Hearing Date: July 25, 2025
J:\MANDATES\2007\TC\07-TC-09 (Discharge of Stormwater Runoff)\07-TC-09-R\Ps&Gs\TOC.docx

ITEM 3

PROPOSED DECISION AND PARAMETERS AND GUIDELINES

San Diego Regional Water Quality Control Board Order No. R9-2007-0001, Permit CAS0108758, Parts D.3.a.(3)(b)(iii), D.5.a.(1), D.5.a.(2), D.5.b.(1)(a), D.5.b.(1)(b)(iii.-vi.), D.5.b.(1)(c), D.5.b.(1)(d), D.5.b.(2), D.5.b.(3), E.2.f., E.2.g., F.1., F.2., F.3., I.1., I.2., I.5., J.3.a.(3)(c)(iv)-(viii), (x)-(xv), the first sentence of L.1. as it applies to the newly mandated activities, and L.1.a.(3)-(6)

07-TC-09-R

Period of reimbursement is January 24, 2007 to December 31, 2017.

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RECEIVED
February 20, 2024
Commission on
State Mandates

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General Explanation and Instructions for the Completion of **"Mandated Meetings - Reasonable Reimbursement Methodology Unit Cost Survey"**

These instructions are provided to assist Stormwater Copermittees in completing the survey of regional and watershed meeting costs included as Worksheet B of this Workbook. To minimize the need for follow-up, clarifications, and corrections, respondents are requested to read the instructions in their entirety before completing the survey.

Part 1: General Information

1. **Please return the completed survey by January 19, 2011**: Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Note A: Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

Part 2: Meeting Information

4. **All meeting information has been completed for you**. You will not be able to modify any information in this section. Average meeting lengths are based on the times typically scheduled for each meeting type, based on a review of past agendas. In most cases, this is 2 hours. Travel time is calculated as the ***average of all Copermittees*** , based on an assumption of 45 minutes for those traveling the farthest, and 15 for those closest to the meeting location. This 30-minute average is doubled to allow for travel in both directions.

Part 3: FY 2007-08 Salary Information

5. **Note 1 (Person Most Frequently Attending Meetings)**: Indicate, by name if possible, and by job classification, the person from your organization who most frequently attended each working body over the 3-year survey period. It's understood that different people may have represented a jurisdiction at different times. However, to simplify calculations, please indicate ***only the individual who in your judgment most typically attended the meetings*** . If a consultant attended on behalf of your jurisdiction, please include the name of the consultant, and "N/A" in the Job Classification field.

6. **Note 2 (Annual Salary)**: Please report the annual salary earned by an employee during FY 2007-08. If the person was employed for only a portion of a fiscal year, the annualized salary should be reported. If a consultant represented your jurisdiction at meetings, please include the charge for 1,800 hours under salaries. For example $120/hour times 1800 hours = $216,000. Also enter zeros under the benefit and indirect cost columns for consultants since these costs are already built into the consulting rates.

7. **Note 3 (Benefit Rate)**: Please indicate the percentage of salary provided by your employer as an employee benefit rate for FY 2007-08.

8. **Note 4 (Indirect Cost Rate)**: Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

9. **Note 5 (Auto-calculation of Costs)**: Based on the information you input, the spreadsheet will auto-calculate two figures for each applicable working body. The first is the "Salaries, Benefits, Indirect Totals," which is simply the salary adjusted for the Benefit and Indirect Cost Rates. The second is the Productive Hourly Rate, which is the sum of the employee's "Salaries, Benefits, Indirect Totals," divided by 1,800 hours, the State's default rate. The Productive Hourly Rate will be used in combination with the Meeting Information to calculate the average cost of attending each working body in each fiscal year.

Part 4: FY 2007-08 through 2009-10 Meeting Costs

10. **Note 6 (Meeting Attendances)**. The only information you are required to complete is the number of meetings you attended for each working body in each of the three fiscal years. If no meetings were attended, please enter a zero. Your total meetings for each fiscal year are summed at the bottom of the sheet.

11. **Note 7 (Average Meeting Costs)**. The "average meeting cost" is the product of the hourly "allowance per meeting" times the productive hourly rate for 2007-08. Based on your meeting attendances and the additional information described above, the spreadsheet will auto-calculate your unit meeting costs for each fiscal year, as well as an average of the three. This information will then be used to calculate an average unit meeting cost for all Copermittees across all working bodies.

12. **Note 8 (Total Meeting Costs)**. Total meeting costs are the product of the number of attendances times the average meeting cost. These are summed for each fiscal year at the bottom of the sheet.

13. **Do not claim more than the number of meetings actually held for any working body**. Even if your jurisdiction had multiple representatives at some meetings, ***only one person per meeting should be counted*** . The purpose of this survey is only to calculate typical meeting costs based on the typical attendees. This will not preclude Copermittees from counting multiple attendees when actual claims are made. Note: To assist Copermittees in completing these sections, meeting dates and descriptions are being provided separately.

Part 1: General Information

Jurisdiction : City of Carlsbad

Contact Person : Elaine Lukey
Phone : 760-602-7582
E-Mail : elaine.lukey@carlsbadca.gov

Alternate: John McKelvey
Phone: 760-434-2992
E-Mail: john.mckelvey@carlsbadca.gov

Please Send Survey Response to:
Jon.VanRhyn@sdcounty.ca.gov [858] 495-5133
Lkaye14765@aol.com [818] 943-8564

	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				Part 4: Meeting Costs — FY 2008-09 Meeting Costs (Note A)				Part 4: Meeting Costs — FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Elaine Lukey	Environmental Manager	$93,594	46	10	$146,006	$81.11	5	5	$324.46	$1,622.29	3	3	$324.46	$973.38	5	5	$324.46	$1,622.29
Program Planning Subcommittee	180	60	4.0	Elaine Lukey	Environmental Manager	$93,594	46	10	$146,007	$81.11	1	1	$324.46	$324.46	4	3	$324.46	$973.38	4	3	$324.46	$973.38
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Jamie Wood	Sr. Env. Specialist	$55,480	51	10	$89,323	$49.62	4	0	$148.87	$0.00	5	0	$148.87	$0.00	2	2	$148.87	$297.74
Education and Residential Sources Workgroup	120	60	3.0	Sheree Hildebrandt	Associate Analyst	$58,832	46	10	$91,778	$50.99	8	4	$152.96	$611.85	6	3	$152.96	$458.89	7	4	$152.96	$611.85
Land Development Workgroup	120	60	3.0	Glen Van Peski	Senior Civil Engineer	$104,937	46	10	$163,701	$90.95	7	4	$272.84	$1,091.34	8	4	$272.84	$1,091.34	7	4	$272.84	$1,091.34
Regional Monitoring Workgroup	120	60	3.0	Jamie Wood	Sr. Env. Specialist	$55,480	51	10	$89,323	$49.62	13	7	$148.87	$1,042.10	13	7	$148.87	$1,042.10	12	5	$148.87	$744.36
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Jamie Wood	Sr. Env. Specialist	$55,480	51	10	$89,323	$49.62	4	2	$148.87	$297.74	4	2	$148.87	$297.74	4	3	$148.87	$446.61
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Jamie Wood	Sr. Env. Specialist	$55,480	51	10	$89,323	$49.62	4	4	$148.87	$595.49	4	4	$148.87	$595.49	2	2	$148.87	$297.74
Regional Watershed URMP Workgroup	120	60	3.0	Elaine Lukey	Environmental Manager	$93,594	46	10	$146,007	$81.11	4	4	$243.34	$973.38	9	9	$243.34	$2,190.10	11	11	$243.34	$2,676.79
Municipal Activities Workgroup	120	60	3.0	Jamie Wood	Sr. Env. Specialist	$55,480	51	10	$89,323	$49.62	1	0	$148.87	$0.00	3	0	$148.87	$0.00	3	3	$148.87	$446.61
Industrial and Commercial Sources Workgroup	120	60	3.0	Jamie Wood	Sr. Env. Specialist	$55,480	51	10	$89,323	$49.62	1	0	$148.87	$0.00	7	2	$148.87	$297.74	6	3	$148.87	$446.61
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	Elaine Lukey	Environmental Manager	$93,594	46	10	$146,007	$81.11	10	10	$243.34	$2,433.44	10	10	$243.34	$2,433.44	8	8	$243.34	$1,946.76
(joint)	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												41		$8,992.09		47		$10,353.60		53		$11,602.09

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$219.32	$220.29	$218.91

Average Unit Meeting Cost (3 years)
$219.49

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of Chula Vista

Contact Person : Khosro Aminpour
Phone : 619-397-6111
E-Mail : kaminpour ci.chula-vista.ca.u

Alternate: Marisa Soriano
Phone: 619-397-6134
E-Mail: msoriano ci.chula-vista.ca.us

Please Send Survey Response to:
Jon.VanRhyn sdcounty.ca.gov [858] 495-5133
Lkaye14765 aol.cor [818] 943-8564

	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Khosro Aminpour	Senior Civil Engineer	$127,368	52.5	76.9	$292,182	$162.32	5	5	$649.29	$3,246.47	3	3	$649.29	$1,947.88	5	5	$649.29	$3,246.47
Program Planning Subcommittee	180	60	4.0	N/A	N/A	$0	0	10	$0	$0.00	1	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Khosro Aminpour	Senior Civil Engineer	$127,368	52.5	76.9	$292,182	$162.32	4	3	$486.97	$1,460.91	5	4	$486.97	$1,947.88	2	2	$486.97	$973.94
Education and Residential Sources Workgroup	120	60	3.0	Khosro Aminpour	Senior Civil Engineer	$127,368	52.5	76.9	$292,182	$162.32	8	6	$486.97	$2,921.82	6	5	$486.97	$2,434.85	7	5	$486.97	$2,434.85
Land Development Workgroup	120	60	3.0	Khosro Aminpour	Senior Civil Engineer	$127,368	52.5	76.9	$292,182	$162.32	7	7	$486.97	$3,408.79	8	8	$486.97	$3,895.76	7	7	$486.97	$3,408.79
Regional Monitoring Workgroup	120	60	3.0	Marisa Soriano	Environmental Health Specialist	$83,556	52.5	76.9	$191,677	$106.49	13	13	$319.46	$4,153.01	13	13	$319.46	$4,153.01	12	12	$319.46	$3,833.55
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Marisa Soriano	Environmental Health Specialist	$83,556	52.5	76.9	$191,677	$106.49	4	4	$319.46	$1,277.85	4	4	$319.46	$1,277.85	4	4	$319.46	$1,277.85
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	9	0	$0.00	$0.00	11	0	$0.00	$0.00
Municipal Activities Workgroup	120	60	3.0	Khosro Aminpour	Senior Civil Engineer	$127,368	52.5	76.9	$292,182	$162.32	1	0	$486.97	$0.00	3	2	$486.97	$973.94	3	1	$486.97	$486.97
Industrial and Commercial Sources Workgroup	120	60	3.0	Khosro Aminpour	Senior Civil Engineer	$127,368	52.5	76.9	$292,182	$162.32	1	1	$486.97	$486.97	7	5	$486.97	$2,434.85	6	5	$486.97	$2,434.85
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	10	0	$0.00	$0.00	8	0	$0.00	$0.00
(joint)	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0	Marisa Soriano	Environmental Health Specialist	$83,556	52.5	76.9	$191,677	$106.49	12	12	$319.46	$3,833.55	11	11	$319.46	$3,514.09	12	12	$319.46	$3,833.55
Tijuana WMA	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												51		########		55		$22,580.12		53		$21,930.82

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$407.63	$410.55	$413.79

Average Unit Meeting Cost (3 years)
$410.69

Part 1: General Information

Jurisdiction : City of Coronado

Contact Person : Kim Godby
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Alternate: Kristi Plume
Phone: 619-522-7380
E-Mail: kplume@coronado.ca.us

Please Send Survey Response to:
Jon.VanRhyn@sdcounty.ca.gov [858] 495-5133
Lkaye14765@aol.con [818] 943-8564

	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Rosanna Lacarra	Consultant	$315,000	0	0	$315,000	$175.00	5	2	$700.00	$1,400.00	3	3	$700.00	$2,100.00	5	4	$700.00	$2,800.00
Program Planning Subcommittee	180	60	4.0	Rosanna Lacarra	Consultant	$315,000	0	0	$315,000	$175.00	1	1	$700.00	$700.00	4	3	$700.00	$2,100.00	4	3	$700.00	$2,100.00
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Rosanna Lacarra	Consultant	$315,000	0	0	$315,000	$175.00	4	4	$525.00	$2,100.00	5	5	$525.00	$2,625.00	2	2	$525.00	$1,050.00
Education and Residential Sources Workgroup	120	60	3.0	Cecilia Lyon	Management Analyst	$65,538	68	10	$116,658	$64.81	8	6	$194.43	$1,166.58	6	5	$194.43	$972.15	7	3	$194.43	$583.29
Land Development Workgroup	120	60	3.0			$0	0	0	$0	$0.00	7	0	$0.00	$0.00	8	0	$0.00	$0.00	7	0	$0.00	$0.00
Regional Monitoring Workgroup	120	60	3.0	Tamara O'Neal	Consultant	$252,000	0	0	$252,000	$140.00	13	8	$420.00	$3,360.00	13	5	$420.00	$2,100.00	12	4	$420.00	$1,680.00
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Tamara O'Neal	Consultant	$252,000	0	0	$252,000	$140.00	4	4	$420.00	$1,680.00	4	4	$420.00	$1,680.00	4	3	$420.00	$1,260.00
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	n/a		$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	Kim Godby	Services Supervisor	$84,328	63	10	$145,887	$81.05	4	1	$243.15	$243.15	9	2	$243.15	$486.29	11	1	$243.15	$243.15
Municipal Activities Workgroup	120	60	3.0	Kirk Duhala	Maintenance Worker II	$38,621	79	10	$72,994	$40.55	1	1	$121.66	$121.66	3	3	$121.66	$364.97	3	3	$121.66	$364.97
Industrial and Commercial Sources Workgroup	120	60	3.0	Kirk Duhala	Maintenance Worker II	$38,621	79	10	$72,994	$40.55	1	1	$121.66	$121.66	7	6	$121.66	$729.94	6	6	$121.66	$729.94
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	n/a		$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	n/a		$0	0	10	$0	$0.00	10	0	$0.00	$0.00	10	0	$0.00	$0.00	8	0	$0.00	$0.00
(joint)	120	60	3.0	n/a		$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	n/a		$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0	Kirk Duhala	Maintenance Worker II	$38,621	79	10	$72,994	$40.55	12	10	$121.66	$1,216.56	11	10	$121.66	$1,216.56	12	11	$121.66	$1,338.22
Tijuana WMA	120	60	3.0	n/a		$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												38		########		46		$14,374.91		40		$12,149.56

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$318.67	$312.50	$303.74

Average Unit Meeting Cost (3 years)
$311.56

Notes

See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of Del Mar

Contact Person : Mikhail Ogawa
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Joseph DeStefano	Clean Water Manager	$111,916	33.9	10	$161,047	$89.47	5	5	$357.88	$1,789.41	3	3	$357.88	$1,073.65	5	5	$357.88	$1,789.41
Program Planning Subcommittee	180	60	4.0			$0	0	10	$0	$0.00	1	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0			$0	0	10	$0	$0.00	4	0	$0.00	$0.00	5	0	$0.00	$0.00	2	0	$0.00	$0.00
Education and Residential Sources Workgroup	120	60	3.0			$0	0	10	$0	$0.00	8	0	$0.00	$0.00	6	0	$0.00	$0.00	7	0	$0.00	$0.00
Land Development Workgroup	120	60	3.0			$0	0	10	$0	$0.00	7	0	$0.00	$0.00	8	0	$0.00	$0.00	7	0	$0.00	$0.00
Regional Monitoring Workgroup	120	60	3.0	Pavitra Rammohan	Consultant	$189,000	0	10	$207,900	**$115.50**	13	13	$346.50	$4,504.50	13	13	$346.50	$4,504.50	12	12	$346.50	$4,158.00
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Pavitra Rammohan	Consultant	$189,000	0	10	$207,900	**$115.50**	4	4	$346.50	$1,386.00	4	4	$346.50	$1,386.00	4	4	$346.50	$1,386.00
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Pavitra Rammohan	Consultant	$189,000	0	10	$207,900	**$115.50**	4	4	$346.50	$1,386.00	4	4	$346.50	$1,386.00	2	2	$346.50	$693.00
Regional Watershed URMP Workgroup	120	60	3.0			$0	0	10	$0	$0.00	4	0	$0.00	$0.00	9	0	$0.00	$0.00	11	0	$0.00	$0.00
Municipal Activities Workgroup	120	60	3.0			$0	0	10	$0	$0.00	1	0	$0.00	$0.00	3	0	$0.00	$0.00	3	0	$0.00	$0.00
Industrial and Commercial Sources Workgroup	120	60	3.0			$0	0	10	$0	$0.00	1	0	$0.00	$0.00	7	0	$0.00	$0.00	6	0	$0.00	$0.00
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0			$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0			$0	0	10	$0	$0.00	10	0	$0.00	$0.00	10	0	$0.00	$0.00	8	0	$0.00	$0.00
(joint)	120	60	3.0	Joseph DeStefano	Clean Water Manager	$111,916	33.9	10	$161,047	$89.47	11	11	$268.41	$2,952.53	7	7	$268.41	$1,878.88	9	9	$268.41	$2,415.71
San Diego WMA	120	60	3.0			$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0			$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0			$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												37		########		31		$10,229.03		32		$10,442.12

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$324.82	$329.97	$326.32

Average Unit Meeting Cost (3 years)
$326.90

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of El Cajon

Contact Person : Jaime Campos
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Jaime Campos	Associate Civil Engineer	$78,858	44.99	7.885	$120,554	$66.97	5	5	$267.90	$1,339.49	3	3	$267.90	$803.69	5	5	$267.90	$1,339.49
Program Planning Subcommittee	180	60	4.0	Jaime Campos	Associate Civil Engineer	$78,858	44.99	7.885	$120,554	$66.97	1	1	$267.90	$267.90	4	4	$267.90	$1,071.59	4	4	$267.90	$1,071.59
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Jaime Campos	Associate Civil Engineer	$78,858	44.99	7.885	$120,554	$66.97	4	1	$200.92	$200.92	5	0	$200.92	$0.00	2	2	$200.92	$401.85
Education and Residential Sources Workgroup	120	60	3.0	Craig Bonner	Code Compliance Officer	$44,244	50.52	4.424	$68,553	$38.09	8	2	$114.26	$228.51	6	4	$114.26	$457.02	7	3	$114.26	$342.77
Land Development Workgroup	120	60	3.0	Blake Behringer	Junior/Assistant Engineer	$25,380	10.15	2.538	$28,600	$15.89	7	6	$47.67	$286.00	8	3	$47.67	$143.00	7	3	$47.67	$143.00
Regional Monitoring Workgroup	120	60	3.0	Robert Griswold	Senior Engineering Technician	$62,514	46.21	6.251	$95,309	$52.95	13	12	$158.85	$1,906.19	13	12	$158.85	$1,906.19	12	11	$158.85	$1,747.34
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Blake Behringer	Junior/Assistant Engineer	$25,380	10.15	2.538	$28,600	$15.89	4	3	$47.67	$143.00	4	3	$47.67	$143.00	4	3	$47.67	$143.00
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	NA	NA	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	Jaime Campos	Associate Civil Engineer	$78,858	44.99	7.885	$120,554	$66.97	4	4	$200.92	$803.69	9	9	$200.92	$1,808.31	11	10	$200.92	$2,009.24
Municipal Activities Workgroup	120	60	3.0	NA	NA	$0	0	10	$0	$0.00	1	0	$0.00	$0.00	3	0	$0.00	$0.00	3	0	$0.00	$0.00
Industrial and Commercial Sources Workgroup	120	60	3.0	Jaime Campos	Associate Civil Engineer	$78,858	44.99	7.885	$120,554	$66.97	1	1	$200.92	$200.92	7	7	$200.92	$1,406.47	6	6	$200.92	$1,205.54
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	NA	NA	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	NA	NA	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	10	0	$0.00	$0.00	8	0	$0.00	$0.00
(joint)	120	60	3.0	NA	NA	$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	Jaime Campos	Associate Civil Engineer	$78,858	44.99	7.885	$120,554	$66.97	7	7	$200.92	$1,406.47	9	9	$200.92	$1,808.31	10	10	$200.92	$2,009.24
San Diego Bay WMA	120	60	3.0	NA	NA	$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0	NA	NA	$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												42		$6,783.10		54		$9,547.59		57		$10,413.05

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$161.50	$176.81	$182.69

Average Unit Meeting Cost (3 years)
$174.80

Notes

See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of Encinitas

Contact Person : Erik Steenblock
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Erik Steenblock	Program Administrator	$102,934	24.21	50	$179,321	$99.62	5	5	$398.49	$1,992.46	3	3	$398.49	$1,195.48	5	5	$398.49	$1,992.46
Program Planning Subcommittee	180	60	4.0	Erik Steenblock	Program Administrator	$102,934	24.21	50	$179,321	$99.62	1	1	$398.49	$398.49	4	4	$398.49	$1,593.97	4	4	$398.49	$1,593.97
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Erik Steenblock	Program Administrator	$102,934	24.21	50	$179,321	$99.62	4	4	$298.87	$1,195.48	5	5	$298.87	$1,494.34	2	2	$298.87	$597.74
Education and Residential Sources Workgroup	120	60	3.0	Kristine Rygiel	Program Assistant	$31,089	24.21	50	$54,160	$30.09	8	6	$90.27	$541.60	6	4	$90.27	$361.07	7	6	$90.27	$541.60
Land Development Workgroup	120	60	3.0	Crystal Najera	Environmental Specialist II	$54,232	34.51	50	$100,063	$55.59	7	7	$166.77	$1,167.41	8	5	$166.77	$833.86	7	6	$166.77	$1,000.63
Regional Monitoring Workgroup	120	60	3.0	Mayela Manasjan	Environmental Specialist II	$54,232	43.21	50	$104,782	$58.21	13	11	$174.64	$1,921.00	13	10	$174.64	$1,746.36	12	8	$174.64	$1,397.09
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Mayela Manasjan	Environmental Specialist II	$54,232	43.21	50	$104,782	$58.21	4	4	$174.64	$698.54	4	4	$174.64	$698.54	4	4	$174.64	$698.54
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Mayela Manasjan	Environmental Specialist II	$54,232	43.21	50	$104,782	$58.21	4	4	$174.64	$698.54	4	4	$174.64	$698.54	2	2	$174.64	$349.27
Regional Watershed URMP Workgroup	120	60	3.0	Erik Steenblock	Program Administrator	$102,934	24.21	50	$179,321	$99.62	4	0	$298.87	$0.00	9	0	$298.87	$0.00	11	0	$298.87	$0.00
Municipal Activities Workgroup	120	60	3.0	Crystal Najera	Environmental Specialist II	$54,232	34.51	50	$100,063	$55.59	1	1	$166.77	$166.77	3	3	$166.77	$500.32	3	3	$166.77	$500.32
Industrial and Commercial Sources Workgroup	120	60	3.0	Mike Emerson	Environmental Specialist II	$43,943	48.21	50	$87,099	$48.39	1	1	$145.17	$145.17	7	4	$145.17	$580.66	6	4	$145.17	$580.66
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	Crystal Najera	Environmental Specialist II	$54,232	34.51	50	$100,063	$55.59	10	10	$166.77	$1,667.72	10	9	$166.77	$1,500.95	8	8	$166.77	$1,334.18
(joint)	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												54		########		55		$11,204.10		52		$10,586.46

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$196.17	$203.71	$203.59

Average Unit Meeting Cost (3 years)
$201.14

Part 1: General Information

Jurisdiction : City of Escondido

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Lkaye14765@aol.com [818] 943-8564

	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Cheryl Filar	Environmental Manager	$74,275	31.54	10	$105,129	$58.40	5	5	$233.62	$1,168.10	3	3	$233.62	$700.86	5	5	$233.62	$1,168.10
Program Planning Subcommittee	180	60	4.0	Cheryl Filar	Environmental Manager	$74,275	31.54	10	$105,129	$58.40	1	0	$233.62	$0.00	4	4	$233.62	$934.48	4	2	$233.62	$467.24
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	5	0	$0.00	$0.00	2	0	$0.00	$0.00
Education and Residential Sources Workgroup	120	60	3.0	Debbie Jardin	Program Coordinator	$57,555	31.63	10	$81,515	$45.29	8	8	$135.86	$1,086.87	6	6	$135.86	$815.15	7	7	$135.86	$951.01
Land Development Workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	8	0	$0.00	$0.00	7	0	$0.00	$0.00
Regional Monitoring Workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	13	0	$0.00	$0.00	13	0	$0.00	$0.00	12	0	$0.00	$0.00
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	Cheryl Filar	Environmental Manager	$74,275	31.54	10	$105,129	$58.40	4	2	$175.21	$350.43	9	6	$175.21	$1,051.29	11	8	$175.21	$1,401.72
Municipal Activities Workgroup	120	60	3.0	Cheryl Filar	Environmental Manager	$74,275	31.54	10	$105,129	$58.40	1	1	$175.21	$175.21	3	3	$175.21	$525.64	3	2	$175.21	$350.43
Industrial and Commercial Sources Workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	1	0	$0.00	$0.00	7	0	$0.00	$0.00	6	0	$0.00	$0.00
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	Cheryl Filar	Environmental Manager	$74,275	31.54	10	$105,129	$58.40	10	8	$175.21	$1,401.72	10	8	$175.21	$1,401.72	8	6	$175.21	$1,051.29
(joint)	120	60	3.0	Cheryl Filar	Environmental Manager	$74,275	31.54	10	$105,129	$58.40	11	11	$175.21	$1,927.36	7	7	$175.21	$1,226.50	9	8	$175.21	$1,401.72
San Diego WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												35		$6,109.69		37		$6,655.64		38		$6,791.50

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$174.56	$179.88	$178.72

Average Unit Meeting Cost (3 years)
$177.79

Part 1: General Information

Jurisdiction : City of Imperial Beach

Contact Person : Chris Helmer
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Alternate: Guy Nelson
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Lkaye14765@aol.com [818] 943-8564

	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs: FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Chris Helmer	Environmental Program Manager	$59,280	**0.16093**	10	$65,303	$36.28	5	5	$145.12	$725.59	3	1	$145.12	$145.12	5	5	$145.12	$725.59
Program Planning Subcommittee	180	60	4.0	Chris Helmer	Environmental Program Manager	$59,280	**0.16093**	10	$65,303	$36.28	1	1	$145.12	$145.12	4	4	$145.12	$580.47	4	4	$145.12	$580.47
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Chris Helmer	Environmental Program Manager	$59,280	**0.16093**	10	$65,303	$36.28	4	4	$108.84	$435.36	5	5	$108.84	$544.20	2	2	$108.84	$217.68
Education and Residential Sources Workgroup	120	60	3.0	Chris Helmer	Environmental Program Manager	$59,280	**0.16093**	10	$65,303	$36.28	8	8	$108.84	$870.71	6	6	$108.84	$653.03	7	7	$108.84	$761.87
Land Development Workgroup	120	60	3.0	Chris Helmer	Environmental Program Manager	$59,280	**0.16093**	10	$65,303	$36.28	7	7	$108.84	$761.87	8	8	$108.84	$870.71	7	7	$108.84	$761.87
Regional Monitoring Workgroup	120	60	3.0	Guy Nelson	Environmental Program Specialist	$50,039	**0.17866**	10	$55,132	$30.63	13	13	$91.89	$1,194.52	13	13	$91.89	$1,194.52	12	12	$91.89	$1,102.64
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Guy Nelson	Environmental Program Specialist	$50,039	**0.17866**	10	$55,132	$30.63	4	4	$91.89	$367.55	4	4	$91.89	$367.55	4	4	$91.89	$367.55
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Chris Helmer	Environmental Program Manager	$59,280	**0.16093**	10	$65,303	$36.28	4	4	$108.84	$435.36	4	4	$108.84	$435.36	2	2	$108.84	$217.68
Regional Watershed URMP Workgroup	120	60	3.0	Chris Helmer	Environmental Program Manager	$59,280	**0.16093**	10	$65,303	$36.28	4	4	$108.84	$435.36	9	9	$108.84	$979.55	11	11	$108.84	$1,197.23
Municipal Activities Workgroup	120	60	3.0	Guy Nelson	Environmental Program Specialist	$50,039	**0.17866**	10	$55,132	$30.63	1	1	$91.89	$91.89	3	3	$91.89	$275.66	3	3	$91.89	$275.66
Industrial and Commercial Sources Workgroup	120	60	3.0	Guy Nelson	Environmental Program Specialist	$50,039	**0.17866**	10	$55,132	$30.63	1	1	$91.89	$91.89	7	7	$91.89	$643.20	6	6	$91.89	$551.32
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5		$0.00	$0.00	5		$0.00	$0.00
Carlsbad WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	10		$0.00	$0.00	8		$0.00	$0.00
(joint)	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7		$0.00	$0.00	9		$0.00	$0.00
San Diego WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9		$0.00	$0.00	10		$0.00	$0.00
San Diego Bay WMA	120	60	3.0	Chris Helmer	Environmental Program Manager	$59,280	**0.16093**	10	$65,303	$36.28	12	12	$108.84	$1,306.07	11	11	$108.84	$1,197.23	12	12	$108.84	$1,306.07
Tijuana WMA	120	60	3.0	Chris Helmer	Environmental Program Manager	$59,280	**0.16093**	10	$65,303	$36.28	6	6	$108.84	$653.03	6	6	$108.84	$653.03	6	6	$108.84	$653.03
												70		$7,514.31		81		$8,539.64		81		$8,718.66

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$107.35	$105.43	$107.64

Average Unit Meeting Cost (3 years)
$106.78

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of La Mesa

Contact Person : Joe Kuhn
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	5	5	$220.21	$1,101.07	3	3	$220.21	$660.64	5	3	$220.21	$660.64
Program Planning Subcommittee	180	60	4.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	1	0	$220.21	$0.00	4	0	$220.21	$0.00	4	0	$220.21	$0.00
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	4	0	$165.16	$0.00	5	0	$165.16	$0.00	2	0	$165.16	$0.00
Education and Residential Sources Workgroup	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	8	2	$165.16	$330.32	6	2	$165.16	$330.32	7	0	$165.16	$0.00
Land Development Workgroup	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	7	4	$165.16	$660.64	8	4	$165.16	$660.64	7	7	$165.16	$1,156.12
Regional Monitoring Workgroup	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	13	6	$165.16	$990.96	13	6	$165.16	$990.96	12	9	$165.16	$1,486.44
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	4	4	$165.16	$660.64	4	4	$165.16	$660.64	4	3	$165.16	$495.48
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	4	0	$165.16	$0.00	4	0	$165.16	$0.00	2	0	$165.16	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	4	0	$165.16	$0.00	9	0	$165.16	$0.00	11	0	$165.16	$0.00
Municipal Activities Workgroup	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	1	0	$165.16	$0.00	3	0	$165.16	$0.00	3	3	$165.16	$495.48
Industrial and Commercial Sources Workgroup	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	1	1	$165.16	$165.16	7	5	$165.16	$825.80	6	5	$165.16	$825.80
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	N/A	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	N/A	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	10	0	$0.00	$0.00	8	0	$0.00	$0.00
(joint)	120	60	3.0	N/A	Enter Job Classification	$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	7	6	$165.16	$990.96	9	9	$165.16	$1,486.44	10	10	$165.16	$1,651.60
San Diego Bay WMA	120	60	3.0	Malik Tamimi	Environmental Specialist	$60,406	54.05	10	$99,096	$55.05	12	11	$165.16	$1,816.76	11	10	$165.16	$1,651.60	12	11	$165.16	$1,816.76
Tijuana WMA	120	60	3.0	N/A	Enter Job Classification	$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												39		$6,716.51		43		$7,267.04		51		$8,588.32

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$172.22	$169.00	$168.40

Average Unit Meeting Cost (3 years)
$169.71

Part 1: General Information

Jurisdiction : City of Lemon Grove

Contact Person : Cora Long
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Alternate: N/A
Phone:
E-Mail:

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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Cora Long	Management Analyst	$91,792	0	10	$100,972	$56.10	5	5	$224.38	$1,121.91	3	3	$224.38	$673.14	5	5	$224.38	$1,121.91
Program Planning Subcommittee	180	60	4.0	Cora Long	Management Analyst	$91,792	0	10	$100,971	$56.10	1	0	$224.38	$0.00	4	0	$224.38	$0.00	4	1	$224.38	$224.38
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Cora Long	Management Analyst	$91,792	0	10	$100,971	$56.10	4	4	$168.29	$673.14	5	5	$168.29	$841.43	2	2	$168.29	$336.57
Education and Residential Sources Workgroup	120	60	3.0	Cora Long	Management Analyst	$91,792	0	10	$100,971	$56.10	8	3	$168.29	$504.86	6	2	$168.29	$336.57	7	2	$168.29	$336.57
Land Development Workgroup	120	60	3.0	Cora Long	Management Analyst	$91,792	0	10	$100,971	$56.10	7	7	$168.29	$1,178.00	8	6	$168.29	$1,009.71	7	4	$168.29	$673.14
Regional Monitoring Workgroup	120	60	3.0	Cora Long	Management Analyst	$91,792	0	10	$100,971	$56.10	13	5	$168.29	$841.43	13	6	$168.29	$1,009.71	12	4	$168.29	$673.14
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	9	0	$0.00	$0.00	11	0	$0.00	$0.00
Municipal Activities Workgroup	120	60	3.0	Cora Long	Management Analyst	$91,792	0	10	$100,971	$56.10	1	1	$168.29	$168.29	3	2	$168.29	$336.57	3	1	$168.29	$168.29
Industrial and Commercial Sources Workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	1	0	$0.00	$0.00	7	0	$0.00	$0.00	6	0	$0.00	$0.00
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	10	0	$0.00	$0.00	8	0	$0.00	$0.00
(joint)	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0	Cora Long	Management Analyst	$91,792	0	10	$100,971	$56.10	12	10	$168.29	$1,682.85	11	9	$168.29	$1,514.57	12	9	$168.29	$1,514.57
Tijuana WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												35		$6,170.47		33		$5,721.70		28		$5,048.56

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$176.30	$173.38	$180.31

Average Unit Meeting Cost (3 years)
$176.47

Notes

See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of National City

Contact Person : Barbara Tipton
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Arsalan Dadkhah	N/A	$252,000	0	0	$252,000	$140.00	5	5	$560.00	$2,800.00	3	3	$560.00	$1,680.00	5	5	$560.00	$2,800.00
Program Planning Subcommittee	180	60	4.0	N/A	N/A	$0	0	0	$0	$0.00	1	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	John Quenzer	N/A	$198,000	0	0	$198,000	$110.00	4	1	$330.00	$330.00	5	1	$330.00	$330.00	2	0	$330.00	$0.00
Education and Residential Sources Workgroup	120	60	3.0	Karen Olson	N/A	$171,000	0	0	$171,000	$95.00	8	0	$285.00	$0.00	6	0	$285.00	$0.00	7	1	$285.00	$285.00
Land Development Workgroup	120	60	3.0	Arsalan Dadkhah	N/A	$252,000	0	0	$252,000	$140.00	7	5	$420.00	$2,100.00	8	4	$420.00	$1,680.00	7	2	$420.00	$840.00
Regional Monitoring Workgroup	120	60	3.0	John Quenzer	N/A	$198,000	0	0	$198,000	$110.00	13	11	$330.00	$3,630.00	13	8	$330.00	$2,640.00	12	10	$330.00	$3,300.00
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Arsalan Dadkhah	N/A	$252,000	0	0	$252,000	$140.00	4	4	$420.00	$1,680.00	4	4	$420.00	$1,680.00	4	4	$420.00	$1,680.00
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	N/A	N/A	$0	0	0	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	John Quenzer	N/A	$198,000	0	0	$198,000	$110.00	4	0	$330.00	$0.00	9	0	$330.00	$0.00	11	8	$330.00	$2,640.00
Municipal Activities Workgroup	120	60	3.0	John Quenzer	N/A	$198,000	0	0	$198,000	$110.00	1	0	$330.00	$0.00	3	3	$330.00	$990.00	3	2	$330.00	$660.00
Industrial and Commercial Sources Workgroup	120	60	3.0	Karen Olson	N/A	$171,000	0	0	$171,000	$95.00	1	1	$285.00	$285.00	7	6	$285.00	$1,710.00	6	6	$285.00	$1,710.00
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	N/A	N/A	$0	0	0	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	N/A	N/A	$0	0	0	$0	$0.00	10	0	$0.00	$0.00	10	0	$0.00	$0.00	8	0	$0.00	$0.00
(joint)	120	60	3.0	N/A	N/A	$0	0	0	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	N/A	N/A	$0	0	0	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0	John Quenzer	N/A	$198,000	0	0	$198,000	$110.00	12	12	$330.00	$3,960.00	11	9	$330.00	$2,970.00	12	12	$330.00	$3,960.00
Tijuana WMA	120	60	3.0	N/A	N/A	$0	0	0	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												39		########		38		$13,680.00		50		$17,875.00

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$379.10	$360.00	$357.50

Average Unit Meeting Cost (3 years)
$364.88

Notes

See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of Oceanside

Contact Person : Mo Lahsaie
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs											
											FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Mo Lahsaie	Clean Water Program Coordinator	$62,369	20.015	10	$81,089	$45.05	5	5	$180.20	$900.99	3	3	$180.20	$540.59	5	5	$180.20	$900.99
Program Planning Subcommittee	180	60	4.0	Cynthia Mallett	Environmental Specialist II	$51,334	20.015	10	$66,742	$37.08	1	0	$148.32	$0.00	4	4	$148.32	$593.26	4	4	$148.32	$593.26
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Cynthia Mallett	Environmental Specialist II	$51,334	20.015	10	$66,742	$37.08	4	0	$111.24	$0.00	5	5	$111.24	$556.18	2	2	$111.24	$222.47
Education and Residential Sources Workgroup	120	60	3.0	Cynthia Mallett	Environmental Specialist II	$51,334	20.015	10	$66,742	$37.08	8	2	$111.24	$222.47	6	6	$111.24	$667.42	7	7	$111.24	$778.66
Land Development Workgroup	120	60	3.0	Billy Walker	Environmental Assistant	$56,867	19.582	10	$73,689	$40.94	7	1	$122.82	$122.82	8	8	$122.82	$982.53	7	7	$122.82	$859.71
Regional Monitoring Workgroup	120	60	3.0	Alison Witheridge	Environmental Specialist II	$51,334	20.015	10	$66,742	$37.08	13	11	$111.24	$1,223.60	13	11	$111.24	$1,223.60	12	9	$111.24	$1,001.13
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Alison Witheridge	Environmental Specialist II	$51,334	20.015	10	$66,742	$37.08	4	4	$111.24	$444.95	4	4	$111.24	$444.95	4	3	$111.24	$333.71
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Alison Witheridge	Environmental Specialist II	$51,334	20.015	10	$66,742	$37.08	4	4	$111.24	$444.95	4	4	$111.24	$444.95	2	2	$111.24	$222.47
Regional Watershed URMP Workgroup	120	60	3.0	Cynthia Mallett	Environmental Specialist II	$51,334	20.015	10	$66,742	$37.08	4	1	$111.24	$111.24	9	9	$111.24	$1,001.13	11	10	$111.24	$1,112.37
Municipal Activities Workgroup	120	60	3.0			$0	0	10	$0	$0.00	1	0	$0.00	$0.00	3	0	$0.00	$0.00	3	0	$0.00	$0.00
Industrial and Commercial Sources Workgroup	120	60	3.0	Wil Perdomo	Compliance Inspector	$62,920	20.515	10	$82,120	$45.62	1	0	$136.87	$0.00	7	2	$136.87	$273.73	6	6	$136.87	$821.20
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	Cynthia Mallett	Environmental Specialist II	$51,334	20.015	10	$66,742	$37.08	10	10	$111.24	$1,112.37	5	5	$111.24	$556.18	5	5	$111.24	$556.18
Carlsbad WMA	120	60	3.0	Cynthia Mallett	Environmental Specialist II	$51,334	20.015	10	$66,742	$37.08	10	10	$111.24	$1,112.37	10	9	$111.24	$1,001.13	8	8	$111.24	$889.89
San Dieguito / Penasquitos WMAs (joint)	120	60	3.0			$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0			$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0			$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0			$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												48		$5,695.74		70		$8,285.65		68		$8,292.04

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$118.66	$118.37	$121.94

Average Unit Meeting Cost (3 years)
$119.75

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of Poway

Contact Person : Roger Morrison
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Malik Tamimi	Stormwater Program Administrator	$84,099	38	15	$128,671	$71.48	5	5	$285.94	$1,429.68	3	3	$285.94	$857.81	5	5	$285.94	$1,429.68
Program Planning Subcommittee	180	60	4.0	Roger Morrison	Management Analyst	$72,432	38	15	$110,821	$61.57	1	1	$246.27	$246.27	4	4	$246.27	$985.08	4	3	$246.27	$738.81
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Roger Morrison	Management Analyst	$72,432	38	15	$110,821	$61.57	4	4	$184.70	$738.81	5	2	$184.70	$369.40	2	2	$184.70	$369.40
Education and Residential Sources Workgroup	120	60	3.0	Roger Morrison	Management Analyst	$72,432	38	15	$110,821	$61.57	8	5	$184.70	$923.51	6	5	$184.70	$923.51	7	5	$184.70	$923.51
Land Development Workgroup	120	60	3.0	Clay Ost	Associate Engineer	$86,936	38	15	$133,012	$73.90	7	2	$221.69	$443.37	8	2	$221.69	$443.37	7	6	$221.69	$1,330.12
Regional Monitoring Workgroup	120	60	3.0	Malik Tamimi	Stormwater Program Administrator	$84,099	38	15	$128,671	$71.48	13	3	$214.45	$643.36	13	2	$214.45	$428.90	12	2	$214.45	$428.90
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Malik Tamimi	Stormwater Program Administrator	$84,099	38	15	$128,671	$71.48	4	1	$214.45	$214.45	4	3	$214.45	$643.36	4	3	$214.45	$643.36
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0			$0	0	15	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	Roger Morrison	Management Analyst	$72,432	38	15	$110,821	$61.57	4	4	$184.70	$738.81	9	8	$184.70	$1,477.61	11	9	$184.70	$1,662.31
Municipal Activities Workgroup	120	60	3.0			$0	0	15	$0	$0.00	1	0	$0.00	$0.00	3	0	$0.00	$0.00	3	0	$0.00	$0.00
Industrial and Commercial Sources Workgroup	120	60	3.0	Taniya Barrows	Engineering Technician	$62,460	38	15	$95,564	$53.09	1	1	$159.27	$159.27	7	7	$159.27	$1,114.91	6	1	$159.27	$159.27
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0			$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0			$0	0	10	$0	$0.00	10	0	$0.00	$0.00	10	0	$0.00	$0.00	8	0	$0.00	$0.00
(joint)	120	60	3.0	Roger Morrison	Management Analyst	$72,432	38	15	$110,821	$61.57	11	10	$184.70	$1,847.02	7	7	$184.70	$1,292.91	9	9	$184.70	$1,662.31
San Diego WMA	120	60	3.0			$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0			$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0			$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												36		$7,384.55		43		$8,536.87		45		$9,347.69

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$205.13	$198.53	$207.73

Average Unit Meeting Cost (3 years)
$203.78

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of San Diego

Contact Person : Amanda Leos
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs: FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Jennifer Nichols Kear	Sr. Public Information Officer	$65,333	46	96.1	$158,171	$87.87	5	2	$351.49	$702.98	3	0	$351.49	$0.00	5	0	$351.49	$0.00
Program Planning Subcommittee	180	60	4.0	Consultant	N/A	$0	0	10	$0	$0.00	1	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	5	0	$0.00	$0.00	2	0	$0.00	$0.00
Education and Residential Sources Workgroup	120	60	3.0	Jennifer Nichols Kear	Sr. Public Information Officer	$65,333	46	96.1	$158,171	$87.87	8	8	$263.62	$2,108.95	6	6	$263.62	$1,581.71	7	7	$263.62	$1,845.33
Land Development Workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	8	0	$0.00	$0.00	7	0	$0.00	$0.00
Regional Monitoring Workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	13	0	$0.00	$0.00	13	0	$0.00	$0.00	12	0	$0.00	$0.00
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	9	0	$0.00	$0.00	11	0	$0.00	$0.00
Municipal Activities Workgroup	120	60	3.0	Jennifer Nichols Kear	Sr. Public Information Officer	$0	0	10	$0	$0.00	1	0	$0.00	$0.00	3	0	$0.00	$0.00	3	1	$0.00	$0.00
Industrial and Commercial Sources Workgroup	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	1	0	$0.00	$0.00	7	0	$0.00	$0.00	6	0	$0.00	$0.00
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	10	0	$0.00	$0.00	8	0	$0.00	$0.00
(joint)	120	60	3.0	Jennifer Nichols Kear	Sr. Public Info. Officer	$65,333	46	96.1	$158,171	$87.87	11	4	$263.62	$1,054.47	7	2	$263.62	$527.24	9	4	$263.62	$1,054.47
San Diego WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0	Tim Graham	Sr. Public Information Officer	$65,333	46	96.1	$158,171	$87.87	12	2	$263.62	$527.24	11	2	$263.62	$527.24	12	2	$263.62	$527.24
Tijuana WMA	120	60	3.0	Tim Graham	Sr. Public Information Officer	$65,333	46	96.1	$158,171	$87.87	6	2	$263.62	$527.24	6	2	$263.62	$527.24	6	2	$263.62	$527.24
												18		$4,920.88		12		$3,163.42		16		$3,954.28

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$273.38	$263.62	$247.14

Average Unit Meeting Cost (3 years)
$261.71

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of San Marcos

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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Ken St. Clair	Administrative Analyst I	$74,058	75	10	$137,007	$76.12	5	5	$304.46	$1,522.30	3	2	$304.46	$608.92	5	4	$304.46	$1,217.84
Program Planning Subcommittee	180	60	4.0	N/A		$0	0	10	$0	$0.00	1	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Erica Ryan	Senior Adminstrative Analyst	$86,112	75	10	$159,307	$88.50	4	0	$265.51	$0.00	5	4	$265.51	$1,062.05	2	2	$265.51	$531.02
Education and Residential Sources Workgroup	120	60	3.0	Veronica Martinez	Public Services Specialist	$74,508	75	10	$137,840	$76.58	8	6	$229.73	$1,378.40	6	6	$229.73	$1,378.40	7	1	$229.73	$229.73
Land Development Workgroup	120	60	3.0	Sassan Haghoo	Deputy City Engineer	$131,016	75	10	$242,380	$134.66	7	7	$403.97	$2,827.76	8	8	$403.97	$3,231.73	7	7	$403.97	$2,827.76
Regional Monitoring Workgroup	120	60	3.0	Ken St. Clair	Administrative Analyst I	$74,058	75	10	$137,007	$76.12	13	4	$228.35	$913.38	13	1	$228.35	$228.35	12	0	$228.35	$0.00
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Ken St. Clair	Administrative Analyst I	$74,058	75	10	$137,007	$76.12	4	4	$228.35	$913.38	4	0	$228.35	$0.00	4	0	$228.35	$0.00
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	Erica Ryan	Senior Adminstrative Analyst	$86,112	75	10	$159,307	$88.50	4	0	$265.51	$0.00	9	4	$265.51	$1,062.05	11	7	$265.51	$1,858.58
Municipal Activities Workgroup	120	60	3.0	Ken St. Clair	Administrative Analyst I	$74,058	75	10	$137,007	$76.12	1	0	$228.35	$0.00	3	0	$228.35	$0.00	3	1	$228.35	$228.35
Industrial and Commercial Sources Workgroup	120	60	3.0	Ken St. Clair	Administrative Analyst I	$74,058	75	10	$137,007	$76.12	1	0	$228.35	$0.00	7	1	$228.35	$228.35	6	1	$228.35	$228.35
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	n/a	n/a	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	Karen Brindley	Principal Planner	$96,972	75	10	$179,398	$99.67	10	8	$299.00	$2,391.98	10	8	$299.00	$2,391.98	8	5	$299.00	$1,494.99
(joint)	120	60	3.0	n/a	n/a	$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	n/a	n/a	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0	n/a	n/a	$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0	n/a	n/a	$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												34		$9,947.20		34		$10,191.81		28		$8,616.62

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$292.56	$299.76	$307.74

Average Unit Meeting Cost (3 years)
$299.54

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of Santee

Contact Person : Helen M. Perry
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Please Send Survey Response to:
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Helen M. Perry	Stormwater Program Manager	$67,528	39.26	38.7	$120,174	$66.76	5	5	$267.05	$1,335.26	3	2	$267.05	$534.11	5	5	$267.05	$1,335.26
Program Planning Subcommittee	180	60	4.0	N/A	N/A	$0	0	10	$0	$0.00	1	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Helen M. Perry	Stormwater Program Manager	$67,528	39.26	38.7	$120,174	$66.76	4	1	$200.29	$200.29	5	1	$200.29	$200.29	2	0	$200.29	$0.00
Education and Residential Sources Workgroup	120	60	3.0	Helen M. Perry	Stormwater Program Manager	$67,528	39.26	38.7	$120,174	$66.76	8	2	$200.29	$400.58	6	2	$200.29	$400.58	7	0	$200.29	$0.00
Land Development Workgroup	120	60	3.0	Julie Procopio	Principal Engineer	$97,061	34.94	37.5	$167,372	$92.98	7	2	$278.95	$557.91	8	3	$278.95	$836.86	7	6	$278.95	$1,673.72
Regional Monitoring Workgroup	120	60	3.0	Helen M. Perry	Stormwater Program Manager	$67,528	39.26	38.7	$120,174	$66.76	13	7	$200.29	$1,402.03	13	10	$200.29	$2,002.89	12	5	$200.29	$1,001.45
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Helen M. Perry	Stormwater Program Manager	$67,528	39.26	38.7	$120,174	$66.76	4	4	$200.29	$801.16	4	4	$200.29	$801.16	4	4	$200.29	$801.16
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	N/A	N/A	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	9	0	$0.00	$0.00	11	0	$0.00	$0.00
Municipal Activities Workgroup	120	60	3.0	Helen M. Perry	Stormwater Program Manager	$67,528	39.26	38.7	$120,174	$66.76	1	0	$200.29	$0.00	3	2	$200.29	$400.58	3	0	$200.29	$0.00
Industrial and Commercial Sources Workgroup	120	60	3.0	Helen M. Perry	Stormwater Program Manager	$67,528	39.26	38.7	$120,174	$66.76	1	0	$200.29	$0.00	7	4	$200.29	$801.16	6	2	$200.29	$400.58
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	10	0	$0.00	$0.00	10	0	$0.00	$0.00	8	0	$0.00	$0.00
(joint)	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	Helen M. Perry	Stormwater Program Manager	$67,528	39.26	38.7	$120,174	$66.76	7	6	$200.29	$1,201.74	9	9	$200.29	$1,802.60	10	10	$200.29	$2,002.89
San Diego Bay WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0	Enter Name	Enter Job Classification	$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												27		$5,898.96		37		$7,780.22		32		$7,215.06

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$218.48	$210.28	$225.47

Average Unit Meeting Cost (3 years)
$217.65

Part 1: General Information

Jurisdiction : City of Solana Beach

Contact Person : Danny King
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Danny King	Env.Programs Mgr	$64,951	40.2	10	$97,556	$54.20	5	5	$216.79	$1,083.96	3	3	$216.79	$650.38	5	5	$216.79	$1,083.96
Program Planning Subcommittee	180	60	4.0			$0	0	10	$0	$0.00	1	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0			$0	0	10	$0	$0.00	4	0	$0.00	$0.00	5	0	$0.00	$0.00	2	0	$0.00	$0.00
Education and Residential Sources Workgroup	120	60	3.0			$0	0	10	$0	$0.00	8	0	$0.00	$0.00	6	0	$0.00	$0.00	7	0	$0.00	$0.00
Land Development Workgroup	120	60	3.0			$0	0	10	$0	$0.00	7	0	$0.00	$0.00	8	0	$0.00	$0.00	7	0	$0.00	$0.00
Regional Monitoring Workgroup	120	60	3.0			$0	0	10	$0	$0.00	13	0	$0.00	$0.00	13	0	$0.00	$0.00	12	0	$0.00	$0.00
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Danny King	Env.Programs Mgr	$64,951	40.2	10	$97,556	$54.20	4	4	$162.59	$650.38	4	0	$162.59	$0.00	4	0	$162.59	$0.00
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Danny King	Env.Programs Mgr	$64,951	40.2	10	$97,556	$54.20	4	4	$162.59	$650.38	4	4	$162.59	$650.38	2	2	$162.59	$325.19
Regional Watershed URMP Workgroup	120	60	3.0			$0	0	10	$0	$0.00	4	0	$0.00	$0.00	9	0	$0.00	$0.00	11	0	$0.00	$0.00
Municipal Activities Workgroup	120	60	3.0			$0	0	10	$0	$0.00	1	0	$0.00	$0.00	3	0	$0.00	$0.00	3	0	$0.00	$0.00
Industrial and Commercial Sources Workgroup	120	60	3.0			$0	0	10	$0	$0.00	1	0	$0.00	$0.00	7	0	$0.00	$0.00	6	0	$0.00	$0.00
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0			$0	0	10	$0	$0.00	10	0	$0.00	$0.00	5	0	$0.00	$0.00	5	0	$0.00	$0.00
Carlsbad WMA	120	60	3.0	Danny King	Env.Programs Mgr	$64,951	40.2	10	$97,556	$54.20	10	10	$162.59	$1,625.94	10	10	$162.59	$1,625.94	8	8	$162.59	$1,300.75
[illegible] (joint)	120	60	3.0	Danny King	Env.Programs Mgr	$64,951	40.2	10	$97,556	$54.20	11	11	$162.59	$1,788.53	7	7	$162.59	$1,138.16	9	9	$162.59	$1,463.35
San Diego WMA	120	60	3.0			$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0			$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0			$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												34		$5,799.19		24		$4,064.85		24		$4,173.25

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$170.56	$169.37	$173.89

Average Unit Meeting Cost (3 years)
$171.19

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

Part 1: General Information

Jurisdiction : City of Vista

Contact Person : Paul Hartman
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	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Paul Hartman	Program Manager	$91,728	33.62	10	$131,740	$73.19	5	5	$292.76	$1,463.78	3	3	$292.76	$878.27	5	5	$292.76	$1,463.78
Program Planning Subcommittee	180	60	4.0	None	N/A	$0	0	10	$0	$0.00	1	0	$0.00	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Paul Hartman	Program Manager	$91,728	33.62	10	$131,740	$73.19	4	0	$219.57	$0.00	5	0	$219.57	$0.00	2	2	$219.57	$439.13
Education and Residential Sources Workgroup	120	60	3.0	None	N/A	$0	0	10	$0	$0.00	8	0	$0.00	$0.00	6	0	$0.00	$0.00	7	0	$0.00	$0.00
Land Development Workgroup	120	60	3.0	Greg Mayer	Deputy Director of Community Development	$115,544	34.28	10	$166,707	$92.61	7	4	$277.84	$1,111.38	8	5	$277.84	$1,389.22	7	4	$277.84	$1,111.38
Regional Monitoring Workgroup	120	60	3.0	Doug Coppi	Sr. Environmental Specialist	$63,149	33.57	10	$90,663	$50.37	13	10	$151.11	$1,511.05	13	10	$151.11	$1,511.05	12	10	$151.11	$1,511.05
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Doug Coppi	Sr. Environmental Specialist	$63,149	33.57	10	$90,663	$50.37	4	4	$151.11	$604.42	4	4	$151.11	$604.42	4	4	$151.11	$604.42
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	None	N/A	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	4	0	$0.00	$0.00	2	0	$0.00	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	None	N/A	$0	0	10	$0	$0.00	4	0	$0.00	$0.00	9	0	$0.00	$0.00	11	0	$0.00	$0.00
Municipal Activities Workgroup	120	60	3.0	None	N/A	$0	0	10	$0	$0.00	1	0	$0.00	$0.00	3	0	$0.00	$0.00	3	0	$0.00	$0.00
Industrial and Commercial Sources Workgroup	120	60	3.0	Doug Coppi	Sr. Environmental Specialist	$63,149	33.57	10	$90,663	$50.37	1	1	$151.11	$151.11	7	7	$151.11	$1,057.74	6	6	$151.11	$906.63
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	Paul Hartman	Program Manager	$91,728	33.62	10	$131,740	$73.19	10	10	$219.57	$2,195.66	5	5	$219.57	$1,097.83	5	5	$219.57	$1,097.83
Carlsbad WMA	120	60	3.0	Paul Hartman	Program Manager	$91,728	33.62	10	$131,740	$73.19	10	10	$219.57	$2,195.66	10	10	$219.57	$2,195.66	8	8	$219.57	$1,756.53
[illegible] (joint)	120	60	3.0	None	N/A	$0	0	10	$0	$0.00	11	0	$0.00	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00
San Diego WMA	120	60	3.0	None	N/A	$0	0	10	$0	$0.00	7	0	$0.00	$0.00	9	0	$0.00	$0.00	10	0	$0.00	$0.00
San Diego Bay WMA	120	60	3.0	None	N/A	$0	0	10	$0	$0.00	12	0	$0.00	$0.00	11	0	$0.00	$0.00	12	0	$0.00	$0.00
Tijuana WMA	120	60	3.0	None	N/A	$0	0	10	$0	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00	6	0	$0.00	$0.00
												44		$9,233.05		44		$8,734.19		44		$8,890.75

Notes
See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$209.84	$198.50	$202.06

Average Unit Meeting Cost (3 years)
$203.47

Part 1: General Information

Jurisdiction : County of San Diego

Contact Person : Jon Van Rhyn
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Lkaye14765@aol.com [818] 943-8564

	Part 2: Meeting Information (Average)			Part 3: FY 2007-08 Salary Information (Note A)							Part 4: Meeting Costs — FY 2007-08 Meeting Costs (Note A)				FY 2008-09 Meeting Costs (Note A)				FY 2009-10 Meeting Costs (Note A)			
	Typical Meeting Length (minutes)	Typical total travel time (minutes)	Allowance per Meeting (hours)	Person most frequently attending meetings (Note 1)	Job Classification	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	Productive Hourly Rates (Note 5)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note 7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note 8)	Total Meetings Held	Meeting Attendances (Note 6)	Average Meeting Cost (Note (7)	Total Meeting Cost (Note (8)
Regional Working Bodies																						
Regional Management Committee	180	60	4.0	Jon Van Rhyn	Water Quality Program Manager	$98,927	59	53	$209,725	$116.51	5	5	$466.06	$2,330.28	3	3	$466.06	$1,398.17	5	5	$466.06	$2,330.28
Program Planning Subcommittee	180	60	4.0	Jon Van Rhyn	Water Quality Program Manager	$98,927	59	53	$209,725	$116.51	1	1	$466.06	$466.06	4	4	$466.06	$1,864.22	4	4	$466.06	$1,864.22
Fiscal, Reporting, & Assessment Subcommittee	120	60	3.0	Jon Van Rhyn	Water Quality Program Manager	$98,927	59	53	$209,725	$116.51	4	4	$349.54	$1,398.17	5	4	$349.54	$1,398.17	2	2	$349.54	$699.08
Education and Residential Sources Workgroup	120	60	3.0	Rachel Borgatti	Program Coordinator	$65,452	59	53	$138,758	$77.09	8	8	$231.26	$1,850.11	6	6	$231.26	$1,387.58	7	7	$231.26	$1,618.85
Land Development Workgroup	120	60	3.0	Sara Agahi	Senior Civil Engineer	$85,433	59	67	$193,079	$107.27	7	7	$321.80	$2,252.58	8	8	$321.80	$2,574.38	7	7	$321.80	$2,252.58
Regional Monitoring Workgroup	120	60	3.0	Jo Ann Weber	Program Coordinator	$79,545	59	53	$168,635	$93.69	13	13	$281.06	$3,653.77	13	13	$281.06	$3,653.77	12	12	$281.06	$3,372.71
Dry Weather Monitoring Sub-workgroup	120	60	3.0	Steven DiDonna	LUEP II	$60,686	59	53	$128,654	$71.47	4	0	$214.42	$0.00	4	0	$214.42	$0.00	4	0	$214.42	$0.00
Coastal Storm Drain Monitoring Sub-workgroup	120	60	3.0	Steven DiDonna	LUEP II	$60,686	59	53	$128,654	$71.47	4	0	$214.42	$0.00	4	0	$214.42	$0.00	2	0	$214.42	$0.00
Regional Watershed URMP Workgroup	120	60	3.0	Todd Snyder	Planning Manager	$92,252	59	53	$195,574	$108.65	4	4	$325.96	$1,303.83	9	3	$325.96	$977.87	11	11	$325.96	$3,585.53
Municipal Activities Workgroup	120	60	3.0	Christine Sloan	Program Coordinator	$72,138	59	53	$152,933	$84.96	1	1	$254.89	$254.89	3	0	$254.89	$0.00	3	0	$254.89	$0.00
Industrial and Commercial Sources Workgroup	120	60	3.0	Richard Diaz	Program Coordinator	$83,492	59	53	$177,003	$98.34	1	1	$295.01	$295.01	7	0	$295.01	$0.00	6	0	$295.01	$0.00
Watershed URMP Working Bodies										$0.00												
San Luis Rey WMA	120	60	3.0	Scott Norris	LUEP II	$62,586	59	53	$132,682	$73.71	10	10	$221.14	$2,211.37	5	5	$221.14	$1,105.69	5	5	$221.14	$1,105.69
Carlsbad WMA	120	60	3.0	Scott Norris	LUEP II	$62,586	59	53	$132,682	$73.71	10	10	$221.14	$2,211.37	10	10	$221.14	$2,211.37	8	8	$221.14	$1,769.10
(joint)	120	60	3.0	Stephanie Gaines	LUEP II	$70,686	59	53	$149,854	$83.25	11	11	$249.76	$2,747.33	7	7	$249.76	$1,748.30	9	9	$249.76	$2,247.81
San Diego WMA	120	60	3.0	Stephanie Gaines	LUEP II	$70,686	59	53	$149,854	$83.25	7	7	$249.76	$1,748.30	9	9	$249.76	$2,247.81	10	10	$249.76	$2,497.57
San Diego Bay WMA	120	60	3.0	Tracy Cline	LUEP III	$81,053	59	53	$171,832	$95.46	12	12	$286.39	$3,436.65	11	11	$286.39	$3,150.26	12	12	$286.39	$3,436.65
Tijuana WMA	120	60	3.0	Tracy Cline	LUEP III	$81,053	59	53	$171,832	$95.46	6	6	$286.39	$1,718.32	6	6	$286.39	$1,718.32	6	6	$286.39	$1,718.32
												100		########		89		$25,435.92		98		$28,498.40

FY 2007-08 Unit Meeting Cost	Unit Meeting Cost (@FY 2007-08 rates)	Unit Meeting Cost (@FY 2007-08 rates)
$278.78	$285.80	$290.80

Average Unit Meeting Cost (3 years)
$285.06

Notes

See Worksheet A (Instructions and Notes) for explanations of notes and aditional instructions on completing the survey.

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Carlsbad		
Contact Person :	Christine Ruess	Alternate:	Craig Schmollinger
Phone :	760-438-2722 x7110	Phone:	760-602-7502
E-Mail :	christine.ruess@carlsbadca.go	E-Mail:	craig.schmollinger@carlsbadca.gov

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$8,435		$8,688		$8,949	
Conveyance System Cleaning Operations		$0		$0		$0
Reporting	$531	$0	$547	$0	$563	$0
Employee Supervision and Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$8,966**	**$0**	**$9,235**	**$0**	**$9,512**	**$0**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$0		$0	
Conveyance System Cleaning Operations Contract		$600		$600		$600
Reporting	$0	$0	$0	$0	$0	$0
Contract Management	$0	$2,654	$0	$2,654	$0	$2,654
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0
Total Contract Costs	**$0**	**$3,254**	**$0**	**$3,254**	**$0**	**$3,254**
Total Costs (In-house + Contractor)	**$8,966**	**$3,254**	**$9,235**	**$3,254**	**$9,512**	**$3,254**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	200		200		**2**	
Unit Cost per Inspection	**$44.83**		**$46.17**		**$4,755.96**	
b. Contract Results						
Number of Inspections	0		0		0	
Unit Cost per Inspection	**#DIV/0!**		**#DIV/0!**		**#DIV/0!**	
c. Combined Results						
Number of Inspections	200		200		**2**	
Unit Cost per Inspection	**$44.83**		**$46.17**		**$4,755.96**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		1		1		1
Unit Cost per Cleaning		**$0.00**		**$0.00**		**$0.00**
b. Contract Results						
Number of Cleanings		10		10		10
Unit Cost per Cleaning		**$325.40**		**$325.40**		**$325.40**
c. Combined Results						
Number of Cleanings		11		11		11
Unit Cost per Cleaning		**$295.82**		**$295.82**		**$295.82**

Worksheet C: In-house Conveyance System Inspection Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
Part 1: Conveyance System Inspection Costs (Note 1)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													**Source of Inspection Cost Information**
1	A. Bentley	Maintenance Worker	1	$47,116	51	10	$75,857	5.5	$4,172	5.5	$4,297	5.5	$4,426	200 new catch basins and curb inlets were added between 2007 and 2010 which is approx. 5.5% of the approx. 3,650 total storm drain catch basins and curb inlets that are inspected. Salary Information if from IFAS. Names reflect the employees in FY08, however they are no longer employees. In FY08 the positions were classisfied as Street Maintenance Workers, they are now classificed as Storm Drain Maintenance Workers
2	C. Thomas	Street/Storm Drain Maintenance Worker	1	$48,141	51	10	$77,508	5.5	$4,263	5.5	$4,391	5.5	$4,523	
3	Enter Name	Enter Job Classification	1	$0	51	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$8,435		$8,688		$8,949	

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Clayton Dobbs	Street/Storm Drain Maintenance Worker III	1	$65,940	51	10	$106,164	0.5	$531	0.5	$547	0.5	$563	Salary Information is from IFAS. Due to reclassifications, etc. Dobbs position is currently a Storm Drain Maintenance Supervisor which has a higher rate of pay and a benefit rate of 46%.
2	Enter Name	Enter Job Classification	1	$0	51	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
								Reporting Totals	**$531**		**$547**		**$563**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Clayton Dobbs	Storm Drain Maintenance Supervisor	1	$0	0	10	$0	0.0005	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
								Supervision and Management Totals	**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
								Training Totals	**$0**		**$0**		**$0**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	
	e. Contract Management (Note 12)													
	Use lines 1-5 if auto-calculating annual contract management costs for each year													**Source of Contract Management Cost Information**
1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.
2	Fuel (Note 15)	$0	$0	$0	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$0	$0	$0	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$8,966	**$9,235**	**$9,512**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	200	200	2	Identify the source of inspection results. Also use this space to document any assumptions used to calculate inspection results.
Unit Cost per Inspection	$ 44.83	$ 46.17	$ 4,755.96	

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)
Part 1: Conveyance System Cleaning Operations Costs (Note 16)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Enter Name	Equip. Operator (example)	1	$0	0	0	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	0	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$0		$0		$0	

Source of Cleaning Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	0	$0	0	0	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	0	$0	0	0	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	0	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	0	$0	0	0	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	0	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	0	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	0	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	0	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	0	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	1	1	1	Identify the source of inspection results. Also use this space to document any assumptions used to calculate cleaning results.
Unit Cost per Cleaning	$ -	$ -	$ -	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$0		$0	
2	Conveyance System Cleaning (Note 16)		$600		$600		$600
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$0	$0	$0	$0
2	Contract Management (Note 19)	$0	$2,654	$0	$2,654	$0	$2,654
3	Employee and Vendor Training (Note 10)	$0	$0	$0	$0	$0	$0
4	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	$0	$0	$0
	Non-personnel Costs						
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0	$0	$0	$0
	Total Contract Costs	**$0**	**$3,254**	**$0**	**$3,254**	**$0**	**$3,254**

Source of Contract Cost Information (Note 6)

$600 for cleaning represents 10 new catch basins and inlets and cleaning costs of $60/each. In addition, the city has a contract with Affordable Pipeline Services for cleaning of D-25/D-27's (under sidewalk drain services) in the amount of $55,000, and a conract with Urban Corps in the amount of $42,000 for outfall cleaning. The in-house cost to manage these contracts is approximately $6,000.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
Inspections	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Number of Inspections	0		0		0	
Unit Cost per Inspection	#DIV/0!		#DIV/0!		#DIV/0!	
Cleanings						
Number of Cleanings		10		10		10
Unit Cost per Cleaning		$ 325.40		$ 325.40		$ 325.40

Source of Inspection and Cleaning Results (Note 7)

The contract management cost is based on 2.5% of a Sr. Storm Drain Maintenance Workers time.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Specific Questions for Carlsbad

Inspection and Cleaning Results Verfication

1) You reported 200 inspections for FY 2007-08, 2008-09 and 2 inspections for FY 2009-10. Is FY 2009-10 suppose to be 200?
2) You reported 10 cleanings for each year, is this correct?
3) Do these results exclude open channels? If yes, how did you exclude them? Can you provide documentation? If no, please revise and provide documentation of process.
4) Why did you report only the inspections of new inlets and catch basins?
5) Please define what catch basins and inlets were included in the results
6) What did you report in your JURMP for all three years?

What does the number of cleanings represent? Are these cleanings of the new inlets and catch
Contract Management Costs (Tab E) is greater than the cost for cleanings. Is this correct?

Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"

Tab A. Instructions and Notes

email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**. The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.

Information).

Tab C. In-house Inspection Costs

to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

reported values.

Tab E. Contractor Costs

inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 5 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Chula Vista		
Contact Person :	Khosro Aminpour	Alternate:	Marisa Soriano
Phone :	619-397-6111	Phone:	619-397-6134
E-Mail :	kaminpour@ci.chula-vista	E-Mail:	msoriano@ci.chula-vista.ca.us

	FY 2007-08		FY 2008-09		FY 2009-10		
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings	
Part 2: Cost Information							
A. In-house Costs (complete Worksheets C and D)							
Personnel Costs							
Conveyance System Inspection	$112,817		$91,757		$272,042		Note -- See Schedule C
Conveyance System Cleaning Operations		$199,670		$459,189		$360,333	Note -- See Schedule D
Reporting	$30,294	$121,176	$30,294	$121,176	$30,294	$121,176	Note - See schedules c and d
Employee Supervision and Management	$50,485	$151,456	$50,485	$151,456	$50,485	$151,456	Note - See schedules c and d
Employee and Vendor Training	$0	$0	$0	$0	$0	$0	
Equipment Maintenance	$11,895	$35,686	$16,262	$48,788	$13,704	$41,113	Note- See schedule D
Contract Management	$0	$0	$0	$0	$0	$0	
Non-personnel Costs							
Equipment Maintenance	$0	$0	$0	$0	$0	$0	Note - See schedules c and d
Fuel	$0	$0	$0	$0	$0	$0	Note - See schedules c and d
Training Materials and Supplies	$0	$0	$0	$0	$0	$0	
Total In-house Costs	**$205,491**	**$507,988**	**$188,798**	**$780,609**	**$366,525**	**$674,078**	
B. Contractor Costs (complete Worksheet E)							
Conveyance System Inspection Contract	$0		$0		$0		
Conveyance System Cleaning Operations Contract		$0		$0		$0	
Reporting	$0	$0	$0	$0	$0	$0	
Contract Management	$0	$0	$0	$0	$0	$0	
Employee and Vendor Training	$0	$0	$0	$0	$0	$0	
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0	
Non-personnel Costs							
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0	
Fuel	$0	$0	$0	$0	$0	$0	
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0	
Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	
Total Costs (In-house + Contractor)	**$205,491**	**$507,988**	**$188,798**	**$780,609**	**$366,525**	**$674,078**	

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results							
a. In-house Results							
Number of Inspections	7908		7343		8480		
Unit Cost per Inspection	**$25.99**		**$25.71**		**$43.22**		
b. Contract Results							
Number of Inspections	1		1		1		Note - See Schedule E
Unit Cost per Inspection	**$0.00**		**$0.00**		**$0.00**		
c. Combined Results							
Number of Inspections	7909		7344		8481		
Unit Cost per Inspection	**$25.98**		**$25.71**		**$43.22**		
Cleaning Results							
a. In-house Results							
Number of Cleanings		3601		5183		4444	
Unit Cost per Cleaning		**$141.07**		**$150.61**		**$151.68**	
b. Contract Results							
Number of Cleanings		1		1		1	Note - See Schedule E
Unit Cost per Cleaning		**$0.00**		**$0.00**		**$0.00**	
c. Combined Results							
Number of Cleanings		3602		5184		4445	
Unit Cost per Cleaning		**$141.03**		**$150.58**		**$151.65**	

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 1: Conveyance System Inspection Costs (Note 1)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		Source of Information (Note 6)
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$112,817		$91,757		$272,042	
								TOTALS	$112,817		$91,757		$272,042	

Source of Inspection Cost Information

Maint. Worker II and Sr. Maint. Worker hours from GBA. Rates from Fully Allocated Hourly Rates minus Maint. & Operations costs. All rates based on 2007-2008 rates as required in the instructions.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	One Public Works Specialist dedicated to storm drain inspection and maintenance data management and reporting. Estimated 20% time for inspections, 80% for maintenance. Based on 1,800 working hours per year. Rates from Fully Allocated Hourly Rates minus Maintenance and Operations.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$30,294		$30,294		$30,294	
							Reporting Totals		**$30,294**		**$30,294**		**$30,294**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	One Public Works Supervisor dedicated to storm drain maintenance inspections and cleaning. Estimated 25% for inspections and 75% for maintenance. Based on 1,800 working hours per year. Rates from Fully Allocated Hourly Rates minus maintenance and operation. One Watstewater Collections Manager costs are included in the Fully Allocated Hourly Rates in Part 1, and not included
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$50,485		$50,485		$50,485	
							Supervision and Management Totals		**$50,485**		**$50,485**		**$50,485**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	This cost is included in the Public Works Supervisor time in Part 2.b.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	From IFAS reports. Includes fleet maint.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	charges, equipment replacement charges, rental equipment, and small tools. Assumed 25% of total maint. charges are for inspections and 75% for maintenance.
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$11,895		$16,262		$13,704	
								Equipment Maintenance Totals	**$11,895**		**$16,262**		**$13,704**	

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	**Source of Contract Management Cost Information**: All inspection activities are in-house. No contracts were awarded for this task.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information: All vehicle and equipment maintenance, fuel, and training materials and supplies are covered under the above listed items. There are no additional costs to be added here.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$205,491	**$188,798**	**$366,525**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10
Number of Inspections	7908	7343	8480
Unit Cost per Inspection	$ 25.99	$ 25.71	$ 43.22

Source of Inspection Results (Note 7)

Numbers indicated in Part 5 are the number of storm drain catch basins and inlets that were inspected during the fiscal year. Information is originally from GBA, which were also used for JURMP Annual Reports.

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Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 1: Conveyance System Cleaning Operations Costs (Note 16)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Equipment Operator, Maint. Worker II and Sr. Maint. Worker hours from GBA. Rates from Fully Allocated Hourly Rates minus Maint. & Operations costs. All rates based on 2007-2008 rates as required in the instructions.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$199,670		$459,189		$360,333	
								TOTALS	$199,670		$459,189		$360,333	

Source of Cleaning Cost Information

Equipment Operator, Maint. Worker II and Sr. Maint. Worker hours from GBA. Rates from Fully Allocated Hourly Rates minus Maint. & Operations costs. All rates based on 2007-2008 rates as required in the instructions.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	One Public Works Specialist dedicated to storm drain inspection and maintenance data management and reporting. Estimated 20% time for inspections, 80% for maintenance. Based on 1,800 working hours per year. Rates from Fully Allocated Hourly Rates minus Maintenance and
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$121,176		$121,176		$121,176	
							Reporting Totals		**$121,176**		**$121,176**		**$121,176**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	One Public Works Supervisor dedicated to storm drain maintenance inspections and cleaning. Estimated 25% for inspections and 75% for maintenance. Based on 1,800 working hours per year. Rates from Fully Allocated Hourly Rates minus maintenance and operation. One
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$151,456		$151,456		$151,456	
							Supervision and Management Totals		**$151,456**		**$151,456**		**$151,456**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	This cost is included in the Public Works Supervisor time in Part 2.b.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$35,686		$48,788		$41,113
								Equipment Maintenance Totals	**$35,686**		**$48,788**		**$41,113**

Source of Equipment Maintenance Cost Information

From IFAS reports. Includes fleet maint. charges, equipment replacement charges, rental equipment, and small tools. Assumed 25% of total maint. charges are for inspections and 75% for maintenance.

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Source of Contract Management Cost Information

All storm drain maintenance activities are in-house. No contracts were awarded for this task.

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

All vehicle and equipment maintenance, fuel, and training materials and supplies are covered under the above listed items. There are no additional costs to be added here.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$507,988	**$780,609**	**$674,078**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10
Number of Cleanings	3601	5183	4444
Unit Cost per Cleaning	$ 141.07	$ 150.61	$ 151.68

Source of Cleaning Results (Note 17)

Numbers indicated in Part 5 are the number of storm drain catch basins and inlets that were cleaned during the fiscal year. Information is originally from GBA, which were also used for JURMP Annual Reports.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$0		$0	
2	Conveyance System Cleaning (Note 16)		$0		$0		$0
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$0	$0	$0	$0
2	Contract Management (Note 19)	$0	$0	$0	$0	$0	$0
3	Employee and Vendor Training (Note 10)	$0	$0	$0	$0	$0	$0
4	14)	$0	$0	$0	$0	$0	$0
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Inspections						
Number of Inspections	1		1		1	
Unit Cost per Inspection	$ -		$ -		$ -	
Cleanings						
Number of Cleanings		1		1		1
Unit Cost per Cleaning		$ -		$ -		$ -

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment	
In-house Personnel Conveyance System	Schedule C - salary information not filled in	Needs to have annual salary, benefit rate, and in-direct cost rates
In-house Personnel Conveyance System	Schedule D - salary information not filled in	Needs to have annual salary, benefit rate, and in-direct cost rates
In-house Personnel Reporting	Schedule C and D - salary information not filled in	Needs to have annual salary, benefit rate, and in-direct cost rates
In-house Personnel Employee Supervisio	Schedule C and D - salary information not filled in	Needs to have annual salary, benefit rate, and in-direct cost rates
In-house Personnel Equipment Maintenar	Schedule D - salary information not filled in and Equipment, tool related charges should be reported in Part 3.	
In-house non-personnel fuel	Schedule C and D - Equipment, tool related charges should be reported in Part 3	
In-house non-personnel Equipment Maint	Schedule C and D - fuel charges should be reported in Part 3	
Contract # of inspections	Schedule E - Number of contract inspections should be zero as cost is zero.	
Contract # of cleanings	Schedule E - Number of contract cleanings should be zero as cost is zero.	
	Why is FY 09-10 almost double the per inspection cost?	

Specific Questions

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of El Cajon		
Contact Person :	Jaime Campos	Alternate:	Dennis Davies
Phone :	619-441-5554	Phone:	619-441-1661
E-Mail :	Jcampos@ci.el-cajon.ca.us	E-Mail:	Ddavies@ci.el-cajon.ca.us

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$12,699		$13,080		$13,472	
Conveyance System Cleaning Operations		$25,921		$26,699		$27,500
Reporting	**$15,997**	**$15,997**	**$16,477**	**$16,477**	**$16,971**	**$16,971**
Employee Supervision and Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$7,986	$16,304	$7,986	$16,304	$7,986	$16,304
Fuel	$0	$0	$0	$0	$0	$0
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$36,682**	**$58,222**	**$37,543**	**$59,479**	**$38,429**	**$60,774**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$0		$0	
Conveyance System Cleaning Operations Contract		$0		$0		$0
Reporting	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$36,682**	**$58,222**	**$37,543**	**$59,479**	**$38,429**	**$60,774**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	480		486		490	
Unit Cost per Inspection	**$76.42**		**$77.25**		**$78.43**	
b. Contract Results						
Number of Inspections	0		0		0	
Unit Cost per Inspection	**#DIV/0!**		**#DIV/0!**		**#DIV/0!**	
c. Combined Results						
Number of Inspections	480		486		490	
Unit Cost per Inspection	**$76.42**		**$77.25**		**$78.43**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		480		486		490
Unit Cost per Cleaning		**$121.29**		**$122.38**		**$124.03**
b. Contract Results						
Number of Cleanings		0		0		0
Unit Cost per Cleaning		**#DIV/0!**		**#DIV/0!**		**#DIV/0!**
c. Combined Results						
Number of Cleanings		480		486		490
Unit Cost per Cleaning		**$121.29**		**$122.38**		**$124.03**

Worksheet C: In-house Conveyance System Inspection Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
Part 1: Conveyance System Inspection Costs (Note 1)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	John Wilson	Equipment Operator	1	$44,460	58.15	4.446	$72,290	9.7	$7,012	0	$0	0	$0	
2	Gary Taylor	Maintenance Worker II	1	$35,496	61.61	3.549	$58,625	9.7	$5,687	0	$0	0	$0	
3	Bill Copper	Equipment Operator	1	$44,460	58.15	4.446	$72,290	0	$0	9.7	$7,223	0	$0	
4	Darryl Mack	Maintenance Worker II	1	$35,496	61.61	3.549	$58,625	0	$0	9.7	$5,857	0	$0	
5	Randy Rizzetto	Equipment Operator	1	$44,460	58.15	4.446	$72,290	0	$0	0	$0	9.7	$7,439	
6	Max Martinez	Maintenance Worker II	1	$35,496	61.61	3.549	$58,625	0	$0	0	$0	9.7	$6,033	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$12,699		$13,080		$13,472	

Source of Inspection Cost Information
Two City employees devote approximately 29.6% of their time inspecting and cleaning storm drain inlets, catch basins, and storm drain inlet filters. Approximately one third of the 29.6% is devoted to inspections (equivalent to 9.7%).

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Robert Griswold	Senior Engineering Technician	1	$62,514	46.21	**6251**	**$3,999,152**	**0.4**	**$15,997**	**0.4**	**$16,477**	**0.4**	**$16,971**	Approximately 8 hours per year in a year composed of approximately 1,992 hours.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$15,997**		**$16,477**		**$16,971**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	cost information. Also use this space to document any assumptions used to calculate costs.
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	**Source of Contract Management Cost Information**
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)	$7,986	$7,986	$7,986	Vehicle and Equipment Mainenance costs are estimated from an operating cost of $41.38/hour per truck. This estimate includes non-personnel costs such as maintenance and fueling of equipment and vehicles. Approximately
2	Fuel (Note 15)	$0	$0	$0	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$7,986	$7,986	$7,986	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$36,682	**$37,543**	**$38,429**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10
Number of Inspections	480	486	490
Unit Cost per Inspection	$ 76.42	$ 77.25	$ 78.43

Source of Inspection Results (Note 7)

The source of the inspection results come from the City maintenance crews. It is important to note that City crews inspect a larger number of inlets and catch basins but only the ones that need cleaning are counted in this survey.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 1: Conveyance System Cleaning Operations Costs (Note 16)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)
1	John Wilson	Equipment Operator	1	$44,460	58.15	4.446	$72,290	19.8	$14,313	0	$0	0	$0	
2	Gary Taylor	Maintenance Worker II	1	$35,496	61.61	3.549	$58,625	19.8	$11,608	0	$0	0	$0	
3	Bill Copper	Equipment Operator	1	$44,460	58.15	4.446	$72,290	0	$0	19.8	$14,743	0	$0	
4	Darryl Mack	Maintenance Worker II	1	$35,496	61.61	3.549	$58,625	0	$0	19.8	$11,956	0	$0	
5	Randy Rizzetto	Equipment Operator	1	$44,460	58.15	4.446	$72,290	0	$0	0	$0	19.8	$15,185	
6	Max Martinez	Maintenance Worker II	1	$35,496	61.61	3.549	$58,625	0	$0	0	$0	19.8	$12,315	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$25,921		$26,699		$27,500	

Source of Cleaning Cost Information

Two City employees devote approximately 29.6% of their time inspecting and cleaning storm drain inlets, catch basins, and storm drain inlet filters. Approximately two thirds of the 29.6% is devoted to cleaning (equivalent to 19.8%).

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Robert Griswold	Senior Engineering Technician	1	$62,514	46.21	**6251**	**$3,999,152**	**0.4**	**$15,997**	**0.4**	**$16,477**	**0.4**	**$16,971**	Approxitamely 8 hours per year in a year composed of approximately 1,992 hours.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$15,997**		**$16,477**		**$16,971**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$16,304	$16,304	$16,304
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$16,304	$16,304	$16,304

Source of Non-personnel Cost Information

Vehicle and Equipment Mainenance costs are estimated from an operating cost of $41.38/hour per truck. This estimate includes non-personnel costs such as maintenance and fueling of equipment and vehicles. Approximately 394

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$58,222	**$59,479**	**$60,774**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	480	486	490	The source of the inspection results come from the City maintenance crews.
Unit Cost per Cleaning	$ 121.29	$ 122.38	$ 124.03	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$0		$0	
2	Conveyance System Cleaning (Note 16)		$0		$0		$0
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$0	$0	$0	$0
2	Contract Management (Note 19)	$0	$0	$0	$0	$0	$0
3	Employee and Vendor Training (Note 10)	$0	$0	$0	$0	$0	$0
4	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	$0	$0	$0
	Non-personnel Costs						
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Inspections						
Number of Inspections	0		0		0	
Unit Cost per Inspection	#DIV/0!		#DIV/0!		#DIV/0!	
Cleanings						
Number of Cleanings		0		0		0
Unit Cost per Cleaning		#DIV/0!		#DIV/0!		#DIV/0!

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
In-house Personnel Conveyance System	Schedule C- Default indirect cost rate is 10%, higher than indirect cost rates used.
In-house Personnel Conveyance System	Schedule D- Default indirect cost rate is 10%, higher than indirect cost rates used.
In-house Personnel Reporting	Schedule C - Indirect cost rate used is 6,251 %. Assuming a 10% indirect cost rate, the total for (column H) would be $97,653. % of time should be 8/1992 or .4%. Assuming $97,653 total (above), the reporting costs would be $391.
In-house Personnel Reporting	Appears to be duplicate cost. Same amount recorded for cleaning as is reported for inspection

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Encinitas		
Contact Person :	Shawn Atherton	Alternate:	Erik Steenblock
Phone :	760-633-2871	Phone:	760-943-2108
E-Mail :	sather@cityofencinitas.org	E-Mail:	esteenblock@cityofencinitas.org

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$39,359		$40,540		$41,756	
Conveyance System Cleaning Operations		$137,756		$141,888		$146,145
Reporting	$0	$0	$0	$0	$0	$0
Employee Supervision and Management	**$32,615**	$13,806	**$33,593**	$14,220	**$34,601**	$14,647
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Equipment Maintenance	**$1,100**	$7,700	$1,133	$7,931	$1,167	$8,169
Contract Management	**$12,960**	$0	**$13,349**	$0	**$13,749**	$0
Non-personnel Costs						
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$86,034**	**$159,262**	**$88,615**	**$164,040**	**$91,273**	**$168,961**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$2		$2	
Conveyance System Cleaning Operations Contract		$0		$0		$0
Reporting	$0	$0	$2	$0	$2	$0
Contract Management	**$32,615**	$0	**$33,593**	$3	**$34,601**	$0
Employee and Vendor Training	$0	$1	$0	$0	$0	$0
Vehicle and Equipment Maintenance	**$12,960**	$2	$2	$2	$2	$2
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$1	$0	$0	$1
Training Equipment and Supplies	$1	$1	$0	$1	$1	$0
Total Contract Costs	**$45,576**	**$4**	**$33,600**	**$6**	**$34,608**	**$3**
Total Costs (In-house + Contractor)	**$131,610**	**$159,266**	**$122,215**	**$164,046**	**$125,881**	**$168,964**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	**2**		**2**		**2**	-
Unit Cost per Inspection	**$43,016.86**		**$44,307.37**		**$45,636.59**	
b. Contract Results						
Number of Inspections	450		450		450	
Unit Cost per Inspection	**$101.28**		**$74.67**		**$76.91**	
c. Combined Results						
Number of Inspections	452		452		452	
Unit Cost per Inspection	**$291.17**		**$270.39**		**$278.50**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		**1**		**1**		**1**
Unit Cost per Cleaning		**$159,261.80**		**$164,039.65**		**$168,960.84**
b. Contract Results						
Number of Cleanings		250		225		200
Unit Cost per Cleaning		**$0.02**		**$0.03**		**$0.02**
c. Combined Results						
Number of Cleanings		251		226		201
Unit Cost per Cleaning		**$634.53**		**$725.87**		**$840.62**

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 1: Conveyance System Inspection Costs (Note 1)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
1	Louie Trantalis	II	1	$50,460	45	50	$98,397	20	$19,679	20	$20,270	20	$20,878	
2	Dave Soto	U & M Wrkr II	1	$50,460	45	50	$98,397	20	$19,679	20	$20,270	20	$20,878	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$39,359		$40,540		$41,756	

Source of Inspection Cost Information

In 2007-2008, Each Employee's annual salary without benefits was $50,460, 08-09 was $52,229 and 09-10 was $54,226. We estimate 20% of each employees time is related to conveyance system inspection.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Ben Taylor	Field Supervisor	1	$70,800	45	50	$138,060	10	$13,806	10	$14,220	10	$14,647	City of Encinitas Salary Schedule for 2008, 2009 and 2010.
2	Shawn Atherton	Utility Superintendent	1	$96,456	45	50	$188,089	10	$18,809	10	$19,373	10	$19,954	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$32,615**		**$33,593**		**$34,601**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Vac-Con FM # 255	Equip. Operator (example)	1	$11,000	0	0	$11,000	10	$1,100	10	$1,133	10	$1,167	Budgeted amounts for Vac-Con

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	maintenance for 2008 was $11,000, $12,000 in 2009 and $14,000 in 2010.
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$1,100**		**$1,133**		**$1,167**	

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Downstream Services	Storm Drain Filter Insert Maintenance	1	$12,960	0	0	$12,960	100	$12,960	100	$13,349	100	$13,749	Annual Contract for 2008, 2009 and 2010; $12,960.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$12,960**		**$13,349**		**$13,749**	

Source of Contract Management Cost Information

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$86,034	**$88,615**	**$91,273**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	2	2	2	Identify the source of inspection results. Also use this space to document any assumptions used to calculate inspection results.
Unit Cost per Inspection	$ 43,016.86	$ 44,307.37	$ 45,636.59	

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Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)

Part 1: Conveyance System Cleaning Operations Costs (Note 16)

Use lines 1-20 if auto-calculating annual inspection costs for each year

1	Louie Trantalis	Utility Wrkr II	1	$50,460	45	50	$98,397	70	$68,878	70	$70,944	70	$73,073	
2	David Soto	Utility Wrkr II	1	$50,460	45	50	$98,397	70	$68,878	70	$70,944	70	$73,073	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$137,756		$141,888		$146,145	

Source of Cleaning Cost Information

Annual Salary without benefits for each employee was; $50,460 in 2008, $52,229 in 2009 and $54,226 in 2010. We estimate that each employee spent 70% of their time related to Storm Drain Cleaning.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Ben Taylor	Field Supervisor	1	$70,800	45	50	$138,060	10	$13,806	10	$14,220	10	$14,647	City of Encinitas Annual Salary Schedule for 2008, 2009 and 2010
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$13,806**		**$14,220**		**$14,647**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Vac-Con FM#255	Combination Sewer and Storm Drain cleaning Truck	1	$11,000	0	0	$11,000	70	$7,700	70	$7,931	70	$8,169
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$7,700**		**$7,931**		**$8,169**

Source of Equipment Maintenance Cost Information

Annual Budget for Vac-Con Maintenance was $11,000 in 2008, $12,000 in 2009 and $14,000 in 2010

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$159,262	**$164,040**	**$168,961**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	1	1	1	Identify the source of inspection results. Also use this space to document any assumptions used to calculate cleaning results.
Unit Cost per Cleaning	##########	##########	##########	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$2		$2	
2	Conveyance System Cleaning (Note 16)		$0		$0		$0
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$2	$0	$2	$0
2	Contract Management (Note 19)	**$32,615**	**$0**	**$33,593**	**$3**	**$34,601**	**$0**
3	Employee and Vendor Training (Note 10)	$0	$1	$0	$0	$0	$0
4	14)	**$12,960**	$2	$2	$2	$2	$2
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$1	$0	$0	$1
3	Training Materials and Supplies (Note 10)	$1	$1	$0	$1	$1	$0
	Total Contract Costs	**$45,576**	**$4**	**$33,600**	**$6**	**$34,608**	**$3**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
Inspections	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Number of Inspections	**450**		**450**		**450**	
Unit Cost per Inspection	**$ 101.28**		**$ 74.67**		**$ 76.91**	
Cleanings						
Number of Cleanings		**250**		**225**		**200**
Unit Cost per Cleaning		**$ 0.02**		**$ 0.03**		**$ 0.02**

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
In-house Personnel Employee Supervisic	Duplicate costs. See Schedules C and E.
In-house Personnel Equipment Maintena	Duplicate costs. See Schedules C and E.
In-house Personnel Contract Manageme	Duplicate cost. See coding from Schedule C.
In-house non-personnel Equipment Main	No nonpersonnel costs were reported.
In-house non-personnel fuel	No nonpersonnel costs were reported.
Contractor Contract Management	Schedule E - Duplicate costs. Already reported in Schedule C.
Contractor Vehicle and Equipment Maint	Schedule E - Duplicate costs. Already reported in Schedule C.
Total Contract Costs	Change to inhouse cleaning reporting only
In-house # of inspections	Change to inhouse reporting only , appears numbers not added, looks like default from template
Contract # of inspections	Change to inhouse reporting only appears numbers not added, looks like default from template
Total # of inspections	Change to inhouse reporting only
In-house # of cleanings	Change to inhouse reporting only appears numbers not added, looks like default from template
Contract # of cleanings	Change to inhouse reporting only appears numbers not added, looks like default from template
Total # of cleanings	Change to inhouse reporting only

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)
inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.
17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).
18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.
19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.
20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).
22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.
23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)
25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Escondido		
Contact Person :	Dan Young	Alternate:	
Phone :	760 839-4600	Phone:	
E-Mail :	dkyoung@escondido.org	E-Mail:	

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$37,269		$38,387		$39,538	
Conveyance System Cleaning Operations		$336,752		$346,855		$357,260
Reporting	$9,515	$7,188	$9,801	$7,403	$10,095	$7,626
Employee Supervision and Management	$34,751	$34,498	$35,794	$35,533	$36,868	$36,599
Employee and Vendor Training	$3,379	$3,551	$3,481	$3,658	$3,585	$3,768
Equipment Maintenance	$7,454	$7,454	$7,677	$7,677	$7,908	$7,908
Contract Management	$678	$678	$698	$698	$719	$719
Non-personnel Costs						
Equipment Maintenance	$79,096	$0	$80,431	$0	$103,852	$6,165
Fuel	$26,635	$0	$18,936	$0	$15,850	$0
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$198,777**	**$390,121**	**$195,205**	**$401,825**	**$218,415**	**$420,044**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$210,000		$2	
Conveyance System Cleaning Operations Contract		$54,900		$45,665		$46,187
Reporting	$9,515	$0	$2	$0	$2	$0
Contract Management	$34,751	$0	$35,794	$3	$36,868	$0
Employee and Vendor Training	$3,379	$1	$3,481	$0	$3,585	$0
Vehicle and Equipment Maintenance	$678	$2	$2	$2	$2	$2
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$1	$0	$0	$1
Training Equipment and Supplies	$1	$1	$0	$1	$1	$0
Total Contract Costs	**$48,325**	**$54,904**	**$249,280**	**$45,671**	**$40,460**	**$46,190**
Total Costs (In-house + Contractor)	**$247,102**	**$445,025**	**$444,484**	**$447,496**	**$258,875**	**$466,234**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	297		2163		376	
Unit Cost per Inspection	**$669.28**		**$90.25**		**$580.89**	
b. Contract Results						
Number of Inspections	450		450		450	
Unit Cost per Inspection	**$107.39**		**$553.95**		**$89.91**	
c. Combined Results						
Number of Inspections	747		2613		826	
Unit Cost per Inspection	**$330.79**		**$170.10**		**$313.41**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		139		172		376
Unit Cost per Cleaning		**$2,806.63**		**$2,336.19**		**$1,117.14**
b. Contract Results						
Number of Cleanings		250		225		200
Unit Cost per Cleaning		**$219.62**		**$202.98**		**$230.95**
c. Combined Results						
Number of Cleanings		389		397		576
Unit Cost per Cleaning		**$1,144.02**		**$1,127.19**		**$809.43**

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 1: Conveyance System Inspection Costs (Note 1)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		Source of Information (Note 6)
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	
1	Mucino E.	Lead Technicain	1	$52,124	33	10	$74,537	25	$18,634	25	$19,193	25	$19,769	
2	Moreno J.	Lead technicain	1	$52,124	33	10	$74,537	25	$18,634	25	$19,193	25	$19,769	
3	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$37,269		$38,387		$39,538	

Source of Inspection Cost Information

People Soft report for salaries and wages. Inspections and customer generated service requests are split 25/25 and 45% of their time is spent cleaning the MS 4. 4% of their time is spent reporting.

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		Source of Information (Note 6)
Staff Person (Note 1)	Job Classification	Number in Class	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	
a. Reporting (Note 8)													

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Villalobos H	Supervisor	1	$62,104	33	10	$88,809	4	$3,552	4	$3,659	4	$3,769	People Soft reports, Daily activity logs and timecards
2	Mucino E.	Lead Tech.	1	$52,124	33	10	$74,537	4	$2,981	4	$3,071	4	$3,163	
3	Moreno J.	Lead Tech.	1	$52,124	33	10	$74,537	4	$2,981	4	$3,071	4	$3,163	
4	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	0	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
								Reporting Totals	**$9,515**		**$9,801**		**$10,095**	

b. Supervision and Management (Note 9)

	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Young D.	Superintendent	1	$79,000	33	10	$112,970	18.4	$20,786	18.4	$21,410	18.4	$22,052	People Soft reports, Daily activity logs and timecards
2	Villalobos H	Supervisor	1	$65,104	33	10	$93,099	15	$13,965	15	$14,384	15	$14,815	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
								Supervision and Management Totals	**$34,751**		**$35,794**		**$36,868**	

c. Employee and Vendor Training (Note 10)

	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Young D.	Superintendent	1	$79,000	33	10	$112,970	1	$1,130	1	$1,164	1	$1,198	an assumption of meetings and in-house training.
2	Villalobos H	Supervisor	1	$65,104	33	10	$93,099	1	$931	1	$959	1	$988	
3	Mucino E.	Lead Tech.	1	$52,124	33	10	$74,537	1	$745	1	$768	1	$791	
4	Moreno J.	Lead Tech.	1	$52,124	0	10	$57,336	1	$573	1	$591	1	$608	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
								Training Totals	**$3,379**		**$3,481**		**$3,585**	

d. Vehicle and Equipment Maintenance (Note 11)

	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Mucino E.	Primary Equip. Operator	1	$52,124	33	10	$74,537	5	$3,727	5	$3,839	5	$3,954	Based on daily maintenances and operators filter cleanings etc. Auto motive maintenace records.
2	Fleet Miantenace Staf	Mechanic I/II	1	$0	33	10	$0	0	$0	0	$0	0	$0	
3	Moreno J.	Lead Tech.	1	$52,124	33	10	$74,537	5	$3,727	5	$3,839	5	$3,954	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$7,454**		**$7,677**		**$7,908**	

e. Contract Management (Note 12)

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Use lines 1-5 if auto-calculating annual contract management costs for each year

														Source of Contract Management Cost Information
1	Young D.	Superintendent	1	$79,000	33	10	$112,970	0.6	$678	0.6	$698	0.6	$719	Based on time spent annually to administer contracts 12 hours.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$678**		**$698**		**$719**	

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)	$79,096	$80,431	$103,852	Automotive divisions asset magagment data base
2	Fuel (Note 15)	$26,635	$18,936	$15,850	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$105,731	$99,367	$119,702	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$198,777	**$195,205**	**$218,415**

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	297	2163	376	Azteca reports and daily logs
Unit Cost per Inspection	$ 669.28	$ 90.25	$ 580.89	

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Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 1: Conveyance System Cleaning Operations Costs (Note 16)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
1	Mucino E	Lead Tech.	1	$52,124	33	10	$74,537	70	$52,176	70	$53,741	70	$55,354	Based on two fulltime employee's for MS4 cleanings and inspections and one full time employee working in the lined and unlined channels and occasional use of temps (2)
2	Moreno J.	Lead Tech.	4	$52,124	33	10	$74,537	70	$208,704	70	$214,966	70	$221,415	
3	Quiroz J.	Tech II	1	$42,827	33	10	$61,243	70	$42,870	70	$44,156	70	$45,481	
4	Garcia C.	Tech II	1	$42,827	33	10	$61,243	25	$15,311	25	$15,770	25	$16,243	
5	Temporary Emp.	1000 Hr.	1	$26,603	23	10	$35,382	25	$8,845	25	$9,111	25	$9,384	
6	Temproary Emp.	1000 Hr.	1	$26,603	23	10	$35,382	25	$8,845	25	$9,111	25	$9,384	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$336,752		$346,855		$357,260	

Source of Cleaning Cost Information

Based on two fulltime employee's for MS4 cleanings and inspections and one full time employee working in the lined and unlined channels and occasional use of temps (2)

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

a. Reporting (Note 8)

Use lines 1-5 to auto-calculate annual reporting costs for each year

1	Mucino E	Lead Tech.	1	$52,124	33	10	$74,537	4	$2,981	4	$3,071	4	$3,163
2	Moreno J.	Lead Tech.	1	$52,124	33	10	$74,537	4	$2,981	4	$3,071	4	$3,163
3	Quiroz J.	Tech II	1	$42,827	33	10	$61,243	2	$1,225	2	$1,262	2	$1,299
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0

Source of Reporting Cost Information

People Soft reports, Daily activity logs and timecards

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$7,188**		**$7,403**		**$7,626**	

b. Supervision and Management (Note 9)

Use lines 1-5 if auto-calculating annual supervision and management costs for each year

1	Young D.	Superintendent	1	$79,000	33	10	$112,970	19	$21,464	19	$22,108	19	$22,771	
2	Villalobos H	Supervisor	1	$65,104	33	10	$93,099	14	$13,034	14	$13,425	14	$13,828	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$34,498**		**$35,533**		**$36,599**	

Source of Supervision & Management Cost Information

This is an assumption of time spent working on Storm water related tasks.

c. Employee and Vendor Training (Note 10)

Use lines 1-5 if auto-calculating annual training costs for each year

1	Young D.	Superintendent	1	$79,000	33	10	$112,970	1	$1,130	1	$1,164	1	$1,198	
2	Villalobos H	Supervisor	1	$65,104	33	10	$93,099	1	$931	1	$959	1	$988	
3	Mucino E.	Lead Tech.	1	$52,124	33	10	$74,537	1	$745	1	$768	1	$791	
4	Moreno J.	Lead Tech.	1	$52,124	33	10	$74,537	1	$745	1	$768	1	$791	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$3,551**		**$3,658**		**$3,768**	

Source of Training Cost Information

in-house training and meetings tailgates.

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Mucino E.	Primary Equip. Operator	1	$52,124	33	10	$74,537	5	$3,727	5	$3,839	5	$3,954	
2	Moreno J.	Lead Tech.	1	$52,124	33	10	$74,537	5	$3,727	5	$3,839	5	$3,954	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
							Equipment Maintenance Totals		**$7,454**		**$7,677**		**$7,908**	

Source of Equipment Maintenance Cost Information

Automotive divisions records and asset magagement

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
	e. Contract Management (Note 12)													
	Use lines 1-5 if auto-calculating annual contract management costs for each year													**Source of Contract Management Cost Information**
1	Young D.	Superitnendent	1	$79,000	33	10	$112,970	0.6	$678	0.6	$698	0.6	$719	Time spent admistrating contracts
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
							Equipment Maintenance Totals		**$678**		**$698**		**$719**	

Contract Management Totals

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$6,165	Automotive divisions records and asset magagement
2	Fuel (Note 15)	$0	$0	$0	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$0	$0	$6,165	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$390,121	**$401,825**	**$420,044**

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	139	172	376	Azteca reports
Unit Cost per Cleaning	$ 2,806.63	$ 2,336.19	$ 1,117.14	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$210,000		$2	
2	Conveyance System Cleaning (Note 16)		$54,900		$45,665		$46,187
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$9,515	$0	$2	$0	$2	$0
2	Contract Management (Note 19)	$34,751	$0	$35,794	$3	$36,868	$0
3	Employee and Vendor Training (Note 10)	$3,379	$1	$3,481	$0	$3,585	$0
4	14)	$678	$2	$2	$2	$2	$2
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$1	$0	$0	$1
3	Training Materials and Supplies (Note 10)	$1	$1	$0	$1	$1	$0
	Total Contract Costs	**$48,325**	**$54,904**	**$249,280**	**$45,671**	**$40,460**	**$46,190**

Source of Contract Cost Information (Note 6)

Dirived from copies of contracts.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
Inspections	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Number of Inspections	450		450		450	
Unit Cost per Inspection	$ 107.39		$ 553.95		$ 89.91	
Cleanings						
Number of Cleanings		250		225		200
Unit Cost per Cleaning		$ 219.62		$ 202.98		$ 230.95

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
Contractor Conveyance System Inspection Contrac	What was this annual contect for?
Suppl/ In-house Reporting Schedule E	Why reporting cost just for 2007-08?
Suppl/ In-house contract management	Why cost when no contract to manage?
Suppl/ In-house Vehicle and Equipment Maintenan	Why no nopersonnel costs?
Suppl/ In-house fuel	Why no nopersonnel costs?
In-house # of inspections	Why did not cost reflect the number of inspections? For example, in 2008-09 ?
Contract # of inspections	appears numbers not added, looks like default from template
Contract # of cleanings	appears numbers not added, looks like default from template. Why is the number of inspections the same, when costs increased five-fold?
In-house # of cleanings	Why did number double in 2009-2010 ,, but not cost ?

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Imperial Beach		
Contact Person :	Guy Nelson	Alternate:	Chris Helmer
Phone :	619-424-4095	Phone:	619-628-1370
E-Mail :	gnelson@cityofib.org	E-Mail:	chelmer@cityofib.org

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$53,336		$57,114		$65,542	
Conveyance System Cleaning Operations		$21,496		$16,375		$19,167
Reporting	$394	$197	$160	$80	$180	$90
Employee Supervision and Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$2,359	$0	$1,163	$0	$611
Equipment Maintenance	$2,320	$7,576	$4,353	$6,099	$2,029	$6,236
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$6,937	$2,535	$7,327	$1,105	$7,358	$1,195
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$62,987**	**$34,163**	**$68,954**	**$24,822**	**$75,109**	**$27,299**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$0		$0	
Conveyance System Cleaning Operations Contract		$0		$0		$0
Reporting	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$62,987**	**$34,163**	**$68,954**	**$24,822**	**$75,109**	**$27,299**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	**29**		**29**		**29**	
Unit Cost per Inspection	**$2,171.97**		**$2,377.72**		**$2,589.95**	
b. Contract Results						
Number of Inspections	0		0		0	
Unit Cost per Inspection	**#DIV/0!**		**#DIV/0!**		**#DIV/0!**	
c. Combined Results						
Number of Inspections	**29**		**29**		**29**	
Unit Cost per Inspection	**$2,171.97**		**$2,377.72**		**$2,589.95**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		36		31		56
Unit Cost per Cleaning		**$948.97**		**$800.71**		**$487.48**
b. Contract Results						
Number of Cleanings		0		0		0
Unit Cost per Cleaning		**#DIV/0!**		**#DIV/0!**		**#DIV/0!**
c. Combined Results						
Number of Cleanings		36		31		56
Unit Cost per Cleaning		**$948.97**		**$800.71**		**$487.48**

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 1: Conveyance System Inspection Costs (Note 1)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
1	Multiple	Maintenance Worker	5	$30,834	40.4	62	$62,408	0	$0	0	$0	0	$0	
2	Multiple	Maintenance Worker II	3	$48,735	40.4	62	$98,640	0	$0	0	$0	0	$0	
3	Cortez, Marco	Street Supervisor	1	$54,397	40.4	62	$110,100	0	$0	0	$0	0	$0	
4	Multiple	Maintenance Worker I	4	$36,455	40.4	62	$73,785	0	$0	0	$0	0	$0	
5	Lau, Peter	PW Superintendant	1	$62,295	40.4	62	$126,085	0	$0	0	$0	0	$0	
6	Moeller, Alan	Sewer Supervisor	1	$57,341	40.4	62	$116,058	0	$0	0	$0	0	$0	
7	Serrano, Anthony	Grounds and Facilities Supervisor	1	$58,063	40.4	62	$117,520	0	$0	0	$0	0	$0	
8	Finnie Bonnie	Administrative Assistant (CIP)	1	$31,732	40.4	62	$64,226	0	$0	0	$0	0	$0	
9	Multiple	Beach Maintenance Worker	3	$9,517	40.4	62	$19,262	0	$0	0	$0	0	$0	
10	Nelson, Guy	Environmental Program Specialist	1	$45,630	40.4	62	$92,355	0	$0	0	$0	0	$0	
11	Helmer, Christopher	Environmental Program Manager	1	$55,265	40.4	62	$111,856	0	$0	0	$0	0	$0	
12	Levien, Hank	Public Works Director	1	$131,803	40.4	62	$266,769	0	$0	0	$0	0	$0	
13	Barber, James	Tidelands Supervisor	1	$59,290	40.4	62	$120,003	0	$0	0	$0	0	$0	
14							$0	0	$0	0	$0	0	$0	
15							$0	0	$0	0	$0	0	$0	
16							$0	0	$0	0	$0	0	$0	
17							$0	0	$0	0	$0	0	$0	
18							$0	0	$0	0	$0	0	$0	
19							$0	0	$0	0	$0	0	$0	
20							$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$53,336		$57,114		$65,542	
								TOTALS	$53,336		$57,114		$65,542	

Source of Inspection Cost Information

Information comes from our work order accounting system. All public works employees must account for every hour worked including time to clean the storm drain. Wage changes and benefit percentages are adjusted for the fiscal year. Benefit percent was averaged to

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Multiple	Environmental Program Manager	2	$55,265	40.4	62	$111,856	0	$0	0	$0	0	$0	Costs of reporting were calculated by using the percentage of the JURMP program dedicated to reporting conveyance system cleaning. Work order hours charged to reporting were multiplied by this factor to arrive at the final numbers.
2	Multiple	Environmental Program Specialist	2	$45,630	40.4	62	$92,355	0	$0	0	$0	0	$0	
3	Levien, Hank	Public Works Director	1	$131,803	40.4	62	$266,769	0	$0	0	$0	0	$0	
4	Galaviz, Sonia	Customer Service Specialist	1	$19,730	40.4	62	$39,934	0	$0	0	$0	0	$0	
5							$0		$0		$0		$0	
6	Use line 6 to insert total reporting costs for each year								$394		$160		$180	
							Reporting Totals		**$394**		**$160**		**$180**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1							$0	0	$0	0	$0	0	$0	Due to the size of Imperial Beach, this category is included in other sections. Managers do not often only supervize to the extent that the data could be meaningfully extrapolated.
2							$0	0	$0	0	$0	0	$0	
3							$0	0	$0	0	$0	0	$0	
4							$0	0	$0	0	$0	0	$0	
5							$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1							$0	0	$0	0	$0	0	$0	Inspection training is done on the job and is therefore absorbed into the cost of conducting inspections.
2							$0	0	$0	0	$0	0	$0	
3							$0	0	$0	0	$0	0	$0	
4							$0	0	$0	0	$0	0	$0	
5							$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

d. Vehicle and Equipment Maintenance (Note 11)

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Aguirre, Jose	Maintenance Worker	1	$30,834	40.4	62	$62,408	0	$0	0	$0	0	$0
2	Levien Henry	Public Works Director	1	$131,803	40.4	62	$266,769	0	$0	0	$0	0	$0
3	Multiple	Maintenance Worker I	1	$36,455	40.4	62	$73,785	0	$0	0	$0	0	$0
4	King, Michael	Fleet Supervisor	1	$61,202	40.4	62	$123,873	0	$0	0	$0	0	$0
5	Murphy, Michael	Mechanic II	1	$49,613	40.4	62	$100,417	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$2,320		$4,353		$2,029
							Equipment Maintenance Totals		**$2,320**		**$4,353**		**$2,029**

Source of Equipment Maintenance Cost Information

Employees charge time to maintaining storm drain inspection equipment including vehicles. We assumed that the equipment being maintained related to the amount of personnel hours where that equipment was likely used. Time which did not include storm drain

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1							$0	0	$0	0	$0	0	$0
2							$0	0	$0	0	$0	0	$0
3							$0	0	$0	0	$0	0	$0
4							$0	0	$0	0	$0	0	$0
5							$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
							Contract Management Totals		**$0**		**$0**		**$0**

Source of Contract Management Cost Information

No contracts were used to manage inspections.

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$6,937	$7,327	$7,358
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$6,937	$7,327	$7,358

Source of Non-personnel Cost Information

Price assumed to be $3 per gallon. Amount discounted by percent of time assumed for storm drain inspections.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$62,987	**$68,954**	**$75,109**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	29	29	29	Inspections in Imperial Beach are documented by location rather than a specific purpose. i.e. a neighborhood inspection likely includes inspection of the sewer, storm drain, streets, and other facilities. This is the number of types of inspections included rather than the
Unit Cost per Inspection	$ 2,171.97	$ 2,377.72	$ 2,589.95	

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)
Part 1: Conveyance System Cleaning Operations Costs (Note 16)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Multiple	Maintenance Worker	3	$30,834	40.4	62	$62,408		$0	0	$0	0	$0	
2	Casas, Manuel	Maintenance Worker II	1	$48,735	40.4	62	$98,640		$0	0	$0	0	$0	
3	Cortez, Marco	Street Supervisor	1	$54,397	40.4	62	$110,100		$0	0	$0	0	$0	
4	Multiple	Maintenance Worker I	3	$36,455	40.4	62	$73,785		$0	0	$0	0	$0	
5	Lau, Peter	PW Superintendant	1	$62,295	40.4	62	$126,085		$0	0	$0	0	$0	
6	Moeller, Alan	Sewer Supervisor	1	$57,341	40.4	62	$116,058		$0	0	$0	0	$0	
7	Serrano, Anthony	Grounds and Facilities Supervisor	1	$58,063	40.4	62	$117,520	0	$0	0	$0	0	$0	
8							$0	0	$0	0	$0	0	$0	
9							$0	0	$0	0	$0	0	$0	
10							$0	0	$0	0	$0	0	$0	
11							$0	0	$0	0	$0	0	$0	
12							$0	0	$0	0	$0	0	$0	
13							$0	0	$0	0	$0	0	$0	
14							$0	0	$0	0	$0	0	$0	
15							$0	0	$0	0	$0	0	$0	
16							$0	0	$0	0	$0	0	$0	
17							$0	0	$0	0	$0	0	$0	
18							$0	0	$0	0	$0	0	$0	
19							$0	0	$0	0	$0	0	$0	
20							$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$21,496		$16,375		$19,167	
								TOTALS	$21,496		$16,375		$19,167	

Source of Cleaning Cost Information

Information comes from our work order accounting system. All public works employees must account for every hour worked including time to clean the storm drain. Wage changes and benefit percentages are adjusted for the fiscal year. Benefit percent was averaged to 42% for

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													
1	Multiple	Environmental Program Manager	2	$55,265	40.4	62	$111,856	0	$0	0	$0	0	$0	
2	Multiple	Environmental Program Specialist	2	$45,630	40.4	62	$92,355	0	$0	0	$0	0	$0	
3	Levien, Hank	Public Works Director	1	$131,803	40.4	62	$266,769	0	$0	0	$0	0	$0	
4	Galaviz, Sonia	Customer Service Specialist	1	$19,730	40.4	62	$39,934	0	$0	0	$0	0	$0	
5							$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$197		$80		$90	
							Reporting Totals		**$197**		**$80**		**$90**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													
1							$0	0	$0	0	$0	0	$0	
2							$0	0	$0	0	$0	0	$0	
3							$0	0	$0	0	$0	0	$0	
4							$0	0	$0	0	$0	0	$0	
5							$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													
1	Multiple	Too many to list	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple		1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name		1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name		1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name		1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$2,359		$1,163		$611	
							Training Totals		**$2,359**		**$1,163**		**$611**	

Source of Reporting Cost Information

Costs of reporting were calculated by using the percentage of the JURMP program dedicated to reporting conveyance system cleaning. Work order hours charged to reporting were multiplied by this factor to arrive at the final numbers.

Source of Supervision & Management Cost Information

Due to the size of Imperial Beach, this category is included in other sections. Managers do not often only supervize to the extent that the data could be meaningfully extrapolated.

Source of Training Cost Information

Hours were charged by employees for training to use our Vactor truck. This is the training required for cleaning the storm drain.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Multiple	Maintenance Worker	4	$30,834	40.4	62	$62,408	0	$0	0	$0	0	$0
2	Multiple	Maintenance Worker I	2	$36,455	40.4	62	$73,785	0	$0	0	$0	0	$0
3	King, Michael	Fleet Supervisor	1	$61,202	40.4	62	$123,873	0	$0	0	$0	0	$0
4	Moeller, Alan	Sewer Supervisor	1	$57,341	40.4	62	$116,058	0	$0	0	$0	0	$0
5	Murphy, Michael	Mechanic II	1	$49,613	40.4	62	$100,417	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$7,576		$6,099		$6,236
							Equipment Maintenance Totals		**$7,576**		**$6,099**		**$6,236**

Source of Equipment Maintenance Cost Information

Employees charge time to maintaining storm drain cleaning equipment including the vactor truck. We assumed that the equipment being maintained related to the amount of personnel hours where that equipment was likely used. Time which did not include storm drain cleaning was

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1							$0	0	$0	0	$0	0	$0
2							$0	0	$0	0	$0	0	$0
3							$0	0	$0	0	$0	0	$0
4							$0	0	$0	0	$0	0	$0
5							$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
							Contract Management Totals		**$0**		**$0**		**$0**

Source of Contract Management Cost Information

No contracts were used to clean the storm drain in these periods.

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$2,535	$1,105	$1,195
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$2,535	$1,105	$1,195

Source of Non-personnel Cost Information

Our large Vactor truck is primarily used for storm drain cleaning. The cost of fuel for this equipment was discounted by the percent of time the equipment was probably used for storm drain cleaning.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$34,163	**$24,822**	**$27,299**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	36	31	56	Used the number of cleaning sessions/locations.
Unit Cost per Cleaning	$ 948.97	$ 800.71	$ 487.48	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0					
2	Conveyance System Cleaning (Note 16)		$0				$0
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)						
2	Contract Management (Note 19)	$0					
3	Employee and Vendor Training (Note 10)	$0					
4	14)	$0					
	Non-personnel Costs						
1	14)						
2	Fuel (Note 15)						
3	Training Materials and Supplies (Note 10)						
	Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Inspections						
Number of Inspections						
Unit Cost per Inspection	#DIV/0!		#DIV/0!		#DIV/0!	
Cleanings						
Number of Cleanings						
Unit Cost per Cleaning		#DIV/0!		#DIV/0!		#DIV/0!

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
In-house Personnel Conveyance System I	Please provide work order accounting system summary sheet of costs charged to this code.
In-house Personnel Conveyance System (	Please provide work order accounting system summary sheet of costs charged to this code.
In-house Personnel Reporting	Please provide work order accounting system summary sheet of costs charged to this code.
In-house Personnel Equipment Maintenan	Please provide work order accounting system summary sheet of costs charged to this code.

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of La Mesa		
Contact Person :	Joe Kuhn	Alternate:	Hamed Hashemian
Phone :	619-667-1340	Phone:	619-667-1153
E-Mail :	jkuhn@ci.la-mesa.ca.us	E-Mail:	hhashemian@ci.la-mesa.ca.us

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$30,912		$25,564		$44,761	
Conveyance System Cleaning Operations		$28,866		$23,457		$43,676
Reporting	$5,114	$3,069	$5,268	$3,161	$5,426	$3,256
Employee Supervision and Management	$10,229	$10,229	$10,536	$10,536	$10,852	$10,852
Employee and Vendor Training	$540	$540	$540	$540	$540	$540
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$0	$19,880	$0	$19,880	$0	$19,880
Fuel	$2,943	$2,943	$2,943	$2,943	$2,355	$2,355
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$49,738**	**$65,526**	**$44,851**	**$60,516**	**$63,934**	**$80,558**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$0		$0	
Conveyance System Cleaning Operations Contract		$0		$0		$0
Reporting	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$49,738**	**$65,526**	**$44,851**	**$60,516**	**$63,934**	**$80,558**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	800		800		800	
Unit Cost per Inspection	**$62.17**		**$56.06**		**$79.92**	
b. Contract Results						
Number of Inspections	0		0		0	
Unit Cost per Inspection	**#DIV/0!**		**#DIV/0!**		**#DIV/0!**	
c. Combined Results						
Number of Inspections	800		800		800	
Unit Cost per Inspection	**$62.17**		**$56.06**		**$79.92**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		800		800		800
Unit Cost per Cleaning		**$81.91**		**$75.65**		**$100.70**
b. Contract Results						
Number of Cleanings		0		0		0
Unit Cost per Cleaning		**#DIV/0!**		**#DIV/0!**		**#DIV/0!**
c. Combined Results						
Number of Cleanings		800		800		800
Unit Cost per Cleaning		**$81.91**		**$75.65**		**$100.70**

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 1: Conveyance System Inspection Costs (Note 1)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		Source of Information (Note 6)
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Alexander, Keith	Maint Wkr III	1	$46,248	54.05	10	$75,870	4	$3,035	2	$1,563	1.5	$1,207	
4	Bell, Matt	Maint Wkr II	1	$42,048	54.05	10	$68,980	0	$0	2.5	$1,776	7	$5,123	
5	Byerly, Mike	Maint Wkr III	1	$46,248	54.05	10	$75,870	4.5	$3,414	5.5	$4,298	4	$3,220	
6	Chiaramonte,Jack	Operator	1	$48,480	54.05	10	$79,531	0	$0	2.5	$2,048	3	$2,531	
7	Harmon, Kellen	Maint Wkr II	1	$42,048	54.05	10	$68,980	4.5	$3,104	3	$2,131	0	$0	
8	Hill, John	Lead Worker	1	$53,292	54.05	10	$87,426	1	$874	0	$0	1	$927	
9	Lotze, Steve	Equip Operator	1	$48,480	54.05	10	$79,531	5	$3,977	6	$4,915	4	$3,375	
10	Maurer, Steve	Supervisor	1	$62,352	54.05	10	$102,288	4	$4,092	4	$4,214	4	$4,341	
11	Mitchell, Nick	Maint Wkr II	1	$42,048	54.05	10	$68,980	18	$12,416	6.5	$4,618	22	$16,100	
12	Menocal, Juan	Maint Wkr I	1	$38,004	54.05	10	$62,346	0	$0	0	$0	12	$7,937	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$30,912		$25,564		$44,761	

Information

Source of Information: Wastewater Supervisor. Supervior used work order assignments from past years to calculate along with Best Professional Judgement for inforemation not recorded or easily available. Salary information: La Mesa HR Salary Info document 2010

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Information**
1	Maurer, Steve	Supervisor	1	$62,352	54.05	10	$102,288	5	$5,114	5	$5,268	5	$5,426	Source of Information: Wastewater Supervisor. Supervior used work order assignments from past years to calculate along with Best Professional Judgement for information not recorded or easily available. Salary information: La Mesa HR Salary Info document
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$5,114**		**$5,268**		**$5,426**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Maurer, Steve	Supervisor	1	$62,352	54.05	10	$102,288	10	$10,229	10	$10,536	10	$10,852	Source of Information: Wastewater Supervisor. Supervior used work order assignments from past years to calculate along with Best Professional Judgement for information not recorded or easily available. Salary information: La Mesa HR Salary Info document
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$10,229**		**$10,536**		**$10,852**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Total Training Budget $2700, Estimated 20% related to SD inspection..
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$540		$540		$540	
							Training Totals		**$540**		**$540**		**$540**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
							Equipment Maintenance Totals		**$0**		**$0**		**$0**	
	e. Contract Management (Note 12)													
	Use lines 1-5 if auto-calculating annual contract management costs for each year													**Source of Contract Management Cost Information**
1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
							Contract Management Totals		**$0**		**$0**		**$0**	

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	Information collected from City Public Works Budget. Diesel Fuel for storm drain cleaning vehicles spilt 50% each for cleaning and maintenance.. Fuel budget decreased 20% from 2008-2009.
2	Fuel (Note 15)	$2,943	$2,943	$2,355	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$2,943	$2,943	$2,355	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$49,738	**$44,851**	**$63,934**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	800	800	800	The City has approximaely 400 inlets and catch basins which are inspected 2x per year.
Unit Cost per Inspection	$ 62.17	$ 56.06	$ 79.92	

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Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 1: Conveyance System Cleaning Operations Costs (Note 16)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)
1	Alexander, Keith	Maint Wkr III	1	$46,248	54.05	10	$75,870	4	$3,035	2	$1,563	1.5	$1,207	
2	Bell, Matt	Maint Wkr II	1	$42,048	54.05	10	$68,980	0	$0	2.5	$1,776	7	$5,123	
3	Byerly, Mike	Maint Wkr III	1	$46,248	54.05	10	$75,870	4.5	$3,414	5.5	$4,298	4	$3,220	
4	Chiaramonte,Jack	Equip Operator	1	$48,480	54.05	10	$79,531	0	$0	2.5	$2,048	3	$2,531	
5	Harmon, Kellen	Maint Wkr II	1	$42,048	54.05	10	$68,980	4.5	$3,104	3	$2,131	0	$0	
6	Hill, John	Lead Worker	1	$53,292	54.05	10	$87,426	1	$874	0	$0	1	$927	
7	Lotze, Steve	Equip Operator	1	$48,480	54.05	10	$79,531	5	$3,977	6	$4,915	4	$3,375	
8	Maurer	Supervisor	1	$62,352	54.05	10	$102,288	2	$2,046	2	$2,107	3	$3,256	
9	Mitchell, Nick	Maint Wkr II	1	$42,048	54.05	10	$68,980	18	$12,416	6.5	$4,618	22	$16,100	
10	Menocal, Juan	Maint Wkr I	1	$38,004	54.05	10	$62,346	0	$0	0	$0	12	$7,937	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$28,866		$23,457		$43,676	

Source of Cleaning Cost Information

Source of Information: Wastewater Supervisor. Supervior used work order assignments from past years to calculate along with Best Professional Judgement for inforemation not recorded or easily available. Salary information: La Mesa HR Salary Info document 2010

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Maurer, Steve	Supervisor	1	$62,352	54.05	10	$102,288	3	$3,069	3	$3,161	3	$3,256	Source of Information: Wastewater Supervisor. Supervior used work order assignments from past years to calculate along with Best Professional Judgement for information not recorded or easily available. Salary information: La Mesa HR Salary Info document
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$3,069**		**$3,161**		**$3,256**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Maurer, Steve	Supervisor	1	$62,352	54.05	10	$102,288	10	$10,229	10	$10,536	10	$10,852	Source of Information: Wastewater Supervisor. Supervior used work order assignments from past years to calculate along with Best Professional Judgement for information not recorded or easily available. Salary information: La Mesa HR Salary Info document
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$10,229**		**$10,536**		**$10,852**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Total Training Budget $2700, Estimated 20% related to SD cleaning.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$540		$540		$540	
							Training Totals		**$540**		**$540**		**$540**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

Source of Equipment Maintenance Cost Information

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Source of Contract Management Cost Information

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$19,880	$19,880	$19,880
2	Fuel (Note 15)	$2,943	$2,943	$2,355
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$22,823	$22,823	$22,235

Source of Non-personnel Cost Information

Information collected from City Public Works Budget. Storm Drain vactor maintenance ($3200), SD rodding supplies ($5150), storm drain related traffic control ($520), storm drain related hardware and supplies ($4000), water for SD cleaning

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$65,526	**$60,516**	**$80,558**

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10
Number of Cleanings	800	800	800
Unit Cost per Cleaning	$ 81.91	$ 75.65	$ 100.70

Source of Cleaning Results (Note 17)

The City has approximaely 400 inlets and catch basins which are cleaned 2x per year

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$0		$0	
2	Conveyance System Cleaning (Note 16)		$0		$0		$0
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$0	$0	$0	$0
2	Contract Management (Note 19)	$0	$0	$0	$0	$0	$0
3	Employee and Vendor Training (Note 10)	$0	$0	$0	$0	$0	$0
4	14)	$0	$0	$0	$0	$0	$0
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

No Contacts related to Storm Drain Inspection and Maintenance

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Inspections						
Number of Inspections	0		0		0	
Unit Cost per Inspection	#DIV/0!		#DIV/0!		#DIV/0!	
Cleanings						
Number of Cleanings		0		0		0
Unit Cost per Cleaning		#DIV/0!		#DIV/0!		#DIV/0!

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
In-house Personnel Equipment Maintenance	Why no maintence costs?
In-house non-personnel Equipment Maintenance	Why no maintence costs?
# of in-house inspections and cleanings	Confirm that all inlets and catch basins are inspected and cleaned twice a year.

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City or County		
Contact Person :	John Smith	Alternate:	Susan Jones
Phone :	619-123-1234	Phone:	619-123-1237
E-Mail :	John.smith@city.gov	E-Mail:	Susan.Jones@city.gov

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$62,347		$64,217		$66,143	
Conveyance System Cleaning Operations		$93,520		$96,325		$99,215
Reporting	$15,146	$15,146	$15,600	$15,600	$16,068	$16,068
Employee Supervision and Management	$39,605	$51,744	$40,794	$53,296	$42,017	$54,895
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$117,098**	**$160,409**	**$120,611**	**$165,222**	**$124,229**	**$170,178**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	**$0**		**$2**		**$2**	
Conveyance System Cleaning Operations Contract		**$0**		**$0**		**$0**
Reporting	**$15,146**	**$0**	**$2**	**$0**	**$2**	**$0**
Contract Management	**$39,605**	**$0**	**$40,794**	**$3**	**$42,017**	**$0**
Employee and Vendor Training	**$0**	**$1**	**$0**	**$0**	**$0**	**$0**
Vehicle and Equipment Maintenance	**$0**	**$2**	**$2**	**$2**	**$2**	**$2**
Non-personnel Costs						
Vehicle and Equipment Maintenance	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fuel	**$0**	**$0**	**$1**	**$0**	**$0**	**$1**
Training Equipment and Supplies	**$1**	**$1**	**$0**	**$1**	**$1**	**$0**
Total Contract Costs	**$54,752**	**$4**	**$40,801**	**$6**	**$42,024**	**$3**
Total Costs (In-house + Contractor)	**$171,850**	**$160,413**	**$161,411**	**$165,228**	**$166,253**	**$170,181**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	**2**		**2**		**2**	
Unit Cost per Inspection	**$58,548.82**		**$60,305.28**		**$62,114.44**	
b. Contract Results						
Number of Inspections	**450**		**450**		**450**	
Unit Cost per Inspection	**$121.67**		**$90.67**		**$93.39**	
c. Combined Results						
Number of Inspections	**452**		**452**		**452**	
Unit Cost per Inspection	**$380.20**		**$357.10**		**$367.82**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		**1**		**1**		**1**
Unit Cost per Cleaning		**$160,409.44**		**$165,221.72**		**$170,178.38**
b. Contract Results						
Number of Cleanings		**250**		**225**		**200**
Unit Cost per Cleaning		**$0.02**		**$0.03**		**$0.02**
c. Combined Results						
Number of Cleanings		**251**		**226**		**201**
Unit Cost per Cleaning		**$639.10**		**$731.10**		**$846.67**

Worksheet C: In-house Conveyance System Inspection Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
Part 1: Conveyance System Inspection Costs (Note 1)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Ricardo Mendoza	Streets Supervisor	1	$73,792	0	10	$81,171	20	$16,234	20	$16,721	20	$17,223	
2	Calvin Hunt	Streets Tech II	1	$57,204	0	10	$62,924	20	$12,585	20	$12,962	20	$13,351	
3	Sam Landeros	Streets Tech II	1	$57,204	0	10	$62,924	20	$12,585	20	$12,962	20	$13,351	
4	John McDonald	Streets Tech I	1	$47,597	0	10	$52,356	20	$10,471	20	$10,785	20	$11,109	
5	Steven Relucio	Streets Tech I	1	$47,597	0	10	$52,357	20	$10,471	20	$10,785	20	$11,109	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$62,347		$64,217		$66,143	

Information

City's HR Department is the source of the information. The annual salary number presented is the fully loaded salary for those employees. It includes their benefits.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Information**
1	Cora Long	Analyst (example)	1	$91,792	0	10	$100,972	15	$15,146	15	$15,600	15	$16,068	City's HR department provided the information. As above the hourly rate porvided includes benefits.
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$15,146**		**$15,600**		**$16,068**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Pat Lund	Director	1	$139,349	0	10	$153,284	10	$15,328	10	$15,788	10	$16,262	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Tom Bell	Departmental Supervisor	1	$110,350	0	10	$121,385	20	$24,277	20	$25,005	20	$25,755	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$39,605**		**$40,794**		**$42,017**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
							Equipment Maintenance Totals		**$0**		**$0**		**$0**	
	e. Contract Management (Note 12)													
	Use lines 1-5 if auto-calculating annual contract management costs for each year													**Source of Contract Management Cost Information**
1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
							Contract Management Totals		**$0**		**$0**		**$0**	

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.
2	Fuel (Note 15)	$0	$0	$0	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$0	$0	$0	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$117,098	**$120,611**	**$124,229**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	2	2	2	Identify the source of inspection results. Also use this space to document any assumptions used to calculate inspection results.
Unit Cost per Inspection	$ 58,548.82	$ 60,305.28	$ 62,114.44	

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 1: Conveyance System Cleaning Operations Costs (Note 16)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		Source of Information (Note 6)
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	
1	Ricardo Mendoza	Streets Supervisor	1	$73,792	0	10	$81,171	30	$24,351	30	$25,082	30	$25,834	
2	Calvin Hunt	Streets Tech II	1	$57,204	0	10	$62,924	30	$18,877	30	$19,444	30	$20,027	
3	Sam Lenderos	Streets Tech II	1	$57,204	0	10	$62,924	30	$18,877	30	$19,444	30	$20,027	
4	John McDonald	Streets Tech I	1	$47,597	0	10	$52,357	30	$15,707	30	$16,178	30	$16,664	
5	Steven Relucio	Streets Tech I	1	$47,597	0	10	$52,357	30	$15,707	30	$16,178	30	$16,664	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$93,520		$96,325		$99,215	

Source of Cleaning Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Cora Long	Analyst	1	$91,792	0	10	$100,972	15	$15,146	15	$15,600	15	$16,068	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$15,146**		**$15,600**		**$16,068**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Pat Lund	Director	1	$139,349	0	10	$153,284	10	$15,328	10	$15,788	10	$16,262	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Tom Bell	Departmenal Supervisor	1	$110,350	0	10	$121,385	30	$36,415	30	$37,508	30	$38,633	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$51,744**		**$53,296**		**$54,895**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$160,409	**$165,222**	**$170,178**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	1	1	1	Identify the source of inspection results. Also use this space to document any assumptions used to calculate cleaning results.
Unit Cost per Cleaning	##########	##########	##########	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		**$2**		**$2**	
2	Conveyance System Cleaning (Note 16)		$0		$0		$0
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	**$15,146**	$0	**$2**	$0	**$2**	$0
2	Contract Management (Note 19)	**$39,605**	**$0**	**$40,794**	$3	**$42,017**	**$0**
3	Employee and Vendor Training (Note 10)	$0	**$1**	$0	$0	$0	$0
4	14)	$0	**$2**	**$2**	**$2**	**$2**	**$2**
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$1	$0	$0	**$1**
3	Training Materials and Supplies (Note 10)	**$1**	**$1**	**$0**	**$1**	**$1**	**$0**
	Total Contract Costs	**$54,752**	**$4**	**$40,801**	**$6**	**$42,024**	**$3**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
Inspections	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Number of Inspections	**450**		**450**		**450**	
Unit Cost per Inspection	$ 121.67		$ 90.67		$ 93.39	
Cleanings						
Number of Cleanings		**250**		**225**		**200**
Unit Cost per Cleaning		$ 0.02		$ 0.03		$ 0.02

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
General Information	Error: Lemon Grove Contact information is missing.
B. Contractor Costs	E.
In-house # of inspections	appears numbers not added, looks like default from template
Contract # of inspections	appears numbers not added, looks like default from template
Total # of inspections	appears numbers not added, looks like default from template
In-house # of cleanings	appears numbers not added, looks like default from template
Contract # of cleanings	appears numbers not added, looks like default from template
Total # of cleanings	appears numbers not added, looks like default from template

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Oceanside		
Contact Person :	Kiel Koger	Alternate:	Larry Boston
Phone :	760-435-5089	Phone:	760-435-5123
E-Mail :	hkkoger@ci.oceanside.ca.us	E-Mail:	lboston@ci.oceanside.ca.us

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$141,682		$145,932		$150,310	
Conveyance System Cleaning Operations		$113,130		$116,524		$120,020
Reporting	$0	$0	$0	$0	$0	$0
Employee Supervision and Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Equipment Maintenance	$22,949	$91,796	$23,638	$94,550	$24,347	$97,387
Contract Management	$1,549	$1,549	$1,595	$1,595	$1,643	$1,643
Non-personnel Costs						
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$166,179**	**$206,475**	**$171,165**	**$212,670**	**$176,300**	**$219,050**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$67,580		$67,580		$67,580	
Conveyance System Cleaning Operations Contract		$67,580		$67,580		$67,580
Reporting	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0
Total Contract Costs	**$67,580**	**$67,580**	**$67,580**	**$67,580**	**$67,580**	**$67,580**
Total Costs (In-house + Contractor)	**$233,759**	**$274,055**	**$238,745**	**$280,250**	**$243,880**	**$286,630**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	1000		1000		1000	
Unit Cost per Inspection	**$166.18**		**$171.16**		**$176.30**	
b. Contract Results						
Number of Inspections	3500		3500		3500	
Unit Cost per Inspection	**$19.31**		**$19.31**		**$19.31**	
c. Combined Results						
Number of Inspections	4500		4500		4500	
Unit Cost per Inspection	**$51.95**		**$53.05**		**$54.20**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		1000		1000		1000
Unit Cost per Cleaning		**$206.48**		**$212.67**		**$219.05**
b. Contract Results						
Number of Cleanings		3500		3500		3500
Unit Cost per Cleaning		**$19.31**		**$19.31**		**$19.31**
c. Combined Results						
Number of Cleanings		4500		4500		4500
Unit Cost per Cleaning		**$60.90**		**$62.28**		**$63.70**

Worksheet C: In-house Conveyance System Inspection Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
Part 1: Conveyance System Inspection Costs (Note 1)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													**Information**
1	Larry Boston	Supervisor	1	$76,606	43	10	$117,207	5	$5,860	5	$6,036	5	$6,217	Finance Department
2	Mark Sabelis	Specialist	1	$61,401	45	10	$95,172	50	$47,586	50	$49,013	50	$50,484	
3	Mike Dengler	Maintenance Worker III	1	$53,581	51	10	$86,265	20	$17,253	20	$17,771	20	$18,304	
4	Victor Guillen	Maintenance Worker III	1	$53,581	51	10	$86,265	20	$17,253	20	$17,771	20	$18,304	
5	Leif Johnson	Maintenance Worker II	1	$51,438	39	10	$76,643	20	$15,329	20	$15,788	20	$16,262	
6	Juan Soriano	Maintenance Worker II	1	$51,438	39	10	$76,643	20	$15,329	20	$15,788	20	$16,262	
7	Bill Tuck	Maintenance Worker II	1	$51,438	39	10	$76,643	20	$15,329	20	$15,788	20	$16,262	
8	Kiel Koger	Maintenance Manager	1	$113,048	27	10	$154,876	5	$7,744	5	$7,976	5	$8,215	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$141,682		$145,932		$150,310	

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Fleet	Yellow Gear (13 pieces of Equipment)	1	$208,628	0	10	$229,491	10	$22,949	10	$23,638	10	$24,347	Fleet
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
							Equipment Maintenance Totals		**$22,949**		**$23,638**		**$24,347**	
	e. Contract Management (Note 12)													
	Use lines 1-5 if auto-calculating annual contract management costs for each year													**Source of Contract Management Cost Information**
1	Kiel Koger	Maintenance Manager	1	$113,048	27	10	$154,876	1	$1,549	1	$1,595	1	$1,643	Finance
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
							Contract Management Totals		**$1,549**		**$1,595**		**$1,643**	

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.
2	Fuel (Note 15)	$0	$0	$0	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$0	$0	$0	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$166,179	**$171,165**	**$176,300**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	1000	1000	1000	Identify the source of inspection results. Also use this space to document any assumptions used to calculate inspection results.
Unit Cost per Inspection	$ 166.18	$ 171.16	$ 176.30	

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Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 1: Conveyance System Cleaning Operations Costs (Note 16)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		Source of Information (Note 6)
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	
1	Larry Boston	Supervisor	1	$76,606	43	10	$117,207	5	$5,860	5	$6,036	5	$6,217	
2	Mark Sabelis	Specialist	1	$61,401	45	10	$95,172	20	$19,034	20	$19,605	20	$20,193	
3	Mike Dengler	Maintenance Worker III	1	$53,581	51	10	$86,265	20	$17,253	20	$17,771	20	$18,304	
4	Victor Guillen	Maintenance Worker III	1	$53,581	51	10	$86,265	20	$17,253	20	$17,771	20	$18,304	
5	Leif Johnson	Maintenance Worker II	1	$51,438	39	10	$76,643	20	$15,329	20	$15,788	20	$16,262	
6	Juan Soriano	Maintenance Worker II	1	$51,438	39	10	$76,643	20	$15,329	20	$15,788	20	$16,262	
7	Bill Tuck	Maintenance Worker II	1	$51,438	39	10	$76,643	20	$15,329	20	$15,788	20	$16,262	
8	Kiel Koger	Maintenance Manager	1	$113,048	27	10	$154,876	5	$7,744	5	$7,976	5	$8,215	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$113,130		$116,524		$120,020	

Source of Cleaning Cost Information
Finance Department

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Fleet	Yellow Gear (13 pieces of Equipment)	1	$208,628	0	10	$229,491	40	$91,796	40	$94,550	40	$97,387
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$91,796**		**$94,550**		**$97,387**

Source of Equipment Maintenance Cost Information

Fleet

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Kiel Koger	Maintenance Manager	1	$113,048	27	10	$154,876	1	$1,549	1	$1,595	1	$1,643
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$1,549**		**$1,595**		**$1,643**

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$206,475	**$212,670**	**$219,050**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	1000	1000	1000	Identify the source of inspection results. Also use this space to document any assumptions used to calculate cleaning results.
Unit Cost per Cleaning	$ 206.48	$ 212.67	$ 219.05	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$67,580		$67,580		$67,580	
2	Conveyance System Cleaning (Note 16)		$67,580		$67,580		$67,580
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$0	$0	$0	$0
2	Contract Management (Note 19)	$0	$0	$0	$0	$0	$0
3	Employee and Vendor Training (Note 10)	$0	$0	$0	$0	$0	$0
4	14)	$0	$0	$0	$0	$0	$0
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0	$0	$0	$0
	Total Contract Costs	**$67,580**	**$67,580**	**$67,580**	**$67,580**	**$67,580**	**$67,580**

Source of Contract Cost Information (Note 6)

Public Works Department

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
Inspections	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Number of Inspections	3500		3500		3500	
Unit Cost per Inspection	$ 19.31		$ 19.31		$ 19.31	
Cleanings						
Number of Cleanings		3500		3500		3500
Unit Cost per Cleaning		$ 19.31		$ 19.31		$ 19.31

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
In-house Personnel Reporting	Why no reporting costs?
In-house non-personnel Equipment Maintenan	Why no maintenance, fuel costs ?
In-house non-personnel fuel	Why no maintenance, fuel costs ?
In-house # of inspections	Are these inspections different from contract inspections?
Contract # of inspections	Is there a cleanng each time there is an inspection?
In-house # of cleanings	How are these cleanings different than contract cleanings?
Contract # of cleanings	Is there a cleanng each time there is an inspection?

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Poway		
Contact Person :	Pat Ryan	Alternate:	Kevin Quinn
Phone :	858-668-4717	Phone:	858-668-4717
E-Mail :	pryan@poway.org	E-Mail:	kquinn@poway.org

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$9,974		$12,422		$15,239	
Conveyance System Cleaning Operations		$11,112		$8,403		$6,096
Reporting	$861	$430	$887	$443	$913	$457
Employee Supervision and Management	$861	$0	$887	$0	$913	$0
Employee and Vendor Training	$271	$271	$279	$279	$288	$288
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$5,508	$6,111	$6,660	$4,509	$7,920	$3,173
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$17,475**	**$17,924**	**$21,135**	**$13,634**	**$25,273**	**$10,012**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$0		$0	
Conveyance System Cleaning Operations Contract		$0		$0		$0
Reporting	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$17,475**	**$17,924**	**$21,135**	**$13,634**	**$25,273**	**$10,012**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	1452		1452		1452	
Unit Cost per Inspection	**$12.03**		**$14.56**		**$17.41**	
b. Contract Results						
Number of Inspections	0		0		0	
Unit Cost per Inspection	**#DIV/0!**		**#DIV/0!**		**#DIV/0!**	
c. Combined Results						
Number of Inspections	1452		1452		1452	
Unit Cost per Inspection	**$12.03**		**$14.56**		**$17.41**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		170		151		68
Unit Cost per Cleaning		**$105.44**		**$90.29**		**$147.24**
b. Contract Results						
Number of Cleanings		0		0		0
Unit Cost per Cleaning		**#DIV/0!**		**#DIV/0!**		**#DIV/0!**
c. Combined Results						
Number of Cleanings		170		151		68
Unit Cost per Cleaning		**$105.44**		**$90.29**		**$147.24**

Worksheet C: In-house Conveyance System Inspection Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
Part 1: Conveyance System Inspection Costs (Note 1)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Const. Maint. II TB	CMW II	1	$44,203	46.86	15	$71,547	3.68	$2,633	4.45	$3,279	5.3	$4,023	
2	Const. Maint. II BG	CMW II	1	$42,098	46.79	15	$68,110	3.68	$2,506	4.45	$3,122	5.3	$3,830	
3	Const. Maint. II CT	CMW II	1	$42,098	46.53	15	$68,001	3.68	$2,502	4.45	$3,117	5.3	$3,824	
4	Const. Maint. II JL	CMW II	1	$38,193	50.91	15	$63,366	3.68	$2,332	4.45	$2,904	5.3	$3,563	
5	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
6	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
7	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
8	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
9	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
10	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
11	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
12	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
13	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
15	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
16	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
17	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
18	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
19	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
20	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$9,974		$12,422		$15,239	

Information

Salaries from 07/08 Personnel Calculation Worksheet. Inspections 07/08 306 hrs, 08/09 370 hrs, 09/10 440 hrs, 2080 Total Annual Hours. Peter Moote, The city-wide overhead rate for FY 2007-08 was 15%.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Information**
1	Const. Maint Sup. K(	Supervisor	1	$67,261	45	15	$107,618	0.8	$861	0.8	$887	0.8	$913	Salaries from 07/08 Personnel Calculation Worksheet. Estimated 16 hrs Reporting, 2080 Total Annual Hours. Peter Moote, The city-wide overhead rate for FY 2007-08 was 15%.
2	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
3	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
4	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
5	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$861**		**$887**		**$913**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Const. Maint Sup. K(	Supervisor	1	$67,261	45	15	$107,618	0.8	$861	0.8	$887	0.8	$913	Salaries from 07/08 Personnel Calculation Worksheet. Estimated 16 hrs Supervision/Management, 2080 Total Annual Hours. Peter Moote, The city-wide overhead rate for FY 2007-08 was 15%.
2	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
3	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
5	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$861**		**$887**		**$913**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Const. Maint. II TB	CMW II	1	$44,203	46.86	15	$71,547	0.1	$72	0.1	$74	0.1	$76	Salaries from 07/08 Personnel Calculation Worksheet. Estimated 2 hrs Training, 2080 Total Annual Hours. Peter Moote, The city-wide overhead rate for FY 2007-08 was 15%.
2	Const. Maint. II BG	CMW II	1	$42,098	46.79	15	$68,110	0.1	$68	0.1	$70	0.1	$72	
3	Const. Maint. II CT	CMW II	1	$42,098	46.53	15	$68,001	0.1	$68	0.1	$70	0.1	$72	
4	Const. Maint. II JL	CMW II	1	$38,193	50.91	15	$63,366	0.1	$63	0.1	$65	0.1	$67	
5	NA	NA	1	$0	0	0	$0	0	$0	0	$0	0.1	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$271**		**$279**		**$288**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
3	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
4	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
5	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
							Equipment Maintenance Totals		**$0**		**$0**		**$0**	
	e. Contract Management (Note 12)													
	Use lines 1-5 if auto-calculating annual contract management costs for each year													**Source of Contract Management Cost Information**
1	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
3	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
4	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
5	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
							Contract Management Totals		**$0**		**$0**		**$0**	

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	Assumption, vehicles continue to operate during inspections using 6 gals per hour. 07/08 306 hrs, 08/09 370 hrs, 09/10 440 hrs. Average Fuel Cost $3.00/gal
2	Fuel (Note 15)	$5,508	$6,660	$7,920	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$5,508	$6,660	$7,920	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$17,475	**$21,135**	**$25,273**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	1452	1452	1452	Number of catch basins/inlets
Unit Cost per Inspection	$ 12.03	$ 14.56	$ 17.41	

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)
Part 1: Conveyance System Cleaning Operations Costs (Note 16)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Const. Maint. II TB	CMW II	1	$44,203	46.86	15	$71,547	4.1	$2,933	3.01	$2,218	2.12	$1,609	
2	Const. Maint. II BG	CMW II	1	$42,098	46.79	15	$68,110	4.1	$2,793	3.01	$2,112	2.12	$1,532	
3	Const. Maint. II CT	CMW II	1	$42,098	46.53	15	$68,001	4.1	$2,788	3.01	$2,108	2.12	$1,529	
4	Const. Maint. II JL	CMW II	1	$38,193	50.91	15	$63,366	4.1	$2,598	3.01	$1,965	2.12	$1,425	
5	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
6	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
7	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
8	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
9	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
10	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
11	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
12	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
13	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
14	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
15	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
16	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
17	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
18	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
19	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
20	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$11,112		$8,403		$6,096	

Source of Cleaning Cost Information

Salaries from 07/08 Personnel Calculation Worksheet. Inspections 07/08 339.5hrs, 08/09 250.5 hrs, 09/10 176.25 hrs 2080 Total Annual Hours. Peter Moote, The city-wide overhead rate for FY 2007-08 was 15%.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
a. Reporting (Note 8)														
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Const. Maint Sup. K(	Supervisor	1	$67,261	45	15	$107,618	0.4	$430	0.4	$443	0.4	$457	Salaries from 07/08 Personnel Calculation Worksheet. Estimated 8 hrs Reporting, 2080 Total Annual Hours. Peter Moote, The city-wide overhead rate for FY 2007-08 was 15%.
2	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
3	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
4	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
5	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$430**		**$443**		**$457**	
b. Supervision and Management (Note 9)														
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Const. Maint Sup. K(	Supervisor	1	$67,261	45	15	$107,618	0	$0	0	$0	0	$0	Salaries from 07/08 Personnel Calculation Worksheet. Estimated 8 hrs Supervision, 2080 Total Annual Hours. Peter Moote, The city-wide overhead rate for FY 2007-08 was 15%.
2	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
3	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
4	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
5	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
c. Employee and Vendor Training (Note 10)														
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Const. Maint. II TB	CMW II	1	$44,203	46.86	15	$71,547	0.1	$72	0.1	$74	0.1	$76	Salaries from 07/08 Personnel Calculation Worksheet. Estimated 2 hrs Training, 2080 Total Annual Hours. Peter Moote, The city-wide overhead rate for FY 2007-08 was 15%.
2	Const. Maint. II BG	CMW II	1	$42,098	46.79	15	$68,110	0.1	$68	0.1	$70	0.1	$72	
3	Const. Maint. II CT	CMW II	1	$42,098	46.53	15	$68,001	0.1	$68	0.1	$70	0.1	$72	
4	Const. Maint. II JL	CMW II	1	$38,193	50.91	15	$63,366	0.1	$63	0.1	$65	0.1	$67	
5	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$271**		**$279**		**$288**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0
2	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0
3	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0
4	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0
5	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0
2	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0
3	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0
4	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0
5	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$6,111	$4,509	$3,173
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$6,111	$4,509	$3,173

Source of Non-personnel Cost Information

Assumption, vehicles continue to operate during cleaning using 6 gals per hour. 07/08 339.5 hrs, 08/09 250.5 hrs, 09/10 176.25 hrs. Average Fuel Cost $3.00/gal

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$17,924	**$13,634**	**$10,012**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	170	151	68	Number of work orders to perform cleaning.
Unit Cost per Cleaning	$ 105.44	$ 90.29	$ 147.24	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$0		$0	
2	Conveyance System Cleaning (Note 16)		$0		$0		$0
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$0	$0	$0	$0
2	Contract Management (Note 19)	$0	$0	$0	$0	$0	$0
3	Employee and Vendor Training (Note 10)	$0	$0	$0	$0	$0	$0
4	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	$0	$0	$0
	Non-personnel Costs						
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Inspections						
Number of Inspections	0		0		0	
Unit Cost per Inspection	#DIV/0!		#DIV/0!		#DIV/0!	
Cleanings						
Number of Cleanings		0		0		0
Unit Cost per Cleaning		#DIV/0!		#DIV/0!		#DIV/0!

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
In-house Personnel Employee Supervision and Management	Error: Based on 8 hours/2080, should be .4% charge.

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)
inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.
17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).
18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.
19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.
20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).
22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.
23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)
25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City or County		
Contact Person :	John Smith	Alternate:	Susan Jones
Phone :	619-123-1234	Phone:	619-123-1237
E-Mail :	John.smith@city.gov	E-Mail:	Susan.Jones@city.gov

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$99,893		$91,506		$59,736	
Conveyance System Cleaning Operations		$278,664		$440,176		$307,904
Reporting	$0	$0	$0	$0	$0	$0
Employee Supervision and Management	$16,703	$0	$28,331	$0	$16,241	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$116,596**	**$278,664**	**$119,837**	**$440,176**	**$75,977**	**$307,904**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$2		$2	
Conveyance System Cleaning Operations Contract		$0		$0		$0
Reporting	$0	$0	$2	$0	$2	$0
Contract Management	$0	$0	$0	$3	$0	$0
Employee and Vendor Training	$0	$1	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$2	$2	$2	$2	$2
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$1	$0	$0	$1
Training Equipment and Supplies	$1	$1	$0	$1	$1	$0
Total Contract Costs	**$1**	**$4**	**$7**	**$6**	**$7**	**$3**
Total Costs (In-house + Contractor)	**$116,597**	**$278,668**	**$119,844**	**$440,182**	**$75,984**	**$307,907**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	2298		2391		2198	
Unit Cost per Inspection	**$50.73**		**$50.11**		**$34.56**	
b. Contract Results						
Number of Inspections	450		450		450	
Unit Cost per Inspection	**$0.00**		**$0.02**		**$0.02**	
c. Combined Results						
Number of Inspections	2748		2841		2648	
Unit Cost per Inspection	**$42.43**		**$42.18**		**$28.69**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		189		179		191
Unit Cost per Cleaning		**$1,474.41**		**$2,459.08**		**$1,612.06**
b. Contract Results						
Number of Cleanings		0		0		
Unit Cost per Cleaning		**$0.00**		**$0.00**		**$0.00**
c. Combined Results						
Number of Cleanings		0		0		0
Unit Cost per Cleaning		**$0.00**		**$0.00**		**$0.00**

Worksheet C: In-house Conveyance System Inspection Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)

Part 1: Conveyance System Inspection Costs (Note 1)

Use lines 1-20 if auto-calculating annual inspection costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$0		$0		$0	

Source of Inspection Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 1)	Job Classification	Number in Class	Annual Salary (Note 2)	Benefit rate (%) (Note 3)	Indirect cost rate %) (Note 4)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)

a. Reporting (Note 8)

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
								Reporting Totals	**$0**		**$0**		**$0**	

b. Supervision and Management (Note 9)

	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
								Supervision and Management Totals	**$0**		**$0**		**$0**	

c. Employee and Vendor Training (Note 10)

	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
								Training Totals	**$0**		**$0**		**$0**	

d. Vehicle and Equipment Maintenance (Note 11)

	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

e. Contract Management (Note 12)

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10
Number of Inspections	2	2	2
Unit Cost per Inspection	$ -	$ -	$ -

Source of Inspection Results (Note 7)

Identify the source of inspection results. Also use this space to document any assumptions used to calculate inspection results.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
Part 1: Conveyance System Cleaning Operations Costs (Note 16)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$0		$0		$0	

Source of Cleaning Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

a. Reporting (Note 8)

	Use lines 1-5 to auto-calculate annual reporting costs for each year													
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	

Source of Reporting Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	

b. Supervision and Management (Note 9)

	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	

c. Employee and Vendor Training (Note 10)

	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

d. Vehicle and Equipment Maintenance (Note 11)

	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
							Equipment Maintenance Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
	e. Contract Management (Note 12)													
	Use lines 1-5 if auto-calculating annual contract management costs for each year													
1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
							Equipment Maintenance Totals		**$0**		**$0**		**$0**	

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Contract Management Totals

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10
Number of Cleanings	1	1	1
Unit Cost per Cleaning	$ -	$ -	$ -

Source of Cleaning Results (Note 17)

Identify the source of inspection results. Also use this space to document any assumptions used to calculate cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$2		$2	
2	Conveyance System Cleaning (Note 16)		$0		$0		$0
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$2	$0	$2	$0
2	Contract Management (Note 19)	$0	$0	$0	$3	$0	$0
3	Employee and Vendor Training (Note 10)	$0	$1	$0	$0	$0	$0
4	14)	$0	$2	$2	$2	$2	$2
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$1	$0	$0	$1
3	Training Materials and Supplies (Note 10)	$1	$1	$0	$1	$1	$0
	Total Contract Costs	**$1**	**$4**	**$7**	**$6**	**$7**	**$3**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
Inspections	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Number of Inspections	450		450		450	
Unit Cost per Inspection	$ 0.00		$ 0.02		$ 0.02	
Cleanings						
Number of Cleanings		250		225		200
Unit Cost per Cleaning		$ 0.02		$ 0.03		$ 0.02

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of San Diego		
Contact Person :	Amanda Leos	Alternate:	Tracy Mangum
Phone :	858-541-4353	Phone:	(858) 541-4307
E-Mail :	avleos@sandiego.gov	E-Mail:	tmangum@sandiego.gov

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$135,838		$139,913		$144,110	
Conveyance System Cleaning Operations		$950,863		$979,389		$1,008,770
Reporting	$0	$0	$0	$0	$0	$0
Employee Supervision and Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$0	$703,154	$0	$1,246,621	$0	$517,627
Fuel	$0	$10,905	$0	$0	$0	$0
Training Materials and Supplies	$0	$213,059	$0	$40,954	$0	$282,112
Total In-house Costs	**$135,838**	**$1,877,980**	**$139,913**	**$2,266,964**	**$144,110**	**$1,808,509**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$672,466		$672,466		$619,416	
Conveyance System Cleaning Operations Contract		$0		$0		$0
Reporting	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0
Total Contract Costs	**$672,466**	**$0**	**$672,466**	**$0**	**$619,416**	**$0**
Total Costs (In-house + Contractor)	**$808,304**	**$1,877,980**	**$812,379**	**$2,266,964**	**$763,526**	**$1,808,509**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	10986		10986		10986	
Unit Cost per Inspection	**$12.36**		**$12.74**		**$13.12**	
b. Contract Results						
Number of Inspections	24020		24020		22122	
Unit Cost per Inspection	**$28.00**		**$28.00**		**$28.00**	
c. Combined Results						
Number of Inspections	35006		35006		33108	
Unit Cost per Inspection	**$23.09**		**$23.21**		**$23.06**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		5536		5536		5536
Unit Cost per Cleaning		**$339.23**		**$409.49**		**$326.68**
b. Contract Results						
Number of Cleanings		10377		10377		9556
Unit Cost per Cleaning		**$0.00**		**$0.00**		**$0.00**
c. Combined Results						
Number of Cleanings		15913		15913		15092
Unit Cost per Cleaning		**$118.02**		**$142.46**		**$119.83**

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 1: Conveyance System Inspection Costs (Note 1)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	FY 2007-08 Personnel Costs: % of time dedicated to inspections	FY 2007-08 Personnel Costs: Annual cost for inspections	FY 2008-09 Personnel Costs: % of time dedicated to inspections	FY 2008-09 Personnel Costs: Annual cost for inspections	FY 2009-10 Personnel Costs: % of time dedicated to inspections	FY 2009-10 Personnel Costs: Annual cost for inspections
1	D. Moreno	Equipment Operator I	1	$45,115	56	96.1	$113,735	10	$11,374	10	$11,715	10	$12,066
2	L. Bakker	Equipment Operator I	1	$45,115	56	96.1	$113,735	10	$11,374	10	$11,715	10	$12,066
3	T. O'Hara	Equipment Operator I	1	$45,115	56	96.1	$113,735	10	$11,374	10	$11,715	10	$12,066
4	V. Correa	Utility Worker II	1	$39,666	56	96.1	$99,997	10	$10,000	10	$10,300	10	$10,609
5	J. Mata	Utility Worker II	1	$39,666	56	96.1	$99,997	10	$10,000	10	$10,300	10	$10,609
6	J. Sanchez	Utility Worker II	1	$39,666	56	96.1	$99,997	10	$10,000	10	$10,300	10	$10,609
7	C. Watson	Utility Worker II	1	$39,666	56	96.1	$99,997	10	$10,000	10	$10,300	10	$10,609
8	J. Diaz	Utility Worker II	1	$39,666	56	96.1	$99,997	10	$10,000	10	$10,300	10	$10,609
9	J. Burgoin	Utility Worker I	1	$36,296	56	96.1	$91,502	10	$9,150	10	$9,425	10	$9,707
10	W. Hancock	Utility Worker I	1	$36,296	56	96.1	$91,502	10	$9,150	10	$9,425	10	$9,707
11	D. Sayles	Utility Worker I	1	$36,296	56	96.1	$91,502	10	$9,150	10	$9,425	10	$9,707
12	R.Hightower	Utility Worker I	1	$36,296	56	96.1	$91,502	10	$9,150	10	$9,425	10	$9,707
13	A. Snelling	Public Works Supervisor	1	$59,966	56	96.1	$151,175	10	$15,118	10	$15,571	10	$16,038
14				$0	0	10	$0	0	$0	0	$0	0	$0
15				$0	0	10	$0	0	$0	0	$0	0	$0
16				$0	0	10	$0	0	$0	0	$0	0	$0
17				$0	0	10	$0	0	$0	0	$0	0	$0
18				$0	0	10	$0	0	$0	0	$0	0	$0
19				$0	0	10	$0	0	$0	0	$0	0	$0
20				$0	0	10	$0	0	$0	0	$0	0	$0
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0
								TOTALS	$135,838		$139,913		$144,110

Source of Information (Note 6)

Source of Inspection Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Total Vehicle and Equipment

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	Maintenance captured
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Because the Non-personnel costs are minimal for inspections, all Non-Personnel costs are captured in the In-house inpsections reports.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$135,838	**$139,913**	**$144,110**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	10986	10986	10986	Only FY 2010 information was available for number of cleanings, so the same number was used for all fiscal years.
Unit Cost per Inspection	$ 12.36	$ 12.74	$ 13.12	

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Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 1: Conveyance System Cleaning Operations Costs (Note 16)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		Source of Information (Note 6)
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	
1	D. Moreno	Equipment Operator I	1	$45,115	56	96.1	$113,735	70	$79,615	70	$82,003	70	$84,463	
2	L. Bakker	Equipment Operator I	1	$45,115	56	96.1	$113,735	70	$79,615	70	$82,003	70	$84,463	
3	T. O'Hara	Equipment Operator I	1	$45,115	56	96.1	$113,735	70	$79,615	70	$82,003	70	$84,463	
4	V. Correa	Utility Worker II	1	$39,666	56	96.1	$99,997	70	$69,998	70	$72,098	70	$74,261	
5	J. Mata	Utility Worker II	1	$39,666	56	96.1	$99,997	70	$69,998	70	$72,098	70	$74,261	
6	J. Sanchez	Utility Worker II	1	$39,666	56	96.1	$99,997	70	$69,998	70	$72,098	70	$74,261	
7	C. Watson	Utility Worker II	1	$39,666	56	96.1	$99,997	70	$69,998	70	$72,098	70	$74,261	
8	J. Diaz	Utility Worker II	1	$39,666	56	96.1	$99,997	70	$69,998	70	$72,098	70	$74,261	
9	J. Burgoin	Utility Worker I	1	$36,296	56	96.1	$91,502	70	$64,052	70	$65,973	70	$67,952	
10	W. Hancock	Utility Worker I	1	$36,296	56	96.1	$91,502	70	$64,052	70	$65,973	70	$67,952	
11	D. Sayles	Utility Worker I	1	$36,296	56	96.1	$91,502	70	$64,052	70	$65,973	70	$67,952	
12	R.Hightower	Utility Worker I	1	$36,296	56	96.1	$91,502	70	$64,052	70	$65,973	70	$67,952	
13	A. Snelling	Public Works Supervisor	1	$59,966	56	96.1	$151,175	70	$105,823	70	$108,997	70	$112,267	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	70	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	70	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	70	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	70	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	70	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	70	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$950,863		$979,389		$1,008,770	

Source of Cleaning Cost Information

Annual Rate: City Personnel Salary Table; Indirect Cost Rate: City Comptroller Statement; Fringe Benefits: Actual Fringe % for FY 2008.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$703,154	$1,246,621	$517,627
2	Fuel (Note 15)	$10,905	$0	$0
3	Training Materials and Supplies (Note 10)	$213,059	$40,954	$282,112
	Total	$927,118	$1,287,575	$799,739

Source of Non-personnel Cost Information

Source: City of San Diego Comptroller reports. Fuel is already captured in the maintenance charges as part of the Storm Water's agreement with the City of San Diego's General Services Dept. - Equipment Division. Special fuel is

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$1,877,980	**$2,266,964**	**$1,808,509**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	5536	5536	5536	Only FY 2010 information was available for number of cleanings, so the same number was used for all fiscal years.
Unit Cost per Cleaning	$ 339.23	$ 409.49	$ 326.68	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$672,466		$672,466		$619,416	
2	Conveyance System Cleaning (Note 16)		$0				
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$0	$0	$0	$0
2	Contract Management (Note 19)	$0	$0	$0	$0	$0	$0
3	Employee and Vendor Training (Note 10)	$0	$0	$0	$0	$0	$0
4	14)	$0	$0	$0	$0	$0	$0
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0	$0	$0	$0
	Total Contract Costs	**$672,466**	**$0**	**$672,466**	**$0**	**$619,416**	**$0**

Source of Contract Cost Information (Note 6)

Purchase order/invoice reports and contractor information provided on a monthly basis.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
Inspections	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Number of Inspections	24020		24020		22122	
Unit Cost per Inspection	$ 28.00		$ 28.00		$ 28.00	
Cleanings						
Number of Cleanings		**10377**		**10377**		**9556**
Unit Cost per Cleaning		$ -		$ -		$ -

Source of Inspection and Cleaning Results (Note 7)

The Contract for Cleaninng Catch Basins is a $28 per unit all inclusive (inspections and cleaning) The actual amounts of Catch Basins cleaned were not available for FY 2008 and 2009, so the number of cleanings were calculated by using the % of catch basins cleaned in FY 2010.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
In-house Personnel Equipment Maintenan	Costs appear high versus other year(s). Plesae explain.
In-house Training Materials and Supplies	Costs appear high versus other year(s). Plesae explain.
Total Contract Costs	Per disclosure below, the number of inspections and cleanings should be the same and costs allocated between the two functions.
Contract # of cleanings	As is -- no cost for cleanings and the number of cleanings should be zero. But see above note.

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	San Marcos		
Contact Person :	Kathleen Trepa	Alternate:	Paul Buckley
Phone :	760-752-7550 x3333	Phone:	760-752-7550 x3314
E-Mail :	ktrepa@san-marcos.net	E-Mail:	pbuckley@san-marcos.net

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$2,061		$6,182		$19,915	
Conveyance System Cleaning Operations		$3,500		$10,507		$33,849
Reporting	$0	$0	$0	$19,555	$0	$112,669
Employee Supervision and Management	$4,847	$9,928	$9,984	$11,729	$14,470	$27,192
Employee and Vendor Training	$0	$1,485	$0	$1,531	$0	$1,578
Equipment Maintenance	$1,005	$2,252	$2,924	$6,686	$9,325	$21,322
Contract Management	$0	$852	$0	$878	$0	$905
Non-personnel Costs						
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Materials and Supplies	$0	$0	$0	$0	$0	$16,050
Total In-house Costs	**$7,913**	**$18,017**	**$19,090**	**$50,886**	**$43,711**	**$213,565**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$0		$0	
Conveyance System Cleaning Operations Contract		$2,000		$2,000		$2,000
Reporting	$0	$0	$0	$0	$0	$0
Contract Management	$0	$852	$0	$878	$0	$905
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0
Total Contract Costs	**$0**	**$2,852**	**$0**	**$2,878**	**$0**	**$2,905**
Total Costs (In-house + Contractor)	**$7,913**	**$20,868**	**$19,090**	**$53,764**	**$43,711**	**$216,470**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	263		765		2390	
Unit Cost per Inspection	**$30.10**		**$24.96**		**$18.29**	
b. Contract Results						
Number of Inspections	0		0		0	
Unit Cost per Inspection	**#DIV/0!**		**#DIV/0!**		**#DIV/0!**	
c. Combined Results						
Number of Inspections	263		765		2390	
Unit Cost per Inspection	**$30.10**		**$24.96**		**$18.29**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		100		300		941
Unit Cost per Cleaning		**$180.17**		**$169.62**		**$226.96**
b. Contract Results						
Number of Cleanings		18		18		18
Unit Cost per Cleaning		**$158.42**		**$159.88**		**$161.39**
c. Combined Results						
Number of Cleanings		118		318		959
Unit Cost per Cleaning		**$176.85**		**$169.07**		**$225.72**

Worksheet C: In-house Conveyance System Inspection Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
Part 1: Conveyance System Inspection Costs (Note 1) Used 2010 work management information as basis														
Use lines 1-20 if auto-calculating annual inspection costs for each year														
1	n/a		1	$0		10	$0	0	$0	0	$0	0	$0	
2	n/a		1	$0	0	10	$0	0.000	$0	0	$0	0	$0	
3	Multiple	Multiple	1	19,241		10	$19,915		$18,738		$19,318		$19,915	
4	n/a		1			10	$0		$0		$0		$0	
5	n/a		1			10	$0		$0		$0		$0	
6	n/a		1			10	$0		$0		$0		$0	
7	n/a		1			10	$0		$0		$0		$0	
8	n/a		1			10	$0		$0		$0		$0	
9	n/a		1			10	$0		$0		$0		$0	
10	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$2,061		$6,182		$19,915	
									11%		32%			

Source of Inspection Cost Information

Used work order management system for structure inspections only, and work load % based on what was cleaned for prior years. Total cost include a 75% benefit overhead rate = $19,241

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	n/a		1	$0		10	$0	0	$0	0	$0	0	$0	Work management system implementation to track cost detail began in FY 09-10 for Storm. Did not include any analyst time for developing reports, etc. Included all costs in Cleaning
2	n/a		4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	n/a			$0		10	$0	0	$0	0	$0	0	$0	
4	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Paul Buckley	Street Maintenance Superint	1	$78,888	75	10	$145,943	1	$1,459	2	$3,006		$0	Used payroll information; estimated time allocation. Time increased with change in requirements and more tools to track
2	Paul Buckley	PW Mgr / Streets & Storm	1	$94,000	75	10	$173,900	0	$0	0	$0	2	$3,690	
3	Jeff Bushnell	Street Maintenance Superv.	1	$91,548	75	10	$169,364	2	$3,387	4	$6,978	6	$10,781	
4	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$4,847**		**$9,984**		**$14,470**	

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

c. Employee and Vendor Training (Note 10)

Use lines 1-5 if auto-calculating annual training costs for each year

1	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total training costs for each year							$0		$0		$0
							Training Totals	**$0**		**$0**		**$0**

Source of Training Cost Information
Did not use

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year							$1,005		$2,924		$9,325
							Equipment Maintenance Totals	**$1,005**		**$2,924**		**$9,325**
								11%		32%		

Source of Equipment Maintenance Cost Information
Used usage rates in work management system and applied them for prior years, discounting each prior year by 2% & by different work load (based on tracking for actual cleaned).

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year							$0		$0		$0
							Contract Management Totals	**$0**		**$0**		**$0**

Source of Contract Management Cost Information
Included in Supervision / management.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)				See (d) for vehicle / equipment maintenance.
2	Fuel (Note 15)	$0	$0	$0	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$0	$0	$0	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$7,913	**$19,090**	**$43,711**

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	263	765	2390	work management system - assets attached to work orders & inspection records. Used 2010 information as representative of prior years.
Unit Cost per Inspection	$ 30.10	$ 24.96	$ 18.29	
	11%	32%		

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)
Part 1: Conveyance System Cleaning Operations Costs (Note 16)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	N/A		1				$0		$0	0	$0	0	$0	
2	n/a		1				$0		$0	0	$0	0	$0	
3	n/a		1				$0		$0	0	$0	0	$0	
4	n/a		1				$0		$0	0	$0	0	$0	
5	n/a		1				$0		$0	0	$0	0	$0	
6	n/a		1				$0		$0	0	$0	0	$0	
7	n/a		1				$0		$0	0	$0	0	$0	
8	n/a		1				$0		$0	0	$0	0	$0	
9	n/a		1				$0		$0	0	$0	0	$0	
10	n/a		1				$0		$0	0	$0	0	$0	
11	n/a		1				$0		$0	0	$0	0	$0	
12	n/a		1				$0		$0	0	$0	0	$0	
13	n/a		1				$0		$0	0	$0	0	$0	
14	n/a		1				$0		$0	0	$0	0	$0	
15	n/a		1				$0		$0	0	$0	0	$0	
16	n/a		1				$0		$0	0	$0	0	$0	
17	n/a		1				$0		$0	0	$0	0	$0	
18	n/a		1				$0		$0	0	$0	0	$0	
19	n/a		1				$0		$0	0	$0	0	$0	
20	n/a		1				$0		$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$3,500		$10,507		$33,849	
									11%		32%		100%	

Source of Cleaning Cost Information

Work Management reporting available for 09/10 - annualized. Used those costs for basis & the number of cleaned structures from prior tracking to estimate costs for what was performed.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Kathleen Trepa	Public Works Manager	1	$95,000	75	10	$175,750	0	$0	0	$0	25	$46,613	Configured asset / work management system & reporting (GBA). Storm implemented Spring 2010. time included verifying inventory, and training - program set up. Salaries actual for 1 - 2 & estimated for 3
2	Pete Ventura	Lead Maintenance Worker	1	$51,312	75	10	$94,927	0	$0	20	$19,555	50	$50,354	
3	Mettja Kuna	GIS Analyst	1	$80,000	75	10	$148,000	0	$0	0	$0	10	$15,701	
4	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	n/a		1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$19,555**		**$112,669**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Paul Buckley	Street Maintenance Superint	1	$78,888	75	10	$145,943	1	$1,459	2	$3,006	0	$0	Used payroll information.
2	Paul Buckley	PW Mgr / Streets & Storm	1	$94,000	75	10	$173,900	0	$0	0	$0	5	$9,225	
3	Jeff Bushnell / Greg Motas	Street Maintenance Superv. Staff change	1	$91,548	75	10	$169,364	5	$8,468	5	$8,722	10	$17,968	
4	n/a						$0	0	$0	0	$0	0	$0	
5	n/a						$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$9,928**		**$11,729**		**$27,192**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

c. Employee and Vendor Training (Note 10)

Use lines 1-5 if auto-calculating annual training costs for each year

1	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total training costs for each year							$1,485		$1,531		$1,578
							Training Totals	**$1,485**		**$1,531**		**$1,578**

Source of Training Cost Information

Dept wide annual NPDES training, from training records in work management system.

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year							$20,477		$20,895		$21,322
							Equipment Maintenance Totals	**$2,252**		**$6,686**		**$21,322**
								11%		32%		100%

Source of Equipment Maintenance Cost Information

Using usage rates in work management system and applied them for prior years, discounting each prior year by 2% & for amount of work performed in prior years.

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Pete Ventura	1	$0	0	10	$0	0	$852	0	$878		$905
3	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	n/a	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year							$0		$0		$0
							Contract Management Totals	**$852**		**$878**		**$905**

Source of Contract Management Cost Information

From work management system - FY 09-10, discounted 3% for prior years

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	See (d) for vehicle / equipment maintenance. Training materials = hardware, software, costs to implement asset / work management system, including computer upgrades to support software
2	Fuel (Note 15)	$0	$0	$0	
3	Training Materials and Supplies (Note 10)	$0	$0	$16,050	
	Total	$0	$0	$16,050	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$18,017	**$50,886**	**$213,565**

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	100	300	941	work management system - implemented FY 09-10. implementation costs captured in 09/10.
Unit Cost per Cleaning	$ 180.17	$ 169.62	$ 226.96	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$0		$0	
2	Conveyance System Cleaning (Note 16)		$2,000		$2,000		$2,000
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0		$0		$0
2	Contract Management (Note 19)	$0	$852	$0	$878	$0	$905
3	Employee and Vendor Training (Note 10)	$0		$0	$0	$0	$0
4	14)	$0					
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0		$0	$0	
3	Training Materials and Supplies (Note 10)			$0			$0
	Total Contract Costs	**$0**	**$2,852**	**$0**	**$2,878**	**$0**	**$2,905**

Source of Contract Cost Information (Note 6)

Contractor costs are captured in the city's work management system, which includes employee & vehicle time to manage / inspect work. So, this is actual documented cost. System implemented spring '09. Assumed same level for prior years. HYPERLINKS POINTED TO INCORRECT CELLS. FIXED REFERENCES - KST.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
Inspections	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Number of Inspections	0		0			
Unit Cost per Inspection	#DIV/0!		#DIV/0!		#DIV/0!	
Cleanings						
Number of Cleanings		18		18		18
Unit Cost per Cleaning		$ 158.42		$ 159.88		$ 161.39

Source of Inspection and Cleaning Results (Note 7)

Contract inspection time on In-house cleaning costs - wasn't sure where to put that here since the cells were linked to that sheet.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

GBA IMPLEMENTATION COSTS

Licensing	1	11,875
Training	1.00	2,675
computer upgrades	4	1,500
		16,050

Activity	Comment
In-house Personnel Conveyance System Inspection	75% benefit rate is high.
In-house Personnel Conveyance System Cleaning Operations	75% benefit rate is high.
In-house non-personnel Equipment Maintenance	No fuel, maintenance costs.
In-house non-personnel fuel	No fuel, maintenance costs.
In-house Personnel Employee Supervision and Management	75% benefit rate is high.

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Santee		
Contact Person :	Helen Perry	Alternate:	Bob Stein
Phone :	619-258-4100 X177	Phone:	619-258-4195 X102
E-Mail :	hperry@ci.santee.ca.us	E-Mail:	bstein@ci.santee.ca.us

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$4,797		$4,941		$5,090	
Conveyance System Cleaning Operations		$35,387		$36,449		$37,542
Reporting	$0	$1,529	$0	$1,575	$0	$1,622
Employee Supervision and Management	$1,529	$1,529	$1,575	$1,575	$1,622	$1,622
Employee and Vendor Training	$0	$24,679	$0	$25,419	$0	$26,182
Equipment Maintenance	$24,679	$24,679	$25,419	$25,419	$26,182	$26,182
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$1,000	$5,000	$1,000	$6,000	$1,200	$6,500
Fuel	$360	$3,120	$380	$3,500	$400	$4,200
Training Materials and Supplies	$50	$50	$50	$50	$50	$50
Total In-house Costs	**$32,415**	**$95,972**	**$33,365**	**$99,987**	**$34,543**	**$103,900**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$0		$0	
Conveyance System Cleaning Operations Contract		$0		$0		$0
Reporting	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$32,415**	**$95,972**	**$33,365**	**$99,987**	**$34,543**	**$103,900**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	1200		820		820	
Unit Cost per Inspection	**$27.01**		**$40.69**		**$42.13**	
b. Contract Results						
Number of Inspections	**450**		**450**		**450**	
Unit Cost per Inspection	**$0.00**		**$0.00**		**$0.00**	
c. Combined Results						
Number of Inspections	1650		1270		1270	
Unit Cost per Inspection	**$19.65**		**$26.27**		**$27.20**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		27		43		40
Unit Cost per Cleaning		**$3,554.54**		**$2,325.27**		**$2,597.49**
b. Contract Results						
Number of Cleanings		**250**		**225**		**200**
Unit Cost per Cleaning		**$0.00**		**$0.00**		**$0.00**
c. Combined Results						
Number of Cleanings		277		268		240
Unit Cost per Cleaning		**$346.47**		**$373.08**		**$432.92**

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 1: Conveyance System Inspection Costs (Note 1)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	FY 2007-08 Personnel Costs: % of time dedicated to inspections	FY 2007-08 Personnel Costs: Annual cost for inspections	FY 2008-09 Personnel Costs: % of time dedicated to inspections	FY 2008-09 Personnel Costs: Annual cost for inspections	FY 2009-10 Personnel Costs: % of time dedicated to inspections	FY 2009-10 Personnel Costs: Annual cost for inspections	Source of Information (Note 6)
1	Todd Vosburgh	Equip. Operator	1	$51,406	43.71	39.95	$94,411	1.7	$1,605	1.7	$1,653	1.7	$1,703	
2	Mark Ethridge	Equip. Operator	1	$51,406	43.71	39.95	$94,411	0.7	$661	0.7	$681	0.7	$701	
3	Sam Rensberry	P.W. Supervisor	1	$59,650	41.13	39.24	$107,591	1.3	$1,399	1.3	$1,441	1.3	$1,484	
4	Mike Poppe	Equip. Operator	1	$51,406	43.71	39.95	$94,411	0.5	$472	0.5	$486	0.5	$501	
5	Martin Ortega	Equip. Operator	1	$51,406	43.71	39.95	$94,411	0.3	$283	0.3	$292	0.3	$300	
6	Victor Michel	Equip. Operator	1	$51,406	43.71	39.95	$94,411	0.4	$378	0.4	$389	0.4	$401	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$4,797		$4,941		$5,090	

Source of Inspection Cost Information

Salary and personnel costs are taken from the actual salaries paid along with the costs for Health, Dental, Life, AD & D and PERS costs. The Percentage of time was calculated from daily time sheets.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	Included in Worksheet D under Reporting costs
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Bob Stein	P. S. Manager	1	$87,985	35.96	37.8	$152,884	1	$1,529	1	$1,575	1	$1,622	Salary and personnel costs are taken from the actual salaries paid along with the costs for Health, Dental, Life, AD & D and PERS costs. One percent is estimated as the time spent on Supervision and Management.
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$1,529**		**$1,575**		**$1,622**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	Included in Worksheet D under Training Cost Information.
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Sam Rensberry	P.W. Supervisor	1	$59,650	41.13	39.24	$107,591	1	$1,076	1	$1,108	1	$1,141	
2	Multiple	Equip. Operator	5	$51,406	43.71	39.95	$94,411	5	$23,603	5	$24,311	5	$25,040	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
							Equipment Maintenance Totals		**$24,679**		**$25,419**		**$26,182**	

Source of Equipment Maintenance Cost Information

Salary and personnel costs are taken from the actual salaries paid along with the costs for Health, Dental, Life, AD & D and PERS costs. Includes time spent on daily equipment and vehicle maintenance.

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
							Contract Management Totals		**$0**		**$0**		**$0**	

Source of Contract Management Cost Information

N/A

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$1,000	$1,000	$1,200
2	Fuel (Note 15)	$360	$380	$400
3	Training Materials and Supplies (Note 10)	$50	$50	$50
	Total	$1,410	$1,430	$1,650

Source of Non-personnel Cost Information

Provided by Public Services Manager.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$32,415	**$33,365**	**$34,543**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	1200	820	820	Information derived from the jurisdictional annual report.
Unit Cost per Inspection	$ 27.01	$ 40.69	$ 42.13	

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Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)

Part 1: Conveyance System Cleaning Operations Costs (Note 16)

Use lines 1-20 if auto-calculating annual inspection costs for each year

1	Todd Vosburgh	Equip. Operator	1	$51,406	43.71	39.95	$94,411	12.4	$11,707	12.4	$12,058	12.4	$12,420	
2	Mark Ethridge	Equip. Operator	1	$51,406	43.71	39.95	$94,411	5.4	$5,098	5.4	$5,251	5.4	$5,409	
3	Sam Rensberry	P.W. Supervisor	1	$59,650	41.13	39.24	$107,591	9.9	$10,651	9.9	$10,971	9.9	$11,300	
4	Mike Poppe	Equip. Operator	1	$51,406	43.71	39.95	$94,411	3.5	$3,304	3.5	$3,404	3.5	$3,506	
5	Martin Ortega	Equip. Operator	1	$51,406	43.71	39.95	$94,411	2.3	$2,171	2.3	$2,237	2.3	$2,304	
6	Victor Michel	Equip. Operator	1	$51,406	43.71	39.95	$94,411	2.6	$2,455	2.6	$2,528	2.6	$2,604	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$35,387		$36,449		$37,542	

Source of Cleaning Cost Information

Salary and personnel costs are taken from the actual salaries paid along with the costs for Health, Dental, Life, AD & D and PERS costs. The Percentage used was calculated from daily time sheets.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Bob Stein	P.S. Manager	$1	$87,985	35.96	37.8	$152,884	1	$1,529	1	$1,575	1	$1,622	Salary and personnel costs are taken from the actual salaries paid along with the costs for Health, Dental, Life, AD & D and PERS costs. One percent is estimated as the time needed to compile and complete this report.
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$1,529**		**$1,575**		**$1,622**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Bob Stein	P.S. Manager	1	$87,985	35.96	37.8	$152,884	1	$1,529	1	$1,575	1	$1,622	Salary and personnel costs are taken from the actual salaries paid along with the costs for Health, Dental, Life, AD & D and PERS costs. One percent is estimated as the time spent on Supervision and Management.
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$1,529**		**$1,575**		**$1,622**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Sam Rensberry	P.W. Supervisor	1	$59,650	41.13	39.24	$107,591	1	$1,076	1	$1,108	1	$1,141	Salary and personnel costs are taken from the actual salaries paid along with the costs for Health, Dental, Life, AD & D and PERS costs. Training is estimated as the time spent on annual as well as ongoing training which is part of the weekly training sessions for municipal
2	Multiple	Equip. Operator	5	$51,406	43.71	39.95	$94,411	5	$23,603	5	$24,311	5	$25,040	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$24,679**		**$25,419**		**$26,182**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Sam Rensberry	P.W. Supervisor	1	$59,650	41.13	39.24	$107,591	1	$1,076	1	$1,108	1	$1,141
2	Multiple	Equip. Operator	5	$51,406	43.71	39.95	$94,411	5	$23,603	5	$24,311	5	$25,040
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
							Equipment Maintenance Totals		**$24,679**		**$25,419**		**$26,182**

Source of Equipment Maintenance Cost Information

Salary and personnel costs are taken from the actual salaries paid along with the costs for Health, Dental, Life, AD & D and PERS costs. Includes time spent on daily equipment and vehicle maintenance.

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Bob Stein	P. S. Manager	1	$0	0	0	$0	1	$0	1	$0	1	$0
2	Christine Edwards	Admin. Secretary	1	$0	0	0	$0	1	$0	1	$0	1	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
							Contract Management Totals		**$0**		**$0**		**$0**

Source of Contract Management Cost Information

N/A

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$5,000	$6,000	$6,500
2	Fuel (Note 15)	$3,120	$3,500	$4,200
3	Training Materials and Supplies (Note 10)	$50	$50	$50
	Total	$8,170	$9,550	$10,750

Source of Non-personnel Cost Information

Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$95,972	**$99,987**	**$103,900**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	27	43	40	Identify the source of inspection results. Also use this space to document any assumptions used to calculate cleaning results.
Unit Cost per Cleaning	$ 3,554.54	$ 2,325.27	$ 2,597.49	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$0		$0	
2	Conveyance System Cleaning (Note 16)		$0		$0		$0
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$0	$0	$0	$0
2	Contract Management (Note 19)	$0	$0	$0	$0	$0	$0
3	Employee and Vendor Training (Note 10)	$0	$0	$0	$0	$0	$0
4	14)	$0	$0	$0	$0	$0	$0
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Inspections						
Number of Inspections	450		450		450	
Unit Cost per Inspection	$ -		$ -		$ -	
Cleanings						
Number of Cleanings		250		225		200
Unit Cost per Cleaning		$ -		$ -		$ -

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
Contract # of inspections	appears numbers not added or non contract work occurred, looks like default from template
Contract # of cleanings	appears numbers not added or non contract work occurred, looks like default from template

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	Solana Beach		
Contact Person :	Danny King	Alternate:	Mikhail Ogawa
Phone :	858-720-2477	Phone:	619-994-7074
E-Mail :	dking@cosb.org	E-Mail:	mikhail@mogawaeng.com

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$569		$587		$604	
Conveyance System Cleaning Operations		$1,479		$1,523		$1,569
Reporting	$913	$0	$940	$0	$968	$0
Employee Supervision and Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Materials and Supplies	$0	$0	$0	$0	$0	$0
Total In-house Costs	**$1,482**	**$1,479**	**$1,527**	**$1,523**	**$1,573**	**$1,569**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		$0		$0	
Conveyance System Cleaning Operations Contract		$0		$1,370		$4,690
Reporting	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$0	$0	$0	$0
Training Equipment and Supplies	$0	$0	$0	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**	**$1,370**	**$0**	**$4,690**
Total Costs (In-house + Contractor)	**$1,482**	**$1,479**	**$1,527**	**$2,893**	**$1,573**	**$6,259**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	309		309		309	
Unit Cost per Inspection	**$4.80**		**$4.94**		**$5.09**	
b. Contract Results						
Number of Inspections	0		0		0	
Unit Cost per Inspection	**#DIV/0!**		**#DIV/0!**		**#DIV/0!**	
c. Combined Results						
Number of Inspections	309		309		309	
Unit Cost per Inspection	**$4.80**		**$4.94**		**$5.09**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		17		13		26
Unit Cost per Cleaning		**$87.01**		**$117.19**		**$60.35**
b. Contract Results						
Number of Cleanings		**17**		13		26
Unit Cost per Cleaning		**$0.00**		**$105.38**		**$180.38**
c. Combined Results						
Number of Cleanings		**34**		26		52
Unit Cost per Cleaning		**$43.50**		**$111.29**		**$120.37**

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 1: Conveyance System Inspection Costs (Note 1)

Use lines 1-20 if auto-calculating annual inspection costs for each year

	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	FY 2007-08 Personnel Costs: % of time dedicated to inspections	FY 2007-08 Personnel Costs: Annual cost for inspections	FY 2008-09 Personnel Costs: % of time dedicated to inspections	FY 2008-09 Personnel Costs: Annual cost for inspections	FY 2009-10 Personnel Costs: % of time dedicated to inspections	FY 2009-10 Personnel Costs: Annual cost for inspections	Source of Information (Note 6)
1		Maintenance Worker II	1	$47,772	44.8	10	$73,951	0.77	$569	0.77	$587	0.77	$604	Finance Dept budget - 2 days a year
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$569		$587		$604	

Personnel Cost Calculations

Source of Inspection Cost Information

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Operations Manager	1	$80,102	38	10	$118,551	0.77	$913	0.77	$940	0.77	$968	Finance Dept Budget - 2 days per year. This reporting covers both inspections and cleanings
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$913**		**$940**		**$968**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

														Source of Contract Management Cost Information
1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	**FY 2008-09**	**FY 2009-10**	**Source of Non-personnel Cost Information**
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	
2	Fuel (Note 15)	$0	$0	$0	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$0	$0	$0	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	**FY 2008-09**	**FY 2009-10**
$1,482	**$1,527**	**$1,573**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	309	309	309	The City inspects all 309 of its inlets/basins each year
Unit Cost per Inspection	$ 4.80	$ 4.94	$ 5.09	

220

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)
Part 1: Conveyance System Cleaning Operations Costs (Note 16)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													Source of Cleaning Cost Information
1	Enter Name	Maintenance Worker II	1	$47,775	44.8	10	$73,956	2	$1,479	2	$1,523	2	$1,569	Finance Dept Budget - 5 days per year
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$1,479		$1,523		$1,569	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

														Source of Equipment Maintenance Cost Information
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

														Source of Contract Management Cost Information
1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10	Source of Non-personnel Cost Information
1	Vehicle and Equipment Maintenance (Note 14)	$0	$0	$0	
2	Fuel (Note 15)	$0	$0	$0	
3	Training Materials and Supplies (Note 10)	$0	$0	$0	
	Total	$0	$0	$0	

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$1,479	**$1,523**	**$1,569**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	17	13	26	This time (e.g. # of inspections) is related to the same cleanings performed by the contractor. The final numbers need to be adjuste to account for this.
Unit Cost per Cleaning	$ 87.01	$ 117.19	$ 60.35	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0					
2	Conveyance System Cleaning (Note 16)		$0		$1,370		$4,690
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0		$0		$0
2	Contract Management (Note 19)	$0	$0	$0		$0	$0
3	Employee and Vendor Training (Note 10)	$0		$0	$0	$0	$0
4	14)	$0					
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$0	$0	$0	$0
3	Training Materials and Supplies (Note 10)	$0	$0	$0	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**	**$1,370**	**$0**	**$4,690**

Source of Contract Cost Information (Note 6)

Invoices were used to develop the contractor's costs. Invoices for FY 07-08 could not be located - this essentially nullifies 07-08 cleaning costs for the survey.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
Inspections	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Number of Inspections						
Unit Cost per Inspection	#DIV/0!		#DIV/0!		#DIV/0!	
Cleanings						
Number of Cleanings		17		13		26
Unit Cost per Cleaning		$ -		$ 105.38		$ 180.38

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
In-house non-personnel fuel	No fuel, maintenance costs.
Contract # of cleanings	# of contract cleaning the same as in-house. Is this correct? For FY 07/08 there are no contract costs.

General Explanation and Instructions for the Completion of **"Conveyance System Inspection and Cleaning - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.

3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.

4. **Costs Not Included**. This RRM survey does not include the following costs: (1) reimbursable costs for parking signage and enforcement, which will be claimed as actual costs, (2) vehicle and equpiment costs, which will be claimed as actual costs, and (3) costs of materials disposal, which are not reimbursable because they were required under the 2001 permit.

5. **Exclusion of Open Channels**. This RRM survey addresses only "catch basins and inlets"; it does not include costs associated with include the inspection or maintenance of open channels, which will be claimed as actual costs. Results for any facilities considered to be within the category of "catch basins and inlets" should be included in your response.

6. **Inclusion of "First" Inspections and Cleanings**. Although actual claims may not include the "first" annual inspection and cleaning of each catch basin and inlet (these were required in the 2001 permit), your survey results should count these activities. The purpose of the survey is to quantify the typical cost of these activities on a unit basis. It is therefore simpler to include all inspections and cleanings in the survey, and ensures a larger sample size.

7. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

8. Based on the information you input in Worksheet C (in-house inspection costs), Worksheet D (In-house cleaning costs), and Worksheet E (Contractor Costs), the Tab B. 2.A. (Cost Summary) spreadsheet will auto-calculate.
9. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Inspection Costs

10. **Note 1 (Conveyance System Inspection and Related Costs).** Please report only the portion of costs allocated to conveyance system inspection or related functions. If these costs are intermingled with cleaning-related costs, please estimate the proportion allocated to inspection functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

11. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

12. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

13. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

14. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

15. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

16. **Note 7 (Source of Inspection Results)**. Please indicate the documents and assumptions used for reported costs.

17. **Note 8 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.D. of the Copermittees' revised Parameters and Guidelines (11/15/10).

18. **Note 9 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

19. **Note 10 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement conveyance system inspection and cleaning and related functions during the life of the Permit.

20. **Note 11 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.

21. **Note 12 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheets C and D, contract management costs should only include those necessary to carry out the Copermittees' in-house conveyance system inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor inspection and cleaning activities are included in Worksheet E (See Note 19).

22. **Note 14 (Vehicle and Equipment Maintenance)**. Annual maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain vehicles, equipment, and supplies.

23. **Note 15 (Fuel)**. The actual cost of fuel necessary to run the conveyance system inspection and cleaning equipment and equipment used to transport collected materials.

Tab D. In-house Cleaning Costs

24. **Note 16 (Conveyance System Cleaning Operations and Related Costs)**. Please report only the portion of costs allocated to conveyance system cleaning or related functions. If these costs are intermingled with inspection-related costs, please estimate the proportion allocated to cleaning functions, and describe the assumptions used to derive this estimate under "Source of Information" (see Note 6)

25. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated inspection functions.

26. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.

27. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.

28. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.

29. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

30. **Note 7 (Source of Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

Tab E. Contractor Costs

31. **Note 17 (Contractor Costs)**. Please allocate a portion of the cost associated with conveyance system inspections and a portion with conveyance system cleaning functions. If these costs are intermingled, please estimate the proportion allocated to each, and describe the assumptions used to derive these estimates under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader categories of "Conveyance System Inspection" and "Conveyance System Cleaning." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figures in the "Source of Contract Cost Information" box .

32. **Note 18 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house inspections and cleaning. Worksheet E should describe only those supplemental activities related to contract inspection and cleaning.

33. **Note 10 (Contract Management Costs)**. Costs of managing conveyance system inspection and cleaning contracts.

34. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.

35. **Note 7 (Source of Inspection and Cleaning Results)**. Please indicate the documents and assumptions used to derive the reported values.

36. **Note 19 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet E, contract management costs should only include those necessary to carry out the contracted conveyance system inspection and cleaning activities . Contract costs associated with in-house inspection and cleaning activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheets C and D (See Note 12).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City or County		
Contact Person :	John Smith	Alternate:	Susan Jones
Phone :	619-123-1234	Phone:	619-123-1237
E-Mail :	John.smith@city.gov	E-Mail:	Susan.Jones@city.gov

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Part 2: Cost Information						
A. In-house Costs (complete Worksheets C and D)						
Personnel Costs						
Conveyance System Inspection	$2,403		$13,267		$16,785	
Conveyance System Cleaning Operations		$30,937		$110,529		$81,429
Reporting	$0	$0	$0	$0	$0	$0
Employee Supervision and Management	$0	$0	$0	$0	$0	$0
Employee and Vendor Training	$0	$0	$0	$0	$0	$0
Equipment Maintenance	$0	$0	$0	$0	$0	$0
Contract Management	$0	$0	$0	$0	$0	$0
Non-personnel Costs						
Equipment Maintenance	$8	$610	$254	$2,117	$312	$1,514
Fuel	$29	$1,165	$484	$4,041	$596	$2,890
Training Materials and Supplies	$2	$21	$9	$73	$11	$52
Total In-house Costs	**$2,441**	**$32,733**	**$14,014**	**$116,760**	**$17,704**	**$85,886**
B. Contractor Costs (complete Worksheet E)						
Conveyance System Inspection Contract	$0		**$2**		**$2**	
Conveyance System Cleaning Operations Contract		$0		$0		$0
Reporting	$0	$0	**$2**	**$0**	**$2**	$0
Contract Management	$0	$0	$0	**$3**	$0	$0
Employee and Vendor Training	$0	$1	$0	$0	$0	$0
Vehicle and Equipment Maintenance	$0	**$2**	**$2**	**$2**	**$2**	**$2**
Non-personnel Costs						
Vehicle and Equipment Maintenance	$0	$0	$0	$0	$0	$0
Fuel	$0	$0	$1	$0	$0	$1
Training Equipment and Supplies	**$1**	**$1**	**$0**	**$1**	**$1**	**$0**
Total Contract Costs	**$1**	**$4**	**$7**	**$6**	**$7**	**$3**
Total Costs (In-house + Contractor)	**$2,442**	**$32,737**	**$14,021**	**$116,766**	**$17,711**	**$85,889**

Part 3: Inspection and Cleaning Totals (Note 3)

Inspection Results						
a. In-house Results						
Number of Inspections	82		269		424	
Unit Cost per Inspection	**$29.77**		**$52.10**		**$41.75**	
b. Contract Results						
Number of Inspections	**450**		**450**		**450**	
Unit Cost per Inspection	**$0.00**		**$0.02**		**$0.02**	
c. Combined Results						
Number of Inspections	**532**		**719**		**874**	
Unit Cost per Inspection	**$4.59**		**$19.50**		**$20.26**	
Cleaning Results						
a. In-house Results						
Number of Cleanings		263		969		55
Unit Cost per Cleaning		**$124.46**		**$120.49**		**$1,561.56**
b. Contract Results						
Number of Cleanings		**250**		**225**		**200**
Unit Cost per Cleaning		**$0.02**		**$0.03**		**$0.02**
c. Combined Results						
Number of Cleanings		**513**		**1194**		**255**
Unit Cost per Cleaning		**$63.82**		**$97.79**		**$336.82**

Worksheet C: In-house Conveyance System Inspection Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	% of time dedicated to inspections	Annual cost for inspections	Source of Information (Note 6)
Part 1: Conveyance System Inspection Costs (Note 1)														
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Enter Name	Maintenance Worker III	1	$53,235	30.4	10	$74,742	0.817	$611	4.38	$3,372	5.38	$4,266	
2	Multiple	Maintenance Worker II	1	$45,986	31.8	10	$65,208	0.817	$533	4.38	$2,942	5.38	$3,722	
3	Multiple	Maintenance Worker I	1	$39,725	33.3	10	$56,926	0.817	$465	4.38	$2,568	5.38	$3,249	
4	Multiple	Public Works Supervisor	1	$70,386	28.1	10	$97,203	0.817	$794	4.38	$4,385	5.38	$5,548	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$2,403		$13,267		$16,785	

Source of Inspection Cost Information
Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Inspections (Note 1)

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Public Works Supervisor	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Maintenance Worker III	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Maintenance Worker II	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Maintenance Worker I	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Public Works Supervisor	1	$0	0	10	$0	10	$0	10	$0	10	$0	Total supervisory time with Storm Drain Maintenance Crew is 25% of PW Supervisor's Time, estimated that 10% total related to inspections.
2	Multiple	Maintenance Worker III	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Maintenance Worker III	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Maintenance Worker II	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Maintenance Worker II	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Maintenance Worker II	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Public Works Supervisor	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	
	d. Vehicle and Equipment Maintenance (Note 11)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	cost information. Also use this space to document any assumptions used to calculate costs.
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	**Source of Contract Management Cost Information** Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Part 3: Non-Personnel Costs Related to Conveyance System Inspections (Note 1)

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$8	$254	$312
2	Fuel (Note 15)	$29	$484	$596
3	Training Materials and Supplies (Note 10)	$2	$9	$11
	Total	$39	$747	$919

Source of Non-personnel Cost Information

Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$2,441	**$14,014**	**$17,704**

Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet C: In-house Conveyance System Inspection Costs and Results

Part 5: Inspection Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Inspection Results (Note 7)
Number of Inspections	82	269	424	Identify the source of inspection results. Also use this space to document any assumptions used to calculate inspection results.
Unit Cost per Inspection	$ 29.77	$ 52.10	$ 41.75	

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Note: Only report statistics for catch basins and inlets. Do not include inspections of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	% of time dedicated to inspections	Annual cost for cleaning	Source of Information (Note 6)

Part 1: Conveyance System Cleaning Operations Costs (Note 16)

Use lines 1-20 if auto-calculating annual inspection costs for each year

1	Enter Name	Maintenance Worker III	1	$53,235	30.4	10	$74,742	10.52	$7,863	36.49	$28,092	26.1	$20,696	
2	Multiple	Maintenance Worker II	1	$45,986	31.8	10	$65,208	10.52	$6,860	36.49	$24,508	26.1	$18,056	
3	Enter Name	Maintenance Worker I	1	$39,725	33.3	10	$56,926	10.52	$5,989	36.49	$21,395	26.1	$15,762	
4	Enter Name	Public Works Supervisor	1	$70,386	28.1	10	$97,203	10.52	$10,226	36.49	$36,533	26.1	$26,915	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$30,937		$110,529		$81,429	

Source of Cleaning Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 2: Other Personnel Costs Related to Conveyance System Cleaning (Note 16)

	Annualized FY 2007-08 Salary Information							Costs		Costs		Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 8)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Public Works Supervisor	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Maintenance Worker III	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 9)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Public Works Supervisor	1	$0	0	10	$0	10	$0	10	$0	10	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Maintenance Worker III	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 10)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Public Works Supervisor	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.
2	Multiple	Maintenance Worker III	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Maintenance Worker II	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Maintenance Worker II	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Maintenance Worker II	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

d. Vehicle and Equipment Maintenance (Note 11)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

e. Contract Management (Note 12)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Source of Contract Management Cost Information

Describe source of salary and personnel cost information. Also use this space to document any assumptions used to calculate costs.

Part 3: Non-Personnel Costs Related to Conveyance Cleaning

		FY 2007-08	FY 2008-09	FY 2009-10
1	Vehicle and Equipment Maintenance (Note 14)	$610	$2,117	$1,514
2	Fuel (Note 15)	$1,165	$4,041	$2,890
3	Training Materials and Supplies (Note 10)	$21	$73	$52
	Total	$1,796	$6,231	$4,457

Source of Non-personnel Cost Information

Describe source of non-personnel cost information. Also use this space to document any assumptions used to determine non-personnel costs.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$32,733	**$116,760**	**$85,886**

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet D: In-house Conveyance System Cleaning Costs and Results

Part 5: Cleaning Results

	FY 2007-08	FY 2008-09	FY 2009-10	Source of Cleaning Results (Note 17)
Number of Cleanings	263	969	55	Identify the source of inspection results. Also use this space to document any assumptions used to calculate cleaning results.
Unit Cost per Cleaning	$ 124.46	$ 120.49	$ 1,561.56	

Note: Only report statistics for catch basins and inlets. Do not include cleaning of open channels.

Worksheet E: Contractor Costs and Results

Part 1: Contract Costs

		FY 2007-08		FY 2008-09		FY 2009-10	
		Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
	Contractor Costs (Note 17)						
1	Conveyance System Inspection (Note 1)	$0		$2		$2	
2	Conveyance System Cleaning (Note 16)		$0		$0		$0
	Supplemental In-house Costs (Note 18)						
	Personnel Costs						
1	Reporting (Note 8)	$0	$0	$2	$0	$2	$0
2	Contract Management (Note 19)	$0	$0	$0	$3	$0	$0
3	Employee and Vendor Training (Note 10)	$0	$1	$0	$0	$0	$0
4	14)	$0	$2	$2	$2	$2	$2
	Non-personnel Costs						
1	14)	$0	$0	$0	$0	$0	$0
2	Fuel (Note 15)	$0	$0	$1	$0	$0	$1
3	Training Materials and Supplies (Note 10)	$1	$1	$0	$1	$1	$0
	Total Contract Costs	$1	$4	$7	$6	$7	$3

Source of Contract Cost Information (Note 6)

Describe source of contract cost information. Also use this space to document any assumptions used to calculate costs.

Part 2: Inspection and Cleaning Results

	FY 2007-08		FY 2008-09		FY 2009-10	
	Inspections	Cleanings	Inspections	Cleanings	Inspections	Cleanings
Inspections						
Number of Inspections	450		450		450	
Unit Cost per Inspection	$ 0.00		$ 0.02		$ 0.02	
Cleanings						
Number of Cleanings		250		225		200
Unit Cost per Cleaning		$ 0.02		$ 0.03		$ 0.02

Source of Inspection and Cleaning Results (Note 7)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate inspection and cleaning results.

Note: Only report statistics for catch basins and inlets. Do not include inspections or cleaning of open channels.

Activity	Comment
General Information	No contact information
In-house Personnel Reporting	Please indicate reporting cost, if any.
B. Contractor Costs	Errors: All contract costs should be removed here and below. See Schedule E.
Contract # of inspections	appears numbers not added, looks like default from template
Contract # of cleanings	appears numbers not added, looks like default from template
In-house # of cleanings	Please explain the large drop in the number of cleanings without a large decrease in costs for FY 09/10

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Carlsbad	Alternate
Contact Person :	Christine Ruess	Craig Schmollinger
Phone :	760-438-2722 x7110	760-602-7502
E-Mail :	christine.ruess@carlsbadca	craig.schmollinger@carlsbadca.go

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$0**	**$0**	**$0**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$5,760	$5,760	$5,760
Reporting	$0	$0	$0
Contract Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$5,760**	**$5,760**	**$5,760**
Total Costs (In-house + Contractor)	**$5,760**	**$5,760**	**$5,760**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	0	0	0
Unit Cost per Mile Swept	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
b. Contract Results			
Miles Swept	480	480	480
Unit Cost per Mile Swept	**$12.00**	**$12.00**	**$12.00**
c. Combined Results			
Miles Swept	480	480	480
Unit Cost per Mile Swept	**$12.00**	**$12.00**	**$12.00**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Enter Name	Equip. Operator (example)	1	$0	0	0	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	0	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$0		$0		$0	

Source of Sweeping Cost Information

Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	0	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	0	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	0	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Information

Describe source of salary and personnel cost information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	0	0	0
Unit Cost per Mile Swept	#DIV/0!	#DIV/0!	#DIV/0!

Source of Sweeping Results

Identify the source of sweeping results.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$5,760	$5,760	$5,760
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)	$0	$0	$0
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$5,760**	**$5,760**	**$5,760**

Source of Contract Cost Information (Note 6)

The contractor costs are based on the additional 40 miles that were added to the City's inventory between 2008 and 2010. The rate per mile is $12.

Note -- The cost seems low. Was the contract charge for street sweeping apporximated ? If so, how.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	480	480	480
Unit Cost per Mile Swept	$ 12.00	$ 12.00	$ 12.00

Source of Street Sweeping Results (Note 6)

The contractor costs are based on the additional 40 miles that were added to the City's inventory between 2008 and 2010. The rate per mile is $12.

Note -- Based on the source comment should the milage for 2007-08 reflect the ful addition of 40 miles?

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Chula Vista	Alternate
Contact Person :	Khosro Aminpour	Marisa Soriano
Phone :	619-397-6111	619-397-6134
E-Mail :	kaminpour@ci.chula-v	msoriano@ci.chula-vista.ca.

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$0**	**$0**	**$0**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$292,737	$244,824	$257,381
Reporting	$16,097	$16,097	$16,097
Contract Management	$36,515	$36,515	$36,515
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$345,349**	**$297,436**	**$309,993**
Total Costs (In-house + Contractor)	**$345,349**	**$297,436**	**$309,993**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	1	1	1
Unit Cost per Mile Swept	**$0.00**	**$0.00**	**$0.00**
b. Contract Results			
Miles Swept	18,000	17,040	18,179
Unit Cost per Mile Swept	**$19.19**	**$17.46**	**$17.05**
c. Combined Results			
Miles Swept	18,001	17,041	18,180
Unit Cost per Mile Swept	**$19.18**	**$17.45**	**$17.05**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$0		$0		$0	

Source of Sweeping Cost Information

Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Information

Describe source of salary and personnel cost information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	1	1	1
Unit Cost per Mile Swept	$ -	$ -	$ -

Source of Sweeping Results

Identify the source of sweeping results.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$292,737	$244,824	$257,381
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$16,097	$16,097	$16,097
2	Contract Management (Note 16)	$36,515	$36,515	$36,515
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$345,349**	**$297,436**	**$309,993**

Note -- Why did contract costs drop 16.4% from 2007-08 to 2008-09 ?

Note -- % FTE personnel and annual salary to be obtained

Note -- % FTE personnel and annual salary to be obtained

Source of Contract Cost Information (Note 6)

JURMP Annual Report Fiscal Section, personnel data from City of Chula Vista Public Works Manager

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	18,000	17,040	18,179
Unit Cost per Mile Swept	$ 19.19	$ 17.46	$ 17.05

Source of Street Sweeping Results (Note 6)

Data from JURMP annual reports and contractor reports

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

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2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Coronado	Alternate
Contact Person :	Kim Godby	Kristi Plume
Phone :	619-522-7380	619-522-7380
E-Mail :	kgodby@coronado.ca.us	kplume@coronado.ca.us

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$80,162	$82,567	$85,044
Reporting	$1,018	$1,049	$1,080
Employee Supervision and Management	$4,048	$4,169	$4,294
Employee and Vendor Training	$197	$203	$209
Equipment Maintenance	$10,108	$11,121	$15,067
Contract Management	0	0	$5,349
Non-personnel Costs			
Equipment Maintenance	$18,028	$25,838	$20,173
Materials Disposal	$0	$0	$0
Fuel	$10,653	$7,875	$7,479
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$124,214**	**$132,822**	**$138,695**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Contract Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$124,214**	**$132,822**	**$138,695**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	8,095	7,851	7,572
Unit Cost per Mile Swept	**$15.34**	**$16.92**	**$18.32**
b. Contract Results			
Miles Swept	**8,095**	**7,851**	**7,572**
Unit Cost per Mile Swept	**$0.00**	**$0.00**	**$0.00**
c. Combined Results			
Miles Swept	**16,190**	**15,702**	**15,144**
Unit Cost per Mile Swept	**$7.67**	**$8.46**	**$9.16**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Mark Dias	Motor Sweeper Operator	1	$44,240	75	10	$81,843	97.5	$79,797	97.5	$82,191	97.5	$84,657	
2	Nuuao Saole	Maintenance Worker II	1	$38,621	79	10	$72,994	0.5	$365	0.5	$376	0.5	$387	
3			1	$0	0	0	$0	0	$0	0	$0	0	$0	
4			1	$0	0	10	$0	0	$0	0	$0	0	$0	
5			1	$0	0	10	$0	0	$0	0	$0	0	$0	
6			1	$0	0	10	$0	0	$0	0	$0	0	$0	
7			1	$0	0	10	$0	0	$0	0	$0	0	$0	
8			1	$0	0	10	$0	0	$0	0	$0	0	$0	
9			1	$0	0	10	$0	0	$0	0	$0	0	$0	
10			1	$0	0	10	$0	0	$0	0	$0	0	$0	
11			1	$0	0	10	$0	0	$0	0	$0	0	$0	
12			1	$0	0	10	$0	0	$0	0	$0	0	$0	
13			1	$0	0	0	$0	0	$0	0	$0	0	$0	
14			1	$0	0	10	$0	0	$0	0	$0	0	$0	
15			1	$0	0	10	$0	0	$0	0	$0	0	$0	
16			1	$0	0	10	$0	0	$0	0	$0	0	$0	
17			1	$0	0	10	$0	0	$0	0	$0	0	$0	
18			1	$0	0	10	$0	0	$0	0	$0	0	$0	
19			1	$0	0	10	$0	0	$0	0	$0	0	$0	
20			1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$80,162		$82,567		$85,044	

Source of Sweeping Cost Information

Salary Information came from the City of Coronado Payroll information.The street sweeper has one full-time operator and one backup driver

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Scott Huth	Director, Public Services	1	$126,972	63	10	$219,662	0.1	$220	0.1	$226	0.1	$233	Review, calculate, provide reporting information for the JURMP, certify JURMP
2	Kim Godby	Services Supervisor	1	$84,328	63	10	$145,887	0.2	$292	0.2	$301	0.2	$310	
3	Leslie Higginbotham	Management Assistant	1	$55,705	72	10	$101,383	0.5	$507	0.5	$522	0.5	$538	
4									$0		$0	0.1	$0	
5				$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
								Reporting Totals	**$1,018**		**$1,049**		**$1,080**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Scott Huth	Director, Public Services	1	$126,972	68	10	$226,010	0.5	$1,130	0.5	$1,164	0.5	$1,199	Review schedule and collection data, respond to residential and internal sweeping questions.
2	Kim Godby	Services Supervisor	1	$84,328	63	10	$145,887	2	$2,918	2	$3,005	2	$3,095	
3									$0	0	$0	2	$0	
4			1				$0		$0		$0		$0	
5			1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
								Supervision and Management Totals	**$4,048**		**$4,169**		**$4,294**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Kim Godby	Services Supervisor	1	$84,328	63	10	$145,887	0.05	$73	0.05	$75	0.05	$77	In-house training from operator to operator and mechanics.
2	Mark Dias	Motor Sweeper Operator	1	$44,240	75	10	$81,843	0.08	$65	0.08	$67	0.08	$69	
3	Nuuao Saole	Maintenance Worker II	1	$38,621	79	10	$72,994	0.08	$58	0.08	$60	0.08	$62	
4			1	$0	0	10	$0	0	$0	0	$0	0	$0	
5			1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
								Training Totals	**$197**		**$203**		**$209**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Manny Gonzales	Master Mechanic	1	$60,003	67	10	$106,206	0.65	$690	1.04	$1,138	0.65	$732
2	Raul Ramirez	Mechanic II	1	$49,998	71	10	$90,496	3.9	$3,529	3.9	$3,635	6.3	$6,048
3	Multiple	Seasonal	3	$11,552	22	10	$15,249	8.4	$3,843	9	$4,241	12.6	$6,115
4	Mark Dias	Motor Sweeper Operator	1	$44,240	75	10	$81,843	2.5	$2,046	2.5	$2,107	2.5	$2,171
5											$0		$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$10,108**		**$11,121**		**$15,067**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Kim Godby	Services Supervisor	1	$84,328	63	10	$145,887	0	$0	0	$0	2	$3,095
2	Manny Gonzales	Master Mechanic	1	$60,003	67	10	$106,205	0	$0	0	$0	2	$2,253
3							$0	0	$0	0	$0	1	$0
4							$0	0	$0	0	$0	1	$0
5				$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$5,349**

Information

Only contract management costs were associated with time used to procure a replacement sweeper in the 2009-2010 period. % of time dedicated to function were determined based on employee estimates of time required for activity

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$18,028	$25,838	$20,173
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$10,653	$7,875	$7,479
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$28,681	$33,713	$27,652

Source of Non-personnel Cost Information

Information came from the City of Coronado Fuel Tracking System for fuel, the streets division vehicle maintance account (only sweeper items were included). City does not incure any non-personnel cost for material disposal or trainning

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$124,214	**$132,822**	**$138,695**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	8,095	7,851	7,572
Unit Cost per Mile Swept	$ 15.34	$ 16.92	$ 18.32

Source of Sweeping Results

Information obtained from City of Coronado's Daily Sweeper Logs

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$0	$0	$0
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)	$0	$0	$0
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

All street sweeping is done in-house

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	**8,095**	**7,851**	**7,572**
Unit Cost per Mile Swept	$ -	$ -	$ -

Error: Should be zero as there is zero cost reported…

Source of Street Sweeping Results (Note 6)

All street sweeping is done in-house

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
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16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	Del Mar	Alternate
Contact Person :	Mikhail Ogawa	Kelly Barker
Phone :	619-994-7074	619-993-4853
E-Mail :	mikhail@mogawaeng.com	kelly@mogawaeng.com

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$12,318	$14,151	$13,235
Reporting	$0	$0	$0
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$11,452	$6,535	$12,994
Materials Disposal	$0	$0	$0
Fuel	$2,142	$1,914	$1,611
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$25,912**	**$22,600**	**$27,840**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Contract Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$25,912**	**$22,600**	**$27,840**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	1,168	1,310	1,156
Unit Cost per Mile Swept	**$22.19**	**$17.25**	**$24.08**
b. Contract Results			
Miles Swept	**2**	**2**	**2**
Unit Cost per Mile Swept	**$0.00**	**$0.00**	**$0.00**
c. Combined Results			
Miles Swept	**1,170**	**1,312**	**1,158**
Unit Cost per Mile Swept	**$22.15**	**$17.23**	**$24.04**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													Source of Sweeping Cost Information
1	Enter Name	Utility Worker II	1	$46,620	52	17.37	$78,960	15.6	$12,318	17.4	$14,151	15.8	$13,235	Expenditures - % time is based on # hours spent sweeping/2080 hours
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$12,318		$14,151		$13,235	

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Information

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$11,452	$6,535	$12,994
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$2,142	$1,914	$1,611
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$13,594	$8,449	$14,605

Source of Non-personnel Cost Information

The City has entered into a franchise agreement with its waste hauler - the disposal of the street sweepings material is incorporated into the franchise agreement and therefore there are no identifiable costs for disposal available at this time. Please consider this when analyzing the survey form.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$25,912	**$22,600**	**$27,840**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	1,168	1,310	1,156
Unit Cost per Mile Swept	$ 22.19	$ 17.25	$ 24.08

Source of Sweeping Results

Identify the source of sweeping results.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$0	$0	$0
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)	$0	$0	$0
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	2	2	2
Unit Cost per Mile Swept	$ -	$ -	$ -

Error: Should be zero miles as there is zero costs

Source of Street Sweeping Results (Note 6)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate street sweeping results.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	El Cajon	Alternate
Contact Person :	Jaime Campos	Dennis Davies
Phone :	619-441-5554	619-441-1661
E-Mail :	Jcampos@ci.el-cajon.ca.us	Ddavies@ci.el-cajon.ca.us

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$12,199	$12,565	$12,942
Reporting	$31,993	$32,953	$33,942
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$13,142	$13,142	$13,142
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$57,335**	**$58,660**	**$60,026**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Contract Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$57,335**	**$58,660**	**$60,026**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	29	29	33
Unit Cost per Mile Swept	**$1,977.06**	**$2,022.78**	**$1,818.97**
b. Contract Results			
Miles Swept	0	0	0
Unit Cost per Mile Swept	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
c. Combined Results			
Miles Swept	29	29	33
Unit Cost per Mile Swept	**$1,977.06**	**$2,022.78**	**$1,818.97**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations					
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs	
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping
	Use lines 1-20 if auto-calculating annual inspection costs for each year												
1	Tom Mitchem	Crew Leader	1	$47,880	56.98	4.788	$77,455	8.75	$6,777	0	$0	0	$0
2	Chris Agundes	Crew Leader	1	$47,880	56.98	4.788	$77,455	0	$0	8.75	$6,981	8.75	$7,190
3	Paul Ballard	Equipment Operator	1	$44,460	58.15	4.446	$72,290	2.5	$1,807	2.5	$1,861	2.5	$1,917
4	Eddie Bawsman	Equipment Operator	1	$44,460	58.15	4.446	$72,290	2.5	$1,807	2.5	$1,861	2.5	$1,917
5	Mike Boyle	Equipment Operator	1	$44,460	58.15	4.446	$72,290	2.5	$1,807	2.5	$1,861	2.5	$1,917
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0
								TOTALS	$12,199		$12,565		$12,942

Source of Information (Note 6)

Source of Sweeping Cost Information

Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Robert Griswold	Senior Engineering Technician	1	$62,514	46.21	6251	########	0.8	$31,993	0.8	$32,953	0.8	$33,942	Approximately 16 hours per year, in a year composed of approximately 1,992 hours.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
								Reporting Totals	**$31,993**		**$32,953**		**$33,942**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
								Supervision and Management Totals	**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
								Training Totals	**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Information

Describe source of salary and personnel cost information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$13,142	$13,142	$13,142
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$13,142	$13,142	$13,142

Source of Non-personnel Cost Information

Vehicle and Equipment Maintenance costs are estimated from an operating cost of $126.37/hour per Street Sweeper. This estimate includes non-personnel costs such as maintenance (i.e. cleaning and lubricating) as well as fueling costs of equipment and vehicle. Approximately 104 operating hours were used to calculate this figure.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$57,335	**$58,660**	**$60,026**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	29	29	33
Unit Cost per Mile Swept	$ 1,977.06	$ 2,022.78	$ 1,818.97

Source of Sweeping Results

The numbers of miles in this Part of the survey was derived from the number of "special sweeps" only. Each special sweep has an average length of 0.5 miles

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$0	$0	$0
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)	$0	$0	$0
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	-	-	-
Unit Cost per Mile Swept	#DIV/0!	#DIV/0!	#DIV/0!

Source of Street Sweeping Results (Note 6)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate street sweeping results.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Encinitas	Alternate
Contact Person :	Mark Hosford	Howard Whitlock
Phone :	760-633-2850	760-633-2850
E-Mail :	mhosford@cityofencinitas	hwhitlock@cityofencinitas.org

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$0**	**$0**	**$0**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$47,691	$46,515	$44,581
Reporting	$4,000	$4,000	$4,000
Contract Management	$9,470	$9,780	$9,780
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$61,161**	**$60,295**	**$58,361**
Total Costs (In-house + Contractor)	**$61,161**	**$60,295**	**$58,361**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	**1**	**1**	**1**
Unit Cost per Mile Swept	**$0.00**	**$0.00**	**$0.00**
b. Contract Results			
Miles Swept	4,252	4,252	4,252
Unit Cost per Mile Swept	**$14.38**	**$14.18**	**$13.73**
c. Combined Results			
Miles Swept	4,253	4,253	4,253
Unit Cost per Mile Swept	**$14.38**	**$14.18**	**$13.72**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations					
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs	
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping
	Use lines 1-20 if auto-calculating annual inspection costs for each year												
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0
								TOTALS	$0		$0		$0

Source of Information (Note 6)
Source of Sweeping Cost Information
Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Information

Describe source of salary and personnel cost information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	**1**	**1**	**1**
Unit Cost per Mile Swept	$ -	$ -	$ -

Source of Sweeping Results

Identify the source of sweeping results.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$47,691	$46,515	$44,581
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$4,000	$4,000	$4,000
2	Contract Management (Note 16)	$9,470	$9,780	$9,780
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$61,161**	**$60,295**	**$58,361**

Source of Contract Cost Information (Note 6)

H.T.E. expenditure report.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	4,252	4,252	4,252
Unit Cost per Mile Swept	$ 14.38	$ 14.18	$ 13.73

Source of Street Sweeping Results (Note 6)

Contract curb mile quantities.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

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6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

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7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Escondido	Alternate
Contact Person :	Dan Young	
Phone :	760 839-4600	
E-Mail :	dkyoung@escondido.org	

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$223,612	$119,158	$122,733
Reporting	$5,963	$6,142	$6,326
Employee Supervision and Management	$29,979	$30,879	$31,805
Employee and Vendor Training	$1,568	$1,615	$1,664
Equipment Maintenance	$7,842	$8,077	$8,319
Contract Management	$1,228	$1,265	$1,303
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$270,192**	**$167,136**	**$172,150**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$54,900	$45,665	$46,187
Reporting	$9,515	$9,801	$10,095
Contract Management	$678	$698	$719
Employee and Vendor Training	$3,379	$3,481	$3,585
Equipment Maintenance	$7,842	$8,077	$8,317
Non-personnel Costs			
Equipment Maintenance	$7,842	$8,077	$8,317
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$1,568	$1,615	$1,664
Total Contract Costs	**$85,724**	**$77,414**	**$78,884**
Total Costs (In-house + Contractor)	**$355,916**	**$244,550**	**$251,034**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	2,500	2,500	7,408
Unit Cost per Mile Swept	**$108.08**	**$66.85**	**$23.24**
b. Contract Results			
Miles Swept	2,500	2,500	7,408
Unit Cost per Mile Swept	**$34.29**	**$30.97**	**$10.65**
c. Combined Results			
Miles Swept	5,000	5,000	14,816
Unit Cost per Mile Swept	**$71.18**	**$48.91**	**$16.94**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													Source of Sweeping Cost Information
1	Hinchliff J.	Lead Technician	1	$52,124	33	10	$74,537	100	$74,537	100	$76,773	100	$79,077	People Soft reports
2	Chris Guenther	Leads Tech.	1	$52,124	33	10	$74,537	100	$74,537	0	$0	0	$0	
3	Quiroz J.	Lead Tech.	1	$52,124	33	10	$74,537	100	$74,537	0	$0	0	$0	
4	Henderson F.	Senior Tech.	1	$57,553	33	10	$82,301	0	$0	50	$42,385	50	$43,656	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$223,612		$119,158		$122,733	

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Hinchliff J.	Lead Technician	1	$52,124	33	10	$74,537	4	$2,981	4	$3,071	4	$3,163	Daily logs
2	Chris Guenther	Leads Tech.	1	$52,124	33	10	$74,537	4	$2,981	4	$3,071	4	$3,163	
3	Quiroz J.	Lead Tech.	1	$52,124	33	10	$74,537	0	$0	0	$0	0	$0	
4	Henderson F.	Senior Tech.	1	$57,553	33	10	$82,301	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$5,963**		**$6,142**		**$6,326**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Young D.	Superintendent	1	$79,000	33	10	$112,970	15	$16,946	15	$17,454	15	$17,977	Assumption of time spent on tasks
2	Pollero P.	Supervisor	1	$65,104	33	10	$93,099	14	$13,034	14	$13,425	14	$13,828	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$29,979**		**$30,879**		**$31,805**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Hinchliff J.	Lead Technician	1	$52,124	33	10	$74,537	1	$745	1	$768	1	$791	Daily logs
2	Henderson F.	Senior Tech.	1	$57,553	33	10	$82,301	1	$823	1	$848	1	$873	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$1,568**		**$1,615**		**$1,664**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Hinchliff J.	Lead Technician	1	$52,124	33	10	$74,537	5	$3,727	5	$3,839	5	$3,954	Daily Logs
2	Henderson F.	Senior Tech.	1	$57,553	33	10	$82,301	5	$4,115	5	$4,238	5	$4,366	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$7,842**		**$8,077**		**$8,319**	

Source of Equipment Maintenance Cost Information

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Young D.	Superintendent	1	$79,000	33	10	$112,970	0.6	$678	0.6	$698	0.6	$719	Based on time spent administering contracts
2	Pollero P.	Supervisor	1	$64,104	33	10	$91,669	0.6	$550	0.6	$567	0.6	$584	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$1,228**		**$1,265**		**$1,303**	

Information

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$270,192	**$167,136**	**$172,150**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	2,500	2,500	7,408
Unit Cost per Mile Swept	$ 108.08	$ 66.85	$ 23.24

Source of Sweeping Results

Identify the source of sweeping results.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$54,900	$45,665	$46,187
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$9,515	$9,801	$10,095
2	Contract Management (Note 16)	$678	$698	$719
3	Employee and Vendor Training (Note 9)	$3,379	$3,481	$3,585
4	Equipment Maintenance (Note 10)	$7,842	$8,077	$8,317
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$7,842	$8,077	$8,317
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$1,568	$1,615	$1,664
	Total Contract Costs	**$85,724**	**$77,414**	**$78,884**

Note: Subtantial costs were reported for in-house cleaning, is this a supplemental contract process?

Note: Are fuel costs included elsewhere?

Source of Contract Cost Information (Note 6)

From Copies of Contracts

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	2,500	2,500	7,408
Unit Cost per Mile Swept	$ 34.29	$ 30.97	$ 10.65

Note: This same mileage was reported for in-house cleaning, is this a supplemental process?

Source of Street Sweeping Results (Note 6)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate street sweeping results.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of La Mesa	Alternate
Contact Person :	Joe Kuhn	Hamed Hashemian
Phone :	619-667-1340	619-667-1153
E-Mail :	jkuhn@ci.la-mesa.ca.us	hhashemian@ci.la-mesa.ca.us

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$0**	**$0**	**$0**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$124,214	$124,897	$127,398
Reporting	$1,564	$1,564	$1,564
Contract Management	$8,342	$8,242	$8,342
Employee and Vendor Training	$1,042	$1,042	$1,042
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$135,162**	**$135,745**	**$138,346**
Total Costs (In-house + Contractor)	**$135,162**	**$135,745**	**$138,346**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	1	1	1
Unit Cost per Mile Swept	**$0.00**	**$0.00**	**$0.00**
b. Contract Results			
Miles Swept	8,285	8,285	8,285
Unit Cost per Mile Swept	**$16.31**	**$16.38**	**$16.70**
c. Combined Results			
Miles Swept	8,286	8,286	8,286
Unit Cost per Mile Swept	**$16.31**	**$16.38**	**$16.70**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$0		$0		$0	

Source of Sweeping Cost Information

Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Enter Job Classification	1	$0	0	10	$0	8	$0	8	$0	8	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
								Reporting Totals	**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
								Supervision and Management Totals	**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
								Training Totals	**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Information

Describe source of salary and personnel cost information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	1	1	1
Unit Cost per Mile Swept	$ -	$ -	$ -

Source of Sweeping Results

Identify the source of sweeping results.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$124,214	$124,897	$127,398
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$1,564	$1,564	$1,564
2	Contract Management (Note 16)	$8,342	$8,242	$8,342
3	Employee and Vendor Training (Note 9)	$1,042	$1,042	$1,042
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$135,162**	**$135,745**	**$138,346**

Source of Contract Cost Information (Note 6)

Streets Division Supervisor. Personnel Costs based on 54.05% overhead rate, and 10% indirect cost rate. 1.5% of time for Reporting, 8% for Contact Management, and 0.5% Training.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	8,285	8,285	8,285
Unit Cost per Mile Swept	$ 16.31	$ 16.38	$ 16.70

Source of Street Sweeping Results (Note 6)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate street sweeping results.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Cities	Alternate
Contact Person :	John Smith	Susan Jones
Phone :	619-123-1234	619-123-1237
E-Mail :	John.smith@city.gov	Susan.Jones@city.gov

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$0**	**$0**	**$0**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$33,181	$32,181	$86,210
Reporting	$138	$138	$138
Contract Management	$1,561	$1,561	$1,561
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$34,881**	**$33,881**	**$87,909**
Total Costs (In-house + Contractor)	**$34,881**	**$33,881**	**$87,909**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	**1**	**1**	**1**
Unit Cost per Mile Swept	**$0.00**	**$0.00**	**$0.00**
b. Contract Results			
Miles Swept	88	1,327	2,556
Unit Cost per Mile Swept	**$394.62**	**$25.53**	**$34.39**
c. Combined Results			
Miles Swept	89	1,328	2,557
Unit Cost per Mile Swept	**$390.21**	**$25.51**	**$34.38**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$0		$0		$0	

Source of Sweeping Cost Information

Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Information

Describe source of salary and personnel cost information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	1	1	1
Unit Cost per Mile Swept	$ -	$ -	$ -

Source of Sweeping Results

Identify the source of sweeping results.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10	
	Contractor Costs (Note 14)				
	Street Sweeping Operations Costs	$33,181	$32,181	$86,210	Note: It appears that costs should be pro-rated to reflect low mileage
	Supplemental In-house Costs (Note 15)				
	Personnel Costs				
1	Reporting (Note 7)	$138	$138	$138	Note: It appears that costs should be pro-rated to reflect low mileage
2	Contract Management (Note 16)	$1,561	$1,561	$1,561	Note: It appears that costs should be pro-rated to reflect low mileage
3	Employee and Vendor Training (Note 9)	$0	$0	$0	
4	Equipment Maintenance (Note 10)	$0	$0	$0	
	Non-personnel Costs				
1	Equipment Maintenance (Note 10)	$0	$0	$0	
2	Materials Disposal (Note 12)	$0	$0	$0	
3	Fuel (Note 13)	$0	$0	$0	
4	Training Materials and Supplies (Note 9)	$0	$0	$0	
	Total Contract Costs	**$34,881**	**$33,881**	**$87,909**	

Source of Contract Cost Information (Note 6)

Contractor information is from Cannon Pacific. In house information is from in house staff.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10	
Miles Swept	88	1,327	2,556	Note: It appears that costs should be pro-rated to reflect low mileage
Unit Cost per Mile Swept	$ 394.62	$ 25.53	$ 34.39	Note: It appears that costs should be pro-rated to reflect low mileage

Source of Street Sweeping Results (Note 6)

Information is from Cannon Pacific, the street sweeping contractor. Cost per mile is not simply equal to operatiing cost divided by miles swept. Bus stops and square footage sweeping are included in the operating costs. The City can provide the Contractor's cost per mile information if needed.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

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6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

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14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
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17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of National City	Alternate
Contact Person :	Barbara Tipton	Crystal Kaplan
Phone :	619-336-4583	858-586-6600 ext 23
E-Mail :	BTipton@nationalcityca.g	ckaplan@dmaxinc.com

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$158,821	$163,586	$168,493
Reporting	$893	$920	$947
Employee Supervision and Management	$5,592	$5,760	$5,933
Employee and Vendor Training	$893	$920	$1,894
Equipment Maintenance	$33,535	$34,541	$35,578
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$28,809	$29,381	$29,680
Materials Disposal	$16,570	$16,175	$15,707
Fuel	$13,923	$10,978	$11,236
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$259,036**	**$262,260**	**$269,468**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Contract Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$259,036**	**$262,260**	**$269,468**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	15,500	15,212	14,855
Unit Cost per Mile Swept	**$16.71**	**$17.24**	**$18.14**
b. Contract Results			
Miles Swept	0	0	0
Unit Cost per Mile Swept	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
c. Combined Results			
Miles Swept	15,500	15,212	14,855
Unit Cost per Mile Swept	**$16.71**	**$17.24**	**$18.14**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Richard Flores	Street Sweeper Op	1	$47,268	58	10	$79,411	100	$79,411	100	$81,793	100	$84,247	
2	Robert Nunez	Street Sweeper Op	1	$47,268	58	10	$79,411	100	$79,411	100	$81,793	100	$84,247	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$158,821		$163,586		$168,493	

Source of Sweeping Cost Information
City of National City Finance Department, via Jeff Servatius

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Joe Ibarra	Senior Operator	1	$53,140	58	10	$89,275	1	$893	1	$920	1	$947	City of National City Finance Department, via Jeff Servatius
2	Enter Name	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$893**		**$920**		**$947**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Jeff Servatius	Superintendent	1	$70,980	49	10	$112,858	1	$1,129	1	$1,162	1	$1,197	City of National City Finance Department, via Jeff Servatius
2	Joe Ibarra	Senior Operator	1	$53,140	58	10	$89,275	5	$4,464	5	$4,598	5	$4,736	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$5,592**		**$5,760**		**$5,933**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Joe Ibarra	Senior Operator	1	$53,140	58	10	$89,275	1	$893	1	$920	2	$1,894	Finance Department: salary and rate information. Percent time is an estimate, via Jeff Servatius.
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$893**		**$920**		**$1,894**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Pat McDaniels	Equipment Mechanic	1	$50,811	55	10	$83,838	40	$33,535	40	$34,541	40	$35,578	City of National City Finance Department, via Jeff Servatius
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$33,535**		**$34,541**		**$35,578**	

Source of Equipment Maintenance Cost Information

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	N/A
2	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Information

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$28,809	$29,381	$29,680
2	Materials Disposal (Note 12)	$16,570	$16,175	$15,707
3	Fuel (Note 13)	$13,923	$10,978	$11,236
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$59,302	$56,534	$56,623

Source of Non-personnel Cost Information

City of National City Public Works, via Jeff Servatius

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$259,036	**$262,260**	**$269,468**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	15,500	15,212	14,855
Unit Cost per Mile Swept	$ 16.71	$ 17.24	$ 18.14

Source of Sweeping Results

City of National City Public Works: sweeper odometer logs

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$0	$0	$0
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)	$0	$0	$0
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	-	-	-
Unit Cost per Mile Swept	#DIV/0!	#DIV/0!	#DIV/0!

Source of Street Sweeping Results (Note 6)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate street sweeping results.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

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12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
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17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Oceanside	Alternate
Contact Person :	Kiel Koger	Bryan Forward
Phone :	760-435-5089	760-435-5194
E-Mail :	hkkoger@ci.oceanside.ca.u	bforward@ci.oceanside.ca.us

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$465,264	$479,222	$493,599
Reporting	$65,958	$67,937	$69,975
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$57,295	$59,014	$60,784
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$588,517**	**$606,173**	**$624,358**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Contract Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$588,517**	**$606,173**	**$624,358**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	800	800	800
Unit Cost per Mile Swept	**$735.65**	**$757.72**	**$780.45**
b. Contract Results			
Miles Swept	0	0	0
Unit Cost per Mile Swept	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
c. Combined Results			
Miles Swept	800	800	800
Unit Cost per Mile Swept	**$735.65**	**$757.72**	**$780.45**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													Source of Sweeping Cost Information
1	Bryan Forward	Supervisor	1	$84,552	43	10	$129,365	5	$6,468	5	$6,662	5	$6,862	Finance
2	Jimmie Walker	Specialist	1	$61,402	45	10	$95,173	100	$95,173	100	$98,028	100	$100,969	
3	Kim Hoff	Maintenance Worker III	1	$53,581	51	0	$80,907	100	$80,907	100	$83,335	100	$85,835	
4	Will Holder	Maintenance Worker III	1	$53,581	51	10	$86,265	100	$86,265	100	$88,853	100	$91,519	
5	Vaughn Murphy	Maintenance Worker III	1	$53,581	51	10	$86,265	100	$86,265	100	$88,853	100	$91,519	
6	Ruben Aquilar	Maintenance Worker III	1	$53,581	51	10	$86,265	100	$86,265	100	$88,853	100	$91,519	
7	Chip Brust	Specialist	1	$61,402	45	10	$95,173	5	$4,759	5	$4,901	5	$5,048	
8	Jesus Chavez	Maintenance Worker II	1	$51,438	39	10	$76,643	5	$3,832	5	$3,947	5	$4,066	
9	Pete Flores	Maintenance Worker II	1	$51,438	39	10	$76,643	5	$3,832	5	$3,947	5	$4,066	
10	Rob Hogan	Maintenance Worker II	1	$51,438	39	10	$76,643	5	$3,832	5	$3,947	5	$4,066	
11	John Sarenana	Maintenance Worker II	1	$51,438	39	10	$76,643	5	$3,832	5	$3,947	5	$4,066	
12	Chili Lopez	Maintenance Worker II	1	$51,438	39	10	$76,643	5	$3,832	5	$3,947	5	$4,066	
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$465,264		$479,222		$493,599	

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Bryan Forward	Supervisor	1	$84,552	43	10	$129,365	45	$58,214	45	$59,960	45	$61,759	Finance
2	Kiel Koger	Maintenance Manager	1	$113,048	27	10	$154,876	5	$7,744	5	$7,976	5	$8,215	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
								Reporting Totals	**$65,958**		**$67,937**		**$69,975**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
								Supervision and Management Totals	**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
								Training Totals	**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Street Sweepers	Street Sweeper (5 sweepers)	1	$50,110	0	10	$55,121	100	$55,121	100	$56,775	100	$58,478
2	Pickup Trucks	4 large pickup trucks	1	$39,528	0	10	$43,481	5	$2,174	5	$2,239	5	$2,306
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
							Equipment Maintenance Totals		**$57,295**		**$59,014**		**$60,784**

Source of Equipment Maintenance Cost Information

Fleet

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
							Contract Management Totals		**$0**		**$0**		**$0**

Information

Describe source of salary and personnel cost information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$588,517	**$606,173**	**$624,358**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	800	800	800
Unit Cost per Mile Swept	$ 735.65	$ 757.72	$ 780.45

Source of Sweeping Results

Engineering Dept.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$0	$0	$0
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)	$0	$0	$0
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	-	-	-
Unit Cost per Mile Swept	#DIV/0!	#DIV/0!	#DIV/0!

Source of Street Sweeping Results (Note 6)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate street sweeping results.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Poway	Alternate
Contact Person :	Pat Ryan	Archie Penney
Phone :	858-668-4717	858-668-4737
E-Mail :	Pryan@poway.org	Apenney@poway.org

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$0**	**$0**	**$0**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$219,730	$224,871	$226,041
Reporting	$0	$0	$0
Contract Management	$4,000	$4,000	$4,000
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$223,730**	**$228,871**	**$230,041**
Total Costs (In-house + Contractor)	**$223,730**	**$228,871**	**$230,041**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	0	0	0
Unit Cost per Mile Swept	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
b. Contract Results			
Miles Swept	12,000	12,000	12,000
Unit Cost per Mile Swept	**$18.64**	**$19.07**	**$19.17**
c. Combined Results			
Miles Swept	12,000	12,000	12,000
Unit Cost per Mile Swept	**$18.64**	**$19.07**	**$19.17**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
2	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
3	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
4	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
5	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
6	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
7	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
8	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
9	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
10	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
11	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
12	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
13	NA	NA	0	$0	0	0	$0	0	$0	0	$0	0	$0	
14	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
15	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
16	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
17	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
18	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
19	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
20	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$0		$0		$0	

Source of Sweeping Cost Information

Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
3	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
4	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
5	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
3	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
4	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
5	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
3	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
4	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
5	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0
2	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0
3	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0
4	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0
5	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0
2	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0
3	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0
4	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0
5	NA	NA	0	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Information

Referenced accounting reports for salary and benefit information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	0	0	0
Unit Cost per Mile Swept	#DIV/0!	#DIV/0!	#DIV/0!

Source of Sweeping Results

Identify the source of sweeping results.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$219,730	$224,871	$226,041
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)	$4,000	$4,000	$4,000
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$223,730**	**$228,871**	**$230,041**

Note: Was the reporting cost included elsewhere ?

Source of Contract Cost Information (Note 6)

Utilized invoice documents to aquire street sweeping costs. Referenced accounting documents for Construction Maintenance Supervisor salary and benefit information. City owned facility parking areas included. Contract Management Calculated, Construction Maintenance Supervisor Streets FY11 approximatly 78 hours

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	12,000	12,000	12,000
Unit Cost per Mile Swept	$ 18.64	$ 19.07	$ 19.17

Note: Source of data should be stated below.

Source of Street Sweeping Results (Note 6)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate street sweeping results.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Cities	Alternate
Contact Person :	John Smith	Susan Jones
Phone :	619-123-1234	619-123-1237
E-Mail :	John.smith@city.gov	Susan.Jones@city.gov

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$480,054	$519,179	$560,218
Reporting	$3,079	$3,171	$3,266
Employee Supervision and Management	$10,436	$10,749	$11,072
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$35,699	$0	$0
Non-personnel Costs			
Equipment Maintenance	$613,710	$692,738	$638,806
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$1,142,978**	**$1,225,836**	**$1,213,362**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Contract Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$1,142,978**	**$1,225,836**	**$1,213,362**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	13,270	21,799	17,262
Unit Cost per Mile Swept	**$86.13**	**$56.23**	**$70.29**
b. Contract Results			
Miles Swept	**2**	**2**	**2**
Unit Cost per Mile Swept	**$0.00**	**$0.00**	**$0.00**
c. Combined Results			
Miles Swept	13,272	21,801	17,264
Unit Cost per Mile Swept	**$86.12**	**$56.23**	**$70.28**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations: FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		Source of Information (Note 6)
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Alpine Road Station	Equipment Operator	2	$18,952	0	49	$28,238	100	$56,477	105	$61,080	110	$65,908	
2	Borrego Road Station	Equipment Operator	2	$18,952	0	49	$28,238	100	$56,477	105	$61,080	110	$65,908	
3	Campo Road Station	Equipment Operator	1	$18,952	0	49	$28,238	100	$28,238	105	$30,540	110	$32,954	
4	Fallbrook RS	Equipment Operator	2	$18,952	0	49	$28,238	100	$56,477	105	$61,080	110	$65,908	
5	Jamacha RS	Equipment Operator	1	$18,952	0	49	$28,238	100	$28,238	105	$30,540	110	$32,954	
6	Julian Road Station	Equipment Operator	1	$18,952	0	49	$28,238	100	$28,238	105	$30,540	110	$32,954	
7	Lakeside RS	Equipment Operator	1	$18,952	0	49	$28,238	100	$28,238	105	$30,540	110	$32,954	
8	Ramona Road Station	Equipment Operator	1	$18,952	0	49	$28,238	100	$28,238	105	$30,540	110	$32,954	
9	San Marcos RS	Equipment Operator	2	$18,952	0	49	$28,238	100	$56,477	105	$61,080	110	$65,908	
10	Spring Valley RS	Equipment Operator	2	$18,952	0	49	$28,238	100	$56,477	105	$61,080	110	$65,908	
11	Valley Center RS	Equipment Operator	2	$18,952	0	49	$28,238	100	$56,477	105	$61,080	110	$65,908	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$480,054		$519,179		$560,218	

Source of Sweeping Cost Information

Total number of hours and employees dedicated to sweeping for FY 07-08 for each of the listed Road Stations. Based on FY 07-08 Blended Labor Rates. $46/hour and 412 productive hours dedicated to sweeping for each employee.

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		Source of Information (Note 6)
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													
1	Vanessa Cabiling	Administrative Analyst	1	$103,309	0	49	$153,930	2	$3,079	2	$3,171	2	$3,266	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
								Reporting Totals	**$3,079**		**$3,171**		**$3,266**	

Source of Reporting Cost Information

Based on the FY 07-08 Blended Labor Rates. $59/hour for 1751 productive hours.

Worksheet C: In-house Sweeping Costs and Results

b. Supervision and Management (Note 8)

Use lines 1-5 if auto-calculating annual supervision and management costs for each year

1	Thomas Herzberger	LUEG Program Manager	1	$140,080	0	49	$208,719	5	$10,436	5	$10,749	5	$11,072
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0
								Supervision and Management Totals	**$10,436**		**$10,749**		**$11,072**

Source of Supervision & Management Cost Information

Based on the FY 07-08 Blended Labor Rates. $80/hour for 1751 productive hours.

c. Employee and Vendor Training (Note 9)

Use lines 1-5 if auto-calculating annual training costs for each year

1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total training costs for each year								$0		$0		$0
								Training Totals	**$0**		**$0**		**$0**

Source of Training Cost Information

Describe source of salary and personnel cost information.

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$35,699		$0		$0
								Contract Management Totals	**$35,699**		**$0**		**$0**

Information

Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$613,710	$692,738	$638,806
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$613,710	$692,738	$638,806

Source of Non-personnel Cost Information

A percentage of Oracle's total equipment charges for vehicles and equipment for the 12 Road Stations above. (23.5% dedicated to Sweeping for each year)

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$1,142,978	**$1,225,836**	**$1,213,362**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	13,270	21,799	17,262
Unit Cost per Mile Swept	$ 86.13	$ 56.23	$ 70.29

Source of Sweeping Results

Stormwater and Road Station crew sweeping logs.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$0	$0	$0
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)	$0	$0	$0
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	2	2	2
Unit Cost per Mile Swept	$ -	$ -	$ -

Error: As zero costs, there should be zero miles reported.

Source of Street Sweeping Results (Note 6)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate street sweeping results.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
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Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

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20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

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23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of San Diego	Alternate
Contact Person :	Amanda Leos	Tracy Mangum
Phone :	858-541-4353	858-541-4307
E-Mail :	avleos@sandiego.gov	tmangum@sandiego.gov

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$2,779,776	$2,863,170	$2,949,065
Reporting	$25,111	$25,864	$26,640
Employee Supervision and Management	$298,756	$307,719	$316,950
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$1,530,264	$2,283,358	$2,085,979
Materials Disposal	$143,225	$262,091	$202,658
Fuel	$21,904	$10,457	$14,227
Training Materials and Supplies	$237,691	$355,035	$29,909
Total In-house Costs	**$5,036,728**	**$6,107,694**	**$5,625,428**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Contract Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$0**	**$0**	**$0**
Total Costs (In-house + Contractor)	**$5,036,728**	**$6,107,694**	**$5,625,428**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	78,000	95,000	101,000
Unit Cost per Mile Swept	**$64.57**	**$64.29**	**$55.70**
b. Contract Results			
Miles Swept	0	0	0
Unit Cost per Mile Swept	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
c. Combined Results			
Miles Swept	78,000	95,000	101,000
Unit Cost per Mile Swept	**$64.57**	**$64.29**	**$55.70**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Various	Motor Sweeper Operator	19	$48,506	62	96.1	$125,194	100	$2,378,686	100	$2,450,046	100	$2,523,548	
2	M. Armas	Motor Sweeper Operator	1	$48,506	62	96.1	$125,194	80	$100,155	80	$103,160	80	$106,255	
3	A. White	Heavy Truck Driver II	1	$45,302	62	96.1	$116,925	70	$81,848	70	$84,303	70	$86,832	
4	R. Macias	Heavy Truck Driver II	1	$45,302	62	96.1	$116,925	70	$81,848	70	$84,303	70	$86,832	
5	M. Penniman	Utiltiy Worker I	1	$36,296	62	96.1	$93,680	70	$65,576	70	$67,543	70	$69,570	
6	J. Golembiewski	Utiltiy Worker II	1	$39,666	62	96.1	$102,377	70	$71,664	70	$73,814	70	$76,028	
7							$0	100	$0	100	$0	100	$0	
8							$0	100	$0	100	$0	100	$0	
9							$0	100	$0	100	$0	100	$0	
10							$0	100	$0	100	$0	100	$0	
11							$0	100	$0	100	$0	100	$0	
12							$0	100	$0	100	$0	100	$0	
13							$0	100	$0	100	$0	100	$0	
14							$0	100	$0	100	$0	100	$0	
15							$0	100	$0	100	$0	100	$0	
16							$0	100	$0	100	$0	100	$0	
17							$0	100	$0	100	$0	100	$0	
18							$0	80	$0	80	$0	80	$0	
19							$0	100	$0	100	$0	100	$0	
20							$0	100	$0	100	$0	100	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$2,779,776		$2,863,170		$2,949,065	

Source of Sweeping Cost Information

Personnel Pay Schedule; Indirect Cost Rate provided by City of SD., Comptroller's Office; Fringe Benefit Rate was obtained by actual expense data in FY 2008. Note: A percentage of the personnel expense for the last MSO Listed is only at 80% due to the remainder of tasks are for special assignments.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													
1	R. Camarena	Field Representative	1	$38,917	62	96.1	$100,444	25	$25,111	25	$25,864	25	$26,640	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
								Reporting Totals	**$25,111**		**$25,864**		**$26,640**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													
1	W. Shipley	Motor Sweeper Supervisor	1	$55,786	62	96.1	$143,983	100	$143,983	100	$148,302	100	$152,751	
2	T. Abeyta	Public Works Supervisor	1	$59,966	62	96.1	$154,773	100	$154,773	100	$159,416	100	$164,199	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
								Supervision and Management Totals	**$298,756**		**$307,719**		**$316,950**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
								Training Totals	**$0**		**$0**		**$0**	

Source of Reporting Cost Information

Expense related to contract management is captured in the indirect costs, therefore, no iadministrative positions are reported in this area. The field representative is responsible for reporting statistical analysis that is used in the reports for Street Sweeping that are related to the permit.

Source of Supervision & Management Cost Information

Personnel Pay Schedule; Indirect Cost Rate provided by City of SD., Comptroller's Office; Fringe Benefit Rate was obtained by actual expense data in FY 2008

Source of Training Cost Information

Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0
								Equipment Maintenance Totals	**$0**		**$0**		**$0**

Source of Equipment Maintenance Cost Information

Only total costs are available (see Equipment Maintenance Expense below)

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0
								Contract Management Totals	**$0**		**$0**		**$0**

Information

Describe source of salary and personnel cost information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$1,530,264	$2,283,358	$2,085,979
2	Materials Disposal (Note 12)	$143,225	$262,091	$202,658
3	Fuel (Note 13)	$21,904	$10,457	$14,227
4	Training Materials and Supplies (Note 9)	$237,691	$355,035	$29,909
	Total	$1,933,084	$2,910,941	$2,332,773

Source of Non-personnel Cost Information

Source: City of San Diego Comptroller reports. Fuel is already captured in the maintenance charges as part of the Storm Water's agreement with the City of San Diego's General Services Dept. - Equipment Division. Special fuel is captured in the fuel area (line item 3). Cost for special sweeps inclusive.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$5,036,728	**$6,107,694**	**$5,625,428**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	78,000	95,000	101,000
Unit Cost per Mile Swept	$ 64.57	$ 64.29	$ 55.70

Source of Sweeping Results

Mileage obtained by Department Performance measures.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$0	$0	$0
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)	$0	$0	$0
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$0**	**$0**	**$0**

Source of Contract Cost Information (Note 6)

Describe source of contract cost information.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	-	-	-
Unit Cost per Mile Swept	#DIV/0!	#DIV/0!	#DIV/0!

Source of Street Sweeping Results (Note 6)

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Tab D. Contractor Sweeping Costs

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23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of San Marcos	Alternate
Contact Person :	Paul Buckley	Kathleen Trepa
Phone :	760-752-7550	760-752-7550
E-Mail :	Pbuckley@san-marcos.net	Ktrepa@san-marcos.net

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$102,511	$79,190	$1,088
Reporting	$0	$0	$0
Employee Supervision and Management	$3,153	$3,248	$6,690
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$6,856	$8,067	$2,504
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$16,494	$10,783	$1,836
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$129,014**	**$101,287**	**$12,119**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$127,643	$251,763	$258,036
Reporting	$0	$0	$0
Contract Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$127,643**	**$251,763**	**$258,036**
Total Costs (In-house + Contractor)	**$256,657**	**$353,050**	**$270,155**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	7,379	5,534	0
Unit Cost per Mile Swept	**$17.48**	**$18.30**	**#DIV/0!**
b. Contract Results			
Miles Swept	7,392	14,612	14,975
Unit Cost per Mile Swept	**$17.27**	**$17.23**	**$17.23**
c. Combined Results			
Miles Swept	14,771	20,146	14,975
Unit Cost per Mile Swept	**$17.38**	**$17.52**	**$18.04**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	George Haigh	Street Sweeper Operator	1	$55,411	75	10	$102,511	100	$102,511	75	$79,190	1	$1,088	Payroll. Dedicated street sweeper for 1 route. Contracted out in April 2009. 1% for special sweeps.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$102,511		$79,190		$1,088	

Source of Sweeping Cost Information

Payroll. Dedicated street sweeper for 1 route. Contracted out in April 2009. 1% for special sweeps.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Included in supervision / management.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Paul Buckley	Public Works Manager	1	91,548	75	10	$169,364	1	$1,694	1	$1,744	2	$3,594	Payroll, assuming 1% per person for either in-house sweeping or contract inspection / management, increased to 2% when 2nd route contracted out
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Jeff Bushnell	Street Maint Supervisor	1	78,888	75	10	$145,943	1	$1,459	1	$1,503	2	$3,097	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$3,153**		**$3,248**		**$6,690**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	None
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	
	d. Equipment Maintenance (Note 10)													
	Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year													**Source of Equipment Maintenance Cost Information**
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	work management records & vehicle ledgers. One route contracted out FY 07-08. 2nd route contracted out 08-09. One sweeper sold in June '09. One sweeper retained in fleet for special requests, accidents & storm clean up.
2	Multiple	Mechanic	3	$0		10	$0	0	$0	0	$0	0	$0	
3			1	$0	75	10	$0		$0		$0		$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$6,856		$8,067		$2,504	
							Equipment Maintenance Totals		**$6,856**		**$8,067**		**$2,504**	

Worksheet C: In-house Sweeping Costs and Results

Worksheet C: In-house Sweeping Costs and Results

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	Included in supervision / management.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Information

Included in supervision / management.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)			$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$16,494	$10,783	$1,836
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$16,494	$10,783	$1,836

Source of Non-personnel Cost Information

Fleet Maintenance Logs. 2nd sweeper sold with 2nd routed contracted out in April 2009. Projected sweeper 1 for special sweeps using 08/09 + 2%.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$129,014	**$101,287**	**$12,119**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	7,379	5,534	
Unit Cost per Mile Swept	$ 17.48	$ 18.30	#DIV/0!

Source of Sweeping Results

Street Sweeping Residential Route - contracted out April 2009 so used 75% of 07/08. 09/10 special sweeps only - distance not tracked.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$127,643	$251,763	$258,036
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)			$0
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$127,643**	**$251,763**	**$258,036**

Source of Contract Cost Information (Note 6)

Contracts with Cannon Pacific, Inc., FY 0708 includes parking lot sweeping. But not for 08-09 & 09-10.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	7,392	14,612	14,975
Unit Cost per Mile Swept	$ 17.27	$ 17.23	$ 17.23

Source of Street Sweeping Results (Note 6)

miles swept from contract calculations & invoicing.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Santee	Alternate
Contact Person :	Helen Perry	
Phone :	619-258-4100 ext. 177	
E-Mail :	hperry@ci.santee.ca.us	

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$0**	**$0**	**$0**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$77,967	$62,938	$63,538
Reporting	$0	$0	$0
Contract Management	$1,434	$1,511	$1,463
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$79,401**	**$64,448**	**$65,001**
Total Costs (In-house + Contractor)	**$79,401**	**$64,448**	**$65,001**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	**1**	**1**	**1**
Unit Cost per Mile Swept	**$0.00**	**$0.00**	**$0.00**
b. Contract Results			
Miles Swept	10,212	10,212	10,212
Unit Cost per Mile Swept	**$7.78**	**$6.31**	**$6.37**
c. Combined Results			
Miles Swept	10,213	10,213	10,213
Unit Cost per Mile Swept	**$7.77**	**$6.31**	**$6.36**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations					
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs	
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping
	Use lines 1-20 if auto-calculating annual inspection costs for each year												
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0
								TOTALS	$0		$0		$0

Source of Information (Note 6)
Source of Sweeping Cost Information
Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Information

Describe source of salary and personnel cost information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	1	1	1
Unit Cost per Mile Swept	$ -	$ -	$ -

Source of Sweeping Results

Identify the source of sweeping results.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$77,967	$62,938	$63,538
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$0	$0	$0
2	Contract Management (Note 16)	$1,434	$1,511	$1,463
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$79,401**	**$64,448**	**$65,001**

Source of Contract Cost Information (Note 6)

Contractor costs based on 50% of actual contract costs for each fiscal year. Contract management costs based on 50% of the number of estimated hours to manage the street sweeping contract.

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	10,212	10,212	10,212
Unit Cost per Mile Swept	$ 7.78	$ 6.31	$ 6.37

Note: Please disclose the source of data.

Source of Street Sweeping Results (Note 6)

Mileage data is not available for the swept area of parking facilities associated with municipal facilities. Mileage accrued while sweeping these facilities is included in the total mileage.

General Explanation and Instructions for the Completion of **"Street Sweeping - Reasonable Reimbursement Methodology Unit Cost Survey"**

Tab A. Instructions and Notes

1. **Please return the completed survey by January 19, 2011**. Once completed, the file should be returned via email to Jon Van Rhyn (Jon.vanrhyn@sdcounty.ca.gov) with a cc to Leonard Kaye (Lkaye14765@aol.com) no later than 5:00 p.m., Wednesday January 19, 2011. If you have questions or need assistance please contact Jon by email or at 858-495-5133.

2. **Please name the completed file as follows**: The file provided to you contains the word JURISDICTION in its name. Please substitute your individual jurisdiction name for JURISDICTION; there is no need to make any additional changes.
3. **Fill in only the blue highlighted cells**. All other cells have been protected to prevent any inadvertent loss of data. Each of the blue cells should be completed regardless of whether or not it applies. For any that do not, fill in either a "zero" or "N/A" as applicable.
4. **Costs Not Included**. This RRM survey does not include the costs of program development, parking enforcement and street sweeping equipment which may be claimed as actual costs.
5. **Exclusion of Unimproved Streets and Roads**. This RRM survey addresses only costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. Costs asociated with any facilities that are not curbed or guttered should not be included in your response.

6. **Claiming of Costs Applicable to the Mandate**. In some instances (i.e., materials disposal, fuel, or equipment maintenance), Copermittee costs may apply to activities other than those subject to the mandate. In such cases, only the proportion of the cost that applies to the mandate should be claimed.

Tab B. Cost Summary Sheet

7. Based on the information you input in Worksheet C (In-house sweeping costs) and Worksheet D (Contractor Sweeping Costs), all required cost and sweeping data will autofill in Worksheet B (Cost Summary).
8. The only information that needs to be input in Worksheet B is the contact information in Part 1 (General Information).

Tab C. In-house Sweeping Costs

9. **Note 1 (Street Sweeping Operations Costs).** Please report the only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Information" (see Note 6).

10. **Note 2 (Staff Person)**. Indicate, by names if possible, and by job classifications, the numbers of your staff persons who perform the indicated sweeping functions.
11. **Note 3 (Annual Salary)**. Please report the salary earned by an employee during 2007-08.
12. **Note 4 (Benefit Rate)**. Please indicate the percentage of salary provided by your employer as an employee benefit rate during 2007-08.
13. **Note 5 (Indirect Cost Rate)**. Please use the annual indirect cost or overhead rate as a percentage of salary for FY 2007-08. If none is available use 10%, the State's default rate.
14. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs. Also document any assumptions used to derive the reported values.
15. **Note 7 (Reporting)**. Generally includes (1) Reporting and tracking policies and procedures, (2) data tracking and analysis, (3) report writing, and (4) associated supervision and management. For additional explanation, see Section IV.B. of the Copermittees' revised Parameters and Guidelines (11/15/10).
16. **Note 8 (Supervision and Management)**. Time spent by supervisory and management personnel supervising personnel directly responsible for performing the mandated activities.

17. **Note 9 (Employee and Vendor Training)**. The claimant's costs to develop, update, and conduct training on street sweeping policies, procedures, to develop and produce documentation (manuals, forms, etc.), and the training costs of all claimant and vendor employees who perform tasks necessary to implement street sweeping and related functions during the life of the Permit.
18. **Note 10 (Equipment Maintenance)**. Annual equipment maintenance costs, including parts, supplies (e.g., water), and personnel costs. This also includes the cost of operating, renting, leasing, or contracting for facilities to store and maintain equipment and supplies.
19. **Note 11 (Contract Management)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet C, contract management costs should only include those necessary to carry out the Copermittees' in-house street sweeping activities (e.g., contracted equipment use, waste disposal, etc.). Contract costs associated with contractor sweeping activities are included in Worksheet D (See Note 16).

20. **Note 12 (Materials Disposal)**. Costs to dispose of material collected from street sweeping, including the removal of materials from street sweeping vehicles, and the transport, storage, and disposal of these materials and the cost of operating, renting, leasing, or contracting for facilities to store or dispose of collected materials, and all applicable disposal fees or charges.
21. **Note 13 (Fuel)**. The actual cost of fuel necessary to run the street sweeping equipment and equipment used to transport and dispose of collected materials.

Tab D. Contractor Sweeping Costs

22. **Note 14 (Contractor Costs)**. Please report only those costs associated with sweeping improved (i.e., curbed and guttered") streets, roads, and highways. If parking lots are included as part of sweeping runs, and these costs are intermingled with the those of streets, roads, and highways, the Copermittee may choose to either include or exclude them. If included, this should be noted under "Source of Contract Cost Information" (see Note 6). Also please note that contract costs do not allow for itemization of specific costs (e.g., fuel, equipment maintenance, etc.). For the purposes of this survey, it is assumed that such costs are included within the broader category of "Street Sweeping Operations Costs." If such itemization is part of your contract activities, please indicate which items have been absorbed into the larger figure in the "Source of Contract Cost Information" box .

23. **Note 15 (Supplemental In-house Costs)**. This section includes in-house personnel and non-personnel costs incurred in supporting contractors' mandated services. Note: It is not intended to replace Worksheets C and D, which correspond to all activities related to in-house sweeping. Worksheet D should describe only those supplemental activities related to contract sweeping. Notes 7-9 and 10-13 are the same as those found in Tab C. (above).

24. **Note 6 (Source of Information)**. Please indicate the documents and assumptions used for reported costs and results. Also document any assumptions used to derive the reported values.

25. **Note 16 (Contract Management Costs)**. The costs of preparing requests for proposals or requests for bids, negotiating or drafting third party contracts, and subsequently administering service contracts for the time they are performing these tasks. For Worksheet D, contract management costs should only include those necessary to carry out the contracted street sweeping activities. Contract costs associated with in-house sweeping activities (e.g., contracted equipment use, waste disposal, etc.) are included in Worksheet D (See Note 11).

Worksheet B: Unit Cost Summary Sheet

Part 1: General Information

Jurisdiction :	City of Cities	Alternate
Contact Person :	John Smith	Susan Jones
Phone :	619-123-1234	619-123-1237
E-Mail :	John.smith@city.gov	Susan.Jones@city.gov

	FY 2007-08	FY 2008-09	FY 2009-10
Part 2: Cost Information			
A. In-house Costs (complete Worksheet C)			
Personnel Costs			
Street Sweeping Operations	$0	$0	$0
Reporting	$0	$0	$0
Employee Supervision and Management	$0	$0	$0
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Contract Management	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total In-house Costs	**$0**	**$0**	**$0**
B. Contractor Costs (complete Worksheet D)			
Personnel Costs			
Street Sweeping Operations	$161,964	$158,400	$158,400
Reporting	$5,112	$5,225	$4,998
Contract Management	$5,112	$5,225	$4,998
Employee and Vendor Training	$0	$0	$0
Equipment Maintenance	$0	$0	$0
Non-personnel Costs			
Equipment Maintenance	$0	$0	$0
Materials Disposal	$0	$0	$0
Fuel	$0	$0	$0
Training Materials and Supplies	$0	$0	$0
Total Contract Costs	**$172,187**	**$168,849**	**$168,396**
Total Costs (In-house + Contractor)	**$172,187**	**$168,849**	**$168,396**

Part 3: Street Sweeping Results and Unit Costs

	FY 2007-08	FY 2008-09	FY 2009-10
a. In-house Results			
Miles Swept	**1**	**1**	**1**
Unit Cost per Mile Swept	**$0.00**	**$0.00**	**$0.00**
b. Contract Results			
Miles Swept	8,000	8,000	8,000
Unit Cost per Mile Swept	**$21.52**	**$21.11**	**$21.05**
c. Combined Results			
Miles Swept	**8,001**	**8,001**	**8,001**
Unit Cost per Mile Swept	**$21.52**	**$21.10**	**$21.05**

Worksheet C: In-house Sweeping Costs and Results

Part 1: Street Sweeping Operations Costs (Note 1)

	Annualized FY 2007-08 Salary Information							Personnel Cost Calculations						
								FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2009-10 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	% of time dedicated to sweeping	Annual cost for sweeping	Source of Information (Note 6)
	Use lines 1-20 if auto-calculating annual inspection costs for each year													
1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
7	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
8	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
9	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
10	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
11	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
12	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
13	Enter Name	Enter Job Classification	1	$0	0	0	$0	0	$0	0	$0	0	$0	
14	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
15	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
16	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
17	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
18	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
19	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
20	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
21	Use line 21 if inserting total inspection costs for each year								$0		$0		$0	
								TOTALS	$0		$0		$0	

Source of Sweeping Cost Information

Describe source of salary and personnel cost information.

Worksheet C: In-house Sweeping Costs and Results

Part 2: Other Personnel Costs Related to Street Sweeping

	Annualized FY 2007-08 Salary Information							FY 2007-08 Personnel Costs		FY 2008-09 Personnel Costs		FY 2008-09 Personnel Costs		
	Staff Person (Note 2)	Job Classification	Number in Class	Annual Salary (Note 3)	Benefit rate (%) (Note 4)	Indirect cost rate %) (Note 5)	Salaries, Benefits, Indirect Totals	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	% of time dedicated to function	Annual cost of function	Source of Information (Note 6)
	a. Reporting (Note 7)													
	Use lines 1-5 to auto-calculate annual reporting costs for each year													**Source of Reporting Cost Information**
1	Enter Name	Analyst (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	4	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 to insert total reporting costs for each year								$0		$0		$0	
							Reporting Totals		**$0**		**$0**		**$0**	
	b. Supervision and Management (Note 8)													
	Use lines 1-5 if auto-calculating annual supervision and management costs for each year													**Source of Supervision & Management Cost Information**
1	Enter Name	Program Mgr (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total supervision and management costs for each year								$0		$0		$0	
							Supervision and Management Totals		**$0**		**$0**		**$0**	
	c. Employee and Vendor Training (Note 9)													
	Use lines 1-5 if auto-calculating annual training costs for each year													**Source of Training Cost Information**
1	Enter Name	Supervisor (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	Describe source of salary and personnel cost information.
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total training costs for each year								$0		$0		$0	
							Training Totals		**$0**		**$0**		**$0**	

Worksheet C: In-house Sweeping Costs and Results

d. Equipment Maintenance (Note 10)

Use lines 1-5 if auto-calculating annual equipment maintenance costs for each year

1	Enter Name	Equip. Operator (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total equipment maintenance costs for each year								$0		$0		$0	
								Equipment Maintenance Totals	**$0**		**$0**		**$0**	

Source of Equipment Maintenance Cost Information

Describe source of salary and personnel cost information.

e. Contract Management (Note 11)

Use lines 1-5 if auto-calculating annual contract management costs for each year

1	Enter Name	Analyst II (example)	1	$0	0	10	$0	0	$0	0	$0	0	$0	
2	Multiple	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
3	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
4	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
5	Enter Name	Enter Job Classification	1	$0	0	10	$0	0	$0	0	$0	0	$0	
6	Use line 6 if inserting total contract management costs for each year								$0		$0		$0	
								Contract Management Totals	**$0**		**$0**		**$0**	

Information

Describe source of salary and personnel cost information.

Part 3: Non-Personnel Costs Related to Street Sweeping

		FY 2007-08	FY 2008-09	FY 2009-10
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total	$0	$0	$0

Source of Non-personnel Cost Information

Describe source of non-personnel cost information.

Part 4: Total Costs (Personnel + Non-personnel)

FY 2007-08	FY 2008-09	FY 2009-10
$0	**$0**	**$0**

Part 5: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	1	1	1
Unit Cost per Mile Swept	$ -	$ -	$ -

Source of Sweeping Results

Identify the source of sweeping results.

Worksheet D: Contractor Street Sweeping Costs and Results

Part 1: Contract Costs

		FY 2007-08	FY 2008-09	FY 2009-10
	Contractor Costs (Note 14)			
	Street Sweeping Operations Costs	$161,964	$158,400	$158,400
	Supplemental In-house Costs (Note 15)			
	Personnel Costs			
1	Reporting (Note 7)	$5,112	$5,225	$4,998
2	Contract Management (Note 16)	$5,112	$5,225	$4,998
3	Employee and Vendor Training (Note 9)	$0	$0	$0
4	Equipment Maintenance (Note 10)	$0	$0	$0
	Non-personnel Costs			
1	Equipment Maintenance (Note 10)	$0	$0	$0
2	Materials Disposal (Note 12)	$0	$0	$0
3	Fuel (Note 13)	$0	$0	$0
4	Training Materials and Supplies (Note 9)	$0	$0	$0
	Total Contract Costs	**$172,187**	**$168,849**	**$168,396**

Source of Contract Cost Information (Note 6)

FY 2007-08: JURMP Annual Report, Fiscal Analysis; supplemental costs not collected, interpolated as an average of FY08-09 and FY09-10 supp costs; FY2008-09: JURMP Annual Report, Fiscal Analysis; supplemental costs reported as $10449 and allocated above as 50% reporting, 50% contract management; FY2009-10: JURMP Annual Report, Fiscal Analysis; supplemental costs reported as $9996 and allocated above as 50% reporting, 50% contract

Part 2: Street Sweeping Results

	FY 2007-08	FY 2008-09	FY 2009-10
Miles Swept	8,000	8,000	8,000
Unit Cost per Mile Swept	$ 21.52	$ 21.11	$ 21.05

Source of Street Sweeping Results (Note 6)

Describe source of inspection and cleaning results. Also use this space to document any assumptions used to calculate street sweeping results.

EXHIBIT 6 "A" - DECLARATION OF JON VANRHYN FOR COUNTY OF SAN DIEGO.

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DECLARATION OF JON VAN RHYN ON BEHALF OF THE COUNTY OF SAN DIEGO IN SUPPORT OF TEST CLAIM

I, Jon Van Rhyn, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have received the following degrees and certifications: Bachelor of Science in Geological Sciences; Master of Public Health, Environmental Health Emphasis; and EPA Water Quality Academy certification.

3. I am employed by the County of San Diego as a Water Quality Program Manager.

4. I have held my current position for approximately six years. My duties include operational oversight of fifteen program staff in several key program areas including science and monitoring, education, regulatory reporting, and program assessment. I also oversee regional coordination of the County's stormwater compliance efforts with the 20 other municipal stormwater co-permittees.

5. I have reviewed the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I know and understand the requirements of the Permit.

6. I have also reviewed and I know and understand the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

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7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The County's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1 of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff

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programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The County's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each working body for each fiscal year and assumed that on average each staff member would spend three hours preparing for and attending each meeting. The cost to the County to comply with this mandated activity for FY 2007-08 is $25,989. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The County's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the

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contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The County's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The County's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County.

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This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The County's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.5 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The County's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.a.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The County used average daily traffic ("ADT") statistics to determine the volume of trash and/or debris that could reasonably be expected to be generated. Improved roads, streets and highways that have more than 20,000 vehicles per day are in the "High" volume of trash and/or debris category. Improved roads, streets and highways that have 15,000 to 20,000 vehicles per day are in the "Medium" volume of trash

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and/or debris category. Improved roads, streets and highways that have less than 15,000 vehicles per day are in the "Low" volume of trash and/or debris category. The County has 1,057 miles of improved roads, streets and highways. Based on these standards, 7% of the improved roads, streets and highways are in the "High" category, 6% in the "Medium" category and 87% in the "Low" category. Based on this analysis it was determined that there will be an 8 % increase in the street sweeping activities as a result of the 2007 Permit. To accommodate the required increase, the County has been required to purchase two new mechanical sweeper brooms. The cost of each vehicle is $240,000 ($200,000 purchase price plus $40,000 year amortization over an expected useful life of five years). The annual maintenance and fuel costs are expected to be $30,000 for each vehicle. The County's actual and estimated equipment costs for complying with this mandated activity for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Staffing Costs: In response to Section D.3.a.(5) the County has increased its staffing by 0.36 staff years for FY 2007-08, and is expected to increase by 1.0 staff years in FY 2008-09. The County's cost in FY 2007-08 for an Equipment Operator is $51 per hour. The increase in the County's staffing cost to comply with this mandated activity in FY 2007-08 is $32,399, and is expected to increase to $127,291 in FY 2008-09 and by 4% in each year thereafter. The County's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Contract Costs: The County of San Diego has not incurred additional costs for contracting street sweeping services.

f. Conveyance System Cleaning: Section D.3.a.(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be

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inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the County has increased staffing of its MS4 operations and maintenance program for FY 2007-08 by 2.64 staff years. The County's cost in FY 2007-08 for an Equipment Operator is $51 per hour. The increase in the County's staffing cost to comply with this mandated activity in FY 2007-08 is $237,592 and is expected to increase 4% in FY 2008-09 and each year thereafter. The County's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with this mandate, the County expects to expend 288 hours of staff time in FY 2008-09, and each year thereafter, to develop, administer and analyze surveys and tests. The County's cost in FY 2008-09 for an Environmental Health Specialist III to perform this work is $80 per hour. The increase in the County's staffing cost to comply with these mandated activities in FY 2008-09 is $22,980 and is expected to increase 4% in FY 2009-10 and each year thereafter. The County's actual and

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estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1 the County will expend 975 hours of staff time in FY 2008-09, and each year thereafter. The County's cost in FY 2008-09 for an Environmental Health Specialist III to perform these mandated activities will be $80 per hour. The increase in the County's staffing cost to comply with these mandated activities in FY 2008-09 is $77,794 and is expected to increase 4% in FY 2009-10 and each year thereafter. The County's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

1. Watershed URMP

1.) Staffing for Development and Implementation: Section E of the 2007 Permit establishes extensive requirements for co-permittees

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to collaborative in the development and implementation of activities and programs at the watershed scale. Section E.2.f specifically requires that watershed co-permittees collaborate within their Watershed Management Areas (WMAs) to develop and implement an updated Watershed Urban Runoff Management Program (WURMP) for each watershed in which they are a participant. Lead responsibility for watershed program implementation resides with the County's Department of Planning and Land Use Watershed Planning Division. This program consists of five staff (one Planning manager, two Planner IIIs and two Planner I/IIs). The FY 2007-08 costs are based on annualized projections for year-to-date expenditures. For FY 2008-09 and beyond, it is estimated that staff will spend 70% of their time on WURMP development and implementation. Calculations are based on the following hourly rates for FY 2007-08: Planning Manager - $115; Planner III - $97; and Planner I/II - $81. The increase in the County's staffing cost to comply with these mandated activities in FY 2007-08 is $436,394 and is expected to increase to $713,207 in FY 2008-09 and by 4% each year thereafter. The County's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The County has entered into four cost sharing agreements to pay for consultant support relating to the Carlsbad, San Diego River, San Dieguito River, and Penasquitos WURMPs. The consultant costs for FY 2007-08 are estimated to be $15,000. Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The County's budgeted cost for this mandated activity for FY 2008-09 is $25,000, and is expected to increase by 5% in FY 2009-10 and each year thereafter. The County's

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actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $40,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The County's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the County in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $1,485,274, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the County expects to incur in FY 2008-09, are expected to be $1,835,181, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the County expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

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14. I am not aware of any authority to assess a fee to offset these increased costs.

15. I believe that the only available source to pay these increased costs are and will be the County's general purpose funds.

Executed this 12th day of June at San Diego, California.

I declare under penalty of perjury that the foregoing is true and correct.

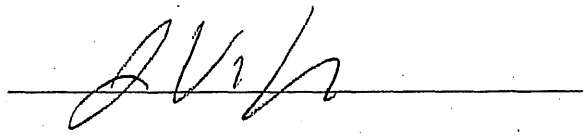

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Co-Permitee - Unincorporated

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$161,599.73	$169,679.79	$178,163.72	$187,071.74	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$25,989.00	$32,862.00	$28,342.00	$29,475.00	$30,654.00	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are County costs only. County participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.

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Regional Residential Education Program Development and Implementation	$39,033.75	$78,067.50	$156,135.00	$163,941.75	$172,138.99	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.
Hydromodification Management Plan (HMP) Development	$243,253.67	$162,169.12	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$15,613.50	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$62,454.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section I.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
JURISDICTIONAL URMP ACTIVITIES						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.

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6.0 Municipal						
Street Sweeping (equipment costs)	$400,000.00	$140,000.00	$140,000.00	$140,000.00	$140,000.00	Permit Section D.3.(5) requires street sweeping frequencies for improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at two times per month. Areas with medium volumes of trash and/or debris must be swept monthly and areas with low volumes of trash and/or debris at least annually. The County uses average daily traffic (ADT) as a proxy for determining the level of trash and debris generated. The categories are as follows: High is defined ADT greater than 20,000 vehicles per day (vpd), medium is defined as ADT between 15,000 and 20,000 vpd, and low is defined as ADT less than 15,000 vpd. The County has approximately 1,057 miles of roads with curbs/berms, with 7% identified as high, 6% as medium and 87% as low. Applying the permit-required sweeping frequencies results in an ~8% increase in overall street sweeping activities over existing levels. To accommodate the required increase, the County has purchased two additional mechanical sweeper brooms. The cost of each vehicle is $240,000 ($200,000 purchase price plus $40,000 year amortization over an expected useful life of five years). The annual maintenance and fuel costs are expected to be $30,000 for each vehicle
Street Sweeping (staffing costs)	$32,398.85	$127,291.47	$132,383.13	$137,678.46	$143,185.60	In response to Section D.3.(5) the County has increased its staffing by 0.36 staff years for FY 2007-08, and is expected to increase by 1.0 staff years in FY 2008-09. The County's cost in FY 2007-08 for an Equipment Operator is $51 per hour. The increase in the County's staffing cost to comply with this mandated activity in FY 2007-08 is $32,399, and is expected to increase to $127,291 in FY 2008-09 and by 4% in each year thereafter.
Street Sweeping (contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	The County of San Diego has not incurred additional costs for contracting street sweeping services.
Conveyance System Cleaning	$237,591.55	$247,095.21	$256,979.02	$267,258.18	$277,948.51	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, additional staffing impacts are projected. The County has increased its MS4 operations and maintenance program by 2.64 staff years in Fy 2007-08. Costs are calculated at $50.56 per hour for Operations Engineers and increased by 4% in each subsequent year.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$0.00	$22,095.36	$22,979.17	$23,898.34	$24,854.28	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. FY 07-08 staffing impacts are estimated at three days per month (288 hours per year) to develop, administer, and analyze surveys and tests. Costs are calculated at the EHS III level ($76.72 per hour), and increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$0.00	$77,794.08	$80,905.84	$84,142.08	$87,507.76	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Although these responsibilities may be incurred across a number of program areas and staff, annual costs are calculated as 975 hours of time (~0.5 staff years) at the EHS III level ($76.72 per hour).
[redacted]						
Staffing for Watershed URMP development and implementation	$436,394.00	$713,207.00	$741,735.28	$771,404.69	$802,260.88	Lead responsibility for watershed program implementation resides with the DPLU Watershed Planning Division. This program consists of five staff (one Planning Manager, two Planner IIIs, and two Planner I/IIs). FY 07-08 cost estimates are based on annualized projections from YTD expenditures. These totals are lower than those projected for the following years because the program has been short staffed for the majority of the year. For FY 2008-09 and beyond, an estimated 70% of total staff time for these positions is spent on WURMP development and implementation. Calculations assume the following hourly rates for FY 2007-08; Planning Manager ~ $115, Planner III ~ $97, and Planner I/II ~ $81). These rates are increased by 4% in each subsequent year.
WURMP Cost-Share Agreements	$15,000.00	$25,000.00	$26,250.00	$27,563.00	$28,940.00	Cost share agreements are used to pay for WURMP consultant support. The FY 07-08 total is based on actual County contributions to the WURMP Cost Share Agreements in which it participates. Increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit. A 5% increase is also assumed for each year after FY 2008-09.
Implementation of Watershed Activities	$40,000.00	$48,000.00	$57,600.00	$69,120.00	$82,944.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The County budgeted $40,000 for implementing WURMP activities in FY 07-08. Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year.
TOTALS	$1,485,274.32	$1,835,181.48	$1,812,989.24	$1,955,099.22	$1,977,505.75	

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost	FY 10-11 No. Meetings	FY 10-11 Meeting Length	FY 10-11 No. Staff	FY 10-11 Hourly Rate	FY 10-11 Total Cost	FY 11-12 No. Meetings	FY 11-12 Meeting Length	FY 11-12 No. Staff	FY 11-12 Hourly Rate	FY 11-12 Total Cost
Program Planning Subcommittee																										
Water Quality Program Manager	$116	1	3	1	$116	$349	8	3	1	$121	$2,907	8	3	1	$126	$3,023	8	3	1	$131	$3,144	8	3	1	$136	$3,270
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	1	3	1	$115	$345	8	3	1	$120	$2,870	8	3	1	$124	$2,985	8	3	1	$129	$3,105	8	3	1	$135	$3,229
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$694					$5,777					$6,008					$6,248					$6,498
Fiscal, Reporting, & Assessment Workgroup																										
Water Quality Program Manager	$116	8	3	1	$116	$2,795	6	3	1	$121	$2,180	6	3	1	$126	$2,267	6	3	1	$131	$2,358	6	3	1	$136	$2,452
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	8	3	1	$77	$1,841	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$4,636					$3,616					$3,761					$3,911					$4,068
Education & Residential Sources Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	10	3	2	$77	$4,603	6	3	2	$80	$2,872	4	3	2	$83	$1,992	4	3	2	$86	$2,071	4	3	2	$90	$2,154
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$4,603					$2,872					$1,992					$2,071					$2,154
Monitoring Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	12	3	1	$95	$3,402	12	3	1	$98	$3,538	12	3	1	$102	$3,680	12	3	1	$106	$3,827	12	3	1	$111	$3,980
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$3,402					$3,538					$3,680					$3,827					$3,980
Dry Weather Monitoring Sub-workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	6	3	1	$77	$1,381	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$1,381					$1,436					$1,494					$1,553					$1,616

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	6	3	1	$77	$1,381	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$1,381					$1,436					$1,494					$1,553					$1,616
Land Development Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Flood Control Program Manager	$110	12	3	1	$110	$3,950	12	3	1	$114	$4,108	4	3	1	$119	$1,424	4	3	1	$123	$1,481	4	3	1	$128	$1,540
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	12	3	1	$77	$2,762	12	3	1	$80	$2,872	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$6,711					$6,980					$2,420					$2,517					$2,617
Municipal Sources Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	4	3	1	$80	$957	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$0					$957					$996					$1,036					$1,077
Industrial Commercial Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	4	3	1	$80	$957	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$0					$957					$996					$1,036					$1,077
Regional WURMP Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	5	3	1	$115	$1,725	8	3	1	$120	$2,870	8	3	1	$124	$2,985	8	3	1	$129	$3,105	8	3	1	$135	$3,229
Planner III	$97	5	3	1	$97	$1,455	8	3	1	$101	$2,421	8	3	1	$105	$2,518	8	3	1	$109	$2,619	8	3	1	$113	$2,723
						$3,180					$5,292					$5,503					$5,723					$5,952
Annual Total						$25,989					$32,862					$28,342					$29,475					$30,654

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EXHIBIT 6 "B" - DECLARATION OF GLENN PRUIM FOR CITY OF CARLSBAD.

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DECLARATION OF GLENN PRUIM ON BEHALF OF THE CITY OF CARLSBAD IN SUPPORT OF TEST CLAIM

I, Glenn Pruim, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have earned a Bachelor of Science and a Master of Sciences Degree in Civil Engineering. I attended several classes in Storm Water training.

3. I am employed by the City of Carlsbad as the Public Works Director.

4. I have held my current position for approximately 2 years. My duties include direction and oversight of the Public Works Department, including the City's Storm Water Program.

5. I have reviewed the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also reviewed and I am familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

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8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L.1 of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Carlsbad's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1 of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of Carlsbad's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for

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each working body for each fiscal year and assumed that on average each staff member would spend 10 hours per month preparing for and attending meetings. The cost to the City of Carlsbad to comply with this mandated activity for FY 2007-08 is $45,793. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of Carlsbad's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Carlsbad's proportional share of the budgeted costs for complying

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with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Carlsbad's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Carlsbad's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.5 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Carlsbad's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping: The City of Carlsbad implemented a street sweeping prigram that meets or exceeds the 2007 Permit requirements after the issuance of the 2001 Permit. The City of Carlsbad is therefore unable to now quantify the additional costs mandated by the 2007 Permit and is not now claiming an amount for Street Sweeping.

f. Conveyance System Cleaning: Section D.3.(a)(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of Carlsbad has encumbered $53,000 to pay for a contractor to provide these services for FY 2007-08. An additional $3,000 is allocated for staff time to oversee these activities. These costs are expected to increase 4% in FY 2008-09 and each year thereafter. The City of Carlsbad's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are

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detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with these mandates the City of Carlsbad has hired a consultant to measure the effectiveness of education programs for city staff. The City of Carlsbad's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and

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updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with these mandates the City of Carlsbad will expend 164 hours of staff time in FY 2008-09, and each year thereafter. The City of Carlsbad's cost in FY 2008-09 for a Senior Environmental Specialist to perform these mandated activities will be $78.70 per hour. The increase in the City of Carlsbad's staffing cost to comply with these mandated activities in FY 2007-08 is $42,867 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Carlsbad's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

1. Watershed URMP

1.) Staffing for Development and Implementation: The Permit requires implementation of Watershed Urban Runoff Management Program. Lead responsibility for the Carlsbad watershed program implementation resides with the Carlsbad Storm Water Protection Division. This program consists of a contracted Watershed Coordinator and staff time. Staff consists of a Storm Water Manager - $106.36 for 5 hours per month, Senior Environmental Specialist - $78.70 for 1 hour per month and an Environmental Specialist I/II - $67.03 for 1 hour per month. The City of Carlsbad's contract and staffing costs to comply with these mandated activities in FY 2007-08 is $34,740 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Carlsbad's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed

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quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $10,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The City of Carlsbad's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of Carlsbad in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $205,016 and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City of Carlsbad expects to incur in FY 2008-09, are expected to be $216,313 and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of Carlsbad expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I am not aware of any authority to assess a fee to offset these increased costs.

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15. I believe that the only available source to pay these increased costs are and will be the city's general purpose funds.

Executed this 10TH day of JUNE at CARLSBAT, California.

I declare under penalty of perjury that the foregoing is true and correct.

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Co-Permittee City of

Carlsbad

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$17,333.66	$18,200.35	$19,110.36	$20,065.87	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$45,973.20	$47,720.18	$32,593.54	$33,832.10	$35,117.72	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are estimated City costs only. Assumes 10 hrs / mo of Environmental Specialist II & Sr. ES time, 10 hours / mo of Storm Water Manager time. Multiply by Fully burdened Rate (Storm Water Manager - $106.36, Sr. Env. Specialist - $78.70, Env. Specialist I/II $67.03). Factor 3.8% increase in rates annually. Estimate 10 hours/mo for Deputy City Engineer ($131.02/hr) (Channel Mtce & HMP Workgroups only) for FY08 and FY09, 0 hours after that.
Regional Residential Education Program Development and Implementation	$4,186.88	$8,373.75	$16,747.50	$17,584.88	$18,464.13	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.

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Hydromodification Management Plan (HMP) Development	$36,989.70	$24,659.80	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$1,674.75	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$6,699.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section 1.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
4.0 Development Planning						
HMP, LID, and SUSMP (Design)						Advised that this was not going to be included in unfunded mandate claim.
HMP, LID, and SUSMP (Implementation)						Advised that this was not going to be included in unfunded mandate claim.
5.0 Construction						
Advanced Treatment (Design, Review, & Implementation)						Advised that this was not going to be included in unfunded mandate claim.
6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Carlsbad contracts Street Sweeping, and the contract calls for a higher level of service than is required by permit. No incremental increase as a result of new permit. Old permit did not explicitly call for Street Sweeping, however, it did require BMPs on High Priority Facilities (i.e., Streets), so the City used Street Sweeping to meet this requirement.
Street Sweeping (staffing and /or contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	See above, no incremental increase in costs.

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Conveyance System Cleaning	$56,000.00	$58,128.00	$60,336.86	$62,629.66	$65,009.59	Storm Drain program has encumbered $53,000 for contract cleaning, and anticipates about $3,000 in staff time this FY. Increased these amounts by 3.8% annually for next 5 years. Actual costs this year are estimated to be $30,000 for cleaning/inspection and $3,000 staff time and materials.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$4,850.00	$0.00	$0.00	$0.00	$0.00	Costs of consultant ($4,850) for measuring effectiveness of education programs for City Staff. Future years' costs are unknown, therefore we did not list any.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						
Annual JURMP Assessments	$12,867.45	$13,356.41	$13,863.96	$14,390.79	$14,937.64	Estimate 30% of time spent on JURMP AR. Used FY06-07 as baseline-545 total hours, 163.5 is 30%. Used Sr. ES ($78.70/hr) as average level for cost basis, and 3.8% increase per year.
[redacted]						
Staffing for Watershed URMP development and implementation	$26,962.00	$27,281.10	$28,645.10	$30,077.41	$39,923.36	Lead responsibility for Carlsbad watershed program resides with the Storm Water Protection Division. This program consists of a contracted Watershed Coordinator, and staff time. Staff increased by 3.8% annually. Contract dollars are actual for term of contract, Calculations assume the following hourly rates for FY 2007-08; Storm Water Manager - $106.36 5 hrs/mo, Sr. Env. Specialist - $78.70, Env. Specialist I/II $67.03 1 hr/mo (from fully burdened rate listing)).
WURMP Cost-Share Agreements						Costs included above. Carlsbad is Watershed Lead and doesn't contribute to another watershed.
Implementation of Watershed Activities	$10,000.00	$12,000.00	$14,400.00	$17,280.00	$20,736.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City budgeted $10,000 for WURMP activities cost share in FY 07-08, and recurring. Using County's 20% number for consistency in outlying years.
TOTALS	**$199,503.98**	**$208,852.90**	**$184,787.31**	**$201,604.20**	**$214,254.30**	

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost	FY 10-11 No. Meetings	FY 10-11 Meeting Length	FY 10-11 No. Staff	FY 10-11 Hourly Rate	FY 10-11 Total Cost	FY 11-12 No. Meetings	FY 11-12 Meeting Length	FY 11-12 No. Staff	FY 11-12 Hourly Rate	FY 11-12 Total Cost
Program Planning Subcommittee																										
Water Quality Program Manager	$116	1	3	1	$116	$349	8	3	1	$121	$2,907	8	3	1	$126	$3,023	8	3	1	$131	$3,144	8	3	1	$136	$3,270
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	1	3	1	$115	$345	8	3	1	$120	$2,870	8	3	1	$124	$2,985	8	3	1	$129	$3,105	8	3	1	$135	$3,229
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$694					$5,777					$6,008					$6,248					$6,498
Fiscal, Reporting, & Assessment Workgroup																										
Water Quality Program Manager	$116	8	3	1	$116	$2,795	6	3	1	$121	$2,180	6	3	1	$126	$2,267	6	3	1	$131	$2,358	6	3	1	$136	$2,452
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	8	3	1	$77	$1,841	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$4,636					$3,616					$3,761					$3,911					$4,068
Education & Residential Sources Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	10	3	2	$77	$4,603	6	3	2	$80	$2,872	4	3	2	$83	$1,992	4	3	2	$86	$2,071	4	3	2	$90	$2,154
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$4,603					$2,872					$1,992					$2,071					$2,154
Monitoring Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	12	3	1	$95	$3,402	12	3	1	$98	$3,538	12	3	1	$102	$3,680	12	3	1	$106	$3,827	12	3	1	$111	$3,980
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$3,402					$3,538					$3,680					$3,827					$3,980
Dry Weather Monitoring Sub-workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	6	3	1	$77	$1,381	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$1,381					$1,436					$1,494					$1,553					$1,616

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	6	3	1	$77	$1,381	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$1,381					$1,436					$1,494					$1,553					$1,616
Land Development Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Flood Control Program Manager	$110	12	3	1	$110	$3,950	12	3	1	$114	$4,108	4	3	1	$119	$1,424	4	3	1	$123	$1,481	4	3	1	$128	$1,540
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	12	3	1	$77	$2,762	12	3	1	$80	$2,872	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$6,711					$6,980					$2,420					$2,517					$2,617
Municipal Sources Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	4	3	1	$80	$957	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$0					$957					$996					$1,036					$1,077
Industrial Commercial Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	4	3	1	$80	$957	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$0					$957					$996					$1,036					$1,077
Regional WURMP Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	5	3	1	$115	$1,725	8	3	1	$120	$2,870	8	3	1	$124	$2,985	8	3	1	$129	$3,105	8	3	1	$135	$3,229
Planner III	$97	5	3	1	$97	$1,455	8	3	1	$101	$2,421	8	3	1	$105	$2,518	8	3	1	$109	$2,619	8	3	1	$113	$2,723
						$3,180					$5,292					$5,503					$5,723					$5,952
Annual Total						$25,989					$32,862					$28,342					$29,475					$30,654

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EXHIBIT 6 "C" - DECLARATION OF KHOSRO AMINPOUR
FOR CITY OF CHULA VISTA

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DECLARATION OF KHOSRO AMINPOUR ON BEHALF OF THE CITY OF CHULA VISTA IN SUPPORT OF TEST CLAIM

I, Khosro Aminpour, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. My qualifications are as follows:

- Bachelors Degree in Civil Engineering
- Licensed Professional Civil Engineer in the State of California
- Over nine years experience in the field of storm water management
- Participated in numerous workshops, training courses, and seminars in the field of storm water management and received certificates when available

3. I am employed by the City of Chula Vista as a Senior Civil Engineer.

4. I have held my current position for approximately nine and one-half years. My duties include:

- Supervising the City's Storm Water Management Section
- Reviewing project submittals for compliance with storm water management requirements
- Reviewing and providing comments on storm water related legislation and permits during public comment period
- Participating in regional and watershed workgroup activities and meetings
- Providing training to City staff on storm water regulations
- Administration of contracts for storm water public education and monitoring
- Responding to enquiries from developers, consultants, and the general public on storm water related issues

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5. I have read the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also reviewed and am familiar with the requirements of Order No. 2001-01 (NPDES No. CAS 0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

8. These new activities include the following:

a. Working Body

1. Support: Sections F and L.1 of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,500 in support costs and an additional 5 percent ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5 percent in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Chula Vista's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and

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each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of Chula Vista's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each working body for each fiscal year and assumed that on average each staff member would spend three hours preparing for and attending each meeting. The cost to the City of Chula Vista to comply with this mandated activity for FY 2007-08 is $9,648. Costs for FY 2008-09 and beyond are projected based on minimum mandated meeting frequencies for each working body. Hourly rates are increased by 4 percent each year after FY 2007-08. The City of Chula Vista's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted

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in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5 percent ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Chula Vista's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000, which includes 5 percent ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Chula Vista's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500, which includes 5 percent ($2,500) for

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contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Chula Vista's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.5 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5 percent ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Chula Vista's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1. Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of Chula Vista contracts with a private company to provide street sweeping services. The cost of the FY 2008-09 street sweeping contract is $264,709. Prior to the 2007 Permit being issued, the City of Chula Vista implemented a sweeping program that meets or exceeds the 2007 Permit requirements. Therefore, the City is now unable to quantify the costs of 2007 Permit mandates.

2. Staffing Costs: In response to Section D.3.(5), all staffing is provided by a private contractor under a street sweeping agreement.

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3. Contract Costs: The City of Chula Vista contracts with a private company to provide street sweeping services. The total cost of this contract is $264,709. The City of Chula Vista street sweeping program was already performing at the level of the Permit requirements prior to adoption of the 2007 Permit. The contract costs for FY 2007-08 and estimated increased contract costs for future years are detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

f. Conveyance System Cleaning: Section D.3.(a)(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Any catch basin or storm drain inlet that has accumulated trash and debris greater than 33 percent of design capacity is to be cleaned in a timely manner. Because inspected facilities must be cleaned in accordance with specific Permit requirements, the City of Chula Vista has increased staffing of its MS4 operations and maintenance program for FY 2007-08 by 1.25 staff years and will need to increase staffing by another 8.75 staff years in FY 2008-09. The City of Chula Vista has procured two additional vacuum trucks and plans to purchase various other equipment necessary to meet the 2007 Permit's conveyance system cleaning requirements in FY 2008-2009. City of Chula Vista's additional conveyance system inspection and cleaning costs in FY 2007-08 for staff and equipment is $824,196. The City of Chula Vista's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to: (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further

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require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Sections I.1 and I.2, the City of Chula Vista has added an Engineering Technician to the Storm Water Management Section to perform educational surveys and tests in addition to other data management work required for annual JURMP assessment. The City of Chula Vista's cost to develop, administer and analyze surveys and tests is not readily separable from the costs for annual JURMP assessment and reporting requirements, and this cost has been included in Item (h.) below. The City of Chula Vista's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are, therefore, shown as zero in Exhibit A to this declaration and Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1, the City of Chula Vista has expended 738 hours of staff time in FY 2007-08, and will expend 1477 hours of staff time each year thereafter. The City of Chula Vista's cost in FY 2007-08 for an

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Engineering Technician to perform these mandated activities is $99 per hour. The increase in the City of Chula Vista's staffing cost to comply with these mandated activities in FY 2007-08 is $73,112 and in FY 2008-2009 will be $152,072 and is expected to increase 4 percent in FY 2009-10 and each year thereafter. The City of Chula Vista's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

i. Watershed URMP

1. Staffing for Development and Implementation: Section E.2 of the 2007 Permit requires each co-permittee to develop and implement an updated Watershed Urban Runoff Management Program. The City of Chula Vista has determined that the level of staff time contribution to this effort is not significantly higher than the level of staff time contribution required by the 2001 Permit and, therefore, the City of Chula Vista will not incur additional costs as a result of this 2007 Permit requirement. The main responsibility for this item falls to the County of San Diego as the Principal Permittee and the Port of San Diego as the Watershed Lead Permittee. Therefore, the City of Chula Vista's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are shown as zero in Exhibit A to this declaration and Exhibit 1 to the Test Claim.

2. Cost-Sharing Agreements: To date, the City of Chula Vista has not entered into a cost sharing agreement with other co-permittees of the San Diego Bay Watershed to pay for consultant support relating to the San Diego Bay WURMPs. At this time it is not possible to predict if consultant services will be necessary in future years for WURMP activities. Should an increasing need for coordination within the San Diego Bay Watershed become necessary over the Permit cycle due to an increased need for coordination within each WURMP over the Permit cycle, costs will be assessed at that time. However, at this time it is difficult to quantify a cost for those services. The City of

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Chula Vista's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are, therefore, shown as zero in Exhibit A to this declaration and Exhibit 1 to the Test Claim.

3. Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each Permit year. The City of Chula Vista's cost of implementing this mandate for FY 2007-08 is expected to be $35,000. Estimated costs are approximate considering the wide range of potential watershed activities. We anticipate that these costs will increase on average by 4 percent per year. The City of Chula Vista's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of Chula Vista in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $1,013,871.41, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City of Chula Vista expects to incur in FY 2008-09, are expected to be $2,236,213.23, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of Chula Vista expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I am not aware of any authority to assess a fee to offset these increased costs.

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15.I believe that the only available source to pay these increased costs are and will be the City of Chula Vista's general purpose funds.

Executed this 12 day of June 2008 at Chula Vista, California.

I declare under penalty of perjury that the foregoing is true and correct.

K. Aminpour

Khosro Aminpour

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Exhibit A - Working Body Support

Working Body	FCR Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost	FY 10-11 No. Meetings	FY 10-11 Meeting Length	FY 10-11 No. Staff	FY 10-11 Hourly Rate	FY 10-11 Total Cost	FY 11-12 No. Meetings	FY 11-12 Meeting Length	FY 11-12 No. Staff	FY 11-12 Hourly Rate	FY 11-12 Total Cost
Program Planning Subcommittee																										
Senior Civil Engineer	$162	0	3	0	$162	$0	0	3	0	$168	$0	0	3	0	$175	$0	0	3	0	$182	$0	0	3	0	$190	$0
Environmental Health Specialist	$106	0	3	0	$106	$0	0	3	0	$110	$0	0	3	0	$115	$0	0	3	0	$119	$0	0	3	0	$124	$0
						$0					$0					$0					$0					$0
Fiscal, Reporting, & Assessment Workgroup																										
Senior Civil Engineer	$162	0	3	1	$162	$0	0	3	0	$168	$0	0	3	1	$175	$0	0	3	1	$182	$0	0	3	1	$190	$0
Environmental Health Specialist	$106	0	3	0	$106	$0	0	3	0	$110	$0	0	3	1	$115	$0	0	3	1	$119	$0	0	3	1	$124	$0
						$0					$0					$0					$0					$0
Education & Residential Sources Workgroup																										
Senior Civil Engineer	$162	0	3	0	$162	$0	0	3	0	$168	$0	0	3	0	$175	$0	0	3	0	$182	$0	0	3	0	$190	$0
Environmental Health Specialist	$106	0	3	0	$106	$0	0	3	0	$110	$0	0	3	1.5	$115	$0	0	3	0	$119	$0	0	3	0	$124	$0
						$0					$0					$0					$0					$0
Monitoring Workgroup																										
Senior Civil Engineer	$162	0	3	0	$162	$0	0	3	0	$168	$0	0	3	0	$175	$0	0	3	0	$182	$0	0	3	0	$190	$0
Environmental Health Specialist	$106	12	3	1	$106	$3,816	12	3	1	$110	$3,969	12	3	1	$115	$4,127	12	3	1	$119	$4,292	12	3	1	$124	$4,464
						$3,816					$3,969					$4,127					$4,292					$4,464
Dry Weather Monitoring Sub-workgroup																										
Senior Civil Engineer	$162	0	3	0	$162	$0	0	3	0	$168	$0	0	3	0	$175	$0	0	3	0	$182	$0	0	3	0	$190	$0
Environmental Health Specialist	$106	0	3	1	$106	$0	0	3	0	$110	$0	0	3	0	$115	$0	0	3	1	$119	$0	0	3	0	$124	$0
						$0					$0					$0					$0					$0
Coastal Storm Drain Sub-Workgroup																										
Senior Civil Engineer	$162	0	3	0	$162	$0	0	3	0	$168	$0	0	3	0	$175	$0	0	3	0	$182	$0	0	3	0	$190	$0
Environmental Health Specialist	$106	0	3	0	$106	$0	0	3	0	$110	$0	0	3	0	$115	$0	0	3	0	$119	$0	0	3	0	$124	$0
						$0					$0					$0					$0					$0
Land Development Workgroup																										
Senior Civil Engineer	$162	12	3	1	$162	$5,832	12	3	1	$168	$6,065	4	3	1	$175	$2,103	4	3	1	$182	$2,187	4	3	1	$190	$2,274
Environmental Health Specialist	$106	0	3	0	$106	$0	0	3	1	$110	$0	0	3	0	$115	$0	0	3	0	$119	$0	0	3	1	$124	$0
						$5,832					$6,065					$2,103					$2,187					$2,274
Municipal Sources Workgroup																										
Senior Civil Engineer	$162	0	3	0	$162	$0	0	3	1	$168	$0	0	3	0	$175	$0	0	3	1	$182	$0	0	3	0	$190	$0
Environmental Health Specialist	$106	0	3	1	$106	$0	0	3	1	$110	$0	0	3	1	$115	$0	0	3	1	$119	$0	0	3	1	$124	$0
						$0					$0					$0					$0					$0
Industrial Commercial Workgroup																										
Senior Civil Engineer	$162	0	3	0	$162	$0	0	3	0	$168	$0	0	3	0	$175	$0	0	3	0	$182	$0	0	3	0	$190	$0
Environmental Health Specialist	$106	0	3	0	$106	$0	4	3	1	$110	$1,323	4	3	1	$115	$1,376	4	3	1	$119	$1,431	4	3	1	$124	$1,488
						$0					$1,323					$1,376					$1,431					$1,488
Regional WURMP Workgroup																										
Senior Civil Engineer	$162	0	3	0	$162	$0	0	3	0	$168	$0	0	3	0	$175	$0	0	3	0	$182	$0	0	3	0	$190	$0
Environmental Health Specialist	$106	0	3	0	$106	$0	0	3	0	$110	$0	0	3	0	$115	$0	0	3	0	$119	$0	0	3	0	$124	$0
						$0					$0					$0					$0					$0
Annual Total						$9,648					$11,357					$7,606					$7,910					$8,226

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Element		FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$73,112.00	$152,072.00	$158,155.00	$164,481.00	$171,060.00	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Although these responsibilities may be incurred across a number of program areas and staff, one Engineering Technician was hired in January 2008 in order to address data mangement, tracking, analysis, and reporting (includes a 4% increas each FY for staff time).
[redacted]						
Staffing for Watershed URMP development and implementation	$0.00	$0.00	$0.00	$0.00	$0.00	Staff time spent is the same as in the previous permit. No additional costs are incurred.
WURMP Cost-Share Agreements	$0.00	$0.00	$0.00	$0.00	$0.00	This does not apply to Chula Vista because cost-sharing is each watershed lead's responsibility.
Implementation of Watershed Activities	$35,000.00	$36,500.00	$38,000.00	$39,500.00	$41,000.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. Estimated costs are approximate considering the wide range of potential watershed activities.
TOTALS	$1,013,871.41	$2,236,213.23	$1,998,331.92	$2,082,497.66	$2,146,437.04	

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Element		FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$2,887.50	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	0	0	0	$11,550.00	0	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section 1.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.
6.0 Municipal						
Street Sweeping (equipment s)	$0.00	$0.00	$0.00	$0.00	$0.00	There are no additional street sweeping costs to the City because the current street sweeping program meets and exceeds Permit requirements.
et Sweeping (staffing costs)	$0.00	$0.00	$0.00	$0.00	$0.00	There are no additional street sweeping costs to the City because the current street sweeping program meets and exceeds Permit requirements.
Street Sweeping (contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	There is no additional street sweeping costs to the City because the current street sweeping program meets and exceeds Permit requirements.
Conveyance System Cleaning	$824,196.00	$1,950,755.00	$1,734,316.00	$1,795,789.00	$1,859,720.00	Cost for FY07-08 includes the purchase of two new storm drain vactor trucks ($620,000 ordered in FY06-07). Calculation of cost for each fiscal year are based on additional costs from Exhibit B for all five years of the Permit cycle. A 4% increase for staff time was factored for each subsequent year of the permit cycle.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$0.00	$0.00	$0.00	$0.00	$0.00	Public awareness survey costs are included in the effectiveness assessment section.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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City of Chula Vista Cost Estimates for Unfunded Mandate Test Claim - Version 3

Revised 6/10/2008

Co-Permittee -
Chula Vista

Element		FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$29,885.83	$31,379.92	$32,948.91	$34,596.32	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$9,648.00	$11,357.00	$7,606.00	$7,910.00	$8,226.00	Copermittees must participate in a minimum number of working body meetings as established under the MOU. The estimates presented here are City of Chula Vista costs only. City participation costs are determined by multiplying the fully allocated hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Exhibit A.
Regional Residential Education Program Development and Implementation	$7,218.75	$14,437.50	$28,875.00	$30,318.75	$31,834.72	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.
Hydromodification Management Plan (HMP) Development	$61,809.16	$11,206.10	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.

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Exhibit B - Additional Funding Needs, FY06-07 through FY11-12

UPDATED 6/25/2007		2007				2008				2009				2010
PERMIT ADOPTION DATE: 01/24/07		FY06-07 Q3	FY06-07 Q4	FY07-08 Q1	FY07-08 Q2	FY07-08 Q3	FY07-08 Q4	FY08-09 Q1	FY08-09 Q2	FY08-09 Q3	FY08-09 Q4	FY09-10 Q1	FY09-10 Q2	FY09-10 Q3	FY09-10 Q4	FY10-11
1 - PROGRAM IMPLEMENTATION STAFF																
TITLE	TASK	* Staff Salaries Include Office & Equipment Purchase and Replacement Costs **Annual Salaries Include 5% Escalation Factor														
A) Environmental Health Specialist	SUSMP Update & WURMP Management	Authorize Staff Position	Recruitment	$82,000	Annual Staff Salary & Benefits			$86,000	Annual Staff Salary & Benefits			$91,000	Annual Staff Salary & Benefits			$96,000
B) Engineering Technician	Data Tracking	Authorize Staff Position		Recruitment		$22,000	$16,000	$66,000	Annual Staff Salary & Benefits			$70,000	Annual Staff Salary & Benefits			$73,000
~~C) Senior Stormwater Compliance Inspector~~	~~Inspection~~						~~Recruitment~~	~~$0~~	~~Annual Staff Salary & Benefits~~			~~$0~~	~~Annual Staff Salary & Benefits~~			~~$0~~
D) Associate Planner	Development Planning & SUSMP Implementation	Additional Workload to be Absorbed by Existing Planning Staff														
E) Associate Engineer	Development Planning & SUSMP Implementation	Additional Workload to be Absorbed by Existing Engineering Staff														
TOTAL IMPLEMENTATION STAFF		$0	$0	$82,000	$0	$22,000	$16,000	$152,000	$0	$0	$0	$161,000	$0	$0	$0	$169,000
2 - PROGRAM DEVELOPMENT - WORK ITEMS																
A) JURMP Update - No Additional Funding Required		Informal Bid	$0													
B) Hydromodification Plan (Regional)		Phase 1: Develop Regional Workplan (1)		$2,500		Phase 2: Hydromodification	$42,000	Phase 2: Regional Hydromodification Plan Development			$42,000	Phase 2: Regional Hydromodification Plan Development			$42,000	
TOTAL WORK ITEMS		$0	$0	$2,500	$0	$0	$42,000	$0	$0	$0	$42,000	$0	$0	$0	$42,000	$0
3 - Operations & Maintenance (Equipment Purchases & Staff)																
A) Public Works Specialist		Authorize Staff Position		Recruitment	$14,500	$14,500	$14,500	$61,000	Annual Staff Salary & Benefits			$64,000	Annual Staff Salary & Benefits			$66,000
B) Public Works Supervisor		Authorize Staff Position		Recruitment	$18,750	$18,750	$18,750	$78,000	Annual Staff Salary & Benefits			$82,000	Annual Staff Salary & Benefits			$86,000
C) Maintenance Worker II (5)				Authorize Staff Positions		Recruitment (5)	$63,750	$255,000	Annual Staff Salary & Benefits			$270,000	Annual Staff Salary & Benefits			$283,000
D) Senior Maintenance Worker (3)				Authorize Staff Positions		Recruitment (3)	$49,000	$197,000	Annual Staff Salary & Benefits			$206,000	Annual Staff Salary & Benefits			$217,000
E) (2) Combination Vehicles			$[illegible]	TWO (2) COMBINATION VEHICLES ON ORDER												
F) (2) Pick Up Trucks - 2 Door				$[illegible]	PLACE ORDER FOR (2) Pick-Up Trucks - 2 Door											
G) (1) 10-Yard Dump Truck				$[illegible]	PLACE ORDER FOR (1) DUMP TRUCK											
H) (1) Construction Vehicle				$50,000	PLACE ORDER FOR (1) Construction Vehicle											
I) (1) Crew Cab Pick Up				$30,000	PLACE ORDER FOR (1) Crew Cab Pick-Up											
J) (1) Rental Equipment				$10,000	PLACE ORDER FOR Rental Equipment											
K) (7) Vehicle & Equipment Radios				$17,500 / $7,000												
L) (6) Laptops, Desktops & Software				$20,000 / $10,000												
M) Annual Equipment Maintenance & Replacement Costs							$36,875	$142,500	Annual Equipment Maintenance & Replacement Costs			$142,500	Annual Equipment Maintenance & Replacement Costs			$142,500
N) Miscellaneous Costs				$55,000				$55,000				$55,000				$55,000
TOTAL OPERATIONS & MAINTENANCE		$0	$620,000	$351,500	$33,250	$33,250	$182,875	$[illegible]	$0	$0	$0	$[illegible]	$0	$0	$0	$849,500
4 - Monitoring																
A) Wet Weather Monitoring						$15,000				$18,000				$22,000		
B) Ambient Bay & Lagoon Monitoring (ABLM)						$5,000				$3,800				$3,700		
C) Source Identification				$45,000				$47,500				$54,500				$60,000
D) Dry Weather				$16,000				$17,000				$17,500				$18,000
TOTAL MONITORING		$0	$0	$61,000	$0	$24,000	$0	$64,500	$0	$21,800	$0	$72,000	$0	$31,700	$0	$78,000
5 - Watershed Urban Runoff Management Program (WURMP) Activities																
A) Watershed Water Quality Activities (2 Annually)				$25,000				$26,000				$27,000				$28,000
B) Watershed Education Activities (2 Annually)				$10,000				$10,500				$11,000				$11,500
TOTAL WURMP ACTIVITIES		$0	$0	$35,000	$0	$0	$0	$36,500	$0	$0	$0	$38,000	$0	$0	$0	$39,500
QUARTERLY TOTALS		$0	$620,000	$532,000	$33,250	$79,250	$240,875	$1,041,500	$0	$26,800	$42,000	$1,090,500	$0	$31,700	$42,000	$1,136,000
GENERAL FUND		$0	$0	$292,500	$33,250	$79,250	$204,000	$1,041,500	$0	$26,800	$42,000	$1,090,500	$0	$31,700	$42,000	$1,136,000
[illegible] PFDIF		$0	$620,000	$239,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
ADJUSTED FISCAL YEAR TOTAL		$620,000		$885,375				$1,110,300				$1,164,200				

1-D and 1-E: Associate Planner and Associate Engineer responsibilities under the new Permit will be absorbed b[illegible]ting staff in the Planning and Engineering Departments respectively.

2-A: No Additi[illegible] will be needed to perform JURMP Update due to FY 2006-07 Cost Savings

REVISEL [illegible]-07

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			2011		
	Annual Staff Salary & Benefits			$101,000	Annual Staff Salary & Benefits
	Annual Staff Salary & Benefits			$78,000	Annual Staff Salary & Benefits
	~~Annual Staff Salary & Benefits~~			~~$0~~	~~Annual Staff Salary & Benefits~~
	Annual Staff Salary & Benefits			$70,000	Annual Staff Salary & Benefits
	Annual Staff Salary & Benefits			$91,000	Annual Staff Salary & Benefits
	Annual Staff Salary & Benefits			$297,000	Annual Staff Salary & Benefits
	Annual Staff Salary & Benefits			$228,000	Annual Staff Salary & Benefits
	Annual Equipment Maintenance & Replacement Costs			$142,500	Maintenance & Replacement
				$55,000	
		$27,000			
		$11,000			
				$66,000	
				$19,000	
				$29,000	
				$12,000	
	$0	$38,000	$0	$1,188,500	$0
	$0	$0	$0	$0	$0

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EXHIBIT 6 "D" - DECLARATION OF SCOTT W. HUTH FOR CITY OF CORONADO.

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DECLARATION OF SCOTT W. HUTH ON BEHALF OF THE CITY OF CORONADO IN SUPPORT OF TEST CLAIM

I, Scott W. Huth, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have a BA in Resources and Environmental Geography and a Masters in Business Administration. I have attended numerous training sessions in water quality, storm water pollution prevention, and storm water program management in the course of my job responsibilities.

3. I am employed by the City of Coronado as the Director of Public Services.

4. I have held my current position for approximately 14 years. My duties include managing the Public Services Department, and I oversee divisional supervisors in Wastewater, Storm Water, Streets, Parks, Beach, Fleet, and Facilities.

5. I have read the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also read and I am familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-

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permittees to perform new activities that are not required by the 2001 permit and are unique to local governmental entities.

8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L.1 of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Coronado's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1 of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU

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establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of Coronado's participation costs were determined by multiplying the hourly rate of each staff person and consultant involved in these activities by the anticipated minimum number of meetings for each working body for each fiscal year and assumed that on average each staff member would spend three hours preparing for and attending each meeting. The cost to the City of Coronado to comply with this mandated activity for FY 2007-08 is $10,186. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of Coronado's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by

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the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Coronado's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Coronado's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County.

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This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Coronado's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.5 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Coronado's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept twice monthly and areas with moderate volumes of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of Coronado performed a visual survey of all improved roads to determine the volume of trash and/or debris generated. Based on this survey of actual conditions, 5% of the City of Coronado's improved roads, streets and highways are in the "High" category, 35% in the "Medium" category and 60% in the "Low"

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category. While the City of Coronado currently sweeps all of its improved roads one time per week, this is on a voluntary basis. The City of Coronado has estimated the staffing cost of mandated street sweeping to be $4,011 for FY 2007-2008, with a 4% increase per year subsequently. In addition the expected replacement cost of the vehicle has been amortized over the eight year expected life of the vehicle. The City of Coronado's actual and estimated equipment costs for complying with this mandated activity for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

f. Conveyance System Cleaning: Section D.3.(a)(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the increase in the City of Coronado's staffing cost to comply with this mandated activity in FY 2007-08 is $12,000 and is expected to increase 4% in FY 2008-09 and each year thereafter. Additionally, the City of Coronado will be contracting out a portion of its line cleaning beginning in FY 2008-09; that contract cleaning cost is $30,000 per year with an anticipated 4% increase each subsequent year. The City of Coronado's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the

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behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section D.5 the City of Coronado expects to expend 48 hours of staff time in FY 2007-08, and 96 hours each year thereafter, to develop, administer and analyze surveys and tests. The City of Coronado's cost in FY 2007-08 for the Management Analyst to perform this work is $60 per hour. The increase in the City of Coronado's staffing cost to comply with these mandated activities in FY 2007-08 is $2,887 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Coronado's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data

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tracking, analysis and report writing. To comply with Section J.3.a.(3) the City of Coronado will expend 340 hours of staff and consultant time in FY 2008-09, and each year thereafter. The increase in the City of Coronado's staffing cost to comply with these mandated activities in FY 2007-08 is $75,000 (including the cost of revising the JURMP). The increase in the City of Coronado's staffing cost to comply with these mandated activities in FY 2008-09 is $18,210, and is expected to increase 4% in FY 2009-10 and each year thereafter. The City of Coronado's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

I. Watershed URMP

1.) Staffing for Development and Implementation: Section E of the 2007 Permit requires each of the co-permittees to collaborate with the other co-permittees within its Watershed Management Area to, at a minimum, implement its Watershed URMP document, as the document was developed and amended to comply with the requirements of Order No. 2001-01. The increase in the City of Coronado's staffing cost to comply with these mandated activities in FY 2008-09 is $2,484 and is expected to increase 4% in FY 2009-10 and each year thereafter. The City of Coronado's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements: The City of Coronado has entered into a cost sharing agreement to pay for consultant support relating to the San Diego Bay WURMP. The consultant costs for FY 2007-08 are expected to be $26,000. Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The City of

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Coronado's budgeted cost for this mandated activity for FY 2008-09 is $27,000. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City of Coronado's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $40,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The City of Coronado's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of Coronado in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $176,979, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City of Coronado expects to incur in FY 2008-09, are expected to be $167,451, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of Coronado expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I believe that the only available source to pay these increased costs are and will be the City of Coronado's General Fund.

Executed this 11th day of June, 2008 at Coronado, California.

I declare under penalty of perjury that the foregoing is true and correct.

Scott W. Huth
Director of Public Services

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Co-Permittee City of Coronado

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$5,651.10	$5,933.66	$6,320.34	$6,541.85	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$10,186.00	$11,678.00	$11,755.00	$12,225.00	$12,714.00	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are City of Coronado costs only. City participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B
Regional Residential Education Program Development and Implementation	$1,365.00	$2,730.00	$5,460.00	$5,733.00	$6,019.66	Permit section L.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.
Hydromodification Management Plan (HMP) Development	$3,352.19	$2,234.79	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$546.00	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.

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City of Coronado
Unfunded Mandate Costs

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00		$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section 1.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
[redacted]						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.
6.0 Municipal						
Street Sweeping (equipment costs)	$27,500.00	$27,500.00	$27,500.00	$27,500.00	$27,500.00	Permit Section D.3.(5) requires street sweeping frequencies for Improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at two times per month. Areas with medium volumes of trash and/or debris must be swept monthly and areas with low volumes of trash and/or debris at least annually. The City of Coronado estimates, by physical survey, that 5% of its improved roads have a high volume of trash and/or debris, 35% have a moderate volume of trash and/or debris, and 60% have a low volume of trash and/or debris.
Street Sweeping (staffing costs)	$4,011.00	$4,171.00	$4,338.00	$4,512.00	$4,692.00	While the City currently sweeps every improved road one time per week, this is on a voluntary basis. The Permit's mandate requires that we sweep moderate and high-volume debris bearing improved roads a minimum of one time per month.
Conveyance System Cleaning	$12,000.00	$42,480.00	$44,179.00	$45,946.00	$47,784.00	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, additional staffing Impacts are projected. The City utilizes Storm Water and Wastewater Division staff for the MS4 operations and maintenance program. Costs are calculated at $50.00 per hour for staff time * 2 personnel * 120 hours, and are increased by 4% in each subsequent year. This hourly cost includes equipment maintenance, etc. Additionally, due to other impacts on staff time, the City has requested approval to contract out some line cleaning. This contract cost is estimated to be $30,000 for FY 08-09, increased 4% each subsequent year.

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City of Coronado
Unfunded Mandate Costs

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
7.0 Industrial and Commercial						Permit section D.3.b.(3)(b) requires that 50% of high threat priority commercial sites be inspected the first year, and 100% be inspected the second year. These costs are associated with the additional staff time for these mandated inspections.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$2,887.00	$6,005.00	$6,245.00	$6,495.00	$6,755.00	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. FY 07-08 staffing impacts are estimated at one day per month (96 hours per FY) to develop, administer, and analyze surveys and tests. Costs are calculated at the Management Analyst level ($60/hr), and increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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City of Coronado
Unfunded Mandate Costs

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$75,000.00	$18,210.00	$18,939.00	$19,696.00	$20,484.00	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Annual costs are calculated as 340 hours of time total for various staff members, and increased by 4% each year after FY 2008-09.
[illegible] Activities						
Staffing for Watershed URMP development and implementation	$396.00	$2,484.00	$2,583.00	$2,687.00	$2,794.00	Lead responsibility for watershed program implementation resides with the County of San Diego DPLU Watershed Planning Division. The City of Imperial Beach participates in meetings to support Watershed URMP development and implementation. Copermittees must maintain representation in, and participate in meetings of, each of the watershed groups in which the City is located. The estimates presented here are City of Imperial Beach costs only for participation in two watershed groups. City participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs are calculated at the Supervisor level ($66/hr), and increased by 4% each year after FY 2008-09.
WURMP Cost-Share Agreements	$26,000.00	$27,000.00	$28,350.00	$29,768.00	$31,256.00	Cost share agreements are used to pay for WURMP consultant support. The FY 07-08 total is based on actual City contributions to the WURMP Cost Share Agreements in which it participates. Increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit. A 5% increase is also assumed for each year after FY 2008-09.
Implementation of Watershed Activities	$3,000.00	$3,600.00	$4,320.00	$5,184.00	$6,221.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City budgeted $3,000 for implementing two WURMP activities in FY 07-08. Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year.
TOTALS	$166,243.19	$148,092.79	$153,669.00	$159,746.00	$166,219.66	

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost	FY 10-11 No. Meetings	FY 10-11 Meeting Length	FY 10-11 No. Staff	FY 10-11 Hourly Rate	FY 10-11 Total Cost	FY 11-12 No. Meetings	FY 11-12 Meeting Length	FY 11-12 No. Staff	FY 11-12 Hourly Rate	FY 11-12 Total Cost
Program Planning Subcommittee																										
Supervisor	$66	0	3	1	$66	$0	8	3	1	$68	$1,639	8	3	1	$71	$1,705	8	3	1	$74	$1,773	8	3	1	$77	$1,844
Management Analyst	$60	0	3	1	$60	$0	0	3	1	$63	$0	0	3	1	$65	$0	0	3	1	$68	$0	0	3	1	$70	$0
Management Assistant	$44	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$48	$0	0	3	1	$50	$0	0	3	1	$52	$0
MW III	$41	1	3	1	$41	$122	8	3	1	$42	$1,011	8	3	1	$44	$1,052	8	3	1	$46	$1,094	8	3	1	$47	$1,137
MW II	$37	0	3	1	$37	$0	0	3	1	$39	$0	0	3	1	$40	$0	0	3	1	$42	$0	0	3	1	$43	$0
						$122					$2,650					$2,756					$2,867					$2,981
Fiscal, Reporting, & Assessment Workgroup																										
Supervisor	$66	0	3	1	$66	$0	0	3	1	$68	$0	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0
Consultant	$165	8	3	1	$165	$3,960	6	3	1	$172	$3,089	6	3	1	$178	$3,212	6	3	1	$186	$3,341	6	3	1	$193	$3,474
Management Analyst	$60	0	3	1	$60	$0	0	3	1	$63	$0	0	3	1	$65	$0	0	3	1	$68	$0	0	3	1	$70	$0
Management Assistant	$44	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$48	$0	0	3	1	$50	$0	0	3	1	$52	$0
MW III	$41	0	3	1	$41	$0	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$47	$0
MW II	$37	0	3	1	$37	$0	0	3	1	$39	$0	0	3	1	$40	$0	0	3	1	$42	$0	0	3	1	$43	$0
						$3,960					$3,089					$3,212					$3,341					$3,474
Education & Residential Sources Workgroup																										
Supervisor	$66	0	3	1	$66	$0	0	3	1	$68	$0	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0
Management Analyst	$60	6	3	1	$60	$1,083	6	3	1	$63	$1,126	4	3	1	$65	$781	4	3	1	$68	$812	4	3	1	$70	$844
Management Assistant	$44	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$48	$0	0	3	0	$50	$0	0	3	1	$52	$0
MW III	$41	0	3	1	$41	$0	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$47	$0
MW II	$37	0	3	1	$37	$0	0	3	1	$39	$0	0	3	1	$40	$0	0	3	1	$42	$0	0	3	1	$43	$0
						$1,083					$1,126					$781					$812					$844
Monitoring Workgroup																										
Supervisor	$66	0	3	1	$66	$0	0	3	1	$68	$0	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0
Management Analyst	$60	0	3	1	$60	$0	0	3	1	$63	$0	0	3	1	$65	$0	0	3	1	$68	$0	0	3	1	$70	$0
Management Assistant	$44	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$48	$0	0	3	1	$50	$0	0	3	1	$52	$0
MW III	$41	0	3	1	$41	$0	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$47	$0
MW II	$37	0	3	1	$37	$0	0	3	1	$39	$0	0	3	1	$40	$0	0	3	1	$42	$0	0	3	1	$43	$0
						$0					$0					$0					$0					$0
Dry Weather Monitoring Sub-workgroup																										
Supervisor	$66	0	3	1	$66	$0	0	3	1	$68	$0	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0
Consultant	$82	6	3	1	$82	$1,476	6	3	1	$85	$1,535	6	3	1	$89	$1,596	6	3	1	$92	$1,660	6	3	1	$96	$1,727
Management Analyst	$60	0	3	1	$60	$0	0	3	1	$63	$0	0	3	1	$65	$0	0	3	1	$68	$0	0	3	1	$70	$0
Management Assistant	$44	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$48	$0	0	3	1	$50	$0	0	3	1	$52	$0
MW III	$41	0	3	1	$41	$0	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$47	$0
MW II	$37	0	3	1	$37	$0	0	3	1	$39	$0	0	3	1	$40	$0	0	3	1	$42	$0	0	3	1	$43	$0
						$1,476					$1,535					$1,596					$1,660					$1,727

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																										
Supervisor	$66	0	3	1	$66	$0	0	3	1	$68	$0	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0
Management Analyst	$60	0	3	1	$60	$0	0	3	1	$63	$0	0	3	1	$65	$0	0	3	1	$68	$0	0	3	1	$70	$0
Management Assistant	$44	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$48	$0	0	3	1	$50	$0	0	3	1	$52	$0
MW III	$41	0	3	1	$41	$0	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$47	$0
MW II	$37	0	3	1	$37	$0	0	3	1	$39	$0	0	3	1	$40	$0	0	3	1	$42	$0	0	3	1	$43	$0
						$0					$0					$0					$0					$0
Land Development Workgroup																										
Supervisor	$66	0	3	1	$66	$0	0	3	1	$68	$0	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0
Management Analyst	$60	0	3	1	$60	$0	0	3	1	$63	$0	0	3	1	$65	$0	0	3	1	$68	$0	0	3	1	$70	$0
Management Assistant	$44	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$48	$0	0	3	1	$50	$0	0	3	1	$52	$0
MW III	$41	0	3	1	$41	$0	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$47	$0
MW II	$37	0	3	1	$37	$0	0	3	1	$39	$0	0	3	1	$40	$0	0	3	1	$42	$0	0	3	1	$43	$0
						$0					$0					$0					$0					$0
Municipal Sources Workgroup																										
Supervisor	$66	6	3	1	$66	$1,182	4	3	1	$68	$820	4	3	1	$71	$852	4	3	1	$74	$886	4	3	1	$77	$922
Management Analyst	$60	0	3	1	$60	$0	0	3	1	$63	$0	0	3	1	$65	$0	0	3	1	$68	$0	0	3	1	$70	$0
Management Assistant	$44	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$48	$0	0	3	1	$50	$0	0	3	1	$52	$0
MW III	$41	0	3	1	$41	$0	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$47	$0
MW II	$37	0	3	1	$37	$0	0	3	1	$39	$0	0	3	1	$40	$0	0	3	1	$42	$0	0	3	1	$43	$0
						$1,182					$820					$852					$886					$922
Industrial Commercial Workgroup																										
Supervisor	$66	0	3	1	$66	$0	0	3	1	$68	$0	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0
Management Analyst	$60	0	3	1	$60	$0	0	3	1	$63	$0	0	3	1	$65	$0	0	3	1	$68	$0	0	3	1	$70	$0
Management Assistant	$44	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$48	$0	0	3	1	$50	$0	0	3	1	$52	$0
MW III	$41	0	3	1	$41	$0	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$47	$0
MW II	$37	0	3	1	$37	$0	0	3	1	$39	$0	0	3	1	$40	$0	0	3	1	$42	$0	0	3	1	$43	$0
						$0					$0					$0					$0					$0
Regional WURMP Workgroup																										
Supervisor	$66	12	3	1	$66	$2,364	12	3	1	$68	$2,459	12	3	1	$71	$2,557	12	3	1	$74	$2,659	12	3	1	$77	$2,766
Management Analyst	$60	0	3	1	$60	$0	0	3	1	$63	$0	0	3	1	$65	$0	0	3	1	$68	$0	0	3	1	$70	$0
Management Assistant	$44	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$48	$0	0	3	1	$50	$0	0	3	1	$52	$0
MW III	$41	0	3	1	$41	$0	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0	0	3	1	$47	$0
MW II	$37	0	3	1	$37	$0	0	3	1	$39	$0	0	3	1	$40	$0	0	3	1	$42	$0	0	3	1	$43	$0
						$2,364					$2,459					$2,557					$2,659					$2,766
Annual Total						$10,186					$11,678					$11,755					$12,225					$12,714

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EXHIBIT 6 "E" - DECLARATION OF JOSEPH M. DE STEFANO II FOR CITY OF DEL MAR.

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DECLARATION OF JOSEPH M. DE STEFANO II ON BEHALF OF THE CITY OF DEL MAR IN SUPPORT OF TEST CLAIM

I, Joseph M. DeStefano II, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I hold a Master of Science Degree in Environmental Science and Civil Engineering (emphasis in Water Quality) and a Bachelor of Arts Degree in Political Science (Public Policy) from Loyola Marymount University. Further, I have received additional formal and informal training in stormwater management from various agencies and organizations over the past eight (8) years that I have been involved in water quality.

3. I am employed by the City of Del Mar as the Clean Water Manager.

4. I have held my current position for approximately five months. My duties include management and implementation of the City of Del Mar Clean Water Program, including implementation of the specific requirements of the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit").

5. Prior to my employment by the City of Del Mar, I was employed as the Land Use/Environmental Planning Manager and Land Use / Environmental Planner with the County of San Diego Watershed Planning Program, a position I held for eight (8) years. My duties included day-to-day operation of the County of San Diego Watershed Planning Program, providing oversight of staff and projects, as well as technical guidance and training on issues related to watershed planning

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principals including implementation of the land use development portions of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

6. Prior to my employment with the County of San Diego, I served as an environmental regulatory specialist in the private sectors for approximately seven (7) years. My responsibilities included regulatory compliance activities for development addressing Federal, state (California, Oregon, Arizona, Nevada, Hawaii, and Utah), and regional multimedia regulations, with particular emphasis in planning and assessment under the California Environmental Quality Act (CEQA); the National Environmental Policy Act (NEPA); the Clean Air Act and Amendments (CAA); and the Clean Water Act (CWA).

5. I have read the RWQCB 2007 Permit and I know and understand the requirements of the Permit.

6. I have also read and I know and understand the requirements of the 2001 Permit.

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L.1 of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding

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("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Del Mar's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives.

The City of Del Mar's participation costs are determined by multiplying the hourly rate of each staff person (or subconsultant staff person) by the number of meetings each fiscal year, and assuming each staff member would spend three (3) hours preparing and attending each meeting. The cost to the City of Del Mar to comply with this mandated activity for FY 2007-08 is $14,640. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to

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reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of Del Mar's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Del Mar's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

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1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Del Mar's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Del Mar's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.5 of the 2007 Permit requires the co-permittees to collaboratively

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develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Del Mar's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept a minimum of twice monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of Del Mar used average daily traffic ("ADT") statistics to determine the volume of trash and/or debris that could reasonably be expected to be generated. Improved roads, streets and highways that have more than 20,000 vehicles per day are in the "High" volume of trash and/or debris category. Improved roads, streets and highways that have 15,000 to 20,000 vehicles per day are in the "Medium" volume of trash and/or debris category. Improved roads, streets and highways that have less than 15,000 vehicles per day are in the "Low" volume of trash and/or debris category. The City of Del Mar has approximately 22 miles of improved roads and streets. Based on these standards, less than 1% of the City of Del Mar improved roads and streets are in the "High" category, less than 1% in the "Medium" category and 99% in the "Low" category. Historic sweeping schedules used by the City of Del Mar have exceeded the mandated permit requirements. Based on this analysis it was determined that there will be no increase in the street

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sweeping activities as a result of the 2007 Permit, and as such, the purchase of additional street sweeping equipment or employment of additional employees was not required at this time.

2.) Staffing Costs: The existing street sweeping schedule used by the City of Del Mar under Order 2001-01 was over and above the minimum requirements listed under Permit section D.3.(5). As such, there was no anticipated increase in staffing levels expected due to R9-2007-001. However, the San Diego RWQCB Fact Sheet/Technical Report for Order No. R9-2007-0001 (January 24, 2007), Pages 10 – 11, states that based on their research approximately 20 - 38% of street sweeping costs are directly attributable to the MS4 Permit. Costs are calculated based on 2006 Actual Costs for labor, maintenance, and equipment supplies ($56,845), and increased by 4% each year after FY 2008-09, with a 25% Factor based on the San Diego RWQCB assumption. The City of Del Mar's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Contract Costs: The City of Del Mar does not currently contract with a private company to provide street sweeping services.

f. Conveyance System Cleaning: Section D.3.(a)(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Permit section D.3.(a)(3) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Existing maintenance and inspection schedules are anticipated to address the updated Permit requirements. As such, no additional staffing impacts are claimed at this time.

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g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section D.5 the City of Del Mar expects to expend 159 hours of staff time beginning in FY 2008-09, and each year thereafter, to develop, administer and analyze surveys and tests. The City of Del Mar's cost beginning in FY 2008-09 for the Clean Water Manger to perform this work is approximately $67 per hour. The increase in the City of Del Mar's staffing cost to comply with these mandated activities is expected to increase 4% in FY 2009-10 and each year thereafter. The City of Del Mar's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and

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utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1. the City of Del Mar will expend 693 hours of staff time in FY 2008-09, and each year thereafter. Although these responsibilities may be incurred across a number of program areas and staff, annual costs are calculated as 693 hours of time at the Program Manager level ($65 in FY07-08), and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Del Mar's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

l. Watershed URMP

1.) Staffing for Development and Implementation:

Section E of the 2007 Permit requires that each Copermittee collaborate with the other Copermittees within its Watershed Management Area(s) (WMA) to at a minimum implement its Watershed URMP document, and develop collaborative inter-jurisdictional programs to reduce the discharge of pollutants from the MS4 to the MEP, and prevent urban runoff discharges from the MS4 from causing or contributing to a violation of water quality standards. As part of this requirement, the 2007 Permit specifically requires the Copermittees to develop a watershed-specific, water quality assessment; to develop, implement, and modify, as necessary, a program for encouraging collaborative, watershed-based, land use planning in their jurisdictional planning departments; to develop and implement a collective watershed strategy to abate the sources and reduce the discharge of

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pollutants causing the high priority water quality problems of the WMA; and outlines specific requirements for "Watershed Activities" under these collaborative programs. Since the majority of these activities cross traditional/legal jurisdictional boundaries, additional funds to develop and implement these mandated activities must be set aside by each jurisdiction. Responsibility for the watershed program implementation in the City of Del Mar resides with the Clean Water Manager. As required under the 2007 Permit, the City of Del Mar is an active co-permittee in two (2) WMAs. The Clean Water Manager is responsible for participation in WURMP development and activities, with support from City of Del Mar subcontractors. Estimated costs for FY 07-08 cost estimates are based on actual YTD expenditures. These totals are slightly higher than those projected for the following years because the program was out-sourced for the majority of the year. For FY 2008-09 and beyond, an estimated 30% of total staff time for these positions is spent on WURMP development and implementation. Costs for staff time for FY 08-09 and beyond are projected based on estimated 12 meetings per year for each watershed at 3 hours per meeting, plus 2 Hours of prep time (total of 5 hrs per meeting). Hourly rates are increased by 4% each year after FY 07-08. All rates include anticipate mileage expenditures based on 2008 Federal IRS Mileage Rates. The City of Del Mar's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of Del Mar has entered into two (2) cost sharing agreement(s) to pay for consultant support relating to the San Dieguito River and Los Peñasquitos WURMPs. The consultant costs for FY 2007-08 are expected to be $3,000. Additional consultant services will be necessary in future years based on the

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development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City of Del Mar's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The City of Del Mar's cost of implementing this mandate for FY 2007-08 is expected to be $7,500. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The City of Del Mar's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of Del Mar in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be approximately $49,810, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City of Del Mar expects to incur in FY 2008-09, are expected to be $124,413, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of Del Mar expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. The City of Del Mar presently utilizes a "Clean Water Fee" to offset a portion of the costs associated with the implementation of the Clean Water Program. This Fee is presently being considered for ratification by the residents of the City of Del Mar under the requirements of Proposition 218. The current fee covers only a portion of the existing costs, and I am not aware of any additional authority to assess a fee to offset these increased costs.

15. I believe that the only available source to pay these increased costs are and will be the city's general purpose funds.

Executed this 10th day of June at Del Mar, California.

I declare under penalty of perjury that the foregoing is true and correct.

Joseph M. DeStefano II

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Annual JURMP Assessment and Reporting	$0.00	$46,431.00	$48,288.24	$50,219.77	$52,228.56	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Although these responsibilities may be incurred across a number of program areas and staff, annual costs are calculated as 693 hours of time (~0.333 staff years) at the Program Manager level ($65 in FY07-08), increased by 4% each year.
Staffing for Watershed URMP development and implementation	$9,897.50	$8,917.00	$9,254.79	$9,606.09	$9,971.45	The City of Del Mar is an active co-permittee in two (2) specific watersheds. The Clean Water Manager is responsible for participation in WURMP development and activities, with support from City of Del Mar subcontractors. Estimated costs for FY 07-08 cost estimates are based on actual YTD expenditures. These totals are slightly higher than those projected for the following years because the program was out-sourced for the majority of the year. For FY 2008-09 and beyond, an estimated 30% of total staff time for these positions is spent on WURMP development and implementation. Costs for staff time for FY 08-09 and beyond are projected based on estimated 12 meetings per year for each watershed at 3 hours per meeting, plus 2 Hours of prep time (total of 5 hrs per meeting). Hourly rates are increased by 4% each year after FY 07-08. All rates include anticipate mileage expenditures based on 2008 Federal IRS Mileage Rates.
WURMP Cost-Share Agreements	$3,000.00	$3,150.00	$3,307.50	$3,472.88	$3,646.52	Cost share agreements are used to pay for WURMP consultant support. The FY 07 08 total is based on actual City of Del Mar contributions to the WURMP Cost Share Agreements in which it participates (San Dieguito and Los Penasquitos). Increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit. A 5% increase is also assumed for each year after FY 2008-09.
Implementation of Watershed Activities	$7,500.00	$9,500.00	$10,450.00	$11,495.00	$12,644.50	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City of Del Mar budgeted $7,500. for implementing WURMP activities in FY 07-08, and has budgeted $9,500 for FY08-09. Because of the wide range of potential costs for these activities, a 10% increase is assumed in each subsequent year.
TOTALS	$54,449.97	$119,190.17	$123,603.48	$130,464.14	$135,053.69	

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Co-Permittee
City of Del Mar

	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$3,314.59	$3,480.32	$3,654.33	$3,837.05	Permit section F.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$14,640.12	$16,084.22	$16,655.10	$17,248.81	$17,866.27	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are the City of Del Mar's costs only. The City of Del Mar's participation costs are determined by multiplying the hourly rate of each staff person (or subconsultant staff) by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.
Regional Residential Education Program Development and Implementation	$800.63	$1,601.25	$3,202.50	$3,362.63	$3,530.76	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.

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Hydromodification Management Plan (HMP) Development	$3,511.67	$2,341.12	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$320.25	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$1,281.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section I.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
[illegible]						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.
6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Permit Section D.3.(5) requires street sweeping frequencies for improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at two times per month. The City of Del Mar maintains one (1) sweeper. No additional equipment has been purchased or is anticipated at this time.
Street Sweeping (staffing costs)	$14,779.80	$15,370.99	$15,985.83	$16,625.27	$17,290.28	The existing street sweeping schedule used by the City of Del Mar under Order 2001-01 was over and above the minimum requirements listed under Permit section D.3.(5). As such, there was no anticipated increase in staffing levels expected due to R9-2007-001. However, the SDRWQCB Fact Sheet/Technical Report for Order No. R9-2007-0001 (January 24, 2007), Pg. 10 – 11, states that based on their research approximately 20 - 38% of street sweeping costs are directly attributable to the MS4 Permit. Costs are calculated based on 2006 Actual Costs for labor, maintenance, and equipment supplies ($56,845), and increased by 4% each year after FY 2008-09, with a 25% Factor based on the SDRWQCB assumption.
Street Sweeping (contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	The City of Del Mar does not contract out for street sweeping.

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Conveyance System Cleaning	$0.00	$0.00	$0.00	$0.00	$0.00	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Existing maintenence and inspection schedules are anticipated to address the updated Permit requirements. As such, no additional staffing impacts are projected at this time.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$0.00	$12,480.00	$12,979.20	$13,498.37	$14,038.30	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. FY 08-09 staffing impacts are estimated at approximately two days per month (up to 192 hours per year) to develop, administer, and analyze surveys and tests. Costs are calculated based on the hourly rate for the Clean Water Manager ($65 per hour), and increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost
Copermittee Management Committee											
Clean Water Manager	$64	4	3	1	$64	$768	8	3	1	$67	$1,597
Clean Water Subcontractors:											
Senior Scientist II	$150	1	3	1	$150	$450	1	3	1	$156	$468
Assistant Scientist	$65	1	3	1	$65	$195	1	3	1	$68	$203
						$1,413					$2,268
Program Planning Subcommittee											
Clean Water Manager	$64	1	3	1	$64	$192	1	3	1	$67	$200
Clean Water Subcontractors:											
Senior Scientist II	$150	0	3	1	$150	$0	0	3	1	$156	$0
Assistant Scientist	$65	0	3	1	$65	$0	0	3	1	$68	$0
						$192					$200
Fiscal, Reporting, & Assessment Workgroup											
Clean Water Manager	$64	2	3	1	$64	$384	2	3	1	$67	$399
Clean Water Subcontractors:											
Senior Scientist II	$150	2	3	1	$150	$900	2	3	1	$156	$936
Assistant Scientist	$65	0	3	1	$65	$0	0	3	1	$68	$0
						$1,284					$1,335
Education & Residential Sources Workgroup											
Clean Water Manager	$64	2	3	2	$64	$768	2	3	2	$67	$799
Clean Water Subcontractors:											
Senior Scientist II	$150	0	3	1	$150	$0	0	3	1	$156	$0
Assistant Scientist	$65	0	3	1	$65	$0	0	3	1	$68	$0
						$768					$799
Monitoring Workgroup											
Clean Water Manager	$64	2	3	1	$64	$384	2	3	1	$67	$399
Clean Water Subcontractors:											
Senior Scientist II	$150	0	3	1	$150	$0	0	3	1	$156	$0
Assistant Scientist	$65	12	3	1	$65	$2,340	12	3	1	$68	$2,434
						$2,724					$2,833
Dry Weather Monitoring Sub-workgroup											
Clean Water Manager	$64	0	3	1	$64	$0	0	3	1	$67	$0
Clean Water Subcontractors:											

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FY 09-10					FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
8	3	1	$69	$1,661	8	3	1	$72	$1,728	8	3	1	$75	$1,797
1	3	1	$162	$487	1	3	1	$169	$506	1	3	1	$175	$526
1	3	1	$70	$211	1	3	1	$73	$219	1	3	1	$76	$228
				$2,359					$2,453					$2,551
1	3	1	$69	$208	1	3	1	$72	$216	1	3	1	$75	$225
0	3	1	$162	$0	0	3	1	$169	$0	0	3	1	$175	$0
0	3	1	$70	$0	0	3	1	$73	$0	0	3	1	$76	$0
				$208					$216					$225
2	3	1	$69	$415	2	3	1	$72	$432	2	3	1	$75	$449
2	3	1	$162	$973	2	3	1	$169	$1,012	2	3	1	$175	$1,053
0	3	1	$70	$0	0	3	1	$73	$0	0	3	1	$76	$0
				$1,389					$1,444					$1,502
2	3	2	$69	$831	2	3	2	$72	$864	2	3	2	$75	$898
0	3	1	$162	$0	0	3	1	$169	$0	0	3	1	$175	$0
0	3	1	$70	$0	0	3	1	$73	$0	0	3	1	$76	$0
				$831					$864					$898
2	3	1	$69	$415	2	3	1	$72	$432	2	3	1	$75	$449
0	3	1	$162	$0	0	3	1	$169	$0	0	3	1	$175	$0
12	3	1	$70	$2,531	12	3	1	$73	$2,632	12	3	1	$76	$2,737
				$2,946					$3,064					$3,187
0	3	1	$69	$0	0	3	1	$72	$0	0	3	1	$75	$0

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	Baseline Hourly Rate	FY 07-08					FY 08-09				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Senior Scientist II	$150	0	3	1	$150	$0	0	3	1	$156	$0
Assistant Scientist	$65	6	3	1	$65	$1,170	6	3	1	$68	$1,217
						$1,170					$1,217

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FY 09-10				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
0	3	1	$162	$0
6	3	1	$70	$1,265
				$1,265

FY 10-11				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
0	3	1	$169	$0
6	3	1	$73	$1,316
				$1,316

FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
0	3	1	$175	$0
6	3	1	$76	$1,369
				$1,369

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FY 09-10					FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
0	3	1	$69	$0	0	3	1	$72	$0	0	3	1	$75	$0
0	3	1	$162	$0	0	3	1	$169	$0	0	3	1	$175	$0
6	3	1	$70	$1,265	6	3	1	$73	$1,316	6	3	1	$76	$1,369
				$1,265					**$1,316**					**$1,369**
1	3	1	$69	$208	1	3	1	$72	$216	1	3	1	$75	$225
0	3	1	$162	$0	0	3	1	$169	$0	0	3	1	$175	$0
0	3	1	$70	$0	0	3	1	$73	$0	0	3	1	$76	$0
				$208					**$216**					**$225**
1	3	1	$69	$208	1	3	1	$72	$216	1	3	1	$75	$225
0	3	1	$162	$0	0	3	1	$169	$0	0	3	1	$175	$0
0	3	1	$70	$0	0	3	1	$73	$0	0	3	1	$76	$0
				$208					**$216**					**$225**
8	5	1	$69	$2,769	8	5	1	$72	$2,880	8	5	1	$75	$2,995
2	3	1	$162	$973	2	3	1	$169	$1,012	2	3	1	$175	$1,053
2	3	1	$70	$422	2	3	1	$73	$439	2	3	1	$76	$456
				$4,164					**$4,331**					**$4,504**

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	Baseline Hourly Rate	FY 07-08					FY 08-09				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup											
Clean Water Manager	$64	0	3	1	$64	$0	0	3	1	$67	$0
Clean Water Subcontractors:											
Senior Scientist II	$150	0	3	1	$150	$0	0	3	1	$156	$0
Assistant Scientist	$65	6	3	1	$65	$1,170	6	3	1	$68	$1,217
						$1,170					**$1,217**
Land Development Workgroup											
Clean Water Manager	$64	1	3	1	$64	$192	1	3	1	$67	$200
Clean Water Subcontractors:											
Senior Scientist II	$150	0	3	1	$150	$0	0	3	1	$156	$0
Assistant Scientist	$65	0	3	1	$65	$0	0	3	1	$68	$0
						$192					**$200**
Municipal Sources Workgroup											
Clean Water Manager	$64	1	3	1	$64	$192	1	3	1	$67	$200
Clean Water Subcontractors:											
Senior Scientist II	$150	0	3	1	$150	$0	0	3	1	$156	$0
Assistant Scientist	$65	0	3	1	$65	$0	0	3	1	$68	$0
						$192					**$200**
Regional WURMP Workgroup (Co-Chair)											
Clean Water Manager	$64	8	5	1	$64	$2,560	8	5	1	$67	$2,662
Clean Water Subcontractors:											
Senior Scientist II	$150	2	3	1	$150	$900	2	3	1	$156	$936
Assistant Scientist	$65	2	3	1	$65	$390	2	3	1	$68	$406
						$3,850					**$4,004**

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FY 09-10					FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
				$14,843					$15,437					$16,054
57 meetings				$ 1,812	57 meetings				$ 1,812	57 meetings				$ 1,812
				$16,655					**$17,249**					**$17,866**
10	5	1	$69	$3,461	10	5	1	$72	$3,600	10	5	1	$75	$3,744
1	4	1	$162	$649	1	4	1	$169	$675	1	4	1	$175	$702
1	4	1	$70	$281	1	4	1	$73	$292	1	4	1	$76	$304
				$4,391					**$4,567**					**$4,750**
10	5	1	$69	$3,461	10	5	1	$72	$3,600	10	5	1	$75	$3,744
1	4	1	$162	$649	1	4	1	$169	$675	1	4	1	$175	$702
1	4	1	$70	$281	1	4	1	$73	$292	1	4	1	$76	$304
				$4,391					**$4,567**					**$4,750**
				$8,783					$9,134					$9,499
24				$472	24				$472	24				$472
				$9,255					**$9,606**					**$9,971**

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	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost
Annual Total - Regional Programs						$12,955					$14,272
Vehicle Mileage		53 meetings				$ 1,685	57 meetings				$ 1,812
ANNUAL TOTAL - REGIONAL PROGRAMS						**$14,640**					**$16,084**
WURMP Workgroups											
WURMP Workgroup (Los Penasquitos)											
Clean Water Manager	**$64**						**10**	5	1	$67	$3,328
Clean Water Subcontractors:		10				$4,752					
Senior Scientist II	**$150**						1	4	1	$156	$624
Assistant Scientist	**$65**						1	4	1	$68	$270
						$4,752					**$4,222**
WURMP Workgroup (San Dieguito)											
Clean Water Manager	**$64**						**10**	5	1	$67	$3,328
Clean Water Subcontractors:		10				$4,752					
Senior Scientist II	**$150**						1	4	1	$156	$624
Assistant Scientist	**$65**						1	4	1	$68	$270
						$4,752					**$4,222**
Total - WURMP Programs						$9,504					$8,445
Vehicle Mileage		20 meetings				$393	24				$472
ANNUAL TOTAL - WURMP PROGRAMS						**$9,897**					**$8,917**

Estimated Mileage:

Regional Programs: Chula Vista Public Works (Maxwell Road)
31.48 miles each way
62.96 RT @ $ 0.505 **per mile**
$ 31.795 per Trip

WURMP Workgroups City of Poway Public Works (14467 Lake Poway Rd, Poway, CA 92064)
19.48 miles each way
38.96 RT @ $ 0.505 **per mile**
$ 19.675 per Trip

Monthy WURMP Copermittee Workgroups

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EXHIBIT 6 "F" - DECLARATION OF ROB TURNER FOR CITY OF EL CAJON.

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DECLARATION OF ROB TURNER IN SUPPORT OF TEST CLAIM

I, Rob Turner, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have a Bachelor's degree in civil engineering from the United States Coast Guard Academy; I also have a Master's degree in civil engineering from the University of Illinois. I have been employed as the Director of Public Works for two (2) cities in California for nearly 13 years, including my present employment with the City of El Cajon. In both of my jobs as a Director of Public Works for California cities my responsibilities included supervising personnel who were responsible for the design, construction, and maintenance of storm water facilities owned and operated by the city.

3. I am currently employed by the City of El Cajon as the Director of Public Works.

4. I have held my current position for approximately two and one-half (2½) years. My duties include managing the operations of the City's Public Works Department, which includes the design and construction of public works, and the review and approval of private development in the City of El Cajon, both of which involve the design, construction, operation and maintenance of the City's storm water facilities, and enforcement of the City's storm water ordinances through the storm water program of the Public Works Department.

5. I have read the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am generally familiar with the requirements of the Permit.

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6. I have also read and I am generally familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, and information provided to me by my staff, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

8. These new activities include the following, all of which I am informed is true and, based on such information I believe it to be true:

a. Working Body

1.) Support: Section L.1 of the 2007 Permit requires all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of El Cajon's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

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2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of El Cajon's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each working body for each fiscal year and assumed that on average each staff member would spend 3 hours preparing for and attending each meeting. The cost to the City of El Cajon to comply with this mandated activity for FY 2007-08 is $14,959. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. It is anticipated that the hourly rates for staff involved in these tasks could increase by 4% each year after FY 07-08. The City of El Cajon's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including

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regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250, which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of El Cajon's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of El Cajon's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-

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09. The total cost of the contract is $52,500, which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of El Cajon's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of El Cajon's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of El Cajon's actual and estimated increased equipment costs for complying with this mandated activity for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

f. Conveyance System Cleaning: Section D.3.(3).(b) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be

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inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City will have to increase staffing of its MS4 operations and maintenance program for FY 2008-09 by 2 staff. The City of El Cajon's cost in FY 2007-08 for an Operator is $74.25 per hour and for a Worker II is $54.68 per hour. The increase in the City of El Cajon's staffing cost to comply with this mandated activity in FY 2008-09 is $269,424 and is expected to increase 4% in FY 2009-10 and each year thereafter. The City of El Cajon's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section D.5 the City expects to expend 288 hours of staff time in FY 2008-09, and each year thereafter, to develop, administer and analyze surveys and tests. The City of El Cajon's cost in FY 2007-08 for a Senior Engineering Technician (to perform this work is $82.60 per hour. The increase in the City of El Cajon's staffing cost to comply with these mandated activities in FY 2007-08 is $23,760 and is expected to increase 4% in FY 2009-010 and each year thereafter. The City of El Cajon's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each

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year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1 the City will expend 960 hours of staff time in FY 2008-09, and each year thereafter. The City's cost in FY 2008-09 for an Associate Civil Engineer to perform these mandated activities will be $103.13 per hour. The increase in the City's staffing cost to comply with these mandated activities in FY 2007-08 is $86,729 and it is anticipated that such rates could increase 4% in FY 2008-09 and each year thereafter. The City of El Cajon's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

i. Watershed URMP

1.) Staffing for Development and Implementation: Section E of the 2007 Permit requires the development and implementation of a WURMP program. Lead responsibility for watershed program implementation resides with the County's Department of Planning and Land Use Watershed Planning Division. This program

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consists of five staff (one Planning manager, two Planner IIIs and two Planner I/IIs). The FY 2007-08 costs are based on annualized projections for year-to-date expenditures. For FY 2008-09 and beyond, it is estimated that staff will spend 70% of their time on WURMP development and implementation. Calculations are based on the following hourly rates for FY 2007-08: Planning Manager - $115; Planner III - $97; and Planner I/II - $81. The increase in the City of El Cajon's staffing cost to comply with these mandated activities in FY 2007-08 is $34,107 and it is anticipated that these rates could increase 4% in FY 2008-09 and each year thereafter. The City of El Cajon's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of El Cajon has entered into one cost sharing agreement to pay for consultant support relating to San Diego River WURMPs. The consultant costs for FY 2007-08 are expected to be $21,500. Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The City of El Cajon's budgeted cost for this mandated activity for FY 2008-09 is $55,000. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City of El Cajon's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $40,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will

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increase on average 20% per year. The City of El Cajon's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. I am informed and believe that the actual increased costs incurred by the City of El Cajon in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $917,816, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. I am informed and believe that the estimated increased costs that the City of El Cajon expects to incur in FY 2008-09, are expected to be $1,717,691, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of El Cajon expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I am not aware of any authority to assess a fee to offset these increased costs without voter approval of the electors in the City of El Cajon.

15. I believe that the only available source to pay these increased costs are and will be the city's waste water funds.

Executed this 12th day of June, 2008, at the City of El Cajon, California.

I declare under penalty of perjury that the foregoing is true and correct.

Rob Turner

Rob Turner

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Co-Permitee - City of El Cajon

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$13,638.71	$14,320.65	$15,036.68	$15,788.50	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$14,958.57	$21,430.97	$19,364.64	$20,139.23	$20,944.80	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are County costs only. County participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.
Regional Residential Education Program Development and Implementation	$3,294.38	$6,588.75	$13,177.50	$13,836.38	$14,528.21	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.

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Hydromodification Management Plan (HMP) Development	$5,026.76	$3,351.17	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$1,317.75	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$5,271.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section I.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
[illegible]						
4.0 Development Planning						Reimbursable costs are not projected for this component
5.0 Construction						Reimbursable costs are not projected for this component

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6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Permit Section D.3.(5) requires street sweeping frequencies for improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at two times per month. Areas with medium volumes of trash and/or debris must be swept monthly and areas with low volumes of trash and/or debris at least annually. The County uses average daily traffic (ADT) as a proxy for determining the level of trash and debris generated. The categories are as follows: High is defined ADT greater than 20,000 vehicles per day (vpd), medium is defined as ADT between 15,000 and 20,000 vpd, and low is defined as ADT less than 15,000 vpd. The County has approximately 1,057 miles of roads with curbs/berms, with 7% identified as high, 6% as medium and 87% as low. Applying the permit-required sweeping frequencies results in an ~8% increase in overall street sweeping activities over existing levels. To accommodate the required increase, the County is purchasing two additional sweepers at $100,000 each (with an estimated lifetime of 10 years). Annual operation and maintenance, including fuel, is $50,000 per vehicle plus an additional $20,000 for amortization of the sweepers.
Street Sweeping (staffing costs)	$0.00	$0.00	$0.00	$0.00	$0.00	In response to Permit section D.3.(5).
Street Sweeping (contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	In response to Permit section D.3.(5), contracted sweeping costs increased by $$$ for FY 07-08 and will increase by an additional $$$ in FY 08-09.
Conveyance System Cleaning	$0.00	$269,424.00	$280,151.00	$291,307.00	$302,909.00	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, additional staffing impacts are projected. The City will need to increase its MS4 operations and maintenance program by 2 staff years in Fy 2008-09. Costs are calculated at $74.25 per hour for Operator and $54.68 for a Worker II - increased by 4% in each subsequent year.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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10.0 Education						
Educational Surveys and Tests	$0.00	$23,760.00	$24,710.00	$25,699.00	$26,727.00	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. FY 07-08 staffing impacts are estimated at three days per month (288 hours per year) to develop, administer, and analyze surveys and tests. Costs are calculated at the Senior Engineering Technician ($82.50 per hour), and increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$0.00	$86,729.00	$90,199.00	$93,807.00	$97,559.00	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Although these responsibilities may be incurred across a number of program areas and staff, annual costs are calculated as 480 hours of time for an Associate Engineer at $103.13 per hour, 320 hours for a Senior Engineering Tech at $82.60, 80 hours for a Code Compliance Office at $62.50, and 80 hours for a Junior Engineer at $72.44.
WATERSHED WIDE ACTIVITIES						

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Staffing for Watershed URMP development and implementation	$34,107.00	$35,472.00	$36,890.00	$38,366.00	$39,900.00	Lead responsibility for watershed program implementation resides with the DPLU Watershed Planning Division. This program consists of five staff (one Planning Manager, two Planner IIIs, and two Planner I/IIs). FY 07-08 cost estimates are based on annualized projections from YTD expenditures. These totals are lower than those projected for the following years because the program has been short-staffed for the majority of the year. For FY 2008-09 and beyond, an estimated 10% of total staff time for Associate Engineer and 5% for Deputy Director is spent on WURMP development and implementation. Calculations assume the following hourly rates for FY 2007-08; Associate Engineer - $103.13, Deputy Director - $121.69). These rates are increased by 4% in each subsequent year.
WURMP Cost-Share Agreements	$2,998.00	$16,152.00	$16,960.00	$17,808.00	$18,698.00	Cost share agreements are used to pay for WURMP consultant support. The FY 07-08 total is based on actual County contributions to the WURMP Cost Share Agreements in which it participates. Increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit. A 5% increase is also assumed for each year after FY 2008-09.
Implementation of Watershed Activities	$52,002.00	$38,848.00	$49,040.00	$74,592.00	$92,182.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The County budgeted $55,000 for implementing WURMP requirements, including activities, in FY 07-08 ($2,998 was used to share cost in WURMP efforts). Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year and deducting the value for the WURMP Cost-Chare Agreements.
TOTALS	$113,704.46	$515,394.60	$544,812.79	$595,862.29	$629,236.51	

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FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
1	3	1	$121.69	$365	4	3	1	$126.56	$1,519	4	3	1	$131.62	$1,579	4	3	1	$136.88	$1,643	4	3	1	$142.36	$1,708
1	3	1	$103.13	$309	8	3	1	$107.26	$2,574	8	3	1	$111.55	$2,677	8	3	1	$116.01	$2,784	8	3	1	$120.65	$2,895
0	3	1	$82.60	$0	0	3	1	$85.90	$0	0	3	1	$89.34	$0	0	3	1	$92.91	$0	0	3	1	$96.63	$0
0	3	1	$62.50	$0	0	3	1	$65.00	$0	0	3	1	$67.60	$0	0	3	1	$70.30	$0	0	3	1	$73.12	$0
0	3	1	$72.44	$0	0	3	1	$75.34	$0	0	3	1	$78.35	$0	0	3	1	$81.49	$0	0	3	1	$84.74	$0
				$674					$4,093					$4,257					$4,427					$4,604
0	3	1	$121.69	$0	0	3	1	$126.56	$0	0	3	1	$131.62	$0	0	3	1	$136.88	$0	0	3	1	$142.36	$0
8	3	1	$103.13	$2,475	6	3	1	$107.26	$1,931	6	3	1	$111.55	$2,008	6	3	1	$116.01	$2,088	6	3	1	$120.65	$2,172
0	3	1	$82.60	$0	0	3	1	$85.90	$0	0	3	1	$89.34	$0	0	3	1	$92.91	$0	0	3	1	$96.63	$0
0	3	1	$62.50	$0	0	3	1	$65.00	$0	0	3	1	$67.60	$0	0	3	1	$70.30	$0	0	3	1	$73.12	$0
0	3	1	$72.44	$0	0	3	1	$75.34	$0	0	3	1	$78.35	$0	0	3	1	$81.49	$0	0	3	1	$84.74	$0
				$2,475					$1,931					$2,008					$2,088					$2,172
0	3	1	$121.69	$0	0	3	1	$126.56	$0	0	3	1	$131.62	$0	0	3	1	$136.88	$0	0	3	1	$142.36	$0
0	3	1	$103.13	$0	0	3	1	$107.26	$0	0	3	1	$111.55	$0	0	3	1	$116.01	$0	0	3	1	$120.65	$0
0	3	2	$82.60	$0	0	3	2	$85.90	$0	0	3	2	$89.34	$0	0	3	2	$92.91	$0	0	3	2	$96.63	$0
10	3	1	$62.50	$1,875	6	3	1	$65.00	$1,170	4	3	1	$67.60	$811	4	3	1	$70.30	$844	4	3	1	$73.12	$877
0	3	1	$72.44	$0	0	3	1	$75.34	$0	0	3	1	$78.35	$0	0	3	1	$81.49	$0	0	3	1	$84.74	$0
				$1,875					$1,170					$811					$844					$877
0	3	1	$121.69	$0	0	3	1	$126.56	$0	0	3	1	$131.62	$0	0	3	1	$136.88	$0	0	3	1	$142.36	$0
0	3	1	$103.13	$0	0	3	1	$107.26	$0	0	3	1	$111.55	$0	0	3	1	$116.01	$0	0	3	1	$120.65	$0
12	3	1	$82.60	$2,974	12	3	1	$85.90	$3,093	12	3	1	$89.34	$3,216	12	3	1	$92.91	$3,345	12	3	1	$96.63	$3,479
0	3	1	$62.50	$0	0	3	1	$65.00	$0	0	3	1	$67.60	$0	0	3	1	$70.30	$0	0	3	1	$73.12	$0
0	3	1	$72.44	$0	3	3	1	$75.34	$678	3	3	1	$78.35	$705	3	3	1	$81.49	$733	3	3	1	$84.74	$763
				$2,974					$3,771					$3,921					$4,078					$4,241
0	3	1	$121.69	$0	0	3	1	$126.56	$0	0	3	1	$131.62	$0	0	3	1	$136.88	$0	0	3	1	$142.36	$0
0	3	1	$103.13	$0	0	3	1	$107.26	$0	0	3	1	$111.55	$0	0	3	1	$116.01	$0	0	3	1	$120.65	$0
6	3	1	$82.60	$1,487	6	3	1	$85.90	$1,546	6	3	1	$89.34	$1,608	6	3	1	$92.91	$1,672	6	3	1	$96.63	$1,739
0	3	1	$62.50	$0	0	3	1	$65.00	$0	0	3	1	$67.60	$0	0	3	1	$70.30	$0	0	3	1	$73.12	$0
2	3	1	$72.44	$435	2	3	1	$75.34	$452	2	3	1	$78.35	$470	2	3	1	$81.49	$489	2	3	1	$84.74	$508
				$1,921					$1,998					$2,078					$2,161					$2,248

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10			
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate
Coastal Storm Drain Sub-Workgroup															
Deputy Director of Public Works	$121.69	0	3	1	$121.69	$0	0	3	1	$126.56	$0	0	3	1	$131.6
Associate Civil Engineer	$103.13	0	3	1	$103.13	$0	0	3	1	$107.26	$0	0	3	1	$111.5
Senior Engineering Technician	$82.60	0	3	1	$82.60	$0	0	3	1	$85.90	$0	0	3	1	$89.3
Code Compliance Officer	$62.50	0	3	1	$62.50	$0	0	3	1	$65.00	$0	0	3	1	$67.6
Junior Civil Engineer	$72.44	0	3	1	$72.44	$0	0	3	1	$75.34	$0	0	3	1	$78.3
						$0					$0				
Land Development Workgroup															
Deputy Director of Public Works	$121.69	0	3	1	$121.69	$0	0	3	1	$126.56	$0	0	3	1	$131.6
Flood Control Program Manager	$103.13	0	3	1	$103.13	$0	0	3	1	$107.26	$0	0	3	1	$111.5
Associate Civil Engineer	$82.60	0	3	1	$82.60	$0	0	3	1	$85.90	$0	0	3	1	$89.3
Senior Engineering Technician	$62.50	0	3	1	$62.50	$0	0	3	1	$65.00	$0	0	3	1	$67.6
Code Compliance Officer	$72.44	0	3	1	$72.44	$0	0	3	1	$75.34	$0	0	3	1	$78.3
Junior Civil Engineer	$97.00	12	3	1	$97.00	$3,492	12	3	1	$100.88	$3,632	4	3	1	$104.9
						$3,492					$3,632				
Municipal Sources Workgroup															
Deputy Director of Public Works	$121.69	0	3	1	$121.69	$0	0	3	1	$126.56	$0	0	3	1	$131.6
Associate Civil Engineer	$103.13	0	3	1	$103.13	$0	0	3	1	$107.26	$0	0	3	1	$111.5
Senior Engineering Technician	$82.60	0	3	1	$82.60	$0	4	3	1	$85.90	$1,031	4	3	1	$89.3
Code Compliance Officer	$62.50	0	3	1	$62.50	$0	0	3	1	$65.00	$0	0	3	1	$67.6
Junior Civil Engineer	$72.44	0	3	1	$72.44	$0	0	3	1	$75.34	$0	0	3	1	$78.3
						$0					$1,031				
Industrial Commercial Workgroup															
Deputy Director of Public Works	$121.69	0	3	1	$121.69	$0	0	3	1	$126.56	$0	0	3	1	$131.6
Associate Civil Engineer	$103.13	0	3	1	$103.13	$0	0	3	1	$107.26	$0	0	3	1	$111.5
Senior Engineering Technician	$82.60	0	3	1	$82.60	$0	0	3	1	$85.90	$0	0	3	1	$89.3
Code Compliance Officer	$62.50	0	3	1	$62.50	$0	4	3	1	$65.00	$780	4	3	1	$67.6
Junior Civil Engineer	$72.44	0	3	1	$72.44	$0	0	3	1	$75.34	$0	0	3	1	$78.3
						$0					$780				
Regional WURMP Workgroup															
Deputy Director of Public Works	$121.69	0	3	1	$121.69	$0	0	3	1	$126.56	$0	0	3	1	$131.6
Associate Civil Engineer	$103.13	6	3	1	$103.13	$1,547	8	3	1	$107.26	$2,574	8	3	1	$111.5
Senior Engineering Technician	$82.60	0	3	1	$82.60	$0	0	3	1	$85.90	$0	0	3	1	$89.3
Code Compliance Officer	$62.50	0	3	1	$62.50	$0	0	3	1	$65.00	$0	0	3	1	$67.6
Junior Civil Engineer	$72.44	0	3	1	$72.44	$0	2	3	1	$75.34	$452	2	3	1	$78.3
						$1,547					$3,026				
Annual Total						$14,959					$21,431				

Working Body	Baseline Hourly Rate
Program Planning Subcommittee	
Deputy Director of Public Works	$121.6
Associate Civil Engineer	$103.1
Senior Engineering Technician	$82.6
Code Compliance Officer	$62.5
Junior Civil Engineer	$72.4
Fiscal, Reporting, & Assessment Workgroup	
Deputy Director of Public Works	$121.6
Associate Civil Engineer	$103.1
Senior Engineering Technician	$82.6
Code Compliance Officer	2.5
Junior Civil Engineer	2.4
Education & Residential Sources Workgroup	
Deputy Director of Public Works	$121.6
Associate Civil Engineer	$103.1
Senior Engineering Technician	$82.6
Code Compliance Officer	$62.5
Junior Civil Engineer	$72.4
Monitoring Workgroup	
Deputy Director of Public Works	$121.6
Associate Civil Engineer	$103.1
Senior Engineering Technician	$82.6
Code Compliance Officer	$62.5
Junior Civil Engineer	$72.4
Dry Weather Monitoring Sub-workgroup	
Deputy Director of Public Works	$121.6
Associate Civil Engineer	$103.1
Senior Engineering Technician	$82.6
Code Compliance Officer	$62.5
Junior Civil Engineer	$72.4

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EXHIBIT 6 "G" - DECLARATION OF ERIK STEENBLOCK FOR CITY OF ENCINITAS.

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DECLARATION OF ERIK STEENBLOCK ON BEHALF OF THE CITY OF ENCINITAS IN SUPPORT OF TEST CLAIM

I, Erik Steenblock, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I hold a Bachelor of Arts Degree in Ocean Studies, from the University of San Diego, 1997.

3. I am employed by the City of Encinitas as a Program Administrator.

4. I have held my current position for approximately 10 months. My duties include the development, implementation, administration and overall management of the City of Encinitas Clean Water Program.

5. I have reviewed the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also read and I am familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I am informed and believe and thereon allege that the 2007 Permit requires the co-permittees to perform new activities

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that are unique to local governmental entities that are not required by the 2001 Permit.

8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L.1 of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Encinitas's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1 of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban

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runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of Encinitas's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each working body for each fiscal year and assumed that on average each staff member would spend 3 hours preparing for, traveling to, and attending each meeting. The cost to the City of Encinitas to comply with this mandated activity for FY 2007-08 is $13,806. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of Encinitas's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of

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marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Encinitas's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Encinitas's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the

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requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Encinitas's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.5 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Encinitas's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Prior to the 2001 Permit, the City of Encinitas implemented a street sweeping program that exceeds the standards now required for the 2007 permit and cannot now quantify the expenses.

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2.) Staffing Costs: Prior to the 2001 Permit, the City of Encinitas implemented a street sweeping program that exceeds the standards now required for the 2007 permit and cannot now quantify the expenses.

3.) Contract Costs: Prior to the 2001 Permit, the City of Encinitas implemented a street sweeping program that exceeds the standards now required for the 2007 permit and cannot now quantify the expenses.

f. Conveyance System Cleaning: Section D.3.(a)(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of Encinitas has re-allocated staffing of its Public Works Department MS4 operations and maintenance program for FY 2007-08 by .25 staff years for a Utility & Field Maintenance Crew Supervisor, and .1 staff years for a Program Coordinator. The City of Encinitas's cost in FY 2007-08 for a Utility & Field Maintenance Crew Supervisor is $70.73 per hour, and the City of Encinitas's cost in FY 2007-08 for a Program Coordinator is $56.70. The City of Encinitas's staffing cost to comply with this mandated activity in FY 2007-08 is $48,573 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Encinitas's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section D.5 the City of Encinitas expects to expend 175 hours of staff time in FY 2007-08, and each year thereafter, to develop, administer and analyze surveys and tests. The City of Encinitas's cost in FY 2007-08 for a Program Assistant to perform this work is $38.25 per hour. The increase in the City of Encinitas's staffing cost to comply with these mandated activities in FY 2007-08 is $6,694 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Encinitas's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each

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jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1 of the 2007 Permit the City of Encinitas will expend 520 hours of staff time in FY 2008-09, and each year thereafter. The City of Encinitas's cost in FY 2008-09 for an Environmental Specialist II to perform these mandated activities will be $62.00 per hour. The increase in the City of Encinitas's staffing cost to comply with these mandated activities in FY 2007-08 is $32,240 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Encinitas's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

I. Watershed URMP

1.) In the 2007 Permit, The City of Encinitas does not hold lead responsibility for Carlsbad watershed program implementation, and therefore the City of Encinitas cannot quantify expenses.

2.) Cost-Sharing Agreements:

The City of Encinitas has entered into a cost sharing agreement(s) to pay for consultant support relating to Carlsbad Watershed WURMP. The consultant costs for FY 2007-08 are expected to be $2,774 for the City of Encinitas.

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Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The City of Encinitas's's budgeted cost for this mandated activity for FY 2008-09 is $3500. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City of Encinitas's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $40,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The City of Encinitas's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of Encinitas in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $91,357.44, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City of Encinitas expects to incur in FY 2008-09, are expected to be $139,331.50, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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11. The estimated increased costs that the City of Encinitas expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I am not aware of any authority to assess a fee to offset these increased costs.

15. I believe that the only available source to pay these increased costs are and will be the (county's/city's) general purpose funds.

Executed this 11th day of June, 2008 at Encinitas, California.

I declare under penalty of perjury under the Laws of the State of California that the foregoing is true and correct.

ERIK STEENBLOCK

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Co-Permittee

City of Encinitas

	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$11,410.88	$11,981.42	$12,580.49	$13,209.50	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$13,806.00	$16,339.00	$14,060.00	$14,622.00	$15,207.00	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are for the City of Encinitas only. City participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.
Regional Residential Education Program Development and Implementation	$2,756.25	$5,512.50	$11,025.00	$11,576.25	$12,155.07	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.

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Hydromodification Management Plan (HMP) Development	$9,319.49	$6,212.99	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$1,102.50	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$4,410.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section 1.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
[redacted]						
4.0 Development Planning						
5.0 Construction						
6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	There is no additional street sweeping costs to the City of Encinitas because the current street sweeping program meets Permit requirements.
Street Sweeping (staffing and /or contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	There is no additional street sweeping costs to the City of Encinitas because the current street sweeping program meets Permit requirements.
Conveyance System Cleaning	$48,573.20	$50,516.13	$52,536.77	$54,638.24	$56,824.00	Additional cost burden to the City of Encinitas to meet the provisions of Permit Sectioin D.3.(3)(b) have been calculated based upon the re-allocation of existing staff time required to meet associated data management, operations, maintenance, program development and report preparation standards. Annual costs have been calcuated at 520 hours (25% Staff Year) for a Utility & Field Maintenance Crew Supervisor ($70.73 / Hour) and 208 Hours (10% Staff Year) for a Program Coordinator ($56.70 / Hour) with an estimted 4% increase per fiscal year.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.

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9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$0.00	$0.00	$0.00	$0.00	$0.00	Public awareness survey costs are included in the effectiveness assessment section.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						
Annual JURMP Assessment & Reporting	$0.00	$32,240.00	$33,530.00	$34,871.00	$36,266.00	Permit section L1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Although these responsibilities may be incurred across a number of program areas and staff, annual costs are calculated as 520 hours of time (25% staff year) for a Stormwater Environmental Speciailst II ($62.00 / hour), and a 4% increase per fiscal year.

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Staffing for Watershed URMP development and implementation	$0.00	$0.00	$0.00	$0.00	$0.00	The City of Encinitas does not have lead resonsibility for the Carlsbad Watershed. Watershed Urban Runoff Management (WURMP) development and implementation costs are shared through a cost agreement accounted for below.
WURMP Cost-Share Agreements	$2,800.00	$3,500.00	$4,000.00	$4,500.00	$5,000.00	Cost share agreements are used to pay for WURMP consultant support. The FY 07-08 total is based on actual City of Encinitas contributions to the WURMP Cost Share Agreement with the Carlsbad Watershed Copermittees. Incremental increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit.
Implementation of Watershed Activities	$3,000.00	$3,600.00	$4,320.00	$5,184.00	$6,222.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City budgeted $3,000 for implementing WURMP activities in FY 07-08. Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year. Notably, such activities may be part of a shared costs for a program implemented watershed-wide, or costs incurred locally for a watershed water qualtiy or education activity.
TOTALS	**$81,357.44**	**$129,331.50**	**$131,453.19**	**$142,381.98**	**$144,883.57**	

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Working Body	Baseline Hourly Rate (Salary & Benefits)	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost
Program Planning Subcommittee																
Clean Water Program Manager	$83	1	3	1	$83	$249	8	3	1	$86	$2,072	8	3	1	$90	$2,155
Environmental Specialist II	$62	0	3	1	$62	$0	0	3	1	$64	$0	0	3	1	$67	$0
Program Assistant	$38	0	3	1	$38	$0	0	3	1	$40	$0	0	3	1	$41	$0
						$249					**$2,072**					**$2,155**
Fiscal, Reporting, & Assessment Workgroup																
Clean Water Program Manager	$83	8	3	1	$83	$1,992	6	3	1	$86	$1,554	6	3	1	$90	$1,616
Environmental Specialist II	$62	8	3	1	$62	$1,488	6	3	1	$64	$1,161	6	3	1	$67	$1,207
Program Assistant	$38	0	3	1	$38	$0	0	3	1	$40	$0	0	3	1	$41	$0
						$3,480					**$2,714**					**$2,823**
Education & Residential Sources Workgroup																
Clean Water Program Manager	$83	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Environmental Specialist II	$62	0	3	1	$62	$0	0	3	1	$64	$0	0	3	1	$67	$0
Program Assistant	$38	10	3	1	$38	$1,140	6	3	1	$40	$711	4	3	1	$41	$493
						$1,140					**$711**					**$493**
Monitoring Workgroup																
Clean Water Program Manager	$83	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Environmental Specialist II	$62	12	3	1	$62	$2,232	12	3	1	$64	$2,321	12	3	1	$67	$2,414
Program Assistant	$38	0	3	1	$38	$0	0	3	1	$40	$0	0	3	1	$41	$0
						$2,232					**$2,321**					**$2,414**
Dry Weather Monitoring Sub-workgroup																
Clean Water Program Manager	$83	3	3	1	$83	$747	3	3	1	$86	$777	3	3	1	$90	$808
Environmental Specialist II	$62	6	3	1	$62	$1,116	6	3	1	$64	$1,161	6	3	1	$67	$1,207
Program Assistant	$38	0	3	1	$38	$0	0	3	1	$40	$0	0	3	1	$41	$0
						$1,863					**$1,938**					**$2,015**

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FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
8	3	1	$93	$2,241	8	3	1	$97	$2,330
0	3	1	$70	$0	0	3	1	$73	$0
0	3	1	$43	$0	0	3	1	$44	$0
				$2,241					**$2,330**
6	3	1	$93	$1,681	6	3	1	$97	$1,748
6	3	1	$70	$1,255	6	3	1	$73	$1,306
0	3	1	$43	$0	0	3	1	$44	$0
				$2,936					**$3,053**
0	3	1	$93	$0	0	3	1	$97	$0
0	3	1	$70	$0	0	3	1	$73	$0
4	3	1	$43	$513	4	3	1	$44	$533
				$513					**$533**
0	3	1	$93	$0	0	3	1	$97	$0
12	3	1	$70	$2,511	12	3	1	$73	$2,611
0	3	1	$43	$0	0	3	1	$44	$0
				$2,511					**$2,611**
3	3	1	$93	$840	3	3	1	$97	$874
6	3	1	$70	$1,255	6	3	1	$73	$1,306
0	3	1	$43	$0	0	3	1	$44	$0
				$2,096					**$2,179**

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Coastal Storm Drain Sub-Workgroup																		
Clean Water Program Manager	**$83**	**0**	3	**1**	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Environmental Specialist II	**$62**	**6**	3	**1**	$62	$1,116	6	3	1	$64	$1,161	6	3	1	$67	$1,207
Program Assistant	**$38**	**0**	3	**1**	$38	$0	0	3	1	$40	$0	0	3	1	$41	$0
						$1,116					**$1,161**					**$1,207**
Land Development Workgroup																
Clean Water Program Manager	**$83**	**6**	3	**1**	$83	$1,494	6	3	1	$86	$1,554	2	3	1	$90	$539
Environmental Specialist II	**$62**	**12**	3	**1**	$62	$2,232	12	3	1	$64	$2,321	4	3	1	$67	$805
Program Assistant	**$38**	**0**	3	**1**	$38	$0	0	3	1	$40	$0	0	3	1	$41	$0
						$3,726					**$3,875**					**$1,343**
Municipal Sources Workgroup																
Clean Water Program Manager	**$83**	**0**	3	**1**	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Environmental Specialist II	**$62**	**0**	3	**1**	$62	$0	4	3	1	$64	$774	4	3	1	$67	$805
Program Assistant	**$38**	**0**	3	**1**	$38	$0	0	3	1	$40	$0	0	3	1	$41	$0
						$0					**$774**					**$805**
Industrial Commercial Workgroup																
Clean Water Program Manager	**$83**	**0**	3	**1**	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Environmental Specialist II	**$62**	**0**	3	**1**	$62	$0	4	3	1	$64	$774	4	3	1	$67	$805
Program Assistant	**$38**	**0**	3	**1**	$38	$0	0	3	1	$40	$0	0	3	1	$41	$0
						$0					**$774**					**$805**
Regional WURMP Workgroup																
Clean Water Program Manager	**$83**	**0**	3	**1**	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Environmental Specialist II	**$62**	**0**	3	**1**	$62	$0	0	3	1	$64	$0	0	3	1	$67	$0
Program Assistant	**$38**	**0**	3	**1**	$38	$0	0	3	1	$40	$0	0	3	1	$41	$0
						$0					**$0**					**$0**
Annual Total						**$13,806**					**$16,339**					**$14,060**

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0	3	1	$93	$0
6	3	1	$70	$1,255
0	3	1	$43	$0
				$1,255

0	3	1	$97	$0
6	3	1	$73	$1,306
0	3	1	$44	$0
				$1,306

2	3	1	$93	$560
4	3	1	$70	$837
0	3	1	$43	$0
				$1,397

2	3	1	$97	$583
4	3	1	$73	$870
0	3	1	$44	$0
				$1,453

0	3	1	$93	$0
4	3	1	$70	$837
0	3	1	$43	$0
				$837

0	3	1	$97	$0
4	3	1	$73	$870
0	3	1	$44	$0
				$870

0	3	1	$93	$0
4	3	1	$70	$837
0	3	1	$43	$0
				$837

0	3	1	$97	$0
4	3	1	$73	$870
0	3	1	$44	$0
				$870

0	3	1	$93	$0
0	3	1	$70	$0
0	3	1	$43	$0
				$0

0	3	1	$97	$0
0	3	1	$73	$0
0	3	1	$44	$0
				$0

$14,622 **$15,207**

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DEPARTMENT	STAFF	LOADED HOURLY RATE (SALARY & BENEFITS)	FULL COST RECOVERY (FCR) RATE (+50%)
Engineering	Clean Water Program Manager	$ 55.54	$ 83.31
Engineering	Environmental Health Specilist II	$ 41.64	$ 62.46
Engineering	Clean Water Program Assistant	$ 25.50	$ 38.25
Public Works	Utility & Field Maintenance Crew Supervisor	$ 47.15	$ 70.73
Public Works	Program Coordinator	$ 37.80	$ 56.70

NOTES

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EXHIBIT 6 "H" – DECLARATION OF CHERYL FILAR FOR CITY OF ESCONDIDO.

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DECLARATION OF CHERYL FILAR (CITY OF ESCONDIDO)
IN SUPPORT OF TEST CLAIM

I, Cheryl Filar, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have a Bachelor of Arts degree, with 22 Years of Public Administration experience, 7 years in stormwater administration.

3. I am employed by the City of Escondido as an Environmental Programs Manager.

4. I have held my current position for approximately three years. My duties include facilitating the City's stormwater program amongst the various departments and/or divisions that develop and implement it.

5. I have read and reviewed the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also read and reviewed and I am familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

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8. These new activities include the following:

a. Working Body

1.) Support: Section L.1 of the 2007 Permit requires all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Escondido's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of Escondido's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for

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each working body for each fiscal year and assumed that on average each staff member would spend approximately three hours preparing for and attending each meeting. The cost to the City of Escondido to comply with this mandated activity for FY 2007-08 is estimated at $1,710, because the current fiscal year does not end until June 30, 2008. Costs for FY 2008-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 3 % each year after FY 07-08. The City of Escondido's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in FY 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Escondido's proportional share of the budgeted costs for complying

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with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Escondido's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Escondido's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Escondido's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept twice monthly. Areas that consistently generate moderate volumes of trash must be swept at least once monthly, and areas identified as generating low volumes of trash must be swept as necessary, but no less than once per year. Because the City was already meeting the minimum requirements of the 2007 permit during the five-year cycle of the 2001 Permit with two operational street sweepers, no additional costs are anticipated for the next five years. However, had the City been meeting only the minimum requirements of the 2001 permit, funding for one additional street sweeper along with resources for associated maintenance and fueling costs would have been necessary to meet the minimum requirements of the 2007 Permit. The additional vehicle would cost approximately $166,000 and maintenance and fueling costs would total $26,000 for an estimated total of $192,000 in FY 2007-08, with an estimated 5% increase for each subsequent fiscal year. These estimated costs are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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2.) Staffing Costs: In response to Section D.3.(5) the City of Escondido will increase its program resources based on the estimated cost for one full-time equivalent (FTE) staff person in FY 2008-09 at $43.26 per hour. The increase in the City of Escondido's program costs to comply with this mandated activity in FY 2008-09 is $90,000 and is expected to increase 3% in FY 2009-10 and each year thereafter. The City of Escondido's estimated costs for complying with these mandated activities are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

f. Conveyance System Cleaning: Section D.3.(3).(b) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of Escondido will increase its program resources based on the estimated cost for two full-time equivalent (FTE) staff person at $42 per hour each in FY 2008-09 plus two new trucks at $47,200. The total estimated increase in the City of Escondido's cost in FY 2008-09 is $221,900 and is expected to increase 4% in FY 2009-10 and 3% each year thereafter. These costs are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the

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program elements to ensure that implementation is resulting in the targeted outcomes. To comply with this Section, the City of Escondido will utilize the surveys developed by the Regional Education Program and therefore does not anticipate additional costs other than those already reflected in the City's share for its participation in regional activities, which are detailed in Exhibit A to this declaration under "Regional Residential Education Program Development and Implementation" and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1 the City of Escondido will expend approximately 54 hours of staff time in FY 2007-08, and each year thereafter. The City of Escondido's total aggregated staff cost (one Environmental Programs Manager and outside consultant support) in FY 2007-08 to perform these mandated activities will be approximately $7,638. After the initial compliance effort in FY 2007-08, the costs are expected to drop to an estimated $6,830 annually but then are anticipated to increase by approximately 14% for each subsequent year after that due to anticipated increases in contract and staff support in terms of salary and time. The City of Escondido's estimated costs for complying with these mandated activities for FY

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2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

1. Watershed URMP

1.) Staffing for Development and Implementation: Section E.2 of the 2007 Permit requires each co-permittee to collaborate with other co-permittees within its Watershed Management Area (WMA) to develop and implement an updated Watershed Urban Runoff Management Program for each watershed. Lead responsibility for the City of Escondido's watershed program implementation resides with the Utilities Department's Environmental Programs Manager. For FY 2007-08 and beyond, it is estimated that staff will spend 30% of its time on WURMP development and implementation. The City of Escondido's estimated costs for complying with these requirements in FY 2007-08 is $59,280 and is expected to increase by an estimated 3% in FY 2008-09 and each year thereafter. The City of Escondido's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of Escondido has entered into two cost sharing agreement(s) to pay for consultant support relating to the Carlsbad and San Dieguito WURMPs. The consultant costs for FY 2007-08 are expected to be $6,125. Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMP and an increasing need for coordination within each WURMP over the Permit cycle. The City of Escondido's budgeted cost for this mandated activity for FY 2008-09 is $10,250. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City of Escondido's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $20,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The City of Escondido's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The estimated increased costs incurred by the City of Escondido in FY 2007-08 to comply with the mandated activities required by the 2007 Permit are estimated at $286,753, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City of Escondido expects to incur in FY 2008-09, are expected to be $701,220, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of Escondido expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I believe that the only available source to pay these increased costs are and will be the City's general purpose and Utilities/Wastewater funds.

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Executed this 12th day of June 2008 at Escondido, California.

I declare under penalty of perjury that the foregoing is true and correct.

Cheryl Filar, Environmental Program Manager

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Co-Permittee -

City of Escondido

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
[illegible]						
Working Body Support	$0.00	$20,430.90	$21,452.45	$22,525.07	$23,651.30	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$1,710.00	$4,560.00	$4,700.00	$4,840.00	$4,980.00	Copermittees must also maintain representation in and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are City costs only. City participation costs are determined by multiplying the hourly rate of the Programs Manager ($95) by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 3% each year after FY 08-09.

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Regional Residential Education Program Development and Implementation	$4,935.00	$9,870.00	$19,740.00	$20,727.00	$21,763.37	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.
Hydromodification Management Plan (HMP) Development	$17,898.32	$11,932.21	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$1,974.00	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$7,896.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section I.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
[illegible]						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.
6.0 Municipal						

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Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Permit Section D.3.(5) requires street sweeping frequencies for improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at two times per month. Areas with medium volumes of trash and/or debris must be swept monthly and areas with low volumes of trash and/or debris at least annually. The City has four sweepers to conduct its program and doesn't anticiapte addtional costs in the upcoming fiscal years to meet the new Permit sweeping frequency requirements.
Street Sweeping (staffing costs)	$90,000.00	$92,700.00	$95,500.00	$98,300.00	$101,000.00	In response to Permit section D.3.(5), City costs will increase increase by the equivalent of one full-time staff person at a rate of $43.26/hour beginning in FY 07/08, with a 3% increase factored in for each subsequent fiscal year.
Street Sweeping (contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	In response to Permit section D.3.(5), contracted sweeping costs increased by $$$ for FY 07-08 and will increase by an additional $$$ in FY 08-09.
Conveyance System Cleaning	$221,900.00	$188,200.00	$194,300.00	$200,200.00	$206,300.00	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, additional staffing and equpment impacts are required: 2 FTE staff at a rate of $41,88/hour for 07/08 with a 3% cost increase for each subsequent fiscal year; two new trucks at an initial cost of $40,000 in addition to ongoing maintenance costs for each subsequent fiscal year.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$0.00	$0.00	$0.00	$0.00	$0.00	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. The City of Escondido will utilize the surveys developed by the Regional Eduction Program to comply with this measure.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$7,638.00	$6,830.00	$7,814.00	$8,939.00	$10,226.00	Permit section L1 requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Although these responsibilities may be incurred across a number of program areas and staff, annual costs include the Prorgram Manager's $95 loaded rate for 8 hours and consultant rates for $165--Senior Scientist; $110--Consultant Scientist; $95--Consultant Analyst; and $90--Consultant, GIS, WP, etc for an average of 50 hours with a 10 percent inflationary increase for each year beginning in FY 09-10.
WATERSHED ACTIVITIES						
Staffing for Watershed URMP development and implementation	$59,280.00	$59,280.00	$61,585.00	$62,890.00	$64,775.00	Lead responsibility for watershed program implementation resides with the Environmental Programs Manager. FY 07-08 cost estimates are based on annualized projections from YTD expenditures. For FY 2007-08 and beyond, an estimated 30% of total staff time for these positions is spent on WURMP development and implementation. Calculations assume an hourly $95 rate for the Programs Manager for FY 2007-08. This rate is increased by 3% in each subsequent year after 2008-09.
WURMP Cost-Share Agreements	$6,125.00	$10,250.00	$10,760.00	$11,300.00	$11,865.00	Cost share agreements are used to pay for WURMP consultant support. The FY 07-08 total is based on actual City contributions to the WURMP Cost Share Agreements in which it participates. Increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit. A 5% increase is also assumed for each year after FY 2008-09.
Implementation of Watershed Activities	$20,000.00	$24,000.00	$28,800.00	$34,560.00	$41,470.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City budgeted $20,000 for implementing WURMP activities in FY 07-08. Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year.
TOTALS	**$431,460.32**	**$428,053.11**	**$444,651.45**	**$472,177.07**	**$486,030.67**	

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost	FY 10-11 No. Meetings	FY 10-11 Meeting Length	FY 10-11 No. Staff	FY 10-11 Hourly Rate	FY 10-11 Total Cost	FY 11-12 No. Meetings	FY 11-12 Meeting Length	FY 11-12 No. Staff	FY 11-12 Hourly Rate	FY 11-12 Total Cost
Program Planning Subcommittee																										
Water Quality Program Manager	$116	1	3	1	$116	$349	8	3	1	$121	$2,907	8	3	1	$126	$3,023	8	3	1	$131	$3,144	8	3	1	$136	$3,270
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	1	3	1	$115	$345	8	3	1	$120	$2,870	8	3	1	$124	$2,985	8	3	1	$129	$3,105	8	3	1	$135	$3,229
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$694					$5,777					$6,008					$6,248					$6,498
Fiscal, Reporting, & Assessment Workgroup																										
Water Quality Program Manager	$116	8	3	1	$116	$2,795	6	3	1	$121	$2,180	6	3	1	$126	$2,267	6	3	1	$131	$2,358	6	3	1	$136	$2,452
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	8	3	1	$77	$1,841	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$4,636					$3,616					$3,761					$3,911					$4,068
Education & Residential Sources Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	10	3	2	$77	$4,603	6	3	2	$80	$2,872	4	3	2	$83	$1,992	4	3	2	$86	$2,071	4	3	2	$90	$2,154
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$4,603					$2,872					$1,992					$2,071					$2,154
Monitoring Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	12	3	1	$95	$3,402	12	3	1	$98	$3,538	12	3	1	$102	$3,680	12	3	1	$106	$3,827	12	3	1	$111	$3,980
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$3,402					$3,538					$3,680					$3,827					$3,980
Dry Weather Monitoring Sub-workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	6	3	1	$77	$1,381	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$1,381					$1,436					$1,494					$1,553					$1,616

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	6	3	1	$77	$1,381	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$1,381					$1,436					$1,494					$1,553					$1,616
Land Development Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Flood Control Program Manager	$110	12	3	1	$110	$3,950	12	3	1	$114	$4,108	4	3	1	$119	$1,424	4	3	1	$123	$1,481	4	3	1	$128	$1,540
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	12	3	1	$77	$2,762	12	3	1	$80	$2,872	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$6,711					$6,980					$2,420					$2,517					$2,617
Municipal Sources Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	4	3	1	$80	$957	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$0					$957					$996					$1,036					$1,077
Industrial Commercial Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	4	3	1	$80	$957	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$0					$957					$996					$1,036					$1,077
Regional WURMP Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	5	3	1	$115	$1,725	8	3	1	$120	$2,870	8	3	1	$124	$2,985	8	3	1	$129	$3,105	8	3	1	$135	$3,229
Planner III	$97	5	3	1	$97	$1,455	8	3	1	$101	$2,421	8	3	1	$105	$2,518	8	3	1	$109	$2,619	8	3	1	$113	$2,723
						$3,180					$5,292					$5,503					$5,723					$5,952
Annual Total						$25,989					$32,862					$28,342					$29,475					$30,654

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EXHIBIT 6 “I” - DECLARATION OF JUDITH KEIR FOR CITY OF IMPERIAL BEACH.

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DECLARATION OF JUDITH KEIR IN SUPPORT OF TEST CLAIM

I, Judith Keir, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have a Bachelors Degree in Environmental Studies, and was previously employed by the Regional Water Quality Control Board, Lahontan Region, as an Environmental Scientist. My duties included regulating waste discharges, writing discharge permits, and ensuring compliance. I prepared investigation reports and enforcement related documents, and analyzed and evaluated available data on the effects of water pollutants, waste management, water diversions, and water use on human health, vegetation, fish, wildlife, water supplies, potential land uses, and other aspects of the environment. I have also worked on a restoration project in the Las Vegas Wash, which drains the Las Vegas Valley into Lake Mead, and includes the components of storm water, urban runoff, shallow groundwater, and treated effluent. I participated with federal, state and local agencies to revitalize the wetlands and restore their capability to filter harmful contaminants from the water.

3. I am employed by the City of Imperial Beach as the Environmental Program Manager.

4. I have held my current position for approximately 1 year. My duties include:

- Planning, organizing, and administering the permitting, monitoring, inspection, enforcement, pollution prevention, and data management activities of the Storm Water Program in accordance with federal, state and local laws and the Permit

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8. These new activities include the following:

a. Working Body

1.) Support: Section L.1 of the 2007 Permit requires all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,500 in support costs and an additional 5 percent ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5 percent in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Imperial Beach's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of Imperial Beach's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings

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detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1.) Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000, which includes 5 percent ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Imperial Beach's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500, which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Imperial Beach's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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approximately $48,000. The City of Imperial Beach's street sweeping program was already performing at the level of the Permit requirements prior to adoption of the 2007 Permit. The contract costs for FY 2007-08 and estimated increased contract costs for future years are detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

f. Conveyance System Cleaning: Section D.3.(3).(b) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Any catch basin or storm drain inlet that has accumulated trash and debris greater than 33 percent of design capacity is to be cleaned in a timely manner. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of Imperial Beach has increased staffing of its MS4 operations and maintenance program for FY 2007-08 by 1.0 staff years. The City of Imperial Beach's cost in FY 2007-08 for two Sewer Division Personnel required to perform the extra cleaning duties is $107 per hour. The increase in the City of Imperial Beach's staffing cost to comply with this mandated activity in FY 2007-08 is $171,200 and is expected to increase 4 percent in FY 2008-09 and each year thereafter. The City of Imperial Beach's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards

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Imperial Beach's staffing cost to comply with these mandated activities in FY 2008-09 is $42,900 and is expected to increase 4 percent in FY 2009-10 and each year thereafter. The City of Imperial's actual and estimated costs for complying with these mandated activities for FY 2008-09 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

i. Watershed URMP

1.) Staffing for Development and Implementation: Section E.2 of the 2007 Permit requires each co-permittee to develop and implement an updated Watershed Urban Runoff Management Program. The City of Imperial Beach has determined that the level of staff time contribution to this effort is not significantly higher than the level of staff time contribution required by the 2001 Permit and, therefore, the City of Imperial Beach will not incur additional costs as a result of this 2007 Permit requirement. The main responsibility for this item falls to the County of San Diego as the Principal Permittee for the Region and as Lead Permittee for the Tijuana River Watershed, and to the Port of San Diego as the San Diego Bay Watershed Lead Permittee. Therefore, the City of Imperial Beach's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are shown as zero in Exhibit A to this declaration and Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements: To date, the City of Imperial Beach has not entered into any cost sharing agreement(s) with other co-permittees of either the San Diego Bay or the Tijuana River Watersheds to pay for consultant support relating to the San Diego Bay WURMPs or to the Tijuana River WURMPs. At this time it is not possible to predict if consultant services will be necessary in future years for WURMP activities. Should an increasing need for coordination within the San Diego Bay Watershed or the Tijuana River Watershed become necessary over the Permit cycle due to an increased need for coordination within each WURMP over the Permit cycle, costs will be assessed at that time. However, at this time it is difficult to quantify a cost for

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13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. The City has a pollution fee that is used to offset a portion of the costs charged to residents and businesses. The Howard Jarvis Taxpayer's Association is currently questioning the legality of this fee.

15. I believe that the only certain available source to pay these increased costs are and will be the city's general purpose funds.

Executed this 13th day of June at Imperial Beach, California.

I declare under penalty of perjury that the foregoing is true and correct.

Judith Keir

Judith Keir

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Co-Permittee - City of Imperial Beach

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
[illegible]						
Working Body Support	$0.00	$5,270.74	$5,534.28	$5,810.99	$6,101.53	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$4,536.00	$4,980.00	$4,968.00	$5,167.00	$5,373.00	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are City of Imperial Beach costs only. City participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.
Regional Residential Education Program Development and Implementation	$1,273.13	$2,546.25	$5,092.50	$5,347.13	$5,614.49	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.
Hydromodification Management Plan (HMP) Development	$3,418.64	$2,279.09	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.

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City of Imperial Beach
Unfunded Mandate Costs

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$509.25	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$2,037.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section 11 requires the collaborative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
[illegible]						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.
6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Permit Section D.3.(5) requires street sweeping frequencies for improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at two times per month. Areas with medium volumes of trash and/or debris must be swept monthly and areas with low volumes of trash and/or debris at least annually. The City contracts the street sweeping, and has approximately 127.9 miles of roads with curbs/berms, with 7.5% identified as high and 92.5% as medium. The categories are determined as follows: High is defined average daily traffic (ADT) greater than 20,000 vehicles per day (vpd), medium is defined as ADT between 15,000 and 20,000 vpd, and low is defined as ADT less than 15,000 vpd.
Street Sweeping (staffing costs)	$0.00	$0.00	$0.00	$0.00	$0.00	The City contracts the street sweeping.
Street Sweeping (contract costs)	$48,000.00	$49,920.00	$51,917.00	$56,070.00	$58,313.00	Contract costs are estimated to increase by approximately 4% annually.
Conveyance System Cleaning	$171,200.00	$178,048.00	$185,169.92	$192,576.72	$200,279.79	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, additional staffing impacts are projected. The City utilizes Sewer Division staff for the MS4 operations and maintenance program. Costs are calculated at $107.00 per hour for Sewer Division personnel * 2 personnel * 800 hours, and are increased by 4% in each subsequent year. This hourly cost includes equipment maintenance, etc.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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City of Imperial Beach
Unfunded Mandate Costs

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
10.0 Education						
Educational Surveys and Tests	$0.00	$12,672.00	$13,248.00	$13,824.00	$14,400.00	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. FY 07-08 staffing impacts are estimated at three days per month (288 hours per year) to develop, administer, and analyze surveys and tests. Costs are calculated at the Environmental Program Manager level ($42/hr), and increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$0.00	$42,900.00	$44,850.00	$46,800.00	$48,750.00	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Annual costs are calculated as 975 hours of time (~0.5 staff years) at the Environmental Program Manager level ($42.00 per hour), and increased by 4% each year after FY 2008-09.

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City of Imperial Beach
Unfunded Mandate Costs

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Staffing for Watershed URMP development and implementation	$452.00	$1,584.00	$1,656.00	$1,728.00	$1,800.00	Lead responsibility for watershed program implementation resides with the County of San Diego DPLU Watershed Planning Division. The City of Imperial Beach participates in meetings to support Watershed URMP development and implementation. Copermittees must maintain representation in, and participate in meetings of, each of the watershed groups in which the City is located. The estimates presented here are City of Imperial Beach costs only for participation in two watershed groups. City participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs are calculated at the Environmental Program Manager level ($42/hr), and increased by 4% each year after FY 2008-09. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload.
WURMP Cost-Share Agreements	$28,000.00	$29,400.00	$30,870.00	$32,414.00	$34,035.00	Cost share agreements are used to pay for WURMP consultant support. The FY 07-08 total is based on actual City contributions to the WURMP Cost Share Agreements in which it participates. Increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit. A 5% increase is also assumed for each year after FY 2008-09.
Implementation of Watershed Activities	$3,000.00	$3,600.00	$4,320.00	$5,184.00	$6,221.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City budgeted $3,000 for implementing two WURMP activities in FY 07-08. Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year.
TOTALS	$260,389.02	$327,929.34	$342,091.42	$361,147.85	$374,786.28	

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City of [illegible]l Beach
Unfunded Mandate Meeting Participation

Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost
Program Planning Subcommittee Environmental Program Manager	$42	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0
						$0					**$0**					**$0**
Fiscal, Reporting, & Assessment Workgroup Environmental Program Manager	$42	8	3	1	$42	$1,008	6	3	1	$44	$786	6	3	1	$46	$828
						$1,008					**$786**					**$828**
Education & Residential Sources Workgroup Environmental Program Manager	$42	10	3	1	$42	$1,260	6	3	1	$44	$786	4	3	1	$46	$552
						$1,260					**$786**					**$552**
Monitoring Workgroup Environmental Program Manager	$42	12	3	1	$42	$1,512	12	3	1	$44	$1,572	12	3	1	$46	$1,656
						$1,512					**$1,572**					**$1,656**
Dry Weather Monitoring Sub-workgroup Environmental Program Manager	$42	6	3	1	$42	$756	6	3	1	$44	$786	6	3	1	$46	$828
						$756					**$786**					**$828**

Worksheet B

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City of Imperial Beach
Unfunded Mandate Meeting Participation

FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
0	3	1	$48	$0	0	3	1	$50	$0
				$0					**$0**
6	3	1	$48	$861	6	3	1	$50	$896
				$861					**$896**
4	3	1	$48	$574	4	3	1	$50	$597
				$574					**$597**
12	3	1	$48	$1,722	12	3	1	$50	$1,791
				$1,722					**$1,791**
6	3	1	$48	$861	6	3	1	$50	$896
				$861					**$896**

Worksheet B

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City of [illegible]l Beach
Unfunded Mandate Meeting Participation

	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																
Environmental Program Manager	$42	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0
						$0					$0					$0
Land Development Workgroup																
Environmental Program Manager	$42	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0
						$0					$0					$0
Municipal Sources Workgroup																
Environmental Program Manager	$42	0	3	1	$42	$0	4	3	1	$44	$524	4	3	1	$46	$552
						$0					$524					$552
Industrial Commercial Workgroup																
Environmental Program Manager	$42	0	3	1	$42	$0	4	3	1	$44	$524	4	3	1	$46	$552
						$0					$524					$552
Regional WURMP Workgroup																
Environmental Program Manager	$42	0	3	1	$42	$0	0	3	1	$44	$0	0	3	1	$46	$0
						$0					$0					$0
Annual Total						$4,536					$4,980					$4,968

Total Unfunded Mandate Costs for Meeting Participation $25,024

Worksheet B

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City of Imperial Beach
Unfunded Mandate Meeting Participation

FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
0	3	1	$48	$0	0	3	1	$50	$0
				$0					$0
0	3	1	$48	$0	0	3	1	$50	$0
				$0					$0
4	3	1	$48	$574	4	3	1	$50	$597
				$574					$597
4	3	1	$48	$574	4	3	1	$50	$597
				$574					$597
0	3	1	$48	$0	0	3	1	$50	$0
				$0					$0
				$5,167					$5,373

Worksheet B

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EXHIBIT 6 "J" - DECLARATION OF MALIK TAMIMI FOR CITY OF LA MESA.

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DECLARATION OF MALIK TAMIMI ON BEHALF OF THE CITY OF LA MESA IN SUPPORT OF TEST CLAIM

I, Malik Tamimi, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have a Bachelor's of Science Degree in Aquatic Biology.

3. I am employed by the City of La Mesa as an Environmental Specialist.

4. I have held my current position for approximately three years. My duties include the development and implementation of the City's NPDES Storm Water Program.

5. I have read and reviewed the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I know and understand the requirements of the Permit.

6. I have also read and reviewed and I know and understand the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

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8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L.1 of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of La Mesa's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of La Mesa's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each

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working body for each fiscal year and assumed that on average each staff member would spend three hours preparing for and attending each meeting. The cost to the City to comply with this mandated activity for FY 2007-08 is $3,304. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of La Mesa's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of La Mesa's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

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c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of La Mesa's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of La Mesa's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because

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of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of La Mesa's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Prior to the 2001 permit, the City of La Mesa implemented a street sweeping program that exceeds the standards now required for the 2007 permit, therefore the City cannot quantify the additional expenses from the 2001 permit to the 2007 permit.

2.) Staffing Costs: In response to Section D.3.(5) the City of La Mesa implemented a street sweeping program prior to the 2001 permit cycle that exceeds the standards now required for the 2007 permit, therefore the City cannot quantify the additional expenses from the 2001 permit to the 2007 permit

3.) Contract Costs: The City of La Mesa contracts with a private company to provide street sweeping services. Prior to the 2001 permit, the City of La Mesa implemented a street sweeping program that exceeds the standards now required for the 2007 permit, therefore the City cannot quantify the additional expenses from the 2001 permit to the 2007 permit.

f. Conveyance System Cleaning: Section D.3.(a).(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Prior to the 2001 permit, the City of La Mesa implemented an MS4 inspection and cleaning program that exceeds the standards now required for the 2007

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permit, therefore the City cannot quantify the additional expenses from the 2001 permit to the 2007 permit

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section D.5 the City expects to expend 108 hours of staff time in FY 2008-09, and each year thereafter, to develop, administer and analyze surveys and tests. The City of La Mesa's cost in FY 2007-08 for an Environmental Specialist to perform this work is $106.82 per hour. The increase in the City of La Mesa's staffing cost to comply with these mandated activities in FY 2008-09 is $11,536 and is expected to increase 4% in FY 2009-10 and each year thereafter. The City of La Mesa's actual and estimated costs for complying with these mandated activities for FY 2008-09 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting

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from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1 the City will expend 324 hours of staff time and $45,000 in consultant fees in FY 2008-09, and each year thereafter. The City of La Mesa's cost in FY 2008-09 for an Environmental Specialist to perform these mandated activities will be $106.82 per hour. The increase in the City of La Mesa's staffing cost and consultant fees to comply with these mandated activities in FY 2007-08 is $79,609 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

l. Watershed URMP

1.) Staffing for Development and Implementation: Section E of the 2007 Permit requires implementation of a Watershed Urban Runoff Management Program. Lead responsibility for watershed program implementation resides with the County's Department of Planning and Land Use Watershed Planning Division. However, the City of La Mesa is required to develop and implement two watershed programs. This program consists of one staff (Environmental Specialist). The FY 2007-08 costs are based on annualized estimated year-to-date expenditures. For FY 2008-09 and beyond, it is estimated that staff will spend 416 hours of their time on WURMP development and implementation. Calculations are based on the following hourly rates for FY 2007-08: Environmental Specialist $106.82. The increase in the City's staffing cost to comply with these mandated activities in FY 2007-08 is $44,437 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City's actual and estimated costs for

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complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of La Mesa has entered into a cost sharing agreement to pay for consultant support relating to San Diego River WURMPs. La Mesa's share of the consultant costs for FY 2007-08 are expected to be $1,305. Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The City's budgeted cost for this mandated activity for FY 2008-09 is $2,000. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $30,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of La Mesa in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $168,357, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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10. The estimated increased costs that the City of La Mesa expects to incur in FY 2008-09, are expected to be $197,078, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I am not aware of any authority to assess a fee to offset these increased costs.

15. I believe that the only available source to pay these increased costs are and will be the City's general purpose funds.

Executed this 11th day of June 2008 at La Mesa, California.

I declare under penalty of perjury that the foregoing is true and correct.

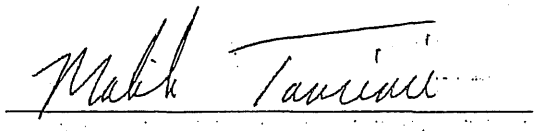

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Co-Permittee -

City of La Mesa

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$9,128.70	$9,585.14	$10,064.39	$10,567.60	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittees Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$3,304.00	$4,769.00	$4,960.00	$5,158.00	$5,364.00	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are City of La Mesa costs only. City's participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.
Regional Residential Education Program Development and Implementation	$2,205.00	$4,410.00	$8,820.00	$9,261.00	$9,724.06	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.

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Hydromodification Management Plan (HMP) Development	$6,614.94	$4,409.96	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$882.00	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$3,528.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section I.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
3.0 Structural BMP Activities						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.
6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Permit Section D.3.(5) requires street sweeping frequencies for improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at twice per month. Areas with medium volumes of trash and/or debris must be swept monthly and areas with low volumes of trash and/or debris at least annually. Prior to the 2001 Permit, the City implemented a street sweeping program that exceeds the standards now required for the 2007 permit, therefore the city cannot quantify the expenses.
Street Sweeping (staffing costs)	$0.00	$0.00	$0.00	$0.00	$0.00	In response to Permit section D.3.(5), prior to the 2001 Permit, the City implemented a street sweeping program that exceeds the standards now required for the 2007 permit, therefore the city cannot quantify the expenses.
Street Sweeping (contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Prior to the 2001 Permit, the City implemented a street sweeping program that exceeds the standards now required for the 2007 permit, therefore the city cannot quantify the expenses.

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Conveyance System Cleaning	$0.00	$0.00	$0.00	$0.00	$0.00	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Prior to the 2001 Permit, the City implemented a MS4 inspection and cleaning program that exceeds the standards now required for the 2007 permit, therefore the city cannot quantify the expenses.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$0.00	$11,536.00	$11,997.72	$12,477.64	$12,976.32	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. FY 08-09 staffing impacts are estimated at one days per month (108 hours per year) to develop, administer, and analyze surveys and tests. Costs are calculated at the Environmental Specialist level ($106.82 per hour), and increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						

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Annual JURMP Assessment and Reporting	$79,609.00	$84,609.68	$90,993.16	$97,431.72	$103,928.60	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Although these responsibilities may be incurred across a number of program areas and staff, annual costs are calculated as lump sum for consultant services $45,000 (with incremental increase of $5,000 of 324 hours of time at the Environmental Specialistlevel ($106.82 per hour). Staffing rates are increased by 4% each year.
WATERSHED LEVEL ACTIVITIES						
Staffing for Watershed URMP development and implementation	$44,437.12	$46,215.00	$48,064.00	$49,987.00	$51,986.00	Staffing time for WURMP development and implementation for San Diego Bay and River watersheds is estimated at 416 hours per year. Calculations assume the following hourly rates for FY 2007-08; Environmental Specialist- $106.82). These rates are increased by 4% in each subsequent year.
WURMP Cost-Share Agreements	$1,305.00	$2,000.00	$2,100.00	$2,205.00	$2,315.00	Cost share agreements are used to pay for WURMP consultant support for San Diego River Watershed. The FY 07-08 total is based on actual City of La Mesa contributions to the WURMP Cost Share Agreements in which it participates. Increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit. A 5% increase is also assumed for each year after FY 2008-09.
Implementation of Watershed Activities	$30,000.00	$30,000.00	$36,000.00	$43,200.00	$51,840.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City of La Mesa budgeted $30,000 for implementing WURMP activities in FY 07-08 for both San Diego River and Bay Watersheds. Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year.
TOTALS	$168,357.06	$197,078.34	$212,520.02	$233,312.75	$248,701.58	

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost
Program Planning Subcommittee																
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0
						$0					$0					$0
Fiscal, Reporting, & Assessment Workgroup																
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0
						$0					$0					$0
Education & Residential Sources Workgroup																
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0
EHS III	$77	0	3	2	$77	$0	0	3	2	$80	$0	0	3	2	$83	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0
						$0					$0					$0
Monitoring Workgroup																
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0
						$0					$0					$0
Dry Weather Monitoring Sub-workgroup																
Environmental Specialist	$107	6	3	1	$107	$1,923	6	3	1	$111	$2,000	6	3	1	$116	$2,080
						$1,923					$2,000					$2,080

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FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
0	3	1	$131	$0	0	3	1	$136	$0
0	3	1	$106	$0	0	3	1	$111	$0
0	3	1	$86	$0	0	3	1	$90	$0
0	3	1	$129	$0	0	3	1	$135	$0
0	3	1	$109	$0	0	3	1	$113	$0
				$0					$0
0	3	1	$131	$0	0	3	1	$136	$0
0	3	1	$106	$0	0	3	1	$111	$0
0	3	1	$86	$0	0	3	1	$90	$0
0	3	1	$129	$0	0	3	1	$135	$0
0	3	1	$109	$0	0	3	1	$113	$0
				$0					$0
0	3	1	$131	$0	0	3	1	$136	$0
0	3	1	$106	$0	0	3	1	$111	$0
0	3	2	$86	$0	0	3	2	$90	$0
0	3	1	$129	$0	0	3	1	$135	$0
0	3	1	$109	$0	0	3	1	$113	$0
				$0					$0
0	3	1	$131	$0	0	3	1	$136	$0
0	3	1	$106	$0	0	3	1	$111	$0
0	3	1	$86	$0	0	3	1	$90	$0
0	3	1	$129	$0	0	3	1	$135	$0
0	3	1	$109	$0	0	3	1	$113	$0
				$0					$0
6	3	1	$120	$2,163	6	3	1	$125	$2,249
				$2,163					$2,249

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0
EHS III	$77	6	3	1	$77	$1,381	6	3	1	$80	$1,436	6	3	1	$83	$1,494
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0
						$1,381					$1,436					$1,494
Land Development Workgroup																
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0
Flood Control Program Manager	$110	0	3	1	$110	$0	0	3	1	$114	$0	0	3	1	$119	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0
						$0					$0					$0
Municipal Sources Workgroup																
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0
						$0					$0					$0
Industrial Commercial Workgroup																
Environmental Specialist	$107	0	3	1	$107	$0	4	3	1	$111	$1,333	4	3	1	$116	$1,386
						$0					$1,333					$1,386
Regional WURMP Workgroup																
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0
						$0					$0					$0
Annual Total						$3,304					$4,769					$4,960

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FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
0	3	1	$131	$0	0	3	1	$136	$0
0	3	1	$106	$0	0	3	1	$111	$0
6	3	1	$86	$1,553	6	3	1	$90	$1,616
0	3	1	$129	$0	0	3	1	$135	$0
0	3	1	$109	$0	0	3	1	$113	$0
				$1,553					$1,616
0	3	1	$131	$0	0	3	1	$136	$0
0	3	1	$123	$0	0	3	1	$128	$0
0	3	1	$106	$0	0	3	1	$111	$0
0	3	1	$86	$0	0	3	1	$90	$0
0	3	1	$129	$0	0	3	1	$135	$0
0	3	1	$109	$0	0	3	1	$113	$0
				$0					$0
0	3	1	$131	$0	0	3	1	$136	$0
0	3	1	$106	$0	0	3	1	$111	$0
0	3	1	$86	$0	0	3	1	$90	$0
0	3	1	$129	$0	0	3	1	$135	$0
0	3	1	$109	$0	0	3	1	$113	$0
				$0					$0
4	3	1	$120	$1,442	4	3	1	$125	$1,500
				$1,442					$1,500
0	3	1	$131	$0	0	3	1	$136	$0
0	3	1	$106	$0	0	3	1	$111	$0
0	3	1	$86	$0	0	3	1	$90	$0
0	3	1	$129	$0	0	3	1	$135	$0
0	3	1	$109	$0	0	3	1	$113	$0
				$0					$0
				$5,158					$5,364

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EXHIBIT 6 "K" – DECLARATION OF CORA LONG FOR CITY OF LEMON GROVE.

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DECLARATION OF CORA LONG ON BEHALF OF

THE CITY OF LEMON GROVE IN SUPPORT OF TEST CLAIM

I, Cora Long, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. Masters of Public Administration

3. I am employed by the City of Lemon Grove as an Environmental Program manager.

4. I have held my current position for approximately four years. My duties include managing the City of Lemon Grove's Stormwater program, which encompasses internal and external outreach and education; regional workgroup meeting attendance; serving as a workgroup leader; managing the dry weather monitoring program; managing the industrial and commercial inspection program; performing inspections on construction projects; performing inspections on existing best management practices including residential, commercial and industrial; review and approval of incoming development plans and water quality documents; performing inspections of all municipal facilities for compliance; writing all responses and reports to the Regional Water Quality Control Board; compliance with all applicable local TMDLs and their working bodies; management of watershed activies within the City boundaries; and attendance at applicable watershed specific meetings.

5. I have reviewed the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No.

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CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also read and I know and understand the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L.1 of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Lemon Grove's proportional share of the budgeted costs for complying

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with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of Lemon Grove's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each working body for each fiscal year and assumed that on average each staff member would spend three hours preparing for and attending each meeting. The cost to the City of Lemon Grove to comply with this mandated activity for FY 2007-08 is $4,428. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of Lemon Grove's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of,

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and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Lemon Grove's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP")

Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Lemon Grove's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed

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in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Lemon Grove's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Lemon Grove's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

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1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of Lemon Grove used average daily traffic ("ADT") statistics to determine the volume of trash and/or debris that could reasonably be expected to be generated. Improved roads, streets and highways that have more than 20,000 vehicles per day are in the "High" volume of trash and/or debris category. Improved roads, streets and highways that have 15,000 to 20,000 vehicles per day are in the "Medium" volume of trash and/or debris category. Improved roads, streets and highways that have less than 15,000 vehicles per day are in the "Low" volume of trash and/or debris category. The City of Lemon Grove has 65.5 miles of City maintained improved roads, streets and highways. Based on these standards, 10.91% of the City of Lemon Grove's improved roads, streets and highways are in the "High" category, 89.09% in the "Medium" category and 0% in the "Low" category. Based on this analysis it was determined that there will be zero increase in the street sweeping activities as a result of the 2007 Permit. To accommodate the required increase, the City of Lemon Grove has been required to purchase 0 new street sweeping vehicles and employ 0 additional employees. Each vehicle cost $0 to purchase and has an expected useful life of ten years. The annual maintenance and fuel costs are expected to be $0 for each vehicle. In addition the expected replacement cost of each vehicle has been amortized over the ten year expected life of each vehicle.) The City of Lemon Grove's actual and estimated equipment costs for complying with this mandated activity for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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2.) Staffing Costs: In response to Section D.3.(5) the City of Lemon Grove has increased its staffing by 0 staff years for FY 2007-08 and will increase staffing by another 0 staff years beginning in FY 2008-09. The City of Lemon Grove's staffing cost in FY 2007-08 is $0 per hour. The increase in the Lemon Grove's staffing cost to comply with this mandated activity in FY 2007-08 is $0 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Lemon Grove's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Contract Costs: The City of City of Lemon Grove contracts with a private company to provide street sweeping services. The total cost of this contract to the City is $33,565. The amount of street sweeping required by the 2007 Permit increased the cost of this contract to the city by approximately $0 per year. The increased contract costs for FY 2007-08 and estimated increased contract costs for future years are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

f. Conveyance System Cleaning: Section D.3.(a).(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of Lemon Grove has increased staffing of its MS4 operations and maintenance program for FY 2007-08 by 565 staff hours and will need to increase staffing by another 4% in FY 2008-09. The City of Lemon Grove's cost in FY 2007-08 for workers in the Public Works Street Division is $ 26 per hour. The increase in the City of Lemon Grove's staffing cost to comply with this mandated activity in FY 2007-08 is $14,924 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Lemon Grove's

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actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section 10 the City of Lemon Grove expects to expend 288 hours of staff time in FY 2008-09, and each year thereafter, to develop, administer and analyze surveys and tests. The City of Lemon Grove's cost in FY 2008-09 for an Environmental Program Manager to perform this work is $41 per hour. The increase in the City of Lemon Grove's staffing cost to comply with these mandated activities in FY 2007-08 is $11,808 and is expected to increase 4% in FY 2009-10 and each year thereafter. The City of Lemon Grove's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable

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targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I, the City of Lemon Grove will expend 975 hours of staff time in FY 2008-09, and each year thereafter. The City of Lemon Grove's cost in FY 2008-09 for an Environmental Program Manager to perform these mandated activities would be $41 per hour. The increase in the City of Lemon Grove's staffing cost to comply with these mandated activities in FY 2008-09 is $39,975 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Lemon Grove's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

1. Watershed URMP

1.) Staffing for Development and Implementation:

Section E of the 2007 Permit requires the development and implementation of a WURMP program. Lead responsibility for watershed program implementation resides with the County's Department of Planning and Land Use Watershed Planning Division. This program consists of five staff (one Planning manager, two Planner IIIs and two Planner I/IIs). The FY 2007-08 costs are based on annualized projections for year-to-date expenditures. For FY 2008-09 and

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beyond, it is estimated that staff will spend 70% of their time on WURMP development and implementation. Calculations are based on the following hourly rates for FY 2007-08: Planning Manager - $115; Planner III - $97; and Planner I/II - $81. The increase in the City of Lemon Grove's staffing cost to comply with these mandated activities in FY 2007-08 is $1,968 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Lemon Grove's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of Lemon Grove has not entered into any cost sharing agreement to pay for consultant support relating to San Diego Bay WURMP. Therefore at the present there are no consultant costs for FY 2007-08.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 cannot be determined separate and apart from on-going activities. However if the City of Lemon Grove were to encounter a severe budget crisis, maintaining these mandated activities, which would otherwise be eliminated at the City's discretion in order to achieve a balanced budget, would have an adverse financial impact on the City of Lemon Grove which is difficult to estimate at this time.

9. The actual increased costs incurred by the City of Lemon Grove in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $58,483, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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10. The estimated increased costs that the City of Lemon Grove expects to incur in FY 2008-09, are expected to be $112,862, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of Lemon Grove expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. The City has a fee that partially offsets existing costs to the program, but I am not aware of any authority to assess a fee to offset these increased costs.

15. I believe that the only available source to pay these increased costs are and will be the /City of Lemon Grove's general purpose funds.

Executed this 12th day of June at Lemon Grove, California.

I declare under penalty of perjury that the foregoing is true and correct.

Cora Long

Cora Long

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Co-Permittee -
Lemon Grove

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
REGIONAL URMP ACTIVITIES						
Working Body Support	$0.00	$5,542.43	$5,819.55	$6,110.52	$6,416.04	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$4,428.00	$4,861.00	$4,968.00	$5,167.00	$5,373.00	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are City of Lemon Grove costs only. City participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.
Regional Residential Education Program Development and Implementation	$1,338.75	$2,677.50	$5,355.00	$5,622.75	$5,903.89	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.
Hydromodification Management Plan (HMP) Development	$3,578.12	$2,385.42	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$535.50	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.

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City of Lemon Grove Unfunded Mandate Costs

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$2,142.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section 1.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
[illegible] Activities						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.
6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Permit Section D.3.(5) requires street sweeping frequencies for improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at two times per month. Areas with medium volumes of trash and/or debris must be swept monthly and areas with low volumes of trash and/or debris at least annually.
Street Sweeping (staffing costs)	$0.00	$0.00	$0.00	$0.00	$0.00	The City contracts the street sweeping.
Street Sweeping (contract costs)	$33,565.00	$34,907.60	$36,303.90	$37,756.06	$39,266.30	Contract costs are estimated to increase by approximately 4% annually.
Conveyance System Cleaning	$14,924.00	$15,520.96	$16,141.80	$16,787.47	$17,458.97	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, additional staffing impacts are projected. The City utilizes the Public Works Street Division for the MS4 operations and maintenance program. Costs are calculated at $26.65 per hour for average personnel at 560 hours, and are increased by 4% in each subsequent year. This hourly cost includes equipment maintenance, etc.

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Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$0.00	$11,808.00	$12,280.00	$12,772.00	$13,282.00	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. FY 07-08 staffing impacts are estimated at three days per month (288 hours per year) to develop, administer, and analyze surveys and tests. Costs are calculated at the Environmental Program Manager level ($41/hr), and increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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City of Lemon Grove Unfunded Mandate Costs

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$0.00	$39,975.00	$41,574.00	$43,237.00	$44,966.00	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Annual costs are calculated as 975 hours of time (~0.5 staff years) at the Environmental Program Manager level ($41/ hour), and increased by 4% each year after FY 2008-09.
WATERSHED WQ ACTIVITIES						
Staffing for Watershed URMP development and implementation	$1,968.00	$2,047.00	$2,129.00	$2,214.00	$2,302.00	Lead responsibility for watershed program implementation resides with the County of San Diego DPLU Watershed Planning Division. The City of Lemon Grove participates in meetings to support Watershed URMP development and Implementation. Copermittees must maintain representation in, and participate in meetings of, each of the watershed groups in which the City is located. The estimates presented here are City of Lemon Grove's costs only for participation in two watershed groups. City participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs are calculated at the Environmental Program Manager level ($41/hr), and increased by 4% each year after FY 2008-09. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload.
WURMP Cost-Share Agreements	$0.00	$0.00	$0.00	$0.00	$0.00	No cost share agreements currently exist for the City of Lemon Grove's watershed groups.
Implementation of Watershed Activities	$0.00	$0.00	$0.00	$0.00	$0.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City does not budget seperately for these activities.
TOTALS	$60,537.37	$114,182.48	$118,751.70	$125,698.28	$128,552.16	

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City of n Grove
Unfunded Mandate Meeting Participation

Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost
Program Planning Subcommittee																
Environmental Program Manager	$41	0	3	1	$41	$0	0	3	1	$43	$0	0	3	1	$46	$0
						$0					**$0**					**$0**
Fiscal, Reporting, & Assessment Workgroup																
Environmental Program Manager	$41	8	3	1	$41	$984	6	3	1	$43	$768	6	3	1	$46	$828
						$984					**$768**					**$828**
Education & Residential Sources Workgroup																
Environmental Program Manager	$41	10	3	1	$41	$1,230	6	3	1	$43	$768	4	3	1	$46	$552
						$1,230					**$768**					**$552**
Monitoring Workgroup																
Environmental Program Manager	$41	12	3	1	$41	$1,476	12	3	1	$43	$1,535	12	3	1	$46	$1,656
						$1,476					**$1,535**					**$1,656**
Dry Weather Monitoring Sub-workgroup																
Environmental Program Manager	$41	6	3	1	$41	$738	6	3	1	$43	$768	6	3	1	$46	$828
						$738					**$768**					**$828**

Worksheet B

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City of Lemon Grove
Unfunded Mandate Meeting Participation

FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
0	3	1	$48	$0	0	3	1	$50	$0
				$0					**$0**
6	3	1	$48	$861	6	3	1	$50	$896
				$861					**$896**
4	3	1	$48	$574	4	3	1	$50	$597
				$574					**$597**
12	3	1	$48	$1,722	12	3	1	$50	$1,791
				$1,722					**$1,791**
6	3	1	$48	$861	6	3	1	$50	$896
				$861					**$896**

Worksheet B

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City of [illegible]n Grove
Unfunded Mandate Meeting Participation

	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																
Environmental Program Manager	$41	0	3	1	$41	$0	0	3	1	$43	$0	0	3	1	$46	$0
						$0					**$0**					**$0**
Land Development Workgroup																
Environmental Program Manager	$41	0	3	1	$41	$0	0	3	1	$43	$0	0	3	1	$46	$0
						$0					**$0**					**$0**
Municipal Sources Workgroup																
Environmental Program Manager	$41	0	3	1	$41	$0	4	3	1	$43	$512	4	3	1	$46	$552
						$0					**$512**					**$552**
Industrial Commercial Workgroup																
Environmental Program Manager	$41	0	3	1	$41	$0	4	3	1	$43	$512	4	3	1	$46	$552
						$0					**$512**					**$552**
Regional WURMP Workgroup																
Environmental Program Manager	$41	0	3	1	$41	$0	0	3	1	$43	$0	0	3	1	$46	$0
						$0					**$0**					**$0**
Annual Total						**$4,428**					**$4,861**					**$4,968**

Total Unfunded Mandate Costs for Meeting Participation $24,797

Worksheet B

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City of Lemon Grove
Unfunded Mandate Meeting Participation

FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
0	3	1	$48	$0	0	3	1	$50	$0
				$0					**$0**
0	3	1	$48	$0	0	3	1	$50	$0
				$0					**$0**
4	3	1	$48	$574	4	3	1	$50	$597
				$574					**$597**
4	3	1	$48	$574	4	3	1	$50	$597
				$574					**$597**
0	3	1	$48	$0	0	3	1	$50	$0
				$0					**$0**
				$5,167					**$5,373**

Worksheet B

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EXHIBIT 6 "L" – DECLARATION OF BARBARA A. TIPTON FOR CITY OF NATIONAL CITY.

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DECLARATION OF BARBARA A. TIPTON IN SUPPORT OF TEST CLAIM.

I, Barbara A. Tipton, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have the following training/certifications: Certified Storm Water Inspector (National Storm Water Center) Certified Environmental Compliance Manager (Southern Columbia University), Cal/EPA Basic Inspector Academy, California Compliance School Certification (Modules I, II, III & IV)

3. I am employed by the City of National City as a Storm Water Compliance Inspector.

4. I have held my current position for approximately 5 years. My duties include reviewing plans and conducting inspections of new and redevelopment projects for compliance with storm water laws, erosion control, construction BMPs and post-construction pollution prevention measures (Standard Urban Storm Water MITIGATION Plan (SUSMP) implementation) coordinating and serving as a liaison for NPDES program with consultants, engineers, developers, contractors, the public, government agencies, other departments, other organizations department staff and committees, performing inspections of construction sites and industrial and commercial businesses for storm water compliance. Reviewing and performing appropriate follow-up to the Dry Weather Monitoring Program reports prepared for the city, receiving, recording and investigating complaints from the public and staff regarding violations of NPDES regulations. Assisting with the development of Best Management Practices (BMPs), training staff on NPDES program; Serving on NPDES related committees, create related public relations materials such as calendars, flyers and pamphlets, conducting workshops

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to educate city employees, citizens, business owners and developers regarding NPDES prohibitions.

5. I have read the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I know and understand the requirements of the Permit.

6. I have also read and I understand the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

8. These new activities include the following:

a. Working Body

1.) Support: Section L.1 of the 2007 Permit requires all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these

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mandated costs is based on a formula set forth in the MOU. The City of National City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of National City's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by the anticipated minimum number of meetings for each working body for each fiscal year and assumed that on average each staff member would spend 3 hours attending each meeting and 20 miles of round trip travel would be required for each meeting. The City of National City must also provide a chair, co-chair, or secretary to one workgroup; it is estimated that fulfilling this responsibility will take 36 hours per year. The cost to the City of National City to comply with this mandated activity for FY 2007-08 is $ 14,345. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of National City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This

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is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of National City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP")

Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of National City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each

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year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of National City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of National City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and

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parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of National City has 110 miles of improved roads, streets and highways. Based on these standards, 10% of the City of National City's improved roads, streets and highways are in the "High" category, 90% in the "Medium" category. Based on this analysis it was determined that there will be a 10% increase in the street sweeping activities as a result of the 2007 Permit. To accommodate the required increase, annual maintenance and fuel costs are expected to be $745 for FY 2007-08. The City's street sweeping vehicle has already been fully depreciated, so no depreciation or amortization costs are included in the cost. The City of National City's actual and estimated equipment costs for complying with this mandated activity for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Staffing Costs: In response to Section D.3.(5) the City of National City will need an additional 0.02 staff years for FY 2007-08 and will increase staffing by another 0.02 staff years beginning in FY 2008-09. The City of National City's cost in FY 2007-08 for a Street Sweeper Operator is $74,000 per year. The increase in the City of National City's staffing cost to comply with this mandated activity in FY 2007-08 is $1,379 and $2,869 in FY 2008-09 and is expected to increase 4% in FY 2009-2010 and each year thereafter. The City of National City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Contract Costs: The City of National City does not contract with a private company to provide street sweeping services.

f. Conveyance System Cleaning: Section D.3.(3).(b) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be

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inspected annually, with high priority facilities being inspected between May and September. The City of National City's MS4 Cleaning program established under the 2001 Permit included annual inspections of all MS$ facilities in the City of National City. Based on conversations with the City of National City Public Works Staff, inspecting high priority facilities between Man and September and cleaning out facilities are at least 33 percent full is not anticipated to add any substantial costs to the City of National City's MS4 cleaning program. There fore, no cost increase is listed for this item.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section D.5, the City of National City expects to expend 5 hours of staff time and 16 hour of consultant time in FY 2007-08, and 15 hours of staff time and 48 hours of consultant time in FY2008-09 and each year thereafter This time includes planning and preparing for, presenting and analyzing the results from on workshop in FY 2007-08 and three workshops in FY 2008-09. The City of National City's cost in FY 2007-08 to perform this work is $33.96 per hour for a Storm Water Compliance Inspector and an average of $100.00 per hour for a consultant. The increase in the City of National City's staffing and consultant cost to comply with these mandated activities in FY 2007-08 is $1,770, $5,522 for FY 2008-09 and is expected to increase 4% in FY 2009-10 and each year thereafter. The City of National City's actual and estimated costs for

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complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis, additional elements of the industrial/commercial inspections (BMP score, knowledge score and pollutant discharge assessment) conducted solely for the effectiveness assessment reasons and report writing. To comply with Section I.1 the City of National City's consultants cost in FY 2007-08 have been $16,716. On average consultant rates for these functions are approximately $75 per hour. In FY 2008-09 and each year thereafter the City of National City anticipates consultant costs of $22,042 which are expected to increase 4% in FY 2009-10 and each year thereafter. The City of National City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

l. Watershed URMP

1.) Staffing for Development and Implementation: Section E of the 2007 Permit requires the co-permittee to develop and implement updated

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watershed URMPs. The City of National City's consultant costs to comply with these mandated activities in FY 2007-08 is $14,588 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of National City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of National City has not presently entered into any cost sharing agreement(s) to pay for consultant support relating to San Diego Bay, so no WURMP cost sharing expenses for FY 2007-08 are anticipated. It is unknown whether a cost-sharing agreement will be implemented for the San Diego Bay WURMP in the future. At this time point, no costs have been budgeted for this item in FY 2008-09 or for future years.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $199,470. This cost mainly consists of additional street sweeping performed above the level required by the 2007 Permit, which is performed as a watershed water quality activity. The City of National City's cost for watershed activities are expected to increase by 4% each year, beginning in FY 2008-09. The City of National City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of National City in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $258,420, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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10. The estimated increased costs that the City of National City expects to incur in FY 2008-09, are expected to be $282,729 and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of National City expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I am not aware of any authority to assess a fee to offset these increased costs.

Executed this 5th day of June, 2008, at National City, California.

I declare under penalty of perjury that the foregoing is true and correct.

Barbara A. Tipton

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Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
[illegible] Activities						
Working Body Support	$0.00	$9,237.38	$9,699.25	$10,184.21	$10,693.41	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs have been established for all Copermittees as a group. The City of National City's share, based on the MOU cost sharing formula, is presented in this spreadsheet.
Working Body Participation	$14,345.40	$10,208.64	$10,616.99	$11,041.67	$11,483.33	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. Cost for 2007-08 is based on consultant costs for attending meetings (July 1, 2007 through May 24, 2008). The 2007-08 fiscal year includes a large number of meetings associated with developing new programs in response to new Permit requirements; it is anticipated that in future years the amount of time spent in meetings will decrease. Cost for future years is based on attending 16 meetings per year (each meeting: 3 hours + 20 miles). Cost also includes workgroup chair or secretary responsibilities of 3 hours per month (36 hours/year). All costs are based on consultant costs to the City (average labor rate of $110/hr and $0.60/mile) and assume 4% annual increases, with 2007-08 as the base year.
Regional Residential Education Program Development and Implementation	$2,231.25	$4,462.50	$8,925.00	$9,371.25	$9,839.82	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to measurably increase the knowledge of, and measurably change the behavior of, residential communities with in their jurisdiction. The City of National City's share of regional costs for this program, based on the MOU cost sharing formula, is presented in this spreadsheet.
Hydromodification Management Plan (HMP) Development	$6,282.68	$4,188.45	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The City of National City's share of regional costs for this program, based on the specially developed cost sharing formula, is presented in this spreadsheet.

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City of National City Copermittee Cost Estimates for Unfunded Mandate Test Claim

Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$892.50	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The Copermittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The City of National City's share of the regional costs for this update, based on the standard MOU cost sharing formula, is presented in this spreadsheet.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$3,570.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section J.1 requires the collaborative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The City of National City's share of regional costs for this program, based on the MOU cost sharing formula, is presented in this spreadsheet.
[illegible]						
4.0 Development Planning						Reimbursable costs are not projected for this component
5.0 Construction						Reimbursable costs are not projected for this component
6.0 Municipal						
Street Sweeping (equipment costs)	$745.46	$1,580.36	$1,643.58	$1,709.32	$1,777.70	Permit Section D.3.(5) lists required street sweeping frequencies. Based on past experience, the City has identified Plaza Blvd, Sweetwater Rd, Highland Ave, 8th St, and National City Blvd as high priority street, and all other streets have been designated medium priority. Of the City's approximately 110 miles of streets and alleys, 10% are high priority, 90% are medium priority, and 0% are low priority. Assuming that previously the City's street sweeping program would complete approximately the equivalent of sweeping all streets in the City once per month, meeting the new requirements is an increase of about 10%. Maintaining a street sweeper utilized at 100% requires an annual cost of $40,000. To meet the above requirements, the City would need to increase utilization from 37% to 41%. These costs assumes 6% annual increases; a slightly higher annual increase is used here to account for rising costs of fuel. The 2007-08 cost is based on implementing the increased requirements for half a year, while the increases are applied to the entire fiscal year in following years.
Street Sweeping (staffing costs)	$1,379.09	$2,868.51	$2,983.25	$3,102.58	$3,226.68	To meet the Permit required sweeping frequencies, staffing will need to increase by about 10%. FY 07-08 costs are calculated at an annual cost of $74,000 for Street Sweepers and increased by 4% in each subsequent year. The 2007-08 cost is based on implementing the staff increase for half a year, and future years assume the staff increase applies for the entire year.
Street Sweeping (contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	The City of National City does not contract out street sweeping services.
Conveyance System Cleaning	$0.00	$0.00	$0.00	$0.00	$0.00	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. The City's previous JURMP included annual inspection of MS4 facilities. Based on conversations with Public Works staff, inspecting high priority facilities during the dry season and cleaning out facilities that are at least 33% full is not anticipated to add any substantial costs to the City's existing program. Therefore, not cost increase is listed for this line item.

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7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$1,769.78	$5,521.71	$5,742.58	$5,972.28	$6,211.17	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Includes the cost of administering assessment tests at training seminars and conducting additional workshops per year for new requirements (per workshop: 16 hrs of consultant at average of $100/hr and 5 hrs of City storm water inspector at $33.96/hr. Hours include preparation, presenting at the workshop, and analyzing results). The 2007-08 cost includes one workshop, and future years include three workshops per year. Costs are increased by 4% each year.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$16,716.25	$22,041.75	$22,923.42	$23,840.36	$24,793.97	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. The additional elements of the industrial/commercial inspections (BMP score, knowledge score, and pollutant discharge assessment) conducted solely for effectiveness assessment reasons are also included in the cost. Additional costs are included for 2007-08 based on consultant costs, as some of the efforts listed above have been started in 2007-08. Beginning in 2008-09, the cost is based off completing additional assessment measures at 205 industrial/commercial sites (0.25 hrs/site at average rate of $88.40/hr); data entry for 275 industrial, commercial, and wet season construction inspections (0.25 hrs/site at average rate of $57.20/hr); and projected consultant data management, database development, and reporting costs totaling $13,730. A 4% annual increase is assumed.
WATERSHED URMP ACTIVITIES						
Staffing for Watershed URMP development and implementation	$16,716.25	$22,041.75	$22,923.42	$23,840.36	$24,793.97	FY 07-08 cost estimates are based on 8 hours of City staff time (4 hrs City Engineer at $80.77/hr and 4 hrs Principal Engineer at $64.42/hr) and actual consultant costs for WURMP support, which mainly includes attending meetings, developing reports, and developing strategy for implementing the WURMP within the City of National City. This cost is increased by 4% in each subsequent year.

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WURMP Cost-Share Agreements	$0.00	$0.00	$0.00	$0.00	$0.00	No cost share agreement has been enacted to date for the San Diego Bay WURMP. There is some possibility that one will be implemented in the future, but there are no known set plans for a cost-sharing agreement at this point. Therefore, no cost has been entered for this line item.
Implementation of Watershed Activities	$199,470.00	$207,448.80	$215,746.75	$224,376.62	$233,351.69	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. 2007-08 cost is based on City staff and consultant cost for conducting additional dry season construction inspections and managing the data from those inspections (23 inspections at average of $150/inspection), financially supporting I Love a Clean San Diego for the Creek to Bay Cleanup ($1,000 per year), consultant and staff support for the City's Clean Community Program (consultant: 20 hrs at average rate of $100/hr; staff: creek cleanup worker for 980 hrs/yr at $12/hr), and conducting additional street sweeping beyond the 2007 Permit requirements (this includes the cost of an additional 1.59 staff years at $74,000 per year and additional equipment maintenance costs of 1.59 times the annual maintenance for one sweeper due to upping the usage of the first sweeper to 100% utilization and 100% of the maintenance costs of a second sweeper unit. The annual sweeper unit maintenance cost is estimated at $40,000 per year). 4% increases are applied in future years.
TOTALS	$260,548.65	$289,599.85	$301,204.25	$317,008.64	$326,171.74	

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EXHIBIT 6 "M" – DECLARATION OF MO LAHSAIE FOR CITY OF OCEANSIDE.

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I, Mo Lahsaie, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. BS in Agricultural Science 1976; MS in Plant Sciences 1979 University of CA Riverside; PhD in Plant Physiology, 1983 University of CA Riverside; Site Assessment and Remediation Certificate, University of CA San Diego; Hazardous Materials Management Certificate, University of CA San Diego; Environmental Scientist with Regional Water Quality Control Board, 2 years; Registered Environmental Health Specialist Certificate.

3. I am employed by the Water Utilities Department of the City of Oceanside as the Clean Water Program Coordinator

4. I have held my current position for approximately five years. My duties include managing the planning and implementation of the Municipal Stormwater National Pollutant Discharge Elimination System Permit mandated by the Regional Water Quality Control Board in San Diego.

5. I have read the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I know and understand the requirements of the Permit.

6. I have also read and I know and understand the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

8. These new activities include the following:

a. <u>Working Body</u>

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1.) Support: Section L.1 of the 2007 Permit requires all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Oceanside's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of Oceanside's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each working body for each fiscal year and assumed that on average each staff member would spend four (4) hours preparing for and attending each meeting. The cost to the City of Oceanside to comply with this mandated activity for FY 2007-08 is $10,620. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are

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increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of Oceanside's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Oceanside's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's

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share of these mandated costs is based on a formula set forth in the MOU. The City of Oceanside's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Oceanside's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Oceanside's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking

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facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of Oceanside Public Works Department used average daily trip (ADT) statistics to determine the volume of trash and/or debris that could reasonably be expected to be generated. Improved roads, streets and highways that have more than 20,000 vehicles per day are in the "High" volume of trash and/or debris category. Improved roads, streets and highways that have 15,000 to 20,000 vehicles per day are in the "Medium" volume of trash and/or debris category. Improved roads, streets and highways that have less than 15,000 vehicles per day are in the "Low" volume of trash and/or debris category. The City of Oceanside has 397 miles of improved roads, streets and highways. Based on these standards, 20 % of the City of Oceanside improved roads, streets and highways are in the "High" category, 0 % in the "Medium" category and 80 % in the "Low" category. Based on this analysis it was determined that there will be a 209 % increase in the street sweeping activities as a result of the 2007 Permit. To accommodate the required increase, the City of Oceanside Public Works Department has been required to purchase four (4) new street sweeping vehicles and employ four (4) additional employees. Each vehicle costs $150,000 to purchase and has an expected useful life of six years. The annual maintenance and fuel costs are expected to be $30,000 for each vehicle. In addition the expected replacement cost of each vehicle has been amortized over the six year expected life of each vehicle. The City of Oceanside Public Works Department's actual and estimated equipment costs for complying with this mandated activity for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Staffing Costs: In response to Section D.3.(5) the City of Oceanside Public Works Department has increased its staffing by seven (7) staff years for FY 2007-08 and will increase staffing by 4 % in FY 2008-09 and each year thereafter. The increase in the City of Oceanside Public Works Department's staffing cost to comply with this mandated activity in FY 2007-08 is $465,000 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Oceanside Public Works Department's actual and estimated costs for complying

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with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Contract Costs: The City of Oceanside conducts all street sweeping service through the Public Works Department and does not contract out any of these services.

f. Conveyance System Cleaning: Section D.3.(3).(b) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of Oceanside Public Works Department has increased staffing of its MS4 operations and maintenance program for FY 2007-08 by two (2) staff years and will increase staffing by 4% in FY 2008-09. The increase in the City of Oceanside Public Works Department's staffing and equipment costs to comply with this mandated activity in FY 2007-08 is $ $216,750 and is expected to increase 4% in FY 2008-09 and each year thereafter. In addition, The City of Oceanside contracts citywide storm drain inlet cleaning on an annual basis at a cost of $135,160 per year. The City of Oceanside Public Works Department's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section D.5 of the 2007 Permit the City of Oceanside expects to expend 288 hours of staff time in FY 2007-08, and each year thereafter, to

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develop, administer and analyze surveys and tests. The City of Oceanside's cost in FY 2007-08 for an Environmental Specialist II to perform this work is $10,656 at $37 per hour. The increase in the City of Oceanside's staffing cost to comply with these mandated activities is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Oceanside's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1 the City of Oceanside will expend 88 hours of staff time in FY 2007-08, with increasing commitment in subsequent years. The City of Oceanside's cost in FY 2007-08 for an Environmental Health Specialist II to perform these mandated activities will be $3,256 at $37 per hour. The increase in the City of Oceanside's staffing cost to comply with these mandated activities in FY 2008-09 is $3,515 and is expected to increase each year thereafter as additional projects and programs are implemented. The City of Oceanside's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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1. Watershed URMP

1.) Staffing for Development and Implementation: Section E.2.a of the 2007 Permit requires the lead watershed permittee in each watershed be responsible for implementing watershed programs. Lead responsibility for the San Luis Rey watershed program implementation resides with the City of Oceanside's Water Utilities Department Clean Water Program (CWP). This program consists of three staff (one CWP Program Coordinator, and two Environmental Specialists). The FY 2007-08 costs are based on annualized projections for year-to-date expenditures. Calculations are based on the following hourly rates for FY 2007-08: CWP Coordinator - $57; Environmental Specialist II - $37. The increase in the City of Oceanside's staffing cost to comply with these mandated activities in FY 2007-08 is $13,172 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Oceanside's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of Oceanside has entered into one cost sharing agreement to pay for consultant support relating to the Carlsbad WURMP. The consultant costs for FY 2007-08 are $3,349. Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The City of Oceanside's budgeted cost for this mandated activity for FY 2008-09 is $3,482. The City of Oceanside's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $25,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year.

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The City of Oceanside's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of Oceanside in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $1,353,668, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City of Oceanside expects to incur in FY 2008-09, are expected to be $1,432,978, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of Oceanside expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I am not aware of any authority to assess a fee to offset these increased costs.

15. I believe that the only available source to pay these increased costs are and will be the City's general purpose funds.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this 29th day of May at Oceanside, California.

M. A. Lahsaiezadeh

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Co-Permittee
City of
Oceanside

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
[illegible]						
Working Body Support	$0.00	$25,647.30	$26,929.68	$28,276.15	$29,689.95	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and ten working bodies. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. The City of Oceanside's cost-share for this element is reflected in this table.
Working Body Participation	$10,620.00	$13,578.00	$11,798.00	$12,270.00	$12,761.00	Copermittees must maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are Oceanside costs only. Oceanside participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of four hours, including travel time. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.
Regional Residential Education Program Development and Implementation	$6,195.00	$12,390.00	$24,780.00	$26,019.00	$27,319.97	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. The City of Oceanside's cost-share for this element is reflected in this table.
Hydromodification Management Plan (HMP) Development	$22,510.02	$15,006.68	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration. The City of Oceanside's cost-share for this element is reflected in this table.

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Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$2,478.00	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$9,912.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section I.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration. The City of Oceanside's cost-share for this element is reflected in this table.
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4.0 Development Planning						
5.0 Construction						

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6.0 Municipal						
Street Sweeping (equipment costs)	$442,000.00	$460,000.00	$478,000.00	$497,000.00	$517,000.00	Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of Oceanside Public Works Department used average daily trip (ADT) statistics to determine the volume of trash and/or debris that could reasonably be expected to be generated. Improved roads, streets and highways that have more than 20,000 vehicles per day are in the "High" volume of trash and/or debris category. Improved roads, streets and highways that have 15,000 to 20,000 vehicles per day are in the "Medium" volume of trash and/or debris category. Improved roads, streets and highways that have less than 15,000 vehicles per day are in the "Low" volume of trash and/or debris category. The City of Oceanside has 397 miles of improved roads, streets and highways. Based on these standards, 20 % of the City of Oceanside improved roads, streets and highways are in the "High" category, 0 % in the "Medium" category and 80 % in the "Low" category. Based on this analysis it was determined that there will be a 209 % increase in the street sweeping activities as a result of the 2007 Permit. To accommodate the required increase, the City of Oceanside Public Works Department has been required to purchase four (4) new street sweeping vehicles and employ four (4) additional employees. Each vehicle cost $ 150,000 to purchase and has an expected useful life of six years. The annual maintenance and fuel costs are expected to be $ 30,000 for each vehicle. In addition the expected replacement cost of each vehicle has been amortized over the six year expected life of each vehicle.
Street Sweeping (staffing and /or contract costs)	$465,000.00	$484,000.00	$503,000.00	$523,000.00	$544,000.00	In response to Section D.3.(5) the City of Oceanside Public Works Department has increased its staffing by seven (7) staff years for FY 2007-08 and will increase staffing by 4 % in FY 2008-09 and each year thereafter. The increase in the City of Oceanside Public Works Department's staffing cost to comply with this mandated activity in FY 2007-08 is $465,000 and is expected to increase 4% in FY 2008-09 and each year thereafter.
Conveyance System Cleaning (Contracted Work and City Staff	$351,910.00	$360,580.00	$369,597.00	$523,000.00	$544,000.00	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, additional staffing impacts are projected. The County has increased its MS4 operations and maintenance program by 2.64 staff years in Fy 2007-08. Costs are calculated at $50.56 per hour for Operations Engineers and increased by 4% in each subsequent year.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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10.0 Education						
Educational Programs	$10,656.00	$11,082.00	$11,525.00	$11,986.00	$12,465.00	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. FY 07-08 staffing impacts are estimated at three days per month (288 hours per year) to develop, administer, and analyze surveys and tests. Costs are calculated at the Environmental specialist level ($37 per hour), and increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$3,256.00	$3,515.00	$4,255.00	$4,995.00	$5,624.00	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. These responsibilities will be incurred across a number of program areas and staff. Additional monitoring programs and development and expansion of education programs in future years will add additional assessment time. Annual costs are calculated at the EHS II level ($37 per hour).
WATERSHED URMP ACTIVITIES						
Staffing for Watershed URMP development and implementation	$13,172.00	$13,698.00	$14,245.00	$14,814.00	$15,406.00	Lead responsibility for the San Luis Rey watershed program implementation resides with the City of Oceanside Water Utilities Department, Clean Water Program. This program consists of three staff (one Program Coordinator and Environmental Specialists). FY 07-08 cost estimates are based on annualized projections from YTD expenditures. Calculations assume the following hourly rates for FY 2007-08 for Environmental Specialists at $37. These rates are increased by 4% in each subsequent year.

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WURMP Cost-Share Agreements	$3,349.00	$3,482.00	$3,621.00	$3,765.00	$3,915.00	Cost share agreements are used to pay for WURMP consultant support. The FY 07-08 total is based on the only cost-share that the City of Oceanside has with Carlsbad in which it participates. A 5% increase is assumed for each year after FY 2007-08.
Implementation of Watershed Activities	$25,000.00	$30,000.00	$36,000.00	$43,200.00	$51,840.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City of Oceanside budgeted $25,000 for implementing WURMP activities in FY 07-08. Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year.
TOTAL	$1,356,146.01	$1,432,978.98	$1,488,750.68	$1,698,237.15	$1,764,020.90	

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost
Program Planning Subcommittee											
Clean Water Program Coordinator	$57	1	4	1	$57	$228	1	4	1	$59	$237
Environmental Specialist II	$37	0	4	1	$37	$0	7	4	1	$38	$1,077
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	8	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
						$228					$1,315
Fiscal, Reporting, & Assessment Workgroup											
Clean Water Program Coordinator	$57	4	4	1	$57	$912	3	4	1	$59	$711
Environmental Specialist II	$37	4	4	1	$37	$592	3	4	1	$38	$462
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
						$1,504					$1,173
Education & Residential Sources Workgroup											
Clean Water Program Coordinator	$57	0	4	1	$57	$0	0	4	1	$59	$0
Environmental Specialist II	$37	5	4	1	$37	$740	5	4	1	$38	$770
		0	3	1	$0	$0	0	3	2	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
						$740					$770
Monitoring Workgroup											
Clean Water Program Coordinator	$57	2	4	1	$57	$456	2	4	1	$59	$474
Environmental Specialist II	$37	12	4	1	$37	$1,776	12	4	1	$38	$1,847
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
						$2,232					$2,321

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Dry Weather Monitoring Sub-workgroup											
Clean Water Program Coordinator	$57	0	4	1	$57	$0	0	4	1	$59	$0
Environmental Specialist II	$37	6	4	1	$37	$888	6	4	1	$38	$924
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
						$888					$924
Coastal Storm Drain Sub-Workgroup											
Clean Water Program Coordinator	$57	0	4	1	$57	$0	0	4	1	$59	$0
Environmental Specialist II	$37	6	4	1	$37	$888	6	4	1	$38	$924
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
						$888					$924
Land Development Workgroup											
Clean Water Program Coordinator	$57	5	4	1	$57	$1,140	5	4	1	$59	$1,186
Engineering Staff	$63	12	4	1	$63	$3,000	12	4	1	$65	$3,120
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
						$4,140					$4,306
Municipal Sources Workgroup											
Clean Water Program Coordinator	$57	0	4	1	$57	$0	0	4	1	$59	$0
Environmental Specialist II	$37	0	4	1	$37	$0	0	4	1	$38	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
						$0					$0
Industrial Commercial Workgroup											
Clean Water Program Coordinator	$57	0	4	1	$57	$0	0	4	1	$59	$0
Environmental Specialist II	$37	0	4	1	$37	$0	4	4	1	$38	$616
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
						$0					$616
Regional WURMP Workgroup											
Clean Water Program Coordinator	$57	0	4	1	$57	$0	0	4	1	$59	$0
Environmental Specialist II	$37	0	4	1	$37	$0	8	4	1	$38	$1,231
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0
						$0					$1,231
Annual Total						$10,620					$13,578

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FY 09-10				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
1	4	1	$62	$247
7	4	1	$40	$1,121
0	3	1	$0	$0
8	3	1	$0	$0
0	3	1	$0	$0
				$1,367
3	4	1	$62	$740
3	4	1	$40	$480
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$1,220
0	4	1	$62	$0
4	4	1	$40	$640
0	3	2	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$640
2	4	1	$62	$493
12	4	1	$40	$1,921
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$2,414

FY 10-11				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
1	4	1	$64	$256
7	4	1	$42	$1,165
0	3	1	$0	$0
8	3	1	$0	$0
0	3	1	$0	$0
				$1,422
3	4	1	$64	$769
3	4	1	$42	$499
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$1,269
0	4	1	$64	$0
4	4	1	$42	$666
0	3	2	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$666
2	4	1	$64	$513
12	4	1	$42	$1,998
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$2,511

FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
1	4	1	$67	$267
7	4	1	$43	$1,212
0	3	1	$0	$0
8	3	1	$0	$0
0	3	1	$0	$0
				$1,479
3	4	1	$67	$800
3	4	1	$43	$519
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$1,320
0	4	1	$67	$0
4	4	1	$43	$693
0	3	2	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$693
2	4	1	$67	$533
12	4	1	$43	$2,078
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$2,611

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0	4	1	$62	$0
6	4	1	$40	$960
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$960

0	4	1	$64	$0
6	4	1	$42	$999
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$999

0	4	1	$67	$0
6	4	1	$43	$1,039
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$1,039

0	4	1	$62	$0
6	4	1	$40	$960
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$960

0	4	1	$64	$0
6	4	1	$42	$999
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$999

0	4	1	$67	$0
6	4	1	$43	$1,039
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$1,039

5	4	1	$62	$1,233
4	4	1	$68	$1,082
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$2,315

5	4	1	$64	$1,282
4	4	1	$70	$1,125
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$2,407

5	4	1	$67	$1,334
4	4	1	$73	$1,170
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$2,503

0	4	1	$62	$0
0	4	1	$40	$0
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$0

0	4	1	$64	$0
0	4	1	$42	$0
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$0

0	4	1	$67	$0
0	4	1	$43	$0
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$0

0	4	1	$62	$0
4	4	1	$40	$640
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$640

0	4	1	$64	$0
4	4	1	$42	$666
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$666

0	4	1	$67	$0
4	4	1	$43	$693
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$693

0	4	1	$62	$0
8	4	1	$40	$1,281
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$1,281

0	4	1	$64	$0
8	4	1	$42	$1,332
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$1,332

0	4	1	$67	$0
8	4	1	$43	$1,385
0	3	1	$0	$0
0	3	1	$0	$0
0	3	1	$0	$0
				$1,385

$11,798 $12,270 $12,761

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EXHIBIT 6 "N" –DECLARATION OF CHARLES A. HEINRICHS FOR CITY OF SAN DIEGO.

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DECLARATION OF CHARLES A. HEINRICHS IN SUPPORT OF TEST CLAIM

I, Charles A. Heinrichs, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. Masters Degree, Civil Engineering, Registered Professional Engineer, California.

3. I am employed by the City of San Diego as Assistant Director, General Services Department.

4. I have held my current position for approximately 2 months. My duties include, directing and controlling activities to protect and improve the water quality of rivers, creeks and bays and the ocean in compliance with the updated Municipal Storm Water Permit.

5. I have read the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also reviewed and I am familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

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8. These new activities include the following:

a. Working Body

1.) Support: Section L.1 of the 2007 Permit requires all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of San Diego's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of San Diego's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for

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each working body for each fiscal year and assumed that on average each staff member would spend three hours preparing for and attending each meeting. The cost to the City of San Diego to comply with this mandated activity for FY 2007-08 is $26,391. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of San Diego's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of San Diego's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

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c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of San Diego's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of San Diego's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because

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of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of San Diego's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of San Diego has been sweeping its streets and roadways at or near the required frequencies. However, over the past several years the sweeping levels have been impacted due to budget constraints. The City determined that the volume of trash and/or debris that could reasonably be based on street use. Roads, streets and highways that are classified as commercial are in the "High" volume of trash and/or debris category. Residential improved roads, streets and highways that have parking restrictions related to street sweeping are in the "Medium" volume of trash and/or debris category. Residential improved roads, streets and highways that are non-posted with parking restrictions are in the "Low" volume of trash and/or debris category. The City of San Diego has approximately 2,600 miles of improved roads, streets and highways. Based on these standards, 27% of the roads, streets and highways are in the "High" category, 3.5% in the "Medium" category and 69.5% in the "Low" category. Based on this analysis it was determined that there will be a 20 % increase in the street sweeping activities as a result of the 2007 Permit. To accommodate the required increase, the City of San Diego has purchased five new street sweeping vehicles and

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hired five additional employees. Each vehicle cost $200,000 to purchase and has an expected useful life of seven years. The annual maintenance and fuel costs are expected to be $42,000 for each vehicle. In addition the expected replacement cost of each vehicle has been amortized over the seven year expected life of each vehicle. The City of San Diego's actual and estimated equipment costs for complying with this mandated activity for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Staffing Costs: In response to Section D.3.(5) the City of San Diego will be increasing its staffing by five staff for FY 2008-09. The increase in the City of San Diego's staffing cost to comply with this mandated activity in FY 2008-09 is $400,000 and is expected to increase 4% in FY 2009-10 and each year thereafter. The City of San Diego's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

f. Conveyance System Cleaning: Section D.3.(3).(b) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of San Diego has increased/contracted out much of its MS4 operations and maintenance program for FY 2007-08. The contract management element is handled by an Associate Engineer ($89.19 per hour) who spends approximately 80 - 100 hours per year writing and managing the contract. In addition, the City is utilizing a contractor to remove trash and debris from the storm drain channels. The City of San Diego's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section D.5 the City of San Diego expects to expend 312 hours of staff time (208 hours from a Senior Public Information Officer, 104 hours from a Public Information Officer) in FY 2007-08, and each year thereafter, to develop, administer and analyze surveys and tests. The City of San Diego's cost in FY 2007-08 for a Sr. Public Information Officer and Public Information Officer to perform this work is $47, and $41 per hour, respectively. The increase in the City of San Diego's staffing cost to comply with these mandated activities in FY 2007-08 is $14,505 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of San Diego's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting

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from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1 the City of San Diego will expend 728 hours of staff time in FY 2007-08, and 1,560 hours of staff time in FY 2008-09, and each year thereafter. The City of San Diego's cost in FY 2007-08 for a Storm Water Specialist and Associate Planner to perform these mandated activities will be $53 and $48 per hour, respectively. The increase in the City of San Diego's staffing cost to comply with these mandated activities in FY 2007-08 is $35,820, $77,127 in FY 2008-09, and is expected to increase 4% in FY 2010-11 and each year thereafter. The City of San Diego's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

1. Watershed URMP

1.) Staffing for Development and Implementation: Section E.1 of the 2007 Permit requires the City of San Diego to perform lead responsibility for implementation of the Mission Bay and La Jolla Watershed Urban Runoff Management Program (WURMP) and participate in the implementation of five other WURMPs. This program consists of 2.5 staff (0.5 Storm Water Specialist, two Associate Planners) that spend 100% of their time on the WURMP program. Calculations are based on the following hourly rates for FY 2007-08: Storm Water Specialist - $53; Associate Planner - $48. The increase in the City of San Diego's staffing cost to comply with these mandated activities in FY 2007-08 is $253,652 and is expected to increase to $308,505 in FY 2008-09 (1.0 Storm Water Specialist, 2.0 Associate Planners), and is expected to increase 4% each year thereafter. The City of San Diego's actual and estimated costs for

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complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of San Diego has entered into one cost sharing agreement to pay for consultant support relating to San Diego River WURMP. The consultant costs for FY 2007-08 was $7,698. In addition, the City of San Diego has or anticipates entering into additional consultant services agreements totaling $449,648 in value. Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The co-permittees expect budgeted costs to increase 5% in FY 2008-09 and each year thereafter. The City of San Diego's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $600,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 10% per year. The City of San Diego's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of San Diego in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be

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$4,790,664, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City of San Diego expects to incur in FY 2008-09, are expected to be $4,457,710, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of San Diego expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I am not aware of any authority to assess a fee to offset these increased costs.

15. I believe that the only available source to pay these increased costs are and will be the (county's/city's) general purpose funds.

Executed this 17th day of June at San Diego, California.

I declare under penalty of perjury that the foregoing is true and correct.

Charles R. Hinrichs

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Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
REGIONAL URMP / ACTIVITIES						
Working Body Support	$0	$543,375	$570,544	$599,071	$629,024	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$26,391	$37,637	$39,142	$40,708	$42,336	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. City participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on having one City representative for each working body meeting on a monthly basis. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.
Regional Residential Education Program Development and Implementation	$131,250	$262,500	$525,000	$551,250	$578,813	Permit section L.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.

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Hydromodification Management Plan (HMP) Development	$630,000	$420,000	$0	$0	$0	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$52,500	$0	$0	$0	$0	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	0	0	0	$210,000	0	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section L1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
JURISDICTIONAL URMP /ACTIVITIES						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.
6.0 Municipal						

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Street Sweeping (equipment costs)	$1,210,000	$218,400	$227,136	$236,221	$245,670	frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of San Diego has been sweeping its streets and roadways at or near the required frequencies. However, over the past several years the sweeping levels have been impacted due to budget constraints. The City determined that the volume of trash and/or debris that could reasonably be based on street use. Roads, streets and highways that are classified as commercial are in the "High" volume of trash and/or debris category. Residential improved roads, streets and highways that have parking restrictions related to street sweeping are in the "Medium" volume of trash and/or debris category. Residential improved roads, streets and highways that are non-posted with parking restrictions are in
Street Sweeping (staffing costs)	$400,000	$416,000	$432,640	$449,946	$467,943	In response to Section D.3.(5) the City of San Diego will be increasing its staffing by five staff for FY 2008-09. The increase in the City of San Diego's staffing cost to comply with this mandated activity in FY 2008-09 is $400,000 and is expected to increase 4% in FY 2009-10 and
Street Sweeping (contract costs)	$0	$0	$0	$0	$0	
Conveyance System Cleaning	$929,200	$966,368	$1,005,023	$1,045,224	$1,087,033	Section D.3.(5).(b) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of San Diego has increased/contracted out much of its MS4 operations and maintenance program for FY 2007-08. The contract management element is handled by an Associate Engineer ($89.19 per hour) who spends approximately 80 -100 hours per year writing and managing the contract. In addition, the City is utilizing a contractor to remove trash and debris from the
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						

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Educational Surveys and Tests	$14,505	$15,085	$15,688	$16,316	$16,969	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. Costs are calculated at 10% of a Sr PIO (208 hrs/year) and 5% of a PIO level (104 hrs/year), and increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$35,820	$77,127	$80,212	$83,420	$86,757	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Although these responsibilities may be incurred across a number of program areas and staff, annual costs are calculated as 0.1 Storm Water Specialist and 0.25 Associate Planner in FY08. For FY09, costs
WATERSHED URMP ACTIVITIES						

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Staffing for Watershed URMP development and implementation	$253,652	$308,505	$320,845	$333,679	$347,026	Lead responsibility for watershed program implementation resides with the Storm Water Pollution Prevention Division. This program consists of 2.5 positions in FY 07-08 (0.5 Storm Water Specialist, two Associate Planners). For FY 2008-09 and beyond, the program will consist of 3.0 positions: 10. Storm Water Specialist and two Associate Planners. Calculations assume the following hourly rates for FY 2007-08; Storm Water Specialist - $53; Associate Planner - $48). These rates are increased by 4% in each subsequent year.
WURMP Consultant Support	$507,346	$532,713	$554,021	$576,183	$599,230	Consultant agreements are used to pay for WURMP consultant support, including cost-share agreements with other jurisdictions on shared WURMP efforts. The FY 07-08 total is based on City contributions to the WURMP Cost Share Agreements and other consultant support. (San Diego River consultant: $7,698, Annual Report consultant: $49,648, implementation consultant: $450,000) Increases are estimated for future years based on requirements for increased coordination on
Implementation of Watershed Activities	$600,000	$660,000	$726,000	$798,600	$878,460	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City budgeted $600,000 ($100,000 in each of the City's six watersheds) for implementing WURMP activities in FY 07-08. Because of the wide range of potential costs for these activities, a 10% increase is assumed in each subsequent year.
TOTALS	$4,790,664	$4,457,710	$4,496,250	$4,940,617	$4,979,262	

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost	FY 10-11 No. Meetings	FY 10-11 Meeting Length	FY 10-11 No. Staff	FY 10-11 Hourly Rate	FY 10-11 Total Cost	FY 11-12 No. Meetings	FY 11-12 Meeting Length	FY 11-12 No. Staff	FY 11-12 Hourly Rate	FY 11-12 Total Cost
Program Planning Subcommittee																										
Storm Water Specialist	$83	1	3	1	$83	$249	8	3	1	$86	$2,072	8	3	1	$90	$2,155	8	3	1	$93	$2,241	8	3	1	$97	$2,330
		0	0	0	$0	$0	0	3	0	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	0	0	$0	$0	0	3	0	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	0	0	$0	$0	0	3	0	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$249					$2,072					$2,155					$2,241					$2,330
Fiscal, Reporting, & Assessment Workgroup																										
Storm Water Specialist	$83	8	3	1	$83	$1,992	6	3	1	$86	$1,554	6	3	1	$90	$1,616	6	3	1	$93	$1,681	6	3	1	$97	$1,748
Associate Planner	$76	8	3	1	$76	$1,824	6	3	1	$79	$1,423	6	3	1	$82	$1,480	6	3	1	$85	$1,539	6	3	1	$89	$1,600
Associate Engineer	$89	8	3	1	$89	$2,136	6	3	1	$93	$1,666	6	3	1	$96	$1,733	6	3	1	$100	$1,802	6	3	1	$104	$1,874
		0	0	0	$0	$0	0	0	0	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	0	0	$0	$0	0	0	0	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$5,952					$4,643					$4,828					$5,021					$5,222
Education & Residential Sources Workgroup																										
Senior PIO	$73	10	3	1.5	$73	$3,285	8	3	1.5	$76	$2,733	8	3	1.5	$79	$2,842	8	3	1.5	$82	$2,956	8	3	1.5	$85	$3,074
PIO	$65	0	3	1	$65	$0	4	3	1	$68	$811	4	3	1	$70	$844	4	3	1	$73	$877	4	3	1	$76	$912
		0	3	2	$0	$0	0	3	2	$0	$0	0	3	2	$0	$0	0	3	2	$0	$0	0	3	2	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$3,285					$3,544					$3,686					$3,834					$3,987
Monitoring Workgroup																										
Storm Water Specialist	$83	12	3	2	$83	$5,976	12	3	2	$86	$6,215	12	3	2	$90	$6,464	12	3	2	$93	$6,722	12	3	2	$97	$6,991
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$5,976					$6,215					$6,464					$6,722					$6,991
Dry Weather Monitoring Sub-workgroup																										
Storm Water Specialist	$83	6	3	1	$83	$1,494	6	3	1	$86	$1,554	6	3	1	$90	$1,616	6	3	1	$93	$1,681	6	3	1	$97	$1,748
Biologist II	$47	0	3	1	$47	$0	3	3	1	$49	$440	3	3	1	$51	$458	3	3	1	$53	$476	3	3	1	$55	$495
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$1,494					$1,994					$2,073					$2,156					$2,243

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																										
Storm Water Specialist	$83	6	3	1	$83	$1,494	6	3	1	$86	$1,554	6	3	1	$90	$1,616	6	3	1	$93	$1,681	6	3	1	$97	$1,748
Biologist II	$74	0	3	1	$74	$0	3	3	1	$77	$693	3	3	1	$80	$720	3	3	1	$83	$749	3	3	1	$87	$779
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$1,494					$2,246					$2,336					$2,430					$2,527
Land Development Workgroup																										
Senior Engineer	$101	4	3	1	$101	$1,212	12	3	1	$105	$3,781	12	3	1	$109	$3,933	12	3	1	$114	$4,090	12	3	1	$118	$4,254
Associate Engineer	$89	12	3	1	$89	$3,204	12	3	1	$93	$3,332	12	3	1	$96	$3,465	12	3	1	$100	$3,604	12	3	1	$104	$3,748
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	12	3	1	$0	$0	4	3	1	$0	$0	4	3	1	$0	$0	4	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$4,416					$7,114					$7,398					$7,694					$8,002
Municipal Sources Workgroup																										
Storm Water Specialist	$83	0	3	1	$83	$0	4	3	1	$86	$1,036	4	3	1	$90	$1,077	4	3	1	$93	$1,120	4	3	1	$97	$1,165
Associate Planner	$76	0	3	1	$76	$0	8	3	1	$79	$1,897	8	3	1	$82	$1,973	8	3	1	$85	$2,052	8	3	1	$89	$2,134
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$0					$2,933					$3,050					$3,172					$3,299
Industrial Commercial Workgroup																										
Storm Water Specialist	$83	0	3	1	$83	$0	4	3	1	$86	$1,036	4	3	1	$90	$1,077	4	3	1	$93	$1,120	4	3	1	$97	$1,165
Associate Planner	$76	0	3	1	$76	$0	2	3	1	$79	$474	2	3	1	$82	$493	2	3	1	$85	$513	2	3	1	$89	$533
Biologist II	$74	0	3	1	$74	$0	4	3	1	$77	$924	4	3	1	$80	$960	4	3	1	$83	$999	4	3	1	$87	$1,039
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$0					$2,434					$2,531					$2,632					$2,737
Regional WURMP Workgroup																										
Storm Water Specialist	$83	5	3	1	$83	$1,245	8	3	1	$86	$2,072	8	3	1	$90	$2,155	8	3	1	$93	$2,241	8	3	1	$97	$2,330
Associate Planner	$76	5	3	2	$76	$2,280	5	3	2	$79	$2,371	5	3	2	$82	$2,466	5	3	2	$85	$2,565	5	3	2	$89	$2,667
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$3,525					$4,443					$4,621					$4,805					$4,998
Annual Total						$26,391					$37,637					$39,142					$40,708					$42,336

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EXHIBIT 6 “O” - DECLARATION OF KENNETH E. ST. CLAIR FOR CITY OF SAN MARCOS.

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DECLARATION OF KENNETH E. ST. CLAIR ON BEHALF OF THE CITY OF SAN MARCOS IN SUPPORT OF TEST CLAIM

I, Kenneth E. St.Clair, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have had no formal education in stormwater issues.

3. I am employed by the City of San Marcos as an Administrative Analyst in the Public Works Department.

4. I have held my current position for approximately 8 years. My duties include acting as the City's representative for the co-permittee working groups, and coordinating the Stormwater program requirements between the various city departments for the past 2 years.

5. I have reviewed the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also reviewed and I am familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I am informed and believe and thereon allege that the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

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8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L.1 of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of San Marcos's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of San Marcos's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for

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each working body for each fiscal year and assumed that on average each staff member would spend 3 hours preparing for and attending each meeting. The cost to the City of San Marcos to comply with this mandated activity for FY 2007-08 is $23,094. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of San Marcos's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include; materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250, which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of San Marcos's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

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c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000, which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of San Marcos's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500, which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of San Marcos's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because

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of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of San Marcos's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. Prior to the 2001 permit, the City of San Marcos implemented a street sweeping program that exceeds the standards now required for the 2007 permit, therefore the City of San Marcos cannot quantify the expenses.

f. Conveyance System Cleaning: Section D.3.(a)(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of San Marcos has increased staffing of its MS4 operations and maintenance program for FY 2007-08 by 1 staff year and will not need to increase staffing in FY 2008-09. The City of San Marcos's cost in FY 2007-08 for a Streets Maintenance Worker 1 is $50.00 per hour. The increase in the City of San Marcos's staffing cost to comply with this mandated activity in FY 2007-08 is $104,000.00 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of San Marcos's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section I-1 of the 2007 Permit, the City of San Marcos expects to expend 100 hours of staff time in FY 2007-08, and each year thereafter, to develop, administer and analyze surveys and tests. The City of San Marcos's cost in FY 2007-08 for coordinating with the North County Stormwater Coalition to jointly develop, administer, and analyze surveys and tests to comply with these mandated activities in FY 2007-08 is $2,700.00 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of San Marcos's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality.

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Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I-1 the City of San Marcos will expend 125 hours of a Consulting Engineer's time in FY 2008-09, and each year thereafter. The City of San Marcos's cost in FY 2008-09 for a Stormwater Consulting Engineer to perform these mandated activities would be $130.00 per hour. The increase in the City of San Marcos's staffing cost to comply with these mandated activities in FY 2007-08 is $16,250.00 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of San Marcos's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

i. Watershed URMP

1.) Staffing for Development and Implementation: Section E.2.f. of the 2007 Permit requires watershed co-permittees to collaborate with other co-permittees within its watershed management areas to develop and implement an updated Watershed Urban Runoff Management Program for each watershed. It also requires watershed co-permittees to identify and implement watershed activities, and to implement at least two watershed quality activities and two watershed education activities for each permit year. Lead responsibility for watershed program implementation resides with the City's Stormwater Program Manager. This program consists of three part time staff (one Stormwater Program Manager, one Public Services Specialist and one Principal Planner) and one Stormwater Consulting Engineer. The FY 2007-08 costs are based on annualized projections for year-to-date expenditures. For FY 2008-09 and beyond, it is estimated that staff will spend 5% of their time on WURMP development and implementation. Calculations assume the following hourly rates for FY 2007-08; Stormwater Consulting Engineer - $130.00, Stormwater Program Manager -

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$68.00, Public Services Specialist - $71.00 and Principal Planner - $89.00. The increase in the City of San Marcos's staffing cost to comply with these mandated activities in FY 2007-08 is $37,232.00 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of San Marcos's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of San Marcos has entered into a cost sharing agreement to pay for consultant support relating to the Carlsbad WURMP. The consultant costs for FY 2007-08 are expected to be $3,314.00. Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The City of San Marcos's budgeted cost for this mandated activity for FY 2008-09 is $3,480.00. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City of San Marcos's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $10,000.00. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The City of San Marcos's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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9. The actual increased costs incurred by the City of San Marcos in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $234,255.96 and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City of San Marcos expects to incur in FY 2008-09, are expected to be $249,386.82 and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of San Marcos expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I am not aware of any authority to assess a fee to offset these increased costs.

15. I believe that the only available source to pay these increased costs are and will be the city's general purpose funds.

Executed this 11th day of June 2008 at San Marcos, California.

I declare under penalty of perjury that the foregoing is true and correct.

Kenneth E. St. Clair, Declarant

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Co-Permittee -

San Marcos

	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$13,475.70	$13,139.49	$14,856.96	$15,599.80	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-Workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$23,094.00	$25,097.00	$26,101.00	$27,145.00	$28,231.00	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are County costs only. County participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.

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Regional Residential Education Program Development and Implementation	$3,255.00	$6,510.00	$13,020.00	$13,671.00	$14,354.56	Permit section F.1 requires that the copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to measurably increase the knowledge of, and measurably change the behavior of residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.
Hydromodification Management Plan (HMP) Development	$33,108.96	$22,072.64	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$1,302.00	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$5,208.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section J.1 requires the collaborataive development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
[illegible]						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.

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6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Permit Section D.3.(5) requires street sweeping frequencies for improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at two times per month. Areas with medium volumes of trash and/or debris must be swept monthly and areas with low volumes of trash and/or debris at least annually. The COSM street sweeping program currently exceeds the requirements of both the old and the new permit by sweeping commercial areas weekly and residential areas every two weeks.
Street Sweeping (staffing costs)	$0.00	$0.00	$0.00	$0.00	$0.00	In response to Permit section D.3.(5), COSM staffing did not increase.
Street Sweeping (contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	In response to Permit section D.3.(5), COSM contracting costs did not increase.
Conveyance System Cleaning	$104,000.00	$108,160.00	$112,486.40	$116,985.86	$121,665.29	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, additional staffing impacts are projected. The COSM has increased its MS4 operations and maintenance program by diverting time out of its streets maintenance program by 1 staff year in Fy 2007-08. Costs are calculated at $50.00 per hour for a Maintenance Worker 1 and increased by 4% in each subsequent year.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$2,700.00	$2,808.00	$2,920.32	$3,037.13	$3,158.62	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. FY 07-08 COSM worked with the North County Stormwater Coalition to jointly develop, administer, and analyze surveys and tests. Costs are calculated at $2,700 and increased by 4% each year after FY 2007-08.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$16,250.00	$17,062.50	$17,915.63	$18,811.41	$19,751.98	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. These responsibilities may be incurred across a number of program areas and staff, annual costs are calculated as 125 hours of time at the Stormwater Consulting Engineer ($130 per hour). These rates are increased by 5% in each subsequent year.
WURMP ACTIVITIES						
Staffing for Watershed URMP development and implementation	$37,232.00	$38,721.28	$40,270.13	$41,880.94	$43,556.17	This program consists of one consultant and three staff. FY 07-08 cost estimates are based on annualized projections from YTD expenditures. For FY 2008-09 and beyond, an estimated 5% of total staff time for these positions is spent on WURMP development and implementation. Calculations assume the following hourly rates for FY 2007-08; Stormwater Consulting Engineer - $130, Stormwater Program Manager - $68, Public Services Specilaist - $71 and Principal Planner - $89). These rates are increased by 4% in each subsequent year.
WURMP Cost-Share Agreements	$3,314.00	$3,479.70	$3,653.69	$3,836.37	$4,028.19	Cost share agreements are used to pay for WURMP consultant support. The FY 07-08 total is based on actual COSM contributions to the WURMP Cost Share Agreements in which it participates. Increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit. A 5% increase is also assumed for each year after FY 2008-09.
Implementation of Watershed Activities	$10,000.00	$12,000.00	$14,400.00	$17,280.00	$20,736.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The COSM budgeted $10,000 for implementing WURMP activities in FY 07-08. Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year.
TOTALS	**$234,255.96**	**$249,386.82**	**$244,916.65**	**$262,712.66**	**$271,081.61**	

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost	FY 10-11 No. Meetings	FY 10-11 Meeting Length	FY 10-11 No. Staff	FY 10-11 Hourly Rate	FY 10-11 Total Cost	FY 11-12 No. Meetings	FY 11-12 Meeting Length	FY 11-12 No. Staff	FY 11-12 Hourly Rate	FY 11-12 Total Cost
Program Planning Subcommittee																										
Stormwater Consulting Engineer	$130	1	3	1	$130	$390	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0	0	3	1	$152	$0
Stormwater Program Manager	$68	1	3	1	$68	$204	8	3	1	$71	$1,697	8	3	1	$74	$1,765	8	3	1	$76	$1,836	8	3	1	$80	$1,909
Public Services Specialist	$71	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Principal Planner	$89	0	3	1	$89	$0	0	3	1	$93	$0	0	3	1	$96	$0	0	3	1	$100	$0	0	3	1	$104	$0
Deputy City Engineer	$125	0	3	1	$125	$0	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0
						$594					$1,697					$1,765					$1,836					$1,909
Fiscal, Reporting, & Assessment Workgroup																										
Stormwater Consulting Engineer	$130	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0	0	3	1	$152	$0
Stormwater Program Manager	$68	6	3	1	$68	$1,224	6	3	1	$71	$1,273	6	3	1	$74	$1,324	6	3	1	$76	$1,377	6	3	1	$80	$1,432
Public Services Specialist	$71	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Principal Planner	$89	0	3	1	$89	$0	0	3	1	$93	$0	0	3	1	$96	$0	0	3	1	$100	$0	0	3	1	$104	$0
Deputy City Engineer	$125	0	3	1	$125	$0	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0
						$1,224					$1,273					$1,324					$1,377					$1,432
Education & Residential Sources Workgroup																										
Stormwater Consulting Engineer	$130	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0	0	3	1	$152	$0
Stormwater Program Manager	$68	0	3	1	$68	$0	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$76	$0	0	3	1	$80	$0
Public Services Specialist	$71	12	3	1	$71	$2,556	12	3	1	$74	$2,658	12	3	1	$77	$2,765	12	3	1	$80	$2,875	12	3	1	$83	$2,990
Principal Planner	$89	0	3	1	$89	$0	0	3	1	$93	$0	0	3	1	$96	$0	0	3	1	$100	$0	0	3	1	$104	$0
Deputy City Engineer	$125	0	3	1	$125	$0	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0
						$2,556					$2,658					$2,765					$2,875					$2,990
Monitoring Workgroup																										
Stormwater Consulting Engineer	$130	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0	0	3	1	$152	$0
Stormwater Program Manager	$68	12	3	1	$68	$2,448	12	3	1	$71	$2,546	12	3	1	$74	$2,648	12	3	1	$76	$2,754	12	3	1	$80	$2,864
Public Services Specialist	$71	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Principal Planner	$89	0	3	1	$89	$0	0	3	1	$93	$0	0	3	1	$96	$0	0	3	1	$100	$0	0	3	1	$104	$0
Deputy City Engineer	$125	0	3	1	$125	$0	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0
						$2,448					$2,546					$2,648					$2,754					$2,864
Dry Weather Monitoring Sub-workgroup																										
Stormwater Consulting Engineer	$130	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0	0	3	1	$152	$0
Stormwater Program Manager	$68	12	3	1	$68	$2,448	12	3	1	$71	$2,546	12	3	1	$74	$2,648	12	3	1	$76	$2,754	12	3	1	$80	$2,864
Public Services Specialist	$71	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Principal Planner	$89	0	3	1	$89	$0	0	3	1	$93	$0	0	3	1	$96	$0	0	3	1	$100	$0	0	3	1	$104	$0
Deputy City Engineer	$125	0	3	1	$125	$0	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0
						$2,448					$2,546					$2,648					$2,754					$2,864

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																										
Stormwater Consulting Engineer	$130	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0	0	3	1	$152	$0
Stormwater Program Manager	$68	0	3	1	$68	$0	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$76	$0	0	3	1	$80	$0
Public Services Specialist	$71	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Principal Planner	$89	0	3	1	$89	$0	0	3	1	$93	$0	0	3	1	$96	$0	0	3	1	$100	$0	0	3	1	$104	$0
Deputy City Engineer	$125	0	3	1	$125	$0	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0
						$0					$0					$0					$0					$0
Land Development Workgroup																										
Stormwater Consulting Engineer	$130	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0	0	3	1	$152	$0
Stormwater Program Manager	$68	0	3	1	$68	$0	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$76	$0	0	3	1	$80	$0
Public Services Specialist	$71	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Principal Planner	$89	0	3	1	$89	$0	0	3	1	$93	$0	0	3	1	$96	$0	0	3	1	$100	$0	0	3	1	$104	$0
Deputy City Engineer	$125	12	3	1	$125	$4,500	12	3	1	$130	$4,680	12	3	1	$135	$4,867	12	3	1	$141	$5,062	12	3	1	$146	$5,264
						$4,500					$4,680					$4,867					$5,062					$5,264
Municipal Sources Workgroup																										
Stormwater Consulting Engineer	$130	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0	0	3	1	$152	$0
Stormwater Program Manager	$68	12	3	1	$68	$2,448	12	3	1	$71	$2,546	12	3	1	$74	$2,648	12	3	1	$76	$2,754	12	3	1	$80	$2,864
Public Services Specialist	$71	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Principal Planner	$89	0	3	1	$89	$0	0	3	1	$93	$0	0	3	1	$96	$0	0	3	1	$100	$0	0	3	1	$104	$0
Deputy City Engineer	$125	0	3	1	$125	$0	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0
						$2,448					$2,546					$2,648					$2,754					$2,864
Industrial Commercial Workgroup																										
Stormwater Consulting Engineer	$130	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0	0	3	1	$152	$0
Stormwater Program Manager	$68	12	3	1	$68	$2,448	12	3	1	$71	$2,546	12	3	1	$74	$2,648	12	3	1	$76	$2,754	12	3	1	$80	$2,864
Public Services Specialist	$71	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Principal Planner	$89	0	3	1	$89	$0	0	3	1	$93	$0	0	3	1	$96	$0	0	3	1	$100	$0	0	3	1	$104	$0
Deputy City Engineer	$125	0	3	1	$125	$0	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0
						$2,448					$2,546					$2,648					$2,754					$2,864
Regional WURMP Workgroup																										
Stormwater Consulting Engineer	$130	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0	0	3	1	$152	$0
Stormwater Program Manager	$68	6	3	1	$68	$1,224	6	3	1	$71	$1,273	6	3	1	$74	$1,324	6	3	1	$76	$1,377	6	3	1	$80	$1,432
Public Services Specialist	$71	0	3	1	$71	$0	0	3	1	$74	$0	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0
Principal Planner	$89	12	3	1	$89	$3,204	12	3	1	$93	$3,332	12	3	1	$96	$3,465	12	3	1	$100	$3,604	12	3	1	$104	$3,748
Deputy City Engineer	$125	0	3	1	$125	$0	0	3	1	$130	$0	0	3	1	$135	$0	0	3	1	$141	$0	0	3	1	$146	$0
						$4,428					$4,605					$4,789					$4,981					$5,180
Annual Total						$23,094					$25,097					$26,101					$27,145					$28,231

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EXHIBIT 6 "P" - DECLARATION OF GARY HALBERT FOR CITY OF SANTEE.

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DECLARATION OF GARY HALBERT IN SUPPORT OF TEST CLAIM

I, Gary Halbert, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have received some training in Storm Water Quality Best Management Practices and Low Impact Development design.

3. I am employed by the City of Santee as a Deputy City Manager/ Development Services Director.

4. I have held my current position for approximately two years. My duties include management of development services, planning and engineering. The Department of Development Services provides all development review, long range planning, traffic engineering, and CIP engineering and administration.

5. I have reviewed the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also reviewed and I am familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

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8. These new activities include the following:

a. Working Body

1.) Support: Section L.1 of the 2007 Permit requires all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Santee's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of Santee's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each

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working body for each fiscal year and assumed that on average each staff member would spend three hours preparing for and attending each meeting. The cost to the City of Santee to comply with this mandated activity for FY 2007-08 is $17,701. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of Santee's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Santee's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

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c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Santee's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Santee's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because

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of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Santee's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping: Section D3(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. The cost impact to the City of Santee cannot be quantified at this time.

f. Conveyance System Cleaning: Section D.3.(3).(b) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of Santee has increased staffing of its MS4 operations and maintenance program for FY 2007-08 by 0.42 staff years and will need to increase contractual services in FY 2008-09. The City of Santee's cost in FY 2007-08 for an Equipment Operator is $52.40 per hour. The increase in the City of Santee's staffing and equipment operations cost to comply with this mandated activity in FY 2007-08 is $98,360 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Santee's additional increase in contractual services and related costs in FY 08-09 is estimated to be $185,770 and is expected to increase 4% in FY 2009-10 and each year thereafter. The City of Santee's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section D.5 the City of Santee expects to expend 288 hours of staff time in FY 2008-09, and each year thereafter, to develop, administer and analyze surveys and tests. The City of Santee's cost in FY 2008-09 for a Stormwater Program Manager to perform this work is $91.37 per hour. The increase in the City of Santee's staffing cost to comply with these mandated activities in FY 2008-09 is $26,259 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Santee's actual and estimated costs for complying with these mandated activities for FY 2008-09 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality.

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Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1 the City of Santee will expend 584 hours of staff time in FY 2008-09, and each year thereafter. The City of Santee's cost in FY 2008-09 for a Stormwater Program Manager to perform these mandated activities will be $87.67 per hour. The increase in the City of Santee's staffing cost to comply with these mandated activities in FY 2007-08 is $51,220 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Santee's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

l. Watershed URMP

1.) Staffing for Development and Implementation: Section E.2 of the 2007 Permit requires Copermittees to update their Watershed Urban Runoff Management Program. The City of Santee is located in the San Diego River Watershed. Lead responsibility for the San Diego River watershed program implementation resides with the City of El Cajon. The increase in the City of Santee's staffing cost to comply with these mandated activities in FY 2007-08 is $4408 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Santee's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of Santee has entered into one cost sharing agreement to pay for consultant support relating to the **San Diego River** WURMP. The consultant costs for FY 2007-08 are expected to be $2,437. Additional consultant services will be necessary in future

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years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The City of Santee's budgeted cost for this mandated activity for FY 2008-09 is $4,874. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City of Santee's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $4,408. Because of the wide range of potential costs for these activities, we anticipate that these costs will double during FY2008-09 and increase on average 5% per year thereafter. The City of Santee's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of Santee in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $146,380, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated costs that the City of Santee expects to incur in FY 2008-09, are expected to be $139,564, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated costs that the City of Santee expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. I am not aware of any authority to assess a fee to offset these increased costs.

15. I believe that the only available source to pay these increased costs are and will be the City of Santee's general purpose funds.

Executed this 12TH day of June 2008 at Santee, California.

I declare under penalty of perjury that the foregoing is true and correct.

Gary Halbert

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Working Body	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Program Planning Subcommittee																										
No participation.	$116																									
Not a watershed lead.	$95																									
						$0					$0					$0					$0					$0
Fiscal, Reporting, & Assessment Workgroup																										
Storm Water Program Manager	$88	4	7	1	$88	$2,455	6	3	1	$91	$1,641	6	3	1	$95	$1,707	6	3	1	$99	$1,775	6	3	1	$103	$1,846
						$2,455					$1,641					$1,707					$1,775					$1,846
Education & Residential Sources Workgroup																										
Storm Water Program Manager	$88	6	3	1	$88	$1,578	6	3	1	$91	$1,641	6	3	1	$95	$1,707	6	3	1	$99	$1,775	6	3	1	$103	$1,846
						$1,578					$1,641					$1,707					$1,775					$1,846
Monitoring Workgroup																										
Storm Water Program Manager	$88	12	3	1	$88	$3,156	12	3	1	$91	$3,282	12	3	1	$95	$3,414	12	3	1	$99	$3,550	12	3	1	$103	$3,692
SWPM (Reviews and input)	$88	1	3	1	$88	$263	1	8	1	$91	$729	1	8	1	$95	$759	1	8	1	$99	$789	1	8	1	$103	$820
Research for program development	$88	1	3	1	$88	$263	0	3	1	$91	$0	0	3	1	$95	$0	0	3	1	$99	$0	0	3	1	$103	$0
						$3,682					$4,012					$4,172					$4,339					$4,513
Dry Weather Monitoring Sub-workgroup																										
Storm Water Program Manager	$88	4	3	1	$88	$1,052	4	3	1	$91	$1,094	4	3	1	$95	$1,138	4	3	1	$99	$1,183	4	3	1	$103	$1,231
Chair Responsibility (SWPM)	$88	36	1	1	$88	$3,163	36	1	1	$91	$3,289	24	1	1	$95	$2,281	24	1	1	$99	$2,372	24	1	1	$103	$2,467
(could apply to other workgroups during		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
the permit)		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$4,215					$4,384					$3,419					$3,555					$3,698

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																										
Storm Water Program Manager	$88	0	3	1	$88	$0	0	3	1	$91	$0	0	3	1	$95	$0	0	3	1	$99	$0	0	3	1	$103	$0
						$0					$0					$0					$0					$0
Land Development Workgroup																										
Principal Civil Engineer	$115	12	3	1	$115	$4,148	0	3	1	$120	$0	0	3	1	$125	$0	0	3	1	$130	$0	0	3	1	$135	$0
Additional reviews/input (PCE)	$115	8	1	1	$115	$922	12	3	1	$120	$4,313	4	3	1	$125	$1,495	4	3	1	$130	$1,555	4	3	1	$135	$1,617
Additional reviews/input (SWPM)	$88	8	1	1	$88	$701	0	3	1	$91	$0	0	3	1	$95	$0	0	3	1	$99	$0	0	3	1	$103	$0
						$5,771					$4,313					$1,495					$1,555					$1,617
Municipal Sources Workgroup																										
Public Services Manager	84.93	0	3	1	$85	$0	4	4	1	$88	$1,413	4	4	1	$92	$1,470	4	4	1	$96	$1,529	4	4	1	$99	$1,590
						$0					$1,413					$1,470					$1,529					$1,590
Industrial Commercial Workgroup																										
Stormwater Program Manager	$88	0	3	1	$88	$0	4	4	1	$91	$1,462	4	4	1	$95	$1,520	4	4	1	$99	$1,581	4	4	1	$103	$1,645
						$0					$1,462					$1,520					$1,581					$1,645
Regional WURMP Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$0					$0					$0					$0					$0
Annual Total						$17,701					$18,866					$15,490					$16,110					$16,754

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EXHIBIT 6 "Q" - DECLARATION OF DENNIS M. COLEMAN FOR CITY OF SOLANA BEACH.

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DECLARATION OF DENNIS M. COLEMAN ON BEHALF OF THE CITY OF SOLANA BEACH IN SUPPORT OF TEST CLAIM

I, Dennis M. Coleman, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I am a municipal finance professional of 26 years with a B.S. in Business Administration.

3. I am employed by the City of Solana Beach as the Finance Director/Treasurer.

4. I have held my current position for approximately 3 years. My duties include Finance, Accounting, and Risk Management.

5. I have reviewed the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also reviewed and I am familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

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8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L.1 of the 2007 Permit requires all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1 of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City's participation costs were

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determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each working body for each fiscal year and assumed that on average each staff member would spend 4 hours preparing for and attending each meeting. The cost to the City to comply with this mandated activity for FY 2007-08 is $5,786. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the

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MOU. The City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City's proportional share of the budgeted costs for complying with these mandated

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activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City used average daily traffic ("ADT") statistics to determine the volume of trash and/or debris that could reasonably be expected to be generated. Improved roads, streets and highways that have more than 20,000 vehicles per day are in the "High" volume of trash and/or debris category. Improved roads, streets and highways that have 15,000 to 20,000 vehicles per day are in the "Medium" volume of trash and/or debris category. Improved roads, streets and highways that have less than 15,000 vehicles per day are in the "Low" volume of trash and/or debris category. The City has 46 miles of improved roads, streets and highways. Based on these

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standards, 7% of the City's improved roads, streets and highways are in the "High" category, 6% in the "Medium" category and 87% in the "Low" category. Based on this analysis it was determined that there will be an 8% increase in the street sweeping activities as a result of the 2007 Permit. To accommodate the required increase, the City has not been required to purchase new street sweeping vehicles and will not have to employ additional employees. The City's actual and estimated equipment costs for complying with this mandated activity for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Staffing Costs: In response to Section D.3.(5) the City has not increased its staffing for FY 2007-08 and will not increase staffing in FY 2008-09. The City's cost in FY 2007-08 for an Environmental Programs Manager is $48.22 per hour. The increase in the City's staffing cost to comply with this mandated activity in FY 2007-08 is $2,315 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City's actual and estimated equipment costs for complying with this mandated activity for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Contract Costs: The City of Solana Beach contracts with a private company to provide street sweeping services. The total cost of this contract to the City is $40,800. The amount of street sweeping required by the 2007 Permit has not increased the cost of this contract to the city. The increased contract costs for FY 2007-08 and estimated increased contract costs for future years are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

f. Conveyance System Cleaning: Section D.3.(a)(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be

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inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City has increased staffing of its MS4 operations and maintenance program for FY 2007-08 by .023 staff years and will not need to increase staffing in FY 2008-09. City's cost in FY 2007-08 for a Lead Maintenance Worker is $36.81 per hour. The increase in the City's staffing cost to comply with this mandated activity in FY 2007-08 is $1,767 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with this Section, the City expects to expend 108 hours of staff time in FY 2008-09, and each year thereafter, to develop, administer and analyze surveys and tests. The City's cost in FY 2008-09 for an Environmental Programs Manager to perform this work is $48.22 per hour. The increase in the City's staffing cost to comply with these mandated activities in FY 2008-09 is $5,208 and is expected to

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increase 4% in FY 2008-09 and each year thereafter. The City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with this Section, the City will expend 160 hours of staff time in FY 2008-09, and each year thereafter. The City's cost in FY 2008-09 for an Environmental Programs Manager to perform these mandated activities will be $48.22 per hour. The increase in the City's staffing cost to comply with these mandated activities in FY 2008-09 is $7,715 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City's actual and estimated costs for complying with these mandated activities for FY 2008-09 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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1. Watershed URMP

1.) Staffing for Development and Implementation:

Section E of the 2007 Permit requires that each co-permittee shall collaborate with other co-permittees to develop and implement an updated Watershed URMP for each watershed. Lead responsibility for watershed program implementation resides with the County's Department of Planning and Land Use Watershed Planning Division. This program consists of five staff (one Planning manager, two Planner IIIs and two Planner I/IIs). The FY 2007-08 costs are based on annualized projections for year-to-date expenditures. For FY 2008-09 and beyond, it is estimated that staff will spend 70% of their time on WURMP development and implementation. Calculations are based on the following hourly rates for FY 2007-08: Planning Manager - $115; Planner III - $97; and Planner I/II - $81. The increase in the City's staffing cost to comply with these mandated activities in FY 2007-08 is $10,416 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City has entered into a cost sharing agreement(s) to pay for consultant support relating to the Carlsbad, San Diego River, San Dieguito River, Penasquitos, San Luis Rey, San Diego Bay, and Tijuana WURMPs. The consultant costs for FY 2007-08 are expected to be $12,000. Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The City's budgeted cost for this mandated activity for FY 2008-09 is $12,600. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City's actual and estimated costs for

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complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $40,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $38,474.16, and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City expects to incur in FY 2008-09, are expected to be $52,426.04, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

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14. The City has a stormwater fee to offset a portion of the costs of the program.

15. I believe that the only other available source to pay these increased costs are and will be the city's general purpose funds.

Executed this 11th day of June, 2008 at Solana Beach, California.

I declare under penalty of perjury that the foregoing is true and correct.

Dennis M. Coleman
Finance Director

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Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$4,455.68	$4,678.46	$4,912.38	$5,158.00	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$5,786.00	$6,017.44	$6,258.14	$6,508.46	$6,768.80	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are City of Solana Beach costs only. City participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.
Regional Residential Education Program Development and Implementation	$1,076.25	$2,152.50	$4,305.00	$4,520.25	$4,746.27	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.
Hydromodification Management Plan (HMP) Development	$3,684.45	$2,456.30	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$430.50	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long Term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$1,722.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section L.1 requires the collaborative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.

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City of Solana Beach Unfunded Mandate Costs

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
[redacted]						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.
6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Permit Section D.3.(5) requires street sweeping frequencies for improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at two times per month. Areas with medium volumes of trash and/or debris must be swept monthly and areas with low volumes of trash and/or debris at least annually.
Street Sweeping (staffing costs)	$2,314.56	$2,407.14	$2,503.43	$2,603.57	$2,707.71	The City contracts the street sweeping but there are administration costs for the City, which include reviewing the GPS forms ensuring sweeping was in fact done in the appropriate areas and monitoring the debris removal and proper disposal (including volume). Costs are calculated at $48.22 per hour for Environmental Programs Manager (48 total hrs)
Street Sweeping (contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	Contract costs are estimated to increase by approximately 4% annually.
Conveyance System Cleaning	$1,766.88	$1,837.56	$1,911.06	$1,987.50	$2,067.00	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, additional staffing impacts are projected. The City utilizes the Public Department for the MS4 operations and maintenance program. Costs are calculated at $36.81 per hour for Lead Maintenance Worker at 48 hours, and are increased by 4% in each subsequent year.
7.0 Industrial and Commercial						
Industrial and Commercial Inspections	$0.00	$0.00	$0.00	$0.00	$0.00	Permit section D.3.b(3) madates that each Copermittee conduct industrial and commercial site inspections for compliance with ordinances, permits and the Order. The cost is based on the average number of facilities inspected annually (110), personnel time ($32.71), average hours per inspection (1 hour), and are increased by 4% in each subsequent year. The City does not recoup any of this cost utilizing inspection fees
9.0 Illicit Discharge Detection & Elimination Component (IDDEC)						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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City of Solana Beach ''`funded Mandate Costs

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
10.0 Education						
Educational Surveys and Tests	$0.00	$5,207.76	$5,416.07	$5,632.71	$5,858.02	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. FY 07-08 staffing impacts are estimated at one day per month (108 hours per year) to develop, administer, and analyze surveys and tests. Costs are calculated at the Environmental Program Manager level ($48.22/hr), and increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$0.00	$7,715.20	$8,023.81	$8,344.76		Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Annual costs are calculated as 160 hours of time per year at the Environmental Program Manager level ($48.22/ hour), and increased by 4% each year after FY 2008-09.
WATERSHED ACTIVITIES						
Staffing for Watershed URMP development and implementation	$10,415.52	$10,832.14	$11,265.43	$11,716.04	$12,184.69	Lead responsibility for watershed program implementation resides with the County of San Diego DPLU Watershed Planning Division. The City of Solana Beach participates in meetings to support Watershed URMP development and implementation for two separate watersheds. Development and implementation costs are estimated at 216 hours of the Environmental Programs Manager. These rates are increased by 4% in each subsequent year.
WURMP Cost-Share Agreements	$12,000.00	$12,600.00	$13,230.00	$13,891.50	$14,586.08	The City of Solana Beach is currently involved in two watershed groups cost share agreements. The total cost is $12,000 per year total. A 5% increase is also assumed for each year after FY 2008-09.
Implementation of Watershed Activities	$1,000.00	$1,200.00	$1,440.00	$1,728.00	$2,073.60	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City budgeted $1,000 the first year and assumed a 20% increase in each subsequent year.
TOTALS	$38,474.16	$52,426.04	$59,031.39	$58,654.80	$50,992.16	

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost
Management Committee																
Environmental Programs Manager	$48	4	3	1	$48	$579	4	3	1	$50	$602	4	3	1	$52	$626
						$579					**$602**					**$626**
Program Planning Subcommittee																
Environmental Programs Manager	$48	0	0	0	$48	$0	0	0	0	$0	$0	0	0	0	$0	$0
						$0					**$0**					**$0**
Fiscal, Reporting, & Assessment Workgroup																
Environmental Programs Manager	$48	4	3	1	$48	$579	4	3	1	$50	$602	4	3	1	$52	$626
						$579					**$602**					**$626**
Education & Residential Sources Workgroup																
Environmental Programs Manager	$48	4	3	1	$48	$579	4	3	1	$50	$602	4	3	1	$52	$626
						$579					**$602**					**$626**
Monitoring Workgroup																
Environmental Programs Manager	$48	4	3	1	$48	$579	4	3	1	$50	$602	4	3	1	$52	$626
						$579					**$602**					**$626**
Dry Weather Monitoring Sub-workgroup																
Environmental Programs Manager	$48	4	3	1	$48	$579	4	3	1	$50	$602	4	3	1	$52	$626
						$579					**$602**					**$626**

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FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
4	3	1	$54	$651	4	3	1	$56	$677
				$651					**$677**
0	0	0	$0	$0	0	0	0	$0	$0
				$0					**$0**
4	3	1	$54	$651	4	3	1	$56	$677
				$651					**$677**
4	3	1	$54	$651	4	3	1	$56	$677
				$651					**$677**
4	3	1	$54	$651	4	3	1	$56	$677
				$651					**$677**
4	3	1	$54	$651	4	3	1	$56	$677
				$651					**$677**

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																
Environmental Programs Manager	**$48**	4	3	1	$48	$579	4	3	1	$50	$602	4	3	1	$52	$626
						$579					**$602**					**$626**
Land Development Workgroup																
Environmental Programs Manager	**$48**	4	3	1	$48	$579	4	3	1	$50	$602	4	3	1	$52	$626
						$579					**$602**					**$626**
Municipal Sources Workgroup																
Environmental Programs Manager	**$48**	4	3	1	$48	$579	4	3	1	$50	$602	4	3	1	$52	$626
						$579					**$602**					**$626**
Industrial Commercial Workgroup																
Environmental Programs Manager	**$48**	4	3	1	$48	$579	4	3	1	$50	$602	4	3	1	$52	$626
						$579					**$602**					**$626**
Regional WURMP Workgroup																
Environmental Programs Manager	**$48**	8	3	1	$48	$1,157	8	3	1	$50	$1,204	8	3	1	$52	$1,252
						$1,157					**$1,204**					**$1,252**
Annual Total						**$5,786**					**$6,018**					**$6,259**

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FY 10-11					FY 11-12				
No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
4	3	1	$54	$651	4	3	1	$56	$677
				$651					**$677**
4	3	1	$54	$651	4	3	1	$56	$677
				$651					**$677**
4	3	1	$54	$651	4	3	1	$56	$677
				$651	0				**$677**
4	3	1	$54	$651	4	3	1	$56	$677
				$651					**$677**
8	3	1	$54	$1,302	8	3	1	$56	$1,354
				$1,302					**$1,354**
				$6,509					**$6,769**

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EXHIBIT 6 "R" - DECLARATION OF DANIS BECHTER FOR CITY OF POWAY.

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DECLARATION OF DANIS BECHTER ON BEHALF OF THE CITY OF POWAY IN SUPPORT OF TEST CLAIM

I, Danis Bechter, declare as follows:

1. I make this declaration based upon information and belief, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I have expertise in storm water pollution prevention obtained through attendance at a variety of storm water seminars and educational programs.

3. I am employed by the City of Poway as an Engineering Inspection Supervisor/NPDES Coordinator.

4. I have held the position of NPDES Coordinator for approximately 6 years. My duties include coordination of the City's storm water pollution prevention program, as well as direct oversight of the Engineering Inspectors.

5. I have read the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also read and I am familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L.1 of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among

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Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Poway's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each working body for each fiscal year and assumed that on average each staff member would spend 3 hours preparing for and attending each meeting. The cost to the City to comply with this mandated activity for FY 2007-08 is $8,097. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body,

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but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was

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initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,500) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.

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The City's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of Poway has a street sweeping agreement with a private contractor that has been performing at the level of permit requirements prior to adoption. Equipment and fuel costs have been incorporated into the agreement costs.

2.) Staffing Costs: In response to Section D.3.(5) all staffing is provided by private contractor under a street sweeping agreement.

3.) Contract Costs: The City of Poway contracts with a private company to provide street sweeping services. The total cost of this contract to the City is $ 221,092. The City of Poway street sweeping program already was performing at a level of permit requirements prior to adoption. No additional costs related to the new Permit requirements are anticipated.

f. Conveyance System Cleaning: Section D.3.(a).(3) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. The City has been cleaning inspected facilities in accordance with specific Permit requirements prior to adoption. No additional costs related to the new Permit requirements are anticipated.

g. Educational Surveys and Tests: No additional costs are estimated for this program element.

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h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with this Section, the City will expend 520 hours of staff time in FY 2008-09, and each year thereafter, as well as approximately $10,000 in consultant costs. The City's cost in FY 2008-09 for staff to perform these mandated activities will be $37,303, and is expected to increase 4% in FY 2008-09 and each year thereafter. The City's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

i. Watershed URMP

1.) Staffing for Development and Implementation: Section E.2 of the 2007 Permit requires each co-permittee to develop and implement an updated Watershed Urban Runoff Management Program. This program consists of two staff (Operations Manager and one Management Analyst). The FY 2007-08 costs are based on annualized projections for year-to-date expenditures. For FY 2008-09 and beyond, it is estimated that staff will spend 25% of their time on WURMP development and implementation. Calculations are based on the following hourly rates for FY 2007-08:

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Operations Manager - $70; Management Analyst - $57. This is expected to increase 3% in FY 2008-09 and each year thereafter.

2.) Cost-Sharing Agreements: The City of Poway has entered into 2 cost-sharing agreements to pay for consultant support relating to the Los Penasquitos and San Dieguito WURMPs. The total consultant costs in both the Cost-Sharing Agreements for FY 2007-08 are expected to be $57,900. Additional consultant services will be necessary in future years based on the development of cost-sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The City of Poway's budgeted cost for this mandated activity for FY 2008-09 is $4,900. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City of Poway's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $40,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The City's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The estimated increased costs incurred by the City in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $94,868, as detailed in Exhibit A to this declaration and incorporated into Exhibit 1 to the Test Claim.

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10. The estimated increased costs that the City expects to incur in FY 2008-09 are $157,945 and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City expects to incur during each year of the remaining term of the 2007 Permit are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

14. The City has a storm water fee to offset a portion of the costs of the program.

15. I believe that the only other available source to pay these increased costs is and will be the City's general purpose funds.

Executed this 18th day of June, 2008, at Poway, California.

I declare under penalty of perjury that the foregoing is true and correct.

Danis R Bechter

Danis Bechter

Engineering Inspection Supervisor/NPDES Coordinator

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Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
[illegible]						
Working Body Support	$0.00	$13,964.74	$14,662.98	$15,396.12	$16,165.92	Permit section L.1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$8,097.00	$14,650.00	$13,128.00	$13,653.00	$14,199.00	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are County costs only. County participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours. FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07 08. Detailed calculations can be found in Worksheet B.

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Regional Residential Education Program Development and Implementation	$3,373.13	$6,746.25	$13,492.50	$14,167.13	$14,875.49	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to, measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.
Hydromodification Management Plan (HMP) Development	$9,498.91	$6,332.61	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.
Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$1,349.25	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$5,397.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section J.1 requires the collaborative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
JURISDICTIONAL GRAD / ACTIVITIES						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.

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6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	The City has an agreement with a private company to provide street sweeping services. The service level already met the requirements of the Permit prior to adoption. Equipment and fuel costs are included in the agreement.
Street Sweeping (staffing costs)	$0.00	$0.00	$0.00	$0.00	$0.00	The City has an agreement with a private company to provide street sweeping services. The service level already met the requirements of the Permit prior to adoption. Staffing costs are included in the agreement.
Street Sweeping (contract costs)	$0.00	$0.00	$0.00	$0.00	$0.00	The City has an agreement with a private company to provide street sweeping services. The service level already met the requirements of the Permit prior to adoption. The total cost of the contract in FY 2007-08 is $221,092. The cost is estimated to increase 3% annually.
Conveyance System Cleaning	$0.00	$0.00	$0.00	$0.00	$0.00	The City has been cleaning inspected facilities in accordance with specific Permit requirements prior to adoption. Staffing costs in FY 2007-08 were $365,214, and are estimated to increase 3% per year.
7.0 Industrial and Commercial	$3,150.00	$3,276.00	$3,407.04	$3,543.32	$3,685.05	New permit requirements necessitate approximately 60 additional inspections per year. Annual additional costs are calculated as 30 hours of time at the
9.0 Illicit Discharge Detection & Elimination						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$0.00	$0.00	$0.00	$0.00	$0.00	The City of Poway has already incorporated educational surveys into its industrial/commercial inspection program, and residential surveying is expected to be performed within the regional education program. Educational surveying or testing of other groups is not anticipated to be a significant activity and would be conducted incidental to the educational efforts.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.

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13.0 Effectiveness Assessment						
Annual JURMP Assessment and Reporting	$0.00	$37,303.00	$38,795.12	$40,346.92	$41,960.80	Permit section L1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Although these responsibilities may be incurred across a number of program areas and staff, annual costs are calculated as 260 hours of time at the Management Analyst level ($56.67 per hour), 260 hours of time at the Engineering Technician II level ($48.34 per hour), and $10,000 in consultant services.
WATERSHED URMP ACTIVITIES						
Staffing for Watershed URMP development and implementation	$60,900.00	$65,772.00	$71,034.00	$76,716.00	$82,854.00	Lead responsibility for watershed program implementation resides with the Public Works Department. This program consists of two staff (one Operations Manager and one Management Analyst). FY 07-08 cost estimates are based on annualized projections from YTD expenditures. For FY 2008-09 and beyond, an estimated 25% of total staff time for these positions is spent on WURMP development and implementation. Calculations assume the following hourly rates for FY 2007-08; (Operations Manager - $70, Management Analyst - $57). These rates are increased by 3% in each subsequent year.
WURMP Cost-Share Agreements	$8,000.00	$4,900.00	$5,100.00	$5,300.00	$5,511.00	Cost share agreements are used to pay for WURMP consultant support. The FY 07-08 total is based on actual City of Poway contributions to the WURMP Cost Share Agreements in which it participates. Costs went down for FY 08/09 and beyond due to the MOU cost share agreement formula. Increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit. A 5% increase is also assumed for each year after FY 2008-09.

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Implementation of Watershed Activities	$500.00	$5,000.00	$6,000.00	$7,200.00	$8,640.00	Watershed activities have been implemented in Poway, however developers have paid for several of them. The standing watershed activity in Poway is $500 annually for clean up events. Future items include over-irrigation studies and purchasing additional trash recepticles and dogi-pot stations. A line item of at least $5,000 will be budgeted in future years for watershed activities. Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year.
TOTALS	$94,868.29	$157,944.60	$165,619.64	$181,719.50	$187,891.27	

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost	FY 10-11 No. Meetings	FY 10-11 Meeting Length	FY 10-11 No. Staff	FY 10-11 Hourly Rate	FY 10-11 Total Cost	FY 11-12 No. Meetings	FY 11-12 Meeting Length	FY 11-12 No. Staff	FY 11-12 Hourly Rate	FY 11-12 Total Cost
Program Planning Subcommittee																										
NPDES Coordinator	$67	1	3	1	$67	$200	8	3	1	$69	$1,660	8	3	1	$72	$1,727	8	3	1	$75	$1,796	8	3	1	$78	$1,868
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$200					$1,660					$1,727					$1,796					$1,868
Fiscal, Reporting, & Assessment Workgroup																										
Management Analyst	$57	1	3	1	$57	$170	6	3	1	$59	$1,061	6	3	1	$61	$1,103	6	3	1	$64	$1,147	6	3	1	$66	$1,193
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$170					$1,061					$1,103					$1,147					$1,193
Education & Residential Sources Workgroup																										
Management Analyst	$57	1	3	1	$57	$170	6	3	1	$59	$1,061	4	3	1	$61	$736	4	3	1	$64	$765	4	3	1	$66	$796
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	2	$0	$0	0	3	2	$0	$0	0	3	2	$0	$0	0	3	2	$0	$0	0	3	2	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$170					$1,061					$736					$765					$796
Monitoring Workgroup																										
Operations Manager	$70	9	3	1	$70	$1,890	9	3	1	$73	$1,966	9	3	1	$76	$2,044	9	3	1	$79	$2,126	9	3	1	$82	$2,211
PW Management Analyst	$57	2	3	1	$57	$342	2	3	1	$59	$356	2	3	1	$62	$370	2	3	1	$64	$385	2	3	1	$67	$400
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$2,232					$2,321					$2,414					$2,511					$2,611
Dry Weather Monitoring Sub-workgroup																										
Operations Manager	$70	1	3	1	$70	$210	1	3	1	$73	$218	1	3	1	$76	$227	1	3	1	$79	$236	1	3	1	$82	$246
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$210					$218					$227					$236					$246

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																										
(not applicable)		0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0
		0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0
		0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0
		0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0
		0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0	0	0	0	$0	$0
						$0					$0					$0					$0					$0
Land Development Workgroup																										
Associate Engineer	$67	1	3	1	$67	$201	12	3	1	$70	$2,510	4	3	1	$73	$870	4	3	1	$75	$905	4	3	1	$78	$941
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$201					$2,510					$870					$905					$941
Municipal Sources Workgroup																										
		0	3	1	$0	$0	4	3	1	$0	$0	4	3	1	$0	$0	4	3	1	$0	$0	4	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$0					$0					$0					$0					$0
Industrial Commercial Workgroup																										
Management Analyst	$57	0	3	1	$57	$0	4	3	1	$59	$707	4	3	1	$61	$736	4	3	1	$64	$765	4	3	1	$66	$796
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
						$0					$707					$736					$765					$796
Regional WURMP Workgroup																										
Operations Manager	$70	12	3	1	$70	$2,520	12	3	1	$73	$2,621	12	3	1	$76	$2,726	12	3	1	$79	$2,835	12	3	1	$82	$2,948
PW Management Analyst	$57	14	3	1	$57	$2,394	14	3	1	$59	$2,490	14	3	1	$62	$2,589	14	3	1	$64	$2,693	14	3	1	$67	$2,801
		0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0	0	3	1	$0	$0
		5	3	1	$0	$0	8	3	1	$0	$0	8	3	1	$0	$0	8	3	1	$0	$0	8	3	1	$0	$0
		5	3	1	$0	$0	8	3	1	$0	$0	8	3	1	$0	$0	8	3	1	$0	$0	8	3	1	$0	$0
						$4,914					$5,111					$5,315					$5,528					$5,749
Annual Total						$8,097					$14,650					$13,128					$13,653					$14,199

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EXHIBIT 6 "S" - DECLARATION OF LAWRENCE D. PIERCE FOR CITY OF VISTA.

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DECLARATION OF LAWRENCE D. PIERCE ON BEHALF OF THE CITY OF VISTA IN SUPPORT OF TEST CLAIM

I, Lawrence D. Pierce, declare as follows:

1. I make this declaration based upon my own personal knowledge, except for matters set forth herein on information and belief, and as to those matters I believe them to be true, and if called upon to testify, I could and would competently testify to the matters set forth herein.

2. I am a Professional Engineer in Civil Engineering.

3. I am employed by the City of Vista as the Director of Engineering.

4. I have held my current position for approximately 4 years.

5. I have reviewed the California Regional Water Quality Control Board ("RWQCB"), San Diego Region, Order No. R9-2007-0001 (NPDES No. CAS 0108758) (the "2007 Permit") and I am familiar with the requirements of the Permit.

6. I have also reviewed and I am familiar with the requirements of Order No. 2001-01 (NPDES CAS0108758) issued by the San Diego RWQCB on February 21, 2001 (the "2001 Permit").

7. Based on my understanding of the requirements of the 2001 Permit and the requirements of the 2007 Permit, I believe the 2007 Permit requires the co-permittees to perform new activities that are unique to local governmental entities that are not required by the 2001 Permit.

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8. These new activities include the following:

a. Working Body

1.) Support: Sections F and L.1 of the 2007 Permit require all co-permittees to collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs ("JURMP") and Watershed Urban Runoff Management Programs ("WURMP"), and to plan and coordinate activities required under the Permit. Ten new regional working bodies were established pursuant to a Memorandum of Understanding ("MOU") effective January 2008 to support the regional coordination programs and activities required under the Permit. Working Body costs represent consultant and/or co-permittee staff support for the co-permittees' program planning subcommittee and the nine regional workgroups or sub-workgroups. The co-permittees' budgeted cost for these mandated activities for Fiscal Year ("FY") 2008-09 is $543,375, which includes $517,000 in support costs and an additional 5% ($25,875) for contract administration. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Vista's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2.) Participation: Section L.1.a of the 2007 Permit requires the co-permittees to enter into a formal agreement that establishes a management structure to promote consistency and develop and implement urban runoff programs, and that also defines the individual and joint responsibilities of co-permittees within that structure. The co-permittees' January 2008 MOU establishes minimum levels of representation and participation in working body meetings required to meet these directives. The City of Vista's participation costs were determined by multiplying the hourly rate of each staff person involved in these activities by anticipated minimum number of meetings for each

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working body for each fiscal year and assumed that on average each staff member would spend 3 hours preparing for and attending each meeting. The cost to the City of Vista to comply with this mandated activity for FY 2007-08 is $4,818.00. Costs for FY 08-09 and beyond are projected based on minimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. The City of Vista's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

b. Regional Residential Education Program Development and Implementation: Section F.1 of the 2007 Permit requires the co-permittees to collaboratively develop and implement a Regional Residential Education Program. This is in addition to Section D.5.a, which requires each co-permittee to develop and implement an education program that measurably increases the knowledge of, and measurably changes the behavior of, residential communities within their jurisdictions. Regional program activities to be funded include: materials development/branding, a regional website, regional outreach events, regional advertising and mass media, partnership development, and the development of marketing and research tools, including regional surveys to be conducted in FY 2008-09 and again in FY 2011-12. The co-permittees retained a consultant to perform these mandated activities in Fiscal Year 2007-08. The total cost of the contract is $131,250 which includes 5% ($6,250) for contract administration by the County. The budgeted cost of these mandated activities increased in FY 2008-09 to $262,500 and is expected to again double in FY 2009-10 to $525,000. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Vista's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

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c. Development of New/Revised Programs and Standards

1. Hydromodification Management Plan ("HMP") Development: Section D.1.g of the 2007 Permit mandates the collaborative development of a HMP. The co-permittees retained a consultant to develop a HMP. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $1,050,000 which includes 5% ($50,000) for contract administration by the County. $630,000 will be expended in FY 2007-08 with the remaining $420,000 to be expended in FY 2008-09. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Vista's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

2. Low Impact Development ("LID") and Standard Urban Storm Water Mitigation Plan ("SUSMP"): Sections D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the County. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Vista's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

d. Long-Term Effectiveness Assessment ("LTEA"): In addition to annual assessments of the regional, jurisdictional and watershed programs, Section I.1 of the 2007 Permit requires the co-permittees to collaboratively develop a LTEA. Because

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of the complexity of the assessment requirements, the consultant costs to perform this assessment, which is expected to be completed in FY 2010-11, are expected to be $210,000, which includes 5% ($10,000) for contract administration by the County. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU. The City of Vista's proportional share of the budgeted costs for complying with these mandated activities for FY 2007-08 and each year thereafter is detailed in Exhibit A to this declaration and is incorporated into Exhibit 1 to the Test Claim.

e. Street Sweeping

1.) Equipment Costs: Section D.3.(5) of the 2007 Permit mandates specific street sweeping frequencies for improved roads, streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept monthly. Areas with low volumes of trash and/or debris must be swept at least annually. The City of Vista contracts out the street sweeping service. Staff and contract costs are addressed in items e.2) and e.3) below.

2.) Staffing Costs: In response to Section D.3.(5) the City of Vista has staff who administer the street sweeping contract and who will conduct additional tracking and reporting to comply with the 2007 Permit. This is anticipated to be 5% of supervisor staff time for FY 2007-08. The City of Vista's cost in FY 2007-08 for a Street Supervisor is $45.52 per hour. The increase in the City of Vista's staffing cost to comply with this mandated activity in FY 2007-08 is $4,438.20 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Vista's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

3.) Contract Costs: The City of Vista contracts with a private company to provide street sweeping services. The total cost of this contract to the City is $159,935.03. The amount of street sweeping required by the 2007 Permit is

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approximately half of the current contract or $79,967.52 per year. The increased contract costs for FY 2007-08 and estimated increased contract costs for future years are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

f. Conveyance System Cleaning: Section D.3.(3).(b) of the 2007 Permit requires all municipal separate storm sewer system ("MS4") facilities to be inspected annually, with high priority facilities being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, the City of Vista has increased staffing of its MS4 operations and maintenance program for FY 2007-08 by 1 staff. The City of Vista's cost in FY 2007-08 for a (Lead Maintenance Worker) is $36.88 per hour. The increase in the City of Vista's staffing cost to comply with this mandated activity in FY 2007-08 is approximately $117,611.85 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Vista's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

g. Educational Surveys and Tests: Section D.5 of the 2007 Permit requires each co-permittee to implement an educational program to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff or receiving waters, and potential Best Management Practices ("BMPs") for the target audiences; and (2) measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Sections I.1 and I.2 further require that the effectiveness of educational activities in meeting these standards be assessed annually where applicable and feasible. Compliance with these mandated activities requires the routine incorporation of testing and surveying methods into the program elements to ensure that implementation is resulting in the targeted outcomes. To comply with Section D.5 the City of Vista has budgeted approximately $5,000 for FY 2007-08 to develop, administer and analyze surveys and tests and is expected to increase

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4% in FY 2008-09 and each year thereafter. The City of Vista's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

h. Annual JURMP Assessment and Reporting Requirements: Section I.1 of the 2007 Permit specifies prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. Co-permittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a new emerging discipline and is expected to evolve over the term of the Permit. Annual costs are expected to include developing and updating standards and methods, database development and modification, and data tracking, analysis and report writing. To comply with Section I.1 the City of Vista will expend an estimated 975 hours of staff time in FY 2008-09, and each year thereafter. The City of Vista's cost in FY 2008-09 for a Sr. Environmental Specialist to perform these mandated activities will be $42.82 per hour. The increase in the City of Vista's staffing cost to comply with these mandated activities in FY 2007-08 is $20,874.75 and is expected to increase 4% in FY 2008-09 and each year thereafter. The City of Vista's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

l. Watershed URMP

1.) Staffing for Development and Implementation: Section E.2.f of the 2007 Permit requires watershed co-permittees to collaborate with other co-

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permittees within its watershed management areas to develop and implement an updated Watershed Urban Runoff Management Program for each watershed. Lead responsibility for watershed program implementation resides with the City of Vista's Water Quality Protection Program. Program staff primarily involved in watershed program implementation include the Program Manager and Sr. Environmental Specialist. The FY 2007-08 costs are based on annualized projections for year-to-date expenditures. For FY 2008-09 and beyond, it is estimated that staff will spend 20% of their time on WURMP development and implementation. Calculations are based on the following hourly rates for FY 2007-08: Program Manager - $58.52; and Sr. Environmental Specialist - $42.82. The City of Vista's estimated staffing cost to comply with these mandated activities in FY 2007-08 is $22,822.80 and is expected to increase in FY 2008-09 once fully staffed with a 4% increase each year thereafter. The City of Vista's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

2.) Cost-Sharing Agreements:

The City of Vista has entered into 2 cost sharing agreement(s) to pay for consultant support relating to the Carlsbad and San Luis Rey WURMPs. The consultant costs for FY 2007-08 are expected to be $4,000. Additional consultant services will be necessary in future years based on the development of cost sharing agreements for other WURMPs and an increasing need for coordination within each WURMP over the Permit cycle. The City of Vista's budgeted cost for this mandated activity for FY 2008-09 is $5,600. The co-permittees expect budgeted costs to increase 5% in FY 2009-10 and each year thereafter. The City of Vista's estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

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3.) Implementation of Watershed Activities: Section E.2.f of the 2007 Permit requires Watershed co-permittees to implement at least two watershed quality activities and two watershed education activities for each permit year. The cost of implementing this mandate for FY 2007-08 is expected to be $10,000. Because of the wide range of potential costs for these activities, we anticipate that these costs will increase on average 20% per year. The City of Vista's actual and estimated costs for complying with these mandated activities for FY 2007-08 and each year thereafter are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

9. The actual increased costs incurred by the City of Vista in FY 2007-08 to comply with the mandated activities required by the 2007 Permit will be $280,959.42 and are detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

10. The estimated increased costs that the City of Vista expects to incur in FY 2008-09, are expected to be $364,128.55, and are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

11. The estimated increased costs that the City of Vista expects to incur during each year of the remaining term of the 2007 Permit are also detailed in Exhibit A to this declaration and are incorporated into Exhibit 1 to the Test Claim.

12. I am not aware of any dedicated state or federal funds that are or will be available to pay for these increased costs.

13. I am not aware of any non-local agency funds that are or will be available to pay for these increased costs.

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14. I am not aware of any authority to assess a fee to offset these increased costs.

15. I believe that the only available source to pay these increased costs are and will be the City's sewer funds.

Executed this 12th day of JUNE at VISTA, California.

I declare under penalty of perjury that the foregoing is true and correct.

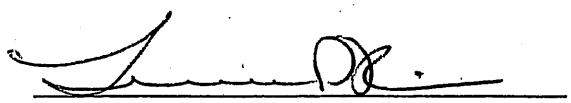

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Co-Permittee -

City of Vista

Element	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	Explanation
Working Body Support	$0.00	$14,236.43	$14,948.25	$15,695.66	$16,480.43	Permit section L1 requires that all Copermittees collaborate to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs, and to plan and coordinate activities required under the Permit. Ten regional working bodies were established per the Copermittee's Jan. 2008 MOU to support the regional coordination of programs and activities required under the Permit. Working body costs represent consultant and/or Copermittee staff support for the Copermittee's Program Planning subcommittee and nine Regional Workgroups or Sub-workgroups. FY 08-09 costs were established in the amount of $543,375 which includes $517,500 in support costs and an additional 5% ($25,875) for contract administration. FY 2008-09 costs were calculated at $125 per hour. A 5% total cost increase is also factored in each subsequent year.
Working Body Participation	$4,818.00	$10,309.85	$7,872.01	$11,264.25	$8,514.37	Copermittees must also maintain representation in, and participate in meetings of, each of the working bodies established under the MOU. The estimates presented here are City of Vista costs. Vista participation costs are determined by multiplying the hourly rate of each staff person by the number of meetings each fiscal year, and assuming an average meeting length of three hours: FY 07-08 costs reflect the actual number of meetings projected through the remainder of the year. Costs for FY 08-09 and beyond are projected based on mimimum mandated meeting frequencies for each working body, but in some cases are increased to reflect experience or anticipated workload. Hourly rates are increased by 4% each year after FY 07-08. Detailed calculations can be found in Worksheet B.
Regional Residential Education Program Development and Implementation	$3,438.75	$6,877.50	$13,755.00	$14,442.75	$15,164.90	Permit section F.1 requires that the Copermittees collaboratively develop and implement a Regional Residential Education Program. This is in addition to section D.5.a, which requires that each Copermittee provide education to measurably increase the knowledge of, and measurably change the behavior of, residential communities within their jurisdiction. An FY 2007-08 budget for consultant support was initially established for this program in the amount of $131,250 ($125,000 for contract costs and $6,250 for contract administration). This figure was increased to $262,500 in FY 2008-09, and is expected to double again in FY 2009-10. Each subsequent year assumes a 5% increase. Regional program activities to be funded include: materials development / branding; a regional website; regional outreach events; regional advertising and mass media; partnership development; and marketing and research tools including the regional surveys to be conducted in FY 2008-09 and FY 2011-12.
Hydromodification Management Plan (HMP) Development	$11,612.05	$7,741.37	$0.00	$0.00	$0.00	Order R9-2007-0001 mandates the collaborative development of a Hydromodification Management Plan (HMP). This task was initiated by the Copermittees' consultant during FY 2007-08 and will be completed in FY 2008-09. The total cost of plan development is $1,050,000, $50,000 of which is for contract administration.

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Low Impact Development (LID) and Standard Urban Stormwater Mitigation Plan (SUSMP)	$1,375.50	$0.00	$0.00	$0.00	$0.00	Section D.1.d.(7) and (8) of the 2007 Permit require the co-permittees to collectively review and update the requirements of their SUSMPs to define minimum LID and other BMP requirements for application to Priority Development Projects. The co-permittees retained a consultant to develop these requirements. This task was initiated in FY 2007-08 and will be completed in FY 2008-09. The total cost of the contract is $52,500 which includes 5% ($2,500) for contract administration by the county. This entire amount will be expended in FY 2007-08. Each co-permittee's share of these mandated costs is based on a formula set forth in the MOU.
Long-term Effectiveness Assessment (LTEA)	$0.00	$0.00	$0.00	$5,502.00	$0.00	In addition to requirements for Copermittees to annually assess their regional, jurisdictional and watershed programs, Permit section D.1 requires the collaboratative development of a Long-term Effectiveness Assessment (LTEA) that builds on the results of the August 2005 Baseline LTEA. The cost of the 2005 LTEA was $125,000. Because of the increased complexity of new assessment requirements, this consultant cost is expected to increase to $200,000, with an additional 5% ($10,000) for contract administration.
[redacted]						
4.0 Development Planning						Reimbursable costs are not projected for this component.
5.0 Construction						Reimbursable costs are not projected for this component.
6.0 Municipal						
Street Sweeping (equipment costs)	$0.00	$0.00	$0.00	$0.00	$0.00	The City contracts out sweeping, so equipment and labor costs are in the rows below.
Street Sweeping (staffing costs)	$4,438.20	$4,615.73	$4,800.36	$4,992.37	$5,192.07	This includes 5% of the supervisor's time to oversee the street sweeping contract and track and report required information, with a 4% annual increase (07/08 rate is $45.52 per hour).

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Street Sweeping (contract costs)	$79,967.52	$83,166.22	$86,492.87	$89,952.58	$93,550.69	Permit Section D.3.(5) sets minimum street sweeping frequencies for improved roads (possessing curbs and gutters), streets, highways, and parking facilities. Those areas that consistently generate the highest volume of trash and/or debris must be swept at two times per month. Areas with medium volumes of trash and/or debris must be swept monthly and areas with low volumes of trash and/or debris at least annually. The City currently has a contractor sweeping 8000 curb miles per year. The current sweeping frequency is approximately twice that required by the Permit. Therefore, the numbers presented here are the City's approximate contract costs to sweep at the required Permit frequency (which is half of the current contract value), with a 4% increase each year thereafter.
Conveyance System Cleaning	$117,611.85	$130,062.60	$135,265.10	$140,675.71	$146,302.74	Permit section D.3.(3).(b) mandates that all MS4 facilities be inspected annually, with high priority facilitates being inspected between May and September. Because all inspected facilities must be cleaned in accordance with specific Permit requirements, additional staffing impacts are projected. The City added one new maintenance worker 2007-08. Overall, all staff efforts have increased (here estimated at 20%) to meet new Permit requirements for cleaning and tracking/reporting. Costs are calculated at $37 per hour for one lead worker, plus 20% of total budget, with a 4% increase in each subsequent year after 08/09.
7.0 Industrial and Commercial						Reimbursable costs are not projected for this component because new costs can be passed through to regulated parties.
9.0 Illicit Discharge Detection & Elimination						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
10.0 Education						
Educational Surveys and Tests	$0.00	$5,000.00	$5,200.00	$5,408.00	$5,624.00	The Permit mandates an educational component that requires the implementation of educational programs to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to the MS4s and the environment. Compliance with this standard requires the routine incorporation of testing and surveying methods into program elements to ensure that implementation is resulting in targeted outcomes. Approximately $5000 was budgeted for this purpose. Costs are increased by 4% each year after FY 2008-09.
11.0 Public Participation						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
12.0 Fiscal Assessment						Reimbursable costs are not projected for this component because these requirements are considered to be supported by federal regulation.
13.0 Effectiveness Assessment						

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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Staffing for Watershed URMP development and implementation	$22,822.80	$41,102.10	$42,746.18	$44,456.03	$46,234.27	Lead responsibility for watershed program implementation resides with the City of Vista Water Quality Protection Program. This program consists of five staff (one Program Manager, one Sr. Environmental Specialist (currently being added) and two Code Enforcement Officers). Program representation is primarily the Program Manager and Sr. Environmental Specialist. FY 07-08 cost estimates are based on annualized projections from YTD expenditures. These totals are lower than those projected for the following years because the program has been short-staffed for the majority of the year. For FY 2008-09 and beyond, an estimated 20% of staff time for these positions is spent on WURMP development and implementation. Calculations assume the following hourly rates for FY 2007-08, Program Manager - $58, Sr. Envt. Specialist - $43). These rates are increased by 4% in each subsequent year.
WURMP Cost-Share Agreements	$4,000.00	$5,600.00	$6,048.00	$6,350.00	$6,668.00	Cost share agreements are used to pay for WURMP consultant support. The FY 07-08 total is based on Vista contributions to the WURMP Cost Share Agreements in which it participates. Increases are estimated for future years based on requirements for increased coordination on WURMP issues in the new Permit. A 5% increase is also assumed for each year after FY 2008-09.
Implementation of Watershed Activities	$10,000.00	$12,000.00	$14,400.00	$17,280.00	$20,736.00	Permit section E.2.f requires Watershed Copermittees to implement at least two watershed water quality activities and two watershed education activities for each permit year. The City of Vista budgeted approximately $10,000 for implementing WURMP activities in FY 07-08. Because of the wide range of potential costs for these activities, a 20% increase is assumed in each subsequent year.
TOTALS	$280,959.42	$364,128.55	$376,681.19	$402,978.91	$413,305.40	

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Annual JURMP Assessment and Reporting	$20,874.75	$43,416.75	$45,153.42	$46,959.56	$48,837.94	Permit section I.1 lays out prescriptive requirements for annually reporting on JURMP effectiveness. This requires the establishment of measurable targeted outcomes, assessment measures, and assessment methods for each jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented, each major JURMP component, and the JURMP as a whole. To the extent applicable and feasible, Copermittees must also determine source load reductions resulting from program implementation, and utilize water quality monitoring results and data to determine whether implementation is resulting in changes to water quality. Programmatic effectiveness assessment is a newly emerging discipline, and will continue to evolve over the entire Permit cycle. Annual costs typically include developing and updating standards and methods, database development and modification, and data tracking, analysis, and report writing. Although these responsibilities may be incurred across a number of program areas and staff, annual costs are calculated as 975 hours of time (~0.5 staff years) at the Sr. Environmental Specialist level ($43 per hour) with 4% annual increases. The 07/08 costs are for 0.25 staff years at the Sr. Envt. Specialist level.

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Working Body	Baseline Hourly Rate	FY 07-08 No. Meetings	FY 07-08 Meeting Length	FY 07-08 No. Staff	FY 07-08 Hourly Rate	FY 07-08 Total Cost	FY 08-09 No. Meetings	FY 08-09 Meeting Length	FY 08-09 No. Staff	FY 08-09 Hourly Rate	FY 08-09 Total Cost	FY 09-10 No. Meetings	FY 09-10 Meeting Length	FY 09-10 No. Staff	FY 09-10 Hourly Rate	FY 09-10 Total Cost	FY 10-11 No. Meetings	FY 10-11 Meeting Length	FY 10-11 No. Staff	FY 10-11 Hourly Rate	FY 10-11 Total Cost	FY 11-12 No. Meetings	FY 11-12 Meeting Length	FY 11-12 No. Staff	FY 11-12 Hourly Rate	FY 11-12 Total Cost
Program Planning Subcommittee																										
Water Quality Program Manager	$116	1	3	1	$116	$349	8	3	1	$121	$2,907	8	3	1	$126	$3,023	8	3	1	$131	$3,144	8	3	1	$136	$3,270
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	1	3	1	$115	$345	8	3	1	$120	$2,870	8	3	1	$124	$2,985	8	3	1	$129	$3,105	8	3	1	$135	$3,229
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$694					$5,777					$6,008					$6,248					$6,498
Fiscal, Reporting, & Assessment Workgroup																										
Water Quality Program Manager	$116	8	3	1	$116	$2,795	6	3	1	$121	$2,180	6	3	1	$126	$2,267	6	3	1	$131	$2,358	6	3	1	$136	$2,452
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	8	3	1	$77	$1,841	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$4,636					$3,616					$3,761					$3,911					$4,068
Education & Residential Sources Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	10	3	2	$77	$4,603	6	3	2	$80	$2,872	4	3	2	$83	$1,992	4	3	2	$86	$2,071	4	3	2	$90	$2,154
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$4,603					$2,872					$1,992					$2,071					$2,154
Monitoring Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	12	3	1	$95	$3,402	12	3	1	$98	$3,538	12	3	1	$102	$3,680	12	3	1	$106	$3,827	12	3	1	$111	$3,980
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$3,402					$3,538					$3,680					$3,827					$3,980
Dry Weather Monitoring Sub-workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	6	3	1	$77	$1,381	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$1,381					$1,436					$1,494					$1,553					$1,616

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	Baseline Hourly Rate	FY 07-08					FY 08-09					FY 09-10					FY 10-11					FY 11-12				
		No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost	No. Meetings	Meeting Length	No. Staff	Hourly Rate	Total Cost
Coastal Storm Drain Sub-Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	6	3	1	$77	$1,381	6	3	1	$80	$1,436	6	3	1	$83	$1,494	6	3	1	$86	$1,553	6	3	1	$90	$1,616
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$1,381					$1,436					$1,494					$1,553					$1,616
Land Development Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Flood Control Program Manager	$110	12	3	1	$110	$3,950	12	3	1	$114	$4,108	4	3	1	$119	$1,424	4	3	1	$123	$1,481	4	3	1	$128	$1,540
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	12	3	1	$77	$2,762	12	3	1	$80	$2,872	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$6,711					$6,980					$2,420					$2,517					$2,617
Municipal Sources Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	4	3	1	$80	$957	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$0					$957					$996					$1,036					$1,077
Industrial Commercial Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	4	3	1	$80	$957	4	3	1	$83	$996	4	3	1	$86	$1,036	4	3	1	$90	$1,077
Planning Manager	$115	0	3	1	$115	$0	0	3	1	$120	$0	0	3	1	$124	$0	0	3	1	$129	$0	0	3	1	$135	$0
Planner III	$97	0	3	1	$97	$0	0	3	1	$101	$0	0	3	1	$105	$0	0	3	1	$109	$0	0	3	1	$113	$0
						$0					$957					$996					$1,036					$1,077
Regional WURMP Workgroup																										
Water Quality Program Manager	$116	0	3	1	$116	$0	0	3	1	$121	$0	0	3	1	$126	$0	0	3	1	$131	$0	0	3	1	$136	$0
Supervising EHS	$95	0	3	1	$95	$0	0	3	1	$98	$0	0	3	1	$102	$0	0	3	1	$106	$0	0	3	1	$111	$0
EHS III	$77	0	3	1	$77	$0	0	3	1	$80	$0	0	3	1	$83	$0	0	3	1	$86	$0	0	3	1	$90	$0
Planning Manager	$115	5	3	1	$115	$1,725	8	3	1	$120	$2,870	8	3	1	$124	$2,985	8	3	1	$129	$3,105	8	3	1	$135	$3,229
Planner III	$97	5	3	1	$97	$1,455	8	3	1	$101	$2,421	8	3	1	$105	$2,518	8	3	1	$109	$2,619	8	3	1	$113	$2,723
						$3,180					$5,292					$5,503					$5,723					$5,952
Annual Total						$25,989					$32,862					$28,342					$29,475					$30,654

l by the CA 3rd District Court of Appeal.

DECLARATION OF SERVICE BY EMAIL

I, the undersigned, declare as follows:

I am a resident of the County of Sacramento and I am over the age of 18 years, and not a party to the within action. My place of employment is 980 Ninth Street, Suite 300, Sacramento, California 95814.

On March 29, 2024, I served the:

- **Current Mailing List dated March 28, 2024**
- **Notice of Waiver of Procedural Requirements, Extension Request Approval, and Postponement of Hearing issued March 29, 2024**
- **Claimants' Comments on the Draft Proposed Decision and Parameters and Guidelines (Volumes 1-14) filed February 20, 2024**

  San Diego Regional Water Quality Control Board Order No. R9-2007-0001, Permit CAS0108758, Parts D.3.a.(3)(b)(iii), D.5.a.(1), D.5.a.(2), D.5.b.(1)(a), D.5.b.(1)(b)(iii-vi), D.5.b.(1)(c), D.5.b.(1)(d), D.5.b.(2), D.5.b.(3), E.2.f., E.2.g., F.1., F.2., F.3., I.1., I.2., I.5., J.3.a.(3)(c)(iv)-(viii), (x)-(xv), the first sentence of L.1. as it applies to the newly mandated activities, and L.1.a.(3)-(6), 07-TC-09-R County of San Diego, Cites of Carlsbad, Del Mar, Imperial Beach, Lemon Grove, Poway, San Marcos, Santee, Solana Beach, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, San Diego, and Vista, Claimants

by making it available on the Commission's website and providing notice of how to locate it to the email addresses provided on the attached mailing list.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this declaration was executed on March 29, 2024 at Sacramento, California.

Jill Magee

Jill Magee
Commission on State Mandates
980 Ninth Street, Suite 300
Sacramento, CA 95814
(916) 323-3562

COMMISSION ON STATE MANDATES

Mailing List

Last Updated: 3/28/24

Claim Number: 07-TC-09-R

Matter: San Diego Regional Water Quality Control Board Order No. R9-2007-0001 Permit CAS0108758 Parts D.1.d.(7)-(8), D.1.g., D.3.a.(3), D.3.a.(5), D.5, E.2.f, E.2.g, F.1, F.2, F.3, I.1, I.2, I.5, J.3.a.(3)(c)iv-viii & x-xv, and L.

Claimants: City of Carlsbad
City of Chula Vista
City of Del Mar
City of Encinitas
City of Escondido
City of Imperial Beach
City of La Mesa
City of Lemon Grove
City of National City
City of Oceanside
City of Poway
City of San Diego
City of San Marcos
City of Santee
City of Solana Beach
City of Vista

TO ALL PARTIES, INTERESTED PARTIES, AND INTERESTED PERSONS:

Each commission mailing list is continuously updated as requests are received to include or remove any party or person on the mailing list. A current mailing list is provided with commission correspondence, and a copy of the current mailing list is available upon request at any time. Except as provided otherwise by commission rule, when a party or interested party files any written material with the commission concerning a claim, it shall simultaneously serve a copy of the written material on the parties and interested parties to the claim identified on the mailing list provided by the commission. (Cal. Code Regs., tit. 2, § 1181.3.)

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Signed Certification Statement

City of Carlsbad
Jurisdictional Urban Runoff Management Plan
Annual Report for July 1, 2006 – June 30, 2007

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Glenn T. Pruim R.E.	
Name (printed)	Signature

Public Works Director	01/24/08
Title	Date

Executive Summary

Overview

The City of Carlsbad's (City) Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report addresses the implementation of the Municipal Storm Water Permit - Order 2001-01, NPDES No. CAS018758 (Permit) issued February 21, 2001. This Annual Report covers the period from July 1, 2006 through June 30, 2007, which corresponds to the City's Fiscal Year 2006-2007 (FY 06-07).

FY 06-07 represented Carlsbad's sixth annual report, and 5th year implementing the JURMP. Since the last Annual Report submission, many procedures have been streamlined to efficiently manage data, monitor sites, track inspections and investigations, and manage other storm water related activities. Planning, construction, and maintenance operations have implemented improved processes to further incorporate storm water pollution prevention practices into internal activities as well as activities enforced by City departments. Highlights of each major component of the JURMP are listed below.

During FY 06-07, the City continued to promote a comprehensive pollution prevention program for the Carlsbad community, combining the activities of storm water, solid waste and water conservation. These three programs were brought under the umbrella of Environmental Programs in FY 03-04 in order to create a unified message, better educate the public, and allow easy access for the public. During FY 06-07 the City continued to promote the use of the Environmental Programs phone number (760-602-4646), as well as a web page (www.carlsbadconserves.org).

Section 2: Municipal

The City's municipal facilities include administration buildings, recreational areas, maintenance and storage yards, water reservoirs, water pump stations, sewer lift stations, a road system, parking facilities, the storm drain system, pressure regulator vaults, and fire stations. Municipal facilities maintain the City's infrastructure that supports Carlsbad's quality of life. These municipal facilities and their activities have the potential to contribute to water pollution if Best Management Practices (BMPs) are not properly implemented.

During FY 06-07, the Storm Water Committee continued to meet monthly to discuss municipal storm water BMPs and pollution prevention issues. The Committee is comprised of approximately 14 members representing various City departments including Public Works, Fire Department, Planning, Recreation, and the Building Department. The intent is to communicate problems and solutions among the group in order to share knowledge, discuss training opportunities, enhance compliance with the Permit, and to pass along any new information from the Regional Water Quality Control Board (Regional Board).

In addition, the City continued implementing the *Maintenance Assessment Program* to measure the level of care provided at various City facilities. While this is a large program developed separate from the Permit or JURMP, there were some measures that overlapped or were related to storm water pollution prevention and BMP implementation. These related measures are reported in Section 11 of this report.

In FY 06-07, the City of Carlsbad's City Manager initiated the Storm Water Leadership Team (SWLT). Monthly meetings of the SWLT were conducted and attendees included Senior Management of the City's major service areas and Directors. Agenda items covered all areas of the City's compliance with Order No. 2001-001, as well as review of the new Order No. R9-2007-0001.

Also during FY 06-07, D-Max Engineering Inc. (D-Max) conducted unannounced inspections of all "High" priority municipal facilities. This provided "*another set of eyes*" to make observations at municipal facilities and recommend corrective actions, when necessary. With the annual inspections by the State Department of Pesticide Regulations (DPR for Parks activities), municipal inspections by D-Max,, and staff training on storm water BMPs, personnel are more aware of the required maintenance practices in preventing storm water pollution.

The City continued to implement a computerized asset management/work order system that allowed the Storm Drain Maintenance Crew to track the Municipal Separate Storm Sewer System (MS4) inventory, inspections, and maintenance activities conducted throughout the system. The Storm Drain Maintenance Crew used the system to manage preventive maintenance schedules for any facilities that needed to be inspected annually or for those requiring more frequent cleaning. This system allows better management of the inspection and cleaning schedule and improved tracking of the amounts and types of debris removed from the MS4.

Comments from the Regional Board on the FY 05-06 JURMP Annual Report related to the Municipal program are addressed in this report as follows:

Review Letter Comment #	Section Addressed
1	2.1 and App. 2-2
2	2.3
3	2.3

Section 3: Industrial

The City currently tracks over 400 industrial facilities within its jurisdiction. Major industry types include airport services, refuse and sewage management, pharmaceutical research and development, high technology and electronics, golf apparel and equipment manufacturers, and several light industry parks. Industrial activities have the potential to contribute to water pollution if BMPs are not implemented properly.

During FY 06-07, the City updated the prioritized industrial inventory, mapped all industries, inspected 294 industries (including all high priority industries), conducted education and outreach to industries, and used enforcement actions to obtain compliance when necessary. The City also worked closely with the Industrial Compliance Unit of the Regional Board by submitting copies of inspection reports and correspondence with high and medium priority industries. The City took 14 enforcement actions against industries to achieve compliance in FY 06-07.

The City will continue to inspect all high priority industrial facilities annually, inspect medium and low priority facilities on a complaint basis and/or as resources are available, and continue to review industrial monitoring data and compare results to benchmark values and previous years' results.

The Regional Board is currently revising the language and procedures outlined in the State General Industrial Permit. When the permit is reissued, the City would like to host a workshop in conjunction with Regional Board staff for all industries in Carlsbad to discuss the new permit guidelines, compliance issues and address any concerns business might have about the new permit.

The Storm Water Protection Program developed and continues to use *Knowledge and BMP Effectiveness Assessment* measures for industries. These assessments continued to be conducted by inspectors during onsite facility inspections. Please refer to Section 3 of this report for more information.

Comments from the Regional Board on the FY 05-06 JURMP Annual Report related to the Industrial Inspection program (#4) are addressed in Section 3.4 of this report.

Section 4: Commercial

The City currently tracks over 600 high priority commercial facilities. Commercial facilities can generate a variety of pollutants depending on the types and locations of activities performed. Major commercial types include automobile maintenance, restaurants, pressure washing, masonry and concrete work, carpet cleaning, and landscaping activities. The City continued to implement a comprehensive program to reduce urban runoff originating from existing commercial sites and sources.

During FY 06-07, the City updated the commercial inventory, mapped all "high" priority commercial facilities, provided education and outreach on BMPs, inspected 385 commercial sites, and conducted enforcement activities to ensure compliance. The City took a total of 43 enforcement actions against commercial businesses during FY 06-07 in order to achieve compliance.

Over 200 "BMPs for Businesses, Commercial and Industrial" brochures were distributed through in-person inspections or mail.

Section 5: Residential

The City encompasses approximately 42 square miles and has an estimated population of 98,607 residents. At build out, sometime beyond year 2010, there will be nearly 54,599 residential units, housing approximately 135,000 residents. The residential community has a significant potential to contribute to water quality degradation. The focus of the City's pollution prevention strategy is a proactive information and education program that utilizes public presentations, fact sheets, direct mailers, brochures, website, and other media to increase knowledge and awareness of storm water pollution prevention efforts.

Targeted activities for residential areas include vehicle washing, storage and maintenance, lawn and garden care, home improvement projects, pet waste disposal, swimming pool maintenance, household hazardous waste (HHW) disposal, and trash and debris cleanup and disposal. The Storm Water Protection Program continued to distribute information addressing these residential BMPs and required several minimum BMPs to be implemented.

The City continued to distribute a new brochure developed in FY 05-06 for the mobile service providers including carpet cleaners, plumbers, pressure washers, mechanics, porta-potty services, and any other mobile business that provide services at various off-site locations. Mobile service materials and residuals such as cleaners, grease, soapy water, dirt, debris, and other pollutants often find their way to our streets and storm drains. This brochure was designed for mobile service providers, their employees and anyone that hires a mobile service provider.

During FY 06-07, the City distributed storm water educational information for residential activities, continued an advertising campaign, hosted or participated in 25 residential outreach events, offered five oil recycling drop-off sites and two HHW collection sites for residential use, initiated a door-to-door residential HHW pick up program, hosted a HHW drop-off disposal day for Carlsbad residents, responded to 154 reports of illegal discharge, and issued 37 enforcement actions to achieve compliance.

In FY 06-07, the Storm Water Protection Program continued to work closely with other City programs and departments to address such issues as water conservation, code enforcement, outreach, and pollution

prevention. The City also continued to advertise Environmental Programs and continued to seek the most efficient and effective ways to educate the public.

The Storm Water Protection Program received several complaints directly related to or caused by poor water conservation practices (over irrigation etc.). The Storm Water Protection Program continues to work closely with the City's Water Conservation Specialist to address these issues with residents.

Section 6: Land-Use Planning

The Permit requires the City to evaluate land use planning policies and principles, revise the environmental review processes, and develop an approval process to minimize the impacts of development activities on receiving water quality. Land-use planning gives the community an opportunity to comment on and shape policies that guide community development and interests. The City has developed goals that balance environmental protection with smart, long-term economic growth. By laying out a vision for local growth and coastal development, projects are consistent with the state and federal regulatory requirements and the City's land-use planning efforts.

The City continued to implement the Standard Urban Stormwater Mitigation Plan (SUSMP), and all applicable projects were subject to a thorough discretionary and plan check review process to ensure compliance. In FY 06-07, there were 55 discretionary projects that were reviewed and required to submit applicable storm water pollution prevention plans (SWPPP).

For FY 07-08, the City will continue to work on updating a comprehensive database of existing and proposed permanent storm water BMPs and other pollution control devices to facilitate Permit compliance and reporting. Additional training will also be made available for planners.

Comments from the Regional Board on the FY 05-06 JURMP Annual Report related to the Land Use Planning program (#5) are addressed in Section 6.2 and Appendix 6.3 in this report.

Section 7: Construction

The Permit requires the City to implement activities that address and minimize short and long-term impacts on receiving water quality related to runoff from new construction sites. The City requires, prior to approval of a construction or grading permit, that project proponents implement measures to ensure that pollutants will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of water quality objectives. The City met these requirements by amending or conditioning existing permits, procedures and ordinances.

During FY 06-07, the City updated the construction inventory, inspected all high priority sites, conducted outreach and education to developers, engineers, contractors, and City staff, and used enforcement actions to obtain compliance when necessary. All active grading permits were ranked as high priority and inspected weekly. All required inspections were completed. There were 6026 required inspections and 6147 inspections were completed in FY 06-07. Inspectors used enforcement actions as necessary to achieve compliance, including issuing 68 field memos, 45 correction notices, and 15 stop work notices.
The City continued to implement the procedures developed in both the ministerial permit report developed in June 2004, and the minimum BMPs report developed in May 2004, and to train inspectors on these procedures.

The City continued to distribute the "*Pollution Prevention Guide to the Construction Industry*" brochure. The City also continued to work with the North County Outreach group to develop new brochures for the construction industry.

Section 8: Illicit Discharge Detection and Elimination

The City continued to conduct a comprehensive and proactive program for detecting and eliminating illegal discharges to the storm drain system. The City's program actively seeks to identify and eliminate illicit discharges and connections by conducting investigations, responding to spills and sewage overflows, conducting monitoring, and performing routine cleaning and maintenance activities on the sewer and MS4.

The public continued to use the storm water hotline and e-mail address to report illegal discharges to the storm drain system. The Storm Water Protection Program responded to reports of illegal discharges and has been trained in water quality sampling techniques. Complaints of illegal discharges were documented and tracked in the City's "*Suite Response* - Request for Action" (RFA) system. The RFA system was used each time there was a complaint through the hotline, email, in-person, or during field discovery related to an actual or potential illegal discharge.

The Storm Water Protection Program is committed to responding in a timely manner to all illegal discharge reports. During FY 06-07, staff responded to 96% of reports of discharges "*happening now*" within 30 minutes. The Storm Water Protection Program responded to 154 reports of illegal discharges to the storm drain system. In addition, 434 complaints or requests for action related to storm water quality, the sewer system, or storm drain system maintenance were conducted by Engineering Inspections, Code Enforcement, Maintenance and Operations, Utility Operations, Construction Maintenance, and Streets Department.

The City continued to implement the *Dry Weather Field Screening and Analytical Program*, analyzing conditions and samples from 60 sites in the storm drain system. The City also continued to implement the Coastal Outfall Program. There were 22 outfall sites routinely monitored by the storm water program.

The City also continued to implement the Sewer Overflow Prevention Plan/Response Plan. The City responded to 12 sewage spills or overflow reports, with a total of 18,000 gallons recovered and approximately 635 gallons entering the environment.

A *Performance Measurement System* has been implemented to monitor annual sewage overflow spills and responses, and assess whether preventive maintenance or other improvements can be made to reduce spills to the environment. For FY 07-08, the City plans to continue to collect data for the *Performance Measures and Maintenance Assessment* program and to analyze alternative work methods to improve the balance of scheduled versus unscheduled maintenance. This will include, but not be limited to, the use of contract services, temporary help, and/or consolidation of services with other Public Works departments.

Comments from the Regional Board on the FY 05-06 JURMP Annual Report related to Illicit Discharges Detection and Elimination Program (#7) are addressed in Section 8.1 of this report.

Section 9: Outreach and Education

The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent, though these messages often took varied forms. During FY 06-07, the City continued to be actively involved in outreach and education at the local level, the watershed level with the North County Storm Water Program (NCSWP), and at the regional level with the Project Clean Water Outreach Workgroup.

The City sent storm water educational information to all city employees distributed via paychecks in FY 06-07, participated in EPA webcasts as training opportunities, collaborated with local non-governmental organizations, hosted or participated in 25 outreach events, presented urban runoff and watershed concepts to 770 school-aged children, and distributed information through various media. The City also distributed promotional items such as notepads, pens and key chains with pollution prevention messages.

Section 10: Public Participation

The City led and/or contributed to several public participation opportunities this reporting period including the development, implementation, and review of storm water management programs, BMPs, new requirements, and other JURMP and storm water related issues. During the reporting period, citizens, business owners and representatives, and other interested parties were invited to attend public meetings, outreach events, workshops, City Council meetings, and other events related to storm water pollution prevention at the local and watershed levels. During FY 06-07, the City also conducted a Public Opinion Survey of 1,000 residents that included questions about storm water pollution.

During FY 06-07, the City's Community Volunteer Coordinator continued to find volunteers to assist the Storm Water Protection Program with various activities, including cleanup and outreach events. The City continued to recruit students from the University of California, San Diego to participate in an internship program with the Storm Water Protection Program. Interns worked on a variety of activities including commercial and industrial inspections, data management, and outreach and education.

Section 11: Effectiveness Assessment

Information collected in surveys, public comments, inspections, investigations, monitoring and other activities during the year were assessed to identify any trends and determine new or modified courses of action. During FY 06-07, the City continued participating in a Copermittee workgroup to draft common elements for effectiveness assessment.

The City made progress with effectiveness assessment measures during FY 06-07, using the Watershed Treatment Model to assess the effectiveness of storm water programs (Deb Caraco, Center for Watershed Protection).

Section 12: Fiscal Analysis

The total operating costs to fund the Storm Water Protection Program activities for FY 06-07 related to existing development was $1,355,240. This includes actual expenditures for personnel and operating costs from the Storm Water Protection Program budget, along with costs for street sweeping and litter pick-up, but does not include the *Storm Water Capital Improvement Program* costs.

Section 13: Special Investigations

Water quality data collected for two projects in FY 06-07 is summarized in this section. One is referred to as the Receiving Water Dry Weather Monitoring program. The second was related to monitoring required by the California Coastal Commission as part of the City's municipal golf course construction.

Section 14: Conclusion

During FY 06-07, the City successfully implemented the Permit requirements and the program activities described in the JURMP. Identified program strengths as well as improvement areas for FY 07-08 are outlined in each report section. As more programs and activities are implemented as part of Order no. R9-2007-0001, there is a clear need for better databases for tracking and reporting all of these activities and the BMPs being implemented. Tying all of these activities to changes in water quality still presents a considerable challenge. This is part of the long-term assessment strategy to develop trends and to determine cause and effect relationships of pollution prevention and water quality management. The City will continue to work with the Copermittees to develop additional effectiveness measures, in addition to implementing the identified measures on program effectiveness within the City.

Information from JURMP activities, WURMP activities, as well as the 303(d) List indicated that bacteria and sediment are high priority pollutants in the Carlsbad Watershed. The City proposes to continue addressing these pollutants through a number of existing or new activities, which include education, inspections, monitoring and maintenance through Order No. R9-2007-0001 implementation.

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Section 1
Introduction

1.0 Overview

The City of Carlsbad's (City) Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report addresses the continued implementation of the Regional Water Quality Control Board (Regional Board) Order No. 2001-01 (NPDES Permit #CAS0108758), commonly known as the Municipal Storm Water Permit (Permit). The Permit was issued February 21, 2001, and replaced the City's first municipal storm water permit issued in 1990 (Order 90-42). The Regional Board issued this Permit to prevent and control polluted urban runoff from Municipal Separate Storm Sewer Systems (MS4s) to downstream water bodies. As runoff flows through urban areas, it can carry harmful pollutants such as pathogens, sediments, fertilizers, pesticides, heavy metals, and petroleum products. Pollutants entering a receiving water body through the MS4 may harm aquatic life through toxicity and habitat degradation.

Each of the Copermittees listed in the Permit was required to develop a JURMP outlining their approach to protecting water quality and preventing harmful impacts from polluted urban runoff. The Permit requires the submittal of an Annual Report to the Regional Board to document the progress and implementation of the JURMP. This sixth Annual Report details the activities conducted during the reporting period of July 1, 2006 through June 30, 2007, which corresponds to the City's Fiscal Year 2006-2007 (FY 06-07).

The Permit also requires each Copermittee to protect water quality during the three major phases of urban development: (1) land use planning for new development; (2) construction; and (3) the "use" or existing development phase.

The City is a municipal corporation, following the Council-Manager form of government. City Departments fall under one of five major service areas (MSA's): Public Safety, Administrative Services, Public Works, Community Development, and Community Services. While the City created the Storm Water Protection Program to help implement the Permit, program implementation is carried out by several departments within different MSA's. This allows for program implementation and new requirements to be incorporated into daily activities of City employees, instead of being viewed as completely new requirements without a connection to on-going services.

The City encompasses just over 42 square miles and borders 6 miles of coastline. Carlsbad also contains or borders three coastal lagoons (Buena Vista, Agua Hedionda and Batiquitos lagoons). The City is part of the Carlsbad Hydrologic Unit (Watershed), which includes four separate sub-watersheds that run through Carlsbad. These include each of the three lagoons and their respective drainage areas, in addition to a fourth watershed commonly known as Encinas Creek. Portions of Agua Hedionda Lagoon and Buena Vista Lagoon are listed as impaired for bacterial indicators and sedimentation/siltation on the Federal Clean Water Act Section 303(d) Impaired Water Bodies list. Buena Vista Lagoon is also impaired for nutrients. While this report focuses on the City's implementation of the JURMP and not the Watershed program, the two are becoming more intertwined as waterbodies and implementation strategies cross programmatic and jurisdictional boundaries.

1.1 Report Organization

This Annual Report was prepared in accordance with the requirements of the Permit. It contains a comprehensive description of the activities conducted by the City of Carlsbad to meet the requirements of section F of the Permit; an accounting of all illicit discharges reported, all inspections conducted, all enforcement actions taken, all education efforts conducted; a description of the public participation mechanisms utilized during the JURMP implementation process; a summary of all urban runoff related data not included in the annual monitoring report; identification of management measures proven to be effective in reducing urban runoff pollutants and flow; identification of water quality improvements or degradation; and a budget for the upcoming year. A list of acronyms is provided in Appendix 1-1.

The organization of this report follows the table of contents agreed to and submitted by the Copermittees to the Regional Board. The Annual Report is divided into sections matching major sections in the Permit and the JURMP. As with the JURMP, many of the activities described in separate JURMP sections overlap with one another, so an activity may be referenced in more than one report section. The Annual Report is organized as follows:

Section 1 - Introduction
Section 2 - Municipal Component
Section 3 - Industrial Component
Section 4 - Commercial Component
Section 5 - Residential Component
Section 6 - Land-Use Planning Component
Section 7 - Construction Component
Section 8 - Illicit Discharges Detection and Elimination Component
Section 9 - Education Component
Section 10 - Public Participation Component
Section 11 - Assessment of JURMP Effectiveness Component
Section 12 - Fiscal Analysis Component
Section 13 - Special Investigations
Section 14 - Conclusions and Recommendations

Section 2
Municipal Component

2.0 Overview

The City's municipal facilities are composed of administration buildings, recreational areas, buildings, maintenance yards, reservoirs, water pump stations, sewer lift stations, road systems, parking facilities, the storm drain system, pressure regulator vaults, and fire stations. These are areas where municipal staff work or provide public services. The City has developed a municipal infrastructure to maintain the quality of life enjoyed by residents, visitors, and employees of Carlsbad. The activities supported by the City's infrastructure have the potential to contribute to urban runoff if Best Management Practices (BMPs) are not properly implemented, maintained, and assessed.

The City has implemented a program to prevent or reduce pollutants in urban runoff from municipal sources or activities. In addition, the Permit requires that high priority municipal facilities and activities be identified and inspected, that minimum BMPs be established for each priority, and that a process for ensuring the application of these BMPs be implemented and enforced by the City.

2.1 Source Identification and Threat to Water Quality Prioritization

The municipal facility inventory is reviewed and updated each year, as new City facilities are developed and brought on-line. The inventory applicable for FY 06-07 is in Appendix 2-1. Prioritization of municipal facilities was determined by type of activities conducted onsite, proximity to an Environmentally Sensitive Area (ESA), compliance inspections, wastes generated, and pollutant discharge potential (see criteria in Section 2 of the JURMP). As pollutant sources are abated and discharge potential decreases, the municipal facilities priority ranking may change. During FY 06-07, 13 facilities were designated and inspected as "high" priority municipal facilities.

In response to the Regional Board's September 18, 2007 FY 05-06 JURMP Annual Report review comment #1: the City has reprioritized the Municipal Inventory and will inspect 63 high priority Municipal facilities in FY 07-08. Please refer to Appendix 2-2 for an updated inventory. Because this reprioritization occurred after the end of FY 06-07, the remainder of this section and this Annual Report refers to the 13 High Priority sites as designated during FY 06-07.

Municipal facility locations were mapped by first geocoding each location's address against the City parcel base map and then the remaining unmatched sites were geocoded to the City's street centerline layer. Locations matched to the parcel base were mapped to the parcel centroid, locations matched to the street center lines were mapped to the estimated location within the address range of the street center line segment, and all were mapped to include proximity to the ESA. A copy of the mapped High Priority municipal facilities is found in Appendix 2-3.

2.2 Pollution Prevention Practices and Best Management Practices Implementation

The City's approach is to promote pollution prevention as an activity for all municipal employees and locations. Since 1991, the City has implemented a procurement policy that directs the purchase and use of recycled products. Purchasing staff are encouraged to use "*Green Purchasing*" principles. This refers to buying products and services with reduced effects on human health and the environment (also called "*Environmental Purchasing*"). While some of these products are office and janitorial supplies, the policy

also applies to construction supplies, landscape materials and equipment, automotive, road and highway supplies.

Specific pollution prevention measures may vary from one site to another, so they are evaluated separately at each facility. All high priority municipal facilities implemented site specific Storm Water Pollution Prevention Plans (SWPPP) and associated training programs. **Furthermore, the pollution prevention BMPs identified in the JURMP were implemented at all municipal facilities.** These pollution prevention BMPs include:

- Affirmative Procurement – Use alternative, safer, or recycled products.
- Reduce the amount of hazardous materials by implementing natural controls.
- Redirect storm water flows away from areas of concern.
- Reduce use of water.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.

In addition, the City required the following minimum pollution prevention practices (detailed in SWPPPs or inspection reports) at all municipal facilities where appropriate:

- Reduce use of water or use dry cleanup methods: Employees use dry cleanup methods when possible (sweeping, etc.). Any washing activities require containment and recovery, with no discharge to the storm drain system. These activities are also required for City contractors.
- Redirect storm water flows and conduct storm drain maintenance: Employees perform regular visual inspections of the storm drains to identify unauthorized discharges and clean as needed.
- Recycle: City departments must recycle appropriate items and implement the City procurement policy to purchase and use recycled products.
- Move or cover potential pollution sources from storm water contact: Corporate yards protect materials and products that could potentially contribute to storm water pollution by storing them indoors, or covering them, and providing them with secondary containment as needed.

In FY 06-07, the City of Carlsbad's City Manager initiated the Storm Water Leadership Team (SWLT). Monthly meetings of the SWLT were conducted and attendees included senior management of the City's major service areas and Directors. Agenda items covered all areas of the City's compliance with Order No. 2001-001, as well as review of the new Order No. R9-2007-0001.

In the fall of 2006, the City formed an Environmental Resources Management Team (ERMT). The team consists of members drawn from many City departments, creating a diverse group of professionals striving to move the City forward towards environmental, economic, and social sustainability. To date, the team has produced a list of guiding principles which was adopted by the City Council and is pursuing several initiatives which will benefit the City in the future. These activities include increased attention to storm water compliance, improved management of open space, tracking progress on the desalination plant, researching the use of solar power, and examining the City's carbon footprint in an effort to reduce carbon emissions.

In June 2007, the City implemented a new waste reduction strategy as a pilot program. This included the purchase and distribution of larger single stream recycling containers for employee work stations accompanied by a small trash can. There were also several new larger recycling containers placed in public meeting areas throughout the City. Seen as an effective pilot program, the City will implement the waste reduction strategy at all City facilities in FY 07-08.

In July 2006, the City passed a new Special Events Ordinance modeled after similar special event ordinances from other jurisdictions and includes: new application and approval time lines, notification requirements for areas affected by events, updated sign regulations, cost recovery requirements, environmental consideration, and enhanced penalties for violations. Specifically the Special Events Ordinance includes requirements for event sponsors to include "run-off containment features" in event planning, recycling and trash management, and all events must be covered by a site and event specific "plan to control water run-off and other contaminants that" have the potential to enter the City's storm drain system. The adoption of the ordinance will help the City better manage resources and ensure compliance with the Permit. A copy of the new Special Events Ordinance can be found in Appendix 2-4

In January 2007, all City employees received a storm water training fact sheet with their paychecks. The training fact sheet included information about NPDES requirements, pollutants of concern, BMPs, and how to report illegal discharges to the storm drain system. A copy of the training fact sheet can be found in Appendix 2-5.

The Storm Water Committee continues to meet monthly to discuss municipal storm water BMPs and pollution prevention issues. The committee is comprised of City employees representing various divisions of Public Works, the Fire Department, the Building Department, the Planning Department and Recreation. The intent is to communicate problems and solutions, share knowledge, enhance conformance with the Permit, and to pass along updates from the Regional Board. Agendas were distributed in advance and meeting summaries were sent to members and appropriate managers after each meeting. A summary of agenda items and meeting dates is found in Appendix 2-6.

During the spring of 2007, the Water Conservation Specialist and Storm Drain Maintenance Division leader completed the 24-hour "*Hazardous Waste Operations and Emergency Response Training*" in San Diego. The Environmental Specialist I continued training in Hazardous Materials Response with an eight hour refresher class. This course is required for anyone who is expected to identify emergency situations involving hazardous materials. Staff was trained to recognize, report, and assist in emergency response. This course fulfills the requirements under OSHA 29 CFR 1910.120.

Municipal facilities are required to implement the minimum BMPs identified and described in the JURMP (good housekeeping, preventive maintenance, material handling and storage, employee training, solid waste handling, record keeping, self inspection, and spill response), as applicable. Specific BMPs are identified in SWPPPs and/or inspection reports. Specific pollution prevention measures may vary from one site to another and are evaluated separately at each facility. The City implements and assesses the effectiveness of BMPs through regular staff training, self-inspections, third party inspections by a contractor, and SWPPP implementation. The following includes a description of specific pollution prevention activities and storm water BMPs implemented during FY 06-07 by various City departments and facilities.

Maintenance and Operations

The Maintenance and Operations, Water and Wastewater Division, is responsible for maintaining the drinking water, sewer, and recycled water infrastructure for the City. This division carries out the preventive maintenance programs as well as emergency response for line breaks and spills. Those involved with Maintenance and Operations (M&O) activities received training on waste minimization techniques for hazardous and solid waste, spill prevention, response and cleanup practices. Following are some of the new and ongoing BMPs implemented for FY 06-07:

- M&O staff training see Appendix 2-7.

- Native soils are used whenever possible to backfill trenches.
- Staff has minimized the amount of dirt and soil stockpiled onsite.
- Gravel bags are used as check dams to reduce the sediment and debris entering the storm drain.
- RapidFlow® replaced the Gutter Buddy BMP used as inlet protection in the past. The Gutter Buddy was found to obstruct flow and caused some flooding in and around the yard. The Rapid Flow filter lets increased volumes of water run through while continuing to filter pollutants such as larger debris, leaves, sand, and trash.
- A permanent structure was built over Coldmix and Sand stockpiles in M&O yard.
- Standardized BMPs for "Potable Water Discharges" are implemented where applicable. These include BMPs such as diffusers and dechlorinators, sweeping prior to discharging water, installing gravel bags as check dams, and implementing inlet protection.
- Approximately 250 tons of Recycled - Class II - Base Material was used to backfill trenches.
- Approximately 85 tons of asphalt and cement waste was hauled to Hanson Aggregates for recycling into Class II base.
- A stabilized construction entrance consisting of 6" minus rock was installed at the driveway entrance to the storage yard to prevent dirt or mud tracking onto the parking areas. The driveway ramp going from the parking lot to the pipe yard was replaced and the rock driveway was also rebuilt.
- A covered metal recycling bin is used in the M&O yard.
- Gravel bags, sand bags, silt fences, hay rolls were purchased for the outdoor storage yard. Approximately $1000 was spent to purchase these additional BMPs. These BMPs are stockpiled in the M&O yard.
- Oil and fuel storage was relocated to a designated area with 290 gallon catch containment area.
- A concrete spillway was constructed where offsite flow enters the property in order to reduce erosion of the slope.
- The M&O SWPPP was revised along with Spill Response Plan for M&O yard. The site map was revised to detail all equipment and materials storage within the facility and provide the amounts of material stored for construction purposes.
- Storm Water protection staff training was conducted in the All Hands safety meetings held on a monthly basis.

Fleet Maintenance

As part of the storm water compliance program, a clean up was conducted by the Streets and Parks Department of the storage yard at Fleet in the spring of 2007. Many of the items removed included discarded, unusable, and broken equipment. In addition, several of the items were a result of illegal dumping from the surrounding residential communities. Approximately four 10 yard dumpsters full of materials were removed.

The City's Fleet Department historically served as a location where the community could dispose of used motor oil. Since 2002, the City no longer offers disposal at that location. Signs were placed to remind residents of this change. However, the signs had not been updated since 2002 and did not reflect the Environmental Programs logo, phone number, website, or appropriate disposal locations. As a result residents continued to illegally drop off used motor oil and other household hazardous waste at the Fleet gate. The Environmental Programs Division worked with the Fleet Department to develop more appropriate and accurate signs that were installed at the end of FY 06-07. Photos of the new signs can be found in Appendix 2-8.

Fleet Maintenance Division (Fleet) provides routine preventive maintenance and repairs for all City vehicles and equipment. Fleet also performs smog inspections, responds to roadside service calls for City

vehicles, and supplies the fuel and maintenance service for City vehicles and fuel services for the Encina Wastewater Authority. The following are pollution prevention and BMP implementation efforts for FY 06-07:

- A designated pressure washer area continues to be used to wash vehicles, engines, and undercarriages. The pressure washer drain discharges to a separator then to sanitary sewer.
- A floor scrubber and mop were used to clean the repair shop floor. Wash water is disposed of inside the shop to the sanitary sewer.
- Oil, fuel, antifreeze, or other liquids spills were cleaned with absorbent and put into marked drums, which were removed by a contracted hazardous waste hauler.
- Used batteries were stored in plastic containers and picked up weekly.
- Brake shoe cores were stored in plastic containers until returned to the vendor for recycling.
- The public waste oil disposal site has been closed and the citizen waste & oil disposal tanks have been removed from the yard by the Hazardous Waste Removal Contractor.
- Drip pans were used to capture leaks from vehicles stored outdoors. Spills are cleaned up using absorbent, which is then stored in marked containers and removed by the hazardous waste hauler.
- Recycled oil is purchased for use in fleet vehicles, and used oil is recovered for recycling.
- Recycled antifreeze is used and waste was stored in poly drums inside the shop. Fleet recycled 300 gallons of antifreeze during FY 06-07.
- All scrap metal was recycled at a local scrap metal supply shop.
- Training was conducted on BMPs, inspection intervals, and basic house keeping.
- Fleet BMPs were amended to include inspection of the outside area including the dumpsters and the hazardous waste bunker.
- A revised site map was been developed and included in the SWPPP.
- Hydro carbon filters have been installed on the southern storm drain inlets and the storm drain inlets located in the center of the Fleet yard.
- An “all maintenance division” clean up was performed in February 2007. All debris and stored materials were removed from the Fleet yard.
- Chain link fencing was installed around the vacant unimproved lot at the southeast corner of the Fleet yard to prohibit unauthorized dumping of materials and waste.
- Tarps were purchased and are utilized to cover wrecked and damaged vehicles pending disposal at auction.
- Canopies were purchased and installed over outside material storage areas.
- Storage containment for all liquid drums was purchased and installed. All outdoor bulk liquid drum storage at the facility has containment provided.
- A metal storage container was procured for storing oversize items including tires and off road motorcycles.

Oak Maintenance Yard

The Streets Department operates out of the Oak Maintenance yard and is responsible for maintaining approximately 582.4 lane miles of roadway, 6,683 streetlights, 149 signalized intersections, 3,671 storm drains and inlets, and all sidewalks in the public right-of-way. The following are pollution prevention and BMP implementation efforts for FY06-07.

1. All materials and machinery are enclosed or covered by canopies. These canopies are inspected quarterly and replaced as needed.
2. Maintenance yard cleaning and sweeping is on a documented schedule.
3. One hundred fifty (150) sign blanks were used to install/replace street signs.
4. The following amounts and types of materials were recycled during this reporting period:
    a. 1,552.5 tons of asphalt used for repair of streets and rights-of-way
    b. 861.81 cubic yards of cement used for repair of streets and rights-of-way
    c. 1,270 pounds of aluminum signs were recycled or reused.
    d. 1,870 gallons of paint were recycled or reused
    e. 56 steel drums (55 gallon) for storing paint
5. Installed 2 large cigarette butt collection points in the Oak yard
6. Installed 11' x 11' x 6" (121 sq ft) asphalt berm around paint storage area creating a containment barrier in case of spill
7. Implemented storm water and BMP training in annual training for all employees

Fire Department

The Carlsbad Fire Department is a dedicated team of professionals whose mission is to enhance the quality of life in our community by delivering exceptional services in safeguarding lives, property and the environment.

During FY 06-07 the Fire Department developed a storm water manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water. The BMPs developed and implemented in FY 06-07 are listed below.

- The manuals include facility specific site maps, storm water inspection reports, facility specific spill response procedures, training records, department policies, and other related storm water compliance information.
- A written department policy on outside water use was formalized on February 14, 2007, covering vehicle, hose, and equipment washing.
- Spill response equipment and materials are clearly identified and staged in accessible locations.
- Sweeping and removal of organic material from parking lots and walkways is completed on a weekly or as needed basis at all fire stations.
- A new location has been identified for fire engineer training and testing. The location is the city's reclaimed water facility at 6220 Avenida Encinas. A training trailer was developed to facilitate engineer operations, pump testing, and other wet training opportunities. All logistics have been worked out and the facility has proven to be a successful alternative.
- A suitable location was established to provide "wet" training opportunities. The fire department will continue to provide acceptable wet training opportunities for personnel, while ensuring that appropriate BMPs are in place to protect storm drains and eliminate discharges to the MS4.
- Awareness was heightened at fire scenes to minimize the potential for excessive water flow.
- Awareness was heightened at incident scenes to contain potential discharges (once the scene had been stabilized) to prevent pollutants from entering the storm drain system.
- The Fire Department continued to implement the City's spill response procedure for incidents that occur on City streets.

The Fire Department continues to communicate with other City departments to improve coordination and education with regards to storm water. Additionally, the Department established a Storm Water Committee in December of 2006, consisting of four personnel. This group meets quarterly to address

new and ongoing storm water topics and how they relate to the responsibilities of the Fire Department, and includes personnel from each Fire Department rank. Other activities include:

- attending the City's Storm Water Committee meetings on a regular basis.
- working closely with the Storm Water Protection Program to conduct a series of meetings to review BMP implementation and perform one-on-one training.
- providing a member to the City's Storm Water Permit Review Goal Team.
- exploring CIP opportunities for potential funding for sewer connections at the fire stations to serve wash areas.
- working extensively with the design and construction committee for Fire Station 6 to ensure that storm water requirements are addressed early in the process and met during and after construction.

The Fire Department has implemented increased training opportunities to ensure that all fire department personnel are versed in storm water as it relates to fire station and fire fighting activities.

- Annual storm water training was conducted for all three shifts on March 28, 2007, March 31, 2007 and April 2, 2007.
- Annual storm water training has been moved to the department's training calendar for the month of October.
- The roll out of the storm water manual was preceded with training on the manual's contents.
- Upon formalizing the department policy on vehicle and equipment washing, training on the appropriate actions and alternatives followed.

Parks Maintenance Division

The Parks Maintenance Division is responsible for maintaining, preserving, and enhancing approximately 348 acres of parks, athletic fields, streetscapes, beach accesses, and landscapes at various civic facilities. This includes the maintenance of 16 neighborhood or community parks, 14 special use areas, and over 625 acres of open space/undeveloped areas. During this reporting period, staff addressed the improvements recommended by the Storm Water Protection Program, D-Max Engineering, and in-house quarterly inspections. The following pollution prevention BMPs were implemented in FY 06-07:

Parks Maintenance Yard:

- Increased frequency of yard clean-ups (inorganic and organic material). (ongoing)
- Trimming of trees and vegetation surrounding the discharge area. (ongoing)
- Landscaped bare pervious areas to prevent erosion runoff. (ongoing)
- Decreased frequency of irrigation by utilizing multiple starts with fewer days. (ongoing)
- Performance of annual yard clean-up. (ongoing)
- Raising of all metal storage bins by constructing wood bases to prevent rust.
- Purchased canopies for covering of all equipment and materials.
- Purchase gutter buddies for placement around storm drain outlets.

Park Maintenance:

- All organic debris from landscaping is blown away from curbs and gutters and parking areas and recycled during mowing process. (ongoing)
- Implementation of all BMPs in our park sites. (ongoing)

- Minimizing organic material in turf by double cutting areas to reduce accumulation of thatch**.** (ongoing)
- Use of sweeping equipment to pick up leaves and debris in turf areas. (ongoing)
- Use of contract sweeping for all parking areas of all park sites.
- Installation of gravel bags around drain inlets and outlets.

Poinsettia Park Maintenance Facility:

- Quarterly documented inspections of maintenance yard. (ongoing)
- Frequent irrigation inspections and repairs to prevent runoff. (ongoing)
- Cleaning of equipment on dirt pervious areas to prevent runoff. (ongoing)
- Weekly yard clean-ups. (ongoing)
- Cleaning of dumpster areas. (ongoing)
- New gravel bags installed at discharge inlets.

Stagecoach Park Maintenance Facility:

- Removal of all dirt in maintenance yard and installation of new asphalt and asphalt curb to prevent runoff.
- Purchased new canopies to cover equipment and materials.

Training:

- Consolidated all pertinent BMP'S into personalized folders (individual use). (ongoing)
- Performed documented monthly Storm Water Training for all maintenance sites. (ongoing)
- Completed of master manual for all maintenance sites for Storm Water related material (Training/ Inspection/ BMPs, etc).

Inspections:

- Developed a documented weekly clean-up and quarterly inspection program for all maintenance yards. (ongoing)
- Perform extensive (annual) yard clean-ups.

Irrigation:

- All irrigation systems are inspected weekly and repaired as necessary to prevent excess runoff. (ongoing)

Recycled Material:

- Use of mulch material generated from tree trimming in bare landscape areas. (ongoing)

The Parks Maintenance Division continues to utilize chips generated from tree trimming activities for erosion control and weed abatement on banks, slopes, and bare ground. The Parks Maintenance Division continues to utilize all current BMPs throughout the parks, trails, beaches, open spaces, medians, facility, and school site landscapes. In addition, the Parks Maintenance Division purchased ornamental chips and bark for use around buildings and high profile landscape areas.

2.3 Maintenance of Municipal Separate Storm Sewer System (MS4)

The Storm Drain Maintenance Division is responsible for inspecting, cleaning, and performing routine maintenance of the City's MS4. The City implements BMPs for maintenance activities with an emphasis on preventing and reducing the quantity of pollutants entering the MS4. In addition, the Streets Department generally performs minor repairs and limited construction activities on certain MS4

structures. The General Services Department and M&O also collect and properly dispose of all waste resulting from storm drain maintenance. The maintenance of the MS4 involved multiple activities, which are summarized below.

Catch Basin/Inlet Cleaning

There are currently 3,671 catch basins and inlets in the City and approximately 3,000 of these inlets are stenciled with storm water protection messages. Set criteria were used to prioritize the inspection process with an emphasis placed on those catch basins in high traffic areas. If during inspection, a basin or inlet was observed to have any obstruction, debris was removed with an inlet plucker from ground level. Further cleaning by a vactor truck occurred as necessary. In FY 06-07, staff inspected and cleaned all 3,671 basins and inlets and removed 45 tons of material.

In response to the Regional Board's September 18, 2007 FY 05-06 JURMP Annual Report review comment #2:

At the end of FY 2005-06, the city reassigned resources and utilized an improved database system in order to ensure that inspections and cleaning of anthropogenic trash occurs on a routine, scheduled basis. With these improvements to the program, the city reached 100% inspection and cleaning of anthropogenic trash of the catch basins within the city for FY 06-07.

In FY 04-05, the City approved the purchase of a trailer mounted vacuum system to be used solely for storm drain maintenance activities. During FY 05-06, this dedicated equipment increased efficiency for the storm drain maintenance program as well as reduced the need to share vacuum equipment with M&O. In FY 06-07, efficiency continued to improve as shown by the increase in the numbers of catch basins inspected and cleaned.

Curbed Streets and Uncurbed Roads

Street sweeping is conducted by subcontractors who collect, manage, and dispose of swept materials as well as maintain sweeping equipment. During FY 06-07, 13,000 miles of roadway and all public parking areas were swept annually. All sediment and debris was removed and transferred to an approved disposal site. A detailed description of the street sweeping activities is provided below for FY 05-06 and remained unchanged for FY 06-07. In addition, the litter removal program transitioned from a year-round program consisting of two temporary persons to a year round contract crew with the Urban Corps. The crews removed approximately 1,200 cubic yards of litter and debris.

In response to the Regional Board's September 18, 2007 FY 05-06 JURMP Annual Report review comment #3:

The street sweeping contractor in FY 05-06 swept approximately 13,000 miles of roadway and medians within the city of Carlsbad. The downtown redevelopment area including Grand Avenue, Beech Street, State Street, Carlsbad Village Drive and Roosevelt Street were swept three times per week adding up to approximately 1,000 miles per year. All arterials are swept weekly including El Camino Real, Palomar Airport Road, La Costa Avenue and sections of Marron Road. These arterials are swept between 2 a.m. and 6 a.m. when traffic is minimally impacted, and total approximately 6,500 miles annually. Residential roads are swept twice a month totaling approximately 5,000 miles annually. The city also sweeps 30 public parking lots twice monthly totaling approximately 500 miles annually.

In FY 04-05, the Streets department reported that parked vehicles were interfering with the street sweeping program. It appeared that residents were not removing their vehicles from the street during regular street sweeping schedules. The vehicles made it difficult for the street sweeper to access all areas of the street. In March 2006, the City developed a new street sweeping notification door hanger. The

door hanger was developed to help notify residents of street sweeping schedules so that they can move their cars and allow the street sweeper better access to clean the curb face and gutter. The door hangers continued to be used in FY 06-07 to increase the effectiveness of the street sweeping program.

Open Drainage Facilities

In accordance with the JURMP, all identified open drainage facilities were inspected and cleaned during FY 06-07. The City has established an ongoing regular voluntary program for the collection of debris and trash in natural stream and storm drain channels. Storm drain channels were inspected and cleaned as necessary. Maintenance of the MS4 is a shared responsibility between residents and the City. All storm drain channels located on private property are the responsibility of private property owners. The City does however maintain those portions of private storm drain structures that are within 10 feet of the curb face or City right-of-way. During FY 06-07, the Storm Drain Maintenance Division inspected and cleaned those channels that required maintenance. The City will work with the Copermittees to address storm channel maintenance activities and to pursue permitting to conduct future maintenance.

Currently, there is an estimated 18,500 lineal feet of public brow ditches in Carlsbad. In FY 06-07, the City again reviewed the 23,500 lineal feet of brow ditches previously reported and determined that approximately 18,500 feet were publicly owned. Maintenance of the MS4 is a shared responsibility between residents and the City. All brow ditches located on private property are the responsibility of private property owners. The City does however maintain those portions of private brow ditches that are within 10 feet of the curb face or City right-of-way. During FY 06-07, the Storm Drain Maintenance Division inspected and removed 6.5 tons of sediment and debris from those brow ditches that required maintenance. As required by the JURMP, the following storm drain channels were inspected and 300 pounds of trash was removed prior to the wet season:

- Buena Vista Channel
- Kelly Drive Channel
- Park and Kelly Outfall
- Park and Andrea Outfall
- Park and Valencia Outfall
- Park and Neblina Outfall

Desiltation Basins

During FY 06-07, all three publicly owned desiltation basins were inspected and 100 pounds of trash was removed. The three desiltation basins that are the responsibility of the City include:

- Desiltation Basin #13 (23,000 square feet) - SW end of Faraday Ave., south of Lot 102 of CRC
- Desiltation Basin #43 (50,000 square feet) - Camino Hills and Faraday, NE corner
- Desiltation Basin # 30 (1,500 square feet) - SW corner of Marron and Monroe

In addition, during FY 06-07 the City conducted more than 100 inspections and photographed privately owned desiltation basins in an effort to rate the quality, location, and maintenance needs of each basin. This information was documented and may be used to further develop and implement an outreach program for private property owners.

Storm Patrol

During storms, street crews were dispatched to handle storm related emergencies in a timely manner. Each crew was assigned to a pre-determined zone to respond to emergencies and to check inlets and

outfalls for blockages. After the storm event, street crews primarily handled emergencies, maintained proper water flow, protected the natural waterways from contamination, and ensured public safety. Major debris removal and storm clean up was performed after emergencies were resolved. In FY 06-07, staff spent 110 staff hours at various locations throughout the City.

2.4 Management of Pesticides, Herbicides, and Fertilizers Actions

Parks Maintenance Division

In conjunction with the Integrated Pest Management (IPM) program, the Parks Maintenance Division continued to utilize slow release fertilizers in an effort to reduce the frequency of applications while minimizing the potential of fertilizer runoff. In some cases, staff reduced the recommended amount of fertilizer per 1,000 square feet by 50% to minimize flush of growth on turf which in turn reduced the amount of clippings. To help monitor fertilizer applications, the Parks Maintenance Division began using fertilizer reports to track material applied, rates, and locations. In accordance with the new IPM practices, weed control applications were withheld at several school sites maintained by the City. Staff is continuously searching for alternative methods of pest control that are proven to be safe and effective.

As required by the Department of Pesticide Regulation, all chemical applications are reported to the County Agriculture Department on a monthly basis. As identified in the JURMP, all BMPs were implemented to address pesticide, herbicide, and fertilizers sources of pollution. Specifically, BMPs implemented during FY 06-07 include:

- **Education:** A training program for identifying and defining chemicals, proper handling, applying, storing, disposing, irrigating, and using non-synthetic alternatives has been implemented. At many of the training seminars, new IPM methods are often presented for consideration by the department. All training information including BMPs were provided to personnel to keep in personalized folders for individual use. In addition, a master application manual that includes all storm water BMPs, training, and inspections was also prepared.
- **Non-chemical applications:** Some pest problems can be eliminated or controlled by handpicking, pruning, or spraying with water. Many pest problems can be reduced or eliminated by removing affected leaves or plant parts. During FY 06-07, efforts have been made to improve upon our IPM system in the City's parks and Downtown Village areas. The release of Lady-Bird beetles at Pine Park and the Downtown Fountain areas to combat infestations of aphids have proven successful in eradicating the bugs. Other methods used to decrease the departments dependency on chemical sprays during FY 06-07 include:
    - Increased mulching of planter beds to smother weed germination
    - Increased tilling of planter beds to kill young weed sprouts
    - The use of organic plant derivative sprays such as Safer products
    - The use of water to spray plants infested with Giant Whitefly
    - The removal of dying or diseased plant material to decrease the presence of harmful organisms.
- Insecticide application is performed on an as needed basis and is usually contracted out to a pest control operator after diagnosis.
- **Native Vegetation:** The Parks Maintenance Division continues to explore opportunities to use native vegetation to control pests, reduce chemical application, and maintain the aesthetic values of the Parks and medians.
- **Schedules for Irrigation and Application** – Irrigation systems are monitored and inspected on a weekly basis in an effort to minimize water loss due. In addition, the use of evapo-transpiration (ET) gauges for controlling the irrigation system helped to reduce watering times based on evaporation and transpiration of plants and turf. ET gauges are installed at

Poinsettia, Stagecoach, and Calavera Park. These gauges also helped staff to adjust watering times at other locations that were not connected to the gauge. During FY 06-07, all irrigation systems were inspected weekly and repaired as necessary to prevent excess runoff. At Poinsettia and Pine Parks synthetic turf is used on the soccer field, which requires minimal maintenance and no watering. The synthetic turf has proven to be successful in eliminating the use of water for irrigation.

Maintenance and Operations (M&O)

M&O has developed a pesticide program and general pesticide training is conducted on an annual basis. Although M&O staff only use *Roundup*, *employees* are trained on pesticide application, the requirements of the pesticide program, MSDS, pesticide labeling, pesticide safety information leaflets-N series, and emergency medical care. This pesticide program complies with the County of San Diego Department of Agriculture, Weights and Measures requirements. *Roundup* is used for minor weed control six to eight times per year. After usage, quantities applied are reported to the County of San Diego Department of Agriculture. Other mechanical control methods (i.e. shovels, hoes) are used whenever possible.

2.5 Inspection of Municipal Areas and Activities

The Storm Water Protection Program conducted pre-inspection assessments at all "high" priority municipal facilities. The purpose of the pre-inspection assessments was to assist with program improvement areas and record-keeping. These pre-inspection assessments were also an excellent opportunity to facilitate coordination and interdepartmental communication. D-Max Engineering (D-Max) was contracted to conduct formal storm water compliance inspections for all of the high priority municipal facilities during FY 06-07. During each inspection, the D-Max inspectors reviewed the municipal facility's SWPPP, BMP implementation plans, and facility self-inspection records. In addition, recommended BMPs or corrective actions were discussed. A comprehensive site evaluation was conducted and the facility operator was verbally notified of any deficiencies or violations.

After the inspection, an inspection report that included corrective actions, recommended BMPs, and other relevant information was provided to the facility manager. Copies of the inspection reports are on file at the facility and with the Storm Water Protection Program. The facility manager then addressed any recommendations or requirements. Documentation of self-inspections and corrective actions are maintained in files at the appropriate facility. The summary of all inspection report recommendations and facility corrective actions are listed in Appendix 2-9.

2.6 Enforcement of Municipal Areas and Activities Actions

Runoff from municipal facilities may pose a threat to water quality if BMPs are not adequately implemented or maintained. BMP implementation and assessment occurs through facility self-inspections, third party inspections, and through on-going employee training. All inspection report recommendations for the municipal facilities were implemented to the maximum extent practicable. During FY 06-07 the Public Works Director sent each high priority municipal facility a letter requesting that all corrective actions be implemented in a timely manner.

2.7 Self-Assessment

Program Strengths

In FY 06-07, the City of Carlsbad's City Manager initiated the Storm Water Leadership Team (SWLT). Monthly meetings of the SWLT were conducted and attendees included senior management of the City's major service areas and Directors. Agenda items covered all areas of the City's compliance with Order No. 2001-001, as well as review of the new Order No. R9-2007-0001.

Best Management Practices

Toward the end of FY 05-06 the City's Catch Basin Inspection Program was evaluated and improved. The City has reassigned resources and improved a work order system so that inspections and cleaning of catch basins occur on a routine and scheduled basis. As a result of this improved program, in FY 06-07 100% of catch basins were inspected and cleaned as necessary.

In June 2007, the City implemented a new waste reduction strategy as a pilot program. This included the purchase and distribution of larger single stream recycling containers for employee work stations accompanied by a small trash can. There were also several new larger recycling containers placed in public meeting areas throughout the City. Seen as an effective pilot program, the City will implement the waste reduction strategy at all facilities in FY 07-08.

Inspections

The City continued to contract out high priority municipal inspections in order to provide an outside set of eyes for inspecting and determining compliance. These inspections were unannounced in order to best assess compliance. With the annual inspections by the State DPR, municipal inspections by D-Max, in-house quarterly inspections, and staff training on storm water BMPs, staff were more aware of the required BMPs for preventing storm water pollution.

During FY 06-07 the City conducted 108 inspections of privately owned desiltation basins in an effort to rate the quality, location, and maintenance needs of each basin. This information was documented and may be used to further develop and implement an outreach program for private property owners. During FY 06-07, the City updated and mapped all desiltation basins within the City. This information will be used to assess the status of each basin and work with private property owners to develop more proactive maintenance schedules.

Policy

In July 2006, the City passed a new Special Events Ordinance modeled after similar special event ordinances from other jurisdictions and includes: new application and approval time lines, notification requirements for areas affected by events, updated sign regulations, cost recovery requirements, environmental consideration, and enhanced penalties for violations. Specifically the Special Events Ordinance includes requirements for event sponsors to include "run-off containment features" in event planning, recycling and trash management, and all events must be covered by a site and event specific "plan to control water run-off and other contaminants that" have the potential to enter the City's storm drain system. The adoption of the ordinance will help the City better manage resources and ensure compliance with the Permit.

The SWPPP and Spill Response Plan for the M&O facility was updated and all staff were trained in storm water compliance and BMP implementation related to their job duties.

A comprehensive storm water manual was created specific to each Fire Station. This manual includes an updated facility-specific SWPPP, spill response procedure, training records, inspection records, and related materials.

The Storm Water Protection Program staff began working with the City Attorney's office to revise the City's ordinance to reflect current enforcement levels and mechanisms. Revision and Council approval occurred in early FY07-08.

Education

During FY 06-07 every edition of the Public Works departmental newsletter featured updates on the Storm Water Protection Program and Environmental Programs. Employees were notified by e-mail when these newsletters were published and posted on the City's intranet, and hard copies were provided for employees who did not have access to computers.

During FY 06-07, the City's Storm Drain Maintenance Division continued to use a new street sweeping notification door hanger. The door hanger was developed to help notify residents of street sweeping schedules so that they can move their cars and allow the street sweeper better access to clean the curb face and gutter. This door hanger helped improve the effectiveness of the street sweeping program.

Storm Water Protection Program and Environmental Programs Division worked with the Information Technology Department to revise the City's webpage and provide updated information about storm water BMPs.

The City's Fleet Department historically served as a location where the community could dispose of used motor oil. Since 2002, the City no longer offers disposal at that location. Signs were placed to remind residents of this change. However, the signs had not been updated since 2002 and do not reflect the Environmental Programs logo, phone number, website, or appropriate disposal locations. As a result residents continued to illegally drop off used motor oil and other household hazardous waste at the Fleet gate. The Environmental Programs Division worked with the Fleet Department to develop more appropriate and accurate signs that were installed at the end of FY 06-07.

Training

The Storm Water Protection Program worked with municipal High Priority facilities to improve SWPPPs, spill response plans, and training programs.

During the spring of 2007, the Environmental Specialist I, the Water Conservation Specialist, and the Storm Drain Maintenance Division completed the twenty four hour "Hazardous Waste Operations and Emergency Response Training" in San Diego. This course is designed for employees that are expected to identify and respond to emergency situations involving hazardous materials. Staff was trained to recognize, report, and assist in emergency response. This course fulfills the requirements under OSHA 29 CFR 1910.120.

The City continued the monthly meetings of the Storm Water Committee, with representatives from Public Works, Public Safety, the Building Department, the Planning Department and Recreation. This committee allows the sharing of ideas and issues with storm water pollution prevention, BMPs and training.

A storm water committee specific to the Fire Department consisting of Fire Department staff was created in FY 06-07.

During FY 06-07, the Storm Drain Maintenance Division continued attending the weekly Storm Water Protection Program staff meetings. Their attendance at these coordination meetings has facilitated information sharing and problem solving within the program.

Maintenance and Operations has implemented a "positive reinforcement" program. This program sheds light on staff that are found doing something right, going the extra mile for the team.

Program Improvement Areas

The City will continue to work with Copermittees to address storm channel maintenance activities and to pursue permitting to conduct future maintenance.

Staff at the M&O Facility continues to evaluate and improve BMPs and their effectiveness in order to prevent pollutants from entering the storm drain system.

All affected city departments are working on revising programs and procedures to address new permit requirements applicable in 2008.

Fire facility self inspections are conducted prior to the rainy season (October). In the future, the inspections will be conducted as a two person team consisting of someone from the storm water department and a member of the Fire Department's Storm Water Committee.

Section 3
Industrial Component

3.0 Overview

The City continues to track, inspect, and monitor all industrial facilities within its jurisdiction. Major industry types in Carlsbad include airport services, refuse and sewage management, a power plant, pharmaceutical research and development, golf equipment manufacturers, and several light industry parks. The City has implemented a program to inspect industrial facilities, ensure compliance, and reduce pollutant runoff. During FY 06-07, the City maintained an inventory of 435 industrial facilities.

During FY 06-07, the City updated the industrial inventory, mapped all industries, and inspected **all** high priority industries, 95 medium industries, and 155 low priority industries. There were 44 "High" priority industries on the inventory at the end of FY 06-07. **Of those 44, 42 inspections were required to be conducted and all 42 High Priority industrial sites were inspected in FY 06-07.** The change between 44 inventoried High Priority industrial sites and the 42 inspections conducted was due to one facility going out of business and one facility relocating industrial activities outside the US. The remaining 42 "High" priority industrial sites were inspected in FY 06-07 and represented 36 individual businesses on the Storm Water Inventory.

The total high, medium and low priority inspections conducted in FY 06-07 equaled 294. These 294 inspections not only included physical inspections, but also reviews, phone contacts, and drive by surveillance to determine business status, provide education and outreach materials, and require BMP implementation in accordance with the City ordinance, Permit, and/or General Industrial Storm Water Permit (General Permit). These activities are described in the following subsections.

3.1 Source Identification and Threat to Water Quality Prioritization

Storm water inspectors identify pollution sources, assess their threat to water quality, and require the implementation of BMPs to eliminate sources at industrial facilities. The Storm Water Protection Program works closely with the Finance Department to obtain accurate information about new business activities, types (home based or commercial locations), contacts, and other related data. Each quarter, the Storm Water Protection Program downloads, sorts, maps, and prioritizes these new businesses.

These new businesses are then added to the inventory list and scheduled for inspection. In some cases information provided on business license applications is not correct and other information must be gathered before an inspection can be scheduled. These pre-inspection evaluations help the City determine if a business' activities are subject to the Storm Water Protection Program's inspection requirements. The two types of pre-inspection evaluations the Storm Water Protection Program uses are:

1. Reviews: Business license and other relevant information reviewed to determine whether the businesses should be inspected by the Storm Water Protection Program.
2. Telephone Contacts: If the review fails to provide enough information about the business, the business is contacted by phone to determine their status and schedule an inspection if necessary.

After physical inspections, reviews, or telephone contacts any changes to a business' priority or status were recorded on the Storm Water Inventory List and in the Permits Plus database. The FY 06-07 year-end inventory is in Appendix 3-1. Data related to industrial businesses is managed on a continual basis as per departmental procedures and JURMP requirements. All documents related to industrial businesses

were filed according to priority and status (active, inactive, excluded, or out of business). Appendix 3-2 contains a map of all prioritized industries on the current inventory.

During FY 06-07, the SIC code identification and assignment procedure was again revised to include additional SICs not previously covered by staff review. In addition to adding several SICs, staff found that some businesses had not been prioritized correctly. As a result several businesses previously identified as industrial "low" were moved to the commercial "high" category. At the end of FY 06-07, the inventory included 44 high priority, 173 medium priority, and 218 low priority industries. Table 3.1 provides a summary of industrial facilities by source type. A total of 12 SIC code groupings related to industrial high facilities were identified.

Table 3.1: SIC Groupings by Type, High Priority

Industrial Sector	Ind High
2675: Die-Cut Paper, Paperboard, and Cardboard	1
28XX: Drugs	3
28XX: Chemical and Allied Products	2
2951: Asphalt Paving Mixtures and Blocks	1
3231: Glass Products Made of Purchased Glass	1
36XX: Electronic and Other Electrical Equipment and Components	1
39XX: Miscellaneous Manufacturing	4
4119: Local Passenger Transportation, NEC	2
42XX: Motor Freight Transportation and Warehousing	2
42XX: Public Warehousing and Storage	1
45XX: Transportation By Air	19
49XX: Electric, Gas, and Sanitary Services	7
TOTAL	44

3.2 Pollution Prevention

Pollution prevention activities are proactive approaches industries can take to identify and reduce sources of pollution. Proactive pollution prevention when framed in the context of appropriate BMP identification, use, and maintenance is a key component to improving regional water quality. Pollution prevention measures are specific to industrial types and activities. Industries were informed of pollution prevention opportunities during site inspections, in outreach materials, and through correspondences. City inspectors required the following minimum best management practices (detailed in individual facility inspection reports and/or brochures) for all industrial facilities.

- Move or cover potential pollution sources from storm water contact. Protect materials and products that could potentially pollute storm water from rain, run-on, runoff, and wind dispersal by storing them indoors or covering them, and providing them with secondary containment as needed. For industries with conditional SIC codes, moving stored materials indoors may allow an exemption from the General Permit requirements.
- Use dry cleanup methods. Washing or cleaning activities that involve the use of a water hose or pressure washing system require the use dry clean up methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible).
- Redirect storm water flows and conduct storm drain maintenance. Perform regular visual inspections of the storm drain to identify unauthorized discharges or pollutants and clean as needed. Industries may be required to modify downspout locations in order to redirect storm water flows away from potential pollutant sources.

- Trash Management. Sweep up around dumpsters and other areas to prevent trash and debris from accumulating. Dumpsters must be kept closed when not in use. All trash must be kept in appropriate sized containers until it can be hauled away.
- Recycle, Reduce and Reuse. Recycle cans, bottles, newspaper, office paper, and cardboard whenever possible. When inspecting solid waste collection areas, inspectors noted if recyclable materials (cardboard, green waste, etc.) were placed in dumpsters.

All high priority industries were required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). In addition, some medium and low priority facilities were also required to develop and implement SWPPPs if their activities had the potential to contribute to storm water pollution. These businesses were usually given 60-90 days to develop and submit the SWPPP to the Storm Water Protection Program for review and approval. During follow up compliance inspections, businesses were required to show documentation that the SWPPPs had been implemented as required. If the inspector found deficiencies, the facility operator was required to revise the SWPPP and ensure compliance procedures and BMPs were implemented as outlined in the plan.

The City continued to provide a sample SWPPP template to industries as a guide for preparing site specific plans. The sample SWPPP was also provided upon request when the current SWPPP was found to be deficient.

In July 2006, the City passed a new Special Events Ordinance modeled after similar special event ordinances from other jurisdictions and includes: new application and approval time lines, notification requirements for areas affected by events, updated sign regulations, cost recovery requirements, environmental consideration, and enhanced penalties for violations. Specifically the Special Events Ordinance includes requirements for industrial business that sponsor events to include "run-off containment features" in event planning, recycling and trash management, and all events must be covered by a site and event specific "plan to control water run-off and other contaminants that" have the potential to enter the City's storm drain system. The adoption of the ordinance will help the City better manage resources and ensure compliance with the Permit**.**

3.3 Best Management Practices Implementation

The City required all industries to implement the minimum BMPs and specific BMPs applicable to specific industrial activities. BMP information was made available during inspections, in printed materials and direct mailings, at workshops, on the storm water website and hotline, during presentations, and at outreach events. A complete listing of all education and outreach events held during FY 06-07 can be found in Section 9 of this report.

Printed Material and Direct Mailings
During FY 06-07, the City continued to distribute the "*Best Management Practices for Businesses – Commercial and Industrial*" brochure containing the list and description of the required minimum BMPs. Over 300 of these brochures were distributed during FY 06-07.

Inspections and Site Visits
Industrial operators select and implement appropriate source and treatment control BMPs as directed by the Storm Water Protection Program, City Planning Department, and/or City Engineering Department. BMPs are considered effective if they address the pollutants of concern and are specific enough to prevent or reduce the likelihood of an illegal discharge. The City may require BMP implementation based on problems identified during site inspections. All industrial facilities were required to implement minimum BMPs, those identified for specific industrial activities, or as directed by the City.

Website and Hotline

Information about water conservation, trash management, and storm water are combined on centralized hotline and web page accessed at www.carlsbadconserves.org. The hotline is answered by Storm Water Protection Program staff during business hours and provides a detailed voice message after hours. In addition, outreach materials continue to be revised to include the Environmental Program's hotline number, storm water hotline number, and web page address. Industries can call the hotline to request BMP information or download the information from the Environmental Programs and the Storm Water Protection Program web pages. During FY 06-07, there were 40,805 hits on the Environmental Programs web page.

The Storm Water Protection Program and Environmental Programs Division worked with the Information Technology Department to revise the Environmental Programs web page and provide updated information about storm water BMPs during FY 06-07. The webpage now includes all fact sheets and BMP brochures produced by the Storm Water Protection Program, new links to related web pages, and additional information about storm water pollution prevention.

BMP and Knowledge Assessment Tools

In FY 06-07, the Storm Water Protection Program continued to use the *BMP and Knowledge Assessment* tool to measure an individual industrial operator's knowledge of storm water issues and assess the implementation of BMPs onsite. The assessment tool is used by inspectors during site visits where industrial operators are rated using the following criteria:

Overall Knowledge Assessment

For Knowledge Assessment, inspectors rank personnel from 1-5 per the following scale:

Level 1: Individual has never heard of the storm water program, requirements, or BMPs. This individual does not know what BMPs are or understand how to implement them.

Level 2: Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.

Level 3: Individual has a general understanding of storm water issues ("*I've heard something about that*"), but not specific storm water requirements or BMPs required for the facility.

Level 4: Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.

Level 5: Individual demonstrated an in-depth knowledge of the storm water program and BMPs consistent with the facility's activities and operations.

Overall BMP Assessment

For BMP Assessment, inspectors rank the facility from 1-5 per the following scale:

Level 1: An illegal discharge was noted during the inspection. Enforcement actions such as a NOV and/or citation are required.

Level 2: BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or written warning was issued.

Level 3: BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal warning was issued. A detailed inspection report or written Warning Notice may follow.

Level 4: BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices (i.e., dumpsters open, leaves in the parking lot, etc.) were noted during the inspection.

Level 5: All BMPs implemented effectively. No violations noted during the inspection.

Table 3.2: Industrial Businesses Rated for Each Score

Rating	Knowledge Assessment (raw score)	Knowledge Assessment (%)	BMP Implementation (raw score)	BMP Implementation (%)
1	2	0%	1	.5%
2	12	2%	3	2%
3	14	10%	40	24%
4	24	18%	65	38%
5	95	70%	60	35.5%
Total	135	100%	169	100%

Table 3.2 shows the number of instances in raw score and percentage that industrial businesses rated for each score, with 5 being the highest score possible. There were a total of 135 businesses assessed for Knowledge and 169 assessed for BMP implementation. The number of BMP Assessments collected is usually higher than the number of Knowledge Assessments collected, because on at least 34 occasions, a company representative was not available to complete the Knowledge Assessment. According to the results of the Knowledge Assessment, 98% of the businesses surveyed had at least a general understanding (score above Level 3) of storm water issues, which is greater than the 85% reached in FY 05-06. This assessment shows that the City's efforts to educate industrial business about storm water issues have been successful. As far as BMP implementation, the results show that the City continues to be successful in ensuring that the businesses have implemented BMPs throughout the sites at least 97.5% of the time. This is also an improvement over FY 05-06 which showed that industrial businesses had implemented BMPs throughout the site 86% of the time. The City will continue to work with businesses to not only educate them about storm water issues, but also ensure BMPs are implemented and maintained.

3.4 Industrial Monitoring Program

The Regional Board requires regulated industries to conduct monitoring as outlined in the General Permit. The Carlsbad Municipal Code also allows the City to require non-permitted facilities to conduct monitoring. Permitted facilities are required by the State to maintain self-audit reports, SWPPPs, monitoring reports, and annual reports onsite.

In response to the Regional Board's September 18, 2007 FY 05-06 JURMP Annual Report review comment #4:

The City ensures that annual water quality monitoring is conducted at each high priority industrial facility by reviewing monitoring results during annual inspections to verify that monitoring was conducted as required. If and when monitoring was not completed as required the City issued NOVs and notified the Regional Board of non-compliance issues. Specifically, in FY 05-06 one NOV was issued to a High

Priority industrial facility for lack of sampling results, and it was referred to the Regional Board for followup. A description of corrective actions and follow up enforcement actions for FY 05-06 can be found in Table 3.3 of the FY 05-06 City of Carlsbad Annual report.

City inspectors reviewed monitoring results during inspections to verify that monitoring was conducted as required. The monitoring results, when available, were entered into a database so that annual comparisons could be made. A spreadsheet has been developed to track monitoring results received from regulated industrial facilities. The spreadsheet was revised during FY 06-07 and contains enough results to provide feedback to industries. During FY 06-07, the City analyzed monitoring results, made comparisons, and provided recommendation to those industrial facilities that exceeded benchmark values. These recommendations included, but were not limited to, SWPPP revisions, implementation of new BMPs, reinforcement of implemented BMPs, and increased employee training. In addition, one high priority industrial facility was issued an NOV and referred to the Regional Board for follow up for not conducting sampling.

The City will continue to annually inspect the high priority industries, collect monitoring data, and provide feedback to industries on the effectiveness of the monitoring program and BMPs. If benchmark values routinely exceed the established parameters, the City will follow up with written notification to the facility and Regional Board and require corrective actions and/or additional BMPs to prevent or reduce the identified pollutant at its source.

3.5 Inspection of Industrial Sites

All high priority industrial sites were inspected by the City during FY 06-07. In addition, the City conducted industrial inspections at approximately 67.6% of all the prioritized facilities in accordance with the program described in the JURMP. Medium and low priority industries were inspected in response to a complaint or as needed. More frequent inspections or follow-ups were conducted for sites found to be non-compliant or placed on a compliance schedule.

Each month, several businesses were selected from the master inventory list for inspection and/or review. The City usually conducted unscheduled, follow-up, and compliance inspections at businesses that had been previously inspected. If a new business could not be excluded by review or telephone survey, then a site visit was scheduled and a comprehensive inspection conducted. Inspections were scheduled within two weeks of contacting the business.

Telephone surveys continue to determine status of home-based businesses listed as low priority industries on the inventory. Twenty-eight businesses initially identified as high, medium, or low industries were surveyed by phone. In most cases, this screening procedure determined that the wrong SIC code had been assigned during the business license application process. Home-based businesses are not typically true manufacturing facilities. In addition, City code prohibits home-based business from conducting activities outdoors or storing materials outdoors. If a business was excluded from additional inspection or regulation, the City followed up with correspondence that included a listing of the minimum BMPs required for all businesses as well as any specific industrial activity related BMPs.

In addition to physical inspections and telephone surveys, the City also reviewed (including home based businesses) 97 industries during FY 06-07. During the review process, the inspector evaluated the industry using relevant information from other City departments, databases, or licensing programs. A business could be excluded during the review process if it was found that their activities were not regulated by the City or General Permit. The most common reason businesses were excluded was because of an incorrect SIC code designation. Of the 97 businesses reviewed in FY 06-07, 3 had moved, 8 were found to be out of business, 69 were found to be active, 7 were duplicate entries, 10 were excluded

or did not require additional inspection. If the business was found to be active and not a home-based location, a physical inspection was conducted to assess potential threat to water quality. Appendix 3-1 includes the name, location, SIC, priority, and types of industrial inspections conducted in FY 06-07.

3.6 Enforcement of Industrial Sites

The City conducted follow-up inspections to determine compliance with the corrective actions outlined in the inspection report or enforcement notices. The City continued to use the Notice to Clean form and NOV form developed in FY 05-06 to facilitate prompt and proactive response from businesses.

During FY 06-07, the City responded to 2 complaints of illegal discharges originating from industrial sites or activities. When a storm water complaint was received about an industrial site or source, or an illegal discharge was observed or suspected, the City conducted a storm water inspection or investigation. If a significant and/or immediate threat to water quality was observed, appropriate actions were taken to require the responsible party to immediately cease the discharge and/or implement corrective actions. In judging the degree of severity, City inspectors also took into account any history of similar incidents or discharges. Table 3.3 includes a summary of corrective actions required by the City after inspections at high priority industrial facilities. This table also includes 36 independent businesses which represent 42 different high priority locations inspected as required during FY 06-07.

Table 3.3: Summary of Inspections, Corrective and Enforcement Actions Required at High Priority Industrial Facilities in FY 06-07.

Business Name	Insp. Date	Corrective Actions If Required FY 06-07	Enforcement Action
1. Randall International	08/29/06	Revise and update SWPPP. Provide records of employee training. Ensure samples are collected using established protocols. Identify sources of nitrates and zinc in collected samples.	NOV, Referred to RWQCB
2. Acushnet Company	08/29/06	Regularly sweep outdoor areas. Clean in and around storm drains. Replace filters as needed.	None
3. Legoland	08/31/06	No violations noted during the inspection.	None
4. NRG Cabrillo Power Operations	08/30/06	Protect materials stored outdoors.	None
5. Hawthorne Rent-It Service	09/12/06	Discard unusable equipment and materials. Protect materials stored outdoors. Ensure all employees are trained on storm water. Provide documentation of employee training for FY 05-06.	None
6. Isis Pharmaceuticals	09/16/06	No violations noted during the inspection.	None
7. Hanson Aggregates	09/21/06	No violations noted during the inspection.	None
8. Graphic Converting, Inc.	10/16/06	Clean in and around storm drains. Ensure all employees are trained on storm water. Regularly sweep outdoor areas.	None
9. Olivenhain Municipal Water District	10/17/06	A SWPPP must be developed and retained onsite. Regularly inspect and sweep outdoor areas. Protect materials stored outdoors. Clean in and around storm drains. Discard unusable materials and equipment. Use lead-acid batteries must be stored in sealed containers. Properly store hazardous materials. Keep dumpsters closed when not in use. Ensure all employees are trained on storm water.	None
10. Melles Griot Laser Division	11/28/06	Regularly sweep outdoor areas. Protect materials stored outdoors. Clean storm drain in the loading bay. Ensure all employees are training on storm water.	None

Business Name	Insp. Date	Corrective Actions If Required FY 06-07	Enforcement Action
11. Beckman Coulter	10/23/06	No violations noted during the inspection.	None
12. Callaway Golf Ball[1] Company	12/11/06	Regularly inspect outdoor areas and sweep up debris.	None
13. Schumacher Company	12/06/06	Properly store hazardous materials. Regularly sweep outdoor areas. Discard unusable equipment and materials Clean in and around storm drains. Update SWPPP as appropriate Label hazardous materials as required by law.	Verbal Warning
14. La Costa Limousine	01/31/07	Regularly inspect outdoor areas. Keep dumpsters closed when not in use.	None
15. Meadowlark Water Reclamation Facility	12/13/06	No violations noted during the inspection.	None
16. Allied Waste Company	12/12/06	No violations noted during the inspection.	None
17. Waste Management	12/12/06	No violations noted during the inspection.	None
18. Mercy Air	03/08/07	No violations noted during the inspection.	None
19. McClellan-Palomar Airport	03/08/07	Ensure tenants are trained on storm water requirements. Protect materials stored outdoors.	None
20. Express Air Aviation	03/08/07	No violations noted during the inspection.	None
21. Leading Edge Aviation	03/08/07	No violations noted during the inspection.	None
22. A&P Aircraft Detailing	03/08/07	No violations noted during the inspection.	None
23. Aero Pacific	03/08/07	No violations noted during the inspection.	None
24. Civic Helicopters	03/08/07	No violations noted during the inspection.	None
25. Barnstorming Adventures	03/08/07	No violations noted during the inspection.	None
26. Hanger One Inc.	03/08/07	No violations noted during the inspection.	None
27. Jet Source Inc.[2]	03/08/07	No violations noted during the inspection.	None
28. Palomar Airport Center	03/08/07	No violations noted during the inspection	None
29. Quality Aircraft Care	03/08/07	No violations noted during the inspection.	None
30. West Coast Jet Services	03/08/07	No violations noted during the inspection.	None
31. Western Flight[3]	03/08/07	No violations noted during the inspection.	None
32. Federal Express Corporation	04/25/07	No violations noted during the inspection.	None
33. Encina Waste Water Facility	04/11/07	No violations noted during the inspection.	None
34. Leucadia Waste Water District	05-17-07	No violations noted during the inspection.	None
35 North Coastal (Palomar) Landfill	06/22/07	No violations noted during the inspection.	None
36. Aalto Scientific Ltd	06-06-07	Sweep up trash and debris in outdoor areas Store metal products/parts in covered areas only.	NOV

The Enforcement Response Plan continued to be used by City inspectors to identify, document, and respond to storm water violations. See the City's *Enforcement Response Plan* (FY 01-02 JURMP Annual Report) for a detailed description of the typical escalating enforcement procedures.

[1] Includes three Callaway Golf high priority facilities.
[2] Jet Source represents 4 high priority industrial locations.
[3] Western Flight represents two high priority industrial locations.

The Storm Water Protection Program had three full-time environmental specialists and one part-time intern to conduct inspections in FY 06-07. In addition to completing the Peace Officer Orientation II Laws of Arrest Course (40 hours of a POST certified course pursuant to Section 832(a) of the California Penal Code), the Environmental Specialists are continually trained on code enforcement, inspection procedures, laws and regulations, and investigation techniques. Storm Water Protection Program staff attended the following training during FY 06-07:

- July 2006 Storm Com, Denver, Co
- September 2006 Incident Command System, Carlsbad, Ca
- September 2006 CASQA Conference, Sacramento, Ca
- January 2007 Hazardous Waste Operations and Emergency Response, San Diego, Ca
- May 2007 24 Hour HAZWOPER, San Diego, Ca.
- June 2007 Storm Com, Woodland Hills, Ca

These training courses, in addition to the Enforcement Response Plan, helped the Storm Water Protection Program appropriately identify and respond to storm water violations. The City took a total of 14 enforcement actions against industrial facilities during FY 06-07. These are listed in Table 3.4.

Table 3.4. Number of Industrial Enforcement Actions in FY 06-07

Industrial Priority	Verbal Warning	Written Warning	Notice of Violation	Notice to Clean	Administrative Citation
High	2	0	2	0	0
Medium	2	4	3	0	0
Low	0	0	0	1	0
Totals	4	4	5	1	0

Escalated enforcement actions were taken when necessary to achieve compliance. In some cases, an informational letter or written warning was escalated to a NOV if compliance was not achieved with the first action. More detailed information on complaint response and illegal discharge investigations is found in Section 8. The following is a discussion of the NOVs issued to high priority industrial facilities during FY 06-07.

Aalto Scientific

Aalto Scientific has been covered under the General Permit since 2004 (WID 9-37I019035). The SIC code currently assigned to Aalto Scientific is 2835 (In Vitro and In Vivo Diagnostic Substances). Aalto Scientific staff had previously implemented a number of BMPs throughout the facility to prevent the discharge of pollutants to the storm drain conveyance system. However, during the FY 05-06 inspection City staff found that BMPs had not been maintained. In addition, Aalto Scientific was not able to provide documentation of key components of the SWPPP.

On July 7, 2006, the City issued a NOV to Aalto Scientific requiring immediate corrective action to address the storm water violations observed during the inspection. On August 8, 2006, the City received correspondence from Aalto Scientific documenting the implementation of corrective actions. Follow-up inspections to verify compliance are regularly conducted at this facility.

Randall International

As a mandatory industry Randall International is required to comply with the requirements of the General Industrial Permit. However, because of several organizational changes they have not been able to maintain compliance with the General Industrial Permit. On August 29, 2006, the City conducted an annual compliance inspection of Randall International and found that staff could not provide

documentation that the storm water program had been implemented as required by the General Industrial Permit.

On August 31, 2006, a NOV was sent to Randall International requesting documentation of the SWPPP, Monitoring Plan, storm water sampling results, and employee training program. The inspection report required a response by September 11, 2006. On September 12, 2006, Randall International responded to the NOV stating that the requested documents had been developed and will be continuously maintained.

3.7 Non-Compliance Notification Action Plan

All industrial facilities were required to maintain compliance with the Carlsbad Municipal Code and the JURMP, as applicable to their operations. The City forwarded copies of all correspondences and actions pertaining to high priority industries to the Regional Board. Actions related to medium priority sites were also forwarded to the Regional Board if the facility was considered non-compliant or if the filing status needed to be documented (i.e. recommended NOI filer or NONA certification required). If an incident or practice of non-compliance occurred at an industrial facility, City inspectors determined if it posed a threat to human or environmental health by considering the following criteria:

- Characteristics, quantity, and toxicity of substances/materials involved;
- Proximity of site to a sensitive water body;
- Proximity of site to an impaired water body;
- Proximity of site to a sensitive habitat/endangered species;
- Estimated volume of actual and/or potential discharge; and
- If discharges to storm drain, condition of storm drain (clog, etc.).

If an incident of non-compliance was determined to pose a threat to human or environmental health (in conjunction with the Carlsbad Fire Dept.) the City provided verbal notification to the Regional Board within 24 hours, followed by a written report within 5 days. There was one incident of this nature that occurred during FY 06-07 that is described next.

On November 14, 2006, the City received a complaint investigation request from the RWQCB (ID Number - 176) regarding an illicit discharge from the NRG Cabrillo Power Station (NRG). The complaint investigation request was sent directly to the Storm Water Manager, who sent a preliminary response to the RWQCB notifying them that a case had been opened and that the investigation had begun. The City contacted the NRG Cabrillo Power Station and was informed that on November 13, 2006 at approximately 5:30pm, NRG staff observed a white foamy material discharging from the 96 inch storm drain outfall located on the north side of the property. Although the discharge appeared to be small in quantity it spread to several areas within 150 feet of the outfall. The substance dissipated before reaching the ocean outfall. NRG staff conducted an upstream investigation and could not find the source of the discharge. On the morning of November 14, 2006, the discharge was not observed in or around the outfall. NRG staff conducted another upstream investigation and again did not observe the substance.

The City conducted a follow up site visit and investigation of the discharge on November 15, 2006. NRG representatives escorted City inspectors through the site, starting at the outfall and upstream through the NRG property boundaries. No illicit discharges were observed by the City inspectors. The City inspectors also checked the storm drain boxes upstream and outside the property line, located on the south side of NRG. Three storm drains were checked and no discharges were observed. In addition, Cannon Lake was checked and no unusual observations were made. The RWQCB was notified of the results of the investigation on November 17, 2006, and since no evidence of the discharge was observed, no follow up actions took place.

3.8 Self-Assessment

Program Strengths

The City added a new Environmental Specialist I position to the department in FY 06-07. In addition, an existing vacant position for a Senior Environmental Specialist was also filled.

Storm Water Protection Program procedures were reviewed and revised during FY 06-07 to include detailed information about work activities, project documentation, filing, SIC Code assignments, inventory management, and complaint response. All Storm Water Protection Program staff were trained on the revised procedures. The procedures will continue to be reviewed annually to ensure they are the most effective and efficient means of program management and compliance. As a result of the procedure reviews, the City found that several "low" priority industrial businesses had been incorrectly prioritized. During the year corrections were made and several of these businesses were moved to the correct designation of commercial "high."

The Storm Water Protection Program and Environmental Programs Division worked with the Information Technology Department to revise the Environmental Programs web page and provide updated information about storm water BMPs. The webpage now includes all fact sheets and BMP brochures, links to related webpages, and additional information about storm water pollution prevention.

The revised streamlined inspection report created in FY 05-06 continued to be used throughout FY 06-07 and was an effective and prompt means to have industries implement corrective actions. The revised streamlined inspection form now includes spaces to report previous enforcement actions, new storm water contacts, and a detailed list of necessary corrective actions.

The Storm Water Protection Program continues to use the effectiveness assessment measures for industrial businesses. This includes both knowledge and BMP implementation assessment conducted by the inspector. According to the results of the *Knowledge Assessment* in FY 06-07, 98% of the industrial businesses surveyed had at least a general understanding of storm water issues that is an increase of 13% over FY 05-06. This assessment shows that the City's efforts to educate industrial businesses about storm water issues have been successful. The *BMP Assessment* results for FY 06-07 show that the City has been successful in ensuring that BMPs had been implemented at least 97.5% of the time. This is also an improvement over 05-06 which showed that industrial businesses had implemented BMPs throughout the site 86% of the time.

The City continued to maintain regular communications with the Industrial Compliance Unit of the Regional Board. In addition to forwarding copies of inspection reports and other correspondence with high and medium industries, the City regularly coordinated compliance issues with the Regional Board over the phone and through emails. On several occasions, the Regional Board expressed their appreciation of the City's professionalism, responsiveness, and implementation of the storm water program.

In July 2006, the City passed a new Special Events Ordinance modeled after similar special event ordinances from other jurisdictions and includes: new application and approval time lines, notification requirements for areas affected by events, updated sign regulations, cost recovery requirements, environmental consideration, and enhanced penalties for violations. Specifically, the Special Events Ordinance includes requirements for industrial business that sponsor events to include "run-off containment features" in event planning, recycling and trash management, and all events must be covered by a site and event specific "plan to control water run-off and other contaminants that" have the potential

to enter the City's storm drain system. The adoption of the ordinance will help the City better manage resources and ensure compliance with the Permit**.**

The City continued to distribute the "*Best Management Practices for Mobile Service Providers*" brochure to all applicable businesses and residents. The brochure was specifically designed to provide BMP guidance to residents, industrial businesses that use mobile service providers, and mobile business that provide services at off-site locations.

The City continued to recruit interns from local universities to work with storm water staff. During FY 06-07, the Storm Water Protection Program had one intern working on various projects, including industrial inspections, data management, water quality monitoring, and outreach and education. Their assistance with inspections, monitoring data entry, and investigations increased productivity and helped the program achieve inspection goals.

During FY 06-07, Waste Management continued to identify problem trash and recycling areas and forward information quarterly to the City for additional enforcement. When trash violations are noted at industrial facilities, City inspectors followed up either during the next scheduled inspection or immediately, depending on the severity of the complaint. This program has been beneficial in tracking businesses with continuous trash problems and initiating enforcement actions for those egregious violators.

The Storm Water Protection Program staff continued to work with the City Attorney's office to revise the ordinance to reflect current enforcement levels and mechanisms. Revision and Council approval occurred in early FY 07-08.

Program Improvement Areas

In late FY 05-06, the Storm Water Protection Program began drafting a "*Best Management Practices Manual*" that includes the minimum and required BMPs for activities and pollutant sources. The manual was worked on during FY 06-07 and should be completed in FY 07-08.

During FY 06-07, staff continued to revise the brochures and fact sheets and update them to reflect changes in the program.

The Regional Board is currently revising the language and procedures outlined in the General Industrial Permit. When the General Industrial Permit is reissued, the City intends to host a workshop in conjunction with Regional Board staff for all industries in Carlsbad to discuss the new General Industrial permit guidelines, compliance issues and address any concerns businesses might have about the new permit.

All affected city departments are working on revising programs and procedures to address new permit requirements applicable in January of 2008.

Section 4
Commercial Component

4.0 Overview

The City continues to track, inspect, and monitor high priority commercial businesses within its jurisdiction. Major commercial types in Carlsbad are automobile maintenance, restaurants, shopping centers, pressure washing, masonry and concrete work, carpet cleaning, and landscape services. These high priority activities have the potential to generate significant amounts of pollutants, if performed with disregard to the environment. The City has implemented a program to inspect high priority facilities, ensure compliance with applicable regulations, and reduce pollutant runoff from commercial sites and sources. During FY 06-07, the City maintained an inventory of 628 commercial businesses.

During FY 06-07, the City updated and prioritized the commercial inventory, mapped all high priority commercial facilities, and inspected 385 high priority commercial businesses. Inspections not only included physical inspections, but also reviews, phone contacts, and drive bys all in an effort to conduct education and outreach, obtain compliance, ensure BMP implementation, and use escalated enforcement actions, when necessary. These activities are further described in the following subsections.

4.1 Source Identification and Threat to Water Quality Prioritization

Storm water inspectors identify pollution sources, assess the potential threat to water quality, and require BMP implementation to eliminate pollution sources from commercial businesses. Each year hundreds of new businesses are established in Carlsbad. The Storm Water Protection Program works closely with the Finance Department to obtain information about new businesses, including activities, SIC codes and descriptions, business types, and contact names and numbers. Each quarter the Storm Water Protection Program downloaded, sorted, mapped, and prioritized new businesses by SIC and business type.

These new businesses were then added to the inventory list and scheduled for inspection. In some cases information provided on business license applications was not correct and a pre-inspection evaluation was necessary. Pre-inspection evaluations helped determine if a business' activities were subject to storm water requirements. Two types of pre-inspection evaluations were used:

1. Reviews: Business license information and other relevant data was+ reviewed to determine whether the business should be inspected and tracked by the Storm Water Protection Program.
2. Telephone Contacts: If the review fails to provide enough information, the inspector will contact the business by phone to determine their status and schedule an inspection if necessary.

After physical inspections, reviews, or telephone contacts, any changes to a business' priority or status was recorded on the Storm Water Inventory List and/or in the Permits Plus database. New businesses were also found by referral from other agencies, field discovery, or business directories. The updated FY 06-07 year end commercial inventory can be found in Appendix 4-1.

Data related to commercial businesses is managed on a continual basis per departmental procedures and JURMP requirements. All documents related to commercial businesses were filed according to status (active, inactive, excluded, or out of business). Appendix 4-2 contains a map of all high priority commercial facilities on the FY 06-07 inventory. Because restaurants and automotive facilities represent the largest commercial groups, the map contains separate symbols for the locations of these facilities.

At the end of FY 06-07, the inventory included 628 high, commercial businesses. This compares to 499 high priority commercial businesses identified at the beginning of the reporting year. The high priority commercial businesses on the inventory continue to be reviewed in response to complaints and as resources become available. As a part of the City's watershed activities, staff conducted inspections at 88% of all restaurant facilities during FY 06-07.

During FY 06-07, the SIC code identification and assignment procedure was again revised to include additional SICs not previously covered by staff review. In addition to adding several SICs, staff found that some businesses had not been prioritized correctly. As a result several business previously identified as industrial "low" were moved to the commercial "high" category. Table 4.1 provides a summary of commercial business by sources type. A total of 24 SIC code groupings related to high priority commercial activities were identified.

Table 4.1 - Summary of Commercial Businesses for Source Types

Commercial Activity	# On Inventory
01XX: Agricultural Production Crops	**13**
02XX: Agricultural Production Livestock and Animal Specialties	**1**
07XX: Agricultural Services	**47**
1521: General Contractors	**30**
1531: Operative Builders	**2**
17XX: Construction Special Trade Contractors	**80**
5032 – Tile Cutting	**1**
51XX: Wholesale Trade Non-Durable Goods	**7**
5211: Lumber Services	**1**
5231: Wholesale Paint, Glass, and Wallpaper	**1**
5261: Retail Nurseries	**3**
53XX: General Merchandise Stores	**4**
54XX: Food Stores	**20**
55XX: Automotive Dealers and Gasoline Service Stations	**49**
58XX: Eating and Drinking Places	**176**
5912: Drug Stores and Proprietary Stores	**3**
5943: Stationary Store	**1**
5963: Direct Selling Establishments	**1**
65XX: Real Estate	**14**
7011: Hotels and Motels	**6**
72XX: Dry Cleaning Plants and Laundry Services	**5**
7217: Carpet and Upholstery Cleaning	**13**
73XX: Business Services	**74**
75XX: Automotive Services Repair and Parking	**60**
76XX: Repair Shops	**4**
79XX: Amusement and Recreation Services	**11**
8059: Nursing Homes	**1**
TOTAL	**628**

Table 4.1 shows that the greatest number of commercial sources of pollution may be from restaurants. Restaurants contribute to storm water pollution through improper housekeeping practices that allow grease, trash, and cleaning products to discharge to streets and the storm drain system. Because restaurants have been identified as a significant pollutant source, the Storm Water Protection Program has intensified efforts to provide BMP information, conduct unscheduled inspections, and escalate

enforcement actions, when necessary. Of the 176 active restaurants on the end of year inventory, 155 were physically inspected by the Storm Water Protection Program in FY 06-07.

4.2 Pollution Prevention

Pollution prevention activities are proactive approaches commercial businesses can use to identify and reduce pollution sources. Proactive pollution prevention, when framed in the context of appropriate and specific BMP identification and maintenance, is key to improving regional water quality. The City's approach is to promote pollution prevention and BMP implementation to the maximum extent practicable. The City encouraged the use of BMPs during inspections, public events, in outreach materials, through direct mailings, and at workshops. City inspectors required the following minimum BMPs for all commercial businesses:

- Move or cover potential pollution sources from storm water contact. Protect materials and products that could potentially contribute to storm water pollution by storing them indoors or covering them, and providing them with secondary containment as needed.
- Use dry cleanup methods. Washing or cleaning activities that involve the use of a water hose or pressure washing system were required to use dry clean up methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible).
- Redirect storm water flows and conduct storm drain maintenance. Perform regular visual inspections of the storm drain to identify unauthorized discharges or pollutants and clean as needed. An commercial facility may be required to modify downspout locations in order to redirect storm water flows away from potential pollutant sources.
- Trash Management. Sweep up around dumpsters and other areas to prevent trash and debris from accumulating. Dumpsters must be kept closed when not in use. All trash must be kept in appropriate sized containers until it can be hauled away.
- Recycle, Reduce and Reuse. Recycle cans, bottles, newspaper, office paper and cardboard whenever possible. When inspecting solid waste collection areas, inspectors noted if recyclable materials (cardboard, green waste, etc.) were placed in dumpsters and recycled.

SWPPPs were encouraged and/or required for commercial businesses based on inspection findings and potential threat to water quality. Commercial businesses were usually given 60-90 days to develop and submit the SWPPP to the Storm Water Protection Program for review and approval. During follow up compliance inspections, businesses were expected to provide documentation that the SWPPP had been implemented as required. If the inspector found deficiencies, the business was required to revise the SWPPP and ensure procedures and BMPs were implemented as outlined in the plan. The City continued to provide the sample SWPPP to commercial businesses as a guide for preparing site specific plans. The sample SWPPP was also provided upon request or when the current SWPPP was found to be deficient.

In July 2006, the City passed a new Special Events Ordinance modeled after similar ordinances from other jurisdictions. The new Special Event Ordinance includes new application and approval time lines, notification requirements for areas affected by events, updated sign regulations, cost recovery requirements, environmental considerations, and enhanced penalties for violations. Specifically, the Special Events ordinance requires 3commercial businesses that sponsor events to include "run-off containment features" in event planning, recycling and trash management, and site and event specific "plans to control water run-off and other contaminates that" have the potential to enter the City's storm drain system. The adoption of the ordinance will help the City better manage resources and ensure compliance with the Permit.

4.3 Best Management Practices Implementation

The City required high priority commercial businesses to implement the minimum BMPs and specific BMPs applicable to each activity and pollutant source. BMP information was made available during inspections, in printed materials, at workshops, on the website and hotline, and at outreach events. A complete listing of all outreach and education events held during FY 06-07 is in Section 9.4 of this report.

Printed Materials and Direct Mailings

During FY 06-07, the City continued to distribute the "*Best Management Practices for Businesses – Commercial and Industrial*" brochure containing the list and description of the minimum BMPs. This brochure was distributed to all commercial businesses during inspections and by direct mail to businesses that the City verified from the inventory. Over 200 of these brochures were distributed during FY 06-07.

The City continued to distribute the "Best Management Practices for Mobile Service Providers" brochure developed in FY 05-06. The brochure was designed for mobile service provides such as carpet cleaners, plumbers, pressure washers, mechanics, porta-potty services, their employees, and anyone that hires a mobile service provider. During FY 06-07, the "*Best Management Practices for Mobile Service Providers*" brochure was mailed to every applicable commercial business on the storm water inventory.

The City also continued to distribute the "*Pollution Prevention Guide for the Construction Industry*." This brochure was developed to provide BMP and pollution prevention information related to materials storage, perimeter controls, building and staging areas, dumpsters and port-a-potty services, concrete trucks and pumpers, washout areas, and storm drain protection. The brochure was distributed to commercial businesses that conduct small remodeling or home improvement projects.

Inspections and Site Visits

Commercial businesses select and implement source and treatment control BMPs as directed by the Storm Water Protection Program, Planning Department and/or the Engineering Department. BMPs are considered effective if they address the pollutants of concern and are specific enough to prevent or reduce the likelihood of an illegal discharge. The City may require BMPs based on problems identified during site inspections. All commercial businesses were required to implement the minimum BMPs, those identified for specific commercial activities, or as directed by the City.

During FY 06-07, the City continued to use the streamlined inspection report to facilitate prompt correction of violations. The streamlined inspection form includes space to report previous enforcement actions, new storm water contacts, and a detailed list of necessary corrective actions. Detailed inspection reports also continue to be used for businesses that have not been previously inspected or if the facility requires a more complex inspection (i.e. high priority facilities, egregious violators). If corrective actions were required, follow-up inspections were conducted to verify compliance.

Website and Hotline

Information about water conservation, trash management, and storm water are combined on one centralized hotline and web page accessed at www.carlsbadconserves.org. The hotline is answered by the Storm Water Protection Program during business hours and provides a detailed voice message after hours. In addition, outreach materials continue to be revised to include the Environmental Program's web page address and hotline number. During FY 06-07, there were 40,805 hits on the Environmental Programs web page.

The Storm Water Protection Program and Environmental Programs Division worked with the Information Technology Department to revise the Environmental Programs web page and provide updated

information about storm water BMPs. The webpage now includes all fact sheets and BMP brochures, links to related web pages, and additional information about storm water pollution prevention.

Workshops

The City sponsored a four-week training opportunity for residents and lawn and garden professionals. The "*Master Composter Training Course,*" was held on consecutive Saturdays between February 24 and March 17, 2007. The Storm Water Protection Program distributed a flyer, information letter, and lawn and garden BMPs to all landscape and garden care businesses in Carlsbad.

BMP and Knowledge Assessment Tools

The Storm Water Protection Program continued to use the *BMP and Knowledge Assessment* to measure knowledge of storm water issues and assess the implementation of BMPs onsite. The assessment tool rated a commercial operator and site using the following criteria:

Overall Knowledge Assessment:

Inspectors rank personnel from 1-5 per the following *Knowledge Assessment* scale:

Level 1: Individual has never heard of the storm water program, requirements, or BMPs. This individual does not know what BMPs are or understand how to implement them.

Level 2: Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.

Level 3: Individual has a general understanding of storm water issues ("*I've heard something about that*"), but not specific storm water requirements or BMPs required for the facility.

Level 4: Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.

Level 5: Individual demonstrated an in-depth knowledge of the storm water program and BMPs consistent with the facility's activities and operations.

Overall BMP Assessment

Inspectors rank the facility per the following 1-5 *BMP Assessment* scale:

Level 1: An illegal discharge was noted during the inspection. Enforcement actions such as a NOV and/or citation are required.

Level 2: BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or written warning was issued.

Level 3: BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal warning was issued. A detailed inspection report or written Warning Notice may follow.

Level 4: BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices (i.e., dumpsters open, leaves in the parking lot, etc.) were noted during the inspection.

Level 5: All BMPs implemented effectively. No violations noted during the inspection.

Table 4.2: Commercial High Businesses Rated for Each Score.

Rating	Knowledge Assessment (raw score)	Knowledge Assessment (%)	BMP Implementation (raw score)	BMP Implementation (%)
1	2	1	9	4
2	10	6	24	11
3	52	33	33	14
4	55	35	70	31
5	40	25	88	40
TOTAL	159	100%	224	100%

Table 4.2 shows the number of instances in raw score and percentage that commercial high businesses rated for each score, with 5 being the highest score possible. There were a total of 159 businesses assessed for Knowledge, and 224 assessed for BMP implementation. The number of *BMP Assessments* collected is usually higher than the number of *Knowledge Assessments* collected, because on at least 64 occasions, a company representative was not available to complete the *Knowledge Assessment*. According to the results of the Knowledge Assessment, 93% of the businesses surveyed had at least a general understanding of storm water issues that is an increase of 11% over FY 05-06. BMP implementation results show that the City has been successful in ensuring that businesses implement BMPs throughout the sites at least 85% of the time. The City will continue to work with businesses to not only educate them about storm water issues, but also ensure BMPs are implemented and maintained.

4.4 Inspection of Commercial Sites

The City conducted high priority commercial inspections at approximately 62% of all prioritized commercial businesses in accordance with the program guidelines described in the JURMP. Site visits, reviews, and telephone contacts were the primary methods used to educate and ensure storm water compliance at commercial businesses. The City conducted inspections of commercial businesses on a complaint basis and as time and resources became available.

The City physically (excludes reviews, phone surveys, and drive bys) inspected 222 commercial businesses in FY 06-07. Storm water staff also reviewed, phoned, or conducted investigations at an additional 163 commercial facilities for a total of 385 businesses inspected during FY 06-07. At the end of the fiscal year there were 628 commercial businesses on the storm water inventory. Of these, 33 were found to be out of business, 10 had moved out of the City, 12 were duplicate entries, 5 were excluded (based on several qualifying factors including SIC Code, location, business type, and probability to contribute to storm water pollution), 440 were active, and 128 had not been reviewed.

A large percentage of businesses on the inventory list were home-based businesses. Many commercial home-based businesses are involved in the mobile trade industry (carpet cleaning, power washing, etc.), which are considered high priority commercial activities. These home-based, mobile businesses were identified, contacted and mailed appropriate BMP information. Because site inspections are not required for home-based businesses, many were reviewed by City inspectors. During the review process the inspector evaluated a commercial business using any relevant information available in other City departments, databases, or licensing programs. A business could be excluded during a review if it was found that their activities were not regulated by the City or Permit. The most common reason businesses were excluded during the review process was because of an incorrect SIC code designation.

Telephone surveys continue to be used to determine the status of certain types of home-based businesses on the commercial inventory. Thirty-seven home-based commercial businesses were surveyed by phone. In most cases, this screening procedure determined that the wrong SIC code had been applied during the business license application process. The Carlsbad Municipal Code prohibits home-based businesses from conducting activities or storing materials outdoors. Once confirmed, home-based businesses were mailed specific BMP information.

Each month several businesses were selected from the master inventory list for inspection. The City usually conducted unscheduled, follow-up and compliance inspections at businesses that had been previously inspected. If a new business could not be excluded by review or telephone survey, then a site visit was scheduled and a comprehensive inspection conducted.

Restaurants have been identified as a significant source of pollutants in the City. Restaurants contribute to storm water pollution through improper cleaning practices that allow grease, food particles, and trash to be either exposed to storm water or discharges into the street or storm drain. The City has identified 176 active restaurants within this jurisdiction. Restaurants represent over 28% of all commercial businesses tracked by the Storm Water Protection Program. In addition to conducting a restaurant workshop, the City also established an internal goal to conduct 80% of restaurant inspections during FY 06-07. The City was successful in this effort and was able to inspect 88% of all restaurants in Carlsbad. This effort resulted in 24 NOVs issued to restaurants for violations of the Carlsbad Municipal Code in FY 06-07.

4.5 Enforcement of Commercial Sites and Sources

The City conducted follow-up inspections to determine compliance with corrective actions outlined in the inspection report or enforcement notices. When a storm water complaint was received about a commercial source or an illegal discharge was observed or suspected, the City conducted a storm water compliance inspection or investigation. If a significant and/or immediate threat to water quality was observed, appropriate actions were taken to require the responsible party to immediately cease the discharge and/or correct the situation. In judging the degree of severity, City inspectors also took into account any history of similar incidents or discharges. Table 4.3 includes a summary of commercial businesses that received NOVs in FY 06-07.

Table 4.3: Summary of NOVs Issued to Commercial Businesses in FY 06-07

Commercial Business	SIC	Date of NOV	CMC Violations	
			Storm Water	Trash
Carlsbad Premium Outlets	6512	8/22/06	15.12.050 15.12.080 15.12.090	6.08.040
Al's Café in the Village	5812	8/29/06	15.12.080	6.08.040 6.08.045
Carl's Jr.	5812	8/29/06	15.12.080	6.08.040 6.08.045
Carl's Jr.	5812	8/29/06	15.12.080	6.08.040 6.08.045
Sammy's Woodfired Pizza	5812	9/22/06	15.12.080	6.08.040 6.08.045
Costco Wholesale	5399	11/3/06	15.12.050 15.12.060 15.12.080	06.08.045
Daily News Café	5812	11/7/06	15.12.050 15.12.080	

Commercial Business	SIC	Date of NOV	CMC Violations	
			Storm Water	Trash
Crossroad Petroleum	5541	11/7/06	15.12.050 15.12.080	
Daphne's Greek Café	5812	11/17/06	15.12.050 15.12.080	6.08.040 6.08.050
Joey's Smokin' BBQ	5812	11/17/06	15.12.050 15.12.080	6.08.040 6.08.050
Tuscany	5812	11/17/06	15.12.050 15.12.080	6.08.040 6.08.050
Pan Pacific Retail Properties	6552	12/15/06	15.12.050 15.12.080	6.08.040
Souplantation	5812	12/28/06	15.12.050 15.12.080	
Nozomi #3	5812	1/10/07	15.12.050 15.12.080 15.12.070	
Pizza Port	5812	1/30/07	15.12.050 15.12.080	
Grand Deli	5812	2/12/07	15.12.050 15.12.080	6.08.045
Buca Di Beppo	5812	3/22/07	15.12.050 15.12.080	6.08.040 6.08.050
Port Brewing Company	5812	3/23/07	15.12.080 12.12.110	
The Olive Garden	5812	3/23/07	15.12.050	6.08.040
Pickles Catering and Deli	5812	3/27/07	15.12.050	
Squid Joe's	5812	5/4/07	15.12.050 15.12.080	
Village Kitchen and Pie Shoppe	5812	5/4/07	15.12.050 15.12.080	6.08.040
KoKo Beach	5812	5/8/07	15.12.050 15.12.080	
La Costa Resort and Spa	7997	5/9/07	15.12.050 15.12.080	6.08.040 6.08.050

Commercial sites or sources were also selected for inspection based on results of *Dry Weather Program* field screening indicating a potential problem. As more water quality data are collected, it is expected that commercial sites may be chosen for inspection in future years based on their potential to discharge a constituent of concern to a specific water body. During FY 06-07, the City responded to 66 complaints of illegal discharges originating from commercial locations or activities.

The Enforcement Response Plan continued to be used by inspectors to identify, document, and respond to storm water violations. See the City's *Enforcement Response Plan* (FY 01-02 JURMP Annual Report) for a detailed description of typical escalating enforcement procedures.

For FY 06-07, the Storm Water Protection Program had two full-time Environmental Specialists and one part-time intern to conduct inspections. Environmental Specialists are continually trained on code enforcement, inspection procedures, laws and regulations, and investigation techniques. Staff attended the following training during FY 06-07:

- July 2006 Storm Com, Denver, Co
- September 2006 Incident Command System, Carlsbad, Ca
- September 2006 CASQA Conference, Sacramento, Ca
- January 2007 Hazardous Waste Operations and Emergency Response, San Diego, Ca
- May 2007 24 Hour HAZWOPER, San Diego, Ca.
- June 2007 Storm Com, Woodland Hills, Ca

These training courses, in addition to the Enforcement Response Plan, helped the Storm Water Protection Program appropriately identify and respond to storm water violations. The City took a total of 43 enforcement actions against commercial businesses during FY 06-07. The types and numbers of enforcement actions are listed in Table 4.4.

Table 4.4. Enforcement Actions at High Priority Commercial Businesses in FY 06-07

Action	Total FY 06-07
Verbal Warning	5
Written Warning	13
Notice of Violation	24
Notice to Clean	1
Cease and Desist Order	0
Administrative Citation	0
TOTAL	43

During inspections and investigations the City required abatement of 33 illegal discharges. Most of these incidents involved construction and landscaping contractors, pool maintenance companies, mobile detailers, pressure washers, and carpet cleaning companies. Mobile service providers were added to the inventory and required to apply for business licenses. More detailed information on complaint response and illegal discharge investigations is found in Section 8 of this report. Escalated enforcement actions were taken when necessary to achieve compliance.

4.6 Self-Assessment

Program Strengths

The City added a new Environmental Specialist I to the department in FY 06-07. In addition, an existing vacant position for a Senior Environmental Specialist was also filled.

Storm Water Protection Program procedures were reviewed and revised during FY 06-07 to include detailed information about work activities, project documentation, filing, SIC Code assignments, inventory management, and complaint response. All Storm Water Protection Program staff were trained on the revised procedures. The procedures will continue to be reviewed annually to ensure they are the most effective and efficient means of program management and compliance. As a result of the procedure reviews, the City found that several “low” priority industrial businesses had been incorrectly prioritized. During the year corrections were made and several of these businesses were moved to the correct designation of commercial “high.”

The revised streamlined inspection report created in FY 05-06 continued to be used throughout FY 06-07 and was an effective and prompt means to have industries implement corrective actions. The revised streamlined inspection form now includes spaces to report previous enforcement actions, new storm water contacts, and a detailed list of necessary corrective actions.

The city continued to distribute the "*Best Management Practices for Mobile Service Providers*" brochure to all applicable businesses and residents. The brochure was specifically designed to provide BMP guidance to residents, businesses that use mobile service providers, and mobile business that provide services at off-site locations.

The Storm Water Protection Program and Environmental Programs Division worked with the Information Technology Department to revise the Environmental Programs web page and provide updated information about storm water BMPs. The webpage now includes all fact sheets and BMP brochures, links to related web pages, and additional information about storm water pollution prevention.

The Storm Water Protection Program continues to use the effectiveness assessment measures for commercial businesses. This includes both knowledge and BMP implementation assessment conducted by the inspector. According to the results of the *Knowledge Assessment*, 93% of the businesses surveyed had at least a general understanding of storm water issues that is an increase of 11% over FY 05-06. The *BMP Assessment* results show that the City has been successful in ensuring that BMPs had been implemented at least 85% of the time.

During FY 06-07, Waste Management continued to identify problem trash and recycling areas and forward information quarterly to the City for additional enforcement. When trash violations are noted at commercial businesses, City inspectors followed up either during the next scheduled inspection or immediately, depending on the severity of the complaint. This program has been beneficial in tracking businesses with continuous trash problems and initiating enforcement actions for those egregious violators.

In July 2006, the City passed a new Special Events Ordinance modeled after similar special event ordinances from other jurisdictions and includes: new application and approval time lines, notification requirements for areas affected by events, updated sign regulations, cost recovery requirements, environmental consideration, and enhanced penalties for violations. Specifically the Special Events Ordinance requires commercial businesses that sponsor events to include "run-off containment features" in event planning, recycling and trash management, and all events must be covered by a site and event specific "plan to control water run-off and other contaminants that" have the potential to enter the City's storm drain system. The adoption of the ordinance will help the City better manage resources and ensure compliance with the Permit.

The City continues to recruit interns from local universities to work with storm water staff. During FY 06-07, the Storm Water Protection Program had one intern working on various projects, including commercial inspections, data management, and outreach and education. Their assistance with inspections, water quality studies and monitoring, data entry, and investigations increased productivity and helped the program achieve inspection and investigation goals.

The City's goal was to respond to complaints "happening right now" within 30 minutes. This goal was met over 90% of the time during FY 06-07. There were several complaints filed for commercial businesses (primarily mobile commercial businesses) in Carlsbad during the reporting year and in most cases prompt enforcement action followed.

In FY 06-07, the Storm Water Protection Program staff continued to work with the City Attorney's office to revise the ordinance to reflect current enforcement levels and mechanisms. Revision and Council approval occurred in early FY 07-08.

Program Improvement Areas

In FY 05-06 the Storm Water Protection Program began drafting a "*Best Management Practices Manual*" that includes the minimum and required BMPs for activities and pollutant types. The manual continued to be worked on during FY 06-07 and should be completed in FY 07-08.

During FY 06-07, staff continued to revise brochures and fact sheets to reflect changes in the program. It is expected that this project will be completed by late FY 07-08.

Dry weather monitoring results continue to show elevated nitrate concentrations downstream from the area of Car Country Carlsbad, Carlsbad Premium Outlets, and Carlsbad Flower Fields. The City has conducted extensive inspections upstream of the sites with elevated results. To date, the Storm Water Protection Program has not been able to identify a source of the nitrates but will continue to monitor dry weather results, conduct frequent inspections, and require the implementation of pollution prevention BMPs that reduce or eliminate nitrates.

All affected city departments are working on revising programs and procedures to address new permit requirements applicable in January of 2008.

Section 5
Residential Component

5.0 Overview

The City encompasses approximately 42 square miles, with an estimated population of 101,337 residents (January 1, 2007, California Department of Finance). The residential community has a significant potential to contribute to water quality degradation. The focus of the City's pollution prevention strategy is a proactive outreach and education program that utilizes public presentations, fact sheets, direct mailers, brochures, complaint response, and the media to increase knowledge and awareness of pollution prevention and storm water BMPs.

During FY 06-07, the City continued to develop and distribute storm water BMP information to residents, host and participate in outreach events, respond to illegal discharge reports, and conduct enforcement actions to achieve compliance. The Permit requires the City to develop and implement a program to ensure residents are aware of and comply with applicable storm water regulations. In order to comply with these requirements, a comprehensive program to reduce polluted urban runoff originating from residences has been implemented. These activities are further described in the following subsections.

5.1 Threat to Water Quality Prioritization

One of the most important tasks is to identify pollution sources, assess the threat to water quality, and require the implementation of appropriate BMPs to eliminate those sources of pollution from residential locations. Each year, hundreds of new residents move into Carlsbad. The City borders over 6 miles of coastline and has three coastal lagoons partially or completely within jurisdictional limits. Because of these water bodies and their tributaries, residential activities have the potential to impact water quality. Table 5.1 identifies the constituents of concern in Carlsbad and examples of residential sources.

Table 5.1: Constituents of Concern and Examples of Residential Sources.

Constituents of Concern	Examples of contributing activities
Primary	
• Bacteria	Pet waste, sanitary sewer overflows, etc.
• Sediment	Landscaping, un-permitted grading activities, etc.
Secondary	
• Nutrients	Garden-care activities, materials storage, etc.
• TDS	Fertilizers, construction, agriculture
• Pesticides	Garden-care activities, residential pest control, etc.
• Trash	Storage of solid waste, green waste, etc.

Residents are required to use BMPs when conducting high priority activities. Residents are provided information about how their activities can adversely impact water quality and what they can do to prevent pollution. The City continues to address residential activities through outreach efforts at the local, watershed, and regional levels using the most efficient and cost-effective methods available. In addition, high priority activities were also addressed during investigations of illicit connections, illegal discharges, or other public complaints. Specific education efforts are further detailed in Section 9 of this report.

5.2 Pollution Prevention

Pollution prevention includes proactive approaches residents can take to identify and reduce pollution sources. Proactive pollution prevention, when framed in the context of appropriate BMP identification, use, and maintenance is a key component to improving regional water quality. Education is the focus of the City's residential pollution prevention efforts and is the best approach to increasing awareness, changing behavior, and providing timely enforcement of storm water violations. A comprehensive outreach and education program that increases knowledge and awareness of pollution prevention measures is continuously being implemented. Residential pollution prevention opportunities were typically incorporated into the BMP brochures and handouts specifically developed for residents. Pollution prevention messages typically contained in the City's outreach materials included:

- Use alternative, safer, or recycled products.
- Recycle and properly dispose of solid waste and hazardous waste.
- Reduce use of water.
- Use dry cleanup methods.
- Reduce the amount of hazardous materials used by implementing natural controls.
- Redirect storm water flows away from areas of concern.

The City has also successfully implemented a Household Hazardous Waste (HHW) program and continues to promote used oil recycling for all residents. During FY 06-07, the City collected and disposed of (including recycled or diverted) approximately 141 tons of HHW. More information about the HHW program can be found in Section 8.5 of this report.

The City continued to implement the HHW door-to-door pick up program approved and adopted by the Carlsbad City Council in FY 05-06. The door-to-door collection program is contracted through Clean Harbors Environmental Services Inc. and offers residents a toll-free phone number (1-800-444-4244) to call for a disposal appointment. The program provides a means for Carlsbad residents to have HHW picked up from their homes and hauled away for a nominal fee. The service costs residents a $10 co-payment (the City share is $80 per collection) for pick-up and the maximum weight allowable is 15 gallons or 125 pounds. Appointments are typically made a week from the collection date and collections occur on Wednesday or Thursdays. In addition, residents can also dispose of HHW for free at three permanent facilities in Vista, Oceanside, and Poway. The process for door-to-door collection is:

- Residents collect HHW material at home.
- Call Clean Harbors Environmental Services and schedules an appointment.
- On the day of the appointment, residents place HHW material on their porch, in front of their garage, or in a safe location and in a sealed container.
- Clean Harbors Environmental Services comes by and collects the materials.

In April 2007, the City sponsored a free HHW disposal day where Carlsbad residents could dispose of up to 15 gallons or 125 pounds of HHW materials. The event attracted 514 households, and everyone was offered the Environmental Programs brochure as well as the Door-to-Door HHW brochure. The City collected and disposed of 34.577 tons (69,155 pounds) of HHW during this event. Table 5.2 shows the types and quantities of HHW collected at the event.

Table 5.2: Items Collected During April 21, 2007 HHW Event.

Material	TOTAL Pounds
Compresses Gas Cylinders	367
Universal Waste	1,330
Electronic Waste	16,646
Reclaimable Materials (paint, motor oil, antifreeze, etc.)	15,200
Flammable Liquids and Poison	31,540
Acids, Base, and Oxidizers	1,122
PCBs	150
Aerosols	700
Other HHW	1,800
Asbestos	300
WEIGHT OF ALL HHW MATERIALS	69,155
Per Household	134.5

The public continued to use the Environmental Programs hotline and e-mail address to request information about the HHW program, trash, and recycling. In addition, the City's RFA system was used to track calls about Environmental Programs comments and questions from residents. During FY 06-07, the Environmental Programs Division responded to 30 complaints related to HHW, recycling, and solid waste. Table 5.3 includes a summary of these complaints.

Table 5.3: Summary of Environmental Programs Division Complaints

Issue Type/SubType	Total #
Recycling: Complaint	5
Solid Waste: Complaint	17
Solid Waste: Missed Collection	8
TOTAL	30

The City's Fleet Department historically served as a location where the community could dispose of used motor oil. Since 2002, the City no longer offers disposal at that location. Signs were placed to remind residents of this change. However, the signs had not been updated since 2002 and do not reflect the Environmental Programs logo, phone number, website, or appropriate disposal locations. As a result residents continued to illegally drop off used motor oil and other household hazardous waste at the Fleet gate. The Environmental Programs Division worked with the Fleet Department to develop more appropriate and accurate signs that were installed at the end of FY 06-07.

The City worked with Waste Management to add an additional day and items to the bulky item pickup schedule. Bulky item pick days for FY 06-07 were as follows:

- July 22, 2006
- October 21, 2006
- January 27, 2007
- March 24, 2007
- June 23, 2007

Water Conservation Program

The City's Water Conservation Specialist works with the Storm Water Protection Program to help address and reduce the discharge of irrigation and the pollutants it can carry. The Water Conservation Specialist responded to 353 related complaints during FY 06-07, including over-irrigation, leaks, and sprinkler line breaks in residential areas. The Water Conservation Specialist also works occasionally with home owner's associations and commercial property management companies to reduce water consumption and over irrigation.

5.3 Best Management Practices Implementation

The City continues to implement a program to reduce contaminants in urban runoff originating from existing residential areas. BMP information was made available to residents during investigations, in printed materials and direct mailings, at workshops, on the storm water website and hotline, during presentations, and at outreach events. A listing of all education and outreach events for residential audiences is in Section 9 of this report. The City has identified minimum BMPs for high priority residential activities and worked to ensure that BMPs were implemented. City inspectors required the following minimum BMPs (detailed in various fact sheets and brochures) for all residential sources:

- Move or cover potential pollution sources from storm water contact. Protect materials that could potentially contribute to storm water pollution by storing them indoors or covering them.
- Use dry cleanup methods. Washing or cleaning activities that involve the use of a water hose or pressure washing system were required to use dry clean up methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible).
- Residential car washing. Use soap sparingly, divert wash water to landscaped areas and pour buckets of soapy water down the sink. Never wash cars in the street or public right of way.
- Pet Waste. Clean up after pets. Use a bag to pick up waste when walking pets. Flush pet waste down the toilet or dispose of in a sealed plastic bag and deposit in the trash.
- Trash Management. All trash must be kept in appropriate sized containers until it can be hauled away. Frequently dispose of grass, debris, leaves, and other waste materials.
- Recycle, Reduce and Reuse. Recycle cans, bottles, paper and cardboard whenever possible.
- Reduce the Use of Landscape Chemicals: Decrease the use of lawn and garden care products such as pesticides, weed killers and chemical fertilizers. Consider using non-toxic pest control methods. Avoid over irrigation which washes these chemicals into the storm drain system.

Printed Materials

Since the Spring 2006, the City of Carlsbad has been offering door-to-door Household Hazardous Waste collection program. Residents gather their HHW, then call for an appointment to have these items collected and disposed of. To further educate residents about the program, the City created a new "*Household Hazardous Waste Collection*" brochure in January 2007. The new brochure includes information about the types of HHW that can be disposed of, information about why residents should participate in the program, phone numbers, addresses, Environmental Programs logo, and web address (Figure 5.1 and 5.2). During FY 06-07, the new brochure was distributed by mail and at outreach events. A copy of the revised brochure can be found in Appendix 5-1.

Figure 5.1: Front of New HHW Brochure

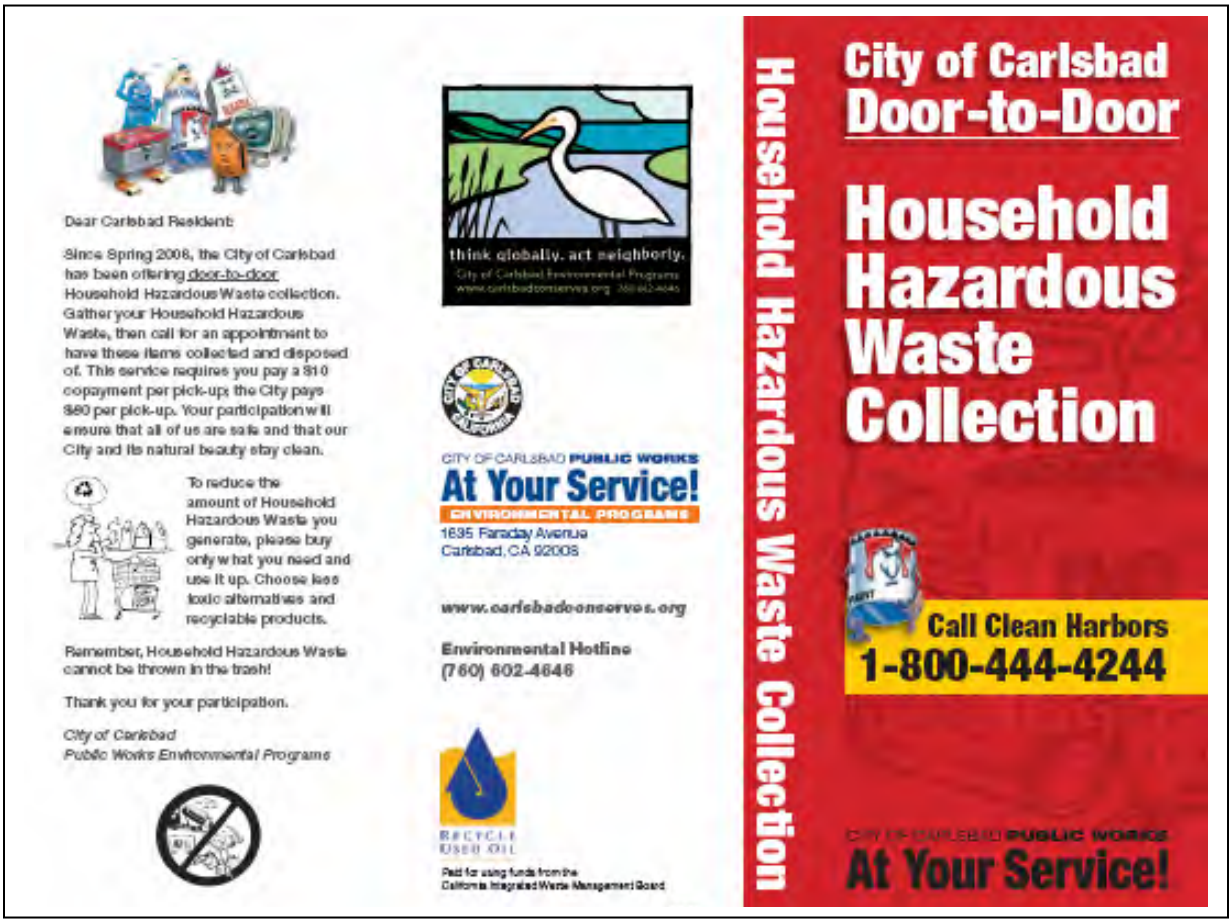

Dear Carlsbad Resident:

Since Spring 2006, the City of Carlsbad has been offering door-to-door Household Hazardous Waste collection. Gather your Household Hazardous Waste, then call for an appointment to have these items collected and disposed of. This service requires you pay a $10 copayment per pick-up; the City pays $80 per pick-up. Your participation will ensure that all of us are safe and that our City and its natural beauty stay clean.

To reduce the amount of Household Hazardous Waste you generate, please buy only what you need and use it up. Choose less toxic alternatives and recyclable products.

Remember, Household Hazardous Waste cannot be thrown in the trash!

Thank you for your participation.

City of Carlsbad
Public Works Environmental Programs

think globally. act neighborly.
City of Carlsbad Environmental Programs
www.carlsbadconserves.org 760-602-4646

CITY OF CARLSBAD PUBLIC WORKS
At Your Service!
ENVIRONMENTAL PROGRAMS
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Carlsbad, CA 92008

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Environmental Hotline
(760) 602-4646

RECYCLE USED OIL

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Household Hazardous Waste Collection

City of Carlsbad
Door-to-Door

Household Hazardous Waste Collection

Call Clean Harbors
1-800-444-4244

CITY OF CARLSBAD PUBLIC WORKS
At Your Service!

Figure 5.2: Back of New HHW Brochure

City of Carlsbad Door-to-Door Household Hazardous Waste Collection

What is Household Hazardous Waste?

Household Hazardous Waste (HHW) includes items used every day in most homes. Items like paint, motor oil, batteries, household cleaners, lawn chemicals, fluorescent light bulbs, televisions and computer monitors contain unsafe materials and need to be disposed of in different ways than household garbage.

Why Participate?

The State of California requires by law that residents not mix HHW with their normal trash because HHW cannot be put into landfills.

How Do You Use This Service?

The City of Carlsbad recognizes that residents need an option for HHW disposal within the City's borders. Carlsbad has contracted with Clean Harbors, Inc., for the door-to-door collection of HHW. This service means that you call the toll-free number, schedule an appointment, and have your HHW picked up at your home.

Now Carlsbad residents have two options for disposal of Household Hazardous Waste:

1. You can still take your HHW to Vista, Poway or Oceanside and dispose of it for free with an appointment; or,
2. You can take advantage of this new door-to-door collection service and, with a $10 copayment, have Clean Harbors come to your home and dispose of the HHW for you.

To Take Advantage of HHW Door-to-Door Collection

- **Collect HHW items from around your home.** Please place your HHW in sealed, non-leaking containers. If possible, leave products in the original container. Products labeled *Dangerous*, *Caution*, *Flammable*, *Poison*, *Toxic* or *Corrosive* are considered Household Hazardous Waste and should be disposed of properly. It is dangerous, and illegal, to discard HHW into the trash, into a storm drain, or down the sewer drain. If you think you have some HHW but are not sure, please call Clean Harbors to check!
- **Call Clean Harbors at 1-800-444-4244 and schedule an appointment.**

On Your Appointment Date

- **Place the HHW in a safe place outside your home** – either on your porch or on your driveway close to your home.
- **Place your $10 copayment check made out to Clean Harbors, Inc., with the HHW.** Clean Harbors, Inc., will collect the HHW materials and dispose of them for you.
- The total weight that is considered per collection is up to 15 gallons or 125 lbs. of waste per pickup. If there is more, it is considered two pickups and you will need to leave a $20 copayment check.

How Often Can You Call?

You may call Clean Harbors as often as you need to. The service simply requires an appointment and a $10 copayment.

If you think you have HHW but are not sure, please call Clean Harbors.

Household Hazardous Waste includes:

- Aerosols
- Asbestos (3-foot sections)
- All Purpose Cleaners
- Antifreeze
- Auto Batteries
- Auto Fluids
- Computer Monitors
- Disinfectants
- Drain Opener
- Fertilizers
- Fluorescent Light Bulbs
- Furniture Polishes and Stains
- Gasoline
- Glue
- Household Batteries
- Household Cleaners
- Insecticides
- Kerosene
- Lighter Fluid
- Mercury Thermostats
- Motor Oil
- Oil Filters
- Oven Cleaner
- Latex Paint
- Oil-Based Paint
- Pesticides and Herbicides
- Pool Chemicals
- Solvents
- Televisions
- Thinners
- Varnishes

Call Clean Harbors 1-800-444-4244

to schedule an appointment or for additional information.

The City continued to distribute the "*Best Management Practices for Mobile Service Providers*" brochure to all applicable businesses and residents. The brochure was specifically designed to provide BMP guidance to residents, businesses that use mobile service providers, and mobile business that provide services at off-site locations.

The City also continued to distribute the "*Pollution Prevention Guide for the Construction Industry*" developed by the North County Outreach Group. This brochure was developed to provide BMP and pollution prevention information related to materials storage, perimeter controls, building and staging areas, dumpsters and port-a-potty services, tracking controls, concrete trucks and pumpers, washout areas, dirt and grading, earthmoving equipments, and storm drain protection. The brochure was distributed to residents who conduct small remodeling or home improvement projects.

In April of 2007, the City developed and distributed a new "Put Toxic Waste In It's Place" brochure designed to provide residents with information about used oil, HHW, and electronic waste disposal and recycling. The brochure includes used oil recycling locations in Carlsbad, the new HHW collection sites, phone numbers, addresses, logo, web address, and map of disposal locations, and information about electronic waster recycling and disposal (Figure 5.3 and 5.4). The brochure was distributed to residents by mail and at outreach events. A copy of the new brochure can be found in Appendix 5-2.

Figure 5.3: Front of the "Put Toxic Waste in its Place" brochure.

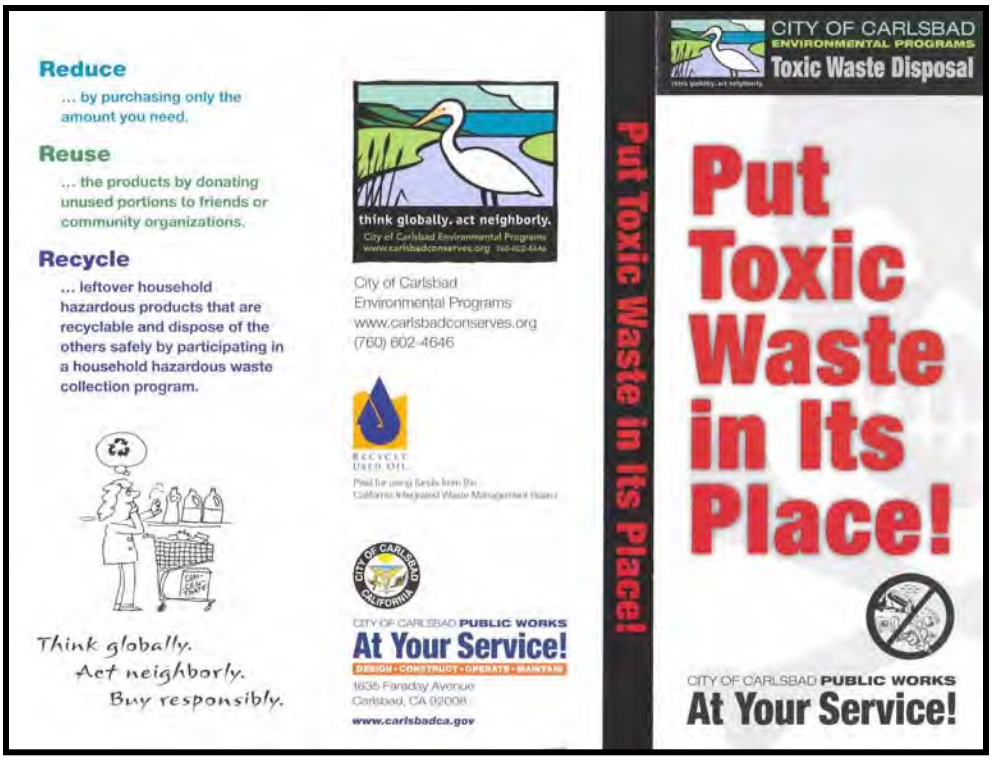

Reduce

... by purchasing only the amount you need.

Reuse

... the products by donating unused portions to friends or community organizations.

Recycle

... leftover household hazardous products that are recyclable and dispose of the others safely by participating in a household hazardous waste collection program.

Think globally.
Act neighborly.
Buy responsibly.

think globally. act neighborly.
City of Carlsbad Environmental Programs
www.carlsbadconserves.org 760-602-4646

City of Carlsbad
Environmental Programs
www.carlsbadconserves.org
(760) 602-4646

RECYCLE USED OIL.
Paid for using funds from the California Integrated Waste Management Board

CITY OF CARLSBAD PUBLIC WORKS
At Your Service!
DESIGN • CONSTRUCT • OPERATE • MAINTAIN
1635 Faraday Avenue
Carlsbad, CA 92008
www.carlsbadca.gov

Put Toxic Waste in Its Place!

CITY OF CARLSBAD
ENVIRONMENTAL PROGRAMS
Toxic Waste Disposal

Put Toxic Waste in Its Place!

CITY OF CARLSBAD PUBLIC WORKS
At Your Service!

Figure 5.4: Back of the "Put Toxic Waste in its Place" brochure.

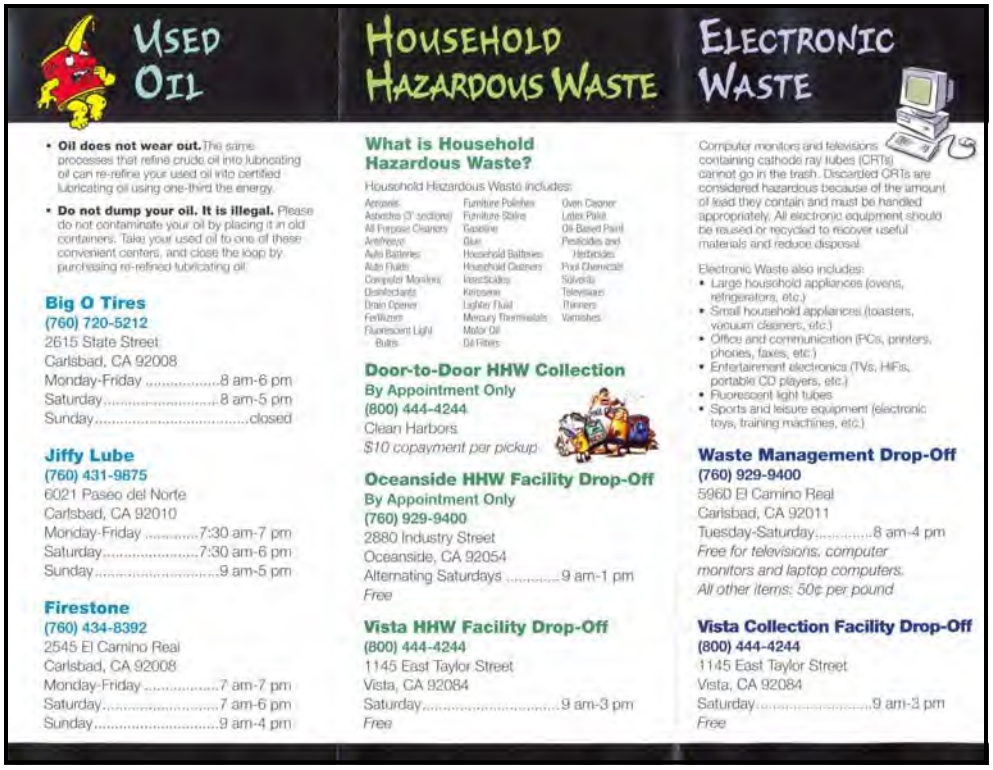

Used Oil

- **Oil does not wear out.** The same processes that refine crude oil into lubricating oil can re-refine your used oil into certified lubricating oil using one-third the energy.
- **Do not dump your oil. It is illegal.** Please do not contaminate your oil by placing it in old containers. Take your used oil to one of these convenient centers, and close the loop by purchasing re-refined lubricating oil.

Big O Tires
(760) 720-5212
2615 State Street
Carlsbad, CA 92008
Monday-Friday .....8 am-6 pm
Saturday.....8 am-5 pm
Sunday.....closed

Jiffy Lube
(760) 431-9875
6021 Paseo del Norte
Carlsbad, CA 92010
Monday-Friday .....7:30 am-7 pm
Saturday.....7:30 am-6 pm
Sunday.....9 am-5 pm

Firestone
(760) 434-8392
2545 El Camino Real
Carlsbad, CA 92008
Monday-Friday.....7 am-7 pm
Saturday.....7 am-6 pm
Sunday.....9 am-4 pm

Household Hazardous Waste

What is Household Hazardous Waste?

Household Hazardous Waste includes:

Aerosols	Furniture Polishes	Oven Cleaner
Asbestos (3" sections)	Furniture Stains	Latex Paint
All Purpose Cleaners	Gasoline	Oil Based Paint
Antifreeze	Glue	Pesticides and Herbicides
Auto Batteries	Household Batteries	Pool Chemicals
Auto Fluids	Household Cleaners	Solvents
Computer Monitors	Insecticides	Televisions
Disinfectants	Kerosene	Thinners
Drain Opener	Lighter Fluid	Varnishes
Fertilizers	Mercury Thermostats	
Fluorescent Light Bulbs	Motor Oil	
	Oil Filters	

Door-to-Door HHW Collection
By Appointment Only
(800) 444-4244
Clean Harbors
$10 copayment per pickup

Oceanside HHW Facility Drop-Off
By Appointment Only
(760) 929-9400
2880 Industry Street
Oceanside, CA 92054
Alternating Saturdays .....9 am-1 pm
Free

Vista HHW Facility Drop-Off
(800) 444-4244
1145 East Taylor Street
Vista, CA 92084
Saturday.....9 am-3 pm
Free

Electronic Waste

Computer monitors and televisions containing cathode ray tubes (CRTs) cannot go in the trash. Discarded CRTs are considered hazardous because of the amount of lead they contain and must be handled appropriately. All electronic equipment should be reused or recycled to recover useful materials and reduce disposal.

Electronic Waste also includes:
- Large household appliances (ovens, refrigerators, etc.)
- Small household appliances (toasters, vacuum cleaners, etc.)
- Office and communication (PCs, printers, phones, faxes, etc.)
- Entertainment electronics (TVs, HiFis, portable CD players, etc.)
- Fluorescent light tubes
- Sports and leisure equipment (electronic toys, training machines, etc.)

Waste Management Drop-Off
(760) 929-9400
5960 El Camino Real
Carlsbad, CA 92011
Tuesday-Saturday.....8 am-4 pm
Free for televisions, computer monitors and laptop computers.
All other items: 50¢ per pound

Vista Collection Facility Drop-Off
(800) 444-4244
1145 East Taylor Street
Vista, CA 92084
Saturday.....9 am-3 pm
Free

Direct Mailers

In the fall of 2006 the Environmental Programs Division launched a new residential newsletter entitled "*Carlsbad Conserves*." The purpose of the newsletter is to inform residents of environmental issues facing Carlsbad, services provided by the City, tips of how to protect the environmental, including storm water BMPs, and calendar of important environmental dates (clean up recycling, bulky item pick up, etc.). The newsletter is distributed quarterly to all Carlsbad residents. A copy of the FY 06-07 editions of the newsletters can be found in Appendix 5-3 and 5-4.

Figure 5.5: Spring and Winter editions of the "Carlsbad Conserves" newsletter

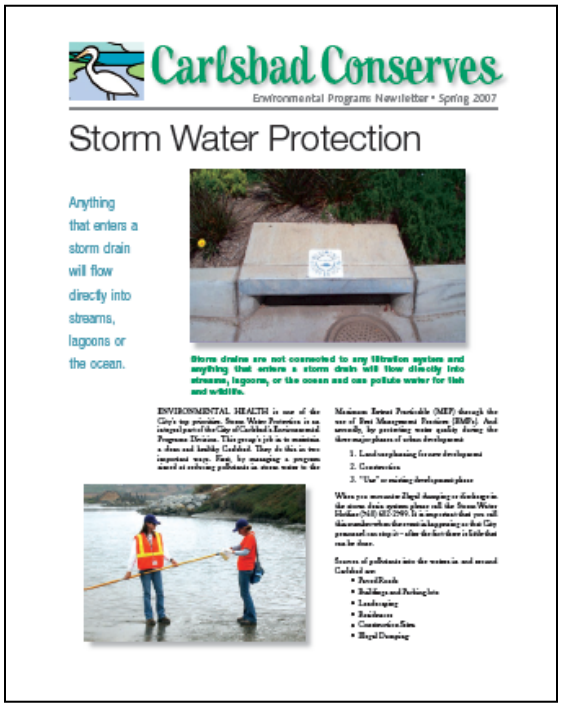

The Carlsbad Community Services Guide is mailed three times a year to all Carlsbad households (approx. 40,000). The fall 2006 and summer 2007 editions included residential storm water BMPs and the Environmental Programs information.

Environmental Programs included information on storm water pollution prevention and BMPs in the City's Annual Drinking Water Quality Report, which was sent with water bills to approximately 36,000 Carlsbad Municipal Water District customers in June 2007 (Appendix 5-5). The purpose of the report is to provide all Carlsbad Municipal Water District customers with an overview of how potable water is delivered and how the City works to ensure that the highest quality service is provided. In addition to information on potable water, the report also included information on water conservation and how to help to protect and maintain clean water ways.

The City of Carlsbad and Coast Waste Management partnered in the creation of a revised Environmental Programs Guide that was sent to residents in January 2007. This publication was designed to offer information about how to dispose of all sorts of waste from trash and recycling to household hazardous waste (HHW). There was also information included on ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution. A copy of the revised brochure can be found in Appendix 5-6.

Website and Hotline

Information about water conservation, trash management, and storm water has been combined to one centralized web page accessed at www.carlsbadconserves.org. The Environmental Programs hotline provides information about storm water, trash, and water conservation for the public. The hotline is answered by the Storm Water Protection Program during business hours and provides a detailed voice message after hours. In addition, outreach materials continue to be revised to include the Environmental Program's web page address and hotline number. During FY 06-07, there were over 40,805 visits to the Environmental Programs web page.

The Storm Water Protection Program and Environmental Programs Division worked with the Information Technology Department to revise the Environmental Programs web page and provide updated information about storm water BMPs. The webpage now includes all fact sheets and BMP brochures, links to related web pages, and additional information about storm water pollution prevention.

Workshops

The City sponsored three workshops geared at educating residents about the benefits of composting. The workshops were held on September 30, October 28, and November 11, 2006. At the workshops, residents received information on water conservation, mulching, plant selection, vegetable peels and turning leaves, and the basic techniques necessary for successful composting. These educational workshops also clearly demonstrated the relationship between water conservation, solid waste, and storm water. Residents were also provided with information on alternative chemical products, including integrated pest management, and were given information on the City's HHW collection facilities.

Presentations

Twice a year, the City hosts a program called "*Citizen's Academy*." This seven week course (one night per week) educates Carlsbad residents about City government and public services. A *PowerPoint* presentation, which included an overview of the Storm Water Protection Program, related Permit, regulations, and program activities, was presented at the academy. Approximately 60 residents attended two academies held on October 12, 2006 and March 29, 2007.

Events

On March 17, 2007, the City's Recreation Department sponsored a community-wide clean up and tree planting event at Hosp Grove in Carlsbad. Residents from various Carlsbad neighborhoods joined together to plant trees, prune bushes, and remove trash from Carlsbad historic Hosp Grove area.

The Storm water Protection Program participated in the first annual "Water Festival" with the Agua Hedionda Lagoon Foundation. The event was held on March 25, 2007, and attracted a diverse group of residents and community leaders all interested in celebrating and supporting the importance of World Water Day.

In September 2006, the City sponsored its annual "*Buena Vista Creek Clean Up*" event. Over 55 volunteers, several of them Carlsbad residents, collected over 3 tons of trash and recyclables along Buena Vista Creek. The clean up effort was a part of the annual California Coastal Cleanup Day. Common items found included fast food containers, recyclable glass and plastic beverage containers, and cigarette butts. Larger items included tires, bed frames, carpets, and wood pallets.

On April 28, 2007, the City sponsored a clean up site for the annual Regional Creek to Bay Clean Up event. Statewide, the Creek to Bay Clean up has the highest turnout with over 2,500 volunteers helping out at 41 cleanup sites. Those hard-working volunteers picked up an estimated 102,000 pounds of debris. For the Carlsbad event, the City selected a site near Batiquitos Lagoon where a significant amount of

debris and litter had accumulated. This was the first year volunteers had cleaned the site and they were successful in removing 1.8 tons of trash and debris from the area.

One September 10, 2006, the City held its annual "*Fiesta Del Barrio*" event in downtown Carlsbad. The event was designed to celebrate Carlsbad residents raise awareness of the Barrio's presence and historical significance. The Storm Water Protection Program was onsite to distribute BMP information in Spanish and English.

Promotional Items

The Storm Water Protection Program continued to distribute pollution prevention message pens to municipal employees and the Carlsbad community. Items such as water bottles, notepads, mouse pads, and cups with the storm water hotline and other pollution prevention messages continued to be distributed to residents.

In April 2007, the City produced and distributed a new HHW magnet that includes information about HHW disposal location for Carlsbad residents (Figure 5.6). The new magnets will continually be distributed during presentations and other outreach events.

Figure 5.6: New HHW Magnet

During FY 06-07, the City purchased and distributed recycling bags to residents at various events. The recycling bags include the Environmental Programs logo and phone number, and were designed to encourage residents to recycle aluminum, glass, paper, and other materials.

Neighborhood Outreach Campaign

As a result of the *Dry Weather Monitoring Program*, several neighborhoods were identified as contributing to storm water pollution through various residential activities. Follow-up investigations to water quality exceedances in the *2007 Dry Weather Monitoring Program* prompted the City to educate residents in five specific neighborhoods. In response, the Storm Water Protection Program conducted a targeted outreach campaign to those identified neighborhoods. The identified neighborhoods were delineated using the City's interactive GIS. Layers were turned on to show the streets, parcels, and storm drain system in the identified neighborhoods. Subsequent to Dry Weather Monitoring in 2007, the City sent an informational letter and BMPs to residential areas that were identified as potential contributors to storm water pollution (e.g., pet waste, car washing, and landscaping activities). Table 5.4 includes a summary of the number of homes targeted and the information they received mailed in FY 07-08.

Table 5.4 Targeted Neighborhood Education.

Neighborhood Site	Number of Homes	Brochures Distributed
AH-65	264	Over-watering, landscape maintenance
BA-06	100	Over-watering, landscape maintenance, pet waste
BV Creek (Calavera Hills)	142	Landscape waste and over-watering, pet waste
BA-36	70	Pet Waste
BA-40	251	Over-watering
Total	**827**	

5.4 Enforcement of Residential Areas and Activities

The public can report illegal discharges or any activities that may impact water quality to the Storm Water Protection Program through the storm water hotline, email address, or to other City departments. All reports and referrals were promptly investigated and resolved to the fullest extent. When a storm water complaint was received about a residential site or source, or an illegal discharge was observed or suspected, the City conducted a complete storm water investigation. If a significant and/or immediate threat to water quality was observed, appropriate actions were taken to require the responsible party to immediately cease the discharge and/or correct the situation. Specific information on the effects of storm water pollution and how to prevent future impacts to water quality through the use of BMPs was provided to residents during investigations. This information was designed to increase the public's awareness and understanding of storm water pollution prevention efforts and water quality enhancement.

When enforcement actions were necessary, City inspectors utilized the appropriate enforcement mechanisms as allowed by the Carlsbad Municipal Code, described in Section 5.4 of the JURMP, and the Enforcement Response Plan. The Enforcement Response Plan continued to be used by inspectors to identify, document, and respond to storm water violations. While the City emphasized education as the primary method for changing behavior, City inspectors and staff with enforcement authority could initiate enforcement actions against residents who discharged pollutants to the storm water conveyance system, or who failed to implement BMPs as required.

Escalating enforcement procedures provided flexibility in establishing appropriate compliance time frames. In judging the degree of severity, City inspectors also took into account any history of similar incidents or discharges and the impact to the environment. The inspectors, in accordance with the City's existing procedures and Enforcement Response Plan, documented each observed violation. Depending on the severity of the violation, enforcement ranged from a warning to monetary fines.

The City added a new Environmental Specialist I position to the Storm Water Protection Program in FY 06-07. In addition, a vacant Senior Environmental Specialist position was also filled.

During FY 06-07, the Storm Water Protection Program received 154 complaints of potential illegal discharges. Approximately half, 83 complaints, were residential in nature. Many of the complaints occurred in residential areas and involved commercial contractors or mobile businesses, however because these could be tracked to a specific business, they were counted as commercial complaints. Of the residential complaints, there were 6 where no violation was found (either because it was an exempt discharge or a source was not found as reported). A summary of all residential enforcement actions is found in Table 5.5.

Table 5.5 – Summary of Residential Enforcement Actions in FY 06-07.

Action	Total
Verbal Warning	17
Informational letter	15
Written Warning	3
Notice of Violation	2
Notice to Clean	0
Cease and Desist Order	0
Administrative Citation	0
TOTAL	37

During FY 06-07, the City continued to use the Notice to Clean form and streamlined NOV form to help facilitate prompt and proactive response from businesses. In addition to completing the Peace Officer Orientation II Laws of Arrest Course (40 hours of a POST certified course pursuant to Section 832(a) of the California Penal Code), Environmental Specialists are continually trained on code enforcement, inspection procedures, laws and regulations, and investigation techniques.

5.5 Self-Assessment

Program Strengths

The City added a new Environmental Specialist I position to the Storm Water Protection Program in FY 06-07. In addition, a vacant Senior Environmental Specialist position was also filled.

The Storm Water Protection Program and Environmental Programs Division worked with the Information Technology Department to revise the Environmental Programs web page and provide updated information about storm water BMPs. The webpage now includes all fact sheets and BMP brochures, links to related webpages, and additional information about storm water pollution prevention.

To further educate residents about the program, the City created a new "*Household Hazardous Waste Collection*" brochure in January 2007. The new brochure includes information about the types of HHW that can be disposed of, why residents should participate in the program, phone numbers, addresses, Environmental Programs logo, and web address. During FY 06-07, the new brochure was distributed by mail and at outreach events.

The City continued to distribute the "*Best Management Practices for Mobile Service Providers*" brochure to all applicable businesses and residents. The brochure was specifically designed to provide BMP guidance to residents and businesses that use mobile service providers, and mobile businesses that provide services at off-site locations.

In April 2007, the City sponsored a free HHW disposal day where 514 Carlsbad households disposed of 69,155 pounds of HHW.

The Storm Water Protection Program occasionally depends on other City departments to assist with investigations and remediation during field reviews. The City's Storm Drain Maintenance Crew was key to prompt, effective responses to residential complaints involving clean ups. Regular meetings and discussions about compliance issues and consistent contacts facilitate this coordination with departmental representatives.

The City continued to utilize university students as part of the internship program with the Storm Water Protection Program. Interns worked on a variety of activities including commercial and industrial inspections, data management, and outreach and education. Their assistance with inspections, business reviews, outreach, data entry, monitoring and investigations increased productivity.

The Storm Water Protection Program once again met the goal of responding to complaints "happening right now" within 30 minutes. This goal was met over 90% of the time during FY 06-07.

In FY 03-04, the City worked with Waste Management to develop an Environmental Programs booklet that included storm water residential BMPs, as well as detailed information on available solid waste services, including oil recycling and HHW disposal sites. The booklet was revised in FY 06-07 to reflect the most current HHW, trash, recycling, storm water, and water conservation information.

The Storm Water Protection Program staff began working with the City Attorney's office to revise the storm water ordinance to reflect current enforcement levels and mechanisms. Revision and Council approval was completed in early FY 07-08.

Program Improvement Areas

In late FY 05-06, the Storm Water Protection Program began drafting a "*Best Management Practices Manual"* that includes the minimum and required BMPs for activities and pollutant types. The manual will be continually worked on during FY 06-07 and should be completed in FY 07-08.

During FY 04-05, staff began revising brochures and fact sheets and updating them to reflect changes in the program. It is expected that this project will be completed by late FY 07-08.

Runoff from residential irrigation continues to be an issue based on complaints received and the results of the *Dry Weather Monitoring Program*. The Environmental Programs Division will continue to investigate the best ways to promote water conservation and to reduce irrigation runoff. The water conservation staff anticipates updating the water conservation ordinance in FY 07-08 to help address over- irrigation in residential and commercial areas.

The City will continue to advertise Environmental Programs and to seek the most cost-effective way to educate the public. In additional, the City will continue to work with the watershed stakeholders to address the residential community and outreach programs on a watershed basis.

Section 6
Land-Use Planning Component

6.0 Overview

The City continues to evaluate land use planning policies and principles, revise the environmental review procedures, and develop approval processes that minimize the impacts of development activities on receiving water quality. This section outlines Land-Use Planning actions implemented since the Permit was issued and during FY 06-07. It also describes the specific actions completed, in progress, or projected to meet or exceed the Permit requirements.

6.1 Assessment of General Plan

In September, 1994 the City adopted a Comprehensive Update of its General Plan. The General Plan includes goals that balance environmental protection with smart, long-term economic growth. By laying out a clear vision for environmentally sensitive development within this coastal community, development projects are required to be consistent with various City ordinances (i.e.; Grading and Erosion Control, Storm Water Management, Hillside Development, Coastal Resource Protection) and other regulatory requirements.

In July 1986, the City adopted a *Growth Management Plan* into its General Plan to guide development and anticipate the types and numbers of facilities needed to accommodate the Carlsbad community at build out. Those facilities include sewer plant capacity, sewage pipelines, reclaimed water system, and storm drain system with flood and pollution control basins.

The General Plan is reviewed annually and revised as necessary to ensure that the public interest is considered and City goals are met. On February 19, 2002 the City Council adopted General Plan Amendment GPA 01-15. This General Plan Amendment revised/supplemented various policies regarding water quality protection in the Open Space and Conservation Element. The new policies reflect water quality and watershed protection principles found in the Permit pertaining to water pollution, and were all implemented in FY 06-07. The General Plan was reviewed for Storm Water Management in FY 06-07 and no revisions were necessary. The revised policies and programs from 2002 are listed below:

a) Develop and implement a JURMP consistent with the Permit and any amendments thereof.

b) Adopt and implement a Master Drainage Plan and Standard Urban Storm Water Mitigation Plan (SUSMP) consistent with the Permit and any amendments thereof.

c) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City requires developments to incorporate structural and non-structural BMPs to mitigate any increases in pollutant loads.

d) Implement storm water pollution prevention methods to the maximum extent practicable, supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into the MS4.

e) Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

f) Developments shall implement appropriate recommendations to protect water quality found in the San Diego Association of Government's (SANDAG's) Water Quality Element of its Regional Growth Management Strategy.

g) Development projects should be designed to comply with the following site design principles:

- Protect slopes and channels to decrease the potential for slopes and/or channels from eroding and impacting storm water runoff.
- To the extent practicable, cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones. Encourage land acquisition of such areas.
- Provide buffer zones for natural water bodies.
- Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment.
- Where feasible implement site design/landscape features to slow runoff and maximize on-site infiltration of runoff.
- Properly design outdoor material storage areas (including the use of roof or awning covers) to minimize the opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids and other pollutants from entering the storm water conveyance system.
- Incorporate roof or awning covers over trash storage areas to prevent off-site transport of trash and other pollutants from entering the storm water conveyance system.
- Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways and bridges.
- Design streets and circulation systems to reduce pollutants associated with vehicles and traffic resulting from development.

The City has adopted a Local Coastal Program covering that part of the City within the Coastal Zone. Under the California Natural Community Conservation Program (NCCP), the City and six other cities in north San Diego County participated in the preparation of the Multiple Habitat Conservation Program (MHCP). The MHCP is a comprehensive planning program designed to develop an extensive ecological preserve in northwestern San Diego County. The City has prepared a subarea plan, called the Carlsbad Habitat Management Plan (HMP) that was adopted in November 2004. The Carlsbad HMP contains the specific conservation, management, facility planning, land use, and other actions the City will take to implement the goals, guidelines, and standards of the MHCP plan. This HMP prohibits development in or near natural habitat areas including creeks and lagoons. Those areas act as a buffer between urban development pollutants and receiving waters. They also protect a significant percentage of pervious surface necessary to absorb run off.

The Carlsbad City Council adopted a Zone Code Amendment (ZCA 01-08), Local Coastal Program Amendment (LCPA 01-15) and Municipal Code Amendments (MCA 01-05, 01-06, and 02-01) to revise/add new policies, standards, procedures and requirements regarding water quality and watershed protection to the Local Coastal Program Land Use Plans, Chapters 21.203 (Coastal Resource Protection Overlay Zone) and 21.205 (Coastal Resource Overlay Zone Mello I LCP Segment Local Coastal Program) of the Zoning Ordinance and Chapters 15.12 (Storm Water Management and Discharge Control) and 15-16 (Grading and Erosion Control) of Carlsbad's Municipal Code. On November 1, 2002,

the revised Zoning Ordinance, Municipal Code, and Local Coastal Plan Amendments were submitted to the California Coastal Commission. In August, 2006, the California Coastal Commission approved these municipal code amendments. All requirements of these documents were implemented in FY 06-07 and previous years while the City waited for Coastal Commission approval. Carlsbad is one of the first coastal cities in San Diego County to have amended NPDES /storm-water regulations approved by the Coastal Commission.

6.2 Modification of Development Project Approval Process Actions

The City requires proposed development projects to implement measures to ensure that pollution and runoff from the development will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of receiving water quality objectives. All project applicants are required to submit a Storm Water Requirements Applicability Checklist (Checklist) concurrent with submittal of an application for a discretionary or administrative approval in accordance with the requirements of the City's SUSMP (approved by the Regional Board on June 12, 2002). The Checklist is used by City staff to determine those projects which meet the priority development project category and are subject to the SUSMP requirements. Developments that are determined to be "priority development projects" are subjected to both the "Priority Permanent Storm Water BMP Requirements" and the "Standard Permanent Storm Water BMP Requirements" consistent with the SUSMP. A copy of the Storm Water Requirements Applicability Checklist is provided in Appendix 6-1.

Priority development projects are required to submit a *Water Quality Technical Report* consistent with the SUSMP standards before the project application is deemed complete. Additionally, applicants for priority development projects must incorporate the standard site design and source control BMPs as well as the BMPs for "Individual Priority Project Categories and Treatment Control BMPs" consistent with the SUSMP requirements. All non-exempt development projects are required to incorporate standard site design and source control BMPs consistent with the SUSMP prior to project approval. The City includes several standard conditions of approval to each discretionary and administrative approval including conditions requiring the developer to:

1. Comply with the City's Permit.
2. Submit a SWPPP prior to construction permit issuance (for projects that are subject to the *General NPDES Permit for Storm Water Discharges Associated with Construction Activities*).
3. Submit a "*Storm Water Management Plan*" (SWMP) prior to issuance of construction permits for the project (for projects that require permanent BMPs).
4. Exercise special care during the construction phase of the project to prevent offsite siltation and to comply with City planting and erosion control standards.
5. Provide proof of NOI submittal to the State Water Resources Control Board prior to start of grading work, if applicable.
6. For Priority Projects, submit a City standard BMP Maintenance Agreement prior to approval of final maps or issuance of construction permits whichever occurs first.

Additionally, special conditions are applied to projects requiring developer construction of all project related and master-planned drainage improvements in accordance with City Standards and the requirements of the Permit. There are no standard project conditions of approval applied to ministerial permits; however, each ministerial permit is required to comply with the referenced standard conditions prior to issuance of the respective ministerial permits.

In FY 06-07, the City approved fifty-five (55) development applications that were determined to be projects subject to the *Priority Permanent Storm Water BMP Requirements* as defined in the City SUSMP. A list of the fifty-five (55) "priority development projects" can be found in Appendix 6-2.

In response to the Regional Board's September 18, 2007 FY 05-06 JURMP Annual Report review comment #5:

The City requires that each treatment control BMP be incorporated within one or more of the projects construction drawings. In addition, City Standards require highlighting of each treatment control BMP within a separate information box shown on the title sheet as well as the individual construction sheet. The title sheet box lists each separate treatment control BMP included within the plans, by type, sheet number where the BMP is detailed, CASQA reference number ownership and maintenance requirements. A separate box is included on each construction sheet where individual BMPs are detailed showing BMP type and the number of separate units shown on that sheet. The BMP information boxes help to ensure construction of the required BMPs and also make it easier for City staff to locate BMPs on construction drawings so they may be entered into the City's GIS BMP inventory database.

The City ensures that all site design, source control or treatment control BMP's are not deleted from a project through strict adherence to the City's "Site Plan Substantial Conformance Policy" and "Construction Plan Revision Procedures". The Substantial Conformance Policy is used to ensure that all project design features, including treatment control BMPs, are incorporated into the final design of a project. All changes in design must be reviewed and approved by City staff. The City's Plan Revision Procedure ensures that all proposed changes in the field during construction are reviewed and approved by appropriate City staff before the change is permitted.

The City confirms the construction of each treatment control BMP with the 'as-builting' of each construction drawing. During the past year, the construction drawings for sixty-two (62) projects were "as built". Twenty-four (24) of the projects were 'high priority projects" requiring installation of structural treatment control BMPs. Through the City's construction inspection and construction drawing 'as-builting' process, the City verified installation of the required treatment control BMPs. A list of the construction drawings for the sixty-two (62) projects 'as-built' during FY 06-07 is included in Appendix 6-3.

6.3 Revisions to Environmental Review Process Actions

Consistent with the Permit, the City's Initial Study Environmental Review Checklist Form was updated in March 2001 to incorporate additional focused hydrology and water quality questions to be considered by Community Development staff during the Initial Study process under CEQA. The review of all discretionary projects is consistent with CEQA requirements. Project proposals are reviewed to ensure that all development will be in compliance with the new/revised Grading, Storm Water, and Coastal ordinances, the Permit, local permits, and all other applicable ordinances and requirements. In FY 06-07, prior to project approval and issuance of local permits, the City required each proposed project to implement measures that prevent and reduce pollutants associated with the development, to the maximum extent practicable, from impacting receiving water quality.

6.4 Education on New Development and Redevelopment

Weekly staff meetings include a review of new discretionary permits, discussions about specific/general topics about pollution control, new projects and of proper source and/or treatment control BMPs, past experiences, design alternatives, effectiveness, long-term maintenance, and other issues related to water quality. A list of all training and topics can be found in Appendix 6-4.

The City also continued to distribute the "*Pollution Prevention Guide for the Construction Industry*." This brochure was developed to provide BMP and pollution prevention information related to materials storage, perimeter controls, building and staging areas, dumpsters and port-a-potty services, concrete trucks and pumpers, washout areas, and storm drain protection.

6.5 Self Assessment

Program Strengths

City personnel continue to build upon the storm water BMP database. Procedures have been put into place to link the BMP database to the City GIS maps. The database will assist the City in monitoring locations and types of permanent BMP measures and to track maintenance inspections.

City engineering staff began a business process review of the various development processes in the City including the process for taking in and reviewing the Priority Project Checklist for ministerial and discretionary permits. Procedures to ensure that all ministerial projects were properly reviewed and records retained in compliance with the Permit and SUSMP requirements were strengthened.

The City also adopted new storm water BMP maintenance agreements in FY 06-07 and incorporated them into its standard operating procedure. The new BMP Maintenance Agreements will ensure compliance with storm water BMP maintenance requirements. The new agreements provide the City with legal authority to access, inspect, and if necessary maintain onsite BMPs. In addition, the agreements allow the City to place a lien on a property if BMPs are not maintained as required by the agreements.

In FY 06-07 the City assigned an Associate Engineer in the Development Services Division to work on storm water compliance issues related to the development review and permit approval process. The assignment has helped to advance compliance with the proposed NPDES Permit Order No. R-9-2006-0011 and to enhance implementation of BMP strategies into new and development plans. The assignment has also helped to assist in the provision of more targeted and extensive training and education of Development Services staff, private land developers, and their professional consultants with specific emphasis on incorporating source control BMPs into land development projects.

Other accomplishments brought about by the City's business process review and reassigned Associate Engineer include the development of a new BMP standard for stabilizing rough graded pads, updating of the City's Storm Water Applicability Checklist and development of a Standard Project Owner's Certificate for post construction BMPs on stand alone building permit construction projects (projects which don't require City discretionary approval).

Program Improvement Areas

The City will continue to conduct a business process review of the development project approval process in FY 07-08. In addition to other things, the business process review will address development of automated record keeping of projects for compliance with Permit and SUSMP requirements. This will help to ensure compliance with storm water regulations and to assist staff in preparing additional useful numeric data for the JURMP annual reports.

The City will develop and incorporate all new Land Use Planning Component requirements as required by the new Municipal NPDES Permit, Order 2007-01.

Section 7
Construction Component

7.0 Overview

The City has implemented activities that address and minimize impacts on receiving water quality related to run off from new construction sites. Performance goals are used to assess the completeness of this component and the effectiveness of action plans. These performance goals include construction site inspections, BMP implementation reviews, corrective actions, enforcement, and reporting requirements. During FY 06-07, the City updated the construction inventory weekly, inspected all construction sites, responded to construction related inquiries and complaints, provided outreach and education to developers, engineers, contractors and City staff, and used enforcement actions to obtain compliance when necessary. These activities are described in the following subsections.

7.1 Source Identification and Threat to Water Quality Prioritization

To assist in the prioritization and identification of threats to water quality, the City uses the Permits Plus database during the construction permitting process to develop and update a watershed based inventory of all construction sites that require grading permits regardless of site size or ownership. Construction sites with grading permits may include sites where activities such as grading, excavation, clearing, road construction, structure construction, or demolition results in the disturbance of soil. Construction permits that do not require a grading permit may include sites where activities such as single family residence, remodels, or additions, home demolitions, tenant improvements, or commercial / industrial buildings that are constructed resulting in the need for water quality protection. The City prioritized all sites with active grading permits for FY 06-07 as high priority for the purposes of conducting site inspections. The City will begin to change from all sites being categorized as a high priority to either a high, medium, or low priority according to the criteria in Order No. 2001-01 in fall of 2007. All construction sites will be appropriately prioritized in accordance with Order 2007-0001 by January 24, 2008. The inventory is maintained throughout the year and updated weekly.

7.2 Pollution Prevention

Pollution prevention consists of procedures and practices that eliminate or reduce the pollutants at the source. The City has identified and required implementation of the following pollution prevention controls for all applicable construction sites:

- SWPPPs and erosion control plans are required for grading permits and appropriate construction projects. These plans are checked by the City to ensure they adequately address the provisions of the General Construction Permit.
- Construction Management and Inspection (CMI) and contracted Construction Storm Water inspectors enforce the implementation and effectiveness of BMP's described in approved erosion control plans and SWPPP's.

The City has adopted the pollution prevention measures contained in the *Storm Water Best Management Practice Handbooks*, published by the California Storm Water Quality Association (CASQA), Caltrans Storm Water Quality Handbooks, and *Standards for Design & Construction of Public Works Improvements in the City of Carlsbad*.

7.3 Construction and Grading Approval Process

During FY 06-07, the City continued verifying the Notice of Intent (NOI) validity prior to issuance of a grading permit or Notice to Proceed for CIP projects. Prior to having a pre-construction meeting and issuing a grading permit, CMI verifies a valid NOI is in place for projects as required by the State. The Construction Manager reviews the State's online database to ensure a NOI has been issued prior to assigning the project to an inspector for grading permit issuance.

The City updated the Construction and Grading approval process during FY 03-04 and continued implementing this process in FY 06-07. The City ensures that all construction sites with a grading permit implement measures to reduce pollutants to the maximum extent practicable. Prior to approval of a grading permit, the project proponent is required to implement measures to ensure that pollutants from the site will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of water quality objectives. The City is meeting this obligation by amending or conditioning existing permits, procedures and ordinances that are already in place. The general project review process for obtaining a grading permit is as follows:

- Identify the project's BMP requirements.
- Determine adequacy of project's proposed storm water BMPs.
- Include BMP requirements in permit conditions, and/or plans and specifications.
- Review previously approved discretionary permits during the construction permit process for post-construction BMPs identified in discretionary approvals, or equivalent (where applicable).
- Review proposed revisions to approved projects for additional storm water requirements (where applicable).

In previous years, the City modified its requirements to be consistent with the General Construction Permit, requiring projects one acre or larger to prepare a SWPPP, and continued implementing this requirement in FY 06-07. The City has also defined a process to outline how BMPs and other pollution prevention measures will be required and implemented. The process has been in place for several years and is described as follows:

<u>Construction Permit Application</u>
A fact sheet (checklist used to define applicability of requirements) has been developed in accordance with the Permit that identifies and prioritizes construction activities. The fact sheet is completed by the construction permit applicant and reviewed by Development Services staff who also assist the applicant in determining the appropriate BMPs and documentation required (SWPPP, SWMP, erosion control plan, minimum BMPs, etc.) to complete the permit application.

Previously only the construction sites that required a grading permit would be required to use the fact sheet. However, during FY 06-07 all construction permit applications, including the ministerial permits, are required to use the fact sheet during the application process. It should be noted that the City's grading ordinance is very strict and captures the majority of all construction sites. The ministerial permits process now includes minimum BMP's; this captures construction sites that may not have a grading permit. An example of these ministerial permits would be one single residential home construction with minimal grading, home remodeling, and commercial site tenant improvements.

<u>Construction Permit Processing</u>
Based on the initial project information and assessment contained in the permit application, staff reviews applications to determine the adequacy and accuracy of the information. During the permitting process, the appropriate BMPs, pollution prevention methods, and documents necessary (SWPPP, SWMP, and minimum BMPs) are reviewed and incorporated into the permit requirements.

The City implemented the construction and grading requirements of Order 2001-01 into local construction and grading permits. A grading permits checklist was developed to ensure construction and grading requirements are incorporated into the construction/building permits and the City continued to use this checklist in FY 06-07. The following construction and grading requirements are incorporated into the construction and building permits through the use of a checklist:

The project proponent must:

- Develop and implement a plan to manage storm water and non-storm water discharges from the site;
- Minimize grading during the wet season and coincide grading with seasonal dry weather periods to the extent feasible. If grading does occur during the wet season, the project proponent is required to implement additional rainy season BMPs, as necessary for compliance with the Permit;
- Emphasize erosion prevention as the most important measure for keeping sediment on site during construction;
- Utilize sediment controls as a supplement to erosion prevention for keeping sediment on-site during construction, and never as the single or primary method;
- Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction;
- Minimize exposure time of disturbed soil areas;
- Temporarily stabilize and reseed disturbed soil areas as rapidly as possible;
- Permanently re-vegetate or landscape as early as feasible; and
- Stabilize all slopes.

7.4 Best Management Practice Implementation

CMI continues to train all inspectors on the appropriate application of construction site BMPs. In addition to using the previously adopted and modified CASQA and Caltrans BMPs, the City also introduced new and improved BMPs during FY 06-07. The City continues to review new and varying site BMPs proposed for use on private development sites.

This year, CMI reviewed several new BMP's and technologies. CMI reviewed the installation and use of The Soaker Wheel Wash® on a grading project that required several thousand yards of import. The device is a self-contained unit that uses pressured nozzles to spray water on the tires and undercarriage of passing trucks to remove any dirt prior to leaving the sight. The product demonstrated some level of effectiveness. However, even though it was used in conjunction with a stabilized construction entrance, some tracking was experienced. Unfortunately, the product did not remove all dirt and it did not appear effective as a sole BMP. Additional BMP's must be used in order to complete an overall effective means of preventing tracking.

CMI, as well as the Maintenance and Operations Division, reviewed RapidFlow®, an inlet protection BMP. The product is similar to other inlet opening protection devices in that it blocks potential pollutants from entering the MS4, but does allow water to filter through. This device is very effective in removing trash and larger debris and allows runoff to filter through in a very efficient manner. This product is not effective, however, in removing sediment, non-visible pollutants, or fine particulates. Due to the ineffective qualities of these products neither of theses products will be used without additional or supplemental BMP's.

During FY 06-07, the City's standard for stabilizing rough graded residential lots was clarified to include the CASQA and Caltrans standard drawing numbers as reference materials (Appendix 7-1). The detailed drawing was incorporated into the City of Carlsbad Engineering Standards as drawing GS-13.

SWPPP's and erosion control plans are reviewed prior to commencement of construction activities to ensure that the required minimum BMPs are implemented. The seven required minimum BMPs, as identified in the JURMP, are:

1. Erosion control methods for graded slopes:
2. Erosion control method for graded flat areas (slope <5%):
3. Sediment control for perimeter boundaries;
4. Offsite tracking control of sediment;
5. Materials management control;
6. Waste management control; and
7. Non-storm water management control.

To address each of the required BMPs, the City ensures the SWPPPs and/or erosion control plans include implementation of the following types of BMPs as applicable, depending on site-specific requirements. The list below corresponds to the numbered BMPs above:

1. Hydroseed applications, bonded fiber matrix application, Geotextiles and Mats, straw waddles, silt fences, and fiber rolls are incorporated into the City approved erosion control plans and project SWPPP's as applicable.
2. Irrigated and non-irrigated hydro-seed mixes', gravel bag and/or sandbag barriers, silt fence, and fiber rolls are incorporated into approved erosion control plans and SWPPPs as applicable.
3. Silt fences, earthen berms, velocity dissipaters, gravel bag and/or sandbag barriers, and drainage swales are incorporated into approved erosion control plans and project SWPPPs as applicable.
4. Construction entrances and tire washing stations are incorporated into approved erosion control plans and project SWPPP's as applicable.
5. Vehicle and equipment maintenance, fueling and cleaning stations, material storage and delivery yards are protected and concrete washout basins are incorporated into approved erosion control plans and project SWPPPs as applicable.
6. Covered receptacles are incorporated into all projects at strategic locations, litter removal programs are incorporated into the project schedules, ensuring material storage is isolated from drainage facilities and watercourses, and other source control BMPs are incorporated into City approved erosion control plans and project SWPPPs as applicable. Additionally, all temporary construction relief stations are required to have, at a minimum, secondary containment units directly beneath them.
7. Non-storm water management generally includes source control BMPs such as paving and grinding operations, dewatering operations, water practices, etc. These BMPs are incorporated into City approved erosion control plans and project SWPPPs as applicable.

7.5 Inspection of Construction Sites

In FY 06-07, the City took the opportunity to review and restructure the current storm water pollution prevention program, as it relates to construction activities, to further ensure compliance with Order No. 2001-01. In January 2007 the City expanded its storm water compliance inspection program by diversifying the construction components into two areas: ministerial construction permits and grading construction permits. CMI oversees the inspections of grading permitted sites while storm water inspectors ensure ministerial permitted sites (construction sites without a grading permit) are compliant, with two inspectors designated with 100% responsibility for storm water compliance.

The City continues to prioritize all construction sites with active grading permits as high priority. These sites are inspected on a weekly basis during the wet season and once a month during the dry season, at a minimum, to ensure proper installation and maintenance of pollution prevention BMPs. For the purposes of this report, a report was generated which illustrates the active grading permits and priority of each for

FY 06-07. Appendix 7-2 is an inventory of active grading permit construction sites. The City performed 6,294 site inspections during FY 06-07.

Engineering inspectors are responsible for inspections on all active grading sites. Storm water issues (compliance with the grading ordinances and Order No. 2001-01) have become one of their main focuses, especially during the rainy season. Engineering inspectors were onsite inspecting grading sites on a regular basis and monitoring changing site conditions and the status and effectiveness of BMP's installed. During the wet season all grading sites were inspected on a weekly basis at a minimum. The high priority inspections are documented weekly. The inspectors are onsite daily on most sites verifying proper BMP implementation in addition to the formal weekly inspection that is documented. The construction site storm water checklist for FY 06-07 is included in Appendix 7-3. Table 7.1 demonstrates the grading permit inspections conducted in FY 06-07:

Table 7.1 Grading Permit Site Compliance Inspections

Required Inspections	Inspections Conducted
4851	4851

Contracted storm water inspectors were onsite inspecting all locations as required by the priority of the site. During the wet season (Oct. 01 through April 30) high priority sites were inspected weekly while medium and low priority sites were inspected once every two weeks.

Ministerial permits were subject to further inspection from the building department during regularly scheduled technical inspections. As a result, more inspections were conducted than actually required. All required inspections were documented. Table 7.2 describes the ministerial permit inspections conducted from February 01, 2007 to June 30, 2007:

Table 7.2 Ministerial Permit Site Compliance Inspections

Required Inspections	Inspections Conducted
1175	1296

Appendix 7-4 shows the current Capital Improvement Projects (CIP) sites. Inspectors are out on CIP projects daily covering a number of issues including storm water issues. It is important to note that not all sites on the inventory were active during the entire rainy season. The City currently has a system of tracking required inspections, which is monitored on a weekly basis to ensure compliance. Information from completed inspections is entered into a database and annual reports are processed from this database for reporting purposes. Table 7.3 describes the CIP project inspections conducted in FY 06-07:

Table 7.3 CIP Site Compliance Inspections

Required Inspections	Inspections Conducted
147	147

7.6 Enforcement of Construction Sites

There have been no changes in the enforcement escalation procedures described in the City's JURMP during this FY 06-07. Table 7.4 is a summary of enforcement actions taken by the City during FY 06-07. A detailed report is available upon request. The City will review current procedures for management of CIP sites and improve as necessary.

Table 7.4 Summary of Enforcement Actions at Construction Sites in FY 06-07

Actions Taken	Number of Actions
Field Memo (written warning)	68
Correction Notice	45
Stop Work Notice	15
Total Actions	**128**

7.7 Reporting of Noncompliant Sites

There were no changes to the reporting procedures as described in the JURMP. The Public Works Director or designated representative provides verbal notification, within 24 hours, to the Regional Board of non-compliant sites that may pose a threat to human or environmental health. Written follow-up notification within 5 days of the discovery of the noncompliant site is sent via certified mail to the Regional Board. Non-compliant construction sites considered a potential threat to water quality criteria are outlined in Section 7.8.1 of the JURMP. The Carlsbad Municipal Code is also used to appropriately respond to and evaluate each individual situation. Other regulations are applied, as appropriate, for impacts to human health and the environment that would not necessarily affect storm water or receiving water. Non-compliant sites that are determined to pose a threat to water quality will continue to be reported to the Regional Board.

During FY 06-07 the City reported two discharges to the Regional Board. Both events occurred at the same project, CT 02-18, WDID # 937C331725, The Bluffs. On October 11, 2006 a construction vehicle backed into a fire hydrant, removing it and causing a potable water discharge. BMP's were in place prior to the event. All sediment and debris were removed and BMP's maintained and/or replaced on the same day. On November 10, 2006 a skip loader also backed into a different fire hydrant, removing it and causing a potable water discharge. BMP's were in place prior to the event. All sediment and debris were removed, as well as, BMP's maintained and/or replaced the same day. After the second event occurred, the CMI division requested that bollards be placed at all fire hydrants at this project. However, the Carlsbad Fire Department requested they not be installed due to access concerns. The developer was required to place delineators and caution tape around all fire hydrants on the site

7.8 Education on Construction Activities

The City continues to conduct and participate in workshops to educate external parties, which includes project applicants, developers, contractors, and property owners on the implementation of the storm water program and requirements for construction sites.

The City of Carlsbad is committed to working with developers and contractors to ensure that BMPs are implemented at all construction sites. A new fact sheet was developed and distributed to all active construction sites in January 2007. The fact sheet includes information about the required minimum BMPs, site specific SWPPP's, and erosion control plans. A copy of the fact sheet can be found in Appendix 7-5.

Incorporating storm water training into regular staff meeting continues to be highly effective. The regular education of BMPs and their effectiveness spawns open dialogue among inspectors to share ideas and field experiences. The information from the manuals and the discussion allows a constant update of how the City will enforce the storm water pollution prevention standards.

The City has continued to use a BMP training program for CMI that is conducted throughout the year. Staff is trained on the installation of specific BMPs pursuant to the CASQA handbook. A list of these internal training topics is in Appendix 7-6 and a list of external training is located in Appendix 7-7.

On May 10 and May 16, 2007, all City inspections staff attended a two part training seminar conducted by Mikhail Ogawa Engineering. The first session consisted of classroom training that covered the evolution of storm water pollution prevention, site analysis, SWPPP's, inspection documentation, effective BMP selection and installation, and an overview of changes in the recently adopted permit. The second session was conducted in the field. Several sites were visited demonstrating a vast array of BMP's.

7.9 Self Assessments

Program Strengths

The City distributes the '*Pollution Prevention Guide to the Construction Industry*' brochure with each construction-related permit application.

The City classified all grading permit applications as high priority projects for the purposes of implementing minimum construction site BMPs and construction BMP inspections.

The City implemented the inspection of BMP requirements on all construction permit projects. These inspections continue throughout the year. Each inspection is documented and a copy of the field inspection report is filed in the project file.

The City has posted the links to the CASQA BMP handbook on the City's website for access by the public, permit applicants, developers, and property owners.

The City will continue to research and observe various types of BMP's and evaluate their performance.

Program Improvement Areas

The City will review and update the database management currently used to track and report construction sites, inspections, and enforcement actions. A centralized and standard tracking system will be considered.

The City will review the current procedures for management of all CIP projects and make improvements where necessary.

The City will consider revising the standard operating procedures for construction site inspections, data collection, and enforcement actions.

Section 8
Illicit Discharges Detection and Elimination Component

8.0 Overview

The City continued to conduct a proactive program for detecting and eliminating illegal discharges and illicit connections to the storm drain system. The City's program actively seeks to identify and eliminate illicit discharges and connections by conducting illegal discharge investigations, responding to spills and sewage overflows, conducting monitoring, and performing routine cleaning and maintenance activities on the sewer and storm drain systems.

8.1 Monitoring Programs

Dry Weather Analytical and Field Screening Monitoring

The City has conducted an annual Dry Weather Analytical and Field Screening Monitoring program since 1995. The purpose of the monitoring program is to detect and eliminate illicit connections and illegal discharges to the storm drain system. This program consists of field observations, field screening, visual monitoring, and analytical monitoring at selected sites throughout the City's storm drain system. During FY 06-07, this monitoring was performed at 60 sites.

The City continues to contract out the Dry Weather Monitoring Program to D-Max. Follow-up investigations were conducted by D-Max and City staff, in combination with the action levels and confidence intervals established by the Monitoring Workgroup. The Dry Weather Monitoring Program report for FY 06-07 is under separate cover and summaries of follow-up activities for 2007 dry weather monitoring are found in Appendix 8-1.

Comments from the Regional Board's Sept. 18, 2007 FY 05-06 JURMP Annual Report review letter related to the Illicit Discharges, Detection, and Elimination program comment #7 are addressed below.

Section F.5.c. of Order 2001-01 requires the City to "investigate and inspect any portion of the MS4 that, based on dry weather analytical monitoring results or other appropriate information, indicates a reasonable potential for illicit discharges, illicit connections, or other sources of non-storm water (including non-prohibited discharge(s) identified in Section B. of this Order). Each Copermittee shall establish criteria to identify portions of the system where such follow-up investigations are appropriate."

Criteria to identify portions of the system where follow-up investigations are appropriate have been established by the Copermittee Dry Weather Monitoring Workgroup. The group, a working subgroup of the Copermittee Regional Monitoring Workgroup, has determined appropriate action levels that will trigger upstream investigations. These action levels are the basis for the dry weather program and are referenced in the Dry Weather Monitoring Program Annual Report under separate cover accompanying this report.

The routine sample collected on 8-9-06 at BA-13 contained elevated concentrations of bacteria, exceeding dry weather action levels for all three indicators. However, the ammonia concentration accompanying this sample was below the action level, indicating that the source of bacteria was NOT sewage related.

The first step of the investigation process is to collect a confirmation sample to show that the source of contamination continues to be present. A confirmation sample was collected upon receipt of the routine analytical results on 9-12-06. The confirmation sample indicated that the bacteria concentrations had decreased at the site, indicating that a transient source of bacteria may be the cause of the routine exceedances. Two additional samples were collected upstream (concurrent with the confirmation sample on 9-12-06) and were also well below action levels.

Even though confirmation samples were within action levels and an investigation was not required, an aggressive investigation was initiated upstream. Potential sources in the area include the Plaza Paseo Real commercial complex, the Carlsbad City Library, residential areas, and an open space area at the top of the drainage basin. During the following week, an additional 15 bacteria samples were collected upstream of the site in an effort to determine the source of bacteria on 9-14, 9-18, and 9-19, 06. All upstream sample results were well within action levels.

Although all bacteria concentrations in the investigation were well below action levels, results indicated that the source was not from the commercial complex or the City library, but may be originating from the residential or open space areas to the north. At the time of the investigation, there was no flow present from the residential area. The Dry Weather Report concludes that: "This source could not be identified with certainty, but it is possible that it could be a small sewer leak or perhaps animal waste in the conveyance." Because initial ammonia results were low and follow-up bacteria results were also low, the possibility of a small sewer leak was not likely. The conjecture that animal waste may be present in the conveyance as a possible source was conjecture only, and was not observed in any investigations upstream. With data indicating water quality well below established action levels in the storm drain system, further action was not warranted and no cleaning was performed within FY 05-06.

In summary, the City maintained full compliance with the Permit requirements through an extensive investigation into the source of the bacteria detected in routine monitoring at BA-13 per the Dry Weather Monitoring Program protocol. Although a definitive source was not identified, as is often the case with bacteria exceedances, bacteria samples over four subsequent sampling days indicated that concentrations were below established action levels. Because of the results of the investigation, no further action was deemed necessary. To further investigate the possibility of illicit connections to the system, all storm drains in the suspected area were televised in February 2007 with no illicit connections found.

Coastal Outfall Monitoring

As required, the City continues to conduct a Coastal Outfall Monitoring Program to detect and mitigate urban runoff discharges to coastal storm drain outfalls. This program monitors ocean and lagoon outfalls and receiving waters for Total Coliform, Fecal Coliform and Enterococci. While this program was primarily designed after the *AB411 Recreational Water Monitoring Program*, this effort can also help identify illegal discharges, illicit connections, or other sewage contamination sources. Sampling is conducted year-round, however samples are not collected within 72 hours of a rainfall event so that discharges sampled will represent dry weather flows only. If bacteria results from the outfall exceed standards established by the program, the site is re-sampled and upstream investigations are initiated as described in the Adaptive Program. The coastal and lagoon outfall results are detailed in Attachment G of the Copermittees Annual Unified Report covering the receiving waters monitoring program.

8.2 Public Reporting of Illicit Discharges and Connections

The public continued to use the storm water hotline and e-mail address to report illegal discharges to the storm drain system. Sources for illegal discharge reports to the City included 46% from the public, 51% from City employees, and 2% from outside agencies. The Storm Water Protection Program also tracked the origins of all received reports and found that during FY 06-07, 38% of the reports came through the hotline, 40% though other phone numbers and email addresses, in addition to 22% which were observed in the field by City employees.

During regular office hours, Storm Water Protection Program staff answered the hotline, checked emails, and forwarded reported information to the appropriate personnel. When calls were received after office hours, the hotline provided a voice mail message (in English and Spanish) directing complainants to leave a message for follow-up or be directed to police dispatch for emergency response (i.e., dumping of hazardous materials into the storm water system).

When an illegal discharge was reported during regular office hours as "happening right now", an inspector was immediately dispatched to the site. The City tracked this response as a way to measure customer service and because an immediate response minimized the potential for harmful discharges to enter waterways. Being able to respond rapidly also provided a better opportunity for proactive education or prompt enforcement. During FY 06-07, there were 44 reports of washing or dumping to the storm drain system that met the high priority complaint criteria. Inspectors were dispatched to all but one of these incidents within 30-minutes, thus exceeding the benchmark of 90%.

The public continued to use the Environmental Programs hotline and e-mail address to request information about the HHW, trash, and recycling programs. In addition, the City tracked calls, comments, and questions about Environmental Programs. During FY 06-07, Environmental Programs responded to 30 complaints related to HHW, recycling, and solid waste (Table 5.3).

8.3 Illicit Connection/Illegal Discharge (IC/ID) Investigation and Follow-up

During FY 06-07, the Storm Water Protection Program responded to 154 storm water related complaints. In addition, 434 complaints or requests for action related to storm water quality, the sewer system, or storm drain system maintenance were conducted by Storm Water, Engineering Inspections, Code Enforcement, and M&O, and the Streets Department. Table 8.1 includes an issue summary by complaint type.

Table 8.1 Total Numbers of Issues for FY 06-07 by Department Responding

Issue Type Sub-Type	Department	Total
Erosion - Erosion from New Construction	Engineering Inspections	1
Sprinklers - Parks / City Facilities	General Services - Parks	1
Water System - Water Leak	Meter Services	1
Recycling Complaint	Solid Waste	5
Solid Waste Complaint	Solid Waste	17
Solid Waste - Missed Collection/Pick-up	Solid Waste	8
Construction - General Complaint	Storm Water Protection	1
Sprinklers - Private Property	Storm Water Protection	1
Storm Drain - Dirt/Debris Piles	Storm Water Protection	9
Storm Drain - Dumping to Storm Drain	Storm Water Protection	41
Storm Drain - Erosion from Existing Development	Storm Water Protection	10
Storm Drain - Needs Cleaning Public Property	Storm Water Protection	1

Issue Type Sub-Type	Department	Total
Storm Drain - Vehicles Leaking Oil/Fluids	Storm Water Protection	16
Storm Drain - Washing to Storm Drain	Storm Water Protection	90
Storm Water - General Information/Questions	Storm Water Protection	11
Water Conservation - Private Property	Storm Water Protection	18
Drainage - Runoff from Street	Streets Maintenance	1
Drainage - Water Ponding/Pooling	Streets Maintenance	3
Litter/Debris - Clean Up Request	Streets Maintenance	3
Storm Drain - Damaged/Needs Repair	Streets Maintenance	5
Storm Drain - Needs Cleaning Public Property	Streets Maintenance	9
Street Sweeping - Request for Sweeping	Streets Maintenance	1
Water System - Water Facilities	Water Operations	1
Water Conservation - Audits (Harris)	Storm Water Protection	334
	Grand Total	**588**

A complete summary of the above Storm Water Protection Program investigations and responses is found in Appendix 8-2.

The City conducted five high priority illicit discharge investigations during FY 06-07. High priority illicit discharge investigations include those that involve hazardous and/or toxic substances and those investigations resulting from complaints to or from the Regional Board.

Diesel Fuel Spill in Oct/Nov 2006

On October 11, 2006, the City received a call via the storm water hotline regarding a diesel fuel discharge on El Camino Real. Multiple City departments responded to the incident including Streets, Storm Water, Fire, and Police. Upon arriving on scene, Streets crews and the Fire Department constructed a dirt berm upstream of the storm drain and were able to contain all fuel on site. There was no discharge of fuel to the storm drain system. Upon investigation, it was found that the saddle tanks on a large truck had been ruptured by a rock causing approximately 50-100 gallons of diesel fuel to be released onto the road way. Thanks to a quick response from the City, all fuel was contained. NRC Environmental was contracted to perform the clean up and did so using absorbent material and a pressure washer, while recovering all materials into a pump truck. All materials were disposed of properly and the trucking company was billed for the clean up efforts of the contractor and the City. Because of the accidental nature of the incident, no enforcement actions were required by the storm water program.

NRG/Cabrillo Investigation

On November 14, 2006, the City received a complaint investigation request from the RWQCB (ID Number - 176) regarding an illicit discharge from the NRG Cabrillo Power Station (NRG). The complaint investigation request was sent directly to the Storm Water Manager, who sent a preliminary response to the RWQCB notifying them that a case had been opened and that the investigation had begun. The City contacted the NRG Cabrillo Power Station and was informed that on November 13, 2006 at approximately 5:30pm, NRG staff observed a white foamy material discharging from the 96 inch storm drain outfall located on the north side of the property. Although the discharge appeared to be small in quantity it spread to several areas within 150 feet of the outfall. The substance dissipated before reaching the ocean outfall. NRG staff conducted an upstream investigation and could not find the source of the discharge. On the morning of November 14, 2006, the discharge was not observed in or around the outfall. NRG staff conducted another upstream investigation and again did not observe the substance.

The City conducted a follow up site visit and investigation of the discharge. NRG representatives escorted City inspectors through the site, starting at the outfall and upstream through the NRG property boundaries. No illicit discharges were observed by the City inspectors. The City inspectors also checked the storm drain boxes outside the property line, located on the south side of NRG. Three storm drains were checked and no discharges were observed. In addition, Cannon Lake was checked and no unusual observations were made. The RWQCB was notified of the results of the investigation on November 17, 2006, and since no evidence of the discharge was observed no follow actions took place.

Nozomi Restaurant

Storm water maintenance staff responded to a report of a person dumping paint and construction materials into the storm drain on the evening of January 3, 2007 at the Nozomi Restaurant. Although the discharge had entered the storm drain system, staff was able to contain the discharge downstream prior to any release to receiving waters. The responsible party was required to discontinue the discharge.

On the 4th, the City contracted with a company to clean the discharge and the affected storm drains. Upon investigation by storm water personnel that morning, an illegal connection was located from the kitchen sink and floor drains to the exterior wall of the building. Additionally, a second drain servicing a wash area, which was properly connected to sanitary sewer, was found to be obstructed to the point of overflowing, causing wash water to flow to the storm drain as well. Since a remodel was in progress, the building inspector was notified and required the owner of the restaurant to immediately repair both connections. The owner of the restaurant was issued a Notice of Violation for a prohibited discharge, failure to implement proper BMPs, and for an illicit connection.

Buena Vista Force Main Sanitary Sewer Overflow

On **A**pril 1, 2007 the 24" ductile iron force main pumping sewage in the Vista/Carlsbad Interceptor line failed. The force main runs from the Buena Vista Lift Station to the Jefferson Street Bridge over Interstate 5. A citizen reported the spill in the evening of April 1st. A Carlsbad Duty person responded within minutes and called in supervisors. Carlsbad, along with representatives from Encina Wastewater Authority and the City of Vista responded immediately. Carlsbad was given permission by the City of Oceanside to divert 800-1,000 gallons per minute of sewage to the Oceanside conveyance system to lessen the volume of the spill. Contractors were called in to make repairs. Sheet pilings were installed and the trench was excavated. Sewage spilled from the site of the break as well as from the Buena Vista Lift Station.

Several measures were taken to lower the impacts to the environment. Aeration pumps were set up to mitigate the decreased oxygen levels in the lagoon water. Several pumps were also installed to "pump back" contaminated lagoon water into the lift station and send it to Encina Wastewater Authority to be treated. Through successful coordination of many agencies and a prompt response from all involved, the impacts to the lagoon were mitigated as much as possible.

Buena Vista Lagoon Paint Spill June 2007

On June 27, 2007, staff was informed of a discharge to Buena Vista Lagoon. Upon investigation, storm drain maintenance staff located a white discharge near the mouth of the lagoon that appeared to have originated from the nearby storm drain outfall. Storm water staff was notified and investigation and cleanup was initiated. Because the substance was unidentified initially, the Carlsbad Fire Department was notified and arrived on scene. After consultation with San Diego County Hazmat, the substance was determined to most likely be paint and a hazmat response was determined to be unnecessary.

City staff deployed an absorbent boom in an effort to contain the discharge. A contractor was then contacted to clean up the discharge. Using a pumper truck and small boats, the contractor was able to remove all of the white material from the water.

Storm water staff immediately initiated an upstream investigation into the source of the material. The storm drain was found to serve only a small private community near the lagoon. Upon investigation, an obvious source was not located, although the possibilities were limited to the few houses in the gated community. There was some evidence that paint waste had been discharged to an area drain leading to the storm drain, potentially after the completion of home improvements. Although a definitive source was not located, the Homeowner's Association was contacted and interviewed. The City proceeded to televise the storm drains in an attempt to locate the source of the discharge; however a single responsible party could not be determined. The HOA proceeded to clean the storm drain system to prevent any further residual discharges to the lagoon.

Storm water staff distributed educational literature to all homeowners in the community in an attempt to prevent future discharges to the lagoon. Appropriate agencies were notified of the release including the Regional Water Quality Control Board and California Department of Fish and Game.

8.4 Elimination of Illicit Connections and Discharges

The IC/ID elimination process is an ongoing endeavor, involving a combination of education, inspections, complaint response, and enforcement. The City used one or any combination of these efforts as necessary to achieve compliance. The ultimate goal is to eliminate the discharge or connection and to prevent future occurrences. Enforcement actions are further discussed in Subsection 8.6.

During FY 06-07, the Storm Water Protection Program received 154 complaints of potential illegal discharges. Thirty of these complaints were referred to other agencies for follow-up and remediation. These other agencies include San Diego County Hazmat and Department of Environmental Health, Waste Management, Regional Water Quality Control Board, and other municipalities. All complaints were investigated, however 55 resulted in either a source not being found as described or the source was not an illegal discharge (i.e. groundwater seepage). Table 8.2 lists the total number of illegal discharges and connections identified. During this reporting period, one illicit connection was identified and eliminated, as described above in Section 8.3.

Table 8.2. Total Numbers of Illegal Discharges and Illicit Connections Reported from Residential, Commercial and Industrial Sources via Storm Water Hotline

Discharge Eliminated	Residential	Commercial	Industrial
Illegal discharge	34	8	2
Illicit connection	0	1	0

8.5 HHW and Oil Recycling Programs

The City continued to promote a used oil-recycling program where the public can recycle up to 10 quarts of used motor oil and/or 15 quarts of diesel fuel at five locations. Used motor oil was only accepted if it was not mixed with other liquids including water, antifreeze, gasoline, or parts cleaners. Table 8.3 shows the five locations that accept used motor oil for recycling.

Table 8.3: Locations in the Carlsbad that Accept Used Motor Oil For Recycling

Location	Address	Phone Number
Firestone Store #2252	2545 El Camino Real, Carlsbad, 92008	760-434-8392
Jiffy Lube # 1621	6021 Paseo Del Norte, Carlsbad, 92009	760-431-9875
Big O Tires	2615 State Street, Carlsbad, 92008	760-720-5212
Vista HHW Collection Facility	1165 East Taylor Street Vista, 92084	800-444-4244
Oceanside Permanent Facility	2880 Industry Street, Oceanside, 92056	760-929-9400

The City also promoted the Used Oil Collection Program through various outreach and education efforts. The Environmental Programs web page offered residents information on how and where to properly dispose of used oil. There were over 40,805 hits on this web page during this reporting year.

The used oil recycling program was also promoted at various public events such as the Public Works Fair, Earth Day, and the Citizen's Academy. The City provided information about disposal locations as well as specific phone numbers to request general information about HHW disposal.

Household Hazardous Waste Program

The HHW program promoted responsible HHW disposal for the protection of Carlsbad's environment and community through various outreach and education efforts, which are further detailed in Section 9 of this report. The same outreach methods and tools used for the oil program were employed for the HHW program.

The City contracted with Clean Harbors and Waste Management to allow residents to dispose of HHW at the Vista HHW Collection Facility and the Oceanside Permanent Facility. More than 1,500 residents used these facilities to collect and dispose of 57 tons of HHW. Residents can also use the Environmental Programs hotline or web site to request additional information about HHW collection and disposal. During FY 06-07, Carlsbad residents disposed of the following types of HHW at permanent facilities as shown in Table 8.4. Updated data is also presented for FY 05-06.

Table 8.4 HHW Amounts Collected at Permanent Facilities

Activity	Tons FY 05-06	Tons FY 06-07
Flammable solid/liquid	10.22	8.92
Oil-base Paint	5.16	6.52
Poison (non-aerosol)	2.29	3.17
Reactive/Explosive	0.00	0.00
Organic/Inorganic Acid	0.50	0.64
Organic/Inorganic Base	0.38	0.50
PCB Waste	0.00	0.03
Oxidizers	0.13	0.24
Antifreeze	0.73	0.64
Car Batteries	2.27	0.00
Flourescent Bulbs	0.00	0.00
Latex Paint	15.42	16.36
Motor Oil	3.25	3.23
Oil Filters	0.15	0.24
Mercury (metallic)	0.00	0.01

Activity	Tons FY 05-06	Tons FY 06-07
Household Batteries	0.31	0.47
Electronic Waste	9.72	11.43
Aerosols	1.32	1.10
Other Universal Waste	0.42	1.23
Other HHW	3.36	2.14
Asbestos	0.21	0.07
Totals	55.85	56.96

In February 2006, the Carlsbad City Council approved a new HHW pick up program that provides a means for residents to have HHW (up to 15 gallons or 125 pounds) picked up from their homes and hauled away. In the first year of that program approximately 100 tons of HHW was collected from homes in Carlsbad. Approximately 49 tons of HHW was collected and disposed using the door-to-door program in this reporting year. Approximately 930 Carlsbad residents took advantage of this program this year. Table 8.5 shows the number and types of HHW collected by the door-door program.

Table 8.5. HHW Amounts Collected by the Door-to-Door Program in FY 06-07

Type of Waste	Quantity in Tons
Flammable & Poison	**8.32**
Acid	**0.42**
Base	**0.42**
Oxidizer	**0.00**
PCB-containing	**0.00**
Latex Paint	**33.29**
Asbestos	**0.00**
Universal Waste (UW)	**0.00**
Electronic Waste (UW)	**0.00**
Aerosol Containers (UW)	**2.08**
Other HHW	**4.16**
Total	**48.68**

The process for door-to-door collection is:

- Residents collect HHW material at home.
- Call for an appointment using the toll-free number (1-800-444-4244).
- On the day of the appointment, place HHW material on the porch or in front of the garage in a safe location and in a sealed container.
- Clean Harbors comes by and collects the materials.

In April 2007, the City sponsored a free HHW disposal day where Carlsbad residents could dispose of up to 15 gallons or 125 pounds of HHW materials. During FY 06-07, 514 residents took advantage of the special HHW collection event and were offered the Environmental Programs and Door-to-Door HHW brochures. The City collected and disposed of 69,155 pounds (34.6 tons) of HHW during this event.

8.6 Ordinance Enforcement

An intensive information and education effort was the first step the City took to eliminate discharges, prevent repeat occurrences, and ensure corrective actions were adequately and promptly implemented. Voluntary elimination of illegal discharges is strongly encouraged. However, when compliance was not achieved, the City initiated enforcement actions. Enforcement was based on the intensity, frequency, duration, and intent of the violation. Enforcement actions can range from a verbal warning to administrative fines. Table 8.6 lists the types and numbers of enforcement actions taken during this reporting period.

Table 8.6. Total Number of Enforcement Actions Taken for Residential, Commercial and Industrial Sources for FY 06-07

Type of Action	Residential	Commercial	Industrial	Total
Verbal warning	17	5	4	26
Information letter	15	0	0	15
Written Warning	3	13	4	20
Notice of Violation	2	24	5	29
Cease and Desist	0	0	0	0
Notice to Clean	0	1	1	2
Admin. Citation	0	0	0	0
TOTAL	37	43	14	92

Verbal Warning: In most cases, a verbal warning was sufficient to stop the discharge or correct the violation. Whenever appropriate, these verbal warnings were combined with distribution of educational information. Violations noted at an industrial or commercial site were written in the inspection report. There were a total of 26 verbal warnings given in FY 06-07.

Information Letter: Informational letters were typically used to provide educational materials for violations reported at residential locations, especially when the violation was not considered a serious threat to water quality. Any potential or illegal discharges observed during an industrial or commercial inspection were addressed on-site, noted in the inspection report, and followed up with enforcement actions as appropriate. There were 15 information letters sent in FY 06-07.

Written Warning: Written warnings provide documentation of an incident, compliance requirements, and constitute the initiation of escalating enforcement actions. There were 20 written warnings issued in FY 06-07.

Notice of Violation, Administrative Citation and Cease and Desist Orders: A NOV is a formal enforcement action that details specific code violations, corrective actions, and a compliance schedule. If the responsible party does not comply as required, the City could follow up with an administrative citation, starting at $100 per violation. During FY 05-06, a new Notice to Clean form and streamlined NOV form were created to help facilitate prompt response from businesses. There were 29 NOVs issued in FY 06-07.

8.7 Spill Response and Sanitary Sewer System Maintenance

The City continued to actively prevent and respond to sewage spills and other spills, and to limit discharges from the sanitary sewer system to the MS4. This occurred through public education and

outreach, inspections, preventive maintenance, complaint response, and spill response (containment and remediation). The City operates and maintains 262 miles of sewer lines and 14 sewer pump stations. The following inspection and preventive maintenance activities were conducted during this reporting period.

Inspection

From Monday through Friday, all sewer pump stations were inspected daily. The ten largest pump stations were also inspected on Saturdays and Sundays. The operator inspected the electrical systems quarterly and the pumps and shafts were serviced annually. In addition, outside services were contracted to inspect the electrical services annually. The wet wells were cleaned every six weeks or more frequently if necessary.

Eleven pump stations are equipped with telemetry which were inspected daily. This included checking the 24-hour history records, pump gallons per minute, wet well on-off cycles and pump alternating cycles. The City conducted most pump repair work, although any needed machine work was performed by outside services. In the case of emergencies, the City has a 24-hour duty person, and cell phones were issued to each member of the Wastewater Operations staff, and Supervisor. In the case of power failures, ten of the stations have onsite generators and three stations can be powered by the City's two trailer mounted generators.

Preventive Maintenance

During FY 06-07, the City performed routine preventative maintenance and inspections of the sanitary sewer system, which included video inspections, access hole inspections, semi-annual inspections of three major trunk lines, and routine cleaning of sewer mains. The City performed approximately 2,300 manhole inspections. Regular monitoring of the sewer system was achieved with routine cleaning and manhole inspections. Sewer system surveillance was conducted on a regular basis. Flow monitoring was performed to compare the flows in dry and wet seasons. Anything unusual was reported and followed up on.

Approximately 158 miles of sewer lines were cleaned last year. The maintenance schedule is designed to provide more frequent cleaning for identified trouble areas, with siphons being cleaned annually, low flow and flat lines cleaned semi-annually, and grease problem areas cleaned quarterly. Tables 8.7 and 8.8 detail the percentage of maintenance and cleaning achieved since 2003.

Table 8.7 Station Facility Maintenance Since FY 02-03

		Percent Maintenance Achieved[1]				
Activity		**FY 02-03**	**FY 03-04**	**FY 04-05**	**FY 05-06**	**FY 06-07**
Station Facility Maintenance	Benchmark					
Pump Station	90%	104%	100%	102%	95%	90%
Pump Station Electrical	90%	102%	51%	94%	77%	100%
Pump Station Wet Well	90%	63%	41%	49%	103%	100%
Pump Station Generator	90%	104%	113%	98%	101%	100%
Pump Valves & Check Valves	90%	8%	61%	91%	103%	95%
Pump Station Pump	90%	86%	17%	30%	71%	90%
Overall		**77.80%**	**64%**	**77%**	**92%**	**96%**

[1] Achievement levels as reported in the "Maintenance Assessment Program" Report

Table 8.8. Sewer Main Cleaning Since FY 02-03

		Percent Maintenance Achieved[1]				
Activity		**FY 02-03**	**FY 03-04**	**FY 04-05**	**FY 05-06**	**FY 06-07**
Sewer Main Cleaning	Benchmark					
Priority Sewer Every 3 Months	90%	*Data not available*	103%	86%	98%	100%
Priority Sewer Every 6 Months	90%	*Data not available*	86%	108%	104%	100%
Priority Sewer Every 12 Months	90%	*Data not available*	93%	80%	92%	84%
VCP Sewer Lines Every 24 Months	90%	*Data not available*	100%	100%	100%	100%
PVC Sewer Lines Every 36 Months	90%	*Data not available*	100%	100%	100%	100%
Overall		**N/A**	**96%**	**95%**	**99%**	**97%**

1 Achievement levels as reported in the "Maintenance Assessment Program" Report

Spill Response

City employees are trained to follow the City's Sewer Overflow Prevention Plan/Response Plan. Staff training was conducted semi-annually, and tailgate meetings were held quarterly. All spill response incidents were tracked in the Hanson system or spill reports. Sanitary sewage overflow responses were documented as required on the Sanitary Sewer Overflow Report Form, which was sent via fax to the Regional Board, County Health Department, and the Storm Water Protection Program. During FY 06-07 the City responded to 27 sewage overflow or spills. A total of 18,000 gallons were recovered with approximately 635 gallons entering the environment. The overflow reports are found in Appendix 8-3. These calculations do not include the large overflow at the Buena Vista Force Main which occurred in April 2007. This incident is described in detail below.

On **A**pril 1, 2007 the 24" ductile iron force main pumping sewage in the Vista/Carlsbad Interceptor line failed. The force main runs from the Buena Vista Lift Station to the Jefferson Street Bridge over Interstate 5. A citizen reported the spill in the evening of April 1st. A Carlsbad Duty person responded within minutes and called in supervisors. Carlsbad, along with representatives from Encina Wastewater Authority and the City of Vista responded immediately. Carlsbad was given permission by the City of Oceanside to divert 800-1,000 gallons per minute of sewage to the Oceanside conveyance system to lessen the volume of the spill. Contractors were called in to make repairs. Sheet pilings were installed and the trench was excavated. Sewage spilled from the site of the break as well as from the Buena Vista Lift Station.

Several measures were taken to lower the impacts to the environment. Aeration pumps were set up to mitigate the decreased oxygen levels in the lagoon water. Several pumps were also installed to "pump back" contaminated lagoon water into the lift station and send it to Encina Wastewater Authority to be treated. Through successful coordination of many agencies and a prompt response from all involved, the impacts to the lagoon were mitigated as much as possible.

M&O continued to respond and coordinate sewage spill response with the Leucadia Waste Water District (LWWD) and Vallecitos Water District for spills that occur outside the M&O jurisdiction. During normal business hours, calls were dispatched by M&O to field units for immediate response and evaluation. After working hours, phone numbers were routed through police dispatch to M&O standby personnel.

A portion of the LWWD collection system is located within the City limits. They are responsible for operating and maintaining their system, including responding to overflows and spills. However, M&O responds or provides assistance when requested. During FY 06-07, LWWD responded to one sewage

overflow in Carlsbad, resulting in the release of 2750 gallons of sewage released into the environment. Response details are found in Appendix 8-4.

A portion of the Vallecitos Water District sewage collection system is also located within the City limits. They are responsible for operating and maintaining their system, including responding to overflows and spills. However, M&O responds or provides assistance when requested. During FY 06-07, Vallecitos Water District reported zero sewage overflows in the City of Carlsbad.

Volume of Spills: This component of the sewer system delivery measure includes reportable spills due specifically to system failure. In past reports, the volume measure included only those spills of 50 gallons or more per incident. All spills are now used in this measure, because M&O reports spills regardless of the volume. Also, because our benchmark partners do not have responsibility for sewer laterals and in order to maintain comparability of data, this measure does not include spills from sewer laterals even though the City reports those types of spills when they occur.

The number of gallons spilled per mile of sewer main as a result of system failure was 5.4. This is a decrease from the previous year and represents the results of our ongoing proactive sewer main cleaning preventative maintenance program. M&O gave particular attention to the sewer main system in the older downtown area of Carlsbad which historically has experienced blockages caused by grease and/or root intrusion. Sewer mains in these older areas are categorized as "high priority." These areas were inspected and cleaned every three months as a proactive measure to mitigate possibility of blockages and/or spills. When staff identifies areas that have continued blockage problems, these areas are included on the high priority maintenance list.

Table 8.9 shows the reportable gallons spilled per mile of sewer infrastructure by fiscal year for the portion of the collection system maintained by the City of Carlsbad. This information is published in the City's annual State of Effectiveness report.

Table 8.9. Volume of Spills and Spills Recaptured

Fiscal Year	Number of Reportable Spills[1]	Reportable Gallons Spilled	Total Miles of Sewer Mains	Reportable Gallons Spilled per Mile
Benchmark				0
2000-2001	9	1,125	212	5.3
2001-2002	14	7,835	212	36.9
2002-2003	7	7,550	232	32.5
2003-2004	6	209	235	0.89
2004-2005	11	3,030	254	11.9
2005-2006	7	1,509	255	5.4
2006-2007	12	4,900	262	18.7

1 Includes all spills caused by a failure in the sewer system (excludes recycled water spills and/or spills from sewer laterals)

Volume of Spills Recaptured: This measure is included to represent the effectiveness of the City's "Sewer Response Plan." The number of gallons recaptured in FY 06-07 was 87% of total reportable gallons spilled due to system failure. Staff responds to all spills upon notification; however, in some

cases notification did not come in time to allow for the total recapture or contain the spill. The number and volume of spills increased from last year; however, the percentage spilled volume recovered was significantly greater than last year. However, this data does not include volume calculations from the Buena Vista Force Main rupture. Table 8.10 illustrates the volume of sewage spilled and the volume recovered by City response efforts.

Table 8.10. Volume of Spills Recaptured

Fiscal Year	Reportable Gallons Spilled [1.]	Reportable Gallons Recaptured [2.]	Percentage of Gallons Recaptured
Benchmark			100%
2000-2001	1,125 [3.]	2,640 [4.]	235%
2001-2002	7,835	6,845	87%
2002-2003	7,550	2,200	29%
2003-2004	209	164	76%
2004-2005	3,030	1,025	34%
2005-2006	1,509	98	6.50%
2006-2007	4,900	4,265	87%

[1.] This column includes all spills that were caused by a failure in the City's sewer system (excludes recycled water spills and/or spills from sewer laterals). Figures are adjusted from previous years' reports.
[2.] Data is based on total reportable gallons recaptured from the City's public sewer system.
[3.] Of note, two significant spills occurred to the recycled water system and are not included above.
[4.] Residual and/ or any other water from other areas during recapture was reported.

Complaint Response

M&O personnel responded to 46 sewer stoppage complaints and 12 sewer repair requests. These requests and the City's response were tracked electronically in the RFA and Hansen systems.

Education

Educating the public on the proper disposal of fats, oils and grease is one of the BMPs used to prevent sewage spills. The City continued to distribute the Water Environment Federation brochure entitled "*Fat-Free Sewers.*" These brochures were distributed at various public events and during field visits.

The Storm Water Protection Program occasionally depends on other City departments to assist with investigations and remediation during field reviews. M&O and the Storm Drain Maintenance Division were key to prompt, effective responses to investigations involving spills and clean ups. Regular meetings and discussions about compliance issues facilitated this interdepartmental coordination effort.

Other Spills

The City's Emergency Services (Fire/Police Departments) responded to reports of hazardous materials spills and discharges in Carlsbad. Fire Department personnel were trained in hazardous material emergency response and identification of hazardous materials and other City departments relied on the Fire Department to assume command during hazardous materials incidents. Emergency services may request assistance from the Streets Department to contain discharges that have the potential to endanger life, property, and/or the City right-of-way, control traffic, and provide secondary perimeter boundaries as directed Emergency Services' staff.

During FY 06-07, the *Spill Response Plan* continued to be used to detail the roles and responsibilities of Emergency Services, Streets Department, M&O, and the Storm Water Protection Program. If Emergency Services was first on the scene of an unidentified spill, the incident commander decided whether to

provide emergency containment measures or wait until the emergency response agency identified the substance. If the incident commander suspected the substance to be of a hazardous nature, emergency response procedures were implemented. All incident commanders retained a copy of the Department of Transportations "*Emergency Response Guidebook*" which lists classifications of hazardous materials and recommendations for handling materials.

The San Diego County DEH HIRT, through a Joint Powers Agreement, was involved in any significant spills of a hazardous nature. The County maintains these records, as does the State OES. Minor petroleum or other small spills on City streets were handled by the Streets Department using absorbents, sweeping, and proper waste disposal. These cleanup requests were documented in the City's RFA or work order systems. During FY 06-07, there were 10 other spills (non-sewage related) in Carlsbad as referenced in Appendix 8-5.

8.8 Self-Assessment

Program Strengths

In April 2007, the City sponsored a free HHW disposal day where Carlsbad residents could dispose of up to 15 gallons or 125 pounds of HHW materials. The event attracted 514 residents.

The City's goal was to respond to complaints "happening right now" within 30 minutes for 90% of incidents. This goal was met over 90% of the time during FY 06-07.

The City continues to use the Performance Measurement System to monitor annual sewage overflow spills and responses, and assess whether preventive maintenance or other improvements can be made to reduce spills to the environment. The City also has a Maintenance Assessment Program to evaluate the condition of public facilities. This program establishes and documents the frequency of recommended preventive maintenance and/or responsiveness to repair needs, then measures the level of accomplishment each year by comparing percent of completed work to scheduled maintenance.

The City continues to recruit interns from local universities to work with storm water staff. During FY 06-07, the Storm Water Protection Program had one intern working on various projects, including commercial and industrial inspections, data management, and outreach and education.

The City continues to use the *Spill Response and Cost Recovery Plan Procedure* to define the process for protecting the storm drain system from potentially hazardous releases. This procedure applies to the City personnel who may be involved in spill prevention, containment and response activities.

In late FY 05-06, the Storm Water Protection Program began drafting a *Best Management Practices Manual* that includes the minimum and required BMPs for activities and pollutants types. The manual will be continually worked on during FY 06-07 and should be completed in FY 07-08.

In FY 03-04, the City worked with Waste Management to develop an Environmental Programs booklet that included storm water residential BMPs, as well as detailed information on available solid waste services, including oil recycling and HHW disposal sites. The booklet was revised and updated in FY 06-07 to reflect the most current HHW, trash, recycling, storm water, and water conservation information.

In an effort to discover sewer blockages before they become a spill, M&O staff will be implemented a pilot program using radio-wave signal technology called "SmartCover™." The SmartCover™ system provides continuous real-time monitoring of five access hole locations that staff has determined as critical. Using wireless communications to designated cell phones and/or pagers, the system alerts staff

upon intrusion or surcharge in any of the monitored locations allowing staff to respond in time to clear any blockages, etc., prior to a spill occurring. The Smartcover technology prevented three overflows from occurring in FY 06-07. An additional 5 more Smartcovers will be implemented in 07-08.

In relation to sewer spill volume and spills recaptured M&O staff will continue:

- Preventive maintenance sewer line inspections and monitoring in a proactive attempt to eliminate the volume of spills.
- Inspection of new construction to ensure that any debris ending up in the sewer system is held to a minimum and does not result in a spill or blockage.
- Investigation and implementation of mitigation efforts and enhancements to the *Sewer Response Plan* to increase the percentage of spills recaptured. The measure will include any sewage spill that occurs, whether or not it's the result of system integrity failure or caused by other occurrences (e.g., line damage due to construction and blockages caused by grease disposal into sewer system).

Program Improvement Areas

During FY 06-07, staff continued to revise brochures and fact sheets to reflect changes in the program. A complete revision of all brochures will take time to complete. However it is expected that this project will be completed by late FY 07-08.

Station Facility Maintenance: Upgrades to the wastewater SCADA system will be accomplished in 07-08 with the goal of obtaining more accurate "real time" data acquisition.

Sewer Main Cleaning: Utilizing a second vactor truck (which was rented for approximately half of the year) staff accomplished the established benchmark. A new vactor will be purchased in 07-08 to replace older equipment. Services of a third vactor will also be added to the fleet. Data analysis of sanitary sewer overflow (SSO's) will assist with redirecting preventative maintenance cleaning efforts. The CCTV van will be added for condition assessment of the sanitary sewer collection system.

The Maintenance and Operations program will be expanding in order to comply with new regulations pertaining to new Waste Discharge Requirements.

Section 9
Outreach and Education

9.0 Overview

Public education is integral to the success of Carlsbad's urban runoff management program. The City continues to increase public awareness about pollution prevention and promote behavioral changes and environmental stewardship. The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent. The City continued to be actively involved in outreach and education efforts at the local level, the watershed level (North County Storm Water Program), and the regional level (Project Clean Water – Outreach Workgroup). These efforts are further discussed in the following subsections by target audience.

9.1 Municipal Departments and Personnel

Storm water training for municipal employees included general training and job specific training for designated departments and personnel. The objectives of the employee training programs are as follows:

- Promote a clear understanding of the urban runoff and water quality issues, including activities that can potentially pollute receiving water bodies.
- Identify and implement strategies for BMPs.
- Promote employee ownership of the problems and their ability to apply solutions.
- Integrate employee feedback into training and BMP implementation.

General Employee Training

During this reporting period, City employees received storm water training covering issues such as the causes of storm water pollution, how it affects the environment, and the overall structure of the storm water program. Messages related to general training may include, where applicable, the topics listed in the Permit. During FY 06-07, City staff received information and general storm water training through various communication methods including:

1. Storm Water Webpage: Employees were able to download BMPs and the JURMP directly from the City's website.
2. Intranet: The City's intranet was used to post messages and inform employees of various events and opportunities for participation, such as the Coastal Cleanup Day and Earth Day activities.
3. Public Works Newsletters: During FY 06-07 every edition of Public Works newsletter featured updates on the Storm Water Protection Program and Environmental Programs. Employees were notified by e-mail when these newsletters were published and posted on the City's intranet, and hard copies were given to maintenance personnel.
4. Promotional Items: Items such as water bottles, notepads, mouse pads, cups, and pens with the hotline numbers and other pollution prevention messages continued to be distributed to employees.
5. Hotline Decals and Notepads: Car window decals and notepads with the storm water hotline were distributed for employee use in the field.

Job Specific Training

Several job positions have been identified that require activity or job specific storm water training. A summary of municipal employee training is in Appendix 9-1. Table 9.1 identifies the departments with personnel that should receive job specific training.

Table 9.1. Department and Positions for Job Specific Storm Water Training

MSA	Department	Positions
PW	Engineering, Construction Inspections	Construction Inspectors
PW	Engineering, Engineering Development Services	Associate Engineer, Assistant Engineer
PW	Environmental Programs, Storm Water	Environmental Specialists Interns
PW	Environmental Programs, Water Conservation	Water Conservation Specialist
PW	General Services, Streets Division	Street Maintenance Workers
PW	General Services, Facilities Maintenance	Building Maintenance Workers
PW	General Services, Parks	Maintenance Workers
PW	General Services, Landscape Maintenance	Maintenance Workers
PW	General Services, Vehicle Maintenance	Equipment Technicians, Equipment Service Worker, Shop Assistant
PW	Maintenance and Operations, Utility Operations	Meter Services Workers; Sanitation System Operators; Water System Operators
PW	Maintenance and Operations, Construction/Maintenance	Utility Workers; Maintenance Workers
Com-Dev	Planning, Building, Code Enforcement	Building Inspectors, Planners, Code Enforcement,
Safety	Fire Department	Fire Fighters

The City also participated in EPA sponsored webcasts this fiscal year where possible. Storm Water Protection Program staff received job specific training during FY 06-07 as provided in Appendix 9-1.

Storm Water Committee

The Storm Water Committee continued to meet monthly to discuss and develop a calendar of storm water training activities for staff, coordinate compliance activities and documentation, create and distribute job specific storm water training information, and standardize documentation of training activities. A summary of Storm Water Committee meeting topics during FY 06-07 can be found in Appendix 2-6.

Storm Water Leadership Team

In FY 06-07, the City of Carlsbad's City Manager initiated the Storm Water Leadership Team (SWLT). Monthly meetings of the SWLT were conducted and attendees included Senior Management of the City's major service areas and Directors. Agenda items covered all areas of the City's compliance with Order No. 2001-001, as well as review of the new Order No. R9-2007-0001.

Other Training

In February 2007, the Environmental Specialist II attended the *Community Based Social Marketing* workshop held in the City of San Diego. The workshop focused on developing outreach and education programs that not only increase the knowledge of various environmental issues, but also effect behavioral changes within the community.

During the spring of 2007, the Senior Environmental Specialist, Water Conservation Specialist, and a Storm Drain Maintenance Crew worker completed the 24-hour "*Hazardous Waste Operations and Emergency Response Training*" in San Diego. This course is required for anyone who is expected to identify emergency situations involving hazardous materials. Staff was trained to recognize, report, and assist in emergency response. This course fulfills the requirements under OSHA 29 CFR 1910.120.

In June 2007, the City implemented a new waste reduction strategy as a pilot program. This included the purchase and distribution of larger single stream recycling containers for employee work stations accompanied by a small trash can. There were also several new larger recycling containers placed in public meeting areas throughout the City. Seen as an effective pilot program, the City will implement the waste reduction strategy at all City facilities in September 2007. Roll out of this new program included the development of posters, fact sheets and a presentation to educate and inform employees about the importance and benefits of recycling.

In January 2007, all City employees were sent storm water BMP information as a paycheck stuffer. The training fact sheet includes information about the NPDES requirements, pollutants of concern, BMPS, and how to report illegal discharges to the storm drain system. A copy of the training fact sheet can be found in Appendix 2.5.

In June 2007, City staff from various departments attended a web cast entitled "The Trend to Low-Impact Development and What It Means to You." The purpose of the webcast was to analyze the various definitions of LID and determine how to make the business case for LID concepts and technologies; examine the policy perspectives and implications of LID on local governments and public works agencies. During the webcast experts shared tips for making good decisions, managing risk, choosing technologies, and addressing funding issues. In addition, there was also information on how to evaluate various applications of LID for general capital improvement, storm water, roadway, and right-of-way projects.

Figure 9.1: Minimum BMP Fact Sheet for Construction Projects

9.2 Construction Site Owners and Developers

The City of Carlsbad is committed to working with developers and contractors to ensure that BMPs are implemented at all construction sites. A new fact sheet was developed and distributed to all active construction sites in January 2007. The fact sheet includes information about the required minimum BMPs, site specific SWPPP's, and erosion control plans (Figure 9.1)

Construction and Development Services provided information and education to applicants and developers during one-on-one or small group meetings, inspections, complaint investigations, and during pre-construction meetings. They also provided sample SWPPPs and SWMPs for engineers, developers, and applicants to use as guides when preparing documents for proposed development projects. Copies of theses documents and the SUSMP are available at the City's Permits Counter. The SUSMP is also available through the City's internet site.

The Storm Water Protection Program also continued to distribute the "*Pollution Prevention Guide for the Construction Industry*." This brochure was developed to provide BMP and pollution prevention information related to materials storage, perimeter controls, building and staging areas, dumpsters and port-a-potty services, tracking controls, concrete trucks and pumpers, washout areas, dirt and grading, earthmoving equipment, and storm drain protection. The brochure was distributed to commercial businesses that conduct small remodeling or home improvement projects.

The City continues to conduct and participate in workshops to educate external parties, which include project applicants, developers, contractors, and property owners on the implementation of the storm water program and requirements for construction sites.

9.3 Commercial and Industrial Owners and Operators

The City continued to educate commercial and industrial owners and operators through various methods. This included the distribution of printed materials, participation at workshops, presentations to business community groups, direct mailings, inspections and site visits. Accomplishments are detailed below.

Printed Materials
The City revised brochures and fact sheets during FY 06-07 and continued to distribute existing brochures developed in previous years. These materials were distributed by direct mail, during inspections and complaint investigations, and were available at public events and presentations. These brochures are also available on the City's storm water web page, accessed at www.carlsbadconserves.org.

During FY 06-07, the City continued to distribute the "*Best Management Practices for Businesses – Commercial and Industrial*" brochure containing the list and description of minimum BMPs. This brochure was distributed to businesses during inspections and by direct mail.

Website and Hotline
The storm water hotline was listed on all printed material. Industries and commercial businesses can call the hotline to request BMP information. All brochures were also available through the City website. During FY 06-07, there were 40,805visits to the Environmental Programs web page.
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Inspections and Site Visits
City storm water inspectors worked with businesses during inspections and complaint investigations to identify storm water compliance issues, detail corrective actions, and assess the appropriateness of BMPs.

9.4 Residential Community, General Public, and School Children

Carlsbad continued its on-going outreach to the residential community, school children, and the general public during FY 06-07. This included the development and distribution of printed materials, public outreach events, presentations, published articles and press releases, videos, website access, and direct interaction with the public. Carlsbad actively pursued a comprehensive environmental education and outreach program, combining the activities of storm water, solid waste and water conservation under the umbrella of Environmental Programs. The purpose was to create a unified message, better educate the public, and allow easy access for the public. These accomplishments are described below.

Printed Material
Since the Spring 2006, the City of Carlsbad has been offering door-to-door Household Hazardous Waste collection program. Residents gather their HHW, then call for an appointment to have these items collected and disposed of properly. To further educate residents about the program, the City created a new "*Household Hazardous Waste Collection*" brochure in January 2007. The new brochure includes information about the types of HHW that can be disposed of, information about why residents should participate in the program, phone numbers, addresses, Environmental Programs logo, and web address (Figure 5.1 and 5.2). During FY 06-07, the new brochure was distributed by mail and at outreach events. A copy of the revised fact sheet can be found in Appendix 5-1.

The Public Works Department continued to distribute the "*Public Works At Your Service*" brochure revised in June 2006. The brochure includes information about Environmental Programs covering storm water, water conservations, and trash management. The brochure was mailed to all Carlsbad residents.

During FY 06-07, the new "*Best Management Practices for Mobile Service Providers*" brochure continued to be provided to residents during complaint investigations related to mobile service provider discharges.

In April of 2007, the City developed and distributed a new "Put Toxic Waste in It's Place" brochure designed to provide residents with information about used oil, HHW, and electronic waste disposal and recycling. The brochure includes used oil recycling locations in Carlsbad, the new HHW collection sites, phone numbers, addresses, logo, web address, and map of disposal locations, and information about electronic waster recycling and disposal (Figure 5.3 and 5.4). The brochure was distributed to residents by mail and at outreach events. A copy of the new brochure can be found in Appendix 5-2.

The City actively participated in the North County Storm Water Program (NCSWP), which is a collaboration of the Carlsbad Watershed Copermittees and the Project Cleanwater Copermittee Outreach Workgroup. The City distributed the printed materials previously developed with these groups.

Direct Mailings

The City of Carlsbad and Coast Waste Management partnered in the creation of a revised Environmental Programs Guide that was sent to residents in January 2007. This publication was designed to offer information about how to dispose of all sorts of waste from trash and recycling to household hazardous waste (HHW). There was also information included on ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution.

In the Fall of 2006 the Environmental Programs Division launched a new residential newsletter entitled "*Carlsbad Conserves*." The purpose of the newsletter is to inform residents of environmental issues facing Carlsbad, services provided by the City, tips of how to protect the environmental, including storm water BMPs, and calendar of important environmental dates (clean up recycling, bulky item pick up, etc.). The newsletter is distributed quarterly to all Carlsbad residents.

The Carlsbad Community Services Guide (City Scene) is mailed three times a year to all Carlsbad households (approx. 40,000). The Winter 2006 and Spring 2007 editions of the guide included residential storm water BMPs and Environmental Programs information.

Environmental Programs included information on storm water pollution prevention and BMPs in the City's Annual Drinking Water Quality Report, which was sent with water bills to approximately 36,000 Carlsbad Municipal Water District customers in June 2007 (Appendix 5-5). The purpose of the report is to provide all Carlsbad Municipal Water District customers with an overview of how potable water is delivered and how the City works to ensure that the highest quality service is provided. In addition to information on potable water, the report also included information on water conservation and how to help to protect and maintain clean waterways.

Classroom Education

During FY 06-07, the Solana Center for Environmental Innovation (Solana Center) continued to conduct the "*Classroom Watershed Program*" for the City. The Solana Center used the *EnviroScape* interactive model to teach students about watershed stewardship and pollution prevention. Outreach materials and workbooks were provided to the students and teachers. During FY 06-07, storm water fliers announcing the free presentations were distributed to teachers.

Each classroom was given a watershed poster, handouts for ten simple ways to help protect the ocean, guides to HHW alternatives and disposal (English and Spanish), and a recycling guide for students to take home. Students were also given pledge cards to sign and take home. The pledge cards read as follows:

1. I pledge not to dump anything down the storm drain.
2. I pledge to remind my family to properly dispose of toxic materials such as paint, cleaners, and pesticides.
3. I pledge to pick up after my dog (given only to those with dogs).

Table 9.2 lists all of the schools and the number of classrooms and students that attended the watershed classroom presentation during FY 06-07.

Table 9.2. Carlsbad Elementary Schools Watershed Awareness Programs

Date	Elementary School	# of teachers	# of students
09/27/06	Jefferson Elementary	3	110
10/04/06	Carrillo Elementary	1	38
10/10/06	Jefferson Elementary	3	105
10-10-06	Solana Center Carlsbad Cub Scout Group	2	20
10-19-06	Magnolia Elementary	1	12
11/30/06	Aviara Oaks Middle School	1	40
01-23-07	Calavera Elementary	1	20
02/12/07	Calavera Elementary	2	40
02/13/07	Calavera Elementary	3	60
05-30-07	Jefferson Elementary	1	30
03/24/07	Carlsbad Loves Kids	4	30
03/25/07	Agua Hedionda Lagoon Foundation	6	70
03/27/07	Pacific Rim Elementary	3	60
03/28/07	Pacific Rim Elementary	3	60
04-14-07	Dove Library	4	25
05/10/07	Hope Elementary	1	25
05/11/07	Hope Elementary	1	25
Total		**40**	**770**

City Stuff is an outreach program which evolved through a partnership between the City of Carlsbad and Junior Achievement program. The program reaches over 50, 3rd grade classrooms in Carlsbad (across district lines) and information filters home to the parents/residents. Students learn how Cities are planned, operated, and what services are offered. They also learn about important businesses in a City. Out of the six lessons taught, three of the lessons are Carlsbad specific, and one lesson is focused on City departmental programs. During FY 06-07, Storm Water Protection Program staff participated in the City Stuff program and educated over 100 students about the importance of storm water pollution prevention.

Advertisements

During FY 06-07, advertisements were published in the Carlsbad Magazine and the Community Services Guide. Table 9.3 lists the published ad and the estimated circulation.

Table 9.3. Dates of Publication of the Environmental Programs Advertisements

Ad	Month	Publication	Circulation
Environmental Programs Ad	Nov-Dec 2006	Carlsbad Magazine	80,000
Environmental Programs Ad	July 2006	North County Times	44,000

Website and Hotline
Most of the printed materials were available for download from the City's website and Environmental Programs website. There were 40,805 hits to the Environmental Programs web pages during FY 06-07.

Information Line/On-hold Messages
A continuous on-hold message provides residents with information about events in the City. During FY 06-07, staff used the information line to inform residents of the Environmental Programs web page, telephone number, upcoming outreach events, City services, Public Works Fair, Bulky Item Collection Day, and HHW collection facilities.

Kiosks/Display Racks
Various Storm Water Protection Program brochures are kept stocked at City kiosks and display racks.

Neighborhood Outreach Campaign
The City's Dry Weather Monitoring Program sample results found that several neighborhoods were contributing to storm water pollution through various residential activities. The Dry Weather Program Monitoring Report included recommendations to educate residents in three specific neighborhoods. In response, the Storm Water Protection Program conducted a targeted outreach campaign to those identified neighborhoods. The identified neighborhoods were delineated using the City's interactive GIS. In the fall of 2007, the City sent an information letter and BMPs to the residential areas identified as potential contributors to storm water pollution (e.g., pet waste, car washing, and landscaping activities). Staff mailed the "*Only Rain in the Storm Drain*" brochure and information letter to each residence in three identified areas in the City.

2007 Calendar and Community Guide
This 122-page bound calendar is mailed once a year to all Carlsbad residents. Several articles related to water quality were included during FY 06-07. Approximately 47,000 were printed for distribution.

Direct Interactions
Residents were educated about pollution prevention and BMPs during complaint investigations. City inspectors met with residents to explain storm water regulations and pollution prevention. When a resident was not available, a door hanger and other outreach materials were left to provide information about the reported discharge. Typically, follow-up informational letters were sent to homeowners and/or contractors after an investigation. These correspondences included brochures and fact sheets about storm water. Additional information on residential complaint investigations is provided in Section 5.4.

Prompts and Promotional items
Environmental Programs created and distributed recycling bags to residents at various events. The recycling bags displayed the Environmental Programs logo and phone number. The bags were also designed to encourage residents to recycle aluminum, glass, paper, and other materials.

The Storm Water Protection Program continued to distribute pollution prevention message pens to Carlsbad residents and City employees. Several existing storm water, solid waste, and water conservation materials were also distributed, including oil funnels and rags, key chains, buttons, notepads, cups, Frisbees, magnets, and a variety of other products.

Workshops
The City sponsored three workshops geared at educating residents about the benefits of composting. The workshops were held on September 30, October 28, and November 11, 2006. At the workshops, residents received information on water conservation, mulching, plant selection, vegetable peels and turning leaves,

and the basic techniques necessary for successful composting. These educational workshops also clearly demonstrated the relationship between water conservation, solid waste, and storm water. Residents were also provided with information on alternative chemical products, including integrated pest management, and were given information on the City's HHW collection facilities. Most residents took with them several of the City's brochures and Environmental Program promotional items publicizing the new phone number and website.

Public Events

The City hosted or participated in several public events, which provided opportunities for residents, school children, and the general public to learn about storm water pollution prevention. During most of these events, a staffed booth was set up and residents and kids have the opportunity to pick up printed materials, view an *Enviroscape* model demonstration, and speak directly with City storm water representatives. Table 9.4 includes a summary of these public events for FY 06-07.

Table 9.4. Outreach Events for Residents, General Public, and School Children

Event	Date	Type	Audience	Attendance
Senior Health Fair	07/08/06	Booth	General public	500
Jazz in the Park	07/21/06	Booth	General public	4,000
Hot Rods & Cool Treats	07/30/06	Booth	General public	500
Jazz in the Park	08/04/06	Booth	General public	4,000
Fiesta del Barrio	09/10/06	Booth	General public	8,000
Health & Education Expo	09/12/06	Booth	City Employees	300
Buena Vista Lagoon Clean-Up	09/16/06	Clean-Up	General public	56
Citizen's Academy	10/12/06	Presentation /Booth	General Public	30
Fall Festival at the Ranch	11/11/06	Booth	General public	500
Holiday at the Rancho	12/09/06	Presentation /Booth	General public	1,000
Hosp Grove Community-Wide Clean Up	03/17/07	Event	General public	300
Water Festival	03/25/07	Booth	General public	300
Carlsbad HS Career Day	03/28/07	Booth	General public	800
Citizen's Academy	03/29/07	Presentation /Booth	General public	60
Children's Day at the Flower Fields	03/31/07	Booth	General public	5,000
HHW Drop Off Event	04/21/07	HHW Drop Off	General public	600
Employee Appreciation Day	04/24/07	Booth	City Employees	500
Batiquitos Lagoon Clean Up	04/28/07	Clean Up	General public	91
Public Works Fair	05/23/07	Booth	School Children	1,000
Trail Blast	06/02/07	Booth	General public	300
LID Webcast	06/06/07	Presentation	City Employees	40
Outreach-Pacific Rim School	06/07/07	Presentation	School Children	20
Calendar Contest	06/12/07	Presentation	School Children	150
San Diego County Fair	06/14/07	Booth	General public	5750
SD County Fair	06/20/07	Booth	General public	5750

9.5 Quasi-Government Agencies/Districts (i.e. Educational Institutions, Water Districts, Sanitation Districts, etc.).

Quasi-government agencies and districts typically fall under one of the existing commercial or industrial classification categories of high, medium, or low priority, based on the criteria used to identify facilities and "businesses." Outreach and education for these facilities is identified during compliance inspections.

During FY 06-07, the City inspected seven water and sanitation facilities as part of the industrial inspection program. Educational information was provided during the inspections, as well as in written inspection reports. Most of the water and sewer districts and educational institutions were covered under permits issued by the Regional Board. Therefore, many of these facilities already have knowledge of the storm water requirements and participate in education activities.

In FY 06-07, the City provided the County Animal Shelter located in Carlsbad with 100 "*Bags on Board*" dispensers to be distributed to residents that use shelter services. The shelter has about 4,000 customers per month (from all over North County). The City will be working with the North County Outreach Group to determine if a larger distribution program can be developed.

9.6 Self-Assessment

Program Strengths

In June 2007, the City implemented a new waste reduction strategy as a pilot program. This included the purchase and distribution of larger single stream recycling containers for employee work stations accompanied by a small trash can. There were also several new larger recycling containers placed in public meeting areas throughout the City. Seen as an effective pilot program, the City will implement the waste reduction strategy at all City facilities in September 2007. Roll out of this new program included the development of posters, fact sheets and a presentation to educate and inform employees about the importance and benefits of recycling.

In March 2006, the City developed a new brochure for the mobile service providers. The brochure was designed for mobile service providers, their employees and anyone that hires a mobile service provider. The new brochure was mailed to every applicable business on the storm water inventory.

The Environmental Programs Division sponsored a composting bin sale event on June 17, 2006, in an effort to get more residents to compost organic waste instead of throwing it away. During FY 06-07 over 320 composting bins were sold to Carlsbad residents. The composting bins will be on sale continuously.

The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent. The messages were delivered by various means including presentations, workshops, inspections, investigations, and outreach events, in addition to use of direct mail, the website and newspaper advertisements.

The City continued to actively promote and advertise the Storm Water Protection Program as part of Environmental Programs. This merger of programs allowed the Storm Water Protection Program to work in conjunction with the "*Used Oil Block Grant Funds*" program to conduct related education and outreach. The merger also created a unified City Environmental Programs message to help foster a better understanding of the relationship between residential activities and sources of pollution.

The City conducted the annual (telephone) Public Opinion Survey in FY 06-07, which included questions on storm water pollution prevention. The results from this survey provide important information on the public's awareness and knowledge of storm water pollution prevention issues and activities. This information can help focus future education and outreach messages and events. This survey information is also used on a *Performance Measure* to gauge the effectiveness of the outreach and education program.

In FY 03-04, the City worked with Waste Management to develop an Environmental Programs booklet that included storm water residential BMPs, as well as detailed information on solid waste services, including oil recycling and HHW disposal sites. The booklet was revised and updated during FY 06-07 to reflect the most current HHW, trash, recycling, storm water, and water conservation information.

The Storm Water Protection Program and Environmental Programs worked with the Information Technology Department to revise the web pages and provide updated information about pollution prevention.

Program Improvement Areas

In late FY 06-07, the Storm Water Protection Program began drafting a *Best Management Practices Manual* that includes minimum and required BMPs for activities and pollutants types. The manual will be continually worked on during FY 06-07 and should be completed in FY 07-08.

During FY 06-07, staff begin revising brochures and fact sheets and updating them to reflect changes in the program. A complete revision of all brochures is expected to be completed in FY 08-09.

During FY 06-07, staff developed a new Environmental Programs education campaign entitled "Think-Act" targeting various environmental concerns, including storm water pollution. This program will be further developed in the future and may be implemented as an additional educational tool in the Storm Water Protection Program.

Section 10
Public Participation Component

10.0 Overview

Public participation is crucial to ensuring the effectiveness of the Storm Water Protection Program. Public participation allows the residents, interested parties, and stakeholders to express their concerns and provide creative solutions before final decisions are made. The City led and/or contributed to several public participation opportunities this reporting period including the development, implementation, and review of storm water management programs, BMPs, and other JURMP and related issues. The goal has been to ensure that the Carlsbad community has a vested interest in solving storm water problems and has a general understanding of watershed protection. Citizens, the business community, and other interested parties were invited to attend public meetings, outreach events, workshops, City Council meetings, and other events during this reporting year.

10.1 Public Meetings and Hearings

The public had numerous opportunities to attend meetings, at the watershed and regional levels, to learn about the City's implementation of the Permit and have their concerns addressed. Table 10.1 contains a list of some of the public meetings and dates held during this reporting period.

Table 10.1. FY 06-07 Public Meetings

City of Carlsbad				Municipal Storm Water Copermittees		
Regular Council Meetings		Planning Commission		Management Committee	Outreach Workgroup	Monitoring Workgroup
07/11/06	01/09/07	07/05/06	01/13/07	07/20/06	08/16/06	07/13/06
07/18/06	01/16/07	07/19/06	01/17/07	09/21/06	09/20/06	08/15/06
07/25/06	01/23/07	08/02/06	02/07/07	11/16/06	10/18/06	09/19/06
08/01/06	02/06/07	08/16/06	02/21/07	01/18/07	01/17/07	10/17/06
08/08/06	02/13/07	09/06/06	03/07/07	03/15/07	02/13/07	11/28/06
08/15/06	02/20/07	09/20/06	03/21/07	04/05/07	02/21/07	12/12/06
09/12/06	03/06/07	10/04/06	04/04/07	05/17/07	03/13/07	01/30/07
09/19/06	03/13/07	10/08/06	04/18/07		04/10/07	02/27/07
09/26/06	03/20/07	11/01/06	05/02/07		04/18/07	03/27/07
10/03/06	03/27/07	11/15/06	05/16/07		05/15/07	04/24/07
10/10/06	04/03/07	12/06/06	06/06/07		06/12/07	05/22/07
10/17/06	04/10/07		06/20/07		06/20/07	06/21/07
11/07/06	04/24/07				07/10/07	
11/14/06	05/01/07				08/14/07	
11/21/06	05/08/07				08/15/07	
12/05/06	05/15/07				09/11/07	
12/12/06	05/22/07				09/19/07	
12/19/06	06/12/07					
	06/19/07					
	06/26/07					

The Carlsbad City Council meets on the first four Tuesdays of every month at 6:00 PM. These meetings are held in the Council Chambers at Carlsbad City Hall and are open to the public. The Council meetings are also televised live on Tuesday night on Cablevision Channel 3 and replayed Wednesdays at 8 AM and 2 PM. Videotaped copies of the Council meetings are available at the Carlsbad Library.

City Council Agendas are prepared by the City Clerk's office and are available on the Friday prior to the City Council Meeting or through a subscription email service. Agendas are available at the meeting, posted outside Council Chambers, or the public can pick up a copy from the Clerk's office. A subscription service is also available for interested parties to receive the agenda each week in the mail, at the cost of $50.00 per year. Copies of the agenda and public hearing notices are available on the City's web site at www.carlsbadca.gov. Council Agenda Packets are available for review at the City Clerk's office and at the Carlsbad Library on the Friday prior to the City Council Meeting. City Council Minutes are prepared by the City Clerk's office and are the permanent record of proceedings of each City Council Meeting.

The public can also attend the Copermittee Management Committee Meetings and other Copermittee meetings. Notices of these meetings are available from the Project Cleanwater website at www.projectcleanwater.org.

Residents can also become representatives on various City committees. The City Clerk's office maintains a current list of City Boards, Commissions, and Committees, current vacancies, meeting dates and times, and coordinates all appointments to these positions.

The Planning Commission is comprised of seven members appointed by the City Council. This commission makes recommendations to the City Council regarding implementation and updating of the General Plan. When needed, they also provide recommendations to the Council regarding policy issues that affect long-range planning. They review development projects, provide recommendations to the City Council, provide reports to the City Council on the Local Facilities Management Plans, review the annual CIP for consistency with Growth Management Program, identify potential problems and opportunities facing the City, and suggest special studies when appropriate.

10.2 Feedback Mechanisms

In addition to the feedback opportunities available through public meetings and hearings, there are also a number of additional mechanisms available for the public to provide feedback.

Hotline and E-mail Address

The public is encouraged to provide input and feedback on the Storm Water Protection Program implementation. In addition to the public meeting opportunities detailed above, the public can call the storm water hotline to request information, provide comments, or make illegal discharge reports. In addition, the public can send e-mails directly to the Storm Water Protection Program at stormwater@ci.carlsbad.ca.us. There are also several other public contact phone numbers and City e-mail addresses available for public use. Other City departments forward comments and questions to the Storm Water Protection Program as needed. The public can also access a Storm Water Protection Program web page through the City's website which provides information about the storm water requirements and BMPs.

The public continued to use the Environmental Programs hotline and e-mail address to obtain information about HHW, trash, and recycling programs. The City's RFA system was used to track calls about Environmental Programs comments and questions from residents. During FY 06-07, the Environmental Programs Division responded to 30 complaints related to HHW, recycling, and solid waste.

Direct interaction

The City continues to rely on the interactions between City staff and the public to convey messages about storm water and pollution prevention. City staff received targeted training to increase their understanding

of urban runoff issues. Staff interaction with the public also provided additional opportunities for the City to obtain direct feedback about BMPs, ordinances, and pollution prevention efforts.

Public Surveys

The BW Research Partnership, on behalf of the City, conducted an annual *Public Opinion Survey* of Carlsbad residents. The survey entails a random-Digit dial methodology of over 1,000 residents to obtain information about attitudes and knowledge of City services, facilities, and issues, and also includes demographic questions for further analysis and interpretation. There were three questions related to storm water quality on the 2007 survey. The results of these questions are in Section 11 of this report. The entire report is available for download from the City's website. Surveys helped the City understand how the public perceives storm water which can help foster better planning and management programs. The City publishes the results of the *Public Opinion Survey* in the annual *State of Effectiveness Report.*

General Outreach

Efforts through printed ads, newspapers, press releases, media interviews, PSA's, the Community Calendar, City guides, brochures, water bill stuffers, and other publications were used to keep the public informed of storm water requirements, updates, and public participation opportunities.

10.3 Community Events and Volunteer Efforts

The City's Community Volunteer Coordinator administers outreach and involvement programs for Carlsbad residents. This position has continued to find volunteers to assist the Storm Water Protection Program with various activities, including cleanup events. During FY 06-07, volunteers contributed over 450 hours towards improving storm water quality. The City participated in several community events held in Carlsbad and other locations across the County. These events are summarized in the following table.

Table 10.2. Community Events FY 06-07

Date	Event	Location	Number of Participants
07/08/2006	Senior Health Fair	Carlsbad	500
07/21/2006	Jazz in the Park	Carlsbad	4000
07/30/2006	Hot Rods & Cool Treats	Carlsbad	500
08/04/2006	Jazz in the Park	Carlsbad	4000
09/10/2006	Fiesta del Barrio	Carlsbad	8000
09/12/2006	Health & Education Expo	Carlsbad	300
09/16/2006	Buena Vista Lagoon Clean-Up	Carlsbad	56
10/12/2006	Citizen's Academy	Carlsbad	30
11/11/2006	Fall Festival at the Ranch	Carlsbad	500
12/09/2006	Holiday at the Rancho	Carlsbad	200
03/17/2007	Hosp Grove Community-Wide Clean Up	Carlsbad	300
03/25/2007	Water Festival	Carlsbad	300
03/28/2007	Carlsbad HS Career Day	Carlsbad	800
03/29/2007	Citizen's Academy	Carlsbad	30
03/31/2007	Children's Day at the Flower Fields	Carlsbad	5000
04/28/2007	Batiquitos Lagoon Clean Up	Carlsbad	91
05/23/2007	Public Works Fair	Carlsbad	1000
06/02/2007	Trail Blast	Carlsbad	300
06/07/2007	Outreach - Pacific Rim School	Carlsbad	20
06/12/2007	Calendar Contest	Carlsbad	150
06/14/2007	SD County Fair	Del Mar	5750
06/20/2007	SD County Fair	Del Mar	5750

Clean Up Events

In September 2006, the City sponsored its annual "*Buena Vista Creek Clean Up*" event. Over 55 volunteers, several of them Carlsbad residents, collected over 3 tons of trash and recyclables along Buena Vista Creek. The clean up effort was a part of the annual California Coastal Cleanup Day. Common items found included fast food containers, recyclable glass and plastic beverage containers, and cigarette butts. Larger items included tires, bed frames, carpets, and wood pallets.

On March 17, 2007, the City's Recreation Department sponsored a community-wide clean up and tree planting event at Hosp Grove in Carlsbad. Residents from various Carlsbad neighborhoods joined together to plant trees, prune bushes, and remove trash from the historic Hosp Grove area.

On April 28, 2007, the City sponsored a clean up site for the annual Regional Creek to Bay Clean Up event. Statewide, the Creek to Bay Clean up has the highest turnout with just over 2,500 volunteers helping out at 41 cleanup sites. Those hard-working volunteers picked up an estimated 102,000 pounds of debris. For the Carlsbad event, the City selected a site near Batiquitos Lagoon where a significant amount of debris and litter had accumulated. This was the first year volunteers had cleaned the site and they were successful in removing 1.8 tons of trash and debris from the area.

Citizen's Academy

Twice a year, the City hosts a program called "*Citizen's Academy*." This seven-week course (one night per week) teaches residents about City government and how public services are provided. This provides an excellent opportunity for citizen participation in City government. An overview of the Storm Water Protection Program, including Permit requirements, program activities, and residential BMPs was presented at both events this reporting year. Approximately 60 residents attended the two academy sessions held on October 12, 2006 and March 29, 2007. This has been a highly successful and popular event, which typically has a waiting list for new participants.

Storm Drain Stenciling

Stenciling storm drain inlets with "*No Dumping – Drains to Ocean*" messages reminds citizens and businesses not to pollute waterways. Stencils are available upon request to businesses and residents who are interested in stenciling private storm drains. Public inlets are marked by the Streets Department.

Composting Workshops

The City sponsored three workshops geared at educating residents about the benefits of composting. The workshops were held on September 30, 2006. October 28, 2006, and November 11, 2006. At the workshops, residents received information on water conservation, mulching, plant selection, vegetable peels and turning leaves, and the basic techniques necessary for successful composting. These educational workshops also clearly demonstrated the relationship between water conservation, solid waste, and storm water. Residents were also provided with information on alternative chemical products, including integrated pest management, and were given information on the City's HHW collection facilities. Most residents took with them several of the City's brochures and Environmental Program promotional items publicizing the new phone number and website.

10.4 Other Public Participation Opportunities

The City continues to recruit interns from local universities to work with storm water staff. During FY 06-07, the Storm Water Protection Program had one intern working on various projects, including commercial and industrial inspections, data management, outreach and education, and coastal storm drain monitoring. Their assistance with inspections, water quality studies and monitoring, data entry, and investigations increased productivity and helped the program achieve inspection and investigation goals.

10.5 Self-Assessment

Program Strengths

Information about water conservation, trash management, and storm water has been combined to one centralized web page accessed at www.carlsbadconserves.org. The Environmental Programs hotline provides information about storm water, trash, and water conservation for the public. The hotline is primarily answered by the Storm Water Protection Program during business hours and provides a detailed voice message after hours. In addition, outreach materials continue to be revised to include the Environmental Program's web page address, hotline number, and storm water hotline number. Residents can call the hotline to request BMP information or download the information from the Environmental Programs and the Storm Water Protection Program web page. During FY 06-07, there were approximately 40,805 visits to the Environmental Programs web page.

The City actively seeks ways to provide two-way communication with the public. This is shown by some of the current City programs, such as the popular "*Citizen's Academy*" and the annual "*State-of-Effectiveness Report*" which includes a citywide public opinion survey of at least 1,000 residents. The City has internal teams dedicated to finding the most effective ways of communicating with the public and providing opportunities for the public to become more involved.

Program Improvement Areas

The City welcomes participation from the public and will continue to actively educate the community.

The City will also continue to improve its website to provide more information to the public and to publicize hotline numbers, email addresses, public meetings and other events where the public can get involved.

Section 11
Assessment of JURMP Effectiveness

11.0 Overview

The Permit requires each Copermittee to develop a long-term strategy for assessing the effectiveness of their JURMP. The Permit language states:

"*The long-term assessment strategy shall identify specific direct and indirect measures that each Copermittee will use to track the long-term progress of its individual JURMP towards achieving improvements in receiving water quality. Methods used for assessing effectiveness shall include the following or their equivalent: surveys, pollutant loading estimations, and receiving water quality monitoring. The long-term strategy shall also discuss the role of monitoring in substantiating or refining the assessment.*"

During FY 06-07, the City continued to participate in a Copermittee workgroup to draft common elements for this assessment. Previously, the Copermittee workgroup submitted *"A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs"* (Framework) to the Regional Board on October 16, 2003. The City continues to use this document as a guideline for refining the assessment strategy and for developing assessment measures.

11.1 Targeted Outcomes

The Framework document established six levels of outcomes. Beginning with Level 1 and ending with Level 6, each type of outcome represents a gradation from activity-based to water quality-based outcomes. Ultimately, the long-term objective is to establish clear relationships between Levels 1 and 6.

Level 1: Compliance with Activity-Based Permit Requirements.
This level consists of activities either prescribed by or established under the Permit. Examples include the establishment of discharge prohibitions, inventory updates, completion of required inspections, and other general messages distributed through outreach programs. A fundamental feature of the Copermittee efforts is the establishment of specific programs and activities, which are assumed but not proven, to be beneficial to water quality. While many of the assumptions may be correct, there are currently few means of quantifying or establishing causal relationships that will make these efforts more measurable. The City will continue to work with the other Copermittees to investigate the basis for these assumed relationships.

Table 11.1 tracks some of the City's program activity measures, which are discussed in detail in the previous report sections. Tracking of many of these activities was useful in assessing compliance with the program, but is not yet tied to long-term assessment or improved water quality.

Table 11.1: FY 06-07 Program Activity Measures

JURMP Section	Targeted Activities				Target Percentage	Percent Completed
MUNICIPAL	Inventory	# inspected/cleaned		Qty. removed		
MS4 – catch basins	3,671	3,671		45 tons	90%	100%
Brow ditches - public	18,500 feet	18,500' insp, 4,776' cleaned		6.5 tons	As needed	100%
Channels – public (6)	6 channels	6 channels		300 pounds	100%	100%
Desilting Basins	3	3		100 pounds	Not established	100%
Street sweeping (annual)*	13,000 miles	13,000 miles		975 tons		100%
Roadside litter	-	-		1,200 cu.yds.		
High Priority Facilities	13	13		N/A	100%	100%
INDUSTRIAL	Inventory		# inspected			
High Priority	42		42		100%	100%
Medium Priority	173		95		50%	55%
Low Priority	218		155		33%	71%
COMMERCIAL	Inventory		# inspected			
High Priority	628		385		27%	61%
RESIDENTIAL	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	
Hazardous waste (tons)	67.81	53.67	64.87	55.85	56.96	
LAND USE	Discretionary permits rev.		# required SWPPP/SWMP			
	62		62		100%	100%
CONSTRUCTION	# high priority inspections required		# high priority sites inspected			
	4998		4998		100%	100%
IC/ID	# complaints received		# responded to			
Complaints	588		588		100%	100%
	Identified		Eliminated			
Illegal Discharges	84		84		100%	100%
Illicit Connections	1		1		100%	100%
Dry weather sites	60 targeted sites		60 monitored sites		100%	100%
EDUCATION	# events (workshops, etc)		# attendance			
School Presentations	40		810		N/A	N/A
Public Events	25		28,047		N/A	N/A
Municipal job specific	115		1,392		N/A	N/A
Website Hits	40,805				N/A	N/A
PUBLIC PARTIC.	>100 opportunities provided					

*does not include public parking areas which were also swept monthly at a minimum

Performance Measurement Program

In addition to these on-going program activities and measures, the City conducts a citywide *Performance Measurement Program* that results in an annual "*State of Effectiveness Report.*" This effort was initiated in 1999 and the first annual report was published in June 2000. The program is a systematic approach designed to continuously assess service and program effectiveness and efficiency. While performance measurement is a fairly common practice in the private sector, there currently is no standard model for the public sector. The City's goal has been to create and improve a measurement system that identifies key

outcomes that quantify success. The result of this effort is to develop an organization that focuses on continuous improvement.

The *Performance Measurement Program* provides a feedback loop between organizational effort and the ability to achieve and sustain desired outcomes. This annual cycle begins each January when the results of the citywide public opinion survey and "*State-of-Effectiveness Report*" are presented to the Carlsbad City Council. The City Council uses these reports to set priorities and strategic goals. The results are then communicated to staff who use them to develop management goals and department budgets for the next fiscal year. For FY 06-07, the City Council identified ten strategic goals that address:

- Balanced Community Development
- Citizen Connection
- Communication
- Environmental Management
- Financial Health
- Learning, Culture and Arts
- Parks/Open Space/Trails
- Top Quality Service
- Transportation/Circulation
- Water

Individual performance measures were developed by departments to address the strategic goals. The City departments annually collect data about each goal and compare results to benchmark values. The benchmark levels were set high, since they target the level of performance each department strives to achieve. The related performance measure goal defined under the *Environmental Management Strategic Goal* for FY 06-07 is as follows:

> "*Be an environmentally sensitive community by focusing on: conservation, storm water, sewage collection and treatment, solid waste, and cost effective and efficient use of energy including alternative energy sources*."

Sanitary Sewer Performance Measure

A number of items were tracked in the sewer related performance measures. They were designed to measure the integrity of the sewer system, the ability of staff to respond quickly and efficiently to spills, and the effectiveness of preventive maintenance operations. These efforts are summarized below with additional detail found in Section 8.7 of this report.

Volume of Spills: Volume of reportable sewage spills per mile of sewer mains. For the purposes of this report, a "spill" is defined as any untreated sewage flow that escapes from the sewer collection system and has the potential for entering surface waters and/or the MS4.

- Benchmark: Annual volume of reported sewage spills due to system failure will be zero. This benchmark is consistent with the requirements of the Regional Board.
- Results: 18.7 gallons per mile

Volume of Spills Recaptured: This component looks at spills caused by a failure in the City's sewer system. This does not include spills from sewer laterals within the City.

- Benchmark: Recapture 100% of all spills from the maintained sewer system so that sewage never enters surface waters and/or the MS4.
- Results: 87%

Station Facility Maintenance: Percentage of work activities completed during the fiscal year (based on the standards established in the *Maintenance Assessment Program*).

- Benchmark: At least 90% of all pump station electrical moving parts, wet wells, generators, valves and pumps are tested annually and repaired as necessary. This program includes station maintenance, electrical maintenance, wet well maintenance, generator maintenance, station surveillance operations, valve maintenance and pump maintenance/repair.
- Results: 96% overall

Sewer Main Cleaning: Percentage of work activities completed during the fiscal year (based on standards established in the Maintenance Assessment Program).

- Benchmark: At least 90% of all priority sewer main lines will receive high velocity cleaning to ensure proper conveyance of sewage and to prevent sanitary sewer overflows and backups. Priority sewer lines are scheduled for cleaning depending on the location of the lines, flow rates, historical information on the frequency of blockages, and pipe material.
- Results: 97% overall

Level 2: Changes in Knowledge/Awareness

The most immediate, basic outcome of urban runoff programs is a change in the knowledge, awareness, or attitudes of target audiences (learning that storm drains and sanitary sewers are separate systems, that everyday activities contribute to storm water pollution, etc.). Such changes are often targeted through outreach programs and once knowledge changes, it presumably forms the basis of behavioral change and the proactive use of BMPs. The City was involved in a number of surveys and programs to assess knowledge and awareness of various target communities. These are highlighted below.

City of Carlsbad Public Opinion Survey

An annual public telephone survey was conducted this year by a new firm, the BW Research Parntership, as part of the *Performance Measurement Program* and "*State-of-Effectiveness Report.*" Carlsbad households were selected using *Random-Digit-Dial* methodology with a minimum sample size of 1,000. This survey had a margin of error of +/- 3% at the 95% confidence level. Storm water pollution was addressed briefly in this survey. The City survey asked, "*Have you seen or heard any information about how residents can prevent the pollution of creeks, lagoons, and the ocean?*" This question was used to gage the public's perception of ocean water pollution and was asked previously in 2003. The results are presented in Table 11.2 below.

Table 11.2: Results of Environmental Question 1

Answer:	2003 (%)	2006 (%)	2007
1. Yes	58.1	64.6	61.1
2. No	41.9	35.4	38.9

This question illustrates a steady awareness of storm water and urban runoff pollution from 2003 to 2007 among residents.

An additional question was added to the surveys this year to assess the most affective educational methods by asking, "Where do you recall seeing or hearing about ways to prevent pollution?" The top two responses were newspaper and radio, respectively comprising over 50% of the total responses. Newsletters and brochures were the next highest, making up nearly 30% of the responses. Other responses included posters, website, curb signs, word of mouth, and public events.

Industrial/Commercial Assessment

In FY 04-05, a *BMP and Knowledge Assessment* tool was developed to measure an individual operator's knowledge of storm water issues and assess the implementation of BMPs onsite. The assessment tool is

used by inspectors during site visits. Please refer to Section 3 for the *Knowledge and BMP Assessment* rating scale criteria. Table 11.3 shows the number of instances in percentages that Industrial High and Medium businesses rated for each score for FY 04-05,FY 05-06, and FY 06-07, with 5 being the highest score possible.

Table 11.3: Industrial Knowledge Assessment Scores as a Percent of the Total

Knowledge Rating	FY 2004-05	FY 2005-06	FY 2006-07
1	6	3	0
2	8	12	2
3	10	26	10
4	27	21	18
5	49	38	70

The number of industries with average or above average knowledge of storm water issues increased in this fiscal year with 86% reported in FY 04-05,85% in FY 05-06, and 98% in FY 06-07.

Complaints

The Storm Water Protection Program responded to 154 reports of potential illegal discharges. Approximately 88 were found to be valid complaints (i.e., others were either not located or not violations, permitted discharges, etc.) Table 11.4 shows the number of potential issues reported to the storm water program, the number of those that were valid complaints, and the number of washing or dumping complaints. These data were compiled for the past six years under Order 2001-01, however the washing/dumping data was only available for the last four years.

Table 11.4 Summary of Complaints Reports FY 2001-02 through FY 2006-07

Fiscal Year	Potential Violations Reported	Valid Reports	Washing/Dumping
2001-02	121	106	-
2002-03	156	128	-
2003-04	186	115	42
2004-05	119	88	12
2005-06	107	76	15
2006-07	154	88	44

Classroom Education

Elementary school students were given an *Eco-quiz* prior to presentations to gauge their knowledge of the subject. Following each presentation, students were given the same *Eco-quiz* to identify the effectiveness of the presentation. This year, the quizzes reflect that 2% of students had knowledge of watersheds and storm drains before the presentations. After the presentations, 100% of the students had a clear awareness. This is a 98% change in knowledge before and after the *Eco-quiz*.

Level 3: Behavioral Change/BMP Implementation

A key goal of jurisdictional programs is to affect significant and lasting changes in the knowledge and behavior of municipal employees, residents, businesses, and other target audiences. Outcomes may range from compliance with discharge prohibitions, to implementation of BMPs, to active stewardship of watershed resources. Therefore, quantifying BMP implementation through surveys or other means provides an important step toward establishing pollutant reductions.

Surveys

The City asked a behavioral question during the 2006 survey to those who answered affirmatively to the question, "*Have you seen or heard any information about how residents can prevent the pollution of creeks, lagoons, and the ocean?*" The 61.1% who answered question one affirmatively were asked the follow-up question, "*What things are you doing to reduce water pollution?*" Results for this question are presented in Table 11.5.

Table 11.5: Top Responses to "*What things are you doing to reduce water pollution*?"

Answer:	Percent
1. Properly disposing of hazardous waste.	24.0
2. Cleaned up trash at Beach, Roadside, Etc.	14.0
3. Using environmentally friendly soaps, pesticides, etc.	12.6
4. Used a commercial carwash.	14.9
5. Cleaned up animal waste.	6.6
6. Did nothing.	21.4
7. Other (recycling, reduced runoff.	42.8
8. Don't know.	3.6

While these responses can not be guaranteed to be accurate, continued survey data should help to show if long-term behavior change has occurred. Over seventy percent of residents who answered question one affirmatively, consciously chose an environmentally friendly method over others in certain instances.

Industrial/Commercial Assessment

The Storm Water Protection Program also implemented a *BMP Assessment* tool. The inspector assigns a rating of overall BMP implementation based on the criteria outlined in Section 3 of this report. Table 11.6 shows the number of instances in percentages that industrial high and medium businesses combined rated for each score during FY 04-05,FY 05-06, and FY 06-07 with 5 being the highest score possible.

Table 11.6: Industrial BMP Assessment Scores as a Percent of the Total

BMP Implementation Rating	FY 04-05	FY 05-06	FY 06-07
1	3	7	0.5
2	8	7	2
3	13	18	24
4	32	37	38
5	43	31	36

In FY 04-05, over 40% had effective BMP implementation with only 3% failing overall; while in FY 05-06 the number of industries ranking highest declined to 31%. Overall, the percentages of industries ranking average or above were similar from year to year, 88% in FY 04-05,86% in FY 05-06, and 98% in FY 06-07.

Enforcement

When the Permit was issued, the Storm Water Protection Program focused efforts on educating the public and informing residents and businesses how to comply. In most instances, a verbal notice was sufficient for compliance. If repeat violations occurred, enforcement actions were escalated to obtain compliance. As anticipated, the Storm Water Protection Program has moved toward escalated enforcement when necessary to achieve compliance. Table 11.7 summarizes types and rates of enforcement actions taken for the past five years.

Table 11.7: Enforcement Mechanisms by Year

Type of Action	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07
Verbal Warning	27%	6%	17%	19%	36%
Informational letter or warning	57%	51%	46%	40%	33%
Notice of Violation	16%	40%	29%	28%	30%
Notice to Clean	-	-	-	4%	2%
Cease and Desist order	<1%	-	-	-	-
Administrative Citation	-	3%	6%	9%	-

Identifying the types of illegal discharges most commonly reported may help indicate problem activities and focus outreach efforts to those areas. Most complaints originated from residential sources. During FY 06-07, washing was the most frequently reported illegal discharge at 40%, followed by illegal dumping at 22%, and home improvement discharges at 21%. Figure 11.1 illustrates the types of discharges in FY 06-07.

Figure 11.1 Types of Discharges

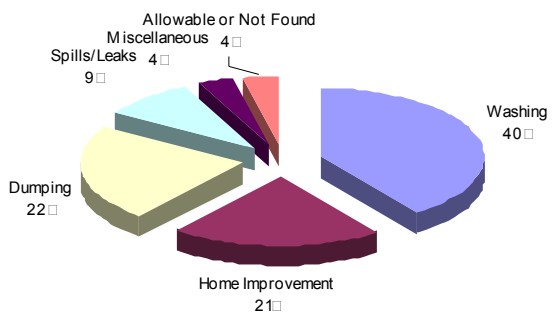

Level 4: Load Reductions

The primary goal of BMP implementation is to reduce pollutant loads in storm water discharges. An important emphasis of annual program assessments is to estimate the load reductions resulting from various program activities. Assuming that such reductions are properly targeted to existing or potential water quality problems, load reductions should in turn result in improvements to discharge and receiving water quality. Quantifying load reductions represents an important intermediate endpoint for assessments. The Regional Board wrote the following in October 2004:

> *Program effectiveness can be assessed by quantifying the pollutant load reductions attributable to various program activities. An effective program will compare pollutant load reductions of various program activities and implement those activities which result in the largest pollutant load reductions. It is expected that by implementing program activities which maximize pollutant load reductions, Copermittees will be implementing effective programs which will improve receiving water quality.*

The City used the Watershed Treatment Model (WTM) as a simple tool for rapid assessment of effectiveness of the storm water programs. The WTM (version 3.1) was prepared by Deb Caraco of the Center for Watershed Protection for the U.S. EPA Region V - Office of Wetlands, Oceans and

Watersheds. Last year's report identified bacteria, sediment, and nutrients as constituents of concern. In response, specific program activities were undertaken to address these constituents. The WTM estimates the pollutant loading reductions for sediment, bacteria and nutrients for various program activities, such as residential education, erosion and sediment control programs, and street sweeping, among others. The results of some of these storm water management programs are discussed below. Complete explanations and assumptions are found in the WTM book.

Public Education

A variety of public education programs may help to reduce the concentration of nutrients, sediment and bacteria in urban streams. The model currently focuses only on a few of these, including programs to address lawn care, septic system maintenance, and pet waste. Several other residential pollution prevention programs improve water quality, but have little effect on nutrients, suspended solids, and bacteria. For example, HHW programs are effective at reducing toxics but do not have a quantifiable impact on pollutants such as suspended solids, nutrients, or bacteria.

Lawn Care: The ideal pollutant removal associated with lawn care would be achieved if all of the additional fertilizer applied to turf were eliminated. The model uses equations to estimate optimal nutrient load reduction from a lawn care program combined with a calculation of the residential lawn area. Table 11.8 shows the spreadsheet information from the WTM. The model calculates the residential lawn area based on the City's input of residential acres taken from GIS. The user inputs the information on how the education campaign was conducted. Default values were given for the fraction of the audience willing to change behavior based on nationwide data. The City conducted lawn care education through brochure distribution, workshops and newspaper ads.

Table 11.8: Lawn Care Education Model Input

Lawn Care Education	
Program? (Y/N)	Y
Lawn Area (acres)	3980
Program Discounts	
Fertilizers (Fraction)	0.78
"Over Fertilizers" (fraction of fertilizers)	0.65
Awareness of Message (fraction of population)	0.15
Fraction willing to change behavior	0.7

The model allows the user to input the media type, which determines the portion of the population that *remember* the message ("Awareness of Message"). This number is largest with television (0.4), followed by newspaper (0.3), radio (0.25), billboard (0.13), brochures (0.08) and workshops (0.07). Because residents have been exposed to five of these mechanisms in FY 06-07, the input value entered was an average for brochures, workshops and newspaper, radio, and television (0.22). This results in an annual nutrient load reduction of 5,826 pounds of nitrogen and 117 pounds of phosphorus (Table 11.9).

Table 11.9: Loading Reduction from Existing Lawn Care Education

Loading Reduction		
	N (lbs/year)	P (lbs/year)
Lawn Care Education	5,826	117

Pet Waste: The Storm Water Protection Program also conducted a *Pet Waste Education Program* during FY 06-07. In the urban watershed, dogs are a significant contributor of bacteria and nutrients. Ideally, a *Pet Waste Education Program* would reduce this source to zero, with all homeowners properly disposing of waste. The model provides estimated values for the fraction of households with a dog, the fraction of owners who walk their dog, the fraction of owners who cleanup after their dog, and the fraction willing to

change their behavior. As with the lawn care education, the portion of the population that remembers the message is based on the media used for the education. This past year, the City delivered this message through brochures and the newspaper. Residents were also exposed to regional education efforts on television and radio. In addition, the City distributed free pet waste bag dispensers at local events and provided animal care facilities with these dispensers. These activities were considered similar to a workshop, so an averaged value of 0.22 was used for this calculation (see Table 11.10).

Table 11.10: Pet Waste Education Program Model Input

Pet Waste Education	
Program? (Y/N)	Y
Program Discounts	
Fraction of Households with a Dog	0.4
Owners who walk their dogs (fraction)	0.5
Owners who Clean Up (fraction)	0.6
Fraction willing to change behavior	0.6
Awareness of Message (fraction of population)	0.15

This results in an annual pollutant loading removal of 3,059 pounds of nitrogen, 399 pounds of phosphorus, and 26,600 billion bacteria per year (Table 11.11).

Table 11.11: Loading Reduction from Existing Pet Waste Education Program

Loading Reduction			
	N (lbs/year)	P (lbs/year)	Bacteria (billion/year)
Pet Waste Education	3,059	399	26,600

The overall assessments of these education programs show that the media significantly affected the associated pollutant removal due to the increased audience that *remembers* the message. For instance, if the City had the ability to use mass media (television and radio), the estimated pollutant reduction would be increased significantly. The City's annual phone survey confirms that most people recall hearing these messages through mass media. However, mass media is significantly more expensive than brochures and workshops. The City has a storm water performance measure that calculates the cost per capita for education activities. Proposed cost changes to the education campaigns can be calculated and compared in order to select the most efficient options. With these loading reduction estimations, costs can also be calculated on a per pound basis in order to justify the use of one option over another. Such calculations may show that it is not cost efficient to conduct a mass media campaign due to these costs and the associated reductions achieved. Large campaigns for mass media may be best conducted on a regional basis with Copermittees sharing the expense or pursuing grant funds for these expensive activities. Due to an increase in mass media educational tools used at the Regional level this year, it is expected that many of the residents in Carlsbad were affected by these campaigns, accounting for the increase in load reductions associated with lawn care and pet waste.

Erosion and Sediment Control Program

The efficiency of the erosion and sediment control program is based on a best case scenario: a sediment control program that emphasizes erosion control measures, including practices that limit clearing and grading or use of phased construction methods (Brown and Caraco, 1997), and requires advanced sediment control measures to reduce sediment runoff from leaving the site. The WTM default efficiency for erosion and sediment control is 70%.

The user assigns the discount factors related to the fraction of the erosion practices installed and the fraction installed/maintained properly. There is a range of discount factors based on the level of program

implementation and oversight. For example, if there were few inspectors, with no pre-construction meetings and poor practices allowed by codes and regulations, the input value would be 0.4. If inspectors visit sites weekly and if there are education programs for inspectors and contractors, the input value is 0.9 (the highest discount value in the WTM). City inspectors treat each grading site as high priority with weekly inspections and education. This allows for high discount input values. Significant improvements were made to the program in FY 06-07 as described in detail in Section 7 of this report. With these considerations, a discount value of 0.8 was used.

A discount factor is also calculated based on the fraction of practices installed and maintained properly. Based on input from CMI with weekly inspections, education programs, and guidance on BMP selection, a high discount value of 0.8 was used (Table 11.12).

Table 11.12: Erosion and Sediment Control Model Input

Erosion and Sediment Control	
Program Efficiency	70%
Fraction of Building Permits Regulated	75%
Compliance Discount	0.8
Installation/Maintenance Discount	0.8

Based on the estimated acres under construction and the discount factors applied, this results in an annual loading reduction of 80,826 pounds of nitrogen, 242,477 pounds of phosphorus, and 80,825,549 pounds of Total Suspended Solids per year (Table 11.13).

Table 11.13: Loading Reduction from Existing Erosion and Sediment Control Programs

Loading Reduction			
	N (lbs/year)	P (lbs/year)	TSS (lbs/year)
Erosion and Sediment Control	80,826	242,477	80,825,549

Street Sweeping

The WTM accounts for street sweeping by reducing the concentration value of TSS, nitrogen, and phosphorus from road runoff. The user inputs the acres of roadway swept for four types of streets: roadways, residential streets, commercial streets, and industrial streets. For each street type, the load reduction is calculated by multiplying the load by the efficiency of street sweeping. The "best case" estimate of street sweeping efficiencies assumes weekly sweeping. Sediment removals are derived from a modeling study conducted in Portland, Oregon (Claytor, 1999a). Other research suggests that the performance of street sweeping for phosphorus is roughly 80% of the performance for suspended solids (Kurahashi and Associates, 1997). The WTM assumes that the removal for nitrogen is the same as for phosphorus. These are simplifications because the performance for different constituents will vary depending on the sweeper performance when picking up various sized particulate (mechanical vs. regenerative air vs. vacuum assisted). Table 11.14 shows the potential pollutant removal efficiencies for different types of sweepers and streets (from the WTM).

Table 11.14: Washoff Reductions for Weekly Street Sweeping Percentages[1]

Street Type/Sweeper Type	TSS Removal	N/P Removal
Residential Street		
• Mechanical	30%	24%
• Regenerative Air	64%	51%
• Vacuum Assisted	78%	62%
Major Road (not residential)		
• Mechanical	5%	4%
• Regenerative Air	22%	18%
• Vacuum Assisted	79%	63%

Discount factors for street sweeping reflect the frequency of sweeping and "technique" (i.e., the amount of the street surface that is swept). The "*frequency factor*" reduces effectiveness if sweeping is less frequent than once per week. Reducing sweeping frequency to monthly can reduce the efficiency to approximately 60% of the efficiency for weekly sweeping (Claytor, 1999a). The "*technique factor*" accounts for reductions in efficiency caused when sweeper operators do not sweep the entire road surface. This typically happens when cars are parked on the streets, or when operators are improperly trained. Table 11.15 shows some rough estimates (acreage) for the existing street sweeping program.

Table 11.15: Street Sweeping Model Input

	Streets Swept (Acres)		
Sweeper Type	Residential	Other Streets	Parking Lots
Mechanical	0	957	500
Regenerative Air	0	0	0
Vacuum Assisted	1,324	0	0
Sweeping Frequency (M=monthly, W = Weekly)	0.8	0.6	0.6
Total Street Area (acres)	498	2870	1784
Technique Discount	0.5		

This existing program resulted in the pollutant loading reductions shown in Table 11.16.

Table 11.16: Loading Reductions from Existing Street Sweeping Activities

Loading Reduction			
	N (lbs/year)	P (lbs/year)	TSS (lbs/year)
Street Sweeping	2,463	285	212,779

Parking restrictions are in effect in 12 locations throughout the City and have not been modified recently. The City improved the street sweeping contract in FY 05-06, adding vacuum assisted sweeping in residential areas, and maintained the contract in FY 06-07 to improve load reductions.

Illicit Connection Removal

Optimistically, an illicit connection removal program would remove the entire illicit connection load as calculated in the WTM. This reduction is then multiplied by two discount factors: a survey factor which represents the fraction of the sewer system where the illicit connection survey is conducted and an implementation factor which represents the fraction of illicit connections found that will be removed. Since 1995, the City has conducted a Dry Weather Monitoring Program designed to identify illegal discharges and illicit connections to the storm drain system. When an illicit connection is found, the City

[1] Claytor, 1999a; Sutherland and Jelen, 1997; Kurahashi and Associates, 1997.

requires the owner/responsible party to immediately disconnect. Table 11.17 shows the model input using conservative figures (number of illicit connections) and Table 11.18 shows the loading reductions if 75% of the MS4 is surveyed in a year and all identified illicit connections are eliminated.

Table 11.17: Illicit Connection Model Input

Illicit Connections	
Fraction of WS Population Illicitly Connected	0.0001
# of Illicit Connections	4.3133
Number of Businesses	4520
Fraction of Businesses with Illicit Connections	0.05
Fraction of Business Connections that are Wash Water Only	0.9
Wash Water Flow (gpd)	50
Total Flow/Business (gpd)	150

Table 11.18: Loading Reductions from Illicit Connection Removal

	N (lbs/year)	P (lbs/year)	TSS (lbs/year)	Bacteria (bil./yr)
ICID removal	691	328	5958	200,111

Illicit connections can be a huge contributor of pollutants to the MS4. Because the City has had an active identification and elimination program for almost a decade, this potential source has been successfully reduced. As new businesses and homes continue to be built, it is important that inspection programs continue to ensure no new illicit connections are added.

Sanitary Sewer Overflow Repair/Abatement

Reduction of sanitary sewer overflow (SSO) loads is difficult to predict and may include practices such as repairing existing blockages, increasing the volume of the sanitary sewer, or lining pipes to prevent infiltration from adjacent soils. In the WTM, the user must input a target reduction as a percentage of the existing SSO load. This load reduction is multiplied by an implementation factor, which represents the fraction of the repairs implemented. Storm loading estimated at 21% of SSOs based on previous year's overflows within 72 hours of rainfall. Table 11.19 shows the calculated loading reductions if the City inputs a value of 75% as the target reduction and can complete 75% of the necessary repairs.

Table 11.19: Loading Reductions from SSO Repair/Abatement at 75% Target

	N (lbs/year)	P (lbs/year)	TSS (lbs/year)	Bacteria (bil./yr)
SSO Repair/Abatement	1.38	0.23	9.17	1,041

The City has an active SSO response program and maintenance program to prevent overflows. The actual annual number and volume of SSO's was entered into the model to calculate secondary loadings (based on performance measure results). (The City's numbers were significantly lower than the EPA Model's national average default values. Data from the large spill in April, as described in Section 8, was excluded from these calculations as the volume represents an outlier in the data set.

Level 5: Changes in Discharge Quality

In many respects, changes in discharge quality are the most direct expression of successful program implementation, since receiving water quality reflects much more than discharges from the MS4. Improving the quality of discharges into and from the MS4 is an important and targeted outcome.

Dry Weather Field Screening and Analytical Monitoring Program

The City has conducted an annual *Dry Weather Field Screeing and Analytical Monitoring Program* since 1995. The purpose of the monitoring program is to detect and eliminate illicit connections and illegal discharges to the storm drain system. For the past eight years, the City has contracted this work out to D-

Max Engineering, Inc. The Dry Weather Monitoring Program report for FY 06-07 and follow-up activities are provided under separate cover with this report. The following charts and discussions summarize current and past dry weather results in order to assess changes in MS4 water quality.

Figure 11.2 reviews the geometric mean for total coliform, fecal coliform and enterococcus over the past five years. There were 19 dry weather samples collected each year, across various points covering the MS4. Fecal coliform concentrations are generally lower over the past four years than in 2003, while enterococcus concentrations are slightly higher in recent years. In comparison to dry weather action levels, fecal coliform and enterococcus mean values are well below the established action levels across all years of data. With only 5 years of data and many variable factors unaccounted for, it is unclear if the recent results are due to improvements and BMP implementation or to the variable nature of bacteria concentrations.

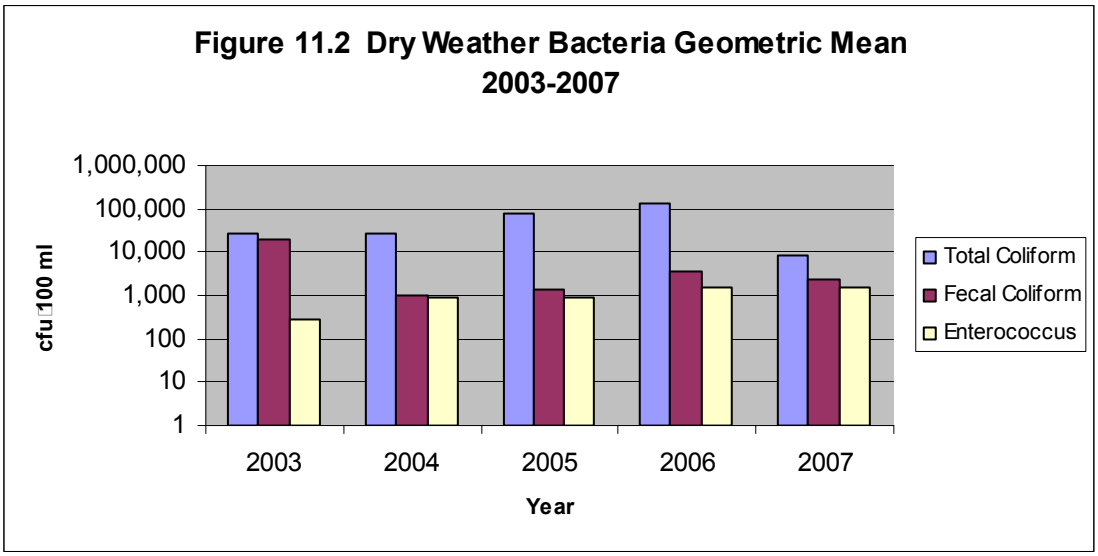

The City has conducted field testing of detergents since 1995. Figure 11.3 appears to show a downward trend in detergent levels found in the MS4 with results less than established action levels for MBAS. Currently, detergents are rarely detected in the dry weather program (at current lab MDLs). This is possibly due to the efforts of the City's Storm Water Protection Program to educate the public and to prevent illegal washing into the MS4.

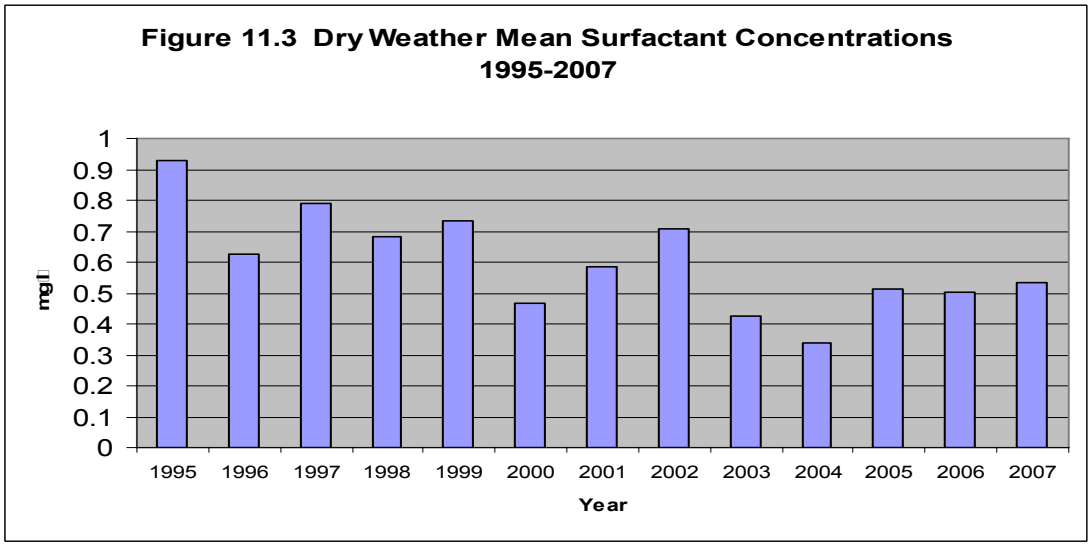

The average pH levels, as shown in Figure 11.4, have also shown a downward trend since 1995. This may be a result of the decreased detergents in the MS4, which are typically basic having pH values >7.

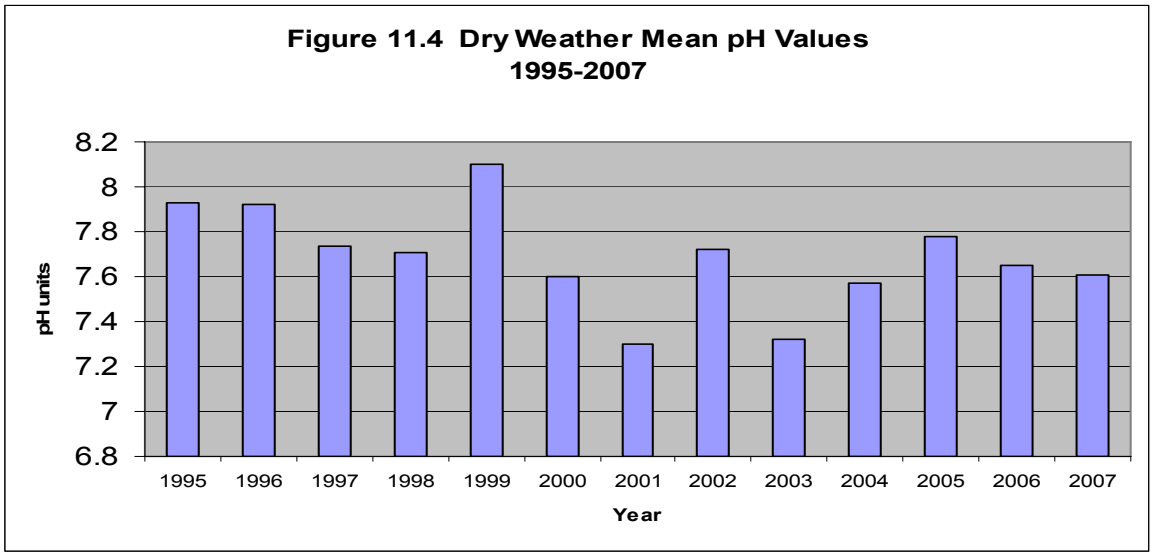

Dry weather samples are analyzed in the field for many parameters including nutrients such as ammonia-nitrogen, nitrate-nitrogen, and ortho-phosphate. Ammonia concentrations, as illustrated in Figure 11.5, show that concentrations have been decreasing since the inception of the Permit. With the exception of 2002, all recent years have averaged well below the established action level for ammonia-nitrogen.

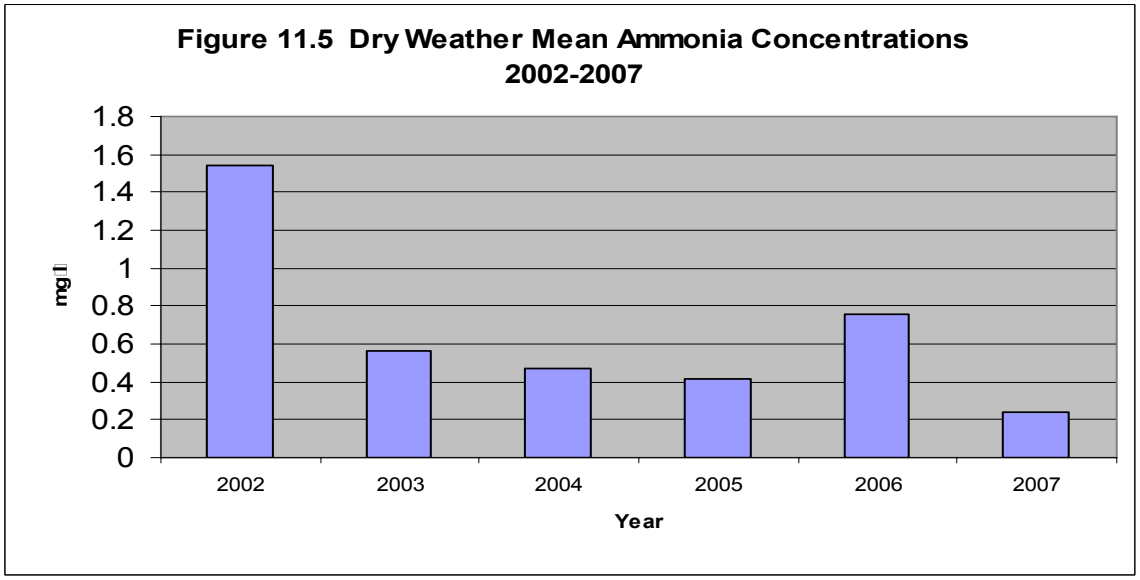

Figure 11.6 illustrates average nitrate-nitrogen concentrations over the past six years. Nitrate concentrations appear to be decreasing at dry weather sites over the past three years, with the lowest average in the past six occurring this year. Many of the higher concentrations of nitrate-nitrogen may be attributable to groundwater in the region.

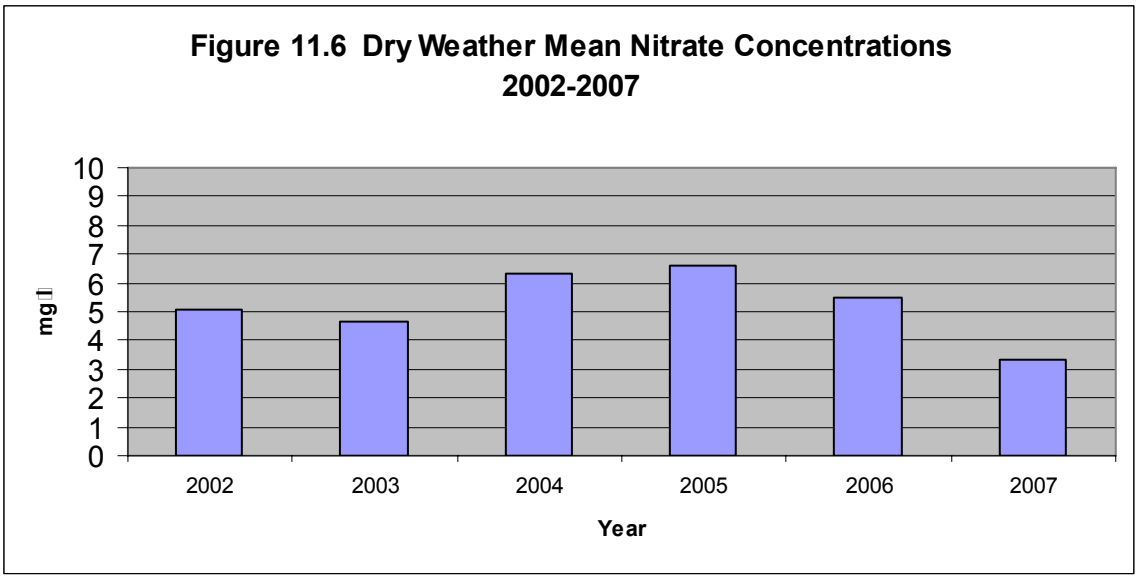

Data for ortho-phoshate is presented in Figure 11.7. Lower in recent years than in 2002, all averages are well below established dry weather action levels.

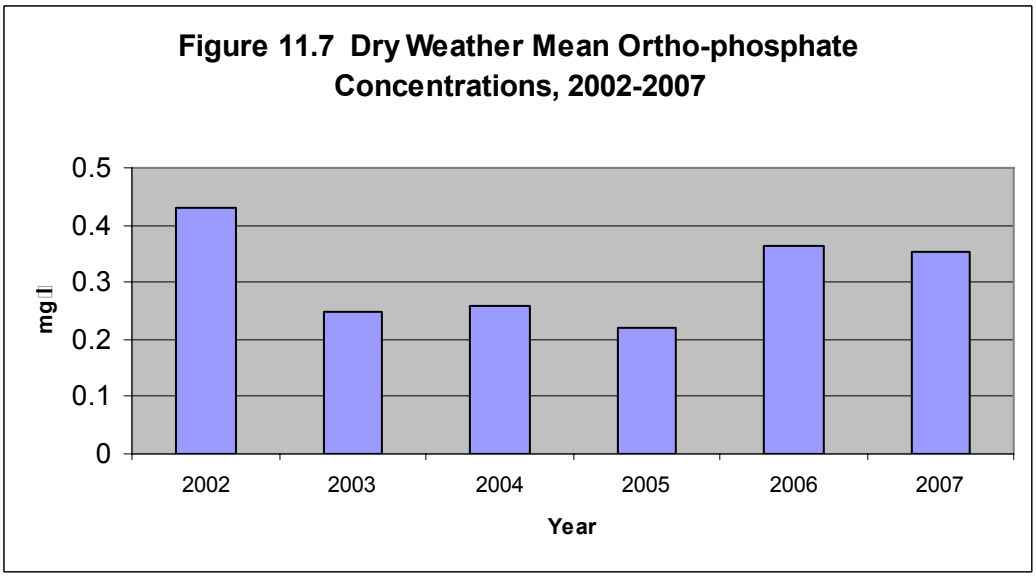

Over the course of the six years of dry weather programs, water quality parameters have been repeatedly analyzed at the same sites allowing for a comparison of data. In general, water quality within the MS4 is good, with evidence of decreasing concentrations of fecal coliform, MBAS, pH, ammonia, and nitrate-nitrogen. Efforts continue to focus on bacteria concentrations in the MS4 and their sources. In the future, increased efforts to understand bacteria concentrations and sources will be made through various TMDL activities. With an enhanced understanding of bacteria, the City will be better prepared to address and abate sources within the watershed.

Coastal Outfall Monitoring Program

As mentioned in Subsection 8.1, the City collected samples from various storm drain outfalls as part of the *Coastal Outfall Monitoring Program*. If water was flowing from a storm drain outfall, samples were collected and analyzed for total coliform, fecal coliform and enterococci. Storm drain sample results were compared to the 95th percentile criteria established in the *Adaptive Monitoring Plan*. Where possible, a paired receiving water sample was collected to assess the impacts of the storm drains on the receiving waters. The receiving water samples were compared to Rec-1 standards to determine exceedances. Where storm drain bacteria concentrations exceeded 95th percentile criteria or receiving water samples exceeded Rec-1 objectives, follow-up sampling and/or investigations were performed. The monitoring and follow-up protocols are detailed in the *Adaptive Monitoring Plan*.

Figure 11.8 shows the number of storm drain outfall samples that had an exceedance of the 95th percentile criteria for the bacterial indicators. Recent years indicate a decrease in storm drain exceedances for all three bacterial indicators, showing improvements in water quality. Exceedances of the 95th percentile did not correlate with any corresponding exceedances in the receiving water. In all cases, the flow from outfalls was intermittent and low volume. In many cases, the flow did not actually reach the receiving waters, but dissipated into the sand or sediment. The City will continue to conduct the Coastal Outfall Monitoring Program and to conduct follow-up investigations as detailed in the Adaptive Plan.

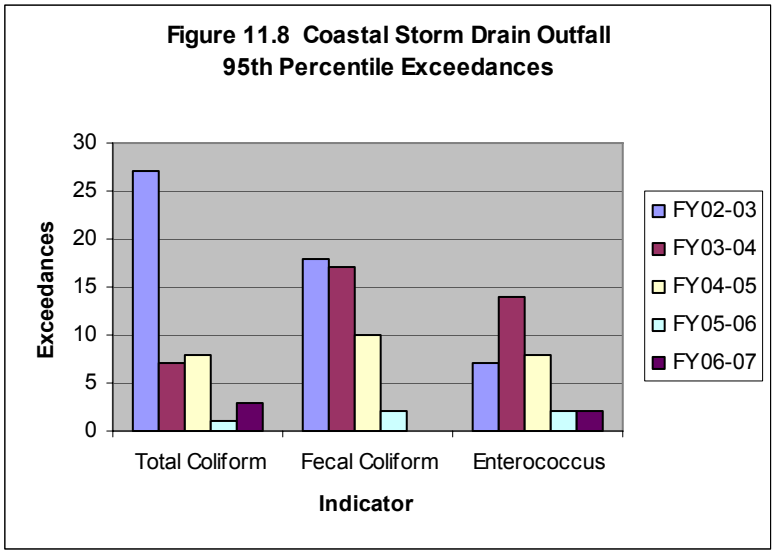

Level 6: Changes in Receiving Water Quality

The ultimate objective of the Permit is to protect and improve water bodies from receiving polluted discharges from the MS4. Targeted changes to receiving water quality can include a variety of outcomes such as compliance with regulatory benchmarks, biological integrity, beneficial use attainment, and protection. Regardless of the outcomes, it is important to note that receiving water quality reflects considerably more than the quality of the City's MS4 discharges. In addition, receiving water quality can be adversely impacted by other events that are not under the control of the City, such as other permitted NPDES discharges, wildlife (impacting bacteria levels), atmospheric deposition, and other events and activities.

At the end of FY 04-05, the City purchased a continuous water quality monitoring probe (Datasonde) to be installed in Agua Hedionda Creek near the Mass Loading Station. The Datasonde was installed during FY 05-06. The probe is tied into a continuous stream flow gauge that was installed during the year as part of a State Proposition 13 Grant for the removal of invasive plant species in the Carlsbad Watershed. Stream flow gauges were installed on Buena Vista Creek, San Marcos Creek, and Agua Hedionda Creek. It is anticipated that this multi-parameter probe will provide useful data in the future development of

TMDLs, specifically to be used to implement the Lagoon Investigative Order, 2006-0076. Although the probe is gathering some data, it has been removed and re-installed a few times, and the data has not been compiled, quality controlled, or assessed at this time.

Expansion of Dry Weather Program

The *Dry Weather Field Screening Program* is aimed at identifying illegal discharges to the MS4. This year the City continued to have four receiving water samples collected in order to provide additional baseline data of surface water quality. This is the fifth year of data collected under the expanded program. The program includes monitoring sites on Buena Vista Creek, Agua Hedionda Creek (at the Mass Loading Station site), Encinas Creek, and San Marcos Creek. Each of these tributaries is representative of the four separate Carlsbad sub-watersheds. The results for FY 06-07 are found in Appendix 13-1. A full discussion of this special study can be found in Section 13 of this report.

Coastal Monitoring Data

The City collected three routine samples of the ocean water during FY 06-07. There were no exceedances of the REC-1 standards in the Ocean for total coliform, fecal coliform or enterococci during the last five reporting periods. There were 48 routine paired samples collected from outfalls to lagoons during FY 06-07. Figure 11.9 shows the number of samples that exceeded a bacterial indicator during the last five reporting periods. A general decline in receiving water exceedances in the lagoons is evident across all bacterial indicators, showing improvements in water quality.

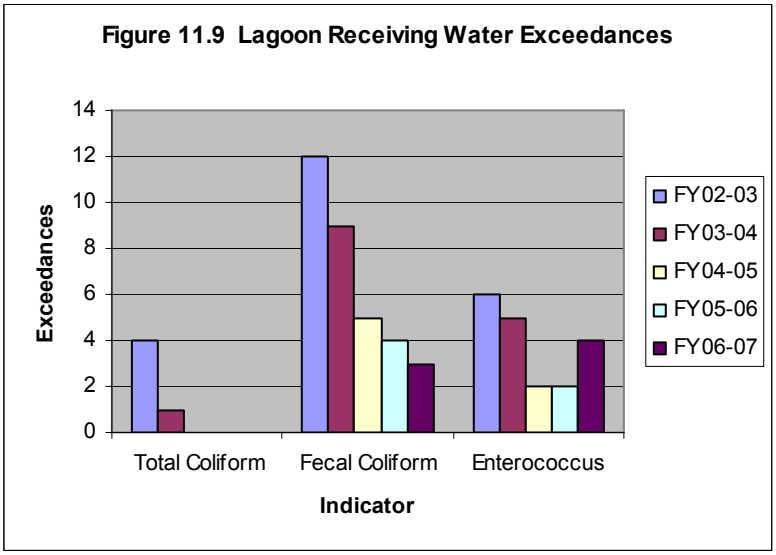

Of the 48 receiving water samples collected in lagoons, there were only a few exceedances of benchmarks: zero for total coliform, three for fecal coliform, and four enterococci. There was wide variability between outfalls, monitoring events, and dry and wet seasons, and there was no correlation between a high receiving water result and a high storm drain result. For the paired receiving water samples exceeding the REC-1 standards, all of the corresponding storm drain results were below the 95th percentile indicating that the storm drain discharge did not negatively impact the receiving water. The City will continue to implement this program and to conduct follow-up investigations in accordance with the *Adaptive Plan*.

11.2 Self Assessment

Program Strengths

The City has continued using effectiveness assessment measures during FY 06-07. This included the continued use of surveys, pollutant loading estimations, and MS4 and water quality monitoring. As more data is collected, assessments will be more representative of actual conditions.

Compliance based (Level 1) assessment is effective in showing that the City is meeting or exceeding Permit requirements. Dedicated resources for litter abatement and MS4 cleaning contribute to better overall water quality. Industrial and commercial inspections were completed as required and have been effective in reducing pollution from these sources. Construction sites with grading permits were all prioritized as high threats to water quality and are inspected frequently. Because the performance measure system has been incorporated into the City's storm water programs, Permit requirements were often exceeded.

Changes in knowledge and awareness in storm water issues (Level 2) is addressed through education and outreach programs and in the industrial and commercial inspection programs. A public phone survey is completed annually and includes questions designed to assess changes in awareness from year to year. An "Eco-quiz" is also given to children in the City through in class school programs. This quiz assesses knowledge before and after the presentations. The City also includes an assessment question on the industrial and commercial inspection forms. This question is designed to assess knowledge and awareness on-site and changes can be tracked year to year. Changes in awareness are evident in the public survey results from 2003 to 2006 and in the results of the "eco-quiz".

Behavioral changes (Level 3) are assessed in the same manner as described above. Questions on the public opinion surveys and on the inspection forms allow for changes in behavior to be tracked and assessed year to year. These questions are slightly different from Level 2 questions in that they are designed to assess what actions the target audience is actually taking to improve water quality. Public surveys help the program to determine which BMPs are implemented in the residential sector. Although this question has not been tracked year to year, the overview of common environmentally conscious behavior is evidence of positive impacts of the program.

Estimated load reductions necessary for the Level 4 assessment are calculated using EPA modeling software. Reductions are calculated for nitrogen and phosphorus associated with improved lawn care, pet waste disposal, erosion and sediment control, street sweeping, removal of illicit connections, and reduction in sanitary sewer overflows. TSS reductions are calculated for improvements in erosion and sediment control, street sweeping, removal of illicit connections, and reductions in sanitary sewer overflows. Bacteria loading reductions are calculated for improvements in pet waste disposal, removal of illicit connections, and reductions in sanitary sewer overflows. Land use information collected from GIS analyses is necessary for generating these estimations. Significant loading reductions to the storm drain system are evident for total nitrogen, phosphorous, bacteria, and total suspended solids through BMP implementation as prescribed by the program.

Tracking changes in MS4 water quality (Level 5) assessment is possible via the Dry Weather Monitoring Program. With five years of dry weather data, ranging from nutrient and physical measurements to bio-available metals and pesticides, collected at 60 sites covering the entire MS4, a picture of water quality within the system is becoming clear. While data is only collected once annually, improvements can be seen for nutrient concentrations, pH, and surfactants within the MS4. Exceedances of bacteria 95th

percentile criteria in the Coastal Storm Drain Monitoring Program have declined in recent years of monitoring.

The ultimate goal of the program is to demonstrate improvements of water quality in receiving waters, Level 6 assessment. Receiving water quality is monitored via several programs including: supplemental Dry Weather Monitoring Program receiving water sites, coastal storm drain monitoring, and mass loading station monitoring.

The Dry Weather Monitoring Program expanded to include four sample locations to assess receiving water quality downstream of the MS4. In 2007 monitoring, nearly all constituents were not detected in the water samples including: MBAS, oil and grease, dissolved cadmium, dissolved copper, dissolved lead, diazinon, and chlorpyrifos. Water quality at the four locations was relatively good.

The Coastal Monitoring Program requires bacteria sampling of the receiving waters, ocean and lagoon, where storm drains are flowing into the water bodies during dry weather. This program attempts to assess the impacts of the storm drain flows on water quality in the receiving water. FY 06-07 data indicates no water quality exceedances for bacteria in the ocean and only a few in the enclosed lagoons. The exceedances in the lagoons have been declining in recent monitoring seasons as water quality appears to be improving. Samples where objectives were exceeded in the lagoon did not positively correlate with high bacteria in the storm drains and were likely influenced by other bacteria sources.

The Regional Monitoring Program includes a monitoring station at Agua Hedionda Creek and monitors a number of water quality constituents during storm events. In the future, this data may be used for long term water quality assessments and for TMDL monitoring information.

Program Improvements

Level 2, assessment of change in knowledge and awareness, is working well. Changes in awareness in the industrial and commercial sector are not evident through the inspection questions as awareness remains consistently high for both. This question could be included on the municipal inspection forms as well.

Level 3 assesses changes in behaviors through questions evaluated during inspections. The implementation of BMPs in the industrial and commercial sectors remains consistently high for both. The questions could be included on the municipal inspection forms as well for further assessement.

Level 4, assessments of load reductions, will be compared to loading estimates from other jurisdictions to determine the quality of the data. For example, total loads per land use have been estimated in studies in the Los Angeles Region. These loads could be compared to the reductions calculated by the EPA model to determine the usefulness of either method. Estimates and load reductions will be calculated for future TMDL development as well.

Level 5 and 6, assessing improvements in MS4 discharge and receiving water quality, will be improved as new permit programs add information useful for these levels of assessment.

Section 12
Fiscal Analysis Component

12.0 Overview

The Permit requires the City to secure the resources necessary to meet the requirements of the Permit and the JURMP, and to conduct an annual fiscal analysis. The analysis must evaluate the expenditures necessary to accomplish the activities identified in the JURMP and describe the sources of the funds used to meet the expenditures. The Storm Water Protection Program is comprised of numerous program activities funded from a variety of sources. Table 12.1 summarizes the storm water protection program activities and identifies the current funding source:

Table 12.1. Summary of Program Activities and Current Funding Sources

Program/Activity	Funding Source(s)
Storm Water Facility Capital Improvement Program	Developer Impact Fees, Developer Exactions, General Fund, Gas Tax, TransNet Sales Tax, Federal and State Grants
Storm Water Facility Maintenance and Operation Program including Street Sweeping, Litter Removal and Storm Event Readiness and Patrolling	Solid Waste Service Fees, General Fund
Storm Water Program Administration	Solid Waste Service Fees
Illicit Detection and Illegal Discharge Enforcement Program	Solid Waste Service Fees, General Fund, Fines
Commercial/Industrial SWPPP Inspection Program	Solid Waste Service Fees (charged to commercial service customers only)
Construction Related SWPPP Review and Inspection Program	Developer Fees

In FY 02-03 and 03-04, the City conducted a fee study to evaluate possible financing mechanisms for the Storm Water Protection Program. The new financing mechanism was detailed in the "*City of Carlsbad Storm Water Pollution Protection Program Regulatory Fee Study Report*", dated September 12, 2003. The report recommended funding the storm water program through an increase in the City's Solid Waste Service fees and new development processing fees. Nearly all of the pollutants discharged into the MS4 are classified as solid waste under state and local codes. Based on this information and other findings, the City implemented a *Solid Waste Service* fee increase for residential and commercial service users to fund certain Storm Water Protection Program activities. The amount of the fee increase is calculated based upon the apportioned costs to the business and residential service users and their contribution to the pollutant loading. This fee was reviewed in June 2007, and updated to reflect current workloads. The current fee is $3.46 per month for residential customers, and 23.09% of the base trash rate for commercial customers.

The total operating costs to fund the storm water program activities related to existing development for FY 06-07 were $1,355,240. This does not include the *Storm Water Capital Improvement Program* costs discussed in Section 12.1. It does, however, include actual expenditures for personnel, operating costs and capital outlay from the Storm Water Protection Program budget, including costs for street sweeping. Since the 2003 fee study and new Storm Water Fees, most of the activities related to Storm Water Protection Program and storm drain maintenance have been funded out of the "Storm Water" account. A few other items, such as a portion of street sweeping not directly involving the City's right-of-ways are

paid for from other sources. A spreadsheet detailing the FY 06-07 expenditures for storm water activities along with the planned FY 07-08 budget is in Appendix 12-1.

The September 2003 study and proposal also recommended the establishment of development processing fees to pay for costs to review and inspect construction related SWPPPs. At the current rate of development, the SWPPP review and inspection fees are expected to generate over $130,000 annually in revenues.

12.1 Storm Water Facility Capital Improvement Program

Capital expenditures for new or upgraded storm water facilities are generally funded from developer revenues generated by the City's adopted Local Drainage Area Fee program, developer exactions, or the General Fund. Occasionally, new drainage facilities or repairs and/or rehabilitation of existing drainage facilities are funded from other road-related funding resources such as the Gas Tax, TransNet Sales Tax, or Federal and State Grants. The adopted CIP budget includes funding for nearly $29 million dollars in storm water facility costs to build-out of the City. Funding for additional drainage facilities are included within the funding for various other City road improvement and civic projects. The exact amount of funding for drainage improvements included within the funding of other projects is not identified in the CIP budget.

Through the end of FY 06-07, the City had active drainage facility projects totaling $7.6 million in the adopted CIP budget. New projects initiated in FY 07-08 appropriated an additional $1.4 million. To date, approximately $3 million has been spent on active drainage projects. The City is committed to funding the construction of new and upgraded storm water facilities from its *Development Impact Fee Program*, the General Fund, and/or other revenue sources. The City will continue to investigate formation of a "*Storm Water Utility*" as a possible alternative source of funding to replace General Fund contributions.

12.2 Storm Water Facility Maintenance and Operation Program

For the purpose of this financial analysis, the formal *Storm Drain Maintenance Program* includes cleaning and minor repairs to the MS4, street sweeping, litter removal, storm event preparations, and patrolling. Historically, the cost to provide these services was funded by the General Fund. However, the adoption of the solid waste funding mechanism has provided a funding source for many of the *Storm Drain Maintenance Program* costs that had previously been funded in the General Fund. Street sweeping expenses totaled $191,244 during FY 06-07, additionally $108,838[1] was spent for litter removal. When all Storm Water Protection Program expenditures were combined, it was estimated that the total costs for storm drain maintenance activities was approximately $521,000. To better track these expenses in the future, the City has established a mechanism to track expenses directly related to Storm Water Facility Maintenance and Operations.

12.3 Storm Water Protection Program Administration

The administrative cost of the Storm Water Protection Program includes expenditures for annual JURMP reporting, GIS updates, records maintenance, wet weather monitoring, NPDES fee payments, education and outreach, and general program administration. The total annual cost for administration for FY 06-07 was estimated at $780,000. Prior to approval of the new storm water funding mechanisms, the full cost for administration of the program was funded from the General Fund. With the approval of the new

[1] In FY 2006-07, the litter removal program transitioned from an in-house service provided by temporary employees to a contracted service. Costs shown here are a hybrid of the 2 programs in 2006-07.

funding mechanisms, the full cost for administration of the Storm Water Protection Program is paid from the revenues generated from the *Solid Waste Service* fee increase.

12.4 Illicit Discharges Detection and Elimination

The *Illicit Discharge Detection and Elimination Program* includes activities to detect and investigate the discharge of non-permitted pollutants into the MS4. This also includes any activities required to eliminate discharges and/or otherwise enforce compliance with the storm water regulations. The primary expenditures for the *Illicit Detection and Illegal Discharge Enforcement Program* for FY 06-07 is included in the administrative costs listed above in Section 12.3. This figure does not include any cost for legal actions taken to enforce compliance with the *Illicit Detection and Illegal Discharge Enforcement Program* when enforcement is elevated beyond an administrative citation. The cost for any legal action taken against an illegal/illicit discharger above an administrative citation will be paid from the General Fund or fines levied against the respective illegal/illicit discharger.

12.5 Commercial/Industrial SWPPP Inspection Program

The City's *Commercial/Industrial SWPPP Inspection Program* includes the review of business related SWPPPs together with periodic site inspections to ensure compliance with requirements of the JURMP and the Carlsbad Municipal Code. The total budget allocated for the *Commercial/Industrial SWPPP Inspection Program* for FY 06-07 was estimated at $115,715. These costs were partially paid for out of the Storm Water Protection Program and the General Fund. Prior to approval of the new storm water funding mechanisms, the full cost for administration of the program was funded from the General Fund.

12.6 Construction Related SWPPP Review and Inspection Program

The *Construction Related SWPPP Review and Inspection Program* also includes regular site inspections during project construction to ensure project proponents comply with the requirements of the Permit, JURMP, and Carlsbad Municipal Code. The annual cost for the *Construction Related SWPPP Review and Inspection Program* varies from year to year depending upon the level of development within the City. The developer processing fees will ensure that adequate revenues are generated to fund all construction related SWPPP reviews and inspections.

Based upon current development activity levels, the City anticipates the annual program costs in the range of $56,500. Prior to the approval of the new storm water funding mechanisms, the full cost for the *Construction Related SWPPP Review and Inspection Program* was funded from the General Fund. With the approval of the new funding mechanisms, the full cost for the program will be paid from the revenues generated from the collection of development processing fees.

12.7 Self-Assessment

Program Strengths

The City has had a steady revenue source to fund the Storm Water Protection Program over the past year. Adjustments to the Solid Waste Fee funding mechanism for Storm Water-related programs have been made to ensure adequate funding for anticipated programs over the next fiscal year.

Program Improvements

The City will be working over the next Fiscal Year to ensure that Storm Drain Maintenance Activities are following the funding conventions outlined in the 2003 Fee Study, and 2007 update to same.

To better track Storm Drain Maintenance expenditures, versus Storm Water Protection Program Expenses, we have created a new account for Storm Drain Maintenance. This will allow City Staff to better track expenses for storm drain maintenance activities which are funded by both the General Fund and Storm Water Fee.

For FY2007-08 we are reviewing our developer fee structure to recover costs incurred to comply with the NPDES permit.

Section 13
Special Investigations

13.0 Overview

This section contains water quality data related to two projects conducted in FY 06-07. The first is described in Section 13.1 and reflects samples collected in four of the City's creeks, representing receiving waters in each sub-watershed. The second special investigation is described in Section 13.2. This monitoring was conducted to fulfill the monitoring requirement of the California Coastal Commission for construction of the new municipal golf course.

13.1 Receiving Waters Monitoring during Dry Weather

Study Design

This monitoring program was first initiated in the summer of 2003, concurrent with the City's Dry Weather Monitoring program described in Section 8, and has continued for the past five years. These sites were selected to be representative of the four major inland receiving waters in each of the sub-watersheds in the City. A site was monitored on Buena Vista Creek, Agua Hedionda Creek, Encinas Creek, and San Marcos Creek. Each location was monitored for the constituents listed under the Dry Weather Program as required under Order 2001-01. This additional effort was in support of the Carlsbad Watershed Group's desire to better understand the condition of the receiving waters within the Carlsbad Hydrologic Unit. The receiving water results are compared to *Water Quality Objectives* (WQO) listed in the 1994 Water Quality Control Plan for the San Diego Basin (Basin Plan), which are set by the State of California to be protective of beneficial uses.

Grab samples were collected during dry weather for all constituents, providing a snapshot of the water quality in the creek at that particular time. Temperature, pH, conductivity, and turbidity measurements were obtained using a recently calibrated hand held meter. Other parameters including detergents, ammonia-N, nitrate-N, and ortho-phosphates were tested using Chemetrics field test kits. While these kits provide enough information to initiate investigations in the dry weather program, they often do not have accuracy or detection levels low enough to compare these data to water quality objectives. This is especially true for the nutrients analyzed. Analyses for other constituents including surfactants (MBAS), oil and grease, dissolved metals, diazinon, chlorpyrifos, and bacteria were performed by certified laboratories using approved methods. As a result, this data is of higher quality and may be compared to water quality objectives (WQO) with more confidence. Because of the differences in analytical procedures, the discussion that follows will be divided into three sections: those constituents measured by reliable calibrated meters, those constituents measure by Chemetrics field test kits, and those analyzed by a certified lab.

Physical Measurements Data

Physical measurements such as temperature, pH, and turbidity were collected using calibrated field instruments and were within Basin Plan water quality objectives at all times for all four creeks.

Temperature is guided by the Thermal Plan, which addressed only discharges to receiving waters. Using Best Professional Judgment, there were no temperature variations causing concern during the monitoring.

The Basin Plan establishes a range for pH of 6.5-8.5 as the WQO. All pH measurements in the four creeks across the five years were within this range.

The turbidity WQO in the Basin Plan is 20 NTU; all measurements were well below the WQO for all five years.

There is currently no WQO established for conductivity, however all measurements were within the recommended action levels used in the Dry Weather Monitoring Program indicative of illicit discharges.

Field Test Kit Data

Measurements using the field test kits include: detergents, ammonia-N, nitrate-N, and orthophosphate. Nearly all measurements were below applicable WQO for each constituent.

Most field samples for detergents using the field test kits were below the Basin Plan WQO of 0.5 mg/l. In Buena Vista Creek, there were no concentrations above the WQO. The sample collected in 2007 for Agua Hedionda Creek was equal to the WQO, while samples collected during the four preceding years were within standards. In Encinas Creek and San Marcos Creek, detergents measured at or above the WQO for three of the last five years. In all cases, the detergent concentrations were below the dry weather action level. Also in all cases, where the sample analyzed using the field test kit was exceeding WQO, the same sample run at the laboratory did not have any detectable concentrations of MBAS (detergents/surfactants). Due to the accuracy of the laboratory analyses, these concentrations (all non-detects) are reliable data and are truly representative of the water quality in the creeks. Both methods are used to allow for immediate investigation in the field where elevated concentrations are detected.

The test kits detection limits do not have the capability to detect ammonia-N concentrations as low as the WQO in the Basin Plan. Therefore, the results from the kits could not be compared to the Basin Plan WQO. These test kits are used in the Dry Weather Monitoring Program to give a general idea of the water quality, with the capability of triggering investigations to track illicit discharges. However, all measurements for ammonia-N were well below the Dry Weather Monitoring Program action level of 1.0 mg/l, indicative of an illicit discharge.

There is currently no WQO established in the Basin Plan for ortho-phosphate, however the USEPA Multisector General Permit does include a WQO of 2.0 mg/l. This WQO was used in analyzing ortho-phosphate data. Ortho-phosphate data collected in all four creeks across five years were well below the WQO established in the Multisector Permit.

The Basin Plan WQO objective for nitrate-N is equal to the drinking water standard of 10 mg/l. Samples collected at all four creeks across five years were all well below this WQO, with the highest concentration detected at 2.5 mg/l.

Analytical Laboratory Data

Analytical measurements in the creeks include surfactants (MBAS), oil and grease, dissolved metals, diazinon, chlorpyrifos, and bacteria. The dissolved metals analyzed are cadmium, copper, lead, and zinc. Hardness values are also measured to allow comparison of dissolved metal concentrations to California Toxics Rule (CTR) standards.

Through all five years, across all four creeks there were no surfactants detected in any sample. A reporting limit of 0.5 mg/l was used which is equal to the WQO in the Basin Plan.

Samples for oil and grease were non-detect in 19 of 20 samples collected. One sample collected in Agua Hedionda Creek in 2003 did have detectable levels of oil and grease, at 3.0 mg/l. The Basin Plan WQO is a visible film on the surface of the water. Although a sheen was observed while sampling, the concentration was well below the established objective of 15 mg/l in the USEPA Multisector General Permit. In all four subsequent years at this site, no samples contained detectable levels of oil and grease.

Dissolved metals, including cadmium, copper, lead, and zinc were rarely detected in the creek samples. None of the detected concentrations exceeded CTR objectives. There were no samples with concentrations of dissolved cadmium or dissolved lead above detection limits. Four out of 20 samples analyzed for dissolved copper were above detection limits, two in Encinas Creek and two in San Marcos Creek. However, none of these four samples exceeded WQO set by the California Toxics Rule (CTR). Dissolved zinc was above detection levels in four of 20 samples collected, however none of the four exceeded water quality objectives established by CTR.

The organophosphorous pesticides diazinon and chlorpyrifos were measured at all four sites for each of the five years. Of the 20 samples collected, there was one sample collected in 2003 at Buena Vista Creek that was above the standard used by the California Department of Fish and Game, 0.08 ug/l, for diazinon. The Basin Plan does not establish numeric WQO objectives for these constituents. All other samples were below detection limits for diazinon and for chlorpyrifos.

Samples are also analyzed for total coliform, fecal coliform, and enterococcus. Currently there is no established WQO for total coliform concentrations in inland surface waters in the Basin Plan.
The single sample REC-1 WQO for fecal coliform in the Basin Plan is 400 cfu/100 ml. The single sample enterococcus standard for freshwater inland surface waters in infrequently used areas is 151 cfu/100 ml. These objectives are the basis of the discussion below.

Many of the samples collected in the creeks over five years exceeded the WQO for fecal coliform and enterococcus. Over the past 5 years in Buena Vista Creek, three of the five samples collected exceeded the WQO for at least one indictor, fecal coliform and/or enterococcus. In Agua Hedionda Creek, Encinas Creek, and San Marcos Creek, four of five samples collected exceeded REC-1 standards for at least one indicator in the past 5 years.

Understanding the nature of bacteria in the region, the fecal coliform may be coming from a variety of sources including homeless encampments in the area and natural sources such as wildlife in the riparian corridor. It is worth noting that all fecal coliform and enterococcus concentrations over the five years are below established 95th percentile action levels used in the Dry Weather Monitoring Program.

Conclusions

This special study was initiated in support of the Carlsbad Watershed Copermittees' efforts to learn more about the quality of receiving waters in the Carlsbad Hydrologic Unit. The high priority pollutants in the Carlsbad Watershed are sediment and bacteria. Data collected in this study is insufficient in quality to provide information on nutrients due to the methodology used in analyzing nutrient concentrations. The prioritization of sediment as a high priority pollutant may be warranted but is not supported by data collected in this study. This is likely because all samples were collected during dry weather and sediment is potentially more prevalent during wet weather. Turbidity data collected as a representative of sediment in the water column is presented below in Figure 13.1.

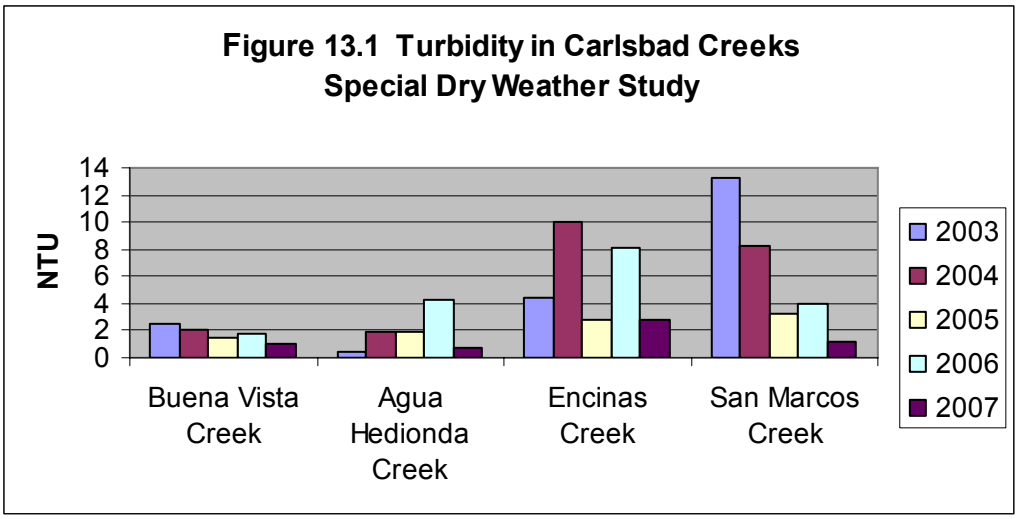

Bacteria is also listed as a high priority pollutant in the Carlsbad Watershed and data has been shown to exceed REC-1 water quality objectives during wet and dry weather. As shown in Figures 13.2 and 13.3 for Fecal Coliform and Enterococcus, respectively, this special study supports the Watershed's prioritization of bacteria during dry weather.

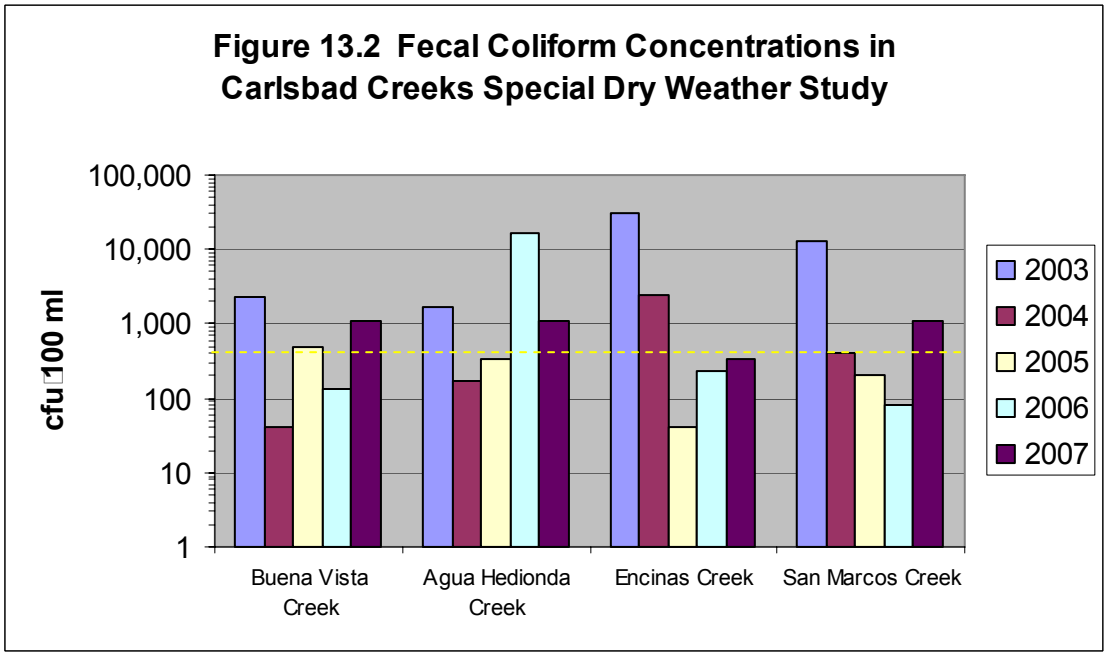

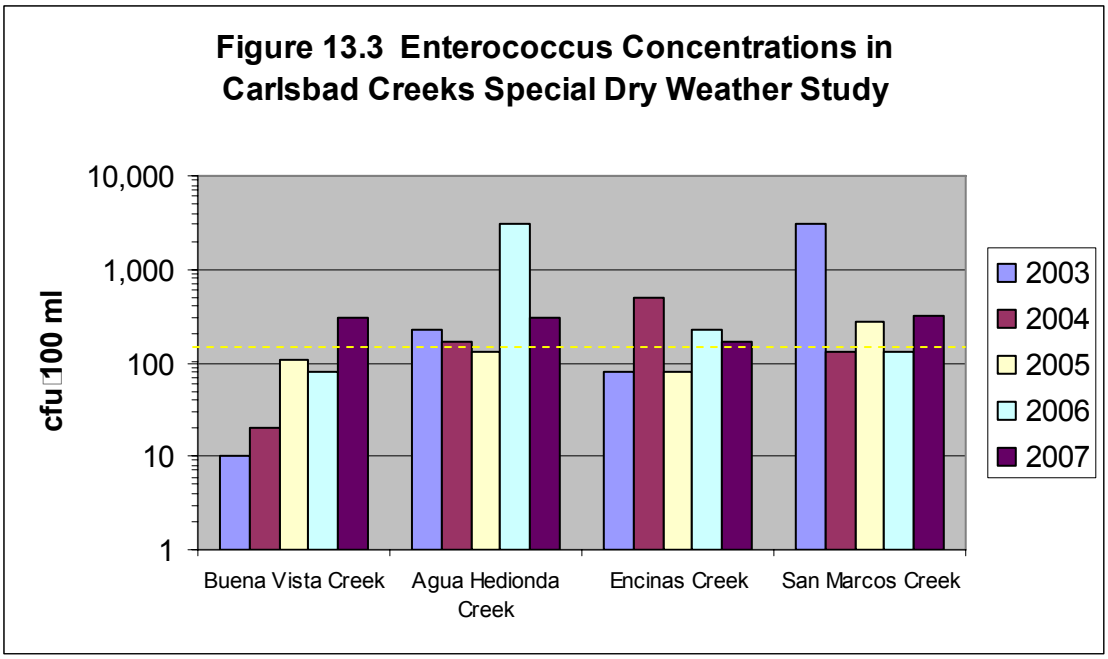

Overall, water quality in these creeks appears to be within both Basin Plan water quality objectives and dry weather action levels for the constituents monitored in this special study. These data support the findings of previous monitoring in the Carlsbad Watershed indicating that bacterial indicators are a constituent of concern in the Carlsbad Hydrologic Unit. Other water chemistry constituents in the creeks appear to be within standards. Because this is a limited set of data, the watershed is in need of additional data to validate these findings. With the onset of the new municipal stormwater permit, temporary watershed assessment stations will be located on Buena Vista Creek and on Agua Hedionda Creek collecting samples for analysis during wet and dry weather. 0

13.2 Carlsbad Golf Course Water Quality Monitoring

Study Design

Beginning in June 2006 and ending in June 2007, the City implemented a monitoring program as required and approved by the California Coastal Commission (CCC). A simple study design was approved consisting of four sample locations: two in surface waters and two wells to access groundwater. Sites were selected upstream of the golf course in the surface water and in a groundwater monitoring well, and downstream of the course in the surface water and in a second groundwater well. Three rounds of sampling were conducted prior to construction (baseline) and three rounds were conducted after construction of the course. Constituents monitored include: pH, dissolved oxygen (DO), total suspended solids, nitrate, nitrite, phosphorous, conductivity, hardness, alkalinity, and toxicity.

Results

Surface Water

No nutrient related impacts were detected in the surface water data collected. In surface waters, nitrate concentrations appear to improve downstream of the golf course before and after construction, indicating that nitrates may actually be removed from the water column in the riparian corridor. No nitrites were detected in any surface water samples up or downstream, before or after construction. Phosphate

concentrations appear to have increased from the upstream to the downstream sample prior to golf course construction; however in samples collected after construction, there is no shown increase.

Total suspended solids were also measured in all monitoring events. Based on the water quality data collected, there appears to be no adverse impacts on suspended solids by the construction of the golf course. In the surface waters, no dry weather samples contained TSS above the detection limit. One sample collected downstream after construction following a storm event contained measurable suspended solids; however the value was well below the WQO of 100 mg/l and was not considered to be indicative of adverse impacts from the course.

Surface water measurements of pH appear in the neutral range. All measurements were within the acceptable Basin Plan range of 6.5-8.5.

Surface water dissolved oxygen levels are slightly higher upstream and downstream in samples collected after construction. This does not appear to be a result of the golf course since the upstream sample is also increased. There is very little change in DO concentrations upstream to downstream, regardless of when the samples were collected.

Toxicity results indicated some toxicity; however it was shown to be driven by the elevated conductivity levels in the samples. Conductivity measurements in surface waters show very little change from upstream to downstream in pre-construction samples. However, in post construction samples a decrease in conductivity in the downstream sample is observed, indicating improvements in water quality, potentially attributable to an improved riparian corridor as required during construction of the golf course.

Ground Water

No nutrient related impacts were detected in the ground water data collected. In ground waters, nitrate concentrations pre and post construction were low at the upstream site and increased at the downstream well. This is evident prior to construction as well as after. Nitrite concentrations were below detection levels in four of six samples collected. Small amounts were noted in two samples collected in the downstream well, one pre and one post construction. Phosphorous concentrations appear to increase slightly downstream in the pre-construction samples but are reduced in the post construction sampling.

Total suspended solids were also measured in all monitoring events. TSS levels in the groundwater samples largely reflect the stirring up of sediment within the well casing when the water is purged prior to collecting the sample. Because of the sampling technique, these values may not be representative of true conditions in the groundwater.

The average pH values downstream of the golf course for pre and post conditions are nearly equal and in the neutral range.

DO levels are low in the groundwater samples. Concentrations appear to increase from upstream to downstream samples, and are slightly higher in samples collected post construction.

Toxicity results indicated some toxicity; however it was shown to be driven by the elevated conductivity levels in the samples. Conductivity measurements in ground waters increase from upstream to downstream in pre and post construction samples.

Section 14
Conclusions and Recommendations

14.0 Overview

During FY 06-07, the City implemented the Permit requirements and the program components of the JURMP. This report described the activities that the City undertook to reduce discharges of pollutants and urban runoff flow to the MS4 to the maximum extent practicable. This Annual Report also provided an overall account of the activities conducted and the programs implemented to address the inspection, monitoring, investigation, education, and enforcement requirements. Identified program strengths as well as improvement areas for FY 07-08 are outlined in each report section.

Several highlights are listed below, including specific discussion of activities conducted related to meeting Permit requirements, internal program goals that met or exceeded Permit requirements, and recommended improvements. Note that these are highlights only and do not represent all activities conducted by the City to maintain and exceed compliance. Comprehensive details are reported in the applicable preceding sections.

14.1 Highlighted Activities Performed to Meet Permit Requirements

The City continued activities to maintain compliance with the Permit. For comprehensive details, please refer to the applicable preceding sections of the report. Highlights for FY 06-07 are listed below.

The City:

- Updated and mapped the municipal inventory and inspected all high priority municipal facilities.
- Conducted cleaning and maintenance activities to reduce pollutant discharges from the MS4.
- Updated and mapped the industrial inventory, inspected 294 industries (including all high priority industries), conducted outreach, and issued 14 enforcement actions to obtain compliance.
- Updated and mapped the commercial inventory, provided outreach on BMPs, inspected 385 commercial sites, and issued 43 enforcement actions to obtain compliance.
- Continued using the *Knowledge and BMP Assessment*s at commercial and industrial facilities.
- Collaborated with other internal departments to assist with investigations and remediation during field incidents. The Storm Drain Maintenance Crew was key to prompt, effective responses to complaints involving clean ups of incidents on public streets. Regular meetings and discussions about compliance issues and consistent contacts facilitates this inter-departmental coordination.
- Distributed educational information for residential activities, continued an advertising campaign, hosted or participated in 25 community outreach events, collaborated in offering five oil recycling and two HHW drop-off sites for residential use, responded to 154 reports of illegal discharges, and issued 37 enforcement actions to obtain compliance.
- Inspected all high priority construction sites at required frequencies, conducted outreach to project proponents and City staff, and issued 128 enforcement actions to obtain compliance.
- Continued implementation of the *Dry Weather Field Screening and Analytical Program*, analyzing conditions and samples from 60 sites in the MS4.
- Continued implementation of the *Coastal Outfall Program* by routinely monitoring 22 “active” outfall sites on a regular basis, and “inactive” sites semi-annually.
- Updated the *Rough Pad Stabilization* example to improve project proponents’ knowledge of the City’s expectations.

- Distributed a copy of the Pollution Prevention Guide to the Construction Industry brochure with each construction related permit application.
- Improved the formal "*Catch Basin Inspection Program*" by reassigning resources to dedicate a work order system that tracks routine and scheduled catch basin inspections and cleaning activities. As a result of this formal program, the City inspected 100% of catch basins during FY 06-07.
- Conducted a proactive program to detect and eliminate illegal discharges to the MS4. The public continued to use the storm water hotline and e-mail address to report illegal discharges to the storm drain system. The Storm Water Protection Program responded to 154 reports of illegal discharges to the storm drain system. In addition, the City responded to 434 complaints or requests for action related to storm water quality, the sewer system, or MS4 maintenance.
- Continued implementation of the *Sewer Overflow Prevention Plan/Response Plan* and responded to 12 sewage spills or overflow reports, with a total of 18,000 gallons recovered and approximately 635 gallons entering the environment.
- Continued involvement in outreach and education at the local level, the watershed level, and the regional level with the Project Clean Water Outreach Workgroup.
- Continued distributing new storm water educational brochures and continued the Environmental Programs advertising campaign.
- Distributed information through direct mail, during inspections and investigations, on the website, at workshops, during presentations, training seminars, and other public outreach events.
- Conducted a Public Opinion Survey of 1,000 residents and included questions on storm water.
- Distributed promotional items such as notepads, pens, Bags on Board, and key chains with pollution prevention messages.
- Decreased illegal discharges from commercial mobile businesses.
- Improved the Carlsbad Municipal Code by working with the City Attorney's office to revise the ordinance to reflect current enforcement levels and mechanisms.
- Reviewed internal NPDES programs for compliance with Order No. 2001-01 prior to implementing Order No. R9-2007-0001.
- Continued to review inventory management, prioritization practices, inspection and enforcement procedures, training programs, record-keeping, and reporting procedures related to construction activities.

14.2 Highlighted Activities In Addition to Permit Requirements

The City implemented several initiatives in addition to the requirements of the Permit. Some of these highlights are internal program goals and should not be viewed as enforceable under the Permit. These internal program goals will be continued and enhanced as resources allow. For comprehensive details, please refer to the applicable preceding sections of this report. Highlights for FY 06-07 are as follows:

The City:

- Continued to maintain regular communications with the Industrial Compliance Unit of the Regional Board. In addition to copies of inspection reports and other correspondence with high and medium industries covered under the Permit, the City regularly coordinated compliance issues with Regional Board representatives over the phone and through emails. On several occasions, the Regional Board expressed their appreciation of the City's professionalism, responsiveness, and implementation of the storm water program
- Continued using the streamlined inspection report revised in FY 05-06 so that businesses could promptly implement corrective actions. The revised streamlined inspection form now includes spaces to report previous enforcement actions, new storm water contacts, and a detailed list of

necessary corrective actions. The revised form has proven to be successful in attaining compliance from regulated facilities.

- Created the Environmental Resources Management Team initiative to look at environmental resources from a City-wide perspective including storm water, open space, habitat management, energy use, and sustainable principles.
- In FY 06-07, the City of Carlsbad's City Manager initiated the Storm Water Leadership Team (SWLT). Monthly meetings of the SWLT were conducted and attendees included Senior Management of the City's major service areas and Directors. Agenda items covered all areas of the City's compliance with Order No. 2001-001, as well as review of the new Order No. R9-2007-0001.
- Continued working on the BMP manual including minimum BMPs for Existing Development activities and pollutant types.
- Adopted the use of BMP maintenance agreements for privately-maintained BMPs
- Continued distributing the new brochure for mobile service providers, including carpet cleaners, plumbers, pressure washers, mechanics, porta-potty services, and any other mobile businesses that provide services at various off-site locations. This brochure was designed for mobile service providers, their employees, and anyone that hires a mobile service provider.
- Posted minimum BMPs on the City's website for access by the public, permit applicants, developers, and property owners.
- Adopted new storm water BMP maintenance agreements and incorporated into standard operating procedures. The new BMP maintenance agreements provide increased control over property owner compliance with storm water BMP requirements. These new agreements will also provide the City with legal authority to access, inspect and if necessary maintain onsite BMPs. In addition, the agreements will allow the City to place a lien on a property if BMPs are not maintained as required.
- Continued to collect data for Performance Measures and the *Maintenance Assessment Program* to analyze improved work methods to balance scheduled versus unscheduled maintenance.
- Continued Storm Water Committee monthly meetings which included members from Public Works, the Fire Department, Recreation, Planning, and the Building Department.
- Continued to use the new database to track private treatment BMPs implemented under SUSMP.
- Continued the implementation of a new HHW pick up program. The program provides a means for Carlsbad residents to have HHW picked up from their homes and hauled away for a nominal fee. In addition, the City hosted a one-day HHW drop-off event.
- Continued to track measures in the *Performance Measurement System* to monitor various environmental goals, including annual sewage overflow spills and responses, # of catch basins inspected, bacteria exceedance investigation response time, and storm water complaint response time.
- Continued to implement a *Maintenance Assessment Program* to measure the level of care being provided at various City facilities.
- Continued to implement a computerized asset management/work order system that will allow the Storm Drain Maintenance Division to manage of the MS4 inventory, inspections, and maintenance activities conducted.

14.3 Highlighted Recommendations for Improvement

As the City implemented the JURMP in FY 06-07, some areas for improvement were noted for FY 06-07. Comprehensive details are included in applicable preceding sections of the report, but highlights are listed below. Areas targeted for improvement in FY 07-08 include the following:

The City will:

- Continue to research, observe, and evaluate the performance of various types of BMPs.
- Continue working on a "*Best Management Practices Manual*" that includes the minimum and required BMPs for activities and pollutant types. The manual should be completed by early FY 07-08.
- Continue to revise existing and add new programs to implement the new NPDES Municipal permit Order No. R9-2007-0001.
- Revise brochures and fact sheets to reflect changes in the program. A complete revision of all brochures it is expected to be completed in FY 07-08.
- Continue to work at the watershed level and help focus activities on high priority pollutants.

14.4 Water Quality Improvements or Degradation

The complete 2007 Dry Weather report is under separate cover accompanying this report. Additional analyses of the MS4 water quality are found in Section 11 of this report. Special receiving water studies were also conducted with results listed in Section 13 of this report. Please refer to the *Carlsbad Watershed FY 06-07 WURMP Annual Report* for data trends supporting the focus on *High Priority Pollutants* on a watershed basis. The following text highlights some of the observations on water quality. References to specific charts are given in parentheses.

MS4 Water Quality

With five years of data from the Dry Weather Program, ranging from nutrient and physical measurements to bio-available metals and pesticides, collected at 60 sites covering the entire MS4, a picture of water quality within the system is starting to appear. While data is only collected once annually, improvements can be seen for nutrient concentrations, pH, fecal coliform, MBAS, ammonia, and surfactants within the MS4.

Exceedances of bacteria 95th percentile criteria in the *Coastal Storm Drain Monitoring Program* have declined in recent years. FY 06-07 had continued decreases in fecal coliform exceedances. Specific water quality information from these programs is highlighted in Sections 8, 11, and 13 of this report. All these programs were conducted under dry weather conditions.

Receiving Water Quality

The City is continuing to conduct additional receiving water monitoring to assess receiving water quality in Carlsbad. Current programs include the *Coastal and Lagoon Outfall Monitoring Program*, the addition of four creek sites to the *Dry Weather Program*, re-installation of a dataSonde at Agua Hedionda Creek, and mass loading station monitoring. Specific water quality information from these programs is highlighted in Sections 8, 11 and 13 of this report, and in the *San Diego County Municipal Copermittees Urban Runoff Monitoring Annual Report*. All of these programs were conducted under dry weather conditions, except for the mass loading station data collection, which was conducted during wet weather events.

Coastal Monitoring Program data indicate no water quality exceedances for bacteria in the ocean and only a few in the enclosed lagoons. The exceedances in the lagoons have declined in recent monitoring seasons and water quality appears to be improving.

Receiving Waters Monitoring during Dry Weather found that nearly all constituents were undetected in the four additional creek sites' water samples including: MBAS, oil and grease, dissolved cadmium, dissolved copper, dissolved lead, diazinon, and chlorpyrifos. Water quality at the four locations was relatively good.

A dataSonde was re-installed at Agua Hedionda Creek to collect continuous water quality data. The Sonde is currently in a testing phase in which all data collected is not accessible for inclusion in this report. However, in the future, the Sonde is expected to provide real time data for dry weather that will be useful in assessing conditions and changes in the Creek water quality and in future TMDL development monitoring.

The regional monitoring program includes a mass loading monitoring station at Agua Hedionda Creek that monitors a number of water quality parameters during storm events. During three storm events in FY 06-07, no water quality objectives were exceeded for dissolved metals, oil and grease, surfactants, nutrients, or chlorpyrifos. In the future, this data may be used for long term water quality assessments and for TMDL monitoring information.

14.5 Conclusion

The Storm Water Protection Program continues to evolve over time in response to the iterative process of implementing BMPs, assessing effectiveness, and evaluating results. As more procedures, programs and activities are implemented, there is a clear need for better databases to track and report activities and BMPs being implemented. Tying these activities to changes in water quality still presents a considerable challenge. This is part of the long-term assessment strategy that will take time to develop trends and to determine cause and effect relationships between pollution prevention and water quality management. The City will continue to work individually and with the Copermittees to further develop existing compliance programs and create new opportunities for improvement.

This Annual Report demonstrates the City's compliance with the Permit and success implementing the JURMP. Previous sections of this report show that knowledge has increased in target communities, improved BMP implementation and behavior changes are occurring, pollutant loadings are being reduced from storm water management programs, the MS4 quality is improving, and some pollutants in receiving waters are improving. These are encouraging signs that are worth noting. The City recognizes that changes are likely to happen slowly and that continued program improvements and effectiveness measures are needed for long-term success.

Acronyms

BGPD	Billion gallons/day
BMP	Best Management Practices
CEQA	California Environmental Quality Act
CFD	Carlsbad Fire Department
CHU	Carlsbad Hydrologic Unit
CWN	Carlsbad Watershed Network
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FC	Fecal Coliform
GIS	Geographical Information System
GPM	Gallons Per Minute
HAZMAT	Hazardous Materials
HHW	Household Hazardous Waste
IC/ID	Illicit Connections/Illegal Discharges
IDD&E	Illegal Discharge Detection and Elimination
JURMP	Jurisdictional Urban Runoff Management Plan
M&O	Maintenance & Operations
MSA	Major Service Area
MS4	Municipal Separate Storm Sewer System
MSDS	Material Safety Data Sheet
NCSWP	North County Storm Water Program
NOI	Notice of Intent
NONA	Notice of Non-Applicability
NON-RCRA	Not related to the Resource Conservation and Recovery Act
NPDES	National Pollutant Discharge Elimination System
OES	Office of Emergency Services
PCB	Poly Chlorinated Bi-phenyl
POST	Peace Officer Standards Training
PVC	Poly Vinyl Chloride
RCD	Resource Conservation District of Greater San Diego
RFA	Request for Action
RV	Recreational Vehicle
RWQCB	Regional Water Quality Control Board – Regional Board
SDRWQCB	San Diego Regional Water Quality Control Board
SDSU	San Diego State University
SIC	Standard Industrial Classification
SOPP	Sewer Overflow Prevention Plan
SUSMP	Standard Urban Stormwater Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Technical Advisory Committee
TC	Total Coliform
URMP	Urban Runoff Management Plan
WTM	Watershed Treatment Model
VCP	Vitrified Clay Pipe

Fiscal Year 2006-07
Municipal Inventory List

BUSINESS NAME	BUSINESS SITE ADDRESS	CURRENT SIC	SIC DESCRIPTION	ORIGINAL CLASS	DRAINAGE BASIN
FIRE STATION #1	1275 CARLSBAD VILLAGE DR	9224	Fire Protection	Muni High	BV
FIRE STATION #2	1906 ARENAL RD	9224	Fire Protection	Muni High	BA
FIRE STATION #3	3701 CATALINA DR	9224	Fire Protection	Muni High	BV
FIRE STATION #4	6885 BATAQUITOS DR	9224	Fire Protection	Muni High	BA
FIRE STATION #5	2540 ORION WY	9224	Fire Protection	Muni High	AH
FIRE STATION #6	3131 LEVANTE ST	9224	Fire Protection	Muni High	BA
FLEET MAINTENANCE FACILITY	2480 IMPALA DR	7539	Vehicle Maintenance	Muni High	AH
M&O OPERATIONS YARD	5950 EL CAMINO REAL	4941	Water Supply	Muni High	AH
OAK OPERATIONS YARD	405 OAK AV	4939	Maintenance Yard	Muni High	BV
PARKS MAINTENANCE/STORAGE	1166 CARLSBAD VILLAGE DR	4939	Maintenance Yard	Muni High	BV
POINSETTIA MAINTENANCE STATION	6600 HIDDEN VALLEY RD	4939	Maintenance Yard	Muni High	EN
STAGECOACH MAINTENANCE STATION	3420 CAMINO DE LOS COCHES	4939	Maintenance Yard	Muni High	BA
SWIM AND RECREATION COMPLEX	3401 MONROE ST	7997	Membership Sports & Recreation Clubs	Muni High	BV
AVIARA OAKS	6900 AMBROSIA LN	7999	Amusement and Recreation Services	Muni Med	BA
BUENA VISTA FIELD	1330 BUENA VISTA AVE	7999	Amusement and Recreation Services	Muni Med	BV
CALAVERA HILLS PARK	2997 GLASGOW DR	7999	Amusement and Recreation Services	Muni Med	AH
CHASE FIELD	3349 HARDING ST	7999	Amusement and Recreation Services	Muni Med	AH
EL FUERTE PARK	600 BLOCK OF EL FUERTE ST	7999	Amusement and Recreation Services	Muni Med	BA
HOLIDAY PARK	CHESTNUT AV & PIO PICO DR	7999	Amusement and Recreation Services	Muni Med	AH
HOSP GROVE PARK	JEFFERSON & MONROE	7999	Amusement and Recreation Services	Muni Med	BV
JEFFERSON FIELD	3743 JEFFERSON ST	7999	Amusement and Recreation Services	Muni Med	AH
LA COSTA CANYON PARK	3020 PUEBLA ST	7999	Amusement and Recreation Services	Muni Med	BA
LAGUNA RIVIERA PARK	4900 KELLY DR	7999	Amusement and Recreation Services	Muni Med	AH
LAS PALMAS OFFICES	2075 LAS PALMAS DR	9199	General Administration	Muni Med	EN
LEVANTE FIELD	3031 LEVANTE ST	7999	Amusement and Recreation Services	Muni Med	BA
PINE FIELD	3333 HARDING ST	7999	Amusement and Recreation Services	Muni Med	AH
POINSETTIA COMMUNITY PARK	6600 HIDDEN VALLEY RD	7999	Amusement and Recreation Services	Muni Med	EN
STAGECOACH COMMUNITY PARK	3420 CAMINO DE LOS COCHES	7999	Amusement and Recreation Services	Muni Med	BA
ADULT LEARNING PROGRAM	1207 CARLSBAD VILLAGE DR STE O			Muni Low	BV
ALGA MEDIANS	ALGA ROAD	9999	Planters and Center Dividers	Muni Low	BA
ARTS OFFICE	2955 ELMWOOD ST	8741	Management Services	Muni Low	BV
BEACH MEDIANS & RIGHTS OF WAY	CARLSBAD BLVD	9999	Planters and Center Dividers	Muni Low	AH
CADENCIA PARK	3310 CADENCIA ST	7999	Amusement and Recreation Services	Muni Low	BA
CALAVERA PUMP STATION	3600 BLOCK OF COLLEGE DR	4941	Water Supply	Muni Low	AH
CALAVERA TREATMENT PLANT	2400 TAMARACK AV	4959	Sanitary Services	Muni Low	BV
CANNON PARK	300 BLOCK OF CANNON	7999	Amusement and Recreation Services	Muni Low	AH
CANNON SEWER LIFT STATION	2301 CANNON RD	4952	Sanitary Services	Muni Low	AH

Fiscal Year 2006-07
Municipal Inventory List

BUSINESS NAME	BUSINESS SITE ADDRESS	CURRENT SIC	SIC DESCRIPTION	ORIGINAL CLASS	DRAINAGE BASIN
CAR COUNTRY PARK	PASEO DEL NORTE	7999	Amusement and Recreation Services	Muni Low	AH
CARLSBAD SENIOR CENTER	799 PINE AVE	7999	Amusement and Recreation Services	Muni Low	AH
CARRILLO RANCH	S-12 PALOMAR AIRPORT RD	7999	Amusement and Recreation Services	Muni Low	BA
CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL	4952	Sanitary Services	Muni Low	AH
CITY HALL FACILITY	1200 CARLSBAD VILLAGE DR	9199	General Administration	Muni Low	BV
CULTURAL ARTS CENTER	3557 MONROE ST	7999	Amusement and Recreation Services	Muni Low	BV
DESILTATION BASIN #13	SW END FARADAY AV SO OF LOT 102 OF CRC	9999	Desiltation Basin	Muni Low	AH
DESILTATION BASIN #30	SW CORNER MARRON AND MONROE	9999	Desiltation Basin	Muni Low	BV
DESILTATION BASIN #43	CAMINO HILLS AND FARADAY NE CORNER	9999	Desiltation Basin	Muni Low	AH
DOVE LIBRARY MAIN BRANCH & ADMINISTRATION	1775 DOVE LN	8231	Libraries	Muni Low	BA
DOWNTOWN CENTER MEDIANS	CARLSBAD VILLAGE DRIVE	9999	Planters and Center Dividers	Muni Low	BV
ELLERY WATER PUMP STATION	2300 BLOCK OF JANIS WY	4941	Water Supply	Muni Low	BV
FARADAY CENTER	1635 FARADAY AV	8741	Management Services	Muni Low	AH
FARMERS BUILDING	FARADAY & EL CAMINO RL	9999	Unspecified	Muni Low	AH
FOREST SEWER LIFT STATION	1731 FOREST AV	4952	Sewerage Systems	Muni Low	EN
FOXES LANDING LIFT STATION	4155 HARRISON ST	4952	Sewerage Systems	Muni Low	AH
GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD	4952	Sewerage Systems	Muni Low	AH
GEORGIA COLE LIBRARY	1250 CARLSBAD VILLAGE DR	8231	Libraries	Muni Low	BV
HARDING COMMUNITY CENTER	3096 HARDING ST	7999	Amusement and Recreation Services	Muni Low	AH
HIGH SCHOOL TENNIS COURT	1751 BASSWOOD	7999	Amusement and Recreation Services	Muni Low	BV
HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL	4952	Sewerage Systems	Muni Low	BV
HOUSING/REDEVELOPMENT OFFICE	2965 ROOSEVELT ST B	9532	urban and Community Development	Muni Low	BV
KNOTS SEWER LIFT STATION	501 KNOTS LN	4952	Sewerage Systems	Muni Low	BA
LA GOLONDRINA SEWER LIFT STATION	2516 LA GOLONDRINA ST	4952	Sewerage Systems	Muni Low	BA
LARWIN/DOG PARK	2700 BLOCK OF CARLSBAD VILLAGE DR	7999	Amusement and Recreation Services	Muni Low	BV
LOWER FARADAY SEWER LIFT STATION	1507 FARADAY AV	4952	Sewerage Systems	Muni Low	EN
MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STATION	5203 SUNNY CREEK RD	4941	Water Supply	Muni Low	AH
MAGEE HOUSE, HERITAGE HALL & MAGEE PARK	258 BEACH AVE	7999	Amusement and Recreation Services	Muni Low	BV
MAXTON BROWN PARK	500 LAGUNA DR	7999	Amusement and Recreation Services	Muni Low	BV
NORTH BATIQUITOS PUMP STATION	7100 BATIQUITOS DR	4941	Water Supply	Muni Low	BA
PALOMAR TRIANGLE	6600 CARLSBAD BL		Planters and Center Dividers	Muni Low	EN
PIO PICO PARK	2600 PIO PICO DR	7999	Amusement and Recreation Services	Muni Low	BV
POINSETTIA OFF RAMP	I5 & POINSETTIA		Open Landscape	Muni Low	BA
POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN	4952	Sewerage Systems	Muni Low	BA
POLICE PISTOL RANGE	MACARIO CANYON	7999	Shooting Range	Muni Low	AH
RESERVOIR B	END OF BLUFF DR	4941	Water Supply	Muni Low	AH
RESERVOIR BUENA VISTA	1600 BUENA VISTA DR	4941	Water Supply	Muni Low	BV
RESERVOIR C	CALAVERA DR	4941	Water Supply	Muni Low	AH

Fiscal Year 2006-07
Municipal Inventory List

BUSINESS NAME	BUSINESS SITE ADDRESS	CURRENT SIC	SIC DESCRIPTION	ORIGINAL CLASS	DRAINAGE BASIN
RESERVOIR D	6700 BLACK RAIL RD	4941	Water Supply	Muni Low	EN
RESERVOIR E	HIDDEN VALLEY	4941	Water Supply	Muni Low	EN
RESERVOIR ELLERY	JANIS WAY	4941	Water Supply	Muni Low	AH
RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR	4941	Water Supply	Muni Low	AH
RESERVOIR LA COSTA HI	ALGA RD	4941	Water Supply	Muni Low	BA
RESERVOIR LA COSTA LO	ALGA RD	4941	Water Supply	Muni Low	BA
RESERVOIR PAJAMA	PAJAMA DR	4941	Water Supply	Muni Low	BV
RESERVOIR SANTA FE I	PYRENEES	4941	Water Supply	Muni Low	EN
RESERVOIR SANTA FE II	PAR & BUSINESS PARK	4941	Water Supply	Muni Low	EN
RESERVOIR SKYLINE	SKYLINE DR	4941	Water Supply	Muni Low	AH
SAFETY CENTER (POLICE & FIRE HEADQUARTERS)	2560 ORION WY	9229	Public Order and Safety	Muni Low	AH
SANTA FE CORRIDORS	SEGOVIA		Open Landscape	Muni Low	BA
SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV	4952	Sewerage Systems	Muni Low	BV
SKATEPARK	2560 ORION WY	7999	Amusement and Recreation Services	Muni Low	AH
SPINNAKER HILL BANK	200 BATIQUITOS DR	7999	Amusement and Recreation Services	Muni Low	BA
TAP PUMP STATION (RECLAIMED WATER)	6400 BLOCK OF EL CAMINO REAL	4941	Water Supply	Muni Low	EN
TERRAMAR SEWER LIFT STATION	300 CANNON RD	4952	Sewerage Systems	Muni Low	AH
UPPER FARADAY SEWER LIFT STATION	1711 FARADAY AV	4952	Sewerage Systems	Muni Low	EN
VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST	4952	Sewerage Systems	Muni Low	BV
VILLAS SEWER LIFT STATION	2860 WINTHROP AV	4952	Sewerage Systems	Muni Low	BV
WOODSTOCK SEWER LIFT STATION	4666 WOODSTOCK ST	4952	Sewerage Systems	Muni Low	AH

City of Carlsbad
Municipal Inventory Reprioritized
FY 2006-07

BUSINESS NAME	BUSINESS SITE ADDRESS	SIC DESCRIPTION	Classification	Drainage Basin
FIRE STATION #1	1275 CARLSBAD VILLAGE DR	Fire Protection	Muni High	BV
FIRE STATION #2	1906 ARENAL RD	Fire Protection	Muni High	BA
FIRE STATION #3	3701 CATALINA DR	Fire Protection	Muni High	BV
FIRE STATION #4	6885 BATAQUITOS DR	Fire Protection	Muni High	BA
FIRE STATION #5	2540 ORION WY	Fire Protection	Muni High	AH
FIRE STATION #6	3131 LEVANTE ST	Fire Protection	Muni High	BA
FLEET MAINTENANCE FACILITY	2480 IMPALA DR	Vehicle Maintenance	Muni High	AH
M&O OPERATIONS YARD	5950 EL CAMINO REAL	Water Supply	Muni High	AH
OAK OPERATIONS YARD	405 OAK AV	Maintenance Yard	Muni High	BV
PARKS MAINTENANCE/STORAGE	1166 CARLSBAD VILLAGE DR	Maintenance Yard	Muni High	BV
POINSETTIA MAINTENANCE STATION	6600 HIDDEN VALLEY RD	Maintenance Yard	Muni High	EN
STAGECOACH MAINTENANCE STATION	3420 CAMINO DE LOS COCHES	Maintenance Yard	Muni High	BA
SWIM AND RECREATION COMPLEX	3401 MONROE ST	Membership Sports & Recreation Clubs	Muni High	BV
CANNON SEWER LIFT STATION	2301 CANNON RD	Sanitary Services	Muni High	AH
CARLSBAD RECYCLED WATER FACILITY	6200 AVENIDA ENCINAS	Amusement and Recreation Services	Muni High	AH
CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL	Sanitary Services	Muni High	AH
DESILTATION BASIN #13	SW END FARADAY AV SO OF LOT 102 OF CRC	Desiltation Basin	Muni High	AH
DESILTATION BASIN #30	SW CORNER MARRON AND MONROE	Desiltation Basin	Muni High	BV
DESILTATION BASIN #43	CAMINO HILLS AND FARADAY NE CORNER	Desiltation Basin	Muni High	AH
FOXES LANDING LIFT STATION	4155 HARRISON ST	Sewerage Systems	Muni High	AH
GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD	Sewerage Systems	Muni High	AH
KNOTS SEWER LIFT STATION	501 KNOTS LN	Sewerage Systems	Muni High	BA
LA GOLONDRINA SEWER LIFT STATION	2516 LA GOLONDRINA ST	Sewerage Systems	Muni High	BA
MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	5203 SUNNY CREEK RD	Water Supply	Muni High	AH
NORTH BATIQUITOS PUMP STATION	7100 BATIQUITOS DR	Water Supply	Muni High	BA
POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN	Sewerage Systems	Muni High	BA
SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV	Sewerage Systems	Muni High	BV
TERRAMAR SEWER LIFT STATION	300 CANNON RD	Sewerage Systems	Muni High	AH
VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST	Sewerage Systems	Muni High	BV
VILLAS SEWER LIFT STATION	2860 WINTHROP AV	Sewerage Systems	Muni High	BV
CITY'S SANITARY SEWAGE COLLECTION SYSTEM	City service area	Sewerage Systems	Muni High	BA,BV,AH,EN
BUENA VISTA CHANNEL	Buena Vista Creek along Haymar	MS4	Muni High	BV

City of Carlsbad
Municipal Inventory Reprioritized
FY 2006-07

BUSINESS NAME	BUSINESS SITE ADDRESS	SIC DESCRIPTION	Classification	Drainage Basin
KELLY DRIVE CHANNEL	Kelly Drive	MS4	Muni High	AH
PARK AND KELLY OUTFALL	Kelly Drive at Park Ave	MS4	Muni High	AH
PARK AND ANDREA OUTFALL	Andrea at Park	MS4	Muni High	AH
PARK AND VALENCIA OUTFALL	Valencia at Park	MS4	Muni High	AH
PARK AND NEBLINA OUTFALL	Nebline at Park	MS4	Muni High	AH
OTHER OUTFALLS	City service area	MS4	Muni High	BA,BV,AH,EN
CATCH BASINS/INLETS	City service area	MS4	Muni High	BA,BV,AH,EN
MS4 PIPELINES	City service area	MS4	Muni High	BA,BV,AH,EN
CONCRETE CHANNELS	City service area	MS4	Muni High	BA,BV,AH,EN
V DITCH CHANNELS	City service area	MS4	Muni High	BA,BV,AH,EN
CURBED STREETS	City service area	MS4	Muni High	BA,BV,AH,EN
UNCURBED ROADS	City service area	MS4	Muni High	BA,BV,AH,EN
PINE FIELD PARKING LOT	3333 HARDING ST	Parking Lot	Muni High	AH
STAGE COACH PARKING LOT	3420 CAMINO DE LOS COCHES	Parking Lot	Muni High	BA
POINSETTIA COMMUNITY PARK PARKING LOT	6600 HIDDEN VALLEY RD	Parking Lot	Muni High	EN
HOSP GROVE PARK PARKING LOT	JEFFERSON & MONROE	Parking Lot	Muni High	BV
CALAVERA HILLS PARK PARKING LOT	2997 GLASGOW DR	Parking Lot	Muni High	AH
CARLSBAD UNIFIED SCHOOL DISCTRICT PARKING LOT	801 Pine Avenue	Parking Lot	Muni High	AH
LA COSTA CANYON PARK PARKING LOT	3020 Pueblo Street	Parking Lot	Muni High	BA
FARADAY CENTER PARKING LOT	1635 FARADAY AV	Parking Lot	Muni High	AH
CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR	Parking Lot	Muni High	BV
HOUSING/REDEVELOPMENT OFFICE PARKING LOT	2965 ROOSEVELT ST B	Parking Lot	Muni High	BV
COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR	Parking Lot	Muni High	BV
HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST	Parking Lot	Muni High	AH
CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE	Parking Lot	Muni High	AH
ARTS OFFICE PARKING LOT	2955 ELMWOOD ST	Parking Lot	Muni High	BV
DOVE LIBRARY PARKING LOT	1775 DOVE LN	Parking Lot	Muni High	BA
SAFETY CENTER PARKING LOT	2560 ORION WY	Parking Lot	Muni High	AH
SKATEPARK PARKING LOT	2560 ORION WY	Parking Lot	Muni High	AH
ADULT LEARNING PROGRAM PARKING LOT	1207 CARLSBAD VILLAGE DR STE O	Parking Lot	Muni High	BV
OTHER OPEN CHANNELS	City service area	MS4	Muni High	BA,BV,AH,EN
AVIARA OAKS	6900 AMBROSIA LN	Amusement and Recreation Services	Muni Med	BA
BUENA VISTA FIELD	1330 BUENA VISTA AVE	Amusement and Recreation Services	Muni Med	BV

City of Carlsbad
Municipal Inventory Reprioritized
FY 2006-07

BUSINESS NAME	BUSINESS SITE ADDRESS	SIC DESCRIPTION	Classification	Drainage Basin
CALAVERA HILLS PARK	2997 GLASGOW DR	Amusement and Recreation Services	Muni Med	AH
CHASE FIELD	3349 HARDING ST	Amusement and Recreation Services	Muni Med	AH
EL FUERTE PARK	600 BLOCK OF EL FUERTE ST	Amusement and Recreation Services	Muni Med	BA
HOLIDAY PARK	CHESTNUT AV & PIO PICO DR	Amusement and Recreation Services	Muni Med	AH
HOSP GROVE PARK	JEFFERSON & MONROE	Amusement and Recreation Services	Muni Med	BV
JEFFERSON FIELD	3743 JEFFERSON ST	Amusement and Recreation Services	Muni Med	AH
LA COSTA CANYON PARK	3020 PUEBLA ST	Amusement and Recreation Services	Muni Med	BA
LAGUNA RIVIERA PARK	4900 KELLY DR	Amusement and Recreation Services	Muni Med	AH
LAS PALMAS OFFICES	2075 LAS PALMAS DR	General Administration	Muni Med	EN
LEVANTE FIELD	3031 LEVANTE ST	Amusement and Recreation Services	Muni Med	BA
PINE FIELD	3333 HARDING ST	Amusement and Recreation Services	Muni Med	AH
POINSETTIA COMMUNITY PARK	6600 HIDDEN VALLEY RD	Amusement and Recreation Services	Muni Med	EN
STAGECOACH COMMUNITY PARK	3420 CAMINO DE LOS COCHES	Amusement and Recreation Services	Muni Med	BA
ADULT LEARNING PROGRAM	1207 CARLSBAD VILLAGE DR STE O		Muni Low	BV
ALGA MEDIANS	ALGA ROAD	Planters and Center Dividers	Muni Low	BA
ARTS OFFICE	2955 ELMWOOD ST	Management Services	Muni Low	BV
BEACH MEDIANS & RIGHTS OF WAY	CARLSBAD BLVD	Planters and Center Dividers	Muni Low	AH
CADENCIA PARK	3310 CADENCIA ST	Amusement and Recreation Services	Muni Low	BA
CALAVERA PUMP STATION	3600 BLOCK OF COLLEGE DR	Water Supply	Muni Low	AH
CALAVERA TREATMENT PLANT	2400 TAMARACK AV	Sanitary Services	Muni Low	BV
CANNON PARK	300 BLOCK OF CANNON	Amusement and Recreation Services	Muni Low	AH
CAR COUNTRY PARK	PASEO DEL NORTE	Amusement and Recreation Services	Muni Low	AH
CARLSBAD SENIOR CENTER	799 PINE AVE	Amusement and Recreation Services	Muni Low	AH
CITY HALL FACILITY	1200 CARLSBAD VILLAGE DR	General Administration	Muni Low	BV
CULTURAL ARTS CENTER	3557 MONROE ST	Amusement and Recreation Services	Muni Low	BV
DOVE LIBRARY MAIN BRANCH & ADMINISTRATION	1775 DOVE LN	Libraries	Muni Low	BA
DOWNTOWN CENTER MEDIANS	CARLSBAD VILLAGE DRIVE	Planters and Center Dividers	Muni Low	BV
ELLERY WATER PUMP STATION	2300 BLOCK OF JANIS WY	Water Supply	Muni Low	BV
FARADAY CENTER	1635 FARADAY AV	Management Services	Muni Low	AH
FARMERS BUILDING	FARADAY & EL CAMINO RL	Unspecified	Muni Low	AH
FOREST SEWER LIFT STATION	1731 FOREST AV	Sewerage Systems	Muni Low	EN
GEORGIA COLE LIBRARY	1250 CARLSBAD VILLAGE DR	Libraries	Muni Low	BV
HARDING COMMUNITY CENTER	3096 HARDING ST	Amusement and Recreation Services	Muni Low	AH
HIGH SCHOOL TENNIS COURT	1751 BASSWOOD	Amusement and Recreation Services	Muni Low	BV

City of Carlsbad
Municipal Inventory Reprioritized
FY 2006-07

BUSINESS NAME	BUSINESS SITE ADDRESS	SIC DESCRIPTION	Classification	Drainage Basin
HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL	Sewerage Systems	Muni Low	BV
HOUSING/REDEVELOPMENT OFFICE	2965 ROOSEVELT ST B	urban and Community Development	Muni Low	BV
LARWIN/DOG PARK	2700 BLOCK OF CARLSBAD VILLAGE DR	Amusement and Recreation Services	Muni Low	BV
LOWER FARADAY SEWER LIFT STATION	1507 FARADAY AV	Sewerage Systems	Muni Low	EN
MAGEE HOUSE, HERITAGE HALL & MAGEE PARK	258 BEACH AVE	Amusement and Recreation Services	Muni Low	BV
MAXTON BROWN PARK	500 LAGUNA DR	Amusement and Recreation Services	Muni Low	BV
PALOMAR TRIANGLE	6600 CARLSBAD BL	Planters and Center Dividers	Muni Low	EN
PIO PICO PARK	2600 PIO PICO DR	Amusement and Recreation Services	Muni Low	BV
POINSETTIA OFF RAMP	I5 & POINSETTIA	Open Landscape	Muni Low	BA
POLICE PISTOL RANGE	MACARIO CANYON	Shooting Range	Muni Low	AH
RESERVOIR B	END OF BLUFF DR	Water Supply	Muni Low	AH
RESERVOIR BUENA VISTA	1600 BUENA VISTA DR	Water Supply	Muni Low	BV
RESERVOIR C	CALAVERA DR	Water Supply	Muni Low	AH
RESERVOIR D	6700 BLACK RAIL RD	Water Supply	Muni Low	EN
RESERVOIR E	HIDDEN VALLEY	Water Supply	Muni Low	EN
RESERVOIR ELLERY	JANIS WAY	Water Supply	Muni Low	AH
RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR	Water Supply	Muni Low	AH
RESERVOIR LA COSTA HI	ALGA RD	Water Supply	Muni Low	BA
RESERVOIR LA COSTA LO	ALGA RD	Water Supply	Muni Low	BA
RESERVOIR PAJAMA	PAJAMA DR	Water Supply	Muni Low	BV
RESERVOIR SANTA FE I	PYRENEES	Water Supply	Muni Low	EN
RESERVOIR SANTA FE II	PAR & BUSINESS PARK	Water Supply	Muni Low	EN
RESERVOIR SKYLINE	SKYLINE DR	Water Supply	Muni Low	AH
SAFETY CENTER (POLICE & FIRE HEADQUARTERS)	2560 ORION WY	Public Order and Safety	Muni Low	AH
SANTA FE CORRIDORS	SEGOVIA	Open Landscape	Muni Low	BA
SKATEPARK	2560 ORION WY	Amusement and Recreation Services	Muni Low	AH
SPINNAKER HILL BANK	200 BATIQUITOS DR	Amusement and Recreation Services	Muni Low	BA
TAP PUMP STATION (RECLAIMED WATER)	6400 BLOCK OF EL CAMINO REAL	Water Supply	Muni Low	EN
UPPER FARADAY SEWER LIFT STATION	1711 FARADAY AV	Sewerage Systems	Muni Low	EN
WOODSTOCK SEWER LIFT STATION	4666 WOODSTOCK ST	Sewerage Systems	Muni Low	AH
CARRILLO RANCH	S-12 PALOMAR AIRPORT RD	Amusement and Recreation Services	Muni Low	BA

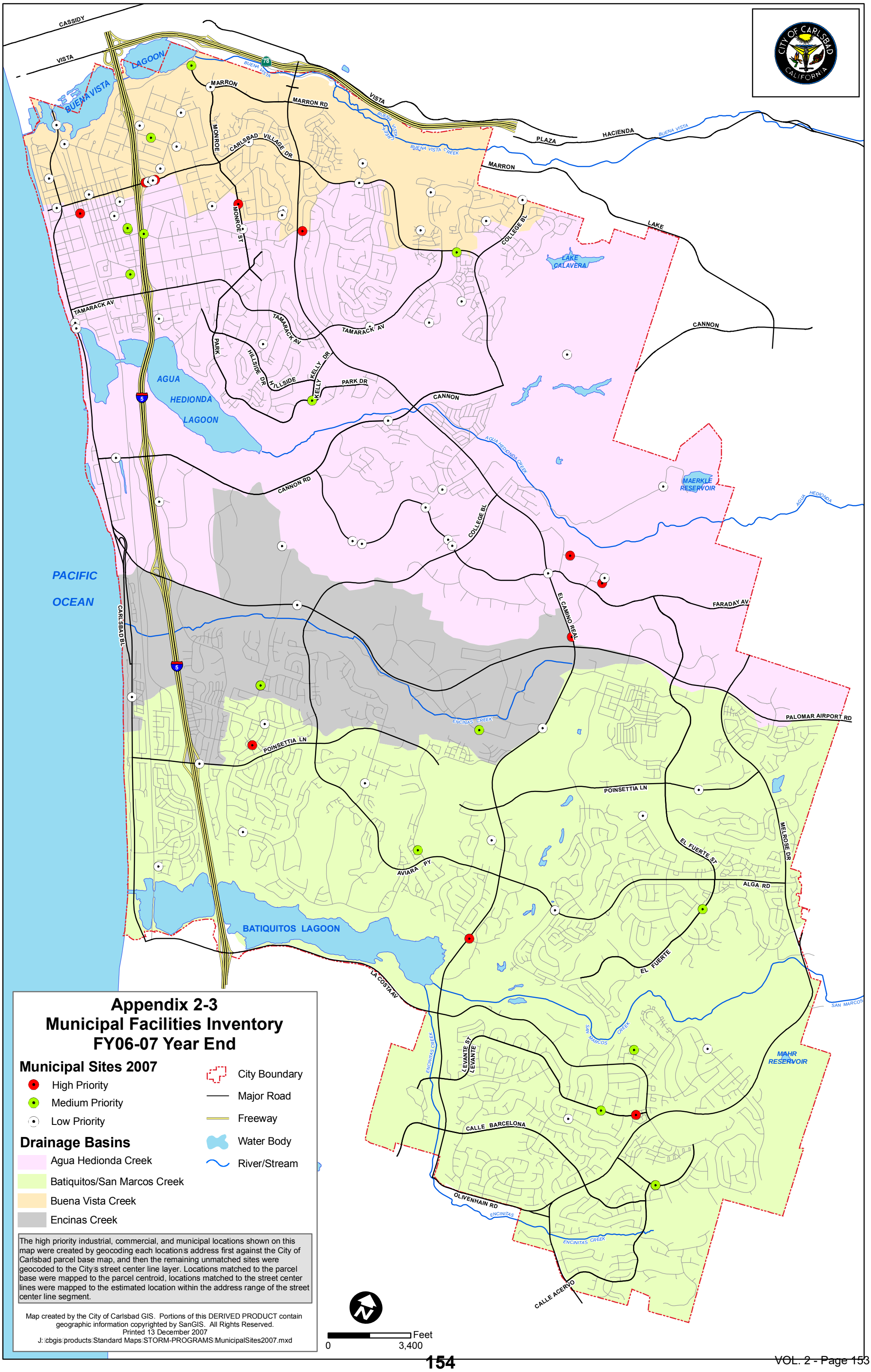
Appendix 2-3
Municipal Facilities Inventory
FY06-07 Year End
Municipal Sites 2007
High Priority
Medium Priority
Low Priority
City Boundary
Major Road
Freeway
Water Body
River/Stream
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
The high priority industrial, commercial, and municipal locations shown on this map were created by geocoding each location's address first against the City of Carlsbad parcel base map, and then the remaining unmatched sites were geocoded to the City's street center line layer. Locations matched to the parcel base were mapped to the parcel centroid, locations matched to the street center lines were mapped to the estimated location within the address range of the street center line segment.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
Printed 13 December 2007
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Feet
0
3,400
CITY OF CARLSBAD
CALIFORNIA
PACIFIC OCEAN
BUENA VISTA LAGOON
AGUA HEDIONDA LAGOON
BATIQUITOS LAGOON
LAKE CALAVERA
MAERKLE RESERVOIR
MAHR RESERVOIR
CASSIDY
VISTA
MARRON
MARRON RD
MONROE
MONROE ST
CARLSBAD VILLAGE DR
PLAZA
HACIENDA
LAKE
COLLEGE BL
TAMARACK AV
PARK
HILLSIDE DR
HILLSIDE
KELLY DR
PARK DR
CANNON
CANNON RD
EL CAMINO REAL
FARADAY AV
CARLSBAD BL
PALOMAR AIRPORT RD
POINSETTIA LN
AVIARA PY
EL FUERTE ST
MELROSE DR
ALGA RD
EL FUERTE
LA COSTA AV
LEVANTE ST
LEVANTE
CALLE BARCELONA
OLIVENHAIN RD
CALLE ACERVO
BUENA VISTA CREEK
AGUA HEDIONDA CREEK
AGUA HEDIONDA
ENCINAS CREEK
SAN MARCOS CREEK
SAN MARCOS
ENCINITAS CREEK
78
5

Title 8 PUBLIC PEACE, MORALS AND SAFETY

Chapter 8.17 SPECIAL EVENTS

8.17.010 Purpose and intent.
8.17.020 Definitions.
8.17.030 Permit required.
8.17.040 Exceptions to special event permit requirement.
8.17.050 Special events committee.
8.17.060 Application.
8.17.070 Fees.
8.17.080 Police protection and other emergency services.
8.17.090 Release and indemnification requirement.
8.17.100 Insurance requirements.
8.17.110 Signs.
8.17.120 Notification.
8.17.130 Reasons for denial of a special event permit.
8.17.140 Notice of denial of application.
8.17.150 Alternatives to permit application.
8.17.160 Appeal procedure.
8.17.170 Notice to city and other officials.
8.17.180 Special events calendar.
8.17.190 Contents of permit.
8.17.200 Violations.
8.17.210 Revocation of permit.
8.17.220 Severability.
8.17.010 Purpose and intent.

The city council recognizes that special events enhance the city's lifestyle and provide benefits to area residents, visitors, and businesses through the creation of unique venues for expression, recreation, and entertainment that are not normally provided as a part of governmental services. However, the city council also recognizes that special events, if unregulated, can have an adverse effect on the public health, safety and welfare due to noise, traffic, safety, and health hazard impacts. The purpose and intent of this chapter is to set forth reasonable regulations by establishing a process for permitting special events within the city, to protect the rights and interest granted to special event permit holders, to ensure the health and safety of patrons of special events, to prohibit illegal activity from occurring within special event venues, and to minimize any adverse effects from special events while ensuring the orderly and efficient use of public property and city services. It is further intended to create a mechanism for cost recovery for special events without having an adverse effect on those special events that contribute to the community. It is also the intent of the council to protect the rights of citizens to engage in protected free speech expression activities and yet allow for the least restrictive and reasonable, time, place and manner regulation of those activities within the overall context of rationally regulating special

events that have an impact upon public facilities and services. (Ord. NS-811 § 2 (part), 2006)

8.17.020 Definitions.

Except where the context otherwise requires, for the purposes of this chapter, the following definitions apply:

A. “Affected parties” means businesses and residents located within three hundred feet of the area around the special event that are likely to experience impact from the special event.

B. “City manager” means the city manager or his authorized designee.

C. “Demonstration” means any formation, procession or assembly of fifty or more persons which,for the purposes of expressive activity, is:

(i) To assemble or travel in unison on any street in a manner that does not comply with normal traffic regulations or controls; or

(ii) To gather at a public park or other public area.

D. “Event” includes special event or a demonstration.

E. “Event organizer” means any person who conducts, manages, promotes, organizes, aids or solicits attendance at a special event.

F. “Expressive activity” includes conduct, the sole or principal object of which is the means of opinion, views, or ideas and for which no fee or donation is charged or required as a condition of participation in or attendance at such activity. It includes public oratory and distribution of literature.

G. “Major event” means a special event that requires a traffic control plan for three or more intersections of any street or requires a traffic control plan for a secondary arterial, major arterial or a prime arterial.

H. “Minor event” means a special event that does not require a traffic control plan or that requires a traffic control plan for two or fewer intersections and does not involve a secondary arterial, major arterial or a prime arterial.

I. “Private property permit” means an administrative permit issued by the community development director for a function held entirely on private property that does not require a use of public property in a manner which impacts or restricts the public’s normal or typical use of such property or does not comply with the normal or usual traffic regulations or controls or that require

the provision of extraordinary city services and are therefore not governed by this chapter.

J. “Permittee” means a person to whom a special events permit has been issued.

K. “Person” means any person, firm, partnership, association, corporation, company or organization of any kind.

L. “Police chief” means the chief of police or his authorized designee.

M. “Sidewalk” means any area or way set aside or open to the general public for purposes of pedestrian travel, whether or not it is paved.

N. “Sound-amplifying system” means any system, apparatus, equipment, device, instrument or machine designed for or intended to be used for the purpose of amplifying the sound or increasing the volume of human voice, musical tone, vibration or sound wave.

O. “Special event” means:

(i) Any organized formation, parade, procession or assembly consisting of fifty or more persons, and which may include animals, vehicles or any combination thereof, which is to assemble or travel in unison on any street which does not comply with normal or usual traffic regulations or controls; or

(ii) Any commercial or noncommercial organized assemblage of fifty or more persons at any public beach, public park, public water ways, street, or sidewalk which is to gather for a common purpose under the direction and control of a person; or

(iii) Any other organized activity conducted by a person for a common or collective use, purpose or benefit which involves the use of, or has an impact on, other public property or facilities and the provision of city public safety services in response thereto;

(iv) Examples of special events include concerts, parades, circuses, fairs, festivals, block parties, community events, mass participation sports (such as marathons and running events, bicycle races or tours, tournaments), or spectator sports (such as football, baseball and basketball games, golf tournaments, surfing contests or other water competitions).

P. “Special event permit” means a permit as required by this chapter.

Q. “Spontaneous demonstration” is an event occasioned by news or affairs coming into public knowledge less than forty-eight hours prior to such event.

R. “Street” means any place or way set aside or open to the general public for purposes of vehicular traffic, including but not limited to any berm or shoulder, parkway, public parking lot, right-of-way, alley or median. (Ord. NS-811 § 2 (part), 2006)

8.17.030 Permit required.

No person shall engage in or conduct any special event unless a special event permit is issued by the city manager or his authorized designee. (Ord. NS-811 § 2 (part), 2006)
8.17.040 Exceptions to special event permit requirement.

A special event permit is not required for any of the following:

A. Any organized activity within the scope of a conditional use permit, other land use approval or a private property permit given or required for that use; or

B. Spontaneous demonstration, consisting of fifty or less persons, that do not involve the use of vehicles, animals, fireworks, pyrotechnics or equipment (other than sound equipment), provided that:

(i) No fee or donation is charged or required as a condition of participation in or attendance at such demonstration; and

(ii) The chief of police is notified at least thirty-six hours in advance of the commencement of the demonstration; or

C. Lawful picketing; or

D. Funeral processions by a licensed mortuary; or

E. Activities conducted by a government agency acting within the scope of its authority. (Ord. NS-811 § 2 (part), 2006)

8.17.050 Special events committee.

A. The special events committee shall be comprised of the assistant city manager, community development director, public works director, fire chief, police chief, housing and redevelopment director, recreation director and risk manager or their designated representatives. The police chief will chair the committee.

B. The special events committee is charged with reviewing and providing recommendations to the city manager regarding the approval or modification of an application for a special event permit based upon the information required in the application with regard to considerations of public safety, traffic flow and

control, the disruption to residences and businesses; availability of resources of city personnel and equipment to adequately ensure the public health, safety and welfare.

C. The special events committee shall not recommend for approval a new event for the date, time or location of a previously established reoccurring event unless the applicant of the previously established reoccurring event notifies the city of their intent to not hold the event or no application has been received by the city at the minimum application filing date. (Ord. NS-811 § 2 (part), 2006)

8.17.060 Application.

A. A person requesting a special event permit shall file an application, certified by affidavit on forms provided by the police department. The police chief will forward the application to the special events committee for review and recommendation to the city manager.

B. The application shall be filed at least ninety days and not more than two years before the special event is proposed to commence except for spontaneous demonstration held to react to current events, which shall provide a minimum of thirty-six hours' notice. The minimum ninety-day notice requirement may be waived by the police chief upon written finding that the limited scope of the event, both in size and magnitude, allows it to be adequately reviewed in the time provided.

C. The application for a special event permit shall set forth all of the following information, if applicable:

The name, address, e-mail address and telephone number of the applicant and event organizer and its officers;

The names, addresses and telephone numbers of the headquarters of any organization for which the special event is to be conducted, and proof of the authorized representatives of the organization;
An acknowledgment of financial responsibility for any city fees or costs that may be imposed for the special event by the applicant and any person authorizing the applicant to apply for the permit on its behalf;

A description of the nature or purpose of the special event, including a description of activities planned during the special event;

A statement of fees to be charged participants in the special event;

Identification of the Carlsbad location where special event sales will be reported to the franchise tax board, a city of Carlsbad business license or a copy of a document showing proof the applicant is a tax-exempt non-profit organization;

Proof of insurance required by this chapter;

The date(s), time(s), and location(s) where the special event is to be conducted, including assembly and disbanding;

A site plan including but not limited to:

a. Portable structures,

b. Prefabricated structures,

c. Site-built structures,

d. Staging,

e. Reviewing stand(s),

f. Elevated platforms,

g. Temporary pedestrian bridges,

h. Tents or canopies,

i. On-site grading,

j. Portable restrooms,

k. All on-site signs and banners that have a face area larger than sixteen square feet and/or stand more than four feet above the ground,

l. Any travel routes,

m. Assembly or production areas,

n. Electrical sources and connections,

o. Fuel storage,

p. Cooking and open fires,

q. Water supply,

r. Run-off containment features,

s. Waste recycling containers,

t. Accessible parking,

u. Access points and routes for disabled persons,

v. Access points for emergency fire and ambulance equipment,

w. Emergency medical services area(s),

x. Any vehicles located in an enclosed area,

y. Pyrotechnics,

z. Inflatable(s),

aa. Animals and animal rides,

bb. Carnival rides,

cc. Location to accommodate individuals desiring to express opinions not consistent with the purpose or intent of the event, and dd. Other similar information that will describe the components of the event;

The location and description of all off-site signs, banners or attention getting devices;

A detailed traffic control plan (TCP) for a major event and parking management plan, consistent with standards set forth in the National Manual on Uniform Traffic Control Devices or the California Supplement to the National Manual on Uniform Traffic Control Devices for all streets, sidewalks and parking lots which the special event will impact by restricting the public's normal, typical or customary use thereof;

The approximate number of participants, spectators, animals and vehicles;

The number of persons proposed or required to monitor or facilitate the special event and to provide spectator or participant control and direction for events using city streets, sidewalks, or facilities;

Provisions for first aid and emergency medical services;

The number, type and location of sanitation facilities;

Provisions for recycling per Public Resources Code Sections 42648 through 42648.7;

Pollution prevention in compliance with city's municipal National Pollutant Discharge
Elimination System permit, city ordinances and the city "Jurisdictional Urban Runoff

Management Plan (JURMP)";

A description of any recording equipment, sound amplification equipment, or other attention-getting devices to be used in connection with the special event.

D. Applications for special event permits for spontaneous demonstration held to react to current events shall provide the information in subsections ©(1), ©(7), ©(11) and ©(18) of this section only.

E. Applicants for a repeated event held on private property (such as fireworks) may file one annual special event application identifying the event dates for one calendar year. (Ord. NS-811 § 2 (part), 2006)

8.17.070 Fees.

A. Major Event Fee. A nonrefundable fee, as set forth in the schedule of service costs approved by city council resolution, reasonably calculated to reimburse the city for its reasonable andnecessary costs in receiving, processing and reviewing applications for permits to hold a major event, must be paid to the city of Carlsbad when an application is filed.

B. Minor Event Fee. A nonrefundable fee, as set forth in the schedule of service costs approved by city council resolution, reasonably calculated to reimburse the city for its reasonable andnecessary costs in receiving, processing and reviewing applications for permits to hold a minor event, must be paid to the city of Carlsbad when an application is filed.

C. If the application includes the use of any city facility and/or property, or if any city services are required for the special event, the applicant must agree to pay for the services in accordance with a schedule of service costs approved by city council resolution. (Ord. NS-811 § 2 (part), 2006)

8.17.080 Police protection and other emergency services.

A. The police chief will determine whether and to what extent additional police protection, civilian traffic control personnel, private security and volunteer staff are reasonably necessary to ensuretraffic control and public safety for the special event. The police chief will base this decision on the size, location, duration, time and date of the special event, the expected sale or service of alcoholic beverages, the number of streets and intersections blocked off from use by the public, and the need to detour or preempt pedestrian and vehicular travel from the use of public streets and sidewalks. The police chief shall provide, if police protection and/or other emergency andsafety services or equipment is deemed necessary for the special event, an estimate of the cost of extraordinary city services and equipment required in writing. The applicant will be billed for services after the event.

B. When the police chief is determining the size of the event and the security needed to protect participants and spectators, the estimate, based upon reasonably known information, of participants shall be determinative. The numbers of persons attending in response to an event, to heckle, protest or oppose the sponsor's viewpoint shall not be considered in the cost of providing police protection. (Ord. NS-811 § 2 (part), 2006)

8.17.090 Release and indemnification requirement.

Permittee agrees to waive and release the city of Carlsbad and its officers, agents, employees and volunteers from and against any and all claims, costs, liabilities, expenses or judgments including attorney's fees and court costs arising out of the activities of this special event or any illness or injury resulting therefrom, and hereby agree to indemnify and hold harmless the city of Carlsbad from and against any and all such claims, whether caused by negligence or otherwise, except for illness and injury resulting directly from gross negligence or wilful misconduct on the part of the city or its employees. (Ord. NS-811 § 2 (part), 2006)

8.17.100 Insurance requirements.

Whenever a special event, including but not limited to exhibits, fairs, athletic events, trade shows, concerts, or conventions, requires a permit under the provisions of this code, the sponsor, promoter or person conducting the special event shall provide evidence of commercial general liability insurance in a form acceptable to the risk manager (and additional coverage(s) as appropriate for the activities of the event), naming the city of Carlsbad as an additional insured, and with a coverage amount to be determined by the risk manager according to the size and risk factors of the event.
When determining the size of the event and the risk to participants and spectators, the estimate of participants shall be determinative. The person conducting the special event shall not be required to insure any risk arising from persons attending in response to an event, to heckle or oppose the sponsor's viewpoint. The insurance company or

companies shall meet the requirements established by city council resolution for all insurance required by the city. The insurance policy required by this section shall not be cancelled, limited or not renewed without thirty days' prior written notice has been given to the city. (Ord. NS-811 § 2 (part), 2006)

8.17.110 Signs.

A. The permittee shall post street closure notification signs at locations approved by the city manager which include the name of the event, date, time and location of the closure and which:

Shall not exceed sixteen square feet in sign area with a minimum letter size of four inches;

Shall be posted on any street on which more than two intersections will be closed, and any secondary arterial, major arterial, or prime arterial that will be closed as a result of the special event;

Shall be posted a maximum of fifteen days and a minimum of ten days prior to the scheduledclosure; and

Shall be removed within two days following the conclusion of the event.

B. The permittee may post a maximum of four signs that promote the event at locations approved by the city manager. Event promotion signs shall meet the following conditions:

The event promotion sign(s) shall not exceed sixteen square feet in sign area;

Shall not be posted more than sixteen days prior to the event; and

Shall be removed immediately but in no event more than two days following the event.

C. The permittee shall post traffic control and/or directional signs the day or days of the special event as required by the permit. Traffic control and/or directional signs shall meet the following conditions:

The location of all traffic control and/or directional signs shall require approval of the city manager; and

Traffic control and/or directional signs shall not be posted more than four hours prior to the start of the special event and shall be removed not more than four hours after the conclusion ofthe special event. Signs left

out after four hours may be removed by city staff and disposed of without compensation to event organizer.

D. The permittee for a special event permit may post signs and banners during the special event at the special event venue.

All venue sign(s) with more than sixteen square feet of sign area or signs that are more than four feet above ground level shall be identified on the site plan.

Each venue signs and/or banners shall be less than fifty square feet of sign area. (Ord. NS 811 § 2 (part), 2006)

8.17.120 Notification.

A. The applicant for:

A first time major event;

A major event that has not been held for more than two years;

A first time event at a city facility that is not authorized by facility use permit; or

An event at a city facility that is not authorized by facility use permit and that has not been held for more than two years; shall sponsor a meeting for all affected parties. This meeting must be held not more than one hundred eighty days prior or less than eighty days prior to the special event date. Affected parties must be notified by the applicant via the United States Postal Service of the meeting a minimum of ten days prior to the meeting. The purpose of this meeting will be to allow the special event sponsor to identify and address concerns of affected parties regarding the time, place and manner in which the special event is to be held. Concerns regarding the message or viewpoint of the event sponsor shall not be considered. The police chief may waive the minimum eighty-day time limit for the affected party meeting with a written finding of good cause if, after due consideration, the police chief determines that because of the limited scope and complexity of the event when considering the application criteria, there will be adequate time for review by and input of concerned affected parties.

B. The applicant for a major special event permit that is not subject to the notification described in subsection A shall notify all affected parties of the event not more forty days nor less than thirty days prior to the special event date via the United States Postal Service. The notification shall contain information

concerning the event and information on how to contact the applicant and the special events committee before and after the event.

C. All applicants for a special event permit shall notify via the United States Postal Service or by direct distribution to all affected parties of the event not more than fifteen days prior or less than ten days prior to the special event date with information concerning the event and information on how to contact the applicant and the special events committee before and after the event. (Ord. NS-811 § 2 (part), 2006)

8.17.130 Reasons for denial of a special event permit.

A. The city manager may only deny a special event permit to an applicant when any of the following applies:

The application for the permit (including any attachments) is not fully completed and executed.

The application for the permit contains a material falsehood or misrepresentation.

The applicant has failed to conduct a previously authorized event in accordance with law or the terms of a permit, or both.

The use or activity would conflict with previously planned programs organized and conducted by the city and previously scheduled for the same place and time.

A fully executed prior application for the same time and place has been received and a permit has been or is likely to be granted authorizing uses or activities which do not reasonably permit multiple occupancy of the particular site or part thereof.

The applicant has not complied or cannot comply with applicable federal, state or local laws, regulations, ordinances or city council policy.

The applicant has not tendered the required application, indemnification agreement and endorsement(s), insurance certificate, or security deposit for police and emergency services and equipment within the times prescribed.

The applicant has not provided for the services of a required number of police officers, fire and/or paramedic personnel, private security, civilian traffic controllers or event volunteers/staff to ensure the safety of the event.

The applicant has not provided adequate sanitation and other required health facilities on or adjacent to any public assembly area.

The applicant has not provided sufficient off-site parking or shuttle service, or both, required to minimize any adverse impacts on public parking and traffic circulation in the vicinity of the special event.

The applicant has not obtained the approval of any other public agency within whose jurisdiction the special event or portion thereof will occur.

The use or activity would present an unreasonable danger to the health or safety of the applicant, other users of the site, or the public.

The special event will require the exclusive use of beach or park areas during any period in a manner which will have adverse impact on the reasonable use or access to those areas by the general public.

The special event will create the imminent possibility of violent disorderly conduct likely to endanger public health, safety and welfare or to result in property damage.

The special event will interfere with the normal access and function of businesses and/or residences during any period in a manner, which will have adverse impact on the reasonable use or access to those areas.

The special event will require the diversion of a great number of police employees from their normal duties, thereby preventing reasonable police protection to the remainder of the city.

The conduct of the special event will substantially interrupt the safe and orderly movement of other pedestrian or vehicular traffic, including public transportation, contiguous to its route or location.

B. The city manager shall not deny a special event permit to an applicant based upon the message, content or viewpoint of the event sponsor. (Ord. NS-811 § 2 (part), 2006)

8.17.140 Notice of denial of application.

The city manager will act promptly upon a timely filed application for a special event permit and will make a determination not less than twenty-eight calendar days prior to the event. The applicant will be notified within two working days of said determination. If the city manager does not act on a special event application at least twenty-eight calendar days prior to the event, the application shall be deemed denied. (Ord. NS-811 § 2 (part), 2006)

8.17.150 Alternatives to permit application.

The city manager, in denying an application for a special event permit, may authorize the conduct of the special event at a date, time, location, or route different from that named by the applicant and shall propose alternative measures, which would cure any defects in the application. An applicant desiring to accept the modifications to the application will, within five days after notice of the action of the city manager, file a written notice of acceptance with the city manager. (Ord. NS-811 § 2 (part), 2006)

8.17.160 Appeal procedure.

A. Any applicant has the right to appeal the denial of a special event permit to the city council. The denied applicant must make the appeal within five days after receipt of the denial by filing a written notice with the city clerk and a copy of the notice with the police chief. The city council will act upon the appeal at the next regularly scheduled meeting following receipt of the notice of appeal, which decision will be final.

B. In the event that the city council denies an applicant's appeal, the applicant shall be afforded prompt judicial review of that decision as provided by California Code of Civil Procedure Section 1094.8. (Ord. NS-811 § 2 (part), 2006)

8.17.170 Notice to city and other officials.

Immediately upon the issuance of a special event permit, the police chief will send a copy thereof to the city manager, the city attorney, the fire chief, the public works director, the community development director, the recreation director (when permits are issued which impact city parks and recreation facilities), the postmaster, and the manager or responsible head of each public transportation utility, the regular routes of whose vehicles will be affected by the route or location of the proposed special event. (Ord. NS-811 § 2 (part), 2006)

8.17.180 Special events calendar.

The city will maintain a special events calendar. Events will be registered on the special events calendar as "approved" or as "pending." (Ord. NS-811 § 2 (part), 2006)

8.17.190 Contents of permit.

Each special event permit will contain the following information or conditions, which is pertinent to the event:

A. The dates and times when the special event is to be held;

B. The dates and time roads will be closed;

C. The set-up or staging time;

D. The time clean-up or dismantling will be completed;

E. The location of the special event venue, including set-up or staging area, if any, and clean-up or dismantling area, if any;

F. The specific route of the special event;

G. Minimum and maximum speed of vehicles or people in the special event;

H. The number of persons, and type and number of animals and vehicles, the number of bands, other musical elements and equipment capable of producing sound, if any, and noise limitationsthereon;

I. The location of reviewing or audience stands;

J. A copy of the traffic control plan (TCP) and/or parking management plan including the numberand location of traffic controllers, monitors, other personnel and equipment and barricades to be furnished by the special event permittee;

K. Conditions or restrictions on the use of alcoholic beverages and authorization for the conditions of the exclusive control or regulation of vendors and related sales activity by the permittee during the special event;

L. Provisions for any required emergency medical services;

M. The applicant's recycling plan;
N. The applicant's plan to control water run-off and other contaminates that may enter the city storm drain system;

O. Provisions for cleaning-up and restoration of the area or route of the event both during and upon completion of the event;

P. The requirement for the on-site presence of the special event organizer or a designated representative for event coordination and management purposes who

shall carry the special event permit upon his/her person during the special event. (Ord. NS-811 § 2 (part), 2006)

8.17.200 Violations.

A. Violations of the terms and conditions of any of the following prohibitions in this chapter will constitute a misdemeanor punishable by a fine of up to one thousand dollars, or by imprisonment in the county jail for a term not exceeding six months, or by both:

To stage, present, or conduct any special event without first having obtained a permit under this chapter;

To hamper, obstruct, impede, or interfere with any special event or with any person, vehicle oranimal participating or used in the special event;

To carry any sign, poster, plaque, or notice, whether or not mounted on a length of material, unless such sign, poster, plaque, or notice is constructed or made of a cloth, paper, or cardboard material;

For any person participating in any special event to carry or possess any length of metal, lumber, wood, or similar material for purposes of displaying a sign, poster, plaque or notice, unless such object is one and one-fourth inch or less in thickness and two inches or less in width, or if not generally rectangular in shape, such object may not exceed three-fourths inch in its thickest dimension.

B. Violations of the terms and conditions of any of the following prohibitions in this chapter will constitute an infraction and shall be punished as provided for in Chapter 1.08 of this code:

To participate in a special event for which the person knows a permit has not been granted;

To knowingly fail to comply with any condition of the permit;

For a participant in or spectator at a special event to knowingly violate any conditions or prohibitions contained in the special events permit;

For any driver of a vehicle to drive between the vehicles or persons comprising a special event when the vehicles or persons are in motion and are conspicuously designated as a special event;

The police chief may prohibit or restrict the parking of vehicles along a street constituting a part of a special event if the police chief posts or

cause to be posted signs to that effect. It is unlawful for any person to park or leave unattended any vehicle in violation of the posted signs.

C. The police chief may, when reasonably necessary, waive parking regulations along a street constituting a part of a special event. (Ord. NS-811 § 2 (part), 2006)

8.17.210 Revocation of permit.

The police chief may revoke a special event permit without prior notice upon violation of the permit or when a public emergency arises where the police resources required for that emergency are so great that deployment of police services for the special event would have an immediate and adverse effect upon the health, safety and welfare of persons or property. Written notice of the revocation setting forth the reasons therefor, shall be hand delivered or mailed to the applicant at the address provided on the application. (Ord. NS-811 § 2 (part), 2006)

8.17.220 Severability.

If any section, subsection, sentence, clause or phrase of this chapter is for any reason held invalid or unconstitutional by the decision of any court of competent jurisdiction, the decision will not affect the validity of the remaining portions of this chapter. The city council declares that it would have passed the ordinance codified in this chapter and each section, subsection, sentence, clause or phrase contained in it irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases are declared invalid or unconstitutional. (Ord. NS-811 § 2 (part), 2006)

Storm Water Protection... It's OUR Business!

What You Need to Know…

The City of Carlsbad's storm water conveyance system consist of pipes, concrete ditches, basins, drains and inlets, as well as natural drainage areas, such as canyons, gullies and streams. The purpose of the system is to carry rainwater away from developed areas to prevent flooding.

Storm drains are **not** connected to sanitary sewer systems or treatment plants. Rainwater and the pollutants it carries flow directly to our creeks, lagoons and ocean. Pollutants of concern include:

- Sediments
- Fertilizers
- Metals
- Detergents
- Pesticides
- Organic Compounds
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

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What is the Storm Water Protection Program?

The City's Storm Water Protection Program regulates storm water activities for existing development (residential, commercial and industrial), investigates illegal discharges to the storm water system, educates the public about pollution prevention, and oversees the water quality monitoring program.

What does the Municipal Permit require?

The Municipal Permit requires the City to prevent storm water pollution during all three phases of urban development land use planning for new development, construction, and existing development.

The Permit also requires the City - **employees, residents, and businesses** - to improve the quality of the water flowing into the storm water system to the maximum extent practical. This is accomplished through the implementation of Best Management Practices (BMPs). In addition, the Municipal Permit requires the City to investigate and eliminate illegal discharges, develop an outreach and education program, and implement BMPs at municipal facilities.

I've heard the term NPDES. What does it mean?

NPDES stands for National Pollutant Discharge Elimination System and is the name of a permit system implemented under the 1972 Federal Clean Water Act. The 1987 amendments to this Act required municipalities discharging storm water runoff into surface waters (i.e., ocean, lagoon, etc.) to obtain a permit. In California, these permits are issued by the Regional Water Quality Control Board.

Our current municipal storm water permit was issued February 21, 2001 and applies to all 18 cities in San Diego County, the Unified Port District, and the County of San Diego. To view a copy of the Permit, please go to http://www.swrcb.ca.gov/rwqcb9/programs/sd_stormwater.html.

Who is responsible for protecting storm water?

EVERYONE! Storm water pollution prevention is a shared duty between the City of Carlsbad and the community. Storm drains on ***public*** streets, property, or easements are monitored and cleaned by the City. Everyone has a part to play in keeping our storm drains free of trash, debris, excessive vegetation, and other materials that may pollute, contaminate or block the flow of water through the storm drain system.

- **City Employees**
- **Residents**
- **Business Community**
- **Developers and construction workers**
- **YOU!!**

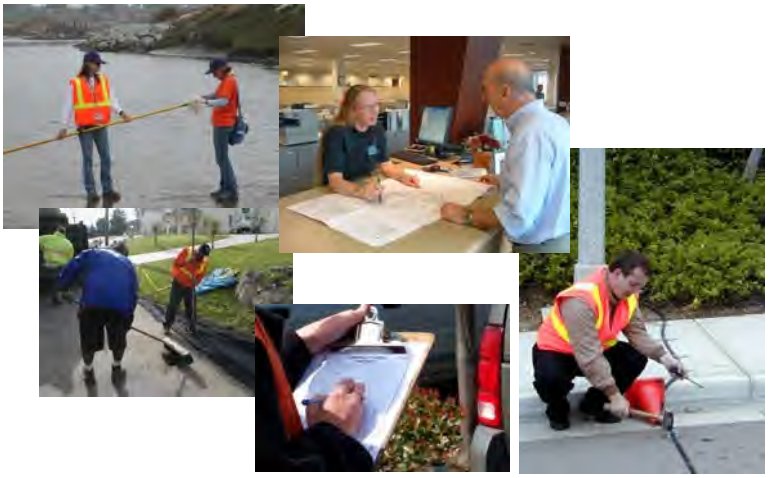

Only Rain in the Storm Drain!

Are all non-storm water discharges illegal?

The Municipal Permit prohibits **all** non-storm water discharges into the storm water system, with some exemptions:

- Landscape irrigation and lawn watering runoff
- Dechlorinated pool water
- Individual Residential car washing
- Potable water sources
- Foundation drains, crawl spaces
- Air conditioning condensate
- Emergency Fire Fighting Flows

What are Best Management Practices?

Best Management Practices or BMPs are procedures that help to prevent pollutants from entering our storm drains. Once potential and existing sources of pollution have been identified, the next step is to select proper BMPs to eliminate or reduce storm water pollution.

What are some BMPs I can use in my daily work?

- Instead of using a hose or pressure washing system, **try a dry clean up method!** Use mops, brooms or wire brushes to clean dumpsters, sidewalks, buildings, equipment, pavement, driveways, or other impervious surfaces. Never dispose of wash water to the storm drain.

- When possible, store materials indoors or under covered areas not exposed to rain. If materials can not be stored under cover, place materials on pallets and cover with a tarp to avoid contact with storm water run-on and runoff.
- Dumpsters should always be kept closed to prevent rainwater from entering. Never place liquid waste, leaky garbage bags or hazardous waste in a dumpster or trash bin.
- Wash vehicles at a commercial car wash, whenever possible. City employees and/or mobile detailers can not wash vehicles on public streets or on public property, including City Hall and all public parking lots.

How do I report a storm water violation?

The Storm Water Protection Program operates a hotline and e-mail address to receive referrals about storm water pollution and illegal discharges. If you see someone dumping or washing waste or pollutants to the street or storm drain, please call the **hotline** at **760-602-2799** or send an email to stormwater ci.carlsbad.ca.us. This information is entered into the City s Request for Action system and is routed to the appropriate person for response.

Storm Water Hotline

760-602-2799

What is the City doing to comply with the Permit?

- A Jurisdictional Urban Runoff Management Plan (JURMP) that specifies how the City will implement the storm water program has been developed and implemented.
- The Carlsbad Municipal Code includes regulations for storm water protection and pollution prevention.
- Several informative brochures and fact sheets have been developed to educate the public and City employees about storm water pollution prevention.
- An extensive education and inspection program has been implemented to ensure the community is aware of and complying with the storm water requirements.
- Reports of illegal discharges are fully investigated and resolved to the maximum extent practical.
- Storm water pollution prevention measures have been incorporated into the new construction and building permit process.
- Storm water pollution prevention plans (SWPPP) have been developed and implemented at all high priority municipal facilities throughout the City.
- City employees have been trained and will continue to be trained on the requirements of the storm water program.
- The General Plan and Environmental Review process includes storm water and pollution prevention requirements.
- The City has completed a Standard Urban Storm Water Mitigation Plan (SUSMP) to address storm water requirements for new development and significant redevelopment.
- Water quality monitoring is being conducted at lagoon and ocean outlets within the City s jurisdiction.
- The storm drain conveyance system has been mapped and the information made available in a GIS format.
- A Watershed Urban Runoff Management Plan (WURMP) has been developed in association with other North County cities.

Be A Part of the Pollution Solution!!

FY 06 - 07 Storm Water Committee Meeting Topics Summary		
DATE	**in attendance**	**AGENDA ITEMS**
07/12/2006	10	training, spill procedures, new swim complex plan review
08/16/2006	5	municipal High Priority facility inspections, golf course ACL, Dry Weather Program findings
09/14/2006	8	review facility-specific spill procedures, JURMP Annual Report FY 04-05 comment letter from the Regional Board, JURMP Annual Report preparation for FY 05-06
10/12/2006	16	contractor BMPs, watershed activities, news articles, complaint response
11/08/2006	7	JURMP Annual Report FY 05-06 preparation, new NPDES MS4 permit, watershed activities, duty list for after-hours callouts, training requirements in the permit
12/06/2006	7	EPA webcast on MS4 programs
01/10/2007	7	EPA webcast on construction inspection programs, new permit discussion
02/13/2007	13	review of JURMP Annual Report FY 05-06 submission, discussion of recent NOVs and Required Technical Report, upcoming field demo and training on BMPs, review of water quality results, new permit overview
03/07/2007	7	EPA webcast municipal compliance guidebook published
05/24/2007	10	BMP demo at UV facility in City of Encinitas
06/12/2007	11	new permit and new JURMP, TMDL Investigative Order, Municipal High Priority facility inspections

Maintenance and Operations Training
FY 06-07

DATE	DEPT./DIV.	EMPLOYEES ATTENDING	TRAINING TYPE	NAME OF TRAINING OR TOPICS	LOCATION	SPONSOR/ PRESENTER
07/06/06	Water	27	all hands meeting	Stormwater Permit Review	PW M&O	Don Wasko
09/06/06	Water	34	all hands meeting	The River Returns-Video	PW M&O	Don Wasko
11/16/06	Storm Water Maintenance	3	sw crew	Spill Response Plan/SWPPP Booklet	OAK	Clayton Dobbs
11/16/06	Water	32	all hands meeting	Definition of SWPPP	PW M&O	Don Wasko
01/03/07	Storm Water Maintenance	3	sw crew	swpp updates/parking lot bmp	OAK	Clayton Dobbs
01/10/07	Water	27	all hands meeting	Trench De-Watering	PW M&O	Don Wasko
02/01/07	Storm Water Maintenance	3	sw crew	BMP	OAK	Clayton Dobbs
02/08/07	Water	36	all hands meeting	Ammonia Testing	PW M&O	Don Wasko
03/14/07	Water	35	all hands meeting	Vendor demo of new BMP's	PW M&O	Don Wasko
04/26/07	Water	40	all hands meeting	Spill Response Plan/SWPPP Booklet	PW M&O	Don Wasko
05/10/07	Water	41	all hands meeting	Stormwater Protection	PW M&O	Don Wasko
05/24/07	Water	38	all hands meeting	SSO Comm. Flow Chart	PW M&O	Don Wasko

HOUSEHOLD HAZARDOUS WASTE INCLUDES
Paint
Insecticides
Household Cleaners
Tire Cleaners
Pesticides
Lawnmowers
Electronic Devices
Cell Phones
Fluorescent Bulbs
All Batteries
Pool Chemicals
Fertilizers
Used Oil
Oil Filters
Televisions
Auto Fluids
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Solvents
Thermostats
Aerosols
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Inspection of Municipal Areas, Activities, and Recommendations

Inspection Report Recommendations		
Oak Maintenance Yard		**Corrective Actions Taken**
1. Keep site free of sediment and debris to maximum extent practicable.		Maintenance yard cleaning and sweeping has been increased to weekly, with bi-weekly visual inspections.
Public Works Operations and Maintenance Facility		**Corrective Actions Taken**
1. No corrective actions were given for this site.		
Swim and Recreation Complex		**Corrective Actions Taken**
1. Consider developing a general spill response plan, in addition to a SWPPP and site map.		The Swim Complex has developed a SWPPP and a site map. A spill response plan is already in place and has been incorporated in the SWPPP. Both documents will be reviewed during FY 07-08 for any necessary updates.
2. Keep parking area free of trash and debris.		Staff inspect and sweep/clean the parking on a daily basis and will continue to do so.
3. Use dry methods to clean pool deck as previously instructed by the City.		As required by the County Health Department the deck is cleaned on a regularly basis. The entire area was replumbed to ensure the most waste water goes to the sanitary sewer. Any other potential runoff is precluded from reaching the storm drain system.
Fleet Maintenance Facility		**Corrective Actions Taken**
1. Keep lot free of sediment and debris to the maximum extent practicable.		The Fleet Maintenance Facility is sweep bi-monthly by a City contracted sweeper. In addition, staff conduct weekly inspections of the yard and remove accumulated sediment and debris.

Municipal Inspection Report Corrective Actions
FY 06-07

Parks Yards		Corrective Actions Taken
Parks Maintenance Storage		
1. Keep site free of organic debris to maximum extent practicable.		Trimmed large Eucalyptus trees and continued a weekly yard clean up program to keep the yard free of sediment and debris.
2. Ensure spill response plan contains appropriate site specific information.		The existing Spill Response Plan has been updated and modified to reflect changes due to new personnel and employees newly trained in Hazwoper duties.
Poinsettia Maintenance Station		
1. Keep training logs onsite.		All Storm Water Training Logs are kept up to date and on-site.
2. Keep equipment covered and raised off the ground to the maximum extent practicable.		All outdoor storage and equipment is off the ground and covered.
3. Stabilize un-landscaped dirt area next to road.		Installed straw wattles to stabilize the unlandscaped areas next to road.
Stagecoach Maintenance Station		
1. Keep lot and parking areas free of organic debris to the maximum extent practicable.		Paved dirt storage equipment area and initiated a rigorous weekly lot clean up to ensure the organic debris is removed.

Municipal Inspection Report Corrective Actions
FY 06-07

Fire Station 1		Corrective Actions Taken
1. Control erosion from un-landscaped slope on east edge of the site.		Sweeping and removal of organic material, including sediments from un-landscaped slope is completed on a weekly or as needed basis at all fire stations.
2. Consider developing a site specific SWPPP and site map.		The Fire Department developed a storm water manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water.
Fire Station 2		**Corrective Actions Taken**
1. Consider developing a site specific SWPPP and site map.		The Fire Department developed a storm water manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water.
2. Keep parking lot free of organic debris to maximum extent practicable.		Sweeping and removal of organic material from parking lots and walkways is completed on a weekly or as needed basis at all fire stations.
3. Consider keeping a spill kit onsite.		Spill response equipment and materials are clearly identified and staged in accessible locations.
Fire Station 3		
1. Keep parking area free of organic debris to maximum extent practicable, especially around catch basin.		Sweeping and removal of organic material from parking lots and walkways is completed on a weekly or as needed basis at all fire stations.
2. Consider developing a site specific SWPPP and site map.		The Fire Department developed a storm water manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water.
Fire Station 4		**Corrective Actions Taken**
1. Keep outdoor areas free of organic debris to maximum extent practicable.		Sweeping and removal of organic material from parking lots and walkways is completed on a weekly or as needed basis at all fire stations.
2. Consider developing a site specific SWPPP and site map.		The Fire Department developed a storm water manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water.

Municipal Inspection Report Corrective Actions
FY 06-07

Fire Station 5		**Corrective Actions Taken**
1. Consider developing a site specific SWPPP and site map.		The Fire Department developed a storm water manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water.
2. Keep dumpster lids closed and the area surrounding the dumpster free of trash.		Staff has been trained onproper waste disposal and dumpsters are routninely kept cllosed when not in use.
Fire Station 6		**Corrective Actions Taken**
1. Prevent stockpiles containing soil and concrete waste from tracking to paved areas.		Sweeping and removal of organic material from parking lots and walkways is completed on a weekly or as needed basis at all fire stations.
2. Consider developing a site specific SWPPP and site map.		The Fire Department developed a storm water manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water.
3. Consider keeping a spill response kit onsite.		Spill response equipment and materials are clearly identified and staged in accessible locations.

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
A & H WHOLESALE	5600 AVENIDA ENCINAS STE 40	ACTIVE	5193	5193	Wholesale Floral	CO	Ind Low	Comml High	04/26/07			AH
A & P AIRCRAFT DETAILING	2006 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Aircraft Washing, Detailing	CO	Ind High	Ind High	03/08/07			EN
A MOMENT IN TIME, BOTANICALS	5600 AVENIDA ENCINAS STE 33	ACTIVE	5193	5193	Indl and Comml Machinery and Equip, NEC	CO	Ind Low	Comml High	04/26/07			AH
A MOMENT IN TIME, BOTANICALS	6102 AVENIDA ENCINAS	ACTIVE	5193		Wholesale Trade Flowers & florists Supplies	CO	Ind Low		03/28/06			EN
AALTO SCIENTIFIC LTD	1959 KELLOGG AVE	ACTIVE	2835	2835	In Vitro & In Vivo Diagnotsitc Subs	CO	Ind High	Ind High	06/06/07			EN
ABLATION FRONTIERS, INC.	5835 AVENIDA ENCINAS STE 118	EXCLUDED	3845	8731	Electromedical/Electrotherapeutic Apparatus	CO	Ind Med	Comml Low		09/12/06	Phone	EN
ACUSHNET COMPANY	1812 ASTON AVE	MOVED	4225	4225	General Warehousing & Storage	CO	Ind Med	Ind Med	08/15/05	08/29/06	Site Visit	AH
ACUSHNET COMPANY	1818 ASTON AVE	ACTIVE	8731	8731	Research and Development	CO	Ind Low	Ind Low	08/29/06			AH
ACUSHNET COMPANY	2819 LOKER AVE EAST	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	CO	Ind High	Ind High	08/29/06			AH
ADDISON SHEET METAL	7238 PONTO DR	ACTIVE	3499		Sheet Metal Fabricator	CO	Ind Med		06/30/05	06/06/06	Reviewed	BA
ADELPHIA COMMUNICATIONS	5720 EL CAMINO REAL	ACTIVE	4841		Cable Provider	CO	Ind Low		04/03/06			AH
ADT CONSTRUCTION INC.	1735 ROGUE ISLE CT	ACTIVE	1521	1521	General Contractors--Single-Family Housing	HO	Ind Low	Comml High		08/01/06	Reviewed	AH
ADVANCED THERMOFOAMING ENTERPRISES (ATE, INC.)	6062 CORTE DEL CEDRO	OUT OF BUSINESS	3089	3089	Plastics Products, Not Elsewhere Classified	CO	Ind Med	Ind Med	01/06/06	06/28/07	Drive By	EN
AERO PACIFIC	2016 PALOMAR AIRPORT RD STE A	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	03/08/07			EN
AFM	5816 DRYDEN PL	ACTIVE	3669	3669	Fabricated Metal Products, Not Elsewhere Classifi	CO	Ind Med	Ind Med	09/11/06	06/27/05	Reviewed	AH
AFRICA THATCH	2270 CAMINO VIDA ROBLE # O	EXCLUDED	1521	1799	Miscellaneous Contracting	CO	Ind Low	Ind Low		08/01/06	Phone	EN
AGRIWEST	6211 YARROW DR STE A	ACTIVE	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Ind Low	Ind Low		02/01/07	Drive By	EN
ALLGIRE BUILDING CONTRACTORS	5055 AVENIDA ENCINAS STE 200	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High	08/01/06	07/26/05	Reviewed	AH
ALLIED WASTE COMPANY	5960 EL CAMINO REAL	ACTIVE	4953	4953	Refuse Systems	CO	Ind High	Ind High	12/12/06			AH
ALPHATEC MANUFACTURING, INC.	6078 CORTE DEL CEDRO # B	MOVED	3842	3842	Orthopedic/Prosthetic/Surgical Appliances And Supp	CO	Ind Med	Ind Med	11/28/05	09/11/06	Drive By	EN

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
ALPHATEC MANUFACTURING, INC.	6110 CORTE DEL CEDRO	ACTIVE	3842	3842	Orhtopedic, Prosthetic & Surgical Appliances and Supplies	CO	Ind Med	Ind Med	06/12/07			EN
AMERICAN EAGLE CORP AKA AMERICAN EAGLE	2052 CORTE DEL NOGAL	OUT OF BUSINESS	3751	3751	Manufacturing Industries, NEC	CO	Ind Med	Ind Med	01/06/06	03/28/07	Drive By	EN
AMERICAN RIM SUPPLY	1955 KELLOGG AVE	ACTIVE	3465		Automotive Metal Stampings	CO	Ind Med		04/12/06			EN
AMIGO CUSTOM SCREEN PRINTS	6351 YARROW DR # A-B	ACTIVE	2261		Finishers of Broadwoven Fabrics of Cotton	CO	Ind Med		04/03/06			EN
ANGELS LIMOUSINE & GROUND TRANSPORTATION	6426 CHIRIQUI LN	EXCLUDED	4119	4119	Local Passenger Transportation, NEC	HO	Ind Low	Ind Low		03/30/07	Reviewed	BA
APPLIED CONTROL CONCEPTS	2221 LAS PALMAS DR STE A	ACTIVE	3571	3571	Electronic Computers	CO	Ind Med	Ind Med	06/28/07			EN
APS DYNAMICS INC.	5731 PALMER WAY STE A	ACTIVE	3826	3826	Laboratory Analytical Instruments	CO	Ind Med	Ind Med	08/01/06			AH
APS GENERAL CONTRACTORS, INC.	1950 KELLOGG AVE # A	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Ind Low	09/11/06	04/26/06	Drive By	EN
ARTISOPTIMUS, INC.	2195 FARADAY AVE STE A-C	DUPLICATE	3999	8731	Manufacturing Industries, Not Elsewhere Classifie	CO	Ind Med	Ind Low		03/30/07	Reviewed	AH
ASHWORTH, INC.	2765 LOKER AVE W	ACTIVE	5136		Clothing Distributor	CO	Ind Low		04/12/06	03/02/04	Reviewed	AH
ASLAN & ZEPHIRINE INC.	6351 CORTE DEL ABETO STE A102	EXCLUDED	3911	3911	Jewelry, Precious Metal	CO	Ind Med	Ind Med	01/06/06	03/30/07	Phone	EN
ASLINE CONSTRUCTION	3008 SEGOVIA WAY	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		08/29/06	Reviewed	AH
ASYMTEK	2762 LOKER AVE W	ACTIVE	3699		Electrical Machinery, Equip & Sups, NEC	CO	Ind Med		03/21/06			AH
ATLANTIS COMPANY	3800 ALDER AVE	ACTIVE	1522	1522	Residential Building Contractor	HO	Ind Low	Comml High		08/29/06	Reviewed	AH
AURORALIGHT INC	2742 LOKER AVE W # 100	EXCLUDED	5063	5063	Landscape Lighting Apparatus	CO	Ind Low	Ind Low	04/03/06	01/31/07	Drive By	AH
AVIARA FARMS	1205 AVIARA PKWY	ACTIVE	5159	5159	Wholesale Distribution of Raw Farm Produce	CO	Ind Low	Comml High	09/11/06			AH
AVIATION SERVICE COMPANY	2138 PALOMAR AIRPORT RD # A	OUT OF BUSINESS	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	06/15/06	03/08/07	Drive By	EN
AZTEC (ALEX) FLOWERS	5600 AVENIDA ENCINAS STE 23	OUT OF BUSINESS	5193	5193	Wholesale Floral	CO	Ind Low	Ind Low	04/04/06	04/26/07	Reviewed	AH

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
B & H CONSTRUCTION	2590 DAVIS AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		09/11/06	Reviewed	BV
B.A. WORTHING, INC.	690 CARLSBAD VILLAGE DR STE 201	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High		06/11/07	Reviewed	BV
BAJAS FLOWERS	5600 AVENIDA ENCINAS STE 24	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
BAKEHOUSE FOODS, INC.	2270 CAMINO VIDA ROBLE STE U	ACTIVE	2052	2052	Cookies & Crackers	CO	Ind Med	Ind Med	06/12/07			EN
BARNSTORMING ADVENTURES	2016 PALOMAR AIRPORT RD	ACTIVE	4522	4522	Air Transportation, Nonscheduled	CO	Ind High	Ind High	03/08/07			en
BECKMAN COULTER	2470 FARADAY AVENUE	ACTIVE	2835	2835	Invitro and Invitro Diagnostic Substances	CO	Ind High	Ind High	10/23/06			AH
BHI-BUILDERS	7213 AVIARA DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Ind Low		09/12/06	Reviewed	BA
BIO-HYDRATION RESEARCH LAB, INC.	2091 RUTHERFORD RD	ACTIVE	2086	2086	Bottled And Canned Soft Drinks & Carbonated Waters	CO	Ind Med	Ind Med	06/28/07			AH
BLACK BOX INC	2777 LOKER AVE W # A		5091		Sporting And Recreational Goods & Supplies	CO	Ind Low					
B-STANG CONSTRUCTION	3490 CHARTER OAK	ACTIVE	1521	1521	General Contractor	HO	Ind Low	Comml High		09/12/06	Phone	AH
BUILDING INNOVATIONS BY DESIGN	7722 CALLE MADERO	OUT OF BUSINESS	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Ind Low		06/11/07	Phone	BA
BYRNES CONSTRUCTION	3870 HIGHLAND DR	ACTIVE	1522	1522	Contractor	HO	Ind Low	Comml High		10/24/06	Reviewed	AH
CABO INTERNATIONAL	2455 IMPALA DR	ACTIVE	2393		Manufacturer of Textile Bags	CO	Ind Med		04/03/06			AH
CALIFORNIA LINEAR DEVICES, INC.	2236 RUTHERFORD RD STE 119	ACTIVE	3621	3621	Motors and Generators	CO	Ind Med	Ind Med	06/12/07			AH
CALIFORNIA SENSOR CORP.	2075 CORTE DEL NOGAL STE P	ACTIVE	3829	3829	Measuring & Controlling Devices, NEC	CO	Ind Med	Ind Med	06/12/07	02/19/04	Reviewed	EN
CALIPER CLUB WORKS, INC.	6361 YARROW DR STE E	ACTIVE	3949	3949	Sporting/Athletic Goods, Not Elsewhere Classified	CO	Ind Med	Ind Med	02/01/07			EN
CALLAWAY GOLF BALL COMPANY	2180 RUTHERFORD RD	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	CO	Ind High	Ind High	12/11/06			AH
CALLAWAY GOLF COMPANY	2081 FARADAY AVE	ACTIVE	3949	4225	Sporting and Athletic Goods, NEC	CO	Ind Med	Ind Med	12/11/06			AH

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CALLAWAY GOLF COMPANY	2285 RUTHERFORD RD	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	CO	Ind High	Ind High	12/11/06			AH
CALLAWAY GOLF COMPANY	5858 DRYDEN PL	ACTIVE	8731	8731	Sporting and Athletic Goods, NEC	CO	Ind Low	Ind Low	12/11/06			AH
CALLAWAY GOLF COMPANY (HUNTER BUILD)	2261 RUTHERFORD RD	ACTIVE	8371	8371	Sporting and Athletic Goods, NEC	CO	Ind Low	Ind Low	12/11/06			AH
CALLAWAY GOLF COMPANY (PASCAL BUILD)	5960 PASCAL CT	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	CO	Ind High	Ind High	12/11/06			AH
CALTRANS/CARLSBAD MAINTENANCE	6050 PASEO DEL NORTE	ACTIVE	9621	9621	Transportation Programs Administration	CO	Ind Low	Ind Low	02/22/07			EN
CAMBRIAN FLOWERS	5600 AVENIDA ENCINAS STE 22	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
CANNON PACIFIC SERVICES, LLC	6102 AVENIDA ENCINAS STE H/I	ACTIVE	4212		Local Trucking Without Storage	CO	Ind Low		09/30/04	04/04/06	Drive By	EN
CARBITE GOLF	5816 DRYDEN PL	ACTIVE	5091	5091	Wholeslae Sprting Goods	CO	Ind Low	Ind Low	09/11/06			AH
CARLSBAD - LA COSTA CAB	6208 LIBERTY PL	EXCLUDED	4121	4121	Taxicabs	HO	Ind Med	Ind Low		03/30/07	Reviewed	BV
CARLSBAD AIRPORT SELF STORAGE	1910 PALOMAR OAKS WAY	ACTIVE	4225	4225	General Warehousing & Storage	CO	Ind Med	Ind Med	06/25/07			EN
CARLSBAD CUSTOM CABINETS	2719 LOKER AV WEST		2434		Cabinet Makers	CO	Ind Med					AH
CARLSBAD INTERNATIONAL EXPORT	1954 KELLOGG AV	ACTIVE	3829		Measuring & Controlling Devices, NEC	CO	Ind Med		05/13/06			EN
CARLSBAD MACHINING & DESIGN	5933 SEA LION PL STE 109	ACTIVE	3499		Fabricated Metal Products	CO	Ind Med		04/05/06			AH
CARLSBAD MAGNETICS	6086 CORTE DEL CEDRO	ACTIVE	3699	3699	Electrical Machinery, Equip & Sups, NEC	CO	Ind Med	Ind Med	06/29/07			EN
CARLSBAD SELF STORAGE LLC	2235 PALOMAR AIRPORT RD	ACTIVE	4225		General Warehousing & Storage	CO	Ind Med		05/10/06			EN
CARLSBAD TECHNOLOGY INC.	5923 BALFOUR CT	ACTIVE	2834	2834	Pharmaceutical Preparations	CO	Ind Med	Ind Med	08/08/06	06/23/05	Site Visit	AH
CARLSBAD TECHNOLOGY INC.	5923 FARNSWORTH CT	ACTIVE	4225	2834	Pharmaceutical Preparations	CO	Ind Med	Ind Med	09/13/06			AH
CARLSBAD VILLAGE SELF STORAGE	3235 TYLER ST	ACTIVE	4225	4225	General Warehousing And Storage	COR	Ind Med	Ind Med	06/27/07			BV
CARVED STONE INTERNATIONAL	2245 CAMINO VIDA ROBLE	ACTIVE	5032		Brick, Stone & Related Constr Mats	CO	Ind Low		03/28/06			EN
CASE BROS FURNITURE MAKERS	6353 EL CAMINO REAL STE G	ACTIVE	2511		Wood Household Furniture	CO	Ind Med		04/05/06			EN
CASE CONSTRUCTION INC	2907 CORTE JARDIN	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		03/30/07	Phone	BA

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CDS PRINTING	6971 EL CAMINO REAL #203	ACTIVE	2759		Commercial Printing, NEC	CO	Ind Med		04/05/06			BA
CERAMIXGOLF.COM	2131 LAS PALMAS DR STE C	EXCLUDED	3949	5091	Sporting and Athletic Goods, NEC	CO	Ind Med	Ind Low	10/15/04	07/24/06	Drive By	EN
CHOICE FLOWER S.D., INC.	5600 AVENIDA ENCINAS STE 27	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
CHRIS BARCA CONSTRUCTION	2441 LEVANTE ST		1521		Building Construction-General Building Contractors	HO	Ind Low					
CHRIS CAVENY GENERAL CONTRACTOR	3946 LINMAR LN	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/11/07	Reviewed	BV
CIVIC HELICOPTER INC	2192 PALOMAR AIRPORT RD STE H	ACTIVE	4522	4522	Helicopter Maintenance & Operations	CO	Ind High	Ind High	03/08/07			EN
COAST WASTE MANAGEMENT	5960 EL CAMINO REAL	ACTIVE	4225	4225	General Warehousing & Storage	CO	Ind High	Ind High	12/12/06			AH
COLORS ENTERPRISES, INC.	6106 AVENIDA ENCINAS STE F	ACTIVE	2099		Food Preparations, NEC	CO	Ind Med		05/01/06			EN
COMPONENT CONCEPTS	6179 EL CAMINO REAL STE 200	ACTIVE	3356	5065	Distribution and Assembling Battery Packs	CO	Ind Med	Ind Low		07/31/06	Phone	BA
CONSOLIDATED ELEC. DIST. INC	6106 AVENIDA ENCINAS STE A	ACTIVE	5063		Electrical Apparatus & Equpment Wiring Supplies	CO	Ind Low		05/01/06			EN
CONWAY & ASSOC., INC.	2525 PIO PICO DR #102	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High	08/17/04	06/11/07	Reviewed	BV
CORINAS WHOLESALE	5600 AVENIDA ENCINAS STE 35	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
CORNERSTONE MANAGING PARTNERS	2438 OVIEDO PL	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		03/30/07	Phone	BA
COTTRELL MACHINE	6102 AVENIDA ENCINAS # B-C	ACTIVE	3599		Indl and Comml Machinery and Equip, NEC	CO	Ind Med		05/01/06			EN
CPS PRINTING	2304 FARADAY AVE	ACTIVE	2759	2759	Commercial Printing, NEC	CO	Ind Med	Ind Med	06/20/07			AH
CRESTONE GROUP BAKING COMPANY	5927 FARNSWORTH CT	ACTIVE	2051		Bread & Other Baker Prods	CO	Ind Med		04/26/06			AH
CURT MERRIMAN CONSTRUCTION	1786 BLACKBIRD CIR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		11/01/06	Reviewed	BA
CURTIS CONSTRUCTION	3420 DONNA DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		03/30/07	Reviewed	BV

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CUSTOM PROJECT DEVELOPMENT	6544 PYRUS PL	OUT OF BUSINESS	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Ind Low		06/11/07	Phone	BA
CUTTING EDGE CNC, INC.	6064 CORTE DEL CEDRO	ACTIVE	3599	3599	Machine Shop	CO	Ind Med	Ind Med	06/29/07			EN
D. ITALIA MARBLE, GRANITE & TILE	2151 LAS PALMAS DR STE B	OUT OF BUSINESS	5713	5713	Floor Covering Stores	CO	Ind Low	Ind Low		03/30/07	Reviewed	en
D.C.C.	1492 OAK AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/25/06	Reviewed	AH
DARTON INTERNATIONAL, INC.	2380 CAMINO VIDA ROBLE STE J/K	ACTIVE	3599		Manufacturing Industrial Machinery	CO	Ind Med		05/10/06			EN
DAVID R. FUNKHOUSER GENERAL CONTRACTOR	1281 MAGNOLIA AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		07/28/06	Reviewed	AH
DAVID TAYLOR DEVELOPMENT INC.	4135 SKYLINE RD	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		07/28/06	Reviewed	AH
DAVISREED CONSTRUCTION, INC.	169 SAXONY RD STE 105	N/A	1542	1542	General Contractors-Nonresidential Buildings, Oth	CO	Ind Low	Ind Low		01/11/07	Reviewed	
DEER SPRINGS GARDENS	5600 AVENIDA ENCINAS STE 34	ACTIVE	5193	5193	Wholesale Flowers	CO	Ind Low	Comml High	04/26/07			AH
DENNIS MATHIS, CONSTRUCTION, INC.	3128 LE VANTE ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		01/30/07	Reviewed	BA
DEPT OF ANIMAL CONTROL	2481 PALOMAR AIRPORT RD	ACTIVE	0752		Animal Shelter	CO	Ind Low		01/11/06			EN
DIAMOND FORTY ENTERPRISE	2753 GALICIA WY	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		07/28/06	Reviewed	BA
DIVINE ORCHIDS AND CERAMIC POTS	5600 AVENIDA ENCINAS STE 3	ACTIVE	5193	5193	Wholesale Floral	CO	Ind Low	Comml High	04/26/07			AH
DOCTOR OF THE HOUSE	2371 MARCA PL	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		07/28/06	Reviewed	BA
DOT HILL SYSTEMS CORPORATION	6305 EL CAMINO REAL	ACTIVE	3577	3577	Computer Peripheral Equip, NEC	CO	Ind Med	Ind Med	06/20/07			EN
DR.'S OWN, INC	2270 COSMOS CT STE 100		3842		Orthopedic/Prosthetic/Surgical Appliances And Supp	CO	Ind Med					
DREAM DINNERS	1905 CALLE BARCELONA STE 206		2099		Food Preparations, Not Elsewhere Classified	CO	Ind Med					

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
E/G ELECTRO-GRAPH INC.	2355 CAMINO VIDA ROBLE	ACTIVE	3674		Semiconductors and Related Devices	CO	Ind Med		05/17/06			EN
E/G ELECTRO-GRAPH INC.	2365 CAMINO VIDA ROBLE	ACTIVE	3674		Semiconductors 7 Related Devices	CO	Ind Med		05/17/06			EN
ECUA ROSE	5600 AVENIDA ENCINAS STE 12	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
ELECTRIC REGULATOR	6189 EL CAMINO REAL	ACTIVE	3625		Electrical Indl Apparatus, NEC	CO	Ind Med		04/12/06			EN
ELECTRO SURFACE TECHNOLOGIES INC.	5803 NEWTON DR # A	ACTIVE	3679	3679	Electronic components, NEC	CO	Ind Med	Ind Med	06/25/07			AH
ELTROL CORPORATION	5661 PALMER WAY STE E	ACTIVE	3625	3625	Relays & Industrial Controls	CO	Ind Med	Ind Med	06/20/07			AH
EMBASSY INTERNATIONAL LIMOUSINE INC	6102 AVENIDA ENCINAS STE G	ACTIVE	4119		Local Passenger Transportation, NEC	CO	Ind Low		05/01/06			EN
ENCINA WATER FACILITY	6200 AVENIDA ENCINAS	ACTIVE	4952	4952	Sewerage Systems	CO	Ind High	Ind High	04/11/07			EN
ENDRES CONSTRUCTION	2895 HIGHLAND DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		07/28/06	Reviewed	AH
EOTRON LLC	2215 FARADAY AVE STE D		3674		Semiconductors And Related Devices	CO	Ind Med					
EUFORA	2885 LOKER AVE E	ACTIVE	5122	5122	Drugs, Drug Proprietaries, Sundries	CO	Ind Low	Ind Low	08/30/06			EN
EWING IRRIGATION PRODUCTS INC.	6104 AVENIDA ENCINAS STE E	ACTIVE	5083		Farm & Garden Machinery & Equipment	CO	Ind Low		05/01/06			EN
EXOTIC FOLIAGE	5600 AVENIDA ENCINAS STE 5	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
EXPRESS AIR AVIATION	2206 PALOMAR AIRPORT RD, ST B1	ACTIVE	4581	4581	Airports, Flying Fields and Terminal	CO	Ind High	Ind High	03/08/07	01/26/06	Drive By	EN
FEDERAL EXPRESS CORPORATION	2495 FARADAY AVE	ACTIVE	4215	4215	Air Courier Services	CO	Ind High	Ind High	04/25/07	02/12/04	Site Visit	AH
FIELDCO	3735 CAVERN PL	OUT OF BUSINESS	1542	1542	General Contractors-Nonresidential Buildings, Oth	HO	Ind Low	Ind Low		03/30/07	Reviewed	AH
FLORAL EXPRESS	5825 AVENIDA ENCINAS STE 107	ACTIVE	5193		Flowers, Nursery Stock, Supplies	CO	Ind Low		12/08/05	05/04/04	Reviewed	AH
FLOREXPO, LLC	1960 KELLOGG AVE	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Ind Low	12/12/06			EN
FLORICEL'S FLOWERS	5600 AVENIDA ENCINAS STE 23	ACTIVE	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Ind Low	Comml High	04/26/07			AH

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FLOWER FARM	5600 AVENIDA ENCINAS STE 4	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
FLOWERS BY HI-LO	6211 YARROW DR STE F	ACTIVE	5193	5193	Wholesale Flower Distribution	CO	Ind Low	Ind Low	08/08/06	05/05/04	Reviewed	EN
FORESIGHT DEVELOPMENT, INC.	2979 STATE ST STE B	ACTIVE	1500	1521	Building Construction-General Building Contractors	COR	Ind Low	Comml High		03/30/07	Reviewed	BV
FOX POINT FARMS WHOLESALE	5600 AVENIDA ENCINAS STE 11	ACTIVE	5193	5193	Wholesale Floral	CO	Ind Low	Comml High	04/26/07			AH
FRAZEE PAINT	7040 AVENIDA ENCINAS # 100		5231		Paint, Glass, And Wallpaper Stores	CO	Ind Low					
FROEDGE CONSTRUCTION	2240 AVENIDA MAGNIFICA APT H	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		03/30/07	Phone	AH
FURNISHINGS 4 LESS	1960 KELLOGG AV STE D	ACTIVE	5712	5712	Furniture Stores	CO	Ind Low	Ind Low	08/21/06			AH
G & R WHOLESALE FLOWERS & PLANTS	5600 AVENIDA ENCINAS STE 38	DUPLICATE	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Ind Low	Ind Low		03/30/07	Reviewed	AH
G&R WHOLESALE FLOWERS	5600 AVENIDA ENCINAS STE 38	ACTIVE	5193	5193	Wholesale Floral	CO	Ind Low	Comml High	04/26/07			AH
G.T. MACHINE SHOP	2790 LOKER AVE W STE 100	ACTIVE	3599		Ind & Comml Machinery & Equip, NEC	CO	Ind Med		04/05/06			AH
GARRETT CONSTRUCTION COMPANY	3310 AVENIDA OBERTURA	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		07/28/06	Phone	BA
GATES CONSTRUCTION	2735 SPOKANE WAY	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Ind Low		07/28/06	Reviewed	AH
GEMATRIA PRODUCTS, INC.	2075 CORTE DEL NOGAL STE H	ACTIVE	2834	2834	Vitamin & Nutrient Manufacturer	CO	Ind Med	Ind Med	06/29/06			EN
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	1949 KELLOGG AVE	ACTIVE	3699	3699	Electrical Machinery, Equip & Sups, NEC	CO	Ind Med	Ind Med		06/11/07	Drive By	AH
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	1964 KELLOGG AVE	ACTIVE	2759	2759	Commercial Printing	CO	Ind Med	Ind Med		06/11/07	Drive By	AH
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	5355 ARMADA DR	ACTIVE	3915		Lapidary Work, Mats, Jewelers, Finding	CO	Ind Med		02/23/06			AH
GEOMILL	2792 LOKER AVE W STE 103		3599		Indus./Commercial Equipment, Not Elsewhere Classi	CO	Ind Med					

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GIGATREND INCORPORATED	5115 AVENIDA ENCINAS STE G	ACTIVE	3577	3577	Computer Peripheral Equipment, NEC	CO	Ind Med	Ind Med	07/24/06			AH
GLOBAL MICROWAVE SYSTEMS, INC	1916 PALOMAR OAKS WAY STE 100		3578		Calculating And Accounting Machines, Except Compu	CO	Ind Med					
GRAFIKOM	5909 SEA OTTER PL	ACTIVE	2759	2759	Commercial Printing	CO	Ind Med	Ind Med	10/16/06			AH
GRANT GENERAL CONTRACTORS	5051 AVENIDA ENCINAS	ACTIVE	1521	1521	General Contractors--Single-Family Housing	CO	Ind Low	Ind Low	08/23/05	07/28/06	Reviewed	AH
GRAPHIC CONVERTING, INC.	2210 FARADAY AV	MOVED	4225	4225	Warehouse and Storage	CO	Ind Med	Ind Med	11/10/04	10/16/06	Drive By	AH
GRAPHIC CONVERTING, INC.	5909 SEA OTTER PL	ACTIVE	2675	2675	Die-Cut Paper & Paperboard & Cardboard	CO	Ind High	Ind High	10/16/06			AH
GREEN FLOWER COMPANY	5600 AVENIDA ENCINAS STE 45	ACTIVE	5193	5193	Wholesale Floral	CO	Ind Low	Comml High	04/26/07			AH
GTR ENTERPRISES, INC.	6352 CORTE DEL ABETO, STE E	ACTIVE	3469	3469	Fabricated Metal Parts	CO	Ind Med	Ind Med	03/28/07			EN
GUYON WEST	2101 LAS PALMAS DR STE C	ACTIVE	5084	5084	Wholesale Baking Equipment	CO	Ind Low	Ind Low	07/24/06			EN
HABITAT RESTORATION SCIENCES	4901 EL CAMINO REAL	MOVED	1700	1700	Construction-Special Trade Contractors	CO	Ind Low	Ind Low		06/11/07	Phone	AH
HANGAR ONE, INC	2100 PALOMAR AIRPORT RD STE 211	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	03/08/07			EN
HANSON AGGREGATES	3750 HAYMAR DR	ACTIVE	2951	2951	Asphalt Paving Mixtures	CO	Ind High	Ind High	09/21/06			BV
HAPPY DAISIES FLORIST	5600 AVENIDA ENCINAS STE 13	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
HARBOR FISH COMPANY	2790 LOKER AVE W STE 115	EXCLUDED	4222	5149	Refrigerated Warehousing & Storage	CO	Ind Med	Ind Low	10/12/04	07/18/06	Drive By	AH
HARVEY INC.	7200 PONTO DR # B	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High	08/08/06	06/20/06	Reviewed	BA
HAWTHORNE RENT-IT SERVICE	2065 CAMINO VIDA ROBLE	ACTIVE	4212	4212	Local Trucking Without Storage	CO	Ind High	Ind High	09/12/06			EN
HEINZE CONSTRUCTION COMPANY	2501 JACARANDA AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		07/28/06	Reviewed	BA
HENRY - FURNITURE MAKER, PAUL	2633 STATE ST REAR	ACTIVE	7641	7641	Reupholstery and Furniture Repair	CO	Ind Low	Ind Low		11/01/06	Reviewed	BV
HONOURGROUP	4722 BIRCHWOOD CIR		1542		General Contractors-Nonresidential Buildings, Oth	HO	Ind Low					

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HUBBS SEA WORLD RESEARCH	4200 GARFIELD ST	ACTIVE	0921	0921	Fish hatcheries & Preserves	CO	Ind Low	Ind Low	02/20/07			AH
HUDSON PRINTING INC	2780 LOKER AVE W	ACTIVE	2759	2759	Commercial Printing, Not Elsewhere Classified	CO	Ind Med	Ind Med	01/31/07			AH
HYDRO-CHECK SYSTEMS INC.	5931 SEA LION PL STE 100	ACTIVE	3823	3823	Ind Instr for Measure, display & Control	CO	Ind Med	Ind Med	07/18/06			AH
HYDROEPOCH, INC.	2270 COSMOS CT # 120		3949		Sporting/Athletic Goods, Not Elsewhere Classified	CO	Ind Med					
INGOLD TRACTOR SERVICE	4135 PARK DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/22/07	Reviewed	AH
INNOVATIVE METAL PRODUCTS, INC.	6351 YARROW DR STE D		3444		Sheet Metal Work	CO	Ind Med					
INT SOFTBOARD TECHNOLOGY	6351 YARROW DR, STE F	ACTIVE	3949	3949	Sporting/Athletic Goods, Not Elsewhere Classified	CO	Ind Med	Ind Med	07/25/06			EN
INTERIOR SPECIALISTS INC.	1630 FARADAY AVE	ACTIVE	1752		Floor Laying & Floor Work	CO	Ind Low		04/19/06			AH
INVITROGEN CORPORATION	5781 VAN ALLEN WAY	ACTIVE	2836		Biological Products, Except Diagnostic Substances	CO	Ind Med		04/05/06			AH
IQ SCIENTIFIC INSTRUMENTS, INC	2075 CORTE DEL NOGAL STE E	ACTIVE	3829	3829	Measuring & Controlling Devices, NEC	CO	Ind Med	Ind Med	07/31/06			EN
IRIS GROUP, INC., THE	1675 FARADAY AVE	ACTIVE	2752	2752	Commercial Printing, Lithographic	CO	Ind Med	Ind Med	07/18/06			AH
ISIS PHARMACEUTICALS	1890 RUTHERFORD RD	MOVED	4225	4225	Warehouse	CO	Ind Med	Ind Med	09/20/05	09/19/06	Reviewed	AH
ISIS PHARMACEUTICALS	2282 FARADAY AVE	ACTIVE	2834	2834	Pharmaceutical Preparations	CO	Ind High	Ind High	09/19/06			AH
J & B GRAPHICS	6351 YARROW DR STE H		2396		Automotive And Apparel Trimmings	CO	Ind Med					
J C CONSTRUCTION & RENOVATION	3110 DEL REY AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/25/07	Reviewed	BA
J H R CONSTRUCTION	5238 CARLSBAD BLVD		1521		Building Construction-General Building Contractors	HO	Ind Low					
JC BALDWIN CONSTRUCTION COMPANY	2469 IMPALA DR	ACTIVE	1521		Building Construction-General Building Contractors	CO	Ind Low		05/01/06			AH
JENNINGS DESIGN & CONSTRUCTION	1430 YOURELL AVE	OUT OF BUSINESS	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Ind Low		01/30/07	Reviewed	BV

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JENSEN CONSTRUCTION CO	2151 LAS PALMAS DR STE A	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High		01/30/07	Reviewed	EN
JESSUP TRANSPORT	5600 AVENIDA ENCINAS STE 44	ACTIVE	4212	4212	Transport	CO	Ind Low	Ind Low	04/26/07			AH
JET SOURCE, INC.	2026 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	CO	Ind High	Ind High	03/08/07			EN
JET SOURCE, INC.	2036 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	CO	Ind High	Ind High	03/08/07			EN
JET SOURCE, INC.	2056 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	CO	Ind High	Ind High	03/08/07			EN
JET SOURCE, INC.	2186 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	CO	Ind High	Ind High	03/08/07			EN
JOE MOORE CONSTRUCTION COMPANY	3612 VALLEY ST	ACTIVE	1521		General Contractor	HO	Ind Low			05/19/06	Drive By	AH
JOHN BIANCHI CONSTRUCTION	2910 MANAGUA PL	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/26/07	Reviewed	BA
JOHN C. WALTERS & ASSOC. INC.	6320 MONTECITO DR	ACTIVE	1500	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/26/07	Reviewed	BA
JOHN D. HEBERT CONSTRUCTION	5460 EL ARBOL DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		01/30/07	Reviewed	AH
JON DORE CONSTRUCTION	3353 DEL RIO CT	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/26/07	Reviewed	BA
JON MCANALLY CONSTRUCTION	5441 WOLVERINE TER		1521		General Contractors--Single-Family Housing	HO	Ind Low					
JOSEPH A. MEEHL'S SONS COMPANY	2717 VANCOUVER ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/29/07	Reviewed	BV
JT SPORTS LLC	5818 EL CAMINO REAL		5091		Sporting And Recreational Goods & Supplies	CO	Ind Low					
K & K LABORATORIES INC	3305 TYLER ST	ACTIVE	2833	2833	Viatmins and Supplements	CO	Ind Med	Ind Med	08/21/06			AH
KAHUNA KALAI LTD	6010 AVENIDA ENCINAS	MOVED	3949	3949	Sporting and Athletic Goods, NEC	CO	Ind Med	Ind Med	09/12/05	07/25/06	Drive By	EN
KARL STRAUSS BREWERY & RESTAURANT	5801 ARMADA DR	ACTIVE	2082	2082	Brewery and Restaurant	CO	Ind Med	Ind Med	08/21/06			AH
KENT WATERS CABINET & MILLWORK	6074 CORTE DEL CEDRO	ACTIVE	1799		Special Trade Contractors	CO	Ind Low			06/05/06	Phone	EN
KNOLL DESIGN AND DEVELOPMENT	5751 PALMER WY STE G1	ACTIVE	1521	1521	General Contractor	CO	Ind Low	Comml High		01/30/07	Reviewed	EN

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KNORR BEESWAX PROD. INC.	1965 KELLOGG AVE	ACTIVE	3999		Manufacturing Industries, NEC	CO	Ind Med		03/06/06			EN
KOSKO CONSTRUCTION	919 BEGONIA CT	ACTIVE	1793	1793	Glass & Glazing Work	HO	Ind Low	Comml High		06/29/07	Reviewed	BA
KVD COMPANY INC.	2465 IMPALA DR	ACTIVE	3825	3825	Inst for Measure & Testing of electricity	CO	Ind Med	Ind Med	07/26/05			AH
L & L PRINTERS	6200 YARROW DR	ACTIVE	2759	2759	Commercial Printing, NEC	CO	Ind Med	Ind Med	09/11/06			EN
LA COSTA LIMOUSINE	2770 LOKER AVE WEST	ACTIVE	4119	4119	Local Passenger Transportation, NEC	CO	Ind High	Ind High	01/31/07			AH
LA COSTA WHOLESALE FLOWERS	3319 JAMES DR	ACTIVE	5193		Flowers, Nursery Stock, Supplies	CO	Ind Low		03/06/06	02/09/04	Reviewed	BV
LANDCO CONSTRUCTION COMPANY	3135 TYLER ST	ACTIVE	2431	2431	Millwork	CO	Ind Med	Ind Med	04/26/07			BV
LAS FLORES WHOLESALE	5600 AVENIDA ENCINAS STE 15	DUPLICATE	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Ind Low	Ind Low		04/30/07	Reviewed	AH
LAS FLORES WHOLESALE	5600 AVENIDA ENCINAS STE 15	ACTIVE	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Ind Low	Comml High	04/26/07			AH
LATERAL DYNAMICS, LLC	5933 SEA LION PL STE 113		3499		Fabricated Metal Products, Not Elsewhere Classifi	CO	Ind Med					
LEADING EDGE AVIATION	2016 PALOMAR AIRPORT RD STE L	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	03/08/07	01/26/06	Drive By	EN
LEGOLAND	ONE LEGOLAND DR	ACTIVE	4119	4119	Local Passenger Transportation, NEC	CO	Ind High	Ind High	08/31/06			EN
LEONARD SCHOLL INDUSTRIES, INC.	5751 PALMER WAY STE A	ACTIVE	3599	3599	Ind & Comml Machinery & Equip, NEC	CO	Ind Med	Ind Med	07/10/06			AH
LEUCADIA WASTE WATER DISTRICT	1960 LA COSTA AV	ACTIVE	4941	4941	Water Supply	CO	Ind High	Ind High	05/17/07			BA
LILYS ENTERPRISES	5600 AVENIDA ENCINAS STE 18	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
LOCKHEED MARTIN MISSILES AND FIRE CONTROL	2355 CAMINO VIDA ROBLE	EXCLUDED	3812	3812	Search, Detection Nav, Guid, Aeronaut Sys & Instr	CO	Ind Med	Ind Low	10/07/04	08/01/06	Phone	AH
LUCAS & MERCIER CONSTRUCTION INC	5245 AVENIDA ENCINAS STE G	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High		01/31/07	Reviewed	AH
LUMINORE INCORPORATED	6060 CORTE DEL CEDRO		873		Research, Development, And Testing Services	CO	Ind Low					
LUMINOUS MEDICAL INC.	2461 IMPALA DR		8731		Research, Development, And Testing Services	CO	Ind Low					
M C S CONSTRUCTION	7804 ESTANCIA ST		1521		Building Construction-General Building Contractors	HO	Ind Low					BA

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MAC PHERSON'S	1277 FOREST AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/29/07	Reviewed	BV
MACHINE VISION PRODUCTS, INC.	5940 DARWIN CT	ACTIVE	3629	3629	Electrical Indl Apparatus, NEC	CO	Ind Med	Ind Med	06/12/07			AH
MAMA MELLACE'S OLD WORLD TREATS	6195 EL CAMINO RL	ACTIVE	2064		Confectionery Manufacturer	CO	Ind Med		04/12/06			AH
MANNY'S WHOLESALE	5600 AVENIDA ENCINAS STE 14	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
MARDX DIAGNOSTICS, INC.	5919 FARNSWORTH CT	ACTIVE	2835		Manufacturer of In Vitro Diagnostic	CO	Ind Med		05/18/06			AH
MARTHAS WHOLESALE	5600 AVENIDA ENCINAS STE 30	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
MATT MILLIN MACHINING	2270 CAMINO VIDA ROBLE STE F	ACTIVE	3499	3499	Fabricated metal Products	CO	Ind Med	Ind Med	07/25/06			EN
MAYESH WHOLESALE FLORIST INC., JACK	5600 AVENIDA ENCINAS STE 41	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
MCCLELLAN-PALOMAR AIRPORT	2192 PALOMAR AIRPORT ROAD	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	03/08/07			EN
MCCOURTNEY CABINETRY	6102 AVENIDA ENCINAS, SUITE L	ACTIVE	2434		Cabinets	CO	Ind Med		05/01/06			EN
MCKITTRICK GRADING & EXCAVATING	3602 KINGSTON ST		1521		Building Construction-General Building Contractors	HO	Ind Low					AH
MCKITTRICK GRADING & EXCAVATING	3602 KINGSTON ST	DUPLICATE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Ind Low		08/24/06	Reviewed	
MEADOWLARK WATER RECLAMATION F	7941 CORINTIA ST	ACTIVE	4952	4952	Sewerage Systems	CO	Ind High	Ind High	12/13/06			BA
MELLANO ENTERPRISES	5600 AVENIDA ENCINAS STE 20	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
MELLES GRIOT LASER DIVISION	2051 PALOMAR AIRPORT RD STE 200	ACTIVE	3674	3674	Semiconductors & Related Devices	CO	Ind High	Ind High	11/28/06			EN
MERCOTAC INC.	6195 CORTE DEL CEDRO STE 100	ACTIVE	3643	3643	Current-Carrying Wiring Devices	CO	Ind Med	Ind Med	06/29/07			EN
MERCURY COMPUTER SYSTEMS INC	1815 ASTON AVE STE 107		3674		Semiconductors And Related Devices	CO	Ind Med					
MERCURY COMPUTER SYSTEMS INC	1815 ASTON AVE STE 107		3674		Semiconductors And Related Devices	CO	Ind Med					
MERCY AIR	2016 PALOMAR AIRPORT RD, STE S	ACTIVE	4522	4522	Air Transportation, Nonscheduled	CO	Ind High	Ind High	03/08/07	01/24/06	Drive By	EN

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METAL URGES INC	6350 YARROW DR STE D	ACTIVE	5021		Furniture, Wholesale	CO	Ind Low		03/28/06	03/25/04	Reviewed	EN
MICHAEL ABAD	7417 SITIO LIMA		1521		Building Construction-General Building Contractors	HO	Ind Low					
MICRO-PROBE, INCORPORATED	2281 LAS PALMAS DR	ACTIVE	3825		Inst for Measure & Testing of electricity	CO	Ind Med		05/01/06			EN
MILLER BUILDING CO., THE	6434 EL PERICO LN	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/29/07	Reviewed	BA
MINUTEMAN PRESS	6353 EL CAMINO REAL STE H	ACTIVE	2752	2752	Commercial Printing, Lithographic	CO	Ind Med	Ind Med	08/08/06			BA
MISSION ELECTRIC SUPPLY INC	2225 CAMINO VIDA ROBLE	ACTIVE	5063		Electrical Apparatus & Equpment Wiring Supplies	CO	Ind Low		02/01/06	02/10/04	Reviewed	EN
MJR CONSTRUCTION, INC.	300 CARLSBAD VILLAGE DR STE 300	ACTIVE	1521	1521	Building Construction-General Building Contractors	COR	Ind Low	Ind Low	08/30/06	07/20/04	Reviewed	BV
MORGAN CONSTRUCTION COMPANY INC.	1910 PALOMAR PT WY STE 101	ACTIVE	1521		Building Construction-General Building Contractors	CO	Ind Low		05/18/06			AH
MOSS REPLACEMENT WINDOWS INC	2790 LOKER AVE W STE 109		1700		Construction-Special Trade Contractors	CO	Ind Low					
MOST CONSTRUCTON (Formally Frost Construction)	1380 CYNTHIA LN	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		01/31/07	Reviewed	BV
MULLEN CONSTRUCTION	2890 PIO PICO DR STE 202	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Ind Low		08/24/06	Reviewed	BV
MV TECHNICAL SALES, LLC	1940 CAMINO VIDA ROBLE	ACTIVE	3825	3825	General Warehousing	CO	Ind Med	Ind Med	08/08/06			EN
MYRON L COMPANY - A CALIF CORP	2450 IMPALA DR	ACTIVE	3829	3829	Measuring & Controlling Devices, NEC	CO	Ind Med	Ind Med	07/24/06			EN
N. REX WILSON CONSTRUCTION, INC.	4600 PARK DR		1521		Building Construction-General Building Contractors	HO	Ind Low					AH
NATURE MAKER	6225 EL CAMINO REAL	ACTIVE	3999	3999	General Manufacturing	CO	Ind Med	Ind Med	07/31/06			EN
NATURE'S SUPPLEMENTS	2270 CAMINO VIDA ROBLE STE Q	ACTIVE	2833	2833	Medicinal Chemicals and botanical Products	CO	Ind Med	Ind Med	07/25/06			EN
NEAL HENNING CONSTRUCTION	3119 VERDE AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/29/07	Reviewed	BA

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NESTI CONSTRUCTION	5631 PALMER WAY STE D	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Ind Low		08/24/06	Reviewed	AH
NEWMAN REPLACEMENT WINDOWS	5845 AVENIDA ENCINAS STE 133	ACTIVE	1751		Window & Door Installation & Sales	CO	Ind Low		05/22/06			EN
NEWPORT FLORAL CONNECTION	5600 AVENIDA ENCINAS STE 46	ACTIVE	5193	5193	Food Crops Grown Undercover	CO	Ind Low	Comml High	04/26/07			AH
NEXT PHARMACEUTICALS	5927 BALFOUR CT STE 110		2023		Dry, Condensed, Evaporated Dairy Products	CO	Ind Med					AH
NO FEAR, INC	2251 FARADAY AVE	ACTIVE	5136	5136	Mens & Boys Clothing & Furnishings	CO	Ind Low	Ind Low	07/25/06			AH
NOBEL HOMES	2734 LOKER AVE W STE M	ACTIVE	1500	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High		06/29/07	Reviewed	AH
NORTH COASTAL (PALOMAR) LANDFILL	2198 PALOMAR AIRPORT RD	ACTIVE	4953	4953	Refuse Systems	CO	Ind High	Ind High	06/29/05	06/22/07	Reviewed	EN
NORTH COUNTY GROWER SUPPLIES	5600 AVENIDA ENCINAS STE 43	ACTIVE	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Ind Low	Comml High	04/26/07			AH
NRG CABRILLO POWER STATION	4600 CARLSBAD BLVD	ACTIVE	4911	4911	Electric Services	CO	Ind High	Ind High	08/30/06			AH
OCEANSIDE GLASSTILE COMPANY	2293 COSMOS CT	EXCLUDED	3231	7389	Business Services	CO	Ind High	Comml Low	02/24/06	08/02/06	Phone	AH
OEM SOLUTIONS, LLC	2245 CAMINO VIDA ROBLE, STE 104	ACTIVE	5045		Computers & Peripheral Equip & Software	CO	Ind Low		05/03/06			AH
OGARA CONSTRUCTION	3200 JAMES DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Ind Low		08/25/06	Reviewed	BV
OLIVENHAIN MUNICIPAL WATER DISTRICT	1966 OLIVENHAIN RD	ACTIVE	4941	4941	Water Systems	CO	Ind High	Ind High	10/17/06			BA
ON TIME TEES	2270 CAMINO VIDA ROBLE # P		2261		Finishers Of Broadwoven Fabrics Of Cotton	CO	Ind Med					
OPOTEK, INC.	2233 FARADAY AVE STE E	EXCLUDED	3845	5065	Electromedical & Electrotherapeutic Apparatus	CO	Ind Med	Ind Low	09/30/04	07/10/06	Drive By	AH
ORCO CONSTRUCTION COMPANY	6125 PASEO DEL NORTE	ACTIVE	5251		Paint and Wallpaper Stores	CO	Ind Low		05/03/06	03/22/04	Reviewed	EN
ORD & RODGERS CONSTRUCTION INC	5122 AVENIDA ENCINAS	ACTIVE	1521		Building Construction-General Building Contractors	CO	Ind Low		04/17/06	06/29/05	Reviewed	AH
ORGANICO PANE COMPANY	5671 PALMER WAY STE B		5149		Groceries And Related Products, Not Elsewhere Cla	CO	Ind Low					

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ORIZON	7190 AVENIDA ENCINAS		1799		Special Trade Contractors, Nec	CO	Ind Low					
ORTEGA'S SAIL AND CANVAS	6102 AVENIDA ENCINAS STE A	ACTIVE	2394	2394	Manufacture Metal Awnings, Covers	CO	Ind Med	Ind Med	06/26/07			EN
ORTHO ORGANIZERS INC.	1822 ASTON AVE		3843		Dental Equipment And Supplies	CO	Ind Med					
OUTSOURCE MANUFACTURING, INC. (Formally Vision Manufacturing	2839 LOKER AVE E	EXCLUDED	3699	5065	Wholesale Electronic Equipment	CO	Ind Med	Ind Low		08/25/06	Phone	AH
P.O.P. PLASTICS INCORPORATED	2225 FARADAY AVE STE C	EXCLUDED	3993	5162	Miscellaneous Manufacturing	CO	Ind Med	Ind Low	09/30/04	07/10/06	Drive By	AH
PACIFIC CNC MACHINE	6351 CORTE DEL ABETO STE 104	ACTIVE	3599	3599	Indus./Commercial Equipment, Not Elsewhere Classi	CO	Ind Med	Ind Med	07/26/06			EN
PACIFIC COAST PRINTING	3021 STATE ST	ACTIVE	2759	2759	Commercial Printing, NEC	COR	Ind Med	Ind Med	07/26/06			BV
PACIFIC COMMERCIAL CONSTRUCTION	2262 RUTHERFORD RD STE 103	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Ind Low		08/25/06	Reviewed	AH
PACIFIC TRADES CONST. & DEV. INC.	2956 ROOSEVELT ST STE 3	ACTIVE	1500	1500	Building Construction-General Building Contractors	COR	Ind Low	Comml High		06/29/07	Reviewed	BV
PALOMAR AIRPORT CENTER, LLC	2100 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, And Airport Terminal Ser	CO	Ind High	Ind High	03/08/07			EN
PALOMAR CLEANERS	2221 LAS PALMAS DR STE F	ACTIVE	7216	7216	Drycleaning plants	CO	Ind Low	Ind Low	08/08/06			EN
PALOMAR DISPLAY PRODUCTS, INC.	1945 KELLOGG AVE	ACTIVE	3577		Computer Peripheral Equipment	CO	Ind Med		05/18/06			EN
PALOMAR LIMOUSINE & TRANSPORTATION, INC.	600 GRAND AV STE A19	ACTIVE	4119	4119	Local Passenger Transportation, NEC	HO	Ind Low	Ind Low	07/13/05	01/10/07	Reviewed	AH
PALOMAR SIGN COMPANY	5205 AVENIDA ENCINAS STE G		3993		Signs And Advertising Specialties	CO	Ind Med					
PALOMAR TECHNOLOGIES, INC.	2728 LOKER AVE W		3674		Semiconductors And Related Devices	CO	Ind Med					
PANTOUR	5651 PALMER WAY STE C	MOVED	3751	3751	Motorcycles, Bicycles, And Parts	CO	Ind Med	Ind Med	05/03/05	07/31/06	Drive By	AH
PAUL DEVELOPMENT	2954 HAWKS EYE PL	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Ind Low		08/23/06	Reviewed	BA
PAUL MCGRATH CONSTRUCTION	6789 CAMINO DE AMIGOS	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Ind Low		08/23/06	Reviewed	BA

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PAUL PARIZEAU	3218 EUREKA PL		1521		Building Construction-General Building Contractors	HO	Ind Low					
PCL CONSTRUCTION SERVICES, INC.	1901 CAMINO VIDA ROBLE STE 112	MOVED	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Ind Low		08/25/06	Reviewed	EN
PELICAN GLASS CO	2680 STATE ST	ACTIVE	1793		Retail Glass Installation	CO	Ind Low		04/26/06			BV
PELICAN PACKAGING, INC.	5816 DRYDEN PL	ACTIVE	3669	3669	Communications Equipment	CO	Ind Med	Ind Med	09/11/06			AH
PENTON OVERSEAS INC	2470 IMPALA DR # A	ACTIVE	5192	5192	Books, Newpapers, Periodicals, Wholesale	CO	Ind Low	Ind Low	08/08/06	09/25/03	Reviewed	AH
PERSONAL STRENGTHS NORTH AMERICA, LLC	1946 KELLOGG AVE		2731		Book Publishing	CO	Ind Med					
PERSONAL TRANPSORT LLC	3123 VISTA MAR	ACTIVE	4119	4119	Limousine Service	CO	Ind Low	Ind Low		01/31/07	Reviewed	BA
PLASTICS ENGINEERING & DEV.	2731 LOKER AVE W # C	ACTIVE	3089	3089	Plastic Products, NEC	CO	Ind Med	Ind Med	11/02/05	01/31/07	Drive By	AH
PONTO STORAGE INC	7290 PONTO DR	ACTIVE	4225	4225	General Warehousing & Storage	CO	Ind Med	Ind Med	07/31/06	03/08/04	Reviewed	BA
PORT BREWING CO	561 CARLSBAD VILLAGE DR	ACTIVE	2082	2082	Brewery	CO	Ind Med	Ind Med	01/24/07			AH
POWER ONE INC.	5999 AVENIDA ENCINAS, STE 100	ACTIVE	3629		Electrical Indl Apparatus, NEC	CO	Ind Med					AH
PRECISION CONST. HAULING (PCH)	3325 VIVIENDA CIR	OUT OF BUSINESS	1752	1752	Flooring Contractor	HO	Ind Low	Ind Low		09/05/06	Reviewed	BA
PRENTICE CONSTRUCTION INC.	7323 EL FUERTE ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		01/31/07	Reviewed	BA
PRINTERY, THE	3138 ROOSEVELT ST STE C	ACTIVE	2759	2759	Commercial Printing, NEC	CO	Ind Med	Ind Med	07/27/06	06/23/06	Drive By	AH
PRODUCT SLINGSHOT INC.	2221 RUTHERFORD RD	ACTIVE	3999	3999	Manufacturing Industries, NEC	CO	Ind Med	Ind Med	08/01/06			EN
PROFESSIONAL AUDIO SYSTEMS	2270 COSMOS CT	ACTIVE	3652		Household Audio & Video Equip	CO	Ind Med		05/22/06			EN
PUBLIC STORAGE	6211 CORTE DEL ABETO	ACTIVE	4225	4225	General Warehousing And Storage	CO	Ind Med	Ind Med	08/21/06			EN
PUBLIC STORAGE, INC.	6211 CORTE DEL ABETO	DUPLICATE	4225	4225	General Warehousing And Storage	CO	Ind Med	Ind Med		09/28/06	Reviewed	EN
QUALIGEN, INC.	2042 CORTE DEL NOGAL STE A	ACTIVE	3841	3841	Surgical & Med Instr & Apparatus	CO	Ind Med	Ind Med	06/29/07			EN
QUALITY AIRCRAFT CARE	2056 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Aircraft Washing	CO	Ind High	Ind High	03/08/07			EN

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R.D. BACON CONSTRUCTION	2800 WILSON ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	BV
RACK CONSTRUCTION & CONSULTING INC	7967 CAMINO ALVARO	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	BA
RAMIREZ FLOWERS	5600 AVENIDA ENCINAS STE 28	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
RAMOS CONSTRUCTION SERVICE	2358 PIO PICO DR		1521		Building Construction-General Building Contractors	HO	Ind Low					
RANDALL INTERNATIONAL	2885 LOKER AVE E	ACTIVE	2844	2844	Perfumes, Cosmetics & Other Toilet Preps	CO	Ind High	Ind High	08/29/06			AH
REBECCA NORMAN INC	2195 FARADAY AVE STE D		3911		No Entry	CO	Ind Med					
RED DIAMOND COATINGS	2075 CORTE DEL NOGAL STE W	OUT OF BUSINESS	5231	5231	Paint Whiolesale	CO	Ind Low	Ind Low	08/26/05	03/30/07	Reviewed	EN
REFLEX CORPORATION	1825 ASTON AVE	ACTIVE	3199	3199	Leather Goods, Manufacturing	CO	Ind Med	Ind Med	06/26/07			AH
REGENCY CARS LLC	1394 SCOTER PL	EXCLUDED	4119	4119	Local Passenger Transportation, NEC	HO	Ind Low	Ind Low		05/02/07	Reviewed	BA
RESPIRONICS CALIFORNIA INC.	2271 COSMOS CT	ACTIVE	3842		Orhtopedic, Prosthetic & Surgical Appliances and Supplies	CO	Ind Med		05/18/06			EN
RICHARD L. CHASE CONTRACTING	3147 JEFFERSON ST APT 2	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	AH
RIEKER MACHINE INC.	5674 EL CAMINO REAL STE E		3599		Indus./Commercial Equipment, Not Elsewhere Classi	CO	Ind Med					AH
RIP CURL	2105 RUTHERFORD RD	OUT OF BUSINESS	5136	5136	Wholesale Distribution of Clothing	CO	Ind Low	Ind Low	01/31/05	07/25/06	Drive By	AH
ROB WITTON GENERAL CONTRACTOR	6831 XANA WY	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	BA
ROCKWELL COLLINS OPTRONICS, INC.	2752 LOKER AVE W	ACTIVE	3827	3827	Optical Instruments & Lenses	CO	Ind Med	Ind Med	06/25/07			AH
ROGER ROBERSON CONSTRUCTION	2030 CORDOBA PL	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	AH

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ROMBOTIS BROTHERS CONSTRUCTION	325 CARLSBAD VILLAGE DR STE C2	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Ind Low	07/31/06			AH
ROMER, INC.	5145 AVENIDA ENCINAS # I	ACTIVE	5089		Industrial Machinery and Equipment	CO	Ind Low		05/03/06			AH
RURAL/METRO FIRE DEPARTMENT	2188 PALOMAR AIRPORT RD	EXCLUDED	7389	7389	Fire Protection, Not Public	CO	Ind Low	Ind Low	03/08/07			EN
S.P. WHITE CONSTRUCTION, INC.	5937 DARWIN CT # 100	ACTIVE	1521		Building Construction-General Building Contractors	CO	Ind Low		08/17/04	06/16/06	Reviewed	AH
S.S. SMITH CO.	1743 MALLOW CT	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		06/29/07	Reviewed	BA
SABRE SCIENCES, INC.	2233 FARADAY AVE STE K	ACTIVE	2844	2844	Perfumes, Cosmetics, & Other Toilet Preparations	CO	Ind Med	Ind Med	08/08/06			AH
SAN DIEGO FLORIST SUPPLIES INC.	5600 AVENIDA ENCINAS STE 1	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
SCHROEDER CONSTRUCTION & DEV	2691 STATE ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Ind Low	07/31/06	06/28/06	Reviewed	BV
SCHUMACHER CO. (AIR PRODUCTS AND CHEMICALS)	1969 PALOMAR OAKS WAY	ACTIVE	2899	2899	Chemicals and Chemical Preparations, NEC	CO	Ind High	Ind High	12/06/06			EN
SCHUMACHER CO. (AIR PRODUCTS AND CHEMICALS)	1979 PALOMAR OAKS WAY	ACTIVE	4225	2899	General Warehousing	CO	Ind Med	Ind Med	12/06/06			EN
SCOTT GUENDERT CONSTRUCTION	7116 AVIARA DR	ACTIVE	1521	1521	General Contractor	HO	Ind Low	Comml High		10/04/06	Reviewed	BA
SCUDELLARO BREAD	2720 LOKER AVE W STE N	ACTIVE	2051		Bread & Other Baker Prods	CO	Ind Med		05/18/06			AH
SDG&E - C/O SEMPRA ENERGY	5016 CARLSBAD BL	ACTIVE	4932	4932	Gas and Other Services Combined	CO	Ind Low	Ind Low	02/06/07			AH
SEA ALOE, INC.	2794 LOKER AVE W STE 103		5122		Drugs, Drug Proprietaries, And Druggists' Sundrie	CO	Ind Low					
SEA BRIGHT COMPANY, THE	4322 SEA BRIGHT PL	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	AH
SEARS CONSTRUCTION CO.	1387 CYNTHIA LN	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	BV
SEASILVER USA, INC.	2045 CORTE DEL NOGAL	OUT OF BUSINESS	2833	2833	Vitamins and Nutritional Supplements	CO	Ind Med	Ind Med	03/28/06	06/29/07	Drive By	EN

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SEASILVER USA, INC.	2350 CAMINO VIDA ROBLE	OUT OF BUSINESS	4225	4225	Vitamins and Nutritional Supplements	CO	Ind Med	Ind Med	03/28/06	06/29/07	Drive By	EN
SELECT CABINETRY & FURNITURE MFG BY DESIGN	2270 CAMINO VIDA ROBLE STE T		2511		Wood Household Furniture	CO	Ind Med					
SELECT CABINETS & FURNITURE MFG CO	2270 CAMINO VIDA ROBLE STE A	DUPLICATE	2499	2499	Wood Products, Not Elsewhere Classified	CO	Ind Med	Ind Med		09/14/06	Reviewed	EN
SELECT CABINETS AND FURNITURE MFG.	2270 CAMINO VIDA ROBLE STE A	ACTIVE	2521		Wholesale Furniture and Cabinet Maker	CO	Ind Med		05/22/06			EN
SELECT SUPPLEMENTS INC	5800 NEWTON DR	ACTIVE	2023	2023	Dry, Condensed, Evaporated Dairy Products	CO	Ind Med	Ind Med	06/25/07			AH
SELTZER CHEMICALS INCORPORATED	5927 GEIGER CT	EXCLUDED	5169	5169	Chemicals & Allied Prods, NEC	CO	Ind Low	Ind Low	09/03/04	01/04/07	Reviewed	AH
SELTZER COMPANIES INC	2840 LOKER AVE E # 101	DUPLICATE	2833	2833	Medicinal Chemicals & Botanical Products	CO	Ind Med	Ind Med		02/06/07	Reviewed	AH
SELTZER COMPANIES INC	5920 PASTEUR CT # B		5169		Chemicals And Allied Products, Not Elsewhere Clas	CO	Ind Low					
SELTZER NUTRITIONAL TECHNOLOGY	2840 LOKER AV EAST #101	ACTIVE	2833	2833	Manufacturer of Nutritional Supplements	CO	Ind Med	Ind Med	07/26/06			AH
SENDX MEDICAL, INC.	1945 PALOMAR OAKS WAY	ACTIVE	3841	3841	Surgical and medical apparatus	CO	Ind Med	Ind Med	06/25/07			EN
SETH HOENIG	2714 MADISON ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	BV
SEVERINO CONSTRUCTION	2395 PIO PICO DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High		10/04/06	Reviewed	BV
SHAFFER CONSTRUCTION	6712 WHITESAIL ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	EN
SHEICO (SGCA) USA	6150 A CORTE DEL CEDRO	ACTIVE	2389	2389	Apparel & Accessories, NEC	CO	Ind Med	Ind Med	06/26/07	02/12/04	Reviewed	EN
SHORE LINE GRAFIX, INC.	5245 AVENIDA ENCINAS STE C	ACTIVE	2759	2759	Commercial Printing, NEC	CO	Ind Med	Ind Med	07/24/06			AH
SIERRA WIRELESS	2290 COSMOS CT	ACTIVE	8731		Research, Development, And Testing Services	CO	Ind Low		04/19/06			EN
SIGNS ON TIME	5670 EL CAMINO REAL STE K	ACTIVE	3993		Sign Making & Painting	CO	Ind Med		03/06/06	02/12/04	Reviewed	AH
SIR SPEEDY PRINTING CENTER	2227 FARADAY AVE STE A	ACTIVE	2759		Commercial Printing, NEC	CO	Ind Med		05/22/06			AH

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SOIL RETENTION SYSTEMS INC	2501 STATE ST		1500		Building Construction-General Building Contractors	COR	Ind Low					
SOMARC CONSTRUCTION	2417 APPIAN RD	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	AH
SONARTEC	1939 PALOMAR OAKS WY	ACTIVE	5091		Sporting And Recreational Goods & Supplies	CO	Ind Low		05/22/06			EN
SPECIALTY CONSTRUCTION	3528 CORTE DELFINIO		1521		Building Construction-General Building Contractors	HO	Ind Low					
SPECTRUM MARKETING, LLC	2796 LOKER AVE W STE 100	ACTIVE	2759		Commercial Printing	CO	Ind Med		05/22/06			AH
SPORTS GIANT LLC	5928 FARNSWORTH CT	ACTIVE	5941		Sporting Goods Stores And Bicycle Shops	CO	Ind Low		04/26/06			AH
SQUADRA, INC.	2077 LAS PALMAS DR	ACTIVE	2389		Manufacturing Apparel Accessories	CO	Ind Med		u			EN
STAINED GLASS OVERLAY	2579 STATE ST	ACTIVE	3231		Stained Glass Design	CO	Ind Med		05/22/06			BV
STANDARD FILTER CORPORATION	5928 BALFOUR CT	ACTIVE	3564	3564	Purification & Dust Collection Equipment	CO	Ind Med	Ind Med	08/08/06			AH
STEICO INDUSTRIES INC.	2081 LAS PALMAS DR	ACTIVE	3728	3728	Aircraft Parts and Auxilliary Equipment, NEC	CO	Ind Med	Ind Med	07/24/06			EN
STEROGENE BIOSEPARATIONS, INC.	5922 FARNSWORTH CT	ACTIVE	2836		Biological Research	CO	Ind Med		03/23/06	08/27/03	Reviewed	AH
STREIGHT MOTORCYCLES, INC.	6108 AVENIDA ENCINAS STE A		3751		Motorcycles, Bicycles, And Parts	CO	Ind Med					
SUN PACIFIC DEVELOPMENT, INC.	3900 1/2 GARFIELD ST		1521		Building Construction-General Building Contractors	HO	Ind Low					BV
SUNRISE WHOLESALE	5600 AVENIDA ENCINAS STE 36	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
SURYA INC	6205 EL CAMINO REAL	ACTIVE	5137		Women's Children's, And Infants' Clothing And Acc	CO	Ind Low		05/10/06			EN
SYNERGEYES, INC.	2232 RUTHERFORD RD		3851		Ophthalmic Goods	CO	Ind Med					
SYNERGYEYES (NEW NAME QUARTER LAMBDA TECHNOLOGIES, INC.)	1926 KELLOGG AVE # 100		3851		Ophthalmic Goods	CO	Ind Med					
SYNTRON BIORESEARCH, INC.	2774 LOKER AVE W	ACTIVE	2835	2835	In Vitro & In Vitro Diagnostics	CO	Ind Med	Ind Med	01/31/07			AH
SYSTEMS, MACHINES, AUTOMATION COMPONENTS CO	1695 FARADAY AV	ACTIVE	3599		Indus/Commercial Establishments	CO	Ind Med		05/15/06			AH

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SYSTEMS, MACHINES, AUTOMATION COMPONENTS CO.	5807 VAN ALLEN WAY	ACTIVE	3599		Ind & Comml Machinery & Equip, NEC	CO	Ind Med		05/16/06			AH
T REX CONSTRUCTION	2791 VISTA DEL ORO		1521		Building Construction-General Building Contractors	HO	Ind Low					
TAMARACK POOL CENTER	2399 APPIAN RD	ACTIVE	1799	1799	Swimming Pool Construction & Contractors	HO	Ind Low	Comml High		10/04/06	Reviewed	BV
TAPPER DEVELOPMENT	2551 STATE ST STE 225	ACTIVE	1521	1521	General Contractor	CO	Ind Low	Comml High		10/06/06	Reviewed	AH
TARGET FRAMING INC	390 OAK AV STE E	ACTIVE	1751	1751	Framing Contractor	CO	Ind Low	Ind Low		10/06/06	Reviewed	BV
TAYAMA GREENHOUSES, INC.	5600 AVENIDA ENCINAS STE 6	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
TAYLOR MADE GOLF COMPANY INC	5545 FERMI CT	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	CO	Ind Med	Ind Med	11/09/06			AH
TELEDYNE KW MICROWAVE CORP	1985 PALOMAR OAKS WY	ACTIVE	3674	3674	Semiconductors and Related Devices	CO	Ind Med	Ind Med	07/18/06			EN
THERA LIGHT, INC.	2794 LOKER AVE W STE 105	ACTIVE	3841		Surgical & Med Instr & Apparatus	CO	Ind Med		05/10/06			AH
TIMELY MEDICAL INNOVATIONS LLC.	5365 AVENIDA ENCINAS STE F		3851		Ophthalmic Goods	CO	Ind Med					
TITAN SPRAYBOOTHS AND PRODUCTION SYSTEMS	3612 MILFORD PL	EXCLUDED	1521	1799	Tanning Booth Sales and Installation	HO	Ind Low	Ind Low		01/31/07	Reviewed	AH
TMAX GEAR	2701 LOKER AVE W STE 290	EXCLUDED	5091	5091	Sporting And Recreational Goods & Supplies	CO	Ind Low	Ind Low		01/31/07	Reviewed	AH
TRADE PRINTING SERVICES, LLC	2080 LAS PALMAS DR	ACTIVE	2752		Commercial Printing, Lithographic	CO	Ind Med		05/10/06			EN
TRADE PRODUCTION STUDIOS	5600 AVENIDA ENCINAS STE 37	OUT OF BUSINESS	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Ind Low	Ind Low		04/26/07	Reviewed	AH
TRINITY PRODUCTS, INC.	2258 RUTHERFORD RD # A	EXCLUDED	5137	5137	Women's Children's, And Infants' Clothing And Acc	CO	Ind Low	Ind Low		09/20/06	Reviewed	AH
TRUNK-IT, LLC	5924 BALFOUR CT # 101		4214		Local Trucking With Storage	CO	Ind Med					
TURNER CONSTRUCTION	3197 JAMES DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		09/20/06	Reviewed	BV
TWINS FLOWER GROWER AND SUPPLIES	5600 AVENIDA ENCINAS STE 42	ACTIVE	5193	5193	Wholesale Floral	CO	Ind Low	Comml High	04/26/07			AH
U S POSTAL SERVICE	2772 ROOSEVELT ST	EXCLUDED	4311	4311	United States Postal Service	CO	Ind Low	Ind Low	11/06/02	08/25/06	Reviewed	BV
U-HAUL CO OF CALIFORNIA	6175 PASEO DEL NORTE	ACTIVE	4225		General Warehousing & Storage	CO	Ind Med		05/15/06			EN

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
UNIQUE WHOLESALE FLOWERS, INC.	5600 AVENIDA ENCINAS STE 25	ACTIVE	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Ind Low	Comml High	04/26/07			AH
US LOGIC	2720 LOKER AVE W STE M	ACTIVE	3575	3575	Computer Terminals	CO	Ind Med	Ind Med	06/26/07			AH
US MICROBICS, INC.	6451 C EL CAMINO REAL	ACTIVE	5049		Professional Equipment - Wholesale	CO	Ind Low		01/30/06	02/13/04	Reviewed	BA
VAN HEFLIN GENERAL CONTRACTOR	2932 AVENIDA VALERA		1500		Building Construction-General Building Contractors	HO	Ind Low					
VAN-GO BUILDERS	2175 CHESTNUT AV	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		09/07/06	Reviewed	AH
VANGUARD INDUSTRIES WEST INC	2440 IMPALA DR	ACTIVE	5136		Apparel, Piece Goods, Notions	CO	Ind Low		02/27/06	03/08/04	Reviewed	AH
VASQUEZ FLORAL	5600 AVENIDA ENCINAS STE 21	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	04/26/07			AH
VIASAT INC	6155 EL CAMINO REAL	ACTIVE	8721		Commercial Physical & Biological Research	CO	Ind Low		05/10/06			EN
VIASAT INC	6161 EL CAMINO REAL	ACTIVE	8731		Research, computer Repair	CO	Ind Low		05/10/06			EN
VIASAT INC	6167 EL CAMINO REAL	ACTIVE	3577		Research & Manufacturing	CO	Ind Med		05/10/06			EN
VIASAT, INC	5791 VAN ALLEN WAY	ACTIVE	8731		Research, Develop, + Testing Services	CO	Ind Low		05/10/06			AH
VIASAT, INC.	6183 EL CAMINO REAL BLDG 5		873		Research, Development, And Testing Services	CO	Ind Low					
VIASAT, INC.	6191 EL CAMINO REAL		8731		Research, Development, And Testing Services	CO	Ind Low					
VIKING COMMERICAL CONST.	1825 ASTON AVE		1521		Building Construction-General Building Contractors	CO	Ind Low					AH
VINTAGE STORAGE, INC.	2225 CAMINO VIDA ROBLE # 100	EXCLUDED	4226	4226	Special Warehousing & Storage, NEC	CO	Ind Med	Ind Low	09/13/05	09/19/06	Reviewed	EN
VISION MANUFACTURING INC.	2839 LOKER AVE E	OUT OF BUSINESS	3679	3679	Electronic components, NEC	CO	Ind Med	Ind Med	09/13/05	08/25/06	Reviewed	AH
VISTA BIOLOGICALS CORP	2120 LAS PALMAS DR STE C	ACTIVE	2836		Biological Products, Except Diagnostic Substances	CO	Ind Med		05/10/06			EN
W.O.T. MARINE	4747 MARINA DR APT 14		3732		Boat Building And Repairing	HO	Ind Med					
WAX RESEARCH INC	1965 KELLOGG AVE	ACTIVE	3999		Manufacturer Surf Board Wax	CO	Ind Med		03/06/06			AH

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
WCM WASTE & COMPLIANCE MANAGEMENT	6054 CORTE DEL CEDRO		5047		Medical, Dental, And Hospital Equipment & Supplie	CO	Ind Low					
WEST COAST JET SERVICES, LLC	2016 PALOMAR AIRPORT RD STE E	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	03/08/07			EN
WESTERN FLIGHT, INC.	2208 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airport Services	CO	Ind High	Ind High	03/08/07			EN
WESTERN FLIGHT, INC.	2210 PALOMAR AIRPORT RD # A	ACTIVE	4581	4581	Airport Services	CO	Ind High	Ind High	03/08/07			EN
WESTERN SUMMIT CONSTRUCTION INC	2850 PIO PICO DR # E	Moved	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Ind Low		09/14/06	Reviewed	AH
WITCH CREEK WINERY	2906 CARLSBAD BLVD	ACTIVE	2084		Wines, Brandy & Brandy Spirits	CO	Ind Med		05/03/06			BV
WOODWORKS PLUS	6104 AVENIDA ENCINAS # C/D	ACTIVE	2541		Mfg. Cabinets, Lockers, Shelving	CO	Ind Med		05/01/06			EN
XNERGY	2237 FARADAY AVE # 100	ACTIVE	1541	1541	Clean Room Construction	CO	Ind Low	Ind Low		09/14/06	Reviewed	AH
ZIMMER DENTAL INC.	1900 ASTON AV	ACTIVE	3848		Manufacture Dental Implants	CO	Ind Med		05/22/06			AH
ZIMMER DENTAL INC.	6221 EL CAMINO REAL	ACTIVE	3848		Manufacture Dental Implants	CO	Ind Med		05/22/06			EN

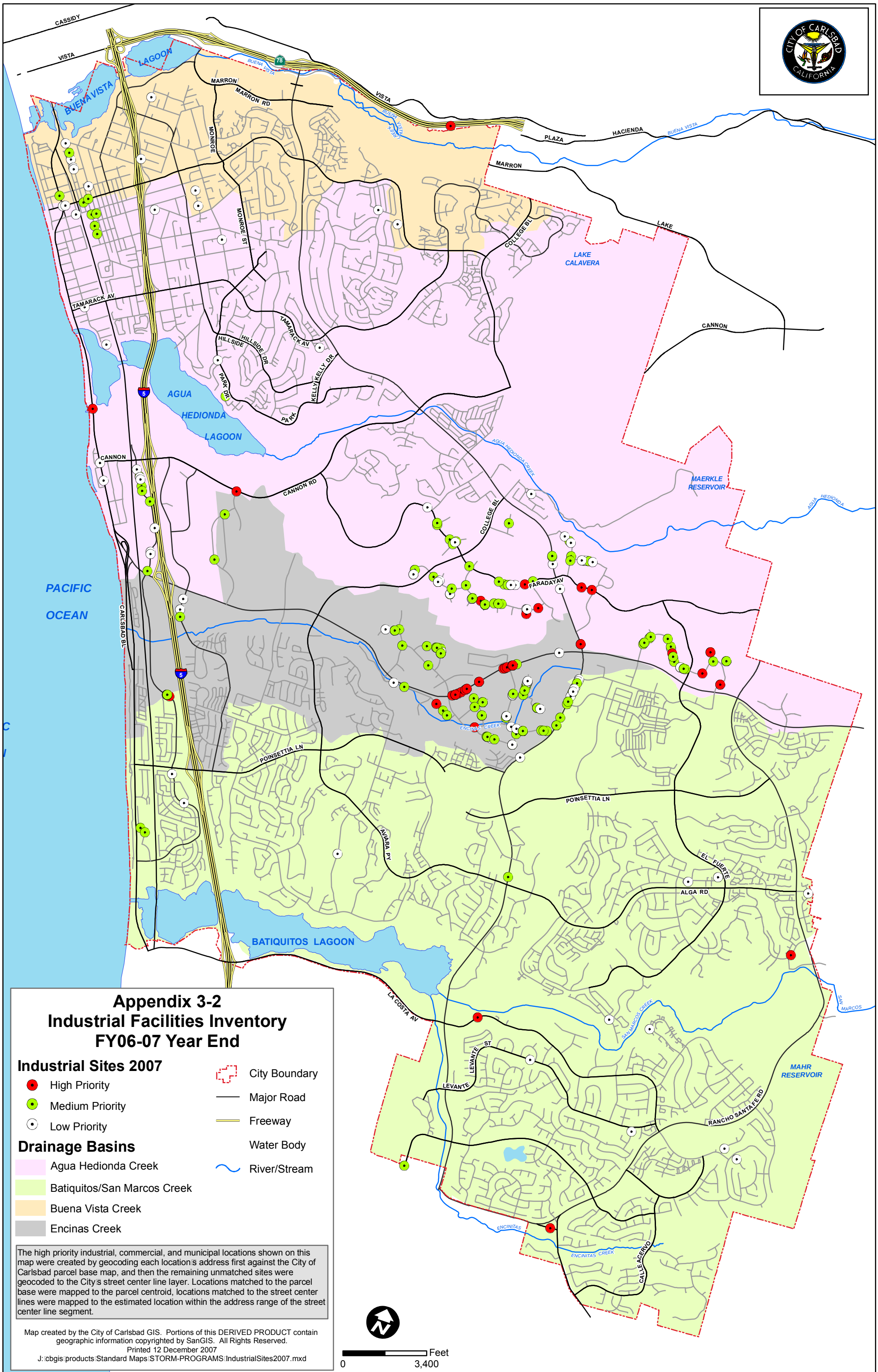
CITY OF CARLSBAD
CALIFORNIA
CASSIDY
VISTA
LAGOON
BUENA VISTA
BUENA VISTA
MARRON
MARRON RD
VISTA
PLAZA
HACIENDA
BUENA VISTA
MARRON
MONROE
MONROE ST
COLLEGE BL
LAKE
LAKE CALAVERA
TAMARACK AV
TAMARACK AV
HILLSIDE
HILLSIDE DR
PARK DR
KELLY
KELLY DR
PARK
CANNON
AGUA HEDIONDA LAGOON
AGUA HEDIONDA CREEK
MAERKLE RESERVOIR
AGUA HEDIONDA
CANNON
CANNON RD
COLLEGE BL
FARADAYAV
PACIFIC OCEAN
CARLSBAD BL
ENCINAS CREEK
POINSETTIA LN
POINSETTIA LN
AVIARA PY
EL FUERTE
ALGA RD
BATIQUITOS LAGOON
LA COSTA AV
SAN MARCOS CREEK
SAN MARCOS
LEVANTE ST
LEVANTE
MAHR RESERVOIR
RANCHO SANTA FE RD
ENCINITAS
ENCINITAS CREEK
CALLE ACERVO
Appendix 3-2
Industrial Facilities Inventory
FY06-07 Year End
Industrial Sites 2007
High Priority
Medium Priority
Low Priority
City Boundary
Major Road
Freeway
Water Body
River/Stream
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
The high priority industrial, commercial, and municipal locations shown on this map were created by geocoding each location's address first against the City of Carlsbad parcel base map, and then the remaining unmatched sites were geocoded to the City's street center line layer. Locations matched to the parcel base were mapped to the parcel centroid, locations matched to the street center lines were mapped to the estimated location within the address range of the street center line segment.
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BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
"JUST LIKE NEW"	961 MELALEUCA AVE APT J		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
24 HOURS CLEANING	695 MAGNOLIA AVE APT A	OUT OF BUSINESS	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		07/28/06	Reviewed	BV
7-ELEVEN	901 PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	07/31/06			EN
7-ELEVEN 32942-A	5802 VAN ALLEN WAY	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	11/28/05	09/08/06	Drive By	AH
A & T LANDSCAPING & TREE TRIMMING COMPANY	2734 CHESTNUT AV	MOVED	0783	0783	Ornamental Shrub And Tree Services	HO	Comml High	Comml High		08/14/06	Phone	AH
A WAY WITH PAINT	1665 AMANTE CT	ACTIVE	1721	1721	Special Trade Contractors	HO	Comml High	Comml High		08/01/06	Reviewed	BA
A.R.M. PAINTING	2687 WATERBURY WAY	ACTIVE	1721	1721	Special Trade Contractors	HO	Comml High	Comml High		08/01/06	Reviewed	BV
A-1 AUTO CARE	3193 TYLER ST # 11	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		01/06/06			AH
A-1 HAMILTON LANDSCAPE MAINTENANCE	3659 TRIESTE DR	ACTIVE	0781	0781	Landscape Counseling and Planning	HO	Comml High	Comml High		06/05/07	Reviewed	BV
A1 QUALITY CARPET CLEANING	3183 JEFFERSON ST APT E	ACTIVE	7217	7217	Carpet Cleaning	HO	Comml High	Comml High		08/01/06	Reviewed	BV
AAPCO	1945 CAMINO VIDA ROBLE, STE E	ACTIVE	1711	1711	Plumbing Contractor	CO	Comml High	Comml High	08/08/06	08/01/05	Reviewed	AH
ABLE AUTO REPAIR & SMOG	665 PALOMAR AIRPORT RD	ACTIVE	7549	7549	Automotive Services, Except Repair And Carwashes	CO	Comml High	Comml High	08/21/06			AH
ABLE AUTO REPAIR & SMOG	665 PALOMAR AIRPORT RD	DUPLICATE	7538	7538	General Automotive Repair Shops	CO	Comml High	Comml High		08/18/06	Reviewed	
ACCENT PAINTING, INC.	7934 LA CAPELA LN	ACTIVE	1721	1721	Painting And Paper Hanging	HO	Comml High	Comml High		01/29/07	Phone	BA
ACES EQUIPMENT LEASING INC	7040 AVENIDA ENCINAS # 104-44		7359		Equipment Rental And Leasing, Not Elsewhere Class	HO	Comml High					
ACTION BUILDING MAINTENANCE/COAST CARPET CLEANING	2408 MAJANO PL	DUPLICATE	7217	7217	Building Cleaning & Maint Svc, NEC	HO	Comml High	Comml High		08/01/06	Reviewed	BA
ADAM'S GARDENS	1775 VALLEY PL	MOVED	0781	7081	Landscape Counseling And Planning	HO	Comml High	Comml High		09/08/06	Phone	BV
A-ECONOMY CONCRETE PUMPING	1702 EVERGREEN CIR	ACTIVE	1771	1771	Concrete Work	HO	Comml High	Comml High		06/05/07	Reviewed	BV
AL MITCHELL'S CLEANING	2945 VALLEY ST	ACTIVE	7217	7217	Carpet And Upholstery Cleaning	HO	Comml High	Comml High		09/08/06	Phone	BV
ALBERTSONS # 6720	7660 EL CAMINO REAL	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	08/23/06			BA
ALBERTSONS #6701	955 CARLSBAD VILLAGE DR	ACTIVE	5411		Supermarkets	CO	Comml High		04/03/06			BV
ALEGRE BLIND COMPANY	6338 HUNTINGTON DR		1700		Construction-Special Trade Contractors	HO	Comml High					
ALEJANDRO'S MEXICAN FOOD	2952 HARDING ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	02/06/07			BV
ALL-BRITE JANITORIAL SUPPLIES	1005 CARLSBAD VILLAGE DR STE D1	ACTIVE	7349	7349	Janitorial and Cleaning Services	CO	Comml High	Comml High	07/26/06	08/02/05	Drive By	BV

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
ALLEN'S NEW YORK PIZZA, INC.	6943 EL CAMINO REAL STE 101	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/01/06			BA
ALLEY, THE	421 GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/10/07			BV
ALLURE LANDSCAPE DESIGN	3316 CABO CT		781		Landscape Counseling And Planning	HO	Comml High					
ALOHA POOL SERVICE & REPAIR	2631 ROOSEVELT ST SPC 14		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
ALOHA POOL SERVICE & REPAIR	5232 LOS ROBLES DR	ACTIVE	7389	7389	Business Services, NEC	HO	Comml High	Comml High		08/29/06	Reviewed	AH
ALOHA POWERWASHING AND PREP	2751 TIBURON AVE		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
AL'S CAFE IN-THE-VILLAGE	795 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/28/06			BV
AM/PM MINI MARKET #5366	1991 PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	08/01/06			EN
AMERICAN ARBOR TREE SERVICE	391 TAMARACK AVE	ACTIVE	0783	0783	Ornamental Shrub & Tree Svc	HO	Comml High	Comml High		08/29/06	Reviewed	AH
AMERICAN WINDOW CLEANING	132 BREAKWATER ST	MOVED	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		08/29/06	Reviewed	EN
ANDERSON'S ORGANIC PHC	2690 KREMEYER CIR APT 4		0783		Ornamental Shrub And Tree Services	HO	Comml High					
ANDING II CONSTRUCTION	3080 LINCOLN ST APT 16	OUT OF BUSINESS	1761	1761	Construction-Special Trade Contractors	HO	Comml High	Comml High		01/31/07	Reviewed	BV
ANDRADE & COMPANY	2123 VUELTA CT	ACTIVE	1700	1721	Painting Contractor	HO	Comml High	Comml High		03/29/07	Phone	BA
ANTBUSTERS	6803 CORINTIA ST	ACTIVE	7342	7342	Disinfecting And Pest Control Services	HO	Comml High	Comml High		01/29/07	Reviewed	BA
ANTOLS NORTH COUNTY MASONRY	3429 DON COTA DR	ACTIVE	1741	1741	Masonry Contractor	HO	Comml High	Comml High		08/29/06	Reviewed	AH
AQUA MOBILE DETAIL	5154 SHORE DR	ACTIVE	7542	7542	Carwashes	HO	Comml High	Comml High		01/31/07	Phone	AH
AQUA-FRESH POOL SERVICE	2081 LEE CT	ACTIVE	7389	7389	Business Services, NEC	HO	Comml High	Comml High		08/29/06	Reviewed	AH
AQUAMAN AQUARIUM SERVICES	3506 HASTINGS DR	EXCLUDED	7389	7389	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		08/29/06	Reviewed	AH
AQUARIAN POOL SERVICE	1775 VALLEY PL	ACTIVE	7389	7389	Business Services, NEC	HO	Comml High	Comml High		09/08/06	Phone	BV
AQUATIC QUALITY ASSURANCE	2185 FARADAY AVE, SUITE 130	ACTIVE	7389	7389	Business Services	CO	Comml High	Comml High	02/27/06	03/30/07	Reviewed	AH
ARAMARK SERVICE / TAYLOR-MADE	5545 FERMI CT		5812		Eating Places	CO	Comml High					
ARCADE, THE	2965 ROOSEVELT ST	ACTIVE	6512		Commercial Shopping Center	CO	Comml High		05/18/06			BV
ARMENIAN CAFÉ, THE	3126 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/07/07			AH
ARMSTRONG GARDEN CENTERS,INC.	5702 PASEO DEL NORTE	ACTIVE	5261		Retail Nurseries, Lawn & Garden Sup Stores	CO	Comml High		12/02/05			AH
ARNOLD'S LANDSCAPE	3610 KINGSTON ST	ACTIVE	0781	0781	Landscape Counseling and Planning	HO	Comml High	Comml High		08/29/06	Reviewed	BV

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ARTHUR A BROWN PLUMBING COMPANY	2697 STATE ST	ACTIVE	1711	1711	Plumbing Contractor	CO	Comml High	Comml High	08/23/06	04/13/06	Drive By	BV
ATLANTIS POOL SERVICE	4023 CRESCENT POINT RD	ACTIVE	7389	7389	Pool Service	HO	Comml High	Comml High		09/11/06	Reviewed	AH
ATTAWAY POOLS	2622 ROOSEVELT ST	ACTIVE	7389	7389	Pool Contractor, Maintenance	HO	Comml High	Comml High		03/30/07	Phone	BA
AUTOMOTIVE SOLUTIONS	945 TAMARACK AVE	ACTIVE	7549		Automotive Services, Except Repair And Carwashes	CO	Comml High		04/05/06			AH
AVIS RENT A CAR	2198 PALOMAR AIRPORT RD	ACTIVE	7514	7514	Rental Car Agency	CO	Comml High	Comml High	03/08/07			EN
B & G TREE SERVICE	1235 STRATFORD LN	ACTIVE	0781	0781	Landscaper	HO	Comml High	Comml High		09/11/06	Phone	BV
BAN'S CLEANERS	981 TAMARACK AV	ACTIVE	7216	7216	Dry Cleaning Plant	CO	Comml High	Comml High	08/01/06	08/23/05	Reviewed	AH
BARBOUR NATURAL STONE & TILE, INC.	5055 AVENIDA ENCINAS STE 240	ACTIVE	1743		Tile and Stone Work	CO	Comml High		04/04/06	06/15/05	Reviewed	AH
BARRETT LANDSCAPE AND MAINTENANCE	6480 CORTE LA LUZ	ACTIVE	0782	0782	Lawn And Garden Services	HO	Comml High	Comml High		01/29/07	Phone	BA
BASELINE TENNIS COURTS AND SUPPLIES	3218 AZAHAR PL		1799		Special Trade Contractors, Nec	HO	Comml High					
BELLEFLEUR CARLSBAD LLC	5610 PASEO DEL NORTE STE 100	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/22/06			AH
BENCHMARK STONEWORKS,INC.	5661 PALMER WY SUITE D		1743		Terrazzo, Tile, Marble, Mosaic Work	CO	Comml High					
BENIHANA	755 RAINTREE DR STE 100	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	04/25/07			AH
BEST TERIYAKI	1818 MARRON RD # 104		5812		Eating Places	CO	Comml High					
BIG FISH MOTORSPORTS	6060 AVENIDA ENCINAS		7538		Motor Vehicle Parts And Accessories	CO	Comml High					
BLACK FOREST DETAIL	7759 CALLE MEJOR	ACTIVE	7542	7542	Mobile Car Wash	HO	Comml High	Comml High		03/30/07	Reviewed	BA
BLODGETT PAINTING	1706 EVERGREEN CIR	OUT OF BUSINESS	1721	1721	Painting Contractor	HO	Comml High	Comml High		09/12/06	Phone	AH
BLUE IMAGE LANDSCAPING	635 CHESTNUT AVE	OUT OF BUSINESS	0781	781	Landscape Counseling And Planning	HO	Comml High	Comml High		06/11/07	Reviewed	BV
BLUE LAGOON POOL SERVICE	2665 LEVANTE ST		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
BLUMELS SUNSET LANDSCAPING	3039 JEFFERSON ST STE D	OUT OF BUSINESS	0781	0781	Landscaping	COR	Comml High	Comml High		10/23/06	Phone	BV
BLW ROOFING	3306 AZAHAR PL	ACTIVE	1761	1761	Roofing Contractor	HO	Comml High	Comml High		01/29/07	Reviewed	BA
BOAR CROSSn	390 GRAND AVE	ACTIVE	5813	5813	Drinking Places (Alcoholic Beverages)	CO	Comml High	Comml High	08/28/06			BV
BOB BAKER CHRYSLER JEEP	5555 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		03/07/06			AH
BOB BAKER MITSUBISHI	5515 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		03/06/06			AH

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
BOB BAKER VOLKSWAGEN/SUBARU	5500 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		05/30/06			AH
BOBBY'S HIDEAWAY CAFE	4901 EL CAMINO REAL STE F	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/01/06			AH
BOSTON MARKET # 637	2606 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/01/06			BV
BOTANICA LANDSCAPE DESIGN	6225 CITRACADO CIR		781		Landscape Counseling And Planning	HO	Comml High					
BOURRET INTERIORS, INC.	1950 KELLOGG AVE		1521		Building Construction-General Building Contractors	CO	Comml High					
BOVENZI CONSTRUCTION INC	343 OAK AVE		1521		Building Construction-General Building Contractors	HO	Comml High					
BOYS & GIRLS CLUB OF CARLSBAD	3115 ROOSEVELT ST	ACTIVE	7997	7997	Membership Sports and Recreation Clubs	CO	Comml High	Comml High	09/11/06			BV
BRIGHTON GARDENS OF CARLSBAD	3140 EL CAMINO RL	ACTIVE	8059		Nursing Home	CO	Comml High		03/28/06			BV
BROOKHART CONCRETE, INC.	2911 STATE ST STE P	ACTIVE	1731	1731	Concrete Contractor	CO	Comml High	Comml High		09/12/06	Reviewed	BV
BRUEGGER'S BAGELS	7680 EL CAMINO REAL # 102	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	05/02/07	05/09/05	Phone	BA
BUCA DI BEPPO	1921 CALLE BARCELONA	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	03/22/07			BA
BUDGET RENT A CAR	850 PALOMAR AIRPORT RD	ACTIVE	7514	7514	Passenger Car Rental	CO	Comml High	Comml High	11/08/06			EN
BURGER KING/POPEYES #37051	2525 EL CAMINO REAL STE 108	OUT OF BUSINESS	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	09/15/05	11/02/06	Reviewed	BV
BURTON'S CARPET CARE	6417 TOBRIA TR #201	ACTIVE	7217	7217	Carpet Cleaning	CO	Comml High	Comml High		03/30/07	Phone	BA
C & C INSTALLATIONS, INC.	810 WINDCREST DR	EXCLUDED	1752	1752	Floor Laying And Floor Work, Not Elsewhere Classi	HO	Comml High	Comml Low		03/30/07	Reviewed	BA
C & C STEAMWAY	2735 WOODWIND RD	ACTIVE	7217	7217	Carpet Cleaning	HO	Comml High	Comml High		01/29/07	Reviewed	AH
CAFÉ ELYSA	3076 CARLSBAD BL	ACTIVE	5812	5812	Eating and Drinking Places	CO	Comml High	Comml High	08/28/06			BV
CALDO POMODORO	2907 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/28/06			BV
CALIBER COLLISION CENTERS	6050 AVENIDA ENCINAS	ACTIVE	7532		Top, Body, Upholstery Repair, Paint	CO	Comml High		04/04/06			EN
CALIFORNIA FABWORKS	2101 LAS PALMAS DR STE G	ACTIVE	7532	7532	Top, Body, Upholstery Repair, Paint	CO	Comml High	Comml High	07/24/06			EN
CALLAWAY GOLF COMPANY	5860 DRYDEN PL	ACTIVE	7999	7999	Amusement & Recreaton Services	CO	Comml High	Comml High	12/11/06			AH
CALPACIFIC POOL AND SPA	4145 HARBOR DR	ACTIVE	7389	7389	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		01/29/07	Reviewed	AH
CAMPUS CAFE	5966 LA PLACE CT STE 150	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/28/06			AH
CAP'S MOBILE SMALL ENGINE REPAIR	3580 TRIESTE DR	ACTIVE	7699	7699	Repair Shops and Related Services, NEC	HO	Comml High	Comml High		10/24/06	Reviewed	AH
CARLS JR	2608 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/29/06			BV

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
CARLS JR	5808 VAN ALLEN WAY # 110	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/02/07			AH
CARLS JR #117	950 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	02/06/07			BV
CARLS JR.	925 PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/28/06			EN
CARLSBAD AQUAFARM INC.	4600 CARLSBAD BLVD	ACTIVE	0182		Food Crops Grown Undercover	CO	Comml High		04/19/06			AH
CARLSBAD AUTO PARTS	3197 TYLER ST	ACTIVE	5531	5531	Auto & Home Supply Stores	CO	Comml High	Comml High	04/26/07			AH
CARLSBAD AUTO SERVICE.	3181 TYLER ST	ACTIVE	7538	7538	General Automotive Repair Shops	CO	Comml High	Comml High	04/26/07			AH
CARLSBAD AUTO TECHNOLOGY	2730 STATE ST	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		01/05/06			BV
CARLSBAD BY THE SEA	2855 CARLSBAD BLVD	ACTIVE	6513		Operators of Apartment Bldgs	CO	Comml High		08/05/05			BV
CARLSBAD CARPET CLEANING COMPANY	936 DAISY AVE	ACTIVE	7217	7217	Carpet & Upholstery Cleaning	HO	Comml High	Comml High		03/30/07	Reviewed	BA
CARLSBAD CHEVRON	1044 CARLSBAD VILLAGE DR	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		01/06/06			BV
CARLSBAD COLLISION CARE	2598 STATE ST	ACTIVE	7532		Auto body Repair and Paint Shop	CO	Comml High		05/15/06			BV
CARLSBAD DANISH BAKERY	2805 ROOSEVELT ST	ACTIVE	5461	5461	Retail Bakeries	CO	Comml High	Comml High	08/28/06			BV
CARLSBAD EXCLUSIVE AUTOMOTIVE	1060 AUTO CENTER CT # DEF		7538		General Automotive Repair Shops	CO	Comml High					
CARLSBAD FRENCH PASTRY CAFE	1005 CARLSBAD VILLAGE DR # B/C	ACTIVE	5461	5461	Retail Bakeries	CO	Comml High	Comml High	08/30/06			BV
CARLSBAD GAS & PROPANE	1089 CARLSBAD VILLAGE DR	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		04/05/06			BV
CARLSBAD GOLF CENTER	2711 HAYMAR DR	ACTIVE	7999	7999	Amusement & Recreation Svcs, NEC	CO	Comml High	Comml High	11/02/06			BV
CARLSBAD HYUNDAI	5285 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		03/14/05			AH
CARLSBAD JAGUAR	2725 STATE ST	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		05/03/06			BV
CARLSBAD LANDSCAPE CONSTRUCTION INC	2777 WILSON STREET	ACTIVE	1700	1799	Landscape Construction	HO	Comml High	Comml High		01/29/07	Reviewed	BA
CARLSBAD MUFFLER & BRAKES	1060 AUTO CENTER CT STE L	ACTIVE	7533		Automotive Exhaust System Repair Shops	CO	Comml High		12/08/05			AH
CARLSBAD PLAZA	2508 EL CAMINO REAL	ACTIVE	6512		Operators of Nonresidential Buildings	CO	Comml High		06/23/05			BV
CARLSBAD PREMIUM OUTLETS	5620 PASEO DEL NORTE, STE 100	ACTIVE	6512	6512	Operators of Nonresidential Buildings	CO	Comml High	Comml High	08/22/06			AH

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CARLSBAD RANCH MARKET	6118 PASEO DEL NORTE # D-F	ACTIVE	5431	5431	Fruit and Vegetable Markets	CO	Comml High	Comml High	03/20/07			EN
CARLSBAD SELF-SVC CAR WASH INC	2608 STATE ST	ACTIVE	7542	7542	Carwashes	CO	Comml High	Comml High	08/23/06			BV
CARLSBAD TOWING	3181 ROOSEVELT ST	ACTIVE	7549		Towing Service	CO	Comml High		11/29/04	06/23/06	Reviewed	BV
CARLSBAD VILLAGE AUTO BODY & PAINT	3191 TYLER ST	ACTIVE	7532		Top, Body, Upholstery Repair, Paint	CO	Comml High		01/06/06			AH
CARLSBAD VILLAGE INDEPENDENT MERCEDES AND VOLVO SERVICE INC	3045 ROOSEVELT ST	ACTIVE	7538			COR	Comml High		01/06/06			BV
CARLSBAD VILLAGE SHELL	1145 CARLSBAD VILLAGE DR	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	06/27/07			BV
CARLSBAD VOLVO	6830 AVENIDA ENCINAS	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		05/15/06			EN
CARTER'S HAY AND GRAIN	1985 OLIVENHAIN RD	ACTIVE	5191	5191	Farm Supplies - Feed and Grain	CO	Comml High	Comml High	10/07/06			BA
CAVALLO MOTOR SPORTS	6010 AVENIDA ENCINAS		7538		General Automotive Repair Shops	CO	Comml High					
CESSY'S TACO SHOP	3016 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/07/07			AH
CHAMPION TERMITE	5245 AVENIDA ENCINAS STE E	ACTIVE	7342		Disinfecting And Pest Control Services	CO	Comml High			04/27/06	Phone	AH
CHARLES T FARM	3008 SUNNY CREEK RD	ACTIVE	0161		Flowers, Nursery Stock, And Florists' Supplies	CO	Comml High		06/10/04	02/06/06	Reviewed	AH
CHARO CHICKEN	7680 EL CAMINO REAL # 103	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	05/02/07			BA
CHEVRON #46	850 PALOMAR AIRPORT RD	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		04/03/06			EN
CHEVRON USA INC #93320	970 TAMARACK AVE	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		04/03/06			AH
CHINA GATE	2525 EL CAMINO RL STE 142	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/02/06			BV
CHIN'S SZECHWAN RESTAURANT	2958 MADISON ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/18/07			BV
CHLORA CLEAR	3504 WOODLAND WAY	OUT OF BUSINESS	7389	7389	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		07/27/06	Reviewed	AH
CHUCKS PLUMBING	3800 WESTHAVEN DR	ACTIVE	1711	1711	Plumbing Contractor	HO	Comml High	Comml High		03/30/07	Reviewed	AH
CHUCK'S TIRE CENTER	6060 AVENIDA ENCINAS STE A	ACTIVE	5531		Auto & Home Supply Stores	CO	Comml High		04/26/06			EN
CILANTRO LIVE	300 CARLSBAD VILLAGE DR STE 106	ACTIVE	5812	5812	Eating Places	COR	Comml High	Comml High	08/30/06			BV
CIRCLE K DBA CARLSBAD FUELS CORP	7602 EL CAMINO REAL	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		08/31/05			BA
CLAIM JUMPER RESTAURANT, 9LTD	5958 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/28/06			AH
CLEAN IMAGE POWER WASH	4129 ADAMS ST	ACTIVE	7349	7349	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		10/24/06	Reviewed	AH

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CLEAR WATER POOL SERVICE	920 POPPY LN	OUT OF BUSINESS	7389	7389	Pool Maintenance	HO	Comml High	Comml High		10/24/06	Phone	BA
CLYD'S SEPTIC TANK SERVICE	7248 PONTO RD	ACTIVE	7699	7699	Septic Tank Cleaning and Pumping	CO	Comml High	Comml High	03/20/07			BA
COAST HOME HOME & GARDEN	1365 TAMARACK AVE		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
COAST POWER WASH	4313 SEA BRIGHT DR	OUT OF BUSINESS	7389	7389	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		03/30/07	Reviewed	AH
COASTAL PLUMBING	4882 HILLSIDE DR	ACTIVE	1711	1711	General Plumbing Constractor	HO	Comml High	Comml High		01/29/07	Reviewed	AH
COLD STONE CREAMERY	2967 CARLSBAD BLVD	ACTIVE	5451	5451	Retail Ice Cream Sales	CO	Comml High	Comml High	06/27/07	07/27/04	Reviewed	AH
COLONIAL PAINTING	2520 NAVARRA DR UNIT F	ACTIVE	1721	1721	Construction-Special Trade Contractors	HO	Comml High	Comml High		03/30/07	Phone	BA
CONCRETE JUNGLE CUTTING & CORING	4509 ADAMS ST # B	ACTIVE	1771	1771	Concrete Cutting & Coring	HO	Comml High	Comml High		10/24/06	Reviewed	AH
CORNERSTONE LANDSCAPE MAINTENANCE	4338 STANFORD ST	OUT OF BUSINESS	0782	0782	Lawn And Garden Services	HO	Comml High	Comml High		10/04/06	Phone	BV
CORSO CONSTRUCTION	4924 PARK DR		1521		Building Construction-General Building Contractors	HO	Comml High					
COSTCO WHOLESALE	951 PALOMAR AIRPORT RD	ACTIVE	5399	5399	Miscellaneous General Merchandise Stores	CO	Comml High	Comml High	11/02/06			EN
COYOTE BAR & GRILL	300 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/30/06			BV
CRAZY BURRO DINING CANTINA	6996 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/17/06			BA
CROSSROAD PETROLEUM (ARCO AM/PM)	810 TAMARACK AVE	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		04/03/06			AH
CROUTONS	5814 VAN ALLEN WAY # 140	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	05/02/07			AH
CRYSTAL RAIN POOL SERVICES	2894 WOODRIDGE CIR	ACTIVE	7389	7389	Swimming Pool Maintenance	HO	Comml High	Comml High		10/24/06	Reviewed	BV
CUSTOM HOME PAINTING	2138 TWAIN AVE	ACTIVE	1721	1721	Special Trade Contractors	HO	Comml High	Comml High		10/25/06	Reviewed	BV
D & H ENTERPRISES	7213 PLAZA DE LA COSTA		1521		Building Construction-General Building Contractors	HO	Comml High					
D M BUILDING	1825 MCCAULEY LN		1521		Building Construction-General Building Contractors	HO	Comml High					
DAG BUILDERS INC	1535 SUNRISE CIR		1521		Building Construction-General Building Contractors	HO	Comml High					
DAILY NEWS CAFE, THE	3001 CARLSBAD BLVD STE A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/28/06			AH
DANIEL C. SOTO CEMENT CONTRACTOR	2515 CHESTNUT AVE	OUT OF BUSINESS	1771	1771	Cement Contractor	HO	Comml High	Comml High		08/14/06	Phone	AH
DANKY'S, LLC	5806 VAN ALLEN WAY STE 100	OUT OF BUSINESS	5812	5812	Eating Places	CO	Comml High	Comml High	03/23/06	11/07/06	Drive By	AH

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DAPHNE'S GREEK CAFE	6981 EL CAMINO REAL STE 101	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	11/17/06			BA
DARIO'S MEDITERANEAN CUISINE	2508 EL CAMINO REAL STE E		5812		Eating Places	CO	Comml High					
DAVE'S RADIATOR SERVICE	3235 ROOSEVELT ST	OUT OF BUSINESS	7538	7538	General Automotive Repair Shops	CO	Comml High	Comml High	10/12/05	07/28/06	Drive By	AH
DAVID PARKER LANDSCAPE	3614 CONTOUR PL	OUT OF BUSINESS	0781	0781	Landscaping	HO	Comml High	Comml High		07/28/06	Reviewed	AH
DEAN PORTER CONSTRUCTION	3750 MONROE ST		1521		Building Construction-General Building Contractors	HO	Comml High					
DEGREGORIO SERVICE & REPAIR	2706 EL RASTRO LN	ACTIVE	7349	7349	Building Cleaning & Maint Svc, NEC	HO	Comml High	Comml High		07/28/06	Reviewed	BA
DELI WISHES	5365 AVENIDA ENCINAS STE B	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	04/19/07			AH
DENNY'S # 7517	1048 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/10/07			BV
DINI'S BY THE SEA	3290 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/19/06			AH
DISCOUNT CARPET & UPHOLSTERY	2408 MAJANO PL	ACTIVE	7217	7217	Carpet & Upholstery	HO	Comml High	Comml High		02/05/07	Reviewed	BA
DISCOUNT DRAIN	3856 WOODVALE DR	OUT OF BUSINESS	1711	1711	Construction Specialist - Plumbing	HO	Comml High	Comml High		01/26/06	Reviewed	AH
DOMINGO GARDENERS	7019 VIA CALIFIA	OUT OF BUSINESS	0782	782	Lawn And Garden Services	HO	Comml High	Comml High		06/11/07	Reviewed	BA
DON'S COUNTRY KITCHEN	2885 ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/08/06			BV
DONUT FAIR, THE	2540 EL CAMINO REAL STE C	ACTIVE	5461		Retail Bakeries	CO	Comml High		03/13/06			BV
DRAGMASTER INC.	2725 STATE ST	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		03/21/06			BV
DRAIN RUNNER	830 CITRUS PL		1711		Construction-Special Trade Contractors	HO	Comml High					
DRD CONCRETE PUMPING	3642 CHESHIRE AVE	MOVED	1771	1771	Concrete Pumping	HO	Comml High	Comml High		07/28/06	Reviewed	BV
DREAM POOLS AND SPAS	3607 BARRANCA CT		1700		Construction-Special Trade Contractors	HO	Comml High					
DREAMSCAPE CONCRETE AND DESIGN	2965 VALLEY ST	OUT OF BUSINESS	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		03/30/07	Reviewed	AH
DREAMSCAPE CONCRETE AND DESIGN	2965 VALLEY ST	DUPLICATE	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		08/25/06	Reviewed	
DRUM PLUMBING, INC.	5631 PALMER WAY STE B	MOVED	1711	1711	Pluming	CO	Comml High	Comml High		07/28/06	Reviewed	AH
DRYCLEAN AMERICA.NET	2708 LOKER AVE W STE 105	ACTIVE	7216	7216	Drycleaning Plants, Except Rug Cleaning	CO	Comml High	Comml High	01/31/07			AH

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DUNN-EDWARDS PAINTS	2840 LOKER AVE E		5231		Paint, Glass, And Wallpaper Stores	CO	Comml High					
DWAMEL INC.	1060 AUTO CENTER CT		7538		General Automotive Repair Shops	CO	Comml High					
EDWARD SHEDLEY MASONRY	2445 SIERRA MORENA AVE	ACTIVE	1741	1741	Special Trade Contractors	HO	Comml High	Comml High		07/28/06	Reviewed	AH
EL CAMINO RENTAL	5701 EL CAMINO REAL	ACTIVE	7359		Equipment Rental & Leasing, NEC	CO	Comml High		04/26/06			AH
EL CARIBE	6965 EL CAMINO REAL STE 205	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/17/06			BA
EL POLLO LOCO #3423	7120 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	04/19/07			BA
EL PUERTO MEXICAN & SEAFOOD	1065 CARLSBAD VILLAGE DR STE D		5812		Eating Places	COR	Comml High					BV
EL RINCON GARDEN CARE	3480 MONROE ST APT B	ACTIVE	0781	0781	Landscape Counseling And Planning	HO	Comml High	Comml High		06/11/07	Phone	BV
EL TORITO MARKET	3163 ROOSEVELT ST	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	12/19/06			BV
ELITE GLASS & WINDOWS, INC.	1207 CARLSBAD VILLAGE DR STE F		1793		Glass And Glazing Work	CO	Comml High					
ELYS PLACE (CALLAWAY GOLF)	5928 PASCAL CT	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/11/06			AH
EM MORALES CONSTRUCTION	7554 CIRCULO SEQUOIA	OUT OF BUSINESS	1741	1741	Masonry Stone Setting, & Other Stone Work	HO	Comml High	Comml High		03/30/07	Phone	BA
EMPIRE PIPELINE	1945 CAMINO VIDA ROBLE STE E		1700		Construction-Special Trade Contractors	CO	Comml High					
ENCINAS BUSINESS PARK/MCWIN CORP	6102 AVENIDA ENCINAS STE B	ACTIVE	6512		Operators of Nonresidential Buildings	CO	Comml High		05/01/06			EN
ENLIGHTENED VIEWS WINDOW CLEANING	1435 YOURELL AVE	OUT OF BUSINESS	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		03/30/07	Reviewed	AH
ENTERPRISE RENT A CAR L.A. #3246	1060 AUTO CENTER CT STE M	ACTIVE	7514		Passenger Car Rental	CO	Comml High		05/03/06			AH
ERIC PAGE PLUMBING	2833 FOREST VIEW WAY	ACTIVE	1711	1711	Special Trade Contractors	HO	Comml High	Comml High		07/28/06	Reviewed	BV
EXCELLENCE IN PAINTING	2781 BERKELEY AVE	ACTIVE	1721	1721	Construction Specialist - Painting	HO	Comml High	Comml High		07/28/06	Reviewed	AH
EXCLUSIVE DESIGN HOME IMPROVEMENT	2911 STATE ST STE C		1521		Construction-Special Trade Contractors	COR	Comml High					
EXPRESS AUTO CENTER	2676 STATE ST # A	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		03/28/06			BV
FACTORY AUTHORIZED AUTOMOTIVE SERVICES	7030 VIA CALAFIA	ACTIVE	7538	7538	General Automotive Repair Shops	HO	Comml High	Comml High		08/01/06	Phone	BA
FELIX A. LANDSCAPING	7782 PALENQUE ST	ACTIVE	0781	0781	Landscape Counseling And Planning	HO	Comml High	Comml High		03/30/07	Reviewed	AH

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FIDELS NORTE INC	3003 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/19/06			AH
FINNEGAN'S PUB & GRILL	1814 MARRON RD		5812		Eating Places	CO	Comml High					
FINNEGAN'S PUB & GRILL	1814 MARRON RD	DUPLICATE	5813	5813	Drinking Places (Alcoholic Beverages)	CO	Comml High	Comml High		12/16/06	Reviewed	
FIRESTONE TIRES & SERVICE CENTER	2545 EL CAMINO REAL	ACTIVE	5531		Auto and Home Supply Stores	CO	Comml High		10/21/05			BV
FISH HOUSE VERA CRUZ	417 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	01/02/07			AH
FLORAL TRADE CENTER RESTAURANT	5600 AVENIDA ENCINAS STE 110	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	04/26/07			AH
FLOWER FIELD, THE	5702 PASEO DEL NORTE	ACTIVE	0181		Ornamental Floriculture	CO	Comml High		12/02/05			AH
FOCUSED AUTO DETAILING	3660 CATALINA DR	MOVED	7542	7542	Carwashes	HO	Comml High	Comml High		07/28/06	Reviewed	BV
FOUR SEASONS AVIARA GOLF CLUB	7447 BATIQUITOS DR	ACTIVE	7997		Golf Club	CO	Comml High		12/15/05			BA
FOUR SEASONS GOLF MAINT FACILITY	7227 AVIARA DR	ACTIVE	7997		Golf Course and Resort	CO	Comml High		12/15/05			BA
FOUR SEASONS RESORT AVIARA	7100 FOUR SEASONS PT	ACTIVE	7011		Hotels and Motels	CO	Comml High		12/15/05			BA
FREIDIN LANDSCAPING AND DESIGN	3160 LINCOLN ST APT 16		1700		Construction Special	HO	Comml High					
FRESCO TRATTORIA	3263 CAMINO DE LOS COCHES # 105		5812		Eating Places	CO	Comml High					BA
FRESCO TRATTORIA & BAR	264 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/10/07			BV
GARCIAS MEXICAN RESTAURANT	2968 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/19/06			BV
GARDEN GAL, THE	6617 VIREO CT	ACTIVE	0781	0781	Landscape Counseling And Planning	HO	Comml High	Comml High		06/11/07	Reviewed	BA
GARDEN STATE BAGELS	5620 PASEO DEL NORTE STE 125	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/22/06			AH
GARY TEAM PAINTING INC.	3890 HIGHLAND DR	ACTIVE	1721	1721	Special Trade Contractors	HO	Comml High	Comml High	07/26/05	07/28/06	Reviewed	AH
GASCO GASOLINE	920 CARLSBAD VILLAGE DR	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		04/03/06			BV
GEORGIOS GREEK BURRITO WRAP	7720 EL CAMINO REAL STE F	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	02/26/07			BA
GERRARD CONSTRUCTION	3751 PARK DR	MOVED	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		03/30/07	Reviewed	AH
GET N' GO DONUTS	6986 EL CAMINO REAL STE E	ACTIVE	5461	5461	Retail Bakeries	CO	Comml High	Comml High	02/26/07			BA
GOLDEN TAIPEI RESTAURANT	1854 MARRON RD # M104	OUT OF BUSINESS	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/02/05	11/30/06	Drive By	BV
GOMEZ PLBG, GERARDO	4765 GATESHEAD RD	ACTIVE	1711	1711	Plumbing Contractor	HO	Comml High	Comml High		03/30/07	Reviewed	AH
GORILLA EQUIPMENT RENTALS	505 OAK AVE	ACTIVE	7359		Equipment Rental & Leasing, NEC	COR	Comml High		03/06/06			AH
GORSZWICK, JOE & TESE	4245 CLEARVIEW DR	OUT OF BUSINESS	0181	0181	Food Crops Grown Undercover	HO	Comml High	Comml High		03/30/07	Phone	AH
GOURMET SUSHI	5814 VAN ALLEN WAY # 135	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	05/02/07			AH

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
GRAND AVENUE BAR & GRILL	752 GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/05/06			BV
GRAND DELI, THE	595 GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/19/06			BV
GRAND PACIFIC PALISADES RESORT	5805 ARMADA DR	ACTIVE	7011	7011	Hotels and Motels	CO	Comml High	Comml High	08/21/06			AH
GREAT KHANS MONGOLIAN FESTIVAL	2525 EL CAMINO REAL STE 236	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/03/06			BV
GREEK CORNER CAFE	1854 MARRON RD # 100	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/14/06			BV
GREEK VILLAGE L.L.C.	6030 PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/20/07			EN
GREEN LAND COMPANY	6367 HUNTINGTON DR	ACTIVE	0782	0782	Landscape Construction	HO	Comml High	Comml High		07/28/06	Reviewed	EN
GREGG'S MOBILE REPAIR	5233 SHELLEY PL	ACTIVE	7699	7699	Repair Shops and Related Services, NEC	HO	Comml High	Comml High		07/28/06	Reviewed	AH
GREGORIOS	300 CARLSBAD VILLAGE DR STE 208	ACTIVE	5812	5812	Eating Places	COR	Comml High	Comml High	08/30/06			AH
GRUBER CONSTRUCTION	2412 LA TINADA CT	ACTIVE	7349	1521	General Contractor	HO	Comml High	Comml High		03/30/07	Phone	BA
GS DREAMSCAPING	1370 PINE AVE	ACTIVE	0782	0782	Landscape Contractor	HO	Comml High	Comml High		07/28/06	Reviewed	AH
HARBOR FISH CAFE	3179 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/07/07			AH
HART CONCRETE CONSTRUCTION	4016 GARFIELD ST	ACTIVE	1771	1771	Concrete Work	HO	Comml High	Comml High		06/11/07	Reviewed	AH
HAYS CONSTRUCTION	1675 BASSWOOD AVE		1521		Building Construction-General Building Contractors	HO	Comml High					
HEAVENLY VIEWS WINDOW CLEANING	3221 CARINGA WAY # 37		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
HENDRIX PLUMBING	470 CHINQUAPIN AVE	ACTIVE	1711	1711	Plumbing Contractor	HO	Comml High	Comml High		06/11/07	Reviewed	AH
HENNESSEY'S TAVERN	2777 ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/13/07			BV
HERTZ CORPORATION, THE	5555 PASEO DEL NORTE	ACTIVE	7514		Passenger Car Rental	CO	Comml High		05/25/06			AH
HIGH PERFORMANCE DETAIL	6451 EL CAMINO REAL # A		7542		Carwashes	CO	Comml High					
HILLS LANDSCAPING	4264 SKYLINE RD	ACTIVE	0782	0782	Lawn and Garden Services	HO	Comml High	Comml High		07/28/06	Reviewed	AH
HINTZ CONSTRUCTION	2535 NAVARRA DR UNIT 8B	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		06/11/07	Reviewed	BA
HI-Q PAINTING COMPANY	2916 LUCIERNAGA ST APT B	ACTIVE	1799	1799	Special Trade Contractors	HO	Comml High	Comml High		01/30/07	Reviewed	BA
HOEHN ACURA	5556 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		05/03/06			AH
HOEHN AUDI	5215 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		05/03/06			AH
HOEHN HONDA	5454 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		03/23/06			AH
HOEHN INFINITI	5245 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		03/23/06			AH
HOEHN MAZDA	5566 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		03/23/06			AH

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HOEHN MERCEDES	5475 CAR COUNTRY DR	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	CO	Comml High	Comml High	11/08/06			AH
HOEHN PORSCHE	6800 AVENIDA ENCINAS	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		04/26/06			BA
HOFFMANS CLASSIC CONST	4310 HORIZON DR		1521		Building Construction-General Building Contractors	HO	Comml High					
HOLIDAY INN CARLSBAD	850 PALOMAR AIRPORT RD	ACTIVE	7011	7011	Hotels and Motels	CO	Comml High	Comml High	01/08/06			AH
HOLLAND FLOWER MARKET	5600 AVENIDA ENCINAS STE 32	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	04/26/07			AH
HONEST 1 AUTO CARE	3235 ROOSEVELT ST		7538		General Automotive Repair Shops	COR	Comml High					
HOPKINS CONSTRUCTION	1201 MAGNOLIA AVE	ACTIVE	1799	1799	Special Trade Contractors	HO	Comml High	Comml High		06/22/07	Reviewed	AH
HURLEYUP CONSTRUCTION	7108 PRIMROSE WAY	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		06/22/07	Reviewed	BA
I LOVE BOBA	5620 PASEO DEL NORTE		5812		Eating Places	CO	Comml High					
IBANEZ MAINTENANCE	3080 MONROE ST		0782		Lawn And Garden Services	HO	Comml High					
IE PAINTING	3546 HASTINGS DR	OUT OF BUSINESS	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		08/25/06	Phone	AH
IN 2 LANDSCAPES	6821 BRIARWOOD DR		1700		Construction-Special Trade Contractors	HO	Comml High					
INDUSTRA PAINT & CONST.	1145 TAMARACK AVE	ACTIVE	1721	1721	Paint Contractor	HO	Comml High	Comml High		01/30/07	Reviewed	AH
INFINITY PRO NEIGHBORHOOD POOLS	3209 JAMES DR		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
INGHAM CONSTRUCTION	2440 PIO PICO DR		1521		Building Construction-General Building Contractors	HO	Comml High					
INK AND STONE	6401 EL PATO CT	EXCLUDED	0781	0781	Landscape Counseling And Planning	HO	Comml High	Comml Low		01/20/07	Reviewed	BA
IN-N-OUT BURGER, A CALIF. CORP. #89	5950 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	09/20/06			AH
INTEGRITY PLUS	2967 LEXINGTON CIR	ACTIVE	1711	1711	Construction-Special Trade Contractors	HO	Comml High	Comml High		01/20/07	Phone	BA
ISAAC'S BAKERY DELI	2051 PALOMAR AIRPORT RD STE 200	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	11/28/06			EN
ISLANDS FINE BURGERS & DRINKS	889 PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	09/20/06			EN
ISLANDS@CARLSBAD	5814 VAN ALLEN WY	ACTIVE	6512	6512	Operators of Nonresidential Buildings	CO	Comml High	Comml High	05/02/07			AH
ITZEL'S CAFE	5600 AVENIDA ENCINAS STE 111	DUPLICATE	5812	5812	Eating Places	CO	Comml High	Comml High		05/04/07	Reviewed	AH
J.C. DELI AND CATERING	2382 CAMINO VIDA ROBLE STE A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/22/07			EN

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J.C. PENNEY COMPANY	2555 EL CAMINO REAL	ACTIVE	5311	5311	Department Store	CO	Comml High	Comml High	11/02/06			BV
JACK IN THE BOX #3006	7050 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	04/19/07			BA
JACK IN THE BOX #36	901 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/10/07			BV
JACOBSON CONCRETE	1344 CYNTHIA LN	ACTIVE	1771		Special Trade Contractors	HO	Comml High			06/28/06	Reviewed	BV
JAGUAR SERVICE OF CAR COUNTRY CARLSBAD	1060 AUTO CENTER CT STE O		7538		General Automotive Repair Shops	CO	Comml High					
JARDINERA	2763 STATE ST	ACTIVE	5261	5261	Retail Nurseries, Lawn And Garden Supply Stores	COR	Comml High	Comml High	03/20/07			BV
JAY'S GOURMET PIZZA AND SEAFOOD	2975 CARLSBAD BLVD # S-B	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/07/07			BV
JIFFY LUBE	6021 PASEO DEL NORTE	ACTIVE	7538	7538	General Automotive Repair Shops	CO	Comml High	Comml High	09/20/06			EN
JIM AGNOS POOL & SPA SERVICE	7040 SNAPDRAGON DR	ACTIVE	7389		Business Services, NEC	HO	Comml High			06/28/06	Reviewed	BA
JIMMI'S RED HOTS	2508 EL CAMINO REAL STE C1		5812		Eating Places	CO	Comml High					
JOEY'S SMOKIN BBQ	6955 EL CAMINO REAL STE 107	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	11/17/06			BA
JOHN RYDEN CONSTRUCTION	376 JUNIPER AVE APT 10		1521		Building Construction-General Building Contractors	HO	Comml High					
JOHN STEVENSON PLUMBING	6351 CORTE DEL ABETO # A108	ACTIVE	1711		Special Trade Contractors	CO	Comml High		02/01/06	02/04/04	Reviewed	EN
JOHNNY'S RUTHERFORD CAFE	2262 RUTHERFORD RD STE 102	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/22/07			AH
JOHNSON POOL SERVICE & REPAIR	3115 SERRANO DR		7389		Business Services	HO	Comml High					
JOHNSONS AUTO BODY AND PAINT	2677 STATE ST	ACTIVE	7532	7532	Auto Body Shop	CO	Comml High	Comml High	08/30/06			BV
JUAN C. MOBILE MECHANIC	7803 CENTELLA ST APT 7		7538		General Automotive Repair Shops	HO	Comml High					
JUDY'S DELI	2035 CORTE DEL NOGAL STE 130	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/22/07			EN
K1 SPEED LLC	6212 CORTE DEL ABETO	ACTIVE	7999	7999	Indoor Kart Racing	CO	Comml High	Comml High	08/21/06			EN
KANINE KARE	1985 OLIVENHAIN RD	ACTIVE	0752	0752	Animal Specialty Services, Except Veterinary	CO	Comml High	Comml High	10/17/06			BA
KATO FARM	3250 SUNNY CREEK RD	OUT OF BUSINESS	0191	0191	Farm	CO	Comml High	Comml High		01/31/07	Phone	AH
KATONA PLUMBING	7076 MONTANES LN	ACTIVE	1711	1711	Plumbing Contractor	HO	Comml High	Comml High		01/30/07	Reviewed	BA
KEN GRODY FORD	5555 PASEO DEL NORTE	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	CO	Comml High	Comml High	11/01/06			AH
KENNEDY MASONRY	7313 MELODIA TER	ACTIVE	1741		Masonry Contractor	HO	Comml High			06/28/06	Reviewed	BA
KEONI LANDSCAPES	1052 KNOWLES AVE	ACTIVE	1799		Landscape Construction	HO	Comml High			06/28/06	Reviewed	BV

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KESSEL WINDOW SERVICES	6600 AMBROSIA LN APT 227	DUPLICATE	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		04/06/07	Reviewed	BA
KESSEL WINDOW SERVICES	6600 AMBROSIA LN APT 227		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
KFC #Y450066	745 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/12/07			AH
KING'S FISH HOUSE	5625 PASEO DEL NORTE	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	04/25/07			AH
KIPP'S LAWN SERVICE	7211 PLAZA DE LA COSTA	ACTIVE	0781	0781	Landscape Counseling And Planning	HO	Comml High	Comml High		01/30/07	Phone	BA
KIWI DIG, INC.	3502 CALLE HIDALGO		1521		Construction-Special Trade Contractors	HO	Comml High					
KLAUS ENYEDI CONCRETE CONST	1715 CATALPA RD		1700		Construction-Special Trade Contractors	HO	Comml High					
KNOCKOUT BURGERS	2971 CARLSBAD BLVD		5812		Eating Places	COR	Comml High					
KNOCKOUT PIZZERIA	2959 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	01/02/07			BV
KOKO BEACH	2858 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/07/07			BV
KOTIJA TACO SHOP	1850 MARRON RD STE 100	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/23/07			BV
KRESSIN POOL CLEANING	2803 VIA TOPACIO		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
L & S CONCESSIONS & CATERING	5620 PASEO DEL NORTE STE 100		5812		Eating Places	CO	Comml High					
LA COSTA RESORT AND SPA	2100 COSTA DEL MAR RD	ACTIVE	7997	7997	Golf Course and Resort	CO	Comml High	Comml High	04/23/07			BA
LA COSTA SUBMARINA	6994 EL CAMINO REAL STE 100	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/17/06			BA
LA COSTA TOP OF THE BAGEL	6955 EL CAMINO REAL STE 105	DUPLICATE	5461	5461	Retail Bakeries	CO	Comml High	Comml High		02/05/07	Reviewed	BA
LA FIESTA DELI	5810 EL CAMINO REAL STE B	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/02/07			AH
LA PLACE DELI	5950 LA PLACE CT STE 150	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	04/16/07			AH
LABO CONSTRUCTION	1720 CATALPA RD		1521		General Contractors--Single-Family Housing	HO	Comml High					
LANCE HOWARD DETAILING	2476 TORREJON PL		7542		Carwashes	HO	Comml High					
LAS OLAS CARLSBAD	2939 CARLSBAD BL	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	05/07/07			BV
LE PASSAGE	2961 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/20/07			BV
LEFT COAST WINDOW WASHING	1941 DOVE LANE APT 308	ACTIVE	7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High			06/28/06	Phone	BA
LESLIE FARM INC	CANNON AND INTERSTATE 5	ACTIVE	0171	0171	Berry Crops	CO	Comml High	Comml High	03/06/07			AH
LEXUS CARLSBAD	5434 PASEO DEL NORTE		5511		Motor Vehicle Dealers (New And Used)	CO	Comml High					

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LEXUS CARLSBAD	5444 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		03/01/06			AH
LIGHTHOUSE POOL AND SPA INC.	2531 STATE ST STE A	ACTIVE	7389		Business Services, NEC	CO	Comml High		04/26/06			BV
LIZ PLACE PERFORMANCE HORSES	2820 SUNNY CREEK RD	EXCLUDED	0752	752	Animal Specialty Services, Except Veterinary	CO	Comml High	Comml High		01/31/07	Reviewed	BV
LLOYD'S AUTO SPECIALTIES	1050 AUTO CENTER CT	ACTIVE	7549		Automotive Services	CO	Comml High		05/01/06			AH
LOLA'S 7 UP MARKET & DELI	3292 ROOSEVELT ST	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	03/12/07			BV
LOMAS DEL RINCON GROWERS	5060 EL CAMINO REAL		182		Food Crops Grown Under Cover	CO	Comml High					AH
LONE ROOTER, THE	2420 PIO PICO DR	ACTIVE	1711	1711	Plumbing Contractor	CO	Comml High	Comml High		01/31/07	Reviewed	BV
LOPEZ LANDSCAPE	1332 MAGNOLIA AVE	ACTIVE	0782		Lawn and Garden Services	HO	Comml High			06/28/06	Reviewed	AH
LORCO	4488 SALISBURY DR	ACTIVE	1741		Masonry, Stone Setting	HO	Comml High			06/28/06	Reviewed	AH
LOS PRIMOS MEXICAN FOOD	2708 LOKER AV W STE 102	ACTIVE	5812	5812	Restaurant	CO	Comml High	Comml High	01/31/07			AH
LOTUS THAI BISTRO	3050 PIO PICO DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	01/05/07			AH
M. M. PAINTING SERVICES	2424 LEVANTE ST		1700		PAINTING/DECORATING	HO	Comml High					
MACY'S - PLAZA CAMINO REAL	2559 EL CAMINO REAL	ACTIVE	5311	5311	Department Store	CO	Comml High	Comml High	11/02/06			BV
MAD ABOUT POOLS	1880 CANYON PL	ACTIVE	7389		Pool Maintenance	HO	Comml High			06/28/06	Phone	AH
MANLEY BUILDERS, INC.	2041 CUMBRE CT		1531		Operative Builders	HO	Comml High					
MANLEY BUILDERS, INC.	2041 CUMBRE CT		1531		Operative Builders	HO	Comml High					
MANNY'S CAFE & GRILL	1854 MARRON RD # 104	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	11/30/06			BV
MARIAH'S WESTWIND	377 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/20/07			BV
MARIANO'S LANDSCAPING	3422 MADISON ST B	ACTIVE	0782	0782	Lawn And Garden Services	HO	Comml High	Comml High		08/24/06	Reviewed	AH
MARIE CALLENDER'S #88	5980 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	09/20/06			AH
MAS FINA CANTINA	2780 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/05/06			BV
MCDONALDs OF PALOMAR AIRPT RD	5990 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	09/20/06			AH
MCDONALDs PLAZA CAMINO REAL	2525 EL CAMINO REAL STE 150	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/03/06			BV
MENDOZA'S FRESH FLOWERS	5600 AVENIDA ENCINAS STE 8	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	04/26/07			AH
MEXICO VIEJO	2508 EL CAMINO REAL STE D	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	03/23/07	07/26/04	Reviewed	BV
MG LANDSCAPE MAINTENANCE	3765 TRIESTE DR	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			06/28/06	Phone	AH
MIKKO JAPANESE CUISINE	1025 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/30/06			BV
MILES PACIFIC NURSERY	1833 BUENA VISTA WAY	ACTIVE	5193		Ornamental Floriculture and Nursery Prods	CO	Comml High		04/19/06			BV
MILES PACIFIC NURSERY	2375 PIO PICO DR	ACTIVE	0181	0181	Ornamental Floriculture and Nursery Prods	CO	Comml High	Comml High	09/11/06	04/27/06	Reviewed	BV

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MISSION AUTO, SALES & LEASE INC.	6060 AVENIDA ENCINAS STE C		5511		Motor Vehicle Dealers (New And Used)	CO	Comml High					
MOBILE SHINE AUTO DETAILING	3320 CALLE SAN BLAS	ACTIVE	7542	7542	Carwashes	HO	Comml High	Comml High		08/24/06	Reviewed	BA
MOLINA'S EXTERIORS	4869 ALONDRA WAY		781		Construction-Special Trade Contractors	HO	Comml High					
MOTION PRODUCTS WEST INC. (Previously MPI INC.)	6102 AVENIDA ENCINAS STE J-K	ACTIVE	7538		Automotive Repair & Restoration	CO	Comml High		05/01/06	06/22/05	Site Visit	EN
MR. PEABODY'S	300 CARLSBAD VILLAGE DR STE 202	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/30/06			BV
MUROYA GROWERS	6697 BLACK RAIL RD	ACTIVE	0191	0191	Nursery - Wholesale	CO	Comml High	Comml High	01/25/07			BA
NEW GROWTH LANDSCAPES	6576 BLUEBONNET DR		1799		Construction-Special Trade Contractors	HO	Comml High					BA
NEW GROWTH LANDSCAPES	6576 BLUEBONNET DR	DUPLICATE	1771	1771	Construction-Special Trade Contractors	HO	Comml High	Comml High		08/24/06	Reviewed	
NEW WORLD CAFÉ & RESTAURANT	2559 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/02/06	09/15/05	Drive By	BV
NEW YORK PIZZERIA	3067 ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	01/02/07			AH
NICK BOWMAN CONSTRUCTION INC	7040 IVY ST		1521		Building Construction-General Building Contractors	HO	Comml High					
NORTH COUNTY COASTAL PLUMBING	3900 LINMAR LN	ACTIVE	1711	1711	Plumbing Contractor	HO	Comml High	Comml High		08/24/06	Reviewed	BV
NORTH COUNTY GMC PONTIAC	5445 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		05/03/06			AH
NORTH COUNTY HOME I.V., INC.	1989 PALOMAR OAKS WAY # A		5912		Drug Stores And Proprietary Stores	CO	Comml High					
NORTH COUNTY PLAZA	1810 MARRON RD	ACTIVE	6552		Operators of Nonresidential Buildings	CO	Comml High		05/30/06			BV
NORTH COUNTY POOL & SPA	5106 LYNCH CT	ACTIVE	7389	7389	Pool & spa Maintenance Services	HO	Comml High	Comml High		08/24/06	Reviewed	AH
NOZOMI # 3	3050 PIO PICO DR # A	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	01/04/07			BV
NOZOMI GROUP LLC	3050 PIO PICO DR # A	DUPLICATE	5812	5812	Eating Places	CO	Comml High	Comml High		01/04/07	Reviewed	
OASIS NURSERY, INC.	4901 EL CAMINO REAL	ACTIVE	5193		Flowers, Nursery Stock, Supplies	CO	Comml High		04/12/06	07/15/03		AH
OCEAN HOME REPAIR	6517 CAMINO DEL PARQUE		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
OCEAN HOUSE (FORMALLY NEIMANS)	300 CARLSBAD VILLAGE DR STE 300	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/30/06			BV
OCEAN POINT TECH CENTRE	5431 AVENIDA ENCINAS, STE E	EXCLUDED	6531	6531	Property Management	CO	Comml High	Comml Low	07/28/05	05/02/07	Reviewed	EN
OCEANS EDGE POOL SERVICE	6550 PONTO DR SPC 38	ACTIVE	7389	7389	Business Services, NEC	HO	Comml High	Comml High		08/24/06	Reviewed	BA

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
OFFICIAL PAINTING	2379 CARINGA WAY	ACTIVE	1721	1721	Painting and Paperhanging	HO	Comml High	Comml High		10/24/06	Phone	BA
OISHI RESTAURANT	2525 EL CAMINO REAL STE 200	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/03/06			BV
OLIVE GARDEN, THE #120	1884 MARRON RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	02/23/07			BV
OLYMPIC RESORT HOTEL	6111 EL CAMINO RL	ACTIVE	7011		Hotels and Motels	CO	Comml High					EN
ON A ROLL	2794 LOKER AVE W STE 110	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/22/07			AH
ON CALL DETAILING	2614 LUCIERNAGA ST		7542		Carwashes	HO	Comml High					BA
OSCAR DIKE POOL REPAIR	841 CAMELLIA PL		7389		Construction-Special Trade Contractors	HO	Comml High					
OVERSEAS CHINESE RESTAURANT	2820 ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/19/06			BV
P G SALES	2333 CARINGA WAY APT 30		1700		Construction-Special Trade Contractors	HO	Comml High					
PACIFIC BLUE POOL SERVICE	7771 PENDON CT		7389		Business Services, Not Elsewhere Classified	HO	Comml High					BA
PACIFIC COAST GRADING INC.	2726 MORNING GLORY LN	ACTIVE	1794	1794	Special Trade Contractors	HO	Comml High	Comml High		08/25/06	Reviewed	AH
PACIFIC COLLISION CENTERS	6030 AVENIDA ENCINAS # C	ACTIVE	7532		Top, Body, And Upholstery Repair Shops & Paint Sh	CO	Comml High		03/28/06			EN
PACIFIC CUSTOM HOMES INC	3429 CORTE VIEJO		1521		Building Construction-General Building Contractors	HO	Comml High					
PACIFIC OIL SERVICES - CAMINO SHELL	2590 EL CAMINO REAL	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	08/21/06			BV
PACIFIC RESTORATION	5365 AVENIDA ENCINAS, STE J	ACTIVE	7349		Building Cleaning & Maint Svc, NEC	CO	Comml High		04/19/06			AH
PACIFIC WINDOW CLEANING	1805 NICOLIA DR UNIT 202	ACTIVE	7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High			06/28/06	Reviewed	BA
PACWEST CONSTRUCTION	2525 PIO PICO DR # 102	ACTIVE	1711	1711	General Building Contractor	CO	Comml High	Comml High		08/25/06	Reviewed	BV
PALOMAR AIRPORT SHELL (TEXACO)	665 PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	08/21/06			AH
PALOMAR DELI	6150 YARROW DR STE C	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	04/16/07			EN
PALOMAR HAND CAR WASH & DETAILING	6019 PASEO DEL NORTE	ACTIVE	7542	7542	Carwashes	CO	Comml High	Comml High	09/20/06			EN
PALOMAR MOBIL	899 PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	09/13/06			EN
PANDA EXPRESS # 393	2560 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	04/16/07			BV
PANDA EXPRESS #635	6951 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/17/07			BA
PANDA EXPRESS #729	5630 PASEO DEL NORTE STE 141	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/22/06			AH
PANERA BREAD	1935 CALLE BARCELONA	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	03/22/07			BA
PAPA C'S MEXICAN FOOD	5806 VAN ALLEN WAY # 105	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/02/07			AH
PAPAYAS CAFE	5840 EL CAMINO REAL # 116		5812		Eating Places	CO	Comml High					

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PAPAYAS CAFE	5840 EL CAMINO REAL # 116		5812		Eating Places	CO	Comml High					
PARK CARE	2744 AUBURN AVE	ACTIVE	0781	0781	Landscape Counseling and Planning	HO	Comml High	Comml High		08/25/06	Reviewed	AH
PARKWAY NURSERY	5050 EL CAMINO REAL	MOVED	0181	0181	Ornamental Floriculture & Nursery Prods	CO	Comml High	Comml High	05/14/04	08/23/06	Drive By	AH
PAT & OSCAR'S	2525 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/02/06			BV
PAT & OSCAR'S	965 PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/02/06			EN
PAUL TURNER CONSTRUCTION	4062 GARFIELD ST APT D		1521		Building Construction-General Building Contractors	HO	Comml High					
PEKING GARDEN	6990 EL CAMINO REAL STE K	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/02/07			BA
PELLY'S FISH MARKET & DELI	7110 AVENIDA ENCINAS STE 101	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	04/19/07			BA
PETAL & PLUME	5835 AVENIDA ENCINAS # 108	ACTIVE	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Comml High	Comml High	4/26/07	06/28/06	Phone	EN
PHILLIP MARRUJO (LANDSCAPE)	360 CHINQUAPIN AVE APT 3	ACTIVE	0781	0781	Landscape Counseling and Planning	HO	Comml High	Comml High		08/25/06	Reviewed	AH
PHIL'S CARWASH / DETAILING	6041 PASEO ACAMPO #107	ACTIVE	7542	7542	Carwashes	HO	Comml High	Comml High		08/25/06	Reviewed	EN
PICK UP STIX	7750 RANCHO SANTA FE RD #101	ACTIVE	5812		Eating Places	CO	Comml High		09/21/05			BA
PICK UP STIX # 7224	7150 AVENIDA ENCINAS		5812		Eating Places	CO	Comml High					
PICK UP STIX CARLSBAD INC.	2508 EL CAMINO REAL STE A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/23/07			BV
PICKLES CATERING & DELI	5670 EL CAMINO REAL STE H	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/27/07			AH
PIZZA HUT	2588 EL CAMINO REAL # B/C	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/23/07			BV
PIZZA PORT CARLSBAD BREWERY	571 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	01/24/07			AH
PIZZA SHUTTLE & SUBS, TOO	959 TAMARACK AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/20/07			AH
PLANTPLAY	4915 EL CAMINO REAL	ACTIVE	5261	5261	Retail Nurseries, Lawn And Garden Supply Stores	CO	Comml High	Comml High	02/26/07			AH
PLAZA AUTOMOTIVE	1060 AUTO CENTER CT STE A	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		05/03/06			AH
PLAZA BUILDERS	5091 EL ARBOL DR		1521		Building Construction-General Building Contractors	HO	Comml High					
PLAZA CAMINO CHEVRON CENTER	2500 EL CAMINO REAL	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	09/11/06			BV
PLAZA CAMINO REAL, L.P.	2525 EL CAMINO REAL	ACTIVE	6512	6512	Non-Residential Property Mangement	CO	Comml High	Comml High	11/30/06			BV

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PLAZA REAL CLEANERS INC	6949 EL CAMINO RL STE 108	ACTIVE	7216		Dry Cleaning Plant	CO	Comml High			08/31/05	Reviewed	BA
PLAZA SOUTH CLEANERS	2620 EL CAMINO REAL	ACTIVE	7212	7212	Laundry Cleaners	CO	Comml High	Comml High	12/14/06			BV
POINSETTIA PLAZA	7040 AVENIDA ENCINAS	ACTIVE	6512		Operators of Nonresidential Buildings	CO	Comml High		05/24/05			EN
POINSETTIA VILLAGE CHEVRON	7170 AVENIDA ENCINAS	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		04/26/06			BA
POLISHED IMAGE MOBILE DETAILING	2454 JEFFERSON ST		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
POLLOS MARIA	3055 HARDING ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/30/06			BV
POOL SERVICE BY INDIGO	2292 AUDEN PL		7389		Business Services, Not Elsewhere Classified	HO	Comml High					AH
POOL TECH	3002 LEVANTE ST	ACTIVE	7389	7389	Business Services, NEC	HO	Comml High	Comml High		08/25/06	Reviewed	BA
POSH PETS GROOMING SERVICES	5515 FOXTAIL LOOP		752		Animal Specialty Services, Except Veterinary	HO	Comml High					
PRECISION KITCHEN AND BATH	2921 LANCASTER RD		1743		Terrazzo, Tile, Marble, Mosaic Work	HO	Comml High					AH
PRECISION KITCHEN AND BATH	2921 LANCASTER RD	DUPLICATE	1743	1743	Terrazzo, Tile, Marble, Mosaic Work	HO	Comml High	Comml High		08/01/06	Reviewed	AH
PREMIER POOLS & SPAS	2244 FARADAY AVE # 109		1700		Construction-Special Trade Contractors	CO	Comml High					
PRIMO PIZZA & PASTA	7110 AVENIDA ENCINAS STE 103	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	04/19/07			BA
PROMONTORY BUSINESS PARK	2715 LOKER AV WEST	ACTIVE	6512	6512	Property Management - Non - Residential	CO	Comml High	Comml High	01/31/07			AH
PRONTO CAR WASH OF CARLSBAD PREMIUM OUTLETS	5620 PASEO DEL NORTE	ACTIVE	7542	7542	Carwashes	CO	Comml High	Comml High	08/22/06			BA
PRONTO WASH SOUTHERN CALIFORNIA	5620 PASEO DEL NORTE # 127C		7542		Carwashes	CO	Comml High					
PRONTOS GOURMET MARKET	2812 ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/20/07			BV
QUALITY CONCRETE CORING	810 SANDBAR WAY	MOVED	1771	1771	Curb Coring - Saw Cutting - Asphalt	HO	Comml High	Comml High		10/04/06	Phone	EN
QUALITY INN & SUITES	751 RAINTREE DR		7011		Hotels And Motels	CO	Comml High					
QURTECH	2131 LAS PALMAS DR STE F	OUT OF BUSINESS	7699	7699	Repair Shops and Related Services NEC	CO	Comml High	Comml High	11/02/05	07/31/06	Drive By	EN
RACCOON ROUNDUP	3812 SIERRA MORENA AVE		7389		Pest Control	HO	Comml High					
RALPHS GROCERY COMPANY #175	7140 AVENIDA ENCINAS FRNT	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	08/21/06			BA
RANCHO CARLSBAD EQUESTRIAN CENTER	2820 SUNNY CREEK RD	ACTIVE	0752	0752	Boarding and Training Horses	CO	Comml High	Comml High	02/05/07			AH

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RANCHO CARLSBAD GOLF COURSE	5200 EL CAMINO REAL	ACTIVE	7992		Public Golf Courses	CO	Comml High		11/24/04			AH
RANCHO DEL ORO TOWING (CONTRACT SERVICES)	6050 AVENIDA ENCINAS	ACTIVE	7549		Automotive Services	CO	Comml High		11/02/04			EN
RANCHO SANTA FE POOL & SPA	5146 WHITMAN WAY APT 213		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
RANCHO SANTA FE POOL & SPA	5146 WHITMAN WAY APT 213		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
RAYMOND J. MENARD, III, INC.	4303 SIERRA MORENA AVE	OUT OF BUSINESS	0781	0781	Landscape Counseling and Planning	HO	Comml High	Comml High		10/04/06	Reviewed	AH
RAY'S PLUMBING	3971 JAMES DR	OUT OF BUSINESS	1711	1711	Plumbing Contractor	HO	Comml High	Comml High		10/04/06	Reviewed	AH
RAY'S POOL SERVICE	3251 AVENIDA ANACAPA		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
RECONSTRUCTION EXPERTS INC	1825 ASTON AVE		1521		Building Construction-General Building Contractors	CO	Comml High					
RED DAHLIA	7740 EL CAMINO REAL STE F		5812		Eating Places	CO	Comml High					
REDLAND CLAY TILE	5355 AVENIDA ENCINAS STE 208A	ACTIVE	5032		Tile Cutting	CO	Comml High			09/28/05	Reviewed	EN
REEF CONCRETE	3646 CHESHIRE AV	ACTIVE	1771	1771	Concrete	HO	Comml High	Comml High		10/04/06	Phone	BV
REPSHER DRYWALL	4795 NEBLINA DR	ACTIVE	1742	1742	Drywall Contractor	HO	Comml High	Comml High		10/04/06	Reviewed	AH
RESTORATION FLOORING	2304 ALTISMA WAY	ACTIVE	7217		Carpet And Upholstery Cleaning	HO	Comml High			06/28/06	Reviewed	BA
RESURFACING SPECIALISTS, INC.	2956 ROOSEVELT ST STE 5	ACTIVE	1771		Concrete Work	COR	Comml High			06/28/06	Phone	BV
RICE KING	5808 VAN ALLEN WAY # 115	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/02/07			AH
RIESTERS CARPET SERVICE	3207 AZAHAR PL	ACTIVE	7217	7217	Carpet & Upholstery Cleaning	HO	Comml High	Comml High		01/31/07	Reviewed	BA
RINCON WEST	411 CHESTNUT AVE APT B		7389		Pool Maintenance	HO	Comml High					
RITE AID #5622	7100 AVENIDA ENCINAS # C	ACTIVE	5912	5812	Drug Stores and Proprietary Stores	CO	Comml High	Comml High	08/21/06	04/30/04	Reviewed	EN
RIVIERA POOL & SPA SERVICE	2635 MADISON ST APT 10		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
ROBERT M. CHAMBERS CONSTRUCTION	2853 CEBU PL		1521		Building Construction-General Building Contractors	HO	Comml High					
RORICK BUICK CADILLAC	5334 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		03/01/06			AH
RORY O'NEAL POOL SERVICE	2022 LEE CT	ACTIVE	7389	7389	Pool and Spa Maintenance	HO	Comml High	Comml High		01/31/07	Phone	AH
RORY O'NEAL POOL SERVICE	2022 LEE CT	DUPLICATE	7389	7389	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		08/25/06	Reviewed	AH

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ROWLETT'S YARD CARE	3480 ADAMS ST	ACTIVE	0781		Landscape Counseling and Planning	HO	Comml High			06/28/06	Reviewed	AH
RUBIO'S BAJA GRILL	2604 EL CAMINO REAL # A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/01/06			BV
RUBIO'S BAJA GRILL	5620 PASEO DEL NORTE STE 128	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/22/06			AH
RUB-KRETE	7331 ALICANTE RD APT C	ACTIVE	1771		Concrete Contractor	HO	Comml High			06/28/06	Reviewed	BA
RUBYS DINER, CARLSBAD	5630 PASEO DEL NORTE STE 128D	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/22/06			AH
RUDVALIS ORCHIDS	6595 BLACK RAIL RD	ACTIVE	0182	0182	Ornamental Floriculture & Nursery Products	CO	Comml High	Comml High	01/25/07			BA
RUSTY JOHNSON CONSTRUCTION	5316 FORECASTLE CT	OUT OF BUSINESS	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		01/31/07	Reviewed	AH
SAFELITE AUTO GLASS	1060 AUTO CENTER CT STE I	ACTIVE	7536		Automotive Glass Replace Shops	CO	Comml High		05/03/06			AH
SAGE RESEARCH LLC	4909 REFUGIO AVE	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			06/28/06	Reviewed	AH
SAMMYS WOODFIRED PIZZA	5970 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	09/20/06			AH
SAN DIEGO INTERNATIONAL FLORAL TRADE CENTER	5600 AVENIDA ENCINAS STE 126	ACTIVE	6531	6531	Operators of Non-residential Buildings	CO	Comml High	Comml High	04/27/07			AH
SAN SAI JAPANESE GRILL	5600 PASEO DEL NORTE STE 115A	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	08/22/06	08/04/04	Reviewed	AH
SANTORINI GREEK ISLAND GRILL	5812 VAN ALLEN WAY # 125	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/02/07			AH
SAV-ON DRUGS #3279	2510 EL CAMINO REAL	ACTIVE	5912	5912	Drug Stores and Proprietary Stores	CO	Comml High	Comml High	09/11/06			BV
SCHMUCKLE PAINTING INC	6084 CORTE DEL CEDRO # 100		1721		Painting And Paper Hanging	CO	Comml High					
SCOTT D PACKARD CONSTRUCTION	4620 TRIESTE DR		1521		Building Construction-General Building Contractors	HO	Comml High					
SCOTT ROGERS POOL SERVICE	2715 MORNING GLORY LN	ACTIVE	7389	7389	Pool Service	HO	Comml High	Comml High		10/04/06	Reviewed	BV
SD FYXIT	3555 HASTINGS DR		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
SEACREST KENNELS	7250 PONTO DR	ACTIVE	0752	0752	Animal Specialty Services, Except Veterinary	CO	Comml High	Comml High	07/31/06			BA
SEARS CONSTRUCTION CO	1387 CYNTHIA LN		1521		Building Construction-General Building Contractors	HO	Comml High					
SEARS ROEBUCK & COMPANY	2561 EL CAMINO REAL	ACTIVE	5311		General Merchandise Stores	CO	Comml High		05/30/06			BV
SEASIDE FARMS (YADA FARMS)	2928 VALLEY ST	ACTIVE	0181	0181	Ornamental Floriculture	CO	Comml High	Comml High	07/18/06			BV
SELECT MOBILE DETAILING	3533 ROCK RIDGE RD		7542		Carwashes	HO	Comml High					

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SHAMROCK POOL SERVICE	2706 GALICIA WAY	ACTIVE	7389	7389	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		10/04/06	Reviewed	BA
SHARPER IMAGE DETAILING	5508 FOXTAIL LOOP		7542		Carwashes	HO	Comml High					
SHARPER IMAGE MOBILE DETAILING	5146 WHITMAN WAY # 212	OUT OF BUSINESS	7542	7542	Carwashes	HO	Comml High	Comml High		10/04/06	Reviewed	BV
SHAWS AUTOSPORT LTD	2531 STATE ST # E	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		04/19/06			BV
SHEILD X	6965 EL CAMINO REAL STE 104	ACTIVE	5963		Direct Selling	HO	Comml High			03/31/06	Phone	BA
SHORELINE POOL SERVICES	6527 CAMINO DEL PARQUE	ACTIVE	7389	7389	Business Services, NEC	HO	Comml High	Comml High		10/04/06	Reviewed	BA
SIERRA CASCADE CONCRETE COMPANY	2382 CAMINO VIDA ROBLE STE L	ACTIVE	1771	1771	Concrete Contractor	CO	Comml High	Comml High		10/04/06	Reviewed	EN
SIGNATURE SCAPES	4004 SKYLINE RD		1521		Building Construction-General Building Contractors	HO	Comml High					
SIMPLY WINDOWS	2601 STATE ST		5211		Lumber And Other Building Materials Dealers	COR	Comml High					BV
SMART & FINAL IRIS CO #339	2618 EL CAMINO REAL	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	12/14/06			BV
SNA LANDSCAPING/DESIGN	3574 HARWICH DR	ACTIVE	0781	0781	Landscape Counseling And Planning	HO	Comml High	Comml High		10/04/06	Reviewed	BV
SNUG HARBOR INC/CAL WATER SPORTS	4215 HARRISON ST	ACTIVE	7999		Amusement & Recreation Svcs, NEC	CO	Comml High		06/23/05			AH
SO CAL ARBOR TREE SERVICE	375 ACACIA AVE APT 1	OUT OF BUSINESS	0783	0783	Ornamental Shrub And Tree Services	HO	Comml High	Comml High		10/04/06	Phone	AH
SO CAL CURB & ADDRESS PAINTING	2740 CIRCULO SANTIAGO APT A		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
SO CAL STONE CREATIONS	4215 HARRISON ST		7336		Commercial Art And Graphic Design	HO	Comml High					
SO. CAL. SPA & SPA TECH SUPPLY	1445 FOREST AVE		7389		Women's Children's, And Infants' Clothing And Acc	HO	Comml High					
SONOMA VALLEY MARKET	300 CARLBSAD VILLAGE DR STE 107	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/30/06			AH
SOUPLANTATION	1860 MARRON RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/30/06	04/30/04	Reviewed	BV
SPIRITO'S PIZZA BY THE SLICE	5812 VAN ALLEN WAY # 130	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/02/07			AH
SQUID JOES	850 TAMARACK AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/04/07			AH
STAPLES THE OFFICE SUPERSTORE	2712 LOKER AVE W		5943		Stationery Stores	CO	Comml High					
STARBUCKS COFFEE # 10851	2708 LOKER AVE W # 100		5812		Eating Places	CO	Comml High					
STARBUCKS COFFEE #5363	2924 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/30/06			BV
STATE AND GRAND COFFEE	519 GRAND AVE	OUT OF BUSINESS	5812	5812	Eating Places	COR	Comml High	Comml High		05/10/07	Drive By	BV

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STEAM KING	1290 LAS FLORES DR	ACTIVE	7217	7217	Carpet & Upholstery Cleaning	HO	Comml High	Comml High		10/04/06	Reviewed	BV
STILLMAN HEATING & AIR CONDITIONING	7200 PONTO DR # A	ACTIVE	1711	1711	HVAC Contractor	CO	Comml High	Comml High	08/08/06	06/20/06	Reviewed	BA
STONE IMAGERY	3546 HIGHLAND DR	ACTIVE	1741	1741	Stone Work	HO	Comml High	Comml High		09/07/06	Phone	BV
SUBMARINA CARLSBAD	300 CARLSBAD VILLAGE DR STE 201A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/30/06			BV
SUBMARINA CARLSBAD FOOD COURT	5812 VAN ALLEN WAY # 120	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/02/07			AH
SUBWAY	7110 AVENIDA ENCINAS STE 100	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	04/19/07			BA
SUBWAY #4584	6020 PASEO DEL NORTE STE A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	04/25/07			EN
SUNNY FRESH CLEANERS	7040 AVENIDA ENCINAS STE 112	ACTIVE	7216		Dry Cleaner	CO	Comml High			08/31/05	Reviewed	BA
SUNSHINE LDSCP&GARDEN SERVICE	4008 GARFIELD ST	ACTIVE	0782		Landscaper	HO	Comml High			01/12/06	Reviewed	AH
SUPER CAFE	1854 MARRON RD # 104		5812		Eating Places	CO	Comml High					
SUPER DONUTS	590 GRAND AVE	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	03/12/07			BV
SUPERIOR RESTORATION	3957 JEFFERSON ST	ACTIVE	1799		Special Trade Contractor	HO	Comml High			05/19/06	Reviewed	BV
SURF BROTHERS TERIYAKI	2708 LOKER AVE W # 103	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	01/31/07			AH
SUSHI FIX	7720 EL CAMINO REAL STE B	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	05/02/07	04/26/05	Phone	BA
SUSHI ON THE ROCK	1923 CALLE BARCELONA, STE 148	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/22/07			BA
SUSHI TAISHO	300 CARLSBAD VILLAGE DR STE 214	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	08/30/06			BV
SWIM CITY, INC.	3191 SEABURY ST	ACTIVE	7389	7389	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		10/02/06	Reviewed	BA
TABATA FARMS	6503 EL CAMINO REAL	ACTIVE	0291		Agriculture	CO	Comml High		01/31/05			BA
TACO BELL 2773	2525 EL CAMINO REAL STE 131	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/03/06			BV
TACO BELL/JODIKA ENTERPRISES	6017 PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	09/20/06			EN
TACO DEL MAR	2525 EL CAMINO REAL STE 104	OUT OF BUSINESS	5812	5812	Eating Places	CO	Comml High	Comml High	09/15/05	11/03/06	Reviewed	BV
TAMARACK 76	895 TAMARACK AVE	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		05/15/06			AH
TAMARACK ST EXXON	945 TAMARACK AVE	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		04/05/06			AH
TAYLOR MADE GOLF COMPANY INC	4155 SALK AV	ACTIVE	7999	7999	Amusement and Recreation Services	CO	Comml High	Comml High	11/09/06	05/23/05	Drive By	AH
TERMINIX INTERNATIONAL	6350 YARROW DR STE A	ACTIVE	7342	7342	Disinfecting & Pest Control Svcs	CO	Comml High	Comml High	02/01/07			EN
TGI FRIDAY'S	850 PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/08/06			EN

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
THAT PIZZA PLACE	2622 EL CAMINO REAL # B	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/14/06			BV
THE CLEANING COMPANY	2605 JACARANDA AVE		7217		Carpet And Upholstery Cleaning	HO	Comml High					
THE CONCRETE GROUP	2205 FARADAY AVE STE F		1731		Construction-Special Trade Contractors	CO	Comml High					
THE FORUM	1935 CALLE BARCELONA STE 137	ACTIVE	6512		Retail Shopping Center	CO	Comml High		06/30/05			BA
THE MOBILE CAR DOCTORS	1010 HOME AVE		7538		General Automotive Repair Shops	HO	Comml High					AH
THE MOBILE CAR DOCTORS	1010 HOME AVE	DUPLICATE	7538	7538	General Automotive Repair Shops	HO	Comml High	Comml High		08/25/06	Reviewed	
THE WOOD WIZARD	6353 EL CAMINO REAL		1751		Carpentry Work	CO	Comml High					
TIP TOP MEATS & EUROPEAN DELI	6118 PASEO DEL NORTE	ACTIVE	5812		Eating & Drinking Places	CO	Comml High		09/21/05			EN
TOGOs EATERY	2508 EL CAMINO REAL STE E	OUT OF BUSINESS	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	03/21/06	03/23/07	Drive By	BV
TOGOs EATERY	6971 EL CAMINO REAL STE 201	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/02/07			BA
TOM GIBLINS IRISH PUB	640 GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/18/07			BV
TOM T HONDA	1565 CHESTNUT AVE	ACTIVE	0781	0781	Landscape Maintenance	HO	Comml High	Comml High		09/20/06	Reviewed	AH
TOMMY V'S	7670 EL CAMINO REAL # 104	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	05/02/07			BA
TOMMY'S PLUMBING	7926 LA CAPELA LN	ACTIVE	1711	1711	Plumbing, Heating, Air-Conditioning	HO	Comml High	Comml High		01/31/07	Phone	BA
TOO TALL HANDYMAN AND WINDOW CLEANING	2561 NAVARRA DR UNIT A		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
TOP OF THE BAGEL	2540 EL CAMINO RL STE E	ACTIVE	5461		Bagel Shop	CO	Comml High		03/21/06			BA
TOP OF THE BAGEL	6955 EL CAMINO RL STE 105	ACTIVE	5461		Bakery and Food Establishment	CO	Comml High		03/13/06			BA
TOWNSEND LINCOLN MERCURY	5434 PASEO DEL NORTE	OUT OF BUSINESS	5511	5511	Motor Vehicle Dealers (New and Used)	CO	Comml High	Comml High	02/15/05	10/10/06	Reviewed	AH
TOYOTA CARLSBAD	5434 PASEO DEL NORTE		5511		Motor Vehicle Dealers (New And Used)	CO	Comml High					
TOYOTA CARLSBAD USED CAR DEPT.	5124 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		02/15/05			AH
TOYOTA OF CARLSBAD	6030 AVENIDA ENCINAS	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		03/28/06			EN
TOYOTA-CARLSBAD	5424 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		02/15/05			AH

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
TOYOTA-CARLSBAD BODY SHOP	5450 PASEO DEL NORTE	MOVED	7532	7532	Top, Body, Upholstery Repair, Paint	CO	Comml High	Comml High	09/30/04	12/19/06	Reviewed	AH
TRICOR COMMERCIAL CLEANING	2471 UNICORNIO ST		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
TRICOR COMMERCIAL CLEANING	2471 UNICORNIO ST		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
TRINAMIC MOBILE TRUCK SERVICES	3293 ROOSEVELT ST	ACTIVE	7538	7538	General Automotive Repair Shops	COR	Comml High	Comml High		09/20/06	Reviewed	BV
TRUE BLUE POOLS	5355 AVENIDA ENCINAS		1700		Construction-Special Trade Contractors	CO	Comml High					
TUSCANY RESTAURANT	6981 EL CAMINO REAL STE 103	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/17/06			BA
TUTULI FLORAL	5600 AVENIDA ENCINAS STE 127	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	04/26/07			ah
ULTIMATE OUTDOOR ENVIRONMENTS	3459 CORTE BREZO		1521		Building Construction-General Building Contractors	HO	Comml High					
UPSTAIRS/DOWNSTAIRS CARPET&CLEAN SERVICE	3465 CAMINO VALENCIA	ACTIVE	7217	7217	Carpet & Upholstery Cleaning	HO	Comml High	Comml High		09/22/06	Reviewed	BA
VALDIVIA FARMS	4914 EL CAMINO REAL	ACTIVE	0181	0181	Crop Production	CO	Comml High	Comml High	01/31/05	09/20/06	Drive By	AH
VERTICAL MASONRY, INC.	2722 LOKER AVE W STE A	ACTIVE	1741		Masonry Contractor	CO	Comml High		05/22/06	05/19/05	Drive By	AH
VIGILUCCIS CUCINA ITALIANA	2943 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	07/07/06			BV
VIGILUCCI'S SEAFOOD & STEAK HOUSE	3878 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/18/07			BV
VILLAGE 76-CAR WASH	880 CARLSBAD VILLAGE DR	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		04/05/06			BV
VILLAGE FAIRE (SIMA VILLAGE FAIRE)	300 CARLSBAD VILLAGE DR STE 200	ACTIVE	6512	6512	Operators of Nonresidential Buildings	CO	Comml High	Comml High	08/30/06			BV
VILLAGE GRILLE, THE	2833 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	01/02/07			BV
VILLAGE KITCHEN & PIE SHOPPE, INC.	950 TAMARACK AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	05/04/07			AH
VILLAGE LAWN CARE	2292 AUDEN PL	ACTIVE	0781	0781	Landscaping	HO	Comml High	Comml High		09/07/06	Reviewed	AH
VILLAGE PUB, THE	2990 STATE ST	ACTIVE	5812	5821	Eating & Drinking Places	CO	Comml High	Comml High	03/12/07			BV
VONS GROCERY COMPANY #2065	6951 EL CAMINO REAL	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	05/17/07			BA
VONS GROCERY COMPANY #2142	2560 EL CAMINO REAL	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	04/16/07			BV
VONS GROCERY COMPANY #2165	7710 EL CAMINO REAL	ACTIVE	5411		Grocery Stores	CO	Comml High		04/27/06			BA
VONS GROCERY COMPANY #2343	985 TAMARACK AVE	ACTIVE	5411		Grocery Stores	CO	Comml High		04/27/06			AH
WALBURNS CARPET CARE	2417 LA PLUMA LN	ACTIVE	7217	7217	Carpet & Upholstery Cleaning	HO	Comml High	Comml High		09/19/06	Reviewed	BA
WASH-ALL	2443 TUTTLE ST	ACTIVE	7349	7349	Powerwash Restaurants, Building Cleaning	HO	Comml High	Comml High		09/18/06	Phone	AH
WATANABE GARDENING, BILL	2560 GREGORY DR	ACTIVE	0781	0781	Landscape Counseling and Planning	HO	Comml High	Comml High		09/14/06	Reviewed	BV

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTIVITY DATE	ACTIVITY TYPE	DRAINAGE BASIN
WATERFALL AMERICA INC	2253 TIGEREYE PL		1521		Building Construction-General Building Contractors	HO	Comml High					
WAX-IT DETAILING	2667 REGENT RD	ACTIVE	7542	7542	Car Washes	HO	Comml High	Comml High		09/19/06	Reviewed	BA
WAXX IT AUTOMOTIVE DETAILING	5215 CAR COUNTRY DR	ACTIVE	7542	7542	Car Washes	CO	Comml High	Comml High		09/14/06	Reviewed	AH
WAYNE MINOR LANDSCAPE	3450 DONNA DR		0781		Landscape Counseling And Planning	HO	Comml High					
WESELOH CHEVROLET HUMMER	5335 PASEO DEL NORTE	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	CO	Comml High	Comml High	11/01/06			AH
WEST BUFFET	2515 EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/14/06			BV
WEST COAST POOLS AND SPAS	2920 LUCIERNAGA ST APT 101		7389		Business Services, Not Elsewhere Classified	HO	Comml High					BA
WEST INN & SUITES, LLC	4970 AVENIDA ENCINAS		7011		Hotels And Motels	CO	Comml High					
WEST STEAK SEAFOOD AND SPIRITS	4980 AVENIDA ENCINAS		5812		Eating Places	CO	Comml High					AH
WESTERN GARDENS	4616 PANNONIA RD	ACTIVE	0781	0781	Landscape Counseling And Planning	HO	Comml High	Comml High		09/14/06	Reviewed	AH
WESTMART GAS	4990 AVENIDA ENCINAS	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		04/26/06			AH
WETZELS PRETZELS	5620 PASEO DEL NORTE STE 122	ACTIVE	5461	5461	Retail Bakeries	CO	Comml High	Comml High	08/22/06			AH
WINGATE & CO INC	4008 1/2 GARFIELD ST	ACTIVE	1521	0782	Landscape Maintenance	HO	Comml High	Comml High		02/06/07	Reviewed	AH
WORTHINGTON DODGE OF CARLSBAD (USED)	5548 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		05/15/06			AH
WORTHINGTON DODGE OF CARLSBAD, INC.	5365 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		05/15/06			AH
YANAGI SUSHI	6986 EL CAMINO REAL STE B		5812		Women's Children's, And Infants' Clothing And Acc	CO	Comml High					
YARD FAIRY, THE	6163 PASEO PALERO	ACTIVE	0781	0781	Landscape Counseling And Planning	HO	Comml High	Comml High		09/14/06	Reviewed	BA
YELLOW COYOTE FOOD CO. LP	1901 CALLE BARCELONA		5812		Eating Places	CO	Comml High					BA
YOSHINO	2913 STATE ST	ACTIVE	5812	5812	Eating Places	COR	Comml High	Comml High	06/27/07			BV
ZEN POOL SERVICE	2894 LANCASTER RD	ACTIVE	7389	7389	Swimming Pool Maintenance	HO	Comml High	Comml High		09/14/06	Reviewed	AH
ZIMMS DETAIL	7546 GIBRALTAR ST APT A		7542		Carwashes	HO	Comml High					

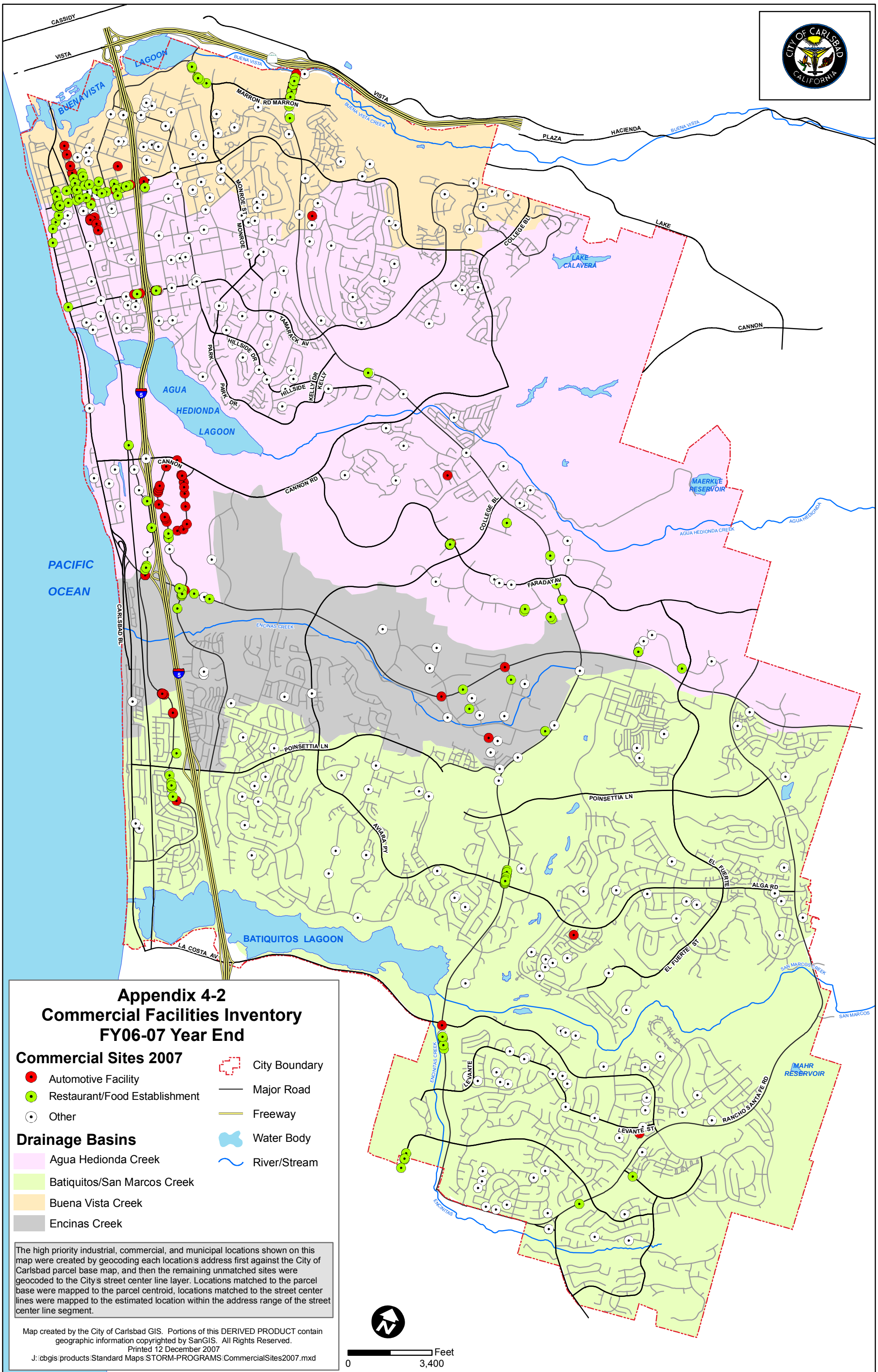
CITY OF CARLSBAD CALIFORNIA
CASSIDY
VISTA
LAGOON
BUENA VISTA
BUENA VISTA
MARRON RD MARRON
VISTA
BUENA VISTA CREEK
PLAZA
HACIENDA
BUENA VISTA
MONROE ST
MONROE
COLLEGE BL
LAKE
LAKE CALAVERA
CANNON
TAMARACK AV
HILLSIDE DR
PARK
PARK DR
HILLSIDE
KELLY DR
KELLY
AGUA HEDIONDA LAGOON
5
CANNON
CANNON RD
COLLEGE BL
MAERKLE RESERVOIR
AGUA HEDIONDA CREEK
AGUA HEDIONDA
PACIFIC OCEAN
CARLSBAD BL
FARADAY AV
ENCINAS CREEK
5
POINSETTIA LN
POINSETTIA LN
AVIARA PY
EL FUERTE
ALGA RD
BATIQUITOS LAGOON
LA COSTA AV
EL FUERTE ST
SAN MARCOS CREEK
SAN MARCOS
ENCINITAS CREEK
LEVANTE
LEVANTE ST
RANCHO SANTA FE RD
MAHR RESERVOIR
ENCINITAS
Appendix 4-2
Commercial Facilities Inventory
FY06-07 Year End
Commercial Sites 2007
Automotive Facility
Restaurant/Food Establishment
Other
City Boundary
Major Road
Freeway
Water Body
River/Stream
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
The high priority industrial, commercial, and municipal locations shown on this map were created by geocoding each location s address first against the City of Carlsbad parcel base map, and then the remaining unmatched sites were geocoded to the City s street center line layer. Locations matched to the parcel base were mapped to the parcel centroid, locations matched to the street center lines were mapped to the estimated location within the address range of the street center line segment.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
Printed 12 December 2007
J: cbgis products Standard Maps STORM-PROGRAMS CommercialSites2007.mxd
Feet
0
3,400

Dear Carlsbad Resident:

The City of Carlsbad is now offering door-to-door Household Hazardous Waste collection. Gather your Household Hazardous Waste, then call for an appointment to have these items collected and disposed of. This service requires you pay a $10 copayment per pick-up; the City pays $80 per pick-up. Your participation will ensure that all of us are safe and that our City and its natural beauty stay clean.

To reduce the amount of Household Hazardous Waste you generate, please buy only what you need and use it up. Choose less toxic alternatives and recyclable products.

Remember, Household Hazardous Waste cannot be thrown in the trash!

Thank you for your participation.

City of Carlsbad
Public Works Environmental Programs

think globally. act neighborly.
City of Carlsbad Environmental Programs
www.carlsbadconserves.org 760-602-4646

CITY OF CARLSBAD **PUBLIC WORKS**
At Your Service!
ENVIRONMENTAL PROGRAMS
1635 Faraday Avenue
Carlsbad, CA 92008

www.carlsbadconserves.org

Environmental Hotline
760-602-4646

RECYCLE
USED OIL

Paid for using funds from the
California Integrated Waste Management Board

Household Hazardous Waste Collection

INTRODUCING

NEW!
Door-to-Door Household Hazardous Waste Collection

CALL
Clean Harbors
1-800-444-4244

CITY OF CARLSBAD **PUBLIC WORKS**
At Your Service!

Appendix 5-1

Household Hazardous Waste Collection

What is Household Hazardous Waste?

Household Hazardous Waste (HHW) includes items used every day in most homes. Items like paint, motor oil, batteries, household cleaners, lawn chemicals, fluorescent light bulbs, televisions and computer monitors contain unsafe materials and need to be disposed of in different ways than household garbage.

Why Participate?

The State of California requires by law that residents not mix HHW with their normal trash because HHW cannot be put into landfills.

Carlsbad residents have been able to take their HHW to permanent facilities in Vista, Poway or Oceanside for disposal. These facilities are still available to residents wishing to transport their own HHW and use of the facilities is free with an appointment.

How Do You Use This Service?

The City of Carlsbad recognizes that residents need an option for HHW disposal within the City's borders. Carlsbad has contracted with Clean Harbors, Inc., for the door-to-door collection of HHW. This service means that you call the toll-free number, schedule an appointment, and have your HHW picked up at your home.

Now Carlsbad residents have two options for disposal of Household Hazardous Waste:

1. You can still take your HHW to Vista, Poway or Oceanside and dispose of it for free; or,
2. You can take advantage of this new door-to-door collection service and, with a $10 copayment, have Clean Harbors come to your home and dispose of the HHW for you.

To Take Advantage of HHW Door-to-Door Collection

- **Collect HHW items from around your home.** Please place your HHW in sealed, non-leaking containers. If possible, leave products in the original container. Products labeled *Dangerous, Caution, Flammable, Poison, Toxic* or *Corrosive* are considered Household Hazardous Waste and should be disposed of properly. It is dangerous, and illegal, to discard HHW into the trash, into a storm drain, or down the sewer drain. If you think you have some HHW but are not sure, please call Clean Harbors to check!
- **Call Clean Harbors at 1-800-444-4244 and schedule an appointment.**

CALL

Clean Harbors
1-800-444-4244

to schedule an appointment or for additional information

On Your Appointment Date

- **Place the HHW in a safe place outside your home** — either on your porch or on your driveway close to your home.
- **Place your $10 copayment check made out to Clean Harbors, Inc., with the HHW.** Clean Harbors, Inc., will collect the HHW materials and dispose of them for you.
- The total weight that is considered per collection is up to 15 gallons or 125 lbs. of waste per pickup. If there is more, it is considered two pickups and you will need to leave a $20 copayment check.

How Often Can You Call?

You may call Clean Harbors as often as you need to. This service simply requires an appointment and a $10 copayment.

Household Hazardous Waste includes:

- ☑ Aerosols
- ☑ Asbestos (3-foot sections)
- ☑ All Purpose Cleaners
- ☑ Antifreeze
- ☑ Auto Batteries
- ☑ Auto Fluids
- ☑ Computer Monitors
- ☑ Disinfectants
- ☑ Drain Opener
- ☑ Fertilizers
- ☑ Fluorescent Light Bulbs
- ☑ Furniture Polishes and Stains
- ☑ Gasoline
- ☑ Glue
- ☑ Household Batteries
- ☑ Household Cleaners
- ☑ Insecticides
- ☑ Kerosene
- ☑ Lighter Fluid
- ☑ Mercury Thermostats
- ☑ Motor Oil
- ☑ Oil Filters
- ☑ Oven Cleaner
- ☑ Latex Paint
- ☑ Oil-Based Paint
- ☑ Pesticides and Herbicides
- ☑ Pool Chemicals
- ☑ Solvents
- ☑ Televisions
- ☑ Thinners
- ☑ Varnishes

If you think you have HHW but are not sure, please call Clean Harbors to check!

Reduce

... by purchasing only the amount you need.

Reuse

... the products by donating unused portions to friends or community organizations.

Recycle

... leftover household hazardous products that are recyclable and dispose of the others safely by participating in a household hazardous waste collection program.

Think globally.
Act neighborly.
Buy responsibly.

think globally. act neighborly.

City of Carlsbad Environmental Programs
www.carlsbadconserves.org 760-602-4646

City of Carlsbad
Environmental Programs
www.carlsbadconserves.org
(760) 602-4646

RECYCLE
USED OIL

Paid for using funds from the
California Integrated Waste Management Board

CITY OF CARLSBAD **PUBLIC WORKS**

At Your Service!

DESIGN • CONSTRUCT • OPERATE • MAINTAIN

1635 Faraday Avenue
Carlsbad, CA 92008

www.carlsbadca.gov

041607

Put Toxic Waste in Its Place!

CITY OF CARLSBAD
ENVIRONMENTAL PROGRAMS
Toxic Waste Disposal

think globally. act neighborly.

Put Toxic Waste in Its Place!

CITY OF CARLSBAD **PUBLIC WORKS**

At Your Service!

Used Oil

- **Oil does not wear out.** The same processes that refine crude oil into lubricating oil can re-refine your used oil into certified lubricating oil using one-third the energy.
- **Do not dump your oil. It is illegal.** Please do not contaminate your oil by placing it in old containers. Take your used oil to one of these convenient centers, and close the loop by purchasing re-refined lubricating oil.

Big O Tires
(760) 720-5212
2615 State Street
Carlsbad, CA 92008
Monday-Friday .....8 am-6 pm
Saturday.....8 am-5 pm
Sunday.....closed

Jiffy Lube
(760) 431-9875
6021 Paseo del Norte
Carlsbad, CA 92010
Monday-Friday .....7:30 am-7 pm
Saturday.....7:30 am-6 pm
Sunday.....9 am-5 pm

Firestone
(760) 434-8392
2545 El Camino Real
Carlsbad, CA 92008
Monday-Friday .....7 am-7 pm
Saturday.....7 am-6 pm
Sunday.....9 am-4 pm

Household Hazardous Waste

What is Household Hazardous Waste?

Household Hazardous Waste includes:

Aerosols	Furniture Polishes	Oven Cleaner
Asbestos (3' sections)	Furniture Stains	Latex Paint
All Purpose Cleaners	Gasoline	Oil-Based Paint
Antifreeze	Glue	Pesticides and Herbicides
Auto Batteries	Household Batteries	Pool Chemicals
Auto Fluids	Household Cleaners	Solvents
Computer Monitors	Insecticides	Televisions
Disinfectants	Kerosene	Thinners
Drain Opener	Lighter Fluid	Varnishes
Fertilizers	Mercury Thermostats	
Fluorescent Light Bulbs	Motor Oil	
	Oil Filters	

Door-to-Door HHW Collection
By Appointment Only
(800) 444-4244
Clean Harbors
$10 copayment per pickup

Oceanside HHW Facility Drop-Off
By Appointment Only
(760) 929-9400
2880 Industry Street
Oceanside, CA 92054
Alternating Saturdays ..... 9 am-1 pm
Free

Vista HHW Facility Drop-Off
(800) 444-4244
1145 East Taylor Street
Vista, CA 92084
Saturday..... 9 am-3 pm
Free

Electronic Waste

Computer monitors and televisions containing cathode ray tubes (CRTs) cannot go in the trash. Discarded CRTs are considered hazardous because of the amount of lead they contain and must be handled appropriately. All electronic equipment should be reused or recycled to recover useful materials and reduce disposal.

Electronic Waste also includes:
- Large household appliances (ovens, refrigerators, etc.)
- Small household appliances (toasters, vacuum cleaners, etc.)
- Office and communication (PCs, printers, phones, faxes, etc.)
- Entertainment electronics (TVs, HiFis, portable CD players, etc.)
- Fluorescent light tubes
- Sports and leisure equipment (electronic toys, training machines, etc.)

Waste Management Drop-Off
(760) 929-9400
5960 El Camino Real
Carlsbad, CA 92011
Tuesday-Saturday.....8 am-4 pm
Free for televisions, computer monitors and laptop computers.
All other items: 50¢ per pound

Vista Collection Facility Drop-Off
(800) 444-4244
1145 East Taylor Street
Vista, CA 92084
Saturday.....9 am-3 pm
Free

Carlsbad Conserves

Environmental Programs Newsletter · Winter 2006-2007

Reduce, Reuse and Recycle!

CARLSBAD ENVIRONMENTAL PROGRAMS encourages all residents to remember that every day is Earth Day and the holiday season is the perfect time for using less. Thanksgiving, Christmas, Hanukkah, or Kwanzaa, the holiday season is an opportunity for most of us to spread holiday cheer through gifts and large family dinners. We buy and use large volumes of food, toys and material goods... but do we still remember to recycle where possible?

Remember that every day is Earth Day.

- Each year around the holidays the amount of trash generated increases approximately 25%.
- Plan meals light on volume. Portion control will help your waistline, the bottom line and won't line our trash containers with wasted food.

Here is a simple chart with some recommended portions that could be useful in planning your holiday meals:

FOOD/DRINK	PORTION PER PERSON
Eggnog	1/2 cup
Turkey for up to 10 people	12-14 pounds
Stuffing	1/4 pound
Sweet Potato Casserole	1/4 pound
Green Beans	1/4 pound
Cranberry relish	3 tablespoons
Pumpkin Pie	1/8 of a 9" pie

- Full freezers and refrigerators help keep the temperature down with all the cold food.
- Run the dishwasher only when you have a full load; use the no-heat fan or air-dry setting for overnight washing.
- Walk to neighborhood parties or carpool (with a designated driver!) with friends if it's too far to walk.
- Think of gift ideas that do not require just buying "stuff" – savings accounts, movie tickets, stock shares, concert tickets, and sports tickets are heavy on value but light on environmental impact.
- Reduce the wrapping paper that you use to cover gifts or even better, put gifts in reusable gift bags.
- Consider energy use when planning for the holidays. Electricity usage can spike during the holidays when we decorate trees and homes with elaborate displays.
- Turn down the heat before the guests arrive. You'll save energy while the extra body heat of your guests will warm up the room.
- Purchase holiday lights with small or LED bulbs. Low wattage has two advantages: it consumes less energy and gives off less heat, making your lights safer. LED can be more expensive initially but they require less electricity and are very durable.
- When buying electronic toys and other portable items that are used regularly, remember to buy rechargeable batteries to go with them.
- Clean it up! Keeping the coils on your fridge free of dust bunnies will use less energy and help it last longer.
- Turn off computers, TVs, VCRs and so forth, when not in use.

Did You Know?

Storm Water Tips

- Call 602-2799 to report a potential storm water violation.
- Provide Who, What, Where, When, and Why (if you know it). The more details you can provide (exact address, license plate number, etc.), the better our response.
- Call at the time you see something happening, if possible. It is okay to leave a message. If it is the dumping of hazardous materials, calling the hotline after business hours will connect you to Police Dispatch.
- If the discharge is coming from a new construction site, please call 602-2780.

We follow up on all calls we receive on the hotline, and greatly appreciate those who call to help prevent pollution from getting into our waterways and ocean. We all want clean beaches and water in Carlsbad!

PETER NAGAINIS

Household Hazardous Waste and Used Oil

Did You Know...?

Did you know that if properly processed, recycling motor oil requires less oil than creating new oil? Did you know that you can request re-refined oil when you get your oil changed?

Carlsbad sponsors three collection centers that are State-certified to collect used motor oil. When residents drop off uncontaminated motor oil to these locations, in an approved (clean) container, the oil gets recycled and residents can get a 4 cents per quart rebate! That may not seem like much but consider that you're being paid to do the right thing. You can feel great about yourself AND have a little change in your pocket.

Used Oil: What Carlsbad Residents Can Do

There are five actions a citizen can take in order to be the ideal recycler of used oil:

- Handle used oil properly
- Do not spill it or dump it onto land or water
- Avoid contaminating used oil with other liquids such as water, antifreeze, gasoline or parts cleaner
- Recycle your oil
- Demand re-refined oil

By offering the Used Oil Program, the city is hoping citizens will model this ideal behavior.

Where Can I Recycle My Used Motor Oil?

Carlsbad residents can drop off used motor oil during business hours at a certified collection center:

- Big O Tires at 2615 State Street
- Firestone at 2545 El Camino Real
- Jiffy Lube at 6021 Paseo Del Norte

If your used oil is contaminated, you can take up to 15 gallons to your nearest Household Hazardous Waste Facility. You should call ahead of time for hours of operation and instructions, and bring proof of residency.

- Clean Harbors (phone: 800-444-4244) will pick up your used oil (up to 15 gallons) for a $10 co-pay.
- The Vista Household Hazardous Waste Collection Facility is located at 1145 East Taylor Street, across the street from the City of Vista Public Works Yard. This facility is open Saturdays from 9 am to 3 pm, except for holiday weekends. Please call (800) 444-4244 for more information. No charge to residents; proof of residency is required.

- Oceanside HHW Collection Facility. Located at 2880 Industry Street. Alternating Saturdays from 9 am to 1 pm. By APPOINTMENT ONLY. Please call (760) 929-9400. Residents may bring up to 15 gallons or 125 pounds per visit. No charge to residents; proof of residency is required.

Free Bulky Item Collections Increase!

In 2007 the City of Carlsbad will offer residents an additional free date for disposing of unwanted large or "bulky" items. Using the City's bulky item collection service is easy and is the responsible way to dispose of large items such as appliances and furniture that cannot be collected during the weekly trash collections.

- In 2007 there will be five opportunities for a free bulky item collection.
- Each household may dispose of two free bulky items at each bulky item collection event.
- To participate in these collections, schedule an appointment by calling Waste Management at **(760) 929-9400** during the appointment period.
- Place your items on the curb outside your residence on the collection day.

Collection Date	Appointment Period
January 27th	January 5th – 16th
March 24th	March 2nd – 13th
June 23rd	June 4th – 14th
September 22nd	September 3rd – 12th
November 10th	October 22nd – 31st

NOTE: Bulky item collection can be done at any time during the year – to schedule a collection residents should call (760) 929-9400. The cost of a regular bulky item collection is $30 for the first item and $5 for each subsequent collection.

A publication from

CITY OF CARLSBAD **PUBLIC WORKS**

At Your Service!

ENVIRONMENTAL PROGRAMS

1635 Faraday Avenue • Carlsbad, CA 92008

think globally, act neighborly.

www.carlsbadconserves.org **• Environmental Hotline (760) 602-4646**

Carlsbad Conserves
Environmental Programs Newsletter • Spring 2007

Storm Water Protection

Anything that enters a storm drain will flow directly into streams, lagoons or the ocean.

Storm drains are not connected to any filtration system and anything that enters a storm drain will flow directly into streams, lagoons, or the ocean and can pollute water for fish and wildlife.

ENVIRONMENTAL HEALTH is one of the City's top priorities. Storm Water Protection is an integral part of the City of Carlsbad's Environmental Programs Division. This group's job is to maintain a clean and healthy Carlsbad. They do this in two important ways. First, by managing a program aimed at reducing pollutants in storm water to the Maximum Extent Practicable (MEP) through the use of Best Management Practices (BMPs). And secondly, by protecting water quality during the three major phases of urban development:

1. Land use planning for new development
2. Construction
3. "Use" or existing development phase

When you encounter illegal dumping or discharge in the storm drain system please call the Storm Water Hotline (760) 602-2799. It is important that you call this number when the event is happening so that City personnel can stop it – after the fact there is little that can be done.

Sources of pollutants into the waters in and around Carlsbad are:

- Paved Roads
- Buildings and Parking lots
- Landscaping
- Residences
- Construction Sites
- Illegal Dumping

Water Conservation

THE CITY OF CARLSBAD'S Environmental Programs staff is working with restaurants throughout Carlsbad to raise awareness about the importance of conserving water. Water is a limited and precious resource throughout Southern California because we live in a semi-arid area. Carlsbad currently imports all of its drinking water – most from the Colorado River or from Northern California.

At local restaurants there are placards and menu stickers provided by Environmental Programs that explain to customers that they must ask for glasses of water. This program was initiated in the past during drought conditions in summer months; we are instituting it now as a reminder to residents that water is a resource and a limited one. Thirsty customers will find the water available and as tasty as ever but by having to ask for it only those people who really want water will get it – reducing wasted water.

You can reduce water use at home!

- Monitor sprinkler usage – grass and plants need less water than you think!
- Get a water use audit from the City of Carlsbad. Call (760) 602-4646
- Run dishwasher only when full – it uses the same amount of water each time
- Don't leave the water running when doing dishes in the sink
- Take shorter showers

Environmental Programs Guide

THE CITY OF CARLSBAD and Coast Waste Management partnered in the creation of an Environmental Programs Guide that was sent to residents in January. This publication is designed to offer information about how to dispose of all sorts of waste from trash and recycling to household hazardous waste (HHW). There is also information included on ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution.

The Environmental Programs Guide is available from the City at the Faraday Center or by calling the City's Environmental Programs Hotline, or from Coast Waste Management at (760) 929-9400. Residents are encouraged to read the guide and hold onto it for reference regarding the City's Environmental Programs.

Calendar of Important Dates

- **March 2-13:** Appointment period for Bulky Item Collection
- **March 24:** Bulky Item Collection Day (two items are free!)
- **April 21:** Earth Day
- **April 21, 9 am-1 pm:** Special HHW Collection Event for Carlsbad residents only, appointments required. For appointments please call (760) 602-2720 or go to *http://www.carlsbadca.gov/waste/hhwsched.html*
- **May 5:** Compost Bin Sale Event. For more information about Environmental Programs please refer to *www.carlsbadconserves.org*
- **May 23:** Public Works Fair. Carlsbad Community Library, 1775 Dove Lane (North Parking Lot)
- **June 4-14:** Appointment period for Bulky Item Collection
- **June 23:** Bulky Item Collection Day (two items are free!)

Compost Program

IMPORTANT DATES – FREE Master Composter course will be offered for four weeks between February 24th and March 17th. The classes will be on Saturdays from 9 am until noon. To register for the classes please contact the City's designated contractor, the Solana Center for Environmental Innovation, (760) 436-7986, ext 216.

For those interested in learning more about how to compost and how compost can be beneficial for their gardens but not sure that they want to commit to becoming a Master Composter, there are also free workshops that will teach basics. The next classes will be:

- Saturday, March 17th: 10-11:30 at the Flower Fields
- Saturday, March 24th: 10-11:30 at the Agua Hedionda Discovery Center

Think Recycling

EVERYONE WANTS TO do the right thing for the environment. We all have a responsibility to take care of Carlsbad's natural beauty and we can start at home. The Carlsbad Environmental Programs works using the principles of reduce, reuse, and recycle. This means that first we reduce what we use, then reuse what we buy where possible and then recycle what we use.

The reach of each person is well beyond their home. Think about adopting some environmentally sensitive behavior when you're out.

Here are some tips to consider:

- Reuse where you can
- Try to use fewer materials that end up in the trash
- Dispose of your trash in a covered container
- Dispose of your paint, toxic cleaners and oil properly
- Reduce your use of water
- Recycle materials at home and at play
- Do not litter
- Walk when its possible instead of driving
- Report materials being discharged into storm drains; call (760) 602-2799

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ENVIRONMENTAL PROGRAMS

1635 Faraday Avenue • Carlsbad, CA 92008

***www.carlsbadconserves.org* • Environmental Hotline (760) 602-4646**

2007 Water Quality Report

Carlsbad Municipal Water District

Este informe contiene información muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

Carlsbad Municipal Water District
5950 El Camino Real
Carlsbad, CA 92008
(760) 438-2722

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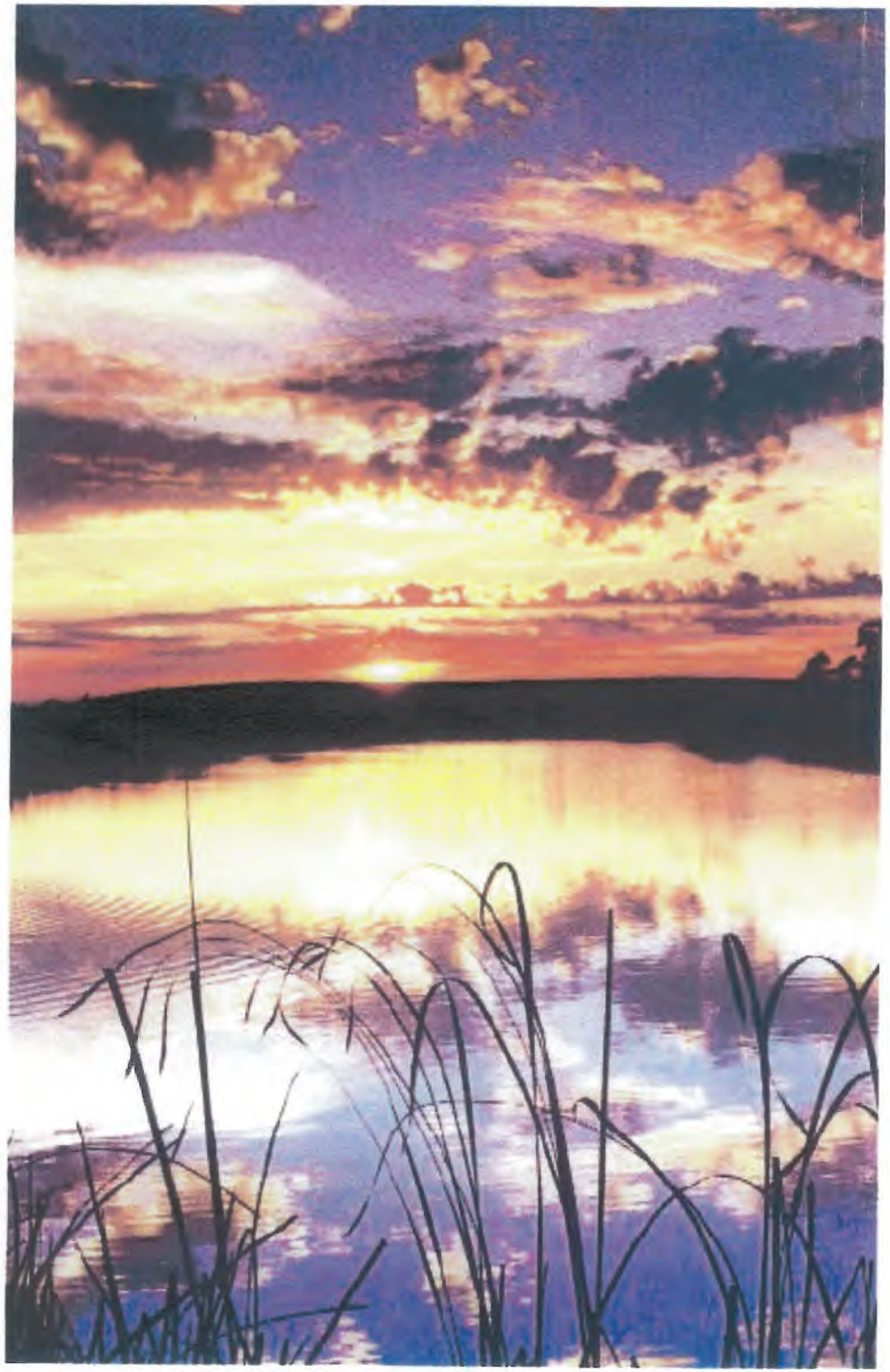

Quality

The Carlsbad Municipal Water District is providing this report to customers as an overview of how your potable water is delivered and how the City works to ensure that the highest quality is achieved.

This report includes information about the quality of the water delivered to Carlsbad Municipal Water District customers in 2006.

Clean Environment

Clean waterways not only provide recreational opportunities for us and habitat for animals and plants, but also add beauty to our natural landscape. Everyone benefits from clean water and plays a role in keeping our creeks, lagoons, and ocean clean.

Water Quality

One of the most important environmental issues today is prevention of storm water run-off

Did you know that storm drains are not connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rain water away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly to creeks, lagoons, and the ocean.

Storm water pollution comes from a variety of sources including oil, fuel, and fluids from vehicles and heavy equipment, lawn clippings, pesticide, and fertilizer runoff from landscaping, concrete and sediment from construction and landscaping activities, bacteria from human and animal waste, and litter.

The City of Carlsbad is committed to improving water quality and reducing the amount of pollutants that enter our precious waterways.

Storm water protection is a shared duty between the City of Carlsbad and the community. The City monitors and cleans storm drains on public streets, property, or easements. The community's role is to keep our storm drains free of trash, debris, excessive vegetation, and other materials that may pollute, contaminate, or block the flow of water through the storm drain system.

What You Can Do To Help

1. Sweep or Rake

Sweep up debris and put it in a trash can. Do not use a hose to wash off sidewalks, parking areas, and garages. Rake up yard waste and start a compost pile.

2. Dispose of Yard Waste More Frequently

By disposing of grass, leaves, shrubs, and other organic matter more frequently, less will wash into storm drains.

3. Reduce Use of Landscape Chemicals

Decrease the use of lawn and garden care products such as pesticides, insecticides, weed killers, fertilizers, herbicides, and other chemicals. Avoid over-irrigation which washes landscape chemicals into the gutter and storm drains.

4. Use Soap Sparingly

When washing your car at home use soap sparingly, divert wash water to landscaped areas, and pour your bucket of soapy water down the sink. NEVER wash your car in the street.

5. Clean Up After Your Pets

Take a bag when you walk your pets and be sure to always clean up after them. Flush pet waste down the toilet or seal it in a plastic bag and throw it in the trash.

6. Buy Non-Toxic Products

When possible, use non-toxic products in household cleaning. If you must use a toxic cleaning product, buy small quantities, use it sparingly and properly dispose of unused portions. For the household hazardous waste collection facility nearest you, call: (800) CLEANUP or (760) 602-4646.

Conserve

The Carlsbad Water Ethic promotes responsible and efficient water use in our Community. If Carlsbad residents adopt these behaviors as a way of life, there will be plenty of clean water for generations to come.

- New landscaping shall incorporate drought-tolerant plant materials and micro-irrigation (drip) systems wherever possible.
- Water can never leave the user's property due to over-irrigation of landscape.
- Watering must be done during the early morning or evening hours to minimize evaporation (between 4:00 pm and 9:00 am the following morning).
- All leaks must be investigated and repaired.
- Water cannot be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards.
- Reclaimed or recycled water shall be used wherever and whenever possible.

For more information on water conservation programs, call: (760) 602-4646.

Supply

Since there are no local sources of fresh drinking water, CMWD imports all of its water supply. This supply is treated by and purchased from the Metropolitan Water District of Southern California (MWD) via our wholesaler, the San Diego County Water Authority (SDCWA).

MWD receives water from two sources: the Colorado River through the Colorado River Aqueduct, and Northern California through the California Aqueduct (also known as the State Water Project). These waters are blended and rigorously treated at MWD's Lake Skinner Treatment Plant in southern Riverside County and delivered to Carlsbad through the San Diego Aqueduct, owned by SDCWA.

An average of 67% of Carlsbad's water comes from the Colorado River, with the remaining 33% coming from the State Water Project.

Safety

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and can pick up substances resulting from the presence of animal or human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria. These may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

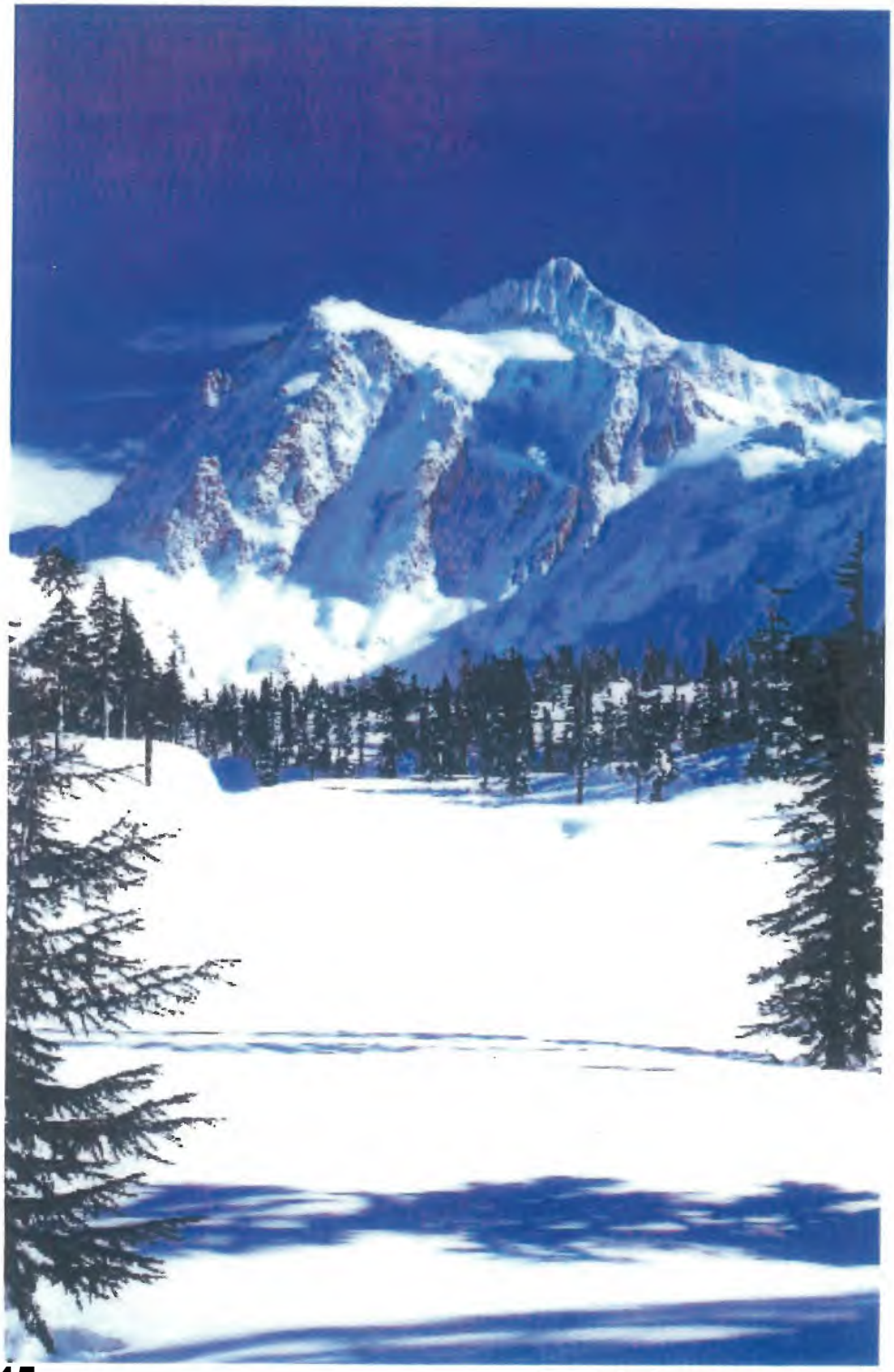

- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

The water quality data contained in this report is obtained from MWD based on their sampling of waters combined at the Lake Skinner Plants.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at: (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Information is also available from the Safe Drinking Water Hotline at: (800) 426-4791.

How to Contact Us

This report covers testing for contaminants in 2006. For questions or concerns regarding the quality of Carlsbad's water, contact Jim Ball at: (760) 438-2722 or by email at jball@ci.carlsbad.ca.us. For more detailed information on testing procedures, results, and source water assessments, contact the Metropolitan Water District of Southern California's Water Quality Division at: (800) CALL MWD.

This report is mailed to all CMWD customers at their billing address and is available at most City facilities. This report may be photocopied and distributed or posted in a prominent place at your facility. Additional copies are available on the Internet at www.ci.carlsbad.ca.us/cserv/water.html or by calling the Carlsbad Municipal Water District at: (760) 438-2722.

The Carlsbad Municipal Water District
5950 El Camino Real
Hours: Monday through Friday, 8 am to 5 pm

Additional sources for water quality information:

San Diego County Water Authority
(858) 522-6600 • www.sdcwa.org

Metropolitan Water District of Southern California
(800) CALL-MWD (225-5693) • www.mwd.dst.ca.us

California Department of Health Services
Division of Drinking Water & Environmental Management
(619) 525-4159 • www.dhs.ca.gov/ps/ddwem

U.S. Environmental Protection Agency
Office of Ground Water & Drinking Water
Safe Drinking Water Hotline: (800) 426-4791
www.epa.gov/safewater/dwhealth.html
www.epa.gov/safewater/faq/faq.html

How to Read this Report

As you read the water quality tables in this report, compare the level of constituents found in CMWD's water in the "Combined Skinner Plant Effluents" column with the standards set for them in the MCL and PHG columns. You'll see that CMWD's water did not violate any drinking water standards in 2006.

The following are key terms to help you understand the standards we use to measure drinking water safety.

Public Health Goals (PHGs)
Reflect the level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goals (MCLGs)
Reflect the same levels as PHGs, but are set by the U.S. Environmental Protection Agency.

Maximum Contaminant Levels (MCLs)
Reflect the highest level of a contaminant that is allowed in drinking water. MCLs are divided into two categories: primary and secondary.

Maximum Residual Disinfectant Levels (MRDLs)
Reflect the level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goals (MRDLGs)
Reflect the level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL)
The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG)
The level of disinfectant added for water treatment below which there is no known or expected risk to health. MEDLGs are set by the U.S. Environmental Protection Agency.

Treatment Technique
A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level
The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.

Abbreviations

[illegible]	Colony-Forming Units per Milliliter
[illegible]	DimethylTetrachloroterephthalate
[illegible]	Disinfection By-Products
[illegible]	Detection Limits for purposes of Reporting
[illegible]	Haloacetic Acids (five)
[illegible]	Methylene Blue Active Substances
[illegible]	Maximum Contaminant Level
[illegible]	Maximum Contaminant Level Goal
[illegible]	Million Fibers per Liter
[illegible]	Most Probable Number
[illegible]	parts per million or milligrams per liter (mg/L)
[illegible]	parts per quadrillion or picograms per liter (pg/L)
[illegible]	parts per trillion or nanograms per liter (ng/L)
[illegible]	Running Annual Average
[illegible]	Saturation Index (Langelier)
[illegible]	Total Organic Carbon
[illegible]	Total Trihalomethanes
[illegible]	Treatment Technique
[illegible]	microSiemen per centimeter;also equivalent to µmho/cm (micromho per centimeter)

PARAMETER	UNITS	STATE OR FEDERAL MCL [MRDL]	PHG (MCLG) [MRDLG]	STATE DLR	COMBINED SKINNER PLANTS RANGE	COMBINED SKINNER PLANTS AVERAGE	MAJOR SOURCES IN DRINKING WATER
Percent State Project Water	%	NA	NA	NA	41 - 59	51	
PRIMARY STANDARDS – Mandatory Health-Related Standards							
CLARITY							
Combined Filter Effluent Turbidity	NTU/ %	0.3/95 (a)	NA	NA	Highest 0.11	100%< 0.3	Soil runoff
MICROBIOLOGICAL							
Total ColiformBacteria	%	5.0 (b)	(0)	NA	0%	0%	Naturally present in the environment
Fecal Coliform and E. coli	(c)	(c)	(0)	NA	Distribution System-wide Fecal Coliform-positive samples = 0 Distribution System-wide E.coli-positive samples = 0		Human and animal fecal waste
Heterotrophic Plate Count (HPC) (d)	CFU/mL	TT	NA	NA	TT	TT	Naturally present in the environment
Cryptosporidium (e)	Oocysts/200 L	TT	(0)	NA	ND	ND	Human and animal fecal waste
Giardia (e)	Cysts/200 L	TT	(0)	NA	ND	ND	Human and animal fecal waste
Total Culturable Viruses (e)	P or A/1000 L	TT	(0)	NA	A	A	Human and animal fecal waste
ORGANIC CHEMICALS							
Pesticides/PCBs							
Acrylamide	NA	TT	(0)	NA	TT	TT	Water treatment chemical impurities
INORGANIC CHEMICALS							
Aluminum (f)	ppb	1000	600	50	ND	ND	Residue from water treatment process; natural deposits; erosion
Fluoride (naturally-occurring)	ppm	2.0	1	0.1	0.16 - 0.23	0.20	Erosion of natural deposits; water additives for tooth health
RADIOLOGICALS (j)							
Gross Alpha Particle Activity	pCi/L	15	(0)	3	ND	ND	Erosion of natural deposits
Uranium	pCi/L	20	0.43	1.0	1.5	1.5	Erosion of natural deposits
DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS (FEDERAL RULE)							
Total Trihalomethanes (TTHM) (l)	ppb	80	NA	0.5	41 - 69	53	By-product of drinking water chlorination
Total Trihalomethanes (TTHM) (l)	ppb	80	NA	0.5	12 - 73	Highest RAA 43	By-product of drinking water chlorination
Haloacetic Acids (five) (HAA5) (l,m)	ppb	60	NA	1	20 - 29	25	By-product of drinking water chlorination
Haloacetic Acids (five) (HAA5) (l,m)	ppb	60	NA	1	5 - 41	Highest RAA 18	By-product of drinking water chlorination
Total Chlorine Residual	ppm	[4.0]	[4.0]	NA	1.4- 2.8	Highest RAA 2.4	Drinking water disinfectant added for treatment
Bromate (n)	ppb	10	(0)	5	NA	Highest RAA NA	By-product of drinking water ozonation
DBP Precursors Control (TOC) (l)	ppm	TT	NA	0.30	TT	TT	Various natural and man-made sources
SECONDARY STANDARDS – Aesthetic Standards							
Aluminum (f)	ppb	200	600	50	ND	ND	Residue from water treatment process; natural deposits erosion
Chloride	ppm	500	NA	NA	68 - 95	78	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NA	NA	1 - 2	2	Naturally occurring organic materials
Corrosivity (o) (as Saturation Index)	SI	non-corrosive	NA	NA	0.17 - 0.45	0.28	Elemental balance in water; affected by temperature, other factors
Odor Threshold (p)	TON	3	NA	1	2	2	Naturally-occurring organic materials
Silver	ppb	100	NA	10	ND	ND	Industrial discharges
Specific Conductance	µS/cm	1600	NA	NA	650 - 880	748	Substances that form ions in water; seawater influence
Sulfate	ppm	500	NA	0.5	118 - 184	154	Runoff/leaching from natural deposits; industrial wastes
Thiobencarb (f)	ppb	1	70	1	ND	ND	Runoff/leaching from rice herbicide
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	381 - 518	438	Runoff/leaching from natural deposits; seawater influence
Turbidity (a)	NTU	5	NA	NA	0.05 - 0.08	0.06	Soil runoff
Zinc	ppm	5.0	NA	0.05	ND	ND	Runoff/leaching from natural deposits; industrial wastes
UNREGULATED CHEMICALS REQUIRING MONITORING							
Boron	ppb	NA	NL=1,000	100	100 - 160	140	Runoff/leaching from natural deposits; industrial wastes
ADDITIONAL PARAMETERS							
Alkalinity	ppm	NA	NA	NA	80 - 100	88	
Calcium	ppm	NA	NA	NA	40 - 55	47	
Hardness	ppm	NA	NA	NA	174 - 234	200	
Magnesium	ppm	NA	NA	NA	18 - 23.5	20	
N-Nitrosodimethylamine (v) (NDMA)	ppt	NA	3	2	ND	ND - 7.5	By-product of drinking water chlorination; industrial processes
pH	pH Units	NA	NA	NA	8.1 - 8.2	8.1	
Potassium	ppm	NA	NA	NA	3.5- 4.3	3.7	
Radon (j)	pCi/L	NA	NA	100	ND	ND	
Sodium	ppm	NA	NA	NA	62 - 88	72	
TOC (w)	ppm	TT	NA	0.30	2.0 - 3.1	2.4	Various natural and man-made sources

Footnotes

- The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The monthly averages and ranges of turbidity shown in the Secondary Standards section were based on the plant effluents.
- Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution system sampling from all the treatment plants. In 2006, 8,813 samples were analyzed. The MCL was not violated.
- Fecal coliform/E.coli MCLs: The occurrence of 2 consecutive total coliform-positive samples, one of which contains fecal coliform/E. coli, constitutes an acute MCL violation. The MCL was not violated in 2006.
- HPC values were based on the monthly averages of the plant effluent samples. In 2006, all distribution samples collected had detectable total chlorine residuals and no HPC was required. Method detection limit is < 1 CFU/mL.
- In 2006, the effluent from the five treatment plants had no detectable Cryptosporidium, Giardia, or Total Culturable Viruses. Two hundred liters of water were collected monthly for Cryptosporidium and Giardia analysis. One thousand liters of water were collected quarterly for Total Culturable Viruses analysis. Reported results ("P" for presence or "A" for absence) were taken from the first three quarters of 2006.
- Aluminum, copper, MTBE, and thiobencarb have both primary and secondary standards.
- MTBE reporting level is 0.5 ppb.
- Lead and copper are regulated as a Treatment Technique under the Lead and Copper Rule. It requires systems to take water samples at the consumers' tap. The action level, which triggers water systems into taking treatment steps if exceeded in more than 10% of the tap water samples, is 1.3 ppm for copper and 15 ppb for lead.
- State MCL is 45 mg/L as nitrate, which equals 10 mg/L as N.
- Metropolitan conducted four quarters of monitoring from August 2005 to April 2006. Reported results were taken from the first two quarters of 2006. Effective June 11, 2006, the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.
- Standard is for Radium-226 and -228 combined.
- Average and range for the treatment plant effluent were taken from weekly samples for TTHM and monthly samples for HAA5. Distribution system-wide average and range were taken from 47 samples collected quarterly. In 2006, Metropolitan was in compliance with all provisions of the Stage 1 Disinfectants/Disinfection By-Products (D/DBP) Rule. The State of California has adopted the D/DBP Rule effective June 2006. TOC provides a medium for the formation of DBPs. Metropolitan was also in compliance with the DBP precursor (TOC) control portion of the Stage 1 D/DBP regulation.
- DLR = 1.0 ppb for each HAA5 analyte (dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid) except for monochloroacetic acid which has a DLR = 2.0 ppb.
- Running annual average was calculated from weekly samples. Bromate reporting level is 3 ppb.
- SI measures the tendency for a water to precipitate or dissolve calcium carbonate (a natural mineral in water). Positive indices indicate the tendency to precipitate and/or deposit scale on pipes and are assumed to be non-corrosive. Negative indices indicate the tendency to dissolve calcium carbonate and are assumed to be corrosive. Effective September 2006, corrosivity is no longer part of the Secondary Standards for drinking water in the State of California.
- Metropolitan has developed a flavor-profile analysis method that can more accurately detect odor occurrences. For more information, contact MWD at (213) 217-6850.
- Chromium VI reporting level is 0.03 ppb.
- Both PHG (issued by the Office of Environmental Health Hazard Assessment) and NL (issued by CA Department of Health Services) were set at 6 ppb. Perchlorate reporting level is 2 ppb.
- Data collected from January 2002 to January 2003. Minimum reporting levels are as stipulated in the Federal Unregulated Contaminants Monitoring Rule (UCMR). List 1 - Assessment Monitoring consists of 12 chemical contaminants for which standard analytical methods are available. List 2 - Screening Survey consists of 16 contaminants for which new analytical methods are used.
- Ranges for the plant effluent and the distribution system were taken from two quarterly samples. Distribution system samples were taken from three locations.
- AI measures the aggressiveness of water transported through pipes. Water with AI <10.0 is highly aggressive and would be very corrosive to almost all materials found in a typical water system. AI > 12.0 indicates non-aggressive water. AI between 10.0 and 11.9 indicates moderately aggressive water.
- Ranges for the plant effluent were taken from quarterly samples. The distribution system-wide range was taken from 19 samples collected quarterly. The PHG was established at 3 ppt in December 2006. The California NL is 10 ppt.
- Average and range for TOC were taken from weekly samples collected at the combined filter effluent.

City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008
(760) 602 - 4646
Printed on recycled paper
Waste Management
5960 El Camino Real
Carlsbad, CA 92008
(760) 929-9400
Pre-Sorted Std
US Postage
PAID
El Cajon, CA
Permit No. 299
City of Carlsbad
Environmental Programs Guide
(760) 602-4646
think globally. act neighborly.
www.carlsbadconserves.org

Welcome to the City of Carlsbad

This brochure provides guidelines and helpful hints on the environmental services available to Carlsbad residents.

Solid Waste Collection

The Solid Waste section will assist residents in understanding the services provided for refuse, recycling and yard waste collection in the City of Carlsbad. The Additional Waste Services section of this flyer instructs residents how and where to properly dispose of household hazardous waste, electronic waste and used oil.

Water Conservation

This section provides residents with cost saving options that will aid them in their efforts to conserve water. Resources such as toilet and clothes washer voucher programs and free on-site water audits are available.

Storm Water Protection

Storm water pollution affects everyone who lives, works and plays in the City of Carlsbad. Litter, fertilizers, pet waste, oil and soap can be washed from our yards, driveways and streets into the storm drain system and directly into our creeks, lagoons, and onto our beaches. This pollutes our water and endangers wildlife. The Storm Water section of this flyer identifies some preventative measures residents can take to minimize the source of these pollutants and the number to call to report illegal discharges in the storm drain system.

Brought to you in partnership by the City of Carlsbad and Waste Management, the City's refuse and recycling provider.

Storm Water Protection

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to prevent flooding by carring rainwater away from developed areas . Untreated storm water flows directly into our creeks, lagoons and the ocean, carrying any pollutants from the roads.

Storm water pollution comes from a variety of sources, including:

- Oil from vehicles
- Excess pesticides and fertilizer from landscaping
- Bacteria from pet waste
- Sediment from construction and landscaping projects
- Soap from car washing
- Litter
- Lawn and garden debris
- Improperly disposed home improvement products (paint, stucco, grout, cement, solvent)
- Washing driveways and sidewalks

Pollution prevention is up to YOU!

Please help us protect OUR environment. Here are some tips to help keep creeks, lagoons and the ocean clean:

- Bag and dispose of pet waste in a trash can, not a yard waste container
- Use fertilizers and pesticides sparingly
- Adjust sprinklers to prevent over-watering
- When possible, take your car to a commercial car wash

- Keep automobiles properly maintained to prevent fluid leaks
- Properly dispose of trash and cigarette butts
- Volunteer at cleanup events in Carlsbad

"Only rain in the storm drain"

To report an illegal discharge or for more information, call our hotline at (760) 602-4646.

www.carlsbadconserves.org

Water Conservation

The Carlsbad Water Ethic promotes responsible and efficient water use in our arid city. Our residents should follow this Water Ethic even when we are not in a drought situation. We encourage residents to adopt these behaviors as a way of life.

- Incorporate drought-tolerant plant materials and micro-irrigation (drip) systems wherever possible into new landscaping
- Water should not leave the user´s property due to over-irrigation of landscape
- Water during the early morning or evening hours to minimize evaporation
- Investigate and repair all leaks
- Water cannot be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards
- Recycled water shall be used wherever and whenever possible.

Residential Voucher Programs

Carlsbad participates in a voucher/rebate program with other San Diego County Water Agencies. The goal of this program is to reduce the amount of water residents use - thus increasing the available supply to all residents. Vouchers are available for money off of the purchase and installation of water saving devices like ultra low flow toilets, high-efficiency clothes washers, landscaping and Weather-Based Irrigation Controllers.
Interested residents and Home Owners Associations can contact the Voucher Processing Center at (800) 986-4538. The center is open Monday through Friday from 8:00 a.m. to 5:00 p.m., and Saturday from 8:00 a.m. to 3:00 p.m.

Residential Survey

Carlsbad residents can receive a free, on-site water conservation survey. This will include a review of indoor and outdoor water saving opportunities, a leak check, and an irrigation system and water schedule review. Customers are also shown how to read their water meter and are given literature promoting other conservation programs.
For ideas on water conservation at home refer to www.h2ouse.org

Contact your local Water Agency

Carlsbad Water Customers: (760) 602-4646

Vallecitos Water Customers: (760) 744-0460

Olivenhain Water Customers: (760) 753-6466

How to contact us

City of Carlsbad Environmental Programs
1635 Faraday Avenue
Carlsbad, California 92008
(760) 602-4646

Hours: Monday - Thursday 7:30 a.m. - 5:30 p.m.
Friday 8:00 a.m.- 5:00 p.m.

www.carlsbadconserves.org

Waste Management
5960 El Camino Real
Carlsbad, California 92008
(760) 929-9400

Hours: Monday - Friday 8:00 a.m. - 5:00 p.m

http://northcounty.wm.com

Holiday Schedule

Waste Management does not offer service on the following holidays:

- New Year's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day

When a holiday falls on a weekday, collection will be delayed one day for the remainder of the week.

Holiday announcements will be published in your local newspaper.

www.carlsbadconserves.org

Buyback Center

Redeemable items

- Newspaper
- CRV aluminum cans
- CRV glass bottles
- CRV plastic bottles
- CRV bi-metal cans

CRV = California Redemption Value. Ready-to-drink beverage containers which are packaged in aluminum, glass, plastic, bi-metal or any combination of these materials.

Also accepted:

- Electronic devices
- Household batteries

(For more information see Household Hazardous Waste)

Donation items

- Non CRV aluminum
- Non CRV glass
- Non CRV plastic
- Tin cans
- White ledger paper
- Computer paper
- Mixed paper
- Corrugated cardboard

Hours: Tuesday - Saturday
8:00 a.m. - 4:00 p.m.
Closed:
1:00 p.m. - 1:40 p.m.
(760) 929-9400

Bulky Item Pickup

Need to dispose of such items as furniture (couch, chair, dresser, cabinet, bookshelf, mattress) or appliances (toilet, washer, stove, sink)? FREE bulky item collection days are scheduled periodically in your community. Residents may dispose of two items per event. Special pickups are available for a fee. Call Waste Management at (760) 929-9400 to schedule an appointment or for additional information.

Electronic Waste

What is E-Waste?

The rapid advances in new technology and demand for new electronic equipment have increased the disposal of outdated electronic equipment known as "E-Waste."

Proper disposal of "E-Waste" through recycling and reuse prevents them from reaching landfills. This also helps to minimize waste, and provide usable items to organizations that need them as well as recapture valuable resources.

- Cell phones
- Computers
- Televisions
- VCRs/DVDs
- Stereos
- Printers
- Fax machines
- Monitors
- Microwaves ovens

Universal Waste

(Including household batteries)

As of February 9, 2006, it is now illegal in the State of California to dispose of common household items such as alkaline batteries*, mercury thermometers and thermostats, and fluorescent light bulbs into the trash. These items are now classified as Universal Waste, and must be disposed of properly through the Household Hazardous Waste (HHW) program. However, in an effort to make the disposal of common household batteries including re-chargeable ones, more efficient, the City has partnered with Waste Management to allow residents to drop off the batteries at the Waste Management Recycling Center located at 1145 East Taylor St., Vista, free of charge. The City recommends storing your used fluorescent light bulbs in a safe place until they can be brought to the HHW facilities or scheduled for a home pick-up.

**Note - rechargeable batteries can also be brought to a participating retail store that provides free drop-off bins for proper disposal.*

Where to recycle Electronic and Universal waste

Door-to-door: Call (800) 444-4244

Waste Management
5960 El Camino Real, Carlsbad
Hours: Tuesday - Saturday 8:00 a.m. - 4:00 p.m.
Closed: 1:00 p.m. - 1:40 p.m.
For additional information please call (760) 929-9400
COST: CRTs (television, laptops, monitors): no charge
All others electronic devices fee at drop-off.

Household Hazardous Waste Collection Facility
1145 East Taylor Street, Vista
Hours: Saturdays 9:00 a.m. - 3:00 p.m.
For additional information please call (800) 714-1195
COST: Currently there is no cost to Carlsbad residents.

www.carlsbadconserves.org

Household Hazardous Waste

MATERIALS ACCEPTED:

- Used motor oil and filters
- Pool cleaners
- Automobile fluids (antifreeze, gasoline, brake, transmission)
- Household cleaners
- Landscaping chemicals
- Automotive batteries
- Mercury thermostats
- Mercury thermometers
- Non-empty aerosol cans
- Lamps with fluorescent tubes, sodium vapor lamps
- Household batteries
- Paint
- Mercury switches(automotive or non-automotive light switches)
- Novelties such as some singing greeting cards or flashing athletic shoes

Drop-off

Residents may bring up to 15 gallons or 125 pounds per visit.

A proof of residency required (California driver license, utility bill or other).

No charge to residents at either location.

Door-to-door collection

The City has implemented a door-to-door program that allows residents to make an appointment to have their HHW picked up at their residence for a small co-pay of $10. This door-to-door program is available to all residents. For more information on this program, or to set up an appointment, call (800) 444-4244.

Drop-off locations

VISTA
Hours: Saturdays:
9:00 a.m.- 3:00 p.m.
No appointment necessary
(800) 714-1195

1145 E Taylor St., Vista

OCEANSIDE
Hours: Alternating Saturdays:
9:00 a.m. - 1:00 p.m.
Appointment ONLY.
For additional information, please call
(760) 929-9400.

2880 Industry St., Oceanside

PUT TOXIC WASTE IN ITS PLACE

Funded by a grant from the California Integrated Waste Management Board.

Overflow Trash

5960 El Camino Real, Carlsbad

PALOMAR TRANSFER STATION
(760) 603-0153

Residents can dispose of overflow trash at the Palomar Transfer Station. A fee will be charged at the time of disposal. For additional information please call the Palomar Transfer Station at (760) 603-0153.

No hazardous or regulated waste is accepted at this facility including batteries, paint, tires, liquids and electronic waste.

Open to residents
Saturday & Sunday
7:30 a.m. to 4:00 p.m

Holiday Trees

The City, in partnership with Waste Management, has a holiday tree recycling and collection program that allows residents to drop off their trees for recycling or be picked up at the curb for collection. This service is free to all Carlsbad residents and it operates the day after Christmas through the first two weeks in January. For locations where residents may drop-off the trees for recycling check the City's website or the Community Services Guide.

For curbside pick-up remove stands, tinsel and ornaments from trees, cut in sections no longer than 4 feet and place out on the curb for collection. Flocked trees are not recyclable and will be collected by the trash drivers.

Holiday schedule announcements will be published.

www.carlsbadconserves.org

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Project Address	Assessors Parcel Number(s):	Project # (city use only):

Complete Sections 1 and 2 of the following checklist to determine your project's permanent and construction storm water best management practices requirements. This form must be completed and submitted with your permit application.

Section 1. Permanent Storm Water BMP Requirements:
If any answers to Part A are answered "Yes," your project is subject to the "Priority Project Permanent Storm Water BMP Requirements," and "Standard Permanent Storm Water BMP Requirements" in Section III, "Permanent Storm Water BMP Selection Procedure" in the Storm Water Standards manual.

If all answers to Part A are "No," and any answers to Part B are "Yes," your project is only subject to the "Standard Permanent Storm Water BMP Requirements". If every question in Part A and B is answered "No," your project is exempt from permanent storm water requirements.

Part A: Determine Priority Project Permanent Storm Water BMP Requirements.

Does the project meet the definition of one or more of the priority project categories?*	Yes	No
1. Detached residential development of 10 or more units.	☐	☐
2. Attached residential development of 10 or more units.	☐	☐
3. Commercial development greater than 100,000 square feet.	☐	☐
4. Automotive repair shop.	☐	☐
5. Restaurant.	☐	☐
6. Steep hillside development greater than 5,000 square feet.	☐	☐
7. Project discharging to receiving waters within Environmentally Sensitive Areas.	☐	☐
8. Parking lots greater than or equal to 5,000 ft^2 or with at least 15 parking spaces, and potentially exposed to urban runoff.	☐	☐
9. Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater	☐	☐
* Refer to the definitions section in the Storm Water Standards for expanded definitions of the priority project categories.		
Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if one or more of the criteria in Part A is met. If all answers to Part A are "No", continue to Part B.		

Part B: Determine Standard Permanent Storm Water Requirements.

Does the project propose:	Yes	No
1. New impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks?	☐	☐
2. New pervious landscape areas and irrigation systems?	☐	☐
3. Permanent structures within 100 feet of any natural water body?	☐	☐
4. Trash storage areas?	☐	☐
5. Liquid or solid material loading and unloading areas?	☐	☐
6. Vehicle or equipment fueling, washing, or maintenance areas?	☐	☐
7. Require a General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except construction)?*	☐	☐
8. Commercial or industrial waste handling or storage, excluding typical office or household waste?	☐	☐
9. Any grading or ground disturbance during construction?	☐	☐
10. Any new storm drains, or alteration to existing storm drains?	☐	☐
*To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/stormwtr/industrial.html		

Section 2. Construction Storm Water BMP Requirements:

If the answer to question 1 of Part C is answered "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Storm Water Pollution Prevention Plan (SWPPP). If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Water Pollution Control Plan (WPCP). If every question in Part C is answered "No," your project is exempt from any construction storm water BMP requirements. If any of the answers to the questions in Part C are "Yes," complete the construction site prioritization in Part D, below.

Part C: Determine Construction Phase Storm Water Requirements.

Would the project meet any of these criteria during construction?	Yes	No
1. Is the project subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities?	☐	☐
2. Does the project propose grading or soil disturbance?	☐	☐
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	☐	☐
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as, paints, solvents, concrete, and stucco)?	☐	☐

Part D: Determine Construction Site Priority

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans, and included in the SWPPP or WPCP. Indicate the project's priority in one of the check boxes using the criteria below, and existing and surrounding conditions of the project, the type of activities necessary to complete the construction and any other extenuating circumstances that may pose a threat to water quality. The City reserves the right to adjust the priority of the projects both before and during construction. [Note: The construction priority does NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority does affect the frequency of inspections that will be conducted by City staff. See Section IV.1 for more details on construction BMP requirements.]

☐ ***A) High Priority***

1) Projects where the site is 50 acres or more and grading will occur during the rainy season
2) Projects 1 acre or more.
3) Projects 1 acre or more within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an environmentally sensitive area
4) Projects, active or inactive, adjacent or tributary to sensitive water bodies

☐ ***B) Medium Priority***

5) Capital Improvement Projects where grading occurs, however a Storm Water Pollution Prevention Plan (SWPPP) is not required under the State General Construction Permit (i.e., water and sewer replacement projects, intersection and street re-alignments, widening, comfort stations, etc.)
6) Permit projects in the public right-of-way where grading occurs, such as installation of sidewalk, substantial retaining walls, curb and gutter for an entire street frontage, etc. , however SWPPPs are not required.
7) Permit projects on private property where grading permits are required, however, Notice Of Intents (NOIs) and SWPPPs are not required.

☐ ***C) Low Priority***

8) Capital Projects where minimal to no grading occurs, such as signal light and loop installations, street light installations, etc.
9) Permit projects in the public right-of-way where minimal to no grading occurs, such as pedestrian ramps, driveway additions, small retaining walls, etc.
10) Permit projects on private property where grading permits are not required, such as small retaining walls, single-family homes, small tenant improvements, etc.

Owner/Agent/Engineer Name (Please Print):	**Title:**
Signature:	**Date:**

City of Carlsbad
Fiscal Year 06-07
Discretionary Projects Subject to Priority Project Permanent Storm Water BMP Requirements

Drawing No.	Project ID	Name	Application Date	Description
DWG3803C	CT 97-23	MAGNOLIA SUBDIVISION PHASE 3	01/16/2007	
DWG4289B	CT 03-02	CARLSBAD RANCH PA 5	08/01/2006	PRECISE GRADING PHASE 2 FOR PA 5
DWG4336A	CT 02-16	ROBERTSON RANCH EAST VILLAGE	02/13/2007	
DWG4375A	MS 04-15	BEACHWALK	08/16/2006	2 LOT MINOR SUB
DWG4407A	PIP 04-03	VENTANA REAL LOT 2	09/11/2006	
DWG4415A	PIP 04-05	VENTANA REAL LOT 3	10/16/2006	
DWG4416A	CDP 05-19	TOYOTA CARLSBAD	07/17/2006	
DWG4421A	CUP 05-06	LA COSTA OAKS NORTH 3.2 RV	12/05/2006	
DWG4425A	PIP 05-06	BRESSI RANCH LOT 33-36	03/26/2007	DEVELOPMENT OF EIGHT OFFICE/COMMERCIAL BUILDINGS WITH ASSOCIATED LANDSCAPE AND HARDSCAPE
DWG4426A	MS 05-05	LA COSTA GREENS 1.2 & 1.3	12/05/2006	
DWG4429A	CDP 03-07	THOMPSON RESIDENCE	02/13/2007	EXPANDING REAR YARD
DWG4434A	CT 05-19	CARLSBAD MEDICAL VILLAGE	07/20/2006	MEDICAL BLDGS
DWG4438A	PD 06-10	ENCINA EAST STORM BASIN REPAIR	07/19/2006	CONSTRUCT 5 DESILTATION BASINS AND ASSOCIATED OUTFALLS AND STABILIZATION OF STRUCTURES.
DWG4439A	CT 04-08	LA COSTA VILLAGE TOWNHOMES	07/19/2006	
DWG4442A	CT 05-05	LA COSTA GREENS 1.16	07/25/2006	
DWG4449A	CUP 05-28	BRESSI RANCH LOT 14	08/25/2006	SELF STORAGE BRESSI RANCH LOT 14
DWG4452A	MS 04-19	BRESSI RANCH PA 13	09/07/2006	GRADING FOR LOTS 2-4 RV SITE PER DWG 400-8K (CT 00-06)
DWG4452B	CUP 06-11	PACIFIC RIDGE SCHOOL	01/24/2007	PRECISE GRADING FOR SCHOOL
DWG4454A	CUP 05-26	CHEVRON SERVICE STATION	09/20/2006	DEMOLISH EXISTING STRUCTURES AND REMOVE STORAGE TANKS
DWG4457A	CUP 05-31	BRESSI RANCH FUEL MART	10/04/2006	
DWG4458A	MS 05-02	PARK DR MINOR SUB	09/25/2006	
DWG4463A	PD 06-17	PALOMAR AIRPORT BUSINESS PARK	10/06/2006	
DWG4464A	CT 05-14	LA COSTA OAKS NORTH NBRHD 3.1	10/10/2006	80 LOTS
DWG4465A	CT 05-15	LA COSTA OAKS NEIGH 3.3	10/10/2006	120 LOTS
DWG4466A	CT 05-16	LA COSTA OAKS NORTH 3.4 & 3.5	10/10/2006	85 LOTS
DWG4472A	CT04-21	CARLSBAD VILLAGE TOWNHOMES	11/07/2006	
DWG4478A	PD 06-21	MAGELLAN AVIATION HANGERS	11/22/2006	
DWG4479A	PIP 06-14	OPUS POINT LOT 8	11/27/2006	
DWG4481A	PIP 06-15	OPUS POINT LOT 7	11/27/2006	
DWG4483A	CT 05-13	LA COSTA RIDGE 2.6	12/06/2006	
DWG4484A	SDP 06-03	CRC LOT 1 FENTON	12/01/2006	
DWG4485A	MS 05-12	PACIFIC SUNSET CONDOS	12/04/2006	
DWG4486A	PIP 06-11	BRESSI RANCH LOTS 17& 18	12/06/2006	
DWG4488A	PIP 06-10	OCEAN COLLECTION BRESSI	12/15/2006	
DWG4489A	MS 05-31	DONALD CONDOS	12/15/2006	

City of Carlsbad
Fiscal Year 06-07
Discretionary Projects Subject to Priority Project Permanent Storm Water BMP Requirements

Drawing No.	Project ID	Name	Application Date	Description
DWG4491A	PIP 06-17	OPUS POINT LOT 9	12/19/2006	
DWG4492A	PIP 06-18	OPUS POINT LOT 11	12/19/2006	
DWG4495A	PD 07-01	CALLAWAY GOLF PARKING STRUCTUR	01/10/2007	
DWG4503A	CT030103	LA COSTA RESORT PHASE 3	02/02/2007	
DWG4505A		CARLSBAD AIRPORT CENTER LOT 12	02/13/2007	
DWG4506A	SDP 06-04	ROBERTSON RANCH PA 15	02/12/2007	ROBERTSON RANCH PA 15 AFFORDABLE APTS
DWG4511A	MS 04-17	MADISON TOWNHOMES	05/09/2007	
DWG4513A	PD 07-05	IRIS PARKING GARAGE	03/28/2007	
DWG4516A	SDP 06-13	ASPIRATIONS DAYCARE CENTER	04/20/2007	
DWG4517A	CT 05-03	LINCOLN & OAK MISED USE	04/20/2007	
DWG4518A	CT 06-06	LA COSTA OAKS NORTH 3.7	04/19/2007	LOT 43
DWG4519A	SDP 05-18	CARLTAS MEDICAL OFFICE	05/03/2007	
DWG4524A	PDP 05-01	LEUCADIA WASTEWATER DISTRICT	05/21/2007	
DWG4525A	RP 06-03	ROOSEVELT CENTER	06/14/2007	
DWG4529A	CT 06-24	BRESSI RANCH LOT 5	06/28/2007	
SWPP0601	CB 063195	CAVALLO MOTOR SPORTS	12/12/2006	REVIEW SWPPP
SWPP0702	CDP 06-13	CAMPBELL RESIDENCE	03/21/2007	NEW SFD - 2 STORY AND BASEMENT
SWPP0703		ARMY NAVY	04/12/2007	INSTALLING A PRE-MANUFACTURED ROLLER HOCKEY RINK
SWPP0704	SWP 07-08	ENCINA POWER PLANT	05/31/2007	
SWPP0705	PD 06-19	ADMANI RESIDENCE	06/27/2007	

List of Construction Plans for Projects "As-Built" in FY 06-07

	Project ID	Project Name	As-built Date	Drawing Numbers	Priority Project	Treatment Control BMP's	Installation Verified
1	CT 00-06	BRESSI RANCH	Mar-07	DWG 400-8F, DWG 400-8B, DWG 400-8C, DWG 400-8D	High	Vortex Separator	Yes
2	CT 01-03	CALAVERA HILLS VILLAGE E-1	Oct-06	DWG 405-6, DWG 405-6A, DWG 405-6C	High	Vortex Separator, Drain Inserts	Yes
3	CT 01-04	CALAVERA HILLS VILLAGE U	May-07	DWG 407-6, DWG 407-6A	High	Vortex Separator, Drain Inserts	Yes
4	CT 01-05	CALAVERA HILLS VILLAGE W	Feb-07	DWG 408-4, DWG 408-4A, 390-A	High	Extended Detention Basin	Yes
5	CT 02-03	VILLAGES OF LA COSTA - OAKS SOUTH 3.12 & 3.13	Mar-07	DWG 399-7, DWG 399-7A, DWG 397-1B	High	Extended Detention Basin	Yes
6	CT 02-05	VILLAGES OF LA COSTA OAKS SOUTH NEIGHBORHOOD 3.15	Mar-07	DWG 399-9, DWG 399-9A,DWG 397-1B	High	Extended Detention Basin	Yes
7	CT 02-14	BRESSI RANCH PLANNING AREA 6 UNITS 1-6	Apr-07	DWG 411-3, DWG 411-4, DWG 413-1, DWG 413-8, DWG 413-7, DWG 413-1, DWG 413-2, DWG 413-2L	High	Vortex Separator	Yes
8	CT 02-15	BRESSI RANCH INDUSTRIAL - AREAS 1, 3-5	Jul-06	DWG 421-3, DWG 421-3L, DWG 421-3M, DWG 421-3N	High	Vortex Separator	Yes
9	CT 02-22	LA COSTA GREENS NEIGHBORHOOD 1.09	Apr-07	DWG 406-7, DWG 406-7A, DWG 397-2 sheet 35	High	Vortex Separator	Yes
10	CT 02-25	NORTHPARK AT LA COSTA	Jul-06	DWG 416-1, DWG 416-1A	High	Vegetated Swale	Yes
11	CT 03-03	BRESSI RANCH AFFORDABLE HOUSING	Jan-07	DWG 415-3	High	Vortex Seperator, Vegetated Swale	Yes
12	CT 03-13	BLACK RAIL RIDGE SUBDIVISION	Feb-07	DWG 422-8, DWG 422-8A	High	Vegetated Swale	Yes
13	CT 04-02	LA COSTA RIDGE ESTATES	Feb-07	DWG 420-4C, 397-3 Sheet 5	High	Vortex Separator	Yes
14	CT 04-06	PALOMAR POINT	Jan-07	DWG 422-9, DWG 422-9A	High	Bioretention, Vegetated Swales, Extended Detention Basin	Yes
15	CUP 01-04	CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS	Apr-07	DWG 403-2, DWG 403-2A	High	Vortex Seperator, Vegetated Swale	Yes
16	CUP 04-28	PAD 4 (POINSETTIA VILLAGE)	Sep-06	DWG 432-7A	High	Drain Inserts	Yes
17	DC 04-01	KELLY RANCH PRESCHOOL CENTER	May-07	DWG 426-2A, DWG 377-3A Sheet 3	High	Inlet Filter Inserts, Extended Detention Basin	Yes
18	MS 02-08	LOS COCHES VILLAGE	Oct-06	DWG 417-1, DWG 417-1A, DWG 417-1C, DWG 417-1D	High	Vortex Separator	Yes
19	MS 03-09	CARLSBAD RESEARCH CENTER/EQUUS	Jan-07	DWG 425-3A	High	Inlet Filter Inserts	Yes
20	MS 04-04	LOKER BUSINESS CENTER	Apr-07	DWG 428-7, DWG 428-7A, DWG 428-7B, DWG 428-7L	High	Extended Detention Basin, Vegetated Swales	Yes
21	PD 04-17	CARLSBAD RESEARCH CENTER LOT 66	Dec-06	DWG 425-6, DWG 425-6A	High	Vegetated Swale	Yes
22	SDP 02-05	VILLAGES OF LA COSTA OAKS N - TEMPORARY RV SITE	Jan-07	DWG 419-6A	High	Extended Detention Basin	Yes
23	SDP 02-16	COASTLINE COMMUNITY CHURCH	Feb-07	DWG 423-1A	High	Extended Detention Basin, Inlet Filter Insertts	Yes
24	3455	COASTAL RAIL TRAIL	Mar-07	DWG 376-9A	High	Vegetated Swale	Yes
25	CT 00-22	REDEEMER BY THE SEA	Feb-07	DWG 403-5, DWG 403-5A	N/A	Project approved prior to 2001	N/A
26	CT 92-03	AVIARA PA 22 PHASE III UNIT 7	Sep-06	DWG 353-4	N/A	Project approved prior to 2001	N/A
27	CT 96-07	KELLY RANCH VILLAGE E	Jan-07	DWG 363-3	N/A	Project approved prior to 2001	N/A
28	CT 97-16A	KELLY RANCH CORE AND ARCHSTONE APTS	Oct-06	DWG 377-3A, DWG 377-3H	N/A	Project approved prior to 2001	N/A
29	CT 97-23	MAGNOLIA SUBDIVISION PHASE 2	Jun-07	DWG 380-3A, DWG 380-3B	N/A	Project approved prior to 2001	N/A
30	CT 98-05	DEJONG PROPERTY	May-07	DWG 408-7, DWG 408-7B	N/A	Project approved prior to 2001	N/A
31	CT 98-14	THOMPSON/TABATA PHASE 1	May-07	DWG 401-9, DWG 401-9A, DWG 401-9B, DWG 401-9G, DWG 401-9H, DWG 401-9I, DWG 401-9J, DWG 401-9K,	N/A	Project approved prior to 2001	N/A
32	CT 98-23	LA COSTA GREENS	Apr-07	DWG 388-2, DWG 388-2A, DWG 388-2L	N/A	Project approved prior to 2001	N/A

List of Construction Plans for Projects "As-Built" in FY 06-07

	Project ID	Project Name	As-built Date	Drawing Numbers	Priority Project	Treatment Control BMP's	Installation Verified
33	CT 99-03	LA COSTA GREENS PHASE 1A	Jul-06	DWG 397-2C, DWG 397-2E, DWG 397-2F, DWG 397-2G, DWG 397-2R, DWG 397-2X, DWG 397-2Z, DWG 419-5A	N/A	Project approved prior to 2001	N/A
34	CT 99-04	VILLAGES OF LA COSTA NEIGHBORHOOD 3.8	Dec-06	DWG 414-1C, DWG 414-1B, DWG 414-1A	N/A	Project approved prior to 2001	N/A
35	CT 99-04-02	VILLAGES OF LA COSTA NEIGHBORHOOD 2.1 - 2.5	Feb-07	DWG 397-3, DWG 397-3A, DWG 397-3B, DWG 397-3C, DWG 397-3D, DWG 397-3E	N/A	Project approved prior to 2001	N/A
36	CUP 99-30	CANNON COURT	Nov-06	DWG 398-9, DWG 398-9A	N/A	Project approved prior to 2001	N/A
37	PD 00-13	SAN ELIJO ROAD DETOUR ROAD	Dec-06	DWG 392-9, DWG 392-9B, DWG 392-9C	N/A	Project approved prior to 2001	N/A
38	FAC 06-02	SAFETY CENTER CHILLER REPLACEMENT	Jul-06	DWG 437-2	Standard	None	N/A
39	3689	VISTA/CARLSBAD INTERCEPTOR SEWER	Aug-06	DWG 446-7	Standard	None	N/A
40	3914	PASEO DEL NORTE RECYCLED WATER PIPELINE	Nov-06	DWG 417-2	Standard	None	N/A
41	39421	GEORGINA COLE LIBRARY	Jul-06	DWG 426-3	Standard	None	N/A
42	3557-1	CARLSBAD BLVD BRIDGE RETROFIT	Dec-06	DWG 416-3	Standard	None	N/A
43	3667-5	PAVEMENT OVERLAY OF PAR, ECR & PASEO DEL NORTE	Nov-06	DWG 404-6A	Standard	None	N/A
44	CT 00-16	SAND SHELL LIFT STATION	Nov-06	DWG 396-7B	Standard	None	N/A
45	CT 03-01	LA COSTA RESORT & SPA EL CAMINO REAL ENTRY LANDSCAPE	Jan-07	DWG 402-2H, DWG 402-2I	Standard	None	N/A
46	CUP 46B	PACIFIC BELL PARCEL 6 MAP 1661	Jan-07	DWG 395-7A	Standard	None	N/A
47	HDP 02-06	TAVELMAN TENNIS COURT	May-07	DWG 409-7A	Standard	None	N/A
48	MS 01-04	LYNN MINOR SUBDIVISION	May-07	DWG 410-6A	Standard	None	N/A
49	PD 04-12	RANCHO CAZADERO	Nov-06	DWG 421-6A	Standard	None	N/A
50	PD 04-15	JAHAN RESIDENCE	Dec-06	DWG 422-1A	Standard	None	N/A
51	PD 05-02	SPADARO RESIDENCE	Mar-07	DWG 428-2A	Standard	None	N/A
52	PD 05-03	OAK AVENUE SINGLE FAMILY RESIDENCE	Feb-07	DWG 428-3A	Standard	None	N/A
53	PD 06-07	ZONARAS RESIDENCE	Mar-07	DWG 443-1A	Standard	None	N/A
54	PIP 04-06	NORTH POINTE TECH CENTER LOT 5	Jul-06	DWG 423-9	Standard	None	N/A
55	PIP 05-01	PALOMAR FORUM EAST LOT 5	Apr-07	DWG 430-9, DWG 430-9A	Standard	None	N/A
56	PIP 05-04	PALOMAR FORUM LOT 4	Dec-06	DWG 434-4, DWG 434-4A	Standard	None	N/A
57	PIP 05-12	OAKS EAST LOT 31	Mar-07	DWG 437-6L	Standard	None	N/A
58	PUD 02-12B	LA COSTA GREENS TENNIS COURTS	Apr-07	DWG 427-4A	Standard	None	N/A
59	PUD 88-04H	BERMAN POOL HOUSE	Nov-06	DWG 432-6A	Standard	None	N/A
60	SDP 86-02B	FOUR SEASONS RESORT	Mar-07	DWG 346-7C	Standard	None	N/A
61	SDP 97-19A	HILTON GARDEN INN MEETING ROOM ADDITION	Dec-06	DWG 431-4A	Standard	None	N/A
62	SUP 00-12	THE VILLAS AT THE COVE	Aug-06	DWG 404-2L	Standard	Pervious Pavement, Inlet Filter Inserts, Vegetated Swale	Yes

FY 06-07 Development Planning Storm Water Training

Date	Dept/Div	Employees Attending	Training Type	Name of Training or Topics	Location	Sponsor / Presenter
07/06/2006	Engineering DS	7	Staff Meeting	Infiltration, Detention and Filtration Systems	1635 Faraday	Bob Wojcik
07/20/2006	Engineering DS	7	Staff Meeting	CASQA Standards, Bioswales	1635 Faraday	Chris Scobba
07/27/2006	Engineering DS	9	Staff Meeting	Coastal Zone SUMP Requirements	1635 Faraday	Jeremy Riddle
08/03/2006	Engineering DS	7	Staff Meeting	Loading Dock BMPs, Environmental Sensitive Area proximity	1635 Faraday	Bob Wojcik
08/10/2006	Engineering DS	5	Staff Meeting	Vegetated swale, Temp vs permanent basins	1635 Faraday	Chris Scobba
08/17/2006	Engineering DS	6	Staff Meeting	Erosion control note revisions	1635 Faraday	Chris Scobba
08/24/2006	Engineering DS	9	Staff Meeting	JURMP regulatory requirements	1635 Faraday	David Hauser
08/31/2006	Engineering DS	5	Staff Meeting	BMP revisions from Discretionary to final review	1635 Faraday	Chris Scobba
09/14/2006	Engineering DS	5	Staff Meeting	BMP maintenance agreement instruments	1635 Faraday	David Hauser
09/21/2006	Engineering DS	6	Staff Meeting	Review of Draft Order 2007-001, discussion of impervious area measurements	1635 Faraday	David Hauser
09/28/2006	Engineering DS	4	Staff Meeting	Detention Basins, unvegetated swale	1635 Faraday	Jeremy Riddle
10/05/2006	Engineering DS	6	Staff Meeting	Misc BMP discussion, New Order 2007-001	1635 Faraday	David Hauser
10/12/2006	Engineering DS	6	Staff Meeting	Permeable pavement and filter inserts	1635 Faraday	David Hauser
11/30/2006	Engineering DS	5	Staff Meeting	SUSMP procedures, applicability checklist, BMP inventory data collection	1635 Faraday	Chris Scobba
12/14/2006	Engineering DS	7	Staff Meeting	Annual JURMP Update, underground parking BMPs, water quality seperators	1635 Faraday	David Hauser
12/21/2006	Engineering DS	4	Staff Meeting	Storm Tech Underground Storage Systems	1635 Faraday	Chris Scobba

FY 06-07 Development Planning Storm Water Training

Date	Dept/Div	Employees Attending	Training Type	Name of Training or Topics	Location	Sponsor / Presenter
12/28/2006	Engineering DS	5	Staff Meeting	Misc BMP discussion, SUSMP Requirements	1635 Faraday	David Hauser
01/04/2007	Engineering DS	9	Staff Meeting	NOV procedures,	1635 Faraday	David Hauser
01/11/2007	Engineering DS	7	Staff Meeting	Desiltation basins, temporary stabilization of dormant construction sites	1635 Faraday	David Hauser
01/18/2007	Engineering DS	4	Staff Meeting	NOV procedures,	1635 Faraday	David Hauser
01/25/2007	Engineering DS	6	Staff Meeting	Priority project determinations, construction inspection priorities	1635 Faraday	David Hauser
02/01/2007	Engineering DS	9	Staff Meeting	Applicability of Storm water requirements to tentative map extensions	1635 Faraday	David Hauser
02/08/2007	Engineering DS	9	Staff Meeting	Underground parking BMPs, underground baffle boxes	1635 Faraday	David Hauser
02/15/2007	Engineering DS	8	Staff Meeting	LID Standards, Interim HMP standards	1635 Faraday	David Hauser
02/22/2007	Engineering DS	10	Staff Meeting	Boilerplate BMP Maintenance Agreement requirements	1635 Faraday	Chris Scobba
03/01/2007	Engineering DS	10	Staff Meeting	SUSMP Applicability to redevelopment projects	1635 Faraday	David Hauser
03/08/2007	Engineering DS	8	Staff Meeting	Review of proposed Municipal Permit changes	1635 Faraday	David Hauser
03/15/2007	Engineering DS	10	Staff Meeting	Applicability of SW standards to Conditional Use Permit projects	1635 Faraday	David Hauser
03/22/2007	Engineering DS	10	Staff Meeting	Building permit review process changes and their effect on SUSMP applicability	1635 Faraday	David Hauser
03/29/2007	Engineering DS	9	Staff Meeting	Building permit BMP requirements, BMP requirements for median construction	1635 Faraday	David Hauser
04/05/2007	Engineering DS	9	Staff Meeting	New parking lot LID standards	1635 Faraday	David Hauser
04/10/2007	Engineering DS	16	Seminar	Detention/Infiltration BMP Systems	1635 Faraday	Dan Clark, Atlantis

FY 06-07 Development Planning Storm Water Training

Date	Dept/Div	Employees Attending	Training Type	Name of Training or Topics	Location	Sponsor / Presenter
04/12/2007	Engineering DS	8	Staff Meeting	SWMP Review checklist, project handout materials	1635 Faraday	Chris Scobba
04/19/2007	Engineering DS	9	Staff Meeting	LID and HMP applicability to current projects	1635 Faraday	David Hauser
04/26/2007	Engineering DS	9	Staff Meeting	BMPs for rough and precise grading plans	1635 Faraday	Chris Scobba
05/31/2007	Engineering DS	10	Staff Meeting	LID standards, notice of formation of Storm Water BMP review committee	1635 Faraday	David Hauser
06/06/2007	Engineering DS	30	Webinare	Latest Tools for Water Conservation and Resource Management	1635 Faraday	APWA
06/14/2007	Engineering DS	9	Staff Meeting	Model SUSMP Review, application of BMPs to redevelopment projects	1635 Faraday	David Hauser

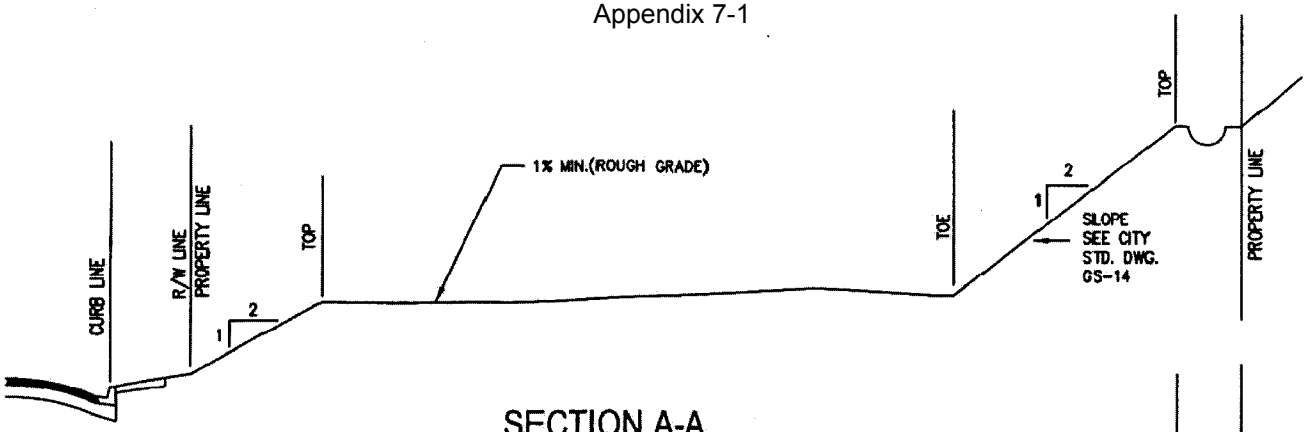

SECTION A-A

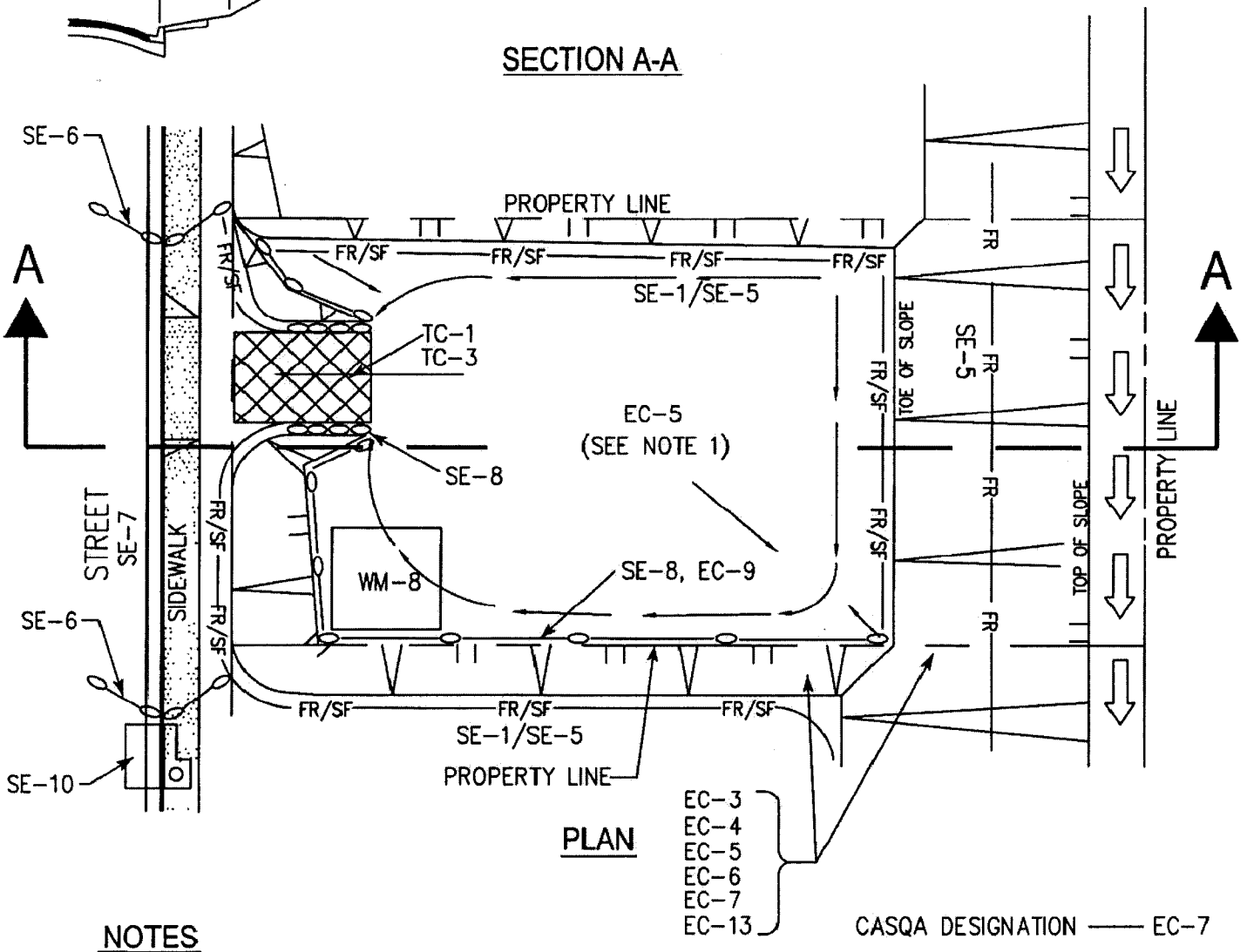

PLAN

NOTES

1). USE EC-3, EC-4, EC-6, EC-7 OR EC-13 AS APPLICABLE AND APPROVED BY INSPECTOR.

2). BEST MANAGEMENT PRACTICE (BMP) FACT SHEETS AS REFERENCED CAN BE DOWNLOADED FROM THE CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) WEBSITE AT WWW.CABMPHANDBOOKS.COM/CONSTRUCTION.ASP

3). DEPENDING ON SITE CONDITIONS, ADDITIONAL BMP'S MAY BE REQUIRED BY THE INSPECTOR.

REV.	APPROVED	DATE	CITY OF CARLSBAD	
			TYPICAL BUILDING PAD CONSTRUCTION BMP REQUIREMENTS	Robert T. Johnson Jr. 2/23/07 CITY ENGINEER DATE
				SUPPLEMENTAL STANDARD NO. GS-13

City of Carlsbad

Active Grading Permits

All Projects in the Carlsbad Watershed

Sorted by Inspector

Permit#	Issue Date	Drawing No.	Proj. No.	Location	Description	Hyd Unit	Pri
GR070004	07/02/2007	DWG 447-5A		7109 WISTERIA WY	DESAI RESIDENCE FILL IN SWIMMING POOL		
GR070036	06/20/2007	DWG 427-6C	CT 04-15	2466 MICA RD	LA COSTA GREENS 1.07 Grading for 71 single family residence		
ABALOS							
GR050057	06/30/2006	DWG4295A	MS040002	NE CORN OF AVIARA PKWY AND POINSETTIA	NORTH COAST CALVARY CHAPEL	D	H
GR060027	01/08/2007	438-8A	PD 06-01	7343 EL FUERTE ST	BAIHAGHY TONY RESIDENCE single family residence		
GR060042	09/20/2006	DWG 440-8A	PD 06-03	7312 EL FUERTE ST	SPADARO RESIDENCE SINGLE FAMILY RESIDENCE		H
GR060044	08/31/2006	DWG 443-2A	PD 06-08	7211 OBELISCO CR	FERNANDEZ RESIDENCE GRADING		H
GR060045	10/03/2006	DWG 437-5A	MS 04-15	3955 GARFIELD ST	BEACHWALK 2 CONDOS		H
GR060046	10/12/2006	442-8A	PD06-06	1650 CALLIANDRA RD	AVIARA PREMIER SLOPE REPAIR SLOPE REPAIR	D	H
GR060051	09/01/2006	DWG 443-1A	PD 06-07	7214 WISTERIA WAY 7214 WISTERIA WY	ZONARAS GEORGE C & CATHERINE SLOPE FAILURE REPAIR		H
GR060054	09/20/2006	DWG 346-7C	SDP 86-02	7100 FOUR SEASONS PT	FOUR SEASONS RESORT EMERGENCY SLOPE REPAIR	D	H
GR060067	11/08/2006	DWG 427-7A	CT 04-16	EAST SIDE OF ALICANTE RD BTWN POINSETTIA LN AND PALOMAR AIPORT RD	VILLAGES- GREENS 1.06 Precise grading for 91 single family homes	D	H
GR060072	02/12/2007	DWG 442-7A	CUP 05-03	EAST SIDE OF EL CAMINO REAL BTWN CAMINO VIDA ROBLE AND POINSETTIA LN	LA COSTA GREENS 1.3 RV PARKING		
GR060073	02/12/2007	DWG 442-6A	MS 05-05		LA COSTA GREENS 1.2/3		
ABALOS/GA							
GR060025	06/30/2006	DWG 438-3A	CT 05-06	2010 CASSIA RD	CASSIA PROFESSIONAL OFFICES CAT HOSPITAL/MEDICAL OFFICE	D	H
GR060029	07/06/2006	DWG 440-3A	PIP 05-19	TOWN GARDEN RD	BRESSI RANCH LOT 16 TWO OFFICE BUILDINGS	D	H
GR060057	10/25/2006	DWG 442-2A	PIP 05-24	INNOVATION & GATEWAY	TOWERS AT BRESSI RANCH COMMERCIAL SITE GRADING	D	H
ABALOS/GL							
GR050059	10/05/2005	DWG 431-5A	SDP05002	5901 PRIESTLY DR	CRC LOT 6 CRC LOT 6 GRADING		H
ARNDT							

2 unassigned
2 duplicates

Permit#	Issue Date	Drawing No.	Proj. No.	Location	Description	Hyd Unit	Pri
ARNDT							
GR040033	07/26/2004	DWG4063A	CT 02-24	W & E SIDE OF ALICANTE BTN ALGA & POINSETTIA	LA COSTA GREENS 1.11/1.13/1.14 DWG 406-3A GREENS 1.11/ 1.13/ 1.14	D	H
GR040034	07/08/2004	DWG 406-5A	CT 02-20	WEST SIDE OF ALICANTE RD NORTH OF ALGA RD AND SOUTH OF POINSETTIA LANE	LA COSTA GREENS 1.10 LA COSTA GREENS NEIGHBORHOOD 1.10	D	H
GR040059	08/11/2004	DWG 418-8A		S SIDE PAR BTWN ECR & EL FUERTE	BRESSI RANCH PA 11 Bressi Ranch PA-11	D	H
GR050010	03/04/2005	DWG4237A		WITHIN FACILITIES MANAGEMENT ZONE 10	LA COSTA GREENS NEIGH. 1.16 Drawing Number 423-7A	B	H
GR050011	03/16/2005	DWG4276A	CT 04-15	NE CORNER OF POINSETTIA LN & ALICANTE RD	LA COSTA GREENS N. 1.06/1.07 Drawing Number 427-6A	B	H
GR050063	11/29/2005	DWG 397-2Y	CT 99-03	WITHIN FACILITIES MANAGEMENT ZONE 10	LA COSTA GREENS 1.01-1.03 DWG 397-2Y	D	H
GR050068	11/29/2005	DWG 433-2	SDP 02-13	6480 EL CAMINO REAL	CASSIA HEIGHTS GRADING FOR FAMILY HOUSING UNIT	D	H
GR060001	02/15/2006	DWG4329A	CUP04022	SOUTH SIDE PALOMAR AIRPORT RD BTWN YARROW DR AND EL CAMINO REAL 2229 PALOMAR AIRPORT RD	CARLSBAD AIRPORT HOTELS Two 3-story hotel buildings w/pools, paved access & parking	C	H
GR060005	03/15/2006	DWG4353A	CT050007	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN GATEWAY RD AND MELROSE DR	BRESSI RANCH LOT 40 GRADING	D	H
GR060063	10/06/2006	DWG 429-2C	CT 04-09	SOUTH SIDE OF POINSETTIA LN BTWN EL CAMINO REAL AND ALICANTE RD	LA COSTA GREENS 1.17 107 SINGLE FAMILY RESIDENCES	D	H
ARNDTCLA							
GR040023	07/12/2004	DWG 406-6A	CT 02-23	ALICANTE BTN ALGA & POINSETTIA	LA COSTA GREENS, NEIGH. 1.08 LA COSTA GREENS NEIGHBORHOOD 1.08	D	H
CLAVIER							
GR030012	06/25/2004	DWG 399-4A		PAR BETWEEN MELROSE & BUSINESS PARK	PALOMAR FORUM ROUGH GRADING PER DWG 399-4A	B	H
GR030043	09/18/2003	DWG 411-8A		HILLSIDE BTWN HIGHLAND & PARK 4240 HILLSIDE DR	OCHELTREE RESIDENCE SINGLE FAMILY RESIDENCE	B	H
GR030056	12/01/2004	DWG 409-1A	CT 98-10	1400 FT SOUTH OF PALOMAR AIRPORT ROAD ON CENTERLINE OF EL CAMINO REAL	CARLSBAD RACEWAY GRADING	B	H
GR040082	11/12/2004	DWG 415-9A	CT 97-13	FARADAY AV & EL FUERTE	CARLSBAD OAKS NORTH PHASE 1 GRADING	B	H
GR040083	11/12/2004	DWG 415-9B	CT 97-13	FARADAY AV & EL FUERTE	CARLSBAD OAKS NORTH FARADAY GRADING	B	H
GR040084	11/12/2004	DWG 415-9D	CT 97-13	PALOMAR AIRPORT RD AT MELROSE	CARLSBAD OAKS NORTH EL FUERTE GRADING	B	H
GR050055	11/29/2005	DWG4159G	CT970013	SOUTH OF FARADAY AV ADJACENT TO CITY BOUNDARY	CARLSBAD OAKS NORTH REVEGETATION GRADING		H
GR050061	11/21/2005	DWG4309A	PIP05001	NORTH SIDE OF PALOMAR AIRPORT RD BTWN EAGLE DR AND BUSINESS PARK DR	PALOMAR FORUM EAST		H
GR050064	04/17/2006	DWG 433-3A	CT 04-01	BLACK RAIL RD @ SONGBIRD AVE	YAMAMOTO SUBDIVISION	D	H

Permit#	Issue Date	Drawing No.	Proj. No.	Location	Description	Hyd Unit	Pri
CLAVIER							
GR060011	06/01/2006	DWG 437-6A	PIP05012	2848 LOKER AVE EAST 2848 LOKER AV EAST	OAKS EAST LOT 31	B	H
GR060012	04/17/2006	438-9A	PIP 05-13	WEST SIDE OF EL CAMINO REAL BTWN PALOMAR AIRPORT RD AND ALGA RD	VIA SAT NEW CONCRETE SHELL TILT-UP	C	H
GR060016	04/26/2006	DWG435-7A	PIP 05-10	NORTH SIDE OF LIONSHEAD VE BTWN EAGLE DR AD BUSINESS PARK DR	OPUS PT LOT 19	B	H
GR060017	05/10/2006	DWG4354A	PIP05007	NORTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND BUSINESS PARK DR	OPUS POINT LOT 20 RACEWAY LOT 20	B	H
GR060018	05/10/2006	DWG4355A	PIP05008	NORTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND BUSINESS PARK DR	OPUS POINT LOT 21	B	H
GR060019	04/27/2006	DWG 435-8A	PIP 05-11	NORTH SIDE OF LIONSHEAD BTWN EAGLE DR AND BUSINESS PARK DR	OPUS PT LOT 18	B	H
GR060020	04/27/2006	DWG435-6A	PIP05009	NORTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND MELROSE DR	OPUS POINT LOT 22	B	H
GR060023	05/03/2006	435-1A	PD 05-12	7151 LATITUDE LN	SMITH RESIDENCE GRADING PLAN DWG 435-1A		H
GR060024	07/25/2006	DWG 439-1A	PIP 05-14	2888 LOKER AV EAST	MAMMOTH PROFESSIONAL BLDG ONE THREE STORY OFFICE BLDG PLUS PARKING STRUCTURE		H
GR060026	07/11/2006	DWG 436-6A	PIP 05-17	3193 LIONSHEAD AV	OPUS PT LOTS 5 & 6	B	H
GR060030	08/29/2006	437-8A	PIP 05-18	NORTH SIDE OF LIONSHEAD RD BTWN MELROSE AND EL FUERTE 3152 LIONSHEAD AV	OPUS POINT LOTS 23 & 24	B	H
GR060030	08/29/2006	437-8A	PIP 05-18	NORTH SIDE OF LIONSHEAD RD BTWN MELROSE AND EL FUERTE 3152 LIONSHEAD AV	OPUS POINT LOTS 23 & 24	B	H
GR060032	07/25/2006	DWG 434-6A	PIP 05-16	3115 MELROSE DR	OPUS LOT 25 RACEWAY ONE TWO STORY OFFICE BLDG	B	H
GR060040	01/22/2007	DWG 434-3A	PIP 05-05	NORTH SIDE OF PALOMAR AIRPORT RD BTWN EAGLE DR AND MELROSE DR	PALOMAR FORUM LOTS 1,2 & 8		
GR060049	12/21/2006	DWG 415-9I	CT 97-13-02	WHIPTAIL LOOP & GAZELLE CT	CARLSBAD OAKS NORTH PHASE 2 LOTS 13-19 CARLSBAD OAKS NORTH PHASE 2		
GR070006	02/16/2007	DWG 445-2A	MS04-19A		PACIFIC RIDGE SCHOOL		
DATES							
GR020019	09/24/2002	DWG 398-9A	MS 99-16	NORTH SIDE OF CANNON RD AT I-5	CANNON COURT	B	H
GR030013	10/16/2003	SDP 00--17		BETWEEN MARRON RD AND HAYMAR DR	SUMMIT @ CARLSBAD 143 apts	A	H
GR030052	10/07/2003	DWG 399-3A		7209 AVIARA 7209 AVIARA DR	TYLER RESIDENCE SINGLE FAMILY RESIDENCE	D	H
GR030053	08/30/2005	DWG 412-2A	CDP02024	4588 ADAMS ST 4480 ADAMS ST	ST CLAIRE RESIDENCE ST CLAIRE RESIDENCE - ADAMS STREET		
GR030053	08/30/2005	DWG 412-2A	CDP02024	4588 ADAMS ST	ST CLAIRE RESIDENCE ST CLAIRE RESIDENCE - ADAMS STREET		
GR030055	11/04/2003	DWG 412-9A	MS 02-12	128 MAPLE	VILLAS DE LUZ CONDOS FOUR (4) CONDOS	B	H

Permit#	Issue Date	Drawing No.	Proj. No.	Location	Description	Hyd Unit	Pri
DATES							
GR030059	09/30/2003	CDP 02-56		5305 CARLSBAD BL	WALTERS RESIDENCE WALTERS RESIDENCE	B	H
GR040009	09/23/2004	DWG412-5A	CT 02-13	1100 LAS FLORES DR	FARBER CONDOMINIUM FARBER CONDOMINIUMS	A	H
GR040058	09/23/2004	DWG4219A		2245 HIGHLAND DR	DUNN RESIDENCE SHOULD BE 2200 HIGHLAND DR	B	H
GR040067	08/09/2004	CDP 02-42		NORTH END OF HIGHLAND 2245 HIGHLAND DR	DUNN RESIDENCE EMERGENCY WORK - LIMITED TO C&G, STABILIZATION OF RAVINE/CANYON AS DIRECTED BY CITY INSPECTOR. NO IMPORT OF SOIL.	B	H
GR040096	03/29/2005	PD 04-18		3471 JEFFERSON 3471 JEFFERSON ST	DIGIACOMO RESIDENCE SINGLE FAMILY RESIDENCE		
GR040111	05/02/2005	DWG 425-9A	CDP04-18	6467 SURFSIDE LN	OLIVER RESIDENCE single family residence	B	H
GR050015	06/13/2005	DWG4235A		CARLSBAD BL N OF MANZANO DR 5486 CARLSBAD BL	JOHANNSEN RESIDENCE GRADING PLAN - DWG 423-5A		H
GR050024	05/17/2005	DWG4261A		5035 TIERRA DEL ORO ST	MCGUIRE RSIDENCE SINGLE FAMILY RESIDENCE	B	H
GR050028	06/24/2005	DWG 430-2A		7176 AVENIDA ENCINAS	NORTH ISLAND CREDIT UNION CREDIT UNION LOT GRADING	C	H
GR050031	11/01/2005	DWG 421-7A	PD 04-13	3824 SKYLINE RD	SEAR RESIDENCE GARAGE ADDITION		H
GR050033	09/07/2005	DWG423-6A	SDP 97-08 (B	EL CAMINO REAL NORTH OF PALOMAR AIRPORT ROAD 5870 EL CAMINO REAL	CARLSBAD CORP CENTER PARCEL C 4 BUILDING MULTI TENANTS		
GR050034	08/30/2005	DWG4283A	CDP03012	PARK DRIVE AND ADAMS STREET 4575 PARK DR	PARK DRIVE KELLY RESIDENCE KELLY RESIDENCE GRADING		
GR050038	10/19/2005	DWG4321A	PD050008	1184 MAGNOLIA AV	SHAMSHOIAN RESIDENCES SFD GRADING		
GR050040	09/29/2005	DWG4324A		5335 PASEO DEL NORTE	WESELOH HUMMER GRADING FOR CONSTR OF HUMMER DEALERSHIP		
GR050043	03/21/2006	DWG4305A	CT020007	BETWEEN SAPPHIRE DR & AVIARA PKWY	EMERALD POINTE ESTATES GRADING FOR EMERALD POINT ESTATES		
GR050045	08/30/2005	DWG4322A	SDP0101B	SOUTHEAST OF PAR AND AVIARA PY	BILTMORE - 24 HR FITNESS GRADING FOR 24 HR FITNESS CLUB		
GR050046	10/06/2005	DWG4268A	CT 02-18	N SIDE HARRISON BTN CHINQUAPIN & ADAMS	THE BLUFFS GRADING FOR THE BLUFFS DEVELOPMENT		
GR050052	05/02/2006	DWG4339A	CDP04050	1200 CHINQUAPIN AV	RHODES RESIDENCE GRADING FOR SFD		
GR050054	02/24/2006	DWG419-8A	CT 03-04	3000 HIGHLAND DR	HIGHLAND DRIVE SUBDIVISION SUBDIVISION GRADING	A	H
GR050060	09/30/2005	DWG4306A	CT 04-18	SOUTH SIDE OF OAK AV BTWN LINCOLN ST AND WASHINGTON ST 341 OAK AV	OCEAN MIST CONDOS 5 CONDOS		H
GR050062	09/29/2005	DWG4092A	CDP02028	2649 OCEAN ST	KIKO RESIDENCE		H
GR050072	01/13/2006	DWG4328A	SDP04010	WEST SIDE OF PASEO DEL NORTE BTWN PALOMAR AIRPORT RD AND SEA GATE RD	PASEO DEL NORTE MEDICAL OFFICE GRADING FOR MEDICAL OFFICE	B	H

Permit#	Issue Date	Drawing No.	Proj. No.	Location	Description	Hyd Unit	Pri
DATES							
GR050076	01/05/2006	DWG4323B	SDP01-01B	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN AVIARA PKWY AND PALOMAR OAKS RD	BILTMORE 24HR FITNESS WETLAND MITIGATION BUFFER	C	H
GR060010	09/25/2006	432-2C	SDP 0101B	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN AVIARA PKWY AND PALOMAR OAKS RD	BILTMORE 24 HR FITNESS/OFFICES	C	H
GR060031	09/06/2006	DWG 439-7A	RP 04-12	2753 JEFFERSON ST	TUSCANY OFFICE SUITES		H
GR060052	09/15/2006	DWG 443-6A	MS 05-32	245 TAMARACK AV	TAMARACK BEACH LOFTS		H
GR060058	02/07/2007	434-9A	CT 03-06	6602 BLACK RAIL RD	BLACK RAIL RD 16		
GR060059	09/26/2006	DWG 433-1A	PD 05-09	4485 ADAMS ST	STEWARD RESIDENCE SINGLE FAMILY RESIDENCE		H
GR070013	03/30/2007		MS 03-07	3200 JAMES DR	O'GARA PARCEL MAP Work limited to earth berm for drainage as shown on apprvd MS 03-07		
FENNESS							
GR030071	01/07/2004	DWG 409-4B		NORTHEAST CORNER OF LA COSTA AV & RSF	LA COSTA TOWN SQUARE MASS GRADING/STOCKPILE	D	H
GR040063	11/19/2004	DWG 419-9A	CT 98-01	NORTH OF LEVANTE ST AND WEST OF EL CAMINO REAL	LA COSTA GLEN NORTH PRECISE GRADING FOR LA COSTA GLEN NORTH	D	H
GR040072	09/08/2004	DWG3973F		RSF RD. WITHIN FACILITIES MGMT ZONE 11	LA COSTA RIDGE-N 2.6 Stockpile (VLC RIdge N 2.6)	D	H
GR040081	02/18/2005	DWG 414-5A		NORTH SIDE OF LA COSTA AVE BWTN EL CAMINO REAL AND VIEJO CASTILLA WAY	LA COSTA FAIRWAYS CONDOS GRADING	D	H
GR040102	04/10/2006	4321A	SDP 02-16	2215 CALLE BARCELONA	COASTLINE COMMUNITY CHURCH GRADING	D	H
GR050005	10/12/2005	DWG420-6A	CT 04-04	WEST AND EAST SIDE OF CORINTIA ST BTWN ALGA AND RSF RD	LA COSTA RIDGE2.5 GRADING	D	H
GR050006	11/03/2005	DWG4204A	CT 04-02	WEST AND EAST SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	LA COSTA RIDGE GRADING	D	H
GR050070	01/31/2006	DWG420-5C	CT 04-03	East end El Fuerte & south of Corintia St.	LA COSTA RIDGE - 2.3 & 2.4	D	H
GR060003	02/15/2006	DWG 429-7C	CT 99-04-3	WITHIN FACILITIES MANAGEMENT ZONE 11	LA COSTA OAKS NORTH DWG 429-7C LA COSTA OAKS NORTH NEIGH 3.6 & 3.7	D	H
GR060009	04/10/2006	DWG420-5D	CT040003	NORTH AND SOUTH SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	VLC - RIDGE 2.3 & 2.4 NORTH PRECISE GRADING FOR 2.3 & 2.4 NORTH	D	H
GR060013	04/11/2006	DWG 429-7A	CT 99-04-03		LA COSTA OAKS NORTH Mass grading for neigh. 3.1, 3.3, 3.4, 3.5	D	H
GR060014	04/11/2006	DWG 429-7B	CT 99-04-03		LA COSTA OAKS NORTH Mass grading for neigh. 3.2	D	H
GR060021	04/20/2006	420-4D	CT 04-02	WEST AND EAST SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	LA COSTA RIDGE 2.1 & 2.2 PRECISE GRADING FOR 90 SINGLE FAMILY RESIDENTIAL UNITS	D	H
GR060039	08/24/2006	DWG434-1A	SDP 04-13	SW CORNER RANCHO SANTA FE RD	HUNTERS POINTE	D	H
GR060055	08/22/2006	420-6B	PUD 04-03A		LA COSTA RIDGE 2.5	D	H

Permit#	Issue Date	Drawing No.	Proj. No.	Location	Description	Hyd Unit	Pri
JJ							
GR980042	05/07/2007				LAUREL TREE APARTMENTS 138 UNIT COMPLEX		
JORDAN							
GR060065	01/23/2007	441-2A	PD 06-04	3551 HIGHLAND 3551 HIGHLAND DR	BROWN RESIDENCE SINGLE FAMILY RESIDENCE		
GR060066	02/21/2007	DWG 441-6A	CDP 05-19	6020 AVENIDA ENCINAS	TOYOTA CARLSBAD TOYOTA C'BAD - 6020 AVE. ENCINAS (dwg 441-6a)	C	H
GR060069	03/16/2007	DWG 379-9C	SDP 97-07B	7662 EL CAMINO REAL	LA COSTA PLAZA PARCEL 7		
GR070021	06/15/2007	DWG 448-9A	MS 05-31	2497 OCEAN ST	DONALD CONDOS		
JORDAN/BL							
GR050079	06/27/2006	DWG4334A	PD050010	6811 VIANDA CT	GOLDEN RESIDENCE		H
GR060022	04/12/2006		PD 05-15	7222 AVIARA DR 7222 AVIARA DR	KERN RESIDENCE SINGLE FAMILY RESIDENCE		H
JORDAN/GG							
GR070009	04/23/2007	442-5A	CT 05-09	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN EL FUERTE AND GATEWAY RD	BRESSI RANCH LOTS 33-39 NEW SHELL R & D BUILDINGS		
JORDAN/KB							
GR020045	09/26/2003	DWG 389-9A		6515 EL CAMINO REAL	MANZANITA APTS MANZANITA APARTMENTS	D	H
GR060006	03/17/2006	DWG4373A	PD 05-18	7245 ALMADEN LN	HINCKLEY RESIDENCE SINGLE FAMILY RESIDENCE		H
GR060007	07/19/2006	DWG 436-3A	PD 05-14	7335 EL FUERTE ST	JOHNSON RESIDENCE SINGLE FAMILY GRADING		H
GR060070	12/01/2006	DWG 444-8A	PD 06-13	1330 CYNTHIA LN	CYTNHIA LN SINGLE FAMILY RESIDENCE	A	H
LOPEZ							
GR020040	12/12/2002	DWG 402-2B		Spa Bldg DWG 402-2B	LA COSTA RESORT & SPA SPA BLDG	D	H
GR020046	01/09/2003	DWG 402-2D		2101 COSTA DEL MAR RD	LA COSTA VALET LOOP LA COSTA RESORT & SPA CREEK PARKING FACILITY	D	H
GR030008	03/28/2003	CUP 258C		2101 COSTA DEL MAR 2101 COSTA DEL MAR RD	LA COSTA RESORT & SPA-BALLROOM GRADING FOR BALLROOM	D	H
GR040104	02/04/2005	DWG 422-6A		2100 COSTA DEL MAR RD	LA COSTA RESORT, CT 03-01 dwg 422-6a - Model Complex	D	H
GR050036	08/29/2005	DWG4226C	CT03-01-02	NE CORNER OF ECR AND COSTA DEL MAR RD 2101 COSTA DEL MAR RD	LA COSTA RESORT & SPA PHASE 2 GRADING FOR LA COSTA RESORT & SPA PH 2		
GR050073	01/09/2006	DWG4226D	CT030102	2101 COSTA DEL MAR RD	LA COSTA RESORT & SPA COSTA DEL MAR ENTRANCE	D	H
ROMAHON							
GR030022	09/23/2003	DWG 380-3A		3655 ADAMS 3655 ADAMS ST	MAGNOLIA SUBDIVISION PHSE 2 GRADING PERMIT FOR 5 SFD'S	B	H
GR030045	10/28/2003	DWG 405-4A	CT 01-06	BETWEEN CARLSBAD VILLAGE DR AND CANNON	CALAVERA HILLS II VILLAGE X ROUGH GRADING OF SITE	B	H
GR030049	10/01/2003	CT 01-03		BETWEEN GLASGOW DR AND COLLEGE BL	CALAVERA HILLS VILLAGE E-1	B	H

not in June

Permit#	Issue Date	Drawing No.	Proj. No.	Location	Description	Hyd Unit	Pri
MCMAHON							
GR040065	10/25/2006	DWG 408-4B		NE COLLEGE/CANNON INTERSECTION	CALAVERA HILLS VILLAGE W		
GR040073	09/08/2004	DWG 407-6A	CT 01-04	CALAVERA HILLS VILLAGE U	CALAVERA HILLS VILLAGE U	B	H
GR050044	08/09/2005	dwg4293a		EAST SIDE OF AVENIDA ENCINAS BTWN PALOMAR AIRPORT RD AND POINSETTIA LN 6200 AVENIDA ENCINAS	EWPCF GRADING BY ENCINA		
GR050048	09/27/2005	DWG4289A	CT030002	W SIDE OF HVR BTWN CANNON & PAR	CARLSBAD RANCH RESORT GRADING FOR CARLSBAD RANCH RESORT		
GR050067	04/10/2007	DWG 432-5A	CDP 04-58	5390 CARLSBAD BL	KOKOPELLI RESIDENCE SINGLE FAMILY RESIDENCE		
GR060033	06/28/2006	DWG 439-3A	CDP 05-21	4410 HIGHLAND DR	KELLAS RESIDENCE		H
GR060056	09/22/2006	DWG 440-7A	PIP 04-03	2173 SALK AVE 2173 SALK AV	VENTANA REAL LOT 2	B	H
GR060061	10/23/2006	DWG 441-5A	PIP 04-05	2173 SALK AVE 2173 SALK AV	VENTANA REAL LOT 3 COMMERCIAL BUILDING	B	H
GR060062	02/27/2007	DWG 442-9A	CDP 03-07	7066 Crystalline Dr	THOMPSON RESIDENCE SFD @ 7066 Crystalline Dr	D	H
GR060075	01/26/2007	DWG 443-4A	CT 05-19	SOUTH SIDE OF CARLSBAD VILLAGE DR BTWN HIGHLAND DR AND PIO PICO DR	CARLSBAD MEDICAL VILLAGE COMMERCIAL/OFFICE BUILDINGS		
GR060076	01/16/2007	DWG 433-6D	CT 02-16	BETWEEN TAMARACK AV AND CANNON RD	ROBERTSON RANCH-- EAST VILLAGE Vegetation Removal		
GR070001	03/12/2007	DWG 380-3C	CT 97-23	3655 ADAMS ST	MAGNOLIA SUBDIVISION PHASE 3		
GR070003	03/28/2007	DWG 433-6A	CT 02-16	BETWEEN TAMARACK AV AND CANNON RD	ROBERTSON RANCH		
GR070010	05/04/2007	DWG 428-9B	CT 03-02	GRAND PACIFIC DRIVE	CARLSBAD RANCH PA 5 PRECISE GRADING PHASE 2 FOR PA 5		

New

City of Carlsbad

Appendix 7.3

Construction Site NPDES Compliance Inspection Checklist

Construction Management & Inspection Division

Permit #: Date:

Inspection Type: Weather:

Inspected By: Project #/Name:

Mark (√) box "Yes", "No", or "N/A"; if there are comments, mark (√) box "Comment".

Yes	No	N/A	Comment	Inspection Description
☐	☐	☐	☐	1. Are slopes steeper than 3:1 properly covered?
☐	☐	☐	☐	2. Are areas flatter than 3:1 covered or protected by desilting basins?
☐	☐	☐	☐	3. Is the SWPPP wall map up to date and accurate?
☐	☐	☐	☐	4. Are all gravel bags, straw waddles, silt fences, and other linear sediment barriers in place in accordance with the SWPPP, and are they functioning properly?
☐	☐	☐	☐	5. Are basins designed and maintained to provide the required retention/detention?
☐	☐	☐	☐	6. Is the stabilized construction entrance preventing tracking (i.e. working properly)?
☐	☐	☐	☐	7. Are all downstream storm drain inlets protected with devices that are in working order and being properly maintained?
☐	☐	☐	☐	8. Are non-storm-water BMP's being used? (e.g. concrete washouts)
☐	☐	☐	☐	9. Are all material and equipment handling, storage, and maintenance areas clean, and free of spills, leaks, or other deleterious materials?
☐	☐	☐	☐	10. Is the site free from litter and the litter collected and placed in covered containers?
☐	☐	☐	☐	11. Are temporary stockpiles and/or construction materials in approved areas and protected/covered?
☐	☐	☐	☐	12. Are all areas designated to be seeded or landscaped properly maintained (i.e. irrigation functioning properly, 90-100% coverage)? NO BMP's REQUIRED
☐	☐	☐	☐	13. Are all natural drainage courses and open spaces in proximity to this project protected?
☐	☐	☐	☐	14. Are all BMP's maintained in functional order? (e.g. sediment removed, basins pumped down, repairs made, etc.)

Comments:_____

Signature:_____ Date:_____

INSPECTOR NAME	PERMIT	PROPERTY NUMBER	PROPERTY NAME
Lopez	3607	3607	Faraday /ECR Imp's & Misc Signals
Lopez	3889-1C	3889-1	Bressi Portable Wtr Pumpstation
Lopez	3890-2	3890-2	Mahr Reservoirt
Dudek	3901	3901	Fire Station 6
JM/Nolte	3956-1A	3956-1A	San Marcos Blvd Transmission Main
Dudek	39721-3	39721-3	Golf Course Construction (Wadsworth)
Soileau	3771/4001	3771/4001	Library Learning Center
Lopez	3907	3907	Wetland Mitigation Restoration /RSF Rd N
Fennessy	3667-12	3667-12	2006 Slurry Seal Project
Soileau	5003	5003	ECR Water System Projects
Fennessy	6013	6013	Concrete Replacement Project
Arndt	6600	6600	Highland Drive Storm Drain

Minimum BMPs for Construction Projects within the City of Carlsbad

The City of Carlsbad is working with developers and contractors to ensure that Best Management Practices (BMP) are implemented at all construction sites. Protecting our water resources improves our water quality. All BMPs must be identified in site specific Storm Water Pollution Prevention Plans (SWPPP) and erosion control plans prior to commencement of construction activities. These plans must address the following minimum BMPs required by the City:

1. Erosion Control Methods for graded slopes
2. Erosion Control method for graded flat areas (slope <5%)
3. Sediment control for perimeter boundaries;
4. Offsite tracking control of sediment;
5. Materials management control;
6. Waste management control; and
7. Non-storm water management control.

To address each of the required BMPs, the City requires the implementation of the following types of BMP's as applicable, depending on site-specific requirements:

- Hydroseed applications, Bonded fiber matrix application, Geotextiles & Mats, straw waddles, silt fences, and fiber rolls are incorporated into the City approved erosion control plans and project SWPPP's as applicable.
- Irrigated and non-irrigated hydroseed mixes, gravel bag and/or sandbag barriers, silt fence, and fiber rolls are incorporated into City approved erosion control plans and project SWPPPs as applicable.
- Silt fences, earthen berms, velocity dissipators, gravel bag and/or sandbag barriers, and drainage swales are incorporated into City approved erosion control plans and project SWPPPs as applicable.
- Construction entrances and tire washing stations are incorporated into City approved erosion control plans and project SWPPPs as applicable.
- Vehicle and equipment maintenance, fueling and cleaning stations, material storage and delivery yards that are protected, and concrete washout basins are incorporated into City approved erosion control plans and project SWPPPs as applicable.
- Covered receptacles are incorporated into all projects at strategic locations, litter removal programs are incorporated into the project schedules, ensuring material storage is isolated from drainage facilities and watercourses, and other source control BMPs are incorporated into City approved erosion control plans and project SWPPPs as applicable.
- Non-storm water management control are generally source control BMPs. These include such things as paving and grinding operations, dewatering operations, water practices, etc. These BMPs are incorporated into City approved erosion control plans and project SWPPP's as applicable.

For more information about the required BMPs, please contact the Public Works Inspector assigned to your project. You may also find additional information about Construction Management and Inspection Division on the City website at

www.carlsbadca.gov

Erosion and Sediment Control / NPDES Training
FY 06-07

NPDES TOPIC	DATE
Scheduling	August 03, 2006
Sediment Basins	August 31, 2006
Hydroseeding	September 14, 2006
BMP Installation for Residential Const.	September 19, 2006
Tire Washing	October 12, 2006
Fiber Blankets	October 26, 2006
Construction Entrances	November 08, 2006
Chevrons	December 07, 2006
Fiber Rolls	January 18, 2007
Earth Dikes	February 01, 2007
Fiber Blankets	February 05, 2007
Check Dams	February 15, 2007
Straw Waddles and Slope Protection	March 01, 2007
Field BMPs	March 14, 2007
Silt Fence	April 12, 2007
Hydraulic Mulch	May 10, 2007
Storm Drain Inlet Protection	June 08, 2007

City of Carlsbad CMI NPDES External Training
FY 06-07

NPDES TOPIC	TYPE	DATE
EPA Webcast	Seminar	July 10, 2006
StormCon	Convention/Seminar	July 25-27, 2006
SWPPP and BMP Inspections	Seminar	September 09, 2006
EPA Webcast	Seminar	January 10, 2007
NPDES and BMP Inspections	Training	May 10 & 16, 2007

Dry Weather Program Exceedance Investigations 2007

Site	Exceedance Constituent	Initial Sample Investigation Results	Followup Investigation
AH-04	Surfactants	Immediate investigation led to identification of source at 5600 Avenida Encinas on 7/16/07. Confirmation sample collected the following day was also above action level for MBAS and source appeared to be from outdoor washing (7/17/07).	Educational materials regarding vehicle washing BMPs and regulations as they pertain to industrial and commercial businesses scheduled to be sent to the responsible parties for the businesses located in the building at 5600 Avenida Encinas in January 08. Potential responsible businesses scheduled for inspection January 08.
AH-10	Nitrate	Initial sample collected on 7/11/07 had nitrates above action level and elevated turbidity.	Confirmation samples on 7/13/07 had lower turbidity but continued to have elevated nitrate concentrations. Upstream investigations confirmed that the source of the flow and the nitrate concentrations originate from seepage below the flower fields, not a direct connection into the system. Nitrates in seepage may originate from historical agricultural use or present fertilization practices. Inspections of potential responsible parties scheduled for Jan. 08
AH-13	Nitrate	Initial sample collected on 7/11/07 had nitrates above action level and elevated turbidity.	Confirmation samples on 7/13/07 had lower turbidity but continued to have elevated nitrate concentrations. Upstream investigations confirmed that the source of the flow and the nitrate concentrations originate from seepage below the flower fields, not a direct connection into the system. Nitrates in seepage may originate from historical agricultural use or present fertilization practices. Inspections of potential responsible parties scheduled for Jan. 08
AH-65	orthophosphate-P	Immediate investigation led to landscapers irrigating area where fertilizer had been applied and was likely source.	Confirmation sample was collected the following day and the ortho-phosphate concentrations had dropped below the action level of 2.0 mg/l. Educational materials regarding BMPs for fertilizer used and minimizing irrigation runoff mailed to all residents in area upstream of the site, January 2008. Distribution to the landscape management company responsible for the landscaping between Victoria Avenue and Auburn Avenue scheduled for Feb. 08.

Dry Weather Program Exceedance Investigations 2007

Site	Exceedance Constituent	Initial Sample Investigation Results	Followup Investigation
BA-06	Total Coliform, Enteroccocus	Initial sample collected on 7/12/07	Confirmation sample collected on 7/16/07. Total coliform concentrations had decreased below action level however, enterococcus concentrations were above action levels in the second sample. Several additional upstream samples were collected in an attempt to identify the enterococcus source. Upstream investigations performed after second sample collection showed organic debris (leaves and grass clippings) and irrigation runoff in the curblines, likely the source of total coliform. On 8/15/07, all manholes and storm drain inlets in the area were inspected. The lines were observed to be clean while some organic debris was observed in the inlets. Pet waste was observed above ground at several locations and may contribute to the elevated enterococcus concentrations. All storm drain inlets in the drainage area were cleaned by City personnel and educational information was distributed to residents in the neighborhood in August 07.
BA-13	Turbidity	Initial sample contained elevated turbidity, collected on 7/12/07. An immediate upstream investigation was conducted for the turbidity.	The likely source was located at a residence on Lotus Court constructing a new driveway. The area around the driveway was damp, although no actual runoff was observed. An informational letter containing two educational brochures was sent to the homeowner on August 15, 2007.
BA-13	Total Coliform	The initial sample contained elevated concentrations of total coliform, collected on 7/12/07. An investigation was performed to locate the source of bacteria.	Follow-up sample was collected on 7/16/07. The sample contained elevated total coliform and enterococcus concentrations above action levels. Investigation narrowed suspected source area to a vacant lot on the North side of Aviara Parkway. This site was inspected 8-28-07 with small amounts of trash present, however there was no evidence of human waste on the site. On 9-25-07, the storm drain lines and inlets were inspected, as well as the vacant lot. with increased amounts of trash and fecal matter present on the vacant lot. However, there was no evidence of trash or waste in the storm drain system. The case was referred to Code Enforcement to have the vacant lot cleaned. As a precaution, the storm drain system was also cleaned with a Vactor truck on 9-26-07. No definitive source of bacteria was located, although encampment activity on the vacant lot is suspected to contribute significantly.

Dry Weather Program Exceedance Investigations 2007

Site	Exceedance Constituent	Initial Sample Investigation Results	Followup Investigation
BA-40	Fecal Coliform	Initial sample was collected on 7/12/07 and contained elevated concentrations of fecal coliform.	A follow-up sample was collected on 7/25/07 and all three bacterial indicators were below action levels. Upstream investigation at this time showed that flow above the sample location was limited and the small amount of water entering the system was from a residential area. Educational information was sent to all residents in the neighborhood regarding storm water pollution and residential sources in October 2007.
BA-47	pH	Initial sample was collected on 7/24/07.	A confirmation sample was collected on 7/25/07 which was within acceptable limits. Source of water investigated and appears to be possible groundwater seepage from subdrains installed into hillside.
BV-02	Total Coliform, Enteroccocus	Initial sample collected on 7/11/07 had TC and ENT concentrations above action levels.	A confirmation sample was collected on 7/16/07 and all three bacteria indicators were below action levels. Upstream investigations performed on 7/16 found little to no flow (□1 gpm) in manholes upstream. The access points were all clean, with no trash or decomposing organic materials inside the MS4. Additional surveys were conducted above and below ground on 7/19 and 7/20 in an attempt to locate sources of bacteria. No sources were found. This leads staff to believe that the source of bacteria at the site is associated with transient encampment activity at the outfall. Remove trash and other anthropogenic debris from site on a regular basis.
EN-02C	Nitrate	Initial and follow up samples exceeded action level. Flow at site was minimal at approximately 1 gpm during each visit.	Storm drain services Cal Trans Rights of Way and small area of street drainage. Nitrates likely originate from irrigation and/or groundwater draining from this ROW.
EN-14A	pH	Initial and follow up samples exceeded action level.	Historical exceedance likely attributable to groundwater. Site directly upstream at EN-14 has a pH of 7.8, therefore suspected groundwater intrusion into MS4 between EN-14 and EN-14A.
EN-23	pH, turbidity	Initial and follow up samples were exceeding action levels for pH and turbididty. Low pH and elevated turbidity were tracked upstream to a segment of pipe between manhole at 6211 Yarrow and 6150	There are no known connections in this segment of pipe. Low pH is likey from groundwater intrusion into pipe along this segment. Turbidity may be attributable to bacterial die-off in the water due to the low pH.
Additional follow up activities			
BA-36		pet waste found in residential area	educational materials sent to all residents in area, January 08
AH-11		vegetation downstream of site blocking drainage	referred to Maintenance and Operations Jan 08
BV-08		washing activities and improper grease storage upstream of site in commercial complex	inspections completed in commercial complex, covering washing activities and grease disposal in Summer/Fall 2007

Dry Weather Program Exceedance Investigations 2007

Site	Exceedance Constituent	Initial Sample Investigation Results	Followup Investigation
AH-03, AH-04, AH-08, AH-11, AH-12, AH-18, AH-31, AH-45, BA-02, BA-04, BA-13, BA-27, BA-36, BA-40, BA-41, BA-43, BA-51, BV-02, BV-06, BV-08, EN-02C, EN-09, EN-14A		trash in area of sites	referred to Maintenance and Operations Jan 08

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
Drainage-Runoff from street				
6TRUJ2	9/18/2006	9/18/2006	Please see attachment. Please include response before closing RFA. Thank you.	9/20/2006 12:26:51PM - XXX Status Change Previous: Open New: Closed Reason: E-mail response was sent to requestor with information regarding the issue. See attachments.
Drainage-Water ponding pooling				
6RFN4M	7/6/2006	7/6/2006	Drain isn't draining properly in front of property, water is just standing there.	7/18/2006 12:12:04PM - XXX Status Change Previous: Open New: Closed Reason: THIS AREA IS STILL UNDER CONSTRUCTION MGMT. AND INSPECTION. ISSUE REFERRED TO XXX PER XXX.
6U9PNG	10/4/2006	10/4/2006	XXX reports that there is a drainage problem in front of his house. The water on Burgos Ct. is supposed to drain, but it puddles in front of his driveway and won't flow to the drainage area, which is on Levante. He said this was caused by previous work done to install handicapped-access ramps on the sidewalk which left part of the street higher. He would appreciate a call from someone.	10/16/2006 12:52:34PM - XXX Status Change Previous: Open New: Closed Reason: See Hansen Service Request No. 14529
745PDV	6/13/2007	6/13/2007	Resident called to report on-going drainage problem in front of her residence. Reports she has called in numerous times for many years (See also RFAA-6EPVE4 and RFAA-5YMMKN). Water builds up in gutter creating standing water with trash etc. Resident requests a return call on what can be done to correct this on-going issue. Thank you.	6/19/2007 5:04:38PM - XXX Status Change Previous: Open New: Closed Reason: Request to close RFA per XXX who reports he spoke with resident and resident agrees it is due to overwatering and issue will be followed up by XXX. XXX request meeting on site with XXX, XXX to investigate further.
Litter Debris-Clean up request				
6RNKRN	7/13/2006	7/13/2006	Can the City do something about the litter, brush, etc. at Cannon Lake?	7/20/2006 1:12:11PM - XXX Status Change Previous: Pending New: Closed Reason: Lessee contacted for cleanup

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6XRMHE	1/24/2007	1/24/2007	Trash dumped on road - christmas tree, bedding, etc.	2/9/2007 11:52:37AM - XXX Status Change Previous: Open New: Closed Reason: Removed and dumped. C. Dobbs
733W2R	5/10/2007	5/10/2007	Dumping trash in field behind Zone 5 park. See photos attached of trash and vehicle that dumped it.	5/11/2007 3:04:55PM - XXX Status Change Previous: Open New: Closed Reason: Clean up was done 5/11/07.
Recycling-Complaint				
6RKNPV	7/10/2006	7/10/2006	Returning CRV items to Palomar Transfer Station for cash but not getting amount requested.	7/10/2006 10:42:50AM - XXX Status Change Previous: Open New: Closed Reason: Emailed resident with information answering her complaint.
6RMTLM	7/12/2006	7/12/2006	A Carlsbad resident, xxx xxx just called to lodge a complaint about Liberty Recycling in Carlsbad. She and her husband were told that they needed to count the bottles (plastic) and would be paid the same amount for the large bottles as for the small ones. They were also told there was a 50 bottle per trip limit, and they had 450 bottles. The attendant was rude, and xxx was very upset about it.	7/14/2006 9:53:04AM - XXX Status Change Previous: Open New: Closed Reason: Customer spoke with Department of Recycling staff memember (XXX) and arranged to drop 50 bottles/person at the recycling center - so she and her husband will each be able to return 50 bottles at a time. Resident was amenable to that plan.
6UWQMJ	10/25/2006	10/25/2006	Forum shopping center does not offer recycling to businesses within the shopping center.	11/9/2006 3:33:09PM - XXX Status Change Previous: Pending New: Closed Reason: This matter is being reviewed with Waste Management and the Forum in the hopes of better publicizing what recycling is done and improving recycling at the Forum for businesses and customers.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6W7TEF	12/5/2006	12/5/2006	Collection at residence missed two large cardboard boxes that had been placed on top of trash. Boxes are empty but were not broken down.	12/6/2006 3:44:26PM - XXX Status Change Previous: Open New: Closed Reason: Per Waste Management, boxes were picked up 12-5-06.
6XWPFE	1/29/2007	1/29/2007	Resident complaining about the small recycling bins offered by City, also experiences missed collections on occasion because she uses a large 65gallon container for recyclables. Says it often gets collected but occasionally it does not.	1/29/2007 10:20:35AM - XXX Status Change Previous: Open New: Closed Reason: Resident's issue seemed the overall recycling program, occasional missed pickup. She seemed satisfied with explanation.
Solid Waste-Complaint				
6RZLZA	7/24/2006	7/24/2006	Trash cans were damaged in collection process and he has called to complain and has been verbally abusive and belligerent to City staff.	8/8/2006 2:18:09PM - XXX Status Change Previous: Open New: Closed Reason: New cans delivered to customer by Waste Management manager.
6V4QV3	10/31/2006	10/31/2006	xxx is disabled and working with a church group to help a homeless family locate into an apartment in Carlsbad. She was able to secure furniture but the donated furniture is apparently contaminated with cat urine. She called WM to schedule them for collection. Operator (xxx?) mistook her address for an Oceanside address and told her collection would be free. Apparently because its a Carlsbad address collection should be 45 - xxx cannot afford that charge and also feels that WM mistake should entitle her to free collection. Items included are a chouch, box spring and mattress. She was also told that until she paid the charge for the collection she would not be able to talk with a manager/supervisor at WM. She was told this by a Theresa. Mrs. Kinser has called several times in the last days to reach a supervisor without a call back.	11/9/2006 2:32:26PM - XXX Status Change Previous: Open New: Closed Reason: Free collection occurred.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6VD2PB	11/8/2006	11/8/2006	Waste Management driver collected (two weeks ago) and not returned a white yardwaste container that resident used to place yard waste at curbside. The container is white, about as wide as a trash bin and about half the height. Resident has called a couple times without a reply from Waste Management.	4/20/2007 8:49:28AM - XXX Status Change Previous: Open New: Closed Reason: Per attached e-mail from Waste Mgmnt - Route Supervisor meeting with XXX to straighten out misunderstanding as to what should and should not be used for trash - giving XXX yard waste stickers.
6VKNEE	11/15/2006	11/15/2006	About mid day during the resident's normal trash pick up a Waste Management Driver - drove truck over disabled curb walkway and resident's driveway damaging the disabled curb and the residents driveway with a 6 1/2 foot sink hole and large cracks. The damaged disabled curb is dangerous for the handicapped access. Please contact resident for inspection and repairs.	12/26/2006 2:47:59PM - XXX Status Change Previous: Open New: Closed Reason: Closing because Streets says damage only cosmetic. Will reopen if Waste Management wants to pay for cosmetic repair.
6W3NS4	12/1/2006	12/1/2006	General complaints about Waste Management-Non responsive, cut off without notification for non payment and check was mailed Nov 10. Trash will not be picked up until Monday after missing two pickups. Overflowing dumpster picture does not show need for extra dump. When trash is picked up, WM does not pick up anything they spill and they do not put lids back in place.	12/4/2006 12:32:37PM - XXX Status Change Previous: Open New: Closed Reason: Customer serviced 12/1/06.
6W6S93	12/4/2006	12/4/2006	Green waste picked up and intermingled with regular trash. Is this the way it is supposed to be done?	12/5/2006 4:05:42PM - XXX Status Change Previous: Open New: Closed Reason: This happens once in a while when there is not another truck available.
6XDPMK	1/12/2007	1/12/2007	Resident wants City to provide automated trash collection service. She doesn't like the look of so many different types of trash containers throughout the City in comparison to other less wealthy cities in the area.	1/12/2007 10:30:05AM - XXX Status Change Previous: Open New: Closed Reason: Resident simply wanted complaint noted... it is noted.
6Z8UNT	3/12/2007	3/12/2007	Please see attachment. Please include response before closing RFA. Thank you.	3/16/2007 10:03:50AM - XXX Status Change Previous: Open New: Closed Reason: Trash picked up and caller was appreciative of quick response.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6ZPM4W	3/27/2007	3/27/2007	Caller complains that when they set there kitchen trash can out for for Waste Management on trash day, the driver throws their kitchen trash can away.	5/10/2007 9:33:12AM - XXX Status Change Previous: Open New: Closed Reason: XXX and XXX spoke with customer and are resolving issue.
6ZXT5F	4/4/2007	4/4/2007	Took an old Xerox machine to Waste Management's recycling center on ECR. Caller claims that he was quoted 20 cents per pound and when he got there it was 50 cents per pound.	4/4/2007 2:32:02PM - XXX Status Change Previous: Open New: Closed Reason: Advised customer of alternative ways to get rid of the waste at less expense. He was satisfied.
727RJM	4/12/2007	4/12/2007	Yard waste not picked up because of weight - when split into two cans only one was picked up.	4/17/2007 8:24:12AM - XXX Status Change Previous: Open New: Closed Reason: Green Waste will be serviced Monday, April 16th on normal day. I talked with the customer and I responded to this issue earlier this week.
72DLQ7	4/18/2007	4/18/2007	Called to complain that the drivers from Clean Harbors were talking to each other when they picked up her old computers. They even used a curse word. She was not home but someone in her house heard them.	4/18/2007 9:16:49AM - XXX Status Change Previous: Open New: Closed Reason: I appologized to caller and informed Clean Harbors of complaint. Caller was satisfied that I passed her complaint on to Clean Harbors.
72FUVZ	4/20/2007	4/20/2007	Please see attachment. Please include response before closing RFA. Thank you.	4/23/2007 10:20:41AM - XXX Status Change Previous: Open New: Closed Reason: Waste Management meeting with complainant 4/25/07. Will leave decals and speak with drivers.
72SLNA	5/1/2007	5/1/2007	Problems with waste pickup. Wanted to cancel trash service.	5/1/2007 9:03:42AM - XXX Status Change Previous: Open New: Closed Reason: Waste Management found no problem but will monitor for next few weeks.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
73ALTS	5/17/2007	5/17/2007	Complaint about trash pickup - recieved note from WM re trash over 40 lbs. Wants trash service like LA.	5/29/2007 7:36:21AM - XXX Status Change Previous: Open New: Closed Reason: Message was left
74424F	6/11/2007	6/11/2007	Building owner is calling because Waste Management has not called him back. Truck spilled liquid on driveway repeatedly - once cleaned and latest time without cleaning. Wants the area cleaned and to have the truck get to him earlier in its route to avoid spillage.	6/15/2007 1:42:03PM - XXX Status Change Previous: Open New: Closed Reason: XXX called asking for name and number of WM Supervisor who called him. I gave him the information (XXX XXX). XXX was satisfied. This is second or third time this issue has come up at this apartment complex. RFA being closed as this will be worked out by WM and XXX.
744LWY	6/12/2007	6/12/2007	Complaint of people using southwest cormer of El Camino Real and Carlsbad Village Drive and west side of El Camino Real just south of Kelly Drive for restrooms as they wait for work.	6/12/2007 9:47:12AM - XXX Status Change Previous: Open New: Closed Reason: No follow up to resident possible.
Solid Waste-Missed collection pick-up				
6RTUWG	7/18/2006	7/18/2006	Not picking up recycling (pick up trash only)	7/18/2006 4:31:38PM - XXX Status Change Previous: Open New: Closed Reason: XXX has advised driver of this pick up - the only one on the street.
6S5S87	7/28/2006	7/28/2006	Resident called WM because her green waste was not collected. She was told they have until Saturday on a missed collection to get the materials (her collection was missed on Thursday). No supervisor was available when she called. Green waste collection has been a problem in her neighborhood recently (last 3-6 motnhs).	7/28/2006 4:09:21PM - XXX Status Change Previous: Open New: Closed Reason: Matter was resolved with WM collecting the green waste for resident. They also dropped green waste stickers to neighbors who did not have any. XXX will follow up with call center on problem of when the matter would be resolved.
6VYM5S	11/28/2006	11/28/2006	New resident who bought the wrong sized containers and placed them out for 3 weeks' worth of trash days. They haven't been collected and she cannot replace them with smaller bins because they're full of trash. She needs to have trash collected to be able to start over.	11/29/2006 10:06:10AM - XXX Status Change Previous: Open New: Closed Reason: Trash being picked up 11/29/06 per XXX of Waste Management.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6X3QA9	1/2/2007	1/2/2007	Recycling not picked up - please pick up	1/3/2007 12:26:21PM - XXX Status Change Previous: Open New: Closed Reason: Per WM - recycling was picked up 1-2-07.
6ZPNCR	3/27/2007	3/27/2007	Recycling not picked up on 3-26-07.	3/27/2007 10:24:17AM - XXX Status Change Previous: Open New: Closed Reason: Waste Management picking up recycling today.
73WV58	6/6/2007	6/6/2007	Trash not picked up - last week trash was left in can on curb and this week they did not pick up the recycling.	6/8/2007 9:29:38AM - XXX Status Change Previous: Open New: Closed Reason: Driver realized mistake and picked up on his way back.
74HP2U	6/25/2007	6/25/2007	Bulky item not picked up on Saturday - 6-22-07. WM offered to pick up on Friday 6-29-07. Caller wants it picked up Wednesday afternoon, 6-27-07.	6/26/2007 1:01:55PM - XXX Status Change Previous: Open New: Closed Reason: Resident has worked out a collection time to meet his needs, staff called to leave a message and confirm satisfaction.
74KSTP	6/27/2007	6/27/2007	Green waste has not been picked up since Monday 6/22. Was promised to be picked up yesterday and still not picked up. The resident wants it picked up today.	7/5/2007 8:44:23AM - XXX Status Change Previous: Open New: Closed Reason: Green waste picke up on 6/22/07.
Sprinklers-Private Property				
6V3S8K	10/30/2006	10/30/2006	Broken/leaking irragation pipe of neighbors who lives up hill behind resident. she has tried to address neighbor about the problem but has rec'd no response from them. neighbor lives at XXX Via Callendo /Carlsbad. She says that her yard is wet all the time especially when neighbors spinkers are on. This has been on going for 2 yrs. land is starting to erode from hill side. afraid of land slide.	10/30/2006 3:03:33PM - XXX Status Change Previous: Open New: Closed Reason: Neighbors have found and are fixing the problem. Customers are not in our water district.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
Storm Drain-Damaged Needs Repair				
6TTKXL	9/20/2006	9/20/2006	SW28 Miscellaneous Incidents Asbestos sheets used in construction of storm drain structure	9/20/2006 8:29:44AM - XXX Status Change Previous: Open New: Closed Reason: Asbestos clean-up scheduled for 9-20-06.Referred for Action
6UMQEW	10/16/2006	10/16/2006	Pile of something white and hard in gutter. Water running over it but not taking it with it. Report of Dumping to the Storm Drain	10/16/2006 5:09:30PM - XXX Status Change Previous: Open New: Closed Reason: Referred to Storm Drain Maintenance crew for resolution. See Hansen Service Request No. 14541
6V7NR9	11/3/2006	11/3/2006	SW28 Miscellaneous Incidents A storm drain structure has been added to the curb inlet on his street and it is causing water to puddle and not flow into the system.	11/3/2006 5:28:12PM - XXX Status Change Previous: Open New: Closed Reason: 11-02-06 XXX conducted a site visit and found that the structure was a BMP for a nearby construction project. The structure will be removed when the project is completed. See XXX for additional information. Referred for Action
6WDR9U	12/11/2006	12/11/2006	Has a storm drain that runs thru his property down to the street below. Says that the drain is not functioning properly, has a crack and is running into neighbors yard.	3/8/2007 10:45:16AM - XXX Status Change Previous: Open New: Closed Reason: Per XXX, problem found to be ground water.
72KLFN	4/24/2007	4/24/2007	SW28 Miscellaneous Incidents Storm drain without lid	4/25/2007 3:35:04PM - XXX Status Change Previous: Open New: Closed Reason: Referred for Action - storm water crew putting new lid on.
Storm Drain-Dirt Debris - Piles				
6S5NAB	7/28/2006	7/28/2006	Tracking Soil Dirt piles in street Report of possible storm water violation - due to dirt or debris piles.	7/28/2006 10:47:10AM - XXX Status Change Previous: Open New: Closed Reason: XXX conducted a site visit and observed some dirt in the street. Most of the dirt was on the sidewalk. Spoke to contractor and informed him of the storm water requiremnets. He stated he would be cleaning up the area ASAP. No discharge to the storm drain. Verbal Notice

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6S9NJ3	8/1/2006	8/1/2006	Landscape Material Dumping Miscellaneous Incidents - Dirt piles - no BMPs Report of possible storm water violation - due to dirt or debris piles.	8/4/2006 4:07:41PM - XXX Status Change Previous: Open New: Closed Reason: Dirt piles are being covered. Follow up will be done.
6UNUXC	10/17/2006	10/17/2006	Dirt in roadway from construction truck(s) at Golf Course site. Report of possible storm water violation - due to dirt or debris piles.	10/24/2006 8:33:53AM -XXX Status Change Previous: Open New: Closed Reason: 10/19/06 :XXX (assigned to Golf Course Project) reported Wadsworth staff hand cleaned street (Faraday) within 1 hour from the time the mud or dirt was dropped on Tuesday 10/17/06. Following new entry on 10/20 -Construction Manager, XXX, informed me he visited site at 4:00pm on 10/20 and the dirt was cleaned off.
6V7PES	11/3/2006	11/3/2006	Dumping soil in field Report of possible storm water violation - due to dirt or debris piles.	11/6/2006 9:04:08AM - XXX Status Change Previous: Open New: Closed Reason: Inspector XXX reports: Crews cleaned up that night. Three more vactor trucks were sent to finish cleanup on 11/02/06. Cleanup was complete at 3:00pm on 11/02/06 -streets were swept and stock piles, gravel bags and trash was removed from site.
6WV336	12/26/2006	12/26/2006	SW28 Miscellaneous Incidents Pile of dirt, foul odor coming from hole where work is being done. Report of possible storm water violation - due to dirt or debris piles.	1/16/2007 11:57:22AM - XXX Status Change Previous: Pending New: Closed Reason: No issue / No violation
6X4S8R	1/3/2007	1/3/2007	Large pile of fertilizer in driveway, encroaching on gutter. No BMPs in place. Report of possible storm water violation - due to dirt or debris piles.	1/9/2007 11:10:47AM - XXX Status Change Previous: Pending New: Closed Reason: No issue / No violation
6XCVMU	1/11/2007	1/11/2007	SW10 Landscape Material Dumping Report of possible storm water violation - due to dirt or debris piles.	1/11/2007 4:33:55PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6YTQGW	2/27/2007	2/27/2007	Piles of dirt from landscape construction - no BMPs Report of possible storm water violation - due to dirt or debris piles.	3/1/2007 10:13:27AM - XXX Status Change Previous: Open New: Closed Reason: Job site was field inspected by XXX. A notice was given to install BMPs. Homeowner agreed to install fiber rolls and construct detention basin at low point behind retaining wall. A followup inspection scheduled for 3-1-07.
6YUPE5	2/28/2007	2/28/2007	SW10 Landscape Material Dumping Construction materials (sand, cement bags) in roadway Report of possible storm water violation - due to dirt or debris piles.	3/5/2007 3:17:06PM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice
Storm Drain-Dumping to Storm Drain				
6RTLVZ	7/18/2006	7/18/2006	Pool / Spa / Fountain Discharge Emptying pool - not de-chlorinated Report of Dumping to the Storm Drain	7/24/2006 3:16:07PM - XXX Status Change Previous: Pending New: Closed Reason: Informational Letter and BMPs sent.
6RTL94	7/18/2006	7/18/2006	Complaint Not Found House Painters left paint in street and dumped paint on hillside Report of Dumping to the Storm Drain	7/21/2006 4:00:58PM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice: 07-19-06. XXX conducted a site visit and spoke with the contractor. He was aware of the storm water requirements and stated that had not dumped or washed any materials to the storm drain. The driveway, gutter, and SD were inspected and there was no evidence of recent dumping or washing. Contractor stated that he had washed brushes and buckets to the dirt behind the house and that water had not left the site. Left BMP information with contractor. No follow up required at this time.
6RTLRC	7/18/2006	7/18/2006	Carpet Cleaning Discharge Carpet cleaner dumping water into storm drain. Report of Dumping to the Storm Drain	7/18/2006 9:02:08AM - XXX Status Change Previous: Open New: Closed Reason: Carpet cleaner stopped dumping when told to do so.
6RVNMU	7/20/2006	7/20/2006	Please see attachment. Please include response before closing RFA. Thank you.	7/20/2006 11:15:00AM - XXX Status Change Previous: Open New: Closed Reason: Refer to RFAA-6VNDF - this was a duplicate.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6SYMFA	8/24/2006	8/24/2006	Dumping - Non-hazardous Materials 50 containers of unknown substance left at site Report of Dumping to the Storm Drain	8/24/2006 4:03:55PM - XXX Status Change Previous: Open New: Closed Reason: Referred for Action: FD and County Haz Mat investigation found that the bottles contained a juice/wine extract. The liquid was disposed of to the sanitary sewer. Material did not spill or reach the SD.
6T4L8V	8/28/2006	8/28/2006	SW8 Paint / Stucco Discharge Bucket of paint fell off of truck - running approximately 100 feet Report of Dumping to the Storm Drain	9/20/2006 10:07:20AM - XXX Status Change Previous: Pending New: Closed Reason: Referred for Action: Charge Back sent to Finance Department.
6TYTJE	9/25/2006	9/25/2006	SW11 Pool / Spa / Fountain Discharge Contractor draining pool to storm drain Report of Washing to the Storm Drain	10/2/2006 2:20:40PM - XXX Status Change Previous: Open New: Closed Reason: Informational Letter and BMPS
6U3L8G	9/28/2006	9/28/2006	SW29 Complaint Not Found Creek running full - usually barely moving - something being emptied into it? Report of Dumping to the Storm Drain	10/2/2006 11:11:34AM - XXX Status Change Previous: Open New: Closed Reason: No sign of excess water running by both M&O and Storm Water.No issue / No violation
6UHSHB	10/12/2006	10/12/2006	SW27 Allowable Discharge - Groundwater Dumping 'gunk' to storm drain. Report of Dumping to the Storm Drain	10/16/2006 1:31:24PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation XXX conducted a site visit and found a reddish-brown substance discharging from a french drain at the subject residence. The homeowner was contacted and verified that the discharge had been happening for a long time. May be related to groundwater discharges observed in other areas of the city.
6UQU45	10/19/2006	10/19/2006	SW26 Accidental Spill Vehicle hit 5 gallon can of paint - about 3 gallons in can went into street. Report of Dumping to the Storm Drain	10/23/2006 1:35:25PM - XXX Status Change Previous: Open New: Closed Reason: Follow up in Hanson. See XXX. Referred for Action

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6UQT8S	10/19/2006	10/19/2006	Sewage in gutter Report of Dumping to the Storm Drain	10/24/2006 8:50:27AM - XXX Status Change Previous: Open New: Closed Reason: Inspector XXX reports : Effluent was contained in the curb and gutter with sand bags, until cleanup truck arrived. New truck arrived and vaccumed and cleaned with cleaning/sanitizing agent.
6UQSBF	10/19/2006	10/19/2006	SW8 Paint / Stucco Discharge Someone in neighborhood has dumped what appears to be brown paint and it is running down the gutter into the stormdrain. Report of Dumping to the Storm Drain	10/23/2006 9:16:38AM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice
6UXNM5	10/26/2006	10/26/2006	SW26 Accidental Spill Tow behind cement mixer rolled over in street. Report of Dumping to the Storm Drain	10/30/2006 10:11:01AM - XXX Status Change Previous: Open New: Closed Reason: XXX responded. Site cleaned by streets and contractor. See work order in Hanson 14822.
6V4LV9	10/31/2006	10/31/2006	SW26 Accidental Spill 5 gallons of oil spilled on street. Report of Dumping to the Storm Drain	10/31/2006 10:09:26AM - XXX Status Change Previous: Open New: Closed Reason: Referred for Action. XXX conducted a site vsit and found that the streets department had quickly implemented BMPS and protected the SD from the discharge. It appears thatthe barrel of oil fell off a truck and spilled onto the streets. SD crew put down absorbants and site is being cleaned. No RP.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6VYN4D	11/28/2006	11/28/2006	SW27 Allowable Discharge - Groundwater Report of Dumping to the Storm Drain	11/28/2006 9:21:14AM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation 11-26-06 10:00am. XXX rec'd a call from XXX of the Streets Department reporting an unknowm discharge on Rana Court. 10:30am XXX responded onsite and reported to FD XXX. FD reported that FD had rec'd a call regarding the discharge of a brown subtstance on Rana Ct. to the street and SD at approx. 9:30am. FD contacted County Haz Mat who arrived onsite soon after XXX. While County Haz Mat conducted its investigation, XXX and streets crew conducted an upstream investigation and found that the discharge originated from the subject address. It was determined that the dicharge was a result of mineralized groundwater and concentrated leaf litter debris. County Haz Mat found that the substance was organic and non-haz. 2:30pm XXX left the site and had planned to have the street cleaned during the next week, however it rained on 11-27-06 a
6X5LQF	1/4/2007	1/4/2007	SW8 Paint / Stucco Discharge SW25 Illicit Connection Dumping paint, grout into drain on property that went into drain in front of 3080 Pio Pico Dr - Approx 420 linear feet effected by this dumping Report of Dumping to the Storm Drain	1/10/2007 8:17:55AM - XXX Status Change Previous: Pending New: Closed Reason: Follow-up in Permits Plus 01-05-06 XXX and XXX conducted a follow up site and verified that all interior drains to the outside had been capped, The outdoor areas had been cleaned and the business onwer stated that all employees had been trained on proper cleaning activities.
6X5MP9	1/4/2007	1/4/2007	SW21 Dumping - Hazardous Materials 10 gallon can of cat feces dumped in gutter Report of Dumping to the Storm Drain	1/4/2007 2:41:47PM - XXX Status Change Previous: Open New: Closed Reason: Site cleaned up.Referred for Action

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6XBLZJ	1/10/2007	1/10/2007	SW28 Miscellaneous Incidents - Clarifier clogged and discharging water from car wash to the street. Palomar Mobile Station car wash drain clogged. Report of Washing to the Storm Drain	1/10/2007 4:46:33PM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus 01-08-07 XXX observed water flowing from the Palomar Mobile to the storm drain at Paseo Del Norte and PAR. Clayton immediately contacted the station manager and found that the clarifier at the exit of the car wash was clogged and water from the car wash had overflowed to the street and storm drain. The car wash operation was shut down and the station manager contacted a plumber to have the clogged cleared. The station manager was informed that he could not resume car wash operations until the drain was fixed.
6XQMWH	1/23/2007	1/23/2007	SW13 Dewatering Blue hose hanging over fence draining water Report of Washing to the Storm Drain	1/24/2007 11:44:59AM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation XXX and XXX conducted a site visit and found that a hose connected to a storm drain was discharging to a service road on the airport. Upon further investigation staff found that the hose was connected to an out of service SD vault and water was being pumped out of the vault. No water reached the City MS4. Airport staff was contacted and advised to redirect the flow to a landscaped area.
6Y222U	2/1/2007	2/1/2007	SW28 Miscellaneous Incidents Potential leaking oildrums and haz mat storage Report of Dumping to the Storm Drain	2/5/2007 2:32:03PM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus SWP00965. XXX conducted a site visit and found that materials were impropoerly stored onsite. Will follow up in Permits Plus.
6YDU2A	2/13/2007	2/13/2007	SW8 Paint / Stucco Discharge Paint being dumped. Report of Dumping to the Storm Drain	2/14/2007 8:28:28AM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice 02-13-07 XXX conducted site visit and found that contractor had been dumping paint to landscape which had the potential to discharge to SD if rain event occured. No paint reached the SD. XXX informed the contractor of BMPs and required them to clean up the paint. XXX will conduct a follow up site visit to verify compliance. Will reopen if paint has not been cleaned up.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6YLNNX	2/20/2007	2/20/2007	Pool being emptied. Test strip shows chlorine. Report of Dumping to the Storm Drain	2/22/2007 8:55:41AM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice from XXX
6Z323U	3/6/2007	3/6/2007	SW29 Complaint Not Found Oil in street from this address' golf cart business. Report of Dumping to the Storm Drain	3/7/2007 8:37:06AM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation
6ZAQ6M	3/14/2007	3/14/2007	SW21 Dumping - Hazardous Materials - Water based paint 10 gallons of paint left on sidewalk. Report of Dumping to the Storm Drain	3/14/2007 4:18:13PM - XXX Status Change Previous: Open New: Closed Reason: XXX and XXX conducted site visit and found that several cans of water based paint had been left on the street in front of th subject address. No RP onsite. Paint was removed and will be disposed of by the City. Referred for Action
6ZBW25	3/15/2007	3/15/2007	SW27 Allowable Discharge Construction water truck dumping water to storm drain. Allowable discharge if proper BMPs are implemented (i.e. dechlorination, inlet protection). Report of Dumping to the Storm Drain	3/29/2007 1:39:03PM - XXX Status Change Previous: Pending New: Closed Reason: Referred for Action to XXX, see attachment. Notice of Violation
6ZCP75	3/16/2007	3/16/2007	SW22 Dumping - Non-hazardous Materials Dumping 5 gallon buckets of unknown clear liquid in landscape and in parking lot. Report of Dumping to the Storm Drain	3/16/2007 4:35:28PM - XXX Status Change Previous: Open New: Closed Reason: Written Warning
6ZCR9M	3/16/2007	3/16/2007	Carpet cleaner dumping dirty water into gutter. Report of Dumping to the Storm Drain	3/16/2007 2:40:28PM - XXX Status Change Previous: Open New: Closed Reason: Water was coming from a generator drip line for condensation. The water was clean and clear.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6ZGNDK	3/20/2007	3/20/2007	SW29 Complaint Not Found Report of illegal dumping - Report of Dumping to the Storm Drain	3/20/2007 4:23:33PM - XXX Status Change Previous: Open New: Closed Reason: Complaint Not Found 8am: XXX stated that he called City Hall to report that a truck from the subject address was leaking sewage on to Ponto Road. 8:50am The complaint was dispatched to CMWD and an inpsector was sent out to respond. 9:15am XXX arrived onsite and discussed the issue with XXX, who XXX reported to be highly upset. Because of XXX temperment, Mr. Perkins called XXX to come site to speak to XXX. 9:45am XXX arrived onsite and spoke to XXX about the incident. Eventhough XXX and XXX could not find any evidence of sewage or a recent spill, XXX was adamant that the subject business had dumped the sewage and that the City was trying to cover up the incident. 10:06am XXX contacted the Storm Water Program and requested an inspector to come onsite to evaluate. 10:20am XXX arrived onsite
6ZHUFG	3/21/2007	3/21/2007	SW27 Allowable Discharge Truck dumped approximately 50 gallons of waste water from tank onto PAR. Report of Dumping to the Storm Drain	3/27/2007 9:15:40AM - XXX Status Change Previous: Pending New: Closed Reason: No issue / No violation Spoke to business owner XXX who stated that a pipe connected to her fresh water tank broke and flooded the van. The water observed leaking or being dumped was potable water. XXX is a ware of the SW requirements and her explaination matches the report filed by XXX as far as quantity of water.
6ZRL2M	3/29/2007	3/29/2007	SW29 Complaint Not Found Gentleman picks up trash from neighborhood and throws it into storm drain. Report of Dumping to the Storm Drain	4/9/2007 4:16:39PM - XXX Status Change Previous: Pending New: Closed Reason: No issue / No violation. Left several messages for the complainant. Could not get specific information about the violation or violator.
6ZZLNY	4/6/2007	4/6/2007	SW4 Carpet Cleaning Discharge Carpet cleaner parks truck at curb at night and empties water to gutter. White chalky residue in gutter. Report of Dumping to the Storm Drain	4/10/2007 4:47:36PM - XXX Status Change Previous: Pending New: Closed Reason: Follow-up in Permits Plus. See SWP01009

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
72JTMQ	4/23/2007	4/23/2007	SW27 Allowable Discharge Sump pump from above address overflowing across Oak yard. Report of Dumping to the Storm Drain	5/14/2007 12:29:10PM - XXX Status Change Previous: Pending New: Closed Reason: Follow-up in Permits Plus
72LTZ7	4/25/2007	4/25/2007	SW26 Accidental Spill Cement tow-behind leaking as going uphill at each intersection. Report of Dumping to the Storm Drain	4/25/2007 3:12:55PM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice - Storm water crew cleaned up and warned driver.
72SNW6	5/1/2007	5/1/2007	SW28 Miscellaneous Incidents Oil being dumped from cans Report of Dumping to the Storm Drain	5/3/2007 2:01:43PM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice
739V9B	5/16/2007	5/16/2007	SW10 Landscape Material Dumping Sediment in street from drain at residence up the street (sand?) Report of Dumping to the Storm Drain	5/18/2007 3:41:15PM - XXX Status Change Previous: Open New: Closed Reason: Referred for Action
739UQF	5/16/2007	5/16/2007	SW21 Dumping - Hazardous Materials Scraping paint off truck onto street 10:30 am May 16, 2007. Report of Dumping to the Storm Drain	5/16/2007 3:53:43PM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice - pictures will be added when received.
73BUE4	5/18/2007	5/18/2007	SW2 Equipment Cleaning Carlsbad Mall, Parking Lot, Fenced Maintenance area behind Dollar Tree - paint is being washed down the storm drain. Report of Dumping to the Storm Drain	5/21/2007 10:19:16AM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
73BRMS	5/18/2007	5/18/2007	SW29 Complaint Not Found Report of Dumping to the Storm Drain Unidentified resident left a message that laborers' were washing mud down the storm drain this morning. (Just heard the message) XXX	5/22/2007 4:44:05PM - XXX Status Change Previous: Pending New: Closed Reason: Complaint Not Found
73FTXT	5/22/2007	5/22/2007	SW7 Cement Discharge White material going down gutter. (Building materials) Report of Dumping to the Storm Drain	6/13/2007 5:35:16PM - XXX Status Change Previous: Pending New: Closed Reason: Notice of Violation and clean-up was performed, verified on 6/13/07 17:00 by XXX.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
73NPUD	5/29/2007	5/29/2007	SW8 Paint / Stucco Discharge Paint spill (10 gallons) on Alga Rd at Melrose blocking 2 lanes of traffic. Report of Dumping to the Storm Drain Discharge did NOT reach storm drain, stucco mud spilled in street and was fully contained in the intersection.	5/29/2007 5:36:10PM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice Citation issued by CPD.
73WNVT	6/6/2007	6/6/2007	Slip and fall - water running over sidewalk Report of Dumping to the Storm Drain	6/6/2007 1:54:42PM - XXX Status Change Previous: Open New: Closed Reason: There is nothing more we can do.
743TM2	6/11/2007	6/11/2007	SW29 Complaint Not Found Dumping some kind of liquid that smells like bleach to Storm Drain Report of Dumping to the Storm Drain	6/12/2007 3:41:03PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation
Storm Drain-Erosion from Existing Development				
6S3VQK	7/26/2006	7/26/2006	Water Line Break Dirty water running to storm drain from water main break Erosion from existing development, not new construction.	10/10/2006 8:24:44AM - XXX Status Change Previous: Pending New: Closed Reason: XXX conducted a site visit and found that the area had been cleaned as required. RFA closed.
6TJUE9	9/11/2006	9/11/2006	SW28 Miscellaneous Incidents Buena Vista Creek filled with silt South side - concerned with future flooding - used to be 8 feet deep - now 2 feet. Erosion from existing development, not new construction.	9/14/2006 10:06:00AM - XXX Status Change Previous: Open New: Closed Reason: Referred for Action 09-13-06: XXX conducted a site visit and found an over growth of reeds. It did not appear to be a flooding hazard. However, XXX was also contacted and stated that XXX and his staff are aware of the area and it is on the list for remediation. This area and others would need to be permitted by the ACOE before work can begin.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6TJPYW	9/11/2006	9/11/2006	SW28 Miscellaneous Incidents Desiltation basin at AH Lagoon on south side has a large hole/gap in the side and is not holding back silt during rains. Erosion from existing development, not new construction.	9/12/2006 2:28:42PM - XXX Status Change Previous: Pending New: Closed Reason: No issue / No violation I spoke to my SDGE contact about the complaint. There is a large gapping hole which is highly visiable from across the lagoon. SDGE stated that the desiltation basin of concern is basin 1, which blew out about two years ago. Since then they have not been able to get down to the area to repair the breach becasue the basin is within a sensitive habitat zone. SDGE is currently processing permits with various agencies to get approval to relocate the basin and fill in the current basin. The permitting process will not be complete this season. In the mean time they have created a temporary desilt basin above basin 1. SDGE plans to reinforce the temporary basin before the rainy season and implement continous maintenance during the season. SDGE will be forwarding a map of the area and a draft scope of work within the next few weeks for our review. We will continue to monitor the area for s
6UMU8M	10/16/2006	10/16/2006	SW10 Landscape Material Dumping - Erosion Erosion from existing development, not new construction.	11/20/2006 9:21:40AM - XXX Status Change Previous: Pending New: Closed Reason: Informational Letter Sent. Follow up inspection conducted. Site has been protected from further erosion.
6UMU64	10/16/2006	10/16/2006	SW10 Landscape Material Dumping - Erosion Erosion from existing development, not new construction.	10/30/2006 3:02:09PM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice. XXX conducted a site visit and found that the homeowners are already in the process of correcting the erosion problem. They are installing a retaining wall and appropriate BMPs.
6UVQEU	10/24/2006	10/24/2006	SW28 Miscellaneous Incidents - Erosion Erosion from existing development, not new construction.	11/29/2006 8:27:11AM - XXX Status Change Previous: Pending New: Closed Reason: Informational Letter and BMPS sent. Follow up site visit conducted and slope stabilized. The sidewalk has also been swept.
6YEMXJ	2/14/2007	2/14/2007	SW9 Tracking Soil Lot has been disturbed and no BMPs onsite to prevent erosion. Erosion from existing development, not new construction.	2/16/2007 8:16:00AM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus XXX and XXX contacted Beckman Coulter representative XXX and provided him with erosion control BMP information. XXX met with XXX onsite for further discussion. Site has been protected as required. Will reopen in Permits Plus for follow up information.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6ZATJ7	3/14/2007	3/14/2007	SW29 Complaint Not Found Per attached e-mail from SD County - neighbor of above address is doing something that is causing erosion to the nearby creek. Erosion from existing development, not new construction.	3/16/2007 4:18:45PM - XXX Status Change Previous: Open New: Closed Reason: XXX conducted a site visit and found that location is fully within the Rancho Carlsbad mobile home property. Drove to and around the subject location and did not observe any unusual activity. Attempted to contact the complainant, but the phone number was not correct. Will reopen if new information becomes available. Complaint Not Found
6ZBUKA	3/15/2007	3/15/2007	SW10 Landscape Material Dumping Mud from yard runs down street and sidewalk every time it rains - nothing but dirt and weeds in lot - residue of mud still on sidewalk Erosion from existing development, not new construction.	4/2/2007 3:22:59PM - XXX Status Change Previous: Pending New: Closed Reason: Informational Letter to homeowner, BMPs in place on re-inspection.
72KLQQ	4/24/2007	4/24/2007	SW9 Tracking Soil Coast Waste has tracked mud/rock onto roadway Erosion from existing development, not new construction.	4/25/2007 1:07:59PM - XXX Status Change Previous: Open New: Closed Reason: XXX sent the street sweeper to clean the street. WM notified of problem.
Storm Drain-Vehicles Leaking Oil Fluids				
6RLVU9	7/11/2006	7/11/2006	Complaint Not Found Report of leaking oil or fluids	7/27/2006 3:55:46PM - XXX Status Change Previous: Pending New: Closed Reason: Complaint Not Found. XXX has conducted several site visits and has not observed the vehicle. Will reopen if additonal infromaion becomes available.
6RVMTT	7/20/2006	7/20/2006	Miscellaneous Incidents Gas stains on street coming from droplets from planes flying overhead and concerned with amount of gas that does not reach the ground being vaporized and potential for being inhaled. Report of leaking oil or fluids	7/20/2006 10:00:24AM - XXX Status Change Previous: Open New: Closed Reason: Referred to County of San Diego HazMat.
6SGLNV	8/8/2006	8/8/2006	Vehicle and equipment leaking White Dodge van leaking oil on street Report of leaking oil or fluids	8/28/2006 3:55:05PM - XXX Status Change Previous: Pending New: Closed Reason: After several site visits vehicle has not been observed on the street and/or leaking fluids. Will reopen if new information becomes available.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6TJSRM	9/11/2006	9/11/2006	SW17 Vehicle and equipment leaking Vehicle parked in front of above address leaking fluids Report of leaking oil or fluids	10/12/2006 1:27:00PM - XXX Status Change Previous: Pending New: Closed Reason: Conducted several follow up site visits and have not observed the vehicle parked on the street. Informational Letter
6UQM7A	10/19/2006	10/19/2006	SW28 Miscellaneous Incidents Transmission fluid/oil in gutter since 10-11 Report of Washing to the Storm Drain Report of leaking oil or fluids	10/20/2006 4:53:00PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation XXX conducted a site visit and did not observe a vehicle leaking or fresh automotive fluids in the gutter or storm drain. However, XXX did observe what appeared to be a stain in the street originating from the condo complex. It could not be determined if the stain came from the subject address. The stain appeared to be a trail of automotive fluid caused by a leaking vehicle in motion. The stain was not fresh and had saturated into the asphalt. No additonal follow up reccommended.
6WNVAV	12/20/2006	12/20/2006	SW17 Vehicle and equipment leaking White BMW leaking oil and anti-freeze in street. Report of leaking oil or fluids	3/19/2007 4:16:16PM - XXX Status Change Previous: Pending New: Closed Reason: After several site visits vehicle has not been observed on street. Will reopen if new information becomes available. Notice of Violation
6X6RHP	1/5/2007	1/5/2007	SW17 Vehicle and equipment leaking Grey, older Saab leaking oil in street. Report of leaking oil or fluids	1/24/2007 2:52:32PM - XXX Status Change Previous: Pending New: Closed Reason: Informational Letter XXX conducted a follow up site visit and found the subject vehicle parked on the driveway with a drip pan underneath. The absorbant had been swept up. Will conduct additional follow up site visits when in the area. Will reopen if additional information becomes available.
6XTSE8	1/26/2007	1/26/2007	SW17 Vehicle and equipment leaking Red Mazda leaking fluid in street. Report of leaking oil or fluids	3/5/07 Closed by Server (See 3/5/07 Issue)
6YUR79	2/28/2007	2/28/2007	SW17 Vehicle and equipment leaking Vehicle at residence leaking oil into storm drain. Report of leaking oil or fluids	3/5/2007 3:37:50PM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6Z8THD	3/12/2007	3/12/2007	SW17 Vehicle and equipment leaking Old bus being worked on and fluids leaking onto ground. Report of leaking oil or fluids	3/12/2007 4:24:03PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation - Private Property.
6ZBPWH	3/15/2007	3/15/2007	SW29 Complaint Not Found Oil in sand from equipment used for dredging. Report of leaking oil or fluids	3/15/2007 1:57:24PM - XXX Status Change Previous: Open New: Closed Reason: No issue, wet spot on sand was from water, no oil or other substance.
72VMRL	5/4/2007	5/4/2007	Report of leaking oil or fluids	5/22/2007 4:53:46PM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice
6UFR7P	10/10/2006	10/10/2006	SW17 Vehicle and equipment leaking Report of leaking oil or fluids. Mario from the CMWD called and said there is a large truck leaking diesal fuel into the SD on ECR between Faraday and PAR.	11/14/2006 11:23:52AM - XXX Status Change Previous: Pending New: Closed Reason: Referred for Action. Charge completed. Forward to Finance Department for action.
739RJC	5/16/2007	5/16/2007	SW17 Vehicle and equipment leaking Grey vehicle parked in street leaking oil. Report of leaking oil or fluids	6/6/2007 10:57:14AM - XXX Status Change Previous: Pending New: Closed Reason: Complaint Not Found
743N59	6/11/2007	6/11/2007	SW17 Vehicle and equipment leaking Older Maroon Nissan Sedan leaking oil in street. Report of leaking oil or fluids	6/15/2007 4:05:37PM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice
74EPT6	6/22/2007	6/22/2007	SW17 Vehicle and equipment leaking Sweeper truck leaking hydraulic fluid in street Report of leaking oil or fluids	6/22/2007 4:19:39PM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice, spoke with the company owner and he will clean up where possible. Also referred to XXX, manager of the City's street sweeping contract.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain				
6RUP6G	7/19/2006	7/19/2006	Water Line Break Water coming from outfall that is normally dry. Report of Washing to the Storm Drain	7/20/2006 4:38:10PM - XXX Status Change Previous: Open New: Closed Reason: I went by the site and the irrigation line was repaired. The storm water outfall in the Tamarack parking lot was dry.
6RUUZK	7/19/2006	7/19/2006	Surface Cleaning Power washing roof - black, dirty water running down curb Report of Washing to the Storm Drain	7/20/2006 2:11:13PM - XXX Status Change Previous: Open New: Closed Reason: XXX Lic XXX Phone XXX. owner cleaned up mess in gutters and sidewalk.
6RUP2R	7/19/2006	7/19/2006	Complaint Not Found Hosing down parking lot, washing to storm drain Report of Washing to the Storm Drain	7/19/2006 11:00:12AM - XXX Status Change Previous: Open New: Closed Reason: Water was shut off - not really an issue - water trickling only
6RWQ4X	7/21/2006	7/21/2006	Paint / Stucco Discharge Washing paint and turpentine to the storm drain Report of Washing to the Storm Drain	7/27/2006 10:24:03AM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice XXX conducted a storm drain inspection and found no material in the drain. Spoke to RP and rec'd report from FD. Street and gutter clear. Verbal Warning to RP.
6RZVGY	7/24/2006	7/24/2006	Vehicle Washing Mobile washer washing cars in street Report of Washing to the Storm Drain	7/31/2006 12:59:17PM - XXX Status Change Previous: Pending New: Closed Reason: Informational Letter and BMPS sent.
6S2LZ9	7/25/2006	7/25/2006	Vehicle Washing Fire Dept washing ambulance at bottom of driveway using bucket and brush - no BMPs observed - 7-24-06 - 7:30 PM Report of Washing to the Storm Drain	7/31/2006 11:56:26AM - XXX Status Change Previous: Pending New: Closed Reason: Referred for Action. Storm Water will be meeting with FD to discuss appropriate BMPs and corrective actions.
6S2QBL	7/25/2006	7/25/2006	Complaint Not Found Landscaper blowing grass cuttings into storm drain Report of Washing to the Storm Drain	7/27/2006 10:12:44AM - XXX Status Change Previous: Open New: Closed Reason: 07-25-06. XXX conducted a site visit and did not find the complaint as reported. SD box checked and no grass clippings were observed. Complaint Not Found

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6S2MSS	7/25/2006	7/25/2006	Surface Cleaning Scrubbing algae out of gutter with brushes and bleach Report of Washing to the Storm Drain	7/27/2006 10:07:45AM - XXX Status Change Previous: Pending New: Closed Reason: 07-26-06 XXX conducted a site vsit and found that the area had been adequately cleaned.
6S3TRV	7/26/2006	7/26/2006	Vehicle and equipment leaking Gentleman works on cars and engines in garage and regularly washes oil to storm drain. Stain in gutter leads to his garage. Report of Washing to the Storm Drain	Written Warning Sent with BMPS 8/3/2006 5:06:01PM - XXX Status Change Previous: Pending New: Closed Reason: Complaint Not Found. After several site visits have not been able to verify the complaint. Will reopen if additional information becomes available.
6S4VK4	7/27/2006	7/27/2006	Surface Cleaning Washing red clay from new drive way into gutter Report of Washing to the Storm Drain	7/31/2006 2:35:36PM - XXX Status Change Previous: Open New: Closed Reason: After meeting with the owner of the properety he agreed to clean up the gutter. I checked on it and he did a good job. Everything looks good.
6SAM9N	8/2/2006	8/2/2006	Miscellaneous Incidents Water Line Break Contractor knocked over a fire hydrant. Water flushed sediments into the street. Report of Washing to the Storm Drain	8/23/2006 1:24:55PM - XXX Status Change Previous: Pending New: Closed Reason: Referral for Enforcement. Referred to Risk Management for charge back. See XXX.
6SGQAX	8/8/2006	8/8/2006	Paint / Stucco Discharge Cleaning paint brushes in back yard drain and white residue coming out of drain in front of house running across street and pooling Report of Washing to the Storm Drain	8/10/2006 1:12:21PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation. STREET WAS CLEANED UP BEFORE INSPECTOR GOT ONSITE.
6SNN8N	8/14/2006	8/14/2006	Allowable Discharge White substance flowing into storm drain from above address Report of Washing to the Storm Drain	8/14/2006 1:37:01PM - XXX Status Change Previous: Open New: Closed Reason: 10:25am Site visit found that the discharge was the result of groundwater infiltration. No evidence of washing or dumping to the storm drain.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6SPS9B	8/15/2006	8/15/2006	Surface Cleaning Report of Washing to the Storm Drain	8/28/2006 11:12:46AM - XXX Status Change Previous: Pending New: Closed Reason: Notice of Violation and BMPs sent to propoerty management. COuld not get an address for the contractor.
6SQVL4	8/16/2006	8/16/2006	Surface Cleaning Roof being washed and running to storm drain Report of Washing to the Storm Drain	8/16/2006 4:36:12PM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice - Company was advised to use BMPs for work. They have complied.
6SRLSL	8/17/2006	8/17/2006	Miscellaneous Incidents White, cloudy, foamy mystery liquid from footbridge to ECR/PAR Report of Washing to the Storm Drain	8/23/2006 2:02:42PM - XXX Status Change Previous: Pending New: Closed Reason: No issue / No violation 08-23-06: XXX and XXX conducted a site investigation and found a similar material observed at Leo Carillo Park. It appears that the white discharge may be associated with certain types of reeds and groundwater interactions. Will continue to monitor the site and other areas for similar discharges.
6SRPF9	8/17/2006	8/17/2006	Complaint Not Found Black, mucky stuff in gutter from construction at above address. Report of Washing to the Storm Drain	8/18/2006 9:47:16AM - XXX Status Change Previous: Open New: Closed Reason: 08-17-06 11:30am: XXX conducted a site visit and did not observe any SW violations. Complaint appears to be the result of neighbor feud. The only water found in the gutter was a result of groundwater. No issue / No violation
6SWLUZ	8/22/2006	8/22/2006	Complaint Not Found Concerned about mobile washing in parking lot Report of Washing to the Storm Drain	8/22/2006 1:34:16PM - XXX Status Change Previous: Open New: Closed Reason: Conducted a site visit and observed the car washing operation. XXX uses a fine mist to wash cars. The cars are then wiped with a cloth to clean off excessive dirt. No discharges observed or probable.
6SXQ3B	8/23/2006	8/23/2006	Surface Cleaning Washing roof on 8-22-06 at 7:00 PM. No BMPs in place. Report of Washing to the Storm Drain	8/28/2006 12:49:09PM - XXX Status Change Previous: Pending New: Closed Reason: Notice of Violation and BMPs sent. Also referred to Finance for BL non-compliance.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6T6Q6L	8/30/2006	8/30/2006	Surface Cleaning Power washing sidewalks and entrance Report of Washing to the Storm Drain	8/30/2006 11:58:45AM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice given by XXX at 11:50 AM. Work has been discontinued.
6T6UYA	8/30/2006	8/30/2006	SW27 Allowable Discharge - Groundwater Rusty water being pumped out of utility vault Report of Washing to the Storm Drain	8/31/2006 3:23:05PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation
6TJTYF	9/11/2006	9/11/2006	SW28 Miscellaneous Incidents washing out Porta-Potty to the storm drain. Report of Washing to the Storm Drain	9/11/2006 3:17:20PM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice sufficient for compliance because of no discharge to the SD.
6TJPVF	9/11/2006	9/11/2006	SW11 Pool / Spa / Fountain Discharge Clorinated water running in gutter Report of Washing to the Storm Drain	9/11/2006 11:43:22AM - XXX Status Change Previous: Open New: Closed Reason: Homeowners sending pool company to fix problem.
6TKNN8	9/12/2006	9/12/2006	SW29 Complaint Not Found Cutting, dying cement driveway and washing to storm drain Report of Washing to the Storm Drain	9/14/2006 10:40:10AM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation XXX conducted site visit and did not observed and concrete wash or debris in the street or gutter.
6TKSSL	9/12/2006	9/12/2006	SW8 Paint / Stucco Discharge Painters washing equipment down drain in middle of driveway which goes to storm drain Report of Washing to the Storm Drain	9/20/2006 9:09:00AM - XXX Status Change Previous: Pending New: Closed Reason: 09-15-06 XXX conducted a site visit and found dried paint leading to the storm drain. It is unclear when the activity happen and could not be traced to a RP because the location is within a condo association. In addition, the complainant had previously reported that the activity had happened earlier in the week. Will reopen if additional information becomes available.
6TMKUH	9/14/2006	9/14/2006	SW29 Complaint Not Found Driveway being washed down Report of Washing to the Storm Drain	9/14/2006 10:11:12AM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation Site visit conducted. No evidence of recent washing or hosing.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6TVV3K	9/22/2006	9/22/2006	SW1 Surface Cleaning Fidel's Norte washing mats to the parking lot 9-22-06 AM. Report of Washing to the Storm Drain	9/25/2006 2:39:36PM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
6U7KV5	10/2/2006	10/2/2006	SW29 Complaint Not Found Power washing garage floor on 9-30-06 at 2:30 PM. Washing epoxy off floor to storm drain. Report of Washing to the Storm Drain	10/4/2006 10:29:43AM - XXX Status Change Previous: Open New: Closed Reason: 10-02-06 XXX conducted a site visit. Did not observe any evidence of recent washing. Site visit occured after the fact. Will reopen RFA if new information becomes available. Complaint Not Found
6UAUNW	10/5/2006	10/5/2006	Power washer at Chestnut and ECR was cleaning the street and washing water to the storm drain. CIP project. Report of Washing to the Storm Drain	10/11/2006 9:55:11AM - XXX Status Change Previous: Open New: Closed Reason: Closed per XXX. Contractor putting BMPs in place.
6UGLPC	10/11/2006	10/11/2006	SW26 Accidental Spill did not reach the SD Report of Washing to the Storm Drain after the fact	10/17/2006 4:37:43PM - XXX Status Change Previous: Pending New: Closed Reason: Will reopen if additional information becomes available. No issue / No violation
6UMNJD	10/16/2006	10/16/2006	Report that Crazy Burro hoses out kitchen area every morning at around 7 am. Report of Washing to the Storm Drain	10/16/2006 1:35:37PM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus SWP00180
6UMRAM	10/16/2006	10/16/2006	SW1 Surface Cleaning Power washing red dye from driveway. Report of Washing to the Storm Drain	10/17/2006 2:11:53PM - XXX Status Change Previous: Pending New: Closed Reason: XXX conducted a follow up site visit and found that the gutter line and street had been cleaned as required.
6UMQJ7	10/16/2006	10/16/2006	Contractor washing sediment, dirt and oil to storm drain. Report of Washing to the Storm Drain	10/23/2006 3:51:15PM - XXX Status Change Previous: Open New: Closed Reason: Issue Resolved and Closed 10/17/2006.
6UQLXG	10/19/2006	10/19/2006	Constant water flow from new apartment landscape Report of Washing to the Storm Drain	12/29/2006 8:35:29AM - XXX Status Change Previous: Open New: Closed Reason: Issue Resolved.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6URQBC	10/20/2006	10/20/2006	SW3 Vehicle Washing Mobile Detailer washing vehicle in street Report of Washing to the Storm Drain	10/25/2006 8:33:36AM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice
6URQBC	10/20/2006	10/20/2006	SW3 Vehicle Washing Mobile Detailer washing vehicle in street Report of Washing to the Storm Drain	1/3/2007 4:44:08PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation This is within a private HOA. Previous site visit found that this involves a neighborhood dispute. Mobile washer is using BMPS and only a minor trickle of water was observed discharging during the previous site visit. Water did not reach SD and would have to travel approx. 100 feet to reach.
6UUSUA	10/23/2006	10/23/2006	SW27 Allowable Discharge - Groundwater Report of water flowing to the storm drain and carrying silt. Report of Washing to the Storm Drain	10/23/2006 2:16:52PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation. See RFA 6CXN25, 65VT4E, 65VUD7. All related to Park Drive erosion and groundwater problems. See attached emails.
6V5NTA	11/1/2006	11/1/2006	SW1 Surface Cleaning Report of Washing to the Storm Drain Resident regularly hoses down patio with bleach.	11/14/2006 11:54:18AM - XXX Status Change Previous: Pending New: Closed Reason: Informational Letter and BMPs sent.
6V7RX9	11/3/2006	11/3/2006	SW29 Complaint Not Found Mobile washer washing cars in parking lot with no BMPs. Report of Washing to the Storm Drain	11/3/2006 5:23:25PM - XXX Status Change Previous: Open New: Closed Reason: Complaint Not Found 12:45pm/ XXXconducted site visit and did not observe mobile washer onsite. However there was evidence that a vehicle had been recently washed in the parking lot. No water reached the storm drain.
6VBMBP	11/7/2006	11/7/2006	SW1 Surface Cleaning Pressure washing parking lot at 11:30 am on 11-2-06. Report of Washing to the Storm Drain	11/7/2006 10:03:44AM - XXX Status Change Previous: Open New: Closed Reason: 11-02-06 XXX responded to a complaint from XXX stating that Crossroad Petroleum was pressure washing the parking lot area. XXX conducted a site visit and found that the activity was occuring as reported. He stopped the activity and contacted XXX, who was unavailable to respond onsite. She asked XXX to get contact information for the RP for follow up. Follow-up in Permits Plus

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6VBM9M	11/7/2006	11/7/2006	SW2 Equipment Cleaning - Washing Mats Report that Daily News Cafe was washing mats at 11:30 am on 11-6-06. Water was observed flowing to storm drain. Report of Washing to the Storm Drain	11/7/2006 11:22:22AM - XXX Status Change Previous: Open New: Closed Reason: 11-06-06 XXX observed employees from the Daily News Cafe washing mats to the parking lot. By the time he was able to approarch the site the activity had stopped. Follow-up in Permits Plus
6VBM7G	11/7/2006	11/7/2006	SW28 Miscellaneous Incidents Don's Country Kitchen discharging water to the Storm Drain. Source of discharge undetermined. Report of Washing to the Storm Drain	11/7/2006 10:36:09AM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
6VHM4H	11/13/2006	11/13/2006	Water has been running down the street for months. Report of Washing to the Storm Drain	11/13/2006 8:27:25AM - XXX Status Change Previous: Open New: Closed Reason: Natural spring running. Has been reported to streets.
6VKMJL	11/15/2006	11/15/2006	SW28 Miscellaneous Incidents Unknown surfactant coming out of 96 inch storm drain Report of Washing to the Storm Drain	11/15/2006 3:01:24PM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus 11-14-06 10:21am: Recieved a complaint investigation request from the RWQCB regarding an illicit discharge from the NRG Cabrillo Power Station (NRG). Because the email was sent to the Storm Water Manager (who was out of the office) directly and not the storm water email, the message was not responded to until 11-15-06. 11-15-06 8:30am XXX contacted XXX of the NRG Cabrillo Power Station. She stated that on 11-13-06 at approximately 5:30pm, NRG staff observed a white foamy material discharging from the 96 inch storm drain outfall on the north side of the property. Although the discharge appeared to be small in quantity it spread to several areas within 150 feet of the outfall. The substance dissipated before reaching the ocean outfall. NRG staff conducted an upstream investigation and could not find the source of the discharge. On the morning of 11-14-06, the
6VXP9Q	11/27/2006	11/27/2006	Water constantly running in gutter. Gutter has algae formed in it. Where is water coming from and gutter needs cleaning. Report of Washing to the Storm Drain	11/30/2006 2:00:08PM - XXX Status Change Previous: Pending New: Closed Reason: Water has stopped and gutter is dry. No algea in gutter. Washing is not necessary.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6VYTXG	11/28/2006	11/28/2006	Foam visible in creek, at base of falls and along the banks of the creek behind the shopping center. Report of Washing to the Storm Drain	12/1/2006 8:51:04AM - XXX Status Change Previous: Pending New: Closed Reason: City of Oceanside Report Attached. City of Oceanside inspected the Buena Vista Creek area from the College Blvd to the falls. One unoccupied encampment and two occupied camps were located. Of the three transients contacted, two were arrested by police (one for felony warrants), the third was cited for illegal camping. Time permitting, the camps and associated trash should be removed by a contractor by late Thursday afternoon. An unusual amount of foam was noted in the creek, especially near the falls. However, City of Oceanside Storm Water Inspector XXX, that this is normal for that area after the first substantial rainfall of the season. Referred for Action
6VYM6J	11/28/2006	11/28/2006	Solar Panels on roof leaking and pool leaking - all to street and storm drain. Report of Washing to the Storm Drain	11/28/2006 2:26:25PM - XXX Status Change Previous: Open New: Closed Reason: Nothing found at property. Two site visits.
6WFNNB	12/13/2006	12/13/2006	SW28 Miscellaneous Incidents Trash truck fire Report of Washing to the Storm Drain	1/29/2007 9:03:16AM - XXX Status Change Previous: Pending New: Closed Reason: Referred for Action Sent Charge back to Finance Department.
6WWQA8	12/28/2006	12/28/2006	SW28 Miscellaneous Incidents Small construction project has piles of sand with no BMPs. Looks like some went to storm drain during last rain. Report of Washing to the Storm Drain	1/2/2007 12:09:27PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation
6WWQDM	12/28/2006	12/28/2006	SW15 Water Line Break Construction going on in street - dirty water going down storm drain even though sand bags are in place. Report of Washing to the Storm Drain	1/2/2007 8:19:16AM - XXX Status Change Previous: Open New: Closed Reason: Referred for Action Water District completed repair and cleaned storm drain and street.
6WXMSK	12/29/2006	12/29/2006	SW29 Complaint Not Found Washing cars in street (commercial washer) using mat but not effective and water going down storm drain. Report of Washing to the Storm Drain	12/29/2006 9:04:09AM - XXX Status Change Previous: Open New: Closed Reason: Refer to RFAA-6URQBC - previous complaint

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6XDMTN	1/12/2007	1/12/2007	SW3 Vehicle Washing Mobil washer washing cars in City Hall parking lot. Report of Washing to the Storm Drain	1/12/2007 9:39:19AM - XXX Status Change Previous: Open New: Closed Reason: Complaint Not Found
6XLLQ5	1/19/2007	1/19/2007	SW3 Vehicle Washing Commercial mobile washer - washing car in street - using mat but water going down and into street. Report of Washing to the Storm Drain	1/19/2007 8:17:05AM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation See RFA-6XLLQ5
6XQRSE	1/23/2007	1/23/2007	SW1 Surface Cleaning Water frequently coming from the north - smelly - sits in gutter and stagnates in fromt of New York Pizza Report of Washing to the Storm Drain	1/29/2007 2:12:17PM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus 01-24-07 Conducted site visit and found evidence that Pizza Port staff had been recently washing mats to the storm drain. Will follow up with further action in Permits Plus.
6XQRXR	1/23/2007	1/23/2007	SW2 Equipment Cleaning Cars being washed and captured water being poured down the storm drain Report of Washing to the Storm Drain	1/24/2007 12:47:59PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation. XXX conducted a site visit and found that the water was not being discharged to the SD, but was being collected and redirected to the landscape.
6XZRBX	2/1/2007	2/1/2007	SW1 Surface Cleaning Lot at gas station at above address is power washed at end of each month at night and no BMPs are being used. Report of Washing to the Storm Drain	2/5/2007 2:21:44PM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus SWP00884
6Y924R	2/8/2007	2/8/2007	Mobil washer washing cars in Cole Library parking lot Report of Washing to the Storm Drain	2/12/2007 8:58:34AM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice
6Y9R4M	2/9/2007	2/9/2007	SW1 Surface Cleaning Foul smelling water in meter box in alley. Report of Washing to the Storm Drain	2/12/2007 9:08:56AM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus 02-09-07. XXX conducted a site visit and found evidence that The Grand Deli has been recently using a water hose to hose down the back porch storage area. Will close and follow up in Permits Plus SWP00223.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6YEUBT	2/14/2007	2/14/2007	SW1 Surface Cleaning Washing drive-way with muratic acid Report of Washing to the Storm Drain	3/5/2007 11:21:26AM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice
6YFTND	2/15/2007	2/15/2007	Pumping liquid from building to canyon in back. Wants to know if this is something other than water. Report of Washing to the Storm Drain	3/9/2007 3:04:37PM - XXX Status Change Previous: Pending New: Closed Reason: After several site visits, inspectors have not observed the discharge. Will reopen if additional information becomes available.
6Z4UT5	3/8/2007	3/8/2007	SW2 Equipment Cleaning Pressure washing equipment at above address Report of Washing to the Storm Drain	3/8/2007 3:00:42PM - XXX Status Change Previous: Open New: Closed Reason: Letter sent to Greater San Diego Air Conditioning Co., Inc. advising them of City's storm water regulations. Power Washing and BMPs for Business brochures sent.Informational Letter
6Z8PN5	3/12/2007	3/12/2007	SW3 Vehicle Washing Washing car in street Report of Washing to the Storm Drain	3/12/2007 11:33:17AM - XXX Status Change Previous: Open New: Closed Reason: Complaint Not Found - Happened on Saturday. Advised caller that we may send a mailer to her neighborhood regarding car washing in street and picking up after their dogs.
6ZAPL8	3/14/2007	3/14/2007	SW8 Paint / Stucco Discharge Contractors? painting, washing something down gutter. Substance not specified. Report of Washing to the Storm Drain	3/14/2007 2:37:31PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation
6ZAQ98	3/14/2007	3/14/2007	SW16 Over-irrigation Colored liquid running down gutter. Report of Washing to the Storm Drain	3/15/2007 11:36:45AM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation. Over irrgation was washed some sediments down the street. Water evaporated
6ZBLS7	3/15/2007	3/15/2007	Golf course construction crews washing down asphalt and sidewalks and not using BMPs. Report of Washing to the Storm Drain	3/15/2007 3:45:48PM - XXX Status Change Previous: Open New: Closed Reason: Issue Resolved.
6ZBKW4	3/15/2007	3/15/2007	SW5 Grey Water Discharge 3/15/07, 8:00 am: People were observed washing down mats with soapy water and letting it run into street Report of Washing to the Storm Drain	3/15/2007 9:20:10AM - XXX Status Change Previous: Open New: Closed Reason: Issue taken care of by XXX. They will use landscape in future.Verbal Notice

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6ZCT6Y	3/16/2007	3/16/2007	SW11 Pool / Spa / Fountain Discharge Someone washed cement or plaster or? down the gutter yesterday afternoon. Residue still in street and being tracked into street. Report of Washing to the Storm Drain	3/22/2007 9:49:54AM - XXX Status Change Previous: Pending New: Closed Reason: Written Warning Follow up site visit found that the contractor had cleaned up the street as required.
6ZFW2Z	3/19/2007	3/19/2007	SW2 Equipment Cleaning Washing engine of white corvette in street using solvents? Report of Washing to the Storm Drain	3/21/2007 8:18:30AM - XXX Status Change Previous: Open New: Closed Reason: Notice of Violation issued to automobile owner, XXX. Cleanup performed by SW crews with vacuum truck.
6ZKS6G	3/23/2007	3/23/2007	SW3 Vehicle Washing Report of Washing to the Storm Drain - Mobile Washer	3/27/2007 8:29:08AM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation
6ZKRUL	3/23/2007	3/23/2007	SW11 Pool / Spa / Fountain Discharge Report of Washing to the Storm Drain	3/28/2007 3:10:54PM - XXX Status Change Previous: Pending New: Closed Reason: Written Warning and BMPs sent
6ZNVCY	3/26/2007	3/26/2007	SW1 Surface Cleaning Everyday between 3:30 and 3:45 as they are cleaning up and closing, they throw a bucket of cleaning water? out that goes to storm drain. Storm drain stinks. Report of Washing to the Storm Drain	3/28/2007 3:21:04PM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
6ZXN5T	4/4/2007	4/4/2007	Water rushing off parking lot of Industrial Park. Has washed some of their hillside into storm gutter and has flooded Encina's construction site. Report of Washing to the Storm Drain	4/6/2007 7:59:59AM - XXX Status Change Previous: Open New: Closed Reason: Property management notified and problem has not recurred.
724Q8Y	4/9/2007	4/9/2007	SW29 Complaint Not Found Painters washed down stucco/paint that had been pressure washed off of building into gutter. Still there. Report of Washing to the Storm Drain	4/10/2007 4:38:24PM - XXX Status Change Previous: Open New: Closed Reason: Complaint Not Found. XXX conducted a site visit on 04-09-07 and did not observe any paint or wash in the street or gutter.
72BTNE	4/16/2007	4/16/2007	SW1 Surface Cleaning Contractor washing paint to storm drain Report of Washing to the Storm Drain	4/18/2007 9:24:59AM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
72KMWN	4/24/2007	4/24/2007	SW6 Saw Cutting Slurry Cement washed into storm drain Report of Washing to the Storm Drain	4/26/2007 2:52:14PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation Clayton Dobbs conducted a site visit and found a small amount of concrete wash in the storm drain discharging from 1305 Tamarack. The materials did not reach the SD. Clayton had the street sweeper come by and pick up the material.
72UKX3	5/3/2007	5/3/2007	SW29 Complaint Not Found Washing Cars in street (commercial operation) Report of Washing to the Storm Drain	5/14/2007 12:16:03PM - XXX Status Change Previous: Pending New: Closed Reason: No issue / No violation
733LGU	5/10/2007	5/10/2007	SW1 Surface Cleaning Pressure washing sidewalk, etc. Report of Washing to the Storm Drain	5/10/2007 10:42:39AM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation
739REU	5/16/2007	5/16/2007	SW10 Landscape Material Dumping Sand, Mulch and Dirt coming out of french drains at above address. 300 lbs of sand in street. Report of Washing to the Storm Drain	6/1/2007 9:33:34AM - XXX Status Change Previous: Pending New: Closed Reason: Informational Letter sent
73UREN	6/4/2007	6/4/2007	Fish House Vera Cruz washing down building. Report of Washing to the Storm Drain	6/4/2007 1:40:56PM - XXX Status Change Previous: Open New: Closed Reason: BMP'S in place. Recieved all info on Bussiness.
73YLLU	6/8/2007	6/8/2007	SW29 Complaint Not Found Concrete tools washed at gutter. Wheelbarrow was washed out directly into gutter. Report of Washing to the Storm Drain	6/11/2007 2:47:20PM - XXX Status Change Previous: Open New: Closed Reason: Complaint Not Found
73YLHB	6/8/2007	6/8/2007	Washing sidewalk Report of Washing to the Storm Drain	6/8/2007 9:46:59AM - XXX Status Change Previous: Open New: Closed Reason: Alol BMP's in place. Wastewater was captured.
73YMWR	6/8/2007	6/8/2007	SW8 Paint / Stucco Discharge Paint being washed down storm drain. Report of Washing to the Storm Drain	6/11/2007 2:50:47PM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice. Area cleaned. Paint did not reach the SD.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
747UFQ	6/15/2007	6/15/2007	SW10 Landscape Material Dumping Landscaper washing colored concrete residue to storm drain. Attempting to clean up. Report of Washing to the Storm Drain	6/18/2007 2:20:10PM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice
74BPLM	6/19/2007	6/19/2007	SW1 Surface Cleaning Washing carpets to storm drain Report of Washing to the Storm Drain	6/25/2007 4:20:40PM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice
74CNXF	6/20/2007	6/20/2007	SW1 Surface Cleaning Caller observed the Boys & Girls staff washing down their yard into the storm drain at 7:55 a.m. He also noted that the gutters and storm drain are always dirty and not cleaned by the City or the Boys and Girls Club. Report of Dumping to the Storm Drain	6/26/2007 2:04:44PM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice
74CL9U	6/20/2007	6/20/2007	Regularly washing trash and debris to the storm drain. Report of Washing to the Storm Drain	6/21/2007 10:38:40AM - XXX Status Change Previous: Pending New: Closed Reason: Refer to RFAA-74CNXF. Same issue.
74DNZF	6/21/2007	6/21/2007	SW1 Surface Cleaning Washing parking lot to storm drain (6-19-07) Report of Washing to the Storm Drain	6/21/2007 12:36:46PM - XXX Status Change Previous: Open New: Closed Reason: Verbal Notice
74DL67	6/21/2007	6/21/2007	SW11 Pool / Spa / Fountain Discharge Liquid running down gutter 6/20. Coming from pool? Foamy and when dry leaves white residue. Some has been blocked by a car parked in street but a lot was washed away when sprinklers came on. Report of Washing to the Storm Drain	6/27/2007 8:40:00AM - XXX Status Change Previous: Pending New: Closed Reason: Verbal Notice
74KTGT	6/27/2007	6/27/2007	SW8 Paint / Stucco Discharge White substance in water smells like paint Report of Washing to the Storm Drain	6/29/2007 3:11:12PM - XXX Status Change Previous: Pending New: Closed Reason: Referred for Action. See attached detail report for a complete description of the incident and investigation.

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Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
74MTYK	6/29/2007	6/29/2007	SW1 Surface Cleaning Report of Washing to the Storm Drain	7/5/2007 8:58:46AM - XXX Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
Storm Water-General Information Questions				
6RKR3G	7/10/2006	7/10/2006	Is it illegal to clean off oil stains from driveway and wash soapy water to storm drain?	7/10/2006 12:44:34PM - XXX Status Change Previous: Open New: Closed Reason: Gave information regarding proper BMPs to caller.
6RKQ7S	7/10/2006	7/10/2006	No unusual odor outside detected. There is an odor that XXX says is inside the building and may be coming from a grease trap and she has smelled it for a month now. Refer to Storm Water Protection per XXX.	7/10/2006 3:31:40PM - XXX Status Change Previous: Open New: Closed Reason: Spoke to complainant who stated that the inside of Bobby's smells like raw sewage. There is no report of dumping or washing to the storm drain. Referred her to County Dept. of Health for response. Not a storm water related issue.
6S9NQF	8/1/2006	8/1/2006	Miscellaneous Incidents Dumpster in right-of-way	8/21/2006 8:25:29AM - XXX Status Change Previous: Pending New: Closed Reason: Inspector verified dumpster removed from the right of way.
6T8264	8/31/2006	8/31/2006	SW22 Dumping - Non-hazardous Materials	9/1/2006 2:28:45PM - XXX Status Change Previous: Pending New: Closed Reason: The alley way has been cleared of the mattress. Two were removed and the other two were moved from the right of way.
6TKNBR	9/12/2006	9/12/2006	Concerned about State Department of Agriculture spraying their neighborhood for Diaprepes Root Weevil	9/12/2006 10:28:40AM - XXX Status Change Previous: Open New: Closed Reason: XXX will call the County Health Dept. with her concerns.
6Y5PBV	2/5/2007	2/5/2007	SW21 Dumping - Hazardous Materials Approximately 3 gallons of oil dumped in parking lot. Oil did not reach storm drain.	2/8/2007 2:12:33PM - XXX Status Change Previous: Open New: Closed Reason: Clean up was performed, responsible party was unable to be identified. No follow-up actions necessary.
6YDUJY	2/13/2007	2/13/2007	Comment regarding an Agenda item. Please see attachment. Please include response before closing RFA. Thank you.	2/13/2007 3:04:43PM - XXX Status Change Previous: Open New: Closed Reason: Issue copied to Council. Comment is regarding an agenda item.

DETAILED ISSUE REPORT

7 1 2006-6 30 2007

Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6ZNL3F	3/26/2007	3/26/2007	Information request - emptying a swimming pool	3/28/2007 8:34:02AM - XXX Status Change Previous: Pending New: Closed Reason: Information sent.
72CNFH	4/17/2007	4/17/2007	Apartment building on Jefferson above may have changed their drainage. Wants to know if it is alright.	4/19/2007 3:58:44PM - XXX Status Change Previous: Open New: Closed Reason: No issue / No violation.
72NL7V	4/27/2007	4/27/2007	Wants office building at XXX Faraday 'LEED' certified. See www.usgbc.org for further info on LEED.	4/27/2007 4:39:44PM - XXX Status Change Previous: Open New: Closed Reason: Returned call to XXX and referred to RWQCB, XXX for NPDES permitting assistance.
74ASQL	6/18/2007	6/18/2007	Contact Information for stormwater Inspector for City of Carlsbad.	6/18/2007 2:14:49PM - XXX Status Change Previous: Open New: Closed Reason: E-mailed Storm Water Hotline number to XXX.
Street Sweeping-Request for sweeping				
733PPN	5/10/2007	5/10/2007	Street has not beeen swept for last two months.	5/10/2007 2:47:24PM - XXX Status Change Previous: Open New: Closed Reason: Referred to XXX.
Water Conservation-Private Property				
6RGQLY	7/7/2006	7/7/2006	Water from broken sprinklers? running down street to storm drain.	7/10/2006 11:12:14AM - XXX Status Change Previous: Open New: Closed Reason: It appears sprinkler head has been fixed by the landscaper.
6RLQJG	7/11/2006	7/11/2006	Over-irrigation	7/12/2006 10:23:09AM - XXX Status Change Previous: Open New: Closed Reason: After three site visit the sprinklers have run twice but there are no signs of excessive runoff or other problems there.
6RWVZM	7/21/2006	7/21/2006	Over-watering - water runs down street	7/25/2006 4:35:46PM - XXX Status Change Previous: Open New: Closed Reason: I spoke to XXXl the owner of the property and explained the problem. He said he would check it out and fix or adjust the timer to prevent any runoff.

DETAILED ISSUE REPORT

7 1 2006-6 30 2007

Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6SAS6M	8/2/2006	8/2/2006	Fountain may be leaking onto ECR and running across street	8/10/2006 8:07:44AM - XXX Status Change Previous: Pending New: Closed Reason: The jets on the fountain have been adjusted to prevent splash out and overspray. Area is not as wet. other maint. is also being done. XXX the owner of purefitnees can be reached at XXX Cell.
6UVQU3	10/24/2006	10/24/2006	Saturday there was a lot of water running and it was running down the curb and going through an animal undercrossing. Overwatering? Near some bouganville plants. Caller demands to be called with followup.	10/25/2006 9:49:51AM - XXX Status Change Previous: Open New: Closed Reason: Inspector XXX reports: The water came from a broken Irrigation line. The sytem was turned off and repairs will be made. The Irr System will be tested to look for other problems. Reporting Party (XXX) advised as above. Issue Resolved.
6V7NTN	11/3/2006	11/3/2006	Report that several residents on the Callandro cul-de-sac are overwatering.Please check this out.	11/9/2006 4:57:23PM - XXX Status Change Previous: Open New: Closed Reason: Area is not a problrm for run off as far as I can see.
6W9LUD	12/7/2006	12/7/2006	Over watering	12/8/2006 9:00:32AM - XXX Status Change Previous: Open New: Closed Reason: Back flow has been shut off to allow for drying. Timers will be adjusted to prevent runoff. I will follow up.
6WQ2N8	12/21/2006	12/21/2006	SW16 Over-irrigation	12/21/2006 4:37:54PM - XXX Status Change Previous: Open New: Closed Reason: Could not find problem.
6XRN46	1/24/2007	1/24/2007	Water running down Grand from overwatering/broken sprinkler head? 8:00 am 1/24/07.	1/30/2007 9:04:26AM - XXX Status Change Previous: Open New: Closed Reason: Nothing found after several site visits.
6XRN6M	1/24/2007	1/24/2007	Overwatering - lots of water at north curb - long time problem - 7:30 am 1/24/07	1/24/2007 3:41:05PM - XXX Status Change Previous: Open New: Closed Reason: Turned over to parks dept.
6YH2VY	2/16/2007	2/16/2007	Water running from french drain at curb 24 hours a day - algae formed in gutter - can t be cleaned and water stopped?	4/5/2007 2:46:56PM - XXX Status Change Previous: Pending New: Closed Reason: Leak has been fixed.

DETAILED ISSUE REPORT

7 1 2006-6 30 2007

Issue N0.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
6ZRTS3	3/29/2007	3/29/2007	Water flowing down Harding St from corner of Harding and Camelia Pl	3/29/2007 3:01:40PM - XXX Status Change Previous: Open New: Closed Reason: Water Conservation brochures given.
72KMZG	4/24/2007	4/24/2007	Water flows from outside drains at property to storm drain twice a day.	5/7/2007 12:13:20PM - XXX Status Change Previous: Open New: Closed Reason: Water running from curb drain from sprinklers. There is no violation.
72SQ4L	5/1/2007	5/1/2007	Water constantly running from drain to gutter - algae formed - water meter running.	5/2/2007 1:02:48PM - XXX Status Change Previous: Open New: Closed Reason: There is no violation.
72YNDE	5/7/2007	5/7/2007	Water running constantly from french drain.	5/7/2007 4:49:32PM - XXX Status Change Previous: OpenNew: Closed Reason: No violation.
734PTY	5/11/2007	5/11/2007	Water running down street from sprinklers.	5/22/2007 12:33:34PM - XXX Status ChangePrevious: Pending New: Closed Reason: Problem was not found.
739LLM	5/16/2007	5/16/2007	Water ponding in front of callers residence. Claims that water comes from apartment building that over irrigates the landscaping.	5/21/2007 10:33:13AM - XXX Status Change Previous: Open New: Closed Reason: Low spot in the street. Water collects here from about three blocks worth of homes and apt.
73PUW4	5/30/2007	5/30/2007	Sprinklers over run and water rushes down street. Would like City to do something.	6/7/2007 9:45:09AM - XXX Status Change Previous: Pending New: Closed Reason: Nothing found.

Sewer Overflow Report

Tracking No.	Regional Board Contact Notified (Name, or "VOICE MAIL", or "FAX")	Date & Time Reported	Reported By	Phone No.	Reporting Agency	Responsible Agency	Start Date & Time	End Date & Time	Estimated Overflow Flow Rate (gallons per minute)	Total Overflow Volume (Gallons)	Overflow Volume Recovered (Gallons)	Overflow Volume Released to Environment (Gallons)	SSO Location -- Street Address	SSO Location -- City	SSO Zip Code	SSO County (SD, RV, OR)	SSO Structure I.D.	No. of Overflows within 1000 ft. of this location in past 12 months	Dates of Overflows within 1000 ft. of this location in past 12 months	SSO Cause (Short Description)	SSO Cause (Detailed Description)
050620	Clay Clifton	07/10/06 - 9:30	Mario Remillard	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	07/07/06 - 9:00	07/07/06 - 10:00	15.00	900.00	2000.00	0.00	7017 Nutmeg Way	Carlsbad	92009	SD	Manhole	0	N/A	Roots	Roots blocking flow in sewer main
050621	Clay Clifton	07/14/06 - 10:30	Mario Remillard	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	07/13/06 - 8:15	07/13/06 - 9:45	0.50	45.00	100.00	0.00	1860 Marron	Carlsbad	92008	SD	Private lateral cleanout	0	N/A	Debris	Debris in lateral blocked sewage from passing to main
050622	Clay Clifton	08/24/06 - 16:00	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	08/24/06 - 8:00	08/24/06 - 9:00	1.00	60.00	60.00	0.00	3601 Monroe St	Carlsbad	92008	SD	Backed up inside swim complex building	0	N/A	Unknown	Unknown cause of blockage caused sewer lateral to back up into swim complex. *All of the back up was vacuumed up and returned to sewer.
050623	Clay Clifton	09/11/06 - 10:00	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	09/09/06 - 11:00	09/09/06 - 13:00	5.00	600.00	0.00	600.00	3500 Catalina	Carlsbad	92010	SD	Inside of residence	0	N/A	Roots	Roots in sewer main caused back up
050624	Clay Clifton	09/26/06 - 13:30	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	09/25/06 - 11:00	09/25/06 - 11:30	1.00	30.00	100.00	0.00	3500 Roosevelt	Carlsbad	92008	SD	Property line cleanout	0	N/A	Roots	Root intrusion at main caused overflow
060706	Clay Clifton	10/11/06 - 14:00	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	10/11/06 - 9:00	10/11/06 - 9:30	50.00	1500.00	100.00	1400.00	Aviara Golf Course	Carlsbad	92009	SD	Manhole	0	N/A	Roots	Roots in manhole caused back up
060707	Clay Clifton	10/12/06 - 15:00	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	10/11/06 - 09:00	10/11/06 - 09:30	50.00	1500.00	12000.00	0.00	Aviara Golf Course	Carlsbad	92009	SD	Manhole	0	N/A	Roots	Roots in manhole caused back up
060708	Clay Clifton	10/12/06 - 16:15	Eric Sanders	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	10/06/06 - 19:15	10/06/06 - 19:45	0.25	7.00	7.00	0.00	752 Grand Ave	Carlsbad	92008	SD	Sewer lateral cleanout	0	N/A	Debris	Seemed to be toilet paper that got blocked in lateral
060709	Clay Clifton	12/20/06 - 11:30	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	12/18/06 - 16:00	12/18/06 - 16:30	1.00	30.00	200.00	0.00	College Blvd/Palomar Point	Carlsbad	92011	SD	Sewer manhole	0	N/A	Unknown	Newly constructed manhole overflowed
060710	Clay Clifton	12/21/06 - 1:00	Marco Castillo	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	12/21/06 - 11:15	12/21/06 - 11:35	0.25	10.00	10.00	20.00	3831 Sierra Morena	Carlsbad	92008	SD	Manhole	0	N/A	Roots	Roots blocking flow in sewer main
060711	Clay Clifton	12/22/06 - 16:00	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	12/22/06 - 13:30	12/22/06 - 15:00	2.00	180.00	400.00	0.00	1800 Block of Aston	Carlsbad	92009	SD	Manhole	1	12/18/2006	Construction	Several different construction projects on Aston. Probably cause, construction debris
060712	Clay Clifton	1/4/07 - 12:26	Jose Orozco	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	1/4/07 - 12:26 pm	1/4/07 - 2:40 pm	0.25	33.50	43.50	0.00	5345 El Arbol	Carlsbad	92008	SD	Sewer lateral	0	N/A	Roots	Roots blocking flow in sewer lateral
060713	Clay Clifton	1/11/07 - 11:15 am	Pat Perkins	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	1/10/07 - 10:55 am	1/10/07 - 11:10 am	6.66	100.00	1850.00	0.00	Walnut/Garfield/Carlsbad Blvd	Carlsbad	92008	SD	Sewer cleanouts	0	N/A	Roots	Root balls 5' upstream of manhole on Carlsbad Blvd
060714	Clay Clifton	1/22/07 - 16:00	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	1/2/07 - 8:40 am	1/22/07 - 10:30 am	3.00	540.00	840.00	0.00	4112 Peninsula	Carlsbad	92010	SD	Manhole	0	N/A	Construction	Construction debris build-up caused blockage
060715	Clay Clifton	1/22/07 - 16:00	Jesus Castaneda	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	1/2/07 - 10:40 am	1/22/07 - 11:40 am	2.00	340.00	450.00	0.00	2958 Madison	Carlsbad	92008	SD	Sewer lateral	0	N/A	Debris	Possible debris in pipe
060716	Clay Clifton	1/27/07 - 16:00	Jose Orozco	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	1/27/07 - 16:00	1/27/07 - 16:10	1.00	10.00	10.00	10.00	390 Oak Ave	Carlsbad	92008	SD	Sewer lateral	0	N/A	Roots	Roots blocking flow in sewer lateral
060717	Clay Clifton	2/3/07 - 11:35 am	Mario Remillard	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	2/3/07 - 11:35 am	2/3/07 - 11:40 am	0.25	2.00	0.00	2.00	1810 Oak St	Carlsbad	92008	SD	4" cleanout	0	N/A	Roots	Roots clogging sewer line
060718	Clay Clifton	2/16/07 - 9:00 am	Pat Perkins	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	2/15/07 - 12:35 pm	2/15/07 - 1:00 pm	3.00	75.00	300.00	0.00	6080 Ambrosia Ln	Carlsbad	92009	SD	School sewer system manhole	0	N/A	Grease	Carlsbad Unified School District sewer system on Aviara Oaks Middle School overflowed. It appeared to be grease from Cafeteria
060719	Clay Clifton	3/19/07 - 8:00	Mario Remillard	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	3/17/07 - 1:05	3/17/07 - 1:10	1.00	5.00	5.00	0.00	3369 Appian Rd	Carlsbad	92010	SD	4" cleanout	0	N/A	Roots	Roots blocking sewer lateral
060720	Clay Clifton	3/22/07 - 16:30	Pat Perkins	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	3/22/07 - 11:15 am	03/22/2007 0:00			50.00		4702 Telescope	Carlsbad	92008	SD	Private lateral piping	0	N/A	Unknown	Blockage in private lateral on their property overflowed
060721	Clay Clifton	3/30/07 - 10:45	Pam James-Adams	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	3/29/07 - 20:00	3/30/07 - 6:00	1041.00	500000.00	0.00	500000.00	La Costa Golf Course	Carlsbad	92009	SD	Recycled water irrigation main line	0	N/A	Line Break	Irrigation mainline broke
060722	Clay Clifton	04/05/07 - 17:00	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	04/01/07 - 19:00	04/06/07 - 12:30	0.00	5100000.00	8640000.00	0.00	Jefferson/Marron	Carlsbad	92008	SD	24" force main	0	N/A	Line Break	24" force main break
060723	Clay Clifton	04/09/07 - 10:00	Mark Schilling	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	04/07/07 - 17:45	04/07/07 - 18:15	5.00	150.00	400.00	0.00	Chestnut/Lincoln	Carlsbad	92008	SD	Sewer manhole (dead end)	0	N/A	Roots	Roots clogged sewer main
060724	Clay Clifton	04/26/07 - 16:00	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	4/26/07 - 9:15	04/26/07 - 10:50	1.00	95.00	200.00	0.00	911 Begonia	Carlsbad	92009	SD	Manhole	0	N/A	Roots	Roots in manhole
060725	Clay Clifton	5/22/07 - 8:30	Eric Sanders	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	5/19/07 - 9:30	5/19/07 - 10:30	1.00	60.00	45.00	15.00	3500 Catalina	Carlsbad	92008	SD	Main	1	09/09/2006	Roots	Big ficus tree in easement causing blockage
060726	Clay Clifton	6/13/07 - 12:00	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	6/12/07 - 16:20	6/12/07 - 16:40	10.00	200.00	400.00	0.00	Laurel tree Lane	Carlsbad	92009	SD	Manhole	0	N/A	Debris	Construction debris caused overflow. City staff cleared blockage, recaptured overflow and wash down water.
060727	Clay Clifton	6/15/07 - 14:45	Don Wasko	760-438-2722	Carlsbad Municipal Water District	Carlsbad Municipal Water District	6/14/07 - 17:00	6/14/07 - 19:00	3.00	360.00	300.00	60.00	955 Tamarack	Carlsbad	92008	SD	Private cleanout	0	N/A	Roots	Blockage on private lateral for Rite-Aid store. Plumber cleared blockage and washed down parking lot.

SSO Correction and Prevention	72-hour period measurable precipitation? (Y or N)	Entered Storm Drain? (Y or N)	Reached surface waters other than storm drain? (Y or N)	Initial Receiving Waters	Secondary Receiving Waters	Final Sewage Destination	Local Health Services Agency Notified (Y or N)	OES Notified (Y or N)	Warning Signs Posted (Y or N)	Location of Posting	No. of Days Signs Posted	Remarks
Vactored out roots to let flow go through in main.	N	Y	N	Storm drain inlet on Nutmeg	Storm drain system	Storm drain box	Y	N	N	N/A	0	None
Private company snaked out lateral. Recommend that Restaurant cleans their private lateral more often.	N	Y	N	Storm drain box	None	Storm drain box	Y	N	N	N/A	0	Private lateral
Televised lateral, take appropriate steps to replace or rehab.	N	N	N	None	None	Recaptured with shop vac	Y	N	N	N/A	0	None
Investigate overflow cause, televise it. Inform resident that they should remove tree from over our sewer easement.	N	Y	N	Storm drain box	Storm Drain	Storm drain	Y	N	N	N/A	0	Minor spill in bathroom of 3500 Catalina, clean up was done. Strom drain outlet was not flowing. Stagnant water standing there.
Rehab or replace 4" sewer lateral	N	N	N	Gutter	None	Recaptured overflow in gutter	Y	N	N	N/A	0	None
Routine cleaning and inspections of manholes	N	Y	Y	Desilt basin	None	Desilt Basin	Y	Y	N	N/A	0	Desilt basin not accessible to human contact
We pumped out desilt basin to recapture overflow from yesterday, pumped back into sewer system.	N	Y	Y	Desilt basin	None	Desilt Basin	Y	Y	N	N/A	0	Revised final
Used router to clear, will research replacing lateral	N	N	N	None	None	Sidewalk	Y	N	N	N/A	0	None
Instruct contractor to televise the sewer system to determine overflow cause	Y	N	N	Gutter along College Blvd	None	We recaptured small overflow along with wash down water	Y	N	N	N/A	0	None
Routed out roots to let sewer flow go through in main, pulled root out	N	N	N	Brow ditch	None	We vacuumed overflow at brow ditch	Y	N	N	N/A	0	None
Televise main. Instruct contractors to keep debris out of sanitary sewer system	Y	Y	N	Storm drain box on Aston	None	We flushed out and recaptured out of the storm drain system	Y	N	N	N/A	0	Crew recaptured overflow.
Routed out roots to clear sewer lateral so sewer lateral can flow to main	N	N	N	None	None	None	Y	N	N	N/A	0	Washed down and recaptured
Cleared stoppage, will televise to investigate	N	Y	N	None	None	Recaptured at storm drain manholes on Carlsbad Blvd	Y	N	N	N/A	0	Upon further investigation, more flushing of storm drain system was required, flushed additional 1000 gallons and recaptured all sewage
City crew cleared stoppage, Inspector Joe McMahon instructed contractor to recapture overflow and wash down water	N	Y	N	Storm drain box on Peninsula	Desilt basin	Overflow was recaptured	Y	N	N	N/A	0	Overflow was recaptured
City crew cleared stoppage, cleaned up and recaptured overflow	N	Y	N	Strom drain box on Madison	Strom drain box	Overflow was recaptured	Y	N	N	N/A	0	Overflow was recaptured
Routed out roots to clear sewer lateral so sewer can flow to main line	N	N	N	None	None	In the ground	Y	N	N	N/A	0	None
Used sewer drain cleaning machine to clear out roots	N	N	N	None	None	Grass area	Y	N	N	N/A	0	None
Recommended to School District to regularly clean their sewer system. Regulate grease into their sewer system	Y	Y	N	None	None	Recaptured within School District storm drain system	Y	N	N	N/A	0	School District sewer system overflowed.
Snaked out line	N	N	N	None	None	None	Y	N	N	N/A	0	None
Advised homeowner to clear the stoppage. Have plumber make repairs to their piping	Y	N	N	None	None	Recaptured	Y	N	N	N/A	0	Private lateral
Line repaired	N	N	Y	San Marcos Creek	Batiquitos Lagoon	None	Y	N	N	N/A	0	None
None	N	N	Y	Buena Vista Lagoon	None	Buena Vista Lagoon - No evidence that overflow reached Ocean as of today (4-5-07)	Y	Y	y	Around Lagoon, along beach, North and South of Buena Vista lagoon opening to Ocean	0	None
Jetted main and cleared blockage. Recaptured overflow and wash down water.	N	Y	N	Storm drain box	None	Crew recaptured overflow and wash down water	Y	N	N	N/A	0	None
Thoroughly clean the main, televise to locate root problem	N	Y	N	Recaptured in storm drain box	None	Recaptured in gutter line and storm drain box, washed down street	Y	N	N	N/A	0	All overflow recaptured.
Will push for removal of tree	N	Y	N	None	None	Storm drain 300 feet west	Y	N	N	N/A	0	None
Inspector will instruct developer to re-clean and televise the sewer main.	N	Y	N	Next to Encinas Creek	None	None	Y	N	N	N/A	0	None
Have shopping center televise their lateral	N	Y	N	Storm drain box in parking lot	None	Small amount of overflow in storm drain system along I-5 freeway	Y	N	N	N/A	0	None

2750 gallon Sanitary Sewer Overflow (0 gallons recovered)
8:30 am 9:25 am, Saturday June 30, 2007
2403 Jacaranda Avenue, Carlsbad, CA 92009
Leucadia Wastewater District (760) 753-0155
Overflow entered storm drain

Appendix 8-4

2750 gallon Sanitary Sewer Overflow (0 gallons recovered)
8:30 am 9:25 am, Saturday June 30, 2007
2403 Jacaranda Avenue, Carlsbad, CA 92009
Leucadia Wastewater District (760) 753-0155
Overflow entered storm drain

Appendix 8-4

2750 gallon Sanitary Sewer Overflow (0 gallons recovered)
8:30 am 9:25 am, Saturday June 30, 2007
2403 Jacaranda Avenue, Carlsbad, CA 92009
Leucadia Wastewater District (760) 753-0155
Overflow entered storm drain

Appendix 8-4

2750 gallon Sanitary Sewer Overflow (0 gallons recovered)
8:30 am 9:25 am, Saturday June 30, 2007
2403 Jacaranda Avenue, Carlsbad, CA 92009
Leucadia Wastewater District (760) 753-0155
Overflow entered storm drain

- Resident called spill to Olivenhain Municipal Water District around 8:30 am, June 30, 2007 to report overflowing manhole in front of 2403 Jacaranda Avenue, Carlsbad, CA 92009 (33.068N, 117.257 W)
- LWD Duty operator contacted at 8:52 am
- LWD on scene around 9:15 am, unable to contain spill due to flow
- LWD cleared blockage at 9:25 am
- SSO rate estimated at 50 gallons per minute, Volume estimated at 2750 gallons (50 gpm X 55 minutes)
- OES notified at 10:12 am (OES 07-3931)
- San Diego Regional Water Quality Control Board (RWQCB) notified at 10:21 am, left message
- County Health (after hours) notified at 10:24 am
- Carlsbad PD notified at 10:28am
- Discussed spill with County Health (Brad Long); distance from Lagoon 1.6 miles, distance from beach 4.5 miles
- Discussed spill with RWQCB (John Anderson)
- LWD staff observed flow in creek at Levante Street, no odor no evidence of sewage at 11:14 am
- Discussed observations with County Health who decided not to post spill or sample beach due to likelihood spill contained in Creek at 11:21 am
- Informed RWQCB of decision not to post beach at 11:25 am
- LWD staff stood down after cleaning Jacaranda Avenue and vactoring wash water at 11:42am
- Sewer line is 8 inch Vitrified Clay pipe constructed in 1974, located in an easement
- Sewer line on annual cleaning cycle and last cleaned August 2006
- CCTV inspection of pipe indicated joint offset by intruding root, insitu repair to be evaluated by Sept 2007
- Line to be cleaned quarterly until line repaired

Appendix 8-4

2750 gallon Sanitary Sewer Overflow (0 gallons recovered)
8:30 am □9:25 am, Saturday June 30, 2007
2403 Jacaranda Avenue, Carlsbad, CA 92009
Leucadia Wastewater District (760) 753-0155
Overflow entered storm drain

Appendix 8-4

2750 gallon Sanitary Sewer Overflow (0 gallons recovered)
8:30 am □ 9:25 am, Saturday June 30, 2007
2403 Jacaranda Avenue, Carlsbad, CA 92009
Leucadia Wastewater District (760) 753-0155
Overflow entered storm drain

Appendix 8-4

Other Spills 2006 – 2007

Event Type ID	Cause	Volume (Gal) Spilled	Volume (Gal) Recovered	Date Occurred	Street Number	Street Name	Responsible Party	Zip Code	Water Body Impact	Water Body
411	Vehicle Leak	1	1	09/07/06	2738	Loker Av West	Leucadia Towing	92010	No	EN
411	Vehicle Leak	1	1	10/08/06	4022	Layang Layang	Vehicle Owner (Shannon)	92008	No	AH
413	Vehicle Leak	1 qt	1 qt	11/22/06	7100	Four Seasons Pt	Four Seasons Resort	92011	No	BA
411	Vehicle Leak	12 oz.	12 oz.	12/04/06	950	Tamarack Av	Vehicle Owner (Randy Goihl)	92008	No	AH
413	Vehicle Leak	1	1	12/16/06		Interstate 5	State of California	92011	No	AH
411	Fuel Hose Separation	20	20	12/21/06	3251	Business Park Dr	Employee (Celina)	92084 (Vista)	No	BA
411	Traffic Collision	1	1	01/28/07		Palomar Airport Rd / Hidden Valley	United Parcel Service	92008	No	BA
413	Vehicle Leak	2	2	02/04/07		Faraday / Cannon	City of Carlsbad	92008	No	AH
411	Motorcycle Leak	1 Pt.	1 Pt.	03/16/07	3580	Carlsbad Blvd	Vehicle Owner	92008	No	AH
411	Vehicle Leak	15	15	04/09/07	1250	Carlsbad Village Dr	Vehicle Owner (City of Carlsbad)	92008	No	BV

DATE	DEPT./DIV.	EMPLOYEES ATTENDING	TRAINING TYPE	NAME OF TRAINING OR TOPICS	LOCATION	SPONSOR/ PRESENTER
7/6/06	Parks	13	Storm water	Understanding Storm water	Parks Yard	Dauss
7/6/06	Water	27	all hands meeting	Stormwater Permit Review	PW M&O	Don Wasko
7/6/06	Engineering DS	7	Staff Meeting	Infiltration, Detention and Filtration Systems	1635 Faraday	Bob Wojcik
7/10/06	CM&I	2	Training	EPA Webcast-NPDES/BMP	PW	EPA
7/20/06	Parks	20	Storm Water	Sea to Summit	Parks Yard	R. Klein
7/20/06	Engineering DS	7	Staff Meeting	CASQA Standards, Bioswales	1635 Faraday	Chris Scobba
7/24/06	Storm Water Protection	2	Conference	STORM CON		Storm Con
7/27/06	Engineering DS	9	Staff Meeting	Coastal Zone SUMP Requirements	1635 Faraday	Jeremy Riddle
8/3/06	CM&I	12	Training	Scheduling	PW	Grant
8/3/06	Parks	23	Storm water	Making the Connection	Parks Yard	R. Klein
8/3/06	Engineering DS	7	Staff Meeting	Loading Dock BMPs, Environmental Sensitive Area proximity	1635 Faraday	Bob Wojcik
8/10/06	Engineering DS	5	Staff Meeting	Vegetated swale, Temp vs permanent basins	1635 Faraday	Chris Scobba
8/17/06	Parks	23	Storm water	BMP's for Construction Sites	Parks Yard	R. Klein
8/17/06	Engineering DS	6	Staff Meeting	Erosion control note revisions	1635 Faraday	Chris Scobba
8/24/06	Streets	20	Training	BMP's pn Parking Lots	PW	Clayton Dobbs
8/24/06	Engineering DS	9	Staff Meeting	JURMP regulatory requirements	1635 Faraday	David Hauser
8/31/06	CM&I	12	Training	Sediment Basins	PW	Casey
8/31/06	Parks	22	Storm water	Housekeeping Practices	Parks Yard	Dauss
8/31/06	Engineering DS	5	Staff Meeting	BMP revisions from Discretionary to final review	1635 Faraday	Chris Scobba
9/6/06	Water	34	all hands meeting	The River Returns-Video	PW M&O	Don Wasko
9/13/06	Streets	24	Training	Stormwater	PW	Stumman
9/14/06	CM&I	12	Training	Hydro Seeding	PW	Joe
9/14/06	Parks	16	Storm water	New Storm water Issues	Parks Yard	Dauss
9/14/06	Engineering DS	5	Staff Meeting	BMP maintenance agreement instruments	1635 Faraday	David Hauser
9/19/06	CM&I	5	Training	BMP Installation for Residential Construction	PW	BIA Training
9/21/06	Engineering DS	6	Staff Meeting	Review of Draft Order 2007-001, discussion of impervious area measurements	1635 Faraday	David Hauser
9/26/06	Storm Water Protection	5	Class	ICS/NIMS	City of Carlsbad	City of Carlsbad
9/27/06	Storm Water Protection	5	Class	ICS/NIMS	City of Carlsbad	City of Carlsbad
9/27/06	Storm Water Protection	2	conference	CASQA	Long Beach	CASQA
9/28/06	Parks	24	Storm water	Rodent Control	Parks Yard	Dauss
9/28/06	Engineering DS	4	Staff Meeting	Detention Basins, unvegetated swale	1635 Faraday	Jeremy Riddle
10/5/06	Engineering DS	6	Staff Meeting	Misc BMP discussion, New Order 2007-001	1635 Faraday	David Hauser
10/6/06	Facilities	11	Training	Spill Cleanup	PW	Bob Richardson
10/12/06	CM&I	12	Training	Tire Washing	PW	Tim
10/12/06	Parks	22	Training	Rodent Control	PW	Dauss
10/12/06	Engineering DS	6	Staff Meeting	Permeable pavement and filter inserts	1635 Faraday	David Hauser
10/19/06	Storm Water Protection	1	Workshop	Grant Writing Workshop	County of San Diego	County of San Diego
10/26/06	CM&I	12	Training	Fiber Blankets	PW	Casey
10/26/06	Parks	24	Storm water	Stop West Nile Virus	Parks Yard	Dauss
11/8/06	CM&I	12	Training	Contruction Entrances	PW	Joe
11/16/06	Storm Water Maintenance	3	sw crew	Spill Response Plan/SWPPP Booklet	OAK	Clayton Dobbs
11/16/06	Water	32	all hands meeting	Definition of SWPPP	PW M&O	Don Wasko
11/18/06	Streets	21	Storm water	Spill Control and Cleanup	Oak Yard	CLAY DOBBS
11/30/06	Engineering DS	5	Staff Meeting	SUSMP procedures, applicability checklist, BMP inventory data collection	1635 Faraday	Chris Scobba
12/6/06	Storm Water Protection	3	Webcast	EPA Webcast	City of Carlsbad	EPA
12/7/06	CM&I	12	Training	Chevrons	PW	Constantine
12/14/06	Engineering DS	7	Staff Meeting	Annual JURMP Update, underground parking BMPs, water quality seperators	1635 Faraday	David Hauser
12/18/06	Fleet	5	Storm water	Storm Water General Training and Awareness	Fleet Maintenance Facility	Clayton Dobbs
12/21/06	Parks	22	Storm water	Spill Control and Cleanup	Parks Yard	Dauss
12/21/06	Engineering DS	4	Staff Meeting	Storm Tech Underground Storage Systems	1635 Faraday	Chris Scobba
12/28/06	Engineering DS	5	Staff Meeting	Misc BMP discussion, SUSMP Requirements	1635 Faraday	David Hauser
1/3/07	Facilities	6	Training	Parking Lot BMP	PW	Clayton Dobbs
1/3/07	Storm Water Maintenance	3	sw crew	swpp updates/parking lot bmp	OAK	Clayton Dobbs
1/4/07	Engineering DS	9	Staff Meeting	NOV procedures,	1635 Faraday	David Hauser
1/8/07	Fleet	7	Training	N-Series	PW	Bruggeman
1/8/07	Parks	7	Storm water	"N" series Handout	Stagecoach	Pimentel
1/10/07	CM&I	8	Training	EPA Webcast-Permitting & Water Quality	PW	EPA
1/10/07	Storm Water Protection	2	Webcast	EPA Webcast (Construction)	City of Carlsbad	EPA
1/10/07	Water	27	all hands meeting	Trench De-Watering	PW M&O	Don Wasko
1/11/07	Engineering DS	7	Staff Meeting	Desiltation basins, temporary stabilization of dormant construction sites	1635 Faraday	David Hauser
1/18/07	CM&I	23	Training	Fiber Rolls	PW	Clayton Dobbs
1/18/07	Storm Water Protection	2	Training	8 Hour HAZWOPER	San Diego	Pacific Safety Council
1/18/07	Engineering DS	4	Staff Meeting	NOV procedures,	1635 Faraday	David Hauser
1/22/07	Fleet	5	Training	Equipment Repair	PW	Bruggeman
1/25/07	Engineering DS	6	Staff Meeting	Priority project determinations, construction inspection priorities	1635 Faraday	David Hauser
2/1/07	CM&I	12	Training	Earth Dikes & Drainage Swales	PW	Tim

2/1/07	Storm Water Maintenance	3	sw crew	BMP	OAK	Clayton Dobbs
2/1/07	Engineering DS	9	Staff Meeting	Applicability of Storm water requirements to tentative map extensions	1635 Faraday	David Hauser
2/5/07	CM&I	5	Training	Fiber Blankets	PW	Casey
2/8/07	Storm Water Protection	1	Workshop	Community Based Social Marketing	City of San Diego	City of San Diego
2/8/07	Water	36	all hands meeting	Ammonia Testing	PW M&O	Don Wasko
2/8/07	Engineering DS	9	Staff Meeting	Underground parking BMPs, underground baffle boxes	1635 Faraday	David Hauser
2/12/07	Fleet	6	Training	Storm Water	PW	Bruggeman
2/15/07	CM&I	12	Training	Check Dams	PW	Jay
2/15/07	Engineering DS	8	Staff Meeting	LID Standards, Interim HMP standards	1635 Faraday	David Hauser
2/22/07	Streets	23	Training	Stormwater	PW	Don Wasko
2/22/07	Engineering DS	10	Staff Meeting	Boilerplate BMP Maintenance Agreement requirements	1635 Faraday	Chris Scobba
2/26/07	Fleet	6	Training	Spill Cleanup	PW	Bruggeman
3/1/07	CM&I	12	Training	Straw Waddles	PW	Grant
3/1/07	Engineering DS	10	Staff Meeting	SUSMP Applicability to redevelopment projects	1635 Faraday	David Hauser
3/5/07	Fleet	6	Training	Equipment Fueling	PW	Bruggeman
3/7/07	Storm Water Protection	2	Webcast	EPA Webcast	City of Carlsbad	EPS
3/8/07	Engineering DS	8	Staff Meeting	Review of proposed Municipal Permit changes	1635 Faraday	David Hauser
3/14/07	CM&I	6	Training	Field BMP's	PW	CMWD
3/14/07	Water	35	all hands meeting	Vendor demo of new BMP's	PW M&O	Don Wasko
3/14/07	Streets	22	Storm water	Vendor demo of new BMP's	PW M&O	Don Wasko
3/15/07	Engineering DS	10	Staff Meeting	Applicability of SW standards to Conditional Use Permit projects	1635 Faraday	David Hauser
3/16/07	Facilities	12	Training	Storm Water Training	PW	Bob Richardson
3/19/07	Fleet	6	Training	Equipment Cleaning	PW	Bruggeman
3/22/07	Engineering DS	10	Staff Meeting	Building permit review process changes and their effect on SUSMP applicability	1635 Faraday	David Hauser
3/28/07	Fire	26	Lecture& manipulative	Department Policy	6220 Avenida Encinas	Kennedy
3/29/07	Engineering DS	9	Staff Meeting	Building permit BMP requirements, BMP requirements for median construction	1635 Faraday	David Hauser
3/31/07	Fire	17	Lecture & manipula	Department policy	6220 Aveniad Encinas	Kennedy
4/2/07	Fire	18	Lecture & manipula	Department Policy	6220 Avenida Encinas	Kennedy
4/2/07	Storm Water Protection	1	Class	PC 832	Mira Mesa	Mira Mesa College
4/5/07	Engineering DS	9	Staff Meeting	New parking lot LID standards	1635 Faraday	David Hauser
4/10/07	Engineering DS	16	Seminar	Detention/Infiltration BMP Systems	1635 Faraday	Dan Clark, Atlantis
4/12/07	CM&I	12	Training	Silt Fence	PW	Casey
4/12/07	Engineering DS	8	Staff Meeting	SWMP Review checklist, project handout materials	1635 Faraday	Chris Scobba
4/19/07	Streets	23	Training	Emergency Spill Storm Water	PW	Clayton Dobbs
4/19/07	Engineering DS	9	Staff Meeting	LID and HMP applicability to current projects	1635 Faraday	David Hauser
4/26/07	Water	40	all hands meeting	Spill Response Plan/SWPPP Booklet	PW M&O	Don Wasko
4/26/07	Engineering DS	9	Staff Meeting	BMPs for rough and precise grading plans	1635 Faraday	Chris Scobba
5/10/07	CM&I	12	Training	General Permit Requirements, Laws & Regulations	PW	Ogawa Engineering
5/10/07	CM&I	11	Training	Hydraulic Mulch	PW	Joe
5/10/07	Water	41	all hands meeting	Stormwater Protection	PW M&O	Don Wasko
5/16/07	CM&I	20	Training	BMP Field Inspection	PW	Ogawa Engineering
5/16/07	CM&I	11	Training	BMP Implementation (Field Presentation)	PW	Ogawa Engineering
5/24/07	Water	38	all hands meeting	SSO Comm. Flow Chart	PW M&O	Don Wasko
5/31/07	Engineering DS	10	Staff Meeting	LID standards, notice of formation of Storm Water BMP review committee	1635 Faraday	David Hauser
6/6/07	Storm Water Protection	2	Webcast	APWA - LID	City of Carlsbad	APWA
6/6/07	Engineering DS	30	Webinare	Latest Tools for Water Conservation and Resource Management	1635 Faraday	APWA
6/14/07	Engineering DS	9	Staff Meeting	Model SUSMP Review, application of BMPs to redevelopment projects	1635 Faraday	David Hauser
6/15/07	Storm Water Protection	1	Workshop	STORM CON	Woodland Hills	Storm Con
8/3/07	Parks	17	Training	Storm Drains	PW	Dauss

Total Attending	1392
Events	115

Expenditure Data
Budget, Actuals & Projections
Through 6/30/2005
5215710 - Storm Water
5216310 - Storm Drain Maintenance

Ending Date ==>> 06/30/06
Months Completed => 12
% of Year Complete => 100.0%

			BUDGET 07-'08*	BUDGET '06-'07	BUDGET '05-'06	BUDGET '04-'05	ACTUAL YTD '06-'07	ACTUAL YTD '05-'06	ACTUAL YTD '04-'05
Personnel									
6100	52157106100	Reg Salaries	619135	439,830	380,684	371,852	406,051	355,257	333,403
6150	52157106150	IOD Worker's Comp	0	0	0	0	0	38	1,537
	Full Time Salaries		619,135	439,830	380,684	371,852	406,051	355,295	334,940
6101	52157106101	Incentive Pay	5976	4,445	7,828		535	3,345	3,674
6200	52157106200	Overtime Salaries	6600	8,750	8,500	7,000	15,138	11,486	4,784
6300	52157106300	Part-Time Salaries	0	0	12,000	8,000	8,413	10,927	14,251
6400	52157106400	Temporary Help	0	0	0	0	0	2,156	25,749
6501	52157106501	Health Insurance	104993	147,783	59,820	57,120	133,242	54,098	49,175
6510	52157106510	Life Insurance	3598	2,059	2,140	2,081	2,212	1,825	1,905
6520	52157106520	Vision Insurance	0	0	0	0	799	690	702
6530	52157106530	Medicare	8979	6,389	6,438	5,392	6,560	5,662	5,119
6640	52157106640	Earned Leave Accrual	0	0	0		10,343	6,103	-831
6653	52157106653	Final Vacation Pay	0	0	0	0	0	2,709	2,572
6655	52157106655	Disability	6424	7,375	5,585	5,549	4,599	4,899	4,576
6656	52157106656	Unemployment	621	441	392	372	187	284	12
6657	52157106657	Worker's Compensation	10374	9,420	8,920	9,280	9,420	8,920	9,280
6720	52157106720	PERS	170092	119,184	110,622	69,912	109,277	100,787	67,114
6730	52157106730	Social Security	0	744	0	0	561	665	13
6740	52157106740	Deferred Comp	0	0	0	0	0	9	517
6741	52157106741	Deferred Comp Match	0	0	0	0	761	769	799
	Benefits		317,657	306,590	222,245	164,706	302,047	215,334	189,409
	Sub-Total Personnel		**936,792**	**746,420**	**602,929**	**536,558**	**708,098**	**570,629**	**524,350**

			BUDGET 07-'08*	BUDGET '06-'07	BUDGET '05-'06	BUDGET '04-'05	ACTUAL YTD '06-'07	ACTUAL YTD '05-'06	ACTUAL YTD '04-'05
M & O									
7490	52157107490	Misc Professional Services	368993	275,231	335,046	362,651	78,418	78,096	57,105
7111	52157107490	Other Mach & Equip Rental	1000	0	0	0	0	1,080	
7210	52157107210	Office Equip Maint	0	0	0	0	0	0	0
7215	52157107215	Software Maintenance	625	0	0	0	613	546	
7225	52157107225	Car Wash Repairs	0	0	0	0	0	31	
7244	52157107244	Street Sweeping	302172	254,256	230,660	217,000	191,245	198,996	234,695
7550	52157107550	Miscellaneous Outside Servi	442129	110,750	138,950	122,500	102,847	70,184	49,682
7554	52157107554	Regulatory / Permit Fees**	430500	55,000			59,839		
7899	52157107899	Misc Supp	34750	19,625	15,382	15,000	14,301	10,075	4,475
7715	52157107715	Printing	20500	11,006	12,500	17,000	6,556	2,612	2,355
7710	52157107710	Ads & Publishing	4685	6,000	12,500	12,500	0	613	2,160
7711	52157107711	Dues and Subscriptions	1000	500	500	500	391	55	0
7712	52157107712	Books and Publications	300	525	500	300	50	72	354
7713	52157107713	Audio-Visual Materials	125	260	250	0	0	38	81
7720	52157107720	Postage	250	250	100	0	345	217	74
7725	52157107725	Office Supplies	3000	3,000	4,000	4,000	3,497	2,901	1,366
7726	52157107726	Office Furniture & Equipmer	4977	0	0	1,500	0	784	386
7730	52157107730	Computer Software	2550	500	500	500	1,876	441	543
7731	52157107731	Misc. Computer Hardware	0	5,000	0	0	0	158	0
7735	52157107735	Promo Materials	2625	2,500	2,500	0	2,672	1,800	896
7745	52157107745	Food Expense	500	0	0	0	98	0	0
7751	52157107751	Telephone & communication	5500	5,250	5,000	3,750	4,465	4,677	4,473
7752	52157107752	Waste Disposal Services	115000	115,000	100,000	0	22,123	101,710	71,804
7850	52157107850	Small tools	1300	1,300	1,250	1,250	338	0	1,370
7851	52157107851	Safety Equipment	2500	0			585	121	
7852	15457107852	Uniforms and Accessories	3750	0	0	0	848	11	0
8120	52157108120	Tuition Reimbursement	0	0	0	0	0	0	0
8130	52157108130	Training/Training Related Tr	2950	1,600	1,500	1,500	2,969	1,114	72
8520	52157108520	Conference Travel	3000	2,600	2,500	2,500	1,332	280	1,936
8522	52157108522	Misc Meals/Miles	2400	1,550	1,500	1,500	1,783	455	81
8810	52157108810	Vehicle Maintenance	35734	24,827	2,990	3,230	11,326	5,044	2,146
8811	52157108811	Vehicle Replacement	21500	13,085	4,000	4,000	9,226	4,917	4,000
8830	52157108830	General Liab	22220	20,900	18,540	19,280	20,900	18,540	19,280
8860	52157108860	Information Technologies	52700	30,200	28,900	26,300	39,183	30,661	28,341
8890	52157108890	Misc Interdepartmental Char	47835	46,262	108,400	103,000	46,262	108,400	103,000
8892	52157108892	Utility Billing Chargeback	15260				46,262		
9999	52157109999	Op Transfers Out	136000	136,000					
Sub-Total M&O			**2,088,330**	**1,142,977**	**1,027,968**	**919,761**	**670,350**	**644,629**	**590,674**

			BUDGET 07-'08*	BUDGET '06-'07	BUDGET '05-'06	BUDGET '04-'05	ACTUAL YTD '06-'07	ACTUAL YTD '05-'06	ACTUAL YTD '04-'05
Capital Outlay									
9005	52157109005	Cap Outlay under $10,000	12000	1600	7,080	0	442	442	0
9010	52157109010	Cap Outlay-Vehicles	40000	0	15,971	0	42,863	42,863	9,541
9020	52157109020	Computer Equip > 10K	5927	21550	0	0	42,863	42,863	9,541
9022	52157109022	Other Equipment	0	21550	0	0	42,863	42,863	9,541
	Capital Outlay		**57,927**	**44,700**	**23,051**	**0**	**129,031**	**129,031**	**9,541**
	TOTAL EXPENDITURES		**3,083,049**	**1,934,097**	**1,630,897**	**1,456,319**	**1,507,479**	**1,344,289**	**1,124,565**

*For FY 2007-08, Storm Drain Maintenance Activities and Storm Water Protection Program were split into 2 separate Org-Keys
**New Object code for 2006/07 Budget to capture permitting expenses. Includes $250,000 for estimated TMDL Cost-Share

CITY OF CARLSBAD
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2007

Submitted to:

City of Carlsbad
Public Works Department
1635 Faraday Avenue
Carlsbad, California 92008

Prepared by:

D-MAX Engineering, Inc.
7220 Trade Street, Suite 119
San Diego, CA 92121
Tel: (858) 586-6600
Fax: (858) 586-6644

January 24, 2008
Project No. 200712W-1

Elaine Lukey
Public Works Department
City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008

Re: 2007 Dry Weather Field Screening and Analytical Monitoring Program City of Carlsbad

Dear Ms. Lukey:

Per your request D-MAX Engineering, Inc (D-MAX) conducted the routine phase of the Dry Weather Field Screening and Analytical Monitoring Program for the City of Carlsbad during the summer of 2007. Subsequently, we conducted follow-up investigations to identify the sources of pollutants detected during the monitoring program.

This report presents the results of the monitoring program and follow-up investigations. The contents include field screening data and analytical laboratory test results, analysis of collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations and our recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. It has been our pleasure working with the City of Carlsbad on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

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1.0 INTRODUCTION

1.1 Regulatory Requirements

San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (the recently adopted Municipal Permit) requires that the Dry Weather Field Screening Program in 2007 be conducted in accordance with RWQCB Order 2001-01 (the previous Municipal Permit) requirement. Under Order No. 2001-01, each of the Copermittees, including the City of Carlsbad, must annually conduct dry weather field screening of discharges into its storm drain system. This procedure consists of recording field observations, estimating observed flow rates, and conducting field testing at selected locations along the storm drain conveyance system during the dry weather season (May 1st through September 30th). The Permit also requires Copermittees to conduct laboratory analysis for at least 25 percent of the visited sites that have flowing or ponded water. At each sampling location that exhibits no flowing or ponded water, an alternate sampling station must be selected and sampled. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required.

1.2 Program Overview

To comply with the San Diego Municipal Storm Water Permit adopted by the RWQCB, the City of Carlsbad is required to conduct field screening and analytical monitoring at different sampling locations throughout the City during the dry weather season (May 1st through September 30th). The purpose of the Dry Weather Field Screening and Analytical Monitoring Program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. The dry weather monitoring program consists of the following three components:

- Field screening observations
- Field analytical testing
- Laboratory analytical testing

Information collected from the dry weather monitoring is also used to characterize dry weather discharges in the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations were conducted as necessary, to detect and eliminate the sources of these pollutants. This report presents the results of the City of Carlsbad 2007 Dry Weather Field Screening and Analytical Monitoring Program.

1.3 Hydrologic Setting

The City of Carlsbad (City) lies entirely within the Carlsbad Hydrologic Unit (904). The City is naturally divided into four separate sub-watersheds. Land use within each watershed determines the potential for generating both runoff and pollutants into receiving water bodies. The four major receiving water bodies or drainage basins that collect the City's storm water are:

- Agua Hedionda Creek and Lagoon

- Buena Vista Creek and Lagoon
- Encina Creek
- San Marcos Creek and Batiquitos Lagoon.

Much of the runoff within the City discharges into three coastal lagoons and eventually into the Pacific Ocean. Agua Hedionda Creek discharges into Agua Hedionda Lagoon. Buena Vista Creek discharges into Buena Vista Lagoon. San Marcos Creek discharges into Batiquitos Lagoon. Encina Creek discharges directly into the Pacific Ocean. The City of Carlsbad makes up 100% of the land area of the Encinas sub-watershed, 41% of the Agua Hedionda sub-watershed, 29% of San Marcos and 19% of the Buena Vista sub-watershed.

1.4 Previous Work

The City of Carlsbad has conducted dry weather field screening programs since 1995. The results of the previous field screening programs (1995 through 2006) are discussed below and summarized in Table 1-1.

In **1995,** the City conducted one round of field screening at 71 sites within the City's storm drain system. Flowing water was observed at 33 of the sites, 16 sites had ponded water, 14 sites were dry, six sites had trickle flow and two sites were submerged. Chemical testing revealed chlorine levels ranging from less than 0.1 milligrams per liter (mg/L) to 1.0 mg/L. Chlorine was detected at all sites tested with flowing or ponded water. Surfactants ranged from less than 0.25 mg/L to 15.0 mg/L. Site AH12 had the highest level of surfactants (15.0 mg/L). Phenols, ammonia and copper were below detection limits. The pH levels ranged from 4.7 to 9.5. Site EN14A had the lowest pH reading of 4.7 during initial and follow-up visits. Foam was observed at six sites. White and light brown dry foam was observed at Sites EN14A and EN23 while the other four sites had soapy, bubbly foam.

In **1996,** the City conducted one round of field screening at 74 locations within the City's storm drain system. The results of the field screening for 1996 indicated that 36 sites had flowing water, 16 sites had ponded water, nine sites were dry, 11 had trickle flows and two sites were submerged. Chemical testing revealed chlorine levels ranging from less than 0.1 mg/L to 1.5 mg/L. Surfactants ranged from less than 0.25 mg/L to 2.0 mg/L. Sites AH11 and AH12 had the highest surfactant readings of 2.0 mg/L during initial site visits. Phenols, ammonia and copper were not detected during the field screening program. The pH readings ranged from 4.3 to 9.3. Site EN-14A had the lowest pH readings of 4.5 upon the first visit and 4.3 during the second visit. Foam was observed at several sites. Sites BA47, EN14A, EN17, EN20 and EN23 had white or light brown dry foam while Sites AH03, AH13, and BA27 had soapy, bubbly foam.

In **1997,** the City conducted one round of field screening at 75 locations within the City's storm drain system. The results of the field screening indicated flowing water at 34 of the sites, ponded water at 18 sites, eight sites had trickle flow, 13 were dry, and two sites were submerged by lagoon water. Chemical testing revealed chlorine levels ranging from 0.1 mg/L to 0.6 mg/L. Surfactants ranged from 0.25 mg/L to 6.0 mg/L with highest surfactant readings at Sites AH11 and AH12. Phenols were detected at low levels (0.1 mg/L) at Sites BV14 and AH31. Copper was detected at

three sites and ranged from 0.1 mg/L to 0.3 mg/L. Ammonia concentrations ranged from below the field test kit detection limit (non-detect) to 10.7 mg/L. The pH readings ranged from 4.2 to 9.9, with Site EN14A having the lowest readings of 4.2 upon the first visit and 4.6 during the second visit. Foam and soap bubbles were observed at Sites BV02, EN14A, EN23, BA27, BA36, BA47 and BA48.

In **1998,** the City conducted one round of field screening tests at 54 locations. 21 sites that had been dry or did not show noticeable pollutant concentrations during the past screening programs were eliminated from the program. The results of the field screening indicated flowing water at 36 of the sites, ponded water at 16 sites, and two sites were dry. Chemical testing revealed chlorine levels ranging from non-detect to 0.4 mg/L. Surfactants ranged from less than 0.25 mg/L to greater than 3.0 mg/L. The highest surfactant readings occurred at Sites AH11 and AH12. Phenols were detected at 27 sites, and the highest reading of 1.0 mg/L was observed at Site EN23. Copper was detected only at Site EN23, where it measured 0.2 mg/L. Ammonia concentrations ranged from non-detect to 10.0 mg/L. The highest ammonia concentration of 10.0 mg/L was detected at Site AH12, while the ammonia concentration at Site BA41 was below the detection limit. The pH values ranged from 4.1 to 10.7. Site EN02B had the highest pH reading of 10.7, and Site EN23 had the lowest pH measurement of 4.1. Dry brown/white foam was observed at Sites EN14A and EN23, while Sites BA36 and BA41 had traces of soapy, bubbly suds.

In **1999,** the City field screened a total of 79 sites. The sites that had been omitted from the program in 1998 were re-added to the program in 1999. Among the sites visited, 32 sites had measurable flowing water, 23 sites had ponded water, eight sites had trickle flow, 14 sites were dry and two sites were submerged. Ammonia concentrations varied from non-detect to 10 mg/L. Surfactant concentrations in excess of 1.0 mg/L were detected at 10 sites. Lower concentration levels of surfactants were detected at all of the sites tested with ponded or flowing water. Chlorine levels at the tested sites were generally low throughout the City. The concentration of chlorine reached 1.0 mg/L only during the first visit to Site BV08. Several sites had low concentrations of phenols. The maximum phenol concentration of 0.4 mg/L was detected at Sites AH46, AH59, EN14, EN14A, EN20 and EN24. A copper concentration of 0.5 mg/L was the highest detected level and was found at Site AH12. Site BA47 had a copper concentration of 0.3 mg/L.

In **2000,** the City performed field screening at a total of 65 sites. 14 sites tested in the previous year were eliminated because they were found to be consistently dry or did not have significant problems. This allowed more detailed investigations to be conducted at sites with chronic problems. Among the visited sites, 42 had measurable flowing water, nine sites had ponded water, one site had trickle flow and nine sites were dry. Four of the sites were observed to have flowing water during one visit but were ponded, dry, or had only trickling water upon follow-up visits. Ammonia concentrations varied from non-detect at a few of the sites to approximately 10 mg/L at Site AH04. Surfactant concentrations ranged from non-detect to greater than 3.0 mg/L, the highest of which was measured at Site AH12. Chlorine levels at the tested sites were found to vary from non-detect to 2.5 mg/L. The highest chlorine level detected was at Site BV09. Both phenol and copper

levels ranged from non-detect to 0.2 mg/L. The pH levels varied from 4.3 to 10.0. Low pH levels were recorded at Sites BA47, EN14A, EN21 and EN23.

In **2001,** the City performed field screening at a total of 67 sites. Among the sites visited, 52 sites had measurable flowing water, six sites had ponded water, and six sites were dry. Three of the sites were observed to have flowing water during one visit but were either ponded or dry upon follow-up visits. Ammonia concentrations of 1 mg/L or higher were detected at seven sites, with all of the sites containing ponded water or measurable flow indicating the presence of ammonia. Six of the sites had surfactant concentrations in excess of 1 mg/L. Both phenol and chlorine concentrations were generally low, and were only detected at 15 of the sites. The highest chlorine concentration of 0.8 mg/L was found at Site AH03, while the highest phenol concentration of 0.2 mg/L was measured at Site BA04. Copper was not detected at any of the selected sites during the 2001 dry weather program. Floatable materials such as scum, foam, suds, oily sheens, wood debris, plastic, paper and aluminum cans were found at several of the sites. Scum was observed at six sites, foam covered the water surface at five sites, 10 sites had significant suds present, an oily sheen was noted at three sites, and floatable materials such as paper, plastics, and other trash were found at three sites. Site EN09 had excessive sediment, which reduced the flow capacity in two of the four corrugated metal pipes (CMPs).

In **2002**, the City conducted field screening at a total of 60 sites. Measurable flow was observed at 48 of the primary sites, while 11 sites were ponded, and one site was dry. Since one of the stations was observed to be dry, an alternate site (BV08) was selected for monitoring with this site having measurable flow. Ammonia concentrations of 1.0 mg/L or higher were found at 14 of the sites, with the highest concentration at Site BA27 of 56 mg/L. Nitrate was found at concentrations of 10 mg/L or higher at six of the sites, with four of these sites having nitrate concentrations exceeding 40 mg/L. Only one site, Site BA47, had a concentration of orthophosphate phosphorus above 2.0 mg/L. The orthophosphate phosphorus concentration at this site measured 6.5 mg/L, but dropped to at or below 0.5 mg/L on two follow-up visits. Surfactants were measured at or greater than 1.0 mg/L at four of the sites and all the sites had at least a small amount of surfactant present. Measurements of pH found that three sites had pH levels below 6.5 and one site had a pH above 9.0. Laboratory analysis for oil and grease found four sites with elevated concentrations and bacterial analysis found contamination at three of the sites. Laboratory results for surfactants, pesticides and metals all had concentrations either at non-detect or below the action level. Floatable materials such as scum, foam, oily sheens, organic films, wood debris, plastic, paper and aluminum cans were found at several of the sites. Foam or scum covered the water surface at four sites, bubbles were observed at 10 sites and an oily sheen or organic film was noted at 11 sites.

In **2003** 60 sites were selected for field screening. 54 of the sites had measurable flow, six sites were ponded, and Site BV15 was dry, so it was replaced with alternate Site BV08. Measurements of pH were 6.5 or lower at four of the sites. Conductivity was measured above 10,000 µmhos/cm at three sites, and an ammonia concentration of 1.0 mg/L or higher was found at 11 sites. Six sites had

nitrate concentrations at or above the action level of 10 mg, with two of sites having concentrations exceeding 40 mg/L. No sites tested above the action level for reactive phosphorus. Surfactant concentrations at or above the action level of 1.0 mg/L were observed at four sites. Bacterial contamination was recorded at eight sites. Dissolved metal concentrations were not detected or below the action level at all sites. Diazinon and chlorpyrifos were not detected or below their action levels at all sites except Site BA06, which exceeded the action level for chlorpyrifos. Laboratory analysis did not detect surfactants (surfactants) at any sites, and oil and grease did not exceed the action level at any sites. Trash was observed at 22 of the visited sites, and five dusty or oily sheens were noted. Results of the additional study on the City's creeks found the diazinon concentration measured at Site BV Creek-1 and the fecal coliform count measured at Site EN Creek-1 exceeded established action levels. No other measured field and lab parameters exceeded action levels; most fell well below action levels or were not detected.

In **2004** 61 sites were visited; 52 sites had measurable flowing water. Eight sites had ponded water. One site, Site BV15, was dry so it was replaced by Site BV08. Measurements of pH were below 6.5 at three of the sites and at 9.0 at one site. An ammonia concentration of 1.0 mg/L NH_3-N or higher was found at four of the sites; tests performed at all of the remaining sites indicated the presence of ammonia at lower concentrations. Nitrate concentrations at or above 10 mg/L NO_3-N were observed at five sites, and two of the sites had concentrations of at least 50 mg/L NO_3-N. Lower concentrations of nitrate were detected at all of the remaining sites with ponded or flowing water. Reactive phosphorous concentrations were below 1.0 mg/L PO_4-P at all sampled sites. A surfactant concentration of at least 1.0 mg/L was observed only at Site BA41. Five of the sites exceeded the established action level for total coliform bacteria; two of these sites also exceeded action levels for fecal coliform and *Enterococcus* bacteria. Dissolved metal concentrations were not detected or were below the action level at all sites. No sites had detectable concentrations of the organophosphate pesticides diazinon or chlorpyrifos. Oil and grease concentrations were below the action level at all sites and surfactants (surfactants) were not detected at any sites. Trash was observed at 24 of the visited sites. Bubbles or foam were observed at six of the sites, and a dull, organic sheen was observed at one site.

In **2005** all 60 primary monitoring sites were visited, but as in 2004, Site BV15 was dry and was thus replaced by Site BV08. Therefore, a total of 61 site visits were conducted. Five sites had ponded water, while the rest of the sampled sites had measurable flows ranging from less than 1 gallon per minute (gpm) to 196 gpm. The pH readings at three of the sites were below the action level of 6.5; these three sites also had low pH readings in 2004. One site had a pH greater than 9.0. Two ammonia concentrations were found to be at or above the action level of 1.0 mg/L NH_3-N, but both were below the action level upon follow-up. Sites AH08, AH10, AH12, AH13 and EN02C had nitrate concentrations above the action level of 10 mg/L NO_3-N, as they had in each Dry Weather Monitoring Program since 2002. The highest nitrate concentration, 100 mg/L NO_3-N, was measured at Site EN02C. Five sites exhibited a surfactant concentration at or above the action level of 1.0 mg/L. At four of these sites, the concentration dropped below the action level by the time of the follow-up visit. Laboratory analysis detected bacterial indicators at or above

the action level at 11 of the sites. Eight of the sites exceeded the total coliform action level, while Site BA06 had an elevated *Enterococcus* count and Site BA40 had an elevated fecal coliform count. Site BA13 showed elevated levels of all three bacterial indicators. None of the sites had detectable levels of the organophosphate pesticides diazinon or chlorpyrifos. Oil and grease was detected at 16 mg/L at Site AH10, but it was not detected in a second sample taken during a later follow-up visit.

In **2006** all 60 primary monitoring sites were visited, but as in previous years, Site BV15 was dry and was thus replaced by alternate Site BV08. Therefore, a total of 61 site visits were conducted. Most sites had measurable flows, ranging from less than 1 gpm to over 200 gpm. The pH levels at four sites were below the action level of 6.5, and one site had a pH greater than 9.0. At six sites ammonia concentrations were at or above the action level of 1.0 mg/L NH_3-N, but three of these sites were below the action level within 24 hours. Sites AH10, AH12, AH13 and EN02C had nitrate concentrations above the action level of 10 mg/L NO_3-N, as in previous years dating back to 2002. Two sites had an orthophosphate concentration at or above the action level of 2.0 mg/L PO_4-P, but the concentrations dropped below the action level at both sites by the time of the follow-up visits. Surfactants were measured at or above the action level of 1.0 mg/L at two sites. Laboratory analyses showed bacteria action level exceedances for 13 sites. Nine of the sites exceeded only the total coliform action level, but one site had total and fecal coliform counts above action levels. In addition, three sites had exceedances for total coliform, fecal coliform, and *Enterococcus* counts. None of the sites had detectable levels of organophosphate pesticides diazinon or chlorpyrifos. Neither surfactants nor oil and grease were detected in laboratory samples.

1.5 Report Outline

This report is presented in the following order:

Section 1 provides a regulatory background, discusses the hydrologic setting of the City of Carlsbad, describes the objectives of the dry weather monitoring program, summarizes historical field screening data and provides an outline to the report.

Section 2 describes the sampling locations and the site selection criteria.

Section 3 describes the field screening and laboratory analytical procedures. This section also discusses quality assurance protocols used during sampling and lists appropriate action levels for initiating follow-up investigations.

Section 4 discusses the results of the field screening analyses.

Section 5 discusses the results of the laboratory analyses.

Section 6 provides a thorough analysis of the collected field and laboratory data and includes descriptions of each site with evidence of physical, chemical, or biological pollution.

Section 7 details the results of follow up investigations undertaken to isolate the source(s) of water contamination detected during the field screening program.

Section 8 provides a summary of the program results and recommendations for follow-up actions.

Appendix A contains photographs of each of the investigated sites.

Appendix B contains the laboratory analytical reports.

Appendix C contains original copies of the field data sheets.

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site ID	BA-04	BA-04A	BA-05	BA-06	BA-07	BA-13	BA-16	BA-26	BA-27	BA-31	BA-32	BA-34	BA-36	BA-40	BA-41	BA-43	BA-46	BA-47	BA-48	BA-48A	BA-49	BA-51	BA-52	BV-02	BV-03	BV-04	BV-04A	BV-06	BV-07	BV-08	BV-09	BA-03	BA-03A
1995																																	
pH	na	8	7.8	na	na	na	na	7.7	na	8.4	na	8.4	8.1	7.8	7.7	na	na	6.8	na					na	na	na	na	na	na	7.9	na	7.2	
Temperature	na	24.5	24.9	na	na	na	na	24	na	24	na	25	22.2	24	24.2	na	na	23.9	na					na	na	na	na	na	na	22.3	na	23.3	
Ammonia mg/L	na	0.1	0.04	na	na	na	na	0.12	na	nd	na	0.5	0.24	0.03	0.05	na	na	0.44	na					na	na	na	na	na	na	0.14	na	0.04	
Detergents mg/L	na	1.5	0.5	na	na	na	na	0.75	na	0.5	na	0.5	1	0.5	0.75	na	na	0.75	na					na	na	na	na	na	na	0.5	na	0.5	
Chlorine mg/L	na	0.8	0.4	na	na	na	na	0.2	na	0.6	na	0.6	0.3	0.3	<.1	na	na	0.6	na					na	na	na	na	na	na	0.6	na	0.4	
Copper mg/L	na	nd	nd	na	na	na	na	nd	na	nd	na	nd	nd	nd	nd	na	na	nd	na					na	na	na	na	na	na	nd	na	nd	
Phenols mg/L	na	nd	nd	na	na	na	na	nd	na	nd	na	nd	nd	nd	nd	na	na	nd	na					na	na	na	na	na	na	nd	na	nd	
1996																																	
pH	8.36		7.7	8.2	na	8.6	na	7.7	8.4	8.1	na	8.2	8.1	8	7.7	7.8	na	6	8.3					na	na	na	na	na	na	8	na	7	
Temperature	25.6		26.5	26.2	na	22.8	na	25.1	21.8	28.6	na	22.8	23.1	23	25.4	23.1	na	24.9	25.1					na	na	na	na	na	na	23.8	na	24	
Ammonia mg/L	0.02		0.07	nd	na	0.65	na	0.07	0.04	0.26	na	0.45	0.03	0.05	0.03	0.24	na	0.49	0.13					na	na	na	na	na	na	0.03	na	0.06	
Detergents mg/L	0.75		0.75	0.5	na	1.75	na	0.75	0.5	0.5	na	0.25	0.5	0.25	0.75	0.5	na	0.5	0.5					na	na	na	na	na	na	0.5	na	0.5	
Chlorine mg/L	0.1		nd	nd	na	nd	na	0.2	0.3	0.2	na	nd	0.2	nd	0.1	0.2	na	nd	nd					na	na	na	na	na	na	0.6	na	<.1	
Copper mg/L	nd		nd	nd	na	nd	na	nd	nd	nd	na	nd	nd	nd	nd	nd	na	nd	nd					na	na	na	na	na	na	nd	na	nd	
Phenols mg/L	nd		nd	nd	na	nd	na	nd	nd	nd	na	nd	nd	nd	nd	nd	na	nd	nd					na	na	na	na	na	na	nd	na	nd	
1997																																	
pH	8.17		8.09	na	8.64	8.19	na	8.07	8.22	8.02	8.27	7.4	8.26	8.07	8.13	7.84	na	5.16	9.77		9.13			7.67	na	7.79	na	7.86	na	7.76	8.02	7.04	na
Temperature	29.6		27.6	na	24.5	28	na	30.4	26.8	25.3	29.5	29	23.8	27.7	24.9	29	na	28.2	23.6		25.9			24.7	na	28.3	na	25.8	na	25.8	26.5	25.1	na
Ammonia mg/L	0.04		0.02	na	0.02	0.07	na	0.33	10.7	nd	0.02	0.02	0.04	3.41	0.07	4.34	na	0.2	0.89		0.02			0.56	na	nd	na	nd	na	0.05	0.38	nd	na
Detergents mg/L	0.5		0.25	na	0.25	0.25	na	0.5	0.25	0.5	0.5	0.25	0.5	0.75	0.75	0.5	na	0.75	1		<.25			0.25	na	<.25	na	<.25	na	1	<.25	0.25	na
Chlorine mg/L	0.6		0.1	na	nd	0.1	na	0.1	0.2	0.1	0.6	0.1	0.1	0.2	nd	0.1	na	0.2	0.2		0.1			nd	na	0.2	na	0.3	na	0.3	0.3	0.6	na
Copper mg/L	nd		nd	na	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd		nd			nd	na	nd	na	nd	na	nd	nd	nd	na
Phenols mg/L	nd		nd	na	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd		nd			nd	na	nd	na	nd	na	nd	nd	nd	na
1998																																	
pH	7.7		7.9			7.7		7.8	8.2	7.7	7.5	8.2	8.1	7.9	7.5	7.3		na	7.8					10						9.8	8.4	7.6	
Temperature	26		23			20		23	22	17	23	20	20	21	22	22		na	22					21						21	22	19	
Ammonia mg/L	0.6		0.3			1		0.6	1	0.6	0.3	0.3	0.6	0.8	0.3	2		na	0.6					0.6						0.6	0.6	0.4	
Detergents mg/L	0.4		0.4			0.5		0.5	1.5	0.5	0.25	0.5	0.5	0.4	0.75	0.3		na	0.25					0.5						0.5	0.4	0.25	
Chlorine mg/L	nd		nd			nd		nd	nd	nd	nd	0.1	nd	nd	nd	nd		na	0.2					nd						0.1	nd	nd	
Copper mg/L	nd		nd			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		na	nd					nd						nd	nd	nd	
Phenols mg/L	nd		nd			nd		0.2	nd	0.2	nd	0.3	0.2	0.1	0.1	nd		na	nd					nd						nd	nd	nd	
1999																																	
pH	7.7	na	7.8	8.8	8	na	8.1	8.4	8.3	7.8	7.7	8.1	8.2	7.9	9.2	na	6.3	8.6	na	8.2				8.1	na	na	7.7	8.2	na	8.2	8.5	8	7.8
Temperature	23	na	26	24	21	na	25	24	24	24	23	23	24	25	27	na	24	23	na	23				21	na	na	26	23	na	25	22	21	21
Ammonia mg/L	0.2	na	0.4	1.5	0.2	na	0.1	1	0.3	4	0.1	0.3	0.2	0.6	1	na	2	1.5	na	0.3				2	na	na	0.2	0.1	na	0.8	0.2	0.2	4.5
Detergents mg/L	0.25	na	1.5	>3.0	0.5	na	0.5	0.5	0.25	0.25	0.25	0.5	0.25	0.5	0.5	na	0.5	0.25	na	0.5				>3.0	na	na	0.75	0.25	na	0.25	0.8	0.25	0.5
Chlorine mg/L	0.3	na	0.2	nd	nd	na	0.2	0.2	0.1	0.2	0.6	0.1	nd	0.1	0.3	na	0.2	0.3	na	nd				0.1	na	na	0.4	0.1	na	1	0.5	0.1	nd
Copper mg/L	nd	na	0.1	0.2	0.1	na	0.1	0.2	0.1	0.2	0.1	nd	nd	0.2	0.2	na	0.3	0.1	na	nd				<0.1	na	na	nd	0.1	na	0.2	nd	0.2	nd
Phenols mg/L	nd	na	0.1	0.1	0.3	na	0.2	0.1	0.2	0.1	0.1	0.3	0.2	0.1	0.1	na	0.3	0.1	na	0.1				<0.1	na	na	0.3	nd	na	0.3	0.1	0.1	0.1
2000																																	
pH	na	na	8.2	7.7	7.8		7.7	na	8.0	7.3	7.5	7.9	7.8	7.5	7.3		6.3	7.4		7.3				7.6			7.0	7.8		7.7	8.1	7.0	na
Temperature	na	na	23	24	24		25	na	25	26	25	23	24	24	25		24	23		22				20			25	24		23	23	23	na
Ammonia mg/L	na	na	3.0	>10	0.8		0.8	na	0.4	0.3	0.3	0.4	0.8	0.8	3.0		1.0	0.8		0.3				0.8			0.2	0.4		0.3	0.1	0.8	na
Detergents mg/L	na	na	0.25	0.25	0.25		0.25	na	0.25	0.25	0.25	0.25	0.25	0.25	0.25		0.25	0.25		0.25				0.25			0.5	0.25		0.25	0.25	0.25	na
Chlorine mg/L	ba	na	nd	nd	nd		nd	na	nd	0.1	nd	nd	nd	nd	nd		0.1	nd		nd				nd			0.1	nd		nd	2.5	nd	ba
Copper mg/L	na	na	0.1	nd	nd		nd	na	0.1	0.1	nd	nd	nd	nd	0.1		0.1	nd		nd				nd			0.1	nd		0.1	nd	0.1	na
Phenols mg/L	na	na	0.2	nd	0.1		nd	na	0.1	nd	nd	nd	nd	0.1	0.1		nd	0.1		nd				0.1			nd	0.1		0.1	nd	nd	na
2001																																	
pH	7.4	na	7.4	7.8	7.6		7.7	7.7	7.8	7.4	7.6	7.9	7.9	7.4	6.8		4.7	7.5		7.7				7.1			6.8	7.4		7.4	7.4	7.4	na
Temperature	25	na	25	22	22		25	23	24	23	24	23	22	24	22		22	23		23				20			23	21		21	20	22	na
Ammonia mg/L	3	na	2	0.8	0.7		0.4	0.8	0.4	0.8	0.2	0.3	0.5	0.6	0.8		0.5	0.5		0.1				0.6			0.2	1		0.3	0.2	0.4	na
Detergents mg/L	0.25	na	2	0.5	0.5		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25		0.5	0.5		0.25				0.25			0.75	0.5		0.25	0.25	0.5	na
Chlorine mg/L	0.2	na	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd		nd				nd			0.4	nd		nd	nd	0.6	na
Copper mg/L	nd	na	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd		nd				nd			nd	nd		nd	nd	nd	na
Phenols mg/L	0.2	na	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd		nd				nd			nd	nd		nd	nd	nd	na

TABLE 1-1 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site ID	BA-04	BA-04A	BA-05	BA-06	BA-07	BA-13	BA-16	BA-26	BA-27	BA-31	BA-32	BA-34	BA-36	BA-40	BA-41	BA-43	BA-46	BA-47	BA-48	BA-48A	BA-49	BA-51	BA-52	BV-02	BV-03	BV-04	BV-04A	BV-06	BV-07	BV-08	BV-09
1995																															
pH	na	8	7.8	na	na	na	na	7.7	na	8.4	na	8.4	8.1	7.8	7.7	na	na	6.8	na					na	na	na	na	na	na	7.9	na
Temperature	na	24.5	24.9	na	na	na	na	24	na	24	na	25	22.2	24	24.2	na	na	23.9	na					na	na	na	na	na	na	22.3	na
Ammonia mg/L	na	0.1	0.04	na	na	na	na	0.12	na	nd	na	0.5	0.24	0.03	0.05	na	na	0.44	na					na	na	na	na	na	na	0.14	na
Detergents mg/L	na	1.5	0.5	na	na	na	na	0.75	na	0.5	na	0.5	1	0.5	0.75	na	na	0.75	na					na	na	na	na	na	na	0.5	na
Chlorine mg/L	na	0.8	0.4	na	na	na	na	0.2	na	0.6	na	0.6	0.3	0.3	<.1	na	na	0.6	na					na	na	na	na	na	na	0.6	na
Copper mg/L	na	nd	nd	na	na	na	na	nd	na	nd	na	nd	nd	nd	nd	na	na	nd	na					na	na	na	na	na	na	nd	na
Phenols mg/L	na	nd	nd	na	na	na	na	nd	na	nd	na	nd	nd	nd	nd	na	na	nd	na					na	na	na	na	na	na	nd	na
1996																															
pH	8.36		7.7	8.2	na	8.6	na	7.7	8.4	8.1	na	8.2	8.1	8	7.7	7.8	na	6	8.3					na	na	na	na	na	na	8	na
Temperature	25.6		26.5	26.2	na	22.8	na	25.1	21.8	28.6	na	22.8	23.1	23	25.4	23.1	na	24.9	25.1					na	na	na	na	na	na	23.8	na
Ammonia mg/L	0.02		0.07	nd	na	0.65	na	0.07	0.04	0.26	na	0.45	0.03	0.05	0.03	0.24	na	0.49	0.13					na	na	na	na	na	na	0.03	na
Detergents mg/L	0.75		0.75	0.5	na	1.75	na	0.75	0.5	0.5	na	0.25	0.5	0.25	0.75	0.5	na	0.5	0.5					na	na	na	na	na	na	0.5	na
Chlorine mg/L	0.1		nd	nd	na	nd	na	0.2	0.3	0.2	na	nd	0.2	nd	0.1	0.2	na	nd	nd					na	na	na	na	na	na	0.6	na
Copper mg/L	nd		nd	nd	na	nd	na	nd	nd	nd	na	nd	nd	nd	nd	nd	na	nd	nd					na	na	na	na	na	na	nd	na
Phenols mg/L	nd		nd	nd	na	nd	na	nd	nd	nd	na	nd	nd	nd	nd	nd	na	nd	nd					na	na	na	na	na	na	nd	na
1997																															
pH	8.17		8.09	na	8.64	8.19	na	8.07	8.22	8.02	8.27	7.4	8.26	8.07	8.13	7.84	na	5.16	9.77		9.13			7.67	na	7.79	na	7.86	na	7.76	8.02
Temperature	29.6		27.6	na	24.5	28	na	30.4	26.8	25.3	29.5	29	23.8	27.7	24.9	29	na	28.2	23.6		25.9			24.7	na	28.3	na	25.8	na	25.8	26.5
Ammonia mg/L	0.04		0.02	na	0.02	0.07	na	0.33	10.7	nd	0.02	0.02	0.04	3.41	0.07	4.34	na	0.2	0.89		0.02			0.56	na	nd	na	nd	na	0.05	0.38
Detergents mg/L	0.5		0.25	na	0.25	0.25	na	0.5	0.25	0.5	0.5	0.25	0.5	0.75	0.75	0.5	na	0.75	1		<.25			0.25	na	<.25	na	<.25	na	1	<.25
Chlorine mg/L	0.6		0.1	na	nd	0.1	na	0.1	0.2	0.1	0.6	0.1	0.1	0.2	nd	0.1	na	0.2	0.2		0.1			nd	na	0.2	na	0.3	na	0.3	0.3
Copper mg/L	nd		nd	na	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd		nd			nd	na	nd	na	nd	na	nd	nd
Phenols mg/L	nd		nd	na	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd		nd			nd	na	nd	na	nd	na	nd	nd
1998																															
pH	7.7		7.9			7.7		7.8	8.2	7.7	7.5	8.2	8.1	7.9	7.5	7.3		na	7.8					10						9.8	8.4
Temperature	26		23			20		23	22	17	23	20	20	21	22	22		na	22					21						21	22
Ammonia mg/L	0.6		0.3			1		0.6	1	0.6	0.3	0.3	0.6	0.8	0.3	2		na	0.6					0.6						0.6	0.6
Detergents mg/L	0.4		0.4			0.5		0.5	1.5	0.5	0.25	0.5	0.5	0.4	0.75	0.3		na	0.25					0.5						0.5	0.4
Chlorine mg/L	nd		nd			nd		nd	nd	nd	nd	0.1	nd	nd	nd	nd		na	0.2					nd						0.1	nd
Copper mg/L	nd		nd			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		na	nd					nd						nd	nd
Phenols mg/L	nd		nd			nd		0.2	nd	0.2	nd	0.3	0.2	0.1	0.1	nd		na	nd					nd						nd	nd
1999																															
pH	7.7	na	7.8	8.8	8	na	8.1	8.4	8.3	7.8	7.7	8.1	8.2	7.9	9.2	na	6.3	8.6	na	8.2				8.1	na	na	7.7	8.2	na	8.2	8.5
Temperature	23	na	26	24	21	na	25	24	24	24	23	23	24	25	27	na	24	23	na	23				21	na	na	26	23	na	25	22
Ammonia mg/L	0.2	na	0.4	1.5	0.2	na	0.1	1	0.3	4	0.1	0.3	0.2	0.6	1	na	2	1.5	na	0.3				2	na	na	0.2	0.1	na	0.8	0.2
Detergents mg/L	0.25	na	1.5	>3.0	0.5	na	0.5	0.5	0.25	0.25	0.25	0.5	0.25	0.5	0.5	na	0.5	0.25	na	0.5				>3.0	na	na	0.75	0.25	na	0.25	0.8
Chlorine mg/L	0.3	na	0.2	nd	nd	na	0.2	0.2	0.1	0.2	0.6	0.1	nd	0.1	0.3	na	0.2	0.3	na	nd				0.1	na	na	0.4	0.1	na	1	0.5
Copper mg/L	nd	na	0.1	0.2	0.1	na	0.1	0.2	0.1	0.2	0.1	nd	nd	0.2	0.2	na	0.3	0.1	na	nd				<0.1	na	na	nd	0.1	na	0.2	nd
Phenols mg/L	nd	na	0.1	0.1	0.3	na	0.2	0.1	0.2	0.1	0.1	0.3	0.2	0.1	0.1	na	0.3	0.1	na	0.1				<0.1	na	na	0.3	nd	na	0.3	0.1
2000																															
pH	na	na	8.2	7.7	7.8		7.7	na	8.0	7.3	7.5	7.9	7.8	7.5	7.3		6.3	7.4		7.3				7.6			7.0	7.8		7.7	8.1
Temperature	na	na	23	24	24		25	na	25	26	25	23	24	24	25		24	23		22				20			25	24		23	23
Ammonia mg/L	na	na	3.0	>10	0.8		0.8	na	0.4	0.3	0.3	0.4	0.8	0.8	3.0		1.0	0.8		0.3				0.8			0.2	0.4		0.3	0.1
Detergents mg/L	na	na	0.25	0.25	0.25		0.25	na	0.25	0.25	0.25	0.25	0.25	0.25	0.25		0.25	0.25		0.25				0.25			0.5	0.25		0.25	0.25
Chlorine mg/L	ba	na	nd	nd	nd		nd	na	nd	0.1	nd	nd	nd	nd	nd		0.1	nd		nd				nd			0.1	nd		nd	2.5
Copper mg/L	na	na	0.1	nd	nd		nd	na	0.1	0.1	nd	nd	nd	nd	0.1		0.1	nd		nd				nd			0.1	nd		0.1	nd
Phenols mg/L	na	na	0.2	nd	0.1		nd	na	0.1	nd	nd	nd	nd	0.1	0.1		nd	0.1		nd				0.1			nd	0.1		0.1	nd
2001																															
pH	7.4	na	7.4	7.8	7.6		7.7	7.7	7.8	7.4	7.6	7.9	7.9	7.4	6.8		4.7	7.5		7.7				7.1			6.8	7.4		7.4	7.4
Temperature	25	na	25	22	22		25	23	24	23	24	23	22	24	22		22	23		23				20			23	21		21	20
Ammonia mg/L	3	na	2	0.8	0.7		0.4	0.8	0.4	0.8	0.2	0.3	0.5	0.6	0.8		0.5	0.5		0.1				0.6			0.2	1		0.3	0.2
Detergents mg/L	0.25	na	2	0.5	0.5		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25		0.5	0.5		0.25				0.25			0.75	0.5		0.25	0.25
Chlorine mg/L	0.2	na	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd		nd				nd			0.4	nd		nd	nd
Copper mg/L	nd	na	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd		nd				nd			nd	nd		nd	nd
Phenols mg/L	0.2	na	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd		nd				nd			nd	nd		nd	nd

TABLE 1-1 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site ID	BV-09A	BV-10	BV-14	BV-15	BV-16	EN-02A	EN-02B	EN-02C	EN-09	EN-11	EN-13	EN-14	EN-14A	EN-16	EN-17	EN-18	EN-19	EN-20	EN-21	EN-22	EN-22A	EN-23	EN-23A	EN-24	EN-30	EN-31
1995																										
pH		na	8.1			7.9	8.9		7.7	na	na	na	4.7	7.7	na	6.8	7.6	8.1	8.7	na	na	7.6	na		na	
Temperature		na	23.9			23.2	25.4		21.1	na	na	na	21.8	25.6	na	22.2	26.6	31.9	24	na	na	21.7	na		na	
Ammonia mg/L		na	0.27			0.07	0.1		0.12	na	na	na	0.61	0.23	na	0.42	0.23	0.08	0.1	na	na	0.16	na		na	
Detergents mg/L		na	0.25			0.5	0.5		0.5	na	na	na	0.75	0.75	na	1	0.5	0.75	0.5	na	na	0.5	na		na	
Chlorine mg/L		na	0.6			0.6	0.3		0.2	na	na	na	0.2	0.6	na	<.01	0.6	0.4	0.4	na	na	0.6	na		na	
Copper mg/L		na	nd			nd	nd		nd	na	na	na	nd	nd	na	nd	nd	nd	nd	na	na	nd	na		na	
Phenols mg/L		na	nd			nd	nd		nd	na	na	na	nd	nd	na	nd	nd	nd	nd	na	na	nd	na		na	
1996																										
pH		6.7	7.8			8	8.9		7.6		na	na	4.3	7.7	7.7	7.1	7.5	7.9	8.4	7.5		7.2		8.1	na	na
Temperature		23.6	25.9			23.6	25.5		23.4		na	na	21.9	23.6	24.3	22.3	24.9	22.9	26.2	24.2		23.8		26	na	na
Ammonia mg/L		0.03	nd			0.2	0.07		0.05		na	na	0.02	0.06	0.01	nd	0.01	0.5	0.9	0.05		0.02		nd	na	na
Detergents mg/L		1.5	0.25			0.5	0.5		0.25		na	na	2	0.25	0.25	0.5	0.75	0.75	1	0.5		0.25		0.25	na	na
Chlorine mg/L		0.8	0.6			0.6	0.1		0.1		na	na	0.6	0.2	0.1	nd	0.2	nd	0.3	0.1		0.1		0.3	na	na
Copper mg/L		nd	nd			nd	nd		nd		na	na	nd	nd	nd	nd	nd	nd	nd	nd		nd		nd	na	na
Phenols mg/L		nd	nd			nd	nd		nd		na	na	nd	nd	nd	nd	nd	nd	nd	nd		nd		nd	na	na
1997																										
pH	na	6.44	8.04			8.39	9.88		7.57		7.2	na	4.18	8.72	na	6.69	8.89	6.94	5.6	na	na	4.42		6.92	na	7.25
Temperature	na	24.6	24.1			25.3	32		26.2		25.3	na	23.2	27.4	na	22.4	27.8	22.4	25.8	na	na	23.7		28.6	na	26
Ammonia mg/L	na	0.18	1.29			4.03	0.05		0.05		3.01	na	0.57	0.05	na	4.38	0.03	0.14	2.65	na	na	0.78		0.07	na	0.03
Detergents mg/L	na	0.75	3			0.25	0.5		0.75		1	na	3	0.25	na	1.98	0.25	0.25	1	na	na	0.75		1	na	0.5
Chlorine mg/L	na	0.4	0.2			0.2	0.2		0.2		nd	na	0.1	0.2	na	nd	0.6	0.1	0.1	na	na	0.1		0.2	na	nd
Copper mg/L	na	nd	nd			nd	nd		nd		nd	na	nd	nd	na	nd	nd	nd	nd	na	na	nd		nd	na	nd
Phenols mg/L	na	nd	0.1			nd	nd		nd		nd	na	nd	nd	na	nd	nd	nd	nd	na	na	nd		nd	na	nd
1998																										
pH		7.6	8.2			7.5	10.7		7.7		na	5.1	4.5	7.9		6.9	8.3	7.4	7.1			4.1		7.3		7.7
Temperature		18	23			20	27		20		na	22	20	20		19	20	21	23			20		20		22
Ammonia mg/L		1	1.5			0.4	0.2		0.6		na	0.6	0.8	0.4		0.8	0.3	0.8	10			3.5		0.6		1
Detergents mg/L		0.25	0.63			0.4	0.5		0.38		na	0.75	0.75	0.25		0.5	0.5	0.5	1.25			0.75		0.25		1.5
Chlorine mg/L		nd	0.1			nd	0.1		nd		na	nd	nd	0.1		nd	nd	nd	nd			nd		nd		nd
Copper mg/L		nd	nd			nd	nd		nd		na	nd	nd	nd		nd	nd	nd	nd			0.2		nd		nd
Phenols mg/L		nd	nd			nd	nd		0.3		na	0.2	0.1	0.1		0.4	0.2	0.2	0.3			1		0.2		0.4
1999																										
pH		8.2	8.2			8.4	9.7		7.7		8	8.1	5.2	8.3	na	7.4	8.1	7.8	8	na	na	5.6		8.1	na	7.8
Temperature		22	27			24	29		22		25	21	23	25	na	20	23	23	22	na	na	23		24	na	22
Ammonia mg/L		0.2	0.3			0.6	0.3		0.3		0.6	4	0.6	0.3	na	0.4	0.2	0.5	0.2	na	na	0.2		0.8	na	0.1
Detergents mg/L		0.5	0.25			0.75	0.75		0.75		1.5	>3.0	0.75	0.25	na	0.5	0.25	0.5	0.5	na	na	0.25		0.25	na	0.5
Chlorine mg/L		0.15	0.1			0.6	0.6		0.3		0.2	0.1	nd	0.2	na	nd	0.1	nd	0.2	na	na	nd		0.3	na	0.2
Copper mg/L		0.1	nd			0.2	0.1		nd		nd	0.2	nd	0.1	na	0.1	nd	0.1	0.1	na	na	nd		0.1	na	nd
Phenols mg/L		0.2	nd			nd	nd		0.3		0.1	nd	0.4	0.2	na	0.2	0.1	0.4	0.1	na	na	nd		0.4	na	0.3
2000																										
pH		7.7	8.0			8.0	8.5		7.3		7.4	8.1	4.6	7.5		6.9	7.4	7.2	6.7			4.3		7.2		7.2
Temperature		23	25			28	32		22		24	31	23	29		23	29	23	24			23		27		22
Ammonia mg/L		0.4	0.5			0.2	0.2		0.4		0.8	0.8	0.6	0.8		1.5	0.8	3.5	3.0			4.0		0.3		0.3
Detergents mg/L		0.25	0.25			0.25	0.25		0.25		0.25	0.5	0.5	0.25		0.25	0.25	0.5	>3.0			0.75		0.25		0.25
Chlorine mg/L		nd	0.1			0.9	nd		nd		nd	nd	0.1	0.1		nd	nd	nd	<0.1			0.4		nd		nd
Copper mg/L		nd	nd			nd	nd		0.1		0.1	nd	0.1	nd		0.1	nd	0.1	0.02			0.1		nd		0.1
Phenols mg/L		0.1	0.1			nd	0.1		0.1		0.1	nd	0.2	nd		0.1	nd	0.1	0.2			0.1		0.1		0.1
2001																										
pH		7.3	7.6			7.6	8.3	7.5	7			7.5	4.1	7.5		6.7	7.6	6.9	6.8			4.8		6.9		6.1
Temperature		19	22			24	24	21	20			21	21	24		21	25	21	22			23		24		21
Ammonia mg/L		0.4	0.3			0.8	0.6	2	0.6			0.5	2	0.3		0.5	0.5	0.4	0.2			0.8		0.8		0.5
Detergents mg/L		0.5	0.25			0.25	0.25	0.5	0.5			3	1	0.25		0.5	0.25	0.5	0.25			0.25		0.25		0.25
Chlorine mg/L		nd	nd			nd	0.5	0.2	nd			nd	nd	0.4		nd	0.1	nd	nd			0.1		nd		nd
Copper mg/L		nd	nd			nd	nd	nd	nd			nd	nd	nd		nd	nd	nd	nd			nd		nd		nd
Phenols mg/L		nd	nd			nd	nd	nd	0.1			nd	nd	nd		nd	nd	nd	nd			nd		nd		nd

TABLE 1-1 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site ID	AH-03	AH-04	AH-08	AH-09	AH-10	AH-11	AH-12	AH-13	AH-18	AH-24	AH-27	AH-28	AH-30	AH-31	AH-32	AH-45	AH-46	AH-59	AH-61	AH-63	AH-65	BA-02	BA-03	BA-04	BA-06	BA-07	BA-13	BA-26	BA-27	BA-32	BA-34	BA-36	BA-40
2002																																	
Temp. ℃	18	25.5	20	21	25	23	23	18.5	18	19	17	28	17	19	24	19.5	18	18	21	21	19	20	21	23	21	20	19	21	21	22	22	18.5	20
pH	8.4	8.4	7.4	8.1	8.9	8.0	8.1	7.4	7.6	7.5	7.6	8.2	7.7	7.7	8.1	8.2	7.6	7.9	8.2	8.8	8.1	7.9	6.9	7.5	7.7	8.2	8	7.9	7.8	7.5	8	8	8
Turbidity, NTU	44.79	34.22	1.45	55.0	0.9	22.63	14.56	0.39	13.23	0.73	16.14	6.46	2.45	35.78	1.35	0	39.98	10.36	22.56	0.41	76.5	8.07	2.46	4.71	7.44	23.86	6.46	12.4	86	3.03	1.6	1.47	3.66
Conductivity, mS/cm	1.66	4.52	2.54	0.94	2.93	1.08	1.33	2.98	3.31	5.75	0.92	4.11	1.59	1.50	3.22	5.04	8.15	2.28	1.46	4.06	2.24	1.45	5.01	5.36	4.11	1.42	4.24	4.38	1.17	2.87	6.53	6.46	4.85
Detergents, mg/L	0.5	8.0	0.5	0.25	0.5	1.0	6.0	0.75	0.25	0.25	0.25	0.25	0.25	0.37	0.25	0.25	0.25	0.5	0.5	0.25	0.25	0.25	0.25	0.37	0.25	0.25	0.25	0.5	8	0.25	0.4	0.5	0.25
Ammonia, mg/L	0.8	1.0	0.1	0.3	0.0	2.0	3.0	0.1	1	0.1	0.5	0.1	0.8	2.5	0.2	0.5	0.6	0.1	0.4	0.2	0.4	0.4	0.2	0.4	1.5	0.2	1	0.4	56	0.2	0.2	0.4	0.2
Nitrate,mg/L	5.0	0.2	>40	1.0	40.0	0.4	2.0	>40	0.2	8	0.1	0.0	0.9	0.0	6.0	3	10	0	18	0.6	0.8	6.0	5.0	6.0	2.5	1.5	4	0.8	0.5	1.5	0.1	1	1.5
Orthophosphate Phosphorus, mg/L	0.13	1.79	0.07	0.20	0.10	0.49	0.98	0.07	0.65	0.07	0.49	0.03	0.65	0.82	0.00	0.07	0.07	0.00	0.10	0.07	0.49	0.65	0.10	0.20	0.49	0.49	1.14	0.07	1.63	0.20	0.08	0.10	0.20
Surfactants, mg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Oil & Grease, mg/L	444		530		317					5		2	0				0	0				3			0		0		11		0		
Total Hardness, mg/L	425		477		548					821		1030	3430				326	1640				1120			1660		1070		300		329		
Cadmium , mg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Copper, mg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Lead, mg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Zinc, mg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Diazinon, µg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Chlorpyrifos, µg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Total Coliform, MPN/100ml	11,000		1,300		800					20		2,400	386				1,700	1,700				50,000			11,000		13,000		170		>160,000		
Fecal Coliform, MPN/100ml	500		340		110					<20		1,300	220				1,700	110				50,000			1,100		3,000		155		800		
Enterococcus, MPN/100ml	5,000		300		80					170		170	1,300				1,700	1,700				50,000			24,000		3,000		300		500		
2003																																	
Temp. ℃	20	31	20	23.5	22	22	23	21	24	25	23	25	23	22	23.5	21	21	20	24	22	22	23.5	22	23	23	21	23	23.5	20	22	24	21	21
pH	7.6	7.1	7.3	7.2	7.4	7.0	7.5	7.2	7.1	7.3	7.7	7.4	7.1	7.3	7.5	7.5	7.4	7.3	7.3	7.6	7.2	7.2	7.0	7.2	7.4	7.5	7.4	7.9	7.1	7.7	8.0	7.6	7.5
Turbidity, NTU	2.45	14.05	9.24	19.3	4.25	18.40	18.91	0.32	40.22	1.62	23.57	1.39	4.85	4.85	5.36	2.47	14.30	4.36	7.68	3.19	0.84	2.21	3.76	16.87	3.78	10.07	7.51	4.82	9.14	23.23	0.29	1.23	6.94
Conductivity, mS/cm	2.50	1.60	2.14	1.10	3.43	1.32	2.40	3.07	4.15	5.78	1.71	4.48	1.93	2.20	3.62	4.27	8.79	10.83	12.29	4.07	1.87	1.97	5.83	4.70	5.73	1.27	6.81	6.46	3.02	3.31	6.88	8.62	2.83
Detergents, mg/L	0.25	1.0	0.25	0.75	0.38	0.8	2.0	0.75	0.25	0.25	0.5	0.25	0.13	1.0	0.25	0.25	0.25	0.75	0.5	0.25	0.13	0.25	0.25	0.5	0.5	0.13	0.75	0.5	0.38	0.25	0.25	0.5	0.25
Ammonia, mg/L	4.0	1.0	0.4	0.3	0.2	2.0	1.0	0.2	1.0	0.2	1.5	0.2	0.3	1.5	0.2	0.3	0.3	0.2	0.4	0.3	0.2	0.3	0.6	0.3	0.4	0.6	0.2	0.3	0.8	0.2	0.4	0.2	0.2
Nitrate,mg/L	6.4	0.1	20.0	0.6	36.0	0.1	32.0	40.0	0.1	8.0	0.2	0.1	0.4	0.6	1.0	2.5	8.0	0.1	4.5	2.0	0.8	5.0	4.5	5.0	4.5	0.8	3.5	0.6	0.4	2.5	1.0	0.6	2.0
Orthophosphate Phosphorus, mg/L	0.98	0.49	0.16	0.20	0.10	0.82	0.82	0.03	0.98	0.03	0.65	0.03	0.33	0.65	nd	0.13	0.07	nd	0.07	0.07	0.49	0.98	0.26	0.20	0.20	0.65	0.49	0.03	0.49	0.10	0.03	0.07	0.13
Surfactants, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Oil & Grease, mg/L	5		2		2					nd						2	nd								nd		nd					nd	nd
Total Hardness, mg/L	393		451		531					1520						1070	2960								1220		1950					2400	671
Cadmium , mg/L	nd		nd		nd					0.046						nd	nd								nd		nd					nd	nd
Copper, mg/L	0.006		nd		0.006					nd						nd	nd								0.014		nd					0.007	nd
Lead, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Zinc, mg/L	0.023		0.045		0.027					0.031						0.031	0.032								nd		0.061					0.021	nd
Diazinon, µg/L	nd		nd		nd					nd						nd	nd								nd		0.33					nd	0.06
Chlorpyrifos, µg/L	nd		nd		nd					nd						nd	nd								0.55		nd					nd	nd
Total Coliform, MPN/100ml	90,000		90,000		8,000					8,000						160,000	22,000								160,000		160,000					160,000	160,000
Fecal Coliform, MPN/100ml	50,000		50,000		5,000					5,000						160,000	11,000								160,000		160,000					160,000	160,000
Enterococcus, MPN/100ml	40		130		130					500						8,000	nd								1,300		90,000					300	230
2004																																	
Temp. ℃	20.7	25	20.4	23	23	22.6	23.1	20.7	22	21	20	19	20	20	26	21	20	19.3	24	22	21	22	21	22	22	22	21.4	24	23	24	21.6	20.4	21
pH	8.3	7.2	7.8	7.5	7.9	7.1	7.98	7.27	7.4	7.62	8.4	6.7	7.7	7.7	7.8	8.2	7.5	7	7.6	8.5	7.7	7.9	7	7.3	7.8	7.9	7.3	7.9	7.1	7.4	8	7.9	7.7
Turbidity, NTU	1.7	8.84	7.05	15.96	2.74	1.74	15.65	0.73	18.08	4.23	14.52	0.84	3.32	20.89	1.67	0.88	5.98	2.42	4.53	1.68	4.21	1.8	8.64	1.79	5.54	7.15	30.92	14.22	13.71	6.46	0.07	2.55	3.56
Conductivity, mS/cm	1.66	2.08	1.32	0.80	2.00	0.91	2.14	2.00	2.68	4.74	0.79	3.86	1.43	1.22	2.02	1.90	5.75	5.81	3.82	2.40	1.61	1.58	3.86	4.18	3.70	1.22	8.53	3.29	5.51	1.73	4.98	5.81	2.70
Detergents, mg/L	0.68	0.5	0.13	0.25	0.5	0.68	0.5	0.5	0.38	0.25	0.13	0.25	0.13	0.38	0.38	0.13	0.25	0.5	0.25	0.25	0.13	0.25	0.25	0.25	0.25	0.25	0.68	0.25	0.25	0.25	0.38	0.25	0.5
Ammonia, mg/L	0.2	0.2	0.2	0.8	0.1	3	0.5	0.1	1.5	0.4	0.3	0.3	0.3	2	0.2	0.1	0.8	0.2	0.4	0.2	0.3	0.1	0.6	0.1	0.2	0.3	0.3	0.3	0.6	0.2	0.3	0.4	0.2
Nitrate,mg/L	2.5	3.75	20	3.8	30	1.25	50	50	1.25	5	1.25	1.25	1.25	1.25	1.25	1.25	7.5	1.25	2.5	2.5	1.25	5	3.75	6.25	8.5	5	2.5	2.5	2.5	4	1.25	2.5	2.5
Orthophosphate Phosphorus, mg/L	0.26	0.03	0.03	0.49	0.07	0.98	0.16	0.03	1.14	0.03	0.13	0.13	0.3	0.81	0.03	0.07	0.26	nd	0.13	0.07	0.82	0.26	0.2	0.07	0.03	0.7	1.6	0.07	0.19	0.13	0.13	0.16	0.19
Surfactants, mg/L	2		nd		nd					nd						nd	nd								nd		nd					nd	nd
Oil & Grease, mg/L	nd		nd		nd					nd						nd	nd								1		1					nd	1
Total Hardness, mg/L	500		529		600					1750						737	2340								1260		3090					1970	1190
Cadmium , mg/L	nd		nd		nd					nd						nd	nd								nd		0.024					nd	nd
Copper, mg/L	nd		nd		0.009					nd						nd	nd								nd		0.085					0.069	nd
Lead, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Zinc, mg/L	nd		0.021		0.022					0.029						nd	0.028								nd		nd					nd	nd
Diazinon, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Chlorpyrifos, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Total Coliform, MPN/100ml	7000		30000		80000					13000						50000	170000								28000		170000					22000	140000
Fecal Coliform, MPN/100ml	2400		300		2300					70						5000	24000								2100		13000					1700	24000
Enterococcus, MPN/100ml	9000		70		200					800						1300	160000								8000		2800					5000	22000

TABLE 1-1 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site ID	BA-41	BA-43	BA-47	BA-48	BA-49	BA-51	BA-52	BV-02	BV-04A	BV-06	BV-08	BV-09	BV-10	BV-15	BV-16	EN-02A	EN-02B	EN-02C	EN-09	EN-14	EN-14A	EN-18	EN-19	EN-20	EN-21	EN-23	EN-24	EN-31
2002																												
Temp. °C	20	20	20	19	20	18	19	18	23	18.5	19	20	17.5	na	19.5	21	25	19	19	21	22	20	20	23	19	19.5	20	21
pH	7.4	7.7	6.6	7.8	7.7	7.8	7.7	7.8	7.5	7.6	7.9	8.3	7.9	na	8.3	7.9	9.1	8.2	7.5	8.0	4.5	6.9	7.2	7.2	6	7.2	7.0	7.4
Turbidity, NTU	7.06	11.41	49.09	14.83	1.04	8.47	4.47	2.86	2.68	1.6	2.21	5.75	3.53	na	46.99	21.27	1.68	0.93	44.48	16.11	0.51	176.0	6.83	26.79	37.95	44.56	27.36	2.78
Conductivity, mS/cm	4.86	4.12	7.59	4.67	1.28	5.17	5.66	1.43	1.48	4.85	4.13	5.94	5.70		2.07	1.36	3.20	5.84	4.23	2.33	1.11	7.44	4.96	4.49	4.96	3.50	3.66	5.73
Detergents, mg/L	0.75	0.5	0.25	0.37	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	na	0.25	0.25	0.25	0.5	0.5	0.25	0.5	0.25	0.75	0.5	0.37	0.25	0.25	0.25
Ammonia, mg/L	0.5	1.5	0.5	1	0.2	0.4	0.6	0.6	0.2	0.2	0.2	0.4	0.4	na	0.3	0.5	0.2	0.2	2.0	0.5	1.5	0.8	1.0	0.5	0.8	1.0	0.5	0.1
Nitrate,mg/L	0.8	0.8	3.5	2.5	0.1	2	2	1.0	20	7.0	2.0	1.5	2.0	na	1.5	0.8	2.5	>40	0.1	0.3	2.5	0.05	< 0.05	< 0.05	2	1.0	< 0.05	1.0
Orthophosphate Phosphorus, mg/L	0.20	0.49	6.52	0.33	0.16	0.05	0.82	0.49	0.05	0.20	0.26	0.13	0.10	na	0.49	0.65	0.13	0.49	0.65	0.49	0.03	0.03	0.00	0.03	0.05	0.07	0.07	0.05
Surfactants, mg/L					0	0																						
Oil & Grease, mg/L					84	7																						
Total Hardness, mg/L					577	1070																						
Cadmium , mg/L					0	0																						
Copper, mg/L					0	0																						
Lead, mg/L					0	0																						
Zinc, mg/L					0	0																						
Diazinon, µg/L					0	0																						
Chlorpyrifos, µg/L					0	0																						
Total Coliform, MPN/100ml					1,400	230																						
Fecal Coliform, MPN/100ml					700	<20																						
Enterococcus, MPN/100ml					500	230																						
2003																												
Temp. °C	24	23	23	23	23	19.5	20	19	25	23.5	24	22	23	na	23	23	26	21	21	21	22.5	24	24	24	22	23	22	23
pH	7.8	7.5	7.1	7.1	7.3	7.4	7.2	7.3	7.0	8.0	7.4	7.6	7.4	na	7.6	7.3	7.8	7.3	7.2	7.2	6.2	6.9	7.3	7.0	6.7	6.0	7.2	6.9
Turbidity, NTU	5.27	4.32	10.55	5.04	4.81	7.99	7.58	3.80	1.22	3.05	14.88	4.58	3.86	na	17.50	10.65	2.60	0.38	3.81	12.03	40.80	12.96	13.14	6.45	36.02	3.53	5.12	1.72
Conductivity, mS/cm	3.90	3.38	2.04	2.61	2.22	6.98	4.88	2.17	15.79	2.98	2.97	5.34	5.41	na	2.57	1.86	3.68	6.04	5.29	11.13	6.60	2.57	3.84	2.01	6.21	9.42	3.51	6.52
Detergents, mg/L	0.25	0.25	0.38	0.25	nd	0.25	0.25	0.25	0.75	0.25	0.25	0.5	0.25	na	2.0	0.25	0.25	0.75	0.38	0.5	0.25	0.25	0.25	0.13	0.5	0.5	0.25	0.25
Ammonia, mg/L	0.4	1.0	0.6	0.8	0.1	0.2	0.4	0.4	0.3	1.0	0.3	0.4	0.4	na	0.4	0.8	0.2	0.2	0.3	0.4	0.6	0.4	0.2	0.2	0.6	3.5	0.4	0.4
Nitrate,mg/L	0.8	0.8	0.8	1.0	4.0	0.6	0.3	2.5	28	4.8	1.5	2.5	3.0	na	0.6	0.3	0.8	40	0.3	1.5	2.0	0.4	0.8	0.8	1.5	1.5	0.3	0.8
Orthophosphate Phosphorus, mg/L	0.10	0.49	0.49	0.65	0.07	0.03	0.07	0.49	0.03	0.26	0.20	0.33	0.49	na	0.49	0.20	nd	0.10	nd	0.07	0.07	0.03	nd	0.03	0.07	0.07	0.07	0.07
Surfactants, mg/L						nd		nd									nd		nd				nd					
Oil & Grease, mg/L						nd		nd									nd		nd				nd					
Total Hardness, mg/L						1960		365									800		1680				979					
Cadmium , mg/L						nd		nd									nd		nd				nd					
Copper, mg/L						nd		0.006									nd		nd				nd					
Lead, mg/L						nd		nd									nd		nd				nd					
Zinc, mg/L						nd		0.054									nd		0.022				0.022					
Diazinon, µg/L						0.12		nd									nd		nd				nd					
Chlorpyrifos, µg/L						nd		nd									nd		nd				nd					
Total Coliform, MPN/100ml						8,000		160,000									8,000		5,000				5,000					
Fecal Coliform, MPN/100ml						3,000		90,000									5,000		3,000				3,000					
Enterococcus, MPN/100ml						230		80									800		230				80					
2004																												
Temp. °C	23.7	21.1	23	21.3	19	21	23	20.7	25	21.5	21	21.9	22.1	na	22.7	20	23	20	21	22.5	22	22.5	23.2	21	22	22	23.4	22
pH	7.5	7.2	5.5	7.2	7.5	7.7	7.4	7.9	7	7.9	7.8	8.2	7.9	na	8.3	7.7	9	8.2	7.5	7.8	4.9	7.3	7.7	7.2	7.2	4.2	7.7	6.9
Turbidity, NTU	4.36	5.25	15.88	5.99	0.83	2.78	6.33	1.68	4.19	1.71	1.44	0.66	4.11	na	5.14	18.64	2.67	0.08	5.92	7.2	48.16	14.71	8.75	26.34	6.76	6.95	1.4	11.38
Conductivity, mS/cm	2.53	2.61	4.24	2.16	1.78	3.95	3.44	1.26	4.08	3.97	2.29	4.04	4.06	na	2.53	0.92	2.50	4.05	3.15	3.14	6.58	1.65	2.56	4.45	1.12	6.25	2.64	4.62
Detergents, mg/L	1.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.75	0.25	0.13	0.25	0.13	na	0.25	0.25	0.25	0.75	0.25	0.25	0.5	0.13	0.25	0.38	0.5	0.5	0.13	0.25
Ammonia, mg/L	0.3	0.8	0.8	0.8	0.1	0.2	0.3	0.8	0.4	0.4	0.4	0.5	0.4	na	0.4	0.8	0.2	0.1	0.2	0.4	0.8	0.4	0.4	0.6	0.3	2	0.3	0.3
Nitrate,mg/L	1.25	2.5	1.25	1.25	3.75	1.25	3.75	5	7.5	7.5	5	6.8	5	na	2.5	2.5	4	75	3	1.25	3.8	2.5	1.25	1.25	3.75	2.5	1.25	3.75
Orthophosphate Phosphorus, mg/L	0.07	0.33	0.19	0.7	0.07	0.03	0.49	0.49	0.98	0.23	0.33	0.65	0.49	na	0.49	0.09	0.03	0.49	0.03	0.19	0.07	0.03	0.03	0.03	0.07	0.03	0.03	0.03
Surfactants, mg/L						nd		nd									nd		nd				nd					
Oil & Grease, mg/L						nd		nd									nd		nd				nd					
Total Hardness, mg/L						2050		375									822		1360				1040					
Cadmium , mg/L						nd		nd									nd		nd				nd					
Copper, mg/L						nd		0.005									nd		nd				nd					
Lead, mg/L						nd		nd									nd		nd				nd					
Zinc, mg/L						0.028		0.076									nd		nd				nd					
Diazinon, µg/L						nd		nd									nd		nd				nd					
Chlorpyrifos, µg/L						nd		nd									nd		nd				nd					
Total Coliform, MPN/100ml						3400		24000									13000		30000				17000					
Fecal Coliform, MPN/100ml						300		270									300		1100				800					
Enterococcus, MPN/100ml						700		2100									140		270				130					

TABLE 1-1 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site ID	AH-03	AH-04	AH-08	AH-09	AH-10	AH-11	AH-12	AH-13	AH-18	AH-24	AH-27	AH-28	AH-30	AH-31	AH-32	AH-45	AH-46	AH-59	AH-61	AH-63	AH-65	BA-02	BA-03	BA-04	BA-06	BA-07	BA-13	BA-26	BA-27	BA-32	BA-34	BA-36	BA-40
2005																																	
Temp. °C	23.5	29.6	20.5	25.1	21.3	23.8	24.4	21.9	25.4	22.9	26.9	20.7	23.0	23.9	27.8	21.6	20.7	20.6	26.2	25.2	24.3	23.6	23.8	25.0	23.9	22.1	22.6	24.5	23.6	24.8	21.3	23.4	23.7
pH	8.5	9.4	7.5	8.0	7.7	8.2	8.2	8.8	7.5	7.6	9.0	7.4	8.0	8.5	8.4	8.2	8.1	7.9	7.6	8.7	8.3	8.1	7.0	7.3	7.7	8.2	8.1	8.0	7.5	7.5	8.2	8.1	8.1
Turbidity, NTU	1.85	1.18	2.98	21.63	7.97	3.22	7.63	12.77	8.36	2.35	6.23	1.72	1.04	11.82	5.82	3.28	2.43	4.61	4.32	0.18	2.09	3.29	12.84	12.83	2.56	6.99	12.54	16.33	2.28	1.49	0.19	1.78	2.11
Conductivity, mS/cm	2.12	2.86	1.58	1.13	2.39	1.01	2.32	2.47	2.39	5.36	1.52	3.78	1.77	2.06	2.74	4.26	2.76	9.02	6.77	2.62	1.48	1.87	4.66	4.05	3.11	1.99	4.43	7.04	7.22	1.94	6.21	8.45	2.81
Detergents, mg/L	0.25	0.5	0.5	0.25	1	0.75	1	1	0.37	0.5	0.25	0.5	0.25	0.25	0.25	0.5	0.25	1	0.5	0.5	0.13	0.25	0.75	0.75	0.50	0.50	0.50	0.75	0.75	0.50	0.75	0.75	0.25
Ammonia, mg/L	0.2	0.2	0.2	0.4	0.2	0.4	0.3	0.3	1.5	0.3	0.6	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.4	0.3	0.6	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2
Nitrate,mg/L	6.75	8.75	15	1.25	50	1.25	30	75	1.25	2.5	1.25	1.25	2.5	1.25	1.25	3.75	1.25	1.25	5	1.25	1.25	6.25	3.75	5.00	2.5	6.25	2.5	1.25	2.5	5	1.25	1.25	2.5
Orthophosphate Phosphorus, mg/L	0.11	nd	0.1	0.49	0.05	0.26	0.33	0.20	0.50	0.03	0.49	0.33	0.2	0.49	0.02	0.07	0.03	0.03	0.03	0.1	0.16	0.33	0.3	0.19	0.33	0.49	0.26	0.10	1.63	0.26	0.10	0.10	0.13
Surfactants, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Oil & Grease, mg/L	nd		nd		16					nd						nd	nd								nd		nd					nd	nd
Total Hardness, mg/L	606		466		564					1940						1520	1040								847		1350					3180	809
Cadmium , mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Copper, mg/L	nd		nd		0.005					nd						nd	nd								0.005		nd					0.008	0.016
Lead, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Zinc, mg/L	nd		0.027		nd					nd						0.036	nd								0.024		0.029					nd	nd
Diazinon, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Chlorpyrifos, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Total Coliform, MPN/100ml	30,000		23,000		500,000					130,000						300,000	50,000								130,000		300,000					50,000	90,000
Fecal Coliform, MPN/100ml	900		17,000		11,000					700						3,000	270								11,000		30,000					3,000	24,000
Enterococcus, MPN/100ml	800		500		270					230						1,300	1,100								160,000		35,000					3,000	2,800
2006																																	
Temp. °C	24.5	33.0	21.0	26.3	29.3	23.6	24.7	22.5	27.7	27.9	27.7	30.5	26.6	25.0	28.9	28.7	23.9	26.5	25.8	24.0	25.0	24.1	25.8	26.6	26.5	24.6	23.3	25.7	23.7	25.9	23.0	22.3	25.3
pH	8.1	9.8	7.9	7.7	7.8	7.7	8.3	7.6	7.5	7.3	8.4	7.6	7.6	7.3	8.1	7.6	7.4	7.7	7.4	8.8	7.9	7.9	8.6	7.2	7.6	7.9	7.8	7.8	7.5	7.7	8.2	8.1	7.5
Turbidity, NTU	5.43	16.63	2.79	25.93	12.77	3.46	2.94	0.93	13.55	2.91	12.32	7.19	2.91	13.7	0	23.2	6.56	10.4	27.48	2.17	3.21	2.37	4.25	11.12	164.00	16.15	35.45	8.52	7.48	1.42	3.50	3.55	1.04
Conductivity, mS/cm	1.92	1.63	1.47	1.00	2.33	0.87	2.03	2.29	3.54	5.27	0.80	4.26	1.76	1.32	2.94	2.78	6.54	1.58	2.92	2.20	1.90	1.63	2.44	2.98	2.56	1.95	10.92	6.40	6.19	1.62	5.67	6.89	2.85
Detergents, mg/L	0.25	0.75	0.5	0.5	0.5	0.5	0.75	0.5	0.25	0.5	0.25	0.5	0.25	0.75	0.25	0.5	0.5	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.75	0.75	0.63	0.50	0.25	0.25	0.50	0.25
Ammonia, mg/L	0.1	0.4	0.2	0.4	0.2	0.6	0.3	0.1	1.5	0.4	0.2	0.3	0.4	2.5	0.1	0.4	1.5	0.2	0.4	0.1	0.2	0.1	0.2	0.2	0.3	4	0.4	0.1	0.1	0.9	0.2	0.2	0.3
Nitrate,mg/L	7.5	1.25	6.75	1.25	30	2.5	25	50	1.25	2.5	1.25	1.25	3.75	2.5	1.25	3.75	5	1.25	2.5	2.5	2.5	3.75	3.75	3.75	2.5	2.5	6.75	1.25	2.5	2.5	2.5	1.25	1.25
Orthophosphate Phosphorus, mg/L	0.27	0.2	0.13	0.49	0.07	0.33	0.26	0.07	0.82	0.03	0.07	0.07	0.33	1.10		0.1	0.13	0.07	0.13	0.49	0.65	0.33	0.3	0.20	0.13	1.30	0.20	0.2	0.07	2.28	0.26	0.07	0.23
Surfactants, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Oil & Grease, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Total Hardness, mg/L	549		271		468					1590						830	1790								448		3400					2110	892
Cadmium , mg/L	nd		nd		nd					nd						nd	nd								nd		0.021					nd	nd
Copper, mg/L	0.009		0.006		0.014					nd						0.005	0.007								0.009		nd					0.008	nd
Lead, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Zinc, mg/L	0.037		0.031		0.029					nd						nd	0.046								nd		0.094					nd	nd
Diazinon, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Chlorpyrifos, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Total Coliform, MPN/100ml	170,000		50,000		300, 000					500,000						300,000	900,000								80,000		240,000					80,000	240,000
Fecal Coliform, MPN/100ml	3,000		1,700		23, 000					3,000						5,000	130,000								8,000		90,000					3,000	130,000
Enterococcus, MPN/100ml	5,000		230		800					5,000						3,000	>160,000								230		13,000					1,300	30,000

TABLE 1-1 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site ID	BA-41	BA-43	BA-47	BA-48	BA-49	BA-51	BA-52	BV-02	BV-04A	BV-06	BV-08	BV-09	BV-10	BV-15	BV-16	EN-02A	EN-02B	EN-02C	EN-09	EN-14	EN-14A	EN-18	EN-19	EN-20	EN-21	EN-23	EN-24	EN-31
2005																												
Temp. ℃	23.8	22.7	22.6	22.4	22.6	22.1	22.4	21.5	23.4	23.8	23.6	23.0	21.4	na	24.2	23.7	22.0	21.7	21.7	23.3	24.8	26.1	25.1	23.5	23.3	23.8	24.5	22.6
pH	7.8	7.5	5.3	7.6	7.7	7.9	7.3	7.9	7.5	7.8	7.8	8.3	7.9	na	8.3	8.5	8.1	8.3	7.5	8.1	4.9	7.2	7.7	7.3	6.9	4.6	7.9	6.5
Turbidity, NTU	48.69	1.75	22.57	7.95	1.40	0.11	10.22	1.81	10.77	2.89	6.58	3.38	2.81	na	2.7	7.56	0.23	0.65	7.13	0.99	30.4	22.48	28.87	13.78	22.69	3.29	2.24	9.9
Conductivity, mS/cm	4.75	3.64	9.16	4.04	2.13	6.15	3.23	1.77	5.82	4.76	2.87	5.20	5.29	na	3.36	1.85	3.23	4.83	2.75	2.45	6.61	2.43	3.68	3.06	1.82	3.61	3.62	7.92
Detergents, mg/L	0.50	0.50	0.75	0.50	0.25	0.75	0.25	0.37	0.5	0.63	0.5	0.63	0.75	na	0.5	0.25	0.25	0.75	0.25	0.25	0.25	0.25	0.25	0.5	0.5	0.75	1.5	0.5
Ammonia, mg/L	0.4	0.6	0.1	0.6	0.2	0.2	0.7	0.5	0.6	0.2	0.4	0.3	0.3	na	0.4	0.8	0.4	0.2	0.3	0.3	0.3	0.4	0.6	0.4	4	0.8	0.2	0.3
Nitrate,mg/L	2.5	2.5	2.5	2.5	1.25	1.25	1.25	5	2.5	5	5	2.5	3.75	na	3.75	1.25	2.5	100	1.25	1.25	2.5	1.25	1.25	1.25	2.5	2.5	1.25	2.5
Orthophosphate Phosphorus, mg/L	0.13	0.20	0.03	0.33	0.13	0.03	0.65	0.13	0.26	0.49	0.2	0.16	0.19	na	0.49	0.50	nd	0.65	nd	0.10	0.03	0.03	nd	0.03	0.65	nd	0.03	0.03
Surfactants, mg/L						nd		nd									nd		nd				nd					
Oil & Grease, mg/L						nd		nd									nd		nd				nd					
Total Hardness, mg/L						251		457									955		1840				1290					
Cadmium , mg/L						nd		nd									nd		nd				nd					
Copper, mg/L						nd		nd									nd		nd				nd					
Lead, mg/L						nd		nd									nd		nd				nd					
Zinc, mg/L						nd		0.247									nd		nd				nd					
Diazinon, µg/L						nd		nd									nd		nd				nd					
Chlorpyrifos, µg/L						nd		nd									nd		nd				nd					
Total Coliform, MPN/100ml						30,000		1,600,000									8,000		130,000				50,000					
Fecal Coliform, MPN/100ml						900		5,000									300		90				2,200					
Enterococcus, MPN/100ml						3,000		2,300									500		300				300					
2006																												
Temp. ℃	25.5	24.5	26.0	25.4	23.1	21.0	23.9	23.3	27.4	24.5	25.5	24.2	23.9	na	25.0	23.4	26.7	21.3	22.3	24.5	25.1	25.0	25.1	24.6	23.8	23.4	24.5	24.2
pH	8.6	8.3	5.6	8.3	7.6	7.8	7.3	7.5	6.8	7.5	7.6	7.9	7.5	na	8.1	7.8	8.9	8.1	7.4	7.9	6.6	6.7	7.5	7.0	7.3	6.9	6.7	6.2
Turbidity, NTU	2.43	4.09	24.82	7.34	1.24	2.35	3.96	5.29	1.1	1.45	11.16	3.11	2.75	na	3.0	41.25	3.38	1.52	10.82	76.00	26.97	34.83	6.05	14.85	6.21	9.3	27.33	7.66
Conductivity, mS/cm	3.98	2.69	9.98	3.97	2.24	5.63	4.41	1.64	15.12	2.62	4.75	3.98	4.01	na	2.18	1.06	2.69	5.09	4.83	2.49	4.11	6.23	5.12	6.04	1.19	3.34	3.65	6.43
Detergents, mg/L	0.75	0.50	0.75	0.75	0.25	0.50	0.50	0.5	0.8	0.25	1.5	0.5	0.5	na	0.5	0.25	0.5	1	0.5	0.25	0.5	0.75	0.75	0.75	0.75	0.5	0.5	0.5
Ammonia, mg/L	0.2	0.8	0.4	0.9	0.1	0.1	0.6	0.8	0.6	0.1	0.6	0.2	0.2	na	0.2	0.6	0.4	0.2	0.3	>10	10	0.8	0.4	0.8	0.8	0.6	0.6	0.2
Nitrate,mg/L	1.25	1.25	2.5	1.75	3.75	1.25	2.5	6.25	10	3.75	5	3.75	5	na	2.5	1.25	2.5	50	2.5	3.75	2.5	2.5	2.5	1.25	15	2.5	1.25	1.25
Orthophosphate Phosphorus, mg/L	0.98	0.49	0.49	0.13	0.07	0.03	0.63	0.8	0.03	0.2	0.3	0.27	0.3	na	0.7	0.26	0.07	3.00	0.03	1.10	0.13	0.00	0.07	0.07	0.07	0.26	0.07	0.03
Surfactants, mg/L						nd		nd									nd		nd				nd					
Oil & Grease, mg/L						nd		nd									nd		nd				nd					
Total Hardness, mg/L						2010		395									707		1660				1770					
Cadmium , mg/L						nd		nd									nd		nd				nd					
Copper, mg/L						nd		0.005									nd		nd				nd					
Lead, mg/L						nd		nd									nd		nd				0.032					
Zinc, mg/L						nd		0.096									nd		0.035				nd					
Diazinon, µg/L						nd		nd									nd		nd				nd					
Chlorpyrifos, µg/L						nd		nd									nd		nd				nd					
Total Coliform, MPN/100ml						50,000		900,000									23,000		17,000				130,000					
Fecal Coliform, MPN/100ml						500		5,000									3,000		140				8,000					
Enterococcus, MPN/100ml						2,300		2,300									500		230				2,300					

2.0 SAMPLING LOCATIONS

In February of 2002, the City prepared a Jurisdictional Urban Runoff Management Plan (JURMP) document that identified 60 primary monitoring stations and 14 alternate stations where data would be collected during the dry weather monitoring program. The additional 14 alternate stations would be monitored if any of the primary stations did not have ponded or flowing water. During the 2007 monitoring program, all 60 primary sampling locations were visited and samples were collected when flowing or ponded water was observed. Only one of the pre-selected sampling locations, Site BV15, was found dry and thus an alternate sampling location, Site BV08, was selected for monitoring.

Table 2-1 provides the site number, location, conveyance configuration, primary and secondary land uses, hydrologic unit, and Global Positioning Satellite (GPS) coordinates of the sampling sites that were visited. Photographs of sampling locations are included in Appendix A. Sites are categorized according to the respective watershed using the following abbreviations: AH = Agua Hedionda Lagoon, BA = Batiquitos Lagoon (San Marcos Creek), BV = Buena Vista Lagoon, and EN = Encina Creek. A complete map of the MS4 system, including sampling locations and drainage basins, is included as Figure 1. The City's sub-watersheds are shown in Figure 2.

TABLE 2-1
2007 DRY WEATHER MONITORING STATIONS

Site ID	Locations	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
Agua Hedionda Lagoon Watershed							
AH03	East of railroad tracks, South of Chinquapin Avenue, outfall into Agua Hedionda Lagoon	Outlet	Residential	Commercial	904	33.14596	-117.33774
AH04	Behind 5600 Avenida Encinas near railroad tracks	Concrete Channel	Commercial	Industrial	904	33.12650	-117.32770
AH08	Inside Encinas Wastewater Plant, East of plant tower, at South end of open channel- outfall	Outlet	Commercial	Commercial	904	33.13670	-117.33414
AH09	Behind 5115 Building Avenida Encinas	Manhole	Commercial	Industrial	904	33.13136	-117.33020
AH10	West of Avenida Encinas, near Manzano/El Arbol intersection, near railroad tracks	Earthen Channel	Agricultural	Commercial	904	33.12750	-117.32837
AH11	Main line East of I-5, South of Cannon Road, West of the Car Country Carlsbad sign	Outlet	Commercial	Agricultural	904	33.12992	-117.32629
AH12	Concrete channel East of I-5, West of the Ken Grody Ford parking lot off Paseo Del Norte	Outlet	Commercial	Agricultural	904	33.12734	-117.32476
AH13	Concrete channel West of Paseo del Norte, approximately 250 feet North of Pea Soup Anderson's	Outlet	Commercial	Agricultural	904	33.12558	-117.32269
AH18	South of the Park Drive and Valencia Avenue intersection	Outlet	Residential	Residential	904	33.14305	-117.31562
AH24	Kelly and Park Drive intersection	Concrete Channel	Open	Residential	904	33.14660	-117.31053
AH27	Tamarack and Pontiac Avenue intersection, North of Tamarack	Concrete Channel	Residential	Open	904	33.15648	-117.30696
AH28	50 yards East of the La Portalada Drive and Tamarack Avenue intersection, on the North side of Tamarack Avenue	Concrete Channel	Residential	Residential	904	33.15580	-117.31043

TABLE 2-1
2007 DRY WEATHER MONITORING STATIONS

Site ID	Locations	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
AH30	East of Sierra Morena Avenue, South of Valewood	Outlet	Open	Residential	904	33.16401	-117.31456
AH31	South of Chestnut, East of Sierra Morena Avenue	Outlet	Open	Residential	904	33.16592	-117.31474
AH32	Intersection of Don Arturo and Don Porfirio Drive (in gated community), off of El Camino Real and Rancho Carlsbad Drive intersection	Concrete Channel	Residential	Open	904	33.15163	-117.29086
AH45	Aston Avenue, behind building 1812 Acushnet Company, Northeast of the pond	Outlet	Commercial	Commercial	904	33.13513	-117.29001
AH46	Outfall located at the North of the horse stable on Sunny Creek Road	Outlet	Residential	Open	904	33.14647	-117.28160
AH59	Sedimentation basin, approximately 1200 feet North of El Fuerte Street	Earthen Channel	Open	Commercial	904	33.13639	-117.25484
AH61	Northeast of 2875 Loker Avenue	Manhole	Commercial	Industrial	904	33.13274	-117.24828
AH63	Tamarack Avenue, Hillside Drive, Park Drive, South of Calavo Court, in East sidewalk	Manhole	Residential	Residential	904	33.14812	-117.32524
AH65	Tamarack Avenue, Pontiac Drive, across from South Hampton Road	Manhole	Residential	Residential	904	33.15759	-117.30790
Batiquitos Lagoon (San Marcos Creek) Watershed							
BA02	Down in the sediment basin at the Southwest corner of Navigator Circle and Windrose Circle	Outlet	Residential	Commercial	904	33.09100	-117.30803
BA03	End of Gabbiano on Batiquitos Lagoon Trail	Outlet	Residential	Open	904	33.09331	-117.30123
BA04	In front of 7017 Nutmeg Way	Manhole	Residential	Residential	904	33.10353	-117.30452

TABLE 2-1
2007 DRY WEATHER MONITORING STATIONS

Site ID	Locations	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
BA06	Batiquitos Drive, midway between Pointsettia Lane and Daisy Avenue	Manhole	Residential	Commercial	904	33.10336	-117.30500
BA07	Northeast of the intersection of Buttercup Road and Seascape Drive	Manhole	Residential	Residential	904	33.10616	-117.30569
BA13	Debris basin outlet to Batiquitos Lagoon, Southwest of El Camino Real and Arenal intersection	Outlet	Residential	Commercial	904	33.09458	-117.26958
BA26	Between 2526 and 2532 Unicornio Street	Catch Basin	Residential	Residential	904	33.10827	-117.25158
BA27	100 feet into the canyon near the El Fuerte and Chorlito intersection	Outlet	Residential	Open	904	33.11274	-117.24479
BA32	In front of 2927 Luciernaga Street	Manhole	Residential	Open	904	33.10695	-117.24141
BA34	South of Vista Mariana, in La Costa Golf Course	Outlet	Residential	Residential	904	33.09163	-117.25123
BA36	Southeast corner of La Costa Golf Course behind 7525 Gibraltar Street near Round Tree Apartments	Outlet	Residential	Open	904	33.08759	-117.24641
BA40	30 feet Southwest of the Melrose Drive and Rancho Santa Fe Road intersection	Outlet	Commercial	Residential	904	33.10542	-117.22543
BA41	(Northern edge) La Costa Canyon Park, in canyon; across from 3015 Pueblo Street	Outlet	Residential	Parks	904	33.08944	-117.24271
BA43	30 yards North of the El Camino Real and Levante Street intersection	Outlet	Residential	Open	904	33.07964	-117.26606
BA47	Rancho Santa Fe Road and Camino Alvaro intersection	Manhole	Residential	Residential	904	33.06908	-117.24709
BA48	500 feet South of the intersection of Camino De Los Coches and Rancho Santa Fe Road	Outlet	Residential	Residential	904	33.07423	-117.23988

TABLE 2-1
2007 DRY WEATHER MONITORING STATIONS

Site ID	Locations	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
BA49	Northwest of Batiquitos Lagoon, East of Carlsbad Boulevard.	Manhole	Open	Residential	904	33.08897	-117.31200
BA51	Alga Road, East of El Camino Real, between 2035 and 2043	Natural Creek	Parks	Residential	904	33.10195	-117.26147
BA52	Batiquitos Drive, East of Golden Star Lane, North of street inside detention basin	Outlet	Parks (Golf Course)	Residential	904	33.09338	-117.28979
Buena Vista Lagoon Watershed							
BV02	East side of State Street, South of the Carlsbad Boulevard and State Street intersection	Outlet	Commercial	Industrial	904	33.16566	-117.35380
BV04A	East of Buena Vista Lagoon Ecological Reserve, on the East bank	Outlet	Commercial	Open	904	33.17775	-117.34100
BV06	50 feet West of the S. Vista Way Bridge on the South side of Buena Vista Creek	Outlet	Commercial	Residential	904	33.18039	-117.32911
BV08*	South bank of Buena Vista Creek, 10 yards West of El Camino Real	Outlet	Commercial	Residential	904	33.18060	-117.32720
BV09	50 yards North of the El Camino Real and Carlsbad Village Drive intersection on the center divider	Manhole	Residential	Commercial	904	33.17264	-117.32323
BV10	Southwest corner of the Carlsbad Village Drive and El Camino Real intersection	Outlet	Residential	Commercial	904	33.17154	-117.32290
BV15*	Laguna Drive and State Street intersection, across from 2531 State Street	Manhole	Commercial	Industrial	904	33.16500	-117.35310
BV16	Marron Road and Monroe Street intersection, across from The Olive Garden Restaurant	Manhole	Residential	Open	904	33.17622	-117.33686
Encina Creek Watershed							
EN02A	West of 6030 Avenida Encinas East of the Rail Road tracks	Outlet	Commercial	Industrial	904	33.11890	-117.32378

TABLE 2-1
2007 DRY WEATHER MONITORING STATIONS

Site ID	Locations	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
EN02B	Inside Encinas Wastewater Plant	Concrete Channel	Industrial	Commercial	904	33.11591	-117.32017
EN02C	North bank of Encina Creek, underneath I-5 overpass. Access through Wastewater Plant	Outlet	Industrial	Commercial	904	33.11659	-117.31873
EN09	Encina Creek, South of Palomar Airport Road, on Laurel Tree Road	Natural Creek	Open	Commercial	904	33.12235	-117.30013
EN14	Corner of Palomar Oaks Way and Camino Vida Roble, near 1911 Palomar Oaks Way	Manhole	Industrial	Commercial	904	33.12360	-117.28976
EN14A	30 yards West of 1911 Palomar Oaks Way, in the canyon	Outlet	Industrial	Commercial	904	33.12350	-117.29023
EN18	Behind 1979 Palomar Oaks Way	Outlet	Commercial	Open	904	33.11781	-117.28245
EN19	Beside 1949 Palomar Oaks Way	Concrete Channel	Commercial	Open	904	33.11903	-117.28593
EN20	Across from 1979 Palomar Oaks Way	Outlet	Commercial	Open	904	33.11908	-117.28232
EN21	Camino Vida Roble, midway between Palomar Airport Road and Owens Avenue	Manhole	Commercial	Industrial	904	33.12117	-117.28230
EN23	Northwest corner of Yarrow Drive and Camino Vida Roble intersection	Outlet	Commercial	Industrial	904	33.11930	-117.27372
EN24	Between 2225 and 2265 Camino Vida Roble, in front of the Post Office	Catch Basin	Industrial	Commercial	904	33.11906	-117.27238
EN31	10 yards North of 1925 Palomar Oaks Way, in the canyon	Manhole	Commercial	Industrial	904	33.12229	-117.29124

Notes:
* Alternate station BV08 was selected to substitute for dry primary monitoring station BV15

3.0 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consisted of qualitative field observations, flow measurement, and field analyses of selected water quality parameters. Information relating to weather conditions, the amount of time since last rainfall, and the type of storm water conveyance was recorded. Specific observations and results of the field water quality analyses were documented on field data sheets, which are included in Appendix C. The data sheets also serve as a record of the field visit and were completed for every site visit regardless of whether or not samples were collected.

Field screening and analyses were conducted according to the following procedures and methods.

Qualitative Observations

Qualitative field observations were made during each site visit whether or not ponded or flowing water was observed. These observations were intended to provide a general assessment of the site and include variables like odor, water clarity, the presence of floatables, visible deposits, stains, and biological status. Evidence of present or past illicit connections and illegal discharges (IC/ID) to the storm drain system may be ascertained by careful field observations. Each field screening location was photographed to provide additional information and documentation of site conditions. Photos are included in Appendix A.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific conductance
- Temperature
- pH
- Turbidity
- Surfactants (MBAS)*
- Nitrate-N
- Ammonia-N
- Orthophosphate-P (reactive phosphorus)

* Surfactants are also referred to as detergents, specifically with respect to discussion of field test kit results. Due to the importance of surfactants, the City conducted analysis for this parameter in both the field and laboratory. Surfactant concentration was measured using the Methylene Blue Active Substances (MBAS) concentration.

Flow Measurement

Flow measurements can be used to estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative of an illegal release upstream. Various field methods can be used to estimate the discharge rate. These include measuring the velocity, depth, and width of the flowing water, or recording the amount of time required to fill a bottle of known volume with sample water.

The methods that were used to perform the above field analyses, along with the detection limit, range and accuracy of each method, are listed in Table 3-2 at the end of this section.

3.2 Laboratory Analytical Methods

In accordance with Order 2001-01, laboratory samples were collected at 15 sites, representing 25 percent of the sites where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc, a California Department of Health Services certified laboratory, for analysis of the following constituents:

- Total hardness
- Surfactants (MBAS)
- Oil and grease
- Diazinon and Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)

Samples for bacteria were submitted to Encina Wastewater Authority Laboratory for analysis of following indicators:

- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria

The methods used to perform each of the above analyses along with method detection limits and holding times are listed in Tables 3-1 and 3-2 at the end of this section.

3.3 Quality Assurance and Quality Control (QA/QC)

The Quality Assurance/Quality Control (QA/QC) Plan utilized for this project included applying Environmental Protection Agency (EPA) approved test methods for the field and laboratory analysis of water samples, frequent calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials when necessary. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters were calibrated periodically with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 7.00 ± 0.01 and 10.00 ± 0.01 units. The glass electrode tube was kept moist to preserve the meter's accuracy during field work. The turbidity meter was calibrated and periodically checked for accuracy using standard solutions. The conductivity meter was checked periodically with standard solutions and calibrated as necessary.

Field sample collection containers were first rinsed with distilled water and then with the sample water before sample collection. Upon completion of sampling at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water.

The accuracy of field analytical techniques was assessed at the beginning of the sampling program by analyzing solutions of known concentrations for ammonia, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in the table below.

TABLE 3-1 FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration	Acceptable Range*	Field Test Kit Results
7/11/07	Ammonia - N	1.0 mg/L	0.8 – 1.2 mg/L	1.0 mg/L
7/11/07	Surfactants	1.0 mg/L	0.75 -1.25 mg/L	1.0 mg/L
7/11/07	Nitrate - N	10.0 mg/L	7.0 - 13.0 mg/L	10.4 mg/L
7/11/07	Orthophosphate	3.0 mg/L	2.5 – 3.5 mg/L	2.9 mg/L

Note

* Acceptable range is calculated based on the error associated with the methods as listed in Table 3-2.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis were collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles were obtained from the laboratories, so they did not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples were kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures were followed, and samples were delivered and analyzed within the appropriate holding times, as listed in Table 3-3 below. Completed chain of custody forms are included in Appendix B.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation was necessary, numeric action levels and best professional judgment (described below) were used to interpret the field screening results. If visual and/or analytical evidence of gross contamination was present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation was initiated. Sites that exceeded numeric action levels but were not perceived as an immediate threat to water quality were re-sampled within 24 hours. A source investigation was conducted thereafter if elevated concentrations persisted; the results of those investigations are included in

Section 7 of this report. Recommendations based on these investigations are included in Section 8.

If elevated levels of pollutants were detected in the laboratory analyses, a comprehensive follow-up investigation including re-sampling was conducted after receiving the analytical reports from the laboratory. The following three methods were employed to determine whether immediate or comprehensive follow-up investigations were necessary: (1) Numeric action levels; (2) California Toxics Rule; and (3) best professional judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels were used as the primary approach for interpreting pH, orthophosphate, nitrate, ammonia, methylene blue active substances (MBAS), oil and grease, diazinon, chlorpyrifos, total coliform, fecal coliform, and *Enterococcus* levels (Table 3-4). If pH, orthophosphate, nitrate, ammonia, or surfactants were observed above the numeric action level, a follow-up investigation was conducted within one business day to investigate the source unless best professional judgment indicated otherwise. If oil and grease, diazinon, chlorpyrifos, total coliform, fecal coliform, or *Enterococcus* laboratory analytical results exceeded numeric action levels, then source investigations were conducted, upon receiving results from the lab.

California Toxics Rule

The California Toxics Rule (CTR) Criterion Maximum Concentration (CMC) was used to determine appropriate action levels for dissolved trace metals cadmium, copper, lead, and zinc. The CTR equations provide action levels for each dissolved metal based on the measured total hardness value of the water sample. More information on the CTR can be found at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment was utilized as the primary approach for interpreting conductivity, turbidity, and water temperature and as the secondary approach for interpreting the results of all other field and laboratory analyses. Best professional judgment may conclude that results that exceed action levels or are statistical outliers are likely the result of natural or background factors.

TABLE 3-2
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01 mS/cm	0 – 20 mS/cm	± 2% of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.1°C	0.0°C – 60.0°C	± 0.5°C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703-11 Portable Turbidity Meter***	0.01 NTU	0.01 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) Methylene Blue Active Substances	0.13 mg/L	0.0 mg/L – 3.0 mg/L*	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[3]***	2.26 mg/L**	2.26 mg/L –13.6 mg/L**	± 30%
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate***	0.10 mg/L**	0.10 mg/L – 3.00 mg/L**	Varies with measured concetration[4,5]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[6]***	0.25 mg/L**	0.25 mg/L – 2.61 mg/L**	Varies with measured concetration[4,5]

Notes:

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14 g/mol) to NO_3 (62 g/mol). The detection limit for nitrate is 10.0 mg/L; however, the detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range. "Full range" is equal to the upper limit of the test kit's range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31 g/mol) to PO_4 (95 g/mol). The detection limit for orthophosphate is 0.75 mg/L; however, the detection limit for orthophosphate-P is lowered due to the conversion.

*Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Reporting limit, range, and accuracy information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com. Additional information regarding CHEMetrics accuracy was obtained from the manufacturer via email.

**Reporting limit, range, and accuracy information taken from Hanna Instruments manuals, available online at www.hannainst.com

TABLE 3-3
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Maximum Holding Time
Surfactants (MBAS)	SM 5540 C	0.5 mg/L	48 hours
Oil and grease	EPA 1664	5 mg/L	28 days
Total Hardness	EPA 200.7	10 mg/L	14 days
Cadmium	EPA 6010, 6020, 200.8	0.005 mg/L	6 months
Copper	EPA 6010, 6020 200.8	0.005 mg/L	6 months
Lead	EPA 6010, 6020 200.8	0.005 mg/L	6 months
Zinc	EPA 6010, 6020, 200.8	0.020 mg/L	6 months
Diazinon	EPA 8141A	0.05 µg/L	7 days
Chlorpyrifos	EPA 8141A	0.05 µg/L	7 days
Total Coliform	SM 9222 B*	20 – 1,600,000 CFU/100 mL	6 hours
Fecal Coliform	SM 9222 D*	20 – 160,000 CFU/100 mL	6 hours
Enterococcus	SM 9230 C*	20 – 160,000 CFU/100 mL	6 hours

Note

*For Site BA36, the bacteria analyses were conducted using multiple tube fermentation methods (SM 9221 B, SM 9221 E, and SM 9230) instead of the membrane filtration methods used for the other sites. The reporting limits and holding times are the same for both types of methods.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
pH	<6.5 or >9.0	Basin Plan, with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity), and unusual odors.
Temperature (°C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Values > 5.00 mS/ cm may indicate IC/ID; however, EC may be highly elevated in some regions due to high TDS groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values <0.75 may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium	California Toxic Rule	Use California Toxics Rule Table, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper	California Toxic Rule	
Dissolved Lead	California Toxic Rule	
Dissolved Zinc	California Toxic Rule	
Total Coliform (MPN/ 100 mL)	50,000	Action levels are based on upper 90% confidence interval of Copermittee 2002 dry weather analytical monitoring data.
Fecal Coliform (MPN/ 100 mL)	20,000	
Enterococcus (MPN/ 100 mL)	10,000	

Notes

[1]The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

°C	degrees Celsius
mS/cm	millisiemens per centimeter
mg/L	milligram per liter
IC/ID	illegal connection/illicit discharge
MBAS	methylene blue active substances
MPN/100 mL	most probable number (of colony forming units) per 100 milliliters
NTU	nephelometric turbidity unit
ppb	parts per billion
USEPA	United States Environment Protection Agency
WQO	Water Quality Objectives

4.0 FIELD SCREENING RESULTS

The dry weather monitoring program commenced on July 11, 2007 and completed on July 25, 2007. A total of 61 monitoring stations were visited. Field screening was conducted at the 60 sites where ponded or flowing water was observed. Fifty-four sites had measurable flow, six sites were ponded, and one site was dry. Primary sampling station Site BV15 was observed to be dry; therefore, alternate Sites BV08 was selected as replacements. Altogether, a total of 76 site visits were performed, including visual surveys at the aforementioned dry sites and 15 follow-up visits to sites where one or more constituents were found to exceed specified action levels.

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the field screening program. Weather conditions were recorded at each site and any evidence of dry weather flows was documented. Visual observations of the sample water and the vicinity of the sampling location such as odor, color, clarity, floatable materials, vegetation, and biological organisms were also recorded. Observations are summarized below and presented in Table 4-1.

Light Conditions
The weather condition was most often sunny during field screening. Partly cloudy and overcast conditions were also observed during visits to almost half of the sites.

Odor
Most sites visited during the 2007 field screening program had no observable odors. However, Site AH11 had a chemical odor, and Site BV10 smelled of rotten eggs.

Color
Water samples taken from the majority of the sites were colorless. However, 21 sites had water with a yellow tint, and samples taken from Site AH04 were red in color.

Clarity
The majority of the water samples collected from the visited sites were clear, with negligible suspended particles observed. At eight of the sites water samples were slightly cloudy. The water sample taken at Site BA36 was observed to be initially opaque, but was clear at the time of the follow-up visit for the site.

Floatable Materials
During routine field screening visits, 18 of the 60 sites were observed to have trash in or around the sampling location. The amount of trash encountered at these sites was relatively small, and generally included materials such as paper, plastics, Styrofoam, aluminum cans, and glass bottles. A total of eight sites were observed to have bubbles on the water surface. Foam was observed at sites BA41, BA47, BA48 and EN23. Fecal matter was observed at sites AH09 and BA32.

Vegetation
Vegetative growth ranged from no growth to naturally vegetated riparian areas to excessive amounts of vegetation. Site AH11 had excessive vegetation. 25 sites had normal vegetation, and Site EN02B had limited vegetation. No growth was observed at the rest of

sites including manholes and catch basins, which receive no sunlight, and concrete channels, which usually have no soil.

Biology

Twenty-nine of the sites exposed to sunlight had algal growth, which indicates that water flow is persistent at the site. Insects were observed at 35 sites during field screening. Several of the sampling locations were also inhabited by other organisms such as fish, snails, tadpoles, and crawfish.

Deposits

Fine particulate deposition was observed at approximately 37 sites, while 14 sites had course and fine particulate deposition. The remaining sites had no observable deposits of any kind.

TABLE 4-1
SUMMARY OF FIELD OBSERVATIONS

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
AH03	7/11/07	11:10	Overcast	None	None	Clear	Trash	None	None	Insects, Algae, Snails
AH04	7/16/07	16:20	Partly Cloudy	None	Red	Slightly Cloudy	Trash, Bubbles	None	None	Insects, Algae, Snails
AH04 (follow-up)	7/17/07	14:40	Partly Cloudy	None	Red	Slightly Cloudy	Trash, Bubbles	None	None	Insects, Algae, Snails
AH08	7/12/07	9:00	Partly Cloudy	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae, Larvae
AH09	7/16/07	15:45	Partly Cloudy	None	Yellow	Slightly Cloudy	Fecal Matter	None	None	None
AH10	7/11/07	10:05	Overcast	None	Yellow	Clear	None	Fine Particulates	Normal	Insects, Algae, Snails
AH10(follow-up)	7/13/07	13:30	Sunny	None	None	Clear	None	Fine Particulates	Normal	Insects, Algae, Snails
AH11	7/19/07	11:30	Overcast	Chemical	Yellow	Clear	Trash	Fine Particulates	Excessive	Algae
AH12	7/19/07	10:15	Overcast	None	None	Slightly Cloudy	Trash, Sheen	Fine Particulates	Normal	Algae
AH13	7/19/07	12:30	Overcast	None	None	Clear	None	Fine Particulates	None	Insects, Algae, Snails
AH13 (follow-up)	7/20/07	11:10	Overcast	None	None	Clear	None	Fine Particulates	None	Insects, Algae, Snails
AH18	7/17/07	16:25	Partly Cloudy	None	Yellow	Clear	Trash	Fine Particulates	Normal	Insects, Snails
AH24	7/11/07	11:40	Partly Cloudy	None	None	Clear	None	Coarse & Fine Particulates	Normal	Insects, Fish, larvae, crawfish
AH27	7/18/07	9:00	Overcast	None	Yellow	Clear	None	Fine Particulates	None	Insects
AH28	7/18/07	9:45	Overcast	None	None	Clear	Leaves	Fine Particulates	Normal	Insects, Algae, Snails
AH30	7/13/07	12:00	Sunny	None	None	Clear	None	Fine Particulates	Normal	Insects, Algae, Fish, Tadpoles
AH31	7/13/07	9:30	Sunny	None	Yellow	Clear	Trash	Coarse & Fine Particulates	Normal	Insects

TABLE 4-1
SUMMARY OF DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
AH32	7/18/07	14:20	Sunny	None	None	Clear	None	Fine Particulates	None	Algae
AH45	7/11/07	12:20	Sunny	None	None	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Snails/Fish
AH46	7/11/07	14:10	Sunny	None	None	Clear	None	Coarse & Fine Particulates	Normal	Insects
AH59	7/18/07	15:20	Sunny	None	None	Clear	None	Coarse & Fine Particulates	Normal	Insects, Algae
AH61	7/18/07	16:15	Sunny	None	None	Clear	None	Fine Particulates	None	None
AH63	7/18/07	12:20	Sunny	None	None	Clear	None	Fine Particulates	None	None
AH65	7/18/07	11:10	Partly Cloudy	None	Yellow	Clear	None	Fine Particulates	None	None
AH65 (follow-up)	7/19/07	8:25	Overcast	None	None	Clear	None	Fine Particulates	None	None
BA02	7/25/07	11:50	Sunny	None	None	Clear	Trash	Fine Particulates	Normal	Algae
BA03	7/25/07	14:25	Sunny	None	None	Clear	None	Fine Particulates	Normal	Insects, Algae, Fish
BA04	7/24/07	12:15	Overcast	None	Yellow	Clear	Trash, Leaves	Fine Particulates	None	Snails
BA06	7/12/07	9:30	Partly Cloudy	None	Yellow	Clear	None	Fine Particulates	None	Snails
BA06(follow-up)	7/16/07	13:00	Partly Cloudy	None	None	Clear	Leaves	None	None	Snails
BA07	7/24/07	13:50	Overcast	None	Yellow	Clear	None	Coarse & Fine Particulates	None	None
BA13	7/12/07	10:25	Sunny	None	Yellow	Slightly Cloudy	Trash	Fine Particulates	None	Snails
BA13(follow-up)	7/13/07	14:50	Sunny	None	None	Clear	Trash	Fine Particulates	None	Snails

TABLE 4-1
SUMMARY OF DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
BA13 (follow-up)	7/16/07	12:00	Partly Cloudy	None	Brown	Slightly Cloudy	Trash	None	None	None
BA26	7/25/07	11:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
BA27	7/23/07	13:35	Partly Cloudy	None	Yellow	Clear	Trash, Bubbles	Coarse & Fine Particulates	Normal	Insects, Algae, Snails, Larvae
BA32	7/23/07	15:30	Sunny	None	Yellow	Clear	Bubbles	None	None	Insects
BA34	7/23/07	14:20	Partly Cloudy	None	None	Clear	None	Fine Particulates	None	Insects, Algae, Snails
BA36	7/12/07	10:40	Sunny	None	Yellow	Opaque	Trash	Fine Particulates	Normal	Insects, Algae
BA36 (follow-up)	7/13/07	15:35	Sunny	None	None	Clear	Trash, Bubbles	Fine Particulates	Normal	Insects, Algae
BA40	7/12/07	11:25	Sunny	None	None	Clear	Trash	Coarse & Fine Particulates	None	Insects, Algae, Other: Worms
BA40 (follow-up)	7/25/07	12:50	Sunny	None	None	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae, Snails
BA41	7/24/07	15:40	Sunny	None	None	Clear	Trash, Foam	Coarse & Fine Particulates	Normal	Insects, Algae, Frogs
BA43	7/24/07	16:40	Sunny	None	None	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae
BA47	7/24/07	9:00	Sunny	None	None	Slightly Cloudy	Foam	Fine Particulates	None	None
BA47 (follow-up)	7/25/07	8:50	Sunny	None	None	Slightly Cloudy	Foam	Fine Particulates	None	None
BA48	7/25/07	9:35	Sunny	None	Yellow	Clear	Foam	Fine Particulates	Normal	Insects, Algae
BA49	7/25/07	15:10	Sunny	None	None	Clear	None	None	None	None

TABLE 4-1
SUMMARY OF DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
BA51	7/11/07	14:10	Sunny	None	None	Clear	Trash, Bubbles	Coarse & Fine Particulates	Normal	Algae, Larvae, Dead Crawdad
BA52	7/24/07	14:40	Partly Cloudy	None	Yellow	Clear	None	Fine Particulates	None	None
BV02	7/11/07	11:15	Partly Cloudy	None	Yellow	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Larva
BV02 (follow-up)	7/16/07	9:50	Partly Cloudy	None	None	Clear	Trash, Bubbles, Sheen	Coarse & Fine Particulates	Normal	Insects, Snails
BV04A	7/20/07	8:20	Overcast	None	Yellow	Slightly Cloudy	Sheen	Fine Particulates	Normal	Insects, Algae, Snails, Fish
BV06	7/16/07	14:35	Sunny	None	None	Clear	Trash	Fine Particulates	Normal	Insects
BV08	7/13/07	10:30	Sunny	None	None	Clear	Trash	Fine Particulates	Normal	Algae
BV09	7/11/07	16:15	Sunny	None	None	Clear	None	None	None	Snail, Worm
BV10	7/12/07	15:05	Sunny	Rotten eggs	None	Clear	None	Fine Particulates	Normal	Insects, Algae, Larva
BV15*	7/12/07	14:35	Sunny	na	na	na	na	None	None	None
BV16	7/12/07	15:50	Sunny	None	None	Clear	None	Fine Particulates	None	Snails
EN02A	7/17/07	15:15	Partly Cloudy	None	Yellow	Clear	Bubbles	Coarse & Fine Particulates	Normal	Insects, Algae, Snails
EN02B	7/11/07	10:00	Overcast	None	Yellow	Clear	None	Fine Particulates	Limited	Insects, Algae, Larva
EN02C	7/19/07	14:10	Overcast	None	None	Clear	None	Fine Particulates	None	Insects, Algae
EN02C (follow-up)	7/20/07	9:40	Overcast	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae
EN09	7/12/07	11:45	Sunny	None	None	Clear	Trash	Fine Particulates	Normal	Insects, Snails, Fish, Crawdads, shrimp

TABLE 4-1
SUMMARY OF DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
EN14	7/23/07	8:40	Overcast	None	None	Clear	None	None	None	Insects, Spiders
EN14A	7/23/07	9:30	Overcast	None	None	Clear	Trash	Fine Particulates	Normal	Insects, Algae
EN14A (follow-up)	7/24/07	11:50	Sunny	None	None	Clear	Trash	Fine Particulates	Normal	Insects, Algae
EN18	7/20/07	14:55	Partly Cloudy	None	None	Clear	None	Fine Particulates	None	Insects, Algae
EN19	7/12/07	8:50	Partly Cloudy	None	None	Clear	Bubbles	Coarse & Fine Particulates	Normal	Insects, Algae
EN20	7/19/07	16:10	Partly Cloudy	None	None	Clear	None	Fine Particulates	None	Insects, Algae
EN21	7/23/07	11:40	Partly Cloudy	None	None	Slightly Cloudy	Bubbles	Fine Particulates	None	Snails
EN21 (follow-up)	7/24/07	11:20	Sunny	None	None	Clear	Bubbles	Fine Particulates	None	Snails
EN23	7/23/07	10:45	Partly Cloudy	None	None	Slightly Cloudy	Bubbles, Foam	Fine Particulates	None	None
EN23 (follow-up)	7/24/07	10:30	Sunny	None	None	Slightly Cloudy	Bubbles, Foam	Fine Particulates	None	None
EN24	7/19/07	15:10	Partly Cloudy	None	Yellow	Clear	Organic debris	Fine Particulates	None	Insects
EN31	7/20/07	14:00	Partly Cloudy	None	None	Clear	None	None	None	None

Notes:
ns = not sampled (dry site)
* Site BV08 was substituted for dry Site BV15

4.2 Field Analytical Results

Field analyses were conducted at all sites with ponded or flowing water. Chemical analyses were conducted using a CHEMetrics field test kits for surfactants. A CHEMetrics V-2000 Multi-Analyte LED Photometer and Vacu-vials® was used for nitrate, ammonia and orthophosphate-P measurements. pH, conductivity, and temperature were measured using a Hanna Instruments Portable pH/EC/TDS/Temperature Meter (HI 991301); and turbidity was measured using a Hanna Instruments Portable Turbidity Meter (HI 93203-11). A summary of the field analytical results is presented in Table 4-2. Table 4-3 presents the results of all field analyses conducted at the sampled sites. Graphs of each parameter analyzed and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Number of Exceedances
Flow Rate (gpm)	299	<1	14.3	3.0	na
Temperature (ºC)	33.8	19.6	23.0	22.8	na
pH	8.8	4.9	7.59	7.7	3
Turbidity (NTU)	68.0	0.1	7.27	3.47	5
Conductivity (mS/cm)	9.74	0.85	3.63	3.22	0
Ammonia Nitrogen (mg/L NH_3-N)	0.8	nd	0.25	0.2	0
Surfactants (mg/L MBAS)	>3.0	0.25	0.54	0.50	1
Nitrate Nitrogen (mg/L NO_3-N)	48.6	0.1	3.58	1.21	3
Orthophosphate Phosphorus (mg/L PO_4-P)	2.02	0.01	0.37	0.26	1

Note: Statistics are calculated from the results of the routine site visits. A total of 60 sites were sampled
nd = not detected
na = not applicable

Flow rates are the measurement of the volume of fluid passing through a given surface per unit time. Flow rate measurements are particularly important because they are needed when calculating the load or particular amount of a pollutant discharged. Best professional judgment is used when determining whether or not the flow rate at a particular site is abnormal or possibly indicating an IC/ID. Sites with measurable flow ranged from less than 1.0 gpm to 299 gpm, with an average of 14.3 gpm and a median of 3.0 gpm, as shown in Table 4-2. The highest flow rate was measured at Site BA51. None of the sites sampled had flow rates potentially indicating an IC/ID.

Water temperature is an important physical parameter because it is needed to assess the significance of other parameters such as pH and conductivity. Furthermore, the aquatic

habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. There is no established action level for water temperature. However, the field crew uses best professional judgment when determining whether or not water temperature is abnormal or possibly indicating an IC/ID. Water temperature was measured in the field immediately upon sample collection at each site with ponded or flowing water. Temperature readings ranged from 19.6 to 33.8 degrees Celsius (℃), with an average of 23℃ and a median of 22.75℃. The maximum water temperature of 33.8℃ was recorded at Site AH04, in the late afternoon. The minimum water temperature of 19.6℃ was measured in the morning at Site AH08. Graph 4-1 presents the results of temperature readings at all sites. None of the sites sampled had temperatures potentially indicating an IC/ID.

The **pH** is an expression of the acidity or alkalinity of a water sample. This is a critical factor in determining water quality, as the pH of an aquatic system will drive a multitude of chemical reactions, including the availability of nutrients and the solubility of chemical substances, especially heavy metals. The accepted action level range for pH is from 6.5 to 9.0. The pH values measured during field screening ranged from 4.9 to 8.8, with an average of 7.6 and a median of 7.7. The highest pH reading of 8.8 was observed at AH63 around noon, and the lowest pH during routine field screening was 4.9 recorded at EN23 during the first visit to the site. A total of three sites, BA47, EN14A and EN23, had pH values above or below the accepted action level range. Graph 4-2 presents the results of pH readings at all sites.

Turbidity indicates the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation (thus reducing photosynthetic capacity), but excessive suspended particles can also absorb heat and elevate water temperatures. There is no established action level for turbidity, therefore the field crew used best professional judgment when determining whether or not a turbidity measurement required further investigation. Turbidity measurements ranged from 0.1 to 68 NTU, with an average of 7.27 NTU and a median of 3.47 NTU. The highest turbidity reading of 68 NTU was recorded at Site BA36, and the lowest measurement of 0.1 NTU was observed at Sites AH45, BV04A and BV09. A total of five sites, AH10, BA13, BA36, EN21 and EN23, required further investigation for elevated turbidity measurements. Graph 4-3 presents the results of turbidity measurements at all sites.

Conductivity values indicate the total concentration of ions in an aquatic system and the ability of water to conduct electricity. This parameter can be used to assess the mineral content of water or to help determine the presence of dissolved pollutants. There is no established action level for conductivity, therefore the field crew used best professional judgment when determining whether or not conductivity results required further investigation. Conductivity readings ranged from 0.85 to 9.74 mS/cm, with an average of 3.63 mS/cm and a median of 3.22 mS/cm. The highest conductivity measurement of 9.74 mS/cm was recorded at Site BA13, while the lowest reading of 0.85 mS/cm was taken at Site AH09. None of the sites sampled required further investigation for abnormally high conductivity measurements. Graph 4-4 illustrates the results of conductivity measurements at all sites.

Ammonia Nitrogen is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment, however, in higher quantities it can become toxic to fish and other organisms. The established action level for ammonia is 1.0 mg/L. Ammonia concentrations measured in sampled water ranged from not detected to 0.8 mg/L NH_3-N, with an average of 0.25 mg/L and a median of 0.2 mg/L. The highest ammonia concentration was observed at Sites AH61 and BA36, while Sites AH03 AH30, AH63 and BA06 had no measurable ammonia concentration. Sixteen sites had an ammonia concentration of 0.1 mg/L. None of the sites sampled had ammonia concentrations exceeding the action level. Graph 4-5 shows the results of the ammonia analyses at all sampling locations.

Surfactants in water samples often indicate illegal discharges from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms. The established action level for surfactant concentration is 1.0 mg/L MBAS. During field analysis, surfactant concentrations ranged from 0.25 mg/L to greater than 3.0 mg/L, with an average of 0.54 mg/L and a median of 0.5 mg/L. More than half of the sites had a surfactant concentration of 0.5 mg/L or less. The highest concentration of surfactants, greater than 3.0 mg/L, was found at Site AH04. This was the only site to exceed the action level for surfactant concentration. Graph 4-6 reflects the results of the surfactant analyses at all sampling locations.

Nitrate Nitrogen is a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, which can later cause the suffocation of fish and other aquatic organisms by depleting oxygen from the water during decomposition. During the field analysis, nitrate was measured in mg/L NO_3 and converted into mg/L nitrate-N using a conversion factor of 0.226. This process is explained in footnote 3 of Table 3-2. The established action level for nitrate nitrogen concentration is 10.0 mg/L. Measured nitrate concentrations ranged from 0.1 to 48.6 mg/L NO_3-N, with an average of 3.58 mg/L and a median of 1.2 mg/L. The highest nitrate concentration of 48.6 mg/L was observed at Site AH13 during first visit to the site. The lowest measurable amount of nitrate, of 0.1 mg/L, was recorded at Site EN09. Three sites, AH10, AH13 and EN02C, each had nitrate nitrogen concentrations exceeding the action level. Graph 4-7 presents the results of the nitrate analyses at all sampling locations.

Orthophosphate Phosphorus, also known as reactive phosphorus, is also a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate, phosphate pollution can cause nutrient enrichment (eutrophication), which stimulates algal growth and eventually lowers aquatic dissolved oxygen to levels that are dangerous for aquatic life. Because it is commonly the limiting nutrient in plant growth, even low levels of phosphate can cause significant algal growth. During the field analysis, orthophosphate was measured in mg/L PO_4 and converted into mg/L orthophosphate-P using a conversion factor of 0.326. This process is explained in Note 6 of Table 3-2. The established action level for orthophosphate phosphorus is 2.0 mg/L. Orthophosphate phosphorus was measured at concentrations ranging from not detected to 2.02 mg/L PO_4-P, with an average of 0.37 mg/L and a median of 0.26 mg/L. Sites EN18, EN19 and EN20 had no measurable orthophosphate concentration, while Site AH 65 had an orthophosphate phosphorus concentration of 2.02 mg/L during the initial visit to the site and dropped to 1.0

mg/L during the second visit to the site. Site AH65 was the only site with an orthophosphate phosphorus concentration recorded above the action level. Graph 4-8 illustrates the results of orthophosphate-P at all sampling locations.

TABLE 4-3
SUMMARY OF FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow	Temp.	pH	Turbidity	Conductivity	Surfactants	Ammonia	Nitrate	Orthophosphate Phosphorus
			gpm	°C		NTU	mS/cm	MBAS mg/L	NH_3-N mg/L	NO_3-N mg/L	PO_4-P mg/L
AH03	7/11/07	11:10	20	22.1	7.6	3.89	1.63	0.25	nd	6.62	0.16[1]
AH04	7/16/07	16:20	Ponded	33.8	8.4	17.01	8.63	**>3.0**	0.2	0.23[1]	0.49
AH04 (follow-up)	7/17/07	14:40	<1	29.5	7.9	nt	5.36	**2.0**	nt	nt	nt
AH08	7/12/07	9:00	14	19.6	7.9	1.39	1.64	0.38	0.1	9.18	0.10[1]
AH09	7/16/07	15:45	Ponded	23.9	7.8	21.03	0.85	0.38	0.1	0.52[1]	0.29
AH10	7/11/07	10:05	48	22.1	7.0	**28.7**	2.08	0.75	0.1	**32.1**	0.20[1]
AH10(follow-up)	7/13/07	13:30	27	28.7	8.6	9.67	2.21	nt	nt	**26.7**	nt
AH11	7/19/07	11:30	Ponded	22.6	7.4	2.72	0.97	0.75	0.1	0.23[1]	0.59
AH12	7/19/07	10:15	2	23.0	8.0	9.27	1.11	0.75	0.1	3.54	0.62
AH13	7/19/07	12:30	11	21.6	7.4	0.75	2.20	0.75	0.2	**48.6**	0.10[1]
AH13 (follow-up)	7/20/07	11:10	9	21.2	7.5	nt	2.20	nt	nt	**30.7**	nt
AH18	7/17/07	16:25	3	24.1	7.6	7.23	2.73	0.5	0.2	0.23[1]	0.98
AH24	7/11/07	11:40	10	23.3	7.3	1.32	5.93	0.5	0.5	2.53	0.03[1]
AH27	7/18/07	9:00	<1	19.6	8.4	4.63	1.59	0.5	0.1	0.20[1]	1.56
AH28	7/18/07	9:45	1	21.3	7.6	2.99	4.34	0.63	0.2	0.14[1]	0.03[1]
AH30	7/13/07	12:00	2	22.0	7.7	1.23	1.45	0.25	nd	0.32[1]	0.23[1]
AH31	7/13/07	9:30	1	21.3	7.7	3.49	1.23	0.25	0.2	0.14[1]	0.52
AH32	7/18/07	14:20	146	26.4	8.3	2.89	2.14	0.25	0.2	0.17[1]	0.07[1]
AH45	7/11/07	12:20	10	20.5	8.2	0.10	3.99	0.5	0.1	2.08[1]	0.20[1]
AH46	7/11/07	14:10	10	21.6	7.7	4.57	8.02	0.75	0.4	4.86	0.07[1]
AH59	7/18/07	15:20	1	22.6	7.7	3.14	2.45	0.38	0.2	0.41[1]	0.10[1]
AH61	7/18/07	16:15	1	25.5	7.7	3.59	5.12	0.38	0.8	1.54[1]	0.10[1]
AH63	7/18/07	12:20	1	21.5	8.8	0.71	1.87	0.25	nd	0.45[1]	0.42
AH65	7/18/07	11:10	2	23.0	7.7	2.9	1.48	0.50	0.6	0.34[1]	**2.02**
AH65 (follow-up)	7/19/07	8:25	3	22.2	7.9	1.37	1.46	nt	nt	nt	1.01
BA02	7/25/07	11:50	10	22.5	7.6	1.33	1.38	0.50	0.5	2.19[1]	0.91
BA03	7/25/07	14:25	Ponded	25.2	7.4	3.44	2.92	0.50	0.2	1.79[1]	0.26
BA04	7/24/07	12:15	3	24.6	7.3	2.21	3.01	0.50	0.2	2.55	0.65

TABLE 4-3
SUMMARY OF FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow	Temp.	pH	Turbidity	Conductivity	Surfactants	Ammonia	Nitrate	Orthophosphate Phosphorus
			gpm	°C		NTU	mS/cm	MBAS mg/L	NH_3-N mg/L	NO_3-N mg/L	PO_4-P mg/L
BA06	7/12/07	9:30	2	23.1	7.3	2.51	2.01	0.25	nd	1.92[1]	0.62
BA06 (follow-up)	7/16/07	13:00	Ponded	23.3	7.5	nt	3.40	nt	nt	nt	nt
BA07	7/24/07	13:50	1	22.7	8.0	3.75	1.82	0.25	0.1	1.54[1]	0.62
BA13	7/12/07	10:25	5	24.8	7.6	**30.97**	9.74	0.75	0.4	7.73	0.33
BA13 (follow-up)	7/13/07	14:50	5	22.9	7.9	12.07	10.05	nt	nt	nt	nt
BA13 (follow-up)	7/16/07	12:00	5	23.9	7.9	21.20	9.53	nt	nt	nt	nt
BA26	7/25/07	11:00	3	24.6	7.8	3.80	5.97	0.63	0.5	0.93[1]	0.07[1]
BA27	7/23/07	13:35	16	23.4	7.4	9.05	4.55	0.50	0.3	0.70[1]	0.78
BA32	7/23/07	15:30	2	24.8	7.3	3.30	2.45	0.63	0.3	1.04[1]	0.59
BA34	7/23/07	14:20	2	22.5	8.0	0.51	5.74	0.50	0.1	0.61[1]	0.03[1]
BA36	7/12/07	10:40	10	21.6	8.0	**68**	7.07	0.25	0.8	0.43[1]	0.46
BA36 (follow-up)	7/13/07	15:35	10	22.7	8.1	7.36	7.55	nt	nt	nt	nt
BA40	7/12/07	11:25	20	24.1	7.9	0.29	3.25	0.38	0.1	0.88[1]	0.23[1]
BA40 (follow-up)	7/25/07	12:50	31	23.7	7.5	nt	2.92	nt	nt	nt	nt
BA41	7/24/07	15:40	10	24.0	7.5	4.28	4.98	0.50	0.2	0.93[1]	0.26
BA43	7/24/07	16:40	Ponded	22.8	7.5	2.51	2.67	0.50	0.3	1.06[1]	0.33
BA47	7/24/07	9:00	10	23.8	**6.2**	11.20	4.51	0.50	0.3	0.75[1]	0.26
BA47 (follow-up)	7/25/07	8:50	15	23.4	**6.5**	nt	2.72	nt	nt	nt	nt
BA48	7/25/07	9:35	2	22.2	7.4	6.46	3.60	0.50	0.3	1.36[1]	0.23[1]
BA49	7/25/07	15:10	15	22.7	7.2	0.61	2.17	0.25	0.1	2.21[1]	0.13[1]
BA51	7/11/07	14:10	299	22.4	7.6	1.10	5.36	0.50	0.1	0.45[1]	0.03[1]
BA52	7/24/07	14:40	15	24.3	7.3	7.63	4.10	0.63	0.3	1.54[1]	0.55
BV02	7/11/07	11:15	3	22.6	7.7	10.05	1.19	0.63	0.2	1.47[1]	0.29
BV02 (follow-up)	7/16/07	9:50	2	20.3	7.8	nt	1.58	nt	nt	nt	nt
BV04A	7/20/07	8:20	1	22.8	7.7	11.33	3.19	0.38	0.3	0.29[1]	0.10[1]
BV06	7/16/07	14:35	3	23.5	7.7	0.10	3.90	0.5	0.1	5.2	0.2[1]
BV08	7/13/07	10:30	3	23.0	7.8	3.6	4.76	0.5	0.2	3.07	0.26
BV09	7/11/07	16:15	1	24.7	7.9	0.09	4.88	0.5	0.1	2.03[1]	0.32

TABLE 4-3
SUMMARY OF FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow	Temp.	pH	Turbidity	Conductivity	Surfactants	Ammonia	Nitrate	Orthophosphate Phosphorus
			gpm	°C		NTU	mS/cm	MBAS mg/L	NH_3-N mg/L	NO_3-N mg/L	PO_4-P mg/L
BV10	7/12/07	15:05	1	21.5	7.7	0.32	5.23	0.5	0.1	2.08[1]	0.29
BV15*	7/12/07	14:35	Dry	ns	ns	ns	ns	ns	ns	ns	ns
BV16	7/12/07	15:50	5	24.6	7.9	7.52	1.76	0.68	0.5	0.97[1]	0.36
EN02A	7/17/07	15:15	Ponded	22.8	8.5	9.66	2.27	0.5	0.3	1.65[1]	0.62
EN02B	7/11/07	10:00	10	22.7	8.7	4.87	2.79	0.5	0.2	2.19[1]	0.09[1]
EN02C	7/19/07	14:10	1	21.1	8.3	0.54	4.81	0.75	0.1	**40.6**	0.72
EN02C (follow-up)	7/20/07	9:40	1	19.3	8.3	nt	4.80	nt	nt	**72.3**	nt
EN09	7/12/07	11:45	5	21.2	7.4	3.98	5.92	0.62	0.2	0.09[1]	0.03[1]
EN14	7/23/07	8:40	2	21.3	7.8	1.22	2.50	0.38	0.2	3.59	0.13[1]
EN14A	7/23/07	9:30	2	21.3	**5.9**	3.38	3.42	0.5	0.2	1.56[1]	0.05[1]
EN14A (follow-up)	7/24/07	11:50	2	23.1	**5.5**	nt	4.56	nt	nt	nt	nt
EN18	7/20/07	14:55	3	23.3	6.7	5.32	6.22	0.63	0.3	0.18[1]	nd
EN19	7/12/07	8:50	15.6	22.3	7.4	0.43	4.95	0.5	0.2	0.2[1]	nd
EN20	7/19/07	16:10	3	22.1	7.1	6.40	6.56	0.63	0.3	0.17[1]	nd
EN21	7/23/07	11:40	2	22.8	6.9	**28.20**	1.65	0.25	0.5	1.58[1]	1.21
EN21 (follow-up)	7/24/07	11:20	2	25.6	**6.3**	4.32	4.30	nt	nt	nt	nt
EN23	7/23/07	10:45	<1	23.2	**4.9**	**47.87**	4.52	0.63	0.3	1.70[1]	0.03[1]
EN23 (follow-up)	7/24/07	10:30	<1	23.4	**5.9**	36.51	4.72	nt	nt	nt	nt
EN24	7/19/07	15:10	<1	24.1	8.1	2.04	3.41	0.5	0.2	0.16[1]	0.07[1]
EN31	7/20/07	14:00	1	22.5	7.2	2.51	5.36	0.5	0.2	0.70[1]	0.01[1]

Notes:
nd= not detected
ns = not samples (dry site)
nt = not tested
[1] Value reported is below the Practical Detection Limit (PDL)
* BV08 was an Alternate site, as Site BV15 was found dry
Red values were at or above the measured constituent's action level
Yellow shaded area denotes follow-up investigations
Light blue shaded area denotes field and laboratory sampling locations

GRAPH 4-1: Temperature

Action Level is Best Professional Judgment

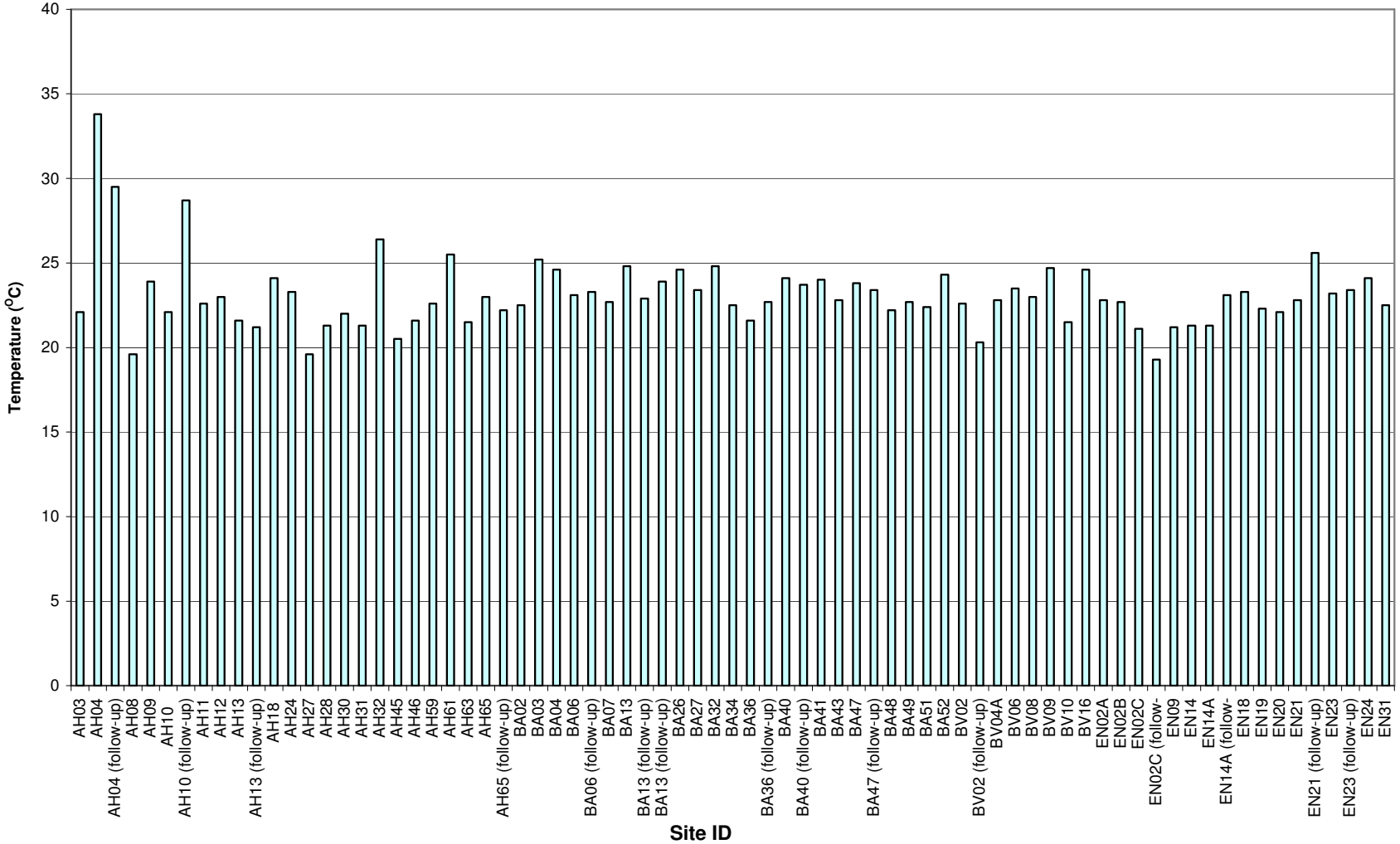

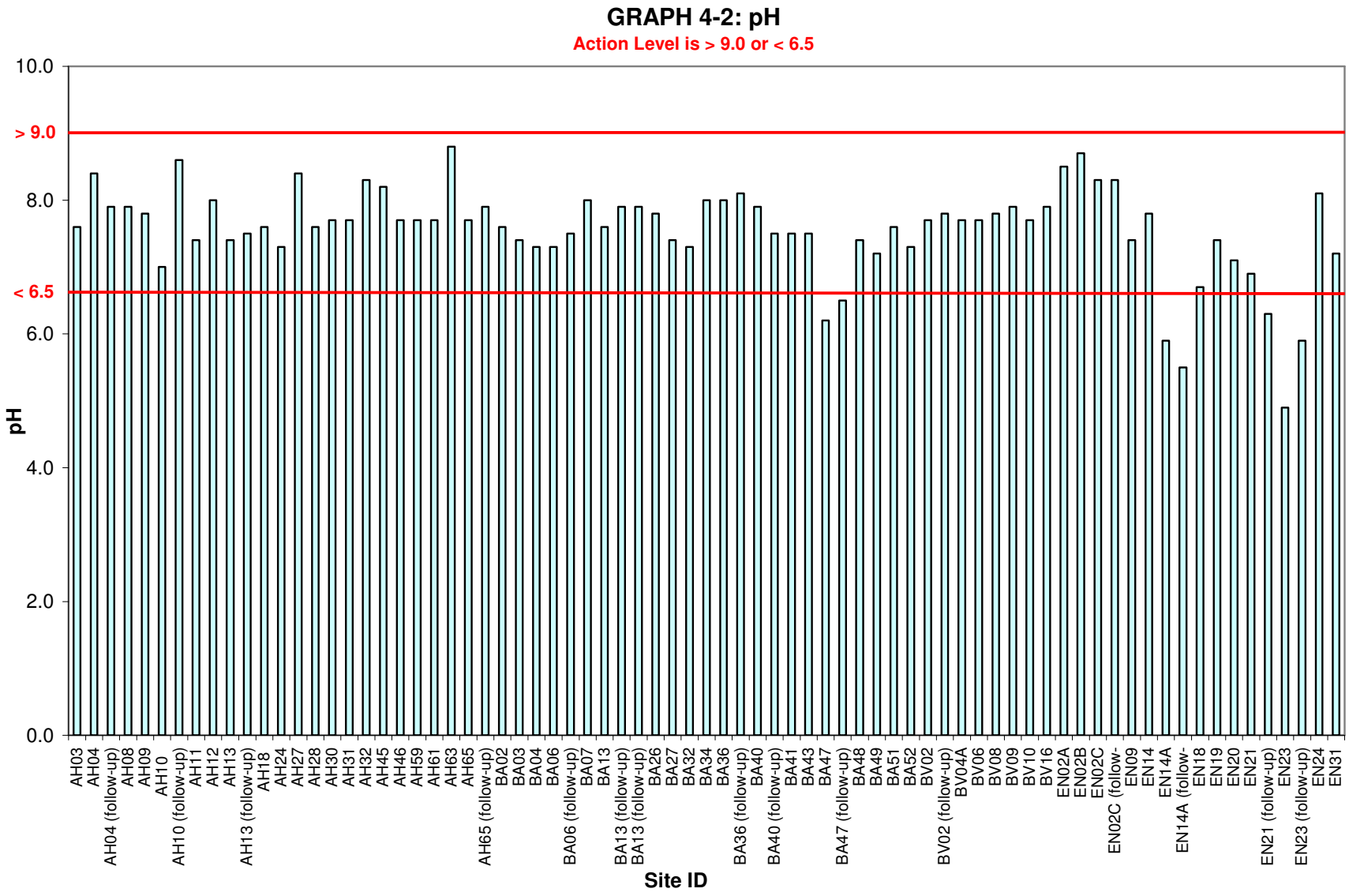
GRAPH 4-2: pH
Action Level is > 9.0 or < 6.5
10.0
> 9.0
8.0
< 6.5
6.0
4.0
2.0
0.0
pH
AH03
AH04
AH04 (follow-up)
AH08
AH09
AH10
AH10 (follow-up)
AH11
AH12
AH13
AH13 (follow-up)
AH18
AH24
AH27
AH28
AH30
AH31
AH32
AH45
AH46
AH59
AH61
AH63
AH65
AH65 (follow-up)
BA02
BA03
BA04
BA06
BA06 (follow-up)
BA07
BA13
BA13 (follow-up)
BA13 (follow-up)
BA26
BA27
BA32
BA34
BA36
BA36 (follow-up)
BA40
BA40 (follow-up)
BA41
BA43
BA47
BA47 (follow-up)
BA48
BA49
BA51
BA52
BV02
BV02 (follow-up)
BV04A
BV06
BV08
BV09
BV10
BV16
EN02A
EN02B
EN02C
EN02C (follow-
EN09
EN14
EN14A
EN14A (follow-
EN18
EN19
EN20
EN21
EN21 (follow-up)
EN23
EN23 (follow-up)
EN24
EN31
Site ID

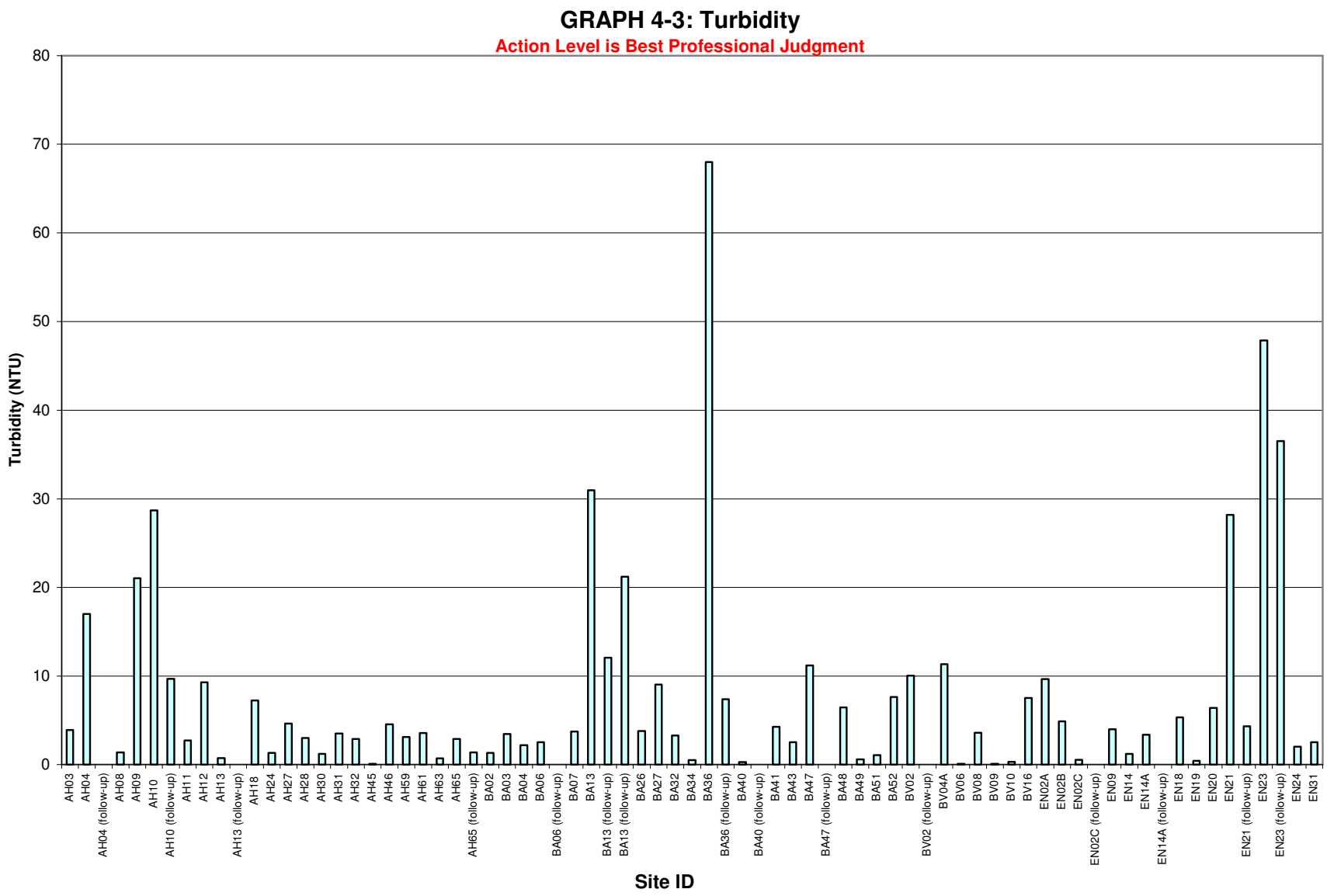
GRAPH 4-3: Turbidity
Action Level is Best Professional Judgment
Turbidity (NTU)
0
10
20
30
40
50
60
70
80
AH03
AH04
AH04 (follow-up)
AH08
AH09
AH10
AH10 (follow-up)
AH11
AH12
AH13
AH13 (follow-up)
AH18
AH24
AH27
AH28
AH30
AH31
AH32
AH45
AH46
AH59
AH61
AH63
AH65
AH65 (follow-up)
BA02
BA03
BA04
BA06
BA06 (follow-up)
BA07
BA13
BA13 (follow-up)
BA13 (follow-up)
BA26
BA27
BA32
BA34
BA36
BA36 (follow-up)
BA40
BA40 (follow-up)
BA41
BA43
BA47
BA47 (follow-up)
BA48
BA49
BA51
BA52
BV02
BV02 (follow-up)
BV04A
BV06
BV08
BV09
BV10
BV16
EN02A
EN02B
EN02C
EN02C (follow-up)
EN09
EN14
EN14A
EN14A (follow-up)
EN18
EN19
EN20
EN21
EN21 (follow-up)
EN23
EN23 (follow-up)
EN24
EN31
Site ID

GRAPH 4-4: Conductivity

Action Level is Best Professional Judgment

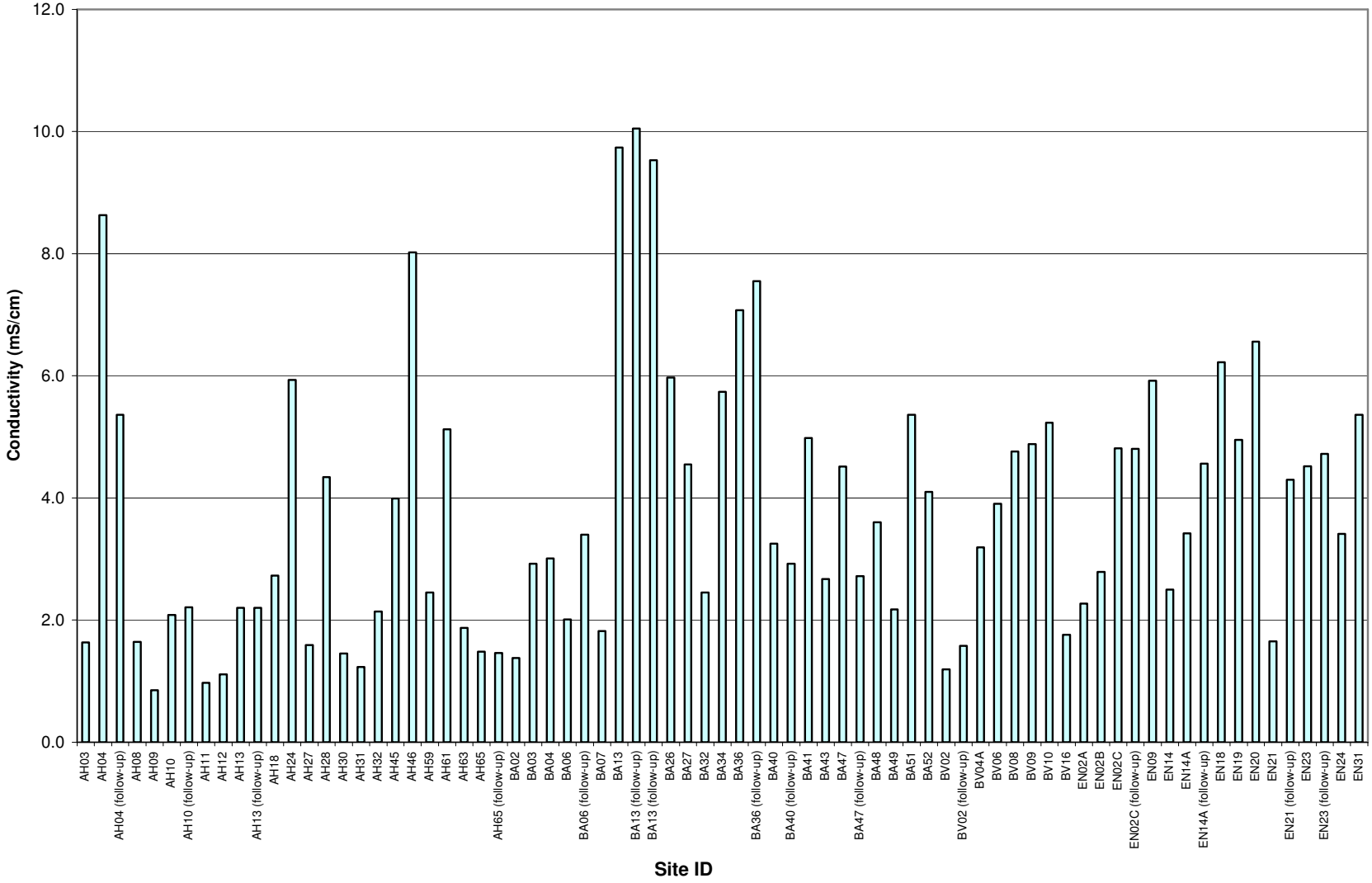

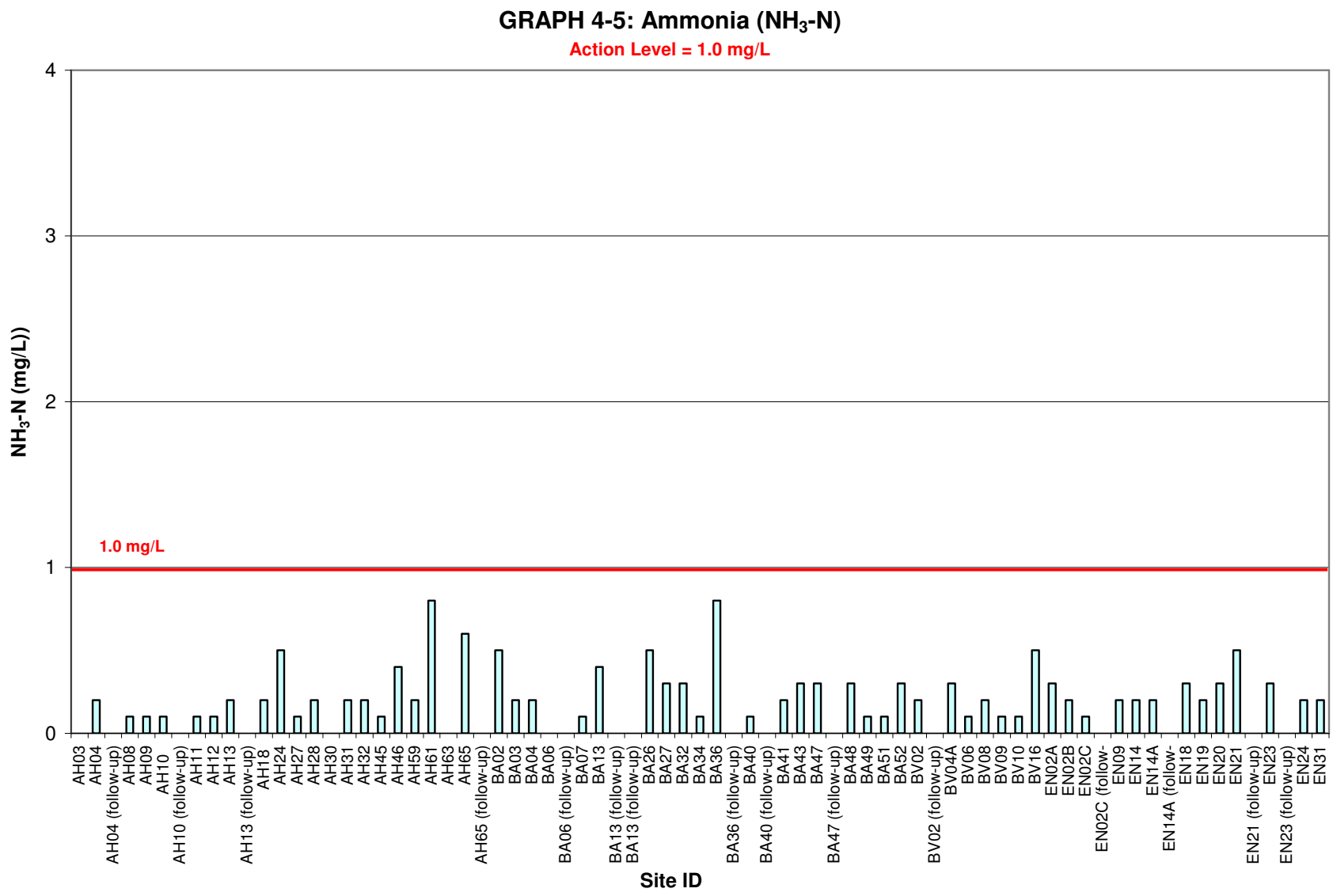
GRAPH 4-5: Ammonia (NH_3-N)
Action Level = 1.0 mg/L
NH_3-N (mg/L))
4
3
2
1
0
1.0 mg/L
AH03
AH04
AH04 (follow-up)
AH08
AH09
AH10
AH10 (follow-up)
AH11
AH12
AH13
AH13 (follow-up)
AH18
AH24
AH27
AH28
AH30
AH31
AH32
AH45
AH46
AH59
AH61
AH63
AH65
AH65 (follow-up)
BA02
BA03
BA04
BA06
BA06 (follow-up)
BA07
BA13
BA13 (follow-up)
BA13 (follow-up)
BA26
BA27
BA32
BA34
BA36
BA36 (follow-up)
BA40
BA40 (follow-up)
BA41
BA43
BA47
BA47 (follow-up)
BA48
BA49
BA51
BA52
BV02
BV02 (follow-up)
BV04A
BV06
BV08
BV09
BV10
BV16
EN02A
EN02B
EN02C
EN02C (follow-
EN09
EN14
EN14A
EN14A (follow-
EN18
EN19
EN20
EN21
EN21 (follow-up)
EN23
EN23 (follow-up)
EN24
EN31
Site ID

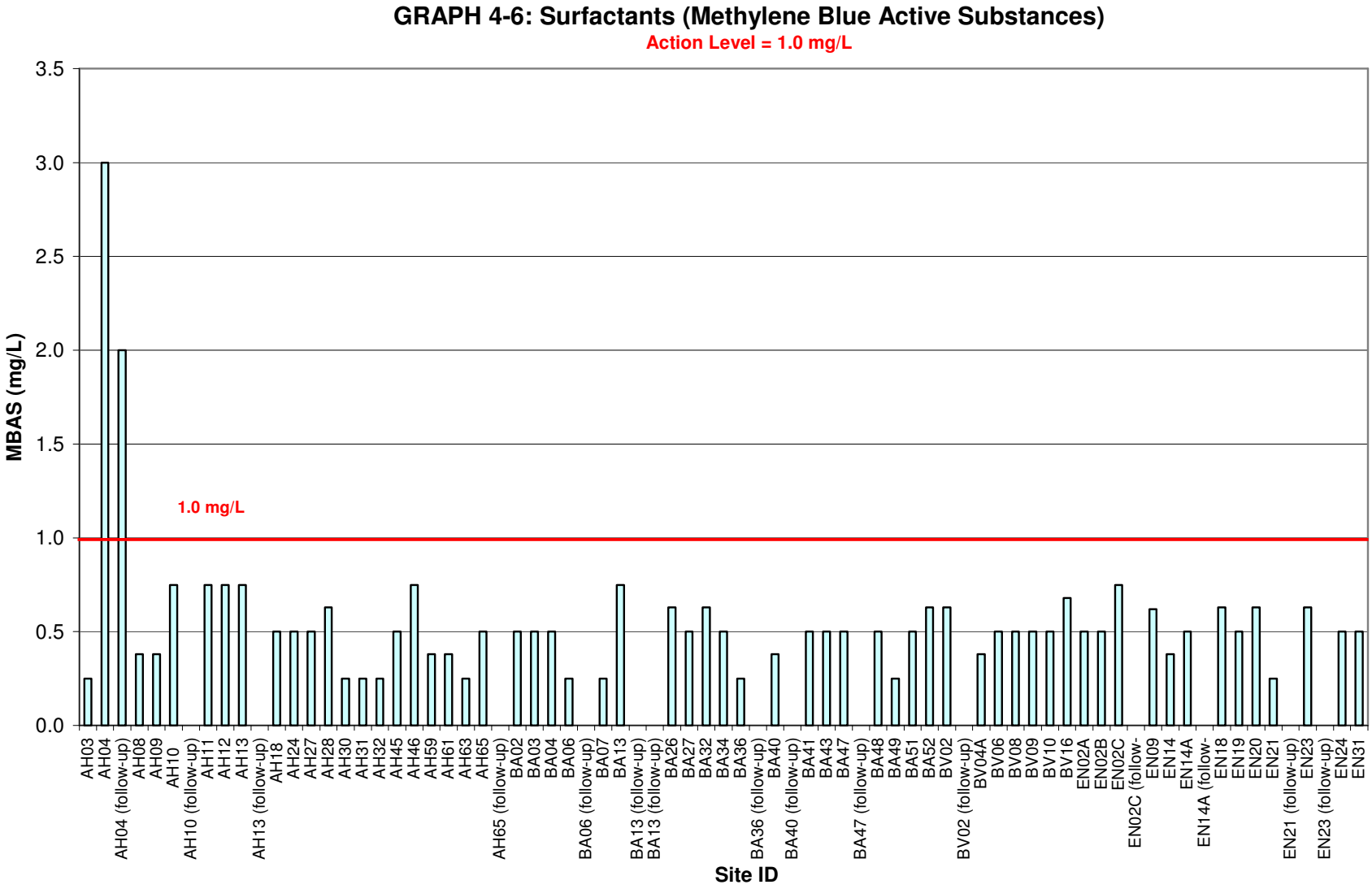
GRAPH 4-6: Surfactants (Methylene Blue Active Substances)
Action Level = 1.0 mg/L
MBAS (mg/L)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.0 mg/L
AH03
AH04
AH04 (follow-up)
AH08
AH09
AH10
AH10 (follow-up)
AH11
AH12
AH13
AH13 (follow-up)
AH18
AH24
AH27
AH28
AH30
AH31
AH32
AH45
AH46
AH59
AH61
AH63
AH65
AH65 (follow-up)
BA02
BA03
BA04
BA06
BA06 (follow-up)
BA07
BA13
BA13 (follow-up)
BA13 (follow-up)
BA26
BA27
BA32
BA34
BA36
BA36 (follow-up)
BA40
BA40 (follow-up)
BA41
BA43
BA47
BA47 (follow-up)
BA48
BA49
BA51
BA52
BV02
BV02 (follow-up)
BV04A
BV06
BV08
BV09
BV10
BV16
EN02A
EN02B
EN02C
EN02C (follow-
EN09
EN14
EN14A
EN14A (follow-
EN18
EN19
EN20
EN21
EN21 (follow-up)
EN23
EN23 (follow-up)
EN24
EN31
Site ID

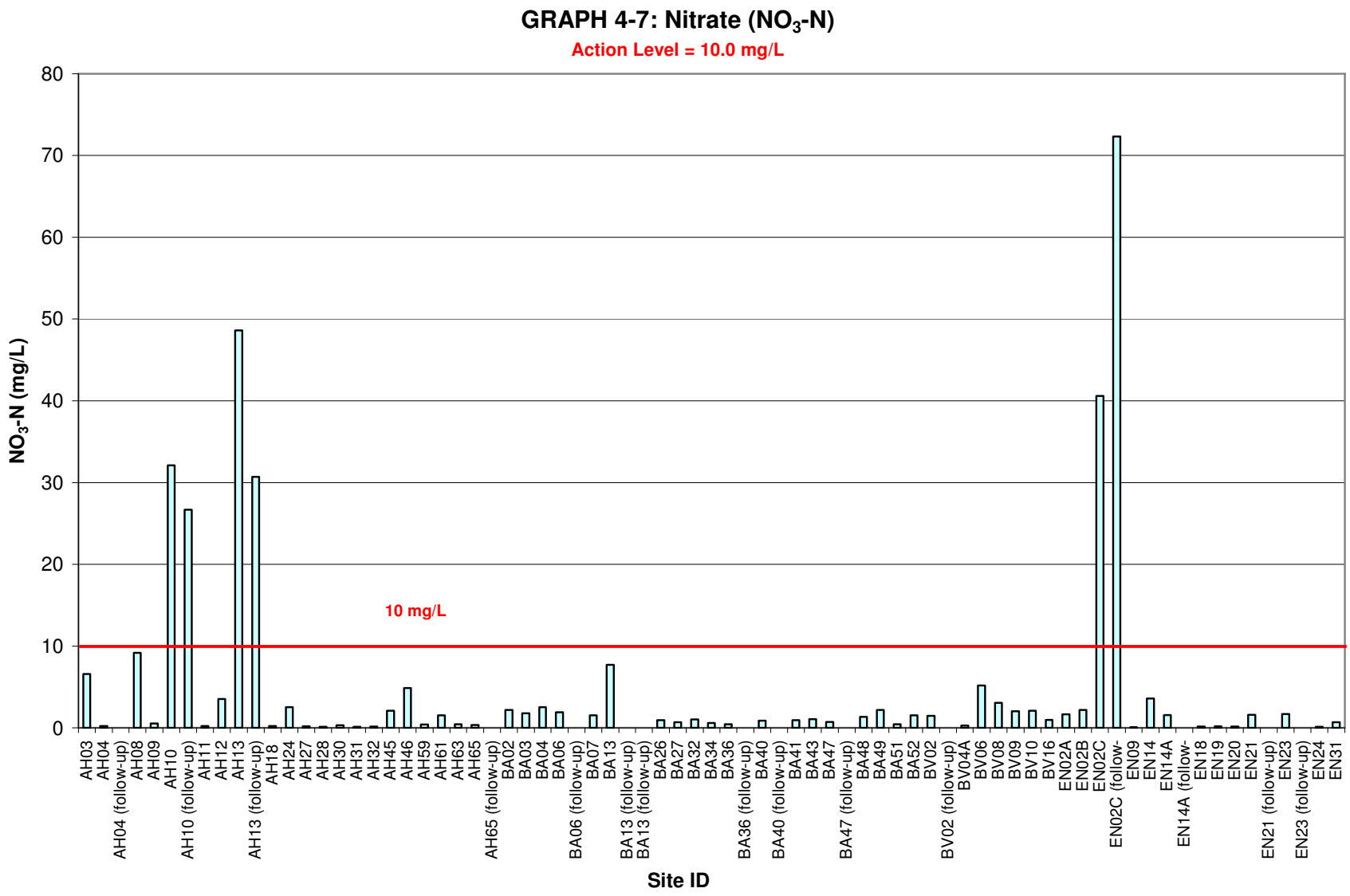
GRAPH 4-7: Nitrate (NO_3-N)
Action Level = 10.0 mg/L
NO_3-N (mg/L)
80
70
60
50
40
30
20
10
0
10 mg/L
AH03
AH04
AH04 (follow-up)
AH08
AH09
AH10
AH10 (follow-up)
AH11
AH12
AH13
AH13 (follow-up)
AH18
AH24
AH27
AH28
AH30
AH31
AH32
AH45
AH46
AH59
AH61
AH63
AH65
AH65 (follow-up)
BA02
BA03
BA04
BA06
BA06 (follow-up)
BA07
BA13
BA13 (follow-up)
BA13 (follow-up)
BA26
BA27
BA32
BA34
BA36
BA36 (follow-up)
BA40
BA40 (follow-up)
BA41
BA43
BA47
BA47 (follow-up)
BA48
BA49
BA51
BA52
BV02
BV02 (follow-up)
BV04A
BV06
BV08
BV09
BV10
BV16
EN02A
EN02B
EN02C
EN02C (follow-
EN09
EN14
EN14A
EN14A (follow-
EN18
EN19
EN20
EN21
EN21 (follow-up)
EN23
EN23 (follow-up)
EN24
EN31
Site ID

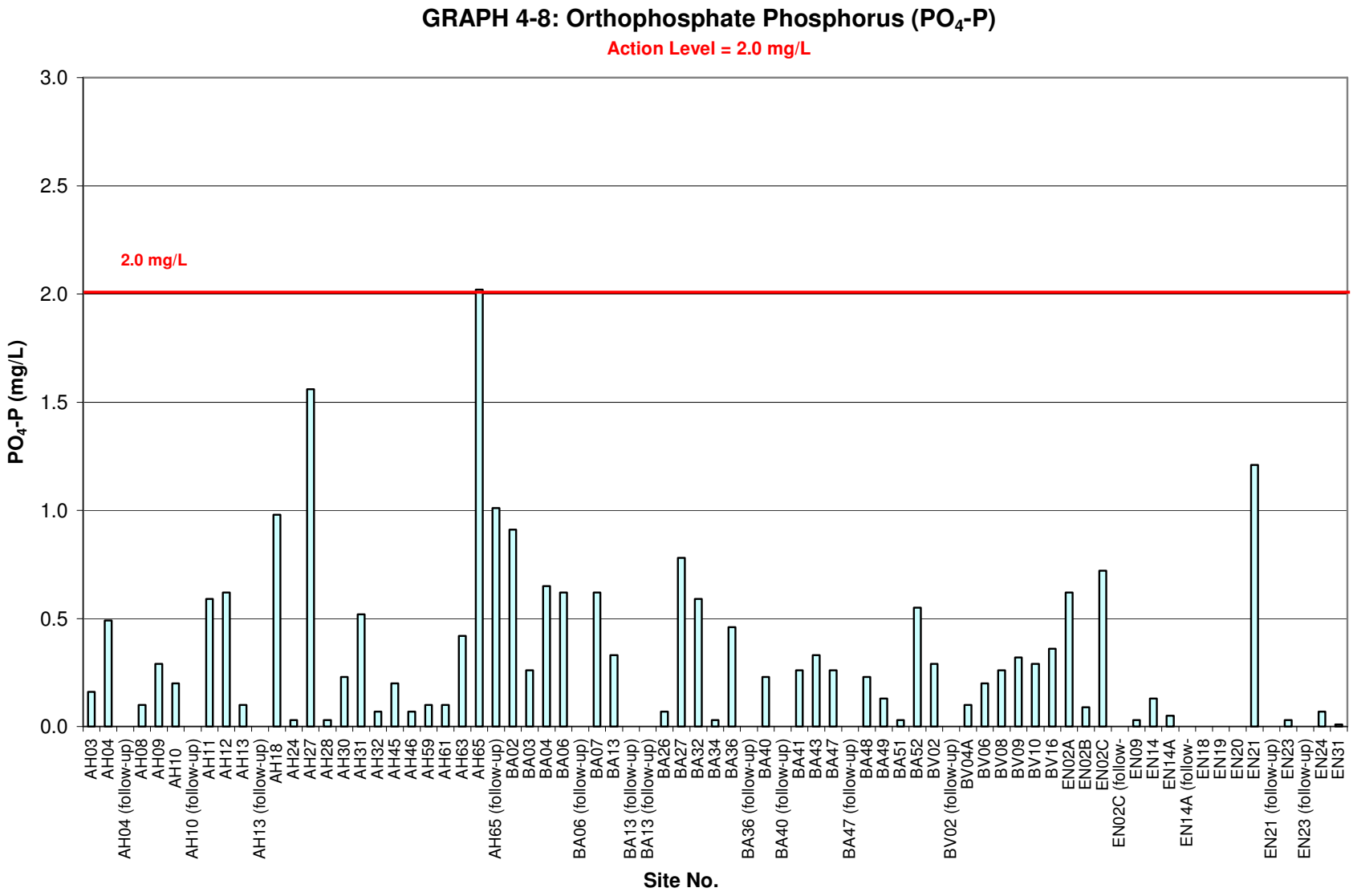
GRAPH 4-8: Orthophosphate Phosphorus (PO_4-P)
Action Level = 2.0 mg/L
2.0 mg/L
PO_4-P (mg/L)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
AH03
AH04
AH04 (follow-up)
AH08
AH09
AH10
AH10 (follow-up)
AH11
AH12
AH13
AH13 (follow-up)
AH18
AH24
AH27
AH28
AH30
AH31
AH32
AH45
AH46
AH59
AH61
AH63
AH65
AH65 (follow-up)
BA02
BA03
BA04
BA06
BA06 (follow-up)
BA07
BA13
BA13 (follow-up)
BA13 (follow-up)
BA26
BA27
BA32
BA34
BA36
BA36 (follow-up)
BA40
BA40 (follow-up)
BA41
BA43
BA47
BA47 (follow-up)
BA48
BA49
BA51
BA52
BV02
BV02 (follow-up)
BV04A
BV06
BV08
BV09
BV10
BV16
EN02A
EN02B
EN02C
EN02C (follow-
EN09
EN14
EN14A
EN14A (follow-
EN18
EN19
EN20
EN21
EN21 (follow-up)
EN23
EN23 (follow-up)
EN24
EN31
Site No.

5.0 LABORATORY ANALYTICAL RESULTS

5.1 Summary

Laboratory analyses were conducted at 15 sites, representing 25 percent of all sites with ponded or flowing water. A summary of the laboratory analytical results from routine (initial) site visits is presented in Table 5-1. Complete laboratory test results are presented in Table 5-2. Laboratory reports are included as Appendix B.

TABLE 5-1
LABORATORY ANALYSIS SUMMARY: ROUTINE VISITS

Parameter (units)	Maximum	Minimum	Number of Exceedances
Total Hardness (mg/L $CaCO_3$)	3,820	372	na
Surfactants (mg/L MBAS)	0.5	nd	0
Oil and grease (mg/L)	nd	nd	0
Diazinon (µg/L)	nd	nd	0
Chlorpyrifos (µg/L)	nd	nd	0
Cadmium (dissolved, mg/L)	0.01	nd	0
Copper (dissolved, mg/L)	0.009	nd	0
Lead (dissolved, mg/L)	nd	nd	0
Zinc (dissolved, mg/L)	0.068	nd	0
Total Coliform (CFU/100 mL)	66,000	<50	3
Fecal Coliform (CFU/100 mL)	22,700	225	1
Enterococcus Bacteria (CFU/100 mL)	82,800	140	2

Note: nd = not detected
na = not applicable

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Although it is not itself considered a pollutant, total hardness is measured in order to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions. Total hardness values ranged from 372 to 3,820 mg/L $CaCO_3$. The highest total hardness value was observed at Site BA13, and the lowest value was found at Site BV02.

Surfactants (MBAS) are analyzed to detect detergent pollution from residential, commercial, or industrial washing activities. As mentioned in Section 4.2, pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms The established action level for surfactant concentration is 1.0 mg/L MBAS. A surfactant concentration of 0.5 mg/L was recorded at Site AH10. All other samples collected contained MBAS concentrations below the reporting limit.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities. The action level for oil and grease is 15 mg/L. Oil and grease levels were below the reporting limit for all 15 tested sites.

Diazinon and **chlorpyrifos** are organophosphate pesticides that are detrimental to birds, mammals, beneficial insects, freshwater fish, invertebrates, and other aquatic organisms. The established action level for both diazinon and chlorpyrifos is 0.5 µg/L. Neither diazinon nor chlorpyrifos were detected at any of the sampled sites.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms, including fish and waterfowl. The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness, with toxicity decreasing as hardness increases. Therefore, each dissolved metal has an action level or CMC for a particular total hardness. The laboratory samples collected were analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Dissolved cadmium, at a concentration of 0.010 mg/L, was detected only at Site BA13. Dissolved copper was detected at seven sites, with the highest concentration of 0.009 mg/L found at Site AH10. Dissolved zinc was detected at five sites. The highest concentration of zinc was found at Site BA13, at 0.068 mg/L. Dissolved lead was not detected at any sites. All samples collected had dissolved metal concentrations below applicable action levels as calculated using CTR criteria. Table 5-2 provides a summary of those sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

Coliform bacteria are relatively harmless to humans and are typically present at high levels in mammalian digestive tracts, as well as naturally found in most surface waters and soils. Testing water samples for total coliform bacteria is a standard practice in public health because a high level of total coliform bacteria often, although not always, indicates the presence of other more harmful, pathogenic organisms, usually from fecal contamination. Total coliform is used as a surrogate for these pathogens because they are generally present in much smaller quantities and are therefore difficult to test for directly. A concentration of 50,000 colony forming units per 100 mL (CFU/100 mL) is used as the action level for total coliform bacteria. During the 2007 routine dry weather monitoring program, total coliform counts ranged from less than 50 to 66,000 CFU/100 mL. The highest level of 66,000 CFU/100 mL was found at Site BV02. Sites BA06 and BA13 exceeded the action level for total coliform bacteria, as well. However, during the follow-up investigation, a sample test from Site BA13 indicated a count of 151,000 CFU/100mL. Upstream investigations were conducted at all three sites in 2007; the results are detailed in Section 7 of this report.

Fecal coliform, a subset of coliform bacteria, and ***Enterococcus*** are found primarily in the gastro-intestinal (GI) tracts of humans and animals, so they are commonly used as indicators of water contamination by fecal matter. A host of human diseases, particularly those of the GI tract, are spread through water contaminated with fecal matter. The action level for fecal coliform bacteria is 20,000 CFU/100 mL. Fecal coliform counts ranged from 225 to 22,700 CFU/100mL. Only Site BA40 exceeded the action level for fecal coliform bacteria. The action level for *Enterococcus* 10,000 CFU/100 mL. *Enterococcus* counts ranged from 140 to 82,800 CFU/100 mL. Sites BA06 and BV02 were the only sites to have *Enterococcus* counts above the action level.

TABLE 5.2
CTR – CMC FOR DISSOLVED METALS[1]

Dissolved Cadmium			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
BA13	3,820	0.218	0.010
Dissolved Copper			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
AH03	588	0.071	0.005
AH10	502	0.061	0.009
AH45	1,550	0.178	0.006
AH46	3,480	0.381	0.005
BA06	547	0.067	0.007
BA13	3,820	0.416	0.006
BA36	2,299	0.258	0.007
Dissolved Zinc			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
AH03	588	0.526	0.033
AH10	502	0.460	0.024
AH45	1,550	1.195	0.022
BA13	3,820	2.566	0.068
BV02	372	0.357	0.053
AH03	588	0.526	0.033
AH10	502	0.460	0.024

Note: Table 5-2 lists only those sites where a particular dissolved metal was detected. Lead was not detected in any of the samples.

[1] For equations and constants used in California Toxics Rule calculations, see http://www.epa.gov/ost/standards/ctr/toxic.pdf

TABLE 5-3
SUMMARY OF LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Surfactants mg/L	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliform CFU/100mL	Fecal Coliform CFU/100mL	*Enterococcus* CFU/100mL
AH03	7/11/07	11:10	nd	nd	588	nd	0.005	nd	0.033	nd	nd	16,000	10,600	5,180
AH08	7/12/07	9:00	nd	nd	385	nd	nd	nd	nd	nd	nd	23,200	2,725	1,260
AH10	7/11/07	10:05	0.5	nd	502	nd	0.009	nd	0.024	nd	nd	40,000	7,100	1,010
AH24	7/11/07	11:40	nd	nd	2,050	nd	nd	nd	nd	nd	nd	6,600	1,400	350
AH45	7/11/07	12:20	nd	nd	1,550	nd	0.006	nd	0.022	nd	nd	29,600	3,875	1,390
AH46	7/11/07	14:10	nd	nd	3,480	nd	0.005	nd	nd	nd	nd	16,800	8,600	2,870
BA06	7/12/07	9:30	nd	nd	547	nd	0.007	nd	nd	nd	nd	**55,400**	6,300	**82,800**
BA06(follow-up)	7/16/07	13:00	nt	nt	nt	nt	nt	nt	nt	nt	nt	26,800	10,700	**19,600**
BA13	7/12/07	10:25	nd	nd	3,820	0.010	0.006	nd	0.068	nd	nd	**56,000**	5,100	9,300
BA13(follow-up)	7/16/07	12:00	nt	nt	nt	nt	nt	nt	nt	nt	nt	**151,000**	15,000	**22,050**
BA36	7/12/07**	10:40**	nd	nd	2,299	nd	0.007	nd	nd	nd	nd	28,000	300	5,000
BA40	7/12/07	11:25	nd	nd	990	nd	nd	nd	nd	nd	nd	23,800	**22,700**	9,800
BA40(follow-up)	7/25/07	12:50	nt	nt	nt	nt	nt	nt	nt	nt	nt	20,300	8,250	9,050
BA51	7/11/07	14:10	nd	nd	2,350	nd	nd	nd	nd	nd	nd	3,200	1,450	830
BV02	7/11/07	11:15	nd	nd	372	nd	nd	nd	0.053	nd	nd	**66,000**	18,100	**12,550**
BV02(follow-up)	7/16/07	9:50	nt	nd	nt	nt	nt	nt	nt	nt	nt	31,500	8,850	6,350
EN02B	7/11/07	10:00	nd	nd	768	nd	nd	nd	nd	nd	nd	<50	225	4,480
EN09	7/12/07	11:45	nd	nd	2,400	nd	nd	nd	nd	nd	nd	3350	1750	140
EN19	7/12/07	8:50	nd	nd	1,830	nd	nd	nd	nd	nd	nd	1,800	500	780
Reporting Limits			**0.5**	**5.0**	**10**	**0.005**	**0.005**	**0.005**	**0.02**	**0.02**	**0.02**	**20**	**20**	**20**
Action Levels			**1.0**	**15.0**	*****	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**50,000**	**20,000**	**10,000**

Notes:

Red values were at or above the measured constituent's action level
nd = not detected
nt = not tested
CTR = California Toxics Rule (based on hardness)
* = Total hardness is not considered a pollutant (see section 3.4 for details), and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependent on the total hardness value of the water sample.
** = Bacteria results are from resample conducted on 9/6/07 at 8:34; results from 7/12/07 sample could not be used due to laboratory complications. Units are MPN/100 mL.

6.0 DATA ANALYSIS

Based on the visual observations and the field and laboratory analytical testing conducted at the visited sites, the following sites demonstrated physical and chemical evidence of possible illegal discharges and/or illicit connections.

Site AH04

Site AH04 is a concrete channel located behind the 5600 Avenida Encinas flower shops (see Appendix A for photo). On the initial site visit, the water in the concrete channel was ponded, and bubbles could be observed on top of the water. When sampled, the water appeared slightly cloudy with a reddish color to it. Surfactants were measured at a concentration greater than 3.0 mg/L MBAS, exceeding the 1.0 mg/L MBAS action level. During the follow-up visit to the site, a slight flow of water (less than 1 gpm) could be observed running in the channel. The sample appeared slightly cloudy with a reddish color, similar to the initial visit. Surfactants were again measured above the action level at a concentration of 2.0 mg/L MBAS. A number of commercial businesses, including some that could conduct washing activities, are located in the area immediately upstream of the sites. An upstream investigation for the source of surfactants at Site AH04 was conducted. The investigation is described in more detail in Section 7 of this report.

Site AH10

Site AH10 is an earthen channel located West of Avenida Encinas, near the Manzano Drive and El Arbol Drive intersection (see Appendix A for photo). Water from the channel flows West through two 60-inch diameter RCP inlets and passes underneath the railroad tracks. During the initial visit to the site a flow of 48 gpm was sampled. The sample appeared slightly yellow in color. Turbidity was measured at 28.70 NTU, which is slightly high for typical dry weather conditions. Nitrate levels were measured at 32.10 mg/L NO_3-N, above the 10.0 mg/L NO_3-N action level. During the follow-up visit to the site a flow of 27 gpm was sampled. The turbidity of the sample collected was measured at 9.67 NTU. This indicated that the turbid water initially sampled at the site was most likely transient. Nitrate was still measured above the action level at 26.89 mg/L NO_3-N. Nitrate levels have been measured above the action level for Site AH10 in the past. Site AH10 is also located downstream of Site AH13. The area upstream of sites AH10 and AH13 has agricultural and commercial land uses located East of the sites. Previous years' investigations have identified the source of the nitrates to likely be from seepage water originating East of the site. A detailed description of the upstream investigation for nitrates at this site can be found in Section 7.

Site AH13

Site AH13 consists of two 48-inch diameter RCP outlets which drain into a concrete channel just West of Paseo Del Norte (see Appendix A for photo). The water sampled at the site appeared clear, colorless, and odorless and was flowing at approximately 11 gpm. Similar to previous years, nitrate was measured above the 10.0 mg/L NO_3-N action level, at a concentration of 48.60 mg/L. During the follow-up visit the condition of the site was similar to the initial visit, except for a slight decrease in flow rate to 9 gpm. Nitrate levels were measured at 30.70 mg/L, still above the established action level of 10.0 mg/L. The upstream land uses associated with this site are commercial and agricultural. In previous

years the source of the nitrate has been attributed to flows originating East of the site. A detailed description of the upstream investigation conducted is included in Section 7.

Site AH65

Site AH65 is a manhole located on Pontiac Drive, across from South Hampton Road (see Appendix A for photo). Two lines drain to the site, one 48-inch RCP from the North and one 24 inch RCP from the Northeast. The water at this site is comprised primarily of runoff from the surrounding residential area. During the initial investigation, water was observed flowing at approximately 2 gpm. The water sampled had a slight yellowish color, but was clear and odorless. No trash could be observed inside the manhole. The concentration of orthophosphate-P was measured slightly above the action level at 2.02 mg/L PO_4-P. An immediate upstream investigation was conducted to determine the source of orthophosphate-P (see Section 7 for more detail). During the follow-up visit to the site, slightly more flow was observed in the manhole, approximately 3 gpm. The sample collected appeared colorless and had an orthophosphate-P concentration of 1.01 mg/L, which is below the action level. The area upstream of the site is primarily well landscaped residential areas. A detailed description of the upstream investigation conducted is included in Section 7.

Site BA06

Site BA06 is a 36-inch RCP in manhole located along the Eastern sidewalk of Batiquitos Drive, between Poinsettia Lane and Daisy Avenue (see Appendix A for photo). During the initial visit to the site, the water sampled was flowing at roughly 2 gpm. The water appeared slightly yellow in color, and dried organic debris (leaves) could be observed inside the manhole. All field screening parameters tested were measured below their respective action levels and required no further investigation. However, both total coliform and *Enterococcus* bacterial indicators were counted above their respective action levels of 50,000 CFU/100 mL and 10,000 CFU/100 mL. Total coliform was counted at 55,400 CFU/100 mL, while *Enterococcus* was counted at 82,800 CFU/100 mL. During the follow-up visit to the site, the water in the manhole was ponded and no longer had a yellowish color. Decaying organic debris (leaves) was still noted in the water at the site. Total coliform was counted at 26,800 CFU/100 mL, below the action level of 50,000 CFU/100 mL. *Enterococcus* counts also decreased but were counted at 19,600 CFU/100 mL, still above the action level of 10,000 CFU/100 mL. The land use of the area upstream of the site is primarily residential. A detailed description of the upstream investigation conducted for this site is included in Section 7.

Site BA13

Site BA13 is a 60-inch RCP debris basin outlet to Batiquitos Lagoon, located on Arenal Road, Southwest of El Camino Real (see Appendix A for photo). During the initial visit to the site, a flow of 5 gpm was observed. The sample collected appeared yellow, and slightly cloudy. Water was ponded at the site and at the manhole just upstream of the site on Arenal Road. So that the sampled water would be more representative of conditions typically present at Site BA13, the sample was taken from flowing water (5 gpm) in the conveyance slightly upstream of the manhole on Arenal Road. The field crew confirmed that no flow was entering the conveyance between the location where the sampling was conducted and the standard monitoring site location. Turbidity was measured at 30.97

NTU. Due to the high turbidity reading, the field crew immediately investigated upstream of the site for any potential IC/IDs that could be contributing to the turbid water (see Section 7 for further details). The field crew observed construction activities taking place on a residential driveway located on Lotus Court. Samples collected from BA13 were also tested for bacterial indicators. During the initial visit, only total coliform was counted above the action level, at 56,000 CFU/100 mL. The action level for total coliform bacteria is 50,000 CFU/100 mL. *Enterococcus* was counted at 9,300 CFU/100 mL, just below the action level of 10,000 CFU/100 mL.

A follow-up visit was conducted for this site the following day for turbidity. A flow of 5 gpm was observed. The water sampled no longer appeared slightly cloudy, and the turbidity was measured at 12.07 NTU. A second follow-up visit for bacterial indicators was performed a few days later, after receiving the initial bacteria results from the laboratory. A flow of 5 gpm was again observed. Laboratory analysis of the samples collected indicated both total coliform and *Enterococcus* bacteria were above their respective action levels. Total coliform was counted at 151,000 CFU/100 mL, and *Enterococcus* was counted at 22,050 CFU/100 mL. The land use of the area upstream of the site is largely residential, with a large commercial shopping center also located farther North of the site. A detailed description of the upstream investigation conducted for this site is included in Section 7.

Site BA36

Site BA36 is a 36-inch RCP outlet located in the Southeast corner of the La Costa Golf Course, behind 7525 Gibraltar Street and the Round Tree Apartments (see Appendix A for photo). The water sampled from the site was flowing at roughly 10 gpm, and appeared slightly yellow and opaque. The turbidity of the sample was measured at 68 NTU. No sources were identified that would potentially explain the turbid water observed at the site. All other constituents were measured below their respective action levels, including those sent off for laboratory analysis. During the follow-up visit to the site, the water sampled appeared clear and colorless. A flow of 10 gpm was again observed. Turbidity was measured at 7.36 NTU, much lower than when initially sampled. The area upstream of the site is comprised of residential and open areas. It is possible that an unidentified source was responsible for the turbid water initially observed at the site. However, due to the significant drop in turbidity and change in the water's appearance between visits, the source of the turbid water is most likely transient. No further upstream investigation was conducted for this site.

Site BA40

Site BA40 is an 84-inch RCP outlet located approximately 30 feet Southwest of the Melrose Drive and Rancho Santa Fe Road intersection (see Appendix A for photo). Algae, insects, and worms were all noted during the initial visit to the site. A small amount of trash, including plastic bottles and food wrappers was observed in the channel downstream of the outfall. All parameters measured in the field tested below their respective action levels. Samples collected at this site were also sent off for laboratory analysis. Fecal coliform bacteria were measured at 22,700 CFU/100 mL, above the established action level of 20,000 CFU/100 mL. The field crew returned to the site a few days later to collect another sample for bacterial analysis, during which trash was again observed at the site. No sources that would contribute fecal coliform bacteria were observed in the immediate area around the site. The area upstream of the site is primarily commercial land use, although

several residential areas are also located farther upstream of the site. A description of the upstream investigation is provided in Section 7.

Site BA47

Site BA47 is a manhole located on Camino Alvaro, just West of the Camino Alvaro and Rancho Santa Fe Road intersection (see Appendix A for photo). This site is comprised of three different conveyance lines that combine inside a junction box and then discharge down a single 30-inch RCP. A sample of the combined flow, flowing at 10 gpm, was collected. The water appeared slightly cloudy, and foam was observed floating on the water toward the Northeast corner of the manhole. The pH of the combined flow was measured at 6.2, below the action level of 6.5. During the follow-up visit, an increase in flow to 15 gpm was observed inside the junction box. The pH of the sample collected was measured at 6.5, exactly that of the action level. Previous investigations for low pH at this site have identified a small PVC pipe within the junction box as likely being the source of the acidic water. The area upstream of the site is almost entirely residential. The upstream investigation conducted for this site is detailed in Section 7 of this report.

Site BV02

Site BV02 consists of two 36-inch RCP outlets located on the East side of State Street, South of the Carlsbad Boulevard and State Street intersection (see Appendix A for photo). During the initial visit, articles such as sleeping bags and clothing were observed around the site, likely indicating human inhabitation of the area near the site. The water sampled was slightly yellow and flowing at 3 gpm. Laboratory analysis indicated action level exceedances for both total coliform and *Enterococcus* bacteria. Total coliform bacteria were counted at 66,000 CFU/100 mL, above the 50,000 CFU/100 mL action level and *Enterococcus* bacteria were counted at 12,550 CFU/100 mL, above the 10,000 CFU/100 mL action level. None of the parameters measured in the field exceeded any action level. The area surrounding the site and upstream is primarily commercial, with some industrial land use. Human inhabitation in the vicinity of the site has been noted in the past. The results of the upstream investigation conducted for Site BV02 are included in Section 7.

Site BV08

Site BV08 is a 66-inch RCP outfall to Buena Vista Creek located close to El Camino Real. At the initial visit to the site, an oily sheen was noted. The City was immediately contacted and responded to the site to meet with the field crew. Further investigation by the City determined that food grease had accumulated in the conveyance upstream of the site. City crews removed the grease using a vactor truck, and BMPs to prevent discharge to the creek during the cleanup were implemented. All field screening parameters tested at the site were measured within acceptable ranges.

Site EN02C

Site EN02C is a 39-inch diameter outfall located on the North bank of Encina Creek, underneath the Interstate-5 Freeway overpass (see Appendix A for photo). This site is accessed through the Encinas Wastewater Plant. During the initial visit to the site, a small flow of 1 gpm was measured. The water sampled appeared, clear, colorless and odorless. Similar to previous years, nitrate levels were again measured above the 10.0 mg/L NO_3-N

action level at 40.60 mg/L NO_3-N. All other field parameters tested for, were measured below their respective action levels. During the follow-up visit to the site the following day, a flow of 1 gpm was again observed. Nitrate levels were measured above the action level at 72.30 mg/L NO_3-N. The area surrounding the site has both commercial and industrial land uses, but Site EN02C primarily drains a section of Interstate 5. The results of the upstream investigation for Site EN02C are included in Section 7.

Site EN14A

Site EN14A is a 48-inch diameter RCP outfall located roughly 30 yards West of 1911 Palomar Oaks Way, in the bottom of a canyon (see Appendix A for photo). Historically, samples collected at this site have had low pH readings. During the initial visit to the site, a flow of 2 gpm was sampled. The sample appeared clear, colorless and odorless. The pH was measured at 5.9, below the 6.5 action level. A few plastic bottles and bags were observed around the site, but nothing that appeared it would influence pH readings. None of the other parameters tested for in the field exceeded their respective action levels. During the follow-up visit to the site a flow of 2 gpm was observed, and the pH was recorded at 5.5. Industrial and commercial business parks comprise most of the area around and upstream of the site. The upstream investigation for this site is described in Section 7.

Site EN21

Site EN21 is a manhole that accesses a 36-inch RCP, located on Camino Vida Roble, approximately half-way between Palomar Airport Road and Owens Avenue (see Appendix A for photo). During the initial visit to the site the flow was 2 gpm, and the sample appeared slightly cloudy. The pH was recorded at 6.9, within the accepted action level range for pH measurements. The turbidity of the sample was slightly high and measured at 28.20 NTU. A follow-up visit to the site was conducted the next day. Conditions at the site were similar to the previous day, except the sample collected no longer appeared slightly cloudy. During the follow-up visit, the turbidity was measured at 4.32 NTU. Since no source of the turbid water was observed during the initial inspection and the measured turbidity significantly dropped by the time of the follow-up inspection, the source of the turbid water is most likely transient. The pH of the sample was 6.3, just below the 6.5 action level. Since pH values are typically within the accepted action level range at this site, including the measurement during the initial site visit, the low pH measured during the follow-up was likely transient. No further upstream investigation was conducted for this site.

Site EN23

Site EN23 is a 24-inch RCP outlet located in the Northwest corner of the Yarrow Drive and Camino Vida Roble intersection. During the initial site visit, bubbles and foam were observed floating on top of the water, and the site smelled of rotten eggs. A sample was collected from the slow flowing water (less than 1 gpm). The sample collected was slightly cloudy and milky in appearance. No discernable odor could be detected from the water, indicating that the conditions present around Site EN23 were responsible for the smell of rotten eggs. A low pH of 4.9 measured from the sample, which is below the 6.5 action level. The turbidity of the sample was measured at 47.87 NTU, warranting further investigation. All other field parameters tested were measured below their respective action levels. During the follow-up visit another low pH reading of 5.9 was measured. The

turbidity of the sample was still high, measured at 36.51 NTU. The conditions present at the site were similar to the initial site visit. The site itself still smelled of rotten eggs and the sampled water appeared slightly cloudy and milky. The area upstream of the site is has both commercial and industrial land uses. It is possible that seepage water from this area is responsible for the low pH measured at this site. The upstream investigation conducted for Site EN23 is described in detail in Section 7.

7.0 FOLLOW UP INVESTIGATIONS

7.1 Purpose

The purpose of the follow-up investigations is to find the source of the pollutants that were identified during initial field screening and laboratory testing.

The field screening program performed in July 2007 found action level exceedances for surfactants at one site, nitrate at three sites, orthophosphate phosphorus at one site, and pH at three sites. In the best professional judgment of the field crew, turbidity levels at five sites were also unusually high and warranted follow-up visits within 24 hours of the initial visit. At sites where field screening parameters were measured above their respective action levels during both visits, upstream investigations were conducted. Upstream investigations are also conducted immediately if pollutant levels are well above the established action levels during the first visit.

Samples were collected for laboratory analysis at 15 sites during the initial round of field screening. Complete results of these analyses indicated bacteria action level exceedances at four sites. Follow-up investigations were conducted at each of these four sites to identify the source(s) of the high bacteria counts. The results of source investigations are detailed below.

7.2 Investigation Procedure

Follow-up investigations were conducted in two rounds. The first follow-up investigations were for the sites at which field tests indicated action level exceedances. These investigations were conducted immediately after confirming the elevated concentrations via additional field testing. The second round of follow-up investigations was carried out for the sites at which laboratory testing had found elevated constituent levels. These investigations were conducted after receiving the test results from the laboratory(s).

During the investigations flow rates were measured, visual observations were performed, and field testing was conducted. Visual observations, such as water color, clarity, odor, floatable materials, vegetation and biology, and physical parameters, such as temperature, pH, and conductivity, were recorded on field data sheets at each dry weather monitoring sampling site. Observations and data for locations upstream of the sites were recorded in the field crew's log notebooks. Field data sheets are included in Appendix C.

Source identification investigations began by testing the water at the site itself; then gradually worked upstream until potential pollutant sources could be identified. If follow-up testing at a site resulted in constituent concentrations below specified action levels, it was concluded that the pollution found during the initial field screening and laboratory analysis phase was due to a transient flow. If follow-up testing at a site found constituent concentrations again above the specified action levels, an upstream investigation was conducted.

Upstream investigations were conducted by checking a number of upstream branches for any potential sources of the constituent of concern. The estimated flow rate in each branch and any relevant observations were recorded in the field crew's notebook. At key upstream

locations in the MS4 samples were taken for field or laboratory analysis, depending on the type of investigation. With this information the field crew was able to identify the sources or areas likely to contribute the particular constituent of concern.

7.3 Investigated Sites

Site AH04

The surfactant concentration of the sample collected from this site was measured greater than 3.0 mg/L MBAS. The water sampled was ponded, with a reddish color and bubbles on the surface. Since the surfactant concentration was measured above the action level of 1.0 mg/L MBAS, an immediate upstream investigation was conducted to determine the source of the surfactants.

Site AH04 is located near an outlet leading into the concrete channel. Upstream of the outlet is a grated catch basin that drains the runoff from behind the 5600 Avenida Encinas flower shops. No flow was observed entering the catch basin, but the field crew was able to collect a small sample of ponded water from within the catch basin. The sample collected also had a surfactant concentration greater than 3.0 mg/L MBAS. The only conveyance line leading to the catch basin is one above ground concrete swale that drains the surrounding lot. Both the swale and surrounding pavement were dry during the initial visit.

A follow-up visit was conducted for Site AH04 the next day. This time the field crew observed a small flow (less than 1 gpm) of water discharging into the concrete channel from the outfall. Again, the water appeared to have a reddish color and bubbles were observed on top of the water. The surfactant concentration measured during the follow-up was at 2.0 mg/L MBAS, still above the action level. Upstream of the site, evidence of washing or dumping activities was observed near the catch basin behind 5600 Avenida Encinas (see Photo 7-1). The source of the water appeared to originate from nearby the trucks in the loading zone behind the flower shops. Farther upstream the concrete swale was dry, the only source of the water appeared to be from the loading dock. Nearby the trucks and loading zone, red colored plants and organic debris were observed. Inside the loading dock red stains (likely dye used to color the plants) were observed on the floor and on some of the employees clothing. The field crew contacted some of the employees in an attempt to determine what party was responsible for the washing activities. Employees were able to confirm that the source of the water was from outdoor washing activities, but it was unclear who was responsible for the washing.

Photo 7-1 Evidence of uncontained washing activities discharging into catch basin upstream of Site AH04

In conclusion, the source of the surfactants at Site AH04 may be from uncontained washing occurring behind the 5600 Avenida Encinas flower shops. The red dye observed on the ground around the loading docks explains the reddish tint in the water.

Sites AH10 and AH13

Site AH13 is located upstream of AH10. Because some of the same sources drain to these two sites, the upstream investigations for these two sites are discussed jointly to avoid

repetition. Due to the high turbidity (28.70 NTU) and nitrate concentration (32.1 mg/L NO_3-N) measured during the initial visit to Site AH10, a follow-up visit to the site was needed. Nitrate concentrations measured at this site and some of the upstream sites have historically been measured above the action level of 10 mg/L. Site AH13 is located upstream of Site AH10, and also had a nitrate concentration exceeding the action level at a concentration of 48.6 mg/L. Nitrate has been measured in excess of the action level at these sites every year since 2002, when nitrate testing was added to the City's Dry weather Monitoring Program. The area upstream of the site has both agricultural and commercial land uses. The source of the nitrate has typically been attributed to seepage water originating upstream of the Carlsbad Premium Outlets.

During the follow-up visit to Site AH10, turbidity was measured at 9.67 NTU. Since the turbidity had significantly dropped between the two visits, it was assumed that the source of the turbid water as transient and therefore no upstream investigation for the source of the turbidity was needed. The nitrate concentration measured during the follow-up visit to Site AH10 was 26.7 mg/L NO_3-N, still well above the action level. The main source of flow to Site AH10 is from the earthen channel running from East to West, originating from East of I-5. The lines from sites AH11, AH12 and AH13 all lead to the earthen channel. A second line is also connected to Site AH10. A concrete channel running from South to North parallel to the railroad tracks also connects to the earthen channel just upstream of Site AH10. During both the initial and follow-up investigations of this site, the water in the concrete channel (from Site AH04) did not reach Site AH10. Similar to previous years, this indicates that the source of the nitrate measured at Site AH10 likely originates upstream of the earthen channel.

During the follow-up visit to Site AH13, the nitrate concentration was measured above the action level at 30.7 mg/L. A flow of 9 gpm was observed, and the sample appeared clear and colorless. Sites AH11 and AH12 are also upstream of Site AH10, but nitrate concentrations at each of those sites were below the action level. This indicates that the elevated nitrate levels at Site AH10 originate from the line upstream of Site AH13.

An upstream investigation was performed to identify the source of nitrates to sites AH10 and AH13. The field crew followed the line draining to Site AH13 to a catch basin (AH13-1) in the Western parking lot of the Carlsbad Premium Outlets, East of Paseo Del Norte. A flow rate of 9 gpm, similar to Site AH13, was observed. The sample collected from the catch basin had a nitrate concentration of 34.4 mg/L. The field crew continued to follow this line farther upstream to another catch basin located behind the Carlsbad Premium Outlets, just below the Carlsbad flower fields. Historical data shows that high levels of nitrates have been measured at this catch basin during previous upstream investigations.

The catch basin behind the Carlsbad Premium Outlets was sampled twice, on separate visits as part of the upstream investigations for Site AH10 and for Site AH13. The first sample was part of the upstream investigation for Site AH10 (AH10-2). A flow of approximately 10 gpm was observed, and the nitrate concentration was measured at 37.0 mg/L. The second time the catch basin was sampled (AH13-2) a similar flow of 10 gpm was observed, and the nitrate concentration was 42.7 mg/L.

Based on past observations and the City's MS4 map, it appears that the storm drain line starts at this boundary and that there are no upstream connections or lines. Flow can be observed in the conveyance in this area, and the most likely source is seepage from the agricultural area upstream of the mall. As described above, the seepage water contains

high levels of nitrate, which is likely from fertilization practices at the flower fields and historical agricultural use in the area. No surface runoff was observed entering the MS4 during the upstream investigation; therefore it seems that all flows are from sub-surface water seeping into the system. Eventually the water from Site AH13 flows North along the concrete channel that runs parallel to I-5 and discharges to the earthen channel that leads to Site AH10.

TABLE 7-1 SITES AH10 AND AH13 UPSTREAM INVESTIGATION LOCATIONS

ID	Location
AH10	West of Avenida Encinas, near Manzano/El Arbol intersection, near railroad tracks.
AH13	Concrete channel West of Paseo del Norte, approximately 250 feet North of Peas Soup Andersons.
AH13-1	Catch basin located in the Western parking lot of the Carlsbad Premium Outlets, East of Paseo del Norte.
AH10-2	Catch basin in back of the Carlsbad Premium Outlets, just below the flower fields
AH13-2	Catch basin in back of the Carlsbad Premium Outlets, just below the flower fields

FIGURE 7-1 SITES AH10 AND AH13 UPSTREAM INVESTIGATION

Base Data Sources: USGS, SanGIS, SANDAG, City of Carlsbad

Site AH65

The orthophosphate-P concentration of the sample collected from this site was measured above the 2.0 mg/L action level, at 2.02 mg/L PO_4-P. During the initial visit to the site, two individuals were observed spraying sections of the landscaping located upstream of the site. When questioned, the individuals reported to the field crew that they were spraying fertilizer for the plants. The bag of fertilizer the individuals were using indicated that the fertilizer was 15 percent phosphorus. When the field crew returned to the site the following day, individuals were no longer observed spraying. The orthophosphate-P concentration was 1.01 mg/L PO_4-P when the site was re-sampled. A slight increase in flow rate from 2 gpm to 3 gpm was noted between the initial and follow-up visits. It is likely that irrigation water from the surrounding residential area transported phosphorus from the fertilizer downstream to Site AH65, resulting in the high orthophosphate-P measurement. In conclusion, the slightly elevated orthophosphate-P concentration was the result of upstream fertilizer use transported to the site by irrigation runoff.

Site BA06

Laboratory analysis of the sample collected from this site indicated both total coliform bacteria counts and *Enterococcus* bacteria counts were above their respective action levels. Total coliform bacteria were measured at 55,400 CFU/100 mL, above the 50,000 CFU/100 mL action level. *Enterococcus* was reported at 82,800 CFU/100 mL, above the 10,000 CFU/100 mL action level. Leaves and organic debris, along with a flow of 2 gpm were observed inside the manhole. A follow-up sample was collected from the site on July 16, 2007. Laboratory analysis of the sample indicated the total coliform count had dropped to 26,800 CFU/100 mL. The *Enterococcus* count also dropped to 19,600 CFU/100 mL, but was still above the action level.

Directly upstream of Site BA06 is Site BA04. There are no known or observed lateral connections between sites BA06 and BA04. The field crew followed the line up to Site BA04 (BA06-1) to conduct an upstream investigation for the source of bacteria. Both trash and organic debris were observed inside the manhole. Grass clippings, leaves and algae were all noted in the gutters leading up to the curb inlet above Site BA04. A small trickle of water was also observed in several of the upstream gutters. The field crew then followed the line upstream to another manhole located at the intersection of Rosemary Avenue and Snapdragon Drive (BA06-2). The flow inside the manhole was slightly less than that observed downstream at Site BA04. Again grass clippings, leaves and algae were all noted in the gutters upstream of the site. A small amount of water from irrigation was also observed along many of the upstream gutters. The growth of algae indicates that water and nutrients are typically present in the gutters around this residential area. Upstream investigations conducted in previous years have indicated irrigation water combined with the decaying organic debris within the gutters and manholes is the most likely source of total coliform bacteria to Site BA06. No sources that would directly contribute to the elevated *Enterococcus* bacteria levels measured at Site BA06 were observed during the upstream investigation for the site.

FIGURE 7-2 SITE BA06 UPSTREAM INVESTIGATION

TABLE 7-2 SITE BA06 UPSTREAM INVESTIGATION LOCATIONS

ID	Location
BA06	Batiquitos Drive, midway between Pointsettia Lane and Daisy Avenue
BA06-1	Same as Site BA04, located in front of 7017 Nutmeg Way
BA06-2	Manhole located at the intersection of Rosemary Avenue and Snapdragon Drive

Site BA13

During the initial visit to the site, the water sampled appeared slightly cloudy and yellow and the turbidity was measured at 30.97 NTU. Since the turbidity measurement was unusually high for this site, an immediate upstream investigation was conducted. The field crew witnessed construction of a driveway occurring upstream to the site outside of a house on Lotus Court. Nearby the house where the construction was observed, sits a curb inlet which drains to Site BA13. Some of the pavement around the driveway and curb inlet appeared damp, but no actual runoff was observed. During the second visit of the site the following day, the water appeared clear. When tested, the turbidity was measured to be 12.07 NTU. The field crew then traveled upstream to the house where the construction had been witnessed the previous day. The driveway and the pavement around the curb inlet appeared dry. It appeared that the responsible party was no longer working on driveway, but rather were constructing a small wooden fence for the yard. The source of the turbid water at Site BA13 is most likely transient, originating from construction of the driveway witnessed on Lotus Court. The City was also notified regarding this exceedance, and the City provided educational information to the homeowner.

Site BA13 is also one of the several sites selected for laboratory sampling and analysis. The results from the initial round of sampling indicated total coliform bacteria count was 56,000 CFU/100 mL, above the 50,000 CFU/100 mL action level. Since the lab results were not available by the time the field crew conducted the follow-up investigation for elevated turbidity, the field crew had to come back for a second follow-up visit to Site BA13. The results of the follow-up samples collected indicated that both total coliform bacteria counts and *Enterococcus* bacteria counts were above their respective action levels. Total coliform was 151,000 CFU/100 mL and *Enterococcus* was 22,050 CFU/100 mL, above the 10,000 CFU/100 mL action level. After collecting the follow-up sample for Site BA13, the field crew began to conduct an upstream investigation in order to determine the most likely source of bacteria to the system.

Site BA13 receives flow from two lines, one originating from the North and one originating from the West. The Western line was investigated first. Following the line West along Arenal Drive, the field crew stopped at a catch basin at the end of Columbine Drive (BA13-1). Only a very small volume of ponded water was observed inside the catch basin. Farther upstream along the Western line, a manhole located at the Southern end of Mimosa Drive (BA13-2) was checked. No water was observed inside the manhole. Since only a small volume of ponded water was observed along the Western line, it is unlikely that the source of bacteria at Site BA13 originated from the Western line.

Along the Northern line the manhole located on Lotus Court (BA13-3), nearby the location of the residential construction was investigated first. A flow of 5 gpm was observed inside the manhole, the same flow rate observed at Site BA13. The investigation conducted farther North to the intersection of Manzanita Street and Aviara Parkway, where two lateral lines connect to the system. Both the Eastern (BA13-6) and Western (BA13-5) laterals were observed to be dry along Aviara Parkway. The main line (BA13-4) was traced farther North to a manhole located outside of the Carlsbad City Library, within the Plaza Paseo Real commercial complex (BA13-7). Again a flow of 5 gpm was measured coming from the Northern line. The Northern line was then checked at a manhole on Dove Lane, just North of the library. This line receives flow from two lines, one from the channel in the open to the North (BA13-8) and one from the residential area on the hill to the Northwest (BA13-9).

Flow was observed in both lines, a majority of it from the Northwestern line (about 4 of the combined 5 gpm).

Photo 7-2 Trash observed in the concrete channel, North of Dove Lane.

The flow observed in the Northwestern line originates from the hill to the West of the library and from runoff farther to the Northwest along Dove Lane. The area upstream of the Northwestern line is primarily residential. No potential sources that would significantly contribute to the elevated total coliform or *Enterococcus* bacteria measured at Site BA13 were observed in this residential area during the upstream investigation. As mentioned earlier, the manhole checked on Dove Lane also received flow from the open area and channel to the North. A flow of approximately 1 gpm was observed coming from the open area and detention basin to the North. On the other side of Dove Lane trash could be observed in the concrete channel that drains this open area. The water in the channel appeared slightly brown and orange in color. The trash observed included food wrappers, plastic bottles, and glass bottles. Since the trash was in direct contact with the water (see Photo 7-2) it seems likely that the channel and surrounding open area could be a contributing source of bacteria to the system. Our understanding is that City investigations related to bacteria at Site BA13 identified this area as the main source of bacteria to Site BA13. D-MAX did not take any upstream bacteria samples during its investigation due to the City's ongoing parallel investigation of the area. Follow-up recommendations for this site are discussed in Section 8 of this report.

TABLE 7-3 SITE BA13 UPSTREAM INVESTIGATION LOCATIONS

ID	Location
BA13	Debris basin outlet to Batiquitos Lagoon, Southwest of El Camino Real and Arenal Intersection
BA13-1	Catch basin at the end of Columbine Drive
BA13-2	Southern end of Mimosa Drive
BA13-3	Between 1843 and 1839 Lotus Court, Near intersection of Lotus Court and Manzanita St.
BA13-4	Manhole at the intersection of Aviara Pkwy and Manzanita Street (Northern line)
BA13-5	Manhole at the intersection of Aviara Pkwy and Manzanita Street (Western line)
BA13-6	Manhole at the intersection of Aviara Pkwy and Manzanita Street (Eastern line)
BA13-7	In parking lot of the Carlsbad City Library near the book drop box
BA13-8	On Dove Lane behind library, Southwest side of Dove Lane (Northern line)
BA13-9	On Dove Lane behind library, Southwest side of Dove Lane (Northwestern line)

7-3 SITE BA13 UPSTREAM INVESTIGATION

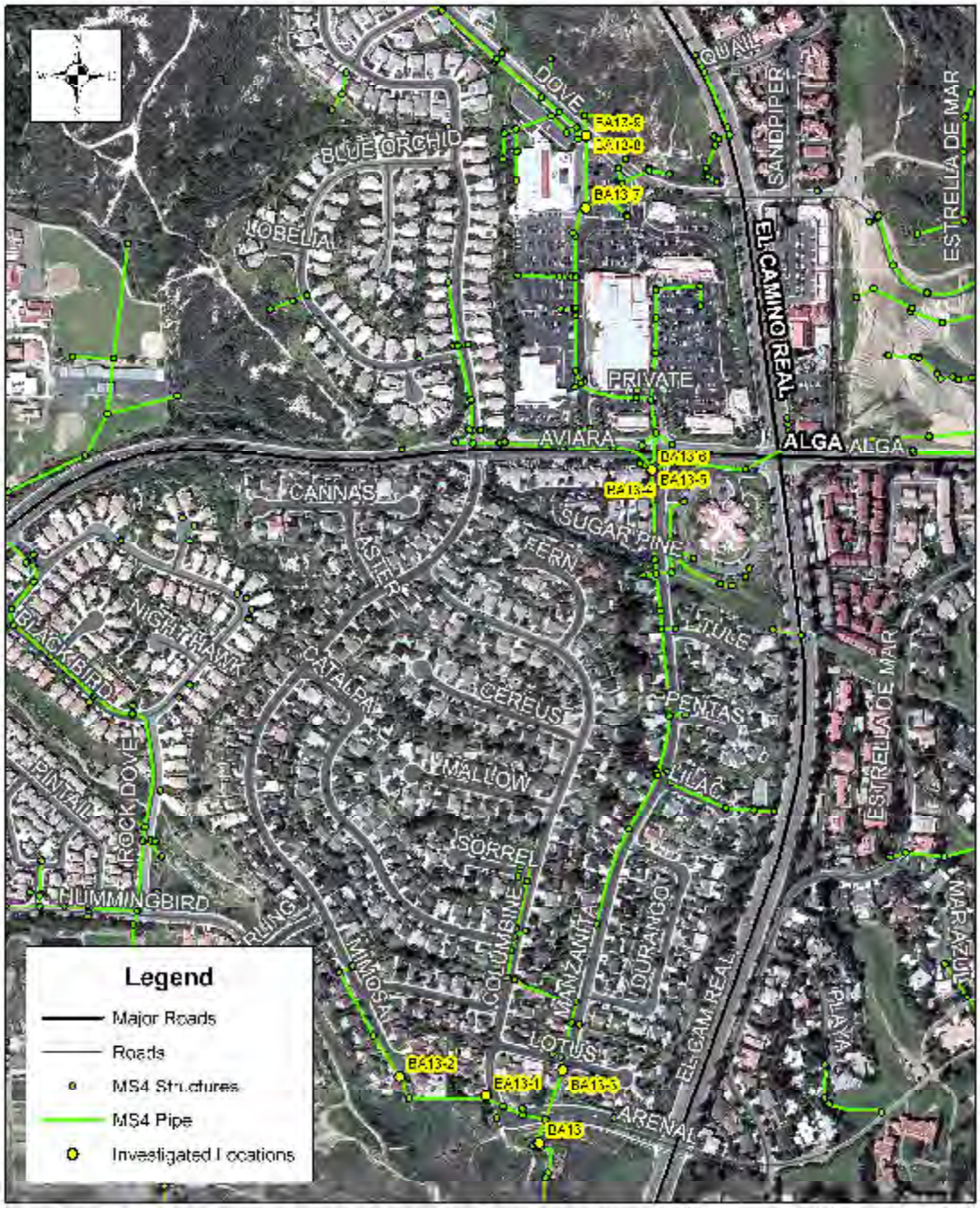

Base Data Sources: USGS, SanGIS, SANDAG, City of Carlsbad

Site BA40

The area immediately surrounding the site was under construction during both visits to the site. Algae and some trash were observed at the site and a flow of 20 gpm was sampled. Laboratory analysis of the sample collected from Site BA40 indicated that fecal coliform bacteria counts were 22,700 CFU/100 mL, above the action level of 20,000 CFU/100 mL. The field crew returned to the site for a follow-up visit and to collect a second set of samples for bacterial analysis. Similar conditions were noted around the site and a flow of 31 gpm was sampled. The results from the second set of sampling showed that the fecal coliform count decreased to 8,250 CFU/100 mL by the time of the follow-up visit. After collecting samples during the follow-up visit to the site, an upstream investigation was conducted to identify any potential sources of bacteria.

Although the source of bacteria in this sampling period may have been transient, elevated levels of bacteria have been measured at Site BA40 in the past. The site primarily drains the commercial and residential area to the North of the outlet; however Site BA40 is also influenced by any runoff from the surrounding construction site as well. The main conveyance line discharging to the site originates along Melrose Drive, approximately 200 yards North of the Alga Road and Melrose Drive intersection. Typically only a small volume of flow, if any, can be observed at the beginning of the line. Similar circumstances were again observed upstream along the main line (BA40-1). During the upstream investigation the majority of the water in the system was observed to be originating from the residential area to the West of Melrose Drive and South of Alga Road. Runoff from this area drains to the main line just West of Melrose Drive, between 6840 and 6842 Via Verano (BA40-2). Irrigation runoff appeared to be the primary source of the water from this residential area. Leaves, algae, and other organic material were noted at several points in the storm drain system upstream of Site BA40, but no direct sources of fecal matter were noted. Since no sources that would directly contribute fecal coliform bacteria were noted upstream, and the fecal coliform count was below the action level when re-sampled, it seems most likely that the elevated fecal coliform bacteria at Site BA40 were transient

TABLE 7-4 SITE BA40 UPSTREAM INVESTIGATION LOCATIONS

ID	Location
BA40	30 ft. Southwest of the Melrose Drive and Rancho Santa Fe Road Intersection
BA40-1	Manhole on Melrose Drive, midway between Alga Road and Rancho Santa Fe Drive
BA40-2	Manhole in sidewalk on Via Verano, between 6840 and 6842 Via Verano

FIGURE 7-4 SITE BA40 UPSTREAM INVESTIGATION

Site BA47

Inside the manhole at this site, is a junction box that drains three main lines, one from the Southwest, one from the West, and one from the Northwest. The line from the Northwest is actually comprised of two lines, one of which is an eight inch, perforated, PVC pipe. During the initial investigation the line from the Southwest was observed to be dry, a flow of roughly 1 gpm was observed coming from the PVC pipe of the combined Northwest line, and a majority of the flow (~ 10 gpm) was observed coming from the Western line. A sample was collected from the combined flow as it was exiting the junction box. The pH was measured to be 6.2, below the action level of 6.5. In the past the pH has been measured below the action level for this site.

Photo 7-3 Excess irrigation water running downstream to Site BA47

A follow-up investigation was conducted the next day. This time a combined flow of 15 gpm was observed inside the manhole. A pH of 6.5 was measured from the sample. Previous years investigations have indicated that flow from the small PVC pipe is the source of low pH. To confirm this, the field crew took samples from each of the lines. No flow was observed entering from the Southwestern line. The main line from the West had a flow rate of 10 gpm with a pH of 7.7. Unlike the initial visit to the site, a combined flow of approximately 4 gpm was observed coming from the Northwestern line. A sample of the combined flow from the Western line had a pH of 5.7. The field crew continued to investigate upstream in order to determine the source of the increased flow observed coming form the Northwestern line. Almost immediately the field crew observed irrigation runoff from some of the upstream residences on Camino Alvaro running in the gutters and entering an upstream catch basin (see Photo 7-3). As concluded in previous years, the small PVC pipe from the Northwest is likely the source of low pH. Irrigation runoff from the upstream residences likely combined in the Northwestern line with the low pH water from the PVC pipe, resulting in the slightly higher pH reading recorded during the follow-up visit to the site.

Site BV02

Site BV02 tested above the action level for both total coliform and *Enterococcus* bacteria counts during the initial round of sampling. Total coliform bacteria was measured at 66,000 CFU/100 mL, above the 50,000 CFU/100 mL action level. *Enterococcus* bacteria was measured at 12,550 CFU/100 mL, above the 10,000 CFU/100 mL action level. An initial flow of 3 gpm was measured at the site. Sleeping bags and clothing were observed nearby the site, indicating human inhabitation of the site (see Photo 7-4). During the follow-up visit the condition appeared the same. Clothes and sleeping bags were still present and trash could be observed in the water and around the site. A flow of 2 gpm was measured at the site. Samples were again collected and sent to the laboratory for bacterial analysis. The results indicated that both total coliform and *Enterococcus* bacteria

Photo 7-4 Evidence of human inhabitation, nearby Site BV02

were below their respective action levels. The total coliform bacteria count was 31,500 CFU/100 mL, and the *Enterococcus* count was 6,350 CFU/100 mL.

After collecting the follow-up samples, an immediate upstream investigation began in order to identify possible sources contributing bacteria to Site BV02. There are two main lines that contribute flow to Site BV02, one line from Laguna Drive to the East, and one from State Street to the South. Along the Eastern line, the field crew checked a manhole (BV02-1) on Laguna Drive approximately 100 feet West of Madison Street. A flow of less than 1 gpm was observed. The inside of the manhole was clean; no trash or decomposing material was observed. The line originating from the South of the site was checked at two different upstream locations. Site BV15 (BV02-2) on State Street was observed to be dry. A manhole in the cul-de-sac directly behind 2551 State Street (BV02-3) was also checked. A flow of 1 gpm was observed. The area inside the manhole appeared clean and free of trash and debris as well. In conclusion, the bacteria levels present during the initial round of sampling appeared to be transient and a result of human inhabitation of the site. It did not appear that the conditions observed upstream of the site would contribute a significant amount of bacteria to the storm drain system.

TABLE 7-5 SITE BV02 UPSTREAM INVESTIGATION LOCATIONS

ID	Location
BV02	East side of State Street, South of the Carlsbad Boulevard and State Street intersection
BV02-1	Manhole 100 ft. West of Madison Street and Laguna Drive intersection
BV02-2	Dry Weather Monitoring Program Site BV-15, at the intersection of Laguna Dr. and State Street, across from 2531 State Street
BV02-3	In the cul-de-sac at the back of 2551 State Street

FIGURE 7-5 SITE BV02 UPSTREAM INVESTIGATION

Site EN02C

Field screening tests performed during the initial visit to the site measured elevated nitrate levels in the sample collected. The nitrate nitrogen concentration was measured at 40.6 mg/L, above the action level of 10.0 mg/L. The sample collected during the follow-up visit had a nitrate concentration of 72.3 mg/L. A flow rate of 1 gpm was noted during both visits

to the site. Nitrate has been measured above the action level at this site in the past. The available GIS layer of the City's storm drain system shows only one underground line draining to Site EN02C; that line is located within the center divider along I-5, with no known major lateral connections, but several minor connections and surface drainage points. Previous upstream investigations have noted that fertilization of the landscaping along I-5 should be investigated as a possible source of the nitrate. However, investigations conducted by the City in 2005 and 2006 concluded that CalTrans median landscape maintenance practices were not the source of the nitrate measured at Site EN02C. No previously unknown laterals connecting to the line for Site EN02C were identified in 2007. Based on the results of investigations in 2007 and previous years, the most likely source of the elevated nitrate levels measured at Site EN02C is groundwater seepage into the main conveyance pipe upstream of the site. Since 2002, when conductivity measurements were first taken as part of the Dry Weather Monitoring Program, the conductivity values at EN02C have been within the range of about 4.0 to 6.0 mS/cm. These relatively high conductivity values are more characteristic of groundwater than typical surface water. A review of aerial photographs, topography, and hydrologic maps indicates that groundwater generally migrates to the Southwest in this area, supporting the idea of groundwater influence at the site. Recommendations for this site are listed in Section 8.

Site EN14A

During both the initial and follow-up visits to the site pH was measured at 5.9 and 5.5 respectively; both readings are below the action level of 6.5. During both visits a clear, colorless, odorless flow of 2 gpm was observed. All other constituents were below action levels. Low pH values have been recorded at this site every year since 1995. Upstream investigations conducted previous years have been unable to identify any above ground sources responsible for the low pH. Historically the low pH has been attributed to groundwater seepage somewhere along the line between sites EN14 and EN14A. Site EN14 is located upstream of Site EN14A, and the pH values measured at Site EN14 have typically been within acceptable dry weather monitoring action levels. This year the pH measured at Site EN14 was 7.8. No overland runoff or illicit connections were observed between sites EN14 and EN14A during the upstream investigation. It appears that groundwater seepage between sites EN14 and EN14A is responsible for the low pH measured at Site EN14A.

Site EN23

Low pH readings of 4.9 and 5.9 were recorded during the initial and follow-up visits, respectively. Turbidity measurements were also unusually high, 47.87 NTU during the initial visit and 36.51 during the follow-up visit. During both visits, the site smelled of rotten eggs, and the samples collected appeared slightly cloudy and milky in appearance. The milky appearance of the water does not appear consistent with samples of turbid water from erosion or sediment pollution.

After confirming the low pH reading and high turbidity readings at the site, the field crew traced the line upstream to a manhole located in front of 6211 Yarrow Drive. Inside the manhole are two lines of potential flow, a main line coming from the North and two small PVC pipes connected to a French drain at 6211 Yarrow Drive. No flow was observed coming from the PVC pipes, but a sample was collected from the flow of the mainline. The pH was 4.5 and the turbidity was 25.15 NTU. The line was followed farther upstream to a

manhole located at the Carlsbad Executive Plaza, West of 6150 Yarrow Drive. The pH of this sample was 7.5, with a turbidity of 1.16 NTU.

There are no known connections between the manhole measuring a pH of 4.5 and the manhole measuring a pH of 7.5. No discharges were observed entering the line between Site EN23 and the upstream locations either. This seems to indicate that the source of the low pH water is likely groundwater seepage somewhere along the line between the two upstream manholes. The source of the elevated turbidity is uncertain. As mentioned earlier, the milky appearance of the samples do not appear consistent with samples of turbid water caused by erosion and sedimentation. The milky appearance of the water has been observed at this site in the past, but not consistently. One hypothesis for the cause of the milky appearance is that the low pH of the water kills any bacteria or microorganisms present in the water. If there had been enough bacteria initially present in the water, the dead cells may give the sample a slightly cloudy milky appearance, which would then explain the elevated turbidity. Recommendations for this site are listed in Section 8.

8.0 SUMMARY AND RECOMMENDATIONS

8.1.1 Summary of Field Screening and Laboratory Analysis Data

Sixty primary monitoring locations were visited during the 2007 dry weather program. Because Site BV15 was dry, the alternate Site BV08 was selected to replace it. A total of 15 sites were sampled for laboratory analyses. During field screening and lab sampling, 14 sites had at least one parameter test above its corresponding action level. Table 8.1 provides a summary of sites exceeding the action level for a particular analyte.

TABLE 8-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (60 Samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
pH	3	5%	BA47, EN14A, EN23
Conductivity	0	0%	None
Turbidity	5	8%	AH10, BA13, BA36, EN21, EN23
Surfactants (Field Test)	1	2%	AH04
Ammonia Nitrogen	0	0%	None
Nitrate Nitrogen	3	5%	AH10, AH13, EN02C
Orthophosphate Phosphorus	1	2%	AH65
Laboratory Analyses (15 Samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
Surfactants (Laboratory)	0	0%	None
Oil & Grease	0	0%	None
Cadmium	0	0%	None
Copper	0	0%	None
Lead	0	0%	None
Zinc	0	0%	None
Diazinon	0	0%	None
Chlorpyrifos	0	0%	None
Total Coliform	3	20%	BA06, BA13, BV02
Fecal Coliform	1	7%	BA40
Enterococcus	2	13%	BA06, BV02

Note: Table incorporates the results from the initial site visits only.

Most sites had flowing water, with the flow rates ranging from less than 1 gpm to 299 gpm. Trash was observed at 18 of the 60 sites were samples were collected. Items included plastic, glass, aluminum cans, Styrofoam, and paper containers. Bubbles were observed at

a total of eight sites, and foam was observed at four sites. Algae was observed at 29 of the sites that receive sunlight. Other organisms such as snails, insects and larvae, fish, and/or crawfish were present at most of the sites. Sediments were deposited at all but nine of the sites visited.

8.1.2 Summary of Upstream Investigation Data

The table on the following page presents the conclusions based on the results of the upstream investigations conducted at 12 sites for the 2007 Dry Weather Monitoring Program.

TABLE 8-2
SUMMARY OF UPSTREAM INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results/Likely Source
	Field	Laboratory	
AH04	Surfactants		Upstream washing activities originating from behind 5600 Avenida Encinas.
AH10	Nitrate		Nitrate may originate from ground water seepage from the East.
AH13	Nitrate		Nitrate may originate from ground water seepage from the East.
AH65	Orthophosphate-P		Observed application of fertilizer upstream from site. Phosphorus used in the fertilizer is likely transported to the site via irrigation runoff.
BA06		Total Coliform, *Enterococcus*	No direct sources of *Enterococcus* were observed. Total coliforms were measured below the action level when resampled. Decomposition of organic debris is a possible source of total coliform bacteria.
BA13		Total Coliform	Total coliform was likely from decomposing organic material and trash noted in the open area North of Dove Lane.
BA40		Fecal Coliform	No direct sources of fecal coliform were observed upstream of the site. Fecal coliform dropped below the action level when resampled.
BA47	pH		Irrigation leach line from upstream residential area. Low pH readings have been measured in this line in the past.
BV02		Total Coliform, *Enterococcus*	Human inhabitation of the site along with trash and the influence of transient communities.
EN02C	Nitrate		Nitrate may originate from ground water seepage.
EN14A	pH		Seepage water with low pH.
EN23	pH, Turbidity		Seepage water with low pH. Turbidity may result from impacts of low pH on microorganisms in the water.

8.2 Recommendations

Based on the results of the year 2007 Dry Weather Field Screening Program for the City of Carlsbad, the following actions are recommended for consideration.

8.2.1 Education

- Provide educational material regarding vehicle washing BMPs and regulations as they pertain to industrial and commercial businesses to the responsible parties for the businesses located in the building at 5600 Avenida Encinas.

- Provide educational materials regarding BMPs for fertilizer use and minimizing irrigation runoff for the residential area upstream of Site AH65. Also distribute to the landscape management company responsible for the landscaping between Victoria Avenue and Auburn Avenue.

- Consider providing education regarding proper disposal of pet waste to residents in the vicinity of Site BA36, located along the Southern boundary of the La Costa golf course near Gibraltar Street.

8.2.2 Inspection and Maintenance

- As a proactive measure, consider cleaning out the storm drain system upstream of Site BA06. No clear source of bacteria was observed during the upstream investigation, but it is possible that material accumulated in the conveyances upstream of the site could be contributing to the high counts recorded.

- Remove trash and other anthropogenic debris from site BV02 on a regular basis.

- Remove trash and debris from the area around the channel North of Dove Lane. Trash and waste in the open upstream area are likely sources of the bacteria measured at Site BA13. Investigations the City conducted in response to recommendations in last year's dry weather report identified this area as the main source of bacteria to Site BA13.

- Clean out the conveyance lines in the immediate vicinity (just upstream and downstream) of the Site BA13 to ensure proper drainage to Site BA13, especially the manhole directly upstream on Arenal Road.

- Remove trash accumulating around Site AH03. Also remove trash as needed from the other sites at which trash was observed; Table 4-1 lists those sites.

- To the extent allowable, consider clearing out vegetation downstream of Site AH11 to allow proper drainage.

- Conduct inspections and/or education in the commercial complex upstream of Site BV08 to promote proper washing and grease disposal practices.

- Remove Site BA04 from the primary site list and replace it with another site in the Batiquitos Basin. This site is located in close proximity to Site BA06 and does not provide substantially different data. As part of its JURMP update, the City may also

consider adding sites in areas of the City that have been developed since the dry weather monitoring locations were selected as part of the preparation of the original JURMP.

8.2.3 Further Investigation

- Contact the company responsible for the maintenance practices of the flower fields East of the Carlsbad Premium Outlets. Work with the company to minimize irrigation runoff and any potential nitrates transported into the groundwater.

- Conduct further investigation as to the source of *Enterococcus* bacteria measured at Site BA06. No sources that would directly contribute *Enterococcus* bacteria were observed during the upstream investigation of the site.

- Conduct further investigation as to the source of bacteria measured at Site BA13. Previous investigations have identified the area North of Dove Lane as the most likely source of bacteria to Site BA13, and along the upstream branch Northwest of the Carlsbad City Library at the intersection of Dove Lane and Moorhen Place. It is unclear in which of the two lines the source of bacteria originates.

- Determine the responsible party for cleanup of accumulated pet waste in the open area close to Site BA36. The responsible party should be directed to clean up the pet waste and encouraged to consider having a sign stating that improper pet waste disposal is prohibited, a pet waste bag dispenser, or other similar measures installed in the area.

- Consider further analysis of the conditions that lead to low pH in water from the irrigation leach line at Site BA47.

- Consider further investigation to eliminate the possibility of an illicit connection to the storm drain system upstream of Site EN02C.

- Continue working with commercial sources upstream of EN02C on pollution prevention and over irrigation.

- Consider further investigation as to the source of the low pH measured at Site EN14A. It is likely that the source of the water originates somewhere along the line between Sites EN14 and EN14A.

- Consider further investigation as to the source of the low pH measured at Site EN23 and the cause of the milky appearance or turbid water intermittently observed at the site.

FIGURE 2
WATERSHED MAP OF THE CARLSBAD AREA, BROKEN INTO HYDROLOGIC SUBAREAS

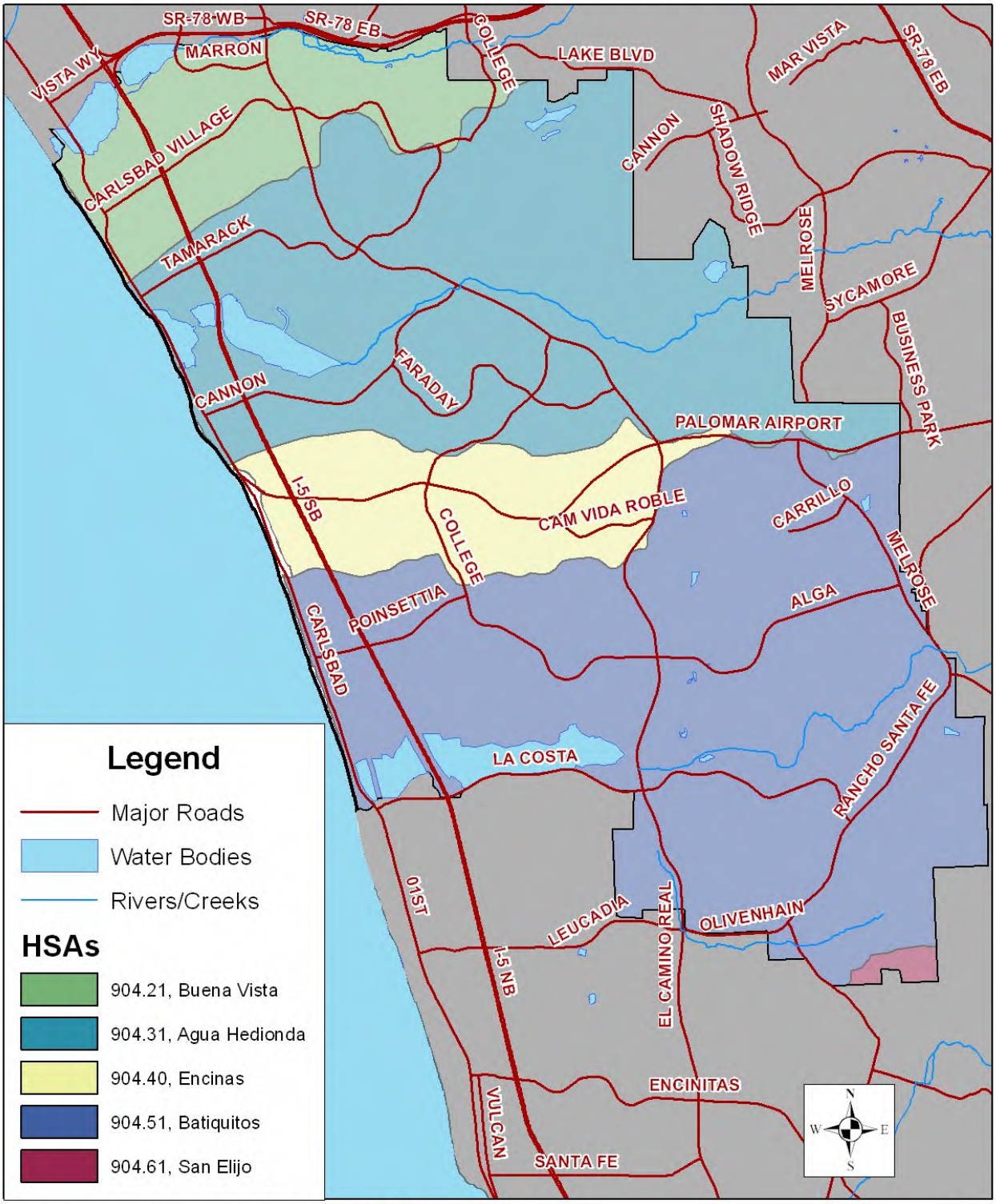

Base Data Sources: USGS, SanGIS, SANDAG

Appendix A

Photographs of Sampling Locations

AH03	
AH04	
AH08	

AH09	
AH10	
AH11	

AH12	
AH13	
AH18	

AH24	
AH27	
AH28	

AH30	
AH31	
AH32	

AH45	
AH46	
AH59	

AH61	
AH63	
AH65	

BA02	
BA03	
BA04	

BA06	
BA07	
BA13	

BA26	
BA27	
BA32	

BA34	
BA36	
BA40	

BA41	
BA43	
BA47	

BA48	
BA49	
BA51	

BA52	
BV02	
BV04A	

BV06	
BV08	
BV09	

BV10	
BV15	
BV16	

EN02A	
EN02B	
EN02C	

EN09	
EN14	
EN14A	

EN18	
EN19	
EN20	

EN21	
EN23	
EN24	

EN 31	

Appendix B

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

07 September 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0707174

Project Name: Carlsbad Dry Weather
Project Desc./#:200712W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/11/07 16:42. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707174

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH 10	0707174-01	Water	07/11/07 10:05	07/11/07 16:42
AH 03	0707174-02	Water	07/11/07 11:10	07/11/07 16:42
AH 24	0707174-03	Water	07/11/07 11:40	07/11/07 16:42
BA 51	0707174-04	Water	07/11/07 14:10	07/11/07 16:42

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707174

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH 10 (0707174-01) Water Sampled: 07/11/07 10:05 Received: 07/11/07 16:42									
Zinc	**0.024**	0.020	mg/l	1	7071305	07/13/07	07/18/07	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Copper	**0.009**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
AH 03 (0707174-02) Water Sampled: 07/11/07 11:10 Received: 07/11/07 16:42									
Lead	ND	0.005	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Copper	**0.005**	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
Zinc	**0.033**	0.020	"	"	"	"	"	"	
AH 24 (0707174-03) Water Sampled: 07/11/07 11:40 Received: 07/11/07 16:42									
Cadmium	ND	0.005	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
BA 51 (0707174-04) Water Sampled: 07/11/07 14:10 Received: 07/11/07 16:42									
Cadmium	ND	0.005	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707174

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH 10 (0707174-01) Water Sampled: 07/11/07 10:05 Received: 07/11/07 16:42									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071223	07/12/07	07/18/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*345 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*116 %*	*60-130*		"	"	"	"	
AH 03 (0707174-02) Water Sampled: 07/11/07 11:10 Received: 07/11/07 16:42									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071223	07/12/07	07/18/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*294 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*117 %*	*60-130*		"	"	"	"	
AH 24 (0707174-03) Water Sampled: 07/11/07 11:40 Received: 07/11/07 16:42									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071223	07/12/07	07/18/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*126 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*114 %*	*60-130*		"	"	"	"	
BA 51 (0707174-04) Water Sampled: 07/11/07 14:10 Received: 07/11/07 16:42									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071223	07/12/07	07/18/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*144 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*117 %*	*60-130*		"	"	"	"	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707174

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH 10 (0707174-01) Water Sampled: 07/11/07 10:05 Received: 07/11/07 16:42									
Hardness (Total)	**502**	100	mg CaCO3/L	10	7071317	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	**0.5**	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071606	07/16/07	07/16/07	EPA 1664	
AH 03 (0707174-02) Water Sampled: 07/11/07 11:10 Received: 07/11/07 16:42									
Hardness (Total)	**588**	100	mg CaCO3/L	10	7071317	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071606	07/16/07	07/16/07	EPA 1664	
AH 24 (0707174-03) Water Sampled: 07/11/07 11:40 Received: 07/11/07 16:42									
Hardness (Total)	**2050**	100	mg CaCO3/L	10	7071317	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071606	07/16/07	07/16/07	EPA 1664	
BA 51 (0707174-04) Water Sampled: 07/11/07 14:10 Received: 07/11/07 16:42									
Hardness (Total)	**2350**	100	mg CaCO3/L	10	7071317	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071606	07/16/07	07/16/07	EPA 1664	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707174

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071305										
Blank (7071305-BLK1)				Prepared & Analyzed: 07/13/07						
Cadmium	ND	0.005	mg/l							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
LCS (7071305-BS1)				Prepared & Analyzed: 07/13/07						
Lead	0.106	0.005	mg/l	0.100		106	75-125			
Zinc	0.118	0.020	"	0.100		118	75-125			
Cadmium	0.115	0.005	"	0.100		115	75-125			
Copper	0.097	0.005	"	0.100		97	75-125			
LCS Dup (7071305-BSD1)				Prepared & Analyzed: 07/13/07						
Copper	0.097	0.005	mg/l	0.100		97	75-125	0	20	
Cadmium	0.119	0.005	"	0.100		119	75-125	3	20	
Lead	0.106	0.005	"	0.100		106	75-125	0	20	
Zinc	0.118	0.020	"	0.100		118	75-125	0	20	
Duplicate (7071305-DUP1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Zinc	ND	0.020	mg/l		ND				20	
Cadmium	ND	0.005	"		ND				20	
Copper	0.004	0.005	"		0.004			0	20	
Lead	ND	0.005	"		ND				20	
Matrix Spike (7071305-MS1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Copper	0.087	0.005	mg/l	0.100	0.004	83	75-125			
Lead	0.094	0.005	"	0.100	ND	94	75-125			
Zinc	0.108	0.020	"	0.100	ND	108	75-125			
Cadmium	0.106	0.005	"	0.100	ND	106	75-125			

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707174

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071305										
Matrix Spike Dup (7071305-MSD1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Copper	0.090	0.005	mg/l	0.100	0.004	86	75-125	3	20	
Zinc	0.112	0.020	"	0.100	ND	112	75-125	4	20	
Lead	0.106	0.005	"	0.100	ND	106	75-125	12	20	
Cadmium	0.112	0.005	"	0.100	ND	112	75-125	6	20	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707174

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071223										
Blank (7071223-BLK1)				Prepared: 07/12/07	Analyzed: 07/18/07					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.267*		*"*	*0.250*		*107*	*60-130*			
Surrogate: Tribuytlphosphate	*0.228*		*"*	*0.250*		*91*	*60-130*			
LCS (7071223-BS1)				Prepared: 07/12/07	Analyzed: 07/18/07					
Bolstar	0.47	0.10	ug/l	0.500		94	60-130			
Diazinon	0.51	0.05	"	0.500		102	60-130			
Ethoprop	0.52	0.05	"	0.500		104	60-130			
Mevinphos	0.48	0.25	"	0.500		96	60-130			
Methyl parathion	0.49	0.10	"	0.500		98	60-130			
Phorate	0.49	0.05	"	0.500		98	60-130			
Ronnel	0.49	0.25	"	0.500		98	60-130			
Trichlorinate	0.48	0.05	"	0.500		96	60-130			
Surrogate: Triphenyl phosphate	*0.268*		*"*	*0.250*		*107*	*60-130*			
Surrogate: Tribuytlphosphate	*0.260*		*"*	*0.250*		*104*	*60-130*			
LCS Dup (7071223-BSD1)				Prepared: 07/12/07	Analyzed: 07/18/07					
Bolstar	0.54	0.10	ug/l	0.500		108	60-130	14	30	
Diazinon	0.57	0.05	"	0.500		114	60-130	11	30	
Ethoprop	0.56	0.05	"	0.500		112	60-130	7	30	
Mevinphos	0.51	0.25	"	0.500		102	60-130	6	30	
Methyl parathion	0.56	0.10	"	0.500		112	60-130	13	30	
Phorate	0.51	0.05	"	0.500		102	60-130	4	30	
Ronnel	0.57	0.25	"	0.500		114	60-130	15	30	
Trichlorinate	0.55	0.05	"	0.500		110	60-130	14	30	
Surrogate: Triphenyl phosphate	*0.287*		*"*	*0.250*		*115*	*60-130*			
Surrogate: Tribuytlphosphate	*0.269*		*"*	*0.250*		*108*	*60-130*			

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707174

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071317										
Blank (7071317-BLK1)				Prepared: 07/13/07	Analyzed: 07/16/07					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7071317-DUP1)		**Source: 0707174-03**		Prepared: 07/13/07	Analyzed: 07/16/07					
Hardness (Total)	1960	100	mg CaCO3/L		2050			4	20	
Batch 7071606										
Blank (7071606-BLK1)				Prepared & Analyzed: 07/16/07						
Oil & Grease	ND	5	mg/l							
LCS (7071606-BS1)				Prepared & Analyzed: 07/16/07						
Oil & Grease	90	5	mg/l	105		86	75-125			
LCS Dup (7071606-BSD1)				Prepared & Analyzed: 07/16/07						
Oil & Grease	82	5	mg/l	102		80	75-125	9	20	
Batch 7071726										
Blank (7071726-BLK1)				Prepared: 07/13/07	Analyzed: 07/17/07					
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7071726-BS1)				Prepared: 07/13/07	Analyzed: 07/17/07					
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120			
LCS Dup (7071726-BSD1)				Prepared: 07/13/07	Analyzed: 07/17/07					
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120	0	20	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707174

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071726										
Duplicate (7071726-DUP1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7071726-MS1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	ND	110	80-120			
Matrix Spike Dup (7071726-MSD1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	ND	110	80-120	0	20	

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Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A • San Diego, CA 92123 • Phone (858) 560-7717 • Fax (858) 560-7763

EMA LOG #: 0707174

EMA DATE/TIME STAMP

Client: D-Max Engineering, Inc.
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Attn: Arsalan Dadkhah Phone: (858) 586-6600
Sampled by: Fax: (858) 586-6644
Billing Address: Same
Carlsbad Dry Weather
Project: 200712W-1 PO #:

REQUESTED ANALYSIS

EMA ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container(s) #	Container(s) Type*	418.1 (TRPH)	Oil & Grease 413.1___ 413.2___ 1664 X	TPH (8015B) Gas___ Diesel___	TPH-Extended 8015B ___ ASTM D2887___	602 / 8021 BTXE___ MTBE___	601 / 8021 (Purgeable Halocarbons)	608 / 8081 (Pesticides)	608 / 8082 (PCB's)	624 / 8260 (Volatile Organics)	625 / 8270 (Semi Volatile Organics)	TTLC Metals (CAC Title 22)	STLC Metals (CAC Title 22)	TCLP (RCRA) Metals___ Organics___	Cd Cr Cu Pb Ni Ag Zn diss	pH EC TSS TDS	Total Hardness	MBAS	Diaz/Chlor (8141)					
1	AH10	7/11/07	10:05	water	2/2	G/P		X												X		X	X	X					
2	AH03	"	11:10	"	"	"		X												X		X	X	X					
3	AH24	"	11:40	"	"	"		X												X		X	X	X					
4	BA51	"	14:10	"	"	"		X												X		X	X	X					
5																													
6																													
7																													
8																													
9																													
10																													

*Container Types: B=Brass Tube; V=VOA; G=Glass: P=Plastic; O=Other (list)

Tamper-Proof Seals Intact: Yes No N/A
Correct Containers: Yes No
Sample(s): Cold Ambient Warm
VOAs w/ZHS: Yes No N/A
All Samples Properly Preserved: Yes No N/A
Disposal: N/C (aqueous) *EMA (@$5.00/sample) Return Hold
Turnaround Time: 24 hr 48 hr 3 day 4 day 5 day Normal
Comments: T=10°C

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	7/11/07 15:30	Signature: [signature]
Print: Manouchehr Dadkhah		Print: Tony Pack
Company: D-Max Engr		Company: EMA
Signature: [signature]	7/11/07 16:42	Signature: [signature]
Print: Tony Pack		Print: W. Lucero
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

*EMA reserves the right to return samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

EnviroMatrix Analytical, Inc.

07 September 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0707175

Project Name: Carlsbad Dry Weather
Project Desc./#:200712W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/11/07 16:42. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707175

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EN02B	0707175-01	Water	07/11/07 10:00	07/11/07 16:42
BV02	0707175-02	Water	07/11/07 11:15	07/11/07 16:42
AH45	0707175-03	Water	07/11/07 12:20	07/11/07 16:42
AH46	0707175-04	Water	07/11/07 14:10	07/11/07 16:42

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707175

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EN02B (0707175-01) Water Sampled: 07/11/07 10:00 Received: 07/11/07 16:42									
Zinc	ND	0.020	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
BV02 (0707175-02) Water Sampled: 07/11/07 11:15 Received: 07/11/07 16:42									
Lead	ND	0.005	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
Zinc	**0.053**	0.020	"	"	"	"	"	"	
AH45 (0707175-03) Water Sampled: 07/11/07 12:20 Received: 07/11/07 16:42									
Cadmium	ND	0.005	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Copper	**0.006**	0.005	"	"	"	"	"	"	
Zinc	**0.022**	0.020	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
AH46 (0707175-04) Water Sampled: 07/11/07 14:10 Received: 07/11/07 16:42									
Cadmium	ND	0.005	mg/l	1	7071305	07/13/07	07/18/07	EPA 6020	
Copper	**0.005**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707175

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EN02B (0707175-01) Water Sampled: 07/11/07 10:00 Received: 07/11/07 16:42									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071223	07/12/07	07/18/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*170 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*128 %*	*60-130*		"	"	"	"	
BV02 (0707175-02) Water Sampled: 07/11/07 11:15 Received: 07/11/07 16:42									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071223	07/12/07	07/18/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*258 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*130 %*	*60-130*		"	"	"	"	
AH45 (0707175-03) Water Sampled: 07/11/07 12:20 Received: 07/11/07 16:42									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071223	07/12/07	07/19/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*109 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*123 %*	*60-130*		"	"	"	"	
AH46 (0707175-04) Water Sampled: 07/11/07 14:10 Received: 07/11/07 16:42									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071223	07/12/07	07/19/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*193 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*126 %*	*60-130*		"	"	"	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707175

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EN02B (0707175-01) Water Sampled: 07/11/07 10:00 Received: 07/11/07 16:42									
Hardness (Total)	**768**	100	mg CaCO3/L	10	7071317	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071606	07/16/07	07/16/07	EPA 1664	
BV02 (0707175-02) Water Sampled: 07/11/07 11:15 Received: 07/11/07 16:42									
Hardness (Total)	**372**	100	mg CaCO3/L	10	7071317	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071606	07/16/07	07/16/07	EPA 1664	
AH45 (0707175-03) Water Sampled: 07/11/07 12:20 Received: 07/11/07 16:42									
Hardness (Total)	**1550**	100	mg CaCO3/L	10	7071317	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071606	07/16/07	07/16/07	EPA 1664	
AH46 (0707175-04) Water Sampled: 07/11/07 14:10 Received: 07/11/07 16:42									
Hardness (Total)	**3480**	100	mg CaCO3/L	10	7071317	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071606	07/16/07	07/16/07	EPA 1664	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707175

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071305										
Blank (7071305-BLK1)				Prepared & Analyzed: 07/13/07						
Cadmium	ND	0.005	mg/l							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
LCS (7071305-BS1)				Prepared & Analyzed: 07/13/07						
Lead	0.106	0.005	mg/l	0.100		106	75-125			
Zinc	0.118	0.020	"	0.100		118	75-125			
Cadmium	0.115	0.005	"	0.100		115	75-125			
Copper	0.097	0.005	"	0.100		97	75-125			
LCS Dup (7071305-BSD1)				Prepared & Analyzed: 07/13/07						
Copper	0.097	0.005	mg/l	0.100		97	75-125	0	20	
Cadmium	0.119	0.005	"	0.100		119	75-125	3	20	
Lead	0.106	0.005	"	0.100		106	75-125	0	20	
Zinc	0.118	0.020	"	0.100		118	75-125	0	20	
Duplicate (7071305-DUP1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Zinc	ND	0.020	mg/l		ND				20	
Cadmium	ND	0.005	"		ND				20	
Copper	0.004	0.005	"		0.004			0	20	
Lead	ND	0.005	"		ND				20	
Matrix Spike (7071305-MS1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Copper	0.087	0.005	mg/l	0.100	0.004	83	75-125			
Lead	0.094	0.005	"	0.100	ND	94	75-125			
Zinc	0.108	0.020	"	0.100	ND	108	75-125			
Cadmium	0.106	0.005	"	0.100	ND	106	75-125			

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707175

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071305										
Matrix Spike Dup (7071305-MSD1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Copper	0.090	0.005	mg/l	0.100	0.004	86	75-125	3	20	
Zinc	0.112	0.020	"	0.100	ND	112	75-125	4	20	
Lead	0.106	0.005	"	0.100	ND	106	75-125	12	20	
Cadmium	0.112	0.005	"	0.100	ND	112	75-125	6	20	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707175

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071223										
Blank (7071223-BLK1)				Prepared: 07/12/07	Analyzed: 07/18/07					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.267*		*"*	*0.250*		*107*	*60-130*			
Surrogate: Tribuytlphosphate	*0.228*		*"*	*0.250*		*91*	*60-130*			
LCS (7071223-BS1)				Prepared: 07/12/07	Analyzed: 07/18/07					
Bolstar	0.47	0.10	ug/l	0.500		94	60-130			
Diazinon	0.51	0.05	"	0.500		102	60-130			
Ethoprop	0.52	0.05	"	0.500		104	60-130			
Mevinphos	0.48	0.25	"	0.500		96	60-130			
Methyl parathion	0.49	0.10	"	0.500		98	60-130			
Phorate	0.49	0.05	"	0.500		98	60-130			
Ronnel	0.49	0.25	"	0.500		98	60-130			
Trichlorinate	0.48	0.05	"	0.500		96	60-130			
Surrogate: Triphenyl phosphate	*0.268*		*"*	*0.250*		*107*	*60-130*			
Surrogate: Tribuytlphosphate	*0.260*		*"*	*0.250*		*104*	*60-130*			
LCS Dup (7071223-BSD1)				Prepared: 07/12/07	Analyzed: 07/18/07					
Bolstar	0.54	0.10	ug/l	0.500		108	60-130	14	30	
Diazinon	0.57	0.05	"	0.500		114	60-130	11	30	
Ethoprop	0.56	0.05	"	0.500		112	60-130	7	30	
Mevinphos	0.51	0.25	"	0.500		102	60-130	6	30	
Methyl parathion	0.56	0.10	"	0.500		112	60-130	13	30	
Phorate	0.51	0.05	"	0.500		102	60-130	4	30	
Ronnel	0.57	0.25	"	0.500		114	60-130	15	30	
Trichlorinate	0.55	0.05	"	0.500		110	60-130	14	30	
Surrogate: Triphenyl phosphate	*0.287*		*"*	*0.250*		*115*	*60-130*			
Surrogate: Tribuytlphosphate	*0.269*		*"*	*0.250*		*108*	*60-130*			

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707175

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071317										
Blank (7071317-BLK1)				Prepared: 07/13/07		Analyzed: 07/16/07				
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7071317-DUP1)		**Source: 0707174-03**		Prepared: 07/13/07		Analyzed: 07/16/07				
Hardness (Total)	1960	100	mg CaCO3/L		2050			4	20	
Batch 7071606										
Blank (7071606-BLK1)				Prepared & Analyzed: 07/16/07						
Oil & Grease	ND	5	mg/l							
LCS (7071606-BS1)				Prepared & Analyzed: 07/16/07						
Oil & Grease	90	5	mg/l	105		86	75-125			
LCS Dup (7071606-BSD1)				Prepared & Analyzed: 07/16/07						
Oil & Grease	82	5	mg/l	102		80	75-125	9	20	
Batch 7071726										
Blank (7071726-BLK1)				Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7071726-BS1)				Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120			
LCS Dup (7071726-BSD1)				Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120	0	20	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707175

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071726										
Duplicate (7071726-DUP1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7071726-MS1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	ND	110	80-120			
Matrix Spike Dup (7071726-MSD1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	ND	110	80-120	0	20	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A • San Diego, CA 92123 • Phone (858) 560-7717 • Fax (858) 560-7763

EMA LOG #: 0707175

EMA DATE/TIME STAMP

Client: D-Max Engineering, Inc.
Address: 7220 Trade St. Suite 119
San Diego, CA 92121
Attn: Arsalan Dadkhah Phone: (858) 586-6600
Sampled by: Fax: (858) 586-6644
Billing Address: Same
Carlsbad Dry Weather
Project: 2007.12W-1 PO #:

REQUESTED ANALYSIS

EMA ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container(s) #	Container(s) Type*	418.1 (TRPH)	Oil & Grease 413.1___ 413.2___ 1664 X	TPH (8015B) Gas___ Diesel___	TPH-Extended 8015B ___ ASTM D2887___	602 / 8021 BTXE___ MTBE___	601 / 8021 (Purgeable Halocarbons)	608 / 8081 (Pesticides)	608 / 8082 (PCB's)	624 / 8260 (Volatile Organics)	625 / 8270 (Semi Volatile Organics)	TTLC Metals (CAC Title 22)	STLC Metals (CAC Title 22)	TCLP (RCRA) Metals___ Organics___	Cd Cr Cu Pb Ni Ag Zn diss	pH EC TSS TDS	Total Hardness	MBAS	Diaz/chlor (8141)				
1	ENOZB	7/11/07	10:00	water	2/6	G/p		X												X		X	X	X				
2	BVOZ	~	11:15	~	~	~		X												X		X	X	X				
3	AH45	~	12:20	~	~	~		X												X		X	X	X				
4	AH46	~	14:10	~	~	~		X												X		X	X	X				
5																												
6																												
7																												
8																												
9																												
10																												

*Container Types: B=Brass Tube; V=VOA; G=Glass: P=Plastic; O=Other (list)

Tamper-Proof Seals Intact: Yes No N/A
Correct Containers: Yes No
Sample(s): Cold Ambient Warm
VOAs w/ZHS: Yes No N/A
All Samples Properly Preserved: Yes No N/A
Disposal: N/C (aqueous) *EMA (@$5.00/sample) Return Hold
Turnaround Time: 24 hr 48 hr 3 day 4 day 5 day Normal
Comments: T-/0C

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	7/11/07 15:30	Signature:
Print: Manouchehr Dadkhah		Print: Jan Peck
Company: D-Max Eng.		Company: EMA
Signature:	7/11/07 16:42	Signature:
Print: Jan Peck		Print: W. Lucero
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

*EMA reserves the right to return samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

EnviroMatrix Analytical, Inc.

07 September 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0707195

Project Name: Carlsbad Dry Weather
Project Desc./#:200712W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/12/07 15:15. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707195

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH08	0707195-01	Water	07/12/07 09:00	07/12/07 15:15
BA36	0707195-02	Water	07/12/07 10:40	07/12/07 15:15
EN09	0707195-03	Water	07/12/07 11:45	07/12/07 15:15

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707195

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH08 (0707195-01) Water Sampled: 07/12/07 09:00 Received: 07/12/07 15:15									
Copper	ND	0.005	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
BA36 (0707195-02) Water Sampled: 07/12/07 10:40 Received: 07/12/07 15:15									
Zinc	ND	0.020	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
Copper	**0.007**	0.005	"	"	"	"	"	"	
EN09 (0707195-03) Water Sampled: 07/12/07 11:45 Received: 07/12/07 15:15									
Zinc	ND	0.020	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707195

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH08 (0707195-01) Water Sampled: 07/12/07 09:00 Received: 07/12/07 15:15									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071620	07/16/07	07/19/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*138 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*102 %*	*60-130*		"	"	"	"	
BA36 (0707195-02) Water Sampled: 07/12/07 10:40 Received: 07/12/07 15:15									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071620	07/16/07	07/19/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*132 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*98 %*	*60-130*		"	"	"	"	
EN09 (0707195-03) Water Sampled: 07/12/07 11:45 Received: 07/12/07 15:15									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071620	07/16/07	07/19/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*122 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*100 %*	*60-130*		"	"	"	"	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707195

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH08 (0707195-01) Water Sampled: 07/12/07 09:00 Received: 07/12/07 15:15									
Hardness (Total)	**385**	100	mg CaCO3/L	10	7071321	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071816	07/18/07	07/18/07	EPA 1664	
BA36 (0707195-02) Water Sampled: 07/12/07 10:40 Received: 07/12/07 15:15									
Hardness (Total)	**2290**	100	mg CaCO3/L	10	7071321	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071816	07/18/07	07/18/07	EPA 1664	
EN09 (0707195-03) Water Sampled: 07/12/07 11:45 Received: 07/12/07 15:15									
Hardness (Total)	**2400**	100	mg CaCO3/L	10	7071321	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071816	07/18/07	07/18/07	EPA 1664	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707195

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071305										
Blank (7071305-BLK1)				Prepared & Analyzed: 07/13/07						
Copper	ND	0.005	mg/l							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
Cadmium	ND	0.005	"							
LCS (7071305-BS1)				Prepared & Analyzed: 07/13/07						
Cadmium	0.115	0.005	mg/l	0.100		115	75-125			
Copper	0.097	0.005	"	0.100		97	75-125			
Lead	0.106	0.005	"	0.100		106	75-125			
Zinc	0.118	0.020	"	0.100		118	75-125			
LCS Dup (7071305-BSD1)				Prepared & Analyzed: 07/13/07						
Cadmium	0.119	0.005	mg/l	0.100		119	75-125	3	20	
Copper	0.097	0.005	"	0.100		97	75-125	0	20	
Lead	0.106	0.005	"	0.100		106	75-125	0	20	
Zinc	0.118	0.020	"	0.100		118	75-125	0	20	
Duplicate (7071305-DUP1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Copper	0.004	0.005	mg/l		0.004			0	20	
Zinc	ND	0.020	"		ND				20	
Lead	ND	0.005	"		ND				20	
Cadmium	ND	0.005	"		ND				20	
Matrix Spike (7071305-MS1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Cadmium	0.106	0.005	mg/l	0.100	ND	106	75-125			
Copper	0.087	0.005	"	0.100	0.004	83	75-125			
Lead	0.094	0.005	"	0.100	ND	94	75-125			
Zinc	0.108	0.020	"	0.100	ND	108	75-125			

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering	**EMA Log #: 0707195**
Project Name: Carlsbad Dry Weather	

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071305										
Matrix Spike Dup (7071305-MSD1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Cadmium	0.112	0.005	mg/l	0.100	ND	112	75-125	6	20	
Copper	0.090	0.005	"	0.100	0.004	86	75-125	3	20	
Lead	0.106	0.005	"	0.100	ND	106	75-125	12	20	
Zinc	0.112	0.020	"	0.100	ND	112	75-125	4	20	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707195

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071620										
Blank (7071620-BLK1)				Prepared: 07/16/07	Analyzed: 07/19/07					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.244*		*"*	*0.250*		*98*	*60-130*			
Surrogate: Tribuytlphosphate	*0.212*		*"*	*0.250*		*85*	*60-130*			
LCS (7071620-BS1)				Prepared: 07/16/07	Analyzed: 07/19/07					
Bolstar	0.50	0.10	ug/l	0.500		100	60-130			
Diazinon	0.54	0.05	"	0.500		108	60-130			
Ethoprop	0.53	0.05	"	0.500		106	60-130			
Mevinphos	0.45	0.25	"	0.500		90	60-130			
Methyl parathion	0.54	0.10	"	0.500		108	60-130			
Phorate	0.53	0.05	"	0.500		106	60-130			
Ronnel	0.54	0.25	"	0.500		108	60-130			
Trichlorinate	0.52	0.05	"	0.500		104	60-130			
Surrogate: Triphenyl phosphate	*0.262*		*"*	*0.250*		*105*	*60-130*			
Surrogate: Tribuytlphosphate	*0.250*		*"*	*0.250*		*100*	*60-130*			
LCS Dup (7071620-BSD1)				Prepared: 07/16/07	Analyzed: 07/19/07					
Bolstar	0.52	0.10	ug/l	0.500		104	60-130	4	30	
Diazinon	0.56	0.05	"	0.500		112	60-130	4	30	
Ethoprop	0.50	0.05	"	0.500		100	60-130	6	30	
Mevinphos	0.50	0.25	"	0.500		100	60-130	11	30	
Methyl parathion	0.53	0.10	"	0.500		106	60-130	2	30	
Phorate	0.52	0.05	"	0.500		104	60-130	2	30	
Ronnel	0.56	0.25	"	0.500		112	60-130	4	30	
Trichlorinate	0.52	0.05	"	0.500		104	60-130	0	30	
Surrogate: Triphenyl phosphate	*0.264*		*"*	*0.250*		*106*	*60-130*			
Surrogate: Tribuytlphosphate	*0.249*		*"*	*0.250*		*100*	*60-130*			

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707195

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071321										
Blank (7071321-BLK1)				Prepared: 07/13/07		Analyzed: 07/16/07				
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7071321-DUP1)		**Source: 0707196-04**		Prepared: 07/13/07		Analyzed: 07/16/07				
Hardness (Total)	1010	100	mg CaCO3/L		990			2	20	
Batch 7071726										
Blank (7071726-BLK1)				Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7071726-BS1)				Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120			
LCS Dup (7071726-BSD1)				Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120	0	20	
Duplicate (7071726-DUP1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7071726-MS1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	ND	110	80-120			
Matrix Spike Dup (7071726-MSD1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	ND	110	80-120	0	20	
Batch 7071816										
Blank (7071816-BLK1)				Prepared & Analyzed: 07/18/07						
Oil & Grease	ND	5	mg/l							

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707195

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071816										
LCS (7071816-BS1)				Prepared & Analyzed: 07/18/07						
Oil & Grease	92	5	mg/l	113		81	75-125			
LCS Dup (7071816-BSD1)				Prepared & Analyzed: 07/18/07						
Oil & Grease	83	5	mg/l	106		78	75-125	10	20	

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Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A • San Diego, CA 92123 • Phone (858) 560-7717 • Fax (858) 560-7763

EMA LOG #: 0707195

EMA DATE/TIME STAMP

Client: D-Max Engineering, Inc.
Address: 7220 Trade st, Suite 119
San Diego, CA 92121
Attn: Arsalan Dadkhah Phone: (858) 586-6600
Sampled by: Fax: (858) 586-6644
Billing Address: Same
Carlsbad Dry Weather
Project: 200712W-1 PO #:

REQUESTED ANALYSIS

EMA ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container(s) #	Container(s) Type*	418.1 (TRPH)	Oil & Grease 413.1___ 413.2___ 1664 X	TPH (8015B) Gas___ Diesel___	TPH-Extended 8015B___ ASTM D2887___	602 / 8021 BTXE___ MTBE___	601 / 8021 (Purgeable Halocarbons)	608 / 8081 (Pesticides)	608 / 8082 (PCB's)	624 / 8260 (Volatile Organics)	625 / 8270 (Semi Volatile Organics)	TTLC Metals (CAC Title 22)	STLC Metals (CAC Title 22)	TCLP (RCRA) Metals___ Organics___	Cd Cr Cu Pb Ni Ag Zn diss	pH EC TSS TDS	Total Hardness	MBAS	Dia/Chlor (8141)				
1	AH08	7/12/07	9:00	water	2/2	G/p		X												X		X	X	X				
2	BA36	"	10:40	"	"	"		X												X		X	X	X				
3	EN09	"	11:45	"		"		X												X		X	X	X				
4																												
5																												
6																												
7																												
8																												
9																												
10																												

*Container Types: B=Brass Tube; V=VOA; G=Glass; P=Plastic; O=Other (list)

Tamper-Proof Seals Intact: Yes No N/A
Correct Containers: Yes No
Sample(s): Cold Ambient Warm
VOAs w/ZHS: Yes No N/A
All Samples Properly Preserved: Yes No N/A
Disposal: N/C (aqueous) *EMA (@$5.00/sample) Return Hold
Turnaround Time: 24 hr 48 hr 3 day 4 day 5 day Normal
Comments:
1°C

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	7/12/07 14:10	Signature: [signature]
Print: Manouchehr Dadkhah		Print: Jay Porch
Company: D-Max Eng.		Company: EMA
Signature: [signature]	7/12/07 15:15	Signature: [signature]
Print: Jane Porch		Print: W. Lucero
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

*EMA reserves the right to return samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

EnviroMatrix Analytical, Inc.

07 September 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0707196

Project Name: Carlsbad Dry Weather
Project Desc./#:200712W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/12/07 15:15. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707196

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EN19	0707196-01	Water	07/12/07 08:50	07/12/07 15:15
BA06	0707196-02	Water	07/12/07 09:30	07/12/07 15:15
BA13	0707196-03	Water	07/12/07 10:25	07/12/07 15:15
BA40	0707196-04	Water	07/12/07 11:25	07/12/07 15:15

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707196

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EN19 (0707196-01) Water Sampled: 07/12/07 08:50 Received: 07/12/07 15:15									
Zinc	ND	0.020	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
BA06 (0707196-02) Water Sampled: 07/12/07 09:30 Received: 07/12/07 15:15									
Lead	ND	0.005	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Copper	**0.007**	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
BA13 (0707196-03) Water Sampled: 07/12/07 10:25 Received: 07/12/07 15:15									
Cadmium	**0.010**	0.005	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Copper	**0.006**	0.005	"	"	"	"	"	"	
Zinc	**0.068**	0.020	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
BA40 (0707196-04) Water Sampled: 07/12/07 11:25 Received: 07/12/07 15:15									
Cadmium	ND	0.005	mg/l	1	7071305	07/13/07	07/13/07	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707196

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EN19 (0707196-01) Water Sampled: 07/12/07 08:50 Received: 07/12/07 15:15									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071620	07/16/07	07/19/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*162 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*102 %*	*60-130*		"	"	"	"	
BA06 (0707196-02) Water Sampled: 07/12/07 09:30 Received: 07/12/07 15:15									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071620	07/16/07	07/19/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*127 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*91 %*	*60-130*		"	"	"	"	
BA13 (0707196-03) Water Sampled: 07/12/07 10:25 Received: 07/12/07 15:15									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071620	07/16/07	07/19/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*251 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*108 %*	*60-130*		"	"	"	"	
BA40 (0707196-04) Water Sampled: 07/12/07 11:25 Received: 07/12/07 15:15									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7071620	07/16/07	07/19/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*123 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*98 %*	*60-130*		"	"	"	"	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707196

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EN19 (0707196-01) Water Sampled: 07/12/07 08:50 Received: 07/12/07 15:15									
Hardness (Total)	**1830**	100	mg CaCO3/L	10	7071321	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071816	07/18/07	07/18/07	EPA 1664	
BA06 (0707196-02) Water Sampled: 07/12/07 09:30 Received: 07/12/07 15:15									
Hardness (Total)	**547**	100	mg CaCO3/L	10	7071321	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071816	07/18/07	07/18/07	EPA 1664	
BA13 (0707196-03) Water Sampled: 07/12/07 10:25 Received: 07/12/07 15:15									
Hardness (Total)	**3820**	100	mg CaCO3/L	10	7071321	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071816	07/18/07	07/18/07	EPA 1664	
BA40 (0707196-04) Water Sampled: 07/12/07 11:25 Received: 07/12/07 15:15									
Hardness (Total)	**990**	100	mg CaCO3/L	10	7071321	07/13/07	07/16/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7071726	07/13/07	07/17/07	SM5540 C	
Oil & Grease	ND	5	"	"	7071816	07/18/07	07/18/07	EPA 1664	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707196

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071305										
Blank (7071305-BLK1)				Prepared & Analyzed: 07/13/07						
Copper	ND	0.005	mg/l							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
Cadmium	ND	0.005	"							
LCS (7071305-BS1)				Prepared & Analyzed: 07/13/07						
Cadmium	0.115	0.005	mg/l	0.100		115	75-125			
Copper	0.097	0.005	"	0.100		97	75-125			
Lead	0.106	0.005	"	0.100		106	75-125			
Zinc	0.118	0.020	"	0.100		118	75-125			
LCS Dup (7071305-BSD1)				Prepared & Analyzed: 07/13/07						
Cadmium	0.119	0.005	mg/l	0.100		119	75-125	3	20	
Copper	0.097	0.005	"	0.100		97	75-125	0	20	
Lead	0.106	0.005	"	0.100		106	75-125	0	20	
Zinc	0.118	0.020	"	0.100		118	75-125	0	20	
Duplicate (7071305-DUP1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Copper	0.004	0.005	mg/l		0.004			0	20	
Zinc	ND	0.020	"		ND				20	
Lead	ND	0.005	"		ND				20	
Cadmium	ND	0.005	"		ND				20	
Matrix Spike (7071305-MS1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Cadmium	0.106	0.005	mg/l	0.100	ND	106	75-125			
Copper	0.087	0.005	"	0.100	0.004	83	75-125			
Lead	0.094	0.005	"	0.100	ND	94	75-125			
Zinc	0.108	0.020	"	0.100	ND	108	75-125			

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707196

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071305										
Matrix Spike Dup (7071305-MSD1)		**Source: 0707136-01**		Prepared & Analyzed: 07/13/07						
Cadmium	0.112	0.005	mg/l	0.100	ND	112	75-125	6	20	
Copper	0.090	0.005	"	0.100	0.004	86	75-125	3	20	
Lead	0.106	0.005	"	0.100	ND	106	75-125	12	20	
Zinc	0.112	0.020	"	0.100	ND	112	75-125	4	20	

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Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707196

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071620										
Blank (7071620-BLK1)				Prepared: 07/16/07	Analyzed: 07/19/07					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.244*		*"*	*0.250*		*98*	*60-130*			
Surrogate: Tribuytlphosphate	*0.212*		*"*	*0.250*		*85*	*60-130*			
LCS (7071620-BS1)				Prepared: 07/16/07	Analyzed: 07/19/07					
Bolstar	0.50	0.10	ug/l	0.500		100	60-130			
Diazinon	0.54	0.05	"	0.500		108	60-130			
Ethoprop	0.53	0.05	"	0.500		106	60-130			
Mevinphos	0.45	0.25	"	0.500		90	60-130			
Methyl parathion	0.54	0.10	"	0.500		108	60-130			
Phorate	0.53	0.05	"	0.500		106	60-130			
Ronnel	0.54	0.25	"	0.500		108	60-130			
Trichlorinate	0.52	0.05	"	0.500		104	60-130			
Surrogate: Triphenyl phosphate	*0.262*		*"*	*0.250*		*105*	*60-130*			
Surrogate: Tribuytlphosphate	*0.250*		*"*	*0.250*		*100*	*60-130*			
LCS Dup (7071620-BSD1)				Prepared: 07/16/07	Analyzed: 07/19/07					
Bolstar	0.52	0.10	ug/l	0.500		104	60-130	4	30	
Diazinon	0.56	0.05	"	0.500		112	60-130	4	30	
Ethoprop	0.50	0.05	"	0.500		100	60-130	6	30	
Mevinphos	0.50	0.25	"	0.500		100	60-130	11	30	
Methyl parathion	0.53	0.10	"	0.500		106	60-130	2	30	
Phorate	0.52	0.05	"	0.500		104	60-130	2	30	
Ronnel	0.56	0.25	"	0.500		112	60-130	4	30	
Trichlorinate	0.52	0.05	"	0.500		104	60-130	0	30	
Surrogate: Triphenyl phosphate	*0.264*		*"*	*0.250*		*106*	*60-130*			
Surrogate: Tribuytlphosphate	*0.249*		*"*	*0.250*		*100*	*60-130*			

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707196

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071321										
Blank (7071321-BLK1)				Prepared: 07/13/07		Analyzed: 07/16/07				
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7071321-DUP1)		**Source: 0707196-04**		Prepared: 07/13/07		Analyzed: 07/16/07				
Hardness (Total)	1010	100	mg CaCO3/L		990			2	20	
Batch 7071726										
Blank (7071726-BLK1)				Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7071726-BS1)				Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120			
LCS Dup (7071726-BSD1)				Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120	0	20	
Duplicate (7071726-DUP1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7071726-MS1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	ND	110	80-120			
Matrix Spike Dup (7071726-MSD1)		**Source: 0707174-02**		Prepared: 07/13/07		Analyzed: 07/17/07				
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	ND	110	80-120	0	20	
Batch 7071816										
Blank (7071816-BLK1)				Prepared & Analyzed: 07/18/07						
Oil & Grease	ND	5	mg/l							

488

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0707196

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7071816										
LCS (7071816-BS1)				Prepared & Analyzed: 07/18/07						
Oil & Grease	92	5	mg/l	113		81	75-125			
LCS Dup (7071816-BSD1)				Prepared & Analyzed: 07/18/07						
Oil & Grease	83	5	mg/l	106		78	75-125	10	20	

489

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

490

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A • San Diego, CA 92123 • Phone (858) 560-7717 • Fax (858) 560-7763

EMA LOG #: 0707196

EMA DATE/TIME STAMP

Client: D-Max Engineering
Address: 7220 Trade St. Suite 19
San Diego, CA 92121
Attn: Arsalan Dadkhah Phone: 858) 586-6600
Sampled by: Fax: 858) 586-6644
Billing Address: SAME
Carlsbad Dry Weather
Project: 20071210-1 PO #:

REQUESTED ANALYSIS

EMA ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container(s) #	Container(s) Type*	418.1 (TRPH)	Oil & Grease 413.1___ 413.2___ 1664 X	TPH (8015B) Gas___ Diesel___	TPH-Extended 8015B ___ASTM D2887___	602 / 8021 BTXE___ MTBE___	601 / 8021 (Purgeable Halocarbons)	608 / 8081 (Pesticides)	608 / 8082 (PCB's)	624 / 8260 (Volatile Organics)	625 / 8270 (Semi Volatile Organics)	TTLC Metals (CAC Title 22)	STLC Metals (CAC Title 22)	TCLP (RCRA) Metals___ Organics___	Cd Cr Cu Pb Ni Ag Zn DSS	pH EC TSS TDS	Total Hardness	LUBAS	Diaz Chlor (8141)					
1	EN 19	7-12-07	08:50	H_2O	2/2	G/P		X												X		X	X	X					
2	BA06	"	09:30	"	"	"		X												X		X	X	X					
3	BA13	"	10:25	"	"	"		X												X		X	X	X					
4	BA40	"	11:25	"	"	"		X												X		X	X	X					
5																													
6																													
7																													
8																													
9																													
10																													

*Container Types: B=Brass Tube; V=VOA; G=Glass: P=Plastic; O=Other (list)

Tamper-Proof Seals Intact: Yes No N/A
Correct Containers: Yes No
Sample(s): Cold Ambient Warm
VOAs w/ZHS: Yes No N/A
All Samples Properly Preserved: Yes No N/A
Disposal: N/C (aqueous) *EMA (@$5.00/sample) Return Hold
Turnaround Time: 24 hr 48 hr 3 day 4 day 5 day Normal
Comments:
10C

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Maneuchehr Dadkhah	7/12/07 14:10	Signature: [signature]
Print: Maneuchehr Dadkhah		Print: Tony Peck
Company:		Company: EMA
Signature: [signature]	7/12/07 15:15	Signature: [signature]
Print: Tony Peck		Print: W. Lucero
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

*EMA reserves the right to return samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

ENCINA WASTEWATER AUTHORITY
A Public Agency
6200 Avenida Encinas
Carlsbad, CA 92011-1095
Telephone (760) 438-3941
FAX (760) 438-3861 (Plant)
(760) 431-7493 (Admin)

July 16, 2007

RECEIVED
JUL 25 2007
ENVIRONMENTAL

Ref No. EC:07-0307

Client: City Of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92009

Contact: Ms. Elaine Lukey
Samplers: Mr. Peter D. Smith
Mr. Manouchehr Dedkhah
Ms. Molly Colvin

ENCINA WASTEWATER AUTHORITY LABORATORY REPORT
E.L.A.P. Certification No. 1441

Sample Location	Sample Date	Sample Time	Analyzed By	Total cfu/100 ml S.M. 9222 B	Fecal cfu/100 ml S.M. 9222 D	Enterococcus cfu/100 ml S.M. 9230 C
AH10	7/11/2007	10:05 AM	Joel Camarillo	40,000	7,100	1,010
AH03	7/11/2007	11:10 AM	Joel Camarillo	16,000	10,600	5,180
AH24	7/11/2007	11:40 AM	Joel Camarillo	6,600	1,400	350
EN02B	7/11/2007	10:00 AM	Joel Camarillo	<50	225	4,480
BV02	7/11/2007	11:15 AM	Joel Camarillo	66,000	18,100	12,550
AH45	7/11/2007	12:20 PM	Joel Camarillo	29,600	3,875	1,390
AH46	7/11/2007	2:10 PM	Joel Camarillo	16,800	8,600	2,870
BA51	7/11/2007	2:10 PM	Joel Camarillo	3,200	1,450	830

E= Estimated Value

Certified By: Doug Campbell

Date: 7/23/07

Doug Campbell, Laboratory Supervisor

01/23/2008 17:16

01/23/2008 17:16

login # 0 10711163327 ✓
1 of 4 (2)

ENCINA WASTEWATER AUTHORITY LABORATORY

6200 AVENIDA ENCINAS
CARLSBAD, CA 92011
PH: (760) 438-3941
FAX: (760) 438-3861
ELAP LABORATORY CERTIFICATION NO. 1441

2245

CHAIN OF CUSTODY

SAMPLERS (SIGNATURE): [signature] PRINT NAME: Peter D. Smith

DATE	TIME	SAMPLE LOCATION	GRAB	COMPOSITE	LIQUID	SOLID	COLILERT	GENERAL PHYSICAL	HETEROTROPHIC PLATE COUNT	OTHER	(TP) TOP PRIORITY OR (R) ROUTINE	NUMBER OF CONTAINERS	ANALYSES REQUESTED
7/11/07	10:05	AH 10	X		X								TC, FC, Entro — Earthen Channel
7/11/07	11:10	AH 03	X		X								TC, FC, Entro — Outlet
7/11/07	11:40	AH 24	X		X								TC, FC, Entro — Concrete Channel

RELINQUISHED BY: [signature] DATE/TIME: 7/11/07 13:45
RECEIVED BY: [signature] DATE/TIME: 13:46 7/11/07
RELINQUISHED BY: DATE/TIME:
RECEIVED BY: DATE/TIME:

ENCINA WASTEWATER AUTHORITY LABORATORY
6200 AVENIDA ENCINAS
CARLSBAD, CA 92011
PH: (760) 438-3941
FAX: (760) 438-3861
ELAP LABORATORY CERTIFICATION NO. 1441

2246

CHAIN OF CUSTODY

SAMPLERS (SIGNATURE): Manouchehr Dadkhah
PRINT NAME: Manouchehr Dadkhah

SAMPLE TYPE

DATE	TIME	SAMPLE LOCATION	GRAB	COMPOSITE	LIQUID	SOLID	COLLIERT	GENERAL PHYSICAL	HETEROTROPHIC PLATE COUNT	OTHER	(TP) TOP PRIORITY OR (R) ROUTINE	NUMBER OF CONTAINERS	ANALYSES REQUESTED
7/11/07	10:00	EN02B	X		X								Tc, FC, Entro, Concrete channel
7/11/07	11:15	BV02	X		X								Tc, FC, Entro. outlet
7/11/07	12:20	BH45	X		X								Tc, FC, Entro, outlet

RELINQUISHED BY: [signature] DATE/TIME: 7/11/07 13:45
RECEIVED BY: [signature] DATE/TIME: 13:46 7/11/07
RELINQUISHED BY: DATE/TIME:
RECEIVED BY: DATE/TIME:

login # 070711163527 E: 3 of 4

ENCINA WASTEWATER AUTHORITY LABORATORY

6200 AVENIDA ENCINAS
CARLSBAD, CA 92011
PH: (760) 438-3941
FAX: (760) 438-3861

ELAP LABORATORY CERTIFICATION NO. 1441

2248

CHAIN OF CUSTODY

SAMPLERS (SIGNATURE): Manoucehr Dadkhah
PRINT NAME: Manoucehr Dadkhah

DATE	TIME	SAMPLE LOCATION	GRAB	COMPOSITE	LIQUID	SOLID	COLILERT	GENERAL PHYSICAL	HETEROTROPHIC PLATE COUNT	OTHER	(TT) TOP PRIORITY OR (R) ROUTINE	NUMBER OF CONTAINERS	ANALYSES REQUESTED
7/11/07	14:10	AH46	X		X								TC, FC, Entro - outlet

RELINQUISHED BY: [signature] DATE/TIME: 7/11/07 1500
RECEIVED BY: [signature] DATE/TIME: 7/11/07 1501
RELINQUISHED BY: DATE/TIME:
RECEIVED BY: DATE/TIME:

7-26-07; 3:28PM;City of Carlsbad ;1 760 602 8556 # 7/ 12

01/23/2008 17:17

login # 0707116732 1 (F)
4 of 4

ENCINA WASTEWATER AUTHORITY LABORATORY

6200 AVENIDA ENCINAS
CARLSBAD, CA 92011
PH: (760) 438-3941
FAX: (760) 438-3861

ELAP LABORATORY CERTIFICATION NO. 1441

2247

CHAIN OF CUSTODY

SAMPLERS (SIGNATURE): [signature] PRINT NAME: Molly Colvin

DATE	TIME	SAMPLE LOCATION	GRAB	COMPOSITE	LIQUID	SOLID	COLILERT	GENERAL PHYSICAL	HETEROTROPHIC PLATE COUNT	OTHER	(TP) TOP PRIORITY OR (R) ROUTINE	NUMBER OF CONTAINERS	ANALYSES REQUESTED
7/11/07	14:10	BAS1	X		X								TC, FC, Entro - Natural Creek

RELINQUISHED BY: [signature] DATE/TIME: 7/11/07 15:00
RECEIVED BY: [signature] DATE/TIME: 7/11/07 1500.
RELINQUISHED BY: DATE/TIME:
RECEIVED BY: DATE/TIME:

ENCINA WASTEWATER AUTHORITY
A Public Agency
6200 Avenida Encinas
Carlsbad, CA 92011-1095
Telephone (760) 438-3941
FAX (760) 438-3861 (Plant)
(760) 431-7493 (Admin)

July 16, 2007

JUL 25 2007
ENVIRONMENTAL

Ref No. EC:07-0308

Client: City Of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92009

Contact: Ms. Elaine Lukey
Samplers:
Mr. Manouchehr Dedkhah
Ms. Molly Colvin

ENCINA WASTEWATER AUTHORITY LABORATORY REPORT
E.L.A.P. Certification No. 1441

Sample Location	Sample Date	Sample Time	Analyzed By:	Total cfu/100 ml S.M. 9222 B	Fecal cfu/100 ml S.M. 9222 D	Enterococcus cfu/100 ml S.M. 9230 C
AH08	7/12/2007	9:00 AM	Rachael Willi	23,200	2,725	1,260
BA36	7/12/2007	10:40 AM	Rachael Willi	E > 1150	1,150	320
EN09	7/12/2007	11:45 AM	Rachael Willi	3,350	1,750	140
EN19	7/12/2007	8:50 AM	Rachael Willi	1,800	500	780
BA06	7/12/2007	9:30 AM	Rachael Willi	55,400	6,300	82,800
BA13	7/12/2007	10:25 AM	Rachael Willi	56,000	5,100	9,300
BA40	7/12/2007	11:25 AM	Rachael Willi	23,800	22,700	9,800
BV02	7/16/2007	9:50 AM	Rachael Willi	31,500	8,850	6,350
BA13	7/16/2007	12:00 PM	Rachael Willi	151,000	15,000	22,050
BA06	7/16/2007	1:00 PM	Rachael Willi	26,800	10,700	19,600

E= Estimated Value

Certified By: Doug Campbell
Doug Campbell, Laboratory Supervisor

Date: 7/23/2007

01/23/2008 17:14

01/23/2008 17:15

Log# 0707124 3906 RV
1 of 2

ENCINA WASTEWATER AUTHORITY LABORATORY

6200 AVENIDA ENCINAS
CARLSBAD, CA 92011
PH: (760) 438-3941
FAX: (760) 438-3861
ELAP LABORATORY CERTIFICATION NO. 1441

CHAIN OF CUSTODY

2251

7-26-07; 3:26PM;City of Carlsbad

SAMPLERS (SIGNATURE): Manouchehr Dadkhah
PRINT NAME: Manouchehr Dadkhah

DATE	TIME	SAMPLE LOCATION	GRAB	COMPOSITE	LIQUID	SOLID	COLILERT	GENERAL PHYSICAL	HETEROTROPHIC PLATE COUNT	OTHER	(TP) TOP PRIORITY OR (R) ROUTINE	NUMBER OF CONTAINERS	ANALYSES REQUESTED
7/12/07	9:00	AH08	X		X								TC, FC, Entro - outlet
7/12/07	10:40	BA36	X		X								TC, FC, Entro - outlet
7/12/07	11:45	EN09	X		X								TC, FC, Entro - Natural Creek

RELINQUISHED BY: [signature] DATE/TIME: 7/12/07 12:50
RECEIVED BY: [signature] DATE/TIME: 7/12/07 12:50
RELINQUISHED BY: DATE/TIME:
RECEIVED BY: DATE/TIME:

01/23/2008 17:15

login # 0707121439060R
2:52 V

ENCINA WASTEWATER AUTHORITY LABORATORY

6200 AVENIDA ENCINAS
CARLSBAD, CA 92011
PH: (760) 438-3941
FAX: (760) 438-3861
ELAP LABORATORY CERTIFICATION NO. 1441

CHAIN OF CUSTODY

2249

SAMPLERS (SIGNATURE): [signature] PRINT NAME: Molly Colvin

DATE	TIME	SAMPLE LOCATION	GRAB	COMPOSITE	LIQUID	SOLID	COLILERT	GENERAL PHYSICAL	HETEROTROPHIC PLATE COUNT	OTHER	(TP) TOP PRIORITY OR (R) ROUTINE	NUMBER OF CONTAINERS	ANALYSES REQUESTED
7/12-07	08:50	EN 19	X		X							1	TC, FC, Enterc - Corrosit Channel
"	09:30	BA 06	X		X							1	TC, FC, Enterc - Manhole
"	10:25	BA 13	X		X							1	TC, FC, Enterc - Outlet
"	11:25	BA 40	X		X							1	TC, FC, Enterc - Outlet

RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:
[signature]	7/12/07 12:50	[signature]	7/12/07 1210
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	DATE/TIME:

ENCINA WASTEWATER AUTHORITY LABORATORY
6200 AVENIDA ENCINAS
CARLSBAD, CA 92011
PH: (760) 438-3941
FAX: (760) 438-3861
ELAP LABORATORY CERTIFICATION NO. 1441

01/23/2008 17:15

Log in # 0707161530 11 RV

CHAIN OF CUSTODY

2250

SAMPLERS (SIGNATURE): Manouchehr Dadkhah
PRINT NAME: Manouchehr Dadkhah

DATE	TIME	SAMPLE LOCATION	GRAB	COMPOSITE	LIQUID	SOLID	COLILERT	GENERAL PHYSICAL	HETEROTROPHIC PLATE COUNT	OTHER	(TP) TOP PRIORITY OR (R) ROUTINE	NUMBER OF CONTAINERS	ANALYSES REQUESTED
7/16/07	9:50	BV02	X		X								TC, FC, Entro - Outlet
"	12:00	BA13	X		X								TC, FC, Entro - outlet
"	13:00	BA06	X		X								TC, FC, Entro - Manhole

RELINQUISHED BY: Manouchehr Dadkhah DATE/TIME: 7/16/07 13:25
RECEIVED BY: Michael DATE/TIME: 7/16/07 1325
RELINQUISHED BY: DATE/TIME:
RECEIVED BY: DATE/TIME:

7-26-07; 3:28PM;City of Carlsbad ;+1 760 602 8556 # 11/ 12

ENCINA WASTEWATER AUTHORITY
A Public Agency
6200 Avenida Encinas
Carlsbad, CA 92011-1095
Telephone (760) 438-3941
FAX (760) 438-3861 (Plant)
(760) 431-7493 (Admin)

August 2, 2007

RECEIVED
AUG 7 2007
ENVIRONMENTAL

Ref No. EC:07-0337

Client: City Of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92009

Contact: Ms. Elaine Lukey
Samplers: * Mr. James Wood
** Manouchehr Dadkhah
*** Paul Hartman

ENCINA WASTEWATER AUTHORITY LABORATORY REPORT
E.L.A.P. Certification No. 1441

Sample Location	Sample Date	Sample Time	Analyzed By:	Total cfu/100 ml	Fecal cfu/100 ml	Enterococcus cfu/100 ml
				S.M 9222 B.	S.M. 9222 D.	S.M. 9230 C.
AH-006 Outfall*	7/23/2007	2:05 PM	Joel Camarillo	18,800	6,000	3,250
AH-006 RW *	7/23/2007	2:07 PM	Joel Camarillo	120	40	30
BA 40**	7/25/2007	12:50 PM	Joel Camarillo	20,300	8,250	9,050
BA06***	8/1/2007	10:05 AM	Joel Camarillo	30,000	8,600	18,600
BA06 (1)***	8/1/2007	10:25 AM	Joel Camarillo	24,200	6,900	24,500
BA06 (2)***	8/1/2007	11:05 AM	Joel Camarillo	3,200	5,625	8,200
BA06 (CDS)***	8/1/2007	10:50 AM	Joel Camarillo	225	50	<20

E= Estimated Value

Certified By: Doug Campbell

Date: 8/6/07

Doug Campbell, Laboratory Supervisor

01/23/2008 17:13

Weston Solutions, Inc

Analytical Report

Client: City of Carlsbad
Project: City of Carlsbad Dry Weather
Number of Samples: 1 Sample - See Below

Date Received: September 6, 2007
Date Test Started: September 6, 2007
Date Test Ended: September 11, 2007
Matrix: Water

Bacterial Analysis Using Multiple Tube Fermentation/MPN

Methods: SM 9221B & E and SM 9230B

Microorganisms Tested: Total/Fecal Coliforms and Enterococci

Bacterial Summary

Coliform analyses based on dilutions providing results between 20-1,600,000 MPN/100mL
Analyses for Enterococci are based on dilutions providing results between 20-160,000 MPN/100mL

Client Sample ID	Weston Sample ID	Date Sample Taken	Time Taken	Total Coliforms MPN/100 mL	Fecal Coliforms MPN/100 mL	Enterococci MPN/100 mL
BA-36	090607 BA-36	9/6/2007	0834	28,000	300	5,000

QA/QC Officer (Rosabel Dias) — Date: 09/13/2007

Microbiology Lab Supervisor (Anthony Trinh) — Date: 9/13/07

01/23/2008 17:19

WESTON

01/23/2008 17:19

☒ 2433 Impala Drive • Carlsbad, CA 92008 • (760) 931-8081, FAX 931-1580
☐ 98 Main St., Ste. #428 • Tiburon, CA 94920 • (415) 435-1847, FAX 435-0479
☐ 1440 Broadway, Ste. 908 • Oakland, CA 94612 • (510) 808-0302, FAX 891-9710
☐ 152 Sunset View Lane • Sequim, WA 98382 • (360) 582-1758, FAX 582-1679
☐ 4729 NE View Drive • Port Gamble, WA 98364 • (360) 297-6903, FAX 297-6905

CHAIN OF CUSTODY

12083

DATE 9/6/07 PAGE 1 OF 1

PROJECT NAME / SURVEY / PROJECT NUMBER: City of Carlsbad Dry Weather

PROJECT MANAGER: Paul Hartman

COMPANY: City of CARLSBAD

ADDRESS: 1635 Faraday Ave, CARLSBAD CA 92008

PHONE/FAX: (760) 602-7586

SAMPLE I.D.	DATE	TIME	MATRIX	INITIALS	NUMBER & TYPE OF CONTAINERS	ANALYSIS/TEST REQUESTED: MTF (T,F,E)					PRESERVED HOW/ COMMENTS	SAMPLE TEMP. UPON RECEIPT	WESTON LAB ID
BA-36	9/6/07	8:34	Water	JW	1	1					ICE/ST		090607 BA-36

SPECIAL INSTRUCTIONS/COMMENTS: sampled by Jaime Wood

20 - 1.6 x 10^6 TF
20 - 160,000 E

SHIPPING:

Shipping VIA: Airbill No:

SAMPLE CONDITION UPON RECEIPT (FOR WESTON USE ONLY):

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: Jaime T Wood	Signature: [illegible]	Signature	Signature	Signature	Signature
Firm: City of Carlsbad	Firm: Weston Solutions	Firm	Firm	Firm	Firm
Date/Time: 9/6/07 9:00	Date/Time: 9/6/07 0900	Date/Time	Date/Time	Date/Time	Date/Time

WHITE – return to originator • YELLOW – lab • PINK – retained by originator

Weston Solutions, Inc.
2433 Impala Drive
Carlsbad, California 92008
760-931-8081 • Fax 760-931-1580
www.westonsolutions.com

September 12, 2007

Paul Hartman
City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA. 92008

Re: Dry Weather Monitoring, September 6, 2007

Dear Paul:

Enclosed, please find the completed report for total and fecal coliform and enterococcus testing performed on 1 sample dated September 6, 2007.

All testing was performed consistent with our internal SOP's, laboratory's quality assurance program and ELAP Certification. The sample met the quality control criteria specified in the above.

If you have any questions please feel free to call me at (760) 795-6915, or e-mail me at Anthony.Trinh@westonsolutions.com. Thank you for using the bacterial testing services of Weston Solutions, Inc.

Sincerely,

Anthony Trinh
Microbiology Lab Supervisor

Rosabel Dias
QA/QC Officer

Enc: 1, 1-page report of finalized data and 1 chain of custody.

01/23/2008 17:19

Appendix C

Field Data Sheets

CITY OF CARLSBAD
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2008

Submitted to:

City of Carlsbad
Public Works Department
1635 Faraday Avenue
Carlsbad, California 92008

Prepared by:

D-MAX Engineering, Inc.
7220 Trade Street, Suite 119
San Diego, CA 92121
Tel: (858) 586-6600
Fax: (858) 586-6644

November 6, 2008
Project No. 200836W-1

Elaine Lukey
Public Works Department
City of Carlsbad
1635 Faraday Avenue
Carlsbad, CA 92008

Re: 2008 Dry Weather Field Screening and Analytical Monitoring Program City of Carlsbad

Dear Ms. Lukey:

Per your request D-MAX Engineering, Inc (D-MAX) conducted the routine phase of the Dry Weather Field Screening and Analytical Monitoring Program for the City of Carlsbad prior to September 30, 2008. Subsequently, we conducted follow-up investigations to identify the sources of pollutants detected during the monitoring program.

This report presents the results of the monitoring program and follow-up investigations. The contents include field screening data and analytical laboratory test results, analyses of collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations and our recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. It has been our pleasure working with the City of Carlsbad on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

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1.0 INTRODUCTION

1.1 Regulatory Requirements

In accordance with San Diego Regional Water Quality Control Board (RWQCB) Municipal Storm Water Permit Order No. R9-2007-0001 (Municipal Permit), each of the Copermittees, including the City of Carlsbad, is required to annually perform dry weather field screening of discharges into its storm drain system. This procedure is comprised of recording field observations, estimating observed flow rates, and conducting field testing at selected locations along the storm drain conveyance system during the dry weather season, May 1 through September 30. The Municipal Permit also necessitates that Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station should be visited. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. A detailed trash assessment component is also now required by the Municipal Permit.

1.2 Program Overview

The purpose of the Dry Weather Monitoring Program is to detect and eliminate illicit connections and illicit discharges (IC/ID) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following three components:

- Field screening observations
- Field screening analytical monitoring
- Laboratory analytical monitoring

The data gathered from dry weather monitoring is used to characterize discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. As needed, follow-up studies and source investigations are conducted to detect and eliminate the sources of these pollutants.

1.3 Previous Work

The City of Carlsbad (City) has conducted dry weather monitoring programs since 1995. The results of the previous programs are summarized in Table 1-1.

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER SITES

Year	Number of Sites Screened [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1995	49	33	16	14	---
1996	65	47	18	9	---
1997	62	42	20	13	---
1998	52	36	16	2	---
1999	65	40	25	14	---
2000	52	43	9	9	---

Year	Number of Sites Screened [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
2001	58	52	6	6	---
2002	59	48	11	1	15
2003	60	54	6	1	15
2004	60	52	8	1	15
2005	60	55	5	1	15
2006	60	54	6	1	15
2007	60	54	6	1	15

Notes:
[1] Number of Sites Screened = Number Flowing + Number Ponded. Field screening cannot be conducted at sites found to be dry. Dry sites are replaced by either a flowing or ponded site.
[2] Laboratory analyses commenced in 2002 as required by RWQCB Order 2001-001.

1.4 Hydrologic Setting

The City of Carlsbad encompasses approximately 42 square miles, constituting about 18% of the Carlsbad Hydrologic Unit (904). The City is naturally divided into five separate sub-watersheds. Land use within each watershed determines the potential for generating both runoff and pollutants into receiving water bodies. The five major receiving water bodies or drainage basins that collect the City's storm water are:

- Buena Vista Creek and Lagoon
- Agua Hedionda Creek and Lagoon
- Encinas Creek
- San Marcos Creek and Batiquitos Lagoon
- Escondido Creek and San Elijo Lagoon

Table 1-2 presents the sub-watersheds within the City of Carlsbad, the respective hydrologic units and receiving water bodies, and the percent of the watershed that is located within the City of Carlsbad's jurisdiction.

TABLE 1-2
CITY OF CARLSBAD SUB-WATERSHEDS

Sub-Watershed	Hydrologic Area	Receiving Water Bodies	% in Carlsbad Jurisdiction
Buena Vista	904.20	Buena Vista Creek and Lagoon	19
Agua Hedionda	904.30	Agua Hedionda Creek and Lagoon	41
Encinas	904.40	Encinas Creek	100
San Marcos Creek	904.50	San Marcos Creek, Batiquitos Lagoon	29
Escondido Creek	904.60	Escondido Creek, San Elijo Lagoon	< 1

The Carlsbad Watershed Urban Runoff Management Program (WURMP) Workgroup has identified constituents of concern (COC) for each sub-watershed. For Agua Hedionda and Escondido Creek, COCs are bacteria/pathogens, nutrients, and sediment. The COC for Buena Vista is bacteria/pathogens, and for San Marcos Creek the COC is nutrients. No COCs were identified for the Encinas hydrologic area.

1.5 Report Outline

Section 1, Introduction, includes regulatory background, a program overview, a discussion of the City of Carlsbad's hydrologic setting and constituents of concern, a summary of historical field screening data, and the report outline.

Section 2, Sampling Locations, describes the field screening sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and results of the field screening analyses.

Section 5, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 6, Data Analysis, provides an analysis of field and laboratory data collected in 2008, as well as a comparison of past results.

Section 7, Upstream Investigations, details the results of follow-up investigations undertaken to isolate the sources of water contamination detected during the field screening program.

Section 8, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Historical Dry Weather Monitoring Table

Appendix B Photographs of the Investigated Sites

Appendix C Laboratory Analytical Reports

Appendix D Field Data Sheets

Appendix E Trash Assessment

2.0 SAMPLING LOCATIONS

The City has identified 60 primary monitoring stations and 14 alternate stations where data could be collected during the Dry Weather Monitoring Program. Alternate stations are monitored if any of the primary stations do not have ponded or flowing water. Sites are selected to provide coverage of the MS4 taking into account various factors. Some of these factors are previously identified or suspected pollution problems, location in drainage area, hydrologic condition such as the total drainage area of the site, and land use.

For 2008, the City has changed its dry weather monitoring site naming system to match the designations assigned to those locations by City maintenance staff. Site 42C-41 (previously BA04) was also removed from the 2008 dry weather monitoring site list because its location was redundant with Site 42C-92 (previously BA06). Site 42C-41 was replaced by new Site 48C-25 for the 2008 program. Of the 60 primary monitoring stations visited this year, only Site 9B-7 was dry. It was replaced by alternate sampling location 1D-20.

Table 2-1 provides the previous site number, new site number, location, conveyance configuration, primary and secondary land uses, hydrologic subarea, and Global Positioning Satellite (GPS) coordinates of the sampling sites that were visited. Photographs of sampling locations are included in Appendix B. Sites are categorized according to the respective sub-watershed using the following abbreviations: AH = Agua Hedionda Lagoon, BA = Batiquitos Lagoon (San Marcos Creek), BV = Buena Vista Lagoon, and EN = Encinas Creek. As it constitutes only a very small portion of the City with minimal storm drain infrastructure, no sampling sites are present in the Escondido Creek sub-watershed. A complete map of the MS4 system, including sampling locations and drainage basins, is included as Figure A. The City's sub-watersheds are shown in Figure B.

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS

Current Site Name	Old Site Name	Location	Latitude	Longitude	Hydrologic Subarea	Primary Land Use	Secondary Land Use	Conveyance
Agua Hedionda Lagoon Sub-Watershed								
11B-46	AH30	East of Sierra Morena Avenue, south of Valewood Avenue	33.16390	-117.31449	904.21	Open	Residential	Outlet
11B-48	AH31	South of Chestnut, east of Sierra Morena Avenue	33.16580	-117.31474	904.21	Open	Residential	Outlet
11D-50	AH65	Southwest of the Pontiac Drive and Southampton Road intersection	33.15759	-117.30790	904.31	Residential	None	Manhole
16C-61	AH03	East of railroad tracks, south of Chinquapin Avenue, outfall into Agua Hedionda Lagoon	33.14606	-117.33807	904.31	Residential	Commercial	Outlet
17B-46	AH28	50 yards east of the La Portalada Drive and Tamarack Avenue intersection, on the north side of Tamarack Avenue	33.15580	-117.31043	904.31	Residential	None	Outlet
17B-47	AH27	Northeast corner of Tamarack Avenue and Pontiac Avenue intersection	33.15648	-117.30696	904.31	Residential	Open	Concrete Channel
17C-83	AH63	East side of Park Drive, south of Calavo Court	33.14812	-117.32524	904.31	Residential	None	Manhole
17D-37	AH24	Northeast corner of the Keely Drive and Park Drive intersection	33.14660	-117.31062	904.31	Open	Residential	Concrete Channel
18D-33A	AH32	Intersection of Don Arturo and Don Porifirio Drive (in gated community), off of the El Camino Real and Rancho Carlsbad Drive intersection	33.15163	-117.29086	904.31	Residential	Open	Concrete Channel
19C-1	AH46	North of the horse stable on Sunny Creek Road, near College Boulevard	33.14647	-117.28160	904.31	Industrial	Residential	Outlet

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS

Current Site Name	Old Site Name	Location	Latitude	Longitude	Hydrologic Subarea	Primary Land Use	Secondary Land Use	Conveyance
21D-34	AH08	Inside Encinas Power Station, east of plant tower, at south end of the open channel	33.13670	-117.33414	904.31	Commercial	None	Outlet
22B-17	AH18	South of the Park Drive and Valencia Avenue intersection	33.14305	-117.31562	904.31	Residential	None	Outlet
25D-2	AH59	North of Palomar Airport Road, approximately 500 feet east of El Fuerte Street, in sedimentation basin	33.13639	-117.25484	904.31	Open	Commercial	Natural Creek
27B-47	AH09	Behind 5115 Avenida Encinas	33.13136	-117.33020	904.31	Commercial	Industrial	Manhole
27B-75	AH11	Main line east of I-5, south of Cannon Road, west of the Car Country Carlsbad sign	33.12992	-117.32476	904.51	Commercial	Agricultural	Outlet
27D-17	AH10	Southwest corner of parking lot for 5451 and 5431 Avenida Encinas	33.12750	-117.32837	904.31	Agricultural	Commercial	Earthen Channel
27D-31A	AH04	Behind 5600 Avenida Encinas near railroad tracks	33.12650	-117.32770	904.31	Commercial	Industrial	Concrete Channel
28C-70	AH13	Across the street from 5600 Paseo del Norte	33.12568	-117.32269	904.40	Commercial	Agricultural	Outlet
28C-73	AH12	East of I-5, west of the Ken Grody Ford parking lot off Paseo Del Norte, east side of concrete channel	33.12734	-117.32476	904.51	Commercial	Agricultural	Outlet
29B-44	AH45	Behind 1812 Aston Avenue, northeast of the pond	33.13513	-117.29001	904.31	Commercial	Industrial	Outlet
31B-34	AH61	In front of 2858 Loker Avenue, east driveway	33.13274	-117.24828	904.31	Commercial	Industrial	Manhole

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS

Current Site Name	Old Site Name	Location	Latitude	Longitude	Hydrologic Subarea	Primary Land Use	Secondary Land Use	Conveyance
Batiquitos Lagoon (San Marcos Creek) Sub-Watershed								
41D-32	BA07	Northeast of the intersection of Buttercup Road and Seascape Drive	33.10616	-117.30582	904.51	Residential	None	Manhole
42C-92	BA06	Batiquitos Drive, midway between Poinsettia Lane and Daisy Avenue	33.10336	-117.30500	904.51	Residential	Commercial	Manhole
44B-45	BA26	Between 2526 and 2532 Unicornio Street	33.10827	-117.25158	904.51	Residential	None	Catch Basin
45A-45	BA27	100 feet into the canyon near the El Fuerte and Chorlito intersection	33.11274	-117.24479	904.51	Residential	Open	Outlet
45C-12	BA32	In front of 2927 Luciernaga Street	33.10695	-117.24141	904.51	Residential	Open	Manhole
45G-13	BA40	30 feet southwest of the Melrose Drive and Rancho Santa Fe Road intersection	33.10542	-117.22565	904.51	Commercial	Residential	Outlet
47C-5	BA03	End of Gabbiano on Batiquitos Lagoon Trail	33.09331	-117.30123	904.51	Residential	Open	Outlet
47D-25	BA52	Batiquitos Drive, east of Golden Star Lane, north of street inside detention basin	33.09338	-117.28979	904.51	Parks	Residential	Outlet
48C-25	**	North of Batiquitos Drive between Kingfish Lane and Spoonbill Lane	33.09419	-117.28196	904.51	Parks	Residential	Natural Creek
48D-24	BA13	Debris basin outlet to Batiquitos Lagoon, southwest of the El Camino Real and Arenal intersection	33.09458	-117.26958	904.51	Residential	Open	Outlet
49A-69	BA51	Between 2035 and 2043 Alga Road, east of El Camino Real	33.10195	-117.26147	904.51	Parks	Residential	Natural Creek

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS

Current Site Name	Old Site Name	Location	Latitude	Longitude	Hydrologic Subarea	Primary Land Use	Secondary Land Use	Conveyance
49D-12	BA34	South of Vista Mariana, in La Costa Golf Course	33.09163	-117.25132	904.51	Residential	None	Outlet
51B-1	BA49	Northwest of Batiquitos Lagoon, east of Carlsbad Boulevard	33.08910	-117.31190	904.51	Open	Residential	Manhole
51B-19	BA02	Down in the sediment basin at the southwest corner of Navigator Circle and Windrose Circle	33.09100	-117.30803	904.51	Residential	Commercial	Outlet
55A-51	BA41	Northern edge of La Costa Canyon Park, in canyon; across from 3015 Pueblo Street	33.08944	-117.24263	904.51	Residential	Parks	Outlet
55A-62	BA36	Southeast corner of La Costa Golf Course behind 7525 Gibraltar Street near Round Tree Apartments	33.08759	-117.24641	904.51	Residential	Open	Outlet
58A-13	BA43	30 yards north of the El Camino Real and Levante Street intersection	33.07954	-117.26699	904.51	Residential	Open	Outlet
59C-90	BA48	500 feet south of the intersection of Camino De Los Coches and Rancho Santa Fe Road	33.07423	-117.23988	904.51	Residential	None	Outlet
62B-4	BA47	Rancho Santa Fe Road and Camino Alvaro intersection	33.06908	-117.24709	904.51	Residential	None	Manhole
Buena Vista Lagoon Sub-Watershed								
1D-20*	BV08	South bank of Buena Vista Creek, ten yards west of El Camino Real	33.18060	-117.32720	904.21	Commercial	Residential	Outlet
1D-31	BV06	50 feet west of the South Vista Way Bridge on the south side of Buena Vista Creek	33.18039	-117.32911	904.21	Commercial	Residential	Outlet

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS

Current Site Name	Old Site Name	Location	Latitude	Longitude	Hydrologic Subarea	Primary Land Use	Secondary Land Use	Conveyance
5A-14	BV16	South of Monroe Street and Marron Road intersection, west sidewalk of Monroe Street	33.17621	-117.33707	904.21	Residential	Open	Manhole
5A-72	BV04A	East of Buena Vista Lagoon Ecological Reserve, on the east bank	33.17765	-117.34219	904.21	Commercial	Residential	Outlet
6C-23	BV10	Southwest corner of the Carlsbad Village Drive and El Camino Real intersection	33.17154	-117.32290	904.21	Residential	Commercial	Outlet
6C-34	BV09	50 yards north of El Camino Real and Carlsbad Village Drive intersection, on center divider	33.17264	-117.32323	904.21	Residential	Commercial	Manhole
9B-38	BV02	East side of State Street, south of the Carlsbad Boulevard and State Street intersection	33.16566	-117.35380	904.21	Residential	Commercial	Outlet
9B-7*	BV15	Laguna Drive and State Street intersection, across from 2531 State Street	33.16492	-117.35305	904.21	Commercial	Industrial	Manhole
Encinas Creek Sub-Watershed								
35A-17	EN02A	West of 6030 Avenida Encinas, east of the railroad tracks	33.11890	-117.32378	904.40	Commercial	Industrial	Outlet
35C-51A	EN02B	Inside Encinas Wastewater Plant	33.11591	-117.32017	904.40	Industrial	Commercial	Concrete Channel
35C-85	EN02C	North bank of Encinas Creek, underneath I-5 overpass; access through Wastewater Plant	33.11659	-117.31873	904.40	Industrial	Commercial	Outlet
36B-4	EN14	Corner of Palomar Oaks Way and Camino Vida Roble, near 1911 Palomar Oaks Way	33.12360	-117.28976	904.40	Industrial	Commercial	Manhole

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS

Current Site Name	Old Site Name	Location	Latitude	Longitude	Hydrologic Subarea	Primary Land Use	Secondary Land Use	Conveyance
36B-6	EN14A	30 yards west of 1911 Palomar Oaks Way, in the canyon	33.12350	-117.29023	904.40	Industrial	Commercial	Outlet
36B-95	EN31	10 yards north of 1925 Palomar Oaks Way, in the canyon	33.12229	-117.29124	904.40	Commercial	Industrial	Manhole
36A-79	EN09	Encinas Creek, south of Palomar Airport Road, on Laurel Tree Road	33.12225	-117.29997	904.40	Open	Commercial	Natural Creek
37A-17	EN21	Camino Vida Roble, midway between Palomar Airport Road and Owens Avenue	33.12117	-117.28230	904.31	Commercial	Industrial	Manhole
37A-70	EN19	Beside 1949 Palomar Oaks Way	33.11910	-117.28632	904.40	Commercial	Open	Concrete Channel
37B-19	EN24	Between 2225 and 2265 Camino Vida Roble, in front of the post office	33.11906	-117.27238	904.40	Industrial	Commercial	Catch Basin
37B-22	EN23	Northwest corner of the Yarrow Drive and Camino Vida Roble intersection	33.11930	-117.27372	904.40	Commercial	Industrial	Outlet
37C-29	EN18	Behind 1979 Palomar Oaks Way	33.11781	-117.28245	904.40	Commercial	Open	Outlet
37C-28	EN20	Across from 1979 Palomar Oaks Way	33.11908	-117.28232	904.40	Commercial	Open	Outlet

Notes:
* Alternate Site 1D-20 was substituted for dry primary monitoring Site 9B-7.
** Site 42C-41 (previously BA04) was removed from the 2008 dry weather monitoring site list and replaced by new Site 48C-25.

3.0 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of flow measurement, quantitative field analyses of selected water quality parameters, and qualitative field observations. Information relating to weather conditions, the amount of time since last rainfall, and the type of storm water conveyance are recorded. Specific observations and results of the field water quality analyses are documented on field data sheets, which are included in Appendix D. The data sheets also serve as a record of the field visit and are completed for every site visit regardless of whether or not samples were collected.

For 2008, field data sheets were updated to include three categories of visits. Previously the sheets included check boxes for either routine field screening or follow-up visits. This year there are check boxes for routine field screening, confirmation and IC/ID follow-up visits. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation. For the purposes of this report, confirmation and IC/ID follow-up visits are both referred to as "follow-up" visits.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Irrespective of flow, qualitative field observations are made during each site visit. These observations provide a general site assessment and describe factors like water odor, clarity, the presence of floatables, visible deposits or stains, vegetation and biological organisms. Evidence of present or past illicit connections and illegal discharges to the storm drain system may also be ascertained through careful field observations. Each field screening location is photographed to provide additional information and documentation of site conditions. Photographs are included in Appendix B.

Flow Measurement

Flow measurements can be utilized to estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may indicate an illegal discharge upstream. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Surfactants, measured as methylene blue active substances (MBAS)*
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)
- Orthophosphate-Phosphorus (Orthophosphate-P)

* Surfactants are also referred to as detergents, specifically with respect to discussion of field test kit results.

The methods used to perform the above field analyses, along with the detection limit, range, and accuracy of each method, are listed in Table 3-1.

3.2 Laboratory Analytical Methods

In accordance with Order R9-2007-0001, laboratory samples were collected at 15 sites, representing 25 percent of field screening sites. Samples were submitted to EnviroMatrix Analytical, Inc, a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Total hardness
- Oil and grease
- Diazinon
- Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)

Samples for bacteria were submitted to Encina Wastewater Authority Laboratory for analysis of following indicators:

- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-1 and Table 3-2.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project includes the United States Environmental Protection Agency (EPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters are calibrated periodically with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter is calibrated and periodically checked for accuracy using standard solutions. The conductivity meter is checked periodically with standard solutions and calibrated as necessary.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01 mS/cm	0 – 20 mS/cm	± 2% of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.1 °C	0.0 °C – 60.0 °C	± 0.5 °C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703-11 Portable Turbidity Meter***	0.01 NTU	0.01 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) Methylene Blue Active Substances	0.13 mg/L	0.0 mg/L – 3.0 mg/L*	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[3]***	2.26 mg/L**	2.26 mg/L –13.6 mg/L**	± 30%
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate***	0.10 mg/L**	0.10 mg/L – 3.00 mg/L**	Varies with measured concetration[4,5]
Orthophosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[6]***	0.25 mg/L**	0.25 mg/L – 2.61 mg/L**	Varies with measured concetration[4,5]

Notes:

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14 g/mol) to NO_3 (62 g/mol). The detection limit for nitrate is 10.0 mg/L; however, the detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range. "Full range" is equal to the upper limit of the test kit's range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31 g/mol) to PO_4 (95 g/mol). The detection limit for orthophosphate is 0.75 mg/L; however, the detection limit for orthophosphate-P is lowered due to the conversion.

*Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Reporting limit, range, and accuracy information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com. Additional information regarding CHEMetrics accuracy was obtained from the manufacturer via email.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Maximum Holding Time [1]
Oil and Grease	EPA 1664	5 mg/L	28 days
Total Hardness	EPA 200.7	10 mg/L	14 days
Dissolved Cadmium	EPA 6020	0.00200 mg/L [2]	24 hours
Dissolved Copper	EPA 6020	0.00200 mg/L [2]	24 hours
Dissolved Lead	EPA 6020	0.00200 mg/L [2]	24 hours
Dissolved Zinc	EPA 6020	0.0100 mg/L [2]	24 hours
Diazinon	EPA 8141A	0.05 µg/L	7 days
Chlorpyrifos	EPA 8141A	0.05 µg/L	7 days
Total Coliforms	SM 9221 B	1 CFU/100 mL [3]	6 hours
Fecal Coliforms	SM 9222 D	1 CFU/100 mL [3]	6 hours
Enterococci	EPA 1600	1 CFU/100 mL [3]	6 hours

Notes:

[1] Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.

[2] These reporting limits apply to results from all sites except 36A-79, 42C-92, and 45G-13. Reporting limits of 0.00100 for cadmium, copper, and lead and 0.00500 for zinc were used by the lab for analysis of samples taken at those three sites.

[3] Based on dilution; reporting limit with no dilution is 1 CFU/ 100mL

Field sample collection containers are first rinsed with distilled water and then with the sample water before sample collection. Upon completion of sampling at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water and dried.

The accuracy of field analytical techniques is assessed at the beginning of each sampling week by analyzing solutions of known concentrations for ammonia-nitrogen, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration (mg/L)	Acceptable Range [1] (mg/L)	Field Test Kit Results (mg/L)
09/03/08	Ammonia-Nitrogen	1.0	0.8 – 1.2	0.905
09/03/08	Surfactants	1.0	0.75 – 1.25	1.0
09/03/08	Nitrate [2]	44.3	31.0 – 57.6	51.32
09/03/08	Orthophosphate [2]	1.0	0.75 – 1.25	0.814
09/08/08	Ammonia-Nitrogen	1.0	0.8 – 1.2	0.965
09/08/08	Surfactants	1.0	0.75 – 1.25	0.875
09/08/08	Nitrate	44.3	31.0 – 57.6	52.74
09/08/08	Orthophosphate	1.0	0.75 – 1.25	0.861
09/15/08	Ammonia-Nitrogen	1.0	0.8 – 1.2	0.802
09/15/08	Surfactants	1.0	0.75 – 1.25	1.0
09/15/08	Nitrate	44.3	31.0 – 57.6	55.93
09/15/08	Orthophosphate	1.0	0.75 – 1.25	0.904

Notes:

[1] Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1.

[2] Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by dividing the results by 4.43 for nitrate and 3.06 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis are collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed, and samples are delivered and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain of custody forms are included in Appendix C.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation was necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a re-sampling is conducted within one day. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by the laboratory analyses, a comprehensive follow-up pollutant source investigation is conducted within two days of receiving the analytical reports from the lab. The results of these investigations are included in

Section 7 of this report. Recommendations based on these investigations are included in Section 8.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (see Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels, which are based on county-wide sampling data and have been used by all Copermittees since the 2003 dry weather season. If pH, orthophosphate-P, nitrate-N, ammonia-N, or surfactants are observed above the numeric action level, a follow-up investigation is conducted within one business day to investigate the source unless best professional judgment indicated otherwise. If oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, or *Enterococcus* laboratory analytical results exceeded numeric action levels, then source investigations are conducted within two business days of receiving the test results from the lab.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in EPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew due to their familiarity with the City of Carlsbad Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters. Best professional judgment may indicate that results which either exceed certain action levels or statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
pH	<6.5 or >9.0	Basin Plan, with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	EPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity), and unusual odors.
Temperature (°C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Values > 5.00 mS/ cm may indicate IC/ID; however, EC may be highly elevated in some regions due to high TDS groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values <0.75 may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Oil and Grease (mg/L)	15	EPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium	California Toxic Rule	Use California Toxics Rule Table, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper	California Toxic Rule	
Dissolved Lead	California Toxic Rule	
Dissolved Zinc	California Toxic Rule	
Total Coliform (MPN/ 100 mL)	50,000	Action levels are based on upper 90% confidence interval of Copermittee 2002 dry weather analytical monitoring data.
Fecal Coliform (MPN/ 100 mL)	20,000	
Enterococcus (MPN/ 100 mL)	10,000	

Notes:

[1]The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

°C	degrees Celsius
mS/cm	millisiemens per centimeter
mg/L	milligram per liter
IC/ID	illegal connection/illicit discharge
MBAS	methylene blue active substances
MPN/100 mL	most probable number (of colony forming units) per 100 milliliters
NTU	nephelometric turbidity unit
ppb	parts per billion
EPA	Environment Protection Agency
WQO	Water Quality Objectives

4.0 FIELD SCREENING RESULTS

The 2008 Dry Weather Monitoring Program began September 3, 2008. All initial and the majority of follow-up investigations were completed before September 30, 2008. The 60 primary monitoring stations were visited. Since primary sampling Site 9B-7 was dry, alternate Site 1D-20 was selected as a replacement. Field screening was conducted at the 60 sites where ponded or flowing water was observed. Completed field data sheets for each site visit are included in Appendix D.

4.1 Qualitative Observations

Qualitative observations, which are a routine part of the Dry Weather Monitoring Program, are summarized below and presented in Table 4-1. Results discussed below include routine and confirmation visit data only, not follow-up visits.

Light Conditions
Light conditions ranged were primarily sunny, with a several occurrences of overcast and partly cloudy weather.

Odor
Water samples from the majority of sites were odorless. Nine sites had water with a musty odor. None of the samples smelled of sewage, chemicals or rotten eggs.

Color
Water samples taken from most of the sites were colorless, with the exception of nine sites displaying water with a yellow hue and one site with brown water.

Clarity
Despite showing negligible suspended particles, water samples were clear at all but six sites. These sites had slightly cloudy water. No sites produced opaque samples.

Floatable Materials
During routine field screening visits, trash was noted at several sites. Appendix E 5 of this report includes a complete Trash Assessment. Some sites also had bubbles, foam, or a dusty sheen.

Deposits
Sediment, gravel or fine particulates were observed at almost all sites. There were no sites showing stains or oily deposits.

Vegetation
Taking into account exposure to sunlight and soil, all sites displayed appropriate vegetation. Manholes lacking soil and sunlight showed no vegetation. Concrete channels displayed either limited or normal vegetation; earthen channels had limited growth; natural creeks showed normal vegetative growth; and the outlets sampled showed a range of vegetation. No sites showed excessive vegetation that would significantly impaired flow.

Biology
The presence of biological organisms typically implies healthy water conditions. Also, algal growth indicates that water flow is persistent at the site. No sites visited displayed excessive algal growth, which can indicate nutrient enrichment (eutrophication). Many of the sampling locations were host to other biological organisms including various insects, crayfish, snails, fish, and turtles.

TABLE 4-1
FIELD OBSERVATIONS

Site Name	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
11B-46	9/5/08	15:15	Sunny	None	None	Clear	Trash	Sediment, Fine Particulates	Normal	Insects, Algae
11B-48	9/5/08	14:35	Sunny	Musty	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects
11D-50	9/4/08	16:45	Sunny	Musty	None	Clear	None	Fine Particulates	None	Spiders
16C-61	9/9/08	10:40	Sunny	None	Yellow	Clear	Bubbles	Sediment, Fine Particulates	Limited	Algae, Snails
17B-46	9/8/08	16:00	Sunny	Musty	None	Clear	None	Sediment, Fine Particulates	Normal	Insects
17B-47	9/4/08	16:10	Sunny	Musty	Yellow	Clear	Trash	Fine Particulates	None	Insects
17C-83	9/8/08	16:40	Sunny	None	None	Clear	Trash	Sediment, Fine Particulates	None	None
17D-37	9/4/08	12:30	Sunny	None	None	Clear	Bubbles	Fine Particulates	None	Algae, Fish
18D-33A	9/5/08	15:50	Sunny	None	None	Clear	None	Fine Particulates	Limited	Algae
19C-1	9/4/08	11:45	Sunny	None	None	Clear	Bubbles	Sediment, Fine Particulates	Normal	Insects
1D-20	9/4/08	9:40	Sunny	None	None	Clear	Trash	Fine Particulates	Normal	Insects, Algae, Fish, Turtles
1D-31	9/4/08	8:50	Overcast	None	None	Clear	Trash	Sediment, Fine Particulates	Normal	Insects
21D-34	9/9/08	9:15	Sunny	None	None	Clear	None	Sediment, Fine Particulates	Normal	Insects, Algae
21D-34 (Confirmation)	9/10/08	14:25	Sunny	None	None	Clear	None	Sediment, Fine Particulates	Normal	Insects, Algae

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site Name	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
22B-17	9/908	15:30	Sunny	None	Yellow	Clear	Trash	Sediment, Fine Particulates	Normal	Insects
25D-2	9/8/08	15:10	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects
27B-47	9/9/08	14:30	Sunny	None	Yellow	Clear	None	Sediment, Fine Particulates	None	None
27B-75	9/10/08	15:10	Sunny	Musty	None	Clear	Trash	Sediment, Fine Particulates	Normal	Insects, Snails
27D-17	9/9/08	12:20	Sunny	None	None	Clear	None	Fine Particulates	Limited	Insects, Algae, Crayfish
27D-17 (Confirmation)	9/10/08	12:30	Sunny	None	None	Clear	None	Fine Particulates	Limited	Insects, Algae, Crayfish
27D-31A	9/11/08	9:10	Overcast	None	Brown	Clear	Trash	Sediment, Fine Particulates	Limited	Algae, Snails
28C-70	9/9/08	16:15	Sunny	None	None	Clear	None	Sediment, Fine Particulates	Limited	Insects
28C-70 (Confirmation)	9/10/08	13:45	Sunny	None	None	Clear	None	Sediment, Fine Particulates	Limited	Insects
28C-73	9/10/08	15:50	Sunny	None	None	Clear	None	Fine Particulates	None	Algae, Snails
28C-73 (Confirmation)	9/11/08	14:30	Overcast	Musty	None	Clear	None	Fine Particulates	None	Insects, Algae, Snails
29B-44	9/4/08	10:50	Sunny	None	Yellow	Clear	Trash, dust sheen	Sediment, Fine Particulates	Normal	Insects, Algae
31B-34	9/8/08	14:30	Sunny	None	None	Clear	Trash	Sediment, Fine Particulates	None	Spiders

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site Name	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
35A-17	9/11/08	16:10	Partly Cloudy	None	None	Clear	Trash, Bubbles, dust sheen	Sediment, Fine Particulates	Normal	Insects
35C-51A	9/9/08	11:40	Sunny	None	None	Clear	None	Fine Particulates	Limited	Insects, Algae, Snails
35C-85	9/11/08	15:20	Overcast	None	None	Slightly Cloudy	None	Fine Particulates	None	Snails
35C-85 (Confirmation)	9/12/08	9:15	Overcast	None	None	Clear	None	Fine Particulates	None	Snails
36A-79	9/10/08	11:30	Sunny	None	None	Clear	Trash	Sediment/Gravel	Limited	Fish
36B-4	9/12/08	11:10	Overcast	None	None	Clear	None	Sediment, Fine Particulates	None	None
36B-6	9/12/08	12:00	Overcast	None	None	Clear	Trash, Foam	Sediment/Gravel, Fine Particulates	Normal	Algae
36B-6 (Confirmation)	9/15/08	9:50	Sunny	None	None	Clear	Trash, Foam	Sediment/Gravel, Fine Particulates	Normal	Algae
36B-95	9/12/08	13:45	Overcast	None	None	Clear	None	Fine Particulates	None	None
36B-95 (Confirmation)	9/15/08	9:15	Partly Cloudy	None	None	Clear	None	Fine Particulates	None	None
37A-17	9/12/08	14:35	Overcast	None	None	Slightly Cloudy	None	Sediment, Fine Particulates	None	None
37A-70	9/8/08	11:00	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae
37B-19	9/12/08	15:30	Overcast	None	None	Clear	Trash	Sediment, Fine Particulates	None	Insects

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site Name	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
37B-22	9/15/08	11:10	Sunny	None	None	Slightly Cloudy	Trash	Sediment/Gravel, Fine Particulates	None	Insects
37B-22 (Confirmation)	9/16/08	9:30	Overcast	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects
37C-28	9/15/08	10:40	Partly Cloudy	None	None	Clear	None	Fine Particulates	Limited	Insects, Algae
37C-29	9/11/08	16:40	Partly Cloudy	None	None	Clear	Trash, dust sheen	Sediment, Fine Particulates	Limited	None
41D-32	9/16/08	14:30	Sunny	Musty	None	Clear	None	Sediment, Fine Particulates	None	None
42C-92	9/10/08	10:40	Sunny	Musty	Yellow	Clear	None	Sediment, Fine Particulates	None	None
42C-92 (Confirmation)	9/18/08	10:45	Sunny	None	Yellow	Clear	Bubbles/ Foam	Sediment, Fine Particulates	None	None
44B-45	9/15/08	16:20	Sunny	None	None	Clear	None	Fine Particulates	None	None
45A-45	9/15/08	15:45	Sunny	None	None	Clear	Trash, Bubbles	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
45C-12	9/15/08	14:50	Sunny	None	None	Clear	None	Fine Particulates	None	None
45G-13	9/10/08	9:15	Sunny	None	None	Clear	Bubbles	Sediment, Fine Particulates	Normal	Algae
45G-13 (Confirmation)	9/18/08	11:50	Sunny	None	None	Clear	None	Sediment, Fine Particulates	Normal	Insects, Algae, Fish
47C-5	9/15/08	14:00	Partly Cloudy	None	None	Clear	Trash	Fine Particulates	Normal	Algae, Fish
47D-25	9/16/08	15:30	Sunny	None	None	Clear	None	Fine Particulates	None	None

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site Name	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
48C-25	9/17/08	10:15	Sunny	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
48D-24	9/5/08	10:45	Sunny	None	None	Clear	Trash, Bubbles	Fine Particulates	None	Algae, Spiders
48D-24 (Confirmation)	9/8/08	12:30	Sunny	None	Yellow	Slightly Cloudy	Trash	Fine Particulates	None	Algae, Spiders
48D-24 (Confirmation)	9/11/08	12:15	Partly Cloudy	None	None	Clear	Trash	Sediment, Fine Particulates	None	None
49A-69	9/5/08	12:00	Sunny	None	None	Clear	None	Sediment, Fine Particulates	Normal	Insects, Algae
49D-12	9/16/08	12:00	Partly Cloudy	None	None	Clear	None	Sediment, Fine Particulates	None	Algae, Snails
49D-12 (Confirmation)	9/17/08	11:20	Sunny	None	Yellow	Clear	None	Sediment, Fine Particulates	None	Insects, Algae, Snails
51B-1	9/9/08	17:00	Sunny	None	None	Clear	Trash	Sediment, Fine Particulates	None	None
51B-19	9/15/08	12:10	Partly Cloudy	None	None	Clear	None	Fine Particulates	Normal	Algae
55A-51	9/16/08	11:10	Overcast	None	None	Clear	Trash, Bubbles	Sediment, Fine Particulates	Normal	Insects, Algae
55A-62	9/5/08	9:20	Sunny	None	None	Clear	Trash, Bubbles	Sediment, Fine Particulates	None	Insects, Algae
58A-13	9/17/08	12:00	Sunny	Musty	None	Slightly Cloudy	Trash	Sediment, Fine Particulates	Normal	Insects
58A-13 (Confirmation)	9/18/08	11:10	Sunny	None	None	Clear	Trash	Sediment, Fine Particulates	Normal	Insects
59C-90	9/17/08	15:10	Sunny	None	None	Clear	Trash	Sediment, Fine Particulates	Normal	Insects, Algae

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site Name	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
5A-14	9/3/08	16:30	Sunny	None	None	Clear	None	Sediment, Fine Particulates	None	None
5A-72	9/11/08	10:40	Overcast	None	None	Clear	Trash, dust sheen	Sediment, Fine Particulates	Normal	Insects, Fish
5A-72 (Confirmation)	9/12/08	10:00	Overcast	None	None	Clear	Trash, dust sheen	Sediment, Fine Particulates	Normal	Insects, Fish, ducks
62B-4	9/16/08	12:50	Sunny	None	None	Slightly Cloudy	None	Sediment, Fine Particulates	None	None
62B-4 (Confirmation)	9/17/08	16:25	Sunny	None	None	Slightly Cloudy	Bubbles/ Foam	Sediment, Fine Particulates	None	None
6C-23	9/3/08	15:50	Sunny	None	None	Clear	None	Fine Particulates	Limited	Insects, Algae
6C-34	9/8/08	15:10	Sunny	None	Yellow	Clear	None	None	None	None
9B-38	9/3/08	10:40	Sunny	None	None	Clear	Bubbles/ Foam	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
9B-38 (Confirmation)	9/4/08	15:00	Overcast	None	None	Clear	Bubbles	Sediment, Fine Particulates	Normal	Insects, Algae
9B-38 (Confirmation)	10/13/08	10:10	Sunny	None	None	Clear	Trash, Bubbles	Sediment, Fine Particulates	Normal	Insects, Algae
9B-7*	9/11/08	10:00	Overcast	ns	ns	ns	ns	Sediment	None	None

Notes:

denotes a confirmation visit

ns = not sampled (dry site)

* Site 9B-7 was dry

4.2 Field Analytical Results

Field analyses are conducted at all sites with flowing or ponded water. The measured constituents are described below.

Flow rates are the measurements of the volume of fluid passing through a given surface per unit time. Flow rate measurements are needed to calculate the load or particular amount of a pollutant discharged.

Water temperature is needed to assess the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. In the field, water temperature is measured immediately upon sample collection at each site with ponded or flowing water.

The **pH** is an expression of acidity or alkalinity of a water sample. The pH of an aquatic system will drive a variety of chemical reactions, including the availability of nutrients or the solubility of chemical substances, particularly heavy metals.

Turbidity describes the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation, thus reducing photosynthetic capacity, but excessive suspended particles can also absorb heat and increase water temperatures.

Specific Conductance (Conductivity) values indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water and potentially help indicate the presence of dissolved pollutants.

Surfactant concentrations in water samples often reflect illegal discharge from industrial, commercial or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms

Ammonia-Nitrogen (Ammonia-N) is an indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-Nitrogen (Nitrate-N) is a common sign of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, which can deplete oxygen from the water during decomposition and eventually suffocate other aquatic life. During the field analysis, nitrate is measured in milligrams per liter (mg/L) NO_3 and converted into mg/L nitrate-N using a conversion factor of 0.226. This process is explained in Note 4 of Table 3-1.

Orthophosphate-Phosphorus (Orthophosphate-P) is also an indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate-N, orthophosphate-P pollution can cause nutrient enrichment (eutrophication), stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient in plant growth. During the field analysis, orthophosphate is measured in mg/L PO_4 and converted into mg/L orthophosphate-P using a conversion factor of 0.326. This process is explained in Note 7 of Table 3-1.

A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 shows the results of all field analyses conducted at the sampled sites. Graphs of the various parameter s and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceed-ances	Graph Number
Flow Rate (gpm)	187	0, ponded	6.6	2	24.2	--	4-1
Temperature (ºC)	29.2	20.6	23.9	23.6	1.6	0	4-2
pH	8.8	5.4	7.6	7.7	0.6	3	4-3
Turbidity (NTU)	83.00	0.01	7.59	3.20	12.98	0	4-4
Conductivity (mS/cm)	18.47	1.22	4.55	3.81	3.07	0	4-5
Surfactants (mg/L MBAS)	1.0	0.13	0.50	0.50	0.20	1	4-6
Ammonia-N (mg/L)	2.27	0.03	0.35	0.26	0.34	2	4-7
Nitrate-N (mg/L NO_3-N)	63.91	0.49	6.47	2.21	12.68	8	4-8
Orthophosphate-P (mg/L PO_4-P)	8.53	nd	0.44	0.18	1.14	2	4-9

Notes:
nd = not detected
Calculations include complete routine visit data only. Confirmation visits, follow-up visits and dry sites not incorporated.

TABLE 4-3
FIELD SCREENING RESULTS

Site Name	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH_3-N)	Nitrate-N (mg/L NO_3-N)	Ortho-phosphate-P (mg/L PO_4-P)
1D-20	9/4/08	9:40	3	24.6	7.7	2.18	4.31	0.5	0.18	4.69	0.20*
1D-31	9/4/08	8:50	2	23.3	7.6	2.58	4.85	0.5	0.16	4.20	0.30
5A-14	9/3/08	16:30	2	24.7	8.2	1.02	2.70	0.5	0.22	1.92*	0.38
5A-72	9/11/08	10:40	1	25.5	6.8	0.57	18.47	0.88	0.25	**24.68**	0.02*
5A-72 (Confirmation)	9/12/08	10:00	1	25.1	6.8	na	18.44	na	na	**27.30**	na
6C-23	9/3/08	15:50	1	22.0	7.8	0.11	6.01	0.68	0.20	2.28	0.19*
6C-34	9/8/08	15:10	1	23.0	8.2	0.01	5.92	0.5	0.14	2.13*	0.17*
9B-7	9/11/08	10:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns
9B-38	9/3/08	10:40	2	22.8	8.1	0.02	2.32	0.25	0.12	**14.49**	0.08*
9B-38 (Confirmation)	9/4/08	15:00	2	24.1	8.1	na	1.90	na	na	**16.22**	na
9B-38 (Confirmation)	10/13/08	10:10	1	16.9	7.7	na	1.76	na	na	**18.31**	na
11B-46	9/5/08	15:15	1	24.9	7.8	1.38	1.61	0.25	0.05*	1.05*	0.23*
11B-48	9/5/08	14:35	1	24.2	7.4	9.72	1.30	0.5	0.81	0.81*	0.66
11D-50	9/4/08	16:45	3	26.0	8.0	0.63	1.43	0.13	0.12	1.01*	0.30
16C-61	9/9/08	10:40	11.7	23.3	8.2	2.17	2.04	0.25	0.09*	5.16	0.40
17B-46	9/8/08	16:00	1	23.2	7.6	1.82	3.98	0.38	0.22	0.94*	0.06*
17B-47	9/4/08	16:10	< 1	25.2	8.4	4.52	1.41	0.5	0.10	0.49*	0.56

TABLE 4-3
FIELD SCREENING RESULTS (CONTINUED)

Site Name	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH_3-N)	Nitrate-N (mg/L NO_3-N)	Ortho-phosphate-P (mg/L PO_4-P)
17C-83	9/8/08	16:40	1	23.2	8.8	1.51	2.55	0.5	0.03*	1.02*	0.16*
17D-37	9/4/08	12:30	5	27.5	7.7	3.81	5.07	0.5	0.45	6.15	0.01*
18D-33A	9/5/08	15:50	5	29.2	7.9	1.81	2.79	0.25	0.24	1.16*	0.01*
19C-1	9/4/08	11:45	5	23.3	7.6	2.26	6.77	0.5	0.64	8.07	0.10*
21D-34	9/9/08	9:15	7	20.6	7.5	1.2	1.79	0.25	0.09*	**14.07**	0.28
21D-34 (Confirmation)	9/10/08	14:25	6	23.6	8.1	na	1.97	na	na	**16.04**	na
22B-17	9/9/08	15:30	2	25.2	7.5	5.00	2.03	0.5	0.34	3.09	0.93
25D-2	9/8/08	15:10	2	23.9	7.8	11.79	4.67	0.68	0.31	1.09*	0.17*
27B-47	9/9/08	14:30	Ponded	25.6	7.7	12.43	1.27	0.5	0.10	2.70	0.38
27B-75	9/10/08	15:10	Ponded	23.0	7.3	2.49	1.22	0.5	0.23	0.84*	0.33
27D-17	9/9/08	12:20	8	26.2	7.9	6.34	2.79	0.68	0.22	**43.66**	0.09*
27D-17 (Confirmation)	9/10/08	12:30	8	26.2	8.3	na	2.82	na	na	**45.18**	na
27D-31A	9/11/08	9:10	Ponded	21.2	8.0	26.87	6.67	0.88	0.36	0.67*	0.66
28C-70	9/9/08	16:15	10	23.5	7.3	0.12	2.56	0.68	0.26	**56.05**	0.10*
28C-70 (Confirmation)	9/10/08	13:45	10	23.6	7.2	na	2.63	na	na	**57.09**	na
28C-73	9/10/08	15:50	1	24.2	8.1	0.62	3.02	0.75	0.15	**35.89**	0.22*
28C-73 (Confirmation)	9/11/08	14:30	<1	25.1	8.5	na	2.95	na	na	**40.41**	na
29B-44	9/4/08	10:50	10	25.0	8.2	14.45	2.85	0.25	0.49	2.24	0.09*

TABLE 4-3
FIELD SCREENING RESULTS (CONTINUED)

Site Name	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH_3-N)	Nitrate-N (mg/L NO_3-N)	Ortho-phosphate-P (mg/L PO_4-P)
31B-34	9/8/08	14:30	1	26.8	7.1	0.01	4.68	0.25	0.18	1.19*	0.02*
35A-17	9/11/08	16:10	Ponded	23.8	8.4	8.12	2.70	0.5	0.26	2.37	0.44
35C-51A	9/9/08	11:40	3	26.8	8.7	0.56	2.62	0.5	0.16	4.59	0.17*
35C-85	9/11/08	15:20	2	21.6	7.9	21.59	4.83	**1.0**	0.27	**63.91**	**8.53**
35C-85 (Confirmation)	9/12/08	9:15	2	20.7	8.1	na	5.24	0.75	na	**72.43**	0.93
36A-79	9/10/08	11:30	10	21.7	7.4	2.4	6.59	0.68	0.26	2.19*	0.02*
36B-4	9/12/08	11:10	1	22.2	7.9	1.98	2.84	0.5	0.26	1.42*	0.13*
36B-6	9/12/08	12:00	1	21.3	**5.5**	8.31	6.50	0.5	0.38	1.61*	0.06*
36B-6 (Confirmation)	9/15/08	9:50	1	21.7	**5.2**	na	6.07	na	na	na	na
36B-95	9/12/08	13:45	3	23.6	7.1	21.58	4.80	0.5	**2.27**	0.94*	**2.85**
36B-95 (Confirmation)	9/15/08	9:15	2	21.7	7.4	na	6.65	na	0.21	na	0.03*
37A-17	9/12/08	14:35	Ponded	23.6	7.3	32.79	5.03	0.5	0.60	1.74*	0.63
37A-70	9/8/08	11:00	12.5	25.6	7.7	3.34	5.91	0.5	0.17	0.90*	nd
37B-19	9/12/08	15:30	<1	23.1	7.6	0.58	3.27	0.38	0.14	1.01*	0.07*
37B-22	9/15/08	11:10	<1	23.5	**5.7**	37.02	4.21	0.5	0.57	2.22	0.17*
37B-22 (Confirmation)	9/16/08	9:30	<1	21.9	**5.0**	na	5.36	na	na	na	na
37C-28	9/15/08	10:40	2	22.5	6.9	17.65	8.96	0.68	0.43	1.73*	nd
37C-29	9/11/08	16:40	1	22.6	6.7	7.06	10.56	0.75	0.59	1.64*	nd

TABLE 4-3
FIELD SCREENING RESULTS (CONTINUED)

Site Name	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH_3-N)	Nitrate-N (mg/L NO_3-N)	Ortho-phosphate-P (mg/L PO_4-P)
41D-32	9/16/08	14:30	1	24.7	8.0	4.68	1.63	0.13	0.11	1.79*	0.36
42C-92	9/10/08	10:40	2	23.9	7.6	5.65	2.65	0.25	0.34	2.64	0.53
42C-92 (Confirmation)	9/18/08	10:45	1	24.3	7.6	na	2.01	na	na	na	na
44B-45	9/15/08	16:20	2	25.4	8.0	3.71	7.74	0.68	0.59	3.33	0.09*
45A-45	9/15/08	15:45	2	23.2	7.4	7.74	12.04	0.75	0.45	3.52	0.08*
45C-12	9/15/08	14:50	2	25.5	7.3	0.13	3.06	0.50	0.12	1.74*	0.08*
45G-13	9/10/08	9:15	33	23.0	7.8	5.61	3.11	0.25	0.25	1.78*	0.18*
45G-13 (Confirmation)	9/18/08	11:50	38	24.7	7.7	na	3.72	na	na	na	na
47C-5	9/15/08	14:00	Ponded	25.5	7.8	3.83	2.09	0.50	0.58	3.76	0.86
47D-25	9/16/08	15:30	3	23.4	7.1	3.05	6.14	0.50	0.30	1.07*	0.35
48C-25	9/17/08	10:15	2	22.7	7.4	4.3	2.48	0.5	0.47	5.82	0.97
48D-24	9/5/08	10:45	3	23.8	7.8	12.07	7.01	0.68	0.32	**12.10**	0.16*
48D-24 (Confirmation)	9/8/08	12:30	8	24.3	7.7	na	8.09	na	na	**16.82**	na
48D-24 (Confirmation)	9/11/08	12:15	5	22.8	7.8	na	14.57	na	na	**12.30**	na
49A-69	9/5/08	12:00	187	23.0	7.6	1.36	5.75	0.25	0.63	4.20	0.17*
49D-12	9/16/08	12:00	2	22.9	8.1	0.01	5.40	0.50	**1.33**	1.97*	0.59
49D-12 (Confirmation)	9/17/08	11:20	2	23.9	8.1	na	5.42	na	0.22	na	na
51B-1	9/9/08	17:00	10	22.8	7.4	0.67	2.67	0.25	0.18	3.17	0.08*

TABLE 4-3
FIELD SCREENING RESULTS (CONTINUED)

Site Name	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH_3-N)	Nitrate-N (mg/L NO_3-N)	Ortho-phosphate-P (mg/L PO_4-P)
51B-19	9/15/08	12:10	10	21.9	7.7	0.56	1.85	0.13	0.04*	3.63	0.53
55A-51	9/16/08	11:10	5	23.0	7.5	5.66	5.76	0.68	0.27	2.27	0.28
55A-62	9/5/08	9:20	5	22.8	8.1	0.45	7.98	0.68	0.23	1.20*	0.04*
58A-13	9/17/08	12:00	1	24.0	7.4	83.00	3.64	0.50	0.85	1.25*	0.27
58A-13 (Confirmation)	9/18/08	11:10	1	23.7	7.3	6.34	2.53	na	na	na	na
59C-90	9/17/08	15:10	Ponded	24.0	7.3	5.12	6.07	0.68	0.32	3.10	0.09*
62B-4	9/16/08	12:50	5	23.6	**5.4**	27.21	10.07	0.75	0.46	2.08*	0.28
62B-4 (Confirmation)	9/17/08	16:25	5	23.7	**5.2**	22.29	10.59	na	na	na	na
PRACTICAL DETECTION LIMIT				**	**	**	**	**	**0.10**	**2.26**	**0.25**
ACTION LEVEL				**BPJ**	**< 6.5 > 9.0**	**BPJ**	**BPJ**	**1.00**	**1.00**	**10.00**	**2.00**

Notes:
na = not analyzed
ns = not sampled (dry site)
BPJ = Best Professional Judgment, see Section 3.4
* value reported is below the Practical Detection Limit
** not applicable, PDL applies only to constituents measured using the CHEMetrics V2000 meter. See Table 3-1for applicable ranges and reporting limits.
Red Bold Type = value exceeds action level
denotes a confirmation visit
denotes a location sampled for laboratory analysis

GRAPH 4-1: Flow

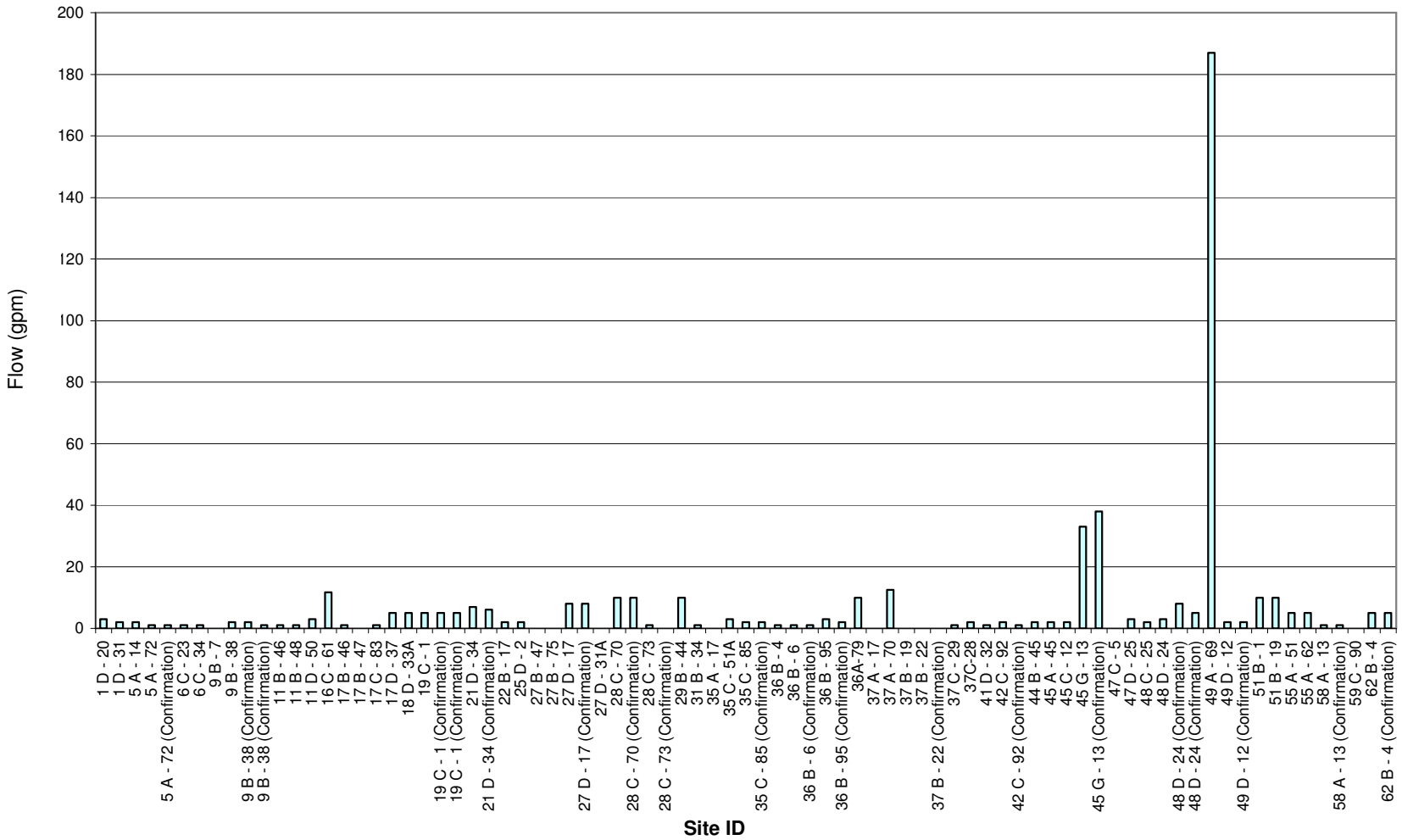

Note: Site 49A-69 is located in a natural creek; a comparatively large amount of flow is normal at this site.

GRAPH 4-2: Temperature

Action Level is Best Professional Judgment

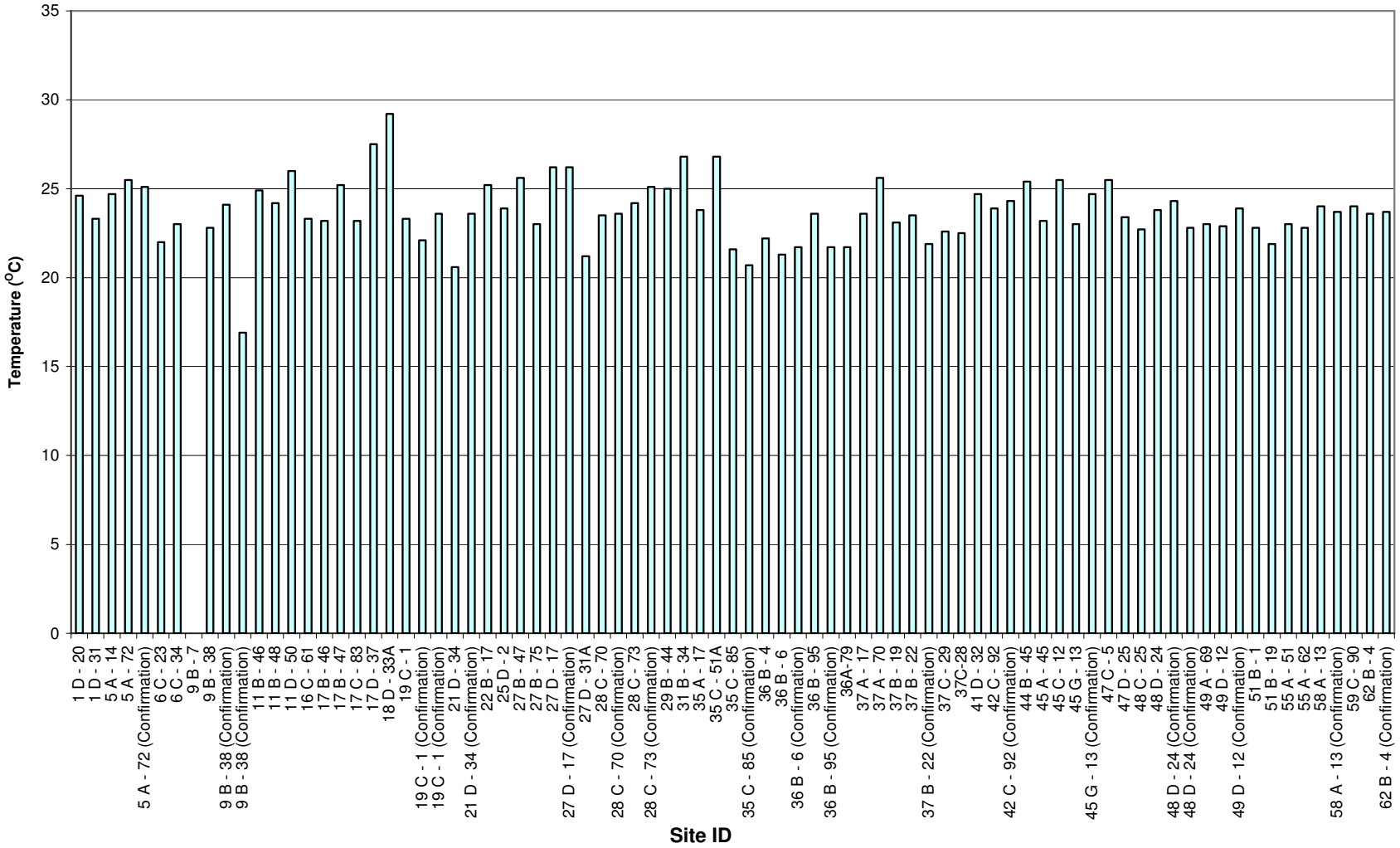

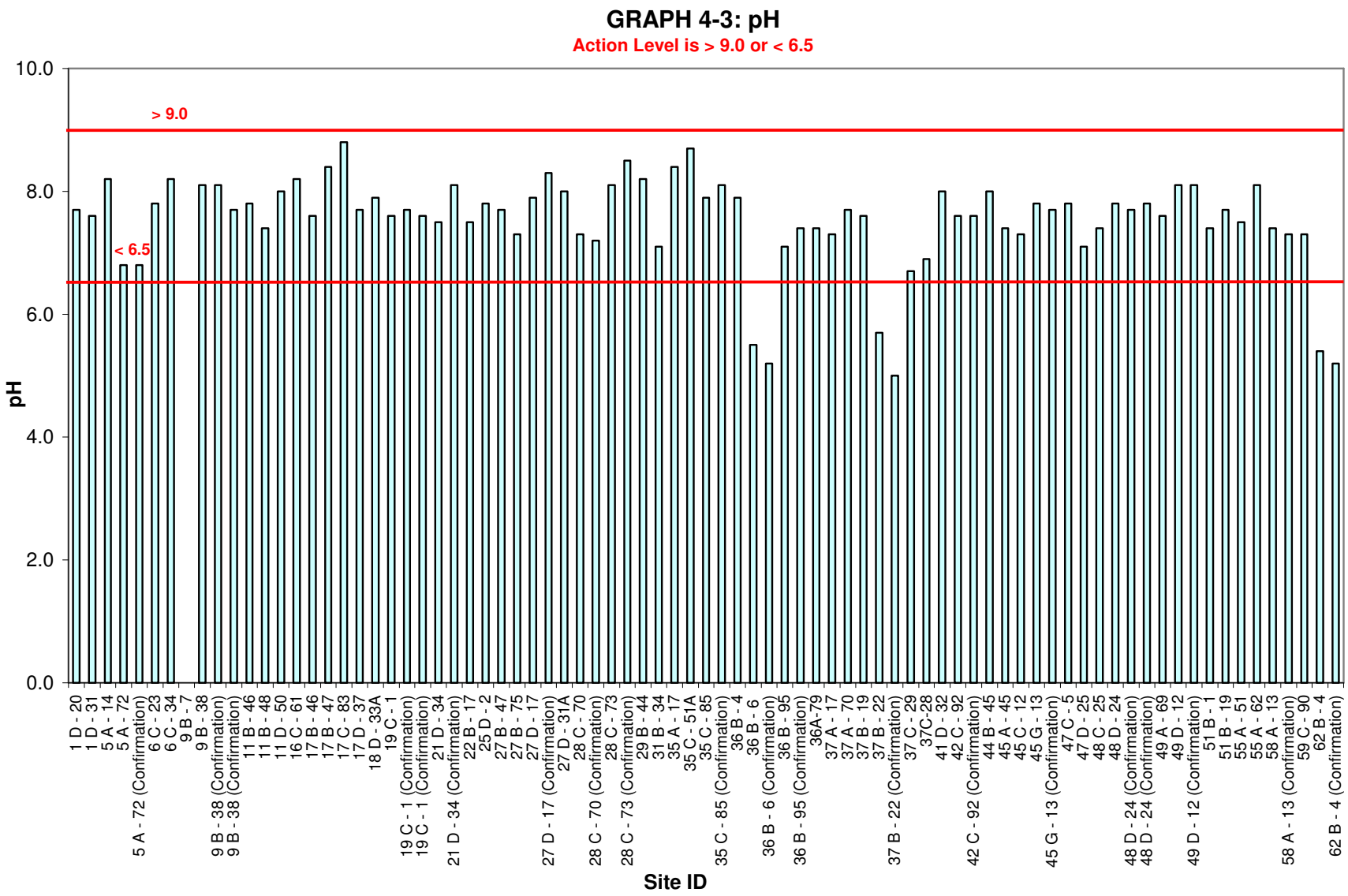
GRAPH 4-3: pH
Action Level is > 9.0 or < 6.5
10.0
8.0
6.0
4.0
2.0
0.0
pH
> 9.0
< 6.5
1 D - 20
1 D - 31
5 A - 14
5 A - 72
5 A - 72 (Confirmation)
6 C - 23
6 C - 34
9 B - 7
9 B - 38
9 B - 38 (Confirmation)
9 B - 38 (Confirmation)
11 B - 46
11 B - 48
11 D - 50
16 C - 61
17 B - 46
17 B - 47
17 C - 83
17 D - 37
18 D - 33A
19 C - 1
19 C - 1 (Confirmation)
19 C - 1 (Confirmation)
21 D - 34
21 D - 34 (Confirmation)
22 B - 17
25 D - 2
27 B - 47
27 B - 75
27 D - 17
27 D - 17 (Confirmation)
27 D - 31A
28 C - 70
28 C - 70 (Confirmation)
28 C - 73
28 C - 73 (Confirmation)
29 B - 44
31 B - 34
35 A - 17
35 C - 51A
35 C - 85
35 C - 85 (Confirmation)
36 B - 4
36 B - 6
36 B - 6 (Confirmation)
36 B - 95
36 B - 95 (Confirmation)
36A-79
37 A - 17
37 A - 70
37 B - 19
37 B - 22
37 B - 22 (Confirmation)
37 C - 29
37C-28
41 D - 32
42 C - 92
42 C - 92 (Confirmation)
44 B - 45
45 A - 45
45 C - 12
45 G - 13
45 G - 13 (Confirmation)
47 C - 5
47 D - 25
48 C - 25
48 D - 24
48 D - 24 (Confirmation)
48 D - 24 (Confirmation)
49 A - 69
49 D - 12
49 D - 12 (Confirmation)
51 B - 1
51 B - 19
55 A - 51
55 A - 62
58 A - 13
58 A - 13 (Confirmation)
59 C - 90
62 B - 4
62 B - 4 (Confirmation)
Site ID

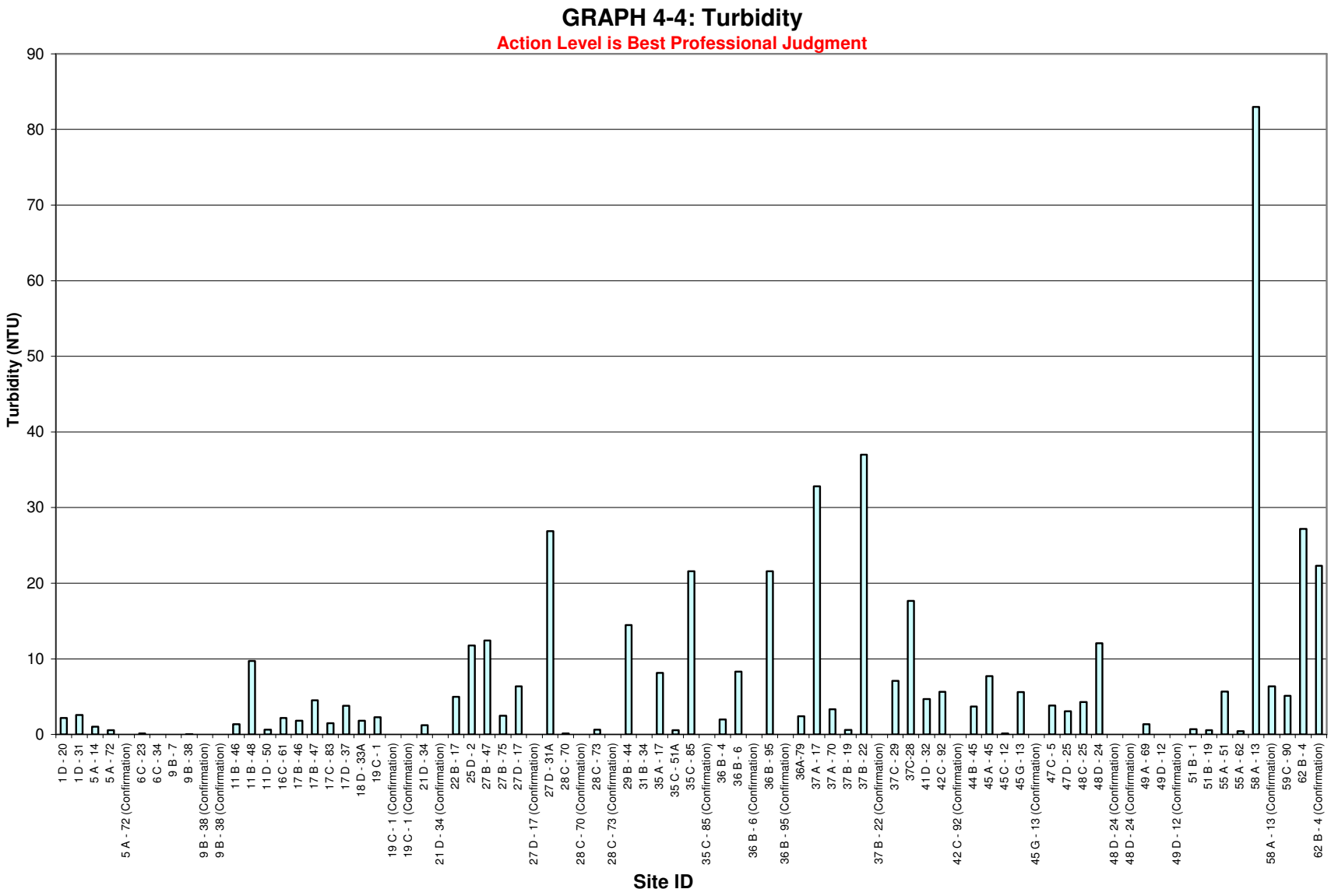
GRAPH 4-4: Turbidity
Action Level is Best Professional Judgment
Turbidity (NTU)
0
10
20
30
40
50
60
70
80
90
1 D - 20
1 D - 31
5 A - 14
5 A - 72
5 A - 72 (Confirmation)
6 C - 23
6 C - 34
9 B - 7
9 B - 38
9 B - 38 (Confirmation)
9 B - 38 (Confirmation)
11 B - 46
11 B - 48
11 D - 50
16 C - 61
17 B - 46
17 B - 47
17 C - 83
17 D - 37
18 D - 33A
19 C - 1
19 C - 1 (Confirmation)
19 C - 1 (Confirmation)
21 D - 34
21 D - 34 (Confirmation)
22 B - 17
25 D - 2
27 B - 47
27 B - 75
27 D - 17
27 D - 17 (Confirmation)
27 D - 31A
28 C - 70
28 C - 70 (Confirmation)
28 C - 73
28 C - 73 (Confirmation)
29 B - 44
31 B - 34
35 A - 17
35 C - 51A
35 C - 85
35 C - 85 (Confirmation)
36 B - 4
36 B - 6
36 B - 6 (Confirmation)
36 B - 95
36 B - 95 (Confirmation)
36A-79
37 A - 17
37 A - 70
37 B - 19
37 B - 22
37 B - 22 (Confirmation)
37 C - 29
37C-28
41 D - 32
42 C - 92
42 C - 92 (Confirmation)
44 B - 45
45 A - 45
45 C - 12
45 G - 13
45 G - 13 (Confirmation)
47 C - 5
47 D - 25
48 C - 25
48 D - 24
48 D - 24 (Confirmation)
48 D - 24 (Confirmation)
49 A - 69
49 D - 12
49 D - 12 (Confirmation)
51 B - 1
51 B - 19
55 A - 51
55 A - 62
58 A - 13
58 A - 13 (Confirmation)
59 C - 90
62 B - 4
62 B - 4 (Confirmation)
Site ID

GRAPH 4-5: Conductivity

Action Level is Best Professional Judgment

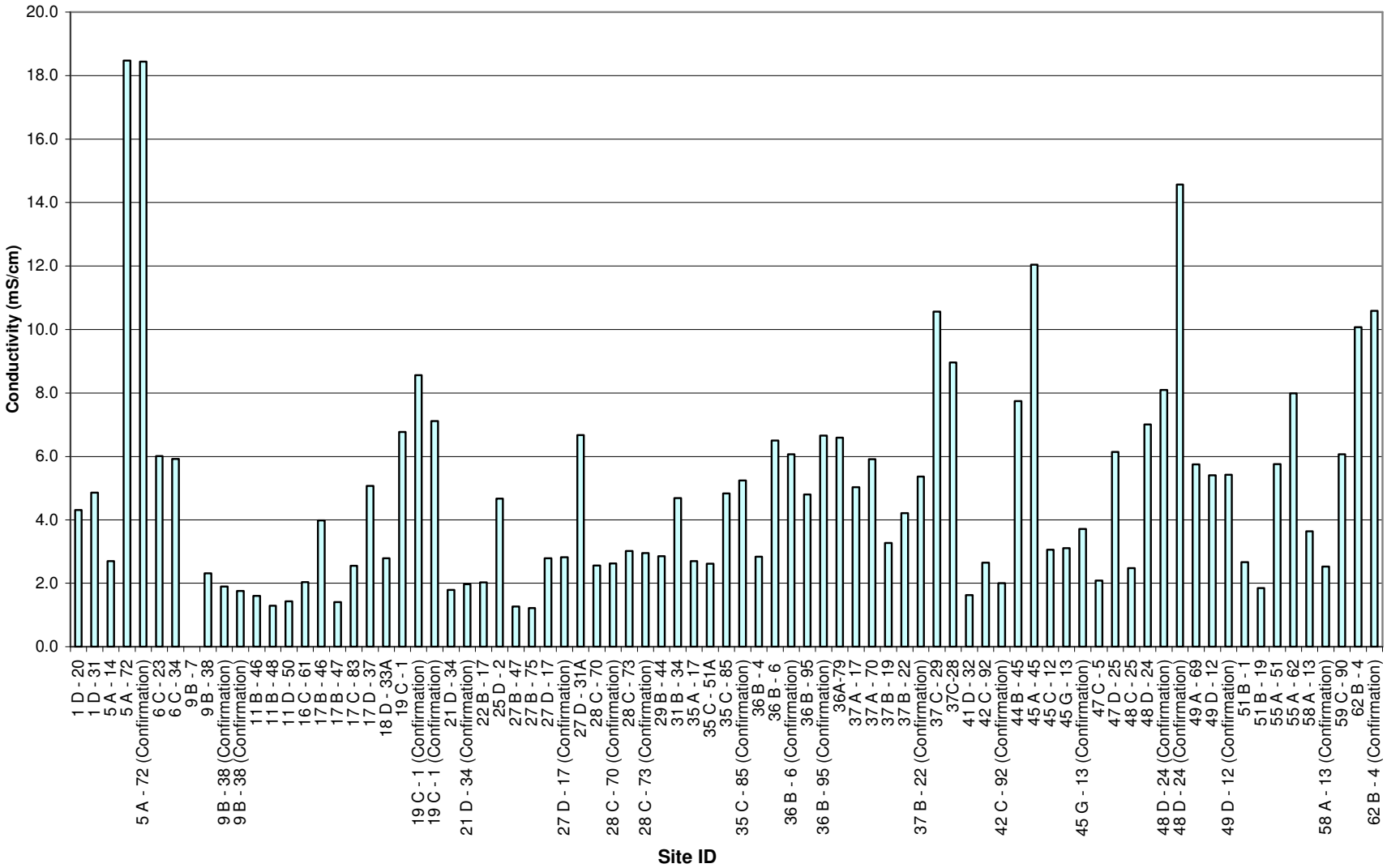

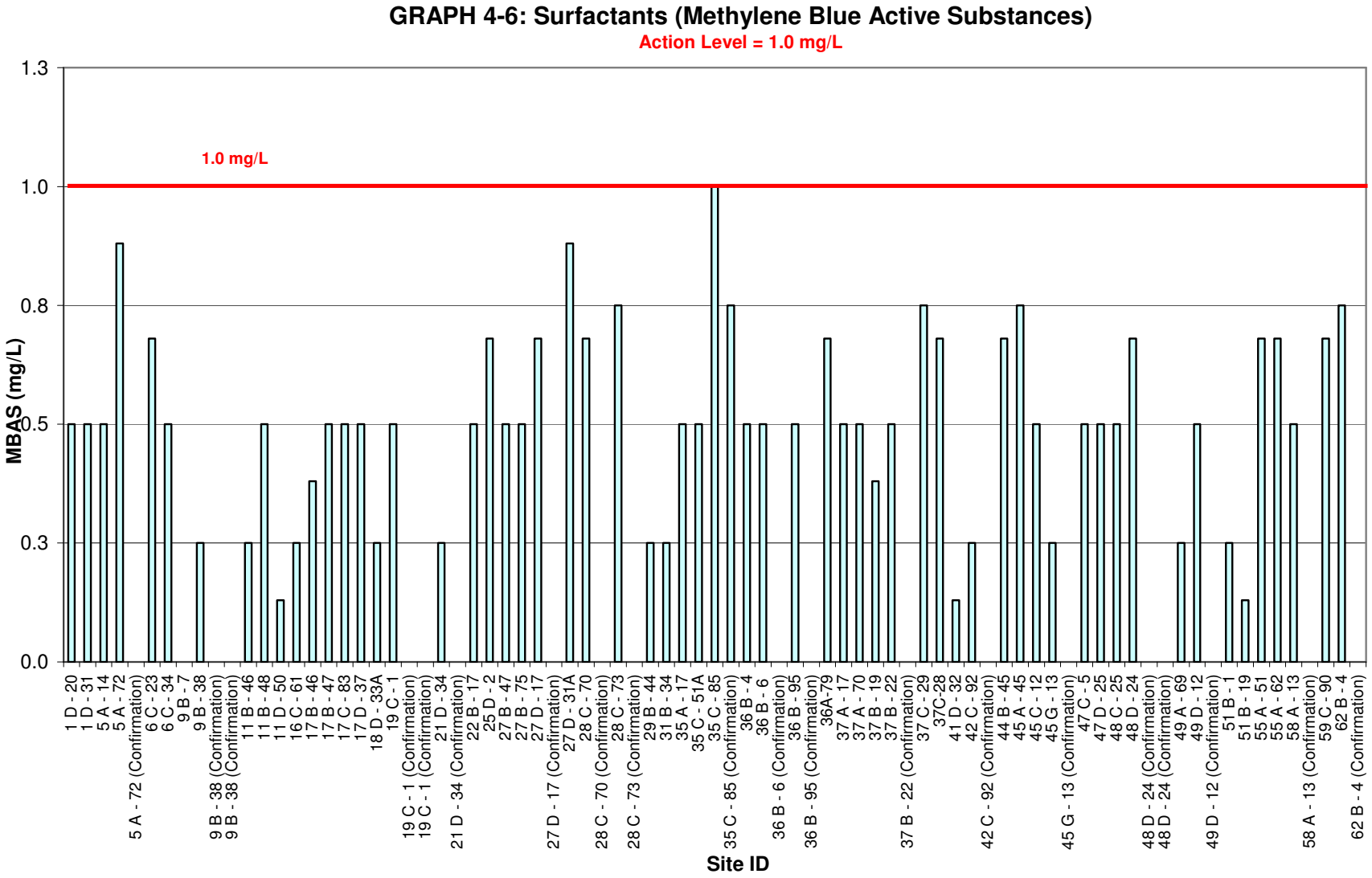
GRAPH 4-6: Surfactants (Methylene Blue Active Substances)
Action Level = 1.0 mg/L
1.0 mg/L
MBAS (mg/L)
1.3
1.0
0.8
0.5
0.3
0.0
1 D - 20
1 D - 31
5 A - 14
5 A - 72
5 A - 72 (Confirmation)
6 C - 23
6 C - 34
9 B - 7
9 B - 38
9 B - 38 (Confirmation)
9 B - 38 (Confirmation)
11 B - 46
11 B - 48
11 D - 50
16 C - 61
17 B - 46
17 B - 47
17 C - 83
17 D - 37
18 D - 33A
19 C - 1
19 C - 1 (Confirmation)
19 C - 1 (Confirmation)
21 D - 34
21 D - 34 (Confirmation)
22 B - 17
25 D - 2
27 B - 47
27 B - 75
27 D - 17
27 D - 17 (Confirmation)
27 D - 31A
28 C - 70
28 C - 70 (Confirmation)
28 C - 73
28 C - 73 (Confirmation)
29 B - 44
31 B - 34
35 A - 17
35 C - 51A
35 C - 85
35 C - 85 (Confirmation)
36 B - 4
36 B - 6
36 B - 6 (Confirmation)
36 B - 95
36 B - 95 (Confirmation)
36A-79
37 A - 17
37 A - 70
37 B - 19
37 B - 22
37 B - 22 (Confirmation)
37 C - 29
37C-28
41 D - 32
42 C - 92
42 C - 92 (Confirmation)
44 B - 45
45 A - 45
45 C - 12
45 G - 13
45 G - 13 (Confirmation)
47 C - 5
47 D - 25
48 C - 25
48 D - 24
48 D - 24 (Confirmation)
48 D - 24 (Confirmation)
49 A - 69
49 D - 12
49 D - 12 (Confirmation)
51 B - 1
51 B - 19
55 A - 51
55 A - 62
58 A - 13
58 A - 13 (Confirmation)
59 C - 90
62 B - 4
62 B - 4 (Confirmation)
Site ID

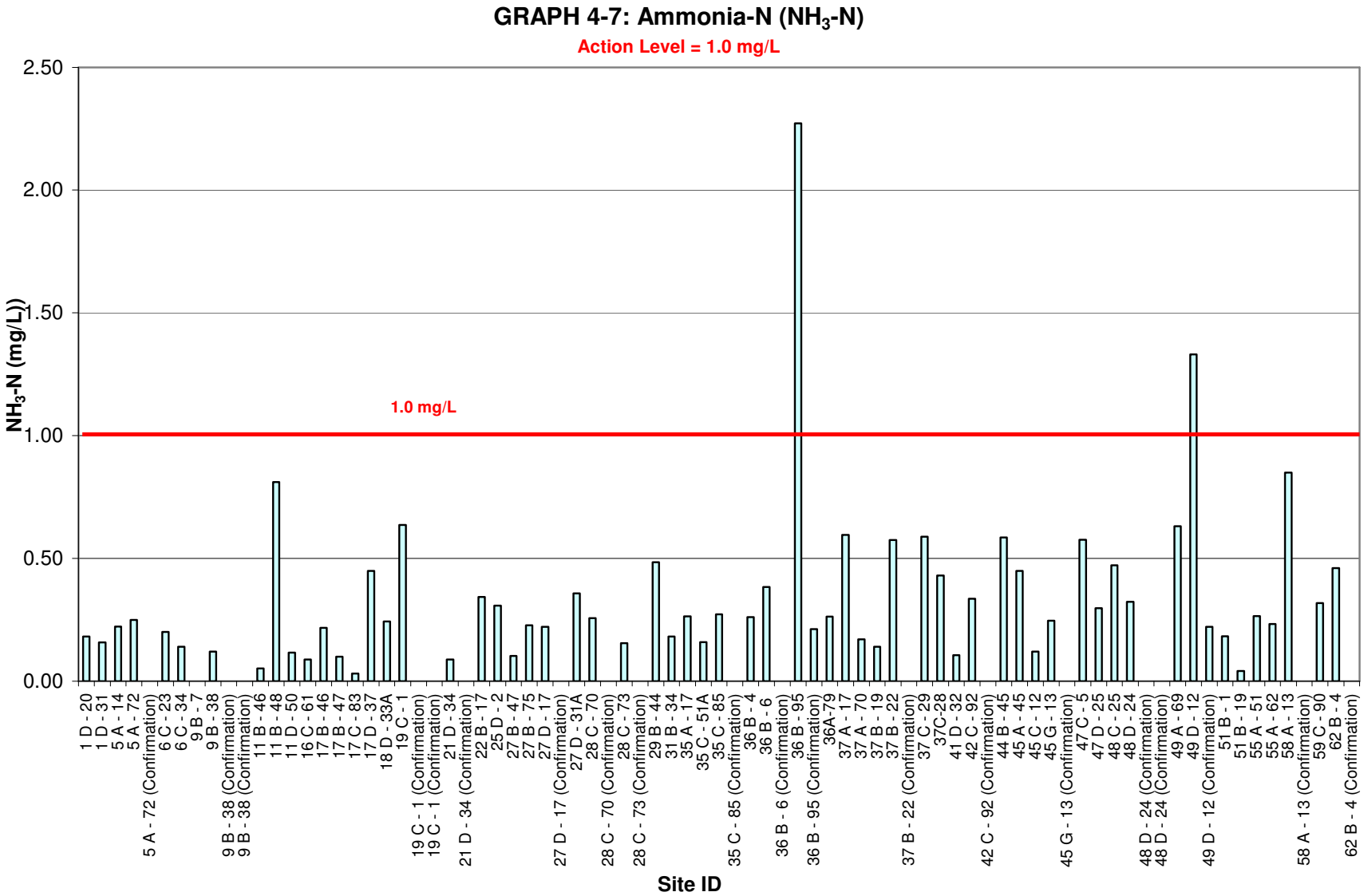
GRAPH 4-7: Ammonia-N (NH_3-N)
Action Level = 1.0 mg/L
2.50
2.00
1.50
1.00
0.50
0.00
NH_3-N (mg/L))
1.0 mg/L
1 D - 20
1 D - 31
5 A - 14
5 A - 72
5 A - 72 (Confirmation)
6 C - 23
6 C - 34
9 B - 7
9 B - 38
9 B - 38 (Confirmation)
9 B - 38 (Confirmation)
11 B - 46
11 B - 48
11 D - 50
16 C - 61
17 B - 46
17 B - 47
17 C - 83
17 D - 37
18 D - 33A
19 C - 1
19 C - 1 (Confirmation)
19 C - 1 (Confirmation)
21 D - 34
21 D - 34 (Confirmation)
22 B - 17
25 D - 2
27 B - 47
27 B - 75
27 D - 17
27 D - 17 (Confirmation)
27 D - 31A
28 C - 70
28 C - 70 (Confirmation)
28 C - 73
28 C - 73 (Confirmation)
29 B - 44
31 B - 34
35 A - 17
35 C - 51A
35 C - 85
35 C - 85 (Confirmation)
36 B - 4
36 B - 6
36 B - 6 (Confirmation)
36 B - 95
36 B - 95 (Confirmation)
36A-79
37 A - 17
37 A - 70
37 B - 19
37 B - 22
37 B - 22 (Confirmation)
37 C - 29
37C-28
41 D - 32
42 C - 92
42 C - 92 (Confirmation)
44 B - 45
45 A - 45
45 C - 12
45 G - 13
45 G - 13 (Confirmation)
47 C - 5
47 D - 25
48 C - 25
48 D - 24
48 D - 24 (Confirmation)
48 D - 24 (Confirmation)
49 A - 69
49 D - 12
49 D - 12 (Confirmation)
51 B - 1
51 B - 19
55 A - 51
55 A - 62
58 A - 13
58 A - 13 (Confirmation)
59 C - 90
62 B - 4
62 B - 4 (Confirmation)
Site ID

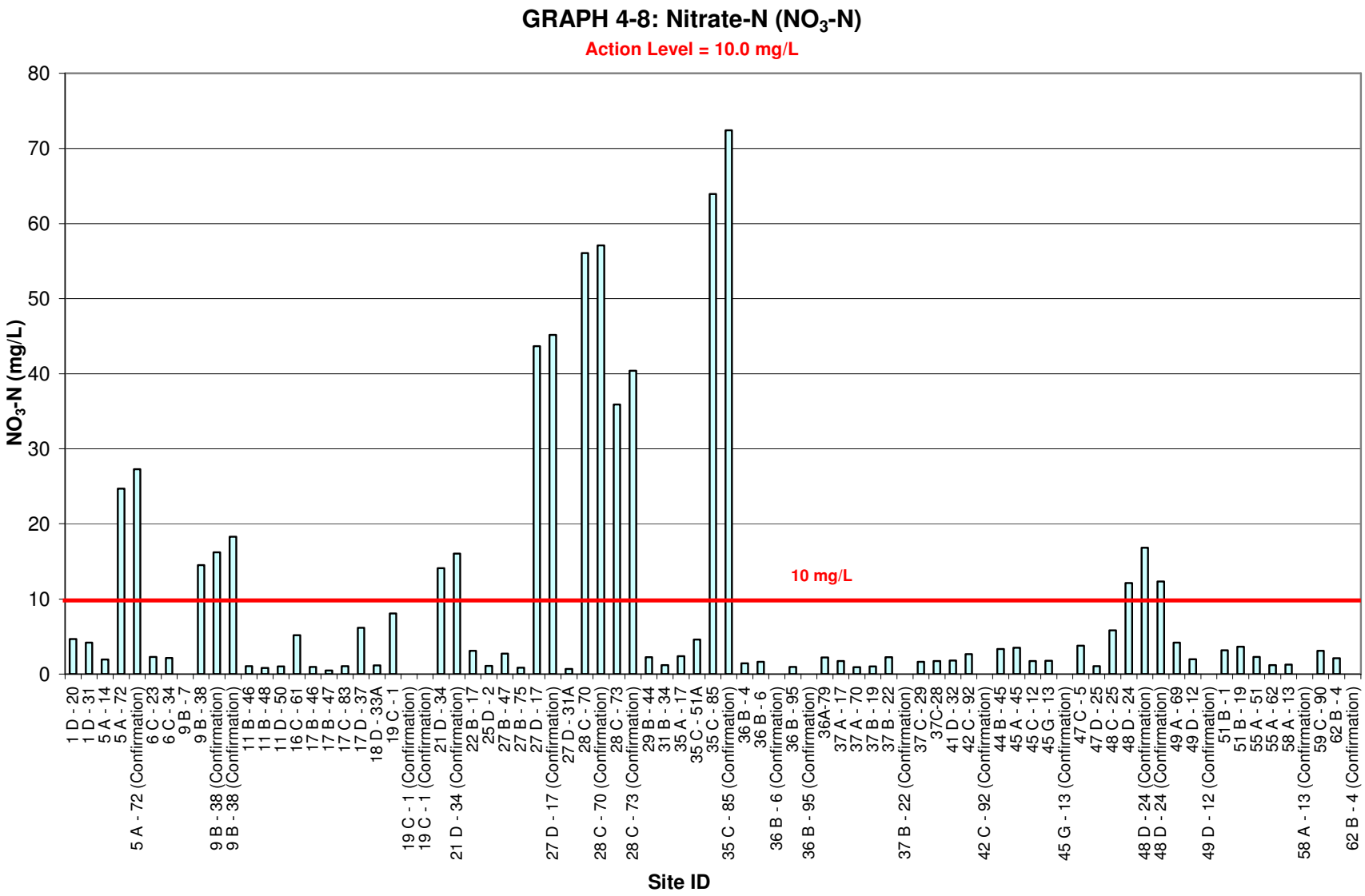
GRAPH 4-8: Nitrate-N (NO_3-N)
Action Level = 10.0 mg/L
NO_3-N (mg/L)
80
70
60
50
40
30
20
10
0
10 mg/L
1 D - 20
1 D - 31
5 A - 14
5 A - 72
5 A - 72 (Confirmation)
6 C - 23
6 C - 34
9 B - 7
9 B - 38
9 B - 38 (Confirmation)
9 B - 38 (Confirmation)
11 B - 46
11 B - 48
11 D - 50
16 C - 61
17 B - 46
17 B - 47
17 C - 83
17 D - 37
18 D - 33A
19 C - 1
19 C - 1 (Confirmation)
19 C - 1 (Confirmation)
21 D - 34
21 D - 34 (Confirmation)
22 B - 17
25 D - 2
27 B - 47
27 B - 75
27 D - 17
27 D - 17 (Confirmation)
27 D - 31A
28 C - 70
28 C - 70 (Confirmation)
28 C - 73
28 C - 73 (Confirmation)
29 B - 44
31 B - 34
35 A - 17
35 C - 51A
35 C - 85
35 C - 85 (Confirmation)
36 B - 4
36 B - 6
36 B - 6 (Confirmation)
36 B - 95
36 B - 95 (Confirmation)
36A-79
37 A - 17
37 A - 70
37 B - 19
37 B - 22
37 B - 22 (Confirmation)
37 C - 29
37C-28
41 D - 32
42 C - 92
42 C - 92 (Confirmation)
44 B - 45
45 A - 45
45 C - 12
45 G - 13
45 G - 13 (Confirmation)
47 C - 5
47 D - 25
48 C - 25
48 D - 24
48 D - 24 (Confirmation)
48 D - 24 (Confirmation)
49 A - 69
49 D - 12
49 D - 12 (Confirmation)
51 B - 1
51 B - 19
55 A - 51
55 A - 62
58 A - 13
58 A - 13 (Confirmation)
59 C - 90
62 B - 4
62 B - 4 (Confirmation)
Site ID

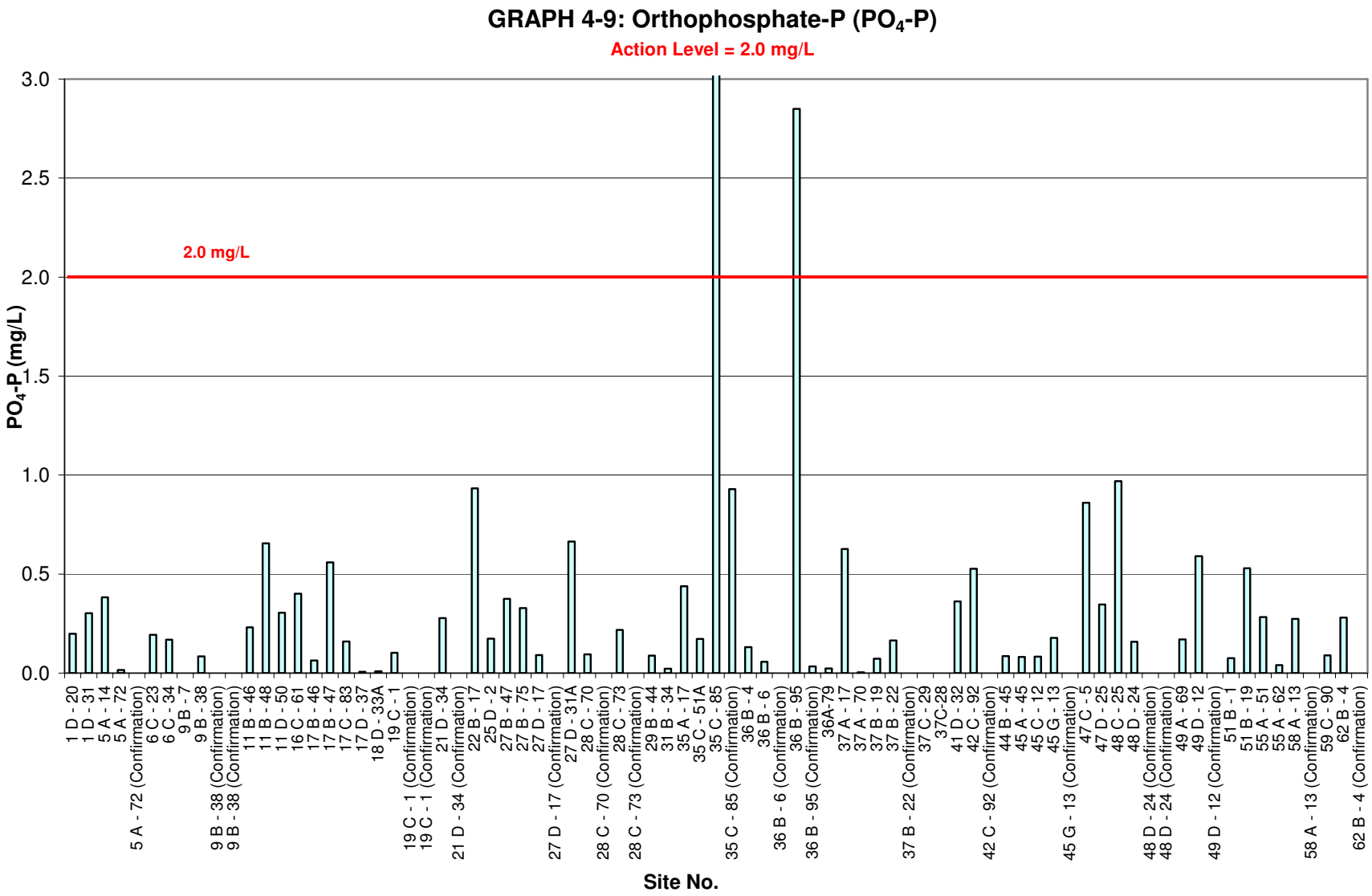
GRAPH 4-9: Orthophosphate-P (PO_4-P)
Action Level = 2.0 mg/L
2.0 mg/L
PO_4-P (mg/L)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1 D - 20
1 D - 31
5 A - 14
5 A - 72
5 A - 72 (Confirmation)
6 C - 23
6 C - 34
9 B - 7
9 B - 38
9 B - 38 (Confirmation)
9 B - 38 (Confirmation)
11 B - 46
11 B - 48
11 D - 50
16 C - 61
17 B - 46
17 B - 47
17 C - 83
17 D - 37
18 D - 33A
19 C - 1
19 C - 1 (Confirmation)
19 C - 1 (Confirmation)
21 D - 34
21 D - 34 (Confirmation)
22 B - 17
25 D - 2
27 B - 47
27 B - 75
27 D - 17
27 D - 17 (Confirmation)
27 D - 31A
28 C - 70
28 C - 70 (Confirmation)
28 C - 73
28 C - 73 (Confirmation)
29 B - 44
31 B - 34
35 A - 17
35 C - 51A
35 C - 85
35 C - 85 (Confirmation)
36 B - 4
36 B - 6
36 B - 6 (Confirmation)
36 B - 95
36 B - 95 (Confirmation)
36A-79
37 A - 17
37 A - 70
37 B - 19
37 B - 22
37 B - 22 (Confirmation)
37 C - 29
37C-28
41 D - 32
42 C - 92
42 C - 92 (Confirmation)
44 B - 45
45 A - 45
45 C - 12
45 G - 13
45 G - 13 (Confirmation)
47 C - 5
47 D - 25
48 C - 25
48 D - 24
48 D - 24 (Confirmation)
48 D - 24 (Confirmation)
49 A - 69
49 D - 12
49 D - 12 (Confirmation)
51 B - 1
51 B - 19
55 A - 51
55 A - 62
58 A - 13
58 A - 13 (Confirmation)
59 C - 90
62 B - 4
62 B - 4 (Confirmation)
Site No.

5.0 LABORATORY ANALYTICAL RESULTS

5.1 Summary

Laboratory analyses were conducted at 15 sites, representing 25 percent of all sites with ponded or flowing water. The laboratory constituents measured are defined below.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Hardness itself is not considered a pollutant, but is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Diazinon and **chlorpyrifos** are organophosphate pesticides that can be harmful to aquatic organisms if transported in urban runoff. Diazinon and chlorpyrifos are highly toxic to birds, mammals, and insects. They are also highly toxic to freshwater fish and invertebrates following acute exposure.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness, with toxicity decreasing as hardness increases. Therefore, each dissolved metal has a CMC for a specific total hardness. The laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 5-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

Coliform bacteria are relatively harmless to humans and are present in mammalian digestive tracts and are naturally found in most surface waters and soils. Testing water samples for total coliform bacteria is a standard practice in public health since a high level of total coliform bacteria often may indicate the presence of other more harmful, pathogenic organisms, sometimes of fecal origin. Total coliform is measured in lieu of these pathogens since the various pathogens are generally present in much smaller quantities and are difficult to detect.

Fecal coliform, a subset of coliform bacteria, and ***Enterococci*** are found primarily in the gastro-intestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. A host of human diseases, particularly those of the gastro-intestinal tract, are spread through water contaminated with fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material was human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

TABLE 5-1
CTR – CMC FOR DISSOLVED METALS[1]

Dissolved Cadmium			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
48D-24	2910	0.163	0.012
Dissolved Copper			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
9B-38	567	0.0689	0.00453
16C-61	478	0.0587	0.0198
17D-37	2020	0.2282	0.00527
19C-1	3370	0.3696	0.0178
21D-34	460	0.0566	0.00692
27D-17	521	0.0636	0.0135
29B-44	1110	0.1298	0.00722
35C-51A	526	0.0642	0.00596
36A-79	2300	0.2579	0.00700
37A-70	1890	0.2143	0.00810
42C-92	634	0.0766	0.00837
45G-13	1030	0.1210	0.00552
48D-24	2910	0.3218	0.0136
49A-69	2240	0.2515	0.00760
55A-62	2970	0.3281	0.0130
Dissolved Zinc			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
9B-38	567	0.510	0.0330
16C-61	478	0.441	0.0499
17D-37	2020	1.496	0.0211
19C-1	3370	2.308	0.0198
21D-34	460	0.427	0.0371
27D-17	521	0.474	0.0339
29B-44	1110	0.901	0.0152
35C-51A	526	0.478	0.0563
36A-79	2300	1.670	0.00661
37A-70	1890	1.414	0.0155
42C-92	634	0.560	0.0110
45G-13	1030	0.845	0.0114
48D-24	2910	2.038	0.0555
49A-69	2240	1.633	0.0197
55A62	2970	2.074	0.0157

Note:
- For equations and constants used in California Toxics Rule calculations, see http://www.epa.gov/ost/standards/ctr/toxic.pdf
- Only sites where a particular dissolved metal was detected are listed. Lead was not detected in any of the samples.

A summary of the laboratory analytical results is presented in Table 5-2. Table 5-3 presents the laboratory results from all samples. Laboratory reports are included in Appendix C.

TABLE 5-2
LABORATORY ANALYSES SUMMARY

Parameter (units)	Maximum	Minimum	Number of Exceedances
Total Hardness (mg/L $CaCO_3$)	3,370	460	*
Oil and Grease (mg/L)	nd	nd	0
Diazinon (µg/L)	nd	nd	0
Chlorpyrifos (µg/L)	nd	nd	0
Cadmium (dissolved, mg/L)	0.0118	nd	0
Copper (dissolved, mg/L)	0.01980	0.00453	0
Lead (dissolved, mg/L)	nd	nd	0
Zinc (dissolved, mg/L)	0.1970	0.00661	0
Total Coliform (MPN/100 mL)	78,000	1,350	3
Fecal Coliform (MPN/100 mL)	39,000	1,050	3
Enterococci (MPN/100 mL)	38,000	50	3

Notes:
* Total hardness is not considered a pollutant and does not have an established action level.
- nd = not detected
- Calculations include complete routine visit data only. Confirmation visits, follow-up visits and dry sites not incorporated.

TABLE 5-3
LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms CFU/100ml	Fecal Coliforms CFU/100ml	*Enterococci* CFU/100ml
9B-38	9/3/08	10:40	nd	567	nd	0.00453	nd	0.0330	nd	nd	3,250	1,050	1,000
16C-61	9/9/08	10:40	nd	478	nd	0.0198	nd	0.0499	nd	nd	10,600	4,300	3,100
17D-37	9/4/08	12:30	nd	2020	nd	0.00527	nd	0.0211	nd	nd	11,000	3,500	200
19C-1	9/4/08	11:45	nd	3370	nd	0.0178	nd	0.0198	nd	nd	**78,000**	**39,000**	**31,000**
19C-1 (Confirmation)	9/11/08	11:30	na	na	na	na	na	na	na	na	46,000	**23,000**	6,000
21D-34	9/9/08	9:15	nd	460	nd	0.00692	nd	0.0371	nd	nd	2,700	1,300	500
27D-17	9/9/08	12:20	nd	521	nd	0.0135	nd	0.0339	nd	nd	3,300	2,000	1,200
29B-44	9/4/08	10:50	nd	1110	nd	0.00722	nd	0.0152	nd	nd	6,700	2,800	1,400
35C-51A	9/9/08	11:40	nd	526	nd	0.00596	nd	0.0563	nd	nd	1,350	1,200	200
36A-79	9/10/08	11:30	nd	2300	nd	0.00700	nd	0.00661	nd	nd	5,400	3,600	50
37A-70	9/8/08	11:00	nd	1890	nd	0.00810	nd	0.0155	nd	nd	1,900	1,600	100
42C-92	9/10/08	10:40	nd	634	nd	0.00837	nd	0.0110	nd	nd	**56,000**	**37,000**	9,000
42C-92 (Confirmation)	9/18/08	10:45	na	na	na	na	na	na	na	na	**63,000**	**53,000**	**15,200**

TABLE 5-3
LABORATORY ANALYTICAL RESULTS (CONTINUED)

Site No.	Date	Time	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms CFU/100ml	Fecal Coliforms CFU/100ml	*Enterococci* CFU/100ml
45G-13	9/10/08	9:15	nd	1030	nd	0.00552	nd	0.0114	nd	nd	23,000	18,000	**11,000**
45G-13 (Confirmation)	9/18/08	11:50	na	na	na	na	na	na	na	na	10,400	10,200	4,600
48D-24	9/5/08	10:45	nd	2910	0.0118	0.0136	nd	0.0555	nd	nd	**52,000**	**29,000**	**38,000**
48D-24 (Confirmation)	9/11/08	12:15	na	na	na	na	na	na	na	na	15,000	12,000	2,000
49A-69	9/5/08	12:00	nd	2240	nd	0.00760	nd	0.0197	nd	nd	43,000	1,400	1,100
55A-62	9/5/08	9:20	nd	2970	nd	0.0130	nd	0.0157	nd	nd	16,000	6,550	2,850
Reporting Limits			**5.0**	**10**	**0.002****	**0.002****	**0.002****	**0.01****	**0.05**	**0.05**	**1**	**1**	**1**
Action Levels			**15.0**	*****	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**50,000**	**20,000**	**10,000**

Notes:
Red Bold Type = value exceeds action level
[ ] denotes a confirmation visit
nd = not detected
na = not analyzed
CTR = California Toxics Rule; CTR action levels for metals are calculated based upon on the total hardness value of the water sample.
* Total hardness is not considered a pollutant and thus has no established action level for the purposes of dry weather monitoring
** These reporting limits apply to results from all sites except 36A-79, 42C-92, and 45G-13. Reporting limits of 0.00100 mg/L for cadmium, copper, and lead and 0.00500 for zinc were used by the lab for analysis of samples taken at those three sites.

6.0 DATA ANALYSIS

This first part of this section provides an overall evaluation of test results obtained from the 2008 Dry Weather Monitoring Program. The second portion of this section describes historical trends for various constituent exceedances.

6.1 2008 Results

The constituent with the greatest number of exceedances this year was nitrate-nitrogen, measuring above the action level at eight sites and remaining high at the confirmation visits. The three pH values that were outside the acceptable range also were outside that range at the confirmation visits. Conversely, the ammonia-nitrogen, orthophosphate-phosphorus and surfactant exceedances were below the action level at the confirmation visits. Table 6-1 presents a snapshot of the exceedances in 2008.

TABLE 6-1
2008 EXCEEDANCES AT A GLANCE

Site No.	pH	Surfactants	Ammonia-N	Nitrate-N	Orthophos-phate-P	Total Coliforms	Fecal Coliforms	*Enterococci*
19C-1						✓	✓	✓
21D-34				✓				
27D-17				✓				
28C-70				✓				
28C-73				✓				
35C-85		✓		✓	✓			
36B-6	✓							
36B-95			✓		✓			
37B-22	✓							
42C-92						✓	✓	
45G-13								✓
48D-24				✓		✓	✓	✓
49D-12			✓					
5A-72				✓				
62B-4	✓							
9B-38				✓				

Note: Table reflects results based on complete routine visits only. Confirmation visits, follow-up visits and dry sites not included.

6.2 Previous Results

Historical results of exceedances are presented in Table 6-2, Graph 6-1 and Graph 6-2. Table 6-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 6-1 illustrates the percentage of exceedances for field constituents, and Graph 6-2 presents the percentage exceedances by year for laboratory analyses.

Since 2002, no exceedances were measured in water temperature, cadmium, copper, lead, zinc, or diazinon. Thus, these constituents have not been included in the following table and graphs.

The historical data for the results of field analyses presented in Graph 6-1 indicate a decreasing trend in ammonia-nitrogen. No discernable trend is apparent for other field constituents.

Historical data for laboratory analyses presented in Graph 6-2 shows that there were exceedances for oil and grease in the year 2002, but none thereafter. Chlorpyrifos was also above the action level for one year, in 2003, but not in subsequent years. Bacteria levels have varied over the years with no clear trend.

TABLE 6-2
PERCENT OF SITES WITH EXCEEDANCES BY YEAR

Year	Number of Field Tested Sites	*pH*	*Turbidity*	*Surfactants*	*Ammonia-N*	*Nitrate-N*	*Orthophosphate-P*	Number of Laboratory Sampling Sites	*Oil & Grease*	*Chlorpyrifos*	*Total Coliforms*	*Fecal Coliforms*	*Enterococci*
2002	60	7	2	7	23	12	2	15	27	0	13	7	13
2003	60	3	0	7	17	10	0	15	0	7	53	53	7
2004	60	7	0	2	7	8	0	15	0	0	33	13	13
2005	60	10	0	7	3	8	0	15	0	0	73	13	13
2006	60	7	3	3	10	10	3	15	0	0	87	27	20
2007	60	5	8	2	0	5	2	15	0	0	27	7	27
2008	60	5	0	2	3	13	3	15	0	0	20	20	20

Note: Results based on complete routine visits only. Confirmation visits, follow-up visits and dry sites not included.

GRAPH 6-1
PERCENT OF SITES WITH FIELD CONSTITUENT EXCEEDANCES BY YEAR

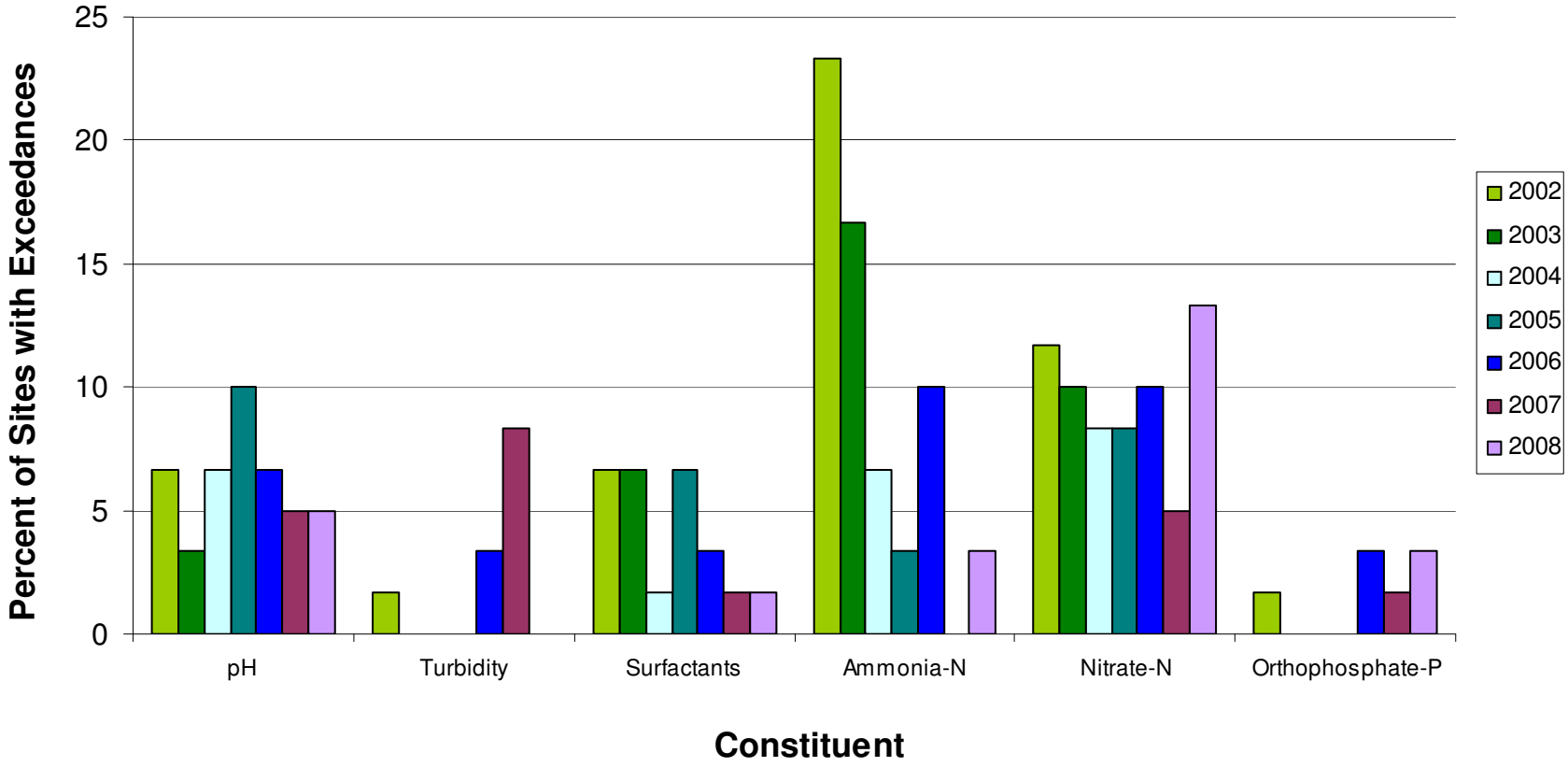

GRAPH 6-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

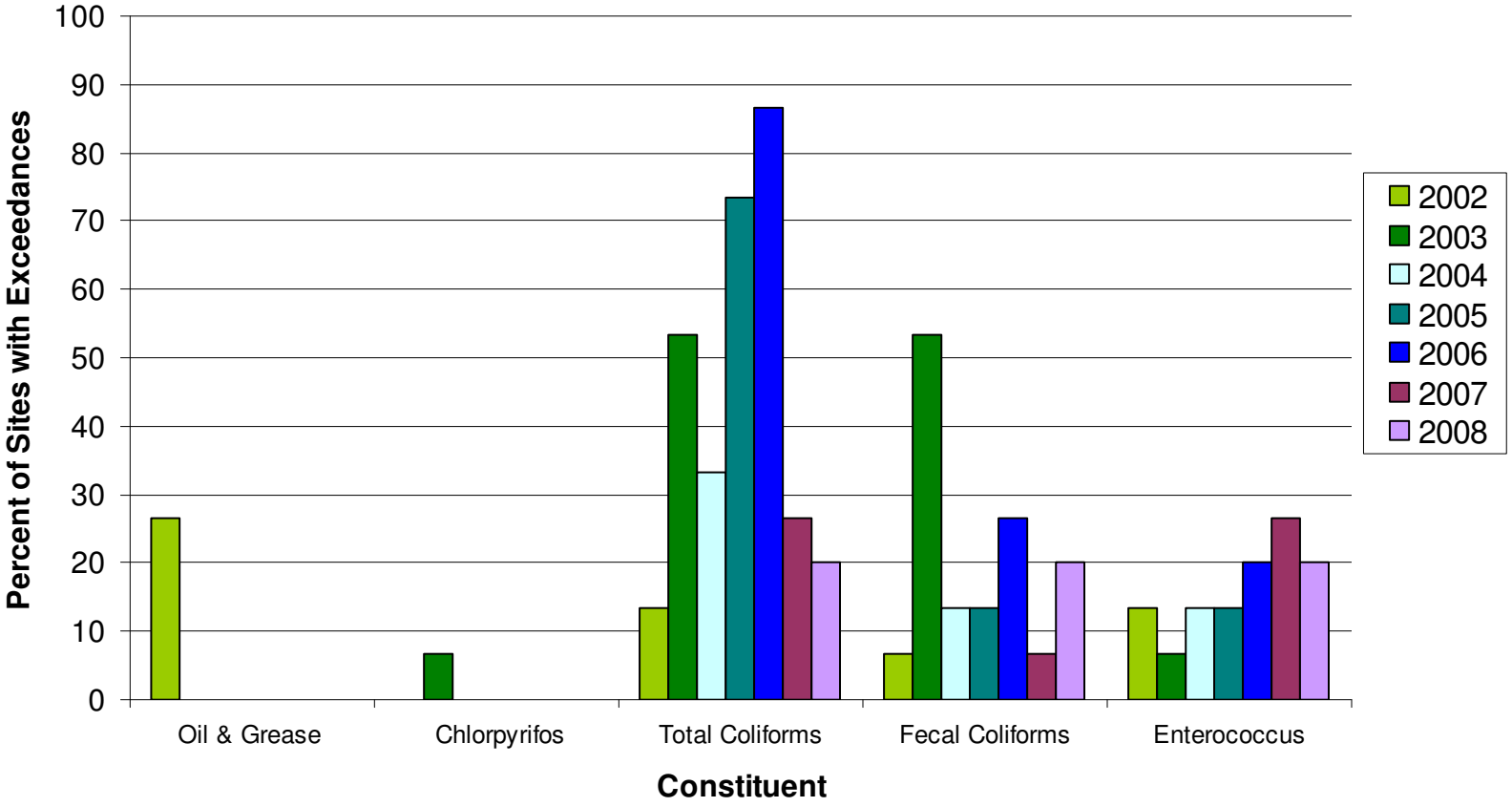

7.0 FOLLOW UP INVESTIGATIONS

One of the main purposes of the Dry Weather Monitoring Program is to identify IC/IDs. Both field screening and laboratory analytical results are compared to regionally developed action levels (Table 3-4). When a parameter is measured at or above its action level, it is possible that an IC/ID is present. To further investigate potential IC/IDs, additional investigation is initiated whenever action levels are exceeded. Procedures for such investigations are described below.

7.1 Investigation Procedures

When Dry Weather Monitoring Program results exceed action levels, the City either conducts an investigation to identify the source of the discharge or provides rationale for why the discharge does not pose a threat to water quality and does not need further investigation. An immediate source identification investigation is initiated if visual and/or analytical evidence of gross contamination is present at a site during a routine investigation. Examples of gross contamination include substantial petroleum sheens, constituent concentrations well above action levels, abnormal colors or odors not attributable to natural site conditions, or evidence of a sewage release; such conditions may be considered a threat to human health or the environment. Immediate source identification investigations are also often conducted when surfactants exceedances are noted. Past experience has shown that an immediate investigation is much more likely to identify the source of the exceedance for this particular constituent. This is because such exceedances are often related to washing activities, which are typically intermittent in nature.

When further investigation is needed but an immediate upstream investigation is not necessary, the City initially confirms the results by resampling within two business days of being informed of the exceedance. For field screening, this is within two business days of the initial test. The overall time frame for laboratory analytical results depends on the time that results are received from the lab, but investigations will be conducted within two days of receiving the data, where applicable. These investigations are labeled as “confirmation” visits in this report, and they are used to guide further upstream investigations where necessary.

When confirmation sampling confirms continued exceedance of action levels, then the City conducts further investigation to identify the source of the exceedance. This type of investigation is referred to as “follow-up” in this report. Additional investigation is not conducted when exceedances are not noted during the confirmation visit or when the exceedance is known not to be the result of IC/IDs. As noted earlier, when gross contamination is observed during a routine visit, an immediate upstream source investigation is initiated. Prior to beginning an upstream source investigation, field staff review previous dry weather monitoring reports and consult MS4 maps to plan the investigation.

Dry weather flows are generally traced from the site in an upstream direction along the conveyance system. Photos, narrative descriptions of relevant visual observations made, and GPS coordinates are recorded to aid in documentation and in potential enforcement procedures. Water samples are collected at upstream confluences for analyses of the constituent(s) being tracked. All samples are documented through the completion of field data sheets, which are provided in Appendix D. If the samples are being submitted for

laboratory analysis, they are delivered within the appropriate holding time, and all appropriate chain-of-custody procedures are followed.

If the results of the upstream investigation indicate that an IC/ID may be present, appropriate City personnel will be notified. Where appropriate and feasible, field staff may also contact the party responsible for the discharge directly regarding the IC/IDs and potential BMPs.

7.2 Investigated Sites

Site 5A-72

Site 5A-72 is an outlet located on the east bank of Buena Vista Lagoon Ecological Reserve. There was a small amount of litter, and the water was clear, colorless, and odorless. Nitrate-nitrogen was measured at 24.68 mg/L at the initial visit and 27.30 mg/L during the confirmation visit, both over the action level of 10 mg/L.

From a manhole on the sidewalk a few feet upstream of the site, ponded water around the joint of the MS4 pipe was visible. The next upstream manhole was located across the street and was dry, and no other upstream lines connected to the site. A potential source of water and nitrates to Site 5A-72 is seepage water around the pipe joint.

Site 9B-38

Site 9B-38 consists of two outlets on the east side of State Street, south of the State Street and Carlsbad Boulevard intersection. The nitrate-nitrogen level was 14.49 mg/L during routine field screening. At the confirmation and follow-up visits to the site, nitrate measured at 16.22 mg/L and 18.31 mg/L.

Two main lines contribute to Site 9B-38, one from the south along State Street and the other from the east along Laguna Drive (Figure 7-1). Located on the State Street branch upstream of Site 9B-38 is Site 9B-7, which was dry this year. Several other manholes and catch basins examined along State Street were dry, indicating that the elevated nitrogen flow originated from the Laguna Drive line.

PHOTO 7-1: Ponded water from the east, inside the manhole at location 9B-38-3

The line on Laguna Drive primarily drains residential areas. Upstream location 9B-38-1, a manhole on this line, was sampled twice. Nitrate-nitrogen levels here were 19.00 mg/L and 19.96 mg/L. Further east prior to reaching Interstate 5 (I-5), upstream location 9B-38-3 had a nitrate-nitrogen level of 12.89 mg/L. This location is a manhole that had ponded water at the time of testing (Photo 7-1). No surface flow was observed in the vicinity.

North of the main line, irrigation runoff was witnessed extending nearly a quarter of a mile (Photo 7-2). The water was traced to a set

of sprinklers on the corner of Lewis Avenue and Knowles Avenue, producing a flow of 2 gpm in the gutter. The portion of landscaping did not clearly belong to a particular house. A resident on Lewis Avenue reported that the sprinklers had turned on recently that morning, indicating that they were not broken but perhaps routinely over-water this area. A sample was taken from the gutter, yielding a 9.35 mg/L nitrate-nitrogen level, slightly below the action level.

The MS4 pipe on Laguna Drive appears to connect to a pipe running underneath I-5. The freeway has landscaping in the center divider and on both sides. At the time of the upstream investigation, no runoff from landscaping along I-5 was observed. East of the freeway, all inspected manholes and catch basins were dry.

PHOTO 7-2: Over-irrigation on Lewis Avenue

Although no obvious source of nitrate-nitrogen could be identified at the time of the investigation, it appears that fertilizer and over-irrigation are contributors.

At location 9B-38-2, nitrate-nitrogen levels were not above the action level but were still relatively high. Nitrate-based fertilizer may have been used in the landscaped areas upstream of the site and transported by over-irrigation. It is also possible that water is coming from landscaping along I-5 since the ponded water downstream of the freeway at location 9B-38-3 was high in nitrate.

TABLE 7-1
SITE 9B-38 UPSTREAM INVESTIGATION

Site	Location	Flow (gpm)	Nitrate-N (mg/L)
9B-38	East side of State Street, south of the Carlsbad Boulevard and State Street intersection	2	**14.49**
9B-38 (Confirmation)	"	2	**16.22**
9B-38 (Follow-up)	"	1	**18.31**
9B-38-1	Laguna Drive, west of Madison Street	1	**19.00**
9B-38-1	"	< 1	**19.96**
9B-38-2	Southwest corner of Lewis Avenue and Knowles Avenue	2	9.35
9B-38-3	In front of 1045 Laguna Drive	Ponded	**12.89**

Note: **Red Bold Type** = value exceeds action level

FIGURE 7-1
SITE 9B-38 UPSTREAM INVESTIGATION

Site 19C-1

PHOTO 7-3: Dense vegetation at Site 19C-1

Site 19C-1 is an outlet off of Sunny Creek Road, in an open area behind a vacant horse stable (Photo 7-3). The site was densely vegetated, and a flow of 5 gpm was observed. Discharge from the outfall joins Agua Hedionda Creek approximately 200 feet downstream of the site.

Initial laboratory analyses yielded a total coliform count of 78,000 CFU/100mL, a fecal coliform reading of 39,000 CFU/100mL and an *Enterococcus* count of 31,000 CFU/100mL. Upon the confirmation visit, total coliform and *Enterococcus* levels had dropped below the action level, but fecal coliforms continued to be high at 23,000 CFU/100mL. A follow-up visit to the site produced similar results, with no exceedances for total coliforms and *Enterococci* but fecal coliforms at 34,000 CFU/100mL.

To pursue the source of fecal coliforms, a manhole was examined at the intersection of Sunny Creek Road and College Boulevard. This manhole is at the junction of the line from a small residential area to the east and the main line from College Boulevard. The smaller line was dry, and thus the line following College Boulevard was traced upstream.

Just south of the intersection of College Boulevard and El Camino Real, a line from the south and southeast converge at a manhole, upstream location 19C-1-1. The flow was the same as observed at Site 19C-1. There was animal waste inside the manhole, although apart from the water's flow at the time of the visit. Laboratory results for a sample taken at Site 19C-1-1 show all bacteria results below respective action levels. A visual survey of the streets that drain to Site 19C-1 and various manholes along the main line did not reveal any additional sources of fecal coliforms.

The most probable source of fecal coliforms is wildlife in the area of the site. Since it is located in an open area with thick vegetation, the site is likely frequented by wildlife leaving behind fecal matter. The animal waste found at Site 19C-1-1 confirms that animals enter the storm drain system in this area.

PHOTO 7-4: Animal waste inside the manhole at upstream location 19C-1-1

TABLE 7-2
SITE 19C-1 UPSTREAM INVESTIGATION

Site	Location	Total Coliforms (CFU/100mL)	Fecal Coliforms (CFU/100mL)	*Enterococci* (CFU/100mL)
19C-1	North of a vacant horse stable on Sunny Creek Road, near College Boulevard	**78,000**	**39,000**	**31,000**
19C-1 (Confirmation)	"	46,000	**23,000**	6,000
19C-1 (Follow-up)	"	36,000	**34,000**	7,300
19C-1-1	College Boulevard, south of El Camino Real	4,600	4,000	800

Note: **Red Bold Type** = value exceeds action level

FIGURE 7-2
SITE 19C-1 UPSTREAM INVESTIGATION

Site 21D-34

Site 21D-34 is an outfall located inside Encina Power Station with a flow of approximately 7 gpm. Nitrate-nitrogen levels were initially measured at 14.07 mg/L, followed by 16.04 mg/L at the confirmation visit.

The main line leading to Site 21D-34 begins on Cannon Road, east of Paseo del Norte. It moves west until curving northward near El Arbol Drive. On the main line, a manhole east of the El Arbol Drive and Cannon Road intersection was examined. It contained only a trickle of flow, indicating that the main line upstream of this area was not the source of the 7 gpm flow to Site 21D-34. This manhole has been inspected in past upstream investigations and was typically dry or had low nitrate levels.

Due to the natural gradient, water moves downhill and westward in this area. It is likely that water was seeping into the MS4 somewhere between the inspected manhole and Site 21D-34. Nitrate levels have been high at Site 21D-34 in the past, but the manhole on Arbol Drive and Cannon Road has consistently been dry or has had nitrate-nitrogen levels below the action level. This is consistent with the explanation of seepage water carrying nitrates entering the MS4 from the hillside between the examined manhole and the site.

A possible source of nitrates is fertilization of the agricultural fields immediately to the east, carried by interflow to the pipes downhill.

Sites 27D-17, 28C-70 and 28C-73

At both the routine visits and confirmation visits to sites 27D-17, 28C-70, and 28C-73, nitrate-nitrogen measured above the action level. Due to their proximity to each other and location on interconnected lines, the follow-up investigations of these sites are discussed together below.

Sites 28C-70 and 28C-73 are outlets located off of Paseo del Norte. Both sites are upstream of Site 27D-17, an earthen channel off of Avenida Encinas. The land use in this area is mainly commercial and agricultural. Table 7-3 displays the flow and nitrate-nitrogen levels of these sites and other locations visited during the upstream investigation. Figure 7-3 provides a map of site locations and the MS4.

All three of these sites have historically shown exceedances in nitrate-nitrogen levels. Past studies have attributed the exceedances to nitrate-enriched water seeping into the storm drain system south of the agricultural fields upstream.

In addition to routine and confirmation visits, two upstream sites were tested. Site 28C-73-1 is a manhole at the Carlsbad Premium Outlets' north entrance. Site 28C-73-2 is a catch basin on the eastern most branch of this MS4 pipe, just west of the flower fields. Both sites 28C-73-1 and 28C-73-2 showed high nitrate-nitrogen levels. Moving eastward closer to the agricultural area, nitrate-nitrogen levels increased. Therefore, the high concentrations most likely originate in the vicinity of the agricultural area to the east of the Carlsbad Premium Outlets.

TABLE 7-3
SITES 27D-17, 28C-70 AND 28C-73 FOLLOW-UP INVESTIGATIONS

Site	Location	Flow (gpm)	NO_3-N (mg/L)
27D-17	Southwest corner of the parking lot for 5451 and 5431 Avenida Encinas	8	**43.66**
27D-17 (Confirmation)	"	8	**45.18**
28C-70	Across the street from 5600 Paseo del Norte	10	**56.06**
28C-70 (Confirmation)	"	10	**57.09**
28C-73	East of I-5, west of the Ken Grody Ford parking lot off Paseo Del Norte, east side of concrete channel	1	**35.89**
28C-73 (Confirmation)	"	<1	**40.41**
28C-73-1	North entrance to Carlsbad Premium Outlets off of Car Country Dr.	1	**54.35**
28C-73-2	Catch basin in rear of Carlsbad Premium Outlets, directly east of the center of mall	10	**68.03**

Note: **Red Bold Type** = value exceeds action level

FIGURE 7-3
SITES 27D-17, 28C-70 AND 28C-73 FOLLOW-UP INVESTIGATIONS

Site 35C-85

Site 35C-85 is an outlet located on the north bank of Encinas Creek with colorless, odorless, slightly cloudy water and a flow of 2 gpm. During the routine visit, surfactants were at the action level of 1.0 mg/L, nitrate-nitrogen was measured at 63.91 mg/L, and orthophosphate-phosphorus was 8.53 mg/L. An immediate upstream investigation did not reveal any obvious sources of the exceedances.

During the confirmation visit, the water no longer had a cloudy appearance. Surfactant levels decreased to 0.75 mg/L and orthophosphate-phosphorus to 0.93 mg/L, both of which are below the action level. Nitrate-nitrogen continued to be elevated at 72.43 mg/L.

The conveyance contributing to Site 35C-85 is an underground pipe from the north that runs along the center divider of I-5. There are a few minor connections and surface drainage points along the line but no major lateral lines. The City has conducted investigations of Caltrans' landscaping practices along the freeway in 2005 and 2006. It was concluded that landscaping was not the main source of nitrates to this site.

It is likely that seepage water into the main pipe has caused nitrate-nitrogen exceedances. One indicator is that conductivity has been relatively high at this site compared with what is typically measured in irrigation runoff. The levels of 4.83 and 5.24 mS/cm measured this year are more characteristic of groundwater conductivity. Additionally, past studies have reviewed aerial photographs and topographical data, and concluded that groundwater flows southwest in this area. Nitrate-containing water may travel from the agricultural fields to the north east, adding to the conveyance's flow.

FIGURE 8-4
SITE 35C-85 AND MS4 LINES

As orthophosphate-phosphorus was no longer above the action level at the confirmation visit, it was concluded that the initial high level was due to a transient flow. Also, it is unlikely to find runoff containing surfactants along the median of I-5. The initial elevated surfactant reading may have been influenced by the high nitrate levels. Nitrate is a negatively charged ion, and large amounts of negatively charged ions may interfere with the MBAS method of measuring anionic surfactants[1].

[1] CHEMetrics, Inc. "Technical Data Sheet (Draft Version): Detergents, (Anionic Surfactants, MBAS), Methylene Blue Method". Available from CHEMetrics, (800) 356-3072.

Site 36B-6

Site 36B-6 is an outlet with located east of the intersection of Camino Vida Roble and Palomar Oaks Way. In 2008 the water had a foamy surface and a flow rate of approximately 1 gpm. This site has had low pH recordings since 1995. This year, the pH was 5.5 during routine screening and 5.2 at the confirmation visit, below the 6.5 action level. No other constituents were outside the acceptable ranges.

PHOTO 7-5: Foam on the water's surface at Site 36B-6

Upstream of Site 36B-6 is Site 36B-4, a manhole located at the intersection of Palomar Oaks Way and Camino Vida Roble. Site 36B-4 is just a few hundred feet west of Site 36B-6, but it is at a higher elevation. The pH at Site 36B-4 was 7.9, within normal limits. The source of low pH was therefore isolated to the region between Site 36B-6 and Site 36B-4.

From Site 36B-4, located at about street level, water flows downhill to Site 36B-6, which is situated lower in a canyon. No overland runoff or illicit connections were observed between the sites. Therefore, the most likely cause of the low pH at Site 36B-6 is seepage water into the MS4 between Site 36B-4 and Site 36B-6. The relatively high conductivity of 6.50 mS/cm at Site 36B-6, as opposed to 2.84 mS/cm at Site 36B-4, is also consistent with the higher conductivity characteristic of groundwater. This source was confirmed in January 2008 in the CCTV investigation conducted by the City.

FIGURE 7-5
SITES 36B-6 AND 36B-4

Site 36B-95

Site 36B-95 is located in a canyon, approximately 10 yards north of 1925 Palomar Oaks Way. It had an ammonia-nitrogen exceedance at 2.3 mg/L and an orthophosphate-phosphorus exceedance of 2.85 mg/L. An upstream investigation was initiated immediately through Palomar Oaks Way and the surrounding area, but no obvious sources of ammonia-nitrogen were observed. Much of the area was landscaped, and irrigation runoff was noted. Fertilizer use in the landscaping is a possible source of orthophosphate, which can be washed into the storm drain system with over watering.

PHOTO 7-6: Irrigation runoff upstream of Site 36B-95.

At the confirmation visit, the ammonia-nitrogen level was 0.2 mg/L, and the orthophosphate-phosphorus level was 0.03 mg/L. Another survey of the upstream area did not reveal any sources of the previously elevated constituents. It was concluded that the constituent elevations were the results of a transient flow.

Site 37B-22

Site 37B-22 is an outlet at the northwest corner of the Yarrow Drive and Camino Vida Roble intersection. The sample water from this site was slightly cloudy, with a pH of 5.7 during the routine visit and 5.0 at the confirmation visit. Both of these values are outside the acceptable range of 6.5 to 9.0. The turbidity of 37.02 NTU, although not considered an exceedance, is on the higher side. Low pH has been noted at Site 37B-22 in the past. High turbidity and a cloudy appearance have also been noted in previous studies.

A manhole upstream, Site 27B-22-1, had a pH of 5.1. Three pipes connected to this manhole; the main conveyance from Yarrow Drive contributed less than 1 gpm of flow, and the two lateral PVC pipes were dry. Further upstream, Site 27B-22-2 had a normal pH of 7.6. Thus, the source of low pH to Site 37B-22 is located between sites 27B-22-1 and 27B-22-B. No surface runoff or illicit connections were observed in the vicinity. It was concluded that seepage water entering the MS4 between sites 27B-22-1 and 27B-22-B was the source of the low pH. This was confirmed in the CCTV investigation conducted by the City in January 2008.

Consistent with this conclusion, conductivity was relatively high at Site 37B-22, measuring at 4.21 mS/cm and 5.36 mS/cm during the routine and confirmation visits, respectively. This higher conductivity is more characteristic of groundwater than surface runoff. Upstream at Site 37B-22-2, which had a normal pH level, the conductivity was lower at 1.82 mS/cm.

The cloudy appearance and higher turbidity may also be influenced by the pH. Some microorganisms found in the water may not be able to survive in low pH levels. It is possible that dead cells may be clouding the water and raising turbidity readings.

FIGURE 7-6
SITE 37B-22 UPSTREAM INVESTIGATION

Site 42C-92

PHOTO 7-7: Manhole on Nutmeg Way and Rosemary Avenue.

Site 42C-92 is a manhole on Batiquitos Drive, midway between Poinsettia Lane and Daisy Avenue. The site had yellow, musty-smelling water at the routine visit. Total coliforms were measured at 56,000 CFU/100mL and fecal coliforms at 37,000 CFU/100mL, both above the respective action levels. Exceedances were also reported from the samples taken during the confirmation visit; total coliforms were 63,000 CFU/100mL, fecal coliforms were 53,000 CFU/100mL, and *Enterococci* were also in exceedance at 15,200 CFU/100mL.

An investigation was conducted through the residential areas upstream. A manhole on the corner of Rosemary Avenue and Nutmeg Way contained decaying leaves and a shallow, slow-moving flow of 1 gpm. A substantial amount of irrigation runoff was noted on Rosemary Avenue, sometimes mixed with dead leaves and small amounts of trash. No fecal matter was observed in this area.

The decomposition of organic material such as leaves and trash is one of the probable sources of bacteria to Site 42C-92. No additional sources were clearly identified during the upstream investigation. Flow was only observed upstream of the area between Batiquitos Drive and Snapdragon Drive, a relatively small area.

PHOTO 7-8: Irrigation runoff on Rosemary Avenue

TABLE 7-4
SITE 42C-92 FOLLOW-UP INVESTIGATION

Site	Location	Total Coliforms (CFU/100mL)	Fecal Coliforms (CFU/100mL)	*Enterococci* (CFU/100mL)
42C-92	Batiquitos Drive, midway between Poinsettia Lane and Daisy Avenue	**56,000**	**37,000**	9,000
42C-92 (Confirmation)	"	**63,000**	**53,000**	**15,200**

Note: **Red Bold Type** = value exceeds action level

FIGURE 7-7
SITE 42C-92 AND MS4 LINES

Site 45G-13

Site 45G-13 is an outlet 30 feet southwest of the Melrose Drive and Rancho Santa Fe Road intersection. The *Enterococcus* level at the site was slightly elevated above 10,000 CFU/100mL action level, measuring at 11,000 CFU/100mL. The site was revisited to take a confirmation sample, and the area upstream of the site was visually investigated in accordance with standard procedure.

PHOTO 7-9: Decomposing organic debris in a manhole upstream of Site 45G-13

The immediate area around the site is open space, and the remainder of the upstream land use is a mix of commercial and residential developments. The streets and several manholes upstream were examined. No source of *Enterococci* was observed during the confirmation visit and upstream investigation. Results from the analysis of the confirmation sample found that the *Enterococci* count was 4,600 CFU/100mL, no longer in exceedance, as shown Table 7-5. It was concluded that the initial *Enterococcus* exceedance was due to a transient flow.

TABLE 7-5
SITE 45G-13 FOLLOW-UP INVESTIGATION

Site	Location	*Enterococci* (CFU/100mL)
45D-13	30 feet southwest of the Melrose Drive and Rancho Santa Fe Road intersection	**11,000**
45D-13 (Confirmation)	"	4,600

Note: **Red Bold Type** = value exceeds action level

Site 48D-24

Site 48D-24 is a debris basin outlet to Batiquitos Lagoon, located southwest of the El Camino Real and Arenal Road intersection. Exceedances for both bacterial indicators and nitrate were noted at this site. The investigation of the bacteria exceedance is discussed first below, and the nitrate investigation description follows.

PHOTO 7-10: Toilet paper and trash at the desiltation basin.

Total coliforms, fecal coliforms and *Enterococci* were above the action level during the routine visit to Site 48D-24. Total coliforms were measured at 52,000 CFU/100mL, fecal coliforms at 29,000 CFU/100mL and *Enterococci* at 38,000 CFU/mL. The site was revisited to take a confirmation sample, and the area

upstream of the site was visually investigated in accordance with standard procedure.

Land use upstream of the site is primarily residential, with an open space to the north. The residential streets were examined, but no obvious fecal sources of bacteria was seen in those areas during the confirmation visit. Previous investigations have identified the desiltation basin located northeast of the Carlsbad City Library on Dove Lane as the main source of bacteria to Site 48D-24, so the basin was also visited during the upstream visual investigation in 2008. Food wrappers and plastic bags were observed in the water, and what appeared to be used toilet paper was located several feet away from the water (Photo 7-10).

The results of the bacteria analyses for the confirmation sample showed all three bacterial indicators were measured below the action level. The data for these constituents are presented Table 7-6. The site was referred to the City regarding the trash and debris observed in the upstream desiltation basin.

TABLE 7-6
SITE 48D-24 BACTERIA FOLLOW-UP INVESTIGATION

Site	Location	Total Coliforms (CFU/100mL)	Fecal Coliforms (CFU/100mL)	*Enterococci* (CFU/100mL)
48D-24	Debris basin outlet to Batiquitos Lagoon, southwest of the El Camino Real and Arenal intersection	**52,000**	**29,000**	**38,000**
48D-24 (Confirmation)	"	15,000	12,000	2,000

Note: **Red Bold Type** = value exceeds action level

Nitrate-nitrogen was also above the action level at Site 48D-24, measuring at 12.10 mg/L during the first visit and 16.82 mg/L and 12.30 mg/L during two different confirmation visits. Nitrate levels were tested at various other locations upstream, as presented in Table 7-7 and Figure 7-8.

TABLE 7-7
SITE 48D-24 NITRATE FOLLOW-UP INVESTIGATION

Site	Location	Nitrate (mg/L)
48D-24	Debris basin outlet to Batiquitos Lagoon, southwest of the El Camino Real and Arenal Road intersection	**12.10**
48D-24 (Confirmation 1)	Debris basin outlet to Batiquitos Lagoon, southwest of the El Camino Real and Arenal Road intersection	**16.82**
48D-24 (Confirmation 2)	Debris basin outlet to Batiquitos Lagoon, southwest of the El Camino Real and Arenal Road intersection	**12.30**
48D-24-1	Parking lot of Carlsbad City Library, 1775 Dove Lane	**33.09**
48D-24-2A	Northern line; northeast of Carlsbad City Library on Dove Lane	9.77
48D-24-2B	Northwestern line, northeast of Carlsbad City Library on Dove Lane	**32.45**

Note: **Red Bold Type** = value exceeds action level

Upstream at Site 48D-24-1, nitrate-nitrogen levels were more than triple the action level. Sites 48D-24-2A and 48D-24-2B are separate lines converging at a manhole further upstream. Field testing demonstrated that the nitrate-nitrogen elevation originated from the northwestern conveyance.

The northwestern line with the highest nitrate-nitrogen level drains a relatively new residential development on a hill, indicating that the high nitrate-nitrogen levels originate in this area. Some irrigation runoff has been observed in this residential area, but no major amounts of surface runoff are typically observed. Based on historical data, nitrate measurements at Site 48D-24 have been trending upward over the past several years. Conductivity measurements have been relatively high ever since measurement for that parameter began in 2002, but an increasing trend has still been seen in recent years, with a value of 14.57 mS/cm recorded during the 2008 confirmation visit. Since a change has been seen over the years, it is possible that irrigation activities at the relatively new residential area upstream of upstream location 48D-24-2B have resulted in a higher groundwater table and greater contribution of groundwater flows to Site 48D-24. It is unknown if groundwater in this area is naturally high in nitrates or if landscaping practices may be a contributing factor.

FIGURE 7-8
SITE 48D-24 FOLLOW-UP INVESTIGATION MAP

Site 49D-12

Site 49D-12 is an outlet at the northern end of La Costa Golf Course. The site had clear, colorless, odorless water, and no trash. At the routine visit, ammonia-nitrogen was measured at 1.3 mg/L. A survey of the drainage area was conducted but no clear source of ammonia was apparent. Upon the confirmation visit the following day, the ammonia-nitrogen reading had fallen to 0.2 mg/L. It was concluded that the initial exceedance was due to a transient flow.

Site 58A-13

During routine field screening, water at site 58A-13 had a cloudy appearance, and turbidity was measured at 83 NTU. The residential streets east of the site were investigated to identify potential sources of high turbidity. On the curb around 2012 and 2022 Ladera Court, a relatively small amount of fine sediment was observed in addition to signs of irrigation runoff, which could carry the sediment to the site. Upon the confirmation visit the following day, the water was clear and colorless, and turbidity levels were measured at 6.34 NTU. The likely cause of the high turbidity was a transient flow transporting the fine sediment observed upstream.

Site 62B-4

Site 62B-4 is a manhole at the intersection of Rancho Santa Fe Road and Camino Alvaro that had slightly cloudy water and a low pH of 5.4. At the confirmation visit, the pH was 5.2, and the water continued to appear cloudy. The site has historically had low pH levels.

The routine sample was taken of the combined flow from three converging lines: one from the southwest, the main line from the west, and another line from the northwest. These three flows combined in the manhole, stirring up sediment and giving the water a cloudy appearance. Each line was sampled separately, and the individual flows were clear with low turbidity readings.

The separate samples taken from each line confirm previous findings that the northwestern flow was the source of low pH. The northwestern line had a pH of 4.7, whereas the western line had a pH of 7.8 and the southern line's pH was 7.6. The northwestern line is a PVC pipe, draining a residential neighborhood. Some irrigation runoff was seen in the upstream area, but no clear discharge of acidic water was observed.

One possible explanation for the low pH is that the soil and interflow in this area have a low pH. This flow may be seeping into the storm water conveyances through corroded pipes. Consistent with this explanation, the northwestern line also has a higher conductivity, a characteristic of groundwater. The City has conducted additional investigations related to this pipe in the past, but the exact origin of groundwater or similar flows to the pipe are unclear.

8.0 SUMMARY AND RECOMMENDATIONS

8.1 Summary of Field Screening and Laboratory Analysis Data

In the City of Carlsbad 2008 Dry Weather Monitoring Program, 60 primary field sampling sites were visited. Since primary monitoring Site 9B-7 was dry, alternate Site 1D-20 was sampled in its place. Fifteen of the field sampling sites were also sampled for laboratory analyses. Confirmation visits and upstream investigations were performed for 17 sites at which constituents were measured at or above their respective action levels during the routine visit.

Appendix E of this report discusses the new trash assessment component that has been adopted by the Municipal Permit. This program includes classifying sites into one of five categories based on the level of trash observed. Including one dry site, 36 sites were rated "optimal," 24 sites were "suboptimal," and one site was rated "marginal" in the trash assessment. No sites were rated "submarginal" or "poor."

The following summaries of action level exceedances and conclusions of follow-up investigations are presented by sub-watershed.

Agua Hedionda Sub-watershed

The City's 2008 Dry Weather Monitoring Program included 21 sites within the Agua Hedionda sub-watershed. Of these, four had nitrate-nitrogen exceedances that were likely related to seepage water from upstream agricultural activities. Table 8-1 presents a summary of action level exceedances in this watershed. Table 8-2 displays the conclusions based on confirmation and upstream investigations conducted for these sites.

TABLE 8-1
AGUA HEDIONDA SUB-WATERSHED ACTION LEVEL EXCEEDANCES

Field Screening (21 Samples)		
Analyte	**Number of Exceedances**	**Site(s) Exceeding Action Level**
Nitrate-N	4	21D-34, 27D-17, 28C-70, 28C-73
Laboratory Analyses (6 Samples)		
Analyte	**Number of Exceedances**	**Site(s) Exceeding Action Level**
Total Coliforms	1	19C-1
Fecal Coliforms	1	19C-1
Enterococci	1	19C-1

TABLE 8-2
AGUA HEDIONDA SUB-WATERSHED SUMMARY OF UPSTREAM INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results/Probable Source
	Field	Laboratory	
19C-1		Total Coliforms Fecal Coliforms *Enterococci*	Wildlife waste in open space around the site and accumulation of trash and waste in dense vegetation; Note that only fecal coliforms were still above the action level in the confirmation sample.
21D-34	Nitrate-N		Seepage water containing nitrate, likely originating from agricultural areas upstream
27D-17	Nitrate-N		Seepage water containing nitrates, probably from agricultural areas upstream
28C-70	Nitrate-N		
28C-73	Nitrate-N		

Buena Vista Sub-watershed

Seven of the City's 2008 dry weather monitoring sites are located within the Buena Vista sub-watershed in 2008. At two of the sites, nitrate-nitrogen measuring above the action level was believed to be related to seepage water containing nitrates. See Table 8-3 and Table 8-4.

TABLE 8-3
BUENA VISTA SUB-WATERSHED ACTION LEVEL EXCEEDANCES

Field Screening (7 Samples)		
Analyte	**Number of Exceedances**	**Site(s) Exceeding Action Level**
Nitrate-N	2	5A-72, 9B-38
Laboratory Analyses (1 Sample)		
There were no laboratory analysis exceedances in the Buena Vista sub-watershed.		

TABLE 8-4
BUENA VISTA SUB-WATERSHED FOLLOW-UP INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results/Probable Source
	Field	Laboratory	
5A-72	Nitrate-N		Seepage water containing nitrates entering cracked MS4 pipe
9B-38	Nitrate-N		Seepage water containing nitrates

Encinas Sub-Watershed

Thirteen of the City's dry weather monitoring sites are situated within the Encinas sub-watershed. In 2008 low pH levels at two sites were believed to be related to groundwater seepage water. Tables 8-5 and 8-6 display the various constituent exceedances and conclusions regarding their sources within the Encinas sub-watershed.

TABLE 8-5
ENCINAS SUB-WATERSHED SUMMARY OF ACTION LEVEL EXCEEDANCES FOR

Field Screening (13 Samples)		
Analyte	**Number of Exceedances**	**Site(s) Exceeding Action Level**
pH	2	36B-4, 37B-22
Surfactants	1	35C-85
Ammonia-N	1	36B-95
Nitrate-N	1	35C-85
Orthophosphate-P	2	35C-85, 36B-95
Laboratory Analyses (3 Samples)		
There were no laboratory analysis exceedances in the Encinas sub-watershed.		

TABLE 8-6
ENCINAS SUB-WATERSHED FOLLOW-UP INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results/Probable Source
	Field	Laboratory	
35C-85	Surfactants, Nitrate-N, Orthophosphate-P		Surfactants: Interference with the test method caused by high levels of nitrate ions Nitrate-N: Seepage water containing nitrates Orthophosphate-P: Transient flow
36B-6	pH		Seepage water with low pH
36B-95	Ammonia-N Orthophosphate-P		Transient flow
37B-22	pH		Seepage water with low pH

San Marcos Creek Sub-Watershed

The City's 2008 Dry Weather Monitoring Program includes 19 sites within the San Marcos Creek sub-watershed, which drains to Batiquitos Lagoon. Several of the exceedances were attributed to transient flows. Groundwater seepage was a possible source of nitrate-nitrogen to Site 48D-24 and low pH to Site 62B-4. Table 8-7 and Table 8-8 summarize the San Marcos Creek exceedances and follow-up investigation conclusions.

TABLE 8-7
SAN MARCOS CREEK SUB-WATERSHED ACTION LEVEL EXCEEDANCES

Field Screening (19 Samples)		
Analyte	**Number of Exceedances**	**Site(s) Exceeding Action Level**
pH	1	62B-4
Turbidity	1	58A-13
Ammonia-N	1	49D-12
Nitrate-N	1	48D-24
Laboratory Analyses (5 Samples)		
Analyte	**Number of Exceedances**	**Site(s) Exceeding Action Level**
Total Coliforms	2	42C-92, 48D-24
Fecal Coliforms	2	42C-92, 48D-24
Enterococci	2	45G-13, 48D-24

TABLE 8-8
SAN MARCOS CREEK SUB-WATERSHED FOLLOW-UP INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results/Probable Source
	Field	Laboratory	
42C-92		Total Coliforms Fecal Coliforms	Decaying organic material in storm drains of Rosemary Avenue
45G-13		*Enterococci*	Transient flow, possibly related to wildlife in surrounding open space
48D-24	Nitrate-N	Total Coliforms Fecal Coliforms *Enterococci*	Nitrate-N: Possible seepage water from residential developments Bacteria: Some trash and indicators of human use were noted in the desiltation basin upstream of the site close to Dove Lane during the upstream investigation. However the results of the confirmation sample at the site showed no exceedances.
49D-12	Ammonia-N		Transient flow
58A-13	Turbidity		Transient flow containing fine sediment
62B-4	pH		Seepage water with low pH from the small PVC pipe from the northwest

8.2 Recommendations

Based on the results of the 2008 Dry Weather Monitoring Program, the following actions are recommended for consideration.

8.2.1 Inspection and Maintenance

- Work with the responsible parties of the agricultural areas upstream of sites 27D-17, 28C-70, 28C-73 and 35C-85 to reduce nitrate levels.
- Consider removing trash from "marginal" Site 37B-19, between 2225 and 2265 Camino Vida Roble.
- Clean up trash from the area northeast of Dove Lane, across from Carlsbad City Library (upstream of Site 48D-24).

8.2.2 Education

- Work with the residents or property manager responsible for landscaping on Lewis Avenue and Knowles Avenue to reduce over-irrigation upstream of Site 9B-38.
- Provide educational materials regarding BMPs to minimize irrigation runoff to the residents of Rosemary Avenue, upstream of Site 42C-92.
- Consider providing educational materials to the residents between 4860 and 4862 Park Drive, upstream of Site 22B-17, regarding BMPs to minimize irrigation runoff. Although no exceedances were found at Site 22B-17, a substantial amount of runoff was observed in front of these residences. Algal growth was present in the curb, indicating that runoff is regularly present.

8.2.3 Further Investigation

- Contact Caltrans to investigate landscaping practices along I-5, upstream of Site 9B-38.
- Contact responsible parties of the agricultural fields east of Site 21D-34 to investigate nitrate use.
- Consider further investigation of the source of the low pH of the water at Site 62B-4.
- Contact parties responsible for landscaping and property management of residential areas upstream of location 48D-24-2B (Moorhen Place and Mimosa Drive) to identify landscaping practices related to fertilization and irrigation.
- Continue additional investigation upstream of Site 42C-92 related to bacterial exceedances.

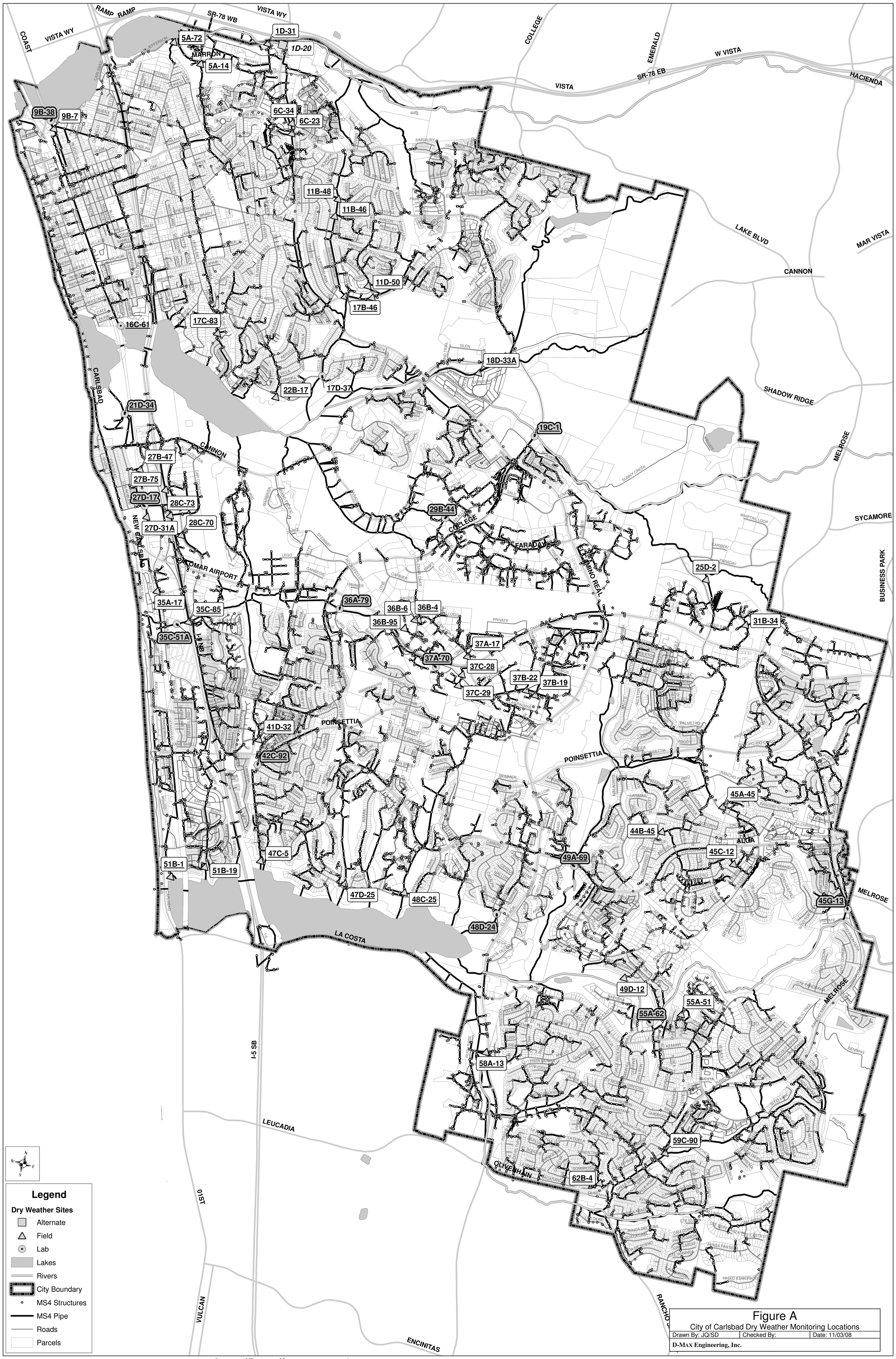

Base Data Sources: USGS, SanGIS, SANDAG, City of Carlsbad

0 0.25 0.5 1 Miles

FIGURE B
WATERSHED MAP OF THE CARLSBAD AREA, BROKEN INTO HYDROLOGIC SUBAREAS

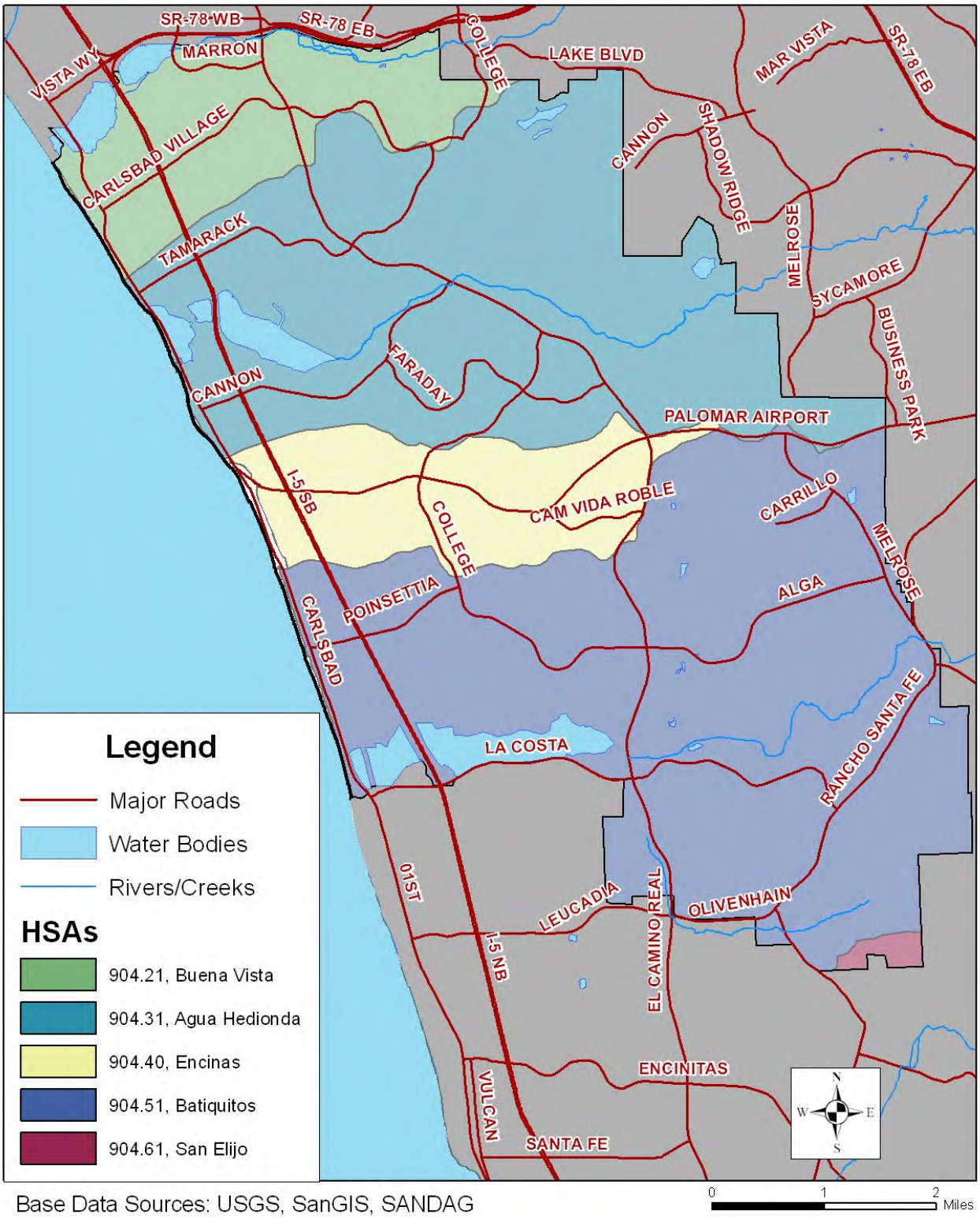

Base Data Sources: USGS, SanGIS, SANDAG

Appendix A

Historical Dry Weather Data Tables

Site ID	AH-02	AH-03	AH-04	AH-05	AH-05A	AH-08	AH-09	AH-10	AH-11	AH-12	AH-13	AH-15	AH-17	AH-18	AH-24	AH-26	AH-27	AH-28	AH-28A	AH-29	AH-30	AH-31	AH-32	AH-45	AH-46	AH-56	AH-59	AH-61	AH-63	AH-65	BA-02	BA-03	BA-03A
1995																																	
pH	na	na		na		8	na	9.5	8	8	7.7	na	na	na	7.9	7.8	9.4	7.1	9	8.1	8.3	na	8	8.7	8.3	na	7.6	na			8.3	7.2	
Temperature	na	na		na		19.4	na	27.7	24.6	22.5	22.1	na	na	na	22.9	22.8	31	24	29.3	25	24	na	28	23.6	25	na	23.9	na			24	23.3	
Ammonia mg/L	na	na		na		0.05	na	0.02	0.16	0.25	0.04	na	na	na	0.14	0.05	0.06	0.07	0.17	0.06	0.02	na	0.02	0.06	0.2	na	0.05	na			0.2	0.04	
Detergents mg/L	na	na		na		0.25	na	1	0.5	15	0.75	na	na	na	0.5	0.25	0.25	0.5	0.75	<.25	0.25	na	0.25	0.25	nd	na	0.75	na			0.5	0.5	
Chlorine mg/L	na	na		na		0.6	na	0.6	0.4	1	0.3	na	na	na	0.4	0.5	0.2	0.8	0.6	0.2	0.4	na	0.1	0.1	0.8	na	0.3	na			0.3	0.4	
Copper mg/L	na	na		na		nd	na	nd	nd	nd	nd	na	na	na	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	na	nd	na			nd	nd	
Phenols mg/L	na	na		na		nd	na	nd	nd	nd	nd	na	na	na	nd	nd	nd	nd	nd	nd	nd	na	nd	nd	nd	na	nd	na			nd	nd	
1996																																	
pH	7.9	9		na		8.1	na	8	8.7	7.8	7.5	8.1	na	8.1	7.8	7.9	9.3	7.9	9	na	na	9.6	8.5	8.4	na	na	7.4	na			8.36	7	
Temperature	21.9	27.8		na		20.9	na	22.4	24	24	24.2	24.9	na	24.3	29.4	25.8	29.7	27.7	28.1	na	na	23.5	29.6	22.4	na	na	24.9	na			23.6	24	
Ammonia mg/L	nd	nd		na		0.33	na	0.05	0.02	0.01	0.54	0.04	na	nd	0.01	0.05	0.08	0.02	0.04	na	na	nd	0.06	0.02	na	na	0.07	na			0.22	0.06	
Detergents mg/L	1	0.75		na		0.25	na	0.5	2	2	0.5	0.25	na	0.5	0.25	0.25	0.25	0.25	0.25	na	na	1	0.25	0.5	na	na	0.5	na			0.75	0.5	
Chlorine mg/L	0.6	1.5		na		0.4	na	0.3	0.1	0.4	0.6	0.6	na	0.6	0.6	0.6	0.6	1	0.6	na	na	0.6	0.6	0.6	na	na	1	na			0.1	<.1	
Copper mg/L	nd	nd		na		nd	na	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd	na	na	nd	nd	nd	na	na	nd	na			nd	nd	
Phenols mg/L	nd	nd		na		nd	na	nd	nd	nd	nd	nd	na	nd	nd	nd	nd	nd	nd	na	na	nd	nd	nd	na	na	nd	na			nd	nd	
1997																																	
pH	na	7.74		na	7.69	7.66	na	8.57	8.19	8.66	7.66	na	na	7.83	7.79	na	na	7.67	7.79	na	7.97	7.69	8.2	7.98	na	8.11	7.29	na			8.19	7.04	na
Temperature	na	24.3		na	24	22.7	na	27	28.1	25.6	22	na	na	25.4	23.7	na	na	34.1	27.4	na	26.6	24.8	29.7	26	na	28.1	24.6	na			25	25.1	na
Ammonia mg/L	na	2.28		na	0.55	0.32	na	nd	nd	0.08	0.01	na	na	0.56	0.98	na	na	0.02	nd	na	0.09	4.11	0.02	0.07	na	0.1	0.01	na			0.02	nd	na
Detergents mg/L	na	1.5		na	0.25	0.25	na	0.25	6	6	0.5	na	na	0.25	0.25	na	na	0.25	0.25	na	0.25	1	<.25	0.25	na	0.5	0.5	na			0.25	0.25	na
Chlorine mg/L	na	0.3		na	0.2	0.2	na	0.3	0.3	0.3	0.6	na	na	0.3	0.2	na	na	0.1	0.3	na	0.6	0.3	0.3	0.2	na	0.4	0.2	na			0.1	0.6	na
Copper mg/L	na	nd		na	nd	nd	na	nd	0.3	0.2	nd	na	na	nd	nd	na	na	nd	nd	na	nd	nd	nd	nd	na	0.2	nd	na			nd	nd	na
Phenols mg/L	na	nd		na	nd	nd	na	nd	nd	nd	nd	na	na	nd	nd	na	nd	nd	na	nd	nd	0.1	nd	nd	na	nd	nd	na			nd	nd	na
1998																																	
pH		6.7	6.9		8.1	7.7		8.5	7.7	7.8	8			7.4	9.2	7.7	na	6.8	8		8.2	8.5	7.6	7.4		8.4	7.5					7.6	
Temperature		24	14		22	19		22	21	25	23			22	26	20	na	19	18		21	21	22	23		24	23					19	
Ammonia mg/L		0.6	nd		0.4	0.4		1	0.6	10	0.3			1	0.2	1	na	0.6	0.6		0.4	4	0.4	0.6		0.1	0.3					0.4	
Detergents mg/L		0.25	0.5		0.5	0.25		0.5	3	3	1.5			0.5	1	0.75	na	0.5	0.4		0.25	3	0.25	0.38		0.25	0.5					0.25	
Chlorine mg/L		0.4	nd		0.1	nd		0.3	0.1	0.1	0.1			nd	nd	0.15	na	nd	0.2		nd	nd	0.2	0.1		nd	nd					nd	
Copper mg/L		nd	nd		nd	nd		nd	nd	nd	nd			nd	nd	nd	na	nd	nd		nd	nd	nd	nd		nd	nd					nd	
Phenols mg/L		nd	nd		nd	nd		nd	nd	nd	nd			0.1	0.2	0.1	na	0.2	0.2		nd	0.2	0.1	nd		nd	0.2					nd	
1999																																	
pH	na	9.1	8.8	na	na	8	na	8.1	8.1	8.4	8.1	8.7	8.4	8.2	8.2	7.7	8.7	na	8	na	7.7	7.9	8.3	8.6	8.4	8.6	7.9	9.8			8.1	8	7.8
Temperature	na	29	30	na	na	22	na	22	24	24	22	31	25	24	29	23	18	na	27	na	22	23	26	27	23	24	21	24			23	21	21
Ammonia mg/L	na	0.3	1	na	na	1.5	na	0.3	0.8	10	0.1	0.2	7	1	0.3	0.3	0.2	na	0.2	na	0.8	1	0.2	0.3	1	0.2	0.4	0.5			0.2	0.2	4.5
Detergents mg/L	na	0.25	0.75	na	na	0.5	na	0.5	0.5	>3.0	0.75	0.5	0.25	2	0.5	0.5	0.25	na	0.25	na	0.25	>3.0	0.5	0.25	1.5	0.25	0.5	1.5			0.5	0.25	0.5
Chlorine mg/L	na	0.3	0.6	na	na	0.3	na	nd	nd	0.3	0.2	0.1	nd	0.2	0.5	0.1	nd	na	nd	na	0.05	0.2	nd	nd	0.6	0.2	0.1	0.6			0.2	0.1	nd
Copper mg/L	na	0.1	0.2	na	na	0.1	na	nd	0.1	0.5	nd	nd	0.1	0.2	0.1	nd	nd	na	nd	na	nd	0.2	0.1	0.1	nd	nd	nd	nd			0.1	0.2	nd
Phenols mg/L	na	0.1	0.2	na	na	nd	na	nd	0.2	0.3	nd	nd	nd	nd	0.3	0.2	nd	na	nd	na	nd	nd	0.1	0.2	0.4	nd	0.4	nd			0.1	0.1	0.1
2000																																	
pH		10	7.8		na	7.5		9.1	7.5	7.4	7.3	na	na	7.8	7.5	7.4	8.2	8.1	8.3		7.8		8.8	8.3	7.7	8.2	7.6	8.0			8.0	7.0	na
Temperature		31	12		na	24		30	23	23	23	na	na	23	21	23	21	31	29		23		28	23	24	24	21	24			22	23	na
Ammonia mg/L		1.0	10		na	0.9		0.2	0.7	0.8	0.1	na	na	0.4	0.2	0.6	1.5	0.1	0.1		0.5		0.2	0.2	0.2	0.1	0.2	0.4			0.3	0.8	na
Detergents mg/L		1.0	1.0		na	0.25		0.5	1.5	>3.0	1.5	na	na	0.25	0.25	0.25	1.0	0.25	0.25		0.25		0.25	0.25	0.25	0.25	0.25	0.5			0.25	0.25	na
Chlorine mg/L		0.2	nd		na	0.1		0.1	nd	nd	0.2	na	na	0.1	nd	nd	0.1	nd	0.1		nd		nd	nd	nd	nd	nd	nd			nd	nd	ba
Copper mg/L		0.2	nd		na	nd		0.2	nd	nd	0.1	na	na	0.1	nd	nd	nd	nd	0.1		0.1		nd	nd	nd	nd	nd	nd			0.1	0.1	na
Phenols mg/L		nd	0.1		na	nd		nd	nd	0.1	nd	na	na	0.1	nd	0.1	nd	nd	nd		nd		nd	0.1	nd	nd	nd	0.1			nd	nd	na
2001																																	
pH		7.7	7.9		na	7.1	7.1	8	8.2	7.6	6.9	na	na	7.3	7.3	7.1	7.5	7.8	7.6		7.4	7.5	8.2	7.8	7.1	7.9	7.1	7.5			7.9	7.4	na
Temperature		23	28		na	23	23	24	23	22	22	na	na	21	27	20	20	29	26		20	21	26	24	20	25	20	24			22	22	na
Ammonia mg/L		0.5	1.0		na	0.6	0.5	0.5	0.4	0.4	0.3	na	na	0.6	0.6	0.8	1.5	0.5	0.3		0.6	0.6	0.2	0.4	0.2	0.2	0.3	0.2			0.2	0.4	na
Detergents mg/L		0.75	3		na	0.25	0.25	3	0.75	3	0.75	na	na	0.25	0.5	0.5	0.5	0.5	0.25		0.25	0.75	0.25	0.25	0.5	0.25	0.5	0.5			0.25	0.5	na
Chlorine mg/L		0.8	0.4		na	nd	nd	nd	nd	nd	0.8	na	na	nd	0.5	nd	nd	nd	nd		nd	nd	0.1	nd	nd	nd	0.3	0.6			nd	0.6	na
Copper mg/L		nd	nd		na	nd	nd	nd	nd	nd	nd	na	na	nd	nd	nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	na
Phenols mg/L		nd	nd		na	nd	nd	nd	nd	nd	nd	na	na	nd	0.1	nd	nd	nd	nd		nd	nd	nd	0.1	0.1	nd	0.1	0.1			nd	nd	na

Site ID	BA-04	BA-04A	BA-05	BA-06	BA-07	BA-13	BA-16	BA-26	BA-27	BA-31	BA-32	BA-34	BA-36	BA-40	BA-41	BA-43	BA-46	BA-47	BA-48	BA-48A	BA-49	BA-51	BA-52	BV-02	BV-03	BV-04	BV-04A	BV-06	BV-07	BV-08	BV-09
1995																															
pH	na	8	7.8	na	na	na	na	7.7	na	8.4	na	8.4	8.1	7.8	7.7	na	na	6.8	na					na	na	na	na	na	na	7.9	na
Temperature	na	24.5	24.9	na	na	na	na	24	na	24	na	25	22.2	24	24.2	na	na	23.9	na					na	na	na	na	na	na	22.3	na
Ammonia mg/L	na	0.1	0.04	na	na	na	na	0.12	na	nd	na	0.5	0.24	0.03	0.05	na	na	0.44	na					na	na	na	na	na	na	0.14	na
Detergents mg/L	na	1.5	0.5	na	na	na	na	0.75	na	0.5	na	0.5	1	0.5	0.75	na	na	0.75	na					na	na	na	na	na	na	0.5	na
Chlorine mg/L	na	0.8	0.4	na	na	na	na	0.2	na	0.6	na	0.6	0.3	0.3	<.1	na	na	0.6	na					na	na	na	na	na	na	0.6	na
Copper mg/L	na	nd	nd	na	na	na	na	nd	na	nd	na	nd	nd	nd	nd	na	na	nd	na					na	na	na	na	na	na	nd	na
Phenols mg/L	na	nd	nd	na	na	na	na	nd	na	nd	na	nd	nd	nd	nd	na	na	nd	na					na	na	na	na	na	na	nd	na
1996																															
pH	8.36		7.7	8.2	na	8.6	na	7.7	8.4	8.1	na	8.2	8.1	8	7.7	7.8	na	6	8.3					na	na	na	na	na	na	8	na
Temperature	25.6		26.5	26.2	na	22.8	na	25.1	21.8	28.6	na	22.8	23.1	23	25.4	23.1	na	24.9	25.1					na	na	na	na	na	na	23.8	na
Ammonia mg/L	0.02		0.07	nd	na	0.65	na	0.07	0.04	0.26	na	0.45	0.03	0.05	0.03	0.24	na	0.49	0.13					na	na	na	na	na	na	0.03	na
Detergents mg/L	0.75		0.75	0.5	na	1.75	na	0.75	0.5	0.5	na	0.25	0.5	0.25	0.75	0.5	na	0.5	0.5					na	na	na	na	na	na	0.5	na
Chlorine mg/L	0.1		nd	nd	na	nd	na	0.2	0.3	0.2	na	nd	0.2	nd	0.1	0.2	na	nd	nd					na	na	na	na	na	na	0.6	na
Copper mg/L	nd		nd	nd	na	nd	na	nd	nd	nd	na	nd	nd	nd	nd	nd	na	nd	nd					na	na	na	na	na	na	nd	na
Phenols mg/L	nd		nd	nd	na	nd	na	nd	nd	nd	na	nd	nd	nd	nd	nd	na	nd	nd					na	na	na	na	na	na	nd	na
1997																															
pH	8.17		8.09	na	8.64	8.19	na	8.07	8.22	8.02	8.27	7.4	8.26	8.07	8.13	7.84	na	5.16	9.77		9.13			7.67	na	7.79	na	7.86	na	7.76	8.02
Temperature	29.6		27.6	na	24.5	28	na	30.4	26.8	25.3	29.5	29	23.8	27.7	24.9	29	na	28.2	23.6		25.9			24.7	na	28.3	na	25.8	na	25.8	26.5
Ammonia mg/L	0.04		0.02	na	0.02	0.07	na	0.33	10.7	nd	0.02	0.02	0.04	3.41	0.07	4.34	na	0.2	0.89		0.02			0.56	na	nd	na	nd	na	0.05	0.38
Detergents mg/L	0.5		0.25	na	0.25	0.25	na	0.5	0.25	0.5	0.5	0.25	0.5	0.75	0.75	0.5	na	0.75	1		<.25			0.25	na	<.25	na	<.25	na	1	<.25
Chlorine mg/L	0.6		0.1	na	nd	0.1	na	0.1	0.2	0.1	0.6	0.1	0.1	0.2	nd	0.1	na	0.2	0.2		0.1			nd	na	0.2	na	0.3	na	0.3	0.3
Copper mg/L	nd		nd	na	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd		nd			nd	na	nd	na	nd	na	nd	nd
Phenols mg/L	nd		nd	na	nd	nd	na	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	nd	nd		nd			nd	na	nd	na	nd	na	nd	nd
1998																															
pH	7.7		7.9			7.7		7.8	8.2	7.7	7.5	8.2	8.1	7.9	7.5	7.3		na	7.8					10						9.8	8.4
Temperature	26		23			20		23	22	17	23	20	20	21	22	22		na	22					21						21	22
Ammonia mg/L	0.6		0.3			1		0.6	1	0.6	0.3	0.3	0.6	0.8	0.3	2		na	0.6					0.6						0.6	0.6
Detergents mg/L	0.4		0.4			0.5		0.5	1.5	0.5	0.25	0.5	0.5	0.4	0.75	0.3		na	0.25					0.5						0.5	0.4
Chlorine mg/L	nd		nd			nd		nd	nd	nd	nd	0.1	nd	nd	nd	nd		na	0.2					nd						0.1	nd
Copper mg/L	nd		nd			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		na	nd					nd						nd	nd
Phenols mg/L	nd		nd			nd		0.2	nd	0.2	nd	0.3	0.2	0.1	0.1	nd		na	nd					nd						nd	nd
1999																															
pH	7.7	na	7.8	8.8	8	na	8.1	8.4	8.3	7.8	7.7	8.1	8.2	7.9	9.2	na	6.3	8.6	na	8.2				8.1	na	na	7.7	8.2	na	8.2	8.5
Temperature	23	na	26	24	21	na	25	24	24	24	23	23	24	25	27	na	24	23	na	23				21	na	na	26	23	na	25	22
Ammonia mg/L	0.2	na	0.4	1.5	0.2	na	0.1	1	0.3	4	0.1	0.3	0.2	0.6	1	na	2	1.5	na	0.3				2	na	na	0.2	0.1	na	0.8	0.2
Detergents mg/L	0.25	na	1.5	>3.0	0.5	na	0.5	0.5	0.25	0.25	0.25	0.5	0.25	0.5	0.5	na	0.5	0.25	na	0.5				>3.0	na	na	0.75	0.25	na	0.25	0.8
Chlorine mg/L	0.3	na	0.2	nd	nd	na	0.2	0.2	0.1	0.2	0.6	0.1	nd	0.1	0.3	na	0.2	0.3	na	nd				0.1	na	na	0.4	0.1	na	1	0.5
Copper mg/L	nd	na	0.1	0.2	0.1	na	0.1	0.2	0.1	0.2	0.1	nd	nd	0.2	0.2	na	0.3	0.1	na	nd				<0.1	na	na	nd	0.1	na	0.2	nd
Phenols mg/L	nd	na	0.1	0.1	0.3	na	0.2	0.1	0.2	0.1	0.1	0.3	0.2	0.1	0.1	na	0.3	0.1	na	0.1				<0.1	na	na	0.3	nd	na	0.3	0.1
2000																															
pH	na	na	8.2	7.7	7.8		7.7	na	8.0	7.3	7.5	7.9	7.8	7.5	7.3		6.3	7.4		7.3				7.6			7.0	7.8		7.7	8.1
Temperature	na	na	23	24	24		25	na	25	26	25	23	24	24	25		24	23		22				20			25	24		23	23
Ammonia mg/L	na	na	3.0	>10	0.8		0.8	na	0.4	0.3	0.3	0.4	0.8	0.8	3.0		1.0	0.8		0.3				0.8			0.2	0.4		0.3	0.1
Detergents mg/L	na	na	0.25	0.25	0.25		0.25	na	0.25	0.25	0.25	0.25	0.25	0.25	0.25		0.25	0.25		0.25				0.25			0.5	0.25		0.25	0.25
Chlorine mg/L	ba	na	nd	nd	nd		nd	na	nd	0.1	nd	nd	nd	nd	nd		0.1	nd		nd				nd			0.1	nd		nd	2.5
Copper mg/L	na	na	0.1	nd	nd		nd	na	0.1	0.1	nd	nd	nd	nd	0.1		0.1	nd		nd				nd			0.1	nd		0.1	nd
Phenols mg/L	na	na	0.2	nd	0.1		nd	na	0.1	nd	nd	nd	nd	0.1	0.1		nd	0.1		nd				0.1			nd	0.1		0.1	nd
2001																															
pH	7.4	na	7.4	7.8	7.6		7.7	7.7	7.8	7.4	7.6	7.9	7.9	7.4	6.8		4.7	7.5		7.7				7.1			6.8	7.4		7.4	7.4
Temperature	25	na	25	22	22		25	23	24	23	24	23	22	24	22		22	23		23				20			23	21		21	20
Ammonia mg/L	3	na	2	0.8	0.7		0.4	0.8	0.4	0.8	0.2	0.3	0.5	0.6	0.8		0.5	0.5		0.1				0.6			0.2	1		0.3	0.2
Detergents mg/L	0.25	na	2	0.5	0.5		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25		0.5	0.5		0.25				0.25			0.75	0.5		0.25	0.25
Chlorine mg/L	0.2	na	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd		nd				nd			0.4	nd		nd	nd
Copper mg/L	nd	na	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd		nd				nd			nd	nd		nd	nd
Phenols mg/L	0.2	na	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd		nd	nd		nd				nd			nd	nd		nd	nd

Site ID	BV-09A	BV-10	BV-14	BV-15	BV-16	EN-02A	EN-02B	EN-02C	EN-09	EN-11	EN-13	EN-14	EN-14A	EN-16	EN-17	EN-18	EN-19	EN-20	EN-21	EN-22	EN-22A	EN-23	EN-23A	EN-24	EN-30	EN-31
1995																										
pH		na	8.1			7.9	8.9		7.7	na	na	na	4.7	7.7	na	6.8	7.6	8.1	8.7	na	na	7.6	na		na	
Temperature		na	23.9			23.2	25.4		21.1	na	na	na	21.8	25.6	na	22.2	26.6	31.9	24	na	na	21.7	na		na	
Ammonia mg/L		na	0.27			0.07	0.1		0.12	na	na	na	0.61	0.23	na	0.42	0.23	0.08	0.1	na	na	0.16	na		na	
Detergents mg/L		na	0.25			0.5	0.5		0.5	na	na	na	0.75	0.75	na	1	0.5	0.75	0.5	na	na	0.5	na		na	
Chlorine mg/L		na	0.6			0.6	0.3		0.2	na	na	na	0.2	0.6	na	<.01	0.6	0.4	0.4	na	na	0.6	na		na	
Copper mg/L		na	nd			nd	nd		nd	na	na	na	nd	nd	na	nd	nd	nd	nd	na	na	nd	na		na	
Phenols mg/L		na	nd			nd	nd		nd	na	na	na	nd	nd	na	nd	nd	nd	nd	na	na	nd	na		na	
1996																										
pH		6.7	7.8			8	8.9		7.6		na	na	4.3	7.7	7.7	7.1	7.5	7.9	8.4	7.5		7.2		8.1	na	na
Temperature		23.6	25.9			23.6	25.5		23.4		na	na	21.9	23.6	24.3	22.3	24.9	22.9	26.2	24.2		23.8		26	na	na
Ammonia mg/L		0.03	nd			0.2	0.07		0.05		na	na	0.02	0.06	0.01	nd	0.01	0.5	0.9	0.05		0.02		nd	na	na
Detergents mg/L		1.5	0.25			0.5	0.5		0.25		na	na	2	0.25	0.25	0.5	0.75	0.75	1	0.5		0.25		0.25	na	na
Chlorine mg/L		0.8	0.6			0.6	0.1		0.1		na	na	0.6	0.2	0.1	nd	0.2	nd	0.3	0.1		0.1		0.3	na	na
Copper mg/L		nd	nd			nd	nd		nd		na	na	nd	nd	nd	nd	nd	nd	nd	nd		nd		nd	na	na
Phenols mg/L		nd	nd			nd	nd		nd		na	na	nd	nd	nd	nd	nd	nd	nd	nd		nd		nd	na	na
1997																										
pH	na	6.44	8.04			8.39	9.88		7.57		7.2	na	4.18	8.72	na	6.69	8.89	6.94	5.6	na	na	4.42		6.92	na	7.25
Temperature	na	24.6	24.1			25.3	32		26.2		25.3	na	23.2	27.4	na	22.4	27.8	22.4	25.8	na	na	23.7		28.6	na	26
Ammonia mg/L	na	0.18	1.29			4.03	0.05		0.05		3.01	na	0.57	0.05	na	4.38	0.03	0.14	2.65	na	na	0.78		0.07	na	0.03
Detergents mg/L	na	0.75	3			0.25	0.5		0.75		1	na	3	0.25	na	1.98	0.25	0.25	1	na	na	0.75		1	na	0.5
Chlorine mg/L	na	0.4	0.2			0.2	0.2		0.2		nd	na	0.1	0.2	na	nd	0.6	0.1	0.1	na	na	0.1		0.2	na	nd
Copper mg/L	na	nd	nd			nd	nd		nd		nd	na	nd	nd	na	nd	nd	nd	nd	na	na	nd		nd	na	nd
Phenols mg/L	na	nd	0.1			nd	nd		nd		nd	na	nd	nd	na	nd	nd	nd	nd	na	na	nd		nd	na	nd
1998																										
pH		7.6	8.2			7.5	10.7		7.7		na	5.1	4.5	7.9		6.9	8.3	7.4	7.1			4.1		7.3		7.7
Temperature		18	23			20	27		20		na	22	20	20		19	20	21	23			20		20		22
Ammonia mg/L		1	1.5			0.4	0.2		0.6		na	0.6	0.8	0.4		0.8	0.3	0.8	10			3.5		0.6		1
Detergents mg/L		0.25	0.63			0.4	0.5		0.38		na	0.75	0.75	0.25		0.5	0.5	0.5	1.25			0.75		0.25		1.5
Chlorine mg/L		nd	0.1			nd	0.1		nd		na	nd	nd	0.1		nd	nd	nd	nd			nd		nd		nd
Copper mg/L		nd	nd			nd	nd		nd		na	nd	nd	nd		nd	nd	nd	nd			0.2		nd		nd
Phenols mg/L		nd	nd			nd	nd		0.3		na	0.2	0.1	0.1		0.4	0.2	0.2	0.3			1		0.2		0.4
1999																										
pH		8.2	8.2			8.4	9.7		7.7		8	8.1	5.2	8.3	na	7.4	8.1	7.8	8	na	na	5.6		8.1	na	7.8
Temperature		22	27			24	29		22		25	21	23	25	na	20	23	23	22	na	na	23		24	na	22
Ammonia mg/L		0.2	0.3			0.6	0.3		0.3		0.6	4	0.6	0.3	na	0.4	0.2	0.5	0.2	na	na	0.2		0.8	na	0.1
Detergents mg/L		0.5	0.25			0.75	0.75		0.75		1.5	>3.0	0.75	0.25	na	0.5	0.25	0.5	0.5	na	na	0.25		0.25	na	0.5
Chlorine mg/L		0.15	0.1			0.6	0.6		0.3		0.2	0.1	nd	0.2	na	nd	0.1	nd	0.2	na	na	nd		0.3	na	0.2
Copper mg/L		0.1	nd			0.2	0.1		nd		nd	0.2	nd	0.1	na	0.1	nd	0.1	0.1	na	na	nd		0.1	na	nd
Phenols mg/L		0.2	nd			nd	nd		0.3		0.1	nd	0.4	0.2	na	0.2	0.1	0.4	0.1	na	na	nd		0.4	na	0.3
2000																										
pH		7.7	8.0			8.0	8.5		7.3		7.4	8.1	4.6	7.5		6.9	7.4	7.2	6.7			4.3		7.2		7.2
Temperature		23	25			28	32		22		24	31	23	29		23	29	23	24			23		27		22
Ammonia mg/L		0.4	0.5			0.2	0.2		0.4		0.8	0.8	0.6	0.8		1.5	0.8	3.5	3.0			4.0		0.3		0.3
Detergents mg/L		0.25	0.25			0.25	0.25		0.25		0.25	0.5	0.5	0.25		0.25	0.25	0.5	>3.0			0.75		0.25		0.25
Chlorine mg/L		nd	0.1			0.9	nd		nd		nd	nd	0.1	0.1		nd	nd	nd	<0.1			0.4		nd		nd
Copper mg/L		nd	nd			nd	nd		0.1		0.1	nd	0.1	nd		0.1	nd	0.1	0.02			0.1		nd		0.1
Phenols mg/L		0.1	0.1			nd	0.1		0.1		0.1	nd	0.2	nd		0.1	nd	0.1	0.2			0.1		0.1		0.1
2001																										
pH		7.3	7.6			7.6	8.3	7.5	7			7.5	4.1	7.5		6.7	7.6	6.9	6.8			4.8		6.9		6.1
Temperature		19	22			24	24	21	20			21	21	24		21	25	21	22			23		24		21
Ammonia mg/L		0.4	0.3			0.8	0.6	2	0.6			0.5	2	0.3		0.5	0.5	0.4	0.2			0.8		0.8		0.5
Detergents mg/L		0.5	0.25			0.25	0.25	0.5	0.5			3	1	0.25		0.5	0.25	0.5	0.25			0.25		0.25		0.25
Chlorine mg/L		nd	nd			nd	0.5	0.2	nd			nd	nd	0.4		nd	0.1	nd	nd			0.1		nd		nd
Copper mg/L		nd	nd			nd	nd	nd	nd			nd	nd	nd		nd	nd	nd	nd			nd		nd		nd
Phenols mg/L		nd	nd			nd	nd	nd	0.1			nd	nd	nd		nd	nd	nd	nd			nd		nd		nd

Site ID	AH-03	AH-04	AH-08	AH-09	AH-10	AH-11	AH-12	AH-13	AH-18	AH-24	AH-27	AH-28	AH-30	AH-31	AH-32	AH-45	AH-46	AH-59	AH-61	AH-63	AH-65	BA-02	BA-03	BA-04	BA-06	BA-07	BA-13	BA-26	BA-27	BA-32	BA-34	BA-36	BA-40
2002																																	
Temp. ℃	18	25.5	20	21	25	23	23	18.5	18	19	17	28	17	19	24	19.5	18	18	21	21	19	20	21	23	21	20	19	21	21	22	22	18.5	20
pH	8.4	8.4	7.4	8.1	8.9	8.0	8.1	7.4	7.6	7.5	7.6	8.2	7.7	7.7	8.1	8.2	7.6	7.9	8.2	8.8	8.1	7.9	6.9	7.5	7.7	8.2	8	7.9	7.8	7.5	8	8	8
Turbidity, NTU	44.79	34.22	1.45	55.0	0.9	22.63	14.56	0.39	13.23	0.73	16.14	6.46	2.45	35.78	1.35	0	39.98	10.36	22.56	0.41	76.5	8.07	2.46	4.71	7.44	23.86	6.46	12.4	86	3.03	1.6	1.47	3.66
Conductivity, mS/cm	1.66	4.52	2.54	0.94	2.93	1.08	1.33	2.98	3.31	5.75	0.92	4.11	1.59	1.50	3.22	5.04	8.15	2.28	1.46	4.06	2.24	1.45	5.01	5.36	4.11	1.42	4.24	4.38	1.17	2.87	6.53	6.46	4.85
Detergents, mg/L	0.5	8.0	0.5	0.25	0.5	1.0	6.0	0.75	0.25	0.25	0.25	0.25	0.25	0.37	0.25	0.25	0.25	0.5	0.5	0.25	0.25	0.25	0.25	0.37	0.25	0.25	0.25	0.5	8	0.25	0.4	0.5	0.25
Ammonia, mg/L	0.8	1.0	0.1	0.3	0.0	2.0	3.0	0.1	1	0.1	0.5	0.1	0.8	2.5	0.2	0.5	0.6	0.1	0.4	0.2	0.4	0.4	0.2	0.4	1.5	0.2	1	0.4	56	0.2	0.2	0.4	0.2
Nitrate,mg/L	5.0	0.2	>40	1.0	40.0	0.4	2.0	>40	0.2	8	0.1	0.0	0.9	0.0	6.0	3	10	0	18	0.6	0.8	6.0	5.0	6.0	2.5	1.5	4	0.8	0.5	1.5	0.1	1	1.5
Orthophosphate Phosphorus, mg/L	0.13	1.79	0.07	0.20	0.10	0.49	0.98	0.07	0.65	0.07	0.49	0.03	0.65	0.82	0.00	0.07	0.07	0.00	0.10	0.07	0.49	0.65	0.10	0.20	0.49	0.49	1.14	0.07	1.63	0.20	0.08	0.10	0.20
Surfactants, mg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Oil & Grease, mg/L	444		530		317					5		2	0				0	0				3			0		0		11		0		
Total Hardness, mg/L	425		477		548					821		1030	3430				326	1640				1120			1660		1070		300		329		
Cadmium , mg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Copper, mg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Lead, mg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Zinc, mg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Diazinon, µg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Chlorpyrifos, µg/L	0		0		0					0		0	0				0	0				0			0		0		0		0		
Total Coliform, MPN/100ml	11,000		1,300		800					20		2,400	386				1,700	1,700				50,000			11,000		13,000		170		>160,000		
Fecal Coliform, MPN/100ml	500		340		110					<20		1,300	220				1,700	110				50,000			1,100		3,000		155		800		
Enterococcus, MPN/100ml	5,000		300		80					170		170	1,300				1,700	1,700				50,000			24,000		3,000		300		500		
2003																																	
Temp. ℃	20	31	20	23.5	22	22	23	21	24	25	23	25	23	22	23.5	21	21	20	24	22	22	23.5	22	23	23	21	23	23.5	20	22	24	21	21
pH	7.6	7.1	7.3	7.2	7.4	7.0	7.5	7.2	7.1	7.3	7.7	7.4	7.1	7.3	7.5	7.5	7.4	7.3	7.3	7.6	7.2	7.2	7.0	7.2	7.4	7.5	7.4	7.9	7.1	7.7	8.0	7.6	7.5
Turbidity, NTU	2.45	14.05	9.24	19.3	4.25	18.40	18.91	0.32	40.22	1.62	23.57	1.39	4.85	4.85	5.36	2.47	14.30	4.36	7.68	3.19	0.84	2.21	3.76	16.87	3.78	10.07	7.51	4.82	9.14	23.23	0.29	1.23	6.94
Conductivity, mS/cm	2.50	1.60	2.14	1.10	3.43	1.32	2.40	3.07	4.15	5.78	1.71	4.48	1.93	2.20	3.62	4.27	8.79	10.83	12.29	4.07	1.87	1.97	5.83	4.70	5.73	1.27	6.81	6.46	3.02	3.31	6.88	8.62	2.83
Detergents, mg/L	0.25	1.0	0.25	0.75	0.38	0.8	2.0	0.75	0.25	0.25	0.5	0.25	0.13	1.0	0.25	0.25	0.25	0.75	0.5	0.25	0.13	0.25	0.25	0.5	0.5	0.13	0.75	0.5	0.38	0.25	0.25	0.5	0.25
Ammonia, mg/L	4.0	1.0	0.4	0.3	0.2	2.0	1.0	0.2	1.0	0.2	1.5	0.2	0.3	1.5	0.2	0.3	0.3	0.2	0.4	0.3	0.2	0.3	0.6	0.3	0.4	0.6	0.2	0.3	0.8	0.2	0.4	0.2	0.2
Nitrate,mg/L	6.4	0.1	20.0	0.6	36.0	0.1	32.0	40.0	0.1	8.0	0.2	0.1	0.4	0.6	1.0	2.5	8.0	0.1	4.5	2.0	0.8	5.0	4.5	5.0	4.5	0.8	3.5	0.6	0.4	2.5	1.0	0.6	2.0
Orthophosphate Phosphorus, mg/L	0.98	0.49	0.16	0.20	0.10	0.82	0.82	0.03	0.98	0.03	0.65	0.03	0.33	0.65	nd	0.13	0.07	nd	0.07	0.07	0.49	0.98	0.26	0.20	0.20	0.65	0.49	0.03	0.49	0.10	0.03	0.07	0.13
Surfactants, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Oil & Grease, mg/L	5		2		2					nd						2	nd								nd		nd					nd	nd
Total Hardness, mg/L	393		451		531					1520						1070	2960								1220		1950					2400	671
Cadmium , mg/L	nd		nd		nd					0.046						nd	nd								nd		nd					nd	nd
Copper, mg/L	0.006		nd		0.006					nd						nd	nd								0.014		nd					0.007	nd
Lead, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Zinc, mg/L	0.023		0.045		0.027					0.031						0.031	0.032								nd		0.061					0.021	nd
Diazinon, µg/L	nd		nd		nd					nd						nd	nd								nd		0.33					nd	0.06
Chlorpyrifos, µg/L	nd		nd		nd					nd						nd	nd								0.55		nd					nd	nd
Total Coliform, MPN/100ml	90,000		90,000		8,000					8,000						160,000	22,000								160,000		160,000					160,000	160,000
Fecal Coliform, MPN/100ml	50,000		50,000		5,000					5,000						160,000	11,000								160,000		160,000					160,000	160,000
Enterococcus, MPN/100ml	40		130		130					500						8,000	nd								1,300		90,000					300	230
2004																																	
Temp. ℃	20.7	25	20.4	23	23	22.6	23.1	20.7	22	21	20	19	20	20	26	21	20	19.3	24	22	21	22	21	22	22	22	21.4	24	23	24	21.6	20.4	21
pH	8.3	7.2	7.8	7.5	7.9	7.1	7.98	7.27	7.4	7.62	8.4	6.7	7.7	7.7	7.8	8.2	7.5	7	7.6	8.5	7.7	7.9	7	7.3	7.8	7.9	7.3	7.9	7.1	7.4	8	7.9	7.7
Turbidity, NTU	1.7	8.84	7.05	15.96	2.74	1.74	15.65	0.73	18.08	4.23	14.52	0.84	3.32	20.89	1.67	0.88	5.98	2.42	4.53	1.68	4.21	1.8	8.64	1.79	5.54	7.15	30.92	14.22	13.71	6.46	0.07	2.55	3.56
Conductivity, mS/cm	1.66	2.08	1.32	0.80	2.00	0.91	2.14	2.00	2.68	4.74	0.79	3.86	1.43	1.22	2.02	1.90	5.75	5.81	3.82	2.40	1.61	1.58	3.86	4.18	3.70	1.22	8.53	3.29	5.51	1.73	4.98	5.81	2.70
Detergents, mg/L	0.68	0.5	0.13	0.25	0.5	0.68	0.5	0.5	0.38	0.25	0.13	0.25	0.13	0.38	0.38	0.13	0.25	0.5	0.25	0.25	0.13	0.25	0.25	0.25	0.25	0.25	0.68	0.25	0.25	0.25	0.38	0.25	0.5
Ammonia, mg/L	0.2	0.2	0.2	0.8	0.1	3	0.5	0.1	1.5	0.4	0.3	0.3	0.3	2	0.2	0.1	0.8	0.2	0.4	0.2	0.3	0.1	0.6	0.1	0.2	0.3	0.3	0.3	0.6	0.2	0.3	0.4	0.2
Nitrate,mg/L	2.5	3.75	20	3.8	30	1.25	50	50	1.25	5	1.25	1.25	1.25	1.25	1.25	1.25	7.5	1.25	2.5	2.5	1.25	5	3.75	6.25	8.5	5	2.5	2.5	2.5	4	1.25	2.5	2.5
Orthophosphate Phosphorus, mg/L	0.26	0.03	0.03	0.49	0.07	0.98	0.16	0.03	1.14	0.03	0.13	0.13	0.3	0.81	0.03	0.07	0.26	nd	0.13	0.07	0.82	0.26	0.2	0.07	0.03	0.7	1.6	0.07	0.19	0.13	0.13	0.16	0.19
Surfactants, mg/L	2		nd		nd					nd						nd	nd								nd		nd					nd	nd
Oil & Grease, mg/L	nd		nd		nd					nd						nd	nd								1		1					nd	1
Total Hardness, mg/L	500		529		600					1750						737	2340								1260		3090					1970	1190
Cadmium , mg/L	nd		nd		nd					nd						nd	nd								nd		0.024					nd	nd
Copper, mg/L	nd		nd		0.009					nd						nd	nd								nd		0.085					0.069	nd
Lead, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Zinc, mg/L	nd		0.021		0.022					0.029						nd	0.028								nd		nd					nd	nd
Diazinon, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Chlorpyrifos, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Total Coliform, MPN/100ml	7000		30000		80000					13000						50000	170000								28000		170000					22000	140000
Fecal Coliform, MPN/100ml	2400		300		2300					70						5000	24000								2100		13000					1700	24000
Enterococcus, MPN/100ml	9000		70		200					800						1300	160000								8000		2800					5000	22000

Site ID	BA-41	BA-43	BA-47	BA-48	BA-49	BA-51	BA-52	BV-02	BV-04A	BV-06	BV-08	BV-09	BV-10	BV-15	BV-16	EN-02A	EN-02B	EN-02C	EN-09	EN-14	EN-14A	EN-18	EN-19	EN-20	EN-21	EN-23	EN-24	EN-31
2002																												
Temp. ℃	20	20	20	19	20	18	19	18	23	18.5	19	20	17.5	na	19.5	21	25	19	19	21	22	20	20	23	19	19.5	20	21
pH	7.4	7.7	6.6	7.8	7.7	7.8	7.7	7.8	7.5	7.6	7.9	8.3	7.9	na	8.3	7.9	9.1	8.2	7.5	8.0	4.5	6.9	7.2	7.2	6	7.2	7.0	7.4
Turbidity, NTU	7.06	11.41	49.09	14.83	1.04	8.47	4.47	2.86	2.68	1.6	2.21	5.75	3.53	na	46.99	21.27	1.68	0.93	44.48	16.11	0.51	176.0	6.83	26.79	37.95	44.56	27.36	2.78
Conductivity, mS/cm	4.86	4.12	7.59	4.67	1.28	5.17	5.66	1.43	1.48	4.85	4.13	5.94	5.70		2.07	1.36	3.20	5.84	4.23	2.33	1.11	7.44	4.96	4.49	4.96	3.50	3.66	5.73
Detergents, mg/L	0.75	0.5	0.25	0.37	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	na	0.25	0.25	0.25	0.5	0.5	0.25	0.5	0.25	0.75	0.5	0.37	0.25	0.25	0.25
Ammonia, mg/L	0.5	1.5	0.5	1	0.2	0.4	0.6	0.6	0.2	0.2	0.2	0.4	0.4	na	0.3	0.5	0.2	0.2	2.0	0.5	1.5	0.8	1.0	0.5	0.8	1.0	0.5	0.1
Nitrate,mg/L	0.8	0.8	3.5	2.5	0.1	2	2	1.0	20	7.0	2.0	1.5	2.0	na	1.5	0.8	2.5	>40	0.1	0.3	2.5	0.05	< 0.05	< 0.05	2	1.0	< 0.05	1.0
Orthophosphate Phosphorus, mg/L	0.20	0.49	6.52	0.33	0.16	0.05	0.82	0.49	0.05	0.20	0.26	0.13	0.10	na	0.49	0.65	0.13	0.49	0.65	0.49	0.03	0.03	0.00	0.03	0.05	0.07	0.07	0.05
Surfactants, mg/L					0	0																						
Oil & Grease, mg/L					84	7																						
Total Hardness, mg/L					577	1070																						
Cadmium , mg/L					0	0																						
Copper, mg/L					0	0																						
Lead, mg/L					0	0																						
Zinc, mg/L					0	0																						
Diazinon, µg/L					0	0																						
Chlorpyrifos, µg/L					0	0																						
Total Coliform, MPN/100ml					1,400	230																						
Fecal Coliform, MPN/100ml					700	<20																						
Enterococcus, MPN/100ml					500	230																						
2003																												
Temp. ℃	24	23	23	23	23	19.5	20	19	25	23.5	24	22	23	na	23	23	26	21	21	21	22.5	24	24	24	22	23	22	23
pH	7.8	7.5	7.1	7.1	7.3	7.4	7.2	7.3	7.0	8.0	7.4	7.6	7.4	na	7.6	7.3	7.8	7.3	7.2	7.2	6.2	6.9	7.3	7.0	6.7	6.0	7.2	6.9
Turbidity, NTU	5.27	4.32	10.55	5.04	4.81	7.99	7.58	3.80	1.22	3.05	14.88	4.58	3.86	na	17.50	10.65	2.60	0.38	3.81	12.03	40.80	12.96	13.14	6.45	36.02	3.53	5.12	1.72
Conductivity, mS/cm	3.90	3.38	2.04	2.61	2.22	6.98	4.88	2.17	15.79	2.98	2.97	5.34	5.41	na	2.57	1.86	3.68	6.04	5.29	11.13	6.60	2.57	3.84	2.01	6.21	9.42	3.51	6.52
Detergents, mg/L	0.25	0.25	0.38	0.25	nd	0.25	0.25	0.25	0.75	0.25	0.25	0.5	0.25	na	2.0	0.25	0.25	0.75	0.38	0.5	0.25	0.25	0.25	0.13	0.5	0.5	0.25	0.25
Ammonia, mg/L	0.4	1.0	0.6	0.8	0.1	0.2	0.4	0.4	0.3	1.0	0.3	0.4	0.4	na	0.4	0.8	0.2	0.2	0.3	0.4	0.6	0.4	0.2	0.2	0.6	3.5	0.4	0.4
Nitrate,mg/L	0.8	0.8	0.8	1.0	4.0	0.6	0.3	2.5	28	4.8	1.5	2.5	3.0	na	0.6	0.3	0.8	40	0.3	1.5	2.0	0.4	0.8	0.8	1.5	1.5	0.3	0.8
Orthophosphate Phosphorus, mg/L	0.10	0.49	0.49	0.65	0.07	0.03	0.07	0.49	0.03	0.26	0.20	0.33	0.49	na	0.49	0.20	nd	0.10	nd	0.07	0.07	0.03	nd	0.03	0.07	0.07	0.07	0.07
Surfactants, mg/L						nd		nd									nd		nd				nd					
Oil & Grease, mg/L						nd		nd									nd		nd				nd					
Total Hardness, mg/L						1960		365									800		1680				979					
Cadmium , mg/L						nd		nd									nd		nd				nd					
Copper, mg/L						nd		0.006									nd		nd				nd					
Lead, mg/L						nd		nd									nd		nd				nd					
Zinc, mg/L						nd		0.054									nd		0.022				0.022					
Diazinon, µg/L						0.12		nd									nd		nd				nd					
Chlorpyrifos, µg/L						nd		nd									nd		nd				nd					
Total Coliform, MPN/100ml						8,000		160,000									8,000		5,000				5,000					
Fecal Coliform, MPN/100ml						3,000		90,000									5,000		3,000				3,000					
Enterococcus, MPN/100ml						230		80									800		230				80					
2004																												
Temp. ℃	23.7	21.1	23	21.3	19	21	23	20.7	25	21.5	21	21.9	22.1	na	22.7	20	23	20	21	22.5	22	22.5	23.2	21	22	22	23.4	22
pH	7.5	7.2	5.5	7.2	7.5	7.7	7.4	7.9	7	7.9	7.8	8.2	7.9	na	8.3	7.7	9	8.2	7.5	7.8	4.9	7.3	7.7	7.2	7.2	4.2	7.7	6.9
Turbidity, NTU	4.36	5.25	15.88	5.99	0.83	2.78	6.33	1.68	4.19	1.71	1.44	0.66	4.11	na	5.14	18.64	2.67	0.08	5.92	7.2	48.16	14.71	8.75	26.34	6.76	6.95	1.4	11.38
Conductivity, mS/cm	2.53	2.61	4.24	2.16	1.78	3.95	3.44	1.26	4.08	3.97	2.29	4.04	4.06	na	2.53	0.92	2.50	4.05	3.15	3.14	6.58	1.65	2.56	4.45	1.12	6.25	2.64	4.62
Detergents, mg/L	1.75	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.75	0.25	0.13	0.25	0.13	na	0.25	0.25	0.25	0.75	0.25	0.25	0.5	0.13	0.25	0.38	0.5	0.5	0.13	0.25
Ammonia, mg/L	0.3	0.8	0.8	0.8	0.1	0.2	0.3	0.8	0.4	0.4	0.4	0.5	0.4	na	0.4	0.8	0.2	0.1	0.2	0.4	0.8	0.4	0.4	0.6	0.3	2	0.3	0.3
Nitrate,mg/L	1.25	2.5	1.25	1.25	3.75	1.25	3.75	5	7.5	7.5	5	6.8	5	na	2.5	2.5	4	75	3	1.25	3.8	2.5	1.25	1.25	3.75	2.5	1.25	3.75
Orthophosphate Phosphorus, mg/L	0.07	0.33	0.19	0.7	0.07	0.03	0.49	0.49	0.98	0.23	0.33	0.65	0.49	na	0.49	0.09	0.03	0.49	0.03	0.19	0.07	0.03	0.03	0.03	0.07	0.03	0.03	0.03
Surfactants, mg/L						nd		nd									nd		nd				nd					
Oil & Grease, mg/L						nd		nd									nd		nd				nd					
Total Hardness, mg/L						2050		375									822		1360				1040					
Cadmium , mg/L						nd		nd									nd		nd				nd					
Copper, mg/L						nd		0.005									nd		nd				nd					
Lead, mg/L						nd		nd									nd		nd				nd					
Zinc, mg/L						0.028		0.076									nd		nd				nd					
Diazinon, µg/L						nd		nd									nd		nd				nd					
Chlorpyrifos, µg/L						nd		nd									nd		nd				nd					
Total Coliform, MPN/100ml						3400		24000									13000		30000				17000					
Fecal Coliform, MPN/100ml						300		270									300		1100				800					
Enterococcus, MPN/100ml						700		2100									140		270				130					

Site ID	AH-03	AH-04	AH-08	AH-09	AH-10	AH-11	AH-12	AH-13	AH-18	AH-24	AH-27	AH-28	AH-30	AH-31	AH-32	AH-45	AH-46	AH-59	AH-61	AH-63	AH-65	BA-02	BA-03	BA-04	BA-06	BA-07	BA-13	BA-26	BA-27	BA-32	BA-34	BA-36	BA-40
2005																																	
Temp. ℃	23.5	29.6	20.5	25.1	21.3	23.8	24.4	21.9	25.4	22.9	26.9	20.7	23.0	23.9	27.8	21.6	20.7	20.6	26.2	25.2	24.3	23.6	23.8	25.0	23.9	22.1	22.6	24.5	23.6	24.8	21.3	23.4	23.7
pH	8.5	9.4	7.5	8.0	7.7	8.2	8.2	8.8	7.5	7.6	9.0	7.4	8.0	8.5	8.4	8.2	8.1	7.9	7.6	8.7	8.3	8.1	7.0	7.3	7.7	8.2	8.1	8.0	7.5	7.5	8.2	8.1	8.1
Turbidity, NTU	1.85	1.18	2.98	21.63	7.97	3.22	7.63	12.77	8.36	2.35	6.23	1.72	1.04	11.82	5.82	3.28	2.43	4.61	4.32	0.18	2.09	3.29	12.84	12.83	2.56	6.99	12.54	16.33	2.28	1.49	0.19	1.78	2.11
Conductivity, mS/cm	2.12	2.86	1.58	1.13	2.39	1.01	2.32	2.47	2.39	5.36	1.52	3.78	1.77	2.06	2.74	4.26	2.76	9.02	6.77	2.62	1.48	1.87	4.66	4.05	3.11	1.99	4.43	7.04	7.22	1.94	6.21	8.45	2.81
Detergents, mg/L	0.25	0.5	0.5	0.25	1	0.75	1	1	0.37	0.5	0.25	0.5	0.25	0.25	0.25	0.5	0.25	1	0.5	0.5	0.13	0.25	0.75	0.75	0.50	0.50	0.50	0.75	0.75	0.50	0.75	0.75	0.25
Ammonia, mg/L	0.2	0.2	0.2	0.4	0.2	0.4	0.3	0.3	1.5	0.3	0.6	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.4	0.3	0.6	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2
Nitrate,mg/L	6.75	8.75	15	1.25	50	1.25	30	75	1.25	2.5	1.25	1.25	2.5	1.25	1.25	3.75	1.25	1.25	5	1.25	1.25	6.25	3.75	5.00	2.5	6.25	2.5	1.25	2.5	5	1.25	1.25	2.5
Orthophosphate Phosphorus, mg/L	0.11	nd	0.1	0.49	0.05	0.26	0.33	0.20	0.50	0.03	0.49	0.33	0.2	0.49	0.02	0.07	0.03	0.03	0.03	0.1	0.16	0.33	0.3	0.19	0.33	0.49	0.26	0.10	1.63	0.26	0.10	0.10	0.13
Surfactants, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Oil & Grease, mg/L	nd		nd		16					nd						nd	nd								nd		nd					nd	nd
Total Hardness, mg/L	606		466		564					1940						1520	1040								847		1350					3180	809
Cadmium , mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Copper, mg/L	nd		nd		0.005					nd						nd	nd								0.005		nd					0.008	0.016
Lead, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Zinc, mg/L	nd		0.027		nd					nd						0.036	nd								0.024		0.029					nd	nd
Diazinon, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Chlorpyrifos, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Total Coliform, MPN/100ml	30,000		23,000		500,000					130,000						300,000	50,000								130,000		300,000					50,000	90,000
Fecal Coliform, MPN/100ml	900		17,000		11,000					700						3,000	270								11,000		30,000					3,000	24,000
Enterococcus, MPN/100ml	800		500		270					230						1,300	1,100								160,000		35,000					3,000	2,800
2006																																	
Temp. ℃	24.5	33.0	21.0	26.3	29.3	23.6	24.7	22.5	27.7	27.9	27.7	30.5	26.6	25.0	28.9	28.7	23.9	26.5	25.8	24.0	25.0	24.1	25.8	26.6	26.5	24.6	23.3	25.7	23.7	25.9	23.0	22.3	25.3
pH	8.1	9.8	7.9	7.7	7.8	7.7	8.3	7.6	7.5	7.3	8.4	7.6	7.6	7.3	8.1	7.6	7.4	7.7	7.4	8.8	7.9	7.9	8.6	7.2	7.6	7.9	7.8	7.8	7.5	7.7	8.2	8.1	7.5
Turbidity, NTU	5.43	16.63	2.79	25.93	12.77	3.46	2.94	0.93	13.55	2.91	12.32	7.19	2.91	13.7	0	23.2	6.56	10.4	27.48	2.17	3.21	2.37	4.25	11.12	164.00	16.15	35.45	8.52	7.48	1.42	3.50	3.55	1.04
Conductivity, mS/cm	1.92	1.63	1.47	1.00	2.33	0.87	2.03	2.29	3.54	5.27	0.80	4.26	1.76	1.32	2.94	2.78	6.54	1.58	2.92	2.20	1.90	1.63	2.44	2.98	2.56	1.95	10.92	6.40	6.19	1.62	5.67	6.89	2.85
Detergents, mg/L	0.25	0.75	0.5	0.5	0.5	0.5	0.75	0.5	0.25	0.5	0.25	0.5	0.25	0.75	0.25	0.5	0.5	0.25	0.25	0.5	0.25	0.25	0.25	0.25	0.25	0.75	0.75	0.63	0.50	0.25	0.25	0.50	0.25
Ammonia, mg/L	0.1	0.4	0.2	0.4	0.2	0.6	0.3	0.1	1.5	0.4	0.2	0.3	0.4	2.5	0.1	0.4	1.5	0.2	0.4	0.1	0.2	0.1	0.2	0.2	0.3	4	0.4	0.1	0.1	0.9	0.2	0.2	0.3
Nitrate,mg/L	7.5	1.25	6.75	1.25	30	2.5	25	50	1.25	2.5	1.25	1.25	3.75	2.5	1.25	3.75	5	1.25	2.5	2.5	2.5	3.75	3.75	3.75	2.5	2.5	6.75	1.25	2.5	2.5	2.5	1.25	1.25
Orthophosphate Phosphorus, mg/L	0.27	0.2	0.13	0.49	0.07	0.33	0.26	0.07	0.82	0.03	0.07	0.07	0.33	1.10		0.1	0.13	0.07	0.13	0.49	0.65	0.33	0.3	0.20	0.13	1.30	0.20	0.2	0.07	2.28	0.26	0.07	0.23
Surfactants, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Oil & Grease, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Total Hardness, mg/L	549		271		468					1590						830	1790								448		3400					2110	892
Cadmium , mg/L	nd		nd		nd					nd						nd	nd								nd		0.021					nd	nd
Copper, mg/L	0.009		0.006		0.014					nd						0.005	0.007								0.009		nd					0.008	nd
Lead, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Zinc, mg/L	0.037		0.031		0.029					nd						nd	0.046								nd		0.094					nd	nd
Diazinon, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Chlorpyrifos, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Total Coliform, MPN/100ml	170,000		50,000		300, 000					500,000						300,000	900,000								80,000		240,000					80,000	240,000
Fecal Coliform, MPN/100ml	3,000		1,700		23, 000					3,000						5,000	130,000								8,000		90,000					3,000	130,000
Enterococcus, MPN/100ml	5,000		230		800					5,000						3,000	>160,000								230		13,000					1,300	30,000
2007																																	
Temp. ℃	22.1	33.8	19.6	23.9	22.1	22.6	23	21.6	24.1	23.3	19.6	21.3	22	21.3	26.4	20.5	21.6	22.6	25.5	21.5	23	22.5	25.2	24.6	23.1	22.7	24.8	24.6	23.4	24.8	22.5	21.6	24.1
pH	7.6	8.4	7.9	7.8	7	7.4	8	7.4	7.6	7.3	8.4	7.6	7.7	7.7	8.3	8.2	7.7	7.7	7.7	8.8	7.7	7.6	7.4	7.3	7.3	8	7.6	7.8	7.4	7.3	8	8	7.9
Turbidity, NTU	3.89	17.01	1.39	21.03	28.7	2.72	9.27	0.75	7.23	1.32	4.63	2.99	1.23	3.49	2.89	0.1	4.57	3.14	3.59	0.71	2.9	1.33	3.44	2.21	2.51	3.75	30.97	3.8	9.05	3.3	0.51	68	0.29
Conductivity, mS/cm	1.63	8.63	1.64	0.85	2.08	0.97	1.11	2.2	2.73	5.93	1.59	4.34	1.45	1.23	2.14	3.99	8.02	2.45	5.12	1.87	1.48	1.38	2.92	3.01	2.01	1.82	9.74	5.97	4.55	2.45	5.74	7.07	3.25
Detergents, mg/L	0.25	3	0.38	0.38	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.63	0.25	0.25	0.25	0.5	0.75	0.38	0.38	0.25	0.5	0.5	0.5	0.5	0.25	0.25	0.75	0.63	0.5	0.63	0.5	0.25	0.38
Ammonia, mg/L	ND	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.5	0.1	0.2	ND	0.2	0.2	0.1	0.4	0.2	0.8	ND	0.6	0.5	0.2	0.2	ND	0.1	0.4	0.5	0.3	0.3	0.1	0.8	0.1
Nitrate,mg/L	6.62	0.23	9.18	0.52	32.1	0.23	3.54	48.6	0.23	2.53	0.2	0.14	0.32	0.14	0.17	2.08	4.86	0.41	1.54	0.45	0.34	2.19	1.79	2.55	1.92	1.54	7.73	0.93	0.7	1.04	0.61	0.43	0.88
Orthophosphate Phosphorus, mg/L	0.16	0.49	0.1	0.29	0.2	0.59	0.62	0.1	0.98	0.03	1.56	0.03	0.23	0.52	0.07	0.2	0.07	0.1	0.1	0.42	2.02	0.91	0.26	0.65	0.62	0.62	0.33	0.07	0.78	0.59	0.03	0.46	0.23
Surfactants, mg/L	nd		nd		0.5					nd						nd	nd								nd		nd					nd	nd
Oil & Grease, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Total Hardness, mg/L	588		385		502					2050						1550	3480								547		3820					2299	990
Cadmium , mg/L	nd		nd		nd					nd						nd	nd								nd		0.01					nd	nd
Copper, mg/L	0.005		nd		0.009					nd						0.006	0.005								0.007		0.006					0.007	nd
Lead, mg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Zinc, mg/L	0.033		nd		0.024					nd						0.022	nd								nd		0.068					nd	nd
Diazinon, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Chlorpyrifos, µg/L	nd		nd		nd					nd						nd	nd								nd		nd					nd	nd
Total Coliform, MPN/100ml	16000		23200		40000					6600						29600	16800								55400		151000					>1150	23800
Fecal Coliform, MPN/100ml	10600		2725		7100					1400						3875	8600								6300		15000					1150	22700
Enterococcus, MPN/100ml	5180		1260		1010					350						1390	2870								82800		22050					320	9800

Site ID	BA-41	BA-43	BA-47	BA-48	BA-49	BA-51	BA-52	BV-02	BV-04A	BV-06	BV-08	BV-09	BV-10	BV-15	BV-16	EN-02A	EN-02B	EN-02C	EN-09	EN-14	EN-14A	EN-18	EN-19	EN-20	EN-21	EN-23	EN-24	EN-31
2005																												
Temp. ℃	23.8	22.7	22.6	22.4	22.6	22.1	22.4	21.5	23.4	23.8	23.6	23.0	21.4	na	24.2	23.7	22.0	21.7	21.7	23.3	24.8	26.1	25.1	23.5	23.3	23.8	24.5	22.6
pH	7.8	7.5	5.3	7.6	7.7	7.9	7.3	7.9	7.5	7.8	7.8	8.3	7.9	na	8.3	8.5	8.1	8.3	7.5	8.1	4.9	7.2	7.7	7.3	6.9	4.6	7.9	6.5
Turbidity, NTU	48.69	1.75	22.57	7.95	1.40	0.11	10.22	1.81	10.77	2.89	6.58	3.38	2.81	na	2.7	7.56	0.23	0.65	7.13	0.99	30.4	22.48	28.87	13.78	22.69	3.29	2.24	9.9
Conductivity, mS/cm	4.75	3.64	9.16	4.04	2.13	6.15	3.23	1.77	5.82	4.76	2.87	5.20	5.29	na	3.36	1.85	3.23	4.83	2.75	2.45	6.61	2.43	3.68	3.06	1.82	3.61	3.62	7.92
Detergents, mg/L	0.50	0.50	0.75	0.50	0.25	0.75	0.25	0.37	0.5	0.63	0.5	0.63	0.75	na	0.5	0.25	0.25	0.75	0.25	0.25	0.25	0.25	0.25	0.5	0.5	0.75	1.5	0.5
Ammonia, mg/L	0.4	0.6	0.1	0.6	0.2	0.2	0.7	0.5	0.6	0.2	0.4	0.3	0.3	na	0.4	0.8	0.4	0.2	0.3	0.3	0.3	0.4	0.6	0.4	4	0.8	0.2	0.3
Nitrate,mg/L	2.5	2.5	2.5	2.5	1.25	1.25	1.25	5	2.5	5	5	2.5	3.75	na	3.75	1.25	2.5	100	1.25	1.25	2.5	1.25	1.25	1.25	2.5	2.5	1.25	2.5
Orthophosphate Phosphorus, mg/L	0.13	0.20	0.03	0.33	0.13	0.03	0.65	0.13	0.26	0.49	0.2	0.16	0.19	na	0.49	0.50	nd	0.65	nd	0.10	0.03	0.03	nd	0.03	0.65	nd	0.03	0.03
Surfactants, mg/L						nd		nd									nd		nd				nd					
Oil & Grease, mg/L						nd		nd									nd		nd				nd					
Total Hardness, mg/L						251		457									955		1840				1290					
Cadmium , mg/L						nd		nd									nd		nd				nd					
Copper, mg/L						nd		nd									nd		nd				nd					
Lead, mg/L						nd		nd									nd		nd				nd					
Zinc, mg/L						nd		0.247									nd		nd				nd					
Diazinon, µg/L						nd		nd									nd		nd				nd					
Chlorpyrifos, µg/L						nd		nd									nd		nd				nd					
Total Coliform, MPN/100ml						30,000		1,600,000									8,000		130,000				50,000					
Fecal Coliform, MPN/100ml						900		5,000									300		90				2,200					
Enterococcus, MPN/100ml						3,000		2,300									500		300				300					
2006																												
Temp. ℃	25.5	24.5	26.0	25.4	23.1	21.0	23.9	23.3	27.4	24.5	25.5	24.2	23.9	na	25.0	23.4	26.7	21.3	22.3	24.5	25.1	25.0	25.1	24.6	23.8	23.4	24.5	24.2
pH	8.6	8.3	5.6	8.3	7.6	7.8	7.3	7.5	6.8	7.5	7.6	7.9	7.5	na	8.1	7.8	8.9	8.1	7.4	7.9	6.6	6.7	7.5	7.0	7.3	6.9	6.7	6.2
Turbidity, NTU	2.43	4.09	24.82	7.34	1.24	2.35	3.96	5.29	1.1	1.45	11.16	3.11	2.75	na	3.0	41.25	3.38	1.52	10.82	76.00	26.97	34.83	6.05	14.85	6.21	9.3	27.33	7.66
Conductivity, mS/cm	3.98	2.69	9.98	3.97	2.24	5.63	4.41	1.64	15.12	2.62	4.75	3.98	4.01	na	2.18	1.06	2.69	5.09	4.83	2.49	4.11	6.23	5.12	6.04	1.19	3.34	3.65	6.43
Detergents, mg/L	0.75	0.50	0.75	0.75	0.25	0.50	0.50	0.5	0.8	0.25	1.5	0.5	0.5	na	0.5	0.25	0.5	1	0.5	0.25	0.5	0.75	0.75	0.75	0.75	0.5	0.5	0.5
Ammonia, mg/L	0.2	0.8	0.4	0.9	0.1	0.1	0.6	0.8	0.6	0.1	0.6	0.2	0.2	na	0.2	0.6	0.4	0.2	0.3	>10	10	0.8	0.4	0.8	0.8	0.6	0.6	0.2
Nitrate,mg/L	1.25	1.25	2.5	1.75	3.75	1.25	2.5	6.25	10	3.75	5	3.75	5	na	2.5	1.25	2.5	50	2.5	3.75	2.5	2.5	2.5	1.25	15	2.5	1.25	1.25
Orthophosphate Phosphorus, mg/L	0.98	0.49	0.49	0.13	0.07	0.03	0.63	0.8	0.03	0.2	0.3	0.27	0.3	na	0.7	0.26	0.07	3.00	0.03	1.10	0.13	0.00	0.07	0.07	0.07	0.26	0.07	0.03
Surfactants, mg/L						nd		nd									nd		nd				nd					
Oil & Grease, mg/L						nd		nd									nd		nd				nd					
Total Hardness, mg/L						2010		395									707		1660				1770					
Cadmium , mg/L						nd		nd									nd		nd				nd					
Copper, mg/L						nd		0.005									nd		nd				nd					
Lead, mg/L						nd		nd									nd		nd				0.032					
Zinc, mg/L						nd		0.096									nd		0.035				nd					
Diazinon, µg/L						nd		nd									nd		nd				nd					
Chlorpyrifos, µg/L						nd		nd									nd		nd				nd					
Total Coliform, MPN/100ml						50,000		900,000									23,000		17,000				130,000					
Fecal Coliform, MPN/100ml						500		5,000									3,000		140				8,000					
Enterococcus, MPN/100ml						2,300		2,300									500		230				2,300					
2007																												
Temp. ℃	24	22.8	23.8	22.2	22.7	22.4	24.3	22.6	22.8	23.5	23	24.7	21.5	ns	24.6	22.8	22.7	21.1	21.2	21.3	21.3	23.3	22.3	22.1	22.8	23.2	24.1	22.5
pH	7.5	7.5	6.2	7.4	7.2	7.6	7.3	7.7	7.7	7.7	7.8	7.9	7.7	ns	7.9	8.5	8.7	8.3	7.4	7.8	5.9	6.7	7.4	7.1	6.9	4.9	8.1	7.2
Turbidity, NTU	4.28	2.51	11.2	6.46	0.61	1.1	7.63	10.05	11.33	0.1	3.6	0.09	0.32	ns	7.52	9.66	4.87	0.54	3.98	1.22	3.38	5.32	0.43	6.4	28.2	47.87	2.04	2.51
Conductivity, mS/cm	4.98	2.67	4.51	3.6	2.17	5.36	4.1	1.19	3.19	3.9	4.76	4.88	5.23	ns	1.76	2.27	2.79	4.81	5.92	2.5	3.42	6.22	4.95	6.56	1.65	4.52	3.41	5.36
Detergents, mg/L	0.5	0.5	0.5	0.5	0.25	0.5	0.63	0.63	0.38	0.5	0.5	0.5	0.5	ns	0.68	0.5	0.5	0.75	0.62	0.38	0.5	0.63	0.5	0.63	0.25	0.63	0.5	0.5
Ammonia, mg/L	0.2	0.3	0.3	0.3	0.1	0.1	0.3	0.2	0.3	0.1	0.2	0.1	0.1	ns	0.5	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.5	0.3	0.2	0.2
Nitrate,mg/L	0.93	1.06	0.75	1.36	2.21	0.45	1.54	1.47	0.29	5.2	3.07	2.03	2.08	ns	0.97	1.65	2.19	40.6	0.09	3.59	1.56	0.18	0.2	0.17	1.58	1.7	0.16	0.7
Orthophosphate Phosphorus, mg/L	0.26	0.33	0.26	0.23	0.13	0.03	0.55	0.29	0.1	0.2	0.26	0.32	0.29	ns	0.36	0.62	0.09	0.72	0.03	0.13	0.05	nd	nd	nd	1.21	0.03	0.07	0.01
Surfactants, mg/L						nd		nd									nd		nd				nd					
Oil & Grease, mg/L						nd		nd									nd		nd				nd					
Total Hardness, mg/L						2350		372									768		2400				1830					
Cadmium , mg/L						nd		nd									nd		nd				nd					
Copper, mg/L						nd		nd									nd		nd				nd					
Lead, mg/L						nd		nd									nd		nd				nd					
Zinc, mg/L						nd		0.053									nd		nd				nd					
Diazinon, µg/L						nd		nd									nd		nd				nd					
Chlorpyrifos, µg/L						nd		nd									nd		nd				nd					
Total Coliform, MPN/100ml						3200		66000									<50		3350				1800					
Fecal Coliform, MPN/100ml						1450		18100									225		1750				500					
Enterococcus, MPN/100ml						830		12550									4480		140				780					

Appendix B

Photographs of Sampling Locations

Site 1D-20	
Site 1D-31	
Site 5A-14	

Site 5A-72	
Site 6C-23	
Site 6C-34	

Site 9B-7	
Site 9B-38	
Site 11B-46	

Site 11B-48	
Site 11D-50	
Site 16C-61	

Site 17B-46	
Site 17B-47	
Site 17C-83	

Site 17D-37	
Site 18D-33A	
Site 19C-1	

Site 21D-34	
Site 22B-17	
Site 25D-2	

Site 27B-47	
Site 27B-75	
Site 27D-17	

Site 27D-31A	
Site 28C-70	
Site 28C-73	

Site 29B-44	
Site 31B-34	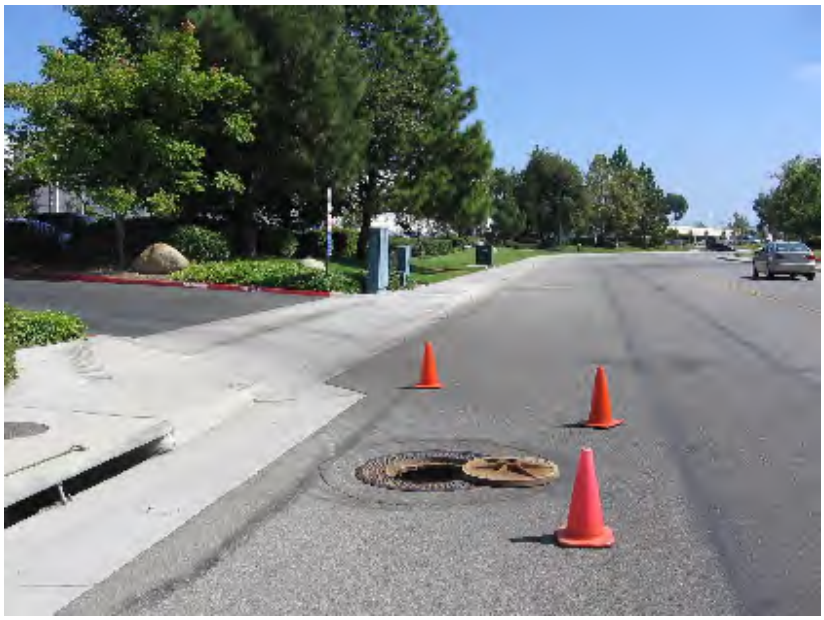
Site 35A-17	

Site 35C-51A	
Site 35C-85	
Site 36A-79	

Site 36B-4	
Site 36B-6	
Site 36B-95	

Site 37A-17	
Site 37A-70	
Site 37B-19	

Site 37B-22	
Site 37C-28	
Site 37C-29	

Site 41D-32	
Site 42C-92	
Site 44B-45	

Site 45A-45	
Site 45C-12	
Site 45G-13	

Site 47C-5	
Site 47D-25	
Site 48C-25	

Site 48D-24	
Site 49A-69	
Site 49D-12	

Site 51B-1	
Site 51B-19	
Site 55A-51	

Site 55A-62	
Site 58A-13	
Site 59C-90	

Site 62B-4		

Appendix C

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

15 September 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0809071

Project Name: Carlsbad Dry Weather
Project Desc./#:200836W-1

Enclosed are the results of analyses for samples received by the laboratory on 09/03/08 13:48. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809071

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
9B-38	0809071-01	Water	09/03/08 10:40	09/03/08 13:48
BV Creek-1	0809071-02	Water	09/03/08 11:30	09/03/08 13:48
AH Creek-1	0809071-03	Water	09/03/08 12:30	09/03/08 13:48

NOTE: Due to a instrument failure the dissolved metals were performed by a subcontract laboraory, results to follow in a separate report.

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809071

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
9B-38 (0809071-01) Water Sampled: 09/03/08 10:40 Received: 09/03/08 13:48									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090403	09/03/08	09/04/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*82 %*	*60-130*		"	"	"	"	
BV Creek-1 (0809071-02) Water Sampled: 09/03/08 11:30 Received: 09/03/08 13:48									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090403	09/03/08	09/04/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*127 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*88 %*	*60-130*		"	"	"	"	
AH Creek-1 (0809071-03) Water Sampled: 09/03/08 12:30 Received: 09/03/08 13:48									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090403	09/03/08	09/04/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*124 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*88 %*	*60-130*		"	"	"	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

EnviroMatrix Analytical, Inc.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809071

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
9B-38 (0809071-01) Water Sampled: 09/03/08 10:40 Received: 09/03/08 13:48									
Hardness (Total)	**567**	100	mg CaCO3/L	10	8090412	09/04/08	09/05/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8090825	09/08/08	09/08/08	EPA 1664A	
BV Creek-1 (0809071-02) Water Sampled: 09/03/08 11:30 Received: 09/03/08 13:48									
Hardness (Total)	**712**	100	mg CaCO3/L	10	8090412	09/04/08	09/05/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8090825	09/08/08	09/08/08	EPA 1664A	
AH Creek-1 (0809071-03) Water Sampled: 09/03/08 12:30 Received: 09/03/08 13:48									
Hardness (Total)	**1110**	100	mg CaCO3/L	10	8090412	09/04/08	09/05/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8090825	09/08/08	09/08/08	EPA 1664A	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809071

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090403										
Blank (8090403-BLK1)				Prepared: 09/03/08	Analyzed: 09/04/08					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.266*		"	*0.250*		*106*	*60-130*			
Surrogate: Tribuytlphosphate	*0.202*		"	*0.250*		*81*	*60-130*			
LCS (8090403-BS1)				Prepared: 09/03/08	Analyzed: 09/04/08					
Bolstar	0.37	0.10	ug/l	0.500		75	60-130			
Diazinon	0.38	0.05	"	0.500		77	60-130			
Ethoprop	0.37	0.05	"	0.500		74	60-130			
Mevinphos	0.38	0.25	"	0.500		75	60-130			
Methyl parathion	0.41	0.10	"	0.500		82	60-130			
Phorate	0.36	0.05	"	0.500		71	60-130			
Ronnel	0.38	0.25	"	0.500		76	60-130			
Trichlorinate	0.40	0.05	"	0.500		79	60-130			
Surrogate: Triphenyl phosphate	*0.259*		"	*0.250*		*104*	*60-130*			
Surrogate: Tribuytlphosphate	*0.250*		"	*0.250*		*100*	*60-130*			
LCS Dup (8090403-BSD1)				Prepared: 09/03/08	Analyzed: 09/04/08					
Bolstar	0.41	0.10	ug/l	0.500		82	60-130	10	30	
Diazinon	0.40	0.05	"	0.500		79	60-130	3	30	
Ethoprop	0.43	0.05	"	0.500		86	60-130	15	30	
Mevinphos	0.40	0.25	"	0.500		80	60-130	6	30	
Methyl parathion	0.43	0.10	"	0.500		85	60-130	4	30	
Phorate	0.41	0.05	"	0.500		83	60-130	15	30	
Ronnel	0.44	0.25	"	0.500		89	60-130	15	30	
Trichlorinate	0.44	0.05	"	0.500		88	60-130	10	30	
Surrogate: Triphenyl phosphate	*0.273*		"	*0.250*		*109*	*60-130*			
Surrogate: Tribuytlphosphate	*0.288*		"	*0.250*		*115*	*60-130*			

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809071

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090412										
Blank (8090412-BLK1)				Prepared: 09/04/08	Analyzed: 09/05/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8090412-DUP1)		**Source: 0809093-03**		Prepared: 09/04/08	Analyzed: 09/05/08					
Hardness (Total)	145	10	mg CaCO3/L		126			15	20	
Batch 8090825										
Blank (8090825-BLK1)				Prepared & Analyzed: 09/08/08						
Oil & Grease	ND	5	mg/l							
LCS (8090825-BS1)				Prepared & Analyzed: 09/08/08						
Oil & Grease	33	5	mg/l	40.0		84	75-125			
LCS Dup (8090825-BSD1)				Prepared & Analyzed: 09/08/08						
Oil & Grease	31	5	mg/l	40.0		77	75-125	8	20	
Matrix Spike (8090825-MS1)		**Source: 0809097-01**		Prepared & Analyzed: 09/08/08						
Oil & Grease	31	5	mg/l	40.0	ND	77	0-200			

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0809071

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr /Sara
Address: 9220 Trade street, Suite 119
San Diego, CA 92129
Phone: 858-586-6600 Fax: (858)586-6644
Email:
Billing Address: Same

Project ID: Carlsbad Dry weather
Project #: 200836W-1 PO#:

SAMPLE DETAILS

REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 X1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Diazinon	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cr Cu Pb Ni Ag Zn Cd ☐Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness						Microbiology Notes:	Sample Comments:
01	9B-38	9/3/08 10:40	Water	3G/2P	X							X							X				X						
02	BV Creek-1	" 11:30	"	2G/2P	X							X							X				X						
03	AH Creek-1	" 12:30	"	2G/2P	X							X							X				X						
04																													
05																													
06																													
07																													
08																													
09																													
10																													

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐6 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please do not include the Malathion in The Lab reports.

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature:	9/3/08 13:25
Print: Manouchehr Dadkhah	Print: Sean Florez	
Company: D-MaX Eng	Company: EMA Inc.	
Signature:	Signature:	9/3/08 13:48
Print: Sean Florez	Print: Louis Lopez	
Company: EMA Inc.	Company: EMA	
Signature:	Signature:	
Print:	Print:	
Company:	Company:	

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

17 September 2008

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0809071

Project Name: Carlsbad Dry Weather
Project Number: 200836W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- Dissolved Metals by EPA 6020

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Calscience Environmental Laboratories, Inc.

September 17, 2008

Jamey Cote
EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Subject: **Calscience Work Order No.: 08-09-0947**
Client Reference: 0809071

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/10/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Amanda Porter

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/10/08
Work Order No:	08-09-0947
Preparation:	EPA 3005A Filt.
Method:	EPA 6020
Units:	mg/L

Project: 0809071

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
0809071-01	**08-09-0947-1-B**	**09/03/08 10:40**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:59**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00453	0.00200	2		Zinc	0.0330	0.0100	2	

0809071-02	**08-09-0947-2-B**	**09/03/08 11:30**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 06:02**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00363	0.00200	2		Zinc	0.0156	0.0100	2	

0809071-03	**08-09-0947-3-B**	**09/03/08 12:30**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 06:05**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00452	0.00200	2		Zinc	0.0290	0.0100	2	

Method Blank	**096-06-003-1,709**	**N/A**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 02:01**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/10/08
Work Order No:	08-09-0947
Preparation:	EPA 3005A Filt.
Method:	EPA 6020

Project 0809071

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-0923-1	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08**	**080910S06**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	107	106	84-114	0	0-8	
Copper	105	105	72-108	0	0-10	
Lead	108	107	79-121	1	0-10	
Zinc	92	95	43-145	4	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

EnviroMatrix Analytical, Inc.		Date Received:	N/A
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-0947
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project: 0809071

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
096-06-003-1,709	Aqueous	ICP/MS A	09/16/08		080910L06F

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Cadmium	0.100	0.109	109	80-120	
Copper	0.100	0.110	110	80-120	
Lead	0.100	0.0973	97	80-120	
Zinc	0.100	0.101	101	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-0947

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809071

0947

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
1 **Sample ID: 0809071-01**	**Water**	**Sampled:09/03/08 10:40**		
Metals, D-Max-DryWea-diss	~~09/10/08 16:00~~	03/02/09 10:40		EPA 6020
Containers Supplied:				
500 mL Poly Unpres (C) Other (F)				
2 **Sample ID: 0809071-02**	**Water**	**Sampled:09/03/08 11:30**		
Metals, D-Max-DryWea-diss	~~09/10/08 16:~~00	03/02/09 11:30		EPA 6020
Containers Supplied:				
500 mL Poly Unpres (C) Other (E)				
3 **Sample ID: 0809071-03**	**Water**	**Sampled:09/03/08 12:30**		
Metals, D-Max-DryWea-diss	~~09/10/08 16~~:00	03/02/09 12:30		EPA 6020
Containers Supplied:				
500 mL Poly Unpres (C) Other (E)				

Analize for Metals (Cd, Cu, Pb, + Zn) 6020 Dissolved

Detection limits → 0.005 0.02

Send reports to jbeyer@enviromatrixinc.com, llvich@enviromatrixinc.com, and reports@enviromatrixinc.com

* Samples already filtered & preserved. Ready for analysis
— extra sample provided if additional filtering necessary.

Released By	Date	Received By	Date
[signature]	9/10/08 1233	[signature] CEL	9/10/8 1233
[signature]	9/10/8	[signature]	9/10/8 1650

Page 1 of 1

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 09 - 0947 (19)

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: EMA

DATE: 9/10/8

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ____ Chilled, cooler with temperature blank provided.
- ____ Chilled, cooler without temperature blank.
- ✓ Chilled and placed in cooler with wet ice.
- ____ Ambient and placed in cooler with wet ice.
- ____ Ambient temperature (For Air & Filter only).

LABORATORY (Other than Calscience Courier):

- ___.___ °C Temperature blank.
- ___.___ °C IR thermometer.
- ____ Ambient temperature (For Air & Filter only).

3.8 °C Temperature blank.

Initial: [signature]

CUSTODY SEAL INTACT:

Sample(s): ____ Cooler: ____ No (Not Intact) : ____ Not Present: ✓

Initial: [signature]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC		✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [signature]

COMMENTS:

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page ____ of ____

EMA LOG #: 0809071

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr /Sara
Address: 9220 Trade street, Suite 119
San Diego, CA 92129
Phone: 858-586-6600 Fax: (858)586-6644
Email:
Billing Address: Same

Project ID: Carlsbad Dry weather
Project #: 200836W-1 PO#:

REQUESTED ANALYSIS

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Diazinon	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn (Dissolved)	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐idexx	Heterotrophic Plate Count (HPC)	Total Hardness					Microbiology Notes: SEP 3708 13:08
01	9B-38	9/3/08	10:00	Water	3G/2P	X							X							X				X					Sample Comments
02	BV creek-1	"	11:30	"	2G/2P	X							X							X				X					
03	AH creek-1	"	12:30	"	2G/2P	X							X							X				X					
04																													
05																													
06																													
07																													
08																													
09																													
10																													

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other ____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other ____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: ____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please do not include the Malathion in The Lab reports.

CHAIN OF CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: [signature]	9/3/08 13:25
Print: Manouchehr Dadkhah	Print: Sean Florez	
Company: D-Max Eng	Company: EMA Inc	
Signature: [signature]	Signature: [signature]	9/3/08 13:48
Print: Sean Florez	Print: Louis Leice	
Company: EMA Inc	Company: EMA	
Signature:	Signature:	
Print:	Print:	
Company:	Company:	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T=3°c on ice

EnviroMatrix Analytical, Inc.

16 September 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0809100

Project Name: Carlsbad Dry Weather
Project Desc./#:200836W-1

Enclosed are the results of analyses for samples received by the laboratory on 09/04/08 14:08. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809100

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
29B-44	0809100-01	Water	09/04/08 10:50	09/04/08 14:08
19C-1	0809100-02	Water	09/04/08 11:45	09/04/08 14:08
17D-37	0809100-03	Water	09/04/08 12:30	09/04/08 14:08

NOTE: Due to a instrument failure the dissolved metals were performed by a subcontract laboraory, results to follow in a separate report.

634

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809100

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
29B-44 (0809100-01) Water Sampled: 09/04/08 10:50 Received: 09/04/08 14:08									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090410	09/04/08	09/08/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*112 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*98 %*	*60-130*		"	"	"	"	
19C-1 (0809100-02) Water Sampled: 09/04/08 11:45 Received: 09/04/08 14:08									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090410	09/04/08	09/08/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*96 %*	*60-130*		"	"	"	"	
17D-37 (0809100-03) Water Sampled: 09/04/08 12:30 Received: 09/04/08 14:08									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090410	09/04/08	09/08/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*122 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*102 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809100

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
29B-44 (0809100-01) Water Sampled: 09/04/08 10:50 Received: 09/04/08 14:08									
Hardness (Total)	**1110**	100	mg CaCO3/L	10	8090412	09/04/08	09/05/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8090825	09/08/08	09/08/08	EPA 1664A	
19C-1 (0809100-02) Water Sampled: 09/04/08 11:45 Received: 09/04/08 14:08									
Hardness (Total)	**3370**	100	mg CaCO3/L	10	8090412	09/04/08	09/05/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8090825	09/08/08	09/08/08	EPA 1664A	
17D-37 (0809100-03) Water Sampled: 09/04/08 12:30 Received: 09/04/08 14:08									
Hardness (Total)	**2020**	100	mg CaCO3/L	10	8090412	09/04/08	09/05/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8090825	09/08/08	09/08/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809100

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090410										
Blank (8090410-BLK1)				Prepared: 09/04/08 Analyzed: 09/08/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.214*		*"*	*0.250*		*86*	*60-130*			
Surrogate: Tribuytlphosphate	*0.208*		*"*	*0.250*		*83*	*60-130*			
LCS (8090410-BS1)				Prepared: 09/04/08 Analyzed: 09/08/08						
Bolstar	0.36	0.10	ug/l	0.500		72	60-130			
Diazinon	0.38	0.05	"	0.500		75	60-130			
Ethoprop	0.39	0.05	"	0.500		77	60-130			
Mevinphos	0.38	0.25	"	0.500		75	60-130			
Methyl parathion	0.38	0.10	"	0.500		77	60-130			
Phorate	0.35	0.05	"	0.500		70	60-130			
Ronnel	0.37	0.25	"	0.500		75	60-130			
Trichlorinate	0.39	0.05	"	0.500		77	60-130			
Surrogate: Triphenyl phosphate	*0.245*		*"*	*0.250*		*98*	*60-130*			
Surrogate: Tribuytlphosphate	*0.281*		*"*	*0.250*		*112*	*60-130*			
LCS Dup (8090410-BSD1)				Prepared: 09/04/08 Analyzed: 09/08/08						
Bolstar	0.37	0.10	ug/l	0.500		75	60-130	4	30	
Diazinon	0.38	0.05	"	0.500		77	60-130	2	30	
Ethoprop	0.39	0.05	"	0.500		78	60-130	0.3	30	
Mevinphos	0.42	0.25	"	0.500		83	60-130	10	30	
Methyl parathion	0.40	0.10	"	0.500		81	60-130	5	30	
Phorate	0.36	0.05	"	0.500		72	60-130	4	30	
Ronnel	0.37	0.25	"	0.500		74	60-130	0.3	30	
Trichlorinate	0.38	0.05	"	0.500		77	60-130	0.8	30	
Surrogate: Triphenyl phosphate	*0.254*		*"*	*0.250*		*102*	*60-130*			
Surrogate: Tribuytlphosphate	*0.295*		*"*	*0.250*		*118*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809100

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090412										
Blank (8090412-BLK1)				Prepared: 09/04/08	Analyzed: 09/05/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8090412-DUP1)		**Source: 0809093-03**		Prepared: 09/04/08	Analyzed: 09/05/08					
Hardness (Total)	145	10	mg CaCO3/L		126			15	20	
Batch 8090825										
Blank (8090825-BLK1)				Prepared & Analyzed: 09/08/08						
Oil & Grease	ND	5	mg/l							
LCS (8090825-BS1)				Prepared & Analyzed: 09/08/08						
Oil & Grease	33	5	mg/l	40.0		84	75-125			
LCS Dup (8090825-BSD1)				Prepared & Analyzed: 09/08/08						
Oil & Grease	31	5	mg/l	40.0		77	75-125	8	20	
Matrix Spike (8090825-MS1)		**Source: 0809097-01**		Prepared & Analyzed: 09/08/08						
Oil & Grease	31	5	mg/l	40.0	ND	77	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809100

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0809100

Client: D_Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / Sara
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone (858) 586-6800 Fax (858) 586-6644
Email:
Billing Address: Same
Project ID: Carlsbad Dry Weather
Project #: 200836W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type
01	29B-44	9/4/08 10:50	water	3G/2P
02	19C-1	" 11:45	"	2G/2P
03	17D-37	" 12:30	"	2G/2P
04				
05				
06				
07				
08				
09				
10				

REQUESTED ANALYSIS

#	Oil & Grease ☐413.1 ☐413.2 X1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) dia/chlor	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cr (Cd) (Pb) Ni Ag (Zn) X Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness						Microbiology Notes:
01	X							X							X				X						Sample Comments:
02	X							X							X				X						
03	X							X							X				X						
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day X5 day ☐STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
please dont include the malathion results in the Lab report.

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature Manouchehr Dadkhah	Signature	9/4/08 1332
Print Manouchehr Dadkhah	Print Adam Queen	
Company D_Max Eng.	Company EMA Inc	
Signature	Signature	9/4/08 1408
Print Adam Queen	Print Sean Flores	
Company EMA Inc	Company EMA Inc	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T= 2°C on ice

17 September 2008

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0809100

Project Name: Carlsbad Dry Weather Monitoring
Project Number: 200836W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- Dissolved Metals by EPA 6020

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Calscience Environmental Laboratories, Inc.

September 17, 2008

Jamey Cote
EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Subject: **Calscience Work Order No.: 08-09-0946**
Client Reference: 0809100

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/10/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Amanda Porter

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager

CA-ELAP ID: 1230 • NELAP ID: 03220CA • CSDLAC ID: 10109 • SCAQMD ID: 93LA0830
7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Analytical Report

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/10/08
Work Order No:	08-09-0946
Preparation:	EPA 3005A Filt.
Method:	EPA 6020
Units:	mg/L

Project: 0809100

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
0809100-01	**08-09-0946-1-B**	**09/04/08 10:50**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:28**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00722	0.00200	2		Zinc	0.0152	0.0100	2	

0809100-02	**08-09-0946-2-B**	**09/04/08 11:45**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:31**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.0178	0.00200	2		Zinc	0.0198	0.0100	2	

0809100-03	**08-09-0946-3-B**	**09/04/08 12:30**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:34**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00527	0.00200	2		Zinc	0.0211	0.0100	2	

Method Blank	**096-06-003-1,709**	**N/A**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 02:01**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/10/08
Work Order No:	08-09-0946
Preparation:	EPA 3005A Filt.
Method:	EPA 6020

Project 0809100

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-0923-1	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08**	**080910S06**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	107	106	84-114	0	0-8	
Copper	105	105	72-108	0	0-10	
Lead	108	107	79-121	1	0-10	
Zinc	92	95	43-145	4	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

EnviroMatrix Analytical, Inc.		Date Received:	N/A
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-0946
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project: 0809100

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
096-06-003-1,709	Aqueous	ICP/MS A	09/16/08		080910L06F

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Cadmium	0.100	0.109	109	80-120	
Copper	0.100	0.110	110	80-120	
Lead	0.100	0.0973	97	80-120	
Zinc	0.100	0.101	101	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-0946

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809100

0946

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
1 **Sample ID: 0809100-01**	**Water**	**Sampled:09/04/08 10:50**		
Metals, D-Max-DryWea-diss	~~09/11/08 16:00~~	03/03/09 10:50		EPA 6020
Containers Supplied:				
500 mL Poly Unpres (E)	Other (F)			
2 **Sample ID: 0809100-02**	**Water**	**Sampled:09/04/08 11:45**		
Metals, D-Max-DryWea-diss	~~09/11/08 16:00~~	03/03/09 11:45		EPA 6020
Containers Supplied:				
Other (B)	500 mL Poly Unpres (E)			
3 **Sample ID: 0809100-03**	**Water**	**Sampled:09/04/08 12:30**		
Metals, D-Max-DryWea-diss	~~09/11/08 16:00~~	03/03/09 12:30		EPA 6020
Containers Supplied:				
Other (B)	500 mL Poly Unpres (E)			

Analize for Metals (Cd, Cu, Pb, + Zn) 6020 - DISSOLVED

Detection limits → 0.005 0.02

Send reports to jbeyer@enviromatrixinc.com, llwick@enviromatrixinc.com, and reports@enviromatrixinc.com

* samples already filtered & preserved. Ready for analysis.
→ extra sample provided if additional filtering is necessary.

Released By	9/10/08	1233	Received By	CEL	9/10/8 1233
Released By	9/10/8	Date	Received By		9/10/8 1600

Page 1 of 1

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 09 - 0946

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: EMA

DATE: 9/10/8

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ____ Chilled, cooler with temperature blank provided.
- ____ Chilled, cooler without temperature blank.
- ✓ Chilled and placed in cooler with wet ice.
- ____ Ambient and placed in cooler with wet ice.
- ____ Ambient temperature (For Air & Filter only).

LABORATORY (Other than Calscience Courier):

- ___.___ °C Temperature blank.
- ___.___ °C IR thermometer.
- ____ Ambient temperature (For Air & Filter only).

3.8 °C Temperature blank.

Initial: [signature]

CUSTODY SEAL INTACT:

Sample(s): ____ Cooler: ____ No (Not Intact) : ____ Not Present: ✓

Initial: [signature]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC		✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [signature]

COMMENTS:

CHAIN-OF-CUSTODY FORM

EnviroMatrix *Analytical, Inc.*

page____of____

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

EMA LOG #: 0809100

Client: D. Max Engineering, Inc.

Attn: Arsalan Dadkhah

Sampler(s): Manouchehr / Sara

Address: 7220 Trade Street, Suite 119
San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: Carlsbad Dry Weather

Project #: 200836W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) dia/chlor	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(3) Cr (3) (Pb) Ni Ag (3) ☒Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Coliform,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness						Microbiology Notes:	Sample Comments
01	29B-44	9/4/08	10:50	water	3G/3P	X							X							X				X									
02	19C-1	"	11:45	"	2G/2P	X							X							X				X									
03	17D-37	"	12:30	"	2G/2P	X							X							X				X									
04																																	
05																																	
06																																	
07																																	
08																																	
09																																	
10																																	

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW) storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)

[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other_____

[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A | Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A | Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A | Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

please dont include the malathion results in the Lab report.

CHAIN OF CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: [signature]	9/4/08 1332
Print: Manouchehr Dadkhah	Print: Adam Queen	
Company: D-Max Eng.	Company: EMA Inc	
Signature: [signature]	Signature: [signature]	9/4/08 1408
Print: Adam Queen	Print: Sara Flores	
Company: EMA Inc	Company: EMA Inc	
Signature:	Signature:	
Print:	Print:	
Company:	Company:	

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 2°C on ice

EnviroMatrix Analytical, Inc.

16 September 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0809119

Project Name: Carlsbad Dry Weather
Project Desc./#:200836W-1

Enclosed are the results of analyses for samples received by the laboratory on 09/05/08 13:51. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809119

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
55A-62	0809119-01	Water	09/05/08 09:20	09/05/08 13:51
48D-24	0809119-02	Water	09/05/08 10:45	09/05/08 13:51
49A-69	0809119-03	Water	09/05/08 12:00	09/05/08 13:51

NOTE: Due to a instrument failure the dissolved metals were performed by a subcontract laboraory, results to follow in a separate report.

651

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809119

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
55A-62 (0809119-01) Water Sampled: 09/05/08 09:20 Received: 09/05/08 13:51									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090802	09/07/08	09/09/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*123 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*92 %*	*60-130*		"	"	"	"	
48D-24 (0809119-02) Water Sampled: 09/05/08 10:45 Received: 09/05/08 13:51									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090802	09/07/08	09/09/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*105 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*101 %*	*60-130*		"	"	"	"	
49A-69 (0809119-03) Water Sampled: 09/05/08 12:00 Received: 09/05/08 13:51									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090802	09/07/08	09/09/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*114 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*98 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809119

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
55A-62 (0809119-01) Water Sampled: 09/05/08 09:20 Received: 09/05/08 13:51									
Hardness (Total)	**2970**	100	mg CaCO3/L	10	8090701	09/07/08	09/08/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	
48D-24 (0809119-02) Water Sampled: 09/05/08 10:45 Received: 09/05/08 13:51									
Hardness (Total)	**2910**	100	mg CaCO3/L	10	8090701	09/07/08	09/08/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	
49A-69 (0809119-03) Water Sampled: 09/05/08 12:00 Received: 09/05/08 13:51									
Hardness (Total)	**2240**	100	mg CaCO3/L	10	8090701	09/07/08	09/08/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809119

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090802										
Blank (8090802-BLK1)				Prepared: 09/07/08 Analyzed: 09/08/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.261*		*"*	*0.250*		*104*	*60-130*			
Surrogate: Tribuytlphosphate	*0.237*		*"*	*0.250*		*95*	*60-130*			
LCS (8090802-BS1)				Prepared: 09/07/08 Analyzed: 09/08/08						
Bolstar	0.38	0.10	ug/l	0.500		76	60-130			
Diazinon	0.40	0.05	"	0.500		79	60-130			
Ethoprop	0.40	0.05	"	0.500		79	60-130			
Mevinphos	0.41	0.25	"	0.500		82	60-130			
Methyl parathion	0.39	0.10	"	0.500		77	60-130			
Phorate	0.40	0.05	"	0.500		80	60-130			
Ronnel	0.41	0.25	"	0.500		82	60-130			
Trichlorinate	0.44	0.05	"	0.500		89	60-130			
Surrogate: Triphenyl phosphate	*0.293*		*"*	*0.250*		*117*	*60-130*			
Surrogate: Tribuytlphosphate	*0.289*		*"*	*0.250*		*116*	*60-130*			
LCS Dup (8090802-BSD1)				Prepared: 09/07/08 Analyzed: 09/08/08						
Bolstar	0.40	0.10	ug/l	0.500		79	60-130	4	30	
Diazinon	0.41	0.05	"	0.500		82	60-130	3	30	
Ethoprop	0.40	0.05	"	0.500		79	60-130	0.3	30	
Mevinphos	0.40	0.25	"	0.500		80	60-130	2	30	
Methyl parathion	0.38	0.10	"	0.500		75	60-130	3	30	
Phorate	0.40	0.05	"	0.500		80	60-130	0.5	30	
Ronnel	0.42	0.25	"	0.500		84	60-130	2	30	
Trichlorinate	0.41	0.05	"	0.500		82	60-130	8	30	
Surrogate: Triphenyl phosphate	*0.275*		*"*	*0.250*		*110*	*60-130*			
Surrogate: Tribuytlphosphate	*0.267*		*"*	*0.250*		*107*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809119

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090701										
Blank (8090701-BLK1)				Prepared: 09/07/08	Analyzed: 09/08/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8090701-DUP1)		**Source: 0809120-04**		Prepared: 09/07/08	Analyzed: 09/08/08					
Hardness (Total)	ND	10	mg CaCO3/L		ND				20	
Batch 8091301										
Blank (8091301-BLK1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	ND	5	mg/l							
LCS (8091301-BS1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	34	5	mg/l	40.0		86	75-125			
LCS Dup (8091301-BSD1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	33	5	mg/l	40.0		83	75-125	4	20	
Matrix Spike (8091301-MS1)		**Source: 0809186-01**		Prepared & Analyzed: 09/11/08						
Oil & Grease	34	5	mg/l	40.0	ND	85	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809119

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0809119

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / Sara
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone (858) 586-6600 Fax (858) 586-6644
Email:
Billing Address: Same

Project ID: Carlsbad Dry Weather
Project #: 200836W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container(s) # of / Type
01	55A-62	9/5/08	9:20	water	3G/2P
02	48D-24	"	10:45	"	2G/2P
03	49A-69	"	12:00	"	2G/2P
04					
05					
06					
07					
08					
09					
10					

REQUESTED ANALYSIS

#	Oil & Grease ☐413.1 ☐413.2 ☒664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(Organophosphorus Pesticides) 8141 Dia/Chlor	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☒Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness					
01	X							X							X				X					
02	X							X							X				X					
03	X							X							X				X					
04																								
05																								
06																								
07																								
08																								
09																								
10																								

Microbiology Notes:

Sample Comments:

SEP 5'08 13:57

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please dont include the Malathion results in the Lab report.

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: [signature]	9/5/08 13:16
Print: Manouchehr Dadkhah	Print: Adam Queen	
Company: D-Max Eng.	Company: EMA Inc	
Signature: [signature]	Signature: Kelly Leyden	9/5/08 13:51
Print: Adam Queen	Print: Kelly Leyden	
Company: EMA Inc	Company: EMA	
Signature	Signature	
Print	Print	
Company	Company	

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 5°C ice

17 September 2008

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0809119

Project Name: Carlsbad Dry Weather Monitoring
Project Number: 200836W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- Dissolved Metals by EPA 6020

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Calscience Environmental Laboratories, Inc.

September 17, 2008

Jamey Cote
EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Subject: **Calscience Work Order No.: 08-09-0944**
Client Reference: 0809119

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/10/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Amanda Porter

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/10/08
Work Order No:	08-09-0944
Preparation:	EPA 3005A Filt.
Method:	EPA 6020
Units:	mg/L

Project: 0809119

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
0809119-01	**08-09-0944-1-B**	**09/08/08 09:20**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:15**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.0130	0.00200	2		Zinc	0.0157	0.0100	2	

0809119-02	**08-09-0944-2-B**	**09/08/08 10:45**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:18**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	0.0118	0.00200	2		Lead	ND	0.00200	2	
Copper	0.0136	0.00200	2		Zinc	0.0555	0.0100	2	

0809119-03	**08-09-0944-3-B**	**09/08/08 12:00**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:21**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00760	0.00200	2		Zinc	0.0197	0.0100	2	

Method Blank	**096-06-003-1,709**	**N/A**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 02:01**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EnviroMatrix Analytical, Inc.		Date Received:	09/10/08
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-0944
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project 0809119

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-0923-1	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08**	**080910S06**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	107	106	84-114	0	0-8	
Copper	105	105	72-108	0	0-10	
Lead	108	107	79-121	1	0-10	
Zinc	92	95	43-145	4	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

EnviroMatrix Analytical, Inc.		Date Received:	N/A
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-0944
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project: 0809119

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
096-06-003-1,709	Aqueous	ICP/MS A	09/16/08		080910L06F

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Cadmium	0.100	0.109	109	80-120	
Copper	0.100	0.110	110	80-120	
Lead	0.100	0.0973	97	80-120	
Zinc	0.100	0.101	101	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-0944

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

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SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809119

0944

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
1 **Sample ID: 0809119-01**	**Water**	**Sampled:09/05/08 09:20**		
Metals, D-Max-DryWea-diss	~~09/12/08 16:00~~	03/04/09 09:20		EPA 6020
Containers Supplied:				
500 mL Poly Unpres (D)	Other (F)			
2 **Sample ID: 0809119-02**	**Water**	**Sampled:09/05/08 10:45**		
Metals, D-Max-DryWea-diss	~~09/12/08 16:00~~	03/04/09 10:45		EPA 6020
Containers Supplied:				
500 mL Poly Unpres (D)	Other (E)			
3 **Sample ID: 0809119-03**	**Water**	**Sampled:09/05/08 12:00**		
Metals, D-Max-DryWea-diss	~~09/12/08 16:00~~	03/04/09 12:00		EPA 6020
Containers Supplied:				
500 mL Poly Unpres (D)	Other (E)			

Analize for Metals (Cd, Cu, Pb, + Zn) 6020 - Dissolved

Detection limits → 0.005 0.02

Send report to jbeyer@enviromatrixinc.com, llwick@enviromatrixinc.com, and reports@enviromatrixinc.com

* Samples already filtered & preserved. Ready for analysis
- extra samples provided if additional filtering necessary.

Released By	9/10/08 1233 Date	Received By	9/10/8 1233 Date
Released By	9/10/8 Date	Received By	9/10/8 1650 Date

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 09 - 0944 (19)

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: EMA

DATE: 9/18/8

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
✓ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter only).

3.8 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

___.___ °C Temperature blank.
___.___ °C IR thermometer.
_____ Ambient temperature (For Air & Filter only).

Initial: [signature]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: [signature]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓	✓	
Sampler's name indicated on COC		✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [signature]

COMMENTS:

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page ____ of ____

EMA LOG #: 0809119

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / Sara
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: Carlsbad Dry Weather
Project #: 200836W-1 PO#:

SAMPLE DETAILS / REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) Dia/Chlor	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) ☒Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness						Microbiology Notes: SEP 5'08 13:37	Sample Comments
01	55A-62	9/5/08	9:20	water	3G/2P	X							X							X				X							
02	48D-24	"	10:45	"	2G/2P	X							X							X				X							
03	49A-69	"	12:00	"	2G/2P	X							X							X				X							
04																															
05																															
06																															
07																															
08																															
09																															
10																															

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW)=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A — Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A — Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A — Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please don't include the Malathion results in the Lab report.

CHAIN-OF-CUSTODY RECORD

	RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature	Manouchehr Dadkhah	[signature]	9/5/08
Print	Manouchehr Dadkhah	Adam Queen	1316
Company	D-Max Eng.	EMA Inc	
Signature	[signature]	Kelly Leyden	9/5/08
Print	Adam Queen	Kelly Leyden	1351
Company	EMA Inc	EMA	
Signature			
Print			
Company			

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T= 5°C on ice

EnviroMatrix Analytical, Inc.

16 September 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0809156

Project Name: Carlsbad Dry Weather
Project Desc./#:200836W-1

Enclosed are the results of analyses for samples received by the laboratory on 09/08/08 13:48. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809156

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SM Creek-1	0809156-01	Water	09/08/08 09:15	09/08/08 13:48
37A-70	0809156-02	Water	09/08/08 11:00	09/08/08 13:48
EN Creek-1	0809156-03	Water	09/08/08 11:45	09/08/08 13:48

NOTE: Due to a instrument failure the dissolved metals were performed by a subcontract laboraory, results to follow in a separate report.

668

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809156

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SM Creek-1 (0809156-01) Water Sampled: 09/08/08 09:15 Received: 09/08/08 13:48									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090919	09/09/08	09/10/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*119 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*96 %*	*60-130*		"	"	"	"	
37A-70 (0809156-02) Water Sampled: 09/08/08 11:00 Received: 09/08/08 13:48									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090919	09/09/08	09/10/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*129 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*115 %*	*60-130*		"	"	"	"	
EN Creek-1 (0809156-03) Water Sampled: 09/08/08 11:45 Received: 09/08/08 13:48									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090919	09/09/08	09/10/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*99 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809156

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SM Creek-1 (0809156-01) Water Sampled: 09/08/08 09:15 Received: 09/08/08 13:48									
Hardness (Total)	**1960**	100	mg CaCO3/L	10	8090824	09/08/08	09/09/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	
37A-70 (0809156-02) Water Sampled: 09/08/08 11:00 Received: 09/08/08 13:48									
Hardness (Total)	**1890**	100	mg CaCO3/L	10	8090824	09/08/08	09/09/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	
EN Creek-1 (0809156-03) Water Sampled: 09/08/08 11:45 Received: 09/08/08 13:48									
Hardness (Total)	**1110**	100	mg CaCO3/L	10	8090824	09/08/08	09/09/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809156

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090919										
Blank (8090919-BLK1)				Prepared: 09/09/08 Analyzed: 09/10/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.274*		*"*	*0.250*		*110*	*60-130*			
Surrogate: Tribuytlphosphate	*0.238*		*"*	*0.250*		*95*	*60-130*			
LCS (8090919-BS1)				Prepared: 09/09/08 Analyzed: 09/10/08						
Bolstar	0.40	0.10	ug/l	0.500		80	60-130			
Diazinon	0.38	0.05	"	0.500		76	60-130			
Ethoprop	0.38	0.05	"	0.500		75	60-130			
Mevinphos	0.40	0.25	"	0.500		79	60-130			
Methyl parathion	0.40	0.10	"	0.500		79	60-130			
Phorate	0.38	0.05	"	0.500		76	60-130			
Ronnel	0.39	0.25	"	0.500		78	60-130			
Trichlorinate	0.38	0.05	"	0.500		75	60-130			
Surrogate: Triphenyl phosphate	*0.279*		*"*	*0.250*		*112*	*60-130*			
Surrogate: Tribuytlphosphate	*0.279*		*"*	*0.250*		*112*	*60-130*			
LCS Dup (8090919-BSD1)				Prepared: 09/09/08 Analyzed: 09/10/08						
Bolstar	0.38	0.10	ug/l	0.500		75	60-130	6	30	
Diazinon	0.41	0.05	"	0.500		83	60-130	9	30	
Ethoprop	0.42	0.05	"	0.500		84	60-130	10	30	
Mevinphos	0.40	0.25	"	0.500		81	60-130	2	30	
Methyl parathion	0.41	0.10	"	0.500		81	60-130	3	30	
Phorate	0.36	0.05	"	0.500		72	60-130	5	30	
Ronnel	0.39	0.25	"	0.500		77	60-130	0.8	30	
Trichlorinate	0.40	0.05	"	0.500		80	60-130	6	30	
Surrogate: Triphenyl phosphate	*0.281*		*"*	*0.250*		*112*	*60-130*			
Surrogate: Tribuytlphosphate	*0.297*		*"*	*0.250*		*119*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809156

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090824										
Blank (8090824-BLK1)				Prepared: 09/08/08	Analyzed: 09/09/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8090824-DUP1)		**Source: 0809140-01**		Prepared: 09/08/08	Analyzed: 09/09/08					
Hardness (Total)	1190	100	mg CaCO3/L		1160			2	20	
Batch 8091301										
Blank (8091301-BLK1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	ND	5	mg/l							
LCS (8091301-BS1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	34	5	mg/l	40.0		86	75-125			
LCS Dup (8091301-BSD1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	33	5	mg/l	40.0		83	75-125	4	20	
Matrix Spike (8091301-MS1)		**Source: 0809186-01**		Prepared & Analyzed: 09/11/08						
Oil & Grease	34	5	mg/l	40.0	ND	85	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809156

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0809156

Client: D-Max Engineering
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / Sara
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: Carlsbad Dry Weather
Project #: 200836W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type
01	SM Creek-1	9/8/08	9:15	Water	3G/2P
02	37A-70	"	11:00	"	2G/2P
03	EN Creek-1	"	11:45	"	2G/2P
04					
05					
06					
07					
08					
09					
10					

REQUESTED ANALYSIS

#	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) Dia/chloro	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) ☒Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness					
01	X							X							X				X					
02	X							X							X				X					
03	X							X							X				X					
04																								
05																								
06																								
07																								
08																								
09																								
10																								

Microbiology Notes:

Sample Comments:

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW)=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☒STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please dont include the Malathion results in the Lab report.

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY		RECEIVED BY		DATE/TIME STAMP
Signature	Manouchehr Dadkhah	Signature	Kelly Leyden	9/8/08
Print	Manouchehr Dadkhah	Print	Kelly Leyden	13:10
Company	D-Max Eng.	Company	EMA	
Signature	Kelly Leyden	Signature	[signature]	9/8/08
Print	Kelly Leyden	Print	Sean Flores	13:48
Company	EMA	Company	EMA Inc.	
Signature		Signature		
Print		Print		
Company		Company		

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

674 T= 2° On Ice

17 September 2008

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0809156

Project Name: Carlsbad Dry Weather
Project Number: 200836W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- Dissolved Metals by EPA 6020

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Calscience Environmental Laboratories, Inc.

September 17, 2008

Jamey Cote
EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Subject: **Calscience Work Order No.: 08-09-0942**
Client Reference: 0809156

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/10/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Amanda Porter

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

EnviroMatrix Analytical, Inc.		Date Received:	09/10/08
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-0942
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020
		Units:	mg/L
Project: 0809156			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
0809156-01	**08-09-0942-1-A**	**09/08/08 09:15**	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08 04:27**	**080911L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00709	0.00200	2		Zinc	0.0193	0.0100	2	

0809156-02	**08-09-0942-2-A**	**09/08/08 11:00**	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08 04:30**	**080911L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00810	0.00200	2		Zinc	0.0155	0.0100	2	

0809156-03	**08-09-0942-3-A**	**09/08/08 11:45**	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08 04:33**	**080911L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00588	0.00200	2		Zinc	0.0168	0.0100	2	

Method Blank	**096-06-003-1,711**	**N/A**	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08 01:58**	**080911L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/10/08
Work Order No:	08-09-0942
Preparation:	EPA 3020A Total
Method:	EPA 6020

Project 0809156

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-1032-2	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08**	**080911S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	102	103	84-114	1	0-8	
Copper	106	107	72-108	1	0-10	
Lead	105	107	79-121	2	0-10	
Zinc	101	104	43-145	3	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	N/A
Work Order No:	08-09-0942
Preparation:	EPA 3005A Filt.
Method:	EPA 6020

Project: 0809156

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,711	Aqueous	ICP/MS A	09/11/08	09/16/08	080911L05F

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	103	106	80-120	3	0-20	
Copper	107	106	80-120	1	0-20	
Lead	102	97	80-120	5	0-20	
Zinc	107	106	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-0942

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

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SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809156

0942

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
1 **Sample ID: 0809156-01**	**Water**	**Sampled:09/08/08 09:15**		
Metals, D-Max-DryWea-diss	~~09/15/08 16:00~~	03/07/09 09:15		EPA 6020
Containers Supplied: 500 mL Poly Unpres (B)				
2 **Sample ID: 0809156-02**	**Water**	**Sampled:09/08/08 11:00**		
Metals, D-Max-DryWea-diss	~~09/15/08 16:00~~	03/07/09 11:00		EPA 6020
Containers Supplied: 500 mL Poly Unpres (B)				
3 **Sample ID: 0809156-03**	**Water**	**Sampled:09/08/08 11:45**		
Metals, D-Max-DryWea-diss	~~09/15/08 16:00~~	03/07/09 11:45		EPA 6020
Containers Supplied: 500 mL Poly Unpres (B)				

anilize for Metals (Cd, Cu, Pb + Zn) 6020 - Dissolved

Detection limits → 0.005 0.02

Send reports to jbeyer@enviromatrixinc.com, llvick@enviromatrixinc.com, and reports@enviromatrixinc.com

* samples not filtered.

Released By	9/10/08 Date	1233	Received By	CEL	Date 9/10/8 1233
Released By	9/10/8 Date		Received By		Date 9/10/8 1650

Page 1 of 1

Calscience Environmental Laboratories, Inc.

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WORK ORDER #: 08 - 09 - 0942

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: EMA

DATE: 9/10/8

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ____ Chilled, cooler with temperature blank provided.
- ____ Chilled, cooler without temperature blank.
- ✓ Chilled and placed in cooler with wet ice.
- ____ Ambient and placed in cooler with wet ice.
- ____ Ambient temperature (For Air & Filter only).

LABORATORY (Other than Calscience Courier):

- ___.___ °C Temperature blank.
- ___.___ °C IR thermometer.
- ____ Ambient temperature (For Air & Filter only).

3.8 °C Temperature blank.

Initial: [signature]

CUSTODY SEAL INTACT:

Sample(s): ____ Cooler: ____ No (Not Intact) : ____ Not Present: ✓

Initial: [signature]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC		✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [signature]

COMMENTS:

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.

page____of____

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

EMA LOG #: 0809156

Client: D_Max Engineering

Attn: Arsalan Dadkhah

Sampler(s): Manouchehr / Sara

Address: 7220 Trade street, Suite 119
San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: Carlsbad Dry Weather

Project #: 200836W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type
01	SM Creek_1	9/8/08 9:15	Water	3G/2P
02	37A-70	" 11:00	"	2G/2P
03	EN Creek-1	" 11:45	"	2G/2P
04				
05				
06				
07				
08				
09				
10				

REQUESTED ANALYSIS

#	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) Diazinon	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) ☒Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness							Microbiology Notes:
01	X							X							X				X							Sample Comments:
02	X							X							X				X							
03	X							X							X				X							

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW)=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☒STD (7 day)

[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A — Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A — Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

Please dont include the Malathion results in the Lab report.

CHAIN OF CUSTODY RECORD

RELINQUISHED BY		RECEIVED BY		DATE/TIME STAMP
Signature	Manouchehr Dadkhah	Signature	Kelly Leyden	9/8/08
Print	Manouchehr Dadkhah	Print	Kelly Leyden	13:10
Company	D_Max Eng.	Company	EMA	
Signature	Kelly Leyden	Signature	[signature]	9/8/08
Print	Kelly Leyden	Print	Sean Flory	13:48
Company	EMA	Company	EMA Inc.	
Signature		Signature		
Print		Print		
Company		Company		

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T = 2°C On Ice

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809156

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0809156-01	**Water**	**Sampled:09/08/08 09:15**		
Metals, D-Max-DryWea-diss	~~09/15/08 16:00~~	03/07/09 09:15		EPA 6020
Containers Supplied: 500 mL Poly Unpres (B)				
Sample ID: 0809156-02	**Water**	**Sampled:09/08/08 11:00**		
Metals, D-Max-DryWea-diss	~~09/15/08 16:00~~	03/07/09 11:00		EPA 6020
Containers Supplied: 500 mL Poly Unpres (B)				
Sample ID: 0809156-03	**Water**	**Sampled:09/08/08 11:45**		
Metals, D-Max-DryWea-diss	~~09/15/08 16:00~~	03/07/09 11:45		EPA 6020
Containers Supplied: 500 mL Poly Unpres (B)				

anilize for Metals (Cd, Cu, Pb + Zn) 6020 - Dissolved

Detection limits → 0.005 0.02

send reports to jbeyer@enviromatrixinc.com, llwick@enviromatrixinc.com, and reports@enviromatrixinc.com

* samples not filtered.

Released By	Date	Received By	Date
	9/10/08 1233		9/10/8 1233
Released By	Date	Received By	Date

EnviroMatrix Analytical, Inc.

16 September 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0809186

Project Name: Carlsbad Dry Weather
Project Desc./#:200836W-1

Enclosed are the results of analyses for samples received by the laboratory on 09/09/08 14:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809186

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
21D-34	0809186-01	Water	09/09/08 09:15	09/09/08 14:00
16C-61	0809186-02	Water	09/09/08 10:40	09/09/08 14:00
35C-51A	0809186-03	Water	09/09/08 11:40	09/09/08 14:00
27D-17	0809186-04	Water	09/09/08 12:20	09/09/08 14:00

NOTE: Due to a instrument failure the dissolved metals were performed by a subcontract laboraory, results to follow in a separate report.

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809186

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
21D-34 (0809186-01) Water Sampled: 09/09/08 09:15 Received: 09/09/08 14:00									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090919	09/09/08	09/10/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*100 %*	*60-130*		"	"	"	"	
16C-61 (0809186-02) Water Sampled: 09/09/08 10:40 Received: 09/09/08 14:00									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090919	09/09/08	09/10/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*503 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*94 %*	*60-130*		"	"	"	"	
35C-51A (0809186-03) Water Sampled: 09/09/08 11:40 Received: 09/09/08 14:00									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090919	09/09/08	09/11/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*137 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*105 %*	*60-130*		"	"	"	"	
27D-17 (0809186-04) Water Sampled: 09/09/08 12:20 Received: 09/09/08 14:00									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8090919	09/09/08	09/11/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*113 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*88 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809186

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
21D-34 (0809186-01) Water Sampled: 09/09/08 09:15 Received: 09/09/08 14:00									
Hardness (Total)	**460**	100	mg CaCO3/L	10	8090924	09/09/08	09/10/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	
16C-61 (0809186-02) Water Sampled: 09/09/08 10:40 Received: 09/09/08 14:00									
Hardness (Total)	**478**	100	mg CaCO3/L	10	8090924	09/09/08	09/10/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	
35C-51A (0809186-03) Water Sampled: 09/09/08 11:40 Received: 09/09/08 14:00									
Hardness (Total)	**526**	100	mg CaCO3/L	10	8090924	09/09/08	09/10/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	
27D-17 (0809186-04) Water Sampled: 09/09/08 12:20 Received: 09/09/08 14:00									
Hardness (Total)	**521**	100	mg CaCO3/L	10	8090924	09/09/08	09/10/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809186

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090919										
Blank (8090919-BLK1)				Prepared: 09/09/08 Analyzed: 09/10/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.274*		*"*	*0.250*		*110*	*60-130*			
Surrogate: Tribuytlphosphate	*0.238*		*"*	*0.250*		*95*	*60-130*			
LCS (8090919-BS1)				Prepared: 09/09/08 Analyzed: 09/10/08						
Bolstar	0.40	0.10	ug/l	0.500		80	60-130			
Diazinon	0.38	0.05	"	0.500		76	60-130			
Ethoprop	0.38	0.05	"	0.500		75	60-130			
Mevinphos	0.40	0.25	"	0.500		79	60-130			
Methyl parathion	0.40	0.10	"	0.500		79	60-130			
Phorate	0.38	0.05	"	0.500		76	60-130			
Ronnel	0.39	0.25	"	0.500		78	60-130			
Trichlorinate	0.38	0.05	"	0.500		75	60-130			
Surrogate: Triphenyl phosphate	*0.279*		*"*	*0.250*		*112*	*60-130*			
Surrogate: Tribuytlphosphate	*0.279*		*"*	*0.250*		*112*	*60-130*			
LCS Dup (8090919-BSD1)				Prepared: 09/09/08 Analyzed: 09/10/08						
Bolstar	0.38	0.10	ug/l	0.500		75	60-130	6	30	
Diazinon	0.41	0.05	"	0.500		83	60-130	9	30	
Ethoprop	0.42	0.05	"	0.500		84	60-130	10	30	
Mevinphos	0.40	0.25	"	0.500		81	60-130	2	30	
Methyl parathion	0.41	0.10	"	0.500		81	60-130	3	30	
Phorate	0.36	0.05	"	0.500		72	60-130	5	30	
Ronnel	0.39	0.25	"	0.500		77	60-130	0.8	30	
Trichlorinate	0.40	0.05	"	0.500		80	60-130	6	30	
Surrogate: Triphenyl phosphate	*0.281*		*"*	*0.250*		*112*	*60-130*			
Surrogate: Tribuytlphosphate	*0.297*		*"*	*0.250*		*119*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809186

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090924										
Blank (8090924-BLK1)				Prepared: 09/09/08	Analyzed: 09/10/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8090924-DUP1)		**Source: 0809166-01**		Prepared: 09/09/08	Analyzed: 09/10/08					
Hardness (Total)	1420	100	mg CaCO3/L		1390			2	20	
Batch 8091301										
Blank (8091301-BLK1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	ND	5	mg/l							
LCS (8091301-BS1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	34	5	mg/l	40.0		86	75-125			
LCS Dup (8091301-BSD1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	33	5	mg/l	40.0		83	75-125	4	20	
Matrix Spike (8091301-MS1)		**Source: 0809186-01**		Prepared & Analyzed: 09/11/08						
Oil & Grease	34	5	mg/l	40.0	ND	85	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering	**EMA Log #: 0809186**
Project Name: Carlsbad Dry Weather	

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0809186

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / Sara
Address: 7220 Trade Street, suite 119
San Diego, CA 92121
Phone (858) 586-6600 Fax (858) 586-6644
Email:
Billing Address: Same
Project ID: Carlsbad Dry Weather
Project #: 200836W-1 PO#:

SAMPLE DETAILS / REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) diazinon/chlpro	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) ☒Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness					
01	21D-34	9/9/08 9:15	water	3G/2P	X							X						X				X					
02	16C-61	" 10:40	"	2G/2P	X							X						X				X					
03	35C-51A	" 11:40	"	2G/2P	X							X						X				X					
04	27D-17	" 12:20	"	2G/2P	X							X						X				X					
05																											
06																											
07																											
08																											
09																											
10																											

Microbiology Notes:

Sample Comments:

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A	Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A	Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please don't include the Malathion results in the report.

CHAIN-OF-CUSTODY RECORD

	RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature	Manouchehr Dadkhah	[signature]	9/9/08
Print	Manouchehr Dadkhah	Adam Queen	13:30
Company	D-Max Eng.	EMA Inc	
Signature	[signature]	[signature]	9/9/08
Print	Adam Queen	Sam Florez	14:00
Company	EMA Inc	EMA Inc.	
Signature			
Print			
Company			

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 6°C on ice

17 September 2008

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0809186

Project Name: Carlsbad Dry Weather
Project Number: 200836W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- Dissolved Metals by EPA 6020

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Calscience Environmental Laboratories, Inc.

September 17, 2008

Jamey Cote
EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Subject: **Calscience Work Order No.: 08-09-0941**
Client Reference: 0809186

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/10/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Amanda Porter

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/10/08
Work Order No:	08-09-0941
Preparation:	EPA 3005A Filt.
Method:	EPA 6020
Units:	mg/L

Project: 0809186

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
0809186-01	**08-09-0941-1-A**	**09/08/08 09:15**	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08 04:05**	**080911L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00692	0.00200	2		Zinc	0.0371	0.0100	2	

0809186-02	**08-09-0941-2-A**	**09/08/08 10:40**	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08 04:17**	**080911L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.0198	0.00200	2		Zinc	0.0499	0.0100	2	

0809186-03	**08-09-0941-3-A**	**09/08/08 11:40**	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08 04:21**	**080911L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00596	0.00200	2		Zinc	0.0563	0.0100	2	

0809186-04	**08-09-0941-4-A**	**09/08/08 12:20**	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08 04:24**	**080911L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.0135	0.00200	2		Zinc	0.0339	0.0100	2	

Method Blank	**096-06-003-1,711**	**N/A**	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08 01:58**	**080911L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/10/08
Work Order No:	08-09-0941
Preparation:	EPA 3020A Total
Method:	EPA 6020

Project 0809186

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-1032-2	**Aqueous**	**ICP/MS A**	**09/11/08**	**09/16/08**	**080911S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	102	103	84-114	1	0-8	
Copper	106	107	72-108	1	0-10	
Lead	105	107	79-121	2	0-10	
Zinc	101	104	43-145	3	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	N/A
Work Order No:	08-09-0941
Preparation:	EPA 3005A Filt.
Method:	EPA 6020

Project: 0809186

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,711	Aqueous	ICP/MS A	09/11/08	09/16/08	080911L05F

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	103	106	80-120	3	0-20	
Copper	107	106	80-120	1	0-20	
Lead	102	97	80-120	5	0-20	
Zinc	107	106	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-0941

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

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SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809186

(0941)

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
1 **Sample ID: 0809186-01**	**Water**	**Sampled:09/09/08 09:15**		
Metals, D-Max-DryWea-diss	~~09/16/08 16:00~~	03/08/09 09:15		EPA 6020
Containers Supplied: 500 mL Poly Unpres (D)				
2 **Sample ID: 0809186-02**	**Water**	**Sampled:09/09/08 10:40**		
Metals, D-Max-DryWea-diss	~~09/16/08 16:00~~	03/08/09 10:40		EPA 6020
Containers Supplied: 500 mL Poly Unpres (D)				
3 **Sample ID: 0809186-03**	**Water**	**Sampled:09/09/08 11:40**		
Metals, D-Max-DryWea-diss	~~09/16/08 16:00~~	03/08/09 11:40		EPA 6020
Containers Supplied: 500 mL Poly Unpres (D)				
4 **Sample ID: 0809186-04**	**Water**	**Sampled:09/09/08 12:20**		
Metals, D-Max-DryWea-diss	~~09/16/08 16:00~~	03/08/09 12:20		EPA 6020
Containers Supplied: 500 mL Poly Unpres (D)				

Analize for Metals (Cd, Cu, Pb, + Zn) 6020 - Dissolved

Detection limits 0.005 0.02

Send reports to jbeyer@enviromatrixinc.com, llvick@enviromatrixinc.com, and reports@enviromatrixinc.com

* Samples not filtered.

Released By	9/10/08 Date	1233	Received By	CEL	9/10/8 1233 Date
Released By	9/10/8 Date		Received By		9/10/8 1650 Date

Page 1 of 1

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 09 - 0941

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: EMA

DATE: 9/10/8

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ____ Chilled, cooler with temperature blank provided.
- ____ Chilled, cooler without temperature blank.
- ✓ Chilled and placed in cooler with wet ice.
- ____ Ambient and placed in cooler with wet ice.
- ____ Ambient temperature (For Air & Filter only).

LABORATORY (Other than Calscience Courier):

- ___.___ °C Temperature blank.
- ___.___ °C IR thermometer.
- ____ Ambient temperature (For Air & Filter only).

3.8 °C Temperature blank.

Initial: [signature]

CUSTODY SEAL INTACT:

Sample(s): ____ Cooler: ____ No (Not Intact) : ____ Not Present: ✓

Initial: [signature]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC		✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [signature]

COMMENTS:

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page ____ of ____

EMA LOG #: 0809186

Client: D_Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / Sara
Address: 7220 Trade street, suite 119
San Diego, CA 92121
Phone (858) 586-6600 Fax (858) 586-6644
Email:
Billing Address: Same
Project ID: Carlsbad Dry Weather
Project #: 200836W-1 PO#:

SAMPLE DETAILS / REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) dia/chlro	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☒Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	Microbiology Notes:	Sampler Comments
01	21D-34	9/9/08	9:15	Water	3G/2P	X							X							X				X		
02	16C-61	"	10:40	"	2G/2P	X							X							X				X		
03	35C-51A	"	11:40	"	2G/2P	X							X							X				X		
04	27D-17	"	12:20	"	2G/2P	X							X							X				X		
05																										
06																										
07																										
08																										
09																										
10																										

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW)=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please dont include The Malathion results in The report.

CHAIN-OF-CUSTODY RECORD

	RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature	Manouchehr Dadkhah	[signature]	9/9/08
Print	Manouchehr Dadkhah	Adam Queen	1370
Company	D-Max Eng.	EMA Inc	
Signature	[signature]	[signature]	9/9/08
Print	Adam Queen	Sam Florey	1400
Company	EMA Inc	EMA Inc.	
Signature			
Print			
Company			

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 6°C on ice

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809186

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0809186-01	**Water**	**Sampled:09/09/08 09:15**		
Metals, D-Max-DryWea-diss	~~09/16/08 16:00~~	03/08/09 09:15		EPA 6020
Containers Supplied: 500 mL Poly Unpres (D)				
Sample ID: 0809186-02	**Water**	**Sampled:09/09/08 10:40**		
Metals, D-Max-DryWea-diss	~~09/16/08 16:00~~	03/08/09 10:40		EPA 6020
Containers Supplied: 500 mL Poly Unpres (D)				
Sample ID: 0809186-03	**Water**	**Sampled:09/09/08 11:40**		
Metals, D-Max-DryWea-diss	~~09/16/08 16:00~~	03/08/09 11:40		EPA 6020
Containers Supplied: 500 mL Poly Unpres (D)				
Sample ID: 0809186-04	**Water**	**Sampled:09/09/08 12:20**		
Metals, D-Max-DryWea-diss	~~09/16/08 16:00~~	03/08/09 12:20		EPA 6020
Containers Supplied: 500 mL Poly Unpres (D)				

Analize for Metals (Cd, Cu, Pb, + Zn) 6020 - Dissolved

Detection limits 0.005 0.02

send reports to jbeyer@enviromatrixinc.com, llvick@enviromatrixinc.com, and reports@enviromatrixinc.c

* Samples not filtered.

Released By	Date	Received By	Date
	9/10/08 1233	CEL	9/10/8 1233
Released By	Date	Received By	Date

EnviroMatrix Analytical, Inc.

18 September 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0809225

Project Name: Carlsbad Dry Weather
Project Desc./#:200836W-1

Enclosed are the results of analyses for samples received by the laboratory on 09/10/08 13:16. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809225

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
45G-13	0809225-01	Water	09/10/08 09:15	09/10/08 13:16
42C-92	0809225-02	Water	09/10/08 10:40	09/10/08 13:16
36A-79	0809225-03	Water	09/10/08 11:30	09/10/08 13:16

NOTE: Due to a instrument failure the dissolved metals were performed by a subcontract laboraory, results to follow in a separate report.

704

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809225

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
45G-13 (0809225-01) Water Sampled: 09/10/08 09:15 Received: 09/10/08 13:16									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8091101	09/11/08	09/12/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*131 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*102 %*	*60-130*		"	"	"	"	
42C-92 (0809225-02) Water Sampled: 09/10/08 10:40 Received: 09/10/08 13:16									**G-04, GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8091101	09/11/08	09/12/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*126 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*106 %*	*60-130*		"	"	"	"	
36A-79 (0809225-03) Water Sampled: 09/10/08 11:30 Received: 09/10/08 13:16									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8091101	09/11/08	09/12/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*102 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809225

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
45G-13 (0809225-01) Water Sampled: 09/10/08 09:15 Received: 09/10/08 13:16									
Hardness (Total)	**1030**	100	mg CaCO3/L	10	8091021	09/10/08	09/11/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	
42C-92 (0809225-02) Water Sampled: 09/10/08 10:40 Received: 09/10/08 13:16									
Hardness (Total)	**634**	100	mg CaCO3/L	10	8091021	09/10/08	09/11/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	
36A-79 (0809225-03) Water Sampled: 09/10/08 11:30 Received: 09/10/08 13:16									
Hardness (Total)	**2300**	100	mg CaCO3/L	10	8091021	09/10/08	09/11/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8091301	09/11/08	09/11/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809225

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091101										
Blank (8091101-BLK1)				Prepared: 09/11/08 Analyzed: 09/12/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.264*		"	*0.250*		*106*	*60-130*			
Surrogate: Tribuytlphosphate	*0.228*		"	*0.250*		*91*	*60-130*			
LCS (8091101-BS1)				Prepared: 09/11/08 Analyzed: 09/12/08						
Bolstar	0.38	0.10	ug/l	0.500		76	60-130			
Diazinon	0.38	0.05	"	0.500		75	60-130			
Ethoprop	0.40	0.05	"	0.500		80	60-130			
Mevinphos	0.38	0.25	"	0.500		76	60-130			
Methyl parathion	0.38	0.10	"	0.500		75	60-130			
Phorate	0.36	0.05	"	0.500		72	60-130			
Ronnel	0.38	0.25	"	0.500		75	60-130			
Trichlorinate	0.38	0.05	"	0.500		77	60-130			
Surrogate: Triphenyl phosphate	*0.268*		"	*0.250*		*107*	*60-130*			
Surrogate: Tribuytlphosphate	*0.296*		"	*0.250*		*118*	*60-130*			
LCS Dup (8091101-BSD1)				Prepared: 09/11/08 Analyzed: 09/12/08						
Bolstar	0.38	0.10	ug/l	0.500		76	60-130	0.8	30	
Diazinon	0.39	0.05	"	0.500		78	60-130	4	30	
Ethoprop	0.38	0.05	"	0.500		76	60-130	5	30	
Mevinphos	0.39	0.25	"	0.500		78	60-130	3	30	
Methyl parathion	0.38	0.10	"	0.500		77	60-130	2	30	
Phorate	0.41	0.05	"	0.500		81	60-130	12	30	
Ronnel	0.40	0.25	"	0.500		79	60-130	5	30	
Trichlorinate	0.40	0.05	"	0.500		80	60-130	5	30	
Surrogate: Triphenyl phosphate	*0.277*		"	*0.250*		*111*	*60-130*			
Surrogate: Tribuytlphosphate	*0.291*		"	*0.250*		*116*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809225

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091021										
Blank (8091021-BLK1)				Prepared: 09/10/08	Analyzed: 09/11/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8091021-DUP1)		**Source: 0809201-02**		Prepared: 09/10/08	Analyzed: 09/11/08					
Hardness (Total)	5120	1000	mg CaCO3/L		5020			2	20	
Batch 8091301										
Blank (8091301-BLK1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	ND	5	mg/l							
LCS (8091301-BS1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	34	5	mg/l	40.0		86	75-125			
LCS Dup (8091301-BSD1)				Prepared & Analyzed: 09/11/08						
Oil & Grease	33	5	mg/l	40.0		83	75-125	4	20	
Matrix Spike (8091301-MS1)		**Source: 0809186-01**		Prepared & Analyzed: 09/11/08						
Oil & Grease	34	5	mg/l	40.0	ND	85	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Carlsbad Dry Weather

EMA Log #: 0809225

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
G-04	This sample contains analytes identified by the method but were not requested for reporting.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0809225

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / Sara
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same
Project ID: Carlsbad Dry Weather
Project #: 20083610-1 PO#:

SAMPLE DETAILS / REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) dia/ch/ro	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) Cr Cu Pb Ni Ag Zn ☒Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness						Microbiology Notes: / Sample Comments:
01	45G-13	9/10/08 9:15	Water	3G/2P	X							X							X				X					
02	42C-92	" 10:40	"	2G/2P	X							X							X				X					
03	36A-79	" 11:30	"	2G/2P	X							X							X				X					
04																												
05																												
06																												
07																												
08																												
09																												
10																												

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW)=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please dont include the Malathion results in the Lab report.

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: Kelly Leyden	9/10/08
Print: Manouchehr Dadkhah	Print: Kelly Leyden	13:00
Company: D-Max Eng.	Company: EMA	
Signature: Kelly Leyden	Signature: [signature]	9/10/08
Print: Kelly Leyden	Print: Sean Flory	13:16
Company: EMA	Company: EMA Inc.	
Signature:	Signature:	
Print:	Print:	
Company:	Company:	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T = 6°C on ice

22 September 2008

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0809225

Project Name: Carlsbad Dry Weather
Project Number: 200836W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- Dissolved Metals by EPA 6020

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

September 22, 2008

The original report has been revised/corrected.

Jamey Cote
EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Subject: **Calscience Work Order No.: 08-09-1130**
Client Reference: 0809225

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/11/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Amanda Porter

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

EnviroMatrix Analytical, Inc.		Date Received:	09/11/08
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-1130
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020
		Units:	mg/L
Project: 0809225			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
0809225-01	**08-09-1130-1-A**	**09/10/08 09:15**	**Aqueous**	**ICP/MS A**	**09/15/08**	**09/18/08 23:15**	**080915L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	0.00552	0.00100	1		Zinc	0.0114	0.00500	1	

0809225-02	**08-09-1130-2-A**	**09/10/08 10:40**	**Aqueous**	**ICP/MS A**	**09/15/08**	**09/18/08 23:38**	**080915L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	0.00837	0.00100	1		Zinc	0.0110	0.00500	1	

0809225-03	**08-09-1130-3-A**	**09/10/08 11:30**	**Aqueous**	**ICP/MS A**	**09/15/08**	**09/18/08 23:41**	**080915L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	0.00700	0.00100	1		Zinc	0.00661	0.00500	1	

Method Blank	**096-06-003-1,717**	**N/A**	**Aqueous**	**ICP/MS A**	**09/15/08**	**09/16/08 17:20**	**080915L05F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/11/08
Work Order No:	08-09-1130
Preparation:	EPA 3020A Total
Method:	EPA 6020

Project 0809225

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-1011-1	**Aqueous**	**ICP/MS A**	**09/15/08**	**09/16/08**	**080915S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	104	103	84-114	1	0-8	
Copper	101	101	72-108	1	0-10	
Lead	106	105	79-121	1	0-10	
Zinc	92	93	43-145	1	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received	09/11/08
Work Order No:	08-09-1130
Preparation:	EPA 3020A Total
Method:	EPA 6020

Project: 0809225

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
08-09-1011-1	**Aqueous**	**ICP/MS A**	**09/15/08**	**09/16/08**	**080915S05**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	101	98	75-125	3	0-8	
Copper	100	93	75-125	8	0-10	
Lead	99	99	75-125	1	0-10	
Zinc	95	94	75-125	1	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

EnviroMatrix Analytical, Inc.		Date Received:	N/A
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-1130
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project: 0809225

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,717	**Aqueous**	**ICP/MS A**	**09/15/08**	**09/16/08**	**080915L05F**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	102	104	80-120	2	0-20	
Copper	105	104	80-120	1	0-20	
Lead	99	98	80-120	1	0-20	
Zinc	103	103	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-1130

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809225

1130

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

	Analysis	Due	Expires	Laboratory ID	Comments
1	**Sample ID: 0809225-01**	**Water**	**Sampled:09/10/08 09:15**		
	Metals, D-Max-DryWea-diss	~~09/17/08 16:~~00	03/09/09 09:15		EPA 6020
	Containers Supplied: 500 mL Poly Unpres (C)				
2	**Sample ID: 0809225-02**	**Water**	**Sampled:09/10/08 10:40**		
	Metals, D-Max-DryWea-diss	~~09/17/08 16:00~~	03/09/09 10:40		EPA 6020
	Containers Supplied: 500 mL Poly Unpres (C)				
3	**Sample ID: 0809225-03**	**Water**	**Sampled:09/10/08 11:30**		
	Metals, D-Max-DryWea-diss	~~09/17/08 16:~~00	03/09/09 11:30		EPA 6020
	Containers Supplied: 500 mL Poly Unpres (C)				

anilize for Metals (Cd, Cu, Pb, + Zn) 6020 - Dissolved
Detection limits → 0.005 0.02

send reports to jbeyer@enviromatrixinc.com, llwick@enviromatrixinc.com, and reports@enviromatrixinc.com

* Samples not filtered.

Released By	Date	Received By	Date
	9/11/08 1304	CEL	9/11/8 1304
	9/11/8		9/11/8 1640

Page 1 of 1

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 9 - 1 1 3 0

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: EMA

DATE: 9/4/08

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
✓ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter only).

3.4 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

___.___ °C Temperature blank.
___.___ °C IR thermometer.
_____ Ambient temperature (For Air & Filter only).

Initial: [signature]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: [signature]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓	✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [signature]

COMMENTS:

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page ____ of ____

EMA LOG #: 0809225

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / Sara
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: Carlsbad Dry Weather
Project #: 20083610-1 PO#:

SEP 10 '08 13:28

REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) diazinon	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☒Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness						Microbiology Notes	Sample Comments
01	45G-13	9/10/08 9:15	Water	3G/2P	X							X							X				X								
02	42C-92	" 10:40	"	2B/2P	X							X							X				X								
03	36A-79	" 11:30	"	2G/2P	X							X							X				X								
04																															
05																															
06																															
07																															
08																															
09																															
10																															

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other ____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other ____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: ____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please dont include the Malathion results in the Lab report.

CHAIN-OF-CUSTODY RECORD

	RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature	Manouchehr Dadkhah	Kelly Leyden	9/10/08
Print	Manouchehr Dadkhah	Kelly Leyden	13:00
Company	D-Max Eng.	EMA	
Signature	Kelly Leyden	[signature]	9/10/08
Print	Kelly Leyden	Sean Flory	13:16
Company	EMA	EMA Inc.	
Signature			
Print			
Company			

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T = 6°

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809225

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0809225-01	**Water**	**Sampled:09/10/08 09:15**		
Metals, D-Max-DryWea-diss	~~09/17/08 16:~~00	03/09/09 09:15		EPA 6020
Containers Supplied: 500 mL Poly Unpres (C)				
Sample ID: 0809225-02	**Water**	**Sampled:09/10/08 10:40**		
Metals, D-Max-DryWea-diss	~~09/17/08 16:00~~	03/09/09 10:40		EPA 6020
Containers Supplied: 500 mL Poly Unpres (C)				
Sample ID: 0809225-03	**Water**	**Sampled:09/10/08 11:30**		
Metals, D-Max-DryWea-diss	~~09/17/08 16:~~00	03/09/09 11:30		EPA 6020
Containers Supplied: 500 mL Poly Unpres (C)				

anilize for Metals (Cd, Cu, Pb, + Zn) 6020 - Dissolved
Detection limits → 0.005 0.02

end reports to jbeyer@enviromatrixinc.com, llwick@enviromatrixinc.com, and reports@enviromatrixinc.com

* Samples not filtered.

Released By	Date	Received By	Date
[signature]	9/11/08 1304	[signature] CEL	9/11/8 1304

Appendix D

Field Data Sheets

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☑ Receiving Water

Site ID	ID-20		**Latitude**	33.18060	**Watershed**	**Hydrologic Unit**	904
Location	South bank of Buena Vista Creek, ten yards west of El Camino Real		**Longitude**	-117.32720		**Hydrologic Area**	904.2
			TB Page	1106-G2		**Hydrologic Subarea** (Optional)	904.21
Date	9/04/08	**Time** 9:40	**Observer**	MD.SD		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☑ Incoming ☐ High ☐ Outgoing **Tide Height:** 3.5 ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☑ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other Turtles

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 16-18

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.6	NH_3-N (mg/L)	0.182	NO_3 (mg/L)	20.73	Ortho-PO_4 (mg/L)	0.610
pH (pH units)	7.7	TURB (NTU)	2.18	NO_3-N (mg/L)	4.685	Ortho-PO_4-P (mg/L)	0.199
COND (mS/cm)	4.31	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash caught in vegetation - food containers, aluminum cans

Trash Assessment Form

SITE ID: 1D-20 **DATE:** ~~8~~ 09/04/08

LOCATION: south bank of Buena Vista creek, ten yards east of El Camino Real **TIME:** 9:40

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	1D-31			Latitude	33.18039	Watershed: Hydrologic Unit	904
Location	50 feet west of the S. Vista Way Bridge on the south side of Buena Vista Creek			Longitude	-117.32911	Hydrologic Area	904.2
				TB Page	1106-G2	Hydrologic Subarea (Optional)	904.21
Date	9/04/08	Time	8:50	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☑ Incoming ☐ High ☐ Outgoing **Tide Height:** 3.25 ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 4415

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	0.158	NO_3 (mg/L)	18.56	Ortho-PO_4 (mg/L)	0.925
pH (pH units)	7.6	TURB (NTU)	2.58	NO_3-N (mg/L)	4.195	Ortho-PO_4-P (mg/L)	0.302
COND (mS/cm)	4.85	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - soda cans, drink cups, plastic bags stuck in vegetation; trash not reaching receiving water. Sample taken from MS4 only.

Trash Assessment Form

SITE ID: 1D-31 DATE: 09/04/2008

LOCATION: 50' west of S Vista Way Bridge on the south side of Buena Vista Creek TIME: 8:50

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☒ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	5A-14		Latitude	33.17621	Watershed	Hydrologic Unit	904
Location	West sidewalk of Monroe St. South of Monroe St & Marron Rd intersection		Longitude	-117.33707		Hydrologic Area	904.2
			TB Page	1106-F3		Hydrologic Subarea (Optional)	904.21
Date	09/03/08	Time 16:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 12-13

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.7	NH_3-N (mg/L)	0.222	NO_3 (mg/L)	8.499	Ortho-PO_4 (mg/L)	1.174
pH (pH units)	8.2	TURB (NTU)	1.02	NO_3-N (mg/L)	1.921	Ortho-PO_4-P (mg/L)	0.383
COND (mS/cm)	2.70	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash, leaf debris

Trash Assessment Form

SITE ID: 5A-14 **DATE:** 09/03/2008

LOCATION: SW corner of Marron Rd & Monroe St intersection, ~~across from Olive Garden Restaurant~~ **TIME:** 16:30

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SA-72		Latitude	33.17765	Watershed	Hydrologic Unit	904
Location	East bank of Buena Vista Lagoon Ecological Reserve		Longitude	-117.34219		Hydrologic Area	904.2
			TB Page	1106-E3		Hydrologic Subarea (Optional)	904.21
Date	9/11/08	Time 10:40	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☑ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 107-111

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.256	NO_3 (mg/L)	109.2	Ortho-PO_4 (mg/L)	0.050
pH (pH units)	6.8	TURB (NTU)	0.57	NO_3-N (mg/L)	24.68	Ortho-PO_4-P (mg/L)	0.016
COND (mS/cm)	18.47	MBAS (mg/L)	0.88	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: little trash - several pieces of litter

Trash Assessment Form

SITE ID: SA-72 **DATE:** 9/11/08

LOCATION: East bank of Buena Vista Lagoon Ecological Reserve **TIME:** 10:40

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 2x2

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NO_3-N ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	5A-72		Latitude	33.17765	Watershed	Hydrologic Unit	904
Location	East bank of Buena Vista Lagoon Ecological Reserve		Longitude	-117.34219		Hydrologic Area	904.2
			TB Page	1106 - E3		Hydrologic Subarea (Optional)	904.21
Date	9/12/08	Time 10:00	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☒ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☒ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.1	NH_3-N (mg/L)	na	NO_3 (mg/L)	120.78	Ortho-PO_4 (mg/L)	na
pH (pH units)	6.8	TURB (NTU)	na	NO_3-N (mg/L)	27.30	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	18.44	MBAS (mg/L)	na	Others	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sample diluted for NO_3-N

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	6C-23		Latitude	33.17154	Watershed	Hydrologic Unit	904
Location	Southwest corner of Carlsbad Village Dr & El Camino Real intersection.		Longitude	-117.32290		Hydrologic Area	904.2
			TB Page	1106-H4		Hydrologic Subarea (Optional)	904.21
Date	9/03/08	Time 15:50	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☒ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 10-11

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.0	NH3-N (mg/L)	0.201	NO3 (mg/L)	10.10	Ortho-PO4 (mg/L)	0.592
pH (pH units)	7.8	TURB (NTU)	0.11	NO3-N (mg/L)	2.283	Ortho-PO4 -P (mg/L)	0.193
COND (mS/cm)	6.01	MBAS (mg/L)	0.68	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 6C-23 DATE: 09/03/2008

LOCATION: southwest corner of Carlsbad Village Dr and El Camino Real intersection. TIME: 15:50

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	6C-34			Latitude	33.17264	Watershed: Hydrologic Unit	904
Location	50 yards north of El camino Real & Carlsbad Village Dr intersec., on center divider			Longitude	-117.32323	Hydrologic Area	904.2
				TB Page	1106-H3	Hydrologic Subarea (Optional)	904.21
Date	9/08/08	Time	15:10	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 8-9

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.141	NO_3 (mg/L)	9.442	Ortho-PO_4 (mg/L)	0.515
pH (pH units)	8.2	TURB (NTU)	0.01	NO_3-N (mg/L)	2.134	Ortho-PO_4-P (mg/L)	0.168
COND (mS/cm)	5.92	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 6C-34 DATE: 9/03/2008

LOCATION: 50 yards north of El Camino Real & Carlsbad Village Dr intersection, on center divider TIME: 15:10

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	9B-7			Latitude	33.16~~585~~ 492	Watershed: Hydrologic Unit	904
Location	Laguna Dr & State St intersection, across from 2531 State St			Longitude	-117.353~~14~~ 05	Hydrologic Area	904.2
				TB Page	1106-D5	Hydrologic Subarea (Optional)	904.21
Date	9/11/08	Time	10:00	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	NS ☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other
Color	NS ☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other
Clarity	NS ☐ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other
Floatables	NS ☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits		☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive			☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 105-106

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)		Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	DRY	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: trash - paper, styrofoam, grate

Trash Assessment Form

SITE ID: 9B-7 DATE: 9/11/2008

LOCATION: Laguna Dr & State St intersection, across from 2531 State St TIME: 10:00

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	9B-38	Latitude	33.16566	Watershed	Hydrologic Unit	904
Location	East side of State St, South of Carlsbad Blvd & State St. intersection	Longitude	-117.35380		Hydrologic Area	904.2
		TB Page	1106 D4		Hydrologic Subarea (Optional)	904.21
Date 09/03/08	Time 10:40	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ~~☒ Commercial~~ ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ~~☒ Industrial~~ ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1-3

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.6	NH_3-N (mg/L)	0.120	NO_3 (mg/L)	64.13	Ortho-PO_4 (mg/L)	0.257
pH (pH units)	8.1	TURB (NTU)	0.02	NO_3-N (mg/L)	14.49	Ortho-PO_4 -P (mg/L)	0.084
COND (mS/cm)	2.37	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: ~~the~~ trash - one aluminum can

Trash Assessment Form

SITE ID: 9B-38 **DATE:** 09/03/2008

LOCATION: East side of State St, South of Carlsbad Blvd & State St intersec. **TIME:** 10:40

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	9B-38		**Latitude**	33.16566	**Watershed**	**Hydrologic Unit**	904
Location	East side of State St, South of Carlsbad Blvd & State St intersection		**Longitude**	-117.35380		**Hydrologic Area**	904.2
			TB Page	1106-D4		**Hydrologic Subarea** (Optional)	904.21
Date	~~09/08~~ 09/04/08	**Time** 15:00	**Observer**	MD SD		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ~~☒ Commercial~~ ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ~~☒ Industrial~~ ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ~~☐ Sunny~~ ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☑ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.1	NH_3-N (mg/L)	na	NO_3 (mg/L)	71.76	Ortho-PO_4 (mg/L)	na
pH (pH units)	8.1	TURB (NTU)	na	NO_3-N (mg/L)	16.22	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.90	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NO_3 ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	9B-38		Latitude	33.16566	Watershed	Hydrologic Unit	904
Location	East side of State St. South of the Carlsbad Blvd & State St intersection		Longitude	-117.35386		Hydrologic Area	904.2
			TB Page	1106-D4		Hydrologic Subarea (Optional)	904.21
Date	10/13/08	Time 10:10	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☑ ~~Commercial~~ ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☑ ~~Industrial~~ ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☑ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	16.9	NH_3-N (mg/L)	na	NO_3 (mg/L)	81.00	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.7	TURB (NTU)	na	NO_3-N (mg/L)	18.31	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.76	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: soda cans. lots of leaves on water's surface. only a few bubbles

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	9B-38-1		Latitude	33.16530	Watershed	Hydrologic Unit	904
Location	North half of Laguna Dr, west of Madison St		Longitude	-117.35052		Hydrologic Area	904.2
			TB Page	1106-D4		Hydrologic Subarea (Optional)	904.21
Date	9/18/08	Time 14:15	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 196-197

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	84.09	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	19.00	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash, immediate area is residential

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City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	9B-38-1		Latitude	33.16530	Watershed	Hydrologic Unit	904
Location	Laguna Drive, west of Madison St.		Longitude	-117.35052		Hydrologic Area	904.2
			TB Page	1106-D4		Hydrologic Subarea (Optional)	904.21
Date	10/13/08	Time 11:10	Observer	MD SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☒ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	88.34	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	19.96	Ortho-PO_4 -P (mg/L)	na
COND (mS/cm)	2.03	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: no trash

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	9B-38-2		Latitude	33.16698	Watershed	Hydrologic Unit	904
Location	Southwest corner of Lewis ~~St~~ Ave & Knowles Ave		Longitude	-117.34574		Hydrologic Area	904.2
			TB Page	1106-E4		Hydrologic Subarea (Optional)	904.21
Date	10/13/08	Time 11:40	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☒ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☒ Yes ☐ No ☒ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1-3

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	41.35	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	9.35	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: some leaves

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	9B-38-3		Latitude	33.16528	Watershed	Hydrologic Unit	904
Location	In front of 1045 Laguna St		Longitude	-117.34468		Hydrologic Area	904.2
			TB Page	1106-E4		Hydrologic Subarea (Optional)	904.21
Date	10/13/08	Time 12:00	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ~~☐ Flowing~~ ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 4-6

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	57.07	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	12.89	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ponded on eastern 1/2. dry toward west.

San Diego Stormwater Copermittees
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☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	11B-46			Latitude	33.16390	Watershed: Hydrologic Unit	904
Location	East of Siena Marena Ave, South of Valewood Ave.			Longitude	-117.31449	Hydrologic Area	904.2
				TB Page	1106-J5	Hydrologic Subarea (Optional)	904.21
Date	9/05/08	Time	15:15	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 38-39

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.9	NH_3-N (mg/L)	0.052	NO_3 (mg/L)	4.631	Ortho-PO_4 (mg/L)	0.710
pH (pH units)	7.8	TURB (NTU)	1.38	NO_3-N (mg/L)	1.047	Ortho-PO_4-P (mg/L)	0.231
COND (mS/cm)	1.61	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - Styrofoam, "H NO" plastic bottle by "No Fear"

Trash Assessment Form

SITE ID: 11B-46 **DATE:** 9/05/2008

LOCATION: East of Sierra Morena Ave, south of Valewood Ave **TIME:** 15:15

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	11B-48		Latitude	33.16580	Watershed	Hydrologic Unit	904
Location	South of Chestnut, east of Sierra Morena Ave.		Longitude	-117.31474		Hydrologic Area	904.2
			TB Page	1106-J4		Hydrologic Subarea (Optional)	904.21
Date	9/05/08	Time 14:35	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☑ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 36-37

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.2	NH_3-N (mg/L)	0.810	NO_3 (mg/L)	3.586	Ortho-PO_4 (mg/L)	2.013
pH (pH units)	9.4	TURB (NTU)	9.72	NO_3-N (mg/L)	0.810	Ortho-PO_4-P (mg/L)	0.656
COND (mS/cm)	1.30	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - plastic bottle

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: 11 B - 48 **DATE:** 9/05/2008

LOCATION: south of chestnut, east of Sierra Morena Ave **TIME:** 14:35

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT): 3 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	11 D-50		Latitude	33.15759	Watershed	Hydrologic Unit	904
Location	southwest ~~side~~ of Pontiac Dr, at intersection with Southampton Rd.		Longitude	-117.30790		Hydrologic Area	904.3
			TB Page	1106-J5		Hydrologic Subarea (Optional)	904.31
Date	9/04/08	Time 16:45	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	~~☑ Sediment/Gravel~~	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other Spiders

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 28-29

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.0	NH_3-N (mg/L)	0.116	NO_3 (mg/L)	4.486	Ortho-PO_4 (mg/L)	0.934
pH (pH units)	8.0	TURB (NTU)	0.63	NO_3-N (mg/L)	1.014	Ortho-PO_4-P (mg/L)	0.304
COND (mS/cm)	1.43	MBAS (mg/L)	0.13	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - tennis ball, paper

Trash Assessment Form

SITE ID: 11D-50

LOCATION: southwest ~~side~~ of Pontiac Dr & Southampton Rd intersection

DATE: 09/04/08

TIME: 16:45

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	16C-61		Latitude	33.14604	Watershed	Hydrologic Unit	904
Location	East of railroad tracks, south of Chinquapin Ave, outfall into Agua Hedionda Lagoon		Longitude	117.33807		Hydrologic Area	904.3
			TB Page	1106-F7		Hydrologic Subarea (Optional)	904.31
Date	9/09/08	Time 10:40	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae ☐ Fish	☑ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 62-63

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	0.089	NO_3 (mg/L)	22.82	Ortho-PO_4 (mg/L)	1.228
pH (pH units)	8.2	TURB (NTU)	2.17	NO_3-N (mg/L)	5.157	Ortho-PO_4-P (mg/L)	0.400
COND (mS/cm)	2.04	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	15	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	11.7	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - fiber roll, styrofoam, aluminum can, a lighter, food wrappers, wood from construction

Trash Assessment Form

SITE ID: 160C-61 **DATE:** 9/09/08

LOCATION: East of railroad tracks, South of Chinquapin Ave, outfall into Agua Hedionda Lagoon **TIME:** 10:40

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	17B-46		Latitude	33.15580	Watershed	Hydrologic Unit	904
Location	50 yards east of the La Portalada Dr and Tamarack Ave intersec, N side of tamarack		Longitude	-117.31043		Hydrologic Area	904.3
			TB Page	1106-J6		Hydrologic Subarea (Optional)	904.31
Date	9/08/08	Time 16:00	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 54-55

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.2	NH_3-N (mg/L)	0.217	NO_3 (mg/L)	4.156	Ortho-PO_4 (mg/L)	0.197
pH (pH units)	7.6	TURB (NTU)	1.82	NO_3-N (mg/L)	0.939	Ortho-PO_4-P (mg/L)	0.064
COND (mS/cm)	3.98	MBAS (mg/L)	0.38	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 17B-46 **DATE:** 9/08/08

LOCATION: 50 yds east of the La Portalada Dr & Tamarack Ave intersection, on north side of Tamarack Ave **TIME:** 16:00

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	17B-47		Latitude	33.15648	Watershed	Hydrologic Unit	904
Location	Northwest corner of Tamarack Ave & Pontiac Ave intersection, ~~north of Tamarack~~		Longitude	-117.30696		Hydrologic Area	904.3
			TB Page	1107-A6		Hydrologic Subarea (Optional)	904.31
Date	09/04/08	Time 16:10	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ~~☑ Outlet~~ ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 26-27

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.2	NH_3-N (mg/L)	0.099	NO_3 (mg/L)	2.179	Ortho-PO_4 (mg/L)	1.718
pH (pH units)	8.4	TURB (NTU)	4.52	NO_3-N (mg/L)	0.492	Ortho-PO_4-P (mg/L)	0.560
COND (mS/cm)	1.41	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - glass container, plastic bag, plastic bottles, food packages

Trash Assessment Form

SITE ID: 17B-47 **DATE:** 9/04/08

LOCATION: northwest corner of the Tamarack Ave & Pontiac Ave intersection **TIME:** 16:10

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 2 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	17C-83		Latitude	33.14812	Watershed	Hydrologic Unit	904
Location	East sidewalk of Park Drive, south of Calavo Court, south of Hillside Drive.		Longitude	-117.32524		Hydrologic Area	904.3
			TB Page	1106-G7		Hydrologic Subarea (Optional)	904.31
Date	9/08/08	Time 16:40	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☑ Yes ☐ No ☒ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 56-58

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.2	NH_3-N (mg/L)	0.030	NO_3 (mg/L)	4.504	Ortho-PO_4 (mg/L)	0.491
pH (pH units)	8.8	TURB (NTU)	1.51	NO_3-N (mg/L)	1.018	Ortho-PO_4-P (mg/L)	0.160
COND (mS/cm)	2.55	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: cigarette, plastic bottle in catch basin
- Irrigation runoff from hill on street NE of site
- Sample not taken from runoff. ≈1 gpm flow of runoff

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: 17C-83 DATE: 9/08/08

LOCATION: East sidewalk of Park Dr, South of Calavo Court, South of Hillside Dr. TIME: 16:40

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	17D-37		Latitude	33.14660	Watershed	Hydrologic Unit	904
Location	Northeast corner of Kelly Dr & Park Dr intersection		Longitude	-117.31062		Hydrologic Area	904.3
			TB Page	1106-J7		Hydrologic Subarea (Optional)	904.31
Date	9/04/08	Time 12:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☑ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~28-30~~ 23-25

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	27.5	NH_3-N (mg/L)	0.448	NO_3 (mg/L)	27.21	Ortho-PO_4 (mg/L)	0.019
pH (pH units)	7.7	TURB (NTU)	3.81	NO_3-N (mg/L)	6.149	Ortho-PO_4-P (mg/L)	0.006
COND (mS/cm)	5.07	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 17D-37 DATE: 09/04/08

LOCATION: northeast corner of Kelly Dr. and Park Dr intersection. TIME: 12:30

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT): 6 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	18D-33A		Latitude	33.15163	Watershed	Hydrologic Unit	904
Location	Intersection of Don Arturo & Don Porfirio Dr (in gated community), off of El Camino Real and Rancho Carlsbad Dr intersection		Longitude	-117.29086		Hydrologic Area	904.3
			TB Page	1107-B6		Hydrologic Subarea (Optional)	904.31
Date	9/05/08	Time 15:50	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 40-41

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	29.2	NH_3-N (mg/L)	0.243	NO_3 (mg/L)	5.146	Ortho-PO_4 (mg/L)	0.036
pH (pH units)	7.9	TURB (NTU)	1.81	NO_3-N (mg/L)	1.163	Ortho-PO_4 -P (mg/L)	0.0081
COND (mS/cm)	2.79	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: no trash

Trash Assessment Form

SITE ID: 18D-33A **DATE:** 9/05/2008

LOCATION: Intersection of Don Arturo & Don Porfirio Dr, (in gated community), off of El Camino Real & Rancho Carlsbad Dr **TIME:** 15:50

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	19C-1		Latitude	33.14647	Watershed	Hydrologic Unit	904
Location	North end of vacant horse stable on Sunny Creek Rd. near College Blvd		Longitude	-117.28160		Hydrologic Area	904.3
			TB Page	1107-C7		Hydrologic Subarea (Optional)	904.31
Date	9/04/08	Time 11:45	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 21-22

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	0.636	NO_3 (mg/L)	35.69	Ortho-PO_4 (mg/L)	0.312
pH (pH units)	7.6	TURB (NTU)	2.26	NO_3-N (mg/L)	8.066	Ortho-PO_4-P (mg/L)	0.102
COND (mS/cm)	6.77	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash, very densly vegetated

Trash Assessment Form

SITE ID: 19C-1 DATE: 09/04/08

LOCATION: outfall located at the north end of the horse stable on Sunny Creek Rd near College Blvd. TIME: 11:45

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 2 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For TC, FC, Enterco ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	19C-1		Latitude	33.14647	Watershed	Hydrologic Unit	904
Location	north end of horse stable on sunny creek Rd, near college Blvd.		Longitude	-117.28160		Hydrologic Area	904.3
			TB Page	1107-C7		Hydrologic Subarea (Optional)	904.31
Date	9/4/08	Time 11:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.1	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.7	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	8.56	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Very thick vegetation. a ~~few~~ few pieces of trash visible.

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☐ Field Screening ☒ Confirmation For Fecal Coli ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	19C-1		Latitude	33.14647	Watershed	Hydrologic Unit	904.
Location	North end of vacant horse stable on Sunny Creek Rd, near College Blvd		Longitude	-117.28160		Hydrologic Area	904.3
			TB Page	1107-C7		Hydrologic Subarea (Optional)	904.31
Date	9/18/08	Time 12:20	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.6	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.6	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4 -P (mg/L)	na
COND (mS/cm)	7.11	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

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☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Fecal Coli

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	19C-1-1		Latitude	33.14283	Watershed	Hydrologic Unit	904
Location	college Blvd., just south of El Camino Real		Longitude	-117.28335		Hydrologic Area	904.3
			TB Page	1107-C7		Hydrologic Subarea (Optional)	904.31
Date	9/18/08	Time 12:45	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 190-195

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: animal waste present. no trash.

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☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	21D-34			Latitude	33.13670	Watershed: Hydrologic Unit	904
Location	Inside Encinas ~~Wastewater~~ Power ~~Plant~~ station, east of plant tower, outfall at south end of open channel			Longitude	-117.33414	Hydrologic Area	904.3
				TB Page	1126-F1	Hydrologic Subarea (Optional)	904.31
Date	9/09/08	Time	9:15	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 59-61

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.6	NH_3-N (mg/L)	0.089	NO_3 (mg/L)	62.25	Ortho-PO_4 (mg/L)	0.851
pH (pH units)	7.5	TURB (NTU)	1.20	NO_3-N (mg/L)	14.07	Ortho-PO_4-P (mg/L)	0.277
COND (mS/cm)	1.79	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	9	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	~~1.41~~ 7	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash visible

Trash Assessment Form

SITE ID: 21D-34 **DATE:** 9/09/2008

LOCATION: inside Encinas Power Plant, east of plant tower, outfall at south end of the open channel **TIME:** 9:15

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 8 x 2

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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☑ ~~Field Screening~~ ☑ Confirmation For NO3 ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	21D-34		Latitude	33.13670	Watershed	Hydrologic Unit	904
Location	inside Encinas Power station, east of plant tower		Longitude	-117.83414		Hydrologic Area	904.3
			TB Page	1126-F1		Hydrologic Subarea (Optional)	904.31
Date	9/10/08	Time 14:25	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☑ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.6	NH_3-N (mg/L)	na	NO_3 (mg/L)	70.98	Ortho-PO_4 (mg/L)	na
pH (pH units)	8.1	TURB (NTU)	na	NO_3-N (mg/L)	16.04	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.97	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	8	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	6	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	22B-17		Latitude	33.14305	Watershed	Hydrologic Unit	904
Location	south of the Park Dr & Valencia Ave intersection		Longitude	-117.31562		Hydrologic Area	904.3
			TB Page	1106-J7		Hydrologic Subarea (Optional)	904.31
Date	9/9/08	Time 15:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae ☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 70 (71-73)

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.2	NH_3-N (mg/L)	0.343	NO_3 (mg/L)	13.67	Ortho-PO_4 (mg/L)	2.861
pH (pH units)	7.5	TURB (NTU)	5.00	NO_3-N (mg/L)	3.089	Ortho-PO_4-P (mg/L)	0.933
COND (mS/cm)	2.03	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	32	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: trash- baseball, water bottle > stuck in vegetation
upstream: irrigation runoff visible from 4860-4862 Park Dr.
Densely vegetated

Trash Assessment Form

SITE ID: 22B-17 DATE: 9/09/08

LOCATION: south of Valencia Ave & Park Dr intersect. TIME: 15:30

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 2 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	25D-2		Latitude	33.13639	Watershed	Hydrologic Unit	904
Location	sedimentation basin. north of Palomar Airport Rd, ~500 feet east of El Fuerte St		Longitude	-117.25484		Hydrologic Area	904.3
			TB Page	1127-G2		Hydrologic Subarea (Optional)	904.31
Date	9/08/08	Time 15:10	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 51-52, 53 alt

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	0.256	NO_3 (mg/L)	4.801	Ortho-PO_4 (mg/L)	0.584
pH (pH units)	7.8	TURB (NTU)	11.79	NO_3-N (mg/L)	1.085	Ortho-PO_4-P (mg/L)	0.174
COND (mS/cm)	4.67	MBAS (mg/L)	0.68	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: no trash

Trash Assessment Form

SITE ID: 25D-2 DATE: 09/08/08

LOCATION: North of Palomar Airport Rd, ~500 feet east of El Fuerte St. sedimentation basin TIME: 15:10

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	27B-47			Latitude	33.13136	Watershed: Hydrologic Unit	904
Location	Behind 5115 Avenida Encinas			Longitude	-117.33020	Hydrologic Area	904.3
				TB Page	1126-G2	Hydrologic Subarea (Optional)	904.31
Date	9/09/08	Time	14:30	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 68-69

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.6	NH_3-N (mg/L)	0.102	NO_3 (mg/L)	11.95	Ortho-PO_4 (mg/L)	1.150
pH (pH units)	7.7	TURB (NTU)	12.43	NO_3-N (mg/L)	2.701	Ortho-PO_4-P (mg/L)	0.375
COND (mS/cm)	1.27	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 27B-47 DATE: 09/09/08

LOCATION: Behind 5115 Avenida Encinas TIME: 14:30

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	27 B-75		Latitude	33.12992	Watershed	Hydrologic Unit	904
Location	main line east of I-5, south of Cannon Road, west of the Car Country Carlsbad sign		Longitude	-117.32476		Hydrologic Area	904.5
			TB Page	1126-+12		Hydrologic Subarea (Optional)	904.51
Date	9/10/08	Time 15:10	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☒ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☒ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 94-95

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.227	NO_3 (mg/L)	3.716	Ortho-PO_4 (mg/L)	1.006
pH (pH units)	7.3	TURB (NTU)	2.49	NO_3-N (mg/L)	0.840	Ortho-PO_4-P (mg/L)	0.328
COND (mS/cm)	1.22	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - 2 aluminum cans

Trash Assessment Form

SITE ID: 27B-75 **DATE:** 9/10/08

LOCATION: main line east of I-5, south of Cannon Rd, west of the Car Country Carlsbad sign **TIME:** 15:10

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	27D-17			Latitude	33.12750	Watershed: Hydrologic Unit	904
Location	southwest corner of parking lot for 5451 & 5431 Avenida Encinas			Longitude	-117.32837	Hydrologic Area	904.3
				TB Page	1126-G3	Hydrologic Subarea (Optional)	904.31
Date	9/09/08	Time	12:20	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☑ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☑ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 66 - 67

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.2	NH_3-N (mg/L)	0.221	NO_3 (mg/L)	193.2	Ortho-PO_4 (mg/L)	0.278
pH (pH units)	7.9	TURB (NTU)	6.34	NO_3-N (mg/L)	43.66	Ortho-PO_4 -P (mg/L)	0.091
COND (mS/cm)	2.79	MBAS (mg/L)	0.68	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 27D-17 **DATE:** 9/09/2008

LOCATION: southwest corner of parking lot for 5451 & 5431 Avenida Encinas **TIME:** 12:20

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NO3 ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	27D-17		Latitude	33.12750	Watershed	Hydrologic Unit	904
Location	southwest corner of parking lot for 5451 & 5431 avenida Encinas		Longitude	-117.32837		Hydrologic Area	904.3
			TB Page	1126-G3		Hydrologic Subarea (Optional)	904.31
Date	9/10/08	Time 12:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☒ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.2	NH_3-N (mg/L)	na	NO_3 (mg/L)	199.9	Ortho-PO_4 (mg/L)	na
pH (pH units)	8.3	TURB (NTU)	na	NO_3-N (mg/L)	45.18	Ortho-PO_4 -P (mg/L)	na
COND (mS/cm)	2.82	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	27D-31A		Latitude	33.12650	Watershed	Hydrologic Unit	904
Location	Behind 5600 avenida encinas, near railroad tracks		Longitude	-117.32770		Hydrologic Area	904.3
			TB Page	1126-H3		Hydrologic Subarea (Optional)	904.31
Date	9/11/08	Time 9:10	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae ☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 103-104

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.2	NH_3-N (mg/L)	0.357	NO_3 (mg/L)	2.974	Ortho-PO_4 (mg/L)	2.036
pH (pH units)	8.0	TURB (NTU)	26.87	NO_3-N (mg/L)	0.672	Ortho-PO_4-P (mg/L)	0.664
COND (mS/cm)	6.67	MBAS (mg/L)	0.88	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: trash - plastic cup, piece of wood, plastic bags, aluminum can

Trash Assessment Form

SITE ID: 27D-31A DATE: 9/11/08

LOCATION: Behind 5000 Avenida Encinas, near railroad tracks TIME: 9:10

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 2 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	28C-70		**Latitude**	33.12588	**Watershed**	**Hydrologic Unit**	904
Location	across the street from 5600 Paseo del Norte		**Longitude**	-117.32269		**Hydrologic Area**	904.4
			TB Page	1127-H3		**Hydrologic Subarea** (Optional)	904.40
Date	9/09/08	**Time** 16:15	**Observer**	MD, SD		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☑ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 74-75

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.5	NH_3-N (mg/L)	0.257	NO_3 (mg/L)	248.0	Ortho-PO_4 (mg/L)	0.292
pH (pH units)	7.3	TURB (NTU)	0.12	NO_3-N (mg/L)	56.05	Ortho-PO_4-P (mg/L)	0.095
COND (mS/cm)	2.56	MBAS (mg/L)	0.68	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 28C-70 DATE: 09/09/08

LOCATION: across the street from 5600 Paseo del Norte TIME: ~~14~~ 16:15

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NO3 ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	28C-70			Latitude	33.12568	Watershed: Hydrologic Unit	904
Location	across the street from 5600 Paseo del Norte			Longitude	-117.32269	Hydrologic Area	904.4
				TB Page	1127-H3	Hydrologic Subarea (Optional)	904.40
Date	9/10/08	Time	13:45	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☒ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☒ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.6	NH3-N (mg/L)	na	NO3 (mg/L)	252.6	Ortho-PO4 (mg/L)	na
pH (pH units)	7.2	TURB (NTU)	na	NO3-N (mg/L)	57.09	Ortho-PO4 -P (mg/L)	na
COND (mS/cm)	2.63	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	28C-73		Latitude	33.12734	Watershed	Hydrologic Unit	904
Location	concrete channel east of I-5, west of the ken Grady Ford parking lot off Paseo del Norte		Longitude	-117.32476		Hydrologic Area	904.5
			TB Page	1126-H3		Hydrologic Subarea (Optional)	904.51
Date	9/10/08	Time 15:50	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☒ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	~~☒ Sediment/Gravel~~	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 96-99

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.2	NH_3-N (mg/L)	0.154	NO_3 (mg/L)	158.8	Ortho-PO_4 (mg/L)	0.665
pH (pH units)	8.1	TURB (NTU)	0.62	NO_3-N (mg/L)	35.89	Ortho-PO_4 -P (mg/L)	0.217
COND (mS/cm)	3.02	MBAS (mg/L)	0.75	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No Trash

Trash Assessment Form

SITE ID: 28C-73 DATE: 9/10/08

LOCATION: concrete channel east of I-5, west of the Ken Grody Ford parking lot off Paseo del Norte TIME: 15:50

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 2 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NO3 ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	28C-73		Latitude	33.12734	Watershed	Hydrologic Unit	904
Location	concrete channel east of I-5, west of the Ken Grody Ford parking lot off Paseo del Norte		Longitude	-117.32476		Hydrologic Area	904.5
			TB Page	1126-H3		Hydrologic Subarea (Optional)	904.51
Date	9/11/08	Time 14:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☒ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☒ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.1	NH_3-N (mg/L)	na	NO_3 (mg/L)	178.8	Ortho-PO_4 (mg/L)	na
pH (pH units)	8.5	TURB (NTU)	na	NO_3-N (mg/L)	40.41	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	2.95	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	28C-73-1		Latitude	33.12811	Watershed	Hydrologic Unit	904
Location	North entrance to Carlsbad Premium outlets off of Car country Dr.		Longitude	-117.32253		Hydrologic Area	904.5
			TB Page	1126-H3		Hydrologic Subarea (Optional)	904.5
Date	9/10/08	Time 16:25	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☒ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 102

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	240.5	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	54.35	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	28C-73-2			Latitude	33.12672	Watershed: Hydrologic Unit	904
Location	catch basin in rear of carlsbad Premium Outlets, directly east of the center of mall			Longitude	-117.32032	Hydrologic Area	904.4
				TB Page	1126-H3	Hydrologic Subarea (Optional)	904.40
Date	9/10/08	Time	16:50	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☒ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ~~☒ No~~ **Photo #** 100-101

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH3-N (mg/L)	na	NO3 (mg/L)	301.0	Ortho-PO4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO3-N (mg/L)	68.03	Ortho-PO4 -P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
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☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	29B-44			Latitude	33.13513	Watershed: Hydrologic Unit	904
Location	~~Aston Ave~~, Behind ~~building~~ 1812 Aston Ave, northeast of the pond			Longitude	-117.29001	Hydrologic Area	904.3
				TB Page	1127-C2	Hydrologic Subarea (Optional)	904.31
Date	09/04/08	Time	10:50	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ~~☐ None~~

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 19-20

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.0	NH_3-N (mg/L)	0.485	NO_3 (mg/L)	9.922	Ortho-PO_4 (mg/L)	0.270
pH (pH units)	8.2	TURB (NTU)	14.45	NO_3-N (mg/L)	2.242	Ortho-PO_4-P (mg/L)	0.088
COND (mS/cm)	2.85	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: some trash - white out containers, food containers

Trash Assessment Form

SITE ID: 29B-44 DATE: 9/04/08

LOCATION: Behind 1812 Aston Ave, northeast of pond TIME: 10:50

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
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☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	31B-34		Latitude	33.13274	Watershed	Hydrologic Unit	904
Location	In front of 2858 Loker Avenue East driveway		Longitude	-117.24828		Hydrologic Area	904.3
			TB Page	1127-G2		Hydrologic Subarea (Optional)	904.31
Date	09/08/08	Time 14:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other spiders

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 49-50

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.8	NH_3-N (mg/L)	0.182	NO_3 (mg/L)	5.250	Ortho-PO_4 (mg/L)	0.066
pH (pH units)	7.1	TURB (NTU)	0.01	NO_3-N (mg/L)	1.187	Ortho-PO_4-P (mg/L)	0.022
COND (mS/cm)	4.68	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - 1 cigarette box ; leaves.

Trash Assessment Form

SITE ID: 31B-34 DATE: 9/08/08

LOCATION: In front of 2858 Loker Ave East TIME: 14:30

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	35A - 17		Latitude	33.11890	Watershed	Hydrologic Unit	904
Location	West of 6030 Avenida Encinas, east of railroad tracks		Longitude	-117.32378		Hydrologic Area	904.4
			TB Page	1126 - H4		Hydrologic Subarea (Optional)	904.40
Date	9/11/08	Time 16:10	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☒ Bubbles/Foam	☒ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 172-173

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.8	NH3-N (mg/L)	0.204	NO3 (mg/L)	10.50	Ortho-PO4 (mg/L)	1.345
pH (pH units)	8.4	TURB (NTU)	8.12	NO3-N (mg/L)	2.373	Ortho-PO4 -P (mg/L)	0.438
COND (mS/cm)	2.70	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - food wrappers; bags, cloth/fabric

Trash Assessment Form

SITE ID: 35A-17 **DATE:** 9/11/08

LOCATION: west of 6030 Avenida Encinas, east of railroad tracks **TIME:** 16:10

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	35C-51A		Latitude	33.11591	Watershed	Hydrologic Unit	904
Location	Inside Encinas Waste-water Plant		Longitude	-117.32017		Hydrologic Area	904.4
			TB Page	1126-H4		Hydrologic Subarea (Optional)	904.40
Date	9/09/08	Time 11:40	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ~~☑ Outlet~~ ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ~~☐ N/A~~

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 64-65

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.8	NH_3-N (mg/L)	0.159	NO_3 (mg/L)	20.30	Ortho-PO_4 (mg/L)	0.527
pH (pH units)	8.7	TURB (NTU)	0.56	NO_3-N (mg/L)	4.588	Ortho-PO_4-P (mg/L)	0.172
COND (mS/cm)	2.62	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - 1 plastic bag, small piece of styrofoam

Trash Assessment Form

SITE ID: 35C-51A **DATE:** 9/09/08

LOCATION: Inside Encinas Wastewater Plant **TIME:** 11:40

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT): 200 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	35C-85		Latitude	33.11659	Watershed	Hydrologic Unit	904
Location	North bank of Encinas creek, underneath I-5 overpass, access through wastewater plant		Longitude	-117.31873		Hydrologic Area	904.4
			TB Page	1126-H4		Hydrologic Subarea (Optional)	904.40
Date	9/11/08	Time 15:20	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 120-121

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.6	NH_3-N (mg/L)	0.272	NO_3 (mg/L)	282.8	Ortho-PO_4 (mg/L)	2615
pH (pH units)	7.9	TURB (NTU)	21.59	NO_3-N (mg/L)	63.91	Ortho-PO_4-P (mg/L)	8.525
COND (mS/cm)	4.83	MBAS (mg/L)	1.0	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 35C-85 **DATE:** 9/11/08

LOCATION: North bank of Encinas Creek, underneath I-5 overpass, access through wastewater plant **TIME:** 15:20

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 2 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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☐ Field Screening ☒ Confirmation For ~~TURB~~ MBAS, NO_3-N, PO_4-P ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	35C-85			Latitude	33.11659	Watershed: Hydrologic Unit	904
Location	North bank of Encinas Creek, underneath I-5 overpass, access through wastewater plant			Longitude	-117.31873	Hydrologic Area	904.4
				TB Page	1126-H4	Hydrologic Subarea (Optional)	904.40
Date	9/12/08	Time	9:15	Observer	MD, DM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ~~☒ Insects~~ ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.7	NH_3-N (mg/L)	na	NO_3 (mg/L)	320.47	Ortho-PO_4 (mg/L)	2.850
pH (pH units)	8.1	TURB (NTU)	na	NO_3-N (mg/L)	72.43	Ortho-PO_4-P (mg/L)	0.9291
COND (mS/cm)	5.24	MBAS (mg/L)	~~[illegible]~~ 0.75	Others	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: sample diluted for NO_3-N

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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☒ Receiving Water

Site ID	36A-79		Latitude	33.12225	Watershed	Hydrologic Unit	904
Location	Encinas Creek, ~~on~~ east side of Laurel Tree Lane, south of Palomar Airport Road		Longitude	-117.29997		Hydrologic Area	904.4
			TB Page	1127-A3		Hydrologic Subarea (Optional)	904.40
Date	9/10/08	Time 11:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☒ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 85-87

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.7	NH_3-N (mg/L)	0.263	NO_3 (mg/L)	9.694	Ortho-PO_4 (mg/L)	0.070
pH (pH units)	7.4	TURB (NTU)	2.46	NO_3-N (mg/L)	2.191	Ortho-PO_4-P (mg/L)	0.023
COND (mS/cm)	6.59	MBAS (mg/L)	0.68	Others			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Paper cup, plastic bottles, paper

Trash Assessment Form

SITE ID: 36A-79 **DATE:** 9/10/2008

LOCATION: Encinas creek, east side of Laurel Tree Lane, south of Palomar airport Rd. **TIME:** 11:30

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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City of Carlsbad
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	36B-4		Latitude	33.12360	Watershed	Hydrologic Unit	904
Location	Corner of Palomar Oaks Way & Camino Vida Roble, near 1911 Palomar Oaks Way		Longitude	-117.28976		Hydrologic Area	904.4
			TB Page	1127-D4		Hydrologic Subarea (Optional)	904.40
Date	9/12/08	Time 11:10	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 126-127

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	~~0.405~~ 0.261	NO_3 (mg/L)	6.273	Ortho-PO_4 (mg/L)	0.403
pH (pH units)	7.9	TURB (NTU)	1.98	NO_3-N (mg/L)	1.498	Ortho-PO_4 -P (mg/L)	0.131
COND (mS/cm)	2.84	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 36B-4 DATE: 9/12/08

LOCATION: Corner of Palomar Oaks Wy & Camino Vida Roble, near 1911 Palomar Oaks Wy TIME: 11:10

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	368-6		Latitude	33.12350	Watershed	Hydrologic Unit	904
Location	30 yards west of 1911 Palomar oaks Way, in the canyon		Longitude	-117.29023		Hydrologic Area	904.4
			TB Page	1127-D4		Hydrologic Subarea (Optional)	904.40
Date	9/12/08	Time 12:00	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☒ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 128-129

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.3	NH_3-N (mg/L)	0.384	NO_3 (mg/L)	7.110	Ortho-PO_4 (mg/L)	0.174
pH (pH units)	5.5	TURB (NTU)	8.31	NO_3-N (mg/L)	1.607	Ortho-PO_4-P (mg/L)	0.057
COND (mS/cm)	6.50	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 36B-6 DATE: 9/12/08

LOCATION: 30 yards west of 194 Palomar Oaks Way, in canyon TIME: 12:00

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15X8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For pH ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	36B-6			Latitude	33.12350	Watershed: Hydrologic Unit	904
Location	30 yards west of 1911 Palomar Oaks Way, in the canyon			Longitude	-117.29023	Hydrologic Area	904.4
				TB Page	1127-D4	Hydrologic Subarea (Optional)	904.40
Date	9/15/08	Time	9:50	Observer	MD, DM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.7	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	5.2	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	6.07	MBAS (mg/L)	na	Others	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	36B-95		Latitude	33.12229	Watershed	Hydrologic Unit	904
Location	10 yards north of 1925 Palomar Oaks Way in the canyon		Longitude	-117.29124		Hydrologic Area	904.4
			TB Page	1127-D4		Hydrologic Subarea (Optional)	904.40
Date	9/12/08	Time 13:45	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	~~☒ Sediment/Gravel~~	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 130 - 131 upstream 132

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.6	NH_3-N (mg/L)	2.272	NO_3 (mg/L)	4.179	Ortho-PO_4 (mg/L)	8.74
pH (pH units)	7.1	TURB (NTU)	21.58	NO_3-N (mg/L)	0.944	Ortho-PO_4-P (mg/L)	2.85
COND (mS/cm)	4.80	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Water filtered before test kits were used, diluted for phosphate, flowing water from gutter, planter into storm drain upstream (Palomar Oaks Way, Wright Place intersection)

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: 36B-95 DATE: 9/12/08

LOCATION: 10 yards north of 1925 Palomar Oaks Wy, in canyon TIME: 13:45

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): ~~4x5~~ 5x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NH3-N, PO4-P ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	36B-95		Latitude	33.12229	Watershed	Hydrologic Unit	904
Location	10 yards north of 1925 Palomar Oaks Way in the canyon		Longitude	-117.29124		Hydrologic Area	904.4
			TB Page	1127-D4		Hydrologic Subarea (Optional)	904.40
Date	9/15/08	Time 9:15	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.7	NH3-N (mg/L)	0.211	NO3 (mg/L)	na	Ortho-PO4 (mg/L)	0.1
pH (pH units)	7.4	TURB (NTU)	na	NO3-N (mg/L)	na	Ortho-PO4 -P (mg/L)	0.033
COND (mS/cm)	6.65	MBAS (mg/L)	na	Others	na		

Analytical Lab Samples Collected? ~~☐ Yes~~ ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	37A-70		Latitude	33.11910	Watershed	Hydrologic Unit	904
Location	Beside 949 Palomar oaks way		Longitude	-117.28632		Hydrologic Area	904.4
			TB Page	1127-04		Hydrologic Subarea (Optional)	904.40
Date	09/08/08	Time 11:00	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 44-46

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.6	NH_3-N (mg/L)	0.170	NO_3 (mg/L)	3.973	Ortho-PO_4 (mg/L)	0.011
pH (pH units)	7.7	TURB (NTU)	3.34	NO_3-N (mg/L)	0.898	Ortho-PO_4-P (mg/L)	0.004
COND (mS/cm)	5.91	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	8	in
Depth	.5	in
Velocity	10/10	ft/sec
Flow	12.5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 37 A - 70 DATE: 9/08/2008

LOCATION: Beside 1949 Palomar Oaks Way TIME: 11:00

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	378-19			Latitude	33.11906	Watershed: Hydrologic Unit	904
Location	Between 2225 & 2265 Camino Vida Roble in front of the post office			Longitude	-117.27238	Hydrologic Area	904.4
				TB Page	1127-E4	Hydrologic Subarea (Optional)	904.40
Date	9/12/08	Time	15:30	Observer	MD, DM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 137-138

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.1	NH_3-N (mg/L)	0.140	NO_3 (mg/L)	4.476	Ortho-PO_4 (mg/L)	0.221
pH (pH units)	9.6	TURB (NTU)	0.58	NO_3-N (mg/L)	1.012	Ortho-PO_4-P (mg/L)	0.072
COND (mS/cm)	3.27	MBAS (mg/L)	0.38	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash: cardboard boxes & paper

Trash Assessment Form

SITE ID: 37B-19 DATE: 9/12/08

LOCATION: Between 2225 & 2205 Camino Vida Roble in front of Post Office TIME: 15:30

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5X4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

Trash Assessment Form

SITE ID: 37A-17 DATE: 9/12/08

LOCATION: Camino Vida Roble, midway between Palomar Airport Road & Owens Ave TIME: 14:35

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5X4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	37B-22		Latitude	33.11930	Watershed	Hydrologic Unit	904
Location	Northwest corner of Yarrow Drive & Camino Vida Roble intersection		Longitude	-117.27372		Hydrologic Area	904.4
			TB Page	1127-E3		Hydrologic Subarea (Optional)	904.40
Date	9/15/08	Time 11:10	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	~~☒ Normal~~	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae ☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 141-143

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.5	NH_3-N (mg/L)	0.574	NO_3 (mg/L)	9.840	Ortho-PO_4 (mg/L)	0.505
pH (pH units)	5.7	TURB (NTU)	37.02	NO_3-N (mg/L)	2.224	Ortho-PO_4-P (mg/L)	0.165
COND (mS/cm)	4.21	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash in channel where outlet discharges (small amount)

Trash Assessment Form

SITE ID: 37B-22 DATE: 9/15/08

LOCATION: NW corner of Yarrow Drive & Camino Vida Roble intersection TIME: 11:10

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 7

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
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☐ Field Screening ☒ Confirmation For pH ☐ IC/ID Follow-Up For _____

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

GENERAL SITE DESCRIPTION

Site ID	37B-22		Latitude	33.11930	Watershed	Hydrologic Unit	904
Location	Northwest corner of Yarrow Dr; camino vida Roble intersection		Longitude	-117.27372		Hydrologic Area	904.4
			TB Page	1127-E3		Hydrologic Subarea (Optional)	904.40
Date	9/16/08	Time 9:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.9	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	5.0	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	5.36	MBAS (mg/L)	na	Others	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: site smells of rotten eggs

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☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For pH

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

GENERAL SITE DESCRIPTION

Site ID	37B-22-1			Latitude	33.12298	Watershed: Hydrologic Unit	904
Location	In front ~~intersection~~ of 6211 Yarrow Dr, & in driveway			Longitude	-117.27385	Hydrologic Area	904.4
				TB Page	1127-E3	Hydrologic Subarea (Optional)	904.40
Date	9/16/08	Time	10:10	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☐ Sunny	☐ Partly Cloudy	☒ Overcast	☐ Fog		
Tide	☒ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	**Tide Height:** _____ ft.
Last Rain	☒ > 72 hours	☐ < 72 hours				
Rainfall	☒ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 155-156

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.2	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	5.1	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Two pipes that would feed to this manhole were dry. water flowing from upsteam on Yarrow Dr.

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For pH

☒ MS4 ☐ Receiving Water

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	37B-22-2		Latitude	33.12350	Watershed	Hydrologic Unit	904
Location	~~Driveway of~~ 2131 Palomar airport Rd., Yarrow Dr driveway (Carlsbad Exec. Plaza)		Longitude	-117.27397		Hydrologic Area	904.4
			TB Page	1127-E3		Hydrologic Subarea (Optional)	904.4
Date	9/16/08	Time 10:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.5	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.6	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.82	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
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Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	37C-28		Latitude	33.11908	Watershed	Hydrologic Unit	904
Location	Across from 1979 Palomar Oaks Way		Longitude	-117.28232		Hydrologic Area	904.4
			TB Page	1127-D4		Hydrologic Subarea (Optional)	904.40
Date	9/15/08	Time 10:40	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 139-140

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.5	NH_3-N (mg/L)	0.430	NO_3 (mg/L)	7.661	Ortho-PO_4 (mg/L)	0.003
pH (pH units)	6.9	TURB (NTU)	17.65	NO_3-N (mg/L)	1.731	Ortho-PO_4-P (mg/L)	0.0001
COND (mS/cm)	8.96	MBAS (mg/L)	0.68	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 37C-28 DATE: 9/15/08

LOCATION: Across from 1979 Palomar Oaks Way TIME: 10:40

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	37C-29		Latitude	33.11781	Watershed	Hydrologic Unit	904
Location	Behind 1979 Palomar Oaks Way		Longitude	-117.28245		Hydrologic Area	904.4
			TB Page	1127-C4		Hydrologic Subarea (Optional)	904.40
Date	9/11/08	Time 16:40	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☒ Sheen (dust)	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ~~☒ No~~ ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 124-125

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.6	NH_3-N (mg/L)	0.588	NO_3 (mg/L)	7.252	Ortho-PO_4 (mg/L)	nd
pH (pH units)	6.7	TURB (NTU)	7.06	NO_3-N (mg/L)	1.639	Ortho-PO_4-P (mg/L)	nd
COND (mS/cm)	10.56	MBAS (mg/L)	0.75	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - plastic bottle, sheet of foam
soil is orange (clay)

Trash Assessment Form

SITE ID: 37C-29 DATE: 9/11/08

LOCATION: Behind 1979 Baldmar Oaks Way TIME: 16:40

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 2

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	41D-32			Latitude	33.10616	Watershed: Hydrologic Unit	904
Location	NE intersection of Buttercup Rd & Seascape Dr			Longitude	-117.30587	Hydrologic Area	904.5
				TB Page	1127-A6	Hydrologic Subarea (Optional)	904.51
Date	9/16/08	Time	14:30	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutt

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☒ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 162-163

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.7	NH_3-N (mg/L)	0.106	NO_3 (mg/L)	7.936	Ortho-PO_4 (mg/L)	1.109
pH (pH units)	8.0	TURB (NTU)	4.68	NO_3-N (mg/L)	1.794	Ortho-PO_4-P (mg/L)	0.362
COND (mS/cm)	1.63	MBAS (mg/L)	0.13	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 4ID - 32 DATE: 9/16/08

LOCATION: NE intersection of Buttercup Rd and Seascape Dr TIME: 14:30

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	42C-92		Latitude	33.10336	Watershed	Hydrologic Unit	904
Location	Batiquitos Drive, midway between Poinsettia Lane & Daisy Avenue		Longitude	-117.30500		Hydrologic Area	904.5
			TB Page	1127-A6		Hydrologic Subarea (Optional)	904.51
Date	9/10/08	Time 10:40	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☒ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 83-84

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	0.335	NO_3 (mg/L)	11.66	Ortho-PO_4 (mg/L)	1.614
pH (pH units)	7.6	TURB (NTU)	5.65	NO_3-N (mg/L)	2.635	Ortho-PO_4-P (mg/L)	0.526
COND (mS/cm)	2.65	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 42C-92 DATE: 9/10/2008

LOCATION: Batiquitos Dr, midway btwn Poinsettia Ln & Daisy Ave TIME: 10:40

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For TC, FC ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	42C-92		Latitude	33.10336	Watershed	Hydrologic Unit	904
Location	Batiquitos Dr, midway between Poinsettia Ln & Daisy Ave		Longitude	-117.30500		Hydrologic Area	904.5
			TB Page	1127-A6		Hydrologic Subarea (Optional)	904.51
Date	9/18/08	Time 10:45	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.3	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.6	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	2.01	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~~PONDED~~ 1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: a few piles of dead leaves, bubbles (decomp?) appears stagnant, almost no trash

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	44B-45		Latitude	33.10827	Watershed	Hydrologic Unit	904
Location	Between 2526 & 2532 Unicornio street		Longitude	-117.25158		Hydrologic Area	904.5
			TB Page	1127-G5		Hydrologic Subarea (Optional)	904.51
Date	9/15/08	Time 10:20	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ~~☒ Residential~~ ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ~~☒ No~~ ☒ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 153-154

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.4	NH_3-N (mg/L)	0.585	NO_3 (mg/L)	14.72	Ortho-PO_4 (mg/L)	0.263
pH (pH units)	8.0	TURB (NTU)	3.71	NO_3-N (mg/L)	3.327	Ortho-PO_4-P (mg/L)	0.086
COND (mS/cm)	7.74	MBAS (mg/L)	0.68	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 44B-45 DATE: 9/15/08

LOCATION: Between 2526 & 2532 California St. TIME: 16:20

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	45A-45			Latitude	33.11274	Watershed: Hydrologic Unit	904
Location	100 ft. into the canyon near El Fuerte & Chorlito intersection			Longitude	-117.24479	Hydrologic Area	904.5
				TB Page	1127-H4	Hydrologic Subarea (Optional)	904.51
Date	9/15/08	Time	15:45	Observer	MD; DM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 150 - 152

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.2	NH3-N (mg/L)	0.448	NO3 (mg/L)	15.57	Ortho-PO4 (mg/L)	0.249
pH (pH units)	7.4	TURB (NTU)	7.74	NO3-N (mg/L)	3.519	Ortho-PO4 -P (mg/L)	0.081
COND (mS/cm)	12.04	MBAS (mg/L)	0.75	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash: can, litter, bottle (plastic)

Trash Assessment Form

SITE ID: 45A-45 DATE: 9/15/08

LOCATION: 100 ft into the canyon near El Fuerte & Charlito intersection TIME: 15:45

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	45C-12		Latitude	33.10895	Watershed	Hydrologic Unit	904
Location	In front of 2927 Luciernaga Way		Longitude	-117.24141		Hydrologic Area	904.5
			TB Page	1127-H5		Hydrologic Subarea (Optional)	904.51
Date	9/15/08	Time 14:50	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 148-149

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.120	NO_3 (mg/L)	7.719	Ortho-PO_4 (mg/L)	0.252
pH (pH units)	7.3	TURB (NTU)	0.13	NO_3-N (mg/L)	1.744	Ortho-PO_4-P (mg/L)	0.082
COND (mS/cm)	3.06	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Animal waste near flowing water

Trash Assessment Form

SITE ID: 45C-12 DATE: 9/15/08

LOCATION: In front of 2927 Luciernaga Way TIME: 14:50

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	45G-13		Latitude	33.10542	Watershed	Hydrologic Unit	904
Location	30 feet southwest of the Melrose Dr & Rancho Santa Fe Rd intersection		Longitude	-117.22565		Hydrologic Area	904.5
			TB Page	1128-A5		Hydrologic Subarea (Optional)	904.51
Date	9/10/08	Time 9:15	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 80-82

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.246	NO_3 (mg/L)	7.882	Ortho-PO_4 (mg/L)	0.545
pH (pH units)	7.8	TURB (NTU)	5.61	NO_3-N (mg/L)	1.781	Ortho-PO_4-P (mg/L)	0.178
COND (mS/cm)	3.11	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	14	in
Depth	.75	in
Velocity	10/10	ft/sec
Flow	33	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - 1 shirt in water

Trash Assessment Form

SITE ID: 45G-B DATE: 9/10/08

LOCATION: 30 feet southwest of the Melrose Dr & Rancho Santa Fe Rd intersection TIME: 9:15

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Entero ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	45G-13		Latitude	33.10542	Watershed	Hydrologic Unit	904
Location	30 feet S.W. of the Melrose Dr & Rancho Santa Fe intersection		Longitude	-117.22565		Hydrologic Area	904.5
			TB Page	1128-A5		Hydrologic Subarea (Optional)	904.51
Date	9/18/08	Time 11:50	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☒ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.7	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.7	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	3.72	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	38	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	47C-5		Latitude	33.09331	Watershed	Hydrologic Unit	904
Location	End of Gabbiano on Batiquitos Lagoon Trail		Longitude	-117.30123		Hydrologic Area	904.5
			TB Page	1127-A7		Hydrologic Subarea (Optional)	904.51
Date	9/15/08	Time 14:00	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae ☒ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 46-47

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.575	NO_3 (mg/L)	16.66	Ortho-PO_4 (mg/L)	2.639
pH (pH units)	7.8	TURB (NTU)	3.83	NO_3-N (mg/L)	3.75 ~~3.43~~	Ortho-PO_4 -P (mg/L)	0.860
COND (mS/cm)	2.09	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 47C-5 DATE: 9/15/08

LOCATION: End of Gabbiano on Batiquitos Lagoon Trail TIME: 14:00

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): ~~10 X~~ 15 X 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	47D-25			Latitude	33.09338	Watershed: Hydrologic Unit	904
Location	Batiquitos Drive, east of Golden Star Lane, north of street, inside detention basin			Longitude	-117.28979	Hydrologic Area	904.5
				TB Page	1127-C7	Hydrologic Subarea (Optional)	904.51
Date	9/16/08	Time	15:30	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 164-165, 166

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	0.297	NO_3 (mg/L)	4.727	Ortho-PO_4 (mg/L)	1.060
pH (pH units)	7.1	TURB (NTU)	3.05	NO_3-N (mg/L)	1.068	Ortho-PO_4-P (mg/L)	0.346
COND (mS/cm)	6.14	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 47D-25 DATE: 9/16/08

LOCATION: Boatiquites Drive, east of Golden Star Lane, north of street, inside detention basin TIME: 15:30

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT): 3 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	48C-25		Latitude	33.09419	Watershed	Hydrologic Unit	904
Location	North of Batiquitos Dr. between Kingfish Ln & Spoonbill Ln		Longitude	-117.283196		Hydrologic Area	904.5
			TB Page	1127-D7		Hydrologic Subarea (Optional)	904.51
Date	9/17/08	Time 10:15	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks Golf course ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 167-168

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.7	NH_3-N (mg/L)	0.472	NO_3 (mg/L)	25.77	Ortho-PO_4 (mg/L)	2.974
pH (pH units)	7.4	TURB (NTU)	4.30	NO_3-N (mg/L)	5.824	Ortho-PO_4-P (mg/L)	0.970
COND (mS/cm)	2.48	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 48C-25 DATE: 9/17/08

LOCATION: North of Batiquitos Dr, btwn Kingfish Ln & Spoonbill Ln TIME: 10:15

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 2 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	48D-24			Latitude	33.09458	Watershed: Hydrologic Unit	904
Location	Debris basin outlet to Batiquitos Lagoon, SW of El Camino Real & Avenida intersec			Longitude	-117.26958	Hydrologic Area	904.5
				TB Page	1127-E7	Hydrologic Subarea (Optional)	904.51
Date	9/05/08	Time	10:45	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☑ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other spiders

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 32-33

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.8	NH_3-N (mg/L)	0.324	NO_3 (mg/L)	53.54	Ortho-PO_4 (mg/L)	0.485
pH (pH units)	7.8	TURB (NTU)	12.07	NO_3-N (mg/L)	12.100	Ortho-PO_4-P (mg/L)	0.158
COND (mS/cm)	7.01	MBAS (mg/L)	0.68	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - cigarettes, bits of litter (paper mainly)

Trash Assessment Form

SITE ID: 48D-24 DATE: 9/05/2008

LOCATION: Debris basin outlet to Batiquitos Lagoon, SW of El Camino Real & arenal intersection TIME: 10:45

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	48D-24		Latitude	33.09458	Watershed	Hydrologic Unit	904
Location	Debris basin outlet to Batiquitos Lagoon, SW of El Camino Real & Chenal intersection		Longitude	-117.26958		Hydrologic Area	904.5
			TB Page	1127-E7		Hydrologic Subarea (Optional)	904.51
Date	9/08/08	Time 12:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☒ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other Spiders

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.3	NH_3-N (mg/L)	na	NO_3 (mg/L)	74.43	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.7	TURB (NTU)	na	NO_3-N (mg/L)	16.82	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	8.09	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For TC, FC, Enterco ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION ☒ NO3 (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	48D-24		**Latitude**		**Watershed**	**Hydrologic Unit**	904
Location	Debris basin outlet to Batiquitos Lagoon, SW of El Camino Real & Arenal intersec		**Longitude**			**Hydrologic Area**	904.5
			TB Page	1127-E7		**Hydrologic Subarea** (Optional)	904.51
Date	9/11/08	**Time** 12:15	**Observer**	MD, SD		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.8	NH3-N (mg/L)	na	NO3 (mg/L)	54.43 ~~na~~	Ortho-PO4 (mg/L)	na
pH (pH units)	7.8	TURB (NTU)	na	NO3-N (mg/L)	~~na~~	Ortho-PO4 -P (mg/L)	na
COND (mS/cm)	14.57	MBAS (mg/L)	na	Others	12.30		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	48D-24-1			Latitude	33.10506	Watershed: Hydrologic Unit	904
Location	carlsbad City Library parking lot			Longitude	-117.26909	Hydrologic Area	904.5
				TB Page	1127, E5	Hydrologic Subarea (Optional)	904.51
Date	9/11/08	Time	12:50	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other cockroach

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	146.4	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	33.09	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	~~5~~ na	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: no trash

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	48D-24-2A		Latitude	33.10586	Watershed	Hydrologic Unit	904
Location	Northern line; Northeast of Library, on Dove Ln.		Longitude	-117.26914		Hydrologic Area	904.5
			TB Page	1127-E5		Hydrologic Subarea (Optional)	904.51
Date	9/18/08	Time 15:10	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 198-201

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH3-N (mg/L)	na	NO3 (mg/L)	43.21	Ortho-PO4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO3-N (mg/L)	9.765	Ortho-PO4 -P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	48D-24-2B		Latitude	33.10580	Watershed	Hydrologic Unit	904
Location	Western Line, Northeast of library on Dove Ln.		Longitude	-117.26914		Hydrologic Area	904.5
			TB Page	1127-E5		Hydrologic Subarea (Optional)	904.51
Date	9/18/08	Time	15:10	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 198-201

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH3-N (mg/L)	na	NO3 (mg/L)	143.6	Ortho-PO4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO3-N (mg/L)	32.45	Ortho-PO4 -P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: water has silvery quality in appearance / ~~luminescent~~

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☑ Receiving Water

Site ID	49A-69		Latitude	33.10195	Watershed	Hydrologic Unit	904
Location	alga Rd, east of El Camino Real, between 2035 & 2043		Longitude	-117.26147		Hydrologic Area	904.5
			TB Page	1127-F6		Hydrologic Subarea (Optional)	904.51
Date	9/05/08	Time 12:00	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ ~~Limited~~ ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☑ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~35-36~~ 34-35

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.631	NO_3 (mg/L)	18.57	Ortho-PO_4 (mg/L)	0.523
pH (pH units)	7.6	TURB (NTU)	1.36	NO_3-N (mg/L)	4.197	Ortho-PO_4-P (mg/L)	0.170
COND (mS/cm)	6.75	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	40	in
Depth	1.5	in
Velocity	10/10	ft/sec
Flow	187	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - plastic, fabric bags, on the bank; plastic bottle
Runoff to catch basin ≈ 50 feet upstream

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: 49A-69 DATE: 9/05/2008

LOCATION: Alga Rd. east of El Camino Real, between 2035 & 2043 TIME: 12:00

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	49D-12		Latitude	33.09163	Watershed	Hydrologic Unit	904
Location	~~Behind~~ South of 2829 Vista Mariana in La Costa Golf Course		Longitude	-117.25132		Hydrologic Area	904.5
			TB Page	1127-G7		Hydrologic Subarea (Optional)	904.51
Date	9/16/08	Time 12:00	Observer	ND, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 158-159

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)	1.331	NO_3 (mg/L)	8.723	Ortho-PO_4 (mg/L)	1.810
pH (pH units)	8.1	TURB (NTU)	0.01	NO_3-N (mg/L)	1.971	Ortho-PO_4-P (mg/L)	0.590
COND (mS/cm)	5.40	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 49D-12 DATE: 9/16/2008

LOCATION: south of 2829 Vista Mariana, in La Costa Golf Course TIME: 12:00

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For ammonia ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	49D-12			Latitude	33.09163	Watershed: Hydrologic Unit	904
Location	south of 2829 Vista Mariana, in La Costa Golf Course			Longitude	-117.25132	Hydrologic Area	904.5
				TB Page	1127-G7	Hydrologic Subarea (Optional)	904.51
Date	9/17/08	Time	11:20	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutt

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ~~☒ Yes~~ ☒ No ☒ Irrigation Runoff ☒ Other: washing/rinsing drive way

Photo Taken ☒ Yes ☐ No **Photo #** 169

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	0.221	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	8.1	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	5.42	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1 clear plastic piece of trash

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	51 B - 1		Latitude	33.08910	Watershed	Hydrologic Unit	904
Location	NW of Batiquitos Lagoon, east of Carlsbad Blvd.		Longitude	-117.31190		Hydrologic Area	904.5
			TB Page	1146-J1		Hydrologic Subarea (Optional)	904.51
Date	09/09/08	Time 17:06	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 76 - 79

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	0.183	NO_3 (mg/L)	14.03	Ortho-PO_4 (mg/L)	0.230
pH (pH units)	7.4	TURB (NTU)	0.67	NO_3-N (mg/L)	3.171	Ortho-PO_4 -P (mg/L)	0.075
COND (mS/cm)	2.67	MBAS (mg/L)	0.25	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash- plastic bottles

Trash Assessment Form

SITE ID: 51B - 1 DATE: 9/09/08

LOCATION: NW of Batiquitos Lagoon, east of Carlsbad Blvd TIME: 17:00

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	51B-19		Latitude	33.09100	Watershed	Hydrologic Unit	904
Location	Down in the sediment basin at the SW corner of Navigator Circle & Windrose Circle		Longitude	-117.30803		Hydrologic Area	904.5
			TB Page	1147-A1		Hydrologic Subarea (Optional)	904.51
Date	9/15/08	Time 12:10	Observer	MD, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 144-145

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.9	NH_3-N (mg/L)	0.041	NO_3 (mg/L)	16.07	Ortho-PO_4 (mg/L)	1.622
pH (pH units)	7.7	TURB (NTU)	0.56	NO_3-N (mg/L)	3.632	Ortho-PO_4-P (mg/L)	0.529
COND (mS/cm)	1.85	MBAS (mg/L)	0.13	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 51B-19 DATE: 9/15/08

LOCATION: Down in the sediment basin at the SW corner of Navigator Circle & Windrose Circle TIME: 12:10

OBSERVER: MD, DM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	55A-51			Latitude	33.08944	Watershed: Hydrologic Unit	904
Location	Northern edge of La Costa Canyon Park, in the canyon, across from 3015 Pueblo St			Longitude	-117.24263	Hydrologic Area	904.5
				TB Page	1147-H1	Hydrologic Subarea (Optional)	904.51
Date	9/16/08	Time	11:10	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutt

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 157

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.265	NO_3 (mg/L)	10.06	Ortho-PO_4 (mg/L)	0.866
pH (pH units)	7.5	TURB (NTU)	5.66	NO_3-N (mg/L)	2.274	Ortho-PO_4-P (mg/L)	0.282
COND (mS/cm)	5.76	MBAS (mg/L)	0.68	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - little bit - plastic bag, tennis ball, styrofoam cup.

Trash Assessment Form

SITE ID: SSA-51 DATE: 9/16/08

LOCATION: Northern edge of La Costa Canyon Park, in canyon, across from 3015 Pueblo St. TIME: 11:10

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	55A-62			Latitude	33.08759	Watershed: Hydrologic Unit	904
Location	SE corner of La Costa Golf Course, behind 7525 Gibraltar St, near Round Tree Apartments			Longitude	-117.24641	Hydrologic Area	904.5
				TB Page	1147-H1	Hydrologic Subarea (Optional)	904.51
Date	9/05/08	Time	9:20	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☒ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 30-31

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	0.233	NO_3 (mg/L)	5.304	Ortho-PO_4 (mg/L)	0.127
pH (pH units)	8.1	TURB (NTU)	0.45	NO_3-N (mg/L)	1.199	Ortho-PO_4-P (mg/L)	0.041
COND (mS/cm)	7.98	MBAS (mg/L)	0.68	Others			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - plastic bag
irrigation runoff - apparent upstream

Trash Assessment Form

SITE ID: 55A-62 DATE: 9/05/08

LOCATION: SE corner of La Costa Golf Course, behind 7525 Gibraltar St, near Round Tree Apartments TIME: 9:20

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	58A-13		Latitude	33.07954	Watershed	Hydrologic Unit	904
Location	50 yards north of the El Camino Real & Levante Street intersection		Longitude	-117.26699		Hydrologic Area	904.5
			TB Page	1147-F2		Hydrologic Subarea (Optional)	904.51
Date	9/17/08	Time 12:00	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☒ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 170-171

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.850	NO_3 (mg/L)	5.544	Ortho-PO_4 (mg/L)	0.839
pH (pH units)	7.4	TURB (NTU)	83	NO_3-N (mg/L)	1.253	Ortho-PO_4-P (mg/L)	0.274
COND (mS/cm)	3.64	MBAS (mg/L)	0.5	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - plastic bottle, newspaper, baseball
water @ site very murky/white

Trash Assessment Form

SITE ID: 58A-13 DATE: 9/17/08

LOCATION: 30 yards north of the Levante St & El Camino Real intersection TIME: 12:00

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Turbidity ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	58A-13		Latitude	33.07954	Watershed	Hydrologic Unit	904
Location	30 yards north of the El Camino Real & Levante Street intersection		Longitude	-117.26699		Hydrologic Area	904.5
			TB Page	1147-F2		Hydrologic Subarea (Optional)	904.51
Date	9/18/08	Time	11:10	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 190

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.7	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.3	TURB (NTU)	6.34	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	2.53	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Water is no longer white-colored or murky

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	59C-90			Latitude	33.07423	Watershed: Hydrologic Unit	904
Location	500 ft south of the intersection of Camino de los Coches & Rancho Santa Fe Rd			Longitude	-117.23988	Hydrologic Area	904.5
				TB Page	1147-H3	Hydrologic Subarea (Optional)	904.51
Date	9/17/08	Time	15:10	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 188-189

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.318	NO_3 (mg/L)	13.70	Ortho-PO_4 (mg/L)	0.273
pH (pH units)	7.3	TURB (NTU)	5.12	NO_3-N (mg/L)	3.096	Ortho-PO_4-P (mg/L)	0.089
COND (mS/cm)	6.07	MBAS (mg/L)	0.06	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash- a few water bottles, tennis ball, paper

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: 59C - 96 DATE: 9/17/08

LOCATION: 500 ft south of the intersection of camino de los codos & Rancho Santa Fe Rd TIME: 15:10

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

City of Carlsbad

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	62B-4			Latitude	33.06908	Watershed: Hydrologic Unit	904
Location	Northwest part of street at intersection of Corte Pedro & Camino Alvaro, near Camino Alvaro & Rancho Santa Fe intersec			Longitude	-117.24709	Hydrologic Area	904.5
				TB Page	1147-H3	Hydrologic Subarea (Optional)	904.51
Date	9/16/08	Time	12:50	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 160-161

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.6	NH_3-N (mg/L)	0.460	NO_3 (mg/L)	9.205	Ortho-PO_4 (mg/L)	0.860
pH (pH units)	5.4	TURB (NTU)	27.21	NO_3-N (mg/L)	2.080	Ortho-PO_4-P (mg/L)	0.280
COND (mS/cm)	10.07	MBAS (mg/L)	0.75	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 62B-4 DATE: 9/16/08

LOCATION: Northeast part of street at intersection of Corte Pedro & Camino Alvaro, near Camino Alvaro and Rancho Santa Fe intersection TIME: 12:50

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For pH, ~~turbidity~~ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	62B-4		Latitude	33.06908	Watershed	Hydrologic Unit	904
Location	northwest part of the street at intersection of Corte Pedro & camino alvaro, near Camino alvaro & Rancho Santa Fe intersec		Longitude	-117.24909		Hydrologic Area	904.5
			TB Page	1147-H3		Hydrologic Subarea (Optional)	904.51
Date	9/17/08	Time 16:25	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.7	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	5.2	TURB (NTU)	22.29	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	10.59	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For pH, turbidity

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	62B-4-A		Latitude	33.06908	Watershed	Hydrologic Unit	904
Location	Western Line; NW of Corte Pedro & Camino Alvaro intersection, near Camino Alvaro & Rancho Santa Fe intersec.		Longitude	-117.24709		Hydrologic Area	904.5
			TB Page	1147-H3		Hydrologic Subarea (Optional)	904.51
Date	9/17/08	Time 10:25	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.4	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.8	TURB (NTU)	1.04	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	2.83	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Main line, from West.

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For pH, turbidity

☒ MS4 ☐ Receiving Water

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	62B-4-B		Latitude	33.06908	Watershed	Hydrologic Unit	904
Location	~~Northern~~ NW Line, NW part of Corte Pedro & Camino Alvaro intersec; near Camino Alvaro & Rancho Santa Fe inter.		Longitude	-117.24709		Hydrologic Area	904.5
			TB Page	1147-H3		Hydrologic Subarea (Optional)	904.51
Date	09/17/08	Time 16:25	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)	24.1	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	~~4.6~~ 4.7	TURB (NTU)	0.01	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	15.07	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: North-western line

San Diego Stormwater Copermittees
City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For pH, turbidity

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	62B-4-C		Latitude	33.06908	Watershed	Hydrologic Unit	904
Location	Southern line; NW of Corte Pedro & Camino Alvaro intersection, near Camino Alvaro & Rancho Santa Fe inlet		Longitude	-117.24709		Hydrologic Area	904.5
			TB Page	1147-H3		Hydrologic Subarea (Optional)	904.51
Date	9/17/08	Time 16:25	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)	24.7	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.5	TURB (NTU)	3.84	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.93	MBAS (mg/L)	na	Others			

Analytical Lab Samples Collected? ☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: South line

Signed Certification Statement

City of Carlsbad
Jurisdictional Urban Runoff Management Plan
Annual Report for July 1, 2007 – June 30, 2008

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Glenn T. Pruim R.E.

Name (printed) Signature

Public Works Director 9/26/08

Title Date

Executive Summary

Overview

The City of Carlsbad's (City) Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report addresses the implementation of the Municipal Storm Water Permit - Order 2001-01, NPDES No. CAS018758 (Permit) issued February 21, 2001, and the beginning of implementation of the new Permit, Order No. R9-2007-0001, issued January 24, 2007 and effective March 24, 2008. This Annual Report therefore is divided into two main sections with the first section covering Order No. 2001-01 from July 1, 2007 through March 23, 2008, and the second section covering the new Permit Order No. R9-2007-0001 from March 24, 2008 to June 30, 2008, for Chapters 1 through 9, and 15. Chapters 10, 11, 12, 13 and 14 were written to cover the full fiscal year, and are provided in the 2007-0001 section of this annual report.

In the full Fiscal Year 07-08 (FY 07-08), many procedures have been streamlined to efficiently manage data, monitor sites, track inspections and investigations, and manage other storm water related activities. Planning, Construction, and Existing Development activities have implemented improved processes to further incorporate storm water pollution prevention practices into internal activities as well as activities enforced by City departments. Highlights of each major component of the JURMP are listed below, and correspond to Section headings in this JURMP Annual Report.

Section 1: Introduction

The Introduction chapter for each section of the report gives some background on the City, explains the reporting period covered, as well as the report organization.

Section 2: Development Planning

The 2001-01 Permit requires the City to evaluate land use planning policies and principles, revise the environmental review processes, and develop an approval process to minimize the impacts of development activities on receiving water quality. Land-use planning gives the community an opportunity to comment on and shape policies that guide community development and interests. The City has developed goals that balance environmental protection with smart, long-term economic growth. By laying out a vision for local growth and coastal development, projects are consistent with the state and federal regulatory requirements and the City's land-use planning efforts.

Also during this reporting period, the City performed an in-depth review of the land-use development processes in preparation for the adoption of the new 2008 JURMP submitted in March, 2008. The City continued to implement the Standard Urban Stormwater Mitigation Plan (SUSMP), and all applicable projects were subject to a thorough discretionary and plan check review process to ensure compliance. From July 1, 2007 to March 23, 2008, there were 55 discretionary projects that were reviewed and required to submit applicable storm water pollution prevention plans (SWPPP). SUSMP requirements were applied to 45 private development/redevelopment projects and 10 City Capital Improvement Projects (CIP). Of the 45 private development/redevelopment projects, 25 were priority development projects subject to site design, source control and treatment control requirements and 20 were standard projects

subject only to site design and source control BMP requirements. Of the 10 City CIPs, 1 was a priority development project and 9 were standard projects.

Between July 1, 2007 and March 23, 2008, the City updated its Storm Water Pollution Prevention, Grading and Drainage, Public Property and Building ordinances to strengthen and clarify its storm water permitting requirements and, to address the requirements of Order No, 2007-0001. The City also completely rewrote and updated its Storm Water Standards Manual which includes the updated 2008 Carlsbad SUSMP and updated Construction SWPPP Standards and Requirements.

From March 24, 2008 to June 30, 2008, SUSMP requirements were applied to 20 private development/redevelopment projects and 4 City Capital Improvement Projects (CIP). Of the 20 private development/redevelopment projects, 12 were priority development projects subject to site design, source control and treatment control requirements and 8 were standard projects subject only to site design and source control BMP requirements. Of the 4 City CIPs, 0 were a priority development project and all 4 were standard projects.

Section 3: Construction

The Permits require the City to implement activities that address and minimize short and long-term impacts on receiving water quality related to runoff from new construction sites. The City requires, prior to approval of a construction or grading permit, that project proponents implement measures to ensure that pollutants will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of water quality objectives. The City met these requirements by amending or conditioning existing permits, procedures and ordinances.

During July 1, 2007 to December 31, 2008, the City updated the construction inventory, inspected all high priority sites, conducted outreach and education to developers, engineers, contractors, and City staff, and used enforcement actions to obtain compliance when necessary. All active grading permits were ranked as high priority and inspected weekly during the rainy season. All required inspections were completed. There were 3148 required inspections and 3148 inspections were completed in this reporting period. Inspectors used enforcement actions as necessary to achieve compliance, including issuing 24 Written Warnings and 4 Stop Work Notices. The City continued to distribute the *Pollution Prevention Guide to the Construction Industry* brochure.

During January 1, 2008 to June 30, 2008, the City updated the construction inventory, conducted inspections, delivered outreach and education to developers, engineers, contractors, and City staff, and used enforcement actions to obtain compliance when necessary. All required inspections were completed. There were 3044 required inspections and 3044 inspections were completed in this reporting period. Inspectors used enforcement actions as necessary to achieve compliance, including issuing 30 Written Warnings. The City continued to distribute the *Pollution Prevention Guide to the Construction Industry* brochure.

Section 4: Municipal

The City's municipal facilities include administration buildings, recreational areas, maintenance and storage yards, water reservoirs, water pump stations, sewer lift stations, a road system, parking facilities, the storm drain system, pressure regulator vaults, and fire stations. Municipal facilities maintain the City's infrastructure that supports Carlsbad's quality of life. These

municipal facilities and their activities have the potential to contribute to water pollution if Best Management Practices (BMPs) are not properly implemented.

During both reporting periods, throughout FY 07-08, the Storm Water Committee continued to meet to discuss municipal storm water BMPs and pollution prevention issues. The Committee is comprised of approximately 14 members representing various City departments including Public Works, Fire Department, Recreation, and the Building Department. The intent is to communicate problems and solutions among the group in order to share knowledge, discuss training opportunities, enhance compliance with the Permit, and to pass along any new information from the Regional Water Quality Control Board (Regional Board). SWPPPs were developed for appropriate High Priority municipal facilities.

In FY 07-08, the City of Carlsbad's City Manager continued support for the Storm Water Leadership Team (SWLT). Monthly meetings of the SWLT were conducted and attendees included Senior Management of the City's major service areas and Directors. Agenda items covered all areas of the City's compliance with Order No. 2001-001, as well as review of the new Order No. R9-2007-0001.

The City's street sweeping program exceeded both Permit requirements throughout the FY with twice weekly downtown sweeping routes.

Also during FY 07-08, inspections were conducted on High Priority Municipal facilities by both internal City staff and external consultants. With the annual inspections by the State Department of Pesticide Regulations (DPR for Parks activities), municipal inspections by internal and external inspectors, and staff training on storm water BMPs, personnel are more aware of the required maintenance practices in preventing storm water pollution.

The City also continued the Environmental Resources Management Team (ERMT) initiative to look at environmental resources from a City-wide perspective including storm water, open space, habitat management, energy use, and sustainable principles. Support for the ERMT's work creating the Environmental Guiding Principles for City decision-making continued, and ERMT obtained approval from City Council on the formal principles.

The City's Municipal facilities and departments also continued to implement Integrated Pest Management practices where possible, to reduce the City's use of pesticides.

Section 5: Industrial/Commercial

The City currently tracks almost 300 industrial facilities within its jurisdiction. Major industry types include airport services, refuse and sewage management, pharmaceutical research and development, high technology and electronics, golf apparel and equipment manufacturers, and several light industry parks. Industrial activities have the potential to contribute to water pollution if BMPs are not implemented properly.

Under Order 2001-01, the City updated the prioritized industrial inventory, mapped all industries, inspected High, Medium, and Low industries. There were 42 required High Priority inspections and 42 were conducted. An additional 91 inspections of Medium and Low priority industries occurred as well. Education and outreach was also conducted to industries, and 2 enforcement actions were taken to obtain compliance when necessary. The City also worked closely with the Industrial Compliance Unit of the Regional Board by submitting copies of inspection reports and correspondence with high and medium priority industries.

The Storm Water Protection Program developed and continues to use *Knowledge and BMP Effectiveness Assessment* measures for industries. These assessments continued to be conducted by inspectors during onsite facility inspections.

The City currently tracks over 700 commercial facilities. Commercial facilities can generate a variety of pollutants depending on the types and locations of activities performed. Major commercial types include automobile maintenance, restaurants, pressure washing, masonry and concrete work, carpet cleaning, and landscaping activities. The City continued to implement a comprehensive program to reduce urban runoff originating from existing commercial sites and sources.

During this reporting period, the City updated the commercial inventory, mapped all high priority commercial facilities, provided education and outreach on BMPs, inspected 385 commercial sites, and conducted 31 enforcement activities to ensure compliance.

Between March 24, 2008 and June 30, 2008, the City combined and reprioritized its Industrial and Commercial Inspection inventory to reflect the new High Threat to Water Quality criteria. The City conducted 72 inspections (one fourth of the 50 required in implementing year 1) and issued 6 enforcement actions to obtain compliance.

Section 6: Residential

The City encompasses approximately 42 square miles and has an estimated population of 98,607 residents. At build out, sometime beyond year 2010, there will be nearly 54,599 residential units, housing approximately 135,000 residents. The residential community has a significant potential to contribute to water quality degradation. The focus of the City s pollution prevention strategy is a proactive information and education program that utilizes public presentations, fact sheets, direct mailers, brochures, website, and other media to increase knowledge and awareness of storm water pollution prevention efforts.

Targeted activities for residential areas include vehicle washing, storage and maintenance, lawn and garden care, home improvement projects, pet waste disposal, swimming pool maintenance, household hazardous waste (HHW) disposal, and trash and debris cleanup and disposal. The Storm Water Protection Program continued to distribute information addressing these residential BMPs and required several minimum BMPs to be implemented.

The City continued to distribute a new brochure developed in FY 05-06 for the mobile service providers including carpet cleaners, plumbers, pressure washers, mechanics, porta-potty services, and any other mobile business that provide services at various off-site locations. Mobile service materials and residuals such as cleaners, grease, soapy water, dirt, debris, and other pollutants often find their way to our streets and storm drains. This brochure was designed for mobile service providers, their employees and anyone that hires a mobile service provider.

Between July 1, 2007 to March 23, 2008 the City distributed storm water educational information for residential activities, continued an advertising campaign, hosted or participated in 12 residential outreach events, offered five oil recycling drop-off sites and two HHW collection sites for residential use, initiated a door-to-door residential HHW pick up program, hosted a HHW drop-off disposal day for Carlsbad residents, responded to 161 reports of illegal discharge, and issued 44 enforcement actions to achieve compliance.

In FY 07-08, the Storm Water Protection Program continued to work closely with other City programs and departments to address such issues as water conservation, code enforcement, outreach, and pollution prevention.

The Storm Water Protection Program received several complaints directly related to or caused by poor water conservation practices (over irrigation etc.). The Storm Water Protection Program continues to work closely with the City's Water Conservation Specialist to address these issues with residents.

From March 24, 2008 to June 30, 2008 the City responded to 66 reports of illegal discharge, and issued 25 enforcement actions to achieve compliance.

Section 7: Illegal Discharge Detection and Elimination

The City continued to conduct a comprehensive and proactive program for detecting and eliminating illegal discharges to the storm drain system. The City's program actively seeks to identify and eliminate illicit discharges and connections by conducting investigations, responding to spills and sewage overflows, conducting monitoring, and performing routine cleaning and maintenance activities on the sewer and MS4.

The Illegal Discharge Detection and Elimination (IDDE) report will be submitted in December 2008, as per Addendum 2, Order 2007-0001.

Section 8: Outreach and Education

The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent, though these messages often took varied forms. During FY 07-08, the City continued to be actively involved in outreach and education at the local level, the watershed level with the North County Storm Water Program (NCSWP), and at the regional level with the Project Clean Water Outreach Workgroup and the Think Blue campaign.

The City sent storm water educational information to all city employees distributed via paychecks in FY 07-08, participated in EPA webcasts as training opportunities, collaborated with local non-governmental organizations, hosted or participated in 12 outreach events, presented urban runoff and watershed concepts to 732 school-aged children, and distributed information through various media. The City also distributed promotional items such as notepads, pens and key chains with pollution prevention messages.

From March 24, 2008 to June 30, 2008 the City also educated 604 school-aged children, continued distributing outreach materials through various media, and participated in 4 outreach events for residents, the general public, and school-aged children.

Section 9: Public Participation

The City led and/or contributed to several public participation opportunities this reporting period including the development, implementation, and review of storm water management programs, BMPs, new requirements, and other JURMP and storm water related issues. During the reporting period, citizens, business owners and representatives, and other interested parties

were invited to attend public meetings, outreach events, workshops, City Council meetings, and other events related to storm water pollution prevention at the local and watershed levels. During this reporting period, the City conducted a Public Opinion Survey of 1,000 residents that included questions about storm water pollution, and held 5 community events.

During FY 07-08, the City's Community Volunteer Coordinator continued to find volunteers to assist the Storm Water Protection Program with various activities, including cleanup and outreach events. The City continued to recruit students from the University of California, San Diego to participate in an internship program with the Storm Water Protection Program. Interns worked on a variety of activities including commercial and industrial inspections, data management, and outreach and education.

Section 10: Fiscal Analysis

The total operating costs to fund the Storm Water Protection Program activities for FY 07-08 related to existing development was budgeted at $3, 083, 049. This includes actual expenditures for personnel, operating costs, and capital outlay from the Storm Water Protection Program budget, along with costs for street sweeping and litter pick-up, but does not include the *Storm Water Capital Improvement Program* costs.

Section 11: Effectiveness Assessment

Information collected in surveys, public comments, inspections, investigations, monitoring and other activities during the year were assessed on a full fiscal year basis to identify any trends and determine new or modified courses of action. During FY 07-08, the City continued participating in a Copermittee workgroup to draft common elements for effectiveness assessment.

The City made progress with effectiveness assessment measures during FY 07-08, using the Watershed Treatment Model to assess the effectiveness of storm water programs (Deb Caraco, Center for Watershed Protection). Assessment of each significant activity, each component, and an integrated assessment of the overall jurisdictional program is provided in Chapter 11 of the 2007-0001 section of this Annual Report.

Section 12: Special Investigations

The City participated in the San Diego Coastal lagoon TMDL Monitoring Program that is described in "San Diego Coastal Lagoons Monitoring Workplan" (Mclauglin et al, June 2008). Samples were taken in February and April 2008 in this FY. Results and conclusions of the monitoring program will be in the final report, written by Southern California Coastal Waters Research Project, near the end of the calendar year 2010.

Section 13: Non-emergency Fire-fighting

For FY 07-08, the Carlsbad Fire Department (CFD) developed this section to meet the requirements of Order No. R9-2007-0001. Several BMPs have been developed and incorporated at all 6 of the City's Fire Stations during implementation of Order 2001-01 and continued this FY. Each station has a storm water manual, spill response equipment, regular cleanup and removal of organic debris from parking lots, and portable BMPs to contain and collect equipment and vehicle wash water. Training is conducted on property with no runoff or

discharge potential into the MS4, or at the City's Reclaimed Water Facility where water is collected into the Reclaimed Water reservoirs. Fire Prevention activities were also continued during this reporting period.

Section 14: JURMP Revisions

The City updated the JURMP in March 2008 in accordance with Order 2007-0001. The new JURMP was implemented for the remainder of the Fiscal Year. There are no specific revisions to be made to the JURMP at this time.

Section 15: Conclusion

During FY 07-08, the City successfully implemented the Permit requirements and the program activities described in the JURMP. Identified program strengths as well as improvement areas for FY 08-09 are outlined in each report section. As more programs and activities are implemented as part of Order no. R9-2007-0001, there is a clear need for better databases for tracking and reporting all of these activities and the BMPs being implemented. Tying all of these activities to changes in water quality still presents a considerable challenge. This is part of the long-term assessment strategy to develop trends and to determine cause and effect relationships of pollution prevention and water quality management. The City will continue to work with the Copermittees to develop additional effectiveness measures, in addition to implementing the identified measures on program effectiveness within the City.

Information from JURMP activities, WURMP activities, as well as the 303(d) List indicated that bacteria and sediment are high priority pollutants in the Carlsbad Watershed. The City proposes to continue addressing these pollutants through a number of existing or new activities, which include education, inspections, monitoring and maintenance through Order No. R9-2007-0001 implementation.

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1.0 INTRODUCTION

This section of the City of Carlsbad s (City) Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report addresses the continued implementation of the Regional Water Quality Control Board (Regional Board) Order No. 2001-01 (NPDES Permit CAS0108758), commonly known as the Municipal Storm Water Permit. The Permit was issued February 21, 2001, and replaced the City s first municipal storm water permit issued in 1990 (Order 90-42). The Regional Board issued this Permit to prevent and control polluted urban runoff from Municipal Separate Storm Sewer Systems (MS4s) to downstream water bodies. As runoff flows through urban areas, it can carry harmful pollutants such as pathogens, sediments, fertilizers, pesticides, heavy metals, and petroleum products. Pollutants entering a receiving water body through the MS4 may harm aquatic life through toxicity and habitat degradation.

Each of the Copermittees listed in the Permit was required to develop a JURMP outlining their approach to protecting water quality and preventing harmful impacts from polluted urban runoff. The Permit requires the submittal of an Annual Report to the Regional Board to document the progress and implementation of the JURMP. This Annual Report details the activities conducted during the reporting period of July 1, 2007 through March 23, 2008, which corresponds to implementation of Order No. 2001-01, and in a separate section, those activities occurring from March 24, 2008 through June 30, 2008, under the implementation of Order No. 2007-0001.

The Permit requires each Copermittee to protect water quality during the three major phases of urban development: (1) land use planning for new development; (2) construction; and (3) the use or existing development phase.

The City is a municipal corporation, following the Council-Manager form of government. City Departments fall under one of five major service areas (MSA s): Public Safety, Administrative Services, Public Works, Community Development, and Community Services. While the City created the Storm Water Protection Program to help implement the Permit, program implementation is carried out by several departments within different MSA s. This allows for program implementation and new requirements to be incorporated into daily activities of City employees, instead of being viewed as completely new requirements without a connection to on-going services.

The City encompasses just over 42 square miles and borders 6 miles of coastline. Carlsbad also contains or borders three coastal lagoons (Buena Vista, Agua Hedionda and Batiquitos lagoons). The City is part of the Carlsbad Hydrologic Unit (Watershed), which includes four separate sub-watersheds that run through Carlsbad. These include each of the three lagoons and their respective drainage areas, in addition to a fourth watershed commonly known as Encinas Creek. Portions of Agua Hedionda Lagoon and Buena Vista Lagoon are listed as impaired for bacterial indicators and sedimentation/siltation on the Federal Clean Water Act Section 303(d) Impaired Water Bodies list. Buena Vista Lagoon is also impaired for nutrients. While this report focuses on the City s implementation of the JURMP and not the Watershed program, the two are becoming more intertwined as waterbodies and implementation strategies cross programmatic and jurisdictional boundaries.

1.1 Report Organization

This section of the Annual Report was prepared in accordance with the requirements of the Permit and contains a comprehensive description of the activities conducted by the City of Carlsbad. A list of acronyms is provided in Appendix 1.1.

The organization of this report follows the table of contents agreed to and submitted by the Copermittees to the Regional Board under Order No. R9-2007-0001. The Annual Report is divided into sections matching major sections in the Permit and the JURMP. As with the JURMP, many of the activities described in separate JURMP sections overlap with one another, so an activity may be referenced in more than one report section. The Annual Report is organized as follows:

Section 1 - Introduction
Section 2 Development Planning Component
Section 3 Construction Component
Section 4 - Municipal Component
Section 5 Industrial/Commercial Component
Section 6 - Residential Component
Section 7 Illicit Discharge Detection and Elimination Component
Section 8 Outreach and Education Component
Section 9 Public Participation Component
Section 10 Fiscal Analysis Component
Section 11 - Assessment of JURMP Effectiveness Component
Section 12 Special Investigations Component
Section 13 Non Emergency Fire Fighting Flows
Section 14 JURMP Revisions
Section 15 - Conclusions and Recommendations

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

This section outlines the Development Planning actions implemented by the City under San Diego Municipal Permit Order No. 2001-01 (the 2001 Municipal Permit) and covers the period from July 1, 2007 through and including March 23, 2008. The Development Planning actions implemented by the City under San Diego Municipal Permit Order No. 2007-001 (the 2007 Municipal Permit) are described in the second component to this annual report covering the period from March 24, 2008 through and including June 30, 2008.

During this reporting period (July 1, 2007 to March 23, 2008) the City maintained compliance with all land-use planning requirements of the City's Jurisdictional Urban Runoff Management Plan dated February 2002 (the 2002 Carlsbad JURMP). The City also continued to evaluate and modify its development review processes to minimize development impacts on storm water quality. The improvements and modifications made to the land-use development process during this reporting period (July 1, 2007 to March 23, 2008) are outlined below. In addition to those improvements outlined below, the City performed an in-depth review of the land-use development processes in preparation for the adoption of the new Carlsbad JURMP submitted to the Regional Board on March 24, 2008 (the 2008 Carlsbad JURMP) prepared in compliance with the 2007 Municipal Permit. The second component to this annual report covering the period from March 24, 2008 to July 30, 2008 will discuss and describe in detail the changes to the land-use development processes made in compliance with the 2007 Municipal Permit.

2.2 Land Use Planning

2.2.1 Background

In July 1986, the City adopted a *Growth Management Plan* into its General Plan to guide development and anticipate the types and numbers of facilities needed to accommodate the Carlsbad community at build out. Those facilities include sewer plant capacity, sewage pipelines, reclaimed water system, and storm drain system with flood and pollution control basins.

In September, 1994 the City adopted a Comprehensive Update of its General Plan. The General Plan includes goals that balance environmental protection with smart, long-term economic growth. By laying out a clear vision for environmentally sensitive development within this coastal community, development projects are required to be consistent with various City ordinances (i.e.; Grading and Erosion Control, Storm Water Management, Hillside Development, Coastal Resource Protection) and other regulatory requirements.

The General Plan is reviewed annually and revised as necessary to ensure that the public facilities are considered and City goals are met. On February 19, 2002, the City Council adopted General Plan Amendment GPA 01-15. This General Plan Amendment revised and supplemented various policies regarding storm water quality protection in the Open Space and Conservation Element of the General Plan. The revised and supplemented policies reflect all storm water quality and watershed protection principles found in both the 2001 and 2007 Municipal Permits pertaining to storm water pollution.

City staff again reviewed the storm water protection policies of the General Plan in FY 07-08 and no revisions were found necessary. The existing General Plan storm water protection policies are listed below:

a.) Develop and implement a JURMP consistent with the Permit and any amendments thereof.

b.) Adopt and implement a Master Drainage Plan and Standard Urban Storm Water Mitigation Plan (SUSMP) consistent with the Permit and any amendments thereof.

c.) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City requires developments to incorporate structural and non-structural BMPs to mitigate any increases in pollutant loads.

d.) Implement storm water pollution prevention methods to the maximum extent practicable, supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into the municipal separate storm sewer system (MS4).

e.) Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

f.) Developments shall implement appropriate recommendations to protect water quality found in the San Diego Association of Government s (SANDAG s) Water Quality Element of its Regional Growth Management Strategy.

g.) Development projects should be designed to comply with the following site design principles:

- Protect slopes and channels to decrease the potential for slopes and/or channels from eroding and impacting storm water runoff.
- To the extent practicable, cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones. Encourage land acquisition of such areas.
- Provide buffer zones for natural water bodies.
- Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment.
- Where feasible implement site design/landscape features to slow runoff and maximize on-site infiltration of runoff.
- Properly design outdoor material storage areas (including the use of roof or awning covers) to minimize the opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids and other pollutants from entering the storm water conveyance system.

- Incorporate roof or awning covers over trash storage areas to prevent off-site transport of trash and other pollutants from entering the storm water conveyance system.
- Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways and bridges.
- Design streets and circulation systems to reduce pollutants associated with vehicles and traffic resulting from development.

In addition to the General Plan, the City has adopted various storm water protection policies in other land use planning documents including the City s Local Coastal Program and Habitat Management Plan.

The Carlsbad Local Coastal Program covers that part of the City lying within the Coastal Zone. The Carlsbad City Council adopted a Zone Code Amendment (ZCA 01-08), Local Coastal Program Amendment (LCPA 01-15) and Municipal Code Amendments (MCA 01-05, 01-06, and 02-01) to revise/add new policies, standards, procedures and requirements regarding water quality and watershed protection to the Local Coastal Program Land Use Plans, Chapters 21.203 (Coastal Resource Protection Overlay Zone) and 21.205 (Coastal Resource Overlay Zone Mello I LCP Segment Local Coastal Program) of the Zoning Ordinance of Carlsbad's Municipal Code. One of the notable storm water requirements of the Carlsbad Local Coastal Program (LCP) is the inclusion of an additional criterion for determining a priority development project. Per the amended LCP, any project located within 200 feet of the Pacific Ocean that creates more than 2500 square feet of impervious surface or increases the project impervious area more than 10 over the existing impervious area is to be considered a priority development project.

Under the California Natural Community Conservation Program (NCCP), the City and six other cities in north San Diego County participated in the preparation of the Multiple Habitat Conservation Program (MHCP). The MHCP is a comprehensive planning program designed to develop an extensive ecological preserve in northwestern San Diego County. The City has prepared a subarea plan, called the Carlsbad Habitat Management Plan that was adopted in November 2004. The Carlsbad HMP contains the specific conservation, management, facility planning, land use, and other actions the City will take to implement the goals, guidelines, and standards of the MHCP plan. This Habitat Management Plan prohibits development in or near natural habitat areas including creeks and lagoons. Those areas act as a buffer between urban development pollutants and receiving waters. They also protect a significant percentage of natural area that are pervious leading to natural groundwater recharge and reduction in peak run off rates.

On November 1, 2002, the revised Zoning Ordinance, Municipal Code, and Local Coastal Plan Amendments were submitted to the California Coastal Commission. In August, 2006, the California Coastal Commission approved these municipal code amendments. All requirements of these documents were implemented in FY 07-08 and previous years including the years the City waited for Coastal Commission approval. The Local Coastal Program and Habitat Management Plan were evaluated during FY 07-08 and no revisions were found necessary.

2.2.2 Source Characterization

Land Use Planning is the process whereby the City determines appropriate land use designations for a property consistent with the City's General Plan requirements. As such, source characterization of pollutants is addressed generically in association with the type of land use proposed (i.e. low density residential, high density residential, commercial, and industrial, etc). Each land use decision made during the reporting period covered by this component of the annual report (July 1, 2007 to March 23, 2008) was found consistent with the storm water protection policies as contained in the City's General Plan, Local Coastal Program (if applicable) and Habitat Management Plan.

In many cases, land use planning applications are accompanied by specific project development applications. In such cases, the project was required to identify specific project pollutant sources consistent with the City's Standard Urban Storm Water Mitigation Plan dated April 2003 (the "2003 Carlsbad SUSMP") and to identify project specific Best Management Practices (BMPs) to eliminate or minimize any negative impacts to storm water quality. For more specifics on source characterization applied to development projects during the project approval and verification process reference Section 2.4.2 below.

2.2.3 Best Management Practice Requirements

The City reviewed the existing storm water quality and watershed protection goals and policies within the City General Plan and found them to be adequate to meet the requirements of the 2001 Municipal Permit as well as the 2007 Municipal Permit. No modification was made to BMP requirements of the General Plan during FY 07-08.

2.2.4 Program Implementation

Every General Plan Amendment and land use planning application approved by the City during FY 07-08 was found in conformance with all storm water protection policies of the Carlsbad General Plan, Local Coastal Program (as appropriate), Habitat Management Plan and the Carlsbad Municipal Code (CMC). This includes compliance findings for all the storm water quality goals and objectives of the City's Grading and Drainage Ordinances (Title 15 of the CMC).

For the period covered by this component of the annual report (July 1, 2007 to March 23, 2008) the land use planning review process began with the submittal of a planning application at the City's development services counter. Concurrent with the land use application the city requires submittal of the Storm Water Requirements Applicability Checklist which determines if the project is a priority or non-priority development project. Each project was then reviewed for conformance with the storm water protection policies and requirements of the 2003 Carlsbad SUSMP, the General Plan, any applicable Local Coastal Plan, the Habitat Management Plan and all City Codes. Concurrent with each project approval in FY 07-08, the City made specific written findings in the project approval document that the project complied with all appropriate General Plan, Local Coastal Plan (as appropriate), Habitat Management Plan and City Codes including all relevant storm water protections policies and requirements. A copy of written findings for an actual project approval is included within the examples of priority project approvals included in Appendix 2.5.

2.3 Environmental Review Process

The City's Environmental Review Process begins with the Initial Study Checklist (CEQA Guidelines). Based on the results of the checklist, the City requires the project applicant to provide additional studies to elaborate on the environmental impacts or recommend denial of the permit that the project applicant is seeking. The Initial Study Checklist includes specific hydrology and water quality analysis as follows:

HYDROLOGY AND WATER QUALITY. *Could the project:*
a. Violate any water quality standards or waste discharge requirements, including but not limited to increasing pollutant discharges to receiving waters (consider temperature, dissolved oxygen, turbidity, and other typical storm water pollutants)?
b. Have potentially significant adverse impacts on ground water quality, including but not limited to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial/increased erosion or siltation on- or offsite?
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site and/or significant adverse environmental impacts?
e. Cause significant alteration of receiving water quality during or following construction?
f. Cause an increase in impervious surfaces and associated runoff?
g. Cause potentially significant adverse impact on ground water quality?
h. Cause or contribute to an exceedance of applicable surface or ground water receiving water quality objectives or degradation of beneficial uses?
i. Is the project tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list of impaired waterbodies? If so, can it result in an increase in any pollutant for which the water body is already impaired?
j. Create or exacerbate already existing environmentally sensitive areas (ESAs)?
k. Create potentially significant environmental impact on surface water quality, to either marine, fresh, or wetland waters?
l. Impact aquatic, wetland, or riparian habitat?

The City reviewed the existing Environmental Review Process Initial Study Checklist during FY 07-08 and found that it adequately addresses the Environmental Review requirements of the 2001 Municipal Permit and the 2007 Municipal Permit; therefore, no revisions were made to the storm water quality compliance requirements of the Initial Study Checklist.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City requires new development and redevelopment projects to implement measures to ensure urban runoff from proposed project sites will be treated to reduce pollutant loads to the maximum extent practicable (MEP), and will not cause or contribute to an exceedance of receiving water quality objectives.

The City is dedicated to putting into place all the administrative and regulatory tools required to implement the Land-Use Planning requirements of the 2001 Municipal Permit as well as the 2007 Municipal Permit. During the reporting period (July 1, 2007 to March 23, 2008), the City updated its Storm Water Pollution Prevention, Grading and Drainage, Public Property and Building ordinances to strengthen and clarify its storm water permitting requirements, and to address the requirements of the 2007 Municipal permit. The City also completely rewrote and updated its Storm Water Standards Manual which includes an updated City SUSMP dated March 2008 (the 2008 Carlsbad SUSMP) and updated Construction SWPPP standards and requirements.

The City updated the Storm Water Requirements Applicability Checklist (now titled the Storm Water Standards Questionnaire) to make it more understandable (for City applicant benefit) and to address redevelopment projects. Changes were also made to the City s application submittal checklists, standard project conditions of approval and project plan review checklists to improve clarity, address the requirements of the new 2007 Municipal Permit and ensure greater compliance with the storm water standards and requirements.

All of the process improvement, code and standards changes became effective after March 24, 2008, with the exception of the standard project conditions of approval and will be discussed and described in greater detail in the second component to the annual report covering the period from March 24, 2008 to June 30, 2008. The changes to the standard project conditions of approval were implemented prior to October 2007 to provide developers advance notice of 2007 Municipal Permit requirements since it generally takes a minimum of six months for a project to proceed from discretionary approval to construction permit stage. The City s early implementation of the updated standard project conditions of approval facilitated developer compliance with the new BMP requirements, interim LID and hydromodification requirements which became effective on March 24, 2008, and helped to avoid costly and timely delays for developers.

2.4.2 Source Characterization

Development project approval is the stage of the development process where storm water quality impacts are assessed and the project is designed to eliminate or minimize potential sources of storm water pollutants. Each priority development project submitted between July 1, 2007 and March 23, 2008, was required to prepare and submit a Storm Water Management Plan (SWMP) consistent with the 2003 City SUSMP concurrent with any discretionary or ministerial permit application. An important component of the SWMP is source identification.

Prior to March 24, 2008, project proponents were required to identify potential pollutant sources generated by their particular land use and development design in accordance with the

procedures outlined in the 2003 City SUSMP. Table 2 on page 12 of the 2003 Carlsbad SUSMP was used to assist the developer in identifying potential pollutant sources for various project categories. Additionally, project proponents were required to identify the pollutants of concern or impairment for the receiving waters into which the project runoff discharges. The project proponent was then required to determine if the proposed project included any land use activity or development design that generated or potentially added to any water quality impairment within the receiving waters. The 2006 303(d) list of water quality impairments for receiving waters in Carlsbad is shown in Table 2.4.2 below:

Table 2.4.2

2006 303(d) Listings within the City of Carlsbad		
Carlsbad Waterbody	**Drains to**	**Pollutant**
Agua Hedionda Creek	Agua Hedionda Lagoon	Manganese
		Selenium
		Sulfates
		Total Dissolved Solids (TDS)
Agua Hedionda Lagoon	Pacific Ocean	Indicator Bacteria
		Sedimentation/Siltation
Buena Vista Creek	Buena Vista Lagoon	Sediment Toxicity
Buena Vista Lagoon	Pacific Ocean	Indicator Bacteria
		Nutrients
		Sedimentation/Siltation
Pacific Ocean at Buena Vista Creek	Pacific Ocean	Indicator Bacteria
Buena Vista Creek		
Carlsbad Village Drive		
Pine Avenue		
Encinitas Creek	Batiquitos Lagoon	Phosphorus
San Marcos Creek	Batiquitos Lagoon	DDE
		Phosphorus
		Sediment Toxicity

Projects draining into one of these receiving waters were required to analyze their potential for contributing one or more of the identified pollutants to the receiving water. If a potential source was identified, then an appropriate source control, site design or treatment control BMP measure was identified to eliminate or reduce the offending pollutant to the MEP and not cause or contribute to an exceedance of receiving water quality objectives.

2.4.3 Best Management Practice Requirements

During the reporting period covered in this component of the annual report (July 1, 2007 to March 23, 2008), each land development project in the City met the minimum BMP requirements of the 2001 Municipal Permit. The City's minimum requirements are contained within the 2003 Carlsbad SUSMP and the City's Storm Water Standards Manual as specified in the 2002 Carlsbad JURMP. All approved projects were required to incorporate both site design and source control BMPs into project design. Priority projects per the 2001 Municipal Permit were required to incorporate additional treatment control BMPs into the project design.

The 2007 Municipal Permit required the City in conjunction with the other co-permittees, under the San Diego Municipal Permit, to update the regional Model SUSMP. During the reporting period covered by this supplement of the annual report (July 1, 2007 to March 23, 2008) the City worked in cooperation with the other co-permittees to develop a revised Model SUSMP which was collectively adopted by the co-permittees on November 6, 2007. Throughout the reporting period, the City compelled all priority development/redevelopment projects, including City Capital Improvement Program (CIP) projects to comply with the 2003 Carlsbad SUSMP.

Beginning in October 2007, the City began requesting new priority development and redevelopment projects to comply with the interim LID and hydro-modification BMP requirements pursuant to the 2007 Municipal Permit. The City's early implementation of the interim BMP requirements into new project design in October 2007 facilitated developer compliance with the new interim LID and hydro-modification requirements which became effective on March 24, 2008, and helped to avoid costly and timely delays for developers and the City.

The City's local SUSMP implementation document is incorporated into the City of Carlsbad Storm Water Standards Manual hereinafter referred to as "Storm Water Standards Manual", which addresses specific post-construction site design, source control and treatment control storm water BMPs that must be incorporated into Priority Development Projects. The City updated its Storm Water Standards Manual to incorporate appropriate requirements of the 2007 Municipal Permit. The updated Storm Water Standards Manual became effective on March 24, 2008, and will be discussed more thoroughly in the second supplement to the annual report covering the period from March 24, 2008 to June 30, 2008. The Storm Water Standards Manual provides information on selection and implementation of the construction, site design, source control and treatment control BMPs. Copies of the 2003 Storm Water Standards Manual and updated 2008 Storm Water Standards Manual are included as Appendices 2.9 and 2.10, respectively.

In addition to participating in the Model SUSMP update, the City participated and will continue to participate in the development of the regional Hydromodification Management Plan (HMP). The HMP, similar to the Model SUSMP document, will require that development projects incorporate BMPs into their design to maximize infiltration and mimic pre-project hydrologic characteristics. Once the HMP is complete and acceptable to the RWQCB, the City will revise its JURMP and Storm Water Standards Manual to reflect the HMP requirements.

Each development project was assessed for its potential to generate urban pollutants using the Storm Water Requirements Applicability Checklist (a copy of the Applicability Checklist is included in Appendix A to the 2003 Carlsbad SUSMP attached as Appendix 2.10. Those specific types of projects (or project components) identified as having a high potential to generate pollutants in accordance with the 2001 Municipal Permit and Local Coastal Program requirements were classified as a "priority development projects". Each priority development project was associated with one or more of the general pollutants categories as described in Table 2 of the 2003 SUSMP. Additional pollutant categories were then determined based upon their potential of being generated from the specific priority project proposal.

Each priority project was then required to incorporate site design, source control and treatment control BMPs into the project design as specified in the 2003 Carlsbad SUSMP to eliminate or reduce the pollutants of concern to the MEP and so as to not cause or contribute to an

exceedance of receiving water quality objectives. Non-priority projects were required to incorporate site design and source control BMPs into their project design. The following is a brief listing and description of the types of BMPs incorporated into project designs during the reporting period:

Site design BMP features incorporated into Carlsbad developments during the reporting period include the following:

- Minimization of building footprints and incorporation of impervious pavements
- Conservation of natural area by clustering of development and preservation of natural drainage systems
- Directing flows from impervious surfaces across pervious pavements or landscape areas
- Preservation of existing trees and planting of new trees to maintain and increase canopy coverage
- Conveying of drainage away from slopes or provision of appropriate slope down drains
- Vegetating slopes and open space areas with drought tolerant plants
- Stabilization of permanent channel crossings and installation of energy dissipaters at drainage outlets

Source Control BMP features incorporated into Carlsbad developments during the reporting period includes the following:

- Enclosure of outdoor storage areas
- Trash enclosures that have impervious surfaces and do not allow drainage to flow through the enclosure and use of trash bins with lids that exclude rain
- Use of efficient irrigation systems with moisture sensors and properly designed flow control systems
- Stenciling and/or placement of tiles at every storm drain inlet

For projects that included one or more of the individual project categories, an appropriate BMP was utilized that include BMPs such as:

- Directing drainage from private streets across vegetated swales or into bioretention areas
- Directing drainage from dock and loading areas into bioretention areas or through filters/clarifiers prior to discharge into storm drains
- Keeping maintenance bays indoors and directing floor drainage into the sewer system
- Installation of special bacterial filter systems for outdoor eating areas
- Incorporation of landscape areas into surface parking lots
- Landscaping of hillside areas with deep rooted and drought tolerant plants

For most projects built during the reporting period (July 1, 2007 to March 23, 2008), hydrodynamic separator systems or filter inserts were the preferred method of treatment control to treat for sediment and trash. Beginning in October of 2007, new development and redevelopment projects were not permitted to use hydrodymanic separator systems or filter inserts as a primary means treatment control.

The City of Carlsbad processed a significant number of development applications during the reporting period covering a wide range of project categories including residential, commercial and industrial projects. Each high priority project included appropriate treatment control BMPs from the list of allowable treatment controls included in Table 4 of the 2003 Carlsbad SUSMP. Other than filter inserts and hydrodynamic separator systems (noted above) the types of treatment control systems approved for new developments during the reporting period included bioretention areas, vegetated swales, detention basins and filtration systems.

2.4.4 Program Implementation

Description of notable activities conducted to manage urban runoff from development projects

The City has a comprehensive set of storm water pollution prevention activities which are incorporated into its project development approval and BMP installation verification process. The measures include everything from the development of urban runoff land use planning policies, development processing procedures, project submittal and review checklist, educational pamphlets, engineering standards, ordinance updates, database inventory control, monitoring requirements, staff and developer training and project tracking and reporting. Each activity has been carefully designed to help eliminate or reduce storm water pollution to the maximum extent practicable (MEP) and to not cause or contribute to an exceedance of receiving water quality objectives.

The development process has many stages from concept review on through to construction completion and project operation and maintenance. The City conducts many notable activities meant to ensure development project compliance with the City s urban runoff management policies and requirements. Table 2.4.4 presents a brief description of the notable storm water pollution prevention activities undertaken at each stage of the development process. Also included in the table are a listing of the City reference materials and implementation documents available to developers and City staff which are applicable to each stage in the process.

Table 2.4.4 Storm Water Compliance Process for Development Activities

Development Process Stage	Activity Description	Process Review Documents References
Conceptual Project Design	Developer uses the 2003 Carlsbad SUSMP and Storm Water Requirements Applicability Checklist to determine project priority and begins project layout and design. For priority projects the City recommends to developers that a preliminary SWMP should be prepared.	• Storm Water Requirements Checklist • Storm Water Standards Manual which includes the 2003 Carlsbad SUSMP • 303(d) List
Pre-application Review	Developer submits the preliminary project proposal to staff to obtain input on conceptual project layout including storm water compliance issues.	• Preliminary site plan checklist • SWMP Fact Sheet
Application for Discretionary Review	City staff review application package at front Counter for completeness of submittal including storm water compliance documents. Project is logged into the City database for tracking. A completed Environmental Initial Assessment (EIA) form is submitted with the application package.	• Project Application Submittal Checklist • City review letter
Application Review	City staff reviews application, site plans and accompanying reports and documents including any SWMP, geotechnical and hydrology/hydraulic reports. Project is reviewed for consistency with General Plan, Local Coastal Plan (LCP), Habitat Management Plan (HMP1), 2003 Carlsbad SUSMP and City Codes and other Standards including all storm water protection policies and requirements. Project location is reviewed for proximity to environmentally sensitive areas and to determine if project drains to a water body on the 303(d) list. Project EIA is reviewed and appropriate environmental review documents are requested and reviewed in compliance with California Environmental Quality Act (CEQA) requirements.	• Site plan review checklist • SWMP checklist • 303(d) List • General Plan • Local Coastal Plan • Habitat Management Plan • City Codes • Environmental Assessment Form • CEQA Guidelines • City review letter (if any)
Discretionary Approval	City denies project or approves with conditions including storm water compliance conditions. Applicable standard conditions of approval are applied to the project together with any special conditions of approval as City staff determines necessary to reduce or eliminate the projects storm water pollution impacts to the MEP. Approving authority makes required findings that project complies with the General Plan, LCP, HMP1, City Codes and any other appropriate land use planning documents. Environmental documents are certified and any mitigation monitoring requirements. are noted in the project approval.	• City s standard conditions of approval • Project Conditions of Approval • Environmental mitigation and monitoring plan (if any)
Final Project Design	Developer prepares project construction plans including grading, improvement, landscape and building detailing required BMPs. Construction SWPPP is prepared and SWMP is finalized.	• Storm Water Standards Manual • Project Conditions of Approval • Environmental mitigation and monitoring plan (if any)
Construction Plan Check Application Submittal	City staff review application package for completeness of submittal including storm water compliance documents. Applicant completes and submits Project Storm Water Threat Assessment Worksheet included as part of the Storm Water Requirements Applicability Checklist.	• Plan Check Application Submittal Checklist • Storm Water Requirements Applicability Checklist • Project Conditions of Approval
Construction Plan	City staff reviews construction plans and accompanying reports and	• Construction Plan Checklist

Table 2.4.4 Storm Water Compliance Process for Development Activities

Development Process Stage	Activity Description	Process Review Documents References
Check Review	documents including any SWMP, Construction SWPPP, geotechnical and hydrology/hydraulic reports. All storm water pollution prevention requirements are checked against construction plan checklist, SWMP checklist, Construction SWPPP checklist and project conditions of approval. Construction cost estimates are approved for bonding costs including costs for structural BMPs. For priority projects a BMP Maintenance Agreement is prepared.	• SWMP Checklist • Construction SWPPP Checklist • Project conditions of approval • Storm Water Requirements Applicability Checklist • City Engineering plan review procedures • Environmental mitigation and monitoring plan (if any) • Cost estimates
Construction Plan Approval	City approves construction plans and accompanying Construction SWPPP and SWMP. The executed BMP Maintenance Agreement is recorded and entered into the City's document management system database. All treatment control BMPs are noted on the construction plans and forwarded to the GIS group for entry into the BMP inventory. Any project design changes that differ from the approved site plan or project conditions of approval are reviewed in compliance with the City's Substantial Conformance Procedures to ensure that the project remains in compliance with all land use planning findings. Secured agreements to construct project improvements are obtained backed up with cash and/or other securities. Developer is required to note the WDID number on the project plans.	• Plan check completion letter • BMP Maintenance Agreement • BMP Inventory update procedures • Substantial Conformance Procedures • Environmental mitigation and monitoring plan (if any) • Cost estimates • Secured Agreements
Ministerial (Construction) Permit Issuance	City issues permit(s) for construction activities including grading, improvement, building, demolition and blasting. Any special storm water compliance requirements are noted on permit. City staff review plan check completion letter for any special storm water compliance requirements. Copies of the permit, construction plans, Construction SWPPP and SWMP are forwarded to the Construction Management and Inspection Division. A construction inspection level (low, medium or high) is assigned in accordance with the project's threat assessment analysis. The project tracking database is updated with the project threat assessment construction level and permit issuance status.	• Plan check completion letter • Project SWMP • Project Construction SWPPP • Construction Threat Assessment Worksheet • Pollution Prevention Guide for the Construction Industry • Construction SWPPP Fact Sheet
Preconstruction Meeting	City staff meets with contractor and other parties to review project construction issues, schedule, storm water BMP implementation, monitoring, and testing requirements. Contractor is informed of storm water inspection and enforcement procedures and reminded to maintain compliance with the City's storm water pollution prevention requirements. City inspector verifies the NOI has been filed with the Regional Board and a WDID number has been assigned to the project.	• Preconstruction checklist • Construction SWPPP • SWMP • Construction plans • Pollution Prevention Guide for the Construction Industry
Construction and	Developer constructs project including temporary and permanent BMPs.	• Construction SWPPP

Table 2.4.4 Storm Water Compliance Process for Development Activities

Development Process Stage	Activity Description	Process Review Documents References
Inspection	City inspectors enforce compliance with SWPPP, SWMP and Municipal Permit. During construction City project inspector reviews construction for compliance with all plans, the Construction SWPPP, SWMP and City Standards. Regular storm water compliance inspections are scheduled and tracked per City procedures and the requirements of the 2003 or 2008 JURMP, as applicable. Enforcement actions are taken as necessary in accordance with City inspection and enforcement procedures. City inspector reviews and approves any minor construction revisions. Major construction revisions are referred to the Engineering Development Services Division for review and approval.	• SWMP • Construction plans • City inspection and enforcement procedures • Pollution Prevention Guide for the Construction Industry • Inspection reports • Enforcement action reports • Secured Agreements
Project Completion	Construction plans are as-built, securities released, and BMP construction verified. As-Built plans prepared and forwarded to the GIS Group to update the BMP inventory. Public Improvements are accepted for maintenance including any public structural control BMPs.	• Construction SWPPP • SWMP • Construction plans • Pollution Prevention Guide for the Construction Industry • Punch list • Secured Agreements • Project Acceptance Forms
Post Construction Annual Treatment Control BMP Inspections	BMP owners maintain BMPs in accordance with recommended and regulatory maintenance schedules.	• SWMP • BMP Inventory List • Site BMP Inspection Report • BMP Maintenance Agreement

Confirmation that all development projects were required to undergo the City's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked

During the reporting period covered by this component of the annual report (July 1, 2007 to March 23, 2008), all new development projects and redevelopment projects including City Capital Improvement Program (CIP) projects were required to undergo the City's urban runoff approval process in accordance with the requirements of the 2001 Municipal Permit and 2002 Carlsbad JURMP.

Project compliance was tracked through a variety of paper and computer tracking systems. During the reporting period (July 1, 2007 to March 23, 2008), tracking of projects through the discretionary project approval process consisted of paper records kept in individual files. As projects are approved, standard and special conditions of approval are placed in the written project conditions of approval. These conditions specified whether the project had to comply with the priority or non-priority project requirements of the 2003 Carlsbad SUSMP. For priority development projects, a written Storm Water Management Plan (SWMP) was prepared detailing all proposed site design, source control and treatment control BMPs. Structural site design, source control and treatment control BMPs are also reflected on the site plan or tentative map. The tentative map/site plan, conditions of approval and SWMP document are used at the construction plan review and ministerial permitting stage of the project to ensure compliance with the appropriate storm water pollution prevention requirements.

The City maintains a database of project discretionary approvals which includes project approval date, approving authority, appropriate resolution numbers and the project priority status (Priority, Non-Priority or Exempt). A listing of the development project approvals is included as Appendix 2.2.

During the construction plan review stage, a final design SWMP is submitted and approved. In addition, each project's required structural BMPs are incorporated into the project plans. For priority projects a table is placed on the title sheet identifying each treatment control facility including manufacturer's information and maintenance schedules and specifying which page of the plans contain the details of each required BMP. A separate table is included on the detail sheet providing additional information including the number of BMP units located on the specified plan sheet. The tables are used to highlight BMP requirements to the contractor and project inspector. The table also makes it easier for City GIS staff to locate treatment control BMPs for entry into the City's GIS database.

At the project permitting stage, the projects priority status and construction inspection threat assessment level (low, medium or high), as determined by the Storm Water Requirements Checklist, was entered into the City's Permits Plus software program for automated tracking. The Permit Plus program links the various ministerial construction permits (building, right-of-way, blasting and grading) to the "master" development project. The Permits Plus program is used to automatically generate storm water inspection requests for development projects with active permits. The program is also used to track inspection results and follow-up enforcement inspections.

A listing of the development projects to which SUSMP requirements were applied

During the reporting period covered by this component of the annual report (July 1, 2007 to March 23, 2008), the 2003 Carlsbad SUSMP requirements were applied to 45 private development/redevelopment projects and 10 City Capital Improvement Program (CIP) projects.

Of the 45 private development/redevelopment projects, 25 were priority development projects subject to site design, source control and treatment control requirements and 20 were standard projects subject only to site design and source control BMP requirements. Of the 10 City CIP projects, 1 was a priority development project subject to site design, source control and treatment control requirements and 9 were standard projects subject only to site design and source control BMP requirements. Copies of the development and CIP project lists showing project priority are attached as Appendices 2.2 and 2.3, respectively.

Confirmation that all applicable 2003 Carlsbad SUSMP BMP requirements were applied to all priority development projects, including a description of how the information was tracked

During the reporting period covered by this component of the annual report (July 1, 2007 to March 23, 2008), all applicable requirements of the 2003 Carlsbad SUSMP were applied to all priority development projects. The City required submittal of a completed Storm Water Requirements Applicability Checklist for every discretionary application made to the City during the reporting period. Projects determined to be priority development projects per the Applicability Checklist were additionally required to submit a preliminary Storm Water Management Plan (SWMP).

As projects are approved, standard and special conditions of approval are placed in the written project conditions of approval. These conditions specify whether the project must comply with the priority project or standard project requirements of the 2003 Carlsbad SUSMP. For priority projects, a written Storm Water Management Plan (SWMP) is prepared detailing all proposed site design, source control and treatment control BMPs. Structural site design, source control and treatment control BMPs are also reflected on the site plan or tentative map. The tentative map/site plan, conditions of approval and SWMP document are used at the construction plan review and ministerial permitting stage of the project to ensure compliance with the appropriate storm water pollution prevention requirements.

The City maintains a database of project discretionary approvals which includes project approval date, approving authority, appropriate resolution numbers and the project priority status (Priority, Non-Priority or Exempt). A list of the project discretionary approvals is included as Appendix 2.2.

At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs

Appendix 2.5 of the annual report includes a sample project which received discretionary approval during the review period (July 1, 2007 to March 23, 2008). The sample project for this reporting period is an 18,578 s.f. office condominium project on a 1.48 acre parcel, known as El Camino Terrace that drains to Agua Hedionda Creek. The anticipated and potential pollutants generated by the project, as determined by Table 2 of the 2003 Carlsbad SUSMP, include sediments, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses and pesticides. The Agua Hedionda Creek is impaired for total dissolved solids, and the Agua Hedionda Lagoon is impaired with indicator bacteria and sediment as noted on the 303(d) list. The required BMPs for the El Camino Terrace project included the following:

1. Site Design
    a. Minimized Impervious Footprint
        i. Building designed to maximum height allowed by Code
        ii. Used existing pavement for a portion of the access drive
        iii. Conserved portions of the onsite existing natural vegetation

b. Provide Buffer Zones Between Natural Water Bodies and the Project Footprint
    i. Used natural drainage systems (vegetated swales) instead of pipes or lined channels
c. Minimized Directly Connected Impervious Areas
    i. Roof drains and parking lot drainage directed to bioswales
    ii. Drain sidewalks to landscape areas
    iii. Driveway and underground parking area drain to detention basin and Filtera bio-filtration unit prior to storm drain
    iv. Maximized canopy using native or drought tolerant trees and large shrubs

2. Source Control
    a. Trash receptacles to be stored under cover
    b. Efficient irrigation with rain shut-off devices for landscaped areas
    c. All storm drain inlets in the project area to be stenciled and signed with porcelain tiles
    d. Property owners to be provided with storm water pollution prevention informational packages
    e. Integrated Pest Management practices to be used
    f. All storage inside no outdoor storage proposed
3. Individual Project Category
    a. The runoff from private driveway directed over filter strips and into vegetated swale
    b. Project slopes to be landscaped with deep-rooted drought-tolerant plants
4. Treatment Control
    a. A high-rate bio-filtration unit (Filtera) sized in accordance with Municipal Permit requirements
    b. Bioswales sized in accordance with the Municipal Permit requirements
    c. Vegetated filter strip
    d. Filter inserts

A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible

No priority projects were allowed to develop using primary treatment control BMPs with low removal efficiency rankings during the reporting period (July 1, 2007 to March 23, 2008).

An updated treatment control BMP inventory

The City has a watershed-based inventory of publicly and privately owned treatment control BMPs. The inventory has been used to track and document information about each of these structures, including, BMP type, inspection dates and findings, maintenance frequencies and requirements, verifications, and other Permit requirements. Development of the inventory is an ongoing process as new structures are researched, verified, and added to the database on a continual basis.

During this reporting period, the City updated the watershed based inventory and prioritized all verified structures into high, medium, and low categories as required by the Permit according to BMP type, location, and proximity to the nearest ESA. During the last quarter of FY 07-08, the City was able to confirm 232 privately owned treatment control BMPs, which includes 85 high priority, 82 medium priority, and 65 low priority structures. In addition, there were 57 publicly owned treatment control BMPs on the inventory, which included 11 high priority, 46, medium

priority, and no low priority structures. A copy of the updated treatment control BMP inventory for both publicly and privately owned facilities is included as Appendix 2.4.

The number of treatment control BMPs inspected, including a summary of inspection results and findings

During FY 07-08, staff worked to confirm the accuracy of information on the inventory, research certifications and maintenance requirements, verify ownership and responsible parties, and develop inspection procedures, forms, and outreach materials for this new program. A new treatment control BMP inspection form for privately owned structures was developed and a copy can be found in Appendix 2.6. Inspection of privately owned treatment control BMPs identified on the updated inventory will be conducted as required by the Permit by October 1, 2008 and the results will be reported in the FY 08-09 annual report.

A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings

During FY 07-08, the City developed a new treatment control verification form. The form will be mailed to all private property owners and other responsible parties identified on the updated inventory prior to the rainy season. The mailers will include an information letter, treatment control BMP brochure, and the verification form. Private property owners will also be able to download information about treatment control BMPs from the City's webpage at www.carlsbadca.gov/cmi. It is anticipated that there will be a learning curve for responsible parties because they have not been required to provide verification of the maintenance and operation of the treatment control BMPs in the past. The City will work with the responsible parties for the first year of the verification program implementation. In the event that a responsible party does not respond the City may use its enforcement authority to escalate efforts. A copy of the new treatment control verification form can be found in Appendix 2.7.

Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked

During the reporting period covered by this component of the annual report (July 1, 2007 to March 23, 2008), the installation of all structural BMPs required of priority projects were verified prior to occupancy. The process is initiated when a request for occupancy is made to the City by the building contractor or developer. Both the building inspector and public works inspector are notified of the request for occupancy and final inspections are schedule. The building inspector and public works inspectors review the project site for compliance with all City requirements including verification of BMP installation. If all the requirements are satisfactory, the building inspector and public works inspector sign off on the occupancy permit and occupancy is granted. The City maintains a copy of the signed occupancy permit in the building permit file. The City Building Department staff then updates the status of the permit in the building permit database.

A listing of any projects which received a SUSMP waiver

No projects received a SUSMP waiver during the reporting period covered by this component of the annual report (July 1, 2007 to March 23, 2008).

A description of any SUSMP waiver mitigation program

The City did not incorporate a SUSMP waiver program within the 2003 Carlsbad SUSMP or the updated 2008 Carlsbad SUSMP. No SUSMP waivers were requested or granted during the reporting period. If a SUSMP waiver is requested in the future, the City will follow the waiver provisions as provided in the 2007 Municipal Permit.

A description of Hydro-modification Management Plan development collaboration and participation

In addition to participating in the Model SUSMP update, the City participated and will continue to participate in the development of the regional Hydromodification Management Plan (HMP). City staff attended the copermittee meetings held on the HMP during FY 07-08 and provided input into the discussion process. The City of Carlsbad participated in the cost sharing for the consultant firms retained to prepare the San Diego regional HMP. The HMP, similar to the Model SUSMP document, will require that development projects incorporate BMPs into their design to maximize infiltration and mimic pre-project hydrologic characteristics. Once the HMP is complete and acceptable to the RWQCB, the City will revise its JURMP and Storm Water Standards Manual to reflect the HMP requirements.

A listing of priority development projects required to meet Hydromodification Management Plan (HMP) requirements, including a description of hydrologic control measures implemented

During the reporting period covered by this component of the annual report (July 1, 2007 to March 23, 2008), the interim HMP requirements were not in effect; therefore, no projects were required to meet the interim HMP requirements.

A listing of priority development projects not required to meet Hydromodification Management Plan requirements, including a description of why the projects were found to be exempt from the requirements

During the reporting period covered by this component of the annual report (July 1, 2007 to March 23, 2008), the interim HMP requirements were not in effect; therefore, no list was prepared.

A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project

During the reporting period covered by this component of the annual report (July 1, 2007 to March 23, 2008), the interim HMP requirements were not in effect; therefore, no list was prepared.

The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance

There were no violations that occurred or enforcement actions taken during the reporting period (July 1, 2007 to March 23, 2008) regarding installation of permanent BMPs. The City achieved compliance with the 2003 SUSMP through the permitting process. Development approvals are not granted until the project shows complete compliance with the City's storm water pollution prevention requirements. The City will not issue a construction permit until all applicable BMP requirements are incorporated into the project plans. For projects involving grading and/or street and utility improvements, the City requires that the developer enter into secured agreements to guarantee developer performance on the grading or improvement work including associated structural BMPs. City inspectors review the project sites during construction to ensure that all work is being done in compliance with the construction plans and City Standards and procedures. Prior to issuance of a certificate of occupancy or release of any security, the City inspector reviews the project site to ensure that all applicable structural BMPs have been

installed per the approved plans and specifications. Only when the BMP installations have been verified will the certificate of occupancy be issued or any security be released.

2.5 Development Planning Component Effectiveness Assessment

During the reporting period, the City has experienced measurable changes in outcome levels 1, 2 and 3 regarding compliance with the Land-Use Planning Component. Outcome Level 1 improvements included the many changes and improvements made to the City's storm water standards, procedures, and Codes. The changes which became effective March 24, 2008, were primarily made to ensure compliance with the 2007 Municipal Permit. However, additional changes were made to clarify and simplify storm water compliance requirements and to enhance the City's storm water protection standards. A more detailed description of the specific changes made will be discussed in the second component to this annual report covering the period from March 24, 2008 to June 30, 2008.

The Outcome Level 2 improvements included the raising of awareness of existing and new storm water compliance requirements among City development review staff, developers and the City's Planning Commission. Through a combination of training during weekly staff meetings, webinars and outside training courses, City staff significantly increased their knowledge and understanding of the new Municipal Permit requirements, LID designs, hydromodification principles and City storm water compliance processes. Developers were seen to increase their knowledge of the new Municipal Permit requirements, LID designs, and City storm water compliance requirements through revised plan review checklists, City plan review comments, the City's updated Storm Water Standards Manual and outside training courses. The City Planning Commission increased their knowledge on LID design principles and general storm water regulatory requirements thorough a staff presentation made at a regularly scheduled Planning Commission meeting.

Outcome Level 3 improvements were seen in the development community. With the adoption of the interim LID and hydromodification criteria on March 23, 2008, the City no longer accepted the use of hydrodynamic separator systems and filter inserts as a primary treatment control BMP. To facilitate compliance to the new LID standards, the City began requesting new development/redevelopment compliance with the new interim criteria in October 2007. By March 24, 2008 when the new interim criteria became effective, the development community was already showing a marked increase in compliance with the interim criteria at the initial project submittal stage.

2.6 Program Review and Modification

The greatest strength of Carlsbad's Land-Use Planning Component is its motivated and well informed project review staff. The project review staff holds weekly meetings where issues of storm water pollution prevention are discussed including issues of new regulatory requirements, new and evolving BMP standards, inventory collection and reporting, LID application in new development design and BMP effectiveness (a list of the Engineering Development Services training meetings is included in Appendix 2.8). The weekly meetings, combined with internal and external training sessions, help to keep the staff knowledgeable on the evolving standards of storm water quality and ensure consistent application of storm water quality requirements for development projects within the City including the City's own Capital Improvement Program (CIP) projects.

The City is dedicated to putting into place all the administrative and regulatory tools required to implement the Land-Use Planning requirements of the 2001 Municipal Permit as well as the 2007 Municipal Permit. During the reporting period (July 1, 2007 to March 23, 2008), the City updated its Storm Water Pollution Prevention, Grading and Drainage, Public Property and Building ordinances to strengthen and clarify its storm water permitting requirements and, to address the requirements of the 2007 Municipal permit. The City also completely rewrote and updated its Storm Water Standards Manual which includes the updated 2008 Carlsbad SUSMP and updated Construction SWPPP Standards and Requirements (a copy of which is included as Appendix 2.10).

With the exception of the standard project conditions of approval, all of the process improvement, code and standards changes became effective on March 24, 2008, and will be discussed and described in greater detail in the second component to the annual report covering the period from March 24, 2008 to June 30, 2008. The changes to the standard project conditions of approval were implemented prior to October 2007 to provide developers advance notice of 2007 Municipal Permit requirements since it generally takes a minimum of six months for a project to proceed from discretionary approval to construction permit. Early implementation of the updated standard conditions of approval ensured compliance with the new interim LID and hydro-modification requirements while avoiding costly and timely delays to the developer once the requirements became effective on March 24, 2008. A copy of the revised and updated standard project conditions of approval is included in Appendix 2.1.

The City will continue to evaluate the storm water quality policies, procedures, codes, standards and other requirements of its Land-Use Planning processes to ensure complete compliance with the 2007 Municipal Permit in FY 08-09. A primary area of focus for next year will be the development of effectiveness review and evaluation procedures for the Land-Use planning process. Another area of focus will be the improvement of the BMP inventory tracking and reporting metrics. Strengthening of these two areas will help to promote more reliable and effective storm water prevention measures and to communicate effectiveness results using measurable parameters.

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City of Carlsbad has continued to stress the importance of storm water pollution prevention throughout its construction component. The following annual report for construction will identify those activities which occurred from July 01, 2007 through December 31, 2007 and will cover the requirements of Order No. 2001-01. The Construction Management and Inspection Division (CMI) began implementing the requirements of Order No. R9-2007-0001, starting January 01, 2008.

The City continued to implement activities that address and minimize impacts on receiving water quality related to run off from construction sites. Performance goals are used to assess the completeness of this component and the effectiveness of action plans. These performance goals include construction site inspections, BMP implementation reviews, corrective actions, enforcement, and reporting requirements. During July 1, 2007 through December 31, 2007 of FY 07-08, the City updated the construction inventory weekly, inspected all construction sites, responded to construction related inquiries and complaints, provided outreach and education to developers, engineers, contractors and City staff, and used enforcement actions to obtain compliance when necessary. These activities are described in the following subsections.

3.2 Source Characterization

The City uses a Permits Plus database during the construction permitting process to develop and update a watershed based inventory of all construction sites that require construction (grading and/or construction) permits regardless of site size or ownership. Please refer to Appendix 3.1 for a Construction Site inventory. Construction sites with grading permits may include sites where activities such as grading, excavation, clearing, road construction, structure construction, or demolition results in the disturbance of soil. Building Construction permits that do not require a grading permit (sites that will not conduct grading onsite) may include sites where activities such as single family residence, remodels, or additions, home demolitions, tenant improvements, or commercial / industrial buildings that are constructed resulting in the need for water quality protection.

The Development Services Division updates the grading permit database throughout the permitting process until the project is ready to begin construction. The CMI then issues the permit, provides inspection services and updates the active construction database throughout the construction process. Construction permits are updated by the Development Services and Building Department throughout the permitting process. Once the permit is issued by the Building Department, CMI provides inspections for storm water pollution prevention inspections throughout the construction phase for the Building Permit projects.

3.3 Updates to Ordinances and Approval Processes

Extensive ordinance and project approval process changes were prepared during the reporting period to meet the new 2007 Municipal Permit requirements, to clarify and improve upon the existing storm water pollution prevention measures. The updates and changes became effective after March 24, 2008. The ordinance updates included changes to the Public Property,

Grading/Drainage, and Building ordinances in the Carlsbad Municipal Code. The project approval process changes included changes to the City's Storm Water Requirements Checklist, application submittal checklist, standard project conditions of approval, project plan review checklist, BMP criteria, Construction SWPPP requirements and LID standards. With the exception of the standard project conditions of approval, all of the process improvement, code and standards changes became effective on March 24, 2008, and will be discussed and described in greater detail in the second component to the annual report covering the period from March 24, 2008 to June 30, 2008.

The changes to the standard project conditions of approval were implemented prior to October 2007 to provide developers advance notice of 2007 Municipal Permit requirements since it generally takes a minimum of six months for a project to proceed from discretionary approval to construction permit. Early implementation of the updated standard conditions of approval ensured compliance with the new interim LID and hydro-modification requirements while avoiding costly and timely delays to the developer once the requirements became effective on March 24, 2008. A copy of the revised and updated standard project conditions of approval is included in Appendix 2.1.

3.4 Best Management Practice Requirements

The City has established required minimum BMPs, as identified in the JURMP and Carlsbad Municipal Code, for all construction sites. SWPPPs and Erosion Control Plans are reviewed prior to commencement of construction activities to ensure that the required minimum BMPs are implemented for all grading sites. As described in the City's JURMP, the seven required minimum BMPs are:

1. Erosion control methods for graded slopes;
2. Erosion control method for graded flat areas (slope 5);
3. Sediment control for perimeter boundaries;
4. Offsite tracking control of sediment;
5. Materials management control;
6. Waste management control; and
7. Non-storm water management control.

The City continues to utilize the pollution prevention measures contained in the Storm Water Best Management Practice Handbooks, published by the California Storm Water Quality Association (CASQA), Caltrans Storm Water Quality Handbooks, and Standards for Design & Construction of Public Works Improvements in the City of Carlsbad. All CMI staff is trained throughout the year on construction site BMPs and their appropriate application.

Pollution prevention consists of procedures and practices that eliminate or reduce the pollutants

at the source. The City has identified and required implementation of the following pollution prevention controls for all applicable construction sites:

- SWPPPs and Erosion Control Plans are required for grading permits and appropriate construction projects. These plans are checked by the City to ensure they adequately address the provisions of the General Construction Permit.
- CMI and contracted Construction Storm Water inspectors enforce the implementation and effectiveness of BMP's described in approved erosion control plans and SWPPPs.

To address each of the required BMPs, the City ensures the SWPPPs and/or erosion control plans include descriptions of the specific BMPs as applicable, depending on site-specific requirements:

1. Hydroseed applications, bonded fiber matrix application, Geotextiles and Mats, straw waddles, silt fences, and fiber rolls are incorporated into the City approved Erosion Control Plans and project SWPPPs as applicable.
2. Irrigated and non-irrigated hydro-seed mixes, gravel bag and/or sandbag barriers, silt fence, and fiber rolls are incorporated into approved Erosion Control Plans and SWPPPs as applicable.
3. Silt fences, earthen berms, velocity dissipaters, gravel bag and/or sandbag barriers, and drainage swales are incorporated into approved Erosion Control Plans and project SWPPPs as applicable.
4. Construction entrances and tire washing stations are incorporated into approved Erosion Control Plans and project SWPPPs as applicable.
5. Vehicle and equipment maintenance, fueling and cleaning stations, material storage and delivery yards are protected and concrete washout basins are incorporated into approved Erosion Control Plans and project SWPPPs as applicable.
6. Covered receptacles are incorporated into all projects at strategic locations, litter removal programs are incorporated into the project schedules, ensuring material storage is isolated from drainage facilities and watercourses, and other source control BMPs are incorporated into City approved Erosion Control Plans and project SWPPPs as applicable. Additionally, all temporary construction relief stations are required to have, at a minimum, secondary containment units directly beneath them.

Non-storm water management generally includes source control BMPs such as paving and grinding operations, dewatering operations, water practices, etc. These BMPs are incorporated into City approved erosion control plans and project SWPPPs as applicable.

3.5 Program Implementation

During the first half of FY 07-08 the City experienced a greater ability to monitor and enforce storm water regulations by diversifying the construction components into two areas: ministerial construction permits and grading construction permits. CMI oversees the inspections of grading permitted sites while contracted storm water inspectors ensure ministerial permitted sites (construction sites without a grading permit) are compliant, with two inspectors designated with 100 responsibility for storm water compliance at ministerial permitted sites.

The City continued to prioritize all construction sites with active grading permits as high priority. These sites were at a minimum, inspected on a weekly basis during the wet season and once a month during the dry season, at a minimum, to ensure proper installation and maintenance of pollution prevention BMPs.

Engineering inspectors were responsible for inspections on all active grading and CIP sites. Storm water issues (compliance with the grading ordinances and Order No. 2001-01) have remained one of their main focuses, especially during the rainy season. During the required inspections, staff would review the site SWPPP and erosion control plans to further ensure the sites compliance with the installation of designated BMPs. Engineering inspectors were onsite inspecting grading sites on a regular basis and monitoring changing site conditions and the status and effectiveness of BMPs installed. All required inspections were documented and placed in the project files.

The current construction site storm water checklist used by the inspectors covers ll phases of the construction process. Documented inspections cover administrative requirements such as SWPPPs and updates wall maps, and field requirements such as desiltation basins, materials and waste management, temporary BMPs, and slope protection. The inspection form also provides a comment section to further describe site conditions and interactions.

In addition, the City continued verifying the Notice of Intent (NOI) validity prior to issuance of a grading permit or Notice to Proceed for CIP projects. Prior to holding a pre-construction meeting and issuing a grading permit, CMI verifies a valid NOI is in place for projects that triggered Statewide General Construction Permit requirements. The Construction Manager reviews the State s online database to ensure an NOI has been issued prior to assigning the project to an inspector for grading permit issuance.

Grading Permit Site Inspections:

The inspectors were onsite daily on most sites verifying proper BMP implementation in addition to the formal weekly inspection that is documented. The current construction site storm water checklist is included in Appendix 3.2. Table 3.1 demonstrates the grading permit inspections conducted from July 01, 2007 to December 31, 2007:

Table 3.1 Grading Permit Site Compliance Inspections

Required Inspections	Inspections Conducted
1844	1844

Building Construction Permit Site Inspections:

Contracted storm water inspectors were onsite inspecting all locations as required by the priority of the site. During the first half of the wet season (Oct. 01 through Dec. 31) high priority sites were inspected weekly while medium and low priority sites were inspected biweekly. All required inspections were documented. Table 3.2 describes the building construction permit inspections conducted from July 01, 2007 to December 31, 2007:

Table 3.2 Building Permit Site Compliance Inspections

Required Inspections	Inspections Conducted
1068	1068

Capital Improvement Site Inspections:

Inspectors were out on CIP project sites daily covering a number of issues including storm water issues. Please refer to Appendix 3.3 for the Capital Improvement Project (CIP) site inventory. It is important to note that not all sites on the inventory were active during the entire rainy season. The City currently has a system of tracking required inspections, which is monitored on a weekly basis to ensure compliance. Information from completed inspections is entered into a database and annual reports are processed from this database for reporting purposes. Table 3.3 summarizes the CIP project inspections conducted from July 01, 2007 to December 31, 2007:

Table 3.3 CIP Site Compliance Inspections

Required Inspections	Inspections Conducted
236	236

During required inspections, staff generally found sites to be compliant in terms of adherence to SWPPP, erosion control plans, and BMP implementation. Most observed deficiencies were found with BMP maintenance (i.e. broken gravel bags). These deficiencies were brought to the attention of the responsible site superintendent and direction was given by the project inspector to have the deficiencies immediately corrected. This interaction has proven to be productive in correcting minor deficiencies.

The current construction site storm water checklist used by the inspectors covers all phases of the construction process. Documented inspections cover administrative requirements such as SWPPPs and updated wall maps, and field requirements such as desiltation basins, materials and waste management, temporary BMPs, slope protection. The inspection form also provides a comment section to further describe site conditions and interactions.

In addition, the City continued verifying the Notice of Intent (NOI) validity prior to issuance of a grading permit or Notice to Proceed for CIP projects. Prior to having a pre-construction meeting and issuing a grading permit, CMI verifies a valid NOI is in place for projects as required by the State. The Construction Manager reviews the State's online database to ensure a NOI has been issued prior to assigning the project to an inspector for grading permit issuance.

There were no changes in the enforcement escalation procedures described in the City s 2001 JURMP during July 01, 2007 to December 31, 2007. Table 3.4 is a summary of enforcement actions taken by the City from July 01, 2007 to December 31, 2007.

Table 3.4 Summary of Enforcement Actions at Construction Sites

Actions Taken	Number of Actions
Written Warning	24
Stop Work Notice	4
Total Actions	28

If a site was found to have minor deficiencies, in terms of storm water compliance, it was typically corrected at the time of the inspection. If a written warning was issued, a specific deadline for correction was noted and a follow up inspection was conducted. Generally, follow up inspections found sites to be in compliance.

The sites that were issued a Stop Work Notice were required to take immediate corrective action. Stop Work Notices were generally a final step in escalating enforcement actions because of the impact to the contractors for having to stop work. This corrective action has continually achieved compliance. In order to have the Stop Work Notice lifted, the site must be in strict compliance with all City requirements.

In September 2007, the CMI division was notified by City field staff that potentially unpermitted clearing and grubbing was occurring in the Agua Hedionda Creek just West of El Camino Real. CMI division staff immediately investigated the claim and found that a contractor was in the creek channel removing vegetation with a small excavator. A Stop Work Notice was immediately issued and the contractor was directed to leave the site. CMI staff then notified the required agencies.

The contractor was hired by a neighboring HOA to clean and maintain a nearby desiltation basin. However, there was a miscommunication and the contractor inadvertently began to clear the creek channel. City staff received direction from CA Fish and Game, Fish and Wildlife Service, Army Corps of Engineers, and the San Diego Regional Water Quality Control Board to have the contractor remove any remaining cut vegetation by hand. The contractor complied immediately. City staff was not directed to initiate any further corrective actions.

In December 2007, the City received a formal complaint regarding the presence of anthropogenic fecal matter in a wildlife crossing at the Carlsbad Raceway project. The project inspector and project Superintendent conducted a field inspection of the wildlife crossing and found the material present. A written notice with corrective action, including a required weekly inspection and cleaning, if necessary, was immediately issued to the project Superintendent. The site was cleaned of any foreign matter and has been inspected and maintained on a weekly basis.

4.0 MUNICIPAL COMPONENT

4.1 Introduction

Municipal facilities are required to implement the minimum BMPs identified and described in the City's JURMP dated February 2002 (good housekeeping, preventive maintenance, material handling and storage, employee training, solid waste handling, record keeping, self inspection, and spill response), as applicable. Specific BMPs are identified in SWPPPs and/or inspection reports. Specific pollution prevention measures may vary from one site to another and are evaluated separately at each facility. The City implements and assesses the effectiveness of BMPs through regular staff training, self-inspections, third party inspections by a contractor, and SWPPP implementation. The following sections include a description of specific pollution prevention activities and storm water BMPs implemented from July 1, 2007 through March 23, 2008 per Order 2001-01 by various City departments at all high priority facilities in the inventory. All BMPs were implemented as required per the JURMP.

Municipal areas and activities are subdivided by categories in the sections below. Prioritization of these municipal areas is presented in the classification column of the municipal inventory for Order 2001-01, located in Appendix 4.1.

All high priority areas and activities were inspected annually as required. Under Order 2001-01, there were a total of 63 high priority areas and activities, covering the time period from July 1, 2007 through March 23, 2008. All of the high threat areas and activities were inspected during the spring of 2008. A summary of inspection findings and corrective actions is included in Appendix 4.5 in the 2007-0001 permit section of this Annual Report. Through regular staff training, self-inspections, third party inspections by a contractor, and SWPPP implementation, all required BMPs were implemented and verified at municipal facilities during FY 07-08.

4.2 Minimum BMP Requirements

The following minimum BMPs were implemented at all of the facilities listed in sections 4.3 through 4.10 below.

4.2.1 Employee Training

Municipal departments provided training at least annually to all employees with responsibility for actions that have a potential to cause storm water pollution. A list of all Municipal storm water training is included in Appendix 8.1. Training generally addresses:

- Storm water awareness
- Applicable regulations
- Discharge prohibitions
- Importance of pollution prevention practices (good housekeeping, recycling, waste management, source control, etc.)
- Applicable best management practices (including those called out in the facility storm water pollution prevention plan [SWPPP]), where applicable
- Integrated pest management
- Self-inspections
- Record keeping

Documentation of training is maintained on-site at the location(s) where operations or activities are conducted. Where the operations are covered in a SWPPP, training records are filed with the SWPPP.

4.2.2 Pollution Prevention

The City implements urban runoff pollution prevention practices that are generally recognized for that facility s activity as being effective and economically advantageous.

Pollution prevention is defined in Order 2001-01 as *practices and processes that reduce or eliminate the generation of pollutants. Recycling, use of different types of products or chemicals, and altering operational procedures are all types of pollution prevention practices that reduce the amounts of pollutants generated by a facility*.

The City s approach is to promote pollution prevention as an activity for all municipal employees and locations. Since 1991, the City has implemented a procurement policy that directs the purchase and use of recycled products. Purchasing staff are encouraged to use *Green Purchasing* principles. This refers to buying products and services with reduced effects on human health and the environment (also called *Environmental Purchasing*). While some of these products are office and janitorial supplies, the policy also applies to construction supplies, landscape materials and equipment, automotive, road and highway supplies.

Specific pollution prevention measures may vary from one site to another, so they are evaluated separately at each facility. Where appropriate, high priority municipal facilities implemented site specific Storm Water Pollution Prevention Plans (SWPPP). In depth storm water training programs were also given for appropriate staff. Furthermore, the pollution prevention BMPs identified in the 2002 JURMP were implemented at all municipal facilities. These pollution prevention BMPs include:

- Affirmative Procurement Use alternative, safer, or recycled products.
- Reduce the amount of hazardous materials used by implementing natural controls.
- Redirect storm water flows away from areas of concern.
- Reduce use of water.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.

In addition, the City required the following minimum pollution prevention practices (detailed in SWPPPs or inspection reports) at municipal facilities where appropriate:

- <u>Reduce use of water or use dry cleanup methods:</u> Employees used dry cleanup methods when possible (sweeping, etc.). Any washing activities required containment and recovery, with no discharge to the storm drain system. These BMPs are also required for City contractors.
- <u>Conduct storm drain maintenance:</u> Employees performed regular visual inspections of the storm drains to identified unauthorized discharges and cleaned as needed.

- Recycle: City departments must recycle appropriate items and implement the City procurement policy to purchase and use recycled products.
- Move or cover potential pollution sources from storm water contact: Corporate yards protected materials and products that could potentially contribute to storm water pollution by storing them indoors, or covering them, and providing them with secondary containment as needed.

4.2.3 Good Housekeeping

Good housekeeping practices employed simple common sense in creating and maintaining a clean, orderly environment that reduces the risk of accidents and urban runoff contamination.

- **Routine Housekeeping Inspections.** Locations with higher risk of impacting storm water quality (e.g., storm water outfalls, loading and unloading areas, materials, products and wastes storage areas, equipment and vehicle maintenance and cleaning areas) were inspected regularly. Inspections focused on leaks or conditions that may lead to discharges of pollutants to the Storm Water Conveyance or Receiving Waters.

- **Maintenance of Clean Ground Surfaces.** Sweeping of all paved areas exposed to precipitation or storm water was conducted on a regular basis. Litter controls of all exposed surfaces were also conducted on a regular basis. The frequency of sweeping and litter control was based on site conditions.

- **Waste Management.** Each facility conducted regular pickup and disposal of garbage and waste materials/products to prevent overfill of waste storage containers.

- **Equipment Inspection.** Each facility conducted routine inspection of equipment to ensure proper functioning. Where problems were identified during inspection, proper and prompt maintenance or repair was conducted.

- **Storage.** Raw materials, intermediate products, finished products, byproducts and waste products were stored in covered areas or sealed containers unless the materials or products were not a threat to urban runoff quality. To prevent accidental spills, materials or products were stored away from direct traffic routes. All containers were stacked according to applicable federal, state, and city regulations as well as manufacturers' instructions to avoid damage from improper weight distribution. Pallets or similar devices were used to prevent corrosion of the containers that can result when containers come in contact with moisture on the ground.

- **Limitations on Handling Hazardous Materials.** Each facility limited the handling of hazardous materials to those personnel specially trained to handle these materials.

- **Employee Training.** All good housekeeping practices were incorporated into a facility's employee-training program.

In addition to the BMPs listed above, good housekeeping was addressed as a site specific BMP for each category of facilities listed in Sections 4.3 4.10. See BMP SC-60 for site specific information on implementation.

4.2.4 Spill Response and Prevention

Municipal staff implemented BMPs at fixed facilities and field programs to prevent, control and cleanup spills. The following are general BMPs that were implemented:

- BMPs listed in SC-11, Spill Prevention, Control and Cleanup (City of Carlsbad JURMP 2008).
- Spill cleanup materials are readily available and in known locations.
- Spills were cleaned up immediately and dry methods are used where possible.
- Spill cleanup material was properly disposed of.

Spill response and prevention is also addressed as a site specific BMP for each category of facilities listed in Sections 4.3 4.10. See SC-11 for site specific information on implementation.

4.3 Roads, Streets, Highways, Parking Facilities

4.3.1 Background

This section includes an inventory of roads, streets, highways, and parking facilities which are deemed high priority areas according to Order 2001-01, Section F.3.a.(3)(b)i and associated BMPs. This section also includes information on the City s street sweeping program and BMPs for the City s street maintenance program.

4.3.2 Source Characterization

The table below lists the 20 high priority roads, streets, highways, and parking facilities on the City s municipal inventory, as revised during FY 06-07.

Table 4.1 Inventory of Roads, Streets, Highways, and Parking Facilities

1	CURBED STREETS	City service area
2	UNCURBED ROADS	City service area
3	PINE FIELD PARKING LOT	3333 HARDING ST
4	STAGE COACH PARKING LOT	3420 CAMINO DE LOS COCHES
5	POINSETTIA COMMUNITY PARK PARKING LOT	6600 HIDDEN VALLEY RD
6	HOSP GROVE PARK PARKING LOT	JEFFERSON & MONROE
7	CALAVERA HILLS PARK PARKING LOT	2997 GLASGOW DR
8	CARLSBAD UNIFIED SCHOOL DISCTRICT PARKING LOT	801 Pine Avenue
9	LA COSTA CANYON PARK PARKING LOT	3020 Pueblo Street
10	FARADAY CENTER PARKING LOT	1635 FARADAY AV
11	CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR
12	HOUSING/REDEVELOPMENT OFFICE PARKING LOT	2965 ROOSEVELT ST B
13	COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR
14	HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST
15	CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE
16	ARTS OFFICE PARKING LOT	2955 ELMWOOD ST
17	DOVE LIBRARY PARKING LOT	1775 DOVE LN
18	SAFETY CENTER PARKING LOT	2560 ORION WY
19	SKATEPARK PARKING LOT	2560 ORION WY
20	ADULT LEARNING PROGRAM PARKING LOT	1207 CARLSBAD VILLAGE DR STE O

4.3.3 Site Specific BMP Requirements

The following site specific BMPs were implemented where applicable at the 20 high priority facilities listed above in Table 4.1.

Table 4.2 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-70 Road and Street Maintenance
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.3.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.2 were implemented at the facilities listed in Table 4.1 and are further described below:

- SC-11 Spill Prevention, Control, and Cleanup: Spill kits are located in all vehicles.

- SC-20 Vehicle and Equipment Fueling: No vehicle or equipment fueling took place as part of these activities or at these locations.
- SC-21 Vehicle and Equipment Cleaning: No vehicle or equipment cleaning took place as part of these activities or at these locations.
- SC-22 Vehicle and Equipment Repair: No vehicle or equipment repair took place as a part of these activities or at these locations.
- SC-33 Outdoor Storage of Raw Materials: Plastic tarps cover raw materials in the yard, equipment is covered by canopies, and the material is covered by a permanent overhead structure or stored indoors. Materials associated with street maintenance activities are stored at the Maintenance and Operations Facility.
- SC-34 Waste Handling and Disposal: Paint waste was returned to the maintenance yard where it was transferred directly from the generating vehicle to secured storage containers. This was done within a contained area in case of any accidental spillage. These containers are clearly marked and stored until arrangements are made for a certified waste management company to remove them and transfer them to an approved facility. Four cigarette butt collectors have been placed along the sea wall, providing a place for proper disposal.
- SC-41 Building and Grounds Maintenance: In the event that any pressure washing is necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking and Storage Area Maintenance: Parking lots and storage areas were swept biweekly.
- SC-60 Housekeeping Practices: Work sites were swept and all debris was removed upon completion of any asphalt or concrete repair. Water was used when sweeping to keep dust down.
- SC-70 Road and Street Maintenance: Storm drain inlets were protected using rock bags prior to the start of any maintenance activities. Concrete wash out was performed on a plastic tarp and contained to prevent any discharge to the storm drain. Street sweeping was performed for all curbed streets and municipal parking lots in the City. Table 4.3 below indicates the distance swept, frequency, and amount of materials removed as a result of the street sweeping activities.

Table 4.3 Street Sweeping Data

Priority	Description	Distance	Frequency	Material Removed
High	Arterials/seawall	100 miles	Weekly	90 tons/month
Medium	Residential	900 miles	Biweekly	
Low	Alleys	50 miles	Biweekly	
Parking Lots		53 acres	Biweekly	

Downtown areas were swept twice weekly

- SC-71 Plaza and Sidewalk Cleaning: A self-contained wet sweeper was used on all tile sidewalks in the downtown area on a scheduled basis.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers were stored inside and used sparingly in accordance with required application practices.

- SC-75 Waste Handling and Disposal: All materials were hauled directly to transfer station and were covered.

4.4 Flood Management Projects Flood Control Devices

4.4.1 Background

This section includes BMPs and an inventory of the City s Flood Management Projects and Flood Control Devices which are deemed high priority areas according to Order 2001-01, Section F.3.a.(3)(b)ii and associated BMPs. This section also includes a description of the Storm Drain Maintenance Program activities.

4.4.2 Source Characterization

The table below lists the high priority Flood Management Projects and Flood Control Devices on the City s municipal inventory, as revised during FY 06-07.

Table 4.4 Flood Control Projects/Devices

1	DESILTATION BASIN 13	SW END FARADAY AV SO OF LOT 102 OF CRC
2	DESILTATION BASIN 30	SW CORNER MARRON AND MONROE
3	DESILTATION BASIN 43	CAMINO HILLS AND FARADAY NE CORNER
4	BUENA VISTA CHANNEL	Buena Vista Creek along Haymar
5	KELLY DRIVE CHANNEL	Kelly Drive
6	PARK AND KELLY OUTFALL	Kelly Drive at Park Ave
7	PARK AND ANDREA OUTFALL	Andrea at Park
8	PARK AND VALENCIA OUTFALL	Valencia at Park
9	PARK AND NEBLINA OUTFALL	Nebline at Park
10	OTHER OUTFALLS	City service area
11	CATCH BASINS/INLETS	City service area
12	MS4 PIPELINES	City service area
13	CONCRETE CHANNELS	City service area
14	V DITCH CHANNELS	City service area
15	OTHER OPEN CHANNELS	City service area

4.4.3 Site Specific BMP Requirements

The following site specific BMPs were implemented where applicable at the high priority facilities listed above in Table 4.4.

Table 4.5 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-21 Vehicle and Equipment Cleaning
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal

4.4.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.5 were implemented at the facilities listed in Table 4.4 and are described below:

- SC-11 Spill prevention, Control, and Cleanup: All vehicles have spill kits and key vehicles carry hydrocarbon booms. All trash was placed in 55 gallon trash bags. The maintenance sweeper truck was called out to assist in spill cleanup when necessary.
- SC-21 Vehicle and Equipment Cleaning: All vehicles used in flood control device cleaning were washed at fleet maintenance using an enclosed pressure wash system. The system has a secondary water and oil separator plumbed into the sanitary sewer system.
- SC-34 Waste Handling and Disposal: Trash was hauled to Palomar Transfer Station. Debris and other organic material transferred and deposited at 2400 Tamarack Avenue in three concrete covered bins. The material was then tested for contaminants and disposed of properly upon receipt of permissible test results.
- SC-60 Housekeeping Practices: Trash was removed from these areas of the MS4 on a routine basis.
- SC-74 Drainage System Maintenance: A small self-contained vacuum with pressure washer was used to clean the drainage system. All material in the drain box was removed by the vacuum. Disposal of the water and material occurred using a filter sock, allowing water to be decanted into the sanitary sewer system. The solid material was taken to the Tamarack site described above. All trash was removed from the MS4, placed in 55 gallon trash bags, and placed in a 40 cubic yard roll off dumpster that was covered. The material was then transported to Palomar Transfer Station for disposal. Data pertaining to maintenance activities of the MS4 is in Table 4.6.

Table 4.6 MS4 Maintenance Activities

Structure	Inspected	Cleaned	Amount of Material Removed (tons)
Catch Basin/Inlet	2380 units[1]	Anthropogenic trash removed 100□	37.5[2]
MS4 miles	□15,000 linear feet	15,000 linear feet	3
Open Channel miles	32,000 linear feet	1100 linear feet	150

[1]Number represents inspections from July 01, 2007 to March 23, 2008, balance inspected after March 24, 2008 four and described in JURMP Annual Report for Order 2007-0001, March 24 □June 30, 2008.
[2]Estimation based on total material removed for Fiscal Year □50 tons x □ (representing □ year).

The cleaning of cement lined channels requires special permits through the California Department of Fish and Game, San Diego Regional Water Quality Control Board, and the US Army Corps of Engineers. A consultant was hired to draft the necessary permits to clean Kelly Channel during this past year. The channel was cleaned using a contractor the week of March 10, 2008.

A Maintenance District funds the annual routine maintenance of the Buena Vista Creek Channel. 100-year flood protection is maintained by removing 50□ of the channel vegetation over a five year period. Annually, at the end of the growing season (October or November), crews cut back 10□ of the channel using hand removal (or 20□ of the northern half of the channel). This maintenance includes removal of any invasive and/or exotic vegetation for the entire length of the channel.

- SC-75 □Waste Handling and Disposal: Described under SC-34 and SC-74 above.
- BMPS to limit infiltration from sanitary sewer to storm drain system: A preventive maintenance schedule was implemented that includes jet rodding, and vactoring the sanitary lines throughout the city of Carlsbad. Closed circuit television was used for investigations in sewer lines.
- Storm Drain Inserts including fossil filters, rapid flow BMPs, and debris catchers with zinc filters are in place at various storm drain locations throughout the City. Fossil filters removed trash and hydrocarbons, while debris catchers were installed to prohibit anthropogenic trash and debris from entering the storm drain system. All structural BMPs are inspected and maintained annually.

4.5 Fire Stations

4.5.1 Background

There are six fire stations in the City. BMPs for these facilities are described below.

4.5.2 Source Characterization

Table 4.7 below lists the high priority Fire Stations on the City's municipal inventory.

Table 4.7 Fire Stations

1	FIRE STATION 1	1275 CARLSBAD VILLAGE DR
2	FIRE STATION 2	1906 ARENAL RD
3	FIRE STATION 3	3701 CATALINA DR
4	FIRE STATION 4	6885 BATAQUITOS DR
5	FIRE STATION 5	2540 ORION WY
6	FIRE STATION 6	3131 LEVANTE ST

4.5.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.8 were implemented at the high priority facilities listed in Table 4.7.

Table 4.8 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.5.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.8 were implemented at the facilities listed in Table 4.7 and are described below. In addition, training and pollution prevention BMPs specific to the Fire Department are described below.

Training

- The City's Reclaimed Water Facility continued to be utilized for fire engineer training and testing. A training trailer facilitated engineer operations, pump testing, and other wet training opportunities. The Facility allowed for wet training and testing opportunities while ensuring that no water was discharged to the MS4.
- Suitable locations were selected to provide wet training opportunities for personnel, while ensuring that appropriate BMPs were in place to protect the storm drains and eliminate discharges to the MS4. These sites were generally located on pervious surfaces with no potential for discharge to the storm drain system.
- A representative from the Fire Department attended and participated in the City's Storm Water Committee meetings on a regular basis.

Pollution Prevention

- Reducing the use of water using dry cleanup methods. The department continued to implement a department policy limiting outside water use applicable to vehicle, hose, and equipment washing. Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations. Awareness was heightened at fire scenes to minimize the potential for excessive water flow.
- Materials were recycled where possible.
- Storm Water Manuals were developed for each station which included SWPPPs with site maps, inspection reports, facility specific spill response procedures, training records, and department policies.
- SC-11 Spill Prevention, Control, and Cleanup: Spill response equipment and materials are clearly identified and staged in accessible locations at each station. Awareness was heightened at incident scenes to contain potential discharges (once the scene had been stabilized) to prevent pollutants from entering the MS4. The Department continued implementation of the City s spill response procedure for incidents that occur on City streets. Absorbent materials are kept on all engines. The spill response plan is to apply absorbent, sweep material, place in bags, and remove from site for proper disposal. A large spill kit is also kept at Station 5.
- SC-21 Vehicle and Equipment Cleaning: The department continued to implement a department policy limiting outside water use that is applicable to vehicle, hose, and equipment washing. Vacuum equipment was purchased to recover and contain all wash water from vehicle washing activities occurring at the Fire Stations.
- SC-22 Vehicle and Equipment Repair: All vehicle and equipment repair was performed at the City s Fleet Maintenance Facility.
- SC-34 Waste Handling and Disposal: Waste containers were inspected regularly for leaks and to ensure that lids remain closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter.
- SC-41 Building and Grounds Maintenance: In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths are used where possible. Paint brushes and tools were always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: Sweeping and removal of organic material from parking lots and walkways was completed on a weekly or as needed basis at all fire stations.
- SC-60 Housekeeping Practices: Fire stations are kept clean and orderly. Wash water was disposed of properly. Sweeping material was disposed of properly. Training on storm water and spill response as provided regularly.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers were stored inside and used sparingly in accordance with required application practices.
- SC-75 Waste Handling and Disposal: Solid waste was collected and disposed of properly at appropriate disposal facilities (Palomar Transfer Station, Waste Management) in accordance with all applicable laws and regulations. Waste containers were inspected regularly for leaks and to ensure that lids remain closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter. Liquids were not

disposed of in waste containers. Recycling was implemented where possible; bins were provided.

4.6 Recreation Facilities

4.6.1 Background

The swim complex is the only recreation facility on the City's municipal inventory as a high priority area. This is primarily due to the chemicals stored on-site. BMPs implemented at this facility are described below.

4.6.2 Source Characterization

The Swim Complex is the only high priority Recreation Facility on the City's municipal inventory.

4.6.3 Site Specific BMP Requirements

The site specific BMPs listed below in Table 4.9 were implemented at the Swim Complex.

Table 4.9 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-31 Outdoor Container Storage
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-60 Housekeeping Practices
SC-72 Fountains & Pools Maintenance
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.6.4 Program Implementation

BMPs listed in Table 4.9 above were implemented at the Swim Complex and are described below.

- SC-11 Spill Prevention, Control, and Cleanup: Commercial spill kits are kept onsite. A facility specific SWPPP was developed and kept onsite. The SWPPP includes a spill response plan.
- SC-31 Outdoor Container Storage: The caustic soda is stored under cover. The majority of materials stored on-site are kept inside sheds. These areas were cleaned up and maintained regularly.
- SC-34 Waste Handling and Disposal: Trash bins and containers are enclosed and covered. Lids remained closed at all times.
- SC-41 Building and Grounds Maintenance: (parks/facilities) Staff performed daily parking lot inspections looking for litter, debris, and leaking vehicles. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.

- SC-60 Housekeeping Practices: Cleaning of pool decks was performed by sweeping in most cases. Occasionally wash down was necessary and all wash water was directed to a pervious area for percolation (football field).
- SC-72 Fountains and Pools Maintenance: Water was de-chlorinated if discharge to storm drain was necessary; however, this is a rare occurrence. All filter backwash was discharged to sewer; overflow from pool decks was directed to earthen swale and percolates.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers were stored inside and used sparingly in accordance with required application practices.
- SC-75 Waste Handling and Disposal: The dumpster remained closed and locked at all times and were serviced weekly.

4.7 Publicly Owned Treatment Works

4.7.1 Background

The City of Carlsbad is an owner in the Encina Wastewater Authority, a Joint Powers Authority. Encina treats raw sewage to the secondary treatment level.

The Carlsbad Water Recycling Facility intakes secondary treated water and treats it again to the tertiary level of treatment which is used as recycled water throughout the City of Carlsbad

This facility was determined to be a high priority area as required in Order 2001-01, Section F.3.a.(3)(b)iv. The BMPs listed below were implemented at this facility.

4.7.2 Source Characterization

The Carlsbad Recycled Water Facility is the only high priority Publicly Owned Treatment Works on the City s municipal inventory.

4.7.3 Site Specific BMP Requirements

The site specific BMPs listed in Table 4.10 were implemented at the Recycled Water Facility.

Table 4.10 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-75 Waste Handling and Disposal

4.7.4 Program Implementation

Each of the applicable BMPs listed above were implemented at the Carlsbad Recycled Water Facility and are described below.

- Employee Training: Employees were informed of activities that could potentially cause contamination of storm water and the importance of carefully conducting these activities in areas that do not discharge/drain to storm drains. Storm water pollution prevention and BMP brochures were available to everyone who works at the materials storage area. Subcontractors were informed about the storm water requirements and their responsibilities. Training consisted of informal tailgate meetings, formal classroom training, or self-guided training activities. Employees in targeted positions were trained annually on the requirements of the SWPPP. Employee training, at a minimum, included: SWPPP requirements; spill response and reporting; good housekeeping; BMP updates and implementation; and materials and waste handling and storage procedures.
- SC-11 Spill Prevention, Control, and Clean-up: A current spill response plan was provided in the SWPPP. The spill response plan addresses measures to clean, abate, and prevent spills and leaks from entering the storm drain. Employees were trained on the elements of the plan. Rags, damp mops, and absorbents were readily accessible. Waste was disposed of properly. Dry cleanup methods were used whenever possible. Spills on dirt areas were cleaned up by digging up and properly disposing of contaminated soil. Spills over 10 gallons were reported to the Storm Water Protection Program and/or the appropriate spill response agencies immediately. Employees were trained to routinely check for leaks and spills.
- SC-20 Vehicle and Equipment Fueling: All vehicles were fueled off-site. Equipment is run with electricity and no equipment fueling is necessary.
- SC-22 Vehicle and Equipment Repair: All vehicle repairs were performed off-site. When equipment repair was necessary, work was performed in covered, contained areas that were not susceptible to storm water runoff.
- SC-31 Outdoor Container Storage: There were several chemical storage tanks stored outside under cover and in full secondary containment structures. See SC-33 below for more information.
- SC-33 Outdoor Storage of Raw Materials: Secondary containment was implemented where materials were stored outside. Examples of temporary BMPs utilized are: a dike, berm, or filter on the down slope sides of any stockpiles. All containment devices used around stockpiles were maintained to work effectively and were replaced when necessary. The chemical storage tanks were contained within a concrete parapet wall enclosure. Spills within the chemical storage areas were contained within the concrete walls and drain to a sump. Where chemical deliveries occur, a concrete pad conveys flow to a curb inlet. From the curb inlet, flow is controlled by plug valves, directing the flow to the sump.
- SC-34 Waste Handling and Disposal: Dumpsters were covered and maintained and checked frequently for leaks. Lids were kept closed at all times. Dumpsters were never cleaned out using water. When cleaning the containers, all rinse water from cleaning was routed to the sanitary sewer system. All wastes and construction debris were disposed of properly. Many materials and wastes were recycled including broken asphalt and concrete, cleared vegetation, scrap metals, aluminum cans, and plastic bottles. Materials and debris that cannot be recycled were taken to an appropriate landfill or transfer station, or properly disposed of as hazardous waste. The waste storage area was swept or otherwise cleaned frequently using dry methods to collect all loose solids for proper disposal. If the amount of waste accumulated appears to frequently exceed the capacity of the dumpster, then another container was obtained and utilized or collection frequency is increased. Green waste consisting of clippings, cuttings and droppings of leafy and woody materials was disposed of properly at an approved composting location or permitted landfill.
- SC-60 Housekeeping Practices: Site was kept free of litter and debris. Trash cans and recycling receptacles were located around the site to minimize litter. Material moving and

transfer activities were scheduled during dry weather periods, where possible. Heavy equipment was maintained in good working condition. Areas are inspected frequently for leaks and repaired as needed. Major equipment repairs were performed away from the storage area. Paved surfaces were swept that drain to storm drains, creeks, or channels. Cleanup materials such as brooms, shovels, dustpans, and sweepers are stocked near the storage area. Paved storage areas were swept weekly for collection and disposal of loose solid materials, and are not hosed into a storm drain or conveyance ditch. Information was distributed on good housekeeping practices during employee training sessions and discussed at employee meetings. Good housekeeping tips and reminders were posted on employee bulletin boards.

- SC-75 Waste Handling and Disposal: See SC-34 above.
- Source Control BMPs:
  - Flo-Guard inlet baskets at all curb inlets on site to collect oil and grease and debris from site.
  - Vegetated swale (approximately 400 feet) collects and treats runoff from a portion of the site.
  - Roof over chemical storage area.
  - Permanent secondary containment is in place around all chemical storage areas.
  - By-pass valves are installed at containment areas to divert rain water.

4.8 Sanitary Sewer Facilities

4.8.1 Background

The facilities listed in Table 4.8.2 are sewer lift stations owned and operated by the City. The table also includes the City s collection system. These have been determined to be high priority areas, primarily due to the presence of sewage and potential for contamination of surface waters resulting from sewer overflows. BMPs implemented at these facilities and BMPs applicable to maintenance of the collection system are described below.

4.8.2 Source Characterization

Table 4.11 below lists the high priority Sanitary Sewer Facilities on the City s JURMP inventory.

Table 4.11 Sanitary Sewer Facilities

1	CANNON SEWER LIFT STATION	2301 CANNON RD
2	CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL
3	FOXES LANDING LIFT STATION	4155 HARRISON ST
4	GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD
5	KNOTS SEWER LIFT STATION	501 KNOTS LN
6	LA GOLONDRINA SEWER LIFT STATION	2516 LA GOLONDRINA ST
7	POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN
8	SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV
9	TERRAMAR SEWER LIFT STATION	300 CANNON RD
10	VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST
11	VILLAS SEWER LIFT STATION	2860 WINTHROP AV
12	CITY'S SANITARY SEWAGE COLLECTION SYSTEM	City service area

4.8.3 Site Specific BMP Requirements

The site specific BMPs listed in Table 4.12 were implemented at all Sanitary Sewer Facilities.

Table 4.12 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-22 Vehicle and Equipment Repair
SC-60 Housekeeping Practices
SC-76 Sewer Utility Maintenance

4.8.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.11 and are described below.

- SC-11 Spill Prevention, Control, and Cleanup: Spill kits are kept inside at all facilities; secondary containment structures were implemented around generator fuel cells and around all chemicals stored on-site; overflow response included immediate Vactor response, containment, and cleanup, per the City's SSORP spill mitigation and clean-up; all vehicles have spill kits.
- SC-22 Vehicle and Equipment Repair: Pump repair occurred indoors on site and was generally performed in the wet well; all material went back to the head works and was transferred to the Encinas treatment plant; wet wells were cleaned every 6 weeks with Vactor equipment and staff ensured that there were no leaks or spills at the facilities.
- SC-60 - Good Housekeeping: Sweep and vacuuming instead of washing down; blowers were used to clean off concrete and asphalt.
- SC-76 Sewer Utility Maintenance: All stations were inspected and cleaned daily; Vactors were checked for leaks during pre-trip inspections; all materials were discharged at Encina Wastewater Authority: solids into grit bin, liquids at headworks; recently the City began to implement FOG requirements as per Order 2006-003 including revision of ordinances, public outreach, and inspections of FOG generating facilities.

4.9 Water Facilities

4.9.1 Background

There is one high priority facility on the City's municipal inventory related to water facilities, primarily due to the chemical storage on-site. BMPs implemented at the site are described below.

4.9.2 Source Characterization

The Maerkle Dam Reservoir, Pump Station, and Chlorination Station is the only high priority Water Facility on the City's JURMP inventory.

4.9.3 Site Specific BMP Requirments

The site specific BMPs listed in Table 4.13 were implemented at the Maerkle Dam and Reservoir.

Table 4.13 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-22 Vehicle and Equipment Repair
SC-60 Housekeeping Practices
REPAIRS AND NEW LINE INSTALLATION (LATERALS, MAINS, HYDRANTS)
RESERVOIR CLEANING
DEWATERING

4.9.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities Maerkle Dam Reservoir, Pump Station, and Chlorination Station and are described below.

- Pollution Prevention replaced existing chlorine scrubber media from caustic soda to an environmentally friendly carbon-based media. Installed automatic shut-off valve units to accompany the chlorine vacuum regulator assembly providing three separate means of isolation in the event of a chlorine problem.
- SC-11 Spill Prevention, Control, and Cleanup: Specialized training to mitigate a chlorine release. In addition to the training all chemicals are stored in containment structures designed to contain stored amount. All chemicals were inspected prior to off loading for containment defects and returned if noted. Operations Staff was trained in Hazardous Material Emergency Response, technician level (HAZWOPER), specialized in chlorine mitigation
- SC-22 Vehicle and Equipment Repair: Vehicle maintenance was performed at the Fleet Maintenance Yard. Equipment repair work was performed with all appropriate BMPs in place.
- SC-60 - Good Housekeeping Increased sweeping schedule of asphalted areas. Chemical supplies were kept at a minimum to reduce potential releases.
- Repairs and New Line Installation: All flushing requirements followed established BMP's regarding de-chlorination and related sediment recovery concerns.
- Reservoir Cleaning and Dewatering: All reservoir de-watering followed pre-established BMP's addressing daily water volume discharge amounts, de-chlorination, monitoring of chlorine residuals and sediment removal and disposal.
- All storm drain collectors were regularly inspected and cleaned accordingly. All building floor drains were inspected and verified to be isolated from discharge system.

4.10 Municipal Yards

4.10.1 Background

Table 4.14 below lists the City's municipal yards that were determined to be high priority areas as required per Order 2001-01, Section F.3.a.(3)(b)iv. Site specific BMPs implemented at each facility are listed in Table 4.15 and described below.

4.10.2 Source Characterization

The table below lists the High Priority Municipal Yards on the City's municipal inventory.

Table 4.14 Municipal Yards

1	POINSETTIA MAINTENANCE STATION	6600 HIDDEN VALLEY RD
2	STAGECOACH MAINTENANCE STATION	3420 CAMINO DE LOS COCHES
3	FLEET MAINTENANCE FACILITY	2480 IMPALA DR
4	M&O OPERATIONS YARD	5950 EL CAMINO REAL
5	OAK OPERATIONS YARD	405 OAK AV
6	PARKS MAINTENANCE/STORAGE	1166 CARLSBAD VILLAGE DR

4.10.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.15 were implemented at Municipal Yards, where applicable. For example, vehicle and equipment repair was not performed at all facilities; therefore SC-22 does not apply to all yards.

Table 4.15 Best Management Practices

Storm Water Pollution Control Plan
SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-61 Safer Alternative Products
SC-70 Road and Street Maintenance
SC-71 Plaza and Sidewalk Cleaning
SC-72 Fountains & Pools Maintenance
SC-73 Landscape Maintenance
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal

4.10.4 Program Implementation

BMPs listed in Table 4.15 were implemented specific to each facility and are described below:

<u>POINSETTIA MAINTENANCE STATION; STAGECOACH MAINTENANCE STATION; PARKS MAINTENANCE YARD</u>

- Storm Water Pollution Control Plan (SWPPP description): Site specific SWPPPs were developed and implemented at each of these three sites.

- SC-11 Spill Prevention, Control, and Clean-up; Spill kits located on-site; drip pans were placed under all equipment kept on-site; spill kits are located in all vehicles; spill response plan was updated and kept on-site.
- SC-20 Vehicle and Equipment Fueling: No vehicle or equipment fueling was performed on-site.
- SC-21 Vehicle and Equipment Cleaning: Most equipment was dry-cleaned in designated areas located away from storm drains; where wet cleaning was necessary, it was performed over pervious surfaces in a manner that allowed all water to percolate, generating no runoff to the storm drain system.
- SC-22 Vehicle and Equipment Repair: All equipment was repaired in designated areas away from storm drains; no vehicle repair was performed on-site.
- SC-31 Outdoor Container Storage: All chemical products were kept in locked storage bins with overhead coverage and containment.
- SC-33 Outdoor Storage of Raw Materials: All bagged materials were stored on skids (pallets) and covered with canopies; canopies were also used to cover scrap metals and equipment.
- SC-34 Waste Handling and Disposal: All waste containers were covered.
- SC-41 Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 Housekeeping Practices: Weekly yard clean-up and litter removal and monthly site inspections.
- SC-61 Safer Alternative Products: IPM practices and green waste applications were in use and are described in detail below.

  In conjunction with the Integrated Pest Management (IPM) program, the Parks Maintenance Division continued to utilize slow release fertilizers in an effort to reduce the frequency of applications while minimizing the potential of fertilizer runoff. In some cases, staff reduced the recommended amount of fertilizer per 1,000 square feet by 50 to minimize flush of growth on turf which in turn reduced the amount of clippings. To help monitor fertilizer applications, the Parks Maintenance Division instituted a soil testing program which defines soil properties allowing the correct monitoring of fertilization applications for proper use and desired outcome. In accordance with the new IPM practices, weed control applications were applied per the Healthy Schools Act in accordance with the School Districts policies and guidelines. Staff continued searching for alternative methods for pest control that have been proven to be safe and effective.

  As required by the Department of Pesticide Regulation, all chemical applications were reported to the County Agriculture Department on a monthly basis. As identified in the JURMP, all BMPs were implemented to address pesticide, herbicide, and fertilizers sources of pollution. Specific, BMPs implemented during FY 07-08 include:

- **Education:** A training program for identifying and defining chemicals, proper handling, applying, storage, disposal, irrigating, and using non-synthetic alternatives was implemented. At many of the training seminars, new IPM methods were often presented for consideration by the department. All training information including BMPs were provided to personnel to keep in personalized folders for individual use. In addition, a master application manual that includes all Storm Water BMPs, training, and inspections was also prepared.

- **Non-chemical applications:** Some pest problems can be eliminated or controlled by handpicking, pruning, or high pressure spraying with water. Many pest problems can be reduced or eliminated by removing affected leaves or plant parts. During FY 07-08, efforts have been made to improve upon our IPM system in the City s Parks and Downtown Village areas. The release of lady-bird beetles at Pine Park and the Downtown Fountain areas to combat infestations of aphids have proven successful in eradicating the bugs. Other methods used to decrease the departments dependency on chemical sprays during FY 07-08 include:

    - Increased mulching of planter beds to smother weed germination
    - Increased tilling of planter beds to kill young weed sprouts
    - The use of organic plant derivative sprays such as Safer Products
    - The use of water to spray plants infested with giant whitefly
    - The removal of dying or diseased plant material to decrease the presence of harmful organisms.

- Insecticide application was performed on an as needed basis and was treated internally or by an outside pest control contractor after diagnosis.

- **Native Vegetation:** The Parks Maintenance Division continued to explore opportunities to use native vegetation to control pests, reduce chemical application, and maintain the aesthetic values of the Parks and Medians.

- **Schedules for Irrigation and Application** Irrigation systems were monitored and inspected on a weekly basis in an effort to minimize water loss. In addition, the use of evapo-transpiration (ET) gauges for controlling the irrigation system helped to reduce watering times based on evaporation and transpiration of plants and turf. ET gauges were installed at Poinsettia, Stagecoach, Pine, Aviara and Calavera Park. These gauges also helped staff to adjust watering times at other locations that were not connected to the gauge. During FY 07-08, all irrigation systems were inspected weekly and repaired as necessary to prevent excess runoff. At Poinsettia, Aviara, Stagecoach, and Pine Parks synthetic turf was installed on the soccer and sports fields, which requires minimal maintenance, fertilization, weed control or watering. The synthetic turf has proven to be successful in eliminating the use of water for irrigation.

- SC-70 Road and Street Maintenance: Not applicable at yard sites.
- SC-71 Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
- SC-72 Fountains and Pools Maintenance: Not applicable at park sites.

- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers were stored inside and used sparingly in accordance with required application practices. Also refer to IPM practices described in SC-61.
- SC-74 Drainage System Maintenance: Storm drain inlets were maintained by City s Storm Drain Maintenance Division on an annual basis.
- SC-75 Waste Handling and Disposal: All non-recyclable waste was disposed of at or transferred to an appropriate transfer station or facility.
- Site Design - Stagecoach Facility drains to grassy field for percolation prior to discharge from site; the Parks Maintenance/Storage Yard also drains to a pervious area allowing low flows to infiltrate into the soils instead of running into the storm drain.

FLEET MAINTENANCE YARD

- Employee Training Storm water protection was covered as part of safety meetings.
- Pollution Prevention Recycling containers were provided at the ends of the fuel pump islands.
- Storm Water Pollution Control Plan: A site specific SWPPP was developed and is maintained on-site.
- SC-11 Spill Prevention: Spill kits containing absorbents and booms continued to be located at the fuel island and south west of the fuel island within the yard, including the shop area.
- SC-20 Vehicle and Equipment Fueling: Spill kits are located adjacent to the vehicle fueling area.
- SC-21 Vehicle and Equipment Cleaning: All vehicle washing was performed on the wash rack, inside the wash bay. This included pressure washing and hand washing of vehicles and equipment. Wash waste water was treated prior to release to the sewer system.
- SC-22 Vehicle and Equipment Repair: All maintenance and repairs to Fleet vehicles were performed inside the shop bays. Any vehicle on the dead line that had a leak will have a drip pan put under it until it was brought into the shop. Any leaks or spills were handled immediately, with either the drip pans or an absorbent. The absorbent was picked up immediately and stored in the drums labeled for waste absorbent. Damaged equipment was covered with provided tarps. Wrecked vehicles were covered with tarps.
- SC-31 Outdoor Container Storage: Outdoor containers that include full coverage and containment of materials are utilized for storage of tires and motorcycles (two 40 yard containers) and for storage of fire extinguisher service items, used batteries, and oil filters for recycling (sheds).
- SC-33 Outdoor Storage of Materials: All materials stored outside are kept under one of the provided canopies or in the shed. City generated hazardous waste is stored in the hazardous waste shed (covered) in an appropriate container and on a pallet. This includes batteries and waste metals. A chain link fence has been installed to prevent unauthorized dumping at the Facility. Signage is also in place to inform citizens that materials are not to be left at the Facility and provides information on proper disposal facilities.
- SC-34 Waste Handling and Disposal: Waste oil was drained into the waste oil containers or into a drip pan and then into a waste oil container. The containers were emptied as needed into the waste oil in ground tank as needed. Used batteries are stored in the provided container inside the shed. Used anti freeze was drained into one of the large drip

pans, then transferred to the poly drums inside the shed. Scrap metal is stored in the provided container and covered. Used tires are stored in the covered tire storage bunker.

- SC-41 Building and Grounds Maintenance: Language was included in contracts requiring storm water compliance and allowing the City to implement BMPs as needed with all associated costs recovered from the contractor. In the event that any pressure washing was necessary, all washwater was recovered for proper disposal. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: The Fleet Yard was swept via Sweeper-truck on a monthly schedule; clean ups of spills were done with dry absorbent and picked up directly, all leaks were captured with drip pans and brought into the shop for service.
- SC-60 Housekeeping Practices: The shop is either swept or mopped. All debris was either picked up and put into appropriate containers or, in the case of wet mopping, all water was directed to the drains inside the shop that flow to our separator. All contaminated floor sweep was stored in labeled containers and removed by our hazardous waste contractor. The Fleet yard will be inspected regularly. Areas inspected were the shed and tire storage area at the north end of the shop, the waste tire and hazardous waste bunker along the north fence line, the two large dumpsters, the two trash and two recyclables cans at the fuel pumps, the spill kits for the fuel island, the storm drains on-site and the paved lot and dirt area at the east end (which is now fenced). Inspection criteria: all waste drums/containers are to have secondary containment, all materials are to be stored in covered areas. Appropriate areas included a shed and two canopies plus the hazardous waste container and waste metal containers. The dumpsters, trash cans, recyclables cans and metal storage must be closed and no trash falling out of them. The filters at the storm drains were inspected for cleaning or replacement. The lot was inspected for spills and cleaned as needed. Vehicles in the lot are inspected for leaks; action was taken to contain leaks as needed. The wash rack area, trash containers area, and drains were inspected for clogging from debris. All employees took immediate action to correct any issues found during inspections of the Fleet yard directly.
- SC-71 Sidewalk Cleaning: Where power washing was necessary, wash water was not allowed to drain to the storm drain system and was directed to sanitary sewer or to pervious surfaces where possible.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 Drainage System Maintenance: Fossil filters have been installed at storm drain inlets in yard and are inspected and maintained regularly.
- SC-75 Waste Handling and Disposal: Updated signage has been installed for Household Hazardous Waste disposal.

MAINTENANCE AND OPERATIONS YARD

- Pollution Prevention Native soils were used whenever possible to backfill trenches: the amount of dirt and soil stockpiled on site was minimized; filtration socks were used to dewater trenches.
- Storm Water Pollution Prevention Plan: A site specific SWPPP is kept on-site and maintained regularly.
- SC-11 Spill Prevention, Control, and Cleanup: Secondary containment where fuel and oil are stored, also yard has spill kits in each vehicle. A hazmat plan has been implemented and is located in the SWPPP.
- SC-20 Vehicle and Equipment Fueling: Small equipment fueling was performed in the secondary containment area or over pervious surfaces.
- SC-21 Vehicle and Equipment Cleaning: Trash was removed daily from the work trucks, otherwise no cleaning or washing was and is allowed at M&O yard.
- SC-22 Vehicle and Equipment Repair: No repairs are performed at yard.
- SC-31 Outdoor Container Storage: Container storage areas are covered using overhead canopies.
- SC-33 Outdoor Storage of Materials: Where necessary, plastic tarps cover raw materials in the yard; equipment is covered by canopies; material is covered by a permanent overhead structure or stored indoors.
- SC-34 Waste Handling and Disposal: All material was put into a covered roll-off container.
- SC-41 Building and Grounds Maintenance: The grounds and parking lot were swept twice a month by street sweeper and weekly by hand when necessary. Trash was removed daily. Erosive areas and slopes were protected by hydroseed, coconut mats, sand bags, and fiber rolls. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Where feasible, work was performed under cover and over pervious areas. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: The parking lot was swept twice a month by a street sweeper; ingress/egress to unpaved area of yard is protected by rocks and shaker plates.
- SC-60 Housekeeping Practices: Recycle bins, dumpsters, and cans covered and kept closed.
- SC-61 Safer Alternative Products: Used less hazardous cleaning materials and water-soluble paints for mark outs.
- SC-70 Road and Street Maintenance: Not Applicable
- SC-71 Sidewalk Cleaning: Swept and/or vacuumed sidewalks.
- SC-72 Fountain and Pools Maintenance: Contractor maintains fountain at facility. No water was discharged during maintenance activities; all filter material was retained on-site for proper disposal.
- SC-73 Landscape Maintenance: All material was cut and carried off by hand in burlap bags; no residue remains on site. Irrigation systems checked regularly to avoid run-off; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 Drainage System Maintenance: Rapid Flow filters and storm drain structures are cleaned annually.
- SC-75 Waste Handling and Disposal: All material was handled properly and covered in yard roll-off dumpsters, or other appropriate containers.

OAK YARD

- Storm Water Pollution Control Plan (SWPPP description): A site specific SWPPP has been developed and implemented at the Oak Yard.
- SC-11 Spill Prevention, Control, and Cleanup: All liquids and hazardous materials are stored in locked containment lockers. These are located within secondary containment areas. Large spill containment kits are strategically located within the yard. MSDS binders are strategically placed throughout the yard.
- SC-20 Vehicle and Equipment Fueling: Small equipment fueling was done only in the secondary containment area.
- SC-21 Vehicle and Equipment Cleaning: Trash was removed daily from the work trucks. No cleaning or washing was allowed in the Oak yard
- SC-22 Vehicle and Equipment Repairs: No repairs were done at the Oak yard.
- SC-31 Outdoor Container Storage: Oak yard has storage areas covered with overhead canopies.
- SC-33 Outdoor Storage of Raw Materials: No raw materials are stored at the Oak yard.
- SC-34 Waste Handling and Disposal: Paint waste was returned to the maintenance yard where it was transferred directly from the generating vehicle to secured storage containers. This was done within a proper containment area in case of any accidental spillage. These containers are clearly marked and stored until arrangements are made for a certified waste management company to remove them and transfer them to an approved facility. Any other debris was placed in a canopy covered 40 yd roll-off. Dumpsters remained covered and all other trash receptacles have lids.
- SC-41 Building and Grounds Maintenance: The Oak yard was swept twice a month by a self-contained street sweeper and weekly by hand. Trash was removed daily. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths are used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: The Oak yard was swept twice a month by a self-contained street sweeper and weekly by hand. Trash was removed daily. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal.
- SC-60 Housekeeping Practices: Recycle bins, dumpsters, and cans remained covered. Yard clean-up was performed by-weekly with monthly site inspections.
- SC-61 Safer Alternative Products: Not Applicable
- SC-70 Road and Street Maintenance: Not Applicable
- SC-71 Sidewalk Cleaning: Not Applicable
- SC-72 Fountain and Pools Maintenance: Not Applicable
- SC-73 Landscape Maintenance: Not Applicable
- SC-74 Drainage System Maintenance: Debris was captured prior to entry into the vegetated swale.

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City continued to track, inspect, and monitor all industrial and commercial facilities on its inventory from July 1, 2007 to March 23, 2008 per Order No. 2001-01. Section 5.2 describes the Industrial Program and Section 5.3 describes the Commercial Program.

5.2 Industrial Sites Sources Element

5.2.1 Background

Major industry types in Carlsbad include airport services, refuse and sewage management, a power plant, pharmaceutical research and development, golf equipment manufacturers, and several light industry parks. The City has implemented a program to inspect industrial facilities, improve compliance, and reduce pollutant runoff.

There were 42 High priority industries on the inventory as of March 23, 2008. Of those 42, all were inspected between July 1, 2007 and March 23, 2008, representing 36 individual businesses on the Inventory.

From July 1, 2007 to March 23, 2008, the City maintained an inventory of 299 industrial facilities prioritized into High, Medium, and Low. The City updated the industrial inventory, mapped all industries, and inspected **all** High Priority industries, as required by RWQCB Order 2001-01.

The total High, Medium and Low priority industrial inspections conducted during this reporting period equaled 133, representing 42 High-Priority, 54 Medium-Priority, and 37 Low-Priority inspections. These 133 inspections not only included physical inspections, but also reviews, phone contacts, and drive by surveillance to determine business status, provide education and outreach materials, and require BMP implementation in accordance with the City ordinance, Permit, and/or General Industrial Storm Water Permit (General Permit). These activities are described in the following subsections.

5.2.2 Source Characterization

Storm water inspectors identify potential pollution sources, assess their threat to water quality, and require the implementation of BMPs to eliminate sources at industrial facilities. The Storm Water Protection Program works closely with the Finance Department to obtain accurate information about new business activities, types (home based or commercial locations), contacts, and other related data. Each quarter, the Storm Water Protection Program downloads, sorts, maps, and prioritizes new businesses.

New businesses are then added to the inventory list and scheduled for inspection. In some cases information provided on business license applications is not correct and other information must be gathered before an inspection can be scheduled. These pre-inspection evaluations help the City determine if a business activities are subject to the Permit requirements. The two types of pre-inspection evaluations the Storm Water Protection Program uses are:

1. Reviews: Business license and other relevant information reviewed to determine whether the businesses should be inspected by the Storm Water Protection Program.

2. Telephone Contacts: If the review fails to provide enough information about the business, the business is contacted by phone to determine their status and schedule an inspection if necessary.

After physical inspections, reviews, or telephone contacts any changes to a business priority or status were recorded on the Storm Water Inventory List and in the Permits Plus database. The inventory as of March 23, 2008 is in Appendix 5.1. Data related to industrial businesses is managed on a continual basis as per departmental procedures and JURMP requirements. Appendix 5.2 contains a map of all prioritized industries on the inventory as of March 23, 2008.

Table 5.1: SIC Groupings by Type, High Priority Industrial

Industrial Sector	Ind High
2675: Die-Cut Paper, Paperboard, and Cardboard	1
28XX: Drugs	3
28XX: Chemical and Allied Products	2
2951: Asphalt Paving Mixtures and Blocks	1
36XX: Electronic and Other Electrical Equipment and Components	1
39XX: Miscellaneous Manufacturing	4
4119: Local Passenger Transportation, NEC	2
42XX: Motor Freight Transportation and Warehousing	2
42XX: Public Warehousing and Storage	1
45XX: Transportation By Air	18
49XX: Electric, Gas, and Sanitary Services	7
TOTAL	42

5.2.3 Best Management Practice Requirements

Pollution prevention activities are proactive approaches industries can take to identify and reduce sources of pollution. Proactive pollution prevention when framed in the context of appropriate BMP identification, use, and maintenance is a key component to improving regional water quality. Pollution prevention measures are specific to industrial types and activities. Industries were informed of pollution prevention opportunities during site inspections, in outreach materials, and through correspondences. City inspectors required the following minimum best management practices (detailed in individual facility inspection reports and/or brochures) for all High Priority industrial facilities.

- Move or cover potential pollution sources from storm water contact. Protect materials and products that could potentially pollute storm water from rain, run-on, runoff, and wind dispersal by storing them indoors or covering them, and providing them with secondary containment as needed. For industries with conditional SIC codes, moving stored materials indoors may allow an exemption from the General Permit requirements.
- Use dry cleanup methods. Washing or cleaning activities that involve the use of a water hose or pressure washing system require the use dry clean up methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible).
- Redirect storm water flows and conduct storm drain maintenance. Perform regular visual inspections of the storm drain to identify unauthorized discharges or pollutants and clean as needed. Industries may be required to modify downspout locations in order to redirect storm water flows away from potential pollutant sources.

- Trash Management. Sweep up around dumpsters and other areas to prevent trash and debris from accumulating. Dumpsters must be kept closed when not in use. All trash must be kept in appropriate sized containers until it can be hauled away.
- Recycle, Reduce and Reuse. Recycle cans, bottles, newspaper, office paper, and cardboard whenever possible. When inspecting solid waste collection areas, inspectors noted if recyclable materials (cardboard, green waste, etc.) were placed in dumpsters.

All High Priority industries were also required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). In addition, some Medium and Low priority facilities were also required to develop and implement SWPPPs if their activities had the potential to contribute to storm water pollution. These businesses were usually given 60-90 days to develop and submit the SWPPP to the Storm Water Protection Program for review and approval. During follow up compliance inspections, businesses were required to show documentation that the SWPPPs had been implemented as required. If the inspector found deficiencies, the facility operator was required to revise the SWPPP and ensure compliance procedures and BMPs were implemented as outlined in the plan.

The City continued to provide a sample SWPPP template to industries as a guide for preparing site specific plans. The sample SWPPP was also provided upon request when the current SWPPP was found to be deficient.

5.2.4 Program Implementation

Best Management Practices Implementation
The City required all inspected industries to implement minimum BMPs and other BMPs applicable to specific industrial activities. BMP information was made available during inspections, in printed materials and direct mailings, at workshops, on the storm water website and hotline, during presentations, and at outreach events. A complete listing of all education and outreach events held during this reporting period can be found in Section 8 of this report.

Printed Material and Direct Mailings
From July 1, 2007 to March 23, 2008, the City continued to distribute the *Best Management Practices for Businesses – Commercial and Industrial* brochure containing the list and description of the required minimum BMPs.

Inspections and Site Visits
Industrial operators select and implement appropriate source and treatment control BMPs as directed by the Storm Water Protection Program, City Planning Department, and/or City Engineering Department. BMPs are considered effective if they address the pollutants of concern and are specific enough to prevent or reduce the likelihood of an illegal discharge. The City may require BMP implementation based on problems identified during site inspections. All industrial facilities were required to implement minimum BMPs, additional BMPs identified for specific industrial activities, or as directed by the City.

Website and Hotline
Information about water conservation, trash management, and storm water was combined on a centralized hotline and web page accessed at www.carlsbadconserves.org. The hotline was answered by Storm Water Protection Program staff during business hours Monday through Friday and provided a detailed voice message after hours. In addition, outreach materials continued to be revised to include the Environmental Program s hotline number, storm water hotline number, and web page address. Industries can call the hotline to request BMP

information or download the information from the Environmental Programs and the Storm Water Protection Program web pages. From July 1, 2007 to March 23, 2008, there were 31,856 hits on the Environmental Programs web page.

The Environmental Programs webpage included all fact sheets and BMP brochures produced by the Storm Water Protection Program, links to related web pages, and additional information about storm water pollution prevention.

BMP and Knowledge Assessment Tools

During this reporting period, the Storm Water Protection Program continued to use the *BMP and Knowledge Assessment* tool to measure an individual industrial operator's knowledge of storm water issues and assess the implementation of BMPs onsite. The assessment tool was used by inspectors during site visits where industrial operators are rated using the following criteria:

Overall Knowledge Assessment

For Knowledge Assessment, inspectors ranked personnel from 1-5 per the following scale:

Level 1: Individual has never heard of the storm water program, requirements, or BMPs. This individual does not know what BMPs are or understand how to implement them.

Level 2: Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.

Level 3: Individual has a general understanding of storm water issues (*I've heard something about that*), but not specific storm water requirements or BMPs required for the facility.

Level 4: Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.

Level 5: Individual demonstrated an in-depth knowledge of the storm water program and BMPs consistent with the facility's activities and operations.

Overall BMP Assessment

For BMP Assessment, inspectors ranked the facility from 1-5 per the following scale:

Level 1: An illegal discharge was noted during the inspection. Enforcement actions such as a NOV and/or citation are required.

Level 2: BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or written warning was issued.

Level 3: BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal warning was issued. A detailed inspection report or written Warning Notice may follow.

Level 4: BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices (i.e., dumpsters open, leaves in the parking lot, etc.) were noted during the inspection.

Level 5: All BMPs implemented effectively. No violations noted during the inspection.

Table 5.2: Industrial Businesses Rated for Each Score

Rating	Knowledge Assessment (raw score)	Knowledge Assessment (□)	BMP Implementation (raw score)	BMP Implementation (□)
1	4	3□	8	6□
2	20	14□	10	8□
3	69	50□	21	16□
4	23	17□	23	17□
5	22	16□	70	53□
Total	138	100□	132	100□

Table 5.2 shows the number of instances in raw score and percentage that industrial businesses rated for each score, with 5 being the highest score possible. For BMP implementation, the results show that the City continued to be successful in ensuring that the businesses have implemented BMPs throughout the city. The City will continue to work with businesses to not only educate them about storm water issues, but also ensure BMPs are implemented and maintained.

The Regional Board requires regulated industries to conduct monitoring as outlined in the General Permit. Permitted facilities are required by the State to maintain self-audit reports, SWPPPs, monitoring reports, and annual reports onsite.

The City ensures that annual water quality monitoring is conducted at each high priority industrial facility by reviewing monitoring results during annual inspections to verify that monitoring was conducted as required. If and when monitoring was not completed as required the City issued NOVs and notified the Regional Board of non-compliance issues. During FY 07-08, the City analyzed monitoring results, made comparisons, and provided recommendation to those industrial facilities that exceeded benchmark values. These recommendations included, but were not limited to, SWPPP revisions, implementation of new BMPs, reinforcement of implemented BMPs, and increased employee training.

The City will continue to annually inspect the industries governed by the Industrial permit, collect monitoring data, and provide feedback to industries on the effectiveness of the monitoring program and BMPs. If benchmark values routinely exceed the established parameters, the City will follow up with written notification to the facility and Regional Board and require corrective actions and/or additional BMPs to prevent or reduce the identified pollutant at its source.

Inspection of Industrial Sites

All 42 high priority industrial sites were inspected by the City during this reporting period. In addition, the City conducted industrial inspections at 34□ of industrial medium facilities and 37□ of industrial low facilities in accordance with the City□s JURMP submitted in 2002. Medium and Low Priority industries were inspected in response to a complaint or as needed. More frequent inspections or follow-ups were conducted for sites found to be non-compliant or placed on a compliance schedule.

Each month, several businesses were selected from the master inventory list for inspection and/or review. The City usually conducted unscheduled, follow-up, and compliance inspections at businesses that had been previously inspected. If a new business could not be excluded by review or telephone survey, then a site visit was scheduled and a comprehensive inspection conducted. Inspections were scheduled within two weeks of contacting the business.

In addition to physical inspections and telephone surveys, the City also reviewed (including home based businesses) industries and evaluated the industry using relevant information from other City departments, databases, or licensing programs. A business could be excluded during the review process if it was found that their activities were not regulated by the City or General Permit. The most common reason businesses were excluded was because of an incorrect SIC code designation. Of the industries reviewed during this reporting period, 3 had moved, 11 were found to be out of business, 69 were found to be active, 2 were duplicate entries, 1 was excluded or did not require an additional inspection. If the business was found to be active and not a home-based location, a physical inspection was conducted to assess potential threat to water quality. Appendix 5.1 includes the name, location, SIC, priority, and types of industrial inspections conducted during the reporting period.

Enforcement of Industrial Sites

The City conducted follow-up inspections to determine compliance with the corrective actions outlined in the inspection report or enforcement notices. The City also continued to use the Notice to Clean form and NOV form developed in FY 05-06 to facilitate prompt and proactive responses from businesses.

When a storm water complaint was received about an industrial site or source, or an illegal discharge was observed or suspected, the City conducted a storm water inspection or investigation. If a significant and/or immediate threat to water quality was observed, appropriate actions were taken to require the responsible party to immediately cease the discharge and/or implement corrective actions. In judging the degree of severity, City inspectors also took into account any history of similar incidents or discharges. Table 5.3 includes a summary of inspections and any corrective or enforcement actions required by the City after inspections at High Priority industrial facilities. This table also includes 36 individual businesses representing 42 different high priority locations inspected as required during this reporting period.

Table 5.3: Summary of Inspections, Corrective and Enforcement Actions Required at High Priority Industrial Facilities from July 1, 2007 to March 23, 2008.

	Business Name	Insp. Date	Corrective Actions	Enforcement Action
1	ACUSHNET COMPANY	8/24/07	Regularly inspect and sweep outdoor areas. Protect materials stored outdoors.	None
2	HAWTHORNE RENT-IT SERVICE	8/27/07	Regularly inspect and sweep outdoor areas. Protect materials stored outdoors. Store metals parts in covered areas. Replace BMPs where necessary. Inspect and clean in and around storm drains as needed	None
3	HANSON AGGREGATES	9/18/07	None required.	None
4	NRG CABRILLO POWER STATION	9/20/07	None required.	None
5	GRAPHIC CONVERTING, INC.	9/25/07	Inspect and clean in and around storm drains as needed.	None

	Business Name	Insp. Date	Corrective Actions	Enforcement Action
			Protect materials stored outdoors.	
6	RANDALL INTERNATIONAL	10/16/07	Regularly inspect and sweep outdoor areas. Protect materials stored outdoors. Clean parking area of any spills or leaks.	Written Warning
7	ISIS PHARMACEUTICALS	10/30/07	Regularly inspect and sweep outdoor areas. Protect materials stored outdoors.	None
8	BECKMAN COULTER	10/31/07	Protect materials stored outdoors Inspect and clean in and around storm drains as needed.	None
9	LEGOLAND	11/6/07	Regularly inspect and sweep outdoor areas. Clean in and around storm drains.	None
10	FEDERAL EXPRESS CORPORATION	11/14/07	Regularly inspect and sweep outdoor areas.	None
11	A & P AIRCRAFT DETAILING	11/19/07	None required.	None
12	BARNSTORMING ADVENTURES	11/19/07	None required.	None
13	CIVIC HELICOPTER INC	11/19/07	None required.	None
14	HANGAR ONE, INC	11/19/07	None required.	None
15	JET SOURCE, INC.	11/19/07	None required.	None
16	JET SOURCE, INC.	11/19/07	None required.	None
17	JET SOURCE, INC.	11/19/07	None required.	None
18	JET SOURCE, INC.	11/19/07	None required.	None
19	LEADING EDGE AVIATION	11/19/07	None required.	None
20	MCCLELLAN-PALOMAR AIRPORT	11/19/07	Protect materials stored outdoors. Ensure tenants are trained on storm water requirements.	None
21	MERCY AIR	11/19/07	None required.	None
22	NORTH COASTAL (PALOMAR) LANDFILL	11/19/07	None required.	None
23	PREMIER JET	11/20/07	None required.	None
24	QUALITY AIRCRAFT CARE	11/20/07	None required.	None
25	WEST COAST JET SERVICES, LLC	11/20/07	None required.	None
26	WESTERN FLIGHT, INC.	11/20/07	None required.	None
27	WESTERN FLIGHT, INC.	11/20/07	None required.	None
28	ALLIED WASTE COMPANY	11/28/07	Regularly inspect and sweep outdoor areas. Inspect and clean in and around storm drains as needed.	None
29	COAST WASTE MANAGEMENT	11/28/07	None required.	None
30	MEADOWLARK WATER RECLAMATION	12/4/07	None required.	None
31	LA COSTA LIMOUSINE	12/6/07	None required.	None
32	SCHUMACHER CO. (AIR PRODUCTS AND CHEMICALS)	12/10/07	None required.	None
33	OLIVENHAIN MUNICIPAL WATER DISTRICT	12/13/07	Regularly inspect and sweep outdoor areas. Inspect and clean in and around storm drains as needed. Properly store hazardous materials.	None
34	AALTO SCIENTIFIC LTD	12/18/07	Inspect and clean in and around storm drains as needed. Protect materials stored outdoors.	None
35	LEUCADIA WASTE WATER DISTRICT	12/20/07	None required.	None

	Business Name	Insp. Date	Corrective Actions	Enforcement Action
36	MELLES GRIOT LASER DIVISION	12/20/07	Regularly inspect and sweep outdoor areas. Protect materials stored outdoors. Inspect and clean in and around storm drains as needed.	None
37	ENCINA WATER FACILITY	12/26/07	Regularly inspect and sweep outdoor areas. Protect materials stored outdoors. Protect landscaped areas from erosion. Dispose of or properly store batteries inside.	None
38	CALLAWAY GOLF BALL COMPANY	12/27/07	None required.	None
39	CALLAWAY GOLF COMPANY	12/27/07	None required.	None
40	CALLAWAY GOLF CO (PASCAL BUILDIING)	12/27/07	None required.	None

The Enforcement Response Plan continued to be used by City inspectors to identify, document, and respond to storm water violations. See the City s *Enforcement Response Plan* (FY 01-02 JURMP Annual Report) for a detailed description of the typical escalating enforcement procedures.

The Storm Water Protection Program had two full-time environmental specialists and one part-time intern to conduct inspections from July 1, 2007 to March 23, 2008. In addition to completing the Peace Officer Orientation II Laws of Arrest Course (40 hours of a POST certified course pursuant to Section 832(a) of the California Penal Code), the Environmental Specialists are continually trained on code enforcement, inspection procedures, laws and regulations, and investigation techniques. Storm Water Protection Program staff attended the following formal training during this reporting period:

- August 2008 24 Hour HAZWOPER, San Diego, Ca.
- February 2008 EPA Webcast BMP Performance

These training courses, in addition to the Enforcement Response Plan, helped the Storm Water Protection Program appropriately identify and respond to storm water violations. The City took a total of 2 enforcement actions against industrial facilities from July 1, 2007 to March 23, 2008. These are listed in Table 5.4.

Table 5.4. Number of Industrial Enforcement Actions

Industrial Priority	Verbal Warning	Written Warning	Notice of Violation	Notice to Clean	Administrative Citation
High	0	1	0	0	0
Medium	0	0	1	0	0
Low	0	0	0	0	0
Totals	0	1	1	0	0

Escalated enforcement actions were taken when necessary to achieve compliance. In some cases, an informational letter or written warning was escalated to a NOV if compliance was not achieved with the first action. More detailed information on complaint response and illegal discharge investigations is found in Section 7.

Non-Compliance Notification Action Plan

All industrial facilities were required to maintain compliance with the Carlsbad Municipal Code and the JURMP, as applicable to their operations. The City communicated all correspondences and actions pertaining to High Priority industries to the Regional Board. Actions related to Medium Priority sites were also forwarded to the Regional Board if the facility was considered non-compliant or if the filing status needed to be documented (i.e. recommended NOI filer or NONA certification required). If an incident or practice of non-compliance occurred at an industrial facility, City inspectors determined if it posed a threat to human or environmental health by considering the following criteria:

- Characteristics, quantity, and toxicity of substances/materials involved;
- Proximity of site to a sensitive water body;
- Proximity of site to an impaired water body;
- Proximity of site to a sensitive habitat/endangered species;
- Estimated volume of actual and/or potential discharge; and
- If discharges to storm drain, condition of storm drain (clog, etc.).

If an incident of non-compliance was determined, in conjunction with Carlsbad Fire Department, to pose a threat to human or environmental health the City provided verbal notification to the Regional Board within 24 hours, followed by a written report within 5 days.

5.3 Commercial Sites Sources Element

5.3.1 Background

The City continued to track, inspect, and monitor high priority commercial businesses within its jurisdiction during this reporting period. Major commercial types in Carlsbad are automobile maintenance, restaurants, shopping centers, pressure washing, masonry and concrete work, carpet cleaning, and landscape services. These high priority activities have the potential to generate significant amounts of pollutants, if performed with disregard to the environment. The City has implemented a program to inspect high priority facilities, ensure compliance with applicable regulations, and reduce pollutant runoff from commercial sites and sources. From July 1, 2007 to March 24, 2008, the City maintained an inventory of 701 commercial businesses.

During this reporting period, the City updated and prioritized the commercial inventory, mapped all high priority commercial facilities, and inspected 385 high priority commercial businesses. Inspections not only included physical inspections, but also reviews, phone contacts, and drive by surveillance, all in an effort to conduct education and outreach, obtain compliance, ensure BMP implementation, and use escalated enforcement actions, when necessary. These activities are further described in the following subsections.

5.3.2 Source Characterization

Source Identification and Threat to Water Quality Prioritization

Storm water inspectors identified pollution sources, assessed the potential threat to water quality, and required BMP implementation to eliminate pollution sources from commercial businesses. Each year hundreds of new businesses are established in Carlsbad. The Storm

Water Protection Program worked closely with the Finance Department to obtain information about new businesses, including activities, SIC codes and descriptions, business types, and contact names and numbers. Each quarter the Storm Water Protection Program downloaded, sorted, mapped, and prioritized new businesses by SIC and business type.

These new businesses were then added to the inventory list and scheduled for inspection. In some cases information provided on business license applications was not correct and a pre-inspection evaluation was necessary. Pre-inspection evaluations helped determine if a business activities were subject to storm water requirements. Two types of pre-inspection evaluations were used:

1. Reviews: Business license information and other relevant data was reviewed to determine whether the business should be inspected and tracked by the Storm Water Protection Program.
2. Telephone Contacts: If the review fails to provide enough information, the inspector contacted the business by phone to determine their status and schedule an inspection if necessary.

After physical inspections, reviews, or telephone contacts, any changes to a business priority or status was recorded on the Storm Water Inventory List and/or in the Permits Plus database. New businesses were also found by referral from other agencies, field discovery, or business directories. The updated Commercial Inventory as of March 24, 2008 can be found in Appendix 5.1.

Data related to commercial businesses was managed on a continual basis per departmental procedures and JURMP requirements. All documents related to commercial businesses were filed according to status (active, inactive, excluded, or out of business). Appendix 5.3 contains a map of all High Priority commercial facilities on the inventory. Because restaurants and automotive facilities represent the largest commercial groups, the map contains separate symbols for the locations of these facilities.

As of March 23, 2008, the inventory included 701 high commercial businesses. The High Priority commercial businesses on the inventory continue to be reviewed in response to complaints and as resources become available. As a part of the City s watershed activities, staff conducted inspections at 91 of all restaurant facilities from July 1, 2007 to March 23, 2008.

Table 5.5 provides a summary of commercial business by sources type. A total of 28 SIC code groupings related to high priority commercial activities were identified.

Table 5.5 - Summary of Commercial Businesses for Source Types

Commercial Activity	On Inventory
01XX: Agricultural Production Crops	11
02XX: Agricultural Production Livestock and Animal Specialties	1
07XX: Agricultural Services	38
15XX: General Contractors	95
1531: Operative Builders	2
17XX: Construction Special Trade Contractors	77
5032 Tile Cutting	1
51XX: Wholesale Trade Non-Durable Goods	42
5211: Lumber Services	1
5231: Wholesale Paint, Glass, and Wallpaper	1
5261: Retail Nurseries	3
53XX: General Merchandise Stores	4
54XX: Food Stores	21
55XX: Automotive Dealers and Gasoline Service Stations	48
58XX: Eating and Drinking Places	172
5912: Drug Stores and Proprietary Stores	4
5943: Stationary Store	1
5963: Direct Selling Establishments	1
65XX: Real Estate	13
7011: Hotels and Motels	6
72XX: Dry Cleaning Plants and Laundry Services	7
7217: Carpet and Upholstery Cleaning	15
7219: Laundry And Garment Services	1
73XX: Business Services	65
75XX: Automotive Services Repair and Parking	56
76XX: Repair Shops	3
79XX: Amusement and Recreation Services	11
8059: Nursing Homes	1
TOTAL	701

Table 5.5 shows that the greatest number of commercial sources of pollution may be from restaurants. Restaurants contribute to storm water pollution through improper housekeeping practices that allow grease, trash, and cleaning products to discharge to streets and the storm drain system. Because restaurants were identified as a watershed priority activity, the Storm Water Protection Program has intensified efforts to provide BMP information, conduct unscheduled inspections, and escalate enforcement actions, when necessary. Of the 183 active restaurants on the end of period inventory, 166 were physically inspected by the Storm Water Protection Program from July 1, 2007 to March 23, 2008.

5.3.3 Best Management Practice Requirements

Pollution Prevention

Pollution prevention activities are proactive approaches commercial businesses can use to identify and reduce pollution sources. Proactive pollution prevention, when framed in the context of appropriate and specific BMP identification and maintenance, is key to improving regional water quality. The City's approach was to promote pollution prevention and BMP implementation to the maximum extent practicable. The City encouraged the use of BMPs during inspections, public events, in outreach materials, through direct mailings, and at

workshops. City inspectors required the following minimum BMPs for all commercial businesses:

- Move or cover potential pollution sources from storm water contact. Protect materials and products that could potentially contribute to storm water pollution by storing them indoors or covering them, and providing them with secondary containment as needed.
- Use dry cleanup methods. Washing or cleaning activities that involve the use of a water hose or pressure washing system were required to use dry clean up methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible).
- Redirect storm water flows and conduct storm drain maintenance. Perform regular visual inspections of the storm drain to identify unauthorized discharges or pollutants and clean as needed. An commercial facility may be required to modify downspout locations in order to redirect storm water flows away from potential pollutant sources.
- Trash Management. Sweep up around dumpsters and other areas to prevent trash and debris from accumulating. Dumpsters must be kept closed when not in use. All trash must be kept in appropriate sized containers until it can be hauled away.
- Recycle, Reduce and Reuse. Recycle cans, bottles, newspaper, office paper and cardboard whenever possible. When inspecting solid waste collection areas, inspectors noted if recyclable materials (cardboard, green waste, etc.) were placed in dumpsters and recycled.

SWPPPs were encouraged and/or required for commercial businesses based on inspection findings and potential threat to water quality. Commercial businesses were usually given 60-90 days to develop and submit the SWPPP to the Storm Water Protection Program for review and approval. During follow up compliance inspections, businesses were expected to provide documentation that the SWPPP had been implemented as required. If the inspector found deficiencies, the business was required to revise the SWPPP and ensure procedures and BMPs were implemented as outlined in the plan. The City continued to provide the sample SWPPP to commercial businesses as a guide for preparing site specific plans. The sample SWPPP was also provided upon request or when the current SWPPP was found to be deficient.

5.3.4 Program Implementation

Best Management Practices Implementation

The City required High Priority commercial businesses to implement the minimum BMPs and specific BMPs applicable to each activity and pollutant source. BMP information was made available during inspections, in printed materials, at workshops, on the website and hotline, and at outreach events. A complete listing of all outreach and education events held during this reporting period, can be found in Section 8 of this report.

Printed Materials and Direct Mailings
During this reporting period, the City continued to distribute the *Best Management Practices for Businesses – Commercial and Industrial* brochure containing the list and description of the minimum BMPs. This brochure was distributed to all commercial businesses during inspections and by direct mail to businesses that the City verified from the inventory.

The City continued to distribute the Best Management Practices for Mobile Service Providers brochure developed in FY 05-06. The brochure was designed for mobile service provides such

as carpet cleaners, plumbers, pressure washers, mechanics, porta-potty services, their employees, and anyone that hires a mobile service provider.

The City also continued to distribute the *Pollution Prevention Guide for the Construction Industry*. This brochure was developed to provide BMP and pollution prevention information related to materials storage, perimeter controls, building and staging areas, dumpsters and port-a-potty services, concrete trucks and pumpers, washout areas, and storm drain protection. The brochure was distributed to commercial businesses that conduct small remodeling or home improvement projects.

Inspections and Site Visits

Commercial businesses select and implement source and treatment control BMPs as directed by the Planning Department, the Engineering Department or the Storm Water Protection Program. BMPs are considered effective if they address the pollutants of concern and are specific enough to prevent or reduce the likelihood of an illegal discharge. The City may require BMPs based on problems identified during site inspections. All commercial businesses were required to implement the minimum BMPs, those identified for specific commercial activities, or as directed by the City.

During this reporting period, the City continued to use the streamlined inspection report to facilitate prompt correction of violations. The streamlined inspection form includes space to report previous enforcement actions, new storm water contacts, and a detailed list of necessary corrective actions. Detailed inspection reports also continue to be used for businesses that have not been previously inspected or if the facility requires a more complex inspection (i.e. high priority facilities, egregious violators). If corrective actions were required, follow-up inspections were conducted to verify compliance.

Website and Hotline

Information about water conservation, trash management, and storm water were combined on one centralized hotline and web page accessed at www.carlsbadconserves.org. The hotline was answered by the Storm Water Protection Program during business hours, Monday through Friday, and provides a detailed voice message after hours. In addition, outreach materials continue to be revised to include the Environmental Program s web page address and hotline number. From July 1, 2007 to March 24, 2008, there were 31,856 hits on the Environmental Programs web page. The webpage includes all fact sheets and BMP brochures, links to related web pages, and additional information about storm water pollution prevention.

BMP and Knowledge Assessment Tools

The Storm Water Protection Program continued to use the *BMP and Knowledge Assessment* to measure knowledge of storm water issues and assess the implementation of BMPs onsite. The assessment tool rated a commercial operator and site using the following criteria:

Overall Knowledge Assessment:

Inspectors ranked personnel from 1-5 per the following *Knowledge Assessment* scale:

Level 1: Individual has never heard of the storm water program, requirements, or BMPs. This individual does not know what BMPs are or understand how to implement them.

Level 2: Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.

Level 3: Individual has a general understanding of storm water issues (*I've heard something about that*), but not specific storm water requirements or BMPs required for the facility.

Level 4: Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.

Level 5: Individual demonstrated an in-depth knowledge of the storm water program and BMPs consistent with the facility s activities and operations.

Overall BMP Assessment
Inspectors ranked the facility per the following 1-5 *BMP Assessment* scale:

Level 1: An illegal discharge was noted during the inspection. Enforcement actions such as a NOV and/or citation are required.

Level 2: BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or written warning was issued.

Level 3: BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal warning was issued. A detailed inspection report or written Warning Notice may follow.

Level 4: BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices (i.e., dumpsters open, leaves in the parking lot, etc.) were noted during the inspection.

Level 5: All BMPs implemented effectively. No violations noted during the inspection.

Table 5.6: Commercial High Businesses Rated for Each Score.

Rating	Knowledge Assessment (raw score)	Knowledge Assessment ( )	BMP Implementation (raw score)	BMP Implementation ( )
1	3	2	48	18
2	48	30	20	8
3	50	31	35	14
4	36	23	50	19
5	22	14	107	41
TOTAL	159	100	260	100

Table 5.6 shows the number of instances in raw score and percentage that commercial high businesses rated for each score, with 5 being the highest score possible. There were a total of 159 businesses assessed for Knowledge, and 260 assessed for BMP implementation. The number of *BMP Assessments* collected is usually higher than the number of *Knowledge Assessments* collected, because company representatives were not available to complete the

Knowledge Assessment. The City will continue to work with businesses to not only educate them about storm water issues, but also ensure BMPs are implemented and maintained.

Inspection of Commercial Sites

The City conducted High Priority commercial inspections at approximately 55□ of all prioritized commercial businesses in accordance with the program guidelines described in the JURMP. Site visits, reviews, and telephone contacts were the primary methods used to educate and ensure storm water compliance at commercial businesses. The City conducted inspections of commercial businesses on a complaint basis and as time and resources became available.

The City physically inspected 266 commercial businesses from July 1, 2007 to March 23, 2008 (excluding reviews, phone surveys, and drive bys). Storm water staff also reviewed, phoned, or conducted investigations at an additional 119 commercial facilities for a total of 385 businesses inspected during this reporting period. As of March 14, 2008 there were 701 commercial businesses on the storm water inventory. Of these, 27 were found to be out of business, 9 had moved out of the City, 5 were duplicate entries, 42 were excluded (based on several qualifying factors including SIC Code, location, business type, and probability to contribute to storm water pollution), 526 were active, and 92 had not been reviewed.

A large percentage of businesses on the inventory list were home-based businesses. Many commercial home-based businesses are involved in the mobile trade industry (carpet cleaning, power washing, etc.), which are considered high priority commercial activities. These home-based, mobile businesses were identified, contacted and mailed appropriate BMP information. Because site inspections are not required for home-based businesses, many were reviewed by City inspectors. During the review process the inspector evaluated a commercial business using any relevant information available in other City departments, databases, or licensing programs. A business could be excluded during a review if it was found that their activities were not regulated by the City or Permit. The most common reason businesses were excluded during the review process was because of an incorrect SIC code designation.

Telephone surveys continue to be used to determine the status of certain types of home-based businesses on the commercial inventory. Thirty-two home-based commercial businesses were surveyed by phone. In most cases, this screening procedure determined that the wrong SIC code had been applied during the business license application process. The Carlsbad Municipal Code prohibits home-based businesses from conducting activities or storing materials outdoors. Once confirmed, home-based businesses were mailed specific BMP information.

Each month several businesses were selected from the master inventory list for inspection. The City usually conducted unscheduled, follow-up and compliance inspections at businesses that had been previously inspected. If a new business could not be excluded by review or telephone survey, then a site visit was scheduled and a comprehensive inspection conducted.

Restaurants have been identified as a High-Priority business at the watershed level. Restaurants can contribute to storm water pollution through improper cleaning practices that can allow grease, food particles, and trash to be exposed to storm water or can create discharges to the street or storm drain. The City has identified 164 active restaurants within this jurisdiction. Restaurants represent over 31□ of all commercial businesses tracked by the Storm Water Protection Program. The City was able to inspect 91□ of all restaurants in Carlsbad. This effort resulted in 11 NOVs issued to restaurants for violations of the Carlsbad Municipal Code from July 1, 2007 to March 23, 2008.

Enforcement of Commercial Sites and Sources

The City conducted follow-up inspections to determine compliance with corrective actions outlined in the inspection report or enforcement notices. When a storm water complaint was received about a commercial source or an illegal discharge was observed or suspected, the City conducted a storm water compliance inspection or investigation. If a significant and/or immediate threat to water quality was observed, appropriate actions were taken to require the responsible party to immediately cease the discharge and/or correct the situation. In judging the degree of severity, City inspectors also took into account any history of similar incidents or discharges. Table 5.7 includes a summary of commercial businesses that received NOVs during this reporting period.

Table 5.7: Summary of NOVs Issued to Commercial Businesses

Commercial Business	SIC	Date of NOV	CMC Violations	
			Storm Water	Trash
Marie Callenders	5812	7/5/07	15.12.050 15.12.080 15.12.090	6.08.040 6.08.050
West Buffett	5812	7/25/07	15.12.050 15.12.080 15.12.090 15.12.110	6.08.040 6.08.045
San Diego International Floral Trade Center	6531	8/1/07	15.12.050 15.12.080 15.12.110	
Carlsbad Premium Outlets	6512	8/27/07	15.12.050 15.12.080 15.12.090	6.08.040
Armenian Caf	5812	12/5/07	15.12.050 15.12.080	6.08.045 6.08.050
Grand Avenue Bar and Grill	5812	12/11/07	15.12.050 15.12.080	6.08.040 6.08.045 6.08.050 6.08.090
Lotus Thai Bistro	5812	12/18/07	15.12.050 15.12.080	
Mikko Japanese Cuisine	5812	12/18/07	15.12.050 15.12.080	6.08.050 6.08.090
Bellefleur Carlsbad	5812	12/20/07	15.12.050 15.12.080	6.08.050 6.08.090
Mariah's Westwind	5812	12/21/07	15.12.050 15.12.080	6.08.050 6.08.090
KoKo Beach	5812	1/4/08		6.08.030 6.08.045 6.08.090

Commercial Business	SIC	Date of NOV	CMC Violations	
			Storm Water	Trash
Macy's Department Store	5311	1/4/08	15.12.050 15.12.080 15.12.090	6.08.030 6.08.045
Plaza Camino Real	6512	1/8/08	15.12.050 15.12.080	6.08.030 6.08.045 6.08.050 6.08.090
Enterprise Rent A car	7514	1/11/08	15.12.050 15.12.080	
The Olive Garden	5812	1/23/08	15.12.080	6.08.045 6.08.050 6.08.090
Von's Grocery 2343	5411	1/28/08	15.12.080	6.08.045 6.08.050 6.08.090
Pizza Port	5812	3/13/08	15.12.080 15.12.090 15.12.110 6.08.050	6.08.050

Commercial sites or sources were also selected for inspection based on results of *Dry Weather Program* field screening indicating a potential problem. As more water quality data are collected, it is expected that commercial sites may be chosen for inspection in future years based on their potential to discharge a constituent of concern to a specific water body.

The Enforcement Response Plan continued to be used by inspectors to identify, document, and respond to storm water violations. See the City's *Enforcement Response Plan* (FY 01-02 JURMP Annual Report) for a detailed description of typical escalating enforcement procedures.

During FY 07-08, the Storm Water Protection Program had two full-time Environmental Specialists and one part-time intern to conduct inspections, with a third full-time Environmental Specialist hired in October 2007. Environmental Specialists are continually trained on code enforcement, inspection procedures, laws and regulations, and investigation techniques. Storm Water Protection Program staff attended the following training during FY 07-08:

- August 2008 24 Hour HAZWOPER, San Diego, Ca.
- February 2008 EPA Webcast BMP Performance

These training courses, in addition to the Enforcement Response Plan, helped the Storm Water Protection Program appropriately identify and respond to storm water violations. The City took a total of 31 enforcement actions against commercial businesses during from July 1, 2007 to March 23, 2008. The types and numbers of enforcement actions are listed in Table 5.8.

Table 5.8. Enforcement Actions at High Priority Commercial Businesses

Action	Total
Verbal Warning	1
Written Warning	6
Notice of Violation	17
Notice to Clean	0
Cease and Desist Order	0
Administrative Citation	7
TOTAL	31

Most of these incidents involved business such as construction and landscaping contractors, pool maintenance companies, mobile detailers, pressure washers, or carpet cleaning companies. Mobile service providers were added to the inventory and required to apply for business licenses. More detailed information on complaint response and illegal discharge investigations is found in Section 7 of this report. Escalated enforcement actions were taken when necessary to achieve compliance.

6.0 RESIDENTIAL

6.1 Introduction

The City encompasses approximately 42 square miles, with an estimated population of 103,811, (January 1, 2008, California, Department of Finance). The residential community has a significant potential to contribute to water quality degradation. This section describes the activities of the City for the reporting period of **July 1, 2007 to March 23, 2008** with respect to the implementation of the Residential Component of the JURMP and Order No. 2001-01.

6.2 Source Characterization

The City conducted activities that focused on the high threat to water quality residential areas and activities. Due to the City s location within the watershed, and the concentration of environmentally sensitive areas, all residential areas are considered high priority. Table 6.1 identifies the constituents of concern in Carlsbad and examples of residential sources.

Table 6.1: Constituents of Concern and Examples of Residential Sources.

Constituents of Concern	Examples of contributing activities
Primary	
• Bacteria	Pet waste, sanitary sewer overflows, etc.
• Sediment	Landscaping, un-permitted grading activities, etc.
Secondary	
• Nutrients	Garden-care activities, materials storage, etc.
• TDS	Fertilizers, construction, agriculture
• Pesticides	Garden-care activities, residential pest control, etc.
• Trash	Storage of solid waste, green waste, etc.

6.3 Best Management Practice Requirements

City inspectors required the following minimum BMPs (detailed in various fact sheets and brochures) for all residential sources or pollution:

- Move or cover potential pollution sources from storm water contact. Protect materials that could potentially contribute to storm water pollution by storing them indoors or covering them.
- Use dry cleanup methods. Washing or cleaning activities that involve the use of a water hose or pressure washing system were required to use dry clean up methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible).
- Residential car washing. Use soap sparingly, divert wash water to landscaped areas and pour buckets of soapy water down the sink. Never wash cars in the street or public right of way.
- Pet Waste. Clean up after pets. Use a bag to pick up waste when walking pets. Flush pet waste down the toilet or dispose of in a sealed plastic bag and deposit in the trash.
- Trash Management. All trash must be kept in appropriate sized containers until it can be hauled away. Frequently dispose of grass, debris, leaves, and other waste materials.

- Recycle, Reduce and Reuse. Recycle cans, bottles, paper and cardboard whenever possible.
- Reduce the Use of Landscape Chemicals: Decrease the use of lawn and garden care products such as pesticides, weed killers and chemical fertilizers. Consider using non-toxic pest control methods. Avoid over irrigation which washes these chemicals into the storm drain system.

6.4 Program Implementation

The following provides a discussion of the steps that were taken to require, encourage, and verify the implementation of the prescribed BMPs for high priority residential areas.

6.4.1 BMP Implementation

The City continued to implement a program to reduce contaminants in urban runoff originating from existing residential areas. BMP information was made available to residents via the storm water website and hotline, during presentations, at outreach events, through direct mailings, through a targeted neighborhood outreach campaign, and during investigations of suspected storm water violations. Written materials (brochures, fact sheets, etc.), promotional items, and verbal explanation of BMPs were used to convey BMP requirements. In addition, various levels of enforcement actions were used as necessary to ensure the use of required BMPs. A listing of all education and outreach events and activities for residential audiences is addressed in Section 8 of this report. Discussion of investigations and enforcement actions for residential areas and activities are discussed in Section 6.4.7 and Section 7 of this report.

Website and Hotline
Information about water conservation, trash management, and storm water was combined to one centralized web page accessed at www.carlsbadconserves.org. The Environmental Programs hotline provides information about storm water, trash, and water conservation for the public. The hotline is answered by the Storm Water Protection Program during business hours and provides a detailed voice message after hours.

In addition, outreach materials continue to be revised to include the Environmental Program s website address and hotline number. From July 1, 2007 to March 23, 2008, there were over 31,856 visits to the Environmental Programs website. The Storm Water Protection Program and Environmental Programs Division worked with the Information Technology Department to revise the Environmental Programs webpage and provide updated information about storm water BMPs. The webpage includes all fact sheets and BMP brochures, links to related web pages, and additional information about storm water pollution prevention.

Presentations
In the fall of 2007 and spring of 2008 the City hosted two *Citizen's Academy* Workshops. This is a seven-week course (one night per week) designed to teach residents about City government and how public services are provided. In September approximately 27 residents attended, and 45 attended in March. As part of each session a presentation included an overview of the Storm Water Protection Program, including Permit requirements, program activities, and residential BMPs. This has been a highly successful and popular event, which typically has a waiting list for new participants.

Outreach Events

The City hosted or participated in several public events, which provided opportunities for residents to learn about pollution prevention and storm water BMPs. During these events residents had the opportunity to pick up printed materials, and speak directly to storm water representatives. Table 6.2 is a summary of these events that took place from July 1, 2007 to March 23, 2008. Details of each event are located in Section 8.

Table 6.2: Outreach Events for Residents from July 1, 2007-March 23, 2008

Event	Date	Type	Audience	Attendance
Senior Health Fair	07/07/07	Booth	General public	600
Citizen s Academy	9/27/07	Presentation Booth	General Public	26
Fall Festival at the Ranch	11/10/07	Booth	General public	500
Citizen s Academy	03/20/08	Presentation Booth	General public	45
Agua Hedionda Lagoon Water Festival	3/22/08	Booth	General public School Children	500

Direct Mailings

Carlsbad Conserves, the Environmental Programs Newsletter was mailed to all residents in the summer and fall of 2007. The newsletter is intended to inform residents of environmental issues facing Carlsbad, services provided by the City, tips of how to protect the environment, including storm water BMPs, and a calendar of important environmental dates (clean up recycling, bulky item pick up, etc.). Copies of the summer and fall editions can be found in Appendix 6.1 and 6.2.

The Carlsbad Community Services Guide is mailed three times a year to all Carlsbad households (approx. 40,000). The Winter 2007-Spring 2008 edition included residential storm water BMPs and Environmental Programs information. A copy can be found in Appendix 6.3.

The Environmental Programs Guide was sent to all new customers requesting trash service. This publication offers information about proper disposal of many types of waste including trash, recycling, and household hazardous waste (HHW). Information also included ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution. A copy of the brochure can be found in Appendix 6.4.

Targeted Neighborhood Outreach Campaign

As a result of the *Dry Weather Monitoring Program,* several neighborhoods were identified as contributing to storm water pollution through various residential activities (eg. pet waste, over-watering, landscape waste). Follow-up investigations to water quality excedances in the *2007 Dry Weather Monitoring Program* prompted the City to educate residents in five specific neighborhoods. Storm Water Protection Program conducted a targeted outreach campaign to those identified neighborhoods, which were delineated using the City s interactive GIS. Layers were turned on to show the streets, parcels, and storm drain system in the identified neighborhoods. Table 6.3 includes a summary of the number of homes targeted and the information they received mailed in Summer and Fall of 2007.

Table 6.3: Targeted Neighborhood Education.

Neighborhood Site	Number of Homes	Brochures Distributed
AH-65	264	Over-watering, landscape maintenance
BA-06	100	Over-watering, landscape maintenance, pet waste
BV Creek (Calavera Hills)	142	Landscape waste and over-watering, pet waste
BA-36	70	Pet Waste
BA-40	251	Over-watering
Total	827	

Written Materials

Written materials, including various brochures and fact sheets detailing storm water BMPs were distributed as necessary to residents through the avenues listed above. Brochures targeted to residential activities include, Car Washing, Lawn & Garden Care, Motor Oil, Pools and Spas, and Pet Waste. They were available in printed form and can also be downloaded from the City s website.

Promotional Items

The Storm Water Protection Program continued to distribute pollution prevention message pens to municipal employees and the Carlsbad community. Other items such as water bottles, notepads, mouse pads, and cups with the storm water hotline and other pollution prevention messages were distributed to residents.

The City distributed a HHW magnet that includes information about HHW disposal location for Carlsbad residents. The magnets will continually be distributed during presentations and other outreach events.

From July 1, 2007 to June 30, 2008, the City distributed 450 *Bags on Board* dispensers to residents as part of the education and outreach program. The product promotes proper pet waste disposal and helps prevent storm water pollution.

6.4.2 HHW and Used Oil

The City continued to operate a Household Hazardous Waste (HHW), and used oil recycling program. During the entire FY 07-08 the City collected and disposed of approximately 148 tons of HHW (including recycled or diverted).

Residents used the Environmental Programs hotline, and e-mail address to request information about the HHW program, trash, and recycling. The City s RFA system was used to track calls about Environmental Programs comments and questions from residents. From July 1, 2007 to March 23, 2008 the Environmental Programs Division responded to 60 complaints/questions related to HHW, recycling, and solid waste. Table 6.4 includes a summary of these complaints.

Table 6.4: Summary of Environmental Programs Division Complaints (July 1, 2007-March 23, 2008)

Issue Type SubType	Total
HHW: Complaint	2
HHW: General Information	3
Recycling: Comment/Suggestion	1
Recycling: Complaint	10
Recycling General Information	6
Solid Waste: Comment/ Suggestion	1
Solid Waste: Complaint	28
Solid Waste: General Information	6
Solid Waste: Missed Collection	3
TOTAL	60

At the end of FY 06-07, signs were placed at the City s Fleet Facility describing proper locations for HHW drop off. This has helped reduce the amount of HHW illegally deposited at this location.

Carlsbad residents may dispose of two large bulky household items at no charge five times per year. The City worked with Waste Management schedule days for the bulky item pickup. Bulky item pickup days were November 10, 2007, January 26, 2008, and March 22, 2008.

6.4.3 Oversight of Residential Areas

In January of 2008 the city began implementing a program of residential water patrols. The Water Conservation Specialist conducted regularly scheduled patrols of different residential areas within the City. Evidence of excess runoff from irrigation were investigated handled on a case-by-case basis. Door hangers are left and follow-up phone calls or visits to evaluate irrigation habits are conducted. When there are large areas or neighborhoods that have extensive irrigation runoff, mailings are conducted to inform residents of the problem.

6.4.4 Enforcement in Residential Areas

The public can report illegal discharges or any activities that may impact water quality to the Storm Water Protection Program through the storm water hotline, email address, or to other City departments. All reports and referrals were promptly investigated and resolved to the fullest extent. When a storm water complaint was received about a residential site or source, or an illegal discharge was observed or suspected, the City conducted a complete storm water investigation. If a significant and/or immediate threat to water quality was observed, appropriate actions were taken to require the responsible party to immediately cease the discharge and/or correct the situation. Specific information on the effects of storm water pollution and how to prevent future impacts to water quality through the use of BMPs was provided to residents during investigations. This information was designed to increase the public s awareness and understanding of storm water pollution prevention efforts and water quality enhancement.

When enforcement actions were necessary, City inspectors utilized the appropriate enforcement mechanisms as allowed by the Carlsbad Municipal Code, and the Enforcement Response Plan. The Enforcement Response Plan continued to be used by inspectors to identify, document, and respond to storm water violations. While the City emphasized education as the primary method for changing behavior, City inspectors and staff with

enforcement authority could initiate enforcement actions against residents who discharged pollutants to the storm water conveyance system, or who failed to implement BMPs as required.

Escalating enforcement procedures provided flexibility in establishing appropriate compliance time frames. In judging the degree of severity, City inspectors also took into account any history of similar incidents or discharges and the impact to the environment. The inspectors, in accordance with the City□s existing procedures and Enforcement Response Plan, documented each observed violation. Depending on the severity of the violation, enforcement ranged from a warning to monetary fines.

From July 1, 2007 to March 23, 2008, the Storm Water Protection Program received 161 complaints of potential illegal discharges. Of those complaints, 74 were residential in nature. Many of the complaints that occurred in residential areas involved commercial contractors or mobile businesses. When complaints were tracked to a specific business, they were counted and documented as commercial complaints. Eight complaints were □referred for action□, meaning, the investigation or resolution of the issue did not fall under the jurisdiction of the Storm Water Protection Program. Examples include wastewater discharge or construction. There were 22 residential complaints in which no violation was found, due to either the source not being found or the reported pollutant discharge not being found. There were a total of 44 enforcement actions for residential complaints. Table 6.5 and Figure 6.1 show a summary of those actions. A summary of all complaints responded to can be found in Appendix 7.4.

Table 6.5: Summary of Residential Enforcement Actions from July 1, 2007 to March 23, 2008

Action	Total
Verbal Warning	23
Informational letter	14
Written Warning	4
Notice of Violation	3
Notice to Clean	0
Cease and Desist Order	0
Administrative Citation	0
TOTAL	44

Figure 6.1: Residential Enforcement Actions

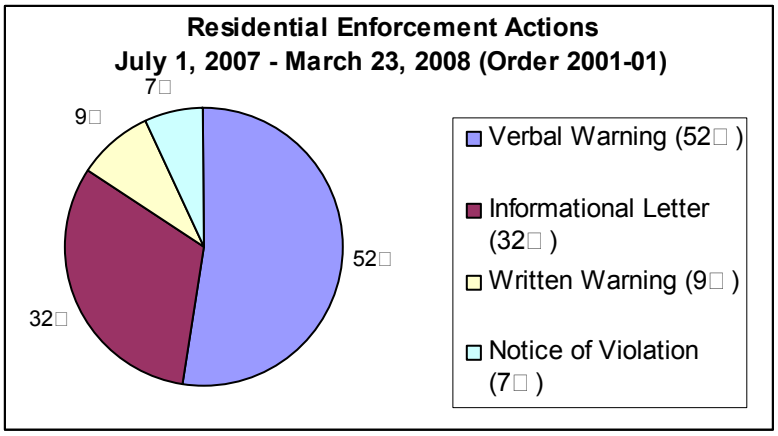

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The City s Illicit Discharge Detection and Elimination (IDDE) will be submitted in December 2008 as approved by the Regional Board in Addendum 2, Order 2007-0001.

8.0 OUTREACH AND EDUCATION COMPONENT

8.1 Introduction

Public education is integral to the success of Carlsbad's urban runoff management program. The City continues to increase public awareness about pollution prevention and promote behavioral changes and environmental stewardship. The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent. The City continued to be actively involved in outreach and education efforts at the local level, the watershed level (North County Storm Water Program), and the regional level (Project Clean Water Outreach Workgroup). These efforts are further discussed in the following subsections by target audience.

8.2 Staff Training Element

Storm water training for municipal employees included general training and job specific training for designated departments and personnel. The objectives of the employee training programs are as follows:

- Promote a clear understanding of the urban runoff and water quality issues, including activities that can potentially pollute receiving water bodies.
- Identify and implement strategies for BMPs.
- Promote employee ownership of the problems and their ability to apply solutions.
- Integrate employee feedback into training and BMP implementation.

General Employee Training

During this reporting period, City employees received storm water training covering issues such as the causes of storm water pollution, how it affects the environment, and the overall structure of the storm water program. Messages related to general training may include, where applicable, the topics listed in the Permit. During FY 07-08, City staff received information and general storm water training through various communication methods including:

1. Storm Water Webpage: Employees were able to download BMPs and the JURMP directly from the City's website.
2. Intranet: The City's intranet was used to post messages and inform employees of various events and opportunities for participation, such as the Coastal Cleanup Day and Earth Day activities.
3. Public Works Newsletters: During FY 07-08 every edition of Public Works newsletters featured updates on the Storm Water Protection Program and Environmental Programs. Employees were notified by e-mail when these newsletters were published and posted on the City's intranet, and hard copies were given to maintenance personnel.
4. Promotional Items: Items such as water bottles, notepads, mouse pads, cups, and pens with the hotline numbers and other pollution prevention messages continued to be distributed to employees.
5. Hotline Decals and Notepads: Car window decals and notepads with the storm water hotline were distributed for employee use in the field.

Job Specific Training

Several job positions were identified that require activity or job specific storm water training. A summary of municipal employee training is in Appendix 8.1. Table 8.1 identifies the departments with personnel that should receive job specific training.

Table 8.1. Department and Positions for Job Specific Storm Water Training

MSA	Department	Positions
PW	Engineering, Construction Inspections	Construction Inspectors
PW	Engineering, Engineering Development Services	Associate Engineer, Assistant Engineer
PW	Environmental Programs, Storm Water	Environmental Specialists, Interns
PW	Environmental Programs, Water Conservation	Water Conservation Specialist
PW	General Services, Streets Division	Street Maintenance Workers
PW	General Services, Facilities Maintenance	Building Maintenance Workers
PW	General Services, Parks	Maintenance Workers
PW	General Services, Landscape Maintenance	Maintenance Workers
PW	General Services, Vehicle Maintenance	Equipment Technicians, Equipment Service Worker, Shop Assistant
PW	Maintenance and Operations, Utility Operations	Meter Services Workers; Sanitation System Operators; Water System Operators
PW	Maintenance and Operations, Construction/Maintenance	Utility Workers; Maintenance Workers
Com-Dev	Planning, Building, Code Enforcement	Building Inspectors, Planners, Code Enforcement,
Safety	Fire Department	Fire Fighters

The City also participated in EPA sponsored webcasts this fiscal year where possible. Storm Water Protection Program staff received job specific training during FY 07-08 as provided in Appendix 8.1.

Storm Water Committee

The Storm Water Committee continued to meet monthly to discuss and develop a calendar of storm water training activities for staff, coordinate compliance activities and documentation, create and distribute job specific storm water training information, and standardize documentation of training activities. A summary of Storm Water Committee meeting topics during FY 07-08 can be found in Appendix 8.2.

Storm Water Leadership Team

In FY 07-08, the City of Carlsbad s City Manager continued the Storm Water Leadership Team (SWLT). Monthly meetings of the SWLT were conducted and attendees included Senior Management of the City s major service areas and Directors. Agenda items covered all areas of the City s compliance with Order No. 2001-01, as well as review of the new Order No. R9-2007-0001.

Other Training

During FY 07-08, the City continued to implement the waste reduction program. Larger single stream recycling containers and a small trash were provided in employee workstations. The larger recycling containers placed in public meeting areas throughout the City continue to be utilized. Seen as an effective pilot program, the City implemented the waste reduction strategy at all City facilities in September 2007. Roll out of this new program included the development

of posters, fact sheets and a presentation to educate and inform employees about the importance and benefits of recycling.

In August of 2007, the Senior Environmental Specialist and Water Conservation Specialist completed the 24-hour □*Hazardous Waste Operations and Emergency Response Training*□ in San Diego. This course is required for anyone who is expected to identify emergency situations involving hazardous materials. Staff was trained to recognize, report, and assist in emergency response. This course fulfills the requirements under OSHA 29 CFR 1910.120.

In September of 2007, the Planning Department employees attended a power point presentation in *Low Impact Development (LID)* training. The goal is to protect water quality by preserving and mimicking nature through use of storm water planning and management techniques on a project site and to prevent or remediate pollutants from discharges. The presentation was designed to provide an overview of storm water regulations, BMP practices, LID background, benefits and goals.

In November of 2007, the City□s Leadership Team employees received a power point presentation on the new requirements under Order No. R9-2007-0001.

In January of 2008, Public Works Managers attended a presentation on the National Pollution Discharge Elimination System (NPDES) Municipal Permit. The presentation covered the Clean Water Act, NPDES regulations, JURMP 2001 and 2007 Orders and new reporting requirements.

In FY 07-08, the City continued the waste reduction program. Larger single stream recycling containers for employee work stations accompanied by a small trash can have been provided to the majority of City Employees. Several larger recycling containers placed in public meeting areas throughout the City continue to be utilized. Seen as an effective pilot program, the City implemented the waste reduction strategy at all City facilities in September 2007. Roll out of this new program included the development of posters, fact sheets and a presentation to educate and inform employees about the importance and benefits of recycling.

In February of 2008, City staff from various departments attended a US EPA Storm Water Program□s Webcast Series entitled □BMP Performance.□ The purpose of the webcast was to explore the details of BMP performance, including pollutant concentrations, volume reduction, and total load reduction. During the webcast experts shared BMP performance myth of □percent (□) removal.□ In addition, it introduced EPA□s new web-based Urban BMP Performance Tool, which is a directory of hundreds of studies on BMP performance.

In March of 2008, the newly-hired Environmental Specialist I attended the PC 832 Peace Officer training. Training included effective ways to enforce stormwater regulations.

Minimum BMPs for Construction Projects within the City of Carlsbad

For more information about the required BMPs, please contact the Public Works Inspector assigned to your project. You may also find additional information about Construction Management and Inspection Division on the City website at

www.carlsbadca.gov

Figure 8.1: Minimum BMP Fact Sheet for Construction Projects

8.3 Educational Outreach Element

New Development and Construction Communities
Construction Site Owners and Developers

The City of Carlsbad is committed to working with developers and contractors to ensure that BMPs are implemented at all construction sites. A fact sheet continued to be distributed to all active construction sites during FY 07-08. The fact sheet includes information about the required minimum BMPs, site specific SWPPPs, and erosion control plans (Figure 8.1).

Construction and Development Services provided information and education to applicants and developers during one-on-one or small group meetings, inspections, complaint investigations, and during pre-construction meetings. They also provided sample SWPPPs and SWMPs for engineers, developers, and applicants to use as guides when preparing documents for proposed development projects. Copies of these documents and the SUSMP are available at the City's Permits Counter. The SUSMP is also available through the City's internet site.

The Storm Water Protection Program also continued to distribute the "*Pollution Prevention Guide for the Construction Industry*." This brochure was developed to provide BMP and pollution prevention information related to materials storage, perimeter controls, building and staging areas, dumpsters and port-a-potty services, tracking controls, concrete trucks and pumpers, washout areas, dirt and grading, earthmoving equipment, and storm drain protection. The brochure was distributed to commercial businesses that conduct small remodeling or home improvement projects.

The City continued to conduct and participate in workshops to educate external parties, which include project applicants, developers, contractors, and property owners on the implementation of the storm water program and requirements for construction sites.

Commercial and Industrial Owners and Operators
The City continued to educate commercial and industrial owners and operators through various methods. This included the distribution of printed materials, participation at workshops, presentations to business community groups, direct mailings, inspections and site visits. Accomplishments are detailed below.

Printed Material
The City continued to distribute brochures and fact sheets. These materials were distributed by direct mail, during inspections and complaint investigations, and were available at public events and presentations. These brochures are also available on the City's storm water web page, accessed at www.carlsbadconserves.org.

During FY 07-08, the City continued to distribute the "*Best Management Practices for Businesses – Commercial and Industrial*" brochure containing the list and description of minimum BMPs. This brochure was distributed to businesses during inspections and by direct mail.

Website and Hotline
The storm water hotline continued to be listed on all printed material. Industries and commercial businesses can call the hotline to request BMP information. All brochures also continued to be

available through the City website. During this permit cycle through March 23, 2008, there were 31,856 visits to the Environmental Programs web page.

Inspections and Site Visits

City storm water inspectors worked with businesses during inspections and complaint investigations to identify storm water compliance issues, detail corrective actions, and assess the appropriateness of BMPs.

Quasi-Government Agencies/Districts (i.e. Educational Institutions, Water Districts, Sanitation Districts, etc.).

Quasi-government agencies and districts typically fall under one of the existing commercial or industrial classification categories of high, medium, or low priority, based on the criteria used to identify facilities and businesses. Outreach and education for these facilities is identified during compliance inspections.

During this reporting period, the City inspected seven water and sanitation facilities as part of the industrial inspection program. Educational information was provided during the inspections, as well as in written inspection reports. Most of the water and sewer districts and educational institutions are covered under permits issued by the Regional Board. Therefore, many of these facilities already have knowledge of the storm water requirements and participate in education activities.

Residential Community, General Public, and School Children

Carlsbad continued its on-going outreach to the residential community, school children, and the general public during this reporting period. This included the development and distribution of printed materials, public outreach events, presentations, published articles, videos, website access, and direct interaction with the public. Carlsbad actively pursued a comprehensive environmental education and outreach program, combining the activities of storm water, solid waste and water conservation under the umbrella of Environmental Programs. The purpose was to create a unified message, better educate the public, and allow easy access. These accomplishments are described below.

Printed Material

Since the spring of 2006, the City of Carlsbad has been offering a door-to-door Household Hazardous Waste collection program. Residents gather their HHW, and then call for an appointment to have these items collected and disposed of properly. To further educate residents about the program, the City created a new *Household Hazardous Waste Collection* brochure in January 2007. The new brochure includes information about the types of HHW that can be disposed of, information about why residents should participate in the program, phone numbers, addresses, the Environmental Programs logo, and web addresses. The City continued to distribute this brochure during this reporting period.

During this reporting period, the new *Best Management Practices for Mobile Service Providers* brochure continued to be provided to residents during complaint investigations related to mobile service provider discharges.

The City actively participated in the North County Storm Water Program (NCSWP), which is a collaboration of the Carlsbad Watershed Copermittees and the Project Cleanwater Copermittee

Outreach Workgroup. The City distributed the printed materials previously developed with these groups.

Direct Mailings

Carlsbad Conserves, the Environmental Programs Newsletter was mailed to all residents in the summer and fall of 2007. The newsletter is intended to inform residents of environmental issues facing Carlsbad, services provided by the City, tips of how to protect the environment, including storm water BMPs, and a calendar of important environmental dates (clean up recycling, bulky item pick up, etc.). Copies of the summer and fall editions can be found in Appendix 6.1 and 6.2.

The Carlsbad Community Services Guide was mailed three times a year to all Carlsbad households (approx. 40,000). The Winter 2007-Spring 2008 edition included residential storm water BMPs and Environmental Programs information. A copy can be found in Appendix 6.3.

The Environmental Programs Guide was sent to all new customers requesting trash service. This publication offers information about proper disposal of many types of waste including trash, recycling, and household hazardous waste (HHW). Information also included ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution. A copy of the brochure can be found in Appendix 6.4.

Classroom Education

During this reporting period, the Solana Center for Environmental Innovation (Solana Center) continued to conduct the *Classroom Watershed Program* for the City. The Solana Center used the *EnviroScape* interactive model to teach students about watershed stewardship and pollution prevention. Outreach materials and workbooks were provided to the students and teachers. Storm water fliers announcing the free presentations were distributed to teachers.

Each classroom was given a watershed poster, handouts for ten simple ways to help protect the ocean, guides to HHW alternatives and disposal (English and Spanish), and a recycling guide for students to take home. Students were also given pledge cards to sign and take home. The pledge cards read as follows:

1. I pledge not to dump anything down the storm drain.
2. I pledge to remind my family to properly dispose of toxic materials such as paint, cleaners, and pesticides.
3. I pledge to pick up after my dog (given only to those with dogs).

Table 8.2 lists all of the schools and the number of classrooms and students that attended the watershed classroom presentation during this reporting period.

Table 8.2. Carlsbad Elementary Schools Watershed Awareness Programs

Date	Elementary School	of students
05/10/07	Hope Elementary	25
5/11/2007	Hope Elementary	25
10/17/2007	Jefferson Elementary	90
11/14/2007	Buena Vista Elementary	69
12/5/2007	Aviara Oaks Middle School	25
12/7/2007	Magnolia Elementary	12
12/12/2007	Aviara Oaks Elementary	25
1/10/2008	Hope Elementary	70
1/23/2008	Hope Elementary	74
2/5/2008	Pacific Rim Elementary	40
2/6/2008	Pacific Rim Elementary	46
2/12/2008	Pacific Rim Elementary	36
2/20/2008	La Costa Heights Elementary	28
2/27/2008	Valley Middle School	90
3/5/2008	Valley Middle School	77
Total		**732**

City Stuff is an outreach program which evolved through a partnership between the City of Carlsbad and Junior Achievement program. The program reaches over 50 3rd-grade classrooms in Carlsbad (across district lines) and information filters home to the parents/residents. Students learn how Cities are planned, operated, and what services are offered. They also learn about important businesses in a City. Out of the six lessons taught, three of the lessons are Carlsbad specific, and one lesson is focused on City departmental programs. During FY 07-08, Storm Water Protection Program staff participated in the City Stuff program and educated over 100 students about the importance of storm water pollution prevention.

Advertisements

From July 01, 2007 to March 23, 2008, advertisements were published in the Carlsbad Magazine and the Community Services Guide. Table 8.3 lists the published ad and the estimated circulation.

Table 8.3. Dates of Publication of the Environmental Programs Advertisements

Ad	Month	Publication	Circulation
Environmental Programs Ad	Nov-Dec 2007	Carlsbad Magazine	80,000
Environmental Programs Ad	March 2008	Carlsbad Magazine	80,000

Website and Hotline

Most of the printed materials were available for download from the City s website and Environmental Programs website. There were 31,856 hits to the Environmental Programs web pages during this reporting period.

Information Line/On-hold Messages

A continuous on-hold message provides residents with information about events in the City. Staff used the information line to inform residents of the Environmental Programs web page, telephone number, upcoming outreach events, City services, Public Works Fair, Bulky Item Collection Day, and HHW collection facilities.

Kiosks/Display Racks
Various Storm Water Protection Program brochures continued to be stocked at City kiosks and display racks.

Targeted Neighborhood Outreach Campaign
As a result of the *Dry Weather Monitoring Program,* several neighborhoods were identified as contributing to storm water pollution through various residential activities. Follow-up investigations to water quality exceedances in the *2007 Dry Weather Monitoring Program* prompted the City to educate residents in five specific neighborhoods. The identified neighborhoods were delineated using the City's interactive GIS. Layers were turned on to show the streets, parcels, and storm drain system in the identified neighborhoods. The City sent an informational letter and BMPs to residential areas that were identified as potential contributors to storm water pollution (e.g., pet waste, car washing, and landscaping activities). Table 8.4 includes a summary of the number of homes targeted and the information they received mailed in Summer and Fall of 2007.

Table 8.4: Targeted Neighborhood Education.

Neighborhood Site	Number of Homes	Brochures Distributed
AH-65	264	Over-watering, landscape maintenance
BA-06	100	Over-watering, landscape maintenance, pet waste
BV Creek (Calavera Hills)	142	Landscape waste and over-watering, pet waste
BA-36	70	Pet Waste
BA-40	251	Over-watering
Total	**827**	

Direct Interactions
Residents were educated about pollution prevention and BMPs during complaint investigations. City inspectors met with residents to explain storm water regulations and pollution prevention. When a resident was not available, a door hanger and other outreach materials were left to provide information about the reported discharge. Typically, follow-up informational letters were sent to homeowners and/or contractors after an investigation. These correspondences included brochures and fact sheets about storm water. Additional information on residential complaint investigations is provided in Section 5.4.

Prompts and Promotional items
Environmental Programs distributed recycling bags to residents at the Citizen's Academy Event. The recycling bags displayed the Environmental Programs logo and phone number. The bags were also designed to encourage residents to recycle aluminum, glass, paper, and other materials.

In FY 07-08, the City distributed 450 *Bags on Board* dispensers to residents as part of the education and outreach program. The product promotes proper pet waste disposal and the prevention of storm water pollution.

The Storm Water Protection Program continued to distribute pollution prevention message pens to Carlsbad residents and City employees. Several existing storm water, solid waste, and water conservation materials were also distributed, including oil funnels and rags, key chains, buttons, notepads, cups, Frisbees, magnets, and a variety of other products.

Public Events

The City hosted or participated in several public events, which provided opportunities for residents, school children, and the general public to learn about storm water pollution prevention. During most of these events, a staffed booth was set up, and residents and children had the opportunity to pick up printed materials, view an *EnviroScape* model demonstration, and speak directly with City storm water representatives. Table 8.5 includes a summary of these public events for FY 07-08.

Table 8.5. Outreach Events for Residents, General Public, and School Children

Event	Date	Type	Audience	Attendance
Senior Health Fair	07/07/07	Booth	General public	600
Health & Education Expo	09/12/07	Booth	City Employees	200
Citizen's Academy	9/27/07	Presentation Booth	General Public	26
Fall Festival at the Ranch	11/10/07	Booth	General public	500
Citizen's Academy	03/20/08	Presentation Booth	General public	45
Agua Hedionda Lagoon Water Festival	3/22/08	Booth	General public School Children	500
Carlsbad HS Career Day	03/28/08	Booth Watershed Model	School Children and Teachers	1000
Children's Day at the Flower Fields	03/29/08	Booth	General public	4,740
Employee Appreciation Day	4/17/2008	Booth	City Employees	
Beach Cleanup	4/19/08	Booth	General Public	100
Public Works Fair	5/21/08	Booth	General Public School Children	1,300
Health & Safety Fair	6/5/08	Booth	Beckman/Coulter Employees	250

8.4 Outreach Component Effectiveness Assessment

Program Strengths

In June 2007, the City implemented a new waste reduction strategy as a pilot program. This included the purchase and distribution of larger single stream recycling containers and a small trash can for employee work stations. There were also several new larger recycling containers placed in public meeting areas throughout the City. Seen as an effective pilot program, the City implemented the waste reduction strategy at all City facilities in September 2007. Since implementation, City facilities have produced 36 more recycled products. Rollout of this new program included the development of posters, fact sheets and a presentation to educate and inform employees about the importance and benefits of recycling.

The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent. The messages were delivered by various means including presentations, workshops, inspections, investigations, and outreach events, in addition to use of direct mail, the website and newspaper advertisements.

The City continued to actively promote and advertise the Storm Water Protection Program as part of Environmental Programs. This merger of programs has allowed the Storm Water Protection Program to work in conjunction with the *Used Oil Block Grant Funds* program to conduct related education and outreach. The merger also created a unified City Environmental Programs message to help foster a better understanding of the relationship between residential activities and sources of pollution.

The City conducted the annual (telephone) Public Opinion Survey in FY 07-08, which included questions on storm water pollution prevention. The results from this survey provide important information on the public s awareness and knowledge of storm water pollution prevention issues and activities. This information can help focus future education and outreach messages and events, and is also used on a *Performance Measure* to gauge the effectiveness of the outreach and education program.

The Storm Water Protection Program and Environmental Programs worked with the Information Technology Department to revise the web pages and provide updated information about pollution prevention.

In late FY 06-07, the Storm Water Protection Program began drafting a *Best Management Practices Manual* that includes minimum and required BMPs for activities and pollutants types. The manual was completed in FY 07-08.

During FY 06-07, staff developed a new Environmental Programs education campaign entitled Think-Act targeting various environmental concerns, including storm water pollution. The program released advertisements in FY 07-08.

8.5 Program Review and Modification

During this reporting period, staff began revising brochures and fact sheets and updating them to reflect changes in the program. A complete revision of all brochures is expected to be completed in FY 08-09.

During FY 07-08, staff played an active roll in reviewing and planning, and they are preparing to meet the new permit requirements of the JURMP Order No. R9-2007-0001.

9.0 PUBLIC PARTICIPATION

9.1 Introduction

This section describes the activities that the City of Carlsbad has taken from July 1, 2007 to March 23, 2008 with respect to the public participation requirements of the permit. Public participation is crucial to ensuring the effectiveness of the Storm Water Protection Program. Public participation allows the residents, interested parties, and stakeholders to express their concerns and provide creative solutions before final decisions are made. The City led and/or contributed to several public participation opportunities from July 1, 2007 to March 23, 2008 including the development, implementation, and review of storm water management programs, BMPs, and other JURMP and related issues. The goal has been to ensure that the Carlsbad community has a vested interest in solving storm water problems and has a general understanding of watershed protection. Citizens, the business community, and other interested parties were invited to attend public meetings, outreach events, workshops, City Council meetings, and other events during this reporting year.

9.2 Public Meetings and Hearings

The public had numerous opportunities to attend meetings, at the local, watershed and regional levels, in order to learn about the City's implementation of the Permit and have their concerns addressed.

City Council Meetings are held in the Council Chambers at Carlsbad City Hall and are open to the public. The City of Carlsbad offers residents and visitors the opportunity to view City Council meetings via the Internet. Regularly scheduled Carlsbad Council meetings air live on Tuesday evenings at 6 pm. Local viewers can also view Council Meetings live on Time Warner Cable channel 19. Each meeting and agenda is posted online approximately two hours after the conclusion of each meeting. Past meetings will be available for up to a year on the City's own archive video portal. Users can conveniently "keyword search" through the audio/video content and "jump to" meeting discussion items in real-time by using a drop down menu. Agendas from previous meeting can be accessed through the City's Document Management System.

The Planning Commission is comprised of seven members appointed by the City Council. This commission makes recommendations to the City Council regarding implementation and updating of the General Plan. When needed, they also provide recommendations to the Council regarding policy issues that affect long-range planning. They review development projects, provide recommendations to the City Council, provide reports to the City Council on the Local Facilities Management Plans, review the annual CIP for consistency with Growth Management Program, identify potential problems and opportunities facing the City, and suggest special studies when appropriate. The City also provides live streaming of Planning Meetings that are typically held on the first and third Wednesday of each month at 6 pm. Table 9.1 contains a list Regular City Council and Planning Commission Meetings from July 1, 2007 to March 23, 2008.

Table: 9.1 Carlsbad Public Meetings
(July 1, 2007-March 23, 2008)

City Council Meetings		Planning Commission Meetings	
07/10/07	11/20/07	07/18/07	01/02/08
07/17/07	12/04/07	08/01/07	01/03/08
07/24/07	12/11/07	08/15/07	01/16/08
08/07/07	12/18/07	09/05/07	02/06/08
08/14/07	01/08/08	09/15/07	02/07/08
09/11/07	01/15/08	10/03/07	02/20/08
09/18/07	01/22/08	10/17/07	03/05/08
09/25/07	02/05/08	11/07/07	03/06/08
10/02/07	02/12/08	12/05/07	03/19/08
10/09/07	02/19/08	12/19/07	
10/16/07	02/26/08		
10/23/07	03/04/08		
11/06/07	03/18/08		
11/13/07			

Residents could also become representatives on various City committees. The City Clerk's office maintains a current list of City Boards, Commissions, and Committees, current vacancies, meeting dates and times, and coordinates all appointments to these positions.

The public could also attend the Copermittee Management Committee Meetings and other Copermittee meetings. Notices of these meetings are available from the Project Clean Water website at www.projectcleanwater.org. Table 9.2 lists the dates of these meetings.

Table 9.2 Coopermittee Public Meetings (July 1, 2007- March 23, 2008)

Municipal Storm Water Copermittees					
Management Committee	Outreach Workgroup	Regional Monitoring Workgroup		Coastal Storm Drain Monitoring Sub-Workgroup	Dry Weather Monitoring Sub-Workgroup
07/19/07 09/20/07 11/29/07	08/15/07 09/17/07 10/17/07 11/14/07 12/19/07 02/13/08 03/13/08	07/24/07 08/28/07 09/25/07 12/13/07	12/20/07 01/07/08 01/29/08 02/26/08	12/20/07	02/13/08 0312/08

9.3 Feedback Mechanisms

In addition to the feedback opportunities available through public meetings and hearings, there were several other mechanisms available for the public to provide feedback.

9.3.1 Hotline and E-mail Address

The public was encouraged to provide input and feedback on the Storm Water Protection Program implementation. In addition to the public meeting opportunities detailed above, the public could call the storm water hotline to request information, provide comments, or make illegal discharge reports. In addition, the public could send e-mails directly to the Storm Water Protection Program at stormwater ci.carlsbad.ca.us. There were several other public contact phone numbers and City e-mail addresses available for public use. Other City departments forwarded comments and questions to the Storm Water Protection Program as needed. The public could access the Storm Water Protection Program web page through the City s website which provides information about the storm water requirements and BMPs.

The public continued to use the Environmental Programs hotline and e-mail address to obtain information about HHW, trash, and recycling programs during this reporting period. The City s Request for Action (RFA) system was used to track calls about Environmental Programs comments and questions from residents. From July 1, 2007 to March 23, 2008 the Environmental Programs Division responded to 60 complaints/questions related to HHW, recycling, and solid waste.

9.3.2 Direct interaction

The City continues to rely on the interactions between City staff and the public to convey messages about storm water and pollution prevention. City staff received targeted training to increase their understanding of urban runoff issues. Staff interaction with the public also provided additional opportunities for the City to obtain direct feedback about BMPs, ordinances, and pollution prevention efforts.

9.3.3 Public Surveys

The BW Research Partnership, on behalf of the City, conducted an annual *Public Opinion Survey* of Carlsbad residents. The survey entails a random-Digit dial methodology of over 1,000 residents to obtain information about attitudes and knowledge of City services, facilities, and issues, and also includes demographic questions for further analysis and interpretation. There were three questions related to storm water quality on the 2007 survey. The results of these questions are summarized in Section 11 of this report. The entire report is available for download from the City s website. Surveys helped the City understand how the public perceives storm water which can help foster better planning and management programs. The City publishes the results of the *Public Opinion Survey* in the annual *State of Effectiveness Report.*

9.3.4 General Outreach

Efforts through printed ads, newspapers, press releases, media interviews, PSA s, the Community Calendar, City guides, brochures, water bill stuffers, and other publications were used to keep the public informed of storm water requirements, updates, and public participation opportunities. Specific outreach and education are detailed in Section 8 of this report.

9.4 Community Events and Volunteer Efforts

The City s Community Volunteer Coordinator administers outreach and involvement programs for Carlsbad residents. This position has continued to find volunteers to assist the Storm Water Protection Program with various activities, including cleanup events. Volunteers contributed over 31 hours towards improving storm water quality from July 1, 2007 to March 23, 2008. The City participated in several community events held in Carlsbad and other locations across the County. These events are summarized in Table 9.3.

Table 9.3 Community Events (July 1, 2007-March 23, 2008)

Date	Event	Location	Number of Participants
07/07/2007	Senior Health Fair	Carlsbad	600
09/27/2007	Citizen's Academy	Carlsbad	26
11/10/2007	Fall Festival	Carlsbad	500
03/20/2008	Citizen's Academy	Carlsbad	45
03/22/2008	Agua Hedionda Lagoon Water Festival	Carlsbad	500

9.4.1 Citizen s Academy

In the fall of 2007, and spring of 2008 the City hosted two *Citizen's Academy* Workshops. This is a seven-week course (one night per week) designed to teach residents about City government and how public services are provided. In September approximately 27 residents attended, and 45 attended in March. As part of each session, on September 27, 2007 and March 20, 2008, a presentation included an overview of the Storm Water Protection Program, including Permit requirements, program activities, and residential BMPs. This has been a highly successful and popular event, which typically has a waiting list for new participants.

9.4.2 Storm Drain Stenciling

Stenciling storm drain inlets with *No Dumping – Drains to Ocean* messages reminds citizens and businesses not to pollute waterways. Stencils are available upon request to businesses and residents who are interested in stenciling private storm drains. Public inlets were marked by the Streets Department.

9.5 Other Public Participation Opportunities

The City continued to recruit interns from local universities to work with storm water staff. From July 1, 2007 to March 23, 2008, the Storm Water Protection Program had an intern working on various projects, including commercial and industrial inspections, data management, outreach and education, and coastal storm drain monitoring. Their assistance with inspections, water quality studies and monitoring, data entry, and investigations increased productivity and helped the program achieve inspection and investigation goals.

10.0 FISCAL ANALYSIS

The City s fiscal analysis has been conducted on an annual reporting period covering July 1, 2007 to June 30, 2008. Please refer to Order No. 2007-0001, Section 10 of the Annual Report.

11.0 EFFECTIVENESS ASSESSMENT

The City s effectiveness assessment has been conducted on an annual reporting period covering July 1, 2007 to June 30, 2008. Please refer to Order No. 2007-0001, Section 11 of the Annual Report.

12.0 SPECIAL INVESTIGATIONS

The City s Special Investigations Section was written based on an annual reporting period covering July 1, 2007 to June 30, 2008. Please refer to Order No. 2007-0001, Section 12 of the Annual Report.

13.0 NON-EMERGENCY FIRE FIGHTING

The City s Non-Emergency Fire Fighting has been conducted on an annual reporting period covering July 1, 2007 to June 30, 2008. Please refer to Order No. 2007-0001, Section 13 of the Annual Report.

14.0 JURMP REVISIONS

The City's JURMP was re-written during this reporting period in response to the issuance of Order 2007-0001 and was submitted to the Regional Board prior to March 24, 2008. The new JURMP will be implemented beginning March 24, 2008 as required under the new permit. Please refer to Order No. 2007-0001, Section 14 of this Annual Report for JURMP Revisions.

15.0 CONCLUSIONS AND RECOMMENDATIONS

15.1 Overview

During this reporting period, from July 1, 2007 to March 23, 2008, the City continued to implement Permit 2001-01. This section of the JURMP Annual Report described activities that the City undertook to reduce discharges of pollutants and urban runoff flow to the MS4 to the maximum extent practicable. This section of the Annual Report also provided an overall account of the activities conducted and the programs implemented to address the inspection, monitoring, investigation, education, and enforcement requirements.

Several highlights are listed below, including specific discussion of activities conducted related to meeting Permit requirements, internal program goals that met or exceeded Permit requirements, and recommended improvements. Note that these are highlights only and do not represent all activities conducted by the City to maintain and exceed compliance. Comprehensive details are reported in the applicable preceding sections.

15.2 Highlighted Activities Performed to Meet Permit Requirements

The City continued activities to maintain compliance with the Permit. For comprehensive details, please refer to the applicable preceding sections of the report. Highlights for July 1, 2007 to March 23, 2008 are listed below.

The City:

- Updated and mapped the municipal inventory and inspected all high priority municipal facilities.
- Conducted cleaning and maintenance activities to reduce pollutant discharges from the MS4.
- Updated and mapped the High Priority industrial inventory, and inspected 42 of 42 High Priority industries.
- Updated and mapped the Medium and Low industrial inventory, inspected 91 Medium and Low industries, conducted outreach, and issued 2 enforcement actions to obtain compliance.
- Updated and mapped the commercial inventory, provided outreach on BMPs, inspected 385 commercial sites, and issued 31 enforcement actions to obtain compliance.
- Continued using the *Knowledge and BMP Assessment*s at commercial and industrial facilities.
- Collaborated with other internal departments to assist with investigations and remediation during field incidents. The Storm Drain Maintenance Division was key to prompt, effective responses to complaints involving clean ups of incidents on public streets. Regular meetings and discussions about compliance issues and consistent contacts facilitates this inter-departmental coordination.
- Distributed educational information for residential activities, continued an advertising campaign, hosted or participated in 12 community outreach events, collaborated in offering five oil recycling and two HHW drop-off sites for residential use, responded to 161 reports of illegal discharges, and issued 44 enforcement actions to obtain compliance.
- Inspected all high priority construction sites at required frequencies, conducted outreach to project proponents and City staff, and issued 28 enforcement actions to obtain compliance, during 3148 inspections.

- Continued implementation of the *Dry Weather Field Screening and Analytical Program*, analyzing conditions and samples from 60 sites in the MS4.
- Continued implementation of the *Coastal Outfall Program* by routinely monitoring 8 active outfall sites on a regular basis, and inactive sites semi-annually.
- Distributed a copy of the Pollution Prevention Guide to the Construction Industry brochure with each construction related permit application.
- Inspected 100 of catch basins and performed maintenance where necessary.
- Conducted a proactive program to detect and eliminate illegal discharges to the MS4. The public continued to use the storm water hotline and e-mail address to report illegal discharges to the storm drain system. The Storm Water Protection Program responded to 161 reports of illegal discharges to the storm drain system.
- Continued involvement in outreach and education at the local level, the watershed level, and the regional level with the Project Clean Water Outreach Workgroup.
- Continued distributing storm water educational brochures and continued the Environmental Programs advertising campaign.
- Distributed information through direct mail, during inspections and investigations, on the website, at workshops, during presentations, training seminars, and other public outreach events.
- Conducted a Public Opinion Survey of 1,000 residents and included questions on storm water.
- Distributed promotional items such as notepads, pens, Bags on Board, and key chains with pollution prevention messages.
- Decreased illegal discharges from commercial mobile businesses.
- Improved the Carlsbad Municipal Code by working with the City Attorney s office to revise the ordinance to reflect current enforcement levels and mechanisms.
- Reviewed internal NPDES programs for compliance with Order No. 2001-01 prior to implementing Order No. R9-2007-0001.
- Continued to review inventory management, prioritization practices, inspection and enforcement procedures, training programs, record-keeping, and reporting procedures related to construction activities.

15.3 Highlighted Activities in Addition to Permit Requirements

The City implemented several initiatives in addition to the requirements of the Permit. Some of these highlights are internal program goals and should not be viewed as enforceable under the Permit. These internal program goals will be continued and enhanced as resources allow. For comprehensive details, please refer to the applicable preceding sections of this report. Highlights for July 1, 2007 to March 23, 2008 are as follows:

The City:

- Continued to maintain regular communications with the Industrial Compliance Unit of the Regional Board. In addition to copies of inspection reports and other correspondence with high and medium industries covered under the Permit, the City regularly coordinated compliance issues with Regional Board representatives over the phone and through emails. On several occasions, the Regional Board expressed their appreciation of the City s professionalism, responsiveness, and implementation of the storm water program
- Continued using the streamlined inspection report revised in FY 05-06 so that businesses could promptly implement corrective actions. The revised streamlined inspection form now includes spaces to report previous enforcement actions, new storm

water contacts, and a detailed list of necessary corrective actions. The revised form has proven to be successful in attaining compliance from regulated facilities.

- Continued the Environmental Resources Management Team (ERMT) initiative to look at environmental resources from a City-wide perspective including storm water, open space, habitat management, energy use, and sustainable principles.
- Supported the ERMT's work creating Environmental Guiding Principles for City decision-making, seeking approval from City Council on the formal principles.
- Continued Storm Water Leadership Team (SWLT) meetings. Monthly meetings of the SWLT were conducted and attendees included Senior Management of the City's major service areas and Directors. Agenda items covered all areas of the City's compliance with Order No. 2001-001, as well as review of the new Order No. R9-2007-0001.
- Adopted the use of BMP maintenance agreements for privately-maintained BMPs
- Continued distributing the new brochure for mobile service providers, including carpet cleaners, plumbers, pressure washers, mechanics, porta-potty services, and any other mobile businesses that provide services at various off-site locations. This brochure was designed for mobile service providers, their employees, and anyone that hires a mobile service provider.
- Posted minimum BMPs on the City's website for access by the public, permit applicants, developers, and property owners.
- Adopted new storm water BMP maintenance agreements and incorporated into standard operating procedures. The new BMP maintenance agreements provide increased control over property owner compliance with storm water BMP requirements. These new agreements will also provide the City with legal authority to access, inspect and if necessary maintain onsite BMPs. In addition, the agreements will allow the City to place a lien on a property if BMPs are not maintained as required.
- Continued to collect data for Performance Measures and the *Maintenance Assessment Program* to analyze improved work methods to balance scheduled versus unscheduled maintenance.
- Continued Storm Water Committee meetings which included members from Public Works, the Fire Department, Recreation, Planning, and the Building Department.
- Continued to use the new database to track private treatment BMPs implemented under SUSMP.
- Continued to implement a computerized asset management/work order system that will allow the Storm Drain Maintenance Division to manage of the MS4 inventory, inspections, and maintenance activities conducted.

15.4 Recommendations for Improvements

As the City implemented the JURMP in this reporting period, some areas for improvement were noted for the future:
The City will:

- Continue to research, observe, and evaluate the performance of various types of BMPs.
- Continue working on a "*Best Management Practices Manual*" for businesses that includes the minimum and required BMPs for activities and pollutant types. The manual should be completed in FY 08-09.
- Continue to revise existing and add new programs to implement the new NPDES Municipal permit Order No. R9-2007-0001.
- Continue to work at the watershed level and help focus activities on high priority pollutants.

15.5 Water Quality Improvements or Degradation

The complete 2008 Dry Weather report and the full IDDE Section of the Annual Report will be submitted in December of 2008. Please refer to the *Carlsbad Watershed 2008 WURMP* for data trends supporting the focus on *High Priority Pollutants* on a watershed basis. The following text highlights some of the observations on water quality.

MS4 Water Quality
With five years of data from the Dry Weather Program, ranging from nutrient and physical measurements to bio-available metals and pesticides, collected at 60 sites covering the entire MS4, a picture of water quality within the system is starting to appear. While data is only collected once annually, improvements can be seen for nutrient concentrations, pH, fecal coliform, ammonia, and surfactants within the MS4.

Exceedances of bacteria 95th percentile criteria in the *Coastal Storm Drain Monitoring Program* have declined in recent years.

Receiving Water Quality
The City is continuing to conduct additional receiving water monitoring to assess receiving water quality in Carlsbad. Current programs include the *Coastal and Lagoon Outfall Monitoring Program*, the Watershed Receiving Waters samples, mass loading station monitoring, and temporary watershed assessment stations (TWAS).

Coastal Monitoring Program data indicate no water quality exceedances for bacteria in the ocean and only a few in the enclosed lagoons. The exceedances in the lagoons have declined in recent monitoring seasons and water quality appears to be improving.

In the Watershed Receiving Waters samples during dry weather nearly all constituents were undetected in the four additional creek sites water samples including: MBAS, oil and grease, dissolved cadmium, dissolved copper, dissolved lead, diazinon, and chlorpyrifos. Water quality at the four locations was relatively good.

Data related to the Mass Loading Station and TWAS will be submitted with the Copermittees Regional Monitoring Annual Report.

15.6 Conclusion

The Storm Water Protection Program continues to evolve over time in response to the iterative process of implementing BMPs, assessing effectiveness, and evaluating results. As more procedures, programs and activities are implemented, there is a clear need for better databases to track and report activities and BMPs being implemented. Tying these activities to changes in water quality still presents a considerable challenge. This is part of the long-term assessment strategy that will take time to develop trends and to determine cause and effect relationships between pollution prevention and water quality management. The City will continue to work individually and with the Copermittees to further develop existing compliance programs and create new opportunities for improvement.

This section of the Annual Report demonstrates the City s compliance with Permit 2001-01 and success implementing the JURMP. Other sections of this report show that knowledge has increased in target communities, improved BMP implementation and behavior changes are occurring, pollutant loadings are being reduced from storm water management programs, the

MS4 quality is improving, and some pollutants in receiving waters are improving. These are encouraging signs that are worth noting. The City recognizes that changes are likely to happen slowly and that continued program improvements and effectiveness measures are needed for long-term success.

Acronyms

BGPD	Billion gallons/day
BMP	Best Management Practices
CEQA	California Environmental Quality Act
CFD	Carlsbad Fire Department
CHU	Carlsbad Hydrologic Unit
CWN	Carlsbad Watershed Network
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FC	Fecal Coliform
GIS	Geographical Information System
GPM	Gallons Per Minute
HAZMAT	Hazardous Materials
HHW	Household Hazardous Waste
IC/ID	Illicit Connections/Illegal Discharges
IDD&E	Illegal Discharge Detection and Elimination
JURMP	Jurisdictional Urban Runoff Management Plan
M&O	Maintenance & Operations
MSA	Major Service Area
MS4	Municipal Separate Storm Sewer System
MSDS	Material Safety Data Sheet
NCSWP	North County Storm Water Program
NOI	Notice of Intent
NONA	Notice of Non-Applicability
NON-RCRA	Not related to the Resource Conservation and Recovery Act
NPDES	National Pollutant Discharge Elimination System
OES	Office of Emergency Services
PCB	Poly Chlorinated Bi-phenyl
POST	Peace Officer Standards Training
PVC	Poly Vinyl Chloride
RCD	Resource Conservation District of Greater San Diego
RFA	Request for Action
RV	Recreational Vehicle
RWQCB	Regional Water Quality Control Board – Regional Board
SDRWQCB	San Diego Regional Water Quality Control Board
SDSU	San Diego State University
SIC	Standard Industrial Classification
SOPP	Sewer Overflow Prevention Plan
SUSMP	Standard Urban Stormwater Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Technical Advisory Committee
TC	Total Coliform
URMP	Urban Runoff Management Plan
WTM	Watershed Treatment Model
VCP	Vitrified Clay Pipe

City of Carlsbad
Standard Engineering Storm Water Compliance
Conditions of Development Approval

NOTE: Unless specifically stated in the condition, all of the following conditions, upon the approval of this proposed (DEVELOPMENT OR SUBDIVISION), must be met prior to approval of a (PARCEL MAP, FINAL MAP, BUILDING OR GRADING PERMIT WHICHEVER OCCURS FIRST).

7. Developer shall submit to the City Engineer an acceptable instrument, via CC&R's and/or other recorded document, addressing the maintenance, repair, and replacement of shared private improvements within this subdivision, including but not limited to private (STREETS, UTILITIES, STREET TREES, SIDEWALKS, LANDSCAPING, STREET LIGHTING, RAISED MEDIANS, ENHANCED PAVING, WATER QUALITY TREATMENT MEASURES, LOW IMPACT DEVELOPMENT FEATURES, STORM DRAIN FACILITIES, etc.) located therein and to distribute the costs of such maintenance in an equitable manner among the owners of the properties within this subdivision.

17. Developer shall cause property owner to process, execute and submit an executed copy to the City Engineer for recordation a City standard Permanent Stormwater Quality Best Management Practice Maintenance Agreement for the perpetual maintenance of all treatment control, applicable site design and source control, post-construction permanent Best Management Practices prior to the issuance of a grading permit or building permit, or the recordation of a (FINAL/PARCEL) map, whichever occurs first for this Project.

33. Developer shall comply with the City's Stormwater Regulations, latest version, and shall implement best management practices at all times. Best management practices include but are not limited to pollution treatment practices or devices, erosion control to prevent silt runoff during construction, general housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants to stormwater, receiving water or stormwater conveyance system to the maximum extent practicable. Developer shall notify prospective owners and tenants of the above requirements.

[USE NEXT TWO CONDITIONS ONLY IF PROJECT QUALIFIES AS TIER 3 SWPPP]

34. Prior to the issuance of a grading permit, Developer shall submit to the City Engineer receipt of a Notice of Intention from the State Water Resources Control Board.

35. Prior to the issuance of grading permit or building permit, whichever occurs first, Developer shall submit for City approval a Tier 3 Storm Water Pollution Prevention Plan (TIER 3 SWPPP). The TIER 3 SWPPP shall be in compliance with current requirements and provisions established by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Requirements. The TIER 3 SWPPP shall address measures to reduce to the maximum extent practicable storm water pollutant runoff during construction of the project.

[USE NEXT CONDITION ONLY IF UNSURE WHICH TIER SWPPP IS NEEDED FOR PROJECT]

36. Developer shall complete and submit to the City Engineer a Project Threat Assessment Form (PTAF) pursuant to City Engineering Standards. Concurrent with the PTAF, Developer shall also submit the appropriate Tier level Storm Water Compliance form and Tier level Storm Water Pollution Prevention Plan (SWPPP) as determined by the completed PTAF all to the satisfaction of the City Engineer.

[USE NEXT CONDITION ONLY IF MEETS PRIORITY PROJECT DESIGNATION]

37. Developer shall submit for City approval a "Storm Water Management Plan (SWMP)." The SWMP shall demonstrate compliance with the City of Carlsbad Standard Urban Stormwater Mitigation Plan (SUSMP), Order R9-2007-0001 issued by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Municipal Code all to the satisfaction of the City Engineer.

[USE AS FYI FOR LID TECHNIQUES]

38. Developer shall incorporate Low Impact Development (LID) design techniques, on all final design plans submitted to the City, to reduce the amount of run-off by mimicking the natural hydrologic function of the site by preserving natural open-spaces and natural drainage channels, minimizing impervious surfaces, promoting infiltration and evaporation of run-off before run-off leaves the site. Developer shall incorporate LID techniques using current County of San Diego Low Impact Development Handbook (Stormwater Management Strategies). LID techniques include, but are not limited to: vegetated swale/strip, rain gardens, and porous pavement, which can greatly reduce the volume, peak flow rate, velocity and pollutants.

[USE IF PROJECT REQUIRES HYDROMODIFICATION THRESHOLDS]

39. Developer shall submit documentation, subject to City Engineer approval, demonstrating how this project complies with Interim Hydromodification requirements per the City's SUSMP, latest version. Documentation shall be included within the Storm Water Management Plan (SWMP).

[USE NEXT TWO CONDITIONS FOR CONDITONAL USE PERMIT EXTENSIONS AS APPLICABLE]

40. Within 6 months of approval of this Conditional Use Permit extension, developer shall submit and receive approval for a Storm Water Management Plan (SWMP) to the City of Carlsbad Engineering Department. This project qualifies as a "priority project" as defined by City of Carlsbad Standard Urban Storm Water Mitigation Plan (SUSMP), and therefore, the project is required to capture and reduce pollutants to a level of insignificance. The organization and content of the SWMP shall be prepared in accordance with the guidelines established by the City of Carlsbad. The SWMP shall address the anticipated pollutants of concern associated with the Project. The SWMP shall also suggest the type(s) of post-construction (structural) Best Management Practices (BMP's) required to capture and filter said pollutants of concern and establish maintenance provisions for said BMP's.

41. Prior to the next annual review of this Conditional Use Permit, developer shall have constructed the BMP measures necessary to capture and filter the anticipated pollutants of concern associated with the project in accordance with the SWMP.

City of Carlsbad
Development Project Approvals
FY 07-08 1st Component Period (July 1, 2007 through March 23, 2008)

			Recommending Authority				Approving Authority				
Project ID	Other Actions	Project Name	Date	Entity	Reso No.	Action	Date	Entity*	Reso No.	Action	Project Priority Status**
MS 05-10		Chehade Minor Subdivision					07/16/2007	CE	Letter	Approval	NP
MS 07-01		Scott Minor Subdivision					07/18/2007	CE	Letter	Approval	NP
CT 02-26x2		Seashore on the Sand					07/18/2007	PC	6325	Approval	NP
CDP 05-45		Alderson Residence					07/18/2007	PC	6324	Approval	NP
CDP 06-30		Tabata Blackrail Road Estates					07/18/2007	PC	6323	Approval	P
MS 06-06		Rozansky Minor Subdivision					08/01/2007	CE	Letter	Approval	NP
MS 07-04		Claire Minor Subdivision					09/11/2007	CE	Letter	Approval	NP
MS 04-20		Ventana Real Minor Subdivision					09/13/2007	CE	Letter	Approval	P
CDP 03-03	GPA 04-20, ZC 04-15, LCPA 06-05, MS 06-12	Kelly/JRM Office Bldg	04/16/2007	PC	6296, 6297, 6299, 6300	Recommend Approval	09/18/2007	CC	2007-199	Approval	P
CT 00-18x1	SDP 01-10x1, HDP 00-09x1, SUP 00-09x1	Cantarini Ranch					09/19/2007	PC	6330, 6331, 6332	Approval	P
CT 00-21x1	HDP 00-12x1	Holly Springs					09/19/2007	PC	6333, 6334, 6335	Approval	P
CT 04-14A		Trails End					09/19/2007	PC	6329	Approval	P
CUP 87-12x4		First Baptist Church of Carlsbad					10/03/2007	PC	6342	Approval	NP
PIP 07-01		Opus Point V					10/17/2007			Approval	P
CT 06-09	PUD 06-07	Atrium II Office Condos					10/17/2007	PC	6336, 6337	Approval	NP
CT 04-26	PUD 06-12, PUD 06-13, PUD 06-14	Robertson Ranch Pas 16, 17 & 18	10/03/2007	PC	6343, 6344, 6345, 6346	Recommend Approval	11/06/2007	CC	2007-290	Approval	P
SDP 06-06	Robertson Ranch PA 19	Robertson Ranch PA 19	10/03/2007	PC	6347	Recommend Approval	11/06/2007	CC	2007-290	Approval	P
SUP 05-18		Bressi Ranch Planning Area 2					11/07/2007	PC	6350	Approval	P
CUP 02-05A		Lot 23 Auto Storage Facility					12/05/2007	PC	6358	Approval	P
MS 06-01		McCarthy Minor Subdivision					12/05/2007	CE	Letter	Approval	NP
CT 02-12x1	PUD 02-05x1, PIP 02-04x1	Carlsbad Office Campus					12/05/2007	PC	6353, 6354, 6355	Approval	P
CT 06-19	PUD 06-16, CUP 06-17	Continuing Care Facility Bressi Ranch	11/07/2007	PC	6270, 6271, 6272	Recommend Approval	12/18/2007	CC	2007-327	Approval	P
CUP 01-12x1		Montessori Arts and Sciences School					12/19/2007	PC	6366	Approval	NP
CT 06-11	PUD 06-10	Palomar Forum Lots 1, 2 & 3					12/19/2007	PC	6367, 6368	Approval	P
MS 05-25		Alexander Minor Subdivision					01/07/2008	CE	Letter	Approval	NP
CDP 06-25		Hagey Residence					01/16/2008	PC	6369, 6370	Approval	NP
CT 07-04	GPA 07-07, MP 178F, SDP 07-03, PUD 07-04, SUP 07-01	Bressi Ranch Medical Center	12/05/2007	PC	6359, 6360, 6361, 6362, 6364, 6365	Recommend Approval	02/05/2008	CC	2008-027	Approval	P

City of Carlsbad
Development Project Approvals
FY 07-08 1st Component Period (July 1, 2007 through March 23, 2008)

Project ID	Other Actions	Project Name	Date	Entity	Reso No.	Action	Date	Entity*	Reso No.	Action	Project Priority Status**
CT 02-17x1	HDP 02-08x1, HMPP 05-04x1	Shelley Property					02/06/2008	PC	6383, 6384, 6385	Approval	P
CDP 05-46		Moss Residence	02/06/2008	PC	6371	Approval		CCC		Denial	P
CT 06-17	PUD 06-15, SDP 06-07, SUP 06-04	El Camino Terrace					02/06/2008	PC	6372, 6373, 6374, 6375		P
PIP 05-23A		Bressi Ranch, PA 4					02/07/2008			Approval	P
MS 05-27x1		Stirnkorb Minor Subdivision					02/14/2008	CE	Letter	Approval	NP
CUP 204E		Saint Patrick Parish School					02/20/2008	PC	6382	Approval	NP
CUP 00-04x1		Sprint PCS Car Country					03/05/2008	PC	6391	Approval	NP
CDP 07-12		Sears Residence					03/05/2008	PC	6400	Approval	NP
CT 05-12	CP 05-11 CDP 05-28	Ocean Street Residences					03/05/2008	PC	6393, 6394, 6395, 6396	Approval	P
RP 04-23x1	CT 04-21	Carlsbad Village Townhomes					03/08/2008	H&RC	447, 448	Approval	P
PIP 07-04		Kilroy Lot 4					03/10/2008			Approval	P
PIP 07-05		Kilroy Lot 5					03/11/2008			Approval	P
CT 06-25	CP 06-17	Robertson Ranch PA 21	02/06/2008	PC	6386, 6387	Recommend Approval	03/18/2008	CC	2008-089	Approval	P
CUP 02-20x1		Legoland Vehicle Storage					03/19/2008	PC	6401	Approval	NP
CT 07-12	PUD 07-07	Oceans Collection					03/19/2008	PC	6398, 6399	Approval	P
CUP 06-20	SUP 08-01	SDG&E Steel Pole WCF					03/19/2008	PC	6392, 6406	Approval	NP
CUP 07-01		Dog Park WCF					03/19/2008	PC	6390	Approval	NP
CUP 91-03C		BP Arco Facility 5792 - Car Wash					03/19/2008	PC	6402	Approval	NP

* PC = Planning Commission; CC = City Council; CE = City Engineer; PD = Planning Director; CCC = Coastal Commission

** P = Priority Development Project; NP = Non-Priority Development Project

City of Carlsbad
Capital Improvement Program (CIP)
FY 2007-08 Project Approvals

No.	Project Name	Proj/Cont. No.	Award of Contract	Priority Status*
1st Fiscal Year Component Projects (July 1, 2007 to March 23, 2008)				
1	2006-07 Street Sealing	3667-14	07/10/2007	NP
2	Poinsettia Sewer Lift Station Upgrade	3875	09/18/2007	NP
3	Maerkle Reservoir Floating Cover	5005	09/18/2007	NP
4	Poinsettia Community Park Phase IIA - Tennis Courts	4502	09/18/2007	P
5	Traffic Signal at Poinsettia Lane and Blackrail Road	3939-1	10/09/2007	NP
6	Calle Gavanzo Drainage Improvements	PWS08-06ENG	11/06/2007	NP
7	Stagecoach and Calavera Hills Park Picnic Shelters.	39361	12/11/2007	NP
8	Cynthia Lane Storm Drain	PWS08-13ENG	02/05/2008	NP
9	2008 Concrete Replacement	PWS08-15ENG	02/20/2008	NP
10	Village Concrete and Hardscape Repairs	STS 08-01	03/18/2008	NP
2nd Fiscal Year Component Projects (March 24, 2008 to June 30, 2008)				
1	2008 Overlay	6001-08 OL	05/20/2008	NP
2	2008 Street Sealing	6001-08 SS	06/24/2008	NP
3	Traffic Signal at Calle Barcelona and Paseo Avellano	6306	06/24/2008	NP
4	El Camino Real North of Cougar	3920, 6001, 6013	07/15/2008	NP

* P = Priority Project; NP = Non-Priority Project

City of Carlsbad
FY 07-08 Publicly Owned Treatment Control BMP Inventory

Facility ID	Priority	Location	Drawing No.	Ownership	Owner Name	BMP Type	BMP Description	Drainage BASIN	Proximity to ESA	Installation Date
DB82	High	132 S OF Via De Canto at elbow	164-8	Public	City of Carlsbad	TC-22	Extended Detention Basin	904.21	Yes	1975
DB109	Medium	SW corner of Marron and Monroe	304-2	Public	City of Carlsbad	TC-22	Extended Detention Basin	904.21	No	1989
DB13	High	SW end of Faraday Avenue, south of Lot 102 of CRC	294-1A	Public	City of Carlsbad	TC-22	Extended Detention Basin	904.31	Yes	1991
SDAH1503	Medium	Chestnut Ave e/o Harding St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
SDAH1506	Medium	Chestnut Ave at Roosevelt St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
SDAH1508	Medium	Chestnut Ave at Roosevelt St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
SDAH1509	Medium	Chestnut Ave e/o Madison St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
SDAH1522	Medium	Harding St at Avacado Lane	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
SDAH1526	Medium	Harding St at Magnolia St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
SDAH3145	Medium	Chestnut Ave e/o Harding St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
SDAH3146	Medium	Chestnut Ave e/o Harding St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
SDAH3147	Medium	Chestnut Ave e/o Harding St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
SDAH3155	Medium	Chestnut Ave w/o Railroad	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
SDAH3157	Medium	Oak St E/O Roosevelt	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
SDAH3159	Medium	Oak Street at Railroad	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
SDAH3161	Medium	Oak St W/O Roosevelt	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
SDAH3163	Medium	Oak St E/O Roosevelt	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
SDAH3166	Medium	Oak St E/O Railroad	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
SDAH3167	Medium	Oak St E/O Railroad	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
SDAH3168	Medium	Oak St W/O Roosevelt	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
SDAH13344	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13345	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13352	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13354	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13369	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13370	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13372	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001

City of Carlsbad
FY 07-08 Publicly Owned Treatment Control BMP Inventory

Facility ID	Priority	Location	Drawing No.	Ownership	Owner Name	BMP Type	BMP Description	Drainage BASIN	Proximity to ESA	Installation Date
SDAH13374	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13375	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13377	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13379	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13382	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13384	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13385	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13395	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
SDAH13396	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
DB62	High	660 ft NW of Cannon@College on College and 140 ft NE of c/l	390-9	Public	City of Carlsbad	TC-12	Retention Basin	904.31	Yes	2004
SDAH13485	Medium	Whiptail Loop n/o Caribu Ct	415-9	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	10/26/2004
SDAH13487	Medium	Whiptail Loop n/o Caribu Ct	415-9	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	10/26/2004
DB111	High	Lake Calavera	N/A	Public	City of Carlsbad	TC-22	Extended Detention Basin	904.31	Yes	1940
DB113	High	Cannon Lake	N/A	Public	City of Carlsbad	TC-22	Extended Detention Basin	904.31	Yes	1954
SDAH11572	High	N/O Gateway Rd E/O ECR	400-8D	Public	City of Carlsbad	TC-60	MP-50 & MP-51	904.40	No	10/07/2004
SDAH14126	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
SDAH14128	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
SDAH14129	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
SDAH14130	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
SDAH14131	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003

City of Carlsbad
FY 07-08 Publicly Owned Treatment Control BMP Inventory

Facility ID	Priority	Location	Drawing No.	Ownership	Owner Name	BMP Type	BMP Description	Drainage BASIN	Proximity to ESA	Installation Date
SDAH14132	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
SDAH10606	High	Corner of Paseo Lupino and Corte Brezo	397-1E	Public	City of Carlsbad	MP-51	CDS UNIT	904.51	No	02/22/2002
SDAH12741	High	Alicante Road n/o Poinsettia Lane	397-2F	Public	City of Carlsbad	MP-51	CDS UNIT	904.51	Yes	01/16/2003
SDAH12986	Medium	N/S PAR E/O Melrose Dr	399-4	Public	City of Carlsbad	MP-52	Drain Insert	904.51	No	06/22/2004
SDAH11082	High	SW Corner El fuerte and Poinsettia Lane	400-8F	Public	City of Carlsbad	TC-60	MP-50 & MP-51	904.51	Yes	02/21/2003
SDAH13877	Medium	Rose Drive and Sagebrush Road	401-9H	Public	City of Carlsbad	MP-52	Drain Insert	904.51	No	06/11/2004
SDAH13845	High	Poinsettia Lane at Mica Rd	427-6B	Public	City of Carlsbad	MP-51	CDS UNIT	904.51	Yes	06/07/2005
SDAH13846	High	Poinsettia Lane at Quartz way	427-6B	Public	City of Carlsbad	MP-51	CDS UNIT	904.51	Yes	06/07/2005
SDAH1536	Medium	Walnut Ave E/O Lincoln St	257-4	Public	City of Carlsbad	MP-52	Drain Insert	AHL	No	11/25/1986
SDAH1535	Medium	Walnut Ave E/O Lincoln St	277-2	Public	City of Carlsbad	MP-52	Drain Insert	AHL	No	03/18/1987

City of Carlsbad
FY 07-08 Privately Owned Treatment Control BMP Inventory

UNIT ID	Priority	APN	Location	Owner	Owner Name	BMP Type	BMP Detail	Drainage BASIN	Proximity to ESA	BMP Maintenance Agreement	Approved/ Signed Date
11C-49	High	2052604000	WESTHAVEN DR	PVT	Robert and Deborah Jennings	MP-50	Wet Vault	904.21	No	Yes	02/26/2007
24C-153	High	2120210100	SALK AVE	PVT	H.G. Fenton Company	MP-50	Wet Vault	904.31	Yes	NA	07/20/2007
31C-129	High	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	MP-50	Wet Vault	904.40	No	NA	06/23/2006
31D-120	High	2131220900	EL FUERTE ST	PVT	PRS ACQUISITION&CONSTRUCTION L L C	MP-51	Vortex Separator	904.51	Yes	UNK	02/22/2005
38A-77	High	2132502700	6361 KEENELAND DR	PVT	BRESSI GARDENLANE LLC	MP-51	Vortex Separator	904.51	No	UNK	08/04/2004
42A-150	High	2146300800	6777 LONICERA ST	PVT	BAY COLLECTION HOMEOWNERS ASSN c/o W	MP-50	Wet Vault	904.21	No	NA	06/11/2004
42A-160	High	2146312200	LEMON LEAF DR	PVT	BAY COLLECTION HOMEOWNERS ASSN c/o W	MP-50	Wet Vault	904.21	No	NA	06/11/2004
42A-167	High	2146400800	7053 HERON CR	PVT	James and Diane Winter	MP-51	Vortex Separator	904.51	No	CCNR	06/11/2004
43A-108	High	2159505500	1629 ZEPHYR CT	PVT	AVIARA BLACK RAIL ROAD 16 L L C	MP-50	Wet Vault	904.51	Yes	CCNR	12/16/2006
43B-40	High	2150202500	6515 EL CAMINO REAL	PVT	MANZANITA PARTNERS L L C	MP-51	Vortex Separator	904.51	No	UNK	10/23/2003
44A-52	High	2132333200	6795 MALACHITE PL	PVT	LACOSTA GREENS COMMUNITY ASSN	MP-51	Vortex Separator	904.51	No	UNK	01/24/2003
45B-121	High	2237901900	3184 PASEO ABRAZO	PVT	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Vortex Separator	904.51	Yes	UNK	04/06/2004
45D-31	High	2237810700	7170 SITIO CABALLERO	PVT	REAL ESTATE COLLATERAL MANAGEMENT C	MP-51	Vortex Separator	904.51	Yes	UNK	04/06/2004
50D-14	High	2238423800	COLINA CERRO	PVT	REAL ESTATE COLLATERAL MANAGEMENT C	MP-51	Vortex Separator	904.51	Yes	CCNR	07/12/2007
53B-20	High	2165901100	COSTA DEL MAR RD AN ECR	PVT	K S L LA COSTA RESORT CORP	MP-51	Vortex Separator	904.51	Yes	UNK	12/21/2005
59C-146	High	2550313000	SE corner of Behind Henry's Grocery Store	PVT	LOS COCHES PROPERTIES L L C	MP-51	Vortex Separator	904.51	Yes	Drainage Basin Maintenance Agreement	10/18/2004
9B-73	High	2031013701	LAGUNA DR	PVT	Laguna Point HOA	TC-60	Multiple Sytems	904.51	Yes	NA	03/25/2004
DB1	High	2121603200	Northwest corner of El Camino Real and Jackspar Drive	PVT	Eagle Canyon Evans Points Association	TC-22	Extended Detention Basin	904.31	Yes	UNK	08/02/1995
DB10	High	2156002700	NE Corner of Hummingbird and Rock Dove	PVT	Aviara Land Associates Limited Partnership	TC-22	Extended Detention Basin	904.51	Yes		03/20/1992
DB101	High	2131210200	129 Ft SE of centerline Intersection of El Fuerte St and Gateway Rd	PVT	Bressi Ranch Fuel Mart LLC	TC-11	Extended Detention Basin	904.51	Yes		
DB102	High	2131910600	382 Ft SW of CL intersection of Bressi Ranch Wy and El Fuerte St	PVT	LNR CPI Bressi Retail LLC	TC-11	Extended Detention Basin	904.51	Yes		
DB103	High	2157901500	491 Ft SE of center line intersection Pelican St & Shorebird Ln	PVT	Aviara Master Assn	TC-11	Extended Detention Basin	904.51	Yes		
DB104	High	2120406400	376 Ft SW of centerline intersection of PAR & Aviara Pkwy	PVT	Kelly/JRM-Palomar Airport Road I LLC	TC-11	Extended Detention Basin	904.51	Yes		
DB11	High	2091210400	North of El Fuerte	PVT	CENTER FOR NATURAL LANDS MGMT	TC-22	Extended Detention Basin	304.31	Yes		11/17/1987
DB110	High	2121520100	El Camino Real and Cannon Rd - 660 South of intersection.	PVT	Evans Point Homeowners Association	TC-11	Extended Detention Basin	904.31	Yes	Grading and Erosion Control Agreement	08/24/1994
DB112	High	1674801700	258 Feet from 3535 Simbury Ct.	PVT	The Villas of Calavera Hills Homeowners Assn	TC-11	Infiltration Basin	904.31	Yes		
DB114	High	2130922500	Palomar Airport Rd and Palomar Oaks	PVT	Palomar Oaks Business Center Assn	TC-11	Infiltration Basin	904.40	Yes		
DB115	High	2130922500	Between 1949 and 1959 Palomar Oaks	PVT	Palomar Oaks Business Center Assn	TC-11	Infiltration Basin	904.40	Yes		
DB116	High	2130922500	1969 Paseo Del Lago	PVT	Palomar Oaks Business Center Assn	TC-11	Infiltration Basin	904.40	Yes		
DB117	High	2091210400	545 Feet Southeast of El Fuerte and Faraday	PVT	CENTER FOR NATURAL LANDS MGMT	TC-11	Infiltration Basin	904.31	Yes		
DB118	High	2218801500	293 Feet NE of Melrose and Lionshead	PVT	Fenton Raceway LLC	TC-11	Infiltration Basin	904.31	Yes		
DB119	High	2226820200	825 Feet SE of Melrose and Poinsettia	PVT	Rancho Carrillo Master Association	TC-11	Infiltration Basin	904.51	Yes		
DB120	High	2551925800	242 Feet NE of Rancho Santa Fe and Olivehain	PVT	Colinas De Oro Community Association	TC-11	Infiltration Basin	904.51	Yes		
DB121	High	2552730400	NE of Calle Barcelona and Paseo Aliso	PVT	La Costa Valley Master Association	TC-11	Infiltration Basin	904.51	Yes		

City of Carlsbad
FY 07-08 Privately Owned Treatment Control BMP Inventory

UNIT ID	Priority	APN	Location	Owner	Owner Name	BMP Type	BMP Detail	Drainage BASIN	Proximity to ESA	BMP Maintenance Agreement	Approved/ Signed Date
DB124	High	2132630600	LOT 38, East of Whitney Pl	PVT	Kelly Capital Group Inc	TC-11	Extended Detention Basin	904.51	Yes		
DB128	High	2131210500	El Fuerte and Poinsettta Lane SW OF Intersection	PVT	BRESSI GARDENLANE LLC	TC-22	Extended Detention Basin	904.51	Yes		02/21/2003
DB129	High	2121205100	NW Portion of property, North of Palomar Point Way	PVT	Lanikai Management Corp.	TC-22	Extended Detention Basin	904.31	Yes	Grading, Drainage, and Erosion Control Plans	07/11/2007
DB13	High	2120101500	SW end of Faraday Avenue, south of Lot 102 of CRC	PVT	NEWPORT NATIONAL/CORNERSTONE L L C	TC-22	Extended Detention Basin	904.31	Yes		05/01/1991
DB130	High	2131101500	PARCEL1 - ASPIRATIONS DAYCARE CENTER	PVT	ECR Corporate Center LP	TC-22	Extended Detention Basin	904.51	Yes		07/11/2007
DB137	High	1680501700	SE/S OF WIND TRAIL WAY	PVT	Calavera Hills II, LLC	SE-2	SEDIMENT BASIN	904.31	Yes	GRADING AGREEMENT	04/05/2007
DB139	High	2131101600	EL CAMINO REAL S/O CAMINO VIDA ROBLE 280 FT	PVT	PALOMAR CONGREGATION OF JEHOVAHS WI	TC-11	Extended Detention Basin	904.51	Yes	Grading and Erosion Control Agreement	
DB14	High	2150507200	NW of Dove Street and El Camino Real	PVT	Plaza Paseo Real Asscs LLC	TC-22	Extended Detention Basin	904.51	Yes		09/11/1989
DB140	High	2238100100	END OF AVENIDA SOLEDAD	PVT	Real Estate Collateral Mgmt. Co.	TC-11	Infiltration Basin	904.51	Yes		
DB15	High	2161211900	SW of Arenal Road and El Camino Real	PVT	Ayres Hotels Corporate Offices	TC-22	Extended Detention Basin	904.51	Yes		06/01/1981
DB156	High	2218810600	LOT 12 SOUTH OF LIONSHEAD AVE	PVT	H.G. Fenton Company	TC-11	Infiltration Basin	904.51	Yes		11/03/2004
DB159	High	2218800400	LOT 2 SOUTH OF LIONSHEAD AVE	PVT	H.G. Fenton Company	TC-11	Infiltration Basin	904.51	Yes		11/03/2004
DB16	High	2150202300	NE corner of Poinsettia and Cassia	PVT	Carlsbad Poinsetta Land Co	TC-22	Extended Detention Basin	904.51	Yes	Grading and Erosion Control Agreement	08/08/1997
DB160	High	2218800100	LOT 1 SOUTH OF LIONSHEAD AVE	PVT	H.G. Fenton Company	TC-11	Infiltration Basin	904.21	Yes		11/03/2004
DB163	High	2120210200	E OF SALK AVENUE S OF EL CAMINO REAL	PVT	Rio SD Plaza II Master LLC	TC-22	Extended Detention Basin	904.31	Yes	CCNR	09/20/2006
DB165	High	2132610700	CAMPBELL PL @ KNUCKLE	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-22	Extended Detention Basin	904.51	Yes	CCNR	06/22/2006
DB166	High	2218801500	N-SIDE OF LOT 22	PVT	Fenton Raceway LLC	TC-22	Extended Detention Basin	904.51	Yes	CCNR	11/03/2004
DB169	High	2218811000	NW CORNER OF LOT 16	PVT	Opus West Corp	TC11	Extended Detention Basin	904.51	Yes	CCNR	10/26/2004
DB172	High	2091200200	124 FT WEST OF WHIPTAIL LOOP AND CARIBOU CT	PVT	CARLSBAD OAKS NORTH VENTURES L P	TC-22	Extended Detention Basin	904.31	Yes	GRADING AGREEMENT	10/26/2004
DB175	High	2237237000	322 FT SE OF SITIO MONTECILLO	PVT	La Costa Ridge Community Assn	TC-22	Extended Detention Basin	904.51	Yes		04/08/2004
DB18	High	2120406600	West of Hidden Valley Rd, South of Palomar Airport Rd	PVT	Kelly Corporate Center	TC-22	Extended Detention Basin	904.51	Yes	Grading and Erosion Control Agreement	10/03/1995
DB180	High	2218811000	NW CORNER OF LOT 17	PVT	Opus West Corp	TC11	Extended Detention Basin	904.51	Yes	CCNR	10/26/2004
DB19	High	2111000900	North of Palomar Airport Road, between Hidden Valley and Armada	PVT	LEGOLAND CALIFORNIA INC <LF> PLAY U S A	TC-22	Extended Detention Basin	904.31	Yes		08/11/1997
DB23	High	2121520200	Milton Drive and Camino Hills Drive	PVT	Evans Point Homeowners Association	TC-22	Extended Detention Basin	904.31	Yes		08/24/1994

City of Carlsbad
FY 07-08 Privately Owned Treatment Control BMP Inventory

UNIT ID	Priority	APN	Location	Owner	Owner Name	BMP Type	BMP Detail	Drainage BASIN	Proximity to ESA	BMP Maintenance Agreement	Approved/ Signed Date
DB24	High	2081703700	Crestview near El Camino Real	PVT	HIDDEN RIDGE AT CARLSBAD HOMEOWNERS	TC-22	Extended Detention Basin	904.31	Yes	Grading and Erosion Control Agreement	11/06/1998
DB25	High	2121305200	Faraday Lot 107	PVT	Hoffman Stephen Living Trust 01-12-05	TC-22	Extended Detention Basin	904.31	Yes	Grading and Erosion Control Agreement	05/01/1991
DB26	High	2080103400	NE corner of Tamarack and Pontiac	PVT	Tamarack Point Master Assn (CORP.)	TC-22	Extended Detention Basin	904.31	Yes		12/13/1984
DB3	High	2164521500	Gabbiano Lane and Batiquitos Drive	PVT	Aviara Master Association	TC-22	Extended Detention Basin	904.51	Yes		07/29/1991
DB33	High	2145721900	Daylily, East of Aviara	PVT	PLUM TREE WALK L L C	TC-22	Extended Detention Basin	904.51	Yes	Grading and Erosion Control Agreement	04/07/1998
DB34	High	2081860400	Hidden Valley, north of bridge on Cannon Road	PVT	Kelly Land Co	TC-22	Extended Detention Basin	904.31	Yes	Drainage Basin Maintenance Agreement	08/19/1985
DB35	High	2552730700	SE corner of Paseo Aliso and Calle Barcelona	PVT	Coastline Community Church	TC-22	Extended Detention Basin	904-51	Yes	Yes	06/11/1999
DB36	High	2110403200	SE of 6130 Paseo del Norte (SW of Costco)	PVT	Brickell Enterprise Inc	TC-22	Extended Detention Basin	904.40	Yes	Grading and Erosion Control Agreement	10/04/1991
DB37	High	2110403600	Costco Parking Lot	PVT	Costco Wholesale Corporation	TC-22	Extended Detention Basin	904.40	Yes	Grading and Erosion Control Agreement	10/04/1991
DB4	High	2144715200	West of Intersection Batiquitos Dr. and Daisy Ave.	PVT	EDBELL LLC	TC-22	Extended Detention Basin	904.51	Yes		05/23/1983
DB44	High	2081860200	Cannon Road and Hemingway Drive	PVT	Heron Bay/Spyglass Hills Homeowners Assc	TC-22	Extended Detention Basin	904.31	Yes		08/19/1985
DB47	High	2120911700	Palomar Oaks Way and Palomar Airport Road	PVT	Carlsbad Airport Centre Owners Assn	TC-22	Extended Detention Basin	904.31	Yes		10/01/1985
DB53	High	2552730800	South of Calle Barcelona, west of Paseo Avellano	PVT	San Dieguito Union High School District	TC-22	Extended Detention Basin				06/11/1999
DB54	High	2226000100	El Fuerte and Rancho Pancho, NE corner	PVT	Palomar Korean Church	TC-22	Extended Detention Basin	904.51	Yes	Grading and Erosion Control Agreement	11/14/1996
DB55	High	2150507400	North of Aviara Middle School, East of Ambrosia	PVT	Carlsbad Unified School District	TC-22	Extended Detention Basin	904.40	Yes		08/24/1989
DB58	High	2550121300	Levante at El Camino Real (Green Valley)	PVT	Continuing Life Communities LLC	TC-22	Extended Detention Basin	904.51	Yes		06/22/1999
DB59	High	2550120300	Calle Barcelona, west of El Camino Real (Green Valley)	PVT	Borders Inc - Fourth Quarter Properties	TC-22	Extended Detention Basin	904.51	Yes		06/22/1999
DB6	High	2161401800	Carlsbad Blvd and Avenida Encinas, Batiquitos Point	PVT	L S F 5 CARLSBAD HOLDINGS L L C	TC-22	Extended Detention Basin	904.51	Yes		10/06/1994
DB63	High	1683511000	SE corner of College Bl and RichField Dr.(180 ft SE of CL of inters.)	PVT	Calavera Hills II Homeowners Assn	TC-11	Extended Detention Basin	904.31	Yes		
DB64	High	1674335000	356 FT. South of Medford Ct. Cul-De-Sac	PVT	Standard Pacific Corporation	TC-11	Extended Detention Basin	904.31	Yes		06/08/1981
DB65	High	2120406700	Palomar Airport Rd. and HiddenValley Rd. SE corner Desilt Basin	PVT	Kelly Corporation Center II LLC	TC-11	Extended Detention Basin	904.31	Yes		12/07/2000

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UNIT ID	Priority	APN	Location	Owner	Owner Name	BMP Type	BMP Detail	Drainage BASIN	Proximity to ESA	BMP Maintenance Agreement	Approved/ Signed Date
DB66	High	2120406600	Palomar Airport Road & 541 west of Hidden Valley Rd.	PVT	Kelly Corporate Center	TC-11	Extended Detention Basin	904.51	Yes	Grading and Erosion Control Agreement	
DB7	High	2161403800	Windrose Circle and Navigator Circle	PVT	State Of California Lands Commis	TC-22	Extended Detention Basin	904.51	Yes		
DB70	High	2159005200	60 Feet West of Amante Ct.	PVT	Aviara Premier Collection	TC-11	Extended Detention Basin	904.51	Yes		
DB72	High	2120406700	478 FEET EAST OF HIDDEN VALLEY RD. DRIVEWAY	PVT	Kelly Corporation Center II LLC	TC-11	Extended Detention Basin	904.31	Yes		
DB79	High	2111000900	663 Feet East of P.A.R. & Armada Dr.CL Intersection	PVT	LEGOLAND CALIFORNIA INC <LF> PLAY U S A(	TC-11	Extended Detention Basin	904.31	Yes		
DB84	High	2131200900	741 FT South of Town Garden Rd on Alicante Rd 259 FT W of Access rd	PVT	Bressi Gardenlane LLC	TC-11	Extended Detention Basin	904.51	Yes		
10D-38	Low	2052205400	3690 Highland Drive	PVT	HIGHLAND FINANCE L L C	TC-30	Vegetated Swale	904.31	No	CCNR	06/22/2007
18C-93	Low	2080401500	EUCALYPTUS LN	PVT	FAMILY REAL ESTATE ENTERPRISES L L C	TC-30	Vegetated Swale	904.31	No	UNK	06/22/2007
22A-78	Low	2071501400	4545 Cove Drive	PVT	LOVULLO SAM A&GRACE M	TC-30	Vegetated Swale	904.31	No	CC&R	08/01/2007
22A-79	Low	2071501500	Cove Drive	PVT	LEWAK JERZY&JOLANTA R REVOCABLE LIVIN(	TC-30	Vegetated Swale	904.31	No	CC&R	08/01/2007
23D-120	Low	2121302700	1507 Faraday Avenue	PVT	NEWPORT NATIONAL/CORNERSTONE L L C	TC-30	VEGETATED SWALE	904.31	Yes	NA	07/11/2001
24D-111	Low	2120210200	SALK AVE	PVT	Rio SD Plaza II Master LLC	TC-30	Vegetated Swale	904.31	Yes	UNK	09/20/2006
24D-112	Low	2120210200	SALK AVE	PVT	Rio SD Plaza II Master LLC	TC-30	Vegetated Swale	904.31	No	UNK	09/20/2006
24D-113	Low	2120210200	2173 Salk Avenue	PVT	Rio SD Plaza II Master LLC	TC-30	Vegetated Swale	904.31	No	UNK	09/20/2006
24D-114	Low	2120210200	SALK AVE	PVT	Rio SD Plaza II Master LLC	TC-30	Vegetated Swale	904.31	Yes	UNK	09/20/2006
27B-89	Low	2100902400	Cannon Road	PVT	Bob Baker Enterprises	TC-30	VEGETATED SWALE	904.31	No	NA	05/18/2004
30D-2	Low	2130701100	6000 CORTE DEL CEDRO	PVT	CARLSBAD SELF STORAGE L L C	TC-30	Vegetated Swale	904.40	No	UNK	06/12/2007
30D-4	Low		Cul-de-sac at Corte Del Cedro	PVT	CARLSBAD SELF STORAGE L L C	TC-30	Vegetated Swale	904.40	No	UNK	06/12/2007
31A-70	Low	2090813200	2714 Loker Avenue West	PVT	C B L L L C	TC-30	VEGETATED SWALE	904.31	Yes	NA	05/29/2001
31C-138	Low	2132611500	CAMPBELL PL	PVT	BRESSI OCEAN COLLECTION L L C	TC-30	Vegetated Swale	904.51	No	CC&R	07/20/2007
31C-140	Low	2132611500	CAMPBELL PL	PVT	BRESSI OCEAN COLLECTION L L C	TC-30	Vegetated Swale	904.51	No	CC&R	07/20/2007
31C-141	Low	2132611500	CAMPBELL PL	PVT	BRESSI OCEAN COLLECTION L L C	TC-30	Vegetated Swale	904.51	No	CC&R	07/20/2007
31C-142	Low	2132611500	CAMPBELL PL	PVT	BRESSI OCEAN COLLECTION L L C	TC-30	Vegetated Swale	904.51	No	CC&R	07/20/2007
31C-143	Low	2132611500	Campbell Place	PVT	BRESSI OCEAN COLLECTION L L C	TC-30	Vegetated Swale	904.51	No	CC&R	07/20/2207
31C-149	Low	2132611000	Slater Place	PVT	BRESSI OCEAN COLLECTION L L C	TC-30	Vegetated Swale	904.51	No	CC&R	09/25/2007
31C-150	Low	2132611100	Slater Place	PVT	BRESSI OCEAN COLLECTION L L C	TC-30	Vegetated Swale	904.51	No	CC&R	09/25/2007
31C-152	Low	2132611300	Slater Place	PVT	BRESSI OCEAN COLLECTION L L C	TC-30	Vegetated Swale	904.51	No	CC&R	09/25/2007
31C-161	Low	2132611200	Slater Place	PVT	BRESSI OCEAN COLLECTION L L C	TC-30	Vegetated Swale	904.51	Yes	UNK	03/25/2004
31C-162	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	UNK	06/23/2006
31C-164	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	UNK	06/23/2006
31C-168	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	UNK	06/23/2006
31C-169	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	UNK	06/23/2006
31C-170	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	UNK	06/23/2006
31C-172	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	UNK	06/23/2006
31C-176	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	CCNR	10/16/2006
31C-178	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	CCNR	10/16/2006
31C-179	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	CCNR	10/16/2006

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UNIT ID	Priority	APN	Location	Owner	Owner Name	BMP Type	BMP Detail	Drainage BASIN	Proximity to ESA	BMP Maintenance Agreement	Approved/ Signed Date
31D-128	Low	2090813400	LOKER AVE WEST	PVT	BROLASKI MARK&LIZ TRUST 09-18-03	TC-30	Vegetated Swale	904.51		CCNR	10/16/2006
31D-129	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	CCNR	10/16/2006
31D-130	Low	2132610700	CAMPBELL PL	PVT	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Vegetated Swale	904.51	No	NA	10/16/2006
31D-135	Low		Terminus of Shamroack Place	PVT	BRESSI GARDENLANE LLC	TC-30	Vegetated Swale	904.51	No		06/30/2004
32B-104	Low	2218810200	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	05/15/2007
32B-105	Low	2218810200	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	05/15/2007
32B-106	Low	2218810200	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	05/15/2007
32B-107	Low	2218810200	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	05/15/2007
32B-108	Low	2218810200	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	05/15/2007
32B-109	Low	2218810200	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	05/15/2007
32B-118	Low	2218810100	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	05/22/2007
32B-119	Low	2218810100	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	05/22/2007
32B-120	Low	2218810100	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	05/22/2007
32B-121	Low	2218810100	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	CCNR	05/22/2007
32B-72	Low	2218810300	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	06/07/2007
32B-75	Low	2218810400	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	CCNR	06/07/2007
32B-97	Low	2218810200	Lionshead Avenue	PVT	Opus West Corp	TC-30	Vegetated Swale	904.31	No	UNK	05/15/2007
36A-83	Low	2120406400	Palomar Airport Road	PVT	KELLY/JRM-PALOMAR AIRPORT ROAD I L L	TC-30	Vegetated Swale	904.40	Yes	CCNR	11/03/2006
37D-123	Low	2150210100	CASSIA RD NW CORNER OF PROPERTY	PVT	Franz-Yut El Camino, LLC	TC-30	Vegetated Swale	904.51	Yes	UNK	06/30/2006
37D-127	Low	2131101800	EL CAMINO REAL	PVT	L C GREENS 1.3 L L C	TC-30	Vegetated Swale	904.51	Yes	Maint Agrmt	01/29/2007
38B-95	Low	2131220900	El Fuerte	PVT	PRS ACQUISITION&CONSTRUCTION L L C	TC-30	Vegetated Swale	904.51	Yes	CCNR	06/22/2007
41A-80	Low	2146135900	Bay Lane	PVT	WATERS END HOMEOWNERS ASSN	TC-30	Vegetated Swale	904.51	No	UNK	07/02/2007
42B-60	Low	2150751200	Poinsettia and Blackrail	PVT	BLACK RAIL RIDGE HOMEOWNERS ASSN	TC-30	Vegetated Swale	904.51	No	UNK	06/30/2004
42D-135	Low	2156122400	LATITUDE LN	PVT	SMITH FAMILY 2000 TRUST 01-31-00	TC-30	Vegetated Swale	904.51	Yes	UNK	02/02/2007
42D-136	Low	2156122400	LATITUDE LN	PVT	SMITH FAMILY 2000 TRUST 01-31-00	TC-30	Vegetated Swale	904.51	Yes	UNK	02/02/2007
42D-139	Low	2156122400	LATITUDE LN	PVT	SMITH FAMILY 2000 TRUST 01-31-00	TC-30	Vegetated Swale	904.51	Yes	UNK	02/02/2007
47B-65	Low	2156122500	Blackrail Court	PVT	Four Seasons Resort - Aviara North San Diego	TC-30	Vegetated Swale	904.51	Yes	UNK	02/02/2007
54B-56	Low	2161702000	2523 Navarra Drive	PVT	CREWS MICHAEL COMMERCIAL DEVELOPMEN	TC-30	Vegetated Swale	904.51	No	UNK	12/15/2005
54B-58	Low	2161702000	2523 Navarra Drive	PVT	CREWS MICHAEL COMMERCIAL DEVELOPMEN	TC-30	Vegetated Swale	904.51	No	UNK	12/15/2005
54B-63	Low	2161702000	2523 Navarra Drive	PVT	CREWS MICHAEL COMMERCIAL DEVELOPMEN	TC-30	Vegetated Swale	904.51	No	UNK	12/15/2005
9B-75	Low	2031101400	2753 Jefferson Street	PVT	DALY WILLIAM V&ROSA C	TC-30	Vegetated Swale	904.21	No	UNK	06/22/2006
9B-77	Low	2031101400	2753 Jefferson Street	PVT	DALY WILLIAM V&ROSA C	TC-30	Vegetated Swale	904.21	No	UNK	06/22/2006
9B-78	Low	2031101400	2753 Jefferson Street	PVT	DALY WILLIAM V&ROSA C	TC-30	Vegetated Swale	904.21	No	UNK	06/22/2006
9B-79	Low	2031101400	2753 Jefferson Street	PVT	DALY WILLIAM V&ROSA C	TC-30	Vegetated Swale	904.21	No	CCNR	06/22/2006
12A-66	Medium	1680411606	3751 JETTY PT	PVT	Mystic Point Homeowners Association	MP-52	Drain Inserts	904.21	No	NA	10/01/2003
12A-68	Medium	1680411315	3640 JETTY PT	PVT	Mystic Point Homeowners Association	MP-52	Drain Inserts	904.31	No	NA	10/01/2003
12A-74	Medium	1680411703	3601 JETTY PT	PVT	Mystic Point Homeowners Association	MP-52	Drain Inserts	904.31	No	NA	10/01/2003
15B-70	Medium	2042340700	EFP Villas of Carlsbad	PVT	EGGEBRECHT LAS VISTA L L C	MP-52	Drain Insert	904.31	No		10/31/2003
22A-65	Medium	2071509304	Villas at the Cove	PVT	J J L ENTERPRISES	MP-52	Drain Inserts	904.51	No	NA	08/25/2003
22A-76	Medium	2071501500	COVE DR	PVT	LEWAK JERZY&JOLANTA R REVOCABLE LIVIN	MP-52	Drain Inserts	904.31	Yes	CC&R	08/01/2007
22D-50	Medium	2081860600	WHITMAN WAY	PVT	O C/S D HOLDINGS L L C	MP-52	Drain Inserts	904.51	Yes	CCNR	01/13/2003
23A-98	Medium	2081833200	STEINBECK CT	PVT	HERON BAY/SPYGLASS HILLS HOMEOWNERS	MP-52	Drain Inserts	904.31	Yes	UNK	12/19/2001
23A-99	Medium	2081850400	STEINBECK CT	PVT	HERON BAY/SPYGLASS HILLS HOMEOWNERS	MP-52	Drain Inserts	904.31	Yes	UNK	12/19/2001
23D-134	Medium	2121303500	Behind 1835 Faraday Avenue	PVT	CARLSBAD RESEARCH CENTER OWNERS ASS	MP-52	Drain Inserts	904.31	Yes		04/07/2005
27B-110	Medium	2100110500		PVT	WEST DEVELOPMENT INC	TC-10	Infiltration Trench	904.31	No	UNK	10/17/2002

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27B-87	Medium	2100902400	Bob Baker Storage Lot H	PVT	Bob Baker Enterprises	MP-52	Drain Insert	904.31	No		05/18/2004
27B-94	Medium	2100104000	CANNON RD	PVT	San Diego Gas and Electric	MP-52	Drain Inserts	904.31	No		01/01/1952
28B-60	Medium	2111300600	HIDDEN VALLEY RD	PVT	GRAND PACIFIC CARLSBAD L P	MP-52	Drain Inserts	904.40	No	UNK	04/02/2007
31A-73	Medium	2090813400	LOKER AVE WEST	PVT	BROLASKI MARK&LIZ TRUST 09-18-03	MP-52	Drain Insert	904.31	Yes		08/01/2003
31C-137	Medium	2132611500	CAMPBELL PL	PVT	BRESSI OCEAN COLLECTION L L C	TC-50	Water Quality Inlet	904.51	No	CCNR	07/20/2007
32A-121	Medium	2210150100	GREY HAWK CT	PVT	CONCOURSE ONE LLC	MP-52	Drain Inserts	904.31	No	CCNR	01/25/2006
34B-14	Medium	2101001900	6450 CARLSBAD BL	PVT	WAVE CREST RESORTS III L L C	MP-52	Drain Inserts	904.31	No		04/04/1999
37D-126	Medium	2131101800	EL CAMINO REAL	PVT	L C GREENS 1.3 L L C	MP-52	Drain Inserts	904.51	Yes	CCNR	01/29/2007
38B-92	Medium	2131221000	EL FUERTE ST	PVT	The Church of Jesus Christ of Latter Day Saints	MP-52	Drain Inserts	904.21	Yes	UNK	02/16/2007
43A-105	Medium	2159504600	1628 ZEPHYR CT	PVT	AVIARA BLACK RAIL ROAD 16 L L C	MP-40	Media Filter	904.51	Yes	CCNR	12/16/2006
46B-40	Medium	2144302700	AVENIDA ENCINAS	PVT	RALPHS GROCERY CO	MP-52	Drain Inserts	904.51	No	UNK	01/01/1952
48C-72	Medium	2155922900	Batiquitos between Kingfisher and Spoonbill; on golf course	PVT	Four Seasons Resort - Aviara North San Diego	TC-10	Infiltration Trench	904.51	No	NA	08/18/1988
9A-26	Medium	2030210800	2497 Ocean Street	PVT	DONALD FAMILY TRUST 03-19-99	MP-52	Drain Inserts	904.21	Yes	UNK	06/14/2007
DB105	Medium	2132600700	115 Ft NW of centerline intersection of Town Garden Rd & Alicante Rd	PVT	HCP Carlsbad LLC	TC-11	Extended Detention Basin	904.51	No		
DB106	Medium	2132600800	670 Ft NW of centerline of Town Garden Rd & Alicante Rd	PVT	HCP Carlsbad LLC	TC-11	Extended Detention Basin	904.51	No		
DB107	Medium	2132600900	239 Ft SW of centerline of Alicante Rd & Gateway Rd	PVT	HCP Carlsbad LLC	TC-11	Extended Detention Basin	904.51	No		
DB108	Medium	2074204200	190 feet SW of Sunnyhill and Horizon	PVT	The Sunset Place Assn. of Carlsbad	TC-11	Extended Detention Basin	904.51	No		09/01/1987
DB123	Medium	2132630700	LOT 39, East of Whitney Pl	PVT	Danielson DSS LLC	TC-11	Extended Detention Basin	904.51	No		
DB131	Medium	1680501700	NW OF GLEN AVE AND HILLTOP ST	PVT	Calavera Hills II, LLC	SE-2	SEDIMENT BASIN	904.31	No	GRADING AGREEMENT	04/05/2007
DB132	Medium	1680403000	382 FT N OF GLENN AVE AND WIND TRAIL WAY	PVT	Calavera Hills II, LLC	SE-2	SEDIMENT BASIN	904.31	No	GRADING AGREEMENT	04/05/2007
DB133	Medium	1680403000	172 FT NE OF GLEN AVE AND WIND TRAIL WAY	PVT	Calavera Hills II, LLC	SE-2	SEDIMENT BASIN	904.31	No	GRADING AGREEMENT	04/05/2007
DB134	Medium	1680403000	140 FT WEST OF WIND TRAIL WAY AND GLEN AVE	PVT	Calavera Hills II, LLC	SE-2	SEDIMENT BASIN	904.31	No	GRADING AGREEMENT	04/05/2007
DB135	Medium	1680501700	N/S CANNON RD AND NW OF COLLEGE BLVD	PVT	Calavera Hills II, LLC	SE-2	SEDIMENT BASIN	904.31	No	GRADING AGREEMENT	04/05/2007
DB136	Medium	1680501700	NW OF CANNON RD AND HILLTOP ST	PVT	Calavera Hills II, LLC	SE-2	SEDIMENT BASIN	904.31	No	GRADING AGREEMENT	04/05/2007
DB141	Medium	2132630800	EAST LOKER AVE E/O BETWEEN PALOMAR AIRPORT RD AND GATEWAY RD	PVT	Bressi Spectrum Owners Association	TC-22	Extended Detention Basin	904.51	No		
DB142	Medium	2132630800	EAST LOKER AVE E/O BETWEEN PALOMAR AIRPORT RD AND GATEWAY RD	PVT	Bressi Spectrum Owners Association	TC-22	Extended Detention Basin	904.51	No		
DB143	Medium	2132630800	EAST LOKER AVE E/O BETWEEN PALOMAR AIRPORT RD AND GATEWAY RD	PVT	Bressi Spectrum Owners Association	TC-22	Extended Detention Basin	904.51	No		
DB152	Medium	2230320100	RANCHO SANTA FE N/O SAN ELIGO E/S	PVT	Real Estate Collateral Mgmt. Co.	TC-11	Infiltration Basin	904.51	no		
DB153	Medium	2210140300	SW OF THE INTERSECTION OF EAGLE DR AND TIGER RUN CT	PVT	Palomar Melrose LLC	TC-11	Infiltration Basin	904.31	no		03/28/2007

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UNIT ID	Priority	APN	Location	Owner	Owner Name	BMP Type	BMP Detail	Drainage BASIN	Proximity to ESA	BMP Maintenance Agreement	Approved/ Signed Date
DB154	Medium	2210150400	northeast of the intersection of Eagle Drive and Tiger Run Court	PVT	Greyhawk Associates	TC-11	Infiltration Basin	904.31	no		03/28/2007
DB155	Medium	2218810500	LOT 11 ON LIONSHEAD AVE	PVT	Opus West Corp	TC-11	Infiltration Basin	904.51	No		10/26/2004
DB157	Medium	2218800400	LOT 4 SOUTH OF LIONSHEAD AVE	PVT	Fenton Raceway LLC	TC-11	Infiltration Basin	904.31	no		11/03/2004
DB158	Medium	2218800300	LOT 3 SOUTH OF LIONSHEAD AVE	PVT	H.G. Fenton Company	TC-11	Infiltration Basin	904.51	No		11/03/2004
DB161	Medium	1680504700	LOT 1 NE OF CANNON RD AND WIND TRAIL WY	PVT	CIC Glen Ridge LP	TC11	Extended Detention Basin	904.31	No	GRADING AGREEMENT	02/28/2007
DB162	Medium	2120210200	SW OF SALK AVE AND EL CAMINO REAL	PVT	Rio SD Plaza II Master LLC	TC-22	Extended Detention Basin	904.31	No	CCNR	09/20/2006
DB164	Medium	2120210200	S OF SALK AVENUE AND W OF EL CAMINO REAL	PVT	Rio SD Plaza II Master LLC	TC-22	Extended Detention Basin	904.31	No	CCNR	09/20/2006
DB167	Medium	2150210100	CASSIA RD NW CORNER OF PROPERTY	PVT	Franz-Yut El Camino, LLC	TC-22	Basin	904.51	No	UNK	06/20/2006
DB168	Medium	2131101800	Approx. 1000ft NE of bus stop at Cassia Rd. and ECR	PVT	L C GREENS 1.3 L L C	TC11	Extended Detention Basin	904.51	No	CCNR	10/26/2004
DB17	Medium	2110231300	Lego Drive, North of Legoland	PVT	M&A Gabaee	TC-22	Extended Detention Basin	904.31	No	Grading and Erosion Control Agreement	08/11/1997
DB170	Medium	2090832200	INTERSECTON OF LOKER AVE EAST AND PALOMAR AIRPORT RD	PVT	Mammoth Carlsbad I LLC	TC11	Extended Detention Basin	904.51	No	CCNR	07/14/2006
DB171	Medium	2091200400	291 FT NE OF INTERSECTION OF FARADAY AV AND WHIPTAIL LOOP	PVT	KILROY REALTY FINANCE PARTNERSHIP LP	TC-22	Extended Detention Basin	904.31	No	GRADING AGREEMENT	10/26/2004
DB173	Medium	2131120800	109 FT NE OF INTERSECTION OF DOVE LN AND TOURMALINE PL	PVT	KB Home Coastal Inc.	TC11	Extended Detention Basin	904.51	No	GRADING AGREEMENT	
DB174	Medium	2131120800	222 FT SE OF DB173	PVT	KB Home Coastal Inc.	TC11	Extended Detention Basin	904.51	No	GRADING AGREEMENT	
DB2	Medium	2122231600	End of Laurel Tree	PVT	Carlsbad Shorepointe Homeowners Assn	TC-22	Extended Detention Basin	904.21	No	UNK	
DB20	Medium	2110231300	SE corner of Armada and Cannon	PVT	M&A Gabaee	TC-22	Extended Detention Basin	904.31	No	Grading and Erosion Control Agreement	12/21/1993
DB21	Medium	2110102800	North of Cannon Rd, West of Armada	PVT	San Diego Gas & Electric Co	TC-22	Extended Detention Basin	904.31	No	Grading and erosion control Agreement	10/16/1995
DB22	Medium	2110102600	North of Cannon and Car Country Drive	PVT	San Diego Gas & Electric Co	TC-22	Extended Detention Basin	904.31	No	Grading and erosion control Agreement	10/16/1995
DB46	Medium	2120931600	NE corner Palomar Airport Road and Camino Vida Roble	PVT	Carlsbad Airport Centre Owners Assn	TC-22	Extended Detention Basin	904.31	No	Subdivision Improvement Agreement	10/01/1985
DB49	Medium	2552730800	South of Calle Barcelona, on hill, triplet basin west (1)	PVT	San Dieguito Union High School District	TC-22	Extended Detention Basin	904.51	No		06/11/1999
DB50	Medium	2552730800	South of Calle Barcelona, on hill, triplet basin middle (2)	PVT	San Dieguito Union High School District	TC-22	Extended Detention Basin	904.51	No		06/11/1999
DB51	Medium	2552730800	South of Calle Barcelona, on hill, triplet basin east (3)	PVT	San Dieguito Union High School District	TC-22	Extended Detention Basin	904.51	No		06/11/1999
DB57	Medium	2156122500	Batiquitos Dr and East of Black Swan Place	PVT	Four Seasons Resort - Aviara North San Diego	TC-22	Extended Detention Basin	904.51	No	Drainage Basin Maintenance Agreement	08/18/1988
DB60	Medium	2110213100	North-west corner of King's Fish House lot (Paseo Del Norte)	PVT	CPT/SC Title Holding Corp	TC-22	Extended Detention Basin	904.31	No		10/15/2002

City of Carlsbad
FY 07-08 Privately Owned Treatment Control BMP Inventory

UNIT ID	Priority	APN	Location	Owner	Owner Name	BMP Type	BMP Detail	Drainage BASIN	Proximity to ESA	BMP Maintenance Agreement	Approved/ Signed Date
DB61	Medium	2230603200	550 ft west of Paseo Lupino and 234 ft SE of Rancho Santa Fe	PVT	Lacosta Town Square LLC	TC-11	Extended Detention Basin	904.51	No		
DB69	Medium	2157500600	126 Feet West of KingFisher Ln and Blue Heron Pl.	PVT	Four Seasons Resort - Aviara North San Diego	TC-11	Extended Detention Basin	904.51	No		
DB71	Medium	2155041100	611 feet southwest of Aviara Parkway and Manzanita Street	PVT	Sunrise Assisted Living at LaCosta	TC-11	Extended Detention Basin	904.51	No		
DB74	Medium	2120406700	569 FEET NE OF HIDDEN VALLEY RD DRIVEWAY	PVT	Kelly Corporation Center II LLC	TC-11	Extended Detention Basin	904.31	No		
DB76	Medium	2070221100	North of 4250 Hillside Dr.	PVT	Carlson Family Trust 12-01-89	TC-11	Extended Detention Basin	904.31	No		
DB77	Medium	2110231100	Flower fields	PVT	The Flower Fields at Carlsbad Ranch	TC-11	Extended Detention Basin	904.31	No		
DB8	Medium	2155922200	Batiquitos and Aviara, on golf course driving range	PVT	Four Seasons Resort - Aviara North San Diego	TC-22	Extended Detention Basin	904.51	no		05/03/1989
DB80	Medium	2121200100	466 Feet from CL intersection of Van Allen Wy & Faraday Ave	PVT	System Machines Automation Components Corp	TC-11	Extended Detention Basin	904.31	No		
DB81	Medium	1670305000	742 Feet NE of ECR & Marron Rd.	PVT	Hughes Investments-Managing Company	TC-11	Extended Detention Basin	904.21	No		
DB85	Medium	2132600100	390 feet southeast of El Camino Real and Town Garden Road	PVT	Bressi Ranch Medical Plaza	TC-11	Extended Detention Basin	904.51	No		
DB86	Medium	2132610100	194 Ft. NE of ECR & Gateway Rd.	PVT	PIVOTAL 650 CALIFORNIA ST L L C	TC-11	Extended Detention Basin	904.51	No		12/24/2003
DB87	Medium	2132610200	470 Ft NW of Gateway Rd & Alicante Rd	PVT	PIVOTAL 650 CALIFORNIA ST L L C	TC-11	Extended Detention Basin	904.51	No		12/24/2003
DB9	Medium	2155922900	Batiquitos between Kingfisher and Spoonbill; on golf course	PVT	Four Seasons Resort - Aviara North San Diego	TC-22	Extended Detention Basin	904.51	No		05/03/1989
DB90	Medium	2132610100	571 Ft NE from ECR & Gateway Rd. Centerline	PVT	PIVOTAL 650 CALIFORNIA ST L L C	TC-11	Extended Detention Basin	904.51	No		12/24/2003
DB92	Medium	2132611400	417 Ft NW Cul-De-Sac of Slater Pl.	PVT	Lot 23 Bressi Ranch LLC	TC-11	Extended Detention Basin	904.51	No		
DB96	Medium	2132620700	120 Ft NE of Gateway Rd and Colt Pl	PVT	HCP Carlsbad LLC	TC-11	Extended Detention Basin	904.51	No		
DB97	Medium	2132620800	368 Ft from centerline of Colt Pl and Gateway Rd	PVT	HCP Carlsbad LLC	TC-11	Extended Detention Basin	904.51	No		
DB99	Medium	2132620900	114 Ft from centerline intersection of Finnila Pl and Gateway Rd	PVT	HCP Carlsbad LLC	TC-11	Extended Detention Basin	904.51	No		

SAMPLE PRIORITY PROJECT

FOR

FIRST COMPONENT TO ANNUAL REPORT

COVERING PERIOD FROM

JULY 1, 2007 THROUGH MARCH 23, 2008

EL CAMINO TERRACE (CT 06-07)

PROJECT ADDRESS: PCL 3, M 18059
APN: 209-040-42

VI. RESOURCES & REFERENCES

APPENDIX A

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the following checklist to determine your project's permanent and construction storm water best management practices requirements. This form must be completed and submitted with your permit application.

Section 1. Permanent Storm Water BMP Requirements:
If any answers to Part A are answered "Yes," your project is subject to the "Priority Project Permanent Storm Water BMP Requirements," and "Standard Permanent Storm Water BMP Requirements" in Section III, "Permanent Storm Water BMP Selection Procedure" in the *Storm Water Standards* manual.

If all answers to Part A are "No," and any answers to Part B are "Yes," your project is only subject to the "Standard Permanent Storm Water BMP Requirements". If every question in Part A and B is answered "No," your project is exempt from permanent storm water requirements.

Part A: Determine Priority Project Permanent Storm Water BMP Requirements.

Does the project meet the definition of one or more of the priority project categories?*	Yes	No
1. Detached residential development of 10 or more units		X
2. Attached residential development of 10 or more units		X
3. Commercial development greater than 100,000 square feet		X
4. Automotive repair shop		X
5. Restaurant		X
6. Steep hillside development greater than 5,000 square feet	X	
7. Project discharging to receiving waters within Environmentally Sensitive Areas		X
8. Parking lots greater than or equal to 5,000 ft^2 or with at least 15 parking spaces, and potentially exposed to urban runoff	X	
9. Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater		X
* Refer to the definitions section in the *Storm Water Standards* for expanded definitions of the priority project categories.		
Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if one or more of the criteria in Part A is met. If all answers to Part A are "No", continue to Part B.		

Part B: Determine Standard Permanent Storm Water Requirements.

Does the project propose:	Yes	No
1. New impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks?	X	
2. New pervious landscape areas and irrigation systems?	X	
3. Permanent structures within 100 feet of any natural water body?		X
4. Trash storage areas?	X	
5. Liquid or solid material loading and unloading areas?		X
6. Vehicle or equipment fueling, washing, or maintenance areas?		X
7. Require a General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except construction)?*		X
8. Commercial or industrial waste handling or storage, excluding typical office or household waste?		X
9. Any grading or ground disturbance during construction?	X	
10. Any new storm drains, or alteration to existing storm drains?	X	

*To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/stormwtr/industrial.html

Section 2. Construction Storm Water BMP Requirements:

If the answer to question 1 of Part C is answered "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Storm Water Pollution Prevention Plan (SWPPP). If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Water Pollution Control Plan (WPCP). If every question in Part C is answered "No," your project is exempt from any construction storm water BMP requirements. If any of the answers to the questions in Part C are "Yes," complete the construction site prioritization in Part D, below.

Part C: Determine Construction Phase Storm Water Requirements.

Would the project meet any of these criteria during construction?	Yes	No
1. Is the project subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities?	X	
2. Does the project propose grading or soil disturbance?	X	
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	X	
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as, paints, solvents, concrete, and stucco)?	X	

Part D: Determine Construction Site Priority

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans, and included in the SWPPP or WPCP. Indicate the project's priority in one of the check boxes using the criteria below, and existing and surrounding conditions of the project, the type of activities necessary to complete the construction and any other extenuating circumstances that may pose a threat to water quality. The City reserves the right to adjust the priority of the projects both before and during construction. [Note: The construction priority does NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority does affect the frequency of inspections that will be conducted by City staff. See Section IV.1 for more details on construction BMP requirements.]

☐ *A) High Priority*

1) Projects where the site is 50 acres or more and grading will occur during the rainy season
2) Projects 5 acres or more. 3) Projects 5 acres or more within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an environmentally sensitive area

   Projects, active or inactive, adjacent or tributary to sensitive water bodies

☒ *B) Medium Priority*

1) Capital Improvement Projects where grading occurs, however a Storm Water Pollution Prevention Plan (SWPPP) is not required under the State General Construction Permit (i.e., water and sewer replacement projects, intersection and street re-alignments, widening, comfort stations, etc.)
2) Permit projects in the public right-of-way where grading occurs, such as installation of sidewalk, substantial retaining walls, curb and gutter for an entire street frontage, etc. , however SWPPPs are not required.
3) Permit projects on private property where grading permits are required, however, Notice Of Intents (NOIs) and SWPPPs are not required.

☐ *C) Low Priority*

1) Capital Projects where minimal to no grading occurs, such as signal light and loop installations, street light installations, etc.
2) Permit projects in the public right-of-way where minimal to no grading occurs, such as pedestrian ramps, driveway additions, small retaining walls, etc.
3) Permit projects on private property where grading permits are not required, such as small retaining walls, single-family homes, small tenant improvements, etc.

PLANNING COMMISSION RESOLUTION NO. 6372

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARLSBAD, CALIFORNIA, APPROVING A TENTATIVE TRACT MAP TO DEVELOP AN 18,578 SQUARE FOOT OFFICE BUILDING AND TO SUBDIVIDE THE BUILDING INTO 30 AIRSPACE OFFICE CONDOMINIUM UNITS ON A 1.48-ACRE PARCEL GENERALLY LOCATED AT THE SOUTH-EAST CORNER OF EL CAMINO REAL AND COUGAR DRIVE IN LOCAL FACILITIES MANAGEMENT ZONE 5.

CASE NAME: EL CAMINO TERRACE
CASE NO.: CT 06-17

WHEREAS, **Tycoon Development Corporation**, "Developer/Owner," has filed a verified application with the City of Carlsbad regarding property described as

> **Parcel 3 of Parcel Map No. 18059, in the City of Carlsbad, County of San Diego, State of California, according to map thereof filed in the San Diego County Recorder's Office on July 2, 1998**

("the Property"); and

WHEREAS, said verified application constitutes a request for a Tentative Tract Map as shown on Exhibits **"A" – "O"** dated **February 6, 2008**, on file in the Planning Department **EL CAMINO TERRACE – CT 06-17,** as provided by **Chapter 20.12** of the Carlsbad Municipal Code; and

WHEREAS, the Planning Commission did, on **February 6, 2008**, hold a duly noticed public hearing as prescribed by law to consider said request; and

WHEREAS, at said public hearing, upon hearing and considering all testimony and arguments, if any, of persons desiring to be heard, said Commission considered all factors relating to the Tentative Tract Map; and

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Planning Commission of the City of Carlsbad as follows:

A) That the foregoing recitations are true and correct.

B) That based on the evidence presented at the public hearing, the Commission **APPROVES EL CAMINO TERRACE – CT 06-17,** based on the following findings and subject to the following conditions:

Findings:

1. That the proposed map and the proposed design and improvement of the subdivision as conditioned, is consistent with and satisfies all requirements of the General Plan, any applicable specific plans, Titles 20 and 21 of the Carlsbad Municipal Code, and the State Subdivision Map Act, and will not cause serious public health problems, in that **the proposed subdivision is designed to comply with the minimum requirements of the General Plan, Title 20 and Title 21.**

2. That the proposed project is compatible with the surrounding future land uses since surrounding properties are designated for **Planned Industrial, Open Space, Residential – High Density, Commercial, and Office and Related Commercial** development on the General Plan, in that **surrounding properties to the south, east, and west are designated for and developed with Planned Industrial and Open Space land uses, and the Residential – High Density, Commercial, and Office and Related Commercial properties to the north are sufficiently separated and buffered from the project by distance, landscaping and Cougar Drive.**

3. That the site is physically suitable for the type and density of the development since the site is adequate in size and shape to accommodate **office/industrial** development at the type proposed, in that **the project complies with all development standards and public facilities requirements without the need for variances from the development standards.**

4. That the design of the subdivision or the type of improvements will not conflict with easements of record or easements established by court judgment, or acquired by the public at large, for access through or use of property within the proposed subdivision, in that **concurrent with the recordation of the final map the developer will vacate and adjust any easements that conflict with the proposed development.**

5. That the property is not subject to a contract entered into pursuant to the Land Conservation Act of 1965 (Williamson Act).

6. That the design of the subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, in that the structures are oriented **in a manner that takes advantage of prevailing breezes.**

7. That the Planning Commission has considered, in connection with the housing proposed by this subdivision, the housing needs of the region, and balanced those housing needs against the public service needs of the City and available fiscal and environmental resources.

8. That the design of the subdivision and improvements are not likely to cause substantial environmental damage nor substantially and avoidably injure fish or wildlife or their habitat, in that **the development is considered infill, is located on a previously graded**

CEQA compliance finding

lot and no natural resources exist on the site. Additionally, the project area is not within a preserve area of the adopted Carlsbad Habitat Management Plan.

Storm water Permit compliance finding

9. That the discharge of waste from the subdivision will not result in violation of existing California Regional Water Quality Control Board requirements, in that **the project is designed in accordance with the Best Management Practices for water quality protection in accordance with the City's sewer and drainage standards and the project is conditioned to comply with the National Pollution Discharge Elimination System (NPDES) requirements.**

10. The **Planning Commission** finds that the project, as conditioned herein, is in conformance with the Elements of the City's General Plan, based on the facts set forth in the staff report dated **February 6, 2008** including, but not limited to the following:

    a. **Land Use – The proposed office/industrial uses are consistent with the Planned Industrial (PI) General Plan Land Use and Industrial (M) and Qualified Development Overlay (Q) Zoning designations for the site.**

    b. **Circulation – All roadways and improvements necessary to serve the development exist, and no additional improvements are required.**

    c. **Noise – The project is not significantly impacted by noise; however it is conditioned to comply with the General Office Interior Noise Standard of 55 dBA CNEL in accordance with City's Noise Guidelines Manual.**

11. The project is consistent with the Citywide Facilities and Improvements Plan, the Local Facilities Management Plan for Zone **5** and all City public facility policies and ordinances. The project includes elements or has been conditioned to construct or provide funding to ensure that all facilities and improvements regarding sewer collection and treatment; water; drainage; circulation; fire; schools; parks and other recreational facilities; libraries; government administrative facilities; and open space, related to the project will be installed to serve new development prior to or concurrent with need.

    a. The project has been conditioned to provide proof from the **Carlsbad Unified** School District that the project has satisfied its obligation for school facilities.

    b. The Public Facility fee is required to be paid by Council Policy No. 17 and will be collected prior to the issuance of building permit.

    c. Developer shall pay non-residential park-in-lieu fee to the City, prior to the approval of a building permit or the final map to be used for park facilities within Zone **5**.

12. The project has been conditioned to pay any increase in public facility fee, or new construction tax, or development fees, and has agreed to abide by any additional requirements established by a Local Facilities Management Plan prepared pursuant to Chapter 21.90 of the Carlsbad Municipal Code. This will ensure continued availability of public facilities and will mitigate any cumulative impacts created by the project.

13. This project has been conditioned to comply with any requirement approved as part of the Local Facilities Management Plan for Zone 5.

14. The project is consistent with the Airport Land Use Compatibility Plan (ALUCP) for the McClellan-Palomar Airport, dated October 2004, in that **the project is located within the Airport Influence Area and Flight Activity Zone and office/industrial development is considered to be a low-intensity use which does not involve assemblages of large groups of people.** The project is compatible with the projected noise levels of the ALUCP; and, based on the noise/land use compatibility matrix of the ALUCP, the proposed land use is compatible with the airport, in that **the project site is located outside of the 60 CNEL noise level contour lines, and the outdoor community noise equivalent level (CNEL) is sufficiently attenuated by conventional construction so that the indoor noise level is acceptable, and both indoor and outdoor activities associated with the land use may be carried out with essentially no interference from aircraft noise.**

15. That the Planning Director has determined that the project belongs to a class of projects that the State Secretary for Resources has found do not have a significant impact on the environment, and it is therefore categorically exempt from the requirement for the preparation of environmental documents pursuant to Section **15332** of the state CEQA Guidelines, **in that (1) the project is consistent with the General Plan designation and policies; (2) the project site is less than five acres in size and is surrounded by urban development; (3) the site has no biological value for endangered, rare or threatened species; (4) the project would not result in any significant impacts relating to traffic, noise, air quality, or water quality; and, (5) the site is adequately served by required utilities.** In making this determination, the Planning Director has found that the exceptions listed in Section 15300.2 of the state CEQA Guidelines do not apply to this project.

16. That all necessary public facilities required by the Growth Management Ordinance will be constructed or are guaranteed to be constructed concurrently with the need for them created by this project and in compliance with adopted City standards, in that **all public roads, water and sewer systems have been constructed or will be constructed concurrently with development of the site.**

17. The Planning Commission has reviewed each of the exactions imposed on the Developer contained in this resolution, and hereby finds, in this case, that the exactions are imposed to mitigate impacts caused by or reasonably related to the project, and the extent and the degree of the exaction is in rough proportionality to the impact caused by the project.

Conditions:

Note: Unless otherwise specified herein, all conditions shall be satisfied prior to **recordation of the final map**.

1. If any of the following conditions fail to occur, or if they are, by their terms, to be implemented and maintained over time, if any of such conditions fail to be so implemented and maintained according to their terms, the City shall have the right to

revoke or modify all approvals herein granted; deny or further condition issuance of all future building permits; deny, revoke, or further condition all certificates of occupancy issued under the authority of approvals herein granted; record a notice of violation on the property title; institute and prosecute litigation to compel their compliance with said conditions or seek damages for their violation. No vested rights are gained by Developer or a successor in interest by the City's approval of this **Tentative Tract Map.**

2. Staff is authorized and directed to make, or require the Developer to make, all corrections and modifications to the **Tentative Tract Map** documents, as necessary to make them internally consistent and in conformity with the final action on the project. Development shall occur substantially as shown on the approved Exhibits. Any proposed development, different from this approval, shall require an amendment to this approval.

3. Developer shall comply with all applicable provisions of federal, state, and local laws and regulations in effect at the time of building permit issuance.

4. If any condition for construction of any public improvements or facilities, or the payment of any fees in-lieu thereof, imposed by this approval or imposed by law on this Project are challenged, this approval shall be suspended as provided in Government Code Section 66020. If any such condition is determined to be invalid, this approval shall be invalid unless the City Council determines that the project without the condition complies with all requirements of law.

5. Developer/Operator shall and does hereby agree to indemnify, protect, defend, and hold harmless the City of Carlsbad, its Council members, officers, employees, agents, and representatives, from and against any and all liabilities, losses, damages, demands, claims and costs, including court costs and attorney's fees incurred by the City arising, directly or indirectly, from (a) City's approval and issuance of this **Tentative Tract Map**, (b) City's approval or issuance of any permit or action, whether discretionary or nondiscretionary, in connection with the use contemplated herein, and (c) Developer/Operator's installation and operation of the facility permitted hereby, including without limitation, any and all liabilities arising from the emission by the facility of electromagnetic fields or other energy waves or emissions. This obligation survives until all legal proceedings have been concluded and continues even if the City's approval is not validated.

6. Developer shall submit to **the Planning Department** a reproducible 24" x 36" mylar copy of the **Tentative Tract Map, Grading Plan, Site Plan and Landscape Plan** reflecting the conditions approved by the final decision-making body.

7. Prior to the issuance of a building permit, the Developer shall provide proof to the Director from the **Carlsbad Unified** School District that this project has satisfied its obligation to provide school facilities.

8. This project shall comply with all conditions and mitigation measures which are required as part of the Zone **5** Local Facilities Management Plan and any amendments made to that Plan; **specifically, the developer shall pay a growth management park fee of 40 cents**

per square foot of non-residential development to the City prior to the issuance of building permits, as required by the Zone 5 Local Facilities Management Plan.

9. Building permits will not be issued for this project unless the local agency providing water and sewer services to the project provides written certification to the City that adequate water service and sewer facilities, respectively, are available to the project at the time of the application for the building permit, and that water and sewer capacity and facilities will continue to be available until the time of occupancy. **A note to this effect shall be placed on the Final Map.**

10. This approval is granted subject to the approval of **PUD 06-15, SDP 06-07 and SUP 06-04** and is subject to all conditions contained in Planning Commission Resolutions No. **6373, 6374, and 6375** for those other approvals incorporated herein by reference.

11. Prior to the issuance of the **Final Map**, Developer shall submit to the City a Notice of Restriction executed by the owner of the real property to be developed. Said notice is to be filed in the office of the County Recorder, subject to the satisfaction of the Planning Director, notifying all interested parties and successors in interest that the City of Carlsbad has issued a **Tentative Tract Map, Non-Residential Planned Development Permit, Site Development Plan, and Special Use Permit** by Resolutions No. **6372, 6373, 6374, and 6375** on the property. Said Notice of Restriction shall note the property description, location of the file containing complete project details and all conditions of approval as well as any conditions or restrictions specified for inclusion in the Notice of Restriction. The Planning Director has the authority to execute and record an amendment to the notice which modifies or terminates said notice upon a showing of good cause by the Developer or successor in interest.

12. Approval is granted for **EL CAMINO TERRACE – CT 06-17** as shown on Exhibits **"A" – "O"** dated **February 6, 2008,** on file in the Planning Department and incorporated herein by reference. Development shall occur substantially as shown unless otherwise noted in these conditions.

13. Developer shall submit and obtain Planning Director approval of a Final Landscape and Irrigation Plan showing conformance with the approved Preliminary Landscape Plan and the City's Landscape Manual. Developer shall construct and install all landscaping as shown on the approved Final Plans, and maintain all landscaping in a healthy and thriving condition, free from weeds, trash, and debris.

14. The first submittal of Final Landscape and Irrigation Plans shall be pursuant to the landscape plancheck process on file in the Planning Department and accompanied by the project's building, improvement, and grading plans.

15. Developer shall establish a homeowner's association and corresponding covenants, conditions and restrictions (CC&Rs). **A draft copy of** said CC&Rs shall be submitted to and approved by the Planning Director prior to final map approval. **The CC&Rs shall adequately address maintenance of all common landscape areas, drainage facilities, employee eating areas, the trash enclosure, paved access and parking areas. The approved CC&Rs shall be recorded concurrently with the final map.** Prior to

issuance of a building permit, the Developer shall provide the Planning Department with a recorded copy of the official CC&Rs that have been approved by the Department of Real Estate and the Planning Director. At a minimum, the CC&Rs shall contain the following provisions:

a. General Enforcement by the City. The City shall have the right, but not the obligation, to enforce those Protective Covenants set forth in this Declaration in favor of, or in which the City has an interest.

b. Notice and Amendment. A copy of any proposed amendment shall be provided to the City in advance. If the proposed amendment affects the City, City shall have the right to disapprove. A copy of the final approved amendment shall be transmitted to City within 30 days for the official record.

c. Failure of Association to Maintain Common Area Lots and Easements. In the event that the Association fails to maintain the "Common Area Lots and/or the Association's Easements" as provided in Article_____, Section _____ the City shall have the right, but not the duty, to perform the necessary maintenance. If the City elects to perform such maintenance, the City shall give written notice to the Association, with a copy thereof to the Owners in the Project, setting forth with particularity the maintenance which the City finds to be required and requesting the same be carried out by the Association within a period of thirty (30) days from the giving of such notice. In the event that the Association fails to carry out such maintenance of the Common Area Lots and/or Association's Easements within the period specified by the City's notice, the City shall be entitled to cause such work to be completed and shall be entitled to reimbursement with respect thereto from the Owners as provided herein.

d. Special Assessments Levied by the City. In the event the City has performed the necessary maintenance to either Common Area Lots and/or Association's Easements, the City shall submit a written invoice to the Association for all costs incurred by the City to perform such maintenance of the Common Area Lots and or Association's Easements. The City shall provide a copy of such invoice to each Owner in the Project, together with a statement that if the Association fails to pay such invoice in full within the time specified, the City will pursue collection against the Owners in the Project pursuant to the provisions of this Section. Said invoice shall be due and payable by the Association within twenty (20) days of receipt by the Association. If the Association shall fail to pay such invoice in full within the period specified, payment shall be deemed delinquent and shall be subject to a late charge in an amount equal to six percent (6%) of the amount of the invoice. Thereafter the City may pursue collection from the Association by means of any remedies available at law or in equity. Without limiting the generality of the foregoing, in addition to all other rights and remedies available to the City, the City may levy a special assessment against the Owners of each Lot in the Project for an equal pro rata share of the invoice, plus the late charge. Such special assessment shall constitute a charge on the land and shall be a continuing lien upon each Lot against which the special assessment is levied. Each Owner in the Project hereby vests the City with the right and power to levy such special

assessment, to impose a lien upon their respective Lot and to bring all legal actions and/or to pursue lien foreclosure procedures against any Owner and his/her respective Lot for purposes of collecting such special assessment in accordance with the procedures set forth in Article _____ of this Declaration.

e. **The location and size of all employee eating areas, parking areas, and landscape areas associated with the project as shown on Exhibits "B" and "N" shall not be altered, reduced, fenced or divided to preclude the equal use by all owners/employees of the site.**

f. **All roof appurtenances, including air conditioners, shall be architecturally integrated and concealed from view and sound buffered from adjacent properties and streets consistent with Building Department Policy No. 80-6, and to the satisfaction of the Directors of Community Development and Planning.**

g. **Parking lot and building lighting shall be shielded so as to prevent light spillage off of the site onto the adjacent residential care facility.**

16. Prior to issuance of building permits, the Developer shall submit to the Planning Director a recorded copy of the Condominium Plan filed with the Department of Real Estate which is in conformance with the City-approved documents and exhibits.

17. Developer shall pay the citywide Public Facilities Fee imposed by City Council Policy #17, the License Tax on new construction imposed by Carlsbad Municipal Code Section 5.09.030, and CFD #1 special tax (if applicable), subject to any credits authorized by Carlsbad Municipal Code Section 5.09.040. Developer shall also pay any applicable Local Facilities Management Plan fee for Zone **5,** pursuant to Chapter 21.90. All such taxes/fees shall be paid at issuance of building permit. If the taxes/fees are not paid, this approval will not be consistent with the General Plan and shall become void.

18. All roof appurtenances, including air conditioners, shall be architecturally integrated and concealed from view and the sound buffered from adjacent properties and streets, in substance as provided in Building Department Policy No. 80-6, to the satisfaction of the Directors of Community Development and Planning.

19. Prior to the recordation of the final **tract** map, the Developer shall prepare and record a Notice that this property may be subject to noise impacts from the proposed or existing Transportation Corridor, in a form meeting the approval of the Planning Director and the City Attorney (see Noise Form #1 on file in the Planning Department).

20. Developer shall construct trash receptacle and recycling areas enclosed by a six-foot-high masonry wall with gates pursuant to City Engineering Standards and Carlsbad Municipal Code Chapter 21.105. Location of said receptacles shall be approved by the Planning Director. Enclosure shall be of similar colors and/or materials to the project to the satisfaction of the Planning Director.

21. No outdoor storage of materials shall occur onsite unless required by the Fire Chief. When so required, the Developer shall submit and obtain approval of the Fire Chief and the Planning Director of an Outdoor Storage Plan, and thereafter comply with the approved plan.

22. Developer shall submit and obtain Planning Director approval of an exterior lighting plan including parking areas. All lighting shall be designed to reflect downward and avoid any impacts on adjacent homes or property. **This exterior lighting plan shall include a photometric analysis that shows no lighting impacts will occur on the adjacent residential care facility to the north.**

23. Developer shall construct, install, and stripe not less than **74** parking spaces, as shown on Exhibit **"B"**.

24. **Prior to building permit issuance, the Developer shall prepare and submit to the Planning Department an interior acoustical analysis to ensure interior noise levels do not exceed 55 dBA CNEL.**

25. **All retaining walls shall be a plantable keystone type wall of a tan color to match the building, designed and constructed to the satisfaction of the Planning Director. The walls shall be planted and irrigated so as to provide sufficient plant cover within one year after installation to the satisfaction of the City's Landscape Plancheck Consultant and the Planning Director.**

Engineering:

General

26. Prior to hauling dirt or construction materials to or from any proposed construction site within this project, Developer shall apply for and obtain approval from, the City Engineer for the proposed haul route.

27. This approval is subject to the approval and conditions of PUD 06-15, SDP 06-07, and SUP 06-04.

BMP Maintenance condition

28. Developer shall provide to the City Engineer, an acceptable means, CC&Rs and/or other recorded document, for maintaining the private easements within the subdivision and all the private improvements: streets, sidewalks, street lights, storm drain facilities and storm water Best Management Practice facilities located therein and to distribute the costs of such maintenance in an equitable manner among the owners of the properties within the subdivision.

29. There shall be one Final Map recorded for this project.

30. Developer shall install sight distance corridors at all street intersections and driveways in accordance with City Engineering Standards.

...

Fees/Agreements

31. Developer shall cause property owner to execute and submit to the City Engineer for recordation, the City's standard form Geologic Failure Hold Harmless Agreement.

32. Developer shall cause property owner to execute and submit to the City Engineer for recordation the City's standard form Drainage Hold Harmless Agreement regarding drainage across the adjacent property.

33. Prior to approval of any grading or building permits for this project, Developer shall cause Owner to give written consent to the City Engineer to the annexation of the area shown within the boundaries of the site plan into the existing City of Carlsbad Street Lighting and Landscaping District No. 1 and/or to the formation or annexation into an additional Street Lighting and Landscaping District. Said written consent shall be on a form provided by the City Engineer.

Grading

34. Based upon a review of the proposed grading and the grading quantities shown on the Site Plan, a grading permit for this project is required. Developer shall apply for and obtain a grading permit from the City Engineer prior to issuance of a building permit for the project.

NOI Requirement

35. Prior to the issuance of a grading permit or building permit, whichever occurs first, Developer shall submit to the City Engineer proof that a Notice of Intention for the start of work has been submitted to the State Water Resources Control Board.

Construction BMP compliance condition

36. Developer shall comply with the City's requirements of the National Pollutant Discharge Elimination System (NPDES) permit and the City's latest Standard Urban Storm Water Mitigation Plan (SUSMP). Developer shall provide improvements constructed pursuant to best management practices as referenced in the "California Storm Water Best Management Practices Handbook" to reduce surface pollutants to an acceptable level prior to discharge to sensitive areas. Plans for such improvements shall be submitted to and subject to the approval of the City Engineer. Said plans shall include but not be limited to notifying prospective owners and tenants of the following:

A. All owners and tenants shall coordinate efforts to establish or work with established disposal programs to remove and properly dispose of toxic and hazardous waste products.

B. Toxic chemicals or hydrocarbon compounds such as gasoline, motor oil, antifreeze, solvents, paints, paint thinners, wood preservatives, and other such fluids shall not be discharged into any street, public or private, or into storm drain or storm water conveyance systems. Use and disposal of pesticides, fungicides, herbicides, insecticides, fertilizers and other such chemical treatments shall meet Federal, State, County and City requirements as prescribed in their respective containers.

C. Best Management Practices shall be used to eliminate or reduce surface pollutants when planning any changes to the landscaping and surface improvements.

Construction SWPPP condition

37. Prior to the issuance of grading permit or building permit, whichever occurs first, Developer shall submit for City approval a "Storm Water Pollution Prevention Plan (SWPPP)." The SWPPP shall be in compliance with latest requirements and provisions established by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Requirements. The SWPPP shall address measures to reduce to the maximum extent practicable storm water pollutant runoff during construction of the project.

SWMP Permanent BMP condition

38. Prior to the issuance of grading permit or building permit, whichever occurs first, Developer shall submit for City approval a "Storm Water Management Plan (SWMP)." The SWMP shall demonstrate compliance with the latest City of Carlsbad Standard Urban Stormwater Mitigation Plan (SUSMP), Order R-9-2007-01 issued by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Municipal Code. The SWMP shall address measures to avoid contact or filter said pollutants from storm water, to the maximum extent practicable, for the post-construction stage of the project. At a minimum, the SWMP shall:

a. Identify existing and post-development on-site pollutants-of-concern.

b. Identify the hydrologic unit this project contributes to and impaired water bodies that could be impacted by this project.

c. Recommend source control, Low Impact Development (LID) BMPs and treatment control BMPs that will be implemented with this project to avoid contact or filter said pollutants from storm water to the maximum extent practicable before discharging offsite.

Low Impact Development (LID) Design must conform to the current County of San Diego Low Impact Development Handbook (Storm water Management Strategies). The design shall help preserve and restore the natural hydrologic cycle of the site by allowing filtration and infiltration of urban run-off using LID BMPs including but not limited to vegetated swale/strip, rain garden, and porous pavement, which can greatly reduce the volume, peak flow rate, velocity and pollutants.

d. Establish specific procedures for handling spills and routine cleanup. Special considerations and effort shall be applied to employee education on the proper procedures for handling cleanup and disposal of pollutants.

e. Ensure long-term maintenance of all post-construction BMPs in perpetuity.

f. Identify how post-construction runoff rates and velocities from the site will not exceed the pre-construction runoff rates and velocities to the maximum extent practicable.

Permanent BMP Maintenance condition

39. Developer shall cause property owner to process, execute and submit an executed copy to the City Engineer for recordation a City standard Permanent Stormwater Quality Best Management Practice Maintenance Agreement for the perpetual maintenance of all treatment control, applicable site design and source control, post-construction permanent Best Management Practices prior to the issuance of a grading permit or building permit, or recordation of the final map whichever occurs first for this Project.

Dedications/Improvements

40. Developer shall cause Owner to dedicate to the City the public water easement shown on the map. The offer shall be made by a separate recorded document. All land so offered shall be offered free and clear of all liens and encumbrances and without cost. Streets that already public are not required to be rededicated.

41. Developer shall execute and record a City standard Subdivision Improvement Agreement to install and secure with appropriate security as provided by law, public improvements shown on the Site Plan and the following improvements including, but not limited to grading, clearing and grubbing, sewer, water, fire hydrants, street lights, and reclaimed water, to City Standards to the satisfaction of the City Engineer. The improvements are:

    a) **Onsite public water main and fire hydrants.**

    Improvements listed above shall be constructed within 18 months of approval of the subdivision or development improvement agreement or such other time as provided in said agreement.

42. Prior to grading permit issuance, Developer shall have design, apply for and obtain approval of the City Engineer, for the structural section for the access aisles with a traffic index of 5.0 in accordance with City Standards due to truck access through the parking area and/or aisles with an ADT greater than 500. The structural pavement design of the aisle ways shall be submitted together with required R-value soil test information and approved by the City Engineer as part of the building or grading plan review whichever occurs first.

Final Map Notes

Add the following notes to the final map as non-mapping data.

43. All improvements are privately owned and are to be privately maintained with the exception of the following:

    a) **Onsite public water main and fire hydrants.**

44. Building permits will not be issued for development of the subject property unless the appropriate agency determines that sewer and water facilities are available.

45. The owner of this property on behalf of itself and all of its successors in interest has agreed to hold harmless and indemnify the City of Carlsbad from any action that may

arise through any diversion of waters, the alteration of the normal flow of surface waters or drainage, or the concentration of surface waters or drainage from the drainage system or other improvements identified in the City approved development plans; or by the design, construction or maintenance of the drainage system or other improvements identified in the City approved development plans.

Utilities

46. Prior to approval of improvement plans or final map, Developer shall meet with the Fire Marshal to determine if fire protection measures (fire flows, fire hydrant locations, building sprinklers) are required to serve the project. Fire hydrants, if proposed, shall be considered public improvements and shall be served by public water mains to the satisfaction of the District Engineer.

47. The Developer shall design and construct public facilities within public right-of-way or within minimum 20-feet wide easements granted to the District or the City of Carlsbad. At the discretion of the District Engineer, wider easements may be required for adequate maintenance, access and/or joint utility purposes.

48. Prior to issuance of building permits, Developer shall pay all fees, deposits, and charges for connection to public facilities. Developer shall pay the San Diego County Water Authority capacity charge(s) prior to issuance of Building Permits.

49. The Developer shall install potable water and recycled water services and meters at a locations approved by the District Engineer. The locations of said services shall be reflected on public improvement plans.

50. The Developer shall install sewer laterals and clean-outs at a location approved by the District Engineer. The locations of sewer laterals shall be reflected on public improvement plans.

51. **Prior to approval of the grading plan, the Developer shall obtain approval from Kinder Morgan Energy Partners LP for the abandonment of the existing 10" pressurized Fuel Transmission Pipe as shown on the Tentative Map. The Developer shall provide evidence of this approval to the City Engineer.**

52. **The design and operation of the proposed water system shall comply with the following:**

    a) **A sub-meter shall be installed for each individually owned unit.**

    b) **Wording within CC&Rs related to water meters cannot be changed without the approval of the City Engineer.**

    c) **Prior to sale of any unit, the owner shall create an impound account to be funded with an amount equal to an estimated three months of water bill payments.**

d) **Owners and tenants of the units shall be notified that the City may shutoff water service to the entire building if adequate payment of the water bill is not made.**

Code Reminders:

53. The tentative map shall expire twenty-four (24) months from the date this tentative map approval becomes final.

54. Approval of this request shall not excuse compliance with all applicable sections of the Zoning Ordinance and all other applicable City ordinances in effect at time of building permit issuance, except as otherwise specifically provided herein.

55. The project shall comply with the latest nonresidential disabled access requirements pursuant to Title 24 of the State Building Code.

56. Any signs proposed for this development shall at a minimum be designed in conformance with the City's Sign Ordinance **and the El Camino Real Corridor Standards,** and shall require review and approval of the Planning Director prior to installation of such signs.

57. Developer shall pay a landscape plancheck and inspection fee as required by Section 20.08.050 of the Carlsbad Municipal Code.

58. Premise identification (addresses) shall be provided consistent with Carlsbad Municipal Code Section 18.04.320.

Construction BMP reminder

59. Developer shall exercise special care during the construction phase of this project to prevent offsite siltation. Planting and erosion control shall be provided in accordance with Carlsbad Municipal Code Chapter 15.16 (the Grading Ordinance) to the satisfaction of the City Engineer.

60. The Average Daily Trips (ADT) and floor area contained in the staff report and shown on the Site Plan are for planning purposes only. Developer shall pay traffic impact and sewer impact fees based on Section 18.42 and Section 13.10 of the City of Carlsbad Municipal Code, respectively.

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NOTICE

Please take NOTICE that approval of your project includes the "imposition" of fees, dedications, reservations, or other exactions hereafter collectively referred to for convenience as "fees/exactions."

You have 90 days from date of approval to protest imposition of these fees/exactions. If you protest them, you must follow the protest procedure set forth in Government Code Section 66020(a), and file the protest and any other required information with the City Manager for processing in accordance with Carlsbad Municipal Code Section 3.32.030. Failure to timely follow that procedure will bar any subsequent legal action to attack, review, set aside, void, or annul their imposition.

You are hereby FURTHER NOTIFIED that your right to protest the specified fees/exactions DOES NOT APPLY to water and sewer connection fees and capacity charges, nor planning, zoning, grading, or other similar application processing or service fees in connection with this project; NOR DOES IT APPLY to any fees/exactions of which you have previously been given a NOTICE similar to this, or as to which the statute of limitations has previously otherwise expired.

PASSED, APPROVED, AND ADOPTED at a regular meeting of the Planning Commission of the City of Carlsbad, California, held on **February 6, 2008**, by the following vote, to wit:

AYES: Chairperson Baker, Commissioners Boddy, Cardosa, Dominguez, Douglas, Montgomery, and Whitton

NOES:

ABSENT:

ABSTAIN:

JULIE BAKER, Chairperson
CARLSBAD PLANNING COMMISSION

ATTEST:

DON NEU
Planning Director

Record Copy
11/14/07
SR

K&S ENGINEERING
Planning Engineering Surveying

PRELIMINARY

STORMWATER MANAGEMENT
And
STORMWATER MAINTENANCE PLAN

CT 06-17, SDP 06-07, PUD 06-15 & SUP 06-04

RECEIVED
OCT 29 2007
CITY OF CARLSBAD
PLANNING DEPT

PARCEL 3 OF MAP 18059
EL CAMINO TERRACE
30 OFFICE CONDOMINIUMS

Prepared By
K&S Engineering
7801 Mission Center Court, Suite 100
San Diego, CA 92108

Prepared For
Tycoon Development Corporation
2371 Fenton Street
Chula Vista, CA. 91914

October 2007

K&S Job #05-062

7801 Mission Center Court, Suite 100 • San Diego, California 92108 • (619) 296-5565 • Fax (619) 296-5564

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ATTACHMENTS

A **HYDROLOGY STUDY**

B **PERMANENT BMP INFORMATION**

- Landscaping & Irrigation
- Integrated Pest Management (IPM) Program
- Material Storage
- Trash Enclosures
- Storm Drain Signage
- Filter Inserts
- Vegetated Filter Strips
- Bioretention Fltration System
- Hydroseeding

C **STORM WATER APPLICABILITY CHECKLIST**

1.0 INTRODUCTION

The California State Water Quality Control Board approved Order Number 2007-01 (Order) on January 24, 2007. The Order updates the original NPDES Storm Water Permit, Order No. 2001-01 and outlines the storm water discharge requirements for municipal separate storm sewer systems (MS4s), which drain "development" areas from watersheds within:

1.) The County of San Diego,
2.) Incorporated cities of San Diego County, and
3.) San Diego Unified Port District.

The City of Carlsbad is one of the municipal co-permittees identified in the order and, therefore, subject to its requirements.

In general, the order requires that Best Management Practices (BMPs):

- Control the post-development peak storm water storm discharge rates and velocities to maintain or reduce pre-development downstream erosion
- Minimize storm water pollutants of concern in urban runoff from new development through implementation of source control BMPs
- Remove pollutants of concern from urban runoff through implementation of structural treatment BMPs
- Include proof of a mechanism, to be provided by the project proposal, which will ensure ongoing long-term structural BMP maintenance. In addition, structural BMPs shall be located to infiltrate, filter, or treat the required runoff volume or flow (*numeric sizing criteria*) prior to discharge to any receiving water body supporting beneficial uses.

This "numeric sizing criteria" is either volume or flow based. Specifically, volume based BMPs must be designed to infiltrate, filter, or treat the volume of runoff produced from a 24-hour – 85th percentile storm event. This is approximately 0.6 inches of runoff for San Diego County. Similarly, flow based BMPs must be designed to infiltrate, filter or treat a flow rate of 0.2 inches of rainfall per hour. Note that the above "numeric sizing criteria" allows the option of infiltration, filtering or treatment of this volume/flow and relates only to water quantity. Retention or detention of water volume/flow is not a requirement of the "numeric sizing criteria."

This Storm Water Management Plan (SWMP) proposes to address the possible water quality impacts from the grading and improvements of the El Camino Terrace (Project) located in the 5400 block of El Camino Real and define the potential Best Management Practice (BMP) options that satisfy the requirements, identified in the following documents:

1.) City of Carlsbad Standard Urban Storm Water Mitigation Plan, Storm Water Standards, (Standards) April 2003
2.) Standard Specifications for Public Works Construction,
3.) NPDES General permit for Storm Water Discharges Associated with Construction Activity, and
4.) County of San Diego Municipal NPDES Storm Water Permit (Order Number 2007-01).

The goal of this SWMP is to develop and implement the best available procedure policies of the Standards to insure to the maximum extent practicable that development does not increase pollutant loads from the project site and considers urban runoff flow rates, potential pollutants, and velocities. The SWMP also intends to insure the effectiveness of the Best Management Practices (BMP) through proper maintenance that is based on long-term fiscal planning.

According to the Storm Water Requirements Applicability Checklist (Appendix A of the Standards) (see Appendix C of this report), the Project is subject to:

- Part A - the Priority Project Permanent Storm Water BMP requirements
- Part B – the Standard Permanent Storm Water BMP requirements
- Part C – the Construction Storm Water BMP Performance Standards and is required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and
- Part D - Medium Priority construction site ranking due to discharging to a tributary to a sensitive water body.

This SWMP is subject to revisions as needed by the engineer.

2.0 PROJECT DESCRIPTION

The Project is located on Assessors Parcel No. 209-040-42-00, more formerly known as Lot 3, of Map 18059. The 1.48 acre site is located adjacent and easterly of El Camino Real and southerly of Cougar Street.

The Project consists of the fine grading of an existing rough graded site for the construction of one commercial building and its associated parking and landscaped areas. The existing site contains driveway paving, underground storm drain piping and storm drain inlet structures that will be utilized by the Project development. Landscaped area site improvements for all permeable disturbed areas, as well as some undisturbed permeable areas, are integral elements of the proposed Project.

In general, the proposed site will surface-drain via overland flows and channelizing ribbon gutters to a proposed grated inlet in the northerly portion of the parking lot and to existing curb inlets located along the paved access drive, within a mutual use access easement. The curb inlets located in the existing driveway on the east drain to an existing storm drain system. The drainage for this project eventually flows into the Agua Hedionda Creek to the Pacific Ocean.

FIGURE 1

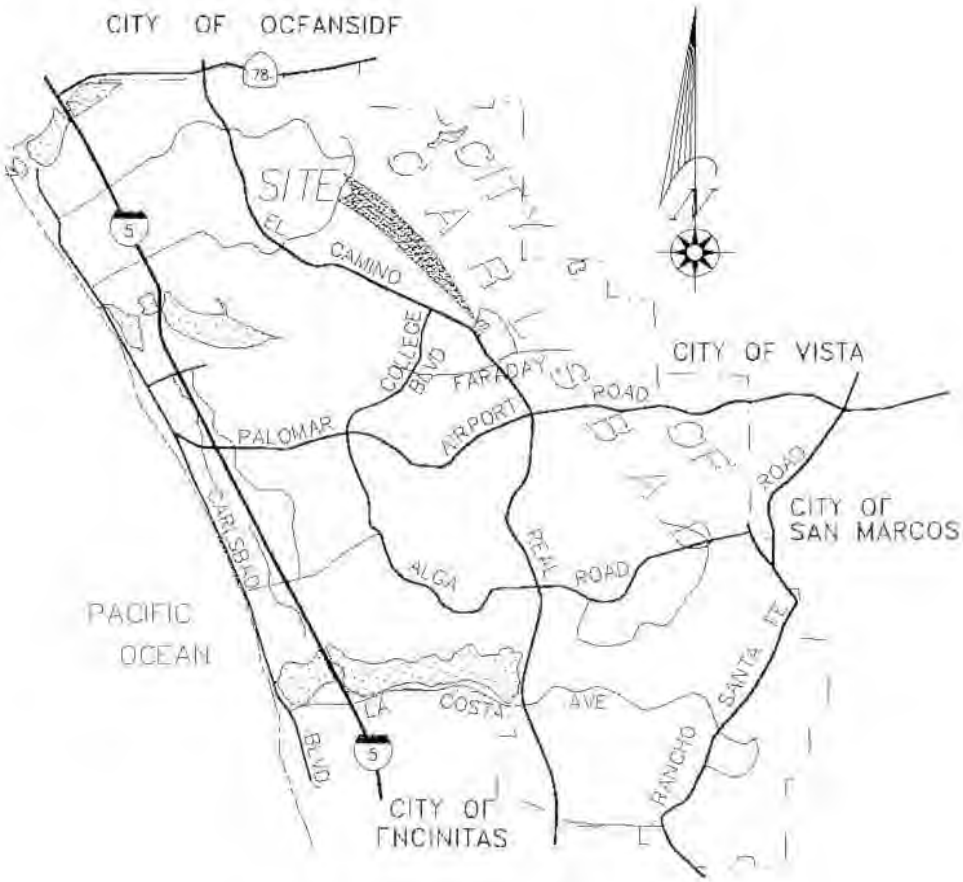

LOCATION MAP

NOT TO SCALE

3.0 Hydrologic Unit Contribution

According to the State of California, Regional Water Quality Control Board, San Diego Hydrologic Basin Planning Area, the Project is located in the Los Manos hydrologic sub-area (HSA) (904.31) of the Carlsbad Watershed hydrologic unit (HU). The area is characterized by mostly moderately sloping land occupied by predominately non-native grass and urban uses. Land use within the watershed is dominated by urban development. Natural habitats are scattered and occur in a matrix of agricultural and urban development, however several relatively large patches of native vegetation occur in the eastern portion of the watershed and in the central area just inland from Agua Hedionda Lagoon.The cities of Carlsbad, San Marcos, and Encinitas are located entirely within the HU. Approximately 48% of the Carlsbad HU is urbanized. The dominant land uses are residential (29%), commercial/industrial (6%), freeways/roads (12%), agriculture (12%), and vacant/undeveloped (32%). The Agua Hedionda HA comprises approximately 14% of the HU.

Constituents of concern for the HU include coliform bacteria, nutrients, sediment, trace metals, and toxics. The Agua Hedionda, Buena Vista, and San Elijo lagoons are experiencing impairments to beneficial uses due to excessive coliform bacteria and sediment loading from upstream sources. These coastal lagoons represent critical regional resources that provide freshwater and estuarine habitats for numerous plant and animal species. Other water bodies in the Carlsbad HU have been identified as impaired on the California 303(d) list for elevated coliform bacteria. Specific waterbodies affected by the Project are identified in Section 4.0.

The Project's 1.48 acres (±1.1 acres disturbed) represents an extremely small percentage of the approximately 210 square miles (134,400 acres) of the hydrologic unit area and representing 0.1% of the hydrologic unit area. The existing site contains ±0.13 acres of impervious surface area that increases to ±0.91 acres in the planned developed condition. The "Project" will not alter the overall drainage pattern of the site before entering the storm drainage system. The drainage within Cougar Drive is designed for total build-out of this development. Therefore, the increase in imperviousness of the Project will have a negligible impact on the hydrologic unit with the proper implementation and maintenance of the permanent BMPs outlined in this report and the proper implementation and maintenance of the construction phase BMPs identified in the Storm Water Pollution Prevention Plan (SWPPP).

FIGURE 2

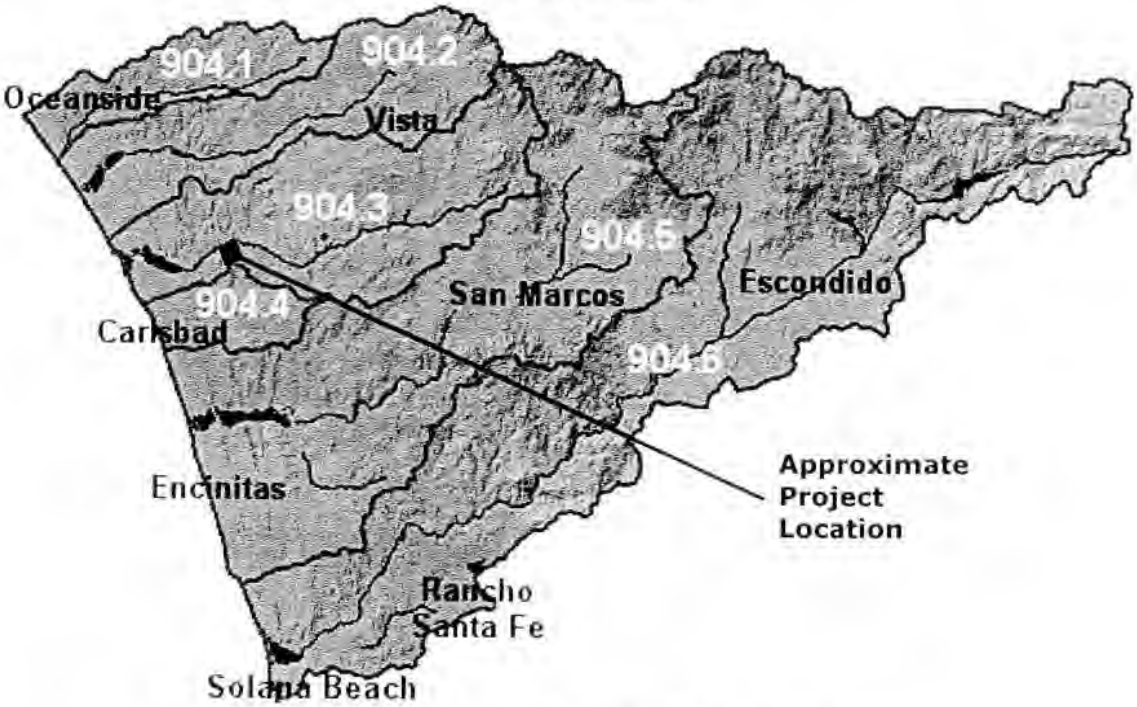

Carlsbad Watershed Hydrologic Unit

3.1 Beneficial Use

Designated beneficial uses within the Los Manos HSA and the downstream locations of Agua Hedionda Creek and Agua Hedionda Lagoon are limited to surface water, coastal water and ground water. Those uses are identified in Table 1. The data contained in this Table is extracted from the Water Quality Control Plan for the San Diego Basin.

TABLE 1

Beneficial Uses	Inland Surface Water	Coastal Waters	Ground Water
Municipal and Domestic Supply	X		O
Agricultural Supply	X		O
Industrial Service Supply	X	X	O
Contact Water Recreation	X	X	
Non-Contact Water Recreation	X	X	
Commercial and Sport Fishing		X	
Warm Freshwater Habitat	X	X	
Estuarine Habitat		X	
Wildlife Habitat	X	X	
Biological Habitats		X	
Rare, Threatened, or Endangered		X	
Marine Habitat		X	
Migration of Aquatic Organisms		X	
Aquaculture		X	
Shellfish Harvesting		X	
Spawning, Reproduction and/or Early Development		X	

Beneficial Uses

X Existing Beneficial Use
O Potential Beneficial Use

The reader is directed to the Water Quality Control Plan for the San Diego Basin for more detailed descriptions of the above beneficial uses.

FIGURE 3

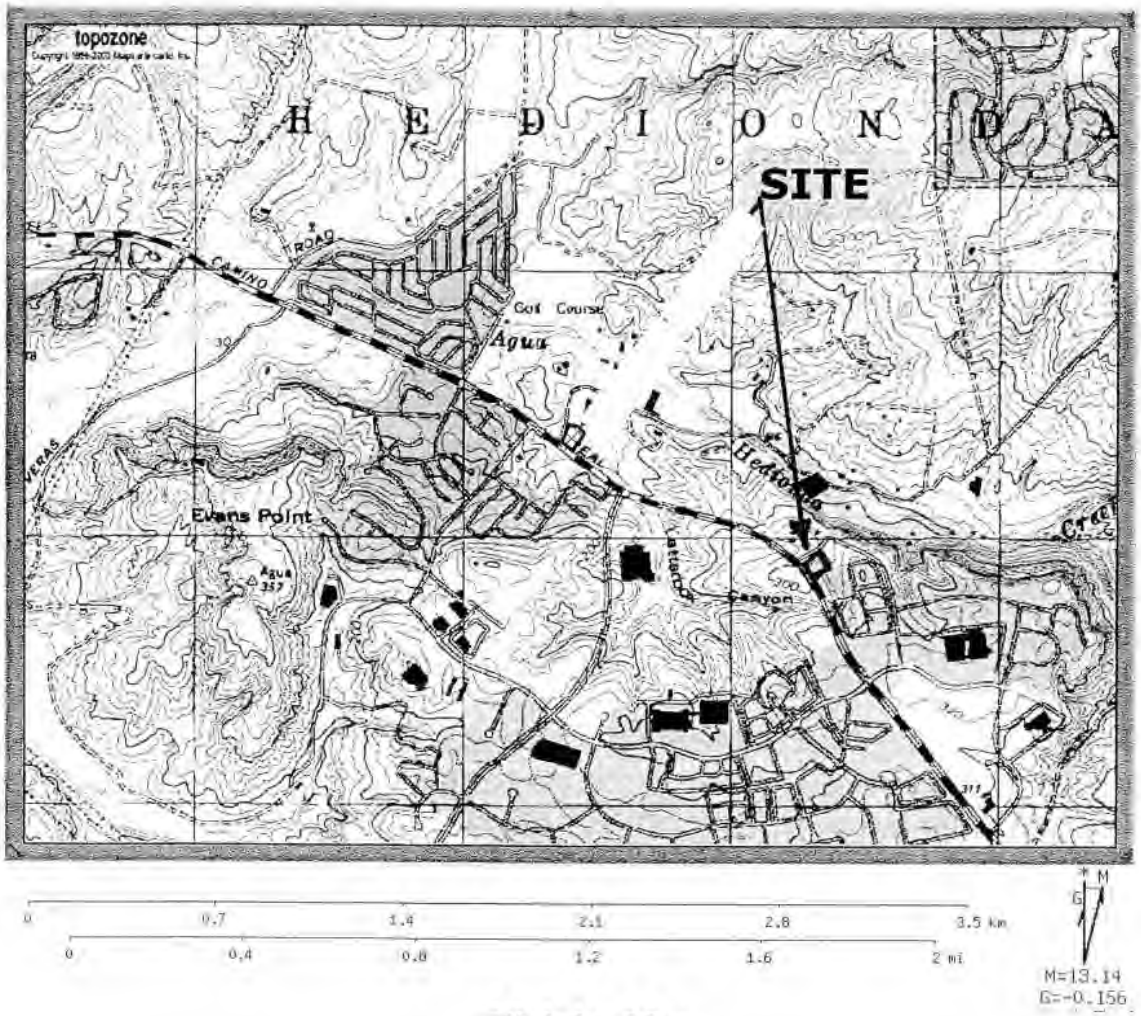

Vicinity Map

4.0 CHARACTERIZATION OF PROJECT RUNOFF

According to the California 2002 303d list published by the San Diego Regional Water Quality Control Board, Agua Hedionda Creek and Agua Hedionda Lagoon are the only impaired water bodies downstream of the Project. The Project area is approximately 2.9 miles upstream from the outlet of the lagoon to the Pacific Ocean.

The Agua Hedionda Creek's impairment is for total dissolved solids for a length of 7 miles and a TMDL classification of "Low". The identified sources of the pollutant/stressor are listed as:

- urban runoff/storm sewers.
- unknown nonpoint source.
- unknown point source.

The Agua Hedionda Lagoon's pollutant/stressors are bacteria indicators and sedimentation/siltation for an area of 6.8 acres and a TMDL classification of "Low" on both. The identified source for both of the pollutant/stressors is listed as nonpoint/point source.

4.1 Constituents of Concern and Sources

There are no sampling data available for the existing site condition.

In addition, the project is not expected to generate significant amounts of non-visible pollutants. However, the constituents listed in Table 2.1 are commonly found on similar developments and could affect water quality.

TABLE 2

Priority Project Categories	*General Pollutant Categories*								
	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Commercial Development >1 Acre	P(1)	P(1)		P(2)	X	P(3)	X	P(4)	P(3)
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Hillside Development >5,000 ft^2	X	X			X	X	X		X

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) Including solvents.
(4) A potential pollutant if land use involves food or animal waste products

Project Pollutant Categories

The potential sources for the constituents of concern for the project could be, but are not limited to those listed below:

- Sediments – Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

- Nutrients – Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

- Metals – Metals are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary source of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

- Organic Compounds – Organic compounds are carbon-based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.

- Trash & Debris – Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.

- Oxygen-Demanding Substances – This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

- Oil and Grease – Oil and grease are characterized as high-molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

- Bacteria and Viruses – Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. In addition, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

- Pesticides – Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

4.2 Soil Characteristics.

The project area consists of soil group D. Soil group D soils have very slow infiltration rate when thoroughly wetted; chiefly clays that have a high shrink-swell potential, soils that have a high permanent water table, soils that have a claypan or clay layer at or near the surface, or soils that are shallow over nearly impervious material. Rate of water transmission is very slow.

4.3 Site Hydrology

Per the Hydrological Analysis (Attachment A), the existing flow rate for the Project drainage areas from a 100-year storm event is 3.19 cfs. This currently drains from the site via an existing, temporary 12" riser with weep holes. The existing drainage area of the Project drains through an underground storm drain system, ultimately outletting to Agua Hedionda Creek.

In the proposed condition, the basin area remains unchanged and the runoff coefficient increases due to the classification of the area changing from existing to commercial for the project. The flow for the proposed condition is 8.31 cfs. This increase to the total storm flow is due to the change in the 'C' factor. The existing drainage facilities, already sized for the ultimate developed conditions for the zoning, are capable of handling the increase in flow. The project continues to drain to the same underground storm drain system piping mentioned above.

5.0 MITIGATIVE MEASURES TO PROTECT WATER QUALITY

As a Priority Project, specific storm water BMP requirements must apply, where applicable. Priority projects incorporate particular BMPs to ensure that those projects reduce potential urban pollutant runoff to the maximum extent practicable (MEP). These storm water pollution prevention requirements are site specific and vary based on the project's potential impact on receiving water quality.

To address water quality for the project, BMPs will be implemented during construction and post construction phases. Per Section II, Table 1 of the Standards, the Project is best described as belonging to the Commercial Development >1 Acre, Parking Lot and Hillside Development >5,000 ft^2 categories.

Priority projects are subject to the requirements of all priority project categories that apply (as shown in Table 3):

- Site Design BMPs
- Source Control BMPs
- BMPs applicable to Priority Project specific categories:
  1. Private Roads,
  2. Dock Areas,
  3. Maintenance Bays,
  4. Outdoor Processing Areas,
  5. Surface Parking Areas and
  6. Hillside landscape

In addition, incorporated into the Project are appropriate site design and source control BMPs for Standard Projects.

5.1 Site Design BMPs

The Project has incorporated specific site design characteristics to provide a minimum of impervious areas on the site. The maximum number of compact car parking spaces allowed by code reduces the pavement areas in surface parking areas. Utilization of existing paved areas for access and existing driveway reduces impermeable areas and affords a greater level of safety on Cougar Drive by not introducing any new driveway openings.

The landscaped areas provide an efficient use of permeable areas. Roof drainage flows are directed into landscaped areas adjacent to and sloping away from building structures. Installation and monitoring of the irrigation system for these landscape areas will reduce over-irrigation, thereby reducing the oversaturation of the areas leading to excess runoff. All existing areas outside of the disturbed areas remains in a natural state or will incorporate major plantings into the new landscape scheme. The conservation preserves native trees and shrubs, lessening the impact of this development on the surrounding area. The landscaped areas of the site will utilize native or drought tolerant species in the planting scheme.

All storm flows will exit the site in the same locations as in the existing condition. The slight increase in post-development peak flow by the increase of impermeable area is accounted for in the design of the existing drainage improvements for the ultimate build-out of this developable parcel.

5.2 Source Control BMPs

Source control BMPs, including construction stage BMPs, are selected, constructed, and maintained to comply with all applicable ordinances and guidance documents. The Project SWPPP will identify and detail construction BMPs that may include, but not be limited to, the following:

Silt Fences, Fiber Rolls, Street Sweeping & Vacuuming, Storm Drain Inlet Protection, Stockpile Management, Solid Waste Management, Stabilized Construction Entrance/Exit, Vehicle & Equipment Maintenance, Gravel Bag Berms, Material Delivery & Storage, Spill Prevention & Control, Concrete Waste Management, Water Conservation Practices, Paving & Grinding Operations, Stabilization of Disturbed Areas, and Permanent Revegetation of Man-made Slopes.

TABLE 3

Project Category	*Site Design BMPs*	*Source Control BMPs*	*BMPs Applicable to Individual Priority Project Categories*										*Treatment Control BMPs*
			a. Private Roads	b. Residential Driveways & Guest Parking	c. Dock Areas	d. Maintenance Bays	e. Vehicle Wash Areas	f. Equipment Wash Areas	g. Outdoor Processing Areas	h. Surface Parking Areas	i. Fueling Areas	j. Hillside Landscaping	
Standard Projects	**R**	**R**	**O**	**O**	**O**	**O**	**O**	**O**	**O**	**O**	**O**	**O**	**O**
Priority Projects													
Commercial Development >1 Acre	**R**	**R**			**R**	**R**	**R**		**R**				**S**
Hillside Development >5,000 ft^2	**R**	**R**	**R**									**R**	**S**
Parking Lots	**R**	**R**								**R**(1)			**S**

R = Required
O = Optional/ or may be required by City Staff.
S = Select one or more applicable and appropriate treatment control BMPs.
(1) = Applies if the paved area totals >5,000 square feet or with >15 parking spaces and is potentially exposed to urban runoff.

Project Storm Water BMP Requirement Matrix

5.2.1 Efficient Irrigation and Landscape Design

Landscape irrigation systems will be of an efficient design and installations will be maintained on a regular and timely basis to prevent over-watering and the transport of silts, sediments, fertilizers and pesticides into the storm drain system. Fertilizers and pesticides will be applied per manufacturer's rate to reduce the potential of pollutant transporting.

5.2.2 Integrated Pest Management (IPM)

The use of an IPM strategy, an ecosystem-based pollution prevention strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant plant varieties will control or eliminate certain pollutants of concern. Pesticides are used only after monitoring indicates they are needed according to established guidelines. Pest control materials selected and applied in a manner that minimize risks to human health and the environment should be used. More information may be obtained at the UC Davis website (http://www.ipm.ucdavis.edu/WATER/U/index.html). If fertilizers and pesticides are necessary, they shall be applied per manufacturer's rates and guidelines to reduce the potential of pollutant transporting.

5.2.3 Outdoor Storage

There is no planned outdoor storage of any types of materials. All material storage areas are located indoors or will be contained in an appropriate enclosure.

5.2.4 Trash Storage Areas

Trash and recycling storage areas will have concrete masonry screen wall enclosures, with gated openings. The containers themselves are to be equipped with integral, locking lids to prevent the blowing of waste materials. Emptying the containers on a regular and as needed basis lessens the likelihood of overflow leading to the distribution of waste.

5.2.5 Storm Drain Signage or Stenciling

Any existing public storm drain inlets affected by project drainage, as well as all on-site private inlets, will be stamped or stenciled (as appropriate to location) to provide notice against illegal dumping of pollutants. The owner/developer will provide information to increase the knowledge of tenants/employees/future owner regarding impacts of pollutants and urban runoff on receiving waters and potential BMPs for the specific land use to affect the behavior of tenants/employees/future owner and thereby reduce pollutant releases to the environment.

5.2.6 Spill Prevention and Control

A spill prevention and control plan applicable to site operations is to be developed and implemented by the property owner and/or the building management. An effective plan will prevent or reduce the discharge of pollutants due to leaks and spills. It should have spill prevention and response procedures that identify potential spill areas, specify material handling procedures, describe spill response procedures, and provide spill clean-up equipment. The plan should identify steps to identify and characterize potential spills, eliminate and reduce spill potential, respond to spills when they occur, and train personnel to prevent and control future spills.

5.3 BMPs Applicable to Individual Priority Project Categories

Commercial Development >1 Acre:

a) Dock Areas, – There are no loading dock areas planned for the Project. All shipping and receiving will be by individual, closed containers and handled on an as needed basis by each tenant and their respective shipping company.
b) Maintenance Bays, – There are no maintenance bays associated with the Project. Any vehicular maintenance will be performed at an off-site location.
c) Vehicle Wash Areas, – Any vehicle washing/steam cleaning is to be performed at an off-site location. If any occurs on site, appropriate BMPs for isolation of wash wastes, such as isolating wash areas with retention berms and appropriate disposal of wash wastes into a sewage wastewater clarifier before entering the municipal sewer system, shall be implemented.
d) Outdoor Processing Areas, – All processing activities are contained within the buildings. No processing allowed outdoors unless it occurs within covered or enclosed areas and discharges any drainage or wastes into a sewage wastewater clarifier before entering the municipal sewer system.

Hillside Development >5,000 ft^2:

a) Private Roads. – The design of private roadway drainage incorporates a treatment control BMP method approved by the City Engineer to reduce storm water runoff pollution in the form of a catch basin filter insert enabling the Project to utilize the existing drainage design of the adjacent properties.
b) Hillside Landscaping. - Hillside areas disturbed by project development will be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, in accordance with the Carlsbad Landscape Manual.

Parking Lots:

a) Surface Parking Areas. –Surface parking areas incorporate landscape areas into the drainage design by sheet flowing to vegetated swale buffer strips before entering the storm drain system.

5.4 Treatment Control BMPs

Landscaped areas, (indicated on Figure 5) and undisturbed natural areas can act as biofilters for irrigation and drainage flow waters that cross over them. Mulching, seeding and planting of the landscaped areas provide

biofiltration of applied pesticides and fertilizers. Following manufacturer guidelines to avoid over treatment of landscaping will provide a limited occurrence of pollutants in the planted areas of the Project.

The paved parking areas will receive storm water to vegetated strips located in the mid part of the parking and along the northerly and easterly parking perimeter. The runoff received by the vegetated strip located in the mid area of the parking will surface flow into the vegetated strip and it will then, be conveyed into a proposed catch basin with filter insert. The rest of the parking runoff will enter into the vegetated strips along the parking northerly and easterly parking perimeter through six-two inch cores of he curb; this runoff will flow through the grass and then will enter into two proposed Bio-filtration systems. The filters strips function by slowing runoff velocity and filtering out sediment and other pollutants, while also providing some infiltration into underlying soil. The landscape plans specify the species used in planting in the strip. Recommended plantings for these buffer areas are low growing, drought tolerant, native species. They should be hardy plants that withstand flows and wet and dry conditions. A thick vegetative cover assures the proper filtration functioning.

The catch basin at the vegetated filter strip terminus is outfitted with catch basin filter insert (FloGard+™ by Kristar® [or City approved equal]), filter inserts are also installed in the catch basins located west of the building to collect the runoff from the rooftop. Installation of this type of inserts on the private drain inlets accepting drainage from the private access drive will treat the runoff from this paved area. The inserts are designed to collect sediment, trash, and debris during low flows (first flush); however, it will not impede peak flow and it help to reduce the hydrocarbons, oil, grease pollutants and metal debris from vehicle brake pads. Insert filters installed on appropriate inlets cleanse the runoff per square foot of effective filter area (per manufacturer efficiency specs in Attachment B). The screening mechanism of the filter inserts is highly effective in the removal of trash and debris. They will also help on the treatment of any pesticides and nutrients emanating from the landscape areas not treated through biofiltration. The use of inserts on all appropriate inlets will effectively aid the removal of pollutants of concern from the Project, preventing them from entering downstream waters.

Using the flow-based aspect of the "numeric sizing criteria," the insert BMPs must be designed to mitigate (infiltrate, filter or treat) a flow rate of 0.2 inches of rainfall per hour and relates only to water quantity. Retention or detention of water volume/flow is not a requirement of the criteria. The flow based filter insert sizing for the Project is as follows:

- Using the basin area formula A=Q/CI:
  - A 24" catch basin (4 sq ft opening) with FloGard+™ insert can treat at least 645 GPM or 1.44 cfs (per specifier chart).
    Where Q=flow rate, 1.44 cfs, C= coefficient of runoff 0.87, I= intensity 0.2"/hr
    or A=1.44/(0.87)(.2))
    Therefore, the maximum acreage draining to this catch basin could be approximately 8.57 acres.

  - A 48" curb inlet (4 ft opening) with FloGard+™ insert can treat at least 1.5 cfs (per specifier chart).

    Where Q=flow rate, 1.5 cfs, C= coefficient of runoff 0.87, I= intensity 0.2"/hr
    or A=1.5/(0.87)(.2))
    Therefore, the maximum acreage draining to this catch basin could be approximately 8.62 acres.

  - A 12"X 12" FGP-12F filter can treat 0.40 CFS (per specifier chart).
    Where Q=flow rate, 0.40 cfs, C= coefficient of runoff 0.87, I= intensity 0.2"/hr
    or A=0.40/(0.87)(.2))
    Therefore, the maximum acreage draining to this catch basin could be approximately 2.30 acres.

Consequently, the inlet filters meet the flow/volume criteria in the Order. Appendix B contains manufacturer information on the capacity of the FloGard+™ inserts to treat the required volume and the Post Construction BMP tributary area Map.

The site proposes two 8'x 4' Filterra™ Stormwater Bioretention Filtration Systems on the northeast corner of the site. The system is well—suited for the ultra-urban environment with high removal efficiencies for pollutants such as petroleum, heavy metals, phosphorus, nitrogen, TSS and bacteria.

The stormwater flows through a specially designed filter media mixture contained in landscaped concrete container. The filter media captures and immobilizes pollutants; those pollutants are then decomposed, volatilized and incorporated into biomass of Filterra™ system's micro/macro fauna and flora. Stormwater runoff flows through the media and into an under-drain system at the bottom of the container, where the treated water is discharged. Higher flows bypass the filterra™ via a downstream inlet structure (See Attachment B for manufacturer specifications).

According to manufacturer's sizing table, each 8' x 4' Filterra™ Stormwater Bioretention Filtration System for commercial areas will treat a contributing area of at least 0.36 acres to 0.44 acres.
The project tributary areas for each Filterra™ Stormwater Bioretention Filtration System are 0.35 acres and 0.21 acres; therefore, the systems will handle the contributing areas.

5.5 Summary

This project has two waterbodies identified in the 303d listing by the SWRCB. The pollutant stressors identified as impairing those waterbodies (total dissolved solids, bacteria indicators and sedimentation/siltation) are the primary pollutants of concern. Therefore, the remaining pollutants identified in Table 2 (nutrients, heavy metals, organic compounds, trash & debris, oxygen demanding substances, oil & grease and pesticides) become the secondary pollutants of concern.

With the predominant use of the site as a multi-tenant office facility with landscaped and parking areas, production of these primary pollutants of concern is a definite possibility. By instituting an effective IPM program, by limiting the appearance of bare soil areas through landscape maintenance and with the implementation of source control BMPs, the production of these pollutants will be limited. The judicious use of fertilizers and pesticides in landscaping keeps the introduction of bacteria and nutrients to a minimum. With adequately established ground plantings to prevent soil erosion, there is a limited possibility for dissolved solids production from eroded soils. Implementing the IPM procedures and preventing access of animal pests to both trash receptacles and desirable environments limits the production of fecal matter considered as a main contributor to bacterial pollution.

While infiltration basins and other infiltration methods are the most effective single treatment BMP for the bacteria indicators and detention basins, infiltration basins, wet ponds or filtration methods identified as the most effective for sediments their use is considered unfeasible for this project. The soil type of soil group D is generally unsuitable for infiltration basin technologies due to low porosity and permeability. Costs associated to modify soil infiltration capabilities is a prohibitive constraint.

Therefore, the Project utilizes a treatment train approach to the majority of storm water flows emanating from the site. Pervious area storm water flows receive treatment from Filterra™ Stormwater Bioretention Filtration Systems after traversing the some porous areas. Part of the Project impervious surface will surface and sheet flow to the filter strip before entering catch basin filter insert.

The vegetated buffer strips or grassed filter strips offer treatment to storm flows from parking lot surfaces by allowing the sheet flows to decrease velocities enabling sediments and pollutants to settle. The strips offer medium to high removal efficiencies on these pollutants: sediment, trash, metals, oil & grease and organics.

Catch basin filter inserts will serve as a secondary Treatment Control. Per the selection matrix in Table 4 (next page), filter inserts provide a low level of removal efficiency for all pollutants, except for providing a medium level for trash and debris. The proper use and adequate maintenance of the catch basin filter inserts allow these effective treatment BMPs to work to their ultimate capabilities, providing adequate filtration to remove the primary pollutants of sediments and TDS. The filtration of silts and sediment by this method will prevent those pollutants from entering downstream waters. This proprietary BMP provides some treatment of bacteria, while integrated pest management methods as well as indoor processing will limit the addition of chemical and biological pollutants to downstream waters to the maximum practicable extent.

The Filterra™ Stormwater Bioretention Filtration System, per the manufacturer's specifications Table 4(next page), can be categorized as a filtration System that provides high and medium removal efficiencies on the primary pollutants of concern. The manufacturer's specs denote the system as having a removal rate of: 82% for

total suspended solids (TSS), 76% for fecal coliform, 45% for nitrogen removal, 73% for phosphorus removal, 82% for heavy metals and >85% for predicted oil and grease.

TABLE 4

Pollutant of Concern	***Treatment Control BMP Categories***						
	Biofilters	Detention Basins	Infiltration Basins(1)	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separator Systems(2)
Sediment	M	H	H	H	L	H	M
Nutrients	L	M	M	M	L	M	L
Heavy Metals	M	M	M	H	L	H	L
Organic Compounds	U	U	U	U	L	M	L
Trash & Debris	L	H	U	U	M	H	M
Oxygen Demanding Substances	L	M	M	M	L	M	L
Bacteria	U	U	H	U	L	M	L
Oil & Grease	M	M	U	U	L	H	L
Pesticides	U	U	U	U	L	U	L

(1) Including trenches and porous pavement.
(2) Also known as hydrodynamic devices and baffle boxes.
L = Low removal efficiency
M = Medium removal efficiency
H = High removal efficiency
U = Unknown removal efficiency

Sources: *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (1993), *National Stormwater Best Management Practices Database* (2001), *Guide for BMP Selection in Urban Developed Areas* (2001), *and Caltrans New Technology Report (2001).*

Treatment Control BMP Selection Matrix

6.0 OPERATION AND MAINTENANCE PROGRAM

The effectiveness of any treatment or source control BMP proposed for a project relies partially on the proper operation and maintenance of any those BMPs for the duration of the existence of that particular BMP. Following are guidelines for the operation and maintenance of the Project source control and treatment BMPs. By following these guidelines on a specific schedule (a schedule of BMP maintenance indicators, actions, measurements, frequency and activities for source and treatment control BMPs is outlined in Table 5), operating efficiency of the BMPs will be maintained.

6.1 LANDSCAPING AND IRRIGATION

The operation and maintenance needs of landscaping and irrigation are:

- Trimming of lawns and plantings in landscaped areas.
- Removal and proper disposal of landscape cuttings.
- Replacement of dead growth with new plantings.
- Monitoring flows, spray areas and spray cycles to eliminate over watering of irrigated areas, thereby conserving water and preventing runoff.
- Fertilizer and pesticide applications as required per manufacturer's guidelines.

6.1.1 Inspection Frequency

Landscape and irrigation should be inspected at the following times:

- On a weekly basis during growing season.
- No less than bi-weekly during winter months.
- During fertilizer and pesticide applications to insure proper treatment to required areas.

6.1.2 Preventive Maintenance

Preventive maintenance activities for landscape and irrigation are:

- Planting Choices. – Use of plants specific for region and soil type.
- Inspection of Irrigation System. – Mechanical components and irrigation lines are inspected for leakage. Repair or replace as required or if signs of wear and tear or abuse are present.
- Scheduling. – Perform mowing, pruning, fertilizing and applications of pesticides and herbicides at optimal times of season.
- Use and Application of Fertilizers, Herbicides and Pesticides. - The application of these materials should be in strict conformance with the manufacturer's instructions and in accordance with federal, state and local regulations. Care should be taken not to over apply and to apply as needed as an augment to an IPM strategy.

6.1.3 Corrective Maintenance

Corrective maintenance for landscaping and irrigation is necessary to repair malfunctions and replace poor performing plants and components. Corrective maintenance activities include:

- Replanting. – Dieing or dead vegetation is replanted in a timely manner as soon as practicable. Removed growth is disposed of properly.
- Irrigation Monitoring. – Irrigation cycle times are monitored and adjusted to provide water at optimum time for sustaining plant growth. Utilization of rain sensing devices to avoid irrigating when not needed.
- Component Replacement. – Replace broken irrigation valves and sprayheads as soon as evident. Early replacement of defective materials prevents breakdowns of entire system.

6.1.4 Aesthetic Maintenance

Aesthetic maintenance is important for the appearance of a well maintained and a conscientiously managed site. The following activities will be included in the aesthetic maintenance program:

- Grass Trimming. – Timely and regular trimming of grass, trees, shrubs and plantings. Cuttings are removed and properly disposed.
- Healthy Plants. - Weeds will be removed as required through mechanical means. Plant health will be maintained through renewing plantings as necessary.

6.2 INTEGRATED PEST MANAGEMENT (IPM) PROGRAM

The operation and maintenance needs of an IPM program vary as to the required degree of implementation of the different facets of the site. The most important parts of an IPM consist of:

- Obtaining knowledge as to the available alternative, non-damaging, ecologically sound methods for pest control. Educating the necessary personnel involved in site maintenance.
- Gathering information pertaining to the specific needs of the site dependent upon the existing regional conditions and requirements of the site components.
- Making informed decisions based upon the knowledge gained and information gathered applicable to the site.

6.2.1 Inspection Frequency

The IPM program inspection frequency is determined by the presence of undesirable pests. Inspections are an important part of the IPM program to determine the effectiveness of pest management measures. Inspections should be performed at the following times:

- Seasonally at a minimum.
- No less than bi-weekly during winter months.
- Weekly during growing season or at normally scheduled landscape maintenance work appointments.

6.2.2 Preventive Maintenance

Preventive maintenance activities for an IPM program include:

- Planting Choices. – Use of plants for their resistance to certain pests and diseases.
- Environment Manipulation. – Maintain the site environment in a nature as to be conducive to the attraction of beneficial species that eliminate or deter undesirable/destructive species. Make the site uninviting to detrimental or nuisance species.
- Use and Application of Fertilizers, Herbicides and Pesticides. – Utilize more environmentally friendly, biodegradable products than traditional chemical based compounds.
- Record Keeping. – Maintain adequate records of dates, times, amounts and locations of all pesticide, herbicide and amendment application for future reference as to effectiveness or overuse.

6.2.3 Corrective Maintenance

Corrective maintenance for an IPM strategy is necessary to recognize and correct deficiencies. Corrective maintenance activities include:

- Recognition. – The ability to anticipate the need for application of chemical based products by implementing IPM strategies in a timely manner.
- Timing. – Use of proper timing in fertilizer, herbicide and pesticide applications as amendments to the ecologically beneficial IPM strategy.
- Healthy Growth. – Inserting healthy, pest free growth as a replacement is necessary insure a healthy greenspace that is more pest resistant.
- Good Housekeeping. – Remove infected materials and dispose of properly.

6.3 MATERIAL STORAGE

The operation and maintenance needs for material storage include:

- All material storage should be indoors.
- Limiting temporary, outdoor material storage to appropriate designated areas for control of run-on and runoff.
- Using appropriate containers for stored materials.
- General good housekeeping practices to maintain material storage facilities.

6.3.1 Inspection Frequency

Inspection of outdoor material storage areas should occur at the following times:

- On a weekly basis to discourage continued outdoor storage.
- A daily inspection of material stored outdoors during wet weather season to assure there is no possible escape of stored materials and no possible run-on or runoff of precipitation.
- During fertilizer and pesticide applications to insure proper treatment to required areas.

6.3.2 Preventive Maintenance

Preventive maintenance activities for material storage include:

- Designated Areas. – Use of appropriate designated areas for outdoor storage. All areas should be completely contained by; a cabinet or shed, or covered with a roof or impenetrable barrier and surrounded by a raised berm or dike for prevention of urban flows contacting materials.
- Containers. – Usage of appropriate, intact containers for stored materials with impermeable cover and made of leakproof material.
- Scheduling. – Perform mowing, pruning, fertilizing and applications of pesticides and herbicides at optimal times of season.
- Safety Data Sheets. – Maintain readily available material safety data sheets for all stored materials.
- Regulations. – Comply with all applicable regulations of zoning, building, health and fire codes pertaining to material storage.

6.3.3 Corrective Maintenance

Corrective maintenance activities for material storage are required on an emergency or non-routine basis to correct problems and include:

- Containment. – Having a practicable and readily deployable spill containment and clean-up procedure identified for stored materials. Maintain presence of personnel trained in implementation of the plan.
- Container Integrity. – Repair or replace storage containers when damaged or unable to contain materials stored within.
- Relocation. – Relocate outdoor material storage areas to an indoor location as soon as feasible.

6.3.4 Aesthetic Maintenance

Aesthetic maintenance is important for the appearance of a for material storage areas to give the appearance of a well managed facility. The following activities will be included in the aesthetic maintenance program:

- Graffiti Removal. - Graffiti will be removed in a timely manner to improve the appearance of a material storage areas and containers. Timely removal aids to discourage additional graffiti or other acts of vandalism.
- Good Housekeeping. – General good housekeeping practices to maintain a neat appearance for all material storage areas, whether inside or outside a shed or cabinet.

6.4 TRASH ENCLOSURES

The operation and maintenance needs of trash enclosures are:

- Regular removal of solid wastes and recyclable materials.
- Proper disposal techniques of allowed materials.
- Keeping enclosure gates and screens functioning.
- Good housekeeping to maintain a neat area around enclosures.

6.4.1 Inspection frequency

Trash enclosures should be inspected at the following times:

- Once a week at a minimum.
- Prior to predicted rain events to prevent trash and debris fro contaminating stormwater.

6.4.2 Preventive Maintenance

Preventive maintenance measures for trash enclosures are:

- Scheduling. – Provide frequent disposal as required to prevent wastes from overflowing containers to surrounding areas.
- Trash and Debris. - Debris and trash shall be placed within appropriate containers to reduce the potential for inlet structures from becoming clogged and inoperable during storm events.
- Structural Integrity. – Ensure adequate strength of construction for; enclosure structure, enclosure gates, container, container lids/covers and pavement surfaces of surrounding areas.
- Operability. – Ensure proper operability of enclosure gates and container lids/covers.
- Container. – Utilizing leakproof containers to prevent contamination of stormwater with disposed liquid wastes.
- Sign Postings. – Signage prohibiting disposal of toxic or hazardous wastes in trash dumpsters or recycling containers (if present).
- Regulations. - Comply with all applicable regulations of zoning, building, health and fire codes pertaining to trash and solid waste storage and disposal.

6.4.3 Corrective Maintenance

Corrective maintenance is required on an emergency or non-routine basis to correct deficiencies in trash enclosures and container operations. Corrective maintenance activities include:

- Damage. – Repair damage to enclosures in a timely manner. Repair or replace defective enclosure gates or screens and container lids or covers when damage affects operability. Repair or replace leaking containers when leaks are evident.
- Scheduling. – Increase the frequency of collection when wastes overflow containers.

6.4.4 Aesthetic Maintenance

Aesthetic maintenance is important for clean appearance of trash enclosures. The following activity will be included in the aesthetic maintenance program:

- Graffiti Removal. - Graffiti will be removed in a timely manner to improve the appearance of trash enclosures, gates or containers and to discourage additional graffiti or other acts of vandalism.
- General Housekeeping. – Ensure all trash is placed in appropriate containers and lids are closed or covers in place. Keep enclosure gates closed when containers are not being accessed.

6.5 STORM DRAIN SIGNAGE AND STENCILING

Storm drain signage operation and maintenance requirements are needed to keep information and guidance contained thereon legible to the general public. The requirements include:

- Maintaining legibility of graphics.
- Maintain unobstructed views of signage.

6.5.1 Inspection frequency

Storm drain signage inspections should be performed at the following times:

- At least four times per year, timed to coincide with the start of seasons.
- Monthly if signage is subject to adverse conditions.

6.5.2 Preventive Maintenance

Preventive maintenance measures for storm drain signage include:

- Material Quality. – The use of high quality, durable materials have a greater tendency to last a significantly longer time than poorer quality.
- Sizing. – Using the largest allowable signage for storm drains increase visibility and impact of message.
- Resistance to Graffiti . – Using graffiti resistant materials discourages graffiti vandalism.

6.5.2 Corrective Maintenance

Corrective maintenance is required on an emergency or non-routine basis to correct deficiencies in storm drain signage. Corrective maintenance activities include:

- Repairs. – Repair illegible signage as required.
- Replacement. – Replace missing signage as required. Modify installation to make removal more difficult.

6.5.3 Aesthetic Maintenance

Aesthetic maintenance is important to maintain legibility of storm drain signage. The following activity will be included in the aesthetic maintenance program:

- Graffiti Removal. - Graffiti will be removed in a timely manner to improve the readability of signage and to discourage additional graffiti or other acts of vandalism.
- Graphic Design. – Chose well thought out words and graphics to improve readability and effectiveness.

6.6 CATCH BASIN FILTER INSERTS

The operation and maintenance needs of filter inserts are:

- Periodic sediment removal to optimize performance.
- Removal of trash, debris, grass trimmings, tree pruning, and leaf collection to prevent obstruction of swales.
- Removal of standing water, which may contribute to the development of aquatic plant communities or mosquito breeding areas.

6.6.1 Inspection Frequency

Filter inserts will be inspected at the following times:

- No less than three inspections per year.
- After every runoff producing storm.
- On a weekly basis during extended periods of inclement weather.

6.6.2 Preventive Maintenance

Preventive maintenance activities for filter inserts are:

- Trash and Debris - Debris and trash removal shall be conducted to reduce the potential for inlet and outlet structures and other components from becoming clogged and inoperable during storm events.
- Removal of Standing Water - Standing water must be removed if it contributes to the development of aquatic plant communities or mosquito breeding areas.
- Use and Application of Fertilizers, Herbicides and Pesticides - The application of these materials should be in strict conformance with the manufacturer's instructions and in accordance with federal, state and local regulations. Care should be taken not to over-apply.

6.6.3 Corrective Maintenance

Corrective maintenance is required on an emergency or non-routine basis to correct problems and to restore the intended operation and safe function of filter inserts. Corrective maintenance activities include:

- Removal of Debris and Sediment - Sediment, debris, and trash, which impede the hydraulic functioning and prevent vegetative growth, shall be removed and properly disposed. Temporary arrangements shall be made for handling the sediments until a permanent arrangement is made.
- Structural Repairs - Once deemed necessary, repairs to Grate Inlet Skimmer Box should be performed within 10 working days.
- Adsorbent Replacement - Remove, characterize and properly dispose of spent media. Replace adsorbent media on a yearly basis (minimum) before start of wet season.

6.7 Vegetated Filter Strip

Filter strip maintenance is part of a conscientious performance of landscape maintenance. If maintained separately, the operation and maintenance needs of filter strips are:

- Vegetation management to maintain adequate hydraulic functioning
- Animal and vector control
- Periodic sediment removal to optimize performance
- Removal of trash, debris, grass trimmings, tree pruning, and leaf collection to prevent obstruction of strips
- Erosion and structural maintenance

6.7.1 Inspection frequency

Inspect filter strips at the following times:

- Once a month at a minimum
- After every runoff producing storm
- On a weekly basis during extended periods of inclement weather

6.7.2 Preventive Maintenance

Preventive maintenance activities for bio-filter swales are:

- Grass Mowing. – Design of the vegetation seed mix or sod within the filter strip is for it to be kept short and thick to maintain adequate hydraulic and filtering function. Regular mowing limits the development of faunal habitats.
- Trash and Debris. – Removal of trash and debris reduces the potential for inlet and outlet structures and other components from becoming clogged and inoperable during storm events.
- Sediment Removal. – Monitoring of sediment accumulation is once a month during the dry season (May 1 to September 30), after every large storm, and at least weekly during the rainy season (October 1 to April 30). Specifically, if sediment reaches a level at or near plant height, or could interfere with flow or operation, the sediment will be removed.
  Characterization and appropriate disposal of sediment will comply with applicable local, county, state, or federal requirements. Regrade the filter strip if the flow gradient has changed and replant with appropriate vegetation.
- Removal of Standing Water. – No standing water should occur. If it does, remove within 72 hours of appearance, and regrade to restore flow line.

- Use and Application of Fertilizers, Herbicides and Pesticides. - The application of these materials must be in strict conformance with the manufacturers' instructions with care taken not to over apply when application is necessary. Use of natural or ecologically friendly materials (per the IPM) is encouraged.

6.7.3 Corrective Maintenance

Corrective maintenance is required on an emergency or non-routine basis to correct problems and to restore the intended operation and safe function of the filter strips. Corrective maintenance activities include:

- Removal of Debris and Sediment. – Remove and properly dispose of removed sediment, debris, and trash that impede the hydraulic functioning and prevent vegetative growth. Temporary arrangements for disposal may be necessary (dependant on potential contaminations that testing will divulge) until a permanent arrangement is made. Reestablish vegetation and grade, if necessary, after sediment removal.
- Embankment and Slope Repairs. - Once deemed necessary, damage to the embankments and slopes upstream of swales will be repaired within 10 working days.
- Erosion Repair. - Where a reseeding program has been ineffective, or where other factors have created erosive conditions (i.e. pedestrian traffic, concentrated flow, etc.), take corrective steps to prevent loss of soil. Corrective actions that can be taken include; erosion control blankets, rip-rap, sodding, or reducing flow through the affected area.

6.8 FILTERRA™ STORMWATER BIORETENTION FILTRATION SYSTEM

Maintenance

A. Each correctly installed Filterra unit is to be maintained by the Supplier, or a Supplier approved contractor for a minimum period of 1 year. The cost of this service is to be included in the price of each Filterra unit. Extended maintenance contracts are available at extra cost upon request.

B. Annual included maintenance consists of a maximum of (2) scheduled visits. The visits are scheduled seasonally; the spring visit aim to clean up after winter loads that may include salts and sands. The fall visit helps the system by removing excessive leaf litter.

C. Each Included Maintenance visit consists of the following tasks.

1. Filterra unit inspection
2. Foreign debris, silt, mulch & trash removal
3. Filter media evaluation and recharge as necessary
4. Plant health evaluation and pruning or replacement as necessary
5. Replacement of mulch
6. Disposal of all maintenance refuse items
7. Maintenance records updated and stored (reports available upon request)

D. The beginning and ending date of Supplier's obligation to maintain the installed system shall be determined by the Supplier at the time the system is activated. Owners must promptly notify the Supplier of any damage to the plant(s), which constitute(s) an integral part to the bioretention technology.

6.9 HYDROSEEDING *

The operation and maintenance needs of hydroseeding are: (* - Hydroseeding only required if site not built upon for more than 30 days.)

- Vegetation management to maintain levels of vegetative cover acceptable to the City.
- Animal and vector control.
- Periodic sediment removal to optimize performance.

- Removal of trash, debris, grass trimmings, tree pruning, and leaf collection to prevent an appearance of neglect.

6.9.1 Inspection frequency

Hydroseeding should be inspected at the following times:

- Once a month at a minimum.
- After every runoff producing storm.
- On a weekly basis during extended periods of inclement weather.

6.9.2 Preventive Maintenance

Preventive maintenance activities for hydroseeding are:

- Grass Mowing. - Vegetation height will be maintained to a height designated by the City.
- Irrigation. – Design of the vegetation seed mix within the hydroseeded area is a native type mix and requires no irrigation after adequate plant establishment.
- Trash and Debris. - Debris and trash removal reduces the potential for storm water inlets becoming clogged and inoperable during storm events.
- Removal of Standing Water. – Remove standing water if present within 72 hours of a storm event to prevent the development of aquatic plant communities or mosquito breeding areas.
- Use and Application of Fertilizers, Herbicides and Pesticides. - The native mix requires no applications of these materials.

6.9.3 Corrective Maintenance

Corrective maintenance is required on an emergency or non-routine basis to correct problems and to restore the function of the hydroseeded area. Corrective maintenance activities include:

- Removal of Debris and Sediment. – Remove and properly dispose of sediment, debris, and trash as required. Vegetation shall be re-established after sediment removal.
- Structural Repairs. - Once deemed necessary, perform repairs to hydroseeded areas within 10 working days.
- Erosion Repair. - Where a reseeding program has been ineffective, or where other factors have created erosive conditions (i.e. pedestrian traffic, concentrated flow, etc.), corrective steps shall be taken to prevent loss of soil and any subsequent danger to the performance of the downstream BMPs, drainage systems and watershed. Methods to limit erosion include; erosion control blankets, rip-rap, sodding, or reduced flow through the affected area.

TABLE 5

Permanent BMP Maintenance Program

A schedule of periodic maintenance should be implemented and modified, as needed, to insure effective operation of the indicated permanent site design, source control and treatment BMPs. As a guideline, a tentative schedule of maintenance frequency follows. The schedule is based on certain indicators outlined for a particular BMP.

BMP	ROUTINE ACTIONS	MAINTENANCE INDICATORS	FIELD MEASUREMENT	FREQUENCY	MAINTENANCE ACTIVITY
Vegetated Filter Strips	Height of vegetation.	Average height of vegetation (grass) exceeds 4".	Visual inspection of vegetation.	Inspect weekly and after rainy periods.	Cut vegetation as required.
Hydroseeding*	Assess adequate cover.	Bare spots appear in planted/mulched areas or less than 70% coverage over entire area.	Visual inspection of lack of vegetative/mulch cover. Record locations to identify persistent problem areas.	Assess growth on a monthly basis. Assess mulch coverage on a monthly basis.	Reseed vegetated areas as required. No later than November. Scarify area for reseeding. Reapply mulching as required to cover bare spots.
* - Hydroseeding only necessary if site not built upon for 30 days.	Inspect for debris accumulation.	Debris or litter accumulation.	Visual inspection for trash.	During routine site landscape maintenance.	Remove and properly dispose of trash, litter and debris.
	Inspect for accumulation of sediment or erosion of soil.	Sediment is at or near vegetation height. Rills or gullies in topsoil.	Visual inspection for sediment depth. Visual inspection for rills and soil erosion.	Inspect monthly and after each significant rainfall.	Remove accumulated sediment when interfering with drainage flows.
Catch Basin Filter Insert	Sediment removal.	Sediment more than ½ height of filter body.	Visual inspection of filter body.	After each rain event.	Remove and properly dispose of sediment.
	Trash and debris removal.	Sufficient trash or debris accumulation to hinder filter performance.	Visual inspection of inlet and filter insert.	After each rain event.	Remove and properly dispose of trash and debris accumulation.
	Oil and grease removal.	Absorbent medium dark gray or darker and saturated with oil.	Visual inspection of adsorbent filter media.	After each Target 2 (0.75") rain event.	Replace adsorbent media within 10 working days. Characterize and properly dispose of spent media prior to wet season.
	Structural integrity of insert.	Broken or damaged insert with visible rips, tears, gashes and/or fallen media.	Visual inspection of insert components.	Semi-annually, May and October.	Replace insert. Contact vendor to develop preventative procedures. Effect repairs within 10 working days.
	Annual renewal of adsorbent medium.	End of wet season.	Lack of precipitation for extended period.	Annually before wet season.	Remove, characterize and properly dispose of spent media. Replace adsorbent media before start of wet season.
Landscaping & Irrigation	**Inspect for overgrown plantings.**	Grass longer than 2". Bushes and shrubs growing into traveled ways. Trees overhanging and interfering with users of walkways, parking spaces or drive aisles.	Visual observation for indicators when landscaping maintenance performed.	Weekly during growing season. Bi-weekly during winter months.	Cut and trim overgrowth as required.
	Inspect for dead or dieing plants.	Indicators vary as to species, but generally are unhealthy looking growth. Browning, drooping branches and leaves.	Visual observation for indicators.	Weekly during growing season. Bi-weekly during winter months.	Remove and replace dead or dieing plantings.
	Inspect for over irrigation.	Oversaturated ground. Standing water in low spots. Excess run-off of irrigation waters.	Visual observation for indicators.	Weekly during growing season. Bi-weekly during winter months.	Adjust timing mechanism for automatic sprinklers. Increase timing between applications. Consider more frequent, shorter operation periods.
	Inspect for over application of fertilizers or pesticides.	Indicators vary as to materials, but generally are burned spots for excessive fertilizer use and sticky residue or staining for over use of pesticides.	Visual observation for indicators.	Weekly during growing season. Bi-weekly during winter months.	Adjust amounts of materials applied. Consider Integrated Pest Management alternatives.

TABLE 5
(Continued)

BMP	ROUTINE ACTIONS	MAINTENANCE INDICATORS	FIELD MEASUREMENT	FREQUENCY	MAINTENANCE ACTIVITY
Integrated Pest Management	Inspect for evidence of undesirable plant species.	Presence of non-native plants or growth, especially in unwanted areas.	Visual observation for indicators.	Seasonally at the minimum. Weekly during growing season.	Remove unwanted species. Replace with native types.
	Inspect for evidence of undesirable insect species.	Presence of non-native or harmful insects. Plant growth destruction.	Visual observation for indicators.	Seasonally at the minimum. Weekly during growing season.	Manage unwanted insects with predatory species or plantings that discourage pest presence. Pesticide use as a last alternative.
	Inspect for evidence of undesirable vertebrate species.	Presence of undesirable animals. Plant growth destruction. Animal scratches on trash dumpsters. Footprints in wet earth, trampled plantings.	Visual observation for indicators. Olfactive presence of animal territory markings.	Weekly during growing season. Seasonally at the minimum.	Manage unwanted animals by eliminating desirable environs. Use of humane traps for relocation. Use poisons as a last alternative.
Material Storage	Inspect for outdoor storage of materials.	Uncovered, unprotected materials stored on the ground.	Visual observation for presence of material storage.	Weekly inspections for presence of stored materials. Daily inspections for stored materials.	Place materials in designated area in shed or cabinet. Bermed area with roof or impermeable cover may also be used.
Trash Enclosures	Inspect containers for overflowing trash and debris.	Trash and debris on ground in area surrounding trash dumpster.	Visual observation for trash and debris on ground.	Weekly inspections at a minimum and prior to predicted rain event.	Place trash and debris in appropriate container.
	Inspect for open containers or enclosures.	Gates of enclosures and lids of containers are open.	Visual observation for open gates and lids.	Daily inspections to prevent blowing of trash and debris and to discourage pest activity.	Close open gates or lids. Install locks for access by authorized personnel only.
Storm Drain Signage	Inspect storm drain stencils, signs or placards.	Deteriorating or missing signage.	Visual observation for illegibility or missing signage.	Seasonal observations of signage. More frequently if signage is located high traffic areas or subject to adverse conditions.	Repair illegible signage. Replace missing signage.
Stormwater Bioretention Filtration System	Inspect for evidence of undesirable plant species.	Presence of non-native plants or growth, in wetland planting areas.	Visual observation for indicators.	Seasonally at the minimum.	Remove unwanted species.
	Inspect for evidence of influent pipe obstructions.	Presence of debris in pipe or reduced inflow volume.	Visual observation for indicators. Standing water in upstream components.	Two scheduled visits in spring and after winter.	Clear debris from upstream inlet openings and influent pipe.
	Inspect skimmers for evidence of damaged components.	Weakened or damaged components, hoses, pipes or connections.	Visual observation for indicators. Tactile testing for structural integrity.		Repair or replace, as necessary, broken components, hoses, pipes or loose connections.
	Inspect for filter sack for clogging and structural integrity.		Measurement of depth of build-up.		Empty and clean filter as needed.
	Inspect for sediment accumulation.		Sediment contained within effluent from discharge pipe.		Remove sediment accumulation with vacuum truck or septic tank cleaner.

7.0 EDUCATION AND OUTREACH

The CC&R document accompanying the condominium plan will specify that the owner's association will be required to provide or designate a qualified individual or agency to provide training and information. The owner's association, on an as needed basis, will provide information regarding BMPs for utilization by anyone performing activities on the site that could impact runoff. This education and training increases the knowledge of tenants, employers and employees regarding the impacts of pollutants and urban runoff on receiving waters. Performing this education and training informs the tenants, employers and employees as to their responsibilities in preventing and reducing pollutant releases to the environment.

The owner's association will be notified of its responsibilities pertaining to the BMPs set-forth in this document, as regulated by the City of Carlsbad Municipal Code, Title 15, Chapter 15.12 and all underlying codes cited therein. Additionally, the owner's association will be advised about the responsibility for reporting illicit discharge and shall be provided with the City of Carlsbad clean water telephone hotline: (760) 602-2799).

8.0 FISCAL RESOURCES

The owner of the El Camino Terrace project will be financially responsible for the construction, installation and maintenance of the post development BMPs. The verification mechanism used by the City to assure maintenance will include the project proponent's signed statement, as part of the project application, accepting responsibility for all permanent BMP maintenance, repair and replacement. The owner is also required to implement the SWMP, until the recording of the Conditions, Covenants and Restrictions (CC&R) document with the condominium plan at the County Recorder's office establishing the owner's association. All maintenance of the permanent, private onsite source control and treatment BMPs, including filter inserts (FloGard+®) and the Filterra™ Stormwater Bioretention Filtration Systems, will be owner's association responsibility.

Most of the permanent BMPs accrue minimal maintenance costs. Mulching, seeding and plantings are part of a continuing landscape maintenance program. Encompassed within the performance of landscaping maintenance is the maintenance of irrigation system and the filter strip. The CC&R document will specify responsibilities of landscaping maintenance for permanent stabilization of graded areas.

A maintenance contract entered into with both the FloGard+® and Filterra™ providers upon installation will insure a continued monitoring of the catch basin filter inserts and the Stormwater Bioretention Filtration System, respectfully, installed as part of the Project. The contract(s) will provide for necessary maintenance and needed repairs to maintain effectiveness of both proprietary BMPs for the length of the contract(s).

The permanent responsibility of the post-development BMPs remains with the property by the use of restrictive deed language and the CC&R document. The deed language and CC&R document will place the responsibility for all future maintenance upon the owner of record.

The installation and maintenance of the post-development BMPs is the responsibility of the owner's association. The City may enter into a Permanent Storm Water Quality Best Management Practices Maintenance Agreement (Agreement) with the project proponent or owner's association obliging that the storm water BMPs are maintained, repaired and replaced as necessary throughout the "use" of the project site, satisfactory to the City Engineer or into perpetuity. The Agreement shall include a provision that gives the City the right, but not the obligation to perform the maintenance. The party responsible for BMP maintenance will pay the City for costs incurred by the City for maintaining any BMP's covered by the Agreement. The Agreement will provide a cost recovery provision in favor of the City satisfactory to the City Attorney. Security may be required in support of the Agreement to equal the cost of maintenance activities for an amount and time period determined by the City. The Agreement becomes part of the project's construction permit before City grants approval of the permit.

The Agreement includes an Operation and Maintenance (O&M) Plan approved by the City. The O&M Plan describes the designated responsible party to manage the storm water BMP(s), employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities (including maintenance of storm water conveyance system signage), copies of resource agency permits, and any other activities necessary to maintain the permanent source control and treatment BMPs.

The Agreement may also include an Access Easement/Agreement, executed and recorded, that is binding on the underlying land throughout the life of the project in favor of the party responsible for maintenance. The easement is in effect for the life of the particular BMP requiring access for maintenance until such time that removal or replacement of the permanent treatment BMP occurs rendering that access unnecessary.

TABLE 6
PERMANENT TREATMENT BMP
ESTIMATED OPERATION AND MAINTENANCE (O&M) COSTS

Permanent treatment BMPs, either existing or constructed and installed for this project, will necessitate continuous operation and maintenance (O&M) when the project is complete. O&M costs are based upon California Department of Transportation estimated costs for the pilot BMP project utilizing prevailing wage rates. Below are estimated itemized costs, based upon the pilot BMP project, manufacturer information and knowledge obtained from prior completed projects, of this project's permanent treatment BMPs as shown in Figure 5 As identified in WQTR Section 8.0, Fiscal Resources, the source for funding of BMP operation and maintenance is the responsibility of the property owner/developer or designated association.Post construction permanent BMP operation and maintenance costs include, but are not limited to the following:

BMP OPERATION & MAINTENANCE ITEM	LABOR			EQUIPMENT				MATERIALS		TOTAL COST
	Per Hrs.	Rate	Cost	Type	Days	Rate	Cost	Item	Cost	
FILTER INSERTS (Qty 4)	12.0	43.63	$523.56	1 Ton Truck	1.5	26.84	$40.26	New Adsorbent, Testing & Disposal	$800.00	$1,363.82
FILTERRA BIORETENTION (Qty2)	10.0	43.63	$436.30	1 Ton Truck	1.5	26.84	$40.26	Trimmer, Rake, Fork, Bags, Safety Equipment, Bags, Testing & Disposal	$600.00	$1,076.56
FILTRATION SYSTEM										
LANDSCAPING & IRRIGATION	96.0	43.63	$4,188.48	Hydroseeder, 1 Ton Truck	6.0	48.15	$288.90	Trimmer, Rake, Fork, Bags, Safety Equipment, Bags, Seed, Testing & Disposal	$550.00	$5,027.38
									O&M TOTAL	$7,467.76

BMP OPERATION & MAINTENANCE ITEM	LABOR			EQUIPMENT				MATERIALS		TOTAL COST
	Per Hrs.	Rate	Cost	Type	Days	Rate	Cost	Item	Cost	
HYDROSEEDING*	52.0	43.63	$2,268.76	1 Ton Truck, Hydroseeder	12.0	48.15	$577.80	Seed, Binder	$400.00	$3,246.56
									O&M TOTAL	$3,246.56

* Only Required if Site not Constructed 30 Days after Grading.

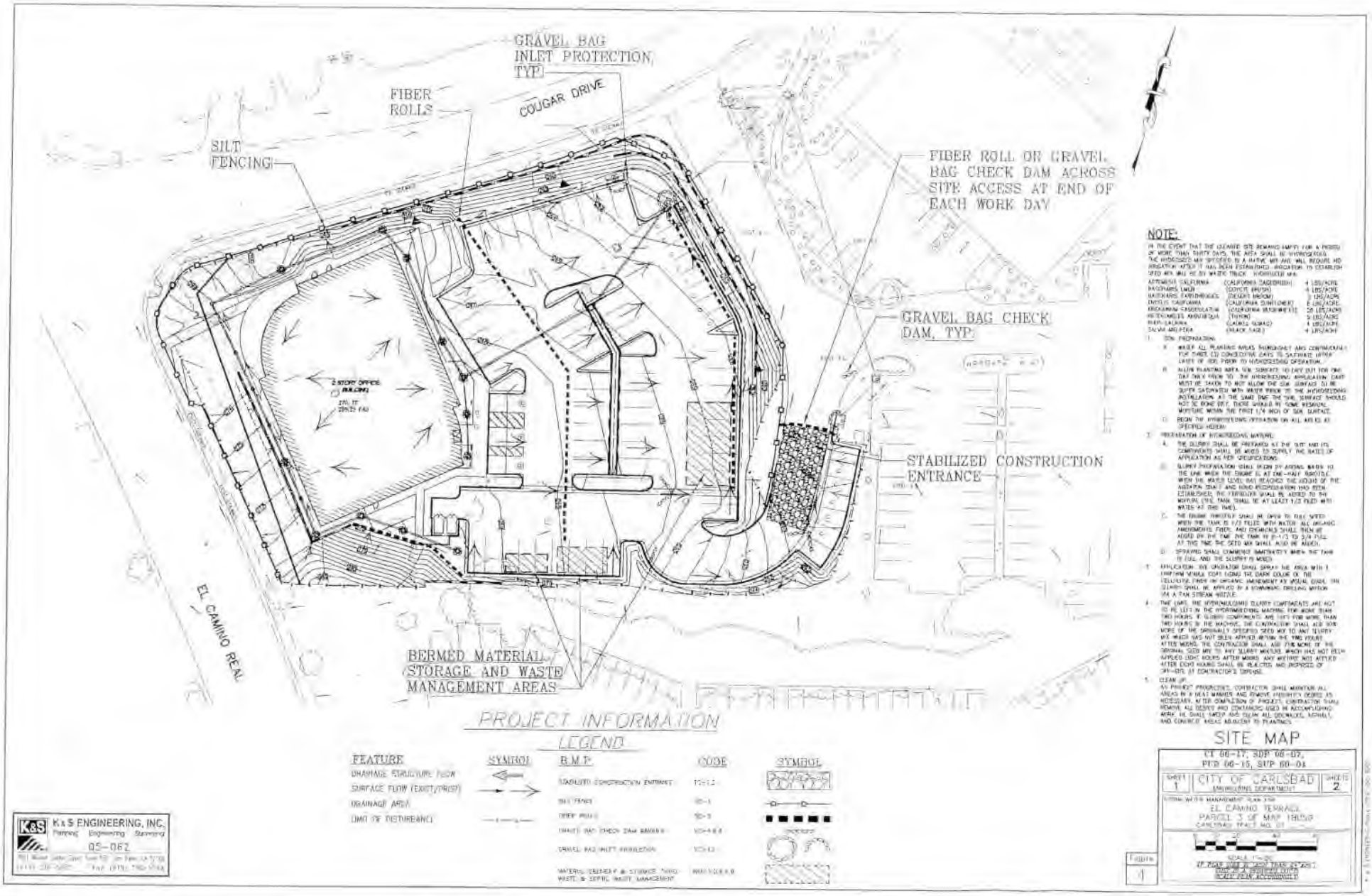
GRAVEL BAG INLET PROTECTION, TYP.
FIBER ROLLS
COUGAR DRIVE
SILT FENCING
FIBER ROLL OR GRAVEL BAG CHECK DAM ACROSS SITE ACCESS AT END OF EACH WORK DAY
GRAVEL BAG CHECK DAM, TYP.
STABILIZED CONSTRUCTION ENTRANCE
2 STORY OFFICE BUILDING
EL CAMINO REAL
BERMED MATERIAL STORAGE AND WASTE MANAGEMENT AREAS
PROJECT INFORMATION
LEGEND
FEATURE
SYMBOL
B.M.P.
CODE
SYMBOL
DRAINAGE STRUCTURE FLOW
SURFACE FLOW (EXIST/PROP)
DRAINAGE AREA
LIMIT OF DISTURBANCE
STABILIZED CONSTRUCTION ENTRANCE
SILT FENCE
FIBER ROLLS
GRAVEL BAG CHECK DAM BARRIER
GRAVEL BAG INLET PROTECTION
MATERIAL TEMPORARY & STORAGE, TRASH WASTE & SEPTIC WASTE MANAGEMENT
NOTE:
IN THE EVENT THAT THE CLEARED SITE REMAINS EMPTY FOR A PERIOD OF MORE THAN THIRTY DAYS, THE AREA SHALL BE HYDROSEED. THE HYDROSEED MIX SPECIFIED IS A NATIVE MIX AND WILL REQUIRE NO IRRIGATION AFTER IT HAS BEEN ESTABLISHED. IRRIGATION TO ESTABLISH SEED MIX WILL BE BY WATER TRUCK. HYDROSEED MIX:
ARTEMISIA CALIFORNICA (CALIFORNIA SAGEBRUSH) 4 LBS/ACRE
BACCHARIS LINEA (COYOTE BRUSH) 4 LBS/ACRE
BACCHARIS PILULARIS (DESERT BROOM) 3 LBS/ACRE
ENCELIA CALIFORNICA (CALIFORNIA SUNFLOWER) 6 LBS/ACRE
ERIGERON CANDIDULATUS (CONFORNIA FLEABANE) 28 LBS/ACRE
HETEROMELES ARBUTIFOLIA (TOYON) 5 LBS/ACRE
RHUS CALIFORNICA (WILD LILAC) 4 LBS/ACRE
SALVIA MELLIFERA (BLACK SAGE) 4 LBS/ACRE
1. SITE PREPARATION:
A. WATER ALL PLANTING AREAS THOROUGHLY AND CONTINUOUSLY FOR THREE (3) CONSECUTIVE DAYS TO SATURATE UPPER LAYER OF SOIL PRIOR TO HYDROSEEDING OPERATION.
B. ALLOW PLANTING AREA SOIL SURFACE TO DRY OUT FOR ONE DAY PRIOR TO THE HYDROSEEDING APPLICATION. CARE MUST BE TAKEN TO NOT ALLOW THE SOIL SURFACE TO BE SUPER SATURATED WITH WATER PRIOR TO THE HYDROSEEDING INSTALLATION. AT THE SAME TIME THE SOIL SURFACE SHOULD NOT BE BONE DRY. THERE SHOULD BE SOME REMAINING MOISTURE WITHIN THE FIRST 1/4 INCH OF SOIL SURFACE.
C. BEGIN THE HYDROSEEDING OPERATION ON ALL AREAS AS SPECIFIED HEREIN.
2. PREPARATION OF HYDROSEEDING MATERIAL:
A. THE SLURRY SHALL BE PREPARED AT THE SITE AND ITS COMPONENTS SHALL BE MIXED TO SUPPLY THE RATES OF APPLICATION AS PER SPECIFICATIONS.
B. SLURRY PREPARATION SHALL BEGIN BY ADDING WATER TO THE TANK WHEN THE TANK IS AT ONE-HALF CAPACITY. WHEN THE WATER LEVEL HAS REACHED THE LEVEL OF THE AGITATOR SHAFT AND GOOD RECIRCULATION HAS BEEN ESTABLISHED, THE FERTILIZER SHALL BE ADDED TO THE MIXTURE (THE TANK SHALL BE AT LEAST 1/3 FILLED WITH WATER AT THIS TIME).
C. THE SEEDING MIXTURE SHALL BE ADDED TO THE SLURRY WHEN THE TANK IS 1/3 FILLED WITH WATER. ALL ORGANIC AMENDMENTS, FIBER, AND CHEMICALS SHALL THEN BE ADDED BY THE TIME THE TANK IS 2-1/3 TO 3/4 FULL. AT THIS TIME THE SEED MIX SHALL ALSO BE ADDED.
D. SPRAYING SHALL COMMENCE IMMEDIATELY WHEN THE TANK IS FULL AND THE SLURRY IS MIXED.
3. APPLICATION: THE OPERATOR SHALL SPRAY THE AREA WITH A UNIFORM MULCH COAT USING THE DARK COLOR OF THE CELLULOSE FIBER AND ORGANIC AMENDMENT AS VISUAL GUIDE. THE SLURRY SHALL BE APPLIED BY A HYDRAULIC SPREADING METHOD FOR A FAN STREAM NOZZLE.
4. TIME LIMIT: THE HYDROMULCHING SLURRY COMPONENTS ARE NOT TO BE LEFT IN THE HYDROSEEDING MACHINE FOR MORE THAN TWO HOURS. IF SLURRY COMPONENTS ARE LEFT FOR MORE THAN TWO HOURS IN THE MACHINE, THE CONTRACTOR SHALL ADD 50% MORE OF THE ORIGINALLY SPECIFIED SEED MIX TO ANY SLURRY MIX WHICH HAS NOT BEEN APPLIED WITHIN THE TIME FRAME AFTER MIXING. THE CONTRACTOR SHALL ADD 75% MORE OF THE ORIGINAL SEED MIX TO ANY SLURRY MIXTURE WHICH HAS NOT BEEN APPLIED EIGHT HOURS AFTER MIXING. ANY MIXTURE NOT APPLIED AFTER EIGHT HOURS SHALL BE REJECTED AND DISPOSED OF OFF-SITE AT CONTRACTOR'S EXPENSE.
5. CLEAN UP:
AS PROJECT PROGRESSES, CONTRACTOR SHALL MAINTAIN ALL AREAS IN A NEAT MANNER AND REMOVE UNSIGHTLY DEBRIS AS NECESSARY. AFTER COMPLETION OF PROJECT, CONTRACTOR SHALL REMOVE ALL DEBRIS AND CONTAINERS USED IN ACCOMPLISHING WORK. HE SHALL SWEEP AND CLEAN ALL SIDEWALKS, ASPHALT, AND CONCRETE AREAS ADJACENT TO PLANTINGS.
SITE MAP
CT 06-17, SDP 06-02, PTD 06-15, SUP 06-01
SHEET 1
CITY OF CARLSBAD
ENGINEERING DEPARTMENT
SHEET 2
EL CAMINO TERRACE
PARCEL 3 OF MAP 15036
CARLSBAD TRACT NO. 01
K&S ENGINEERING, INC.
Planning Engineering Surveying
05-062
FIGURE 1

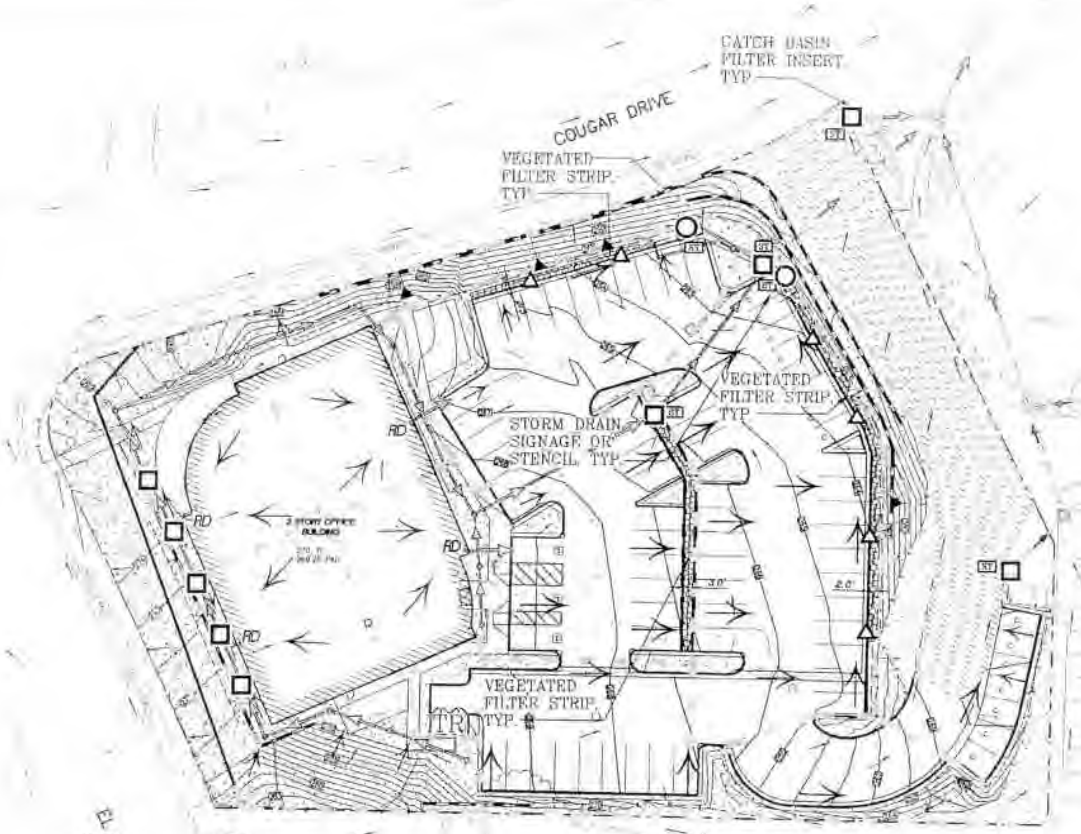

POST-CONSTRUCTION MAINTENANCE PLAN

[illegible]

PERMANENT POST-CONSTRUCTION BMP NOTES

[illegible]

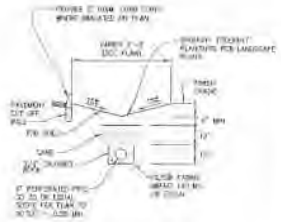

VEGETATED FILTER STRIP
NOT TO SCALE

POST CONSTRUCTION BMP LEGEND

DRAINAGE STRUCTURE FLOW		PERVIOUS AREA	
SURFACE FLOW (EXIST/TRUE)		PAVEMENT AREA (CONC—ASPH)	
DRAINAGE AREA		PAVEMENT AREA (EXIST. TO REMAIN)	
LIMIT OF DISTURBANCE		BUILDING FOOTPRINT	
TRASH ENCLOSURE AREA	TR	STORMWATER BIOREMEDIATION FILTRATION SYSTEM (TREATMENT CONTROL BMP)	
ROOF DRAIN OUTLET	RD	CATCH BASIN FILTER INSERT (TREATMENT CONTROL BMP)	
STORM DRAIN SIGNAGE OR STENCIL		VEGETATED SWALE W/UNDERDRAIN (TREATMENT CONTROL BMP)	
2" DIAMETER CORE ON CURB			

K&S ENGINEERING, INC.
Planning Engineering Surveying
05-062

BMP MAP

CT 06-17, SDP 06-07,
PUD 06-15, SUP 06-04

SHEET 2	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEET 2

STORM WATER MANAGEMENT PLAN FOR
EL CAMINO TERRACE
PARCEL 3 OF MAP 14059
CARLSBAD TRACT NO. 07

SCALE 1"=20'
IF PLAN SIZE IS LESS THAN 24"x36" THEN IT IS UNDIMENSIONAL AND SHOULD BEAR ACCORDINGLY

FIGURE 5

9.0 CONCLUSION

This SWMP has been prepared to define potential Best Management Practices (BMPs) that satisfy the requirements identified in the following documents:

1) City of Carlsbad "Standard Urban Storm Water Mitigation Plan, Storm Water Standards" dated April 2003.
2) Standard Specifications for Public Works Construction, current edition.
3) National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (General Permit), issued by the State Water Resources Control Board, Water Quality Order 99-08 DWQ.
4) San Diego NPDES Municipal Storm Water Permit (Order Number 2007-01).

Thus, it has been shown that this project can meet the water quality objectives as outlined in Order 2007-01 as proposed and shown on the site plan. An analysis has been performed to ensure that the site plan can accommodate the water quality BMPs. Therefore, it is anticipated that the site plan will not affect downstream waters by the implementation of these BMPs.

10.0 CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person and persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This Storm Water Management Plan has been prepared to comply with the requirements of the "City of Carlsbad, Standard Urban Storm Water Mitigation Plan, Storm Water Standards Manual" in effect as of the date of this report.

Signature 10-23-07 Date

Kamal S. Sweis, P.E. 619 296-5565
Name and Title Telephone Number

REGISTERED PROFESSIONAL ENGINEER
KAMAL S. SWEIS
No. 48592
Exp. 6-30-08
CIVIL
STATE OF CALIFORNIA

FY 07-08 Development Planning Storm Water Training

March 24, 2008 - June 30, 2008

Date	Dept/Div	# Employees Attending	Training Type	Name of Training or Topics	Location	Sponsor / Presenter
3/25/08	Engineering DS	1	Seminar	LID Applicibility and Options	5201 Ruffin Rd.	SD Copermittees
3/27/08	Engineering DS	6	Staff Meeting	Discussion of effectiveness of as-built LID measures.	1635 Faraday	Jeremy Riddle
4/3/08	Engineering DS	6	Staff Meeting	Update re State Gen Permit, City Stormwater Standards. Discussion of site design BMPs, i.e. vegetated swales, rain gardens, etc.	1635 Faraday	Glen Van Peski
4/9/08	Engineering DS	3	Workshop	Hydro-modification Management and Continuous Simulation Hydrologic Modeling for Plan Reviewers	SD Metro Water Dist.	APWA
4/10/08	Engineering DS	6	Staff Meeting	Discussion regarding hydromod workshop	1635 Faraday	Jeremy Riddle
4/17/08	Engineering DS	7	Staff Meeting	Discussion of treatment trains, preparation of tier SWPPP conditions, review of new product design criteria.	1635 Faraday	David Rick
4/24/08	Engineering DS	7	Staff Meeting	Review of applicibility of grasscrete for LID.	1635 Faraday	Glen Van Peski
5/1/08	Engineering DS	8	Staff Meeting	Discussion re effectiveness of CDS units; LID options for parking lot; comparison of TDS vs. conductivity/resistivity.	1635 Faraday	Steve Bobbett
5/8/08	Engineering DS	8	Staff Meeting	Review of std conditions for basin maintenance (BMP agreement), LID, and hydromodification.	1635 Faraday	Steve Bobbett
5/15/08	Engineering DS	5	Staff Meeting	Review of std conditions for stormwater treatment facilities. Applicibility of stormwater standards for expansion of existing CUPs.	1635 Faraday	Glen Van Peski
5/22/08	Engineering DS	8	Staff Meeting	Review of redevelopment, expansion, and priority project applicibility standards	1635 Faraday	Steve Bobbett
5/29/08	Engineering DS	8	Staff Meeting	BMPs for pvt streets and driveways. LID design options. LEED certification standards.	1635 Faraday	Steve Bobbett

FY 07-08 Development Planning Storm Water Training

March 24, 2008 - June 30, 2008

Date	Dept/Div	# Employees Attending	Training Type	Name of Training or Topics	Location	Sponsor / Presenter
6/3/08	Engineering DS/ Planning/Design/ Engineering	17	Presentation	MWS-Linear Hybrid Storm water Filtration Systems	1635 Faraday	Modular Wetlands
6/3/08			Presentation	BIO CLEAN Environmental Services Inc.	1635 Faraday	
6/12/08	Engineering DS	8	Staff Meeting	Review of revised Stormwater Standards and associated Building Department forms. Review of LID requirements for private streets.	1635 Faraday	Steve Bobbett
6/17/08	Engineering DS	4	Staff Training	Review of water quality laws, construction activities connection to water quality, implementation of construction BMP's, current inspection, plan review and enforcement policies, curent advancements in BMP technologies and SUSMP requirements.	1635 Faraday	Shawn Grandberry
6/19/08	Engineering DS		Staff Meeting		1635 Faraday	
6/26/08	Engineering DS		Staff Meeting		1635 Faraday	

CITY OF CARLSBAD

2003 STORM WATER STANDARDS MANUAL

CITY OF CARLSBAD
PUBLIC WORKS DEPARTMENT

STORM WATER STANDARDS

FOR

CONSTRUCTION SITES

November 2003

Prepared by:

Skip Hammann
Don Moore
Bob Wojcik
Chris DeCerbo
Mike Peterson
Jayne Strommer

DRAFT

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SECTION 1

INTRODUCTION

This manual is intended to provide information on storm water pollution prevention measures or best management practices (BMPs) for construction sites that are not required to prepare a Storm Water Pollution Prevention Plan (SWPPP). The City of Carlsbad has selected and included BMPs in this manual to be used for ministerial permits. Ministerial permits are construction permits that do not require discretionary review, such as building permits, right-of-way permits, and sign permits.

BMPs are required for all construction permits to the maximum extent practical (MEP) in the City of Carlsbad. This requirement is based on the Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit (Municipal Permit) issued on February 21, 2001.

The BMPs contained in this manual are the minimal BMPs that would be found on all construction sites. Additional BMPs may be required on a construction site and it is not intended that this manual imply any limitations. It is expected that BMPs will be implemented to the maximum extent practicable.

Reference to Resident Engineer in the Caltrans manual shall mean the responsible party, owner, builder, and contractor, not a representative from the City of Carlsbad.

The detail numbers, and sections referenced in this document have been obtained directly from Caltrans website www.dot.ca.gov/manuals and from California Stormwater Quality Association website www.cabmphandbooks.com. Please refer to this documents for additional BMPs and details.

SECTION 2

Carlsbad Modifications to Construction Site BMPs

TC-1 Shall be modified to provide 2" to 3" minus rock and a fence, barrier, or other approved device shall be installed to restrict access to only the construction entrance.

SECTION 3

Construction Site BMP Cross-Reference Table

It should be noted that this table is for reference, additional BMPs may be required that are not checked. Please evaluate project site conditions and scope of work for applicability of BMPs. Consult with City staff or the project consultants for assistance if necessary.

City of Carlsbad
Construction Site BMPs
Cross-Reference Table

ID (CASQA)	ID (CAL TRANS)	BMP NAME	APPROVED FOR USE ON ALL PROJECTS	APPROVED FOR USE ON A PROJECT-BY-PROJECT BASIS	GENERAL BUILDING MINIMUM REQUIREMENT	GENERAL MASONRY	RETAINING WALLS	STUCCO / WINDOWS	SIGNS	LANDSCAPING	PATIO / DECKS	POOLS / SPA	ROOM ADDITIONS	RE-ROOF		
TEMPORARY SOIL STABILIZATION																
EC-1	SS-1	Scheduling	X		√		√		√	√		√	√	√		
EC-2	SS-2	Preservation of Existing Vegatation	X		√											
EC-3	SS-3	Hydraulic Mulch	X		√(2)											
EC-4	SS-4	Hydroseeding	X		√(2)											
EC-5	SS-5	Soil Binders	X		√(2)											
EC-6	SS-6	Straw Mulch	X		√(2)											
EC-7	SS-7	Geotextiles, Plastic Covers & Erosion Control Blankets/Mats	X		√(2)					√						
EC-8	SS-8	Wood Mulch	X							√						
EC-9	SS-9	Earth Dikes/Drainage Swales & Lined Ditches		X												
EC-10	SS-10	Outlet Protection/Velocity Dissipation Devices		X						√						
EC-11	SS-11	Slope Drains		X												
EC-12	SS-12	Streambank Stabilization	X													
TEMPORARY SEDIMENT CONTROL																
SE-1	SC-1	Silt Fence	X		√(3)					√						
SE-2	SC-2	Sediment/Desilting Basin		X												
SE-3	SC-3	Sediment Trap		X												
SE-4	SC-4	Check Dam		X												
SE-5	SC-5	Fiber Rolls		X	√(3)											
SE-6	SC-6	Gravel Bag Berm		X												
SE-7	SC-7	Street Sweeping and Vacuuming	X		√					√		√	√	√		
SE-8	SC-8	Sandbag Barrier		X												
SE-9	SC-9	Straw Bale Barrier		X												

City of Carlsbad
Construction Site BMPs
Cross-Reference Table

ID (CASQA)	ID (CALTRANS)	BMP NAME	APPROVED FOR USE ON ALL PROJECTS	APPROVED FOR USE ON A PROJECT-BY-PROJECT BASIS	GENERAL BUILDING MINIMUM REQUIREMENT	GENERAL MASONRY	RETAINING WALLS	STUCCO / WINDOWS	SIGNS	LANDSCAPING	PATIO / DECKS	POOLS / SPA	ROOM ADDITIONS	RE-ROOF		
SE-10	SC-10	Storm Drain Inlet Protection		X	√	√	√	√	√	√	√	√	√	√		
WIND EROSION CONTROL																
WE-1	WE-1	Wind Erosion Control	X		√											
TRACKING CONTROL																
TC-1	TC-1	Stabilized Construction Entrance/Exit		X												
TC-2	TC-2	Stabilized Construction Roadway		X												
TC-3	TC-3	Entrance/Outlet Tire Wash		X												
NON-STORM WATER MANAGEMENT																
NS-1	NS-1	Water Conservation Practices	X			√	√	√	√	√	√	√	√	√		
NS-2	NS-2	Dewatering Operations	X										√			
NS-3	NS-3	Paving and Grinding Operations	X													
NS-4	NS-4	Dewatering Operations	X													
NS-5	NS-5	Clear Water Diversion	X													
NS-6	NS-6	Illicit connection/Illegal Discharge Detection/Reporting	X		√	√	√	√	√	√	√	√	√	√		
NS-7	NS-7	Potable Water/Irrigation	X							√						
NS-8	NS-8	Vehicle and Equipment Cleaning	X		√	√	√	√		√	√	√	√	√		
NS-9	NS-9	Vehicle and Equipment Fueling	X		√											
NS-10	NS-10	Vehicle and Equipment Maintenance	X		√											
NS-11	NS-11	Pile Driving Operations	X													
NS-12	NS-12	Concrete Curing	X			√	√	√	√	√	√	√	√	√		
NS-13	NS-13	Concrete Finishing	X													
NS-14	NS-14	Material and Equipment Use Over Water	X			√	√	√		√	√	√	√	√		

City of Carlsbad
Construction Site BMPs
Cross-Reference Table

ID (CASQA)	ID (CALTRANS)	BMP NAME	APPROVED FOR USE ON ALL PROJECTS	APPROVED FOR USE ON A PROJECT-BY-PROJECT BASIS	GENERAL BUILDING MINIMUM REQUIREMENT	GENERAL MASONRY	RETAINING WALLS	STUCCO / WINDOWS	SIGNS	LANDSCAPING	PATIO / DECKS	POOLS / SPA	ROOM ADDITIONS	RE-ROOF		
NS-15	NS-15	Structure Demolition/Removal Over or Adjacent to Water	X													
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL																
WM-1	Wm-1	Material Delivery and Storage	X		√	√	√	√	√	√	√	√	√	√		
WM-2	WM-2	Material Use	X		√	√	√	√	√	√	√	√	√	√		
WM-3	WM-3	Stockpile Management	X		√	√	√	√		√	√	√	√	√		
WM-4	WM-4	Spill Prevention and Control	X		√	√	√	√		√	√	√	√	√		
WM-5	WM-5	Solid Waste Management	X		√	√	√	√	√	√	√	√	√	√		
WM-6	WM-6	Hazardous Waste Management	X													
WM-7	WM-7	Contaminated Soil Management	X													
WM-8	WM-8	Concrete Waste Management	X		√	√	√	√	√	√	√	√	√			
WM-9	WM-9	Sanitary/Septic Waste Management	X		√											
WM-10	WM-10	Liquid Waste Management	X													

(1) Implementation depends on applicability to a project.

(2) The Contractor shall select one of the five measures listed or a combination thereof to achieve and maintain the contract's rainy season disturbed soil area (DSA) requirements.

(3) The Contractor shall select one of the two measures listed or a combination thereof to achieve and maintain the contract's rainy season disturbed soil area (DSA) requirements.

SECTION 4

Checklists

City of Carlsbad

Construction Site NPDES Compliance Inspection Checklist

BUILDING DEPARTMENT

Inspection Type: ☐ Foundation ☐ Framing ☐ Elect/Plumb ☐ Other

Inspected By: _____ Weather: _____

Project Name/#: _____ Date: _____

Mark (√) box "Yes", "No", or "N/A"; if there are comments, mark (√) box "Comment".

Yes	No	N/A	Comment	Inspection Description
☐	☐	☐	☐	1. Are slopes steeper than 3:1 properly covered?
☐	☐	☐	☐	2. Are all gravel bags, straw waddles, silt fences, and other linear sediment barriers in place in accordance with the SWPPP, and are they functioning properly?
☐	☐	☐	☐	3. Are all gravel bags, straw waddles, silt fences, and other linear sediment barriers in place and are they functioning properly?
☐	☐	☐	☐	4. Is the stabilized construction entrance preventing tracking (i.e. working properly)?
☐	☐	☐	☐	5. Are all downstream storm drain inlets protected with devices that are in working order and being properly maintained?
	☐	☐	☐	6. Are non-storm-water BMPs being used? (e.g. concrete washouts)
☐	☐	☐	☐	7. Are all material and equipment handling, storage, and maintenance areas clean, and free of spills, leaks, or other deleterious materials?
☐	☐	☐	☐	8. Is the site free from litter and the litter collected and placed in covered containers?
☐	☐	☐	☐	9. Are temporary stockpiles and/or construction materials in approved areas and protected/covered?
☐	☐	☐	☐	10. Are all seeded or landscaped and irrigation areas properly maintained?
☐	☐	☐	☐	11. Are all natural drainage courses and open spaces in proximity to this project protected?
☐	☐	☐	☐	12. Are all BMPs maintained in functional order? (e.g. sediment removed, basins pumped down, repairs made, etc.)

Comments: _____

_____

_____

_____

Signature: _____ Date: _____

City of Carlsbad

Construction Site NPDES Compliance Inspection Checklist

Construction Management & Inspection Division

Inspection Type: ☐ Weekly ☐ Monthly ☐ Pre-storm ☐ Post-event

Inspected By: _____ Weather: _____

Project Name/#: _____ Date: _____

Mark (√) box "Yes", "No", or "N/A"; if there are comments, mark (√) box "Comment".

Yes	No	N/A	Comment	Inspection Description
☐	☐	☐	☐	1. Are slopes steeper than 3:1 properly covered?
☐	☐	☐	☐	2. Are areas flatter than 3:1 covered or protected by desilting basins?
☐	☐	☐	☐	3. Is the SWPPP wall map up to date and accurate?
☐	☐	☐	☐	4. Are all gravel bags, straw waddles, silt fences, and other linear sediment barriers in place in accordance with the SWPPP, and are they functioning properly?
☐	☐	☐	☐	6. Are basins designed and maintained to provide the required retention/detention?
☐	☐	☐	☐	7. Is the stabilized construction entrance preventing tracking (i.e. working properly)?
☐	☐	☐	☐	8. Are all downstream storm drain inlets protected with devices that are in working order and being properly maintained?
☐	☐	☐	☐	9. Are non-storm-water BMP's being used? (e.g. concrete washouts)
☐	☐	☐	☐	10. Are all material and equipment handling, storage, and maintenance areas clean, and free of spills, leaks, or other deleterious materials?
☐	☐	☐	☐	11. Is the site free from litter and the litter collected and placed in covered containers?
☐	☐	☐	☐	12. Are temporary stockpiles and/or construction materials in approved areas and protected/covered?
☐	☐	☐	☐	13. Are all seeded or landscaped and irrigation areas properly maintained?
☐	☐	☐	☐	14. Are all natural drainage courses and open spaces in proximity to this project protected?
☐	☐	☐	☐	15. Are all BMP's maintained in functional order? (e.g. sediment removed, basins pumped down, repairs made, etc.)

Comments: _____

_____

_____

_____

_____

Signature: _____ Date: _____

City of Carlsbad
Storm Water Fact Sheet
Checklist for Building/Grading Permits

Project Name: **Contractor:**	**Location:**
Project Class: (please check appropriate box) ☐ Exempt (no outside work) **Stop here!** ☐ Building Permit ☐ Grading/Building Permit	
Activities: (please check all that apply) ☐ Demolition (outside) ☐ Grading	☐ Excavation ☐ Construction/Repair
Disturbed Area: (please check appropriate box) ☐ < 5,000 sq/ft ☐ < 20,000 sq/ft ☐ < 1 acre	☐ > 1 acres (requires CA General Construction Permit) ☐ > 1 acres and discharges to tributary of CWA section 303(d) water body or 200 feet (ESA) ☐ > 50 acres
Grading/Construction: (please check appropriate box) When will Grading/Construction Activities Occur? ☐ Wet Season (October 1 - April 30) ☐ Dry Season (May 1 - September 30) ☐ Both	
Proximity to Water Bodies: (please check appropriate box) Carlsbad Watershed ☐ Hydrologic Unit A ☐ Hydrologic Unit B Receiving Water Body ☐ Buena Vista Lagoon ☐ Agua Hedionda Lagoon ☐ Encinas Creek Distance from receiving water body _____feet	☐ Hydrologic Unit C ☐ Hydrologic Unit D ☐ Batiquitos Lagoon ☐ Pacific Ocean
Projects requiring Building Permit must include following items: ☐ Certificate of intent to comply ☐ Checklist of selected BMPs applicable	☐ Storm Water Pollution Prevention Plan (SWPPP) [or a Caltrans Water Pollution Control Plan (WPCP) (optional)]
Projects Not subject to CA General Construction Permit (require grading permit and > 1 acres) must include following items: ☐ Certificate of intent to comply ☐ Checklist of selected BMPs and location on project plans	☐ SWPPP (optional) ☐ WPCP (optional) ☐ Certificate of intent to maintain selected BMPs
Projects subject to CA General Construction Permit (< 1 acres) must include following items: ☐ Notice of Intent (NOI) and SWRCB letter issuing WDID number ☐ Checklist of selected BMPs and location on project plans	☐ SWPPP or WPCP ☐ Certificate of intent to maintain selected BMPs ☐ Substitution of SWPPP for BMP checklist and project plans

City of Carlsbad
Storm Water Fact Sheet
Checklist for Building/Grading Permits

	Yes	No	N/A
1. Plan to manage storm water and non-storm water discharges during construction activities at all times?	☐	☐	☐
If no, provide Storm Water Management Application Form.			
2. Does grading occur during the wet season (October 1 - April 30)?	☐	☐	☐
If yes, can grading be rescheduled?	☐	☐	☐
What additional BMPs (e.g., Phasing, Minimize Disturbed Soil Area) will be required?			
_____			
_____			
3. Are adequate erosion prevention BMPs included?	☐	☐	☐
If no, additional BMPs required?			
_____			
_____			
4. Are adequate sediment control BMPs included?	☐	☐	☐
If no, additional BMPs required?			
_____			
_____			
5. Is cleaning and grading minimized to only the portion of the site necessary for construction?	☐	☐	☐
If no, any additional requirements?			
_____			
_____			

City of Carlsbad
Strom Water Fact Sheet
Checklist for Building/Grading Permits

	Yes	No	N/A
6. Is the exposure time of disturbed soil areas minimized? If no, any additional requirements? _____ _____	☐	☐	☐
7. Will the disturbed area be temporarily stabilized and reseeded as rapidly as possible? If no, any additional requirements? _____ _____	☐	☐	☐
8. Will the disturbed area be permanently revegetated or landscaped as early as feasible? If no, any additional requirements? _____ _____	☐	☐	☐
9. If slopes are disturbed, will the slopes be stabilized? If no, any additional requirements? _____ _____	☐	☐	☐

CITY OF CARLSBAD
STORM WATER QUALITY
PROJECT PRIORITY DETERMINATION
CHECKLIST

State law holds the City responsible for any type of water pollution caused within City limits. In order to help us keep pollution out of our waterways, we need your help. Please check the appropriate YES/NO box as it relates to the project you are submitting for a building permit.

This form must be completed and submitted with your permit application.

PART A – DOES YOUR PROJECT INCLUDE A:	YES	NO
1. Detached residential development of 10 or more units?	☐	☐
2. Attached residential development of 10 or more units?	☐	☐
3. Commercial development greater than 100,000 square feet?	☐	☐
4. Automotive repair shop?	☐	☐
5. Restaurant?	☐	☐
6. Hillside development with a slope greater than 15% that disturbs more than 5,000 square feet of ground?	☐	☐
7. Possible drainage of rainwater toward a waterway with natural vegetation such as: a creek, stream or wetland area with natural occurring plants?	☐	☐
8. Parking lot greater than or equal to 5,000 square feet or with at least 15 uncovered parking spaces?	☐	☐
9. Street or road which would create a new paved surface that is 5,000 square feet or greater?	☐	☐
Limited Exclusion: Trenching and resurfacing work associated with utility projects.		

If any answer in Part A is "YES", your project is subject to the "Priority Project Permanent Storm Water Best Management Practices (BMP) Requirements," and "Standard Permanent Storm Water BMP Requirements".
To find out what these requirements are, you can visit the City of Carlsbad website at: www.ci.carlsbad.ca.us/cserv/susmppdf/susmp.pdf or ask at the City's Engineering Counter to review or purchase a copy. These BMPs must be included in the design of your site.

PART B – DOES YOUR PROJECT PROPOSE:	YES	NO
1. New impervious areas, such as: rooftops, roads, parking lots, driveways, or sidewalks?	☐	☐
2. New landscape areas with irrigation systems?	☐	☐
3. Permanent structures within 100 feet of any natural water body?	☐	☐
4. Outdoor trash enclosures?	☐	☐
5. Permanent liquid or solid material loading and unloading areas?	☐	☐
6. Vehicle or equipment fueling, washing, or maintenance areas?	☐	☐
7. A use that will require a permit for storm water discharge associated with industrial activities (except construction)?*	☐	☐

8. Commercial or industrial waste handling or storage, excluding typical office or household waste?	☐	☐
9. More than 100 cubic yards of grading or more than 5,000 square feet of ground disturbance during construction?	☐	☐
10. Any new storm drains, or alteration to existing storm drains?		
*To find out if your project is required to obtain a permit for storm water discharges associated with industrial activities, visit the State Water Resources Control Board web site at: www.swrcb.ca.gov/stormwtr/industrial.html		

If all answers to Part A are "NO", and any answers to Part B are "YES", your project is only subject to the "Standard Permanent Storm Water BMP Requirements". and you must fill out Part C below. **If every question in Part A and B is answered "NO", DO NOT ANSWER PARTS C OR D**, your project is exempt from permanent pollution control requirements and no further action regarding this is needed. Thank you.

PART C – WOULD YOUR PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	**YES**	**NO**
1. Is the project subject to California's statewide General NPDES Permit for storm water discharges associated with construction activities?**	☐	☐
2. Does the project propose grading or soil disturbance?	☐	☐
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	☐	☐
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete, and stucco)?	☐	☐
**To find out if your project is required to obtain a permit for storm water discharges associated with construction activities, visit the State Water Resources Control Board web site at: www.swrcb.ca.gov/stormwtr/construction.html		

- If every question in Part C is answered "NO", your project is exempt from any additional requirements.
- **If the answer to question 1 of Part C is "Yes", your project is subject to "Construction Storm Water BMP Performance Standards," and must prepare a Storm Water Pollution Prevention Plan (SWPPP)**
- If the answer to question 1 is "No" but any other question in Part C was "Yes", your project is subject to "Construction Storm Water BMP Performance Standards," and must prepare a Water Pollution Control Plan (WPCP).
- If any of the answers to the questions in Part C are "YES", **complete Part D**, below.

PART D

Please check the box next to the "priority" that best describes your project.

☐ *High Priority*

- Projects 1 acre or more
- Projects requiring grading permit

☐ *Medium Priority*

- Projects in the public right-of-way where grading occurs, such as installation of sidewalk, substantial retaining walls, or curb and gutter for a majority of street frontage.
- Projects on private property where grading permits are required.

☐ *Low Priority*

- Projects in the public right-of-way where minimal to no grading occurs, such as pedestrian ramps, driveway additions, small retaining walls, etc.
- Projects on private property where grading permits are not required, such as small retaining walls, single-family homes, small tenant improvements, etc.

SECTION 5

Certifications

STORM WATER MANAGEMENT PLAN

APPLICANT'S CERTIFICATION OF SWMP

I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature Date

Name and Title Telephone Number

City of Carlsbad
Public Works Department

Standard Urban Storm Water Mitigation Plan

Storm Water Standards

A Manual for Construction & Permanent Storm Water Best Management Practices Requirements

April 2003

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I. INTRODUCTION

1. Storm Water Standards Manual Organization

This manual is intended to provide information to applicants for private projects processed through the Development Services Division of the Engineering Department (DSD), on how to comply with the permanent and construction storm water requirements for new private and public development projects in the City of Carlsbad. This manual further guides the project applicant through the selection, design, and incorporation of storm water BMPs into the project's design plan.

Section 1, "Introduction," describes storm water pollution background information and legal or regulatory requirements associated with storm water pollution control.

Section II, "Project Review & Permitting Process," outlines the project plan review and approval process for both discretionary actions and construction permits for private development projects. Applicants should use Section II as the roadmap to navigate through this manual and ensure storm water requirements are accurately and efficiently incorporated into their projects during project review. The remaining sections provide technical information necessary to incorporate the storm water requirements in the review process outlined in Section II.

Section III, "Permanent Storm Water BMP Selection Procedure," lists the permanent storm water BMP requirements, which are organized into a progression intended to dovetail with a typical project planning and design process and maximize storm water protections while minimizing project costs. Section IV, "Construction Storm Water BMP Performance Standards," describes the City's construction storm water BMP standards. Section V, "Implementation & Maintenance of Requirements," describes how implementation and maintenance of construction and permanent BMPs must be assured for both construction permits and discretionary actions. For permanent BMPs, this section provides a process and requirements for executing a maintenance agreement with the City. Section VI contains appendices to the Storm Water Standards manual that are either necessary or designed to provide guidance in completing the storm water requirements in this manual.

2. Background

Urban runoff discharged from municipal storm water conveyance systems has been identified by local, regional, and national research programs as one of the principal causes of water quality problems in most urban areas. The City of Carlsbad's storm water conveyance system, which collects runoff and rainwater from our streets, rooftops, driveways, parking lots, and other impervious areas, flows directly to our beaches and lagoons without receiving treatment (our storm water conveyance system is separate from our sanitary sewer system). Urban runoff potentially contains a host of

pollutants like trash and debris, bacteria and viruses, oil and grease, sediments, nutrients, metals, and toxic chemicals. These contaminants can adversely affect receiving and coastal waters, associated wildlife, and public health. Urban runoff pollution is not only a problem during rainy seasons, but also year-round due to many types of urban water use that discharge runoff to the storm water conveyance system.

Storm water pollution can negatively affect human health and aquatic plant and animal life. Potentially harmful viruses and bacteria are now found in our coastal waters along with soil particles, solids/debris, litter, oil, grease, and chemical compounds. Oil and grease from parking lots, pesticides, cleaning solvents, and other toxic chemicals can contaminate storm water and these contaminants can be transported into receiving waters—the beaches, lagoons and creeks we all enjoy. Fertilizer constituents from lawns and golf courses or leaking septic tanks can cause algal blooms and encourage microbial growth to create an increasing spiral of biological activity known as eutrophication. Disturbances of the soil from construction can allow silt to wash into storm channels and receiving waters making them muddy, turbid, and inhospitable to natural aquatic organisms. Many artificial surfaces of the urban environment such as galvanized metal, paint, or preserved wood containing metals, contribute to pollution by storm water run-on or leaching by storm water as the surfaces corrode, flake, dissolve, or decay. Heavy metals, such as, copper from automobile brakes, and lead and chromium from paints and primer coatings, are toxic to aquatic organisms and may bio-accumulate.

Land development and construction activities significantly alter drainage patterns and contribute pollutants to urban runoff primarily through erosion and removal or change of existing natural vegetation during construction, and the creation of new impervious surfaces, such as parking lots, which often permanently contribute pollutants throughout the "use" of the project site. When homes, work places, recreational areas, roads, parking lots, and structures are built, new impervious areas are built- creating the potential for a "double-negative" impact to water quality. First, the natural landscape's ability to infiltrate and cleanse storm water and urban runoff is "capped" by the impervious surfaces. As impervious surfaces increase, water that normally would have percolated into the soil where it could be naturally filtered now flows over the land surface directly to downstream wetlands, creeks, and eventually the Pacific Ocean. Accordingly, increases in impervious cover can increase the frequency and intensity of storm water flows. Second, new impervious surfaces often become a source of pollutants associated with development such as, automotive fluids, cleaning solvents, toxic or hazardous chemicals, detergents, sediment, metals, pesticides, oil and grease, and food wastes. These pollutants, which are often temporarily captured on impervious surfaces, are transported to the storm water conveyance system by storm water and urban runoff. The pollutants flow untreated through the storm water conveyance system and ultimately into our creeks, rivers, beaches, and lagoons. With the growing concerns of urban runoff and storm water pollution, local, state, and federal agencies devised regulations requiring development planning and construction controls to treat storm water-related pollution from new development projects before it reaches any receiving waters.

The Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit (Municipal Permit), issued on February 21, 2001 to the City of San Diego, the County of San Diego, the Port of San Diego, and 17 other cities in the region by the San Diego Regional Water Quality Control Board (Regional Board), requires the development and implementation of storm water regulations addressing storm water pollution issues in development planning and construction associated with private and public development projects. Specifically, private and public development projects are required to include storm water best management practices (BMPs) both during construction, and in the projects permanent design, to reduce pollutants discharged from the project site, to the maximum extent practicable (see Appendix C for a detailed description of the various types and categories of BMPs discussed in this manual). The primary objectives of the Storm Water Standards manual requirements are to: (1) Effectively prohibit non-storm water discharges; and (2) Reduce the discharge of pollutants from storm water conveyance systems to the Maximum Extent Practicable (MEP statutory standard) both during construction and throughout the use of a developed site. To address pollutants that may be generated from new development once the site is in use, the Municipal Permit further requires that the City implement a series of permanent BMPs described in a document called the Model Standard Urban Storm Water Mitigation Plan, or SUSMP (pronounced "sue-sump"), which was approved by the Regional Board on June 12, 2002.

The City's Storm Water Standards manual is intended to provide information on how to comply with all of the City's permanent and construction storm water BMP requirements, for new private and public development projects in the City of Carlsbad. The effective date of the Storm Water Standards manual is December 2, 2002, and applies to all projects requiring any permit approvals on or after December 2, 2002, even if the project is currently under review or if previous approvals have been obtained. These Standards will be modified from time to time and are effective on the date issued.

3. Legal Framework

The requirement to implement storm water BMP requirements for development projects is based on Section 402 (p) of the Clean Water Act. The Federal Clean Water Act amendments of 1987 established a framework for regulating storm water discharges from municipal, industrial, and construction activities under the NPDES program. Under the Federal Clean Water Act, municipalities throughout the nation are issued a Municipal NPDES Permit. The primary goal of the Municipal Permit is to reduce polluted discharges from entering the storm water conveyance system and local receiving and coastal waters and to ensure the beneficial uses of protected receiving waters.

In California, the State Water Resources Control Board (SWRCB), through the nine Regional Boards, administers the NPDES storm water municipal permitting program. Based on the San Diego Municipal Permit issued by the San Diego Regional Board, the City is required to develop and implement construction and permanent storm water BMPs addressing pollution from new private and public development projects.

II. PROJECT REVIEW & PERMITTING PROCESS

Per the National Pollution Discharge Elimination System (NPDES) permit (Order No. 2001-01 NPDES No. CAS0108758) the City of Carlsbad requires development and significant redevelopment, that fall under the category of "priority projects", include Best Management Practices (BMP's) be incorporated to ensure that those projects reduce potential urban pollutant runoff to the maximum extent practicable (MEP). These storm water pollution prevention requirements, which are described in detail in Sections III, "Permanent Storm Water Best Management Practices Selection Procedure," and Section IV, "Construction Storm Water Best Management Practices Performance Standards," are site specific and vary based on the project's potential impact on receiving water quality.

The steps below describe the elements of the development application plan review and permitting processes for storm water best management practice (BMP) requirements. The flow chart in Figure 1, "Review Process For Discretionary Actions" demonstrates how storm water requirements are incorporated into projects requiring subdivision approvals, development permits, discretionary actions or ministerial permits. The flow chart in Figure 2, "Construction Permit Review & Approval Process" describes how storm water requirements are incorporated into projects during the construction permit review process.

Public projects are also subject to the requirements of this Storm Water Standards manual, and although this manual is designed to address the development review process for private projects, City project managers should use this document to identify storm water requirements that must be incorporated into capital improvement projects.

Step 1: Determine Applicable Storm Water BMP Requirements

Prior to submittal, applicants must complete the "Storm Water Requirements Applicability Checklist" in Appendix A, to determine if their project is subject to permanent and construction storm water best management practice (BMP) requirements. (Note: this form must be completed for all permit applications, even if previous approvals exist. Projects with previous approvals will be required to comply with the storm water requirements in this document). This checklist must be completed, signed by the responsible party for the project, and submitted with the permit application. For private projects, the project design must include all required permanent BMPs prior to deeming the application package complete. For public projects, the City project manager shall review and approve the required BMP information prior to bidding for construction contracts.

Figure 1. Review Process for Discretionary Actions

The following figure provides an overview of the project review process for projects that require a discretionary action by the City of Carlsbad. Discretionary actions include land use plan amendments, rezonings, subdivisions, planned development permits, planned industrial permits, redevelopment permits, coastal development permits, conditional use permits, site development plans.

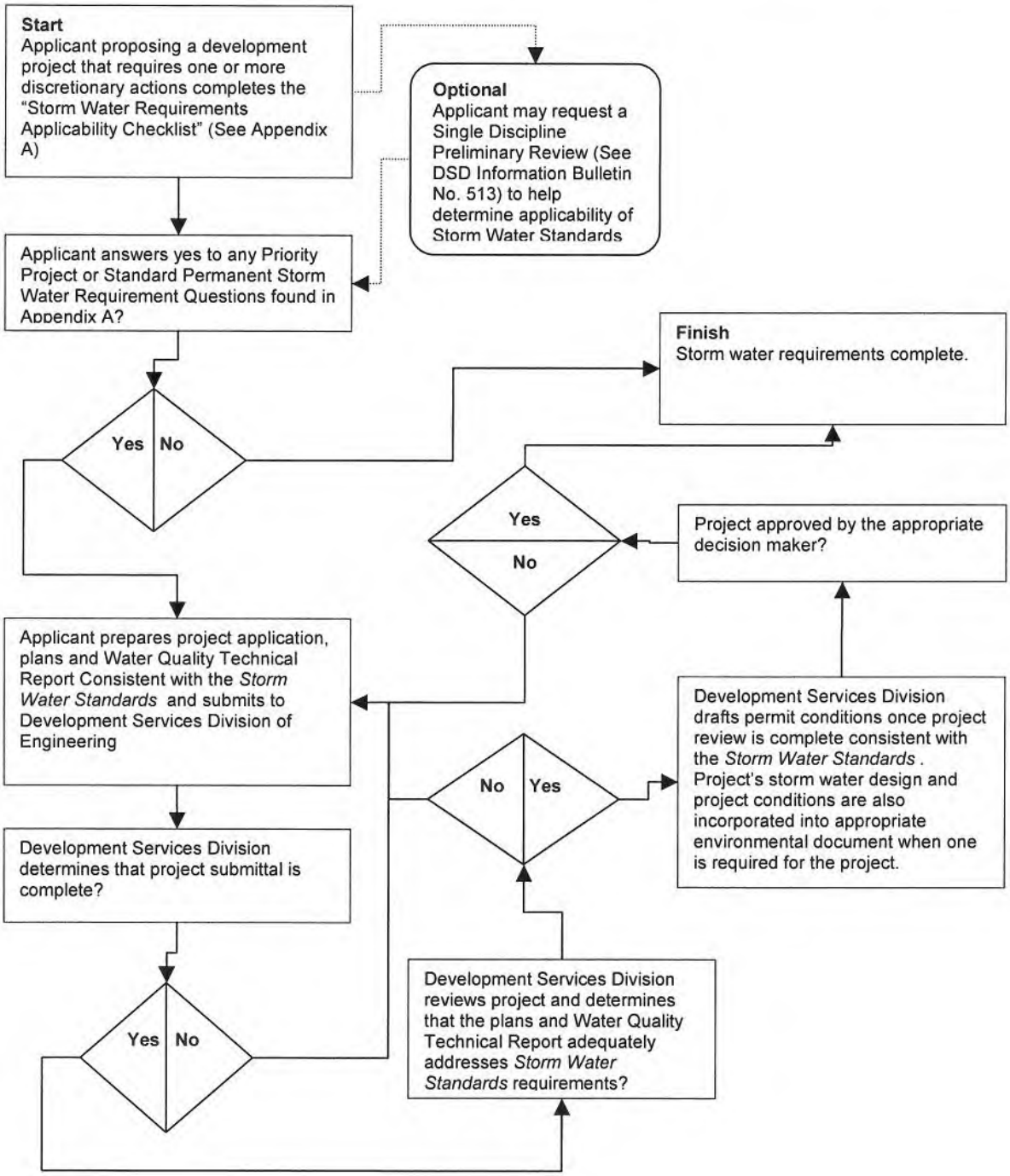

Figure 2. Construction Permit Review & Approval Process

The following figure provides an overview of the project review process for projects that require a construction permit from the City of Carlsbad. Construction permits include building permits, grading permits, demolition permits, ministerial permits and public right-of-way permits.

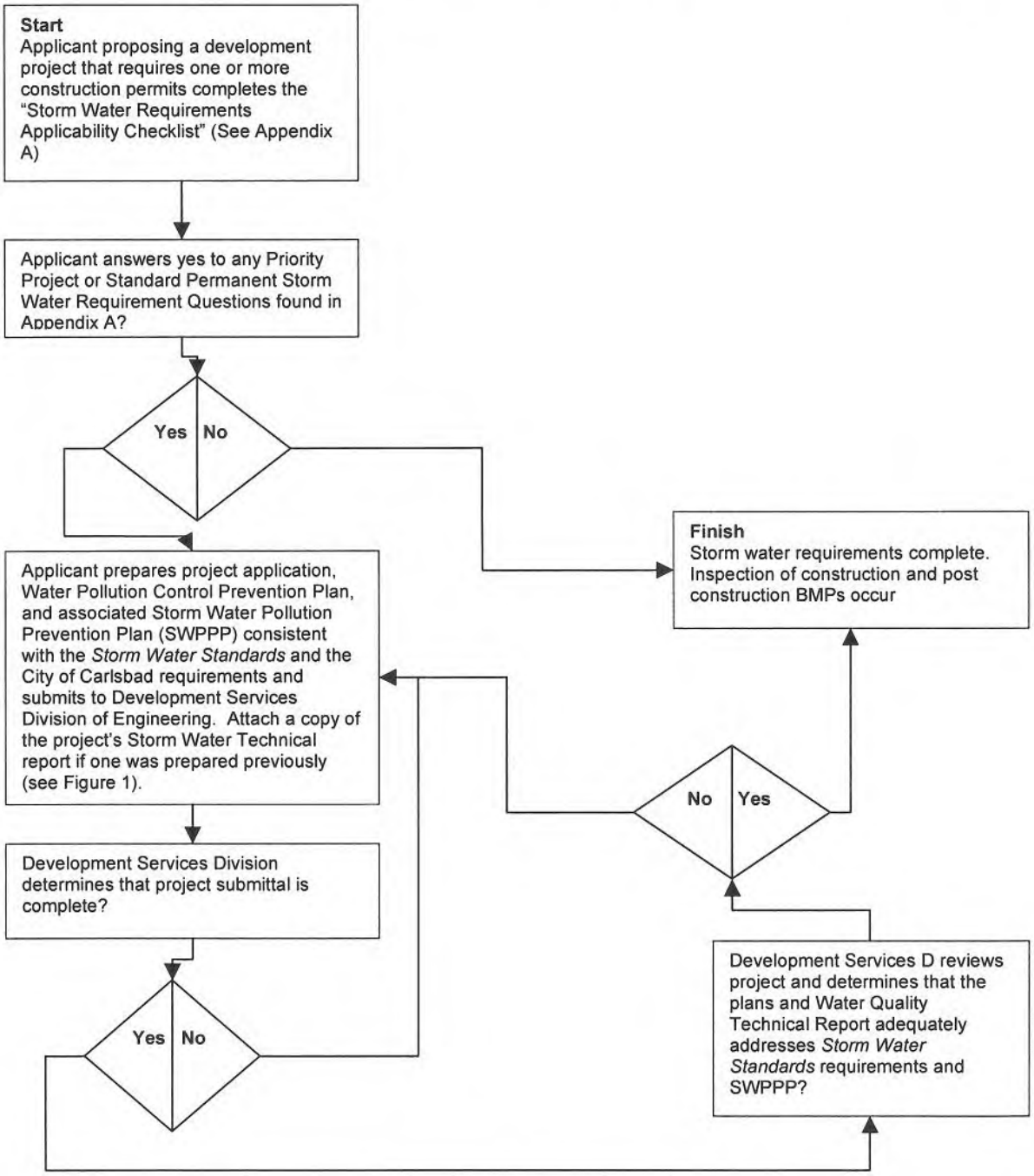

A. Permanent Storm Water BMP Requirements

i. Standard Requirements. Projects subject to standard permanent storm water requirements as appropriate will incorporate the site design and source control requirements identified in Sections III.2.A and B (requirements 1 through 15), into the project (see Table 1). Refer to Step 2: "Prepare & Submit Appropriate Plans," for guidance in the BMP design process.

ii. Priority Project Requirements. Projects subject to priority project permanent storm water requirements as appropriate will incorporate all applicable requirements in Section III.2, "Establish Permanent Storm Water Best Management Practices," (requirements 1 through 35) into the project design. This includes the site design and source control BMPs, BMPs applicable to individual priority project categories, and treatment control BMP requirements. If a priority project meets more than one priority project category definition, as shown in Table 1, the project is subject to all BMPs applicable to individual priority project categories that apply. For example, if a project is proposing to build 50 attached residential units and a 6,000 square foot restaurant with a 70-space surface parking lot, the project would be subject to the individual priority project category BMP requirements for "Attached Residential Development," "Restaurants," and "Parking Lots," as shown in Table 1 below. Refer to Step 2: "Prepare & Submit Appropriate Plans," for guidance in the permanent BMP design process.

Table 1. Standard Development Project & Priority Project Storm Water BMP Requirements Matrix.

			BMPs Applicable to Individual Priority Project Categories(3)										
	Site Design BMPs(1)	*Source Control BMPs(2)*	a. Private Roads	b. Residential Driveways & Guest Parking	c. Dock Areas	d. Maintenance Bays	e. Vehicle Wash Areas	f. Equipment Wash Areas	g. Outdoor Processing Areas	h. Surface Parking Areas	i. Fueling Areas	j. Hillside Landscaping	*Treatment Control BMPs(4)*
Standard Projects	R	R	O	O	O	O	O	O	O	O	O	O	O
Priority Projects:													
Detached Residential Development	R	R	R	R								R	S
Attached Residential Development	R	R	R										S
Commercial Development >100,000 ft²	R	R			R	R	R		R				S
Automotive Repair Shop	R	R			R	R	R	R			R		S
Restaurants	R	R			R			R					S
Hillside Development >5,000 ft²	R	R	R									R	S
Parking Lots	R	R								R(5)			S
Streets, Highways & Freeways	R	R											S

R = Required; select one or more applicable and appropriate BMPs from the applicable steps in Section III.2.A-D, or equivalent as identified in Appendix C.
O = Optional/ or may be required by City staff. As appropriate, applicants are encouraged to incorporate treatment control BMPs and BMPs applicable to individual priority project categories into the project design. City staff may require one or more of these BMPs, where appropriate.
S = Select one or more applicable and appropriate treatment control BMPs from Appendix C.
(1) Refer to Section III.2.A.
(2) Refer to Section III.2.B.
(3) Priority project categories must apply specific storm water BMP requirements, where applicable. Priority projects are subject to the requirements of all priority project categories that apply.
(4) Refer to Section III.2.D.
(5) Applies if the paved area totals >5,000 square feet or with >15 parking spaces and is potentially exposed to urban runoff.

B. Construction Storm Water BMP Requirements

Projects subject to the construction storm water best management practices requirements must comply with the standards included in Section IV, "Construction Storm Water BMP Performance Standards," as appropriate depending on the site conditions, season, and project design, and construction methods. Each project must be given a priority ranking (high, medium or low) for the construction phase (see Appendix A). The prioritization will determine the inspection frequency by City staff but will not change the construction BMP requirements. Refer to Step 2: "Prepare & Submit Appropriate Plans," for guidance in navigating through this manual to ensure construction BMP performance standards are met.

Step 2 – Prepare & Submit Appropriate Plans.

After determining the general categories of storm water requirements that apply to the project in Step 1 (e.g., construction BMPs, standard permanent BMPs, and/or priority project permanent BMPs), refer to the instructions in this step (see below) to determine what analysis and/or specific BMP requirements in Sections III and IV of the Storm Water Standards manual must be provided and/or incorporated into the project[1].

A. Permanent Storm Water BMPs

Section III, "Permanent Best Management Practices Selection Procedure," contains a process for reviewing the project site's location and preliminary project design before progressively identifying and incorporating site design BMPs, source control BMPs, requirements for individual priority project types, and treatment control BMPs into the project design. The procedure is organized so that the level of analysis required is commensurate with the potential pollutant type and quantity, the location of the project relative to sensitive receiving waters, and with the type of storm water requirements that apply to a particular project.

i. Standard Requirements. Projects (requiring either discretionary actions or construction permits), subject to only standard permanent BMP requirements need only to complete the "Identify Pollutants from the Project Area" procedure (Section III.1.A), and then incorporate the requirements in Section III.2.A, "Site Design BMPs" and Section III.2.B, "Source Control BMPs" (requirements 1-15). Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. Analysis of the project's anticipated pollutants of concern must also be included with the project submittal.

[1] Projects are only required to provide applicable BMPs. For example, an attached residential development project subject to the priority project requirements would not have to meet the "private road" requirements in this manual if no private roads were proposed. In addition, the City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable and equally effective.

ii. Priority Project Requirements. Projects (requiring either discretionary actions or construction permits), subject to the priority project permanent BMP requirements must complete all of the analyses required in Section III.1, "Identify Pollutants and Conditions of Concern," and incorporate all of the applicable BMP requirements in Section III.2, "Establish Storm Water BMP Requirements" (requirements 1-33). Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. In addition, projects subject to priority project requirements must prepare and submit a Water Quality Technical Report in accordance with Appendix D. Analysis of the project's anticipated pollutants of concern, anticipated pollutants of concern in downstream receiving waters, and conditions of concern, must also be included in the Water Quality Technical Report as part of the project submittal.

B. Construction Storm Water BMPs

Section IV, "Construction Storm Water BMP Performance Standards," describes the construction site management requirements that contractors must comply with. In addition, Section IV lists the performance standards that construction sites must meet, and provides a list of erosion control, sediment control, and materials management BMPs for reference. Additionally, each project must be given a priority of high, medium or low (see Appendix A). (Note: Prioritization of construction projects will determine the inspection frequency by City staff and may be changed during the construction process based on the potential for pollutants to be discharged from the site.)

i. Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in Section IV, "Construction Storm Water BMP Performance Standards." The applicant must provide a Storm Water Pollution Prevention Plan (SWPPP), which identifies all construction BMP requirements required by Section IV, in accordance with Order No. 99-08-DWQ of the State General Permit for Storm Water Discharges Associated with Construction Activity (State General Construction Permit). For projects that disturb 1-acre or more, and are determined to have a potential to impact water quality during construction, the applicant must provide a Water Pollution Control Plan (WPCP), which identifies all construction BMP requirements required by Section IV, with the project submittal. The WPCP shall depict the BMP's to be implemented during construction to reduce/eliminate discharges of pollutants to the storm drain conveyance system. The WPCP shall include but not be limited to erosion and sediment control BMP's, good housekeeping measures and site and materials management.

Consistent with the State General Construction Permit, the City will require that both erosion and sediment control BMPs be installed and maintained for all applicable projects in addition to good housekeeping and site and materials management. Appendix E provides general guidelines for preparation of a SWPPP as well as a more detailed checklist to meet the requirements.

After preparing plans and supporting documents according to the requirements in this manual, submit plans to the Development Services Division of the Engineering Department for review (See Step 3).

Step 3 – Determine Adequacy of Proposed Plans.

The City Engineer will review submitted plans for compliance with the applicable storm water requirements contained in this manual. The City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs, and will be requested through a project issues report following the conclusion of a staff review cycle. After all storm water requirements have been approved by the City Engineer, proceed to Step 4 to assure implementation and maintenance of the approved BMPs through permit conditions, plan notes, and if necessary, maintenance agreements.

Step 4 -- Assure Implementation & Maintenance of Requirements.

Applicants must provide assurances that required permanent storm water BMPs will be constructed and permanently maintained throughout the use of a developed site, and that construction BMPs will be implemented and maintained until construction is complete. The summaries below describe how construction and permanent BMP requirements must be assured during both discretionary actions and construction permit review processes. After the City Engineer has approved all construction and/or permanent BMPs, refer to Section V, "Implementation & Maintenance of Requirements" to determine how construction and permanent BMP implementation and maintenance will be assured.

A. Discretionary Action

For any discretionary action, required permanent storm water requirements shall be incorporated into the project design and be shown on the plans. If the project will be required to provide construction BMPs, the permit/approval shall include the "Standard Construction BMP Implementation And Maintenance Condition" listed in Section V, "Implementation & Maintenance of Requirements".

B. Construction Permits

For projects requiring construction permits, construction and required permanent BMP requirements shall be incorporated into the project design and shown on the plans prior to the issuance of any permits. Construction and permanent BMP requirements shall also be noted on the plans. Any construction BMP requirements that cannot be shown graphically must be noted on the plans.

C. Public Projects

For public projects, required permanent, as well as construction, BMP requirements must be incorporated into the project design and shown on the plans prior to bidding for construction contracts, or equivalent. Public project contracts must also add the requirement for the project to implement and maintain construction BMP requirements in accordance with this manual.

III. PERMANENT BEST MANAGEMENT PRACTICES SELECTION PROCEDURE

When referred to this Section, by Step 2 of Section II, complete the analysis required for your project in the subsections of Section III.1 below.

1. IDENTIFY POLLUTANTS & CONDITIONS OF CONCERN

A. Identify Pollutants from the Project Area

Using Table 1, identify the project's anticipated pollutants. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern. Projects meeting the definition of more than one project category shall identify all general pollutant categories that apply.

Table 2. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P(1)	X
Commercial Development >100,000 ft²	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Automotive Repair			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft²	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Streets, Highways & Freeways	X	P(1) X	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

B. Identify Pollutants of Concern in Receiving Waters

For priority projects, the following analysis shall be conducted and reported in the project's Water Quality Technical Report:

1. For each of the proposed projects discharge points, identify the receiving water(s) that each discharge point proposes to discharge to, including hydrologic unit basin number(s), as identified in the most recent version of the *Water Quality Control Plan for the San Diego Basin*[2], prepared by the San Diego Regional Water Quality Control Board.
2. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies[3]. List any and all pollutants for which the receiving waters are impaired.

Sites tributary to Clean Water Act section 303(d) water bodies impaired for sediment and sites discharging directly into environmentally sensitive areas (ESA) require additional BMP implementation. These sites are by definition classified as posing a high threat to water quality. In the 1998 303(d) listing, the Agua Hedionda Lagoon is impaired for sediment and siltation. Buena Vista Lagoon also has impaired beneficial uses (aquatic life) due to high sedimentation/siltation. Portions of Carlsbad where construction sites have the potential to discharge into a tributary of a 303(d) or directly into a 303(d) water body or sites located within 200 feet of an ESA require additional BMP implementation. These water bodies include the Pacific Ocean, Buena Vista Lagoon, Encinas Creek, Agua Hedionda Lagoon, and Batiquitos Lagoon.

C. Identify Conditions of Concern

For priority projects, the following analysis shall be conducted and reported in the project's Water Quality Technical Report:

1. Evaluate the project's conditions of concern in a drainage study report prepared by a registered civil engineer in the State of California, with experience in the science of stream and river generated surface features (i.e., fluvial geomorphology) and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed.
2. As part of the drainage study, the applicant's civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of any future upstream development.

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2. Go to: http://www.swrcb.ca.gov/~rwqcb9/Programs/Basin_PLanning/Basin_PLan/basin_plan.html
3. Go to: http://www.swrcb.ca.gov/tmdl/303d_lists.html. San Diego is in Region 9 (a link is provided).

3. The drainage study shall utilize the most recent edition of the San Diego County Hydrology Manual, compute rainfall runoff characteristics from the project area including, at a minimum, runoff volume, time of concentration, and retention volume. These characteristics shall be developed for the two-year and 10-year frequency, Type I storm, of six-hour or 24-hour duration (whichever is the closer approximation of the site's time of concentration), during critical hydrologic conditions for soil and vegetative cover[4]. The drainage study shall also report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions that minimize impacts on those downstream conditions of concern would be either improved or maintained by the proposed project, satisfactory to the City Engineer, by incorporating the permanent BMP requirements identified in Section III.2, below.

2. ESTABLISH PERMANENT STORM WATER BEST MANAGEMENT PRACTICES

After identifying the project's pollutants of concern, and conditions of concern (for priority projects), in Section III.1, projects subject to standard or priority project requirements shall implement all applicable site design, source control BMPs listed below. Projects subject to priority project requirements must also implement the BMPs applicable to individual priority project categories and structural treatment control BMPs. Applicants may employ alternative comparable and equally effective site design and source control BMPs (including requirements applicable to individual priority project categories), satisfactory to the City Engineer.

Projects are encouraged to address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Mimicking a site's natural hydrologic regime may be pursued by:

- Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the storm water conveyance system, and minimizing clearing and grading that is necessary for the project.
- Providing runoff storage measures dispersed uniformly throughout a site's landscape with the appropriate use of a variety of detention, retention, and runoff practices.
- Implementing on-lot hydrologically functional landscape design and management practices.

4. Design storms can be found at http://www.wrcc.dri.edu/pcpnfreq.html.

These design principles offer an innovative approach to urban storm water management, one that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates storm water controls throughout the urban landscape. Useful resources for applying these principles are referenced in Appendix G. Effective source controls offer another strategy to reduce a project's need for treatment. Therefore, projects shall incorporate, where applicable, storm water BMPs into the project design, in the following progression:

- Site Design BMPs
- Source Control BMPs
- BMPs for Individual Priority Project Categories (these are site design and source control BMPs)
- Treatment Control BMPs

The series of best management practices listed in Section III.2 have been organized sequentially to allow the applicant and design professional to incorporate the site design, source control BMPs, and where necessary, requirements applicable to individual priority project categories and treatment control BMPs in this progression.

A. Site Design BMPs

Maintain Pre-Development Rainfall Runoff Characteristics

Control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development development downstream erosion by applying the following or similar concepts:

1. Minimize impervious footprint to the maximum extent practicable consistent with the General Plan, Municipal Code, and other City standards by utilization of measures of the following types: (1) Increase building density (number of stories above or below ground); (2) construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials; (3) construct streets, sidewalks and parking lot aisles to the minimum widths required, provided that public safety and a walkable environment for pedestrians are not compromised; and (4) minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.
2. Conserve natural areas. (1) Concentrate or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition; and (2) Use natural drainage systems to the maximum extent practicable.
3. Minimize Directly Connected Impervious Areas. (1) Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm water conveyance system; and (2) where landscaping is proposed, drain impervious parking lots, sidewalks, walkways, trails, and patios into adjacent landscaping.
4. Maximize canopy interception and water conservation consistent with the Carlsbad Landscape Manual. (1) Preserve existing native trees and shrubs; and (2) plant additional native or drought tolerant trees and large shrubs in place of non-drought tolerant exotics.

Protect Slopes and Channels

5. Convey runoff safely from the tops of slopes.
6. Vegetate slopes with native or drought tolerant vegetation where practicable consistent with the Carlsbad Landscape Manual.
7. Stabilize permanent channel crossings.
8. Install energy dissipaters, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable standards and specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.

B. Source Control BMPs

Design Outdoor Material Storage Areas to Reduce Pollution Introduction

9. Hazardous materials with the potential to contaminate urban runoff shall be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with rain, runoff or spillage to the storm water conveyance system; and (2) protected by secondary containment structures such as berms, dikes, or curbs. The storage area shall be paved and sufficiently impervious to contain leaks and spills, and have a roof or awning to minimize direct precipitation within the secondary containment area.

Design Trash Storage Areas to Reduce Pollution Introduction

10. Trash storage areas shall be: (1) paved with an impervious surface, designed not to allow run-on from adjoining areas, screened or walled to prevent off-site transport of trash; and) contain attached lids on all trash containers that exclude rain; or contain a roof or awning to minimize direct precipitation.

Limited exclusion: detached residential homes.

Use Efficient Irrigation Systems & Landscape Design

11. Employ rain shutoff devices to prevent irrigation during precipitation consistent with the Carlsbad Landscape Manual.
12. Design irrigation systems to each landscape area's specific water requirements consistent with the Carlsbad Landscape Manual.

Limited exclusion: detached residential homes.

Provide Storm Water conveyance System Stenciling and Signage

13. Provide concrete stamping, porcelain tile, inset permanent marking or equivalent as approved by the City of Carlsbad, of all storm water conveyance system inlets and catch basins within the project area with prohibitive language (e.g., "No Dumping – I Live Downstream"), satisfactory to the City Engineer.
14. Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area, trailheads and parks.

C. BMPs Applicable to Individual Priority Project Categories

Where identified in Table 1, the following requirements shall be incorporated into applicable priority projects. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for "h. Parking Areas" into the project design).

a. Private Roads

15. The design of private roadway drainage where appropriate, shall incorporate, to the extent practicable, (1) rural swale system- street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings; (2) urban curb/swale system- street slopes to curb, periodic swale inlets drain to vegetated swale/biofilter; or (3) dual drainage system- first flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder, (4) other treatment control BMP methods approved by the City Engineer to reduce storm water runoff pollution.

b. Residential Driveways & Guest Parking

16. Driveways shall have, to the extent practicable, one of the following: (1) shared access; (2) flared entrance (single lane at street); (3) wheelstrips (paving only under tires); or (4) designed to drain into landscaping prior to discharging to the storm water conveyance system.
17. Uncovered temporary or guest parking on private residential lots shall be, to the extent practicable,: (1) paved with a permeable surface; or (2) designed to drain into landscaping prior to discharging to the storm water conveyance system.

c. Dock Areas

18. Loading/unloading dock areas shall include the following: (1) cover loading dock areas, or design drainage to preclude urban run-on and runoff; and (2) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

d. Maintenance Bays

19. Maintenance bays shall include at least one of the following: (1) repair/ maintenance bays shall be indoors; or, (2) designed to preclude urban run-on and runoff.
20. Maintenance bays shall include a repair/maintenance bay drainage system to capture all wash water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm water conveyance system is prohibited. Where areas are allowed to connect to the sanitary sewer system, an Industrial Waste Permit from the Encina Water Pollution Control Facility may be required.

e. & f. Vehicle & Equipment Wash Areas

21. Areas for washing/steam cleaning of vehicles and areas for outdoor equipment/accessory washing and steam cleaning shall be: (1) self-contained to preclude run-on and run-off, covered with a roof or overhang, and equipped with a clarifier or other pretreatment facility; and (2) properly connected to a sanitary sewer if appropriate. Where areas are connected to a sanitary sewer, an Industrial Waste Permit may be required from the Encina Water Pollution Control Facility.

g. Outdoor Processing Areas

22. Outdoor processing areas shall: (1) cover or enclose areas that would be the most significant source of pollutants; or, (2) slope the area toward a dead-end sump or, (3) discharge to the sanitary sewer system
23. Grade or berm processing area to prevent run-on from surrounding areas.
24. Installation of storm drains in areas of equipment repair is prohibited.

h. Surface Parking Areas

25. Where landscaping is proposed in surface parking areas (both covered and uncovered), incorporate landscape areas into the drainage design.
26. Overflow parking (parking in excess of the project's minimum parking requirements) may be constructed with permeable paving subject to the City Engineer's approval.

i. Non-Retail Fueling Areas

Non-Retail fueling areas shall be designed with the following:

27. Fuel dispensing area that is: (1) paved with Portland cement concrete or equivalent smooth impervious surface (asphalt concrete is prohibited); (2) designed to extend 6.5 feet from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot, whichever is greater; (3) sloped to prevent ponding; (4) separated from the rest of the site by a grade break that prevents run-on of urban runoff; and (5) designed to drain to the project's treatment control BMP(s) prior to discharging to the storm water conveyance system.
28. Overhanging roof structure or canopy that is: (1) equal to or greater than the area within the fuel dispensing area's grade break; and (2) designed not to drain onto or across the fuel dispensing area.

j. Hillside Landscaping

29. Hillside areas disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, in accordance with the with the Carlsbad Landscape Manual.

D. Treatment Control BMPs

30. Where identified in Table 1, and after site design and source control BMPs have been incorporated into the project, applicants of priority projects shall design a single or combination of treatment control BMPs designed to infiltrate, filter, and/or treat runoff from the project footprint to one of the "Numeric Sizing Treatment Standards" listed in Table 3, below. Applicants must use the Structural Treatment BMP Selection Procedure outlined in Section III.2.D.i, below to select appropriate treatment control BMPs. Applicants are encouraged to design projects so that runoff is treated by site design BMPs, such as rooftop runoff treated in landscaping, so that it may be applied towards the numeric sizing treatment standards, satisfactory to the City Engineer. In addition, applicants are encouraged to apply a "drainage basin approach" in meeting the treatment requirements. Treating entire hydrologic sub-drainages, which often extend off-site, is an equitable, environmentally sound regional solution that applies treatment requirements to hydrologically defined areas, rather than legally defined parcels. When integrated with other projects, this approach can provide a more efficient and cost effective method of treatment by locating fewer, more effective BMPs to treat entire sub-drainages once. In all instances, structural treatment BMP(s) may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following criteria:

    (a) All structural treatment control BMPs shall infiltrate, filter, and/or treat the required runoff volume or flow prior to discharging to any receiving water body supporting beneficial uses;

    (b) Multiple post-construction structural treatment control BMPs for a single priority project shall collectively be designed to comply with the numeric sizing treatment standards;

    (c) Shared BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;

    (d) Interim storm water BMPs that provide equivalent or greater treatment than is required may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

Table 3. Numeric Sizing Treatment Standards.

Volume

1. Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) the volume of runoff produced from a 24-hour 85th percentile storm event, as determined from isopluvial maps contained in the County of San Diego Hydrology Manual.

OR

Flow

2. Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour for each hour of a storm event.

i. Structural Treatment BMP Selection Procedure

Priority projects shall select a single or combination of treatment BMPs from the categories in Table 4 that maximize pollutant removal for the particular pollutant(s) of concern. Any pollutants the project is expected to generate that are also causing a Clean Water Act section 303(d) impairment of the downstream receiving waters of the project should be given top priority in selecting treatment BMPs.

To select a structural treatment BMP using the Structural Treatment Control BMP Selection Matrix (Table 4), each priority project shall compare the list of pollutants for which the downstream receiving waters are impaired (if any). According to the 1998 303(d) listing, the Agua Hedionda Lagoon is impaired for sediment and siltation. Buena Vista Lagoon also has impaired beneficial uses (aquatic life) due to high sedimentation/siltation. Portions of Carlsbad where construction sites have the potential to discharge into a tributary of a 303(d) or directly into a 303(d) water body or sites located within 200 feet of an ESA require additional BMP implementation. These water bodies include the Pacific Ocean, Buena Vista Lagoon, Encinas Creek, Agua Hedionda Lagoon, and Batiquitos Lagoon.

Priority projects that are not anticipated to generate a pollutant for which the receiving water is Clean Water Act Section 303(d) impaired shall select a single or combination of structural treatment BMPs from Table 4 that are effective for pollutant removal of the identified pollutants of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 1).

Alternative storm water BMPs not identified in Table 4 may be approved at the discretion of the City Engineer, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 4.

Table 4. Structural Treatment Control BMP Selection Matrix.

Pollutant of Concern	*Treatment Control BMP Categories*						
	Biofilters	Detention Basins	Infiltration Basins(1)	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separator Systems(2)
Sediment	M	H	H	H	L	H	M
Nutrients	L	M	M	M	L	M	L
Heavy Metals	M	M	M	H	L	H	L
Organic Compounds	U	U	U	U	L	M	L
Trash & Debris	L	H	U	U	M	H	M
Oxygen Demanding Substances	L	M	M	M	L	M	L
Bacteria	U	U	H	U	L	M	L
Oil & Grease	M	M	U	U	L	H	L
Pesticides	U	U	U	U	L	U	L

(1) Including trenches and porous pavement.
(2) Also known as hydrodynamic devices and baffle boxes.

L: Low removal efficiency
M: Medium removal efficiency
H: High removal efficiency
U: Unknown removal efficiency

Sources: *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (1993), *National Stormwater Best Management Practices Database* (2001), and *Guide for BMP Selection in Urban Developed Areas* (2001).

ii. Restrictions on the Use of Infiltration Treatment BMPs

31. Treatment control BMPs that are designed to primarily function as infiltration devices shall meet the following conditions (these conditions do not apply to treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices, such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.): (1) urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants, such as sedimentation or filtration, prior to infiltration; (2) all dry weather flows shall be diverted from infiltration devices except for those non-storm water discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to storm water conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and dechlorinated swimming pool discharges; (3) pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used; (4) the vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet. Where groundwater does not support beneficial uses, this vertical distance criterion may be reduced, provided groundwater quality is maintained; (5) the soil through which infiltration is to occur shall have physical and

chemical characteristics that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses; (6) the horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as determined appropriate by the City Engineer.

32. Notification to neighboring jurisdictions may be required where staff determines the infiltration BMP(s) may impact the groundwater in a neighboring jurisdiction.

Structural Treatment Limited Exclusions

(a.) Proposed restaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical sizing criteria requirements listed in Table 3.

(b.) Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to priority project requirements, the numeric sizing criteria apply only to the addition, and not to the entire development.

IV. CONSTRUCTION STORM WATER BMP PERFORMANCE STANDARDS

Those projects that have been determined to require construction BMPs in Steps 1 and 2 of Section II, must identify the construction BMPs to be implemented in accordance with the performance standards in this section. The construction BMPs must be identified in a Storm Water Pollution Prevention Plan or Water Pollution Control Plan for projects disturbing more than 1-acre. These plans must be prepared in accordance with the guidelines in Appendix E.

It is the responsibility of the property owner and/or contractor to select, install and maintain appropriate BMPs. A list of construction BMPs is provided for reference in Appendix F. BMPs must be installed in accordance with an industry recommended standard or in accordance with the requirements of the State General Construction Permit. More information about BMPs is provided in the Model Construction Program for San Diego Copermittees, the City of Los Angeles "Reference Guide for Stormwater Best Management Practices," State Storm Water BMP Manuals, and Caltrans Standard BMP handbook.

BMP requirements differ between the rainy season(Oct. 1 – Apr. 30) and the dry season (May 1 – Sept. 30), the type of the project and topography of the site, as described below.

1. Site Management Requirements

Construction is a dynamic operation where changes are expected. Storm water BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain their effectiveness and may require relocation, revision and re-installation, particularly as project grading progresses. Therefore, owner/contractor self-inspections are required. They shall be performed by the owner's/contractor's Qualified Contact Person specifically trained in storm water pollution prevention site management and storm water BMPs, including the installation and maintenance of sediment and erosion control measures. Additional qualified persons may assist with the inspection activities under the direction of the Qualified Contact Person. A Qualified Contact Person is required for all sites during both wet and dry weather conditions.

There are four primary purposes of the self-inspections conducted by owners and contractors:

- To ensure that the owners/contractors take full responsibility for managing storm water pollution caused by their activities.
- To ensure that storm water BMPs are properly documented and implemented and are functioning effectively.
- To identify maintenance (e.g., sediment removal) and repair needs.
- To ensure that the project proponents implement their storm water management plans.

A self-inspection checklist, noting date, time, conditions and inspection date, must be kept on-site and made available for inspection, if requested. Self-inspections must be performed by a Qualified Contact Person according to the following schedule:

- Daily weather forecasting at all times
- At 24-hour intervals during extended rainfall events
- Daily evaluations as earth moving/grading is being conducted during the wet season
- Weekly (every 7 days) in the dry season as earth moving/grading is progressing
- Self inspection checklists shall be submitted to the project inspector on a weekly basis during the rainy season.

Storm water pollution prevention site management requirements include:

A. A qualified person who is trained and competent in the use of BMPs shall be on site daily, although not necessarily full time, to evaluate the conditions of the site with respect to storm water pollution prevention. This qualified contact person shall represent the contractor/ owner on storm water issues.

B. The qualified person shall implement the conditions of the Storm Water Pollution Prevention Plan, contract documents and/or local ordinances with respect to erosion and sediment control and other waste management regulations.

C. The qualified person is responsible for monitoring the weather and implementation of any emergency plans as needed. The weather shall be monitored on a 5-day forecast plan and a full BMP protection plan shall be activated when there is a 40% chance of rain.

D. The qualified person is responsible for overseeing any site grading and operations and evaluating the effectiveness of the BMPs. This person shall modify the BMPs as necessary to keep the dynamics of the site in compliance. This person or other qualified persons are responsible for checking the BMPs routinely for maintenance and documenting the BMPs being implemented.

2. Performance Standards

The City of Carlsbad will evaluate the adequacy of the owner's/contractor's site management for storm water pollution prevention, inclusive of BMP implementation, on construction sites based on performance standards for storm water BMPs. Poor BMP practices shall be challenged. Performance standards shall include:

A. Prevent increase in pollution to the maximum extent practicable.

B. Minimize slope erosion.

C. Control discharge velocities moving offsite to limit down stream erosion potential to the pre-construction levels. .

A site will be considered inactive if construction activities have ceased for a period of 7 or more consecutive calendar days. At any time of year, an inactive site must be fully protected from erosion and discharges of sediment. It is also the owner's/contractor's responsibility at both active and inactive sites to implement a plan to address all potential non-storm water discharges.

Regardless of any inspections conducted by the City, property owners or contractors are required to prevent any construction-related materials, trash, wastes, spills or residues from entering a storm water conveyance system.

3. Seasonal Requirements

A. Dry Season Requirements (May 1 through September 30):

1. Perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
2. Sediment control BMPs must be installed and maintained to comply with performance standards (above).
3. BMPs to control sediment tracking must be installed and maintained at entrances/exits to comply with performance standards (above).
4. Material needed to install standby BMP's necessary to completely protect the exposed portions of the site from erosion, and to prevent sediment discharges, must be stored on site Areas that have already been protected from erosion using physical stabilization or established vegetation stabilization BMP's as described below are not considered to be "exposed" for purposes of this requirement.
5. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted, 40% chance of rain). On request, the owner/contractor must provide proof of this capability that is acceptable to the City of Carlsbad.
6. Deployment of physical or vegetation erosion control BMP's must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
7. The area that can be cleared or graded and left exposed at one time is limited to the amount of acreage that the owner/contractor can adequately protect prior to a predicted rainstorm.

Requirement "7" will require grading to be phased at larger sites. For example, it may be necessary to deploy erosion and sediment control BMPs in areas that are not completed but are not actively being worked before additional grading is done.

B. Rainy Season Requirements (October 1 through April 30):

1. Perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
2. Sediment control BMPs must be installed and maintained to comply with performance standards (above).
3. BMPs to control sediment tracking must be installed and maintained at site entrances/exits to comply with performance standards (above).
4. Material needed to install standby BMPs necessary to completely protect the exposed portions of the site from erosion, and to prevent sediment discharges, must be stored on site. Areas that have already been protected from erosion using physical stabilization or established vegetation stabilization BMPs as described below are not considered to be "exposed" for purposes of this requirement.
5. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted, 40% chance of rain). On request, the owner/contractor must provide proof of this capability that is acceptable to the City of Carlsbad.
6. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The owner/contractor may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
7. The area that can be cleared or graded and left exposed at one time is limited to the amount of acreage that the owner/contractor can adequately protect prior to a predicted rainstorm.
8. Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
9. Perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
10. Adequate physical or vegetation erosion control BMPs must be installed and established for all graded areas prior to the start of the rainy season. These BMPs must be maintained throughout the rainy season. If a selected BMP fails, it must be repaired and improved, or replaced with an acceptable alternate as soon as it is safe to do so. The failure of a BMP shows that the BMP, as installed, was not adequate for the circumstances in which it was used and shall be corrected or modified as necessary. Repairs or replacements must therefore put a more effective BMP in place.
11. All vegetation erosion control must be established prior to the rainy season to be considered as a BMP.

V. IMPLEMENTATION & MAINTENANCE OF REQUIREMENTS

After all project BMPs have been approved by the City Engineer, applicants and City project managers must ensure implementation and maintenance of the BMPs according to the processes outlined in the applicable sections for projects requesting discretionary actions, construction permits, or for public projects. In addition, any project that will require a "General NPDES Permit for Storm Water Discharges Associated with Industrial Activities," shall include the following note on the plans and condition in the permit/approval:

Industrial NPDES Permit Requirement

"The Permittee or designee (or contractor for public projects) shall provide evidence of coverage under the General Industrial National Pollutant Discharge Elimination System Permit, in the form of a Notice of Intent (NOI) filed with the State Water Resources Control Board, prior to the issuance of any construction permits."

1. Discretionary Actions

A. *Permanent BMP Requirements.* Applicants proposing projects that include permanent BMPs shall enter into a maintenance agreement, satisfactory to the City, following the program outlined in the "Permanent Storm Water BMP Maintenance Agreement Requirements" below, prior to the issuance of any permits or approvals. The permanent BMPs shall be graphically shown on the plans, where possible, and made a condition of the project's permit/approval. The permanent BMP's operation and maintenance requirements (O & M plan discussed below) shall also be noted on the plans and made a condition of the project's permit/approval.

B. *Construction BMP Requirements.* Projects seeking discretionary approvals are not required to graphically demonstrate any construction BMP requirements on the project plans. Instead, the discretionary action shall be conditioned to provide BMP's in accordance with the City's Storm Water Standards.

2. Construction Permits

A. *Construction Permits for Projects Under 1 Acre.* Projects proposing to disturb less than 1 acre during construction shall include construction requirements, where possible, on the plans. Any remaining construction BMPs that cannot be shown graphically on the plans shall be either noted on, or stapled to, the plans (Water Pollution Control Plan) and made a condition of the permit. The project's construction priority ranking (see Appendix E) must also be noted on the construction plans. Applicants proposing projects that include permanent BMPs must prepare (if not already prepared as part of a previous permit or approval), and execute a maintenance agreement, prepared satisfactory to the City, following the program outlined below prior to the issuance of any construction permits. The permanent BMPs shall be graphically shown on the plans, where

possible, and made a condition of the project's permit/approval. The permanent BMP's operation and maintenance requirements (O & M plan discussed below) shall also be noted on the plans and made a condition of the project's permit/approval.

B. *Construction Permits for Projects Over 1 Acre.* Projects proposing to disturb more than 1 acre during construction shall include all construction BMPs in a Storm Water Pollution Prevention Plan, prepared in accordance with Appendix E, "Storm Water Pollution Prevention Plan Guidelines." The construction BMPs shall also be shown on the plans, where possible. Any remaining construction BMPs that cannot be shown graphically on the plans shall be either noted or stapled to the plans and made a condition of the permit. The project's construction priority ranking (see Appendix A) must also be noted on the construction plans. Applicants proposing projects that include permanent BMPs must prepare (if not already prepared as part of a previous permit or approval), and execute a maintenance agreement, prepared satisfactory to the City, following the program outlined below prior to the issuance of any construction permits. The permanent BMPs shall be graphically shown on the plans, where possible, and made a condition of the project's permit/approval. The permanent BMP's operation and maintenance requirements (O & M plan discussed below) shall also be noted on the plans and made a condition of the project's permit/approval.

3. Public Projects

Construction and Permanent storm water requirements must be incorporated into the project design and described in the contract documents (plans and specifications) prior to bidding for construction contracts, or equivalent. In addition, the permanent BMP's maintenance requirements shall also be noted on the plans and/or specifications and made a condition of the project's permit/approval. Project Managers should utilize the standard boiler specification and expound upon any project specific requirements.

For projects disturbing over 1 acre, City project managers must include the requirement for the preparation of a Storm Water Pollution Prevention Plan in the contract documents to be sent out to bid. The contract documents must also include the requirement for the contractor to periodically update the Storm Water Pollution Prevention Plan throughout the construction phase of the project.

For projects disturbing less than 1 acre, City projects shall have a specific Water Pollution Control Plan developed to identify construction BMP requirements prior to sending the public project contracts out to bid. The contract documents shall include a requirement for the contractor to update the Water Pollution Control Plan throughout the construction phase of the project.

4. Permanent BMP Maintenance Agreement Requirements

Applicants shall propose a maintenance agreement assuring all permanent BMPs will be maintained throughout the "use" of a project site, satisfactory to the City Engineer (see Appendix H for a list of potential mechanisms). The City-approved method of permanent BMP maintenance shall be incorporated into the project's construction permit, and shall be consistent with permits issued by resource agencies, before City approval of the permit.

City project managers carrying out public projects that are not required to obtain permits shall be responsible for ensuring that a client department-approved method of storm water BMP maintenance, repair and replacement is executed prior to the commencement of construction.

For all properties, the verification mechanism will include the project proponent's signed statement, as part of the project application, accepting responsibility for all permanent BMP maintenance, repair and replacement.

The maintenance agreement shall include the following:

1. *Operation & Maintenance (O&M) Plan*: The applicant shall include an Operation & Maintenance (O&M) plan, prepared satisfactory to the City, with the approved maintenance agreement, which describes the designated responsible party to manage the storm water BMP(s), employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities (including maintenance of storm water conveyance system stamps), copies of resource agency permits, and any other necessary activities. At a minimum, maintenance agreements shall require the applicant to provide inspection and servicing of all permanent treatment BMPs on an annual basis. The project proponent or City-approved maintenance entity shall complete and maintain O&M forms to document all maintenance requirements. Parties responsible for the O&M plan shall retain records for at least 5 years. These documents shall be made available to the City for inspection upon request at any time.

2. *Access Easement/Agreement:* If a permanent BMP requires access for maintenance, as part of the O&M plan , the applicant shall execute and record an access easement or agreement that shall be binding on the under lying land throughout the life of the project in favor of the party responsible for maintenance, until such time that the permanent treatment BMP requiring access for maintenance is removed or replaced. The City shall approve any changes to permanent BMP's, O&M Plans or access agreements. The agreement shall include a provision that gives the City the right, but not the obligation to perform the maintenance. The party responsible for BMP maintenance will pay the City for any and all costs incurred by the City for maintaining any BMP's. The agreement will provide a cost recovery provision in favor of the City satisfactory to the City Attorney.

VI. RESOURCES & REFERENCES

APPENDIX A

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the following checklist to determine your project's permanent and construction storm water best management practices requirements. This form must be completed and submitted with your permit application.

Section 1. Permanent Storm Water BMP Requirements:
If any answers to Part A are answered "Yes," your project is subject to the "Priority Project Permanent Storm Water BMP Requirements," and "Standard Permanent Storm Water BMP Requirements" in Section III, "Permanent Storm Water BMP Selection Procedure" in the *Storm Water Standards* manual.

If all answers to Part A are "No," and any answers to Part B are "Yes," your project is only subject to the "Standard Permanent Storm Water BMP Requirements". If every question in Part A and B is answered "No," your project is exempt from permanent storm water requirements.

Part A: Determine Priority Project Permanent Storm Water BMP Requirements.

Does the project meet the definition of one or more of the priority project categories?*	**Yes**	**No**
1. Detached residential development of 10 or more units		
2. Attached residential development of 10 or more units		
3. Commercial development greater than 100,000 square feet		
4. Automotive repair shop		
5. Restaurant		
6. Steep hillside development greater than 5,000 square feet		
7. Project discharging to receiving waters within Environmentally Sensitive Areas		
8. Parking lots greater than or equal to 5,000 ft^2 or with at least 15 parking spaces, and potentially exposed to urban runoff		
9. Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater		
* Refer to the definitions section in the *Storm Water Standards* for expanded definitions of the priority project categories.		
Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if one or more of the criteria in Part A is met. If all answers to Part A are "No", continue to Part B.		

Part B: Determine Standard Permanent Storm Water Requirements.

Does the project propose:	Yes	No
1. New impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks?		
2. New pervious landscape areas and irrigation systems?		
3. Permanent structures within 100 feet of any natural water body?		
4. Trash storage areas?		
5. Liquid or solid material loading and unloading areas?		
6. Vehicle or equipment fueling, washing, or maintenance areas?		
7. Require a General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except construction)?*		
8. Commercial or industrial waste handling or storage, excluding typical office or household waste?		
9. Any grading or ground disturbance during construction?		
10. Any new storm drains, or alteration to existing storm drains?		
*To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/stormwtr/industrial.html		

Section 2. Construction Storm Water BMP Requirements:

If the answer to question 1 of Part C is answered "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Storm Water Pollution Prevention Plan (SWPPP). If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Water Pollution Control Plan (WPCP). If every question in Part C is answered "No," your project is exempt from any construction storm water BMP requirements. If any of the answers to the questions in Part C are "Yes," complete the construction site prioritization in Part D, below.

Part C: Determine Construction Phase Storm Water Requirements.

Would the project meet any of these criteria during construction?	Yes	No
1. Is the project subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities?		
2. Does the project propose grading or soil disturbance?		
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?		
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as, paints, solvents, concrete, and stucco)?		

Part D: Determine Construction Site Priority

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans, and included in the SWPPP or WPCP. Indicate the project's priority in one of the check boxes using the criteria below, and existing and surrounding conditions of the project, the type of activities necessary to complete the construction and any other extenuating circumstances that may pose a threat to water quality. The City reserves the right to adjust the priority of the projects both before and during construction. [Note: The construction priority does NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority does affect the frequency of inspections that will be conducted by City staff. See Section IV.1 for more details on construction BMP requirements.]

☐ *A) High Priority*

1) Projects where the site is 50 acres or more and grading will occur during the rainy season
2) Projects 5 acres or more. 3) Projects 5 acres or more within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an environmentally sensitive area

   Projects, active or inactive, adjacent or tributary to sensitive water bodies

☐ *B) Medium Priority*

1) Capital Improvement Projects where grading occurs, however a Storm Water Pollution Prevention Plan (SWPPP) is not required under the State General Construction Permit (i.e., water and sewer replacement projects, intersection and street re-alignments, widening, comfort stations, etc.)
2) Permit projects in the public right-of-way where grading occurs, such as installation of sidewalk, substantial retaining walls, curb and gutter for an entire street frontage, etc. , however SWPPPs are not required.
3) Permit projects on private property where grading permits are required, however, Notice Of Intents (NOIs) and SWPPPs are not required.

☐ *C) Low Priority*

1) Capital Projects where minimal to no grading occurs, such as signal light and loop installations, street light installations, etc.
2) Permit projects in the public right-of-way where minimal to no grading occurs, such as pedestrian ramps, driveway additions, small retaining walls, etc.
3) Permit projects on private property where grading permits are not required, such as small retaining walls, single-family homes, small tenant improvements, etc.

APPENDIX B

DRAFT
ENVIRONMENTALLY SENSITIVE AREAS WITHIN THE CITY OF CARLSBAD

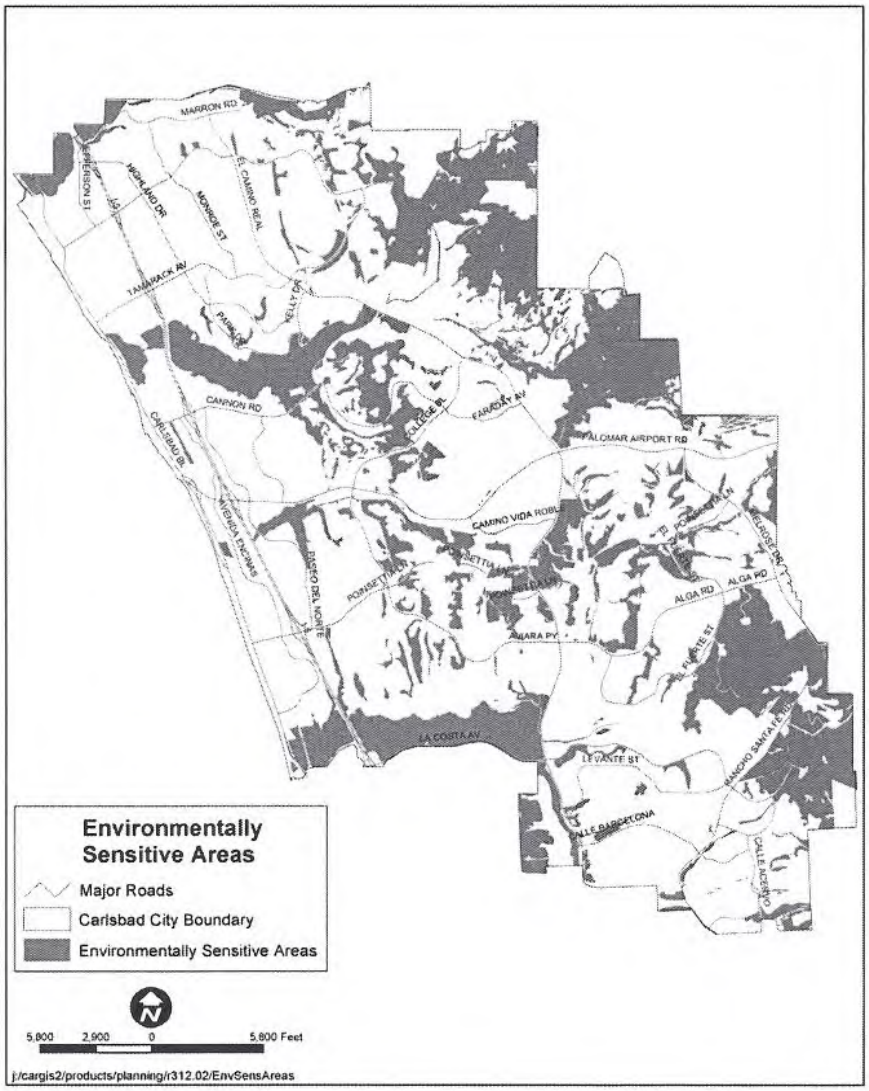

APPENDIX C

EXAMPLE PERMANENT STORM WATER BEST MANAGEMENT PRACTICES

The following are a list of BMPs that may be used to minimize the introduction of pollutants of concern that may result in significant impacts to receiving waters. Other BMPs approved by the Development Services Division as being equal or more effective in pollutant reduction than comparable BMPs identified below are acceptable. All BMPs must comply with local zoning and building codes and other applicable regulations.

Site Design BMPs

Minimizing Impervious Areas Consistent With City Standards, Ordinances and Policies

- Incorporate landscaped buffer areas between sidewalks and streets.
- Design residential streets for the required pavement widths
- Minimize the number of residential street cul-de-sacs and incorporate landscaped areas to reduce their impervious cover.
- Use open space development that incorporates smaller lot sizes
- Increase building density while decreasing the building footprint
- Reduce overall lot imperviousness by promoting alternative driveway surfaces and shared driveways that connect two or more homes together
- Reduce overall imperviousness associated with parking lots by providing compact car spaces, minimizing stall dimensions, incorporating efficient parking lanes, and using pervious materials in spillover parking areas

Increase Rainfall Infiltration

- Use permeable materials for private sidewalks, driveways, parking lots, and interior roadway surfaces (examples: hybrid lots, parking groves, permeable overflow parking, etc.) to the extent practicable consistent with City standards.
- Direct rooftop runoff to pervious areas such as yards, open channels, or vegetated areas, and avoid routing rooftop runoff to the roadway or the urban runoff conveyance system to the extent practicable consistent with City standards.

Maximize Rainfall Interception

- Maximizing canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs. to the extent practicable consistent with City Landscape Manual.

Storm Water Standards
4/03/03

Minimize Directly Connected Impervious Areas (DCIAs)

- Draining rooftops into adjacent landscaping prior to discharging to the storm water conveyance system to the extent practicable consistent with City standards
- Draining parking lots into landscape areas co-designed as biofiltration areas to the extent practicable consistent with City standards
- Draining roads, sidewalks, and impervious trails into adjacent landscaping to the extent practicable consistent with City standards

Use of natural drainage systems to the maximum extent practicable

- Stabilized permanent channel crossings
- Planting native or drought tolerant vegetation on slopes to the extent practicable consistent with City Landscape Manual.

Maximize Rainfall Interception

- Cisterns
- Foundation planting

Increase Rainfall Infiltration

- Dry wells

Source Control BMPs

- Storm water conveyance system stenciling and signage
- Outdoor material and trash storage area designed to reduce or control rainfall runoff
- Efficient irrigation system

Treatment Control BMPs

Biofilters
- Grass swale
- Grass strip
- Wetland vegetation swale
- Bioretention

Detention Basins

- Extended/dry detention basin with vegetated lining
- Extended/dry detention basin with impervious lining

Storm Water Standards
4/03/03

Infiltration

- Infiltration basin
- Infiltration trench

Pervious Paving

- Porous asphalt
- Porous concrete
- Porous modular concrete block

Wet Ponds and Wetlands

- Wet pond (permanent pool)
- Constructed wetland

Drainage Inserts

- Catch basin/storm drain inserts
- Catch basin screens

Filtration Systems

- Media filtration
- Sand filtration

Hydrodynamic Separation Systems

- Swirl concentrator
- Cyclone separator
- Baffle boxes

APPENDIX D

WATER QUALITY TECHNICAL REPORT GUIDELINES

Purpose

To describe the permanent storm water Best Management Practices (BMPs) that will be incorporated in the project to mitigate the impacts of urban runoff due to the development.

Minimum Requirements

- Prepared by Registered Civil Engineer

Organization & Content

Table of Contents
Vicinity Map
Project Description
- Narrative of project activities

Site Map
- Entire property included on one map (use key map if multi-sheets)
- Drainage areas and direction of flow
- Private storm drain system(s)
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing and proposed storm water controls
- Location of "impervious" areas- paved areas, buildings, covered areas
- Locations where materials would be directly exposed to storm water
- Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)
- Areas of potential soil erosion (including areas downstream of project)

Pollutants and Conditions of Concern
- Name and number of Carlsbad Watershed Hydrological UnitImpaired water bodies downstream of the project and impairment
- Impacts to hydrologic regime
- Pollutants based upon land use

Types of BMPs:

Site Design BMPs
- Reduce impervious surfaces
- Conserve natural areas
- Minimize directly connected impervious areas
- Protect slopes and channels

Source Control BMPs

- Inlet stenciling and signage
- Materials Storage
- Trash storage
- Efficient irrigation
- Other controls (as applicable)

Structural Treatment BMPs

- Basis for selection (include targeted pollutants, justification, and alternative analysis)
- Design criteria (include calculations)
- Pollutant removal information (other than vendor specifications)
- Literature References

Maintenance (i.e. identify the responsible parties who will implement the Best Management Practices)

- Maintenance schedule
- Maintenance Costs
- Qualifications of maintenance personnel

Drainage Study

APPENDIX E

STORM WATER POLLUTION PREVENTION PLAN/WATER POLLUTION CONTROL PLAN GUIDELINES

At a minimum, the Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP), whichever is required, must cover the areas listed below. The SWPPP must be kept on site and made available upon request of a representative of the City of Carlsbad. Projects that are also required to obtain a general construction National Pollutant Discharge Elimination System (NPDES) Permit are encouraged to visit the State Water Resource Control Board's website for permit application instructions, NOI and NOT forms and guidance in preparing a Storm Water Pollution Prevention Plan (go to: www.swrcb.ca.gov/stormwtr/docs/constpermit).

Planning and Organization

- Identify the pollution prevention team members who will maintain and implement the SWPPP.
- If applicable, incorporate or reference the appropriate elements of other regulatory requirements.

Site Map

Features displayed on the map must include:

- An outline of the entire property
- Drainage areas on the property and direction of flow
- Areas of soil erosion
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing storm water controls (oil/ water separators, sumps, etc.)
- Location of "impervious" areas- paved areas, buildings, covered areas
- Locations where materials are directly exposed to storm water
- Locations where toxic or hazardous materials have spilled in the past
- Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)

List of Significant Materials

List materials stored and handled at the site. Include the location and typical quantities.

Description of Potential Pollutant Sources

- Provide a narrative description of the site's activities and list the potential pollutant sources and the potential pollutants that could be discharged in storm water discharges from each activity.
- List non-storm water discharges including the source, quantity, frequency, and characteristics of the discharges and drainage area.

Assessment of Potential Sources

Describe which activities are likely to be sources of pollution in storm water and which pollutants are likely to be present in storm water discharges.

Best Management Practices

Describe the BMPs that will be implemented at the site for each potential pollutant and its source.

APPENDIX F

EXAMPLE CONSTRUCTION BEST MANAGEMENT PRACTICES

A. Erosion Control

Physical stabilization BMPs, vegetation stabilization BMPs, or both, will be required to prevent erosion and sediment runoff from exposed graded areas. BMPs for physical and vegetation stabilization include:

1) Physical Stabilization
    a) Geotextiles
    b) Mats
    c) Fiber rolls
    d) Sprayed on binders
    e) Mulch on flat areas
    f) Other material approved by the City for use in specific circumstances

If physical stabilization is selected, materials must be appropriate to the circumstances in which they are deployed, and sufficient material must be deployed.

2) Vegetation Stabilization
    a) Preservation of existing vegetation
    b) Established interim vegetation (via Hydroseed, seeded mats, etc.)
    c) Established permanent landscaping

If vegetation stabilization is selected, the stabilizing vegetation must be installed, irrigated and established (uniform vegetative coverage with 70% coverage established) prior to October 1. In the event stabilizing vegetation has not been established by October 1, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.

B. Sediment Control

2) Perimeter protection. Protect the perimeter of the site or exposed area from sediment ingress/discharge in sheet flows using:
    a) Silt fencing
    b) Gravel bag barriers
    c) Fiber rolls

3) Resource protection. Protect environmentally sensitive areas, and watercourses from sediment in sheet flows by using:
    a) Silt fencing
    b) Gravel bag barriers
    c) Fiber rolls

4) Sediment Capture. Capture sediments in channeled storm water by using:
    a) Storm-drain inlet protection measures
    b) De-silting basins (Designed in accordance with an industry standard such as Caltrans, California Storm water BMP manual etc. If the project is 5 acres or greater the desilting basin(s) must be designed in accordance with the State General Construction Permit, Order DWQ 99-08.)

5) Velocity Reduction. Reduce the velocity of storm water by using:
    a) Outlet protection (energy dissipater)
    b) Equalization basins
    c) Check dams

6) Off-site Sediment Tracking. Prevent sediment from being tracked off-site by using:
    a) Stabilized construction entrances/exits
    b) Construction road stabilization
    c) Tracking control (i.e., corrugated steel panels, wheel washes)
    d) Dust control

C. Materials Management

7) Prevent the contamination of storm water by wastes through proper management of the following types of wastes:
    a) Solid
    b) Sanitary
    c) Concrete
    d) Hazardous
    e) Equipment – related wastes
    f) Stock piles (protection from wind and rain)

8) Prevent the contamination of storm water by construction materials by:
    a) Covering and/or providing secondary containment of storage areas
    b) Taking adequate precautions when handling materials.

APPENDIX G

SUGGESTED RESOURCES	HOW TO GET A COPY
Better Site Design: A Handbook for Changing Development Rules in Your Community (1998) Presents guidance for different model development alternatives.	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 www.cwp.org
California Urban runoff Best Management Practices Handbooks (1993) for Construction Activity, Municipal, and Industrial/Commercial Presents a description of a large variety of Structural BMPs, Treatment Control, BMPs and Source Control BMPs	Los Angeles County Department of Public Works Cashiers Office 900 S. Fremont Avenue Alhambra, CA 91803 626-458-6959
Caltrans Urban runoff Quality Handbook: Planning and Design Staff Guide (Best Management Practices Handbooks (1998) Presents guidance for design of urban runoff BMPs	California Department of Transportation P.O. Box 942874 Sacramento, CA 94274-0001 916-653-2975
Design Manual for Use of Bioretention in Stormwater Management (1993) Presents guidance for designing bioretention facilities.	Prince George's County Watershed Protection Branch 9400 Peppercorn Place, Suite 600 Landover, MD 20785
Design of Stormwater Filtering Systems (1996) by Richard A. Claytor and Thomas R. Schuler Presents detailed engineering guidance on ten different urban runoff-filtering systems.	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323
Development Planning for Stormwater Management, A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), (May 2000)	Los Angeles County Department of Public Works http://dpw.co.la.ca.us/epd/ or http://www.888cleanLA.com
Florida Development Manual: A Guide to Sound Land and Water Management (1988) Presents detailed guidance for designing BMPs	Florida Department of the Environment 2600 Blairstone Road, Mail Station 3570 Tallahassee, FL 32399 850-921-9472
Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (1993) Report No. EPA–840-B-92-002. Provides an overview of, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.	National Technical Information Service U.S. Department of Commerce Springfield, VA 22161 800-553-6847
Guide for BMP Selection in Urban Developed Areas (2001)	ASCE Envir. and Water Res. Inst. 1801 Alexander Bell Dr. Reston, VA 20191-4400 (800) 548-2723

SUGGESTED RESOURCES	HOW TO GET A COPY
Low-Impact Development Design Strategies - An Integrated Design Approach (June 1999)	Prince George's County, Maryland Department of Environmental Resource Programs and Planning Division 9400 Peppercorn Place Largo, Maryland 20774 *http://www.co.pg.md.us/Government/DER/PPD/pgcounty/lidmain.htm*
Maryland Stormwater Design Manual (1999) Presents guidance for designing urban runoff BMPs	Maryland Department of the Environment 2500 Broening Highway Baltimore, MD 21224 410-631-3000
National Stormwater Best Management Practices (BMP) Database, Version 1.0 Provides data on performance and evaluation of urban runoff BMPs	American Society of Civil Engineers 1801 Alexander Bell Drive Reston, VA 20191 703-296-6000
National Stormwater Best Management Practices Database (2001)	Urban Water Resources Research Council of ASCE Wright Water Engineers, Inc. (303) 480-1700
Operation, Maintenance and Management of Stormwater Management (1997) Provides a thorough look at storm water practices including, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.	Watershed Management Institute, Inc. 410 White Oak Drive Crawfordville, FL 32327 850-926-5310
Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration	Report No. EPA/600/R-94/051, USEPA (1994).
Preliminary Data Summary of Urban runoff Best Management Practices (August 1999) EPA-821-R-99-012	*http://www.epa.gov/ost/stormwater/*
Reference Guide for Stormwater Best Management Practices (July 2000)	City of Los Angeles Urban runoff Management Division 650 South Spring Street, 7th Floor Los Angeles, California 90014 *http://www.lacity.org/san/swmd/*
Second Nature: Adapting LA's Landscape for Sustainable Living (1999) by Tree People Detailed discussion of BMP designs presented to conserve water, improve water quality, and achieve flood protection.	Tree People 12601 Mullholland Drive Beverly Hills, CA 90210 (818) 623-4848 Fax (818) 753-4625
Start at the Source (1999) Detailed discussion of permeable pavements and alternative driveway designs presented.	Bay Area Stormwater Management Agencies Association 2101 Webster Street Suite 500 Oakland, CA 510-286-1255

SUGGESTED RESOURCES	HOW TO GET A COPY
Stormwater Management in Washington State (1999) Vols. 1-5 Presents detailed guidance on BMP design for new development and construction.	Department of Printing State of Washington Department of Ecology P.O. Box 798 Olympia, WA 98507-0798 360-407-7529
Stormwater, Grading and Drainage Control Code, Seattle Municipal Code Section 22.800-22.808, and Director's Rules, Volumes 1-4. (Ordinance 119965, effective July 5, 2000)	City of Seattle Department of Design, Construction & Land Use 700 5th Avenue, Suite 1900 Seattle, WA 98104-5070 (206) 684-8880 *http://www.ci.seattle.wa.us/dclu/Codes/sgdccode.htm*
Texas Nonpoint Source Book – Online Module (1998)www.txnpsbook.org Presents BMP design and guidance information on-line	Texas Statewide Urban runoff Quality Task Force North Central Texas Council of Governments 616 Six Flags Drive Arlington, TX 76005 817-695-9150
The Practice of Watershed Protection by Thomas R. Shchuler and Heather K. Holland	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 www.cwp.org
Urban Storm Drainage, Criteria Manual – Volume 3, Best Management Practices (1999) Presents guidance for designing BMPs	Urban Drainage and Flood Control District 2480 West 26th Avenue, Suite 156-B Denver, CO 80211 303-455-6277

APPENDIX H

POTENTIAL PERMANENT TREATMENT BMP MAINTENANCE MECHANISMS

1. Project proponent agreement to maintain storm water BMPs: The City may enter into a contract with the project proponent obliging the project proponent to maintain, repair and replace the storm water BMP as necessary into perpetuity. Security may be required.
2. Assessment districts: The City may approve an Assessment District or other funding mechanism created by the project proponent to provide funds for storm water BMP maintenance, repair and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.
3. Lease provisions: In those cases where the City holds title to the land in question, and the land is being leased to another party for private or public use, the City may assure storm water BMP maintenance, repair and replacement through conditions in the lease.
4. Public entity maintenance: The City may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the permanent treatment BMP. Unless acceptable to the City, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed, (e.g., through a trust fund, assessment district fees, bond, letter of credit or similar means). In addition, the City may seek protection from liability by appropriate releases and indemnities. The City shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The City shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions; and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the facilities. The City must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

The City may accept alternative maintenance mechanisms if such mechanisms are as protective as those listed above.

APPENDIX I

DEFINITIONS

"Attached Residential Development" means any development that provides 10 or more residential units that share an interior/exterior wall. This category includes, but is not limited to: dormitories, condominiums and apartments.

"Automotive Repair Shop" means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

"Best Management Practices" see: "storm water best management practices".

"Commercial Development" means any development on private land that is not exclusively heavy industrial or residential uses. The category includes, but is not limited to: automotive dealerships, commercial airfields, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses, hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, and other light industrial complexes.

"Commercial Development greater than 100,000 square feet" means any commercial development that with a project footprint of at least 100,000 square feet.

"Construction Permits" means any ministerial, building, demolition/removal, grading and public right-of-way permits

"Detached Residential Development" means any development that provides 10 or more freestanding residential units. This category includes, but is not limited to: detached homes, such as single-family homes and detached condominiums.

"Directly Connected Impervious Area (DCIA)" means the area covered by a building, impermeable pavement, and/ or other impervious surfaces, which drains directly into the storm water conveyance system without first flowing across permeable vegetated land area (e.g., lawns).

"Discretionary Actions" means any adoption or amendment of a land use plan, zoning or rezoning action, development agreement, subdivision of land in accordance with the Subdivision Map Act, or development permits

"Environmentally Sensitive Areas" (ESA) means areas that include, but are not limited to, all Clean Water Act 303(d) impaired water bodies ("303[d] water bodies"); areas designated as an "Area of Special Biological Significance" (ASBS) by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated as having a RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego

Basin (1994) and amendments), or areas designated as preserves or their equivalent under the Multiple Species Conservation Program (MSCP) within the Cities and County of San Diego. The limits of Areas of Special Biological Significance are those defined in the Water Quality Control Plan for the San Diego Basin (1994 and amendments).

Environmentally sensitive area is defined for the purposes of implementing SUSMP requirements, and does not replace or supplement other environmental resource-based terms, such as "Environmentally Sensitive Lands," employed by the City in their land development review processes.

"Hillside" means lands that have a natural gradient of 25 percent (4 feet of horizontal distance for every 1 foot of vertical distance) or greater and a minimum elevation differential of 50 feet, or a natural gradient of 200 percent (1 foot of horizontal distance for every 2 feet of vertical distance) or greater and a minimum elevation differential of 10 feet.

"Hillside development greater than 5,000 square feet" means any development that would create more than 5,000 square feet of impervious surfaces in hillsides with known erosive soil conditions.

"Infiltration" means the downward entry of water into the surface of the soil.

"Maximum Extent Practicable (MEP)" means the technology-based standard established by Congress in the Clean Water Act 402(p)(3)(B)(iii) that municipal dischargers of urban runoff must meet. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional lines of defense).

"New Development" means land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces; and land subdivision.

"Parking Lot" means land area or facility for the temporary parking or storage of motor vehicles used personally, or for business or commerce.

"Projects Discharging to Receiving Waters within Environmentally Sensitive Areas" means all development and significant redevelopment that would create 2,500 square feet of impervious surfaces or increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition, and either discharge urban runoff to a receiving water within an environmentally sensitive area (where any portion of the project footprint is located within 200 feet of the environmentally sensitive area), or discharge to a receiving water within an environmentally sensitive area without mixing with flows from adjacent lands (where the project footprint is located more than 200 feet from the environmentally sensitive area).

"Project Footprint" means the limits of all grading and ground disturbance, including landscaping, associated with a project.

"Receiving Waters" means surface bodies of water, which directly or indirectly receive discharges from urban runoff conveyance systems, including naturally occurring wetlands, streams (perennial, intermittent, and ephemeral (exhibiting bed, bank, and ordinary high water mark)), creeks, rivers, reservoirs, lakes, lagoons, estuaries, harbors, bays and the Pacific Ocean. The City shall determine the definition for wetlands and the limits thereof for the purposes of this definition, provided the City definition is as protective as the Federal definition utilized by the United States Army Corps of Engineers and the United States Environmental Protection Agency. Constructed wetlands are not considered wetlands under this definition, unless the wetlands were constructed as mitigation for habitat loss. Other constructed BMP's are not considered receiving waters under this definition, unless the BMP was originally constructed in receiving waters.

"Residential Development" means any development on private land that provides living accommodations for one or more persons. This category includes, but is not limited to: single-family homes, multi-family homes, condominiums, and apartments.

"Restaurant" means a stand-alone facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812).

"Significant Redevelopment" means development that would create or add at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to: the expansion of a building footprint; addition to or replacement of a structure; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots; new sidewalk construction, pedestrian ramps, or bikelane on existing roads; and replacement of damaged pavement.

"Site Design BMP" means any project design feature that reduces the creation or severity of potential pollutant sources or reduces the alteration of the project site's natural flow regime. Redevelopment projects that are undertaken to remove pollutant sources (such as existing surface parking lots and other impervious surfaces) or to reduce the need for new roads and other impervious surfaces (as compared to conventional or low-density new development) by incorporating higher densities and/or mixed land uses into the project design, are also considered site design BMPs.

"Source Control BMP (both structural and non-structural)" means land use or site planning practices, or structures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff. Examples include roof structures over trash or material storage areas, and berms around fuel dispensing areas.

"Storm Water Best Management Practice (BMP)" means any schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, structural treatment BMPs, and other management practices to prevent or reduce to the maximum extent practicable the discharge of pollutants directly or indirectly to receiving waters. Storm Water BMPs also include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. This manual groups development-related storm water BMPs into two categories: (1) *construction BMPs*, which are practices, procedures, devices or materials used to prevent the transport and introduction of pollutants both on and from a project site during construction; and (2) *permanent BMPs*, which are the site design features, source control features, and treatment control BMPs that become a permanent part of a project's design and remain functioning throughout the "use" phase of a project site. (See the definitions for site design, source control and treatment control BMPs in this appendix).

"Storm Water Conveyance System" means private and public drainage facilities by which storm water may be conveyed to Receiving Waters, such as: ditches, natural drainages, roads, streets, constructed channels, aqueducts, storm drains, pipes, street gutters, or catch basins.

"Streets, Roads, Highways, and Freeways" means any project that is not part of a routine maintenance activity, and would create a new paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles and other vehicles. For the purposes of SUSMP requirements, Streets, Roads, Highways and Freeways do not include trenching and resurfacing associated with utility work; applying asphalt overlay to existing pavement; new sidewalk, pedestrian ramps, or bikelane construction on existing roads; and replacement of damaged pavement.

"Treatment Control (Structural) BMP" means any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

City of Carlsbad

Engineering Standards

Volume 4
Storm Water Standards Manual

2004 Edition

Revised 3/24/08 and 6/4/08

CITY OF CARLSBAD
ENGINEERING STANDARDS

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REVISIONS/ADDENDUM		
CHAPTER/ PAGE/DWG.	**ITEM**	**REVISION DATE**
All of Volume 4	Update to implement new storm water requirements	3/24/2008
Revised Cover Sheet (all), Table of Contents (all), Introduction (all), Chapter 2 text (all) Chapter 2 Appendix C (all), Chapter 3 text (all) and Chapter 3 Appendix B. Added Chapter 2 Appendix G	Changed all Section references to Chapter references. Minor revisions throughout Chapters 2 and 3 to correct typographical errors, correct certain document references and improve clarity. Update Stormwater Standards Questionnaire on redevelopment projects. Revised list of exempted projects on page 10 of Chapter 3 and on Storm Water Compliance Exemption Form in Appendix B. Cover Sheet revised to read "2004 Version" with listed revision dates. Added Appendix G (Interim Hydromodification Criteria) to Chapter 2. Revised Chapter 2 Appendix C to specify Qualified SWMP Preparer.	6/04/2008

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3.1 Construction SWPPP Standards Introduction

3.1.1 Background Information

The Construction Storm Water Pollution Prevention Plan (SWPPP) standards and requirements described herein were established to ensure construction compliance with the City of Carlsbad Storm Water Ordinance and the Municipal Permit, as issued by the Regional Water Quality Control Board for the San Diego Region (see below for Municipal Permit reference details). This chapter must be used in conjunction with other chapters of this manual to ensure full compliance with both construction and post construction storm water requirements. This chapter addresses the need for temporary Best Management Practices (BMPs) during construction activities to minimize the mobilization of pollutants such as sediment and to minimize the exposure of storm water to pollutants.

Pursuant to Titles 11, 15 and 18 of the Carlsbad Municipal Code, all construction activities within the City, whether the City issues a construction permit or not, are subject to the provisions of the standards and requirements of this manual.

The water quality protection measures and construction procedures described in this chapter of the manual are intended to ensure construction activity compliance with the following State and Regional water quality permits:

Municipal Permit -more particularly described as San Diego California Regional Water Quality Control Board San Diego Region Order No. R9-2007-01, NPDES No. CAS0108758 Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority and any amendment, revision or re-issuance thereof; and,

General Construction Permit - more particularly described as NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Water Quality Order No. 99-08-DWQ, NPDES No. CAS000002, issued by the State Water Resources Control Board (Construction General Permit), and any amendment, revision or re-issuance thereof; and,

General Linear Utility Permit - more particularly described as NPDES General Permit for Storm Water Discharges Associated with Construction Activity from Small Linear Underground/Overhead Projects, Water Quality Order 2003-0007 DWQ issued by the State Water Resources Control Board, and any amendment, revision or re-issuance thereof.

3.1.2 Standards Applicability to Construction Projects

All construction activities in the City of Carlsbad are subject to the requirements of the Municipal Permit. Construction activities that meet one or more of the following criteria are additionally subject to the requirements of the General Construction Permit. Construction activities that:

1) Disturb one or more acres of land area;
2) Form part of a larger common plan of development that encompasses one or more acres of soil disturbance; or
3) Have the potential for significant water quality impairment.

The General Construction Permit does not apply to routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of an existing facility, nor does it include emergency construction activities required to protect public health and safety. Developers/owners/contractors should confirm with the San Diego Regional Water Quality Control Board (SDRWQCB) staff whether or not a particular routine maintenance activity is subject to the General Construction Permit.

Construction of small linear utility facility projects that are not subject to the General Construction Permit are subject to the requirements of the General Linear Utility Permit. This includes but is not limited to construction of any conveyance pipe for transportation of gaseous, liquid, liquescent or slurry material; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications; and, associated ancillary facilities. Developers/owners/contractors should confirm with the SDRWQCB staff whether or not a particular underground or overhead utility construction project is subject to the General Linear Utility Permit.

3.2 Construction SWPPP Requirements and Approval Process

3.2.1 Construction SWPPP Tier Levels

Every construction activity within the City that has the potential to negatively affect water quality must prepare a construction storm water pollution prevention plan (Construction SWPPP) whether or not the City issues a construction permit for the activity. To ensure compliance with all the various State and Regional permitting regulations, the City established a three-tiered system for the preparation of Construction SWPPPs. The tiers range from Tier 3 representing the highest threat to water quality to Tier 1 representing the lowest threat to water quality. The threshold triggers for each of the three tier levels are generally described below together with a reference to the applicable Construction SWPPP standards.

Tier 3 - Construction activities that impact one or more acres (individually or cumulatively through phased construction) or that, regardless of size, pose a significant potential for storm water quality impairment must prepare a Tier 3 Construction SWPPP in conformance with the standards and requirements of the Construction General Permit and City Standards.

Tier 2 - Construction activities that impact less than one acre and that pose a moderate threat to storm water quality must prepare a Tier 2 Construction SWPPP in conformance with City Standards. In the case of small linear underground/overhead utility projects, the project must also demonstrate compliance with the General Linear Utility Permit.

Tier 1 - Construction activities that impact less than one acre and pose a low threat to storm water quality must prepare a Tier 1 Construction SWPPP in conformance with City Standards. In the case of small linear underground/overhead utility projects, the project must also demonstrate compliance with the General Linear Utility Permit.

Exempt - Construction activities that pose no threat to storm water quality are exempt from the preparation of a Construction SWPPP; however, the construction activities must still comply with all construction BMPs required pursuant to Title 15 of the CMC and these standards.

3.2.2 Determination of Construction SWPPP Tier Level

The worksheet entitled "Project Threat Assessment Worksheet for Determination of Construction SWPPP Tier Level", attached as Appendix A, shall be used to determine the appropriate tier level of Construction SWPPP for a proposed construction project. The worksheet is also used to determine whether the project is exempt from Construction SWPPP requirements. The completed worksheet shall be submitted with applications for each construction permit submitted to the City including building permits, grading permits and right-of-way permits.

To make a determination, the project reviewer starts with the assessment criteria located at the top of the worksheet along the left hand column and works downward through the various threat categories and assessment criteria. At the first point where the proposed project makes a match with the assessment criteria, a check is made in the box next to the criteria. The tier level listed in the right hand column in the same row as the selected assessment criteria is the required Construction SWPPP Tier Level for the project.

If none of the boxes in the Significant, Moderate or Low Threat Project Assessment Criteria categories are checked, then the project is exempt from the Construction SWPPP requirements. Proposed construction projects may be considered categorically exempt from the Construction SWPPP requirements when, and if, the project only requires issuance of one or more of the construction permit types shown on Table1 below.

Exempt projects must still comply with all storm water best management practices pursuant to Title 15 of the Carlsbad Municipal Code and City Standards. If in the opinion of the City Engineer, an otherwise exempt project is, or potentially could pose, a threat to storm water quality, the City Engineer may require preparation and implementation of a Construction SWPPP at a tier level commensurate with the storm water threat

Table 1	
City Construction Permit Types Exempt from Construction SWPPP Requirements	
Electrical Permit Fire Additional Permit Fire Alarm Permit Fixed Systems Permit Mechanical Permit Mobile Home Permit Re-Roofing Permit	Patio Deck Plumbing Permit Sign Permit Spa □ Factory Made Sprinkler Permit Water Discharge Permit

Cautionary Note - The Project Threat Assessment Worksheet represents the project proponent's assessment of the threat posed by a proposed construction project. City staff has responsibility for making the final assessment regarding the need for and tier level of Construction SWPPP required The City staff decision is made after submission of the plan review application. A staff determination that the construction plan review application is subject to the preparation of a Construction SWPPP, or is subject to more stringent Construction SWPPP requirement than initially assessed by the applicant (project proponent), will result in the return of the plan review application as incomplete.

If applicants are unsure about the meaning of any of the assessment criteria described in the worksheet or need help in determining how to respond to one or more of the assessment criteria, they are strongly encouraged to seek assistance from Engineering Department Development Services staff prior to preparation of the Construction SWPPP and submission for construction plan review.

3.2.3 Qualified Persons to Prepare a Construction SWPPP

The project proponent is responsible for preparing the appropriate tier level Construction SWPPP. Tier 2 and Tier 3 Construction SWPPPs shall be prepared in accordance with the requirements of this manual. All Tier 2 and Tier 3 Construction SWPPPs shall be written, amended and certified by a Qualified SWPPP Preparer.

A Qualified SWPPP Preparer shall have one of the following registrations or certifications:

1. A California registered civil engineer,
2. A California registered geologist,
3. A California registered landscape architect,
4. A professional hydrologist registered through the American Institute of Hydrology,
5. A certified professional soil scientist registered through the Soil Science Society of America,
6. A certified professional in erosion and sediment control registered through Certified Professional in Erosion and Sediment Control, Inc.,
7. A certified professional in storm water quality registered through Certified Professional in Erosion and Sediment Control, Inc., or
8. A certified professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies.

Any hydrology or hydraulic calculations, soils reports or geotechnical reports prepared in support of a Tier 2 or Tier 3 Construction SWPPP must be prepared by a professional engineer with appropriate registration qualifications issued by the State of California.

The City Engineer may approve alternative means for establishing the certification of a Qualified SWPPP Preparer for Tier 2 or Tier 3 Construction SWPPPs upon submittal of a letter by the project proponent requesting approval of an alternative certification and presenting due cause why such alternative certification should be considered.

Projects requiring a Tier 1 Construction SWPPP shall use the City s Tier 1 Construction SWPPP Standard Template attached as Appendix H. No special qualification is required to prepare a Tier 1 Construction SWPPP.

3.2.4 Storm Water Certification Forms

For non-exempt projects, the project proponent must submit a certified Construction SWPPP (of the appropriate tier level) concurrent with any application for construction plan review including submittals for building plans, public and private improvement plans, grading plans, blasting plans, demolition plans, landscape plans and plans for right-of-way construction activities.

In addition to any other required construction plan review application submittal requirements, the project proponent must submit a completed and signed Storm Water Compliance Certification statement on the form prescribed in this Manual. A separate certification form is used corresponding to each of the three Construction SWPPP tier levels and for exempt projects. Copies of the required Storm Water Compliance Forms for Tier 2 and 3 Construction SWPPPs and for exempt projects are attached as Appendix B. The Storm Water Compliance statement for a Tier 1 Construction SWPPP is incorporated into the City's standard form Tier 1 Construction SWPPP attached as Appendix H.

After submittal of the application, City staff will review the Storm Water Compliance statement and either note concurrence with the proponents threat assessment at the bottom right hand corner of the Storm Water Compliance Form or reject the application as incomplete and return the application submittal package with a written explanation why the project threat assessment should be changed. See Cautionary Note in Chapter 3.2.1 above.

3.2.5 Project Threat to Storm Water Quality

Before a project construction permit can be issued for any project not found exempt from the Construction SWPPP requirements, a project's perceived threat to storm water quality must be determined. The Municipal Permit mandates that the City provide inspection commensurate with a project's perceived threat to storm water quality. The assessment criteria used to determine a project's perceived threat to storm water quality is not the same as the assessment criteria used to determine the tier level of Construction SWPPP for a project.

The worksheet entitled "Construction Threat Assessment Worksheet for Determination of Project's Perceived Threat to Storm Water Quality", attached as Appendix C, is used to determine the appropriate perceived threat to storm water compliance for a particular project. The projects perceived threat to storm water quality relates to the frequency of storm water compliance inspections required under the Municipal Permit and is one of the factors used to determine the City Construction SWPPP inspection fee. For more detailed information on storm water compliance inspections please refer to Chapter 3.4 of this manual.

3.2.6 Tier 3 Construction SWPPP Requirements

For projects that result in the disturbance of one acre or more of soil (individually or cumulatively through phased construction) and/or are determined to have a significant potential for water quality impairment, a Tier 3 Construction SWPPP shall be prepared in accordance with the requirements of the General Construction Permit and these standards.

3.2.6.1 Required Elements for Tier 3 Construction SWPPP

A Tier 3 Construction SWPPP must contain all of the elements required by the General Construction Permit, the Municipal Permit and these standards. The *TIER 3 CONSTRUCTION SWPPP REQUIRED ELEMENTS CHECKLIST*, attached as Appendix B, provides a complete listing of the required elements for a Tier 3 Construction SWPPP together with the regulatory source for each listed element. The checklist utilizes the same formatting as the checklist prepared by the State Water Resources Control Board entitled *STORM WATER POLLUTION PREVENTION PLAN AND MONITORING PROGRAM CHECKLIST,* modified to include elements required by the Municipal Permit and these standards.

The checklist is provided as an aid to those unfamiliar in the preparation of a Tier 3 Construction SWPPP. It is a comprehensive list of issues a SWPPP preparer must consider during the development of the document. Many sites, especially small construction sites, will not need to address some of the listed elements because they are not relevant to the site, the construction activities planned, or the construction materials used. The list allows the preparer to consider the applicability of the element to the specific circumstances of the site, and then determine to what extent the element should be addressed in the SWPPP.

The elements in the checklist are derived from Sections A, B, and C of the General Construction Permit, Section D.2. of the Municipal Permit, and these standards. The specific regulatory permit or City Standard chapter is listed in the second column. The third column indicates the page number(s) in the SWPPP document where the line item element is addressed. If the required element is not applicable to the specific project, then N/A should be noted in the fourth column. The fifth column is a space to note the scheduled date where any specified BMP elements will be implemented.

The use of this checklist does not guarantee compliance with the General Construction Storm Water Permit or these standards. Additionally, using the checklist to generate a Tier 3 Construction SWPPP is not a substitute for knowledge of the permit requirement. The checklist serves as a guidance document only. A site specific Tier 3 Construction SWPPP must be combined with proper and timely installation of the BMPs, thorough and frequent inspections, maintenance, and documentation.

3.2.6.2 Required Format for a Tier 3 Construction SWPPP

A Tier 3 Construction SWPPP shall be formatted in accordance with the SWPPP template included in the latest version of the *California Stormwater BMP Handbook Construction"* prepared by the California Storm Water Quality Association (CASQA). As an alternative, the developer may use the Construction SWPPP format presented in the latest edition of the *Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual* prepared by Caltrans. The developer/owner/applicant must request approval for the use of the Caltrans format prior to submittal.

As an aide to the preparation of a Tier 3 Construction SWPPP document, the preparer may utilize the *Tier 3 CONSTRUCTION SWPPP CASQA FORMAT CHECKLIST (CASQA SWPPP Checklist)* included in Appendix C. The Tier 3 CASQA SWPPP Checklist is used by the City during its review of the Tier 3 Construction SWPPP documents.

The use of the checklist does not guarantee compliance with the General Construction Storm Water Permit or these standards. Additionally, using the checklist to generate a Tier 3 Construction SWPPP is not a substitute for knowledge of the permit requirement. The checklist serves as a guidance document only. A site specific Tier 3 Construction SWPPP must be combined with proper and timely installation of the BMPs, thorough and frequent inspections, maintenance, and documentation.

3.2.6.3 General Construction Permit Compliance Procedures

The General Construction Permit requires certain standard notifications to be made to the San Diego Regional Water Quality Control Board (SDRWQCB) prior to initiation of construction and after completion of construction as follows:

Notice of Intent (NOI) - It is the responsibility of the owner/developer/applicant to obtain coverage under the General Construction Permit through the filing of a Notice of Intent (NOI) with the SDRWQCB prior to commencement of construction activities. After City approval of the Tier 3 Construction SWPPP and prior to signature of the grading plans and/or issuance of grading permit for the project, the owner/developer/applicant shall submit the City approved Tier 3 Construction Permit, a filing fee and other required documentation to the SDRWQCB. Upon filing of the NOI, the project will be assigned a Waste Discharger's Identification (WDID) number by the SDRWQCB. The WDID number must be added into the Tier 3 Construction SWPPP and affixed onto the respective construction plans.

Notice of Termination (NOT) - Upon completion of the construction activity or transfer of ownership, the landowner shall file a NOT with the SDRWQCB certifying that all State and local requirements have been met in accordance with Special Provisions for Construction Activity, C.7, of the General Construction Permit.

Landowners who fail to obtain coverage of the General Construction Permit for storm water discharges to surface waters will be in violation of the CWA and the California Water Code.

To obtain a copy of the General Construction Permit, general information about the permit, fact sheets and copies of the various forms described below, visit the following website:

http://www.swrcb.ca.gov/stormwtr/construction.html

Once at the site click on the highlighted link titled "Construction General Permit, 99-08-DWQ".

3.2.7 Tier 2 Construction SWPPP Requirements

Construction activities that impact less than one acre and pose a moderate threat to water quality (as determined by the moderate threat assessment criteria contained in the Project Threat Assessment Worksheet attached as Appendix A) must prepare a Tier 2 Construction SWPPP in conformance with City Standards. Small linear underground or overhead utility projects must also comply with the requirements of the General Linear Utility Permit.

3.2.7.1 Required Elements for Tier 2 Construction SWPPP

A Tier 2 Construction SWPPP shall contain all of the elements as described on the TIER 2 CONSTRUCTION SWPPP CHECKLIST attached as Appendix G.

The use of the checklist does not guarantee compliance with these standards. The checklist serves as a guidance document only. A site specific Tier 2 Construction SWPPP must be combined with proper and timely installation of the BMPs, thorough and frequent inspections, maintenance, and documentation.

3.2.7.2 Required Format for Tier 2 Construction SWPPP

A Tier 2 Construction SWPPP shall be formatted in accordance with the template attached as Appendix F.

For small linear utility construction project subject to the General Linear Utility Permit, the project proponent shall follow the requirements of the General Linear Utility Permit for preparation of a Tier 2 Construction SWPPP. The Tier 2 SWPPP specified in the General Linear Utility Permit shall be submitted to the City in lieu of the City standard form Tier 2 Construction SWPPP.

3.2.8 Tier 1 Construction SWPPP Requirements

Construction activities that impact less than one acre and pose a low threat to water quality (as determined by the low threat assessment criteria contained in the Project Threat Assessment Worksheet attached as Appendix A) must prepare a standard format Tier 1 Construction SWPPP in conformance with City Standards. Small linear underground or overhead utility projects must also comply with the requirements of the General Linear Utility Permit.

3.2.8.1 Required Standard Format for Tier 1 Construction SWPPP

A Tier 1 Construction SWPPP shall utilize the standard form Tier 1 Construction SWPPP template attached as Appendix H. The standard form template includes the two sheets containing standard storm water prevention construction notes, a project information block, a Storm Water Compliance Statement, City approval block and a Best Management Practice (BMP) Checklist Table.

A Tier 1 level project that receives a low perceived threat to storm water quality rating as determined by the Construction Threat Assessment Worksheet, attached as Appendix C, need only complete and sign the first two sheets of the template. A Tier 1 level project that receives a medium perceived threat to storm water quality rating as determined by the Construction Threat Assessment Worksheet must additionally, attach

a site plan map sheet(s) showing the proposed construction site and depicting the areas of proposed construction and proposed location of structural BMPs. For a more detail description regarding the site plan requirements, see the site plan instruction sheet included with the template in Appendix H.

For all Tier 1 Construction SWPPPs, the property owner or owner's agent must complete the information in the Project Information block, check the appropriate boxes in the BMP Checklist Table and fill out and sign the Storm Water Compliance Statement. The form is intended to be completed as an "over the counter" type document for processing of construction permits for projects with a "low perceived threat to storm water quality". Projects with a "medium perceived threat to storm water quality", may require additional staff time to review the site plan included with the Tier 1 Construction SWPPP.

The BMP Checklist Table on page two of the standard form template is intended to be completed by the project proponent. The project proponent begins by checking the box to the left of each construction activity that will be performed during construction of the proposed project. Then, for each checked activity, the project proponent will pick one or more of the BMPs described along the top of the table that will be used to prevent storm water pollution resulting from that specific activity. The project proponent will then make a check in the box along the particular construction activity row that corresponds with the column for each BMP selected to help mitigate the potential storm water pollution effects of the activity. This process is repeated until all appropriate BMP boxes have been checked corresponding to each of the checked construction activities. Blank columns are included on the form to allow the applicant to add additional proposed BMPs not included on the standard table.

The owner/developer/contractor performing the construction work is responsible for ensuring that each of the selected BMPs is appropriately incorporated into the project during construction. The use of the BMP Checklist Table does not guarantee compliance with these standards. The BMP Checklist Table serves as a guidance document only. Additional BMPs may be required if the selected BMP(s) are shown to be ineffective or not relevant to a particular construction activity.

For small linear utility construction project subject to the General Linear Utility Permit, the project proponent shall follow the requirements of the General Linear Utility Permit for preparation of a Tier 1 Construction SWPPP. The Tier 1 SWPPP specified in the General Linear Utility Permit shall be submitted to the City in lieu of the City standard form Tier 1 Construction SWPPP.

3.2.9 General Linear Utility Permit Compliance Procedures

The General Linear Utility Permit requires certain standard notifications to be made to the San Diego Regional Water Quality Control Board (SDRWQCB) prior to initiation of construction and after completion of construction as described below. To obtain a copy of the General Linear Utility Permit, general information about the permit, fact sheets and copies of the various forms described below, visit the following website:

http://www.swrcb.ca.gov/stormwtr/construction.html

Once at the site click on the highlighted link titled "Small LUP General Permit".

3.2.9.1 Notice of Intent (NOI)

It is the responsibility of the owner/developer/applicant to obtain coverage under the General Linear Permit through the filing of a Notice of Intent (NOI) with the SDRWQCB prior to commencement of construction activities. After City approval of the Tier 2 or Tier 1Construction SWPPP and prior to issuance of grading and/or right-of-way permit for the project, the project proponent shall submit the City approved Construction Permit, a filing fee and other required documentation to the SDRWQCB. Upon filing of the NOI, the project will be assigned a Waste Discharger's Identification (WDID) number by the SDRWQCB. The WDID number must be added into the Construction SWPPP and affixed onto the respective construction plans

3.2.9.2 General Linear Utility Permit - Tier 1 SWPPP

A single Tier 1 SWPPP prepared in accordance with the General Linear Utility Permit may authorize construction of any number of small utility projects. The Notice of Intent (NOI) and corresponding WDID number remains in effect until the discharger requests termination and such termination request is approved by the SDRWQCB.

3.2.9.2.1 Linear Construction Activity Notification (LCAN)

Prior to initiation of construction for each small utility project covered by the Tier 1 SWPPP, the discharger must submit a LCAN to the SDRWQCB prior to start of construction on the form provided for such purpose by the SDRWQCB. Alternatively, the discharger may submit a LCAN at least quarterly listing multiple small utility projects that will be constructed during the next quarter.

3.2.9.2.2 Linear Construction Termination Notification (LCTN)

At the conclusion of construction of small utility project covered by a Tier 1 SWPPP, the discharger must file a LCTN with the SDRWQCB certifying that the site was in full compliance with the requirements of the General Linear Utility Permit. The discharger may submit a single LCTN for multiple projects completed over a specified period of time. The LCTN submittal must include all required documentation requested by the SDRWQCB.

3.2.9.3 Notice of Termination (NOT)

Upon completion of the construction activity the discharger shall file a NOT with the SDRWQCB certifying that all construction activities were completed in full compliance with the requirements of the General Linear Utility Permit. For Tier 1 SWPPPs, filing of the NOT, and approval of the NOT by the SDRWQCB, will terminate permit coverage and work on additional small utility projects will no longer be permitted without obtaining an new Tier 1 or Tier 2 SWPPP. A NOT for a Tier 2 SWPPP indicates that the specified small utility project is complete and all work was done in compliance with the General Linear Utility Permit. When filing the NOT dischargers must use the NOT forms provided by the SDRWQCB.

3.2.9.4 City General Operating Permit (GOP)

The City's GOP procedures are intended to provide a mechanism for utility operators to conduct routine maintenance operations under a single permit. To avoid the need for

preparing and processing separate Construction SWPPPs for each routine maintenance operation, the City will allow preparation of a single Tier 1 Construction SWPPP to cover multiple small utility projects. The process will follow the same procedures as for a Tier 1 SWPPP prepared and processed in accordance with City Standards and the requirements of the General Linear Utility Permit.

The notification procedures described above shall apply with the following addition:

1. A copy of each LCAN shall be faxed to the City Construction Management and Inspection Division a minimum of 24 hours prior to start of construction. A copy of the fax notification shall be kept at the construction site. The copy shall be presented and shown upon demand to any City Official for verification of authority to work. A lack of 24-hour notification to the City for intended work may subject the operator to a stop-work notice.
2. A copy of the LCTN shall be submitted to the City Construction Management and Inspection Division concurrent with its submittal to the RWQCB.
3. A copy of the NOT shall be submitted to the City Construction Management and Inspection Division concurrent with its submittal to the RWQCB.

Any Small Utility Project that meets the requirements of a Tier 2 SWPPP pursuant to the General Linear Utility Permit requirements shall process a Tier 2 SWPPP consistent with Tier 2 Construction SWPPP procedures described above.

3.3 Construction BMP Standards

3.3.1 Background Information

Construction Best Management Practices (BMPs) are the schedules of activities, prohibitions of practices, maintenance procedures and other management practices employed during construction activities to prevent or reduce pollution of the ocean, lagoons, lakes, streams and other sensitive water bodies and water courses. Construction BMPs also include the physical devices and structural construction control measures designed to prevent soil erosion from occurring or to contain sediment before it leaves the construction site. The BMPs required pursuant this manual are also intended to protect the health, safety and welfare of the public and to prevent damage to adjoining public and private property resulting from construction activities.

The City of Carlsbad has adopted the California Stormwater Quality Association Construction Stormwater Best Management Practice Handbook (CASQA Construction Handbook) latest edition as its preferred source for construction BMPs. All BMP reference numbers used in this manual correspond to the BMP Fact Sheets included within the CASQA Construction Handbook unless specifically noted otherwise. With the approval of the City Engineer, or his/her designee, the City may accept comparable BMPs from reputable alternative sources such as Caltrans.

This manual is not intended as a comprehensive engineering or design manual on BMPs. The engineer or other qualified person, who prepares the Construction SWPPP, must utilize their individual knowledge and experience of BMPs together with the tools and reference materials described in this manual, or found elsewhere, to prepare an appropriate and adequate Construction SWPPP document.

The BMP categories below coincide with the BMP categories described in the CASQA Construction Handbook and provide a kind of checklist of the BMPs that are to be included in a Construction SWPPP. The combination or suite of BMPs that are included in a Construction SWPPP must reflect the specific conditions at the proposed construction site. An effective SWPPP includes a suite of BMPs that are designed to work together.

3.3.2 Minimum BMP Requirements

In accordance with the Municipal Permit, minimum BMPs must be installed for all projects to be implemented year-round. Because all sites, regardless of the priority, must be protected to prevent discharges to the maximum extent practicable, the minimum BMP requirements are the same for all projects requiring a Construction SWPPP. Each site must be protected by an effective combination of erosion and sediment controls, non-storm water management, materials and waste management controls, and general site management controls. The chapters following this chapter describe the minimum BMPs for each of the above listed BMP types that must be

incorporated into each Construction SWPPP prepared in accordance with these standards.

If particular BMPs are infeasible at any specific site, the owner/developer/contractor must install other equivalent BMPs. At any time of the year, an inactive site must be fully protected from erosion and discharges of sediment. A site will be considered inactive if construction activities have ceased for a period of ten or more consecutive days. It is also the owner/developer/contractors responsibility at both active and inactive sites to implement a plan to address all potential storm water and non-storm water discharges.

3.3.3 Erosion and Sediment Control BMPs

Erosion and sediment control BMPs are the structural and non-structural practices used during the construction process to keep sediment in place (erosion control) and to capture any sediment that is moved by stormwater before it leaves the site (sediment control). Erosion controls, keeping soil where it is, are the heart of any effective Construction SWPPP. The Construction SWPPP should rely on erosion controls as the primary means of preventing stormwater pollution. Sediment controls provide a necessary second line of defense to properly designed and installed erosion controls.

3.3.3.1 Erosion Control BMPs

Erosion control is any source control practice that protects the soil surface and prevents soil particles from being detached by rainfall, flowing water or wind. Erosion control is referred to as soil stabilization. Erosion control consists of preparing the soil surface and implementing one or more of the BMPs shown in Table 2.

Table 2
Erosion Control BMPs

CASQA BMP	BMP Name
EC-1	Scheduling
EC-2	Preservation of Existing Vegetation
EC-3	Hydraulic Mulch
EC-4	Hydroseeding
EC-5	Soil Binders
EC-6	Straw Mulch
EC-7	Geotextiles & Mats
EC-8	Wood Mulching
EC-9	Earth Dikes and Drainage Swales
EC-10	Velocity Dissipation
EC-11	Slope Drains
EC-12	Streambank Stabilization
EC-13	Polyacrylamide

All inactive soil-disturbed areas on the project site, and most active areas prior to the onset of rain, must be protected from erosion. Soil disturbed areas may include relatively flat areas as well as slopes. Typically, steep slopes and large exposed areas require the most robust erosion controls; flatter slopes and smaller areas still require protection, but less costly materials may be appropriate for these areas, allowing savings to be directed to the more robust BMPs for steep slopes and large exposed areas. To be effective, erosion control BMPs must be implemented at slopes and disturbed areas to protect them from concentrated flows.

Some erosion control BMPs can be used effectively to temporarily prevent erosion by concentrated flows. These BMPs, used alone or in combination, prevent erosion by intercepting, diverting, conveying, and discharging concentrated flows in a manner that prevents soil detachment and transport. Temporary concentrated flow conveyance

controls may be required to direct run-on around or through the project in a non-erodible fashion. Temporary concentrated flow conveyance controls include EC-9 (Earth Dikes and Drainage Swales), EC-10 (Velocity Dissipation Devices) and EC-11 (Slope Drains).

3.3.3.2 Sediment Control BMPs

Sediment control is any practice that traps soil particles after they have been detached and moved by rain, flowing water, or wind. Sediment control measures are usually passive systems that rely on filtering or settling the particles out of the water or wind that is transporting them. Sediment control practices include the BMPs listed in Table 3.

Table 3
Sediment Control BMPs

CASQA BMP	BMP Name
SE-1	Silt Fence
SE-2	Sediment Basin
SE-3	Sediment Trap
SE-4	Check Dam
SE-5	Fiber Rolls
SE-6	Gravel Bag Berm
SE-7	Street Sweeping and Vacuuming
SE-8	Sandbag Barrier
SE-9	Straw Bale Barrier
SE-10	Storm Drain Inlet Protection
SE-11	Chemical Treatment

Sediment control BMPs include those practices that intercept and slow or detain the flow of stormwater to allow sediment to settle and be trapped. Sediment control practices can consist of installing linear sediment barriers (such as silt fence, sandbag barrier, and straw bale barrier); providing fiber rolls, gravel bag berms, or check dams to break up slope length or flow; or constructing a sediment trap or sediment basin. Linear sediment barriers are typically placed below the toe of exposed and erodible slopes, down-slope of exposed soil areas, around soil stockpiles, and at other appropriate locations along the site perimeter.

A few BMPs may control both sediment and erosion, for example, fiber rolls and sand bag barriers. The CASQA Construction Handbook classifies these BMPs as either erosion control (EC) or sediment control (SC) based on the BMPs most common and effective use. Sediment control BMPs are most effective when used in conjunction with erosion control BMPs. The combination of erosion control and sediment control is usually the most effective means to prevent sediment from leaving the project site and potentially entering storm drains or receiving waters. The City of Carlsbad requires that the discharger implement an effective combination of erosion and sediment controls.

Under limited circumstances, sediment control, alone may be appropriate. For example, applying erosion control BMPs to an area where excavation, filling, compaction, or grading is currently under way may not be feasible when storms come unexpectedly. Use of sediment controls by establishing perimeter control on these areas may be appropriate and allowable provided the following conditions are met:

- Weather monitoring is under way.
- Inactive soil-disturbed areas have been protected with an effective combination of erosion and sediment controls.
- An adequate supply of sediment control materials is stored on-site and there are sufficient forces of labor and equipment available to implement sediment controls on the active area prior to the onset of rain.
- The SWPPP adequately describes the methods to protect active areas.

3.3.3.3 Wind Erosion Control BMPs

Wind erosion control consists of applying water or other dust palliatives to prevent or alleviate dust nuisance. Wind erosion control best management practices BMPs are shown in Table 4.

Table 4
Wind Erosion Control BMPs

CASQA BMP	BMP Name
WE-1	Wind Erosion Control

Other BMPs that are sometimes applied to disturbed soil areas in order to control wind erosion are BMPs EC-2 through EC-7, shown in Chapter 3.3.2.1 above. Be advised that many of the dust palliatives may contain compounds that have an unknown effect on stormwater. A sampling and analysis protocol to test for stormwater contamination from exposure to such compounds is required in the SWPPP.

3.3.3.4 Tracking Control BMPs

Tracking control consists of preventing or reducing the tracking of sediment off-site by vehicles leaving the construction area. Tracking control best management practices (BMPs) are shown in Table 5.

Table 5
Tracking Control BMPs

CASQA BMP	BMP Name
TR-1	Stabilized Construction Ingress/Egress
TR-2	Stabilized Construction Roadway
TR-3	Ingress/Egress Tire Wash

Attention to control of tracking sediment off site is highly recommended, as dirty streets and roads near a construction site create a nuisance to the public and generate constituent complaints to elected officials and regulators. These complaints often result in immediate inspections and regulatory actions.

3.3.4 Non-Storm Water Management BMPs

Carlsbad Standards prohibit the discharge of materials other than stormwater and authorized non-stormwater discharges. It is recognized that certain non-stormwater discharges may be necessary for the completion of construction projects. Such discharges include but are not limited to irrigation of vegetative erosion control measures, pipe flushing and testing, and street cleaning.

Non-stormwater management BMPs are source control BMPs that prevent pollution by limiting or reducing potential pollutants at their source or eliminating off-site discharge. These practices involve day-to-day operations of the construction site and are usually under the control of the contractor. These BMPs are also referred to as good housekeeping practices which involve keeping a clean, orderly construction site.

Non-stormwater management BMPs also include procedures and practices designed to minimize or eliminate the discharge of pollutants from vehicle and equipment cleaning, fueling, and maintenance operations to stormwater drainage systems or to watercourses.

Table 6 lists standard non-stormwater management BMPs. All these BMPs must be implemented depending on the conditions and applicability of deployment described as part of the BMP.

Table 6
Non-Storm Water Management BMPs

CASQA BMP	BMP Name
NS-1	Water Conservation Practices
NS-2	Dewatering Operations
NS-3	Paving and Grinding Operations
NS-4	Temporary Stream Crossing
NS-5	Clear Water Diversion
NS-6	Illicit Connection/Discharge
NS-7	Potable Water/Irrigation
NS-8	Vehicle and Equipment Cleaning
NS-9	Vehicle and Equipment Fueling
NS-10	Vehicle and Equipment Maintenance
NS-11	Pile Driving Operations
NS-12	Concrete Curing
NS-13	Concrete Finishing
NS-14	Material and Equipment Use
NS-15	Demolition Adjacent to Water
NS-16	Temporary Batch Plants

It is recommended that owners and contractors be vigilant regarding implementation of these BMPs, including making their implementation a condition of continued employment, and part of all prime and subcontract agreements. By doing so, the chance of inadvertent violation by an uncaring individual can be prevented, potentially saving thousands of dollars in fines and project delays. Also, if procedures are not properly implemented and/or if BMPs are compromised then the discharge is subject to sampling and analysis requirements contained in the General Construction Permit.

3.3.5 Waste Management and Materials Pollution Control BMPs

Waste management and materials pollution control BMPs, like non-stormwater management BMPs, are source control BMPs that prevent pollution by limiting or reducing potential pollutants at their source before they come in contact with stormwater. These BMPs also involve day-to-day operations of the construction site, are under the control of the contractor, and are additional good housekeeping practices which involve keeping a clean, orderly construction site.

Table 7 Waste Management and Materials Pollution Control BMPs	
CASQA BMP	**BMP Name**
WM-1	Material Delivery and Storage
WM-2	Material Use
WM-3	Stockpile Management
WM-4	Spill Prevention and Control
WM-5	Solid Waste Management
WM-6	Hazardous Waste Management
WM-7	Contaminated Soil Management
WM-8	Concrete Waste Management
WM-9	Sanitary/ Septic Waste Management
WM-10	Liquid Waste Management

Waste management consists of implementing procedural and structural BMPs for handling, storing, and disposing of wastes generated by a construction project. The objective is to prevent the release of waste materials into stormwater runoff or discharges through proper management of the following types of wastes:

- Solid
- Sanitary
- Hazardous
- Equipment-related wastes

Materials pollution control (also called materials handling) consists of implementing procedural and structural BMPs in the handling, storing, and the use of construction materials. The BMPs are intended to prevent the release of pollutants during stormwater and non-stormwater discharges. The objective is to prevent or reduce the opportunity for contamination of stormwater runoff from construction materials by covering and/or providing secondary containment of storage areas, and by taking adequate precautions when handling materials. These controls must be implemented for all applicable activities, material usage, and site conditions.

Table 7 lists the waste management and materials pollution control BMPs. It is important to note that these BMPs should be implemented depending on the conditions/applicability of deployment described as part of the BMP.

3.3.6 General Site Management Requirements

Every construction site shall implement the following minimum general site management requirements:

1. Emphasize pollution prevention where appropriate; and,
2. Implement all the requirements of the site approved Construction SWPPP to manage storm water and non-storm water discharges from the site at all times; and,

3. Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction; and,
4. Minimize exposure time of disturbed soil areas; and,
5. Minimize grading during the wet season and coincide grading with seasonal dry weather periods to the extent feasible. If grading does occur during the wet season, then implement additional BMPs for any rain events that may occur; and,
6. Limit he amount of exposed soil allowed at one time to the amount that which can be adequately protected by deploying standby erosion control and sediment control BMPs prior to a predicted rainstorm; and,
7. Temporarily stabilize and/or re-seed disturbed soil areas as rapidly as possible; and,
8. Preserve the natural hydrologic features of the site where feasible; and,
9. Preserve riparian buffers and corridors where feasible; and,
10. Maintain all BMPs until removed; and,
11. Retain, reduce and properly manage all pollutant discharges on-site to the MEP standard.

3.3.6.1 Dry Season Site Management Requirements

The following minimum BMPs must be in place at all construction sites throughout the year during both the wet and dry seasons:

1. All graded areas must have erosion protection BMPs properly installed
2. Adequate perimeter protection BMPs must be installed and maintained.
3. Adequate sediment control BMPs must be installed and maintained.
4. Adequate BMPs to control offsite sediment tracking must be installed and maintained.
5. A minimum of 125 of the material needed to install standby BMPs to protect the exposed areas from erosion and prevent sediment discharges, must be stored onsite. Areas already protected from erosion using physical stabilization or established vegetation stabilization BMPs are not considered to be exposed for purposes of this requirement.
6. The owner/developer/contractor must have an approved weather triggered action plan and be able to deploy standby BMPs to completely protect the exposed portions of the site within 48 hours of a predicted storm event (a predicted storm event is defined as a forecasted, 40 chance of rain by 5-day National Weather Service). On request, the owner/developer/contractor must provide proof of this capability that is acceptable to the City.
7. Deployment of physical or vegetation erosion control BMPs must commence as soon as slopes are completed. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of slopes that have been completed.
8. The area that can be cleared, graded, and left exposed at one time is limited to the amount of acreage that the contractor can adequately protect prior to a predicted rainstorm. For larger sites, grading should be phased (See Chapter 3.3.8). It may be necessary to deploy erosion and sediment control BMPs in areas that are not completed, but are not actively being worked before additional grading is done.

3.3.6.2 Rainy Season Site Management Requirements

In addition to the dry season requirements described above, the following additional minimum BMPs must be in place at all sites during the rainy season, which is defined as October 1st through April 30th:

1) Erosion control, perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
2) Adequate physical or vegetation erosion control BMPs must be installed and established for all completed slopes prior to the start of the rainy season. These BMPs must be maintained throughout the rainy season. If a selected BMP fails, it must be repaired and improved, or replaced with an acceptable alternate as soon as it is safe to do so. The failure of a BMP indicates it was not adequate for the circumstances in which it was used. Repairs or replacements must therefore put a more robust BMP in place.
3) The amount of exposed soil allowed at one time shall not exceed that which can be adequately protected by deploying standby erosion control and sediment control BMPs prior to a predicted rainstorm.
4) A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for 10 or more days. The ability to deploy standby BMP materials is not sufficient for these areas. BMPs must actually be deployed.
5) All vegetation erosion control must be established prior to the rainy season to be considered as an effective BMP.

3.3.7 Additional Controls for Construction Sites

For project sites that are tributary to 303(d) water body segments that are impaired for sediment, the following BMPs must be implemented at all times to the maximum extent possible:

- Maintain vegetative cover as much as possible by developing the project in a phased approach to reduce the amount of exposed soil at any one time.
- Limit the areas of active construction to five acres at any one time.
- Provide 100 percent soil cover for all areas of inactive construction throughout the entire time of construction, on a year-round basis.
- Provide appropriate perimeter control at all appropriate locations along the site perimeter and at all inlets to the storm drain system at all times during the rainy season.
- Provide vegetated buffer strips between the active construction area and any water bodies.
- Provide stabilized construction entrances and limit all vehicle and foot traffic to those entrances.

Where the provisions described above can not be accommodated, additional or supplemental controls shall be recommended. The City Engineer or designee shall have the authority to approve supplemental or alternative control methods based upon an evaluation of the proposed control and the sites potential threat to storm water quality impairment.

3.3.8 Maximum Disturbed Area for Erosion Control

The active disturbed soil area of any project site shall be not more than 50 acres for an individual grading permit or a combination of grading permits under an associated Tentative or Final Map. The City may approve, on a case-by-case basis, expansions of the active disturbed soil area limit if adequate site protection is demonstrated. At all times, sufficient soil stabilization and sediment control materials shall be maintained on site to provide adequate site protection.

3.3.9 Advanced Treatment Methods

Advanced Treatment is defined in the Municipal Permit as the use of mechanical or chemical means to flocculate and remove suspended sediment from runoff from construction sites prior to discharge.

If a project meets all of the following criteria, advanced treatment will be required:

1. All or part of the site is within 200 feet of waters named on the CWA Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation and/or turbidity;
2. The disturbance area is greater than five acres, including all phases of the development;
3. The disturbed slopes are steeper than 4:1 with at least 10 feet of relief, and drain toward a Section 303(d) listed receiving water for sedimentation or turbidity;
4. The site contains a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4.

Advanced treatment may be required on sites that do not meet all four of the criteria for exceptional threat to water quality listed above at the discretion of the City Engineer based on a record on non-compliance.

Treatment effluent water quality shall meet or exceed the water quality objectives for sediment, turbidity, pH, and toxicity as listed in the Water Quality Control Plan for the San Diego Basin (9) for inland surface waters and lagoons and estuaries for the appropriate hydrologic unit.

Prior to obtaining a grading permit, the applicant shall submit, to the satisfaction of the City Engineer, the following:

1. An operations and maintenance schedule for all advanced treatment methods.
2. A monitoring plan for all required BMPs and water quality for all proposed work deemed necessary to achieve project water quality goals.
3. A written training plan for certification and documentation of necessary training and refreshers of staff.

The discharger shall either deploy Advanced Treatment Methods or comply with source control procedures described below.

- Maintain vegetative cover as much as possible by developing the project in a phased approach to reduce the amount of exposed soil at any one time.

- Limit the areas of active construction to five acres at any one time.
- Provide 100 percent soil cover for all areas of inactive construction throughout the entire time of construction, on a year-round basis.
- Provide appropriate perimeter control at all appropriate locations along the site perimeter and at all inlets to the storm drain system at all times during the rainy season.
- Provide vegetated buffer strips between the active construction area and any water bodies.
- Provide stabilized construction entrances and limit all vehicle and foot traffic to those entrances.

3.3.10 City Standard Water Pollution Prevention Notes

All Tier 2 and Tier 3 Construction SWPPPs shall include the City Standard Storm Water Pollution Prevention notes as specified in Appendix I. The notes shall be placed upon the Construction SWPPP drawing or, in the case of a Tier 3 Construction SWPPP, on the grading plan. The Qualified Plan Preparer may include supplemental Storm Water Pollution Prevention notes to address specific requirements of the proposed project and/or construction site. The City Engineer or designee may also request inclusion of supplemental Storm Water Pollution Prevention notes to address specific construction activities or site issues.

3.4 Storm Water BMP Inspection and Maintenance

3.4.1 General information

Construction is a dynamic operation where changes are expected. Storm water BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain their effectiveness and may require relocation, revision and re-installation, particularly as project grading progresses. Therefore, in addition to City inspections, owner/developer/contractor self- inspections are required.

3.4.2 Inspection of Construction Sites

All construction sites are subject to site inspection by City staff in accordance with the Carlsbad Municipal Code, the Municipal Permit, City's policies and procedures and these standards. Additionally, owner/developer/contractors are required to perform self-inspection of construction sites, for projects requiring a Tier 2 or Tier 3 Construction SWPPP, in accordance with these standards.

The City of Carlsbad will evaluate the adequacy of the owner's/contractor's site management for storm water pollution prevention, inclusive of BMP implementation, on construction sites based on performance standards for storm water BMPs. Poor BMP practices shall be challenged. Performance standards shall include:

1. Prevent increase in pollution to the maximum extent practicable.
2. Minimize slope erosion.
3. Control discharge velocities moving offsite to limit down stream erosion potential to the pre-construction levels.

3.4.3 City Storm Water BMP Inspection Frequency

Each construction site must be inspected by City staff for compliance with storm water standards at the minimum frequency as shown in Table 8. Site-specific inspection frequencies are reevaluated periodically, particularly when grading activities are being conducted during the rainy season. The need for additional inspections may vary depending upon several factors including:

- Site conditions;
- Previous violations;
- History of developer or contractor past performance;
- Grading during rainy season; and,
- Weather patterns.

Table 8		
	Inspection Frequency	
Site Threat to Water Quality	**Rainy Season Oct 1st – April 30th**	**Dry Season May 1st – September 30th**
High	Bi-weekly	As-needed
Medium	Monthly	As-needed
Low	As-needed	As-needed

The minimum inspection frequency is based upon a project's perceived Threat to Water Quality (TTWQ) and whether or not the construction occurs during the wet or dry season. Each project site is assigned one of three priorities to describe its TTWQ - low, medium or high. The worksheet entitled "Construction Threat Assessment Worksheet for Determination of Project's Perceived Threat to Water Quality", attached as Appendix A, is used to determine a construction site's TTWQ priority.

3.4.4 City Storm Water BMP Inspection Requirements

City inspection of construction sites for storm water compliance shall include, but not be limited to the following:

1. Assessment of BMP effectiveness including implementation of an effective combination of erosion, sediment and non-stormwater BMPs to meet the City's minimum water quality protection requirements and prevent the discharge of pollutants into storm water and receiving waters, and
2. Check for coverage under the General Construction Permit (Regional Board Notice of Intent (NOI) and/or Waste Discharge Identification No. (WDID No.)) during initial inspection;
3. Ensure compliance with the City's applicable ordinances, permits and other site-specific requirements;
4. Visual observations for non-stormwater discharges, potential illicit connections and potential discharge of pollutants in stormwater runoff;
5. Ensure proper implementation of plans and specifications,
6. Education and outreach on stormwater pollution prevention as needed;
7. Ensure that the project proponents implement their stormwater management on a year-round basis, and;
8. Creation of a written or electronic inspection report

City inspection staff will utilize the following framework when conducting an inspection:

1. Review the site erosion control and BMP implementation plans and determine whether they are being properly implemented;
2. Determine if BMPs are being used in accordance with the intent of all laws and approved plans;
3. Determine whether BMPs are effectively being implemented and maintained properly; and

4. Determine whether the owner/developer/contractor is making appropriate adjustments when ineffective BMPs are found.

For projects subject to the State General Construction Permit, the RWQCB is responsible for verifying and enforcing requirements of the General Construction Permit. The City inspection staff will continue to work with RWQCB staff in assuring compliance at these sites. City staff will document observations of potential violations and will notify the RWQCB of the noncompliance in accordance with Order R9-2007-0001 if the noncompliance poses a threat to human or environmental health.

Regardless of any inspections conducted by the City, property owners or contractors are required to prevent any construction-related materials, trash, wastes, spills or residues from entering a storm water conveyance system.

3.4.5 Qualified Person Required

All construction sites requiring a Tier 2 or Tier 3 Construction SWPPP are required to employ a Qualified Person to ensure proper installation and maintenance of the project BMPs. The Qualified Person shall:

1. Be trained and competent in the use of BMPs, shall be on site daily, although not necessarily full time, to evaluate the conditions of the site with respect to storm water pollution prevention. This qualified contact person shall represent the contractor/owner on storm water issues.

2. Shall implement the conditions of the Storm Water Pollution Prevention Plan, contract documents and/or local ordinances with respect to erosion and sediment control and other waste management regulations.

3. Be responsible for monitoring the weather and implementation of any emergency plans as needed. The weather shall be monitored on a 5-day forecast plan and a full BMP protection plan shall be activated when there is a 40 chance of rain.

4. Be responsible for overseeing any site grading and operations and evaluating the effectiveness of the BMPs. This person shall modify the BMPs as necessary to keep the dynamics of the site in compliance. This person or other qualified persons are responsible for checking the BMPs routinely for maintenance and documenting the BMPs being implemented.

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Appendix A

Project Threat Assessment Worksheet for Determination of Construction SWPPP Tier Level

Project Threat Assessment Worksheet for Determination of Construction SWPPP Tier Level

Project Storm Water Threat Assessment Criteria*	Construction SWPPP Tier Level
Significant Threat Assessment Criteria ❑ My project includes clearing, grading or other disturbances to the ground resulting in soil disturbance totaling one or more acres including any associated construction staging, equipment storage, stockpiling, pavement removal, refueling and maintenance areas; or, ❑ My project is part of a phased development plan that will cumulatively result in soil disturbance totaling one or more acres including any associated construction staging, equipment storage, refueling and maintenance areas; or, ❑ My project is located inside or within 200 feet of an environmentally sensitive area (see City ESA Proximity map) and has a significant potential for contributing pollutants to nearby receiving waters by way of storm water runoff or non-storm water discharge(s).	Tier 3
Moderate Threat Assessment Criteria My project does not meet any of the Significant Threat Assessment Criteria described above and meets one or more of the following criteria: ❑ Project requires a grading plan pursuant to the Carlsbad Grading Ordinance (Chapter 15.16 of the Carlsbad Municipal Code); or, ❑ Project will result in 2,500 square feet or more of soils disturbance including any associated construction staging, stockpiling, pavement removal, equipment storage, refueling and maintenance areas and project meets one or more of the additional following criteria: • located within 200 feet of an environmentally sensitive area or the Pacific Ocean; and/or, • disturbed area is located on a slope with a grade at or exceeding 5 horizontal to 1 vertical; and/or • disturbed area is located along or within 30 feet of a storm drain inlet, an open drainage channel or watercourse; and/or • construction will be initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30).	Tier 2
Low Threat Assessment Criteria ❑ My project does not meet any of the Significant or Moderate Threat criteria, is not an exempt permit type (see City's list of Permit Types Exempt from Construction SWPPP requirements) and the project meets one or more of the following criteria: • results in some soil disturbance; and/or • includes outdoor construction activities (such as roofing, saw cutting, equipment washing, material stockpiling, vehicle fueling, waste stockpiling)	Tier 1
No Threat Project Assessment Criteria ❑ My project is in a category of permit types exempt from City Construction SWPPP requirements (see City's list of Permit Types Exempt from Construction SWPPP requirements) and/or does not meet any of the High, Moderate or Low Threat criteria described above.	Exempt

The City Engineer may authorize minor variances from the Storm Water Threat Assessment Criteria in special circumstances where it can be shown that a lesser or higher Construction SWPPP Tier Level is warranted in the opinion of the City Engineer

Appendix B

Storm Water Compliance Forms

Storm Water Compliance Form For a Tier 3 Construction SWPPP

I am applying to the City of Carlsbad for the following type of construction permit(s):

☐ Grading Permit ☐ Building Permit ☐ Right-of-Way Permit

My project requires preparation and approval of a Tier 3 Construction Storm Water Pollution Prevention Plan (SWPPP) because my project meets one or more of the following criteria demonstrating that the project potentially poses a significant threat to storm water quality:

- ❑ My project includes clearing, grading or other disturbances to the ground resulting in soil disturbance totaling one or more acres including any associated construction staging, equipment storage, stockpiling, pavement removal, refueling and maintenance areas; or,
- ❑ My project is part of a phased development plan that will cumulatively result in soil disturbance totaling one or more acres including any associated construction staging, equipment storage, stockpiling, pavement removal, refueling and maintenance areas; or,
- ❑ My project is located inside or within 200 feet of an environmentally sensitive area and has a significant potential for contributing pollutants to nearby receiving waters by way of storm water runoff or non-storm water discharge(s).

I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THE ABOVE CHECKED STATEMENTS ARE TRUE AND CORRECT.

I AM SUBMITTING FOR CITY APPROVAL A TIER 3 CONSTRUCTION SWPPP PREPARED IN ACCORDANCE WITH CITY STANDARDS AND THE REQUIREMENTS OF THE STATE WATER RESOURCES CONTROL BOARD GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES - WATER QUALITY ORDER NO 99-08-DWQ (GENERAL CONSTRUCTION PERMIT) AND ANY AMENDMENT, REVISION OR RE-ISSUANCE THEREOF.

I UNDERSTAND AND ACKNOWLEDGE THAT I MUST SUBMIT THE CITY APPROVED TIER 3 CONSTRUCTION SWPPP TO THE SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD TOGETHER WITH A NOTICE OF INTENTION (NOI), AN APPROPRIATE FILING FEE AND OTHER REQUIRED DOCUMENTATION AND RECEIVE A STATE WASTE DISCHARGER'S IDENTIFICATION (WDID) NUMBER PRIOR TO CITY ISSUANCE OF THE ABOVE REQUESTED CONSTRUCTION PERMIT(S).

I ALSO UNDERSTAND AND ACKNOWLEDGE THAT I MUST ADHERE TO, AND AT ALL TIMES, COMPLY WITH THE CITY APPROVED TIER 3 CONSTRUCTION SWPPP THROUGHTOUT THE DURATION OF THE CONSTRUCTION ACTIVITIES UNTIL THE CONSTRUCTION WORK IS COMPLETE AND APPROVED BY THE CITY OF CARLSBAD.

Owner/Owner's Authorized Agent Information and Signature Box

Address/Location:	Assessor Parcel Number(s):
Owner/Owner's Authorized Agent Name:	Title:
Owner/Owner's Authorized Agent Signature:	Date:

This Box for City Use Only

City Concurrence:	Yes	No
By:		
Date:		
Project ID:		

Storm Water Compliance Form For a Tier 2 Construction SWPPP

I am applying to the City of Carlsbad for one or more the following type of construction permit(s):

☐ Grading Permit ☐ Building Permit ☐ Right-of-Way Permit

My project does not meet any of the following criteria for a project that poses a significant threat to storm water quality:

- ✓ My project does not include clearing, grading or other ground disturbances resulting in soil disturbance totaling one or more acres including any associated construction staging, equipment storage, stockpiling, pavement removal, refueling and maintenance areas; and,
- ✓ My project is not part of a phased development plan that will cumulatively result in soil disturbance totaling one or more acres including any associated construction staging, equipment storage, stockpiling, pavement removal, refueling and maintenance areas; and,
- ✓ My project is not located inside or within 200 feet of an environmentally sensitive area and will not have a significant potential for contributing pollutants to nearby receiving waters by way of storm water runoff or non-storm water discharge(s).

My project requires preparation and approval of a Tier 2 Construction Storm Water Pollution Prevention Plan (SWPPP) because my project meets one or more of the following criteria demonstrating that the project potentially poses a moderate threat to storm water quality:

- ❑ My project requires a grading plan pursuant to the Carlsbad Grading Ordinance (Chapter 15.16 of the Carlsbad Municipal Code); and/or,
- ❑ My Project will result in 2,500 square feet or more of soils disturbance including any associated construction staging, stockpiling, pavement removal, equipment storage, refueling and maintenance areas and, my project meets one or more of the following additional criteria:
  - Project is located within 200 feet of an environmentally sensitive area or the Pacific Ocean;
  - Project's disturbed area is located on a slope with a grade at or exceeding 5 horizontal to 1 vertical;
  - Project's disturbed area is located along or within 30 feet of a storm drain inlet, an open drainage channel or watercourse; and/or
  - Project will be initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30).

I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THE ABOVE CHECKED STATEMENTS ARE TRUE AND CORRECT. I AM SUBMITTING FOR CITY APPROVAL A TIER 2 CONSTRUCTION SWPPP PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF CITY STANDARDS.

I UNDERSTAND AND ACKNOWLEDGE THAT I MUST ADHERE TO, AND AT ALL TIMES, COMPLY WITH THE CITY APPROVED TIER 2 CONSTRUCTION SWPPP THROUGHTOUT THE DURATION OF THE CONSTRUCTION ACTIVITIES UNTIL THE CONSTRUCTION WORK IS COMPLETE AND APPROVED BY THE CITY OF CARLSBAD.

Owner/Owner's Authorized Agent Information and Signature Box

Address/Location:	Assessor Parcel Number(s):
Owner/Owner's Authorized Agent Name:	Title:
Owner/Owner's Authorized Agent Signature:	Date:

This Box for City Use Only

City Concurrence:	Yess	No
By:		
Date:		
Project ID:		

Storm Water Compliance Exemption Form

I am applying to the City of Carlsbad for the following type(s) of construction permit:

☐ Building Permit ☐ Right-of-Way Permit

☐ My project is categorically exempt from the requirement to prepare a storm water pollution prevention plan (SWPPP) because it only requires issuance of one or more of the following permit types:

Electrical Permit Fire Additional Permit Fire Alarm Permit Fixed Systems Permit Mechanical Permit Mobile Home Permit Re-Roofing Permit	Patio Deck Plumbing Permit Sign Permit Spa ☐ Factory Made Sprinkler Permit Water Discharge Permit

☐ My project is exempt from the requirement to prepare a storm water pollution prevention plan (SWPPP) because it meets the ☐no threat☐ assessment criteria on the City☐s Project Threat Assessment Worksheet for Determination of Construction SWPPP Tier Level.

I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THE ABOVE CHECKED STATEMENTS ARE TRUE AND CORRECT.

I UNDERSTAND AND ACKNOWLEDGE THAT EVEN THOUGH THIS PROJECT DOES NOT REQUIRE PREPARATION OF A CONSTRUCTION SWPPP, I MUST STILL ADHERE TO, AND AT ALL TIMES DURING CONSTRUCTION ACTIVITES FOR THE PERMIT TYPE(S) CHECKED ABOVE, COMPLY WITH THE STORM WATER BEST MANAGEMENT PRACTICES PURSUANT TO TITLE 15 OF THE CARLSBAD MUNICIPAL CODE AND TO CITY STANDARDS.

Owner/Owner☐s Authorized Agent Information and Signature Box

Address/Location: Assessor Parcel Number(s):	
Owner/Owner☐s Authorized Agent Name:	Title:
Owner/Owner☐s Authorized Agent Signature:	Date:

This Box for City Use Only

City Concurrence:	Yess	No
By:		
Date:		
Project ID:		

Appendix C

Construction Threat Assessment Worksheet
for
Determination of Threat to Storm Water Quality

Construction Threat Assessment Worksheet for Determination of a Project's Perceived Threat to Storm Water Quality

Construction SWPPP Tier Level	Construction Threat Assessment Criteria*	Perceived Threat to Storm Water Quality
Tier 3	Tier 3 – High Construction Threat Assessment Criteria ❑ Project site is 50 acres or more and grading will occur during the rainy season ❑ Project site is 1 acre or more in size and is located within the Buena Vista or Agua Hedionda Lagoon watershed, inside or within 200 feet of an environmentally sensitive area (ESA) or discharges directly to an ESA ❑ Soil at site is moderately to highly erosive (defined as having a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4) ❑ Site slope is 5 to 1 or steeper ❑ Construction is initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30). ❑ Owner/contractor received a Storm Water Notice of Violation within past two years	High
	Tier 3 – Medium Construction Threat Assessment Criteria □ All projects not meeting Tier 3 High Construction Threat Assessment Criteria	Medium
Tier 2	Tier 2 High Construction Threat Assessment Criteria ❑ Project is located within the Buena Vista or Agua Hedionda Lagoon watershed, inside or within 200 feet of an environmentally sensitive area (ESA) or discharges directly to an ESA ❑ Soil at site is moderately to highly erosive (defined as having a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4) ❑ Site slope is 5 to 1 or steeper ❑ Construction is initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30). ❑ Owner/contractor received a Storm Water Notice of Violation within past two years ❑ Site results in one half acre or more of soil disturbance	High
	Tier 2 – Medium Construction Threat Assessment Criteria ❑ All projects not meeting Tier 2 High Construction Threat Assessment Criteria	Medium
Tier 1	Tier 1 - Medium Inspection Threat Assessment Criteria ❑ Project is located within the Buena Vista or Agua Hedionda Lagoon watershed, within or directly adjacent to an environmentally sensitive area (ESA) or discharges directly to an ESA ❑ Soil at site is moderately to highly erosive (defined as having a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4) ❑ Site slope is 5 to 1 or steeper ❑ Construction is initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30). ❑ Owner/contractor received a Storm Water Notice of Violation within past two years ❑ Site results in one half acre or more of soil disturbance	Medium
	Tier 1 - Low Inspection Threat Assessment Criteria ❑ All projects not meeting Tier 1 Medium Construction Threat Assessment Criteria	Low
Exempt	- Not Applicable -	Exempt

□ The City Engineer may authorize minor variances from the Construction Threat Assessment Criteria in special circumstances where it can be shown that a lesser or higher amount of storm water compliance inspection is warranted in the opinion of the City Engineer

Appendix D

Tier 3 Construction SWPPP Required Elements Checklist

TIER 3 CONSTRUCTION SWPPP REQUIRED ELEMENTS CHECKLIST

Project Name_____ Project ID _____ SWPPP Preparer _____ Date _____

Construction SWPPP Required Element	Reference Document and Section (1)	Page Number (2)	Not Applicable N/A	Implementation Date (3)
GCP Section A. Storm Water Pollution Prevention Plan (SWPPP)				
Vicinity Map (graphic)	***GCP A.5.a.1***			
Major roadways, geographic features or landmarks	*GCP* A.5.a.1			
Site perimeter	*GCP* A.5.a.1			
Geographic features	GCP A.5.a.1			
General topography	*GCP* A.5.a.1			
Site Map (graphic)(can modify Parcel Map)	***GCP A.5.a.2***			
Site perimeter	*GCP* A.5.a.2			
Existing and proposed buildings, lots, and roadways	*GCP* A.5.a.2			
Storm water collection and discharge points	*GCP* A.5.a.2			
General topography before and after construction	*GCP* A.5.a.2			
Anticipated discharge location(s)	*GCP* A.5.a.2			
Drainage patterns	*GCP* A.5.a.2			
Relevant drainage areas 2	*GCP* A.5.a.			
Temporary on-site drainage	*GCP* A.5.a.2			
Drainage (graphic)	*GCP A.5.b.1*			
Drainage patterns	*GCP* A.5.b.1			
Slopes after major grading	*GCP* A.5.b.1			
Calculations for storm water run-on	*GCP* A.5.b.1			
BMPs that divert off-site drainage from going through site	*GCP* A.5.b.1			
Storm Water Inlets (graphic)	***GCP A.5.b.2***			
Drainage patterns to storm water inlets or receiving water	*GCP* A.5.b.2			
BMPs that protect storm water inlets or receiving water	*GCP* A.5.b.2			
Site History/Past Site Usage (Real Estate Broker Disclosure may be sufficient)	***GCP A.5.b.3***			
Description of toxic materials treated, stored, or spilled on site	*GCP* A.5.b.3			
BMPs that minimize contact of contaminants with storm water	*GCP* A.5.b.3			
Location of Areas Designated for: (graphic)	***GCP A.5.b.4***			

(1) Reference Document Legend: GCP = General Construction Permit; MP = Municipal Permit; CSWSM = City Storm Water Standards Manual

(2) Indicate the page number where the information is located in your SWPPP. If the information is not applicable to your site, construction activities, or construction materials, check the N/A box. Your SWPPP does not have to address items which are not applicable to your situation.

(3) Date that the BMP will be installed on the site

Construction SWPPP Required Element	Reference Document and Section (1)	Page Number (2)	Not Applicable N/A	Implementation Date (3)
Soil or waste storage	*GCP* A.5.b.4			
Vehicle storage & service	*GCP* A.5.b.4			
Construction material loading, unloading, and access	*GCP* A.5.b.4			
Equipment storage, cleaning, maintenance	*GCP* A.5.b.4			
BMP Descriptions for: (graphic or narrative)	***GCP A.5.b.5***			
Waste handling and disposal areas	*GCP* A.5.b.5			
On-site storage and disposal of construction materials and waste	*GCP* A.5.b.5			
BMPs to minimize exposure of storm water to construction materials, equipment, vehicles, waste	*GCP* A.5.b.5			
Post Construction BMPs	***GCP A.5.b.6 See A. 10***			
Additional Information	***GCP A.5. c***			
Description of other pollutant sources and BMPs that cannot be shown graphically	*GCP* A.5.c.1			
Pre-construction control practices	*GCP* A.5.c.1			
Inventory of materials and activities that may pollute storm water	*GCP* A.5.c.2			
BMPs to reduce/eliminate potential pollutants listed in the inventory	*GCP* A.5.c.2			
Runoff coefficient (before & after)	*GCP* A.5.c.3			
Percent impervious (before & after)	*GCP* A.5.c.3			
Copy of the NOI and WDID #	*GCP* A.5.c.4			
Construction activity schedule	*GCP* A.5.c.5			
Contact information	*GCP* A.5.c.6			
EROSION CONTROL	***GCP* A.6**			
The SWPPP shall include: (graphic)	***GCP A.6.a-c***			
Areas of vegetation on site	*GCP* A.6.a.1			
Areas of soil disturbance that will be stabilized during rainy season	*GCP* A.6.a.2			
Areas of soil disturbance which will be exposed during any part of the rainy season	*GCP* A.6.a.3			
Construction phase / BMP sequencing schedule including supplemental pre-rain action plan for erosion control measures	*GCP* A.6.a.4			
BMPs for erosion control	*GCP* A.6.b			

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(3) Date that the BMP will be installed on the site

Construction SWPPP Required Element	Reference Document and Section (1)	Page Number (2)	Not Applicable N/A	Implementation Date (3)
BMPs to control wind erosion	*GCP* A.6.c			
SEDIMENT CONTROL	*GCP* A.8			
Description/Illustration of BMPs to prevent increase of sediment load in discharge	*GCP* A.8			
Construction phase / BMP sequencing schedule including supplemental pre-rain action plan for sediment control measures	*GCP* A.8			
NON-STORM WATER	***GCP* A.9**			
Description of non-storm water discharges to receiving waters	*GCP* A.9			
Locations of discharges	*GCP* A.9			
Description of BMPs	*GCP* A.9			
Name and phone number of qualified person responsible for non-storm water management	*GCP* A.9			
POST-CONSTRUCTION	***GCP* A.10**			
Description and location of BMPs	*GCP* A.10			
Operation/Maintenance of BMPs after project completion (including funding)	*GCP* A.10			
MAINTENANCE, INSPECTIONS, AND REPAIR	*GCP* A.11			
Name and phone number of qualified person responsible for inspections	*GCP* A.11			
Inspection checklist: date, weather, inadequate BMPs, visual observations of BMPs, corrective action, inspector's name, title, signature	*GCP* A.11.a-f			
OTHER REQUIREMENTS	*GCP* A.12-16			
Documentation of all training	*GCP* A.12			
List of Contractors/Subcontractors	*GCP* A.13			
GCP Section B. Monitoring and Reporting Requirements				
Description of site inspection plans	*GCP* B.3			
Compliance certification (annually 7/1) if project is under active construction	*GCP* B.4			
Noncompliance reporting	*GCP* B.5			
Records of all inspections; compliance certifications; noncompliance reports, etc.	*GCP* B.6			

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(2) Indicate the page number where the information is located in your SWPPP. If the information is not applicable to your site, construction activities, or construction materials, check the N/A box. Your SWPPP does not have to address items which are not applicable to your situation.

(3) Date that the BMP will be installed on the site

Construction SWPPP Required Element	Reference Document and Section (1)	Page Number (2)	Not Applicable N/A	Implementation Date (3)
Monitoring program for sediment contribution from direct discharges to impaired water bodies	*GCP* B.7			
Monitoring program for pollutants not visually detectable in storm water (nonvisible pollutants)	*GCP* B.8			
GCP Section C. Standard Provisions for Construction Activities				
Signed Certification for SWPPP, reports, amendments, etc. Who is authorized to sign and by what authority has the duly authorized representative been assigned?	*GCP* C.9,10			
Location of General Permit and SWPPP on site during construction activities	*GCP* C. 17			
MP Section D.2 Construction Component				
GENERAL SITE MANAGEMENT	**MP D.2.c.(1)(a)**			
Pollution prevention, where appropriate	MP D.2.c.(1)(a)i. and CSWSM 3.3.2			
Development and implementation of a storm water site management plan	MP D.2.c.(1)(a)ii. and CSWSM 3.3.6			
Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction	MP D.2.c.(1)(a)iii. and CSWSM 3.3.6.1			
Minimization of exposure time of disturbed soil areas	MP D.2.c (1)(a)iv. and CSWSM 3.3.6.1			
Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods to the extent feasible	MP D.2.c.(1)(a)v. and CSWSM 3.3.6.1			
Limitation of grading to a maximum disturbed area of 50 acres	MP D.2.c.(1)(a)vi. and CSWSM 3.3.8			
Temporary stabilization and reseeding of disturbed soil areas as rapidly as feasible	MP D.2.c.(1)(a)vii. and CSWSM 3.3.6.1			
Preservation of natural hydrologic features where feasible;	MP D.2.c. (1)(a)viii. and CSWSM 3.3.6			
Preservation of riparian buffers and corridors where feasible	MP D.2.c.(1)(a)ix. and CSWSM 3.3.6			
Maintenance of all BMPs, until removed	MP D.2.c.(1)(a)x. and CSWSM 3.3.6			
Retention, reduction, and proper management of all pollutant discharges on site to	MP D.2.c.(1)(a)xi. and			

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(2) Indicate the page number where the information is located in your SWPPP. If the information is not applicable to your site, construction activities, or construction materials, check the N/A box. Your SWPPP does not have to address items which are not applicable to your situation.

(3) Date that the BMP will be installed on the site

Construction SWPPP Required Element	Reference Document and Section (1)	Page Number (2)	Not Applicable N/A	Implementation Date (3)
the MEP standard	CSWSM 3.3.6			
EROSION AND SEDIMENT CONTROLS	**MP D.2.c.(1)(b)** and CSWSM 3.3.3			
Erosion prevention, to be used as the most important measure for keeping sediment on site during construction, but never as the single method	MP D.2.c.(1)(b)i. and CSWSM 3.3.3			
Sediment controls, to be used as a supplement to erosion prevention for keeping sediment on-site during construction	MP D.2.c.(1)(b)ii. and CSWSM 3.3.3			
Slope stabilization on all inactive slopes during the rainy season and during rain events in the dry season	MP D.2.c (1)(b)iii. and CSWSM 3.3.6.1&2			
Slope stabilization on all active slopes during rain events regardless of the season	MP D.2.c (1)(b)iv. and CSWSM 3.3.6.1			
Permanent re-vegetation or landscaping as early as feasible.	MP D.2.c.(1)(b)v. and CSWSM 3.3.6			
ADVANCED TREATMENT CONTROLS Addition of advanced treatment controls for projects that are determined to be an exceptional threat to water quality	**MP D.2.c.(2) and CSWSM 3.3.9**			
Operations and Maintenance Schedule	CSWSM 3.3.9			
Advanced treatment Monitoring Plan	CSWSM 3.3.9			
Advanced Treatment Training Plan	CSWSM 3.3.9			
Alternative Source Control Procedures in Lieu of Advanced Treatment Control Noted on Plans	CSWSM 3.3.9			
YEAR ROUND BMP IMPLEMENTATION	**MP D.2.c.(3) and CSWSM 3.3.6**			
Plan for year round implementation of minimum BMPs that can vary based upon wet and dry seasons	MP D.2.c.(3) and CSWSM 3.3.6			
ADDITIONAL CONTROLS FOR SITES TRIBUTARY TO CWA SECTION 303(d) IMPAIRED WATERS	**MP D.2.c.(4) and CSWSM 3.3.7**			
Maintain vegetative cover as much as possible by developing the project in a phased approach to reduce the amount of exposed soil at any one time.	CSWSM 3.3.7			
Limit the areas of active construction to five acres at any one time.	CSWSM 3.3.7			

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(2) Indicate the page number where the information is located in your SWPPP. If the information is not applicable to your site, construction activities, or construction materials, check the N/A box. Your SWPPP does not have to address items which are not applicable to your situation.

(3) Date that the BMP will be installed on the site

Construction SWPPP Required Element	Reference Document and Section (1)	Page Number (2)	Not Applicable N/A	Implementation Date (3)
Provide 100 percent soil cover for all areas of inactive construction throughout the entire time of construction, on a year-round basis.	CSWSM 3.3.7			
Provide appropriate perimeter control at all appropriate locations along the site perimeter and at all inlets to the storm drain system at all times during the rainy season	CSWSM 3.3.7			
Provide vegetated buffer strips between the active construction area and any water bodies.	CSWSM 3.3.7			
Provide stabilized construction entrances and limit all vehicle and foot traffic to those entrances.	CSWSM 3.3.7			
INSPECTION OF CONSTRUCTION SITE	**MP D.2.d and CSWSM 3.4.3**			
Inspection priority determined for site and frequency noted in SWPPP	MP D.2.d and CSWSM 3.4.3			
STANDARD STORM WATER POLLUTION PREVENTION NOTES	**CSWSM 3.3.10**			
Standard Storm Water Pollution Prevention Notes included on Grading Plans	CSWSM 3.3.10			

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(2) Indicate the page number where the information is located in your SWPPP. If the information is not applicable to your site, construction activities, or construction materials, check the N/A box. Your SWPPP does not have to address items which are not applicable to your situation.

(3) Date that the BMP will be installed on the site

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Appendix E

TIER 3 Construction SWPPP Checklist
(CASQA Format)

TIER 3 CONSTRUCTION SWPPP CASQA FORMAT CHECKLIST

Project Name_____ Planchecker _____
Project ID _____ Date _____

CASQA Section Number and Potential Required Elements	Required for Project	Planchecker Verification
General Formatting		
Tabbed separators included between Sections		
Section - 100 SWPPP Certifications and Approval		
100.1 - SWPPP Certification by Preparer		
Project name, grading permit, building permit, discretionary permit number(s), APN at top of form		
Certification signed and dated by person responsible for preparation of the SWPPP		
Name, title and telephone number of the person signing the form		
SWPPP and Monitoring Program Checklist in Attachment L completed		
Notice of Intent (NOI) attached, completed and signed by Owner or Owner's agent		
100.2 - Owner Approval and Certification of SWPPP		
Project name, grading permit, building permit, discretionary permit number(s), APN at top of form		
Certification signed and dated by owners staff; specifically, the person responsible for preparation of the SWPPP and/or the person responsible for overall management of the site		
Name, title and telephone number of the person signing the form		
100.3 - Annual Compliance Certification		
Blank copy of the Annual Compliance of Compliance included as Attachment M		
Section 200 – SWPPP Amendments		
200.1 - SWPPP Amendment Certification and Approval		
Instructions and Blank Amendment Certification and Approval forms included		
200.2 - Amendment Log		
Instructions and Blank Amendment Log included		
Section 300 - Introduction and Project Description		
300.1 – Introduction and Project Description		
Projects legal description including County, City and address, proximity to receiving waters to which project will discharge including surface waters, drainage channels, and drainage systems; ownership of all drainage systems to which the project discharges		
300.2 – Unique Site Features		
Description of unique site features (water bodies, wetlands, environmentally sensitive areas, endangered or protected species, etc) and significant or high risk construction activities that may impact storm water quality. Include any		

unique features or activities within or adjacent to water bodies		
300.3 - Construction Site Estimates		
Construction site area in acres		
Runoff coefficient and percentage impervious area before and after construction		
Calculations for Coefficient change included in Attachment D		
Anticipated storm water run-on to the construction site		
Calculations for storm water run-on included in Attachment E		
300.4 - Project Schedule/Water Pollution Control Schedule		
Written and geographical project schedule including:		
Project start and finish dates		
Rainy season dates		
Annual certifications		
Mobilization dates		
Mass clearing and grubbing/roadside clearing dates		
Major grading/excavation dates		
Special dates named in other permits such as Fish and Game and Army Corps of Engineers Permits		
Dates for submittal of SWPPP Amendments required by the contract documents		
Annual submittal of rainy season implementation schedule if required by the Owner or Permittee		
Dates for implementation of pre-rainy season temporary soil stabilization and temporary sediment control BMPs, if required		
Rainy season implementation schedule including:		
Deployment of temporary soil stabilization BMPs		
Deployment of temporary sediment control BMPs		
Deployment of wind erosion control Bmps		
Deployment of tracking control BMPs		
Deployment of non-storm water BMPs		
Deployment of waste management and materials pollution control BMPs		
Non-rainy season implementation schedule		
Deployment of temporary soil stabilization BMPs		
Deployment of temporary sediment control BMPs		
Deployment of wind erosion control Bmps		
Deployment of tracking control BMPs		
Deployment of non-storm water BMPs		
Deployment of waste management and materials pollution control BMPs		
Paving, saw-cutting and any other pavement related operations		
Major planned stockpiling operations		

Dates for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc		
Final stabilization activities staged over time for each area of the project		
300.5 - Contact Information/List of Responsible Parties		
Name and telephone number(s) of the Contractor's Storm Water Pollution Prevention Manager (SWPPM) and required text		
Section 400 - References		
List of documents referenced in the SWPPP		
All Federal, State and City permits		
On-site project information including plans and specifications, geotechnical report(s), hydrology/hydraulic report(s), and other reports and regulatory guidance documents		
Each referenced document includes title, number (if applicable), author, date published and revision date		
Section 500 – Body of SWPPP		
500.1 - Objectives		
Required text included		
500.2 – Vicinity Map		
8 ½' x 11" color copy of USGS map or equal included as Attachment A displaying site perimeter, major roadways, geographic features and landmarks, adjacent water bodies, known wells, an outline of the off-site drainage area, anticipated discharge locations and general topography		
Brief narrative description of the vicinity map		
500.3 – Pollutant Source Identification and BMP Selection		
Required text included for each subsection		
500.3.1 – Inventory of Materials and Activities that May Pollute Storm Water		
List of all construction materials that have the potential to contribute to the discharge of pollutants to storm water and required text		
List of all construction activities that have the potential to contribute sediment to storm water discharges		
500.3.2 – Existing Pre-construction Control Measures		
List of any existing BMPs in place prior to construction used to reduce erosion, sediment or other pollutants in storm water discharges		
500.3.3 Nature of Fill Material and Existing Data Describing the Soil		
Description of the conditions of the fill materials and soils at the construction site including soil types, groundwater location and condition, dewatering operations, presence of existing toxic materials and contaminants and other relevant information		
500.3.4 Erosion Control (EC) (Soil Stabilization)		
Attachment C included. BMP Consideration Checklist filled out. Appropriate EC BMPs selected		
Introductory paragraphs the define EC and give general approach on how temporary EC BMPs will be implemented		

List all temporary EC BMPs to be used on the project		
Show temporary EC BMPs on the Water Pollution Control Drawings (WPCDs)		
Provide narrative description of temporary EC BMPs that cannot be adequately identified on the WPCDs		
Discussion of on-site availability of temporary EC materials and proposed mobilization and implementation of temporary EC BMPs in event of predicted rain. Explanation of how and when BMPs will be implemented when rain is forecasted		
Additional City Required Erosion Control Requirements		
Erosion prevention, to be used as the most important measure for keeping sediment on site during construction, but never as the single method		
Sediment controls, to be used as a supplement to erosion prevention for keeping sediment on-site during construction		
Slope stabilization on all inactive slopes during the rainy season and during rain events in the dry season		
Slope stabilization on all active slopes during rain events regardless of the season		
Permanent revegetation or landscaping as early as feasible.		
500.3.5 – Sediment Control (SC)		
Attachment C included. BMP Consideration Checklist filled out. Appropriate SC BMPs selected		
List all temporary SC BMPs to be used on the project		
Show temporary SC BMPs on the Water Pollution Control Drawings (WPCDs)		
Provide narrative description of temporary SC BMPs that cannot be adequately identified on the WPCDs		
BMPs used to divert off-site drainage around and/or through the construction site shown on WPCDs		
Discussion of on-site availability of temporary EC materials and proposed mobilization and implementation of temporary EC BMPs in event of predicted rain		
500.3.6 Tracking Control (TC)		
Attachment C included. BMP Consideration Checklist filled out. Appropriate TC BMPs selected		
List all temporary TC BMPs to be used on the project		
Show all ingress/egress points to project site on WPCDs and show or describe TC BMPs		
Provide narrative description of temporary TC BMPs that cannot be adequately identified on the WPCDs		
Discussion of road cleaning BMPs		
500.3.7 Wind Erosion Control (WEC)		
Attachment C included. BMP Consideration Checklist filled out. Appropriate WEC BMPs selected		
Narrative description of WEC BMPs to be used on project		
500.3.8 – Non-Storm Water Control (NSWC)		
All potential non-storm water discharges listed		
Attachment C included. BMP Consideration Checklist filled out. Appropriate NSWC BMPs selected		
Discuss how mobile operations, such as equipment maintenance and fueling, will be addressed		
Describe each planned NSW discharge from project including flow/quantity. If flow/quantity cannot be determined,		

then describe nature and extent of activity so quantity can be inferred		
Show NSWC BMPs on WPCDs and/or provide narrative description including path of discharge to storm inlet, drainage facilities or receiving waters		
Describe time period and frequency of each NSW activity that generates or may generate a discharge		
Describe mandatory NSWC BMPs and practices required by City , State or Federal agencies and provide details and schedules as appropriate. Include maintenance, inspection, testing and reporting procedures, if applicable. Include permit info for discharges covered by separate NPDES permit		
Describe selected NSWC BMPs and practices to minimize, contain and dispose of prohibited discharges. Include maintenance, inspection, testing and reporting procedures, if applicable		
Describe sediment controls for landscape irrigation run-off prior to establishment of vegetation		
Indicate how illicit connections and illegal discharges will be handled.		
Develop new owner notification pamphlet to make new owner aware of potential for unauthorized discharges and practices, if needed		
500.3.9 – Waste Management and Material Pollution Control (WMMPC)		
All potential WMMP activities listed		
Attachment C included. BMP Consideration Checklist filled out. Appropriate WMMPC BMPs selected		
Substitute safer, less polluting products where possible		
List selected WMMPC BMPs and describe proposed facilities for materials storage and waste management. Include schedules, inspection and maintenance requirements. Show on WPCDs as appropriate		
Describe proposed waste collection and removal schedule		
500.3.10 – Cost Breakdown for Water Pollution Control		
Water pollution control cost estimate sheet included		
Additional City Requirements		
Advanced Treatment Controls (If required. See Storm Water Standards Manual Section 3.3.9)		
Operations and Maintenance Schedule		
Advanced treatment Monitoring Plan		
Advanced Treatment Training Plan		
Alternative Source Control Procedures in Lieu of Advanced Treatment Control Noted on Plans		
Year Round BMP Implementation		
Plan for year round implementation of minimum BMPs that can vary based upon wet and dry seasons		
Additional Controls for Sites tributary to CWA Section 303(d) Impaired Waters RS		
Maintain vegetative cover as much as possible by developing the project in a phased approach to reduce the amount of exposed soil at any one time.		
Limit the areas of active construction to five acres at any one time.		
Provide 100 percent soil cover for all areas of inactive construction throughout the entire time of construction, on a year-round basis.		

Provide appropriate perimeter control at all appropriate locations along the site perimeter and at all inlets to the storm drain system at all times during the rainy season		
Provide vegetated buffer strips between the active construction area and any water bodies.		
Provide stabilized construction entrances and limit all vehicle and foot traffic to those entrances.		
Inspection of Construction Site		
Inspection priority determined for site and frequency noted in SWPPP		
City Standard Storm Water Pollution Prevention Notes		
Standard Storm Water Pollution Prevention Notes included on Grading Plans		
500.4 – Water Pollution Control Drawings (WPCDs)		
WPCDs included as Attachment B		
Cover sheet listing BMPs that will be used and any selected options shown on fact sheets, along with construction notes and a legend		
All BMPs that can be shown are shown where appropriate on WPCDs		
BMP details included with WPCDs and appropriate CASQA and other standard references included		
Additional details shown as necessary to describe site specific BMP applications		
Grading sheets, drainage sheets or erosion control sheets used as base sheets for WPCDs.		
Base sheet details required:		
site perimeter		
Existing and proposed buildings, lots and roadways		
Permanent post construction BMPs		
Storm water collection and discharge points		
General topography before and after construction; anticipated discharge location(s)		
Tributary areas and drainage patterns to each on-site storm water inlet		
Receiving water or discharge point; off-site tributary drainage areas; temporary on-site drainage(s) to carry concentrated flows		
Outline of areas of existing vegetation; soil cover or native vegetation that will remain undisturbed		
Areas of cut and fill		
Outlines of areas of soil disturbance		
Locations of known toxic spills and discharges or contaminated soils		
Locations of potential non-storm water discharges such as dewatering operations, concrete saw cutting or coring, pressure washing, waterline flushing, diversions, cofferdams and vehicle equipment cleaning		
Locations of direct discharge into a Section 303(d) listed water body		
Sampling locations		
Ingress and egress points		
Temporary stockpiles		

Vehicle and equipment storage, fueling, maintenance and cleaning; and, phasing and/or construction staging		
BMPs for waste management and materials pollution control		
Show all storage, staging, borrow sites, stockpile sites, access roads, lay down areas and other non-development construction areas where construction activity will occur including contractors yard if in vicinity		
All contractor phasing and/or construction staging reflected on WPCDs for full scope of project		
500.5 – Construction BMP Maintenance, Inspection and Repair		
Description of program to maintain all construction BMPs		
Complete maintenance, inspection and repair program included as Attachment G		
500.6 – Post-Construction Storm Water Management		
500.6.1 Post-Construction Control Practices		
Describe the construction BMPs employed after all construction phases have been completed including their operation and maintenance after project completion		
For projects that require a Storm Water Management Plan (SWMP), the City SWMP identification number shall be referenced		
500.6.2 – Operation/Maintenance after Project Completion		
Description of any operations and maintenance requirements of post-construction control practices		
List parties responsible for long term operation and maintenance of permanent BMPs		
500.7 - Training		
Description of storm water pollution prevention training that contractor's inspection, maintenance and repair personnel have received		
Storm Water Pollution Prevention Manger (SWPPM) has a minimum of 24 hours training		
Document formal and informal storm water training on Trained Contractor Personnel Log Sheet included as Attachment I		
List of classes and copies of class completion documents may be submitted		
500.8 – List of Subcontractors		
List of subcontractors and individuals responsible for implementation of the SWPPP including telephone numbers and addresses included as Attachment J		
Section 600 – Monitoring Program and Reports		
600.1 – Site Inspections		
Required text included		
600.2 – Non-Compliance Reporting		
Required text included		
Sample Notice of Compliance form included as Attachment K		
Sample logging discharges form included as Attachment T		
600.3 – Record Keeping and Reports		
Required text included		

600.4 – Sampling and Analysis Plan for Sediment (for projects discharging to 303(d) waters)		
Required text included		
Describe if project discharges to 303(d) waters		
600.4.1 – Scope of Monitoring Activities		
List the impaired 303(d) water body and reason for impairment		
Describe the location(s) of direct discharge to each 303(d) listed water body		
Required text included		
600.4.2 – Monitoring Strategy		
Required text included		
Description of sampling schedule for monitoring impacts of direct discharges		
Description of sampling locations		
Description of rationale for selection of sampling location		
Identification of upstream location for sampling including GPS coordinates		
Identification of downstream location for sampling including GPS coordinates		
Include sampling location for run-on location if one exists		
Describe surrounding areas that may contribute to run-on sediment to site		
Sampling locations not located near point sources or confluences		
Sampling locations not located directly downstream from bridge or road surface run-off		
600.4.3 – Monitoring Preparation		
Identify sampling personnel including company name		
Describe training and qualifications of sampling personnel		
Identify contractors health and safety procedures for sampling personnel		
Identify alternate sampling personnel		
Identify state certified laboratory to analyze samples		
Describe strategy for ensuring adequate sample supplies are available prior to sampling		
Describe strategy for ensuring appropriate field testing equipment is available prior to sampling		
600.4.4 – Sample Collection and Handling		
Description of sample collection procedures		
Sample procedure in accordance with test procedure under 40 CFR Part 136		
Description of sample handling procedures		
Description of decontamination waste disposal requirements		
Description of sample collection documentation procedures		
Description of procedures for recording and correcting sampling data		
Chain of custody form required to be submitted to laboratory with samples		
Sampling activity log to be kept to document details of all sampling events		
Each sample bottle required to have proper and complete identification label		

600.4.5 – Sample Analysis		
Describe tests to be used on project samples using "Sample Collection, Preservation and Analysis for Monitoring Sedimentation/Siltation and/or Turbidity" form		
Appropriate answers included on form for discharges to 303(d) listed waters		
All appropriate blank fields on form filled in		
600.4.6 – Quality Assurance/Quality Control		
Required text included		
600.4.7 – Data Management and Reporting		
Required text included		
600.4.8 – Data Evaluation		
Required text included		
600.4.9 – Change of Conditions		
Required text included		
600.5 – Sampling and Analysis Plan for Non-Visible Pollutants		
Required text included		
600.5.1 – Scope of Monitoring Activities		
Required text included		
Identify general sources and locations of potential non-visible pollutants on project site for:		
Materials or wastes identified in Section 500.3.1		
Materials or wastes that are stored under watertight conditions		
Construction activities such as application of fertilizers, pesticides, herbicides etc that have occurred during a rain event of with 24 hours preceding a rain event		
Existing site features contaminated with non-visible pollutants		
Application of soil amendments and other chemicals with the potential to alter PH levels or contribute toxic pollutants to storm water runoff		
Storm water runoff from an area contaminated by historical usage of the site		
Storm water run-on to the project site with potential to contribute pollutants		
Breaches, malfunctions, leakages or spills from a BMP		
600.5.2 - Monitoring Strategy		
Required text included		
Description of sampling schedule		
Describe locations for sampling locations		
Description for rationale for selection sampling locations		
Sampling locations selected from each source of non-visible pollutants identified in Section 600.5.1		
Description of location for collecting uncontaminated background sample		
Description of location for sampling storm water run-on form each location identified in Section 600.5.1		

Description of sampling locationat off-site activities related to the project		
Sampling locations in areas that are safe, out of the path of heavy traffic and have attainable access		
List and describe surrounding sites and uses that may contribute run-on or airborne constituents to the site		
600.5.3 – Monitoring Preparation		
Identify party responsible for sample collection		
Describe training and qualifications of sampling personnel		
Identify contractors health and safety procedures for sampling personnel		
Identify alternate sampling personnel		
Identify state certified laboratory to analyze samples		
Describe strategy for ensuring adequate sample supplies are available prior to sampling		
Describe strategy for ensuring appropriate field testing equipment is available prior to sampling		
600.5.4 – Analytical Constituents		
Table 600-2 to be completed and attached		
List of non-visible pollutant source, non-visible pollutant name and water quality indicator		
Construction Material and Pollutant Testing Guidance Table – Non-Visible Pollutants table completed and attached		
Visible pollutants not added to table		
Table 600-3 completed and attached		
600.5.5 – Sample Collection and Handling		
Laboratory analysis, sampling, sample preservation and analyses conducted according to test procedures under 40 CFR Part 136		
Chain of custody form required to be submitted to laboratory with samples		
Sampling activity log to be kept to document details of all sampling events		
Each sample bottle required to have proper and complete identification label		
Description of sample collection procedures		
Description of sample handling procedures		
Description of decontamination waste disposal requirements		
Description of sample collection documentation procedures		
Description of procedures for recording and correcting sampling data		
Table 600-3 to be completed		
600.5.6 – Sample analysis		
Table 600-2 to be completed and attached		
Table 600-3 to be completed and attached		
Test method included for each non-visible pollutant identified in Table 600-2		
Procedure to contact laboratory for appropriate test method(s)/specification to be used for each constituent		
Field test instruments to be used for sampling identified		
600.5.7 – Quality Assurance/Quality Control		

Required text included		
6**00.5.8 – Data Management and Reporting**		
Required text included		
600.5.9 Data Evaluation		
Required text included		
600.5.10 – Change of Conditions		
Required text included		

Appendix F

Tier 2 Construction SWPPP Template

Tier 2 Construction SWPPP Preparation Template

This document has been prepared to identify the various components that make up a Tier 2 Construction Storm Water Pollution Prevention Plan (SWPPP). A complete Tier 2 Construction SWPPP is composed of the following components:

1. A set of storm water pollution plan drawings meeting all the requirements of the Construction SWPPP Checklist items as contained in the Tier 2 Construction SWPPP Review Checklist attached as Appendix G to Section 3 (Construction SWPPP Standards and Requirements) in the City Storm Water Standards Manual.

2. A completed and signed Storm Water Compliance Form for a Tier 2 Construction SWPPP as contained in Appendix B to Section 3 (Construction SWPPP Standards and Requirements) in the City Storm Water Standards Manual.

3. A completed and signed Tier 2 Construction SWPPP Site Assessment Form (attached)

4. All supporting documentation, studies and reports as required to comply with the Municipal Permit and City Standards including any needed hydrology and hydraulic calculations, soils and geotechnical reports, spill prevention plan and manufacturers information and other data needed to clarify and support of the proposed storm water pollution prevention plan.

Included with this template is a Tier 2 Construction SWPPP Required Elements Checklist that should be used by the qualified Construction SWPPP preparer during the preparation of the plan to ensure that all required elements are included into the plan.

Tier 2 Construction SWPPP Site Assessment Form

Project ID: _____

Project Information:

Project Name: _____

Project Address/Location; _____

_____

Responsible Parties/Contact Information:

Name of Preparer: _____

Qualification of Preparer (Registration/Certification): _____

_____

Address: _____

City/State/Zip Code: _____

Phone Number: _____

Name of Owner/Owner's Agent: _____

Address: _____

City/State/Zip Code: _____

Phone Number: _____

Name of Emergency Contact: _____
(during construction)

Address: _____

City/State/Zip Code: _____

Phone Number: _____

Site and Construction Activity Description:

Construction Start Date: _____ End Date: _____

If work begins in rainy season or extends into rainy season, explain how project work can be scheduled can be altered to avoid rainy season impacts or to lessen exposure of site during rainy season: _____

_____

_____

_____

Grading Quantities: Cut: _____CY; Fill: _____CY; Import: _____CY;

Export: _____CY

Any Stockpile Proposed? _____ If yes, then estimate quantity: _____CY

Estimated duration of stockpile: _____Months

Soils types: _____

Does site contain a preponderance of soils with USDA-NRCS erosion factor kf greater than or equal to 0.4? _____

Is a staging area proposed (yes/no)? _____

If yes, then where is it located? _____

_____

Is concrete washout required (yes/no)? _____

Where is it located? _____

Any existing site contamination (yes/no)? _____

Where is it located? _____

Any vehicle storage, maintenance or fueling area proposed (yes/no)? _____

Where is it located? _____

Any de-watering operation proposed (yes/no)? _____

Where is it located? _____

Any other special operations proposed that may impair water quality (yes/no)? _____

What and where? _____

Watershed Basin project drains to: ☐ Buena Vista Lagoon ☐ Agua Hedionda Lagoon
☐ Encinas Creek ☐ Batiquitos Lagoon ☐ Pacific Ocean

Is project drainage tributary to a CWA section 303(d) listed water body impaired for sediment (includes Buena Vista and Agua Hedionda Lagoons) (yes/no): _____

If yes, describe additional controls that will be used on project site to mitigate for sediment impairments (if any): _____

_____

_____

_____

Is project inside or within 200 feet of an Environmentally Sensitive Area (yes/no): _____

If yes, describe additional controls that will be used on project site to mitigate for potential storm water impacts (if any): _____

_____

_____

Are any agency permits required (yes/no)? _____

Check off permit types required: ☐ Army Corps 404 permit
☐ Regional Board Water Quality 401 Certification ☐ Coastal Commission Certification
☐ U.S. Fish and Wildlife Section 7 ☐ Fish and Game Stream Alteration Agreement
☐ Other list: _____

List materials that will be used on construction site and their handling and storage requirements		
Material	Characteristics/Toxicity	Handling requirements

If any toxic or hazardous materials are proposed, then a spill prevention plan is required. Is a spill prevention plan required (yes/no)? _____.

If yes, attach spill prevention plan.

Perceived Threat to Storm Water Quality rating:

Using the Construction Threat Assessment Worksheet (attached as Appendix C to Section 3 (Construction SWPPP Standards and Requirements) of the City Storm Water Standards Manual, determine the projects Perceived Threat to Storm Water Quality rating.

The Construction Threat to Storm Water Quality rating for this project is: ☐ High ☐ Medium

Signature of Plan Preparer:

Signature: _____ Date: _____

Print Name: _____ Title: _____

Attachments:

- ❑ Storm Water Compliance Form – Tier 2
- ❑ Spill Prevention Plan
- ❑ Hydrology and/or hydraulic study
- ❑ Solis and/or geotechnical report(s)
- ❑ Other. List: _____

_____

BMP Selection:

The following tables are provided to help identify and select appropriate site specific BMPs for the proposed project. Review the list of potential site construction activities and site conditions described along the left hand column of each sheet. Then, for each activity or site condition that is included in the proposed project, pick one or more of the BMPs described at the top of the form and place an X(s) in the box(es) that form(s) an intersection between the activity/site condition row and BMP column(s).

All structural (physical facility) BMP's should be shown on the site plan in the Construction SWPPP drawing set. Any proposed no-structural BMP should be noted in the Special Notes on the Construction SWPPP drawing set.

	Erosion Control BMPs													Wind Erosion BMPs
BMP Description →	Scheduling	Preservation of Existing Vegetation	Hydraulic Mulch	Hydroseeding	Soil Binders	Straw Mulch	Geotextiles & Mats	Wood Mulching	Earth Dikes and Drainage Swales	Velocity Dissipation	Slope Drains	Streambank Stabilization	Polyacrylamide	Wind Erosion Control
CASQA Designation → **Construction Activity or Site Condition**	EC-1	EC-2	EC-3	EC-4	EC-5	EC-6	EC-7	EC-8	EC-9	EC-10	EC-11	EC-12	EC-13	WE-1
Cleared Areas														
Flat pad graded areas														
Graded slope areas														
Trenching/Excavation														
Stockpiling														
Drilling/Boring														
Conduit/Pipe Installation														
Substructure/Pad Installation														
Staging Area														
Existing onsite vegetated areas														
Drainage flow onto site														
Drainage flows off of site														
Drainage at top of slope														
Other (list):														

	Sediment Control BMPs										
BMP Description →	Silt Fence	Sediment Basin	Sediment Trap	Check Dam	Fiber Rolls	Gravel Bag Berm	Street Sweeping and Vacuuming	Sandbag Barrier	Straw Bale Barrier	Storm Drain Inlet Protection	Chemical Treatment
CASQA Designation →	SE-1	SE-2	SE-3	SE-4	SE-5	SE-6	SE-7	SE-8	SE-9	SE-10	SE-11
Construction Activity Or Site Condition											
Cleared Areas											
Flat pad graded areas											
Graded slope areas											
Trenching/Excavation											
Stockpiling											
Drilling/Boring											
Conduit/Pipe Installation											
Substructure/Pad Installation											
Paving											
Staging Area											
Existing onsite vegetated areas											
Drainage flow onto site											
Drainage flows off of site											
Drainage at top of slope											
Other (list):											

	Tracking Control BMPs		
BMP Description →	Stabilized Construction Ingress/Egress	Stabilized Construcion Roadway	Ingress/Egress Tire Wash
CASQA Designation → **Construction Activity v**	TR-1	TR-2	TR-3
Site Access point(s)			
Staging area access point(s)			
Maintenance access roads to BMPs			
Other (list):			

	Non-Storm Water Management BMPs															
BMP Description →	Water Conservation Practices	Dewatering Operations	Paving and Grinding Operations	Temporary Stream Crossing	Clear Water Diversion	Illicit Connection/Discharge	Potable Water/Irrigation	Vehicle and Equipment Cleaning	Vehicle and Equipment Fueling	Vehicle and Equipment Maintenance	Pile Driving Operations	Concrete Curing	Concrete Finishing	Material and Equipment Use	Demolition Adjacent to Water	Temporary Batch Plants
CASQA Designation → **Construction Activity Site Conditions**	NS-1	NS-2	NS-3	NS-4	NS-5	NS-6	NS-7	NS-8	NS-9	NS-10	NS-11	NS-12	NS-13	NS-14	NS-15	NS-16
Landscaping & Irrigation																
Drilling/Boring																
Concrete/Asphalt Sawcutting																
Concrete flatwork																
Paving																
Wire, Cable & Connector Installation																
Site Housekeeping																
Staging Area																
Equipment Maintenance and Fueling																
Hazardous Substance Management																
Dewatering																
Steam crossing																
Material delivery																
Solid waste handling including trash and debris removal																
Concrete or stucco work																
Other (list):																

	Waste Management and Materials Pollution Control BMPs									
BMP Description →	Material Delivery and Storage	Material Use	Stockpile Management	Spill Prevention and Control	Solid Waste Management	Hazardous Waste Management	Contaminated Soil Management	Concrete Waste Management	Sanitary/ Septic Waste Management	Liquid Waste Management
CASQA Designation → **Construction Activity And Site Conditions**	WM-1	WM-2	WM-3	WM-4	WM-5	WM-6	WM-7	WM-8	WM-9	WM-10
Landscaping & Irrigation										
Drilling/Boring										
Concrete/Asphalt Sawcutting										
Concrete flatwork										
Paving										
Wire, Cable & Connector Installation										
Site Housekeeping										
Staging Area										
Equipment Maintenance and Fueling										
Hazardous Substance Management										
Dewatering										
Steam crossing										
Material delivery										
Solid waste handling including trash and debris removal										
Concrete or stucco work										
Temporary porta-potties										
Other (list):										

Tier 2 Construction SWPPP Required Elements Checklist

Required Elements	Required for Project	Preparer Verification
Construction SWPPP Drawing Set		
1. Standard Storm Water Pollution Prevention Notes		
A. General Site Management Requirements Notes		
B. Rainy Season Site Management Requirements Notes		
C. Erosion Control Hydroseeding, Planting and Irrigation Notes		
D. Special site specific notes		
2. City SWMP identification number affixed for high priority projects		
3. Construction Threat to Storm Water Quality rating (high or medium inspection frequency required?)		
4. Regional Water Board WDID Number shall be affixed for small linear utility projects as appropriate		
5. Project Location		
6. Legend		
7. Description of work		
A. Quantities (cut, fill, import, export)		
B. Area of disturbance		
C. Site conditions description		
1) Soils type		
8. Benchmark Information		
9. Preparer's signature and seal as appropriate		
10. City title block		
11. Emergency contact name, company and phone number		
12. Water shed project drains to listed		
13. Site Plan		
A. Existing topographic and cultural features of site and immediate vicinity as appropriate		
B. Scale and north arrow		
C. Project boundary and property lines		
D. Proposed grading contours and slopes clearly shown		

E. Staging areas, equipment storage, refueling, stockpiling and maintenance areas identified		
F. Storm drain inlets, open channels and natural drainages and watercourses that flow onto or drain off of the project site clearly delineated		
G. Potential source points of pollutants (fueling locations, waste container areas, wash racks, hazardous materials storage, etc)		
H. Site access locations		
I. Proposed BMPs – location and description		
1) Perimeter controls		
2) Erosion controls		
3) Sediment controls		
4) Tracking controls		
5) Non-storm water management controls		
6) Waste management and materials pollution controls		
7) Additional controls (as needed)		
8) Advanced treatment methods (as needed)		
J. Toxic or hazardous material contamination or spill areas		
K. Existing site BMP installations		
14. BMP detail drawings as needed		
Construction SWPPP Supplemental Documentation		
1. Storm Water Compliance Form for a Tier 2 Construction SWPPP completed and signed		
2. Tier 2 Site Assessment Form completed and signed		
3. Hydrology and hydraulic calculations (as needed for sediment basins and sizing of drainage swales to handle drainage during construction		
4. Soils report (as needed when proposed BMP installation may affect ground water, slope stability or other geotechnical site condition)		

Appendix G

Tier 2 Construction SWPPP Plan Review Checklist

Tier 2 Construction SWPPP Review Checklist

PROJECT ID NO._____PROJECT NAME_____
PLANCHECKER_____DRAWING NO._____DATE_____

	1st Chk	2nd Chk	3rd Chk	Mylar	Comments
I. CONSTRUCTION SWPPP DRAWING					
1. ALL SHEETS					
A. Medium (to be reviewed at time of submission of final plan check)					
1) 24"x36" mylar film with title block (Alternative medium may be approved by Deputy City Engineer or designee)					
2) No "sticky-back", glued or taped on or together sections					
3) Drawing with waterproof ink or photographically reproduced					
B. Drafting					
1) Signed by the Qualified SWPPP Preparer					
2) Marked with the name, address & telephone number of the Qualified SWPPP Preparer preparing the plan & date of preparation					
3) Consecutively numbered & the total number of sheets shown					
4) Lettered in a neat & legible style no lettering smaller than 1/8"					
5) Title with the name & discretionary permit number of the City approval					
6) Prepared to appropriate Scale(s)					
7) Drawn as separate plans from Grading Plans, Building Plans or Improvement Plans					
8) Use standard plans & details to maximum extent					
9) Clearly designate between existing conditions & work proposed					
10) Scale noted, north arrow & bar scale provided					
11) No duplication of any section or detail letter designation.					
2. TITLE SHEET					
A. Erosion Control Notes Provided					
1) Standard Notes					
2) Supplemental special notes					
B. Project Location					
1) Legal description					
2) Assessor's parcel number					
3) Vicinity map (may be waived by Deputy City Engineer or designee)					
C. Legend					
1) Symbols per County Standards					

√ Acceptable ? Unclear, Provide More Data N/A Not Applicable X Not Acceptable (provide reason for unacceptability in comment section)

	1st Chk	2nd Chk	3rd Chk	Mylar	Comments
2) Every symbol used on the plans is shown in the legend					
3) Every symbol description clear & unequivocal					
D. Description & Quantities of Work					
1) Quantities for each item constructed or installed per these plans					
2) Erosion control Structural BMPs					
3) Standard references listed					
E. Site Plan - (certain site plan requirements may be waived for projects not requiring a grading plan per the approval of the Deputy City Engineer or designee)					
1) Full project site area shown (on one sheet if possible)					
2) Adequate adjacent site area shown to clearly indicate drainage courses that flow onto or off of the site					
3) Topography extends minimum 15' beyond limits of work & over entire property					
4) Existing contours and cultural features (screened back 60 matte)					
5) Proposed contours and cultural features					
6) Existing & proposed contours clearly differentiated					
7) Slope symbols used only on slopes 2:1 or steeper					
8) Degree of slope shown for all slopes					
9) Fill slopes shaded					
10) Proposed lot lines shown					
11) Existing lot lines shown & dimensioned					
12) Street name or designations					
F. Drainage Facilities and Water Courses					
1) Storm drains and inlets existing and proposed					
2) Water courses and natural drainages shown with arrows indicating direction of flow					
3) Down drains					
4) Paved swales & terrace drains shown with arrows indicating direction of flow					
5) Existing and proposed basins					
G. Detail Drawings (Only when necessary. Generally refer to CASQA reference drawings)					
1) Modifications to standard drawings (CASQA or others) should be detailed					
H. Proposed Storm Water BMPs					
1) BMPs shown in bold ink and clearly visible					
2) BMP notes and identifiers bolded and clearly shown					

√ Acceptable ? Unclear, Provide More Data N/A Not Applicable X Not Acceptable (provide reason for unacceptability in comment section)

	1st Chk	2nd Chk	3rd Chk	Mylar	Comments
3) Proper CASQA (or other standard) designations used					
4) Perimeter control shown					
a. Flows onto site contained or diverted around construction area					
b. Flows off-site mitigated through retention, dissipation or other means					
c. Perimeter silt fencing, fiber rolls or other sediment control BMP for sloped areas or areas of sheet flow					
5) Erosion control shown					
a. Existing vegetation preserved where possible					
b. BMP specified for all sloped areas 3:1 or steeper					
c. Minimize area and duration of exposed soils					
6) Sediment control shown					
a. Basin or other appropriate BMP shown for flat areas less than 3:1					
b. Onsite and offsite inlets protected with storm drain inlet protection, gravel bags or other appropriate BMP					
c. Onsite earth swales and water courses protected with check dams, gravel bags, fiber rolls or other appropriate BMP					
d. Additional controls proposed for sites draining directly to receiving waters					
7) Tracking control shown					
a. Limit vehicle and equipment access points onto site					
b. Stabilized construction entrance called out on plan					
8) Non-Storm Water Management BMP indicated on plan					
a. Vehicle and equipment fueling and maintenance areas identified and protected					
b. Concrete Finishing and curing protections					
9) Waste Management and Materials Control BMPs					
a. Material Delivery and Storage BMPs indicated					
b. Stockpile management BMPs indicated					
c. Concrete mixer wash out BMP indicated					
I. General Site Management					
1) All weather access provide to basins and other BMPs that require cleaning or maintenance during rainy season					

√ Acceptable ? Unclear, Provide More Data N/A Not Applicable X Not Acceptable (provide reason for unacceptability in comment section)

	1st Chk	2nd Chk	3rd Chk	Mylar	Comments
2) 24 hour telephone number for emergency erosion control person and name of specific individual with authority and responsibility for erosion control					
3) Schedule for completion of installation of erosion control facilities					
4) Erosion control planting & method of starting & maintaining growth (irrigation)					
5) Weather triggered action plan for deploying BMPs with 48 hours of a predicted rain					
6) Description of standby BMP materials plan					
J. Project Conditions of Approval (list if applicable.)					
1)					
2)					
3. ADDITIONAL PLAN SHEETS (Additional plan sheets as required to adequately depict required BMP details or depict the site plan with an appropriate scale to clearly show all existing and proposed features)					
II. SUPPLEMENTAL DOCUMENTATION					
1. STORM WATER COMPLIANCE FORM (properly filled out and signed by Owner or Owner's Agent including appropriate City approval initial)					
2. COMPLETED SITE ASSESSMENT FORM					
3. SPILL PREVENTION PLAN (as required)					
5. SOILS/GEOTECHNICAL INVESTIGATION REPORT (As needed for geotechnical safety. Follow format indicated on Grading Plan Checklist when required)					
6. CALCULATIONS (As needed for projects with sedimentation basins or significant on-site/off-site drainage flows to determine sizing of swales and potential for erosive velocities)					
A. All					
1) All pages numbered					
2) Total number of pages on each page					
3) Each page labeled with the name address & telephone number of the preparing firm					
4) Neat & legible					
5) Indexed					
6) In logical order					
7) Cross-referenced to plans					
8) Bound					
9) Sturdy cover					
10) Signed, sealed & dates of preparation and expiration of registration applied on report cover or on bound-in cover letter					
11) Cover prominently labeled with subject, name & number of the discretionary permit for the project.					

√ Acceptable ? Unclear, Provide More Data N/A Not Applicable X Not Acceptable (provide reason for unacceptability in comment section)

	1st Chk	2nd Chk	3rd Chk	Mylar	Comments
B. Hydrology Per San Diego County Standards					
1) 1984 rainfall intensity curves					
2) Appropriate value of C					
3) Appropriate design method					
a. U.S. Army Corps of Engineers HEC series					
b. Soil Conservation Service Unit Hydrography					
c. Rational Method (Q□CIA) (0.5 sq. mile max)					
4) TI correctly completed					
5) If correctly completed					
6) Tc correct					
7) Six hour/24 intensities correctly balanced					
8) Documentation provided or "plain english" output for computer generated reports					
C. Hydraulic					
1) Documentation provided or "plain english" output for computer generated reports					
2) Clear copies provided or all charts, maps, nomogrpahs or other graphic used					
3) Cite general formula before inserting specific values (i.e. Q□AV; Q□ 2.5 x 18 □ 4.75 cfs)					
7. ENGINEER'S ESTIMATE (Needed only for projects with grading plans. Follow grading plan checklist requirements)					

Additional Comments:_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

√ Acceptable ? Unclear, Provide More Data N□A Not Applicable X Not Acceptable (provide reason for unacceptability in comment section)

Appendix H

Tier 1 Construction SWPPP Standard Template

CITY OF CARLSBAD
STANDARD FORM - TIER 1 STORM WATER POLLUTION PREVENTION PLAN

STORM WATER COMPLIANCE CERTIFICATE

- ✓ My project is not in a category of permit types exempt from the Construction SWPPP requirements
- ✓ My project is not located inside or within 200 feet of an environmentally sensitive area with a significant potential for contributing pollutants to nearby receiving waters by way of storm water runoff or non-storm water discharge(s).
- ✓ My project does not requires a grading plan pursuant to the Carlsbad Grading Ordinance (Chapter 15.16 of the Carlsbad Municipal Code)
- ✓ My project will not result in 2,500 square feet or more of soils disturbance including any associated construction staging, stockpiling, pavement removal, equipment storage, refueling and maintenance areas that meets one or more of the additional following criteria:
  - located within 200 feet of an environmentally sensitive area or the Pacific Ocean; and/or,
  - disturbed area is located on a slope with a grade at or exceeding 5 horizontal to 1 vertical; and/or
  - disturbed area is located along or within 30 feet of a storm drain inlet, an open drainage channel or watercourse; and/or
  - construction will be initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30).

I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT ALL OF THE ABOVE CHECKED STATEMENTS ARE TRUE AND CORRECT. I AM SUBMITTING FOR CITY APPROVAL A TIER 1 CONSTRUCTION SWPPP PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF CITY STANDARDS.

I UNDERSTAND AND ACKNOWLEDGE THAT I MUST: (1) IMPLEMENT BEST MANAGEMENT PRACTICES (BMPS) DURING CONSTRUCTION ACTIVITIES TO THE MAXIMUM EXTENT PRACTICABLE TO MINIMIZE THE MOBILIZATION OF POLLUTANTS SUCH AS SEDIMENT AND TO MINIMIZE THE EXPOSURE OF STORM WATER TO CONSTRUCTION RELATED POLLUTANTS; AND, (2) ADHERE TO, AND AT ALL TIMES, COMPLY WITH THIS CITY APPROVED TIER 1 CONSTRUCTION SWPPP THROUGHTOUT THE DURATION OF THE CONSTRUCTION ACTIVITIES UNTIL THE CONSTRUCTION WORK IS COMPLETE AND APPROVED BY THE CITY OF CARLSBAD.

_____
OWNER(S)/OWNER'S AGENT NAME (PRINT)

_____ _____
OWNER(S)/OWNER'S AGENT NAME (SIGNATURE) DATE

STORM WATER POLLUTION PREVENTION NOTES

1. ALL NECESSARY EQUIPMENT AND MATERIALS SHALL BE AVAILABLE ON SITE TO FACILITATE RAPID INSTALLATION OF EROSION AND SEDIMENT CONTROL BMPS WHEN RAIN IS EMINENT.
2. THE OWNER/CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
3. THE OWNER/CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEERING OR BUILDING INSPECTOR DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY ARISE.
4. ALL REMOVABLE PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE (5) DAY RAIN PROBABILITY FORECAST EXCEEDS FORTY PERCENT (40%). SILT AND OTHER DEBRIS SHALL BE REMOVED AFTER EACH RAINFALL.
5. ALL GRAVEL BAGS SHALL BE BURLAP TYPE WITH 3/4 INCH MINIMUM AGGREGATE.
6. ADEQUATE EROSION AND SEDIMENT CONTROL AND PERIMETER PROTECTION BEST MANAGEMENT PRACTICE MEASURES MUST BE INSTALLED AND MAINTAINED.

SPECIAL NOTES

PROJECT INFORMATION

Site Address: _____

Assessor's Parcel Number: _____

Project ID: _____

Construction Permit No.: _____

Estimated Construction Start Date _____

Project Duration _____Months

Emergency Contact:

Name: _____

24 hour Phone: _____

Perceived Threat to Storm Water Quality

☐ Medium ☐ Low

If medium box is checked, must attach a site plan sheet showing proposed work area and location of proposed structural BMPs

For City Use Only

CITY OF CARLSBAD
STANDARD TIER 1 SWPPP

Approved By: _____
Date: _____

Page 1 of ____

	Erosion Control BMPs					Sediment Control BMPs									Tracking Control BMPs			Non-Storm ater Management BMPs					Waste Management and Materials Pollution Control BMPs							
Best Management Practice (BMP) Description →	Geotextiles & Mats	Wood Mulching	Earth Dikes and Drainage Swales	Slope Drains		Silt Fence	Sediment Trap	Check Dam	Fiber Rolls	Gravel Bag Berm	Street Sweeping and Vacuuming	Sandbag Barrier	Storm Drain Inlet Protection		Stabilized Construction Ingress/Egress	Stabilized Construcion Roadway		Water Conservation Practices	Paving and Grinding Operations	Potable Water/Irrigation	Vehicle and Equipment Cleaning		Material Delivery and Storage	Material Use	Stockpile Management	Spill Prevention and Control	Solid Waste Management	Hazardous Waste Management	Concrete Waste Management	
CASQA Designation →	EC-7	EC-8	EC-9	EC-11		SE-1	SE-3	SE-4	SE-5	SE-6	SE-7	SE-8	SE-10		TR-1	TR-2		NS-1	NS-3	NS-7	NS-8		WM-1	WM-2	WM-3	WM-4	WM-5	WM-6	WM-8	
Construction Activity																														
Grading/Soil Disturbance																														
Trenching/Excavation																														
Stockpiling																														
Drilling/Boring																														
Concrete/Asphalt Sawcutting																														
Concrete flatwork																														
Paving																														
Conduit/Pipe Installation																														
Stucco/Mortar Work																														
Waste Disposal																														
Staging/Lay Down Area																														
Equipment Maintenance and Fueling																														
Hazardous Substance Use/Storage																														
Dewatering																														
Site Access Across Dirt																														
Other (list):																														

Instructions: Begin by reviewing the list of construction activities and checking the box to the left of any activity that will occur during the proposed construction. Add any other activity descriptions in the blank activity description boxes provided for that purpose and place a check in the box immediately to the left of the added activity description. For each activity descrribed, pick one or more best management practices (BMPs) from the list located alon the top of the form. Then place an X in the box at the place where the activity row intersects with the BMP column. Do this for each activity that was checked off and for each of the selected BMPs selected from the list. For Example – If the project includes site access across dirt, then check the box to the left of "Site Access Across Dirt". Then review the list for something that applies such as "Stabilized Construcion Ingress/Egress" under Tracking Control. Follow along the "Site Access Across Dirt" row until you get to the "Stabilized Construction Ingress/Egress" column and place an X in the box where the two meet. As another example say the project included a stockpile that you intend to cover with a plastic sheet. Since plastic sheeting is not on the list of BMPs, then write in "Cover with Plastic" in the blank column under the heading Erosion Control BMPs. Then place an X in the box where "Stockpiling" row intersects the new "Cover with Plastic" column.

To learn more about what each BMP description means, you may wish to review the BMP Reference Handout prepared to assist applicants in the selection of appropriate Best Management Practice measures. The reference also explains the California Stormwater Quality Association (CASQA) designation and how to apply the various selected BMPs to a project.

Scale of map

Legend

Site Map

Features displayed on the map must include:

- An outline of the entire property
- Location and brief description of construction activity areas (e.g. grading, building, trenching, fueling areas, waste container area, wash racks, hazardous material storage areas, etc.)
- Location and flow direction arrows for existing drainage facilities (ditches, channels, inlets, storm drains, etc.)
- Location of existing storm water BMP controls (sediment basins, oil/ water separators, sumps, etc.)
- Location of proposed storm water BMP controls with brief description or legend reference

Page 3 of _____

Appendix I

City Standard
Storm Water Pollution Prevention Notes

STORM WATER POLLUTION PREVENTION

GENERAL SITE MANAGEMENT REQUIREMENTS

THE FOLLOWING GENERAL SITE MANAGEMENT REQUIREMENTS SHALL BE ADHERED TO THROUGHOUT THE DURATION OF THE CONSTRUCTION WORK (YEAR ROUND):

1. IN CASE EMERGENCY WORK IS REQUIRED, CONTACT _____ FROM _____ AT _____.

2. DEVICES SHOWN ON CITY APPROVED PLANS SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE ENGINEERING INSPECTOR.

3. THE CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.

4. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY ARISE.

5. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.

6. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.

7. ALL REMOVABLE PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE (5) DAY RAIN PROBABILITY FORECAST EXCEEDS FORTY PERCENT (40□). SILT AND OTHER DEBRIS SHALL BE REMOVED AFTER EACH RAINFALL.

8. ALL GRAVEL BAGS SHALL BE BURLAP TYPE WITH 3/4 INCH MINIMUM AGGREGATE.

9. ALL GRADED AREAS MUST HAVE EROSION CONTROL PROTECTION BEST MANAGEMENT PRACTICE MEASURES PROPERLY INSTALLED.

10. ADEQUATE PERIMETER PROTECTION BEST MANAGEMENT PRACTICE MEASURES MUST BE INSTALLED AND MAINTAINED.

11. ADEQUATE SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MEASURES MUST BE INSTALLED AND MAINTAINED.

12. ADEQUATE MEASURES TO CONTROL OFFSITE SEDIMENT TRACKING MUST BE INSTALLED AND MAINTAINED.

13. A MINIMUM OF 125□ OF THE MATERIAL NEEDED TO INSTALL STANDBY BEST MANAGEMENT PRACTIVE MEASURES TO PROTECT THE EXPOSED AREAS FROM EROSION AND PREVENT SEDIMENT DISCHARGES, MUST BE STORED ONSITE. AREAS ALREADY PROTECTED FROM EROSION USING PHYSICAL STABILIZATION OR ESTABLISHED VEGETATION STABILIZATION MEASURES ARE NOT CONSIDERED TO BE □EXPOSED□FOR PURPOSES OF THIS REQUIREMENT.

14. THE OWNER/DEVELOPER/CONTRACTOR MUST HAVE AN APPROVED WEATHER TRIGGERED ACTION PLAN AND BE ABLE TO DEPLOY STANDBY BEST MANAGEMENT PRACTICE MEASURES TO COMPLETELY PROTECT THE EXPOSED PORTIONS OF THE SITE WITHIN 48 HOURS OF A PREDICTED STORM EVENT (A PREDICTED STORM EVENT IS DEFINED AS A FORECASTED, 40 CHANCE OF RAIN BY THE NATIONAL WEATHER SERVICE). ON REQUEST, THE OWNER/CONTRACTOR MUST PROVIDE PROOF OF THIS CAPABILITY THAT IS ACCEPTABLE TO THE CITY.

15. DEPLOYMENT OF PHYSICAL OR VEGETATION EROSION CONTROL MEASURES MUST COMMENCE AS SOON AS SLOPES ARE COMPLETED. THE OWNER/CONTRACTOR MAY NOT CONTINUE TO RELY ON THE ABILITY TO DEPLOY STANDBY BEST MANAGEMENT PRACTICE MATERIALS TO PREVENT EROSION OF SLOPES THAT HAVE BEEN COMPLETED.

16. UNLESS OTHERWISE SPECIFIED ON THE GRADING PLANS OR THE CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN DOCUMENTS, THE AREA THAT CAN BE CLEARED, GRADED, AND LEFT EXPOSED AT ONE TIME IS LIMITED TO THE AMOUNT OF ACREAGE THAT THE CONTRACTOR CAN ADEQUATELY PROTECT PRIOR TO A PREDICTED RAINSTORM. IT MAY BE NECESSARY TO DEPLOY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MEASURES IN AREAS THAT ARE NOT COMPLETED AND ARE NOT ACTIVELY BEING WORKED BEFORE ADDITIONAL GRADING IS ALLOWED TO PROCEED, AT THE DISCRETION OF THE PUBLIC WORKS INSPECTOR.

RAINY SEASON SITE MANAGEMENT REQUIREMENTS (OCTOBER 1 APRIL 30)

THE FOLLOWING RAINY SEASON SITE MANAGEMENT REQUIREMENTS SHALL BE ADHERED TO THROUGHOUT THE RAINY SEASON DEFINED AS BEGINNING ON OCTOBER 1 OF ANY YEAR AND EXTENDING THROUGH APRIL 30TH OF THE FOLLOWING YEAR:

1. EROSION CONTROL, PERIMETER PROTECTION AND SEDIMENT CONTROL BEST MANAGEMETN PRACTICE MEASURES MUST BE UPGRADED IF NECESSARY TO PROVIDE SUFFICIENT PROTECTION FOR STORMS LIKELY TO OCCUR DURING THE RAINY SEASON.

2. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS EMINENT.

3. ADEQUATE PHYSICAL OR VEGETATION EROSION CONTROL BEST MANAGEMENT PRACTICE MEASURES MUST BE INSTALLED AND ESTABLISHED FOR ALL COMPLETED SLOPES PRIOR TO THE START OF THE RAINY SEASON. THESE BEST MANAGEMENT PRACTICE MEASURES MUST BE MAINTAINED THROUGHOUT THE RAINY SEASON. IF A SELECTED BEST MANAGEMENT PRACTICE MEASURE FAILS, IT MUST BE REPAIRED AND IMPROVED, OR REPLACED WITH AN ACCEPTABLE ALTERNATE AS SOON AS IT IS SAFE TO DO SO. THE FAILURE OF A BEST MANAGEMENT PRACTICE MEASURE INDICATES IT WAS NOT ADEQUATE FOR THE CIRCUMSTANCES IN WHICH IT WAS USED. REPAIRS OR REPLACEMENTS MUST THEREFORE PUT A MORE ROBUST BEST MANAGEMENT PRACTICE MEASURE IN PLACE.

4. ALL VEGETATION EROSION CONTROL MUST BE ESTABLISHED PRIOR TO THE RAINY SEASON TO BE CONSIDERED AS A BEST MANAGEMENT PRACTICE MEASURE.

5. THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED BY DEPLOYING STANDBY EROSION CONTROL AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MEASURES PRIOR TO A PREDICTED RAINSTORM.

6. A DISTURBED AREA THAT IS NOT COMPLETED BUT THAT IS NOT BEING ACTIVELY GRADED MUST BE FULLY PROTECTED FROM EROSION IF LEFT FOR 10 OR MORE DAYS. THE ABILITY TO DEPLOY STANDBY BEST MANAGEMENT PRACTICE MEASURE MATERIALS IS NOT SUFFICIENT FOR THESE AREAS. BEST MANAGEMENT PRACTICE MEASURES MUST ACTUALLY BE DEPLOYED.

<u>EROSION CONTROL HYDROSEEDING, PLANTING AND IRRIGATION</u>

1. ALL PERMANENT AND TEMPORARY EROSION CONTROL PLANTING AND IRRIGATION SHALL BE INSTALLED AND MAINTAINED AS REQUIRED IN SECTION 212 OF THE STANDARD SPECIFICATIONS AND THE FOLLOWING:

   A HYDROSEEDING SHALL BE APPLIED TO:
      1 ALL SLOPES THAT ARE GRADED 6:1 (HORIZONTAL TO VERTICAL) OR STEEPER WHEN THEY ARE:
         a. THREE FEET OR MORE IN HEIGHT AND ADJACENT TO A PUBLIC WALL OR STREET.
         b. ALL SLOPES 4 FEET OR MORE IN HEIGHT.
      2 AREAS GRADED FLATTER THAN 6:1 WHEN ANY OF THE FOLLOWING CONDITIONS EXIST:
         a. NOT SCHEDULED FOR IMPROVEMENTS (CONSTRUCTION OR GENERAL LANDSCAPING) WITHIN 60 DAYS OF ROUGH GRADING.
         b. IDENTIFIED BY THE PARKS AND RECREATION DIRECTOR AS HIGHLY VISIBLE TO THE PUBLIC.
         c. HAVE ANY SPECIAL CONDITION IDENTIFIED BY THE CITY ENGINEER THAT WARRANTS IMMEDIATE TREATMENT.

   B HYDROSEEDED AREAS SHALL BE IRRIGATED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
      1 ALL SLOPES THAT ARE GRADED 6:1 OR STEEPER AND THAT ARE:
         a. THREE TO EIGHT FEET IN HEIGHT SHALL BE IRRIGATED BY HAND WATERING FROM QUICK COUPLERS/HOSE BIBS OR A CONVENTIONAL SYSTEM OF LOW PRECIPITATION SPRINKLER HEADS PROVIDING 100 COVERAGE.
         b. GREATER THAN 8 FEET IN HEIGHT SHALL BE WATERED BY A CONVENTIONAL SYSTEM OF LOW PRECIPITATION SPRINKLER HEADS PROVIDING 100 COVERAGE.
      2 AREAS SLOPED LESS THAN 6:1 SHALL BE IRRIGATED AS APPROVED BY THE CITY ENGINEER, PRIOR TO HYDROSEEDING. THE DEVELOPER SHALL SUBMIT A PROPOSED SCHEME TO PROVIDE IRRIGATION TO THE CITY ENGINEER. THE PROPOSAL SHALL BE SPECIFIC REGARDING THE NUMBERS, TYPES, AND COSTS OF THE ELEMENTS OF THE PROPOSED SYSTEM.
      3 IRRIGATION SHALL MAINTAIN THE MOISTURE LEVEL OF THE SOIL AT THE OPTIMUM LEVEL FOR THE GROWN OF THE HYDROSEEDED GROWTH.

C HYDROSEEDING MIX SHALL CONSIST OF ALL OF THE FOLLOWING:

1 SEED MIX SHALL CONSIST OF NO LESS THAN:

a. 20 lbs. PER ACRE OF ROSE CLOVER
b. 20 lbs. PER ACRE OF ZORRO FESCUE
c. 3 lbs. PER ACRE OF E SCHOOL CIA CALIFORNICA
d. 4 lbs. PER ACRE OF ACHILLEA MILLEFOLIA
e. 3 lbs. PER ACRE OF ALYSSUM (CARPET OF SNOW)
f. 1/2 lb. PER ACRE OF DIMORPHOLECA
g. ITEMS c,d,e, AND f OF THIS SUBSECTION MAY BE OMITTED ON LOCATIONS WHERE THE AREA BEING HYDROSEEDED IS NOT VISIBLE FROM EITHER A PUBLIC STREET OR RESIDENTIAL STRUCTURES.
h. ITEM a OF THIS SUBSECTION MUST BE INOCULATED WITH A NITROGEN FIXING BACTERIA AND APPLIED DRY EITHER BY DRILLING OR BROADCASING BEFORE HYDROSEEDING.
i. ALL SEED MATERIALS SHALL BE TRANSPORTED TO THE JOBSITE IN UNOPENED CONTAINERS WITH THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE CERTIFICATION TAG ATTACHED TO, OR PRINTED ON SAID CONTAINERS.
j. NON-PHYTO-TOXIC WETTING AGENTS MAY BE ADDED TO THE HYDROSEED SLURRY AT THE DISCRETION OF THE CONTRACTOR.

2 TYPE 1 MULCH APPLIED AT THE RATE OF NO LESS THAN 2000 lbs PER ACRE. TYPE 6 MULCH (STRAW) MAY BE SUBSTITUTED, ALL OR PART, FOR HYDRAULICALLY APPLIED FIBER MATERIAL. WHEN STRAW IS USED, IT MUST BE ANCHORED TO THE SLOPE BY MECHANICALLY PUNCHING NO LESS THAN 50 OF THE STRAW INTO THE SOIL.

3 FERTILIZER CONSISTING OF AMMONIUM PHOSPHATE SULFATE, 16-20-0, WITH 15 SULPHUR APPLIED AT THE RATE OF 500 lbs. PER ACRE.

D AREAS TO BE HYDROSEEDED SHALL BE PREPARED PRIOR TO HYDROSEEDING BY:

1 ROUGHENING THE SURFACE TO BE PLANTED BY ANY OR A COMBINATION OF:

a. TRACK WALKING SLOPES STEEPER THAN 6:1
b. HARROWING AREAS 6:1 OR FLATTER THAT ARE SUFFICIENTLY FRIABLE.
c. RIPPING AREAS THAT WILL NOT BREAK UP USING ITEMS a OR b ABOVE.

2 CONDITIONING THE SOILS SO THAT IT IS SUITABLE FOR PLANTING BY:

a. ADJUSTING THE SURFACE SOIL MOISTURE TO PROVIDE A DAMP BUT NOT SATURATED SEED BED.
b. THE ADDITION OF SOIL AMENDMENTS, PH ADJUSTMENT, LEACHING COVERING SALINE SOILS TO PROVIDED VIABLE CONDITIONS FOR GROWTH.

E HYDROSEEDED AREAS SHALL BE MAINTAINED TO PROVIDE A VIGOROUS GROWTH UNTIL THE PROJECT IS PERMANENTLY LANDCAPED OR, FOR AREAS WHERE HYDROSEEDING IS THE PERMANENT LANDSCAPING, UNTIL THE PROJECT IS COMPLETED AND ALL BONDS RELEASED.

2. ALL SLOPES SHALL HAVE IRRIGATION INSTALLED AND BE STABILIZED, PLANTED AND/OR HYDROSEEDED WITHIN TEN (10) DAYS OF THE TIME WHEN EACH SLOPE IS BROUGHT TO GRADE AS SHOWN ON THE APPROVED GRADING PLANS.

3. SHOULD GERMINATION OF HYDROSEEDED SLOPES FAIL TO PROVIDE EFFICIENT COVERAGE OF GRADED SLOPES (90 COVERAGE) PRIOR TO OCTOBER 1, THE SLOPES SHALL BE STABILIZED BY AN APPROPRIATE EROSION CONTROL MATTING MATERIAL APPROVED BY THE PUBLIC WORKS INSPECTOR.

4. LANDSCAPING SHALL BE ACCOMPLISHED ON ALL SLOPES AND PADS AS REQUIRED BY THE CITY OF CARLSBAD LANDSCAPE MANUAL, THE LANDSCAPING PLANS FOR THIS PROJECT, DRAWING NO. _____, AND/OR AS DIRECTED BY THE CITY ENGINEER OR PLANNING DIRECTOR.

5. THE OWNER/APPLICANT SHALL ENSURE THAT ALL CONTRACTORS SHALL COORDINATE THE WORK OF THIS CONSTRUCTION SWPPP WITH THAT SHOWN ON ANY GRADING PLANS, LANDSCAPE AND IRRIGATION PLANS AND IMPROVEMENT PLANS AS REQUIRED FOR THIS PROJECT WORK.

Appendix J

Excerpts from EPA Guidelines for Selecting Construction BMPs

Chapter 4: **SWPPP Development—Selecting Erosion and Sediment Control BMPs**

▶ **This chapter presents a brief discussion of erosion and sediment control principles and a discussion of some commonly used BMPs.**

This document is not intended as an engineering or design manual on BMPs. The engineer or other qualified person that develops the details of your sediment and erosion control plan should be using the appropriate state or local specifications. The descriptions below provide a kind of checklist of the things to look for and some helpful installation and maintenance hints.

Erosion and sediment controls are the structural and non-structural practices used during the construction process to keep sediment in place (erosion control) and to capture any sediment that is moved by stormwater before it leaves the site (sediment control). Erosion controls—keeping soil where it is—are the heart of any effective SWPPP. Your SWPPP should rely on erosion controls as the primary means of preventing stormwater pollution. Sediment controls provide a necessary second line of defense to properly designed and installed erosion controls.

The suite of BMPs that you include in your SWPPP should reflect the specific conditions at the site. The information that you collected in the previous steps should help you select the appropriate BMPs for your site. An effective SWPPP includes a combination or suite of BMPs that are designed to work together.

Ten Keys to Effective Erosion and Sediment Control (ESC)

The ultimate goal of any SWPPP is to protect rivers, lakes, wetlands, and coastal waters that could be affected by your construction project. The following principles and tips should help you build an effective SWPPP. **Keep in mind that there are many BMP options available to you. We have selected a few common BMPs to help illustrate the principles discussed in this chapter.**

Erosion Control (keeping the dirt in place) and Minimizing the Impact of Construction

1. **Minimize disturbed area and protect natural features and soil**
2. **Phase construction activity**
3. **Control stormwater flowing onto and through the project**
4. **Stabilize soils promptly**
5. **Protect slopes**

Sediment Controls (the second line of defense)

6. **Protect storm drain inlets**
7. **Establish perimeter controls**
8. **Retain sediment on-site and control dewatering practices**
9. **Establish stabilized construction exits**
10. **Inspect and maintain controls**

Take a Closer Look…

BMPs in Combination

BMPs work much better when they are used in combination. For instance, a silt fence should not be used alone to address a bare slope. An erosion control BMP should be used to stabilize the slope, and the silt fence should serve as the backup BMP.

What does this mean to me?

Wherever possible, rely on erosion controls to keep sediment in place. Back up those erosion controls with sediment controls to ensure that sediment doesn't leave your site. Continually evaluate your BMPs. Are they performing well? Could the addition of a supplemental BMP improve performance? Should you replace a BMP with another one that might work better? Using BMPs in series also gives you some protection in case one BMP should fail.

Erosion Control and Minimizing the Impact of Construction

ESC Principle 1: Minimize disturbed area and protect natural features and soil. As you put together your SWPPP, carefully consider the natural features of the site that you assessed in Chapter 3. By carefully delineating and controlling the area that will be disturbed by grading or construction activities, you can greatly reduce the potential for soil erosion and stormwater pollution problems. Limit disturbed areas to only those necessary for the construction of your project. Natural vegetation is your best and cheapest erosion control BMP.

Figure 7. Protect vegetated buffers by using silt fence or other sediment controls.

Protecting and preserving topsoil is also a good BMP. Removing topsoil exposes underlying layers that are often more prone to erosion and have less infiltration capacity. Keeping topsoil in place preserves the natural structure of the soils and aids the infiltration of stormwater.

ESC Principle 2: Phase construction activity. Another technique for minimizing the duration of exposed soil is phasing. By scheduling or sequencing your construction work and concentrating it in certain areas, you can minimize the amount of soil that is exposed to the elements at any given time. Limiting the area of disturbance to places where construction activities are underway and stabilizing them as quickly as possible can be one of your most effective BMPs.

ESC Principle 3: Control stormwater flowing onto and through your project. Plan for any potential stormwater flows coming onto the project area from upstream locations, and divert (and slow) flows to prevent erosion. Likewise, the volume and velocity of on-site stormwater runoff should be controlled to minimize soil erosion.

Example BMP: Diversion Ditches or Berms

Description: Diversion ditches or berms direct runoff away from unprotected slopes and may also direct sediment-laden runoff to a sediment-trapping structure. A diversion ditch can be located at the upslope side of a construction site to prevent surface runoff from entering the disturbed area. Ditches or berms on slopes need to be designed for erosive velocities. Also, ensure that the diverted water is released through a stable outlet and does not cause downslope or downstream erosion or flooding.

Installation Tips:

- Divert run-on and runoff away from disturbed areas
- Ensure that the diversion is protected from erosion, using vegetation, geotextiles, or other appropriate BMPs
- Divert sediment-laden water to a sediment-trapping structure
- Use practices that encourage infiltration of stormwater runoff wherever possible

Maintenance:

- Inspect diversions and berms, including any outlets, regularly and after each rainfall
- Remove any accumulated sediment

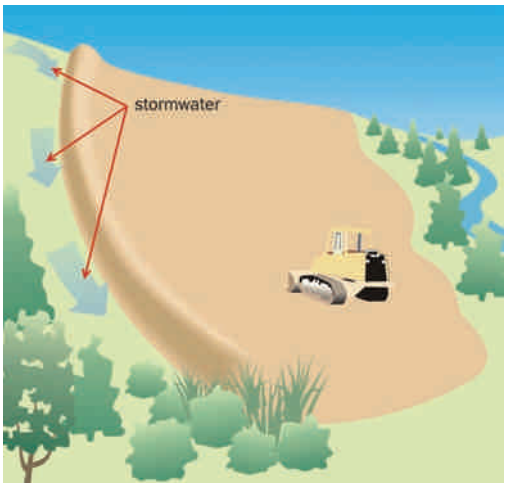

Figure 8. Illustration of a construction berm to divert stormwater away from the disturbed construction area.

ESC Principle 4: Stabilize soils promptly. Where construction activities have temporarily or permanently ceased, you should stabilize exposed soils to minimize erosion. You should have stabilization measures in place after grading activities have ceased (many permits require stabilization within a specified time frame). You can provide either temporary or permanent cover to protect exposed soils. Temporary measures are necessary when an area of a site is disturbed but where activities in that area are not completed or until permanent BMPs are established. Topsoil stockpiles should also be protected to minimize any erosion from these areas. Temporary-cover BMPs include temporary seeding, mulches, matrices, blankets and mats, and the use of soil binders (there may be additional state and local requirements for the use of chemical-based soil binders). Permanent-cover BMPs include permanent seeding and planting, sodding, channel stabilization, and vegetative buffer strips. Silt fence and other sediment control measures are not stabilization measures.

SWPPP Tip!

Final Stabilization

Once construction activity in an area is completed and the area is stabilized (typically by achieving 70 percent permanent vegetative cover), you can mark this area on your SWPPP and discontinue inspections in that area. By bringing areas of your site to final stabilization, you can reduce your workload associated with maintaining and inspecting BMPs. For more information on final stabilization, see Chapter 9.

Example BMP: Temporary Seeding

Description: Temporarily seeding an area to establish vegetative cover is one of the most effective, and least expensive, methods of reducing erosion. This approach, as a single BMP, might not be appropriate on steep slopes, when vegetation cannot be established quickly enough to control erosion during a storm event, or when additional activities might occur soon in the area.

Installation Tips:

- Seed and mulch area (the mulch provides temporary erosion protection by protecting the soil surface, moderating temperature, and retaining moisture while seeds germinate and grow)
- Water regularly, if needed, to ensure quick growth
- Maintain backup BMPs, such as silt fence or settling ponds

SWPPP Tip!

Wind Control BMPs

In areas where dust control is an issue, your SWPPP should include BMPs for wind-erosion control. These consist of mulching, wet suppression (watering), and other practices.

ESC Principle 5: Protect slopes. Protect all slopes with appropriate erosion controls. Steeper slopes, slopes with highly erodible soils, or long slopes require a more complex combination of controls. Erosion control blankets, bonded fiber matrices, or turf reinforcement mats are very effective options. Silt fence or fiber rolls may also be used to help control erosion on moderate slopes and should be installed on level contours spaced at 10- to 20-foot intervals. You can also use diversion channels and berms to keep stormwater off slopes.

Example BMP: Rolled erosion control products

Description: Erosion control products include mats, geotextiles, and erosion control blankets and products that provide temporary stabilization and help to establish vegetation on disturbed soils. Such products help control erosion and help establish vegetation and are often used on slopes, channels, or stream banks.

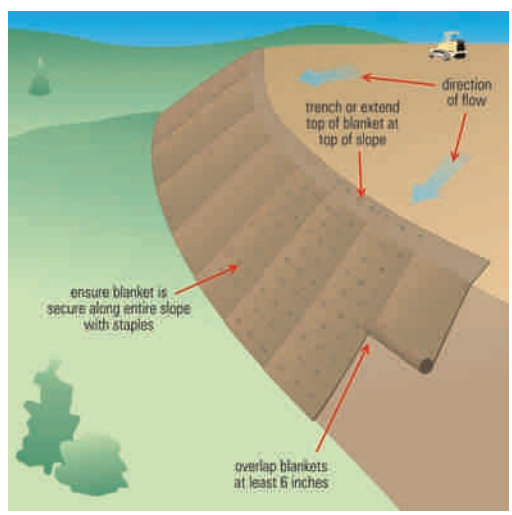

Figure 9. Illustration of erosion control blankets installed on slope.

Installation Tips:

- Use rolled erosion-control products on slopes steeper than 3 to 1 (horizontal to vertical) and in swales or long channels

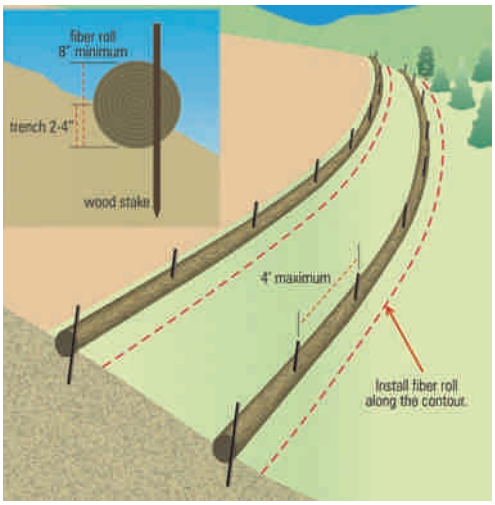

Figure 10. Illustration of a fiber roll installation along a slope.

- Trench the top of the blanket into the ground to prevent runoff from flowing under the blanket
- Overlap the lower end of the top mat over the top of the downslope mat to ensure that runoff stays on top of the blankets and mats
- Staple blankets and mats according to specifications

Maintenance:

- Periodically inspect for signs of erosion or failure
- Repair the blanket or mat if necessary
- Continue inspections until vegetation is established at the level required to qualify as final *stabilization*

ESC Principle 6: Protect storm drain inlets. Protect all inlets that could receive stormwater from the project until final stabilization of the site has been achieved. Install inlet protection before soil-disturbing activities begin. Maintenance throughout the construction process is important. Upon completion of the project, storm drain inlet protection is one of the temporary BMPs that should be removed. Storm drain inlet protection should be used not only for storm drains within the active construction project, but also for storm drains outside the project area that might receive stormwater discharges from the project. If there are storm drains on private property that could receive stormwater runoff from your project, coordinate with the owners of that property to ensure proper inlet protection.

Example BMP: Storm Drain Inlet Protection

Description: Storm drain inlet protection prevents sediment from entering a storm drain by surrounding or covering the inlet with a filtering material. Several types of filters are commonly used for inlet protection: silt fence, rock-filled bags, or block and gravel. The type of filter used depends on the inlet type (for example, curb inlet, drop inlet), slope, and volume of flow. Many different commercial inlet filters are also available. Some commercial inlet filters are placed in front of or on top of an inlet, while others are placed inside the inlet under the grate.

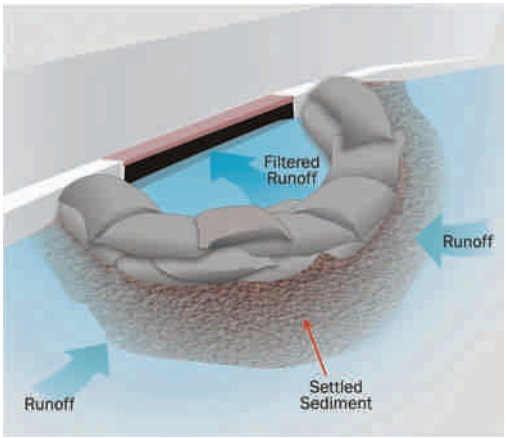

Figure 11. Illustration of a storm drain inlet with rock-filled bags filtering stormwater.

Installation Tips:

- Install inlet protection as soon as storm drain inlets are installed and before land-disturbance activities begin in areas with existing storm drain systems
- Protect all inlets that could receive stormwater from your construction project
- Use in conjunction with other erosion prevention and sediment control BMPs—remember, inlet protection is a secondary BMP!
- Design your inlet protection to handle the volume of water from the area being drained. Ensure that the design is sized appropriately.

Maintenance:

- Inspect inlets frequently and after each rainfall

- Remove accumulated sediment from around the device and check and remove any sediment that might have entered the inlet
- Replace or repair the inlet protection if it becomes damaged
- Sweep streets, sidewalks, and other paved areas regularly

SWPPP Tip!

Storm drain inlet protection should never be used as a primary BMP! Use erosion control techniques such as hydromulching or erosion-control blankets to prevent erosion. Use inlet protection and other sediment control BMPs as a *backup* or last line of defense.

ESC Principle 7: Establish perimeter controls. Maintain natural areas and supplement them with silt fence and fiber rolls around the perimeter of your site to help prevent soil erosion and stop sediment from leaving the site. Install controls on the downslope perimeter of your project (it is often unnecessary to surround the entire site with silt fence). Sediment barriers can be used to protect stream buffers, riparian areas, wetlands, or other waterways. They are effective only in small areas and should not be used in areas of concentrated flow.

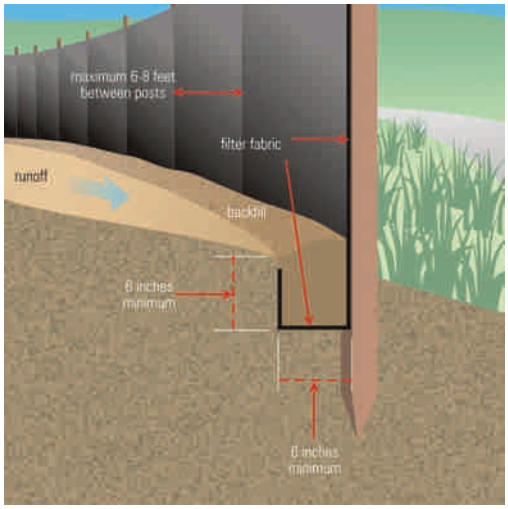

Figure 12. Illustration of proper techniques to use in installing silt fence.

Example BMP: Silt Fence and Fiber Rolls

Description: A silt fence is a temporary sediment barrier consisting of a geotextile attached to supporting posts and trenched into the ground. Silt fencing is intended to retain sediment that has been dislodged by stormwater. It is designed only for runoff from small areas and is not intended to handle flows from large slopes or in areas of concentrated flow. Fiber rolls serve the same purpose and consist of an open mesh tubular sleeve filled with a fibrous material which traps sediment. Fiber rolls are generally staked to the ground.

Installation Tips:

DO:

- Use silt fence or fiber rolls as perimeter controls, particularly at the lower or down slope edge of a disturbed area
- Leave space for maintenance between toe of slope and silt fence or roll
- Trench in the silt fence on the uphill side (6 inches deep by 6 inches wide)
- Install stakes on the downhill side of the fence or roll
- Curve the end of the silt fence or fiber roll up-gradient to help it contain runoff

DON'T:

- Install a silt fence or fiber rolls in ditches, channels, or areas of concentrated flow
- Install it running up and down a slope or hill
- Use silt fencing or fiber rolls alone in areas that drain more than a quarter-acre per 100 feet of fence

Maintenance:

- Remove sediment when it reaches one-third of the height of the fence or one-half the height of the fiber roll
- Replace the silt fence or roll where it is worn, torn, or otherwise damaged
- Retrench or replace any silt fence or roll that is not properly anchored to the ground

ESC Principle 8: Retain sediment on-site and control dewatering practices. Sediment barriers described in ESC Principle 7 can trap sediment from small areas, but when sediment retention from a larger area is required, consider using a temporary sediment trap or sediment basin. These practices detain sediment-laden runoff for a period of time, allowing sediment to settle before the runoff is discharged. Proper design and maintenance are essential to ensure that these practices are effective.

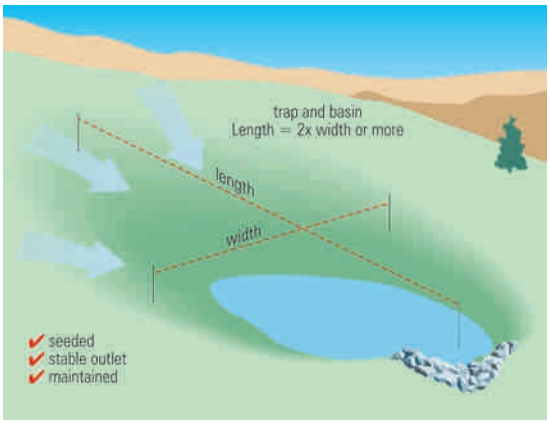

Figure 13. Illustration of a sediment basin.

You should use a sediment basin for common drainage locations that serve an area with 10 or more acres disturbed at any one time. The basin should be designed to provide storage for the volume of runoff from the drainage area for at least a 2-year, 24-hour storm (or 3,600 cubic feet of storage per acre drained, which is enough to contain 1 inch of runoff, if the 2-year, 24-hour calculation has not been performed). Check your permit for exact basin sizing requirements. Sediment basins should be located at low-lying areas of the site and on the down-gradient side of bare soil areas where flows converge. Do not put sediment traps or basins in or immediately adjacent to flowing streams or other waterways.

Where a large sediment basin is not practical, use smaller sediment basins or sediment traps (or both) where feasible. At a minimum, use silt fences, vegetative buffer strips, or equivalent sediment controls for all down-gradient boundaries (and for those side-slope boundaries deemed appropriate for individual site conditions).

Dewatering practices are used to remove ground water or accumulated rain water from excavated areas. Pump muddy water from these areas to a temporary or permanent sedimentation basin or to an area completely enclosed by silt fence in a flat vegetated area where discharges can infiltrate into the ground. Never discharge muddy water into storm drains, streams, lakes, or wetlands unless the sediment has been removed before discharge.

Keep in mind that some states and local jurisdictions require a separate permit for dewatering activities at a site.

ESC Principle 9: Establish stabilized construction exits. Vehicles entering and leaving the site have the potential to track significant amounts of sediment onto streets. Identify and clearly mark one or two locations where vehicles will enter and exit the site and focus stabilizing measures at those locations. Construction entrances are commonly made from large crushed rock. They can be further stabilized using stone pads or concrete. Also, steel wash racks and a hose-down system will remove even more mud and debris from vehicle tires. Divert runoff from wash areas to a sediment trap or basin. No system is perfect, so sweeping the street regularly completes this BMP.

Example BMP: Stabilized Construction Exit

Description: A rock construction exit can reduce the amount of mud transported onto paved roads by vehicles. The construction exit does this by removing mud from vehicle tires before the vehicle enters a public road.

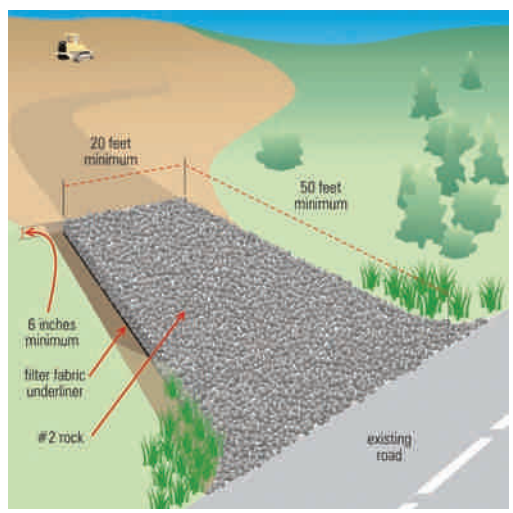

Figure 14. Illustration of a stabilized construction exit.

You might also want to install a wheel wash when mud is especially difficult to remove or space doesn't allow sufficient tire revolutions (four or five are needed) before exiting the site. Direct wash water to a suitable settling area—do not discharge wash water to a stream or storm drain!

Installation tips:

- Ensure that the exit is at least 50 feet long (generally, the length of two dump trucks) and graded so runoff does not enter the adjacent street
- Place a geotextile fabric under a layer of aggregate at least 6–12 inches thick. The stones or aggregate should be 3–6 inches in diameter
- Train employees and subcontractors to use the designated construction exits. Empower your employees to provide directions to subcontractors and others that are not on the site every day

Maintenance:

- Replenish or replace aggregate if it becomes clogged with sediment
- Sweep the street regularly

ESC Principle 10: Inspect and maintain controls. Inspection and maintenance is just as important as proper planning, design, and installation of controls. Without adequate maintenance, erosion and sediment controls will quickly fail, sometimes after just one rainfall, and cause significant water quality problems and potential violations of the NPDES construction general permit. Your permit likely requires you to maintain your BMPs at all times. To do this effectively, you should establish an inspection and maintenance approach or strategy that includes both regular and spot inspections. Inspecting both prior to predicted storm events and after will help ensure that controls are working effectively. Perform maintenance or corrective action as soon as problems are noted. **Inspection and maintenance of BMPs are addressed in more detail in Chapter 6.**

Other Sediment and Erosion Control Techniques

As mentioned at the beginning of this chapter, there are many other erosion and sediment control techniques that can be used effectively. The BMPs highlighted in this chapter are among those more commonly used and highlight many general erosion and sediment control principles for which other BMPs may be used effectively. Check to see if your state or local government has developed a BMP design manual for detailed information on any BMP you are considering. Appendix D lists several good BMP design manuals. You can also find out more about various BMPs by visiting EPA's Menu of BMPs at **www.epa.gov/npdes/menuofbmps**

The following BMPs are also commonly used at construction sites.

Erosion control measures:

- Surface roughening, trackwalking, scarifying, sheepsfoot rolling, imprinting
- Soil bioengineering techniques (e.g., live staking, fascines, brush wattles)
- Composting
- Sodding

Sediment control and runoff management measures:

- Gravel bag barrier
- Compost berm
- Rock or brush filters
- Baffles or skimmers in sediment basins to increase effectiveness
- Lowering soil levels near streets and sidewalks to prevent runoff
- Level spreaders
- Energy dissipaters
- Check dams

Chapter 5: **SWPPP Development—Selecting Good Housekeeping BMPs**

▶ **This chapter presents a brief discussion of good housekeeping principles to consider to ensure your construction site does not contaminate stormwater runoff.**

As noted in Chapter 3, sediment is the principal pollutant of concern in stormwater discharges from construction sites. But, EPA's CGP and many state construction general permits require that the SWPPP describe good housekeeping measures for other pollutants that might be found on construction sites. This chapter discusses these measures.

Six Key Pollution Prevention Principles for Good Housekeeping

Construction projects generate large amounts of building-related waste, which can end up polluting stormwater runoff if not properly managed. The suite of BMPs that are described in your SWPPP must include pollution prevention (P2) or good housekeeping practices that are designed to prevent contamination of stormwater from a wide range of materials and wastes at your site. The six principles described below are designed to help you identify the pollution prevention practices that should be described in your SWPPP and implemented at your site.

1. Provide for waste management
2. Establish proper building material staging areas
3. Designate paint and concrete washout areas
4. Establish proper equipment/vehicle fueling and maintenance practices
5. Control equipment/vehicle washing and allowable non-stormwater discharges
6. Develop a spill prevention and response plan

P2 Principle 1: Provide for waste management. Design proper management procedures and practices to prevent or reduce the discharge of pollutants to stormwater from solid or liquid wastes that will be generated at your site. Practices such as trash disposal, recycling, proper material handling, and cleanup measures can reduce the potential for stormwater runoff to pick up construction site wastes and discharge them to surface waters.

Figure 15. Illustration showing construction materials with secondary containment and overhead cover to prevent stormwater contamination.

Provide convenient, well-maintained, and properly located toilet facilities. Provide for regular inspections, service, and disposal. Locate toilet facilities away from storm drain inlets and waterways to prevent accidental spills and contamination of stormwater. Treat or dispose of sanitary and septic waste in accordance with state or local regulations.

Proper material use, storage, waste disposal, and training of employees and subcontractors can prevent or reduce the discharge of hazardous and toxic wastes to stormwater. Implement a comprehensive set of waste-management practices for hazardous or toxic materials, such as paints, solvents, petroleum products, pesticides, wood preservatives, acids, roofing tar, and other materials. Practices should include storage, handling, inventory, and cleanup procedures, in case of spills (see the following P2 principles).

Waste Management Checklist

Solid or Construction Waste

- ✓ Designate trash and bulk waste-collection areas on-site
- ✓ Recycle materials whenever possible (e.g., paper, wood, concrete, oil)
- ✓ Segregate and provide proper disposal options for hazardous material wastes
- ✓ Clean up litter and debris from the construction site daily
- ✓ Locate waste-collection areas away from streets, gutters, watercourses, and storm drains. Waste-collection areas (dumpsters, and such) are often best located near construction site entrances to minimize traffic on disturbed soils. Consider secondary containment around waste collection areas to further minimize the likelihood of contaminated discharges.

Sanitary and Septic Waste

- ✓ Provide restroom facilities on-site
- ✓ Maintain clean restroom facilities and empty porta-johns regularly
- ✓ Provide secondary containment pans under porta-johns, where possible
- ✓ Provide tie-downs or stake downs for porta-johns in areas of high winds
- ✓ Educate employees, subcontractors, and suppliers on locations of facilities
- ✓ Do not discharge or bury wastewater at the construction site
- ✓ Inspect facilities for leaks, repair or replace immediately

Hazardous Materials and Wastes

- ✓ Develop and implement employee and subcontractor education, as needed, on hazardous and toxic waste handling, storage, disposal, and cleanup
- ✓ Designate hazardous waste-collection areas on-site
- ✓ Place all hazardous and toxic material wastes in secondary containment
- ✓ Hazardous waste containers should be inspected to ensure that all containers are labeled properly and that no leaks are present

P2 Principle 2: Establish proper building material handling and staging areas.
Your SWPPP should include comprehensive handling and management procedures for building materials, especially those that are hazardous or toxic. Paints, solvents, pesticides, fuels and oils, other hazardous materials or any building materials that have the potential to contaminate stormwater should be stored indoors or under cover whenever possible or in areas with secondary containment. Secondary containment prevents a spill from spreading across the site and include dikes, berms, curbing, or other containment methods. Secondary containment techniques should also ensure the protection of ground water. Designate staging areas for activities such as fueling vehicles, mixing paints, plaster, mortar, and so on. Designated staging areas will help you to monitor the use of materials and to clean up any spills. Training employees and subcontractors is essential to the success of this pollution prevention principle.

SWPPP Tip!

Material Staging Area Measures

Your SWPPP should include procedures for storing materials that can contribute pollutants to stormwater. Consider the following:

- Train employees and subcontractors in proper handling and storage practices
- Designate site areas for storage. Provide storage in accordance with secondary containment regulations and provide cover for hazardous materials when necessary. Ensure that storage containers are regularly inspected for leaks, corrosion, support or foundation failure, or any other signs of deterioration and tested for soundness
- Reuse and recycle construction materials when possible

P2 Principle 3: Designate washout areas.
Concrete contractors should be encouraged, where possible, to use the washout facilities at their own plants or dispatch facilities. If it is necessary to provide for concrete washout areas on-site, designate specific washout areas and design facilities to handle anticipated washout water. Washout areas should also be provided for paint and stucco operations. Because washout areas can be a source of pollutants from leaks or spills,

EPA recommends that you locate them at least 50 yards away from storm drains and watercourses whenever possible.

Several companies rent or sell prefabricated washout containers, and some provide disposal of waste solids and liquids along with the containers. These prefabricated containers are sturdy and provide a more reliable option for preventing leaks and spills of wash water than self-constructed washouts. Alternatively, you can construct your own washout area, either by digging a pit and lining it with 10 mil plastic sheeting or creating an aboveground structure from straw bales or sandbags with a plastic liner. If you create your own structure, you should inspect it daily for leaks or tears in the plastic because these structures are prone to failure.

Regular inspection and maintenance are important for the success of this BMP. Both self-constructed and prefabricated washout containers can fill up quickly when concrete, paint, and stucco work are occurring on large portions of the site. You should also inspect for evidence that contractors are using the washout areas and not dumping materials onto the ground or into drainage facilities. If the washout areas are not being used regularly, consider posting additional signage, relocating the facilities to more convenient locations, or providing training to workers and contractors.

SWPPP Tip!

Washout Area Measures

When concrete, paint, or stucco is part of the construction process, consider these practices which will help prevent contamination of stormwater. Include the locations of these areas and your maintenance and inspection procedures in your SWPPP.

- Do not washout concrete trucks or equipment into storm drains, streets, gutters, uncontained areas, or streams
- Establish washout areas and advertise their locations with signs
- Provide adequate containment for the amount of wash water that will be used
- Inspect washout structures daily to detect leaks or tears and to identify when materials need to be removed
- Dispose of materials properly. The preferred method is to allow the water to evaporate and to recycle the hardened concrete. Full service companies may provide dewatering services and should dispose of wastewater properly. Concrete wash water can be highly polluted. It should not be discharged to any surface water, storm sewer system, or allowed to infiltrate into the ground. It should not be discharged to a sanitary sewer system without first receiving written permission from the system operator

P2 Principle 4: Establish proper equipment/vehicle fueling and maintenance practices. Performing equipment/vehicle fueling and maintenance at an off-site facility is preferred over performing these activities on the site, particularly for road vehicles (e.g., trucks, vans). For grading and excavating equipment, this is usually not possible or desirable. Create an on-site fueling and maintenance area that is clean and dry. The on-site fueling area should have a spill kit, and staff should know how to use it. If possible, conduct vehicle fueling and maintenance activities in a covered area; outdoor vehicle fueling and maintenance is a potentially significant source of stormwater pollution. Significant maintenance on vehicles and equipment should be conducted off-site.

SWPPP Tip!

Equipment/Vehicle Fueling and Maintenance Measures

Consider the following practices to help prevent the discharge of pollutants to stormwater from equipment/vehicle fueling and maintenance. Include the locations of these areas and your inspection and maintenance procedures in your SWPPP.

- Train employees and subcontractors in proper fueling procedures (stay with vehicles during fueling, proper use of pumps, emergency shut-off valves, and such)
- Inspect on-site vehicles and equipment daily for leaks, equipment damage, and other service problems
- Clearly designate vehicle/equipment service areas away from drainage facilities and water-courses to prevent stormwater run-on and runoff
- Use drip pans, drip cloths, or absorbent pads when replacing spent fluids
- Collect all spent fluids, store in appropriate labeled containers in the proper storage areas, and recycle fluids whenever possible

P2 Principle 5: Control equipment/vehicle washing and allowable non-stormwater discharges. Environmentally friendly washing practices can be practiced at every construction site to prevent contamination of surface and ground water from wash water. Procedures and practices include using off-site facilities; washing in designated, contained areas only; eliminating discharges to the storm drain by infiltrating the wash water or routing to the sanitary sewer; and training employees and subcontractors in proper cleaning procedures.

Take a Closer Look…

Non-Stormwater Runoff

A construction site might have sources of runoff that are not generated by stormwater. These non-stormwater discharges include fire hydrant flushing, vehicle or equipment wash water (no detergents!), water used to control dust, and landscape irrigation.

What does this mean to me?

Take steps to infiltrate these sources of uncontaminated water into the ground. You can also route these sources of water to sediment ponds or detention basins or otherwise treat them with appropriate BMPs.

SWPPP Tip!

Equipment/Vehicle Washing Measures

The following equipment/vehicle washing measures will help prevent stormwater pollution. Include the location of your washing facilities and your inspection and maintenance procedures in your SWPPP.

- Educate employees and subcontractors on proper washing procedures
- Clearly mark the washing areas and inform workers that all washing must occur in this area
- Contain wash water and treat and infiltrate it whenever possible
- Use high-pressure water spray at vehicle washing facilities without any detergents because water can remove most dirt adequately
- Do not conduct any other activities, such as vehicle repairs, in the wash area

P2 Principle 6: Develop a spill prevention and response plan. Most state and EPA construction general permits require the preparation of spill prevention and response plans. Generally, these plans can be included or incorporated into your SWPPP. The plan should clearly identify ways to reduce the chance of spills, stop the source of spills, contain and clean up spills, dispose of materials contaminated by spills, and train personnel responsible for spill prevention and response. The plan should also specify material handling procedures and storage requirements and ensure that clear and concise spill cleanup procedures are provided and posted for areas in which spills may potentially occur. When developing a spill prevention plan, include, at a minimum, the following:

- Note the locations of chemical storage areas, storm drains, tributary drainage areas, surface waterbodies on or near the site, and measures to stop spills from leaving the site
- Specify how to notify appropriate authorities, such as police and fire departments, hospitals, or municipal sewage treatment facilities to request assistance
- Describe the procedures for immediate cleanup of spills and proper disposal
- Identify personnel responsible for implementing the plan in the event of a spill

SWPPP Tip!

Spill Prevention Measures

Additional spill prevention measures that will help prevent spills and leaks include the following:

- Describe and list all types of equipment to be used to adequately clean up the spill
- Provide proper handling and safety procedures for each type of waste
- Establish an education program for employees and subcontractors on the potential hazards to humans and the environment from spills and leaks
- Update the spill prevention plan and clean up materials as changes occur to the types of chemicals stored and used at the facility

Take a Closer Look…

Spill Prevention, Control and Countermeasure (SPCC) Plan

Construction sites may be subject to 40 CFR Part 112 regulations that require the preparation and implementation of a SPCC Plan to prevent oil spills from aboveground and underground storage tanks. Your facility is subject to this rule if you are a nontransportation-related facility that:

- Has a total storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons and
- Could reasonably be expected to discharge oil in quantities that may be harmful to navigable waters of the United States and adjoining shorelines

Furthermore, if your facility is subject to 40 CFR Part 112, your SWPPP should reference the SPCC Plan. To find out more about SPCC Plans, see EPA's website on SPPC at **www.epa.gov/oilspill/spcc.htm**

What does this mean to me?

Reporting Oil Spills

In the event of an oil spill, you should contact the National Response Center toll free at 1-800-424-8802 for assistance, or for more details, visit their website: ***www.nrc.uscg.mil/nrchp.html***

Appendix K

Reference Documents

Construction SWPPP Reference Documents

Document	Title	Website/Update Information
General Construction Permit	National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (Water Quality Order No. 99-08-DWQ, NPDES No. CAS000002) issued by the State Water Resources Control Board	http://www.swrcb.ca.gov/stormwtr/construction.html Once at the site click on the highlighted link titled Construction General Permit, 99-08-DWQ. An update to the 99-08 Order is under consideration
General Linear Utility Permit	NPDES General Permit for Storm Water Discharges Associated with Construction Activity from Small Linear Underground/Overhead Projects, Water Quality Order No. 2003-0007 issued by the State Water Resources Control Board	http://www.swrcb.ca.gov/stormwtr/construction.html Once at the site click on the highlighted link titled Small LUP General Permit.
EPA Guide for Construction Sites	Environmental Protection Agency (EPA) Developing Your Stormwater Pollution Prevention Plan A Guide for Construction Sites EPA 833-R-060-04 May 2007	http://www.epa.gov/npdes/swpppguide
CASQA Construction Handbook	California Stormwater Quality Association (CASQA) Stormwater Best Management Practice Handbook Construction January 2003	http://www.cabmphandbooks.com Click on Construction. Also check for Errata Sheets
Caltrans Construction Site BMP Manual	California Department of Transportation (Caltrans) Stormwater Quality Handbook - Construction Site Best Management Practices March 1, 2003	http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm
Caltrans SWPPP/WPCP Preparation Manual	California Department of Transportation (Caltrans) Stormwater Quality Handbook - Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual Construction Site Best Management Practices (BMPs) Reference Manual March 2007	http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm

For a more complete listing of additional references and suggested resources on storm water pollution prevention planning, see the Suggested Resources List attached as Appendix D to Section 2 (Standard Urban Storm Water Mitigation Plan) included in the City of Carlsbad Storm Water Standards Manual.

CITY OF CARLSBAD

2008 STORM WATER STANDARDS MANUAL

City of Carlsbad

Active Grading Permits

All Projects in the Carlsbad Watershed

Sorted by Inspector

Permit#	Inspector	Issue Date	Location	Description	Hydrologic Unit	Priority
GR070029	Stanfill	12/11/2007	RANCHO SANTA FE & AVENDIA SOLEDAD	LA COSTA OAKS NEIGH 3.3		
GR070045	Stanfill	12/11/2007	RANCHO SANTA FE & AVENIDA SOLEDAD	LA COSTA OAKS NORTH 3.7		
GR070046	McWilson	12/27/2007	5056 EL CAMINO REAL	ROBERTSON RANCH PA 12 & 13 GRADING FOR PARK SITE		
GR050057	ABALOS	06/30/2006	NE CORN OF AVIARA PKWY AND POINSETTIA	NORTH COAST CALVARY CHAPEL	D	H
GR060001	ABALOS	02/15/2006	SOUTH SIDE PALOMAR AIRPORT RD BTWN YARROW DR AND EL CAMINO REAL 2229 PALOMAR AIRPORT RD	CARLSBAD AIRPORT HOTELS Two 3-story hotel buildings w/pools, paved access & parking	C	H
GR060027	ABALOS	01/08/2007	7343 EL FUERTE ST	BAIHAGHY TONY RESIDENCE single family residence		
GR060042	ABALOS	09/20/2006	7312 EL FUERTE ST	SPADARO RESIDENCE SINGLE FAMILY RESIDENCE		H
GR060044	ABALOS	08/31/2006	7211 OBELISCO CR	FERNANDEZ RESIDENCE GRADING		H
GR060045	ABALOS	10/03/2006	3955 GARFIELD ST	BEACHWALK 2 CONDOS	B	H
GR060046	ABALOS	10/12/2006	1650 CALLIANDRA RD	AVIARA PREMIER SLOPE REPAIR SLOPE REPAIR	D	H
GR060051	ABALOS	09/01/2006	7214 WISTERIA WAY 7214 WISTERIA WY	ZONARAS GEORGE C & CATHERINE SLOPE FAILURE REPAIR		H
GR060067	ABALOS	11/08/2006	EAST SIDE OF ALICANTE RD BTWN POINSETTIA LN AND PALOMAR AIPORT RD	VILLAGES- GREENS 1.06 Precise grading for 91 single family homes	D	H
GR060072	ABALOS	02/12/2007	EAST SIDE OF EL CAMINO REAL BTWN CAMINO VIDA ROBLE AND POINSETTIA LN	LA COSTA GREENS 1.3 RV PARKING		
GR060073	ABALOS	02/12/2007		LA COSTA GREENS 1.2/3		
GR070016	ABALOS	07/12/2007	2922 MANAGUA PL	ADMANI RESIDENCE SINGLE FAMILY RESIDENCE		
GR070026	ABALOS	07/16/2007	2500 CAMPBELL PL	BRESSI RANCH SELF STORAGE		
GR070036	ABALOS	06/20/2007	2466 MICA RD	LA COSTA GREENS 1.07 Grading for 71 single family residence		
GR070043	ABALOS	08/27/2007	EAST SIDE OF EL CAMINO REAL BTWN CAMINO VIDA ROBLE AND TOWNGATE 6286 EL CAMINO REAL	ASPIRATIONS DAYCARE build to suit daycare center (9,970 SF slab on grade/2 acre site)		

for 01/02/2008

Permit#	Inspector	Issue Date	Location	Description	Hydrologic Unit	Priority
GR070051	ABALOS	10/17/2007	ON THE EAST SIDE OF EL CAMINO REAL BETWEEN EL CAMINO REAL AND GATEWAY ROAD	ECR CORPORATE CENTER TWO MEDICAL OFFICE BUILDINGS TOTALING 87,000 SF TO INCLUDE A REHABILITATION FACILITY	D	H
GR060025	ABALOS/CA	06/30/2006	2010 CASSIA RD	CASSIA PROFESSIONAL OFFICES CAT HOSPITAL/MEDICAL OFFICE	D	H
GR060029	ABALOS/CA	07/06/2006	TOWN GARDEN RD	BRESSI RANCH LOT 16 TWO OFFICE BUILDINGS	D	H
GR060057	ABALOS/CA	10/25/2006	INNOVATION & GATEWAY	TOWERS AT BRESSI RANCH COMMERCIAL SITE GRADING	D	H
GR050059	ABALOS/CL	10/05/2005	5901 PRIESTLY DR	CRC LOT 6 CRC LOT 6 GRADING		H
GR040033	ARNDT	07/26/2004	W & E SIDE OF ALICANTE BTN ALGA & POINSETTIA	LA COSTA GREENS 1.11/1.13/1.14 DWG 406-3A GREENS 1.11/ 1.13/ 1.14	D	H
GR040034	ARNDT	07/08/2004	WEST SIDE OF ALICANTE RD NORTH OF ALGA RD AND SOUTH OF POINSETTIA LANE	LA COSTA GREENS 1.10 LA COSTA GREENS NEIGHBORHOOD 1.10	D	H
GR040059	ARNDT	08/11/2004	S SIDE PAR BTWN ECR & EL FUERTE	BRESSI RANCH PA 11 Bressi Ranch PA-11	D	H
GR050010	ARNDT	03/04/2005	WITHIN FACILITIES MANAGEMENT ZONE 10	LA COSTA GREENS NEIGH. 1.16 Drawing Number 423-7A	B	H
GR050011	ARNDT	03/16/2005	NE CORNER OF POINSETTIA LN & ALICANTE RD	LA COSTA GREENS N. 1.06/1.07 Drawing Number 427-6A	B	H
GR050063	ARNDT	11/29/2005	WITHIN FACILITIES MANAGEMENT ZONE 10	LA COSTA GREENS 1.01-1.03 DWG 397-2Y	D	H
GR050068	ARNDT	11/29/2005	6480 EL CAMINO REAL	CASSIA HEIGHTS GRADING FOR FAMILY HOUSING UNIT	D	H
GR040023	ARNDT/CLA	07/12/2004	ALICANTE BTN ALGA & POINSETTIA	LA COSTA GREENS, NEIGH. 1.08 LA COSTA GREENS NEIGHBORHOOD 1.08	D	H
GR060005	ARNDT/CLA	03/15/2006	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN GATEWAY RD AND MELROSE DR	BRESSI RANCH LOT 40 GRADING	D	H
GR060063	ARNDT/CLA	10/06/2006	SOUTH SIDE OF POINSETTIA LN BTWN EL CAMINO REAL AND ALICANTE RD	LA COSTA GREENS 1.17 107 SINGLE FAMILY RESIDENCES	D	H
GR030012	CLAVIER	06/25/2004	PAR BETWEEN MELROSE & BUSINESS PARK	PALOMAR FORUM ROUGH GRADING PER DWG 399-4A	B	H
GR030043	CLAVIER	09/18/2003	HILLSIDE BTWN HIGHLAND & PARK 4240 HILLSIDE DR	OCHELTREE RESIDENCE SINGLE FAMILY RESIDENCE	B	H
GR030056	CLAVIER	12/01/2004	1400 FT SOUTH OF PALOMAR AIRPORT ROAD ON CENTERLINE OF EL CAMINO REAL	CARLSBAD RACEWAY GRADING	B	H
GR040082	CLAVIER	11/12/2004	FARADAY AV & EL FUERTE	CARLSBAD OAKS NORTH PHASE 1 GRADING	B	H
GR040083	CLAVIER	11/12/2004	FARADAY AV & EL FUERTE	CARLSBAD OAKS NORTH FARADAY GRADING	B	H
GR040084	CLAVIER	11/12/2004	PALOMAR AIRPORT RD AT MELROSE	CARLSBAD OAKS NORTH EL FUERTE GRADING	B	H
GR050055	CLAVIER	11/29/2005	SOUTH OF FARADAY AV ADJACENT TO CITY BOUNDARY	CARLSBAD OAKS NORTH REVEGETATION GRADING		H

Permit#	Inspector	Issue Date	Location	Description	Hydrologic Unit	Priority
GR050061	CLAVIER	11/21/2005	NORTH SIDE OF PALOMAR AIRPORT RD BTWN EAGLE DR AND BUSINESS PARK DR	PALOMAR FORUM EAST		H
GR050064	CLAVIER	04/17/2006	BLACK RAIL RD @ SONGBIRD AVE	YAMAMOTO SUBDIVISION	D	H
GR060011	CLAVIER	06/01/2006	2848 LOKER AVE EAST 2848 LOKER AV EAST	OAKS EAST LOT 31	B	H
GR060012	CLAVIER	04/17/2006	WEST SIDE OF EL CAMINO REAL BTWN PALOMAR AIRPORT RD AND ALGA RD	VIA SAT NEW CONCRETE SHELL TILT-UP	C	H
GR060016	CLAVIER	04/26/2006	NORTH SIDE OF LIONSHEAD VE BTWN EAGLE DR AD BUSINESS PARK DR	OPUS PT LOT 19	B	H
GR060017	CLAVIER	05/10/2006	NORTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND BUSINESS PARK DR	OPUS POINT LOT 20 RACEWAY LOT 20	B	H
GR060018	CLAVIER	05/10/2006	NORTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND BUSINESS PARK DR	OPUS POINT LOT 21	B	H
GR060019	CLAVIER	04/27/2006	NORTH SIDE OF LIONSHEAD BTWN EAGLE DR AND BUSINESS PARK DR	OPUS PT LOT 18	B	H
GR060020	CLAVIER	04/27/2006	NORTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND MELROSE DR	OPUS POINT LOT 22	B	H
GR060023	CLAVIER	05/03/2006	7151 LATITUDE LN	SMITH RESIDENCE GRADING PLAN DWG 435-1A		H
GR060024	CLAVIER	07/25/2006	2888 LOKER AV EAST	MAMMOTH PROFESSIONAL BLDG ONE THREE STORY OFFICE BLDG PLUS PARKING STRUCTURE		H
GR060026	CLAVIER	07/11/2006	3193 LIONSHEAD AV	OPUS PT LOTS 5 & 6	B	H
GR060030	CLAVIER	08/29/2006	NORTH SIDE OF LIONSHEAD RD BTWN MELROSE AND EL FUERTE 3152 LIONSHEAD AV	OPUS POINT LOTS 23 & 24	B	H
GR060030	CLAVIER	08/29/2006	NORTH SIDE OF LIONSHEAD RD BTWN MELROSE AND EL FUERTE 3152 LIONSHEAD AV	OPUS POINT LOTS 23 & 24	B	H
GR060032	CLAVIER	07/25/2006	3115 MELROSE DR	OPUS LOT 25 RACEWAY ONE TWO STORY OFFICE BLDG	B	H
GR060040	CLAVIER	01/22/2007	NORTH SIDE OF PALOMAR AIRPORT RD BTWN EAGLE DR AND MELROSE DR	PALOMAR FORUM LOTS 1,2 & 8		
GR060049	CLAVIER	12/21/2006	WHIPTAIL LOOP & GAZELLE CT	CARLSBAD OAKS NORTH PHASE 2 LOTS 13-19 CARLSBAD OAKS NORTH PHASE 2		
GR070006	CLAVIER	02/16/2007		PACIFIC RIDGE SCHOOL		
GR070011	CLAVIER	07/17/2007	5960 EL CAMINO REAL	PALOMAR TRANSFER STATION		
GR070015	CLAVIER	08/24/2007	2741 GATEWAY RD	BRESSI RANCH FUEL MART		
GR070025	CLAVIER	07/18/2007	WEST SIDE OF EL FUERTE BTWN PALOMAR AIRPORT RD AND GREENHAVEN DR	PACIFIC RIDGE SCHOOL		

Permit#	Inspector	Issue Date	Location	Description	Hydrologic Unit	Priority
GR030053	DATES	08/30/2005	4588 ADAMS ST 4480 ADAMS ST	ST CLAIRE RESIDENCE ST CLAIRE RESIDENCE - ADAMS STREET	B	H
GR030053	DATES	08/30/2005	4588 ADAMS ST	ST CLAIRE RESIDENCE ST CLAIRE RESIDENCE - ADAMS STREET	B	H
GR030059	DATES	09/30/2003	5305 CARLSBAD BL - CDP 02-56	WALTERS RESIDENCE WALTERS RESIDENCE	B	H
GR040009	DATES	09/23/2004	1100 LAS FLORES DR	FARBER CONDOMINIUM FARBER CONDOMINIUMS	A	H
GR040058	DATES	09/23/2004	2245 HIGHLAND DR	DUNN RESIDENCE SHOULD BE 2200 HIGHLAND DR	B	H
GR040067	DATES	08/09/2004	NORTH END OF HIGHLAND 2245 HIGHLAND DR CDP 02-42	DUNN RESIDENCE EMERGENCY WORK - LIMITED TO C&G, STABILIZATION OF RAVINE/CANYON AS DIRECTED BY CITY INSPECTOR. NO IMPORT OF SOIL.	B	H
GR040096	DATES	03/29/2005	3471 JEFFERSON 3471 JEFFERSON ST	DIGIACOMO RESIDENCE SINGLE FAMILY RESIDENCE CDP 04-18		
GR050031	DATES	11/01/2005	3824 SKYLINE RD	SEAR RESIDENCE GARAGE ADDITION		H
GR050034	DATES	08/30/2005	PARK DRIVE AND ADAMS STREET 4575 PARK DR	PARK DRIVE KELLY RESIDENCE KELLY RESIDENCE GRADING		
GR050038	DATES	10/19/2005	1184 MAGNOLIA AV	SHAMSHOIAN RESIDENCES SFD GRADING		
GR050040	DATES	09/29/2005	5335 PASEO DEL NORTE - CDP 04-56	WESELOH HUMMER GRADING FOR CONSTR OF HUMMER DEALERSHIP		
GR050043	DATES	03/21/2006	BETWEEN SAPPHIRE DR & AVIARA PKWY	EMERALD POINTE ESTATES GRADING FOR EMERALD POINT ESTATES		
GR050045	DATES	08/30/2005	SOUTHEAST OF PAR AND AVIARA PY	BILTMORE - 24 HR FITNESS GRADING FOR 24 HR FITNESS CLUB		
GR050046	DATES	10/06/2005	N SIDE HARRISON BTN CHINQUAPIN & ADAMS	THE BLUFFS GRADING FOR THE BLUFFS DEVELOPMENT		
GR050054	DATES	02/24/2006	3000 HIGHLAND DR	HIGHLAND DRIVE SUBDIVISION SUBDIVISION GRADING	A	H
GR050060	DATES	09/30/2005	SOUTH SIDE OF OAK AV BTWN LINCOLN ST AND WASHINGTON ST 341 OAK AV	OCEAN MIST CONDOS 5 CONDOS		H
GR050062	DATES	09/29/2005	2649 OCEAN ST	KIKO RESIDENCE		H
GR050072	DATES	01/13/2006	WEST SIDE OF PASEO DEL NORTE BTWN PALOMAR AIRPORT RD AND SEA GATE RD	PASEO DEL NORTE MEDICAL OFFICE GRADING FOR MEDICAL OFFICE	B	H
GR050076	DATES	01/05/2006	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN AVIARA PKWY AND PALOMAR OAKS RD	BILTMORE 24HR FITNESS WETLAND MITIGATION BUFFER	C	H
GR060010	DATES	09/25/2006	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN AVIARA PKWY AND PALOMAR OAKS RD	BILTMORE 24 HR FITNESS/OFFICES	C	H
GR060031	DATES	09/06/2006	2753 JEFFERSON ST	TUSCANY OFFICE SUITES		H
GR060047	DATES	07/10/2007	234 DATE AV	CRESCENT DEL SOL ESTATES		

Permit#	Inspector	Issue Date	Location	Description	Hydrologic Unit	Priority
GR060052	DATES	09/15/2006	245 TAMARACK AV	TAMARACK BEACH LOFTS		H
GR060058	DATES	02/07/2007	6602 BLACK RAIL RD	BLACK RAIL RD 16		
GR060059	DATES	09/26/2006	4485 ADAMS ST	STEWARD RESIDENCE SINGLE FAMILY RESIDENCE		H
GR060071	DATES	07/05/2007	4998 EUCALYPTUS LN	EUCALYPTUS LANE 4 lot subdivision		
GR070034	DATES	12/14/2007	3770 CARLSBAD BL	PACIFIC SUNSET CONDOMINIUMS 4 unit condo project		
GR070039	DATES	08/09/2007	EAST SIDE OF EL CAMINO REAL BTWN HAYMAR DR AND MARRON DR	CHEVRON SERVICE STA #09-1312 GAS STATION		
GR070059	DATES	11/16/2007	560-562 CARLSBAD VILLAGE DRIVE 560 CARLSBAD VILLAGE DR	ROOSEVELT CENTER		
GR030071	FENNESSY	01/07/2004	NORTHEAST CORNER OF LA COSTA AV & RSF	LA COSTA TOWN SQUARE MASS GRADING/STOCKPILE	D	H
GR040063	FENNESSY	11/19/2004	NORTH OF LEVANTE ST AND WEST OF EL CAMINO REAL	LA COSTA GLEN NORTH PRECISE GRADING FOR LA COSTA GLEN NORTH	D	H
GR040072	FENNESSY	09/08/2004	RSF RD. WITHIN FACILITIES MGMT ZONE 11	LA COSTA RIDGE-N 2.6 Stockpile (VLC RIdge N 2.6)	D	H
GR040081	FENNESSY	02/18/2005	NORTH SIDE OF LA COSTA AVE BWTN EL CAMINO REAL AND VIEJO CASTILLA WAY	LA COSTA FAIRWAYS CONDOS GRADING	D	H
GR050005	FENNESSY	10/12/2005	WEST AND EAST SIDE OF CORINTIA ST BTWN ALGA AND RSF RD	LA COSTA RIDGE2.5 GRADING	D	H
GR050006	FENNESSY	11/03/2005	WEST AND EAST SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	LA COSTA RIDGE GRADING	D	H
GR050025	FENNESSY	09/29/2005	NORTH AND SOUTH SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	LA COSTA RIDGE NEIGH 2.3 & 2.4 GRADING FOR LA COSTA RIDGE 2.3 & 2.4	D	H
GR050070	FENNESSY	01/31/2006	East end El Fuerte & south of Corintia St.	LA COSTA RIDGE - 2.3 & 2.4	D	H
GR060003	FENNESSY	02/15/2006	WITHIN FACILITIES MANAGEMENT ZONE 11	LA COSTA OAKS NORTH DWG 429-7C LA COSTA OAKS NORTH NEIGH 3.6 & 3.7	D	H
GR060009	FENNESSY	04/10/2006	NORTH AND SOUTH SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	VLC - RIDGE 2.3 & 2.4 NORTH PRECISE GRADING FOR 2.3 & 2.4 NORTH	D	H
GR060013	FENNESSY	04/11/2006		LA COSTA OAKS NORTH Mass grading for neigh. 3.1, 3.3, 3.4, 3.5	D	H
GR060014	FENNESSY	04/11/2006		LA COSTA OAKS NORTH Mass grading for neigh. 3.2	D	H
GR060021	FENNESSY	04/20/2006	WEST AND EAST SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	LA COSTA RIDGE 2.1 & 2.2 PRECISE GRADING FOR 90 SINGLE FAMILY RESIDENTIAL UNITS	D	H
GR060039	FENNESSY	08/24/2006	SW CORNER RANCHO SANTA FE RD	HUNTERS POINTE	D	H
GR060055	FENNESSY	08/22/2006		LA COSTA RIDGE 2.5	D	H

Permit#	Inspector	Issue Date	Location	Description	Hydrologic Unit	Priority
GR070014	FENNESSY	09/25/2007	2756 GALICIA WY	VAN WEY SLOPE REPAIR		
GR070048	FENNESSY	08/31/2007	S OF LCA BTWN ECR AND CASTILLA WY	LA COSTA CONDOS SLOPE REPAIR		
GR070061	FENNESSY	12/10/2007	7342 ALTIVA PL	JAVAHERI RESIDENCE Single Family Residence		
GR980042	JJ	05/07/2007		LAUREL TREE APARTMENTS 138 UNIT COMPLEX		
GR060007	JORDAN	07/19/2006	7335 EL FUERTE ST	JOHNSON RESIDENCE SINGLE FAMILY GRADING		H
GR060065	JORDAN	01/23/2007	3551 HIGHLAND 3551 HIGHLAND DR	BROWN RESIDENCE SINGLE FAMILY RESIDENCE	B	H
GR060066	JORDAN	02/21/2007	6020 AVENIDA ENCINAS	TOYOTA CARLSBAD TOYOTA C'BAD - 6020 AVE. ENCINAS (dwg 441-6a)	C	H
GR060069	JORDAN	03/16/2007	7662 EL CAMINO REAL	LA COSTA PLAZA PARCEL 7		
GR070002	JORDAN	07/03/2007	WEST SIDE OF AVENIDA ENCINAS BTWN POINSETTA LN AND PALOMAR AIRPORT RD	POINSETTIA COMMONS No grading within Embarcadero ROW (Lot 3) until approved otherwise by City inspector.		
GR070017	JORDAN	07/23/2007	INNOVATION & GATEWAY	BRESSI RANCH LOTS 17 & 18 5 OFFICE BUILDINGS		
GR070021	JORDAN	06/15/2007	2497 OCEAN ST	DONALD CONDOS		
GR070035	JORDAN	10/12/2007	2578 ROOSEVELT ST	ROOSEVELT GARDENS CONDOS	A	H
GR050079	JORDAN/BL	06/27/2006	6811 VIANDA CT	GOLDEN RESIDENCE		H
GR060022	JORDAN/BL	04/12/2006	7222 AVIARA DR 7222 AVIARA DR	KERN RESIDENCE SINGLE FAMILY RESIDENCE		H
GR070009	JORDAN/GC	04/23/2007	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN EL FUERTE AND GATEWAY RD	BRESSI RANCH LOTS 33-39 NEW SHELL R & D BUILDINGS		
GR020045	JORDAN/KB	09/26/2003	6515 EL CAMINO REAL	MANZANITA APTS MANZANITA APARTMENTS	D	H
GR060070	JORDAN/KB	12/01/2006	1330 CYNTHIA LN	CYTNHIA LN SINGLE FAMILY RESIDENCE	A	H
GR020040	LOPEZ	12/12/2002	Spa Bldg DWG 402-2B	LA COSTA RESORT & SPA SPA BLDG	D	H
GR020046	LOPEZ	01/09/2003	2101 COSTA DEL MAR RD	LA COSTA VALET LOOP LA COSTA RESORT & SPA CREEK PARKING FACILITY	D	H
GR030008	LOPEZ	03/28/2003	2101 COSTA DEL MAR 2101 COSTA DEL MAR RD	LA COSTA RESORT & SPA-BALLROOM GRADING FOR BALLROOM	D	H
GR040104	LOPEZ	02/04/2005	2100 COSTA DEL MAR RD	LA COSTA RESORT, CT 03-01 dwg 422-6a - Model Complex	D	H
GR050036	LOPEZ	08/29/2005	NE CORNER OF ECR AND COSTA DEL MAR RD 2101 COSTA DEL MAR RD	LA COSTA RESORT & SPA PHASE 2 GRADING FOR LA COSTA RESORT & SPA PH 2		
GR050073	LOPEZ	01/09/2006	2101 COSTA DEL MAR RD	LA COSTA RESORT & SPA COSTA DEL MAR ENTRANCE	D	H
GR030022	MCMAHON	09/23/2003	3655 ADAMS 3655 ADAMS ST	CT 97-33-2 MAGNOLIA SUBDIVISION PHSE 2 GRADING PERMIT FOR 5 SFD'S	B	H
GR030045	MCMAHON	10/28/2003	BETWEEN CARLSBAD VILLAGE DR AND CANNON	CALAVERA HILLS II VILLAGE X ROUGH GRADING OF SITE	B	H

Permit#	Inspector	Issue Date	Location	Description	Hydrologic Unit	Priority
GR040065	MCMAHON	10/25/2006	NE COLLEGE/CANNON INTERSECTION	CALAVERA HILLS VILLAGE W CT 01-05		
GR040073	MCMAHON	09/08/2004	CALAVERA HILLS VILLAGE U	CALAVERA HILLS VILLAGE U	B	H
GR050044	MCMAHON	08/09/2005	EAST SIDE OF AVENIDA ENCINAS BTWN PALOMAR AIRPORT RD AND POINSETTIA LN 6200 AVENIDA ENCINAS	EWPCF GRADING BY ENCINA		
GR050048	MCMAHON	09/27/2005	W SIDE OF HVR BTWN CANNON & PAR	CARLSBAD RANCH RESORT GRADING FOR CARLSBAD RANCH RESORT		
GR050067	MCMAHON	04/10/2007	5390 CARLSBAD BL	KOKOPELLI RESIDENCE SINGLE FAMILY RESIDENCE		
GR060056	MCMAHON	09/22/2006	2173 SALK AVE 2173 SALK AV	VENTANA REAL LOT 2	B	H
GR060061	MCMAHON	10/23/2006	2173 SALK AVE 2173 SALK AV	VENTANA REAL LOT 3 COMMERCIAL BUILDING	B	H
GR060075	MCMAHON	01/26/2007	SOUTH SIDE OF CARLSBAD VILLAGE DR BTWN HIGHLAND DR AND PIO PICO DR	CARLSBAD MEDICAL VILLAGE COMMERCIAL/OFFICE BUILDINGS		
GR060076	MCMAHON	01/16/2007	BETWEEN TAMARACK AV AND CANNON RD	ROBERTSON RANCH-- EAST VILLAGE Vegetation Removal		
GR070001	MCMAHON	03/12/2007	3655 ADAMS ST	MAGNOLIA SUBDIVISION PHASE 3		
GR070003	MCMAHON	03/28/2007	BETWEEN TAMARACK AV AND CANNON RD	ROBERTSON RANCH		
GR070010	MCMAHON	05/04/2007	GRAND PACIFIC DRIVE	CARLSBAD RANCH PA 5 PRECISE GRADING PHASE 2 FOR PA 5		
GR070013	MCMAHON	03/30/2007	3200 JAMES DR	O'GARA PARCEL MAP Work limited to earth berm for drainage as shown on apprvd MS 03-07	A	H
7 GR070038	MCMAHON	07/25/2007	SALK AVE @ ECR	CRC LOT 1 FENTON		
GR070042	MCMAHON	09/11/2007	2424 CANNON RD	ROBERTSON RANCH PA 15 AFFORDABLE APTS		
GR070052	MCMAHON	12/07/2007	2180 RUTHERFORD RD	CALLAWAY GOLF PARKING STRUCTUR		

City of Carlsbad

Construction Site NPDES Compliance Inspection Checklist

Construction Management & Inspection Division

Permit #: Date:

Inspection Type: Weather:

Inspected By: Project #/Name:

Mark (√) box "Yes", "No", or "N/A"; if there are comments, mark (√) box "Comment".

Yes	No	N/A	Comment	Inspection Description
☐	☐	☐	☐	1. Are slopes steeper than 3:1 properly covered?
☐	☐	☐	☐	2. Are areas flatter than 3:1 covered or protected by desilting basins?
☐	☐	☐	☐	3. Is the SWPPP wall map up to date and accurate?
☐	☐	☐	☐	4. Are all gravel bags, straw waddles, silt fences, and other linear sediment barriers in place in accordance with the SWPPP, and are they functioning properly?
☐	☐	☐	☐	5. Are basins designed and maintained to provide the required retention/detention?
☐	☐	☐	☐	6. Is the stabilized construction entrance preventing tracking (i.e. working properly)?
☐	☐	☐	☐	7. Are all downstream storm drain inlets protected with devices that are in working order and being properly maintained?
☐	☐	☐	☐	8. Are non-storm-water BMP's being used? (e.g. concrete washouts)
☐	☐	☐	☐	9. Are all material and equipment handling, storage, and maintenance areas clean, and free of spills, leaks, or other deleterious materials?
☐	☐	☐	☐	10. Is the site free from litter and the litter collected and placed in covered containers?
☐	☐	☐	☐	11. Are temporary stockpiles and/or construction materials in approved areas and protected/covered?
☐	☐	☐	☐	12. Are all areas designated to be seeded or landscaped properly maintained (i.e. irrigation functioning properly, 90-100% coverage)? NO BMP's REQUIRED
☐	☐	☐	☐	13. Are all natural drainage courses and open spaces in proximity to this project protected?
☐	☐	☐	☐	14. Are all BMP's maintained in functional order? (e.g. sediment removed, basins pumped down, repairs made, etc.)

Comments:_____

_____

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_____

Signature:_____ Date:_____

City of Carlsbad CIP Construction Site Inventory December 26, 2007

PERMIT	PRONUM	PRONAME	DATE
3860-1	3860-1	Widening Olivenhain & RSF	12/26/2007
3667-14	3667-14	2007 Slurry Seal	12/26/2007
3667-15	3667-15	2007 Pavement Overlay Project	12/26/2007
3699-W	3699-W	Aviara Park Water Svc Relocation	12/26/2007
3875-1	3875-1	Poinsettia Sewer Lift Station Upgrade	12/26/2007
3889-1C	3889-1	Bressi Portable Wtr Pumpstation	12/26/2007
3890-2	3890-2	Mahr Reservoir	12/26/2007
3901	3901	Fire Station 6	12/26/2007
3939-1	3939-1	Signal Poinsettia Ln & Black Rail Rd	12/26/2007
3955	3955	Demo of Pajama Dr Water Facility	12/26/2007
39721-3	39721-3	Golf Course Construction (Wadsworth)	12/26/2007
3771/4001	3771/4001	Library Learning Center	12/26/2007
3907	3907	Wetland Mitigation Restoration /RSF Rd N	12/26/2007
4502	4502	Poinsettia Community Pk -Ph 2A Tennis Courts	12/26/2007
5003	5003	ECR Water System Projects	12/26/2007
6013	6013	Concrete Replacement Project	12/26/2007
PWS 07-05	PWS 07-05	Mira Monte Dr Access Control Gate	12/26/2007

City of Carlsbad
Municipal Inventory
Order 2001-01

	BUSINESS NAME	BUSINESS SITE ADDRESS	SIC DESCRIPTION	Classification	Drainage Basin
1	FIRE STATION #1	1275 CARLSBAD VILLAGE DR	Fire Protection	Muni High	BV
2	FIRE STATION #2	1906 ARENAL RD	Fire Protection	Muni High	BA
3	FIRE STATION #3	3701 CATALINA DR	Fire Protection	Muni High	BV
4	FIRE STATION #4	6885 BATAQUITOS DR	Fire Protection	Muni High	BA
5	FIRE STATION #5	2540 ORION WY	Fire Protection	Muni High	AH
6	FIRE STATION #6	3131 LEVANTE ST	Fire Protection	Muni High	BA
7	FLEET MAINTENANCE FACILITY	2480 IMPALA DR	Vehicle Maintenance	Muni High	AH
8	M&O OPERATIONS YARD	5950 EL CAMINO REAL	Water Supply	Muni High	AH
9	OAK OPERATIONS YARD	405 OAK AV	Maintenance Yard	Muni High	BV
10	PARKS MAINTENANCE/STORAGE	1166 CARLSBAD VILLAGE DR	Maintenance Yard	Muni High	BV
11	POINSETTIA MAINTENANCE STATION	6600 HIDDEN VALLEY RD	Maintenance Yard	Muni High	EN
12	STAGECOACH MAINTENANCE STATION	3420 CAMINO DE LOS COCHES	Maintenance Yard	Muni High	BA
13	SWIM AND RECREATION COMPLEX	3401 MONROE ST	Membership Sports & Recreation Clu	Muni High	BV
14	CANNON SEWER LIFT STATION	2301 CANNON RD	Sanitary Services	Muni High	AH
15	CARLSBAD RECYCLED WATER FACILITY	6200 AVENIDA ENCINAS	Amusement and Recreation Services	Muni High	AH
16	CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL	Sanitary Services	Muni High	AH
17	DESILTATION BASIN #13	SW END FARADAY AV SO OF LOT 102 OF CRC	Desiltation Basin	Muni High	AH
18	DESILTATION BASIN #30	SW CORNER MARRON AND MONROE	Desiltation Basin	Muni High	BV
19	DESILTATION BASIN #43	CAMINO HILLS AND FARADAY NE CORNER	Desiltation Basin	Muni High	AH
20	FOXES LANDING LIFT STATION	4155 HARRISON ST	Sewerage Systems	Muni High	AH
21	GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD	Sewerage Systems	Muni High	AH
22	KNOTS SEWER LIFT STATION	501 KNOTS LN	Sewerage Systems	Muni High	BA
23	LA GOLONDRINA SEWER LIFT STATION	2516 LA GOLONDRINA ST	Sewerage Systems	Muni High	BA
24	MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	5203 SUNNY CREEK RD	Water Supply	Muni High	AH
25	NORTH BATIQUITOS PUMP STATION	7100 BATIQUITOS DR	Water Supply	Muni High	BA
26	POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN	Sewerage Systems	Muni High	BA
27	SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV	Sewerage Systems	Muni High	BV
28	TERRAMAR SEWER LIFT STATION	300 CANNON RD	Sewerage Systems	Muni High	AH
29	VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST	Sewerage Systems	Muni High	BV
30	VILLAS SEWER LIFT STATION	2860 WINTHROP AV	Sewerage Systems	Muni High	BV
31	CITY'S SANITARY SEWAGE COLLECTION SYSTEM	City service area	Sewerage Systems	Muni High	BA,BV,AH,EN
32	BUENA VISTA CHANNEL	Buena Vista Creek along Haymar	MS4	Muni High	BV
33	KELLY DRIVE CHANNEL	Kelly Drive	MS4	Muni High	AH
34	PARK AND KELLY OUTFALL	Kelly Drive at Park Ave	MS4	Muni High	AH
35	PARK AND ANDREA OUTFALL	Andrea at Park	MS4	Muni High	AH
36	PARK AND VALENCIA OUTFALL	Valencia at Park	MS4	Muni High	AH
37	PARK AND NEBLINA OUTFALL	Nebline at Park	MS4	Muni High	AH
38	OTHER OUTFALLS	City service area	MS4	Muni High	BA,BV,AH,EN
39	CATCH BASINS/INLETS	City service area	MS4	Muni High	BA,BV,AH,EN
40	MS4 PIPELINES	City service area	MS4	Muni High	BA,BV,AH,EN
41	CONCRETE CHANNELS	City service area	MS4	Muni High	BA,BV,AH,EN
42	V DITCH CHANNELS	City service area	MS4	Muni High	BA,BV,AH,EN
43	CURBED STREETS	City service area	MS4	Muni High	BA,BV,AH,EN
44	UNCURBED ROADS	City service area	MS4	Muni High	BA,BV,AH,EN
45	PINE FIELD PARKING LOT	3333 HARDING ST	Parking Lot	Muni High	AH
46	STAGE COACH PARKING LOT	3420 CAMINO DE LOS COCHES	Parking Lot	Muni High	BA
47	POINSETTIA COMMUNITY PARK PARKING LOT	6600 HIDDEN VALLEY RD	Parking Lot	Muni High	EN
48	HOSP GROVE PARK PARKING LOT	JEFFERSON & MONROE	Parking Lot	Muni High	BV
49	CALAVERA HILLS PARK PARKING LOT	2997 GLASGOW DR	Parking Lot	Muni High	AH
50	CARLSBAD UNIFIED SCHOOL DISCTRICT PARKING LOT	801 Pine Avenue	Parking Lot	Muni High	AH
51	LA COSTA CANYON PARK PARKING LOT	3020 Pueblo Street	Parking Lot	Muni High	BA
52	FARADAY CENTER PARKING LOT	1635 FARADAY AV	Parking Lot	Muni High	AH
53	CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR	Parking Lot	Muni High	BV
54	HOUSING/REDEVELOPMENT OFFICE PARKING LOT	2965 ROOSEVELT ST B	Parking Lot	Muni High	BV
55	COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR	Parking Lot	Muni High	BV
56	HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST	Parking Lot	Muni High	AH
57	CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE	Parking Lot	Muni High	AH
58	ARTS OFFICE PARKING LOT	2955 ELMWOOD ST	Parking Lot	Muni High	BV
59	DOVE LIBRARY PARKING LOT	1775 DOVE LN	Parking Lot	Muni High	BA
60	SAFETY CENTER PARKING LOT	2560 ORION WY	Parking Lot	Muni High	AH
61	SKATEPARK PARKING LOT	2560 ORION WY	Parking Lot	Muni High	AH
62	ADULT LEARNING PROGRAM PARKING LOT	1207 CARLSBAD VILLAGE DR STE O	Parking Lot	Muni High	BV
63	OTHER OPEN CHANNELS	City service area	MS4	Muni High	BA,BV,AH,EN
64	AVIARA OAKS	6900 AMBROSIA LN	Amusement and Recreation Services	Muni Med	BA
65	BUENA VISTA FIELD	1330 BUENA VISTA AVE	Amusement and Recreation Services	Muni Med	BV
66	CALAVERA HILLS PARK	2997 GLASGOW DR	Amusement and Recreation Services	Muni Med	AH
67	CHASE FIELD	3349 HARDING ST	Amusement and Recreation Services	Muni Med	AH
68	EL FUERTE PARK	600 BLOCK OF EL FUERTE ST	Amusement and Recreation Services	Muni Med	BA
69	HOLIDAY PARK	CHESTNUT AV & PIO PICO DR	Amusement and Recreation Services	Muni Med	AH
70	HOSP GROVE PARK	JEFFERSON & MONROE	Amusement and Recreation Services	Muni Med	BV
71	JEFFERSON FIELD	3743 JEFFERSON ST	Amusement and Recreation Services	Muni Med	AH
72	LA COSTA CANYON PARK	3020 PUEBLA ST	Amusement and Recreation Services	Muni Med	BA
73	LAGUNA RIVIERA PARK	4900 KELLY DR	Amusement and Recreation Services	Muni Med	AH
74	LAS PALMAS OFFICES	2075 LAS PALMAS DR	General Administration	Muni Med	EN
75	LEVANTE FIELD	3031 LEVANTE ST	Amusement and Recreation Services	Muni Med	BA

	BUSINESS NAME	BUSINESS SITE ADDRESS	SIC DESCRIPTION	Classification	Drainage Basin
76	PINE FIELD	3333 HARDING ST	Amusement and Recreation Services	Muni Med	AH
77	POINSETTIA COMMUNITY PARK	6600 HIDDEN VALLEY RD	Amusement and Recreation Services	Muni Med	EN
78	STAGECOACH COMMUNITY PARK	3420 CAMINO DE LOS COCHES	Amusement and Recreation Services	Muni Med	BA
79	ADULT LEARNING PROGRAM	1207 CARLSBAD VILLAGE DR STE O		Muni Low	BV
80	ALGA MEDIANS	ALGA ROAD	Planters and Center Dividers	Muni Low	BA
81	ARTS OFFICE	2955 ELMWOOD ST	Management Services	Muni Low	BV
82	BEACH MEDIANS & RIGHTS OF WAY	CARLSBAD BLVD	Planters and Center Dividers	Muni Low	AH
83	CADENCIA PARK	3310 CADENCIA ST	Amusement and Recreation Services	Muni Low	BA
84	CALAVERA PUMP STATION	3600 BLOCK OF COLLEGE DR	Water Supply	Muni Low	AH
85	CALAVERA TREATMENT PLANT	2400 TAMARACK AV	Sanitary Services	Muni Low	BV
86	CANNON PARK	300 BLOCK OF CANNON	Amusement and Recreation Services	Muni Low	AH
87	CAR COUNTRY PARK	PASEO DEL NORTE	Amusement and Recreation Services	Muni Low	AH
88	CARLSBAD SENIOR CENTER	799 PINE AVE	Amusement and Recreation Services	Muni Low	AH
89	CITY HALL FACILITY	1200 CARLSBAD VILLAGE DR	General Administration	Muni Low	BV
90	CULTURAL ARTS CENTER	3557 MONROE ST	Amusement and Recreation Services	Muni Low	BV
91	DOVE LIBRARY MAIN BRANCH & ADMINISTRATION	1775 DOVE LN	Libraries	Muni Low	BA
92	DOWNTOWN CENTER MEDIANS	CARLSBAD VILLAGE DRIVE	Planters and Center Dividers	Muni Low	BV
93	ELLERY WATER PUMP STATION	2300 BLOCK OF JANIS WY	Water Supply	Muni Low	BV
94	FARADAY CENTER	1635 FARADAY AV	Management Services	Muni Low	AH
95	FARMERS BUILDING	FARADAY & EL CAMINO RL	Unspecified	Muni Low	AH
96	FOREST SEWER LIFT STATION	1731 FOREST AV	Sewerage Systems	Muni Low	EN
97	GEORGIA COLE LIBRARY	1250 CARLSBAD VILLAGE DR	Libraries	Muni Low	BV
98	HARDING COMMUNITY CENTER	3096 HARDING ST	Amusement and Recreation Services	Muni Low	AH
99	HIGH SCHOOL TENNIS COURT	1751 BASSWOOD	Amusement and Recreation Services	Muni Low	BV
100	HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL	Sewerage Systems	Muni Low	BV
101	HOUSING/REDEVELOPMENT OFFICE	2965 ROOSEVELT ST B	urban and Community Development	Muni Low	BV
102	LARWIN/DOG PARK	2700 BLOCK OF CARLSBAD VILLAGE DR	Amusement and Recreation Services	Muni Low	BV
103	LOWER FARADAY SEWER LIFT STATION	1507 FARADAY AV	Sewerage Systems	Muni Low	EN
104	MAGEE HOUSE, HERITAGE HALL & MAGEE PARK	258 BEACH AVE	Amusement and Recreation Services	Muni Low	BV
105	MAXTON BROWN PARK	500 LAGUNA DR	Amusement and Recreation Services	Muni Low	BV
106	PALOMAR TRIANGLE	6600 CARLSBAD BL	Planters and Center Dividers	Muni Low	EN
107	PIO PICO PARK	2600 PIO PICO DR	Amusement and Recreation Services	Muni Low	BV
108	POINSETTIA OFF RAMP	I5 & POINSETTIA	Open Landscape	Muni Low	BA
109	POLICE PISTOL RANGE	MACARIO CANYON	Shooting Range	Muni Low	AH
110	RESERVOIR B	END OF BLUFF DR	Water Supply	Muni Low	AH
111	RESERVOIR BUENA VISTA	1600 BUENA VISTA DR	Water Supply	Muni Low	BV
112	RESERVOIR C	CALAVERA DR	Water Supply	Muni Low	AH
113	RESERVOIR D	6700 BLACK RAIL RD	Water Supply	Muni Low	EN
114	RESERVOIR E	HIDDEN VALLEY	Water Supply	Muni Low	EN
115	RESERVOIR ELLERY	JANIS WAY	Water Supply	Muni Low	AH
116	RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR	Water Supply	Muni Low	AH
117	RESERVOIR LA COSTA HI	ALGA RD	Water Supply	Muni Low	BA
118	RESERVOIR LA COSTA LO	ALGA RD	Water Supply	Muni Low	BA
119	RESERVOIR PAJAMA	PAJAMA DR	Water Supply	Muni Low	BV
120	RESERVOIR SANTA FE I	PYRENEES	Water Supply	Muni Low	EN
121	RESERVOIR SANTA FE II	PAR & BUSINESS PARK	Water Supply	Muni Low	EN
122	RESERVOIR SKYLINE	SKYLINE DR	Water Supply	Muni Low	AH
123	SAFETY CENTER (POLICE & FIRE HEADQUARTERS)	2560 ORION WY	Public Order and Safety	Muni Low	AH
124	SANTA FE CORRIDORS	SEGOVIA	Open Landscape	Muni Low	BA
125	SKATEPARK	2560 ORION WY	Amusement and Recreation Services	Muni Low	AH
126	SPINNAKER HILL BANK	200 BATIQUITOS DR	Amusement and Recreation Services	Muni Low	BA
127	TAP PUMP STATION (RECLAIMED WATER)	6400 BLOCK OF EL CAMINO REAL	Water Supply	Muni Low	EN
128	UPPER FARADAY SEWER LIFT STATION	1711 FARADAY AV	Sewerage Systems	Muni Low	EN
129	WOODSTOCK SEWER LIFT STATION	4666 WOODSTOCK ST	Sewerage Systems	Muni Low	AH
130	CARRILLO RANCH	S-12 PALOMAR AIRPORT RD	Amusement and Recreation Services	Muni Low	BA

Inventory List
July 1, 2007 - March 23, 2008
Order 2001-01

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTVITY DATE	ACTIVITY TYPE	Drainage Basin
7-ELEVEN	901 PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	1/9/08			EN
7-ELEVEN 32942-A	5802 VAN ALLEN WAY	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	11/20/07	09/08/06	Drive By	AH
A & H WHOLESALE	5600 AVENIDA ENCINAS STE 40	EXCLUDED	5193	5193	Wholesale Floral	CO	Comml High	Comml High	1/23/08			AH
A & P AIRCRAFT DETAILING	2006 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Aircraft Washing, Detailing	CO	Ind High	Ind High	11/19/07			EN
A MOMENT IN TIME, BOTANICALS	5600 AVENIDA ENCINAS STE 33	EXCLUDED	5193	5193	Indl and Comml Machinery and Equip, NEC	CO	Comml High	Comml High	1/23/08			AH
A MOMENT IN TIME, BOTANICALS	6102 AVENIDA ENCINAS	ACTIVE	5193		Wholesale Trade Flowers & florists Supplies	CO	Ind Low		3/28/06			EN
A WAY WITH PAINT	1665 AMANTE CT	OUT OF BUSINESS	1721	1721	Special Trade Contractors	HO	Comml High	Comml High		11/20/07	Reviewed	BA
A.R.M. PAINTING	2687 WATERBURY WAY	ACTIVE	1721	1721	Special Trade Contractors	HO	Comml High	Comml High		11/20/07	Reviewed	BV
A-1 AUTO CARE	3193 TYLER ST # 11	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		1/6/06			AH
A-1 HAMILTON LANDSCAPE MAINTENANCE	3659 TRIESTE DR	ACTIVE	0781		Landscape Counseling and Planning	HO	Comml High			06/05/07	Reviewed	BV
A1 QUALITY CARPET CLEANING	667 MAGNOLIA AV	ACTIVE	7217	7217	Carpet Cleaning	HO	Comml High	Comml High		11/20/07	Phone	BV
AALTO SCIENTIFIC LTD	1959 KELLOGG AVE	ACTIVE	2835	2835	In Vitro & In Vivo Diagnotsitc Subs	CO	Ind High	Ind High	12/18/07			EN
AAPCO	1945 CAMINO VIDA ROBLE, STE E	MOVED	1711	1711	Plumbing Contractor	CO	Comml High	Comml High	8/8/06	11/20/07	Reviewed	AH
ABLE AUTO REPAIR & SMOG	665 PALOMAR AIRPORT RD	ACTIVE	7549		Automotive Services, Except Repair And Carwashes	CO	Comml High		8/21/06			AH
ACCENT PAINTING, INC.	7934 LA CAPELA LN	ACTIVE	1721		Painting And Paper Hanging	HO	Comml High			01/29/07	Phone	BA
ACES EQUIPMENT LEASING INC	7040 AVENIDA ENCINAS # 104-44	OUT OF BUSINESS	7359	7359	Equipment Rental And Leasing, Not Elsewhere Class	HO	Comml High	Comml High		11/20/07	Reviewed	BA
ACUSHNET COMPANY	2819 LOKER AVE EAST	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	CO	Ind High	Ind High	8/24/07			AH
ACUSHNET COMPANY	1818 ASTON AVE	ACTIVE	8731		Research and Development	CO	Ind Low		8/29/06			AH
ADDISON SHEET METAL	7238 PONTO DR	ACTIVE	3499	3499	Sheet Metal Fabricator	CO	Ind Med	Ind Med	1/8/08	06/06/06	Reviewed	BA
ADT CONSTRUCTION INC.	1735 ROGUE ISLE CT	ACTIVE	1521	1521	General Contractors--Single-Family Housing	HO	Comml High	Comml High		11/20/07	Reviewed	AH
A-ECONOMY CONCRETE PUMPING	1702 EVERGREEN CIR	ACTIVE	1771		Concrete Work	HO	Comml High			06/05/07	Reviewed	BV
AERO PACIFIC	2016 PALOMAR AIRPORT RD STE A	OUT OF BUSINESS	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	3/8/07	11/19/07	Site Visit	EN
AFM	5816 DRYDEN PL	ACTIVE	3669		Fabricated Metal Products, Not Elsewhere Classifi	CO	Ind Med		9/11/06	06/27/05	Reviewed	AH
AGRIWEST	6211 YARROW DR STE A	ACTIVE	5193		Flowers, Nursery Stock, And Florists' Supplies	CO	Ind Low			02/01/07	Drive By	EN
AL MITCHELL'S CLEANING	2945 VALLEY ST	ACTIVE	7217	7217	Carpet And Upholstery Cleaning	HO	Comml High	Comml High		12/24/07	Reviewed	BV
ALBERTSONS # 6720	7660 EL CAMINO REAL	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	2/15/08			BA
ALBERTSONS #6701	955 CARLSBAD VILLAGE DR	ACTIVE	5411	5411	Supermarkets	CO	Comml High	Comml High	2/20/08			BV
ALEGRE BLIND COMPANY	6338 HUNTINGTON DR	EXCLUDED	1700	1700	Construction-Special Trade Contractors	HO	Comml High	Comml High		11/20/07	Reviewed	BA

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BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTVITY DATE	ACTIVITY TYPE	Drainage Basin
ALEJANDRO'S MEXICAN FOOD	2952 HARDING ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/8/07			BV
ALEX'S FLOWERS	5600 AVENIDA ENCINAS STE 23	EXCLUDED	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Comml High	Comml High	1/23/08			AH
ALLEN'S NEW YORK PIZZA, INC.	6943 EL CAMINO REAL STE 101	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/1/06	08/27/07	Drive By	BA
ALLEY, THE	421 GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/11/07			BV
ALLGIRE BUILDING CONTRACTORS	3278 GREY HAWK CT	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Comml High	Comml High	8/1/06	12/24/07	Reviewed	BA
ALLIANCE FLORAL	5600 AVENIDA ENCINAS STE 37	EXCLUDED	5193	5193	Wholesale Floral	CO	Comml High	Comml High	1/23/08			AH
ALLIED WASTE COMPANY	5960 EL CAMINO REAL	ACTIVE	4953	4953	Refuse Systems	CO	Ind High	Ind High	11/28/07			AH
ALLIE'S EDIBLES LLC	5671 PALMER WAY STE J		2064		Candy & Other Confectionery Products	CO	Ind Med					
ALLURE LANDSCAPE DESIGN	3316 CABO CT	EXCLUDED	781	781	Landscape Counseling And Planning	HO	Comml High	Comml Low		12/24/07	Reviewed	BA
ALOHA POOL SERVICE & REPAIR	2631 ROOSEVELT ST SPC 14	ACTIVE	7389	7389	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		12/24/07	Phone	BV
ALOHA POOL SERVICE & REPAIR	5232 LOS ROBLES DR	OUT OF BUSINESS	7389	7389	Business Services, NEC	HO	Comml High	Comml High		12/24/07	Reviewed	AH
ALPHATEC MANUFACTURING, INC.	6110 CORTE DEL CEDRO	ACTIVE	3842		Orhtopedic, Prosthetic & Surgical Appliances and Supplies	CO	Ind Med		6/12/07			EN
AL'S CAFE IN-THE-VILLAGE	795 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/20/07			BV
AM/PM MINI MARKET #5366	1991 PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	1/9/08			EN
AMERICAN ARBOR TREE SERVICE	391 TAMARACK AVE	ACTIVE	0783	0783	Ornamental Shrub & Tree Svc	HO	Comml High	Comml High		12/24/07	Reviewed	AH
AMERICAN RIM SUPPLY	1955 KELLOGG AVE	ACTIVE	3465	3465	Automotive Metal Stampings	CO	Ind Med	Ind Med	10/16/07			EN
AMIGO CUSTOM SCREEN PRINTS	6351 YARROW DR # A-B	ACTIVE	2261		Finishers of Broadwoven Fabrics of Cotton	CO	Ind Med		4/3/06			EN
ANDERSON'S ORGANIC PHC	2690 KREMEYER CIR APT 4	OUT OF BUSINESS	0783	783	Ornamental Shrub And Tree Services	HO	Comml High	Comml High		10/25/07	Reviewed	AH
ANDRADE & COMPANY	2123 VUELTA CT	ACTIVE	1721		Painting Contractor	HO	Comml High			03/29/07	Phone	BA
ANTBUSTERS	6803 CORINTIA ST	ACTIVE	7342		Disinfecting And Pest Control Services	HO	Comml High			01/29/07	Reviewed	BA
ANTOLS NORTH COUNTY MASONRY	3429 DON COTA DR	ACTIVE	1741	1741	Masonry Contractor	HO	Comml High	Comml High		12/24/07	Reviewed	AH
APPLIED CONTROL CONCEPTS	2221 LAS PALMAS DR STE A	MOVED	3571	3571	Electronic Computers	CO	Ind Med	Ind Med	6/28/07	08/28/07	Reviewed	EN
APS DYNAMICS INC.	5731 PALMER WAY STE A	ACTIVE	3826	3826	Laboratory Analytical Instruments	CO	Ind Med	Ind Med	1/29/08			AH
APS GENERAL CONTRACTORS, INC.	4005 SUNNYHILL DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High	9/11/06	12/24/07	Reviewed	BV
AQUA MOBILE DETAIL	5154 SHORE DR	ACTIVE	7542		Carwashes	HO	Comml High			01/31/07	Phone	AH
AQUA-FRESH POOL SERVICE	2081 LEE CT	ACTIVE	7389	7389	Business Services, NEC	HO	Comml High	Comml High		12/24/07	Reviewed	AH
AQUARIAN POOL SERVICE	1775 VALLEY PL	ACTIVE	7389	7389	Business Services, NEC	HO	Comml High	Comml High		12/24/07	Reviewed	BV

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BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTVITY DATE	ACTIVITY TYPE	Drainage Basin
AQUATIC QUALITY ASSURANCE	6062 CORTE DEL CEDRO	ACTIVE	7389	7389	Business Services	CO	Comml High	Comml High	1/16/08	03/30/07	Reviewed	AH
ARAMARK SERVICE / TAYLOR-MADE	5545 FERMI CT		5812		Eating Places	CO	Comml High					
ARCADE, THE	2965 ROOSEVELT ST	ACTIVE	6512		Commercial Shopping Center	CO	Comml High		5/18/06			BV
ARMENIAN CAFÉ, THE	3126 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/5/07			AH
ARMSTRONG GARDEN CENTERS,INC.	5702 PASEO DEL NORTE	ACTIVE	5261	5261	Retail Nurseries, Lawn & Garden Sup Stores	CO	Comml High	Comml High	3/13/08			AH
ARNOLD'S LANDSCAPE	3610 KINGSTON ST	ACTIVE	0781	0781	Landscape Counseling and Planning	HO	Comml High	Comml High		12/24/07	Reviewed	BV
ARRISCAPE, INC	4511 SAINT GEORGE CT		1799		Construction-Special Trade Contractors	HO	Comml High					
ARTHUR A BROWN PLUMBING COMPANY	2697 STATE ST	ACTIVE	1711		Plumbing Contractor	CO	Comml High		8/23/06	04/13/06	Drive By	BV
ASHWORTH, INC.	2765 LOKER AVE W	ACTIVE	5136		Clothing Distributor	CO	Ind Low		4/12/06	03/02/04	Reviewed	AH
ASLINE CONSTRUCTION	3008 SEGOVIA WAY	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/24/07	Reviewed	AH
ASYMTEK	2762 LOKER AVE W	ACTIVE	3699	3699	Electrical Machinery, Equip & Sups, NEC	CO	Ind Med	Ind Med	1/31/08			AH
ATLANTIS COMPANY	3800 ALDER AVE	MOVED	1522	1522	Residential Building Contractor	HO	Comml High	Comml High		12/24/07	Reviewed	AH
ATLANTIS POOL SERVICE	4023 CRESCENT POINT RD	ACTIVE	7389	7389	Pool Service	HO	Comml High	Comml High		12/24/07	Reviewed	AH
ATTAWAY POOLS	2622 ROOSEVELT ST	ACTIVE	7389		Pool Contractor, Maintenance	HO	Comml High			03/30/07	Phone	BA
AUTO GENOMICS, INC	2251 RUTHERFORD RD		3841			co	Ind Med					
AUTOMOTIVE SOLUTIONS	945 TAMARACK AVE	ACTIVE	7549		Automotive Services, Except Repair And Carwashes	CO	Comml High		4/5/06			AH
AVIARA FARMS	1205 AVIARA PKWY	ACTIVE	5159		Wholesale Distribution of Raw Farm Produce	CO	Comml High		9/11/06			AH
AVIS RENT A CAR	2198 PALOMAR AIRPORT RD	ACTIVE	7514	7514	Rental Car Agency	CO	Comml High	Comml High	11/20/07			EN
B & G TREE SERVICE	2631 ROOSEVELT STREET	ACTIVE	0781	0781	Landscaper	HO	Comml High	Comml High		12/24/07	Reviewed	BV
B & H CONSTRUCTION	2590 DAVIS AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/24/07	Reviewed	BV
B.A. WORTHING, INC.	690 CARLSBAD VILLAGE DR STE 201	ACTIVE	1521		Building Construction-General Building Contractors	CO	Comml High			06/11/07	Reviewed	BV
BAJAS FLOWERS	5600 AVENIDA ENCINAS STE 24	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
BAKEHOUSE FOODS, INC.	2270 CAMINO VIDA ROBLE STE U	ACTIVE	2052	2052	Cookies & Crackers	CO	Ind Med	Ind Med	2/25/08			EN
BAN'S CLEANERS	981 TAMARACK AV	ACTIVE	7216	7216	Dry Cleaning Plant	CO	Comml High	Comml High	1/28/08	08/23/05	Reviewed	AH
BARNSTORMING ADVENTURES	2206 PALOMAR AIRPORT RD	ACTIVE	4522	4522	Air Transportation, Nonscheduled	CO	Ind High	Ind High	11/19/07			en
BARRETT LANDSCAPE AND MAINTENANCE	6480 CORTE LA LUZ	ACTIVE	0782		Lawn And Garden Services	HO	Comml High			01/29/07	Phone	BA
BASELINE TENNIS COURTS AND SUPPLIES	3218 AZAHAR PL	ACTIVE	1799	1799	Special Trade Contractors, Nec	HO	Comml High	Comml High		12/24/07	Phone	BA

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BASKIN ROBBINS	2540 EL CAMINO REAL STE D		5451		Dairy Products Stores	CO	Comml High					
BASKIN ROBBINS	6949 EL CAMINO REAL STE 101		5451		Dairy Products Stores	CO	Comml High					
BECKMAN COULTER	2470 FARADAY AVENUE	ACTIVE	2835	2835	Invitro and Invitro Diagnostic Substances	CO	Ind High	Ind High	10/31/07			AH
BELLEFLEUR CARLSBAD LLC	5610 PASEO DEL NORTE STE 100	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/8/07			AH
BENCHMARK STONEWORKS,INC.	5661 PALMER WY SUITE D	ACTIVE	1743	1743	Terrazzo, Tile, Marble, Mosaic Work	CO	Comml High	Comml High		12/24/07	Phone	AH
BENIHANA	755 RAINTREE DR STE 100	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/10/07			AH
BEST TERIYAKI	1818 MARRON RD # 104	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/31/07			BV
BHI-BUILDERS	7213 AVIARA DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		12/26/07	Reviewed	BA
BIG FISH MOTORSPORTS	6060 AVENIDA ENCINAS		7538		Motor Vehicle Parts And Accessories	CO	Comml High					
BIO-HYDRATION RESEARCH LAB, INC.	2091 RUTHERFORD RD	ACTIVE	2086		Bottled And Canned Soft Drinks & Carbonated Waters	CO	Ind Med		6/28/07			AH
BISTRO WEST	4960 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating and Drinking Places	CO	Comml High	Comml High	1/2/08			AH
BLACK BOX INC	2777 LOKER AVE W # A		5091		Sporting And Recreational Goods & Supplies	CO	Ind Low					
BLACK FOREST DETAIL	7759 CALLE MEJOR	ACTIVE	7542	7542	Mobile Car Wash	HO	Comml High	Comml High		11/15/07	Reviewed	BA
BLUE LAGOON POOL SERVICE	2665 LEVANTE ST	ACTIVE	7389	7389	Pool Maintenance	HO	Comml High	Comml High		12/26/07	Phone	
BLW ROOFING	3306 AZAHAR PL	ACTIVE	1761		Roofing Contractor	HO	Comml High			01/29/07	Reviewed	BA
BOAR CROSSn	390 GRAND AVE	ACTIVE	5813	5813	Drinking Places (Alcoholic Beverages)	CO	Comml High	Comml High	1/3/08			BV
BOB BAKER CHRYSLER JEEP	5555 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		3/7/06			AH
BOB BAKER MITSUBISHI	5515 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		3/6/06			AH
BOB BAKER VOLKSWAGEN/SUBARU	5500 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		5/30/06			AH
BOBBY'S HIDEAWAY CAFE	4901 EL CAMINO REAL STE F	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/27/07			AH
BOSTON MARKET # 637	2606 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/27/07			BV
BOTANICA LANDSCAPE DESIGN	6225 CITRACADO CIR	EXCLUDED	781	781	Landscape Counseling And Planning	HO	Comml High	Comml Low		12/26/07	Reviewed	BA
BOURRET INTERIORS, INC.	1950 KELLOGG AVE	EXCLUDED	1521	7389	Interior Design	CO	Comml High	Comml Low		12/26/2007	Reviewed	BA
BOVENZI CONSTRUCTION INC	343 OAK AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/26/07	Phone	BV
BOYS & GIRLS CLUB OF CARLSBAD	3115 ROOSEVELT ST	ACTIVE	7997		Membership Sports and Recreation Clubs	CO	Comml High		9/11/06			BV
BRIGHTON GARDENS OF CARLSBAD	3140 EL CAMINO RL	ACTIVE	8059		Nursing Home	CO	Comml High		3/28/06			BV

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BRITISH INDEPENDENT CAR COUNTRY CARLSBAD	1060 AUTO CENTER CT STE O	ACTIVE	7538	7538	General Automotive Repair Shops	CO	Comml High	Comml High	1/11/08			AH
BROOKHART CONCRETE, INC.	2911 STATE ST STE P	ACTIVE	1731	1731	Concrete Contractor	CO	Comml High	Comml High		12/26/07	Reviewed	BV
BRUEGGER'S BAGELS	7680 EL CAMINO REAL # 102	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	9/19/07	05/09/05	Phone	BA
B-STANG CONSTRUCTION	3490 CHARTER OAK	ACTIVE	1521	1521	General Contractor	HO	Comml High	Comml High		12/24/07	Reviewed	AH
BUCA DI BEPPO	1921 CALLE BARCELONA	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	11/26/07			BA
BUDGET RENT A CAR	850 PALOMAR AIRPORT RD	ACTIVE	7514	7514	Passenger Car Rental	CO	Comml High	Comml High	2/27/08			EN
BURTON'S CARPET CARE	6417 TOBRIA TR #201	ACTIVE	7217		Carpet Cleaning	CO	Comml High			03/30/07	Phone	BA
BYRNES CONSTRUCTION	3095 STATE STREET, SUITE G	ACTIVE	1522	1522	Contractor	CO	Comml High	Comml High		12/26/07	Reviewed	AH
C & C STEAMWAY	2735 WOODWIND RD	ACTIVE	7217		Carpet Cleaning	HO	Comml High			01/29/07	Reviewed	AH
C.A. MASONRY	3729 JETTY PT		1731		Construction-Special Trade Contractors	HO	Comml High					
CABO INTERNATIONAL	2455 IMPALA DR	OUT OF BUSINESS	2393	2393	Manufacturer of Textile Bags	CO	Ind Med	Ind Med	4/3/06	01/16/08	Drive By	AH
CAFÉ ELYSA	3076 CARLSBAD BL	ACTIVE	5812	5812	Eating and Drinking Places	CO	Comml High	Comml High	8/28/07			BV
CALDO POMODORO	2907 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/20/07			BV
CALIBER COLLISION CENTERS	6050 AVENIDA ENCINAS	ACTIVE	7532		Top, Body, Upholstery Repair, Paint	CO	Comml High		4/4/06			EN
CALIFORNIA FABWORKS	2101 LAS PALMAS DR STE G	ACTIVE	7532		Top, Body, Upholstery Repair, Paint	CO	Comml High		7/24/06			EN
CALIFORNIA LINEAR DEVICES, INC.	2236 RUTHERFORD RD STE 119	ACTIVE	3621		Motors and Generators	CO	Ind Med		6/12/07			AH
CALIFORNIA SENSOR CORP.	2075 CORTE DEL NOGAL STE P	ACTIVE	3829	3829	Measuring & Controlling Devices, NEC	CO	Ind Med	Ind Med	3/6/08	02/19/04	Reviewed	EN
CALIPER CLUB WORKS, INC.	6361 YARROW DR STE E	ACTIVE	3949		Sporting/Athletic Goods, Not Elsewhere Classified	CO	Ind Med		2/1/07			EN
CALLAWAY GOLF BALL COMPANY	2180 RUTHERFORD RD	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	CO	Ind High	Ind High	12/27/07			AH
CALLAWAY GOLF COMPANY	5860 DRYDEN PL	ACTIVE	7999	7999	Amusement & Recreaton Services	CO	Comml High	Comml High	12/27/07			AH
CALLAWAY GOLF COMPANY	2285 RUTHERFORD RD	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	CO	Ind High	Ind High	12/27/07			AH
CALLAWAY GOLF COMPANY	5858 DRYDEN PL	ACTIVE	8731	8731	Sporting and Athletic Goods, NEC	CO	Ind Low	Ind Low	12/27/07			AH
CALLAWAY GOLF COMPANY	2081 FARADAY AVE	ACTIVE	4225	4225	Sporting and Athletic Goods, NEC	CO	Ind Med	Ind Med	12/27/07			AH
CALLAWAY GOLF COMPANY (HUNTER BUILD)	2261 RUTHERFORD RD	ACTIVE	8371	8371	Sporting and Athletic Goods, NEC	CO	Ind Low	Ind Low	12/27/07			AH
CALLAWAY GOLF COMPANY (PASCAL BUILD)	5960 PASCAL CT	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	CO	Ind High	Ind High	12/27/07			AH
CALPACIFIC POOL AND SPA	4145 HARBOR DR	ACTIVE	7389		Business Services, Not Elsewhere Classified	HO	Comml High			01/29/07	Reviewed	AH
CALTRANS/CARLSBAD MAINTENANCE	6050 PASEO DEL NORTE	ACTIVE	9621		Transportation Programs Administration	CO	Ind Low		2/22/07			EN
CAMBRIAN FLOWERS	5600 AVENIDA ENCINAS STE 22	OUT OF BUSINESS	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	4/26/07	01/23/08	Reviewed	AH

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CAMPUS CAFE	5966 LA PLACE CT STE 150	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/27/07			AH
CANNON PACIFIC SERVICES, LLC	6102 AVENIDA ENCINAS STE H/I	ACTIVE	4212		Local Trucking Without Storage	CO	Ind Low		9/30/04	04/04/06	Drive By	EN
CAP'S MOBILE SMALL ENGINE REPAIR	3580 TRIESTE DR	ACTIVE	7699	7699	Repair Shops and Related Services, NEC	HO	Comml High	Comml High		12/26/07	Reviewed	AH
CARBITE GOLF	5816 DRYDEN PL	ACTIVE	5091		Wholeslae Sprting Goods	CO	Ind Low		9/11/06			AH
CARLS JR	2608 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/27/07			BV
CARLS JR	5808 VAN ALLEN WAY # 110	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/20/07			AH
CARLS JR #117	950 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/11/07			BV
CARLS JR.	925 PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/8/07			EN
CARLSBAD AIRPORT SELF STORAGE	1910 PALOMAR OAKS WAY	ACTIVE	4225		General Warehousing & Storage	CO	Ind Med		6/25/07			EN
CARLSBAD AQUAFARM INC.	4600 CARLSBAD BLVD	ACTIVE	0182		Food Crops Grown Undercover	CO	Comml High		4/19/06			AH
CARLSBAD AUTO PARTS	3197 TYLER ST	ACTIVE	5531		Auto & Home Supply Stores	CO	Comml High		4/26/07			AH
CARLSBAD AUTO SERVICE.	3181 TYLER ST	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		4/26/07			AH
CARLSBAD AUTO TECHNOLOGY	2730 STATE ST	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		1/5/06			BV
CARLSBAD BY THE SEA	2855 CARLSBAD BLVD	ACTIVE	6513	6513	Operators of Apartment Bldgs	CO	Comml High	Comml High	1/14/08			BV
CARLSBAD CARPET CLEANING COMPANY	936 DAISY AVE	ACTIVE	7217		Carpet & Upholstery Cleaning	HO	Comml High			03/30/07	Reviewed	BA
CARLSBAD CHEVRON	1044 CARLSBAD VILLAGE DR	OUT OF BUSINESS	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	1/6/06	02/20/08	Drive By	BV
CARLSBAD COLLISION CARE	2598 STATE ST	ACTIVE	7532		Auto body Repair and Paint Shop	CO	Comml High		5/15/06			BV
CARLSBAD CUSTOM CABINETS	2719 LOKER AV WEST		2434		Cabinet Makers	CO	Ind Med					AH
CARLSBAD DANISH BAKERY	2805 ROOSEVELT ST	ACTIVE	5461	5461	Retail Bakeries	CO	Comml High	Comml High	2/21/08			BV
CARLSBAD EXCLUSIVE AUTOMOTIVE	1060 AUTO CENTER CT # DEF	ACTIVE	7538	7538	General Automotive Repair Shops	CO	Comml High	Comml High	1/11/08			AH
CARLSBAD FRENCH PASTRY CAFE	1005 CARLSBAD VILLAGE DR # B/C	ACTIVE	5461	5461	Retail Bakeries	CO	Comml High	Comml High	2/21/08			BV
CARLSBAD GAS & PROPANE	1089 CARLSBAD VILLAGE DR	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/20/08			BV
CARLSBAD GOLF CENTER	2711 HAYMAR DR	ACTIVE	7999		Amusement & Recreation Svcs, NEC	CO	Comml High		11/2/06			BV
CARLSBAD HYUNDAI	5285 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		3/14/05			AH
CARLSBAD INTERNATIONAL EXPORT	1954 KELLOGG AV	ACTIVE	3829	3829	Measuring & Controlling Devices, NEC	CO	Ind Med	Ind Med	10/16/07			EN
CARLSBAD JAGUAR	2725 STATE ST	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		5/3/06			BV
CARLSBAD LANDSCAPE CONSTRUCTION INC	2777 WILSON STREET	ACTIVE	1799		Landscape Construction	HO	Comml High			01/29/07	Reviewed	BA
CARLSBAD MACHINING & DESIGN	5933 SEA LION PL STE 109	OUT OF BUSINESS	3499	3499	Fabricated Metal Products	CO	Ind Med	Ind Med	4/5/06	01/16/08	Drive By	AH
CARLSBAD MACHINING & DESIGN	5933 SEA LION PL STE 109	OUT OF BUSINESS	3499	3499	Fabricated Metal Products	CO	Ind Med	Ind Med	4/5/06	01/16/08	Drive By	AH

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CARLSBAD MAGNETICS	6086 CORTE DEL CEDRO	ACTIVE	3699		Electrical Machinery, Equip & Sups, NEC	CO	Ind Med		6/29/07			EN
CARLSBAD MUFFLER & BRAKES	1060 AUTO CENTER CT STE L	ACTIVE	7533	7533	Automotive Exhaust System Repair Shops	CO	Comml High	Comml High	1/11/08			AH
CARLSBAD PLAZA	2508 EL CAMINO REAL	ACTIVE	6512	6512	Operators of Nonresidential Buildings	CO	Comml High	Comml High	1/17/08			BV
CARLSBAD PREMIUM OUTLETS	5620 PASEO DEL NORTE, STE 100	ACTIVE	6512	6512	Operators of Nonresidential Buildings	CO	Comml High	Comml High	8/8/07			AH
CARLSBAD RANCH MARKET	6118 PASEO DEL NORTE # D-F	ACTIVE	5431		Fruit and Vegetable Markets	CO	Comml High		3/20/07			EN
CARLSBAD SELF STORAGE LLC	2235 PALOMAR AIRPORT RD	ACTIVE	4225	4225	General Warehousing & Storage	CO	Ind Med	Ind Med	1/30/08			EN
CARLSBAD SELF-SVC CAR WASH INC	2608 STATE ST	ACTIVE	7542		Carwashes	CO	Comml High		8/23/06			BV
CARLSBAD TECHNOLOGY INC.	5923 BALFOUR CT	ACTIVE	2834		Pharmaceutical Preparations	CO	Ind Med		8/8/06	06/23/05	Site Visit	AH
CARLSBAD TECHNOLOGY INC.	5923 FARNSWORTH CT	ACTIVE	2834		Pharmaceutical Preparations	CO	Ind Med		9/13/06			AH
CARLSBAD TOWING	3181 ROOSEVELT ST	ACTIVE	7549	7549	Towing Service	CO	Comml High	Comml High	1/28/08	06/23/06	Reviewed	BV
CARLSBAD VILLAGE AUTO BODY & PAINT	3191 TYLER ST	ACTIVE	7532		Top, Body, Upholstery Repair, Paint	CO	Comml High		1/6/06			AH
CARLSBAD VILLAGE INDEPENDENT MERCEDES AND VOLVO SERVICE INC	3045 ROOSEVELT ST	ACTIVE	7538			COR	Comml High		1/6/06			BV
CARLSBAD VILLAGE SELF STORAGE	3235 TYLER ST	ACTIVE	4225		General Warehousing And Storage	COR	Ind Med		6/27/07			BV
CARLSBAD VILLAGE SHELL	1145 CARLSBAD VILLAGE DR	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		6/27/07			BV
CARLSBAD VOLVO	6830 AVENIDA ENCINAS	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		5/15/06			EN
CARPET CLEANER1.COM	6311 MONTECITO DR		7217		Carpet And Upholstery Cleaning	HO	Comml High					
CARTER'S HAY AND GRAIN	1985 OLIVENHAIN RD	ACTIVE	5191	5191	Farm Supplies - Feed and Grain	CO	Comml High	Comml High	12/13/07			BA
CARVED STONE INTERNATIONAL	2245 CAMINO VIDA ROBLE	ACTIVE	5032		Brick, Stone & Related Constr Mats	CO	Ind Low		3/28/06			EN
CASE BROS FURNITURE MAKERS	6353 EL CAMINO REAL STE G	OUT OF BUSINESS	2511	2511	Wood Household Furniture	CO	Ind Med	Ind Med	4/5/06	08/21/07	Drive By	EN
CASE CONSTRUCTION INC	2907 CORTE JARDIN	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			03/30/07	Phone	BA
CAVALLO MOTOR SPORTS	6010 AVENIDA ENCINAS		7538		General Automotive Repair Shops	CO	Comml High					
CDS PRINTING	6971 EL CAMINO REAL #203	ACTIVE	2759	2759	Commercial Printing, NEC	CO	Ind Med	Ind Med	8/2/07			BA
CESSY'S TACO SHOP	3016 CARLSBAD BLVD	ACTIVE	5812		Eating & Drinking Places	CO	Comml High		5/7/07			AH
CHAMPION TERMITE	5245 AVENIDA ENCINAS STE E	ACTIVE	7342		Disinfecting And Pest Control Services	CO	Comml High			04/27/06	Phone	AH
CHARLES T FARM	3008 SUNNY CREEK RD	ACTIVE	0161	161	Flowers, Nursery Stock, And Florists' Supplies	CO	Comml High	Comml High	6/10/04	01/03/08	Reviewed	AH
CHARO CHICKEN	7680 EL CAMINO REAL # 103	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	9/19/07			BA
CHEVRON #46	850 PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/27/08			EN
CHEVRON USA INC #93320	970 TAMARACK AVE	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/19/08			AH

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CHINA GATE	2525 EL CAMINO RL STE 142	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/4/08			BV
CHIN'S SZECHWAN RESTAURANT	2958 MADISON ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/8/07			BV
CHOICE FLOWER S.D., INC.	5600 AVENIDA ENCINAS STE 27	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
CHRIS BARCA CONSTRUCTION	2441 LEVANTE ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/25/07	Phone	BA
CHRIS CAVENY GENERAL CONTRACTOR	3946 LINMAR LN	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/11/07	Reviewed	BV
CHUCKS PLUMBING	3800 WESTHAVEN DR	ACTIVE	1711		Plumbing Contractor	HO	Comml High			03/30/07	Reviewed	AH
CHUCK'S TIRE CENTER	6060 AVENIDA ENCINAS STE A	ACTIVE	5531		Auto & Home Supply Stores	CO	Comml High		4/26/06			EN
CILANTRO LIVE	300 CARLSBAD VILLAGE DR STE 106	ACTIVE	5812	5812	Eating Places	COR	Comml High	Comml High	8/20/07			BV
CIRCLE K DBA CARLSBAD FUELS CORP	7602 EL CAMINO REAL	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	1/16/08			BA
CIVIC HELICOPTER INC	2206 PALOMAR AIRPORT RD STE H	ACTIVE	4522	4522	Helicopter Maintenance & Operations	CO	Ind High	Ind High	11/19/07			EN
CLAIM JUMPER RESTAURANT, 9LTD	5958 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/20/07			AH
CLEAN IMAGE POWER WASH	4129 ADAMS ST	ACTIVE	7349	7349	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		12/26/07	Reviewed	AH
CLEANING COMPANY, THE	2605 JACARANDA AVE		7217		Carpet And Upholstery Cleaning	HO	Comml High					
CLYD'S SEPTIC TANK SERVICE	7248 PONTO RD	ACTIVE	7699	7699	Septic Tank Cleaning and Pumping	CO	Comml High	Comml High	1/8/08			BA
COAST HOME HOME & GARDEN	1365 TAMARACK AVE	EXCLUDED	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		12/26/2007	Reviewed	AH
COAST WASTE MANAGEMENT	5960 EL CAMINO REAL	ACTIVE	4225	4225	General Warehousing & Storage	CO	Ind High	Ind High	11/28/07			AH
COASTAL PLUMBING	4882 HILLSIDE DR	MOVED	1711	1711	General Plumbing Constractor	HO	Comml High	Comml High	10/11/07	01/29/07	Reviewed	AH
COLD STONE CREAMERY	2967 CARLSBAD BLVD	ACTIVE	5451		Retail Ice Cream Sales	CO	Comml High		6/27/07	07/27/04	Reviewed	AH
COLONIAL PAINTING	2520 NAVARRA DR UNIT F	ACTIVE	1721		Construction-Special Trade Contractors	HO	Comml High			03/30/07	Phone	BA
COLORS ENTERPRISES, INC.	6106 AVENIDA ENCINAS STE F	OUT OF BUSINESS	2099	2099	Food Preparations, NEC	CO	Ind Med	Ind Med	5/1/06	12/31/07	Reviewed	EN
COMPONENT CONCEPTS	6179 EL CAMINO REAL STE 200	ACTIVE	5065		Distribution and Assembling Battery Packs	CO	Ind Low			07/31/06	Phone	BA
CONCRETE GROUP, THE	2205 FARADAY AVE STE F		1731		Construction-Special Trade Contractors	CO	Comml High					
CONCRETE JUNGLE CUTTING & CORING	4509 ADAMS ST # B	ACTIVE	1771	1771	Concrete Cutting & Coring	HO	Comml High	Comml High		12/26/07	Reviewed	AH
CONCRETE RESTORATIONS	6134 PASEO ENSILLAR		1731		Construction-Special Trade Contractors	HO	Comml High					
CONSOLIDATED ELEC. DIST. INC	6106 AVENIDA ENCINAS STE A	ACTIVE	5063		Electrical Apparatus & Equpment Wiring Supplies	CO	Ind Low		5/1/06			EN
CONWAY & ASSOC., INC.	2525 PIO PICO DR #102	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Comml High	Comml High	1/28/08	06/11/07	Reviewed	BV

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CORINAS WHOLESALE	5600 AVENIDA ENCINAS STE 35	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
CORNERSTONE MANAGING PARTNERS	2438 OVIEDO PL	MOVED	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		07/11/07	Reviewed	BA
CORSO CONSTRUCTION	4924 PARK DR	OUT OF BUSINESS	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/26/07	Phone	AH
COSTCO WHOLESALE	951 PALOMAR AIRPORT RD	ACTIVE	5399	5399	Miscellaneous General Merchandise Stores	CO	Comml High	Comml High	2/6/08			EN
COTTRELL MACHINE	6102 AVENIDA ENCINAS # B-C	ACTIVE	3599		Indl and Comml Machinery and Equip, NEC	CO	Ind Med		5/1/06			EN
COYOTE BAR & GRILL	300 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/20/07			BV
CPS PRINTING	2304 FARADAY AVE	ACTIVE	2759		Commercial Printing, NEC	CO	Ind Med		6/20/07			AH
CRAZY BURRO DINING CANTINA	6996 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/6/07			BA
CREATIVE MACHINING LLC	6102 AVENIDA ENCINAS STE B &C		3599		Indus./Commercial Equipment, Not Elsewhere Classi	CO	Ind Med					
CREATIVE STONE AND TILE	5235 AVENIDA ENCINAS	ACTIVE	1743	1743	Tile and Stone Work	CO	Comml High	Comml High	1/17/08	06/15/05	Reviewed	AH
CRESTONE GROUP BAKING COMPANY	5927 FARNSWORTH CT	ACTIVE	2051		Bread & Other Baker Prods	CO	Ind Med		4/26/06			AH
CROSSROAD PETROLEUM (ARCO AM/PM)	810 TAMARACK AVE	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/19/08			AH
CROUTONS	5814 VAN ALLEN WAY # 140	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	11/20/07			AH
CRYSTAL RAIN POOL SERVICES	2894 WOODRIDGE CIR	ACTIVE	7389	7389	Swimming Pool Maintenance	HO	Comml High	Comml High		12/27/07	Reviewed	BV
CURT MERRIMAN CONSTRUCTION	1786 BLACKBIRD CIR	MOVED	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/07	Reviewed	BA
CURTIS CONSTRUCTION	3420 DONNA DR	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			03/30/07	Reviewed	BV
CUSTOM HOME PAINTING	2138 TWAIN AVE	ACTIVE	1721	1721	Special Trade Contractors	HO	Comml High	Comml High		12/27/07	Reviewed	BV
CUTTING EDGE CNC, INC.	6064 CORTE DEL CEDRO	ACTIVE	3599		Machine Shop	CO	Ind Med		6/29/07			EN
CVS PHARMACY #9479	2510 EL CAMINO REAL	ACTIVE	5912	5912	Drug Stores and Proprietary Stores	CO	Comml High	Comml High	2/5/08			BV
D & H ENTERPRISES	7213 PLAZA DE LA COSTA	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/2007	Phone	BA
D M BUILDING	1825 MCCAULEY LN	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/2007	Phone	AH
D.C.C.	1492 OAK AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/07	Reviewed	AH
DAG BUILDERS INC	1535 SUNRISE CIR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/07	Phone	BV
DAILY NEWS CAFE, THE	3001 CARLSBAD BLVD STE A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/28/07			AH
DAPHNE'S GREEK CAFE	6981 EL CAMINO REAL STE 101	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	9/6/07			BA

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DARIO'S MEDITERANEAN CUISINE	2508 EL CAMINO REAL STE E	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/31/07			BV
DARTON INTERNATIONAL, INC.	2380 CAMINO VIDA ROBLE STE J/K	ACTIVE	3599		Manufacturing Industrial Machinery	CO	Ind Med		5/10/06			EN
DAVID R. FUNKHOUSER GENERAL CONTRACTOR	1281 MAGNOLIA AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/07	Reviewed	AH
DAVID TAYLOR DEVELOPMENT INC.	4135 SKYLINE RD	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/07	Reviewed	AH
DEAN PORTER CONSTRUCTION	3750 MONROE ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/07	Phone	AH
DEER SPRINGS GARDENS	5600 AVENIDA ENCINAS STE 34	EXCLUDED	5193	5193	Wholesale Flowers	CO	Comml High	Comml High	1/23/08			AH
DEGREGORIO SERVICE & REPAIR	2706 EL RASTRO LN	ACTIVE	7349	7349	Building Cleaning & Maint Svc, NEC	HO	Comml High	Comml High		12/27/07	Reviewed	BA
DELI WISHES	5365 AVENIDA ENCINAS STE B	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/10/07			AH
DENNIS MATHIS, CONSTRUCTION, INC.	3128 LE VANTE ST	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			01/30/07	Reviewed	BA
DENNY'S # 7517	1048 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/8/07			BV
DEPT OF ANIMAL CONTROL	2481 PALOMAR AIRPORT RD	ACTIVE	0752	0752	Animal Shelter	CO	Ind Low	Ind Low	1/30/08			EN
DIAMOND FORTY ENTERPRISE	2753 GALICIA WY	OUT OF BUSINESS	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/07	Phone	BA
DINI'S BY THE SEA	3290 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/5/07			AH
DISCOUNT CARPET & UPHOLSTERY	2408 MAJANO PL	ACTIVE	7217		Carpet & Upholstery	HO	Comml High			02/05/07	Reviewed	BA
DIVINE ORCHIDS AND CERAMIC POTS	5600 AVENIDA ENCINAS STE 3	EXCLUDED	5193	5193	Wholesale Floral	CO	Comml High	Comml High	1/23/08			AH
DOCTOR OF THE HOUSE	2371 MARCA PL	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/07	Reviewed	BA
DON'S COUNTRY KITCHEN	2885 ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/28/07			BV
DONUT FAIR, THE	2540 EL CAMINO REAL STE C	ACTIVE	5461	5461	Retail Bakeries	CO	Comml High	Comml High	1/17/08			BV
DOT HILL SYSTEMS CORPORATION	6305 EL CAMINO REAL	ACTIVE	3577		Computer Peripheral Equip, NEC	CO	Ind Med		6/20/07			EN
DR.'S OWN, INC	2270 COSMOS CT STE 100	ACTIVE	3842	3842	Orthopedic/Prosthetic/Surgical Appliances And Supp	CO	Ind Med	Ind Med	2/25/08			EN
DRAGMASTER INC.	2725 STATE ST	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		3/21/06			BV
DRAIN RUNNER	830 CITRUS PL	ACTIVE	1711	1711	Construction-Special Trade Contractors	HO	Comml High	Comml High		12/27/07	Phone	BV
DREAM DINNERS	1905 CALLE BARCELONA STE 206	EXCLUDED	2099	5812	Caterer	CO	Ind Med	Comml Low		12/27/07	Reviewed	BA
DREAM POOLS AND SPAS	3607 BARRANCA CT	ACTIVE	1700	1799	Construction-Special Trade Contractors	HO	Comml High	Comml High		12/27/07	Phone	BA
DRYCLEAN AMERICA.NET	2708 LOKER AVE W STE 105	ACTIVE	7216		Drycleaning Plants, Except Rug Cleaning	CO	Comml High		1/31/07			AH

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DUNN-EDWARDS PAINTS	2840 LOKER AVE E		5231		Paint, Glass, And Wallpaper Stores	CO	Comml High					
DWAMEL INC.	1060 AUTO CENTER CT	OUT OF BUSINESS	7538	7538	General Automotive Repair Shops	CO	Comml High	Comml High		01/11/08	Drive By	AH
E/G ELECTRO-GRAPH INC.	2355 CAMINO VIDA ROBLE	ACTIVE	3674		Semiconductors and Related Devices	CO	Ind Med		5/17/06			EN
E/G ELECTRO-GRAPH INC.	2365 CAMINO VIDA ROBLE	ACTIVE	3674		Semiconductors 7 Related Devices	CO	Ind Med		5/17/06			EN
ECR GRILLE	7740 EL CAMINO REAL STE F	ACTIVE	5812	5812	Eating and Drinking Places	CO	Comml High	Comml High	12/24/07			BA
ECUA ROSE	5600 AVENIDA ENCINAS STE 12	OUT OF BUSINESS	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
EDWARD SHEDLEY MASONRY	2445 SIERRA MORENA AVE	ACTIVE	1741	1741	Special Trade Contractors	HO	Comml High	Comml High		12/27/07	Reviewed	AH
EL CAMINO RENTAL	5701 EL CAMINO REAL	ACTIVE	7359	7359	Equipment Rental & Leasing, NEC	CO	Comml High	Comml High	2/15/08			AH
EL CARIBE	6965 EL CAMINO REAL STE 205	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/6/07			BA
EL POLLO LOCO #3423	7120 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/10/07			BA
EL PUERTO MEXICAN & SEAFOOD	1065 CARLSBAD VILLAGE DR STE D	ACTIVE	5812	5812	Eating Places	COR	Comml High	Comml High	1/3/08			BV
EL RINCON GARDEN CARE	3480 MONROE ST APT B	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			06/11/07	Phone	BV
EL TORITO MARKET	3163 ROOSEVELT ST	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	1/28/08			BV
ELECTRIC REGULATOR	6189 EL CAMINO REAL	ACTIVE	3625	3625	Electrical Indl Apparatus, NEC	CO	Ind Med	Ind Med	8/21/07			EN
ELECTRO SURFACE TECHNOLOGIES INC.	2280 FARADAY AV STE 100	ACTIVE	3679	3679	Electronic components, NEC	CO	Ind Med	Ind Med	8/21/07			AH
ELITE GLASS & WINDOWS, INC.	1207 CARLSBAD VILLAGE DR STE F		1793		Glass And Glazing Work	CO	Comml High					
ELTROL CORPORATION	5661 PALMER WAY STE E	ACTIVE	3625		Relays & Industrial Controls	CO	Ind Med		6/20/07			AH
ELYS PLACE (CALLAWAY GOLF)	5928 PASCAL CT	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/27/07			AH
EMBASSY INTERNATIONAL LIMOUSINE INC	6102 AVENIDA ENCINAS STE G	ACTIVE	4119		Local Passenger Transportation, NEC	CO	Ind Low		5/1/06			EN
EMPIRE PIPELINE	1945 CAMINO VIDA ROBLE STE E	ACTIVE	1700	1711	Construction-Special Trade Contractors	CO	Comml High	Comml High		12/27/2007	Reviewed	AH
ENCINA WATER FACILITY	6200 AVENIDA ENCINAS	ACTIVE	4952	4952	Sewerage Systems	CO	Ind High	Ind High	12/26/07			EN
ENCINAS BUSINESS PARK/MCWIN CORP	6102 AVENIDA ENCINAS STE B	ACTIVE	6512		Operators of Nonresidential Buildings	CO	Comml High		5/1/06			EN
ENDLESS SUMMERSCAPES	2240 AVENIDA MAGNIFICA APT L		781		Landscape Counseling And Planning	HO	Comml High					
ENDRES CONSTRUCTION	2895 HIGHLAND DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		12/27/07	Reviewed	AH
ENTERPRISE RENT A CAR L.A. #3246	1060 AUTO CENTER CT STE M	ACTIVE	7514	7514	Passenger Car Rental	CO	Comml High	Comml High	1/11/08			AH
EOTRON LLC	2215 FARADAY AVE STE D		3674		Semiconductors And Related Devices	CO	Ind Med					
ERIC PAGE PLUMBING	2833 FOREST VIEW WAY	ACTIVE	1711	1711	Special Trade Contractors	HO	Comml High	Comml High		12/27/07	Reviewed	BV
EUFORA	2885 LOKER AVE E	ACTIVE	5122	5122	Drugs, Drug Proprietaries, Sundries	CO	Ind Low	Ind Low	10/17/07			EN

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EWING IRRIGATION PRODUCTS INC.	6104 AVENIDA ENCINAS STE E	ACTIVE	5083		Farm & Garden Machinery & Equipment	CO	Ind Low		5/1/06			EN
EXCELLENCE IN PAINTING	2781 BERKELEY AVE	ACTIVE	1721	1721	Construction Specialist - Painting	HO	Comml High	Comml High		01/02/08	Reviewed	AH
EXCLUSIVE DESIGN HOME IMPROVEMENT	2911 STATE ST STE C	EXCLUDED	1521	1751	Construction-Special Trade Contractors	COR	Comml High	Comml Low		01/02/08	Phone	BV
EXOTIC FOLIAGE	5600 AVENIDA ENCINAS STE 5	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
EXPRESS AIR AVIATION	2206 PALOMAR AIRPORT RD, ST B1	OUT OF BUSINESS	4581	4581	Airports, Flying Fields and Terminal	CO	Ind High	Ind High	3/8/07	11/19/07	Site Visit	EN
EXPRESS AUTO CENTER	2676 STATE ST # A	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		3/28/06			BV
FACTORY AUTHORIZED AUTOMOTIVE SERVICES	7030 VIA CALAFIA	OUT OF BUSINESS	7538	7538	General Automotive Repair Shops	HO	Comml High	Comml High		01/02/08	Phone	BA
FAMILY POOL SERVICE	1884 PALISADES DR		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
FEDERAL EXPRESS CORPORATION	2495 FARADAY AVE	ACTIVE	4215	4215	Air Courier Services	CO	Ind High	Ind High	11/14/07	02/12/04	Site Visit	AH
FELIX A. LANDSCAPING	7782 PALENQUE ST	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			03/30/07	Reviewed	AH
FIDELS NORTE INC	3003 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/5/07			AH
FINISH TECH CORPORATION	5993 AVENIDA ENCINAS STE 101		1521		Building Construction-General Building Contractors	CO	Comml High					
FINNEGAN'S PUB & GRILL	1814 MARRON RD	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/31/07			BV
FIRESTONE TIRES & SERVICE CENTER	2545 EL CAMINO REAL	ACTIVE	5531		Auto and Home Supply Stores	CO	Comml High		10/21/05			BV
FISH HOUSE VERA CRUZ	417 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/5/07			AH
FLORAL EXPRESS	5825 AVENIDA ENCINAS STE 107	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	12/8/05	05/04/04	Reviewed	AH
FLOREXPO, LLC	1960 KELLOGG AVE	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	2/27/08			EN
FLORICEL'S FLOWERS	5600 AVENIDA ENCINAS STE 23	EXCLUDED	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Comml High	Comml High	1/23/08			AH
FLOWER FARM	5600 AVENIDA ENCINAS STE 4	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
FLOWER FIELD, THE	5702 PASEO DEL NORTE	ACTIVE	0181	181	Ornamental Floriculture	CO	Comml High	Comml High	3/13/08			AH
FLOWERS BY HI-LO	6211 YARROW DR STE F	ACTIVE	5193	5193	Wholesale Flower Distribution	CO	Ind Low	Comml High	2/28/08	05/05/04	Reviewed	EN
FOCUSED AUTO DETAILING	3660 CATALINA DRIVE	ACTIVE	7542	7542	Moile Detailer	HO	Comml High	Comml High	2/20/08	07/28/06	Reviewed	BV
FORESIGHT DEVELOPMENT, INC.	2979 STATE ST STE B	ACTIVE	1521		Building Construction-General Building Contractors	COR	Comml High			03/30/07	Reviewed	BV
FOUR SEASONS AVIARA GOLF CLUB	7447 BATIQUITOS DR	ACTIVE	7997	7997	Golf Club	CO	Comml High	Comml High	2/5/08			BA
FOUR SEASONS GOLF MAINT FACILITY	7227 AVIARA DR	ACTIVE	7997	7997	Golf Course and Resort	CO	Comml High	Comml High	2/5/08			BA
FOUR SEASONS RESORT AVIARA	7100 FOUR SEASONS PT	ACTIVE	7011	7011	Hotels and Motels	CO	Comml High	Comml High	2/5/08			BA
FOX POINT FARMS WHOLESALE	5600 AVENIDA ENCINAS STE 11	ACTIVE	5193	5193	Wholesale Floral	CO	Comml High	Comml High	1/23/08			AH

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FRAZEE PAINT	7040 AVENIDA ENCINAS # 100		5231		Paint, Glass, And Wallpaper Stores	CO	Ind Low					
FREIDIN LANDSCAPING AND DESIGN	3160 LINCOLN ST APT 16	OUT OF BUSINESS	1700	1700	Construction Special	HO	Comml High	Comml High		01/02/08	Reviewed	BV
FRESCO TRATTORIA	3263 CAMINO DE LOS COCHES # 105	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/24/07			BA
FRESCO TRATTORIA & BAR	264 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/8/07			BV
FROEDGE CONSTRUCTION	2240 AVENIDA MAGNIFICA APT H	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			03/30/07	Phone	AH
FRONTERA CONSTRUCTION INC	5993 AVENIDA ENCINAS STE 101		1521		Building Construction-General Building Contractors	CO	Comml High					
FURNISHINGS 4 LESS	1960 KELLOGG AV STE D	ACTIVE	5712	5712	Furniture Stores	CO	Ind Low	Comml High	2/27/08			AH
G&R WHOLESALE FLOWERS	5600 AVENIDA ENCINAS STE 38	EXCLUDED	5193	5193	Wholesale Floral	CO	Comml High	Comml High	1/23/08			AH
G.T. MACHINE SHOP	2790 LOKER AVE W STE 100	ACTIVE	3599	3599	Ind & Comml Machinery & Equip, NEC	CO	Ind Med	Ind Med	1/16/08			AH
GARCIAS MEXICAN RESTAURANT	2968 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/11/07			BV
GARDEN GAL, THE	6617 VIREO CT	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			06/11/07	Reviewed	BA
GARDEN STATE BAGELS	5620 PASEO DEL NORTE STE 125	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/8/07			AH
GARRETT CONSTRUCTION COMPANY	3310 AVENIDA OBERTURA	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		01/02/08	Phone	BA
GARY TEAM PAINTING INC.	3890 HIGHLAND DR	ACTIVE	1721	1721	Special Trade Contractors	HO	Comml High	Comml High	7/26/05	01/02/08	Reviewed	AH
GASCO GASOLINE	920 CARLSBAD VILLAGE DR	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/20/08			BV
GATES CONSTRUCTION	2735 SPOKANE WAY	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		01/02/08	Reviewed	AH
GEMATRIA PRODUCTS, INC.	2075 CORTE DEL NOGAL STE H	ACTIVE	2834	2834	Vitamin & Nutrient Manufacturer	CO	Ind Med	Ind Med	3/6/08			EN
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	1949 KELLOGG AVE	ACTIVE	3699	3699	Electrical Machinery, Equip & Sups, NEC	CO	Ind Med	Ind Med	3/10/08	06/11/07	Drive By	AH
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	1964 KELLOGG AVE	ACTIVE	2759	2759	Commercial Printing	CO	Ind Med	Ind Med	3/10/08	06/11/07	Drive By	AH
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	5355 ARMADA DR	ACTIVE	3915		Lapidary Work, Mats, Jewelers, Finding	CO	Ind Med		2/23/06			AH
GEOMILL	2792 LOKER AVE W STE 103		3599		Indus./Commercial Equipment, Not Elsewhere Classi	CO	Ind Med					
GEORGIOS GREEK BURRITO WRAP	7720 EL CAMINO REAL STE F	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/10/07			BA
GET N' GO DONUTS	6986 EL CAMINO REAL STE E	ACTIVE	5461	5461	Retail Bakeries	CO	Comml High	Comml High	2/15/08			BA
GIGATREND INCORPORATED	5115 AVENIDA ENCINAS STE G	ACTIVE	3577		Computer Peripheral Equipment, NEC	CO	Ind Med		7/24/06			AH
GLOBAL MICROWAVE SYSTEMS, INC	1916 PALOMAR OAKS WAY STE 100		3578		Calculating And Accounting Machines, Except Compu	CO	Ind Med					

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GOMEZ PLBG, GERARDO	4765 GATESHEAD RD	ACTIVE	1711		Plumbing Contractor	HO	Comml High			03/30/07	Reviewed	AH
GORILLA EQUIPMENT RENTALS	505 OAK AVE	ACTIVE	7359		Equipment Rental & Leasing, NEC	COR	Comml High		3/6/06			AH
GOURMET SUSHI	5814 VAN ALLEN WAY # 135	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	11/20/07			AH
GRAFIKOM	5909 SEA OTTER PL	ACTIVE	2759	2759	Commercial Printing	CO	Ind Med	Ind Med	11/1/07			AH
GRAHAM ESPIE CONSTRUCTION	4717 GATESHEAD RD		1521		Building Construction-General Building Contractors	HO	Comml High					
GRAND AVENUE BAR & GRILL	752 GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/11/07			BV
GRAND DELI, THE	595 GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/11/07			BV
GRAND PACIFIC PALISADES RESORT	5805 ARMADA DR	ACTIVE	7011		Hotels and Motels	CO	Comml High		8/21/06			AH
GRANT GENERAL CONTRACTORS	5051 AVENIDA ENCINAS	ACTIVE	1521	1521	General Contractors--Single-Family Housing	CO	Ind Low	Comml High	8/23/05	01/03/08	Reviewed	AH
GRAPHIC CONVERTING, INC.	5909 SEA OTTER PL	ACTIVE	2675	2675	Die-Cut Paper & Paperboard & Cardboard	CO	Ind High	Ind High	9/25/07			AH
GREAT KHANS MONGOLIAN FESTIVAL	2525 EL CAMINO REAL STE 236	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/4/08			BV
GREEK CORNER CAFE	1854 MARRON RD # 100	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/19/07			BV
GREEK VILLAGE L.L.C.	6030 PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/5/07			EN
GREEN FLOWER COMPANY	5600 AVENIDA ENCINAS STE 45	EXCLUDED	5193	5193	Wholesale Floral	CO	Comml High	Comml High	1/23/08			AH
GREEN LAND COMPANY	3562 CALLE PALMITO	ACTIVE	0782	0782	Landscape Construction	HO	Comml High	Comml High		01/02/08	Reviewed	EN
GREGG'S MOBILE REPAIR	5233 SHELLEY PL	ACTIVE	7699	7699	Repair Shops and Related Services, NEC	HO	Comml High	Comml High		01/02/08	Reviewed	AH
GREGORIOS	300 CARLSBAD VILLAGE DR STE 208	ACTIVE	5812	5812	Eating Places	COR	Comml High	Comml High	8/20/07			AH
GRUBER CONSTRUCTION	2412 LA TINADA CT	ACTIVE	1521		General Contractor	HO	Comml High			03/30/07	Phone	BA
GS DREAMSCAPING	1370 PINE AVE	ACTIVE	0782	0782	Landscape Contractor	HO	Comml High	Comml High		01/02/08	Reviewed	AH
GTR ENTERPRISES, INC.	6352 CORTE DEL ABETO, STE E	ACTIVE	3469		Fabricated Metal Parts	CO	Ind Med		3/28/07			EN
GUYON WEST	2101 LAS PALMAS DR STE C	ACTIVE	5084		Wholesale Baking Equipment	CO	Ind Low		7/24/06			EN
HALL PEST MANAGEMENT	3572 MADISON ST		7342		Disinfecting And Pest Control Services	HO	Comml High					
HANGAR ONE, INC	2100 PALOMAR AIRPORT RD STE 5	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	11/19/07			EN
HANSON AGGREGATES	3750 HAYMAR DR	ACTIVE	2951	2951	Asphalt Paving Mixtures	CO	Ind High	Ind High	9/18/07			BV
HAPPY DAISIES FLORIST	5600 AVENIDA ENCINAS STE 13	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
HARBOR FISH CAFE	3179 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/5/07			AH
HART CONCRETE CONSTRUCTION	4016 GARFIELD ST	ACTIVE	1771		Concrete Work	HO	Comml High			06/11/07	Reviewed	AH
HARVEY INC.	7200 PONTO DR # B	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Comml High	Comml High	8/8/06	01/02/07	Reviewed	BA

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HAWTHORNE RENT-IT SERVICE	2065 CAMINO VIDA ROBLE	ACTIVE	4212	4212	Local Trucking Without Storage	CO	Ind High	Ind High	8/27/07			EN
HAYS CONSTRUCTION	1675 BASSWOOD AVE	MOVED	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		01/02/08	Phone	AH
HEAVENLY VIEWS WINDOW CLEANING	3221 CARINGA WAY # 37	ACTIVE	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		01/02/08	Phone	BA
HEINZE CONSTRUCTION COMPANY	2501 JACARANDA AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		01/02/08	Reviewed	BA
HENDRIX PLUMBING	470 CHINQUAPIN AVE	ACTIVE	1711		Plumbing Contractor	HO	Comml High			06/11/07	Reviewed	AH
HENNESSEY'S TAVERN	2777 ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/8/07			BV
HENRY - FURNITURE MAKER, PAUL	2633 STATE ST REAR	ACTIVE	7641		Reupholstery and Furniture Repair	CO	Ind Low			11/01/06	Reviewed	BV
HENSLEY'S FLYING ELEPHANT PUB AND GRILL	850 TAMARACK AVE		5812		Eating Places	CO	Comml High					
HERTZ CORPORATION, THE	5555 PASEO DEL NORTE	ACTIVE	7514		Passenger Car Rental	CO	Comml High		5/25/06			AH
HETHERINGTON ROOFING CO	3265 VALLEY ST		1741		Construction-Special Trade Contractors	HO	Comml High					
HIGH PERFORMANCE DETAIL	6451 EL CAMINO REAL # A	OUT OF BUSINESS	7542	7542	Carwashes	CO	Comml High	Comml High		01/02/08	Phone	BA
HILLS LANDSCAPING	4264 SKYLINE RD	ACTIVE	0782	0782	Lawn and Garden Services	HO	Comml High	Comml High		01/02/08	Reviewed	AH
HINTZ CONSTRUCTION	2535 NAVARRA DR UNIT 8B	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/11/07	Reviewed	BA
HI-Q PAINTING COMPANY	2916 LUCIERNAGA ST APT B	ACTIVE	1799		Special Trade Contractors	HO	Comml High			01/30/07	Reviewed	BA
HOEHN ACURA	5556 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		5/3/06			AH
HOEHN AUDI	5215 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		5/3/06			AH
HOEHN HONDA	5454 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		3/23/06			AH
HOEHN INFINITI	5245 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		3/23/06			AH
HOEHN MAZDA	5566 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		3/23/06			AH
HOEHN MERCEDES	5475 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		11/8/06			AH
HOEHN PORSCHE	6800 AVENIDA ENCINAS	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		4/26/06			BA
HOFFMANS CLASSIC CONSTRUCTION	4310 HORIZON DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		01/02/2008	Reviewed	BV
HOLIDAY INN CARLSBAD	850 PALOMAR AIRPORT RD	ACTIVE	7011	7011	Hotels and Motels	CO	Comml High	Comml High	2/27/08			AH
HOLLAND FLOWER MARKET	5600 AVENIDA ENCINAS STE 32	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
HOMESPACE OF CALIFORNIA INC.	2270 CAMINO VIDA ROBLE STE A		1752		Floor Laying And Floor Work, Not Elsewhere Classi	CO	Comml High					

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HONEST 1 AUTO CARE	3235 ROOSEVELT ST		7538		General Automotive Repair Shops	COR	Comml High					
HONOURGROUP	4722 BIRCHWOOD CIR	ACTIVE	1542	1542	General Contractors-Nonresidential Buildings, Oth	HO	Ind Low	Comml High		08/29/07	Phone	BV
HOPKINS CONSTRUCTION	1201 MAGNOLIA AVE	ACTIVE	1799		Special Trade Contractors	HO	Comml High			06/22/07	Reviewed	AH
HOT DOG ON A STICK	5620 PASEO DEL NORTE # C126		5812		Eating Places	CO	Comml High					
HUBBS SEA WORLD RESEARCH	4200 GARFIELD ST	ACTIVE	0921		Fish hatcheries & Preserves	CO	Ind Low		2/20/07			AH
HUDSON PRINTING INC	2780 LOKER AVE W	ACTIVE	2759		Commercial Printing, Not Elsewhere Classified	CO	Ind Med		1/31/07			AH
HURLEYUP CONSTRUCTION	7108 PRIMROSE WAY	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/22/07	Reviewed	BA
HYDRO-CHECK SYSTEMS INC.	5931 SEA LION PL STE 100	ACTIVE	3823		Ind Instr for Measure, display & Control	CO	Ind Med		7/18/06			AH
HYDROEPOCH, INC.	2270 COSMOS CT # 120	OUT OF BUSINESS	3949	3949	Sporting/Athletic Goods, Not Elsewhere Classified	CO	Ind Med	Ind Med		02/25/08	Drive By	AH
I LOVE BOBA	5620 PASEO DEL NORTE	MOVED	5812	5812	Eating Places	CO	Comml High	Comml High		01/04/08	Reviewed	AH
IBANEZ MAINTENANCE	3080 MONROE ST	ACTIVE	0782	782	Lawn And Garden Services	HO	Comml High	Comml High		01/03/08	Phone	BV
IN 2 LANDSCAPES	6821 BRIARWOOD DR	OUT OF BUSINESS	1700	1700	Construction-Special Trade Contractors	HO	Comml High	Comml High		01/03/2008	Phone	BA
INDUSTRA PAINT & CONST.	1145 TAMARACK AVE	ACTIVE	1721		Paint Contractor	HO	Comml High			01/30/07	Reviewed	AH
INDUSTRIAL STRENGTH CORP	6115 CORTE DEL CEDRO		3599		Indus./Commercial Equipment, Not Elsewhere Classi	CO	Ind Med					
INFINITY PRO NEIGHBORHOOD POOLS	3209 JAMES DR	OUT OF BUSINESS	7389	7389	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		01/03/08	Reviewed	BV
INGHAM CONSTRUCTION	2440 PIO PICO DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		01/03/08	Phone	AH
INGOLD TRACTOR SERVICE	4135 PARK DR	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/22/07	Reviewed	AH
IN-N-OUT BURGER, A CALIF. CORP. #89	5950 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/28/07			AH
INNOVATIVE METAL PRODUCTS, INC.	6351 YARROW DR STE D		3444		Sheet Metal Work	CO	Ind Med					
INT SOFTBOARD TECHNOLOGY	6351 YARROW DR, STE F	ACTIVE	3949		Sporting/Athletic Goods, Not Elsewhere Classified	CO	Ind Med		7/25/06			EN
INTEGRITY PLUS	2967 LEXINGTON CIR	ACTIVE	1711		Construction-Special Trade Contractors	HO	Comml High			01/20/07	Phone	BA
INTERIOR SPECIALISTS INC.	1630 FARADAY AVE	ACTIVE	1752	1752	Floor Laying & Floor Work	CO	Ind Low	Comml High	1/18/08			AH
INVITROGEN CORPORATION	5781 VAN ALLEN WAY	ACTIVE	2836		Biological Products, Except Diagnostic Substances	CO	Ind Med		4/5/06			AH

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IQ SCIENTIFIC INSTRUMENTS, INC	2075 CORTE DEL NOGAL STE E	ACTIVE	3829	3829	Measuring & Controlling Devices, NEC	CO	Ind Med	Ind Med	3/6/08			EN
IRIS GROUP, INC., THE	1675 FARADAY AVE	ACTIVE	2752	2752	Commercial Printing, Lithographic	CO	Ind Med	Ind Med	3/10/08			AH
ISAAC'S BAKERY DELI	2051 PALOMAR AIRPORT RD STE 200	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/12/07			EN
ISIS PHARMACEUTICALS	2282 FARADAY AVE	ACTIVE	2834	2834	Pharmaceutical Preparations	CO	Ind High	Ind High	10/30/07			AH
ISLANDS FINE BURGERS & DRINKS	889 PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/28/07			EN
ISLANDS@CARLSBAD	5814 VAN ALLEN WY	ACTIVE	6512	6512	Operators of Nonresidential Buildings	CO	Comml High	Comml High	11/20/07			AH
ITZEL'S CAFÉ	5600 AVENIDA ENCINAS STE 110	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/23/08			AH
J & B GRAPHICS	6351 YARROW DR STE H		2396		Automotive And Apparel Trimmings	CO	Ind Med					
J C CONSTRUCTION & RENOVATION	3110 DEL REY AVE	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/25/07	Reviewed	BA
J H R CONSTRUCTION	5238 CARLSBAD BLVD	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		01/03/08	Reviewed	AH
J.C. DELI AND CATERING	2382 CAMINO VIDA ROBLE STE A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/11/07			EN
J.C. PENNEY COMPANY	2555 EL CAMINO REAL	ACTIVE	5311	5311	Department Store	CO	Comml High	Comml High	1/4/08			BV
JACK IN THE BOX #3006	7050 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/10/07			BA
JACK IN THE BOX #36	901 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/8/07			BV
JACOBSON CONCRETE	1344 CYNTHIA LN	ACTIVE	1771	1771	Special Trade Contractors	HO	Comml High	Comml High		01/07/08	Reviewed	BV
JARDINERA	2763 STATE ST	ACTIVE	5261		Retail Nurseries, Lawn And Garden Supply Stores	COR	Comml High		3/20/07			BV
JAY'S GOURMET PIZZA AND SEAFOOD	2975 CARLSBAD BLVD # S-B	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/5/07			BV
JC BALDWIN CONSTRUCTION COMPANY	2469 IMPALA DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High	1/28/08			AH
JENSEN CONSTRUCTION CO	2151 LAS PALMAS DR STE A	ACTIVE	1521		Building Construction-General Building Contractors	CO	Comml High			01/30/07	Reviewed	EN
JESSUP TRANSPORT	5600 AVENIDA ENCINAS STE 44	ACTIVE	4212	4212	Transport	CO	Ind Low	Ind Low	1/23/08			AH
JET SOURCE, INC.	2026 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	CO	Ind High	Ind High	11/19/07			EN
JET SOURCE, INC.	2036 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	CO	Ind High	Ind High	11/19/07			EN
JET SOURCE, INC.	2056 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	CO	Ind High	Ind High	11/19/07			EN
JET SOURCE, INC.	2186 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	CO	Ind High	Ind High	11/19/07			EN
JIFFY LUBE	6021 PASEO DEL NORTE	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		9/20/06			EN
JIM AGNOS POOL & SPA SERVICE	7040 SNAPDRAGON DR	ACTIVE	7389	7389	Business Services, NEC	HO	Comml High	Comml High		01/07/08	Reviewed	BA

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JIMMI'S RED HOTS	2508 EL CAMINO REAL STE C1	OUT OF BUSINESS	5812	5812	Eating Places	CO	Comml High	Comml High		12/31/07	Drive By	BV
JOE MOORE CONSTRUCTION COMPANY	3612 VALLEY ST	ACTIVE	1521	1521	General Contractor	HO	Ind Low	Comml High		11/20/07	Reviewed	AH
JOEY'S SMOKIN BBQ	6955 EL CAMINO REAL STE 107	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	9/6/07			BA
JOHN BIANCHI CONSTRUCTION	2910 MANAGUA PL	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/26/07	Reviewed	BA
JOHN C. WALTERS & ASSOC. INC.	6320 MONTECITO DR	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/26/07	Reviewed	BA
JOHN D. HEBERT CONSTRUCTION	5460 EL ARBOL DR	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			01/30/07	Reviewed	AH
JOHN RYDEN CONSTRUCTION	376 JUNIPER AVE APT 10	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		01/07/2008	Phone	BV
JOHN STEVENSON PLUMBING	6351 CORTE DEL ABETO # A108	ACTIVE	1711	1711	Special Trade Contractors	CO	Comml High	Comml High	2/1/06	01/07/08	Reviewed	EN
JOHNNY'S RUTHERFORD CAFE	2262 RUTHERFORD RD STE 102	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/12/07			AH
JOHNSON POOL SERVICE & REPAIR	3115 SERRANO DR	ACTIVE	7389	7389	Business Services	HO	Comml High	Comml High		01/07/08	Phone	BA
JOHNSONS AUTO BODY AND PAINT	2677 STATE ST	ACTIVE	7532		Auto Body Shop	CO	Comml High		8/30/06			BV
JON DORE CONSTRUCTION	3353 DEL RIO CT	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/26/07	Reviewed	BA
JON MCANALLY CONSTRUCTION	5441 WOLVERINE TER		1521		General Contractors--Single-Family Housing	HO	Ind Low					
JOSEPH A. MEEHL'S SONS COMPANY	2717 VANCOUVER ST	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/29/07	Reviewed	BV
JT SPORTS LLC	5818 EL CAMINO REAL		5091		Sporting And Recreational Goods & Supplies	CO	Ind Low					
JUAN C. MOBILE MECHANIC	7803 CENTELLA ST APT 7	ACTIVE	7538	7538	General Automotive Repair Shops	HO	Comml High	Comml High		01/14/08	Phone	BA
JUDY'S DELI	2035 CORTE DEL NOGAL STE 130	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/2/08			EN
K & K LABORATORIES INC	3305 TYLER ST	ACTIVE	2833		Viatmins and Supplements	CO	Ind Med		8/21/06			AH
K1 SPEED LLC	6212 CORTE DEL ABETO	ACTIVE	7999		Indoor Kart Racing	CO	Comml High		8/21/06			EN
KANINE KARE	1985 OLIVENHAIN RD	ACTIVE	0752	0752	Animal Specialty Services, Except Veterinary	CO	Comml High	Comml High	12/13/07			BA
KARL STRAUSS BREWERY & RESTAURANT	5801 ARMADA DR	ACTIVE	2082		Brewery and Restaurant	CO	Ind Med		8/21/06			AH
KATONA PLUMBING	7076 MONTANES LN	ACTIVE	1711		Plumbing Contractor	HO	Comml High			01/30/07	Reviewed	BA
KEN GRODY FORD	5555 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		11/1/06			AH
KENNEDY MASONRY	7313 MELODIA TER	ACTIVE	1741	1741	Masonry Contractor	HO	Comml High	Comml High		01/14/08	Reviewed	BA
KENT WATERS CABINET & MILLWORK	6074 CORTE DEL CEDRO	ACTIVE	1799		Special Trade Contractors	CO	Ind Low			06/05/06	Phone	EN
KEONI LANDSCAPES	1052 KNOWLES AVE	ACTIVE	1799	1799	Landscape Construction	HO	Comml High	Comml High		01/14/08	Reviewed	BV

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KESSEL WINDOW SERVICES	6600 AMBROSIA LN APT 227	MOVED	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		01/14/08	Reviewed	BA
KFC #Y450066	745 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/18/07			AH
KILWA MANUFACTURING, INC,	2045 CORTE DEL NOGAL		2086		Bottled And Canned Soft Drinks & Carbonated Waters	CO	Ind Med					
KING'S FISH HOUSE	5625 PASEO DEL NORTE	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	9/5/07			AH
KIPP'S LAWN SERVICE	7211 PLAZA DE LA COSTA	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			01/30/07	Phone	BA
KIWI DIG, INC.	3502 CALLE HIDALGO	ACTIVE	1521	1521	Construction-Special Trade Contractors	HO	Comml High	Comml High		01/14/08	Phone	BA
KLAUS ENYEDI CONCRETE CONST	1715 CATALPA RD	ACTIVE	1700	1741	Construction-Special Trade Contractors	HO	Comml High	Comml High		01/14/08	Phone	BA
KNOCKOUT BURGERS	2971 CARLSBAD BLVD	ACTIVE	5812	5812	Eating Places	COR	Comml High	Comml High	1/3/08			BV
KNOCKOUT PIZZERIA	2959 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/18/07			BV
KNOLL DESIGN AND DEVELOPMENT	5751 PALMER WY STE G1	ACTIVE	1521		General Contractor	CO	Comml High			01/30/07	Reviewed	EN
KNORR BEESWAX PROD. INC.	1965 KELLOGG AVE	ACTIVE	3999	3999	Manufacturing Industries, NEC	CO	Ind Med	Ind Med	10/16/07			EN
KOKO BEACH	2858 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/3/08			BV
KOSKO CONSTRUCTION	919 BEGONIA CT	ACTIVE	1793		Glass & Glazing Work	HO	Comml High			06/29/07	Reviewed	BA
KOTIJA TACO SHOP	1850 MARRON RD STE 100	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/31/07			BV
KRESSIN POOL CLEANING	2803 VIA TOPACIO		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
KVD COMPANY INC.	2465 IMPALA DR	ACTIVE	3825	3825	Inst for Measure & Testing of electricity	CO	Ind Med	Ind Med	1/16/08			AH
L & L PRINTERS	6200 YARROW DR	ACTIVE	2759		Commercial Printing, NEC	CO	Ind Med		9/11/06			EN
L & S CONCESSIONS & CATERING	5620 PASEO DEL NORTE STE 100	EXCLUDED	5812	5812	Eating Places	CO	Comml High	Comm Low		01/14/08	Reviewed	AH
LA COSTA LIMOUSINE	2770 LOKER AVE WEST	ACTIVE	4119	4119	Local Passenger Transportation, NEC	CO	Ind High	Ind High	12/6/07			AH
LA COSTA RESORT AND SPA	2100 COSTA DEL MAR RD	ACTIVE	7997		Golf Course and Resort	CO	Comml High		4/23/07			BA
LA COSTA SUBMARINA	6994 EL CAMINO REAL STE 100	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/6/07			BA
LA COSTA WHOLESALE FLOWERS	3319 JAMES DR	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	CO	Ind Low	Comml High	3/6/06	11/20/07	Reviewed	BV
LA FIESTA DELI	5810 EL CAMINO REAL STE B	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/19/07			AH
LA PLACE DELI	5950 LA PLACE CT STE 150	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/2/08			AH
LABO CONSTRUCTION	1720 CATALPA RD		1521		General Contractors--Single-Family Housing	HO	Comml High					
LANCE HOWARD DETAILING	2476 TORREJON PL		7542		Carwashes	HO	Comml High					
LANDCO CONSTRUCTION COMPANY	3135 TYLER ST	ACTIVE	2431		Millwork	CO	Ind Med		4/26/07			BV
LAS FLORES WHOLESALE	5600 AVENIDA ENCINAS STE 15	EXCLUDED	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Comml High	Comml High	1/23/08			AH

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LAS OLAS CARLSBAD	2939 CARLSBAD BL	ACTIVE	5812		Eating Places	CO	Comml High		5/7/07			BV
LATERAL DYNAMICS, LLC	5933 SEA LION PL STE 113		3499		Fabricated Metal Products, Not Elsewhere Classifi	CO	Ind Med					
LE PASSAGE	2961 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/13/07			BV
LEADING EDGE AVIATION	2010 PALOMAR AIRPORT RD STE L	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	11/19/07	01/26/06	Drive By	EN
LEFT COAST WINDOW WASHING	1941 DOVE LANE APT 308	ACTIVE	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		01/14/08	Reviewed	BA
LEGOLAND	ONE LEGOLAND DR	ACTIVE	4119	4119	Local Passenger Transportation, NEC	CO	Ind High	Ind High	11/6/07			EN
LEONARD SCHOLL INDUSTRIES, INC.	5751 PALMER WAY STE A	ACTIVE	3599		Ind & Comml Machinery & Equip, NEC	CO	Ind Med		7/10/06			AH
LESLIE FARM INC	CANNON AND INTERSTATE 5	ACTIVE	0171		Berry Crops	CO	Comml High		3/6/07			AH
LEUCADIA WASTE WATER DISTRICT	1960 LA COSTA AV	ACTIVE	4941	4941	Water Supply	CO	Ind High	Ind High	12/20/07			BA
LEXUS CARLSBAD	5434 PASEO DEL NORTE		5511		Motor Vehicle Dealers (New And Used)	CO	Comml High					
LEXUS CARLSBAD	5444 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		3/1/06			AH
LIGHTHOUSE POOL AND SPA INC.	2531 STATE ST STE A	ACTIVE	7389		Business Services, NEC	CO	Comml High		4/26/06			BV
LILYS ENTERPRISES	5600 AVENIDA ENCINAS STE 18	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
LLOYD'S AUTO SPECIALTIES	1050 AUTO CENTER CT	ACTIVE	7549	7549	Automotive Services	CO	Comml High	Comml High	1/11/08			AH
LOLA'S 7 UP MARKET & DELI	3292 ROOSEVELT ST	ACTIVE	5411		Grocery Stores	CO	Comml High		3/12/07			BV
LOMAS DEL RINCON GROWERS	5060 EL CAMINO REAL	OUT OF BUSINESS	182	182	Food Crops Grown Under Cover	CO	Comml High	Comml High		12/24/07	Reviewed	AH
LONE ROOTER, THE	2420 PIO PICO DR	ACTIVE	1711		Plumbing Contractor	CO	Comml High			01/31/07	Reviewed	BV
LOPEZ LANDSCAPE	1332 MAGNOLIA AVE	ACTIVE	0782		Lawn and Garden Services	HO	Comml High			06/28/06	Reviewed	AH
LORCO	4488 SALISBURY DR	ACTIVE	1741		Masonry, Stone Setting	HO	Comml High			06/28/06	Reviewed	AH
LOS COCHES CLEANERS	3235 CAMINO DE LOS COCHES STE 105		7216		Drycleaning Plants, Except Rug Cleaning	CO	Comml High					
LOS PRIMOS MEXICAN FOOD	2708 LOKER AV W STE 102	ACTIVE	5812	5812	Restaurant	CO	Comml High	Comml High	12/12/07			AH
LOTUS THAI BISTRO	3050 PIO PICO DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/13/07			AH
LUCAS & MERCIER CONSTRUCTION INC	5245 AVENIDA ENCINAS STE G	ACTIVE	1521		Building Construction-General Building Contractors	CO	Comml High			01/31/07	Reviewed	AH
LUCAS PLUMBING	2890 WOODRIDGE CIR		1711		Construction-Special Trade Contractors	HO	Comml High					
LUMINORE INCORPORATED	6060 CORTE DEL CEDRO		873		Research, Development, And Testing Services	CO	Ind Low					
LUMINOUS MEDICAL INC.	2461 IMPALA DR		8731		Research, Development, And Testing Services	CO	Ind Low					
M C S CONSTRUCTION	7804 ESTANCIA ST		1521		Building Construction-General Building Contractors	HO	Ind Low					BA

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M. M. PAINTING SERVICES	2424 LEVANTE ST	ACTIVE	1700	1721	PAINTING/DECORATING	HO	Comml High	Comml High		12/21/07	Phone	BA
MAC PHERSON'S	1277 FOREST AVE	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/29/07	Reviewed	BV
MACHINE VISION PRODUCTS, INC.	5940 DARWIN CT	ACTIVE	3629		Electrical Indl Apparatus, NEC	CO	Ind Med		6/12/07			AH
MACY'S - PLAZA CAMINO REAL	2559 EL CAMINO REAL	ACTIVE	5311	5311	Department Store	CO	Comml High	Comml High	1/4/08			BV
MAD ABOUT POOLS	1880 CANYON PL	ACTIVE	7389		Pool Maintenance	HO	Comml High			06/28/06	Phone	AH
MAMA MELLACE'S OLD WORLD TREATS	6195 EL CAMINO RL	ACTIVE	2064	2064	Confectionery Manufacturer	CO	Ind Med	Ind Med	8/2/07			AH
MANLEY BUILDERS, INC.	2041 CUMBRE CT		1531		Operative Builders	HO	Comml High					
MANLEY BUILDERS, INC.	2041 CUMBRE CT	DUPLICATE	1531	1531	Operative Builders	HO	Comml High	Comml High		09/05/07	Reviewed	AH
MANNY'S CAFE & GRILL	1854 MARRON RD # 104	OUT OF BUSINESS	5812	5812	Eating Places	CO	Comml High	Comml High	11/30/06	12/19/07	Site Visit	BV
MANNY'S WHOLESALE	5600 AVENIDA ENCINAS STE 14	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
MARDX DIAGNOSTICS, INC.	5919 FARNSWORTH CT	ACTIVE	2835		Manufacturer of In Vitro Diagnostic	CO	Ind Med		5/18/06			AH
MARIAH'S WESTWIND	377 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/18/07			BV
MARIANO'S LANDSCAPING	3422 MADISON ST B	ACTIVE	0782		Lawn And Garden Services	HO	Comml High			08/24/06	Reviewed	AH
MARIE CALLENDER'S #88	5980 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	7/5/07			AH
MARTHAS WHOLESALE	5600 AVENIDA ENCINAS STE 30	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
MAS FINA CANTINA	2780 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/13/07			BV
MASSIE CONSTRUCTION CO	2642 JEFFERSON ST APT A		1521		Building Construction-General Building Contractors	HO	Comml High					
MATT MILLIN MACHINING	2270 CAMINO VIDA ROBLE STE F	ACTIVE	3499	3499	Fabricated metal Products	CO	Ind Med	Ind Med	2/25/08			EN
MAYESH WHOLESALE FLORIST INC., JACK	5600 AVENIDA ENCINAS STE 41	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
MCCLELLAN-PALOMAR AIRPORT	2192 PALOMAR AIRPORT ROAD	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	11/19/07			EN
MCCOURTNEY CABINETRY	6102 AVENIDA ENCINAS, SUITE L	ACTIVE	2434		Cabinets	CO	Ind Med		5/1/06			EN
MCDONALDs OF PALOMAR AIRPT RD	5990 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/28/07			AH
MCDONALDs PLAZA CAMINO REAL	2525 EL CAMINO REAL STE 150	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/4/08			BV
MCKITTRICK GRADING & EXCAVATING	3602 KINGSTON ST		1521		Building Construction-General Building Contractors	HO	Ind Low					AH
MEADOWLARK WATER RECLAMATION F	7941 CORINTIA ST	ACTIVE	4952	4952	Sewerage Systems	CO	Ind High	Ind High	12/4/07			BA
MELLANO ENTERPRISES	5600 AVENIDA ENCINAS STE 20	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
MELLES GRIOT LASER DIVISION	2051 PALOMAR AIRPORT RD STE 200	ACTIVE	3674	3674	Semiconductors & Related Devices	CO	Ind High	Ind High	12/20/07			EN

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MENDOZA'S FRESH FLOWERS	5600 AVENIDA ENCINAS STE 22	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
MERCOTAC INC.	6195 CORTE DEL CEDRO STE 100	ACTIVE	3643		Current-Carrying Wiring Devices	CO	Ind Med		6/29/07			EN
MERCURY COMPUTER SYSTEMS INC	1815 ASTON AVE STE 107		3674		Semiconductors And Related Devices	CO	Ind Med					
MERCURY COMPUTER SYSTEMS INC	1815 ASTON AVE STE 107	DUPLICATE	3674	3674	Semiconductors And Related Devices	CO	Ind Med	Ind Med		11/27/07	Reviewed	AH
MERCY AIR	2006 PALOMAR AIRPORT RD, STE S	ACTIVE	4522	4522	Air Transportation, Nonscheduled	CO	Ind High	Ind High	11/19/07	01/24/06	Drive By	EN
METAL URGES INC	6350 YARROW DR STE D	MOVED	5021	5021	Furniture, Wholesale	CO	Ind Low	Ind Low	3/28/06	01/09/08	Drive By	EN
MEXICO VIEJO	2508 EL CAMINO REAL STE D	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	9/18/07	07/26/04	Reviewed	BV
MG LANDSCAPE MAINTENANCE	3765 TRIESTE DR	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			06/28/06	Phone	AH
MH JONES DEVELOPMENT	6738 PASEO DEL VIS		1521		Building Construction-General Building Contractors	HO	Comml High					
MICHAEL ABAD	7417 SITIO LIMA		1521		Building Construction-General Building Contractors	HO	Ind Low					
MICRO-PROBE, INCORPORATED	2281 LAS PALMAS DR	ACTIVE	3825		Inst for Measure & Testing of electricity	CO	Ind Med		5/1/06			EN
MIKKO JAPANESE CUISINE	1025 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/18/07			BV
MILES PACIFIC NURSERY	1833 BUENA VISTA WAY	ACTIVE	5193	5193	Ornamental Floriculture and Nursery Prods	CO	Comml High	Comml High	3/13/08			BV
MILES PACIFIC NURSERY	2375 PIO PICO DR	ACTIVE	0181	0181	Ornamental Floriculture and Nursery Prods	CO	Comml High	Comml High	3/13/08	04/27/06	Reviewed	BV
MILLER BUILDING CO., THE	6434 EL PERICO LN	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/29/07	Reviewed	BA
MINUTEMAN PRESS	6353 EL CAMINO REAL STE H	ACTIVE	2752		Commercial Printing, Lithographic	CO	Ind Med		8/8/06			BA
MISSION AUTO, SALES & LEASE INC.	6060 AVENIDA ENCINAS STE C		5511		Motor Vehicle Dealers (New And Used)	CO	Comml High					
MISSION ELECTRIC SUPPLY INC	2225 CAMINO VIDA ROBLE	ACTIVE	5063	5063	Electrical Apparatus & Equpment Wiring Supplies	CO	Ind Low	Ind Low	1/9/08	02/10/04	Reviewed	EN
MJR CONSTRUCTION, INC.	300 CARLSBAD VILLAGE DR STE 300	ACTIVE	1521	1521	Building Construction-General Building Contractors	COR	Ind Low	Comml High	8/30/06	01/03/08	Reviewed	BV
MOBILE CAR DOCTORS, THE	1010 HOME AVE		7538		General Automotive Repair Shops	HO	Comml High					AH
MOBILE SHINE AUTO DETAILING	3320 CALLE SAN BLAS	ACTIVE	7542		Carwashes	HO	Comml High			08/24/06	Reviewed	BA
MOLINA'S EXTERIORS	4869 ALONDRA WAY		781		Construction-Special Trade Contractors	HO	Comml High					
MORGAN CONSTRUCTION COMPANY INC.	1910 PALOMAR PT WY STE 101	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High	5/18/06	11/20/07	Reviewed	AH
MOSS REPLACEMENT WINDOWS INC	2790 LOKER AVE W STE 109		1700		Construction-Special Trade Contractors	CO	Ind Low					
MOST CONSTRUCTON (Formally Frost Construction)	1380 CYNTHIA LN	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			01/31/07	Reviewed	BV

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MOTION PRODUCTS WEST INC. (Previously MPI INC.)	6102 AVENIDA ENCINAS STE J-K	ACTIVE	7538		Automotive Repair & Restoration	CO	Comml High		5/1/06	06/22/05	Site Visit	EN
MR. PEABODY'S	300 CARLSBAD VILLAGE DR STE 202	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/20/07			BV
MULLEN CONSTRUCTION	2890 PIO PICO DR STE 202	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High		11/20/07	Reviewed	BV
MUROYA GROWERS	6697 BLACK RAIL RD	ACTIVE	0191		Nursery - Wholesale	CO	Comml High		1/25/07			BA
MV TECHNICAL SALES, LLC	1940 CAMINO VIDA ROBLE	ACTIVE	3825	3825	General Warehousing	CO	Ind Med	Ind Med	3/10/08			EN
MYRON L COMPANY - A CALIF CORP	2450 IMPALA DR	ACTIVE	3829		Measuring & Controlling Devices, NEC	CO	Ind Med		7/24/06			EN
N. REX WILSON CONSTRUCTION, INC.	4600 PARK DR		1521		Building Construction-General Building Contractors	HO	Ind Low					AH
NATURE MAKER	6225 EL CAMINO REAL	ACTIVE	3999		General Manufacturing	CO	Ind Med		7/31/06			EN
NATURE'S SUPPLEMENTS	2270 CAMINO VIDA ROBLE STE Q	ACTIVE	2833	2833	Medicinal Chemicals and botanical Products	CO	Ind Med	Ind Med	2/25/08			EN
NAVIGANT INTERNATIONAL / WEST LLC	2180 RUTHERFORD RD # 2		4724		Travel Agencies	CO	Ind Med					
NEAL HENNING CONSTRUCTION	3119 VERDE AVE	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/29/07	Reviewed	BA
NESTI CONSTRUCTION	5631 PALMER WAY STE D	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High		10/25/07	Reviewed	AH
NEW GROWTH LANDSCAPES	6576 BLUEBONNET DR		1799		Construction-Special Trade Contractors	HO	Comml High					BA
NEW WORLD CAFÉ & RESTAURANT	2559 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/4/08	09/15/05	Drive By	BV
NEW YORK PIZZERIA	3067 ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/18/07			AH
NEWMAN REPLACEMENT WINDOWS	5845 AVENIDA ENCINAS STE 133	ACTIVE	1751		Window & Door Installation & Sales	CO	Ind Low		5/22/06			EN
NEWPORT FLORAL CONNECTION	5600 AVENIDA ENCINAS STE 46	EXCLUDED	5193	5193	Food Crops Grown Undercover	CO	Comml High	Comml High	1/23/08			AH
NEXT PHARMACEUTICALS	5927 BALFOUR CT STE 110		2023		Dry, Condensed, Evaporated Dairy Products	CO	Ind Med					AH
NICK BOWMAN CONSTRUCTION INC	7040 IVY ST		1521		Building Construction-General Building Contractors	HO	Comml High					
NO FEAR, INC	2251 FARADAY AVE	ACTIVE	5136		Mens & Boys Clothing & Furnishings	CO	Ind Low		7/25/06			AH
NOBEL HOMES	2734 LOKER AVE W STE M	ACTIVE	1521		Building Construction-General Building Contractors	CO	Comml High			06/29/07	Reviewed	AH
NORCO POWER WASHING	2751 TIBURON AVE	ACTIVE	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		12/24/07	Phone	AH
NORTH COASTAL (PALOMAR) LANDFILL	2198 PALOMAR AIRPORT RD	ACTIVE	4953	4953	Refuse Systems	CO	Ind High	Ind High	11/19/07	06/22/07	Reviewed	EN
NORTH COUNTY COASTAL PLUMBING	3900 LINMAR LN	ACTIVE	1711		Plumbing Contractor	HO	Comml High			08/24/06	Reviewed	BV
NORTH COUNTY GMC PONTIAC	5445 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		5/3/06			AH
NORTH COUNTY GROWER SUPPLIES	5600 AVENIDA ENCINAS STE 43	EXCLUDED	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Comml High	Comml High	1/23/08			AH

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NORTH COUNTY HOME I.V., INC.	1989 PALOMAR OAKS WAY # A		5912		Drug Stores And Proprietary Stores	CO	Comml High					
NORTH COUNTY PLAZA	1810 MARRON RD	ACTIVE	6552		Operators of Nonresidential Buildings	CO	Comml High		5/30/06			BV
NORTH COUNTY POOL & SPA	5106 LYNCH CT	ACTIVE	7389		Pool & spa Maintenance Services	HO	Comml High			08/24/06	Reviewed	AH
NOZOMI # 3	3050 PIO PICO DR # A	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/13/07			BV
NRG CABRILLO POWER STATION	4600 CARLSBAD BLVD	ACTIVE	4911	4911	Electric Services	CO	Ind High	Ind High	9/20/07			AH
OASIS NURSERY AND LANDSCAPING, INC.	4901 EL CAMINO REAL	ACTIVE	5193		Flowers, Nursery Stock, Supplies	CO	Comml High		4/12/06	07/15/03		AH
OCEAN BREEZE CARPET CLEANING	1739 MALLOW CT		7217		Carpet And Upholstery Cleaning	HO	Comml High					
OCEAN HOME REPAIR	6517 CAMINO DEL PARQUE		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
OCEAN HOUSE (FORMALLY NEIMANS)	300 CARLSBAD VILLAGE DR STE 300	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/20/07			BV
OCEANS EDGE POOL SERVICE	6550 PONTO DR SPC 38	ACTIVE	7389		Business Services, NEC	HO	Comml High			08/24/06	Reviewed	BA
OEM SOLUTIONS, LLC	2245 CAMINO VIDA ROBLE, STE 104	ACTIVE	5045		Computers & Peripheral Equip & Software	CO	Ind Low		5/3/06			AH
OFFICIAL PAINTING	2379 CARINGA WAY	ACTIVE	1721		Painting and Paperhanging	HO	Comml High			10/24/06	Phone	BA
OGARA CONSTRUCTION	3200 JAMES DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/25/07	Reviewed	BV
OISHI RESTAURANT	2525 EL CAMINO REAL STE 200	OUT OF BUSINESS	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/3/06	12/31/07	Reviewed	BV
OLIVE GARDEN, THE #120	1884 MARRON RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/19/07			BV
OLIVENHAIN MUNICIPAL WATER DISTRICT	1966 OLIVENHAIN RD	ACTIVE	4941	4941	Water Systems	CO	Ind High	Ind High	12/13/07			BA
OLYMPIC RESORT HOTEL	6111 EL CAMINO RL	ACTIVE	7011		Hotels and Motels	CO	Comml High					EN
ON A ROLL	2794 LOKER AVE W STE 110	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/31/07			AH
ON CALL DETAILING	2614 LUCIERNAGA ST		7542		Carwashes	HO	Comml High					BA
ON TIME TEES	2270 CAMINO VIDA ROBLE # P	OUT OF BUSINESS	2261	2261	Finishers Of Broadwoven Fabrics Of Cotton	CO	Ind Med	Ind Med		2/2/508	Site Visit	EN
ORCO CONSTRUCTION COMPANY	6125 PASEO DEL NORTE	ACTIVE	5251		Paint and Wallpaper Stores	CO	Ind Low		5/3/06	03/22/04	Reviewed	EN
ORD & RODGERS CONSTRUCTION INC	5122 AVENIDA ENCINAS	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High	1/17/08	06/29/05	Reviewed	AH
ORGANICO PANE COMPANY	5671 PALMER WAY STE B		5149		Groceries And Related Products, Not Elsewhere Cla	CO	Ind Low					
ORIZON	7190 AVENIDA ENCINAS		1799		Special Trade Contractors, Nec	CO	Ind Low					
ORTEGA'S SAIL AND CANVAS	6102 AVENIDA ENCINAS STE A	ACTIVE	2394		Manufacture Metal Awnings, Covers	CO	Ind Med		6/26/07			EN
ORTHO ORGANIZERS INC.	1822 ASTON AVE		3843		Dental Equipment And Supplies	CO	Ind Med					
OSCAR DIKE POOL REPAIR	841 CAMELLIA PL		7389		Construction-Special Trade Contractors	HO	Comml High					
OUTSOURCE MANUFACTURING	2839 E LOKER AVE		3699			co	Ind Med					

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BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTVITY DATE	ACTIVITY TYPE	Drainage Basin
OVERSEAS CHINESE RESTAURANT	2820 ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/13/07			BV
P G SALES	2333 CARINGA WAY APT 30		1700		Construction-Special Trade Contractors	HO	Comml High					
PACIFIC BLUE POOL SERVICE	7771 PENDON CT		7389		Business Services, Not Elsewhere Classified	HO	Comml High					BA
PACIFIC CNC MACHINE	6351 CORTE DEL ABETO STE 104	ACTIVE	3599		Indus./Commercial Equipment, Not Elsewhere Classi	CO	Ind Med		7/26/06			EN
PACIFIC COAST GRADING INC.	2726 MORNING GLORY LN	ACTIVE	1794		Special Trade Contractors	HO	Comml High			08/25/06	Reviewed	AH
PACIFIC COAST PRINTING	3021 STATE ST	ACTIVE	2759		Commercial Printing, NEC	COR	Ind Med		7/26/06			BV
PACIFIC COLLISION CENTERS	6030 AVENIDA ENCINAS # C	ACTIVE	7532		Top, Body, And Upholstery Repair Shops & Paint Sh	CO	Comml High		3/28/06			EN
PACIFIC COMMERCIAL CONSTRUCTION	2262 RUTHERFORD RD STE 103	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High		11/05/07	Reviewed	AH
PACIFIC CUSTOM HOMES INC	3429 CORTE VIEJO		1521		Building Construction-General Building Contractors	HO	Comml High					
PACIFIC OIL SERVICES - CAMINO SHELL	2590 EL CAMINO REAL	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/5/08			BV
PACIFIC RESTORATION	5365 AVENIDA ENCINAS, STE J	ACTIVE	7349	7349	Building Cleaning & Maint Svc, NEC	CO	Comml High	Comml High	2/21/08			AH
PACIFIC TRADES CONST. & DEV. INC.	2956 ROOSEVELT ST STE 3	ACTIVE	1521		Building Construction-General Building Contractors	COR	Comml High			06/29/07	Reviewed	BV
PACIFIC WINDOW CLEANING	1805 NICOLIA DR UNIT 202	ACTIVE	7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High			06/28/06	Reviewed	BA
PACWEST CONSTRUCTION	2525 PIO PICO DR # 102	ACTIVE	1711		General Building Contractor	CO	Comml High			08/25/06	Reviewed	BV
PALOMAR AIRPORT SHELL (TEXACO)	665 PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/21/08			AH
PALOMAR CLEANERS	2221 LAS PALMAS DR STE F	ACTIVE	7216	7216	Drycleaning plants	CO	Ind Low	Comml High	1/2/08			EN
PALOMAR DELI	6150 YARROW DR STE C	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/2/08			EN
PALOMAR DISPLAY PRODUCTS, INC.	1945 KELLOGG AVE	ACTIVE	3577		Computer Peripheral Equipment	CO	Ind Med		5/18/06			EN
PALOMAR HAND CAR WASH & DETAILING	6019 PASEO DEL NORTE	ACTIVE	7542		Carwashes	CO	Comml High		9/20/06			EN
PALOMAR LIMOUSINE & TRANSPORTATION, INC.	600 GRAND AV STE A19	ACTIVE	4119		Local Passenger Transportation, NEC	HO	Ind Low		7/13/05	01/10/07	Reviewed	AH
PALOMAR MOBIL	899 PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/21/08			EN
PALOMAR SIGN COMPANY	5205 AVENIDA ENCINAS STE G		3993		Signs And Advertising Specialties	CO	Ind Med					
PALOMAR TECHNOLOGIES, INC.	2728 LOKER AVE W		3674		Semiconductors And Related Devices	CO	Ind Med					
PANDA EXPRESS # 393	2560 EL CAMINO REAL	ACTIVE	5812		Eating & Drinking Places	CO	Comml High		4/16/07			BV
PANDA EXPRESS #635	6951 EL CAMINO REAL	ACTIVE	5812		Eating & Drinking Places	CO	Comml High		5/17/07			BA
PANDA EXPRESS #729	5630 PASEO DEL NORTE STE 141	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/8/07			AH

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PANERA BREAD	1935 CALLE BARCELONA	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	11/26/07			BA
PAPA C'S MEXICAN FOOD	5806 VAN ALLEN WAY # 105	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/20/07			AH
PAPAYAS CAFE	5840 EL CAMINO REAL # 116		5812		Eating Places	CO	Comml High					
PAPAYAS CAFE	5840 EL CAMINO REAL # 116	Duplicate	5812	5812	Eating Places	CO	Comml High	Comml High		10/25/07	Reviewed	AH
PARK CARE	2744 AUBURN AVE	ACTIVE	0781		Landscape Counseling and Planning	HO	Comml High			08/25/06	Reviewed	AH
PAT & OSCAR'S	2525 EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/8/08			BV
PAT & OSCAR'S	965 PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/28/07			EN
PAUL DEVELOPMENT	2954 HAWKS EYE PL	OUT OF BUSINESS	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Ind Low		08/28/07	Phone	BA
PAUL MCGRATH CONSTRUCTION	6789 CAMINO DE AMIGOS	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		10/25/07	Reviewed	BA
PAUL PARIZEAU	3218 EUREKA PL		1521		Building Construction-General Building Contractors	HO	Ind Low					
PAUL TURNER CONSTRUCTION	4062 GARFIELD ST APT D		1521		Building Construction-General Building Contractors	HO	Comml High					
PEKING GARDEN	6990 EL CAMINO REAL STE K	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/6/07			BA
PELICAN GLASS CO	2680 STATE ST	ACTIVE	1793		Retail Glass Installation	CO	Ind Low		4/26/06			BV
PELICAN PACKAGING, INC.	5816 DRYDEN PL	ACTIVE	3669		Communications Equipment	CO	Ind Med		9/11/06			AH
PELLY'S FISH MARKET & DELI	7110 AVENIDA ENCINAS STE 101	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/2/08			BA
PENTON OVERSEAS INC	2470 IMPALA DR # A	ACTIVE	5192		Books, Newpapers, Periodicals, Wholesale	CO	Ind Low		8/8/06	09/25/03	Reviewed	AH
PERSONAL STRENGTHS NORTH AMERICA, LLC	1946 KELLOGG AVE		2731		Book Publishing	CO	Ind Med					
PERSONAL TRANPSORT LLC	3123 VISTA MAR	ACTIVE	4119		Limousine Service	CO	Ind Low			01/31/07	Reviewed	BA
PETAL & PLUME	5600 AVENIDA ENCINAS, SUITE 47	EXCLUDED	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Comml High	Comml High	01/23/08	06/28/06	Phone	EN
PETER ANDREW PAINTING	7000 FORSTERS TERN DR		1721		Construction-Special Trade Contractors	HO	Comml High					
PHILLIP MARRUJO (LANDSCAPE)	360 CHINQUAPIN AVE APT 3	ACTIVE	0781		Landscape Counseling and Planning	HO	Comml High			08/25/06	Reviewed	AH
PHIL'S CARWASH / DETAILING	6041 PASEO ACAMPO #107	ACTIVE	7542		Carwashes	HO	Comml High			08/25/06	Reviewed	EN
PICK UP STIX	7750 RANCHO SANTA FE RD #101	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	8/27/07			BA
PICK UP STIX # 7224	7150 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	1/2/08			BA
PICK UP STIX CARLSBAD INC.	2508 EL CAMINO REAL STE A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/18/07			BV
PICKLES CATERING & DELI	5670 EL CAMINO REAL STE H	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/19/07			AH
PIZZA HUT	2588 EL CAMINO REAL # B/C	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/18/07			BV

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PIZZA PORT CARLSBAD BREWERY	571 CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	3/4/08			AH
PIZZA SHUTTLE & SUBS, TOO	959 TAMARACK AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/19/07			AH
PLANTPLAY	4915 EL CAMINO REAL	ACTIVE	5261		Retail Nurseries, Lawn And Garden Supply Stores	CO	Comml High		2/26/07			AH
PLASTICS ENGINEERING & DEV.	2731 LOKER AVE W # C	ACTIVE	3089		Plastic Products, NEC	CO	Ind Med		11/2/05	01/31/07	Drive By	AH
PLAYGROUNDS WEST INC	3566 KNOLLWOOD DR		1521		Building Construction-General Building Contractors	HO	Comml High					
PLAZA AUTOMOTIVE	1060 AUTO CENTER CT STE A	OUT OF BUSINESS	7538	7538	General Automotive Repair Shops	CO	Comml High	Comml High	5/3/06	01/11/08	Drive By	AH
PLAZA BUILDERS	5091 EL ARBOL DR		1521		Building Construction-General Building Contractors	HO	Comml High					
PLAZA CAMINO CHEVRON CENTER	2500 EL CAMINO REAL	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/5/08			BV
PLAZA CAMINO REAL, L.P.	2525 EL CAMINO REAL	ACTIVE	6512	6512	Non-Residential Property Mangement	CO	Comml High	Comml High	1/7/08			BV
PLAZA REAL CLEANERS INC	6949 EL CAMINO RL STE 108	ACTIVE	7216		Dry Cleaning Plant	CO	Comml High			08/31/05	Reviewed	BA
PLAZA SOUTH CLEANERS	2620 EL CAMINO REAL	ACTIVE	7212	7212	Laundry Cleaners	CO	Comml High	Comml High	1/17/08			BV
PODS OF SAN DIEGO, LLC	2858 LOKER AVE E # 200		4225		General Warehousing And Storage	CO	Ind Med					
POINSETTIA PLAZA	7040 AVENIDA ENCINAS	ACTIVE	6512		Operators of Nonresidential Buildings	CO	Comml High		5/24/05			EN
POINSETTIA VILLAGE CHEVRON	7170 AVENIDA ENCINAS	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/26/08			BA
POLISHED IMAGE MOBILE DETAILING	2454 JEFFERSON ST		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
POLLOS MARIA	3055 HARDING ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/18/07			BV
POND & AQUARIUM SOURCE, THE	2599 STATE ST	ACTIVE	1521	1521	Pool Construction/Aquarium Installation	CO	Comml High	Comml High	1/30/08			BV
PONTO CLEANERS	690 CARLSBAD VILLAGE DR STE 101		7216		Drycleaning Plants, Except Rug Cleaning	COR	Comml High					
PONTO STORAGE INC	7290 PONTO DR	ACTIVE	4225	4225	General Warehousing & Storage	CO	Ind Med	Ind Med	1/8/08	03/08/04	Reviewed	BA
POOL SERVICE BY INDIGO	2292 AUDEN PL		7389		Business Services, Not Elsewhere Classified	HO	Comml High					AH
POOL TECH	3002 LEVANTE ST	ACTIVE	7389		Business Services, NEC	HO	Comml High			08/25/06	Reviewed	BA
PORT BREWING CO	561 CARLSBAD VILLAGE DR	ACTIVE	2082	2082	Brewery	CO	Ind Med	Ind Med	3/4/08			AH
POSH PETS GROOMING SERVICES	5515 FOXTAIL LOOP		752		Animal Specialty Services, Except Veterinary	HO	Comml High					
POWER ONE INC.	5999 AVENIDA ENCINAS, STE 100	ACTIVE	3629		Electrical Indl Apparatus, NEC	CO	Ind Med					AH
PRECISION KITCHEN AND BATH	2921 LANCASTER RD		1743		Terrazzo, Tile, Marble, Mosaic Work	HO	Comml High					AH
PREMIER JET	2100 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, And Airport Terminal Ser	CO	Ind High	Ind High	11/20/07			EN
PREMIER POOLS & SPAS	2244 FARADAY AVE # 109		1700		Construction-Special Trade Contractors	CO	Comml High					

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PRENTICE CONSTRUCTION INC.	7323 EL FUERTE ST	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			01/31/07	Reviewed	BA
PRIMO PIZZA & PASTA	7110 AVENIDA ENCINAS STE 103	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/2/08			BA
PRINTERY, THE	3138 ROOSEVELT ST STE C	ACTIVE	2759		Commercial Printing, NEC	CO	Ind Med		7/27/06	06/23/06	Drive By	AH
PRODUCT SLINGSHOT INC.	2221 RUTHERFORD RD	ACTIVE	3999		Manufacturing Industries, NEC	CO	Ind Med		8/1/06			EN
PROFESSIONAL AUDIO SYSTEMS	2270 COSMOS CT	OUT OF BUSINESS	3652	3652	Household Audio & Video Equip	CO	Ind Med	Ind Med	5/22/06	01/09/08	Drive By	EN
PROMONTORY BUSINESS PARK	2715 LOKER AV WEST	ACTIVE	6512		Property Management - Non - Residential	CO	Comml High		1/31/07			AH
PRONTO CAR WASH OF CARLSBAD PREMIUM OUTLETS	5620 PASEO DEL NORTE	ACTIVE	7542		Carwashes	CO	Comml High		8/22/06			BA
PRONTO WASH SOUTHERN CALIFORNIA	5620 PASEO DEL NORTE # 127C		7542		Carwashes	CO	Comml High					
PRONTOS GOURMET MARKET	2812 ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/13/07			BV
PUBLIC STORAGE	6211 CORTE DEL ABETO	ACTIVE	4225		General Warehousing And Storage	CO	Ind Med		8/21/06			EN
QUALIGEN, INC.	2042 CORTE DEL NOGAL STE A	ACTIVE	3841	3841	Surgical & Med Instr & Apparatus	CO	Ind Med	Ind Med	3/10/08			EN
QUALITY AIRCRAFT CARE	2056 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Aircraft Washing	CO	Ind High	Ind High	11/20/07			EN
QUALITY INN & SUITES	751 RAINTREE DR		7011		Hotels And Motels	CO	Comml High					
QUICK SERVICE DISTRIBUTION	1005 CARLSBAD VILLAGE DR STE D1	EXCLUDED	7349	5999	Janitorial and Cleaning Services	CO	Comml High	Comml Low	7/26/06	11/20/07	Reviewed	BV
R.D. BACON CONSTRUCTION	2800 WILSON ST	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			10/04/06	Reviewed	BV
RACCOON ROUNDUP	3812 SIERRA MORENA AVE		7389		Pest Control	HO	Comml High					
RACK CONSTRUCTION & CONSULTING INC	7967 CAMINO ALVARO	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			10/04/06	Reviewed	BA
RALPHS GROCERY COMPANY #175	7140 AVENIDA ENCINAS FRNT	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	2/12/08			BA
RAMIREZ FLOWERS	5600 AVENIDA ENCINAS STE 28	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
RAMOS CONSTRUCTION SERVICE	2358 PIO PICO DR		1521		Building Construction-General Building Contractors	HO	Ind Low					
RANCHO CARLSBAD EQUESTRIAN CENTER	2820 SUNNY CREEK RD	ACTIVE	0752		Boarding and Training Horses	CO	Comml High		2/5/07			AH
RANCHO CARLSBAD GOLF COURSE	5200 EL CAMINO REAL	ACTIVE	7992		Public Golf Courses	CO	Comml High		11/24/04			AH
RANCHO DEL ORO TOWING (CONTRACT SERVICES)	6050 AVENIDA ENCINAS	ACTIVE	7549	7549	Automotive Services	CO	Comml High	Comml High	1/17/08			EN
RANCHO SANTA FE POOL & SPA	5146 WHITMAN WAY APT 213		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
RANCHO SANTA FE POOL & SPA	5146 WHITMAN WAY APT 213	Duplicate	7389	7389	Business Services, Not Elsewhere Classified	HO	Comml High	Comml High		11/20/07	Reviewed	BA
RANDALL INTERNATIONAL	2885 LOKER AVE E	ACTIVE	2844	2844	Perfumes, Cosmetics & Other Toilet Preps	CO	Ind High	Ind High	10/16/07			AH
RAY'S POOL SERVICE	3251 AVENIDA ANACAPA		7389		Business Services, Not Elsewhere Classified	HO	Comml High					

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REBECCA NORMAN INC	2195 FARADAY AVE STE D		3911		No Entry	CO	Ind Med					
RECONSTRUCTION EXPERTS INC	1825 ASTON AVE		1521		Building Construction-General Building Contractors	CO	Comml High					
RED DAHLIA	7740 EL CAMINO REAL STE F	OUT OF BUSINESS	5812	5812	Eating Places	CO	Comml High	Comml High		12/24/07	Site Visit	BA
REDLAND CLAY TILE	5355 AVENIDA ENCINAS STE 208A	ACTIVE	5032		Tile Cutting	CO	Comml High			09/28/05	Reviewed	EN
REEF CONCRETE	3646 CHESHIRE AV	ACTIVE	1771		Concrete	HO	Comml High			10/04/06	Phone	BV
REFLEX CORPORATION	1825 ASTON AVE	ACTIVE	3199	3199	Leather Goods, Manufacturing	CO	Ind Med	Ind Med	6/26/07	03/10/08	Drive By	AH
REPSHER DRYWALL	4795 NEBLINA DR	ACTIVE	1742		Drywall Contractor	HO	Comml High			10/04/06	Reviewed	AH
RESPIRONICS CALIFORNIA INC.	2271 COSMOS CT	ACTIVE	3842	3842	Orhtopedic, Prosthetic & Surgical Appliances and Supplies	CO	Ind Med	Ind Med	10/11/07			EN
RESTORATION FLOORING	2304 ALTISMA WAY	ACTIVE	7217		Carpet And Upholstery Cleaning	HO	Comml High			06/28/06	Reviewed	BA
RESTORE SOLUTIONS, INC.	2283 COSMOS CT		7349		Building Cleaning And Maintenance Services, Not E	CO	Comml High					
RESURFACING SPECIALISTS, INC.	2956 ROOSEVELT ST STE 5	ACTIVE	1771		Concrete Work	COR	Comml High			06/28/06	Phone	BV
RICE KING	5808 VAN ALLEN WAY # 115	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/20/07			AH
RICHARD L. CHASE CONTRACTING	3147 JEFFERSON ST APT 2	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		10/25/07	Reviewed	AH
RIEKER MACHINE INC.	5674 EL CAMINO REAL STE E		3599		Indus./Commercial Equipment, Not Elsewhere Classi	CO	Ind Med					AH
RIESTERS CARPET SERVICE	3207 AZAHAR PL	ACTIVE	7217		Carpet & Upholstery Cleaning	HO	Comml High			01/31/07	Reviewed	BA
RINCON WEST	411 CHESTNUT AVE APT B		7389		Pool Maintenance	HO	Comml High					
RITE AID #5621	955 TAMARACK AVE	ACTIVE	5912	5912	Drug Stores and Proprietary Stores	CO	Comml High	Comml High	1/23/08			AH
RITE AID #5622	7100 AVENIDA ENCINAS # C	ACTIVE	5912	5912	Drug Stores and Proprietary Stores	CO	Comml High	Comml High	8/20/07	04/30/04	Reviewed	EN
RIVERA'S GARDEN TREASURES	1211 CHESTNUT AVE		181		Ornamental Nursery Products	HO	Comml High					
RIVIERA POOL & SPA SERVICE	2635 MADISON ST APT 10		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
ROB WITTON GENERAL CONTRACTOR	6831 XANA WY	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			10/04/06	Reviewed	BA
ROBERT M. CHAMBERS CONSTRUCTION	2853 CEBU PL		1521		Building Construction-General Building Contractors	HO	Comml High					
ROCKWELL COLLINS OPTRONICS, INC.	2752 LOKER AVE W	ACTIVE	3827		Optical Instruments & Lenses	CO	Ind Med		6/25/07			AH
ROGER ROBERSON CONSTRUCTION	2030 CORDOBA PL	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			10/04/06	Reviewed	AH

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ROMBOTIS BROTHERS CONSTRUCTION	325 CARLSBAD VILLAGE DR STE C2	ACTIVE	1521		Building Construction-General Building Contractors	CO	Ind Low		7/31/06			AH
ROMER, INC.	5145 AVENIDA ENCINAS # I	ACTIVE	5089		Industrial Machinery and Equipment	CO	Ind Low		5/3/06			AH
RORICK BUICK CADILLAC	5334 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		3/1/06			AH
RORY O'NEAL POOL SERVICE	2022 LEE CT	ACTIVE	7389		Pool and Spa Maintenance	HO	Comml High			01/31/07	Phone	AH
ROWLETT'S YARD CARE	3480 ADAMS ST	ACTIVE	0781		Landscape Counseling and Planning	HO	Comml High			06/28/06	Reviewed	AH
RUBIO'S BAJA GRILL	2604 EL CAMINO REAL # A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/27/07			BV
RUBIO'S BAJA GRILL	5620 PASEO DEL NORTE STE 128	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/8/07			AH
RUB-KRETE	7331 ALICANTE RD APT C	ACTIVE	1771		Concrete Contractor	HO	Comml High			06/28/06	Reviewed	BA
RUBYS DINER, CARLSBAD	5630 PASEO DEL NORTE STE 128D	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/8/07			AH
RUDVALIS ORCHIDS	6595 BLACK RAIL RD	ACTIVE	0182		Ornamental Floriculture & Nursery Products	CO	Comml High		1/25/07			BA
RUSTY JOHNSON CONSTRUCTION	5316 FORECASTLE CT		1521		Building Construction-General Building Contractors	HO	Comml High					
S&E SERGIO WHOLESALE FLOWERS	5600 AVENIDA ENCINAS STE 31	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
S.P. WHITE CONSTRUCTION, INC.	5937 DARWIN CT # 100	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High	1/9/08			AH
S.S. SMITH CO.	1743 MALLOW CT	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			06/29/07	Reviewed	BA
SABRE SCIENCES, INC.	2233 FARADAY AVE STE K	ACTIVE	2844		Perfumes, Cosmetics, & Other Toilet Preparations	CO	Ind Med		8/8/06			AH
SAFELITE AUTO GLASS	1060 AUTO CENTER CT STE I	ACTIVE	7536	7536	Automotive Glass Replace Shops	CO	Comml High	Comml High	1/11/08			AH
SAGE RESEARCH LLC	4909 REFUGIO AVE	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			06/28/06	Reviewed	AH
SAMMYS WOODFIRED PIZZA	5970 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/28/07			AH
SAN DIEGO FLORIST SUPPLIES INC.	5600 AVENIDA ENCINAS STE 1	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
SAN DIEGO INTERNATIONAL FLORAL TRADE CENTER	5600 AVENIDA ENCINAS STE 126	ACTIVE	6531	6531	Operators of Non-residential Buildings	CO	Comml High	Comml High	1/23/08			AH
SAN SAI JAPANESE GRILL	5600 PASEO DEL NORTE STE 115A	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	8/8/07	08/04/04	Reviewed	AH
SANTORINI GREEK ISLAND GRILL	5812 VAN ALLEN WAY # 125	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/20/07			AH
SCHMUCKLE PAINTING INC	6084 CORTE DEL CEDRO # 100		1721		Painting And Paper Hanging	CO	Comml High					
SCHROEDER CONSTRUCTION & DEV	2691 STATE ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	CO	Ind Low	Comml High	1/28/08	06/28/06	Reviewed	BV
SCHUMACHER CO. (AIR PRODUCTS AND CHEMICALS)	1969 PALOMAR OAKS WAY	ACTIVE	2899	2899	Chemicals and Chemical Preparations, NEC	CO	Ind High	Ind High	12/10/07			EN

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SCHUMACHER CO. (AIR PRODUCTS AND CHEMICALS)	1979 PALOMAR OAKS WAY	ACTIVE	2899	2899	General Warehousing	CO	Ind Med	Ind Med	12/10/07			EN
SCOTT D PACKARD CONSTRUCTION	4620 TRIESTE DR		1521		Building Construction-General Building Contractors	HO	Comml High					
SCOTT GUENDERT CONSTRUCTION	7116 AVIARA DR	ACTIVE	1521		General Contractor	HO	Comml High			10/04/06	Reviewed	BA
SCOTT ROGERS POOL SERVICE	2715 MORNING GLORY LN	ACTIVE	7389		Pool Service	HO	Comml High			10/04/06	Reviewed	BV
SCUDELLARO BREAD	2720 LOKER AVE W STE N	ACTIVE	2051		Bread & Other Baker Prods	CO	Ind Med		5/18/06			AH
SD FYXIT	3555 HASTINGS DR		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
SDG&E - C/O SEMPRA ENERGY	5016 CARLSBAD BL	ACTIVE	4932		Gas and Other Services Combined	CO	Ind Low		2/6/07			AH
SEA ALOE, INC.	2794 LOKER AVE W STE 103		5122		Drugs, Drug Proprietaries, And Druggists' Sundrie	CO	Ind Low					
SEA BRIGHT COMPANY, THE	4322 SEA BRIGHT PL	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			10/04/06	Reviewed	AH
SEACREST KENNELS	7250 PONTO DR	ACTIVE	0752	0752	Animal Specialty Services, Except Veterinary	CO	Comml High	Comml High	1/8/08			BA
SEARS CONSTRUCTION CO	1387 CYNTHIA LN	Duplicate	1521	1521	Building Construction-General Building Contractors	HO	Comml High	Comml High		08/24/2007	Reviewed	BV
SEARS CONSTRUCTION CO.	1387 CYNTHIA LN	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			10/04/06	Reviewed	BV
SEARS ROEBUCK & COMPANY	2561 EL CAMINO REAL	ACTIVE	5311	5311	General Merchandise Stores	CO	Comml High	Comml High	1/4/08			BV
SEASIDE FARMS (YADA FARMS)	2928 VALLEY ST	ACTIVE	0181		Ornamental Floriculture	CO	Comml High		7/18/06			BV
SELECT CABINETRY & FURNITURE MFG BY DESIGN	2270 CAMINO VIDA ROBLE STE T	Duplicate	2511	2511	Wood Household Furniture	CO	Ind Med	Ind Med		01/09/08	Site Visit	EN
SELECT CABINETS AND FURNITURE MFG.	2270 CAMINO VIDA ROBLE STE T	ACTIVE	2521	2521	Wholesale Furniture and Cabinet Maker	CO	Ind Med	Ind Med	1/9/08			EN
SELECT MOBILE DETAILING	3533 ROCK RIDGE RD		7542		Carwashes	HO	Comml High					
SELECT SUPPLEMENTS INC	5800 NEWTON DR	ACTIVE	2023		Dry, Condensed, Evaporated Dairy Products	CO	Ind Med		6/25/07			AH
SELTZER COMPANIES INC	5920 PASTEUR CT # B		5169		Chemicals And Allied Products, Not Elsewhere Clas	CO	Ind Low					
SELTZER NUTRITIONAL TECHNOLOGY	2840 LOKER AV EAST #101	ACTIVE	2833		Manufacturer of Nutritional Supplements	CO	Ind Med		7/26/06			AH
SENDX MEDICAL, INC.	1945 PALOMAR OAKS WAY	ACTIVE	3841		Surgical and medical apparatus	CO	Ind Med		6/25/07			EN
SETH HOENIG	2714 MADISON ST	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			10/04/06	Reviewed	BV
SEVERINO CONSTRUCTION	2395 PIO PICO DR	ACTIVE	1521		Building Construction-General Building Contractors	CO	Comml High			10/04/06	Reviewed	BV
SHAFFER CONSTRUCTION	6712 WHITESAIL ST	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			10/04/06	Reviewed	EN

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SHAMROCK POOL SERVICE	2706 GALICIA WAY	ACTIVE	7389		Business Services, Not Elsewhere Classified	HO	Comml High			10/04/06	Reviewed	BA
SHARPER IMAGE DETAILING	5508 FOXTAIL LOOP		7542		Carwashes	HO	Comml High					
SHAWS AUTOSPORT LTD	2531 STATE ST # E	ACTIVE	7538		General Automotive Repair Shops	CO	Comml High		4/19/06			BV
SHEICO (SGCA) USA	6150 A CORTE DEL CEDRO	ACTIVE	2389		Apparel & Accessories, NEC	CO	Ind Med		6/26/07	02/12/04	Reviewed	EN
SHEILD X	6965 EL CAMINO REAL STE 104	ACTIVE	5963		Direct Selling	HO	Comml High			03/31/06	Phone	BA
SHORE LINE GRAFIX, INC.	5245 AVENIDA ENCINAS STE C	ACTIVE	2759		Commercial Printing, NEC	CO	Ind Med		7/24/06			AH
SHORELINE POOL SERVICES	6527 CAMINO DEL PARQUE	ACTIVE	7389		Business Services, NEC	HO	Comml High			10/04/06	Reviewed	BA
SIERRA CASCADE CONCRETE COMPANY	2382 CAMINO VIDA ROBLE STE L	ACTIVE	1771		Concrete Contractor	CO	Comml High			10/04/06	Reviewed	EN
SIERRA WIRELESS	2290 COSMOS CT	ACTIVE	8731		Research, Development, And Testing Services	CO	Ind Low		4/19/06			EN
SIGNATURE SCAPES	4004 SKYLINE RD		1521		Building Construction-General Building Contractors	HO	Comml High					
SIGNS ON TIME	5670 EL CAMINO REAL STE K	ACTIVE	3993	3993	Sign Making & Painting	CO	Ind Med	Ind Med	8/21/07	02/12/04	Reviewed	AH
SIMPLY WINDOWS	2601 STATE ST	OUT OF BUSINESS	5211	5211	Lumber And Other Building Materials Dealers	COR	Comml High	Comml High		02/05/08	Reviewed	BV
SIR SPEEDY PRINTING CENTER	2227 FARADAY AVE STE A	ACTIVE	2759		Commercial Printing, NEC	CO	Ind Med		5/22/06			AH
SMART & FINAL IRIS CO #339	2618 EL CAMINO REAL	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	1/17/08			BV
SNA LANDSCAPING/DESIGN	3574 HARWICH DR	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			10/04/06	Reviewed	BV
SNUG HARBOR INC/CAL WATER SPORTS	4215 HARRISON ST	ACTIVE	7999		Amusement & Recreation Svcs, NEC	CO	Comml High		6/23/05			AH
SO CAL CURB & ADDRESS PAINTING	2740 CIRCULO SANTIAGO APT A		7389		Business Services, Not Elsewhere Classified	HO	Comml High					
SO CAL STONE CREATIONS	4215 HARRISON ST		7336		Commercial Art And Graphic Design	HO	Comml High					
SO. CAL. SPA & SPA TECH SUPPLY	1445 FOREST AVE		7389		Women's Children's, And Infants' Clothing And Acc	HO	Comml High					
SOIL RETENTION SYSTEMS INC	2501 STATE ST	ACTIVE	1500	1521	Building Construction-General Building Contractors	COR	Ind Low	Comml High		12/21/07	Phone	BV
SOMARC CONSTRUCTION	2417 APPIAN RD	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			10/04/06	Reviewed	AH
SONARTEC	1939 PALOMAR OAKS WY	ACTIVE	5091		Sporting And Recreational Goods & Supplies	CO	Ind Low		5/22/06			EN
SONOMA VALLEY MARKET	300 CARLBSAD VILLAGE DR STE 107	OUT OF BUSINESS	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High		08/20/07	Drive By	AH
SOUPLANTATION	1860 MARRON RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/19/07	04/30/04	Reviewed	BV
SOUTH COAST CARPET CLEANING	961 MELALEUCA AVE APT J	ACTIVE	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		11/20/2007	Phone	BA
SPECIALTY CONSTRUCTION	3528 CORTE DELFINIO	ACTIVE	1521	1521	Building Construction-General Building Contractors	HO	Ind Low	Comml High		12/21/07	Phone	BA
SPECTRUM MARKETING, LLC	2796 LOKER AVE W STE 100	ACTIVE	2759	2759	Commercial Printing	CO	Ind Med	Ind Med	1/16/08			AH

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SPIRITO'S PIZZA BY THE SLICE	5812 VAN ALLEN WAY # 130	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/20/07			AH
SPORTS GIANT LLC	5928 FARNSWORTH CT	ACTIVE	5941		Sporting Goods Stores And Bicycle Shops	CO	Ind Low		4/26/06			AH
SQUADRA, INC.	2077 LAS PALMAS DR	ACTIVE	2389	2389	Manufacturing Apparel Accessories	CO	Ind Med	Ind Med	3/10/08			EN
SQUID JOES	850 TAMARACK AVE	OUT OF BUSINESS	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	5/4/07	01/02/08	Reviewed	AH
STAINED GLASS OVERLAY	2579 STATE ST	ACTIVE	3231	3231	Stained Glass Design	CO	Ind Med	Ind Med	2/26/08			BV
STANDARD FILTER CORPORATION	5928 BALFOUR CT	ACTIVE	3564		Purification & Dust Collection Equipment	CO	Ind Med		8/8/06			AH
STAPLES THE OFFICE SUPERSTORE	2712 LOKER AVE W		5943		Stationery Stores	CO	Comml High					
STARBUCKS COFFEE # 10851	2708 LOKER AVE W # 100		5812		Eating Places	CO	Comml High					
STARBUCKS COFFEE #5363	2924 CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/27/07			BV
STEAM KING	1290 LAS FLORES DR	ACTIVE	7217		Carpet & Upholstery Cleaning	HO	Comml High			10/04/06	Reviewed	BV
STEICO INDUSTRIES INC.	2081 LAS PALMAS DR	MOVED	3728	3728	Aircraft Parts and Auxilliary Equipment, NEC	CO	Ind Med	Ind Med	7/24/06	03/10/08	Drive By	EN
STEROGENE BIOSEPARATIONS, INC.	5922 FARNSWORTH CT	ACTIVE	2836		Biological Research	CO	Ind Med		3/23/06	08/27/03	Reviewed	AH
STILLMAN HEATING & AIR CONDITIONING	7200 PONTO DR # A	ACTIVE	1711		HVAC Contractor	CO	Comml High		8/8/06	06/20/06	Reviewed	BA
STONE IMAGERY	3546 HIGHLAND DR	ACTIVE	1741		Stone Work	HO	Comml High			09/07/06	Phone	BV
STREIGHT MOTORCYCLES, INC.	6108 AVENIDA ENCINAS STE A		3751		Motorcycles, Bicycles, And Parts	CO	Ind Med					
SUBMARINA CARLSBAD	300 CARLSBAD VILLAGE DR STE 201A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/20/07			BV
SUBMARINA CARLSBAD FOOD COURT	5812 VAN ALLEN WAY # 120	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/20/07			AH
SUBWAY	7110 AVENIDA ENCINAS STE 100	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/2/08			BA
SUBWAY #4584	6020 PASEO DEL NORTE STE A	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/5/07			EN
SUN PACIFIC DEVELOPMENT, INC.	3900 1/2 GARFIELD ST		1521		Building Construction-General Building Contractors	HO	Ind Low					BV
SUNNY FRESH CLEANERS	7040 AVENIDA ENCINAS STE 112	ACTIVE	7216		Dry Cleaner	CO	Comml High			08/31/05	Reviewed	BA
SUNRISE WHOLESALE	5600 AVENIDA ENCINAS STE 36	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
SUNSHINE LDSCP&GARDEN SERVICE	4008 GARFIELD ST	ACTIVE	0782		Landscaper	HO	Comml High			01/12/06	Reviewed	AH
SUPER CAFE	1854 MARRON RD # 104	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/19/07			BV
SUPER DONUTS	590 GRAND AVE	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/13/07			BV
SUPERIOR RESTORATION	3957 JEFFERSON ST	ACTIVE	1799		Special Trade Contractor	HO	Comml High			05/19/06	Reviewed	BV
SURF BROTHERS TERIYAKI	2708 LOKER AVE W # 103	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/12/07			AH
SURYA INC	6205 EL CAMINO REAL	ACTIVE	5137		Women's Children's, And Infants' Clothing And Acc	CO	Ind Low		5/10/06			EN

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SUSHI FIX	7720 EL CAMINO REAL STE B	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	12/31/07	04/26/05	Phone	BA
SUSHI ON THE ROCK	1923 CALLE BARCELONA, STE 148	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/26/07			BA
SUSHI TAISHO	300 CARLSBAD VILLAGE DR STE 214	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/20/07			BV
SWARTZY'S CARPET CARE	515 CARLSBAD VILLAGE DR		7217		Carpet And Upholstery Cleaning	HO	Comml High					
SWIM CITY, INC.	3191 SEABURY ST	ACTIVE	7389		Business Services, Not Elsewhere Classified	HO	Comml High			10/02/06	Reviewed	BA
SYNERGEYES, INC.	2232 RUTHERFORD RD		3851		Ophthalmic Goods	CO	Ind Med					
SYNERGYEYES (NEW NAME QUARTER LAMBDA TECHNOLOGIES, INC.)	1926 KELLOGG AVE # 100		3851		Ophthalmic Goods	CO	Ind Med					
SYNTRON BIORESEARCH, INC.	2774 LOKER AVE W	ACTIVE	2835		In Vitro & In Vitro Diagnostics	CO	Ind Med		1/31/07			AH
SYSTEMS, MACHINES, AUTOMATION COMPONENTS CO	1695 FARADAY AV	ACTIVE	3599	3599	Indus/Commercial Establishments	CO	Ind Med	Ind Med	3/10/08			AH
SYSTEMS, MACHINES, AUTOMATION COMPONENTS CO.	5807 VAN ALLEN WAY	ACTIVE	3599	3599	Ind & Comml Machinery & Equip, NEC	CO	Ind Med	Inc M	3/10/08			AH
T REX CONSTRUCTION	2791 VISTA DEL ORO		1521		Building Construction-General Building Contractors	HO	Ind Low					
TABATA FARMS	6503 EL CAMINO REAL	OUT OF BUSINESS	0291	291	Agriculture	CO	Comml High	Comml High	1/31/05	01/16/08	Drive By	BA
TACO BELL 2773	2525 EL CAMINO REAL STE 131	OUT OF BUSINESS	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	11/3/06	01/08/08	Reviewed	BV
TACO BELL/JODIKA ENTERPRISES	6017 PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/5/07			EN
TAMARACK 76	895 TAMARACK AVE	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		5/15/06			AH
TAMARACK POOL CENTER	2399 APPIAN RD	ACTIVE	1799		Swimming Pool Construction & Contractors	HO	Comml High			10/04/06	Reviewed	BV
TAMARACK ST EXXON	945 TAMARACK AVE	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	2/20/08			AH
TAPPER DEVELOPMENT	2551 STATE ST STE 225	ACTIVE	1521		General Contractor	CO	Comml High			10/06/06	Reviewed	AH
TARGET FRAMING INC	390 OAK AV STE E	ACTIVE	1751		Framing Contractor	CO	Ind Low			10/06/06	Reviewed	BV
TAYAMA GREENHOUSES, INC.	5600 AVENIDA ENCINAS STE 6	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
TAYLOR MADE GOLF COMPANY INC	4155 SALK AV	ACTIVE	7999		Amusement and Recreation Services	CO	Comml High		11/9/06	05/23/05	Drive By	AH
TAYLOR MADE GOLF COMPANY INC	5545 FERMI CT	ACTIVE	3949		Sporting and Athletic Goods, NEC	CO	Ind Med		11/9/06			AH
TELEDYNE KW MICROWAVE CORP	1985 PALOMAR OAKS WY	ACTIVE	3674		Semiconductors and Related Devices	CO	Ind Med		7/18/06			EN
TERMINIX INTERNATIONAL	6350 YARROW DR STE A	ACTIVE	7342		Disinfecting & Pest Control Svcs	CO	Comml High		2/1/07			EN
TGI FRIDAY'S	850 PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/28/07			EN
THAT PIZZA PLACE	2622 EL CAMINO REAL # B	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/18/07			BV
THE FORUM	1935 CALLE BARCELONA STE 137	ACTIVE	6512	6512	Retail Shopping Center	CO	Comml High	Comml High	11/26/07			BA
THE WINE SPOT	2801 ROOSEVELT ST # A		5813		Drinking Places (Alcoholic Beverages)	COR	Comml High					

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THE WOOD WIZARD	6353 EL CAMINO REAL STE G		2511		Construction-Special Trade Contractors	CO	Ind Med					
THERA LIGHT, INC.	2794 LOKER AVE W STE 105	ACTIVE	3841		Surgical & Med Instr & Apparatus	CO	Ind Med		5/10/06			AH
THREADS	5814 VAN ALLEN WAY STE 145		7219		Laundry And Garment Services, Not Elsewhere Class	CO	Comml High					
TIME WARNER CABLE	5720 EL CAMINO REAL	ACTIVE	4841	4841	Cable Provider	CO	Ind Low	Ind Low	1/9/08			AH
TIMELY MEDICAL INNOVATIONS LLC.	5365 AVENIDA ENCINAS STE F		3851		Ophthalmic Goods	CO	Ind Med					
TIP TOP MEATS & EUROPEAN DELI	6118 PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/8/07			EN
TODD'S TINT SHOP (DENTWORKS)	1060 AUTO CENTER CT STE N	ACTIVE	7538	7538	General Automotive Repair Shops	CO	Comml High	Comml High	1/11/08			AH
TOGOs EATERY	6971 EL CAMINO REAL STE 201	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/6/07			BA
TOM GIBLINS IRISH PUB	640 GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	1/3/08			BV
TOM T HONDA	1565 CHESTNUT AVE	ACTIVE	0781		Landscape Maintenance	HO	Comml High			09/20/06	Reviewed	AH
TOMMY V'S	7670 EL CAMINO REAL # 104	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	9/19/07			BA
TOMMY'S PLUMBING	7926 LA CAPELA LN	ACTIVE	1711		Plumbing, Heating, Air-Conditioning	HO	Comml High			01/31/07	Phone	BA
TOO TALL HANDYMAN AND WINDOW CLEANING	2561 NAVARRA DR UNIT A		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
TOP OF THE BAGEL	2540 EL CAMINO RL STE E	ACTIVE	5461	5461	Bagel Shop	CO	Comml High	Comml High	12/31/07			BA
TOP OF THE BAGEL	6955 EL CAMINO RL STE 105	OUT OF BUSINESS	5461	5461	Bakery and Food Establishment	CO	Comml High	Comml High	3/13/06	12/31/07	Reviewed	BA
TOYOTA CARLSBAD	5434 PASEO DEL NORTE		5511		Motor Vehicle Dealers (New And Used)	CO	Comml High					
TOYOTA CARLSBAD USED CAR DEPT.	5124 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		2/15/05			AH
TOYOTA OF CARLSBAD	6030 AVENIDA ENCINAS	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		3/28/06			EN
TOYOTA-CARLSBAD	5424 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		2/15/05			AH
TRADE PRINTING SERVICES, LLC	2080 LAS PALMAS DR	ACTIVE	2752	2752	Commercial Printing, Lithographic	CO	Ind Med	Ind Med	3/10/08			EN
TRICOR COMMERCIAL CLEANING	2471 UNICORNIO ST		7349		Building Cleaning And Maintenance Services, Not E	HO	Comml High					
TRICOR COMMERCIAL CLEANING	2471 UNICORNIO ST	DUPLICATE	7349	7349	Building Cleaning And Maintenance Services, Not E	HO	Comml High	Comml High		09/25/07	Reviewed	
TRINAMIC MOBILE TRUCK SERVICES	3293 ROOSEVELT ST	ACTIVE	7538		General Automotive Repair Shops	COR	Comml High			09/20/06	Reviewed	BV
TRUE BLUE POOLS	5355 AVENIDA ENCINAS		1700		Construction-Special Trade Contractors	CO	Comml High					
TRUNK-IT, LLC	5924 BALFOUR CT # 101		4214		Local Trucking With Storage	CO	Ind Med					
TURNER CONSTRUCTION	3197 JAMES DR	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			09/20/06	Reviewed	BV

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TUSCANY RESTAURANT	6981 EL CAMINO REAL STE 103	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	9/6/07			BA
TUTULI FLORAL	5600 AVENIDA ENCINAS STE 127	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
TWINS FLOWER GROWER AND SUPPLIES	5600 AVENIDA ENCINAS STE 42	ACTIVE	5193	5193	Wholesale Floral	CO	Comml High	Comml High	1/23/08			AH
U-HAUL CO OF CALIFORNIA	6175 PASEO DEL NORTE	ACTIVE	4225		General Warehousing & Storage	CO	Ind Med		5/15/06			EN
ULTIMATE OUTDOOR ENVIRONMENTS	3459 CORTE BREZO		1521		Building Construction-General Building Contractors	HO	Comml High					
UNIQUE WHOLESALE FLOWERS, INC.	5600 AVENIDA ENCINAS STE 25	EXCLUDED	5193	5193	Flowers, Nursery Stock, And Florists' Supplies	CO	Comml High	Comml High	1/23/08			AH
UPSTAIRS/DOWNSTAIRS CARPET&CLEAN SERVICE	3465 CAMINO VALENCIA	ACTIVE	7217		Carpet & Upholstery Cleaning	HO	Comml High			09/22/06	Reviewed	BA
US LOGIC	2720 LOKER AVE W STE M	ACTIVE	3575		Computer Terminals	CO	Ind Med		6/26/07			AH
US MICROBICS, INC.	6451 C EL CAMINO REAL	ACTIVE	5049		Professional Equipment - Wholesale	CO	Ind Low		1/30/06	02/13/04	Reviewed	BA
VALDIVIA FARMS	4914 EL CAMINO REAL	ACTIVE	0181	0181	Crop Production	CO	Comml High	Comml High	1/23/08	09/20/06	Drive By	AH
VAN HEFLIN GENERAL CONTRACTOR	2932 AVENIDA VALERA		1500		Building Construction-General Building Contractors	HO	Ind Low					
VAN-GO BUILDERS	2175 CHESTNUT AV	ACTIVE	1521		Building Construction-General Building Contractors	HO	Comml High			09/07/06	Reviewed	AH
VANGUARD INDUSTRIES WEST INC	2440 IMPALA DR	ACTIVE	5136	5136	Apparel, Piece Goods, Notions	CO	Ind Low	Ind Low	1/16/08	03/08/04	Reviewed	AH
VASQUEZ FLORAL	5600 AVENIDA ENCINAS STE 21	EXCLUDED	5193	5193	Flowers, Nursery Stock, Supplies	CO	Comml High	Comml High	1/23/08			AH
VERTICAL MASONRY, INC.	2722 LOKER AVE W STE A	MOVED	1741	1741	Masonry Contractor	CO	Comml High	Comml High	5/22/06	01/16/08	Drive By	AH
VIASAT INC	6155 EL CAMINO REAL	ACTIVE	8721		Commercial Physical & Biological Research	CO	Ind Low		5/10/06			EN
VIASAT INC	6161 EL CAMINO REAL	ACTIVE	8731		Research, computer Repair	CO	Ind Low		5/10/06			EN
VIASAT INC	6167 EL CAMINO REAL	ACTIVE	3577		Research & Manufacturing	CO	Ind Med		5/10/06			EN
VIASAT, INC	5791 VAN ALLEN WAY	ACTIVE	8731		Research, Develop, + Testing Services	CO	Ind Low		5/10/06			AH
VIASAT, INC.	6183 EL CAMINO REAL BLDG 5		873		Research, Development, And Testing Services	CO	Ind Low					
VIASAT, INC.	6191 EL CAMINO REAL		8731		Research, Development, And Testing Services	CO	Ind Low					
VIGILUCCIS CUCINA ITALIANA	2943 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	8/20/07			BV
VIGILUCCI'S SEAFOOD & STEAK HOUSE	3878 CARLSBAD BLVD	ACTIVE	5812		Eating & Drinking Places	CO	Comml High		5/18/07			BV
VIKING COMMERICAL CONST.	1825 ASTON AVE		1521		Building Construction-General Building Contractors	CO	Ind Low					AH
VILLAGE 76-CAR WASH	880 CARLSBAD VILLAGE DR	ACTIVE	5541		Gasoline Service Stations	CO	Comml High		4/5/06			BV
VILLAGE FAIRE (SIMA VILLAGE FAIRE)	300 CARLSBAD VILLAGE DR STE 200	ACTIVE	6512	5812	Operators of Nonresidential Buildings	CO	Comml High	Comml High	12/20/07			BV
VILLAGE GRILLE, THE	2833 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	12/13/07			BV

Inventory List
July 1, 2007 - March 23, 2008
Order 2001-01

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTVITY DATE	ACTIVITY TYPE	Drainage Basin
VILLAGE KITCHEN & PIE SHOPPE, INC.	950 TAMARACK AVE	ACTIVE	5812		Eating & Drinking Places	CO	Comml High		5/4/07			AH
VILLAGE LAWN CARE	2292 AUDEN PL	ACTIVE	0781		Landscaping	HO	Comml High			09/07/06	Reviewed	AH
VILLAGE PUB, THE	2990 STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comm H	1/3/08			BV
VISTA BIOLOGICALS CORP	2120 LAS PALMAS DR STE C	ACTIVE	2836		Biological Products, Except Diagnostic Substances	CO	Ind Med		5/10/06			EN
VONS GROCERY COMPANY #2065	6951 EL CAMINO REAL	ACTIVE	5411		Grocery Stores	CO	Comml High		5/17/07			BA
VONS GROCERY COMPANY #2142	2560 EL CAMINO REAL	ACTIVE	5411		Grocery Stores	CO	Comml High		4/16/07			BV
VONS GROCERY COMPANY #2165	7710 EL CAMINO REAL	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	2/15/08			BA
VONS GROCERY COMPANY #2343	985 TAMARACK AVE	ACTIVE	5411	5411	Grocery Stores	CO	Comml High	Comml High	1/28/08			AH
W.O.T. MARINE	4747 MARINA DR APT 14		3732		Boat Building And Repairing	HO	Ind Med					
WALBURNS CARPET CARE	2417 LA PLUMA LN	ACTIVE	7217		Carpet & Upholstery Cleaning	HO	Comml High			09/19/06	Reviewed	BA
WASH-ALL	2443 TUTTLE ST	ACTIVE	7349		Powerwash Restaurants, Building Cleaning	HO	Comml High			09/18/06	Phone	AH
WATANABE GARDENING, BILL	2560 GREGORY DR	ACTIVE	0781		Landscape Counseling and Planning	HO	Comml High			09/14/06	Reviewed	BV
WATERFALL AMERICA INC	2253 TIGEREYE PL		1521		Building Construction-General Building Contractors	HO	Comml High					
WAX RESEARCH INC	1965 KELLOGG AVE	ACTIVE	3999	3999	Manufacturer Surf Board Wax	CO	Ind Med	Ind Med	10/16/07			AH
WAX-IT DETAILING	2667 REGENT RD	ACTIVE	7542		Car Washes	HO	Comml High			09/19/06	Reviewed	BA
WAXX IT AUTOMOTIVE DETAILING	5215 CAR COUNTRY DR	ACTIVE	7542		Car Washes	CO	Comml High			09/14/06	Reviewed	AH
WAYNE MINOR LANDSCAPE	3450 DONNA DR		0781		Landscape Counseling And Planning	HO	Comml High					
WCM WASTE & COMPLIANCE MANAGEMENT	6054 CORTE DEL CEDRO		5047		Medical, Dental, And Hospital Equipment & Supplie	CO	Ind Low					
WESELOH CHEVROLET HUMMER	5335 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		11/1/06			AH
WEST BUFFET	2515 EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	CO	Comml High	Comml High	7/13/07			BV
WEST COAST JET SERVICES, LLC	2006 PALOMAR AIRPORT RD STE E	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	CO	Ind High	Ind High	11/20/07			EN
WEST COAST POOLS AND SPAS	2920 LUCIERNAGA ST APT 101		7389		Business Services, Not Elsewhere Classified	HO	Comml High					BA
WEST INN & SUITES, LLC	4970 AVENIDA ENCINAS	ACTIVE	7011	7011	Hotels And Motels	CO	Comml High	Comml High	1/23/08			AH
WEST STEAK SEAFOOD AND SPIRITS	4980 AVENIDA ENCINAS	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	1/2/08			AH
WESTERN FLIGHT, INC.	2208 PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airport Services	CO	Ind High	Ind High	11/20/07			EN
WESTERN FLIGHT, INC.	2210 PALOMAR AIRPORT RD # A	ACTIVE	4581	4581	Airport Services	CO	Ind High	Ind High	11/20/07			EN
WESTERN GARDENS	4616 PANNONIA RD	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			09/14/06	Reviewed	AH

Inventory List
July 1, 2007 - March 23, 2008
Order 2001-01

BUSINESS NAME	BUSINESS SITE ADDRESS	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUS TYPE	BOY CLASS	EOY CLASS	INSPECTION DATE	ACTVITY DATE	ACTIVITY TYPE	Drainage Basin
WESTMART GAS	4990 AVENIDA ENCINAS	ACTIVE	5541	5541	Gasoline Service Stations	CO	Comml High	Comml High	1/23/08			AH
WETZELS PRETZELS	5620 PASEO DEL NORTE STE 122	ACTIVE	5461	5461	Retail Bakeries	CO	Comml High	Comml High	8/8/07			AH
WINGATE & CO INC	4008 1/2 GARFIELD ST	ACTIVE	0782		Landscape Maintenance	HO	Comml High			02/06/07	Reviewed	AH
WITCH CREEK WINERY	2906 CARLSBAD BLVD	ACTIVE	2084		Wines, Brandy & Brandy Spirits	CO	Ind Med		5/3/06			BV
WOOD WIZARD, THE	6353 EL CAMINO REAL	ACTIVE	1751	2511	Carpentry Work	CO	Comml High	Ind Med	8/21/07			EN
WOODWORKS PLUS	6104 AVENIDA ENCINAS # C/D	ACTIVE	2541		Mfg. Cabinets, Lockers, Shelving	CO	Ind Med		5/1/06			EN
WORTHINGTON DODGE OF CARLSBAD (USED)	5548 PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		5/15/06			AH
WORTHINGTON DODGE OF CARLSBAD, INC.	5365 CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	CO	Comml High		5/15/06			AH
WRNT INC	6211 YARROW DR STE E		5093		No Entry	CO	Ind Med					
XNERGY	2237 FARADAY AVE # 100	ACTIVE	1541		Clean Room Construction	CO	Ind Low			09/14/06	Reviewed	AH
YANAGI SUSHI	6986 EL CAMINO REAL STE B	ACTIVE	5812	5812	Women's Children's, And Infants' Clothing And Acc	CO	Comml High	Comml High	12/24/07			BA
YARD FAIRY, THE	6163 PASEO PALERO	ACTIVE	0781		Landscape Counseling And Planning	HO	Comml High			09/14/06	Reviewed	BA
YELLOW COYOTE FOOD CO. LP	1901 CALLE BARCELONA	ACTIVE	5812	5812	Eating Places	CO	Comml High	Comml High	11/26/07			BA
YMCA	401 CHINQUAPIN AV	ACTIVE	7999		Youth Camp	CO	Comml High					AH
YOSHINO	2913 STATE ST	ACTIVE	5812		Eating Places	COR	Comml High		6/27/07			BV
ZEN POOL SERVICE	2894 LANCASTER RD	ACTIVE	7389		Swimming Pool Maintenance	HO	Comml High			09/14/06	Reviewed	AH
ZIMMER DENTAL INC.	1900 ASTON AV	ACTIVE	3848			CO	Ind Med		5/22/06			AH
ZIMMER DENTAL INC.	6221 EL CAMINO REAL	ACTIVE	3848		Manufacture Dental Implants	CO	Ind Med		5/22/06			EN
ZIMMS DETAIL	7546 GIBRALTAR ST APT A		7542		Carwashes	HO	Comml High					

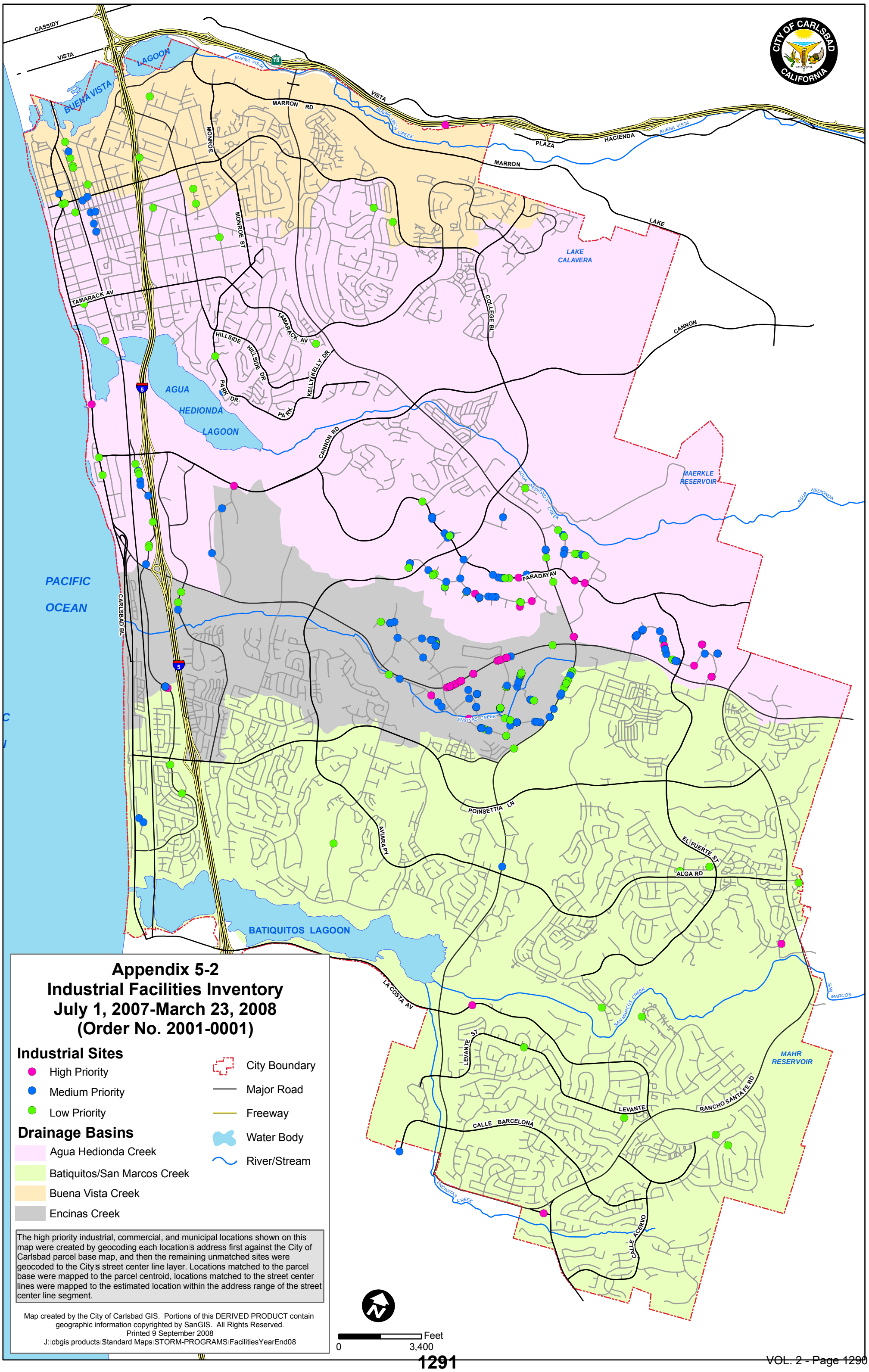
CITY OF CARLSBAD
CALIFORNIA
CASSIDY
VISTA
BUENA VISTA
LAGOON
BUENA VISTA
BUENA VISTA CREEK
MARRON RD
MONROE
MONROE ST
VISTA
PLAZA
HACIENDA
BUENA VISTA
MARRON
LAKE
LAKE CALAVERA
TAMARACK AV
HILLSIDE
HILLSIDE DR
TAMARACK AV
KELLY
KELLY DR
PARK DR
PARK
COLLEGE BL
CANNON
AGUA HEDIONDA LAGOON
CANNON RD
AGUA HEDIONDA CREEK
MAERKLE RESERVOIR
AGUA HEDIONDA
PACIFIC OCEAN
CARLSBAD BL
FARADAY AV
ENCINAS CREEK
POINSETTIA LN
AVIARA PY
EL FUERTE ST
ALGA RD
BATIQUITOS LAGOON
LA COSTA AV
SAN MARCOS CREEK
SAN MARCOS
LEVANTE ST
MAHR RESERVOIR
LEVANTE
RANCHO SANTA FE RD
CALLE BARCELONA
ENCINITAS CREEK
CALLE ACERVO
Appendix 5-2
Industrial Facilities Inventory
July 1, 2007-March 23, 2008
(Order No. 2001-0001)
Industrial Sites
High Priority
Medium Priority
Low Priority
City Boundary
Major Road
Freeway
Water Body
River/Stream
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
The high priority industrial, commercial, and municipal locations shown on this map were created by geocoding each location's address first against the City of Carlsbad parcel base map, and then the remaining unmatched sites were geocoded to the City's street center line layer. Locations matched to the parcel base were mapped to the parcel centroid, locations matched to the street center lines were mapped to the estimated location within the address range of the street center line segment.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
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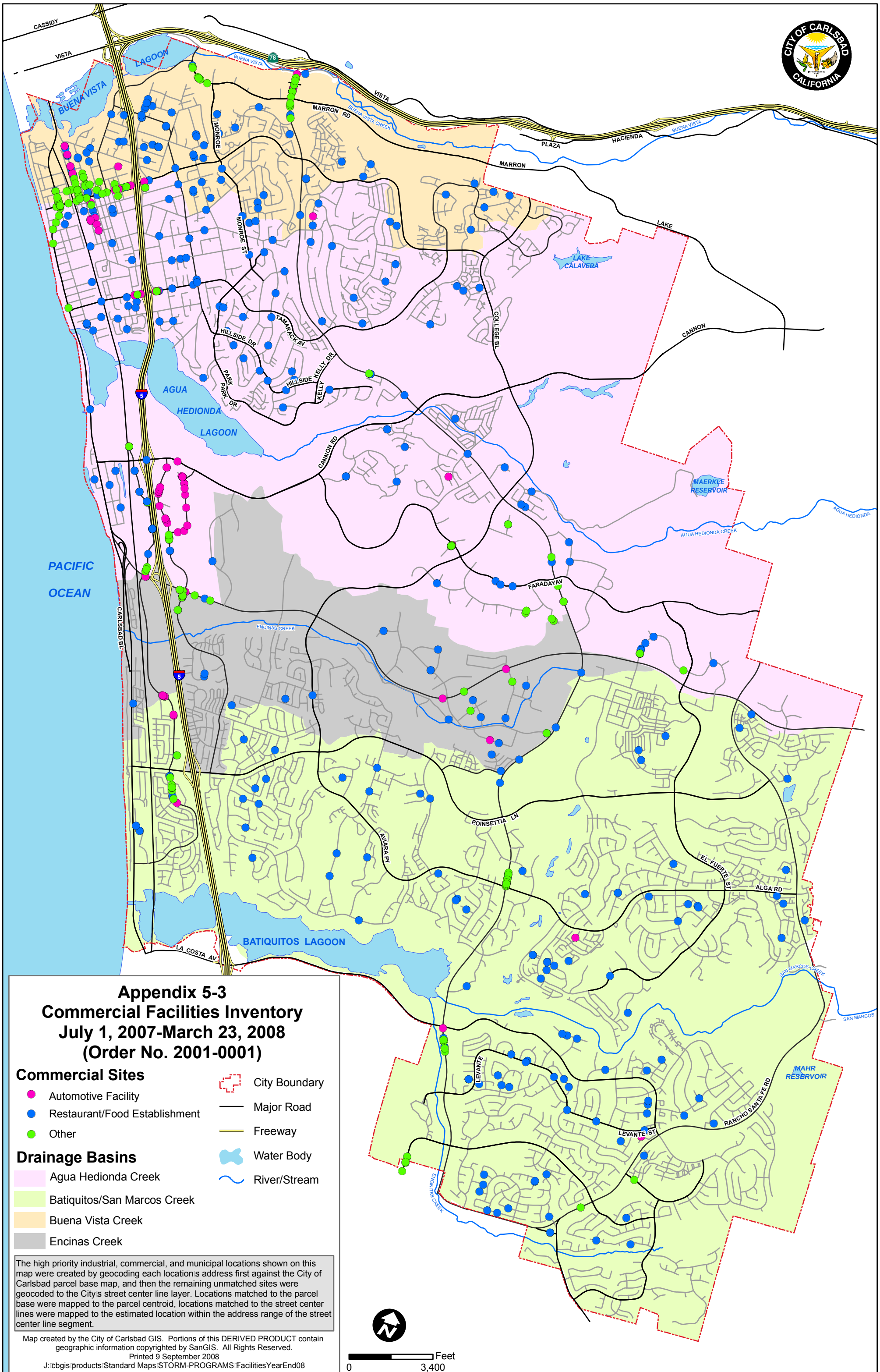
CITY OF CARLSBAD
CALIFORNIA
CASSIDY
VISTA
LAGOON
BUENA VISTA
BUENA VISTA
BUENA VISTA CREEK
78
VISTA
MARRON RD
MONROE
MONROE ST
MARRON
PLAZA
HACIENDA
BUENA VISTA
LAKE
LAKE CALAVERA
COLLEGE BL
CANNON
TAMARACK AV
HILLSIDE DR
HILLSIDE
KELLY DR
KELLY
PARK
PARK DR
AGUA
HEDIONDA
LAGOON
5
CANNON RD
MAERKLE RESERVOIR
AGUA HEDIONDA
AGUA HEDIONDA CREEK
PACIFIC
OCEAN
CARLSBAD BL
FARADAYAV
ENCINAS CREEK
POINSETTIA LN
AVIARA PY
EL FUERTE ST
ALGA RD
BATIQUITOS LAGOON
LA COSTA AV
SAN MARCOS CREEK
SAN MARCOS
LEVANTE
LEVANTE ST
RANCHO SANTA FE RD
MAHR RESERVOIR
ENCINITAS CREEK
Appendix 5-3
Commercial Facilities Inventory
July 1, 2007-March 23, 2008
(Order No. 2001-0001)
Commercial Sites
Automotive Facility
Restaurant/Food Establishment
Other
City Boundary
Major Road
Freeway
Water Body
River/Stream
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
The high priority industrial, commercial, and municipal locations shown on this map were created by geocoding each location's address first against the City of Carlsbad parcel base map, and then the remaining unmatched sites were geocoded to the City's street center line layer. Locations matched to the parcel base were mapped to the parcel centroid, locations matched to the street center lines were mapped to the estimated location within the address range of the street center line segment.
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Printed 9 September 2008
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Carlsbad Conserves

Environmental Programs Newsletter • Summer 2007

Making the Grade

Annual Public Opinion Survey

EACH YEAR THE CITY OF CARLSBAD asks for a report card from its residents. This feedback is collected and analyzed in the annual Public Opinion Survey and used to plan programs within Carlsbad. City officials and staff take the Public Opinion Survey results very seriously.

The most recent Public Opinion Survey was published in early 2007, reflecting data gathered in 2006. Residents were asked questions about how they regularly receive information about City programs and about their knowledge of environmental practices.

Carlsbad Environmental Programs includes storm water protection, solid waste management and water conservation. Each City work area sets benchmarks – a goal to work toward – and measures achievement.

Residents report a high level of satisfaction with the City's Environmental Programs.

Residents are happy with their trash and recycling service

BASED UPON FEEDBACK from the Public Opinion Survey, residents are happy with their trash and recycling service and generally satisfied with the options offered for Household Hazardous Waste (HHW). The rating in the latest survey indicated an 87% satisfaction with trash and an 85% satisfaction with recycling service. HHW disposal service was rated at 66%.

Do you know what to do?

INTERESTING RESULTS gathered from the Public Opinion Survey included City education efforts on storm water protection and water conservation are reaching residents. The disheartening thing is that residents report not changing their behaviors despite knowing how to reduce water pollution.

Results of the survey indicated that 65% of those residents interviewed had seen or heard of how to prevent pollution in our creeks, lagoons and the ocean (up from 58% last year).

Despite almost two-thirds of residents knowing what to do, the survey indicated that the most common answer to the follow-up question of "what have you done to reduce water pollution" was *nothing*!

Storm Drains Are Not Filtered

STORM DRAINS ARE NOT FILTERED or connected to the sewer system; items entering the storm drains will eventually enter the area's waterways. Storm drains are there to prevent flooding and convey rainwater – not other liquids or trash.

What does this mean? Soaps, trash, car fluids, fertilizers and pet waste will eventually pollute our water. You could be swimming in waste!

Steps YOU can take to prevent storm water pollution:

- Wash your car at a professional carwash or on your lawn, not on the streets
- Properly dispose of materials. Storm drains are meant to carry rainwater, not trash
- Spread the word that storm drains are not filtered before delivering water to creeks, lagoons and the ocean
- Ask anyone working for you – landscapers or car detailers – to practice proper waste disposal

Storm Water Protection maintains a hotline to report illegal discharges into the storm drains – when you see it happening please call (706) 602-2799.

If you simply want more information about the storm drain system please call the Environmental Programs hotline at (760) 602-4646.

Water Conservation

Call Carlsbad Environmental Programs for information on ways you can reduce your water usage.

CARLSBAD MUNICIPAL WATER DISTRICT (CMWD) services most of Carlsbad's residents. CMWD is committed to implementing conservation programs that will reduce water demand and lessen our dependency on imported water supplies. These programs can assist you to more efficiently manage your water consumption and are offered free of charge in conjunction with the District's water wholesale suppliers, the Metropolitan Water District.

Vouchers are like coupons that are redeemed at the time of purchase. Items like high-efficiency clothes washers and landscaping controllers are eligible for vouchers. By getting a voucher before you make your purchase, you are guaranteed an immediate discount when you purchase from a participating supplier. Voucher supplies are limited, and are distributed on a first come, first served basis by calling 1-800-986-4538. You must be a Carlsbad Municipal Water District customer to receive vouchers; Olivenhain Water District does not offer the vouchers to its customers (not all Carlsbad residents qualify).

If you are interested in ways you can reduce your water usage, please call Carlsbad Environmental Programs for information. Our Water Conservation Specialist will come to your home or business and perform a thorough indoor/outdoor water survey, including recommendations on water usage improvements for your property. Call (760) 602-4646 to make an appointment for a water use audit.

Household Hazardous Waste Event Results

THE CITY OF CARLSBAD recently held its second annual Special Household Hazardous Waste (HHW) Drop-off Event. The event was free to residents of Carlsbad and offered a disposal method within the City for hazardous items within the typical home. The event, held April 21st, was a huge success. 514 residents came to the event and together those residents disposed of approximately 33 tons of hazardous materials. The total cars more than doubles the total from the previous year (232 to 514) and the material collected more than triples the 2006 total (9 tons to 33 tons). Great job everyone!

The items disposed at the event consisted of paint, used motor oil and filters, electronic waste (TVs and computers), and many other items.

For residents who either missed the event or who have HHW to dispose of throughout the year there are options. First, Carlsbad residents can dispose of HHW for free at either Vista or Oceanside permanent HHW facilities (addresses listed below). Another option is to pay $10 to have Clean Harbors (a City contractor) come to your home and collect your materials. Our next Special HHW Drop Off Event will be in April 2008.

HHW materials cannot be placed in the curbside trash – they require special handling. When transporting HHW the federal government has mandate that no one may transport more than 15 gallons or 125 lbs without a special permit. Please be careful when transporting HHW materials as they have been designated hazardous for a reason!

Oceanside HHW Facility
Free Drop-Off
By Appointment Only
(760) 929-9400
2880 Industry Street • Oceanside
Alternating Saturdays, 9 am-1 pm

Vista HHW Facility
Free Drop-Off
(800) 444-4244
1145 East Taylor Street • Vista
Saturdays, 9 am-3 pm

Door-to-Door
HHW Collection
By Appointment Only
(800) 444-4244
Clean Harbors
$10 copayment per pickup

Bulky Item Appointments Online!

BEGINNING IMMEDIATELY Waste Management and the City of Carlsbad are happy to offer bulky item collection appointments online through the Waste Management website. There will still be an appointment window available to residents to schedule appointments but the online service will add greater convenience – allowing residents to make their own appointment. Simply go to *http://northcounty.wm.com* or *http://www.carlsbadca.gov/waste*. **The next bulky item collection events are September 22nd and November 10th.**

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Carlsbad Conserves

Environmental Programs Newsletter • Fall 2007

Water Conservation Begins At Home

WATER CONSERVATION is an environmental goal at the City of Carlsbad. Conserving water has always been important but never more so than right now. Although we enjoy seven miles of some of California's most beautiful beaches and from many vantage points throughout the City we can look out our windows and see water, we are on the verge of experiencing a water shortage. With the combination of historic dry conditions, limited local water sources and a court order that will reduce water deliveries to our area, we face the very real potential of mandated water restrictions in 2008.

The City's Environmental Programs Division is committed to working together with the citizens of Carlsbad to effectively reduce our water consumption and conserve this precious resource. We encourage you to get involved:

- Take part in the San Diego County Water Authority's 20-Gallon Challenge (*www.20gallonchallenge.com*); see the illustration below for some of the water-saving tips suggested in the Challenge.
- Take advantage of the various vouchers for water-saving products offered to Carlsbad Municipal Water District customers by calling (800) 986-4536.
- Make an appointment for a water use audit offered to District customers to help improve water usage and reduce water waste by calling (760) 602-4646.

YOU are an integral part of the water conservation process and the cost of your participation is nominal. By instituting a few or all of the following daily household conservation actions, see how the potential estimated water savings add up!

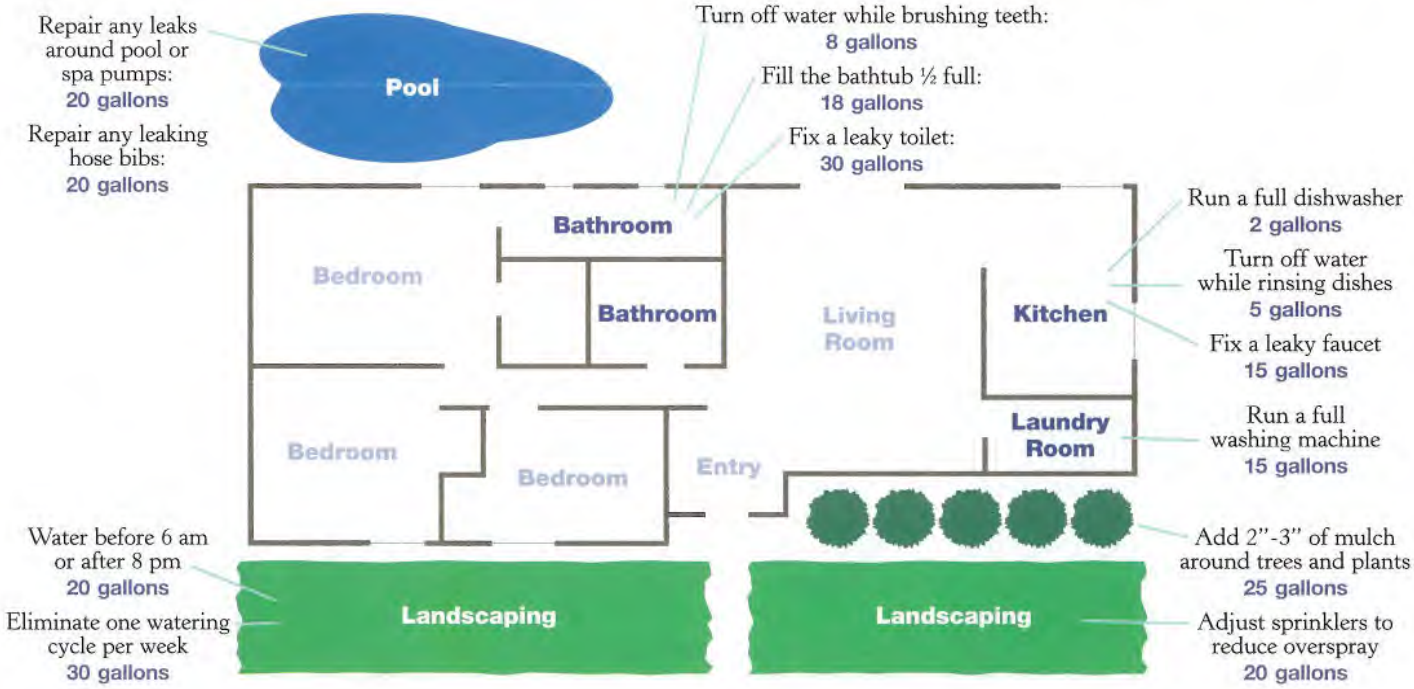

Conserving Water Helps Protect Our Storm Drains

This view brought to you by you.

Carlsbad is a great place to live, thanks to people like you, who show they care about the Earth by taking care of the neighborhood. Please call or visit our website to learn additional ways to keep Carlsbad – and the planet – beautiful.

Neighborly Tips:

- Check for oil leaks frequently and repair immediately to avoid oil spots on driveways and in streets.
- When you change your motor oil, recycle. Used motor oil is the largest source of pollution in our ocean. Carlsbad has three locations for recycling.
- Clean up pet waste from yard, patios, driveways and other hard surfaces frequently and dispose of properly. Never hose pet waste into streets or gutters.
- During pool construction and home remodeling, contain ALL materials and dispose of properly. Materials such as cement, paint, stucco, Gunite, mortar and sediment must not be discharged into storm drains.

MANY WATER CONSERVING ACTIONS also help protect our storm drains which in turn help to keep our creeks, lagoons, and ocean pollution-free. Water traveling through our storm drains does not end up in water treatment plants but goes straight into our bodies of water. Did you know that the majority of water pollution comes from common materials such as oil, fuel, and fluids leaked from cars, soaps from washing our cars, lawn and garden fertilizers, and sediments from a lack of erosion control?

YOU have the power not only to keep our water free from pollution but to reduce water waste by adopting the following procedures and practices:

- Avoid over-irrigating lawns and gardens. Excessive watering washes fertilizers and pesticides into gutters and storm drains AND wastes water.
- Use a broom, not a hose. Rather than hosing off sidewalks, parking areas and garages which forces pollutants into our storm drains AND wastes water, sweep up yard waste and debris and dispose of them in appropriate trash receptacles.
- Rather than washing your car at home take it to a commercial car wash that recycles water. Washing vehicles at home results in soap in our storm drains AND wastes water.

By practicing proper waste disposal you protect and conserve our water – now that's multi-tasking!

Use a broom, not a hose.

Important Dates in 2008

CONSERVING WATER IS VERY IMPORTANT but it's not enough. To keep our environment beautiful and viable for generations to come, we must also dispose of solid waste, bulky items and household hazardous waste properly and recycle when appropriate. Bulky items, such as furniture and appliances, and household hazardous waste, such as paint, oil, fertilizers and other common household items, can NOT be placed in your trash receptacles. Please make note of the following events scheduled in 2008 to help accommodate Carlsbad residents with the proper disposal of these items.

Call Waste Management at (760) 929-9400 or visit their website at *http://northcounty.wm.com* to schedule; limit of 2 bulky items per Carlsbad resident per quarter at no charge.

Bulky Item Dates for 2008

Saturday, January 26th
Appointments accepted January 7-14th

Saturday March 22nd
Appointments accepted March 3-10th

Saturday June 21st
Appointments accepted June 2-9th

Saturday September 20th
Appointments accepted September 1-8th

Saturday, November 8th
Appointments accepted October 20-27th

Contact Waste Management to learn about other options for disposing of bulky items throughout the year or if you are unsure if your household item(s) qualifies.

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CARLSBAD

Community Services Guide

CITY OF CARLSBAD CALIFORNIA

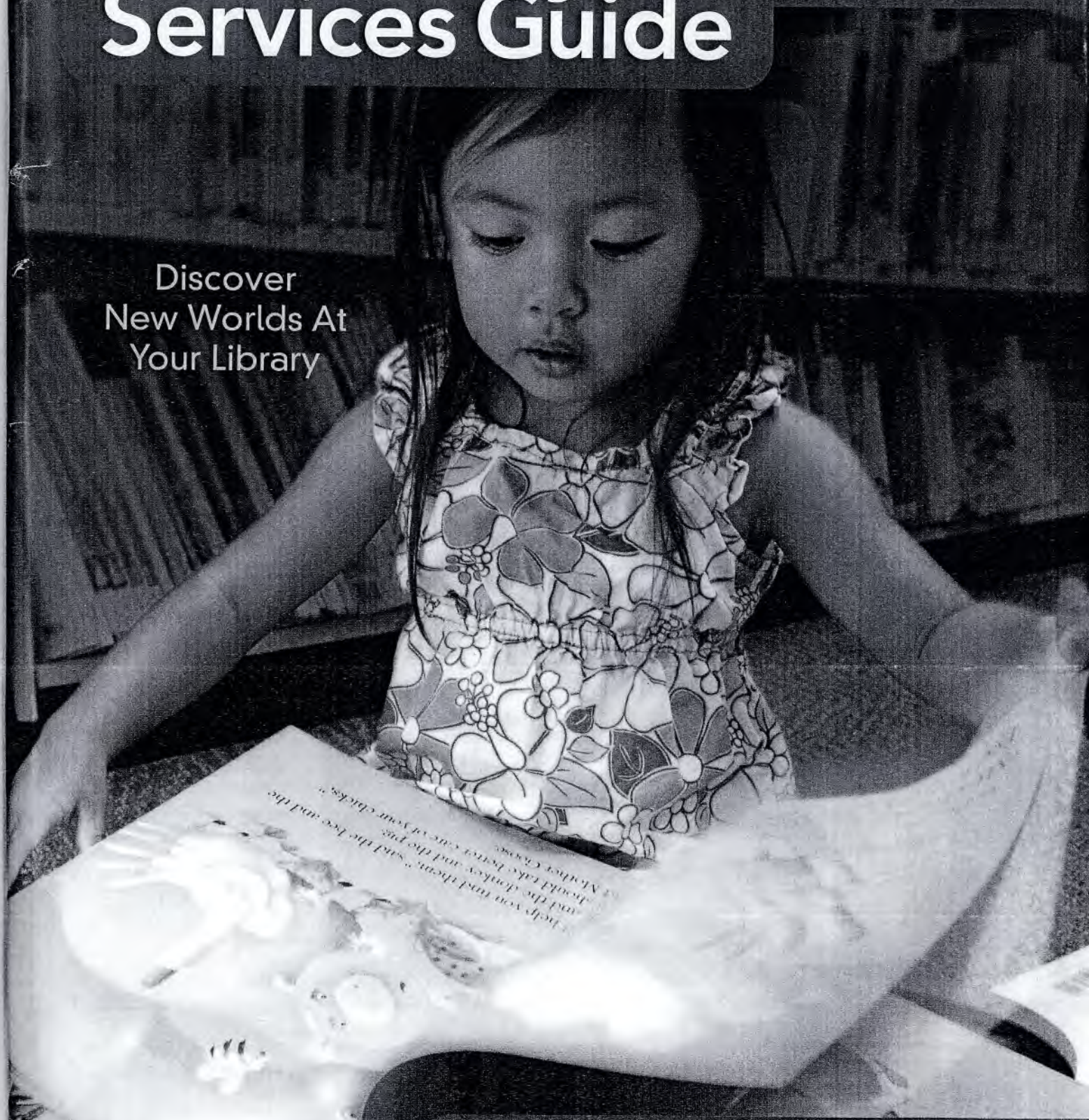

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Winter 2007 - Spring 2008

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Neighborly Tip #4 : Prevent

- Storm drains in the streets lead to creeks, lagoons, and oceans. Don't dump anything into them.
- Use a broom instead of a hose to clean paved surfaces so dirt and other contaminents don't go into drains, including ash from the recent fires.
- Use a drip pan beneath your vehicle if you have leaks or are doing engine work. Recycle used oil.

Recycle Christmas Trees*

Don't let your tree become a fire hazard; recycle your tree – it's easy!

- Remove decorations, lights and tinsel
- Cut tree into four-foot pieces
- Dispose of tree curbside on your scheduled trash day

Trees may also be disposed of at several locations throughout North County. Call Waste Management at 929-9400 or visit *northcountywm.com* for locations.

*Flocked trees are not recyclable

Start Your Spring Cleaning Early: Sign Up for Bulky Item Collection

Has spring cleaning left you with an old bookshelf, refrigerator or mattress that you don't know what to do with? Then Bulky Item Collection is just for you! Call Waste Management at 929-9400 from Jan. 7 to 14 to schedule an appointment for Saturday, Jan. 26. Call from March 3 to 10 to schedule an appointment for Saturday, March 22. Other collection dates will be available later this year and are listed at *www.carlsbadca.gov/waste/bulky.html*.

On your scheduled pick-up date, leave your items curbside by 7 am. There will be no charge for the first two items picked up during these special collection events.

Residents may schedule other pick-up appointments throughout the year for a cost of $35 for the first item and $5 for each additional item.

Keep Hazardous Waste In Its Place

Household hazardous waste (HHW), better known as gasoline, TVs, computers, fertilizers and many other everyday items, cannot be thrown away with your normal trash and recycling. These items contain various substances that are dangerous to humans and the environment. Keep your family and City safe, and use one of these three options to dispose of hazardous waste:

Drop-off HHW at a disposal site:
2880 Industry Street, Oceanside
By appointment only, call 929-9400

1145 East Taylor Street, Vista
Every Saturday (except holiday weekends), call (800) 444-4244

Schedule a door-to-door pick up
Contact Clean Harbors, Inc. (800) 444-4244
$10 co-payment

Attend an annual HHW Collection Event

Visit *www.carlsbadca.gov* and search for "Household Hazardous Waste" to schedule an appointment.

For a complete list of HHW items, visit *www.carlsbadca.gov* and search for "Household Hazardous Waste."

Green Scene: A New Year, A Greener You

Water Conservation: Challenge Yourself

Did YOU take the 20-Gallon Challenge offered by the San Diego County Water Authority? If you registered, congratulations! By adopting lifetime water conservation habits, you benefit not only yourself but also the community and the environment.

Here are some simple steps you can take to meet the 20-Gallon Challenge.

- Run the dishwasher only when it is full – 2 gallons
- Fix a leaky faucet – 15 gallons
- Fix a leaky toilet – 30 gallons
- Water your yard only before 6 am or after 8 pm – 20 gallons
- Install a water-efficient drip irrigation system – 20 gallons
- Install a pool cover to reduce evaporation – 30 gallons

For a complete listing, visit the San Diego County Water Authority Web site at *www.sdcwa.org*.

Storm Water Drains, Only For Rain

Storm drains primarily carry rain water away from developed areas to prevent flooding, and they are not connected to sanitary sewer systems and treatment plants.

Untreated storm water and the pollutants it carries flow directly to creeks, lagoons and the ocean. The majority of water pollution now comes from common, everyday activities performed by all of us.

You can help significantly reduce the amount of harmful substances that travel through our storm drains by adhering to the following:

Pools/Spas

- Clean filters onto dirt areas and not in streets or near storm drains.
- Drain de-chlorinated water only where it will not flow into storm drains; discharge onto a landscaped area or when applicable, to a sanitary sewer clean out.
- Call the Encinas Water Authority at 438-3941 to locate your nearest clean out. For additional guidelines on proper pool/spa draining, check out the California Stormwater Quality Association's Construction Handbook at *www.cabmphandbooks.com/Construction.asp*.

Landscape Maintenance

- Use fertilizers and pesticides sparingly, and dispose of all unused portions at a Household Hazardous Waste collection site.
- Avoid over-irrigation to reduce run-off which washes fertilizers, pesticides and sediment into streets and storm drains.

Car Washes

- When washing your car at home, use soap sparingly. When finished, pour the bucket of soapy water down the sink rather than in the street.
- Better yet, instead of washing your vehicles at home take them to a commercial car wash that re-uses wash water.

Used Motor Oil (the single largest source of oil pollution in water)

- Check frequently for leaks and repair immediately when found to avoid oil drips on driveways and in streets.
- Do not hose off oil spills or leaky spots, which washes these pollutants into our storm drains. Instead, absorb the sites with sand or kitty litter then sweep up and dispose of properly.
- Recycle used motor oil and only purchase recycled ("refined") motor oil. Call 434-2980 for locations and hours of operation of facilities that accept used motor oil.

Pet Waste

- Bring a bag on walks with your pet to collect waste.
- Flush waste down a toilet or place it into a sealed bag and dispose of in a trash receptacle.

Always remember – THINK then ACT when caring for our environment!

1635 Faraday Avenue
Carlsbad, CA 92008
(760) 602 - 4646

5960 El Camino Real
Carlsbad, CA 92008
(760) 929-9400

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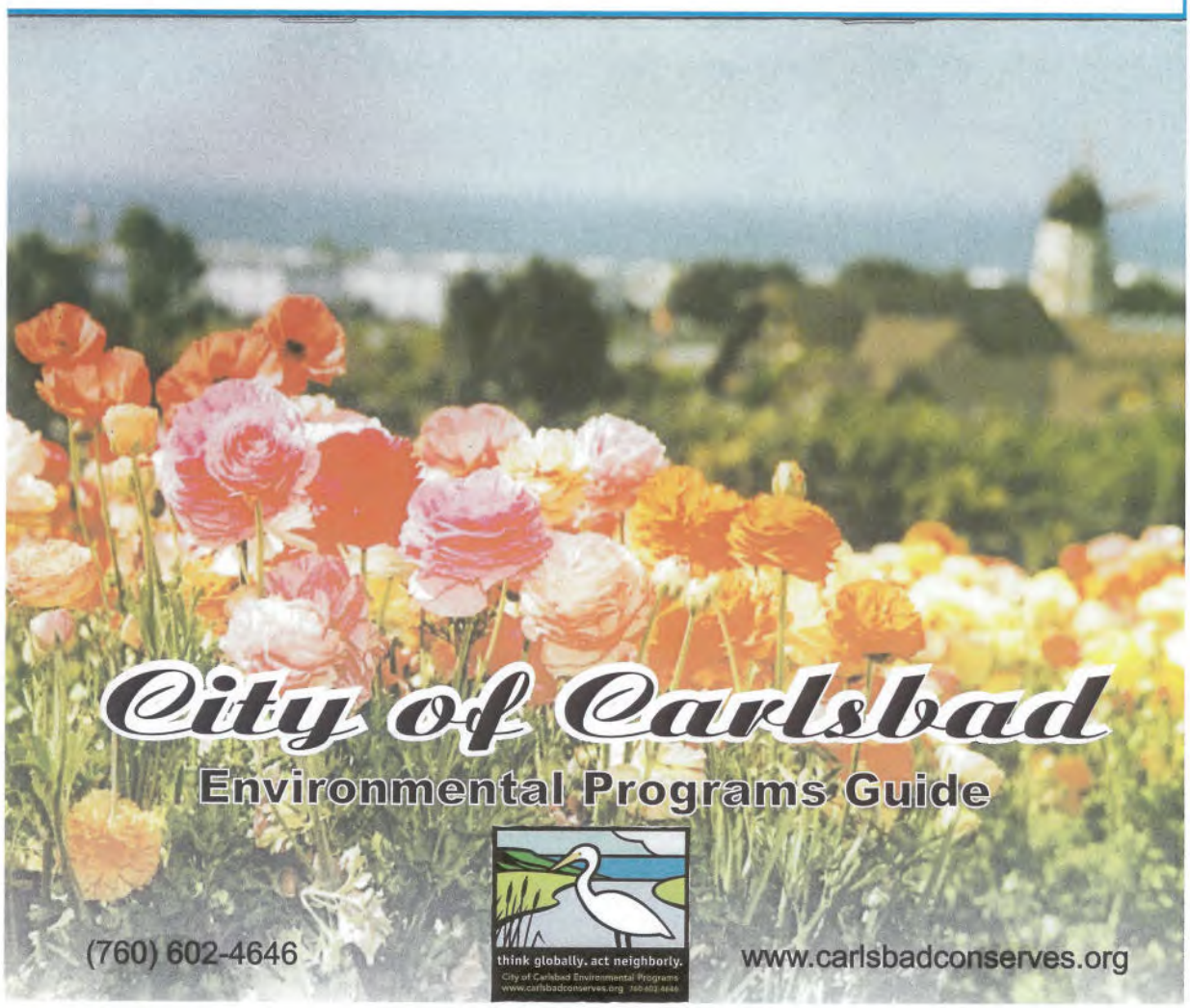

Welcome to the City of Carlsbad

This brochure provides guidelines and helpful hints on the environmental services available to Carlsbad residents.

Solid Waste Collection

The Solid Waste section will assist residents in understanding the services provided for refuse, recycling and yard waste collection in the City of Carlsbad. The Additional Waste Services section of this flyer instructs residents how and where to properly dispose of household hazardous waste, electronic waste and used oil.

Water Conservation

This section provides residents with cost saving options that will aid them in their efforts to conserve water. Resources such as toilet and clothes washer voucher programs and free on-site water audits are available.

Storm Water Protection

Storm water pollution affects everyone who lives, works and plays in the City of Carlsbad. Litter, fertilizers, pet waste, oil and soap can be washed from our yards, driveways and streets into the storm drain system and directly into our creeks, lagoons, and onto our beaches. This pollutes our water and endangers wildlife. The Storm Water section of this flyer identifies some preventative measures residents can take to minimize the source of these pollutants and the number to call to report illegal discharges in the storm drain system.

Brought to you in partnership by the City of Carlsbad and Waste Management, the City's refuse and recycling provider.

Storm Water Protection

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to prevent flooding by carring rainwater away from developed areas . Untreated storm water flows directly into our creeks, lagoons and the ocean, carrying any pollutants from the roads.

Storm water pollution comes from a variety of sources, including:

- Oil from vehicles
- Excess pesticides and fertilizer from landscaping
- Bacteria from pet waste
- Sediment from construction and landscaping projects
- Soap from car washing
- Litter
- Lawn and garden debris
- Improperly disposed home improvement products (paint, stucco, grout, cement, solvent)
- Washing driveways and sidewalks

Pollution prevention is up to YOU!

Please help us protect OUR environment. Here are some tips to help keep creeks, lagoons and the ocean clean:

- Bag and dispose of pet waste in a trash can, not a yard waste container
- Use fertilizers and pesticides sparingly
- Adjust sprinklers to prevent over-watering
- When possible, take your car to a commercial car wash

- Keep automobiles properly maintained to prevent fluid leaks
- Properly dispose of trash and cigarette butts
- Volunteer at cleanup events in Carlsbad

"Only rain in the storm drain"

To report an illegal discharge or for more information, call our hotline at (760) 602-4646.

www.carlsbadconserves.org

Water Conservation

The Carlsbad Water Ethic promotes responsible and efficient water use in our arid city. Our residents should follow this Water Ethic even when we are not in a drought situation. We encourage residents to adopt these behaviors as a way of life.

- Incorporate drought-tolerant plant materials and micro-irrigation (drip) systems wherever possible into new landscaping
- Water should not leave the user´s property due to over-irrigation of landscape
- Water during the early morning or evening hours to minimize evaporation
- Investigate and repair all leaks
- Water cannot be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards
- Recycled water shall be used wherever and whenever possible.

Residential Voucher Programs

Carlsbad participates in a voucher/rebate program with other San Diego County Water Agencies. The goal of this program is to reduce the amount of water residents use - thus increasing the available supply to all residents. Vouchers are available for money off of the purchase and installation of water saving devices like ultra low flow toilets, high-efficiency clothes washers, landscaping and Weather-Based Irrigation Controllers.
Interested residents and Home Owners Associations can contact the Voucher Processing Center at (800) 986-4538. The center is open Monday through Friday from 8:00 a.m. to 5:00 p.m., and Saturday from 8:00 a.m. to 3:00 p.m.

Residential Survey

Carlsbad residents can receive a free, on-site water conservation survey. This will include a review of indoor and outdoor water saving opportunities, a leak check, and an irrigation system and water schedule review. Customers are also shown how to read their water meter and are given literature promoting other conservation programs.
For ideas on water conservation at home refer to www.h2ouse.org

Contact your local Water Agency

Carlsbad Water Customers: (760) 602-4646

Vallecitos Water Customers: (760) 744-0460

Olivenhain Water Customers: (760) 753-6466

How to contact us

City of Carlsbad Environmental Programs
1635 Faraday Avenue
Carlsbad, California 92008
(760) 602-4646

Hours: Monday - Thursday 7:30 a.m. - 5:30 p.m.
Friday 8:00 a.m.- 5:00 p.m.

www.carlsbadconserves.org

Waste Management
5960 El Camino Real
Carlsbad, California 92008
(760) 929-9400

Hours: Monday - Friday 8:00 a.m. - 5:00 p.m

http://northcounty.wm.com

Holiday Schedule

Waste Management does not offer service on the following holidays:

- New Year's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day

When a holiday falls on a weekday, collection will be delayed one day for the remainder of the week.

Holiday announcements will be published in your local newspaper.

www.carlsbadconserves.org

Buyback Center

Redeemable items

- Newspaper
- CRV aluminum cans
- CRV glass bottles
- CRV plastic bottles
- CRV bi-metal cans

CRV = California Redemption Value. Ready-to-drink beverage containers which are packaged in aluminum, glass, plastic, bi-metal or any combination of these materials.

Also accepted:

- Electronic devices
- Household batteries

(For more information see Household Hazardous Waste)

Donation items

- Non CRV aluminum
- Non CRV glass
- Non CRV plastic
- Tin cans
- White ledger paper
- Computer paper
- Mixed paper
- Corrugated cardboard

Hours: Tuesday - Saturday
8:00 a.m. - 4:00 p.m.
Closed:
1:00 p.m. - 1:40 p.m.
(760) 929-9400

Bulky Item Pickup

Need to dispose of such items as furniture (couch, chair, dresser, cabinet, bookshelf, mattress) or appliances (toilet, washer, stove, sink)? FREE bulky item collection days are scheduled periodically in your community. Residents may dispose of two items per event. Special pickups are available for a fee. Call Waste Management at (760) 929-9400 to schedule an appointment or for additional information.

Electronic Waste

What is E-Waste?

The rapid advances in new technology and demand for new electronic equipment have increased the disposal of outdated electronic equipment known as "E-Waste."

Proper disposal of "E-Waste" through recycling and reuse prevents them from reaching landfills. This also helps to minimize waste, and provide usable items to organizations that need them as well as recapture valuable resources.

- Cell phones
- Computers
- Televisions
- VCRs/DVDs
- Stereos
- Printers
- Fax machines
- Monitors
- Microwaves ovens

Universal Waste

(Including household batteries)

As of February 9, 2006, it is now illegal in the State of California to dispose of common household items such as alkaline batteries*, mercury thermometers and thermostats, and fluorescent light bulbs into the trash. These items are now classified as Universal Waste, and must be disposed of properly through the Household Hazardous Waste (HHW) program. However, in an effort to make the disposal of common household batteries including re-chargeable ones, more efficient, the City has partnered with Waste Management to allow residents to drop off the batteries at the Waste Management Recycling Center located at 1145 East Taylor St., Vista, free of charge. The City recommends storing your used fluorescent light bulbs in a safe place until they can be brought to the HHW facilities or scheduled for a home pick-up.

**Note - rechargeable batteries can also be brought to a participating retail store that provides free drop-off bins for proper disposal.*

Where to recycle Electronic and Universal waste

Door-to-door: Call (800) 444-4244

Waste Management
5960 El Camino Real, Carlsbad
Hours: Tuesday - Saturday 8:00 a.m. - 4:00 p.m.
Closed: 1:00 p.m. - 1:40 p.m.
For additional information please call (760) 929-9400
COST: CRTs (television, laptops, monitors): no charge
All others electronic devices fee at drop-off.

Household Hazardous Waste Collection Facility
1145 East Taylor Street, Vista
Hours: Saturdays 9:00 a.m. - 3:00 p.m.
For additional information please call (800) 714-1195
COST: Currently there is no cost to Carlsbad residents.

www.carlsbadconserves.org

Household Hazardous Waste

MATERIALS ACCEPTED:

- Used motor oil and filters
- Pool cleaners
- Automobile fluids (antifreeze, gasoline, brake, transmission)
- Household cleaners
- Landscaping chemicals
- Automotive batteries
- Mercury thermostats
- Mercury thermometers
- Non-empty aerosol cans
- Lamps with fluorescent tubes, sodium vapor lamps
- Household batteries
- Paint
- Mercury switches(automotive or non-automotive light switches)
- Novelties such as some singing greeting cards or flashing athletic shoes

Drop-off

Residents may bring up to 15 gallons or 125 pounds per visit.

A proof of residency required (California driver license, utility bill or other).

No charge to residents at either location.

Door-to-door collection

The City has implemented a door-to-door program that allows residents to make an appointment to have their HHW picked up at their residence for a small co-pay of $10. This door-to-door program is available to all residents. For more information on this program, or to set up an appointment, call (800) 444-4244.

Drop-off locations

VISTA
Hours: Saturdays:
9:00 a.m.- 3:00 p.m.
No appointment necessary
(800) 714-1195

1145 E Taylor St., Vista

OCEANSIDE
Hours: Alternating Saturdays:
9:00 a.m. - 1:00 p.m.
Appointment ONLY.
For additional information, please call
(760) 929-9400.

2880 Industry St., Oceanside

PUT TOXIC WASTE IN ITS PLACE

Funded by a grant from the California Integrated Waste Management Board.

Overflow Trash

5960 El Camino Real, Carlsbad

PALOMAR TRANSFER STATION
(760) 603-0153

Residents can dispose of overflow trash at the Palomar Transfer Station. A fee will be charged at the time of disposal. For additional information please call the Palomar Transfer Station at (760) 603-0153.

No hazardous or regulated waste is accepted at this facility including batteries, paint, tires, liquids and electronic waste.

Open to residents
Saturday & Sunday
7:30 a.m. to 4:00 p.m

Holiday Trees

The City, in partnership with Waste Management, has a holiday tree recycling and collection program that allows residents to drop off their trees for recycling or be picked up at the curb for collection. This service is free to all Carlsbad residents and it operates the day after Christmas through the first two weeks in January. For locations where residents may drop-off the trees for recycling check the City's website or the Community Services Guide.

For curbside pick-up remove stands, tinsel and ornaments from trees, cut in sections no longer than 4 feet and place out on the curb for collection. Flocked trees are not recyclable and will be collected by the trash drivers.

Holiday schedule announcements will be published.

www.carlsbadconserves.org

Sanitary Sewer Overflows
July 1, 2007 - March 23, 2008

Date	Source	Substance	Volume	Enter MS4?	Enter RW?	Response
03/22/2008	Private Interceptor	FOG	600	Yes	Yes	Costco notified to clear and clean interceptor and lateral, and to clean storm darins affected.
03/04/2008	Private Lateral	Sewage	10	No	No	Replaced C/O cap, had resident cal plumber.
03/03/2008	Private Lateral	Sewage	75	No	No	Illegal storm drain to sewer connection to be disconnected. Call plumber for stoppage.
03/01/2008	Private Lateral	Sewage	25	No	No	Debris in lateral.
01/31/2008	Private Lateral	Sewage	30	No	No	Plumber cleared grease blockage.
01/17/2008	Private Lateral	Sewage	45	No	No	Plumber cleared grease blockage.
12-31-07	Sewer MH	Sewage	350	No	Yes	Clear root stoppage, TV to ID cause.
12/23/2007	Private Lateral	Sewage	5	No	No	Plumber cleared root blockage.
12/21/2007	Private Lateral	Sewage	20	No	No	Plumber cleared blockage.
11-13-07	Sewer Main C/O	Sewage	60	No	No	Clear stoppage, capture all spill.
11-04-07	Sewer MH	Sewage	2000	No	No	Contained, cleared grease blockage, and captured all.
10-28-07	Sewer MH	Sewage	3625	No	No	Vandalism, construction debris,
10/17/2007	Private Lateral	Sewage	40	No	No	Plumber cleared tampons and sanitary napkins in cleanout.
10/11/2007	Private Lateral	Sewage	40	Yes	Yes	Plumber cleared root blockage.
09/10/2007	Private Lateral	Sewage	30	No	No	Plumber cleared lateral stoppage.
09/07/2007	Private Lateral	Sewage	15	Yes	Yes	Root blockage.
09-04-07	Sewer MH	Sewage	1	No	No	Clear root stoppage.

These spills were from the City of Carlsbad maintained sewer main.

Date	Address	Volume (gallons)	Recovered (gallons)	lat - deg.min.sec	long - deg.min.sec	CIWQS
08/31/07	Private Cleanout, 2534 Luceirnaga, Carlsbad, CA	20	0	33.06.11N	117.15.25W	656751
10/24/07	Private Cleanout, 7306 Alicante, Carlsbad, CA	10	0	33.05.41N	117.15.32W	706440
11/26/07	Private Cleanout, 2824 Cacatua St, Carlsbad, CA	10	0	33.06.37N	117.14.36W	708121
11/9/2007	LWD Manhole, N. Estrella Del Mar Rd, Carlsbad, CA	300	250	36.06.12N	117.15.47W	707537

Other Spills July 1, 07 to March 23, 08

Event Type	Cause	Volume (Gal) Spilled	Volume (Gal) Recovered	Incident Date	Street Number	Street	Responsible Party	Zip Code	Water Body Impact	Water Body
413	Vehicle Leak	¼	¼ Diesel	8/7/07	3780	Pio Pico Dr.	Unknown	92008	None	None
413	Traffic Accident	1 Diesel 1 Oil	1 Diesel 1 Oil	10/29/07	1221	Las Flores	Zach Edwards Meas AZ 85205	92008	None	None
413	Mechanical Problem	Unknown Hydraulic Fluid	Unknown	11/1/07	7044	Ivy St	Coast Waste Management	92011	None	None
413	Vehicle Leak	1 Motor Oil	1 Motor Oil	11/3/07	3401	Monroe St	Unknown	92008	None	None
413	Fuel Pump Hose	20 Diesel	Unknown	11/10/07	7170	Avenda Encinas	Chevron Gas Station (same address)	92011	None	None
413	Vehicle Leak	1 Gasoline	1 Gasoline	11/19/07	2858	Loker Ave East.	Unknown	92010	NA	NA
413	Vehicle Leak	1 Motor Oil	1 Motor Oil	12/17/07	3748	Jefferson St	Unknown	92008	None	None
413	Leak from Drum	20-30 Gallons Oil	Unknown	12/18/07	Unknown	La Costa / Paseo Tamarindo	Unknown	92009	NA	NA
413	Vehicle Leak	Unknown	Unknown	2/5/08	1700	Olivenhain Rd	Unknown	92009	None	None

Appendix 7.4

See Appendix 7.3, Order 2007-0001 Section of Annual Report for a full summary of the complaints for the Fiscal Year 2007-2008.

Storm Water Training for Municipal Employees
July 1, 2007- March 23, 2008

DATE	DEPT. DIV.	EMPLOYEES ATTENDING	TRAINING TYPE	NAME OF TRAINING OR TOPICS	LOCATION	SPONSOR PRESENTER
07/07/2007	Parks	27	Meeting	(DVD) After the Storm	Parks Yard	Greg Dauss
07/26/2007	Water	42	all hands meeting	Storm water Training, knowledge of terms	PW M&O	Don Wasko
08/02/2007	CM&I	12	Meeting	Wind Erosion Control CASQA	M&O	Casey Arndt
08/16/2007	Water	27	all hands meeting	Stormwater Protection BMP's	PW M&O	Don Wasko
08/31/2007	Parks	6	Meeting	Water Management	Parks Yard	Greg Dauss
09/06/2007	Water	31	all hands meeting	BMP's for yard and field work	PW M&O	Don Wasko
09/13/2007	CM&I	12	Meeting	CASQA SE-10 Storm DrainInlet Protection	M&O	Casey Arndt
09/20/2007	Water	37	all hands meeting	Rainy Season Approaching, Let's be prepared	PW M&O	Don Wasko
09/20/2007	City Planning Dept. employees	20	Meeting	Planning Staff Meeting LID training	Carlsbad	Storm Water
09/26/2007	Parks	29	Meeting	Grounds Maintenance	Parks Yard	Greg Dauss
09/28/2007	Parks	7	Meeting	Landscape Maintenance	Parks Yard	Greg Dauss
10/11/2007	CM&I	13	Meeting	Material Delivery and Storage (Stockpile	M&O	Casey Arndt
10/18/2007	Storm Water Dept	2	Class	National Incident Management System	Faraday	David Harrison
10/23/2007	Storm Water Dept	1	Class	National Incident Management System	Faraday	David Harrison
10/25/2007	CM&I	12	Meeting	Hydro Seeding	M&O	Casey Arndt

DATE	DEPT. DIV.	EMPLOYEES ATTENDING	TRAINING TYPE	NAME OF TRAINING OR TOPICS	LOCATION	SPONSOR PRESENTER
11/08/2007	CM&I	9	Meeting	CASQA SE-10 Storm DrainInlet Protection	M&O	Casey Arndt
11/29/2007	City of Carlsbad Leadership	11	Meeting	LT presentation of new permit/JURMP	Carlsbad	Storm Water
11/30/2007	Fire Department	22	Staff Meeting	Regulations, department policy, related equipment	Fire Station	Mike Kennedy
12/05/2007	CM&I	11	Meeting	Earth Dikes & Drainage Swales	M&O	Casey Arndt
12/05/2007	Fire Department	24	Staff Meeting	Regulations, department policy, related equipment	Fire Station	Mike Kennedy
12/06/2007	Fire Department	22	Staff Meeting	Regulations, department policy, related equipment	Fire Station	Mike Kennedy
12/06/2007	Parks	24	Meeting	Non-storm water discharges	Parks Yard	Greg Dauss
12/20/2007	CM&I	10	Meeting	Carlsbad Municipal Code	M&O	Caset Arndt
01/03/2008	CM&I	9	Meeting	BMP Inspection and Removal of Temporary	M&O	Casey Arndt
01/07/2008	PW management	33	Meeting	NPDES Municipal permit general information	Carlsbad	Storm Water
01/17/2008	CM&I	10	Meeting	Dewatering Operations	M&O	Casey Arndt
01/24/2008	Water	33	all hands meeting	New Stormwater Permit	PW M&O	Don Wasko
01/31/2008	CM&I	9	Meeting	Silt Fence	M&O	Tim Fennessy
02/06/2008	CM&I	8	Workshop	BMP Performance	Safety Center	EPA
02/06/2008	PW - CMI, Dev Services, Storm Water	19	Webcast	EPA - BMP performance	Carlsbad	EPA
02/07/2008	Storm Water Dept	1	Class	National Incident Management System	Faraday	David Harrison

DATE	DEPT. DIV.	EMPLOYEES ATTENDING	TRAINING TYPE	NAME OF TRAINING OR TOPICS	LOCATION	SPONSOR PRESENTER
02/14/2008	CM&I	7	Meeting	Earth Dikes & Drainage Swales	M&O	Tim Fennessy
02/27/2008	CM&I	10	Meeting	CASQA SE-10 Storm DrainInlet Protection	M&O	Tim Fennessy
03/13/2008	CM&I	9	Meeting	Hydro Seeding	M&O	Tim Fennessy

Storm Water Committee Meetings Summary
July 1, 2007 - March 23, 2008

DATE	in attendance	AGENDA ITEMS
07/10/2007	15	JURMP Annual Report FY 07-08 preparation, requirements in the permit, and regional monitoring permit requirements
08/14/2007	10	JURMP Annual Report deadlines, BMP fieldtrip
11/13/2007	9	JURMP Annual Report status, RB activity status
03/11/2008	10	JURMP Municipal Section recap/overview, JURMP Municipal text review

Appendix 10.1
Fiscal Year 2007-08 Expenditures and Fiscal Year 2008-09 Projected Budget

Refer to Appendix 10.1, Order 2007-0001 Section of Annual Report.

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1.0 INTRODUCTION

This section of the City of Carlsbad s (City) Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report addresses the implementation of the Regional Water Quality Control Board (Regional Board) Order No. 2007-0001 (NPDES No. CAS0108758) commonly known as the Municipal Storm Water Permit (Permit). The recent Permit was issued January 24, 2007, and replaced the prior municipal storm water permit issued in 2001 (Order 2001-01). The permit went into effect on March 24, 2008 and this report covers the reporting period from March 24, 2008 through June 30, 2008.

The Regional Board issued this Permit to prevent and control polluted urban runoff from Municipal Separate Storm Sewer Systems (MS4s) to downstream water bodies. As runoff flows through urban areas, it can carry harmful pollutants such as pathogens, sediments, fertilizers, pesticides, heavy metals, and petroleum products. Pollutants entering a receiving water body through the MS4 may harm aquatic life through toxicity and habitat degradation.

Each of the Copermittees listed in the Permit was required to develop a JURMP outlining their approach to protecting water quality and preventing harmful impacts from polluted urban runoff. The Permit requires the submittal of an Annual Report to the Regional Board to document the progress and implementation of the JURMP.

The Permit also requires each Copermittee to protect water quality during the three major phases of urban development: (1) land use planning for new development; (2) construction; and (3) the use or existing development phase.

The City is a municipal corporation, following the Council-Manager form of government. City Departments fall under one of five major service areas (MSA s): Public Safety, Administrative Services, Public Works, Community Development, and Community Services. While the City created the Storm Water Protection Program to help implement the Permit, program implementation is carried out by several departments within different MSA s. This allows for program implementation and new requirements to be incorporated into daily activities of City employees, instead of being viewed as completely new requirements without a connection to on-going services.

The City encompasses just over 42 square miles and borders 6 miles of coastline. Carlsbad also contains or borders three coastal lagoons (Buena Vista, Agua Hedionda and Batiquitos lagoons). The City is part of the Carlsbad Hydrologic Unit (Watershed), which includes four separate sub-watersheds that run through Carlsbad. These include each of the three lagoons and their respective drainage areas, in addition to a fourth watershed commonly known as Encinas Creek. Portions of Agua Hedionda Lagoon and Buena Vista Lagoon are listed as impaired for bacterial indicators and sedimentation/siltation on the Federal Clean Water Act Section 303(d) Impaired Water Bodies list. Buena Vista Lagoon is also impaired for nutrients. While this report focuses on the City s implementation of the JURMP and not the Watershed program, the two are becoming more intertwined as waterbodies and implementation strategies cross programmatic and jurisdictional boundaries.

1.1 Report Organization

This Annual Report was prepared in accordance with the requirements of the Permit. It contains a comprehensive description of the activities conducted by the City of Carlsbad to meet the requirements of section F of the Permit; an accounting of all illicit discharges reported, all inspections conducted, all enforcement actions taken, all education efforts conducted; a description of the public participation mechanisms utilized during the JURMP implementation process; a summary of all urban runoff related data not included in the annual monitoring report; identification of management measures proven to be effective in reducing urban runoff pollutants and flow; identification of water quality improvements or degradation; and a budget for the upcoming year. A list of acronyms is provided in Appendix 1-1.

The organization of this report follows the table of contents agreed to and submitted by the Copermittees to the Regional Board. The Annual Report is divided into sections matching major sections in the Permit and the JURMP. As with the JURMP, many of the activities described in separate JURMP sections overlap with one another, so an activity may be referenced in more than one report section. The Annual Report is organized as follows:

Section 1 - Introduction
Section 2 Development Planning Component
Section 3 Construction Component
Section 4 - Municipal Component
Section 5 Industrial/Commercial Component
Section 6 - Residential Component
Section 7 Illicit Discharge Detection and Elimination Component
Section 8 Outreach and Education Component
Section 9 Public Participation Component
Section 10 Fiscal Analysis Component
Section 11 - Assessment of JURMP Effectiveness Component
Section 12 Special Investigations Component
Section 13 Non Emergency Fire Fighting Flows
Section 14 JURMP Revisions
Section 15 - Conclusions and Recommendations

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

This section outlines the Development Planning actions implemented by the City under San Diego Municipal Permit Order No. 2007-001 (the 2007 Municipal Permit) and covers the portion of the annual reporting period from March 24, 2008 through and including June 30, 2008. During this reporting period, the City maintained compliance with all land-use planning requirements of the 2007 Municipal Permit.

The City submitted an updated Jurisdictional Urban Runoff Management Plan to the Regional Board March 24, 2008 (hereinafter referred to as the 2008 Carlsbad JURMP). The 2008 JURMP incorporated numerous project processing changes to improve development related storm water pollution prevention activities and to ensure complete conformance with the Development Planning Component of the 2007 Municipal Permit.

During preparation of the 2008 Carlsbad JURMP, the City performed an in-depth review of its development planning and review processes. In summary, the review found that the City s existing land-use planning policies and processes met requirements and that numerous changes and modifications to the development project approval process were needed to ensure compliance with the 2007 Municipal Permit. In response to the findings, numerous revisions to the City s development review process were initiated to improve existing storm water pollution prevention activities and ensure compliance with the 2007 Municipal Permit. The changes included updates to the City s Best Management Practices (BMPs) standards, Storm Water Codes, development project approval process, project tracking and record keeping and BMP installation verification procedures. The changes which became effective after March 24, 2008 are discussed and explained in greater detail in the following sections.

2.2 Land Use Planning

2.2.1 Background

In July 1986, the City adopted a *Growth Management Plan* into its General Plan to guide development and anticipate the types and numbers of facilities needed to accommodate the Carlsbad community at build out. Those facilities include sewer plant capacity, sewage pipelines, reclaimed water system, and storm drain system with flood and pollution control basins.

In September, 1994 the City adopted a Comprehensive Update of its General Plan. The General Plan includes goals that balance environmental protection with smart, long-term economic growth. By laying out a clear vision for environmentally sensitive development within this coastal community, development projects are required to be consistent with various City ordinances (i.e.; Grading and Erosion Control, Storm Water Management, Hillside Development, Coastal Resource Protection) and other regulatory requirements.

The General Plan is reviewed annually and revised as necessary to ensure that the public facilities are considered and City goals are met. On February 19, 2002, the City Council adopted General Plan Amendment GPA 01-15. This General Plan Amendment revised and supplemented various policies regarding storm water quality protection in the Open Space and Conservation Element of the General Plan. The revised and supplemented policies reflect all

storm water quality and watershed protection principles found in both the 2001 and 2007 Municipal Permits pertaining to storm water pollution.

City staff again reviewed the storm water protection policies of the General Plan in FY 07-08 and no revisions were found necessary. The existing General Plan storm water protection policies are listed below:

a.) Develop and implement a JURMP consistent with the Permit and any amendments thereof.

b). Adopt and implement a Master Drainage Plan and Standard Urban Storm Water Mitigation Plan (SUSMP) consistent with the Permit and any amendments thereof.

c.) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City requires developments to incorporate structural and non-structural BMPs to mitigate any increases in pollutant loads.

d.) Implement storm water pollution prevention methods to the maximum extent practicable, supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into the municipal separate storm sewer system (MS4).

e.) Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

f.) Developments shall implement appropriate recommendations to protect water quality found in the San Diego Association of Government s (SANDAG s) Water Quality Element of its Regional Growth Management Strategy.

g.) Development projects should be designed to comply with the following site design principles:

- Protect slopes and channels to decrease the potential for slopes and/or channels from eroding and impacting storm water runoff.
- To the extent practicable, cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones. Encourage land acquisition of such areas.
- Provide buffer zones for natural water bodies.
- Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment.
- Where feasible implement site design/landscape features to slow runoff and maximize on-site infiltration of runoff.
- Properly design outdoor material storage areas (including the use of roof or awning covers) to minimize the opportunity for toxic compounds, oil and grease,

heavy metals, nutrients, suspended solids and other pollutants from entering the storm water conveyance system.

- Incorporate roof or awning covers over trash storage areas to prevent off-site transport of trash and other pollutants from entering the storm water conveyance system.
- Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways and bridges.
- Design streets and circulation systems to reduce pollutants associated with vehicles and traffic resulting from development.

In addition to the General Plan, the City has adopted various storm water protection policies in other land use planning documents including the City s Local Coastal Program and Habitat Management Plan.

The Carlsbad Local Coastal Program covers that part of the City lying within the Coastal Zone. The Carlsbad City Council adopted a Zone Code Amendment (ZCA 01-08), Local Coastal Program Amendment (LCPA 01-15) and Municipal Code Amendments (MCA 01-05, 01-06, and 02-01) to revise/add new policies, standards, procedures and requirements regarding water quality and watershed protection to the Local Coastal Program Land Use Plans, Chapters 21.203 (Coastal Resource Protection Overlay Zone) and 21.205 (Coastal Resource Overlay Zone Mello I LCP Segment Local Coastal Program) of the Zoning Ordinance of Carlsbad's Municipal Code. One of the notable storm water requirements of the Carlsbad Local Coastal Program (LCP) is the inclusion of an additional criterion for determining a priority development project. Per the amended LCP, any project located within 200 feet of the Pacific Ocean that creates more than 2500 square feet of impervious surface or increases the project impervious area more than 10 over the existing impervious area is to be considered a priority development project.

Under the California Natural Community Conservation Program (NCCP), the City and six other cities in north San Diego County participated in the preparation of the Multiple Habitat Conservation Program (MHCP). The MHCP is a comprehensive planning program designed to develop an extensive ecological preserve in northwestern San Diego County. The City has prepared a subarea plan, called the Carlsbad Habitat Management Plan that was adopted in November 2004. The Carlsbad HMP contains the specific conservation, management, facility planning, land use, and other actions the City will take to implement the goals, guidelines, and standards of the MHCP plan. This Habitat Management Plan prohibits development in or near natural habitat areas including creeks and lagoons. Those areas act as a buffer between urban development pollutants and receiving waters. They also protect a significant percentage of natural area that are pervious leading to natural groundwater recharge and reduction in peak run off rates.

On November 1, 2002, the revised Zoning Ordinance, Municipal Code, and Local Coastal Plan Amendments were submitted to the California Coastal Commission. In August, 2006, the California Coastal Commission approved these municipal code amendments. All requirements of these documents were implemented in FY 07-08 and previous years including the years the City waited for Coastal Commission approval. The Local Coastal Program and Habitat Management Plan were evaluated during FY 07-08 and no revisions were found necessary.

2.2.2 Source Characterization

Land Use Planning is the process whereby the City determines appropriate land use designations for a property consistent with the City's General Plan requirements. As such, source characterization of pollutants is addressed generically in association with the type of land use proposed (i.e. low density residential, high density residential, commercial, and industrial, etc). Each land use decision made during the reporting period covered by this component of the annual report (March 24, 2008 to June 30, 2008) was found consistent with the storm water protection policies as contained in the City's General Plan, Local Coastal Program (if applicable) and Habitat Management Plan.

In many cases, land use planning applications are accompanied by specific project development applications. In such cases, the project was required to identify specific project pollutant sources consistent with the City's Standard Urban Storm Water Mitigation Plan dated March 2008 (the "2008 Carlsbad SUSMP") and to identify project specific Best Management Practices (BMPs) to eliminate or minimize any negative impacts to storm water quality. For more specifics on source characterization applied to development projects during the project approval and verification process reference Section 2.4.2 below.

2.2.3 Best Management Practice Requirements

The City reviewed the existing storm water quality and watershed protection goals and policies within the City General Plan and found them to be adequate to meet the requirements of the 2007 Municipal Permit. No modification was made to BMP requirements of the General Plan during FY 07-08.

2.2.4 Program Implementation

Every General Plan Amendment and land use planning application approved by the City during FY 07-08 was found in conformance with all storm water protection policies of the Carlsbad General Plan, Local Coastal Program (as appropriate), Habitat Management Plan and the Carlsbad Municipal Code (CMC). This includes compliance findings for all the storm water quality goals and objectives of the City's Grading and Drainage Ordinances (Title 15 of the CMC).

For the period covered by this component of the annual report (March 24, 2008 to June 30, 2008) the land use planning review process began with the submittal of a planning application at the City's development services counter. Concurrent with the land use application the city requires submittal of the Storm Water Standards Questionnaire which determines if the project is a priority or non-priority development project. Each project was then reviewed for conformance with the storm water protection policies and requirements of the 2008 Carlsbad SUSMP, the General Plan, any applicable Local Coastal Plan, the Habitat Management Plan and all City Codes. Concurrent with each project approval in FY 07-08, the City made specific written findings in the project approval document that the project complied with all appropriate General Plan, Local Coastal Plan (as appropriate), Habitat Management Plan and City Codes including all relevant storm water protections policies and requirements. A copy of written findings for an actual project approval is included within the examples of priority project approvals included in Appendix 2.5.

2.3 Environmental Review Process

The City's Environmental Review Process begins with the Initial Study Checklist (CEQA Guidelines). Based on the results of the checklist, the City requires the project applicant to provide additional studies to elaborate on the environmental impacts or recommend denial of the permit that the project applicant is seeking. The Initial Study Checklist includes specific hydrology and water quality analysis as follows:

HYDROLOGY AND WATER QUALITY. *Could the project:*
a. Violate any water quality standards or waste discharge requirements, including but not limited to increasing pollutant discharges to receiving waters (consider temperature, dissolved oxygen, turbidity, and other typical storm water pollutants)?
b. Have potentially significant adverse impacts on ground water quality, including but not limited to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial/increased erosion or siltation on- or offsite?
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site and/or significant adverse environmental impacts?
e. Cause significant alteration of receiving water quality during or following construction?
f. Cause an increase in impervious surfaces and associated runoff?
g. Cause potentially significant adverse impact on ground water quality?
h. Cause or contribute to an exceedance of applicable surface or ground water receiving water quality objectives or degradation of beneficial uses?
i. Is the project tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list of impaired waterbodies. If so, can it result in an increase in any pollutant for which the water body is already impaired?
j. Create or exacerbate already existing environmentally sensitive areas (ESAs)?
k. Create potentially significant environmental impact on surface water quality, to either marine, fresh, or wetland waters?
l. Impact aquatic, wetland, or riparian habitat?

The City reviewed the existing Environmental Review Process Initial Study Checklist during FY 07-08 and found that it adequately addresses the Environmental Review requirements of the 2007 Municipal Permit; therefore, no revisions were made to the storm water quality compliance requirements of the Initial Study Checklist.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City requires new development and redevelopment projects to implement measures to ensure urban runoff from proposed project sites will be treated to reduce pollutant loads to the maximum extent practicable (MEP), and will not cause or contribute to an exceedance of receiving water quality objectives.

The City is dedicated to putting into place all the administrative and regulatory tools required to implement the Land-Use Planning requirements of the 2007 Municipal Permit. During the reporting period (March 24, 2008 to June 30, 2008), the City updated its Storm Water Pollution Prevention, Grading and Drainage, Public Property and Building ordinances to strengthen and clarify its storm water permitting requirements and, to address the requirements of the 2007 Municipal permit (see Section 3.3 for a more detailed explanation of the ordinance updates). The City also completely rewrote and updated its Storm Water Standards Manual which includes an updated City SUSMP dated March 2008 (the 2008 Carlsbad SUSMP) and updated Construction SWPPP Standards and Requirements.

The City updated the Storm Water Requirements Applicability Checklist (now titled the Storm Water Standards Questionnaire) to make it more understandable (for City applicant benefit) and to address redevelopment projects. Changes were also made to the City's application submittal checklists, standard project conditions of approval and project plan review checklists to improve clarity, address the requirements of the new 2007 Municipal Permit and ensure greater compliance with the storm water standards and requirements.

All of the process improvement, code and standards changes became effective after March 24, 2008, with the exception of the standard project conditions of approval. The changes to the standard project conditions of approval were implemented prior to October 2007 to provide developers advance notice of 2007 Municipal Permit requirements since it generally takes a minimum of six months for a project to proceed from discretionary approval to construction permit stage. The City's early implementation of the updated standard project conditions of approval facilitated developer compliance with the new BMP requirements, interim LID and hydromodification requirements which became effective on March 24, 2008, and helped to avoid costly and timely delays for developers.

2.4.2 Source Characterization

Development project approval is the stage of the development process where storm water quality impacts are assessed and the project is designed to eliminate or minimize potential sources of storm water pollutants. Each priority development project submitted between March 24, 2008 to June 30, 2008, was required to prepare and submit a Storm Water Management Plan (SWMP) consistent with the 2008 City SUSMP concurrent with any discretionary or ministerial permit application. An important component of the SWMP is source identification.

After March 24, 2008, project proponents were required to identify potential pollutant sources generated by their particular land use and development design in accordance with the procedures outlined in the 2008 City SUSMP. Table 2 on page 8 of the 2008 Carlsbad SUSMP was used to assist the developer in identifying potential pollutant sources for various project categories. Additionally, project proponents were required to identify the pollutants of concern or impairment for the receiving waters into which the project runoff discharges. The project proponent was then required to determine if the proposed project included any land use activity or development design that generated or potentially added to any water quality impairment within the receiving waters. The 2006 303(d) list of water quality impairments for receiving waters in Carlsbad is shown in Table 2.4.2 below:

Table 2.4.2

2006 303(d) Listings within the City of Carlsbad		
Carlsbad Waterbody	**Drains to**	**Pollutant**
Agua Hedionda Creek	Agua Hedionda Lagoon	Manganese
		Selenium
		Sulfates
		Total Dissolved Solids (TDS)
Agua Hedionda Lagoon	Pacific Ocean	Indicator Bacteria
		Sedimentation/Siltation
Buena Vista Creek	Buena Vista Lagoon	Sediment Toxicity
Buena Vista Lagoon	Pacific Ocean	Indicator Bacteria
		Nutrients
		Sedimentation/Siltation
Pacific Ocean at Buena Vista Creek	Pacific Ocean	Indicator Bacteria
Buena Vista Creek		
Carlsbad Village Drive		
Pine Avenue		
Encinitas Creek	Batiquitos Lagoon	Phosphorus
San Marcos Creek	Batiquitos Lagoon	DDE
		Phosphorus
		Sediment Toxicity

Projects draining into one of these receiving waters were required to analyze their potential for contributing one or more of the identified pollutants to the receiving water. If a potential source was identified, then an appropriate source control, site design or treatment control BMP measure was identified to eliminate or reduce the pollutant of concern to the MEP and to not cause or contribute to an exceedance of receiving water quality objectives.

2.4.3 Best Management Practice Requirements

During the reporting period covered in this component of the annual report (March 24, 2008 to June 30, 2008), each land development project in the City met the minimum BMP requirements of the 2007 Municipal Permit. The City's minimum requirements are contained within the 2008 Carlsbad SUSMP and the City's Storm Water Standards Manual as specified in the 2008 Carlsbad JURMP. All approved projects were required to incorporate both site design and source control BMPs into project design. Priority projects per the 2007 Municipal Permit were required to incorporate additional treatment control BMPs into the project design.

The 2007 Municipal Permit required the City in conjunction with the other co-permittees, under the San Diego Municipal Permit, to update the regional Model SUSMP. During the reporting period covered by the first component of the annual report (July 1, 2007 to March 23, 2008) the City worked in cooperation with the other co-permittees to develop a revised Model SUSMP which was collectively adopted by the co-permittees on November 6, 2007. The City was requested under the 2007 Municipal Permit to modify its local SUSMP to comply with the interim Low Impact Development (LID) and hydromodification requirements. The interim LID and hydromodification requirements were incorporated into the 2008 Carlsbad SUSMP which

became effective March 24, 2008. Throughout the reporting period (March 24, 2008 to June 30, 2008), the City compelled all priority development/redevelopment projects, including City Capital Improvement Program (CIP) projects to comply with the 2008 Carlsbad SUSMP.

Beginning in October 2007, the City began requesting new priority development and redevelopment projects to comply with the interim LID and hydro-modification BMP requirements pursuant to the 2007 Municipal Permit. The City's early implementation of the interim BMP requirements into new project design in October 2007 facilitated developer compliance with the new interim LID and hydro-modification requirements which became effective on March 24, 2008, and helped to avoid costly and timely delays for developers and the City.

The City's local SUSMP implementation document is incorporated into the City of Carlsbad Storm Water Standards Manual hereinafter referred to as "Storm Water Standards Manual", which addresses specific post-construction site design, source control and treatment control storm water BMPs that must be incorporated into Priority Development Projects. The City updated its Storm Water Standards Manual to incorporate appropriate requirements of the 2007 Municipal Permit. The updated Storm water Standards Manual became effective on March 24, 2008. The Storm Water Standards Manual provides information on selection and implementation of the construction, site design, source control and treatment control BMPs. A copy of the updated 2008 Storm Water Standards Manual is included as Appendix 2.10.

In addition to participating in the Model SUSMP update, the City participated and will continue to participate in the development of the regional Hydromodification Management Plan (HMP). The HMP, similar to the Model SUSMP document, will require that development projects incorporate BMPs into their design to maximize infiltration and mimic pre-project hydrologic characteristics. Once the HMP is complete and acceptable to the RWQCB, the City will revise its JURMP and Storm Water Standards Manual to reflect the HMP requirements.

Each development project was assessed for its potential to generate urban pollutants using the Storm Water Standards Questionnaire (a copy of the Questionnaire is included a Appendix A to the 2008 Carlsbad SUSMP included as Appendix 2.10. Those specific types of projects (or project components) identified as having a high potential to generate pollutants in accordance with the 2007 Municipal Permit and Local Coastal Program requirements were classified as a "priority development projects". Each priority development project was associated with one or more of the general pollutants categories as described in Table 2 of the 2008 SUSMP. Additional pollutant categories were then determined based upon their potential of being generated by the specific proposed priority project.

Each priority project was then required to incorporate site design, source control and treatment control BMPs into the project design as specified in the 2008 Carlsbad SUSMP including the new interim LID and hydromodification requirements, as appropriate. Non-priority projects were required to incorporate site design and source control BMPs into their project design. The following is a brief listing and description of the types of BMPs incorporated into project designs during the reporting period:

Site design BMP features incorporated into Carlsbad developments during the reporting period include the following:

- Minimization of building footprints and incorporation of impervious pavements

- Conservation of natural area by clustering of development and preservation of natural drainage systems
- Directing flows from impervious surfaces across pervious pavements or landscape areas
- Preservation of existing trees and planting of new trees to maintain and increase canopy coverage
- Conveying of drainage away from slopes or provision of appropriate slope down drains
- Vegetating slopes and open space areas with drought tolerant plants
- Stabilization of permanent channel crossings and installation of energy dissipaters at drainage outlets

Source Control BMP features incorporated into Carlsbad developments during the reporting period include the following:

- Enclosure of outdoor storage areas
- Trash enclosures that have impervious surfaces and do not allow drainage to flow through the enclosure and use of trash bins with lids that exclude rain
- Use of efficient irrigation systems with moisture sensors and properly designed flow control systems
- Stenciling and/or placement of tiles at every storm drain inlet

For projects that included one or more of the individual project categories, an appropriate BMP was utilized that include BMPs such as:

- Directing drainage from private streets across vegetated swales or into bioretention areas
- Directing drainage from dock and loading areas into bioretention areas or through filters/clarifiers prior to discharge into storm drains
- Keeping maintenance bays indoors and directing floor drainage into the sewer system
- Installation of special bacterial filter systems for outdoor eating areas
- Incorporation of landscape areas into surface parking lots
- Landscaping of hillside areas with deep rooted and drought tolerant plants

During the reporting period (March 24, 2008 to June 30, 2008), hydrodynamic separator systems and filter inserts were no longer permitted to be used as a primary treatment control method (the 2008 Carlsbad SUSMP was updated to show them only effective at removing trash, debris and coarse sediment).

Due to the economic slow down, the City processed fewer development approvals than in previous years. The development approvals processed during the reporting period (March 24, 2008 to June 30, 2008), encompassed many project categories including residential, commercial and industrial projects. Each high priority development project included appropriate treatment control BMPs from the list of allowable treatment controls included in Table 4 of the 2008 Carlsbad SUSMP. The types of treatment control systems approved for new developments during the reporting period included bioretention areas, vegetated swales, detention basins and filtration systems.

2.4.4 Program Implementation

Description of notable activities conducted to manage urban runoff from development projects

The City has a comprehensive set of storm water pollution prevention activities which are incorporated into its project development approval and BMP installation verification process. The measures include everything from the development of urban runoff land use planning policies, development processing procedures, project submittal and review checklist, educational pamphlets, engineering standards, City Codes, database inventory control, monitoring requirements, staff and developer training and project tracking and reporting. Each activity has been carefully designed to help eliminate or reduce storm water pollution to the maximum extent practicable (MEP) and to not cause or contribute to an exceedance of receiving water quality objectives.

The development process has many stages from concept review on through to construction completion and project operation and maintenance. The City conducts many notable activities meant to ensure development project compliance with the City s urban runoff management policies and requirements. Table 2.4.4 presents a brief description of the notable storm water pollution prevention activities undertaken at each stage of the development process. Also included in the table are a listing of the City reference materials and implementation documents available to developers and City staff which are applicable to each stage in the process.

Table 2.4.4 Storm Water Compliance Process for Development Activities

Development Process Stage	Activity Description	Process Review Documents References
Conceptual Project Design	Developer uses the 2008 Carlsbad SUSMP and Storm Water Standards Questionnaire to determine project priority and begins project layout and design. For priority projects the City recommends to developers that a preliminary SWMP should be prepared	• Storm Water Standards Questionnaire • Storm Water Standards Manual which includes the 2008 Carlsbad SUSMP • 303(d) List
Pre-application Review	Developer submits the preliminary project proposal to staff to obtain input on conceptual project layout including storm water compliance issues.	• Preliminary site plan checklist • SWMP Fact Sheet
Application for Discretionary Review	City staff review application package at front Counter for completeness of submittal including storm water compliance documents. Project is logged into the City database for tracking. A completed Environmental Initial Assessment (EIA) form is submitted with the application package.	• Project Application Submittal Checklist • City review letter
Application Review	City staff reviews application, site plans and accompanying reports and documents including any SWMP, geotechnical and hydrology/hydraulic reports. Project is reviewed for consistency with General Plan, Local Coastal Plan (LCP), Habitat Management Plan (HMP1), 2008 Carlsbad SUSMP and City Codes and other Standards including all storm water protection policies and requirements including new interim LID and hydromodification requirements. Project location is reviewed for proximity to environmentally sensitive areas and to determine if project drains to a water body on the 303(d) list. Project EIA is reviewed and appropriate environmental review documents are requested and reviewed in compliance with California Environmental Quality Act (CEQA) requirements.	• Site plan review checklist • SWMP checklist • 303(d) List • General Plan • Local Coastal Plan • Habitat Management Plan • City Codes • Environmental Assessment Form • CEQA Guidelines • City review letter (if any)
Discretionary Approval	City denies project or approves with conditions including storm water compliance conditions. Applicable standard conditions of approval are applied to the project together with any special conditions of approval as City staff determines necessary to reduce or eliminate the projects storm water pollution impacts to the MEP. Approving authority makes required findings that project complies with the General Plan, LCP, HMP1, City Codes and any other appropriate land use planning documents. Environmental documents are certified and any mitigation monitoring requirements. are noted in the project approval.	• City s standard conditions of approval • Project Conditions of Approval • Environmental mitigation and monitoring plan (if any)
Final Project Design	Developer prepares project construction plans including grading, improvement, landscape and building detailing required BMPs. Construction SWPPP is prepared and SWMP is finalized. A single sheet BMP site plan is prepared.	• Storm Water Standards Manual • Project Conditions of Approval • Environmental mitigation and monitoring plan (if any)

Table 2.4.4 Storm Water Compliance Process for Development Activities

Development Process Stage	Activity Description	Process Review Documents References
Construction Plan Check Application Submittal	City staff review application package for completeness of submittal including storm water compliance documents. Applicant completes and submits Project Storm Water Threat Assessment Worksheet included as part of the Storm Water Requirements Applicability Checklist.	• Plan Check Application Submittal Checklist • Project Threat Assessment Worksheet • Project Conditions of Approval
Construction Plan Check Review	City staff reviews construction plans and accompanying reports and documents including any SWMP, single sheet BMP site plan, Construction SWPPP, geotechnical and hydrology/hydraulic reports. All storm water pollution prevention requirements are checked against construction plan checklist, SWMP checklist, Construction SWPPP checklist and project conditions of approval. Construction cost estimates are approved for bonding costs including costs for structural BMPs. For priority projects a BMP Maintenance Agreement is prepared.	• Construction Plan Checklist • SWMP Checklist • Construction SWPPP Checklist • Project conditions of approval • Project Threat Assessment • City Engineering plan review procedures • Environmental mitigation and monitoring plan (if any) • Cost estimates
Construction Plan Approval	City approves construction plans and accompanying Construction SWPPP and SWMP including single sheet BMP site plan. The executed BMP Maintenance Agreement is recorded and entered into the City's document management system database. All treatment control BMPs are noted on the construction plans and forwarded to the GIS group for entry into the BMP inventory. Any project design changes that differ from the approved site plan or project conditions of approval are reviewed in compliance with the City's Substantial Conformance Procedures to ensure that the project remains in compliance with all land use planning findings. Secured agreements to construct project improvements are obtained backed up with cash and/or other securities. Developer is required to note the WDID number on the project plans	• Plan check completion letter • BMP Maintenance Agreement • BMP Inventory update procedures • Substantial Conformance Procedures • Environmental mitigation and monitoring plan (if any) • Cost estimates • Secured Agreements • Single sheet BMP site plan
Ministerial (Construction) Permit Issuance	City issues permit(s) for construction activities including grading, improvement, building, demolition and blasting. Any special storm water compliance requirements are noted on permit. City staff review plan check completion letter for any special storm water compliance requirements. Copies of the permit, construction plans, Construction SWPPP, single sheet BMP site plan and SWMP are forwarded to the Construction Management and Inspection Division. A construction inspection level (low, medium or high) is assigned in accordance with the project's threat assessment form. The project tracking database is updated with the project threat assessment construction level and permit issuance status.	• Plan check completion letter • Project SWMP • Project Construction SWPPP • Construction Threat Assessment Worksheet • Pollution Prevention Guide for the Construction Industry • Construction SWPPP Fact Sheet • Single sheet BMP site plan

Table 2.4.4 Storm Water Compliance Process for Development Activities

Development Process Stage	Activity Description	Process Review Documents References
Preconstruction Meeting	City staff meets with contractor and other parties to review project construction issues, schedule, and storm water BMP implementation, monitoring and testing requirements. Contractor is informed of storm water inspection and enforcement procedures and reminded to maintain compliance with the City's storm water pollution prevention requirements. City inspector verifies the NOI has been filed with the Regional Board and a WDID number has been assigned to the project.	• Preconstruction checklist • Construction SWPPP • SWMP • Construction plans • Pollution Prevention Guide for the Construction Industry • Single sheet BMP site plan
Construction and Inspection	Developer constructs project including temporary and permanent BMPs. City inspectors enforce compliance with SWPPP, SWMP and Municipal Permit. During construction City project inspector reviews construction for compliance with all plans, the Construction SWPPP, SWMP and City Standards. Regular storm water compliance inspections are scheduled and tracked per City procedures and the requirements of the 2008 JURMP. Enforcement actions are taken as necessary in accordance with City inspection and enforcement procedures. City inspector reviews and approves any minor construction revisions. Major construction revisions are referred to the Engineering Development Services Division for review and approval.	• Construction SWPPP • SWMP • Construction plans • City inspection and enforcement procedures • Pollution Prevention Guide for the Construction Industry • Inspection reports • Enforcement action reports • Secured Agreements • Single sheet BMP site plan
Project Completion	Construction plans are "as-built", securities released, and BMP construction verified. As-Built plans prepared and forwarded to the GIS Group to update the BMP inventory. City inspector reviews project site to verify installation of permanent BMPs prior to occupancy permit and/or project acceptance using the single sheet BMP site plan. Public Improvements are accepted for maintenance including any public structural control BMPs.	• Construction SWPPP • SWMP • Construction plans • Pollution Prevention Guide for the Construction Industry • Punch list • Secured Agreements • Project Acceptance Forms • Single sheet BMP site plan
Post Construction Annual Treatment Control BMP Inspections	BMP owners maintain BMPs in accordance with recommended and regulatory maintenance schedules. Treatment Control BMP owners submit annual verification of effective operation and maintenance of installed treatment control BMPs. City staff inspects project sites with installed treatment control BMPs to verify compliance with storm water requirements. (New requirement to be implemented in FY 08-09).	• SWMP • BMP Inventory List • Site BMP Inspection Report • BMP Maintenance Agreement

Confirmation that all development projects were required to undergo the City's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked

During the reporting period covered by this component of the annual report (March 24, 2008 to June 30, 2008), all new development projects and redevelopment projects including City Capital Improvement Program (CIP) projects were required to undergo the City s urban runoff approval process in accordance with the requirements of the 2007 Municipal Permit and 2008 Carlsbad JURMP.

Project compliance was tracked through a variety of paper and computer tracking systems. During the reporting period (March 24, 2008 to June 30, 2008), tracking of projects through the discretionary project approval process consisted of paper records kept in individual files. As projects are approved, standard and special conditions of approval are placed in the written project conditions of approval. These conditions specify whether the project must comply with the priority or non-priority project requirements of the 2008 Carlsbad SUSMP. For priority development projects, a written Storm Water Management Plan (SWMP) is prepared detailing all proposed site design, source control and treatment control BMPs, including interim LID and hydromodification requirements. Structural site design, source control and treatment control BMPs are also reflected on the site plan or tentative map. The tentative map/site plan, conditions of approval and SWMP document are used at the construction plan review and ministerial permitting stage of the project to ensure compliance with the appropriate storm water pollution prevention requirements.

The City maintains a database of project discretionary approvals which includes project approval date, approving authority, appropriate resolution numbers and the project priority status (Priority, Non-Priority or Exempt). A list of the project discretionary approvals for the reporting period is included as Appendix 2.2. Additionally, the City initiated a new single plan BMP sheet that includes a project site plan and calls out the location of each required LID site design, source control and treatment control BMP. The plan contains a matrix cross referencing the required BMP with the appropriate construction plan (grading, improvement, building or landscape) where the specified BMP construction is detailed. A copy of the plan is attached to each construction drawing for reference by the contractor and inspector. At the conclusion of the project and prior to issuance of an occupancy permit or acceptance of the improvements, the inspector will use the single sheet BMP plan to help ensure all required BMPs are installed as required. After verification, the inspector will initial the plan and place a copy in the project inspection file.

During the construction plan review stage, a final design SWMP is submitted and approved. In addition, each project s required structural BMPs are incorporated into the project plans. For priority projects, a table is placed on the title sheet identifying each treatment control facility including manufacturer s information and maintenance schedules and specifying which page of the plans contain the details of each required BMP. A separate table is included on the detail sheet providing additional information including the number of BMP units located on the specified plan sheet. The tables are used to highlight BMP requirements to the contractor and project inspector. The table also makes it easier for City GIS staff to locate treatment control BMPs for entry into the City s GIS database.

At the project permitting stage, the applicant is required to submit a completed Construction Threat Assessment Worksheet for Determination of a Project's Perceived Threat to Storm Water Quality (Construction Threat Assessment Worksheet). The Construction Threat Assessment Worksheet is used to determine the inspection frequency level pursuant to the 2007 Municipal Permit requirements (low, medium or high). The required inspection level is entered into the City's Permits Plus software program for automated tracking. The Permit Plus program links the various ministerial construction permits (building, right-of-way, blasting and grading) to the "master" development project. The Permits Plus program is used to automatically generate storm water inspection requests for development projects with active permits. The program is also used to track inspection results and follow-up enforcement inspections. A copy of the Construction Threat Assessment Worksheet is included as Appendix C to the Construction SWPPP Standards and Requirements Chapter of the Storm Water Standards Manual attached as Appendix 2.10.

A listing of the development projects to which SUSMP requirements were applied

During the reporting period covered by this component of the annual report (March 24, 2008 to June 30, 2008), the 2008 Carlsbad SUSMP requirements were applied to 20 private development/redevelopment projects and 4 City Capital Improvement Program (CIP) projects. Of the 20 private development/redevelopment projects, 12 were priority development projects subject to site design, source control and treatment control requirements and 8 were standard projects subject only to site design and source control BMP requirements. Of the 4 City CIP projects, there were no priority development projects and all 4 were standard projects subject only to site design and source control BMP requirements. Copies of the development and CIP project approval list showing project priority are included in Appexdices 2.2 and 2.3, respectively.

Confirmation that all applicable 2008 Carlsbad SUSMP BMP requirements were applied to all priority development projects, including a description of how the information was tracked

During the reporting period covered by this component of the annual report (March 24, 2008 to June 30, 2008), all applicable requirements of the 2008 Carlsbad SUSMP were applied to all priority development projects. The City required submittal of a completed Storm Water Standards Questionnaire for every discretionary application made to the City during the reporting period. Projects determined to be priority development projects per the Storm Water Standards Questionnaire were additionally required to submit a preliminary Storm Water Management Plan (SWMP).

As projects are approved, standard and special conditions of approval are placed in the written project conditions of approval. These conditions specify whether the project must comply with the priority project or standard project requirements of the 2008 Carlsbad SUSMP. For priority projects, a written Storm Water Management Plan (SWMP) is prepared detailing all proposed site design, source control and treatment control BMPs. Structural site design, source control and treatment control BMPs, including the new interim LID and hydromodification requirements are also reflected on the site plan or tentative map. The tentative map/site plan, conditions of approval and SWMP document are used at the construction plan review and ministerial permitting stage of the project to ensure compliance with the appropriate storm water pollution prevention requirements.

The City maintains a database of project discretionary approvals which includes project approval date, approving authority, appropriate resolution numbers and the project priority

status (Priority, Non-Priority or Exempt). A of the project discretionary approval list is included as Appendix 2.2. Additionally, the City initiated a new single plan BMP sheet that includes a project site plan and calls out the location of each required LID site design, source control and treatment control BMP. The plan contains a matrix cross referencing the required BMP with the appropriate construction plan (grading, improvement, building or landscape) where the specified BMP construction is detailed. A copy of the plan is attached to each construction drawing for reference by the contractor and inspector. At the conclusion of the project and prior to issuance of an occupancy permit or acceptance of the improvements, the inspector will use the single sheet to help ensure all required BMPs were installed as required. After verification, the inspector will initial the plan and place a copy in the project inspection file.

At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs

Appendix 2.5 of the annual report includes a sample project which received discretionary approval during the review period (March 24, 2008 to June 30, 2008). The sample project was a 22,500 square foot corporate office located on a 3.85 acre industrial lot known as the Kisco Home Office (PIP 08-01). The site drains to the Encinas Creek. The anticipated and potential pollutants generated by the project, as determined by Table 2 of the 2008 Carlsbad SUSMP, include sediments, nutrients, heavy metals, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses and pesticides. The Encinas Creek is not on the 303(d) list of impaired water bodies. The required project BMPs included:

1. Site Design
    a. Minimized Impervious Footprint
        i. Building designed to maximum height allowed by Code
        ii. Used permeable surface for a portion of fire access driveway
        iii. Conserved natural and existing onsite vegetation
    b. Minimized Directly Connected Impervious Areas
        i. Roof drains and parking lot drainage directed to bioswales
        ii. Drain sidewalks to landscape areas
        iii. Maximized canopy using native or drought tolerant trees and large shrubs
    c. Maximized Canopy by retaining existing oak trees and planting new trees around building and parking areas
2. Source Control
    a. Trash receptacles to be stored under cover and designed not to allow run-on water to enter enclosure
    b. Efficient irrigation with rain and water loss shut-off devices for landscaped areas
    c. All storm drain inlets in the project area to be stenciled and signed with porcelain tiles
    d. Property owners to be provided with storm water pollution prevention informational package
    e. Integrated pest management practices to be used
3. Individual Project Category
    a. The runoff from private driveway to be directed to bioswale
    b. Hillside are or project to be landscaped with deep-rooted drought tolerant plants
4. Treatment Control
    a. Bioswales
    b. Sand filter/detention basin

A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible

No priority projects were allowed to develop using treatment control BMPs with low removal efficiency rankings as the sole method of treatment control during the reporting period (March 24, 2008 to June 30, 2008).

An updated treatment control BMP inventory

The City has a watershed-based inventory of publicly and privately owned treatment control BMPs. The inventory has been used to track and document information about each of these structures, including, BMP type, inspection dates and findings, maintenance frequencies and requirements, verifications, and other Permit requirements. Development of the inventory is an ongoing process as new structures are researched, verified, and added to the database on a continual basis.

During this reporting period, the City updated the watershed based inventory and prioritized all verified structures into high, medium, and low categories as required by the Permit according to BMP type, location, and proximity to the nearest ESA. During the last quarter of FY 07-08, the City was able to confirm 232 privately owned treatment control BMPs, which includes 85 high priority, 82 medium priority, and 65 low priority structures. In addition, there were 57 publicly owned treatment control BMPs on the inventory, which included 11 high priority, 46, medium priority, and no low priority structures. A copy of the updated treatment control BMP inventory for both publicly and privately owned facilities is included as Appendix 2.4.

The number of treatment control BMPs inspected, including a summary of inspection results and findings

During FY 07-08, the City did not conduct any inspections of privately owned treatment control BMPs. However, staff worked to confirm the accuracy of information on the inventory, research certifications and maintenance requirements, verify ownership and responsible parties, and develop inspection procedures, forms, and outreach materials for this new program. A new treatment control BMP inspection form for privately owned structures was developed and a copy can be found in Appendix 2.6. Inspection of privately owned treatment control BMPs identified on the updated inventory will be conducted as required by the Permit by October 1, 2008 and the results will be reported in the FY 08-09 annual report.

A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings

During FY 07-08, the City developed a new treatment control verification form. The form will be mailed to all private property owners and other responsible parties identified on the updated inventory prior to the rainy season. The mailers will include an information letter, treatment control BMP brochure, and the verification form. Private property owners will also be able to download information about treatment control BMPs from the City's webpage at www.carlsbadca.gov/cmi. It is anticipated that there will be a learning curve for responsible parties because they have not been required to provide verification of the maintenance and operation of the treatment control BMPs in the past. The City will work with the responsible parties for the first year of the verification program implementation. In the event that a responsible party does not respond the City may use its enforcement authority to escalate efforts. A copy of the new treatment control verification form can be found in Appendix 2.7.

Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked

During the reporting period covered by this component of the annual report (March 24, 2008 to June 30, 2008), the installation of all structural BMPs required of priority projects were verified prior to occupancy. The process is initiated when a request for occupancy is made to the City by the building contractor or developer. Both the building inspector and public works inspector are notified of the request for occupancy and final inspections are schedule. The building inspector and public works inspectors review the project site for compliance with all City requirements including verification of BMP installation. If all the requirements are satisfactory the building inspector and public works inspector sign off on the occupancy permit and occupancy is granted. The City maintains a copy of the signed occupancy permit in the building permit file. The City Building Department staff then updates the status of the permit in the building permit database.

A listing of any projects which received a SUSMP waiver

No projects received a SUSMP waiver during the reporting period covered by this component of the annual report (March 24, 2008 to June 30, 2008).

A description of any SUSMP waiver mitigation program

The City did not incorporate a SUSMP waiver program within the 2008 Carlsbad SUSMP. No SUSMP waivers were requested or granted during the reporting period. If a SUSMP waiver is requested in the future, the City will follow the waiver provisions as provided in the 2007 Municipal Permit.

A description of Hydro-modification Management Plan development collaboration and participation

In addition to participating in the Model SUSMP update, the City participated and will continue to participate in the development of the regional Hydro-modification Management Plan (HMP). City staff attended the copermittee meetings held on the HMP during FY 07-08 and provided input into the discussion process. The City of Carlsbad participated in the cost sharing for the consultant firms retained to prepare the San Diego regional HMP. The HMP, similar to the Model SUSMP document, will require that development projects incorporate BMPs into their design to maximize infiltration and mimic pre-project hydrologic characteristics. Once the HMP is complete and acceptable to the RWQCB, the City will revise its JURMP and Storm Water Standards Manual to reflect the HMP requirements.

A listing of priority development projects required to meet Hydromodification Management Plan (HMP) requirements, including a description of hydrologic control measures implemented

During the reporting period covered by this component of the annual report (March 24, 2008 to June 30, 2008), no projects were approved that met the 50 acre minimum requirement for implementation of the interim hydromodification requirements.

A listing of priority development projects not required to meet Hydromodification Management Plan (HMP) requirements, including a description of why the projects were found to be exempt from the requirements

During the reporting period covered by this component of the annual report (March 24, 2008 to June 30, 2008), no projects were found to be exempt from the interim hydromodification requirements. Several permitted projects that met the 50 acre criteria were under construction

when the interim hydromodification requirement became effective. However, the 2007 Municipal Permit stated that projects under construction when the requirements became effective were not required to meet interim HMP requirements and therefore, no projects were exempted from the HMP requirements during the reporting period.

A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project

During the reporting period covered by this component of the annual report (March 24, 2008 to June 30, 2008), no projects were found to meet the interim HMP criteria except those which were under construction when the requirements became effective. Per the requirements of the 2007 Municipal Permit, projects under construction or which were lawfully approved prior to March 24, 2008, were not required to meet the interim hydromodification criteria.

The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance

There were no violations that occurred or enforcement actions taken during the reporting period (March 24, 2008 to June 30, 2008) regarding installation of permanent BMPs. The City achieved compliance with the 2008 SUSMP through the permitting process. Development approvals are not granted until the project shows complete compliance with the City s storm water pollution prevention requirements. The City will not issue a construction permit until all applicable BMP requirements are incorporated into the project plans. For projects involving grading and/or street and utility improvements, the City requires that the developer enter into secured agreements to guarantee developer performance on the grading or improvement work including associated structural BMPs. City inspectors review the project sites during construction to ensure that all work is being done in compliance with the construction plans and City Standards and procedures. Prior to issuance of a certificate of occupancy or release of any security, the City inspector reviews the project site to ensure that all applicable structural BMPs have been installed per the approved plans and specifications. Only when the BMP installations have been verified will the certificate of occupancy be issued or any security be released.

2.5 Development Planning Component Effectiveness Assessment

During the reporting period, the City has experienced measurable changes in outcome levels 1, 2 and 3 regarding compliance with the Land-Use Planning Component. Outcome Level 1 improvements included the many changes and improvements made to the City s storm water standards, procedures, and ordinances. The changes which became effective March 24, 2008, were primarily made to ensure compliance with the 2007 Municipal Permit. However, additional changes were made to clarify and simplify storm water compliance requirements and to enhance the City s storm water protection standards.

The Outcome Level 2 improvements included the raising of awareness of existing and new storm water compliance requirements among City development review staff, developers and the City s Planning Commission. Through a combination of training during weekly staff meetings, webinars and outside training courses, City staff significantly increased their knowledge and understanding of the new Municipal Permit requirements, LID designs, hydromodification principles and City storm water compliance processes. Developers were seen to increase their

knowledge of the new Municipal Permit requirements, LID designs, and City storm water compliance requirements through revised plan review checklists, City plan review comments, the City's updated Storm Water Standards Manual and outside training courses. The City Planning Commission increased their knowledge on LID design principles and general storm water regulatory requirements thorough a staff presentation made at a regularly scheduled Planning Commission meeting.

Outcome Level 3 improvements were seen in the development community. With the adoption of the interim LID and hydromodification criteria on March 23, 2008, the City no longer accepted the use of hydrodynamic separator systems and filter inserts as a primary treatment control BMP. To facilitate compliance to the new LID standards, the City began requesting new development/redevelopment compliance with the new interim criteria in October 2007. By March 24, 2008 when the new interim criteria became effective, the development community was already showing a marked increase in compliance with the interim criteria at the initial project submittal stage.

2.6 Program Review and Modification

The greatest strength of Carlsbad's Land-Use Planning Component is its motivated and well informed project review staff. The project review staff holds weekly meetings where issues of storm water pollution prevention are discussed including issues of new regulatory requirements, new and evolving BMP standards, inventory collection and reporting, LID application in new development design and BMP effectiveness (a list of the Engineering Development Services training meetings is included in Appendix 2.8). The weekly meetings, combined with internal and external training sessions, help to keep the staff knowledgeable on the evolving standards of storm water quality and ensure consistent application of storm water quality requirements for development projects within the City including the City's own Capital Improvement Program (CIP) projects.

The City is dedicated to putting into place all the administrative and regulatory tools required to implement the Land-Use Planning requirements of the 2007 Municipal Permit. During the reporting period (March 24, 2008 to June 30, 2008), the City updated its Storm Water Pollution Prevention, Grading and Drainage, Public Property and Building ordinances to strengthen and clarify its storm water permitting requirements and, to address the requirements of the 2007 Municipal permit. The City also completely rewrote and updated its Storm Water Standards Manual which includes the updated 2008 Carlsbad SUSMP and updated Construction SWPPP standards and requirements.

With the exception of the standard project conditions of approval, all of the process improvement, code and standards changes became effective on March 24, 2008. The changes to the standard project conditions of approval were implemented prior to October 2007 to provide developers advance notice of 2007 Municipal Permit requirements since it generally takes a minimum of six months for a project to proceed from discretionary approval to construction permit. Early implementation of the updated standard conditions of approval ensured compliance with the new interim LID and hydro-modification requirements while avoiding costly and timely delays to the developer once the requirements became effective on March 24, 2008. A copy of the revised and updated standard project conditions of approval is included in Appendix 2.1.

The City will continue to evaluate the storm water quality policies, procedures, codes, standards and other requirements of its Land-Use Planning processes to ensure complete compliance with the 2007 Municipal Permit in FY 08-09. A primary area of focus for next year will be the development of effectiveness review and evaluation procedures for the Land-Use planning process. Another area of focus will be the improvement of the BMP inventory tracking and reporting metrics. Strengthening of these two areas will help to promote more reliable and effective storm water prevention measures and to communicate effectiveness results using measurable parameters.

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City of Carlsbad has continued to stress the importance of storm water pollution prevention throughout the implementation of construction component. This section of the annual report for construction sites identifies those activities which occurred from January 1, 2008 through June 30, 2008 and will cover the requirements of the Permit R9-2007-0001 (Permit).

The City has implemented activities that address and minimize impacts to receiving water quality from construction sites. Performance goals were used to assess the completeness of this component and the effectiveness of action plans. These performance goals included construction site inspections, BMP implementation reviews, corrective actions, enforcement, and reporting requirements. During January 1, 2008 through June 30, 2008 of FY 07-08, the City updated the construction inventory, inspected all construction sites, responded to construction related inquiries and complaints, provided outreach and education to developers, engineers, contractors and City staff, and when necessary used enforcement actions to obtain compliance.

3.2 Source Characterization

The City uses the Permits Plus database to update a watershed based inventory of all construction sites that require (grading and/or construction) permits regardless of site size or ownership. Construction sites with grading permits may include sites where activities such as grading, excavation, clearing, road construction, structure construction, or demolition results in the disturbance of soil. Construction permits that do not require a grading permit may include sites where activities such as single family residence, remodels, or additions, home demolitions, tenant improvements, or commercial/industrial buildings that are constructed resulting in the need for water quality protection. An inventory of all active construction sites can be found in Appendix 3.1.

The Development Services Division updates the Permits Plus database until the project is ready to begin construction. The Construction Management and Inspection Division (CMI) then issue the permit and updates the database during the active construction phase of the project. The CMI inspectors are primarily responsible for conducting storm water compliance inspections during the active construction phase.

3.3 Updates to Ordinances and Approval Processes

Extensive ordinance and project approval process revisions were implemented during the reporting period to meet the new 2007 Municipal Permit requirements, to clarify and improve upon the existing storm water pollution prevention measures. The updates and revisions became effective after March 24, 2008. The ordinance updates included changes to the Public Property, Grading/Drainage, and Building Codes/Regulations ordinances in the Carlsbad Municipal Code. The following presents a brief summary of the changes made to the various ordinances:

Public Property Ordinance

Various sections in Chapter 11.16 (Permits for Work or Encroachment in Public Places) were revised to require all work in the public right-of-way to comply with the provisions of the 2007 Municipal Permit. Included with the revisions are requirements for right-of-way applicants to: 1) install permanent storm water protection measures for qualifying projects; 2) enter into storm water pollutant protection facility maintenance agreements; and, 3) implement Construction Storm Water Pollution Prevention Plans (SWPPPs) as necessary. Also included with the revision to this ordinance is a provision giving the City Engineer authority to deny issuance of right-of-way permits for any project not in compliance with requirements of the 2007 Municipal Permit.

Grading and Drainage Ordinances

Chapter 15.04 (General Regulations) was revised to include new and updated storm water compliance definitions for various words, terms and phrases used throughout the Grading and Drainage Ordinances. The changes were needed to clarify definitions, eliminate redundancy and reference the updated 2007 Municipal Permit.

Chapter 15.12 (Storm Water Management and Discharge Control) was revised to bring this ordinance into compliance with the new 2007 Municipal Permit, clarify requirements and provide the City enforcement official with improved inspection and enforcement authority. Additional revisions were made to clarify that all ministerial and discretionary permits are subject to the City s storm water standards and must install permanent storm water pollution prevention measures as required. This ordinance change included new language requiring that property owners must enter into storm water pollution prevention facility maintenance agreements before receiving construction permits.

A new Section 15.12.095 (Structural treatment control BMP maintenance requirement) was added to require property owners to maintain permanent storm water pollution prevention facilities on a continuing basis after construction work is completed. This ordinance revision also provides authority for the City enforcement official to conduct inspections of any site that includes a permanent storm water pollution prevention facility constructed in accordance with the requirements of the 2007 Municipal Permit. Also included in this ordinance update is a provision requiring the owners of privately owned and maintained storm water pollution prevention facilities, to submit an annual statement to the City verifying the effective operation and maintenance of each installed treatment control facility prior to the rainy season. The inspection and maintenance provisions of this ordinance update are necessary to accommodate new storm water facility maintenance and inspection requirements of the 2007 Municipal Permit.

Various sections of Chapter 15.16 (Grading and Erosion Control) were revised to incorporate use of the revised storm water compliance words, terms or phrases as proposed in the revised definitions included within Chapter 15.04. Section 15.16.070 (Application for a grading permit) was revised to clarify that a Construction Storm Water Pollution Prevention Plan (SWPPP), submitted with a grading permit, must pay a separate plan review and inspection fee. This revision was needed to clarify existing processing fee payment requirements.

A new Section 15.16.085 (Construction SWPPP) was added mandating preparation of a Construction SWPPP, in accordance with City Standards, for every grading permit and for any non-permitted construction activity which has the potential for contamination of storm water

and/or the discharge of non-storm water pollutants to the City's storm water conveyance system. The new section also provides an exemption from the preparation of a Construction SWPPP when the project has no potential to impair water quality. Additional provisions provide authority for the implementation of the City's existing Construction SWPPP review and inspection fees.

Other miscellaneous revisions were made to various sections of Chapter 15.16 to clarify compliance with various storm water provisions or make the code consistent with existing grading permit processing procedures including requirements to: 1) require grading plans to conform to the Grading and Drainage Ordinances; 2) require grading plans to include provisions for implementation and maintenance of all storm water pollution prevention measures identified in the accompanying Construction SWPPP; 3) clarify grading permit application withdrawal procedures; 4) require City approval of a Construction SWPPP prior to issuance of a grading permit; 5) require that grading and erosion control securities to include coverage for Construction SWPPP costs; and, 6) ensure that the enforcement provisions of this chapter specifically address failures to install storm water protection measures.

Title 18 Building Codes and Regulations

A new Chapter 18.48 was added to require that all building construction comply with the provisions of the 2007 Municipal Permit. Included with this ordinance revision are requirements to: 1) install permanent storm water protection measures for qualifying projects; 2) enter into storm water pollutant protection facility maintenance agreements; 3) implement Construction SWPPPs as necessary; and, 4) provide authority for the community development director to deny issuance of building permits for any project not in compliance with requirements of the Municipal Permit.

In addition to the ordinance changes, numerous changes were made to the City's project approval processes and BMP standards to comply with new 2007 Municipal Permit requirements and to update and improve upon the existing processes and standards. The City's Storm Water Standards Manual as revised on March 24, 2008 and again on June 4, 2008 describes the updated standards and processes. The Storm Water Standards Manual includes the City's updated Standard Urban Storm Water Mitigation Plan (referred to as the 2008 Carlsbad SUSMP) and the updated Construction Storm Water Pollution Prevention Plan (Construction SWPPP) Standards and Requirements. An additional change was made to Chapter 7 of the City's General Design Standards to incorporate new Low Impact Development (LID) design requirements. A brief description of the changes made in the 2007 Carlsbad SUSMP, Construction SWPPP Standards and Requirements and General Design Standards are as follows:

<u>2008 Carlsbad SUSMP</u>

The format of the City SUSMP document was completely revised to make it easier to read and understand. The prior 2003 Carlsbad SUSMP intermixed permanent post construction and temporary construction BMP requirements. The revised 2008 Carlsbad SUSMP removes the temporary construction BMP requirements (as they were moved to the Construction SWPPP section), and deals only with the post construction permanent BMP requirements. A simplified discretionary review process flowchart was crafted to replace the more complex flowchart found in the previous SUSMP document. The process description chapters were simplified and placed in an order more closely corresponding to the manner in which a development Storm Water Management Plan (SWMP) is prepared. The updated SUSMP includes the new interim

hydromodification criteria of the 2007 Municipal Permit.

Additional improvements include the revision of the Storm Water Requirements Checklist (now titled the Storm Water Standards Questionnaire) to make it easier to read and to address redevelopment project submittals. A new Storm Water Management Plan (SWMP) review checklist was created assist developers with the preparation of SWMPs and to assist City staff during the review process. To help ensure verification of BMP installation during the plan review and construction process, the City developed a new single sheet BMP plan requirement. For each priority project a single sheet BMP plan will be prepared by the develop calling out the location of each required LID site design, source control and treatment control BMP. The plan will include a matrix listing the required BMP cross referenced with a list of the specific construction plan drawing where the specified BMP is detailed (grading, improvement, building or landscape plan). The singe sheet BMP plan will be attached to each appropriate construction drawing. At the conclusion of the project and/or prior to occupancy, the City inspector will use the single sheet BMP plan to help ensure verification of all site BMP requirements. When verified, the inspector will initial the plan and have it placed in the project file.

Construction SWPPP Standards and Requirements

The City s existing Construction SWPPP Standards and Requirements document was updated to clarify and improve the City s Construction SWPPP processes and requirements. The temporary construction BMP standards and requirements removed from the 2003 Carlsbad SUSMP were updated and added to the City s Construction SWPPP Standards and Requirements document together with additional process and BMP standard improvements. The updated Construction SWPPP Standards and Requirements include discussion on compliance with the Municipal Permit, General Construction Permit and General Utility Permit. To accommodate these and other permit requirements, the City established a new three tiered construction SWPPP process. The three tiers allow for preparation of Construction SWPPPs tailored to match the threat to water quality posed by a specific project.

The updated Construction SWPPP Standards and Requirements incorporate detailed references to specific construction BMPs and detail general construction site management requirements during both the rainy and non-rainy seasons. Also included are updated controls for construction sites, maximum disturbed area requirements and advanced treatment control requirements. The updated standards also include new inspection frequency other inspection requirements.
As part of the update, the City prepared new Storm Water Threat Assessment forms to help determine which Tier level Construction SWPPP applies and what inspection frequency is required. New storm water compliance forms that notify and commit the developer to storm water compliance requirements were prepared and instituted.

A new Tier 3 Construction SWPPP checklist was prepared that better follows the CASQA Construction SWPPP preparation manual. A new Tier 2 Construction SWPPP Site Assessment Form, SWPPP Template and Checklist were prepared to help assist developers with the preparation of a Tier 2 Construction SWPPP. A standard format Tier 1 Construction SWPPP was created that can easily be completed over the counter for projects posing a minor threat to storm water quality. The City also adopted updated Storm Water Pollution Prevention standard notes to eliminate redundancy and clarify and improve the standard construction requirements for developers.

General Design Standards

Chapter 7 of the City's General Design Standards was modified to establish new Low Impact Development (LID) standards. The Chapter title was changed from "Grading and Erosion Control Standards" to "Grading Site Design and Low Impact Development (LID) Standards". The changes included adoption of the County of San Diego *Low Impact Development Handbook, Stormwater Management Strategies* and *Low Impact Development Appendices, San Diego Considerations and LID Fact Sheets. Also included in the update was* a description of the purpose and intent of LID, *a requirement that LID plans should be reviewed by geotechnical engineers (as appropriate), requirements for the new single sheet BMP plan and references to additional LID reference materials..*

The full text of the revised and updated ordinances (in strikeout format) can be found in Appendix 2.12. The 2008 SUSMP and Construction SWPPP Standards and Requirements are included in the Storm Water Standards Manual attached as Appendix 2.10, and the previous and revised General Deign Standards are attached as Appendix 2.11.

3.4 Best Management Practice Requirements

SWPPPs and Erosion Control Plans are reviewed prior to commencement of construction activities by the Development Services Department to ensure that the required minimum BMPs will be implemented for all construction sites. Please refer to section 2 for more information. The City has established required minimum BMPs, as identified in the 2008 JURMP and Carlsbad Municipal Code, for all construction sites. The seven required minimum BMPs include components that address the following:

1. Erosion control methods for graded slopes;
2. Erosion control method for graded flat areas (slope 5);
3. Sediment control for perimeter boundaries;
4. Offsite tracking control of sediment;
5. Materials management control;
6. Waste management control; and
7. Non-storm water management control.

The City continues to utilize the pollution prevention measures contained in the Storm Water Best Management Practice Handbooks, published by the California Storm Water Quality Association (CASQA), Caltrans Storm Water Quality Handbooks, and Standards for Design & Construction of Public Works Improvements in the City of Carlsbad. All CMI staff are trained on construction site BMPs and their appropriate application.

Pollution prevention consists of procedures and practices that eliminate or reduce the pollutants at the source. The City has identified and required implementation of the following pollution prevention controls for all applicable construction sites:

- SWPPPs and Erosion Control Plans are required for grading permits and appropriate construction projects. These plans are checked by the City to ensure they adequately address the provisions of the General Construction Permit.
- CMI inspectors enforce the implementation and effectiveness of BMPs described in approved erosion control plans and SWPPPs.

To address each of the required BMPs, the City ensures the SWPPPs and/or erosion control plans include implementation of several types of BMPs as applicable, depending on site-specific requirements. The list of BMPs can be referenced in the 2008 JURMP.

3.5 Program Implementation

During the second half of FY 07-08 the City continued to monitor and enforce storm water regulations by distinguishing the construction components into two areas-Building Construction Permits and Grading Construction Permits. CMI oversees the inspections of grading permitted sites while contracted storm water inspectors ensure building permitted sites (construction sites without a grading permit) are compliant, with two inspectors designated with full responsibility for storm water compliance related to building permitted sites.

The CMI division utilized the Permits Plus database to merge the project information onto the construction site inspection forms. This change provided more accurate information and reduced the time needed to complete forms manually. The CMI division also added a full time storm water compliance position to its staff. The new position was added to focus on storm water compliance in construction and treatment control BMP inspection and management.

The City continued to prioritize all construction sites with active grading permits as High Priority. These sites were at a minimum inspected on a bi-weekly basis during the wet season and once a month during the dry season, at a minimum, to ensure proper installation and maintenance of pollution prevention BMPs. CMI inspectors are responsible for inspections on all active grading and CIP sites. Storm water compliance remained their main focus during this reporting period, especially during the rainy season. All required inspections were documented and placed in the project files. Grading sites in the City were held to the maximum allowable disturbed areas on all applicable sites. There were no projects that triggered Advanced Treatment requirements.

Grading Permit Site Inspections:

All active grading sites were prioritized as high during this reporting period. CMI inspectors verified and documented proper BMP implementation on a weekly basis, sometimes daily. A copy of the construction site storm water checklist can be found in Appendix 3.2. Table 3.1 demonstrates the grading permit inspections conducted during this reporting period of January 1, 2008 to June 30, 2008:

Table 3.1 Grading Permit Site Compliance Inspections

Required Inspections	Inspections Conducted
1,608	1,608

Appendix 3.1 contains a listing of all of the projects active during the period of January 1, 2008, through June 30, 2008. The listing demonstrates that the projects were inspected the required number of times to meet the City's JURMP requirements.

Building Construction Permit Site Inspections:

CMI inspectors were onsite inspecting all locations as required by the priority of the site. During the wet season (Jan. 1 through April 30) high priority sites were inspected bi-weekly. All medium and low priority sites were inspected at least once monthly. All required and follow up inspections were documented. Table 3.2 describes the construction permit inspections conducted this reporting period:

Table 3.2 Building Permit Site Compliance Inspections

Required Inspections	Inspections Conducted
1,212	1,212

Capital Improvement Projects Site Inspections:

Appendix 3.3 shows the current Capital Improvement Projects (CIP) sites. Daily inspections were conducted for CIP projects. These inspections cover a number of storm water issues. It is important to note that not all sites on the inventory were active during the entire rainy season. Table 3.3 describes the CIP project inspections conducted during this reporting period:

Table 3.3 CIP Site Compliance Inspections

Required Inspections	Inspections Conducted
224	224

During required inspections, staff generally found sites to be compliant with SWPPPs, Erosion Control Plans, and BMP implementation. Most observed deficiencies were found with BMP maintenance (i.e. broken gravel bags). These deficiencies were immediately brought to the attention of the responsible site superintendent who was given specific and corrective action requirements by the project inspector. This interaction has proven to be productive in correcting minor deficiencies.

The City meets the standard procedures of inspection to obtain full compliance by conducting required field inspections of all active construction sites followed by the completion of a written construction site storm water checklist. The construction site storm water checklist is used by the inspectors and it covers all phases of the construction process. The documented inspections cover all administrative requirements including SWPPPs, updated wall maps, desiltation basins, materials and waste management, temporary BMPs, slope protection, and site conditions and interactions.

In addition, the City continued verifying the Notice of Intent (NOI) validity prior to issuance of a grading permit or Notice to Proceed for CIP projects. Prior to having a pre-construction meeting and issuing a grading permit, CMI verified a valid NOI was in place for projects subject to the State requirements. The Construction Manager reviewed the State's online database to ensure a NOI had been issued prior to assigning the project to an inspector for grading permit issuance.

There were no changes in the City's enforcement escalation procedures as described in the

2008 JURMP during this reporting period. Table 3.4 is a summary of enforcement actions taken by the City during this reporting period fro January 1, 2008 to June 30, 2008.

Table 3.4 Summary of Enforcement Actions at Construction Sites

Actions Taken	Number of Actions
Written Warning	30
Stop Work Notice	0
Total Actions	30

If a site was found to have minor deficiencies, in terms of storm water compliance, it was generally corrected at the time of the inspection. If a written warning was issued, a specific deadline for correction was noted. Follow up inspections were conducted to ensure construction sites fully complied with the required corrective actions. All sites were found to have completed corrective actions and were in compliance at the time of the follow up inspection.

There were no Stop Work Notices issued during this reporting period, January 1, 2008 to June 30, 2008.

3.6 Construction Activities Effectiveness Assessment

The City of Carlsbad has continued their strong stance on storm water pollution prevention. The field inspectors have realized a higher awareness among field personnel (superintendents, field labor, etc.) regarding the importance and application of best management practices for storm water pollution prevention on construction sites. The City will also be assessing current procedures in order to identify possible improvements in the implementation of the construction component and program in FY 08-09 based on the violations and corrective actions identified in NOV No. R9-2008-0099. A few of the possible improvements are:

- Creating a new checklist that identifies and certifies that all treatment control BMPs have been installed.
- Creating a new database to better track and record the installation, inspection, and certification of all new treatment control BMPs.
- Assessing a more efficient method of updating the current databases at the time of project approvals.

4.0 MUNICIPAL COMPONENT

4.1 Introduction

Municipal facilities are required to implement the minimum BMPs identified and described in the 2008 JURMP (good housekeeping, preventive maintenance, material handling and storage, employee training, solid waste handling, record keeping, self inspection, and spill response), as applicable. Specific BMPs are identified in SWPPPs and/or inspection reports. Specific pollution prevention measures may vary from one site to another and are evaluated separately at each facility. The City implements and assesses the effectiveness of BMPs through regular staff training, self-inspections, third party inspections by a contractor, and SWPPP implementation. The following includes a description of specific pollution prevention activities and storm water BMPs implemented from March 24 through June 30, 2008 per Order R-9-2007-0001 by various City departments. All BMPs were implemented as required by the 2008 JURMP.

Municipal areas and activities are subdivided by categories in the sections below. Prioritization of these municipal areas is presented in the High Priority column of the Municipal Inventory for Order R9-2007-0001, located in Appendix 4.1.

4.2 Minimum BMP Requirements

The following minimum BMPs were implemented at all of the facilities in the Municipal Inventory provided in Appendix 4.1.

4.2.1 Employee Training

Municipal departments provided training at least annually to all employees with responsibility for actions that have a potential to cause storm water pollution. A list of all Municipal storm water training is included in Appendix 8.2. Training generally addresses among other topics:

- Storm water awareness
- Applicable regulations
- Discharge prohibitions
- Importance of pollution prevention practices (good housekeeping, recycling, waste management, source control, etc.)
- Applicable best management practices (including those called out in the facility storm water pollution prevention plan [SWPPP]), where applicable
- Integrated pest management
- Self-inspections
- Record keeping

Documentation of training is maintained on-site at the location(s) where operations or activities are conducted. Where the operations are covered in a SWPPP, training records are filed with the SWPPP.

4.2.2 Pollution Prevention

The City implements urban runoff pollution prevention practices that are generally recognized for that facility s activity as being effective.

Pollution prevention is defined in Orders 2001-01 and 2007-0001 *as practices and processes that reduce or eliminate the generation of pollutants. Recycling, use of different types of products or chemicals, and altering operational procedures are all types of pollution prevention practices that reduce the amounts of pollutants generated by a facility."*

The City's approach is to promote pollution prevention as an activity for all municipal employees and locations. Since 1991, the City has implemented a procurement policy that directs the purchase and use of recycled products. Purchasing staff are encouraged to use *Green Purchasing* principles. This refers to buying products and services with reduced effects on human health and the environment (also called *Environmental Purchasing*). While some of these products are office and janitorial supplies, the policy also applies to construction supplies, landscape materials and equipment, automotive, road and highway supplies.

Specific pollution prevention measures may vary from one site to another, so they are evaluated separately at each facility. Where appropriate, High Priority municipal facilities implemented site specific Storm Water Pollution Prevention Plans (SWPPP) and associated training programs. Furthermore, the pollution prevention BMPs identified in the JURMP were implemented at all municipal facilities. These pollution prevention BMPs include:

- Affirmative Procurement Use alternative, safer, or recycled products.
- Reduce the amount of hazardous materials used by implementing natural controls.
- Redirect storm water flows away from areas of concern.
- Reduce use of water.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.

In addition, the City required the following minimum pollution prevention practices (detailed in SWPPPs or inspection reports) at all municipal facilities where appropriate:

- <u>Reduce use of water or use dry cleanup methods:</u> Employees used dry cleanup methods when possible (sweeping, etc.). Any washing activities required containment and recovery, with no discharge to the storm drain system. These BMPs are also required for City contractors.
- <u>Conduct storm drain maintenance:</u> Employees performed regular visual inspections of the storm drains to identify unauthorized discharges and clean as needed.
- <u>Recycle:</u> City departments recycled appropriate items and implemented the City procurement policy to purchase and use recycled products.
- <u>Move or cover potential pollution sources from storm water contact:</u> Corporate yards protected materials and products that could potentially contribute to storm water pollution by storing them indoors, or covering them, and providing them with secondary containment as needed.

4.2.3 Good Housekeeping

Good housekeeping practices employed simple common sense in creating and maintaining a clean, orderly environment that reduced the risk of accidents and urban runoff contamination.

- **Routine Housekeeping Inspections.** Locations with higher risk of impacting storm water quality (e.g., storm water outfalls, loading and unloading areas, materials, products and wastes storage areas, equipment and vehicle maintenance and cleaning areas) were inspected regularly. Inspections focused on leaks or conditions that may have led to discharges of pollutants to the Storm Water Conveyance or Receiving Waters.

- **Maintenance of Clean Grounds Surfaces.** Sweeping of all paved areas exposed to precipitation or storm water was conducted on a regular basis. Litter controls of all exposed surface were conducted on a regular basis. The frequency of sweeping and litter control is based on site conditions.

- **Waste Management.** Each facility conducted regular pickup and disposal of garbage and waste materials/products to prevent overfill of waste storage containers.

- **Equipment Inspection.** Each facility conducted routine inspection of equipment to ensure proper functioning. Where problems were identified during inspection, proper and prompt maintenance or repair is conducted.

- **Storage.** Raw materials, intermediate products, finished products, byproducts and waste products were stored in covered areas or sealed containers unless the materials or products were not a threat to urban runoff quality. To prevent accidental spills, materials or products are stored away from direct traffic routes. All containers were stacked according to applicable federal, state, and city regulations as well as manufacturers' instructions to avoid damage from improper weight distribution. Pallets or similar devices were used to prevent corrosion of the containers that can result when containers come in contact with moisture on the ground.

- **Limitations on Handling Hazardous Materials.** Each facility limited the handling of hazardous materials to those personnel specially trained to handle these materials.

- **Employee Training.** All good housekeeping practices were incorporated into a facility's employee-training program.

In addition to the BMPs listed above, good housekeeping was addressed as a site specific BMP for each category of facilities listed below. See BMP SC-60 for site specific information on implementation.

4.2.4 Spill Response and Prevention

Municipal staff implemented BMPs at all fixed facilities and field programs to prevent, control and cleanup spills. The following are general BMPs that were implemented:

- BMPs listed in SC-11, Spill Prevention, Control and Cleanup (City of Carlsbad JURMP 2008).

- Spill cleanup materials are readily available and in known locations.

- Spills are cleaned up immediately and dry methods are used where possible.

- Spill cleanup material is properly disposed of.

Spill response and prevention was also addressed as a site specific BMP for each category of facilities listed in Sections 4.3 4.14. See SC-11 for site specific information on implementation.

4.3 Roads, Streets, Highways, Parking Facilities

4.3.1 Background

This section includes BMPs and an inventory of roads, streets, highways, and parking facilities which are deemed High Priority according to Order 2007-0001, Section D.3.a.(7)(a) and the City s 2008 JURMP. This section also includes information on the City s street sweeping program and BMPs for the City s street maintenance program.

4.3.2 Source Characterization

The table below lists the 12 High Priority roads, streets, highways, and parking facilities on the City s municipal inventory, updated in the 2008 JURMP.

Table 4.1 Roads, Streets, Highways, and Parking Facilities

1	ADULT LEARNING PROGRAM PARKING LOT	1207 CARLSBAD VILLAGE DR STE O
2	CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE
3	CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR
4	CITY STREETS	CITY WIDE
5	COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR
6	DOVE LIBRARY PARKING LOT	1775 DOVE LN
7	FARADAY CENTER PARKING LOT	1635 FARADAY AV
8	FARMERS BUILDING PARKING LOT	FARADAY & EL CAMINO RL
9	HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST
10	HELEN ALLMAN GIRLS CLUB PARKING LOT	3368 EUREKA PL
11	HOUSING/REDEVELOPMENT OFFICE PARKING LOT	2965 ROOSEVELT ST B
12	RAILROAD DEPOT VISITORS CENTER PARKING LOT	400 CARLSBAD VILLAGE DR

4.3.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.2 were implemented at the 12 High Priority facilities listed above.

Table 4.2 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-70 Road and Street Maintenance
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.3.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.2 were implemented at the facilities listed in Table 4.1 and are described below:

- SC-11 Spill Prevention, Control, and Cleanup: Spill kits are located in all vehicles.
- SC-33 Outdoor Storage of Raw Materials: Plastic tarps cover raw materials in the yard, equipment is covered by canopies, and the material is covered by a permanent overhead structure or stored indoors. Materials associated with street maintenance activities are stored at the Maintenance and Operations Facility.
- SC-34 Waste Handling and Disposal: Paint waste was returned to the maintenance yard where it was transferred directly from the generating vehicle to secured storage containers. This was done within a contained area in case of any accidental spillage. These containers are clearly marked and stored until arrangements were made for a certified waste management company to remove them and transfer them to an approved facility. Four cigarette butt collectors have been placed along the sea wall, providing a place for proper disposal.
- SC-41 Building and Grounds Maintenance: In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking and Storage Area Maintenance: Parking lots and storage areas were swept biweekly.
- SC-60 Housekeeping Practices: Work sites were swept and all debris was removed upon completion of any asphalt or concrete repair. Water was used when sweeping to keep dust down.
- SC-70 Road and Street Maintenance: Storm drain inlets were protected using rock bags prior to the start of any maintenance activities. Concrete wash out was performed on a plastic tarp and contained to prevent any discharge to the storm drain. Street sweeping was performed for all curbed streets and municipal parking lots in the City. Table 4.3 below indicates the distance swept in curb miles, frequency, and amount of materials removed as a result of the street sweeping activities. In total, there were approximately 8,050 curb miles of streets swept from March 23 to June 30, 2008.

Table 4.3 Street Sweeping Data

Priority[1]	Description	Distance	Frequency	Material Removed
High[2]	Arterials/seawall	100 curb miles	Weekly	90 tons/month
Medium	Residential	900 curb miles	Biweekly	
Low	Alleys	50 curb miles	Biweekly	
Parking Lots	54 lots	53 acres	Biweekly	

[1]Priority is based on the volume of trash and debris generated at these types of streets; streets which generate high volumes of trash are High Priority; streets which generate moderate and low volumes of trash are medium and low priority respectively.
[2]Downtown streets were swept twice weekly

- SC-71 Plaza and Sidewalk Cleaning: A self-contained wet sweeper was used on all tile sidewalks in the downtown area on a scheduled basis.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements

on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers were stored inside and used sparingly in accordance with required application practices.

- SC-75 Waste Handling and Disposal: All materials were hauled directly to transfer station and were covered.

4.4 Flood Management Projects Flood Control Devices

4.4.1 Background

This section includes BMPs and an inventory of the City s Flood Management Projects and Flood Control Devices which are deemed High Priority areas according to Order 2007-0001, Section D.3.a.(7)(a) and the City s 2008 JURMP. This section also includes a description of the Storm Drain Maintenance Program activities.

4.4.2 Source Characterization

The municipal separate storm sewer system is the only High Priority Flood Management Projects and Flood Control Devices on the City s municipal inventory, as updated for the 2008 JURMP. The municipal separate storm sewer system is inclusive of the City s flood management projects and flood control devices.

4.4.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.4 were implemented throughout the City s MS4.

Table 4.4 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-21 Vehicle and Equipment Cleaning
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal

4.4.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.4 were implemented where applicable pertaining to the municipal separate storm sewer system and are described below.

- SC-11 Spill prevention, Control, and Cleanup: All vehicles have spill kits and key vehicles carry hydrocarbon booms. All trash was placed in 55 gallon trash bags. The maintenance sweeper truck was called out to assist in spill cleanup when necessary.
- SC-21 Vehicle and Equipment Cleaning: All vehicles used in flood control device cleaning were washed at fleet maintenance using an enclosed pressure wash system. The system has a secondary water and oil separator plumbed into the sanitary sewer system.
- SC-34 Waste Handling and Disposal: Trash was hauled to transfer station. Debris and other organic material were transferred and deposited at 2400 Tamarack Avenue in three

concrete covered bins. The material was then tested for contaminants and hauled to a landfill or appropriate facility upon receipt of permissible test results.

- SC-60 □ Housekeeping Practices: Trash was removed from these areas of the MS4 on a routine basis.
- SC-74 □ Drainage System Maintenance: A small self-contained vacuum with pressure washer was used to clean the drainage system. All material in the drain box was removed by the vacuum. Disposal of the water and material occurred using a filter sock, allowing water to be decanted into the sanitary sewer system. The solid material was taken to the Tamarack site described above. All trash was removed from the MS4, placed in 55 gallon trash bags, and placed in a 40 cubic yard roll off dumpster that is covered. The material was then transported to Palomar Transfer Station for disposal. Data pertaining to maintenance activities of the MS4 is in Table 4.5 below.

Table 4.5 MS4 Maintenance

Structure	Inspected	Exceeding Cleaning Criteria	Cleaned	Amount of Material Removed (tons)
Catch Basin/Inlet	1300 units[1]	53[2]	Anthropogenic trash removed 100□	12.5[2]
MS4 miles	□15,000 linear feet	N/A	15,000 linear feet	0.5
Open Channel miles	32,000 linear feet	N/A	800 linear feet	0.5

[1] Number represents inspections for quarter four only, balance inspected during quarters one through three and described in JURMP Annual Report for Order 2001-01, July 1, 2007 - March 23, 2008.
[2] Estimation based on inlets exceeding criteria for Fiscal Year □211 and material removed for Fiscal Year □50 tons. Values are □ of the totals for the Fiscal Year.

- SC-75 □ Waste Handling and Disposal: Described under SC-34 and SC-74 above.
- BMPs to limit infiltration from sanitary sewer to storm drain system: a preventive maintenance schedule was implemented that includes jet rodding, and vactoring the sanitary lines throughout the city of Carlsbad. Closed circuit television was used for investigations in sewer lines. In addition, engineering standards described below prevent infiltration of sewage to the MS4.

  The City of Carlsbad□s Engineering Standards employed several measures to prevent sewage intrusion into municipal separate storm sewer systems (MS4).

  1. All gravity sewer pipes and laterals are required to have gasketed joints, which create water tight joints (Volume 1, Chapter 6, Item 3.A, 3.C, and 3.F). The water tight joints are tested using the methods indicated in Standard Specifications for Public Works Construction (SSPWC) section 306-1.4. The water tight test methods include a post-installation closed circuit television (CCTV) inspection and an air pressure test where the sewer line must sustain 2.5 to 3.5 psi gage pressure for at least 2 minutes after being pressurized to 3.0 psi.

  2. All gravity sewer lines are required to follow engineering standard for the amount of flow they can carry. During peak hour dry weather season the pipe shall be designed to carry a flow depth of 0.5 (or 0.75 depending on the pipe size) the diameter of the pipe (Volume 1, Chapter 6, Item 4.C). This design requirement prevents the pipe from becoming full, which would pressurize the pipe and potentially cause a leak.

3. Per Carlsbad's Engineering Standard GS-6 and GS-6A, the sewer lines are typically located at an elevation deeper than the storm drain line, which further prevents sewage intrusion into MS4. In the event of a sewage pipe leak, the leakage flow will naturally gravitate below the sewer line rather than up to the storm drain line.

4. The standard horizontal separation between sewer and storm drain is 13 feet, which further prevents sewage intrusion into MS4.

5. In special cases where storm drain lines are installed at a depth greater than that of sewer lines, additional design standards are required such as water tight joints or encasements (Volume 1, Chapter 5, Item 1.G).

- Treatment Control BMPs: Storm Drain Inserts including fossil filters, rapid flow BMPs, and debris catchers with zinc filters are in place at various storm drain locations throughout the City. Fossil filters removed trash and hydrocarbons, while debris catchers were installed to prohibit anthropogenic trash and debris from entering the storm drain system. Table 4.6 lists the type of insert, location, quantity, and minimum frequency of maintenance.

Table 4.6 Storm Drain Insert-Type BMPs

Type	Location	Number	Frequency
Debris Catcher	Carlsbad Boulevard	9	Annual
	State Street	4	Annual
	Grand Avenue	3	Annual
	Carlsbad Village Drive	4	Annual
	Ocean Street	4	Annual
	Rancho Santa Fe	1	Annual
	Celinda Drive	1	Annual
Fossil Filter	Oak Avenue	4	Annual
	Chesnut Avenue	6	Annual
	Jefferson Street	5	Annual
	Fleet Maintenance	4	Annual
	Ocean Street	2	Annual
	Paseo del Norte	3	Annual
	Cannon Road	5	Annual
	Faraday Avenue	3	Annual
	Recycled Water Plant	4	Annual
	M&O Yard	2	Annual
Gravel Filter	M&O Yard	1	Annual

The City also inspected and maintained three desiltation basins. Table 4.7 below lists the City owned and maintained basins. The basins were inspected annually prior to the rainy season and maintained as necessary.

Table 4.7. City Owned/Maintained Desiltation Basins

Site	Location	Description	Inspection Frequency
DESILTATION BASIN 13	SW END FARADAY AV SO OF LOT 102 OF CRC	Desiltation Basin	Annual
DESILTATION BASIN 30	SW CORNER MARRON AND MONROE	Desiltation Basin	Annual
DESILTATION BASIN 43	CAMINO HILLS AND FARADAY NE CORNER	Desiltation Basin	Annual

4.5 Fire Stations

4.5.1 Background

There are six fire stations in the City, which are high priority areas according to the City s JURMP. The inventory and BMPs for these facilities are described below.

4.5.2 Source Characterization

Table 4.8 below lists the High Priority Fire Stations on the City s 2008 JURMP inventory.

Table 4.8 Fire Stations

1	FIRE STATION 1	1275 CARLSBAD VILLAGE DR
2	FIRE STATION 2	1906 ARENAL RD
3	FIRE STATION 3	3701 CATALINA DR
4	FIRE STATION 4	6885 BATAQUITOS DR
5	FIRE STATION 5	2540 ORION WY
6	FIRE STATION 6	3131 LEVANTE ST

4.5.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.9 were implemented at the High Priority facilities listed above.

Table 4.9 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-21 Vehicle and Equipment Cleaning
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.5.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.9 were implemented at the facilities listed in Table 4.8 and are described below. In addition, training and pollution prevention BMPs specific to the Fire Department are described below.

Training

- The City s Reclaimed Water Facility continued to be utilized for fire engineer training and testing. A training trailer facilitated engineer operations, pump testing, and other wet training opportunities. The Facility allowed for wet training and testing opportunities while ensuring that no water is discharged to the MS4.
- Suitable locations were selected to provide wet training opportunities for personnel, while ensuring that appropriate BMPs were in place to protect the storm drains and eliminate discharges to the MS4. These sites were generally located on pervious surfaces with no potential for discharge to the storm drain system.
- A representative from the Fire Department attended and participated in the City s Storm Water Committee meetings on a regular basis.

Pollution Prevention

- Dry cleanup methods were used to reduce water use. The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations. Awareness was heightened at fire scenes to minimize the potential for excessive water flow.
- Materials were recycled where possible.
- Storm Water Manuals were developed for each station which include SWPPPs with site maps, inspection reports, facility specific spill response procedures, training records, and department policies.
- SC-11 Spill Prevention, Control, and Cleanup: Spill response equipment and materials are clearly identified and staged in accessible locations at each station. Awareness was heightened at incident scenes to contain potential discharges (once the scene had been stabilized) to prevent pollutants from entering the MS4. The Department continued implementation of the City s spill response procedure for incidents that occur on City streets. Absorbent materials are kept on all engines. The spill response plan is to apply absorbent, sweep material, place in bags, and remove from site for proper disposal. A large spill kit is also kept at Station 5.
- SC-21 Vehicle and Equipment Cleaning: The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Vacuum equipment was purchased to recover and contain all wash water from vehicle washing activities occurring at the Fire Stations.
- SC-34 Waste Handling and Disposal: Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter.
- SC-41 Building and Grounds Maintenance: In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented

any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.

- SC-43 Parking/Storage Area Maintenance: Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations.
- SC-60 Housekeeping Practices: Fire stations are kept clean and orderly. Wash water was disposed of properly. Sweeping material was disposed of properly. Training on storm water and spill response was provided regularly.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-75 Waste Handling and Disposal: Solid waste was collected and disposed of properly at appropriate disposal facilities (Palomar Transfer Station, Waste Management) in accordance with all applicable laws and regulations. Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter. Liquids were not disposed of in waste containers. Recycling was implemented where possible; bins were provided.

4.6 Recreation Facilities

4.6.1 Background

The Swim Complex is the only recreation facility on the City s municipal inventory listed as a High Priority area. This is primarily due to the chemicals stored on-site. BMPs implemented at this facility are described below.

4.6.2 Source Characterization

The only High Priority Recreation Facility on the City s 2008 JURMP inventory was the Swim Complex.

4.6.3 Site Specific BMP Requirements

The site specific BMPs listed below in Table 4.10 were implemented at the Swim and Recreation Complex.

Table 4.10 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-31 Outdoor Container Storage
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-60 Housekeeping Practices
SC-72 Fountains & Pools Maintenance
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.6.4 Program Implementation

BMPs listed in Table 4.10 above were implemented at the Swim and Recreation Complex. BMPs implemented specific to this facility and its activities are described below.

- SC-11 Spill Prevention, Control, and Cleanup: Commercial spill kits are kept onsite. A facility specific SWPPP was developed and is kept onsite. The SWPPP includes a spill response plan.
- SC-31 Outdoor Container Storage: The caustic soda is stored under cover. The majority of materials stored on-site are kept inside sheds. These areas were cleaned up and maintained regularly.
- SC-34 Waste Handling and Disposal: Trash bins and containers are enclosed and covered. Lids remained closed at all times.
- SC-41 Building and Grounds Maintenance: (parks/facilities) Staff performed daily parking lot inspections looking for litter, debris, and leaking vehicles. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-60 Housekeeping Practices: Cleaning of pool decks was performed by sweeping in most cases. Occasionally wash down was necessary and all wash water was directed to a pervious area for percolation (football field).
- SC-72 Fountains and Pools Maintenance: Water was de-chlorinated if discharge to storm drain was necessary; however, this was a rare occurrence. All filter back wash was discharged to sewer; overflow from pool decks was directed to earthen swale and percolates.
- SC-73 Landscape Maintenance: Irrigation systems checked regularly to avoid run-off; soil testing utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers were not stored onsite and used sparingly in accordance with required application practices.
- SC-75 Waste Handling and Disposal: The dumpster remained closed and locked at all times and was serviced weekly.

4.7 Publicly Owned Treatment Works

4.7.1 Background

The City of Carlsbad is a part owner of the Encina Wastewater Authority which treats raw sewage to the secondary treatment level.

The Carlsbad Water Recycling Facility intakes secondary treated water and treats it again to the tertiary level of treatment which is used as recycled water throughout the City of Carlsbad. This facility was determined to be High Priority as required in Order 2007-0001, Section D.3.a.(7)(a). The BMPs listed below were implemented at the Carlsbad Recycled Water Facility.

4.7.2 Source Characterization

The Carlsbad Recycled Water Facility is the only High Priority Publicly Owned Treatment Works on the City's 2008 JURMP inventory.

4.7.3 Site Specific BMP Requirements

The site specific BMPs listed in Table 4.11 were implemented at the Recycled Water Facility.

4.11 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-75 Waste Handling and Disposal
SC-76 Sewer Utility Maintenance

4.7.4 Program Implementation

Each of the applicable BMPs listed above were implemented at the Carlsbad Recycled Water Facility and are described below.

- Employee Training: Employees were informed of activities that could potentially cause contamination of storm water and the importance of carefully conducting these activities in areas that do not discharge/drain to storm drains. Storm water pollution prevention and BMP brochures were available to everyone who works at the materials storage area. Subcontractors were informed about the storm water requirements and their responsibilities. Training consisted of informal tailgate meetings, formal classroom training, or self-guided training activities. Employees in targeted positions were trained annually on the requirements of the SWPPP. Employee training, at a minimum, included: SWPPP requirements; spill response and reporting; good housekeeping; BMP updates and implementation; and materials and waste handling and storage procedures.
- SC-11 Spill Prevention, Control, and Clean-up: A current spill response plan was provided in the SWPPP. The spill response plan addressed measures to clean, abate, and prevent spills and leaks from entering the storm drain. Employees were trained on the elements of the plan. Rags and absorbents were readily accessible. Waste was disposed of properly. Dry cleanup methods were used whenever possible. Spills on dirt areas were cleaned up by digging up and properly disposing of contaminated soil. Spills over 10 gallons were reported to the Storm Water Protection Program and/or the appropriate spill response agencies immediately. Employees were trained to routinely check for leaks and spills.
- SC-20 Vehicle and Equipment Fueling: All vehicles were fueled off-site. Equipment continued to be run with electricity and no equipment fueling was necessary.
- SC-22 Vehicle and Equipment Repair: All vehicle repairs were performed off-site. When equipment repair was necessary, work was performed in covered, contained areas that were not susceptible to storm water runoff.

- SC-31 Outdoor Container Storage: There were several chemical storage tanks stored outside under cover and in full secondary containment structures. See SC-33 below for more information.
- SC-33 Outdoor Storage of Raw Materials: Secondary containment was implemented where materials are stored outside. Examples of temporary BMPs utilized are: a dike, berm, or filter on the down slope sides of any stockpiles. All containment devices used around stockpiles were maintained to work effectively and were replaced when necessary. The chemical storage tanks were contained within a concrete parapet wall enclosure. Spills within the chemical storage areas were contained within the concrete walls and drain to a sump. Where chemical deliveries occurred, a concrete pad conveyed flow to a curb inlet. From the curb inlet, flow was controlled by plug valves, directing the flow to the sump.
- SC-34 Waste Handling and Disposal: Dumpsters were covered and maintained and checked frequently for leaks. Lids were kept closed at all times. Dumpsters were never cleaned out using water. When cleaning the containers, all rinse water from cleaning was routed to the sanitary sewer system. All wastes and construction debris were disposed of properly. Many materials and wastes were recycled including broken asphalt and concrete, cleared vegetation, scrap metals, aluminum cans, and plastic bottles. Materials and debris that could not be recycled were taken to an appropriate landfill or disposed of as hazardous waste. The waste storage area was swept or otherwise cleaned frequently using dry methods to collect all loose solids for proper disposal. If the amount of waste accumulated appeared to frequently exceed the capacity of the dumpster, then another container should have been obtained and utilized or collection frequency was increased. Green waste consisting of clippings, cuttings and droppings of leafy and woody materials was disposed of properly at an approved composting location or permitted landfill.
- SC-60 Housekeeping Practices: Site was kept free of litter and debris. Trash cans and recycling receptacles were located around the site to minimize litter. Material moving and transfer activities were scheduled during dry weather periods, where possible. Heavy equipment was maintained in good working condition. Areas were inspected frequently for leaks and repaired as needed. Major equipment repairs were performed away from the storage area. Paved surfaces were swept that drain to storm drains, creeks, or channels. Cleanup materials such as brooms, shovels, dustpans, and sweepers are stocked near the storage area. Paved storage areas were swept weekly for collection and disposal of loose solid materials, and were not hosed into a storm drain or conveyance ditch. Information was distributed on good housekeeping practices during employee training sessions and discussed at employee meetings. Good housekeeping tips and reminders were posted on employee bulletin boards.
- SC-75 Waste Handling and Disposal: See SC-34 above.
- SC-76 Sewer Utility Maintenance: Sewer utility maintenance was not performed at this facility.
- Source Control BMPs (specific to the Recycled Water Facility):
  - Flo-Guard inlet baskets at all curb inlets on site to collect oil and grease and debris from site.
  - Vegetated swale (approximately 400 feet) collects and treats runoff from a portion of the site.
  - Roof over chemical storage area.
  - Permanent secondary containment is in place around all chemical storage areas.
  - By-pass valves are installed at containment areas to divert rain water.

4.8 Sanitary Sewer Facilities

4.8.1 Background

The facilities listed in Table 4.12 are sewer lift stations owned and operated by the City. The table also includes the City's collection system. These have been determined to be High Priority areas according to Order 2007-0001 and the City's 2008 JURMP, primarily due to the presence of sewage and potential for contamination of surface waters resulting from sewer overflows. BMPs implemented at these facilities and BMPs applicable to maintenance of the collection system are described below.

4.8.2 Source Characterization

Table 4.12 below lists the High Priority Sanitary Sewer Facilities on the City's JURMP inventory.

Table 4.12 Sanitary Sewer Facilities

1	BATIQUITOS SEWER LIFT STATION	7382 GABBIANO LN
2	BUENA VISTA SEWER LIFT STATION	JEFFERSON
3	CALAVERA PUMP STATION	3600 BLOCK COLLEGE DR
4	CANNON SEWER LIFT STATION	2301 CANNON RD
5	CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL
6	FOXES LANDING LIFT STATION	4155 HARRISON ST
7	GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD
8	HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL
9	KNOTS SEWER LIFT STATION	501 KNOTS LN
10	LA GOLONDRINA SEWER LIFT STATION	2516 LA GOLONDRINA ST
11	POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN
12	SAND SHELL SEWER LIFT STATION	613 SAND SHELL
13	SANITARY SEWAGE COLLECTION SYSTEM	CITY SERVICE AREA
14	SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV
15	TERRAMAR SEWER LIFT STATION	300 CANNON RD
16	VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST
17	VILLAS SEWER LIFT STATION	2860 WINTHROP AV

4.8.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.13 were implemented at all Sanitary Sewer Facilities.

Table 4.13 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-75 Waste Handling and Disposal
SC-76 Sewer Utility Maintenance

4.8.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.12 and are described below.

- SC-11 Spill Prevention, Control, and Cleanup: Hazmat plans were drawn up and located in the SWPPP at each location; spill kits are kept inside at all facilities; secondary containment structures were implemented around generator fuel cells and around all chemicals stored on-site; overflow response included immediate Vactor response, containment, and cleanup. For more details see City of Carlsbad SSORP spill mitigation and clean-up; all vehicles have spill kits.
- SC-20 Vehicle and Equipment Fueling: Small equipment fueling was performed in secondary containment areas or over pervious surfaces. Fuel deliveries were performed by an outside contractor. Documentation is kept onsite.
- SC-22 Vehicle and Equipment Repair: Pump repair occurred indoors on site and was generally performed in the wet well; all material went back to the head works was transferred to the Encinas treatment plant; wet wells were cleaned every 6 weeks with Vactor equipment and staff ensured that there were no leaks or spills at the facilities.
- SC-31 Outdoor Container Storage: The 55-gallon trash can was covered with a liner.
- SC-34 Waste Handling and Disposal: Trash and debris were removed on a regular basis.
- SC-60 - Good Housekeeping: Sweep and vacuuming instead of washing down; blowers were used to clean off concrete and asphalt.
- SC-75 Waste Handling and Disposal: Trash and debris were removed on a regular basis.
- SC-76 Sewer Utility Maintenance: All stations were inspected and cleaned daily; Vactors were checked for leaks during pre-trip inspections; all materials were discharged at Encina Wastewater Authority: solids into grit bin, liquids at headworks; recently the City began to implement FOG requirements as per Order 2006-003 including revision of ordinances, public outreach, and inspections of FOG generating facilities.

4.9 Water Facilities

4.9.1 Background

There are six High Priority water facilities on the City's JURMP inventory. The sites are High Priority facilities due to chemical storage on-site or due to their location in the watershed. BMPs implemented at the sites according to the JURMP are described below.

4.9.2 Source Characterization

The table below lists the High Priority Water Facilities on the City's JURMP inventory.

Table 4.14 Water Facilities

1	MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	5203 SUNNY CREEK RD
2	RESERVOIR C	CALAVERA DR
3	RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR
4	RESERVOIR LA COSTA HI	ALGA RD
5	RESERVOIR LA COSTA LO	ALGA RD
6	TAP PUMP STATION	6400 BLOCK OF EL CAMINO REAL

4.9.3 Site Specific BMP Requirements

The site specific BMPs listed in Table 4.15 were implemented at the water facilities listed above.

Table 4.15 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-60 Housekeeping Practices
Water Operations and Maintenance

4.9.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.14 and are described below.

- Pollution Prevention: Automatic shut-off valves have been installed.
- SC-11 Spill Prevention, Control, and Cleanup: Specialized training was implemented to mitigate a chlorine release. In addition to the training all chemicals are stored in containment structures designed to contain stored amount. All chemicals were inspected prior to off loading for containment defects and returned if noted. Operations Staff was trained in Hazardous Material Emergency Response, technician level (HAZWOPER), specialized in chlorine mitigation. A site specific SWPPP was developed for Maerkle Reservoir.
- SC-20 Vehicle and Equipment Fueling: Diesel deliveries were performed by outside contractors.
- SC-22 Vehicle and Equipment Repair: All storm drain collectors were regularly inspected and cleaned accordingly. All building floor drains were inspected and verified to be isolated from discharge system.
- SC-31 Outdoor Container Storage: The 55-gallon trash cans with liners were utilized and trash was removed on a regular basis.
- SC-33 Outdoor Storage of Raw Materials: No raw materials are stored outdoors.
- SC-60 - Good Housekeeping Increased sweeping schedule of asphalted areas was implemented. Chemicals supplies are kept at a minimum to reduce potential releases.

- Water Operations and Maintenance:
    - Repairs and New Line Installation: All flushing requirements follow established BMP's regarding de-chlorination and related sediment recovery concerns.
    - Reservoir Cleaning and Dewatering: All reservoir de-watering follows pre-established BMP's addressing daily water volume discharge amounts, de-chlorination, monitoring of chlorine residuals and sediment removal and disposal

4.10 Municipal Yards

4.10.1 Background

Table 4.16 below lists the City's municipal yards that were determined to be High Priority areas as required per Order 2007-0001, Section D.3.a.(7)(a) and the City's JURMP. Site specific BMPs implemented at each facility are listed and described below.

4.10.2 Source Characterization

The table below lists the High Priority Municipal Yards on the City's JURMP inventory.

Table 4.16 MUNICIPAL YARDS

1	FLEET MAINTENANCE FACILITY AND PARKING LOT	2480 IMPALA DR
2	M&O OPERATIONS YARD AND PARKING LOT	5950 EL CAMINO REAL
3	OAK OPERATIONS YARD AND PARKING LOT	405 OAK AV
4	PARKS MAINTENANCE/STORAGE/PARKING LOT	1166 CARLSBAD VILLAGE DR

4.10.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.17 were implemented at Municipal Yards, where applicable. For example, vehicle and equipment repair is not performed at all facilities; therefore SC-22 does not apply to all yards.

Table 4.17 Best Management Practices

Storm Water Pollution Control Plan
SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-61 Safer Alternative Products
SC-70 Road and Street Maintenance
SC-71 Plaza and Sidewalk Cleaning
SC-72 Fountains & Pools Maintenance
SC-73 Landscape Maintenance
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal

4.10.4 Program Implementation

BMPs listed in Table 4.17 were implemented specific to each facility and are described below.

FLEET MAINTENANCE YARD

- Employee Training Storm water protection was covered as part of safety meetings.
- Pollution Prevention Recycling containers were provided at the ends of the fuel pump inlands.
- Storm Water Pollution Control Plan: A site specific SWPPP was developed and is maintained on-site.
- SC-11 Spill Prevention: Spill kits containing absorbents and booms are located at the fuel island and south west of the fuel island within the yard, including the shop area.
- SC-20 Vehicle and Equipment Fueling: Spill kits are located adjacent to the vehicle fueling area.
- SC-21 Vehicle and Equipment Cleaning: All vehicle washing was performed on the wash rack, inside the wash bay. This included pressure washing and hand washing of vehicles and equipment. Wash waste water is treated prior to release to the sewer system.
- SC-22 Vehicle and Equipment Repair: All maintenance and repairs to Fleet vehicles were performed inside the shop bays. Any vehicle on the dead line that had a leak had a drip pan put under it until it is brought into the shop. Any leaks or spills were handled immediately, with either the drip pans or an absorbent. The absorbent was picked up immediately and stored in the drums labeled for waste absorbent. Damaged equipment and wrecked vehicles with a potential for discharge were covered with tarps.
- SC-31 Outdoor Container Storage: Outdoor containers that include full coverage and containment of materials are utilized for storage of tires and motorcycles (two 40 yard containers) and for storage of fire extinguisher service items, used batteries, and oil filters for recycling (sheds).

- SC-33 Outdoor Storage of Materials: All materials stored outside are kept under one of the provided canopies or in the shed. City-generated hazardous waste is stored in the hazardous waste shed (covered) in an appropriate container and on a pallet. This includes batteries and waste metals. A chain link fence was installed to prevent unauthorized dumping at the Facility. Signage was also in place to inform citizens that materials were not to be left at the Facility and provided information on proper disposal facilities.
- SC-34 Waste Handling and Disposal: Waste oil was drained into the waste oil containers or into a drip pan and then into a waste oil container. The containers were emptied as needed into the waste oil in ground tank as needed. Used batteries were stored in the provided container inside the shed. Used antifreeze was drained into one of the large drip pans, then transferred to the poly drums inside the shed. Scrap metal is stored in the provided container and covered. Used tires are stored in the covered tire storage bunker.
- SC-41 Building and Grounds Maintenance: Language was included in contracts requiring storm water compliance and allowing the City to implement BMPs as needed with all associated costs recovered from the contractor. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: The Fleet Yard was swept via Sweeper-truck on a monthly schedule, clean ups of spills were done with dry absorbent and picked up directly, all leaks were captured with drip pans and brought into the shop for service.
- SC-60 Housekeeping Practices: The shop was either swept or mopped. All debris was either picked up and put into appropriate containers or, in the case of wet mopping, all water was directed to the drains inside the shop that flow to our separator. All contaminated floor sweep was stored in labeled containers and removed by our hazardous waste contractor. The Fleet yard was inspected regularly as well as before and after storm events. Areas inspected were the shed and tire storage area at the north end of the shop, the waste tire and hazardous waste bunker along the north fence line, the two large dumpsters, the two trash and two recyclables cans at the fuel pumps, the spill kits for the fuel island, the storm drains on-site and the paved lot and dirt area at the east end (which is now fenced). Inspection criteria: all waste drums/containers are to have secondary containment, all materials are to be stored in covered areas. Appropriate areas included a shed and two canopies plus the hazardous waste container and waste metal containers. The dumpsters, trash cans, recyclables cans and metal storage were kept closed and no trash fell out of them. The filters at the storm drains were inspected for cleaning or replacement. The lot was inspected for spills and cleaned up as needed. Vehicles in the lot were inspected for leaks; action was taken to contain leaks as needed. The wash rack area, trash containers area, and drains were inspected for clogging from debris. All employees always took immediate action to correct any issues found during inspections of the Fleet yard directly.
- SC-61 Safer Alternative Products: Not applicable.
- SC-70 Road and Street Maintenance: Not applicable.
- SC-71 Sidewalk Cleaning: Where power washing was necessary, wash water was not allowed to drain to the storm drain system and was directed to sanitary sewer or to pervious surfaces where possible.
- SC-72 Fountain and Pools Maintenance: Not applicable.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever

possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.

- SC-74 Drainage System Maintenance: Fossil filters have been installed at storm drain inlets in yard and were inspected and maintained regularly.
- SC-75 Waste Handling and Disposal: Updated signage was installed for Household Hazardous Waste disposal.

MAINTENANCE AND OPERATIONS YARD

- Pollution Prevention Native soils were used whenever possible to backfill trenches: the amount of dirt and soil stockpiled on site was minimized; filtration socks were used to dewater trenches.
- Storm Water Pollution Control Plan: A site specific SWPPP is kept on-site and maintained regularly.
- SC-11 Spill Prevention, Control, and Cleanup: Secondary containment where fuel and oil are stored, also yard has spill kits in each vehicle. A hazmat plan has been implemented and is located in the SWPPP.
- SC-20 Vehicle and Equipment Fueling: Small equipment fueling was performed in the secondary containment area or over pervious surfaces.
- SC-21 Vehicle and Equipment Cleaning: Trash was removed daily from the work trucks, otherwise no cleaning or washing was allowed at M&O yard.
- SC-22 Vehicle and Equipment Repair: No repairs were performed at yard.
- SC-31 Outdoor Container Storage: Container storage areas are covered using overhead canopies.
- SC-33 Outdoor Storage of Materials: Where necessary, plastic tarps cover raw materials in the yard; equipment is covered by canopies; material is covered by a permanent overhead structure or stored indoors.
- SC-34 Waste Handling and Disposal: All material was put into a covered roll-off container.
- SC-41 Building and Grounds Maintenance: The grounds and parking lot were swept twice a month by street sweeper and weekly by hand when necessary. Trash was removed daily. Erosive areas and slopes were protected by hydroseed, coconut mats, sand bags, and fiber rolls. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Where feasible, work was performed under cover and over pervious areas. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: The parking lot was swept twice a month by a street sweeper; ingress/egress to unpaved area of yard was protected by rocks and shaker plates.
- SC-60 Housekeeping Practices: Recycle bins, dumpsters, and cans were covered and kept closed.
- SC-61 Safer Alternative Products: Used less hazardous cleaning materials and water-soluble paints for mark outs.
- SC-70 Road and Street Maintenance: Not Applicable
- SC-71 Sidewalk Cleaning: Sweep and/or vacuum sidewalks.
- SC-72 Fountain and Pools Maintenance: Contractor maintained fountain at facility. No water was discharged during maintenance activities; all filter material was retained on-site for proper disposal.
- SC-73 Landscape Maintenance: All material was cut and carried off by hand in burlap bags; no residue remains on site. Irrigation systems were checked regularly to avoid run-off;

timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.

- SC-74 Drainage System Maintenance: Rapid Flow filters and storm drain structures were cleaned annually. A pilot program was implemented using the innovative Drivable Grass which drains the parking lot through subsurface drainage system to reduce storm water flowing directly into MS4.
- SC-75 Waste Handling and Disposal: All material was handled properly and covered in yard roll-off dumpsters, or other appropriate containers.

OAK YARD

- Storm Water Pollution Control Plan (SWPPP description): A site specific SWPPP was developed and implemented at the Oak Yard.
- SC-11 Spill Prevention, Control, and Cleanup: All liquids and hazardous materials are stored in locked containment lockers. These are located within secondary containment areas. Large spill containment kits are strategically located within the yard. MSDS binders are strategically placed throughout the yard.
- SC-20 Vehicle and Equipment Fueling: Small equipment fueling was done only in the secondary containment area.
- SC-21 Vehicle and Equipment Cleaning: Trash was removed daily from the work trucks. No cleaning or washing was allowed in the Oak yard
- SC-22 Vehicle and Equipment Repairs: No repairs were done at the Oak yard.
- SC-31 Outdoor Container Storage: Oak yard has storage areas covered with overhead canopies.
- SC-33 Outdoor Storage of Raw Materials: No raw materials are stored at the Oak yard.
- SC-34 Waste Handling and Disposal: Paint waste was returned to the maintenance yard where it was transferred directly from the generating vehicle to secured storage containers. This was done within a proper containment area in case of any accidental spillage. These containers are clearly marked and stored until arrangements were made for a certified waste management company to remove them and transfer them to an approved facility. Any other debris was placed in a canopy covered 40 yd roll-off. Dumpsters were covered and all other trash receptacles had lids.
- SC-41 Building and Grounds Maintenance: The Oak yard was swept twice a month by a self-contained street sweeper and weekly by hand. Trash was removed daily. In the event that any pressure washing was necessary, all washwater was recovered for proper disposal. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control and lot was swept regularly.
- SC-60 Housekeeping Practices: Recycle bins, dumpsters, and cans are covered. Yard clean-up was performed by-weekly with monthly site inspections.
- SC-61 Safer Alternative Products: Not Applicable
- SC-70 Road and Street Maintenance: Not Applicable
- SC-71 Sidewalk Cleaning: Not Applicable
- SC-72 Fountain and Pools Maintenance: Not Applicable
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements

on downtown irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers were stored inside and used sparingly in accordance with required application practices.

- SC-74 Drainage System Maintenance: Debris was captured prior to entry into the vegetated swale.

PARKS MAINTENANCE YARD

- Storm Water Pollution Control Plan (SWPPP description): Site specific SWPPPs were developed and implemented at each of these sites, with the exception of Aviara. Aviara is a new site and the SWPPP is currently under development.
- SC-11 Spill Prevention, Control, and Clean-up; Spill kits are located on-site; drip pans were placed under all equipment kept on-site; spill kits are located in all vehicles; spill response plan is updated and kept on-site.
- SC-20 Vehicle and Equipment Fueling: No vehicle or equipment fueling was performed on-site.
- SC-21 Vehicle and Equipment Cleaning: Most equipment was dry-cleaned in designated areas located away from storm drains; where wet cleaning was necessary, it was performed over pervious surfaces in a manner that allowed all water to percolate, generating no runoff to the storm drain system.
- SC-22 Vehicle and Equipment Repair: All equipment was repaired in designated areas away from storm drains; no vehicle repair was performed on-site.
- SC-31 Outdoor Container Storage: All chemical products are kept in locked storage bins with overhead coverage and containment.
- SC-33 Outdoor Storage of Raw Materials: All bagged materials are stored on skids (pallets) and covered with canopies; canopies are also used to cover scrap metals and equipment.
- SC-34 Waste Handling and Disposal: All waste containers are covered.
- SC-41 Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 Housekeeping Practices: Weekly yard clean-up and litter removal and monthly site inspections were conducted.
- SC-61 Safer Alternative Products: IPM practices and green waste applications were in use; artificial turf and permeable surfaces were implemented where feasible; organics from tree trimming were mulched or composted and used for landscaping.
- SC-70 Road and Street Maintenance: Not applicable at yard sites.
- SC-71 Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
- SC-72 Fountains and Pools Maintenance: Not applicable at park sites.

- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on downtown irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 Drainage System Maintenance: Storm drain inlets were maintained by City s Storm Drain Maintenance Division on an annual basis.
- SC-75 Waste Handling and Disposal: All non-recyclable waste was disposed of properly.
- Site Design - Stagecoach Facility drains to grassy field for percolation prior to discharge from site; the Parks Maintenance/Storage Yard also drains to a pervious area allowing low flows to infiltrate into the soils instead of running into the storm drain.

4.11 Parks Facilities

4.11.1 Background

The table below lists City parks facilities that were determined to be High Priority areas based on the criteria established in Order 2007-0001, Section D.3.a.(7)(a) and the City s JURMP. High Priority parks facilities were defined as developed park sites containing landscaping, building(s), and parking lot(s) and developed park sites within an Environmentally Sensitive Area.

Site specific BMPs implemented at each facility are listed and described below.

4.11.2 Source Characterization

The table below lists facilities on the inventory that are medium priority and includes 14 parks and recreation facilities.

Table 4.18 Parks

1	AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	6425 AMBROSIA LN
2	CADENCIA PARK	3310 CADENCIA ST
3	CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	2997 GLASGOW DR
4	CARRILLO RANCH AND PARKING LOT	5200 FLYING LC LANE
5	HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	2685 VANCOUVER STREET
6	HOLIDAY PARK AND PARKING LOTS	3200 PIO PICO DR
7	HOSP GROVE PARK AND PARKING LOT	JEFFERSON & MONROE
8	LA COSTA CANYON PARK AND PARKING LOT	3020 PUEBLA ST
9	LAGUNA RIVIERA PARK	4900 KELLY DR
10	MAGEE PARK AND PARKING LOT	258 BEECH AVE
11	MAXTON BROWN PARK	500 LAGUNA DR
12	PINE PARK AND PARKING LOT	3333 HARDING ST
13	POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	6600 HIDDEN VALLEY RD
14	STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	3420 CAMINO DE LOS COCHES

4.11.3 Site Specific BMP Requirements

Site specific BMPs listed below were implemented at Parks Facilities.

Table 4.19 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-61 Safer Alternative Products
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.11.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.18 and are described below.

- SWPPP: Aviara, Poinsettia, and Stagecoach Parks also house small maintenance yards. Because of the added potential to contribute to storm water pollution, SWPPPs were required by the City for these facilities. Poinsettia and Stagecoach have developed and fully implemented SWPPPs. Aviara is a new site and the SWPPP is currently under development.
- SC-11 Spill Prevention, Control, and Cleanup; Spills kits are located on-site; spill response plan was updated and kept on-site
- SC-20 Vehicle and Equipment Fueling: Minor equipment fueling was performed over pervious surfaces when necessary.
- SC-21 Vehicle and Equipment Cleaning: Most equipment was dry-cleaned in designated areas located away from storm drains; where wet cleaning was necessary, it was performed over pervious surfaces in a manner that allowed all water to percolate, generating no runoff to the storm drain system.
- SC-22 Vehicle and Equipment Repair: Equipment was repaired in designated areas away from storm drains; no vehicle repair was performed on-site.
- SC-31 Outdoor Container Storage: Chemical products are kept in locked storage bins with overhead coverage and containment.
- SC-33 Outdoor Storage of Raw Materials: All bagged materials are stored on skids (pallets) and covered with canopies; canopies were also used to cover scrap metals and equipment.
- SC-34 Waste Handling and Disposal: All waste containers are covered; pet waste bag dispensers and containers were provided at all parks where dogs are allowed.
- SC-41 Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 Housekeeping Practices: Park sites are kept clean and orderly; all debris was removed in a timely fashion and hard-scape areas were swept or blown routinely; wash water, sweepings, and sediments were disposed of properly; recyclable materials were recycled; spill response plans were reviewed as part of routine training with staff.
- SC-61 Safer Alternative Products: IPM practices and green waste applications were in use and are described below.

  In conjunction with the Integrated Pest Management (IPM) program, the Parks Maintenance Division continued to utilize slow release fertilizers in an effort to reduce the frequency of applications while minimizing the potential of fertilizer runoff. In some cases, staff reduced the recommended amount of fertilizer per 1,000 square feet by 50 to minimize flush of growth on turf which in turn reduced the amount of clippings. To help monitor fertilizer applications, the Parks Maintenance Division instituted a soil testing program which defined soil properties, allowing the correct monitoring of fertilization applications for proper use and desired outcome. In accordance with the new IPM practices, pesticide and herbicide applications were performed sparingly. Staff continued to search for alternative methods to pest control that are proven to be safe and effective.

As required by the Department of Pesticide Regulation, all chemical applications were reported to the County Agriculture Department on a monthly basis. As identified in the JURMP, all applicable BMPs were implemented to address pesticide, herbicide, and fertilizers sources of pollution. Specific, BMPs implemented during FY 07-08 include:

- **Education:** A training program for identifying and defining chemicals, proper handling, applying, storage, disposal, irrigating, and using non-synthetic alternatives was implemented. At many of the training seminars, new IPM methods were often presented for consideration by the department. All training information including BMPs were provided to personnel to keep in personalized folders for individual use. In addition, a master application manual that includes all Storm Water BMPs, training, and inspections was also prepared.

- **Non-chemical applications:** Some pest problems can be eliminated or controlled by handpicking, pruning, or high pressure spraying with water. Many pest problems can be reduced or eliminated by removing affected leaves or plant parts. During FY 07-08, efforts were made to improve upon our IPM system in the City s Parks and Downtown Village areas. The release of lady-bird beetles at Pine Park and the Downtown Fountain areas to combat infestations of aphids have proven successful in eradicating the bugs. Other methods used to decrease the department s dependency on chemical sprays during FY 07-08 include:

    - Increased mulching of planter beds to smother weed germination
    - Increased tilling of planter beds to kill young weed sprouts
    - The use of organic plant derivative pesticide sprays such as Safer brand Products
    - The use of water to spray plants infested with giant whitefly
    - The removal of dying or diseased plant material to decrease the presence of harmful organisms.

- Pesticide application was performed on an as needed basis and was performed internally or by an outside pest control contractor after diagnosis.

- **Native Vegetation:** The Parks Maintenance Division continued to explore opportunities to use native vegetation to control pests, reduce chemical application, and maintain the aesthetic values of the Parks and Downtown Village areas.

- **Schedules for Irrigation and Application** Irrigation systems were monitored and inspected on a weekly basis in an effort to minimize water loss. In addition, the use of evapo-transpiration (ET) gauges for controlling the irrigation system helped to reduce watering times based on evaporation and transpiration of moisture from plants and turf. ET gauges were installed at Poinsettia, Stagecoach, Pine, Aviara and Calavera Park. These gauges also helped staff to adjust watering times at other locations that were not connected to the gauge. During FY 07-08, all irrigation systems were inspected weekly and repaired as necessary to prevent excess runoff. At Poinsettia, Aviara, Stagecoach and Pine Parks, synthetic turf has been installed on the soccer and sports fields, which requires no fertilization, weeding, or watering. The synthetic turf has proven to be particularly successful in eliminating the use of water for irrigation.

- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices. Refer to description of IPM practices in SC-61 above.
- SC-75 Waste Handling and Disposal: All non-recyclable waste was disposed of at appropriate landfill or transfer station.
- Site Design Desiltation basin was retrofitted at La Costa Canyon Park; pervious concrete was installed at Pine Park.

4.12 Administrative Areas

4.12.1 Background

One administrative building was determined to be a high priority facility based on its proximity to an environmentally sensitive area (ESA). This facility is the Safety Center, which includes a parking lot, police and fire department headquarters, and a skatepark.

4.12.2 Source Characterization

The only administrative building on the inventory that is a High Priority is the Safety Center.

4.12.3 Site Specific BMP Requirements

Site specific BMPs listed below were implemented at the Safety Center.

Table 4.20 Best Management Practices

SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.12.4 Program Implementation

Each of the BMPs listed above were implemented at the Safety Center and are described below.

- SC-34 Waste Handling and Disposal: Dumpsters were covered and maintained and checked frequently for leaks. Lids were kept closed at all times.
- SC-41 Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper

disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.

- SC-43 Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 Housekeeping Practices: Site is kept clean and orderly; all debris was removed in a timely fashion and hardscape areas were swept or blown routinely; wash water, sweepings, and sediments were disposed of properly; recyclable materials were recycled.
- SC-71 Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system ; any storm drains in proximity were protected from discharges.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-75 Waste Handling and Disposal: All non-recyclable waste was disposed of properly.

4.13 Activities

4.13.1 Background

Four municipal activities were determined to be High Priority activities based on their potential to generate pollutants. These operations occur throughout the City and are required to implement BMPs as described in the JURMP.

4.13.2 Source Characterization

The table below lists the activities on the inventory that are considered High Priority.

Table 4.21 ACTIVITIES

1	LANDSCAPE MAINTENANCE AND REPAIR	CITYWIDE
2	MS4 MAINTENANCE	CITYWIDE
3	POWER WASHING	CITYWIDE
4	SANITARY SEWER MAINTENANCE AND OPERATIONS	CITY SERVICE AREA

4.13.3 Site Specific BMP Requirements

4.13.4 Program Implementation

Each of the BMPs listed were implemented for the activities listed in Table 4.21 and are described below.

Table 4.22 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-61 Safer Alternative Products
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal
SC-76 Sewer Utility Maintenance

- SC-11 Spill Prevention, Control & Cleanup: Spill kits are kept in all vehicles. Employees were trained in spill response as applicable to their activities. Absorbents were used for spill cleanup where possible and disposed of properly.
- SC-20 Vehicle and Equipment Fueling: Minor equipment fueling was performed over pervious surfaces when necessary; larger equipment was fueled at the fleet maintenance facility (BMPs are described above for Fleet Yard).
- SC-34 Waste Handling and Disposal:
    - Landscape Maintenance: All non-recyclable waste was disposed of properly.
    - MS4 Maintenance: Trash was hauled to transfer station. Debris and other organic material were transferred and deposited at 2400 Tamarack Avenue in three concrete covered bins. The material was then tested for contaminants and disposed of properly upon receipt of permissible test results.
    - Powerwashing: All wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system ; any storm drains in proximity were protected from discharges.
    - Sewer Utility Maintenance: Waste was contained in Vactor truck tanks and disposed of properly to sanitary sewer.
- SC-41 Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-61 Safer Alternative Products: IPM practices and green waste applications were in use. These practices are described in detail above.
- SC-71 Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 Drainage System Maintenance: A small self-contained vacuum with pressure washer was used to clean the drainage system. All material in the drain box was removed by the vacuum. Disposal of the water and material occurred using a filter sock, allowing water to be decanted into the sanitary sewer system through a permit from Encina Wastewater Authority. The solid material was taken to the Tamarack site described above.

All trash was removed from the MS4, placed in 55 gallon trash bags, and placed in a 40 cubic yard roll off dumpster that is covered. The material was then transported to Palomar Transfer Station for disposal.

- SC-75 Waste Handling and Disposal: See SC-34 above.
- SC-76 Sewer Utility Maintenance: All lift stations were inspected and cleaned as needed; Vactors were checked for leaks during pre-trip inspections; all materials were discharged at Encina Wastewater Authority: solids into grit bin, liquids at headworks; recently the City has begun to implement FOG requirements as per Order 2006-003 including revision of ordinances, public outreach, and inspections of FOG generating facilities.

The collections system maintenance schedule is designed to provide more frequent cleaning for identified trouble areas, with siphons being cleaned annually, low flow and flat lines cleaned semi-annually, and grease problem areas cleaned quarterly.

4.14 Areas and Activities Categorized as Not High Priority

4.14.1 Background

Table 4.23 lists City owned areas and activities that were determined NOT to be High Priority based on the criteria established in Order 2007-0001, Section D.3.a.(7)(a). Basic minimum BMPs were implemented at each facility listed below as per the City s JURMP.

4.14.2 Source Characterization

The table below lists facilities on the inventory that are NOT High Priority and includes 50 facilities that are administrative, small parks, medians, and water/wastewater stations that are small or out of service. These facilities are located outside of ESAs and do not generate significant pollutant loads.

Table 4.23 FACILITIES THAT ARE NOT HIGH PRIORITY

1	NON-EMERGENCY FIRE FIGHTING FLOWS	CITYWIDE
2	SPECIAL EVENTS	CITYWIDE
3	STREET MAINTENANCE (CLEANING/REPAIR)	CITYWIDE
4	TRAIL MAINTENANCE	CITYWIDE
5	WATER OPERATIONS AND MAINTENANCE	CITY SERVICE AREA
6	ADULT LEARNING PROGRAM	1207 CARLSBAD VILLAGE DR STE O
7	ARTS OFFICE	2955 ELMWOOD ST
8	CENTRO DE INFORMACION	3330 HARDING ST
9	CITY HALL FACILITY	1200 CARLSBAD VILLAGE DR
10	COLE LIBRARY	1250 CARLSBAD VILLAGE DR
11	DOVE LIBRARY MAIN BRANCH & ADMINISTRATION	1775 DOVE LN
12	FARADAY CENTER	1635 FARADAY AV
13	FARMERS BUILDING	FARADAY & EL CAMINO RL
14	HIRING CENTER	5958 EL CAMINO REAL
15	HOUSING/REDEVELOPMENT OFFICE	2965 ROOSEVELT ST B
16	LAS PALMAS OFFICES	2075 LAS PALMAS DR
17	LIBRARY STORAGE	2075 Q CORTE DEL NOGAL 9
18	RAILROAD DEPOT VISITORS CENTER	400 CARLSBAD VILLAGE DR
19	ANN D. L'HEUREUX MEMORIAL DOG PARK	2700 BLOCK OF CARLSBAD VILLAGE DR

20	BEACH ACCESSES	NORTH OF TAMARACK
21	BEACH BLUFF TRIANGLE/PARK	CARLSBAD BLVD AT PINE
22	CANNON PARK	300 BLOCK OF CANNON
23	CAR COUNTRY PARK	PASEO DEL NORTE
24	CHASE FIELD	3349 HARDING ST
25	EL FUERTE PARK	600 BLOCK OF EL FUERTE ST
26	HOSP GROVE-HI NOON ROTARY/PICNIC TABLE/TRAIL	2630 MONROE ST
27	LEVANTE FIELD/PARK	3031 LEVANTE ST
28	OAK PARK	PIO PICO DRIVE
29	PIO PICO PARK	2600 PIO PICO
30	SPINNAKER HILL BANK	1700 BATIQUITOS DR
31	ZONE 5 PARK	CAMINO HILLS AND FARADAY
32	BRESSI RANCH RECLAIMED PUMP STATION	BRESSI RANCH
33	RESERVOIR D-1, D-2	6700 BLACK RAIL RD
34	CARLSBAD SENIOR CENTER	799 PINE AVE
35	HARDING COMMUNITY CENTER	3096 HARDING ST
36	HELEN ALLMAN GIRLS CLUB	3368 EUREKA PL
37	SEA WALL	CARLSBAD BLVD
38	CALAVERA TREATMENT PLANT	2400 TAMARACK AV
39	LOWER FARADAY SEWER LIFT STATION	1507 FARADAY AV
40	UPPER FARADAY SEWER LIFT STATION	1711 FARADAY AV
41	BRESSI RANCH WATER PUMP STATION	BRESSI RANCH
42	BUENA VISTA WATER PUMP STATION AND RESERVOIR	1400 BLOCK BUENA VISTA DRIVE
43	ELLERY WATER PUMP STATION AND RESERVOIR	2300 BLOCK OF JANIS WY
44	RESERVOIR B	END OF BLUFF DR
45	RESERVOIR D-3	6580 BLACK RAIL ROAD
46	RESERVOIR E	HIDDEN VALLEY
47	RESERVOIR PAJAMA	PAJAMA DR
48	RESERVOIR SANTA FE I	PYRENEES
49	RESERVOIR SANTA FE II	PAR & BUSINESS PARK
50	RESERVOIR SKYLINE	SKYLINE DR

4.14.3 Site Specific BMP Requirements

a. Employee Training
b. Pollution Prevention
c. Good Housekeeping
d. Spill Response and Prevention

4.14.4 Program Implementation

The BMPs listed above in Section 4.2 were implemented City wide at all facilities, including the facilities listed in Table 4.23. A description of these BMPs and how each were implemented is provided in Section 4.2 above.

4.15 Special Events

4.15.1 Background

The City of Carlsbad hosts a multitude of events each year from major invitational sporting events to community based festivals. A Special Event Permit and BMP Implementation Plan is required for any organized event involving 50 or more people on public property that travel or assemble together, cause a change in normal traffic flow or controls, and is not within the scope of a Facility Use Permit, other land use approval, or a private property permit. The City has organized a Special Events Committee to assure events are held in a manner that is safe and does not adversely impact the Carlsbad community or the environment.

4.15.2 Source Characterization

The City developed an inventory of special events. These special events have been prioritized according to type of event, number in attendance, proximity to the nearest water body, and potential threat to water quality. During FY 07-08, there were 10 special events on the inventory, which included 6 High Priority, 3 medium priority, and 1 low priority event. Based on this prioritization, the City conducted storm water compliance inspections at all of the High Priority events and two inspections of medium priority events. Events that required inspections, were inspected at least twice a Pre-Event and Post-Event inspection. However, in some cases inspectors were onsite for the duration of the event. A copy of the special events inventory can be found in Appendix 4.2.

4.15.3 BMP Requirements

All special events were required to implement the designated special event BMPs and comply with all applicable regulations outlined in the Carlsbad Municipal Code. Event organizers were notified of the designated BMPs during the event planning process, in outreach materials, and at pre-event meetings. In addition, if site specific BMPs were needed event organizers were required to develop a Special Event SWPPP. The SWPPP is intended to help demonstrate that appropriate measures and BMPs are being implemented before, during, and after the event to reduce and/or prevent pollution. The SWPPP was approved by the City prior to Special Event Permit issuance in FY 07-08. During compliance inspections, the City confirmed that the designated and specific BMPs were implemented as required. A copy of the City's designated BMPs for all special events can be found in Appendix 4.3.

4.15.4 Program Implementation

Generally, the City found that event organizers implemented BMPs as required. Event venues were well managed, BMPs were installed, and the impacted areas were cleaned as required. As with any new program, it is anticipated that there will be a learning curve for event organizers as they have not been required to implement storm water BMPs, develop SWPPPs, and understand pollution prevention practices in the past. The City will work closely with event organizers for the first year of the program implementation to ensure compliance.

Storm water compliance inspections include a Pre-Event inspection where storm water BMPs were evaluated, a During-Event inspection to determine the effectiveness of BMPs, and a Post-Event inspection to ensure the site is properly cleaned. Compliance inspections may also include recommendations for additional measures that may be required to comply with the storm water regulations. A new Special Events Inspection Form was created to ensure that all

inspection steps were implemented consistently. A copy of the new Special Events Inspection Form can be found in Appendix 4.4.

Compliance with special event requirements was ensured throughout the planning and implementation process. During the Pre-Event inspection, the City ensured that BMPs are implemented as required. During the Post-Event inspection, the City also ensured the site was cleaned properly and returned to pre-existing state in an expeditious manner. During FY 07-08, there were only a few minor violations noted at the eight inspected events, all of which were immediately corrected. There were no enforcement actions for special events issued during FY 07-08.

4.16 Inspection of Municipal Facilities

Order 2007-0001 requires that all High Priority municipal facilities are inspected annually. Due to the timing of Order R9-2007-0001 adoption and reprioritization of the High Priority municipal inventory for the 2008 JURMP, the City s High Priority inventory changed mid-year. All High Priority municipal annual inspections under Order 2001-01 were completed this Fiscal Year, and totaled 63 of 63.

In addition, the majority of new High Priority municipal inspections from the 2008 JURMP was completed prior to the end of the Fiscal Year, and totaled 66 of 67. The last inspection occurred in the first quarter of FY 08-09. All 67, plus any new facilities, will be inspected again in FY 08-09.

4.16.1 Background

Inspections of these facilities addressed all required inspection steps according to the Section D.3.b.(3)(a) including:

- Review of BMP implementation plans, if the site uses or is required to use such a plan;
- Review of facility monitoring data, if the site monitors its runoff;
- Coverage under the General Industrial Permit and NOI filing is checked;
- Compliance with the City of Carlsbad ordinances related to urban runoff is assessed;
- BMP implementation, maintenance, and effectiveness is assessed;
- Visual observations for non-storm water discharges, potential illicit connections, and potential discharges of pollutants in storm water are made;
- And education and training on storm water pollution prevention is performed as warranted.

Each of these facilities is formally inspected annually, although responsible departments often perform inspections of their facilities more frequently, as described above in Section XX.

4.16.2 Source Characterization

In total, there were 67 High Priority municipal areas and activities identified in the 2008 JURMP. These areas and activities included:

- Roads, Streets, Highways, and Parking facilities (12);
- Flood Management Projects and Flood Control Devices (1);
- Fire Stations (6);

- Recreation Facilities (1);
- Publicly Owned Treatment Works (1);
- Sanitary Sewer Faciliites (16);
- Water Facilities (6);
- Municipal Yards (4);
- Parks Facilities (14);
- Administrative Facilities (1); and
- Activities (4).

the activities include: landscape maintenance and repair, power washing, MS4 maintenance, and sanitary sewer maintenance.

Refer to Appendix XX, the City's Municipal Inventory, for a list of the City's High Priority municipal areas and activities.

4.16.3 BMP Requirements

All areas and activities implement site specific BMP requirements as per the City's JURMP, Appendix 6-A. The preceeding sections include table of site specific BMPs required to be implemented for each area and activity listed above. For facilities that are not High Priority, minimum BMPs are required that are tailored specifically to those sites and activities occurring there. Required BMPs have been implemented at all City areas and activities as described it the City's JURMP.

4.16.4 Program Implementation

Most inspections were performed by a contractor, as in years past, while some were performed in house. Those facilities that are not High Priority are inspected on an as needed basis.

Sites inspected were found to be in compliance with permit requirements and City ordinances. In general, there were very few corrective actions required. Deficiencies were minor and most often involved over-irrigation, accumulation of organic debris and general housekeeping.

All four High Priority activities were inspected and were found to be in compliance with permit requirements and City ordinances. There were no corrective actions identified for the High Priority activities.

For a listing of all corrective actions identified during inspections and their implementation, refer to Appendix 4.5. There were no violations of the Carlsbad Municipal Code observed during municipal inspections; therefore there were no necessary enforcement actions.

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City of Carlsbad s Industrial and Commercial program is intended to reduce industrial and commercial discharges of pollutants from the MS4 to the maximum extent practicable, and prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards. This section covers activities occurring from March 24, 2008 to June 30, 2008 under the new Permit Order No. R9-2007-0001.

5.2 Stationary Industrial and Commercial Sites Sources Element

5.2.1 Background

Storm water inspectors identify pollution sources, assess the potential threat to water quality, and require BMP implementation to eliminate pollution sources from industrial and commercial businesses. Major industrial types in Carlsbad include high technology, multimedia and biomedical businesses, electronics, golf apparel and equipment manufacturers and several light industry parks. Stationary commercial types in Carlsbad are restaurants, automobile maintenance, gas stations, golf courses, and resorts. These industrial and commercial sites and their activities have the potential to generate significant amounts of pollutants, if proper BMPs are not implemented.

5.2.2 Source Characterization

Each year hundreds of new businesses are established in Carlsbad. During this reporting period, the Storm Water Protection Program worked closely with the Finance Department to obtain information about new businesses, including activities, SIC codes and descriptions, business types, and contact names and numbers. Each quarter the Storm Water Protection Program downloaded, sorted, mapped, and prioritized new businesses by SIC, business type and other criteria per the new permit.

These new businesses were screened, evaluated, prioritized, and then added to the inventory list and scheduled for inspection. In some cases information provided on business license applications was not correct and a pre-inspection evaluation was necessary. Pre-inspection evaluations helped determine if a business activities were subject to storm water requirements. Two types of pre-inspection source evaluations were used:

1. Reviews: During the review process, the inspector evaluated the source and activity using relevant information from other City departments, databases, or licensing programs to determine whether the site/source should be inspected and tracked by the Storm Water Protection Program. A business could be excluded during the review process if it was found that their activities are not regulated by the City or General Permit. The most common reason businesses were excluded was because of an incorrect SIC code designation or low threat to water quality.
2. Telephone Contacts: If the review failed to provide enough information, the inspector will contacted the business by phone to determine their status and scheduled an inspection if necessary.

After physical inspections, reviews, or telephone contacts, any changes to a business priority or status was recorded on the Storm Water Inventory List and/or in the Permits Plus database.

New businesses were also found by referral from other agencies, field discovery, or business directories.

The City s Commercial/Industrial inventory is located in Appendix 5-1.

As required by the permit, the following applicable stationary sites/sources are included in the inventory:

1. Commercial Sites/Sources:
    - Automobile repair, maintenance, fueling, or cleaning;
    - Airplane repair, maintenance, fueling, or cleaning;
    - Boat repair, maintenance, fueling, or cleaning;
    - Equipment repair, maintenance, fueling, or cleaning;
    - Automobile and other vehicle body repair or painting;
    - Automobile (or other vehicle) parking lots and storage facilities;
    - Retail or wholesale fueling;
    - Pest control services;
    - Eating or drinking establishments, including food markets;
    - Cement mixing or cutting;
    - Masonry;
    - Painting and coating;
    - Botanical or zoological gardens and exhibits;
    - Landscaping;
    - Nurseries and greenhouses;
    - Golf courses, parks and other recreational areas/facilities;
    - Cemeteries;
    - Marinas;
    - Portable sanitary services;
    - Building material retailers and storage;
    - Animal facilities

2. Industrial Sites/Sources:
    - Industrial Facilities, as defined at 40 CFR 122.26(b)(14), including those subject to the General Industrial Permit or other individual NPDES permit;
    - Operating and closed landfills;
    - Facilities subject to SARA Title III; and
    - Hazardous waste treatment, disposal, storage and recovery facilities.

3. All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired.

4. All other commercial or industrial sites/sources within or directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

5. All other commercial or industrial sites/sources that the Copermittee determines may contribute a significant pollutant load to the MS4.

Potential threats to water quality at each commercial and industrial site/source were determined by evaluating a variety of site-specific factors including the criteria outlined in the Permit.

Commercial and industrial facilities will continue to be reviewed during the first year of implementation and prioritizations will be reviewed and updated annually in conjunction with the watershed-based inventory to reflect any changes in industrial and commercial uses. Individual prioritization criteria are described below in further detail:

Prioritization Criteria: Prioritization involved two steps: (1) initially classifying a facility as being a high threat to water quality based on site information; and (2) subsequently confirming or reclassifying the facility based on field observations and additional information. Initial classification of sites/sources was accomplished administratively using the data provided in the existing industrial and commercial inventory. The confirmation and/or reclassification, when necessary, was and will be completed following the initial inspection of each site/source. In addition to the minimum criteria listed above, the City also considered the following site/source attributes to evaluate the potential threat to water quality:

i. Type of activity (SIC code): Standard Industrial Classification (SIC) codes were used primarily to prioritize and identify specific commercial and industrial activities/sites that have the potential to contribute to storm water pollution. In addition, the NPDES General Industrial Permit (General Permit) defines specific SIC codes such that (1) coverage under the General Permit is mandatory (as defined in Categories ii, iii, vi, and viii of the General Industrial Permit) or (2) coverage under the General Permit is conditional, required only if material, machinery, or products are exposed to storm water (as defined in Category 10 of the General Permit). Industries not listed with an SIC code were directly contacted and assigned an appropriate code based on a description of business activities.

ii. Materials used at the facility: Materials, including hazardous materials, used at industrial and commercial sites have the potential to contribute significant pollutant loads to receiving waters if transported by storm water. These materials and associated activities were considered during the prioritization process.

iii. Wastes generated: If not properly disposed of, industrial and commercial wastes have the potential to degrade receiving waters when transported by storm water. Types of wastes generated or stored onsite were considered during the prioritization process. Industrial Waste Permits issued by Encina Wastewater Authority may also be examined.

iv. Pollutant discharge potential: When evaluating a commercial or industrial site/source s potential to discharge pollutants, the inspector took into account all material handling equipment or activities, raw materials, intermediate products, final products, waste material, by-products, or industrial machinery exposed to storm water. Discharge potential was assessed during site inspections at each facility.

v. Non-storm water discharges: Authorized non-storm water discharges can contribute to water quality degradation by transporting pollutants into receiving waters. Non-storm water discharges were evaluated to determine whether they were a significant source of pollutants and whether the discharges may continue to be exempted from the prohibitions of Section B.1 of the Permit.

vi. Size of facility: Size of the facility affects the amount of runoff and pollutant loads generated from the industry. The size of a facility was taken into consideration during the threat evaluation process.

vii. Proximity to receiving water bodies: The potential for pollutant transport to sensitive receiving water bodies was evaluated by determining the proximity and sensitivity of receiving water bodies using the ESA definitions from the Permit.

viii. Sensitivity of receiving water bodies: All facilities directly discharging to or within 200 feet of the ESA s listed above were considered high priority.

ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit: A listing of facilities located in Carlsbad that have filed a Notice of Intent (NOI) and are covered under the General Permit were classified as high priority threats to water quality.

x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability: Those facilities that were identified as Conditional (NONA and NEC filers) were evaluated using the prioritization flowchart and prioritized accordingly.

xi. Facility design: The design of a facility, including whether structural BMPs has been installed and maintained, or there are outdoor activities, was considered during the threat to water quality evaluation process.

xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff was considered during the Threat to Water Quality evaluation process.

xiii. The facility s compliance history: Inspectors reviewed the compliance history of each commercial and industrial site and considered any relevant enforcement actions in determining the threat potential on activities conducted onsite.

xiv. Any other relevant factors: The City reserved the authority to consider any other relevant factors specific to the facility to utilize in the prioritization process.

5.2.3 Best Management Practice Requirements

5.2.3.1 Pollution Prevention

Pollution prevention eliminates or reduces the management of polluted storm water runoff. Specific pollution prevention procedures may vary from one industrial or commercial facility to another, and the City informed these facilities of pollution prevention opportunities during site inspections. However, the following pollution prevention principles applied to most industrial and commercial facilities:

- Affirmative Procurement Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

5.2.3.2 Minimum BMPs

Described below are minimum BMPs required to be implemented, during this reporting period, by stationary commercial and industrial facilities, as applicable:

1. Good housekeeping

   Specifically stationary facilities are required to:

   - Protect materials and products that could potentially pollute storm water from rain, run-on, runoff, and wind dispersal by storing them indoors or covering them, and providing them with secondary containment as needed. For industries with conditional SIC codes, moving stored materials indoors may allow an exemption from the General Permit requirements.

- Use dry clean up methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible) instead of using water hose or pressure washing system to conduct washing or cleaning activities.
- Sweep up around dumpsters and other areas to prevent trash and debris from accumulating. Dumpsters must be kept closed when not in use. All trash must be kept in appropriate sized containers until it can be hauled away. When inspecting solid waste collection areas, inspectors will note if recyclable materials (cardboard, green waste, etc.) are placed in dumpsters.

2. Preventive maintenance

   Preventive maintenance includes the regular inspection and maintenance of storm water structures (drains, catch basins, etc.) as well as other facility equipment and systems. Structures should be maintained in good working order and cleaned as needed to prevent discharge of pollutants into the storm water system. Facility equipment or systems should be properly maintained to prevent leaks or discharges of pollutants into the storm water system.

3. Material Storage and Handling

   This includes all procedures to minimize exposure of significant materials to storm water and to minimize the potential for spills and leaks from storage, loading, unloading and transfer of materials.

4. Employee training

   Appropriate personnel should be trained in good housekeeping, preventive maintenance, materials storage and handling, solid waste handling and recycling, and spill response as applicable to the facility. Records should be retained of employees attending storm water training sessions and the topics covered.

5. Solid waste (non-hazardous) handling and recycling

   This includes the procedures or processes to handle, store, or dispose of waste or recyclable materials. Waste disposal areas should be kept free of litter and debris and waste and recyclable receptacles must have a cover or lid to prevent the contents from being dispersed by the wind or coming in contact with storm water.

6. Spill response

   Spills and leaks can be a major contributor to storm water pollution. Facilities should identify potential locations and quantities of significant materials that may spill or leak, and should write and implement a response plan addressing spill containment, clean up and notification procedures. Appropriate spill clean-up equipment should be readily accessible to trained spill response personnel.

7. Record keeping

   This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel. Record keeping and internal reporting represent good operating practices as they increase the efficiency of the facility and the effectiveness of BMPs.

8. Self inspection/quality assurance
   This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures should be described to ensure adequate corrective actions are taken. Quality assurance includes the procedures to ensure that all elements of any required SWPPPs or monitoring plans are adequately conducted.

BMP information was made available during inspections, in printed materials and direct mailings, on the storm water website and hotline, during presentations and at outreach events. A listing of education and outreach events held during this reporting period can be found in Section 8 of this report.

5.2.3.3 BMP and Knowledge Assessment Tools

During this reporting period, the Storm Water Protection Program continued to use the *BMP and Knowledge Assessment* to measure knowledge of storm water issues and assess the implementation of BMPs onsite. The assessment tool rated a commercial operator and site using the following criteria:

Overall Knowledge Assessment:
Inspectors ranked personnel from 1-5 per the following *Knowledge Assessment* scale:

Level 1: Individual has never heard of the storm water program, requirements, or BMPs. This individual does not know what BMPs are or understand how to implement them.

Level 2: Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.

Level 3: Individual has a general understanding of storm water issues (*I've heard something about that*), but not specific storm water requirements or BMPs required for the facility.

Level 4: Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.

Level 5: Individual demonstrated an in-depth knowledge of the storm water program and BMPs consistent with the facility's activities and operations.

Overall BMP Assessment
Inspectors ranked the facility per the following 1-5 *BMP Assessment* scale:

Level 1: An illegal discharge was noted during the inspection. Enforcement actions such as a NOV and/or citation are required.

Level 2: BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or written warning was issued.

Level 3: BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal warning was issued. A detailed inspection report or written Warning Notice may follow.

Level 4: BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices (i.e., dumpsters open, leaves in the parking lot, etc.) were noted during the inspection.

Level 5: All BMPs implemented effectively. No violations noted during the inspection.

Table 5.1: HTTWQ Facilities Rated for Each Score □ March 24, 2008 to June 30, 2008.

Rating	Knowledge Assessment (raw score)	Knowledge Assessment (□)	BMP Implementation (raw score)	BMP Implementation (□)
1	0	0□	1	2□
2	2	4□	4	7□
3	11	22□	10	18□
4	20	39□	17	31□
5	18	35□	23	42□
TOTAL	51	100□	55	100□

Table 5.1 shows the number of instances in raw score and percentage that HTTWQ businesses rated for each score, with 5 being the highest score possible. The number of *BMP Assessments* collected is usually higher than the number of *Knowledge Assessments* collected, because at some facilities, a company representative is not available to complete the *Knowledge Assessment*. BMP implementation results show that the City has been successful in ensuring that businesses implement BMPs throughout the sites at least 91□ of the time during this reporting period. The City will continue to work with businesses to not only educate them about storm water issues, but also ensure BMPs are implemented and maintained.

5.2.4 Program Implementation

5.2.4.1 Inspections

The City conducted inspections to verify BMP implementation, Permit compliance, and municipal code compliance. From March 24 to June 30, 2008, a total of 72 inspections were performed on high threat to water quality facilities from an inventory of 558. A goal of 70 inspections was set for this time period using 12.5□ of all HTTWQ facilities (one fourth of the 50□ required by the permit for the first year of the permit cycle).

The City conducted scheduled, unscheduled, follow-up, and compliance inspections at commercial and industrial sites/sources at the frequencies as required by the Permit. During site visits, the inspector:

a. Reviewed the SWPPP or BMP implementation plans, if the site used or was required to use such a plan;
b. Reviewed facility monitoring data, if the site monitored its runoff
c. Checked for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
d. Assessed compliance with ordinances and permits related to urban runoff;
e. Assessed BMP implementation, maintenance and effectiveness;

f. Conducted visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
g. Evaluated education and training on storm water pollution prevention, as conditions warrant.

Copies of inspection reports and correspondence are maintained by the Storm Water Protection Program.

5.2.4.2 Enforcement

The City conducted follow-up inspections to determine compliance with corrective actions outlined in the inspection report or enforcement notices. When a storm water complaint was received about an industrial or commercial site/source or an illegal discharge was observed or suspected, the City conducted a storm water compliance inspection or investigation. If a significant and/or immediate threat to water quality was observed, appropriate actions were taken to require the responsible party to immediately cease the discharge and/or correct the situation. In judging the degree of severity, City inspectors also took into account any history of similar incidents or discharges. Table 5.2 includes a summary of businesses that received NOVs from March 24 to June 30, 2008.

Table 5.2: Summary of NOVs Issued from March 24 to June 30, 2008

Business Name	SIC	Date of NOV	CMC Violations		Findings	Compliance Achieved
			Storm Water	Trash		
Ocean House	5812	4/15/08	15.12.050 15.12.080	6.08.045	Improperly stored materials. No BMPs in place.	Yes
Express Auto Center	7538	4/30/08	15.12.080	6.08.050	Improperly stored materials. No BMPs in place.	Yes
Firestone Tire and Service	7538	5/22/08	15.12.080	6.08.045 6.08.050 6.08.090	Oil spills not properly cleaned. No BMPs in place.	Yes
Bob Baker Mazda	5511	6/19/08	15.12.080 15.12.090	6.08.045	Improperly stored materials. Vehicle fluid spills not cleaned. Trash and debris throughout site. No BMPs in place.	Yes
Bob Baker Chrysler Jeep	5511	6/19/08	15.12.080 15.12.090	6.08.045	Improperly stored materials. Vehicle fluid spills not cleaned. Trash and debris throughout site. No BMPs in place.	Yes

The Enforcement Response Plan continued to be used by inspectors to identify, document, and respond to storm water violations.

For this reporting period, the Storm Water Protection Program had three full-time Environmental Specialists. Environmental Specialists are continually trained on code enforcement, inspection procedures, laws and regulations, and investigation techniques.

These training courses, in addition to the Enforcement Response Plan, helped the Storm Water Protection Program appropriately identify and respond to storm water violations. The City took a total of 6 enforcement actions against industrial and commercial businesses from March 24 to June 30, 2008. The types and numbers of enforcement actions are listed in Table 5.3.

Table 5.3. Enforcement Actions from March 24 to June 30, 2008

Action	Total
Verbal Warning	0
Written Warning	1
Notice of Violation	5
Notice to Clean	0
Cease and Desist Order	0
Administrative Citation	0
TOTAL	6

During inspections and investigations completed during this reporting period, there were no illegal discharges found. Mobile service providers were added to the inventory and required to apply for business licenses. More detailed information on complaint response and illegal discharge investigations is found in Section 7 of this report. Escalated enforcement actions were taken when necessary to achieve compliance.

5.3 Mobile Sources Element

5.3.1 Background

The City has participated in the development of a Regional Mobile Outreach and Education Strategy. The City will work with the Copermittees to ensure the implementation and success of this strategy. A copy of the *Regional Mobile Outreach and Education Strategy*, which includes a discussion of Carlsbad s jurisdictional efforts, can be found in the City s JURMP.

5.3.2 Source Characterization

A large percentage of businesses on the inventory list are mobile businesses, which include carpet cleaning, power washing, etc. These mobile businesses were identified, contacted and mailed appropriate BMP information. Because site inspections are not required for mobile businesses, many were reviewed by City inspectors. During the review process the inspector evaluated a commercial business using any relevant information available in other City departments, databases, or licensing programs. A business could be excluded during a review if it was found that their activities were not regulated by the City or Permit. The most common reason businesses were excluded during the review process was because of an incorrect SIC code designation.

Telephone surveys continued to be used to determine the status of certain types of mobile businesses on the inventory. In most cases, this screening procedure determined that the wrong SIC code had been applied during the business license application process. The Carlsbad Municipal Code prohibits mobile businesses from storing materials outdoors. Once confirmed, mobile businesses were mailed specific BMP information.

5.3.3 Best Management Practice Requirements

Implementing BMPs are a priority for all mobile businesses. Dry cleanup methods, diverting wash water, covering or blocking drains are all required.

5.3.4 Program Implementation

Upon arrival onsite to investigate a complaint of non-compliance, City staff conducted the following activities:

Requested stop work if discharge was entering or had potential to enter the MS4 system.
Requested to speak to the manager of the responsible party or property owner as necessary.
Took photos and made observations.
Educated the responsible party or person onsite as necessary regarding the City s NPDES permit, Federal and State requirements, Carlsbad Municipal Code (CMC), and required BMPs in order to continue work.
Enforced the CMC as necessary.
Followed up with documentation in RFA system and with written correspondence to the responsible party with a CC to the property owner.

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

This section describes the activities of the City for the reporting period from March 24, 2008 to June 30, 2008 with respect to implementation of the Residential Component of the JURMP. The program is intended to: (1) reduce residential discharges of pollutants from the MS4 to the MEP, and; (2) prevent residential discharges from the MS4 from causing or contributing to a violation of water quality standards.

6.2 Source Characterization

In accordance with Order R9-2007-0001 and the City's JURMP, the City focused on all the high priority activities and areas outlined in the JURMP (March 2008). Since writing the JURMP, no amendments were made to source characterization or areas of focus.

6.3 Best Management Practice Requirements

In accordance with the City's JURMP required BMPs were implemented in residential areas. City inspectors required the following minimum BMPs (detailed in fact sheets and brochures) for all residential sources or pollution:

- Move or cover potential pollution sources from storm water contact. Protect materials that could potentially contribute to storm water pollution by storing them indoors or covering them.
- Use dry cleanup methods. Washing or cleaning activities that involve the use of a water hose or pressure washing system were required to use dry clean up methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible).
- Residential car washing. Use soap sparingly, divert wash water to landscaped areas and pour buckets of soapy water down the sink. Never wash cars in the street or public right of way.
- Pet Waste. Clean up after pets. Use a bag to pick up waste when walking pets. Flush pet waste down the toilet or dispose of in a sealed plastic bag and deposit in the trash.
- Trash Management. All trash must be kept in appropriate sized containers until it can be hauled away. Frequently dispose of grass, debris, leaves, and other waste materials.
- Recycle, Reduce and Reuse. Recycle cans, bottles, paper and cardboard whenever possible.
- Reduce the Use of Landscape Chemicals: Decrease the use of lawn and garden care products such as pesticides, weed killers and chemical fertilizers. Consider using non-toxic pest control methods. Avoid over irrigation which washes these chemicals into the storm drain system.

6.4 Program Implementation

The following provides a discussion of the steps that were taken to require, encourage, and verify the implementation of the prescribed BMPs, and the notable activities conducted to manage urban runoff for high priority residential areas.

6.4.1 Regional Residential Education Program

The San Diego Regional Storm Water Copermittees sponsored the San Diego County Fair (Fair) in 2008 as an education and outreach activity. The sponsorship was a joint effort between the City of San Diego s Think Blue program and the regional Copermittees with each entity contributing approximately half towards the overall cost. The Fair was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental message. The Residential Sources and Outreach Workgroup (Outreach Workgroup) was responsible for overseeing sponsorship activities with the City of San Diego leading the coordination and implementation efforts.

The 2008 Fair was held June 14, 2008 through July 6, 2008, spanning two fiscal years and will be included in the FY 07/08 and FY 08/09 annual reports. The attendance for the fair was estimated at 1,235,698 persons for the 21 days the event occurred. Sponsorship for the Fair included staffing an outreach booth for 11 days, in which the majority of jurisdictions provided staffing support. The City of Carlsbad provided staffing on June 21, 2008. The outreach booth served as the primary method for educating the public about watershed protection and pollution prevention. The Outreach Workgroup elected to promote Integrated Pest Management (IPM) as the primary theme and collaborated on the distribution of IPM materials in both English and Spanish. Individual jurisdictions were invited to distribute their own materials in addition to the IPM materials. The Copermittees received billing as both a Flower & Garden Show sponsor and an Enviro-Fair sponsor.

Think Blue was designated as the brand for the Copemittees during the event and signage demarking the symbol included banners, planter box displays and recycle bid stickers, which were visible at over 500 locations at the Fair. Media exposure included TV, radio, and press releases. The sponsorship was printed in both the Fair program and included on the Fair map. Other promotions included newspaper advertisements, electronic messaging over the Jumbo Tron, website logos and links, and PA system announcements in both English and Spanish.

Think Blue, City of San Diego developed an event survey for the purposes of assessment. Over 1,200 survey cards were completed during the 11 days the booth was staffed. The questions focused on general storm water knowledge and awareness. The results are being tabulated and will be reported in FY 08/09.

6.4.2 BMP Implementation

During this reporting period the City continued to implement a program to reduce contaminants in urban runoff originating from existing residential areas. BMP information was made available to residents via the storm water website and hotline, at outreach events, through direct mailings, and during investigations of suspected storm water violations. Written materials (brochures, fact sheets, etc.), promotional items, and verbal explanation of BMPs were used to convey BMP information. In addition, various levels of enforcement actions were used as necessary to ensure the use of required BMPs. A listing of all education and outreach events and activities for residential audiences is addressed in Section 8 of this report. Discussion of investigations and enforcement actions for residential areas and activities are discussed in Section 6.4.7 and Section 7 of this report.

Website and Hotline

Information about water conservation, trash management, and storm water was located on one centralized web page accessed at www.carlsbadconserves.org. The Environmental Programs hotline provided information about storm water, trash, and water conservation for the public. The hotline was answered by the Storm Water Protection Program during business hours and provided a detailed voice message after hours. In addition, outreach materials continued to be revised to include the Environmental Program s web page address and hotline number. From March 24, 2008 to June 30, 2008, there were a total 8,350 visits, or average of over 84 hits per day to the Environmental Programs website. The website was updated to include the City s current JURMP and WURMP documents.

Outreach Events

The City hosted or participated in several public events, which provided opportunities for residents to learn about pollution prevention and storm water BMPs. During these events residents had the opportunity to pick up printed materials, and to speak directly to storm water representatives. Table 6.1 is a summary of these events that took place from March 24, 2008 to June 30, 2008.

Table 6.1: Outreach Events for Residential Community (March 24, 2008 to June 30, 2008)

Event	Date	Type	Audience	Attendance
Beach Cleanup	4/19/08	Booth	General Public	100
Public Works Fair	5/21/08	Booth	General Public School Children	1,300
Health & Safety Fair	6/5/08	Booth	Beckman/Coulter Employees	250
San Diego County Fair	6/21/08- 07/06/08	Booth	General Public	1.2 million

Direct Mailings

Carlsbad Conserves, the Environmental Programs newsletter was mailed in the spring of 2008. The newsletter informs residents of: environmental issues facing Carlsbad, services provided by the City, tips of how to protect the environment, storm water BMPs, and a calendar of important dates. A copy of the spring edition of Carlsbad Conserves can be found in Appendix 6.1

The Environmental Programs Guide was sent to all new customers requesting trash service during the period from March 24, 2008 to June 30, 2008. This publication offers information about proper disposal of many types of waste including trash, recycling, and household hazardous waste (HHW). Information also included ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution. A copy of the brochure can be found in Appendix 6.2.

On April 24, 2008 a letter was mailed to 95 residents in response to illegal dumping of used motor oil into a Storm Drain. Included with the letter was a copy of the Motor Oil brochure and the Only Rain in the Storm Drain brochure. A copy of the letter can be found in Appendix 6.3.

Written Materials

Written materials including various brochures and fact sheets detailing storm water BMPs were distributed as necessary to residents through the avenues listed above.

Promotional Items

The Storm Water Protection Program continued to distribute pollution prevention message pens to municipal employees and the Carlsbad community. Other items such as water bottles, notepads, mouse pads, and cups with the storm water hotline and other pollution prevention messages were distributed to residents.

The City distributed a HHW magnet that gives details about HHW disposal location for Carlsbad residents. The magnets will continually be distributed during presentations and other outreach events.

6.4.3 HHW and Used Oil

The City continued to operate the Household Hazardous Waste (HHW) and used oil recycling program outlined in the JURMP. From July 1, 2007 to June 30, 2008 the City collected and disposed of approximately 148 tons of HHW (including recycled or diverted).

On April 19, 2008, the City sponsored a free HHW disposal day where Carlsbad residents could dispose of up to 15 gallons or 125 pounds of HHW materials. The event attracted 513 households, and everyone was offered the Environmental Programs brochure as well as the Door-to-Door HHW brochure. The City collected and disposed of 60,566 pounds of HHW during this event. Table 6.2 shows the types and quantities of HHW collected at the event.

Table 6.2: Items Collected During April 19, 2008 HHW Event

Type of Material	Weight In Pounds
1. Flammable & Poison	33,620
2. Acid	400
3. Base	350
4. Oxidizer	75
5. PCB-containing	0
6. Aerosol	1,500
7. Reclaimable	6,890
a. Antifreeze	400
b. Car Batteries	2,700
c. HH Batteries	650
d. Rechargeable Batteries	65
e. Fluorescent bulbs	425
f. Motor Oil/products	2,500
g. Oil Filters	150
8. Other	17,731
a. Compressed Gas	294
b. CRT	10,161
c. E-Waste	7,276
9. Asbestos	0
10. Grand Total	**60,566**

Residents used the Environmental Programs hotline and e-mail address to request information about the HHW program, trash, and recycling. The City's RFA system was used to track calls about Environmental Programs comments and questions from residents. From March 24, 2008

to June 30, 2008 the Environmental Programs Division responded to 23 complaints/questions related to HHW, recycling, and solid waste. Table 6.3 includes a summary of these complaints.

Table 6.3: Summary of Environmental Programs Division Complaints

Issue Type/SubType	Total
HHW Complaint	2
Recycling: Complaint	3
Recycling: General Information	2
Solid Waste: Complaint	6
Solid Waste: General Information	5
Solid Waste: Missed Collection	5
TOTAL	**23**

Carlsbad residents may dispose of two large bulky household items at no charge five times per year. The City worked with Waste Management to schedule days for the bulky item pickup schedule. One bulky item pickup day was organized on Saturday June 21, 2008.

6.4.4 Oversight of Residential Areas

The Water Conservation Specialist conducted regularly scheduled patrols of different residential areas within the City. The City was divided into 4 hydrologic areas. Patrols were conducted for a specified period for each area. Evidence of excess runoff from irrigation were investigated and on a case-by-case basis. Door hangers were left and a follow-up phone call or a site visit conducted to evaluate irrigation.. When there were large areas or neighborhoods with extensive irrigation runoff mailings were conducted to educate residents of the problem.

6.4.5 Enforcement in Residential Areas

Storm water staff handled all residential complaints and subsequent enforcement actions in accordance with the City s existing procedures and Carlsbad Municipal Code. Each observed violation was documented using the RFA system.

From March 24, 2008 to June 30, 2008, the Storm Water Protection Program received 66 complaints of potential illegal discharges. Of those complaints, 41 were residential in nature. Many of the complaints that occurred in residential areas involved commercial contractors or mobile businesses. When complaints were tracked to a specific business, they were counted and documented as commercial complaints. Seven complaints were referred for action, meaning, that the investigation or resolution of the issue did not fall under the jurisdiction of the Storm Water Protection Program. Examples include wastewater discharge or construction. There were 9 residential complaints in which no violation was found, due to either the source not being found or the reported pollutant discharge not being found. There were 25 enforcement actions for residential complaints. Table 6.4, and Figure 6.1 show a summary of those actions. A summary of all complaints responded to can be found in Appendix 7.4

Table 6.4: Summary of Residential Enforcement Actions
March 24, 2008 to June 30, 2008.

Action	Total
Verbal Warning	11
Informational letter	12
Written Warning	1
Notice of Violation	1
Notice to Clean	0
Cease and Desist Order	0
Administrative Citation	0
TOTAL	25

Figure 6.1: Residential Enforcement Actions March 24, 2008-June 30, 2008 (Order 2007-0001)

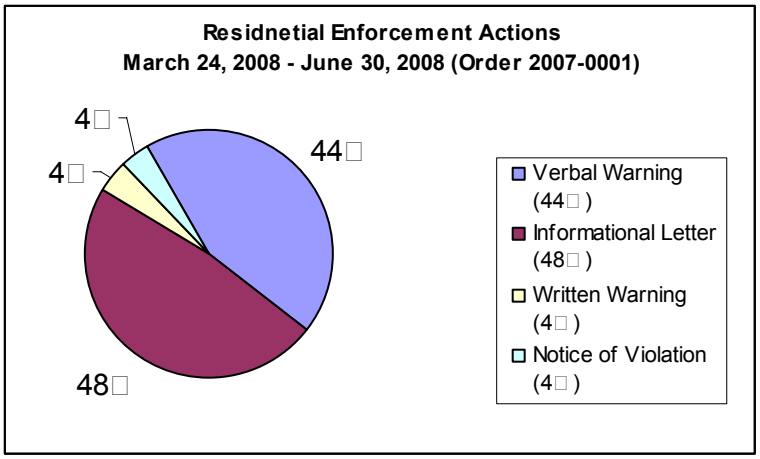

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The City s Illicit Discharge Detection and Elimination (IDDE) will be submitted in December 2008 as approved by the Regional Board in Addendum 2, Order 2007-0001.

8.0 OUTREACH AND EDUCATION COMPONENT

8.1 Introduction

The City of Carlsbad Storm Water Protection Program continued to conduct outreach and education according to our 2008 JURMP from March 24, 2008 to June 30, 2008.

8.2 Staff Training Element

General information for FY 07-08 has been submitted under permit 2001-01.

Other Training
In addition to the general information for FY 07-08 submitted under Order No. 2001-01, in May 2008 all City employees were sent storm water BMP information as a paycheck stuffer. The training fact sheet includes information about the NPDES requirements, pollutants of concern, BMPs, and how to report illegal discharges to the storm drain system. A copy of the training fact sheet can be found in Appendix 8.1.

Job Specific Training
Several job positions were identified that require activity or job specific storm water training. A summary of municipal employee training is in Appendix 8.2 The City also participated in EPA sponsored webcasts this fiscal year where possible. Storm Water Protection Program staff received job specific training during this reporting period as provided in Appendix 8.-2.

Storm Water Committee
The Storm Water Committee continued to meet monthly to discuss and develop a calendar of storm water training activities for staff, coordinate compliance activities and documentation, create and distribute job specific storm water training information, and standardize documentation of training activities. A summary of Storm Water Committee meeting topics during FY 07-08 can be found in Appendix 8.3.

8.3 Educational Outreach Element

Underserved Target Audiences, High Risk Behaviors, and Allowable Behaviors and Discharges

Classroom Education
During the FY 07-08, the Solana Center for Environmental Innovation continued to conduct the Classroom Watershed Program for the City. The EnviroScape interactive model was used to teach students about watershed stewardship and pollution prevention. Outreach materials and workbooks were provided to the students and teachers. Each classroom was given a watershed poster, handouts for ten simple ways to help protect the ocean, guides to HHW alternatives and disposal in English and Spanish, and a recycling guide for students to take home. Please see Table 8.1 for the list of Carlsbad Elementary Schools participating in the Watershed Awareness Program. The educational material presented reaches out to the Spanish-speaking communities and Low-Socio-Economic Status families increasing knowledge and awareness with less complicated and/or confusing messages.

Printed Material and Website
During this reporting period, the City of Carlsbad offered brochures in the Spanish language, providing important information on Automotive Service and Repair Shops, Lawn and Garden Care and Restaurants. These brochures were developed to raise awareness in the Spanish-speaking community about the difference between storm water conveyance systems and sanitary sewer systems, the connection of storm drains to local waterways, and common residential sources of urban run-off. The brochures include BMPs, the City s logo, website address and the City s storm water phone number. These materials are available at various City facilities, through public events and the City s storm water web page, accessed at www.carlsbadconserves.org.

New Development and Construction Communities - The City continued to educate these communities during this reporting period through the distribution of print materials in person and through the mail, as well as through website postings.

Construction Site Owners and Developers The City continued to educate these communities during this reporting period through the distribution of print materials in person and through the mail, as well as through website postings.

Commercial and Industrial Owners and Operators
The City continued to educate commercial and industrial owners and operators through various methods. This included the distribution of printed materials, participation at workshops, presentations to business community groups, direct mailings, inspections and site visits. In addition to the general information submitted under permit 2001-01 annual report section, all brochures were available through the City website. During permit cycle from March 24, 2008 through June 30, 2008, there were 8,350 visits to the Environmental Programs web page.

Quasi-Government Agencies/Districts (i.e. Educational Institutions, Water Districts, Sanitation Districts, etc.). The City continued to educate these communities during this reporting period through the distribution of print materials in person and through the mail, as well as through website postings.

Residential Community, General Public, and School Children
In addition to the general information submitted under permit 2001-01, accomplishments are described below:

Direct Mailings
Carlsbad Conserves, the Environmental Programs newsletter was mailed in the spring of 2008. The newsletter informs residents of environmental issues facing Carlsbad; services provided by the City; tips of how to protect the environment; storm water BMPs; and a calendar of important dates. A copy of the spring edition of Carlsbad Conserves can be found in Appendix 6.1

The Environmental Programs Guide was sent to all new customers requesting trash service during the period from March 24, 2008 to June 30, 2008. This publication offers information about proper disposal of many types of waste including trash, recycling, and household hazardous waste (HHW). Information also included ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution. A copy brochure can be found in Appendix 6.2.

On April 24, 2008 a letter was mailed to 95 residents in response to illegal dumping of used

motor oil into a Storm Drain. Included with the letter was a copy of the Motor Oil brochure and the Only Rain in the Storm Drain brochure. A copy of the letter can be found in Appendix 6.4.

Classroom Education

During FY 07-08, the Solana Center for Environmental Innovation (Solana Center) continued to conduct the *Classroom Watershed Program* for the City.

Table 8.1 lists all of the schools and the number of classrooms and students that attended the watershed classroom presentation for permit cycle R9-2007-0001 from March 24, 2008 to June 30, 2008.

Table 8.1. Carlsbad Elementary Schools Watershed Awareness Programs

Date	Elementary School	of students
03/27/2008	Girl Scouts of Carlsbad	10
04/02/2008	Magnolia Elementary	85
04/02/2008	Calevara Hills Elementary	20
04/09/2008	ASPIRE Day Program	60
04/16/2008	Hope Elementary	79
05/21/2008	Dove Library Public Works Fair	350
Total		**604**

Advertisements

During FY 07-08, advertisements were published in the Carlsbad Magazine and the Community Services Guide. Table 8.2 lists the published ad and the estimated circulation.

Table 8.2. Dates of Publication of the Environmental Programs Advertisements

Ad	Month	Publication	Circulation
Environmental Programs Ad	June 2008	Carlsbad Magazine	80,000
Environmental Programs Ad	June 2008	Jazz in the Parks Magazine	9,000

Website and Hotline

Most of the printed materials were available for download from the City s website and Environmental Programs website. There were 8,350 hits to the Environmental Programs web pages from March 24, 2008 to June 30, 2008.

Neighborhood Outreach Campaign

The 2008 Calendar and Community Guide, a 122-page bound calendar, was mailed during the year to all Carlsbad residents. Several articles related to water quality were included during FY07-08. Approximately 47,000 were printed for distribution.

Direct Interactions

Additional information on direct interaction with the residential community through complaint investigations is provided in Section 6.4.5.

Public Events

Table 8.3. R9-2007-001 Outreach Events for Residents, General Public, and School Children

Event	Date	Type	Audience	Attendance
Employee Appreciation Day	4/17/08	Booth	City Employees	500
Beach Cleanup	4/19/08	Booth	General Public	100
Public Works Fair	5/21/08	Booth	General Public School Children	1,300
Health & Safety Fair	6/5/08	Booth	Beckman/Coulter Employees	250

8.4 Outreach Component Effectiveness Assessment

Assessment can be found under permit 2001-01 annual report section. In addition to the program strengths listed under Order No. 2001-01 annual report section, the City s waste reduction pilot program continued to increase the amount recycled.

8.5 Program Review and Modification

Review and modification can be found under the Annual Report section for Order No. 2001-01.

9.0 PUBLIC PARTICIPATION

9.1 Introduction

This section describes the activities of the City for the reporting period of March 24, 2008 to June 30, 2008 with respect to the implementation of the Public Participation Component of the 2008 JURMP.

9.2 Public Meetings and Hearings

The public had numerous opportunities to attend meetings at the local, watershed and regional levels, in order to learn about the City s implementation of the Permit and to have their concerns addressed.

City Council Meetings were held in the Council Chambers at Carlsbad City Hall and were open to the public. The City of Carlsbad also offers residents and visitors the opportunity to view City Council meetings via the Internet. Regularly scheduled Carlsbad Council meetings air live on Tuesday evenings at 6 pm. Local viewers could also view Council Meetings live on Time Warner Cable channel 19. Each meeting and agenda was posted online approximately two hours after the conclusion of each meeting. Past meetings will be available for up to a year on the City's own archive video portal. Users can conveniently "keyword search" through the audio/video content and "jump to" meeting discussion items in real-time by using a drop down menu. Agendas from previous meetings can be accessed through the City's Document Management System.

The Planning Commission is comprised of seven members appointed by the City Council. This commission makes recommendations to the City Council regarding implementation and updating of the General Plan. When needed, they also provide recommendations to the Council regarding policy issues that affect long-range planning. They review development projects, provide recommendations to the City Council, provide reports to the City Council on the Local Facilities Management Plans, review the annual CIP for consistency with Growth Management Program, identify potential problems and opportunities facing the City, and suggest special studies when appropriate. During this reporting period the City also provided live streaming of Planning Meetings that are typically held on the first and third Wednesday of each month at 6 pm. Table 9.1 contains a list of Regularly Scheduled City Council and Planning Commission Meetings from March 2, 2008 to June 30, 2008.

Table 9.1: Carlsbad Public Meetings
(March 24, 2008-June 30, 2008)

Regular Council Meetings		Planning Commission	
03/25/08	05/13/08	04/02/08	05/21/08
04/01/08	05/20/08	04/16/08	06/04/08
04/08/08	06/10/08	05/07/08	06/18/08
04/15/08	06/17/08		
04/22/08	06/24/08		
04/06/08			

Residents could also become representatives on various City committees. The City Clerk's office maintained a current list of City Boards, Commissions, and Committees, current vacancies, meeting dates and times, and coordinated all appointments to these positions.

The public could also attend the Copermittee Management Committee Meetings and other Copermittee meetings. Notices of these meetings were available from the Project Clean Water website at www.projectcleanwater.org. Table 9.2 lists the dates of these meetings.

Table 9.2 Coopermittee Public Meetings (March 24, 2008 June 30, 2008)

Municipal Storm Water Copermittees				
Management Committee	Outreach Workgroup	Regional Monitoring Workgroup	Coastal Storm Drain Monitoring Sub-Workgroup	Dry Weather Monitoring Sub-Workgroup
	05/21/08	04/22/08 05/20/08	04/23/08 06/18/08	04/08/08 04/23/08

9.3 Feedback Mechanisms

In addition to the feedback opportunities available through public meetings and hearings, there were a number of other mechanisms available for the public to provide feedback.

9.3.1 Hotline and E-mail Address

The public was encouraged to provide input and feedback on the Storm Water Protection Program implementation. In addition to the public meeting opportunities detailed above, the public could call the storm water hotline to request information, provide comments, or make illegal discharge reports. The public could also send e-mails directly to the Storm Water Protection Program at stormwater ci.carlsbad.ca.us. There were several other public contact phone numbers and City e-mail addresses available for public use. Other City departments forwarded comments and questions to the Storm Water Protection Program as needed. The public accessed the Storm Water Protection Program web page through the City s website, which provided information about the storm water requirements and BMPs.

The public used the Environmental Programs hotline and e-mail address to obtain information about HHW, trash, and recycling programs. The City s Request for Action (RFA) system was used to track calls about Environmental Programs comments and questions from residents. From March 24, 2008 to June 30, 2008 the Environmental Programs Division responded to 23 complaints/questions related to HHW, recycling, and solid waste.

9.3.2 Direct interaction

The City relied on interactions between City staff and the public to convey messages about storm water and pollution prevention. City staff received targeted training to increase their understanding of urban runoff issues. Staff interaction with the public also provided additional opportunities for the City to obtain direct feedback about BMPs, ordinances, and pollution prevention efforts.

9.3.3 General Outreach

Efforts through printed ads, newspapers, press releases, media interviews, PSA s, the Community Calendar, City guides, brochures, water bill stuffers, and other publications were used to keep the public informed of storm water requirements, updates, and public participation opportunities. Specific outreach efforts are discussed in section 8 of this report.

9.3.4 Storm Drain Stenciling

Stenciling storm drain inlets with *No Dumping – Drains to Ocean* messages reminds citizens and businesses not to pollute waterways. Stencils were available upon request to businesses and residents who were interested in stenciling private storm drains. Public inlets are marked by the Streets Department.

9.4 Community Events and Volunteer Efforts

The City s Community Volunteer Coordinator administered outreach and involvement programs for Carlsbad residents. This position continued to find volunteers to assist the Storm Water Protection Program with various activities, including cleanup events. The City participated in several community events held in Carlsbad and other locations across the county. These events are summarized in Table 9.3.

Table 9.3: Community Events FY (March 24, 2008-June 30, 2008)

DATE	Event	Location	Number of Participants
03/28/2008	CHS Career Day	Carlsbad	1000
03/29/2008	Kid's Day at the Flower Fields	Carlsbad	4740
04/17/2008	Employee Appreciation Day	Carlsbad	500
04/19/2008	Beach Cleanup	Carlsbad	100
05/21/2008	Public Works Fair	Carlsbad	1,300
06/05/2008	Health & Safety Fair Beckman Coulter	Carlsbad	250
06/14/2008-07/06/2008	SD County Fair	Del Mar	1.2 million

9.5 Other Public Participation Opportunities

The City continued to recruit interns from local universities to work with storm water staff. During this reporting period the Storm Water Protection Program had one intern working on various projects, including commercial and industrial inspections, data management, outreach and education, and coastal storm drain monitoring. Their participation in inspections, water quality studies and monitoring, data entry, and investigations added valuable input to overall programs.

9.5 Effectiveness Assessment.

The City has many opportunities for the public to get involved is storm water issues. Mechanisms are considered effective by the high usage rate of the methods of public involvement.

10.0 Fiscal Analysis Component

The Permit requires the City to secure the resources necessary to meet the requirements of the Permit and the JURMP, and to conduct an annual fiscal analysis. The analysis must evaluate the expenditures necessary to accomplish the activities identified in the JURMP and describe the sources of the funds used to meet the expenditures. The Storm Water Protection Program is comprised of numerous program activities funded from a variety of sources. Table 10.1 summarizes the storm water protection program activities and identifies the current funding source:

Table 10.1. Summary of Program Activities and Current Funding Sources

Program Activity	**Funding Source(s)**
Storm Water Facility Capital Improvement Program	Developer Impact Fees, Developer Exactions, General Fund, Gas Tax, TransNet Sales Tax, Federal and State Grants
Storm Water Facility Maintenance and Operation Program including Street Sweeping, Litter Removal and Storm Event Readiness and Patrolling	Solid Waste Service Fees, General Fund
Storm Water Program Administration	Solid Waste Service Fees
Illicit Detection and Illegal Discharge Enforcement Program	Solid Waste Service Fees
Commercial/Industrial SWPPP Inspection Program	Solid Waste Service Fees (charged to commercial service customers only)
Construction Related SWPPP Review and Inspection Program	Developer Fees

In FY 02-03 and 03-04, the City conducted a fee study to evaluate possible financing mechanisms for the Storm Water Protection Program. The new financing mechanism was detailed in the *City of Carlsbad Storm Water Pollution Protection Program Regulatory Fee Study Report*, dated September 12, 2003. The report recommended funding the storm water program through an increase in the City s Solid Waste Service fees and new development processing fees. Nearly all of the pollutants discharged into the MS4 are classified as solid waste under state and local codes. Based on this information and other findings, the City implemented a *Solid Waste Service* fee increase for residential and commercial service users to fund certain Storm Water Protection Program activities. The amount of the fee increase is calculated based upon the apportioned costs to the business and residential service users and their contribution to the pollutant loading. This fee was reviewed in June 2007, and updated to reflect current workloads. The current fee is 3.46 per month for residential customers, and 23.09 of the base trash rate for commercial customers.

The total operating costs to fund the storm water program activities related to existing development for FY 07-08 were budgeted at 3,083,049. This does not include the *Storm Water Capital Improvement Program* costs discussed in Section 10.1. It does, however, include budgeted expenditures for personnel, operating costs and capital outlay from the Storm Water Protection and Storm Drain Maintenance Program budgets, including costs for street sweeping. Since the 2003 fee study and new storm water fee increase, most of the activities related to Storm Water Protection Program and storm drain maintenance have been funded out of the Storm Water account. A few other items, such as a portion of street sweeping not directly involving the City s right-of-ways are paid for from other sources. A spreadsheet detailing the FY 07-08 expenditures for storm water activities along with the planned FY 08-09 budget is in Appendix 10.1.

The September 2003 study and proposal also recommended the establishment of development processing fees to pay for costs to review and inspect construction related SWPPPs. For FY 07-08, the SWPPP review and inspection fees generated over □149,000 in revenues.

10.1 Storm Water Facility Capital Improvement Program

Capital expenditures for new or upgraded storm water facilities are generally funded from developer revenues generated by the City□s adopted Local Drainage Area Fee program, developer exactions, or the General Fund. Occasionally, new drainage facilities or repairs and/or rehabilitation of existing drainage facilities are funded from other road-related funding resources such as the Gas Tax, TransNet Sales Tax, or Federal and State Grants. The adopted CIP budget includes funding for nearly □29 million dollars in storm water facility costs to build-out of the City. Funding for additional drainage facilities are included within the funding for various other City road improvement and civic projects. The exact amount of funding for drainage improvements included within the funding of other projects is not identified in the CIP budget.

Through the end of FY 06-07, the City had active drainage facility projects totaling □7.6 million in the adopted CIP budget. New projects initiated in FY 07-08 appropriated an additional □1.6 million. To date, approximately □4.2 million has been spent on active drainage projects. The City is committed to funding the construction of new and upgraded storm water facilities from its *Development Impact Fee Program*, the General Fund, and/or other revenue sources. The City will continue to investigate formation of a □*Storm Water Utility*□as a possible alternative source of funding to replace General Fund contributions.

10.2 Storm Water Facility Maintenance and Operation Program

For the purpose of this financial analysis, the formal *Storm Drain Maintenance Program* includes cleaning and minor repairs to the MS4, street sweeping, litter removal, storm event preparations, and patrolling. Historically, the cost to provide these services was funded by the General Fund. However, the adoption of the solid waste funding mechanism has provided a funding source for many of the *Storm Drain Maintenance Program* costs that had previously been funded in the General Fund. To better track expenses for Storm Drain Maintenance, a separate billing code was established for this program during FY07-08. This new code captures costs for salaries, benefits, equipment and services related to Storm Drain Maintenance. Street sweeping expenses totaled □203,632 during FY07-08, additionally □106,659 was spent for litter removal. When all Storm Water Protection Program expenditures were combined, it was estimated that the total costs for storm drain maintenance activities was approximately □1,087,000.

10.3 Storm Water Protection Program Administration

The administrative cost of the Storm Water Protection Program includes expenditures for annual JURMP reporting, GIS updates, records maintenance, wet weather monitoring, NPDES fee payments, education and outreach, and general program administration. The total annual cost for administration for FY 07-08 was estimated at □780,000. Prior to approval of the new storm water funding mechanisms, the full cost for administration of the program was funded from the General Fund. With the approval of the new funding mechanisms, the full cost for administration of the Storm Water Protection Program is paid from the revenues generated from the *Solid Waste Service* fee increase.

10.4 Illicit Discharges Detection and Elimination

The *Illicit Discharge Detection and Elimination Program* includes activities to detect and investigate the discharge of non-permitted pollutants into the MS4. This also includes any activities required to eliminate discharges and/or otherwise enforce compliance with the storm water regulations. The primary expenditures for the *Illicit Detection and Illegal Discharge Enforcement Program* for FY 07-08 are included in the administrative costs listed above in Section 10.3. This figure does not include any cost for legal actions taken to enforce compliance with the *Illicit Detection and Illegal Discharge Enforcement Program* when enforcement is elevated beyond an administrative citation. The cost for any legal action taken against an illegal/illicit discharger above an administrative citation will be paid from the General Fund or fines levied against the respective illegal/illicit discharger.

10.5 Commercial Industrial SWPPP Inspection Program

The City s *Commercial/Industrial SWPPP Inspection Program* includes the review of business related SWPPPs together with periodic site inspections to ensure compliance with requirements of the JURMP and the Carlsbad Municipal Code. The total budget allocated for the *Commercial/Industrial SWPPP Inspection Program* for FY 07-08 was estimated at 100,000. These costs were partially paid for out of the Storm Water Protection Program and the General Fund. Prior to approval of the new storm water funding mechanisms, the full cost for administration of the program was funded from the General Fund.

10.6 Construction Related SWPPP Review and Inspection Program

The *Construction Related SWPPP Review and Inspection Program* also includes regular site inspections during project construction to ensure project proponents comply with the requirements of the Permit, JURMP, and Carlsbad Municipal Code. The annual cost for the *Construction Related SWPPP Review and Inspection Program* varies from year to year depending upon the level of development within the City. The developer processing fees will ensure that adequate revenues are generated to fund all construction related SWPPP reviews and inspections.

Based upon current development activity levels, the City anticipates the annual program costs in the range of 46,000. Prior to the approval of the new storm water funding mechanisms, the full cost for the *Construction Related SWPPP Review and Inspection Program* was funded from the General Fund. With the approval of the new funding mechanisms, the full cost for the program will be paid from the revenues generated from the collection of development processing fees.

10.7 Self-Assessment

Program Strengths

The City has had a steady revenue source to fund the Storm Water Protection Program over the past year. Adjustments to the Solid Waste Fee funding mechanism for Storm Water-related programs have been made to ensure adequate funding for anticipated programs over the next fiscal year.

Program Improvements

The City has worked over this Fiscal Year to ensure that that Storm Drain Maintenance Activities are following the funding conventions outlined in the 2003 Fee Study, and 2007 update to same.

To better track Storm Drain Maintenance expenditures, versus Storm Water Protection Program Expenses, a new account was established for Storm Drain Maintenance. This will allow City Staff to better track expenses for storm drain maintenance activities which are funded by both the General Fund and Storm Water Fee.

For FY 08-09 we are reviewing our developer fee structure to recover costs incurred to comply with the NPDES permit.

11.0 EFFECTIVENESS ASSESSMENT

The effectiveness assessment is based on data for the full Fiscal Year 2007-08 and focuses on the assessment of three areas, as required in Section I.1.a.(1) of Order 2007-0001: significant activities, components, and an integrated assessment.

- Section 11.1 assesses the significant activities as listed in the City's JURMP. Each significant activity has an associated measure and targeted outcome. These measures relate to various levels in the range of Levels 1-4 outcome levels, assessing permit compliance, changes in knowledge and awareness, changes in behavior/BMP implementation, and load reductions.

- Section 11.2 assesses each component identified in Section I.1.a.(1)(b). The components include Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education. Each component assessment uses various levels in the range of Levels 1-4 outcome levels where measures have been developed applicable to the component.

- Section 11.3 provides an integrated assessment, combining conclusions from the individual component assessments and water quality data. At this time, it is not always feasible to link jurisdictional activities and components to changes in discharge and receiving water quality. This assessment draws conclusions where possible and will be further developed as more water quality data is collected in future years.

11.1 Significant Activity Assessment

The identification of significant activities was performed during the development of the JURMP. These significant activities, targeted measurable outcomes, and results for FY 07-08 are listed in Table 11.1. Some of the measurable goals are related to Levels 1-4 of the Effectiveness Assessment Outcomes as defined in Attachment C of Order R9-2007-0001. As more information about water quality problems, sources and activities are gathered, the City may revise its significant activities and targeted measurable outcomes.

The discussion below is related to Table 11.1 which follows.

Level 1: Compliance with Activity Based Permit Requirements

Where required during this fiscal year, all compliance based permit activities were completed successfully at or above 100 compliance. These measures are effective at determining the City's compliance with the permit.

The compliance measure for the Land Development Category crosses the FY reporting boundary because the measure is a new permit requirement that must be completed prior to the onset of the rainy season, October 1. All required inspections will be performed prior to October 1, 2008 and reported in the next Annual Report. Other measures appear to be appropriate for assessing compliance this year and the City was in compliance on all counts.

Level 2: Changes in Knowledge/Awareness

Changes in knowledge and awareness of storm water requirements were assessed using two significant activities or measures as described in Table 11.1.

As a part of the business inspection program, the City implemented a rating system to assess the general knowledge of storm water requirements at the establishments during inspections. This measure has been used for several years in the industrial and commercial inspections programs. For this measure, data collected during FY 07-08 was compared to data collected during FY 06-07. As shown in the table, the average knowledge/awareness at these businesses was down this year as compared to last. This may be a result of the difference in businesses inspected from year to year or reflect the difference in assessments by the various inspectors.

The second method to assess changes in knowledge and awareness compares quiz scores that are administered before and after class room presentations to school aged children. In general, the knowledge base before the presentation is low. Quizzes administered this year showed only 2 of the children had an awareness of storm water prior to the presentation. After the presentation, the number of children aware of storm water issues rose to 69 of the children. This demonstrates an increase in storm water awareness in 67 of the students that were present during the presentations. By measuring this change, it appears that the presentations are effective at increasing the children s knowledge of storm water issues.

Level 3: Behavioral Change/BMP Implementation

The mechanism the City used to assess behavior change is the BMP inspection ratings for industrial and commercial businesses, assessed during site inspections.

As a part of the business inspection program, the City used the one to five rating system to assess BMP implementation (i.e. behavior change) at the establishments during industrial and commercial inspections. Because this measure has been used for several years data collected during FY 07-08 was compared to data collected during FY 06-07. As shown in Table 11.1, the average measured BMP implementation at these businesses was down this year as compared to last. While a slight decline is evident, in general, BMP implementation remained relatively high this fiscal year. A comparison of the changes from year to year over the past four are discussed below in Section 11.2.

Level 4: Load Reductions

There are two significant activities that provide direct load reductions of various pollutants. These include storm drain cleaning and street sweeping activities, providing estimations of the removal of trash, sediments, and debris from these facilities. Combined, these activities account for the removal of nearly 1300 tons of trash, sediment, and debris from the storm drain system and streets.

Additionally, the City uses two estimations of load reductions related to residential outreach and education activities in an attempt to quantify the amount of nutrients and bacteria prevented from entering the MS4. These estimations are dependent on the types of education and outreach utilized and relate this education to reductions in fertilizer usage (i.e. nitrogen and phosphorous reductions) and reductions in pet waste (i.e. bacteria) entering the MS4.

Table 11.1 contains relevant information pertaining to the significant activities defined in the City's JURMP. This data is used to determine if these activities are considered effective.

Table 11.1 Significant Activity Assessment Table

Component	Significant Activity	Method	Measure	Level	Targeted Outcome	Data	Result	Program Effective? YES/NO			
								Compliance	Knowledge Change	Behavior Change	Load Reduction
								Level 1	Level 2	Level 3	Level 4
Land Development	1. Post construction BMP inspection: inspections performed/inspections required.[1]	Confirmation	Performed /Required	Compliance (1)	100% prior to October 1	Refer to JURMP Annual Report for Fiscal Year 2008-09.					
Construction	1. Were all required inspections performed during the wet season?	Confirmation	Performed /Required	Compliance (1)	100%	6192 /6192	100%	Yes	N/A	N/A	N/A
Municipal	1a. Were all required inspections performed under Order 2001-01?	Confirmation	Performed/ Required	Compliance (1)	100%	63/63	100%	Yes	N/A	N/A	Yes
	1b. Were all required inspections performed under Order 2007-0001, Permit Year 1, March 24, 2008 – March 23, 2009?	Confirmation	Performed /Required	Compliance (1)	100%	67/67	100%				
	2. Were all required catch basin inspections performed?	Confirmation	Performed /Required	Compliance (1)	100%	3680 /3680	100%				
	3. How much debris was removed from the MS4?	Direct Measure	Tons	Load Reduction (4)	N/A	204	N/A				
	4. How much debris was removed from street sweeping activities?	Direct Measure	Tons	Load Reduction (4)	N/A	1080	N/A				
	5. Were all special events applications reviewed for potential coverage under City requirements?	Confirmation	# Reviewed /Total	Compliance (1)	100%	10/10	100%				

Commercial-Industrial	1. Were all inspections performed as required?	Confirmation	Performed /Required	Compliance (1)	100%	112/112	100%	Yes	No[2]	No[2]	N/A
	2. Were knowledge scores, on average, for current fiscal year higher than previous fiscal year?	Analysis	Average Score	Knowledge Change (2)	Upward Average	4.05 FY06-07, 3.23 FY 07-08	-20%[2]				
	3. Were behavioral change/BMP implementation scores, on average, for current fiscal year higher than previous fiscal year?	Analysis	Average Score	Behavior Change (3)	Upward Average	4.00 FY06-07, 3.73 FY 07-08	-6.8%[2]				
IDDE	1. Were all urban runoff related complaints responded to and resolved?	Confirmation	# Responses /Total Complaints	Compliance (1)	100%	226 responses, 226 total	100%	Yes	N/A	N/A	N/A
Education	1. Were changes in knowledge demonstrated or verified (i.e. quizzes?)[3]	Analysis	Average Score Before/After	Knowledge Change (2)	%Change	2% aware in pre-test, 69% aware in post test	67%	N/A	Yes	N/A	Yes
	2. How much nutrient load reduction occurred as a result of the "Lawn Care Education" Program?	WTM	Tons	Load Reduction (4)	N/A	N=3.0, P=0.06	N/A				
	3. How much bacteria load reduction occurred as a result of the "Pet Waste Education" Program?	WTM	billion/year	Load Reduction (4)	N/A	26,600	N/A				

[1]During FY 07-08, City staff worked to confirm information on the BMP inventory, ensure ownership and responsible parties, and revise procedures. A new treatment control inspection form was created and a copy can be found in Appendix 2.6, and a new Treatment Control BMP Verification Form was created and can be found in Appendix 2.7. Inspection of treatment control BMPs will be conducted as required by the Permit by October 1, 2008 and reported in the FY 08-09 annual report.

[2]During Fiscal Year 2007-08, new inspectors may have been implementing a higher rating standard as compared to previous years, accounting for the decrease in knowledge/awareness and BMP implementation ratings.
[3]Quiz results based on acquisition of knowledge or not, as opposed to based on a raw score.

11.2 Component Assessment

11.2.1 Development Planning

During FY 07-08, the City has experienced changes in outcome levels 1, 2, and 3 regarding compliance with the Development Planning Component.

Level 1: Compliance with Activity Based Permit Requirements

Outcome Level 1 improvements included the many changes and improvements made to the City's storm water standards, procedures, and ordinances. The changes which became effective March 24, 2008, were primarily made to ensure compliance with the 2007 Municipal Permit. However, additional changes were made to clarify and simplify storm water compliance requirements and to enhance the City's storm water protection standards.

Level 2: Changes in Knowledge/Awareness

The Outcome Level 2 improvements included the raising of awareness of existing and new storm water compliance requirements among City development review staff, developers and the City's Planning Commission. Through a combination of training during weekly staff meetings, webinars and outside training courses, City staff significantly increased their knowledge and understanding of the new Municipal Permit requirements, LID designs, hydromodification principles and City storm water compliance processes. Developers were seen to increase their knowledge of the new Municipal Permit requirements, LID designs, and City storm water compliance requirements through revised plan review checklists, City plan review comments, the City's updated Storm Water Standards Manual and outside training courses. The City Planning Commission increased their knowledge on LID design principles and general storm water regulatory requirements through a staff presentation made at a regularly scheduled Planning Commission meeting.

Level 3: Behavioral Change/BMP Implementation

Outcome Level 3 improvements were seen in the development community. With the adoption of the interim LID and hydromodification criteria on March 23, 2008, the City no longer accepted the use of hydrodynamic separator systems and filter inserts as a primary treatment control BMP. To facilitate compliance to the new LID standards, the City began requesting new development/redevelopment compliance with the new interim criteria in October 2007. By March 24, 2008 when the new interim criteria became effective, the development community was already showing a marked increase in compliance with the interim criteria at the initial project submittal stage.

11.2.2 Construction

Outcome levels one, three, and four are used to the assess the effectiveness of the City's Construction Component.

Level 1: Compliance with Activity Based Permit Requirements

Overall, the Construction, Management, and Inspections Division (CM&I) was successful at maintaining full compliance with the permit requirements during FY 07-08. Table 11.2 contains examples of permit requirements and confirmation that these requirements were met.

Table 11.2 Examples of Construction Related Permit Requirements and Compliance

Permit Requirements	Requirement	Performed
Ordinance updates to comply with order	As Necessary	Yes
Designate a set of minimum BMPs	In JURMP	Yes
Require implementation of designated minimum BMPs	All sites	Yes
Maintain and update a watershed based inventory	Monthly	Yes
Require advanced treatment	Sites determined to be an exceptional threat to water quality	Yes, none identified.
Inspections of sites meeting criteria in D.2.d.(1)	Every 2 weeks during wet season	Yes
Implement follow-up actions	As needed based on inspection results	Yes
Inspect according to requirements in Section D.2.d.(6)	Each inspection	Yes
Track number of inspections for the inventoried sites	Continuous	Yes
Develop escalating enforcement process	JURMP	Yes
Implement escalating enforcement process	As needed based on inspections	Yes
Report non-compliant sites to Regional Board	Stop Work order or higher level of enforcement	Yes

In the next fiscal year, the CM&I division will continue to explore new methods for tracking inspections and compliance activities in order to facilitate better reporting.

Level 3: Behavioral Change/BMP Implementation

Changes in behavior and implementation of BMPs on construction sites are evident throughout the City. In general, contractors are more aware of the BMP requirements and are more willing to cooperate with inspectors, resulting in timely and proper implementation of the required BMPs. This may be due to increased presence and knowledge from the inspectors, allowing the inspectors to better understand and convey the necessary information to the contractors, and increased enforcement actions in previous years pertaining to erosion and sediment controls.

One method used to draw comparison of BMP implemention from year to year is to track the number and types of enforcement actions, normalized by the number of inspections each year. This may allow for a comparison of overall changes in compliance levels over time. Table 11.3 contains data for FY 06-07 and FY 07-08 and shows that the number of necessary enforcement actions has decreased. This may indicate better implementation of BMPs on construction sites; however it is difficult to draw conclusions from this small amount of data.

Table 11.3 Comparison of Enforcement Actions on Construction Sites

Enforcement Actions	FY 06-07			FY 07-08		
	Number	Total Inspections	Percentage	Number	Total Inspections	Percentage
Written Warning/Correction Notice	116	6294	1.8	74	6192	1.2
Stop Work	15	6294	0.24	4	6192	0.06

Staff will continue to develop ideas and implement those deemed appropriate in the future to assist in assessing the changes in knowledge and awareness in the construction community.

Level 4: Load Reductions

Load reductions are estimated for the construction program using a Watershed Treatment Model (WTM) developed by USEPA. The efficiency of the erosion and sediment control program is based on a best case scenario: a sediment control program that emphasizes erosion control measures, including practices that limit clearing and grading or use of phased construction methods (Brown and Caraco, 1997), and requires advanced sediment control measures to reduce sediment runoff from leaving the site. The WTM default efficiency for erosion and sediment control is 80 .

The user assigns the discount factors related to the fraction of the erosion practices installed and the fraction installed/maintained properly. There is a range of discount factors based on the level of program implementation and oversight. For example, if there were few inspectors, with no pre-construction meetings and poor practices allowed by codes and regulations, the input value would be 0.4. If inspectors visit sites weekly and if there are education programs for inspectors and contractors, the input value is 0.9 (the highest discount value in the WTM). City inspectors treat each grading site as high priority and perform inspections and enforcement actions as required in the permit. This allows for high discount input values. Due to continued improvements made to the program in FY 07-08, as described in detail in Section 3 of this report, a discount value of 0.8 was used.

A discount factor is also calculated based on the fraction of practices installed and maintained properly. Based on input from CMI with regular inspections, education programs, and guidance on BMP selection, a high discount value of 0.8 was used. Based on the estimated acres under construction and the discount factors applied, this results in an annual loading reduction of 16,571 pounds of nitrogen, 49,713 pounds of phosphorus, and 16,570,884 pounds of Total Suspended Solids per year (Table 11.4).

Table 11.4: Loading Reduction from Existing Erosion and Sediment Control Programs

	N (lbs/year)	P (lbs/year)	TSS (lbs/year)
Erosion and Sediment Control	16,571	49,713	16,570,884

11.2.3 Municipal

Level 1: Compliance with Activity-Based Permit Requirements

This level of effectiveness assessment is based on compliance with Activity Based Permit Requirements. The City was in compliance with all municipal requirements of Orders 2001-01 and 2007-0001 for the applicable time periods during the past fiscal year. Table 11.5 tracks some of the City's Municipal Program activity measures, which are discussed in detail in the previous report sections. Tracking of many of these activities was useful in assessing compliance with the program, but is not yet tied to long-term assessment or improved water quality.

Table 11.5: FY 07-08 Program Activity Measures

	Permit Requirements	Requirement	Performed
	Develop Inventory of Areas and Activities	Update with JURMP	Yes
	Develop and Implement Minimum BMPs	Update with JURMP	Yes
Special Events	Require Minimum BMPs	Establish and Require Implementation	Yes
	Inspections	Inspection all Special Event venues following events	Yes
MS4 Maintenance	Catch Basins	Inspect all, clean those exceeding 33% criteria	3680 inspections, cleaned all trash and 211 exceeding 33% criteria
	Pipelines (miles)	As needed	3 miles cleaned
	Open Channels (miles)	Inspect all and clean in a timely manner	Inspected 6 miles and removed all trash from 6.
	Desilting Basins	Inspect all, clean as needed	Inspected 3, removed all trash from 3
	Treatment Controls	Inspection and Maintenance	annually
	High Volumes of Trash	Inspection between May 1 and September 30	Yes
	Tracking of Quantities of Waste Removed	Track Quantities	Yes
Integrated Pest Management	Implement Program	Develop and Implement	Yes
Street Sweeping	High Volume Streets (miles)	2 times/month	weekly
	Moderate Volume Streets (miles)	monthly	biweekly
	Low Volume Streets (miles)	annual	biweekly

	Permit Requirements	Requirement	Performed
	Parking Lots (acres)	Depends on volume, see above	biweekly
Infiltration from Sanitary Sewer to MS4	Preventative Maintenance of Sanitary Sewer	Perform	Yes
	Preventative Maintenance of MS4	Perform	Yes
	High Priority Facilities	Inspect all in Permit Year 1	67 inspected

Based on the permit requirements presented above in Table 11.5, the municipal program remains in compliance with the requirements of Order 2007-0001. Several of the measures will be further developed in the upcoming year, with better tracking mechanisms and improved coordination between departments.

Level 2: Changes in Knowledge / Awareness

Changes in knowledge and awareness of storm water requirements are evident across City staff. Although not specifically measured, all staff is trained regularly on storm water compliance, as required in Section D.5 of Order 2007-0001. Appendix 8.1 (2001-01) and Appendix 8.2 (2007-01) contains all municipal training performed for FY 07-08.

An assessment of the numbers of complaints reported by City staff is one measurement that may lead to a better understanding of the effects of the training on municipal staff. Over the last four years, the number of complaints related to storm water has shown an increasing trend. The numbers of complaints reported by City staff has also shown an increasing trend. See Figure 11.1 below for an illustration of these data.

Figure 11.1 Storm Water Complaints Reported by City Staff FY 04-05 through FY 07-08

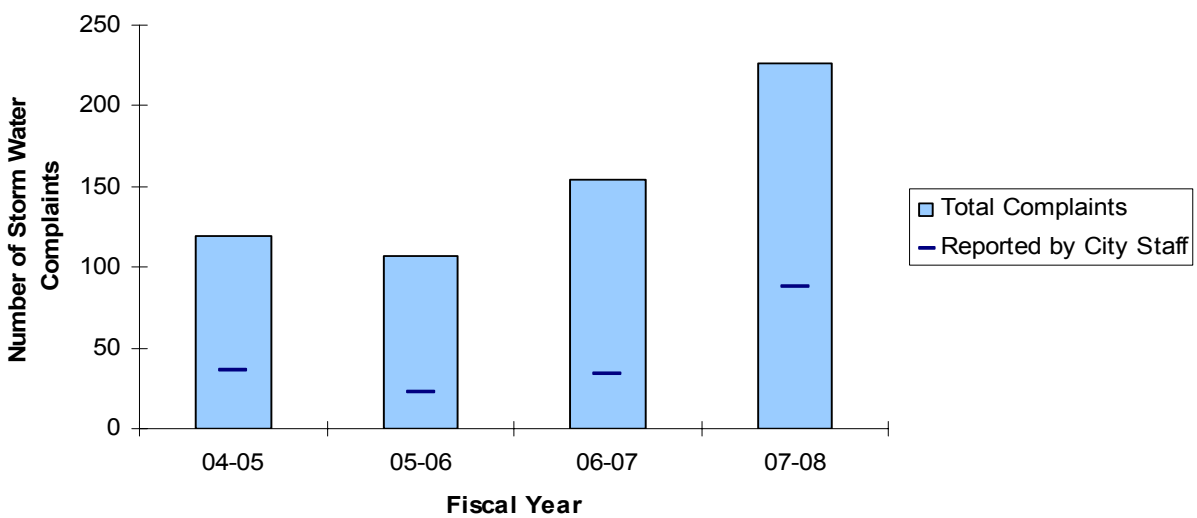

Each year for the past three, a significant portion of the increase in complaints reported has been attributable to City staff. It is possible that the increase in complaints in general has caused the increase in staff reporting; however, assuming the number of actual storm water related incidents within the community is the same or decreasing, it is likely that more complaints are being reported by staff due to an increased awareness of storm water issues corresponding to better and more frequent training as the Storm Water Program has continued to develop.

Level 3: Behavioral Change / BMP Implementation

One way to assess the amount of behavioral change and the actual implementation of BMPs for storm water is to look at the results of the municipal inspections. In general, all facilities have improved over the years. In past years, corrective actions have been more complicated and numerous. This year the most common corrective actions found during municipal inspections were minor and less numerous and pertained to organic debris (i.e. leaves) in the parking and storage areas, stenciling storm drains, and updating of SWPPP documents.

In addition, several departments and facilities have invested in new structural BMPs at their sites which are effective at mitigating potential pollutants at the sites. Three examples of new BMPs implemented this year include:

- Vacuum equipment was used to recover and contain all wash water from vehicle washing activities occurring at the Fire Stations.
- A pilot BMP was implemented using the innovative Drivable Grass which drains the parking lot through subsurface drainage system to reduce storm water flowing directly into MS4.
- Site specific SWPPPs were developed and updated for many of the high priority municipal facilities including: six fire stations, all maintenance yards, pump stations, and the Carlsbad Recycled Water Facility.

Level 4: Load Reductions

As described in Table 11.1, there are several methods of calculating load reductions available from data collected in the municipal program. Refer to Section 11.1 and Table 11.1 for more detail on estimated load reductions resulting from activities performed in the municipal program.

11.2.4 Industrial and Commercial

Level 1: Compliance with Activity Based Permit Requirements

As seen in Table 11.6, all inspections, as required by both permits, were completed during FY 07-08.

Table 11.6 Inspections of sites/sources FY 07-08

Order 2001-01 (July 1, 2007 to March 23, 2008)				
Industrial	**Inventory**	**Inspected**	**Permit Requirement**	**Percent Completed**
High Priority	42	42	100□	100□
Medium Priority	158	54	As needed	34□
Low Priority	99	37	As needed	37□
Commercial	**Inventory**	**Inspected**	**Target Percentage**	**Percent Completed**
High Priority	701	385	As needed	55□
Order 2007-0001 (March 24 to June 30, 2008)				
High Threat to WQ	**Inventory**	**Inspected**	**Target Percentage**	**Percent Completed**
Ind/Comm Sites/Sources	558	72	12.5□ [1]	13□

[1] Calculated based on requirement in Order 2007-01 to inspect 50□ of high priority businesses during Permit Year 1. Because there was approximately □ of the fiscal year left, the 50□ was multiplied by 25□ require a total of 12.5□ of the total high priority business inventory.

Level 2: Changes in Knowledge / Awareness

For Knowledge Assessment, inspectors rank personnel from one to five. Refer to Section 5 of this report for details on the rating scale.

Since the implementation of the rating system, the majority of businesses have ranked at three or better for storm water knowledge and awareness. Figure 11.2 illustrates that on average the majority of the sites inspected had a relatively high knowledge of storm water and ranked greater than or equal to 3.

Figure 11.2 Average Scores for Storm Water Knowledge and Awareness at Businesses Inspected

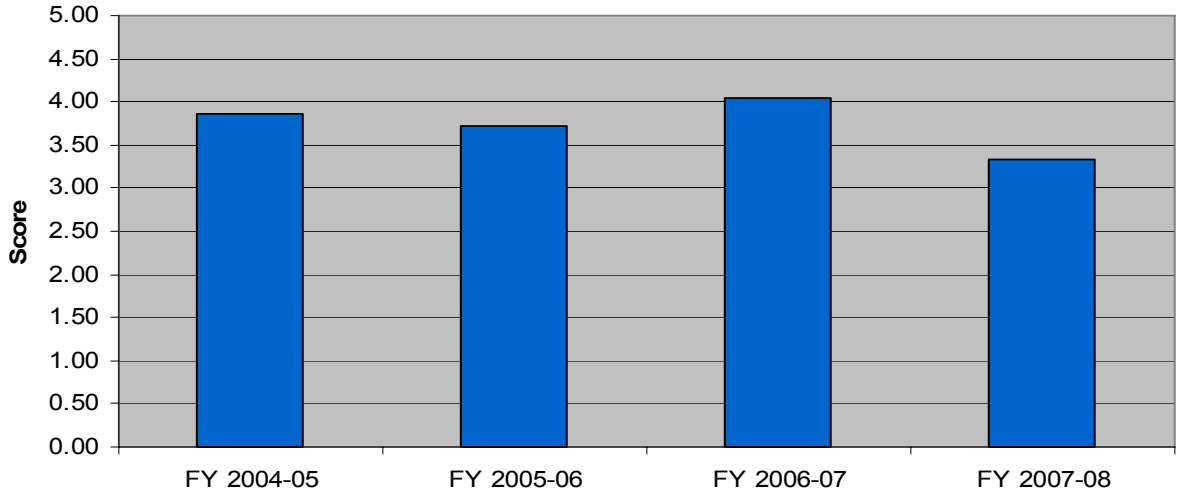

11.2.5 Residential

Level 1: Compliance with Activity-Based Requirements

Residential activities outlined in the March 2008 JURMP were completed as described in Section 6 of this report. Activities include various outreach events and activities; used oil and waste collection services, and complaint response followed by enforcement action.

Level 2: Changes in Knowledge/ Awareness

City of Carlsbad Public Opinion Survey

An annual public telephone survey was conducted this year by a new firm, the BW Research Partnership, as part of the *Performance Measurement Program* and *State-of-Effectiveness Report.* Carlsbad households were selected using *Random-Digit-Dial* methodology with a minimum sample size of 1,000. This survey had a margin of error of /- 3 at the 95 confidence level. Storm water pollution was addressed briefly in this survey. The City survey asked, *Have you seen or heard any information about how residents can prevent the pollution of creeks, lagoons, and the ocean?* This question was used to guage the public s perception of ocean water pollution and was asked previously in 2003. The results are presented in Table 11.7 below.

Table 11.7: Results of Environmental Question 1

Answer:	2003 ( )	2006 ( )	2007 ( )
1. Yes	58.1	64.6	61.1
2. No	41.9	35.4	38.9

This question illustrates a steady awareness of storm water and urban runoff pollution from 2003 to 2007 among residents.

An additional question was added to the surveys this year to assess the most affective educational methods by asking, Where do you recall seeing or hearing about ways to prevent pollution? The top two responses were newspaper and radio, respectively comprising over 50 of the total responses. Newsletters and brochures were the next highest, making up nearly 30 of the responses. Other responses included posters, website, curb signs, word of mouth, and public events.

Level 3: Behavioral Change/BMP Implementation

The City asked a behavioral question during the survey to those who answered affirmatively to the question, *Have you seen or heard any information about how residents can prevent the pollution of creeks, lagoons, and the ocean?* The 61.1 who answered question one affirmatively were asked the follow-up question, *What things are you doing to reduce water pollution?* Results for this question are presented in Table 11.8.

Table 11.8: Top Responses to *What things are you doing to reduce water pollution*?

Answer:	**Percent**
1. Properly disposing of hazardous waste.	24.0
2. Cleaned up trash at Beach, Roadside, Etc.	14.0
3. Using environmentally friendly soaps, pesticides, etc.	12.6
4. Used a commercial carwash.	14.9
5. Cleaned up animal waste.	6.6
6. Did nothing.	21.4
7. Other (recycling, reduced runoff.	42.8
8. Don't know.	3.6

Continued survey data should help to show if long-term behavior change has occurred. Over seventy percent of residents who answered question one affirmatively, consciously chose an environmentally friendly method over others in certain instances.

Level 4: Load Reduction

The primary goal of BMP implementation is to reduce pollutant loads in storm water discharges. An important emphasis of annual program assessments is to estimate the load reductions resulting from various program activities. Assuming that such reductions are properly targeted to existing or potential water quality problems, load reductions should in turn result in improvements to discharge and receiving water quality. Quantifying load reductions represents an important intermediate endpoint for assessments. The Regional Board wrote the following in October 2004:

> *Program effectiveness can be assessed by quantifying the pollutant load reductions attributable to various program activities. An effective program will compare pollutant load reductions of various program activities and implement those activities which result in the largest pollutant load reductions. It is expected that by implementing program activities which maximize pollutant load reductions, Copermittees will be implementing effective programs which will improve receiving water quality.*

The City used the Watershed Treatment Model (WTM) as a simple tool for rapid assessment of effectiveness of the storm water programs. The WTM (version 3.1) was prepared by Deb Caraco of the Center for Watershed Protection for the U.S. EPA Region V - Office of Wetlands, Oceans and Watersheds. Last year's report identified bacteria, sediment, and nutrients as constituents of concern. In response, specific program activities were undertaken to address these constituents. The WTM estimates the pollutant loading reductions for sediment, bacteria and nutrients for various program activities, such as residential education, erosion and sediment control programs, and street sweeping, among others. The results of some of these storm water management programs are discussed below. Complete explanations and assumptions are found in the WTM book.

<u>Public Education</u>
A variety of public education programs may help to reduce the concentration of nutrients, sediment and bacteria in urban streams. The model currently focuses only on a few of these, including programs to address lawn care, septic system maintenance, and pet waste. Several other residential pollution prevention programs improve water quality, but have little effect on nutrients, suspended solids, and bacteria. For example, HHW programs are effective at

reducing toxics but do not have a quantifiable impact on pollutants such as suspended solids, nutrients, or bacteria.

Lawn Care: The ideal pollutant removal associated with lawn care would be achieved if all of the additional fertilizer applied to turf were eliminated. The model uses equations to estimate optimal nutrient load reduction from a lawn care program combined with a calculation of the residential lawn area. The model calculates the residential lawn area based on the City's input of residential acres taken from GIS. The user inputs the information on how the education campaign was conducted. Default values were given for the fraction of the audience willing to change behavior based on nationwide data. The City conducted lawn care education through brochure distribution, workshops and newspaper ads.

The model allows the user to input the media type, which determines the portion of the population that *remember* the message ("Awareness of Message"). This number is largest with television (0.4), followed by newspaper (0.3), radio (0.25), billboard (0.13), brochures (0.08) and workshops (0.07). Because residents have been exposed to five of these mechanisms in FY 07-08, the input value entered was an average for brochures, workshops and newspaper, radio, and television (0.22). This results in an annual nutrient load reduction of 6,031 pounds of nitrogen and 121 pounds of phosphorus (Table 11.9).

Table 11.9: Loading Reduction from Existing Lawn Care Education

	N (lbs/year)	P (lbs/year)
Lawn Care Education	6,048	121

Pet Waste: The Storm Water Protection Program also conducted a *Pet Waste Education Program* during FY 07-08. In the urban watershed, dogs are a significant contributor of bacteria and nutrients. Ideally, a *Pet Waste Education Program* would reduce this source to zero, with all homeowners properly disposing of waste. The model provides estimated values for the fraction of households with a dog, the fraction of owners who walk their dog, the fraction of owners who cleanup after their dog, and the fraction willing to change their behavior. As with the lawn care education, the portion of the population that remembers the message is based on the media used for the education. This past year, the City delivered this message through brochures and the newspaper. Residents were also exposed to regional education efforts on television and radio. In addition, the City distributed free pet waste bag dispensers at local events and provided animal care facilities with these dispensers. These activities were considered similar to a workshop, so an averaged value of 0.22 was used for this calculation.

This results in an annual pollutant loading removal of 3,059 pounds of nitrogen, 399 pounds of phosphorus, and 26,600 billion bacteria per year (Table 11.10).

Table 11.10: Loading Reduction from Existing Pet Waste Education Program

	N (lbs/year)	P (lbs/year)	Bacteria (billion/year)
Pet Waste Education	3,059	399	26,600

The overall assessments of these education programs show that the media significantly affected the associated pollutant removal due to the increased audience that *remembers* the message. For instance, if the City had the ability to use mass media (television and radio), the estimated pollutant reduction would be increased significantly. The City's annual phone survey confirms that most people recall hearing these messages through mass media. However, mass media is <u>significantly</u> more expensive than brochures and workshops. The City has a storm water

performance measure that calculates the cost per capita for education activities. With these loading reduction estimations, costs can also be calculated on a per pound basis in order to justify the use of one option over another. Such calculations may show that it is not cost efficient to conduct a mass media campaign due to these costs and the associated reductions achieved. Large campaigns for mass media may be best conducted on a regional basis with Copermittees sharing the expense or pursuing grant funds for these expensive activities. Due to an increase in mass media educational tools used at the Regional level this year, it is expected that many of the residents in Carlsbad were affected by these campaigns, accounting for the increase in load reductions associated with lawn care and pet waste. Specifically the Think Blue campaign is described in Section 6.

11.2.6 Illicit Discharge Detection and Elimination

Effectiveness assessment for the IDDE Program will be submitted with Section 7 of this year's Annual Report to be submitted to the Regional Board by December 15, 2008.

11.2.7 Outreach and Education

Level 1: Compliance with Activity Based Permit Requirements

Table 11.11 below illustrates examples of the permit requirements in the outreach and education section and what activities the City implemented to comply with each.

Table 11.11 Outreach and Education Permit Requirements

Requirement	Compliance Activity
Municipal Training	
• Development Planning	Staff training specific to development planning activities 9/20/08
• Construction	Various staff training events (14) specific to construction activities
• Inspection Staff (industrial/commercial)	Various training events specific to inspections of businesses
• Other Activities	Various activity specific training events for fire, water and waste water, parks departments
New Development and Construction	Various outreach activities as described in Section 8.3
Residential	
General Public	
School Children	

Level 2: Changes in Knowledge/Awareness

Measurably increase the knowledge/awareness of target communities:

- Municipal Departments and Personnel

  During FY 07-08, a detailed municipal training program was developed to ensure compliance with Order 2007-0001. This training program assesses each position within the City to determine the applicable (i.e. required) training and groups the positions into separate modules to make training easier for the various departments. Staff will continue to determine ways to assess the changes in knowledge and awareness of municipal personnel throughout the permit cycle.

- Construction Site Owners and Developers

  The City conducts outreach activities specific to construction site owners and developers as described in Section 8.3. The activities occur throughout the development process.

- Industrial and Commercial Owners and Operators

  The City uses a program to assess changes in knowledge at industrial and commercial facilities based on a numeric ranking from one to five, with one representing a lack of knowledge and five representing adequate knowledge of storm water BMPs and requirements as applicable to their facility. The results are compiled each year and reported in the industrial/commercial section of the Annual Reports. Over time, these site assessments can be compiled and compared.

- Residential Community, General Public, and School Children

  There are various outreach efforts in place to increase storm water knowledge and awareness for residents, the general public, and for school children. Changes in the knowledge and awareness of the residents and general public are assessed and tracked via an annual telephone survey of the citizens of Carlsbad. The survey includes several questions used to assess these changes in awareness. Survey results, tracked over the past three surveys are described above in Section 11.6.

Level 3: Changes in Behavior/BMP Implementation

Measurably change the behavior of target communities:

- Municipal Departments and Personnel

  Behavior changes are evident throughout municipal departments and personnel and can be attributed to targeted outreach and training for municipal staff. As illustrated above, the awareness continues to increase, as evidenced by the continually increasing numbers of calls to the storm water hotline by City staff. All levels of staff are continually seeking advice from the Storm Water Program on how to implement BMPs allowing them to continue to perform their necessary activities. There have also been programmatic changes in the Development Services Division, ensuring that required BMPs and submittals are provided on all projects, and are tracked and approved.

- Construction Site Owners and Developers

  Changes in behavior on construction sites and by developers are also evident throughout the development community. These changes are manifested throughout the development process, from submitting appropriate BMPs on plans and better Storm Water Management Plans, to installation and maintenance of proper BMPs during construction, to the development, installation, and maintenance of BMPs on projects after construction is complete. The City is

developing better tracking mechanism for these various changes in behavior and will be able to better assess these changes in future years.

- Industrial/Commercial Owners and Operators

  Industrial and commercial owners and operators are continually educated on storm water issues via direct interaction during inspections, mailers, and interactions during outreach events. In general, the BMP implementation on industrial sites remains the highest, as evidenced by the fewer number of enforcement actions at these sites (refer to Section 5). In contrast, while the BMP implementation is consistently high, more enforcement actions are required at the commercial sites, likely due to the larger number of commercial sites in the City, and therefore less frequent inspections at these locations. Commercial sites also tend to have more turn over in staff, hindering the continuity desired to implement and maintain BMPs year to year. The Carlsbad Watershed Group is currently piloting an outreach project specifically targeting the commercial community. Results of this pilot will be discussed in the upcoming WURMP Annual Report and may be implemented within the City in the future, pending positive results.

- Residential Community, General Public, and School Children

  Outreach to the residential community, general public, and school children continues to be effective in conveying storm water information. At this time, it is difficult to measure the changes in BMP implementation in these target audience. Several methods have been discussed previously and will continue to be utilized. One of the best feedback mechanisms that the City has in place is its annual citizen survey. Answers to the question, What things are you doing to reduce water pollution? helps the Storm Water Program track BMP implementation over time and changes in the community, as discussed previously in the report.

11.3 Integrated Assessment

11.3.1 Changes in Discharge Water Quality

Dry Weather Field Screening and Analytical Monitoring Program

The City has conducted an annual *Dry Weather Field Screeing and Analytical Monitoring Program* since 1995. The purpose of the monitoring program is to detect and eliminate illicit connections and illegal discharges to the storm drain system. The Dry Weather Monitoring Program report for FY 07-08 and follow-up activities will be provided under separate cover, due to the Regional Board by December 15, 2008. The following discussions summarize current and past dry weather results in order to assess changes in MS4 water quality, through the 2007 dry weather season, as data is not yet available for the 2008 season.

Fecal coliform concentrations are generally lower over the past four years than in 2003, while enterococcus concentrations are slightly higher in recent years. In comparison to dry weather action levels, fecal coliform and enterococcus mean values are well below the established action levels across all years of data. With many variable factors unaccounted for, it is unclear if the recent results are due to improvements and BMP implementation or to the variable nature of bacteria concentrations.

The City has conducted field testing of detergents since 1995. Data appear to show a downward trend in detergent levels found in the MS4 with results less than established action levels for MBAS. Currently, detergents are rarely detected in the dry weather program.

The average pH levels have also shown a downward trend since 1995. This may be a result of the decreased detergents in the MS4, which are typically basic having pH values 7.

Ammonia concentrations show that concentrations have been decreasing in past years. With the exception of 2002, all recent years have averaged well below the established action level for ammonia-nitrogen.

Nitrate concentrations appear to be decreasing at dry weather sites over the past three years, with the lowest average in the past six occurring in 2007.

Lower in recent years, all ortho-phosphate averages are well below established dry weather action levels.

Over the course of the past six years of dry weather programs, water quality parameters have been repeatedly analyzed at the same sites allowing for a comparison of data. In general, water quality within the MS4 is good, with evidence of decreasing concentrations of bacteria, nutrients, pH, and surfactants. Efforts continue to focus on bacteria concentrations in the MS4 and their sources. In the future, increased efforts to understand bacteria concentrations and sources will be made through various TMDL activities. With an enhanced understanding of bacteria, the City will be better prepared to address and abate sources within the watershed.

Coastal Outfall Monitoring Program

The City continued to collect samples from various storm drain outfalls as part of the *Coastal Outfall Monitoring Program*. If water was flowing from a storm drain outfall, samples were collected and analyzed for total coliform, fecal coliform and enterococci. Storm drain sample results were compared to the 95th percentile criteria established in the *Adaptive Monitoring Plan*. Where possible, a paired receiving water sample was collected to assess the impacts of the storm drains on the receiving waters. The receiving water samples were compared to Rec-1 standards to determine exceedances. Where storm drain bacteria concentrations exceeded 95th percentile criteria or receiving water samples exceeded Rec-1 objectives, follow-up sampling and/or investigations were performed.

Recent years indicate a decrease in storm drain exceedances for all three bacterial indicators, showing improvements in water quality. In all cases, the flow from outfalls was intermittent and low volume. In many cases, the flow did not actually reach the receiving waters, but dissipated into the sand or sediment. The City will continue to conduct the Coastal Outfall Monitoring Program and to conduct follow-up investigations as detailed in the Adaptive Plan.

11.3.2 Level 6: Changes in Receiving Water Quality

It is important to note that receiving water quality reflects considerably more than the quality of the City's MS4 discharges. In addition, receiving water quality can be adversely impacted by other events that are not under the control of the City, such as other permitted NPDES discharges, wildlife (impacting bacteria levels), atmospheric deposition, and other events and activities.

Watershed Receiving Water Samples

This year the City continued to have four receiving water samples collected in order to provide additional baseline data of surface water quality. These samples are collected at the same time as the Dry Weather Program samples. This is the sixth year of data collected under the this program, however at the time of this report, data for the sixth year is not available for inclusion. The program includes monitoring sites on Buena Vista Creek, Agua Hedionda Creek (at the Mass Loading Station site), Encinas Creek, and San Marcos Creek. Each of these tributaries is representative of the four separate Carlsbad sub-watersheds.

This special study was initiated in support of the Carlsbad Watershed Copermittees efforts to learn more about the quality of receiving waters in the Carlsbad Hydrologic Unit. The high priority pollutants in the Carlsbad Watershed are sediment and bacteria. Data collected in this study is insufficient in quality to provide information on nutrients due to the methodology used in analyzing nutrient concentrations. The prioritization of sediment as a high priority pollutant does not appear to be supported by data collected in this study. This is likely because all samples were collected during dry weather and sediment is potentially more prevalent during wet weather.

Bacteria is also listed as a high priority pollutant in the Carlsbad Watershed and data has been shown to exceed REC-1 water quality objectives during wet and dry weather. This special study appears to support the Watershed's prioritization of bacteria during dry weather.

Overall, water quality in these creeks appears to be within both Basin Plan water quality objectives and dry weather action levels for the constituents monitored in this special study. These data support the findings of previous monitoring in the Carlsbad Watershed indicating that bacterial indicators are a constituent of concern in the Carlsbad Hydrologic Unit. Other water chemistry constituents in the creeks appear to be within standards. Because this is a limited set of data, the watershed is in need of additional data to validate these findings. With the onset of the requirements of Order 2007-0001, Temporary Watershed Assessment Stations were located on Buena Vista Creek and on Agua Hedionda Creek during FY 07-08, collecting samples for analysis during wet and dry weather. These results were not available at the time of this report, but will be available for inclusion in future years.

Coastal Outfall Monitoring Program Receiving Waters

Of samples collected in the receiving waters during FY 07-08, there was only one exceedance for enterococcus across all three indicators. This exceedance occurred in Agua Hedionda Lagoon. There were no exceedances of the REC-1 standards in the Ocean for total coliform, fecal coliform or enterococci during the last six reporting periods. A general decline in receiving water exceedances in the lagoons is evident across all bacterial indicators, showing improvements in water quality.

It should be noted that lagoon samples were only collected during July, August, and September of 2007, as the Coastal Monitoring Program implemented permit requirements under Order 2007-0001 on October 1, 2007 monitoring only ocean outfalls. The City will continue to implement this program and to conduct follow-up investigations in accordance with the *Adaptive Plan*.

11.3.3 Overall Assessment

Program implementation in areas of construction, residential, MS4 maintenance, and street sweeping are properly targeted for protection of and improvement of water quality, as evidenced by direct load reductions in these programs.

Other program implementation in areas of industrial and commercial inspections, municipal, residential, construction, and outreach and education appear to be properly targeted for the protection of and improvement of water quality, as evidenced by changes in knowledge and awareness and in behavior.

12.0 SPECIAL INVESTIGATIONS

12.1 Introduction

This section describes any special investigations that the City of Carlsbad has knowledge of occurring during FY 07-08 within its jurisdiction.

12.2 Special Investigations

Lagoon TMDL Investigative Order

The City of Carlsbad participated in the San Diego Coastal Lagoon TMDL Monitoring Program that is described in San Diego Coastal Lagoons Monitoring Workplan (Mclauglin et al, June 2008). Samples were taken on February 7-8, 2008 and on April 8, 2008. Two storm drain outfalls in Carlsbad were sampled during each index period. Flow rates were measured and samples were analyzed for pH, Specific Conductivity, Temperature, Dissolved Oxygen, Turbidity, Totals Suspended Solids (TSS), Total Coliform, Fecal Coliform, and Enterococcus. Results and conclusions of the monitoring program will be in the final report, written by Southern California Coastal Research Project, expected to be completed in the third quarter of 2010.

Agua Hedionda Creek Datasonde

At the end of FY 04-05, the City purchased a continuous water quality monitoring probe (Datasonde) to be installed in Agua Hedionda Creek near the Mass Loading Station. The Datasonde was installed during FY 05-06. The probe is tied into a continuous stream flow gauge that was installed during the year as part of a State Proposition 13 Grant for the removal of invasive plant species in the Carlsbad Watershed. Stream flow gauges were installed on Buena Vista Creek, San Marcos Creek, and Agua Hedionda Creek. Although the probe is gathering some data, it has been removed and re-installed a few times, and the data has not been compiled, quality controlled, or assessed at this time.

Watershed Receiving Water Samples

This year the City continued to have four receiving water samples collected in order to provide additional baseline data of surface water quality. These samples are collected at the same time as the Dry Weather Program samples. This is the sixth year of data collected under the this program, however at the time of this report, data for the sixth year is not available for inclusion. The program includes monitoring sites on Buena Vista Creek, Agua Hedionda Creek (at the Mass Loading Station site), Encinas Creek, and San Marcos Creek. Each of these tributaries is representative of the four separate Carlsbad sub-watersheds.

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13.0 NON-EMERGENCY FIRE-FIGHTING

13.1 Introduction

The Carlsbad Fire Department (CFD) has developed the Non-Emergency Fire Fighting Program to meet the requirements of Order R9-2007-0001, as written in the City's 2008 JURMP. This section describes the City's program to reduce pollutants from non-emergency fire fighting flows (i.e., flows from controlled or practice blazes and maintenance activities) conducted in FY 07-08 from March 24, 2008 to June 30, 2008.

13.2 Overall Program Definition

The CFD is a dedicated team of professionals whose mission is to enhance the quality of life in our community by delivering exceptional services in safeguarding lives, property and the environment. By default, the definition of non-emergency fire-fighting flows are flows generated by the Fire Department other than emergency situations. The duration of an emergency exists from alarm notification until, in the opinion of the Incident Commander, the emergency has concluded and equipment is returned to service. Outside of this duration of time, Fire Department flows are considered non-emergency.

13.3 BMP Implementation

In order to reduce pollutant discharges from non-emergency fire-fighting flows, the City of Carlsbad's Fire Department has implemented several BMPs. During this reporting period, the CFD maintained a Storm Water Manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water. The BMPs incorporated at Fire Stations are listed below:

- The manuals included facility specific site maps, storm water inspection reports, facility specific spill response procedures, training records, department policies, and other related storm water compliance information.
- A written department policy on outside water use was followed and covers vehicle, hose, and equipment washing.
- Spill response equipment and materials were clearly identified and staged in accessible locations.
- Sweeping and removal of organic material from parking lots and walkways was completed on a weekly or as needed basis at all fire stations.
- Awareness was heightened at fire scenes to minimize the potential for excessive water flow.
- Awareness was heightened at incident scenes to contain potential discharges (once the scene had been stabilized) to prevent pollutants from entering the storm drain system.
- The Fire Department continued to implement the City's Spill Response Procedure for incidents that occur on City streets.

13.4 Training and Education

The CFD continued to communicate with other City departments to improve coordination and education with regards to storm water. The CFD's Storm Water Committee met quarterly to address new and ongoing storm water topics and how they relate to the responsibilities of the

Fire Department, and included personnel from each Fire Department rank. Other activities CFD participated in are as follows:

- Attended the City's Storm Water Committee meetings on a regular basis;
- Worked closely with the Storm Water Protection Program to conduct a series of meetings to review BMP implementation and perform one-on-one training;
- Conducted Fire Engineer training and testing at the City's reclaimed water facility at 6220 Avenida Encinas. A training trailer was used to facilitate engineer operations, pump testing, and other wet training opportunities;
- The Fire Department continued to provide acceptable wet training opportunities for personnel, while ensuring that appropriate BMPs were in place to protect storm drains and eliminate discharges to the MS4;
- Explored CIP opportunities for potential funding for permanent structural BMPs at the fire stations to serve wash areas;
- Worked extensively with the design and construction committee for new fire stations to ensure that storm water requirements were 1) addressed early in the process and 2) met during and after construction.
- Continued current annual training levels to ensure that all CFD personnel were versed in storm water as it relates to fire stations and fire fighting activities.

13.5 Fire Prevention Program

Fire prevention is itself a Best Management Practice (BMP). During this reporting period, Fire Prevention activities included those activities not directly associated with emergency scene operations, post fire scene or mop-up operations.

Perhaps the most effective way to eliminate water runoff from fires is to eliminate or reduce the magnitude of fires. The CFD has shown that an aggressive Fire Prevention Program has a significant impact on the number and magnitude of fires. Procedures or actions that lead to early fire detection/notification, automatic suppression, confinement, or enhanced suppression capabilities can reduce or control fires and ultimately reduce water runoff. The installation and maintenance of these procedures, devices, or features can significantly reduce potential flows in the event of an emergency.

An example of this type of prevention was weed abatement which included the encouragement of mowing. When mowing was not practical for perimeter breaks, and after considering topography, roughing the slope in a manner that would not increase soil or sediment releases was utilized, such as disking.

The City of Carlsbad continued its Fire Prevention Program during this reporting period.

14.0 JURMP REVISIONS

The City s JURMP was re-written during the previous reporting period in response to the issuance of Order 2007-0001. The new JURMP was initially implemented beginning March 24, 2008 as required under the new permit. At this time, no revisions to the new JURMP have been required. Any necessary changes to the new JURMP that are made during the upcoming reporting period will be detailed in the Annual Report for FY 08-09.

15.0 CONCLUSIONS AND RECOMMENDATIONS

15.1 Overview

During this reporting period, from March 24, 2008 to June 30, 2008, the City started implementing the new Permit Order No. R9-2007-0001. This section of the JURMP Annual Report described activities that the City undertook to reduce discharges of pollutants and urban runoff flow to the MS4 to the maximum extent practicable. It also provided an overall account of the activities conducted and the programs implemented to address the new Permit requirements for major components: Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education.

Several highlights are listed below, including specific discussion of activities conducted related to meeting Permit requirements as well as those that exceeded requirements. Note that these are highlights only and do not represent all activities conducted by the City to maintain compliance. Comprehensive details are reported in the applicable preceding sections.

15.2 Highlighted Activities Performed to Meet Permit Requirements

The City continued activities that were consistent between the two permits, as well as started new programs specific to the new Permit, Order No. R9-2007-0001. For comprehensive details, please refer to the applicable preceding sections of the report. Highlights for March 24, 2008 to June 30, 2008 are listed below.

The City:

- Updated the Carlsbad Municipal Code to reflect new requirements of the Permit related to Development Planning, Construction, and Existing Development.
- Continued updating and revising the Treatment Control BMP (TCBMP) database of private and public TCBMPs.
- Created a new TCBMP Inspection Form
- Created a new TCBMP Verification Form
- Created a new TCBMP outreach brochure.
- Distributed a copy of the Pollution Prevention Guide to the Construction Industry brochure with each construction related permit application
- Inspected all high priority construction sites at required frequencies, conducted outreach to project proponents and City staff, and issued 30 enforcement actions to obtain compliance, during 3044 inspections.
- Updated and mapped the municipal inventory and inspected all high priority municipal facilities in year 1 of the Permit, prior to the start of the rainy season October 1, 2008.
- Conducted cleaning and maintenance activities to reduce pollutant discharges from the MS4.
- Inspected 100 of catch basins.
- Developed a new program to evaluate and inspect Special Events.
- Updated and revised the Special Events inventory, developed a Special Events BMP brochure, and created a Special Events Inspection Form.
- Updated and mapped the High Threat to Water Quality Industrial/Commercial inventory, and conducted 72 inspections. The total revised inventory per the new Permit and JURMP prioritization criteria totaled 558 for this reporting period. Since the Permit requirement is 50 inspected within the first year of implementation and there were 3 months in FY 07-08 to start implementing the new Permit, 12.5 (one fourth of 50) of

the inventory was set as the goal for this reporting period, or 70 inspections. The City conducted 72 inspections during this reporting period. The City issued 6 enforcement actions to obtain compliance from March 24, 2008 to June 30, 2008.

- Continued using the *Knowledge and BMP Assessment*s at commercial and industrial facilities.
- Continued distributing the new brochure for mobile service providers, including carpet cleaners, plumbers, pressure washers, mechanics, porta-potty services, and any other mobile businesses that provide services at various off-site locations. This brochure was designed for mobile service providers, their employees, and anyone that hires a mobile service provider.
- Distributed educational information for residential activities, continued an advertising campaign, hosted or participated in 5 community outreach events, collaborated in offering five oil recycling and two HHW drop-off sites for residential use, responded to 66 reports of illegal discharges, and issued 25 enforcement actions to obtain compliance.
- Collaborated with other internal departments to assist with investigations and remediation during field incidents. The Storm Drain Maintenance Division was key to prompt, effective responses to complaints involving clean ups of incidents on public streets. Regular meetings and discussions about compliance issues and consistent contacts facilitates this inter-departmental coordination.
- Conducted a proactive program to detect and eliminate illegal discharges to the MS4. The public continued to use the storm water hotline and e-mail address to report illegal discharges to the storm drain system. The Storm Water Protection Program responded to 66 reports of illegal discharges to the storm drain system.
- Continued implementation of the *Dry Weather Field Screening and Analytical Program*, analyzing conditions and samples from 60 sites in the MS4.
- Continued implementation of the *Coastal Outfall Program* by routinely monitoring 8 active outfall sites on a regular basis, and inactive sites semi-annually.
- Created monitoring plans and located sites for the new MS4 Discharge Program
- Created monitoring plans and located sites for the new Trash Monitoring Program to be conducted concurrently with the Dry Weather Field Screening and Analytical Program.
- Continued involvement in outreach and education at the local level, the watershed level, and the regional level with the Project Clean Water Outreach Workgroup, and the Think Blue campaign.
- Continued distributing storm water educational brochures and continued the Environmental Programs advertising campaign.
- Distributed information through direct mail, during inspections and investigations, on the website, at workshops, during presentations, training seminars, and other public outreach events.
- Conducted a Public Opinion Survey of 1,000 residents and included questions on storm water.
- Distributed promotional items such as notepads, pens, Bags on Board, and key chains with pollution prevention messages.
- Improved the Carlsbad Municipal Code by working with the City Attorney s office to revise the ordinance to reflect current enforcement levels and mechanisms.
- Continued to review inventory management, prioritization practices, inspection and enforcement procedures, training programs, record-keeping, and reporting procedures related to construction activities.

15.3 Highlighted Activities in Addition to Permit Requirements

The City implemented several initiatives in addition to the requirements of the new Permit. Some of these highlights are internal program goals and should not be viewed as enforceable under the Permit. These internal program goals will be continued and enhanced as resources allow. For comprehensive details, please refer to the applicable preceding sections of this report. Highlights for March July 1, 2007 to March 23, 2008 are as follows:

The City:

- Started educating Developers and applicants about the new Development Planning Permit requirements early to ensure compliance would be achieved.
- Implemented Permit requirements related to Construction Inspection activities earlier than required, starting January 1, 2008.
- Adopted new storm water BMP maintenance agreements and incorporated into standard operating procedures. The new BMP maintenance agreements provide increased control over property owner compliance with storm water BMP requirements. These new agreements will also provide the City with legal authority to access, inspect and if necessary maintain onsite BMPs. In addition, the agreements will allow the City to place a lien on a property if BMPs are not maintained as required.
- Continued to maintain regular communications with the Industrial Compliance Unit of the Regional Board. In addition to copies of inspection reports and other correspondence with high and medium industries covered under the Permit, the City regularly coordinated compliance issues with Regional Board representatives over the phone and through emails. On several occasions, the Regional Board expressed their appreciation of the City s professionalism, responsiveness, and implementation of the storm water program
- Continued using the streamlined Industrial/Commercial inspection report revised in FY 05-06 so that businesses could promptly implement corrective actions. The revised streamlined inspection form now includes spaces to report previous enforcement actions, new storm water contacts, and a detailed list of necessary corrective actions. The revised form has proven to be successful in attaining compliance from regulated facilities.
- Posted minimum BMPs on the City s website for access by the public, permit applicants, developers, and property owners.
- Continued Storm Water Committee meetings which included members from Public Works, the Fire Department, Recreation, Planning, and the Building Department.
- Continued to implement a computerized asset management/work order system that will allow the Storm Drain Maintenance Division to manage of the MS4 inventory, inspections, and maintenance activities conducted.
- Continued the Environmental Resources Management Team (ERMT) initiative to look at environmental resources from a City-wide perspective including storm water, open space, habitat management, energy use, and sustainable principles.
- Supported the ERMT s work creating Environmental Guiding Principles for City decision-making, obtaining approval from City Council on the formal principles.
- Continued Storm Water Leadership Team (SWLT) meetings. Monthly meetings of the SWLT were conducted and attendees included Senior Management of the City s major service areas and Directors. Agenda items covered all areas of the City s compliance with Order No. 2001-001, as well as new programs under Order No. R9-2007-0001.

- Continued to collect data for Performance Measures and the *Maintenance Assessment Program* to analyze improved work methods to balance scheduled versus unscheduled maintenance.

15.4 Recommendations for Improvements

As the City started to implement the new 2008 JURMP in this reporting period, some areas for improvement were noted for the future:
The City will:

- Continue to research, observe, and evaluate the performance of various types of BMPs.
- Continue working on a *Best Management Practices Manual* that includes the minimum and required BMPs for activities and pollutant types. The manual should be completed in FY 08-09.
- Continue to develop effectiveness assessment mechanisms for each significant activity, for each major component, as well as an integrated assessment of the overall program.
- Continue to work at the watershed level and help focus activities on high priority pollutants.

15.5 Water Quality Improvements or Degradation

The complete 2008 Dry Weather report and the full IDDE Section of the Annual Report will be submitted in December of 2008. Please refer to the *Carlsbad Watershed 2008 WURMP* for data trends supporting the focus on *High Priority Pollutants* on a watershed basis. The following text highlights some of the observations on water quality.

<u>MS4 Water Quality</u>
With five years of data from the Dry Weather Program, ranging from nutrient and physical measurements to bio-available metals and pesticides, collected at 60 sites covering the entire MS4, a picture of water quality within the system is starting to appear. While data is only collected once annually, improvements can be seen for nutrient concentrations, pH, fecal coliform, ammonia, and surfactants within the MS4.

Exceedances of bacteria 95th percentile criteria in the *Coastal Storm Drain Monitoring Program* have declined in recent years.

<u>Receiving Water Quality</u>
The City is continuing to conduct additional receiving water monitoring to assess receiving water quality in Carlsbad. Current programs include the *Coastal and Lagoon Outfall Monitoring Program*, the Watershed Receiving Waters samples, and mass loading station monitoring.

Coastal Monitoring Program data indicate no water quality exceedances for bacteria in the ocean and only a few in the enclosed lagoons. The exceedances in the lagoons have declined in recent monitoring seasons and water quality appears to be improving.

In the Watershed Receiving Waters samples during dry weather nearly all constituents were undetected in the four additional creek sites water samples including: MBAS, oil and grease, dissolved cadmium, dissolved copper, dissolved lead, diazinon, and chlorpyrifos. Water quality at the four locations was relatively good.

Data related to the Mass Loading Station will be submitted with the Copermittees Regional Monitoring Annual Report.

15.6 Conclusion

The Storm Water Protection Program continues to evolve over time in response to the iterative process of implementing BMPs, assessing effectiveness, and evaluating results. As more procedures, programs and activities are implemented, there is a clear need for better databases to track and report activities and BMPs being implemented. Tying these activities to changes in water quality still presents a considerable challenge. This is part of the long-term assessment strategy that will take time to develop trends and to determine cause and effect relationships between pollution prevention and water quality management. The City will continue to work individually and with the Copermittees to further develop existing compliance programs and create new opportunities for improvement.

This section of the Annual Report demonstrated the City s compliance with Permit 2007-0001 and initial implementation of the 2008 JURMP. Because the new Permit was only implemented for 3 months of the reporting FY, it does not represent a full year of implementation.

Other sections of this report show that knowledge has increased in target communities, improved BMP implementation and behavior changes are occurring, pollutant loadings are being reduced from storm water management programs, the MS4 quality is improving, and some pollutants in receiving waters are improving. These are encouraging signs that are worth noting. The City recognizes that changes are likely to happen slowly and that continued program improvements and effectiveness measures are needed for long-term success.

Appendix 2.1
Engineering Standard Conditions of Approval

Refer to Appendix 2.1, Order 2001-01 Section of Annual Report.

City of Carlsbad
Development Project Approvals
FY 07-08 2nd Component Review Period (March 24, 2008 through June 30, 2008)

			Recommending Authority				Approving Authority				
Project ID	Other Actions	Project Name	Date	Entity	Reso No.	Action	Date	Entity*	Reso No.	Action	Project Priority Status**
PIP 06-19		Durkin Industrial Building					03/27/2008			Approval	P
PIP 07-02		Palomar Airport Terminal (COUNTY)					04/10/2008			Approval	NP
SUP 07-07		Humphry Lot Split					04/02/2008	PC	6407	Approval	NP
CT 07-05	CP 07-02, SUP 07-02	Villages of LC Greens Neighborhood 1.3					04/02/2008	PC	6403, 6404, 6405	Approval	P
SDP 88-09B	CDP 08-03	Bob Baker Jeep Addition					04/16/2008	PC	6408, 6409	Approval	NP
CT 07-13	CP 07-05, CDP 07-29	Chestnut Five Condominiums					04/16/2008	PC	6410, 6412, 6413	Approval	P
SDP 06-10		Roosevelt Street Residences	03/05/2008	PC	6397	Recommend Approval	04/22/2008	CC	2008-119	Approval	P
MS 06-03		Ozaki Minor Subdivision					04/22/2008	CE	Letter	Approval	NP
SDP 05-15		Rancho La Costa Building					05/07/2008	PC	6418	Approval	P
RP 04-11x1	CT 05-03	Lincoln and Oak Mixed Use Developmt					05/20/2008	H&RC	451, 452, 453	Approval	NP
MS 07-03		Ingold Minor Subdivision					05/20/2008	CE	Letter	Approval	NP
MS 05-02x1		Fieldman Minor Subdivision					05/23/2008	CE	Letter	Approval	P
CT 07-10	CP 07-04 CDP 07-23	Walnut Avenue Condominiums	06/04/2008	PC	6425, 6426, 6427	Recommend Approval	06/04/2008	PC	6425, 6426, 6427	Approval	P
CT 06-14	CP 06-12 SDP 06-12	Harding Street Senior Living					06/04/2008	PC	6421, 6422, 6423, 6424	Approval	P
MS 04-12x1		Dix Minor Subdivision					06/04/2008	CE	Letter	Approval	NP
SP 207G	LCPA 07-07 CUP 98-20B CDP 98-91A	Palomar Airport Road Driveway	04/16/2008	PC	6414, 6415, 6416 6417	Recommend Approval	06/17/2008	CC	2008-174	Approval	P
CUP 07-04		Robertson Ranch PA 22					06/18/2008	PC	6429	Approval	P
PIP 08-01		Kisco Home Office					07/10/2008	PD	Letter	Approval	P
PUD 05-12A		La Costa Oaks North Neighborhood 3.3	05/21/2008	PC	6420	Recommend Approval	07/01/2008	CC	2008-201	Approval	P
RP 06-03	CDP 086-09	Roosevelt Center					07/10/2008	H&RC	441, 442	Approval	NP

* PC = Planning Commission; CC = City Council; CE = City Engineer; PD = Planning Director; CCC = Coastal Commission

** P = Priority Development Project; NP = Non-Priority Development Project

Appendix 2.3
Capital Improvement Project Approvals

Refer to Appendix 2.3, Order 2001-01 Section of Annual Report.

Appendix 2.4
Treatment Control BMP Inventory

Refer to Appendix 2.4, Order 2001-01 Section of Annual Report.

SAMPLE PRIORITY PROJECT

FOR

SECOND COMPONENT TO ANNUAL REPORT

COVERING PERIOD FROM

MARCH 24, 2008 THROUGH JUNE 30, 2008

KISCO HOME OFFICE (PIP 08-01)

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Project Address	Assessors Parcel Number(s):	Project # (city use only):
1901 Wright Place	212-091-13	

Complete Sections 1 and 2 of the following checklist to determine your project's permanent and construction storm water best management practices requirements. This form must be completed and submitted with your permit application.

Section 1. Permanent Storm Water BMP Requirements:
If any answers to Part A are answered "Yes," your project is subject to the "Priority Project Permanent Storm Water BMP Requirements," and "Standard Permanent Storm Water BMP Requirements" in Section III, "Permanent Storm Water BMP Selection Procedure" in the Storm Water Standards manual.

If all answers to Part A are "No," and any answers to Part B are "Yes," your project is only subject to the "Standard Permanent Storm Water BMP Requirements". If every question in Part A and B is answered "No," your project is exempt from permanent storm water requirements.

Part A: Determine Priority Project Permanent Storm Water BMP Requirements.

Does the project meet the definition of one or more of the priority project categories?*	Yes	No
1. Detached residential development of 10 or more units.		X
2. Attached residential development of 10 or more units.		X
3. Commercial development greater than 100,000 square feet.	X	
4. Automotive repair shop.		X
5. Restaurant.		X
6. Steep hillside development greater than 5,000 square feet.		X
7. Project discharging to receiving waters within Environmentally Sensitive Areas.		X
8. Parking lots greater than or equal to 5,000 ft^2 or with at least 15 parking spaces, and potentially exposed to urban runoff.	X	
9. Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater		X
* Refer to the definitions section in the Storm Water Standards for expanded definitions of the priority project categories.		
Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if one or more of the criteria in Part A is met. If all answers to Part A are "No", continue to Part B.		

Part B: Determine Standard Permanent Storm Water Requirements.

Does the project propose:	Yes	No
1. New impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks?	X	
2. New pervious landscape areas and irrigation systems?	X	
3. Permanent structures within 100 feet of any natural water body?		X
4. Trash storage areas?	X	
5. Liquid or solid material loading and unloading areas?		X
6. Vehicle or equipment fueling, washing, or maintenance areas?		X
7. Require a General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except construction)?*	X	
8. Commercial or industrial waste handling or storage, excluding typical office or household waste?		X
9. Any grading or ground disturbance during construction?	X	
10. Any new storm drains, or alteration to existing storm drains?	X	
*To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/stormwtr/industrial.html		

Section 2. Construction Storm Water BMP Requirements:

If the answer to question 1 of Part C is answered "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Storm Water Pollution Prevention Plan (SWPPP). If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Water Pollution Control Plan (WPCP). If every question in Part C is answered "No," your project is exempt from any construction storm water BMP requirements. If any of the answers to the questions in Part C are "Yes," complete the construction site prioritization in Part D, below.

Part C: Determine Construction Phase Storm Water Requirements.

Would the project meet any of these criteria during construction?	Yes	No
1. Is the project subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities?	X	
2. Does the project propose grading or soil disturbance?	X	
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	X	
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as, paints, solvents, concrete, and stucco)?	X	

Part D: Determine Construction Site Priority

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans, and included in the SWPPP or WPCP. Indicate the project's priority in one of the check boxes using the criteria below, and existing and surrounding conditions of the project, the type of activities necessary to complete the construction and any other extenuating circumstances that may pose a threat to water quality. The City reserves the right to adjust the priority of the projects both before and during construction. [Note: The construction priority does NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority does affect the frequency of inspections that will be conducted by City staff. See Section IV.1 for more details on construction BMP requirements.]

☑ ***A) High Priority***

1) Projects where the site is 50 acres or more and grading will occur during the rainy season
2) Projects 1 acre or more.
3) Projects 1 acre or more within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an environmentally sensitive area
4) Projects, active or inactive, adjacent or tributary to sensitive water bodies

☐ ***B) Medium Priority***

5) Capital Improvement Projects where grading occurs, however a Storm Water Pollution Prevention Plan (SWPPP) is not required under the State General Construction Permit (i.e., water and sewer replacement projects, intersection and street re-alignments, widening, comfort stations, etc.)
6) Permit projects in the public right-of-way where grading occurs, such as installation of sidewalk, substantial retaining walls, curb and gutter for an entire street frontage. etc. , however SWPPPs are not required.
7) Permit projects on private property where grading permits are required, however, Notice Of Intents (NOIs) and SWPPPs are not required.

☐ ***C) Low Priority***

8) Capital Projects where minimal to no grading occurs, such as signal light and loop installations, street light installations, etc.
9) Permit projects in the public right-of-way where minimal to no grading occurs, such as pedestrian ramps, driveway additions, small retaining walls, etc.
10) Permit projects on private property where grading permits are not required, such as small retaining walls, single-family homes, small tenant improvements, etc.

Owner/Agent/Engineer Name (Please Print):	Title:
MICHAEL MCCALL	PRESIDENT
Signature:	Date:

MAILED 07/11/08

FILE COPY

City of Carlsbad
Planning Department

PLANNED INDUSTRIAL PERMIT

July 10, 2008

Robert Haskins
KSL Wright Place Office, LLC
5790 Fleet Street, Ste. 300
Carlsbad, CA 92008

SUBJECT: PIP 08-01 - KISCO HOME OFFICE

The City has completed a review of the application for a Planned Industrial Permit for development proposed on Lot 12 of the Carlsbad Airport Centre Specific Plan (SP 181F). The site is addressed as 1901 Wright Place (APN 212-091-13) and is located on the corner of Palomar Airport Road, Palomar Oaks Way, and Wright Place. The proposed project entails a 22,500 square foot, two-story corporate office/industrial building with 90 surface parking spaces, site landscaping, and all of the necessary improvements to provide utilities for the site. Vehicular access is proposed off of Wright Place, along the northern boundary of the lot.

It is the Assistant Planning Director's determination that the project **IS** consistent with the City's Planned Industrial Zone regulations (Chapter 21.34), the Carlsbad Airport Centre Specific Plan (SP 181F), and with all other applicable City ordinances and policies. The Planning Director, therefore, **APPROVES** this request based on the following:

Findings:

1. That the site indicated by the Planned Industrial Permit **PIP 08-01** is adequate in size and shape to accommodate the proposed use, and all yards, spaces, walls, fences, parking, loading, landscaping and other features required by SP 181(F) and Chapter 21.34 in that **the proposed two-story corporate office/industrial building, surface parking, landscaping, employee eating areas, and all other associated improvements fit within the developable footprint of the lot and all applicable development standards are met**.

2. That the improvements indicated on the Planned Industrial Permit **PIP 08-01** are located in such a manner to be related to existing and proposed streets and highways in that **the proposed building's access is provided off of Wright Place, which was previously-approved by the Carlsbad Airport Centre Specific Plan (SP 181F), in accordance with City Engineering standards.**

3. That the improvements as shown on the Planned Industrial Permit **PIP 08-01** are consistent with the intent and purpose of the Planned Industrial zone and SP 181(F) and all adopted development, design and performance standards as set forth in Chapter 21.34 and SP 181(F) in that **the proposed two-story office building conforms to the building height, setbacks, parking, lot coverage, employee eating areas, and design criteria of the P-M zone (Carlsbad Municipal Code, Chapter 21.34) and all applicable development standards in the Carlsbad Airport Centre Specific Plan (SP 181F) and the Zoning Ordinance.**

CEQA Finding

4. That the Planning Director has determined that the project belongs to a class of projects that the State Secretary for Resources has found do not have a significant impact on the environment, and it is therefore categorically exempt from the requirement for the preparation of environmental documents pursuant to Section **15332, Class 32 – In-Fill Development Projects**, of the state

CEQA Guidelines. In making this determination, the Planning Director has found that the exceptions listed in Section 15300.2 of the state CEQA Guidelines do not apply to this project.

General Plan Conformance Finding

5. That the **Planning Director** finds that the project, as conditioned herein, is in conformance with the Elements of the City's General Plan, in that **the project consists of a two-story corporate office/industrial building which is consistent with the Carlsbad Airport Centre Specific Plan (SP 181F) which implements the intent and purpose of the Planned Industrial (P-I) General Plan Land Use Designation.**

6. That the project is consistent with the City-Wide Facilities and Improvements Plan, the Local Facilities Management Plan for Zone **5** and all City public facility policies and ordinances. The project includes elements or has been conditioned to construct or provide funding to ensure that all facilities and improvements regarding: sewer collection and treatment; water; drainage; circulation; fire; schools; parks and other recreational facilities; libraries; government administrative facilities; and open space, related to the project will be installed to serve new development prior to or concurrent with need. Specifically,

   a. The project has been conditioned to provide proof from the **Carlsbad Unified** School District that the project has satisfied its obligation for school facilities;

   b. The Public Facility fee is required to be paid by Council Policy No. 17 and will be collected prior to the issuance of building permit;

   c. The Local Facilities Management fee for Zone **5** is required by Carlsbad Municipal Code Section 21.90.050 and will be collected prior to issuance of building permit; and

   d. **A growth management park fee of 40 cents per square foot of non-residential development will be collected at the time of building permit issuance. This fee will be used to construct recreational facilities to offset the demand created by employees within Local Facilities Management Zone 5.**

7. That the project is consistent with the Airport Land Use Comprehensive Plan (ALUCP) for the McClellan-Palomar Airport, dated April 1994, in that as conditioned, the applicant shall record a notice concerning aircraft noise. The project is compatible with the projected noise levels of the ALUCP; and, based on the noise/land use compatibility matrix of the ALUCP, the proposed land use is compatible with the airport, **in that the project is not located within any noise contours greater than 65 CNEL as created by airport operations.**

Landscape Manual Compliance

8. That the project is consistent with the City's Landscape Manual (Carlsbad Municipal Code Section 14.I28.020 and Landscape Manual Section 1B) **as well as the Carlsbad Airport Centre Specific Plan (SP 181F) landscape guidelines and requirements.**

9. That the Assistant Planning Director has reviewed each of the exactions imposed on the Developer contained in this letter, and hereby finds, in this case, that the exactions are imposed to mitigate impacts caused by or reasonably related to the project, and the extent and the degree of the exaction is in rough proportionality to the impact caused by the project.

Conditions:

Note: Unless otherwise specified herein, all conditions shall be satisfied prior to issuance of a grading permit or building permit, whichever occurs first.

1. Approval is granted for **PIP 08-01** as shown on Exhibits **"A – U"**, dated **July 10, 2008**, on file in the Planning Department and incorporated herein by reference. Development shall occur substantially as shown unless otherwise noted in these conditions.

2. All uses established in this structure shall be consistent with Section III of SP 181F (Permitted Uses).

3. If any of the following conditions fail to occur; or if they are, by their terms, to be implemented and maintained over time, if any of such conditions fail to be so implemented and maintained according to their terms, the City shall have the right to revoke or modify all approvals herein granted; record a notice of violation on the property title; deny or further condition issuance of all future building permits; deny, revoke or further condition all certificates of occupancy issued under the authority of approvals herein granted; record a notice of violation on the property title; institute and prosecute litigation to compel their compliance with said conditions or seek damages for their violation. No vested rights are gained by Developer or a successor in interest by the City's approval of this **Planned Industrial Permit (PIP 08-01)**.

4. Staff is authorized and directed to make, or require the Developer to make, all corrections and modifications to the **Planned Industrial Permit (PIP 08-01)** documents, as necessary to make them internally consistent and in conformity with the final action on the project. Development shall occur substantially as shown on the approved Exhibits. Any proposed development different from this approval, shall require an amendment to this approval.

5. Developer shall comply with all applicable provisions of federal, state, and local laws and regulations in effect at the time of building permit issuance.

6. If any conditions for construction of any public improvements or facilities, or the payment of any fees in-lieu thereof, imposed by this approval or imposed by law on this Project are challenged, this approval shall be suspended as provided in Government Code Section 66020. If any such condition is determined to be invalid this approval shall be invalid unless the City Council determines that the project without the condition complies with all requirements of law.

7. Developer/Operator shall and does hereby agree to indemnify, protect, defend and hold harmless the City of Carlsbad, its Council members, officers, employees, agents, and representatives, from and against any and all liabilities, losses, damages, demands, claims and costs, including court costs and attorney's fees incurred by the City arising, directly or indirectly, from (a) City's approval and issuance of this **Planned Industrial Permit,** (b) City's approval or issuance of any permit or action, whether discretionary or non-discretionary, in connection with the use contemplated herein, and (c) Developer/Operator's installation and operation of the facility permitted hereby, including without limitation, any and all liabilities arising from the emission by the facility of electromagnetic fields or other energy waves or emissions. This obligation survives until all legal proceedings have been concluded and continues even if the City's approval is not validated.

8. Developer shall submit to **Planning Department** a reproducible 24" x 36," mylar copy of the **Site Plan** reflecting the conditions approved by the final decision making body.

9. Prior to the issuance of a building permit, the Developer shall provide proof to the Director from the **Carlsbad Unified** School District that this project has satisfied its obligation to provide school facilities.

10. This project shall comply with all conditions and mitigation measures which are required as part of the Zone **5** Local Facilities Management Plan and any amendments made to that Plan prior to the issuance of building permits, including, but not limited to the following:

    a. **A growth management park fee of 40 cents per square foot of non-residential development will be collected at the time of building permit issuance. This fee will be used to construct recreational facilities to offset the demand created by employees within Local Facilities Management Zone 5.**

11. This approval shall become null and void if building permits are not issued for this project within 24 months from the date of project approval.

12. Building permits will not be issued for this project unless the local agency providing water and sewer services to the project provides written certification to the City that adequate water service and sewer facilities, respectively, are available to the project at the time of the application for the building permit, and that water and sewer capacity and facilities will continue to be available until the time of occupancy.

13. Developer shall pay the citywide Public Facilities Fee imposed by City Council Policy #17, the License Tax on new construction imposed by Carlsbad Municipal Code Section 5.09.030, and CFD #1 special tax (if applicable), subject to any credits authorized by Carlsbad Municipal Code Section 5.09.040. Developer shall also pay any applicable Local Facilities Management Plan fee for Zone **5,** pursuant to Chapter 21.90. All such taxes/fees shall be paid at issuance of building permit. If the taxes/fees are not paid, this approval will not be consistent with the General Plan and shall become void.

Landscape Plan Conditions

14. Developer shall submit and obtain Planning Director approval of a Final Landscape and Irrigation Plan showing conformance with the approved Preliminary Landscape Plan and the City's Landscape Manual. Developer shall construct and install all landscaping as shown on the approved Final Plans, and maintain all landscaping in a healthy and thriving condition, free from weeds, trash, and debris.

15. The first submittal of Final Landscape and Irrigation Plans shall be pursuant to the landscape plan check process on file in the Planning Department and accompanied by the project's building, improvement, and grading plans.

16. Prior to the issuance of the **grading permit**, Developer shall submit to the City a Notice of Restriction executed by the owner of the real property to be developed. Said notice is to be filed in the office of the County Recorder, subject to the satisfaction of the Planning Director, notifying all interested parties and successors in interest that the City of Carlsbad has issued a **Planned Industrial Permit** on the property. Said Notice of Restriction shall note the property description, location of the file containing complete project details and all conditions of approval as well as any conditions or restrictions specified for inclusion in the Notice of Restriction. The Planning Director has the authority to execute and record an amendment to the notice which modifies or terminates said notice upon a showing of good cause by the Developer or successor in interest.

Trash receptacle Conditions

17. Developer shall construct trash receptacle and recycling areas enclosed by a six-foot high masonry wall with gates pursuant to City Engineering Standards and Carlsbad Municipal Code Chapter 21.105. Location of said receptacles shall be approved by the Planning Director. Enclosure shall be of similar colors and/or materials to the project to the satisfaction of the Planning Director.

Outdoor Storage of materials prohibited

18. No outdoor storage of materials shall occur onsite unless required by the Fire Chief. When so required, the Developer shall submit and obtain approval of the Fire Chief and the Planning Director of an Outdoor Storage Plan, and thereafter comply with the approved plan.

19. Developer shall submit and obtain Planning Director approval of an exterior lighting plan including parking areas. All lighting shall be designed to reflect downward and avoid any impacts on adjacent property.

20. All roof appurtenances, including air conditioners, shall be architecturally integrated and concealed from view and the sound buffered from adjacent properties and streets, in substance as provided in Building Department Policy No. 80-6, to the satisfaction of the Directors of Community Development and Planning.

21. The Developer shall construct, install, and stripe not less than **90** parking spaces, as depicted on Exhibits **"A - U."**

22. **The location and size of all employee eating areas, surface parking, and landscaped areas within the project as shown on Exhibits "A – U" shall not be altered, reduced, fenced, or divided so as to preclude the equal use by all employees of the office building.**

23. Prior to the issuance of building or grading permits, whichever occurs first, the Developer shall prepare and record a Notice that this property may be subject to noise impacts from the Palomar Airport Road Transportation Corridor,, in a form meeting the approval of the Planning Director and the City Attorney (see Noise Form #1 on file in the Planning Department).

24. **Pursuant to the Carlsbad Airport Centre Specific Plan (SP 181F), any signs proposed for this development shall be designed to comply with the City's Sign Ordinance, CMC Chapter 21.41, and shall require review and approval of the Planning Director prior to installation of any such signs.**

25. Prior to the issuance of building or grading permits, whichever occurs first, the Developer shall prepare and record a Notice that this property is subject to overflight, sight and sound of aircraft operating from McClellan-Palomar Airport, in a form meeting the approval of the Planning Director and the City Attorney (see Noise Form #2 on file in the Planning Department).

26. **Prior to issuance of building permits, a revised acoustical analysis shall be submitted to demonstrate how the proposed building will meet the City's interior noise standard of 55 dBA CNEL.**

27. **The proposed sound wall defining the western perimeter of the employee eating area shall be designed to meet the minimum specifications as recommended in the acoustical analysis. In addition, the height of the combination sound/retaining wall shall not exceed six (6) feet.**

28. **All retaining walls shall utilize a decorative material consistent with the architectural materials of the main building and shall incorporate a decorative architectural cap, to the satisfaction of the Planning Director.**

29. **All development, including retaining walls, shall be located outside of the drip line (i.e. exterior edge of canopy) of all existing, mature oak trees on the site.**

Removed trees to be replaced at 2:1 ratio

30. **A total of two (2) sapling oak trees (identified as an "oak bush" with 3-inch caliper on landscape plan) are approved to be removed. Said trees shall be replaced at a minimum 2:1 ratio with 36-inch box size oak trees (Quercus Agrifolia). Said trees proposed to be removed shall be clearly noted on all final grading and landscape plans, to the satisfaction of the Planning Director.**

Engineering:

General

31. Prior to hauling dirt or construction materials to or from any proposed construction site within this project, the Developer shall apply for and obtain approval from, the City Engineer for the proposed haul route.

32. The Developer shall install sight distance corridors at all street intersections and driveways in accordance with City Engineering Standards.

Fees/Agreements

33. The Developer shall cause property owner to execute and submit to the City Engineer for recordation the City's standard form Drainage Hold Harmless Agreement.

34. Prior to approval of any grading or building permits for this project, the Developer shall cause Owner to give written consent to the City Engineer for the annexation of the area shown within the boundaries of the site plan into the existing City of Carlsbad Street Lighting and Landscaping District No. 1 and/or to the formation or annexation into an additional Street Lighting and Landscaping District. Said written consent shall be on a form provided by the City Engineer.

Grading

35. Based upon a review of the proposed grading and the grading quantities shown on the site plan, a grading permit for this project is required. Developer shall apply for and obtain a grading permit from the City Engineer prior to issuance of a building permit.

Storm water BMP Compliance Condition

36. The Developer shall comply with the City's requirements of the National Pollutant Discharge Elimination System (NPDES) permit and the City's current Standard Urban Storm Water Mitigation Plan (SUSMP). Developer shall provide improvements constructed pursuant to best management practices as referenced in the "California Storm Water Best Management Practices Handbook" to reduce surface pollutants to an acceptable level prior to discharge to sensitive areas. Plans for such improvements shall be submitted to and subject to the approval of the City Engineer. Said plans shall include but not be limited to notifying prospective owners and tenants of the following:

A. All owners and tenants shall coordinate efforts to establish or work with established disposal programs to remove and properly dispose of toxic and hazardous waste products.

B. Toxic chemicals or hydrocarbon compounds such as gasoline, motor oil, antifreeze, solvents, paints, paint thinners, wood preservatives, and other such fluids shall not be discharged into any street, public or private, or into storm drain or storm water conveyance systems. Use and disposal of pesticides, fungicides, herbicides, insecticides, fertilizers and other such chemical treatments shall meet Federal, State, County and City requirements as prescribed in their respective containers.

C. Best Management Practices shall be used to eliminate or reduce surface pollutants when planning any changes to the landscaping and surface improvements.

Project Threat Assessment condition

37. **With the application for grading plan check, the Developer shall complete and submit to the City Engineer a Project Threat Assessment Form (PTAF) pursuant to City Engineering Standards. Concurrent with the PTAF, Developer shall also submit the appropriate Tier level Storm Water Compliance form and Tier level Storm Water Pollution Prevention Plan (SWPPP) as determined by the completed PTAF, all to the satisfaction of the City Engineer.**

Priority project required to submit storm water management plan (SWMP)

38. **Prior to the issuance of grading permit or building permit, whichever occurs first, Developer shall submit for City approval a "Storm Water Management Plan (SWMP)." The SWMP shall demonstrate compliance with the City of Carlsbad Standard Urban Stormwater Mitigation Plan (SUSMP), Order R9-2007-0001 issued by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Municipal Code, all to the satisfaction of the City Engineer. The SWMP shall address measures to avoid contact or filter said pollutants from storm water, to the maximum extent practicable, for the post-construction stage of the project.**

LID Condition

39. **The Developer shall incorporate Low Impact Development (LID) standards into the design of this project per City Standard Urban Storm Water Mitigation Plan (SUSMP), latest version, including applicable Regional Water Quality Control Board Orders, all to the satisfaction of the City Engineer.**

Permanent BMP maintenance condition

40. The Developer shall cause property owner to process, execute and submit an executed copy to the City Engineer for recordation a City standard Permanent Stormwater Quality Best

Management Practice Maintenance Agreement for the perpetual maintenance of all treatment control, applicable site design and source control, post-construction permanent Best Management Practices prior to the issuance of a grading permit or building permit, whichever occurs first for this Project.

Dedications/Improvements

41. The Developer shall cause Owner to dedicate to the City and/or other appropriate entities for the **waterline easement** shown on the site plan. The offer shall be made by a separate recorded document. All land so offered shall be free and clear of all liens and encumbrances and without cost to the City. Streets that are already public are not required to be rededicated.

42. Additional drainage easements may be required. The Developer shall dedicate and provide or install drainage structures, as may be required by the City Engineer, prior to or concurrent with any grading or building permit.

43. **Owner shall execute and record a Grant of Easement across the southeasterly corner of the subject property for private storm drain purposes, as shown in the site plan, for the benefit of the property easterly of the project site, all to the satisfaction of the City Engineer.**

44. The Developer shall provide the design of the drainage system to the satisfaction of the City Engineer. The private drainage system shall be inspected by the City. The Developer shall pay the standard improvement plan check and inspection fees.

45. The Developer shall execute a City standard Development Improvement Agreement to install and secure with appropriate security as provided by law, public improvements shown on the site plan. Said improvements shall be installed to City Standards to the satisfaction of the City Engineer. More specifically, these improvements include:

Water main, fire hydrants and appurtenances

Improvements listed above shall be constructed within 18 months of approval of the subdivision or development improvement agreement or such other time as provided in said agreement.

46. Prior to issuance of building permits, the Developer shall install or secure with appropriate security as provided by law street lights along all public and private street frontages abutting and/or within the project site in conformance with City of Carlsbad Standards.

47. Prior to issuance of building permits, the Developer shall install or secure with appropriate security as provided by law, sidewalks along all public streets abutting the project site in conformance with City of Carlsbad Standards.

48. Prior to the issuance of building permits, the Developer shall install or secure with appropriate security as provided by law wheelchair ramps at the public street corners abutting the project site in conformance with City of Carlsbad Standards.

Utilities

49. Prior to approval of improvement plans or final map, the Developer shall meet with the Fire Marshal to determine if fire protection measures (fire flows, fire hydrant locations, building sprinklers) are required to serve the project. Fire hydrants, if proposed, shall be considered public improvements and shall be served by public water mains to the satisfaction of the District Engineer.

50. The Developer shall design and construct public facilities within public right-of-way or within minimum 20-foot wide easements granted to the District or the City of Carlsbad. At the discretion of the District Engineer, wider easements may be required for adequate maintenance, access and/or joint utility purposes.

51. Prior to the issuance of building permits, the Developer shall pay all fees, deposits, and charges for connection to public facilities.

52. The Developer shall design landscape and irrigation plans utilizing recycled water as a source and prepare and submit a colored recycled water use map to the Planning Department for processing and approval by the District Engineer.

53. The Developer shall install potable water and/or recycled water services and meters at locations approved by the District Engineer. The locations of said services shall be reflected on public improvement plans.

54. The Developer shall install sewer laterals and clean-outs at locations approved by the District Engineer. The locations of sewer laterals shall be reflected on public improvement plans.

55. The Developer shall design and construct public water, sewer, and recycled water facilities substantially as shown on the site plan to the satisfaction of the District Engineer.

Fire:

56. The alternative surface for the Fire Department turn-around shall be designed by an Engineer and shall be able to support a minimum axle weight of 75,000 pounds.

Code Reminders:

The project is subject to all applicable provisions of local ordinances, including but not limited to the following:

57. The Average Daily Trips (ADT) and floor area shown on the site plan are for planning purposes only. Developer shall pay traffic impact and sewer impact fees based on Section 18.42 and Section 13.10 of the City of Carlsbad Municipal Code, respectively.

58. Developer shall pay a landscape plan check and inspection fee as required by Section 20.08.050 of the Carlsbad Municipal Code.

59. Approval of this request shall not excuse compliance with all applicable sections of the Zoning Ordinance and all other applicable City ordinances in effect at time of building permit issuance, except as otherwise specifically provided herein.

60. The project shall comply with the latest nonresidential disabled access requirements pursuant to Title 24 of the California Building Code.

61. Premise identification (addresses) shall be provided consistent with Carlsbad Municipal Code Section 18.04.320.

NOTICE

Please take **NOTICE** that approval of your project includes the "imposition" of fees, dedications, reservations, or other exactions hereafter collectively referred to for convenience as "fees/exactions."

You have 90 days from date of final approval to protest imposition of these fees/exactions. If you protest them, you must follow the protest procedure set forth in Government Code Section 66020(a) and file the protest and any other required information with the City Manager for processing in accordance with

Carlsbad Municipal Code Section 3.32.030. Failure to timely follow that procedure will bar any subsequent legal action to attack, review, set aside, void, or annul their imposition.

You are hereby FURTHER NOTIFIED that your right to protest the specified fees/exactions DOES NOT APPLY to water and sewer connection fees and capacity charges, nor planning, zoning, grading, or other similar application processing or service fees in connection with this project; NOR DOES IT APPLY to any fees/exactions of which you have previously been given a NOTICE similar to this, or as to which the statute of limitations has previously otherwise expired.

If you have any questions, please contact Shannon Werneke at (760) 602-4621 or swern@ci.carlsbad.ca.us.

Sincerely,

GARY T. BARBERIO
Assistant Planning Director

GTB:SW:sm

c: Mike McCall, Civil Consulting Group, 5858 Mt. Alifan Drive, Ste. 202, San Diego, CA 92111
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Revised
(Previous reports dated:
3/3/08
4/28/08

STORM WATER MANAGEMENT PLAN
FOR

KISCO SENIOR LIVING OFFICE BUILDING
(PIP 08-01)
1901 WRIGHT PLACE
CARLSBAD, CA 92009

APN #212-091-13

CITY OF CARLSBAD

RECEIVED
JUN 23 2008
CITY OF CARLSBAD
PLANNING DEPT

Prepared By:

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PROJECT NUMBER – 425-01-00

June 12, 2008

REGISTERED PROFESSIONAL ENGINEER
MICHAEL J.
C 53444
Exp. 6/07
CIVIL
STATE OF CALIFORNIA

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1.0 INTRODUCTION

The purpose of this Storm Water Management Plan (SWMP) is to develop and implement practicable policies to ensure to the maximum extent practicable that development does not increase pollutant loads from the project site and considers urban runoff flow rates and velocities. The SWMP intends to ensure the effectiveness of the Best Management Practices (BMP's) through proper maintenance, based on long-term operational and fiscal planning. The purpose of this SWMP is to address the possible water quality impacts from the proposed site improvements for this project and the best methods to mitigate them.

1.1 PROJECT DESCRIPTION

The 3.85 acre project site is located at 1901 Wright Place in the City of Carlsbad, California (See Vicinity Map). The site is currently a vacant and graded building pad. The proposed project includes the development of one commercial office building, site parking, and a graded pad area (See attached Site Map).

The current general plan designation is PI. The existing site zone for the project is PM

The project is planned to be developed in and include the construction of a 22,500 square foot building onsite parking areas. The stormwater treatment system planned for this project will consist of a network of bioswales, and the utilization of an sand infiltration basin which will function as a detention basin during large storm events.

An on-site stormdrain system will be constructed within the project in order to convey drainage from the subject site and will be designed as a comprehensive system that will direct low flows through bioswales and the sand filter basin. The larger flows will also be directed through the onsite stormdrain system to the detention basin..

The onsite system will be connected to an existing stormdrain system that crosses the site, at the northeast corner of the subject property. This stormdrain system connects to a public stormdrain located in Palomar Airport Road. There will not be any on site material storage and the trash enclosures have been covered according to current City of Carlsbad Standards.

1.2 HYDROLOGIC UNIT CONTRIBUTION

The subject project is located in the Carlsbad Hydrologic Unit, Encinas basin, and hydrologic unit (904.40). The project is a small portion of this larger watershed. Project improvements will require that approximately 2.69 acres of area will be graded in order to finish grade the existing building pad, driveways and parking. The drainage for this project will flow into a proposed on-site stormdrain system that will be connected to an existing on-site private stormdrain system.

This drainage will flow towards the south and confluence into a public stormdrain located within Palomar Airport Road. This combined drainage will travel approximately 4.0 miles, in a westerly direction, and ultimately empty into the Pacific Ocean near Ponto State Beach.

1.3 BENEFICIAL USE

The beneficial uses of Coastal Water(Pacific Ocean) for this hydrologic unit are included in Table 2-3 Beneficial Use of Coastal Waters

Table 2-3. BENEFICIAL USES OF COASTAL WATERS

Coastal Waters	Hydrologic Unit Basin Number	BENEFICIAL USE														
		IND	NAV	REC1	REC2	COMM	BIOL	EST	WILD	RARE	MAR	AQUA	MIGR	SPWN	WARM	SHELL
Pacific Ocean		●	●	●	●	●	●		●	●	●	●	●	●		●
Dana Point Harbor		●	●	●	●	●			●	●	●		●	●		●
Del Mar Boat Basin		●	●	●	●	●			●	●	●		●	●		●
Mission Bay		●		●	●	●		●	●	●	●		●	●		●
Oceanside Harbor		●	●	●	●	●			●	●	●		●	●		●
San Diego Bay [1]		●	●	●	●	●	●	●	●	●	●		●	●		●
Coastal Lagoons																
Tijuana River Estuary	11.11			●	●	●	●	●	●	●	●		●	●		●
Mouth of San Diego River	7.11			●	●	●		●	●	●	●		●	●		●
Los Penasquitos Lagoon [2]	6.10			●	●		●	●	●	●	●		●	●		●
San Dieguito Lagoon	5.11			●	●		●	●	●	●	●		●	●		
Batiquitos Lagoon	4.51			●	●		●	●	●	●	●		●	●		
San Elijo Lagoon	5.61			●	●		●	●	●	●	●		●	●		
Aqua Hedionda Lagoon	4.31	●		●	●	●		●	●	●	●	●	●	●		●

1 Includes the tidal prisms of the Otay and Sweetwater Rivers.

2 Fishing from shore or boat permitted, but other water contact recreational (REC-1) uses are prohibited.

● Existing Beneficial Use

2.0 CHARACTERIZATION OF PROJECT RUNOFF

Discharge from the project site outlet point, should have minimal influence on water quality in nearby coastal areas south of the Carlsbad state beach and waters further south.

The project area is located approximately 4 miles upstream from the Pacific Ocean. The development is planned so surface water generated from the site will be physically clarified through the use of selected BMP practices before it is directed to the public storm drain system.

2.1 POLLUTANTS OF CONCERN

The runoff generated from the project site during and after construction may consist of the following constituents, potential pollutants and conditions of concern:

Pollutants of concern from the Project Area Pollutants from the Project Area

General Pollutant Categories									
Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Commercial Development >1000,000 ft	P	P	P		x	P	x	P	p
Parking Lots	p	p	X		x	P	x		p

Legend: X = Anticipated, P = Potential

Receiving waters (Pacific Ocean) in the Hydrologic Area Basin Number 904.40 (As shown in table CWA 2006 are not affected by any pollutants.

There are no primary pollutants of concern. Secondary pollutants of concern are listed and described in section 2.2 thru 2.10.

2.2 CONDITIONS OF CONCERN

The project drainage study is supplied with this report in addition to the project precise grading plans. We have observed downstream conditions and found minimal potential for this project to contribute significantly to increased soil erosion, slope stability factors, vegetative stress and will not alter existing habitat in the nearby areas.

2.3 SEDIMENTS

Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

2.4 NUTRIENTS

Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

2.6 TRASH & DEBRIS

Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Additionally, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.

2.7 OXYGEN – DEMANDING SUBSTANCES

This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds.

The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

2.8 HEAVY METALS

Metals are raw material components in non-metal products such as fuels, adhesives, paints and other coatings. Primary source of metal pollution in stormwater are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Environmental concerns, regarding the potential for release of metals into the environment, have already led to restricted metal usage in certain applications.

2.9 BACTERIA AND VIRUSES

Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. In addition, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

2.10 PESTICIDES

Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

3.0 SOIL CHARACTERISTICS

The project area consists of Soil Group D.

3.1 MITIGATIVE MEASURES TO PROTECT WATER QUALITY

Best management practices (BMP's) will be implemented during construction(see project SWPPP) and post construction (permanent) phases in order to address water quality issues for the subject site.

3.2 CONSTRUCTION BMP'S

A detailed description of the construction BMP's will be developed and shown on the final Grading Plans and in the Project SWPPP.

3.3 SITE DESIGN

The site has been designed to maintain the predevelopment rainfall runoff characteristics as much as possible by incorporating the measures in order to reduce post construction storm water runoff discharges.

The site will incorporate a system of bioswales and an sand filter/detention basin as a treatment train approach in order to effectively treat the stormwater from the project site. Drainage from the buildings, impervious parking areas and all exposed impervious surfaces will first be directed into a network of bioswales as primary treatment and then to a secondary treatment facility which will be a sand filter/detention basin.

The basin will be designed to treat the low flow stormwater volumes which will be directed after treatment directly to the stomdrain system. This basin will also act as an onsite detention facility designed to detain the 100 year drainage flows from the site and release flows at current existing drainage flow rates

We have chosen the sand filter/detention basin as the treatment method for the project because of its treatment specifications which show that it will effectively treat the potential pollutants from the parking lot and the drainage directed from the separate building and landscape areas. With proper maintenance and attention to the filtering media the basin will work effectively to treat the stormwater from the site.

The maintenance and inspection requirement for this system can be easily incorporated into the scheduled maintenance and management of the developments landscaping and ground keeping work.

The planned grassy swale locations, infiltration basin/media filter, on-site stormdrain systems, and drainage patterns can be found and are shown on the project conceptual grading plans for this site which will accompany this report as part of the submittal documents.

This stormwater management plan has been prepared upon the current City of Carlsbad SUSMP. This SWMP will be part of the documents submitted for a planned industrial permit (PIP)submittal.

A brief description of the site design principles utilized for this project are described below:

Maintain Pre Development rainfall Runoff Characteristics

Minimize Impervious footprint:

1. The buildings are designed to maximum height to minimize the impervious footprint. Sidewalks are sloped towards landscaping where possible and are designed to minimum widths allowed by code. All additional secondary concrete

paths proposed within the landscaping areas will be sloped into the adjacent landscaping. A portion of the planned fire access driveway near building A portion of the fire access lane will be constructed using plantable "ritter rings" which will allow drainage in this area to pass through grassy vegetation before it is directed to the drainage outlet point.

2. Conserve natural areas and provide buffer zones natural water bodies and the project footprint:

   The project is planned to conserve the existing on-site landscaping and trees to the maximum extent possible. New landscaping is planned for the project development and is shown on the project conceptual landscaping plans. There are no know environmentally sensitive areas on the project site. This project maintains the existing runoff drainage patterns and will not discharge directly into natural drainage systems. Grassy swales are used to direct drainage into landscaping around the planned buildings and from the parking areas.

Minimize Directly Connected Impervious Areas:

3. In order to minimize directly connected impervious areas we have directed roof drainage and exposed parking garage drainage into downspouts which will discharge directly into bioswales that ring the planned building site. It is planned to collect and reuse this stormwater runoff as site irrigation water. The water reuse system will be shown and incorporated into the site landscaping plans. The design, layout and connection to the irrigation system will be performed by others.

   Separating the building roof areas, sidewalks, patio and landscaping from directly discharging onto the impervious parking areas allows better treatment of stromwater flows and minimizes stormwater contact with parking lot areas.

   Pervious pavements may be used for secondary sidewalks and access paths; However, the pervious pavement will have to be underlain by a pervious gravel or sand layers with drainage pipes and a protective liner since the underlying soils have a very high clay content and have a low permeability. In addition, the site requires extensive removal and recompaction of on-site alluvial soils. The recompacted soil will have almost no permeability once it is processed and placed according to geotechnical specifications.

Maximize canopy interception and water conversation Consistent with the Carlsbad Landscape Manual

4. Existing native oak trees, shrubs and onsite landscaping areas will be preserved to the maximum extent practicle. In addition, new landscaping has been placed in and around the buildings with trees and shrubs in order to maximize the canopy rainfall interception. A preliminary landscaping plan has been prepared which shows the planned project landscaping areas and types of plant species to be utilized. This landscaping plan will be submitted with the project conceptual grading plans and other project documents. This plan will be developed based upon the City of Carlsbad standard list of approved planting species. The

landscaping will consist of ornamental plantings and ground covers including turfed areas to provide bio-filtration of storm and non-storm runoff. The goal is to achieve plant establishment expeditiously to reduce erosion. A water efficient irrigation system for these landscape areas will be installed and monitored to reduce over-irrigation and minimize erosion and over watering.

Protect slopes and Channels:

5. Runoff will be directed away from the top of any slopes. Runoff has been conveyed safely from the top of slopes by utilizing brow ditches as shown on the project grading plans
6. Slopes that will be generated as part of this project would be vegetated with native or drought tolerant vegetation as required. All proposed slopes will be vegetated with native or drought tolerant vegetation where practicable consistent with the current City of Carlsbad landscape manual other City requirements
7. No permanent channel crossings are proposed.
8. No energy dissipaters are planned for this project.

3.4 SOURCE CONTROL BMP'S

Design Outdoor Material Storage Areas to Reduce Pollution Introduction:

9. No Outside material storage is planned for the project. The project is designed for commercial office use and will not have fueling islands, wash racks or hazardous material storage on-site.

Design Trash Storage Areas to Reduce Pollution:

10. The enclosure will be paved and designed to not allow run-on from adjoining areas. It will be walled and constructed with roof or awning to minimize direct precipitation from falling on the area for Phase 1. Phase 2 will require that the trash enclosure be relocated amd incorporated into the parking garage. It will be covered and designed as required to minimize stormwater contact.

Use Efficient Irrigation Systems & Landscape Design

11. Rain shutoff devices to prevent over irrigation will be employed to minimize watering during precipitation events. consistent with the current City of Carlsbad Landscape Manual.

12. . A water efficient irrigation system for these landscape areas will be installed and monitored to reduce over-irrigation and minimize erosion and over watering, A landscape plan must be prepared by a licensed landscape architect and incorporate irrigations systems to each landscape area's specific water requirements consistent with the current City of Carlsbad Landscape Manual.The use of flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines will be incorporated into the landscaping design. The landscape plans shall also address herbicide and pesticide management for the project.

Provide Storm water conveyance System Stenciling and Signage:

13. Provide concrete stamping, percelien tile, inset permanaent marking or equivalent as approved by the City of Carlsbad. of all storm water conveyance system inlets and catch basins within the project are with prohibitive language("No Dumping – I live Downstream, satifactroy to the City engineer
14. No public access near channels or creeks is proposed within the project area.

BMP's Applicable to Individual Priority Project Categories

15. No private roads are planned for this project
16. The new driveway planned for the project site will be paved. Drainage from this driveway will be directed to the proposed bioswales and other stromwater treatment devices.
17. No permanent temporary or guest parking is proposed for the site. Phase one parking will be directed to bioswales.
18. No loading docks are planned for the sites.
19. No maintenance bays are planned for the sites
20. No maintenance bays are planned for the sites
21. No Vehicle & equipment Wash areas are planned for the site.
22. No outdoor processing is planned for the site.
23. No outdoor processing is planned for the site
24. No equipment repair is planned for the site
25. Landscaping has been incorporated into the drainage design
26. No overflow parking is planned for the project sites.
27. No retail fueling is planned for the project sites.
28. No retail fueling is planned for the project sites.
29. Any portion of the project site that disturbs any steep hillsides shall be landscaped with deep rooted, drought tolerant plant species selected for erosion control, in accordance with the current landscape technical manual.

Employ Integrated Pest Management Principles:

30. Pesticide reduction will be accomplished by planting pest resistant or well adapted plant varieties, native plants and incorporating a comprehensive landscaping design and plan. A landscape management plan, developed by the landscape architect, will be incorporated into the project. The elements of the plan should consist of public awareness signs, and management of herbicide/pesticide usage.

31. IPM educational materials will be distributed to current owners. We have provided a sample of the handout "Stormwater Pollution Prevention Yard Work (Landscaping, Gardening, Pest) Control" with this report.

Other Controls

An educational component, of source control, directed towards future building owners, and tenants will be and supplied with a set of brochures developed by the County's Environmental Health Department that will be distributed to all building owners and tenants. A copy of the County handouts and CASQUA Fact sheets are supplied in Section 15.

These brochures and handouts will include the following:

1. Stormwater Runoff Pollution Fact Sheet;
2. Stormwater Runoff Pollution Prevention Tips for property owners and tenants;
3. Stormwater Pollution Prevention Yard Work (Landscaping, Gardening, Pest Control);

3.5 TREATMENT CONTROL BMP'S

Treatment Control BMP's include, but are not limited to the following:

1. Bioswales
2. Sand filter/Detention Basin

The treatment control system is designed to meet flow based sizing standards outlined in the latest City of Carlsbad Storm Water Management Manual. Calculations for the proposed structural treatment controls are provided within this report. Operations and Maintenance procedures are also provided within this report.

BIOSWALE

The bioswale swale best management practice (BMP) functions as a soil and plant-based filtration devise that removes pollutants through a variety of physical, biological, and chemical treatment processes. These facilities normally consist of a grass buffer strip, organic layer or mulch layer, water passing over or through the grass buffer strip is subsequently distributed evenly along and within the grass strip. Exfiltration of the stormwater in the grassy swale area is usually through the planting soil into the underlying soils and occurs over a period of days. The bioswale is an effective way to minimize siltation and sediment transport within the stormwater before the water is directed into the primary stormwater treatment system.

Bioswales requires frequent landscaping maintenance, including measures to ensure that the area is functioning properly, as well as maintenance of the landscaping on the practice. In many cases, grassy swale areas initially require intense maintenance, but less maintenance is needed over time. In many cases, maintenance tasks can be completed by a landscaping contractor, who may already be hired at the site. In cold climates the soil may freeze, preventing runoff from infiltrating into the planting soil.

Sand Filter/Detention Basin

We have chosen the sand filter/ detention basin as the primary stromwater treatment control system for this project because of its treatment specifications which show that it will effectively treat the potential pollutants from the parking lot and the drainage directed from the separate building and landscape areas. The stormwater will undergo pretreatment to remove physical and chemical contaminants prior to being directed to the sand filter via the onsite bioswales and the utilization of a settling basin. The basin will be lined with a water proof fabric in order to avoid infiltrating the high clay content subsurface soils. The treatment layer will be designed based upon 0.2 inch of rainfall per hour for each hour of a storm event flow based design method. The basin will be lined with grass to minimize erosion and sedimentation clogging of the filter medium.

Table 3: Treatment Control BMP Selection Matrix

Pollutant of Concern	Treatment Control BMP Categories[9]							
	Veg. Swale /Veg. Filter Strips	Detention Basins[2]	Infiltration Basins & Trenches/Porous Pavement[3][10]	Wet Ponds or Wetlands	Sand Filter or Filtration	Water Quality Inlets	Hydrodynamic Separator Systems[4]	Manufactured/ Proprietary Devices
Sediment/Turbidity Y☒ N☐	H/M ☒	M ☐	H/M ☐	H/M ☐	H/M ☒	L ☐	H/M (L for turbidity) ☐	U ☐
Nutrients Y☒ N☐	L ☒	M ☐	H/M ☐	H/M ☐	L/M ☒	L ☐	L ☐	U ☐
Organic Compounds Y☒ N☐	U ☒	U ☐	U ☐	U ☐	H/M ☒	L ☐	L ☐	U ☐
Trash & Debris Y☒ N☐	L ☒	M ☐	U ☐	U ☐	H/M ☒	M ☐	H/M ☐	U ☐
Oxygen Demanding Substances Y☒ N☐	L ☒	M ☐	H/M ☐	H/M ☐	H/M ☒	L ☐	L ☐	U ☐
Bacteria & Viruses Y☐ N☒	U ☐	U ☐	H/M ☐	U ☐	H/M ☐	L ☐	L ☐	U ☐
Oils & Grease Y☒ N☐	H/M ☒	M ☐	U ☐	U ☐	H/M ☒	M ☐	L/M ☐	U ☐
Pesticides (non-soil bound) Y☒ N☐	U ☐	U ☐	U ☐	U ☐	U ☐	L ☐	L ☐	U ☐
Metals Y☐ N☒	H/M ☐	M ☐	H ☐	H ☐	H ☐	L ☐	L ☐	U ☐

Abbreviations

L: Low removal efficiency H/M: High or medium removal efficiency U: Unknown removal efficiency

Notes

(1) Periodic performance assessment and updating of the guidance provided by this table may be necessary.

(2) Includes grass swales, grass strips, wetland vegetation swales, and bioretention.

(3) Includes extended/dry detention basins with grass lining and extended/dry detention basins with impervious lining. Effectiveness based upon minimum 36-48-hour drawdown time.

(4) Includes infiltration basins, infiltration trenches, and porous pavements.

(5) Includes permanent pool wet ponds and constructed wetlands.

(6) Includes sand filters and media filters.

(7) Also known as hydrodynamic devices, baffle boxes, swirl concentrators, or cyclone separators.

(8) Includes proprietary stormwater treatment devices as listed in the CASQA Stormwater Best Management Practices Handbooks, other stormwater treatment BMPs not specifically listed in this WQMP, or newly developed/emerging stormwater treatment technologies.

(9) Project proponents should base BMP designs on the Riverside County Stormwater Quality Best Management Practice Design Handbook. However, project proponents may also wish to reference the California Stormwater BMP Handbook for New Development and Redevelopment (www.cabmphandbooks.com). The Handbook contains additional information on BMP operation and maintenance.

(10) Note: Projects that will utilize infiltration-based Treatment Control BMPs (e.g., Infiltration Basins, Infiltration Trenches, Porous Pavement) must include a copy of the property/project soils report as Appendix E to the project-specific WQMP. The report must at a Treatment Control BMP (or BMPs) for the project must specifically consider the effectiveness of the Treatment Control BMP for pollutants identified as causing an impairment of Receiving Waters to which the project will discharge. Under F...

3.6 OPERATION MAINTANCE PROCEDURES AND SCHEDULE SCOURCE CONTROL BMP'S

SWMP SOURCE CONTROL MAINTENANCE SCHEDULE - TABLE A

SOURCE CONTROL BMP DESCRIPTION	OPERATION AND MAINTENANCE SCHEDULE FOR SOURCE CONTROL BMP'S				
	O&M RESPONSIBLE PARTY DESIGNEE: PROPERTY OWNER/CC & R'S				
	INSPECTION FREQUENCY	MAINTENANCE FREQUENCY	MAINTENANCE METHOD	SERVICE FREQUENCY	SERVICE METHOD
SLOPE PLANTING/SEEDING	BI-WEEKLY	MONTHLY	LANDSCAPE MAINTENANCE	NA	NA
TRASH ENCLOSURE	WEEKLY	WEEKLY	SECURE ENCL. LIDS/CLEAN	NA	NA
INLET STENCILING	NA	YEARLY	VISUAL/REPAINT	NA	NA
EFFICIENT IRRIGATION	MONTHLY	YEARLY	LINE, VALVE, HEAD CHECK	NA	NA
PARKING LOT SWEEPING	BI-WEEKLY	BI-WEEKLY	N/A	NA	NA

*OWNER PUBLIC EDUCATION OUTREACH PROGRAM. HANDOUTS ON STORM WATER MANAGEMENT SOURCE CONTROL BEST MANAGEMENT PRACTICES TO BE DISTRIBUTED TO ALL PROPERTY OWNERS

3.7 OPERATION MAINTANCE PROCEDURES AND MAINTENANCE SCHEDULE TREATMENT CONTROL BMP'S – BIOSWALES, SAND FILTER BASIN

BIOSWALES

Regular Inspections

Inspection soil and repair eroded areas. Inspect for erosion or damage to vegetation, preferably at the end of the wet season to schedule summer maintenance and before major fall runoff to be sure the strips are ready for winter. However, additional inspection after periods of heavy runoff is desirable. Inspect to ensure grass is well established. If not, either prepare soil and reseed or replace with alternative species. Install erosion control blanket. Check for debris and litter, and areas of sediment accumulation. Inspect health of trees and shrubs.

Maintenance

Water plants regularly. Remove litter and debris bi weekly. Remove sediment after rain events. Remulch void areas as required. Treat and replace diseased areas. Mow turf areas as required to maintain proper grass length. Repair erosion at inflow points. Repair outflow points. Repair outflow structures. Unclog underdrains if required. Regulate soil pH to maintain the correct plant growth. Remove and replace dead and diseased vegetation. Mulch should be replaced every 2 to 3 years or when bare spots appear. Remulch prior to the wet season. Maintain a bi weekly maintenance schedule, incorporated into ongoing landscape maintenance procedures to ensure proper condition of grassy swale is always maintained.

SAND FILTER/DETENTION BASIN

Regular Inspections

Inspection soil and repair eroded areas. Inspect for erosion or damage to vegetation, preferably at the end of the wet season to schedule summer maintenance and before major fall runoff to be sure the strips are ready for winter. However, additional inspection after periods of heavy runoff is desirable. Inspect to ensure grass is well established. If not, either prepare soil and reseed or replace with alternative species. Install erosion control blanket. Check for debris and litter, and areas of sediment accumulation. Inspect health of trees and shrubs.

Inspections and maintenance to ensure that water infiltrates into the subsurface completely (We recommend a 48 hour draw down time) and that vegetation is carefully managed to prevent creating mosquito and other vector habitats.

Observe drain time for the design storm after completion or modification to the facility to confirm that the desired drain time has been obtained

Schedule semiannual inspections for beginning and the end of the wet season to identify potential problems such as erosion of the basin side slopes and invert, standing water, trash and debris and sediment accumulation.

Remove accumulated trash and debris in the basin at the strat and end of the wet season

Inspect for standing water at the end of the wet season

Trim vegetation at the beginning and the end of the wet season to prevent establishment of woody vegetation and for asthetic and vector control reasons

Remove accumulated sediment and regrade when the accumulated sediment volume exceeds 10 % of the basin volume

If erosion is occurring within the basin, revegetate immediately and stabilize with and erosion control much or mat until vegetation cover is established

Maintenance

Water plants regularly. Remove litter and debris bi weekly. Remove sediment after rain events. Remulch void areas as required. Treat and replace diseased areas. Mow turf areas as required to maintain proper grass length. Repair erosion at inflow points. Repair outflow points. Repair outflow structures. Unclog underdrains if required. Regulate soil pH to maintain the correct plant growth. Remove and replace dead and diseased vegetation. Mulch should be replaced every 2 to 3 years or when bare spots appear. Remulch prior to the wet season. Maintain a bi weekly maintenance schedule, incorporated into ongoing landscape maintenance procedures to ensure proper condition of grassy swale is always maintained.

SWMP TREATMENT CONTROL MAINTENANCE SCHEDULE - TABLE B

TREATMENT CONTROL BMP DESCRIPTION	OPERATION AND MAINTENANCE SCHEDULE FOR TREATMENT CONTROL BMP'S				
	O&M RESPONSIBLE PARTY DESIGNEE: PROPERTY OWNER/CC & R'S				
	INSPECTION FREQUENCY	MAINTENANCE FREQUENCY	MAINTENANCE METHOD	SERVICE FREQUENCY	SERVICE METHOD
SAND FILTER	WEEKLY	AS REQUIRED	INSPECTION/TRASH REMOVAL	YEARLY	REPLACE MEDIA IF NECESSARY

3.8 MAINTENANCE COSTS

Bioswales

The estimated annual costs to inspect, maintain, monitor the bioswales approximately $1,000 per year.

Sand Filter Basin

The estimated annual costs to inspect, maintain, monitor, clean the sand filter basin is approximately $2,000 per year.

4.0 MAINTENANCE RESPONSIBILTY

The perpetual maintenance upkeep and monitoring of the proposed BMP will be the responsibility of the property owners and tenants and will be outlined in a permanent Stormwater Quality Best Management Practice Maintenance Agreement(See Section 16.0).

5.O EDUCATION AND OUTREACH

Potential BMP's that could be used by any one performing daily activities on the site that could impact run-off will be provided by the property owners on an as needed basis to thereby reduce pollutant releases to the environment. The property owners will provide information to increase the knowledge of building owners regarding impacts of urban runoff on receiving waters, on-site BMP's incorporated into the project for the planned commercial land use and how to mitigate and minimize these impacts on local receiving waters. County of San Diego brochures and handouts are made part of this report and can be found in Section 13.

The property owners will be notified of their responsibilities pertaining to the BMP's set-forth in Sections 67.807 and 67.808 of the County of San Diego Watershed Protection Stormwater Management, and Discharge Control Ordinance, Ordinance No. 9424 N.S.

Additionally building owners will be advised, by the property owner, of the reporting of illicit discharge responsibilities and provided with the reporting hotlines: (888) 846-0800 and (888) 844-6525.

6.0 FISCAL RESOURCES

Construction, installation and maintenance of the post- development BMP's will be the responsibility of the project developer under a BMP Maintenance Agreement with the City of Carlsbad. The permanent responsibility of the post--development BMP's will be outlined in the final covenants, conditions and restrictions (CC&R's) for the development. Individual property owners and tenants will be responsible for their respective properties. The responsibility to perform landscape maintenance to permanently stabilize graded areas will lie with the same entities.

Most of the post--construction BMP's accrue minimal maintenance costs. Mulching, slope seeding and plantings are maintained as part of continuing landscape maintenance through the project owners and tenants. Landscape Maintenance to permanently stabilize graded areas will be the responsibility of the individual property owners.

7.0 CONCLUSIONS

This SWMP has been prepared to define potential Best Management Practices (BMP's) that satisfy the requirements identified in the following documents:

1. Standard Specifications for Public Works Construction.
2. City of Carlsbad Stormwater Standards Manual for Construction & Permanent Storm Water Best Management Practices Requirements April, 2003.
3. NPDES General Permit for Storm Water Discharges Associated with Construction Activity issued by the State Water Resources Control Board.
4. San Diego Regional Water Quality Control Board Municipal Storm Water Permit (Order Number 2001-01).
5. County of San Diego Low Impact Development Handbook, July 20th, 2007

It has been shown, within this report, that this project can meet the water quality objectives as required in the City of Carlsbad Public Works Department Standard Urban Stormwater Mitigation Plan Storm Water Standards Dated April 2003.

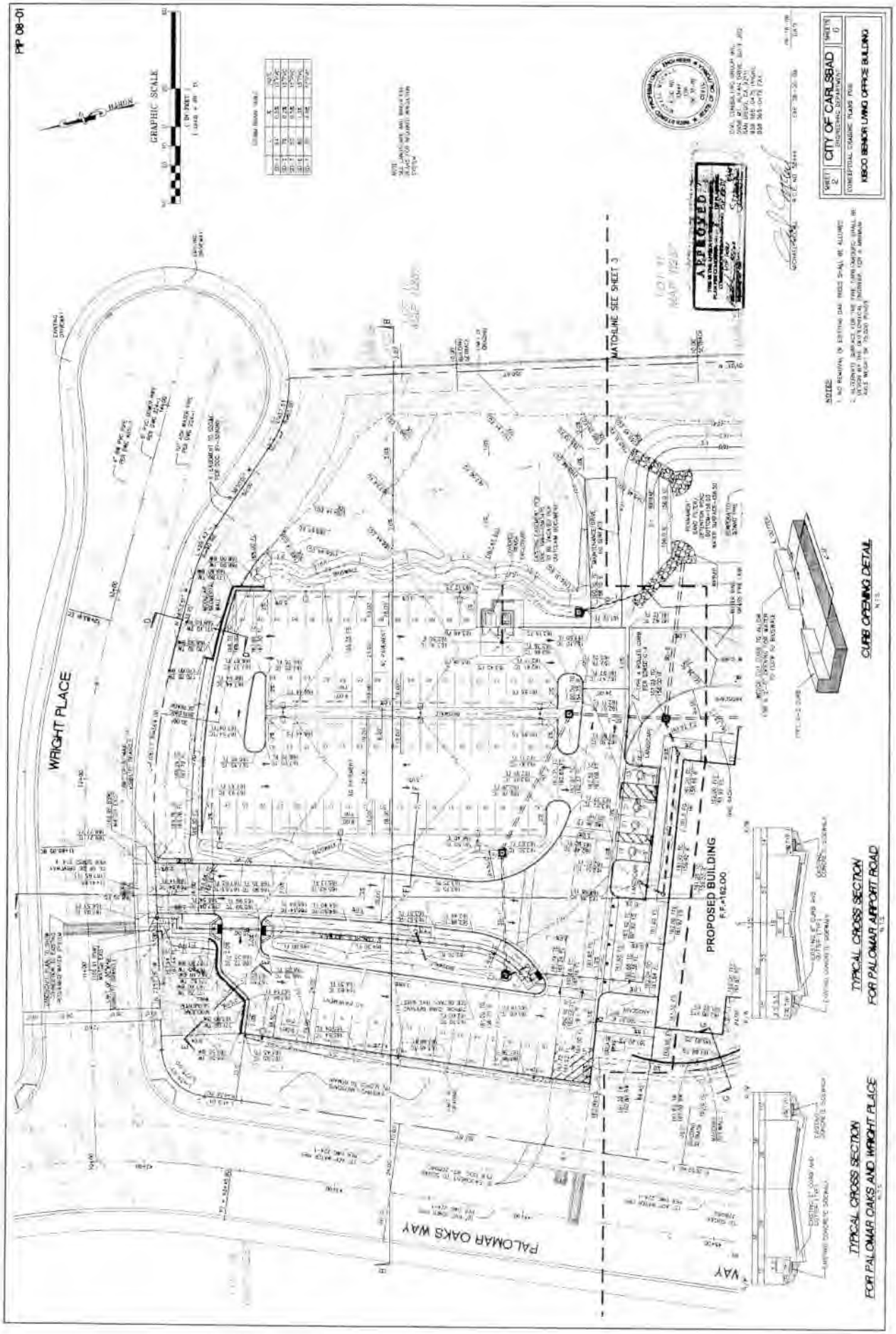
PP 08-01
GRAPHIC SCALE
WRIGHT PLACE
PALOMAR OAKS WAY
MATCHLINE SEE SHEET 3
PROPOSED BUILDING
F.F.=162.00
CURB OPENING DETAIL
TYPICAL CROSS SECTION
FOR PALOMAR AIRPORT ROAD
TYPICAL CROSS SECTION
FOR PALOMAR OAKS AND WRIGHT PLACE
CITY OF CARLSBAD
ENGINEERING DEPARTMENT
CONCEPTUAL GRADING PLANS FOR
NBCO SENIOR LIVING OFFICE BUILDING
APPROVED

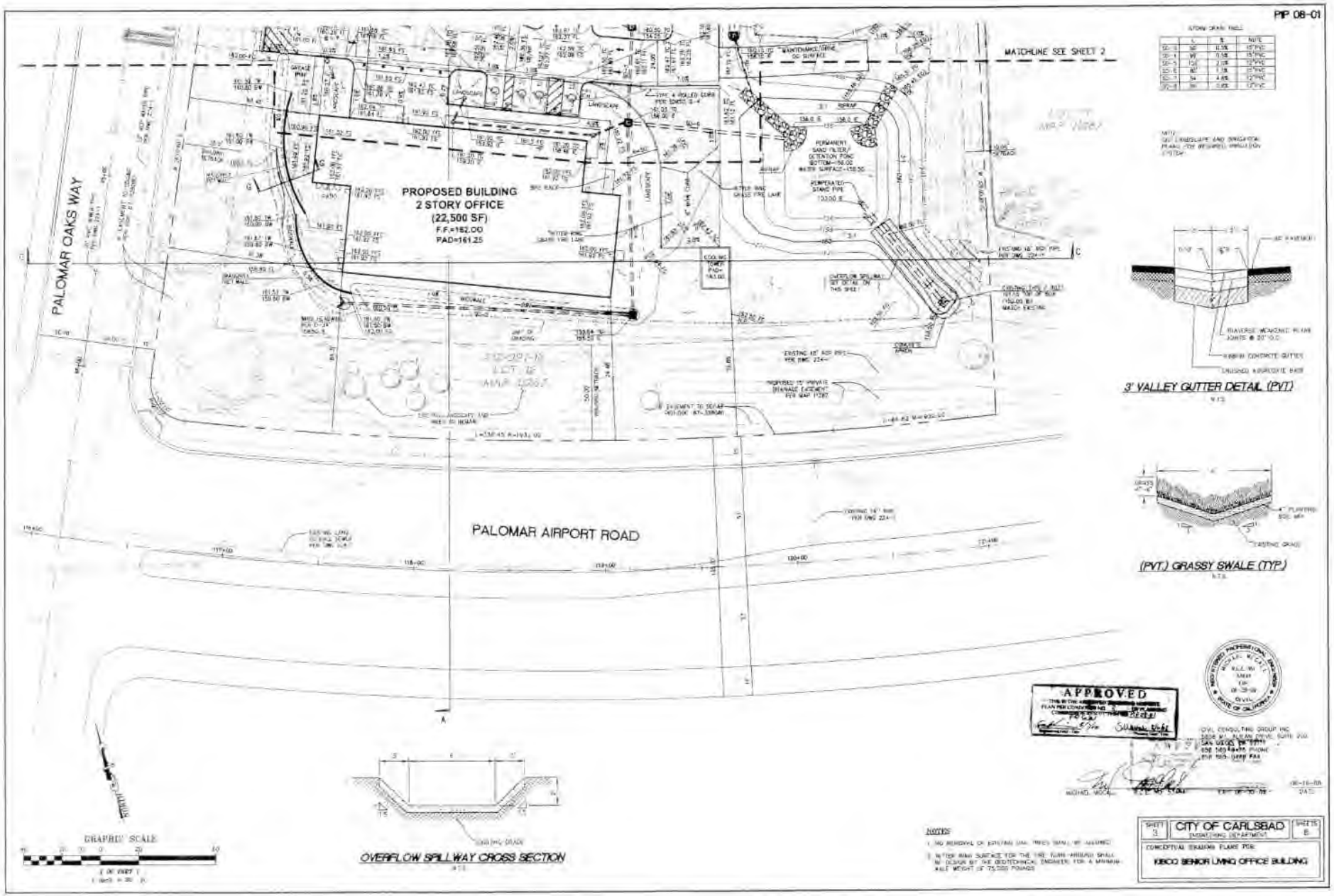
PIP 08-01
MATCHLINE SEE SHEET 2
PALOMAR OAKS WAY
PROPOSED BUILDING
2 STORY OFFICE
(22,500 SF)
F.F.=162.00
PAD=161.25
PERMANENT SAND FILTER/ DETENTION POND
PALOMAR AIRPORT ROAD
3' VALLEY GUTTER DETAIL (PVT)
(PVT.) GRASSY SWALE (TYP.)
OVERFLOW SPILLWAY CROSS SECTION
GRAPHIC SCALE
APPROVED
CITY OF CARLSBAD
ENGINEERING DEPARTMENT
CONCEPTUAL GRADING PLANS FOR:
KBCO SENIOR LIVING OFFICE BUILDING
NOTES

Appendix 2.6
Treatment Control BMP Inspection Form

Refer to Appendix 2.6, Order 2001-01 Section of Annual Report.

Appendix 2.7
Treatment Control BMP Verification Form

Refer to Appendix 2.7, Order 2001-01 Section of Annual Report.

FY 07-08 Development Planning Storm Water Training

March 24, 2008 - June 30, 2008

Date	Dept/Div	# Employees Attending	Training Type	Name of Training or Topics	Location	Sponsor / Presenter
3/25/08	Engineering DS	1	Seminar	LID Applicibility and Options	5201 Ruffin Rd.	SD Copermittees
3/27/08	Engineering DS	6	Staff Meeting	Discussion of effectiveness of as-built LID measures.	1635 Faraday	Jeremy Riddle
4/3/08	Engineering DS	6	Staff Meeting	Update re State Gen Permit, City Stormwater Standards. Discussion of site design BMPs, i.e. vegetated swales, rain gardens, etc.	1635 Faraday	Glen Van Peski
4/9/08	Engineering DS	3	Workshop	Hydro-modification Management and Continuous Simulation Hydrologic Modeling for Plan Reviewers	SD Metro Water Dist.	APWA
4/10/08	Engineering DS	6	Staff Meeting	Discussion regarding hydromod workshop	1635 Faraday	Jeremy Riddle
4/17/08	Engineering DS	7	Staff Meeting	Discussion of treatment trains, preparation of tier SWPPP conditions, review of new product design criteria.	1635 Faraday	David Rick
4/24/08	Engineering DS	7	Staff Meeting	Review of applicibility of grasscrete for LID.	1635 Faraday	Glen Van Peski
5/1/08	Engineering DS	8	Staff Meeting	Discussion re effectiveness of CDS units; LID options for parking lot; comparison of TDS vs. conductivity/resistivity.	1635 Faraday	Steve Bobbett
5/8/08	Engineering DS	8	Staff Meeting	Review of std conditions for basin maintenance (BMP agreement), LID, and hydromodification.	1635 Faraday	Steve Bobbett
5/15/08	Engineering DS	5	Staff Meeting	Review of std conditions for stormwater treatment facilities. Applicibility of stormwater standards for expansion of existing CUPs.	1635 Faraday	Glen Van Peski
5/22/08	Engineering DS	8	Staff Meeting	Review of redevelopment, expansion, and priority project applicibility standards	1635 Faraday	Steve Bobbett
5/29/08	Engineering DS	8	Staff Meeting	BMPs for pvt streets and driveways. LID design options. LEED certification standards.	1635 Faraday	Steve Bobbett

FY 07-08 Development Planning Storm Water Training

March 24, 2008 - June 30, 2008

Date	Dept/Div	# Employees Attending	Training Type	Name of Training or Topics	Location	Sponsor / Presenter
6/3/08	Engineering DS/ Planning/Design/ Engineering	17	Presentation	MWS-Linear Hybrid Storm water Filtration Systems	1635 Faraday	Modular Wetlands
6/3/08			Presentation	BIO CLEAN Environmental Services Inc.	1635 Faraday	
6/12/08	Engineering DS	8	Staff Meeting	Review of revised Stormwater Standards and associated Building Department forms. Review of LID requirements for private streets.	1635 Faraday	Steve Bobbett
6/17/08	Engineering DS	4	Staff Training	Review of water quality laws, construction activities connection to water quality, implementation of construction BMP's, current inspection, plan review and enforcement policies, curent advancements in BMP technologies and SUSMP requirements.	1635 Faraday	Shawn Grandberry
6/19/08	Engineering DS		Staff Meeting		1635 Faraday	
6/26/08	Engineering DS		Staff Meeting		1635 Faraday	

Appendix 2.9
Engineering Standards Manual, 2004

Refer to Appendix 2.9, Order 2001-01 Section of Annual Report.

Appendix 2.10
Engineering Standards Manual, 2008

Refer to Appendix 2.10, Order 2001-01 Section of Annual Report.

REVISIONS TO CHAPTER 7 (GRADING, SITE DESIGN AND LOW IMPACT DEVELOPMENT STANDARDS)

OF

CITY OF CARLSBAD

GENERAL DESIGN STANDARDS

CHAPTER 7 - GRADING AND EROSION CONTROL STANDARDS

1. SOILS REPORTS

A preliminary soils report is required with the submittal of all grading plans. The City Engineer may waive the requirement for the preliminary report for grading projects which have cut or fill with a height of five feet or less or where it can be shown that the preliminary report is not needed to ensure the protection of the health, safety or welfare of the public. All soil reports shall be bound within sturdy covers and signed and sealed by a registered engineer competent in the field of soils engineering. The report shall be neat and logically ordered and include an index, the City project ID, name and location of the project, the name, address and telephone number of the firm which prepared the report and the date of the report. Each page of the report shall be numbered..

The preliminary soils report must be current and must reference the specific project proposed for development. Reports over one year old at time of grading plan submittal and/or reports which reference a different grading proposal must be made current by submittal of an amended report or by submittal of a signed and sealed letter from the soils engineer stating that the findings and conclusions of the previous report are current and valid for the present proposed project.

The preliminary soils report shall at a minimum include the following:

A. A written description of the proposed project or grading work to be done and a preliminary site plan;

B. A location map and geologic history of the site and surrounding region including a synopsis of the existing soils condition, description of the type and extent of the existing vegetation, description of the seismic setting and proximity of nearby faults, and presence of water on the site;

C. A description of the testing done onsite including number and location of the test holes, a map showing the location of the test sites, type and depth of the holes, depth of any found water table, evidence of seismic or landslide activity, reason for performing the test and explanation of the test results;

D. Soil profiles;

E. A description of the laboratory testing done on soil samples including a description of where the samples came from, reason for performing the test, test results and explanation of the test results;

F. Calculations, if any, needed to determine the stability of any slopes which exceed twenty feet in height or which are steeper than two horizontal to one vertical;

G. A summary of the conclusions and recommendations as to the suitability of the site for the proposed project, any building restrictions, any proposed mitigation measures, footing or building foundation recommendations, type and placement of any subsurface drains or any other recommendations as may be determined by the soils engineer;

H. A set of recommended specifications for the grading work to be done on the site.

2. SLOPES

A. No cut or fill slope shall be steeper than two horizontal to one vertical unless specifically approved by the City Engineer. The City Engineer may approve a slope steeper than two to one under the following conditions:

1) The cut or fill at a steeper slope will be stable and not create a hazard to public or private property;

2) The steeper slope is determined by the City Engineer to be necessary to reduce the overall environmental or aesthetic impacts of the grading project;

3) The overall project grading is consistent with the provisions of the Hillside Grading Ordinance;

4) A soils report prepared by a registered engineer qualified in the field of soils engineering is submitted which report shall provide calculations indicating that the proposed slope will have a factor of safety of 1.5 or better for both deep seated and surficial failures under saturated soil conditions.

B. Cut and fill slopes shall be set back from site boundaries in accordance with City of Carlsbad Standard Drawing GS-14.

C. Buildings shall be set back from cut or fill slopes in accordance with City of Carlsbad Standard Drawing GS-15, or as specifically approved by the City Engineer.

D. Terrace drains shall be installed on all manufactured slopes exceeding thirty feet in height. The City Engineer may waive this requirement for slopes with a longitudinal length of one hundred feet or less, or upon the recommendation of a registered soils engineer or geologist that such terrace drain is not necessary for stability or erosion protection. Terrace drains shall be designed to prevent deposition of sand and/or other soil materials within the concrete drain. The minimum longitudinal slope shall be two percent and maximum slope shall be twelve percent. Drainage terraces exceeding eight feet in width need only be paved for a width of eight feet, provided such pavement provides for a minimum channel depth of one foot. Down drains or drainage outlets shall be provided at approximately three hundred foot intervals along the drainage terrace. All such down drains or outlets shall be designed to safely convey the intercepted waters to the point of disposal.

3. SITE DRAINAGE

A. All drainage facilities shall be designed to carry surface waters to the nearest practical street, storm drain, or natural water course approved by the City Engineer. When discharging concentrated flows onto natural ground, the engineer-of-work shall provide appropriate calculations to determine the erosive effects at the point of discharge and immediately downstream from the discharge point. If erosive velocities will occur at the discharge point or immediately downstream, then an appropriately designed rip-rap field or other energy dissipating device shall be installed to mitigate the erosive effects.

B. Graded building pads shall have a minimum slope of one percent towards an adjoining street or an approved drainage course. A lessor slope may be approved by the City Engineer for sites graded in relatively flat terrain, or where special drainage provisions are made. In such cases, the City Engineer may require a supporting recommendation by a registered soils engineer.

C. Berms, swales or other methods and devices shall be provided at the top of cut and fill slopes to prevent surface waters from overflowing onto and damaging the slope face. Special drainage provisions shall be made where a building or structure exists within five feet of the top of a slope.

4. EROSION CONTROL

A. An erosion control plan shall be included as an integral part of all grading plans. The erosion control plan shall be designed to minimize the loss of soil materials from the project site to the maximum extent practicable. Onsite erosion control measures are required for all grading projects regardless of whether or not a proposed or existing sedimentation basin is located downstream from the project site. Engineers are encouraged to use the standard erosion control detail and note sheet available at minimal cost from the Engineering Counter. The erosion control sheet is also available in digital format.

B. All temporary onsite erosion control measures shall be designed to mitigate the erosion impacts of a two year 24-hour storm unless otherwise directed by the City Engineer.

C. Erosion control measures employed on a project site shall include but not be limited to the use of gravel bags, straw and other matting materials, hay bales, siltation fences, sedimentation basins, grassy swales, hydroseeding, straw mulching, check dams or any other measure as may be approved by the City Engineer.

D. For project sites with a graded area of one acre or more, the erosion control plan must also be made to comply with the General Construction Permit requirements of the Regional Water Quality Control Board.

E. All landscaping and irrigation shall be done in accordance with the latest version of the City Landscape Manual.

F. Permanent sedimentation basins shall be designed to capture soils with a particle size of 0.02 mm or greater during a ten year 24-hour storm. The City Engineer may allow the use of 0.074 mm particle size in areas where the discharge of finer soil materials will not adversely affect downstream habitats or land uses. Sedimentation basins shall be adequately designed to retain a minimum five years worth of sediment generated from the contributing hydrologic basin in its fully developed state.

G. Check dams or other erosion control measures shall be installed along all unprotected swales, roads or other drainage courses where the velocity of the drainage runoff exceeds the erosive velocity of the underlying soil material. In the absence of specific soil testing and soil transport calculations which may dictate another design, the distance between check dams shall be as follows:

Slope Gradient	Interval
0 - 4%	100 feet
4 - 10%	50 feet
Over 10%	25 feet

5. STANDARD NOTES

All Grading and Erosion Control Plans shall include the standard grading and erosion control notes and erosion control details as shown on City of Carlsbad Standard Drawing GS22 and GS23.

CHAPTER 7 - GRADING, SITE DRAINAGE AND LOW IMPACT DEVELOPMENT (LID) STANDARDS

1. SOILS REPORTS

A preliminary soils report is required with the submittal of all grading plans. The City Engineer may waive the requirement for the preliminary report for grading projects which have cut or fill with a height of five feet or less or where it can be shown that the preliminary report is not needed to ensure the protection of the health, safety or welfare of the public. All soil reports shall be bound within sturdy covers and signed and sealed by a registered engineer competent in the field of soils engineering. The report shall be neat and logically ordered and include an index, the City project ID, name and location of the project, the name, address and telephone number of the firm which prepared the report and the date of the report. Each page of the report shall be numbered.

The preliminary soils report must be current and must reference the specific project proposed for development. Reports over one year old at time of grading plan submittal and/or reports which reference a different grading proposal must be made current by submittal of an amended report or by submittal of a signed and sealed letter from the soils engineer stating that the findings and conclusions of the previous report are current and valid for the present proposed project.

The preliminary soils report shall at a minimum include the following:

A. A written description of the proposed project or grading work to be done and a preliminary site plan;

B. A location map and geologic history of the site and surrounding region including a synopsis of the existing soils condition, description of the type and extent of the existing vegetation, description of the seismic setting and proximity of nearby faults, and presence of water on the site;

C. A description of the testing done onsite including number and location of the test holes, a map showing the location of the test sites, type and depth of the holes, depth of any found water table, evidence of seismic or landslide activity, reason for performing the test and explanation of the test results;

D. Soil profiles;

E. A description of the laboratory testing done on soil samples including a description of where the samples came from, reason for performing the test, test results and explanation of the test results;

F. Calculations, if any, needed to determine the stability of any slopes which exceed twenty feet in height or which are steeper than two horizontal to one vertical;

G. A summary of the conclusions and recommendations as to the suitability of the site for the proposed project, any building restrictions, any proposed mitigation measures, footing or building foundation recommendations, type and placement of any subsurface drains or any other recommendations as may be determined by the soils engineer;

H. A set of recommended specifications for the grading work to be done on the site.

2. SLOPES

A. No cut or fill slope shall be steeper than two horizontal to one vertical unless specifically approved by the City Engineer. The City Engineer may approve a slope steeper than two to one under the following conditions:

1) The cut or fill at a steeper slope will be stable and not create a hazard to public or private property;

2) The steeper slope is determined by the City Engineer to be necessary to reduce the overall environmental or aesthetic impacts of the grading project;

3) The overall project grading is consistent with the provisions of the Hillside Grading Ordinance;

4) A soils report prepared by a registered engineer qualified in the field of soils engineering is submitted which report shall provide calculations indicating that the proposed slope will have a factor of safety of 1.5 or better for both deep seated and surficial failures under saturated soil conditions.

B. Cut and fill slopes shall be set back from site boundaries in accordance with City of Carlsbad Standard Drawing GS-14.

C. Buildings shall be set back from cut or fill slopes in accordance with City of Carlsbad Standard Drawing GS-15, or as specifically approved by the City Engineer.

D. Terrace drains shall be installed on all manufactured slopes exceeding thirty feet in height. The City Engineer may waive this requirement for slopes with a longitudinal length of one hundred feet or less, or upon the recommendation of a registered soils engineer or geologist that such terrace drain is not necessary for stability or erosion protection. Terrace drains shall be designed to prevent deposition of sand and/or other soil materials within the concrete drain. The minimum longitudinal slope shall be two percent and maximum slope shall be twelve percent. Drainage terraces exceeding eight feet in width need only be paved for a width of eight feet, provided such pavement provides for a minimum channel depth of one foot. Down drains or drainage outlets shall be provided at approximately three hundred foot intervals along the drainage terrace. All such down drains or outlets shall be designed to safely convey the intercepted waters to the point of disposal.

3. SITE DRAINAGE

A. All drainage facilities shall be designed to carry surface waters to the nearest practical street, storm drain, or natural water course approved by the City Engineer. When discharging concentrated flows onto natural ground, the engineer-of-work shall provide appropriate calculations to determine the erosive effects at the point of discharge and immediately downstream from the discharge point. If erosive velocities will occur at the discharge point or immediately downstream, then an appropriately designed rip-rap field or other energy dissipating device shall be installed to mitigate the erosive effects.

B. Graded building pads shall have a minimum slope of one percent towards an adjoining street or an approved drainage course. A lesser slope may be approved by the City Engineer for sites graded in relatively flat terrain, or where special drainage provisions are made. In such cases, the City Engineer may require a supporting recommendation by a registered soils engineer.

C. Berms, swales or other methods and devices shall be provided at the top of cut and fill slopes to prevent surface waters from overflowing onto and damaging the slope face. Special drainage provisions shall be made where a building or structure exists within five feet of the top of a slope.

4. LOW IMPACT DEVELOPMENT (LID)

A. All development projects shall be developed with LID Integrated Management Practices (IMPs) to mimic the site's natural hydrological function. LID uses decentralized, site-based planning and design strategies to manage the quantity and quality of storm water runoff. LID attempts to reduce the amount of runoff by mimicking the natural hydrologic function of the site. Lid focuses on minimizing impervious surfaces and promoting infiltration and evaporation of runoff before it can leave the location of origination. Using small, economical landscape features, LID techniques work as a system to filter, slow, evaporate, and infiltrate surface runoff at the source (reference Mull, K.K., (2005, December) *Selling Low Impact Development: Audiences, Messages, and Media).*

B. LID Design shall generally be in accordance with the latest edition of the County of San Diego *Low Impact Development Handbook, Stormwater Management Strategies* and *Low Impact Development Appendices, San Diego Considerations and LID Fact Sheets.* For additional literature on LID and best management practices consult the reference materials listed in the latest edition of the County of San Diego *Low Impact Development Literature Index.*

C. Stormwater infiltration plans, including permeable pavement, should be reviewed by a qualified, licensed professional to provide a professional opinion regarding the potential adverse geological conditions created by implementation of the plans. Geotechnical conditions such as: slope stability, expansive soils, compressible soils, seepage, groundwater level, and loss of foundation or pavement subgrade strength should be addressed, and where appropriate, mitigation recommendations should be provided. The impact on existing, proposed, and future improvements including buildings, roads and manufactured

slopes must be included in the review.

D. A Storm Water Management Plan (SWMP) prepared in accordance with Title 15 of the Carlsbad Municipal Code and the City s Standard Urban Storm Water Mitigation Plan (SUSMP) shall be submitted concurrent with all development permits for projects determined to meet priority development project criteria, as such term is defined in the Municipal Permit. The SWMP shall describe in detail all proposed LID IMPs to be incorporated into the site design for the proposed development.

E. The post construction BMP site plan prepared in accordance with the SWMP shall be attached to each construction plan (grading, improvement, erosion control, landscape or building) highlighting the BMPs incorporated within the respective plan. The developer/owner/applicant shall be responsible for the construction and/or implementation of all BMPs as shown on the post construction BMP site plan whether or not such BMPs are reflected on the respective construction plans. No changes are to be made to the post construction BMP site plan without the express approval of the City Engineer or his/her designated representative.

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Chapter 11.16 Permits for Work or Encroachments in Public Property

11.16.010 Title.

The ordinance codified in this chapter may be cited as the Right-of-Way Permit Ordinance.(Ord. NS-386 2 (part), 1996)

11.16.020 Definitions.

For the purpose of this chapter, the following words, terms and phrases shall have the following meanings as set out in this section:

A. City engineer means the city engineer of the city of Carlsbad or his designated representative.

B. Encroachment means and includes any tower, pole, pole line, pipe, pipeline, fence, billboard, stand or building, or any structure or object of any kind or character not particularly mentioned in this subsection, which is placed in, under or over any portion of a public place.

C. Facility means any street, highway, curb, gutter, fencing, pipe, pipeline, tube, main, service, trap, vent, vault, manhole, meter, gauge, regulator, valve, conduit, wire, tower, pole, pole line, anchor, cable, junction box, transformer or any other material structure or object of any kind or character, whether enumerated in this subsection or not which is constructed, left, placed or maintained in, upon, along, across, under or over any public place.

D. Improvement plans means the construction plans, prepared by a civil engineer, in accordance with City Standards for the purpose of describing a public improvement to be constructed, repaired, rehabilitated and/or otherwise installed in a public place. The term may also be used to mean the construction plans, prepared by a civil engineer, in accordance with City Standards for the purpose of describing a private improvement to be constructed, repaired, rehabilitated and/or otherwise installed on private property or in a public easement or right-of-way.

E. Plans means the document developed and approved by the city engineer describing the nature and extent of works proposed to be constructed or carried out on a public place.

F. Public place means any public street, highway, way, place, alley, sidewalk, easement, right-of-way, park, square, plaza or other similar public property owned or controlled by the city and dedicated to public use.

G. Redevelopment director means the redevelopment director of the City of Carlsbad or his designated representative.

H. Specification means the Standard Specifications for Public Works Construction (current edition including supplements) written and promulgated by Southern California Chapter American Public Works Association and Southern California District Associated General Contractors or California Joint Cooperative Committee and published by Building News Incorporated, or such other specifications noted on approved plans.

I. Standard drawings means the standard drawings of the City of Carlsbad, adopted and revised by the city engineer and the most recently adopted San Diego Area Regional Standard Drawings.

In addition to the above defined words, terms and phrases, the definition of words, terms and phrases, as described in Chapter 15.04, shall apply to this chapter.

(Ord. NS-386 2 (part), 1996)

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11.16.030 City engineer's authority and responsibilities.
This chapter shall be administered by the city engineer who shall have the responsibility and authority to:

A. Establish the form and procedures for application for right-of-way permits required pursuant to this chapter including the certification of completed applications, the approval of plans, the establishment of files, collection of fees and security deposits;
B. Interpret the provisions of this chapter and advise the public regarding requirements for plans, specifications and special provisions for facilities or encroachments subject to the provisions of this chapter;
C. Establish format and content of plans and standards governing work on facilities or encroachments pursuant to the provisions of this chapter;
D. Issue right-of-way permits upon such conditions as determined are reasonable and necessary to protect the public health, safety and welfare;
E. Consider and approve amendments, including extensions, of any right-of-way permit issued when such amendment is necessary to provide for the safe and efficient movement of traffic or to protect public places, persons or property;
F. The city engineer shall, subject to the authority of the community development director pursuant to Section 1.08.020, administer and enforce the provisions of this chapter. (Ord. NS-386 2 (part), 1996)

11.16.040 Redevelopment director's authority and responsibilities.
In cases where a sign or table is proposed to be placed in the right-of-way within the village redevelopment zone, the redevelopment director shall be the city engineer's designated representative and shall have all of the authority and responsibilities of the city engineer as stated in this chapter. (Ord. NS-386 2 (part), 1996)

11.16.050 Permits--Required.
No person shall do any of the following acts without first obtaining a valid right-of-way permit:

A. Make or cause to be made any excavation or opening, fill or obstruction in, over, along, on, across or through any public place for any purpose whatsoever;
B. Construct or repair or cause to be constructed or repaired any curb, sidewalk, gutter, curb with integral gutter, drive approach, driveway, alley approach, spandrel and cross gutter, wheelchair ramp, A.C. dike, or any other work of any nature covered by the city standard drawings or city policy within a public place; or place, change, renew an encroachment in, over, along or across or through any street right-of-way or public place excepting, however, for or in connection with the installation of poles, guys and anchors constructed for use under franchise for public utility purposes where such poles, guys and anchors do not interfere with or lie within ten feet of existing improvements;
C. Place any banner over, across, on, or along any public place;
D. Plant, remove, cut, cut down, injure or destroy any tree, plant, shrub, or flower growing within any public place excepting necessary pruning or trimming to protect persons or property;
E. Construct or modify or cause to be constructed or modified, any storm drain or conveyor of drainage waters and appurtenant items within a public place;
F. Modify, alter or deface any block wall on or adjacent to public places;
G. Engage in any traffic-control operations in such a fashion as to affect any public place while constructing, demolishing or maintaining any facility;
H. Enter onto or exit from any public place at any location not approved and constructed as a driveway;

I. Install marquees, awnings and building mounted signs which obtrude into a public place. (Ord. NS-386 □2 (part), 1996)

11.16.060 Permits--Application.

A. Any person proposing to do any of the acts described in Section 11.16.050 of this chapter shall make an application for a right-of-way permit to the city engineer.
B. The following information shall be included on the application:
   1. The location, nature and extent of work to be performed;
   2. The proposed date when such work shall be commenced;
   3. The proposed date when work shall be completed;
   4. Such other information as may be required by the city engineer.
C. The city engineer may require the application to contain an encroachment agreement if deemed necessary due to the size, duration, and/or nature of the encroachment. The encroachment agreement shall require removal of the encroachment by the permittee upon reasonable demand by the city engineer, adequate security for performance of such promise, and be in a form acceptable to the city attorney. It may be executed on behalf of the city by the city engineer.
D. If the work proposed to be done requires the making of plans or the setting of stakes, or both, the city engineer may require the application to be accompanied by the necessary plans, which plans shall be prepared by a competent engineer licensed by the State Department of Consumer Affairs.
E. Upon right-of-way permit issuance the application shall become part of the right-of-way permit. (Ord. NS-386 □2 (part), 1996)

11.16.070 Relocation of structures--Removal of encroachment.

The city engineer may require any person who, pursuant to a duly issued right-of-way permit under this chapter, has performed construction work or placed and maintained any encroachment, to move the same at his own cost and expense to such different location as is specified in a written demand of the city engineer, whenever such move is necessary to ensure the safety and convenience of the public or facilitate construction within the right-of-way. The city engineer shall specify in the demand a reasonable time within which the work of relocation must be commenced, and the permittee must commence such relocation within the time specified in the demand and thereafter diligently prosecute the same to completion. Any encroachment agreement required by the city engineer shall specify these requirements and require adequate security to enforce these provisions if the permittee fails to do so. (Ord. NS-386 □2 (part), 1996)

11.16.080 Permits--Commencement and completion of work.

Every permittee shall commence work as stipulated in the right-of-way permit and diligently pursue the work to completion without interruption within the time period required by the right-of-way permit. Right-of-way permits issued under this chapter shall be valid for the period of time specified in the right-of-way permits, unless the city engineer grants a time extension. (Ord. NS-386 □2 (part), 1996)

11.16.090 Permits--Requirements for performance of work.

A. The permittee shall perform the work in a timely manner, in accordance with approved plans, specifications and City Standards and, to the satisfaction of the city engineer.
B. No person shall cause any public improvement or appurtenant work to be performed upon any public place within the city by any person other than a licensed contractor or a public utility.

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C. Any works conducted requiring the temporary, partial or full closure of the traveled or pedestrian right-of-way shall not be commenced until the permittee has obtained a permit therefor pursuant to Title 8 or Title 10 of this code and has been issued a traffic-control permit stipulating the date, time and provisions under which closure may be carried out.

D. As the work progresses, all streets shall be thoroughly cleaned of all rubbish, excess earth, rock and other debris resulting from such work. All cleanup operations at the location of such work shall be accomplished at the expense of the permittee. From time to time, as may be ordered by the city engineer, and in any event immediately after completion of the work, the permittee shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the work. Upon failure to do so, within twenty-four hours after having been notified, the work may be done by the city and the cost thereof charged to the permittee. Whenever it may be necessary for the permittee to excavate through any landscaped area, the area shall be reestablished in a like manner after the excavation has been backfilled as required. All construction and maintenance work shall be done in a manner designed to leave the area clean of earth and debris and in a condition as nearly as possible to that which existed before such work began. The permittee shall not remove, even temporarily, any existing trees or shrubs without first obtaining the consent of the city engineer.

E. All work affecting public improvements or public safety shall be inspected by the city engineer as follows:
   1. No person shall prevent or obstruct the city engineer in making any inspection authorized by this chapter or in taking any sample or in making any test;
   2. Twenty-four-hour notice to the city engineer is required for all inspections;
   3. All work not in conformance with approved plans and specifications is subject to rejection by the city engineer;

   Request for final inspections shall be made in writing. (Ord. NS-386 □2 (part), 1996)

F. Prior to the issuance of a right-of-way permit for a project, the project owner or authorized agent shall:
   1. Provide the city engineer with a completed storm water requirements applicability questionnaire in accordance with SUSMP requirements;
   2. If the project is determined to be a priority development project, then the project owner or authorized agent shall:
      (a) Prepare and submit a storm water management plan in conformance with the requirements of City Standards and Title 15 of this code;

(b) Enter into a Permanent Storm Water Quality Best Management Practices Maintenance Agreement or provide an alternate maintenance mechanism as approved by the city engineer.G. A city approved Construction SWPPP is required to be submitted prior to right-of-way permit issuance in accordance with City Standards and Chapter 15.16.085 of this code for any project which has the potential for adding pollutants to storm water or non-storm water runoff during construction activities, unless an exemption from such requirement is provided pursuant to Chapter 15.16.085 and the Municipal Permit.

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11.16.100 Permits--Acceptance of work.

The city engineer, upon determination by survey or by inspection or by both, that the work has been completed according to the requirements of this chapter and the right-of-way permit, shall issue a certificate of acceptance which shall contain a statement of the location, nature and extent of the work performed under the right-of-way permit. (Ord. NS-386 □2 (part), 1996)

11.16.110 Permits - Denial and revocation.

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A. The city engineer may deny the issuance of a right-of-way permit to any person who refuses or fails to comply with the provisions of this chapter, who is indebted to the city for past permit violations or who in the judgment of the city engineer has repeatedly violated permit procedures or failed to comply with conditions requiring protection of the public health and safety.
B. The city engineer may deny the issuance of a right-of-way permit to any person who refuses to execute an encroachment agreement as required pursuant to Section 11.16.060.
C. Any permittee found in violation of the conditions of a right-of-way permit or the provisions of this chapter shall be given a written notice to comply stipulating the code violation. Upon receipt of a notice to comply, the permittee shall take action to correct the condition of violation within the period stipulated in the notice. If within that period appropriate measures have not been implemented, the city engineer may revoke the right-of-way permit and take any measures required to secure the work site or return the work site to its original condition. The cost of such work may be collected from the permittee. (Ord. NS-386 □2 (part), 1996)
D. The city engineer shall deny the issuance of a right-of-way permit to any person who refuses to comply with all storm water protection provisions of this chapter or Title 15 of this code.

11.16.120 Appeal procedure.

A. An individual may appeal the decision of the city engineer made in regard to administration of this chapter to the city council within ten calendar days following the decision. Appeals shall be in writing, filed with the city clerk and shall state the basis for the appeal. Fees for filing an appeal shall be in an amount as established by resolution of the city council. The decision of the city council shall be final.
B. The city clerk shall thereupon fix a time and place for hearing such appeal. The city clerk shall give notice to the appellant and applicant/permittee of the time and place of hearing by serving the notice personally or by depositing it in the United States Post Office in the city, postage prepaid, addressed to such persons at their last known address. (Ord. NS-386 □2 (part), 1996)

11.16.130 Right-of-way permit fees.

Right-of-way permit fees shall be charged by the city for the processing of a right-of-way application and the issuance of a right-of-way permit. The fee shall be established by resolution of the city council and is for the purpose of defraying the cost of processing an application, issuing the requested right-of-way permit, inspection of works completed under the right-of-way permit and other costs of administrating this chapter. (Ord. NS-386 □2 (part), 1996)

11.16.140 Performance deposits.

(a) As a condition of issuance of a right-of-way permit, the city engineer may require posting of a cash deposit or an equivalent security in a form acceptable to the city attorney. The city engineer may require that up to one hundred percent of any deposit be submitted in the form of a cash deposit. The cash deposit may be used at the discretion of the city engineer to provide for traffic-control, restoration of public facilities or removal from the right-of-way of work, materials or equipment when permittee or the permittee□s agent fails to act in a timely manner to provide for the public health, safety or welfare. The deposit shall otherwise be for the purpose of guaranteeing performance of work contemplated under the permit including removal

of Encroachments, if required. Each deposit shall be accompanied by a right-of-way cash security agreement stipulating the uses and conditions under which the funds may be expended.

(b) The amount of the deposit shall be established by the city engineer based on the size, duration, and/or nature of the encroachment.

(c) Upon completion and acceptance of work under permit, any funds unused shall be refunded to the permittee and any other bonds or security instruments shall be released.

(d) If any deposit or security is not sufficient for the protection of the public interest in the public places, the city engineer may require an additional deposit or an increase in the security in such amount as he determines necessary. The permittee shall, upon demand, deposit the additional cash or security.
Upon failure or refusal to pay, the city engineer may revoke the permit and/or recover the deficiency by appropriate action in any court of competent jurisdiction. Until such deficiency is paid in full, no other permit shall be issued to such permittee.

(e) Where work is to be done by persons or utilities operating under a franchise issued by the city or regulated by the State Public Utilities Commission or utilities operated by governmental agencies, a permit may be granted without making a deposit. In such cases, the permittee shall be liable for the actual cost of any work to be done by the city in restoring the area covered by the permit to the satisfaction of the city engineer. (Ord. NS-386 □2 (part), 1996)

11.16.145 Improvement Plans.

A. Improvement plans shall be prepared in accordance with City Standards and this chapter for all work involving the construction repair and/or major rehabilitation of public improvements with a public place. The city engineer may waive the requirement for preparation of improvement plans if, in the opinion of the city engineer, the improvements are of a size or type that does not warrant the preparation of improvement plans.

B. A separate application for each set of improvement plans, if required, shall be made in advance of submittal for a right-of-way permit. Each application for improvement plan review shall include a completed application form, improvement plans, specifications, engineering calculations, a soils and/or geotechnical investigation, and other such calculations, documentation and information as may be necessary to demonstrate that the improvement work will be carried out in substantial compliance with all city codes, City Standards and the requirements of the Landscape Manual. Each improvement plan review application shall be accompanied by a Construction SWPPP prepared in accordance with the requirements of this chapter, Title 15 and City Standards.

C. An improvement plan review fee and inspection fee shall be charged by the city for the processing of the improvement plan review and inspecting the improvements during construction. The fees shall be established by resolution of the city council and are for the purpose of defraying the cost of processing the improvement plan review and inspecting the improvements during construction. The improvement plan review fee and inspection fee are in addition to any other plan review, inspection and permit issuance fees charged for the issuance of a right-of-way permit or processing grading plans and building plans or, the issuance of permits thereto.

D. Improvement plan applications for which city approval is not granted one year following the date of application shall be deemed withdrawn. The improvement plans and other documents submitted for review may thereafter be returned to the applicant or destroyed by the city engineer. The city engineer may extend the time

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for action by the applicant for a period not exceeding one hundred eighty days upon request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after withdrawal, the applicant shall resubmit a new application and pay new improvement plan review and inspection fees.

E. The city engineer may authorize refunding of the entire improvement plan inspection fee and not more than eighty percent of the improvement plan review fee paid when an application for a improvement plan is withdrawn in accordance with this section. The city engineer shall not authorize refunding of any fee paid except upon written application filed by the original applicant not later than sixty days after withdrawal of the improvement plan application by the applicant, when withdrawn prior to completion of the improvement plan review.

F. Any application in process on the effective date of this code amendment shall be subject to the provisions of this section. The filing date for such application shall be considered to be the effective date of the code amendment.

15.16.146 Improvement Plan Security.

A. The owner, developer or subdivider shall enter into a secured agreement with the city guaranteeing the construction of the public improvements in accordance with this chapter and the improvement security requirements of Chapters 20.16.070 and 20.16.080 of this code, prior to issuance of a right-of-way permit or at such other time as required per the conditions of approval for projects approved pursuant to Titles 20 and 21 of this code.

B. The improvement security release procedures described in Chapter 20.16.090 of this code shall be followed for release of security posted per the requirements of this section.

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11.16.150 Placement of materials or obstruction of streets.

A. No person shall place or maintain any material or any obstruction or impediment to travel in or upon any public place without a permit to do so.

B. Persons violating provisions of this section shall be issued a notice of removal and given a specified time to remove such material, obstruction or impediment. Any failure to comply with the notice is unlawful and a public nuisance endangering the health, safety and general welfare of the public. In addition to any other remedy provided by law for the abatement of such public nuisance, the city engineer may, after giving notice, cause the work necessary to accomplish the removal. The costs thereof may be assessed against the owner or owners of the project creating the obstruction.

C. Notice of removal shall be in writing and mailed to all persons whose names appear on the last equalized assessment roll as owners of real property creating the obstruction at the address shown on the assessment roll. Notice shall also be sent to any person known to the city engineer to be responsible for the nuisance. The city engineer shall also cause at least one copy of such notice to be posted in a conspicuous place on the premises. No assessment shall be held invalid for failure to post or mail or correctly address any notice. The notice shall particularly specify the work required to be done and shall state that if the work is not commenced within twenty-four hours after receipt of such notice and diligently prosecuted (without interruption) to completion, the city shall cause such work to be done, in which case the cost and expense of such work, including incidental expenses incurred by the

city, will be assessed against the property or against each separate lot and become a lien upon such property.

D. If upon the expiration of the twenty-four hour period provided for in subsection C of this section, the work has not been done, or having commenced, is not being performed with diligence, the city engineer shall proceed to do such work or cause such work to be done. Upon completion of such work, the city engineer shall file written report with the city council setting forth the fact that the work has been completed and the cost thereof, together with a legal description of the property against which cost is to be assessed. The city council shall thereupon fix a time and place for hearing protest against the assessment of the cost of such work. The city engineer or the city clerk, if so directed by the council, shall thereafter give notice in writing to the owners of the project in the manner provided in subsection (c) of the hour and place that the city council will pass upon the city engineer s report and will hear protests against the assessments. Such notice shall also set forth the amount of the proposed assessment.

E. Upon the date and hour set for the hearing of protests, the city council shall hear and consider the city engineer s report and all protests, if there are any, and then proceed to confirm, modify or reject the assessments.

F. A list of assessments as finally confirmed by the city council shall be sent to the city treasurer for collection. If any assessment is not paid within ten days after its confirmation by the city council, the city clerk shall cause to be filed in the office of the county recorder a notice of lien, substantially in the following form:

NOTICE OF LIEN

Pursuant to Chapter 11.16, Title 11, of the Carlsbad Municipal Code (Ordinance No. ____), the City of Carlsbad did on the _____ day of _____, 20 ___, cause maintenance and report work to be done in the public right-of-way for the purpose of abating a public nuisance caused by activities related to construction at the property described below. The Council of the City of Carlsbad did on the _____ day of _____, 20 ____, by its Resolution No. _____ assess the cost or portion of the cost thereof upon the real property hereinafter described, and the same has not been paid nor any part thereof, and the City of Carlsbad does hereby claim a lien upon said real properly until the same sum with interest thereon at the maximum rate allowed by law from the date of the recordation of this instrument has been paid in full and discharged of record. The real property hereinbefore mentioned and upon which a lien is hereby claimed is that certain parcel of land in the City of Carlsbad, County of San Diego, State of California, particularly described as follows:

(Description of property)

Dated this _____ day of _____, 20 ___.

City Clerk, City of Carlsbad.

G. From and after the date of recordation of such notice of lien, the amount of the unpaid assessment shall be a lien on the property against which the assessment is made, and such assessment shall bear interest at the maximum rate allowed by law until paid in full. The lien shall continue until the amount of the assessment and all interest thereon has been paid. The lien shall be subordinate to tax liens and all fixed special assessment items previously imposed upon the same property, but shall have priority over all contractual liens and all fixed special assessment liens which may thereafter be created against the property. From and after the date of

recordation of such notice of lien, all persons shall be deemed to have notice of the contents thereof. (Ord. NS-386 □2 (part), 1996)

11.16.160 Holding city harmless--Insurance.
The applicant for a right-of-way permit, as a condition to receiving a right-of-way permit, shall sign a statement that he agrees to indemnify and hold harmless the city, and each officer and employee thereof, from any liability or responsibility for death or injury to persons and loss or damage to property happening or occurring as a result of the design or performance of any work undertaken under any right-of-way permit granted pursuant to the application. The applicant shall be required to provide proof of liability insurance in the amount of at least one million dollars and shall name the city as an additional insured under the insurance policy. The insurance shall be provided by a company satisfactory to the city. Any deductible or self-insured retention under the insurance policy shall be in an amount acceptable to the city. (Ord. NS-386 □2 (part), 1996)

11.16.170 Exemptions.
The city and its employees, acting in their official capacity, are exempt from the requirements set forth in this chapter. (Ord. NS-386 □2 (part), 1996)

Chapter 15.04 GENERAL REGULATIONS

Sections:
15.04.010 Title
15.04.020 Definitions

15.04.010 Title.

This title shall be known as the Grading and Drainage Ordinances. (Ord. NS-385 3, 1996: Ord. NS-293 2 (part), 1994)

15.04.020 Definitions.

For the purpose of this title, the following words or phrases shall be construed as defined in this section:

A. Basin Plan means the Water Quality Control Plan for the San Diego Region (July 1975) and approved by the State Water Resources Control Board, together with subsequent amendments.

B. Best management practices (BMP) means schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, employee training programs, maintenance procedures, and other management practices to prevent or reduce to the maximum extent practicable the discharge of pollutants directly or indirectly to storm water conveyance system and/or receiving waters. Best management practices also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw materials storage. Best management practices also include the use of structural treatment controls designed to remove pollutants from storm water runoff.

C. Building permit means a permit required by and issued pursuant to Chapter 18.04 of this code.

D. Building footprint means the gross floor area of a structure measured at the ground level elevation within the confines of the exterior wall surfaces.

E. Business Activity SWPPP means a storm water pollution prevention plan prepared pursuant to General Industrial Activity Permit or pursuant to Section 15.12.080 for the purpose of 1) identifying and evaluating sources of pollutants associated with business activities that may affect the quality of storm water discharges and authorized non-storm water discharges from a facility; and 2) Identifying and implementing site-specific best management practices to reduce or prevent pollutants associated with business activities in storm water discharges and authorized non-storm water discharges from a facility.

F. California Ocean Plan means the California Ocean Plan: Water Quality Control Plan for Ocean Waters of California adopted by the State Water Resources Control Board effective February 14, 2006, and any subsequent amendment, revision or re-issuance thereof.

G. City Standards means the standards used for the design and construction of public and private improvements in Carlsbad, including grading improvements and storm water best management practices, as contained in the latest edition of the City of Carlsbad City Standards as promulgated by the city engineer.

H. Construction SWPPP means a storm water pollution prevention plan prepared pursuant to the General Construction Permit, Chapters 11.16.090, 15.12.080, 15.16.085 and 18.48.040 of this code and, City Standards for the purpose of 1) identifying and evaluating sources of pollutants associated with construction activities that may affect the quality of storm water

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discharges and authorized non-storm water discharges from a construction site; and 2) identifying and implementing site-specific best management practices to reduce or prevent pollutants associated with construction activities in storm water discharges and authorized non-storm water discharges from a construction site.

I. Development means:

1. The placement or erection of any solid material or structure on land, in water, or under water;
2. The discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste;
3. The grading, removing, dredging, mining, or extraction of any materials;
4. A change in the density or intensity of the use of land, including, but not limited to, a subdivision pursuant to the Subdivision Map Act (Government Code Section 66410, et seq.) and any other division of land, including lot splits, except where the division of land is brought about in connection with the purchase of such land by a public agency for public recreational use;
5. A change in the intensity of the use of water, or of access to water.
6. The construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal entity; and,
7. The removal or harvesting of major vegetation other than for agricultural purposes. As used in this definition, structure includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line. (Source: Government Code Section 65927).

J. Development permit means any permit approval or entitlement issued pursuant to Titles 11, 15,18, 20 or 21 of this code.

K. Development project means any new development or redevelopment with land disturbing activities; structural development, including construction or installation of a building or structure; the creation of impervious surfaces; public agency projects; and, land subdivision.

L. Drainage master plan means the report entitled Master Drainage and Storm Water Quality Management Plan, dated March 1994, and any supplements, revision or modification thereto as may be approved by city council resolution.

M. General Construction Permit means NPDES General Permit for Storm Water Discharges Associated with Construction Activity (Water Quality Order No. 99-08-DWQ, NPDES No. CAS000002) issued by the State Water Resources Control Board, and any amendment, revision or re-issuance thereof. The General Construction Permit establishes a framework for regulating the discharge of storm water runoff from construction activities that encompass one of more acres of soil disturbance.

N. General Industrial Activity Permit means NPDES General Permit for Storm Water Discharges Associated with Industrial Activities (Order No. 97-03-DWQ, NPDES No. CAS 000001) issued by the State Water Resources Control Board, and any amendment, revision or re-issuance thereof. The General Industrial Activity Permit establishes a framework for regulating the discharge of storm water runoff from certain industrial activities as specified in the permit.

O. General Linear Utility Permit means NPDES General Permit for Storm Water Discharges Associated with Construction Activity from Small Linear Underground/Overhead Projects, Water Quality Order No. 2003-0007 issued by the State Water Resources Control Board, and any amendment, revision or re-issuance thereof. The General Linear Utility Permit establishes a framework for regulating the discharge of storm water runoff from small linear underground or overhead utility projects as specified in the permit.

P. Illicit connection means any physical connection (pipe, facility, or other device) to the storm water conveyance system permitted or unpermitted by the City of Carlsbad, which drains illegal discharges either directly or indirectly into a storm water conveyance system.

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Q. Jurisdictional Urban Runoff Mitigation Plan (JURMP) means a plan, prepared pursuant to Municipal Permit, to:
   1. Ensure that discharges from municipal separate storm sewer system do not cause or contribute to degradation of water quality,
   2. Effectively prohibit urban discharges of illicit connections to the municipal separate storm sewer system, and,
   3. Reduce the discharge of pollutants from municipal separate storm sewer system to the maximum extent practicable. When used in the Carlsbad Municipal Code, this refers to the JURMP adopted by the city of Carlsbad.

R. Landscape Manual means the Landscape Manual adopted by city council resolution which contains the policies and requirements for the design, construction and maintenance of landscape and irrigation systems constructed pursuant to a city development approval.

S. Low impact Design (LID) means a storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

T. Maximum extent practicable (MEP) means, with respect to best management practices (BMPs), an individual BMP or group of BMPs which reduces or eliminates the discharge of a pollutant of concern, which have a cost of implementation reasonably related to the pollution control benefits achieved, and which are technologically feasible.

U. Municipal Permit means California Regional Water Quality Control Board San Diego Region Order No. R9-2007-01, NPDES No. CAS0108758 Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority (Municipal Permit), and any amendment, revision or re-issuance thereof.

V. National Pollution Discharge Elimination System (NPDES) Permit means a permit issued by the San Diego Regional Water Quality Control Board or the State Water Resources Control Board pursuant to Chapter 5.5, Division 7 of the California Water Code, to control discharges from point sources to waters of the United States, including, but not limited to:
   1. Municipal Permit;
   2. General Industrial Activity Permit;
   3. General Construction Permit;
   4. General Linear Utility Permit; and,
   4. California Regional Water Quality Control Board, San Diego Region, General De-Watering Permits (Order Numbers 91-10 and 90-31).

W. National Pollution Discharge Elimination System (NPDES) general permit means a permit issued by the State Water Resources Control Board which establishes a framework for regulating the discharge of storm water runoff for certain broad classes of activities, including, but not limited to:
   1. General Construction Permit;
   2. General Industrial Activity Permit; and,
   3. General Linear Utility Permit.

X. Occupancy permit means a permit required or issued pursuant to Chapter 21.60 of this code.

Y. Pollutant means and includes, but is not limited to, solid waste, sewage, garbage, medical waste, wrecked or discarded equipment, radioactive materials, dredged spoil, rock, sand, sediment, silt, industrial waste, and any organic or inorganic substance defined as a pollutant under 40 C.F.R. 122.2 whose presence degrades the quality of the receiving waters in violation of basin plan and California ocean plan standards such as fecal coliform, fecal

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Deleted: (c) . Master drainage plan means the report entitled Master Drainage and Storm Water Quality Management Plan, dated March, 1994, and any supplements, revision or modification thereto as may be approved by city council resolution.

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streptococcus, enterococcus, volatile organic carbon, surfactants, oil and grease, petroleum hydrocarbons, total organic carbon, lead, copper, chromium, cadmium, silver, nickel, zinc, cyanides, phenols, fertilizers, pesticides, herbicides and other biocides.A pollutant also includes any contaminant which degrades the quality of the receiving waters in violation of basin plan and California ocean plan standards by altering any of the following parameters: pH, total suspended and settleable solids, biochemical oxygen demand (BOD), chemical oxygen demand (COD), nutrients, temperature and other narrative standards of the basin plan.

Z. Priority development project means new development and redevelopment project categories listed in section D.1.d(2) of the Municipal Permit.

AA. Planned local drainage facility means any storm drainage facility, flood control facility or water quality enhancement facility identified in the drainage master plan including drainage easements, storm drain pipes, inlet structures, outlet structure, sedimentation and depollutant basins, drop structures, rip rap, junction structures, environmental mitigation measures, water quality monitoring and testing equipment and other improvements necessary to convey, contain or enhance the quality of storm water discharge.

BB. Planned local drainage area (PLDA) means one of four drainage areas within the city identified within the drainage master plan. Separate planned local drainage area (PLDA) fees are established for each of the four drainage areas and were calculated to be equal to or less than the cost of the planned local facility drainage improvements within each respective PLDA. (Ord. NS-293 2 (part), 1994)

CC. Receiving waters means surface bodies of water which serve as receiving points for discharges from the storm water conveyance system, including Encinas Creek, San Marcos Creek, Batiquitos Lagoon, Agua Hedionda Lagoon, San Elijo Lagoon and Buena Vista Lagoon and their tributary creeks, reservoirs, lakes, estuaries, and the Pacific Ocean.

DD. Rainy season means the period of time between October 1 of any year and April 30 of the following year during which the likelihood of rainfall is greater than at other times of the year.

EE. Standard Urban Storm Water Mitigation Plan (SUSMP) means a plan, prepared pursuant to the Municipal Permit, to reduce pollutants and runoff flows from all new development and significant redevelopment projects that fall under priority project categories. When used in the Carlsbad Municipal Code, this refers to the SUSMP prepared by the city of Carlsbad.

FF. Storm water means surface runoff and drainage associated with storm events and snow melt that flows across a surface to the storm water conveyance system or receiving waters. For the purposes of this chapter, storm water runoff and drainage from areas that are in a natural state, have not been significantly disturbed or altered, either directly or indirectly, as a result of human activity, and the character and type of pollutants naturally appearing in the runoff have not been significantly altered, either directly or indirectly, as a result of human activity, shall be considered unpolluted and shall satisfy the definition of storm water in this chapter.

GG. Storm water requirements applicability questionnaire means the questionnaire form, as specified in the SUSMP, filled out and signed by the responsible party submitting an application for a development permit, and used by the city to determine if the development project is required to comply with standard or priority project storm water requirements.

HH. Storm water conveyance system means private and public drainage facilities by which storm water may be conveyed to receiving waters, such as natural drainages, ditches, roads, streets, constructed channels, aqueducts, storm drains, pipes, culverts, street gutters or catch basins.

II. Storm water management plan (SWMP) means a storm water pollution prevention plan prepared in accordance with the SUSMP which describes best management practices to be implemented on a development site during the post construction phase of a project. A storm

Deleted: (e) Project means on any property subject to this chapter, any new building permit or any redevelopment or remodel permit wherein the building footprint is increased by fifty percent or greater over the existing building footprint. (f) Property subject to this chapter means any lot or parcel of land in the city

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water management plan also includes recommended maintenance activities and schedules of maintenance for any structural treatment controls included in the plan. A SWMP is sometimes referred to as a post-construction SWPPP.

JJ. Storm water pollution prevention plan (SWPPP) means a document which describes the on-site program activities and structural treatment control measures to eliminate or reduce to the maximum extent practicable, pollutant discharges to the storm water conveyance system primarily through the application and use of best management practices. A SWPPP is prepared in accordance with the requirements of a NPDES general permit and/or City Standards. The city utilizes three types of SWPPP documents for storm water pollution prevention during different phases of land development and land use activities including the following:

1. Storm Water Management Plan (SWMP);
2. Construction SWPPP; and,
3. Business Activity SWPPP.

KK. Structural treatment control BMP means engineered facilities designed for the treatment of storm water runoff. Structural treatment controls typically use infiltration, filtration, retention/detention, biofiltering and other techniques to remove pollutants from storm water runoff.

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Chapter 15.12 STORM WATER MANAGEMENT AND DISCHARGE CONTROL

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15.12.020 Definitions.
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15.12.010 Purpose and intent.

The purpose of this chapter is to ensure the environmental and public health, safety, and general welfare of the residential, commercial, and industrial sectors of the City of Carlsbad by:

A. Prohibiting non-storm water discharges to the storm water conveyance system.
B. Eliminating discharges to the storm water conveyance system from spills, dumping or disposal of materials other than storm water or permitted or exempted discharges.
C. Reducing pollutants in storm water discharges to the maximum extent practicable, including those pollutants taken up by storm water as it flows over urban areas (urban runoff).
D. Reducing pollutants in storm water discharges in order to achieve applicable water quality objectives for receiving waters within the City of Carlsbad.

The intent of this chapter is to protect and enhance the water quality of the City of Carlsbad receiving waters and wetlands in a manner pursuant to and consistent with the Clean Water Act and Municipal Permit. (Ord. NS-624 □ 1 2002: Ord. NS-394 □ 2 (part), 1997)

15.12.020 Definitions.

When used in this chapter, the following terms shall have the meanings ascribed to them in this section:

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Deleted: A. □Basin plan□means the Water Quality Control Plan for the San Diego Region (July 1975) and approved by the State Water Resources Control Board, together with subsequent amendments.□
B. □Best management practices (BMP)□means schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce to the maximum extent practicable the discharge of pollutants directly or indirectly to storm water conveyance system and/or receiving waters. Best management practices also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw materials storage.□
C. □Building permit□means a permit issued pursuant to Chapter 18.04.□
D. □California ocean plan□means the California Ocean Plan: Water Quality Control Plan for Ocean Waters of California adopted by the State Water Resources Control Board effective July 23, 1997, and any subsequent amendments.□

A. "Clean Water Act" means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 95-117 (33 USCA Section 1251 et seq.), and any subsequent amendments.

B. "County health officer" means the health officer of the County of San Diego Department of Public Health or designee.

C. "Employee training program" means a documented employee training program for all persons responsible for implementing a storm water pollution prevention plan. The employee training program shall include, but is not limited to, the following topics:

1. Laws, regulations, and local ordinances associated with storm water pollution prevention, and an overview of the potential impacts of polluted storm water on the receiving waters of the San Diego region;
2. Proper handling of all materials and wastes to prevent spillage;
3. Mitigation of spills including spill response, containment and cleanup procedures;
4. Visual monitoring of all effluent streams to ensure illicit discharges do not enter the storm water conveyance system;
5. Discussion of the differences between the storm water conveyance system and the sanitary sewer system;
6. Identification of all on-site connections to the storm water conveyance system;
7. Preventive maintenance and good housekeeping procedures;
8. Material management practices employed by the facility to reduce or eliminate pollutant contact with storm water discharge: and
9. Documentation of training and records detailing dates, time, subjects covered and, attendance.

D. "Enforcement agency" means the City of Carlsbad or its authorized agents charged with ensuring compliance with this chapter.

E. "Enforcement official" means the city manager of the City of Carlsbad or his or her designee.

F. "Hazardous materials" means any substance or mixture of substances which is toxic, corrosive, flammable, an irritant, a strong sensitizer, or generates pressure through decomposition, heat or other means, if such a substance or mixture of substances may cause, or contribute to, substantial injury, serious illness or harm to humans, domestic livestock, wildlife, or deterioration of receiving water quality or the environment.

G. "Illegal discharge" means any discharge to the storm water conveyance system that is not composed entirely of storm water, or is expressly prohibited by federal, state, or local regulations, laws, codes, or ordinances, or degrades the quality of receiving waters in violation of any NPDES Permit, the Basin Plan and California Ocean Plan standards.

H. "Parking lot" means an open area, other than a street or other public way, used for the parking of motorized vehicles, whether for a fee or free, to accommodate clients or customers or to accommodate residents of multi-family dwellings (i.e., apartments, condominiums, townhomes, mobile homes, dormitories, group quarters, etc.).

I. "Person" means any individual, organization, business trust, company, partnership, entity, firm, association, corporation, or public agency, including the State of California and the United States of America.

J. "Premises" means any building, lot parcel, real estate, land or portion of land whether improved or unimproved.

K. "Responsible Party" means one or more persons that control, are in possession of or own property that shall be individually or, jointly and severally held responsible for compliance with the provision of this chapter or with any illicit discharge from property controlled, possessed or owned. As defined in this chapter, "property" includes, but is not limited to, real estate, fixtures, facilities or premises of any kind located upon, under or above the real estate. This definition of responsible party does not include the city when an illicit discharge is caused by a person on a public street or on public property.

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Deleted: G. "Development" means: 1. The placement or erection of any solid material or structure on land, in water, or under water; 2. The discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; 3. The grading, removing, dredging, mining, or extraction of any materials; 4. A change in the density or intensity of the use of land, including, but not limited to, a subdivision pursuant to the Subdivision Map Act (Government Code Section 66410, et seq.) and any other division of land, including lot splits, except where the division of land is brought about in connection with the purchase of such land by a public agency for public recreational use; 5. A change in the intensity of the use of water, or of access to water. 6. The construction, reconstruction, demolition, or alteration of the size of any structure, including any fac ... [1]
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L. Wetlands means areas that are inundated or saturated by surface or ground waters at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. (Ord. NS-624 2, 2002: Ord. NS-468 1--3, 1999; Ord. NS-394 2 (part), 1997)

15.12.030 Administration.
The enforcement official shall administer, implement, and enforce the provisions of this chapter. Any powers granted to, or duties imposed upon, the enforcement official may be delegated by the enforcement official to persons in the employ of the City of Carlsbad, or pursuant to contract. When deemed necessary by the enforcement official, the enforcement official shall prepare and present to the city council for approval regulations consistent with the general policies established herein by the city council. The enforcement official shall enforce council approved regulations necessary to the administration of this chapter, and may recommend that the council amend such regulations as conditions require. (Ord. NS-394 2 (part), 1997)

15.12.040 Applicability.
This chapter shall be interpreted to assure consistency with the requirements of the federal Clean Water Act, applicable implementing regulations, and Municipal Permit. (Ord. NS-624 2, 2002: Ord. NS-394 2 (part), 1997)

15.12.050 Prohibited discharges.
The discharge of non-storm water discharges to the storm water conveyance system or to any other conveyance system which discharges into receiving water is prohibited, including, but not limited to:

A. Sewage;
B. Discharges of wash water resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities;
C. Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility including motor vehicles, cement-related equipment, and port-apotty servicing, etc.;
D. Discharges of wash water from mobile operations such as mobile automobile washing, steam cleaning, power washing, and carpet cleaning, etc.;
E. Discharges of wash water from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, and residential areas including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.;
F. Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;
G. Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water;
H. Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related wastes; and
I. Discharges of food-related wastes (e.g., grease, fish processing, and restaurant kitchen mat and trash bin wash water, etc.).

(Ord. NS-624 4, 2002: Ord. NS-468 4, 5, 1999; Ord. NS-394 2 (part), 1997)

15.12.055 Exemptions from discharge prohibitions.
A. The prohibition on discharges shall not apply to any discharge regulated under a NPDES permit issued to the discharger and administered by the state of California pursuant to Chapter 5.5, Division 7, of the California Water Code, provided that the discharger is in compliance with all requirements of the permit and other applicable laws and regulations.

Deleted: W. Storm water means surface runoff and drainage associated with storm events and snow melt that flows across a surface to the storm water conveyance system or receiving waters. For the purposes of this chapter, storm water runoff and drainage from areas that are in a natural state, have not been significantly disturbed or altered, either directly or indirectly, as a result of human activity, and the character and type of pollutants naturally appearing in the runoff have not been significantly altered, either directly or indirectly, as a result of human activity, shall be considered unpolluted and shall satisfy the definition of storm water in this chapter.
X. Storm water conveyance system means private, natural and publicly owned facilities within the city of Carlsbad by which storm water may be conveyed to receiving waters of the United States, including any roads with drainage systems, streets, catch basins, curbs, gutters, ditches, pipes, natural and man-made channels or storm drains.
Y. Storm water pollution prevention plan means a document which describes the on-site program activities to eliminate or reduce to the maximum extent practicable, pollutant discharges to the storm water conveyance system primarily through the application and use of BMPs. A storm water pollution prevention plan prepared and implemented pursuant to any NPDES Storm Water Permit shall meet the definition of a storm water pollution prevention plan for the purposes of this chapter.
Z. System means storm water conveyance system, as defined herein. ... [8]

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Proof of compliance with such permit may be required in a form acceptable to the city prior to or as a condition of a subdivision map, site plan, building permit, or development improvement plan; upon inspection of the facility; during any enforcement proceeding or action; or for any other reasonable cause.

B. Discharges from the following activities will not be considered a source of pollutants to the storm water conveyance system or receiving waters and are exempt from the definition of non-storm water discharge when properly managed as required by applicable federal, state and local laws, regulations or codes:

1. Water line flushing;
2. Landscape irrigation and lawn watering;
3. Diverted stream flows;
4. Rising ground waters or springs;
5. Uncontaminated pumped ground water not subject to any applicable NPDES permit;
6. Discharges from potable water sources not subject to any applicable NPDES permit;
7. Foundation and footing drains;
8. Air conditioning and refrigeration condensation;
9. Natural springs;
10. Water from crawl space pumps;
11. Individual residential car washing;
12. Flows from riparian habitats and wetlands;
13. Dechlorinated swimming pool discharges;
14. Emergency firefighting; and,
15. Uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)].

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C. The prohibition of discharges shall not apply to any discharge which the enforcement official, the county health officer, the State or San Diego Regional Water Quality Control Board, or U.S. Environmental Protection Agency determines in writing are necessary for the protection of the environment, water quality, and public health and safety. (Ord. NS-624 □5, 2002)

15.12.060 Discharge in violation of permit.

Any discharge that would result in or contribute to a violation of Municipal Permit either separately considered or when combined with other discharges, is prohibited. Liability for any such discharge shall be the responsibility of the person(s) causing or responsible for the discharge. (Ord. NS-624 □6, 2002: Ord. NS-394 □2 (part), 1997)

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15.12.070 Illicit connections.

It is prohibited to establish, use, maintain, conceal or continue illicit connections to the storm water conveyance system, regardless of whether such connections were made under a permit or other authorization or whether permissible under the law or practices applicable or prevailing at the time of the connection except as authorized in Section 15.12.050. (Ord. NS-394 □2 (part), 1997)

15.12.080 Reduction of pollutants contacting or entering storm water required.

A. It is unlawful for any person not to utilize best management practices to the maximum extent practicable to eliminate or reduce pollutants entering the city□s storm water conveyance system.

B. In order to reduce the risk of contamination of storm water and the discharge of non-storm water or pollutants to the city□s storm water conveyance system, the enforcement official may require the person(s) conducting the following activities to implement best management practices to the maximum extent practicable:

1. Automobile, airplane, boat, and/or vehicle repair, service, fueling, maintenance, washing, storage, and/or parking;

2. Landscape and garden care activities including application of related products, such as pesticides, herbicides, and fertilizers;
3. Building remodeling, repair and maintenance, including, but not limited to: cement mixing, repair or cutting, masonry, plumbing, painting and/or coating;
4. Impervious surface or building washing or cleaning, including pressure washing or steam cleaning;
5. Storage and disposal of household hazardous waste (e.g. paints, used motor oil, cleaning products, pesticides, herbicides);
6. Disposal of pet waste;
7. Storage and disposal of green waste;
8. Mobile carpet, drape or furniture cleaning;
9. Pool, spa, jacuzzi, or fountain cleaning, servicing, or repair;
10. Pest control;
11. Plant growing including: farmlands, fields, nurseries, greenhouses, and botanical gardens.

C. Persons conducting an activity or activities that the enforcement official determines may contribute to an illegal discharge to the storm water conveyance system, and/or a tributary to a Clean Water Act Section 303(d) impaired water body, where the site or source generates pollutants for which the water body is impaired; and/or any person within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water may also be subject to subsection 15.12.080(B.).

D. Business Activity Storm Water Pollution Prevention Plan (SWPPP). When the enforcement official determines that a person in the course of conducting a business-related activity causes, has the potential to cause, or contributes to a violation of the water quality standards set forth in the San Diego Basin Plan or California Ocean Plan, or conveys pollutants to receiving waters that may cause or contribute to the deterioration of water quality, then the enforcement official may require the person to develop and implement a Business Activity SWPPP that includes the implementation and use of best management practices, and an employee training program. This section applies, but is not limited to:

1. Persons conducting maintenance, storage, manufacturing, assembly, equipment operations, vehicle loading, and/or cleanup activities partially or wholly out of doors;
2. Persons conducting automobile, airplane, boat, and/or equipment mechanical service, repair, maintenance, fueling, cleaning and/or parking; marinas; mobile automobile or other vehicle washing and/or parking; retail or wholesale fueling; mobile carpet, drape or furniture cleaning; pest control services; eating and drinking establishments; cement mixing, repair or cutting; masonry; plumbing; painting and coating; surface or building washing or cleaning services, including pressure washing or steam cleaning; botanical or zoological gardens and exhibits; landscaping and lawn and garden services; nurseries and greenhouses; golf courses, parks and other recreational areas/facilities; cemeteries; pool and fountain cleaning; or port-a-potty servicing;
3. Persons owning or operating a parking lot or an impervious surface (including, but not limited to, service station pavements, sidewalks, patios and paved private streets and roads) used for automobile-related or similar purposes shall clean those surfaces as frequently and as thoroughly as is necessary, in accordance with best management practices, to prevent the discharge of pollutants to the city's storm water conveyance system. Sweepings or cleaning residue from parking lots or impervious surfaces shall not be swept or otherwise made or allowed to enter any storm water conveyance system, gutter, or roadway, but must be disposed of in accordance with regional and local solid waste procedures and regulations.
   Persons owning or operating a parking lot or impervious surfaces used for similar purposes shall clean those surfaces thoroughly as is necessary to prevent the

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accumulation and discharge of pollutants to the storm water conveyance system to the maximum extent practicable, but not less than once prior to each rainy season. Sweepings or cleaning residue from parking lots or said impervious surfaces shall not be swept or otherwise made or allowed to enter the gutter roadway or storm water conveyance system.

E. Development, Grading or Construction Activities. Any person engaged in development, grading or construction in the City of Carlsbad shall utilize best management practices to prevent pollutants from entering the storm water conveyance system by complying with City Standards, all applicable local ordinances, including the Chapter 15.16 of the Carlsbad Municipal Code, the standard specifications for public works construction, when performing public work, and, required provisions of all applicable NPDES Permits.
In order to reduce the risk of contamination of storm water and the discharge of non-storm water or pollutants to the city s storm water conveyance system, the enforcement official may require the person conducting the development, grading or construction activities to prepare and implement a Construction SWPPP in compliance with City Standards and/or to implement best management practices to the maximum extent practicable.

F. No person shall stand or park any vehicle or equipment on any street for the purpose of washing, greasing, repairing, and/or maintaining the vehicle or equipment, except for repairs necessitated by an emergency.

G. No person shall stand or park any vehicle or equipment on any public street, if such vehicle or equipment is determined by the enforcement official to be leaking fluids such as oils or other fluids that contribute or have the potential to contribute a discharge of pollutants to the storm water conveyance system and/or the receiving waters.

H. Other activities not covered by sections B, C, D, E and F of this section.
In order to reduce the risk of contamination of storm water the discharge of non-storm water or, pollutants to the city s storm water conveyance system, the enforcement official may require the person conducting any activity not listed in sections B, C and D above, to implement best management practices to the maximum extent practicable, if the enforcement official determines that the activity has the potential to discharge pollutants or is known to discharge pollutants to the storm water conveyance system or receiving waters.

I. Storm Water Management Plan (SWMP). Any project issued a development permit shall comply with all applicable best management practices and low impact development (LID) requirements of the Municipal Code, Standard Urban Storm Water Mitigation Plan (SUSMP), City Standards and this code including but not limited to the following:

1. All development permit applications for priority development projects shall be accompanied by a SWMP prepared pursuant to the SUSMP. No development permit shall be approved or issued unless the following requirements have been met:
   a. The city engineer has approved the SWMP in accordance with the SUSMP; and,
   b. The development project complies with all best management practices specified in the approved SWMP.
2. No development permit shall be issued for a priority development project without ensuring that all structural treatment control best management practices, as specified in the approved SWMP, will be maintained in compliance with the requirements of the Municipal Permit, JURMP and SUSMP. To ensure maintenance of the structural treatment control best management practices, the owner of the development site shall enter into a Permanent Storm Water Quality Best Management Practices Maintenance Agreement or provide an alternate maintenance mechanism as approved by the enforcement official.

(Ord. NS-624 7, 2002: Ord. NS-394 2 (part), 1997)

15.12.090 Storm water conveyance system protection.

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Every person owning property through which a storm water conveyance system passes, and such person□s lessee or tenant, shall keep and maintain that part of the storm water conveyance system within the property free of trash, debris, excessive vegetation, and other obstacles which would pollute, contaminate or significantly retard the flow of water through the storm water conveyance system.

Every person shall maintain existing privately owned storm water conveyance structures within or adjacent to a storm water conveyance system, so that such structures do not become a hazard to the use, function or physical integrity of the storm water conveyance system.

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Every person shall not remove healthy banks of vegetation beyond that actually necessary for such maintenance which shall be accomplished in a manner that minimizes the vulnerability of the storm water conveyance system to erosion; and shall be responsible for maintaining that portion of the storm water conveyance system that is within their property lines in order to protect against erosion and degradation of the storm water conveyance system originating or contributed from their property.

No person shall commit or cause to be committed any of the following acts, unless a written permit has first been obtained from the city and the appropriate state or federal agencies, if applicable:

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A. Discharge pollutants into or connect any pipe or channel to the storm water conveyance system;
B. Modify the natural flow of water in a storm water conveyance system;
C. Carry out developments within thirty feet of the center line of any storm water conveyance system or twenty feet of the edge of a storm water conveyance system, whichever is the greater distance, unless such development is approved pursuant to a development permit issued in compliance with Titles 19, 20 and 21 of this code;
D. Deposit in, plant in, or remove any material from a storm water conveyance system including its banks except as required for necessary maintenance;
E. Construct, alter, enlarge, connect to, change or remove any structure in a storm water conveyance system; or
F. Place any loose or unconsolidated material along the side of or within a storm water conveyance system or so close to the side as to cause a diversion of the flow, or to cause a probability of such material being carried away by storm waters passing through such a storm water conveyance system.
G. The above requirements do not supersede any requirements set forth by the California Department of Fish and Game Stream Alteration Permit process. (Ord. NS-624 □8, 2002: Ord. NS-468 □6, 1999: Ord. NS-394 □2 (part), 1997)

15.12.095 Structural treatment control BMP maintenance requirement.

A. Every person owning property which includes a structural treatment control best management practice (BMP), installed pursuant to a city approved Storm Water Management Plan, shall:
   1. Insure that each and every city approved structural treatment control BMP is operating effectively and has been adequately maintained; and,
   2. Provide an annual verification of the effective operation and maintenance of each and every city approved structural treatment control BMP by the party responsible for the maintenance of the structural treatment control BMP. The annual verification shall be submitted to the enforcement official in a format as approved by the city prior to the start of the rainy season.

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B. The enforcement official shall have the authority to conduct an inspection of any property containing a city approved structural treatment control BMP to enforce the provision of this section in accordance with the inspection provisions specified in section 15.12.100 and 15.12.110 of this chapter.

15.12.100 Authority to inspect.

A. During normal and reasonable hours of operation, the enforcement official shall have the authority to conduct an inspection to enforce the provisions of this chapter, and to ascertain whether the requirements of this chapter are being met. The enforcement official has the authority to inspect all publicly visible and accessible areas during reasonable times without the permission of the property owner or representative, as long as those areas are not specifically designated as no public access areas. If inaccessible or limited access areas are to be inspected, an inspection may be conducted after the enforcement official has presented the proper credentials and the owner, occupant, and or facility operator authorizes entry. If the enforcement official is unable to locate the owner or other persons having charge or control of the premises, or the owner, occupant, and/or facility operator refuses the request for entry, the City of Carlsbad is empowered to seek assistance from any court of competent jurisdiction in obtaining entry.

After obtaining authorized entry to a business or facility, the enforcement official may:

1. Inspect the premises at all reasonable times.
2. Carry out any sampling activities or install devices to conduct sampling or metering operations necessary to enforce this chapter, including taking samples from the property which the enforcement official reasonably believes is currently, or has in the past, caused or contributed to causing an illegal storm water discharge to the storm water conveyance system. Upon request by the property owner or his or her authorized representative, split samples shall be given to the person from whose property the samples were obtained.
3. Conduct tests, analyses and evaluations to determine whether a discharge of storm water is an illegal discharge or whether the requirements of this chapter are met.
4. Photograph any effluent stream, material or waste, material or waste container, container label, vehicle, waste treatment process, waste disposal site connection, or condition believed to contribute to storm water pollution or constitute a violation of this chapter.
5. Review and obtain a copy of the Industrial Activity Storm Water Pollution Prevention Plan, the hazardous materials release response plan and inventory, and/or any other documents, permits, manifests, logs or records that may be required of the facility from local, state or federal laws, regulations or codes in order to conduct operations or business on the premises.
6. Require the facility operator to retain evidence, as instructed by the enforcement official, for a period not to exceed thirty days.
7. Review and obtain copies of all storm water monitoring data compiled by the facility, if such monitoring is required of the facility. (Ord. NS-624 □9, 2002: Ord. NS-394 □2 (part), 1997)

15.12.110 Inspection procedures - Additional requirements.

During the inspection, the enforcement official shall comply with all reasonable security, safety, and sanitation measures. In addition, the enforcement official shall comply with reasonable precautionary measures specified by the owner and/or occupant or facility operator.

At the conclusion of the inspection, and prior to leaving the site, the enforcement official shall make every reasonable effort to review with the owner and/or occupant or the facility operator each of the violations noted by the enforcement official and any corrective actions that may be necessary. A report listing any violation found by the enforcement official during the inspection shall be kept on file by the enforcement agency. An inspection report shall be provided to the

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owner and/or occupant or facility operator, or left at the premises after being signed by a designated representative of the facility. If corrective action is required, then the occupant, facility owner, and/or facility operator shall implement corrective actions based upon a written corrective action plan. The corrective action plan shall be submitted to the enforcement agency for review and approval and should state the corrective actions to be taken and the expected dates of completion. Failure to implement a corrective action plan constitutes a violation of this chapter.

All enforcement officials shall have adequate identification. Enforcement officials and other authorized personnel shall identify themselves when entering any property for inspection purposes or when inspecting the work of any contractor.

With the consent of the property owner or occupant, or pursuant to a search warrant, the enforcement official is authorized to establish on any property that discharges directly or indirectly to the municipal storm water conveyance system such devices as are necessary to conduct sampling or metering operations. During all inspections as provided herein, the enforcement official may take samples of materials, wastes, and/or effluent as deemed necessary to aid in the pursuit of the investigation or in the recordation of the activities onsite. (Ord. NS-394 □2 (part), 1997)

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15.12.120 Containment, cleanup, and notification of spills.

Any person owning or occupying any premises who has knowledge of any release of materials, pollutants or waste which may result in pollutants or non-storm water discharges entering any storm water conveyance system shall immediately take all reasonable action to contain, minimize, and clean up such release. Such person shall notify the City of Carlsbad of the occurrence and any other appropriate federal, state or county agency of the occurrence as soon as possible, but no later than twenty-four hours from the time of the incident□s occurrence. (Ord. NS-624 □10, 2002: Ord. NS-394 □2 (part), 1997)

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15.12.130 Testing, monitoring or mitigation requirements.

A. The enforcement official may require that any person engaged in any activity and/or owning or operating any facility which causes or contributes to storm water pollution or contamination, illegal discharges, prohibited discharges and/or discharge of non-storm water to the storm water conveyance system perform monitoring, including physical and chemical monitoring and/or analyses and furnish reports as the enforcement official may specify if:
   1. The person, or facility owner or operator, fails to eliminate illegal or prohibited discharges within a specified time after receiving a written notice to do so by the enforcement official;
   2. The enforcement official has documented repeated violations of this chapter by the person or facility owner or operator which has caused or contributed to storm water pollution.

      It is unlawful for such person or facility owner or operator to fail or refuse to undertake and provide the monitoring, analyses, and/or reports specified. Specific monitoring criteria shall bear a relationship to the types of pollutants which may be generated by the person□s activities or the facility□s operations. If the enforcement agency has evidence that a pollutant is originating from a specific source or premises, then the enforcement agency may require monitoring for that pollutant regardless of whether said pollutant may be generated by routine activities or operations. The person or facility owner or operator shall be responsible for all costs of these activities, analyses and reports.
B. Any persons required to monitor pursuant to subsection A of this section, shall implement a storm water monitoring program including, but not limited to, the following:
   1. Routine visual monitoring for dry weather flows;
   2. Routine visual monitoring for spills which may pollute storm water runoff;

3. A monitoring log including monitoring date, potential pollution sources, as noted in parts 1 and 2 of this section B, and a description of the mitigation measures taken to eliminate any potential pollution sources;
4. All samples must be collected using approved procedures and guidelines as set forth by federal Environmental Protection Agency (EPA) approved protocols; and,
5. The samples must be analyzed by a State of California certified laboratory qualified to undertaken such analyses.

C. The enforcement official may require a person, or facility owner or operator, to install or implement storm water pollution reduction or control measures, including, but not limited to, process modification to reduce the generation of pollutants if:
1. The person, or facility owner or operator fails to eliminate illegal or prohibited discharges after receiving a written notice from the enforcement official;
2. The person, or facility owner or operator, fails to implement a storm water pollution prevention plan, as required by the enforcement official; or,
3. The enforcement official has documented repeated violations of this chapter by any such person or facility owner or operator which has caused or contributed to storm water pollution.

D. If testing, monitoring or mitigation required pursuant to this chapter are deemed no longer necessary by the enforcement official, then any or all of the requirements contained in subsections A, B, and C of this section may be discontinued.

E. A storm water monitoring program prepared and implemented pursuant to any state-issued NPDES General Permit shall be deemed to meet the requirements of a monitoring program for the purposes of this chapter. (Ord. NS-624 □11, 2002: Ord. NS-394 □2 (part), 1997)

15.12.140 Concealment.
Causing, permitting, aiding, abetting or concealing a violation of any provision of this chapter is unlawful and shall constitute a separate violation of this chapter. (Ord. NS-394 □2 (part), 1997)

15.12.150 Administrative code enforcement powers and procedures.
The enforcement agency and enforcement official can exercise any code enforcement powers and procedures as provided in Title 1 of this code. In addition to the general enforcement powers and procedures provided in Title 1 of this code, the enforcement agency and enforcement official have the authority to utilize the following administrative remedies as may be necessary to enforce this chapter:

A. Cease and Desist Orders. When the enforcement official finds that a discharge has taken place or is likely to take place in violation of this chapter, the enforcement official may issue an order to cease and desist such discharge, practice, or operation likely to cause such discharge and direct that those persons not complying shall:
1. Comply with the applicable provisions and policies of this chapter;
2. Comply with a time schedule for compliance; and,
3. Take appropriate remedial or preventive action to prevent the violation from recurring.

B. Notice to Clean, Test and/or Abate. Whenever the enforcement official finds any oil, earth, dirt, grass, weeds, dead trees, tin cans, rubbish, refuse, waste or any other material of any kind, in or upon the sidewalk abutting or adjoining any parcel of land, or upon any parcel of land or grounds, which may result in an increase in pollutants entering the city□s storm water conveyance system or a non-storm water discharge to the city□s storm water conveyance system, the enforcement official may issue orders and give written notice to remove same in any reasonable manner. The recipient of such notice shall undertake the activities as described in the notice.

C. Stop Work Orders. Whenever any work is being done contrary to the provisions of this chapter, the enforcement official may order the work stopped by notice in writing served on

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any person engaged in performing or causing such work to be done, and any such person shall immediately stop such work until authorized by the enforcement official to proceed with the work.

D. Permit or License Suspension, Denial or Revocation. Violations of this chapter may be grounds for permit or license suspension or revocation, including but not limited to building permits, right-of-way permits, grading permits and conditional use permits.

E. Civil Penalties. Any person who violates any of the provisions of this chapter, fails to prepare or implement a corrective action plan when requested by the enforcement official, fails to implement a storm water monitoring plan, violates any cease and desist order or notice to clean and abate, or fails to adopt or implement a storm water pollution prevention plan as directed by the enforcement official shall be liable for a civil penalty not to exceed two thousand five hundred dollars for each day such a violation exists. The responsible party shall be charged for the full costs of any investigation, inspection, or monitoring survey which led to the detection of any such violation, for abatement costs, and for the reasonable costs of preparing and bringing legal action under this subsection. In addition to any other applicable procedures, the enforcement agency may utilize the lien procedures listed in Section 15.12.150(F) to enforce the responsible party's liability. The responsible party may also be liable for compensatory damages for impairment, loss or destruction to water quality, wildlife, fish and aquatic life.

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F. The enforcement official shall take all appropriate legal steps to collect these obligations, including referral to the city attorney for commencement of a civil action to recover said funds. If collected as a lien, the enforcement official shall cause a notice of lien to be filed with the county recorder, inform the county auditor and county recorder of the amount of the obligation, a description of the real property upon which the lien is to be recovered, and the name of the agency to which the obligation is to be paid. Upon payment in full, the enforcement official shall file a release of lien with the county recorder.

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G. Environmental Code Enforcement Civil Penalties Fund. Civil penalties collected pursuant to this chapter shall be deposited in the Environmental Code Enforcement Civil Penalties Fund as established by the city manager for the enhancement of the city's code enforcement efforts, environmental public outreach or education, environmental improvement grants, and/or to reimburse city departments for investigative costs and costs associated with the hearing process that are not paid by the responsible party. Civil penalties deposited in this fund shall be appropriated and allocated in a manner determined by the city manager. The city auditor shall establish accounting procedures to ensure proper account identification, credit and collection. (Ord. NS-624 12, 2002: Ord. NS-394 2 (part), 1997)

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15.12.160 Administrative notice, hearing, and appeal procedures.

A. Unless otherwise provided herein, any notice required to be given by the enforcement official under this chapter shall be in writing and served in person or by registered or certified mail. If served by mail, the notice shall be sent to the last address known to the enforcement official. Where the address is unknown, service may be made upon the owner of record of the property involved. Such notice shall be deemed to have been given at the time of deposit, postage prepaid, in a facility regularly serviced by the United States Postal Service whether or not the registered or certified mail is accepted.

B. When the enforcement official determines that a violation of one or more provisions of this chapter exists or has occurred, any violator(s) or property owner(s) of record shall be served by the enforcement official with a written notice and order. The notice and order shall state the municipal code section violated, describe how violated, the location and date(s) of the violation(s), and describe the corrective action required. The notice and order shall require immediate corrective action by the violator(s) or property owner(s) and explain which method(s) of administrative enforcement are being utilized by the enforcement official: cease

and desist order, notice to clean and abate, establishment of a storm water pollution prevention plan, and/or establishment of an employee training program. The notice and order shall also explain the consequences of failure to comply, including that civil penalties shall begin to immediately accrue if compliance is not achieved within ten days from the date the notice and order is issued. The notice and order shall identify all hearing rights. The enforcement official may propose any enforcement action reasonably necessary to abate the violation.

C. If the violation(s) is not corrected within ten days from the date the notice and order is issued, the enforcement official shall request the city manager to appoint a hearing officer and fix a date, time, and place for hearing. The enforcement official shall give written notice thereof to the violator(s) or owner(s) of record, at least ten days prior to the date for hearing.

1. The hearing officer shall consider any written or oral evidence presented to determine whether the violation(s) exists, a corrective action plan should be required, a cease and desist order should be required, a notice to clean and abate should be required, a storm water pollution prevention plan should be required, an employee training program should be required, and/or civil penalties should be imposed, consistent with rules and procedures for the conduct of hearings and rendering of decisions established and promulgated by the city manager.
2. In determining whether action should be taken or the amount of a civil penalty to be imposed, the hearing officer may consider any of the following factors:
   a. Duration of the violation(s).
   b. Frequency or recurrence.
   c. Seriousness. Deleted:
   d. History. Deleted:
   e. Violator's conduct after notice and order.
   f. Good faith effort to comply.
   g. Economic impact of the penalty on the violator(s). Deleted:
   h. Impact of the violation on the community. Deleted:
   i. Any other factor which justice may require.
3. If the violator(s) or owner(s) of record fail to attend the hearing, it shall constitute a waiver of the right to a hearing and adjudication of all or any portion of the notice and order.
4. The hearing officer shall render a written decision within ten days of the close of the hearing, including findings of fact and conclusions of law, identifying the time frame involved and the factors considered in assessing civil penalties, if any. The decision shall be effective immediately unless otherwise stated in the decision. The hearing officer shall cause the decision to be served on the enforcement official and all participating violators or owners of record.
5. If the persons assessed civil penalties fail to pay them within the time specified in the hearing officer's decision, the unpaid amount constitutes either a personal obligation of the person assessed or a lien upon the real property on which the violation occurred, in the discretion of the enforcement official. If the violation(s) is not corrected as directed the civil penalty continues to accrue on a daily basis. Civil penalties may not exceed one hundred thousand dollars in the aggregate. When the violation is subsequently corrected, the enforcement official shall notify the violator(s) and/or owner(s) of record of the outstanding civil penalties and provide an opportunity for hearing if the amount(s) is disputed within ten days from such notice.
6. The enforcement official shall take all appropriate legal steps to collect these obligations, including referral to the city attorney for commencement of a civil action to recover said funds. If collected as a lien, the enforcement official shall cause a notice of lien to be filed with the county recorder, inform the county auditor and county recorder of the amount of

the obligation, a description of the real property upon which the lien is to be recovered, and the name of the agency to which the obligation is to be paid. Upon payment in full, the enforcement official shall file a release of lien with the county recorder. (Ord. NS-394 □2 (part), 1997)

15.12.170 Judicial enforcement.

A. Criminal Penalties. Any person who violates any provision of this chapter or who fails to implement a storm water monitoring plan, violates any cease and desist order or notice to clean and abate, or fails to adopt or implement storm water pollution prevention plans or employee training programs as directed by the enforcement official shall be punished, upon conviction, by a fine not to exceed one thousand dollars for each day in which such violation occurs, or imprisonment in the San Diego County jail for a period not to exceed six months, or both.

B. Injunction/Abatement of Public Nuisance. Whenever a discharge into the storm water conveyance system is in violation of the provisions of this chapter or otherwise threatens to cause a condition of contamination, pollution, or nuisance, the enforcement official may also cause the city to seek a petition to the Superior Court for the issuance of a preliminary or permanent injunction, or both, or an action to abate a public nuisance, as may be appropriate in restraining the continuance of such discharge.

C. Other Civil Action. Whenever a notice and order, notice of determination, hearing officer□s decision or city council□s decision is not complied with, the city attorney may, at the request of the enforcement official, initiate any appropriate civil action in a court of competent jurisdiction to enforce such notice and order and decision, including the recovery of any unpaid storm drain fees and/or civil penalties provided herein. (Ord. NS-624 □13, 2002: Ord. NS-394 □2 (part), 1997)

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15.12.180 Violations deemed a public nuisance.

In addition to the other civil and criminal penalties provided herein, any condition caused or permitted to exist in violation of any of the provisions of this chapter is a threat to the public health, safety, and welfare and is declared and deemed a public nuisance, which may be summarily abated and/or restored as directed by the enforcement official in accordance with the procedures identified in Chapter 6.16. A civil action to abate, enjoin or otherwise compel the cessation of such nuisance may also be taken by the city, if necessary.

The full cost of such abatement and restoration shall be borne by the owner of the property and shall be a lien upon and against the property in accordance with the procedures set forth in Section 15.12.150(F). (Ord. NS-624 □14, 2002: Ord. NS-394 □2 (part), 1997)

15.12.190 Remedies not exclusive.

Remedies set forth in this chapter are not exclusive but are cumulative to all other civil and criminal penalties provided by law, including, but not limited to, penalty provisions of the Federal Clean Water Act and/or the state Porter-Cologne Water Quality Control Act. The Porter-Cologne Water Quality Control Act is California Water Code Section 13000 et seq., and any future amendments. The seeking of such federal and/or state remedies shall not preclude the simultaneous commencement of proceedings pursuant to this chapter. (Ord. NS-468 □7, 1999: Ord. NS-394 □2 (part), 1997)

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G. Development means:

1. The placement or erection of any solid material or structure on land, in water, or under water;
2. The discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste;
3. The grading, removing, dredging, mining, or extraction of any materials;
4. A change in the density or intensity of the use of land, including, but not limited to, a subdivision pursuant to the Subdivision Map Act (Government Code Section 66410, et seq.) and any other division of land, including lot splits, except where the division of land is brought about in connection with the purchase of such land by a public agency for public recreational use;
5. A change in the intensity of the use of water, or of access to water.
6. The construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal entity; and
7. The removal or harvesting of major vegetation other than for agricultural purposes. As used in this definition, structure includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line. (Source: Government Code Section 65927).

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L. Illicit connection means any physical connection (pipe, facility, or other device) to the storm water conveyance system permitted or unpermitted by the city of Carlsbad, which drains illegal discharges either directly or indirectly into a storm water conveyance system.

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California Regional Water Quality Control Board

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No. CAS0108758, Order No. 2001-01 and any amendment

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N. Maximum extent practicable (MEP) means, with respect to best management practices (BMPs), an individual BMP or group of BMPs which reduces or eliminates the discharge of a pollutant of concern, which have a cost of implementation reasonably related to the pollution control benefits achieved, and which are technologically feasible.

O. National Pollution Discharge Elimination System (NPDES) Permit means a permit issued by the Regional Water Quality Control Board or the State Water Resources Control Board pursuant to Chapter 5.5, Division 7 of the California Water Code, to control discharges from point sources to waters of the United States, including, but not limited to:

1. California Regional Water Quality Control Board NPDES Permit No. CASO108758, Order 2001-01 and any amendment, revision or reissuance to it;
2. General Permit for Storm Water Discharges Associated with Industrial Activities (NPDES No. CAS 000001, Order No. 97-03-DWQ);
3. NPDES General Permit for Storm Water Discharges Associated with Construction Activity (Permit No. 99-08-DWQ, NPDES General Order No. CAS000002); and

4. California Regional Water Quality Control Board, San Diego Region, General De-Watering Permits (Order Numbers 91-10 and 90-31).

P. Non-storm water discharge means any discharge to the storm water conveyance system that is not entirely composed of storm water.

Q. NPDES General Permit means a permit issued by the State Water Resources Control Board, including, but not limited to:

1. NPDES General Permit for Storm Water Discharges Associated with Industrial Activities; and
2. NPDES General Permit for Storm Water Discharges Associated with Construction Activity (Permit No. 99-08-DWQ, NPDES General Order No. CAS000002).

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T. Pollutant means and includes, but is not limited to, solid waste, sewage, garbage, medical waste, wrecked or discarded equipment, radioactive materials, dredged spoil, rock, sand, sediment, silt, industrial waste, and any organic or inorganic substance defined as a pollutant under 40 C.F.R. 122.2 whose presence degrades the quality of the receiving waters in violation of basin plan and California ocean plan standards such as fecal coliform, fecal streptococcus, enterococcus, volatile organic carbon, surfactants, oil and grease, petroleum hydrocarbons, total organic carbon, lead, copper, chromium, cadmium, silver, nickel, zinc, cyanides, phenols, fertilizers, pesticides, herbicides and other biocides.

A pollutant also includes any contaminant which degrades the quality of the receiving waters in violation of basin plan and California ocean plan standards by altering any of the following parameters: pH, total suspended and settleable solids, biochemical oxygen demand (BOD), chemical oxygen demand (COD), nutrients, temperature and other narrative standards of the basin plan.

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V. Receiving waters means surface bodies of water which serve as receiving points for discharges from the storm water conveyance system, including Encinas Creek, Batiquitos Lagoon, Agua Hedionda Lagoon and Buena Vista Lagoon and their tributary creeks, reservoirs, lakes, estuaries, and the Pacific Ocean.

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W. Storm water means surface runoff and drainage associated with storm events and snow melt that flows across a surface to the storm water conveyance system or receiving waters.

For the purposes of this chapter, storm water runoff and drainage from areas that are in a natural state, have not been significantly disturbed or altered, either directly or indirectly, as a result of human activity, and the character and type of pollutants naturally appearing in the runoff have not been significantly altered, either directly or indirectly, as a result of human activity, shall be considered unpolluted and shall satisfy the definition of storm water in this chapter.

X. Storm water conveyance system means private, natural and publicly owned facilities within the city of Carlsbad by which storm water may be conveyed to receiving waters of the United States, including any roads with drainage systems, streets, catch basins, curbs, gutters, ditches, pipes, natural and man-made channels or storm drains.

Y. Storm water pollution prevention plan means a document which describes the on-site program activities to eliminate or reduce to the maximum extent practicable,

pollutant discharges to the storm water conveyance system primarily through the application and use of BMPs.

A storm water pollution prevention plan prepared and implemented pursuant to any NPDES Storm Water Permit shall meet the definition of a storm water pollution prevention plan for the purposes of this chapter.

Z. System means storm water conveyance system, as defined herein.

AA. Wet season means the period of time between October 1 through April 30.

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Chapter 15.16 GRADING AND EROSION CONTROL

15.16.010 Title.
15.16.020 Purpose.
15.16.030 City engineer authority.
15.16.040 Definitions.
15.16.050 Grading permit required.
15.16.060 Work exempt from grading permit.
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15.16.070 Application for grading permit.
15.16.080 Grading permit submittal documents.
15.16.085 Construction Storm Water Pollution Prevention Plan (SWPPP)
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15.16.110 Grading permit issuance.
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15.16.150 Agreement for uncontrolled stockpile.
15.16.160 Appeals.
15.16.170 Unlawful acts.
15.16.180 Investigation fee.
15.16.190 Enforcement measures--Remedies.

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15.16.010 Title.

A. This chapter shall be known as the Grading Ordinance.(Ord. NS-385 4 (part), 1996)

15.16.020 Purpose.

A. The purpose of this chapter is to establish minimum requirements for grading, including clearing and grubbing of vegetation, to provide for the issuance of ministerial permits and to provide for the enforcement of the requirements. These provisions are supplementary and additional to Title 20, Subdivisions, and Title 21, Zoning, of this code and shall be read and construed as an integral part of these titles and the land development patterns and controls established thereby. It is the intent of the city council to protect life and property and promote the general welfare; enhance and improve the physical environment of the community; and preserve, subject to economic feasibility, the natural scenic character of the city. The provisions of this chapter shall be administered to achieve the intent expressed above and, to the maximum extent feasible, the following goals:
   1. Facilitate the planning, design and construction of development sites to maximize safety and human enjoyment while protecting, insofar as possible, the surrounding natural environment;
   2. Ensure compatibility of graded land development sites with surrounding land forms and land uses;
   3. Prevent unnecessary and unauthorized grading, including clearing and grubbing of vegetation, on property within Carlsbad;
   4. Preserve natural plant communities and existing mature trees;
   5. Preserve significant cultural and archaeological sites;

6. Promote the rapid restoration of graded slopes with fire resistant, drought tolerant landscaping that is aesthetically pleasing and which enhances adjacent habitat values; and
7. Protect public and private property, storm water conveyance systems, downstream riparian habitats, waterways, wetlands, and lagoons by controlling soil erosion, sedimentation and other potential adverse impacts caused by grading operations or which result as a consequence of the increased rate of surface water runoff from graded sites. (Ord. NS-623 □1, 2002: Ord. NS-385 □4 (part), 1996)

15.16.030 City engineer authority.

A. This chapter shall be administered by the city engineer who shall have the authority and responsibility to:
   1. Establish the form and procedures for application for grading permits required pursuant to this chapter including the certification of completed applications, the approval of grading plans, Construction SWPPPs, the establishment of files, the processing of secured grading and erosion control agreements and the collection of fees and security deposits;
   2. Interpret the provisions of this chapter and advise the public regarding requirements for grading plans, Construction SWPPPs, specifications and special provisions;
   3. Establish the format and content of grading plans, Construction SWPPPs, specifications and special provisions pursuant to the provisions of this chapter;
   4. Establish and promulgate city standards to govern grading and storm water pollution prevention work in accordance with good engineering practice pursuant to the provisions of this chapter;
   5. Issue permits and approve amendments, including extensions, to permits found to conform with this chapter and applicable city standards and the landscape manual;
   6. Issue and maintain permanent records of determinations of exemption authorized by Section 15.16.060;
   7. Approve grading and erosion control agreements;
   8. Accept surety bonds and other forms of security in connection with grading and erosion control agreements;
   9. Monitor compliance of all grading work with city codes, city standards and any limitations of the grading permit;
   10. Record notices of grading violation and/or take other administrative actions against violators of the provisions of this chapter; and
   11. Grant authority to appropriate members of the city engineer□s staff to act on behalf of the city engineer with regard to any aspect of the administration of the provisions of this chapter. (Ord. NS-385 □4 (part), 1996)

15.16.040 Definitions.

Whenever the following words, terms or phrases are used in this chapter they shall be construed as defined in the following subsections unless from the context in which the word, term, or phrase is used a different meaning is specifically defined or intended.

A. □Civil engineer□means a professional engineer in the branch of civil engineering holding a valid certificate of registration issued by the state of California.

B. □Clearing and grubbing of vegetation□means the removal of any and all types of vegetation, roots, stumps or other plant material and the clearing or breaking up of the surface of the land by digging or other means.

C. □Default□means the condition or situation which results when an applicant fails to perform in compliance with the terms and requirements of the grading and erosion control agreement required pursuant to Section 15.16.140 of this chapter.

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Deleted: 1. □City standards□means the standards used for the design and construction of public and private improvements in Carlsbad, including grading improvements, as contained in the latest edition of the □Standards for Design and Construction of Public and Private Improvements in the City of Carlsbad□as promulgated by the city engineer.□
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D. Engineer-of-work means the civil engineer responsible for the preparation of the grading and/or construction plans, for the certification of the completed work and preparation of the record plans.

E. Excavation means the cutting, digging, removal, displacement or any other movement of soil, sand, gravel, rock or other similar material from its natural or preexisting location upon or beneath the surface of the earth by the direct action of humans and/or human invention.

F. Fill means the depositing of soil, sand, gravel, rock, or other similar materials upon or beneath the surface of the earth by the direct action of humans and/or human invention.

G. Finished grade means the vertical location of the ground surface upon completion of any excavation or fill.

H. Geologist means a person holding a valid certificate of registration as a geologist in the specialty of engineering geology issued by the state of California under provisions of the Geologist Act of the Business and Professions Code.

I. Grading means any excavation, fill, clearing and grubbing of vegetation or any combination thereof.

J. Grading permit means the document issued by the city engineer pursuant to Section 15.16.110, after having determined that the application demonstrates compliance with this chapter, city standards, the landscape manual, and all applicable portions of Titles 15, 19, 20 and 21 of this code.

K. Landscape manual means the landscape manual adopted by city council resolution which contains the policies and requirements for the design, construction and maintenance of landscape and irrigation systems constructed pursuant to a city development approval.

L. Site is any lot or parcel of land or contiguous combination thereof, under the same ownership, where grading is proposed or performed.

M. Soils engineer means a person holding a valid certificate of registration as an engineer in the specialty of soils engineering issued by the state of California under the provisions of the Business and Professions Code.

N. Uncontrolled stockpile means any fill placed on land for which no soil testing was performed or no compaction reports or other soil reports were prepared or submitted.

In addition to the above defined words, terms and phrases, the definition of words, terms and phrases, as described in Chapter 15.04, shall apply to this chapter.

(Ord. NS-623 2, 9, 10, 2002; Ord. NS-385 4 (part), 1996)

15.16.050 Grading permit required.

A. Except as provided in Section 15.16.060, no person shall do, or cause to be done, any grading, including clearing and grubbing of vegetation, without first having obtained a grading permit. (Ord. NS-385 4 (part), 1996)

15.16.060 Work exempt from grading permit.

A. A grading permit shall not be required for the following:
   1. An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation nor exempt any excavation having an unsupported height greater than five feet after the completion of such structure.
   2. Cemetery graves.
   3. Refuse disposal sites controlled by other regulations.
   4. Excavations for wells or tunnels or utilities.
   5. Exploratory excavations under the direction of soil engineers or engineering geologists.

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17. Jurisdictional Urban Runoff Mitigation Plan (JURMP) means a plan, prepared pursuant to Regional Water Quality Control Board NPDES Order No. 2001-02, to: 1) ensure that discharges from municipal runoff conveyance systems do not cause or contribute to degradation of water quality, 2) effectively prohibit urban discharges of illicit connections to the storm water conveyance system, and 3) reduce the discharge of pollutants from urban runoff conveyance systems to the maximum extent practicable. When used in the Carlsbad Municipal Code, this refers to the JURMP adopted by the city of Carlsbad.

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Deleted: Standard Urban Storm Water Mitigation Plan (SUSMP) means a plan, prepared pursuant to Regional Water Quality Control Board NPDES Order No. 2001-01, to reduce pollutants and runoff flows from all new development and significant redevelopment projects that fall under priority project categories. When used in the Carlsbad Municipal Code, this refers to the SUSMP prepared by the city of Carlsbad

6. Grading on any site or contiguous sites held under one ownership in which the city engineer finds all of the following conditions exist:
   a. No cut or fill material exceeds three and one half feet in vertical depth at its deepest point measured from the existing ground surface. The city engineer may waive this requirement for grading work which is not intended to support a building structure;
   b. No fill material is placed on an existing slope steeper than five units horizontal to one vertical;
   c. The grading work does not adversely affect the existing drainage pattern;
   d. The toe of any fill slope or top of any cut slope is no closer than one foot to an exterior property line; and
   e. The amount of soil material moved does not exceed one hundred cubic yards.
7. Grading in an isolated, self-contained area if the city engineer finds that no danger to private or public property can now or hereafter result from grading operations.
8. Grading on a site which has been previously graded to provide a relatively flat pad area, suitable for development, where the city engineer finds all of the following to exist:
   a. The proposed grading work complies with all of the environmental protection procedures described in Chapter 19.04 of this code;
   b. The proposed grading will not adversely affect existing drainage patterns or result in a condition which may cause damage to adjacent property; and
   c. The proposed grading work is performed concurrent with the site preparation work done in connection with a building permit issued pursuant to Chapter 18.04 of this code and does not require a Hillside Development Permit (HDP) or a Coastal Development Permit (CDP).
   d. Best management practices (BMPs) for erosion control construction activities have been incorporated into the construction documents and site design.
9. Clearing and grubbing of vegetation done for the purpose of routine landscape maintenance, the removal of dead or diseased trees or shrubs or the removal of vegetation done upon order of the fire marshal to eliminate a potential fire hazard or for the abatement of weeds.
10. Clearing and grubbing of vegetation done preparatory to agricultural operations on land which has been used for agricultural purposes within the previous five years.
11. Construction of pavement surfaces less than five thousand square feet on natural or existing grade for the purposes of a private road or commercial, industrial or multi-residential parking lot or travel way.

B. All grading work, including any grading work exempted from the requirement of a grading permit as determined pursuant to subsection a of this section, shall be done in compliance with city standards and Titles 15, 19, 20 and 21 of this code, and within the coastal zone, shall also be consistent with all certified local coastal program provisions. (Ord. NS-623 □□3--6, 2002; Ord. NS-385 □4 (part), 1996)

15.16.065 Application for Grading Plan.

A. A separate application for a grading plan shall be made in advance of submittal for a grading permit.

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B. Each application for a grading plan review shall include a complete grading plan review application form, grading plans, specifications, engineering calculations, a soils investigation, a geotechnical report and other such documentation and information as may be necessary to demonstrate that the grading work will be carried out in substantial compliance with all city codes, City Standards and the requirements of the Landscape Manual. Each grading plan review application shall be accompanied by a Construction SWPPP prepared in accordance with the requirements of this chapter and City Standards.

C. The city engineer may waive submission of a geotechnical report or other required documents if the applicant clearly demonstrates that the nature of the grading work applied for is such that reviewing of such report or other documents is not necessary to obtain compliance with this code

D. A grading plan review fee shall be charged by the city for the processing of the grading plan review. The fee shall be established by resolution of the city council and is for the purpose of defraying the cost of processing the grading plan review. The grading plan review fee is in addition to any other plan review, inspection and permit issuance fees charged for the issuance of a grading permit or processing improvement plans and building plans or the issuance of permits thereto.

E. Grading plan applications for which city approval is not granted within one year following the date of application shall be deemed withdrawn. The grading plans and other documents submitted for review may thereafter be returned to the applicant or destroyed by the city engineer. The city engineer may extend the time for action by the applicant for a period not exceeding one hundred eighty days upon request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after withdrawal, the applicant shall resubmit a new application and pay a new grading plan review application fee.

F. The city engineer may authorize refunding of not more than eighty percent of the grading plan review fee paid when an application for a grading plan is withdrawn in accordance with this section. The city engineer shall not authorize refunding of any fee paid except upon written application filed by the original permittee not later than sixty days after withdrawal of the grading plan application by the applicant, when withdrawn prior to completion of the grading plan review.

G. Any application in process on the effective date of this code amendment shall be subject to the provisions of this section. The filing date for such application shall be considered to be the effective date of the code amendment.

15.16.067 Information on grading plans, specifications and engineering reports.

A. All grading plans, specifications and engineering reports required for grading permit submittal shall be prepared in accordance with the following requirements:

1. Grading plans, specifications, engineering calculations and other relevant engineering data shall be prepared by a civil engineer. The grading plans shall be drawn to scale in accordance with City Standards and be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this chapter, City Standards, the Landscape Manual and Titles 15, 19, 20 and 21 of this code. All grading plans must include provisions for implementation and maintenance of all storm water pollution prevention measures identified in the Construction SWPPP prepared for the project, pursuant to Title 15 and City Standards.
2. Geotechnical investigation report(s) shall be based upon the proposed grading plan. The geotechnical investigation report(s) shall include an adequate description of the geology of the site and conclusions and recommendations regarding the effect of geologic conditions on the proposed development. Recommendations included in the report shall be consistent with the provisions of this chapter and City Standards and shall be incorporated into the grading plans and/or specifications.
3. Preliminary soils investigations and reports shall be based upon the proposed grading plan. Such report shall include data regarding the nature, distribution and strength of existing soil types at the proposed grading site, recommendations for grading procedures and design criteria for corrective measures, if required by the soils engineer.

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Recommendations included in the report and approved by the city engineer shall be incorporated into the grading plans and/or specifications.

15.16.070 Application for grading permit.

A. To obtain a grading permit, the applicant shall first file an application therefore in writing on a form furnished by the city engineer for that purpose. Every such application shall:
   1. Identify and describe the work to be covered by the grading permit for which the application is made;
   2. Describe the land on which the proposed work is to be done by legal description, street address, and/or similar description that will readily identify and definitely locate the proposed grading work;
   3. State the quantity of excavation and fill for the proposed grading work including the amount of excavation or fill to be imported to or exported from the grading site;
   4. State the name, address, telephone number and state of California certification number of the engineer-of-work, soils engineer and geotechnical engineer who prepared the grading plan, soils report and geotechnical report for the proposed grading work;
   5. State the name, address, telephone number, state contractors license number and Carlsbad business license number for the contractor who will perform the grading work;
   6. State the name, address and telephone number of the property owner upon whose property the work will be done and the applicant requesting the grading permit;
   7. Be signed by the applicant and property owner or their authorized agent(s); and
   8. Give other such information as may be required by the city engineer.

B. Each grading permit application shall be accompanied by:
   1. Grading plans, specifications, calculations, reports and other data as required in Section 15.16.080;
   2. Proof of all other applicable discretionary approvals, including a site plan approved in accordance with such prior discretionary approvals, if any, pursuant to Title 20 or 21, except where:
      a. The grading work is necessary to complete a major arterial roadway or other major public facility, will significantly reduce the need to haul fill material over public roads, or is incidental to the grading for another project which has obtained all appropriate development approvals in accordance with Titles 20 and 21 of this code, or
      b. The grading work is found by the planning director to be reasonably consistent with the future development of the site pursuant to the site's existing general plan land use classification;
   3. A completed environmental impact assessment form or submittal of other environmental documentation which demonstrates compliance with the California Environmental Quality Act (CEQA) and Title 19 of this code;
   4. All appropriate documentation evidencing the applicant's right to enter upon and grade property not within the ownership of the person signing the grading permit application form;
   5. An agreement for uncontrolled stockpile, if required, signed by the property owner with appropriate signature notarization; and
   6. A grading permit application fee in an amount as established by the city council by resolution. A separate plan review and/or inspection fee shall apply to retaining walls, Construction SWPPP or major drainage structures as provided for elsewhere in this code. There shall be no separate charge for standard terraced drains and similar facilities. If during the grading plan review the grading quantities, upon which the grading plan fee is based, are changed, the applicant shall pay any supplemental fee required or receive a credit against the payment of the grading permit fee. (Ord. NS-385 4 (part), 1996)

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15.16.080 Grading Permit Submittal documents.

A. Each application submittal for a grading permit shall be accompanied by city approved grading plans, city approved Construction SWPPP and other such documentation and information as may be necessary to demonstrate that the grading work will be carried out in substantial compliance with all city codes, City Standards and the requirements of the Landscape Manual.

B. The number of copies and format of the submittal documents required pursuant to this chapter shall be as prescribed by the city engineer.

C. All documents shall, upon submittal to the city engineer, become the property of the city and shall be kept on file with the city engineer. (Ord. NS-385 4 (part), 1996)

15.16.085 Construction Storm Water Pollution Prevention Plan (SWPPP).

A. Each grading permit issued shall be accompanied by a Construction SWPPP prepared in accordance with City Standards and approved by the city engineer.

B. The city engineer may also require preparation of a Construction SWPPP, in accordance with City Standards, for any person conducting development or other construction activity, including grading activities which are exempt from a grading permit, in order to reduce the risk of contamination of storm water and the discharge of non-storm water pollutants to the city s storm water conveyance system.

C. Construction activities that have no potential to add pollutants to storm water or non-storm water runoff may be exempt from the preparation of a Construction SWPPP, pursuant to the Construction SWPPP exemption requirements of City Standards and the Municipal Permit. Any construction activity exempted from the preparation of a Construction SWPPP must still comply with the storm water pollution prevention requirements of city standards at all times during construction.

D. Each Construction SWPPP shall be prepared in a form and include the content as specified in City Standards and shall be made to comply with all other applicable NPDES Permit requirements.

E. Construction SWPPP review and inspection fees shall be charged by the city for the processing of the plan review and field inspection of the construction work. The fee shall be established by resolution of the city council and is for the purpose of defraying the cost of processing the plan review and ensuring compliance with the Construction SWPPP during construction. The Construction SWPPP review and inspection fees are in addition to any other plan review, inspection and permit issuance fees charged for processing grading plans, improvement plans and building plans or the issuance of permits thereto.

F. The processing time limits, application withdrawal and refund provisions of section 15.16.082 subsections C through D shall be applicable to the processing of an application for a Construction SWPPP.

(Ord. NS-623 7, 2002; Ord. NS-385 4 (part), 1996)

15.16.100 Withdrawal of grading permit applications.

A. Applications for which no grading permit is issued within two hundred forty days following the date of application shall be deemed withdrawn. Plans and other documents submitted for review may thereafter be returned to the applicant or destroyed by the city engineer. The city engineer may extend the time for action by the applicant for a period not exceeding one hundred eighty days upon request by the applicant showing that circumstances beyond the

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A. All grading plans, specifications and engineering reports required for grading permit submittal shall be prepared in accordance with the following requirements:

1. Grading plans, specifications, engineering calculations and other relevant engineering data shall be prepared by a civil engineer. The grading plans shall be drawn to scale in accordance with city standards and be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this chapter, city standards, the landscape manual and Titles 19, 20 and 21 of this code. All grading plans must include provision for protective measures for the control of urban pollutants, erosion and sedimentation in accordance with the requirements of this chapter, and city standards, including but not limited to the city Standard Urban Storm Water Mitigation Plan (SUSMP).

2. Geotechnical investigation reports shall be based upon the proposed grading plan. The geotechnical investigation report shall include an adequate description of the geology of the site and conclusions and recommendations regarding the effect of geologic … [1]

control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after withdrawal, the applicant shall resubmit a new application and pay a new grading permit application fee.

B. The city engineer may authorize refunding of not more than eighty percent of the grading permit application fee paid when an application for a grading permit is withdrawn in accordance with this section. The city engineer shall not authorize refunding of any fee paid except upon written application filed by the original permittee not later than sixty days after withdrawal of the grading permit application by the applicant or by action of this section.

C. Any application in process on the effective date of this code amendment shall be subject to the provisions of this section. The filing date for such application shall be considered to be the effective date of the code amendment. (Ord. NS-385 4 (part), 1996)

Deleted: The city engineer may waive any or all of the grading permit application fee when a resubmitted application is accompanied by a grading plan which has been previously signed and approved by the city engineer. The amount of the waiver shall be determined by the city engineer based upon the estimated amount of work required to complete review of the grading permit.

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15.16.110 Grading permit issuance.

A. Following submittal of a completed grading permit application and completion of the following requirements, the city engineer shall issue a grading permit:
   1. Approval and signature of the grading plans by the city engineer;
   2. Payment of the grading permit application fee required pursuant to Section 15.16.070(B)(6);
   3. Submittal of a fully executed grading and erosion control agreement together with the required cash and/or other securities;
   4. Approval of a Construction SWPPP prepared in accordance with this chapter and city standards;
   Submittal of proof of valid Coastal Development Permit, Stream Alteration Permit, Army Corps Permit, National Pollutant Discharge Elimination System Permit or other permits, if any, required by other departments or agencies with competent authority; and
   Completion of all environmental documentation in accordance with Chapter 19.04 of this code.

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B. The issuance or granting of a grading permit or approval of grading plans, specifications and computations shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this chapter or any other chapter of this code. Permits presuming to give authority to violate or cancel the provisions of this chapter or any other chapter of this code shall not be valid.

C. The issuance of a grading permit based on approved grading plans, Construction SWPPP, specifications and other data shall not prevent the city engineer from thereafter requiring correction of errors in said plans, specifications and other data, or from preventing grading operations being carried on thereunder when in violation of this chapter or any other chapter of this code. (Ord. NS-385 4 (part), 1996)

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15.16.120 Grading permit limitations, requirements and procedures.

A. All grading permits shall be subject to the following limitations, requirements and procedures:
   1. Scope of Work; Amendments. Issuance of a grading permit shall constitute authorization to do only that work which is described on the application for the permit and detailed on the grading plans and specifications approved by the city engineer in accordance with the provisions of this chapter. No approved grading plans or specifications may be modified without approval by the city engineer of a revised grading plan. Application for the revision of a grading plan shall be submitted to the city engineer on the prescribed form, accompanied by a grading plan revision fee in the amount set forward in the fee schedule approved by city council resolution. Modifications which substantially affect the basic tract design or land use as described on any prior discretionary approvals, issued pursuant to Titles 20 and 21 of this code, must have the approval of the appropriate approving authority.

2. Jurisdictions of Other Agencies. Permits issued under the provisions of this chapter shall not relieve the owner of the responsibility for securing permits or licenses that may be required from other departments or divisions of all governing agencies.
3. Time Limits; Extensions. The permittee shall fully perform and complete all of the work required to be done pursuant to the grading permit within the time limit specified therein or, if no time is so specified, within one hundred eighty days after the date of issuance of the permit. The specified time limit may be extended by action of the city engineer upon written request of the permittee, owner or surety showing that good and sufficient cause has prevented the permittee from completing the grading work within the allotted time limit. All such extension requests shall be accompanied by an extension fee in an amount as established by city council resolution.
4. Time of Grading Operations. Grading operations within one-half mile of a structure for human occupancy shall not be conducted between the hours of sunset and seven a.m. Grading operations may be allowed during specific hours after sunset or before seven a.m. if the city engineer determines that such operations are not detrimental to the health, safety or welfare of the inhabitants of such a structure. The permitted hours of operation may be shortened by the city engineer upon a finding of a previously unforeseen effect upon the health, safety or welfare of the public.
5. Noise Limitations. The noise limitation provisions of Chapter 8.48 of this code shall be observed.
6. Hauling Operations. All hauling operations to or from the grading site shall be conducted in accordance with city code, over the route and in accordance with the procedures prescribed by the city engineer in the grading permit.
7. Storm Damage Precautions. All grading operations shall install protective measures to prevent unnecessary erosion and sedimentation as follows:
   a. All grading permits issued during the rainy season or within thirty days of the start of the rainy season shall require the installation of erosion and sedimentation control protective measures in advance of the start of the grading work in accordance with city standards;
   b. All grading permits issued earlier than thirty days prior to the start of the rainy season shall require the installation of all erosion and sedimentation control protective measures within thirty days prior to the start of the rainy season in accordance with city standards;
   c. All erosion and sedimentation control protective measures shall be maintained in good working order throughout the duration of the grading operation unless it can be demonstrated to the city engineer that their removal at an earlier date will not result in any unnecessary erosion of or sedimentation on public or private properties; and
   d. All slopes required to be landscaped and irrigated shall be landscaped and irrigated within the time limits as specified in the landscape manual. All other erosion and sedimentation control protective measures shall be installed as quickly as practicable.
8. Inspection and Testing. The applicant shall ensure that the work is inspected and tested as follows:
   a. Inspection and testing of the grading work by a soils or civil engineer to ensure proper compaction of fill materials, stability of the cut and fill slopes and general compliance of the grading work with the recommendations of the preliminary soils report, city standards, permit conditions and the provisions of this chapter.
   b. Inspection and survey of the grading work by a civil engineer to ensure that all building pads, street grades and drainage facilities have been constructed in general conformance with the locations and elevations as shown on the approved grading plans.

c. Where unusual or hazardous geotechnical conditions exist upon or beneath the grading site, a geologist shall inspect all or any portion of the grading work to assure that all geologic and geotechnical conditions have been adequately addressed and that any recommended corrective measures are incorporated into the work.

9. Partial Releases. The city engineer may authorize the partial release of a portion of the grading work to allow construction of a structure pursuant to a building permit issued in accordance with this code and in accordance with the following requirements:
   a. Prior to the issuance of such building permit for any given lot or lots, the engineer-of-work, or another civil engineer as may be approved by the city engineer, shall provide the city engineer with a written statement certifying that, in their professional opinion, all grading for the proposed building pad was completed within the tolerances allowed pursuant to city standards and that all embankments, cut slopes and pad elevations are constructed as shown on the approved plans.
   b. The soils or civil engineer shall provide the city engineer with a written statement certifying that, in their professional opinion, all embankments beneath the proposed building pad site have been constructed in accordance with city standards and the recommendations of the preliminary soils report.
   c. The city engineer may also require compliance with any other requirement or condition as may be deemed necessary to ensure the health, safety and welfare of the public prior to release of the site for the purpose of issuing a building permit.
10. Final Reports. Upon completion of the grading work the permittee shall ensure that the following reports and documents are submitted to the city engineer:
   a. A written statement signed by the engineer-of-work, or another civil engineer as may be approved by the city engineer, which shall state that, in their professional opinion, all grading work and drainage facilities have been completed in substantial conformance with the grading permit. The approved grading plan on file with the city shall be amended by the engineer-of-work, or another civil engineer as may be approved by the city engineer, to show the as-built elevations for all pads, streets and drainage facilities together with any other field modifications or changes made to the original approved plans.
   b. A report by a soils or civil engineer which shall include recommended soil bearing capacities for the project site, a statement as to the expansive qualities of the soil, and summaries of field and laboratory tests. The locations of such tests and the limits of the compacted fill shall be shown on a final plan, prepared by the soils or civil engineer and submitted to the city engineer with the final soils report, which shall also show by plan and cross-section the location of any rock disposal areas, sub-drains and/or buttress fills if such were involved in the grading. The final soils report shall contain a written statement that all soils inspections and tests were made by, or under the supervision of, the soils or civil engineer and that in the professional opinion of the soils or civil engineer, all embankments have been constructed and compacted to city standards and in accordance with the earthwork specification of the preliminary soils report.
   c. A report and an as-graded geologic map of the site prepared by the geologist which shall include specific approval of the grading as affected by geological factors. Where necessary, such report shall include geologic cross-sections and recommendations regarding the location of buildings, sewage disposal systems or any other special requirements.
11. Notification of Noncompliance. If, in the course of fulfilling their responsibility under this chapter, the engineer-of-work, soils engineer or geologist finds that the work is not being done in conformance with the grading permit, this chapter or the approved plans and specifications or with accepted engineering practices, they shall immediately notify the

permittee and the city engineer, in writing, of the nonconformity and of the recommended corrective measures to be taken. (Ord. NS-623 □8, 2002; Ord. NS-385 □4 (part), 1996)

15.16.130 Responsibility of permittee.

A. The permittee shall be responsible for the following:
   1. Completion of all work in compliance with the approved grading permit, plans and specifications, city standards, the landscape manual and the requirements of this code;
   2. Protection of public and/or franchise facilities, utilities or services from damage caused by the grading operation;
   3. Protection of adjacent public or private properties from damage caused by the grading operation;
   4. Preservation of adjacent and on site environmental resources, which are outside of the scope of work, from the impacts of the grading operation;
   5. Installation and maintenance of drainage and erosion control measures to protect downstream properties and habitats from flooding, sedimentation and other adverse impacts caused by the grading operation or the increase in surface water runoff resulting from the grading operation; and
   6. Inspection and testing of the grading work to ensure conformance with the plans and specifications, the recommendations of the soils and geotechnical engineers, city standards, the landscape manual and the provisions of this chapter.

B. The responsibilities described in this section shall also apply to the permittee□s authorized agents, contractors or employees; however, any such application shall not in any way relieve or absolve the permittee from the responsibility to grade or to conduct the grading operation consistent with this section or this chapter. The permittee shall have ultimate responsibility over the actions and conduct of any and all authorized agents, contractors and employees with regard to the performance of the permitted work and compliance with this section. (Ord. NS-385 □4 (part), 1996)

15.16.140 Grading and erosion control agreement and securities.

A. Secured Agreement Required. Prior to issuance of a grading permit, the permittee shall enter into a secured grading and erosion control agreement with the city to guarantee performance of the grading work in compliance with the grading permit.

B. Form of Secured Agreement. The grading and erosion control agreement shall be in a form as prescribed by the city attorney which shall include, but not be limited to, the following:
   1. Incorporation of the grading permit and the approved plans and specifications, including Construction SWPPP, as part of the agreement;
   2. Agreement by the permittee to comply with all the terms and conditions of the grading permit including the grading permit time limits;
   3. Agreement by the permittee to comply with all provisions of this chapter and other applicable laws and ordinances;
   4. A cost estimate prepared by a civil engineer which provides for the construction of all earthwork, drainage facilities, retaining walls, storm water best management practices including the cost of maintenance during the period of time the permit is active, geotechnical mitigation measures, landscaping, irrigation and any other items needed to complete the grading work;
   5. Agreement to indemnify and hold the city harmless against any and all claims arising from the performance of the grading work; and
   6. Agreement by the permittee to maintain all safety and storm water best management practices until the grading work is complete and stabilized against erosion in accordance with City Standards.

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C. Security Types. The grading and erosion control agreement shall be secured using one or more of the security types listed in Section 20.16.070.

D. Security Requirements. Security offered to guarantee performance in connection with the grading and erosion control agreement shall meet the following requirements:

1. The amount of the security shall be sufficient to guarantee performance of all grading work described on the approved grading plans, Construction SWPPP and specifications as estimated in Section 15.16.140(B)(4);
2. Surety bonds shall be valid upon the date of filing with the city and shall remain valid until the work has been completed to the satisfaction of the city engineer. Any extension of the time specified in the permit shall not be cause for release of a surety bond;
3. The surety company which issues a surety bond shall meet or exceed the minimum qualifications established by the city council by resolution;
4. The city engineer may require that up to ten percent of the engineer's estimated cost for the grading work be submitted in the form of a cash deposit, provided however, that no such cash deposit shall be less than five hundred dollars. The cash deposit may be utilized by the city to cure any default in regard to the performance of work covered by the grading and erosion control agreement including but not limited to cleaning, repair and rehabilitation of public or private facilities that are damaged by sedimentation, erosion or construction activities and to insure that adequate safeguards for the prevention of erosion and sedimentation are in place when needed;
5. The city engineer may allow a single security to cover work under multiple grading permits when the work covered is either part of a progressive construction of a single project or when several concurrent projects are being constructed by one permittee. In such cases, the grading and erosion control agreement shall include reference to the multiple permit requirements or a grading and erosion control agreement shall be submitted for each separate permit; and
6. The city engineer may permit substitution of the required security either in kind or of any other type allowed for in Section 20.16.070; provided, however, that the substitute security is adequate to insure completion of the remaining work to be performed and the security is found to be of proper form and substance. The original security may be released upon acceptance of the new security and upon determination that all conditions of the permit are being complied with and there is no default as to the performance of the work up to the date of acceptance of the new security.

E. Secured Agreement Waivers. The city engineer may waive the requirement for a secured agreement or may waive all or any portion of the security amount if the applicant clearly demonstrates to the city engineer that the proposed grading work will not adversely affect or will have minimal impact upon public or private property and upon the health, safety and welfare of the public. In no such case, shall the city engineer reduce the security amount below the amount needed to ensure public safety and to secure the site with effective storm water best management practices.

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F. Reduction of Security. The city engineer may reduce the amount of the security commensurate with the value of the grading work which has been completed. In no case shall the security be reduced below the amount necessary to ensure public health, safety and welfare.

G. Release of Security. The city engineer shall release the security held by the city to secure the grading work upon completion of the work in substantial compliance with the terms and conditions of the permit and the provisions of this chapter.

H. Default Procedures. Whenever the permittee fails to perform in compliance with the terms and requirements of the grading and erosion control agreement, the city engineer may, in addition to any other administrative and judicial remedies allowed pursuant to this chapter, make a demand upon the cash, letter of credit, surety bond or other collateral held as

security for the grading and erosion control agreement in accordance with the following procedures:

1. Notice of Default. The city engineer shall send a written notice of default by certified mail to the permittee which specifies the permit number and identifies the location, nature and extent of the activity or condition which contributed to the default. The notice of default shall specify the work to be done to cure the default, the estimated cost of such work and the period of time deemed by the city engineer to be reasonably necessary for the completion of such work. A copy of the notice of default shall be mailed to the owner of the grading site and to the surety company, bank or institution which provided the security for the grading and erosion control agreement.
2. Emergency Corrective Actions. In the event the work needed to cure the default is not completed by the permittee, surety company or financial institution within the period of time specified on the notice of default, the city engineer may thereupon enter the property for the purpose of performing, by city forces or by other means, the necessary corrective or curative work. The cost for such corrective work shall be paid for by the permittee, surety company or financial institution as provided for in this section.
3. Surety Bond, Letter of Credit or Instrument of Credit. Upon receipt of the notice of default, the surety company or financial institution shall, within the time specified, cause or require the work needed to cure the default to be performed, or failing therein, shall pay over to the city the estimated cost of doing the work as set forth in the notice of default.
4. Cash Deposit. Upon expiration of the time period specified in the notice of default, the city engineer may withdraw all or any portion of the cash deposit to reimburse the city for completing or having a third party complete the work needed to cure the default as specified in the notice of default. Upon utilizing the cash deposit, the city engineer shall notify the applicant in writing of the amount utilized and the purpose for which the deposit was used. (Ord. NS-385 □4 (part), 1996)

15.16.150 Agreement for uncontrolled stockpile.

A. Applications for grading permits involving uncontrolled stockpiles shall be accompanied by an agreement signed by the property owner.
B. The agreement shall be in a form as prescribed by the city attorney which shall include, but not be limited to, the following:
   1. Owner acknowledgment that the grading or fill material is designated as an uncontrolled stockpile;
   2. Owner acknowledgment that the site is not eligible for a building permit unless special soils analysis and foundation design are submitted and approved by the city engineer or, the site is subsequently graded pursuant to a valid grading permit issued in accordance with the provisions of this chapter;
   3. Agreement by the owner that the grading or stockpile work will be done in accordance with grading plans and specifications as approved by the city engineer;
   4. Agreement by the owner that the stockpile will be maintained in a safe and sanitary manner at the sole cost, risk and responsibility of the owner;
   5. Agreement by the owner indemnifying and holding the city harmless against any and all claims arising from the grading or maintenance of the stockpile; and
   6. Agreement by the owner that the agreement for uncontrolled stockpile will inure and be binding upon any and all successors in interest to the property.
C. The agreement for uncontrolled stockpile shall be approved by the city engineer and recorded by the city clerk in the office of the county recorder as constructive notice upon the land involved. The notice shall remain in effect until release of the agreement is filed by the city engineer. (Ord. NS-385 □4 (part), 1996)

15.16.160 Appeals.

A. An individual may appeal the decision of the city engineer made in regard to administration of this chapter to the city council within ten calendar days following the decision. Appeals shall be in writing, filed with the city clerk and shall state the basis for the appeal. Fees for filing an appeal shall be in an amount as established by resolution of the city council. The decision of the city council shall be final.

B. The city clerk shall thereupon fix a time and place for hearing such appeal. The city clerk shall give notice to the appellant and applicant/permittee of the time and place of hearing by serving the notice personally or by depositing it in the United States Post Office in the city, postage prepaid, addressed to such persons at their last known address. (Ord. NS-385 □4 (part), 1996)

15.16.170 Unlawful acts.

A. It is unlawful to:
   1. Perform grading work without a grading permit when such permit is required pursuant to this chapter;
   2. Perform any grading work which is not in conformance with an approved grading permit;
   3. Make a false statement or furnish false data on any application, grading plan, engineering report or other document required pursuant to the provisions of this chapter; or,
   4. Delay, frustrate or otherwise hinder the efforts of the city engineer or his/her designee from carrying out the duties required pursuant to the provisions of this chapter.

B. Regardless of whether or not a grading permit has been issued or is required to be issued, it is unlawful for any person to commit or cause to be committed the following acts or, to maintain or cause to be maintained a property in such a manner as to result in the commission of the following acts:
   1. Grading in such a manner as to become a hazard to life and limb or to endanger property or to adversely affect the safe use or stability of a public property, place or way;
   2. Grading without application of appropriate storm water best management practices (BMPs) in accordance the provisions of Title 15, City Standards and Municipal Permit;
   3. Dump, move or place any soil, sand, gravel, rock or other earthen material, or leave any bank, slope or other earthen surface unprotected so as to cause any such earthen material to be deposited upon or to roll, blow or wash upon or over the premises of another without the express consent of the owner of each such premises so affected or, upon or over any public property, place or way. Such consent shall be in writing and in a form acceptable to the city engineer; or
   4. Transport, haul or otherwise move any soil, sand, gravel, rock or other earthen material over any public or private street, place or way in such a manner as to allow such materials to blow or spill over and upon such public or private street, place or way. (Ord. NS-385 □4 (part), 1996)

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15.16.180 Investigation fee.

A. Whenever any work for which a permit is required by this code has been commenced without first obtaining a grading permit or an unlawful act, as defined in Section 15.16.170, has been committed, the city engineer shall conduct a special investigation into the cause, extent and potential remedial actions that must be undertaken before a new permit may be issued, the stop work notice is removed or the notice of grading violation is released. The city engineer shall collect an investigation fee from the offender whether or not a permit is then or

subsequently issued. The investigation fee shall be established by resolution of the city council and shall be in addition to any required permit fee. The investigation fee may be reduced or waived if the city engineer finds that:

1. The amount of the investigation fee is significantly out of proportion to the cost of the administrative work necessary to investigate the violation or unlawful act;
2. The violation or unlawful act was not in the control of the property owner and the property owner took immediate action to correct the violation upon notification by the city engineer; or
3. The violation or unlawful act was caused by or resulted from an unintentional action or misunderstanding of city codes or a directive issued by the city engineer or the city engineer's authorized representative.

B. The payment of an investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law. (Ord. NS-385 § 4 (part), 1996)

15.16.190 Enforcement measures--Remedies.

A. Whenever the city engineer determines that an unlawful act, as defined in Section 15.16.170, has been committed by an individual operating with or without benefit of a grading permit, the following enforcement measures and remedies may be undertaken by the city engineer, in lieu of or in addition to any remedial actions undertaken in accordance with Section 15.16.140:

1. Stop Work Notice. The city engineer may issue a stop work notice demanding that all unlawful activities, as defined in this chapter, be stopped until a valid grading permit is obtained or corrective action is authorized by the city engineer. The city engineer may allow continuance of the work to the extent necessary to install protective measures to safeguard the public or to secure the site against erosion, sedimentation and the discharge of non-storm water pollutants. Prior to resumption of any work, other than as may be permitted by the city engineer pursuant to this subsection, on a permitted grading operation, the permittee shall restore all cash deposits and/or other securities consumed by the city to the amount specified in the approved grading and erosion control agreement.

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2. Owner Notification. The owner of the property shall be notified in writing that a violation has occurred. The notification shall specify the location, nature and extent of the activity or condition which contributed to the violation, the corrective action needed to cure the violation and the period of time deemed necessary by the city engineer to correct the violation.
3. Record Notice of Grading Violation. In the event that the owner does not correct the violation in the manner or within the time period requested by the city engineer, the city engineer shall record a notice of grading violation against the property with the county recorder. Upon completion of any corrective action and/or issuance of a valid grading permit and upon payment of the investigation fee required pursuant to this section, the city engineer shall file a notice of release of grading violation with the county recorder releasing the property from the notice of grading violation.
4. Prohibition of Development Permits. Any property which has a notice of grading violation recorded against it shall be prohibited from obtaining or using any development permit pursuant to Titles 18, 20 and 21 of this code until after all corrective actions are taken in accordance with the requirements of the city engineer and, a notice of release of grading violation has been recorded with the county recorder.
5. Investigation Fee. An investigation fee shall be paid by the person responsible for the violation in accordance with the provisions of this chapter. The payment of such

investigation fee shall not relieve any person from the performance of the corrective work or otherwise complying with the requirements of this chapter.

6. Criminal Penalties. Each person, firm or corporation who commences or does any grading contrary to the provisions of this chapter, or otherwise violates the provisions of this chapter, is guilty of an infraction. Every day during any portion of which any violation of any provisions of this title is committed, continued or permitted by such person, firm or corporation, shall be deemed a separate violation and shall be punishable as provided in this title and in Section 1.08.010(b) of this code.
7. Abatement of Public Nuisance. Any grading commenced or done contrary to the provisions of this chapter, or other violation of this chapter, shall be, and the same is declared to be, a public nuisance. Upon order of the city council, the city attorney shall commence necessary proceedings for the abatement of any such public nuisance in the manner provided by law. Any failure, refusal, or neglect to obtain a permit as required by this chapter shall be prima facie evidence of the fact that a public nuisance has been committed in connection with any grading commenced or done contrary to the provisions of this chapter.
8. Civil Action. The city attorney may, at the request of the city engineer, initiate any appropriate civil action in a court of competent jurisdiction to enforce the stop work notice, including the required corrective actions, and/or the grading and erosion control agreement, including the recovery of any funds expended by the city to abate any public nuisance resulting from an unlawful act as defined in Section 15.16.170 and any additional civil penalties provided for by law. (Ord. NS-385 □4 (part), 1996)

15.16.090 Information on grading plans, specifications and engineering reports.

A. All grading plans, specifications and engineering reports required for grading permit submittal shall be prepared in accordance with the following requirements:

1. Grading plans, specifications, engineering calculations and other relevant engineering data shall be prepared by a civil engineer. The grading plans shall be drawn to scale in accordance with city standards and be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this chapter, city standards, the landscape manual and Titles 19, 20 and 21 of this code. All grading plans must include provision for protective measures for the control of urban pollutants, erosion and sedimentation in accordance with the requirements of this chapter, and city standards, including but not limited to the city Standard Urban Storm Water Mitigation Plan (SUSMP).
2. Geotechnical investigation reports shall be based upon the proposed grading plan. The geotechnical investigation report shall include an adequate description of the geology of the site and conclusions and recommendations regarding the effect of geologic conditions on the proposed development. Recommendations included in the report shall be consistent with the provisions of this chapter and city standards and shall be incorporated into the grading plans and/or specifications.
3. Preliminary soils investigations and reports shall be based upon the proposed grading plan. Such report shall include data regarding the nature, distribution and strength of existing soil types at the proposed grading site, recommendations for grading procedures and design criteria for corrective measures, if required by the soils engineer. Recommendations included in the report and approved by the city engineer shall be incorporated into the grading plans and/or specifications.

New Section
for
Code Revisions to Title 18 Building Codes and Regulations

Chapter 18.48 Storm Water Pollution Prevention

Sections:

18.48.010 Purpose and intent.
18.48.020 Definitions.
18.48.030 Prohibition on development.
18.48.040 Requirement for permit issuance.
18.48.050 Duty to deny final building permit approval.

18.48.010 Purpose and intent.

The purpose of this chapter is to ensure the environmental and public health, safety, and general welfare of the residential, commercial, and industrial sectors of the city of Carlsbad by:

A. Prohibiting non-storm water discharges to the storm water conveyance system.
B. Eliminating discharges to the storm water conveyance system from spills, dumping or disposal of materials other than storm water or permitted or exempted discharges.
C. Reducing pollutants in storm water discharges, including those pollutants taken up by storm water as it flows over urban areas (urban runoff), to the maximum extent practicable.
D. Reducing pollutants in storm water discharges in order to achieve applicable water quality objectives for receiving waters within the city of Carlsbad.

18.48.020 Definitions.

For purposes of this chapter, the definitions for the words, terms or phrases defined in chapter 15.04 of this code shall be used.

18.48.030 Prohibition on development.

For any property subject to this chapter, notwithstanding any provision of this code to the contrary, no building permit or occupancy permit for any project shall be issued and no person shall build, use or occupy any project, without first complying to the storm water protection provisions of Title 15 of this code.

18.48.040 Requirement for permit issuance.

A. Prior to the issuance of a building permit or occupancy permit for a project, the project owner or developer shall:
   1. Provide the city engineer with a completed storm water requirements applicability checklist in accordance with Standard Urban Storm Water Mitigation Plan (SUSMP) requirements;
   2. If the project is determined by the city engineer to be a priority development project, then the project owner or developer shall:

a. Prepare and submit a storm water management plan in conformance with the requirements of the SUSMP and Title 15 of this code;
b. Enter into a Permanent Storm Water Quality Best Management Practices Maintenance Agreement or provide an alternate maintenance mechanism as approved by the city engineer.

3. Agree to comply with storm water best management practices during construction of the building, structure or dwelling.

B. A city approved Construction SWPPP is required to be submitted prior to building permit issuance in accordance with city standards and Chapter 15.16.085 of this code for any project which has the potential for adding pollutants to storm water or non-storm water runoff during construction activities, unless an exemption from such requirement is provided pursuant to Chapter 15.16.085 and the Municipal Permit.

18.48.050 Duty to deny final building permit approval.

The community development director shall deny final approval and acceptance of a building permit, and shall refuse to allow final public utility connection and occupancy in any building, structure or dwelling unless the project owner or developer has complied with all storm water protection provisions of Title 15 of this code.

City of Carlsbad Construction Site Inventory January 01, 2008 through June 30, 2008

Permit	Issue Date	Addresss	Location Description	HU	Priority	Rainy Season Weeks	Dry Season Weeks	Rainy Season Inspections	Dry Season Inspections	Total Inspections	Completion date
GR980042	07-May-07	ECR CASSIA RD	LAUREL TREE APARTMENTS 138 UNIT COMPLEX	C	H	18	4	9	1	10	05/27/2008
GR000008	26-Apr-00	NORTHEAST CORNER ECR & COLLEGE BLVD	TERRACES SUNNYCEEK DWG361-6F Stockpile grading east of ECR DWG 361-6F.	B	H	18	8	9	2	11	
GR020040	12-Dec-02	Spa Bldg DWG 402-2B	LA COSTA RESORT & SPA SPA BLDG	D	H	18	8	9	2	11	
GR020045	26-Sep-03	6515 EL CAMINO REAL	MANZANITA APTS MANZANITA APARTMENTS	D	H	18	8	9	2	11	
GR020046	09-Jan-03	2101 COSTA DEL MAR RD	LA COSTA VALET LOOP LA COSTA RESORT & SPA CREEK PARKING FACILITY	D	H	18	8	9	2	11	
GR030008	28-Mar-03	2101 COSTA DEL MAR 2101 COSTA DEL MAR RD	LA COSTA RESORT & SPA-BALLROOM GRADING FOR BALLROOM	D	H	18	8	9	2	11	
GR030012	25-Jun-04	PAR BETWEEN MELROSE & BUSINESS PARK	PALOMAR FORUM / CT 99-06 ROUGH GRADING PER DWG 399-4A	B	H	18	8	9	2	11	
GR030022	23-Sep-03	3655 ADAMS 3655 ADAMS ST	MAGNOLIA SUBDIVISION PHSE 2 GRADING PERMIT FOR 5 SFD'S	B	H	18	8	9	2	11	
GR030043	18-Sep-03	HILLSIDE BTWN HIGHLAND & PARK 4240 HILLSIDE DR	OCHELTREE RESIDENCE SINGLE FAMILY RESIDENCE	B	H	18	8	9	2	11	
GR030053	30-Aug-05	4588 ADAMS ST	ST CLAIRE RESIDENCE ST CLAIRE RESIDENCE - ADAMS STREET	B	H	18	8	9	2	11	
GR030056	01-Dec-04	1400 FT SOUTH OF PALOMAR AIRPORT ROAD ON CENTERLINE OF EL CAMINO REAL	CARLSBAD RACEWAY GRADING	B	H	18	8	9	2	11	
GR030059	30-Sep-03	5305 CARLSBAD BL	WALTERS RESIDENCE CDP 02-56 / WALTERS RESIDENCE	B	H	18	8	9	2	11	
GR030071	07-Jan-04	NORTHEAST CORNER OF LA COSTA AV & RSF	LA COSTA TOWN SQUARE MASS GRADING/STOCKPILE	D	H	18	8	9	2	11	
GR040023	12-Jul-04	ALICANTE BTN ALGA & POINSETTIA	LA COSTA GREENS, NEIGH. 1.08	D	H	11	0	6	0	6	03/13/2008
GR040033	26-Jul-04	W & E SIDE OF ALICANTE BTN ALGA & POINSETTIA	LA COSTA GREENS 1.11/1.13/1.14 DWG 406-3A GREENS 1.11/ 1.13/ 1.14	D	H	18	8	9	2	11	
GR040034	08-Jul-04	WEST SIDE OF ALICANTE RD NORTH OF ALGA RD AND SOUTH OF POINSETTIA LANE	LA COSTA GREENS 1.10 LA COSTA GREENS NEIGHBORHOOD 1.10	D	H	18	8	9	2	11	
GR040058	23-Sep-04	2245 HIGHLAND DR	DUNN RESIDENCE SHOULD BE 2200 HIGHLAND DR	B	H	18	8	9	2	11	
GR040059	11-Aug-04	S SIDE PAR BTWN ECR & EL FUERTE	BRESSI RANCH PA 11 Bressi Ranch PA-11	D	H	18	8	9	2	11	
GR040063	19-Nov-04	NORTH OF LEVANTE ST AND WEST OF EL CAMINO REAL	LA COSTA GLEN NORTH PRECISE GRADING FOR LA COSTA GLEN NORTH	D	H	18	8	9	2	11	
GR040065	25-Oct-06	NE COLLEGE/CANNON INTERSECTION	CALAVERA HILLS VILLAGE W			18	8	9	2	11	
GR040067	09-Aug-04	NORTH END OF HIGHLAND 2245 HIGHLAND DR	DUNN RESIDENCE CDP 02-42 / EMERGENCY WORK - NO IMPORT OF SOIL.	B	H	18	8	9	2	11	
GR040070	20-Mar-07	ALICANTE BTN ALGA & POINSETTIA	LACOSTA GREENS NEIGHBORHD 1.08 precise grading for dwg 406-6b	D	H	18	8	9	2	11	
GR040072	08-Sep-04	RSF RD. WITHIN FACILITIES MGMT ZONE 11	LA COSTA RIDGE-N 2.6 Stockpile (VLC RIdge N 2.6)	D	H	18	8	9	2	11	
GR040073	08-Sep-04	CALAVERA HILLS VILLAGE U	CALAVERA HILLS VILLAGE U	B	H	18	8	9	2	11	
GR040081	18-Feb-05	NORTH SIDE OF LA COSTA AVE BWTN EL CAMINO REAL AND VIEJO CASTILLA WAY	LA COSTA FAIRWAYS CONDOS GRADING	D	H	18	8	9	2	11	
GR040082	12-Nov-04	FARADAY AV & EL FUERTE	CARLSBAD OAKS NORTH PHASE 1 GRADING	B	H	18	8	9	2	11	
GR040083	12-Nov-04	FARADAY AV & EL FUERTE	CARLSBAD OAKS NORTH FARADAY GRADING	B	H	18	8	9	2	11	
GR040084	12-Nov-04	PALOMAR AIRPORT RD AT MELROSE	CARLSBAD OAKS NORTH EL FUERTE GRADING	B	H	18	8	9	2	11	
GR040096	29-Mar-05	3471 JEFFERSON 3471 JEFFERSON ST	DIGIACOMO RESIDENCE PD 04-18 / SINGLE FAMILY RESIDENCE	A	H	18	8	9	2	11	
GR040104	04-Feb-05	2100 COSTA DEL MAR RD	LA COSTA RESORT, CT 03-01 dwg 422-6a - Model Complex	D	H	18	8	9	2	11	
GR050005	12-Oct-05	WEST AND EAST SIDE OF CORINTIA ST BTWN ALGA AND RSF RD	LA COSTA RIDGE2.5 GRADING	D	H	18	8	9	2	11	
GR050006	03-Nov-05	WEST AND EAST SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	LA COSTA RIDGE GRADING	D	H	18	8	9	2	11	
GR050010	04-Mar-05	WITHIN FACILITIES MANAGEMENT ZONE 10	LA COSTA GREENS NEIGH. 1.16 Drawing Number 423-7A	B	H	18	8	9	2	11	
GR050011	16-Mar-05	NE CORNER OF POINSETTIA LN & ALICANTE RD	LA COSTA GREENS N. 1.06/1.07 Drawing Number 427-6A	B	H	18	8	9	2	11	
GR050012	20-Apr-05		LA COSTA GREENS Neigh. 1.11, 1.13, 1.14 precise grading for Phase 4 to Buildout	B	H	18	8	9	2	11	
GR050025	29-Sep-05	NORTH AND SOUTH SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	LA COSTA RIDGE NEIGH 2.3 & 2.4 GRADING FOR LA COSTA RIDGE 2.3 & 2.4	D	H	18	8	9	2	11	
GR050031	01-Nov-05	3824 SKYLINE RD	SEAR RESIDENCE GARAGE ADDITION	A	H	5	0	3	0	3	01/31/2008

GR050034	30-Aug-05	PARK DRIVE AND ADAMS STREET 4575 PARK DR	PARK DRIVE KELLY RESIDENCE KELLY RESIDENCE GRADING	B	H	18	8	9	2	11	
GR050036	29-Aug-05	NE CORNER OF ECR AND COSTA DEL MAR RD 2101 COSTA DEL MAR RD	LA COSTA RESORT & SPA PHASE 2 GRADING FOR LA COSTA RESORT & SPA PH 2	D	H	18	8	9	2	11	
GR050037	03-Nov-05	ADJACENT TO ESTRELLA DE MAR RD SOUTH OF POINSETTIA	LA COSTA GREENS1.17	D	H	18	8	9	2	11	
GR050038	19-Oct-05	1184 MAGNOLIA AV	SHAMSHOIAN RESIDENCES SFD GRADING	B	H	18	8	9	2	11	
GR050040	29-Sep-05	5335 PASEO DEL NORTE	WESELOH HUMMER GRADING FOR CONSTR OF HUMMER DEALERSHIP	B	H	1	0	1	0	1	01/04/2008
GR050043	21-Mar-06	BETWEEN SAPPHIRE DR & AVIARA PKWY	EMERALD POINTE ESTATES GRADING FOR EMERALD POINT ESTATES	C	H	18	8	9	2	11	
GR050044	09-Aug-05	EAST SIDE OF AVENIDA ENCINAS BTWN PALOMAR AIRPORT RD AND POINSETTIA LN 6200 AVENIDA ENCINAS	EWPCF GRADING BY ENCINA	C	H	18	8	9	2	11	
GR050045	30-Aug-05	SOUTHEAST OF PAR AND AVIARA PKWY	BILTMORE - 24 HR FITNESS GRADING FOR 24 HR FITNESS CLUB	C	H	18	8	9	2	11	
GR050046	06-Oct-05	N SIDE HARRISON BTN CHINQUAPIN & ADAMS	THE BLUFFS GRADING FOR THE BLUFFS DEVELOPMENT	A	H	18	8	9	2	11	
GR050054	24-Feb-06	3000 HIGHLAND DR	HIGHLAND DRIVE SUBDIVISION SUBDIVISION GRADING	A	H	18	8	9	2	11	
GR050055	29-Nov-05	SOUTH OF FARADAY AV ADJACENT TO CITY BOUNDARY	CARLSBAD OAKS NORTH REVEGETATION GRADING	B	H	18	8	9	2	11	
GR050057	30-Jun-06	NE CORN OF AVIARA PKWY AND POINSETTIA	NORTH COAST CALVARY CHAPEL	D	H	18	8	9	2	11	
GR050060	30-Sep-05	SOUTH SIDE OF OAK AV BTWN LINCOLN ST AND WASHINGTON ST 341 OAK AV	OCEAN MIST CONDOS 5 CONDOS	B	H	18	8	9	2	11	
GR050061	21-Nov-05	NORTH SIDE OF PALOMAR AIRPORT RD BTWN EAGLE DR AND BUSINESS PARK DR	PALOMAR FORUM EAST	C	H	18	8	9	2	11	
GR050062	29-Sep-05	2649 OCEAN STREET	KIKO RESIDENCE	A	H	18	8	9	2	11	
GR050063	29-Nov-05	WITHIN FACILITIES MANAGEMENT ZONE 10	LA COSTA GREENS 1.01-1.03 DWG 397-2Y	D	H	18	8	9	2	11	
GR050067	10-Apr-07	5390 CARLSBAD BL	KOKOPELLI RESIDENCE SINGLE FAMILY RESIDENCE	B	H	18	8	9	2	11	
GR050068	29-Nov-05	6480 EL CAMINO REAL	CASSIA HEIGHTS GRADING FOR FAMILY HOUSING UNIT	D	H	18	8	9	2	11	
GR050070	31-Jan-06	East end El Fuerte & south of Corintia St.	LA COSTA RIDGE - 2.3 & 2.4	D	H	18	8	9	2	11	
GR050072	13-Jan-06	WEST SIDE OF PASEO DEL NORTE BTWN PALOMAR AIRPORT RD AND SEA GATE RD	PASEO DEL NORTE MEDICAL OFFICE GRADING FOR MEDICAL OFFICE	B	H	18	8	9	2	11	
GR050073	09-Jan-06	2101 COSTA DEL MAR RD	LA COSTA RESORT & SPA COSTA DEL MAR ENTRANCE	D	H	18	8	9	2	11	
GR050079	27-Jun-06	6811 VIANDA CT	GOLDEN RESIDENCE	D	H	18	8	9	2	11	
GR060001	15-Feb-06	SOUTH SIDE PALOMAR AIRPORT RD BTWN YARROW DR AND EL CAMINO REAL 2229 PALOMAR AIRPORT RD	CARLSBAD AIRPORT HOTELS Two 3-story hotel buildings w/pools, paved access & parking	C	H	18	8	9	2	11	
GR060003	15-Feb-06	WITHIN FACILITIES MANAGEMENT ZONE 11	LA COSTA OAKS NORTH DWG 429-7C LA COSTA OAKS NORTH NEIGH 3.6 & 3.7	D	H	18	8	9	2	11	
GR060005	15-Mar-06	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN GATEWAY RD AND MELROSE DR	BRESSI RANCH LOT 40 GRADING	D	H	18	8	9	2	11	
GR060007	19-Jul-06	7335 EL FUERTE ST	JOHNSON RESIDENCE SINGLE FAMILY GRADING		H	18	8	9	2	11	
GR060009	10-Apr-06	NORTH AND SOUTH SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	VLC - RIDGE 2.3 & 2.4 NORTH PRECISE GRADING FOR 2.3 & 2.4 NORTH	D	H	18	8	9	2	11	
GR060010	25-Sep-06	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN AVIARA PKWY AND PALOMAR OAKS	BILTMORE 24 HR FITNESS/OFFICES	C	H	18	8	9	2	11	
GR060011	01-Jun-06	2848 LOKER AVE EAST 2848 LOKER AV EAST	OAKS EAST LOT 31	B	H	18	8	9	2	11	
GR060012	17-Apr-06	WEST SIDE OF EL CAMINO REAL BTWN PALOMAR AIRPORT RD AND ALGA RD	VIA SAT NEW CONCRETE SHELL TILT-UP	C	H	18	8	9	2	11	
GR060013	11-Apr-06		LA COSTA OAKS NORTH Mass grading for neigh. 3.1, 3.3, 3.4, 3.5	D	H	18	8	9	2	11	
GR060014	11-Apr-06		LA COSTA OAKS NORTH Mass grading for neigh. 3.2	D	H	18	8	9	2	11	
GR060016	26-Apr-06	NORTH SIDE OF LIONSHEAD VE BTWN EAGLE DR AD BUSINESS PARK DR	OPUS PT LOT 19	B	H	18	8	9	2	11	
GR060017	10-May-06	NORTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND BUSINESS PARK DR	OPUS POINT LOT 20 RACEWAY LOT 20	B	H	18	8	9	2	11	
GR060018	10-May-06	NORTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND BUSINESS PARK DR	OPUS POINT LOT 21	B	H	18	8	9	2	11	
GR060019	27-Apr-06	NORTH SIDE OF LIONSHEAD BTWN EAGLE DR AND BUSINESS PARK DR	OPUS PT LOT 18	B	H	18	8	9	2	11	
GR060020	27-Apr-06	NORTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND MELROSE DR	OPUS POINT LOT 22	B	H	18	8	9	2	11	

GR060021	20-Apr-06	WEST AND EAST SIDE OF CORINTIA ST BTWN EL FUERTE AND XANA	LA COSTA RIDGE 2.1 & 2.2 PRECISE GRADING FOR 90 SFD's (Pulte Homes)	D	H	18	8	9	2	11	
GR060022	12-Apr-06	7222 AVIARA DR 7222 AVIARA DR	KERN RESIDENCE SINGLE FAMILY RESIDENCE	D	H	18	8	9	2	11	
GR060023	03-May-06	7151 LATITUDE LN	SMITH RESIDENCE GRADING PLAN DWG 435-1A	D	H	18	8	9	2	11	
GR060025	30-Jun-06	2010 CASSIA RD	CASSIA PROFESSIONAL OFFICES CAT HOSPITAL/MEDICAL OFFICE	D	H	18	8	9	2	11	
GR060026	11-Jul-06	3193 LIONSHEAD AV	OPUS PT LOTS 5 & 6	B	H	18	8	9	2	11	
GR060027	08-Jan-07	7343 EL FUERTE ST	BAIHAGHY TONY RESIDENCE single family residence		H	18	8	9	2	11	
GR060029	06-Jul-06	TOWN GARDEN RD	BRESSI RANCH LOT 16 TWO OFFICE BUILDINGS	D	H	18	8	9	2	11	
GR060030	29-Aug-06	NORTH SIDE OF LIONSHEAD RD BTWN MELROSE AND EL FUERTE 3152 LIONSHEAD AV	OPUS POINT LOTS 23 & 24	B	H	18	8	9	2	11	
GR060031	06-Sep-06	2753 JEFFERSON ST	TUSCANY OFFICE SUITES		H	18	8	9	2	11	
GR060032	25-Jul-06	3115 MELROSE DR	OPUS LOT 25 RACEWAY ONE TWO STORY OFFICE BLDG	B	H	18	8	9	2	11	
GR060034	22-Feb-08	3725 WESTHAVEN DR	JENNINGS MINOR SUB SINGLE FAMILY GRADING	B	H	10	8	5	2	7	
GR060039	24-Aug-06	SW CORNER RANCHO SANTA FE RD	HUNTERS POINTE Hunters Point (multi-family project)	D	H	18	8	9	2	11	
GR060040	22-Jan-07	NORTH SIDE OF PALOMAR AIRPORT RD BTWN EAGLE DR AND MELROSE DR	PALOMAR FORUM LOTS 1,2 & 8 Lots 1,2&8	B	H	18	8	9	2	11	
GR060044	31-Aug-06	7211 OBELISCO CR	FERNANDEZ RESIDENCE GRADING		H	18	8	9	2	11	
GR060045	03-Oct-06	3955 GARFIELD ST	BEACHWALK 2 CONDOS	B	H	18	8	9	2	11	
GR060046	12-Oct-06	1650 CALLIANDRA RD	AVIARA PREMIER SLOPE REPAIR SLOPE REPAIR	D	H	18	8	9	2	11	
GR060047	10-Jul-07	234 DATE AV	CRESCENT DEL SOL ESTATES	B	H	18	8	9	2	11	
GR060049	21-Dec-06	WHIPTAIL LOOP & GAZELLE CT	CARLSBAD OAKS NORTH PHASE 2 LOTS 13-19 CARLSBAD OAKS NORTH PHASE 2	B	H	18	8	9	2	11	
GR060051	01-Sep-06	7214 WISTERIA WAY	ZONARAS GEORGE C & CATHERINE SLOPE FAILURE REPAIR	D	H	4	0	2	0	2	01/15/2008
GR060052	15-Sep-06	245 TAMARACK AV	TAMARACK BEACH LOFTS	B	H	18	8	9	2	11	
GR060055	22-Aug-06		LA COSTA RIDGE 2.5 The Ridge 2.5	D	H	18	8	9	2	11	
GR060056	22-Sep-06	2173 SALK AVE 2173 SALK AV	VENTANA REAL LOT 2 Vantana Real Lot 2	B	H	18	8	9	2	11	
GR060057	25-Oct-06	INNOVATION & GATEWAY	TOWERS AT BRESSI RANCH COMMERCIAL SITE GRADING	D	H	18	8	9	2	11	
GR060058	07-Feb-07	6602 BLACK RAIL RD	BLACK RAIL RD 16	D	H	18	8	9	2	11	
GR060059	26-Sep-06	4485 ADAMS ST	STEWARD RESIDENCE SINGLE FAMILY RESIDENCE	B	H	18	8	9	2	11	
GR060061	23-Oct-06	2173 SALK AVE 2173 SALK AV	VENTANA REAL LOT 3 COMMERCIAL BUILDING	B	H	18	8	9	2	11	
GR060063	06-Oct-06	SOUTH SIDE OF POINSETTIA LN BTWN EL CAMINO REAL AND ALICANTE RD	LA COSTA GREENS 1.17 107 SINGLE FAMILY RESIDENCES	D	H	18	8	9	2	11	
GR060065	23-Jan-07	3551 HIGHLAND 3551 HIGHLAND DR	BROWN RESIDENCE SINGLE FAMILY RESIDENCE	B	H	18	8	9	2	11	
GR060066	21-Feb-07	6020 AVENIDA ENCINAS	TOYOTA CARLSBAD TOYOTA C'BAD - 6020 AVE. ENCINAS (dwg 441-6a)	C	H	18	8	9	2	11	
GR060067	08-Nov-06	EAST SIDE OF ALICANTE RD BTWN POINSETTIA LN AND PALOMAR AIPORT RD	VILLAGES- GREENS 1.06 Precise grading for 91 single family homes	D	H	18	8	9	2	11	
GR060069	16-Mar-07	7662 EL CAMINO REAL	LA COSTA PLAZA PARCEL 7	D	H	18	3	9	1	10	05/22/2008
GR060071	05-Jul-07	4998 EUCALYPTUS LN	EUCALYPTUS LANE 4 lot subdivision	B	H	18	8	9	2	11	
GR060072	12-Feb-07	EAST SIDE OF EL CAMINO REAL BTWN CAMINO VIDA ROBLE AND POINSETTIA LN	LA COSTA GREENS 1.3 RV PARKING	D	H	18	8	9	2	11	
GR060073	12-Feb-07		LA COSTA GREENS 1.2/3	D	H	18	8	9	2	11	
GR060075	26-Jan-07	SOUTH SIDE OF CARLSBAD VILLAGE DR BTWN HIGHLAND DR AND PIO PICO DR	CARLSBAD MEDICAL VILLAGE COMMERCIAL/OFFICE BUILDINGS	B	H	18	8	9	2	11	
GR060076	16-Jan-07	BETWEEN TAMARACK AV AND CANNON RD	ROBERTSON RANCH-- EAST VILLAGE Vegetation Removal	B	H	18	8	9	2	11	
GR070001	12-Mar-07	3655 ADAMS ST	MAGNOLIA SUBDIVISION PHASE 3	B	H	18	8	9	2	11	
GR070002	03-Jul-07	WEST SIDE OF AVENIDA ENCINAS BTWN POINSETTA LN AND PALOMAR AIRPORT RD	POINSETTIA COMMONS Mixed use project on Ave. Encinitas	B	H	18	8	9	2	11	
GR070003	28-Mar-07	BETWEEN TAMARACK AV AND CANNON RD	ROBERTSON RANCH Robertson Ranch DWG 433-6a	B	H	18	8	9	2	11	
GR070006	16-Feb-07		PACIFIC RIDGE SCHOOL	D	H	18	8	9	2	11	
GR070009	23-Apr-07	SOUTH SIDE OF PALOMAR AIRPORT RD BTWN EL FUERTE AND GATEWAY RD	BRESSI RANCH LOTS 33-39 NEW SHELL R & D BUILDINGS	D	H	18	8	9	2	11	
GR070010	04-May-07	GRAND PACIFIC DRIVE	CARLSBAD RANCH PA 5 PRECISE GRADING PHASE 2 FOR PA 5	B	H	18	8	9	2	11	
GR070011	17-Jul-07	5960 EL CAMINO REAL	PALOMAR TRANSFER STATION	D	H	18	8	9	2	11	
GR070012	11-Jun-08	3690 HIGHLAND DR	KAWANO RESIDENCE	B	H	0	2	0	1	1	

GR070013	30-Mar-07	3200 JAMES DR	O'GARA PARCEL MAP Work limited to earth berm for drainage as shown on apprvd MS 03-07	A	H	18	8	9	2	11
GR070014	25-Sep-07	2756 GALICIA WY	VAN WEY SLOPE REPAIR	C	H	18	8	9	2	11
GR070015	24-Aug-07	2741 GATEWAY RD	BRESSI RANCH FUEL MART	D	H	18	8	9	2	11
GR070016	12-Jul-07	2922 MANAGUA PL	ADMANI RESIDENCE SINGLE FAMILY RESIDENCE	D	H	18	8	9	2	11
GR070017	23-Jul-07	INNOVATION & GATEWAY	BRESSI RANCH LOTS 17 & 18 5 OFFICE BUILDINGS	D	H	18	8	9	2	11
GR070018	18-Jul-08	COVE DR 4547 COVE DR	LBC CONDOS 2 UNIT CONDOMINIUM (DUPLEX) CONSTRUCTION	B	H	18	8	9	2	11
GR070019	07-Apr-08	SOUTH SIDE OF LIONSHEAD BTWN EAGLE & BUSINESS PARK	OPUS POINT LOTS 9 & 10	B	H	4	8	2	2	4
GR070021	15-Jun-07	2497 OCEAN ST	DONALD CONDOS	B	H	18	8	9	2	11
GR070022	07-Apr-08	SOUTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND BUSINESS PARK	OPUS POINT LOT 10 & 11	B	H	4	8	2	2	4
GR070025	18-Jul-07	WEST SIDE OF EL FUERTE BTWN PALOMAR AIRPORT RD AND GREENHAVEN DR	PACIFIC RIDGE SCHOOL	C	H	18	8	9	2	11
GR070026	16-Jul-07	2500 CAMPBELL PL	BRESSI RANCH SELF STORAGE	C	H	18	8	9	2	11
GR070028	30-Jan-08	RSF RD & SAN ELIJO RD	LA COSTA OAKS NORTH NEIGH. 3.1	D	H	14	8	7	2	9
GR070029	11-Dec-07	RANCHO SANTA FE & AVENDIA SOLEDAD	LA COSTA OAKS NEIGH 3.3 DWG 446-5A	D	H	18	8	9	2	11
GR070030	30-Jan-08	RANCHO SANTA FE & AVENIDA SOLEDAD	LA COSTA OAKS NORTH 3.4 & 3.5	D	H	14	8	7	2	9
GR070031	07-Apr-08	SOUTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND BUSINESS PARK	OPUS POINT LOT 7	B	H	4	8	2	2	4
GR070033	07-Apr-08	SOUTH SIDE OF LIONSHEAD AV BTWN EAGLE DR AND BUSINESS PARK	OPUS POINT LOT 8 PIP 06-14 - Lot 8	B	H	4	8	2	2	4
GR070034	14-Dec-07	3770 CARLSBAD BL	PACIFIC SUNSET CONDOMINIUMS 4 unit condo project	B	H	18	8	9	2	11
GR070035	12-Oct-07	2578 ROOSEVELT ST	ROOSEVELT GARDENS CONDOS	A	H	18	8	9	2	11
GR070036	20-Jun-07	2466 MICA RD	LA COSTA GREENS 1.07 Grading for 71 single family residence	C		18	8	9	2	11
GR070038	25-Jul-07	SALK AVE □ ECR	CRC LOT 1 FENTON	B	H	18	8	9	2	11
GR070039	09-Aug-07	EAST SIDE OF EL CAMINO REAL BTWN HAYMAR DR AND MARRON DR	CHEVRON SERVICE STA 09-1312 GAS STATION	A	H	18	8	9	2	11
GR070042	11-Sep-07	2424 CANNON RD	ROBERTSON RANCH PA 15 AFFORDABLE APTS	B	H	18	8	9	2	11
GR070043	27-Aug-07	EAST SIDE OF EL CAMINO REAL BTWN CAMINO VIDA ROBLE AND TOWNGATE 6286 EL CAMINO REAL	ASPIRATIONS DAYCARE build to suit daycare center (9,970 SF slab on grade/2 acre site)	C	H	18	8	9	2	11
GR070045	11-Dec-07	RANCHO SANTA FE & AVENIDA SOLEDAD	LA COSTA OAKS NORTH 3.7 SUBDIVISION OF 44 RESIDENTIAL LOTS, 3 PRIVATE DRIVEWAYS LOTS AND 2 OPEN SPACE LOTS ON 13.8 ACRES	D	H	18	8	9	2	11
GR070047	11-Jan-08	5056 EL CAMINO REAL	ROBERTSON RANCH HABITAT CORRID Grading to create permanent open space (habitat corridor) DWG 447-4a			17	8	9	2	11
GR070048	31-Aug-07	S OF LCA BTWN ECR AND CASTILLA WY	LA COSTA CONDOS SLOPE REPAIR	D	H	18	8	9	2	11
GR070049	11-Jun-08	2016 PALOMAR AIRPORT RD	MAGELLAN AVIATION HANGERS MAGELLAN AVIATION HANGERS	C	H	0	2	0	1	1
GR070051	17-Oct-07	ON THE EAST SIDE OF EL CAMINO REAL BETWEEN EL CAMINO REAL AND GATEWAY ROAD	ECR CORPORATE CENTER TWO MEDICAL OFFICE BUILDINGS TOTALING 87,000 SF TO INCLUDE A REHABILITATION FACILITY	D	H	18	8	9	2	11
GR070052	07-Dec-07	2180 RUTHERFORD RD	CALLAWAY GOLF PARKING STRUCTUR			18	8	9	2	11
GR070053	04-Feb-08	W SIDE OF HVR BTWN CANNON & PAR	CARLSBAD RANCH PA 5 Villas 50-52 (DWG 428-9D)	C	H	13	8	7	2	9
GR070055	26-Aug-08	NORTH SIDE OF PARADISE RD BTWN EL FUERTE	BOYS & GIRLS CLUB			18	8	9	2	11
GR070056	01-Feb-08	1960 LA COSTA AV 1956 EL CAMINO REAL	LEUCADIA WASTEWATER DISTRICT	D	H	14	8	7	2	9
GR070059	16-Nov-07	560-562 CARLSBAD VILLAGE DRIVE 560 CARLSBAD VILLAGE DR	ROOSEVELT CENTER	A	H	18	8	9	2	11
GR070060	30-Jan-08	2737 MADISON ST	MADISON SQUARE TOWNHOMES 2737 Madison St , 4 -unit Condo DWG 451-1A	A	H	14	8	7	2	9
GR070061	10-Dec-07	7342 ALTIVA PL	JAVAHERI RESIDENCE Single Family Residence		H	18	8	9	2	11
GR070065	06-May-08	NORTH SIDE OF CHINQUAPIN BTWN STELLA MARIS AND HIGHLAND DR	MATSUBARA RESIDENCE SINGLE FAMILY RESIDENCE	B	H	0	7	0	2	2
GR070066	10-Jan-08	EAST SIDE OF EL FUERTE BTWN GATEWAY RD AND BRESSI RANCH WY	BRESSI RANCH VILLAGE CENTER	D	H	17	8	9	2	11
GR070070	27-Mar-08	WEST SIDE OF SITIO CORAZON BTWN SAN ELIJO RD AND AVENIDA PARADA	LA COSTA OAKS NORTH REC CENTER PRECISE GRADING FOR REC CENTER FOR LA COSTA OAKS NORTH	D	H	6	8	3	2	5

GR080001	24-Mar-08	NORTH SIDE OF CANNON RD BTWN EL CAMINO REAL AND COLLEGE BL	ROBERTSON RANCH REC SITE ROBERTSON RANCH PA 19	B	H	6	8	3	2	5
GR080002	24-Mar-08	NORTH SIDE OF CANNON RD BTWN EL CAMINO REAL AND COLLEGE BL	ROBERTSON RANCH EAST VILLAGE 314 LOTS	B	H	6	8	3	2	5
GR080003	24-Jun-08	5545 FERMI CT	TAYLORMADE DRIVING RANGE driving range	B	H	0	1	0	1	1
GR080004	08-May-08	N SIDE CAMPBELL CUL-DE-SAC BTWN CAMPBELL PL & PAR 2530 CAMPBELL PL	BRESSI RANCH LOT 15 40,000 SQUARE FOOT CONCRETE TILT UP	D	H	0	7	0	2	2
										1608

City of Carlsbad

Construction Site NPDES Compliance Inspection Checklist

Construction Management & Inspection Division

Permit #: Date:

Inspection Type: Weather:

Inspected By: Project #/Name:

Mark (√) box "Yes", "No", or "N/A"; if there are comments, mark (√) box "Comment".

Yes	No	N/A	Comment	Inspection Description
☐	☐	☐	☐	1. Are slopes steeper than 3:1 properly covered?
☐	☐	☐	☐	2. Are areas flatter than 3:1 covered or protected by desilting basins?
☐	☐	☐	☐	3. Is the SWPPP wall map up to date and accurate?
☐	☐	☐	☐	4. Are all gravel bags, straw waddles, silt fences, and other linear sediment barriers in place in accordance with the SWPPP, and are they functioning properly?
☐	☐	☐	☐	5. Are basins designed and maintained to provide the required retention/detention?
☐	☐	☐	☐	6. Is the stabilized construction entrance preventing tracking (i.e. working properly)?
☐	☐	☐	☐	7. Are all downstream storm drain inlets protected with devices that are in working order and being properly maintained?
☐	☐	☐	☐	8. Are non-storm-water BMP's being used? (e.g. concrete washouts)
☐	☐	☐	☐	9. Are all material and equipment handling, storage, and maintenance areas clean, and free of spills, leaks, or other deleterious materials?
☐	☐	☐	☐	10. Is the site free from litter and the litter collected and placed in covered containers?
☐	☐	☐	☐	11. Are temporary stockpiles and/or construction materials in approved areas and protected/covered?
☐	☐	☐	☐	12. Are all areas designated to be seeded or landscaped properly maintained (i.e. irrigation functioning properly, 90-100% coverage)? NO BMP's REQUIRED
☐	☐	☐	☐	13. Are all natural drainage courses and open spaces in proximity to this project protected?
☐	☐	☐	☐	14. Are all BMP's maintained in functional order? (e.g. sediment removed, basins pumped down, repairs made, etc.)

Comments:_____

_____

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_____

Signature:_____ Date:_____

City of Carlsbad CIP Construction Site Inventory June 2008

PERMIT	PRONUM	PRONAME	DATE	
3860-1	3860-1	Widening Olivenhain & RSF	06/04/2008	
3667-14	3667-14	2007 Slurry Seal	06/04/2008	
3667-15	3667-15	2007 Pavement Overlay Project	06/04/2008	
3699-W	3699-W	Aviara Park Water Svc Relocation	06/04/2008	
3822	3822	Reservoir Fencing Project	06/04/2008	**Add 5 2008**
3875-1	3875-1	Poinsettia Sewer Lift Station Upgrade	06/04/2008	**Add 11 13 07**
3901	3901	Fire Station 6	06/04/2008	
3936	3936	Picnic Shelters Stagecoach & Calavera Hills Community Pk	06/04/2008	Add 2/06/2008
3939-1	3939-1	Signal Poinsettia Ln & Black Rail Rd	06/04/2008	JM Assign to CLA 1/30/08
3955	3955	Demo of Pajama Dr Water Facility	06/04/2008	**2 5 Reassigned to DS**
39721-3	39721-3	Golf Course Construction (Wadsworth)	06/04/2008	
3771/4001	3771/4001	Library Learning Center	06/04/2008	
4502	4502	Poinsettia Community Pk -Ph 2A Tennis Courts	06/04/2008	Add 11/06/2007
5005	5005	Maerkle Reservoir Cover	06/04/2008	Add 01/10/2007/WAS Adams
6013	6013	Concrete Replacement Project	06/04/2008	
6601	6601	Cynthia Lane Storm Drain Improvements	06/04/2008	Add 04/28/2008
66051	66051	Calle Gavanzo Drainage	06/04/2008	Add 01/10/2007
9101	9101	Sewer Access Hole Rehabiltation NE Quadrant	06/04/2008	
PWS 07-05	PWS 07-05	Mira Monte Dr Access Control Gate	06/04/2008	
PWM08-17ENG	PWM08-17ENG	Point "D" Piping Removal PAR & ECR	06/04/2008	

	AREA NAME	ADDRESS	DESCRIPTION	Pollutant Generating Activities															Potential Pollutants									Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?
				Building Maintenance and Repair SC-41	Equipment Storage SC-22	Hazmat Storage SC-34	Landscape Maintenance and Repair SC-73	Material Storage SC-33	Parking Lot Maintenance SC-43	Pool Fountian Cleaning Service SC-72	Pump Maintenance, Replacement SC-22	Sanitary Sewer Maintenance and Operations SC-76	Vehicle and Equipment Fueling SC-20	Vehicle and Equipment Maintenance SC-22	Vehicle Parking SC-43	Vehicle and Equipment Washing SC-21	Waste Management, Hazardous SC-34	Waste Management, Non-hazardous SC-34	Water Operations and Maintenance SC-76	Sediment	Nutrients	Trash	Metals	Bacteria	Oil Grease	Organics	Pesticides	Oxygen Demanding Substances			
1	ADULT LEARNING PROGRAM PARKING LOT	1207 CARLSBAD VILLAGE DR STE O	PARKING LOT				X		X						X			X											NO	NO	YES
2	ANN D. L'HEUREUX MEMORIAL DOG PARK	2700 BLOCK OF CARLSBAD VILLAGE DR	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											NO	NO	NO
3	ARTS OFFICE	2955 ELMWOOD ST	MANAGEMENT SERVICES	X														X											NO	NO	NO
4	AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	6425 AMBROSIA LN	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	X	X	X	X	X	X						X			X											YES	NO	YES
5	BATIQUITOS SEWER LIFT STATION	7382 GABBIANO LN	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											YES	NO	YES
6	BEACH ACCESSES	NORTH OF TAMARACK	AMUSEMENT AND RECREATION SERVICES				X											X											YES	NO	NO
7	BEACH BLUFF TRIANGLE/PARK	CARLSBAD BLVD AT PINE	AMUSEMENT AND RECREATION SERVICES				X											X											YES	NO	NO
8	BRESSI RANCH RECLAIMED PUMP STATION	BRESSI RANCH	RECLAIMED WATER						X		X	X			X				X										NO	NO	NO
9	BRESSI RANCH WATER PUMP STATION	BRESSI RANCH	WATER SUPPLY						X		X				X				X										NO	NO	NO
10	BUENA VISTA SEWER LIFT STATION	JEFFERSON	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											YES	YES	YES
11	BUENA VISTA WATER PUMP STATION AND RESERVOIR	1400 BLOCK BUENA VISTA DRIVE	WATER SUPPLY		X						X							X	X										NO	NO	NO
12	CADENCIA PARK	3310 CADENCIA ST	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											YES	NO	YES
13	CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	2997 GLASGOW DR	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	X	X		X	X	X						X			X											NO	NO	YES
14	CALAVERA PUMP STATION	3600 BLOCK OF COLLEGE DR	RECLAIMED WATER	X	X						X	X							X										YES	YES	YES
15	CALAVERA TREATMENT PLANT	2400 TAMARACK AV	INACTIVE SEWERAGE SYSTEMS																										YES	NO	NO
16	CANNON PARK	300 BLOCK OF CANNON	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											NO	NO	NO
17	CANNON SEWER LIFT STATION	2301 CANNON RD	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											YES	YES	YES
18	CAR COUNTRY PARK	PASEO DEL NORTE	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											NO	NO	NO
19	CARLSBAD RECYCLED WATER FACILITY	6200 AVENIDA ENCINAS	RECLAIMED WATER	X	X	X	X		X		X	X			X			X											NO	NO	YES
20	CARLSBAD SENIOR CENTER	799 PINE AVE	AMUSEMENT AND RECREATION SERVICES	X														X											NO	NO	NO
21	CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE	PARKING LOT				X		X						X			X											NO	NO	YES

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22	CARRILLO RANCH AND PARKING LOT	5200 FLYING LC LANE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	X	X		X	X	X						X			X											YES	NO	YES
23	CENTRO DE INFORMACION	3330 HARDING ST	LIBRARIES	X														X											NO	NO	NO
24	CHASE FIELD	3349 HARDING ST	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											NO	NO	NO
25	CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											YES	YES	YES
26	CITY HALL FACILITY	1200 CARLSBAD VILLAGE DR	GENERAL ADMINISTRATION	X														X											NO	NO	NO
27	CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR	PARKING LOT				X		X						X			X											NO	NO	YES
28	CITY STREETS	CITY WIDE	ROADS						X						X			X											YES	YES	YES
29	COLE LIBRARY	1250 CARLSBAD VILLAGE DR	LIBRARIES	X														X											NO	NO	NO
30	COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR	PARKING LOT				X		X						X			X											NO	NO	YES
31	DOVE LIBRARY MAIN BRANCH & ADMINISTRATION	1775 DOVE LN	LIBRARIES	X														X											YES	NO	NO
32	DOVE LIBRARY PARKING LOT	1775 DOVE LN	PARKING LOT				X		X						X			X											YES	NO	YES
33	EL FUERTE PARK	600 BLOCK OF EL FUERTE ST	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											NO	NO	NO
34	ELLERY WATER PUMP STATION AND RESERVOIR	2300 BLOCK OF JANIS WY	WATER SUPPLY		X		X				X							X	X										NO	NO	NO
35	FARADAY CENTER	1635 FARADAY AV	MANAGEMENT SERVICES	X														X											YES	NO	NO
36	FARADAY CENTER PARKING LOT	1635 FARADAY AV	PARKING LOT				X		X						X			X											YES	YES	YES
37	FARMERS BUILDING	FARADAY & EL CAMINO RL	OFFICE BUILDING	X														X											NO	NO	NO
38	FARMERS BUILDING PARKING LOT	FARADAY & EL CAMINO RL	PARKING LOT				X		X						X			X											NO	NO	YES
39	FIRE STATION 1	1275 CARLSBAD VILLAGE DR	FIRE PROTECTION	X	X		X		X					X	X	X		X											NO	NO	YES
40	FIRE STATION 2	1906 ARENAL RD	FIRE PROTECTION	X	X		X		X					X	X	X		X											NO	NO	YES
41	FIRE STATION 3	3701 CATALINA DR	FIRE PROTECTION	X	X		X		X					X	X	X		X											NO	NO	YES
42	FIRE STATION 4	6885 BATAQUITOS DR	FIRE PROTECTION	X	X		X		X					X	X	X		X											YES	NO	YES
43	FIRE STATION 5	2540 ORION WY	FIRE PROTECTION	X	X		X		X					X	X	X		X											NO	NO	YES
44	FIRE STATION 6	3131 LEVANTE ST	FIRE PROTECTION	X	X		X		X					X	X	X		X											NO	NO	YES
45	FLEET MAINTENANCE FACILITY AND PARKING LOT	2480 IMPALA DR	VEHICLE MAINTENANCE/ PARKING LOT	X	X	X	X	X	X				X	X	X	X	X	X											NO	NO	YES
46	FOXES LANDING LIFT STATION	4155 HARRISON ST	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											YES	YES	YES
47	GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD	SEWERAGE SYSTEMS		X						X	X			X		X	X											YES	YES	YES

	AREA NAME	ADDRESS	DESCRIPTION	Pollutant Generating Activities																Potential Pollutants									Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?
				Building Maintenance and Repair SC-41	Equipment Storage SC-22	Hazmat Storage SC-34	Landscape Maintenance and Repair SC-73	Material Storage SC-33	Parking Lot Maintenance SC-43	Pool Fountian Cleaning Service SC-72	Pump Maintenance, Replacement SC-22	Sanitary Sewer Maintenance and Operations SC-76	Vehicle and Equipment Fueling SC-20	Vehicle and Equipment Maintenance SC-22	Vehicle Parking SC-43	Vehicle and Equipment Washing SC-21	Waste Management, Hazardous SC-34	Waste Management, Non-hazardous SC-34	Water Operations and Maintenance SC-76	Sediment	Nutrients	Trash	Metals	Bacteria	Oil Grease	Organics	Pesticides	Oxygen Demanding Substances			
48	HARDING COMMUNITY CENTER	3096 HARDING ST	AMUSEMENT AND RECREATION SERVICES	X			X		X						X			X											NO	NO	NO
49	HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST	PARKING LOT				X		X						X			X											NO	NO	YES
50	HELEN ALLMAN GIRLS CLUB	3368 EUREKA PL	AMUSEMENT AND RECREATION SERVICES	X														X											NO	NO	NO
51	HELEN ALLMAN GIRLS CLUB PARKING LOT	3368 EUREKA PL	PARKING LOT				X		X						X			X											NO	NO	YES
52	HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	2685 VANCOUVER STREET	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	X	X		X	X	X						X			X											YES	YES	YES
53	HIRING CENTER	5958 EL CAMINO REAL	OFFICE BUILDING	X														X											NO	NO	NO
54	HOLIDAY PARK AND PARKING LOTS	3200 PIO PICO DR	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	X	X		X		X						X			X											NO	NO	YES
55	HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											NO	NO	YES
56	HOSP GROVE PARK AND PARKING LOT	JEFFERSON & MONROE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT				X		X						X			X											YES	YES	YES
57	HOSP GROVE-HI NOON ROTARY/PICNIC TABLE/TRAIL	2630 MONROE ST	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											NO	NO	NO
58	HOUSING/REDEVELOPMENT OFFICE	2965 ROOSEVELT ST B	URBAN AND COMMUNITY DEVELOPMENT	X														X											NO	NO	NO
59	HOUSING/REDEVELOPMENT OFFICE PARKING LOT	2965 ROOSEVELT ST B	PARKING LOT				X		X						X			X											NO	NO	YES
60	KNOTS SEWER LIFT STATION	501 KNOTS LN	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											NO	NO	YES
61	LA COSTA CANYON PARK AND PARKING LOT	3020 PUEBLA ST	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	X	X		X		X						X			X											YES	NO	YES
62	LA GOLONDRINA SEWER LIFT STATION	2516 LA GOLONDRINA ST	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											YES	NO	YES
63	LAGUNA RIVIERA PARK	4900 KELLY DR	AMUSEMENT AND RECREATION SERVICES	X	X		X		X						X			X											YES	YES	YES
64	LANDSCAPE MAINTENANCE AND REPAIR	CITYWIDE	TRIMMING, CUTTING, FERTILIZING,				X																						YES	YES	YES
65	LAS PALMAS OFFICES	2075 LAS PALMAS DR	GENERAL ADMINISTRATION	X														X											NO	NO	NO
66	LEVANTE FIELD/PARK	3031 LEVANTE ST	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											NO	NO	NO
67	LIBRARY STORAGE	2075 Q CORTE DEL NOGAL 9	OFFICE BUILDING	X														X											NO	NO	NO
68	LOWER FARADAY SEWER LIFT STATION	1507 FARADAY AV	INACTIVE SEWERAGE SYSTEMS																										YES	NO	NO

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69	M&O OPERATIONS YARD AND PARKING LOT	5950 EL CAMINO REAL	WATER SUPPLY/ MAINTENANCE YARD/ PARKING LOT	X	X	X	X	X	X	X			X	X	X		X	X											YES	YES	YES
70	MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	5203 SUNNY CREEK RD	WATER SUPPLY	X	X	X	X		X		X				X			X	X										YES	YES	YES
71	MAGEE PARK AND PARKING LOT	258 BEECH AVE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	X	X		X		X						X			X											NO	NO	YES
72	MAXTON BROWN PARK	500 LAGUNA DR	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											YES	YES	YES
73	MS4 MAINTENANCE	CITYWIDE	INSPECTION, CLEANING																										YES	YES	YES
74	MUNICIPAL SEPARATE STORM SEWER SYSTEM	CITY WIDE	MS4															X											YES	YES	YES
75	NON-EMERGENCY FIRE FIGHTING FLOWS	CITYWIDE	TRAINING EXCERCISES, SPRINKLER DISCHARGES																										NO	NO	NO
76	OAK OPERATIONS YARD AND PARKING LOT	405 OAK AV	MAINTENANCE YARD AND PARKING LOT	X	X	X	X	X	X				X	X	X		X	X											NO	NO	YES
77	OAK PARK	PIO PICO DRIVE	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											NO	NO	NO
78	PARKS MAINTENANCE/STORAGE/PARKING LOT	1166 CARLSBAD VILLAGE DR	MAINTENANCE YARD AND PARKING LOT	X	X	X	X	X	X				X	X	X		X	X											NO	NO	YES
79	PINE PARK AND PARKING LOT	3333 HARDING ST	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	X	X		X		X						X			X											NO	NO	YES
80	PIO PICO PARK	2600 PIO PICO	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											NO	NO	NO
81	POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	6600 HIDDEN VALLEY RD	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	X	X	X	X	X	X						X			X											NO	NO	YES
82	POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											YES	NO	YES
83	POWER WASHING	CITYWIDE	SIDEWALKS, STREETS, GRAFFITTI REMOVAL																										YES	YES	YES
84	RAILROAD DEPOT VISITORS CENTER	400 CARLSBAD VILLAGE DR	VISITOR CENTER	X														X											NO	NO	NO
85	RAILROAD DEPOT VISITORS CENTER PARKING LOT	400 CARLSBAD VILLAGE DR	PARKING LOT				X		X						X			X											NO	NO	YES
86	RESERVOIR B	END OF BLUFF DR	WATER SUPPLY																X										NO	NO	NO
87	RESERVOIR C	CALAVERA DR	WATER SUPPLY																X										YES	YES	YES
88	RESERVOIR D-1, D-2	6700 BLACK RAIL RD	RECLAIMED WATER	X			X		X		X	X			X				X										NO	NO	NO

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89	RESERVOIR D-3	6580 BLACK RAIL ROAD	WATER SUPPLY	X			X		X		X				X				X										NO	NO	NO
90	RESERVOIR E	HIDDEN VALLEY	WATER SUPPLY																X										NO	NO	NO
91	RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR	WATER SUPPLY				X				X								X										YES	YES	YES
92	RESERVOIR LA COSTA HI	ALGA RD	WATER SUPPLY								X								X										YES	NO	YES
93	RESERVOIR LA COSTA LO	ALGA RD	WATER SUPPLY				X				X								X										YES	NO	YES
94	RESERVOIR PAJAMA	PAJAMA DR	WATER SUPPLY	X	X	X	X		X		X				X				X										NO	NO	NO
95	RESERVOIR SANTA FE I	PYRENEES	INACTIVE WATER SUPPLY	X			X												X										NO	NO	NO
96	RESERVOIR SANTA FE II	PAR & BUSINESS PARK	WATER SUPPLY								X								X										NO	NO	NO
97	RESERVOIR SKYLINE	SKYLINE DR	WATER SUPPLY				X				X								X										NO	NO	NO
98	SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	2560 ORION WY	PUBLIC ORDER AND SAFETY	X	X		X		X						X			X											YES	YES	YES
99	SAND SHELL SEWER LIFT STATION	613 SAND SHELL	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											YES	NO	YES
100	SANITARY SEWAGE COLLECTION SYSTEM	CITY SERVICE AREA	SEWERAGE SYSTEMS		X						X	X					X	X											YES	YES	YES
101	SANITARY SEWER MAINTENANCE AND OPERATIONS	CITY SERVICE AREA	JETTING, RODDING, LINE REPLACEMENT									X																	YES	YES	YES
102	SEA WALL	CARLSBAD BLVD	AMUSEMENT AND RECREATION SERVICES						X									X											NO	NO	NO
103	SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											YES	YES	YES
104	SPECIAL EVENTS	CITYWIDE	STREET FAIR, ETC.																										NO	NO	NO
105	SPINNAKER HILL BANK	1700 BATIQUITOS DR	OPEN SPACE				X																						YES	NO	NO
106	STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	3420 CAMINO DE LOS COCHES	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	X	X	X	X	X	X						X			X											NO	NO	YES
107	STREET MAINTENANCE (CLEANING/REPAIR)	CITYWIDE	POT HOLES, OVERLAYS, STRIPING																										NO	NO	NO
108	SWIM AND RECREATION COMPLEX	3401 MONROE ST	AMUSEMENT AND RECREATION SERVICES	X	X	X	X	X		X					X			X											NO	NO	YES
109	TAP PUMP STATION	6400 BLOCK OF EL CAMINO REAL	WATER SUPPLY	X			X				X								X										YES	YES	YES
110	TERRAMAR SEWER LIFT STATION	300 CANNON RD	SEWERAGE SYSTEMS		X						X	X			X		X	X											YES	YES	YES
111	TRAIL MAINTENANCE	CITYWIDE	EROSION REPAIR, PET WASTE																										NO	NO	NO
112	UPPER FARADAY SEWER LIFT STATION	1711 FARADAY AV	INACTIVE SEWERAGE SYSTEMS																										NO	NO	NO

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113	VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST	SEWERAGE SYSTEMS		X	X					X	X			X		X	X											YES	YES	YES
114	VILLAS SEWER LIFT STATION	2860 WINTHROP AV	SEWERAGE SYSTEMS		X						X	X			X		X	X											YES	YES	YES
115	WATER OPERATIONS AND MAINTENANCE	CITY SERVICE AREA	FLUSHING, REPAIRS																X										NO	NO	NO
116	ZONE 5 PARK	CAMINO HILLS AND FARADAY	AMUSEMENT AND RECREATION SERVICES				X		X						X			X											NO	NO	NO

PRIORITY	EVENT TYPE	EVENT	BEGIN DATE	INSPECTION REQUIRED	PRE-EVENT INSPECTION DATE	POST-EVENT INSPECTION DATE	HYDROLOGIC AREA	PROXIMITY TO ESA	TRIBUTARY TO 303(d)	# OF PARTICIPANTS	ADDITIONAL CONTROLS REQUIRED	Potential Pollutants								
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
Medium	Parade	Cardiovascular Disease Foundation Walk	03/25/2008	Yes	03/25/2008	03/25/2008	904.31	No	No	250	Yes		X							X
Medium	Parade	March of Dimes March for Babies	04/19/2008	Yes	04/19/2008	04/19/2008	904.31	yes	No	500	Yes									x
Medium	Atheletic	Police Officers' Memorial Run	05/17/2008	No			904.31	No	No	175	No		X							X
Low	Atheletic	Law Enforcement Torch Run for Special Olympics	06/04/2008	No			904.51	No	No	35	No									X
High	Atheletic	Carlsbad Junior	04/05/2008	Yes	04/05/2008	04/05/2008	904.21	No	No	5,000	Yes		X							X
High	Atheletic	Carlsbad 5000	04/06/2008	Yes	04/05/2008	04/06/2008	904.21	No	No	5,000	Yes		X							X
High	Festival	Carlsbad Village Spring Street Faire	05/04/2008	Yes	05/04/2008	05/04/2008	904.21	No	No	70,000	Yes	X	X	X		X				X
High	Parade	Cystic Fibrosis Foundation's Great Strides Walk	05/18/2008	Yes	05/18/2008	05/18/2008	904.21	No	No	400	Yes		X							X
High	Concert	TGIF Jazz in the Parks	06/20/2008	Yes	06/20/2008	06/20/2008	904.51	No	No	3,500	Yes	X	X	X		X				X
High	Concert	TGIF Jazz in the Parks	06/27/2008	Yes	06/27/2008	06/27/2008	904.51	No	No	3,500	Yes	X	X	X		X				X

Storm Water Compliance Inspections

The City of Carlsbad has developed an inventory of special events. These special events have been prioritized according to type of event, number in attendance, proximity to the nearest water body, and potential threat to water quality. Based on this prioritization, the City will be conducting storm water compliance inspections of most **special events** within the City. These compliance inspections will include a pre-event inspection where storm water BMPs are evaluated. An event inspection is required to determine the effectiveness of BMPs, and a post-event inspection to ensure the site is properly cleaned. Compliance inspections may also include recommendations for additional measures that may be required to comply with the storm water regulations. Please note that all special events in the City of Carlsbad are required to implement all of the minimum special event BMPs and comply with all applicable regulations outlined in the Carlsbad Municipal Code.

City of Carlsbad
5950 El Camino Real
Carlsbad, CA 92008

Sanitary Sewer vs. Storm Drain What's the difference?

The water that drains down a sink or toilet flows to the sanitary sewer and is treated at a wastewater treatment plant before being discharged to the ocean. The storm drain system, on the other hand, is designed to carry rainwater away from streets, parking lots, and driveways to help prevent flooding during rain events. Water entering the storm drain system does not receive any treatment and flows directly to our creeks, lagoons, and ocean.

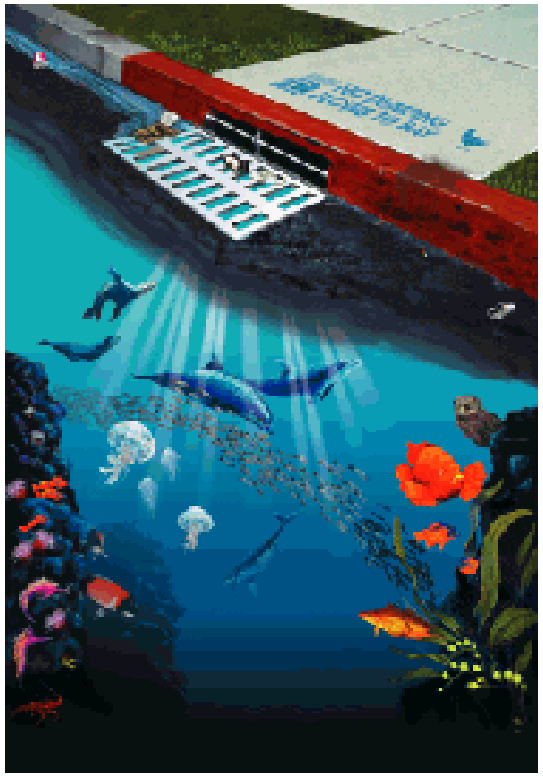

Construction Management and Inspection
760-602-2780

Best Management Practices

SPECIAL EVENTS

City of Carlsbad Storm Water Compliance Guidelines for Special Events

Only Rain in the Storm Drain!

Preventing Pollution Is Up To US!

Did you know that storm drains are NOT connected to sanitary sewer systems or other treatment plants? As rainfall flows over the ground, it picks up a variety of pollutants that flow directly to our creeks, lagoons, and ocean.

Special Event Pollutants o

- Sediments
- Metals
- Detergents
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

Best Management Practices Work!

Best Management Practices (BMPs) are procedures and practices that all special event organizers **are required** to implement to prevent pollutants from entering our storm drains. Once sources of pollution have been identified, the next step is to select BMPs that eliminate or reduce storm water pollution. Storm Water Compliance staff can work with you to develop BMPs for your specific special event.

Protection for All Seasons

Even when rain is not expected, event organizers are required to implement the designated BMPs. Depending on the size, location, number of participants, and other relevant factors, Storm Water Pollution Prevention Plan (SWPPP) may need to be developed. The SWPPP is intended to help demonstrate that appropriate measures are being actively implemented before, during, and after the event to reduce and prevent pollutants from leaving the event venue. The SWPPP must be approved by the City prior to Special Event Permit issuance.

Good House Keeping

- **Use dry clean-up methods first!** Never use a water hose or pressure washing system to clean up spills. Use mops, brooms, or wire brushes to clean sidewalks, pavement, and other impervious surfaces. Wash water must be disposed of to the sanitary sewer and never the storm drain.
- Minimize the use of cleaning solutions and chemical agents. Dispose of waste properly.
- Keep site free of litter. Place trash and recycling receptacles around the site to minimize litter.

Preventive Maintenance

- Inspect equipment and vehicles frequently and clean up leaks and spills immediately.
- Prior to the event, locate and protect all drainage points using storm drain protection devices such as sand bags, fabric filters, berms, containment booms, etc.
- Label or place signs at, around, or adjacent to storm drains with the following wording: *"No Dumping"* or other pollution prevention message.
- Regularly inspect storm drains during the event to prevent pollutants from accumulating.

Waste Management

- Reduce, Reuse, Recycle.
- Frequently inspect trash and recycling receptacles to ensure they do not overflow. Place trash inside dumpsters or plastic bags until it can be removed.
- Dumpsters must be kept closed when not in use.
- Never place liquid waste, leaky bags, or hazardous waste in dumpsters or trash bins.

Materials Storage and Handling

- Store materials in covered areas not exposed to rain.
- Keep outdoor storage areas clean.
- Clean around stored materials so that pollutants do not accumulate.

Food Preparation

- Food vendors must have spill kits in or adjacent to their work area. Spill kits include: towels, kitty litter, and/or clean-up materials. All spilled materials must be promptly cleaned up and disposed of properly.

Temporary Relief Stations

- Relief stations must be placed away from locations that have the potential to impact the storm drain system.
- All relief stations are required to have a secondary containment or additional BMPs to contain possible overflows.

Staff and Vendor Training

- Discuss and distribute information about storm water pollution prevention during staff (including contractor) training and vendor registration.

Post Event Clean Up

- All streets, sidewalks, and public areas must be cleaned (sweeping, litter pickup, etc.) and returned to the pre-event condition.
- Remove temporary public art (chalk, paint, charcoal, clay, etc) using dry clean-up methods only.

- If a street sweeper will be used , ensure they are onsite promptly after the event.
- Assign an appropriate number of staff to promptly and adequately clean-up after the event.
- After the site has been cleaned, storm drain containment and protection devices must be removed.

For more information or assistance, please call 760-602-2780

SPECIAL EVENTS

Inspection Report

Pursuant to CMC 15.12.100

Inspector:		Date		Season		Priority	
Event Name			Event Type				
Event Location			Event Address				
Contact Name			Contact Phone				
Weather Conditions	☐ Heavy Rain ☐ Light Rain ☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain Expected at ☐☐☐☐ chance						

PRE-EVENT (1)									POST-EVENT (2)								
Time:	NEEDS								NEEDS								Time:
SOURCE	N/A	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	N/A	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	COMMENTS
Solid Waste Storage and Disposal																	
Waste Containers																	
Grease Storage																	
Recycling Containers																	
Disposal Areas																	
Vehicles and Heavy Equipment																	
Washing Area																	
Spill Response																	
Storage Area																	
Outdoor Materials Handling and Storage																	
Storage Tanks																	
Other Liquid Containers																	
Equipment Storage																	
Food Preparation and Eating Areas																	
Spill Kits																	
Food Disposal																	
Eating Areas																	
Grounds Maintenance and Housekeeping																	
Storm Drains																	
Parking lots																	
Staff/Vendor Training and SWPPP																	
SWPPP																	
Training																	
Portable Restrooms																	
Storage Area																	

OBSERVATIONS

❒ **No violations observed during the inspection.**	❒ **No violations observed during the inspection.**
❒ **Violations observed during the inspection**	❒ **Violations observed during the inspection**
❒ **Implement Corrective Actions As Required Below**	❒ **Implement Corrective Actions As Required Below**

CORRECTIVE ACTION REQUIRED: ☐ Photos Taken

1	2		1	2	
☐	☐	Prevent trash/recycling from overflowing.	☐	☐	Sweep up trash and debris.
☐	☐	**Immediately** clean up oil/grease spills and leaks.	☐	☐	**Immediately** discontinue outdoor washing or hosing.
☐	☐	Post-event street sweeping required.	☐	☐	Dumpsters and trash receptacles must be covered during rain events.
☐	☐	Provide immediate protection for storm drain inlets.	☐	☐	Provide spill kit(s) in required areas.
☐	☐	Clean in and around storm drains.	☐	☐	Provide secondary containment for portable restroom(s).
☐	☐	Train staff, vendors, and participants on pollution prevention.			

Other _____

Implement corrective actions by_____. A City Inspector will return to verify that corrective actions implemented as required. If you have any questions or comments, please contact the Storm Water Inspector at 760-602-2780 x7111.

Inspector Signature:	Received By ☐ Please Print	Received By - Signature ☐ Mailed	Date

EVENT SUMMARY

PRE-EVENT	POST-EVENT

IMPROVEMENTS AND RECCOMENDATIONS

ADDITIONAL INFORMATION

Potential Pollutants	☐ **Bacteria** ☐ **Gross Pollutants** ☐ **Metals** ☐ **Nutrients** ☐ **Oil and Grease** ☐ **Organics** ☐ **Pesticides** ☐ **Sediments** ☐ **Trash** ☐ **Hazardous Materials** ☐ **Other**		
Enforcement Required	☐ Verbal Warning ☐ Written Warning ☐ Notice of Violation ☐ Stop Work Order ☐ Charge Back ☐ Administrative Citation/Fine ☐ Referred for Action		
BMP Assessment (circle one)	**5 4 3 2 1**	**Knowledge Assessment (circle one)**	**5 4 3 2 1** ☐ **Contact not available**

Comments/Notes

2007-08 Muncipal Inspection Recommendations and Corrective Actions

Facility	Recommendation	Corrective Actions Taken
Fleet Maintenance	1. Provide a working spill kit inside the garage and train employees on its location.	Ordered and placed additional spill kits, followed with training information on use and placement
	2. Check vehicles for leaks regularly and consider draining fluids from leaky non-operational vehicles/equipment if feasible.	It is generally not feasible to drain fluids from equipment unless it has been damaged in an accident and is no longer moveable under its own power. Vehicles awaiting service or auction are regularly inspected. Any minor fluid leaks are first addressed with absorbent. Absorbent is swept up by staff and is disposed of by a Haz-mat contractor. 10 large drip trays were procured and are utilized for any vehicle with minor fluid leaks. These trays are inspected regularly and any fluids captured are emptied, recycled and the drip tray is replaced.
	3. Minimize waste inventory and ensure the shed for temporary hazardous material storage can properly store materials as needed.	Hazardous materials are regularly removed by a Haz-mat Contractor. Leak containment has been placed in the storage area to prevent spills.
	4. Update and maintain SWPPP appropriately.	Updated SWPPP with weekly inspections and info.
	5. Provide adequate cover for vehicles and equipment that pose a threat to storm water to the maximum extent practicable.	It is not practical to cover stored automobiles, equipment, or trucks. We have ordered a 40' weatherproof storage container for covered storage of used tires and motorcycles. Delivery of the storage unit is scheduled for July 16, 2008.
Maintenance and Operations	1. keep vehicle parking area free of vehicle fluids	Staff training and also purchasing 3 24" x 36" pans with hydrocarbon boom inserts. Installation undrivable pavers with sand filter to remove any hydrocarbons prior to entering conveyance system located at the lowest portion of the driveway were all drainage enters
	2. Keep site free of sediment and debris to MEP	Yard is swept by Canon Pacific services twice a month yard is also cleaned by staff once a week Sandbag storage was reconfigured with all bags placed on pallets with biweekly inspections, broken bags to be removed and swept up
Public Works Operations and Maintenance Facility (Oak Ave)	1. Keep site free of sediment and debris to maximum extent practicable, especially under storage areas.	All trees that line the Oak yard have been trimmed and put on a regular pruning schedule.
	2. Provide "no dumping" signage for storm drain inlet.	Applied "no dumping" sign at storm drain inlet.
	3. Store paint in a way that ensures leaks will be contained within the bermed storage area.	Painted yellow line 12" from containment wall along inside perimeter of containment area. Moved all paint storage pallets inside of delineated area.
Parks Maintenance Storage	1. Finish updating spill response plan with appropriate site specific information.	Spill Plan updated and on file
Carlsbad Recycled Water Facility	1. Keep dumpster lids closed when not in use.	Staff shall check during each routine visit to ensure compiance
North Batiquitos Pump Station	1. Keep paved areas of the site free of sediment and organic debris to the maximum extent practicable.	Wastewater facility
	2. Keep concrete swales free of organic debris and sediment accumulations to the maximum extent practicable.	
Reservoir Elm	1. Provide appropriate signage for the storm drain inlet.	Will label inlet and instal bmp the week of 7-21-08
	2. Keep site free of organic debris to the maximum extent practicable.	Site is maintaine bi-weekly via a landscape contract thereby not taking away resources needed to operate the potable water system
Reservoir C	1. Provide appropriate signage for the storm drain inlet.	Will label inlet the week of 7-21-08
	2. Keep site free of debris and leaves to the maximum extent practicable.	Site is maintaine bi-weekly via a landscape contract thereby not taking away resources needed to operate the potable water system
Reservoir La Costa Hi	1. Provide appropriate signage for the storm drain inlet.	Will instal bmp the week of 7-21-08

	2. Keep site free of debris and leaves to the maximum extent practicable.	Site is maintaine bi-weekly via a landscape contract thereby not taking away resources needed to operate the potable water system
Reservoir La Costa Lo	1. Keep paved areas free of sediment and organic debris to the maximum extent practicable.	Site is maintaine bi-weekly via a landscape contract thereby not taking away resources needed to operate the potable water system
	2. Ensure the soil stockpile is adequately protected to prevent runoff transport.	Pile is located on SDG&E property
Tap Pump Station	1. Implement erosion control BMPs in order to prevent sediment transport to the paved areas of the site to maximum extent practicable.	
	2. Consider implementing tracking control BMPs in order to prevent sediment tracking to El Camino Real to the maximum extent practicable.	
Aviara Community Park	1. Control sediment racking from fields to maximum extent practicable.	Installation of gravel bags around edges to minimize runoff.
	2. Minimize overwatering to the maximum extent practicable.	Irrigation controller set for cycle and soak to prevent runoff.
	3. Cover and contain stockpiles.	Tarpulins used to cover stockpiles.
	4. Replace broken gravel bags surrounding catch basin as needed.	Replaced with new bags and changed as necessary.
Calavera Hills Park	1. Keep trash areas and parking lot free of litter, debris and sediment to the maximum extent practicable.	Ongoing litter removal and sediment sweeping on scheduled basis.
	2. Inspect and maintain filter inserts as needed, particularly before the start of the rainy season.	Filters cleaned and monitored and replaced as necessary.
Carillo Ranch and Parking Lot	1. Control erosion and sediment tracking into catch basins to maximum extent practicable.	Gravel bags used for erosion control.
Holiday Park and Parking Lots	1. Keep parking lot free of debris and sediment to the maximum extent practicable.	Scheduled weekly clean-up along with daily litter removal.
Hosp Grove Park and Parking Lot	1. Remove organic debris accumulations from the two storm drain inlets located along the northern portion of the eastern	Permeable water socks, straw wattles and gravel bags installed.
	2. Implement BMPs to reduce sediment tracking from the eastern parking lot to Monroe Street.	Sediment cleaning scheduled □ 3 times per week.
La Costa Canyon Park and Parking Lot	1. Prevent erosion and control sediment tracking to maximum extent practicable.	Pedestrian foot traffic prevents tarping of slope, straw wattles installed at base of slope.
Laguna Riviera Park	1. Keep drainage channels free of trash and debris to maximum extent practicable.	Cleanouts scheduled accordingly depending on dry/wet season.
	2. Consider investigating source of water discharge.	Irrigation controller set for cycle and soak to prevent runoff.
Magee Park and Parking Lot	1. Keep trash enclosure free of organic debris and the dumpster lids closed when not in use.	Enclosures cleaned regularly.
	2. Keep all storm drain inlets free of organic debris to the maximum extent practicable.	Cleanouts scheduled on regular basis.
Pine Park and Parking Lot	1. Maintain BMPs along unpaved western portion of the park.	Replaced straw wattles along alley.
	2. Ensure gravel bags along Chestnut Avenue are properly maintained.	Gravel bags removed from original park construction.
	3. Adjust irrigation timers, or implement other effective BMPs, to minimize irrigation runoff.	Irrigation controller set for cycle and soak to prevent runoff.
Poinsettia Community Park, Maintenance Station and Parking Lot	1. Control sediment tracking to the maximum extent practicable.	Gravel bags installed.
	2. Consider adding "no dumping" signage to catch basin in center of maintenance yard.	Signs painted □ perimeter of basin.
Stagecoach Maintenance Station	1. Finish preparing the site specific SWPPP.	SWPPP revised and current.
Adult Learning Parking Lot	1. Trench drains should be kept free of sediment, debris and litter.	The lease has terminated and we are no longer occupying this site.
Carlsbad Senior Center Parking Lot	1. Sweep up organic debris in outdoor areas.	Parking lots are swept semi-monthly with a mechancial sweeper. Litter and organic material is removed on a regular basis by our landscape maintenance contractor.
	2. Provide appropriate signage for the grated storm drain in the eastern parking lot.	Will coordinate with Streets to have "No Dumping" stencil installed.

Cole Library Parking Lot	1. Keep parking lot free of organic debris to the maximum extent practicable.	Parking lots are swept semi-monthly with a mechancial sweeper. Litter and organic material is removed on a regular basis by our landscape maintenance contractor.
	2. Keep parking lot free of vehicle fluids to the maximum extent practicable.	Parking lots are swept semi-monthly with a mechancial sweeper. Facilities staff will coordinate periodically with Streets to clean vehicle fluids where excessive.
Farmers Building Parking Lot	1. Keep outdoor areas free of trash and debris.	Parking lots are swept semi-monthly with a mechancial sweeper. Litter and organic material is removed on a regular basis by our landscape maintenance contractor.
	2. Keep storm drain inlets free of debris to maximum extent practicable.	Litter and organic material is removed on a regular basis by our landscape maintenance contractor.
	3. Minimize irrigation runoff from landscape areas.	Coordinate with Parks staff to minimize irrigation runoff.
Harding Community Center Parking Lot	1. Routinely inspect the parking lot for fresh oil stains and treat stains as necessary.	Parking lots are swept semi-monthly with a mechancial sweeper. Facilities staff will coordinate periodically with Streets to clean oil stains where excessive.
Helen Allman Girls Club Parking Lot	1. Keep outdoor areas free of sediment and debris to the maximum extent practicable.	Parking lots are swept semi-monthly with a mechancial sweeper. Litter and organic material is removed on a regular basis by our landscape maintenance contractor..
	2. Keep dumpster lids closed when not in use.	Staff has been instructed to keep the dumpsters closed when not in use.
Railroad Depot Visitors Center Parking Lot	1. Keep outdoor areas free of trash and debris to maximum extent practicable.	Parking lots are swept semi-monthly with a mechancial sweeper. Litter and organic material is removed on a regular basis by our landscape maintenance contractor.
	2. Clean in and around storm drains on a regular basis.	Litter and organic material is removed on a regular basis by our landscape maintenance contractor.
	3. Ensure filter fabric is securely installed to adequately cover the curb inlet it is protecting.	There are no curb inlets at the Railroad Depot Visitors Center Parking Lot. This inspection was performed at the Amtrack Station which is not a City of Carlsbad facility.

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7-ELEVEN	901		PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.40
7-ELEVEN 32942-A	5802		VAN ALLEN WAY	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.31
A & P AIRCRAFT DETAILING	2006		PALOMAR AIRPORT RD	ACTIVE	4581	4581	Aircraft Washing, Detailing	Fixed	Yes	YES	904.40
A MOMENT IN TIME, BOTANICALS	6102		AVENIDA ENCINAS	ACTIVE	5193		Wholesale Trade Flowers & florists Supplies	Fixed	Yes		904.40
A.R.M. PAINTING	2687		WATERBURY WAY	ACTIVE	1721	1721	Special Trade Contractors	Mobile	Yes	YES	904.21
A-1 AUTO CARE	3193	11	TYLER ST	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.31
A-1 HAMILTON LANDSCAPE MAINTENANCE	3659		TRIESTE DR	ACTIVE	0781		Landscape Counseling and Planning	Mobile	Yes		904.21
A1 QUALITY CARPET CLEANING	667		MAGNOLIA AVE	ACTIVE	7217	7217	Carpet Cleaning	Mobile	Yes	YES	904.21
AALTO SCIENTIFIC LTD	1959		KELLOGG AVE	ACTIVE	2835	2835	In Vitro & In Vivo Diagnotsitc Subs	Fixed	Yes	YES	904.40
ABLE AUTO REPAIR & SMOG	665		PALOMAR AIRPORT RD	ACTIVE	7549		Automotive Services, Except Repair And Carwashes	Fixed	Yes		904.31
ACCENT PAINTING, INC.	7934		LA CAPELA LN	ACTIVE	1721	1721	Painting And Paper Hanging	Mobile	Yes	YES	904.51
ACUSHNET COMPANY	2819		E LOKER AVE	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	Fixed	Yes	YES	904.31
ACUSHNET COMPANY	1818		ASTON AVE	ACTIVE	8731		Research and Development	Fixed	No		904.31
ADDISON SHEET METAL	7238		PONTO DR	ACTIVE	3499	3499	Sheet Metal Fabricator	Fixed	Yes	YES	904.51
ADT CONSTRUCTION INC.	1735		ROGUE ISLE CT	ACTIVE	1521	1521	General Contractors--Single-Family Housing	Mobile	Yes	YES	904.31
A-ECONOMY CONCRETE PUMPING	1702		EVERGEEN CIR	ACTIVE	1771		Concrete Work	Mobile	Yes		904.21
AFM	5816		DRYDEN PL	ACTIVE	3669		Fabricated Metal Products, Not Elsewhere Classifi	Fixed	Yes		904.31
AGRIWEST	6211	A	YARROW DR	ACTIVE	5193		Flowers, Nursery Stock, And Florists' Supplies	Fixed	Yes		904.40
AL MITCHELL'S CLEANING	2945		VALLEY ST	ACTIVE	7217	7217	Carpet And Upholstery Cleaning	Mobile	Yes	YES	904.21
ALBERTSONS # 6720	7660		EL CAMINO RL	ACTIVE	5411	5411	Grocery Stores	Fixed	Yes	YES	904.51
ALBERTSONS #6701	955		CARLSBAD VILLAGE DR	ACTIVE	5411	5411	Supermarkets	Fixed	Yes	YES	904.21
ALEJANDRO'S MEXICAN FOOD	2952		HARDING ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
ALLEN'S NEW YORK PIZZA, INC.	6943	101	EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
ALLEY, THE	421		GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
ALLGIRE BUILDING CONTRACTORS	3278		GREY HAWK CT	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.51
ALLIED WASTE COMPANY	5960		EL CAMINO RL	ACTIVE	4953	4953	Refuse Systems	Fixed	Yes	YES	904.31
ALLIE'S EDIBLES LLC	5671		PALMER WAY		2064		Candy & Other Confectionery Products	Fixed	Yes		904.31
ALOHA POOL SERVICE & REPAIR	2631	14	ROOSEVELT ST	ACTIVE	7389	7389	Business Services, Not Elsewhere Classified	Mobile	Yes	YES	904.21
ALPHATEC MANUFACTURING, INC.	6110		CORTE DEL CEDRO	ACTIVE	3842		Orhtopedic, Prosthetic & Surgical Appliances and Supplies	Fixed	Yes		904.40
AL'S CAFE IN-THE-VILLAGE	795		CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
AM/PM MINI MARKET #5366	1991		PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.40

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AMERICAN ARBOR TREE SERVICE	391		TAMARACK AVE	ACTIVE	0783	0783	Ornamental Shrub & Tree Svc	Mobile	Yes	YES	904.31
AMERICAN RIM SUPPLY	1955		KELLOGG AVE	ACTIVE	3465	3465	Automotive Metal Stampings	Fixed	Yes	YES	904.40
AMIGO CUSTOM SCREEN PRINTS	6351	A-B	YARROW DR	ACTIVE	2261	2261	Finishers of Broadwoven Fabrics of Cotton	Fixed	Yes	YES	904.40
ANDRADE & COMPANY	2123		VUELTA CT	ACTIVE	1721		Painting Contractor	Mobile	Yes		904.51
ANTBUSTERS	6803		CORINTIA ST	ACTIVE	7342		Disinfecting And Pest Control Services	Mobile	Yes		904.51
ANTOLS NORTH COUNTY MASONRY	3429		DON COTA DR	ACTIVE	1741	1741	Masonry Contractor	Mobile	Yes	YES	904.31
APS DYNAMICS INC.	5731		PALMER WAY	ACTIVE	3826	3826	Laboratory Analytical Instruments	Fixed	Yes	YES	904.31
APS GENERAL CONTRACTORS, INC.	4005		SUNNYHILL DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
AQUA MOBILE DETAIL	5154		SHORE DR	ACTIVE	7542		Carwashes	Mobile	Yes		904.31
AQUA-FRESH POOL SERVICE	2081		LEE CT	ACTIVE	7389	7389	Business Services, NEC	Mobile	Yes	YES	904.31
AQUARIAN POOL SERVICE	1775		VALLEY PL	ACTIVE	7389	7389	Business Services, NEC	Mobile	Yes	YES	904.21
AQUATIC QUALITY ASSURANCE	6062		CORTE DEL CEDRO	ACTIVE	7389	7389	Business Services	Mobile	Yes	YES	904.31
ARAMARK SERVICE / TAYLOR-MADE	5545		FERMI CT		5812		Eating Places	Fixed	Yes		904.31
ARCADE, THE	2965		ROOSEVELT ST	ACTIVE	6512		Commercial Shopping Center	Fixed	Yes		904.21
ARMENIAN CAFÉ, THE	3126		CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
ARMSTRONG GARDEN CENTERS,INC.	5702		PASEO DEL NORTE	ACTIVE	5261	5261	Retail Nurseries, Lawn & Garden Sup Stores	Fixed	Yes	YES	904.31
ARNOLD'S LANDSCAPE	3610		KINGSTON ST	ACTIVE	0781	0781	Landscape Counseling and Planning	Mobile	Yes	YES	904.21
ARRISCAPE, INC	4511		SAINT GEORGE CT		1799		Construction-Special Trade Contractors	Mobile	Yes		904.51
ARTHUR A BROWN PLUMBING COMPANY	2697		STATE ST	ACTIVE	1711		Plumbing Contractor	Mobile	Yes		904.21
ASHWORTH, INC.	2765		LOKER AV W	ACTIVE	5136		Clothing Distributor	Fixed	Yes		904.31
ASLINE CONSTRUCTION	3008		SEGOVIA WAY	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
ASYMTEK	2762		LOKER AV W	ACTIVE	3699	3699	Electrical Machinery, Equip & Sups, NEC	Fixed	Yes	yes	904.31
ATLANTIS POOL SERVICE	4023		CRESCENT POINT RD	ACTIVE	7389	7389	Pool Service	Mobile	Yes	YES	904.31
ATTAWAY POOLS	2622		ROOSEVELT ST	ACTIVE	7389		Pool Contractor, Maintenance	Mobile	Yes		904.51
AUTO GENOMICS, INC	2251		RUTHERFORD RD	ACTIVE	3841	3841	Surgical and medical INSTRUMENTS	Fixed	Yes	YES	904.31
AUTOMOTIVE SOLUTIONS	945		TAMARACK AVE	ACTIVE	7549	7549	Automotive Services, Except Repair And Carwashes	Fixed	Yes	YES	904.31
AVIARA FARMS	1205		AVIARA PKWY	ACTIVE	5159	5159	Wholesale Distribution of Raw Farm Produce	Fixed	Yes	YES	904.31
AVIS RENT A CAR	2198		PALOMAR AIRPORT RD	ACTIVE	7514	7514	Rental Car Agency	Fixed	Yes	YES	904.40
B & G TREE SERVICE	2631		ROOSEVELT ST	ACTIVE	0781	0781	Landscaper	Mobile	Yes	YES	904.21
B & H CONSTRUCTION	2590		DAVIS	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
B.A. WORTHING, INC.	690	201	CARLSBAD VILAGE DR	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
BAKEHOUSE FOODS, INC.	2270	U	CAMINO VIDA ROBLE	ACTIVE	2052	2052	Cookies & Crackers	Fixed	Yes	yes	904.40
BAN'S CLEANERS	981		TAMARACK AVE	ACTIVE	7216	7216	Dry Cleaning Plant	Fixed	Yes	YES	904.31

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BARNSTORMING ADVENTURES	2206		PALOMAR AIRPORT RD	ACTIVE	4522	4522	Air Transportation, Nonscheduled	Fixed	Yes	YES	904.40
BARRETT LANDSCAPE AND MAINTENANCE	6480		CORTE LA LUZ	ACTIVE	0782		Lawn And Garden Services	Mobile	Yes		904.51
BASELINE TENNIS COURTS AND SUPPLIES	3218		AZAHAR PL	ACTIVE	1799	1799	Special Trade Contractors, Nec	Mobile	Yes	YES	904.51
BASKIN ROBBINS	2540	D	EL CAMINO REAL		5451		Dairy Products Stores	Fixed	Yes		904.31
BASKIN ROBBINS	6949	101	EL CAMINO RL		5451		Dairy Products Stores	Fixed	Yes		904.51
BECKMAN COULTER	2470		FARADAY AVE	ACTIVE	2835	2835	Invitro and Invitro Diagnostic Substances	Fixed	Yes	YES	904.31
BELLEFLEUR CARLSBAD LLC	5610	100	PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
BENCHMARK STONEWORKS,INC.	5661		PALMER WAY	ACTIVE	1743	1743	Terrazzo, Tile, Marble, Mosaic Work	Mobile	Yes	YES	904.31
BENIHANA	755	100	RAINTREE DR	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.31
BEST TERIYAKI	1818	104	MARRON RD	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.21
BHI-BUILDERS	7213		AVIARA DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.51
BIG FISH MOTORSPORTS	6060		AVENIDA ENCINAS		7538		Motor Vehicle Parts And Accessories	Fixed	Yes		904.40
BIG O TIRES	2615		STATE ST	ACTIVE	5531	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.21
BIO-HYDRATION RESEARCH LAB, INC.	2091		RUTHERFORD RD	ACTIVE	2086		Bottled And Canned Soft Drinks & Carbonated Waters	Fixed	Yes		904.31
BISTRO WEST	4960		AVENIDA ENCINAS	ACTIVE	5812	5812	Eating and Drinking Places	Fixed	Yes	YES	904.31
BLACK BOX INC	2777	A	LOKER AV W		5091		Sporting And Recreational Goods & Supplies	Fixed	Yes		904.31
BLACK FOREST DETAIL	7759		CALLE MEJOR	ACTIVE	7542	7542	Mobile Car Wash	Mobile	Yes	YES	904.51
BLUE LAGOON POOL SERVICE	2665		LEVANTE ST	ACTIVE	7389	7389	Pool Maintenance	Mobile	Yes	YES	904.51
BLW ROOFING	3306		AZAHAR PL	ACTIVE	1761		Roofing Contractor	Mobile	Yes		904.51
BOAR CROSSn	390		GRAND AVE	ACTIVE	5813	5813	Drinking Places (Alcoholic Beverages)	Fixed	Yes	YES	904.21
BOB BAKER CHRYSLER JEEP	5555		CAR COUNTRY DR	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	Yes	YES	904.31
BOB BAKER MAZDA	5515		CAR COUNTRY DR	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	Yes	YES	904.31
BOB BAKER VOLKSWAGEN/SUBARU	5500		PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.31
BOBBY'S HIDEAWAY CAFE	4901	F	EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
BOSTON MARKET # 637	2606		EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
BOVENZI CONSTRUCTION INC	343		OAK AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
BOYS & GIRLS CLUB OF CARLSBAD	3115		ROOSEVELT ST	ACTIVE	7997		Membership Sports and Recreation Clubs	Fixed	Yes		904.21
BRIGHTON GARDENS OF CARLSBAD	3140		EL CAMINO RL	ACTIVE	8059	8059	Nursing Home	Fixed	Yes	YES	904.21
BRISTISH MOTOR CARS	2725		STATE ST	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.21
BRITISH INDEPENDENT CAR COUNTRY CARLSBAD	1060	O	AUTO CENTER CT	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.31
BROOKHART CONCRETE, INC.	2911	P	STATE ST	ACTIVE	1731	1731	Concrete Contractor	Mobile	Yes	YES	904.21
BRUEGGER'S BAGELS	7680	102	EL CAMINO RL	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.51

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B-STANG CONSTRUCTION	3490		CHARTE OAK	ACTIVE	1521	1521	General Contractor	Mobile	Yes	YES	904.31
BUCA DI BEPPO	1921		CALLE BARCELONA	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.51
BUDGET RENT A CAR	850		PALOMAR AIRPORT RD	ACTIVE	7514	7514	Passenger Car Rental	Fixed	Yes	YES	904.40
BURTON'S CARPET CARE	6417	201	TOBRIA TR	ACTIVE	7217		Carpet Cleaning	Fixed	Yes		904.51
BYRNES CONSTRUCTION	3095	G	STATE ST	ACTIVE	1522	1522	Contractor	Mobile	Yes	YES	904.31
C & C STEAMWAY	2735		WOODWIND RD	ACTIVE	7217		Carpet Cleaning	Mobile	Yes		904.31
C.A. MASONRY	3729		JETTY PT		1731		Construction-Special Trade Contractors	Mobile	Yes		904.31
CAFÉ ELYSA	3076		CARLSBAD BLVD	ACTIVE	5812	5812	Eating and Drinking Places	Fixed	Yes	YES	904.21
CALDO POMODORO	2907		STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
CALIBER COLLISION CENTERS	6050		AVENIDA ENCINAS	ACTIVE	7532	7532	Top, Body, Upholstery Repair, Paint	Fixed	Yes	YES	904.40
CALIFORNIA FABWORKS	2101	G	LAS PALMAS DR	ACTIVE	7532	7532	Top, Body, Upholstery Repair, Paint	Fixed	Yes	YES	904.40
CALIFORNIA LINEAR DEVICES, INC.	2236	119	RUTHERFORD RD	ACTIVE	3621		Motors and Generators	Fixed	Yes		904.31
CALIFORNIA SENSOR CORP.	2075	P	CORTE DEL NOGAL	ACTIVE	3829	3829	Measuring & Controlling Devices, NEC	Fixed	No	No	904.40
CALIPER CLUB WORKS, INC.	6361	E	YARROW DR	ACTIVE	3949		Sporting/Athletic Goods, Not Elsewhere Classified	Fixed	Yes		904.40
CALLAWAY GOLF BALL COMPANY	2180		RUTHERFORD RD	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	Fixed	Yes	YES	904.31
CALLAWAY GOLF COMPANY	2285		RUTHERFORD RD	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	Fixed	Yes	YES	904.31
CALLAWAY GOLF COMPANY	2081		FARADAY AVE	ACTIVE	4225	4225	Sporting and Athletic Goods, NEC	Fixed	Yes	YES	904.31
CALLAWAY GOLF COMPANY	5860		DRYDEN PL	ACTIVE	7999	7999	Amusement & Recreaton Services	Fixed	Yes	YES	904.31
CALLAWAY GOLF COMPANY	5858		DRYDEN PL	ACTIVE	8731	8731	Sporting and Athletic Goods, NEC	Fixed	Yes	yes	904.31
CALLAWAY GOLF COMPANY (HUNTER BUILD)	2261		RUTHERFORD RD	ACTIVE	8371	8371	Sporting and Athletic Goods, NEC	Fixed	Yes	yes	904.31
CALLAWAY GOLF COMPANY (PASCAL BUILD)	5960	150	PASCAL CT	ACTIVE	3949	3949	Sporting and Athletic Goods, NEC	Fixed	Yes	YES	904.31
CALPACIFIC POOL AND SPA	4145		HARBOR DR	ACTIVE	7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.31
CALTRANS/CARLSBAD MAINTENANCE	6050		PASEO DEL NORTE	ACTIVE	9621		Transportation Programs Administration	Fixed	Yes		904.40
CAMPUS CAFE	5966		LA PLACE CT	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
CANNON PACIFIC SERVICES, LLC	6102	H/I	AVENIDA ENCINAS	ACTIVE	4212		Local Trucking Without Storage	Fixed	Yes		904.40
CAP'S MOBILE SMALL ENGINE REPAIR	3580		TRIESTE DR	ACTIVE	7699	7699	Repair Shops and Related Services, NEC	Mobile	Yes	YES	904.31
CARBITE GOLF	5816		DRYDEN PL	ACTIVE	5091		Wholeslae Sprting Goods	Fixed	Yes		904.31
CARLS JR	2608		EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
CARLS JR	5808	110	VAN ALLEN WAY	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
CARLS JR #117	950		CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
CARLS JR.	925		PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.40
CARLSBAD AIRPORT SELF STORAGE	1910		PALOMAR OAKS WAY	ACTIVE	4225	4225	General Warehousing & Storage	Fixed	Yes	NO	904.40
CARLSBAD AQUAFARM INC.	4600		CARLSBAD BLVD	ACTIVE	0182		Food Crops Grown Undercover	Fixed	Yes		904.31
CARLSBAD AUTO PARTS	3197		TYLER ST	ACTIVE	5531		Auto & Home Supply Stores	Fixed	Yes		904.31

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CARLSBAD AUTO SERVICE.	3181		TYLER ST	ACTIVE	7538		General Automotive Repair Shops	Fixed	Yes		904.31
CARLSBAD AUTO TECHNOLOGY	2730		STATE ST	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.21
CARLSBAD BY THE SEA	2855		CARLSBAD BLVD	ACTIVE	6513	6513	Operators of Apartment Bldgs	Fixed	Yes	YES	904.21
CARLSBAD CARPET CLEANING COMPANY	936		DAISY AVE	ACTIVE	7217		Carpet & Upholstery Cleaning	Mobile	Yes		904.51
CARLSBAD COLLISION CARE	2598		STATE ST	ACTIVE	7532		Auto body Repair and Paint Shop	Fixed	Yes		904.21
CARLSBAD CUSTOM CABINETS	2719		LOKER AV W		2434		Cabinet Makers	Fixed	Yes		904.31
CARLSBAD DANISH BAKERY	2805		ROOSEVELT ST	ACTIVE	5461	5461	Retail Bakeries	Fixed	Yes	YES	904.21
CARLSBAD EXCLUSIVE AUTOMOTIVE	1060	DEF	AUTO CENTER CT	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.31
CARLSBAD FRENCH PASTRY CAFE	1008	B/C	CARLSBAD VILLAGE DR	ACTIVE	5461	5461	Retail Bakeries	Fixed	Yes	YES	904.21
CARLSBAD GAS & PROPANE	1089		CARLSBAD VILLAGE DR	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.21
CARLSBAD GOLF CENTER	2711		HAYMAR	ACTIVE	7999		Amusement & Recreation Svcs, NEC	Fixed	Yes		904.21
CARLSBAD HYUNDAI	5285		CAR COUNTRY DR	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	Yes	Yes	904.31
CARLSBAD INTERNATIONAL EXPORT	1954		KELLOGG AVE	ACTIVE	3829	3829	Measuring & Controlling Devices, NEC	Fixed	No	No	904.40
CARLSBAD LANDSCAPE CONSTRUCTION INC	2777		WILSON ST	ACTIVE	1799		Landscape Construction	Mobile	Yes		904.51
CARLSBAD MAGNETICS	6086		CORTE DEL CEDRO	ACTIVE	3699		Electrical Machinery, Equip & Sups, NEC	Fixed	Yes		904.40
CARLSBAD MUFFLER & BRAKES	1060	L	AUTO CENTER CT	ACTIVE	7533	7533	Automotive Exhaust System Repair Shops	Fixed	Yes	YES	904.31
CARLSBAD PLAZA	2508		EL CAMINO REAL	ACTIVE	6512	6512	Operators of Nonresidential Buildings	Fixed	Yes	YES	904.21
CARLSBAD PREMIUM OUTLETS	5620	100	PASEO DEL NORTE	ACTIVE	6512	6512	Operators of Nonresidential Buildings	Fixed	Yes	YES	904.31
CARLSBAD RANCH MARKET	6118	D-F	PASEO DEL NORTE	ACTIVE	5431		Fruit and Vegetable Markets	Fixed	Yes		904.40
CARLSBAD SELF STORAGE LLC	2235		PALOMAR AIRPORT RD	ACTIVE	4225	4225	General Warehousing & Storage	Fixed	No	No	904.40
CARLSBAD SELF-SVC CAR WASH INC	2608		STATE ST	ACTIVE	7542	7542	Carwashes	Fixed	Yes	YES	904.21
CARLSBAD TECHNOLOGY INC.	5923		BALFOUR CT	ACTIVE	2834		Pharmaceutical Preparations	Fixed	Yes		904.31
CARLSBAD TECHNOLOGY INC.	5923		FARNSWORTH CT	ACTIVE	2834		Pharmaceutical Preparations	Fixed	Yes		904.31
CARLSBAD TOWING	3181		ROOSEVELT ST	ACTIVE	7549	7549	Towing Service	Fixed	Yes	YES	904.21
CARLSBAD VILLAGE AUTO BODY & PAINT	3191		TYLER ST	ACTIVE	7532	7532	Top, Body, Upholstery Repair, Paint	Fixed	Yes	YES	904.31
CARLSBAD VILLAGE INDEPENDENT MERCEDES AND VOLVO SERVICES INC	3045		ROOSEVELT ST	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.21
CARLSBAD VILLAGE SELF STORAGE	3235		TYLER ST	ACTIVE	4225		General Warehousing And Storage	Fixed	No		904.21
CARLSBAD VILLAGE SHELL	1145		CARLSBAD VILLAGE DR	ACTIVE	5541		Gasoline Service Stations	Fixed	Yes		904.21
CARLSBAD VOLVO	6830		AVENIDA ENCINAS	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.40
CARPET CLEANER1.COM	6311		MONTECITO DR		7217		Carpet And Upholstery Cleaning	Mobile	Yes		904.51
CARTER'S HAY AND GRAIN	1985		OLIVENHAIN RD	ACTIVE	5191	5191	Farm Supplies - Feed and Grain	Fixed	Yes	YES	904.51
CARVED STONE INTERNATIONAL	2245		CAMINO VIDA ROBLE	ACTIVE	5032	5032	Brick, Stone & Related Constr Mats	Fixed	Yes	YES	904.40
CASE CONSTRUCTION INC	2907		CORTE JARDIN	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51

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CAVALLO MOTOR SPORTS	6010		AVENIDA ENCINAS		7538		General Automotive Repair Shops	Fixed	Yes		904.40
CDS PRINTING	6971	203	EL CAMINO RL	ACTIVE	2759	2759	Commercial Printing, NEC	Fixed	Yes	YES	904.51
CESSY'S TACO SHOP	3016		CARLSBAD BLVD	ACTIVE	5812		Eating & Drinking Places	Fixed	Yes		904.31
CHAMPION TERMITE	5245	E	AVENIDA ENCINAS	NLB	7342	7342	Disinfecting And Pest Control Services	Mobile	Yes	YES	904.31
CHARLES T FARM	3008		SUNNY CREEK RD	ACTIVE	0161	161	Flowers, Nursery Stock, And Florists' Supplies	Fixed	Yes	YES	904.31
CHARO CHICKEN	7680	103	EL CAMINO RL	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.51
CHEVRON #46	850		PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.40
CHEVRON USA INC #93320	970		TAMARACK AVE	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.31
CHINA GATE	2525	142	EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
CHIN'S SZECHWAN RESTAURANT	2958		MADISON ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
CHRIS BARCA CONSTRUCTION	2441		LEVANTE ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.51
CHRIS CAVENY GENERAL CONTRACTOR	3946		LINMAR LN	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
CHUCKS PLUMBING	3800		WESTHAVEN DR	ACTIVE	1711		Plumbing Contractor	Mobile	Yes		904.31
CHUCK'S TIRE CENTER	6060	A19	AVENIDA ENCINAS	ACTIVE	5531		Auto & Home Supply Stores	Fixed	Yes		904.40
CILANTRO LIVE	300	106	CARLSBAD VILLAG DR	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.21
CIRCLE K DBA CARLSBAD FUELS CORP	7602		EL CAMINO RL	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.51
CIVIC HELICOPTER INC	2206	H	PALOMAR AIRPORT RD	ACTIVE	4522	4522	Helicopter Maintenance & Operations	Fixed	Yes	YES	904.40
CLAIM JUMPER RESTAURANT, 9LTD	5958		AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
CLEAN IMAGE POWER WASH	4129		ADAMS ST	ACTIVE	7349	7349	Business Services, Not Elsewhere Classified	Mobile	Yes	YES	904.31
CLEANING COMPANY, THE	2605		JACARANDA AVE		7217		Carpet And Upholstery Cleaning	Mobile	Yes		904.51
CLYD'S SEPTIC TANK SERVICE	7248		PONTO DR	ACTIVE	7699	7699	Septic Tank Cleaning and Pumping	Mobile	Yes	YES	904.51
COAST WASTE MANAGEMENT	5960		EL CAMINO RL	ACTIVE	4225	4225	General Warehousing & Storage	Fixed	Yes	YES	904.31
COLD STONE CREAMERY	2967		CARLSBAD BLVD	ACTIVE	5451		Retail Ice Cream Sales	Fixed	Yes		904.31
COLONIAL PAINTING	2520	F	NAVARRA DR	ACTIVE	1721		Construction-Special Trade Contractors	Mobile	Yes		904.51
COMPONENT CONCEPTS	6179	200	EL CAMINO RL	ACTIVE	5065		Distribution and Assembling Battery Packs	Fixed	No		904.51
CONCRETE GROUP, THE	2205	F	FARADAY AVE		1731		Construction-Special Trade Contractors	Mobile	Yes		904.31
CONCRETE JUNGLE CUTTING & CORING	4509	B	ADAMS ST	ACTIVE	1771	1771	Concrete Cutting & Coring	Mobile	Yes	YES	904.31
CONCRETE RESTORATIONS	6134		PASEO ENSILLAR		1731		Construction-Special Trade Contractors	Mobile	Yes		904.51
CONSOLIDATED ELEC. DIST. INC	6106	A	AVENIDA ENCINAS	ACTIVE	5063		Electrical Apparatus & Equipment Wiring Supplies	Fixed	Yes		904.40
CONWAY & ASSOC., INC.	2525	102	PIO PICO DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
COSTCO WHOLESALE	951		PALOMAR AIRPORT RD	ACTIVE	5399	5399	Miscellaneous General Merchandise Stores	Fixed	Yes	YES	904.40
COTTRELL MACHINE	6102	B-C	AVENIDA ENCINAS	ACTIVE	3599		Indl and Comml Machinery and Equip, NEC	Fixed	Yes		904.40
COYOTE BAR & GRILL	300		CARLSBAD VILLAG DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
CPS PRINTING	2304		FARADAY AVE	ACTIVE	2759		Commercial Printing, NEC	Fixed	Yes	YES	904.31

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CRAZY BURRO DINING CANTINA	6996		EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
CREATIVE MACHINING LLC	6102	B & C	AVENIDA ENCINAS		3599		Indus./Commercial Equipment, Not Elsewhere Classi	Fixed	Yes		904.40
CREATIVE STONE AND TILE	5234		AVENIDA ENCINAS	ACTIVE	1743	1743	Tile and Stone Work	Mobile	Yes	YES	904.31
CRESTONE GROUP BAKING COMPANY	5927		FARNSWORTH CT	ACTIVE	2051	2051	Bread & Other Baker Prods	Fixed	Yes	YES	904.31
CROSSINGS AT CARLSBAD, THE	5800		HIDDEN VALLEY ROAD		7992		Public Golf Courses	Fixed	Yes		904.31
CROSSROAD PETROLEUM (ARCO AM/PM)	810		TAMARACK AVE	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.31
CROUTONS	5814	140	VAN ALLEN WAY	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.31
CRYSTAL RAIN POOL SERVICES	2894		WOODRIDGE CIR	ACTIVE	7389	7389	Swimming Pool Maintenance	Mobile	Yes	YES	904.21
CURTIS CONSTRUCTION	3420		DONNA DR	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
CUSTOM HOME PAINTING	2138		TWAIN AVE	ACTIVE	1721	1721	Special Trade Contractors	Mobile	Yes	YES	904.21
CUTTING EDGE CNC, INC.	6064		CORTE DEL CEDRO	ACTIVE	3599		Machine Shop	Fixed	Yes		904.40
CVS PHARMACY #9479	2510	E	EL CAMINO REAL	ACTIVE	5912	5912	Drug Stores and Proprietary Stores	Fixed	Yes	YES	904.21
D & H ENTERPRISES	7213		PLAZA DE LA COSTA	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.51
D M BUILDING	1825		MCCAULEY LN	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
D.C.C.	1492		OAK AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
DAG BUILDERS INC	1535		SUNRISE CIR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
DAILY NEWS CAFE, THE	3001	A	CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
DAPHNE'S GREEK CAFE	6981	101	EL CAMINO RL	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.51
DARIO'S MEDITERANEAN CUISINE	2508	D	EL CAMINO REAL	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.21
DARTON INTERNATIONAL, INC.	2380	J/K	CAMINO VIDA ROBLE	ACTIVE	3599	3599	Manufacturing Industrial Machinery	Fixed	Yes	YES	904.40
DAVID R. FUNKHOUSER GENERAL CONTRACTOR	1281		MAGNOLIA AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
DAVID TAYLOR DEVELOPMENT INC.	4135		SKYLINE RD	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
DEAN PORTER CONSTRUCTION	3750		MONROE ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
DEGREGORIO SERVICE & REPAIR	2706		EL RASTRO LN	ACTIVE	7349	7349	Building Cleaning & Maint Svc, NEC	Mobile	Yes	YES	904.51
DELI WISHES	5365	B	AVENIDA ENCINAS	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.31
DENNIS MATHIS, CONSTRUCTION, INC.	3128		LE VANTE ST	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
DENNY'S # 7517	1048		CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
DEPT OF ANIMAL CONTROL	2481		PALOMAR AIRPORT RD	ACTIVE	0752	0752	Animal Shelter	Fixed	Yes	YES	904.40
DINI'S BY THE SEA	3290		CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
DISCOUNT CARPET & UPHOLSTERY	2408		MAJANO PL	ACTIVE	7217		Carpet & Upholstery	Mobile	Yes		904.51
DOCTOR OF THE HOUSE	2371		MARCA PL	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.51
DON'S COUNTRY KITCHEN	2885		ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21

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DONUT FAIR, THE	2540	C1	EL CAMINO REAL	ACTIVE	5461	5461	Retail Bakeries	Fixed	Yes	YES	904.21
DOT HILL SYSTEMS CORPORATION	6305		EL CAMINO RL	ACTIVE	3577		Computer Peripheral Equip, NEC	Fixed	Yes		904.40
DR.'S OWN, INC	2270	100	COSMOS T	ACTIVE	3842	3842	Orthopedic/Prosthetic/Surgical Appliances And Supp	Fixed	No	No	904.31
DRAGMASTER INC.	2725		STATE ST	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.21
DRAIN RUNNER	830		CITRUS PL	ACTIVE	1711	1711	Construction-Special Trade Contractors	Mobile	Yes	YES	904.21
DREAM POOLS AND SPAS	3607		BARRANCA CT	ACTIVE	1799	1799	Construction-Special Trade Contractors	Mobile	Yes	YES	904.51
DRYCLEAN AMERICA.NET	2708	105	LOKER AV W	ACTIVE	7216		Drycleaning Plants, Except Rug Cleaning	Fixed	Yes		904.31
DUNN-EDWARDS PAINTS	2840	E	E LOKER AVE		5231		Paint, Glass, And Wallpaper Stores	Fixed	Yes		904.31
E/G ELECTRO-GRAPH INC.	2365		CAMINO VIDA ROBLE	ACTIVE	3674		Semiconductors 7 Related Devices	Fixed	Yes		904.40
E/G ELECTRO-GRAPH INC.	2355		CAMINO VIDA ROBLE	ACTIVE	3674		Semiconductors and Related Devices	Fixed	Yes		904.40
ECR GRILLE	7740	F	EL CAMINO RL	ACTIVE	5812	5812	Eating and Drinking Places	Fixed	Yes	YES	904.51
EDWARD SHEDLEY MASONRY	2445		SIERRA MORENA AVE	ACTIVE	1741	1741	Special Trade Contractors	Mobile	Yes	YES	904.31
EL CAMINO RENTAL	5701		EL CAMINO RL	ACTIVE	7359	7359	Equipment Rental & Leasing, NEC	Fixed	Yes	YES	904.31
EL CARIBE	6965	205	EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
EL POLLO LOCO #3423	7120		AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
EL PUERTO MEXICAN & SEAFOOD	1065	D	CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.21
EL RINCON GARDEN CARE	3480	B	MONROE ST	ACTIVE	0781		Landscape Counseling And Planning	Mobile	Yes		904.21
EL TORITO MARKET	3163		ROOSEVELT ST	ACTIVE	5411	5411	Grocery Stores	Fixed	Yes	YES	904.21
ELECTRIC REGULATOR	6189		EL CAMINO RL	ACTIVE	3625	3625	Electrical Indl Apparatus, NEC	Fixed	Yes	yes	904.40
ELECTRO SURFACE TECHNOLOGIES INC.	2280	100	FARADAY AVE	ACTIVE	3679	3679	Electronic components, NEC	Fixed	Yes	yes	904.31
ELITE GLASS & WINDOWS, INC.	1207	F	CARLSBAD VILLAGE DR	ACTIVE	1793	1793	Glass And Glazing Work	Mobile	Yes	YES	904.21
ELTROL CORPORATION	5661		PALMER WAY	ACTIVE	3625		Relays & Industrial Controls	Fixed	Yes		904.31
ELYS PLACE (CALLAWAY GOLF)	5928		PASCAL CT	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
EMBASSY INTERNATIONAL LIMOUSINE INC	6102	G	AVENIDA ENCINAS	ACTIVE	4119		Local Passenger Transportation, NEC	Fixed	Yes		904.40
EMPIRE PIPELINE	1945	E	CAMINO VIDA ROBLE	ACTIVE	1711	1711	Construction-Special Trade Contractors	Mobile	Yes	YES	904.31
ENCINA WATER FACILITY	6200		AVENIDA ENCINAS	ACTIVE	4952	4952	Sewerage Systems	Fixed	Yes	YES	904.40
ENCINAS BUSINESS PARK/MCWIN CORP	6102	B	AVENIDA ENCINAS	ACTIVE	6512	6512	Operators of Nonresidential Buildings	Fixed	Yes	YES	904.40
ENDLESS SUMMERSCAPES	2240	L	AVENIDA MAGNIFICA		0781		Landscape Counseling And Planning	Mobile	Yes		904.31
ENDRES CONSTRUCTION	2895		HIGHLAND DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
ENTERPRISE RENT A CAR L.A. #3246	1060	M	AUTO CENTER CT	ACTIVE	7514	7514	Passenger Car Rental	Fixed	Yes	YES	904.31
EOTRON LLC	2215	D	FARADAY AVE		3674		Semiconductors And Related Devices	Fixed	Yes		904.31
ERIC PAGE PLUMBING	2833		FOREST VIEW WAY	ACTIVE	1711	1711	Special Trade Contractors	Mobile	Yes	YES	904.21
EUFORA	2885	E	E LOKER AVE	ACTIVE	5122	5122	Drugs, Drug Proprietaries, Sundries	Fixed	No	No	904.40

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EWING IRRIGATION PRODUCTS INC.	6104	E	AVENIDA ENCINAS	ACTIVE	5083		Farm & Garden Machinery & Equipment	Fixed	Yes		904.40
EXCELLENCE IN PAINTING	2781		BERKELEY AVE	ACTIVE	1721	1721	Construction Specialist - Painting	Mobile	Yes	YES	904.31
EXPRESS AUTO CENTER	2676	A	STATE ST	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.21
FAMILY POOL SERVICE	1884		PALISADES DR		7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.31
FEDERAL EXPRESS CORPORATION	2495		FARADAY AVE	ACTIVE	4215	4215	Air Courier Services	Fixed	Yes	YES	904.31
FELIX A. LANDSCAPING	7782		PALENQUE ST	ACTIVE	0781		Landscape Counseling And Planning	Mobile	Yes		904.31
FIDELS NORTE INC	3003		CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
FINISH TECH CORPORATION	5993	101	AVENIDA ENCINAS		1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
FINNEGAN'S PUB & GRILL	1814		MARRON RD	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.21
FIRESTONE TIRES & SERVICE CENTER	2545		EL CAMINO REAL	ACTIVE	5531	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.21
FISH HOUSE VERA CRUZ	417		CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
FLORAL EXPRESS	5825	107	AVENIDA ENCINAS	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	Fixed	Yes	YES	904.31
FLOREXPO, LLC	1960		KELLOGG AVE	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	Fixed	Yes	YES	904.40
FLOWER FIELD, THE	5702		PASEO DEL NORTE	ACTIVE	0181	181	Ornamental Floriculture	Fixed	Yes	YES	904.31
FLOWERS BY HI-LO	6211	F	YARROW DR	ACTIVE	5193	5193	Wholesale Flower Distribution	Fixed	Yes	YES	904.40
FOCUSED AUTO DETAILING	3660		CATALINA DRIVE	ACTIVE	7542	7542	Mobile Detailing/Washer	Mobile	Yes	YES	904.21
FORESIGHT DEVELOPMENT, INC.	2879	B	STATE ST	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
FOUR SEASONS AVIARA GOLF CLUB	7447		BATIQUITOS DR	ACTIVE	7997	7997	Golf Club	Fixed	Yes	YES	904.51
FOUR SEASONS GOLF MAINT FACILITY	7227		AVIARA DR	ACTIVE	7997	7997	Golf Course and Resort	Fixed	Yes	YES	904.51
FOUR SEASONS RESORT AVIARA	7100		FOUR SEASONS PT	ACTIVE	7011	7011	Hotels and Motels	Fixed	Yes	YES	904.51
FOX POINT FARMS WHOLESALE	5600	11	AVENIDA ENCINAS	ACTIVE	5193	5193	Wholesale Floral	Fixed	Yes	YES	904.31
FRAZEE PAINT	7040	100	AVENIDA ENCINAS		5231		Paint, Glass, And Wallpaper Stores	Fixed	Yes		904.40
FRESCO TRATTORIA	3263	105	CAM. DE LOS COCHES	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.51
FRESCO TRATTORIA & BAR	264		CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
FROEDGE CONSTRUCTION	2240	H	AVENIDA MAGNIFICA	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
FRONTERA CONSTRUCTION INC	5993	101	AVENIDA ENCINAS		1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
FURNISHINGS 4 LESS	1960	D	KELLOGG AVE	ACTIVE	5712	5712	Furniture Stores	Fixed	Yes	YES	904.31
G.T. MACHINE SHOP	2790	100	LOKER AV W	ACTIVE	3599	3599	Ind & Comml Machinery & Equip, NEC	Fixed	Yes	yes	904.31
GARCIAS MEXICAN RESTAURANT	2968		STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
GARDEN GAL, THE	6617		VIREO CT	ACTIVE	0781		Landscape Counseling And Planning	Mobile	Yes		904.51
GARDEN STATE BAGELS	5620	125	PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
GARRETT CONSTRUCTION COMPANY	3310		AVENIDA OBERTURA	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.51
GARY TEAM PAINTING INC.	3890		HIGHLAND DR	ACTIVE	1721	1721	Special Trade Contractors	Mobile	Yes	YES	904.31
GASCO GASOLINE	920		CARLSBAD VILLAGE DR	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.21

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GATES CONSTRUCTION	2735		SPOKANE WAY	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
GEMATRIA PRODUCTS, INC.	2075	H	CORTE DEL NOGAL	ACTIVE	2834	2834	Vitamin & Nutrient Manufacturer	Fixed	No	No	904.40
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	1964		KELLOGG AVE	ACTIVE	2759	2759	Commercial Printing	Fixed	No	No	904.31
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	1949		KELLOGG AVE	ACTIVE	3699	3699	Electrical Machinery, Equip & Sups, NEC	Fixed	No	No	904.31
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	5355		ARMADA DR	ACTIVE	3915		Lapidary Work, Mats, Jewelers, Finding	Fixed	No		904.31
GEOMILL	2792	103	LOKER AV W		3599		Indus./Commercial Equipment, Not Elsewhere Classi	Fixed	Yes		904.31
GEORGIOS GREEK BURRITO WRAP	7720	F	EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
GET N' GO DONUTS	6986	E	EL CAMINO RL	ACTIVE	5461	5461	Retail Bakeries	Fixed	Yes	YES	904.51
GIGATREND INCORPORATED	5115	G	AVENIDA ENCINAS	ACTIVE	3577		Computer Peripheral Equipment, NEC	Fixed	No		904.31
GLOBAL MICROWAVE SYSTEMS, INC	1916	100	PALOMAR OAKS WAY	ACTIVE	3578	3663	Radio and Television Broadcasting and Communications Equip.	Fixed	Yes	YES	904.40
GOMEZ PLBG, GERARDO	4765		GATESHEAD RD	ACTIVE	1711		Plumbing Contractor	Mobile	Yes		904.31
GORILLA EQUIPMENT RENTALS	505		OAK AVE	ACTIVE	7359	7359	Equipment Rental & Leasing, NEC	Fixed	Yes	YES	904.31
GOURMET SUSHI	5814	135	VAN ALLEN WAY	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.31
GRAFIKOM	5909		SEA OTTER PL	ACTIVE	2759	2759	Commercial Printing	Fixed	Yes	YES	904.31
GRAHAM ESPIE CONSTRUCTION	4717		GATESHEAD RD		1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
GRAND AVENUE BAR & GRILL	752		GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
GRAND DELI, THE	595		GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
GRAND PACIFIC PALISADES RESORT	5805		ARMADA DR	ACTIVE	7011		Hotels and Motels	Fixed	No		904.31
GRANT GENERAL CONTRACTORS	5051		AVENIDA ENCINAS	ACTIVE	1521	1521	General Contractors--Single-Family Housing	Mobile	Yes	YES	904.31
GRAPHIC CONVERTING, INC.	5909		SEA OTTER PL	ACTIVE	2675	2675	Die-Cut Paper & Paperboard & Cardboard	Fixed	Yes	YES	904.31
GREAT KHANS MONGOLIAN FESTIVAL	2525	236	EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
GREEK CORNER CAFE	1854	100	MARRON RD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
GREEK VILLAGE L.L.C.	6030		PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.40
GREEN LAND COMPANY	3562		CALLE PALMITO	ACTIVE	0782	0782	Landscape Construction	Mobile	Yes	YES	904.40
GREGG'S MOBILE REPAIR	5233		SHELLEY PL	ACTIVE	7699	7699	Repair Shops and Related Services, NEC	Mobile	Yes	YES	904.31
GREGORIOS	300	208	CARLSBAD VILLAG DR	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.31
GRUBER CONSTRUCTION	2412		LA TINADA CT	ACTIVE	1521		General Contractor	Mobile	Yes		904.51
GS DREAMSCAPING	1370		PINE AVE	ACTIVE	0782	0782	Landscape Contractor	Mobile	Yes	YES	904.31
GTR ENTERPRISES, INC.	6352	E	CORTE DEL ABETO	ACTIVE	3469		Fabricated Metal Parts	Fixed	Yes		904.40
GUYON WEST	2101	C	LAS PALMAS DR	ACTIVE	5084	5084	Wholesale Baking Equipment	Fixed	Yes	YES	904.40
HALL PEST MANAGEMENT	3572		MADISON ST		7342		Disinfecting And Pest Control Services	Mobile	Yes		904.21
HANGAR ONE, INC	2100	5	PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	Fixed	Yes	YES	904.40

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HANSON AGGREGATES	3750		HAYMAR DR	ACTIVE	2951	2951	Asphalt Paving Mixtures	Fixed	Yes	YES	904.21
HARBOR FISH CAFE	3179		CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
HART CONCRETE CONSTRUCTION	4016		GARFIELD ST	ACTIVE	1771		Concrete Work	Mobile	Yes		904.31
HARVEY INC.	7200	B	PONTO DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.51
HAWTHORNE RENT-IT SERVICE	2065		CAMINO VIDA ROBLE	ACTIVE	4212	4212	Local Trucking Without Storage	Fixed	Yes	YES	904.40
HEAVENLY VIEWS WINDOW CLEANING	3221	37	CARINGA WAY	ACTIVE	7349	7349	Building Cleaning And Maintenance Services, Not E	Mobile	Yes	YES	904.51
HEINZE CONSTRUCTION COMPANY	2501		JACARANDA AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.51
HENDRIX PLUMBING	470		CHINQUAPIN AVE	ACTIVE	1711		Plumbing Contractor	Mobile	Yes		904.31
HENNESSEY'S TAVERN	2777		ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
HENRY - FURNITURE MAKER, PAUL	2633		STATE ST	ACTIVE	7641		Reupholstery and Furniture Repair	Fixed	No		904.21
HENSLEY'S FLYING ELEPHANT PUB AND GRILL	850		TAMARACK AVE		5812		Eating Places	Fixed	Yes		904.31
HERTZ CORPORATION, THE	5555		PASEO DEL NORTE	ACTIVE	7514		Passenger Car Rental	Fixed	Yes		904.31
HETHERINGTON ROOFING CO	3265		VALLEY ST		1741		Construction-Special Trade Contractors	Mobile	Yes		904.31
HILLS LANDSCAPING	4264		SKYLINE RD	ACTIVE	0782	0782	Lawn and Garden Services	Mobile	Yes	YES	904.31
HINTZ CONSTRUCTION	2535	8B	NAVARRA DR	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
HI-Q PAINTING COMPANY	2916	B	LUCIERNAGA ST	ACTIVE	1799		Special Trade Contractors	Mobile	Yes		904.51
HOEHN ACURA	5556		PASEO DEL NORTE	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	Yes	Yes	904.31
HOEHN AUDI	5215		CAR COUNTRY DR	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	Yes	Yes	904.31
HOEHN HONDA	5454		PASEO DEL NORTE	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	Yes	Yes	904.31
HOEHN HONDA USED CARS	5566		PASEO DEL NORTE	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	Yes	Yes	904.31
HOEHN INFINITI	5245		CAR COUNTRY DR	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	Yes	Yes	904.31
HOEHN MERCEDES	5475		CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.31
HOEHN PORSCHE	6800		AVENIDA ENCINAS	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	Yes	Yes	904.51
HOFFMANS CLASSIC CONSTRUCTION	4310		HORIZON DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
HOLIDAY INN CARLSBAD	850		PALOMAR AIRPORT RD	ACTIVE	7011	7011	Hotels and Motels	Fixed	Yes	YES	904.31
HOMESPACE OF CALIFORNIA INC.	2270	A	CAMINO VIDA ROBLE		1752		Floor Laying And Floor Work, Not Elsewhere Classi	Fixed	Yes		904.40
HONEST 1 AUTO CARE	3235		ROOSEVELT ST		7538		General Automotive Repair Shops	Fixed	Yes		904.31
HONOURGROUP	4722		BIRCHWOOD CIT	ACTIVE	1542	1542	General Contractors-Nonresidential Buildings, Oth	Mobile	Yes	YES	904.21
HOPKINS CONSTRUCTION	1201		TAMARACK AVE	ACTIVE	1799		Special Trade Contractors	Mobile	Yes		904.31
HOT DOG ON A STICK	5620	C126	PASEO DEL NORTE		5812		Eating Places	Fixed	Yes		904.31
HUBBS SEA WORLD RESEARCH	4200		GARFIELD ST	ACTIVE	0921	0921	Fish hatcheries & Preserves	Fixed	Yes	YES	904.31
HUDSON PRINTING INC	2780		LOKER AV W	ACTIVE	2759		Commercial Printing, Not Elsewhere Classified	Fixed	Yes	YES	904.31

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HURLEYUP CONSTRUCTION	7108		PRIMROSE WAY	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
HYDRO-CHECK SYSTEMS INC.	5931	100	SEA LION PL	ACTIVE	3823		Ind Instr for Measure, display & Control	Fixed	Yes		904.31
IBANEZ MAINTENANCE	3080		MONROE ST	ACTIVE	0782	782	Lawn And Garden Services	Mobile	Yes	YES	904.21
INDUSTRA PAINT & CONST.	1145		TAMARACK AV	ACTIVE	1721		Paint Contractor	Mobile	Yes		904.31
INDUSTRIAL STRENGTH CORP	6115		CORTE DEL CEDRO	ACTIVE	3599	3599	Indus./Commercial Equipment, Not Elsewhere Classi	Fixed	Yes	YES	904.40
INGHAM CONSTRUCTION	2440		PIO PICO DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
INGOLD TRACTOR SERVICE	4135		PARK DR	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
IN-N-OUT BURGER, A CALIF. CORP. #89	5950	150	AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
INNOVATIVE METAL PRODUCTS, INC.	6351	D-F	YARROW DR		3444		Sheet Metal Work	Fixed	Yes		904.40
INT SOFTBOARD TECHNOLOGY	6351	F	YARROW DR	ACTIVE	3949		Sporting/Athletic Goods, Not Elsewhere Classified	Fixed	Yes		904.40
INTEGRITY PLUS	2967		LEXINGTON CIR	ACTIVE	1711		Construction-Special Trade Contractors	Mobile	Yes		904.51
INTERIOR SPECIALISTS INC.	1630		FARADAY AVE	ACTIVE	1752	1752	Floor Laying & Floor Work	Mobile	Yes	YES	904.31
INVITROGEN CORPORATION	5781		VAN ALLEN WAY	ACTIVE	2836	2836	Biological Products, Except Diagnostic Substances	Fixed	Yes	YES	904.31
IQ SCIENTIFIC INSTRUMENTS, INC	2075	E	CORTE DEL NOGAL	ACTIVE	3829	3829	Measuring & Controlling Devices, NEC	Fixed	No	No	904.40
IRIS GROUP, INC., THE	1675		FARADAY AVE	ACTIVE	2752	2752	Commercial Printing, Lithographic	Fixed	Yes	YES	904.31
ISAAC'S BAKERY DELI	2061	200	PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.40
ISIS PHARMACEUTICALS	2282		FARADAY AVE	ACTIVE	2834	2834	Pharmaceutical Preparations	Fixed	Yes	YES	904.31
ISLANDS FINE BURGERS & DRINKS	889		PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.40
ISLANDS@CARLSBAD	5814		VAN ALLEN WAY	ACTIVE	6512	6512	Operators of Nonresidential Buildings	Fixed	Yes	YES	904.31
ITZEL'S CAFÉ	5600	110	AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
J & B GRAPHICS	6351	H/I	YARROW DR		2396		Automotive And Apparel Trimmings	Fixed	Yes		904.40
J C CONSTRUCTION & RENOVATION	3110		DEL REY AVE	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
J H R CONSTRUCTION	5238		CARLSBAD BLVD	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
J.C. DELI AND CATERING	2382	A	CAMINO VIDA ROBLE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.40
J.C. PENNEY COMPANY	2555		EL CAMINO REAL	ACTIVE	5311	5311	Department Store	Fixed	Yes	YES	904.21
JACK IN THE BOX #3006	7050		AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
JACK IN THE BOX #36	901		CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
JACOBSON CONCRETE	1344		CYNTHIA LN	ACTIVE	1771	1771	Special Trade Contractors	Mobile	Yes	YES	904.21
JARDINERA	2763		STATE ST	ACTIVE	5261		Retail Nurseries, Lawn And Garden Supply Stores	Fixed	Yes		904.21
JAY'S GOURMET PIZZA AND SEAFOOD	2975	S-B	CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
JC BALDWIN CONSTRUCTION COMPANY	2469		IMPALA DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Fixed	Yes	YES	904.31

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JENSEN CONSTRUCTION CO	2151	A	LAS PALMAS DR	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.40
JESSUP TRANSPORT	5600	44	AVENIDA ENCINAS	ACTIVE	4212	4212	Transport	Fixed	Yes	YES	904.31
JET SOURCE, INC.	2056		PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	Fixed	Yes	YES	904.40
JET SOURCE, INC.	2036		PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	Fixed	Yes	YES	904.40
JET SOURCE, INC.	2026		PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	Fixed	Yes	YES	904.40
JET SOURCE, INC.	2186		PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, Terminals	Fixed	Yes	YES	904.40
JIFFY LUBE	6021		PASEO DEL NORTE	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes		904.40
JIM AGNOS POOL & SPA SERVICE	7040		SNAPDRAGON DR	ACTIVE	7389	7389	Business Services, NEC	Mobile	Yes	YES	904.51
JOE MOORE CONSTRUCTION COMPANY	3612		VALLEY ST	ACTIVE	1521	1521	General Contractor	Mobile	Yes	YES	904.31
JOEY'S SMOKIN BBQ	6955	107	EL CAMINO RL	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.51
JOHN BIANCHI CONSTRUCTION	2910		MANAGUA PL	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
JOHN C. WALTERS & ASSOC. INC.	6320		MONTECITO DR	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
JOHN D. HEBERT CONSTRUCTION	5460		EL ARBOL DR	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
JOHN RYDEN CONSTRUCTION	376	10	JUNIPER AVE	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
JOHN STEVENSON PLUMBING	6351	A108	CORTE DEL ABETO	ACTIVE	1711	1711	Special Trade Contractors	Mobile	Yes	YES	904.40
JOHNNY'S RUTHERFORD CAFE	2262	102	RUTHERFORD RD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
JOHNSON POOL SERVICE & REPAIR	3115		SERRANO DR	ACTIVE	7389	7389	Business Services	Mobile	Yes	YES	904.51
JOHNSONS AUTO BODY AND PAINT	2677		STATE ST	ACTIVE	7532		Auto Body Shop	Fixed	Yes		904.21
JON DORE CONSTRUCTION	3353		DEL RIO CT	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
JON MCANALLY CONSTRUCTION	5441		WOLVERINE TER		1521		General Contractors--Single-Family Housing	Mobile	Yes		904.31
JOSEPH A. MEEHL'S SONS COMPANY	2717		VANCOUVER ST	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
JT SPORTS LLC	5818		EL CAMINO RL		5091		Sporting And Recreational Goods & Supplies	Fixed	Yes		904.31
JUAN C. MOBILE MECHANIC	7803	7	CENTELLA ST	ACTIVE	7538	7538	General Automotive Repair Shops	Mobile	Yes	YES	904.51
JUDY'S DELI	2035	130	CORTE DEL NOGAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.40
K & K LABORATORIES INC	3305		TYLER ST	ACTIVE	2833		Viatmins and Supplements	Fixed	Yes		904.31
K1 SPEED LLC	6212		CORTE DEL CEDRO	ACTIVE	7999		Indoor Kart Racing	Fixed	Yes		904.40
KANINE KARE	1985		OLIVENHAIN RD	ACTIVE	0752	0752	Animal Specialty Services, Except Veterinary	Fixed	Yes	YES	904.51
KARL STRAUSS BREWERY & RESTAURANT	5801		ARMADA DR	ACTIVE	2082	2082	Brewery and Restaurant	Fixed	Yes	Yes	904.31
KATONA PLUMBING	7076		MOTANES LN	ACTIVE	1711		Plumbing Contractor	Mobile	Yes		904.51
KEN GRODY FORD	5555		PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.31
KENNEDY MASONRY	7313		MELODIA TER	ACTIVE	1741	1741	Masonry Contractor	Mobile	Yes	YES	904.51
KENT WATERS CABINET & MILLWORK	6074		CORTE DEL CEDRO	ACTIVE	1799		Special Trade Contractors	Fixed	Yes		904.40
KEONI LANDSCAPES	1052		KNOWLES AVE	ACTIVE	1799	1799	Landscape Construction	Mobile	Yes	YES	904.21
KFC #Y450066	745		CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31

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KILWA MANUFACTURING, INC,	2045		CORTE DEL NOGAL		2086		Bottled And Canned Soft Drinks & Carbonated Waters	Fixed	Yes		904.40
KING'S FISH HOUSE	5625		PASEO DEL NORTE	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.31
KIPP'S LAWN SERVICE	7211		PLAZA DE LA COSTA	ACTIVE	0781		Landscape Counseling And Planning	Mobile	Yes		904.51
KIWI DIG, INC.	3502		CALLE HIDALGO	ACTIVE	1521	1521	Construction-Special Trade Contractors	Mobile	Yes	YES	904.51
KLAUS ENYEDI CONCRETE CONST	1715		CATALPA RD	ACTIVE	1741	1741	Construction-Special Trade Contractors	Mobile	Yes	YES	904.51
KNOCKOUT BURGERS	2971		CARLSBAD BLVD	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.21
KNOCKOUT PIZZERIA	2959		CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
KNOLL DESIGN AND DEVELOPMENT	5751	G1	PALMER WAY	ACTIVE	1521		General Contractor	Mobile	Yes		904.40
KNORR BEESWAX PROD. INC.	1965		KELLOGG AVE	ACTIVE	3999	3999	Manufacturing Industries, NEC	Fixed	Yes	YES	904.40
KOKO BEACH	2858		CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
KOSKO CONSTRUCTION	919		BEGONIA CT	ACTIVE	1793		Glass & Glazing Work	Mobile	Yes		904.51
KOTIJA TACO SHOP	1850	100	MARRON RD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
KRESSIN POOL CLEANING	2803		VIA TOPACIO		7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.51
KVD COMPANY INC.	2465		IMPALA DR	ACTIVE	3825	3825	Inst for Measure & Testing of electricity	Fixed	Yes	yes	904.31
L & L PRINTERS	6200		YARROW DR	ACTIVE	2759		Commercial Printing, NEC	Fixed	Yes		904.40
LA COSTA LIMOUSINE	2770		LOKER AV W	ACTIVE	4119	4119	Local Passenger Transportation, NEC	Fixed	Yes	YES	904.31
LA COSTA RESORT AND SPA	2100		COSTA DEL MAR RD	ACTIVE	7997		Golf Course and Resort	Fixed	Yes		904.51
LA COSTA SUBMARINA	6994	100	EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
LA COSTA WHOLESALE FLOWERS	3319		JAMES DR	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	Fixed	Yes	YES	904.21
LA FIESTA DELI	5810	B	EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
LA PLACE DELI	5950		LA PLACE CT	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
LABO CONSTRUCTION	1720		CATALPA RD		1521		General Contractors--Single-Family Housing	Mobile	Yes		904.51
LANCE HOWARD DETAILING	2476		TORREJON PL		7542		Carwashes	Mobile	Yes		904.51
LANDCO CONSTRUCTION COMPANY	3135		TYLER ST	ACTIVE	2431		Millwork	Fixed	Yes		904.21
LAS OLAS CARLSBAD	2939		CARLSBAD BLVD	ACTIVE	5812		Eating Places	Fixed	Yes		904.21
LATERAL DYNAMICS, LLC	5933	113	SEA LION PL		3499		Fabricated Metal Products, Not Elsewhere Classifi	Fixed	Yes		904.31
LE PASSAGE	2961		STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
LEADING EDGE AVIATION	2010	L	PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	Fixed	Yes	YES	904.40
LEFT COAST WINDOW WASHING	1941	308	DOVE LN	ACTIVE	7349	7349	Building Cleaning And Maintenance Services, Not E	Mobile	Yes	YES	904.51
LEGOLAND	ONE		LEGOLAND DR	ACTIVE	4119	4119	Local Passenger Transportation, NEC	Fixed	Yes	YES	904.40
LEONARD SCHOLL INDUSTRIES, INC.	5751		PALMER WAY	ACTIVE	3599		Ind & Comml Machinery & Equip, NEC	Fixed	Yes		904.31

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LESLIE FARM INC			CANNON AND I-5	ACTIVE	0171		Berry Crops	Fixed	Yes		904.31
LEUCADIA WASTE WATER DISTRICT	1960		LA COSTA AVE	ACTIVE	4941	4941	Water Supply	Fixed	Yes	YES	904.51
LEXUS CARLSBAD	5444		PASEO DEL NORTE	ACTIVE	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	Yes	Yes	904.31
LEXUS CARLSBAD	5434		PASEO DEL NORTE	ACTIVE	5511	5511	Motor Vehicle Dealers (New And Used)	Fixed	Yes	Yes	904.31
LIGHTHOUSE POOL AND SPA INC.	2531	A	STATE ST	NLB	7389		Business Services, NEC	Mobile	Yes	NO	904.21
LLOYD'S AUTO SPECIALTIES	1050		AUTO CENTER CT	ACTIVE	7549	7549	Automotive Services	Fixed	Yes	YES	904.31
LOLA'S 7 UP MARKET & DELI	3292		ROOSEVELT ST	ACTIVE	5411		Grocery Stores	Fixed	Yes		904.21
LONE ROOTER, THE	2420		PIO PICO DR	ACTIVE	1711		Plumbing Contractor	Mobile	Yes		904.21
LOPEZ LANDSCAPE	1332		MAGNOLIA AVE	ACTIVE	0782	782	Lawn and Garden Services	Mobile	Yes	YES	904.31
LORCO	4488		SALISBURY DR	ACTIVE	1741		Masonry, Stone Setting	Mobile	Yes		904.31
LOS COCHES CLEANERS	3235	105	CAM DE LOS COCHES		7216		Drycleaning Plants, Except Rug Cleaning	Fixed	Yes		904.51
LOS PRIMOS MEXICAN FOOD	2708	102	LOKER AV W	ACTIVE	5812	5812	Restaurant	Fixed	Yes	YES	904.31
LOTUS THAI BISTRO	3050		PIO PICO DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
LUCAS & MERCIER CONSTRUCTION INC	5245	G	AVENIDA ENCINAS	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
LUCAS PLUMBING	2890		WOODRIDGE CIR		1711		Construction-Special Trade Contractors	Mobile	Yes		904.31
LUMINORE INCORPORATED	6060		CORTE DEL CEDRO		873		Research, Development, And Testing Services	Fixed	No		904.51
LUMINOUS MEDICAL INC.	2461		IMPALA DR		8731		Research, Development, And Testing Services	Fixed	Yes		904.31
M C S CONSTRUCTION	7804		ESTANCIA ST		1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
M. M. PAINTING SERVICES	2424		LEVANTE ST	ACTIVE	1721	1721	PAINTING/DECORATING	Mobile	Yes	YES	904.51
MAC PHERSON'S	1277		FOREST AVE	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
MACHINE VISION PRODUCTS, INC.	5940		DARWIN CT	ACTIVE	3629		Electrical Indl Apparatus, NEC	Fixed	Yes		904.31
MACY'S - PLAZA CAMINO REAL	2559		EL CAMINO REAL	ACTIVE	5311	5311	Department Store	Fixed	Yes	YES	904.21
MAD ABOUT POOLS	1860		CANYON PL	ACTIVE	7389		Pool Maintenance	Mobile	Yes		904.31
MAMA MELLACE'S OLD WORLD TREATS	9195		EL CAMINO RL	ACTIVE	2064	2064	Confectionery Manufacturer	Fixed	Yes	yes	904.31
MANLEY BUILDERS, INC.	2041		CUMBRE		1531		Operative Builders	Mobile	Yes		904.51
MARDX DIAGNOSTICS, INC.	5919		FARNSWORTH CT	ACTIVE	2835		Manufacturer of In Vitro Diagnostic	Fixed	No		904.31
MARIAH'S WESTWIND	377		CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
MARIANO'S LANDSCAPING	3422	B	MADISON ST	ACTIVE	0782		Lawn And Garden Services	Mobile	Yes		904.31
MARIE CALLENDER'S #88	5780		AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
MAS FINA CANTINA	2780		STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
MASSIE CONSTRUCTION CO	2652	A	JEFFERSON ST		1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
MATT MILLIN MACHINING	2270	F	CAMINO VIDA ROBLE	ACTIVE	3499	3499	Fabricated metal Products	Fixed	Yes	yes	904.40
MCCLELLAN-PALOMAR AIRPORT	2192		PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	Fixed	Yes	YES	904.40
MCCOURTNEY CABINETRY	6102	L	AVENIDA ENCINAS	ACTIVE	2434		Cabinets	Fixed	Yes		904.40

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MCDONALDs OF PALOMAR AIRPT RD	5990		AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
MCDONALDs PLAZA CAMINO REAL	2525	150	EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
MCKITTRICK GRADING & EXCAVATING	3602		KINGSTON ST		1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
MEADOWLARK WATER RECLAMATION F	7941		CORINTIA ST	ACTIVE	4952	4952	Sewerage Systems	Fixed	Yes	YES	904.51
MELLES GRIOT LASER DIVISION	2061	200	PALOMAR AIRPORT RD	ACTIVE	3674	3674	Semiconductors & Related Devices	Fixed	Yes	YES	904.40
MERCOTAC INC.	9195	100	CORTE DEL CEDRO	ACTIVE	3643		Current-Carrying Wiring Devices	Fixed	Yes		904.40
MERCURY COMPUTER SYSTEMS INC	1815	107	ASTON AVE	ACTIVE	3674	3674	Semiconductors And Related Devices	Fixed	Yes	YES	904.31
MERCY AIR	2006	S	PALOMAR AIRPORT RD	ACTIVE	4522	4522	Air Transportation, Nonscheduled	Fixed	Yes	YES	904.40
MEXICO VIEJO	2508	C1	EL CAMINO REAL	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.21
MG LANDSCAPE MAINTENANCE	3765		TRIESTE DR	ACTIVE	0781		Landscape Counseling And Planning	Mobile	Yes		904.31
MH JONES DEVELOPMENT	6738		PASEO DEL VIS		1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
MICHAEL ABAD	7417		SITIO LIMA		1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
MICRO-PROBE, INCORPORATED	2281		LAS PALMAS DR	ACTIVE	3825	3825	Inst for Measure & Testing of electricity	Fixed	Yes	YES	904.40
MIKKO JAPANESE CUISINE	1025		CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
MILES PACIFIC NURSERY	2375		PIO PICO DR	ACTIVE	0181	0181	Ornamental Floriculture and Nursery Prods	Fixed	Yes	YES	904.21
MILES PACIFIC NURSERY	1833		BUENA VISTA WAY	ACTIVE	5193	5193	Ornamental Floriculture and Nursery Prods	Fixed	Yes	YES	904.21
MILLER BUILDING CO., THE	6434		EL PERICO LN	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
MINUTEMAN PRESS	6353	H/I	EL CAMINO RL	ACTIVE	2752		Commercial Printing, Lithographic	Fixed	Yes		904.51
MISSION AUTO, SALES & LEASE INC.	6060	C	AVENIDA ENCINAS		5511		Motor Vehicle Dealers (New And Used)	Fixed	Yes		904.40
MISSION ELECTRIC SUPPLY INC	2225		CAMINO VIDA ROBLE	ACTIVE	5063	5063	Electrical Apparatus & Equpment Wiring Supplies	Fixed	Yes	yes	904.40
MJR CONSTRUCTION, INC.	300	300	CARLSBAD VILLAG DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
MOBILE CAR DOCTORS, THE	1010		HOME AVE		7538		General Automotive Repair Shops	Mobile	Yes		904.31
MOBILE SHINE AUTO DETAILING	3320		CARLSBAD BLVD	ACTIVE	7542		Carwashes	Mobile	Yes		904.51
MOLINA'S EXTERIORS	4869		ALONDRA WAY		0781		Construction-Special Trade Contractors	Mobile	Yes		904.31
MORGAN CONSTRUCTION COMPANY INC.	1910	101	PALOMAR OAKS WAY	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
MOSS REPLACEMENT WINDOWS INC	2790	109	LOKER AV W		1700		Construction-Special Trade Contractors	Mobile	Yes		904.31
MOST CONSTRUCTON (Formally Frost Construction)	1380		CYNTHIA LN	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
MOTION PRODUCTS WEST INC. (Previously MPI INC.)	6102	J-K	AVENIDA ENCINAS	ACTIVE	7538		Automotive Repair & Restoration	Fixed	Yes		904.40
MR. PEABODY'S	300	202	CARLSBAD VILLAG DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
MULLEN CONSTRUCTION	2890	202	PIO PICO DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
MUROYA GROWERS	6697		BLACK RAIL RD	ACTIVE	0191		Nursery - Wholesale	Fixed	Yes		904.51
MV TECHNICAL SALES, LLC	1940		CAMINO VIDA ROBLE	ACTIVE	3825	3825	General Warehousing	Fixed	Yes	YES	904.40

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MYRON L COMPANY - A CALIF CORP	2450		IMPALA DR	ACTIVE	3829		Measuring & Controlling Devices, NEC	Fixed	Yes		904.40
N. REX WILSON CONSTRUCTION, INC.	4600		PARK DR		1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
NATURE MAKER	6225		EL CAMINO RL	ACTIVE	3999		General Manufacturing	Fixed	Yes		904.40
NATURE'S SUPPLEMENTS	2270	Q	CAMINO VIDA ROBLE	ACTIVE	2833	2833	Medicinal Chemicals and botanical Products	Fixed	Yes	yes	904.40
NAVIGANT INTERNATIONAL / WEST LLC	2180	2	RUTHERFORD RD		4724		Travel Agencies	Fixed	Yes		904.31
NEAL HENNING CONSTRUCTION	3119		VERDE AVE	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
NESTI CONSTRUCTION	5631		PALMER WAY	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
NEW GROWTH LANDSCAPES	6676		BLUEBONNET DR		1799		Construction-Special Trade Contractors	Mobile	Yes		904.51
NEW WORLD CAFÉ & RESTAURANT	2559		EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
NEW YORK PIZZERIA	3067		ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
NEWMAN REPLACEMENT WINDOWS	5845	133	AVENIDA ENCINAS	ACTIVE	1751		Window & Door Installation & Sales	Mobile	Yes		904.40
NEXT PHARMACEUTICALS	5927	110	BALFOUR CT		2023		Dry, Condensed, Evaporated Dairy Products	Fixed	Yes		904.31
NICK BOWMAN CONSTRUCTION INC	7040		IVY ST		1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
NO FEAR, INC	2251		FARADAY AVE	ACTIVE	5136		Mens & Boys Clothing & Furnishings	Fixed	No		904.31
NOBEL HOMES	2734	M	LOKER AV W	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
NORCO POWER WASHING	2751		TIBURON AVE	ACTIVE	7349	7349	Building Cleaning And Maintenance Services, Not E	Mobile	Yes	YES	904.31
NORTH COASTAL (PALOMAR) LANDFILL	2198		PALOMAR AIRPORT RD	ACTIVE	4953	4953	Refuse Systems	Fixed	Yes	YES	904.40
NORTH COUNTY COASTAL PLUMBING	3900		LINMAR LN	ACTIVE	1711		Plumbing Contractor	Mobile	Yes		904.21
NORTH COUNTY GMC PONTIAC	5454		PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.31
NORTH COUNTY HOME I.V., INC.	1989	A	PALOMAR OAKS WAY	NLB	5912	5912	Drug Stores And Proprietary Stores	Fixed	Yes	No	904.40
NORTH COUNTY PLAZA	1810		MARRON RD	ACTIVE	6552		Operators of Nonresidential Buildings	Fixed	Yes		904.21
NORTH COUNTY POOL & SPA	5106		LYNCH CT	ACTIVE	7389		Pool & spa Maintenance Services	Mobile	Yes		904.31
NOZOMI # 3	3050	A	PIO PICO DR	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.21
NRG CABRILLO POWER STATION	4600		CARLSBAD BLVD	ACTIVE	4911	4911	Electric Services	Fixed	Yes	YES	904.31
OASIS NURSERY AND LANDSCAPING, INC.	4901		EL CAMINO RL	ACTIVE	5193		Flowers, Nursery Stock, Supplies	Fixed	Yes		904.31
OCEAN BREEZE CARPET CLEANING	1739		MALLOW CT		7217		Carpet And Upholstery Cleaning	Mobile	Yes		904.51
OCEAN HOME REPAIR	6517		CAMINO DEL PARQUE		7349		Building Cleaning And Maintenance Services, Not E	Mobile	Yes		904.51
OCEAN HOUSE (FORMALLY NEIMANS)	300	300	CARLSBAD VILLAG DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
OCEANS EDGE POOL SERVICE	6550	38	PONTO DR	ACTIVE	7389		Business Services, NEC	Mobile	Yes		904.51
OEM SOLUTIONS, LLC	2245	104	CAMINO VIDA ROBLE	Moved	5045	5045	Computers & Peripheral Equip & Software	Fixed	Yes	NO	904.31
OFFICIAL PAINTING	2379		CARINGA WAY	ACTIVE	1721		Painting and Paperhanging	Mobile	Yes		904.51
OGARA CONSTRUCTION	3200		JAMES DR	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21

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OLIVE GARDEN, THE #120	1884		MARRON RD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
OLIVENHAIN MUNICIPAL WATER DISTRICT	1966		OLIVENHAIN RD	ACTIVE	4941	4941	Water Systems	Fixed	Yes	YES	904.51
OLYMPIC RESORT HOTEL	6111		EL CAMINO RL	ACTIVE	7011		Hotels and Motels	Fixed	Yes		904.40
ON A ROLL	2794	110	LOKER AV W	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
ON CALL DETAILING	2614		LUCIENAGA ST		7542		Carwashes	Mobile	Yes		904.51
ORCO CONSTRUCTION COMPANY	6125		PASEO DEL NORTE	ACTIVE	5251		Paint and Wallpaper Stores	Fixed	Yes		904.40
ORD & RODGERS CONSTRUCTION INC	5122		AVENIDA ENCINAS	ACTIVE	1521	1521	Building Construction-General Building Contractors	Fixed	Yes	YES	904.31
ORGANICO PANE COMPANY	5671		PALMER WAY		5149		Groceries And Related Products, Not Elsewhere Cla	Fixed	Yes		904.31
ORIZON	7190		AVENIDA ENCINAS		1799		Special Trade Contractors, Nec	Fixed	Yes		904.40
ORTEGA'S SAIL AND CANVAS	6102	A	AVENIDA ENCINAS	ACTIVE	2394		Manufacture Metal Awnings, Covers	Fixed	Yes		904.40
ORTHO ORGANIZERS INC.	1822		ASTON AVE	ACTIVE	3843	3843	Dental Equipment And Supplies	Fixed	Yes	YES	904.31
OSCAR DIKE POOL REPAIR	841		CAMELLIA PL		7389		Construction-Special Trade Contractors	Mobile	Yes		904.31
OUTSOURCE MANUFACTURING	2839		E LOKER AVE	ACTIVE	3699	3699	Electrical Contract Manufacturing	Fixed	Yes	YES	904.31
OVERSEAS CHINESE RESTAURANT	2820		ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
P G SALES	2333	30	CARINGA WAY		1700		Construction-Special Trade Contractors	Mobile	Yes		904.51
PACIFIC BLUE POOL SERVICE	7771		PENDON CT		7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.51
PACIFIC CNC MACHINE	6351	104	CORTE DEL ABETO	ACTIVE	3599		Indus./Commercial Equipment, Not Elsewhere Classi	Fixed	Yes		904.40
PACIFIC COAST GRADING INC.	2726		MORNING CLORY LN	ACTIVE	1794		Special Trade Contractors	Mobile	Yes		904.31
PACIFIC COAST PRINTING	3021		STATE ST	ACTIVE	2759		Commercial Printing, NEC	Fixed	No		904.21
PACIFIC COLLISION CENTERS	6030	C	AVENIDA ENCINAS	ACTIVE	7532		Top, Body, And Upholstery Repair Shops & Paint Sh	Fixed	Yes		904.40
PACIFIC COMMERCIAL CONSTRUCTION	2262	103	RUTHERFORD RD	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
PACIFIC CUSTOM HOMES INC	3429		CORTE VIEJO		1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
PACIFIC OIL SERVICES - CAMINO SHELL	2590		EL CAMINO REAL	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.21
PACIFIC RESTORATION	5365	J	AVENIDA ENCINAS	ACTIVE	7349	7349	Building Cleaning & Maint Svc, NEC	Mobile	Yes	YES	904.31
PACIFIC TRADES CONST. & DEV. INC.	2956	3	ROOSEVELT ST	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
PACIFIC WINDOW CLEANING	1802	202	NICOLIA DR	ACTIVE	7349		Building Cleaning And Maintenance Services, Not E	Mobile	Yes		904.51
PACWEST CONSTRUCTION	2525	102	PIO PICO DR	ACTIVE	1711		General Building Contractor	Mobile	Yes		904.21
PALOMAR AIRPORT SHELL (TEXACO)	665		PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.31
PALOMAR CLEANERS	2221	F	LAS PALMAS DR	ACTIVE	7216	7216	Drycleaning plants	Fixed	Yes	YES	904.40
PALOMAR DELI	6150	C	YARROW DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.40

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PALOMAR DISPLAY PRODUCTS, INC.	1945		KELLOGG AVE	ACTIVE	3577	3577	Computer Peripheral Equipment	Fixed	Yes	YES	904.40
PALOMAR HAND CAR WASH & DETAILING	6019		PASEO DEL NORTE	ACTIVE	7542		Carwashes	Fixed	Yes		904.40
PALOMAR MOBIL	899		PALOMAR AIRPORT RD	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.40
PALOMAR SIGN COMPANY	5205	G	AVENIDA ENCINAS		3993		Signs And Advertising Specialties	Fixed	Yes		904.31
PALOMAR TECHNOLOGIES, INC.	2726		LOKER AV W		3674		Semiconductors And Related Devices	Fixed	Yes		904.31
Palomar Transportation Inc.	800	AG-7	GRAND AVE	ACTIVE	4119	4119	Local Passenger Transportation, NEC	Mobile	Yes	YES	904.31
PANDA EXPRESS # 393	2560		EL CAMINO REAL	ACTIVE	5812		Eating & Drinking Places	Fixed	Yes		904.21
PANDA EXPRESS #635	6951		EL CAMINO RL	ACTIVE	5812		Eating & Drinking Places	Fixed	Yes		904.51
PANDA EXPRESS #729	5630	141	PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
PANERA BREAD	1935		CALLE BARCELONA	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.51
PAPA C'S MEXICAN FOOD	5806	105	VAN ALLEN WAY	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
PAPAYAS CAFE	5840	116	EL CAMINO RL		5812		Eating Places	Fixed	Yes		904.51
PARK CARE	2744		AUBURN AVE	ACTIVE	0781		Landscape Counseling and Planning	Mobile	Yes		904.31
PAT & OSCAR'S	965		PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.40
PAT & OSCAR'S	2525		EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
PAUL MCGRATH CONSTRUCTION	6789		CAMINO DE AMIGOS	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.51
PAUL PARIZEAU	3218		EUREKA PL		1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
PAUL TURNER CONSTRUCTION	4062	D	GARFIELD ST		1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
PEKING GARDEN	6990	K	EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
PELICAN GLASS CO	2680		STATE ST	ACTIVE	1793	1793	Retail Glass Installation	Mobile	Yes	YES	904.21
PELICAN PACKAGING, INC.	5816		DRYDEN PL	ACTIVE	3669		Communications Equipment	Fixed	Yes		904.31
PELLY'S FISH MARKET & DELI	7110	101	AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
PENTON OVERSEAS INC	2470	A	IMPALA DR	ACTIVE	5192		Books, Newpapers, Periodicals, Wholesale	Fixed	No		904.31
PERSONAL STRENGTHS NORTH AMERICA, LLC	1946		KELLOGG AVE	Excluded	2731	7389	Book Publishing	Fixed	Yes	no	904.31
PERSONAL TRANPSORT LLC	3123		VISTA MAR	ACTIVE	4119		Limousine Service	Fixed	Yes		904.51
PETER ANDREW PAINTING	7000		FORSTERS TERN DR		1721		Construction-Special Trade Contractors	Mobile	Yes		904.51
PHILLIP MARRUJO (LANDSCAPE)	360	3	CHINQUAPIN AVE	ACTIVE	0781		Landscape Counseling and Planning	Mobile	Yes		904.31
PHIL'S CARWASH / DETAILING	6041	107	PASEO DEL NORTE	ACTIVE	7542		Carwashes	Mobile	Yes		904.40
PICK UP STIX	7750	101	RANCHO SANTA FE RD	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.51
PICK UP STIX # 7224	7150		AVENIDA ENCINAS	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.51
PICK UP STIX CARLSBAD INC.	2508		EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
PICKLES CATERING & DELI	5670		EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
PIZZA HUT	2588	B/C	EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21

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PIZZA PORT CARLSBAD BREWERY	571		CARLSBAD VILLAGE DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
PIZZA SHUTTLE & SUBS, TOO	959		TAMARACK AVE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
PLANTPLAY	4915		EL CAMINO RL	ACTIVE	5261		Retail Nurseries, Lawn And Garden Supply Stores	Fixed	Yes		904.31
PLASTICS ENGINEERING & DEV.	2731	C	LOKER AV W	ACTIVE	3089	3089	Plastic Products, NEC	Fixed	Yes	YES	904.31
PLAYGROUNDS WEST INC	3566		KNOLLWOOD DR		1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
PLAZA BUILDERS	5091		EL ARBOL DR		1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
PLAZA CAMINO CHEVRON CENTER	2500		EL CAMINO REAL	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.21
PLAZA CAMINO REAL, L.P.	2525		EL CAMINO REAL	ACTIVE	6512	6512	Non-Residential Property Mangement	Fixed	Yes	YES	904.21
PLAZA REAL CLEANERS INC	6949	108	EL CAMINO RL	ACTIVE	7216		Dry Cleaning Plant	Fixed	Yes		904.51
PLAZA SOUTH CLEANERS	2620		EL CAMINO REAL	ACTIVE	7212	7212	Laundry Cleaners	Fixed	Yes	YES	904.21
PODS OF SAN DIEGO, LLC	2858	200	E LOKER AVE		4225		General Warehousing And Storage	Fixed	Yes		904.31
POINSETTIA PLAZA	7040		AVENIDA ENCINAS	ACTIVE	6512	6512	Operators of Nonresidential Buildings	Fixed	Yes	Yes	904.40
POINSETTIA VILLAGE CHEVRON	7170		AVENIDA ENCINAS	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.51
POLISHED IMAGE MOBILE DETAILING	2454		JEFFERSON ST		7349		Building Cleaning And Maintenance Services, Not E	Mobile	Yes		904.31
POLLOS MARIA	3055		HARDING ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
POND AND AQUARIUM SOURCE	2599		STATE ST	ACTIVE	1521	1521	Pond and Aquarium Installation	Fixed	Yes	YES	904.21
PONTO CLEANERS	690	101	CARLSBAD VILLAGE DR		7216		Drycleaning Plants, Except Rug Cleaning	Fixed	Yes		904.51
PONTO STORAGE INC	7290		PONTO DR	ACTIVE	4225	4225	General Warehousing & Storage	Fixed	No	no	904.51
POOL SERVICE BY INDIGO	2292		AUDEN PL		7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.51
POOL TECH	3002		LEVANTE ST	ACTIVE	7389		Business Services, NEC	Mobile	Yes		904.31
PORT BREWING CO	561		CARLSBAD VILLAG DR	ACTIVE	2082	2082	Brewery	Fixed	Yes	YES	904.51
POSH PETS GROOMING SERVICES	5515		FOXTAIL LOOP		0752		Animal Specialty Services, Except Veterinary	Mobile	Yes		904.31
POWER ONE INC.	5999	100	AVENIDA ENCINAS	ACTIVE	3629		Electrical Indl Apparatus, NEC	Fixed	Yes		904.40
PRECISION KITCHEN AND BATH	2921		LANCASTER RD		1743		Terrazzo, Tile, Marble, Mosaic Work	Mobile	Yes		904.31
PREMIER JET	2100		PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Fields, And Airport Terminal Ser	Fixed	Yes	YES	904.31
PREMIER POOLS & SPAS	2244	109	FARADAY AVE		1700		Construction-Special Trade Contractors	Mobile	Yes		904.40
PRENTICE CONSTRUCTION INC.	7323		EL FUERTE ST	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31

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PRIMO PIZZA & PASTA	7110	103	AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
PRINTERY, THE	3138	C2	ROOSEVELT ST	ACTIVE	2759		Commercial Printing, NEC	Fixed	No		904.51
PRODUCT SLINGSHOT INC.	2221		RUTHERFORD RD	ACTIVE	3999		Manufacturing Industries, NEC	Fixed	Yes		904.31
PROMONTORY BUSINESS PARK	2715		LOKER AV W	ACTIVE	6512		Property Management - Non - Residential	Fixed	Yes		904.40
PRONTO CAR WASH OF CARLSBAD PREMIUM OUTLETS	5620		PASEO DEL NORTE	ACTIVE	7542		Carwashes	Fixed	Yes		904.31
PRONTO WASH SOUTHERN CALIFORNIA	5620	127C	PASEO DEL NORTE		7542		Carwashes	Fixed	Yes		904.51
PRONTOS GOURMET MARKET	2812		ROOSEVELT ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
PUBLIC STORAGE	6211		CORTE DEL CEDRO	ACTIVE	4225		General Warehousing And Storage	Fixed	Yes		904.21
QUALIGEN, INC.	2042	A	CORTE DEL NOGAL	ACTIVE	3841		Surgical & Med Instr & Apparatus	Fixed	Yes		904.40
QUALITY AIRCRAFT CARE	2056		PALOMAR AIRPORT RD	ACTIVE	4581	4581	Aircraft Washing	Fixed	Yes	YES	904.40
QUALITY INN & SUITES	751		RAINTREE DR		7011		Hotels And Motels	Fixed	Yes		904.40
R.D. BACON CONSTRUCTION	2800		WILSON ST	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
RACCOON ROUNDUP	3812		SIERRA MORENA AVE		7389		Pest Control	Mobile	Yes		904.21
RACK CONSTRUCTION & CONSULTING INC	7967		CAMINO ALVARO	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
RALPHS GROCERY COMPANY #175	7140	FRNT	AVENIDA ENCINAS	ACTIVE	5411	5411	Grocery Stores	Fixed	Yes	YES	904.51
RAMIREZ FLOWERS	5600	28	AVENIDA ENCINAS	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	Fixed	Yes	YES	904.51
RAMOS CONSTRUCTION SERVICE	2358		PIO PICO DR		1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
RANCHO CARLSBAD EQUESTRIAN CENTER	2820		SUNNY CREEK RD	ACTIVE	0752		Boarding and Training Horses	Fixed	Yes		904.31
RANCHO CARLSBAD GOLF COURSE	5200		EL CAMINO RL	ACTIVE	7992	7992	Public Golf Courses	Fixed	Yes	YES	904.31
RANCHO DEL ORO TOWING (CONTRACT SERVICES)	6050		AVENIDA ENCINAS	ACTIVE	7549	7549	Automotive Services	Fixed	Yes	YES	904.31
RANCHO SANTA FE POOL & SPA	5146	213	WHITMAN WAY		7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.40
RANDALL INTERNATIONAL	2885	E	E LOKER AVE	ACTIVE	2844	2844	Perfumes, Cosmetics & Other Toilet Preps	Fixed	Yes	YES	904.51
RAY'S POOL SERVICE	3251		AVEINIDA ANACAPA		7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.31
REBECCA NORMAN INC	2195	D	FARADAY AVE		3911		No Entry	Fixed	Yes		904.31
RECONSTRUCTION EXPERTS INC	1825		ASTON AVE	Duplicate	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
REDLAND CLAY TILE	5355	208A	AVENIDA ENCINAS	ACTIVE	5032		Tile Cutting	Fixed	Yes		904.51
REEF CONCRETE	3646		CHESHIRE AV	ACTIVE	1771		Concrete	Mobile	Yes		904.40
REFLEX CORPORATION	1825		ASTON AVE	ACTIVE	3199	3199	Leather Goods, Manufacturing	Fixed	No	no	904.21
REPSHER DRYWALL	4795		NEBLINA DR	ACTIVE	1742		Drywall Contractor	Mobile	Yes		904.31
RESPIRONICS CALIFORNIA INC.	2271		COSMOS T	ACTIVE	3842	3842	Orhtopedic, Prosthetic & Surgical Appliances and Supplies	Fixed	Yes	yes	904.31

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RESTORATION FLOORING	2304		ALTISMA WAY	ACTIVE	7217		Carpet And Upholstery Cleaning	Mobile	Yes		904.40
RESTORE SOLUTIONS, INC.	2283		COSMOS T		7349		Building Cleaning And Maintenance Services, Not E	Mobile	Yes		904.51
RESURFACING SPECIALISTS, INC.	2956	5	ROOSEVELT ST	ACTIVE	1771		Concrete Work	Mobile	Yes		904.21
RICE KING	5808	115	VAN ALLEN WAY	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
RICHARD L. CHASE CONTRACTING	3147	2	JEFFERSON ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
RIEKER MACHINE INC.	5674		EL CAMINO RL		3599		Indus./Commercial Equipment, Not Elsewhere Classi	Fixed	Yes		904.31
RIESTERS CARPET SERVICE	3207		AZAHAR PL	ACTIVE	7217		Carpet & Upholstery Cleaning	Mobile	Yes		904.31
RINCON WEST	411	B	CHESHIRE AV		7389		Pool Maintenance	Mobile	Yes		904.51
RITE AID #5621	955		TAMARACK AVE	ACTIVE	5912	5912	Drug Stores and Proprietary Stores	Fixed	Yes	YES	904.31
RITE AID #5622	7100	C	AVENIDA ENCINAS	ACTIVE	5912	5912	Drug Stores and Proprietary Stores	Fixed	Yes	YES	904.31
RIVERA'S GARDEN TREASURES	1211		CHESTNUT AVE		181		Ornamental Nursery Products	Mobile	Yes		904.40
RIVIERA POOL & SPA SERVICE	2635	10	MADISON ST		7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.31
ROB WITTON GENERAL CONTRACTOR	6831		XANA WY	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
ROBERT M. CHAMBERS CONSTRUCTION	2853		CEBU PL		1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
ROCKWELL COLLINS OPTRONICS, INC.	2752		LOKER AV W	ACTIVE	3827		Optical Instruments & Lenses	Fixed	No		904.31
ROGER ROBERSON CONSTRUCTION	2030		CORDOBA PL	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
ROMBOTIS BROTHERS CONSTRUCTION	325	C2	CARLSBAD VILLAGE DR	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
ROMER, INC.	5145	1	AVENIDA ENCINAS	ACTIVE	5089	5089	Industrial Machinery and Equipment	Fixed	No	No	904.31
RORICK BUICK CADILLAC	5334		PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.31
RORY O'NEAL POOL SERVICE	2022		LEE CT	ACTIVE	7389		Pool and Spa Maintenance	Mobile	Yes		904.31
ROWLETT'S YARD CARE	3480		ADAMS ST	ACTIVE	0781		Landscape Counseling and Planning	Mobile	Yes		904.31
RUBIO'S BAJA GRILL	2604	A	EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
RUBIO'S BAJA GRILL	5620	128	PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
RUB-KRETE	7331	C	ALICNTE RD	ACTIVE	1771		Concrete Contractor	Mobile	Yes		904.31
RUBYS DINER, CARLSBAD	5630	128D	PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
RUDVALIS ORCHIDS	6595		BLACK RAIL RD	ACTIVE	0182		Ornamental Floriculture & Nursery Products	Fixed	Yes		904.31
RUSTY JOHNSON CONSTRUCTION	5316		FORECASTLE CT		1521		Building Construction-General Building Contractors	Mobile	Yes		904.51
S.P. WHITE CONSTRUCTION, INC.	5937	100	DARWIN CT	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.31
S.S. SMITH CO.	1743		MALLOW CT	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
SABRE SCIENCES, INC.	2233	K	FARADAY AVE	ACTIVE	2844		Perfumes, Cosmetics, & Other Toilet Preparations	Fixed	No		904.51
SAFC PHARMA	6219		EL CAMINO REAL	ACTIVE	2836	2836	Biological Products, Except Diagnostic Substances	Fixed	Yes	YES	904.40

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SAFC PHARMA	1890	200	1890 RUTHERFORD RD	ACTIVE	2836	2836	Biological Products	Fixed	YES	YES	904.31
SAFELITE AUTO GLASS	1060	I	AUTO CENTER CT	ACTIVE	7536	7536	Automotive Glass Replace Shops	Fixed	Yes	YES	904.31
SAGE RESEARCH LLC	4909		REFUGIO AE	ACTIVE	0781		Landscape Counseling And Planning	Mobile	Yes		904.31
SAMMYS WOODFIRED PIZZA	5970		AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
SAN DIEGO FLORIST SUPPLIES INC.	5600	1	AVENIDA ENCINAS	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	Fixed	Yes	YES	904.31
SAN DIEGO INTERNATIONAL FLORAL TRADE CENTER	5600	126	AVENIDA ENCINAS	ACTIVE	6531	6531	Operators of Non-residential Buildings	Fixed	Yes	YES	904.31
SAN SAI JAPANESE GRILL	5600	115A	PASEO DEL NORTE	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.31
SANTORINI GREEK ISLAND GRILL	5812	125	VAN ALLEN WAY	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
SCHMUCKLE PAINTING INC	6084	100	CORTE DEL CEDRO		1721		Painting And Paper Hanging	Mobile	Yes		904.31
SCHROEDER CONSTRUCTION & DEV	2691		STATE ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
SCHUMACHER CO. (AIR PRODUCTS AND CHEMICALS)	1969		PALOMAR OAKS WAY	ACTIVE	2899	2899	Chemicals and Chemical Preparations, NEC	Fixed	Yes	YES	904.21
SCHUMACHER CO. (AIR PRODUCTS AND CHEMICALS)	1979		PALOMAR OAKS WAY	ACTIVE	2899	2899	General Warehousing	Fixed	Yes	YES	904.40
SCOTT D PACKARD CONSTRUCTION	4620		TRIESTE DR		1521		Building Construction-General Building Contractors	Mobile	Yes		904.40
SCOTT GUENDERT CONSTRUCTION	7116		AVIARA DR	ACTIVE	1521		General Contractor	Mobile	Yes		904.51
SCOTT ROGERS POOL SERVICE	2715		MORNING CLORY LN	ACTIVE	7389		Pool Service	Mobile	Yes		904.51
SCUDELLARO BREAD	2720	N	LOKER AV W	ACTIVE	2051		Bread & Other Baker Prods	Fixed	Yes		904.21
SD FYXIT	3555		HASTINGS DR		7349		Building Cleaning And Maintenance Services, Not E	Mobile	Yes		904.31
SDG&E - C/O SEMPRA ENERGY	5016		CARLSBAD BLVD	ACTIVE	4932		Gas and Other Services Combined	Fixed	Yes		904.31
SEA ALOE, INC.	2794	103	LOKER AV W		5122		Drugs, Drug Proprietaries, And Druggists' Sundrie	Fixed	No		904.31
SEA BRIGHT COMPANY, THE	4322		SEA BRIGHT PL	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
SEACREST KENNELS	7250		PONTO DR	ACTIVE	0752	0752	Animal Specialty Services, Except Veterinary	Fixed	Yes	YES	904.31
SEARS CONSTRUCTION CO.	1387		CYNTHIA LN	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
SEARS ROEBUCK & COMPANY	2561		EL CAMINO REAL	ACTIVE	5311	5311	General Merchandise Stores	Fixed	Yes	YES	904.21
SEASIDE FARMS (YADA FARMS)	2928		VALLEY ST	ACTIVE	0181	0181	Ornamental Floriculture	Fixed	Yes	YES	904.21
SELECT CABINETS AND FURNITURE MFG.	2270	T	CAMINO VIDA ROBLE	ACTIVE	2521	2521	Wholesale Furniture and Cabinet Maker	Fixed	Yes	YES	904.40
SELECT MOBILE DETAILING	3533		ROCK RIDGE RD		7542		Carwashes	Mobile	Yes		904.40
SELECT SUPPLEMENTS INC	5800		NEWTON DR	ACTIVE	2023		Dry, Condensed, Evaporated Dairy Products	Fixed	Yes		904.31
SELTZER COMPANIES INC	5920	B	PASTEUR CT		5169		Chemicals And Allied Products, Not Elsewhere Clas	Fixed	Yes		904.31
SELTZER NUTRITIONAL TECHNOLOGY	2840	101	E LOKER AVE	ACTIVE	2833		Manufacturer of Nutritional Supplements	Fixed	Yes		904.31

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SENDX MEDICAL, INC.	1945		PALOMAR OAKS WAY	ACTIVE	3841	3841	Surgical and medical apparatus	Fixed	Yes	No	904.31
SETH HOENIG	2714		MADISON ST	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.40
SEVERINO CONSTRUCTION	2395		PIO PICO DR	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
SHAFFER CONSTRUCTION	6712		WHITESAIL ST	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
SHAMROCK POOL SERVICE	2706		GALICIA WAY	ACTIVE	7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.40
SHARPER IMAGE DETAILING	5508		FOXTAIL LOOP		7542		Carwashes	Mobile	Yes		904.51
SHAWS AUTOSPORT LTD	2531	E	STATE ST	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.21
SHEICO (SGCA) USA	6150		CORTE DEL CEDRO	ACTIVE	2389		Apparel & Accessories, NEC	Fixed	No		904.21
SHEILD X	6965	104	EL CAMINO RL	ACTIVE	5963		Direct Selling	Fixed	Yes		904.40
SHORE LINE GRAFIX, INC.	5245	C	AVENIDA ENCINAS	ACTIVE	2759		Commercial Printing, NEC	Fixed	No		904.51
SHORELINE POOL SERVICES	6527		CAMINO DEL PARQUE	ACTIVE	7389		Business Services, NEC	Mobile	Yes		904.31
SIERRA CASCADE CONCRETE COMPANY	2382	L	CAMINO VIDA ROBLE	ACTIVE	1771		Concrete Contractor	Mobile	Yes		904.51
SIERRA WIRELESS	2290		COSMOS T	ACTIVE	8731	8731	Research, Development, And Testing Services	Fixed	Yes	YES	904.40
SIGNATURE SCAPES	4004		SKYLINE RD		1521		Building Construction-General Building Contractors	Mobile	Yes		904.40
SIGNS ON TIME	5670		EL CAMINO RL	ACTIVE	3993	3993	Sign Making & Painting	Fixed	Yes	yes	904.31
SIR SPEEDY PRINTING CENTER	2227	A	FARADAY AVE	ACTIVE	2759		Commercial Printing, NEC	Fixed	Yes	yes	904.21
SMART & FINAL IRIS CO #339	2618		EL CAMINO REAL	ACTIVE	5411	5411	Grocery Stores	Fixed	Yes	YES	904.31
SNA LANDSCAPING/DESIGN	3474		HARWICH DR	ACTIVE	0781		Landscape Counseling And Planning	Mobile	Yes		904.21
SNUG HARBOR INC/CAL WATER SPORTS	4215		HARRISON ST	ACTIVE	7999	7999	Amusement & Recreation Svcs, NEC	Fixed	Yes	YES	904.31
SO CAL CURB & ADDRESS PAINTING	2740	A	CIRCULO SANTIAGO		7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.31
SO CAL STONE CREATIONS	4215		HARRISON ST		7336		Commercial Art And Graphic Design	Mobile	Yes		904.31
SO. CAL. SPA & SPA TECH SUPPLY	1445		FOREST AVE		7389		Women's Children's, And Infants' Clothing And Acc	Mobile	Yes		904.31
SOIL RETENTION SYSTEMS INC	2501		STATE ST	ACTIVE	1521	1521	Building Construction-General Building Contractors	Fixed	Yes	YES	904.21
SOMARC CONSTRUCTION	2417		APPIAN RD	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
SONARTEC	1930	105	PALOMAR POINT WAY	ACTIVE	5091	5091	Sporting And Recreational Goods & Supplies	Fixed	Yes	No	904.31
SOUPLANTATION	1860		MARRON RD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
SOUTH COUST CARPET CLEANING	961	J	MELALEUCA AVE	ACTIVE	7349	7349	Building Cleaning And Maintenance Services, Not E	Mobile	Yes	YES	904.51
SPECIALTY CONSTRUCTION	3528		CORTE DELFINIO	ACTIVE	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21
SPECTRUM MARKETING, LLC	2796	100	LOKER AV W	ACTIVE	2759	2759	Commercial Printing	Fixed	Yes	YES	904.51
SPIRITO'S PIZZA BY THE SLICE	5812	130	VAN ALLEN WAY	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
SPORTS GIANT LLC	5928		FARNSWORTH CT	ACTIVE	5941	5941	Sporting Goods Stores And Bicycle Shops	Fixed	Yes	YES	904.31
SQUADRA, INC.	2077		LAS PALMAS DR	ACTIVE	2389	2389	Manufacturing Apparel Accessories	Fixed	Yes	YES	904.31

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FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
STAINED GLASS OVERLAY	2579		STATE ST	ACTIVE	3231	3231	Stained Glass Design	Fixed	Yes	YES	904.31
STANDARD FILTER CORPORATION	5928		BALFOUR CT	ACTIVE	3564		Purification & Dust Collection Equipment	Fixed	Yes		904.21
STAPLES THE OFFICE SUPERSTORE	2712		LOKER AV W		5943		Stationery Stores	Fixed	Yes		904.31
STARBUCKS COFFEE # 10851	2708	100	LOKER AV W		5812		Eating Places	Fixed	Yes		904.31
STARBUCKS COFFEE #5363	2924		CARLSBAD BLVD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
STEAM KING	1290		LA FLORES DR	ACTIVE	7217		Carpet & Upholstery Cleaning	Mobile	Yes		904.21
STEROGENE BIOSEPARATIONS, INC.	5922		FARNSWORTH CT	ACTIVE	2836	2836	Biological Research	Fixed	Yes	YES	904.40
STILLMAN HEATING & AIR CONDITIONING	7200	A	PONTO DR	ACTIVE	1711		HVAC Contractor	Mobile	Yes		904.31
STONE IMAGERY	3546		HIGHLAND DR	ACTIVE	1741		Stone Work	Mobile	Yes		904.51
STREIGHT MOTORCYCLES, INC.	6108	A	AVENIDA ENCINAS		3751		Motorcycles, Bicycles, And Parts	Fixed	Yes		904.21
SUBMARINA CARLSBAD	300	201A	CARLSBAD VILLAG DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
SUBMARINA CARLSBAD FOOD COURT	5812	120	VAN ALLEN WAY	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
SUBWAY	7110	100	AVENIDA ENCINAS	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
SUBWAY #4584	6020	A19	PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
SUN PACIFIC DEVELOPMENT, INC.	3900 1/2		GARFIELD ST		1521		Building Construction-General Building Contractors	Mobile	Yes		904.40
SUNNY FRESH CLEANERS	7040	112	AVENIDA ENCINAS	ACTIVE	7216		Dry Cleaner	Fixed	Yes		904.21
SUNRISE WHOLESALE	5600	36	AVENIDA ENCINAS	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	Fixed	Yes	YES	904.51
SUNSHINE LDSCP&GARDEN SERVICE	4008		GARFIELD ST	Duplicate	0782	782	Landscaper	Mobile	Yes	YES	904.31
SUPER CAFE	1854	104	MARRON RD	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.31
SUPER DONUTS	590		GRAND AVE	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.21
SUPERIOR RESTORATION	3957		JEFFERSON ST	ACTIVE	1799		Special Trade Contractor	Mobile	Yes		904.21
SURF BROTHERS TERIYAKI	2708	103	LOKER AV W	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.21
SURYA INC	6205		EL CAMINO RL	ACTIVE	5137	5137	Women's Children's, And Infants' Clothing And Acc	Fixed	Yes	YES	904.41
SUSHI FIX	7720	B	EL CAMINO RL	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.40
SUSHI ON THE ROCK	1923	148	CALLE BARCELONA	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
SUSHI TAISHO	300	214	CARLSBAD VILLAG DR	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
SWARTZY'S CARPET CARE	515		CARLSBAD VILLAG DR		7217		Carpet And Upholstery Cleaning	Mobile	Yes		904.21
SWIM CITY, INC.	3191		SEABURY ST	ACTIVE	7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.51
SYNERGEYES INC. (NEW NAME QUARTER LAMBDA TECHNOLOGIES)	2232		RUTHERFORD RD	ACTIVE	3851	3851	Ophthalmic Goods	Fixed	Yes	yes	904.31
SYNERGEYES, INC.	2232		RUTHERFORD RD		3851		Ophthalmic Goods	Fixed	Yes		904.51
SYNTRON BIORESEARCH, INC.	2774		LOKER AV W	ACTIVE	2835		In Vitro & In Vitro Diagnostics	Fixed	Yes		904.31

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FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
SYSTEMS, MACHINES, AUTOMATION COMPONENTS CO	1695		FARADAY AVE	ACTIVE	3599	3599	Indus/Commercial Establishments	Fixed	Yes	yes	904.31
SYSTEMS, MACHINES, AUTOMATION COMPONENTS CO.	5807		VAN ALLEN WAY	ACTIVE	3599	3599	Ind & Comml Machinery & Equip, NEC	Fixed	Yes	yes	904.31
T REX CONSTRUCTION	2791		VISTA DEL ORO		1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
TACO BELL/JODIKA ENTERPRISES	6017		PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
TAMARACK 76	895		TAMARACK AVE	NLB	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.40
TAMARACK POOL CENTER	2399		APPIAN RD	ACTIVE	1799		Swimming Pool Construction & Contractors	Mobile	Yes		904.31
TAMARACK ST EXXON	945		TAMARACK AVE	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.21
TAPPER DEVELOPMENT	2551	225	STATE ST	ACTIVE	1521		General Contractor	Mobile	Yes		904.31
TARGET FRAMING INC	390	E	OAK AVE	ACTIVE	1751		Framing Contractor	Mobile	Yes		904.31
TAYLOR MADE GOLF COMPANY INC	5545		FERMI CT	ACTIVE	3949		Sporting and Athletic Goods, NEC	Fixed	Yes		904.31
TAYLOR MADE GOLF COMPANY INC	4155		SALK AV	ACTIVE	7999		Amusement and Recreation Services	Fixed	Yes		904.31
TELEDYNE KW MICROWAVE CORP	1985		PALOMAR OAKS WAY	Moved	3674	3674	Semiconductors and Related Devices	Fixed	Yes	YES	904.31
TERMINIX INTERNATIONAL	6350	A	YARROW DR	ACTIVE	7342		Disinfecting & Pest Control Svcs	Mobile	Yes		904.40
TGI FRIDAY'S	850		PALOMAR AIRPORT RD	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.40
THAT PIZZA PLACE	2622	B/C	EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.40
THE FORUM	1935	137	CALLE BARCELONA	ACTIVE	6512	6512	Retail Shopping Center	Fixed	Yes	YES	904.21
THE WINE SPOT	2801	A	ROOSEVELT ST		5813		Drinking Places (Alcoholic Beverages)	Fixed	Yes		904.51
THE WOOD WIZARD	6353	G	EL CAMINO RL		2511		Construction-Special Trade Contractors	Fixed	Yes		904.40
THERA LIGHT, INC.	2794	105	LOKER AV W	ACTIVE	3841	3841	Commercial Physical and Biological Research	Fixed	Yes	YES	904.31
THREADS	5814	145	VAN ALLEN WAY		7219		Laundry And Garment Services, Not Elsewhere Class	Fixed	Yes		904.31
TIME WARNER CABLE	5720		EL CAMINO RL	ACTIVE	4841	4841	Cable Provider	Fixed	Yes	YES	904.31
TIMELY MEDICAL INNOVATIONS LLC.	5365	F	AVENIDA ENCINAS		3851		Ophthalmic Goods	Fixed	No		904.31
TIP TOP MEATS & EUROPEAN DELI	6118		PASEO DEL NORTE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.40
TODD'S TINT SHOP (DENTWORKS)	1060	N	AUTO CENTER CT	ACTIVE	7538	7538	General Automotive Repair Shops	Fixed	Yes	YES	904.40
TOGOs EATERY	6971	201	EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
TOM GIBLINS IRISH PUB	640		GRAND AVE	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.51
TOM T HONDA	1565		CHESTNUT AVE	ACTIVE	0781		Landscape Maintenance	Mobile	Yes		904.21
TOMMY V'S	7670	104	EL CAMINO RL	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.31
TOMMY'S PLUMBING	7926		LA CAPELA LN	ACTIVE	1711		Plumbing, Heating, Air-Conditioning	Mobile	Yes		904.51
TOO TALL HANDYMAN AND WINDOW CLEANING	2561	A	NAVARRA DR		7349		Building Cleaning And Maintenance Services, Not E	Mobile	Yes		904.51

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FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
TOP OF THE BAGEL	2540	E	EL CAMINO REAL	ACTIVE	5461	5461	Bagel Shop	Fixed	Yes	YES	904.21
TOYOTA CARLSBAD	5434		PASEO DEL NORTE		5511		Motor Vehicle Dealers (New And Used)	Fixed	Yes		904.51
TOYOTA CARLSBAD USED CAR DEPT.	5124		PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.31
TOYOTA OF CARLSBAD	6030		AVENIDA ENCINAS	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.31
TOYOTA-CARLSBAD	5424		PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.40
TRADE PRINTING SERVICES, LLC	2080		LAS PALMAS DR	ACTIVE	2752	2752	Commercial Printing, Lithographic	Fixed	Yes	YES	904.31
TRICOR COMMERCIAL CLEANING	2471		UNICORNIO ST		7349		Building Cleaning And Maintenance Services, Not E	Mobile	Yes		904.40
TRINAMIC MOBILE TRUCK SERVICES	3293		ROOSEVELT ST	ACTIVE	7538		General Automotive Repair Shops	Fixed	Yes		904.21
TRUE BLUE POOLS	5355		AVENIDA ENCINAS		1700		Construction-Special Trade Contractors	Mobile	Yes		904.21
TRUNK-IT, LLC	5924	101	BALFOUR CT		4214		Local Trucking With Storage	Fixed	Yes		904.31
TURNER CONSTRUCTION	3197		JAMES DR	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.31
TUSCANY RESTAURANT	6981	103	EL CAMINO RL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
TWINS FLOWER GROWER AND SUPPLIES	5600	42	AVENIDA ENCINAS	ACTIVE	5193	5193	Wholesale Floral	Fixed	Yes	YES	904.31
U-HAUL CO OF CALIFORNIA	6175		PASEO DEL NORTE	ACTIVE	4225		General Warehousing & Storage	Fixed	No		904.31
ULTIMATE OUTDOOR ENVIRONMENTS	3459		CORTE BREZO		1521		Building Construction-General Building Contractors	Mobile	Yes		904.40
UPSTAIRS/DOWNSTAIRS CARPET&CLEAN SERVICE	3465		CAMINO VLENCIA	ACTIVE	7217		Carpet & Upholstery Cleaning	Mobile	Yes		904.31
US LOGIC	2720	M	LOKER AV W	ACTIVE	3575		Computer Terminals	Fixed	No		904.51
US MICROBICS, INC.	6451		EL CAMINO RL	ACTIVE	5049	5049	Professional Equipment - Wholesale	Fixed	Yes	yes	904.31
VALDIVIA FARMS	4914		EL CAMINO RL	ACTIVE	0181	0181	Crop Production	Fixed	Yes	YES	904.51
VAN HEFLIN GENERAL CONTRACTOR	2932		AVENIDA VALERA		1500		Building Construction-General Building Contractors	Mobile	Yes		904.31
VAN-GO BUILDERS	2175		CHESTNUT AVE	ACTIVE	1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
VANGUARD INDUSTRIES WEST INC	2440		IMPALA DR	ACTIVE	5136	5136	Apparel, Piece Goods, Notions	Fixed	No	No	904.31
VASQUEZ FLORAL	5600	21	AVENIDA ENCINAS	ACTIVE	5193	5193	Flowers, Nursery Stock, Supplies	Fixed	Yes	YES	904.31
VIASAT INC	6167		EL CAMINO RL	ACTIVE	3577		Research & Manufacturing	Fixed	Yes		904.40
VIASAT INC	6155		EL CAMINO RL	ACTIVE	8721		Commercial Physical & Biological Research	Fixed	Yes		904.31
VIASAT INC	6161		EL CAMINO RL	ACTIVE	8731		Research, computer Repair	Fixed	Yes		904.40
VIASAT, INC	5791		VAN ALLEN WAY	ACTIVE	8731		Research, Develop, + Testing Services	Fixed	Yes		904.40
VIASAT, INC.	6183	5	EL CAMINO RL		873		Research, Development, And Testing Services	Fixed	Yes		904.31
VIASAT, INC.	6191		EL CAMINO RL		8731		Research, Development, And Testing Services	Fixed	Yes		904.40
VIGILUCCIS CUCINA ITALIANA	2943		STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
VIGILUCCI'S SEAFOOD & STEAK HOUSE	3878		CARLSBAD BLVD	ACTIVE	5812		Eating & Drinking Places	Fixed	Yes		904.21
VIKING COMMERICAL CONSTRUCTION.	1825		ASTON AVE	ACTIVE	1521	1542	Building Construction-General Building Contractors	Mobile	Yes	YES	904.21

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FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
VILLAGE 76-CAR WASH	880		CARLSBAD VILLAGE DR	NLB	5541	5541	Gasoline Service Stations	Fixed	Yes	No	904.31
VILLAGE FAIRE (SIMA VILLAGE FAIRE)	300	108	CARLSBAD VILLAG DR	ACTIVE	6512	5812	Operators of Nonresidential Buildings	Fixed	Yes	YES	904.21
VILLAGE GRILLE, THE	2833		STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.21
VILLAGE KITCHEN & PIE SHOPPE, INC.	950		TAMARACK AVE	ACTIVE	5812		Eating & Drinking Places	Fixed	Yes		904.21
VILLAGE LAWN CARE	2292		AUDEN PL	ACTIVE	0781		Landscaping	Mobile	Yes		904.31
VILLAGE PUB, THE	2990		STATE ST	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
VISTA BIOLOGICALS CORP	2120	C	LAS PALMAS DR	ACTIVE	2836		Biological Products, Except Diagnostic Substances	Fixed	No		904.21
VONS GROCERY COMPANY #2065	6951		EL CAMINO RL	ACTIVE	5411		Grocery Stores	Fixed	Yes		904.40
VONS GROCERY COMPANY #2142	2560		EL CAMINO REAL	ACTIVE	5411		Grocery Stores	Fixed	Yes		904.51
VONS GROCERY COMPANY #2165	7710		EL CAMINO RL	ACTIVE	5411	5411	Grocery Stores	Fixed	Yes	YES	904.21
VONS GROCERY COMPANY #2343	985		TAMARACK AVE	ACTIVE	5411	5411	Grocery Stores	Fixed	Yes	YES	904.51
W.O.T. MARINE	4747	14	MARINA DR		3732		Boat Building And Repairing	Mobile	Yes		904.31
WALBURNS CARPET CARE	2417		LA PLUMA LN	ACTIVE	7217		Carpet & Upholstery Cleaning	Mobile	Yes		904.51
WASH-ALL	2443		TUTTLE ST	ACTIVE	7349		Powerwash Restaurants, Building Cleaning	Mobile	Yes		904.51
WATANABE GARDENING, BILL	2560		GREGORY DR	ACTIVE	0781		Landscape Counseling and Planning	Mobile	Yes		904.31
WATERFALL AMERICA INC	2253		TIGEREYE PL		1521		Building Construction-General Building Contractors	Mobile	Yes		904.21
WAX RESEARCH INC	1965		KELLOGG AVE	ACTIVE	3999	3999	Manufacturer Surf Board Wax	Fixed	Yes	YES	904.31
WAX-IT DETAILING	2667		REGENT RD	ACTIVE	7542		Car Washes	Mobile	Yes		904.31
WAXX IT AUTOMOTIVE DETAILING	5215		CAR COUNTRY DR	ACTIVE	7542		Car Washes	Fixed	Yes		904.51
WAYNE MINOR LANDSCAPE	3450		DONNA DR		0781		Landscape Counseling And Planning	Mobile	Yes		904.31
WCM WASTE & COMPLIANCE MANAGEMENT	6054		CORTE DEL CEDRO		5047		Medical, Dental, And Hospital Equipment & Supplie	Fixed	Yes		904.40
WESELOH CHEVROLET HUMMER	5335		PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.31
WEST BUFFET	2515		EL CAMINO REAL	ACTIVE	5812	5812	Eating & Drinking Places	Fixed	Yes	YES	904.31
WEST COAST JET SERVICES, LLC	2006	E	PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airports, Flying Field & Airport Terminal Svc	Fixed	Yes	YES	904.21
WEST COAST POOLS AND SPAS	2920	101	LUCIERNAGA ST		7389		Business Services, Not Elsewhere Classified	Mobile	Yes		904.40
WEST INN & SUITES, LLC	4970		AVENIDA ENCINAS	ACTIVE	7011	7011	Hotels And Motels	Fixed	Yes	YES	904.51
WEST STEAK SEAFOOD AND SPIRITS	4980		AVENIDA ENCINAS	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.31
WESTERN FLIGHT, INC.	2210	A	PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airport Services	Fixed	Yes	YES	904.40
WESTERN FLIGHT, INC.	2208		PALOMAR AIRPORT RD	ACTIVE	4581	4581	Airport Services	Fixed	Yes	YES	904.31
WESTERN GARDENS	4616		PANNONIA RD	ACTIVE	0781		Landscape Counseling And Planning	Mobile	Yes		904.40
WESTMART GAS	4990		AVENIDA ENCINAS	ACTIVE	5541	5541	Gasoline Service Stations	Fixed	Yes	YES	904.31
WETZELS PRETZELS	5620	122	PASEO DEL NORTE	ACTIVE	5461	5461	Retail Bakeries	Fixed	Yes	YES	904.31

Inventory List
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FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	SIC DESCRIPTION	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
WINGATE & CO INC	4008 1/2		GARFIELD ST	ACTIVE	0782	782	Landscape Maintenance	Mobile	Yes	YES	904.31
WITCH CREEK WINERY	2906		CARLSBAD BLVD	ACTIVE	2084	2084	Wines, Brandy & Brandy Spirits	Fixed	Yes	YES	904.31
WOOD WIZARD, THE	6353		EL CAMINO REAL	ACTIVE	2511	2511	Carpentry Work	Fixed	Yes	YES	904.21
WOODWORKS PLUS	6104	C/D	AVENIDA ENCINAS	ACTIVE	2541		Mfg. Cabinets, Lockers, Shelving	Fixed	Yes		904.40
WORTHINGTON DODGE OF CARLSBAD (USED)	5548		PASEO DEL NORTE	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.40
WORTHINGTON DODGE OF CARLSBAD, INC.	5365		CAR COUNTRY DR	ACTIVE	5511		Motor Vehicle Dealers (New and Used)	Fixed	Yes		904.31
WRNT INC	6211	E	YARROW DR		5093		No Entry	Fixed	Yes		904.31
XNERGY	2237	100	FARADAY AVE	ACTIVE	1541		Clean Room Construction	Mobile	Yes		904.31
YANAGI SUSHI	6986	B	EL CAMINO REAL	ACTIVE	5812	5812	Women's Children's, And Infants' Clothing And Acc	Fixed	Yes	YES	904.31
YARD FAIRY, THE	6163		PASEO PALERO	ACTIVE	0781		Landscape Counseling And Planning	Mobile	Yes		904.51
YELLOW COYOTE FOOD CO. LP	1901		CALLE BARCELONA	ACTIVE	5812	5812	Eating Places	Fixed	Yes	YES	904.51
YMCA	401		CHINQUAPIN AVE	ACTIVE	7999	7999	Youth Camp	Fixed	Yes	YES	904.51
YOSHINO	2913		STATE ST	ACTIVE	5812		Eating Places	Fixed	Yes		904.31
ZEN POOL SERVICE	2894		LANCASTER RD	ACTIVE	7389		Swimming Pool Maintenance	Mobile	Yes		904.21
ZIMMER DENTAL INC.	1900		ASTON AVE	ACTIVE	3848	3848	Manufacture Dental Implants	Fixed	Yes	No	904.31
ZIMMER DENTAL INC.	6221		EL CAMINO REAL	ACTIVE	3848	3848	Manufacture Dental Implants	Fixed	Yes	No	904.31
ZIMMS DETAIL	7546	A	GIBRALTER ST		7542		Carwashes	Mobile	Yes		904.40

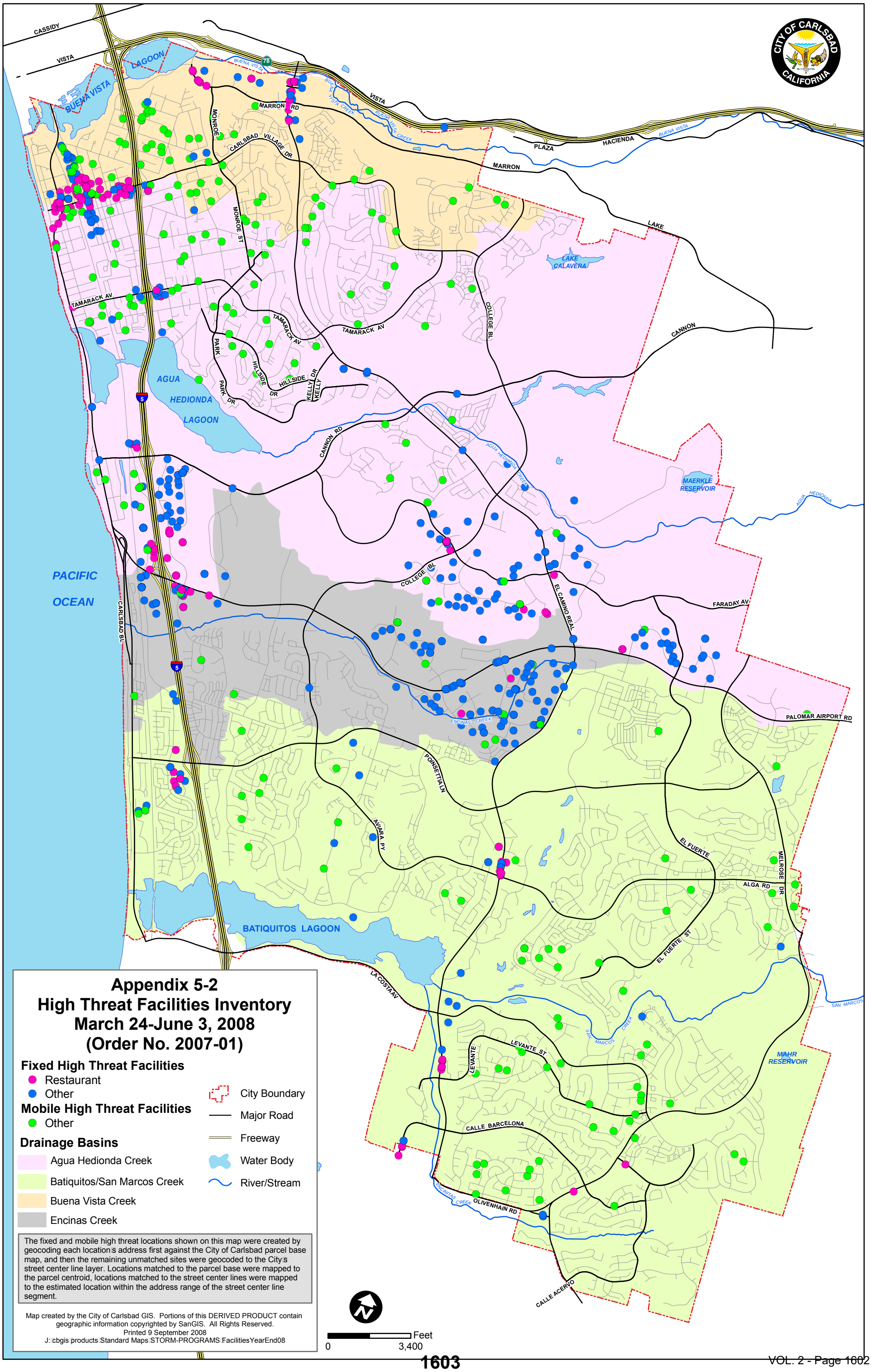
Appendix 5-2
High Threat Facilities Inventory
March 24-June 3, 2008
(Order No. 2007-01)
Fixed High Threat Facilities
Restaurant
Other
Mobile High Threat Facilities
Other
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
City Boundary
Major Road
Freeway
Water Body
River/Stream
The fixed and mobile high threat locations shown on this map were created by geocoding each location's address first against the City of Carlsbad parcel base map, and then the remaining unmatched sites were geocoded to the City's street center line layer. Locations matched to the parcel base were mapped to the parcel centroid, locations matched to the street center lines were mapped to the estimated location within the address range of the street center line segment.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
Printed 9 September 2008
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Feet
0
3,400
CITY OF CARLSBAD CALIFORNIA
PACIFIC OCEAN
BUENA VISTA LAGOON
AGUA HEDIONDA LAGOON
BATIQUITOS LAGOON
LAKE CALAVERA
MAERKLE RESERVOIR
MAHR RESERVOIR
CASSIDY
VISTA
MARRON RD
CARLSBAD VILLAGE DR
MONROE
MONROE ST
PLAZA
HACIENDA
LAKE
TAMARACK AV
PARK
PARK DR
HILLSIDE DR
KELLY DR
COLLEGE BL
CANNON
CANNON RD
EL CAMINO REAL
FARADAY AV
PALOMAR AIRPORT RD
CARLSBAD BL
POINSETTIA LN
AVIARA PY
EL FUERTE
EL FUERTE ST
MELROSE DR
ALGA RD
LA COSTA AV
LEVANTE
LEVANTE ST
CALLE BARCELONA
OLIVENHAIN RD
CALLE ACERVO
BUENA VISTA
BUENA VISTA CREEK
AGUA HEDIONDA
AGUA HEDIONDA CREEK
ENCINAS CREEK
SAN MARCOS CREEK
SAN MARCOS
78
5

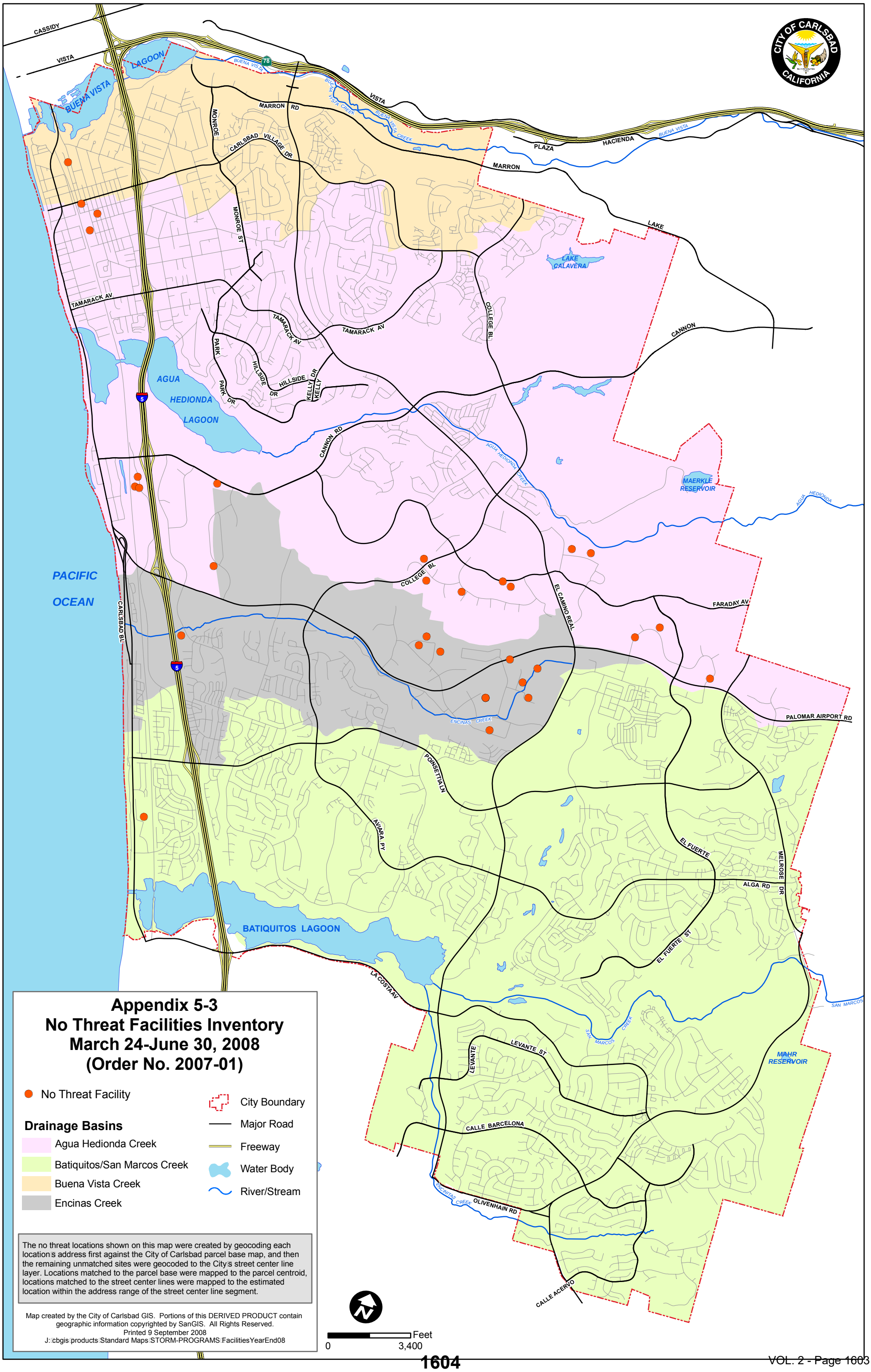
Appendix 5-3
No Threat Facilities Inventory
March 24-June 30, 2008
(Order No. 2007-01)
No Threat Facility
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
City Boundary
Major Road
Freeway
Water Body
River/Stream
The no threat locations shown on this map were created by geocoding each location's address first against the City of Carlsbad parcel base map, and then the remaining unmatched sites were geocoded to the City's street center line layer. Locations matched to the parcel base were mapped to the parcel centroid, locations matched to the street center lines were mapped to the estimated location within the address range of the street center line segment.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
Printed 9 September 2008
J:\cbgis\products\Standard Maps\STORM-PROGRAMS\FacilitiesYearEnd08
Feet
0
3,400
CITY OF CARLSBAD
CALIFORNIA
PACIFIC OCEAN
BUENA VISTA LAGOON
AGUA HEDIONDA LAGOON
BATIQUITOS LAGOON
LAKE CALAVERA
MAERKLE RESERVOIR
MAHR RESERVOIR
CASSIDY
VISTA
MARRON RD
CARLSBAD VILLAGE DR
MONROE
MONROE ST
PLAZA
HACIENDA
LAKE
TAMARACK AV
PARK
PARK DR
HILLSIDE DR
KELLY DR
COLLEGE BL
CANNON
CANNON RD
EL CAMINO REAL
FARADAY AV
PALOMAR AIRPORT RD
CARLSBAD BL
POINSETTIA LN
AVIARA PY
EL FUERTE
MELROSE DR
ALGA RD
EL FUERTE ST
LA COSTA AV
LEVANTE
LEVANTE ST
CALLE BARCELONA
OLIVENHAIN RD
CALLE ACERVO
BUENA VISTA CREEK
AGUA HEDIONDA CREEK
ENCINAS CREEK
SAN MARCOS CREEK
SAN MARCOS
78
5

Carlsbad Conserves

Environmental Programs Newsletter • Spring 2008

Spring Cleaning Made Easy

...THEN ACT!

YOUR EVERYDAY ACTIONS IMPACT OUR ENVIRONMENT!

Proper disposal of household electronics, poisons and cleaning supplies is not only important for the environment but it's the law. Carlsbad offers a variety of options to do the right thing – isn't it worth going the extra mile?

ONCE AGAIN IT'S TIME to clean out our homes and garages in preparation for spring. Did you know that many common products used daily require special handling for disposal and may not be discarded in sinks, storm drains or household trash? These items are classified as "household hazardous waste" (HHW) and are typically labeled Caution, Warning, Danger, Poison, Toxic, Flammable or Corrosive.

Carlsbad residents have several options for properly disposing of HHW.

Annual HHW Collection Event

Saturday, April 19, 2008, 9 a.m. - 1 p.m.
Visit *www.carlsbadca.gov/waste/hhwsched.html*
Or call (760) 602-7559 to book an appointment
FREE to Carlsbad residents with proof of residency

Door-to-Door Collection Program

Operated by Clean Harbors
Call (800) 444-4244 to schedule an appointment
$10 Co-pay

HHW Collection Facility

Operated by Clean Harbors
1145 East Taylor Street, Vista
Hours: Saturdays 9 a.m. - 3 p.m.
No appointment necessary
Call (800) 444-4244 for additional information
FREE to Carlsbad residents with proof of residency

HHW Collection Facility

Operated by Waste Management
2880 Industry Street, Oceanside
Hours: Alternating Saturdays 9 a.m. - 1 p.m.
By Appointment Only
Call (760) 929-9400 to schedule your appointment
FREE to Carlsbad residents with proof of residency

Common HHW Items:

- Automotive products (antifreeze, fluids, motor oil)
- Batteries (home and car)
- Cathode ray tubes (TVs, computer monitors)
- Fluorescent light tubes and ballasts
- Fuels
- Herbicides
- Hobby supplies
- Household cleaners
- Medicines
- Mercury (thermometers, thermostats)
- Paint products
- Paints (latex and oil)
- Pesticides
- Polishes and waxes
- Pool and spa chemicals
- Propane tanks from barbeques
- Small household appliances with LED displays
- Unused road flares
- Wood preservatives

Bulky Items Take Up Lots of Space

GETTING RID OF BULKY ITEMS such as furniture and appliances that can not be disposed of with regular household trash? No problem! There are three Bulky Item Collection dates still to come:

Call Waste Management at (760) 929-9400 or visit their website at *http://northcounty.wm.com* to schedule an appointment for the pick-up in June, September or November; limit of two bulky items per Carlsbad resident at no charge. Contact Waste Management regarding other options for disposing of bulky items throughout the year or to determine if your household item(s) qualifies.

Saturday June 21st
Appointments accepted June 2-9th

Saturday September 20th
Appointments accepted September 1-8th

Saturday November 8th
Appointments accepted October 20-27th

City of Carlsbad Environmental Programs Outreach Events Spring 2008

EACH YEAR the City of Carlsbad's Environmental Programs Division participates in several outreach events intended to increase public awareness of current environmental issues impacting residents in Carlsbad. Events include fairs, household hazardous waste collection, and beach and creek clean-ups, among others. Please plan to join us at these upcoming events.

March 22 • 10 a.m. - 4 p.m.
World Water Day Festival
Agua Hedionda Lagoon
Discovery Center
1580 Cannon Road, Carlsbad

March 29 • 9 a.m. - 5 p.m.
Kids Day at the Flower Fields
Paseo Del Norte, Carlsbad

March 30 • 11 a.m. - 4 p.m.
Peppertree/Earth Day Event*
Mission San Luis Rey
4050 Mission Avenue, Oceanside

April 20 • 10 a.m. - 4 p.m.
Avocado Festival*
Downtown Main Street, Fallbrook

April 26 • 9 a.m. - noon
Regional Creek to Bay Clean Up
Various locations throughout San Diego
Check *www.idacsd.org* for more information

May 21 • 9 a.m. - 1 p.m.
Public Works Fair, City of Carlsbad
Dove Library
1775 Dove Lane, Carlsbad

*A Watershed sponsored event; Carlsbad City staff will be present.

April Showers Bring ...

THE NEED TO WATER OUR LAWNS LESS! Even with the perceived benefits of recent rainfall, we are on the verge of experiencing a water shortage. Limited local water sources, historic dry conditions and a recent court order that will reduce water deliveries to our area threaten our water supply and could very well lead to mandated water restrictions. Water conservation is a team sport and we are all the most valuable players! Here are a few winning conservation actions that can reduce our water consumption and help conserve this precious resource:

- Eliminate one irrigation cycle per week
- Turn off sprinklers during rain storms
- Repair leaks around pool or spa pumps
- Adjust sprinklers to reduce overspray
- Use a broom, not a hose, to clean driveways and sidewalks

We have many teammates in our quest to conserve water who can offer invaluable assistance:

- Vouchers for water-savings products offered to Carlsbad Municipal Water District customers: call (800) 986-4538
- Water use audits offered to District customers: call (760) 602-7585
- San Diego County Water Authority's 20-Gallon Challenge: log onto *http://www.20gallonchallenge.com/*
- Metropolitan Water District's "Be Waterwise" website offers water efficiency tips for outside the home: log onto *http://www.bewaterwise.com/*
- "The Water Conservation Garden" website showcases water conservation through a series of themed gardens: log onto *http://www.thegarden.org/*
- The "H2OUSE Water Saver Home" has numerous tips for reducing water consumption in and around your home: log onto *http://www.h2ouse.org/*

...THEN ACT!

YOUR EVERYDAY ACTIONS IMPACT OUR ENVIRONMENT!

Don't leave the water running ... not in the sink, in the yard or from the hose. The City can help you save money if you take advantage of vouchers offered for the use of water saving devices like efficient washing machines and weather-based irrigation systems. And if you think you might have a leak – have it fixed immediately and don't wait a week. Think about it – you will have a little money saved for a rainy day.

A publication from

CITY OF CARLSBAD **PUBLIC WORKS**

At Your Service!

ENVIRONMENTAL PROGRAMS

1635 Faraday Avenue • Carlsbad, CA 92008

think globally. act neighborly.

***www.carlsbadconserves.org* • Environmental Hotline (760) 602-4646**

1635 Faraday Avenue
Carlsbad, CA 92008
(760) 602 - 4646

5960 El Camino Real
Carlsbad, CA 92008
(760) 929-9400

Think Green.
WM WASTE MANAGEMENT

Printed on 100% Post Consumer Content Paper

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Permit No. 299

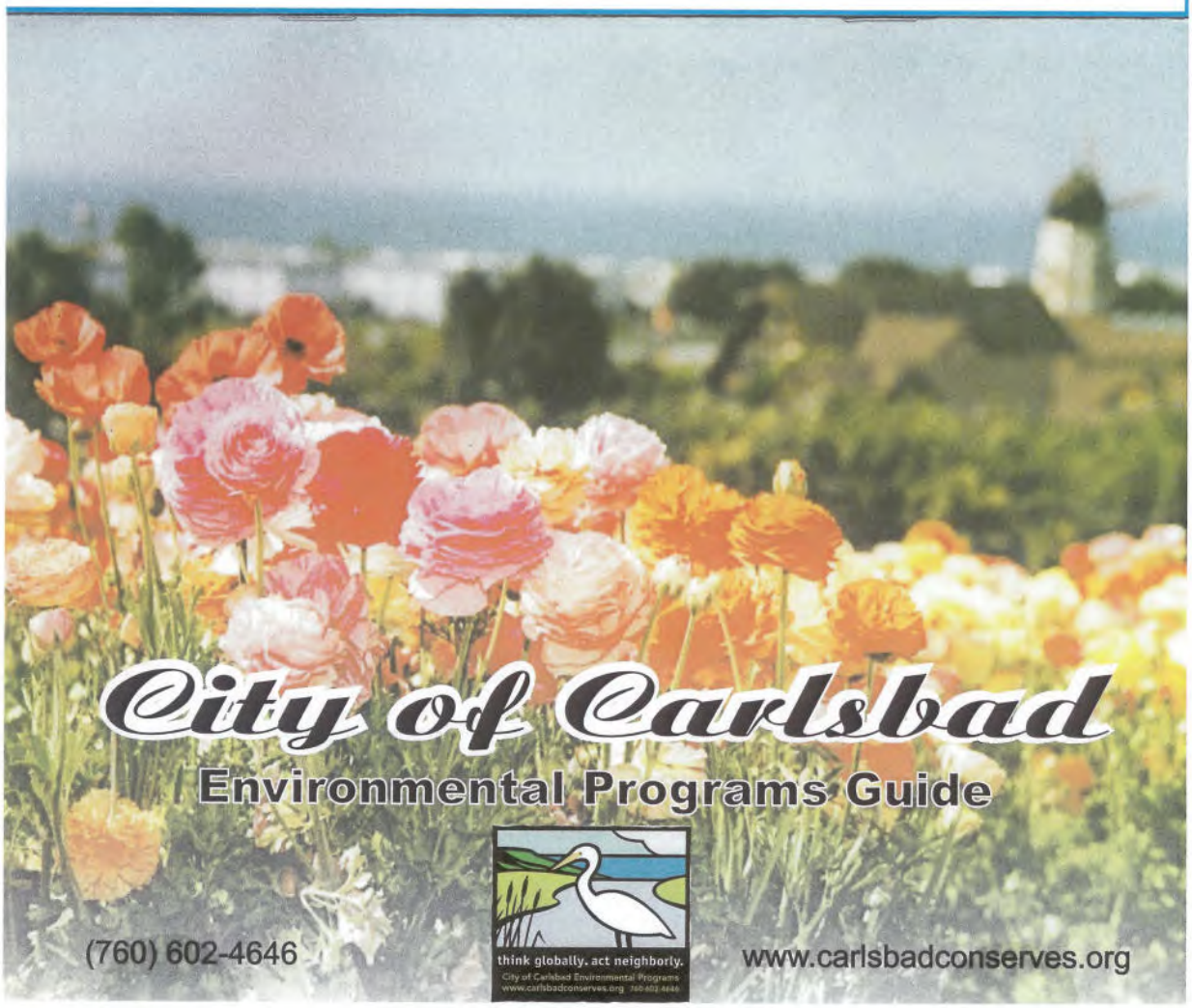

Welcome to the City of Carlsbad

This brochure provides guidelines and helpful hints on the environmental services available to Carlsbad residents.

Solid Waste Collection

The Solid Waste section will assist residents in understanding the services provided for refuse, recycling and yard waste collection in the City of Carlsbad. The Additional Waste Services section of this flyer instructs residents how and where to properly dispose of household hazardous waste, electronic waste and used oil.

Water Conservation

This section provides residents with cost saving options that will aid them in their efforts to conserve water. Resources such as toilet and clothes washer voucher programs and free on-site water audits are available.

Storm Water Protection

Storm water pollution affects everyone who lives, works and plays in the City of Carlsbad. Litter, fertilizers, pet waste, oil and soap can be washed from our yards, driveways and streets into the storm drain system and directly into our creeks, lagoons, and onto our beaches. This pollutes our water and endangers wildlife. The Storm Water section of this flyer identifies some preventative measures residents can take to minimize the source of these pollutants and the number to call to report illegal discharges in the storm drain system.

Brought to you in partnership by the City of Carlsbad and Waste Management, the City's refuse and recycling provider.

Storm Water Protection

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to prevent flooding by carring rainwater away from developed areas . Untreated storm water flows directly into our creeks, lagoons and the ocean, carrying any pollutants from the roads.

Storm water pollution comes from a variety of sources, including:

- Oil from vehicles
- Excess pesticides and fertilizer from landscaping
- Bacteria from pet waste
- Sediment from construction and landscaping projects
- Soap from car washing
- Litter
- Lawn and garden debris
- Improperly disposed home improvement products (paint, stucco, grout, cement, solvent)
- Washing driveways and sidewalks

Pollution prevention is up to YOU!

Please help us protect OUR environment. Here are some tips to help keep creeks, lagoons and the ocean clean:

- Bag and dispose of pet waste in a trash can, not a yard waste container
- Use fertilizers and pesticides sparingly
- Adjust sprinklers to prevent over-watering
- When possible, take your car to a commercial car wash

- Keep automobiles properly maintained to prevent fluid leaks
- Properly dispose of trash and cigarette butts
- Volunteer at cleanup events in Carlsbad

"Only rain in the storm drain"

To report an illegal discharge or for more information, call our hotline at (760) 602-4646.

www.carlsbadconserves.org

Water Conservation/Storm Water Program

Water Conservation

The Carlsbad Water Ethic promotes responsible and efficient water use in our arid city. Our residents should follow this Water Ethic even when we are not in a drought situation. We encourage residents to adopt these behaviors as a way of life.

- Incorporate drought-tolerant plant materials and micro-irrigation (drip) systems wherever possible into new landscaping
- Water should not leave the user´s property due to over-irrigation of landscape
- Water during the early morning or evening hours to minimize evaporation
- Investigate and repair all leaks
- Water cannot be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards
- Recycled water shall be used wherever and whenever possible.

Residential Voucher Programs

Carlsbad participates in a voucher/rebate program with other San Diego County Water Agencies. The goal of this program is to reduce the amount of water residents use - thus increasing the available supply to all residents. Vouchers are available for money off of the purchase and installation of water saving devices like ultra low flow toilets, high-efficiency clothes washers, landscaping and Weather-Based Irrigation Controllers.
Interested residents and Home Owners Associations can contact the Voucher Processing Center at (800) 986-4538. The center is open Monday through Friday from 8:00 a.m. to 5:00 p.m., and Saturday from 8:00 a.m. to 3:00 p.m.

Residential Survey

Carlsbad residents can receive a free, on-site water conservation survey. This will include a review of indoor and outdoor water saving opportunities, a leak check, and an irrigation system and water schedule review. Customers are also shown how to read their water meter and are given literature promoting other conservation programs.
For ideas on water conservation at home refer to www.h2ouse.org

Contact your local Water Agency

Carlsbad Water Customers: (760) 602-4646

Vallecitos Water Customers: (760) 744-0460

Olivenhain Water Customers: (760) 753-6466

How to contact us

City of Carlsbad Environmental Programs
1635 Faraday Avenue
Carlsbad, California 92008
(760) 602-4646

Hours: Monday - Thursday 7:30 a.m. - 5:30 p.m.
Friday 8:00 a.m.- 5:00 p.m.

www.carlsbadconserves.org

Waste Management
5960 El Camino Real
Carlsbad, California 92008
(760) 929-9400

Hours: Monday - Friday 8:00 a.m. - 5:00 p.m

http://northcounty.wm.com

Holiday Schedule

Waste Management does not offer service on the following holidays:

- New Year's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day

When a holiday falls on a weekday, collection will be delayed one day for the remainder of the week.

Holiday announcements will be published in your local newspaper.

www.carlsbadconserves.org

Buyback Center

Redeemable items

- Newspaper
- CRV aluminum cans
- CRV glass bottles
- CRV plastic bottles
- CRV bi-metal cans

CRV = California Redemption Value. Ready-to-drink beverage containers which are packaged in aluminum, glass, plastic, bi-metal or any combination of these materials.

Also accepted:

- Electronic devices
- Household batteries

(For more information see Household Hazardous Waste)

Donation items

- Non CRV aluminum
- Non CRV glass
- Non CRV plastic
- Tin cans
- White ledger paper
- Computer paper
- Mixed paper
- Corrugated cardboard

Hours: Tuesday - Saturday
8:00 a.m. - 4:00 p.m.
Closed:
1:00 p.m. - 1:40 p.m.
(760) 929-9400

Bulky Item Pickup

Need to dispose of such items as furniture (couch, chair, dresser, cabinet, bookshelf, mattress) or appliances (toilet, washer, stove, sink)? FREE bulky item collection days are scheduled periodically in your community. Residents may dispose of two items per event. Special pickups are available for a fee. Call Waste Management at (760) 929-9400 to schedule an appointment or for additional information.

Electronic Waste

What is E-Waste?

The rapid advances in new technology and demand for new electronic equipment have increased the disposal of outdated electronic equipment known as "E-Waste."

Proper disposal of "E-Waste" through recycling and reuse prevents them from reaching landfills. This also helps to minimize waste, and provide usable items to organizations that need them as well as recapture valuable resources.

- Cell phones
- Computers
- Televisions
- VCRs/DVDs
- Stereos
- Printers
- Fax machines
- Monitors
- Microwaves ovens

Universal Waste

(Including household batteries)

As of February 9, 2006, it is now illegal in the State of California to dispose of common household items such as alkaline batteries*, mercury thermometers and thermostats, and fluorescent light bulbs into the trash. These items are now classified as Universal Waste, and must be disposed of properly through the Household Hazardous Waste (HHW) program. However, in an effort to make the disposal of common household batteries including re-chargeable ones, more efficient, the City has partnered with Waste Management to allow residents to drop off the batteries at the Waste Management Recycling Center located at 1145 East Taylor St., Vista, free of charge. The City recommends storing your used fluorescent light bulbs in a safe place until they can be brought to the HHW facilities or scheduled for a home pick-up.

**Note - rechargeable batteries can also be brought to a participating retail store that provides free drop-off bins for proper disposal.*

Where to recycle Electronic and Universal waste

Door-to-door: Call (800) 444-4244

Waste Management
5960 El Camino Real, Carlsbad
Hours: Tuesday - Saturday 8:00 a.m. - 4:00 p.m.
Closed: 1:00 p.m. - 1:40 p.m.
For additional information please call (760) 929-9400
COST: CRTs (television, laptops, monitors): no charge
All others electronic devices fee at drop-off.

Household Hazardous Waste Collection Facility
1145 East Taylor Street, Vista
Hours: Saturdays 9:00 a.m. - 3:00 p.m.
For additional information please call (800) 714-1195
COST: Currently there is no cost to Carlsbad residents.

www.carlsbadconserves.org

Household Hazardous Waste

MATERIALS ACCEPTED:

- Used motor oil and filters
- Pool cleaners
- Automobile fluids (antifreeze, gasoline, brake, transmission)
- Household cleaners
- Landscaping chemicals
- Automotive batteries
- Mercury thermostats
- Mercury thermometers
- Non-empty aerosol cans
- Lamps with fluorescent tubes, sodium vapor lamps
- Household batteries
- Paint
- Mercury switches(automotive or non-automotive light switches)
- Novelties such as some singing greeting cards or flashing athletic shoes

Drop-off

Residents may bring up to 15 gallons or 125 pounds per visit.

A proof of residency required (California driver license, utility bill or other).

No charge to residents at either location.

Door-to-door collection

The City has implemented a door-to-door program that allows residents to make an appointment to have their HHW picked up at their residence for a small co-pay of $10. This door-to-door program is available to all residents. For more information on this program, or to set up an appointment, call (800) 444-4244.

Drop-off locations

VISTA
Hours: Saturdays:
9:00 a.m.- 3:00 p.m.
No appointment necessary
(800) 714-1195

1145 E Taylor St., Vista

OCEANSIDE
Hours: Alternating Saturdays:
9:00 a.m. - 1:00 p.m.
Appointment ONLY.
For additional information, please call
(760) 929-9400.

2880 Industry St., Oceanside

PUT TOXIC WASTE IN ITS PLACE

Funded by a grant from the California Integrated Waste Management Board.

Overflow Trash

5960 El Camino Real, Carlsbad

PALOMAR TRANSFER STATION
(760) 603-0153

Residents can dispose of overflow trash at the Palomar Transfer Station. A fee will be charged at the time of disposal. For additional information please call the Palomar Transfer Station at (760) 603-0153.

No hazardous or regulated waste is accepted at this facility including batteries, paint, tires, liquids and electronic waste.

Open to residents
Saturday & Sunday
7:30 a.m. to 4:00 p.m

Holiday Trees

The City, in partnership with Waste Management, has a holiday tree recycling and collection program that allows residents to drop off their trees for recycling or be picked up at the curb for collection. This service is free to all Carlsbad residents and it operates the day after Christmas through the first two weeks in January. For locations where residents may drop-off the trees for recycling check the City's website or the Community Services Guide.

For curbside pick-up remove stands, tinsel and ornaments from trees, cut in sections no longer than 4 feet and place out on the curb for collection. Flocked trees are not recyclable and will be collected by the trash drivers.

Holiday schedule announcements will be published.

www.carlsbadconserves.org

City of Carlsbad

Storm Water Protection

April 23, 2008

Re: Discharge of Motor Oil into storm drain. (RFAA-7DAMC)

Dear Resident,

This letter is to inform you of a recent event that took place in your neighborhood. On Monday March 31, 2008, City staff received a report that a sheen, which appeared to be used motor oil, was exiting a storm drain into Agua Hedionda Lagoon. City staff and Contractors responded and were able to clean the oil from the Lagoon and Storm Drain. Fortunately, the discharge was caught in a timely manner and little oil actually reached the lagoon. This prevented any permanent damage to the lagoon or wildlife. On Tuesday April 1st an article covering the event appeared in the newspaper. The article led a witness to report the source or the oil to the City's Storm Water Protection Program.

Automotive fluids are hazardous and may be toxic to our environment. It is a violation of Carlsbad Municipal Code (CMC) 15.12.050 to discharge motor oil or any non-storm water to the storm drain. In addition CMC 15.12.080(F) prohibits any person from parking or standing any vehicle on any street for the purpose of washing, greasing, repairing, and/or maintaining the vehicle or equipment, except for repairs necessitated by an emergency.

The City of Carlsbad operates a Storm Water Protection Program, which is part of a statewide effort to protect our creeks, lagoons, and ocean from pollution. Storm drains are NOT connected to sanitary sewer systems and treatment plants. The untreated water and pollutants flow directly into our waterways. The Program is regulated by a State permit which requires the City to respond to complaints of illegal discharges to the City's storm drain system.

The program strives to inform residents of these requirements and how to comply with the City ordinance. CMC requires persons to properly dispose of trash and other materials and to eliminate or reduce pollutants entering the City's storm water conveyance system. Enclosed is information about the City's Storm Water Protection Program. To report suspected storm water violations or for more information please call the City's Storm Water Hotline at 760 602-2799.

Sincerely,

Tim Murphy

Tim Murphy
Environmental Specialist

Enclosures

1635 Faraday Avenue • Carlsbad, CA 92008-3009
760-602-2799 •FAX 760-602-8562

Sanitary Sewer Overflows
March 23 - June 30, 2008

Date	Source	Substance	Volume	Enter MS4?	Enter RW?	Response
06/27/2008	Private Lateral	Sewage	10	No	No	Root blockage.
06/19/08	Sewer Lateral C/O, main stoppage	Sewage	20	No	No	Clear root stoppage, capture all spill.
04/28/08	Sewer MH	Sewage	1125	Yes	No	Captured at silt pond, used bypass pump to sewer, flushed storm system with 10,000 gals fresh water.
04/14/2008	Private Lateral	Sewage	800	No	No	Plumber cleared root blockage.
04/10/2008	Private Lateral	Sewage	25	No	No	Plumber cleared root blockage.

These spills were from the City of Carlsbad maintained sewer main.

Other Spills March 24, 08 to June 30, 08

Event Type	Cause	Volume (Gal) Spilled	Volume (Gal) Recovered	Incident Date	Street Number	Street	Responsible Party	Zip Code	Water Body Impact	Water Body
413	Unknown	5 gallons Oil	Unknown	3/31/08	Unknown	Chinquapin / Long Pl	Unknown	92008	Aqua Hedionda	Agua Hedionda
413	Fork Lift Rollover	Unknown Oil / Fuel	Unknown Oil / Fuel	4/1/08	Unknown	Palomar Airport Rd	Unknown	92008	NA	NA
413	Vehicle Leak	Unknown Oil	Unknown Oil	4/12/08	NA	I-5	Unknown	92011	None	None
413	Vehicle Leak	1 Oil	1 Oil	6/20/08	3521	Charter Oak	Unknown	92009	None	None
411	Unknown	2-3 Diesel	2 Diesel	10/3/07	Unknown	Alga Rd / Corintia St	Unknown	92009	None	None
411	Vehicle Leak	0.5 Gasoline	None	12/1/07	Unknown	Ambrosia / Aviara Pkwy	Unknown	92011	None	None
411	Semi Truck leak	25 Diesel	25 Diesel	1/15/08	5931	Darwin Ct	Pacifica Trucks – Wilmington CA	92009	None	None
411	Tiki Torch	0.25 Gallon Lamp Oil	None	4/20/08	1604	Sapphire Dr	Unknown	92011	None	None
411	Vehicle Accident	Unknown	Unknown	5/5/08	Unknown	Pio Pico / Carlsbad Village Dr	Unknown	92008	None	None

Detailed Issue Report - Department

7/1/2007-6/30/2008

Issue Nr.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
Drainage-Water ponding/pooling				
5728G	2/25/2008	2/25/2008	EXCESSIVE WATER RUN OFF ONTO SIDEWALK.	3/3/2008 12:35:21PM - Clayton Dobbs Status Change Previous: Open New: Closed Reason: no water foun 2/26 and 2/28 cd
Sprinklers-Private Property				
56LCX	8/17/2007	8/17/2007	Water running like broken sprinkler pipe.	8/17/2007 9:13:10AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Contacted Property Mgmt - they will send landscaper to fix immediately.
56N3B	8/17/2007	8/17/2007	Reports that water is running (faulty sprinkler heads? or possibly another problem) profusely. Location is on Jackspar (between ECR and Camino Hills) near the park on Jackspar that has the barn. She said the water hasn't run into the street yet, but is close. (I do not know if this is private property or city-maintained.)	8/20/2007 9:55:19AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Leak was fixed.
Storm Drain-Dirt/Debris - Piles				
5DTJ9	8/24/2007	8/24/2007	SW10 Landscape Material Dumping Dirt in roadway - remodeling? Report of possible storm water violation - due to dirt or debris piles.	8/28/2007 11:05:22AM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
5QKTG	9/4/2007	9/4/2007	SW10 Landscape Material Dumping Construction materials in street Report of possible storm water violation - due to dirt or debris piles.	9/5/2007 3:50:44PM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
9UP53	12/13/2007	12/13/2007	SW10 Landscape Material Dumping Piles of dirt (two) Report of possible storm water violation - due to dirt or debris piles.	5/9/2008 8:25:11AM - Tim Murphy Status Change Previous: Open New: Closed Reason: Informational Letter

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Dirt/Debris - Piles				
A3PEP	12/20/2007	12/20/2007	SW28 Miscellaneous Incidents Vacant lot on Navarra Drive has dirt running off of it into the street. Report of possible storm water violation - due to dirt or debris piles.	2/27/2008 9:11:49AM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter BMPs installed.
AP2UT	1/8/2008	1/8/2008	SW28 Miscellaneous Incidents 3 lots, dirt, no bmps Report of possible storm water violation - due to dirt or debris piles.	1/11/2008 9:33:30AM - James Wood Status Change Previous: Open New: Closed Reason: Written Warning
B4U9Q	1/22/2008	1/22/2008	SW28 Miscellaneous Incidents Mess behind [redacted] of theCoaster parking lot, along the frontage road Report of possible storm water violation - due to dirt or debris piles.	2/5/2008 3:59:09PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Follow-up in Permits Plus
BBTDL	1/29/2008	1/29/2008	SW10 Landscape Material Dumping Dirt piles on dirt surface not discharging into storm drain Report of possible storm water violation - due to dirt or debris piles.	2/4/2008 9:34:42AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Verbal Notice. BMPs were put into place no further action required.
Storm Drain-Dumping to Storm Drain				
4TQED	7/5/2007	7/5/2007	SW20 Oil & Grease Discharge - Food Facility Grease/liquid coming out of dumpster area (spill) Report of Dumping to the Storm Drain	7/6/2007 11:22:27AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: [redacted] conducted a site visit and found that approximately 10-15 gallons of grease had been spilled and an attempt was made to wash the materials to the storm drain. Grease was found in the parking lot and storm drainage path. However, only a minumum amount actually reached the SD box because of previous placed sand bags. The RP was informed and required to immediately clean the impacted area. The site was adequately cleaned before the inspector left the scene. NOV issued. Follow-up in Permits Plus

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
4UNNG	7/6/2007	7/6/2007	SW29 Complaint Not Found Reported after the fact. Water flowing to storm drain Report of Dumping to the Storm Drain	7/9/2007 4:22:26PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Complaint Not Found
53MT9	7/13/2007	7/13/2007	SW20 Oil & Grease Discharge - Food Facility Grease dumped on bank of Buena Vista Creek. Report of Dumping to the Storm Drain	7/20/2007 2:51:17PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Follow-up in Permits Plus
56SC6	7/16/2007	7/16/2007	SW6 Saw Cutting Slurry Someone is sawing conrete washing the silt down the storm drain as of 1:40 p.m. Report of Dumping to the Storm Drain	7/18/2007 12:14:55PM - James Wood Status Change Previous: Pending New: Closed Reason: No issue / No violation
5FTKS	7/25/2007	7/25/2007	SW29 Complaint Not Found [redacted] on Tamarack putting debris, etc into storm drain in alley behind [redacted] Report of Dumping to the Storm Drain	7/25/2007 3:57:39PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Issue not found.No issue / No violation
5PM87	8/2/2007	8/2/2007	SW4 Carpet Cleaning Discharge Carpet cleaning company dumped waste to the storm drain Report of Dumping to the Storm Drain	8/3/2007 11:17:43AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Informational Letter sent along with BMPs
5VKYC	8/8/2007	8/8/2007	SW28 Miscellaneous Incidents Pile of mud dumped in strteet in front of storm drain Report of Dumping to the Storm Drain	8/9/2007 2:10:49PM - James Wood Status Change Previous: Open New: Closed Reason: Referred for Action
59VB9	8/20/2007	8/20/2007	SW29 Complaint Not Found Carpet cleaner dumping dirty water into storm drain Report of Dumping to the Storm Drain	9/25/2007 9:07:14AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Complaint Not Found. Could not locate additional contact information n the RP. Will reopen if additional infrmationbecasomes available.

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain				
5BM54	8/22/2007	8/22/2007	SW26 Accidental Spill Pipe leaking seawater into storm drain at mouth of Agua Hedionda Lagoon from [redacted] Report of Dumping to the Storm Drain	8/22/2007 9:27:31AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: 50 gallons of seawater going into the sea - no issue.No issue / No violation
5LPGC	8/31/2007	8/31/2007	SW29 Complaint Not Found Cutting grass and blowing grass clippings into the storm drain Report of Dumping to the Storm Drain	8/31/2007 3:45:41PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Complaint Not Found. Conducted site visit and did not observed and landscapers onsite.
5QPVF	9/4/2007	9/4/2007	SW3 Vehicle Washing Mobile washer - no BMPs Report of Dumping to the Storm Drain	9/4/2007 4:13:45PM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
5TTRX	9/7/2007	9/7/2007	SW15 Water Line Break Plumber digging and dumping water? to storm drain. Report of Dumping to the Storm Drain	9/7/2007 4:02:30PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
5WPMN	9/10/2007	9/10/2007	SW11 Pool / Spa / Fountain Discharge Emptying pool without dechlorinating and mixing diatomacious filter debris in with the water. Report of Dumping to the Storm Drain	9/10/2007 12:37:08PM - AllenHartman Status Change Previous: Open New: Closed Reason: Verbal Notice Educational information provided to homeowner. No further discharges anticipated.
5WS58	9/10/2007	9/10/2007	SW11 Pool / Spa / Fountain Discharge Resident is draining their pool into [redacted] storm drain that dumps into the Calavara Lake. Report of Dumping to the Storm Drain [redacted]	9/10/2007 3:27:21PM - AllenHartman Status Change Previous: Open New: Closed Reason: Informational Letter Door hanger and information regarding pool discharges and pet waste left at residence. Also left pet waste bags/dispenser.

This report details all closed issues for the selected department(s) that were opened during the report period.

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain				
7KSR7	10/1/2007	10/1/2007	SW28 Miscellaneous Incidents Two barrels of oil? covered but leaking into ground [redacted] Report of Dumping to the Storm Drain	10/2/2007 2:35:06PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
7MU3E	10/3/2007	10/3/2007	SW21 Dumping - Hazardous Materials 1-2 gallons diesel fuel in gutter Report of Dumping to the Storm Drain	10/3/2007 3:20:17PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: No issue / No violation - Cleaned up and disposed of properly. No RP.
7UM4Z	10/10/2007	10/10/2007	SW20 Oil & Grease Discharge - Food Facility Dumping grease in storm drain behind souplantation by dock area - drain is on corner of bldg Report of Dumping to the Storm Drain	11/13/2007 8:46:00AM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter
7VUMV	10/11/2007	10/11/2007	SW24 Sanitary Spill or Leak Plumber dumped sewage to storm drain Report of Dumping to the Storm Drain	10/12/2007 3:45:15PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: At 3pm it was reported that sewage was being washed to the storm drain. [redacted] responded onsite and found that an unknown quantity of raw sewage and debris had been washed to the SD. [redacted] contacted the SW hotline and [redacted] were immediately dispatched to the site. Upon investigation, inspectors found that [redacted] had been called onsite earlier that morning to clear a blocked sewage line which resulted in raw sewage overflowing to the parking lot. After the blockage had been cleared, [redacted] left the site, however they did not clean the debris left in the lot caused by the overflow. Later that afternoon, a [redacted] employee used a water hose for approx. 5 minutes to in an attempt to clean the parking lot and debrais. It was not clear if sewage actually reach the storm drain box and/or adjacent channel. A vactor truck was called in to remedaite the SD and approximately 500 g
7WPAD	10/12/2007	10/12/2007	SW11 Pool / Spa / Fountain Discharge Cleaning out pond and dumping water, etc. to storm drain. Report of Dumping to the Storm Drain	10/12/2007 4:35:53PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: No issue / No violation. [redacted] conducted a site visit and found that no water had been discharged to the SD. BMPs implemented.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
7WVVJ	10/12/2007	10/12/2007	SW22 Dumping - Non-hazardous Materials Person was taking trash out of a large cardboard box and putting it into the storm drain Report of Dumping to the Storm Drain	11/15/2007 2:08:36PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: See RFA-77WVVJ
3APN7	10/24/2007	10/24/2007	SW22 Dumping - Non-hazardous Materials Dumping wine making debris to storm drain Report of Dumping to the Storm Drain	10/24/2007 2:42:14PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
3FSXG	10/29/2007	10/29/2007	SW11 Pool / Spa / Fountain Discharge Emptying pool that has been sprayed by County Vector Control into street and is cleaning sides of pool with chemicals and draining them into the street. Report of Dumping to the Storm Drain	10/31/2007 9:00:49AM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
3JLPA	11/1/2007	11/1/2007	SW29 Complaint Not Found Commercial popcorn machine on wheels being cleaned in street. Oil etc on street in front of above address. Report of Dumping to the Storm Drain	11/5/2007 3:07:19PM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter
3KLRM	11/2/2007	11/2/2007	Dogs are walked here and not cleaned up after. Lots of dog waste on this hillside. Wants to get a set up like trails, etc., with bags and trash area (doggie station). Report of Dumping to the Storm Drain	11/2/2007 4:55:04PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Referred to Center for Natural Lands Management.
9YTSR	12/17/2007	12/17/2007	SW11 Pool / Spa / Fountain Discharge Emptying pool Report of Dumping to the Storm Drain	12/17/2007 4:25:25PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Verbal Notice, Resident was compliant and wishes to follow all rules and regulations.
9YTSR	12/17/2007	12/17/2007	SW11 Pool / Spa / Fountain Discharge Emptying pool Report of Dumping to the Storm Drain	5/9/2008 8:28:16AM - Tim Murphy Status Change Previous: Open New: Closed Reason: Changed issue type to dumping to storm drain.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
9ZVEB	12/18/2007	12/18/2007	SW21 Dumping - Hazardous Materials 50 gallon oil drum at trail head - leaking - this was Sunday. Report of Dumping to the Storm Drain Report of Dumping to the Storm Drain	1/10/2008 4:01:34PM - Greg Clavier Status Change Previous: Open New: Closed Reason: A short report on the cleanup activities of the 55 gallon oil drum deposited north of La Costa Avenue. I met with NRC Environmental Services at approximately 1 p.m. to remove and manifest the oil drum and contaminated soil illegally dumped on Paseo Tamarindo a small dirt road off La Costa Avenue. We used an" Over- Pack" to contain and quarantine the abandoned 55 gallon drum and we also removed approximately 225 gallons of saturated and contaminated soil. The oil had infiltrated the soil approximately 6 inches in depth and needed to be removed, The soil was then packed into five 55 gallon containers and removed from the site at 3:45 p.m. and hauled down to NRC's facility in Mira Mesa to be repackaged and sent to Overton in Long Beach for its final resting place. I signed as generator of the waste material on the manifest the City of Carlsbad is liable for payment for the removal of the drum and the contaminated soil witho
A2SHC	12/19/2007	12/19/2007	SW8 Paint / Stucco Discharge Dumping paint into storm drain Report of Dumping to the Storm Drain	12/26/2007 3:38:52PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Written Warning Issued along with BMPS
AUVMR	1/14/2008	1/14/2008	SW8 Paint / Stucco Discharge Paint in gutter from up the hill Report of Dumping to the Storm Drain	3/3/2008 8:41:44AM - James Wood Status Change Previous: Pending New: Closed Reason: Written Warning
35M5W	1/23/2008	1/23/2008	SW22 Dumping - Non-hazardous Materials trash in parkin area. Storm drain dirty, odor. Report of Dumping to the Storm Drain	3/26/2008 9:21:43AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
3EN9G	2/1/2008	2/1/2008	SW12 Fire Suppresion System Water discharge to parking lot, undetermined source Report of Dumping to the Storm Drain	2/1/2008 9:50:48AM - AllenHartman Status Change Previous: Open New: Closed Reason: Verbal Notice Spoke with contractor and required him to route remainder of water to landscaped area. Educated him on the potential impacts of the discharge.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
3ENSK	2/1/2008	2/1/2008	SW28 Miscellaneous Incidents Pool construction company discharging water and sediment to storm drain. Report of Dumping to the Storm Drain	2/1/2008 5:12:35PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Verbal Notice Re-inspected at 16:30 on 2/1/08, site cleaned up, BMPs implemented.
3EU98	2/1/2008	2/1/2008	SW8 Paint / Stucco Discharge Code Enforcement reported that paint is being dumped into the storm drain near the creek at [redacted] Report of Dumping to the Storm Drain	2/4/2008 9:57:44AM - Tim Murphy Status Change Previous: Open New: Closed Reason: Referred for Action to Different RFA (RFAA-7BET6X)
3L2AZ	2/6/2008	2/6/2008	SW8 Paint / Stucco Discharge Dumping paint into storm drain Report of Dumping to the Storm Drain	2/11/2008 8:12:00AM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice Street and gutter cleaned by RP.
3QUTB	2/11/2008	2/11/2008	SW27 Allowable Discharge Foamy material coming from french drain/landscape drain to street Report of Dumping to the Storm Drain	2/12/2008 12:22:27PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Ground water is coming from the drain.
3YQDK	2/19/2008	2/19/2008	SW21 Dumping - Hazardous Materials SW2 Equipment Cleaning Bleach smell coming from storm drain Report of Dumping to the Storm Drain	3/21/2008 3:20:04PM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter
C7PLM	2/26/2008	2/26/2008	SW11 Pool / Spa / Fountain Discharge Discharging pool water to the street Report of Dumping to the Storm Drain	2/27/2008 10:07:17AM - James Wood Status Change Previous: Open New: Closed Reason: Written Warning
C82TC	2/26/2008	2/26/2008	SW9 Tracking Soil Report of concrete work going into the street Report of Dumping to the Storm Drain	3/13/2008 3:17:47PM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
CDTQQ	3/3/2008	3/3/2008	SW11 Pool / Spa / Fountain Discharge The ponds at [redacted]k are being drained into the street. This has occurred over the last 3-4 days and there is concern about the quality of the water, as well as a possibility of fish being dumped out into the street, ultimately to the storm drains. The called suggests that it be looked into today. Report of Washing to the Storm Drain Report of Dumping to the Storm Drain	3/4/2008 10:32:33AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Verbal Notice Shawnetta and Tim Murphy conducted a site visit on 03-02-08 at 2:45pm. They spoke with the property manager who stated that several ponds onsite were currently being drained and retrofitted. At the time of the site visit, the ponds were not being drained. Shawnetta provided BMP information and stated that the remaining water would need to be discharged to the sewer with the permission of the EWA.
CEN8T	3/4/2008	3/4/2008	SW11 Pool / Spa / Fountain Discharge Emptying pool water into street Report of Washing to the Storm Drain Report of Dumping to the Storm Drain	3/10/2008 5:13:09PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter sent to PM for [redacted]
CEN8T	3/4/2008	3/4/2008	SW11 Pool / Spa / Fountain Discharge Emptying pool water into street Report of Washing to the Storm Drain Report of Dumping to the Storm Drain	3/13/2008 1:19:58PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Changed Type
CEQPA	3/4/2008	3/4/2008	SW29 Complaint Not Found washing carpets with machine and dumping water into street Report of Dumping to the Storm Drain	3/5/2008 3:32:01PM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
CGUQL	3/6/2008	3/6/2008	SW11 Pool / Spa / Fountain Discharge Draining pool into street Report of Dumping to the Storm Drain	3/10/2008 4:42:58PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
D5S5V	3/27/2008	3/27/2008	SW18 Vehicle Repair 2 small business - Need to be educated on updated practices. They are rinsing cars, sidewalk and shade enclosure. Report of Dumping to the Storm Drain	3/28/2008 8:31:08AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus. Will follow up through inspection program.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
DAMC6	4/1/2008	4/1/2008	SW21 Dumping - Hazardous Materials Report of Dumping to the Storm Drain	4/24/2008 4:46:19PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Informational Letter and Educational information distributed. Unable to identify RP. Case referred to CPD for further investigation. Will re-open if new information becomes available.
DBM6Y	4/2/2008	4/2/2008	SW11 Pool / Spa / Fountain Discharge pool with chlorine had been emptied on 4/1/08. It is empty now. Resident needs education materials. Report of Dumping to the Storm Drain	4/3/2008 2:09:31PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Informational Letter
DBRNQ	4/2/2008	4/2/2008	SW17 Vehicle and equipment leaking Report of Dumping to the Storm Drain	4/2/2008 3:00:56PM - James Wood Status Change Previous: Open New: Closed Reason: Referred for Action - to SD Maintenance Crew. No discharge to Storm Drain.
DGV8M	4/7/2008	4/7/2008	SW11 Pool / Spa / Fountain Discharge with solids deposited to gutter Swimming pool drained a week ago. White residue in gutter. Please clean. Report of Dumping to the Storm Drain	4/28/2008 5:13:28PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Notice of Violation
DGV8M	4/7/2008	4/7/2008	SW11 Pool / Spa / Fountain Discharge with solids deposited to gutter Swimming pool drained a week ago. White residue in gutter. Please clean. Report of Dumping to the Storm Drain	5/9/2008 8:09:53AM - Tim Murphy Status Change Previous: Open New: Closed Reason: changed issue tipe to dumping to storm drain
DRTJZ	4/16/2008	4/16/2008	SW13 Dewatering Rusty colored dried material in the gutter and in Encina Creek. Report of Dumping to the Storm Drain	5/6/2008 3:25:49PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Notice of Violation Issued to [redacted] for the discharge. Referred incident to [redacted] at the San Diego Regional Water Quality Control Board for concerns regarding vault discharge permit.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
DTKV5	4/18/2008	4/18/2008	SW28 Miscellaneous Incidents Foam in ditch near shopping center. Report of Dumping to the Storm Drain	4/18/2008 8:45:28AM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter
DXQAN	4/22/2008	4/22/2008	SW7 Cement Discharge Dumping paint to the storm drain Report of Dumping to the Storm Drain	4/22/2008 4:48:57PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
E2N9T	4/25/2008	4/25/2008	SW28 Miscellaneous Incidents Mobil washer dumping in street - lifted manhole cover (sewer). Water from pressure washing diverted into sewer cleanout in street.	4/25/2008 2:20:25PM - Tim Murphy Status Change Previous: Open New: Closed Reason: No issue / No violation
E5NFX	4/28/2008	4/28/2008	SW11 Pool / Spa / Fountain Discharge Report of Dumping to the Storm Drain Reported after the fact.	4/28/2008 4:52:59PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
ECQSW	5/5/2008	5/5/2008	SW13 Dewatering [redacted] pumping from vaults directly to Agua Hedionda Creek Report of Dumping to the Storm Drain	5/5/2008 1:07:05PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: No issue / No violation. Dewatering done as required by the discharge permit.
EDLS7	5/6/2008	5/6/2008	SW1 Surface Cleaning Carpet cleaners dumping wash water down storm drain Report of Dumping to the Storm Drain	5/6/2008 12:31:08PM - James Wood Status Change Previous: Open New: Closed Reason: Notice of Violation
EFP93	5/8/2008	5/8/2008	SW13 Dewatering - storm water collection vault Sump pump pumping excessive amount of water to the adjacent railroad tracks Report of Dumping to the Storm Drain	5/12/2008 8:59:13AM - James Wood Status Change Previous: Pending New: Closed Reason: No issue / No violation

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
EFT2X	5/8/2008	5/8/2008	SW27 Allowable Discharge Strange white liquid coming from pvc outfall near walk trail; appeared to be from sub-drain, likely groundwater Report of Dumping to the Storm Drain	5/8/2008 6:18:23PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Most likely groundwater discharge. No other sources nearby, no access to sub drainage system. Sub drains designed to dewater hillside to prevent movement. Reclaimed irrigation likely contributing to mineral content in the discharge.
ELLMH	5/13/2008	5/13/2008	SW17 Vehicle and equipment leaking Report of Dumping to the Storm Drain	5/13/2008 3:45:55PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Informational Letter
ENNBV	5/15/2008	5/15/2008	SW5 Grey Water Discharge Washing dog inside van and dumping water through sink drain on to street - white van Report of Dumping to the Storm Drain	5/23/2008 9:32:10AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
EUNM5	5/21/2008	5/21/2008	SW13 Dewatering [redacted] vault with sump pump - messy water comes out Report of Dumping to the Storm Drain	5/21/2008 4:11:19PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Permitted groundwater discharge. Water appears clean and clear.
F2LLZ	5/27/2008	5/27/2008	SW8 Paint / Stucco Discharge Per e-mail, someone poured concrete on 5-25 and left a mess in front of above address Report of Dumping to the Storm Drain	6/5/2008 9:58:39AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
F9LDB	6/3/2008	6/3/2008	SW4 Carpet Cleaning Discharge Carpet cleaner dumped their dirty woater into the storm drain on 5-31-08. Report of Dumping to the Storm Drain	7/3/2008 1:46:05PM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain				
FCMMD	6/6/2008	6/6/2008	SW28 Miscellaneous Incidents Open 55 gallon drum - no lid - with grease from restaurant sitting by dumpster in back. Does not belong to restaurant, left there Illegally Report of Dumping to the Storm Drain	6/6/2008 11:43:47AM - Tim Murphy Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
FGPGR	6/10/2008	6/10/2008	SW23 RV Waste Discharge Vehicle dropped plastic barrel with green liquid that smells and has run down the storm drain. Report of Dumping to the Storm Drain	6/11/2008 8:57:25AM - James Wood Status Change Previous: Open New: Closed Reason: Referred for Action - site cleaned by Fire and Streets dept. No RP found.
FQK4K	6/18/2008	6/18/2008	SW17 Vehicle and equipment leaking Report of Dumping to the Storm Drain	6/25/2008 2:20:11PM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter - and vehicle no longer parked on street.
FWK8G	6/24/2008	6/24/2008	SW20 Oil & Grease Discharge - Food Facility Report of Dumping to the Storm Drain	6/25/2008 2:08:45PM - James Wood Status Change Previous: Open New: Closed Reason: See RFA-753MT9
FXQN5	6/25/2008	6/25/2008	SW10 Landscape Material Dumping At 11:54 a.m., 6/25 - [redacted] reported that the neighbor's gardner (1 house north of him) in dumping into the storm drain at [redacted] The gardner is hosing off the lawnmower and the catch basin directly into the storm drain. When [redacted] mentioned it to him, he was very rude. The gardners trucks have no markings on them. Report of Dumping to the Storm Drain	7/16/2008 4:36:30PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
Storm Drain-Erosion from Existing Development				

Storm Drain-Erosion from Existing Development

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
9FQ6H	11/30/2007	11/30/2007	Drainage easment w/pipe between these two addresses. Pipe drains water from La Costa down to a concrete drainage ditch next to the golf course. Water shooting out the pipe and missing the concrete ditch. Hitting opposite bank and causing some erosion. Erosion from existing development, not new construction. 12/05/2007 - Field visit Sherri Howard and Nick Roque. No visible erosion. Streets division will extend existing 18" CMP into brow ditch to prevent possible future erosion.	12/12/2007 5:13:11PM - Shea Sainz Status Change Previous: Pending New: Closed Reason: Per Nick Roque: No evidence of erosion. No action taken at this time.
9FV2D	11/30/2007	11/30/2007	SW9 Tracking Soil Dirt coming off of [redacted] Ridgecrest Dr and pooling at [redacted] Ridgecrest Dr Erosion from existing development, not new construction.	1/14/2008 9:28:34AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Verbal Notice. Spoke to property owner and conducted site visit. BMPs were put in place on Jan. 11.
ANS46	1/8/2008	1/8/2008	SW9 Tracking Soil Mud coming from lot into street and storm drain..no bmps in place..grower Erosion from existing development, not new construction.	3/21/2008 3:23:10PM - James Wood Status Change Previous: Pending New: Closed Reason: Written Warning
APNXD	1/9/2008	1/9/2008	Concerned about standing water on construction site. Erosion from existing development, not new construction.	1/9/2008 9:55:36AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: [redacted] visited site and found no threat of erosion.. [redacted] visited residents and alleviated their concerns.
3ERTK	2/1/2008	2/1/2008	SW28 Miscellaneous Incidents Sediment discharged from [redacted] Streets deposited on James Drive and Sandalwood Lane Erosion from existing development, not new construction.	2/1/2008 12:29:46PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Appeared that some sediment had been discharged from [redacted] along Valley Street. Upon inspection, sediment had been cleaned up along Basswood, James, and Sandalwood. Some straw waddle and gravel bags were in place near area of suspected discharge.

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Erosion from Existing Development				
3K2JR	2/5/2008	2/5/2008	SW9 Tracking Soil Lot owned by [redacted], dirt being tracked off site to storm drain. BMPs need maintenance. Erosion from existing development, not new construction.	2/29/2008 9:16:48AM - AllenHartman Status Change Previous: Pending New: Closed Reason: Referred for Action Referred to [redacted] for action as this is their property and not under the City's jurisdiction.
CEPKY	3/4/2008	3/4/2008	SW28 Miscellaneous Incidents Erosion from hillside Erosion from existing development, not new construction.	4/16/2008 8:43:58AM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
F9R42	6/3/2008	6/3/2008	Ground slipping away towards Hillside Dr. Soaked earth. Erosion from existing development, not new construction.	6/11/2008 12:41:20PM - Michael Fairbanks Status Change Previous: Pending New: Closed Reason: Ground water.
FZMQG	6/27/2008	6/27/2008	SW28 Miscellaneous Incidents Erosion from hillside bringing dirt into street. Broken pipe? Erosion from existing development, not new construction.	7/2/2008 9:01:34AM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
Storm Drain-Labels or Stencils				
5ZVRZ	9/13/2007	9/13/2007	Requesting storm drain stencil General Information re: Storm Drain labels or stencils.	10/3/2007 11:44:51AM - Wayne Hoffer Status Change Previous: Pending New: Closed Reason: Stencil returned 10-3-07.
Storm Drain-Needs Cleaning - Private Property				
5SN47	9/6/2007	9/6/2007	SW28 Miscellaneous Incidents Complaining that the storm drains on her street are having trash thrown into them. Wants them cleaned and neighborhood informed of Storm Water issues. Request for storm drain cleaning - private property. What is the address / location: Is there flooding in the area?: (yes) (no)	9/25/2007 4:49:21PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: No issue / No violation. Left two messages for the complainant with no return call. Will reopen if additional information becomes available.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Vehicles Leaking Oil/Fluids

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
4RVKC	7/3/2007	7/3/2007	Report of leaking oil or fluids Airplane crash with potential to discharge fluids/fuel to MS4.	7/3/2007 4:46:13PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation No discharge to the MS4
4ZTQE	7/11/2007	7/11/2007	SW26 Accidental Spill Kitty litter being spread in street. Report of leaking oil or fluids	7/11/2007 2:59:45PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Litter was used as absorbant to clean up small oil spill from WM truck.No issue / No violation
5SMW2	9/6/2007	9/6/2007	SW29 Complaint Not Found Cars parked in street for long periods of time - PD can't do anything - leaking oil Report of leaking oil or fluids	9/17/2007 2:24:31PM - James Wood Status Change Previous: Pending New: Closed Reason: No issue / No violation
5ZMWQ	9/13/2007	9/13/2007	Truck delivering dirt to project had an oil line blowout on 9/12/07. They just put down dirt. Report of leaking oil or fluids	9/13/2007 10:03:15AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: [redacted] will handle and get cleaned up properly.
7KMS8	10/1/2007	10/1/2007	SW17 Vehicle and equipment leaking Truck leaking diesel fuel. Did not reach the storm drain. Called in at 9:27 am. Report of leaking oil or fluids	1/9/2008 2:12:12PM - James Wood Status Change Previous: Pending New: Closed Reason: Notice of Violation - will reopen if chargeback is filed.
7MSMW	10/3/2007	10/3/2007	SW21 Dumping - Hazardous Materials Oil in gutter Report of leaking oil or fluids	10/9/2007 11:50:33AM - James Wood Status Change Previous: Pending New: Closed Reason: No issue / No violation. RP unknown and no discharge to MS4.
7MSMW	10/3/2007	10/3/2007	SW21 Dumping - Hazardous Materials Oil in gutter Report of leaking oil or fluids	10/15/2007 8:37:24AM - James Wood Status Change Previous: Pending New: Closed Reason: Referred for Action - oil removed and area cleaned by Chris Thomas.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Vehicles Leaking Oil/Fluids

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
3NM8S	11/5/2007	11/5/2007	Car damaged oil pan in parking lot of [redacted] and lost oil to parking lot and storm drain Report of leaking oil or fluids	11/5/2007 8:27:13AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Parking lot and storm drain being cleaned.
9FUF6	11/30/2007	11/30/2007	SW29 Complaint Not Found Car parked in driveway leaking oil - oil running into gutter and storm drain. Greasy sheen on the water as it mixes with the rain water. Report of leaking oil or fluids	12/10/2007 3:29:37PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Complaint Not Found Conducted three site visits and did not observe the vehicle parked on site or any fresh oil stains. Will reopen if new information becomes available.
AVUZS	1/15/2008	1/15/2008	SW17 Vehicle and equipment leaking Diesel fuel spill. Report of leaking oil or fluids	1/17/2008 11:13:51AM - James Wood Status Change Previous: Open New: Closed Reason: Referred for Action - SD County Haz Mat
3CLGF	1/30/2008	1/30/2008	SW17 Vehicle and equipment leaking Report of leaking oil or fluids	1/30/2008 7:50:25AM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
3JQGH	2/5/2008	2/5/2008	SW17 Vehicle and equipment leaking White [redacted] leaking oil on street at above addres Report of leaking oil or fluids	2/13/2008 11:58:41AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Complaint Not Found
3KV4F	2/6/2008	2/6/2008	SW17 Vehicle and equipment leaking VEhicle leaking oil i street - [redacted] Report of leaking oil or fluids	2/15/2008 5:09:34PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Notice of Violation Issued to vehicle owner. Upon follow up inspections on three occassions, the vehicle was not present in the area.
3YRR4	2/19/2008	2/19/2008	SW17 Vehicle and equipment leaking [redacted] leaking oil in street at above address Report of leaking oil or fluids	2/26/2008 9:03:37AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Complaint Not Found

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Vehicles Leaking Oil/Fluids

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
DGKXW	4/7/2008	4/7/2008	SW17 Vehicle and equipment leaking RV parked on street leaking hydraulic fluid and gasoline Report of leaking oil or fluids	4/7/2008 9:30:27AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Verbal Notice. Tim Murphy and Shawnetta conducted a site visit and found that a small amount of vehicle fluid had leaked onto the street from the subject RV [redacted]. Streets department had already responded and put absorbants down. At no time did the fluid have the potential to reach the SD which is located approximately 500 feet to the north. Storm drain maintenance arrived and checked the street for other fresh leaks and provided remediation as needed. Shawnetta provided BMP information to the RP. PD ticketed the RP and required them to move the RV off the street.
F3L9K	5/28/2008	5/28/2008	SW17 Vehicle and equipment leaking Continuous parking of vehicles on [redacted] and [redacted] results in oil spills, fluids and battery acids dropping onto the road and washing into storm drains. See attachment. Report of leaking oil or fluids	7/7/2008 8:32:55AM - AllenHartman Status Change Previous: Pending New: Closed Reason: Informational Letters sent to 151 residents in area. Also information sent specifically to owners of vehicles present during first inspection. Fewer vehicles have been present on the streets and none have been observed leaking upon follow-up inspections.
F4U88	5/29/2008	5/29/2008	SW17 Vehicle and equipment leaking Oil in street from vehicle parking there and from motorcycle oil on newpapers Report of leaking oil or fluids	6/2/2008 2:07:56PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
F5RJY	5/30/2008	5/30/2008	SW17 Vehicle and equipment leaking Car leaking oil on street - [redacted] - green w/white roof Report of leaking oil or fluids	6/9/2008 11:06:52AM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
F5RMS	5/30/2008	5/30/2008	SW17 Vehicle and equipment leaking Car leaking oil in street - [redacted] Report of leaking oil or fluids	6/9/2008 11:09:06AM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Vehicles Leaking Oil/Fluids				
F8QBL	6/2/2008	6/2/2008	SW17 Vehicle and equipment leaking Engine block in driveway leaking fluids Report of leaking oil or fluids	6/2/2008 4:26:20PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Verbal Notice
F8QDJ	6/2/2008	6/2/2008	SW17 Vehicle and equipment leaking [redacted] leaking fluids in street Report of leaking oil or fluids	6/10/2008 5:15:03PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
FAUXA	6/4/2008	6/4/2008	SW28 Miscellaneous Incidents Report of leaking oil or fluids Resident had spilled 12-15 gallons of biodiesel in back yard and it had flowed to front yard. Did not reach the street or storm drain.	6/4/2008 4:44:42PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Verbal Notice
FQS9Q	6/18/2008	6/18/2008	SW17 Vehicle and equipment leaking Report of leaking oil or fluids [redacted] Leaking fluids while parked in front of [redacted]	6/18/2008 1:57:07PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Verbal Notice
Storm Drain-Washing to Storm Drain				
4UNK7	7/6/2007	7/6/2007	SW1 Surface Cleaning SW1 Surface Cleaning Washing sidewalk down with hose this morning (7-6-07). Report of Washing to the Storm Drain	7/9/2007 3:29:21PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
4UNK7	7/6/2007	7/6/2007	SW1 Surface Cleaning SW1 Surface Cleaning Washing sidewalk down with hose this morning (7-6-07). Report of Washing to the Storm Drain	9/5/2007 11:25:42AM - James Wood Status Change Previous: Pending New: Closed Reason: Notice of Violation
4XTNR	7/9/2007	7/9/2007	SW15 Water Line Break Water rushing through storm drain in parking lot - coming from ? Report of Washing to the Storm Drain	7/9/2007 3:15:49PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Private water line break, source located and flows abated upon response.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
4YL9P	7/10/2007	7/10/2007	SW1 Surface Cleaning Power washing red tile roof - red water running down street Report of Washing to the Storm Drain	7/11/2007 5:12:22PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
4YLBV	7/10/2007	7/10/2007	SW29 Complaint Not Found Washing down [redacted]s parking lot into alley mornings around 6:00 AM Report of Washing to the Storm Drain	7/12/2007 8:55:33AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: No issue / No violation [redacted] is private property. Checked with Code Enforcement - not an issue they deal with. Water does not run to Storm Drain. Advised caller to speak with property owner with concerns.
59NJL	7/19/2007	7/19/2007	SW27 Allowable Discharge Mobile home fire. Fire Dept. captured contaminated water and wants Storm Water to respond. Report of Washing to the Storm Drain	7/19/2007 6:01:51PM - AllenHartman Status Change Previous: Open New: Closed Reason: Referred for Action Referred to CD and crew for cleanup.
5ESNK	7/24/2007	7/24/2007	SW29 Complaint Not Found Anonymous person called and left message on 7/7 at 10 AM that there was a tremendous amount of sudsy water with fertilizer coming from the property at [redacted] The caller left the homeowner a note at the address. Report of Washing to the Storm Drain	7/27/2007 1:28:02PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
5HSDQ	7/27/2007	7/27/2007	SW6 Saw Cutting Slurry Mixing materials in street and letting them go down the storm drain. Report of Washing to the Storm Drain	7/27/2007 3:20:23PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
5TMHH	8/6/2007	8/6/2007	SW3 Vehicle Washing Washing car in street Report of Washing to the Storm Drain	8/7/2007 8:12:27AM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
5TMNG	8/6/2007	8/6/2007	SW1 Surface Cleaning Power washing garage doors Report of Washing to the Storm Drain	8/7/2007 2:52:17PM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter
5TPPP	8/6/2007	8/6/2007	SW3 Vehicle Washing Mobile washer washing cars in street Monday, Wednesday or Friday between 12:00 and 1:30 Report of Washing to the Storm Drain	8/15/2007 2:24:35PM - James Wood Status Change Previous: Pending New: Closed Reason: Complaint Not Found
5UTNG	8/7/2007	8/7/2007	SW25 Illicit Connection Soapy water flowing out from under the bank at the bottom of the slope at above address in Oceanside and flowing into Carlsbad (Calavera) Report of Washing to the Storm Drain	8/16/2007 3:36:10PM - James Wood Status Change Previous: Pending New: Closed Reason: Referred for Action to City of Oceanside.
5VKUB	8/8/2007	8/8/2007	SW19 Dumpster Discharge Black murky substance coming from their trash bin washout area near the NE corner of the building going into the storm drain Report of Washing to the Storm Drain	8/13/2007 9:15:59AM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
5WU7K	8/9/2007	8/9/2007	SW29 Complaint Not Found Signs of washing trash bins and water running across lot by drive through - stagnant, smelly water in landscaping. Report of Washing to the Storm Drain	8/15/2007 2:28:27PM - James Wood Status Change Previous: Pending New: Closed Reason: Complaint Not Found
52MR7	8/13/2007	8/13/2007	SW1 Surface Cleaning Washing parking lot to street Report of Washing to the Storm Drain	8/13/2007 1:55:30PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
53MRJ	8/14/2007	8/14/2007	SW6 Saw Cutting Slurry (8/27/08) SW10 Landscape Material Dumping (8/14/08) Dirt in gutter that was washed from up the street Report of Washing to the Storm Drain	8/23/2007 10:07:25AM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter
54SAL	8/15/2007	8/15/2007	SW1 Surface Cleaning Report of Washing to the Storm Drain Hosing out dumpster area to storm drain.	8/16/2007 10:39:26AM - James Wood Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
54SAL	8/15/2007	8/15/2007	SW1 Surface Cleaning Report of Washing to the Storm Drain Hosing out dumpster area to storm drain.	9/17/2007 2:30:16PM - James Wood Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
54T5D	8/15/2007	8/15/2007	SW22 Dumping - Non-hazardous Materials Small, unusual release of water from a sump pump next to the road (water went into the street) this morning. It appeared that there was a wash area (mops and buckets) near the other end of the curb drain. There is a dental office in the building. Photos attached. Report of Washing to the Storm Drain	8/17/2007 3:44:37PM - AllenHartman Status Change Previous: Open New: Closed Reason: Informational Letter Letters and education info sent to all businesses in building and to the property manager of shopping center.
5BQCF	8/22/2007	8/22/2007	SW26 Accidental Spill Washing tile residue to storm drain Report of Washing to the Storm Drain	8/23/2007 10:54:35AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Site cleaned up.Verbal Notice
5CNWY	8/23/2007	8/23/2007	SW15 Water Line Break Water or ? bubbling up out of drain in parking lot at space [redacted] Report of Washing to the Storm Drain	8/23/2007 2:07:45PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: M&O are fixing the problem.
5CRCX	8/23/2007	8/23/2007	SW3 Vehicle Washing Washing cars in parking lot. BMPs? Report of Washing to the Storm Drain	8/23/2007 1:54:42PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
5HUVE	8/28/2007	8/28/2007	SW6 Saw Cutting Slurry [redacted] company materials in street - water going down storm drain Report of Washing to the Storm Drain	9/11/2007 4:35:12PM - James Wood Status Change Previous: Pending New: Closed Reason: Complaint Not Found
5KKLL	8/30/2007	8/30/2007	SW3 Vehicle Washing Mobile washing on street Report of Washing to the Storm Drain	8/30/2007 10:23:55AM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
5LMNU	8/31/2007	8/31/2007	SW3 Vehicle Washing Mobile washer in parking lot of condos at above intersection letting water run to storm drain Report of Washing to the Storm Drain	8/31/2007 3:49:33PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: No issue / No violation. Conducted site visit and no water was discharged to SD. Wash mat and BMPs implemented. Additional BMP information provided.
5LPZG	8/31/2007	8/31/2007	SW22 Dumping - Non-hazardous Materials Washed pool filter to storm gutter - running in front of [redacted] Report of Washing to the Storm Drain	8/31/2007 3:43:11PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Referred for Action. Conducted a site visit and found a white sandy residue which appeared to be sprinkled into the gutter line. It could not be determined where the material originated. Street sweeper called out and street swept, material removed.
5LPZG	8/31/2007	8/31/2007	SW22 Dumping - Non-hazardous Materials Washed pool filter to storm gutter - running in front of [redacted]. Report of Washing to the Storm Drain	1/28/2008 10:03:50AM - James Wood Status Change Previous: Pending New: Closed Reason: Written Warning
5LT67	8/31/2007	8/31/2007	SW29 Complaint Not Found Mobile washer Report of Washing to the Storm Drain	8/31/2007 3:39:53PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: No issue / No violation. Conducted site visit and found that BMPs had been implemented and no water was discharged to the storm drain. Provided BMPs and info about SW program.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
5QLQ8	9/4/2007	9/4/2007	SW27 Allowable Discharge Motorhome fire in street Report of Washing to the Storm Drain	9/4/2007 5:59:03PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation BMPs implemented to the [redacted] given the emergency situation. Cleanup performed properly with all water recovered.
5RN52	9/5/2007	9/5/2007	SW1 Surface Cleaning [redacted] washing down sidewalks in front of [redacted] without BMPs Report of Washing to the Storm Drain	9/24/2007 9:58:51AM - AllenHartman Status Change Previous: Pending New: Closed Reason: Verbal Notice Spoke with [redacted] and discussed her storm water management plan and the complaint received regarding power washing. She will follow up with appropriate individuals within [redacted] and remedy the situation.
5YTJK	9/12/2007	9/12/2007	SW1 Surface Cleaning Construction site washing down pavement? into gutters with soil, etc. Report of Washing to the Storm Drain	9/12/2007 2:52:50PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Referred for Action - Referred to CMI. They will handle.
5YTP3	9/12/2007	9/12/2007	9/11/07 - 4:45 PM - 2" irrigation pipe break. (Per Mike, these pipes are carrying potable water, not recycled even though they are painted purple) Report of Washing to the Storm Drain	9/12/2007 3:08:16PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Referred for Action - Referred to CMI
5ZMHG	9/13/2007	9/13/2007	Every Thursday morning - runoff from Dept of Animal Control property. Report of Washing to the Storm Drain	9/18/2007 11:10:38AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus.
7EP46	9/26/2007	9/26/2007	SW3 Vehicle Washing Water running in street for last 24 hours Report of Washing to the Storm Drain	10/2/2007 12:04:54PM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain				
7GUJZ	9/28/2007	9/28/2007	SW7 Cement Discharge Hosing concrete release (powder) to storm drain Report of Washing to the Storm Drain	10/4/2007 2:34:18PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Notice of Violation NOV issued to homeowner for illegal discharge and for lack of BMPs in side yard.
7KQ5K	10/1/2007	10/1/2007	SW29 Complaint Not Found [redacted] has high water in creek off the lagoon trail" Report of Washing to the Storm Drain	10/9/2007 10:12:03AM - AllenHartman Status Change Previous: Pending New: Closed Reason: No issue / No violation Nothing found at location. Groundwater suspected in the area.
7PVNQ	10/5/2007	10/5/2007	SW7 Cement Discharge Washing concrete to the storm drain 10-5-07 pm Report of Washing to the Storm Drain	10/26/2007 10:14:43AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Informational Letter and BMPs sent
7WM35	10/12/2007	10/12/2007	SW10 Landscape Material Dumping Washing yard waste to storm drain on 10-11-07 Report of Washing to the Storm Drain	11/15/2007 2:07:24PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Information letter and BMPs sent. Informational Letter
32UPK	10/16/2007	10/16/2007	SW8 Paint / Stucco Discharge something tan washed to storm drain Report of Washing to the Storm Drain	10/18/2007 4:46:07PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
34S7S	10/18/2007	10/18/2007	Water constnatly running in gutter from neichbor. Algae growing in gutter. City has come out and cleaned in the past. Report of Washing to the Storm Drain	10/29/2007 11:13:16AM - Shea Sainz Status Change Previous: Open New: Closed Reason: Per Nick Roque, Streets Division will check site and steam clean if necessary.
3YMVU	11/15/2007	11/15/2007	SW1 Surface Cleaning Hosing sidewalk debris to storm drain Report of Washing to the Storm Drain	11/15/2007 2:02:18PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
3YU6Y	11/15/2007	11/15/2007	SW22 Dumping - Non-hazardous Materials Discharge of water at [redacted] at 10:25 AM on 11-15-07. Report of Washing to the Storm Drain	11/15/2007 2:50:13PM - AllenHartman Status Change Previous: Open New: Closed Reason: Verbal Notice
9BP4W	11/26/2007	11/26/2007	SW29 Complaint Not Found Pool overflow line coming down street and running across the sidewalk - continually flowing. Report of Washing to the Storm Drain	12/13/2007 9:06:54AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Complaint Not Found. City inspectors conducted three site visits and did not observe any water flowing across the sidewalk or to storm drain. Will reopen if new or additional information becomes available.
9JMM8	12/3/2007	12/3/2007	SW8 Paint / Stucco Discharge Report of Washing to the Storm Drain. Report that last Monday 11-26-077 neighbor at subject addres had washing popcorn cieling and paint to area drains. Becasue it rained during the weekend the material has been washed away, but there is still white debris in the street.	12/6/2007 8:14:24AM - James Wood Status Change Previous: Pending New: Closed Reason: Complaint Not Found
9JREH	12/3/2007	12/3/2007	Mobile Detail Washer Report of Washing to the Storm Drain	12/5/2007 10:35:22AM - Elaine Lukey Status Change Previous: Open New: Closed Reason: Complaint Not Found
9NMBJ	12/7/2007	12/7/2007	SW29 Complaint Not Found Dirty water flowing down to storm drain - same thing happened last week during rain. Report of Washing to the Storm Drain	12/7/2007 9:24:40AM - Tim Murphy Status Change Previous: Open New: Closed Reason: No issue / No violation Referred to CMI
9V2S8	12/13/2007	12/13/2007	SW1 Surface Cleaning Hosing down loading ramp in back of building. Report of Washing to the Storm Drain	12/18/2007 8:53:07AM - Tim Murphy Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus this is a comml high business we inspect.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
9VT7W	12/14/2007	12/14/2007	SW3 Vehicle Washing Mobile washer washing cars in street Report of Washing to the Storm Drain	12/18/2007 1:51:51PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
9ZQVJ	12/18/2007	12/18/2007	SW29 Complaint Not Found Washing off heavy equipment to storm drain. Report of Washing to the Storm Drain	12/18/2007 1:39:48PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Complaint Not Found, water found on street but nobody was washing. No evidence of soap or dirt in street.
A2VJ8	12/19/2007	12/19/2007	SW29 Complaint Not Found 3 feet of foam in Encinas Creek behind the [redacted], SE of PAR and College intersection. This was seen on 12/18/07. Report of Washing to the Storm Drain	12/20/2007 7:55:44AM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
AEPQ5	12/31/2007	12/31/2007	SW22 Dumping - Non-hazardous Materials Report of Washing to the Storm Drain Report of foul smelling water discharging from the outfall	1/2/2008 9:59:02AM - James Wood Status Change Previous: Open New: Closed Reason: Referred for Action - cleaned by Storm Drain Maintenance Crew
APQAK	1/9/2008	1/9/2008	SW9 Tracking Soil Small farmer not implementing BMPs. Dirt being tracked into the road. Report of Washing to the Storm Drain	2/12/2008 3:37:39PM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
APQEE	1/9/2008	1/9/2008	Construction site at [redacted] not implementing BMPs during dewatering. Report of Washing to the Storm Drain	1/14/2008 3:26:15PM - Dale Willis Status Change Previous: Open New: Closed Reason: Per request of Inspector Casey Arndt. DW
ARPWW	1/11/2008	1/11/2008	SW9 Tracking Soil Mud tracking from [redacted] on Cannon Court - No active Permits. Report of Washing to the Storm Drain	1/23/2008 9:01:23AM - James Wood Status Change Previous: Pending New: Closed Reason: Referred for Action - [redacted] completed cleanup and installed BMPs

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
AURBG	1/14/2008	1/14/2008	SW3 Vehicle Washing, no discharge to storm drain. Effective BMP's Mobil Washer in parking lot no bmps Report of Washing to the Storm Drain	1/14/2008 2:20:18PM - Tim Murphy Status Change Previous: Open New: Closed Reason: No issue / No violation. Water not entering storm drain. BMPs in place.
3ET6X	2/1/2008	2/1/2008	SW8 Paint / Stucco Discharge Code Enforcement reports that paint is being washed into the storm drain near the creek area at [redacted] Pink paint coming out of Storm Drain at the [redacted] maintenance area off [redacted] Traveled 30 feet downstream in drainage channel. Did not reach San Marcos Creek. Report of Dumping to the Storm Drain Report of Washing to the Storm Drain	2/5/2008 2:56:45PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Notice of Violation
3ET6X	2/1/2008	2/1/2008	SW8 Paint / Stucco Discharge Code Enforcement reports that paint is being washed into the storm drain near the creek area at [redacted]. Pink paint coming out of Storm Drain at the [redacted]rt maintenance area off [redacted] Traveled 30 feet downstream in drainage channel. Did not reach San Marcos Creek. Report of Dumping to the Storm Drain Report of Washing to the Storm Drain	2/27/2008 10:13:42AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Notice of Violation. Issued on February 1. RFA updated on 02/27/08
3RLUN	2/12/2008	2/12/2008	SW3 Vehicle Washing Mobile washer washing car in street Report of Washing to the Storm Drain	2/13/2008 1:35:03PM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
3RLUN	2/12/2008	2/12/2008	SW3 Vehicle Washing Mobile washer washing car in street Report of Washing to the Storm Drain	2/26/2008 8:59:40AM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
3RN4W	2/12/2008	2/12/2008	SW3 Vehicle Washing Washing trucks in the parking lot for last three days Report of Washing to the Storm Drain	2/13/2008 4:58:54PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Notice of Violation to [redacted]

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
3YQHR	2/19/2008	2/19/2008	SW6 Saw Cutting Slurry Tile cutter washed red residue down stormdrain Report of Washing to the Storm Drain	2/19/2008 5:01:15PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Verbal Notice
C6TSB	2/25/2008	2/25/2008	SW3 Vehicle Washing [redacted]uttles lined up in street and being washed. Report of Washing to the Storm Drain	2/27/2008 9:22:59AM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter
C7NB2	2/26/2008	2/26/2008	SW29 Complaint Not Found Washing cars in pprivate parking lot. BMPs were in place, not washing into storm drain. Report of Washing to the Storm Drain	2/26/2008 10:55:05AM - Tim Murphy Status Change Previous: Open New: Closed Reason: No issue / No violation
C8R37	2/27/2008	2/27/2008	SW29 Complaint Not Found At about 4:30 every morning there is water coming from the pool. It leaves a residue in the gutter on its way to the Storm Drain. Report of Washing to the Storm Drain	3/10/2008 4:30:45PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter To home owner at [redacted]
CDUVD	3/3/2008	3/3/2008	SW28 Miscellaneous Incidents - Erosion Control Report of Washing to the Storm Drain	3/24/2008 10:05:00AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Referred for Action. 03-21-08 Spoke to [redacted]. [redacted]tated that he had requested the contractor to improve the BMPs along El Camino Real at [redacted] The primary improvements were completed the week of March 17. [redacted] conducted an inpsection of the SD under ECR and did not find any materials in the drain. I also spoke to [redacted] and imformed her of the BMP maintenance activities. In addtion, I also told her that the source of the erosion was most probably from the agriculural area above her property and the deterioration of the earthen channel on her property. She was provided with BMP information and she stated that she would be hiring a contratcor to reinforce the slope and the channel to prevent dfurther erosion. Will reopen if new complaint is filed or new information becomes available.

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain				
CHLZR	3/7/2008	3/7/2008	SW28 Miscellaneous Incidents Concern over possible contamination of vernal pools	3/11/2008 2:29:57PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation No evidence of pollution in the vernal pool, determined to be natural decomposition.
CNMY5	3/12/2008	3/12/2008	SW28 Miscellaneous Incidents A patch of what looks like contaminated water southeast of the lake where the city removed some abandoned autos several years ago.	3/12/2008 5:35:18PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Discoloration of water most likely attributable to natural groundwater in the area. No other potential sources were evident upon investigation.
CPLCU	3/13/2008	3/13/2008	SW27 Allowable Discharge Washing paint to storm drain Report of Washing to the Storm Drain	3/13/2008 2:52:11PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
CUTBE	3/18/2008	3/18/2008	SW29 Complaint Not Found Yelolow substance floating down storm drain Report of Washing to the Storm Drain	3/19/2008 9:20:00AM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
D3SKQ	3/25/2008	3/25/2008	SW29 Complaint Not Found Ten to twelve open 55 gallon drums of what looks like paint. No lids ont eh barrels and if it rains they will run off into a storm drain nearby. Report of Washing to the Storm Drain	3/25/2008 3:46:17PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Complaint Not Found
D4RC3	3/26/2008	3/26/2008	SW10 Landscape Material Dumping/Washing Brown liquid running down gutter to storm drain Report of Dumping to the Storm Drain Report of Washing to the Storm Drain	3/31/2008 9:25:39AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Verbal Notice. Tim conducted a follow up site visit and found that the street had been cleaned as required.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
D4VGT	3/26/2008	3/26/2008	SW27 Allowable Discharge River of Water flowing dow Jeffersonat 3:10 PM Report of Washing to the Storm Drain Report of Washing to the Storm Drain	3/26/2008 4:42:18PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Water line flushing by water department.
DHMXT	4/8/2008	4/8/2008	SW11 Pool / Spa / Fountain Discharge Drained pool on 4/7/08 and there is a white residue in the gutter. Report of Washing to the Storm Drain	4/10/2008 8:11:27AM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter
DKPX3	4/10/2008	4/10/2008	SW27 Allowable Discharge Water running across sidewalk for some time. Strange color and oily sheen. Discharge is believed to be groundwater. Report of Washing to the Storm Drain	4/21/2008 4:29:45PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: No issue / No violation
DST29	4/17/2008	4/17/2008	SW3 Vehicle Washing Mobile detailer washing in parking lot. Report of Washing to the Storm Drain	4/17/2008 4:00:40PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
DXSEC	4/22/2008	4/22/2008	SW1 Surface Cleaning Steam cleaning all lifeguard towers and no bmp's. Report of Washing to the Storm Drain	5/5/2008 10:48:24AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
DYVXE	4/23/2008	4/23/2008	SW17 Vehicle and equipment leaking Concrete work done and debris washed into street and not cleaned up Report of Washing to the Storm Drain	4/29/2008 1:25:14PM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice - cleanup done by RP.
DZV3D	4/24/2008	4/24/2008	SW11 Pool / Spa / Fountain Discharge Pool being draind to street This happened this morning. Was reported this afternoon. Report of Washing to the Storm Drain	4/28/2008 10:55:28AM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter

This report details all closed issues for the selected department(s) that were opened during the report period.

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain				
ECKQA	5/5/2008	5/5/2008	SW8 Paint / Stucco Discharge Washing paint into a storm drain. Report of Washing to the Storm Drain	5/5/2008 8:33:14AM - James Wood Status Change Previous: Open New: Closed Reason: Written Warning
EDLKK	5/6/2008	5/6/2008	SW1 Surface Cleaning Pressure washing sidewalks,no containment Report of Washing to the Storm Drain	5/6/2008 11:02:18AM - AllenHartman Status Change Previous: Open New: Closed Reason: Verbal Notice Issued to contractor, [redacted] Informed them of stormwater requirements and let him know that we would be contacting personnel in charge of contract. Will follow up with [redacted]
EDS7W	5/6/2008	5/6/2008	Concrete residue washing to Storm Drain. Under construction permit. Report of Washing to the Storm Drain	5/6/2008 3:21:15PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Referred for Action to CM&I
EESRK	5/7/2008	5/7/2008	SW11 Pool / Spa / Fountain Discharge Pool being drained and chloine smell Report of Washing to the Storm Drain	5/7/2008 4:15:00PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
EFUAG	5/8/2008	5/8/2008	SW8 Paint / Stucco Discharge Report of Washing to the Storm Drain Report of red liquid discharging to storm drain	5/8/2008 4:14:17PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Informational Letter
EFUAG	5/8/2008	5/8/2008	SW8 Paint / Stucco Discharge Report of Washing to the Storm Drain Report of red liquid discharging to storm drain	5/8/2008 4:15:44PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Verbal Notice
EKVFW	5/12/2008	5/12/2008	SW29 Complaint Not Found Washing off driveway into street Report of Washing to the Storm Drain	5/14/2008 3:30:22PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Complaint Not Found

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
EMRKE	5/14/2008	5/14/2008	SW1 Surface Cleaning Power washing dirveway and house Report of Washing to the Storm Drain	5/16/2008 8:23:15AM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
EVTTW	5/22/2008	5/22/2008	SW29 Complaint Not Found - Washing to sewer connection. Waste area being hosed to storm drain. at 2:30 PM Report of Washing to the Storm Drain	5/22/2008 3:54:40PM - James Wood Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
F3L4R	5/28/2008	5/28/2008	Pressure washing on 5/22/08. Report of Washing to the Storm Drain	5/28/2008 4:10:14PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
F8Q2X	6/2/2008	6/2/2008	SW29 Complaint Not Found Water gushing out of storm drain since thismorning Report of Washing to the Storm Drain	6/2/2008 4:29:01PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
FBQ9Z	6/5/2008	6/5/2008	SW8 Paint / Stucco Discharge Stucco being hosed to storm drain. Report of Washing to the Storm Drain	6/5/2008 4:37:57PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Referred for Action
FBQ9Z	6/5/2008	6/5/2008	SW8 Paint / Stucco Discharge Stucco being hosed to storm drain. Report of Washing to the Storm Drain	6/12/2008 8:44:29AM - Dale Willis Status Change Previous: Open New: Closed Reason: 6/6/2008 Issue Resolved. DW
FC23N	6/5/2008	6/5/2008	SW27 Allowable Discharge Wash water enters a sump and is routed to the sewer system. Report of Washing to the Storm Drain	6/5/2008 5:08:08PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
FQKEZ	6/18/2008	6/18/2008	SW11 Pool / Spa / Fountain Discharge Report of Washing to the Storm Drain	6/18/2008 8:00:01AM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice and information left.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Water-General Information/Questions

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
3BTSP	10/25/2007	10/25/2007	Dog drinking from [redacted] and getting sick. Can he bring a water sample to the lab?	10/31/2007 8:44:49AM - AllenHartman Status Change Previous: Pending New: Closed Reason: Investigation revealed that the City is not responsible for the pond or any water entering the pond. Will follow up with the property management company and have closed the loop with the complainant.
3XU72	11/14/2007	11/14/2007	Opening new mobile detailing business. Wants information reguarding rules, regulations, and BMP's	12/4/2007 1:23:37PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Phone number is not correct. Can not contact.
ANLCV	1/8/2008	1/8/2008	[redacted] called in AM of January 7th to CIty Hall to complain about Hazardous waste runoff from vehicles being worked on at bu[redacted]esses operting on the 60 foot easement running beside [redacted] He would cite the specific businesses but said he saw radiator fluid being poured on the ground and oil being drained from a transmission onto the ground on the side of the easement road in front of these businesses. He also eluded to a long history of inaction by any enforcement agency and that a [redacted] area seemed to have control of the area and that the City wasn't doing anything. I mentioned we could have code enforcement take a look at the site and see if any violations were currently happening. I then spoke to Shawnetta who said her group will review the situation. Hazardous materials disposal.	1/8/2008 7:48:48AM - Rob Houston Status Change Previous: Open New: Closed

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Water-General Information/Questions				
ANLCV	1/8/2008	1/8/2008	[redacted] in AM of January 7th to CIty Hall to complain about Hazardous waste runoff from vehicles being worked on at businesses operting on the 60 foot easement running beside [redacted]. He would cite the specific businesses but said he saw radiator fluid being poured on the ground and oil being drained from a transmission onto the ground on the side of the easement road in front of these businesses. He also eluded to a long history of inaction by any enforcement agency and that a [redacted] area seemed to have control of the area and that the City wasn't doing anything. I mentioned we could have code enforcement take a look at the site and see if any violations were currently happening. I then spoke to Shawnetta who said her group will review the situation. Hazardous materials disposal.	1/15/2008 4:31:46PM - Rob Houston Status Change Previous: Pending New: Closed Reason: Rweceived phone message from [redacted] stating that he was very busty at this time and would call back in several weeks. Closed RFA as current concern deemed completed.

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Water-General Information/Questions				
APUXP	1/9/2008	1/9/2008	[redacted] La Costa Ave [redacted] Across the street from his residence, [redacted] he states there used to be a culvert that ran down to the street to divert the water. He said that a couple years ago the City did work out there and dammed it up and the water now collects up on top in a lake & the water no longer follows its natural flow and doesn't drain into the street. He says the water goes into the ground and underneath his house now. He states the situation should be remedied before there's a slide out there. From Tim Fennessy Immediate response provided to resident's at 10:45 a.m. Prior to meeting residents a quick review of [redacted]s was made and a small amount of water is present at the rock bags placed at the "F" box inlet. This water is being filtered by the rock bags and draining to the "F' box as designed. Reviewed both the [redacted] properties, met with [redacted]. [redacted] property; [redacted] observed standing water on his property in the back yard during the most recent rain event of Jan. 4th to the 6th. The yard is immediately adjacent to the open drainage channel at [redacted]urse. Water is no longer present. He believes water is migrating from the [redacted] repair project, across La Costa Ave. and day lighting into his [redacted]. He came to this conclusion due to the fact that sedimentation devices were holding water as designed in order to desilt storm water runoff per the SSWPP requirements. During the course of reviewing his property, It was discovered his rain gutters go underground and have since been disconnected at an unknown location and do not outfall at a lower surface elevation on the property. The line presently is disconnected somewhere under a side yard. I advised [redacted] to locate this line as soon as possible and re-establish the connection in order to alleviate a potential wash out to the slope. This gutter drain is on the west side of his house. A City drainage easement and line out falls on his properties east	1/9/2008 3:43:58PM - Kim Stankavich Status Change Previous: Open New: Closed Reason: [redacted] has been to site and address the situation with residents

Appendix 7.3 RFA Report

Storm Water-General Information/Questions

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
			side. I told [redacted] I would request the City storm drain maintenance to check this storm drain line to insure it is operating correctly. I then met with [redacted] and reviewed their property. The rain gutters at this residence are also connected to an underground conduit, 3 in. PVC that out falls up slope of the William's property on an adjacent property line. It appears the water is crossing the property line and contributing to the area in question on the [redacted] property. I suggested [redacted] connect a line of suitable length to carry the roof drainage to the toe of slope thereby allowing the water to sheet flow across @ 30ft. of landscape at the northerly property line. These actions, if taken by the property owners, will probably correct the situation. Departed the [redacted] location at 12:00 p.m. Upon returning to office I met with Don Wasko and Clayton Dobbs, briefed them on situation and requested they review the storm drain outfall in order to be sure the City line is functioning as designed. This action should be taken to assure the property owners the city line is not contributing to the problem.	
3L25T	2/6/2008	2/6/2008	SW22 Dumping - Non-hazardous Materials 3 unlabled drums in parking lot	2/6/2008 4:17:42PM - Tim Murphy Status Change Previous: Open New: Closed Reason: information letter sent
EUMFV	5/21/2008	5/21/2008	Questions regarding who to contact when car is being washed in the street and who to contact when construction isbeing done after hours or on Sunday in violation of City Code.	5/21/2008 9:47:42AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Responded to resident. Construction question being answered by Building.
FATAB	6/4/2008	6/4/2008	Wants to know if allowable to wash car on street, and without soap, and a reference to the law	6/9/2008 8:45:02AM - James Wood Status Change Previous: Open New: Closed Reason: Information provided to caller.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Water-General Information/Questions				
FBPFH	6/5/2008	6/5/2008	Requesting information regarding swimming pools to send to the HOAs that they manage.	6/5/2008 11:19:48AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Emailed adobe of swimming pool brochure.
Vehicles-Leaking Oil or Fluids				
AATDP	12/27/2007	12/27/2007	SW17 Vehicle and equipment leaking Report of leaking oil or fluids Report that QUOTE...oil, grease, and other pollutants of concern are running into the storm drains on [redacted] and [redacted] having been discharged from abandoned vehicles left in the storm gutter.QUOTE	2/7/2008 4:01:12PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Informational Letter Unable to identify definitively which vehicles were leaking or where the owners reside. Sent educational information to all vehicles suspected of leaking that were parked along [redacted] and to all residents in the areas along [redacted] apartments.
Water Conservation-Private Property				
4TL9E	7/5/2007	7/5/2007	Overwatering in evening (9:30) and forcing pedestrians off sidewalk into bike lane.	7/6/2007 9:10:30AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Management co. is having the problem looked into and fixed.
5APJM	7/20/2007	7/20/2007	Water has been running out of outfall at beach for an hour a day for last ten days.	7/25/2007 9:31:10AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Repairs are being made on a leaking service line.
5NUF5	8/1/2007	8/1/2007	Report of possible water leak between [redacted] and the [redacted] located to the east.	8/2/2007 10:38:17AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Maint. is working to find, fix and solve the problem.
5TLVW	8/6/2007	8/6/2007	Overwatering at small park at this location	8/8/2007 8:45:18AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: No problem found.

This report details all closed issues for the selected department(s) that were opened during the report period.

Water Conservation-Private Property

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
5TLXD	8/6/2007	8/6/2007	Overwatering at this home	8/8/2007 8:49:46AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: No problem found.
5TPM4	8/6/2007	8/6/2007	Sediment from landscape drain at [redacted] collects at [redacted]	8/9/2007 12:44:16PM - Michael Fairbanks Status Change Previous: Pending New: Closed Reason: Please see RFA-739REU
5WU5Q	8/9/2007	8/9/2007	Water coming out of D25 - overwatering?	8/13/2007 11:56:24AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: I did not find any violations.
54TFZ	8/15/2007	8/15/2007	Over irrigation at above address seen evening of 8-14-07. Water was running into storm drain.	8/16/2007 4:11:01PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: [redacted] is the contact at [redacted] Landscapers have been told of the problem.
55UVJ	8/16/2007	8/16/2007	Overwatering - water in and around parking lot	8/22/2007 9:42:35AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: No problem found.

This report details all closed issues for the selected department(s) that were opened during the report period.

ssue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Water Conservation-Private Property				
5YVV9	9/12/2007	9/12/2007	Complaint of constant water at this intersection for past years. Wants to have cleaned and if can be fixed. Addresses of over-watering sent to Olivenhain 10-26-07.	10/17/2007 1:41:06PM - Shea Sainz Status Change Previous: Open New: Closed Reason: As reported by Public Works Inspector K. Brooks: On 10/03/07 City contractor ([redacted]) had pressure washing crew clean from [redacted] and from [redacted] to the storm drain boxes just west of [redacted] both sides. Inspector also spoke with C. Dobbs regarding street sweeping of the area and he reported that [redacted] are supposed to be swept every 1st and 3dr Monday. He will follow up and make sure sweeper is addressing this area properly. I recommend that water conservation materials be placed at [redacted] as well as the [redacted] concerning the n/e corner of [redacted] and Avenida Helecho. Overwatering from the listed areas is where the algae starts in the gutter. Kelly Brooks, PW Inspector.
5YVV9	9/12/2007	9/12/2007	Complaint of constant water at this intersection for past years. Wants to have cleaned and if can be fixed. Addresses of over-watering sent to Olivenhain 10-26-07.	10/18/2007 2:15:43PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Not in our district. Olevenhain
75L75	9/17/2007	9/17/2007	Removing back lawn - putting water wise plants - looking for grant? and advise and help	9/17/2007 10:46:21AM - AllenHartman Status Change Previous: Open New: Closed Reason: Literature sent to customer.
34P6T	10/18/2007	10/18/2007	Requesting lists of acceptable plants for this area for her hillside.	10/18/2007 11:05:26AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Sent brochures as requested.
3CL7S	10/26/2007	10/26/2007	Watering slope behind home from 4:00 pm on 10-25-07 at least until time of call - 10-25-07 6:30 pm. Concerned with overwatering and excess water may soak their yard, etc.	10/26/2007 10:37:24AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Not in our district.
9FTR9	11/30/2007	11/30/2007	Overwatering on 11-29-07 between 12 and 1:30 pm. Water running down street. Broken sprinkler head?	12/5/2007 10:23:54AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: A door hanger was left. No problems found.

This report details all closed issues for the selected department(s) that were opened during the report period.

Water Conservation-Private Property

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
9MUUY	12/6/2007	12/6/2007	Neighbor overwaters - water runs into street and storm drain	12/17/2007 2:02:20PM - Michael Fairbanks Status Change Previous: Pending New: Closed Reason: I have seen no problems at the property.
9SN3P	12/11/2007	12/11/2007	Water hose left on - running into street - owners not home	12/11/2007 9:26:38AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Water had been shut off by owner when I arrived.
AXTXL	1/17/2008	1/17/2008	Water surfacing to top of the street and damaging the street	1/17/2008 2:18:00PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Not in our water district.
CTLJX	3/17/2008	3/17/2008	Water leak from grassy area running into street	
CXNYH	3/21/2008	3/21/2008	Water is constantly runing and into his yard from an unknown source - Groundwater or Neighbors Sprinkler system	4/7/2008 12:27:09PM - Michael Fairbanks Status Change Previous: Pending New: Closed Reason: It appears to be ground water.
DC2C8	4/2/2008	4/2/2008	REPORT OF ALGAE ON SIDEWALK AS A RESULT OF OVER IRRIGATING, IN ADDITION TO THE ALGAE, IT IS APPARENT THAT A TRAFFIC SIGNAL CONTROL BOX OR PULL BOX IS FULL OF WATER. THE ALGAE AND THE CONTROL BOX ISSUES HAVE BEEN REFERRED TO STREET MAINT FOR RESOLUTION. PLEASE CHECK SITE FOR POSSIBLE OVER WATERING.	4/7/2008 7:48:27AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: I have told parks about the problem. I will check to see if it is still going on.
DGPHB	4/7/2008	4/7/2008	call from resident regarding water coming from neighbors property	4/7/2008 11:25:15AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Per [redacted] leaking valve has been repaired.
E8MDP	5/1/2008	5/1/2008	Water discharging 24/7 from "site drainage pipe" daylighting into curb and gutter. Steady stream of water has saturated the subsoil in complainants sideyard. Suspected water leak.	5/6/2008 10:59:33AM - Michael Fairbanks Status Change Previous: Pending New: Closed Reason: There are no violations or leaks here.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Water Conservation-Private Property				
F3NPY	5/28/2008	5/28/2008	Water running from residence and gutter need to be cleaned of algae.	5/29/2008 12:34:24PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Ground water.
Water Conservation-Water Audits				
D3L6V	3/25/2008	3/25/2008	SW16 Over-irrigation	3/25/2008 8:37:30AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: High usage due to growing of flowers on the property.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Water Protection... It's OUR Business!

What You Need to Know…

The City of Carlsbad's storm water conveyance system consist of pipes, concrete ditches, basins, drains and inlets, as well as natural drainage areas, such as canyons, gullies and streams. The purpose of the system is to carry rainwater away from developed areas to prevent flooding.

Storm drains are **not** connected to sanitary sewer systems or treatment plants. Rainwater and the pollutants it carries flow directly to our creeks, lagoons and ocean. Pollutants of concern include:

- Sediments
- Fertilizers
- Metals
- Detergents
- Pesticides
- Organic Compounds
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

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What is the Storm Water Protection Program?

The City's Storm Water Protection Program regulates storm water activities for existing development (residential, commercial and industrial), investigates illegal discharges to the storm water system, educates the public about pollution prevention, and oversees the water quality monitoring program.

What does the Municipal Permit require?

The Municipal Permit requires the City to prevent storm water pollution during all three phases of urban development land use planning for new development, construction, and existing development.

The Permit also requires the City - **employees, residents, and businesses** - to improve the quality of the water flowing into the storm water system to the maximum extent practical. This is accomplished through the implementation of Best Management Practices (BMPs). In addition, the Municipal Permit requires the City to investigate and eliminate illegal discharges, develop an outreach and education program, and implement BMPs at municipal facilities.

I've heard the term NPDES. What does it mean?

NPDES stands for National Pollutant Discharge Elimination System and is the name of a permit system implemented under the 1972 Federal Clean Water Act. The 1987 amendments to this Act required municipalities discharging storm water runoff into surface waters (i.e., ocean, lagoon, etc.) to obtain a permit. In California, these permits are issued by the Regional Water Quality Control Board.

Our current municipal storm water permit was issued on January 24, 2007 and applies to all 18 cities in San Diego County, the Unified Port District, the San Diego County Regional Airport Authority, and the County of San Diego. To view a copy of the Permit, please go to http://www.swrcb.ca.gov/rwqcb9/programs/sd_stormwater.html.

Who is responsible for protecting storm water?

EVERYONE! Storm water pollution prevention is a shared duty between the City of Carlsbad and the community. Storm drains on ***public*** streets, property, or easements are monitored and cleaned by the City. Everyone has a part to play in keeping our storm drains free of trash, debris, excessive vegetation, and other materials that may pollute, contaminate or block the flow of water through the storm drain system.

- **City Employees**
- **Residents**
- **Business Community**
- **Developers and construction workers**
- **YOU!!**

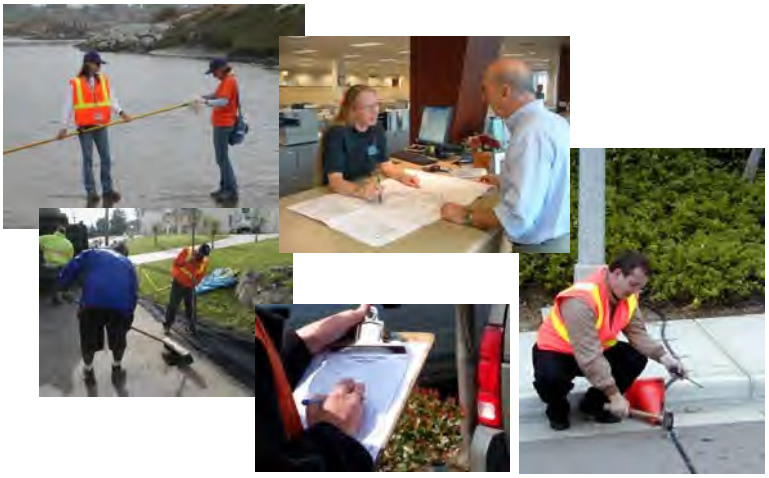

Storm Water Hotline: 760-602-2799

Only Rain in the Storm Drain!

Are all non-storm water discharges illegal?

The Municipal Permit prohibits **all** non-storm water discharges into the storm water system, with some exemptions:

- Landscape irrigation and lawn watering runoff
- Dechlorinated pool water
- Individual Residential car washing
- Potable water sources
- Foundation drains, crawl spaces
- Air conditioning condensate
- Emergency Fire Fighting Flows

What are Best Management Practices?

Best Management Practices or BMPs are procedures or structures that help to prevent pollutants from entering our storm drains. Once potential and existing sources of pollution have been identified, the next step is to select proper BMPs to eliminate or reduce storm water pollution.

What are some BMPs I can use in my daily work?

- Instead of using a hose or pressure washing system, **try a dry clean up method!** Use mops, brooms or wire brushes to clean dumpsters, sidewalks, buildings, equipment, pavement, driveways, or other impervious surfaces. Never dispose of wash water to the storm drain.

- When possible, store materials indoors or under covered areas not exposed to rain. If materials can not be stored under cover, place materials on pallets and cover with a tarp to avoid contact with storm water run-on and runoff.
- Dumpsters should always be kept closed to prevent rainwater from entering. Never place liquid waste, leaky garbage bags or hazardous waste in a dumpster or trash bin.
- Wash vehicles at a commercial car wash, whenever possible. City employees and/or mobile detailers can not wash vehicles on public streets or on public property, including City Hall and all public parking lots.

How do I report a storm water violation?

The Storm Water Protection Program operates a hotline and e-mail address to receive referrals about storm water pollution and illegal discharges. If you see someone dumping or washing waste or pollutants to the street or storm drain, please call the **hotline** at **760-602-2799** or send an email to stormwater ci.carlsbad.ca.us. This information is entered into the City s Request for Action system and is routed to the appropriate person for response.

Storm Water Hotline

760-602-2799

What is the City doing to comply with the Permit?

- A Jurisdictional Urban Runoff Management Plan (JURMP) that specifies how the City will implement the storm water program has been developed and implemented.
- The Carlsbad Municipal Code includes regulations for storm water protection and pollution prevention.
- Several informative brochures and fact sheets have been developed to educate the public and City employees about storm water pollution prevention.
- An extensive education and inspection program has been implemented to ensure the community is aware of and complying with the storm water requirements.
- Reports of illegal discharges are fully investigated and resolved to the maximum extent practical.
- Storm water pollution prevention measures have been incorporated into the new construction and building permit process.
- Storm water pollution prevention plans (SWPPP) have been developed and implemented at all high priority municipal facilities throughout the City.
- City employees have been trained and will continue to be trained on the requirements of the storm water program.
- The General Plan and Environmental Review process includes storm water and pollution prevention requirements.
- The City has completed a Standard Urban Storm Water Mitigation Plan (SUSMP) to address storm water requirements for new development and significant redevelopment.
- Water quality monitoring is being conducted at lagoon and ocean outlets within the City s jurisdiction.
- The storm drain conveyance system has been mapped and the information made available in a GIS format.
- A Watershed Urban Runoff Management Plan (WURMP) has been developed and implemented in association with other North County cities.

Be A Part of the Pollution Solution!!

Storm Water Training for Municipal Employees
March 24, 2008- June 30, 2008

DATE	DEPT. DIV.	EMPLOYEES ATTENDING	TRAINING TYPE	NAME OF TRAINING OR TOPICS	LOCATION	SPONSOR PRESENTER
03/27/2008	Water	34	Meeting	BMP Innovations	M&O	Don Wasko
03/27/2008	CM&I	10	Meeting	Overall Erosion Control and Reporting	M&O	Tim Fennessy
04/09/2008	CM&I	3	Workshop	EPA Webcast-Retro-fitting of BMPs	Safety Center	EPA
04/09/2008	CM&I	10	Meeting	Typical Lot Protection During Production	M&O	Tim Fennessy
04/09/2008	Storm Water, Parks, General Services, Construction, Storm Drain Maintenance	15	Webcast	EPA - Retrofitting BMPs	Carlsbad	EPA
04/18/2008	Parks	36	Meeting	Preventative Maintenance, BMPs, Federal/State Laws & Regulations, Non-storm water discharges	Parks Yard	Greg Dauss
04/24/2008	Water	45	all hands meeting	M&O Yard Inspection	PW M&O	Don Wasko
05/07/2008	Storm Water Dept	7	Meeting	WURMP 2008	Carlsbad	Storm Water
05/08/2008	Water	44	all hands meeting	Stormwater Terms and Accromyns	PW M&O	Don Wasko
06/04/2008	Storm Water Dept	5	webcast	EPA - Effectiveness Assessment	Carlsbad	Storm Water
06/17/2008	Building and CE	12	Meeting	Municipal Construction Actvities [per Sec. D.5b(1)(b)]	Faraday	Shawn Grandberry
06/17/2008	CM&I	11	Meeting	Municipal Construction Actvities [per Sec. D.5b(1)(b)]	Faraday	Shawn Grandberry
03/17-3/21/08	Storm Water Dept	1	Class	PC 832	San Diego	Miramar College
08/06-08/08/2007	Storm Water Dept	2	Class	24 Hr. HAZWOPER	San Diego	Pacific Saftey Council

Storm Water Committee Meetings Summary
March 24 - June 30, 2008

DATE	in attendance	AGENDA ITEMS
04/15/2008	10	Audit preparation and overview, JURMP questions, Municipal BMPs
05/13/2008	15	JURMP Annual Report preparation, RWQCB Audit review
06/10/2008	13	Annual Municipal Inspections recap, review JAR submitted, WURMP training

Expenditure Data
Budget, Actuals & Projections
Through 6/30/2008
5215710 - Storm Water
5216310 - Storm Drain Maintenance

Ending Date ==>> 06/30/08
Months Completed => 12
% of Year Complete => 100.0%

			BUDGET 07-'08*	BUDGET '06-'07	BUDGET '05-'06	BUDGET '04-'05	ACTUAL YTD '07-'08	ACTUAL YTD '06-'07	ACTUAL YTD '05-'06	ACTUAL YTD '04-'05
Personnel										
6100	52157106100	Reg Salaries	619,135	439,830	380,684	371,852	534,698	406,051	355,257	333,403
6150	52157106150	IOD Worker's Comp	0	0	0	0	0	0	38	1,537
	Full Time Salaries		619,135	439,830	380,684	371,852	534,698	406,051	355,295	334,940
6101	52157106101	Incentive Pay	5,976	4,445	7,828		8,163	535	3,345	3,674
6200	52157106200	Overtime Salaries	6,600	8,750	8,500	7,000	16,590	15,138	11,486	4,784
6300	52157106300	Part-Time Salaries	0	0	12,000	8,000	0	8,413	10,927	14,251
6400	52157106400	Temporary Help	0	0	0	0	1,713	0	2,156	25,749
6501	52157106501	Health Insurance	104,993	147,783	59,820	57,120	84,597	133,242	54,098	49,175
6510	52157106510	Life Insurance	3,598	2,059	2,140	2,081	3,193	2,212	1,825	1,905
6520	52157106520	Vision Insurance	0	0	0	0	1,015	799	690	702
6530	52157106530	Medicare	8,979	6,389	6,438	5,392	8,758	6,560	5,662	5,119
6640	52157106640	Earned Leave Accrual	0	0	0		-2,909	10,343	6,103	-831
6653	52157106653	Final Vacation Pay	0	0	0	0	631	0	2,709	2,572
6655	52157106655	Disability	6,424	7,375	5,585	5,549	6,072	4,599	4,899	4,576
6656	52157106656	Unemployment	621	441	392	372	605	187	284	12
6657	52157106657	Worker's Compensation	10,374	9,420	8,920	9,280	10,374	9,420	8,920	9,280
6720	52157106720	PERS	170,092	119,184	110,622	69,912	150,035	109,277	100,787	67,114
6730	52157106730	Social Security	0	744	0	0		561	665	13
6740	52157106740	Deferred Comp	0	0	0	0		0	9	517
6741	52157106741	Deferred Comp Match	0	0	0	0	844	761	769	799
	Benefits		317,657	306,590	222,245	164,706	289,681	302,047	215,334	189,409
	Sub-Total Personnel		**936,792**	**746,420**	**602,929**	**536,558**	**824,380**	**708,098**	**570,629**	**524,350**

			BUDGET 07-'08*	BUDGET '06-'07	BUDGET '05-'06	BUDGET '04-'05	ACTUAL YTD '07-'08	ACTUAL YTD '06-'07	ACTUAL YTD '05-'06	ACTUAL YTD '04-'05
M & O										
7490	52157107490	Misc Professional Services	368,993	275,231	335,046	362,651	101,076	78,418	78,096	57,105
7111	52157107490	Other Mach & Equip Rental	1,000	0	0	0	0	0	1,080	
7210	52157107210	Office Equip Maint	0	0	0	0	0	0	0	0
7215	52157107215	Software Maintenance	625	0	0	0	988	613	546	
7225	52157107225	Car Wash Repairs	0	0	0	0	0	0	31	
7244	52157107244	Street Sweeping	302,172	254,256	230,660	217,000	210,664	191,245	198,996	234,695
7550	52157107550	Miscellaneous Outside Servi	442,129	110,750	138,950	122,500	233,444	102,847	70,184	49,682
7554	52157107554	Regulatory / Permit Fees**	430,500	55,000			372,269	59,839		
7899	52157107899	Misc Supp	34,750	19,625	15,382	15,000	20,580	14,301	10,075	4,475
7715	52157107715	Printing	20,500	11,006	12,500	17,000	1,169	6,556	2,612	2,355
7710	52157107710	Ads & Publishing	4,685	6,000	12,500	12,500	0	0	613	2,160
7711	52157107711	Dues and Subscriptions	1,000	500	500	500	253	391	55	0
7712	52157107712	Books and Publications	300	525	500	300	0	50	72	354
7713	52157107713	Audio-Visual Materials	125	260	250	0	0	0	38	81
7720	52157107720	Postage	250	250	100	0	425	345	217	74
7725	52157107725	Office Supplies	3,000	3,000	4,000	4,000	4,825	3,497	2,901	1,366
7726	52157107726	Office Furniture & Equipmer	4,977	0	0	1,500	4,776	0	784	386
7730	52157107730	Computer Software	2,550	500	500	500	2,162	1,876	441	543
7731	52157107731	Misc. Computer Hardware	0	5,000	0	0	551	0	158	0
7735	52157107735	Promo Materials	2,625	2,500	2,500	0	1,326	2,672	1,800	896
7745	52157107745	Food Expense	500	0	0	0	219	98	0	0
7751	52157107751	Telephone & communication	5,500	5,250	5,000	3,750	6,059	4,465	4,677	4,473
7752	52157107752	Waste Disposal Services	115,000	115,000	100,000	0	53,825	22,123	101,710	71,804
7850	52157107850	Small tools	1,300	1,300	1,250	1,250	471	338	0	1,370
7851	52157107851	Safety Equipment	2,500	0			2,121	585	121	
7852	15457107852	Uniforms and Accessories	3,750	0	0	0	1,407	848	11	0
8120	52157108120	Tuition Reimbursement	0	0	0	0	0	0	0	0
8130	52157108130	Training/Training Related Tr	2,950	1,600	1,500	1,500	2,707	2,969	1,114	72
8520	52157108520	Conference Travel	3,000	2,600	2,500	2,500	777	1,332	280	1,936
8522	52157108522	Misc Meals/Miles	2,400	1,550	1,500	1,500	785	1,783	455	81
8810	52157108810	Vehicle Maintenance	35,734	24,827	2,990	3,230	28,481	11,326	5,044	2,146
8811	52157108811	Vehicle Replacement	21,500	13,085	4,000	4,000	18,000	9,226	4,917	4,000
8830	52157108830	General Liab	22,220	20,900	18,540	19,280	22,220	20,900	18,540	19,280
8860	52157108860	Information Technologies	52,700	30,200	28,900	26,300	52,700	39,183	30,661	28,341
8890	52157108890	Misc Interdepartmental Char	47,835	46,262	108,400	103,000	47,835	46,262	108,400	103,000
8892	52157108892	Utility Billing Chargeback	15,260				15,260	46,262		
9999	52157109999	Op Transfers Out	136,000	136,000						
Sub-Total M&O			**2,088,330**	**1,142,977**	**1,027,968**	**919,761**	**1,207,375**	**670,350**	**644,629**	**590,674**

			BUDGET 07-'08*	BUDGET '06-'07	BUDGET '05-'06	BUDGET '04-'05	ACTUAL YTD '07-'08	ACTUAL YTD '06-'07	ACTUAL YTD '05-'06	ACTUAL YTD '04-'05
Capital Outlay										
9005	52157109005	Cap Outlay under $10,000	12,000	1600	7,080	0		442	442	0
9010	52157109010	Cap Outlay-Vehicles	40,000	0	15,971	0	34,853	42,863	42,863	9,541
9020	52157109020	Computer Equip > 10K	5,927	21550	0	0		42,863	42,863	9,541
9022	52157109022	Other Equipment	0	21550	0	0		42,863	42,863	9,541
	Capital Outlay		**57,927**	**44,700**	**23,051**	**0**	**34,853**	**129,031**	**129,031**	**9,541**
	TOTAL EXPENDITURES		**3,083,049**	**1,934,097**	**1,630,897**	**1,456,319**	**2,066,608**	**1,507,479**	**1,344,289**	**1,124,565**

*For FY 2007-08, Storm Drain Maintenance Activities and Storm Water Protection Program were split into 2 separate Org-Keys
**New Object code for 2006/07 Budget to capture permitting expenses. Includes $250,000 for estimated TMDL Cost-Share

Signed Certification Statement

City of Carlsbad
Jurisdictional Urban Runoff Management Plan
IDDE Section of the Annual Report for July 1, 2007 – June 30, 2008

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Glenn T. Pruim R.E.

Name (printed) Signature

Public Works Director 11/26/08

Title Date

INTRODUCTION

This section of the City of Carlsbad's (City) Jurisdictional Urban Runoff Management Plan (JURMP) FY 07-08 Annual Report addresses the Illicit Discharge Detection and Elimination (IDDE) requirements of the Regional Water Quality Control Board (Regional Board) Orders No. 2001-01 and 2007-0001 (NPDES No. CAS0108758) commonly known as the Municipal Storm Water Permit (Permit).

Order No. 2007-0001 was issued January 24, 2007, and replaced Order No. 2001-01 issued in 2001. The new permit went into effect on March 24, 2008 partway through FY 07-08, therefore this report covers both reporting periods: from July 1, 2007 to March 23, 2008 under Order No. 2001-01, as well as from March 24, 2008 to June 20, 2008 under Order No. 2007-0001. The report is segregated into two main sections corresponding to the permit and time frames listed above.

The Regional Board issued these Permits to prevent and control polluted urban runoff from Municipal Separate Storm Sewer Systems (MS4s) discharging to downstream water bodies. As runoff flows through urban areas, it can carry harmful pollutants such as pathogens, sediments, fertilizers, pesticides, heavy metals, and petroleum products. Pollutants entering a receiving water body through the MS4 may harm aquatic life through toxicity and habitat degradation.

Each of the Copermittees listed in the Permit was required to develop a JURMP outlining their approach to protecting water quality and preventing harmful impacts from polluted urban runoff submitted to the Regional Board in March of 2008. The Permit requires the submittal of an Annual Report to the Regional Board to document the progress and implementation of the JURMP with Addendum No. 2 outlining submission of this IDDE section in December of each year.

The City is a municipal corporation, following the Council-Manager form of government. City Departments fall under one of five major service areas (MSA's): Public Safety, Administrative Services, Public Works, Community Development, and Community Services. While the City created the Storm Water Protection Program to help implement the Permit, program implementation is carried out by several departments within different MSA's. This allows for program implementation and new requirements to be incorporated into daily activities of City employees, instead of being viewed as completely new requirements without a connection to on-going services.

The City encompasses just over 42 square miles and borders 6 miles of coastline. Carlsbad also contains or borders three coastal lagoons (Buena Vista, Agua Hedionda and Batiquitos lagoons). The City is part of the Carlsbad Hydrologic Unit (Watershed), which includes four separate sub-watersheds that run through Carlsbad. These include each of the three lagoons and their respective drainage areas, in addition to a fourth watershed commonly known as Encinas Creek. Portions of Agua Hedionda Lagoon and Buena Vista Lagoon are listed as impaired for bacterial indicators and sedimentation/siltation on the Federal Clean Water Act Section 303(d) Impaired Water Bodies list. Buena Vista Lagoon is also impaired for nutrients. While this report focuses on the City's implementation of the JURMP and not the Watershed program, the two are becoming more intertwined as waterbodies and implementation strategies cross programmatic and jurisdictional boundaries.

Highlights

There were several highlights to be noted in FY 07-08 as follows:

- The City responded to a total of 226 complaints of illegal discharges to the MS4
- There was an increase in the percentage of complaint calls originating from City staff between the first of the year, and the last , increasing from 48 to 59
- The City s existing nine Smart Covers saved 4 wastewater spills in the first of the year, and the City added a tenth Smart Cover in the last of the year
- The City continued daily, quarterly, annual inspections of the wastewater system
- The City conducted 4106 manhole inspections and cleaned 188.24 miles of sewer lines
- The City conducted targeted outreach to 800 residents resulting from Dry Weather Program investigations
- There was a decrease in exceedances in coastal monitoring in both storm drains and receiving waters
- The City conducted 6 high level investigations resulting from either notification to or from the Regional Board, or those involving hazardous materials
- The City issued 73 enforcement actions consisting of an informational letter, verbal or written warning, or NOV
- The City conducted two Fats, Oils, and Grease workshops in the last of the year.

Notable Activities

Notable activities for FY07-08 include:

- There was an increase in complaints responded to from the hotline, with a total number of calls in FY 06-07 of 154, and a total of calls in FY 07-08 of 226
- The City conducted two Fats, Oils, and Grease workshops in the last of the year
- The City added a tenth Smart Cover in the last of the year
- The City conducted 6 high level investigations resulting from either notification to or from the Regional Board, or those involving hazardous materials.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

Under Order 2001-01, the City continued to conduct a proactive program for detecting and eliminating illegal discharges and illicit connections to the storm drain system during this reporting period. The City s program actively sought to identify and eliminate illicit discharges and connections by conducting illegal discharge investigations, responding to spills and sewage overflows, conducting monitoring, and performing routine cleaning and maintenance activities on the sewer and storm drain systems. Several notable activities occurred between July 1, 2007 and March 23, 2008 and are described below.

- Addition of staff an Environmental Specialist I in October 2007, and a new Public Works Supervisor for the Storm Drain Maintenance Division
- Continued operation of the stormwater hotline and complaint response with a summary in Section 7.2.
- Continued 24 hour spill response for wastewater and storm drain emergencies

7.1 Introduction

The Illicit Discharge Detection & Elimination (IDD&E) Program for the City encompasses all sources of solids and liquids containing pollutants and sanitary sewer system wastewater that may enter the municipal separate storm sewer system (MS4). The Program focuses on prevention while actively pursuing, investigating, and eliminating illicit discharges. The City facilitates public reporting of illicit discharges and connections as described in Section 7.2. Continued efforts are in place to facilitate reporting of spills, immediate response to spills, and continued education to prevent spills. These efforts are described in Section 7.3. In addition to complaint and spill response, the City continues to perform monitoring in support of the IDDE program. These monitoring programs are described in Section 7.4. The previously mentioned parts of the IDDE Program require routine follow-up investigations and may prompt enforcement actions by the City. These efforts are described in Section 7.5. The City strongly encourages voluntary elimination and cleanup of illicit discharges; however, enforcement is escalated to obtain compliance, where necessary.

7.2 Public Reporting of Illicit Discharges and Connections

As required under Order 2001-01, the City continued to publicize and facilitate public reporting of illicit discharges and water quality impacts. Methods to publicize and facilitate public reporting included:

- Brochures and Publications
- Outreach events
- The City s Website
- Internal training
- Operation of a Storm Water Hotline
- Operation of an Environmental Programs Hotline

All outreach methods utilized are described in detail in Sections 8.0 and 9.0, the Education and Public Participation Sections of the Annual Report submitted to the Regional Board on September 30, 2008.

During regular office hours from Monday to Friday, Storm Water Protection Program staff answered the storm water hotline, checked emails to the storm water account, and forwarded reported information to the appropriate personnel. When calls were received after office hours, the hotline provided a voice mail message (in English and Spanish) directing complainants to leave a message for follow-up or be directed to police dispatch for emergency response (i.e., dumping of hazardous materials into the storm water system).

The public continued to use the storm water hotline and e-mail address to report illegal discharges to the storm drain system. During this reporting period, the Storm Water Program received 161 reports regarding urban runoff or storm water. Figure 7.1 illustrates the breakdown of storm water complaints by reporting mechanism.

Figure 7.1 Storm Water Complaints by Reporting Mechanism
July 1, 2007 - March 23, 2008 (Order 2001-01)

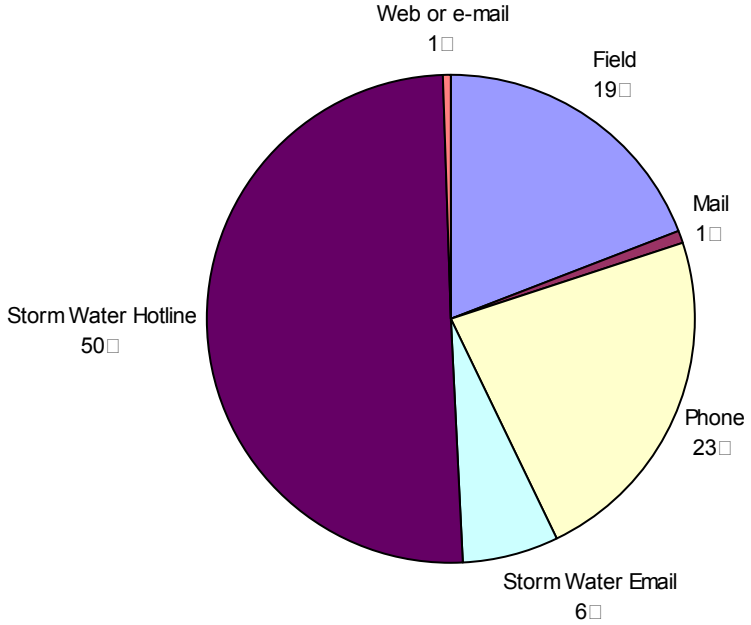

Other calls ranged from information requests, to solid waste inquiries, to other City business.

Sources of illegal discharge reports to the City included approximately 44 from the public, 48 from City employees, and 8 from outside agencies. Figure 7.2 illustrates the breakdown of reporting parties for the storm water complaints received during this reporting period.

Figure 7.2 Storm Water Complaints by Reporting Party
July 1, 2007 - March 23, 2008 (Order 2001-01)

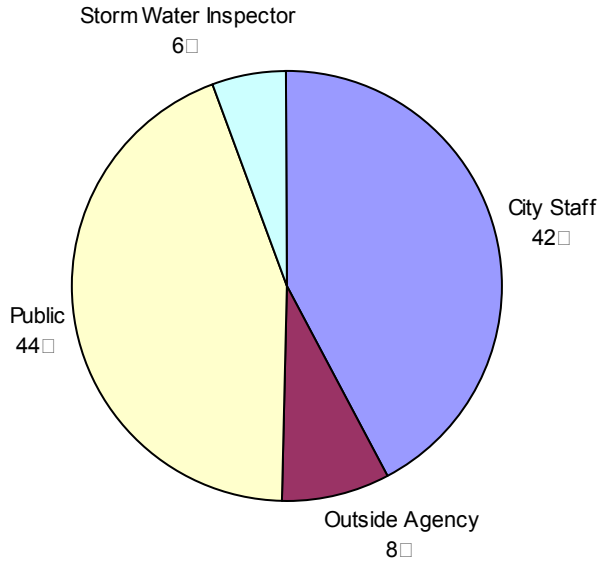

The Storm Water Protection Program responded to 161 complaints potentially related to urban runoff during this reporting period. Figure 7.3 illustrates the breakdown of storm water related complaints by type of complaint.

Figure 7.3 Storm Water Complaints
July 1, 2007 - March 23, 2008 (Order 2001-01)

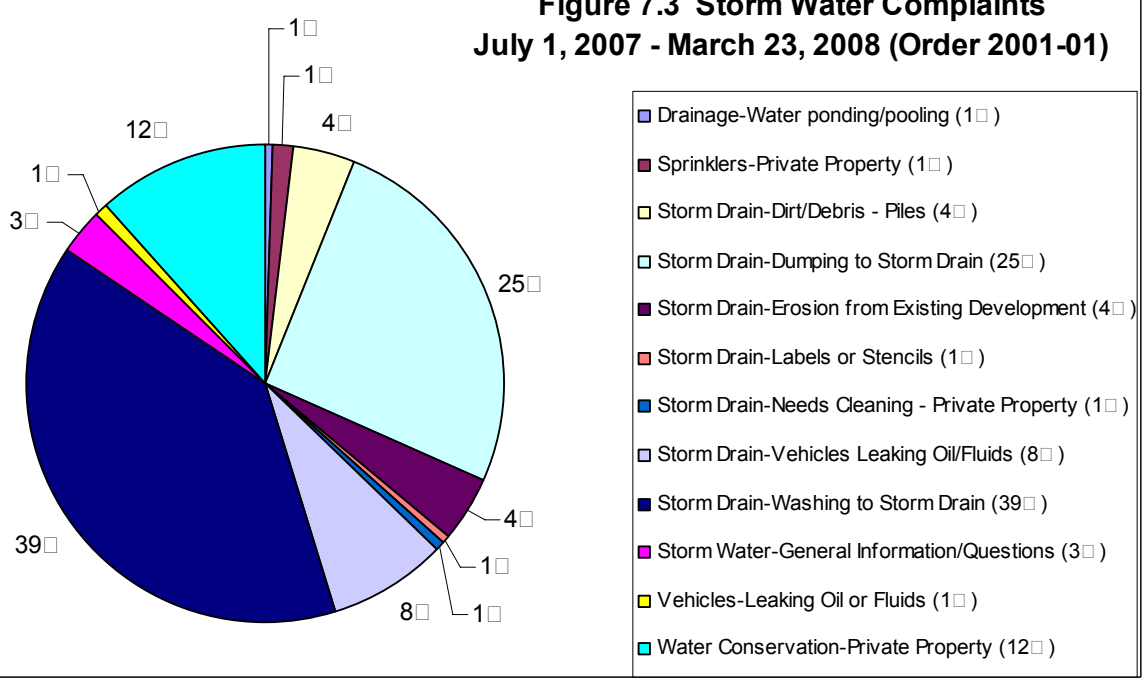

The City continued to operate a Household Hazardous Waste (HHW), and used oil recycling program. During the entire FY 07-08, the City collected and disposed of approximately 148 tons of HHW (including recycled or diverted).

Residents used the Environmental Programs hotline and e-mail address to request information about the HHW program, trash, and recycling. The City's RFA system was used to track calls about Environmental Programs comments and questions from residents. From July 1, 2007 to March 23, 2008 the Environmental Programs Division responded to 60 complaints related to HHW, recycling, and solid waste. Table 6.4 in the Residential section of the City's FY 07-08 JURMP Annual Report submitted to the Regional Board on September 30, 2008 summarizes these complaints.

7.3 Spill Reporting, Response, and Prevention

Spill Response

City employees are trained to follow the City's Sewer Overflow Prevention Plan/Response Plan. Staff training was conducted semi-annually, either by tailgate or all-hands class format. All spill response incidents were tracked in the Hansen system or spill reports. Sanitary sewage overflow responses were documented as required on the Sanitary Sewer Overflow Report Form, which was sent via fax to the Regional Board, County Health Department, and the Storm Water Protection Program.

During this reporting period the City responded to 17 sewage overflows or spills. Four of these spill responses involved sewer mains, of approximately 5,686 gallons. The other 13 spill responses were due to private sewer lateral spills, of approximately 916 gallons. Of an estimated 5686 gallons spilled, 2061 gallons were recovered with approximately 3625 gallons entering the environment. The overflow reports are found in Appendix 7.1.

Public Works Maintenance and Operations staff (M&O) continued to respond and coordinate sewage spill response with the Leucadia Waste Water District (LWWD) and Vallecitos Water District for spills that occur outside the M&O jurisdiction. During normal business hours, calls were dispatched by M&O to field units for immediate response and evaluation. After working hours, phone numbers were routed through police dispatch to M&O standby personnel.

A portion of the Leucadia Wastewater District (LWWD) collection system is located within the City limits. LWWD are responsible for operating and maintaining their system, including responding to overflows and spills. However, the City's M&O Department responds or provides assistance when requested. During this reporting period, LWWD responded to four sewage overflows in Carlsbad, three of which were private lateral spills. A total of 340 gallons of sewage was spilled with 250 gallons recovered, resulting in the release of 90 gallons of sewage into the environment. Response details are found in Appendix 7.2.

A portion of the Vallecitos Water District (VWD) sewage collection system is also located within the City limits. They are responsible for operating and maintaining their system, including responding to overflows and spills. However, M&O responds or provides assistance when requested. During this reporting period, VWD reported one sewage overflow in the City of Carlsbad. Seven gallons were released and all seven gallons were recovered, with zero gallons discharged to the environment.

The City continued to actively prevent and respond to sewage spills and other spills, and to limit discharges from the sanitary sewer system to the MS4. This occurred through public education and outreach, inspections, preventive maintenance, complaint response, and spill response (containment and remediation). The City operated a total of 283.5 miles of sewer mains and City staff maintained 253 miles of 12 and under sewer mains. Large sewer trunk mains are maintained by both City staff and contract work. City staff maintains 14 sewer pump stations.

The City of Carlsbad had nine Smart Covers to monitor flow levels in problem sewer manholes during this reporting period, and plans to add one more next quarter. Smart cover alarms saved the City from four spills during the reporting period.

Table 7.1 contains a summary of information associated with miles of sewer mains and spills.

Table 7.1 Summary

Time Period	Number of Reportable Spills[1]	Reportable Gallons Spilled	Total Miles of Sewer Mains
July 1, 2007 - March 23, 2008	5	5686	283.5

[1] Includes all spills caused by a failure in the sewer system (excludes recycled water spills and/or spills from sewer laterals).

The following inspection and preventive maintenance activities were conducted during this reporting period.

Inspection

From Monday through Friday, all sewer pump stations were inspected daily. The ten largest pump stations were also inspected on Saturdays and Sundays. The operator inspected the electrical systems quarterly and the pumps and shafts were serviced annually. In addition, outside services were contracted to inspect the electrical services annually. The wet wells were cleaned every six weeks or more frequently if necessary.

Eleven pump stations are equipped with telemetry which were inspected daily. This included checking the 24-hour history records, pump gallons per minute, wet well on-off cycles and pump alternating cycles. The City conducted most pump repair work, although any needed machine work was performed by outside services. In the case of emergencies, the City has a 24-hour duty person, and cell phones were issued to each member of the Wastewater Operations staff, and Supervisor. In the case of power failures, ten of the stations have onsite generators and three stations can be powered by the City s two trailer mounted generators. The remaining station has 24 hours of storage capacity and can be maintained by a vacuum or pumper truck.

Education

Educating the public on the proper disposal of fats, oils and grease is one of the BMPs used to prevent sewage spills. The City continued to distribute the Water Environment Federation brochure entitled *Fat-Free Sewers.* These brochures were distributed at various public events and during field visits. The City planned Fats, Oils and Grease (FOG) workshops for the Food Service Establishments.

Preventive Maintenance

During this reporting period, the City performed routine preventative maintenance and inspections of the sanitary sewer system, which included video inspections, access hole inspections, semi-annual inspections of three major trunk lines, and routine cleaning of sewer mains. For the reporting period July 1, 2007 through March 23, 2008, the City crews performed

approximately 3,496 manhole inspections. Regular monitoring of the sewer system was achieved with routine cleaning and manhole inspections. Sewer system surveillance was conducted on a regular basis. Flow monitoring was performed to compare the flows in dry and wet seasons. Anything unusual was reported and followed up on.

Approximately 147.51 miles of sewer lines were cleaned during this reporting period. The maintenance schedule is designed to provide more frequent cleaning for identified trouble areas, with siphons being cleaned annually, low flow and flat lines cleaned semi-annually, and grease problem areas cleaned quarterly. The Buena Vista Force Main is inspected Monday through Friday, by walking all accessible areas from the lift station west to I-5.

Complaint Response

The Storm Water Protection Program occasionally depends on other City departments to assist with investigations and remediation during field reviews. M&O and the Storm Drain Maintenance Division were key to prompt, effective responses to investigations involving spills and clean ups. Regular meetings and discussions about compliance issues facilitated this interdepartmental coordination effort.

M&O personnel responded to 149 sewer stoppage complaints during this reporting period. These requests and the City s response were tracked electronically in the RFA and Hansen systems.

Other Spills

The City s Emergency Services (Fire/Police Departments) continued to respond to reports of hazardous materials spills and discharges in Carlsbad. Fire Department personnel were trained in hazardous material emergency response and identification of hazardous materials and other City departments relied on the Fire Department to assume command during hazardous materials incidents. Emergency services may request assistance from the Streets Department or Storm Drain Maintenance Division (SDMD) to contain discharges that have the potential to endanger life, property, and/or the City right-of-way, control traffic, and provide secondary perimeter boundaries as directed by Emergency Services staff.

During this reporting period, the City s Spill Response Procedure continued to be used to detail the roles and responsibilities of Emergency Services, Streets Department, M&O, and the Storm Water Protection Program. If Emergency Services was first on the scene of an unidentified spill, the Incident Commander suspected the substance to be of a hazardous nature, emergency response procedures were implemented. Incident Commanders retained a copy of the Department of Transportations *Emergency Response Guidebook* which lists classifications of hazardous materials and recommendations for handling materials.

The San Diego County DEH HIRT, through a Joint Powers Agreement, was involved in any significant spills of a hazardous nature. The County maintains these records, as does the State OES. Minor petroleum or other small spills on City streets were handled by the Streets Department or SDMD using absorbents, sweeping, and proper waste disposal. These cleanup requests were documented in the City s RFA or work order systems. During this reporting period, there were 9 other spills (non-sewage related) in Carlsbad as referenced in Appendix 7.3.

PREVENTION MEASURES OF SEWAGE INTRUSION INTO MS4

The City of Carlsbad's Engineering Standards have several measures to prevent sewage intrusion into municipal separate storm sewer systems (MS4).

1. All gravity sewer pipes and laterals are required to have gasketed joints, which create water tight joints (Volume 1, Chapter 6, Item 3.A, 3.C, and 3.F). The water tight joints are tested using the methods indicated in Standard Specifications for Public Works Construction (SSPWC) section 306-1.4. The water tight test methods include a post-installation closed circuit television (CCTV) inspection and an air pressure test where the sewer line must sustain 2.5 to 3.5 psi gage pressure for at least 2 minutes after being pressurized to 3.0 psi.

2. All gravity sewer lines are required to follow engineering standard for the amount of flow they can carry. During peak hour dry weather season the pipe shall be designed to carry a flow depth of 0.5 (or 0.75 depending on the pipe size) the diameter of the pipe (Volume 1, Chapter 6, Item 4.C). This design requirement prevents the pipe from becoming full, which would pressurize the pipe and potentially cause a leak.

3. Per Carlsbad's Engineering Standard GS-6 and GS-6A, the sewer lines are typically located at an elevation deeper than the storm drain line, which further prevents sewage intrusion into MS4. In the event of a sewage pipe leak, the leakage flow will naturally gravitate below the sewer line rather than up to the storm drain line.

4. The standard horizontal separation between sewer and storm drain is 13 feet, which further prevents sewage intrusion into MS4.

5. In special cases where storm drain lines are installed at a depth greater than that of sewer lines, additional design standards are required such as water tight joints or encasements (Volume 1, Chapter 5, Item 1.G).

Preventative maintenance of the sanitary sewer system, as described above is also effective at preventing infiltration from sanitary sewer lines into the MS4. Continued preventative maintenance prevents exfiltration of sewer water from the pipelines by ensuring that flow is maintained in the system and pressure does not build up causing water to leave the system.

In the storm drain system, ammonia test kits are utilized as part of the dry weather program, primarily to test for the presence of sewage. These tests are taken once per year at various points strategically placed throughout the MS4 to provide adequate coverage. Exceedances for ammonia may trigger source investigations, which may detect infiltration from sewer lines if present.

7.4 Urban Runoff Monitoring

Dry Weather Monitoring

During this reporting period, the City continued investigations related to the Dry Weather Monitoring Program that was implemented between May 1 and September 30, 2007. As in years past this program included monitoring at 60 MS4 locations throughout the City.

Several of the findings in the 2007 Dry Weather Program prompted further investigations upstream. As reported previously, several investigations resulted in extensive outreach campaigns in response to water quality exceedances, especially in residential areas, where

specific sources of pollutants were not able to be identified. The City distributed educational information to over 800 residents, focusing mainly on over irrigation, lawn care and landscaping, and pet waste.

Additionally, three sites were recommended for further inspection where low pH was detected. The low pH was suspected to be caused by groundwater intrusion into the MS4. Using closed circuit television (CCTV) camera equipment, the City inspected the portions of the MS4 where the pH was low. In two cases, groundwater intrusion was evident through seams in the pipe and no illicit connections were identified. In the third case, a connection to the MS4 was located that appears to convey groundwater from a sub-drain system. In all three cases, groundwater was confirmed as the source of the low pH.

Results and investigations from the 2007 Dry Weather Monitoring Program were reported in the City s Dry Weather Monitoring Report for 2007 submitted with the City s FY 06-07 JURMP Annual Report in January 2008.

Coastal Storm Drain Monitoring

As required under the Permit, the City continued to monitor storm drains discharging to coastal waters. In order to facilitate the transition from Order 2001-01 to Order 2007-0001, the Copermittees requested permission from the Regional Board to implement the Coastal Storm Drain Monitoring Program beginning with the new monitoring season, October 1, 2007. This request was granted and the City began to implement the program according to the Order 2007-0001 requirements at this time.

Table 7.2 summarizes the City Coastal Storm Drain Monitoring activities under each permit during this reporting period.

Table 7.2 Coastal Storm Drain Monitoring Program Summary Statistics (July 1, 2007 March 23, 2008)

Sites Monitored		Frequency	Routine Samples Collected		Sites with Exceedances		Findings
Ocean	Lagoon		Pairs	Singles	Storm Drain	Receiving Water	
Order 2001-01							
6	16	Monthly	9	9	2	1	All confirmation samples were within established criteria. No further action.
Order 2007-0001							
8	0	Monthly	1	3	1	0	No flow was observed at the sites when staff returned to collect confirmation samples. No further action.

Results of this reporting period show that the majority of sites do not have sufficient flow to sample the majority of the time during dry weather. Over the course of this reporting period, 114 site visits were made and samples were collected on 22 of the visits, or only 19 of the time. Of the 22 monitoring events where samples were collected, four of the initial samples had exceedances of water quality criteria: three for exceeding 95th percentile criteria in the storm drain and one for exceeding Rec-1 criteria in the receiving water. On follow-up visits, none of

the samples collected confirmed exceedances of water quality criteria. On one of the three follow-up visits, there was no flow at the site.

All data collected and a full analysis of the Coastal Storm Drain Monitoring Program will be submitted in the San Diego County Storm Water Monitoring Annual Report to be submitted in January 2009.

7.5 Follow-up and Enforcement

The IDDE process is an ongoing endeavor, involving a combination of education, inspections, complaint response, and enforcement. The City used one or any combination of these efforts as necessary to achieve compliance. The ultimate goal is to eliminate the discharge or connection and to prevent future occurrences.

During this reporting period, the Storm Water Protection Program received 161 complaints of potential illegal discharges. As illustrated in Figure 7.3, 64 of the complaints involved alleged washing or dumping to the storm drain, totaling 104 of the 161 complaints. These types of complaints are representative of illegal discharges reported to the program. All reports were investigated, however not all reports of washing or dumping to the storm drain were illegal discharges. Of the 104 reports of washing or dumping to the storm drain, 69 were found to be valid complaints, 11 were not illicit discharges, and 25 were not found upon investigation. Table 7.3 provides a breakdown of illicit discharges and connections by residential, commercial, industrial, and municipal land uses. There were no illicit connections identified. All illicit discharges (69) that were identified were eliminated as required.

Table 7.3 Illicit Discharges and Connections

Land Use	Number of Illicit Discharges	Number of Illicit Connections
Residential	37	0
Commercial	18	0
Industrial	1	0
Mobile Washer	6	0
Municipal	5	0
Construction	2	0

All complaints were addressed according to the City s Enforcement Procedures as described in the JURMP, Section 2.4. In utilizing this escalating enforcement process, all illicit discharges were eliminated. Table 7.4 summarizes the enforcement actions that were necessary to eliminate the discharges described above. Enforcement actions specific to land uses (i.e. residential, construction, industrial/commercial) are described in their respective sections of the annual report.

Table 7.4 Enforcement Actions to Eliminate Illicit Discharges/Connections

Enforcement Action	Number	Percentage
No Issue/No Violation	22	21
Verbal Warning	23	22
Informational Letter	15	14
Written Warning	4	4
Notice of Violation	6	6
Referred for Action	17	16
Not Found	17	16
	104	

The City conducted four high level illicit discharge investigations during this reporting period. High level illicit discharge investigations include those that involve hazardous and/or toxic substances and those investigations resulting from complaints to or from the Regional Board. Each of these high level complaints is described below.

West Buffet (RFAA-753MT9)

On July 13, 2007 the City's storm water staff was notified of grease observed at a storm drain outfall near Buena Vista Creek. The observation was a result of the City's Dry Weather Monitoring Program. Initially the source was not identified and the City hired a contractor to clean the storm drain and area adjacent to the outfall. Further upstream investigation led City inspectors to a nearby restaurant, West Buffet. It appeared that they had washed grease and other materials to the storm drain in the back of their building. They were instructed to stop the activity immediately and agreed to have the storm drain system cleaned from their restaurant to the outfall. The MS4 was hydro-jetted from the source to the discharge. The City oversaw both cleanup efforts to ensure that no further discharges occurred. A Notice of Violation was issued to West Buffet and the City charged the business for time and money spent on the cleanup of the discharge. West Buffet responded in writing that they would implement BMPs to prevent any further discharges to the MS4. A subsequent storm water inspection was performed on January 23, 2008 and no violations were observed. The incident was reported to the Regional Board verbally within 24 hours and followed up in writing within five business days.

La Costa Foam Incident (RFAA-7DTKV5)

During a rain event on November 30, 2007 the City responded to a report of foam entering the storm drain. An investigation was initiated by City staff and it appeared that the foam originated from property owned by SDG&E. SDG&E was contacted and responded to the incident with equipment to contain the remainder of the foam and to recover as much as possible. Because the discharge was observed in the storm drain and in Batiquitos Lagoon, the RWQCB was notified. SDG&E cleaned the foam and drainage path from its source. The source of the foam was not definitively identified. The incident was reported the Regional Board verbally within 24 hours and followed up in writing within five business days.

Sediment Discharge Carlsbad High School (RFAA-7BERTK)

In February the City of Carlsbad Storm Water Department received a complaint from nearby residents regarding sediment leaving the property of Carlsbad High School. Sediment had been discharged onto the City streets and into the storm drain system. City Staff worked with the Carlsbad Unified School District and the RWQCB to address a short term solution to the erosion issue. The School District cleaned up all sediment from the streets and implemented appropriate BMPs to retain sediment on-site. City crews cleaned the sediment from the storm drain system. Currently under construction, the District will address the long term erosion concerns with the new construction.

Quality Inn and Suites (RFAA-7BRN4W)

On February 13, 2008, the City responded to a report of a mobile washing operation in the parking lot of the Quality Inn and Suites. Semi-trucks were being washed on-site and excess wash water was flowing into the storm drain system. Workers stopped all washing and were required to build containment around the wash area and direct all water to the landscape prior to

resuming the activity. A follow up inspection was performed to verify compliance and a Notice of Violation was issued to the Quality Inn and Suites for violations of Carlsbad Municipal Code 15.12.050 and 15.12.080.

A complete summary of all Storm Water Protection Program investigations and responses is found in Appendix 7.4.

Sanitary Sewer Overflows
July 1, 2007 - March 23, 2008

Date	Source	Substance	Volume	Enter MS4?	Enter RW?	Response
03/22/2008	Private Interceptor	FOG	600	Yes	Yes	Costco notified to clear and clean interceptor and lateral, and to clean storm darins affected.
03/04/2008	Private Lateral	Sewage	10	No	No	Replaced C/O cap, had resident cal plumber.
03/03/2008	Private Lateral	Sewage	75	No	No	Illegal storm drain to sewer connection to be disconnected. Call plumber for stoppage.
03/01/2008	Private Lateral	Sewage	25	No	No	Debris in lateral.
01/31/2008	Private Lateral	Sewage	30	No	No	Plumber cleared grease blockage.
01/17/2008	Private Lateral	Sewage	45	No	No	Plumber cleared grease blockage.
12-31-07	Sewer MH	Sewage	350	No	Yes	Clear root stoppage, TV to ID cause.
12/23/2007	Private Lateral	Sewage	5	No	No	Plumber cleared root blockage.
12/21/2007	Private Lateral	Sewage	20	No	No	Plumber cleared blockage.
11-13-07	Sewer Main C/O	Sewage	60	No	No	Clear stoppage, capture all spill.
11-04-07	Sewer MH	Sewage	2000	No	No	Contained, cleared grease blockage, and captured all.
10-28-07	Sewer MH	Sewage	3625	No	No	Vandalism, construction debris,
10/17/2007	Private Lateral	Sewage	40	No	No	Plumber cleared tampons and sanitary napkins in cleanout.
10/11/2007	Private Lateral	Sewage	40	Yes	Yes	Plumber cleared root blockage.
09/10/2007	Private Lateral	Sewage	30	No	No	Plumber cleared lateral stoppage.
09/07/2007	Private Lateral	Sewage	15	Yes	Yes	Root blockage.
09-04-07	Sewer MH	Sewage	1	No	No	Clear root stoppage.

These spills were from the City of Carlsbad maintained sewer main.

Date	Address	Volume (gallons)	Recovered (gallons)	lat - deg.min.sec	long - deg.min.sec	CIWQS
08/31/07	Private Cleanout, 2534 Luceirnaga, Carlsbad, CA	20	0	33.06.11N	117.15.25W	656751
10/24/07	Private Cleanout, 7306 Alicante, Carlsbad, CA	10	0	33.05.41N	117.15.32W	706440
11/26/07	Private Cleanout, 2824 Cacatua St, Carlsbad, CA	10	0	33.06.37N	117.14.36W	708121
11/9/2007	LWD Manhole, N. Estrella Del Mar Rd, Carlsbad, CA	300	250	36.06.12N	117.15.47W	707537

Other Spills July 1, 07 to March 23, 08

Event Type	Cause	Volume (Gal) Spilled	Volume (Gal) Recovered	Incident Date	Street Number	Street	Responsible Party	Zip Code	Water Body Impact	Water Body
413	Vehicle Leak	¼	¼ Diesel	8/7/07	3780	Pio Pico Dr.	Unknown	92008	None	None
413	Traffic Accident	1 Diesel 1 Oil	1 Diesel 1 Oil	10/29/07	1221	Las Flores	Zach Edwards Meas AZ 85205	92008	None	None
413	Mechanical Problem	Unknown Hydraulic Fluid	Unknown	11/1/07	7044	Ivy St	Coast Waste Management	92011	None	None
413	Vehicle Leak	1 Motor Oil	1 Motor Oil	11/3/07	3401	Monroe St	Unknown	92008	None	None
413	Fuel Pump Hose	20 Diesel	Unknown	11/10/07	7170	Avenda Encinas	Chevron Gas Station (same address)	92011	None	None
413	Vehicle Leak	1 Gasoline	1 Gasoline	11/19/07	2858	Loker Ave East.	Unknown	92010	NA	NA
413	Vehicle Leak	1 Motor Oil	1 Motor Oil	12/17/07	3748	Jefferson St	Unknown	92008	None	None
413	Leak from Drum	20-30 Gallons Oil	Unknown	12/18/07	Unknown	La Costa / Paseo Tamarindo	Unknown	92009	NA	NA
413	Vehicle Leak	Unknown	Unknown	2/5/08	1700	Olivenhain Rd	Unknown	92009	None	None

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

Under Order 2007-0001, the City continued to conduct a proactive program for detecting and eliminating illegal discharges and illicit connections to the storm drain system. The City's program actively seeks to identify and eliminate illicit discharges and connections by conducting illegal discharge investigations, responding to spills and sewage overflows, conducting monitoring, and performing routine cleaning and maintenance activities on the sewer and storm drain systems. Several notable activities occurred between March 24 and June 30, 2008 and are described below.

- Continued operation of a stormwater hotline and complaint response with a summary in Section 7.2.
- Continued 24 hour spill response for wastewater and storm drain emergencies
- Updated the Dry Weather Program sites
- Conducted the Dry Weather Program from May 1 September 30, 2008

7.1 Introduction

The Illicit Discharge Detection & Elimination (IDD&E) Program for the City encompasses sources of solids and liquids containing pollutants and sanitary sewer system wastewater that may enter the municipal separate storm sewer system (MS4). The Program focuses on prevention while actively pursuing, investigating, and eliminating illicit discharges. The City facilitates public reporting of illicit discharges and connections as described in Section 7.2. Continued efforts are in place to facilitate reporting of spills, immediate response to spills, and continued education to prevent spills, described in Section 7.3. In addition to complaint and spill response, the City continues to perform monitoring in support of the IDDE program, described in Section 7.4. Routine follow-up investigations and associated enforcement actions are described in Section 7.5. The City strongly encourages voluntary elimination and cleanup of illicit discharges, however, enforcement is escalated to obtain compliance when necessary.

7.2 Public Reporting of Illicit Discharges and Connections

As required under Order 2007-0001, the City continues to publicize and facilitate public reporting of illicit discharges and water quality impacts. Methods to publicize and facilitate public reporting include:

- Brochures and Publications
- Outreach events
- The City's Website
- Internal training
- Operation of a Storm Water Hotline
- Operation of an Environmental Programs Hotline

All outreach methods utilized are described in detail in Sections 8.0 and 9.0, the Education and Public Participation Sections of the City's FY 07-08 Annual Report, submitted on September 30, 2008 to the RWQCB.

During regular office hours, 8 am to 5 pm, Monday through Friday, Storm Water Protection Program staff answered the storm water hotline, checked emails to the storm water account, and forwarded reported information to the appropriate personnel. When calls were received

after office hours, the hotline provided a voice mail message (in English and Spanish) directing complainants to leave a message for follow-up or be directed to an after hours number for dumping of hazardous materials into the storm water system.

The public continued to use the storm water hotline and e-mail address to report illegal discharges to the storm drain system. During this reporting period, the Storm Water Program received 65 reports of potential illegal discharges to the MS4. Figure 7.1 illustrates the breakdown of storm water complaints by the reporting mechanism.

Figure 7.1 Storm Water Complaints by Reporting Mechanism
March 24 - June 30, 2008 (Order 2007-0001)

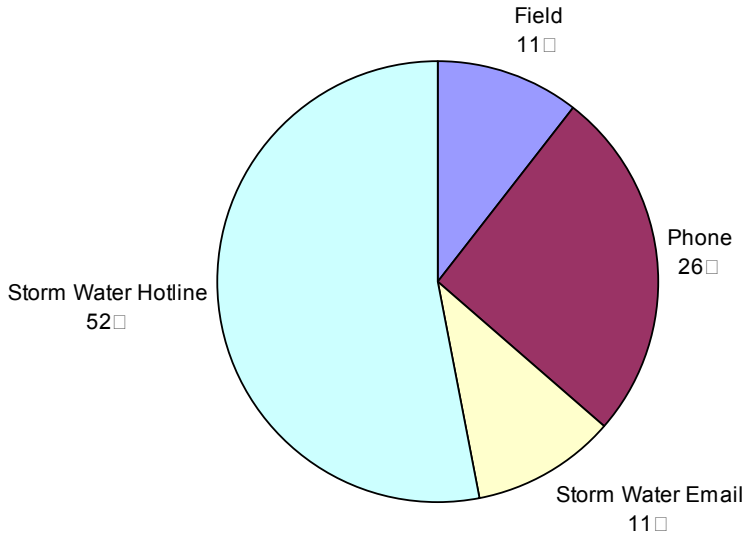

Other calls ranged from information requests, to solid waste inquiries, to other City business.

During the time period from March 24 through June 30, 2008 the storm water program researched software available to track the number of calls to the storm water hotline. New methods to track calls were implemented July 1, 2008 and will be reported on in the Annual Report for Fiscal Year 2008-09. There were 65 storm water related complaints received, 35 of which were via the hotline.

Sources of illegal discharge reports to the City included approximately 36 from the public, 59 from City employees, and 5 from outside agencies. Figure 7.2 illustrates the breakdown of reporting parties for the storm water complaints received during this reporting period.

Figure 7.2 Storm Water Complaints by Reporting Party
March 24 - June 30, 2008 (2007-0001)

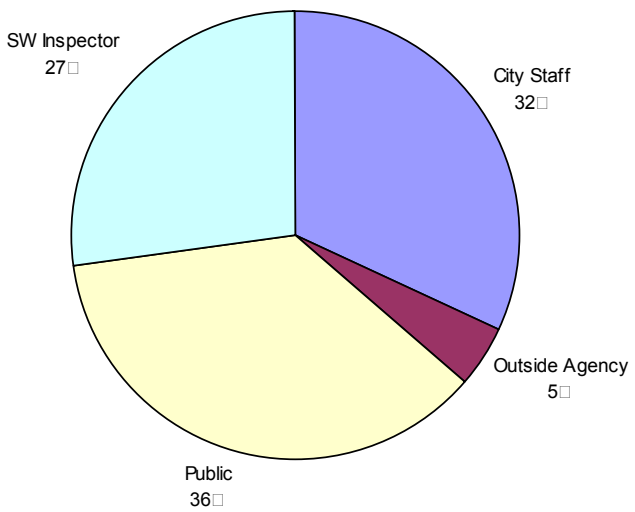

Of the 65 storm water related complaints received during the period from March 24 to June 30, 2008, most were related to washing or dumping to the storm drain. Figure 7.3 illustrates the types of storm water related complaints received during this period.

Figure 7.3 Storm Water Complaints
March 24-June 30, 2008 (Order 2007-0001)

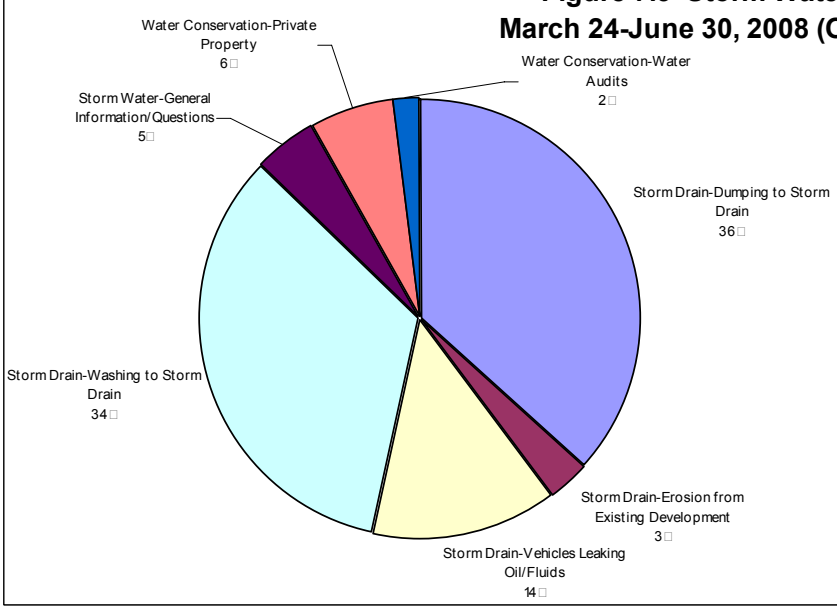

As compared to previous reporting periods, call volume appears to be increasing marginally. For this report period, March to June, there were 65 calls. In FY 07-08, the total number of storm water related calls were 226 compared to 154 in FY 06-07.

7.3 Spill Reporting, Response, and Prevention

Spill Response

City employees are trained to follow the City s Sewer Overflow Prevention Plan/Response Plan. Staff training was conducted semi-annually, either by tailgate or all-hands class format. All spill response incidents were tracked in the Hansen system or spill reports. Sanitary sewage overflow responses were documented as required on the Sanitary Sewer Overflow Report Form, which was sent via fax to the Regional Board, County Health Department, and the Storm Water Protection Program. During this reporting period of March 24 to June 30, 2008, the City responded to 2 sewage overflows or spills of approximately 1,145 gallons. Of the estimated 1,145 gallons spilled, all was recovered plus approximately 10,020 gallons of wash down water. The overflow reports are found in Appendix 7.1.

The City Public Works Maintenance and Operations Division (M&O) continued to respond and coordinate sewage spill response with the Leucadia Waste Water District (LWWD) and Vallecitos Water District (VWD) for spills that occurred outside the M&O jurisdiction. During normal business hours, calls were dispatched by M&O to field units for immediate response and evaluation. After working hours, phone numbers were routed through police dispatch to M&O standby personnel.

A portion of the LWWD collection system is located within the City limits. LWWD is responsible for operating and maintaining their system, including responding to overflows and spills. However, M&O responds or provides assistance when requested. During this reporting period, LWWD responded to zero sewage overflows in Carlsbad.

A portion of the VWD sewage collection system is also located within the City limits. VWD is responsible for operating and maintaining their system, including responding to overflows and spills. However, M&O responds or provides assistance when requested. During this reporting period, Vallecitos Water District reported zero sewage overflows in the City of Carlsbad.

The City continued to actively prevent and respond to sewage spills and other spills, and to limit discharges from the sanitary sewer system to the MS4. This occurred through public education and outreach, inspections, preventive maintenance, complaint response, and spill response (containment and remediation). The City operated 283.5 miles of sewer mains, and City staff maintained 253 miles of 12 and under sewer mains. Large sewer trunk mains are maintained by both City staff and contract work. City staff maintained 14 sewer pump stations.

The City also added an additional Smart Cover to the existing nine, for a total of ten, to monitor flow levels in problem sewer manholes. Smart Cover alarms saved the City from one spill during this reporting period. The City entered into a joint project with Encina Wastewater Authority and installed new ADS Intelliserve flow monitoring systems to monitor sanitation flow rates 24 hours a day at selected areas.

Table 7.1 contains a summary of information associated with miles of sewer mains and spills.

Table 7.1 Summary

Time Period	Number of Reportable Spills[1]	Reportable Gallons Spilled	Total Miles of Sewer Mains
March 24 - June 30, 2008	2	1145	283.5

[1] Includes all spills caused by a failure in the sewer system (excludes recycled water spills and/or spills from sewer laterals).

The following inspection and preventive maintenance activities were conducted during this reporting period.

Inspection

From Monday through Friday, all 14 sewer pump stations were inspected daily. The ten largest pump stations were also inspected on Saturdays and Sundays. The operator inspected the electrical systems quarterly and the pumps and shafts were serviced annually. In addition, outside services were contracted to inspect the electrical services annually. The wet wells were cleaned every six weeks or more frequently if necessary.

Eleven pump stations are equipped with telemetry which was inspected daily. This included checking the 24-hour history records, pump gallons per minute, wet well on-off cycles and pump alternating cycles. The City conducted most pump repair work; although any needed machine work was performed by outside services. In the case of emergencies, the City has a 24-hour duty person, and cell phones were issued to each member of the Wastewater Operations staff, and Supervisor. In the case of power failures, ten of the stations have onsite generators and three stations can be powered by the City s two trailer mounted generators. The remaining station has 24 hours of storage capacity and can be maintained by a vacuum or pumper truck.

Education

Educating the public on the proper disposal of fats, oils and grease is one of the BMPs used to prevent sewage spills. The City continued to distribute the Water Environment Federation brochure entitled *Fat-Free Sewers.* These brochures were distributed at various public events and during field visits. The City held two Fats, Oils, and Grease (FOG) workshops during this reporting period.

Preventive Maintenance

During this reporting period, the City performed routine preventative maintenance and inspections of the sanitary sewer system, which included video inspections, 610 manhole inspections, semi-annual inspections of three major trunk lines, and routine cleaning of sewer mains. Regular monitoring of the sewer system was achieved with routine cleaning and manhole inspections. Sewer system surveillance was conducted on a regular basis. Flow monitoring was performed to compare the flows in dry and wet seasons. Anything unusual was reported and followed up on.

Approximately 40.74 miles of sewer lines were cleaned from March 23 June 30, 2008. The maintenance schedule is designed to provide more frequent cleaning for identified trouble areas, with siphons being cleaned annually, low flow and flat lines cleaned semi-annually, and grease problem areas cleaned quarterly. City staff also performs Monday through Friday checks of the Buena Vista Force Main, walking the line from the lift station to I-5.

Complaint Response

The Storm Water Protection Program occasionally depends on other City departments to assist with investigations and remediation during field reviews. M&O and the Storm Drain Maintenance Division were key to prompt, effective responses to investigations involving spills and clean ups. Regular meetings and discussions about compliance issues facilitated this interdepartmental coordination effort.

M&O personnel responded to 36 sewer stoppage complaints during this reporting period. These requests and the City s response were tracked electronically in the Accela, Hansen systems, and the CIWQS website.

Other Spills

The City s Emergency Services (Fire/Police Departments) continued to respond to reports of hazardous materials spills and discharges in Carlsbad. Fire Department personnel were trained in hazardous material emergency response and identification of hazardous materials and other City departments relied on the Fire Department to assume command during hazardous materials incidents. Emergency services may request assistance from the Streets Department or Storm Drain Maintenance Division (SDMD) to contain discharges that have the potential to endanger life, property, and/or the City right-of-way, control traffic, and provide secondary perimeter boundaries as directed Emergency Services staff.

During this reporting period, the City s Spill Response Procedures continued to be used to detail the roles and responsibilities of Emergency Services, Streets Department, M&O, and the Storm Water Protection Program. If Emergency Services was first on the scene of an unidentified spill, and the Incident Commander suspected the substance to be of a hazardous nature, emergency response procedures were implemented. Incident Commanders retained a copy of the Department of Transportations *Emergency Response Guidebook* which lists classifications of hazardous materials and recommendations for handling materials.

The San Diego County DEH HIRT, through a Joint Powers Agreement, was involved in any significant spills of a hazardous nature. The County maintains these records, as does the State OES. Minor petroleum or other small spills on City streets were handled by the Streets Department or SDMD using absorbents, sweeping, and proper waste disposal. These cleanup requests were documented in the City s RFA or work order systems. During this reporting period, there were nine other spills (non-sewage related) in Carlsbad as reference in Appendix 7.2.

PREVENTION MEASURES OF SEWAGE INTRUSION INTO MS4

The City of Carlsbad s Engineering Standards have several measures to prevent sewage intrusion into municipal separate storm sewer systems (MS4).

1. All gravity sewer pipes and laterals are required to have gasketed joints, which create water tight joints (Volume 1, Chapter 6, Item 3.A, 3.C, and 3.F). The water tight joints are tested using the methods indicated in Standard Specifications for Public Works Construction (SSPWC) section 306-1.4. The water tight test methods include a post-installation closed circuit television (CCTV) inspection and an air pressure test where the sewer line must sustain 2.5 to 3.5 psi gage pressure for at least 2 minutes after being pressurized to 3.0 psi.

2. All gravity sewer lines are required to follow engineering standard for the amount of flow they can carry. During peak hour dry weather season the pipe shall be designed to carry a flow depth of 0.5 (or 0.75 depending on the pipe size) the diameter of the pipe (Volume 1, Chapter 6, Item 4.C). This design requirement prevents the pipe from becoming full, which would pressurize the pipe and potentially cause a leak.

3. Per Carlsbad s Engineering Standard GS-6 and GS-6A, the sewer lines are typically located at an elevation deeper than the storm drain line, which further prevents sewage intrusion into MS4. In the event of a sewage pipe leak, the leakage flow will naturally gravitate below the sewer line rather than up to the storm drain line.

4. The standard horizontal separation between sewer and storm drain is 13 feet, which further prevents sewage intrusion into MS4.

5. In special cases where storm drain lines are installed at a depth greater than that of sewer lines, additional design standards are required such as water tight joints or encasements (Volume 1, Chapter 5, Item 1.G).

Preventative maintenance of the sanitary sewer system, as described above is also effective at preventing infiltration from sanitary sewer lines into the MS4. Continued preventative maintenance prevents exfiltration of sewer water from the pipelines by ensuring that flow is maintained in the system and pressure does not build up causing water to leave the system.

In the storm drain system, ammonia test kits are utilized as part of the dry weather program, primarily to test for the presence of sewage. These tests are taken once per year at various points strategically placed throughout the MS4 to provide adequate coverage. Exceedances for ammonia may trigger source investigations, which may detect infiltration from sewer lines if present.

7.4 Urban Runoff Monitoring

Dry Weather Monitoring

The Dry Weather Monitoring Program was implemented between May 1 and September 30, 2008. The program was designed to detect and eliminate illicit connections and illegal discharges to the MS4. This was accomplished by performing field observations and field screening at all monitoring locations and performing analytical monitoring at 25 of the locations. As in years past this program included monitoring at 60 MS4 locations throughout the City. New in 2008, the program included an assessment for trash at each location, as required per Order 2007-0001. The dry weather sites were re-assessed as part of the JURMP preparation process and have changed slightly.

All results and investigations are included under separate cover in the City s Dry Weather Monitoring Report for 2008. This report includes the Dry Weather Field Screening and Analytical Monitoring Map.

In general, exceedances for field screening and analytical parameters decreased in the 2008 monitoring season as compared to previous years. Water quality at most sites had no exceedances. The most common field constituent to exceed action levels were nitrate-nitrogen. The most common analytical constituents to exceed action levels were bacteria. All follow up activities were performed as required under Order 2007-0001. Follow-up activities performed

immediately after the initial sampling efforts are described in the Dry Weather Report under separate cover. Follow-up activities performed by the City are described in Appendix 7.4. Required follow up actions were taken for all sites where water quality exceeded established action levels as described in the permit.

MS4 Outfall Monitoring

The MS4 Outfall Monitoring Program is part of the Regional Monitoring required in Order 2007-0001. This program has been developed by the Regional Copermittees and was implemented within the region during FY 07-08 as required. Sites were monitored in all watersheds throughout the County. Monitoring results will be summarized in the County of San Diego Storm Water Monitoring Annual Report, to be submitted in January 2009.

The objective of this monitoring program is to assess MS4 discharge water quality throughout the county and assess the relative contributions to receiving waters within each defined watershed management area.

The monitoring design is based on a combination of random and targeted sampling of MS4 outfalls in each watershed. Random sampling will be conducted to assess countywide conditions of MS4 outfall water quality. Targeted sampling will be conducted to assess the relative contribution of particular MS4 outfalls to receiving waters.

A detailed description of the program was submitted to the Regional Board prior to July 1, 2008 as required by the Order. The description includes monitoring locations, frequencies, analytes, sampling and analysis methods, procedures, and reporting strategies.

Random samples were collected throughout the watershed management areas by the Regional Monitoring contractor. These samples were collected during FY 07-08, as prescribed in the permit.

Targeted samples will be collected during FY 08-09 and during subsequent years by the individual jurisdictions, independent of the regional group. The targeted approach includes six locations within the City of Carlsbad. These locations were selected based on criteria developed in the Regional Monitoring Workgroup. Table 7.2 lists the targeted locations, hydrologic area, and analytes to be monitored for the program.

Table 7.2 Targeted monitoring locations.

Site ID	Hydrologic Area	Analytes
1D-21	904.2	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
1D-20	904.2	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
1C-21	904.2	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
16C-61	904.3	Bacteria, TSS
21C-14	904.3	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
19C-1	904.3	Bacteria, TDS, TSS, Manganese, Selenium, Sulfates

Results will be summarized in the Regional Monitoring Report submitted by the County of San Diego each year.

Coastal Storm Drain Monitoring

As required under the Permit, the City continued to monitor storm drains discharging to coastal waters. In order to facilitate the transition from Order 2001-01 to Order 2007-0001, the Copermittees requested permission from the Regional Board to implement the Coastal Storm Drain Monitoring Program beginning with the new monitoring season, October 1, 2007. This request was granted and the City began to implement the program according to the Order 2007-0001 requirements at that time.

Table 7.3 summarizes the City Coastal Storm Drain Monitoring activities during this reporting period, March 24 June 30, 2008.

Table 7.3 Coastal Storm Drain Monitoring

Sites Monitored		Frequency	Total Site Visits	Routine Samples Collected		Sites with Exceedances		Findings
Ocean	Lagoon			Pairs	Singles	Storm Drain	Receiving Water	
8	0	Monthly	24	0	4	1	0	No flow was observed at the site when staff returned to collect confirmation samples. No further action.

Results of this year of monitoring show that the majority of sites do not have sufficient flow to sample the majority of the time during dry weather. Over the course of this reporting period, 24 routine site visits were made and samples were collected on four of the visits, or only 17 of the time. Upstream investigations are performed at the time of sampling. During these four site visits, the storm drain flow did not reach the receiving water, therefore samples were only collected from the storm drain. Of the four monitoring events where samples were collected, one of the initial samples had exceedances of water quality criteria in the storm drain sample. On the follow-up visit there was no flow at the site.

All data collected and a full analysis of the Coastal Storm Drain Monitoring Program will be submitted in the San Diego County Storm Water Quality Monitoring Annual Report to be submitted in January 2009.

7.5 Follow-up and Enforcement

The IDDE process is an ongoing endeavor, involving a combination of education, inspections, complaint response, and enforcement. The City used one or any combination of these efforts as necessary to achieve compliance. The ultimate goal is to eliminate the discharge or connection and to prevent future occurrences.

During this reporting period, the Storm Water Protection Program received 65 complaints of potential illegal discharges. As illustrated in Figure 7.4, 70 of the complaints involved alleged washing or dumping to the storm drain, totaling 46 of the 65 complaints. These types of complaints are representative of illegal discharges reported to the program. All reports were investigated, however not all reports of washing or dumping to the storm drain were illegal discharges. Of the 65 reports of washing or dumping to the storm drain, 33 were found to be valid complaints, 9 were not illicit discharges, and 4 were not found upon investigation. Table 7.4 provides a breakdown of illicit discharges and connections by residential, commercial, industrial, and municipal land uses. All illicit discharges (33) that were identified were eliminated as required. There were no illicit connections identified during this reporting period.

Table 7.4 Illicit Discharges and Connections

Land Use	Number of Illicit Discharges	Number of Illicit Connections
Commercial	9	0
Industrial	1	0
Municipal	1	0
Mobile Washer	3	0
Residential	19	0
Total	33	0

All complaints were addressed according to the City s Enforcement Procedures as described in the 2008 JURMP, Section 2.4. In utilizing this escalating enforcement process, all illicit discharges were eliminated. Table 7.5 summarizes the enforcement actions that were necessary to eliminate the discharges described above.

Table 7.5 Enforcement Actions Related to Illicit Discharges

Enforcement Action	Number	Percentage
Verbal Warning	6	13
Informational Letter	14	30
Written Warning	1	2
Notice of Violation	4	9
Total	25	

The City conducted two high level illicit discharge investigations during this reporting period. High level illicit discharge investigations include those that involve hazardous and/or toxic substances and those investigations resulting from complaints to or from the Regional Board. Each of these high level complaints is described below.

Agua Hedionda Lagoon Middle Basin Oil Discharge (RFAA-7DAMC6)

On March 31, 2008 Storm Water staff received a call from a City employee stating there was an oily substance discharging from a storm drain into Agua Hedionda Lagoon. Upon receipt, Storm Water staff, Carlsbad Fire Department and other city divisions responded immediately. Carlsbad Fire Department and public works crews initiated containment measures, and Storm Water staff, police units and other city employees canvassed the area looking for the source. The California Office of Emergency Services was notified and San Diego County HIRT responded. It was determined by San Diego County HIRT that the substance was most likely motor oil. An environmental clean-up contractor was called in to conduct a thorough cleanup of the immediate area around the outfall and the upstream storm drain system. It was estimated that approximately five gallons of motor oil entered the lagoon. The incident was reported to Regional Board staff within 24 hours verbally and followed up in writing within five business days.

After a comprehensive search of the drainage area, City employees were unable to locate a source. The following day an article describing the event ran in the newspaper. Upon reading the article, a Carlsbad resident notified the Storm Water department of the suspected location that the motor oil entered the storm drain. After confirming the location was in fact accurate, Carlsbad Police initiated an investigation and were able to determine that the used motor oil

from a tractor trailer was emptied to the storm drain; however, they were unable to identify the responsible party. Outreach materials were distributed and placed in nearby businesses and an educational letter was sent to all residents in the surrounding neighborhood.

AT T Vault Discharge (RFAA-7DRTJZ)

On April 16, 2008, City Storm Water Staff received a report of a large flow of discolored water entering a storm drain in a local business park. Upon receipt, multiple departments including Storm Water Protection and Storm Drain Maintenance responded. Upon arrival, the discharge had ceased; a rust colored stain in the street and gutter line and rust colored water in Encinas Creek were observed. The discharge originated from an AT&T underground utility vault. Approximately 2800 gallons of discolored water were pumped from an underground utility vault by HP Communications (a contractor for AT&T). AT&T was contacted and required to clean the street and storm drain and was advised to contact appropriate agencies (RWQCB, CDFG, USFWS, and City of Vista) concerning cleanup of material in the creek. The City oversaw the cleanup of the street and storm drain and the other agencies were involved in the cleanup of the impacted area of the creek.

The City of Carlsbad Storm Water Department issued a Notice of Violation to AT&T and HP Communications, Inc. for four violations of the City of Carlsbad Municipal Code including: prohibited discharges, a discharge in violation of a separate Permit, a failure to reduce pollutants, and a failure to contain, cleanup, and notify the City of the discharge. Follow-up inspections/investigations showed no further issues or action required.

A complete summary of the storm water related complaints is provided in Appendix 7.3.

7.6 Effectiveness Assessment

Level 1: Compliance with Activity Based Permit Requirements

Overall, the City is compliant with activity based permit requirements.

- The City implemented a program to actively seek and eliminate illicit discharges and connections to the MS4: As described above in Sections 7.1-7.5.

- The City continued to verify the accuracy of its MS4 map and update it at least annually: The accuracy of the City s MS4 map is verified continually by field staff and updated with new information or as existing information is updated. The most current MS4 map is provided in Appendix 7.5.

- The City performed Dry Weather Screening and Analytical Monitoring:The City conducted a Dry Weather Monitoring Program inclusive of 60 monitoring locations throughout the drainage area in the City. The Dry Weather Report for 2008 is included as under separate cover with this submission.

- Investigations and follow-up actions were performed in accordance with the Permit: Indications of illicit discharges and/or connections to the MS4 were investigated and followed up accordingly. Follow-up investigations to dry weather field screening exceedances were usually performed immediately and always within two business days

of the field screening. Any results of analytical parameters were investigated within two business days of receipt of results from the laboratory.

- All illicit discharges and connections were investigated and eliminated: All reported illicit discharges and connections were investigated and eliminated.

- The City implemented and enforced the City's ordinances to prevent or eliminate illicit discharges and connections to the MS4:The City implemented an escalating enforcement process as described in its 2008 JURMP, Section 2. Enforcement actions related to illicit discharges are described above in Table 7.5.

- The City prevented and responded to sewage spills, including from private laterals and failing septic systems, and other spills:The City responded to all reported spills as described above in Section 7.3.

- The City facilitated public reporting of illicit discharges and connections via a public hotline:A storm water hotline was staffed year round. Complaints received via the storm water hotline are summarized above in Section 7.2.

Overall, the City's IDDE program is compliant with permit requirements.

Level 2: Changes in Knowledge/Awareness

Educational material is distributed in response to nearly all storm water related complaints, whether to residents or businesses within the City. Additionally, educational information is distributed to entire neighborhoods throughout the year, most often in response to complaints or dry weather exceedances. Often, exceedances of nutrient action levels in residential areas will trigger the need for larger scale distribution of outreach materials. These efforts are described in Section 6 of the City's JURMP Annual Report for FY 07-08, submitted in September 2008. While the City does not currently measure the changes in knowledge, educational materials provide a good source of information to citizens and businesses about the connection between their activities and water quality.

Level 3: Behavioral Change/BMP Implementation

Behavioral changes and BMP implementation are continually obtained through the IDDE program. Over the Fiscal Year 2007-08, 226 storm water related complaints were responded to by City staff. Of these, approximately 150 pertained to illegal dumping or washing. In all cases, the discharges were discontinued immediately. Some of the incidents were one time occurrences, however, many were routine activities performed by the responsible parties. In these cases, through education and enforcement actions, BMPs were implemented and behavioral changes were evident. Follow-up inspections confirmed BMP implementation and behavioral changes.

Level 4: Load Reductions

Load reductions are difficult to estimate in relation to the IDDE program. Estimates of sewage recovered during spills can provide the number of gallons of raw sewage prevented from entering the environment. If correlated with bacteria data, rough estimates of load reductions of bacteria may be generated. Of an estimated 6831 gallons (5686 from July 1, 2007 to March 23,

2008 and 1145 from March 24 to June 30, 2008) spilled during FY 07-08 due to municipal infrastructure failure, 3206 gallons were recovered. If a conservative estimate of 1,000,000 cfu/100 ml of fecal coliform is used for raw sewage, a total of 121,360,300,000 colony forming units of fecal coliform was prevented from entering the environment.

Level 5: Changes in Discharge Water Quality

Dry Weather Field Screening and Analytical Monitoring Program

The City has conducted an annual *Dry Weather Field Screeing and Analytical Monitoring Program* since 1995. The purpose of the monitoring program is to detect and eliminate illicit connections and illegal discharges to the storm drain system. The Dry Weather Monitoring Program report for FY 07-08 and follow-up activities is provided under separate cover. The following discussions summarize current and past dry weather results in order to assess changes in MS4 water quality, through the 2008 dry weather season.

Fecal coliform concentrations are generally lower over the past five years than in 2003, while enterococcus concentrations are slightly higher in recent years. In comparison to dry weather action levels, fecal coliform and enterococcus mean values are well below the established action levels across all years of data. With many variable factors unaccounted for, it is unclear if the recent results are due to improvements and BMP implementation or to the variable nature of bacteria concentrations.

The City has conducted field testing of detergents since 1995. Data appear to show a downward trend in detergent levels found in the MS4 with results less than established action levels for MBAS.

The average pH levels have also shown a downward trend since 1995, with results generally below action levels. This may be a result of the decreased detergents in the MS4, which are typically basic having pH values 7.

Ammonia and Nitrate concentrations have continued to show no significant increases from previous years. With the exception of 2002, all recent years have averaged well below the established action level for ammonia-nitrogen.

Lower in recent years, all ortho-phosphate averages are well below established dry weather action levels.

Over the course of the past seven years of dry weather programs, water quality parameters have been repeatedly analyzed at the same sites allowing for a comparison of data. In general, water quality within the MS4 is good, with concentrations of bacteria, nutrients, pH, and surfactants generally decreasing and below Action Levels. Efforts continue to focus on bacteria concentrations in the MS4 and their sources. In the future, increased efforts to understand bacteria concentrations and sources will be made through various TMDL activities. With an enhanced understanding of bacteria, the City will be better prepared to address and abate sources within the watershed.

Coastal Storm Drain Outfall Monitoring Program

The City continued to collect samples from various storm drain outfalls as part of the *Coastal Outfall Monitoring Program*. If water was flowing from a storm drain outfall, samples were collected and analyzed for total coliform, fecal coliform and enterococci. Storm drain sample results were compared to the 95th percentile criteria established in the previous year s annual

report for the CSDM Program. Where required, a paired receiving water sample was collected to assess the impacts of the storm drains on the receiving waters. However, the majority of the time, storm drain flows, when present, did not reach the receiving water and only a single storm drain sample was collected. The receiving water samples were compared to Rec-1 standards to determine exceedances. Where storm drain bacteria concentrations exceeded 95th percentile criteria or receiving water samples exceeded Rec-1 objectives, follow-up sampling and/or investigations were performed.

Recent years indicate a decrease in storm drain exceedances for all three bacterial indicators, showing improvements in outfall water quality. In all cases, the flow from outfalls was intermittent and low volume. In most cases, the flow did not actually reach the receiving waters, but dissipated into the sand or sediment. The City will continue to conduct the Coastal Outfall Monitoring Program and to conduct follow-up investigations as detailed in the Monitoring Plan per permit requirements.

Level 6: Changes in Receiving Water Quality

It is important to note that receiving water quality reflects considerably more than the quality of the City s MS4 discharges. In addition, receiving water quality can be adversely impacted by other events that are not under the control of the City, such as other permitted NPDES discharges, wildlife (impacting bacteria levels), atmospheric deposition, and other events and activities.

Watershed Receiving Water Samples

This year the City continued to have four receiving water samples collected during the Dry season in order to provide additional baseline data of surface water quality in conjunction with Carlsbad Watershed numbers. These samples are collected at the same time as the Dry Weather Program samples. This is the sixth year of data collected under the this program. The program includes monitoring sites on Buena Vista Creek, Agua Hedionda Creek (at the Mass Loading Station site), Encinas Creek, and San Marcos Creek. Each of these tributaries is representative of the four separate Carlsbad sub-watersheds.

This special study was initiated in support of the Carlsbad Watershed Copermittees efforts to learn more about the quality of receiving waters in the Carlsbad Hydrologic Unit. The high priority pollutants in the Carlsbad Watershed are sediment, nutrients, and bacteria. Data collected in this study is insufficient in quality to provide information on nutrients due to the methodology used in analyzing nutrient concentrations. The prioritization of sediment as a high priority pollutant does not appear to be supported by data collected in this study. This is likely because all samples were collected during dry weather and sediment is potentially more prevalent during wet weather.

Bacteria is also listed as a high priority pollutant in the Carlsbad Watershed and data has been shown to exceed REC-1 water quality objectives during wet and dry weather. This special study appears to support the Watershed s prioritization of bacteria during dry weather.

Overall, water quality in these creeks appears to be within both Basin Plan water quality objectives and dry weather action levels for the constituents monitored in this special study. These data support the findings of previous monitoring in the Carlsbad Watershed indicating that bacterial indicators are a constituent of concern in the Carlsbad Hydrologic Unit. Other

water chemistry constituents in the creeks appear to be within standards. Because this is a limited set of data, the watershed is in need of additional data to validate these findings. With the onset of the requirements of Order 2007-0001, Temporary Watershed Assessment Stations were located on Buena Vista Creek and on Agua Hedionda Creek during FY 07-08, collecting samples for analysis during wet and dry weather. These results were not available at the time of this report, but will be available for inclusion in future years.

Coastal Outfall Monitoring Program Receiving Waters

Of samples collected in the receiving waters during FY 07-08, there was only one exceedance for enterococcus across all three indicators. This exceedance occurred in Agua Hedionda Lagoon prior to the change in procedure to monitor only ocean sites. There were no exceedances of the REC-1 standards in the Ocean for total coliform, fecal coliform or enterococci during the last six reporting periods. A general decline in receiving water exceedances in the lagoons is evident across all bacterial indicators, showing improvements in water quality.

It should be noted that lagoon samples were only collected during July, August, and September of 2007, as the Coastal Monitoring Program implemented permit requirements under Order 2007-0001 on October 1, 2007 monitoring only ocean outfalls. The City will continue to implement this program and to conduct follow-up investigations in accordance with the *Adaptive Plan*.

Overall, the City has remained in compliance with all permit requirements of the IDDE program. With full program implementation, evidence of knowledge and behavior changes are evident, although difficult to measure. Program implementation also results in immediate load reductions, through complaint response efforts, whether related to urban runoff, sewer overflows, or other spills. It is difficult to quantify these reductions at this time,however, the City will continue to develop assessment measures related to load reductions. Changes in discharge water quality are also evident, most often showing improvements during dry weather. While not fully attributable solely to the IDDE program, implementation of the monitoring programs provides useful data to make this assessment. As more data is collected in discharge waters and in receiving waters, assessments will show a more accurate picture of the changes in water quality and relationships to MS4 programs.

Sanitary Sewer Overflows
March 23 - June 30, 2008

Date	Source	Substance	Volume	Enter MS4?	Enter RW?	Response
06/27/2008	Private Lateral	Sewage	10	No	No	Root blockage.
06/19/08	Sewer Lateral C/O, main stoppage	Sewage	20	No	No	Clear root stoppage, capture all spill.
04/28/08	Sewer MH	Sewage	1125	Yes	No	Captured at silt pond, used bypass pump to sewer, flushed storm system with 10,000 gals fresh water.
04/14/2008	Private Lateral	Sewage	800	No	No	Plumber cleared root blockage.
04/10/2008	Private Lateral	Sewage	25	No	No	Plumber cleared root blockage.

These spills were from the City of Carlsbad maintained sewer main.

Other Spills March 24, 08 to June 30, 08

Event Type	Cause	Volume (Gal) Spilled	Volume (Gal) Recovered	Incident Date	Street Number	Street	Responsible Party	Zip Code	Water Body Impact	Water Body
413	Unknown	5 gallons Oil	Unknown	3/31/08	Unknown	Chinquapin / Long Pl	Unknown	92008	Aqua Hedionda	Agua Hedionda
413	Fork Lift Rollover	Unknown Oil / Fuel	Unknown Oil / Fuel	4/1/08	Unknown	Palomar Airport Rd	Unknown	92008	NA	NA
413	Vehicle Leak	Unknown Oil	Unknown Oil	4/12/08	NA	I-5	Unknown	92011	None	None
413	Vehicle Leak	1 Oil	1 Oil	6/20/08	3521	Charter Oak	Unknown	92009	None	None
411	Unknown	2-3 Diesel	2 Diesel	10/3/07	Unknown	Alga Rd / Corintia St	Unknown	92009	None	None
411	Vehicle Leak	0.5 Gasoline	None	12/1/07	Unknown	Ambrosia / Aviara Pkwy	Unknown	92011	None	None
411	Semi Truck leak	25 Diesel	25 Diesel	1/15/08	5931	Darwin Ct	Pacifica Trucks – Wilmington CA	92009	None	None
411	Tiki Torch	0.25 Gallon Lamp Oil	None	4/20/08	1604	Sapphire Dr	Unknown	92011	None	None
411	Vehicle Accident	Unknown	Unknown	5/5/08	Unknown	Pio Pico / Carlsbad Village Dr	Unknown	92008	None	None

Detailed Issue Report - Department

7/1/2007-6/30/2008

Issue Nr.	Date Opened	Date Closed	Issue Description	Action History - Closed Action
Drainage-Water ponding/pooling				
C728G	2/25/2008	2/25/2008	EXCESSIVE WATER RUN OFF ONTO SIDEWALK.	3/3/2008 12:35:21PM - Clayton Dobbs Status Change Previous: Open New: Closed Reason: no water foun 2/26 and 2/28 cd
Sprinklers-Private Property				
56LCX	8/17/2007	8/17/2007	Water running like broken sprinkler pipe.	8/17/2007 9:13:10AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Contacted Property Mgmt - they will send landscaper to fix immediately.
56N3B	8/17/2007	8/17/2007	Reports that water is running (faulty sprinkler heads? or possibly another problem) profusely. Location is on Jackspar (between ECR and Camino Hills) near the park on Jackspar that has the barn. She said the water hasn't run into the street yet, but is close. (I do not know if this is private property or city-maintained.)	8/20/2007 9:55:19AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Leak was fixed.
Storm Drain-Dirt/Debris - Piles				
5DTJ9	8/24/2007	8/24/2007	SW10 Landscape Material Dumping Dirt in roadway - remodeling? Report of possible storm water violation - due to dirt or debris piles.	8/28/2007 11:05:22AM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
5QKTG	9/4/2007	9/4/2007	SW10 Landscape Material Dumping Construction materials in street Report of possible storm water violation - due to dirt or debris piles.	9/5/2007 3:50:44PM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
9UP53	12/13/2007	12/13/2007	SW10 Landscape Material Dumping Piles of dirt (two) Report of possible storm water violation - due to dirt or debris piles.	5/9/2008 8:25:11AM - Tim Murphy Status Change Previous: Open New: Closed Reason: Informational Letter

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Dirt/Debris - Piles				
A3PEP	12/20/2007	12/20/2007	SW28 Miscellaneous Incidents Vacant lot on Navarra Drive has dirt running off of it into the street. Report of possible storm water violation - due to dirt or debris piles.	2/27/2008 9:11:49AM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter BMPs installed.
AP2UT	1/8/2008	1/8/2008	SW28 Miscellaneous Incidents 3 lots, dirt, no bmps Report of possible storm water violation - due to dirt or debris piles.	1/11/2008 9:33:30AM - James Wood Status Change Previous: Open New: Closed Reason: Written Warning
B4U9Q	1/22/2008	1/22/2008	SW28 Miscellaneous Incidents Mess behind [redacted] of theCoaster parking lot, along the frontage road Report of possible storm water violation - due to dirt or debris piles.	2/5/2008 3:59:09PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Follow-up in Permits Plus
BBTDL	1/29/2008	1/29/2008	SW10 Landscape Material Dumping Dirt piles on dirt surface not discharging into storm drain Report of possible storm water violation - due to dirt or debris piles.	2/4/2008 9:34:42AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Verbal Notice. BMPs were put into place no further action required.
Storm Drain-Dumping to Storm Drain				
4TQED	7/5/2007	7/5/2007	SW20 Oil & Grease Discharge - Food Facility Grease/liquid coming out of dumpster area (spill) Report of Dumping to the Storm Drain	7/6/2007 11:22:27AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: [redacted] conducted a site visit and found that approximately 10-15 gallons of grease had been spilled and an attempt was made to wash the materials to the storm drain. Grease was found in the parking lot and storm drainage path. However, only a minumum amount actually reached the SD box because of previous placed sand bags. The RP was informed and required to immediately clean the impacted area. The site was adequately cleaned before the inspector left the scene. NOV issued. Follow-up in Permits Plus

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
4UNNG	7/6/2007	7/6/2007	SW29 Complaint Not Found Reported after the fact. Water flowing to storm drain Report of Dumping to the Storm Drain	7/9/2007 4:22:26PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Complaint Not Found
53MT9	7/13/2007	7/13/2007	SW20 Oil & Grease Discharge - Food Facility Grease dumped on bank of Buena Vista Creek. Report of Dumping to the Storm Drain	7/20/2007 2:51:17PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Follow-up in Permits Plus
56SC6	7/16/2007	7/16/2007	SW6 Saw Cutting Slurry Someone is sawing conrete washing the silt down the storm drain as of 1:40 p.m. Report of Dumping to the Storm Drain	7/18/2007 12:14:55PM - James Wood Status Change Previous: Pending New: Closed Reason: No issue / No violation
5FTKS	7/25/2007	7/25/2007	SW29 Complaint Not Found [redacted] on Tamarack putting debris, etc into storm drain in alley behind [redacted] Report of Dumping to the Storm Drain	7/25/2007 3:57:39PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Issue not found.No issue / No violation
5PM87	8/2/2007	8/2/2007	SW4 Carpet Cleaning Discharge Carpet cleaning company dumped waste to the storm drain Report of Dumping to the Storm Drain	8/3/2007 11:17:43AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Informational Letter sent along with BMPs
5VKYC	8/8/2007	8/8/2007	SW28 Miscellaneous Incidents Pile of mud dumped in strteet in front of storm drain Report of Dumping to the Storm Drain	8/9/2007 2:10:49PM - James Wood Status Change Previous: Open New: Closed Reason: Referred for Action
59VB9	8/20/2007	8/20/2007	SW29 Complaint Not Found Carpet cleaner dumping dirty water into storm drain Report of Dumping to the Storm Drain	9/25/2007 9:07:14AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Complaint Not Found. Could not locate additional contact information n the RP. Will reopen if additional infrmationbecasomes available.

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain				
5BM54	8/22/2007	8/22/2007	SW26 Accidental Spill Pipe leaking seawater into storm drain at mouth of Agua Hedionda Lagoon from [redacted] Report of Dumping to the Storm Drain	8/22/2007 9:27:31AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: 50 gallons of seawater going into the sea - no issue.No issue / No violation
5LPGC	8/31/2007	8/31/2007	SW29 Complaint Not Found Cutting grass and blowing grass clippings into the storm drain Report of Dumping to the Storm Drain	8/31/2007 3:45:41PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Complaint Not Found. Conducted site visit and did not observed and landscapers onsite.
5QPVF	9/4/2007	9/4/2007	SW3 Vehicle Washing Mobile washer - no BMPs Report of Dumping to the Storm Drain	9/4/2007 4:13:45PM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
5TTRX	9/7/2007	9/7/2007	SW15 Water Line Break Plumber digging and dumping water? to storm drain. Report of Dumping to the Storm Drain	9/7/2007 4:02:30PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
5WPMN	9/10/2007	9/10/2007	SW11 Pool / Spa / Fountain Discharge Emptying pool without dechlorinating and mixing diatomacious filter debris in with the water. Report of Dumping to the Storm Drain	9/10/2007 12:37:08PM - AllenHartman Status Change Previous: Open New: Closed Reason: Verbal Notice Educational information provided to homeowner. No further discharges anticipated.
5WS58	9/10/2007	9/10/2007	SW11 Pool / Spa / Fountain Discharge Resident is draining their pool into [redacted] storm drain that dumps into the Calavara Lake. Report of Dumping to the Storm Drain [redacted]	9/10/2007 3:27:21PM - AllenHartman Status Change Previous: Open New: Closed Reason: Informational Letter Door hanger and information regarding pool discharges and pet waste left at residence. Also left pet waste bags/dispenser.

This report details all closed issues for the selected department(s) that were opened during the report period.

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain				
7KSR7	10/1/2007	10/1/2007	SW28 Miscellaneous Incidents Two barrels of oil? covered but leaking into ground [redacted] Report of Dumping to the Storm Drain	10/2/2007 2:35:06PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
7MU3E	10/3/2007	10/3/2007	SW21 Dumping - Hazardous Materials 1-2 gallons diesel fuel in gutter Report of Dumping to the Storm Drain	10/3/2007 3:20:17PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: No issue / No violation - Cleaned up and disposed of properly. No RP.
7UM4Z	10/10/2007	10/10/2007	SW20 Oil & Grease Discharge - Food Facility Dumping grease in storm drain behind souplantation by dock area - drain is on corner of bldg Report of Dumping to the Storm Drain	11/13/2007 8:46:00AM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter
7VUMV	10/11/2007	10/11/2007	SW24 Sanitary Spill or Leak Plumber dumped sewage to storm drain Report of Dumping to the Storm Drain	10/12/2007 3:45:15PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: At 3pm it was reported that sewage was being washed to the storm drain. [redacted] responded onsite and found that an unknown quantity of raw sewage and debris had been washed to the SD. [redacted] contacted the SW hotline and [redacted] were immediately dispatched to the site. Upon investigation, inspectors found that [redacted] had been called onsite earlier that morning to clear a blocked sewage line which resulted in raw sewage overflowing to the parking lot. After the blockage had been cleared, [redacted] left the site, however they did not clean the debris left in the lot caused by the overflow. Later that afternoon, a [redacted] employee used a water hose for approx. 5 minutes to in an attempt to clean the parking lot and debrais. It was not clear if sewage actually reach the storm drain box and/or adjacent channel. A vactor truck was called in to remedaite the SD and approximately 500 g
7WPAD	10/12/2007	10/12/2007	SW11 Pool / Spa / Fountain Discharge Cleaning out pond and dumping water, etc. to storm drain. Report of Dumping to the Storm Drain	10/12/2007 4:35:53PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: No issue / No violation. [redacted] conducted a site visit and found that no water had been discharged to the SD. BMPs implemented.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
7WVVJ	10/12/2007	10/12/2007	SW22 Dumping - Non-hazardous Materials Person was taking trash out of a large cardboard box and putting it into the storm drain Report of Dumping to the Storm Drain	11/15/2007 2:08:36PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: See RFA-77WVVJ
3APN7	10/24/2007	10/24/2007	SW22 Dumping - Non-hazardous Materials Dumping wine making debris to storm drain Report of Dumping to the Storm Drain	10/24/2007 2:42:14PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
3FSXG	10/29/2007	10/29/2007	SW11 Pool / Spa / Fountain Discharge Emptying pool that has been sprayed by County Vector Control into street and is cleaning sides of pool with chemicals and draining them into the street. Report of Dumping to the Storm Drain	10/31/2007 9:00:49AM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
3JLPA	11/1/2007	11/1/2007	SW29 Complaint Not Found Commercial popcorn machine on wheels being cleaned in street. Oil etc on street in front of above address. Report of Dumping to the Storm Drain	11/5/2007 3:07:19PM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter
3KLRM	11/2/2007	11/2/2007	Dogs are walked here and not cleaned up after. Lots of dog waste on this hillside. Wants to get a set up like trails, etc., with bags and trash area (doggie station). Report of Dumping to the Storm Drain	11/2/2007 4:55:04PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Referred to Center for Natural Lands Management.
9YTSR	12/17/2007	12/17/2007	SW11 Pool / Spa / Fountain Discharge Emptying pool Report of Dumping to the Storm Drain	12/17/2007 4:25:25PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Verbal Notice, Resident was compliant and wishes to follow all rules and regulations.
9YTSR	12/17/2007	12/17/2007	SW11 Pool / Spa / Fountain Discharge Emptying pool Report of Dumping to the Storm Drain	5/9/2008 8:28:16AM - Tim Murphy Status Change Previous: Open New: Closed Reason: Changed issue type to dumping to storm drain.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain				
9ZVEB	12/18/2007	12/18/2007	SW21 Dumping - Hazardous Materials 50 gallon oil drum at trail head - leaking - this was Sunday. Report of Dumping to the Storm Drain Report of Dumping to the Storm Drain	1/10/2008 4:01:34PM - Greg Clavier Status Change Previous: Open New: Closed Reason: A short report on the cleanup activities of the 55 gallon oil drum deposited north of La Costa Avenue. I met with NRC Environmental Services at approximately 1 p.m. to remove and manifest the oil drum and contaminated soil illegally dumped on Paseo Tamarindo a small dirt road off La Costa Avenue. We used an" Over- Pack" to contain and quarantine the abandoned 55 gallon drum and we also removed approximately 225 gallons of saturated and contaminated soil. The oil had infiltrated the soil approximately 6 inches in depth and needed to be removed, The soil was then packed into five 55 gallon containers and removed from the site at 3:45 p.m. and hauled down to NRC's facility in Mira Mesa to be repackaged and sent to Overton in Long Beach for its final resting place. I signed as generator of the waste material on the manifest the City of Carlsbad is liable for payment for the removal of the drum and the contaminated soil witho
A2SHC	12/19/2007	12/19/2007	SW8 Paint / Stucco Discharge Dumping paint into storm drain Report of Dumping to the Storm Drain	12/26/2007 3:38:52PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Written Warning Issued along with BMPS
AUVMR	1/14/2008	1/14/2008	SW8 Paint / Stucco Discharge Paint in gutter from up the hill Report of Dumping to the Storm Drain	3/3/2008 8:41:44AM - James Wood Status Change Previous: Pending New: Closed Reason: Written Warning
35M5W	1/23/2008	1/23/2008	SW22 Dumping - Non-hazardous Materials trash in parkin area. Storm drain dirty, odor. Report of Dumping to the Storm Drain	3/26/2008 9:21:43AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
3EN9G	2/1/2008	2/1/2008	SW12 Fire Suppresion System Water discharge to parking lot, undetermined source Report of Dumping to the Storm Drain	2/1/2008 9:50:48AM - AllenHartman Status Change Previous: Open New: Closed Reason: Verbal Notice Spoke with contractor and required him to route remainder of water to landscaped area. Educated him on the potential impacts of the discharge.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
3ENSK	2/1/2008	2/1/2008	SW28 Miscellaneous Incidents Pool construction company discharging water and sediment to storm drain. Report of Dumping to the Storm Drain	2/1/2008 5:12:35PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Verbal Notice Re-inspected at 16:30 on 2/1/08, site cleaned up, BMPs implemented.
3EU98	2/1/2008	2/1/2008	SW8 Paint / Stucco Discharge Code Enforcement reported that paint is being dumped into the storm drain near the creek at [redacted] Report of Dumping to the Storm Drain	2/4/2008 9:57:44AM - Tim Murphy Status Change Previous: Open New: Closed Reason: Referred for Action to Different RFA (RFAA-7BET6X)
3L2AZ	2/6/2008	2/6/2008	SW8 Paint / Stucco Discharge Dumping paint into storm drain Report of Dumping to the Storm Drain	2/11/2008 8:12:00AM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice Street and gutter cleaned by RP.
3QUTB	2/11/2008	2/11/2008	SW27 Allowable Discharge Foamy material coming from french drain/landscape drain to street Report of Dumping to the Storm Drain	2/12/2008 12:22:27PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Ground water is coming from the drain.
3YQDK	2/19/2008	2/19/2008	SW21 Dumping - Hazardous Materials SW2 Equipment Cleaning Bleach smell coming from storm drain Report of Dumping to the Storm Drain	3/21/2008 3:20:04PM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter
C7PLM	2/26/2008	2/26/2008	SW11 Pool / Spa / Fountain Discharge Discharging pool water to the street Report of Dumping to the Storm Drain	2/27/2008 10:07:17AM - James Wood Status Change Previous: Open New: Closed Reason: Written Warning
C82TC	2/26/2008	2/26/2008	SW9 Tracking Soil Report of concrete work going into the street Report of Dumping to the Storm Drain	3/13/2008 3:17:47PM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
CDTQQ	3/3/2008	3/3/2008	SW11 Pool / Spa / Fountain Discharge The ponds at [redacted] are being drained into the street. This has occurred over the last 3-4 days and there is concern about the quality of the water, as well as a possibility of fish being dumped out into the street, ultimately to the storm drains. The called suggests that it be looked into today. Report of Washing to the Storm Drain Report of Dumping to the Storm Drain	3/4/2008 10:32:33AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Verbal Notice Shawnetta and Tim Murphy conducted a site visit on 03-02-08 at 2:45pm. They spoke with the property manager who stated that several ponds onsite were currently being drained and retrofitted. At the time of the site visit, the ponds were not being drained. Shawnetta provided BMP information and stated that the remaining water would need to be discharged to the sewer with the permission of the EWA.
CEN8T	3/4/2008	3/4/2008	SW11 Pool / Spa / Fountain Discharge Emptying pool water into street Report of Washing to the Storm Drain Report of Dumping to the Storm Drain	3/10/2008 5:13:09PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter sent to PM for [redacted]
CEN8T	3/4/2008	3/4/2008	SW11 Pool / Spa / Fountain Discharge Emptying pool water into street Report of Washing to the Storm Drain Report of Dumping to the Storm Drain	3/13/2008 1:19:58PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Changed Type
CEQPA	3/4/2008	3/4/2008	SW29 Complaint Not Found washing carpets with machine and dumping water into street Report of Dumping to the Storm Drain	3/5/2008 3:32:01PM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
CGUQL	3/6/2008	3/6/2008	SW11 Pool / Spa / Fountain Discharge Draining pool into street Report of Dumping to the Storm Drain	3/10/2008 4:42:58PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
D5S5V	3/27/2008	3/27/2008	SW18 Vehicle Repair 2 small business - Need to be educated on updated practices. They are rinsing cars, sidewalk and shade enclosure. Report of Dumping to the Storm Drain	3/28/2008 8:31:08AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus. Will follow up through inspection program.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
DAMC6	4/1/2008	4/1/2008	SW21 Dumping - Hazardous Materials Report of Dumping to the Storm Drain	4/24/2008 4:46:19PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Informational Letter and Educational information distributed. Unable to identify RP. Case referred to CPD for further investigation. Will re-open if new information becomes available.
DBM6Y	4/2/2008	4/2/2008	SW11 Pool / Spa / Fountain Discharge pool with chlorine had been emptied on 4/1/08. It is empty now. Resident needs education materials. Report of Dumping to the Storm Drain	4/3/2008 2:09:31PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Informational Letter
DBRNQ	4/2/2008	4/2/2008	SW17 Vehicle and equipment leaking Report of Dumping to the Storm Drain	4/2/2008 3:00:56PM - James Wood Status Change Previous: Open New: Closed Reason: Referred for Action - to SD Maintenance Crew. No discharge to Storm Drain.
DGV8M	4/7/2008	4/7/2008	SW11 Pool / Spa / Fountain Discharge with solids deposited to gutter Swimming pool drained a week ago. White residue in gutter. Please clean. Report of Dumping to the Storm Drain	4/28/2008 5:13:28PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Notice of Violation
DGV8M	4/7/2008	4/7/2008	SW11 Pool / Spa / Fountain Discharge with solids deposited to gutter Swimming pool drained a week ago. White residue in gutter. Please clean. Report of Dumping to the Storm Drain	5/9/2008 8:09:53AM - Tim Murphy Status Change Previous: Open New: Closed Reason: changed issue tipe to dumping to storm drain
DRTJZ	4/16/2008	4/16/2008	SW13 Dewatering Rusty colored dried material in the gutter and in Encina Creek. Report of Dumping to the Storm Drain	5/6/2008 3:25:49PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Notice of Violation Issued to [redacted] for the discharge. Referred incident to [redacted] at the San Diego Regional Water Quality Control Board for concerns regarding vault discharge permit.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
DTKV5	4/18/2008	4/18/2008	SW28 Miscellaneous Incidents Foam in ditch near shopping center. Report of Dumping to the Storm Drain	4/18/2008 8:45:28AM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter
DXQAN	4/22/2008	4/22/2008	SW7 Cement Discharge Dumping paint to the storm drain Report of Dumping to the Storm Drain	4/22/2008 4:48:57PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
E2N9T	4/25/2008	4/25/2008	SW28 Miscellaneous Incidents Mobil washer dumping in street - lifted manhole cover (sewer). Water from pressure washing diverted into sewer cleanout in street.	4/25/2008 2:20:25PM - Tim Murphy Status Change Previous: Open New: Closed Reason: No issue / No violation
E5NFX	4/28/2008	4/28/2008	SW11 Pool / Spa / Fountain Discharge Report of Dumping to the Storm Drain Reported after the fact.	4/28/2008 4:52:59PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
ECQSW	5/5/2008	5/5/2008	SW13 Dewatering [redacted] pumping from vaults directly to Agua Hedionda Creek Report of Dumping to the Storm Drain	5/5/2008 1:07:05PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: No issue / No violation. Dewatering done as required by the discharge permit.
EDLS7	5/6/2008	5/6/2008	SW1 Surface Cleaning Carpet cleaners dumping wash water down storm drain Report of Dumping to the Storm Drain	5/6/2008 12:31:08PM - James Wood Status Change Previous: Open New: Closed Reason: Notice of Violation
EFP93	5/8/2008	5/8/2008	SW13 Dewatering - storm water collection vault Sump pump pumping excessive amount of water to the adjacent railroad tracks Report of Dumping to the Storm Drain	5/12/2008 8:59:13AM - James Wood Status Change Previous: Pending New: Closed Reason: No issue / No violation

This report details all closed issues for the selected department(s) that were opened during the report period.

Appendix 7.3 RFA Report

Storm Drain-Dumping to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
EFT2X	5/8/2008	5/8/2008	SW27 Allowable Discharge Strange white liquid coming from pvc outfall near walk trail; appeared to be from sub-drain, likely groundwater Report of Dumping to the Storm Drain	5/8/2008 6:18:23PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Most likely groundwater discharge. No other sources nearby, no access to sub drainage system. Sub drains designed to dewater hillside to prevent movement. Reclaimed irrigation likely contributing to mineral content in the discharge.
ELLMH	5/13/2008	5/13/2008	SW17 Vehicle and equipment leaking Report of Dumping to the Storm Drain	5/13/2008 3:45:55PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Informational Letter
ENNBV	5/15/2008	5/15/2008	SW5 Grey Water Discharge Washing dog inside van and dumping water through sink drain on to street - white van Report of Dumping to the Storm Drain	5/23/2008 9:32:10AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
EUNM5	5/21/2008	5/21/2008	SW13 Dewatering [redacted] vault with sump pump - messy water comes out Report of Dumping to the Storm Drain	5/21/2008 4:11:19PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Permitted groundwater discharge. Water appears clean and clear.
F2LLZ	5/27/2008	5/27/2008	SW8 Paint / Stucco Discharge Per e-mail, someone poured concrete on 5-25 and left a mess in front of above address Report of Dumping to the Storm Drain	6/5/2008 9:58:39AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
F9LDB	6/3/2008	6/3/2008	SW4 Carpet Cleaning Discharge Carpet cleaner dumped their dirty woater into the storm drain on 5-31-08. Report of Dumping to the Storm Drain	7/3/2008 1:46:05PM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain				
FCMMD	6/6/2008	6/6/2008	SW28 Miscellaneous Incidents Open 55 gallon drum - no lid - with grease from restaurant sitting by dumpster in back. Does not belong to restaurant, left there Illegally Report of Dumping to the Storm Drain	6/6/2008 11:43:47AM - Tim Murphy Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
FGPGR	6/10/2008	6/10/2008	SW23 RV Waste Discharge Vehicle dropped plastic barrel with green liquid that smells and has run down the storm drain. Report of Dumping to the Storm Drain	6/11/2008 8:57:25AM - James Wood Status Change Previous: Open New: Closed Reason: Referred for Action - site cleaned by Fire and Streets dept. No RP found.
FQK4K	6/18/2008	6/18/2008	SW17 Vehicle and equipment leaking Report of Dumping to the Storm Drain	6/25/2008 2:20:11PM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter - and vehicle no longer parked on street.
FWK8G	6/24/2008	6/24/2008	SW20 Oil & Grease Discharge - Food Facility Report of Dumping to the Storm Drain	6/25/2008 2:08:45PM - James Wood Status Change Previous: Open New: Closed Reason: See RFA-753MT9
FXQN5	6/25/2008	6/25/2008	SW10 Landscape Material Dumping At 11:54 a.m., 6/25 - [redacted] reported that the neighbor's gardner (1 house north of him) in dumping into the storm drain at [redacted] The gardner is hosing off the lawnmower and the catch basin directly into the storm drain. When [redacted] mentioned it to him, he was very rude. The gardners trucks have no markings on them. Report of Dumping to the Storm Drain	7/16/2008 4:36:30PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
Storm Drain-Erosion from Existing Development				

Storm Drain-Erosion from Existing Development

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
9FQ6H	11/30/2007	11/30/2007	Drainage easment w/pipe between these two addresses. Pipe drains water from La Costa down to a concrete drainage ditch next to the golf course. Water shooting out the pipe and missing the concrete ditch. Hitting opposite bank and causing some erosion. Erosion from existing development, not new construction. 12/05/2007 - Field visit Sherri Howard and Nick Roque. No visible erosion. Streets division will extend existing 18" CMP into brow ditch to prevent possible future erosion.	12/12/2007 5:13:11PM - Shea Sainz Status Change Previous: Pending New: Closed Reason: Per Nick Roque: No evidence of erosion. No action taken at this time.
9FV2D	11/30/2007	11/30/2007	SW9 Tracking Soil Dirt coming off of [redacted] Ridgecrest Dr and pooling at [redacted] Ridgecrest Dr Erosion from existing development, not new construction.	1/14/2008 9:28:34AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Verbal Notice. Spoke to property owner and conducted site visit. BMPs were put in place on Jan. 11.
ANS46	1/8/2008	1/8/2008	SW9 Tracking Soil Mud coming from lot into street and storm drain..no bmps in place..grower Erosion from existing development, not new construction.	3/21/2008 3:23:10PM - James Wood Status Change Previous: Pending New: Closed Reason: Written Warning
APNXD	1/9/2008	1/9/2008	Concerned about standing water on construction site. Erosion from existing development, not new construction.	1/9/2008 9:55:36AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: [redacted] visited site and found no threat of erosion.. [redacted] visited residents and alleviated their concerns.
3ERTK	2/1/2008	2/1/2008	SW28 Miscellaneous Incidents Sediment discharged from [redacted] Streets deposited on James Drive and Sandalwood Lane Erosion from existing development, not new construction.	2/1/2008 12:29:46PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Appeared that some sediment had been discharged from [redacted] along Valley Street. Upon inspection, sediment had been cleaned up along Basswood, James, and Sandalwood. Some straw waddle and gravel bags were in place near area of suspected discharge.

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Erosion from Existing Development				
3K2JR	2/5/2008	2/5/2008	SW9 Tracking Soil Lot owned by [redacted], dirt being tracked off site to storm drain. BMPs need maintenance. Erosion from existing development, not new construction.	2/29/2008 9:16:48AM - AllenHartman Status Change Previous: Pending New: Closed Reason: Referred for Action Referred to [redacted] for action as this is their property and not under the City's jurisdiction.
CEPKY	3/4/2008	3/4/2008	SW28 Miscellaneous Incidents Erosion from hillside Erosion from existing development, not new construction.	4/16/2008 8:43:58AM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
F9R42	6/3/2008	6/3/2008	Ground slipping away towards Hillside Dr. Soaked earth. Erosion from existing development, not new construction.	6/11/2008 12:41:20PM - Michael Fairbanks Status Change Previous: Pending New: Closed Reason: Ground water.
FZMQG	6/27/2008	6/27/2008	SW28 Miscellaneous Incidents Erosion from hillside bringing dirt into street. Broken pipe? Erosion from existing development, not new construction.	7/2/2008 9:01:34AM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
Storm Drain-Labels or Stencils				
5ZVRZ	9/13/2007	9/13/2007	Requesting storm drain stencil General Information re: Storm Drain labels or stencils.	10/3/2007 11:44:51AM - Wayne Hoffer Status Change Previous: Pending New: Closed Reason: Stencil returned 10-3-07.
Storm Drain-Needs Cleaning - Private Property				
5SN47	9/6/2007	9/6/2007	SW28 Miscellaneous Incidents Complaining that the storm drains on her street are having trash thrown into them. Wants them cleaned and neighborhood informed of Storm Water issues. Request for storm drain cleaning - private property. What is the address / location: Is there flooding in the area?: (yes) (no)	9/25/2007 4:49:21PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: No issue / No violation. Left two messages for the complainant with no return call. Will reopen if additional information becomes available.

Storm Drain-Vehicles Leaking Oil/Fluids

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
4RVKC	7/3/2007	7/3/2007	Report of leaking oil or fluids Airplane crash with potential to discharge fluids/fuel to MS4.	7/3/2007 4:46:13PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation No discharge to the MS4
4ZTQE	7/11/2007	7/11/2007	SW26 Accidental Spill Kitty litter being spread in street. Report of leaking oil or fluids	7/11/2007 2:59:45PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Litter was used as absorbant to clean up small oil spill from WM truck.No issue / No violation
5SMW2	9/6/2007	9/6/2007	SW29 Complaint Not Found Cars parked in street for long periods of time - PD can't do anything - leaking oil Report of leaking oil or fluids	9/17/2007 2:24:31PM - James Wood Status Change Previous: Pending New: Closed Reason: No issue / No violation
5ZMWQ	9/13/2007	9/13/2007	Truck delivering dirt to project had an oil line blowout on 9/12/07. They just put down dirt. Report of leaking oil or fluids	9/13/2007 10:03:15AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: [redacted] will handle and get cleaned up properly.
7KMS8	10/1/2007	10/1/2007	SW17 Vehicle and equipment leaking Truck leaking diesel fuel. Did not reach the storm drain. Called in at 9:27 am. Report of leaking oil or fluids	1/9/2008 2:12:12PM - James Wood Status Change Previous: Pending New: Closed Reason: Notice of Violation - will reopen if chargeback is filed.
7MSMW	10/3/2007	10/3/2007	SW21 Dumping - Hazardous Materials Oil in gutter Report of leaking oil or fluids	10/9/2007 11:50:33AM - James Wood Status Change Previous: Pending New: Closed Reason: No issue / No violation. RP unknown and no discharge to MS4.
7MSMW	10/3/2007	10/3/2007	SW21 Dumping - Hazardous Materials Oil in gutter Report of leaking oil or fluids	10/15/2007 8:37:24AM - James Wood Status Change Previous: Pending New: Closed Reason: Referred for Action - oil removed and area cleaned by Chris Thomas.

Appendix 7.3 RFA Report

Storm Drain-Vehicles Leaking Oil/Fluids

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
3NM8S	11/5/2007	11/5/2007	Car damaged oil pan in parking lot of [redacted] and lost oil to parking lot and storm drain Report of leaking oil or fluids	11/5/2007 8:27:13AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Parking lot and storm drain being cleaned.
9FUF6	11/30/2007	11/30/2007	SW29 Complaint Not Found Car parked in driveway leaking oil - oil running into gutter and storm drain. Greasy sheen on the water as it mixes with the rain water. Report of leaking oil or fluids	12/10/2007 3:29:37PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Complaint Not Found Conducted three site visits and did not observe the vehicle parked on site or any fresh oil stains. Will reopen if new information becomes available.
4VUZS	1/15/2008	1/15/2008	SW17 Vehicle and equipment leaking Diesel fuel spill. Report of leaking oil or fluids	1/17/2008 11:13:51AM - James Wood Status Change Previous: Open New: Closed Reason: Referred for Action - SD County Haz Mat
3CLGF	1/30/2008	1/30/2008	SW17 Vehicle and equipment leaking Report of leaking oil or fluids	1/30/2008 7:50:25AM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
3JQGH	2/5/2008	2/5/2008	SW17 Vehicle and equipment leaking White [redacted] leaking oil on street at above addres Report of leaking oil or fluids	2/13/2008 11:58:41AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Complaint Not Found
3KV4F	2/6/2008	2/6/2008	SW17 Vehicle and equipment leaking VEhicle leaking oil i street - [redacted] Report of leaking oil or fluids	2/15/2008 5:09:34PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Notice of Violation Issued to vehicle owner. Upon follow up inspections on three occassions, the vehicle was not present in the area.
3YRR4	2/19/2008	2/19/2008	SW17 Vehicle and equipment leaking [redacted] leaking oil in street at above address Report of leaking oil or fluids	2/26/2008 9:03:37AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Complaint Not Found

Storm Drain-Vehicles Leaking Oil/Fluids

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
DGKXW	4/7/2008	4/7/2008	SW17 Vehicle and equipment leaking RV parked on street leaking hydraulic fluid and gasoline Report of leaking oil or fluids	4/7/2008 9:30:27AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Verbal Notice. Tim Murphy and Shawnetta conducted a site visit and found that a small amount of vehicle fluid had leaked onto the street from the subject RV [redacted]. Streets department had already responded and put absorbants down. At no time did the fluid have the potential to reach the SD which is located approximately 500 feet to the north. Storm drain maintenance arrived and checked the street for other fresh leaks and provided remediation as needed. Shawnetta provided BMP information to the RP. PD ticketed the RP and required them to move the RV off the street.
F3L9K	5/28/2008	5/28/2008	SW17 Vehicle and equipment leaking Continuous parking of vehicles on [redacted] and [redacted] results in oil spills, fluids and battery acids dropping onto the road and washing into storm drains. See attachment. Report of leaking oil or fluids	7/7/2008 8:32:55AM - AllenHartman Status Change Previous: Pending New: Closed Reason: Informational Letters sent to 151 residents in area. Also information sent specifically to owners of vehicles present during first inspection. Fewer vehicles have been present on the streets and none have been observed leaking upon follow-up inspections.
F4U88	5/29/2008	5/29/2008	SW17 Vehicle and equipment leaking Oil in street from vehicle parking there and from motorcycle oil on newpapers Report of leaking oil or fluids	6/2/2008 2:07:56PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
F5RJY	5/30/2008	5/30/2008	SW17 Vehicle and equipment leaking Car leaking oil on street - [redacted] - green w/white roof Report of leaking oil or fluids	6/9/2008 11:06:52AM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
F5RMS	5/30/2008	5/30/2008	SW17 Vehicle and equipment leaking Car leaking oil in street - [redacted] Report of leaking oil or fluids	6/9/2008 11:09:06AM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice

This report details all closed issues for the selected department(s) that were opened during the report period.

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Vehicles Leaking Oil/Fluids				
F8QBL	6/2/2008	6/2/2008	SW17 Vehicle and equipment leaking Engine block in driveway leaking fluids Report of leaking oil or fluids	6/2/2008 4:26:20PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Verbal Notice
F8QDJ	6/2/2008	6/2/2008	SW17 Vehicle and equipment leaking [redacted] leaking fluids in street Report of leaking oil or fluids	6/10/2008 5:15:03PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
FAUXA	6/4/2008	6/4/2008	SW28 Miscellaneous Incidents Report of leaking oil or fluids Resident had spilled 12-15 gallons of biodiesel in back yard and it had flowed to front yard. Did not reach the street or storm drain.	6/4/2008 4:44:42PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Verbal Notice
FQS9Q	6/18/2008	6/18/2008	SW17 Vehicle and equipment leaking Report of leaking oil or fluids [redacted] Leaking fluids while parked in front of [redacted]	6/18/2008 1:57:07PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Verbal Notice
Storm Drain-Washing to Storm Drain				
4UNK7	7/6/2007	7/6/2007	SW1 Surface Cleaning SW1 Surface Cleaning Washing sidewalk down with hose this morning (7-6-07). Report of Washing to the Storm Drain	7/9/2007 3:29:21PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
4UNK7	7/6/2007	7/6/2007	SW1 Surface Cleaning SW1 Surface Cleaning Washing sidewalk down with hose this morning (7-6-07). Report of Washing to the Storm Drain	9/5/2007 11:25:42AM - James Wood Status Change Previous: Pending New: Closed Reason: Notice of Violation
4XTNR	7/9/2007	7/9/2007	SW15 Water Line Break Water rushing through storm drain in parking lot - coming from ? Report of Washing to the Storm Drain	7/9/2007 3:15:49PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Private water line break, source located and flows abated upon response.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
4YL9P	7/10/2007	7/10/2007	SW1 Surface Cleaning Power washing red tile roof - red water running down street Report of Washing to the Storm Drain	7/11/2007 5:12:22PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
4YLBV	7/10/2007	7/10/2007	SW29 Complaint Not Found Washing down [redacted] parking lot into alley mornings around 6:00 AM Report of Washing to the Storm Drain	7/12/2007 8:55:33AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: No issue / No violation [redacted] is private property. Checked with Code Enforcement - not an issue they deal with. Water does not run to Storm Drain. Advised caller to speak with property owner with concerns.
59NJL	7/19/2007	7/19/2007	SW27 Allowable Discharge Mobile home fire. Fire Dept. captured contaminated water and wants Storm Water to respond. Report of Washing to the Storm Drain	7/19/2007 6:01:51PM - AllenHartman Status Change Previous: Open New: Closed Reason: Referred for Action Referred to CD and crew for cleanup.
5ESNK	7/24/2007	7/24/2007	SW29 Complaint Not Found Anonymous person called and left message on 7/7 at 10 AM that there was a tremendous amount of sudsy water with fertilizer coming from the property at [redacted] The caller left the homeowner a note at the address. Report of Washing to the Storm Drain	7/27/2007 1:28:02PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
5HSDQ	7/27/2007	7/27/2007	SW6 Saw Cutting Slurry Mixing materials in street and letting them go down the storm drain. Report of Washing to the Storm Drain	7/27/2007 3:20:23PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
5TMHH	8/6/2007	8/6/2007	SW3 Vehicle Washing Washing car in street Report of Washing to the Storm Drain	8/7/2007 8:12:27AM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
5TMNG	8/6/2007	8/6/2007	SW1 Surface Cleaning Power washing garage doors Report of Washing to the Storm Drain	8/7/2007 2:52:17PM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter
5TPPP	8/6/2007	8/6/2007	SW3 Vehicle Washing Mobile washer washing cars in street Monday, Wednesday or Friday between 12:00 and 1:30 Report of Washing to the Storm Drain	8/15/2007 2:24:35PM - James Wood Status Change Previous: Pending New: Closed Reason: Complaint Not Found
5UTNG	8/7/2007	8/7/2007	SW25 Illicit Connection Soapy water flowing out from under the bank at the bottom of the slope at above address in Oceanside and flowing into Carlsbad (Calavera) Report of Washing to the Storm Drain	8/16/2007 3:36:10PM - James Wood Status Change Previous: Pending New: Closed Reason: Referred for Action to City of Oceanside.
5VKUB	8/8/2007	8/8/2007	SW19 Dumpster Discharge Black murky substance coming from their trash bin washout area near the NE corner of the building going into the storm drain Report of Washing to the Storm Drain	8/13/2007 9:15:59AM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
5WU7K	8/9/2007	8/9/2007	SW29 Complaint Not Found Signs of washing trash bins and water running across lot by drive through - stagnant, smelly water in landscaping. Report of Washing to the Storm Drain	8/15/2007 2:28:27PM - James Wood Status Change Previous: Pending New: Closed Reason: Complaint Not Found
52MR7	8/13/2007	8/13/2007	SW1 Surface Cleaning Washing parking lot to street Report of Washing to the Storm Drain	8/13/2007 1:55:30PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
53MRJ	8/14/2007	8/14/2007	SW6 Saw Cutting Slurry (8/27/08) SW10 Landscape Material Dumping (8/14/08) Dirt in gutter that was washed from up the street Report of Washing to the Storm Drain	8/23/2007 10:07:25AM - James Wood Status Change Previous: Pending New: Closed Reason: Informational Letter
54SAL	8/15/2007	8/15/2007	SW1 Surface Cleaning Report of Washing to the Storm Drain Hosing out dumpster area to storm drain.	8/16/2007 10:39:26AM - James Wood Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
54SAL	8/15/2007	8/15/2007	SW1 Surface Cleaning Report of Washing to the Storm Drain Hosing out dumpster area to storm drain.	9/17/2007 2:30:16PM - James Wood Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
54T5D	8/15/2007	8/15/2007	SW22 Dumping - Non-hazardous Materials Small, unusual release of water from a sump pump next to the road (water went into the street) this morning. It appeared that there was a wash area (mops and buckets) near the other end of the curb drain. There is a dental office in the building. Photos attached. Report of Washing to the Storm Drain	8/17/2007 3:44:37PM - AllenHartman Status Change Previous: Open New: Closed Reason: Informational Letter Letters and education info sent to all businesses in building and to the property manager of shopping center.
5BQCF	8/22/2007	8/22/2007	SW26 Accidental Spill Washing tile residue to storm drain Report of Washing to the Storm Drain	8/23/2007 10:54:35AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Site cleaned up.Verbal Notice
5CNWY	8/23/2007	8/23/2007	SW15 Water Line Break Water or ? bubbling up out of drain in parking lot at space [redacted] Report of Washing to the Storm Drain	8/23/2007 2:07:45PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: M&O are fixing the problem.
5CRCX	8/23/2007	8/23/2007	SW3 Vehicle Washing Washing cars in parking lot. BMPs? Report of Washing to the Storm Drain	8/23/2007 1:54:42PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain				
5HUVE	8/28/2007	8/28/2007	SW6 Saw Cutting Slurry [redacted] company materials in street - water going down storm drain Report of Washing to the Storm Drain	9/11/2007 4:35:12PM - James Wood Status Change Previous: Pending New: Closed Reason: Complaint Not Found
5KKLL	8/30/2007	8/30/2007	SW3 Vehicle Washing Mobile washing on street Report of Washing to the Storm Drain	8/30/2007 10:23:55AM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
5LMNU	8/31/2007	8/31/2007	SW3 Vehicle Washing Mobile washer in parking lot of condos at above intersection letting water run to storm drain Report of Washing to the Storm Drain	8/31/2007 3:49:33PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: No issue / No violation. Conducted site visit and no water was discharged to SD. Wash mat and BMPs implemented. Additional BMP information provided.
5LPZG	8/31/2007	8/31/2007	SW22 Dumping - Non-hazardous Materials Washed pool filter to storm gutter - running in front of [redacted] Report of Washing to the Storm Drain	8/31/2007 3:43:11PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Referred for Action. Conducted a site visit and found a white sandy residue which appeared to be sprinkled into the gutter line. It could not be determined where the material originated. Street sweeper called out and street swept, material removed.
5LPZG	8/31/2007	8/31/2007	SW22 Dumping - Non-hazardous Materials Washed pool filter to storm gutter - running in front of [redacted]. Report of Washing to the Storm Drain	1/28/2008 10:03:50AM - James Wood Status Change Previous: Pending New: Closed Reason: Written Warning
5LT67	8/31/2007	8/31/2007	SW29 Complaint Not Found Mobile washer Report of Washing to the Storm Drain	8/31/2007 3:39:53PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: No issue / No violation. Conducted site visit and found that BMPs had been implemented and no water was discharged to the storm drain. Provided BMPs and info about SW program.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain				
5QLQ8	9/4/2007	9/4/2007	SW27 Allowable Discharge Motorhome fire in street Report of Washing to the Storm Drain	9/4/2007 5:59:03PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation BMPs implemented to the [redacted] given the emergency situation. Cleanup performed properly with all water recovered.
5RN52	9/5/2007	9/5/2007	SW1 Surface Cleaning [redacted] washing down sidewalks in front of [redacted] without BMPs Report of Washing to the Storm Drain	9/24/2007 9:58:51AM - AllenHartman Status Change Previous: Pending New: Closed Reason: Verbal Notice Spoke with [redacted] and discussed her storm water management plan and the complaint received regarding power washing. She will follow up with appropriate individuals within [redacted] and remedy the situation.
5YTJK	9/12/2007	9/12/2007	SW1 Surface Cleaning Construction site washing down pavement? into gutters with soil, etc. Report of Washing to the Storm Drain	9/12/2007 2:52:50PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Referred for Action - Referred to CMI. They will handle.
5YTP3	9/12/2007	9/12/2007	9/11/07 - 4:45 PM - 2" irrigation pipe break. (Per Mike, these pipes are carrying potable water, not recycled even though they are painted purple) Report of Washing to the Storm Drain	9/12/2007 3:08:16PM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Referred for Action - Referred to CMI
5ZMHG	9/13/2007	9/13/2007	Every Thursday morning - runoff from Dept of Animal Control property. Report of Washing to the Storm Drain	9/18/2007 11:10:38AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus.
7EP46	9/26/2007	9/26/2007	SW3 Vehicle Washing Water running in street for last 24 hours Report of Washing to the Storm Drain	10/2/2007 12:04:54PM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice

This report details all closed issues for the selected department(s) that were opened during the report period.

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain				
7GUJZ	9/28/2007	9/28/2007	SW7 Cement Discharge Hosing concrete release (powder) to storm drain Report of Washing to the Storm Drain	10/4/2007 2:34:18PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Notice of Violation NOV issued to homeowner for illegal discharge and for lack of BMPs in side yard.
7KQ5K	10/1/2007	10/1/2007	SW29 Complaint Not Found [redacted] has high water in creek off the lagoon trail" Report of Washing to the Storm Drain	10/9/2007 10:12:03AM - AllenHartman Status Change Previous: Pending New: Closed Reason: No issue / No violation Nothing found at location. Groundwater suspected in the area.
7PVNQ	10/5/2007	10/5/2007	SW7 Cement Discharge Washing concrete to the storm drain 10-5-07 pm Report of Washing to the Storm Drain	10/26/2007 10:14:43AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Informational Letter and BMPs sent
7WM35	10/12/2007	10/12/2007	SW10 Landscape Material Dumping Washing yard waste to storm drain on 10-11-07 Report of Washing to the Storm Drain	11/15/2007 2:07:24PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Information letter and BMPs sent. Informational Letter
32UPK	10/16/2007	10/16/2007	SW8 Paint / Stucco Discharge something tan washed to storm drain Report of Washing to the Storm Drain	10/18/2007 4:46:07PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
34S7S	10/18/2007	10/18/2007	Water constnatly running in gutter from neichbor. Algae growing in gutter. City has come out and cleaned in the past. Report of Washing to the Storm Drain	10/29/2007 11:13:16AM - Shea Sainz Status Change Previous: Open New: Closed Reason: Per Nick Roque, Streets Division will check site and steam clean if necessary.
3YMVU	11/15/2007	11/15/2007	SW1 Surface Cleaning Hosing sidewalk debris to storm drain Report of Washing to the Storm Drain	11/15/2007 2:02:18PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
3YU6Y	11/15/2007	11/15/2007	SW22 Dumping - Non-hazardous Materials Discharge of water at [redacted] at 10:25 AM on 11-15-07. Report of Washing to the Storm Drain	11/15/2007 2:50:13PM - AllenHartman Status Change Previous: Open New: Closed Reason: Verbal Notice
9BP4W	11/26/2007	11/26/2007	SW29 Complaint Not Found Pool overflow line coming down street and running across the sidewalk - continually flowing. Report of Washing to the Storm Drain	12/13/2007 9:06:54AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Complaint Not Found. City inspectors conducted three site visits and did not observe any water flowing across the sidewalk or to storm drain. Will reopen if new or additional information becomes available.
9JMM8	12/3/2007	12/3/2007	SW8 Paint / Stucco Discharge Report of Washing to the Storm Drain. Report that last Monday 11-26-077 neighbor at subject addres had washing popcorn cieling and paint to area drains. Becasue it rained during the weekend the material has been washed away, but there is still white debris in the street.	12/6/2007 8:14:24AM - James Wood Status Change Previous: Pending New: Closed Reason: Complaint Not Found
9JREH	12/3/2007	12/3/2007	Mobile Detail Washer Report of Washing to the Storm Drain	12/5/2007 10:35:22AM - Elaine Lukey Status Change Previous: Open New: Closed Reason: Complaint Not Found
9NMBJ	12/7/2007	12/7/2007	SW29 Complaint Not Found Dirty water flowing down to storm drain - same thing happened last week during rain. Report of Washing to the Storm Drain	12/7/2007 9:24:40AM - Tim Murphy Status Change Previous: Open New: Closed Reason: No issue / No violation Referred to CMI
9V2S8	12/13/2007	12/13/2007	SW1 Surface Cleaning Hosing down loading ramp in back of building. Report of Washing to the Storm Drain	12/18/2007 8:53:07AM - Tim Murphy Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus this is a comml high business we inspect.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
9VT7W	12/14/2007	12/14/2007	SW3 Vehicle Washing Mobile washer washing cars in street Report of Washing to the Storm Drain	12/18/2007 1:51:51PM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
9ZQVJ	12/18/2007	12/18/2007	SW29 Complaint Not Found Washing off heavy equipment to storm drain. Report of Washing to the Storm Drain	12/18/2007 1:39:48PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Complaint Not Found, water found on street but nobody was washing. No evidence of soap or dirt in street.
A2VJ8	12/19/2007	12/19/2007	SW29 Complaint Not Found 3 feet of foam in Encinas Creek behind the [redacted], SE of PAR and College intersection. This was seen on 12/18/07. Report of Washing to the Storm Drain	12/20/2007 7:55:44AM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
AEPQ5	12/31/2007	12/31/2007	SW22 Dumping - Non-hazardous Materials Report of Washing to the Storm Drain Report of foul smelling water discharging from the outfall	1/2/2008 9:59:02AM - James Wood Status Change Previous: Open New: Closed Reason: Referred for Action - cleaned by Storm Drain Maintenance Crew
APQAK	1/9/2008	1/9/2008	SW9 Tracking Soil Small farmer not implementing BMPs. Dirt being tracked into the road. Report of Washing to the Storm Drain	2/12/2008 3:37:39PM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice
APQEE	1/9/2008	1/9/2008	Construction site at [redacted] not implementing BMPs during dewatering. Report of Washing to the Storm Drain	1/14/2008 3:26:15PM - Dale Willis Status Change Previous: Open New: Closed Reason: Per request of Inspector Casey Arndt. DW
ARPWW	1/11/2008	1/11/2008	SW9 Tracking Soil Mud tracking from [redacted] on Cannon Court - No active Permits. Report of Washing to the Storm Drain	1/23/2008 9:01:23AM - James Wood Status Change Previous: Pending New: Closed Reason: Referred for Action - [redacted] completed cleanup and installed BMPs

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain				
AURBG	1/14/2008	1/14/2008	SW3 Vehicle Washing, no discharge to storm drain. Effective BMP's Mobil Washer in parking lot no bmps Report of Washing to the Storm Drain	1/14/2008 2:20:18PM - Tim Murphy Status Change Previous: Open New: Closed Reason: No issue / No violation. Water not entering storm drain. BMPs in place.
3ET6X	2/1/2008	2/1/2008	SW8 Paint / Stucco Discharge Code Enforcement reports that paint is being washed into the storm drain near the creek area at [redacted]. Pink paint coming out of Storm Drain at the [redacted] maintenance area off [redacted]. Traveled 30 feet downstream in drainage channel. Did not reach San Marcos Creek. Report of Dumping to the Storm Drain Report of Washing to the Storm Drain	2/5/2008 2:56:45PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Notice of Violation
3ET6X	2/1/2008	2/1/2008	SW8 Paint / Stucco Discharge Code Enforcement reports that paint is being washed into the storm drain near the creek area at [redacted]. Pink paint coming out of Storm Drain at the [redacted] maintenance area off [redacted]. Traveled 30 feet downstream in drainage channel. Did not reach San Marcos Creek. Report of Dumping to the Storm Drain Report of Washing to the Storm Drain	2/27/2008 10:13:42AM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Notice of Violation. Issued on February 1. RFA updated on 02/27/08
3RLUN	2/12/2008	2/12/2008	SW3 Vehicle Washing Mobile washer washing car in street Report of Washing to the Storm Drain	2/13/2008 1:35:03PM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
3RLUN	2/12/2008	2/12/2008	SW3 Vehicle Washing Mobile washer washing car in street Report of Washing to the Storm Drain	2/26/2008 8:59:40AM - James Wood Status Change Previous: Open New: Closed Reason: Complaint Not Found
3RN4W	2/12/2008	2/12/2008	SW3 Vehicle Washing Washing trucks in the parking lot for last three days Report of Washing to the Storm Drain	2/13/2008 4:58:54PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Notice of Violation to [redacted]

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
3YQHR	2/19/2008	2/19/2008	SW6 Saw Cutting Slurry Tile cutter washed red residue down stormdrain Report of Washing to the Storm Drain	2/19/2008 5:01:15PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Verbal Notice
C6TSB	2/25/2008	2/25/2008	SW3 Vehicle Washing [redacted] shuttles lined up in street and being washed. Report of Washing to the Storm Drain	2/27/2008 9:22:59AM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter
C7NB2	2/26/2008	2/26/2008	SW29 Complaint Not Found Washing cars in pprivate parking lot. BMPs were in place, not washing into storm drain. Report of Washing to the Storm Drain	2/26/2008 10:55:05AM - Tim Murphy Status Change Previous: Open New: Closed Reason: No issue / No violation
C8R37	2/27/2008	2/27/2008	SW29 Complaint Not Found At about 4:30 every morning there is water coming from the pool. It leaves a residue in the gutter on its way to the Storm Drain. Report of Washing to the Storm Drain	3/10/2008 4:30:45PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter To home owner at [redacted]
CDUVD	3/3/2008	3/3/2008	SW28 Miscellaneous Incidents - Erosion Control Report of Washing to the Storm Drain	3/24/2008 10:05:00AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Referred for Action. 03-21-08 Spoke to [redacted]. [redacted] stated that he had requested the contractor to improve the BMPs along El Camino Real at [redacted] The primary improvements were completed the week of March 17. [redacted] conducted an inpsection of the SD under ECR and did not find any materials in the drain. I also spoke to [redacted] and imformed her of the BMP maintenance activities. In addtion, I also told her that the source of the erosion was most probably from the agriculural area above her property and the deterioration of the earthen channel on her property. She was provided with BMP information and she stated that she would be hiring a contratcor to reinforce the slope and the channel to prevent dfurther erosion. Will reopen if new complaint is filed or new information becomes available.

This report details all closed issues for the selected department(s) that were opened during the report period.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
CHLZR	3/7/2008	3/7/2008	SW28 Miscellaneous Incidents Concern over possible contamination of vernal pools	3/11/2008 2:29:57PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation No evidence of pollution in the vernal pool, determined to be natural decomposition.
CNMY5	3/12/2008	3/12/2008	SW28 Miscellaneous Incidents A patch of what looks like contaminated water southeast of the lake where the city removed some abandoned autos several years ago.	3/12/2008 5:35:18PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Discoloration of water most likely attributable to natural groundwater in the area. No other potential sources were evident upon investigation.
CPLCU	3/13/2008	3/13/2008	SW27 Allowable Discharge Washing paint to storm drain Report of Washing to the Storm Drain	3/13/2008 2:52:11PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
CUTBE	3/18/2008	3/18/2008	SW29 Complaint Not Found Yelolow substance floating down storm drain Report of Washing to the Storm Drain	3/19/2008 9:20:00AM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
D3SKQ	3/25/2008	3/25/2008	SW29 Complaint Not Found Ten to twelve open 55 gallon drums of what looks like paint. No lids ont eh barrels and if it rains they will run off into a storm drain nearby. Report of Washing to the Storm Drain	3/25/2008 3:46:17PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Complaint Not Found
D4RC3	3/26/2008	3/26/2008	SW10 Landscape Material Dumping/Washing Brown liquid running down gutter to storm drain Report of Dumping to the Storm Drain Report of Washing to the Storm Drain	3/31/2008 9:25:39AM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Verbal Notice. Tim conducted a follow up site visit and found that the street had been cleaned as required.

Storm Drain-Washing to Storm Drain

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
D4VGT	3/26/2008	3/26/2008	SW27 Allowable Discharge River of Water flowing dow Jeffersonat 3:10 PM Report of Washing to the Storm Drain Report of Washing to the Storm Drain	3/26/2008 4:42:18PM - AllenHartman Status Change Previous: Open New: Closed Reason: No issue / No violation Water line flushing by water department.
DHMXT	4/8/2008	4/8/2008	SW11 Pool / Spa / Fountain Discharge Drained pool on 4/7/08 and there is a white residue in the gutter. Report of Washing to the Storm Drain	4/10/2008 8:11:27AM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter
DKPX3	4/10/2008	4/10/2008	SW27 Allowable Discharge Water running across sidewalk for some time. Strange color and oily sheen. Discharge is believed to be groundwater. Report of Washing to the Storm Drain	4/21/2008 4:29:45PM - Tim Murphy Status Change Previous: Pending New: Closed Reason: No issue / No violation
DST29	4/17/2008	4/17/2008	SW3 Vehicle Washing Mobile detailer washing in parking lot. Report of Washing to the Storm Drain	4/17/2008 4:00:40PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
DXSEC	4/22/2008	4/22/2008	SW1 Surface Cleaning Steam cleaning all lifeguard towers and no bmp's. Report of Washing to the Storm Drain	5/5/2008 10:48:24AM - Tim Murphy Status Change Previous: Pending New: Closed Reason: Informational Letter
DYVXE	4/23/2008	4/23/2008	SW17 Vehicle and equipment leaking Concrete work done and debris washed into street and not cleaned up Report of Washing to the Storm Drain	4/29/2008 1:25:14PM - James Wood Status Change Previous: Pending New: Closed Reason: Verbal Notice - cleanup done by RP.
DZV3D	4/24/2008	4/24/2008	SW11 Pool / Spa / Fountain Discharge Pool being draind to street This happened this morning. Was reported this afternoon. Report of Washing to the Storm Drain	4/28/2008 10:55:28AM - James Wood Status Change Previous: Open New: Closed Reason: Informational Letter

This report details all closed issues for the selected department(s) that were opened during the report period.

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain				
ECKQA	5/5/2008	5/5/2008	SW8 Paint / Stucco Discharge Washing paint into a storm drain. Report of Washing to the Storm Drain	5/5/2008 8:33:14AM - James Wood Status Change Previous: Open New: Closed Reason: Written Warning
EDLKK	5/6/2008	5/6/2008	SW1 Surface Cleaning Pressure washing sidewalks,no containment Report of Washing to the Storm Drain	5/6/2008 11:02:18AM - AllenHartman Status Change Previous: Open New: Closed Reason: Verbal Notice Issued to contractor, [redacted] Informed them of stormwater requirements and let him know that we would be contacting personnel in charge of contract. Will follow up with [redacted]
EDS7W	5/6/2008	5/6/2008	Concrete residue washing to Storm Drain. Under construction permit. Report of Washing to the Storm Drain	5/6/2008 3:21:15PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Referred for Action to CM&I
EESRK	5/7/2008	5/7/2008	SW11 Pool / Spa / Fountain Discharge Pool being drained and chloine smell Report of Washing to the Storm Drain	5/7/2008 4:15:00PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
EFUAG	5/8/2008	5/8/2008	SW8 Paint / Stucco Discharge Report of Washing to the Storm Drain Report of red liquid discharging to storm drain	5/8/2008 4:14:17PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Informational Letter
EFUAG	5/8/2008	5/8/2008	SW8 Paint / Stucco Discharge Report of Washing to the Storm Drain Report of red liquid discharging to storm drain	5/8/2008 4:15:44PM - Shawnetta Grandberry Status Change Previous: Pending New: Closed Reason: Verbal Notice
EKVFW	5/12/2008	5/12/2008	SW29 Complaint Not Found Washing off driveway into street Report of Washing to the Storm Drain	5/14/2008 3:30:22PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Complaint Not Found

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain				
EMRKE	5/14/2008	5/14/2008	SW1 Surface Cleaning Power washing dirveway and house Report of Washing to the Storm Drain	5/16/2008 8:23:15AM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice
EVTTW	5/22/2008	5/22/2008	SW29 Complaint Not Found - Washing to sewer connection. Waste area being hosed to storm drain. at 2:30 PM Report of Washing to the Storm Drain	5/22/2008 3:54:40PM - James Wood Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
F3L4R	5/28/2008	5/28/2008	Pressure washing on 5/22/08. Report of Washing to the Storm Drain	5/28/2008 4:10:14PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
F8Q2X	6/2/2008	6/2/2008	SW29 Complaint Not Found Water gushing out of storm drain since thismorning Report of Washing to the Storm Drain	6/2/2008 4:29:01PM - James Wood Status Change Previous: Open New: Closed Reason: No issue / No violation
FBQ9Z	6/5/2008	6/5/2008	SW8 Paint / Stucco Discharge Stucco being hosed to storm drain. Report of Washing to the Storm Drain	6/5/2008 4:37:57PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Referred for Action
FBQ9Z	6/5/2008	6/5/2008	SW8 Paint / Stucco Discharge Stucco being hosed to storm drain. Report of Washing to the Storm Drain	6/12/2008 8:44:29AM - Dale Willis Status Change Previous: Open New: Closed Reason: 6/6/2008 Issue Resolved. DW
FC23N	6/5/2008	6/5/2008	SW27 Allowable Discharge Wash water enters a sump and is routed to the sewer system. Report of Washing to the Storm Drain	6/5/2008 5:08:08PM - Tim Murphy Status Change Previous: Open New: Closed Reason: Follow-up in Permits Plus
FQKEZ	6/18/2008	6/18/2008	SW11 Pool / Spa / Fountain Discharge Report of Washing to the Storm Drain	6/18/2008 8:00:01AM - James Wood Status Change Previous: Open New: Closed Reason: Verbal Notice and information left.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Water-General Information/Questions				
3BTSP	10/25/2007	10/25/2007	Dog drinking from [redacted] and getting sick. Can he bring a water sample to the lab?	10/31/2007 8:44:49AM - AllenHartman Status Change Previous: Pending New: Closed Reason: Investigation revealed that the City is not responsible for the pond or any water entering the pond. Will follow up with the property management company and have closed the loop with the complainant.
3XU72	11/14/2007	11/14/2007	Opening new mobile detailing business. Wants information reguarding rules, regulations, and BMP's	12/4/2007 1:23:37PM - Shawnetta Grandberry Status Change Previous: Open New: Closed Reason: Phone number is not correct. Can not contact.
ANLCV	1/8/2008	1/8/2008	[redacted] called in AM of January 7th to CIty Hall to complain about Hazardous waste runoff from vehicles being worked on at businesses operting on the 60 foot easement running beside [redacted] He would cite the specific businesses but said he saw radiator fluid being poured on the ground and oil being drained from a transmission onto the ground on the side of the easement road in front of these businesses. He also eluded to a long history of inaction by any enforcement agency and that a [redacted] area seemed to have control of the area and that the City wasn't doing anything. I mentioned we could have code enforcement take a look at the site and see if any violations were currently happening. I then spoke to Shawnetta who said her group will review the situation. Hazardous materials disposal.	1/8/2008 7:48:48AM - Rob Houston Status Change Previous: Open New: Closed

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ssue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Water-General Information/Questions				
ANLCV	1/8/2008	1/8/2008	[redacted] in AM of January 7th to CIty Hall to complain about Hazardous waste runoff from vehicles being worked on at businesses operting on the 60 foot easement running beside [redacted]. He would cite the specific businesses but said he saw radiator fluid being poured on the ground and oil being drained from a transmission onto the ground on the side of the easement road in front of these businesses. He also eluded to a long history of inaction by any enforcement agency and that a [redacted] area seemed to have control of the area and that the City wasn't doing anything. I mentioned we could have code enforcement take a look at the site and see if any violations were currently happening. I then spoke to Shawnetta who said her group will review the situation. Hazardous materials disposal.	1/15/2008 4:31:46PM - Rob Houston Status Change Previous: Pending New: Closed Reason: Rweceived phone message from [redacted] stating that he was very busty at this time and would call back in several weeks. Closed RFA as current concern deemed completed.

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Water-General Information/Questions				
APUXP	1/9/2008	1/9/2008	[redacted] Across the street from his residence, [redacted] he states there used to be a culvert that ran down to the street to divert the water. He said that a couple years ago the City did work out there and dammed it up and the water now collects up on top in a lake & the water no longer follows its natural flow and doesn't drain into the street. He says the water goes into the ground and underneath his house now. He states the situation should be remedied before there's a slide out there. From Tim Fennessy Immediate response provided to resident's at 10:45 a.m. Prior to meeting residents a quick review of [redacted]s was made and a small amount of water is present at the rock bags placed at the "F" box inlet. This water is being filtered by the rock bags and draining to the "F' box as designed. Reviewed both the [redacted] properties, met with [redacted]. [redacted] property; [redacted] observed standing water on his property in the back yard during the most recent rain event of Jan. 4th to the 6th. The yard is immediately adjacent to the open drainage channel at [redacted]urse. Water is no longer present. He believes water is migrating from the [redacted] repair project, across La Costa Ave. and day lighting into his [redacted]. He came to this conclusion due to the fact that sedimentation devices were holding water as designed in order to desilt storm water runoff per the SSWPP requirements. During the course of reviewing his property, It was discovered his rain gutters go underground and have since been disconnected at an unknown location and do not outfall at a lower surface elevation on the property. The line presently is disconnected somewhere under a side yard. I advised [redacted] to locate this line as soon as possible and re-establish the connection in order to alleviate a potential wash out to the slope. This gutter drain is on the west side of his house. A City drainage easement and line out falls on his properties east	1/9/2008 3:43:58PM - Kim Stankavich Status Change Previous: Open New: Closed Reason: [redacted] has been to site and address the situation with residents

Appendix 7.3 RFA Report

Storm Water-General Information/Questions

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
			side. I told [redacted] I would request the City storm drain maintenance to check this storm drain line to insure it is operating correctly. I then met with [redacted] and reviewed their property. The rain gutters at this residence are also connected to an underground conduit, 3 in. PVC that out falls up slope of the William's property on an adjacent property line. It appears the water is crossing the property line and contributing to the area in question on the [redacted] property. I suggested [redacted] connect a line of suitable length to carry the roof drainage to the toe of slope thereby allowing the water to sheet flow across @ 30ft. of landscape at the northerly property line. These actions, if taken by the property owners, will probably correct the situation. Departed the [redacted] location at 12:00 p.m. Upon returning to office I met with Don Wasko and Clayton Dobbs, briefed them on situation and requested they review the storm drain outfall in order to be sure the City line is functioning as designed. This action should be taken to assure the property owners the city line is not contributing to the problem.	
3L25T	2/6/2008	2/6/2008	SW22 Dumping - Non-hazardous Materials 3 unlabled drums in parking lot	2/6/2008 4:17:42PM - Tim Murphy Status Change Previous: Open New: Closed Reason: information letter sent
EUMFV	5/21/2008	5/21/2008	Questions regarding who to contact when car is being washed in the street and who to contact when construction isbeing done after hours or on Sunday in violation of City Code.	5/21/2008 9:47:42AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Responded to resident. Construction question being answered by Building.
FATAB	6/4/2008	6/4/2008	Wants to know if allowable to wash car on street, and without soap, and a reference to the law	6/9/2008 8:45:02AM - James Wood Status Change Previous: Open New: Closed Reason: Information provided to caller.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Storm Water-General Information/Questions				
FBPFH	6/5/2008	6/5/2008	Requesting information regarding swimming pools to send to the HOAs that they manage.	6/5/2008 11:19:48AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Emailed adobe of swimming pool brochure.
Vehicles-Leaking Oil or Fluids				
AATDP	12/27/2007	12/27/2007	SW17 Vehicle and equipment leaking Report of leaking oil or fluids Report that QUOTE...oil, grease, and other pollutants of concern are running into the storm drains on [redacted] and [redacted] having been discharged from abandoned vehicles left in the storm gutter.QUOTE	2/7/2008 4:01:12PM - AllenHartman Status Change Previous: Pending New: Closed Reason: Informational Letter Unable to identify definitively which vehicles were leaking or where the owners reside. Sent educational information to all vehicles suspected of leaking that were parked along [redacted] and to all residents in the areas along [redacted] apartments.
Water Conservation-Private Property				
4TL9E	7/5/2007	7/5/2007	Overwatering in evening (9:30) and forcing pedestrians off sidewalk into bike lane.	7/6/2007 9:10:30AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Management co. is having the problem looked into and fixed.
5APJM	7/20/2007	7/20/2007	Water has been running out of outfall at beach for an hour a day for last ten days.	7/25/2007 9:31:10AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Repairs are being made on a leaking service line.
5NUF5	8/1/2007	8/1/2007	Report of possible water leak between [redacted] and the [redacted] located to the east.	8/2/2007 10:38:17AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Maint. is working to find, fix and solve the problem.
5TLVW	8/6/2007	8/6/2007	Overwatering at small park at this location	8/8/2007 8:45:18AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: No problem found.

This report details all closed issues for the selected department(s) that were opened during the report period.

Water Conservation-Private Property

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
5TLXD	8/6/2007	8/6/2007	Overwatering at this home	8/8/2007 8:49:46AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: No problem found.
5TPM4	8/6/2007	8/6/2007	Sediment from landscape drain at [redacted] collects at [redacted]	8/9/2007 12:44:16PM - Michael Fairbanks Status Change Previous: Pending New: Closed Reason: Please see RFA-739REU
5WU5Q	8/9/2007	8/9/2007	Water coming out of D25 - overwatering?	8/13/2007 11:56:24AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: I did not find any violations.
54TFZ	8/15/2007	8/15/2007	Over irrigation at above address seen evening of 8-14-07. Water was running into storm drain.	8/16/2007 4:11:01PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: [redacted] is the contact at [redacted] Landscapers have been told of the problem.
55UVJ	8/16/2007	8/16/2007	Overwatering - water in and around parking lot	8/22/2007 9:42:35AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: No problem found.

Appendix 7.3 RFA Report

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Water Conservation-Private Property				
5YVV9	9/12/2007	9/12/2007	Complaint of constant water at this intersection for past years. Wants to have cleaned and if can be fixed. Addresses of over-watering sent to Olivenhain 10-26-07.	10/17/2007 1:41:06PM - Shea Sainz Status Change Previous: Open New: Closed Reason: As reported by Public Works Inspector K. Brooks: On 10/03/07 City contractor ([redacted]) had pressure washing crew clean from [redacted] Olivia to Avenida Helecho and from [redacted] Camino Serbal to Avenida [redacted] Helecho and [redacted] from [redacted] to the storm drain boxes just west of [redacted] both sides. Inspector also spoke with C. Dobbs regarding street sweeping of the area and he reported that [redacted] are supposed to be swept every 1st and 3dr Monday. He will follow up and make sure sweeper is addressing this area properly. I recommend that water conservation materials be placed at [redacted] as well as the [redacted] concerning the n/e corner of [redacted] and Avenida Helecho. Overwatering from the listed areas is where the algae starts in the gutter. Kelly Brooks, PW Inspector.
5YVV9	9/12/2007	9/12/2007	Complaint of constant water at this intersection for past years. Wants to have cleaned and if can be fixed. Addresses of over-watering sent to Olivenhain 10-26-07.	10/18/2007 2:15:43PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Not in our district. Olevenhain
75L75	9/17/2007	9/17/2007	Removing back lawn - putting water wise plants - looking for grant? and advise and help	9/17/2007 10:46:21AM - AllenHartman Status Change Previous: Open New: Closed Reason: Literature sent to customer.
34P6T	10/18/2007	10/18/2007	Requesting lists of acceptable plants for this area for her hillside.	10/18/2007 11:05:26AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Sent brochures as requested.
3CL7S	10/26/2007	10/26/2007	Watering slope behind home from 4:00 pm on 10-25-07 at least until time of call - 10-25-07 6:30 pm. Concerned with overwatering and excess water may soak their yard, etc.	10/26/2007 10:37:24AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Not in our district.
9FTR9	11/30/2007	11/30/2007	Overwatering on 11-29-07 between 12 and 1:30 pm. Water running down street. Broken sprinkler head?	12/5/2007 10:23:54AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: A door hanger was left. No problems found.

Water Conservation-Private Property

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
9MUUY	12/6/2007	12/6/2007	Neighbor overwaters - water runs into street and storm drain	12/17/2007 2:02:20PM - Michael Fairbanks Status Change Previous: Pending New: Closed Reason: I have seen no problems at the property.
9SN3P	12/11/2007	12/11/2007	Water hose left on - running into street - owners not home	12/11/2007 9:26:38AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Water had been shut off by owner when I arrived.
AXTXL	1/17/2008	1/17/2008	Water surfacing to top of the street and damaging the street	1/17/2008 2:18:00PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Not in our water district.
CTLJX	3/17/2008	3/17/2008	Water leak from grassy area running into street	
CXNYH	3/21/2008	3/21/2008	Water is constantly runing and into his yard from an unknown source - Groundwater or Neighbors Sprinkler system	4/7/2008 12:27:09PM - Michael Fairbanks Status Change Previous: Pending New: Closed Reason: It appears to be ground water.
DC2C8	4/2/2008	4/2/2008	REPORT OF ALGAE ON SIDEWALK AS A RESULT OF OVER IRRIGATING, IN ADDITION TO THE ALGAE, IT IS APPARENT THAT A TRAFFIC SIGNAL CONTROL BOX OR PULL BOX IS FULL OF WATER. THE ALGAE AND THE CONTROL BOX ISSUES HAVE BEEN REFERRED TO STREET MAINT FOR RESOLUTION. PLEASE CHECK SITE FOR POSSIBLE OVER WATERING.	4/7/2008 7:48:27AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: I have told parks about the problem. I will check to see if it is still going on.
DGPHB	4/7/2008	4/7/2008	call from resident regarding water coming from neighbors property	4/7/2008 11:25:15AM - Wayne Hoffer Status Change Previous: Open New: Closed Reason: Per[redacted] leaking valve has been repaired.
E8MDP	5/1/2008	5/1/2008	Water discharging 24/7 from "site drainage pipe" daylighting into curb and gutter. Steady stream of water has saturated the subsoil in complainants sideyard. Suspected water leak.	5/6/2008 10:59:33AM - Michael Fairbanks Status Change Previous: Pending New: Closed Reason: There are no violations or leaks here.

This report details all closed issues for the selected department(s) that were opened during the report period.

Issue Nr.	Opened	Closed	Issue Description	Action History - Closed Action
Water Conservation-Private Property				
F3NPY	5/28/2008	5/28/2008	Water running from residence and gutter need to be cleaned of algae.	5/29/2008 12:34:24PM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: Ground water.
Water Conservation-Water Audits				
D3L6V	3/25/2008	3/25/2008	SW16 Over-irrigation	3/25/2008 8:37:30AM - Michael Fairbanks Status Change Previous: Open New: Closed Reason: High usage due to growing of flowers on the property.

This report details all closed issues for the selected department(s) that were opened during the report period.

City of Carlsbad
Dry Weather Program

2008 Dry Weather Exceedances and Investigations

Site ID	Initial Site Visit	Initial Findings	Date Data Received	Date Investigated	Sampled by	Confirmation Findings	Follow up	Closing Notes
Follow-up Sampling and Investigations for Water Quality Exceedances								
19C-1 (AH-46)	09/04/2008	TC 78,000 FC 39,000 Ent 31,000		09/11/08	Dmax	Confirmation sample collected on 09/11/08 (TC 46,000, FC 23,000, Ent 6,000). Results still high for Fecal Coliform.	Resample on 09/18/08 (TC 36,000, FC 34,000, Ent 7,300). Fecal Coliform result still out of compliance. Sample was taken at next accessible manhole above this outfall (24A-3) with no exceedances (TC 4,600, FC 4,000, Ent 800).	No exceedances were found in the discharge up the pipe from the outfall. There was an excessive amount of vegetation surrounding the outfall and several various animal droppings were found around the site. Suspected source of fecal coliform is wild animals in vicinity of outfall. Closed.
48D-24 (BA-13)	09/05/2008	TC 52,000 FC 8,500 Ent 38,000		09/11/08	Dmax	Confirmation sample collected on 09/11/08 (TC 15,000, FC 12,000, Ent 2,000)	09/11/08 resample results within limits for TC, FC and Entero.	Exceedance not confirmed. Closed.
45G-13 (BA-40)	09/10/2008	TC 23,000 FC 18,000 Ent 11,000		09/18/08	Dmax	Confirmation sample collected on 09/18/08 (TC 10,400, FC 10,200, Ent 4,600)	09/18/08 resample results within limits for TC, FC and Entero.	Exceedance not confirmed. Closed.
42C-92 (BA-06)	09/10/2008	TC 56,000 FC 37,600 Ent 9,000		09/18/08	Dmax	Confirmation sample collected on 09/18/08 (TC 63,000, FC 53,000, Ent 15,200) Results high for all parameters.	10/15/08 Onsite investigation performed by PH, JW, and CD. 10/22-10/23/08 Contractor brought in to clean SD lines and boxes. Resample taken on 10/27/08 within limits for TC, FC and Entero.	Samples taken following cleaning of SD lines and boxes were within limits for all paramaters. Closed.
Follow-up Actions Related to Trash Observations during Monitoring								
48D-24	09/05/2008	Sub-optimal			Dmax	Trash observed in vacant lot east of Dove Lane.	Referral to Code Enforcement for clean-up of private property, 10/9/08.	Referral to Code Enforcement for clean-up of private property, 10/9/08.
37B-19		Marginal			Dmax	Trash observed (boxes and paper) between 2225 and 2265 Camino Vida Roble.	Referred to Storm Drain Maintenance Division for clean-up of MS4, 10/9/08.	Cleaned 10/10/08.
58A-13		Sub-optimal		10/09/08	Dmax	White powdery substance in front of 2012 and 2022 Ladera Court.	Referral to Environmental Specialist for investigation, 10/9/08.	See RFAA--7K9NT7. No powdery substance found on site at time of investigation. Street sweepers had cleaned the streets.
1D-31		Sub-optimal			Dmax	Trash (food containers and aluminum cans) observed in vegetation on South Bank of Buena Vista Creek, ten yards west of El Camino Real.	Referral to Storm Drain Maintenance Division for clean-up of trash on Creek bank, 10/9/08.	Cleaned 10/10/08.
1D-20		Sub-optimal			Dmax	Trash (soda cans, drink cups, plastic bags) observed on South side of Buena Vista Creek, 50 feet west of South Vista Way bridge.	Referral to Storm Drain Maintenance Division for clean-up of trash on Creek bank, 10/9/08.	Cleaned 10/10/08.

City of Carlsbad
Municipal Separate StormSewer System (MS4)

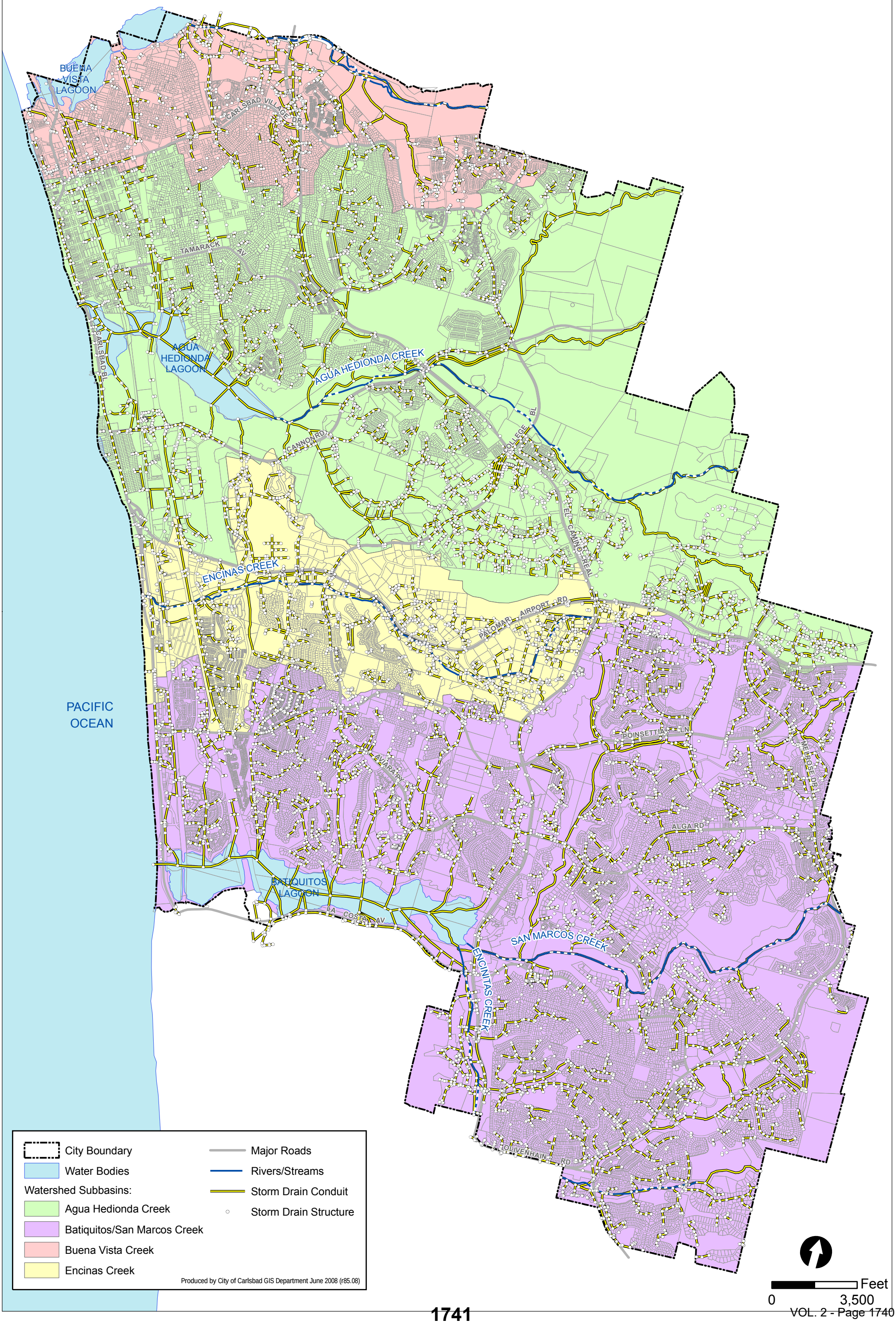

CITY OF CARLSBAD

Jurisdictional Urban Runoff Management Program Annual Report

July 1, 2008 – June 30, 2009

Signed Certification Statement

City of Carlsbad
Jurisdictional Urban Runoff Management Plan
Annual Report for July 1, 2008 – June 30, 2009

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Glenn T. Pruim R.E. — Glenn Pruim

Name (printed) — Signature

Public Works Director — SEPT 21, 2009

Title — Date

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Executive Summary

Section 1: Introduction

The City of Carlsbad's (City) Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report addresses the implementation of the Municipal Storm Water Permit Order No. R9-2007-0001, issued January 24, 2007 and effective March 24, 2008. This Annual Report is covering Order No. R9-2007-0001 from July 1, 2008 to June 30, 2009, hereby listed as Fiscal Year 2008-09.

In the Fiscal Year 2008-09 (FY 2008-09), many procedures have been streamlined to efficiently manage data, monitor sites, track inspections and investigations, and manage other storm water related activities. Planning, Construction, and Existing Development activities have implemented improved processes to further incorporate storm water pollution prevention practices into internal activities as well as activities enforced by City departments. Highlights of each major component of the JURMP are listed below, and correspond to Section headings in this JURMP Annual Report.

The City has defined Notable Activities as those that are above and beyond compliance requirements, and are highlighted in Sections 2, 3, 4, 5, 6, as well as 15 Conclusions. Section 7 Notable Activities will be included in the December submittal of that section.

New this year, the City has included a Compliance Reference Table located in Appendix 1.2 that links permit requirements with corresponding sections in the report where they are referenced.

Section 2: Development Planning

Permit Order No. R9-2007-0001 requires the City to describe amendments to the General Plan, evaluate land use planning policies and principles, revise the environmental review processes, and develop an approval process to minimize the impacts of development activities on receiving water quality. Land-use planning gives the community an opportunity to comment on and shape policies that guide community development and interests. The City has developed goals that balance environmental protection with smart, long-term economic growth. By laying out a vision for local growth and coastal development, projects are consistent with the state and federal regulatory requirements and the City's land-use planning efforts.

The City continued to implement the Standard Urban Stormwater Mitigation Plan (SUSMP), and all applicable projects were subject to a thorough discretionary and plan check review process to ensure compliance. From July 1, 2008 to June 30, 2009, there were 88 discretionary projects that were reviewed and required to submit applicable storm water pollution prevention plans (SWPPP). SUSMP requirements were applied to 74 private development/redevelopment projects and 14 City Capital Improvement Projects (CIP). Of the 74 private development/redevelopment projects, 40 were priority development projects subject to site design, source control and treatment control requirements and 24 were standard projects subject only to site design and source control BMP requirements. Of the 14 City CIPs, 3 were priority development projects and 11 were standard projects.

During FY 2008-09, the City instituted three new procedures on NPDES Treatment Control BMP (TCBMP) inspections, TCBMP inventory management, and compliance verification. In addition,

the City updated and restructured the development processing fees for the plan review and inspection of Construction Storm Water Pollution Prevention Plans and post-construction Storm Water Management Plans.

Section 3: Construction

Order No. R9-2007-0001 requires the City to implement activities that address and minimize short and long-term impacts on receiving water quality related to runoff from new construction sites. The City requires, prior to approval of a construction or grading permit, that project proponents implement measures to ensure that pollutants will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of water quality objectives. The City met these requirements by amending or conditioning existing permits, procedures and ordinances.

During FY 2008-09, the City updated the construction inventory, inspected all high priority sites, conducted outreach and education to developers, engineers, contractors, and City staff, and used enforcement actions to obtain compliance when necessary. All active grading permits were ranked as high priority and inspected weekly during the rainy season, with some inspected on a daily basis. The required number of inspections was exceeded this fiscal year. There were 1415 required inspections and 1858 inspections were completed in this reporting period. Inspectors issued 164 enforcement actions to achieve compliance, including issuing 116 Verbal Notices, 44 Written Warnings, 3 Stop Work Notices, and 1 Summary Abatement Notice. The City continued to distribute the *Pollution Prevention Guide to the Construction Industry* brochure.

Section 4: Municipal

The City's municipal facilities and their activities have the potential to contribute to water pollution if Best Management Practices (BMPs) are not properly implemented. City facilities include administration buildings, recreational areas, maintenance and storage yards, water reservoirs, water pump stations, sewer lift stations, a road system, parking facilities, the storm drain system, pressure regulator vaults, and fire stations. Municipal facilities maintain the City's infrastructure that supports Carlsbad's quality of life.

The Storm Water Committee comprised of various City departments including Public Works, Fire Department, Recreation, and the Building Department continued to meet and discuss municipal storm water BMPs and pollution prevention issues. The intent of the committee is to communicate problems and solutions among the group in order to share knowledge, discuss training opportunities, enhance compliance with the Permit, and to pass along any new information from the Regional Water Quality Control Board (Regional Board). SWPPPs were developed for appropriate High Priority municipal facilities.

The City of Carlsbad's City Manager continued support for the Storm Water Leadership Team (SWLT). Monthly meetings were conducted and attendees included Senior Management of the City's major service areas and Directors. Agenda items covered all areas of the City's compliance with Order No. R9-2007-001.

The City's street sweeping program exceeded both Permit requirements throughout the FY with twice weekly downtown sweeping routes.
High Priority Municipal facility inspections were conducted by both internal City staff and external consultants. The combination of annual inspections by the State Department of

Pesticide Regulations, municipal inspections by internal and external inspectors, and staff training on storm water BMPs, personnel are more aware of the required maintenance practices in preventing storm water pollution.

The City also continued the Environmental Resources Management Team (ERMT) initiative to look at environmental resources from a City-wide perspective including storm water, open space, habitat management, energy use, and sustainable principles. Support for the ERMT's work implementing the Environmental Guiding Principles for City decision-making approved by Council in August of 2007 continued.

Municipal facilities and departments also continued to implement Integrated Pest Management practices to reduce the City's use of pesticides.

Section 5: Industrial/Commercial

The City currently maintains an inventory of industrial and commercial sites and sources within its jurisdiction. Major industry types include airport services, refuse and sewage management, pharmaceutical research and development, high technology and electronics, golf apparel and equipment manufacturers, and several light industry parks. Major commercial types include automobile maintenance, restaurants, pressure washing, masonry and concrete work, carpet cleaning, and landscaping activities. The City continued to implement a comprehensive program to reduce urban runoff originating from existing sites and sources since industrial and commercial activities have the potential to contribute to water pollution, if BMPs are not implemented properly.

During this reporting period, the City updated the industrial/commercial inventory, mapped all facilities, provided education and outreach on BMPs, inspected 65% of fixed high threat to water quality facilities, and conducted 46 enforcement activities to ensure compliance.

The Storm Water Protection Program continues to use *Knowledge and BMP Effectiveness Assessment* measures for inspected sites and sources.

Section 6: Residential

The residential community has a significant potential to contribute to water quality degradation. Beyond year 2010, there will be nearly 54,599 residential units, housing approximately 135,000 residents. The focus of the City's pollution prevention strategy is a proactive information and education program that utilizes public presentations, fact sheets, direct mailers, brochures, website, and other media to increase knowledge and awareness of storm water pollution prevention efforts.

Targeted activities for residential areas include vehicle washing, storage and maintenance, lawn and garden care, home improvement projects, pet waste disposal, swimming pool maintenance, household hazardous waste (HHW) disposal, and trash and debris cleanup and disposal. The Storm Water Protection Program continued to distribute educational information addressing these residential BMPs and required several minimum BMPs to be implemented.

Between July 1, 2008 to June 30, 2009 the City distributed storm water educational information for residential activities, continued an advertising campaign, hosted or participated in 10 residential outreach events, offered five oil recycling drop-off sites and two HHW collection sites for residential use, initiated a door-to-door residential HHW pick up program, hosted a HHW

drop-off disposal day for Carlsbad residents, responded to 116 reports of illegal discharge, and issued 41 enforcement actions to achieve compliance.

Four mailers were sent out to a total of 198 households regarding storm water pollution issues. Two of these mailers addressed overirrigation issues. The Storm Water Protection Program continues to work closely with the City's Water Conservation Specialist to address runoff due to overirrigation.

Section 7: Illegal Discharge Detection and Elimination

The City continued to conduct a comprehensive and proactive program for detecting and eliminating illegal discharges to the storm drain system. The City's program actively seeks to identify and eliminate illicit discharges and connections by conducting investigations, responding to spills and sewage overflows, conducting monitoring, and performing routine cleaning and maintenance activities on the sewer and MS4.

The Illegal Discharge Detection and Elimination (IDDE) report will be submitted in December 2009, as per Addendum 2, Order No. R9-2007-0001, and will include Notable Activities in that section.

Section 8: Outreach and Education

The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent, though these messages often took varied forms. During FY 2008-09, the City continued to be actively involved in outreach and education at the local level, the watershed level with the North County Storm Water Program (NCSWP), and at the regional level with the Project Clean Water Outreach Workgroup and the Think Blue campaign.

The City sent storm water educational information to all city employees distributed via paychecks in FY 2008-09, participated in EPA webcasts as training opportunities, collaborated with local non-governmental organizations, hosted or participated in 10 outreach events, presented urban runoff and watershed concepts to 1084 school-aged children, and distributed information through various media. The City also distributed promotional items such as notepads, pens, and pet waste Bags on Board with pollution prevention messages.

Section 9: Public Participation

The City led or assisted with several public participation opportunities this reporting period. During the reporting period, citizens, business owners and representatives, and other interested parties were invited to attend public meetings, outreach events, workshops, City Council meetings, and other events related to storm water pollution prevention at the local and watershed levels.

During this reporting period, the City conducted a Public Opinion Survey of 1,000 residents that included questions about storm water pollution, and held 10 community events.

The City continued to recruit students from the San Diego Region, to participate in an internship program with the Storm Water Protection Program. One intern worked on a variety of activities including complaint response, commercial and industrial inspections, data management, and

outreach and education. Due to budget reductions, this program was not funded in the Fall of FY 2008-09 but will be reconsidered as resources allow.

Section 10: Fiscal Analysis

The total operating costs to fund the Storm Water Protection Program activities for FY 2008-09 was 2,561,593. This includes actual expenditures for personnel, operating costs, and capital outlay from the Storm Water Protection Program budget, Storm Drain Maintenance budget, Storm Water Engineering budget, and income from Engineering Plan Checks related to storm water, but does not include the *Storm Water Capital Improvement Program* costs.

Section 11: Effectiveness Assessment

Information collected in surveys, public comments, inspections, investigations, monitoring and other activities during the year were assessed on a full fiscal year basis to identify any trends and determine new or modified courses of action.

The City continued to make progress with effectiveness assessment measures during FY 2008-09, using the Watershed Treatment Model to assess the effectiveness of storm water pollution prevention. Assessment of each significant activity, each component, and an integrated assessment of the overall jurisdictional program is provided in Section 11 of this report.

Section 12: Special Investigations

The City continued to participate in the San Diego Coastal Lagoon TMDL Monitoring Program that is described in San Diego Coastal Lagoons Monitoring Workplan. Results and conclusions of the monitoring program will be in the final report, written by Southern California Coastal Waters Research Project, near the end of the calendar year 2010.

A Watershed Additional Receiving Water Study is also described in Section 12 of this report.

Section 13: Non-Emergency Fire-Fighting

The Carlsbad Fire Department (CFD) developed this section to meet the requirements of Order No. R9-2007-0001. Several BMPs have been developed and incorporated at all 6 of the City s Fire Stations. Each station has a storm water manual, spill response equipment, regular cleanup and removal of organic debris from parking lots, and portable BMPs to contain and collect equipment and vehicle wash water. Training is conducted on property with no runoff or discharge potential into the MS4, or at the City s Reclaimed Water Facility where water is collected into the Reclaimed Water reservoirs. Fire Prevention activities were also continued during this reporting period.

Section 14: JURMP Revisions

The City s 2008 JURMP was developed in response to the issuance of Order No. R9-2007-0001. The City began implementing the 2008 JURMP on March 24, 2008 as required under the new permit. There were a few minor changes to the City s 2008 JURMP during FY 2008-09 and they are discussed in Section 14.

Section 15: Conclusion

The City successfully implemented the Permit requirements and the program activities described in the JURMP. Information from JURMP activities, WURMP activities, as well as the 303(d) List indicated that bacteria, sediment, and nutrients are high priority pollutants in the Carlsbad Watershed. The City proposes to continue addressing these pollutants through a number of existing or new activities, which include education, inspections, monitoring and maintenance through implementation of Order No. R9-2007-0001.

This Section also highlights Notable Activities conducted over and above permit requirements.

1.0 INTRODUCTION

1.1 Background

The San Diego Regional Water Quality Control Board issued the Municipal Storm Water Permit Order No. R9-2007-0001, NPDES No. CAS018758 on January 24, 2007 to control waste discharges in urban runoff from the Municipal Separate Storm Sewer System (MS4) draining the watersheds of the County of San Diego, the Incorporated Cities of San Diego County and the San Diego Unified Port District Copermittees.

The Order describes all requirements, including the content of the Jurisdictional Urban Runoff Management Plan (JURMP) to be prepared and submitted to the San Diego Regional Water Quality Control Board by each and all of the Copermittees.

The Regional Board issued this Permit to specify the requirements necessary to reduce the discharge of pollutants in urban runoff to the maximum extent practicable (MEP). Pollutants in urban runoff discharging to downstream water bodies can be prevented and controlled by effective implementation of best management practices (BMP s). The Permit requires the submittal of a Jurisdictional Urban Runoff Management Plan (JURMP) to the Regional Board in the first year of the permit, and an Annual Report each remaining year of the permit to document the progress and implementation of the JURMP.

The Permit also requires the City of Carlsbad (City) to protect water quality during the three major phases of urban development: (1) land use planning for new development; (2) construction; and (3) the use or existing development phase.

In 2008, the City prepared a JURMP that addresses the requirements of Water Quality Order No. R9-2007-0001. The City officially began implementing the 2008 JURMP on March 24, 2008. The following report covers the implementation of the JURMP for Fiscal Year 2008-09 (July 1, 2008 to June 30, 2009).

1.2 Overview of the City of Carlsbad

The City encompasses just over 42 square miles and borders 6 miles of coastline. The entire city is contained within the Carlsbad Hydrologic Unit (Watershed) and encompasses four smaller hydrologic areas. These include Buena Vista Creek, Agua Hedionda, Encinas, and San Marcos. Major water bodies within the city are Buena Vista Creek, Buena Vista Lagoon, Agua Hedionda Creek, Agua Hedionda Lagoon, San Marcos Creek, and Batiquitos Lagoon. Several waterbodies within the city are listed as impaired under Section 303(d) of the Federal Clean Water Act.

The City is a municipal corporation, following the Council-Manager form of government. During FY 2008-09, the City changed from a General Law City to a Charter City. City Departments fall under one of five major service areas (MSA s): Public Safety, Administrative Services, Public Works, Community Development, and Community Services. While the City created the Storm Water Protection Program to help implement the Permit, program implementation is carried out by several departments within different MSA s. This allows for program implementation and new requirements to be incorporated into daily activities of City employees, instead of being viewed as completely new requirements without a connection to on-going services.

1.3 Purpose and Objectives

The purpose of the City s JURMP Annual Report is to provide a comprehensive account of activities conducted by the City to meet the requirements of Water Quality Order No. R9-2007-0001. In addition the reporting process allows the City to evaluate the effectiveness of the program and make any changes necessary to improve the implementation and effectiveness of the JURMP.

1.4 Report Organization

This Annual Report was prepared in accordance with the requirements of the Permit. It contains a comprehensive description of the activities conducted by the City of Carlsbad to meet the requirements of the Permit; an accounting of illicit discharges reported, inspections conducted, enforcement actions taken, education efforts conducted; a description of the public participation mechanisms utilized during the JURMP implementation process; identification of management measures proven to be effective in reducing urban runoff pollutants and flow; identification of water quality improvements or degradation; and a fiscal analysis. A list of acronyms is provided in Appendix 1-1.

The organization of this report follows the Table of Contents agreed to and submitted by the Regional Copermittees to the Regional Board. The Annual Report is divided into sections matching major sections in the Permit and the JURMP. As with the JURMP, many of the activities described in separate JURMP sections overlap with one another, so an activity may be referenced in more than one report section. The Annual Report is organized as follows:

Section 1	Introduction
Section 2	Development Planning Component
Section 3	Construction Component
Section 4	Municipal Component
Section 5	Industrial/Commercial Component
Section 6	Residential Component
Section 7	Illicit Discharge Detection and Elimination Component
Section 8	Outreach and Education Component
Section 9	Public Participation Component
Section 10	Fiscal Analysis Component
Section 11	Assessment of JURMP Effectiveness Component
Section 12	Special Investigations Component
Section 13	Non Emergency Fire Fighting Flows
Section 14	JURMP Revisions
Section 15	Conclusions and Recommendations

Appendix 1.2 contains the JURMP Annual Report Requirements Checklist which shows the reporting requirements from the Permit and where each requirement can be found in the City s 2008-09 JURMP Annual Report.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

This section outlines the Development Planning actions implemented by the City under San Diego Municipal Permit Order No. R9-2007-001 (the 2007 Municipal Permit) and covers the portion of the annual reporting period from July 1, 2008 through and including June 30, 2009. During this reporting period, the City maintained compliance with all land-use planning requirements of the 2007 Municipal Permit.

The City submitted an updated Jurisdictional Urban Runoff Management Plan to the Regional Board March 24, 2008 (hereinafter referred to as the 2008 Carlsbad JURMP). The 2008 JURMP incorporated numerous project processing changes to improve development related storm water pollution prevention activities and to ensure complete conformance with the Development Planning Component of the 2007 Municipal Permit.

During preparation of the 2008 Carlsbad JURMP, the City performed an in-depth review of its development planning and review processes. In summary, the review found that the City s existing land-use planning policies and processes met requirements and that numerous changes and modifications to the development project approval process were needed to ensure compliance with the 2007 Municipal Permit. In response to the findings, numerous revisions to the City s development review process were initiated in FY 2007-08 to improve existing storm water pollution prevention activities and ensure compliance with the 2007 Municipal Permit. The changes included updates to the City s Best Management Practices (BMPs) standards, Storm Water Codes, development project approval process, project tracking and record keeping and BMP installation verification procedures. For a complete detailed listing of the changes made during FY 2007-08 see the FY 2007-08 Carlsbad JURMP Annual Report.

During the current reporting period, from July 1, 2008 through June 30, 2009, the City proceeded with implementation of the comprehensive development planning changes put into place during FY 2007-08. Several development planning process changes were instituted to ensure compliance with the 2007 Municipal Permit as more fully discussed and detailed in the following sections.

2.2 Land Use Planning

2.2.1 Background

In July 1986, the City adopted a *Growth Management Plan* into its General Plan to guide development and anticipate the types and numbers of facilities needed to accommodate the Carlsbad community at build out. Those facilities include sewer plant capacity, sewage pipelines, reclaimed water system, and storm drain system with flood and pollution control basins.

In September, 1994 the City adopted a Comprehensive Update of its General Plan. The General Plan includes goals that balance environmental protection with smart, long-term economic growth. By laying out a clear vision for environmentally sensitive development within this coastal community, development projects are required to be consistent with various City ordinances (i.e.; Grading and Erosion Control, Storm Water Management, Hillside Development, Coastal Resource Protection) and other regulatory requirements.

The General Plan is reviewed annually and revised as necessary to ensure that the public facilities are considered and City goals are met. On February 19, 2002, the City Council adopted General Plan Amendment GPA 01-15. This General Plan Amendment revised and supplemented various policies regarding storm water quality protection in the Open Space and Conservation Element of the General Plan. The revised and supplemented policies reflect all storm water quality and watershed protection principles found in both the 2001 and 2007 Municipal Permits pertaining to storm water pollution.

City staff again reviewed the storm water protection policies of the General Plan in FY 2008-09 and no revisions were found necessary. The existing General Plan storm water protection policies are listed below:

a.) Develop and implement a JURMP consistent with the Permit and any amendments thereof.

b). Adopt and implement a Master Drainage Plan and Standard Urban Storm Water Mitigation Plan (SUSMP) consistent with the Permit and any amendments thereof.

c.) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City requires developments to incorporate structural and non-structural BMPs to mitigate any increases in pollutant loads.

d.) Implement storm water pollution prevention methods to the maximum extent practicable, supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into the municipal separate storm sewer system (MS4).

e.) Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

f.) Developments shall implement appropriate recommendations to protect water quality found in the San Diego Association of Government s (SANDAG s) Water Quality Element of its Regional Growth Management Strategy.

g.) Development projects should be designed to comply with the following site design principles:

- Protect slopes and channels to decrease the potential for slopes and/or channels from eroding and impacting storm water runoff.
- To the extent practicable, cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones. Encourage land acquisition of such areas.
- Provide buffer zones for natural water bodies.
- Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment.

- Where feasible implement site design/landscape features to slow runoff and maximize on-site infiltration of runoff.
- Properly design outdoor material storage areas (including the use of roof or awning covers) to minimize the opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids and other pollutants from entering the storm water conveyance system.
- Incorporate roof or awning covers over trash storage areas to prevent off-site transport of trash and other pollutants from entering the storm water conveyance system.
- Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways and bridges.
- Design streets and circulation systems to reduce pollutants associated with vehicles and traffic resulting from development.

In addition to the General Plan, the City has adopted various storm water protection policies in other land use planning documents including the City s Local Coastal Program and Habitat Management Plan.

The Carlsbad Local Coastal Program covers that part of the City lying within the Coastal Zone. The Carlsbad City Council adopted a Zone Code Amendment (ZCA 01-08), Local Coastal Program Amendment (LCPA 01-15) and Municipal Code Amendments (MCA 01-05, 01-06, and 02-01) to revise/add new policies, standards, procedures and requirements regarding water quality and watershed protection to the Local Coastal Program Land Use Plans, Chapters 21.203 (Coastal Resource Protection Overlay Zone) and 21.205 (Coastal Resource Overlay Zone Mello I LCP Segment Local Coastal Program) of the Zoning Ordinance of Carlsbad's Municipal Code. One of the notable storm water requirements of the Carlsbad Local Coastal Program (LCP) is the inclusion of an additional criterion for determining a priority development project. Per the amended LCP, any project located within 200 feet of the Pacific Ocean that creates more than 2500 square feet of impervious surface or increases the project impervious area more than 10 over the existing impervious area is to be considered a priority development project.

Under the California Natural Community Conservation Program (NCCP), the City and six other cities in north San Diego County participated in the preparation of the Multiple Habitat Conservation Program (MHCP). The MHCP is a comprehensive planning program designed to develop an extensive ecological preserve in northwestern San Diego County. The City has prepared a subarea plan, called the Carlsbad Habitat Management Plan that was adopted in November 2004. The Carlsbad HMP contains the specific conservation, management, facility planning, land use, and other actions the City will take to implement the goals, guidelines, and standards of the MHCP plan. This Habitat Management Plan prohibits development in or near natural habitat areas including creeks and lagoons. Those areas act as a buffer between urban development pollutants and receiving waters. They also protect a significant percentage of natural areas that are pervious, leading to natural groundwater recharge and reduction in peak run off rates.

On November 1, 2002, the revised Zoning Ordinance, Municipal Code, and Local Coastal Plan Amendments were submitted to the California Coastal Commission. In August, 2006, the California Coastal Commission approved these municipal code amendments. All requirements of these documents continued to be implemented in FY 2008-09 and previous years including

the years the City waited for Coastal Commission approval. The Local Coastal Program and Habitat Management Plan were evaluated during FY 2008-09 and no revisions were found necessary.

2.2.2 Source Characterization

Land Use Planning is the process whereby the City determines appropriate land use designations for a property consistent with the City's General Plan requirements. As such, source characterization of pollutants is addressed generically in association with the type of land use proposed (i.e. low density residential, high density residential, commercial, and industrial, etc). Each land use decision made during FY 2008-09 was found consistent with the storm water protection policies as contained in the City's General Plan, Local Coastal Program (if applicable) and Habitat Management Plan.

In many cases, land use planning applications are accompanied by specific project development applications. In such cases, the project was required to identify specific project pollutant sources consistent with the City's Standard Urban Storm Water Mitigation Plan dated March 2008 (the "2008 Carlsbad SUSMP") and to identify project specific Best Management Practices (BMPs) to eliminate or minimize any negative impacts to storm water quality. For more specifics on source characterization applied to development projects during the project approval and verification process reference Section 2.4.2 below.

2.2.3 Best Management Practice Requirements

The City reviewed the existing storm water quality and watershed protection goals and policies within the City General Plan and found them to be adequate to meet the requirements of the 2007 Municipal Permit. No modification was made to BMP requirements of the General Plan during FY 2008-09.

2.2.4 Program Implementation

Every General Plan Amendment and land use planning application approved by the City during FY 2008-09 was found in conformance with all storm water protection policies of the Carlsbad General Plan, Local Coastal Program (as appropriate), Habitat Management Plan and the Carlsbad Municipal Code (CMC). This includes compliance findings for all the storm water quality goals and objectives of the City's Grading and Drainage Ordinances (Title 15 of the CMC).

For the period covered by this annual report (July 1, 2008 to June 30, 2009), the land use planning review process began with the submittal of a planning application at the City's development services counter. Concurrent with the land use application the city requires submittal of the Storm Water Standards Questionnaire which determines if the project is a priority or non-priority development project. Each project was then reviewed for conformance with the storm water protection policies and requirements of the 2008 Carlsbad SUSMP, the General Plan, any applicable Local Coastal Plan, the Habitat Management Plan and all City Codes. Concurrent with each project approval in FY 2008-09, the City made specific written findings in the project approval document that the project complied with all appropriate General Plan, Local Coastal Plan (as appropriate), Habitat Management Plan and City Codes including all relevant storm water protections policies and requirements. A copy of written findings for an

actual project approval is included within the examples of priority project approvals included in Appendix 2.5.

2.3 Environmental Review Process

The City's Environmental Review Process begins with the Initial Study Checklist (CEQA Guidelines). Based on the results of the checklist, the City requires the project applicant to provide additional studies to elaborate on the environmental impacts or recommend denial of the permit that the project applicant is seeking. The Initial Study Checklist includes specific hydrology and water quality analysis as follows:

HYDROLOGY AND WATER QUALITY. *Could the project:*
a. Violate any water quality standards or waste discharge requirements, including but not limited to increasing pollutant discharges to receiving waters (consider temperature, dissolved oxygen, turbidity, and other typical storm water pollutants)?
b. Have potentially significant adverse impacts on ground water quality, including but not limited to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial/increased erosion or siltation on- or offsite?
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site and/or significant adverse environmental impacts?
e. Cause significant alteration of receiving water quality during or following construction?
f. Cause an increase in impervious surfaces and associated runoff?
g. Cause potentially significant adverse impact on ground water quality?
h. Cause or contribute to an exceedance of applicable surface or ground water receiving water quality objectives or degradation of beneficial uses?
i. Is the project tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list of impaired waterbodies? If so, can it result in an increase in any pollutant for which the water body is already impaired?
j. Create or exacerbate already existing environmentally sensitive areas (ESAs)?
k. Create potentially significant environmental impact on surface water quality, to either marine, fresh, or wetland waters?
l. Impact aquatic, wetland, or riparian habitat?

The City reviewed the existing Environmental Review Process Initial Study Checklist during FY 2008-09 and found that it adequately addresses the Environmental Review requirements of the 2007 Municipal Permit; therefore, no revisions were made to the storm water quality compliance requirements of the Initial Study Checklist.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City requires new development and redevelopment projects to implement measures to ensure urban runoff from proposed project sites will be treated to reduce pollutant loads to the maximum extent practicable (MEP), and will not cause or contribute to an exceedance of receiving water quality objectives.

The City is dedicated to putting into place all the administrative and regulatory tools required to implement the Land-Use Planning requirements of the 2007 Municipal Permit. During the FY 2007-08 reporting period, the City updated its Storm Water Pollution Prevention, Grading and Drainage, Public Property and Building ordinances to strengthen and clarify its storm water permitting requirements and, to address the requirements of the 2007 Municipal permit. During FY 2007-08, the City also rewrote and updated its Storm Water Standards Manual, City SUSMP (now referred to as the 2008 Carlsbad SUSMP) document, its Storm Water Requirements Applicability Checklist (now titled the Storm Water Standards Questionnaire) and Construction SWPPP Standards and Requirements. For a more complete and detailed description of the changes made during the FY 2007-08 reporting period, see Section 2 of the FY 2007-08 Carlsbad JURMP Annual Report.

During the current reporting period (July 1, 2008 to June 30, 2009), the City instituted new storm water program elements and/or procedures as follows:

1. Instituted a new procedure to define the process for inspecting, tracking, and enforcing compliance for structures listed on the privately owned treatment control BMP Inventory List (procedure CMI-300). A copy of this new procedure can be found in Appendix 2.8.
2. Instituted a new procedure that defines the process for managing and updating the privately owned treatment control BMP Inventory List (procedure CMI-310). A copy of this new procedure can be found in Appendix 2.9
3. Instituted a new procedure that defines the process for verifying and tracking compliance with the treatment control BMP verification of maintenance requirements (procedure CMI-320). A copy of this new procedure can be found in Appendix 2.10.
4. Developed two new outreach handouts to assist private property owners in understanding and complying with the new annual treatment control BMP verification program including the *What You Need to Know About Privately Owned Treatment Control BMPs* (Appendix 2.7) brochure and the *Frequently Asked Questions About Treatment Control BMPs* (Appendix 2.6) factsheet.
5. Updated and restructured the development processing fees for the plan review and inspection of Construction Storm Water Pollution Prevention Plans and post-construction Storm Water Management Plans.
6. Initiated use of standard findings of storm water compliance on administrative minor subdivision approvals. The new finding is included in Appendix 2.1.

2.4.2 Source Characterization

Development project approval is the stage of the development process where storm water quality impacts are assessed and the project is designed to eliminate or minimize potential sources of storm water pollutants. Each priority development project submitted between July 1, 2008 to June 30, 2009, was required to prepare and submit a Storm Water Management Plan

(SWMP) consistent with the 2008 City SUSMP concurrent with any discretionary or ministerial permit application. An important component of the SWMP is source identification.

During the FY 2008-09, project proponents were required to identify potential pollutant sources generated by their particular land use and development design in accordance with the procedures outlined in the 2008 City SUSMP. Table 2 on page 8 of the 2008 Carlsbad SUSMP was used to assist the developer in identifying potential pollutant sources for various project categories. Additionally, project proponents were required to identify the pollutants of concern or impairment for the receiving waters into which the project runoff discharges. The project proponent was then required to determine if the proposed project included any land use activity or development design that generated or potentially added to any water quality impairment within the receiving waters. The 2006 303(d) list of water quality impairments for receiving waters in Carlsbad is shown in Table 2.4.2 below:

Table 2.4.2: 2006 303(d) Listings within the City of Carlsbad

Carlsbad Waterbody	Drains to	Pollutant
Agua Hedionda Creek	Agua Hedionda Lagoon	Manganese
		Selenium
		Sulfates
		Total Dissolved Solids (TDS)
Agua Hedionda Lagoon	Pacific Ocean	Indicator Bacteria
		Sedimentation/Siltation
Buena Vista Creek	Buena Vista Lagoon	Sediment Toxicity
Buena Vista Lagoon	Pacific Ocean	Indicator Bacteria
		Nutrients
		Sedimentation/Siltation
Pacific Ocean at Buena Vista Creek	Pacific Ocean	Indicator Bacteria
Buena Vista Creek		
Carlsbad Village Drive		
Pine Avenue		
Encinitas Creek	Batiquitos Lagoon	Phosphorus
San Marcos Creek	Batiquitos Lagoon	DDE
		Phosphorus
		Sediment Toxicity

Projects draining into one of these receiving waters were required to analyze their potential for contributing one or more of the identified pollutants to the receiving water. If a potential source was identified, then an appropriate source control, site design or treatment control BMP measure was identified to eliminate or reduce the pollutant of concern to the MEP and to not cause or contribute to an exceedance of receiving water quality objectives.

2.4.3 Best Management Practice Requirements

During FY 2008-09, each land development project in the City met the minimum BMP requirements of the 2007 Municipal Permit. The City s minimum requirements are contained within the 2008 Carlsbad SUSMP and the City s Storm Water Standards Manual as specified in the 2008 Carlsbad JURMP. All approved projects were required to incorporate both site design

and source control BMPs into project design. Priority projects per the 2007 Municipal Permit were required to incorporate additional treatment control BMPs into the project design.

The 2007 Municipal Permit required the City in conjunction with the other Copermittees, under the San Diego Municipal Permit, to update the regional Model SUSMP. The City worked in cooperation with the other Copermittees to develop a revised Model SUSMP which was collectively adopted by the Copermittees on November 6, 2007. The City was requested under the 2007 Municipal Permit to modify its local SUSMP to comply with the interim Low Impact Development (LID) and hydromodification requirements. The interim LID and hydromodification requirements were incorporated into the 2008 Carlsbad SUSMP which became effective March 24, 2008. Throughout FY 2008-09, all priority development/redevelopment projects, including City Capital Improvement Program (CIP) projects complied with the 2008 Carlsbad SUSMP.

The City s local SUSMP implementation document is incorporated into the City of Carlsbad Storm Water Standards Manual hereinafter referred to as Storm Water Standards Manual, which addresses specific post-construction site design, source control and treatment control storm water BMPs that must be incorporated into Priority Development Projects. The City updated its Storm Water Standards Manual to incorporate appropriate requirements of the 2007 Municipal Permit. The updated Storm Water Standards Manual became effective on March 24, 2008. The Storm Water Standards Manual provides information on selection and implementation of the construction, site design, source control and treatment control BMPs. A copy of the updated 2008 Storm Water Standards Manual can be found in Appendix 2.10 of the FY 2007-08 Carlsbad JURMP Annual Report and at the following City of Carlsbad web link http://www.carlsbadca.gov/engineering/4engstd.html.

In addition to participating in the Model SUSMP update, the City participated and will continue to participate in the development of the regional Hydromodification Management Plan (HMP). The HMP, similar to the Model SUSMP document, will require that development projects incorporate BMPs into their design to maximize infiltration and mimic pre-project hydrologic characteristics. Once the HMP is complete and acceptable to the RWQCB, the City will revise its JURMP and Storm Water Standards Manual to reflect the HMP requirements.

Each development project was assessed for its potential to generate urban pollutants using the Storm Water Standards Questionnaire (a copy of the Questionnaire is included as Appendix A to the 2008 Carlsbad SUSMP and is included as Appendix 2.11 to this annual report. Those specific types of projects (or project components) identified as having a high potential to generate pollutants in accordance with the 2007 Municipal Permit and Local Coastal Program requirements were classified as a priority development projects". Each priority development project was associated with one or more of the general pollutants categories as described in Table 2 of the 2008 SUSMP. Additional pollutant categories were then determined based upon their potential of being generated by the specific proposed priority project.

Each priority project was then required to incorporate site design, source control and treatment control BMPs into the project design as specified in the 2008 Carlsbad SUSMP including the new interim LID and hydromodification requirements, as appropriate. Non-priority projects were required to incorporate site design and source control BMPs into their project design. The following is a brief listing and description of the types of BMPs incorporated into project designs during the reporting period:

Site design BMP features incorporated into Carlsbad developments during the reporting period include the following:

- Minimization of building footprints and incorporation of impervious pavements
- Conservation of natural area by clustering of development and preservation of natural drainage systems
- Directing flows from impervious surfaces across pervious pavements or landscape areas
- Preservation of existing trees and planting of new trees to maintain and increase canopy coverage
- Conveying of drainage away from slopes or provision of appropriate slope down drains
- Vegetating slopes and open space areas with drought tolerant plants
- Stabilization of permanent channel crossings and installation of energy dissipaters at drainage outlets

Source Control BMP features incorporated into Carlsbad developments during the reporting period include the following:

- Enclosure of outdoor storage areas
- Trash enclosures that have impervious surfaces and do not allow drainage to flow through the enclosure and use of trash bins with lids that exclude rain
- Use of efficient irrigation systems with moisture sensors and properly designed flow control systems
- Stenciling and/or placement of tiles at every storm drain inlet

For projects that included one or more of the individual project categories, an appropriate BMP was utilized. This included the following:

- Directing drainage from private streets across vegetated swales or into bioretention areas
- Directing drainage from dock and loading areas into bioretention areas or through filters/clarifiers prior to discharge into storm drains
- Keeping maintenance bays indoors and directing floor drainage into the sewer system
- Installation of special bacterial filter systems for outdoor eating areas
- Incorporation of landscape areas into surface parking lots
- Landscaping of hillside areas with deep rooted and drought tolerant plants

During FY 2008-09, hydrodynamic separator systems and filter inserts were not permitted to be used as a primary treatment control method (the 2008 Carlsbad SUSMP was updated to show them only effective at removing trash, debris and coarse sediment).

Due to the economic slowdown, the City processed fewer development approvals than in previous years. The development approvals processed during FY 2008-09, encompassed many project categories including residential, commercial and industrial projects. Each high priority development project included appropriate treatment control BMPs from the list of allowable treatment controls included in Table 4 of the 2008 Carlsbad SUSMP. The types of treatment control systems approved for new developments during the reporting period included bioretention areas, vegetated swales, detention basins and filtration systems.

2.4.4 Program Implementation

Description of notable activities conducted to manage urban runoff from development projects
The City has a comprehensive set of storm water pollution prevention activities which are incorporated into its project development approval and BMP installation verification process. The measures include everything from the development of urban runoff land use planning policies, development processing procedures, project submittal and review checklist, educational pamphlets, engineering standards, City Codes, database inventory control, monitoring requirements, staff and developer training and project tracking and reporting. Each activity has been carefully designed to help eliminate or reduce storm water pollution to the maximum extent practicable (MEP) and to not cause or contribute to an exceedance of receiving water quality objectives.

The development process has many stages from concept review on through to construction completion and project operation and maintenance. The City conducts many notable activities meant to ensure development project compliance with the City s urban runoff management policies and requirements. Table 2.4.4.1 presents a brief description of the storm water pollution prevention activities undertaken at each stage of the development process. Also included in the table are a listing of the City reference materials and implementation documents available to developers and City staff which are applicable to each stage in the process.

Table 2.4.4.1 Storm Water Compliance Process for Development Activities

Development Process Stage	Activity Description	Process Review Documents References
Conceptual Project Design	Developer uses the 2008 Carlsbad SUSMP and Storm Water Standards Questionnaire to determine project priority and begins project layout and design. For priority projects the City recommends to developers that a preliminary SWMP should be prepared	• Storm Water Standards Questionnaire • Storm Water Standards Manual which includes the 2008 Carlsbad SUSMP • 303(d) List
Pre-application Review	Developer submits the preliminary project proposal to staff to obtain input on conceptual project layout including storm water compliance issues.	• Preliminary site plan checklist • SWMP Fact Sheet
Application for Discretionary Review	City staff review application package at front Counter for completeness of submittal including storm water compliance documents. Project is logged into the City database for tracking. A completed Environmental Initial Assessment (EIA) form is submitted with the application package.	• Project Application Submittal Checklist • City review letter
Application Review	City staff reviews application, site plans and accompanying reports and documents including any SWMP, geotechnical and hydrology/hydraulic reports. Project is reviewed for consistency with General Plan, Local Coastal Plan (LCP), Habitat Management Plan (HMP1), 2008 Carlsbad SUSMP and City Codes and other Standards including all storm water protection policies and requirements including new interim LID and hydromodification requirements. Project location is reviewed for proximity to environmentally sensitive areas and to determine if project drains to a water body on the 303(d) list. Project EIA is reviewed and appropriate environmental review documents are requested and reviewed in compliance with California Environmental Quality Act (CEQA) requirements.	• Site plan review checklist • SWMP checklist • 303(d) List • General Plan • Local Coastal Plan • Habitat Management Plan • City Codes • Environmental Assessment Form • CEQA Guidelines • City review letter (if any)
Discretionary Approval	City denies project or approves with conditions including storm water compliance conditions. Applicable standard conditions of approval are applied to the project together with any special conditions of approval as City staff determines necessary to reduce or eliminate the projects storm water pollution impacts to the MEP. Approving authority makes required findings that project complies with the General Plan, LCP, HMP1, City Codes and any other appropriate land use planning documents. Environmental documents are certified and any mitigation monitoring requirements. are noted in the project approval.	• City s standard conditions of approval • Project Conditions of Approval • Environmental mitigation and monitoring plan (if any)
Final Project Design	Developer prepares project construction plans including grading, improvement, landscape and building detailing required BMPs. Construction SWPPP is prepared and SWMP is finalized. A single sheet BMP site plan is prepared.	• Storm Water Standards Manual • Project Conditions of Approval • Environmental mitigation and monitoring plan (if any)

Table 2.4.4.1 Storm Water Compliance Process for Development Activities

Development Process Stage	Activity Description	Process Review Documents References
Construction Plan Check Application Submittal	City staff review application package for completeness of submittal including storm water compliance documents. Applicant completes and submits Project Storm Water Threat Assessment Worksheet included as part of the Storm Water Requirements Applicability Checklist.	• Plan Check Application Submittal Checklist • Project Threat Assessment Worksheet • Project Conditions of Approval
Construction Plan Check Review	City staff reviews construction plans and accompanying reports and documents including any SWMP, single sheet BMP site plan, Construction SWPPP, geotechnical and hydrology/hydraulic reports. All storm water pollution prevention requirements are checked against construction plan checklist, SWMP checklist, Construction SWPPP checklist and project conditions of approval. Construction cost estimates are approved for bonding costs including costs for structural BMPs. For priority projects a BMP Maintenance Agreement is prepared.	• Construction Plan Checklist • SWMP Checklist • Construction SWPPP Checklist • Project conditions of approval • Project Threat Assessment • City Engineering plan review procedures • Environmental mitigation and monitoring plan (if any) • Cost estimates
Construction Plan Approval	City approves construction plans and accompanying Construction SWPPP and SWMP including single sheet BMP site plan. The executed BMP Maintenance Agreement is recorded and entered into the City s document management system database. All treatment control BMPs are noted on the construction plans and forwarded to the GIS group for entry into the BMP inventory. Any project design changes that differ from the approved site plan or project conditions of approval are reviewed in compliance with the City s Substantial Conformance Procedures to ensure that the project remains in compliance with all land use planning findings. Secured agreements to construct project improvements are obtained backed up with cash and/or other securities. Developer is required to note the WDID number on the project plans	• Plan check completion letter • BMP Maintenance Agreement • BMP Inventory update procedures • Substantial Conformance Procedures • Environmental mitigation and monitoring plan (if any) • Cost estimates • Secured Agreements • Single sheet BMP site plan
Ministerial (Construction) Permit Issuance	City issues permit(s) for construction activities including grading, improvement, building, demolition and blasting. Any special storm water compliance requirements are noted on permit. City staff review plan check completion letter for any special storm water compliance requirements. Copies of the permit, construction plans, Construction SWPPP, single sheet BMP site plan and SWMP are forwarded to the Construction Management and Inspection Division. A construction inspection level (low, medium or high) is assigned in accordance with the project s threat assessment form. The project tracking database is updated with the project threat assessment construction level and permit issuance status.	• Plan check completion letter • Project SWMP • Project Construction SWPPP • Construction Threat Assessment Worksheet • Pollution Prevention Guide for the Construction Industry • Construction SWPPP Fact Sheet • Single sheet BMP site plan

Table 2.4.4.1 Storm Water Compliance Process for Development Activities

Development Process Stage	Activity Description	Process Review Documents References
Preconstruction Meeting	City staff meets with contractor and other parties to review project construction issues, schedule, and storm water BMP implementation, monitoring and testing requirements. Contractor is informed of storm water inspection and enforcement procedures and reminded to maintain compliance with the City's storm water pollution prevention requirements. City inspector verifies the NOI has been filed with the Regional Board and a WDID number has been assigned to the project.	• Preconstruction checklist • Construction SWPPP • SWMP • Construction plans • Pollution Prevention Guide for the Construction Industry • Single sheet BMP site plan
Construction and Inspection	Developer constructs project including temporary and permanent BMPs. City inspectors enforce compliance with SWPPP, SWMP and Municipal Permit. During construction City project inspector reviews construction for compliance with all plans, the Construction SWPPP, SWMP and City Standards. Regular storm water compliance inspections are scheduled and tracked per City procedures and the requirements of the 2008 JURMP. Enforcement actions are taken as necessary in accordance with City inspection and enforcement procedures. City inspector reviews and approves any minor construction revisions. Major construction revisions are referred to the Engineering Development Services Division for review and approval.	• Construction SWPPP • SWMP • Construction plans • City inspection and enforcement procedures • Pollution Prevention Guide for the Construction Industry • Inspection reports • Enforcement action reports • Secured Agreements • Single sheet BMP site plan
Project Completion	Construction plans are "as-built", securities released, and BMP construction verified. As-Built plans prepared and forwarded to the GIS Group to update the BMP inventory. City inspector reviews project site to verify installation of permanent BMPs prior to occupancy permit and/or project acceptance using the single sheet BMP site plan. Public Improvements are accepted for maintenance including any public structural control BMPs.	• Construction SWPPP • SWMP • Construction plans • Pollution Prevention Guide for the Construction Industry • Punch list • Secured Agreements • Project Acceptance Forms • Single sheet BMP site plan
Post Construction Annual Treatment Control BMP Inspections	BMP owners maintain BMPs in accordance with recommended and regulatory maintenance schedules. Treatment Control BMP owners submit annual verification of effective operation and maintenance of installed treatment control BMPs. City staff inspects project sites with installed treatment control BMPs to verify compliance with storm water requirements. (New requirement to be implemented in FY 2008-09).	• SWMP • BMP Inventory List • Site BMP Inspection Report • BMP Maintenance Agreement

Confirmation that all development projects were required to undergo the City's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked

In FY 2008-09, all new development projects and redevelopment projects including City Capital Improvement Program (CIP) projects were required to undergo the City s urban runoff approval process in accordance with the requirements of the 2007 Municipal Permit and 2008 Carlsbad JURMP.

Project compliance was tracked through a variety of paper and computer tracking systems. In FY 2008-09, tracking of projects through the discretionary project approval process consisted of paper records kept in individual files. As projects are approved, standard and special conditions of approval are placed in the written project conditions of approval. These conditions specify whether the project must comply with the priority or non-priority project requirements of the 2008 Carlsbad SUSMP. For priority development projects, a written Storm Water Management Plan (SWMP) is prepared detailing all proposed site design, source control and treatment control BMPs, including interim LID and hydromodification requirements. Structural site design, source control and treatment control BMPs are also reflected on the site plan or tentative map. The tentative map/site plan, conditions of approval and SWMP document are used at the construction plan review and ministerial permitting stage of the project to ensure compliance with the appropriate storm water pollution prevention requirements.

The City maintains a database of project discretionary approvals which includes project approval date, approving authority, appropriate resolution numbers and the project priority status (Priority, Non-Priority or Exempt). A list of the project discretionary approvals for the reporting period is included as Appendix 2.2. Additionally, the City adopted a single plan BMP sheet that includes a project site plan and calls out the location of each required LID site design, source control and treatment control BMP. The plan contains a matrix cross referencing the required BMP with the appropriate construction plan (grading, improvement, building or landscape) where the specified BMP construction is detailed. A copy of the plan is attached to each construction drawing for reference by the contractor and inspector. At the conclusion of the project and prior to issuance of an occupancy permit or acceptance of the improvements, the inspector will use the single sheet BMP plan to help ensure all required BMPs are installed as required. After verification, the inspector will initial the plan and place a copy in the project inspection file.

During the construction plan review stage, a final design SWMP is submitted and approved. In addition, each project s required structural BMPs are incorporated into the project plans. For priority projects, a table is placed on the title sheet identifying each treatment control facility including manufacturer s information and maintenance schedules and specifying which page of the plans contain the details of each required BMP. A separate table is included on the detail sheet providing additional information including the number of BMP units located on the specified plan sheet. The tables are used to highlight BMP requirements to the contractor and project inspector. The table also makes it easier for City GIS staff to locate treatment control BMPs for entry into the City s GIS database.

At the project permitting stage, the applicant is required to submit a completed Construction Threat Assessment Worksheet for Determination of a Project s Perceived Threat to Storm Water Quality (Construction Threat Assessment Worksheet). The Construction Threat Assessment Worksheet is used to determine the inspection frequency level pursuant to the 2007 Municipal Permit requirements (low, medium or high). The required inspection level is

entered into the City's Permits Plus software program for automated tracking. The Permit Plus program links the various ministerial construction permits (building, right-of-way, blasting and grading) to the "master" development project. The Permits Plus program is used to automatically generate storm water inspection requests for development projects with active permits. The program is also used to track inspection results and follow-up enforcement inspections. A copy of the Construction Threat Assessment Worksheet is included as Appendix C to the Construction SWPPP Standards and Requirements Chapter of the Storm Water Standards Manual attached and is attached as Appendix 2.12.

A listing of the development projects to which SUSMP requirements were applied
During FY 2008-09, the 2008 Carlsbad SUSMP requirements were applied to 74 private development/redevelopment projects and 14 City Capital Improvement Program (CIP) projects. Of the 74 private development/redevelopment projects, 40 were priority development projects subject to site design, source control and treatment control requirements and 24 were standard projects subject only to site design and source control BMP requirements. Of the 14 City CIP projects, there were 3 priority development projects subject to site design, source control and treatment control BMP requirements and 11 standard projects subject only to site design and source control BMP requirements. Copies of the development and CIP project approval list showing project priority are included in Appendices 2.2 and 2.3, respectively.

Confirmation that all applicable 2008 Carlsbad SUSMP BMP requirements were applied to all priority development projects, including a description of how the information was tracked
In FY 2008-09, all applicable requirements of the 2008 Carlsbad SUSMP were applied to all priority development projects. The City required submittal of a completed Storm Water Standards Questionnaire for every discretionary application made to the City during the reporting period. Projects determined to be priority development projects per the Storm Water Standards Questionnaire were additionally required to submit a preliminary Storm Water Management Plan (SWMP).

As projects are approved, standard and special conditions of approval are placed in the written project conditions of approval. These conditions specify whether the project must comply with the priority project or standard project requirements of the 2008 Carlsbad SUSMP. For priority projects, a written Storm Water Management Plan (SWMP) is prepared detailing all proposed site design, source control and treatment control BMPs. Structural site design, source control and treatment control BMPs, including the new interim LID and hydromodification requirements are also reflected on the site plan or tentative map. The tentative map/site plan, conditions of approval and SWMP document are used at the construction plan review and ministerial permitting stage of the project to ensure compliance with the appropriate storm water pollution prevention requirements.

The City maintains a database of project discretionary approvals which includes project approval date, approving authority, appropriate resolution numbers and the project priority status (Priority, Non-Priority or Exempt). A list of the project discretionary approval list is included as Appendix 2.2. Additionally, the City requires preparation of a single plan BMP sheet for all priority development projects that includes a project site plan and calls out the location of each required LID site design, source control and treatment control BMP. The single sheet plan contains a matrix cross referencing the required BMP with the appropriate construction plan (grading, improvement, building or landscape) where the specified BMP construction is detailed. A copy of the plan is attached to each construction drawing for reference by the contractor and inspector. At the conclusion of the project and prior to issuance of an occupancy permit or

acceptance of the improvements, the inspector uses the single sheet to help ensure all required BMPs were installed as required. After verification, the inspector initials the plan and places a copy in the project inspection file.

At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs

Appendix 2.5 of the annual report includes a sample project which received discretionary approval during the review period (July 1, 2008 to June 30, 2009). The sample project is a commercial development including two restaurant sites and a 44,391 square foot commercial center. The site drains to a concrete lined channel located within the Agua Hedionda Lagoon hydrologic area. The anticipated and potential pollutants generated by the project, as determined by Table 2 of the 2008 Carlsbad SUSMP, include sediments, nutrients, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses and pesticides. The Agua Hedionda Lagoon is impaired for sedimentation/siltation and indicator bacteria. The required project BMPs included:

1. Site Design
    a. Minimized Directly Connected Impervious Areas
        i. Roof drains and parking lot drainage directed to bioswales
        ii. Drain impervious surfaces to landscape areas
        iii. Clustered lot design.
    b. Use of smart irrigation system
    c. Re-tilling of soils compacted by construction equipment
    d. Collection and re-use of onsite organic soils material
2. Source Control
    a. Trash receptacles to be stored under cover and designed not to allow run-on water to enter enclosure
    b. Efficient irrigation with rain and water loss shut-off devices for landscaped areas
    c. All storm drain inlets in the project area to be stenciled and signed with porcelain tiles
    d. Integrated pest management practices to be used
3. Individual Project Category
    a. Loading docks to be covered or drainage designed to preclude urban run-on and run-off. No direct connects from depressed truck wells to storm drains
    b. Parking landscape areas to include tree canopies where possible.
    c. Grease interceptors to be installed for restaurants.
4. Treatment Control
    a. Extended dry detention basin
    b. High-rate media filter
    c. Pre-treatment baffle boxes with trash rack and sediment traps.
    d. Water polisher to treat offsite water draining through the project.

A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible

No priority projects were allowed to develop using treatment control BMPs with low removal efficiency rankings as the sole method of treatment control during FY 2008-09.

An updated treatment control BMP inventory

The City has a watershed-based inventory of publicly and privately owned treatment control BMPs. The inventory has been used to track and document information about each of these

structures including BMP type, inspection dates and findings, maintenance frequencies and requirements, verifications, and other Permit requirements. Development of the inventory is an ongoing process, as new structures are researched, verified, and added to the database on a continual basis.

During this reporting period, the City updated the watershed based inventory and prioritized all verified structures into high, medium, and low categories as required by the Permit according to BMP type, location, and proximity to the nearest ESA. During dry season 2008 (July 1, 2008 through September 30, 2008), the City had verified 232 privately owned treatment control BMPs on the inventory, which includes 85 high priority, 82 medium priority, and 65 low priority structures. In addition, there were 79 publicly owned treatment control BMPs on the inventory, which included 31 high priority, 48 medium priority, and zero low priority structures. A copy of the updated treatment control BMP inventory for both publicly and privately owned facilities is included as Appendix 2.4.

For privately owned treatment control BMPs, staff continued to confirm the accuracy of the inventory, research certifications and maintenance requirements, verify ownership and responsible parties, and develop inspection procedures, forms, and outreach materials for the treatment control BMP program. In addition, the City developed a new procedure that defines the process for managing and updating the privately owned treatment control BMP Inventory List (procedure CMI-310). A copy of this new procedure can be found in Appendix 2.9. Although updating this inventory was a major undertaking during FY 2008-09, the new procedures in place will help maintain a more accurate inventory.

The number of treatment control BMPs inspected, including a summary of inspection results and findings

During FY 2008-09, the City conducted two rounds of compliance inspections of privately owned treatment control BMPs. During dry season 2008 (July 1, 2008 through September 30, 2008), the City inspected 71.55 of the privately owned treatment control BMP inventory. The City also began conducting inspections of privately owned treatment control BMPs for dry season 2009 (May 1, 2009 through June 30, 2009) during this reported period. At the end of the reporting period, June 30, 2009, the City had inspected 65.64 of the privately owned treatment control BMP inventory. Inspection of privately owned treatment control BMPs identified on the updated inventory will continue to be conducted as required by the Permit through October 1, 2009 and additional results will be reported in the FY 2009-10 annual report.

Inspectors used the treatment control BMP inspection form developed in FY 2007-08 for privately owned structures. During inspections, the inspector uses their best professional judgment to determine the condition of the TCBMP using the following criteria:

- **Good:** Currently no maintenance or corrective action is required for the TCBMP. No trees, large plants, excessive trash, stagnant water, blockages, or other major sources of pollutants were observed. The TCBMP appears to be functioning as designed. Re-inspect in one year.
- **Fair:** Light to minor maintenance required within the next year. Small amounts of trash, weeds, plants, debris, and/or silt has accumulated, but the TCBMP is functioning as designed. The structure should be re-inspected within one year by the responsible party and/or the City.
- **Poor:** Maintenance and/or repairs are required on the structure. Excessive trash, weeds, vegetation, stagnant water, trees, silt, and/or other pollutants were observed during the

inspection. The TCBMP is blocked, needs repaired, and/or is not functioning as required. The responsible party should be notified and corrective actions implemented within six months of inspection. The structure should be re-inspected within six months by the responsible party and/or the City.

In addition, the City developed a new procedure to define the process for inspecting, tracking, and enforcing compliance for structures listed on the privately owned treatment control BMP Inventory List (procedure CMI-300). A copy of this new procedure can be found in Appendix 2.8.

Dry Season 2008 (July 1, 2008 September 30, 2008)

For dry season 2008, all high priority privately owned treatment control BMPs were inspected as required. In addition, all minimum inspection requirements for privately owned treatment control BMPs were met or exceeded during the 2008 dry season inspections. Table 2.4.4.2 includes a summary of the inspections and findings of the 2008 dry season inspections.

Table 2.4.4.2: Summary of July 1 - September 30, 2008 Dry Season Inspections and Findings for Privately Owned Treatment Control BMPs

Classification	Total on Inv List	Condition	Total	Total Confirmed	% to target Dry Season 2008
High	85	Good	23		
		Fair	16		
		Poor	37		
		Future	6		
		Removed	3		
		Not Inspected	0		
		Total High Inspected		**85**	**100%**
Medium	82	Good	38		
		Fair	16		
		Poor	20		
		Future	1		
		Removed	6		
		Not Inspected	1		
		Total Med. Inspected		**81**	**98.78 %**
Low	65	Good	0		
		Fair	0		
		Poor	0		
		Future	0		
		Removed	0		
		Not Inspected	65		
Total	**232**				

Dry Season 2009 (May 1, 2009 June 30, 2009)

The City began conducting inspections of privately owned treatment control BMPs for dry season 2009 (May 1, 2009 through June 30, 2009) during this reported period. Between October 1, 2008 and May 1, 2009, the treatment control inventory was updated and additional structures were added to the inventory. Inspection of privately owned treatment control BMPs identified on the updated inventory will continue to be conducted as required by the Permit through October 1, 2009 and complete inspection results for dry season 2009 will be reported in the FY 09-10 annual report. Table 2.4.4.3 includes a summary of the inspections and findings of the 2008 dry season inspections.

Table 2.4.4.3: Summary of May 1 - June 30, 2009 Dry Season Inspections and Findings for Privately Owned Treatment Control BMPs

Classification	Total on Inv List	Condition	Total	Total Confirmed	% to target 2009
High	129	Good	25		
		Fair	33		
		Poor	44		
		Future	3		
		Removed	7		
		Not Inspected	17		
		Total High Inspected		**112**	**86.82%**
Medium	323	Good	75		
		Fair	48		
		Poor	80		
		Future	18		
		Removed	7		
		Not Inspected	96		
		Total Med. Inspected		**228**	**70.59%**
Low	66	Good	0		
		Fair	0		
		Poor	0		
		Future	0		
		Removed	0		
		Not Inspected	66		
Total	**518**				

A description of the annual verification of operation and maintenance of treatment control BMPs including a summary of verification results and findings

During FY 2008-09, the City finalized and mailed a new treatment control verification form to all responsible parties on the treatment control BMP inventory list. The form was mailed to all

private property owners and other responsible parties identified on the updated inventory prior to the 2008 and 2009 rainy season. In addition, the City instituted a new procedure that defines the process for verifying and tracking compliance with the treatment control BMP verification of maintenance requirements (procedure CMI-320). A copy of this new procedure can be found in Appendix 2.10.

New outreach materials were developed to be included with the verification form mailers. The *What You Need to Know About Privately Owned Treatment Control BMPs* (Appendix 2.7) brochure and the *Frequently Asked Questions About Treatment Control BMPs* (Appendix 2.6) factsheet were developed to help property owners and other responsible parties understand their maintenance responsibilities. All the new outreach materials and verification forms along with additional information about treatment control BMPs were also available for download from the City s webpage at www.carlsbadca.gov/cmi. In addition, the City created a new email address for the treatment control BMP verification program. Owners and responsible parties can send questions, verification forms, and other requests to the tcbmp carlsbadca.gov email address, which is monitored by the Senior Construction Inspector.

For dry season 2008, mailers were sent out between July 30 and September 15, 2008. In addition to the first notification, those who did not comply with the first request were sent reminder notices after the initial due date. As a result of the 2008 dry season effort, over 60 (140 of the 232 mailed) of the verification forms were returned as required. This return rate was higher than expected and seen as a success for the City considering this is a new requirement for private property owners. The City will be using the first year return rate as a benchmark to help measure the effectiveness of the verification program.

For dry season 2009, the first notifications were sent to all responsible parties listed on the updated treatment control BMP inventory on May 4, 2009, with a second reminder notice mailed on June 22, 2009. As of June 30, 2009, over 48 (249 of the 518 mailed) of the verification forms were returned, which is already twice as many as the total number returned for the entire 2008 dry season. The City will continue to work with the responsible parties to ensure verifications are returned as required. In the event that a responsible party does not respond, the City may use its enforcement authority to escalate efforts. .

Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked

During FY 2008-09, the installation of all structural BMPs required of priority projects were verified prior to occupancy. The process is initiated when a request for occupancy is made to the City by the building contractor or developer. Both the building inspector and public works inspector are notified of the request for occupancy and final inspections are schedule. The building inspector and public works inspectors review the project site for compliance with all City requirements including verification of BMP installation. If all the requirements are satisfactory the building inspector and public works inspector sign off on the occupancy permit and occupancy is granted. The City maintains a copy of the signed occupancy permit in the building permit file. The City Building Department staff then updates the status of the permit in the building permit database.

A listing of any projects which received a SUSMP waiver

No projects received a SUSMP waiver in FY 2008-09.

A description of any SUSMP waiver mitigation program

The City did not incorporate a SUSMP waiver program within the 2008 Carlsbad SUSMP. No SUSMP waivers were requested or granted during the reporting period. If a SUSMP waiver is requested in the future, the City will follow the waiver provisions as provided in the 2007 Municipal Permit.

A description of Hydromodification Management Plan development collaboration and participation

In addition to participating in the Model SUSMP update, the City participated and will continue to participate in the development of the regional Hydromodification Management Plan (HMP). City staff attended the copermittee meetings held on the HMP during FY 2008-09 and provided input into the discussion process. The City of Carlsbad participated in the cost sharing for the consultant firms retained to prepare the San Diego regional HMP. The HMP, similar to the Model SUSMP document, will require that development projects incorporate BMPs into their design to maximize infiltration and mimic pre-project hydrologic characteristics. Once the HMP is complete and acceptable to the RWQCB, the City will revise its JURMP and Storm Water Standards Manual to reflect the HMP requirements.

A listing of priority development projects required to meet Hydromodification Management Plan (HMP) requirements, including a description of hydrologic control measures implemented

In FY 2008-09, no projects were approved that met the 50 acre minimum requirement for implementation of the interim hydromodification requirements.

A listing of priority development projects not required to meet Hydromodification Management Plan (HMP) requirements, including a description of why the projects were found to be exempt from the requirements

In FY 2008-09, no projects were found to be exempt from the interim hydromodification requirements. Several permitted projects that met the 50 acre criteria were under construction when the interim hydromodification requirement became effective. However, the 2007 Municipal Permit stated that projects under construction when the requirements became effective were not required to meet interim HMP requirements and therefore, no projects were exempted from the HMP requirements during the reporting period.

A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project

In FY 2008-09, no projects were found to meet the interim HMP criteria except those which were under construction when the requirements became effective. Per the requirements of the 2007 Municipal Permit, projects under construction or which were lawfully approved prior to March 24, 2008, were not required to meet the interim hydromodification criteria.

The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken

In FY 2008-09, CMI issued 18 Notice to Clean enforcement actions for privately owned treatment control BMPs found to be in poor condition during the 2008 dry season inspections. In addition, the City conducted follow-up inspections and found that corrective action had been implemented as required.

The City achieved compliance with the 2008 SUSMP through the permitting process. Development approvals are not granted until the project shows complete compliance with the City s storm water pollution prevention requirements. The City will not issue a construction

permit until all applicable BMP requirements are incorporated into the project plans. For projects involving grading and/or street and utility improvements, the City requires that the developer enter into secured agreements to guarantee developer performance on the grading or improvement work including associated structural BMPs. City inspectors review the project sites during construction to ensure that all work is being done in compliance with the construction plans and City Standards and procedures. Prior to issuance of a certificate of occupancy or release of any security, the City inspector reviews the project site to ensure that all applicable structural BMPs have been installed per the approved plans and specifications. Only when the BMP installations have been verified will the certificate of occupancy be issued or any security be released.

2.5 Notable Activities

As mentioned in the Executive Summary, the City considers Notable Activities to be any activity above compliance requirements.

- The greatest strength of Carlsbad s Land-Use Planning Component is its motivated and well informed project review staff. The project review staff holds weekly meetings where issues of storm water pollution prevention are discussed including issues of new regulatory requirements, new and evolving BMP standards, inventory collection and reporting, LID application in new development design and BMP effectiveness (a list of the Engineering Development Services training meetings is included in (Appendix 8.2).

- During FY 2008-09, the City hired a qualified storm water professional to prepare an in-house training program for the City s Development Services staff (planning, engineering, building and inspection). Two training sessions were conducted during the FY 2008-09 reporting period, including an introduction to storm water regulations and the City s storm water processes and requirements. This particular training program was notable because the class syllabus was specially designed to cover the City s local development storm water regulations and requirements. The training included hands on review of sample City projects and use of City storm water forms and checklist.

- During FY 2008-09, the City instituted a new procedure to define the process for inspecting, tracking, and enforcing compliance for structures listed on the privately owned treatment control BMP Inventory List (procedure CMI-300). A copy of this new procedure can be found in Appendix 2.8.

- The City also instituted a new procedure that defines the process for managing and updating the privately owned treatment control BMP Inventory List (procedure CMI-310). A copy of this new procedure can be found in Appendix 2.9.

- The City instituted a new procedure that defines the process for verifying and tracking compliance with the treatment control BMP verification of maintenance requirements (procedure CMI-320). A copy of this new procedure can be found in Appendix 2.10.

- The City developed two new outreach handouts to assist private property owners in understanding and complying with the new annual treatment control BMP verification program including the *What You Need to Know About Privately Owned Treatment*

Control BMPs brochure located in Appendix 2.7, and the *Frequently Asked Questions About Treatment Control BMPs* fact sheet found in Appendix 2.6.

- In FY 2008-09, the City updated and restructured the development processing fees for the plan review and inspection of Construction Storm Water Pollution Prevention Plans and post-construction Storm Water Management Plans.

- This reporting period the City also initiated use of standard findings of storm water compliance on administrative minor subdivision approvals. The new finding is included in Appendix 2.1.

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City of Carlsbad continues to stress the importance of storm water pollution prevention throughout the implementation of the construction component. This section of the annual report identifies those activities which occurred from July 1, 2008 through June 30, 2009 and will cover the requirements of the Permit No. R9-2007-0001 (Permit).

The City has implemented activities that address and minimize impacts to receiving water quality from construction sites. Performance goals were used to assess the completeness of this component and the effectiveness of action plans. These performance goals included construction site inspections, BMP implementation reviews, corrective actions, enforcement, and reporting requirements. During this reporting period, the City updated the construction inventory on a monthly basis, inspected all construction sites at the required frequencies, responded to construction related inquiries and complaints, provided outreach and education to developers, engineers, contractors and City staff, and when necessary used enforcement actions to obtain compliance.

3.2 Source Characterization

All construction sites were required to undergo the City s construction urban runoff approval process and meet the applicable construction requirements. The City uses the Permits Plus database to update a watershed based inventory of all construction sites that required grading and/or construction permits. The Development Services Division updates the Permits Plus database until the project is ready to begin construction. The Construction Management and Inspection Department (CMI) then issues the permit and updates the database during the active construction phase of the project. The CMI inspectors are primarily responsible for conducting storm water compliance inspections during the active construction phase.

Construction sites with grading permits may include sites where activities such as grading, excavation, clearing, road construction, structure construction, or demolition results in the disturbance of soil. Construction permits that do not require a grading permit may include sites where activities such as single family residence, remodels, or additions, home demolitions, tenant improvements, or commercial/industrial buildings that are constructed resulting in the need for water quality protection. An inventory of all active construction sites requiring a grading permit can be found in Appendix 3.1. At the end of FY 2008-09, there were 173 grading permits on the construction site inventory, of which 123 were active and 50 were inactive (finaled, expired or withdrawn). Table 3.2.1 is a summary of the FY 2008-09 active construction site inventory.

Table 3.2.1: Summary of the FY 2008-09 Active Grading Permit and Construction Site Inventory

Priority	Active	Finaled	Withdrawn	Expired	Total
High	44	8	0	1	53
Medium	26	7	0	0	33
Low	53	32	1	1	87
Total	**123**	**47**	**1**	**2**	**173**

3.3 Updates to Ordinances and Approval Processes

Extensive changes to the ordinance, storm water standards and grading and construction approval process changes were implemented during the FY 2007-08 reporting period to meet the Permit requirements.

During the FY 2008-09 reporting period, the ordinances were reviewed and with the changes adopted in the FY 2007-08 reporting period, the ordinances were found to be adequate; therefore, no ordinance changes were made. In addition, the City initiated several grading and construction approval process changes to implement the various ordinance and standards changes adopted FY 2007-08. Below is a complete listing of the grading and construction approval process changes made during FY 2008-09:

1. Updated and restructured the development processing fees for the plan review and inspection of Construction Storm Water Pollution Prevention Plans and post-construction Storm Water Management Plans.
2. Updated the procedure for inspecting tracking and enforcing construction sites as described in procedure CMI-100 (Appendix 3.4).
3. Updated the procedure for inspecting building sites as described in procedure CMI-110 (Appendix 3.5).
4. Updated the procedure for managing and updating data on the Active Grading Permit and Construction Site Inventory List as described in procedure CMI-120 (Appendix 3.6).

3.4 Best Management Practice Requirements

SWPPPs and Erosion Control Plans are reviewed prior to commencement of construction activities to ensure that the required minimum BMPs will be implemented for all construction sites. The City has required the minimum BMPs be implemented, as identified in the 2008 JURMP and Carlsbad Municipal Code, for all construction sites. The seven required minimum BMPs include components that address the following:

1. Erosion control methods for graded slopes;
2. Erosion control method for graded flat areas (slope 5);
3. Sediment control for perimeter boundaries;
4. Offsite tracking control of sediment;
5. Materials management control;
6. Waste management control; and
7. Non-storm water management control.

The City continues to utilize the pollution prevention measures contained in the Storm Water Best Management Practice Handbooks, published by the California Storm Water Quality Association (CASQA), Caltrans Storm Water Quality Handbooks, and Standards for Design & Construction of Public Works Improvements in the City of Carlsbad. All CMI staff are trained on

construction site BMPs and their appropriate application.

Pollution prevention consists of procedures and practices that eliminate or reduce the pollutants at the source. The City has identified and required implementation of the following pollution prevention controls for all applicable construction sites:

- SWPPPs and Erosion Control Plans are required for grading permits and appropriate construction projects. These plans are checked by the City to ensure they adequately address the provisions of the General Construction Permit.
- CMI inspectors enforce the implementation and effectiveness of BMPs described in approved erosion control plans and SWPPPs.

To address each of the required BMPs, the City ensures the SWPPPs and/or erosion control plans include implementation of several types of BMPs as applicable, depending on site-specific requirements. The list of BMPs can be referenced in the 2008 JURMP.

Grading sites in the City were held to the maximum allowable disturbed areas on all applicable sites.

There were no projects that triggered the Advanced Treatment requirements.

3.5 Program Implementation

During FY 2008-09, the City continued to monitor and enforce storm water regulations by distinguishing the construction components into two areas - Building Construction Permits and Grading Construction Permits. CMI oversees the inspections of grading permitted sites while contracted storm water inspectors ensure building permitted sites (construction sites without a grading permit) are compliant. In addition, one Senior Construction Inspector has been designated with full responsibility for storm water compliance. A copy of the active grading permit inventory detailing each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the wet season, the number of inspections conducted during the wet season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all active grading sites can be found in Appendix 3.1.

In an effort to identify and implement BMPs in a more effective manner, the City revised the NPDES inspection report in January 2009, to include a duplicate tear off sheet. The revised NPDES inspection report covers all administrative requirements including inspection and evaluation of SWPPPs, wall maps, desiltation basins, materials and waste management, temporary BMPs, slope protection, and site conditions and interactions. A copy of the inspection report can be provided directly to the site representative upon completion of an inspection. This process has proven to be time saving, cost effective, and successful in attaining compliance from construction sites. If corrective actions were required, follow-up inspections were conducted to verify compliance. A copy of the revised NPDES inspection form can be found in Appendix 3.3.

For the first half of FY 2008-09, the City continued to prioritize all construction sites with active grading permits as high priority. These sites were, at a minimum, inspected on a bi-weekly

basis during the wet season and once a month during the dry season, to ensure proper installation and maintenance of pollution prevention BMPs. Beginning January 1, 2009, all active grading permits and building inspection sites were prioritized into high, medium, and low categories and inspected at the minimum frequencies required by the Permit. All inspection protocols outlined in the Permit, JUMRP, CMI procedures, and the CMC were followed and implemented as required.

CMI updated and finalized three new procedures for NPDES inspections and inventory management during FY 2008-09. Procedure CMI-100 defines the process for inspecting, tracking, and enforcing grading and construction sites (Appendix 3.4), procedure CMI-110 defines the process for inspecting, tracking, and enforcing building sites (Appendix 3.5), and procedure CMI-120 defines the process for managing and updating data on the Active Grading Permit and Construction Site Inventory List (Appendix 3.6).

CMI inspectors are responsible for inspections on all active grading and CIP sites. Storm water compliance remained their main focus during this reporting period, especially during the wet season. All required inspections were documented and placed in the project files. During required inspections, staff generally found sites to be compliant with SWPPPs, Erosion Control Plans, and BMP implementation. Most observed deficiencies were found with BMP maintenance (i.e. broken gravel bags, silt fences, etc.). These deficiencies were immediately brought to the attention of the responsible site superintendent who was given specific and corrective action requirements by the project inspector. This interaction has proven to be productive in correcting minor deficiencies.

Prior to the wet season, CMI inspectors hand delivered a memo to all site superintendents reminding them of the NPDES requirements and informing them to ensure all sites are in compliance by and throughout the wet season. A copy of the *Rainy Season Preparation and Storm Water Compliance* memorandum issued on September 3, 2008, can be found in Appendix 3.7.

In addition, the City continued to verify the validity of a project s Notice of Intent (NOI) prior to issuance of a grading permit or Notice to Proceed for CIP projects. Prior to the pre-construction meeting and issuing a grading permit, CMI verified a valid NOI was in place for projects subject to the State requirements. The Construction Manager reviewed the State s online database to ensure a NOI had been issued prior to assigning the project to an inspector for grading permit issuance.

Grading Permit Site Inspections:

All active grading sites were prioritized and inspected as required during this reporting period. CMI inspectors verified and documented proper BMP implementation on a weekly, sometimes daily basis. Table 3.5.1 is a summary the grading permit inspections conducted during this reporting period:

Table 3.5.1: Inspections Required and Conducted for Sites Requiring a Grading Permit FY 2008-09

Wet Season Inspections Required	Wet Season Inspections Conducted	Dry Season Inspections Required	Dry Season Inspections Conducted	**Total** Inspections Required	**Total** Inspections Conducted
995	**1226**	**420**	**632**	**1415**	**1858**

On October 9, 2008, the RWQCB conducted storm water compliance inspections at various construction sites within the City of Carlsbad. On November 3, 2008, the City received an inspection report from the RWQCB detailing several minor corrective actions that would need to be implemented to bring these construction sites into compliance. The City worked closely with the developers and contractors to ensure corrective actions were implemented in a timely manner. On November 12, 2008, a written response to the inspection report was sent to the RWQCB detailing the City's efforts to ensure corrective actions were implemented. In addition, follow up inspections were conducted at all the noted sites to ensure compliance was achieved.

Building Construction Permit Site Inspections:

CMI inspectors also conducted inspections at building permit sites. During the wet season high priority sites were inspected bi-weekly. All medium and low priority sites were inspected as needed. All required and follow up inspections were conducted. There were 851 inspections conducted at building sites during FY 2008-09.

Capital Improvement Projects Site Inspections:

Daily inspections were conducted for all CIP projects. These inspections cover a number of storm water compliance issues. All medium and low priority sites were inspected as needed. All required and follow up inspections were conducted. There were 100 NPDES inspections conducted at CIP sites during FY 2008-09. A copy of the CIP inventory can be found in Appendix 3.2.

Enforcement Actions at Construction Sites:

There were no changes in the City's enforcement escalation procedures as described in the 2008 JURMP during this reporting period. Table 3.5.2 is a summary of enforcement actions taken by the City during this reporting period from July 1, 2008 to June 30, 2009.

Table 3.5.2 Summary of Violations and Enforcement Actions at Construction Sites

Actions Taken	Number of Actions
Verbal Notices	116
Written Warning	44
Stop Work Notice	3
Notice of Violations	0
Summary Abatement Notice	1
Total Actions	164

If a site was found to have deficiencies in storm water compliance, it was generally corrected at the time of the inspection. If a verbal or written warning was issued, a specific deadline for correction action was noted. Follow up inspections were conducted to ensure construction sites fully complied with the required corrective actions. All sites were found to have completed corrective actions and were in compliance at the time of the follow up inspection.

If a site was found to be out of compliance to the point where major deficiencies were noted, a Stop Work Notice was issued. Stop Work Notices prevent the contractor from continuing any construction related work until the corrective actions have been implemented. Stop Work Notices were found to be an immediate and effective mechanism to ensure non-compliance was

corrected in an expeditious manner. Therefore, zero Notice of Violations (NOV) were issued during FY 2008-09.

There were three Stop Work Notices issued during this reporting period. As required by the JURMP and CMI procedures, the RWQCB was notified via telephone and email during this reporting period. Table 3.5.3 is a summary of the Stop Work Notices issued in FY 2008-09.

Table 3.5.3 Summary of Stop Work Notices Issued

Permit Number	Issue Date	RWQCB Notification	Follow Up Inspection Date
Carlsbad Golf Center	10/22/08	10/24/08	10/24/08
CB080429	12/22/08	12/22/08	12/22/08
CB081283	04/10/09	04/13/09	04/14/09

On February 5, 2009, the City responded to a report that an unidentified septic pumping company had dumped raw septage into a storm drain system located on an active construction site managed by Warmington Homes. The City responded by blocking the storm drain system and preventing additional discharge of the material through the system. The City estimates that approximately 3,000 gallons of septage was contained within an impacted storm drain clean out, vortex separator, desiltation basin, and desiltation basin clean out. A contractor retained by the City removed approximately 100,000 gallons of contaminated storm water runoff from the storm drain system. The site was monitored by the City until all contaminants were properly and adequately removed. On February 19, 2009, the City initiated Summary Abatement proceedings and issued a Notice of Determination to Warmington Homes, which required them to reimburse the City for all costs associated with remediation/abatement effort. A Notice of Violation was considered for issuance, but after careful analysis of the circumstances of the incident, it was determined that a Summary Abatement would be a more effective and consequential course of action.

3.6 Notable Activities

As mentioned in the Executive Summary, the City considers Notable Activities to be any activity above compliance requirements.

The City of Carlsbad has continued its strong stance on storm water pollution prevention. The Construction Inspectors have obtained a higher awareness among field personnel (superintendents, field labor, etc.) regarding the importance and application of Best Management Practices for storm water pollution prevention on construction sites. Notable activities for FY 2008-09 include:

- In FY 2008-09, CMI revised the NPDES inspection form for construction sites, which includes a duplicate tear off sheet. The revised NPDES inspection report covers all administrative requirements including SWPPPs, updated wall maps, desiltation basins, materials and waste management, temporary BMPs, slope protection, and site conditions and interactions. A copy of the revised inspection report can be provided directly to the site representative upon completion of an inspection. This process has proven to be time saving, cost effective, and successful in attaining compliance from construction sites.

- CMI developed three new procedures for NPDES inspections and inventory

management. Procedure CMI-100 defines the process for inspecting, tracking, and enforcing grading and construction sites, procedure CMI-110 defines the process for inspecting, tracking, and enforcing building sites, and procedure CMI-120 defines the process for managing and updating data on the Active Grading Permit and Construction Site Inventory List. All active grading permits and building inspection sites are prioritized into high, medium, and low categories and inspected at the minimum frequencies required by the Permit.

- In FY 2008-09, the required number of inspections for active construction sites was exceeded. CMI conducted 1858 inspections, which exceeds the 1415 inspections required for the wet and dry seasons.

4.0 MUNICIPAL COMPONENT

4.1 Introduction

Municipal facilities are required to implement the minimum BMPs identified and described in the 2008 JURMP (good housekeeping, preventive maintenance, material handling and storage, employee training, solid waste handling, record keeping, self inspection, and spill response), as applicable. Specific BMPs are identified in SWPPPs and/or inspection reports. Specific pollution prevention measures may vary from one site to another and are evaluated separately at each facility. The City implements and assesses the effectiveness of BMPs through regular staff training, self-inspections, third party inspections by a contractor, and SWPPP implementation. The following includes a description of specific pollution prevention activities and storm water BMPs implemented from July 1, 2008 to June 30, 2009 per Order R9-2007-0001 by various City departments. All BMPs were implemented as required by the 2008 JURMP.

Municipal areas and activities are subdivided by categories in the sections below. Prioritization of these municipal areas is presented in the High Priority column of the Municipal Inventory for Order R9-2007-0001, located in Appendix 4.1.

4.2 Minimum BMP Requirements

The following minimum BMPs were implemented at the facilities in the Municipal Inventory provided in Appendix 4.1, where appropriate.

4.2.1 Employee Training

Municipal departments provided training at least annually to all employees with responsibility for actions that have a potential to cause storm water pollution. A list of all Municipal storm water training is included in Appendix 8.2. Training generally addresses, among other topics, the following:

- Storm water awareness
- Applicable regulations
- Discharge prohibitions
- Importance of pollution prevention practices (good housekeeping, recycling, waste management, source control, etc.)
- Applicable best management practices (including those called out in the facility storm water pollution prevention plan [SWPPP]), where applicable
- Integrated pest management
- Self-inspections
- Record keeping

Documentation of training is maintained on-site at the location(s) where operations or activities are conducted. Where the operations are covered in a SWPPP, training records are filed with the SWPPP.

4.2.2 Pollution Prevention

The City implements urban runoff pollution prevention practices that are generally recognized for that facility's activity as being effective.

Pollution prevention is defined in Order No. R9-2007-0001 *as practices and processes that reduce or eliminate the generation of pollutants. Recycling, use of different types of products or chemicals, and altering operational procedures are all types of pollution prevention practices that reduce the amounts of pollutants generated by a facility."*

The City's approach is to promote pollution prevention as an activity for all municipal employees and locations. Since 1991, the City has implemented a procurement policy that directs the purchase and use of recycled products. Purchasing staff are encouraged to use *Green Purchasing* principles. This refers to buying products and services with reduced effects on human health and the environment (also called *Environmental Purchasing*). While some of these products are office and janitorial supplies, the policy also applies to construction supplies, landscape materials and equipment, automotive, road and highway supplies.

Specific pollution prevention measures may vary from one site to another, so they are evaluated separately at each facility. Where appropriate, High Priority municipal facilities implemented site specific Storm Water Pollution Prevention Plans (SWPPP) and associated training programs. Furthermore, the pollution prevention BMPs identified in the JURMP were implemented at all municipal facilities. These pollution prevention BMPs include:

- Affirmative Procurement Use alternative, safer, or recycled products.
- Reduce the amount of hazardous materials used by implementing natural controls.
- Redirect storm water flows away from areas of concern.
- Reduce use of water.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.

In addition, the City required the following minimum pollution prevention practices (detailed in SWPPPs or inspection reports) at all municipal facilities where appropriate:

- <u>Reduce use of water or use dry cleanup methods:</u> Employees used dry cleanup methods when possible (sweeping, etc.). Any washing activities required containment and recovery, with no discharge to the storm drain system. These BMPs are also required for City contractors.
- <u>Conduct storm drain maintenance:</u> Employees performed regular visual inspections of the storm drains to identify unauthorized discharges and clean as needed.
- <u>Recycle:</u> City departments recycled appropriate items and implemented the City procurement policy to purchase and use recycled products.
- <u>Move or cover potential pollution sources from storm water contact:</u> Corporate yards protected materials and products that could potentially contribute to storm water pollution by storing them indoors, or covering them, and providing them with secondary containment as needed.

4.2.3 Good Housekeeping

Good housekeeping practices employed simple common sense in creating and maintaining a clean, orderly environment that reduced the risk of accidents and urban runoff contamination.

- **Routine Housekeeping Inspections.** Locations with higher risk of impacting storm water quality (e.g., storm water outfalls, loading and unloading areas, materials, products and wastes storage areas, equipment and vehicle maintenance and cleaning areas) were inspected regularly. Inspections focused on leaks or conditions that may have led to discharges of pollutants to the Storm Water Conveyance System or Receiving Waters.

- **Maintenance of Clean Grounds Surfaces.** Sweeping of all paved areas exposed to precipitation or storm water was conducted on a regular basis. Litter controls of all exposed surface were conducted on a regular basis. The frequency of sweeping and litter control is based on site conditions.

- **Waste Management.** Each facility conducted regular pickup and disposal of garbage and waste materials/products to prevent overfill of waste storage containers.

- **Equipment Inspection.** Each facility conducted routine inspection of equipment to ensure proper functioning. Where problems were identified during inspection, proper and prompt maintenance or repair is conducted.

- **Storage.** Raw materials, intermediate products, finished products, byproducts and waste products were stored in covered areas or sealed containers unless the materials or products were not a threat to urban runoff quality. To prevent accidental spills, materials or products are stored away from direct traffic routes. All containers were stacked according to applicable federal, state, and city regulations as well as manufacturers' instructions to avoid damage from improper weight distribution. Pallets or similar devices were used to prevent corrosion of the containers that can result when containers come in contact with moisture on the ground.

- **Limitations on Handling Hazardous Materials.** Each facility limited the handling of hazardous materials to those personnel specially trained to handle these materials.

- **Employee Training.** All good housekeeping practices were incorporated into a facility's employee-training program.

In addition to the BMPs listed above, good housekeeping was addressed as a site specific BMP for each category of facilities listed below. See BMP SC-60 for site specific information on implementation.

4.2.4 Spill Response and Prevention

Municipal staff implemented BMPs at all fixed facilities and field programs to prevent, control and clean up spills. The following are general BMPs that were implemented:

- BMPs listed in SC-11, Spill Prevention, Control and Cleanup (City of Carlsbad JURMP 2008).

- Spill cleanup materials were readily available and in known locations.

- Spills were cleaned up immediately and dry methods are used where possible.
- Spill cleanup material was disposed of properly.

Spill response and prevention was also addressed as a site specific BMP for each category of facilities listed in Sections 4.3 4.14 of this report. See SC-11 for site specific information on implementation.

4.3 Roads, Streets, Highways, Parking Facilities

4.3.1 Background

This section includes BMPs and an inventory of roads, streets, highways, and parking facilities which are deemed High Priority according to Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City s 2008 JURMP. This section also includes information on the City s street sweeping program and BMPs for the City s street maintenance program.

4.3.2 Source Characterization

The table below lists the 10 High Priority roads, streets, highways, and parking facilities on the City s municipal inventory as updated in the 2008 JURMP.

Table 4.1 Roads, Streets, Highways, and Parking Facilities

1	ADULT LEARNING PROGRAM PARKING LOT	3368 EUREKA PL
2	CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE
3	CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR
4	CITY STREETS	CITY WIDE
5	COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR
6	DOVE LIBRARY PARKING LOT	1775 DOVE LN
7	FARADAY CENTER PARKING LOT	1635 FARADAY AV
8	FARMERS BUILDING PARKING LOT	FARADAY & EL CAMINO RL
9	HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST
10	RAILROAD DEPOT VISITORS CENTER PARKING LOT	400 CARLSBAD VILLAGE DR

4.3.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.2 were implemented at the 10 High Priority facilities listed above.

Table 4.2 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-70 Road and Street Maintenance
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.3.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.2 were implemented at the facilities listed in Table 4.1 and are described below:

- SC-11 Spill Prevention, Control, and Cleanup: Spill kits were located in all vehicles.
- SC-33 Outdoor Storage of Raw Materials: Plastic tarps covered raw materials in the yard, equipment was covered by canopies, and the material was covered by a permanent overhead structure or stored indoors. Materials associated with street maintenance activities were stored at the Maintenance and Operations Facility.
- SC-34 Waste Handling and Disposal: Paint waste was returned to the maintenance yard where it was transferred directly from the generating vehicle to secured storage containers. This was done within a proper containment area in case of any accidental spillage. These containers were clearly marked and stored until arrangements were made for a certified waste management company to remove them and transfer them to an approved facility.
- SC-41 Building and Grounds Maintenance: In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking and Storage Area Maintenance: Parking lots and storage areas were swept biweekly.
- SC-60 Housekeeping Practices: All maintenance vehicles are equipped with spill kits. Work sites were swept and all debris was removed upon completion of any asphalt or concrete repair.
- SC-70 Road and Street Maintenance: Storm drain inlets were protected using rock bags prior to the start of any maintenance activities. Concrete wash out was performed on a plastic tarp and contained to prevent any discharge to the storm drain. Street sweeping was performed for all curbed streets and municipal parking lots in the City. Table 4.3 below indicates the distance swept in curb miles, frequency, and amount of materials removed as a result of the street sweeping activities. In total, there were approximately 8,050 curb miles of streets swept from July 1, 2008 to June 30, 2009.

Table 4.3 Street Sweeping Data

Priority[1]	Description	Distance	Frequency	Material Removed
High[2]	Arterials/seawall	100 curb miles	Weekly	90 tons/month
Medium	Residential	1000 curb miles	Biweekly	
Low	Alleys	50 curb miles	Biweekly	
Parking Lots	54 lots	53 acres	Biweekly	

[1]Priority is based on the volume of trash and debris generated at these types of streets - streets which generate high volumes of trash are High Priority; streets which generate moderate and low volumes of trash are medium and low priority respectively.
[2]Downtown streets were swept twice weekly

- SC-71 Plaza and Sidewalk Cleaning: A self-contained wet sweeper was used on all tile sidewalks in the downtown area on a scheduled basis.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever

possible; pesticide, herbicide, and fertilizers were stored inside and used sparingly in accordance with required application practices.

- SC-75 Waste Handling and Disposal: All materials were hauled directly to the transfer station and were covered.

4.4 Flood Management Projects Flood Control Devices

4.4.1 Background

This section includes BMPs and an inventory of the City s Flood Management Projects and Flood Control Devices which are deemed High Priority areas according to Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City s 2008 JURMP. This section also includes a description of the Storm Drain Maintenance Program activities.

4.4.2 Source Characterization

The municipal separate storm sewer system is the only High Priority Flood Management Projects and Flood Control Devices on the City s municipal inventory, as updated for the 2008 JURMP. The municipal separate storm sewer system is inclusive of the City s flood management projects and flood control devices.

4.4.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.4 were implemented throughout the City s MS4.

Table 4.4 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-21 Vehicle and Equipment Cleaning
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal

4.4.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.4 were implemented where applicable pertaining to the municipal separate storm sewer system and are described below.

- SC-11 Spill prevention, Control, and Cleanup: All vehicles have spill kits and key vehicles carry hydrocarbon booms. All trash was placed in 55 gallon trash bags. The maintenance sweeper truck was called out to assist in spill cleanup when necessary.
- SC-21 Vehicle and Equipment Cleaning: All vehicles used in flood control device cleaning were washed at fleet maintenance using an enclosed pressure wash system. The system has a secondary water and oil separator plumbed into the sanitary sewer system.
- SC-34 Waste Handling and Disposal: Trash was hauled to transfer station. Debris and other organic material were transferred and deposited at 2400 Tamarack Avenue in three concrete covered bins. The material was then tested for contaminants and hauled to a landfill or appropriate facility upon receipt of permissible test results.

- SC-60 Housekeeping Practices: Trash was removed from these areas of the MS4 on a routine basis.
- SC-74 Drainage System Maintenance: A small self-contained vacuum with pressure washer was used to clean the drainage system. All material in the drain box was removed by the vacuum. Disposal of the water and material occurred using a filter sock, allowing water to be decanted into the sanitary sewer system. The solid material was taken to the Tamarack site described above. All trash was removed from the MS4, placed in 55 gallon trash bags, and placed in a 40 cubic yard roll off dumpster that is covered. The material was then transported to Palomar Transfer Station for disposal. Data pertaining to maintenance activities of the MS4 is in Table 4.5 below.

Table 4.5 MS4 Maintenance

Structure	Inspected	Exceeding Cleaning Criteria	Cleaned	Amount of Material Removed (tons)
Catch Basin/Inlet	3446 units	224	Anthropogenic trash removed 100	54
MS4 miles	5,000 linear feet	N/A	5,000 linear feet	0.5
Open Channel miles	32,000 linear feet	N/A	908 linear feet	0.5

- SC-75 Waste Handling and Disposal: Described under SC-34 and SC-74 above.
- BMPs to limit infiltration from sanitary sewer to storm drain system: a preventive maintenance schedule was implemented that includes jet rodding, and vactoring the sanitary lines throughout the city of Carlsbad. Closed circuit television was used for investigations in sewer lines. In addition, engineering standards described below prevent infiltration of sewage to the MS4.

  The City of Carlsbad s Engineering Standards employed several measures to prevent sewage intrusion into municipal separate storm sewer systems (MS4).

  1. All gravity sewer pipes and laterals are required to have gasketed joints, which create water tight joints (Volume 1, Chapter 6, Item 3.A, 3.C, and 3.F). The water tight joints are tested using the methods indicated in Standard Specifications for Public Works Construction (SSPWC) section 306-1.4. The water tight test methods include a post-installation closed circuit television (CCTV) inspection and an air pressure test where the sewer line must sustain 2.5 to 3.5 psi gage pressure for at least 2 minutes after being pressurized to 3.0 psi.

  2. All gravity sewer lines are required to follow engineering standard for the amount of flow they can carry. During peak hour dry weather season the pipe shall be designed to carry a flow depth of 0.5 (or 0.75 depending on the pipe size) the diameter of the pipe (Volume 1, Chapter 6, Item 4.C). This design requirement prevents the pipe from becoming full, which would pressurize the pipe and potentially cause a leak.

  3. Per Carlsbad s Engineering Standard GS-6 and GS-6A, the sewer lines are typically located at an elevation deeper than the storm drain line, which further prevents sewage intrusion into MS4. In the event of a sewage pipe leak, the leakage flow will naturally gravitate below the sewer line rather than up to the storm drain line.

  4. The standard horizontal separation between sewer and storm drain is 13 feet, which further prevents sewage intrusion into MS4.

5. In special cases where storm drain lines are installed at a depth greater than that of sewer lines, additional design standards are required such as water tight joints or encasements (Volume 1, Chapter 5, Item 1.G).

- Treatment Control BMPs: Storm Drain Inserts including fossil filters, rapid flow BMPs, and debris catchers with zinc filters are in place at various storm drain locations throughout the City. Fossil filters removed trash and hydrocarbons, while debris catchers were installed to prohibit anthropogenic trash and debris from entering the storm drain system. Table 4.6 lists the type of insert, location, quantity, and minimum frequency of maintenance.

Table 4.6 Storm Drain Insert-Type BMPs

Type	Location	Number	Frequency
Debris Catcher	Carlsbad Boulevard	9	Annual
	State Street	4	Annual
	Grand Avenue	3	Annual
	Carlsbad Village Drive	4	Annual
	Ocean Street	4	Annual
	Rancho Santa Fe	1	Annual
	Celinda Drive	1	Annual
Fossil Filter	Oak Avenue	4	Annual
	Chesnut Avenue	6	Annual
	Jefferson Street	5	Annual
	Fleet Maintenance	4	Annual
	Ocean Street	2	Annual
	Paseo del Norte	3	Annual
	Cannon Road	5	Annual
	Faraday Avenue	3	Annual
	Recycled Water Plant	4	Annual
	M&O Yard	2	Annual
Debris Filter at	Oak Avenue	3	Bi-monthly
inlet entrance	Valencia Avenue	1	Bi-monthly
	Carlsbad Boulevard	6	Weekly
	Orion Street	3	Weekly

The City also inspected and maintained three desiltation basins. Table 4.7 below lists the City owned and maintained basins. The basins were inspected annually prior to the rainy season and maintained as necessary.

Table 4.7. City Owned Maintained Desiltation Basins

Site	Location	Description	Inspection Frequency
DESILTATION BASIN 13	SW END FARADAY AV SO OF LOT 102 OF CRC	Desiltation Basin	Annual
DESILTATION BASIN 30	SW CORNER MARRON AND MONROE	Desiltation Basin	Annual
DESILTATION BASIN 43	CAMINO HILLS AND FARADAY NE CORNER	Desiltation Basin	Annual

4.5 Fire Stations

4.5.1 Background

There are six fire stations in the City, which are high priority areas according to the City's JURMP. The inventory and BMPs for these facilities are described below.

4.5.2 Source Characterization

Table 4.8 below lists the High Priority Fire Stations on the City's 2008 JURMP inventory.

Table 4.8 Fire Stations

1	FIRE STATION 1	1275 CARLSBAD VILLAGE DR
2	FIRE STATION 2	1906 ARENAL RD
3	FIRE STATION 3	3701 CATALINA DR
4	FIRE STATION 4	6885 BATIQUITOS DR
5	FIRE STATION 5	2540 ORION WY
6	FIRE STATION 6	7201 RANCHO SANTA FE ROAD

4.5.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.9 were implemented at the High Priority facilities listed above.

Table 4.9 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-21 Vehicle and Equipment Cleaning
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.5.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.9 were implemented at the facilities listed in Table 4.8 and are described below. In addition, training and pollution prevention BMPs specific to the Fire Department are described below.

Training

- The City's Reclaimed Water Facility continued to be utilized for fire engineer training and testing. A training trailer facilitated engineer operations, pump testing, and other wet training opportunities. The Facility allowed for wet training and testing opportunities while ensuring that no water is discharged to the MS4.

- Conduct training and testing at other fire agencies Training Facilities which recycles the water that is being discharged (i.e. Rancho Santa Fe and San Marcos Fire Departments).Suitable locations were selected to provide wet training opportunities for personnel, while ensuring that appropriate BMPs were in place to protect the storm drains and eliminate discharges to the MS4. These sites were generally located on pervious surfaces with no potential for discharge to the storm drain system.
- A representative from the Fire Department attended and participated in the City s Storm Water Committee meetings when available.

Pollution Prevention

- Dry cleanup methods were used to reduce water use. The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations. Awareness was heightened at fire scenes to minimize the potential for excessive water flow.
- Materials were recycled where possible.
- Storm Water Manuals were developed for each station which include SWPPPs with site maps, inspection reports, facility specific spill response procedures, training records, and department policies.
- SC-11 Spill Prevention, Control, and Cleanup: Spill response equipment and materials are clearly identified and staged in accessible locations at each station. Awareness was heightened at incident scenes to contain potential discharges (once the scene had been stabilized) to prevent pollutants from entering the MS4. The Department continued implementation of the City s spill response procedure for incidents that occur on City streets. Absorbent materials are kept on all engines. The spill response plan is to apply absorbent, sweep material, place in bags, and remove from site for proper disposal.
- SC-21 Vehicle and Equipment Cleaning: The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Vacuum equipment was purchased to recover and contain all wash water from vehicle washing activities occurring at the Fire Stations. Fire Station 5 currently has a pressure washer for vehicle and equipment cleaning to minimize the amount of water being used. Five more pressure washers have been approved and purchased for the other five fire stations.
- SC-34 Waste Handling and Disposal: Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter.
- SC-43 Parking/Storage Area Maintenance: Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations.
- SC-60 Housekeeping Practices: Fire stations are kept clean and orderly. Wash water was disposed of properly. Sweeping material was disposed of properly. Training on storm water and spill response was provided regularly.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-75 Waste Handling and Disposal: Solid waste was collected and disposed of properly at appropriate disposal facilities (Palomar Transfer Station, Waste Management) in

accordance with all applicable laws and regulations. Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter. Liquids were not disposed of in waste containers. Recycling was implemented where possible; bins were provided.

4.6 Recreation Facilities

4.6.1 Background

The Monroe Street Pool is the only Recreation facility on the City s municipal inventory listed as a High Priority area. This is primarily due to the chemicals stored on-site. The pool s chemical systems were changed from gas chlorine and caustic soda to liquid chlorine (sodium hypochlorite) and muriatic (hydrochloric) acid/carbon dioxide, with 500 and 300 gallon double wall containers, respectively. BMPs implemented at this facility are described below.

4.6.2 Source Characterization

The only High Priority Recreation facility on the City s 2008 JURMP inventory was the Monroe Street Pool.

4.6.3 Site Specific BMP Requirements

The site specific BMPs, listed below in Table 4.10, were implemented at the Monroe Street Pool.

Table 4.10 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-31 Outdoor Container Storage
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-60 Housekeeping Practices
SC-72 Fountains & Pools Maintenance
SC-73 Landscape Maintenance

4.6.4 Program Implementation

BMPs listed in Table 4.10 above were implemented at the Monroe Street Pool. BMPs implemented specific to this facility and its activities are described below.

- SC-11 Spill Prevention, Control, and Cleanup: Commercial spill kits are kept onsite. A facility specific SWPPP was developed and is kept onsite. The SWPPP includes a spill response plan.
- SC-31 Outdoor Container Storage: The majority of materials stored on-site are kept inside sheds. These areas were cleaned up and maintained regularly.
- SC-34 Waste Handling and Disposal: Trash bins and containers are enclosed and covered. Lids remain closed and locked at all times and serviced weekly.
- SC-41 Building and Grounds Maintenance: (parks/facilities) Staff performed daily parking lot inspections looking for litter, debris, and leaking vehicles. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting,

scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.

- SC-60 Housekeeping Practices: Cleaning of pool decks was performed by sweeping in most cases. Occasionally, wash down was necessary and all wash water was directed to a pervious area for percolation (football field).
- SC-72 Fountains and Pools Maintenance: Water was de-chlorinated if discharging to the storm drain was necessary; however, this was a rare occurrence. All filter back wash was discharged to sewer. Overflow from pool decks was directed to earthen swale and percolates.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off. Soil testing was utilized to assess need for fertilizers and irrigation. Timing improvements on irrigation system have reduced water usage. Blowing and sweeping were used wherever possible. Pesticide, herbicide, and fertilizers were not stored onsite and used sparingly in accordance with required application practices.

4.7 Publicly Owned Treatment Works

4.7.1 Background

The City of Carlsbad is a member agency of the Encina Wastewater Authority which treats raw sewage to the secondary treatment level. The Carlsbad Water Recycling Facility intakes secondary treated water and treats it again to the tertiary level of treatment which is used as recycled water throughout the City of Carlsbad. This facility was determined to be High Priority as required in Order No. R9-2007-0001, Section D.3.a.(7)(a). The BMPs listed below were implemented at the Carlsbad Recycled Water Facility.

4.7.2 Source Characterization

The Carlsbad Recycled Water Facility is the only High Priority Publicly Owned Treatment Works on the City's 2008 JURMP inventory.

4.7.3 Site Specific BMP Requirements

The site specific BMPs listed in Table 4.11 were implemented at the Recycled Water Facility.

4.11 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-75 Waste Handling and Disposal
SC-76 Sewer Utility Maintenance

4.7.4 Program Implementation

Each of the applicable BMPs listed above were implemented at the Carlsbad Recycled Water Facility and are described below.

- Employee Training: Employees were informed of activities that could potentially cause contamination of storm water and the importance of carefully conducting these activities in areas that do not discharge/drain to storm drains. Storm water pollution prevention and BMP brochures were available to everyone who works at the materials storage area. Subcontractors were informed about the storm water requirements and their responsibilities. Training consisted of informal tailgate meetings, formal classroom training, or self-guided training activities. Employees in targeted positions were trained annually on the requirements of the SWPPP. Employee training, at a minimum, included: SWPPP requirements; spill response and reporting; good housekeeping; BMP updates and implementation; and materials and waste handling and storage procedures.
- SC-11 Spill Prevention, Control, and Clean-up: A current spill response plan was provided in the SWPPP. The spill response plan addressed measures to clean, abate, and prevent spills and leaks from entering the storm drain. Employees were trained on the elements of the plan. Rags and absorbents were readily accessible. Waste was disposed of properly. Dry cleanup methods were used whenever possible. Spills on dirt areas were cleaned up by digging up and properly disposing of contaminated soil. Spills over 10 gallons were reported to the Storm Water Protection Program and/or the appropriate spill response agencies immediately. Employees were trained to routinely check for leaks and spills.
- SC-20 Vehicle and Equipment Fueling: All vehicles were fueled off-site. Equipment continued to be run with electricity and no equipment fueling was necessary.
- SC-22 Vehicle and Equipment Repair: All vehicle repairs were performed off-site. When equipment repair was necessary, work was performed in covered, contained areas that were not susceptible to storm water runoff.
- SC-31 Outdoor Container Storage: There were several chemical storage tanks stored outside under cover and in full secondary containment structures. See SC-33 below for more information.
- SC-33 Outdoor Storage of Raw Materials: Secondary containment was implemented where materials are stored outside. Examples of temporary BMPs utilized are: a dike, berm, or filter on the down slope sides of any stockpiles. All containment devices used around stockpiles were maintained to work effectively and were replaced when necessary. The chemical storage tanks were contained within a concrete parapet wall enclosure. Spills within the chemical storage areas were contained within the concrete walls and drain to a sump. Where chemical deliveries occurred, a concrete pad conveyed flow to a curb inlet. From the curb inlet, flow was controlled by plug valves, directing the flow to the sump.
- SC-34 Waste Handling and Disposal: Dumpsters were covered and maintained and checked frequently for leaks. Lids were kept closed at all times. Dumpsters were never cleaned out using water. When cleaning the containers, all rinse water from cleaning was routed to the sanitary sewer system. All wastes and construction debris were disposed of properly. Many materials and wastes were recycled including broken asphalt and concrete, cleared vegetation, scrap metals, aluminum cans, and plastic bottles. Materials and debris that could not be recycled were taken to an appropriate landfill or disposed of as hazardous waste. The waste storage area was swept or otherwise cleaned frequently using dry

methods to collect all loose solids for proper disposal. If the amount of waste accumulated appeared to frequently exceed the capacity of the dumpster, then another container should have been obtained and utilized or collection frequency was increased. Green waste consisting of clippings, cuttings and droppings of leafy and woody materials was disposed of properly at an approved composting location or permitted landfill.

- SC-60 Housekeeping Practices: Site was kept free of litter and debris. Trash cans and recycling receptacles were located around the site to minimize litter. Material moving and transfer activities were scheduled during dry weather periods, where possible. Heavy equipment was maintained in good working condition. Areas were inspected frequently for leaks and repaired as needed. Major equipment repairs were performed away from the storage area. Paved surfaces were swept that drain to storm drains, creeks, or channels. Cleanup materials such as brooms, shovels, dustpans, and sweepers are stocked near the storage area. Paved storage areas were swept weekly for collection and disposal of loose solid materials, and were not hosed into a storm drain or conveyance ditch. Information was distributed on good housekeeping practices during employee training sessions and discussed at employee meetings. Good housekeeping tips and reminders were posted on employee bulletin boards.
- SC-75 Waste Handling and Disposal: See SC-34 above.
- SC-76 Sewer Utility Maintenance: Sewer utility maintenance was not performed at this facility.
- Source Control BMPs (specific to the Recycled Water Facility):
  - Flo-Guard inlet baskets at all curb inlets on site to collect oil and grease and debris from site.
  - Vegetated swale (approximately 400 feet) collects and treats runoff from a portion of the site.
  - Roof over chemical storage area.
  - Permanent secondary containment is in place around all chemical storage areas.
  - By-pass valves are installed at containment areas to divert rain water.

4.8 Sanitary Sewer Facilities

4.8.1 Background

The facilities listed in Table 4.12 are sewer lift stations owned and operated by the City. The table also includes the City's collection system. These have been determined to be High Priority areas according to Order No. R9-2007-0001 and the City's 2008 JURMP, primarily due to the presence of sewage and potential for contamination of surface waters resulting from sewer overflows. BMPs implemented at these facilities and BMPs applicable to maintenance of the collection system are described below.

4.8.2 Source Characterization

Table 4.12 below lists the High Priority Sanitary Sewer Facilities on the City's JURMP inventory.

Table 4.12 Sanitary Sewer Facilities

1	AGUA HEDIONDA SEWER LIFT STATION	SDGE PLANT SITE
2	BATIQUITOS SEWER LIFT STATION	7382 GABBIANO LN
3	BUENA VISTA SEWER LIFT STATION	JEFFERSON
4	CANNON SEWER LIFT STATION	2301 CANNON RD
5	CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL

6	FOXES LANDING LIFT STATION	4155 HARRISON ST
7	GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD
8	HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL
9	KNOTS SEWER LIFT STATION	501 KNOTS LN
10	LA GOLONDRINA SEWER LIFT STATION	2516 LA GOLONDRINA ST
11	POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN
12	SAND SHELL SEWER LIFT STATION	613 SAND SHELL
13	SANITARY SEWAGE COLLECTION SYSTEM	CITY SERVICE AREA
14	SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV
15	TERRAMAR SEWER LIFT STATION	300 CANNON RD
16	VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST
17	VILLAS SEWER LIFT STATION	2860 WINTHROP AV

4.8.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.13 were implemented at all Sanitary Sewer Facilities.

Table 4.13 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-75 Waste Handling and Disposal
SC-76 Sewer Utility Maintenance

4.8.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.12 and are described below.

- SC-11 Spill Prevention, Control, and Cleanup: Hazmat plans were drawn up and located in the SWPPP at each location. Spill kits are kept inside at all facilities. Secondary containment structures were implemented around generator fuel cells and around all chemicals stored on-site. Overflow response included immediate Vactor response, containment, and cleanup. For more details see City of Carlsbad SSORP spill mitigation and clean-up. All vehicles have spill kits.
- SC-20 Vehicle and Equipment Fueling: Small equipment fueling was performed in secondary containment areas or over pervious surfaces. All locations have secondary containment for fuel spills or oil leaks. Fuel deliveries were performed by an outside contractor. Documentation is kept onsite.
- SC-22 Vehicle and Equipment Repair: Pump repair occurred indoors on site and was generally performed in the wet well. All material went back to the headworks and was transferred to the Encinas treatment plant. Wet wells were cleaned every 6 weeks with Vactor equipment and staff ensured that there were no leaks or spills at the facilities.
- SC-31 Outdoor Container Storage: The 55-gallon trash cans are covered with a liner.
- SC-34 Waste Handling and Disposal: Trash and debris were removed on a regular basis.

- SC-60 - Good Housekeeping: Sweep and vacuuming were implemented instead of washing down. Blowers were used to clean off concrete and asphalt. All hoses are rolled up and stored off the ground.
- SC-75 Waste Handling and Disposal: Trash and debris were removed on a regular basis. All trash cans or other containers are covered or closed.
- SC-76 Sewer Utility Maintenance: All stations were inspected and cleaned daily. Vactors were checked for leaks during pre-trip inspections. All materials were discharged at Encina Wastewater Authority: solids into grit bin, liquids at headworks. Recently the City began to implement FOG requirements as per Order 2006-003, including revision of ordinances, public outreach, and inspections of FOG generating facilities.

4.9 Water Facilities

4.9.1 Background

There are seven High Priority water facilities on the City s JURMP inventory. The sites are High Priority facilities due to chemical storage on-site or due to their location in the watershed. BMPs implemented at the sites according to the JURMP are described below.

4.9.2 Source Characterization

The table below lists the High Priority Water Facilities on the City s JURMP inventory.

Table 4.14 Water Facilities

1	MAERKLE DAM RESERVOIR/ PUMP/ CHLORINATION STATION	5203 SUNNY CREEK RD
2	RESERVOIR C	CALAVERA DR
3	RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR
4	RESERVOIR LA COSTA HI	ALGA RD
5	RESERVOIR LA COSTA LO	ALGA RD
6	CALAVERA PUMP STATION	3600 BLOCK COLLEGE DR
7	TAP PUMP STATION	6400 BLOCK OF EL CAMINO REAL

4.9.3 Site Specific BMP Requirements

The site specific BMPs listed in Table 4.15 were implemented at the water facilities listed above.

Table 4.15 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-60 Housekeeping Practices
Water Operations and Maintenance

4.9.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.14 and are described below.

- Pollution Prevention: Automatic shut-off valves have been installed.
- SC-11 Spill Prevention, Control, and Cleanup: At facility 1, specialized equipment has been implemented to mitigate a chlorine release; chlorine gas detectors, vacuum regulators, automatic shut-off valves, and chlorine scrubber systems. In addition to the equipment, all chemicals are stored in containment structures designed to contain stored amount. All chemicals are inspected prior to off-loading for containment defects and returned if any defects are noted. Operations Staff have the necessary hazardous materials training to be considered qualified to assess the severity of a chlorine leak. A site specific SWPPP was developed for Maerkle Reservoir.
- SC-20 Vehicle and Equipment Fueling: Diesel deliveries were performed by outside contractors.
- SC-22 Vehicle and Equipment Repair: All storm drain collectors were regularly inspected and cleaned accordingly. All building floor drains were inspected and verified to be isolated from discharge system.
- SC-31 Outdoor Container Storage: The 55-gallon trash cans with liners were utilized and trash was removed on a regular basis.
- SC-33 Outdoor Storage of Raw Materials: No raw materials are stored outdoors.
- SC-60 - Good Housekeeping Increased sweeping schedule of asphalted areas was implemented. Chemicals supplies are kept at a minimum to reduce potential releases.
- Water Operations and Maintenance:
    - Repairs and New Line Installation: All flushing requirements follow established BMPs regarding de-chlorination and related sediment recovery concerns.
    - Reservoir Cleaning and Dewatering: All reservoir de-watering follows pre-established BMPs addressing daily water volume discharge amounts, de-chlorination, monitoring of chlorine residuals and sediment removal and disposal

4.10 Municipal Yards

4.10.1 Background

Table 4.16 below lists the City's municipal yards that were determined to be High Priority areas as required per Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City's JURMP. Site specific BMPs implemented at each facility are listed and described below.

4.10.2 Source Characterization

The table below lists the High Priority Municipal Yards on the City's JURMP inventory.

Table 4.16 MUNICIPAL YARDS

1	FLEET MAINTENANCE FACILITY AND PARKING LOT	2480 IMPALA DR
2	M&O OPERATIONS YARD AND PARKING LOT	5950 EL CAMINO REAL
3	OAK OPERATIONS YARD AND PARKING LOT	405 OAK AV
4	PARKS MAINTENANCE/STORAGE/PARKING LOT	1166 CARLSBAD VILLAGE DR

4.10.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.17 were implemented at Municipal Yards, where applicable. For example, vehicle and equipment repair is not performed at all facilities; therefore SC-22 does not apply to all yards.

Table 4.17 Best Management Practices

Storm Water Pollution Control Plan
SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-61 Safer Alternative Products
SC-70 Road and Street Maintenance
SC-71 Plaza and Sidewalk Cleaning
SC-72 Fountains & Pools Maintenance
SC-73 Landscape Maintenance
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal

4.10.4 Program Implementation

BMPs listed in Table 4.17 were implemented specific to each facility and are described below.

<u>FLEET MAINTENANCE YARD</u>

- Employee Training Storm water protection was covered as part of safety meetings.
- Pollution Prevention Recycling containers were provided at the ends of the fuel pump inlands.
- Storm Water Pollution Control Plan: A site specific SWPPP was developed and is maintained on-site.
- SC-11 Spill Prevention: Spill kits containing absorbents and booms are located at the fuel island and south west of the fuel island within the yard, including the shop area.
- SC-20 Vehicle and Equipment Fueling: Spill kits are located adjacent to the vehicle fueling area.
- SC-21 Vehicle and Equipment Cleaning: All vehicle washing was performed on the wash rack, inside the wash bay. This included pressure washing and hand washing of vehicles and equipment. Wash waste water is treated prior to release to the sewer system.
- SC-22 Vehicle and Equipment Repair: All maintenance and repairs to Fleet vehicles were performed inside the shop bays whenever possible. Any vehicle on the dead line that had a leak had a drip pan put under it until it is brought into the shop. Any leaks or spills were handled immediately, with either the drip pans or an absorbent. The absorbent was picked

up immediately and stored in the drums labeled for waste absorbent. Damaged equipment and wrecked vehicles with a potential for discharge were covered with tarps.

- SC-31 Outdoor Container Storage: Outdoor containers that include full coverage and containment of materials are utilized for storage of tires and motorcycles (two 40 yard containers) and for storage of fire extinguisher service items, used batteries, and oil filters for recycling (sheds).
- SC-33 Outdoor Storage of Materials: All materials stored outside are kept under one of the provided canopies or in the shed. City-generated hazardous waste is stored in the hazardous waste shed (covered) in an appropriate container and on a pallet. This includes batteries and waste metals. A chain link fence was installed to prevent unauthorized dumping at the Facility. Signage was also in place to inform citizens that materials were not to be left at the Facility and provided information on proper disposal facilities.
- SC-34 Waste Handling and Disposal: Waste oil was drained into the waste oil containers or into a drip pan and then into a waste oil container. The containers were emptied as needed into the waste oil in-ground tank as needed. Used batteries were stored in the provided container inside the shed. Used antifreeze was drained into one of the large drip pans, then transferred to the poly drums inside the shed. Scrap metal is stored in the provided container and covered. Used tires are stored in the covered tire storage bunker.
- SC-41 Building and Grounds Maintenance: Language was included in contracts requiring storm water compliance and allowing the City to implement BMPs as needed with all associated costs recovered from the contractor. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: The Fleet Yard was swept via Sweeper-truck on a monthly schedule, clean ups of spills were done with dry absorbent and picked up directly, all leaks were captured with drip pans and brought into the shop for service.
- SC-60 Housekeeping Practices: The shop was either swept or mopped. All debris was either picked up and put into appropriate containers or, in the case of wet mopping, all water was directed to the drains inside the shop that flow to our separator. All contaminated floor sweep was stored in labeled containers and removed by our hazardous waste contractor. The Fleet yard was inspected regularly as well as before and after storm events. Areas inspected were the shed and tire storage area at the north end of the shop, the waste tire and hazardous waste bunker along the north fence line, the two large dumpsters, the two trash and two recyclables cans at the fuel pumps, the spill kits for the fuel island, the storm drains on-site and the paved lot and dirt area at the east end (which is now fenced). Inspection criteria: all waste drums/containers are to have secondary containment, all materials are to be stored in covered areas. Appropriate areas included a shed and two canopies plus the hazardous waste container and waste metal containers. The dumpsters, trash cans, recyclables cans and metal storage were kept closed and no trash fell out of them. The filters at the storm drains were inspected for cleaning or replacement. The lot was inspected for spills and cleaned up as needed. Vehicles in the lot were inspected for leaks; action was taken to contain leaks as needed. The wash rack area, trash containers area, and drains were inspected for clogging from debris. All employees always took immediate action to correct any issues found during inspections of the Fleet yard directly.
- SC-71 Sidewalk Cleaning: Where power washing was necessary, wash water was not allowed to drain to the storm drain system and was directed to sanitary sewer or to pervious surfaces where possible.

- SC-72 Fountain and Pools Maintenance: Not applicable.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off. Soil testing was utilized to assess need for fertilizers and irrigation. Timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever possible. Pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 Drainage System Maintenance: Fossil filters have been installed at storm drain inlets in yard and were inspected and maintained regularly.
- SC-75 Waste Handling and Disposal: Updated signage was installed for Household Hazardous Waste disposal.

MAINTENANCE AND OPERATIONS YARD

- Pollution Prevention Native soils were used whenever possible to backfill trenches: the amount of dirt and soil stockpiled on site was minimized; filtration socks were used to dewater trenches.
- Storm Water Pollution Control Plan: A site specific SWPPP is kept on-site and maintained regularly.
- SC-11 Spill Prevention, Control, and Cleanup: Secondary containment where fuel and oil are stored, also yard has spill kits in each vehicle. A hazmat plan has been implemented and is located in the SWPPP.
- SC-20 Vehicle and Equipment Fueling: Small equipment fueling was performed in the secondary containment area or over pervious surfaces.
- SC-21 Vehicle and Equipment Cleaning: Trash was removed daily from the work trucks, otherwise no cleaning or washing was allowed at M&O yard.
- SC-22 Vehicle and Equipment Repair: No repairs were performed at yard.
- SC-31 Outdoor Container Storage: Container storage areas are covered using overhead canopies.
- SC-33 Outdoor Storage of Materials: Where necessary, plastic tarps cover raw materials in the yard; equipment is covered by canopies; material is covered by a permanent overhead structure or stored indoors.
- SC-34 Waste Handling and Disposal: All material was put into a covered roll-off container.
- SC-41 Building and Grounds Maintenance: The grounds and parking lot were swept twice a month by street sweeper and weekly by hand when necessary. Trash was removed daily. Erosive areas and slopes were protected by hydroseed, coconut mats, sand bags, and fiber rolls. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Where feasible, work was performed under cover and over pervious areas. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. Parking lots are spot cleaned for all spills weekly. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: The parking lot was swept twice a month by a street sweeper; ingress/egress to unpaved area of yard was protected by rocks and shaker plates.
- SC-60 Housekeeping Practices: Recycle bins, dumpsters, and cans were covered and kept closed.
- SC-61 Safer Alternative Products: Used less hazardous cleaning materials and water-soluble paints for mark outs.
- SC-70 Road and Street Maintenance: Not Applicable
- SC-71 Sidewalk Cleaning: Sweep and/or vacuum sidewalks.

- SC-72 Fountain and Pools Maintenance: Contractor maintained fountain at facility. No water was discharged during maintenance activities; all filter material was retained on-site for proper disposal.
- SC-73 Landscape Maintenance: All material was cut and carried off by hand in burlap bags; no residue remains on site. Irrigation systems were checked regularly to avoid run-off; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 Drainage System Maintenance: Rapid Flow filters and storm drain structures were cleaned annually. A pilot program was implemented using the innovative Drivable Grass which drains the parking lot through subsurface drainage system to reduce storm water flowing directly into MS4.
- SC-75 Waste Handling and Disposal: All material was handled properly and covered in yard roll-off dumpsters, or other appropriate containers.

OAK YARD

- Storm Water Pollution Control Plan (SWPPP description): A site specific SWPPP was implemented at the Oak Yard.
- SC-11 Spill Prevention, Control, and Cleanup: All liquids and hazardous materials are stored in locked containment lockers. These are located within secondary containment areas. Large spill containment kits are strategically located within the yard. MSDS binders are strategically placed throughout the yard.
- SC-20 Vehicle and Equipment Fueling: Small equipment fueling was done only in the secondary containment area.
- SC-21 Vehicle and Equipment Cleaning: Trash was removed daily from the work trucks. No cleaning or washing was allowed in the Oak yard
- SC-22 Vehicle and Equipment Repairs: No repairs were done at the Oak yard.
- SC-31 Outdoor Container Storage: Oak yard has storage areas covered with overhead canopies.
- SC-33 Outdoor Storage of Raw Materials: No raw materials are stored at the Oak yard.
- SC-34 Waste Handling and Disposal: Paint waste was returned to the maintenance yard where it was transferred directly from the generating vehicle to secured storage containers. This was done within a proper containment area in case of any accidental spillage. These containers are clearly marked and stored until arrangements were made for a certified waste management company to remove them and transfer them to an approved facility. Any other debris was placed in a canopy covered 40 yd roll-off. Dumpsters were covered and all other trash receptacles had lids.
- SC-41 Building and Grounds Maintenance: The Oak yard was swept twice a month by a self-contained street sweeper and weekly by hand. Trash was removed daily. SC-43 Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control and lot was swept regularly.
- SC-60 Housekeeping Practices: Recycle bins, dumpsters, and cans are covered. Yard clean-up was performed by-weekly with monthly site inspections.
- SC-61 Safer Alternative Products: Not Applicable
- SC-70 Road and Street Maintenance: Not Applicable
- SC-71 Sidewalk Cleaning: Not Applicable
- SC-72 Fountain and Pools Maintenance: Not Applicable
- SC-73 Landscape Maintenance: Not Applicable

- SC-74 Drainage System Maintenance: Debris was captured prior to entry into the vegetated swale.

PARKS MAINTENANCE YARD

- Storm Water Pollution Control Plan (SWPPP description): Site specific SWPPPs were developed and implemented at each of these sites.
- SC-11 Spill Prevention, Control, and Clean-up; Spill kits are located on-site; drip pans were placed under all equipment kept on-site; spill kits are located in all vehicles; spill response plan is updated and kept on-site.
- SC-20 Vehicle and Equipment Fueling: No vehicle or equipment fueling was performed on-site.
- SC-21 Vehicle and Equipment Cleaning: Most equipment was dry-cleaned in designated areas located away from storm drains; where wet cleaning was necessary, it was performed over pervious surfaces in a manner that allowed all water to percolate, generating no runoff to the storm drain system.
- SC-22 Vehicle and Equipment Repair: All equipment was repaired in designated areas away from storm drains; no vehicle repair was performed on-site.
- SC-31 Outdoor Container Storage: All chemical products are kept in locked storage bins with overhead coverage and containment.
- SC-33 Outdoor Storage of Raw Materials: All bagged materials are stored on skids (pallets) and covered with canopies; canopies are also used to cover scrap metals and equipment.
- SC-34 Waste Handling and Disposal: All waste containers are covered.
- SC-41 Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 Housekeeping Practices: Weekly yard clean-up and litter removal and monthly site inspections were conducted.
- SC-61 Safer Alternative Products: IPM practices and green waste applications were in use; artificial turf and permeable surfaces were implemented where feasible; organics from tree trimming were mulched or composted and used for landscaping.
- SC-70 Road and Street Maintenance: Not applicable at yard sites.
- SC-71 Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
- SC-72 Fountains and Pools Maintenance: Not applicable at park sites.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on downtown irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.

- SC-74 Drainage System Maintenance: Storm drain inlets were maintained by City's Storm Drain Maintenance Division on an annual basis.
- SC-75 Waste Handling and Disposal: All non-recyclable waste was disposed of properly.
- Site Design - Parks Maintenance/Storage Yard drains to a pervious area allowing low flows to infiltrate into the soils instead of running into the storm drain.

4.11 Parks Facilities

4.11.1 Background

The table below lists City parks facilities that were determined to be High Priority areas based on the criteria established in Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City's JURMP. High Priority parks facilities were defined as developed park sites containing landscaping, building(s), and parking lot(s) and developed park sites within an Environmentally Sensitive Area.

Site specific BMPs implemented at each facility are listed and described below.

4.11.2 Source Characterization

The table below lists facilities on the inventory that are medium priority and includes 14 parks and recreation facilities.

Table 4.18 Parks

1	AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	6425 AMBROSIA LN
2	CADENCIA PARK	3310 CADENCIA ST
3	CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	2997 GLASGOW DR
4	CARRILLO RANCH AND PARKING LOT	5200 FLYING LC LANE
5	HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	2685 VANCOUVER STREET
6	HOLIDAY PARK AND PARKING LOTS	3200 PIO PICO DR
7	HOSP GROVE PARK AND PARKING LOT	JEFFERSON & MONROE
8	LA COSTA CANYON PARK AND PARKING LOT	3020 PUEBLA ST
9	LAGUNA RIVIERA PARK	4900 KELLY DR
10	MAGEE PARK AND PARKING LOT	258 BEECH AVE
11	MAXTON BROWN PARK	500 LAGUNA DR
12	PINE PARK AND PARKING LOT	3333 HARDING ST
13	POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	6600 HIDDEN VALLEY RD
14	STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	3420 CAMINO DE LOS COCHES

4.11.3 Site Specific BMP Requirements

Site specific BMPs listed below were implemented at Parks Facilities.

Table 4.19 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-61 Safer Alternative Products
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.11.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.18 and are described below.

- SWPPP: Aviara, Poinsettia, and Stagecoach Parks also house small maintenance yards. Because of the added potential to contribute to storm water pollution, SWPPPs were required by the City for these facilities. Poinsettia and Stagecoach have developed and fully implemented SWPPPs. Aviara is a new site and the SWPPP is currently under development.
- SC-11 Spill Prevention, Control, and Cleanup; Spills kits are located on-site; spill response plan was updated and kept on-site
- SC-20 Vehicle and Equipment Fueling: Minor equipment fueling was performed over pervious surfaces when necessary.
- SC-21 Vehicle and Equipment Cleaning: Most equipment was dry-cleaned in designated areas located away from storm drains; where wet cleaning was necessary, it was performed over pervious surfaces in a manner that allowed all water to percolate, generating no runoff to the storm drain system.
- SC-22 Vehicle and Equipment Repair: Equipment was repaired in designated areas away from storm drains; no vehicle repair was performed on-site.
- SC-31 Outdoor Container Storage: Chemical products are kept in locked storage bins with overhead coverage and containment.
- SC-33 Outdoor Storage of Raw Materials: All bagged materials are stored on skids (pallets) and covered with canopies; canopies were also used to cover scrap metals and equipment.
- SC-34 Waste Handling and Disposal: All waste containers are covered; pet waste bag dispensers and containers were provided at all parks where dogs are allowed.
- SC-41 Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the

storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.

- SC-43 Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 Housekeeping Practices: Park sites are kept clean and orderly; all debris was removed in a timely fashion and hard-scape areas were swept or blown routinely; wash water, sweepings, and sediments were disposed of properly; recyclable materials were recycled; spill response plans were reviewed as part of routine training with staff.
- SC-61 Safer Alternative Products: IPM practices and green waste applications were in use and are described below.

In conjunction with the Integrated Pest Management (IPM) program, the Parks Maintenance Division continued to utilize slow release fertilizers in an effort to reduce the frequency of applications while minimizing the potential of fertilizer runoff. In some cases, staff reduced the recommended amount of fertilizer per 1,000 square feet by 50 to minimize flush of growth on turf which in turn reduced the amount of clippings. To help monitor fertilizer applications, the Parks Maintenance Division instituted a soil testing program which defined soil properties, allowing the correct monitoring of fertilization applications for proper use and desired outcome. In accordance with the new IPM practices, pesticide and herbicide applications were performed sparingly. Staff continued to search for alternative methods to pest control that are proven to be safe and effective.

As required by the Department of Pesticide Regulation, all chemical applications were reported to the County Agriculture Department on a monthly basis. As identified in the JURMP, all applicable BMPs were implemented to address pesticide, herbicide, and fertilizers sources of pollution. Specific, BMPs implemented during FY 2008-09 include:

- **Education:** A training program for identifying and defining chemicals, proper handling, applying, storage, disposal, irrigating, and using non-synthetic alternatives was implemented. At many of the training seminars, new IPM methods were often presented for consideration by the department. All training information including BMPs were provided to personnel to keep in personalized folders for individual use. In addition, a master application manual that includes all Storm Water BMPs, training, and inspections was also prepared.

- **Non-chemical applications:** Some pest problems can be eliminated or controlled by handpicking, pruning, or high pressure spraying with water. Many pest problems can be reduced or eliminated by removing affected leaves or plant parts. During FY 2008-09, efforts were made to improve upon our IPM system in the City s Parks and Downtown Village areas. The release of lady-bird beetles at Pine Park and the Downtown Fountain areas to combat infestations of aphids have proven successful in eradicating the bugs. Other methods used to decrease the department s dependency on chemical sprays during FY 2008-09 include:

    - Increased mulching of planter beds to smother weed germination
    - Increased tilling of planter beds to kill young weed sprouts
    - The use of organic plant derivative pesticide sprays such as Safer brand Products

- The use of water to spray plants infested with giant whitefly
- The removal of dying or diseased plant material to decrease the presence of harmful organisms.

- Pesticide application was performed on an as needed basis and was performed internally or by an outside pest control contractor after diagnosis.

- **Native Vegetation:** The Parks Maintenance Division continued to explore opportunities to use native vegetation to control pests, reduce chemical application, and maintain the aesthetic values of the Parks and Downtown Village areas.

- **Schedules for Irrigation and Application** Irrigation systems were monitored and inspected on a weekly basis in an effort to minimize water loss. In addition, the use of evapo-transpiration (ET) gauges for controlling the irrigation system helped to reduce watering times based on evaporation and transpiration of moisture from plants and turf. ET gauges were installed at Poinsettia, Stagecoach, Pine, Aviara and Calavera Park. These gauges also helped staff to adjust watering times at other locations that were not connected to the gauge. During FY 2008-09, all irrigation systems were inspected weekly and repaired as necessary to prevent excess runoff. At Poinsettia, Aviara, Stagecoach and Pine Parks, synthetic turf has been installed on the soccer and sports fields, which requires no fertilization, weeding, or watering. The synthetic turf has proven to be particularly successful in eliminating the use of water for irrigation.

- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices. Refer to description of IPM practices in SC-61 above.
- SC-75 Waste Handling and Disposal: All non-recyclable waste was disposed of at appropriate landfill or transfer station.
- Site Design Desiltation basin was retrofitted at La Costa Canyon Park; pervious concrete was installed at Pine Park.

4.12 Administrative Areas

4.12.1 Background

One administrative building was determined to be a high priority facility based on its proximity to an environmentally sensitive area (ESA). This facility is the Safety Center, which includes a parking lot, police and fire department headquarters, and a skatepark.

4.12.2 Source Characterization

The only administrative building on the inventory that is a High Priority is the Safety Center.

4.12.3 Site Specific BMP Requirements

Site specific BMPs listed below were implemented at the Safety Center.

Table 4.20 Best Management Practices

SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.12.4 Program Implementation

Each of the BMPs listed above were implemented at the Safety Center and are described below.

- SC-34 Waste Handling and Disposal: Dumpsters were covered and maintained and checked frequently for leaks. Lids were kept closed at all times.
- SC-41 Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 Housekeeping Practices: Site was kept clean and orderly; all debris was removed in a timely fashion and hardscape areas were swept or blown routinely; wash water, sweepings, and sediments were disposed of properly; recyclable materials were recycled.
- SC-71 Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system ; any storm drains in proximity were protected from discharges.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-75 Waste Handling and Disposal: All non-recyclable waste was disposed of properly.

4.13 Activities

4.13.1 Background

Four municipal activities were determined to be High Priority activities based on their potential to generate pollutants. These operations occur throughout the City and are required to implement BMPs as described in the JURMP.

4.13.2 Source Characterization

The table below lists the activities on the inventory that are considered High Priority.

Table 4.21 ACTIVITIES

1	LANDSCAPE MAINTENANCE AND REPAIR	CITYWIDE
2	MS4 MAINTENANCE	CITYWIDE
3	POWER WASHING	CITYWIDE
4	SANITARY SEWER MAINTENANCE AND OPERATIONS	CITY SERVICE AREA

4.13.3 Site Specific BMP Requirements

Each of the BMPs listed were implemented for the activities listed in Table 4.21 and are described below.

Table 4.22 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-61 Safer Alternative Products
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal
SC-76 Sewer Utility Maintenance

4.13.4 Program Implementation

- SC-11 Spill Prevention, Control & Cleanup: Spill kits are kept in all vehicles. Employees were trained in spill response as applicable to their activities. Absorbents were used for spill cleanup where possible and disposed of properly.
- SC-20 Vehicle and Equipment Fueling: Minor equipment fueling was performed over pervious surfaces when necessary; larger equipment was fueled at the fleet maintenance facility (BMPs are described above for Fleet Yard).
- SC-34 Waste Handling and Disposal:
    - Landscape Maintenance: All non-recyclable waste was disposed of properly.
    - MS4 Maintenance: Trash was hauled to transfer station. Debris and other organic material were transferred and deposited at 2400 Tamarack Avenue in three concrete covered bins. The material was then tested for contaminants and disposed of properly upon receipt of permissible test results.

  - Powerwashing: All wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system ; any storm drains in proximity were protected from discharges.
  - Sewer Utility Maintenance: Waste was contained in Vactor truck tanks and disposed of properly to sanitary sewer.
- SC-41 Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-61 Safer Alternative Products: IPM practices and green waste applications were in use. These practices are described in detail above.
- SC-71 Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
- SC-73 Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 Drainage System Maintenance: A small self-contained vacuum with pressure washer was used to clean the drainage system. All material in the drain box was removed by the vacuum. Disposal of the water and material occurred using a filter sock, allowing water to be decanted into the sanitary sewer system through a permit from Encina Wastewater Authority. The solid material was taken to the Tamarack site described above. All trash was removed from the MS4, placed in 55 gallon trash bags, and placed in a 40 cubic yard roll off dumpster that is covered. The material was then transported to Palomar Transfer Station for disposal.
- SC-75 Waste Handling and Disposal: See SC-34 above.
- SC-76 Sewer Utility Maintenance: All lift stations were inspected and cleaned as needed; Vactors were checked for leaks during pre-trip inspections; all materials were discharged at Encina Wastewater Authority: solids into grit bin, liquids at head-works; recently the City has begun to implement FOG requirements as per Order 2006-003 including revision of ordinances, public outreach, and inspections of FOG generating facilities.

  The collections system maintenance schedule is designed to provide more frequent cleaning for identified trouble areas, with siphons being cleaned annually, low flow and flat lines cleaned semi-annually, and grease problem areas cleaned quarterly.

4.14 Areas and Activities Categorized as Not High Priority

4.14.1 Background

Table 4.23 lists City owned areas and activities that were determined NOT to be High Priority based on the criteria established in Order No. R9-2007-0001, Section D.3.a.(7)(a). Basic minimum BMPs were implemented at each facility listed below as per the City s JURMP.

4.14.2 Source Characterization

The Municipal Inventory found in Appendix 4.1, lists facilities that are NOT High Priority and includes 46 facilities that are administrative, small parks, medians, and water/wastewater stations that are small or out of service. These facilities are located outside of ESAs and do not generate significant pollutant loads.

4.14.3 Site Specific BMP Requirements

a. Employee Training
b. Pollution Prevention
c. Good Housekeeping
d. Spill Response and Prevention

4.14.4 Program Implementation

The BMPs listed above were implemented City wide at all facilities, including the facilities listed in Table 4.23. A description of these BMPs and how each was implemented is provided in Section 4.2.

4.15 Special Events

4.15.1 Background

The City of Carlsbad hosts a multitude of events each year from major invitational sporting events to community based festivals. A Special Event Permit and SWPPP is required for any organized event involving 50 or more people on public property that travel or assemble together, cause a change in normal traffic flow or controls, and is not within the scope of a Facility Use Permit, other land use approval, or a private property permit. The City has organized a Special Events Committee to ensure events are held in a manner that is safe and does not adversely impact the Carlsbad community or the environment.

4.15.2 Source Characterization

The City manages an updated inventory of special events. These special events have been prioritized according to type of event, number in attendance, proximity to the nearest water body, and potential threat to water quality. During FY 2008-09, there were 37 special events on the inventory, which included 19 high priority, 8 medium priority, and 10 low priority events. Based on this prioritization, the City conducted storm water compliance inspections at all of the high priority events and 3 inspections at medium priority events. During this reporting period, there were 42 inspections conducted which included 22 pre-event inspections and 20 post-event inspections. In some cases inspectors were onsite for the duration of the event. A copy of the special events inventory can be found in Appendix 4.2.

4.15.3 BMP Requirements

All special events were required to implement the designated minimum special event BMPs and comply with all applicable regulations outlined in the Carlsbad Municipal Code. Event organizers were notified of the minimum BMPs during the event planning process, in outreach materials, and at pre-event meetings. All special events, regardless of priority, submitted a SWPPP for City review and approval in FY 2008-09. The SWPPP is intended to help demonstrate that appropriate measures and BMPs are being implemented before, during, and after the event to reduce and/or prevent pollution. All SWPPPs were approved by the City prior to Special Event Permit issuance in FY 2008-09. During compliance inspections, the City confirmed that the designated and specific BMPs were implemented as required.

The City revised and updated the brochure that outlines the minimum BMPs for special events. The Best Management Practices for Special Events brochure was provided to all event promoters during the applications and planning process. A copy of the revised brochure can be found in Appendix 4.3.

4.15.4 Program Implementation

Generally, the City found that event organizers implemented BMPs as required. Event venues were well managed, BMPs were installed, and the impacted areas were cleaned as required. The City will continue to work closely with event organizers to ensure compliance.

Storm water compliance inspections include a pre-event inspection where storm water BMPs were evaluated, a during-event inspection to determine the effectiveness of BMPs, and a post-event inspection to ensure the site is properly cleaned. Compliance inspections may also include recommendations for additional measures that may be required to comply with the storm water regulations. The Special Events Inspection Form developed at the end of FY 2007-08 continued to be used throughout FY 2008-09 and is attached as Appendix 4.4.

During FY 2008-09, there were only a few minor violations noted at the 22 inspected events, all of which were immediately corrected. There were no enforcement actions for special events issued during FY 2008-09.

CMI developed two new procedures for NPDES inspections and inventory management for special events. Procedure CMI-200 defines the process for inspecting, tracking, and enforcing special events (Appendix 4.7) and procedure CMI-210 defines the process for managing and updating information on the special events inventory (Appendix 4.8). All special events are prioritized into high, medium, and low categories and inspected at the minimum frequencies required by the Permit. All inspection protocols outlined in the Permit, JURMP, CMI procedures, and the CMC were implemented as required.

4.16 Inspection of Municipal Facilities

4.16.1 Background

All High Priority municipal facilities were formally inspected during this fiscal year as required by the Permit. In addition, many departments will perform inspections of their facilities more frequently. Inspections of these facilities addressed all required inspection steps according to the Section D.3.b.(3)(a) including:

- Review of BMP implementation plans, if the site uses or is required to use such a plan;
- Review of facility monitoring data, if the site monitors its runoff;
- Coverage under the General Industrial Permit and NOI filing is checked;
- Compliance with the City of Carlsbad ordinances related to urban runoff is assessed;
- BMP implementation, maintenance, and effectiveness is assessed;
- Visual observations for non-storm water discharges, potential illicit connections, and potential discharges of pollutants in storm water are made;
- And education and training on storm water pollution prevention is performed as warranted.

4.16.2 Source Characterization

In total, there were 63 High Priority municipal areas and activities on the City s inventory list. These areas and activities included:

- Roads, Streets, Highways, and Parking facilities;
- Flood Management Projects and Flood Control Devices;
- Fire Stations;
- Recreation Facilities;
- Publicly Owned Treatment Works;
- Sanitary Sewer Faciliites;
- Water Facilities;
- Municipal Yards;
- Parks Facilities;
- Administrative Facilities; and
- Activities

the activities include: landscape maintenance and repair, power washing, MS4 maintenance, and sanitary sewer maintenance.

Refer to Appendix 4.1, the City s Municipal Inventory, for a list of the City s High Priority municipal areas and activities.

4.16.3 BMP Requirements

All areas and activities implement site specific BMP requirements as per the City s JURMP, Appendix 6-A. The preceding sections include table of site specific BMPs required to be implemented for each area and activity listed above. For facilities that are not High Priority, minimum BMPs are required that are tailored specifically to those sites and activities occurring there. Required BMPs have been implemented at all City areas and activities as described it the City s JURMP.

4.16.4 Program Implementation

A total of 63 inspections were performed at municipal facilities. Of the 63, 47 were performed by a third party contractor and 16 performed in house. Third party inspections were performed at larger, more complex facilities such as Fire Stations, Fleet Maintenance, Parks Maintenance and Operations as well as simple parks, water facilities and parking lots. Facilities that are not High Priority are inspected on an as needed basis.

All sites inspected with the exception of Maerkle Dam Reservoir, Pump, and Chlorination Station were found to be in compliance with permit requirements and City ordinances. In general, the recommendations and/or corrective actions most often involved over-irrigation, accumulation of organic debris and general housekeeping. The Maerkle Dam facility was found to be in violation of the City's Storm Water Ordinance Section 15.12.080 which requires reduction of pollutants contacting or entering storm water. At the time of the inspection, there was evidence of a prior discharge from construction related activities. All corrective actions were implemented and follow-up was conducted by City staff to ensure compliance.

All four High Priority activities were inspected during field activities and were found to be in compliance with permit requirements and City ordinances. There were no corrective actions identified for the High Priority activities.

For a listing of all corrective actions identified during inspections and their implementation, refer to Appendix 4.5. There were no violations of the Carlsbad Municipal Code observed during municipal inspections; therefore there were no necessary enforcement actions.

4.17 Notable Activities

As mentioned in the Executive Summary, the City considers a Notable Activity to be any activity above compliance requirements. Notable Activities for FY 2008-09 include:

- The continued use and addition of treatment control BMPs to prevent pollutants from reaching receiving waters.
- The completion and use of a strip drain in the driveway at the new Fire Station 6 facility which allows Fire Department employees to wash Fire vehicles onsite, with any excess wash water diverted to sewer.
- The utilization of the Reclaimed Water Facility and a training trailer which allowed the Fire Department to perform wet training and testing with no discharge to the MS4 and while conserving water.
- The Maintenance and Operations Yard and the Oak Yard parking lots were swept twice a month by a street sweeper and weekly by hand when necessary.
- The Maintenance and Operations Yard parking areas were spot cleaned for all spills weekly.
- The CMI department developed new procedures for inspecting, tracking and enforcing special events as well as managing and updating information on the special events inventory.

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City of Carlsbad s Industrial and Commercial program is intended to reduce industrial and commercial discharges of pollutants from the MS4 to the maximum extent practicable, and prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards. This section covers activities occurring from July 1, 2008 to June 30, 2009 under the Permit Order No. R9-2007-0001.

5.2 Stationary Industrial and Commercial Sites Sources Element

5.2.1 Background

Storm water inspectors identify pollution sources, assess the potential threat to water quality, and require BMP implementation to eliminate pollution sources from industrial and commercial businesses. Major industrial types in Carlsbad include high technology, multimedia and biomedical businesses, electronics, golf apparel and equipment manufacturers and several light industry parks. Stationary commercial types in Carlsbad consist of restaurants, automobile maintenance, gas stations, golf courses, and resorts, among others. Many of these industrial and commercial sites and their activities have the potential to generate significant amounts of pollutants, if proper BMPs are not implemented.

5.2.2 Source Characterization

Each year hundreds of new businesses are established in Carlsbad. During this reporting period, the Storm Water Protection Program worked closely with the Finance Department to obtain information about new businesses, including activities, SIC codes and descriptions, business types, and contact names and numbers. Each quarter the Storm Water Protection Program downloaded, sorted, mapped, and prioritized new businesses by SIC, business type and other criteria per Investigative Order No. R9-2007-0001.

These new businesses were screened, evaluated, prioritized, and then added to the inventory list and scheduled for inspection. In some cases information provided on business license applications was not correct and a pre-inspection evaluation was necessary. Pre-inspection evaluations helped determine if a business activities were subject to storm water requirements. Two types of pre-inspection source evaluations were used:

1. Reviews: During the review process, the inspector evaluated the source and activity using relevant information from other City departments, databases, or licensing programs to determine whether the site/source should be inspected and tracked by the Storm Water Protection Program. A business could be excluded during the review process if it was found that their activities are not regulated by the City or General Permit. The most common reason businesses were excluded was because of an incorrect SIC code designation or they were not a high threat to water quality.
2. Telephone Contacts: If the review failed to provide enough information, the inspector contacted the business by phone to determine its status and scheduled an inspection if necessary.

After physical inspections, reviews, or telephone contacts, any changes to a business priority or status were recorded on the Storm Water Inventory List and/or in the Permits Plus database.

New businesses were also found by referral from other agencies, field discovery, complaint investigations, or business directories.

The City s Commercial/Industrial inventory is located in Appendix 5-1.

As required by the permit, the following applicable stationary sites/sources are included in the inventory:

1. Commercial Sites/Sources:
    - Automobile repair, maintenance, fueling, or cleaning;
    - Airplane repair, maintenance, fueling, or cleaning;
    - Boat repair, maintenance, fueling, or cleaning;
    - Equipment repair, maintenance, fueling, or cleaning;
    - Automobile and other vehicle body repair or painting;
    - Automobile (or other vehicle) parking lots and storage facilities;
    - Retail or wholesale fueling;
    - Pest control services;
    - Eating or drinking establishments, including food markets;
    - Cement mixing or cutting;
    - Masonry;
    - Painting and coating;
    - Botanical or zoological gardens and exhibits;
    - Landscaping;
    - Nurseries and greenhouses;
    - Golf courses, parks and other recreational areas/facilities;
    - Cemeteries;
    - Marinas;
    - Portable sanitary services;
    - Building material retailers and storage;
    - Animal facilities

2. Industrial Sites/Sources:
    - Industrial Facilities, as defined at 40 CFR 122.26(b)(14), including those subject to the General Industrial Permit or other individual NPDES permit;
    - Operating and closed landfills;
    - Facilities subject to SARA Title III; and
    - Hazardous waste treatment, disposal, storage and recovery facilities.

3. All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired.

4. All other commercial or industrial sites/sources within or directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas. This criterion will be reviewed in FY 2009-10, to ensure that all sites/sources within an ESA are included on the current business inventory.

5. All other commercial or industrial sites/sources that the Copermittee determines may contribute a significant pollutant load to the MS4.

Potential threats to water quality at each commercial and industrial site/source were determined by evaluating a variety of site-specific factors including the criteria outlined in the Permit. Commercial and industrial facilities will continue to be reviewed annually and prioritizations will be reviewed and updated annually in conjunction with the watershed-based inventory to reflect any changes in industrial and commercial uses. Individual prioritization criteria are described below in further detail:

Prioritization Criteria: Prioritization for high threat sites and sources involved two steps: (1) initially classifying a facility as being a high threat to water quality based on site information; and (2) subsequently confirming or reclassifying the facility based on field observations and additional information. Initial classification of sites/sources was accomplished administratively using the data provided in the existing industrial and commercial inventory. The confirmation and/or reclassification, when necessary, were and will be completed following the initial inspection of each site/source. In addition to the minimum criteria listed above, the City also considered the following site/source attributes to evaluate the potential threat to water quality:

i. Type of activity (SIC code): Standard Industrial Classification (SIC) codes were used primarily to prioritize and identify specific commercial and industrial activities/sites that have the potential to contribute to storm water pollution. In addition, the NPDES General Industrial Permit (General Permit) defines specific SIC codes such that (1) coverage under the General Permit is mandatory (as defined in Categories ii, iii, vi, and viii of the General Industrial Permit) or (2) coverage under the General Permit is conditional, required only if material, machinery, or products are exposed to storm water (as defined in Category 10 of the General Permit). Industries not listed with an SIC code were directly contacted and assigned an appropriate code based on a description of business activities.
ii. Materials used at the facility: Materials, including hazardous materials, used at industrial and commercial sites have the potential to contribute significant pollutant loads to receiving waters if transported by storm water. These materials and associated activities were considered during the prioritization process.
iii. Wastes generated: If not properly disposed of, industrial and commercial wastes have the potential to degrade receiving waters when transported by storm water. Types of wastes generated or stored onsite were considered during the prioritization process. Industrial Waste Permits issued by Encina Wastewater Authority may also be examined.
iv. Pollutant discharge potential: When evaluating a commercial or industrial site/source s potential to discharge pollutants, the inspector took into account all material handling equipment or activities, raw materials, intermediate products, final products, waste material, by-products, or industrial machinery exposed to storm water. Discharge potential was assessed during site inspections at each facility.
v. Non-storm water discharges: Authorized non-storm water discharges can contribute to water quality degradation by transporting pollutants into receiving waters. Non-storm water discharges were evaluated to determine whether they were a significant source of pollutants and whether the discharges may continue to be exempted from the prohibitions of Section B.1 of the Permit.
vi. Size of facility: Size of the facility affects the amount of runoff and pollutant loads generated from the industry. The size of a facility was taken into consideration during the threat evaluation process.

vii. Proximity to receiving water bodies: The potential for pollutant transport to sensitive receiving water bodies was evaluated by determining the proximity and sensitivity of receiving water bodies using the ESA definitions from the Permit.

viii. Sensitivity of receiving water bodies: All facilities directly discharging to or within 200 feet of the ESA s listed above were considered high priority. This criterion will be reviewed in FY 2009-10, to ensure that all sites/sources within an ESA are included on the current business inventory.

ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit: A listing of facilities located in Carlsbad that have filed a Notice of Intent (NOI) and are covered under the General Permit were classified as high priority threats to water quality.

x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability: Those facilities that were identified as Conditional (NONA and NEC filers) were evaluated using the prioritization flowchart and prioritized accordingly.

xi. Facility design: The design of a facility, including whether structural BMPs has been installed and maintained, or there are outdoor activities, was considered during the threat to water quality evaluation process.

xii. Total area of the site, area of the site where industrial or commercial activities occur, percentage of pervious surface, and area of the site exposed to rainfall and runoff was considered during the Threat to Water Quality evaluation process.

xiii. The facility s compliance history: Inspectors reviewed the compliance history of each commercial and industrial site and considered any relevant enforcement actions in determining the threat potential on activities conducted onsite.

xiv. Any other relevant factors: The City reserved the authority to consider any other relevant factors specific to the facility to utilize in the prioritization process.

5.2.3 Best Management Practice Requirements

5.2.3.1 Pollution Prevention

Pollution prevention eliminates or reduces polluted storm water runoff. Specific pollution prevention procedures and management guidelines may vary from one industrial or commercial facility to another, and the City informed these facilities of pollution prevention opportunities during site inspections. Nevertheless, the following pollution prevention principles applied to most industrial and commercial facilities:

- Affirmative Procurement Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

5.2.3.2 Minimum BMPs

Described below are minimum BMPs required to be implemented, during this reporting period, by stationary commercial and industrial facilities, as applicable:

1. Good housekeeping

   Specifically stationary facilities are required to:

   - Protect materials and products that could potentially pollute storm water from rain, run-on, runoff, and wind dispersal by storing them indoors or covering them, and providing them with secondary containment as needed. For industries with conditional SIC codes, moving stored materials indoors may allow an exemption from the General Permit requirements.
   - Use dry cleanup methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible) instead of using water hose or pressure washing system to conduct washing or cleaning activities.
   - Sweep up around dumpsters and other areas to prevent trash and debris from accumulating. Dumpsters must be kept closed when not in use. All trash must be kept in appropriate sized containers until it can be hauled away. When inspecting solid waste collection areas, inspectors will note if recyclable materials (cardboard, green waste, etc.) are placed in dumpsters.

2. Preventive maintenance

   Preventive maintenance includes the regular inspection and maintenance of storm water structures (drains, catch basins, etc.) as well as other facility equipment and systems. Structures should be maintained in good working order and cleaned as needed to prevent discharge of pollutants into the storm water system. Facility equipment or systems should be properly maintained to prevent leaks or discharges of pollutants into the storm water system.

3. Material Storage and Handling

   This includes all procedures to minimize exposure of significant materials to storm water and to minimize the potential for spills and leaks from storage, loading, unloading and transfer of materials.

4. Employee training

   Appropriate personnel should be trained in good housekeeping, preventive maintenance, materials storage and handling, solid waste handling and recycling, and spill response as applicable to the facility. Records should be retained of employees attending storm water training sessions and the topics covered.

5. Solid waste (non-hazardous) handling and recycling

   This includes the procedures or processes to handle, store, or dispose of waste or recyclable materials. Waste disposal areas should be kept free of litter and debris and waste and recyclable receptacles must have a cover or lid to prevent the contents from being dispersed by the wind or coming in contact with storm water.

6. Spill response

   Spills and leaks can be a major contributor to storm water pollution. Facilities should identify potential locations and quantities of significant materials that may spill or leak, and should write and implement a response plan addressing spill containment,

clean up and notification procedures. Appropriate spill clean-up equipment should be readily accessible to trained spill response personnel.

7. Record keeping
   This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel. Record keeping and internal reporting represent good operating practices as they increase the efficiency of the facility and the effectiveness of BMPs.

8. Self inspection/quality assurance
   This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures should be described to ensure adequate corrective actions are taken. Quality assurance includes the procedures to ensure that all elements of any required SWPPPs or monitoring plans are adequately conducted.

BMP information was made available during inspections, in printed materials and direct mailings, on the storm water website and hotline, during presentations and at outreach events. A listing of education and outreach events held during this reporting period can be found in Section 8 of this report.

5.2.3.3 BMP and Knowledge Assessment Tools

During this reporting period, the Storm Water Protection Program continued to use the *BMP and Knowledge Assessment* to measure knowledge of storm water issues and assess the implementation of BMPs onsite. The assessment tool rated a commercial operator and site using the following criteria:

Overall Knowledge Assessment:
Inspectors ranked personnel from 1-5 per the following *Knowledge Assessment* scale:

Level 1: Individual has never heard of the storm water program, requirements, or BMPs. This individual does not know what BMPs are or understand how to implement them.

Level 2: Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.

Level 3: Individual has a general understanding of storm water issues (*I've heard something about that*), but not specific storm water requirements or BMPs required for the facility.

Level 4: Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.

Level 5: Individual demonstrated an in-depth knowledge of the storm water program and BMPs consistent with the facility's activities and operations.

Overall BMP Assessment
Inspectors ranked the facility per the following 1-5 *BMP Assessment* scale:

Level 1: An illegal discharge was noted during the inspection. Enforcement actions such as a NOV and/or citation are required.

Level 2: BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or written warning were issued.

Level 3: BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal warning was issued. A detailed inspection report or written Warning Notice may follow.

Level 4: BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices (i.e., dumpsters open, leaves in the parking lot, etc.) were noted during the inspection.

Level 5: All BMPs implemented effectively. No violations noted during the inspection.

Table 5.1: HTTWQ Facilities Rated for Each Score □ July 1, 2008 to June 30, 2009.

Rating	Knowledge Assessment (raw score)	Knowledge Assessment (□)	BMP Implementation (raw score)	BMP Implementation (□)
1	5	1.3□	19	4□
2	32	8.4□	24	5□
3	80	21□	72	14□
4	152	39.9□	157	31□
5	112	29.4□	236	46□
TOTAL	381	100□	508	100□

Table 5.1 shows the number of instances in raw score and percentage that HTTWQ businesses rated for each score, with 5 being the highest score possible. The number of *BMP Assessments* collected is usually higher than the number of *Knowledge Assessments* collected, because at some facilities, a company representative is not available to complete the *Knowledge Assessment*. BMP implementation results show that the City has been successful in ensuring that businesses implement BMPs throughout the sites at least 91□ of the time during this reporting period. The City will continue to work with businesses to not only educate them about storm water issues, but also ensure BMPs are implemented and maintained.

5.2.4 Program Implementation

5.2.4.1 Inspections

The City conducted inspections to verify BMP implementation, Permit compliance, and municipal code compliance. From July 1, 2008 to June 30, 2009, a total of 370 inspections were performed on fixed high threat to water quality facilities from a year-end inventory of 566. The inspectors performed on-site inspections at 65□ of the high threat to water quality facilities, which is greater than the permit requirement of 50□.

The City conducted scheduled, unscheduled, follow-up, and compliance inspections at commercial and industrial sites/sources at the frequencies required by the Permit. During site visits, the inspector:

a. Reviewed the SWPPP or BMP implementation plans, if the site used or was required to use such a plan;
b. Reviewed facility monitoring data, if the site monitored its runoff
c. Checked for coverage under the General Industrial Permit (Notice of Intent (NOI), Waste Discharge Identification No., or No Exposure Certification), if applicable;
d. Assessed compliance with ordinances and permits related to urban runoff;
e. Assessed BMP implementation, maintenance and effectiveness;
f. Conducted visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
g. Evaluated education and training on storm water pollution prevention, as conditions warrant.

Copies of inspection reports and correspondence are maintained by the Storm Water Protection Program. No inspections were performed by a third party.

On January 30, 2009 the City of Carlsbad also received a complaint from the RWCQB that a Bobcat machine was being used to push dirt into Cannon Lake. The report was called into the RWQCB by a nearby resident. Cannon Lake is an approximately two acre wet detention basin in the City s storm water conveyance system.

The alleged violation took place on the eastern side of Cannon Lake on an agriculture property. Upon investigation the activity was no longer taking place and no sediment was discharged into the lake. There were small piles of dirt near the edge of the lake and no immediate threat of sediment or pollutants entering the conveyance system.

The complaint was also investigated by the Engineering Department for a possible grading violation, but no violations were found because the dirt moved was part of agricultural activities. The Storm Water Department added the commercial grower to the industrial/commercial inventory. Through the inspection process the grower was required to remove the sediment piles and implement several other BMPs. The commercial grower has implemented the required BMPs and is in compliance with storm water regulations.

5.2.4.2 Enforcement

The City conducted follow-up inspections to determine compliance with corrective actions outlined in the inspection report or enforcement notices. When a storm water complaint was received about an industrial or commercial site/source or an illegal discharge was observed or suspected, the City conducted a storm water compliance inspection or investigation. If a significant and/or immediate threat to water quality was observed, appropriate actions were taken to require the responsible party to immediately cease the discharge and/or correct the situation. In judging the degree of severity, City inspectors also took into account any history of similar incidents or discharges. Table 5.2 includes a summary of businesses that received NOVs from July 1, 2008, to June 30, 2009.

Table 5.2: Summary of NOVs Issued during FY 2008-09

Business Name	SIC	Date of NOV	CMC Violations		Findings	Compliance Achieved
			Storm Water	Trash		
Lexus Carlsbad	5511	07/23/08	15.12.050 15.12.080		Prohibited discharge of wash water to MS4.	Yes
San Diego International Floral Trade Center	5193	07/23/08	15.12.080	6.08.045	Prohibited discharge of colored water to MS4. Oil leaks in parking lot. Trash and debris accumulation in receptacle area.	Yes
Ruby s Diner	5812	08/01/08	15.12.050 15.12.080 15.12.090		Prohibited discharge to MS4. Grease accumulation around bins. Debris in and around storm drains.	Yes
Plaza Camino Real	6512	09/03/08	15.12.090	6.08.040	Compactor leaking. Trash and debris in receptacle area. Grease accumulation on bin and surrounding areas. Trash and debris in and around storm drains. Improper storage of hazardous waste.	Yes
The Village Faire	6512	10/07/08	15.12.080 15.12.090	6.08.045	Evidence of outdoor washing without proper BMPs. Trash and debris in and around storm drains. Grease and trash accumulation in disposal areas.	Yes
Claim Jumper	5812	10/21/08	15.12.050 15.12.080	6.08.040	Prohibited discharge of wash water to MS4. Debris in and around storm drains.	Yes
Panda Express 393	5812	10/16/08	15.12.050 15.12.080	6.08.040	Grease and trash accumulation in disposal areas.	Yes
Lexus Carlsbad	5511	11/12/08	15.12.050 15.12.080		Prohibited discharge of wash water to MS4.	Yes
Dini s By The Sea	5812	12/09/08	15.12.050 15.12.080		Prohibited discharge from outdoor hosing discharged to MS4.	Yes
Mikko Japanese Cuisine	5812	12/18/08	15.12.080		Improper storage of cleaning chemicals and unusable equipment outdoors. Evidence of outdoor washing without BMPs.	Yes
KoKo Beach	5812	12/29/08	15.12.080	6.08.050	Improper storage of materials and equipment.	Yes
King s Fish House	5812	12/30/08	15.12.050 15.12.080		Prohibited discharge of wash water to the MS4.	Yes

Express Auto Center	7538	01/08/09	15.12.080		Improper storage of equipment and hazardous materials. Unusable materials stored on-site.	Yes
Lexus Carlsbad	5511	03/09/09	15.12.050 15.12.080		Prohibited discharge of wash water to MS4.	Yes
Vons 2142	5411	03/12/09	15.12.050 15.12.080 15.12.090		Prohibited discharge from sump pump to MS4. Trash and debris accumulation in and around loading bay.	Yes
Senor Grubby s	5812	04/08/09	15.12.080	6.08.030 6.08.090	Trash and debris accumulation not contained within receptacles. Unused equipment and materials stored outdoors. Standing water in pump vault in parking lot.	Yes

The Enforcement Response Plan continued to be used by inspectors to identify, document, and respond to storm water violations.

For this reporting period, the Storm Water Protection Program had three full-time Environmental Specialists and one part-time intern. In addition, a Senior Environmental Specialist was hired in February 2009. Environmental Specialists are continually trained on code enforcement, inspection procedures, applicable laws and regulations, and investigation techniques.

These training courses, in addition to the Enforcement Response Plan, helped the Storm Water Protection Program appropriately identify and respond to storm water violations. The City took a total of 46 enforcement actions against industrial and commercial businesses during FY 2008-09. The types and numbers of enforcement actions are listed in Table 5.3.

Table 5.3. Enforcement Actions during FY 2008-09

Action	Total
Verbal Warning	16
Written Warning	12
Notice of Violation	16
Notice to Clean	0
Cease and Desist Order	0
Administrative Citation	2
TOTAL	46

During inspections and investigations completed during this reporting period, there were no illegal discharges found. Mobile service providers were added to the inventory and required to apply for business licenses. More detailed information on complaint response and illegal discharge investigations is found in Section 7 of this report. Escalated enforcement actions were taken when necessary to achieve compliance.

5.2.4.3 Third Party Inspections

There were no third party inspections conducted on any industrial or commercial facilities during FY 2008-09.

5.3 Mobile Sources Element

5.3.1 Background

The City has participated in the development of a Regional Mobile Outreach and Education Strategy. The City will work with the Copermittees to ensure the implementation and success of this strategy. A copy of the *Regional Mobile Outreach and Education Strategy*, which includes a discussion of Carlsbad s jurisdictional efforts, can be found in the City s JURMP.

5.3.2 Source Characterization

A large percentage of businesses on the inventory list are mobile businesses, which include carpet cleaning, power washing, etc. These mobile businesses were identified, contacted and mailed appropriate BMP information. Because site inspections are not required for mobile businesses, many were reviewed by City inspectors. During the review process the inspector evaluated a commercial business using any relevant information available in other City departments, databases, or licensing programs. A business could be excluded during a review if it was found that their activities were not regulated by the City or Permit. The most common reason businesses were excluded during the review process was because of an incorrect SIC code designation.

Telephone surveys continued to be used to determine the status of certain types of mobile businesses on the inventory. In most cases, this screening procedure determined that the wrong SIC code had been applied during the business license application process. The Carlsbad Municipal Code prohibits mobile businesses from storing materials outdoors. Once confirmed, mobile businesses were mailed specific BMP information.

5.3.3 Best Management Practice Requirements

Implementing BMPs is a priority for all mobile businesses. Dry cleanup methods, diverting wash water, and covering or blocking drains are all required practices.

5.3.4 Program Implementation

Upon arrival onsite to investigate a complaint of non-compliance, City staff conducted the following activities:

- Requested stop work if discharge was entering or had potential to enter the MS4 system.
- Requested to speak to the manager of the responsible party or property owner as necessary.
- Took photos and made observations.
- Educated the responsible party or person onsite as necessary regarding the City s NPDES permit, Federal and State requirements, Carlsbad Municipal Code (CMC), and required BMPs in order to continue work.
- Enforced the CMC as necessary.
- Followed up with documentation in RFA system and with written correspondence to the responsible party with a CC to the property owner.

5.4 Notable Activities

As mentioned in the Executive Summary, the City considers a Notable Activity to be any activity above compliance requirements.

Notable Activities for the Industrial and Commercial Program during FY 2008-09 include:

- Performed 370 inspections of high threat fixed facilities from an inventory of 566. This was an inspection rate of 65 which exceeded the permit requirement of 50 .

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

This section describes the activities of the City for the reporting period for FY 2008-09 with respect to implementation of the Residential Component of the JURMP. The program is intended to: (1) reduce residential discharges of pollutants from the MS4 to the MEP, and; (2) prevent residential discharges from the MS4 from causing or contributing to a violation of water quality standards.

6.2 Source Characterization

In accordance with Order R9-2007-0001 and the City s JURMP, the City focused on all the high priority activities and areas outlined in the JURMP (March 2008). Since writing the JURMP, no amendments were made to source characterization or areas of focus.

6.3 Best Management Practice Requirements

In accordance with the City s JURMP required BMPs were implemented in residential areas. City inspectors required the following minimum BMPs (detailed in fact sheets and brochures) for all residential sources or pollution:

- Move or cover potential pollution sources from storm water contact. Protect materials that could potentially contribute to storm water pollution by storing them indoors or covering them.
- Use dry cleanup methods. Washing or cleaning activities that involve the use of a water hose or pressure washing system were required to use dry cleanup methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible).
- Residential car washing. Use soap sparingly, divert wash water to landscaped areas and pour buckets of soapy water down the sink. Never wash cars in the street or public right of way.
- Pet Waste. Clean up after pets. Use a bag to pick up waste when walking pets. Flush pet waste down the toilet or dispose of in a sealed plastic bag and deposit in the trash.
- Trash Management. All trash must be kept in appropriate sized containers until it can be hauled away. Frequently dispose of grass, debris, leaves, and other waste materials.
- Recycle, Reduce and Reuse. Recycle cans, bottles, paper and cardboard whenever possible.
- Reduce the Use of Landscape Chemicals. Decrease the use of lawn and garden care products such as pesticides, weed killers and chemical fertilizers. Consider using non-toxic pest control methods. Avoid over irrigation which washes these chemicals into the storm drain system.

6.4 Program Implementation

The following provides a discussion of the steps that were taken to require, encourage, and verify the implementation of the prescribed BMPs, and the notable activities conducted to manage urban runoff for high priority residential areas.

6.4.1 Regional Residential Education Program

The San Diego Regional Storm Water Copermittees sponsored the San Diego County Fair (Fair) in 2008 as an education and outreach activity. The sponsorship was a joint effort between the City of San Diego s Think Blue program and the regional Copermittees with each entity contributing approximately half towards the overall cost. The Fair was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental message. The Residential Sources and Outreach Workgroup (Outreach Workgroup) was responsible for overseeing sponsorship activities with the City of San Diego leading the coordination and implementation efforts.

The 2008 Fair was held June 14, 2008 through July 6, 2008, spanning two fiscal years and was included in the FY 2007-08 as well as the current FY annual reports. The attendance for the fair was estimated at 1,235,698 persons for the 21 days the event occurred. Sponsorship for the Fair included staffing an outreach booth for 11 days, in which the majority of jurisdictions provided staffing support. The City of Carlsbad provided staffing on June 21, 2008. The outreach booth served as the primary method for educating the public about watershed protection and pollution prevention. The Outreach Workgroup elected to promote Integrated Pest Management (IPM) as the primary theme and collaborated on the distribution of IPM materials in both English and Spanish. Individual jurisdictions were invited to distribute their own materials in addition to the IPM materials. The Copermittees received billing as both a Flower & Garden Show sponsor and an Enviro-Fair sponsor.

Think Blue was designated as the brand for the Copermittees during the event, and signage demarking the symbol included banners, planter box displays and recycle bid stickers, which were visible at over 500 locations at the Fair. Media exposure included TV, radio, and press releases. The sponsorship was printed in both the Fair program and included on the Fair map. Other promotions included newspaper advertisements, electronic messaging over the Jumbo Tron, website logos and links, and PA system announcements in both English and Spanish.

Think Blue, City of San Diego developed an event survey for the purposes of assessment. Over 1,200 survey cards were completed during the 11 days the booth was staffed. The questions focused on general storm water knowledge and awareness. The results were tabulated by the City of San Diego and were not available to the City of Carlsbad at the time of writing this report.

6.4.2 BMP Implementation

During FY 2008-09 the City implemented a program to reduce contaminants in urban runoff originating from existing residential areas. BMP information was made available to residents via the following:

- Storm water website and hotline
- Outreach events
- Direct mailings
- During investigations of suspected storm water violations.

Written materials (brochures, fact sheets, etc.), promotional items, and verbal explanation of BMPs were used to convey BMP information. In addition, various levels of enforcement actions were used as necessary to ensure the use of required BMPs. A listing of all education and outreach events and activities for residential audiences is addressed in Section 8 of this report. Discussion of investigations and enforcement actions for residential areas and activities are discussed in Section 6.4.5 and Section 7 of this report.

Website and Hotline

Information about water conservation, trash management, and storm water was located on one centralized web page accessed at www.carlsbadconserves.org. The Environmental Programs and Storm Water hotlines provided information about storm water, trash, and water conservation for the public. The hotline was answered by the Storm Water Protection Program during business hours and provided a detailed voice message after hours. In addition, outreach materials continued to be revised to include the Environmental Programs web page address and hotline number. During FY 2008-09 there were a total 44,944 visits, or average of over 123 hits per day to the Environmental Programs website.

Outreach Events

The City hosted or participated in several public events, which provided opportunities for residents to learn about pollution prevention and storm water BMPs. During these events residents had the opportunity to pick up printed materials, and to speak directly to storm water representatives. Table 6.1 is a summary of these events that took place during FY 2008-09.

Table 6.1: Outreach Events for Residential Community (FY 2008-09)

Event	Date	Type	Audience	Attendance
San Diego County Fair	6/21/08-07/06/08	Booth	General Public	1.2 million
Health Fair	7/12/08	Booth	General Public	500
Beach Cleanup	9/20/08	Booth	General Public	130
Citizen s Academy	10/9/08	Presentation	Carlsbad Residents	30
Aqua Hedionda Water Festival	3/21/09	Booth	General Public	850
Children s Day at The Flower Fields	3/28/09	Booth	General Public	4500
Citizen s Academy	4/2/09	Presentation	Carlsbad Residents	38
Earth Day Cleanup	4/18/09	Booth	General Public	250
Beach Cleanup	5/2/09	Booth	General Public	1000
Hosp Grove Cleanup	5/2/09	Booth	General Public	200

Direct Mailings

Table 6.2 outlines several direct mailings that were sent to Carlsbad Residents during FY 2008-09. Copies of the mailings can be found in Appendix 6.1, 6.2, 6.3, and 6.4. Table 6.2 provides a summary of direct mailings to Carlsbad Residents.

Table 6.2: Direct Mailings for Residential Community (FY 2008-09)

Date	Type	Topic	Number
Once per Quarter	News Letter Carlsbad Conserves	Storm Water BMPs	All Residents
Varies	Environmental Programs Guide	Solid Waste, Storm Water BMPS	All New Trash Customers
10/30/08	Informational Letter	Irrigation Runoff/ Storm Water BMPs	80
12/26/08	Informational Letter	Erosion Control/ Storm Water BMPs	17
3/02/09	Informational Letter	Irrigation Runoff/ Storm Water BMPs	91
3/19/09	Informational Letter	Erosion Control/ Storm water BMPs	10
6/26/09	Water Quality Report	Residential Storm water BMPs	38,000

Carlsbad Conserves, the Environmental Programs newsletter was mailed once each quarter during FY 2008-09. The newsletter informs residents of environmental issues facing Carlsbad, services provided by the City, tips of how to protect the environment, storm water BMPs, and a calendar of important dates.

The Environmental Programs Guide was sent to all new customers requesting trash service during the period during FY 2008-09. This publication offers information about proper disposal of many types of waste including trash, recycling, and household hazardous waste (HHW). Information also included ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution.

Four different informational letters were sent to a total of 198 residences, as part of complaint investigations in residential areas where inspectors found multiple possible sources of storm water pollution. Issues addressed included erosion control, irrigation runoff, and proper storm water BMPs.

Written Materials

Written materials including various brochures and fact sheets detailing storm water BMPs were distributed as necessary to residents through the avenues listed above.

Promotional Items

The Storm Water Protection Program distributed various promotional items with the storm water hotline and pollution prevention messages. The city had several new promotional items in FY 2008-09, including a book titled All the Way to the Ocean, a six pack cooler bag, recycle stickers for children, and a Recycled Bag Clip.

6.4.3 HHW, Used Oil, Bulky Items, and Environmental Programs Hotline

The City continued to operate the Household Hazardous Waste (HHW) and used oil recycling program outlined in the JURMP. During FY 2008-09 the City collected and disposed of approximately 167 tons of HHW (including recycled or diverted).

On April 18, 2009, the City sponsored a free HHW disposal day where Carlsbad residents could dispose of up to 15 gallons or 125 pounds of HHW materials. The City collected and disposed of

55,155 pounds of HHW during this event. Table 6.3 shows the types and quantities of HHW collected at the event.

Table 6.3: Items Collected During April 18, 2009 HHW Event

Type of Material	Weight In Pounds
1. Flammable & Poison	33,000
2. Acid	350
3. Base	400
4. Oxidizer	150
5. PCB-containing	0
6. Aerosol	1,600
7. Reclaimable	
a. Antifreeze	425
b. Car Batteries	1,680
c. HH Batteries	1000
d. Rechargeable Batteries	0
e. Fluorescent bulbs	880
f. Motor Oil/products	2,635
g. Oil Filters	60
h. thermostats/thermometers	5
8. Other	
a. Compressed Gas	399
b. CRT	0
c. E-Waste	11,421
d. Other	1,150
9. Asbestos	0
10. Grand Total	**55,155**

Carlsbad residents may dispose of two large bulky household items at no charge five times per year. In FY 2008-09 bulky item pick-up days were September 20, 2008, November 8, 2008, January 24, 2009, March 21, 2009 and June 20, 2009.

Residents used the Environmental Programs hotline and e-mail address to request information about the HHW program, trash, and recycling. The City s RFA system was used to track calls about Environmental Programs comments and questions from residents. During FY 2008-09 the Environmental Programs Division responded to 44 complaints/questions related to HHW, recycling, and solid waste. Table 6.3 includes a summary of these complaints.

Table 6.4 Summary of Environmental Programs Division Complaints

Issue Type Subtype	Total
HHW General Information	3
Recycling: Comment/Suggestion	1
Recycling: Complaint	5
Recycling: General Information	6
Recycling: Single Stream Request	14
Solid Waste: Complaint	5
Solid Waste: General Information	4
Solid Waste: Missed Collection	6
Total	**44**

6.4.4 Oversight of Residential Areas

The Water Conservation Specialist conducted regularly scheduled patrols of different residential areas within the City. The City was divided into 4 hydrologic areas. Patrols were conducted for a specified period for each area. Evidence of excess runoff from irrigation were investigated and on a case-by-case basis. Door hangers were left and a follow-up phone call or a site visit conducted to evaluate irrigation. When there were large areas or neighborhoods with extensive irrigation runoff mailings were conducted to educate residents of the problem.

6.4.5 Enforcement in Residential Areas

Storm water staff handled all residential complaints and subsequent enforcement actions in accordance with the City s existing procedures and Carlsbad Municipal Code. Each observed violation was documented using the RFA system.

During FY 2008-09, the Storm Water Protection Program received 195 storm water related complaints. Of those complaints, 116 occurred in residential areas. 35 of the complaints that occurred in residential areas involved mobile sources. Enforcement actions for those are outlined in the Section 7, submitted in December 2009. Seven complaints were referred for action , meaning, that the investigation or resolution of the issue did not fall under the jurisdiction of the Storm Water Protection Program. Examples include wastewater discharge or cleanup of street or storm drain. There were 33 residential complaints in which no violation was found, due to either the source not being found or the reported pollutant discharge not being found. There were 41 enforcement actions for residential complaints. Table 6.4 and Figure 6.1 show a summary of residential enforcement actions. A summary of all complaints responded to can be found in Appendix 7.3, submitted in December 2009.

Table 6.5: Summary of Residential Enforcement Actions FY 2008-09

Enforcement Action	Number
Informational Letter	15
Notice of Violation	3
Verbal Warning	21
Written Warning	2
Total	**41**

Figure 6.1: Residential Enforcement Actions FY 2008-09

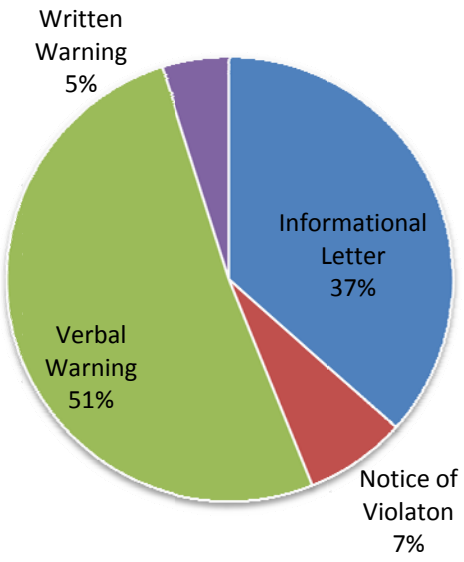

6.5 Notable Activities

As mentioned in the Executive Summary, the City considers a notable activity to be any activity above compliance requirements.

Notable activities for FY 2008-09 include:

- Stormwater and BMP information included in the annual Water Quality Report mailed to 38,000 households in the Carlsbad Municipal Water District.
- Four informational letters sent to a total of 198 households addressing storm water pollution issues in the neighborhood, in response to complaint investigations.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The City s Illicit Discharge Detection and Elimination (IDDE) will be submitted in December 2009 as approved by the Regional Board in Addendum 2, Order 2007-0001.

8.0 OUTREACH AND EDUCATION COMPONENT

8.1 Introduction

Public and municipal employee education is integral to the success of Carlsbad s urban runoff management program. The City continues to increase public awareness about pollution prevention and promote behavioral changes and environmental stewardship. The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent. The City continued to be actively involved in outreach and education efforts at the local level, the watershed level (North County Storm Water Program), and the regional level (Project Clean Water Outreach Workgroup). These efforts are further discussed in the following subsections by target audience.

8.2 Staff Training Element

Storm water training for municipal employees included general training and job specific training for designated departments and personnel. The objectives of the employee training programs are as follows:

- Promote a clear understanding of the urban runoff and water quality issues, including activities that can potentially pollute receiving water bodies.
- Identify and implement strategies for BMPs.
- Promote employee ownership of the problems and their ability to apply solutions.
- Integrate employee feedback into training and BMP implementation.

8.2.1 General Employee Training

During FY 2008-09, City employees received storm water training covering issues such as the causes of storm water pollution, how it affects the environment, and the overall structure of the storm water program. Messages related to general training may include, where applicable, the topics listed in the Permit. City staff received information and general storm water training through various communication methods including:

1. Storm Water Webpage: Employees were able to download BMP brochures and the JURMP directly from the City s website.
2. Intranet: The City s intranet was used to post messages and inform employees of various events and opportunities for participation, such as the Coastal Cleanup Day and Earth Day activities.
3. Public Works Newsletters: During FY 2008-09 every edition of Public Works newsletters featured updates on the Storm Water Protection Program and Environmental Programs. Employees were notified by e-mail when these newsletters were published and posted on the City s intranet, and hard copies were given to maintenance personnel.
4. Promotional Items: Items such as water bottles, notepads, mouse pads, cups, and pens with the hotline numbers and other pollution prevention messages continued to be distributed to employees.
5. Hotline Decals and Notepads: Car window decals and notepads with the storm water hotline were distributed for employee use in the field.
6. Paycheck Stuffer: City employees received a double-sided training fact sheet detailing urban runoff concepts, storm water BMP information, permit requirements and regulations, and other topics such as GIS mapping of the storm water conveyance system, the

expanded purchase program of clean city vehicles, and the implementation of the Waste Reduction Strategy.

7. First Mondays: During FY 2008-09, all new employees attended an orientation training called First Mondays. The training session includes general information about the City and regular Human Resources issues, as well as NPDES regulations, the City's JURMP and Storm Water Pollution Prevention BMPs applicable to municipal personnel.

8.2.2 Job Specific Training

Several job positions were identified that require activity or job specific storm water training. A summary of municipal employee training is in Appendix 8.2. Table 8.1 identifies the departments with personnel that should receive job specific training.

Table 8.1. Department and Positions for Job Specific Storm Water Training

MSA	Department	Positions
PW	Engineering, Construction Inspections	Construction Inspectors
PW	Engineering, Engineering Development Services	Associate Engineer, Assistant Engineer
PW	Environmental Programs, Storm Water	Environmental Specialists, Interns
PW	Environmental Programs, Water Conservation	Water Conservation Specialist
PW	General Services, Streets Division	Street Maintenance Workers
PW	General Services, Facilities Maintenance	Building Maintenance Workers
PW	General Services, Parks	Maintenance Workers
PW	General Services, Landscape Maintenance	Maintenance Workers
PW	General Services, Vehicle Maintenance	Equipment Technicians, Equipment Service Worker, Shop Assistant
PW	Maintenance and Operations, Utility Operations	Meter Services Workers; Sanitation System Operators; Water System Operators
PW	Maintenance and Operations, Construction/Maintenance	Utility Workers; Maintenance Workers
Com-Dev	Planning, Building, Code Enforcement	Building Inspectors, Planners, Code Enforcement,
Safety	Fire Department	Fire Fighters

8.2.3 Storm Water Committee

The Storm Water Committee continued to meet monthly to discuss and develop a calendar of storm water training activities for staff, coordinate compliance activities and documentation, create and distribute job specific storm water training information, and standardize documentation of training activities. A summary of Storm Water Committee meeting topics during FY 2008-09 can be found in Appendix 8.3.

8.2.4 Storm Water Leadership Team

In FY 2008-09, the City of Carlsbad's City Manager continued the Storm Water Leadership Team (SWLT). Monthly meetings of the SWLT were conducted and attendees included Senior Management of the City's major service areas and Directors. Agenda items covered areas of the City's compliance with Order No. R9-2007-0001.

8.2.5 Special Events Committee

Construction management and inspection staff and environmental programs staff attend the monthly Special Events Committee meeting to coordinate upcoming event operations and activities. As a standing agenda item, storm water and NPDES compliance are discussed at each meeting to ensure staff understand their role in pollution prevention.

8.2.6 Other Training

During FY 2008-09, the City continued to implement the waste reduction program. Education continued with the internal single stream recycling program. The larger recycling containers placed in public meeting areas throughout the City continue to be utilized. Seen as an effective program, the City implemented new waste reduction programs at all City facilities: double siding copies and print jobs, and reusing beverage containers. Roll out of these new programs included the development of posters, fact sheets, and a presentation to educate and inform employees about the importance and benefits of recycling, reducing and reusing.

On October 21, 2008, the City of Carlsbad s Special Events Committee hosted a Special Events Workshop for promoters and event organizers. The workshop provided event promoters and organizers with assistance and training about City parks, storm water pollution prevention, sanitation and recycling, the application process, and new NPDES requirements. Featured speakers and members from the Special Events Committee were on hand to provide the most current information about each component of the special events process and answer questions.

In addition, staff coordinated with the Finance Department to insert a Storm Water Training Fact Sheet into all employee paychecks on April 23, 2009. This fact sheet can be found in Appendix 8.1.

8.3 Educational Outreach Element

8.3.1 New Development and Construction Communities

The City continued to educate these communities during FY 2008-09 through the distribution of print materials in person and through the mail, as well as through website postings.

City inspectors worked with new businesses and construction communities during inspections and investigations to identify storm water compliance issues, detail corrective actions and assess the appropriateness of BMPs.

8.3.2 Construction Site Owners and Developers

The City of Carlsbad is committed to working with developers and contractors to ensure that BMPs are implemented at all construction sites. The *Pollution Prevention Guide for the Construction Industry* brochure continues to be distributed at pre-construction meetings. In addition, storm water and NPDES compliance were a part of the regular agenda for each of the meetings. Pre-construction meetings are required for all new development, CIP, and major construction projects in Carlsbad.

Construction and Development Services provided information and education to applicants and developers during one-on-one or small group meetings, inspections, complaint investigations, and during pre-construction meetings. They also provided sample SWPPPs and SWMPs for engineers, developers, and applicants to use as guides when preparing documents for proposed development projects. Copies of these documents and the SUSMP are available at the City s Permits Counter. The SUSMP is also available through the City s internet site.

The Storm Water Protection Program also continued to distribute the *Pollution Prevention Guide for the Construction Industry*. This brochure was developed to provide BMP and pollution prevention information related to materials storage, perimeter controls, building and staging areas, dumpsters and port-a-potty services, tracking controls, concrete trucks and pumpers, washout areas, dirt and grading, earthmoving equipment, and storm drain protection. The brochure was distributed to commercial businesses that conduct small remodeling or home improvement projects.

The City continued to conduct and participate in workshops to educate external parties, which include project applicants, developers, contractors, and property owners on the implementation of the storm water program and requirements for construction sites.

8.3.3 Commercial and Industrial Owners and Operators

The City continued to educate commercial and industrial owners and operators through various methods. This included the distribution of printed materials, participation at workshops, presentations to business community groups, direct mailings, inspections and site visits. Accomplishments are detailed below.

1. Printed Material

During FY 2008-09, the new *Best Management Practices for Mobile Service Providers* brochure continued to be provided to residents during complaint investigations related to mobile service provider discharges.

The brochure on Best Management Practices for Restaurants and Lawn & Garden Care was revised, printed and distributed through public events and public displays in FY 2008-09.

Most of the storm water protection printed materials were available for download from the City s website and Environmental Programs website. There were 44,944 annual or over 123 daily visits to the Environmental Programs web pages during this reporting period.

Various Storm Water Protection Program brochures continued to be stocked at City kiosks and display racks.

During FY 2008-09, the City continued to distribute the *Best Management Practices for Businesses – Commercial and Industrial* brochure listing and describing minimum BMPs. This brochure was distributed to businesses during inspections and by direct mail.

In June 2009, the City mailed 38,000 copies of the Carlsbad Municipal Water Districts Drinking Water Quality Report to residents, which included reference to residential Storm Water BMPs.

2. Website and Hotline

The storm water hotline continued to be listed on all printed material. Industries and commercial businesses can call the hotline to request BMP information. All brochures also continued to be available through the City website. During FY 2008-09, there were 44,944 visits to the Environmental Programs web page.

The hotline has a continuous on-hold message that provides residents with information about events in the City. Staff used the information line to inform residents of the Environmental Programs web page, telephone number, upcoming outreach events, City services, bulky item collection day, and HHW collection facilities.

New methods to track calls were implemented July 1, 2008. In FY 2008-09 there were a total of 564 calls to the storm water hotline.

3. Inspections and Site Visits

City inspectors worked with businesses, construction sites, and special event promoters during inspections and investigations to identify storm water compliance issues, detail corrective actions, and assess the appropriateness of BMPs.

8.3.4 Quasi-Government Agencies/Districts (i.e. Educational Institutions, Water Districts, Sanitation Districts, etc.)

The City continued to educate these communities during this reporting period through the distribution of printed materials in person and through the mail, as well as through website postings.

The City meets bi-monthly with agencies within the Carlsbad jurisdiction to discuss construction projects that impact various utility operations. As a standing item on the Utility Coordination Committee Meeting agenda, storm water and NPDES is discussed to ensure other agencies that work in Carlsbad understand the requirements of the Permit, JURMP, and CMC.

During this reporting period, the City inspected seven water and sanitation facilities as part of the industrial inspection program. Educational information was provided during the inspections, as well as in written inspection reports.

8.3.5 Residential Community, General Public, and School Children

Carlsbad continued its ongoing outreach to the residential community, school children, and the general public during this reporting period. This included the development and distribution of printed materials, public outreach events, presentations, published articles, videos, website access, and direct interaction with the public. Carlsbad actively pursued a comprehensive environmental education and outreach program, combining the activities of storm water, solid waste and water conservation under the umbrella of Environmental Programs. The purpose was to create a unified message, better educate the public, and allow easy access to information. These accomplishments are described below.

1. Printed Material

Since the spring of 2006, the City of Carlsbad has been offering a door-to-door Household Hazardous Waste collection program. Residents gather their HHW, and then call for an

appointment to have these items collected and disposed of properly. The City continued to distribute this brochure on Household Hazardous Waste during this reporting period.

A Household Hazardous Waste Recycling Used Motor Oil flyer was developed in FY 2008-09. This flyer contained information, tips and best management practices on how to protect our waterways and dispose of used motor oil and filters properly.

Most of the storm water protection printed materials were available for download from the City's website and Environmental Programs website. There were 44,944 visits to the Environmental Programs web pages during this reporting period.

Various Storm Water Protection Program brochures continued to be stocked at City kiosks and display racks.

2. Direct Mailings

Carlsbad Conserves, the Environmental Programs Newsletter was mailed to all residents four times during FY 2008-09. The newsletter is intended to inform residents of environmental issues facing Carlsbad, services provided by the City, tips of how to protect the environment, including storm water BMPs, and a calendar of important environmental dates (household hazardous waste disposal, bulky item pick up, etc.). Copies of all four editions can be found in Appendix 6.1.

The Carlsbad Community Services Guide was mailed three times a year to all Carlsbad households (approx. 40,000). The Fall 2008 and Spring 2009 editions included residential storm water BMPs and Environmental Programs information in full-page advertisements. A copy can be found in Appendix 8.4.

The Environmental Programs Guide was sent to all new customers requesting trash service. This publication offers information about proper disposal of many types of waste including trash, recycling, and household hazardous waste (HHW). Information also included ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution. A copy of the brochure can be found in Appendix 6.2.

3. Underserved Target Audiences, High Risk Behaviors, and Allowable Behaviors and Discharges

The educational material presented in the school education program, explained below, reaches out to the Spanish-speaking communities and Low-Socio-Economic Status families increasing knowledge and awareness with less complicated and/or confusing messages.

During this reporting period, the City of Carlsbad offered brochures in the Spanish language, providing important information on Automotive Service and Repair Shops, Lawn and Garden Care and Restaurants. These brochures were developed to raise awareness in the Spanish-speaking community about the difference between storm water conveyance systems and sanitary sewer systems, the connection of storm drains to local waterways, and common residential sources of urban run-off. The brochures include BMPs, the City's logo, website address and the City's storm water phone number. These materials are available at various City facilities, through public events and the City's storm water web page, accessed at www.carlsbadconserves.org.

Staff collaborates with the Regional Education and Residential Sources workgroup focusing on the development of a regional brand, a regional website, mass media and public relations, materials development and distribution, underserved target audience, market research and assessment tools, partnership development and regional events. Staff will continue to participate in these areas with accomplishments reported in the next annual report.

4. Classroom Education

During this reporting period, the Solana Center for Environmental Innovation (Solana Center) continued to conduct the *Classroom Watershed Program* for the City. The Solana Center used the *EnviroScape* interactive model to teach students about watershed stewardship and pollution prevention. Outreach materials and workbooks were provided to the students and teachers. Storm water fliers announcing the free presentations were distributed to teachers.

The education material presented reaches out to the Spanish-speaking communities and Low-Socio-Economic Status families increasing knowledge and awareness with less complicated and/or confusing messages.

Each classroom was given a watershed poster, handouts for ten simple ways to help protect the ocean, guides to HHW alternatives and disposal (English and Spanish), and a recycling guide for students to take home. Students were also given pledge cards to sign and take home. The pledge cards read as follows:

1) I pledge not to dump anything down the storm drain.
2) I pledge to remind my family to properly dispose of toxic materials such as paint, cleaners, and pesticides.
3) I pledge to pick up after my dog (given only to those with dogs).

Table 8.2 lists all of the schools and the number of classrooms and students that attended the watershed classroom presentation during this reporting period.

Table 8.2. Carlsbad Elementary Schools Watershed Awareness Programs

Date	Elementary School	of students
09/29/2008	Jefferson Elementary	91
10/06/2008	El Camino Creek Elementary	58
10/08/2008	El Camino Elementary	80
11/10/2008	Magnolia Elementary	42
11/25/2008	Beautiful Savior School	14
02/05/2009	Aviara Oaks Elementary	60
02/09/2009	Calavera Hills Elementary	19
02/17/2009	Aviara Oaks Elementary	19
02/17/2009	Pacific Rim Elementary	40
02/18/2009	Pacific Rim Elementary	40
02/20/2009	Aviara Oaks Elementary	15
02/24/2009	Pacific Rim Elementary	43
02/25/2009	Pacific Rim Elementary	41
02/26/2009	Hope Elementary	81
02/26/2009	Aviara Oaks School	39
03/02/2009	La costa Heights Elementary	17
03/03/2009	Calavera Hills Elementary	38
03/04/2009	Calavera Hills Elementary	36

Date	Elementary School	of students
03/04/2009	Aviara Oaks Elementary	20
03/06/2009	Calavera Hills Elementary	36
05/14/2009	La Costa Meadows Elementary	58
05/15/2009	La Costa Meadows Elementary	55
06/04/2009	Carillo Elementary	66
06/08/2009	Poinsettia Elementary	76
Total		**1084**

City Stuff is an outreach program which evolved through a partnership between the City of Carlsbad and Junior Achievement program. The program reaches over 50 3rd-grade classrooms in Carlsbad (across district lines) and information filters home to the parents/residents. Students learn how Cities are planned, operated, and what services are offered. They also learn about important businesses in a City. Out of the six lessons taught, three of the lessons are Carlsbad specific, and one lesson is focused on City departmental programs, including reference to Storm Water Pollution Prevention.

4) Advertisements

From July 01, 2008 to June 30, 2009, advertisements were published in the Carlsbad Magazine and the Community Services Guide. Table 8.3 lists the published ad and the estimated circulation.

Table 8.3. Dates of Publication of the Environmental Programs Advertisements

Ad	Month	Publication	Circulation
Environmental Programs Ad	Mar-Apr 2009	Carlsbad Magazine	80,000
Environmental Programs Ad	May-June 2009	Carlsbad Magazine	80,000
Environmental Programs Ad	May 2009	Community Service Guide	40,000

5) Website and Hotline

Most of the printed materials were available for download from the City s website and Environmental Programs website. There were 44,944 annual or over 123 daily visits to the Environmental Programs web pages during this reporting period.

6) Information Line/On-hold Messages

A continuous on-hold message provides residents with information about events in the City. Staff used the information line to inform residents of the Environmental Programs web page, telephone number, upcoming outreach events, City services, Bulky Item Collection Day, and HHW collection facilities.

7) Kiosks/Display Racks

Various Storm Water Protection Program brochures continued to be stocked at City kiosks and display racks.

8) Targeted Neighborhood Outreach Campaign

The 2009 Calendar and Community Guide, a 122-page bound calendar, was mailed during the year to all Carlsbad residents. An advertisement related to water quality was included during FY 2008-09. Approximately 47,000 were printed for distribution.

Table 8.4 includes a summary of the number of homes targeted and the information they received mailed in Fall and Winter of 2008 and Spring of 2009.

Table 8.4: Targeted Neighborhood Education.

Neighborhood Site	Number of Homes	Brochures Distributed
Rancho Carillo	80	Over-watering, landscape maintenance
Elmwood Drive	17	Erosion control, landscape maintenance
Calavera	91	Irrigation Runoff Reduction Watershed Pilot Project
Alga	10	Erosion control, landscape maintenance
Total	**198**	

9) Prompts and Promotional items

Environmental Programs distributed recycling bags to residents at the Citizen s Academy Event. The recycling bags displayed the Environmental Programs logo and phone number. The bags were also designed to encourage residents to recycle aluminum, glass, paper, and other materials.

In FY 2008-09, the City distributed 400 *Bags on Board* dispensers to residents as part of the education and outreach program. The product promotes proper pet waste disposal and the prevention of storm water pollution.

The Storm Water Protection Program continued to distribute pollution prevention message pens to Carlsbad residents and City employees. Several existing storm water, solid waste, and water conservation materials were also distributed, including oil funnels and rags, key chains, buttons, notepads, cups, Frisbees, magnets, and a variety of other products.

10) Public Events

The City hosted or participated in several public events, which provided opportunities for residents, school children, and the general public to learn about storm water pollution prevention. During most of these events, a staffed booth was set up, and residents and children had the opportunity to pick up printed materials, view an *EnviroScape* model demonstration, and speak directly with City storm water representatives. Table 8.5 includes a summary of these public events for FY 2008-09.

Table 8.5. Outreach Events for Residents, General Public, and School Children

Event	Date	Type	Audience	Attendance
Employee Health Day	7/12/2008	Booth	General Public	500
Coastal Cleanup Day	9/20/2008	Booth	General Public	130
Citizen s Academy	10/09/2008	Booth	General Public	30
Agua Hedionda Water Festival	3/21/2009	Booth	General Public	850
Children s Day at the Flower Fields	3/28/2009	Booth	General Public	4,500
Citizen s Academy	04/02/2009	Booth	Residents	38
Earth Day Cleanup	04/18/2009	Booth	General public	250
Household Hazardous Waste Event	04/25/2009	Drive-thru	Residents	501
Beach Fest Cleanup	05/02/2009	Booth	General public	1000
Hosp Grove Cleanup	05/02/2009	Booth	General public	200

11) Direct Interactions

Residents were also educated about pollution prevention and BMPs during complaint investigations. City inspectors met with residents to explain storm water regulations and pollution prevention. When a resident was not available, a door hanger and other outreach materials were left to provide information about the reported discharge. Typically, follow-up informational letters were sent to homeowners and/or contractors after an investigation. These correspondences included brochures and fact sheets about storm water. Additional information on residential complaint investigations is provided in Section 6.4.5.

9.0 PUBLIC PARTICIPATION

9.1 Introduction

This section describes the activities of the City for the FY 2008-09 reporting period with respect to the implementation of the Public Participation Component of the 2008 JURMP.

9.2 Public Meetings and Hearings

The public had numerous opportunities to attend meetings at the local, watershed and regional levels, in order to learn about the City s implementation of the Permit and to have their concerns addressed.

City Council Meetings were held in the Council Chambers at Carlsbad City Hall and were open to the public. The City of Carlsbad also offers residents and visitors the opportunity to view City Council meetings via the Internet. Regularly scheduled Carlsbad Council meetings air live on Tuesday evenings at 6 pm. Local viewers could also watch Council Meetings live on the local cable channel. Each meeting and agenda was posted online approximately two hours after the conclusion of each meeting. Past meetings are available for up to a year on the City's own archive video portal. Users can conveniently "keyword search" through the audio/video content and "jump to" meeting discussion items in real-time by using a drop down menu. Agendas from previous meetings can be accessed through the City's Document Management System.

The Planning Commission is comprised of seven members appointed by the City Council. This commission makes recommendations to the City Council regarding implementation and updating of the General Plan. When needed, they also provide recommendations to the Council regarding policy issues that affect long-range planning. They review development projects, provide recommendations to the City Council, provide reports to the City Council on the Local Facilities Management Plans, review the annual CIP for consistency with Growth Management Program, identify potential problems and opportunities facing the City, and suggest special studies when appropriate. During this reporting period the City also provided live streaming of Planning Meetings that are typically held on the first and third Wednesday of each month at 6 pm. Table 9.1 contains a list of Regularly Scheduled City Council and Planning Commission Meetings during FY 2008-09.

Table 9.1: Carlsbad Public Meetings FY 2008-09

City Council Meetings			Planning Commission Meetings		
07/01/2008	12/02/2008	04/01/2009	03/03/2008	11/05/2008	03/04/2009
07/15/2008	11/18/2008	04/07/2009	07/02/2008	11/19/2008	03/18/2009
07/22/2008	12/09/2008	04/14/2009	07/16/2008	12/03/2008	04/01/2009
08/05/2008	12/12/2008	04/21/2009	08/06/2008	12/17/2008	04/15/2009
08/12/2008	01/06/2009	04/28/2009	08/20/2008	01/07/2009	05/06/2009
09/09/2008	01/13/2009	05/05/2009	09/17/2008	01/21/2009	05/20/2009
09/16/2008	01/27/2009	05/12/2009	10/01/2008	02/04/2009	06/03/2009
09/23/2008	02/10/2009	05/19/2009	10/15/2008	02/18/2009	06/17/2009
10/07/2008	02/17/2009	06/02/2009			
10/14/2008	03/10/2009	06/09/2009			
10/21/2008	03/17/2009	06/16/2009			
11/04/2008	03/24/2009	06/23/2009			

Residents could also become representatives on various City committees. The City Clerk's office maintained a current list of City Boards, Commissions, and Committees, current vacancies, meeting dates and times, and coordinated all appointments to these positions.

In addition, the public could attend the Copermittee Management Committee Meetings and other Copermittee meetings. Notices of these meetings were available from the Project Clean Water website at www.projectcleanwater.org. Table 9.2 lists the dates of these meetings.

Table 9.2 Copermittee Public Meetings FY 2008-09

Municipal Storm Water Copermittee Meetings				
Management Committee	Outreach Workgroup	Regional Monitoring Workgroup	Coastal Storm Drain Monitoring Sub-Workgroup	Dry Weather Monitoring Sub-Workgroup
07/17/2008 01/15/2009 03/19/2009	01/19/2008 01/21/2009 03/18/2009 05/20/2009	07/22/2008 10/28/2008 11/25/2008 12/18/2008 01/27/2009 02/24/2009 03/24/2009 04/28/2009 06/10/2009 06/30/2009	10/15/2008 11/13/2008 01/14/2009 04/02/2009	10/14/2008 10/28/2008 02/18/2009 03/17/2009 04/22/2009

9.3 Feedback Mechanisms

In addition to the public participation opportunities available through public meetings and hearings, numerous other feedback mechanisms promoted public involvement.

9.3.1 Hotline and E-mail Address

The public was encouraged to provide input and feedback on the Storm Water Protection Program implementation. In addition to the public meeting opportunities detailed above, the public could call the storm water hotline to request information, provide comments, or make illegal discharge reports. The public could also send e-mails directly to the Storm Water Protection Program at stormwater carlsbadca.gov. There were several other public contact phone numbers and City e-mail addresses available for public use. Other City departments forwarded comments and questions to the Storm Water Protection Program as needed. The public accessed the Storm Water Protection Program web page through the City s website, which provided information about the storm water requirements and BMPs.

The public used the Environmental Programs hotline and e-mail address to obtain information about HHW, trash, and recycling programs. The City s Request for Action (RFA) system was used to track calls about Environmental Programs comments and questions from residents. During FY 2008-09 the Environmental Programs Division responded to 44 complaints/questions related to HHW, recycling, and solid waste.

9.3.2 Direct interaction

The City relied on interactions between City staff and the public to convey messages about storm water and pollution prevention. City staff received targeted training to increase their understanding of urban runoff issues. Staff interaction with the public also provided additional opportunities for the City to obtain direct feedback about BMPs, ordinances, and pollution prevention efforts.

9.3.3 General Outreach

Efforts through printed ads, newspapers, press releases, media interviews, PSA s, the Community Calendar, City guides, brochures, water bill stuffers, and other publications were used to keep the public informed of storm water requirements, updates, and public participation opportunities. Specific outreach efforts are discussed in Section 8 of this report.

9.3.4 Storm Drain Stenciling

Stenciling storm drain inlets with *No Dumping – Drains to Ocean* messages reminds citizens and businesses not to pollute waterways. Stencils were available upon request to businesses and residents who were interested in stenciling private storm drains. Public inlets are marked by the Streets Department.

9.3.5 Public Surveys

The BW Research Partnership, on behalf of the City, conducted an annual *Public Opinion Survey* of Carlsbad residents. The city-wide telephone survey of residents was administered from September 3 through 18, 2008 and averaged 20 minutes in length. In total, a statistically representative sample of 1,000 Carlsbad residents 18 years and older completed a telephone survey, resulting in a maximum margin of error /- 3.08 percent (at the 95 percent level of confidence) for questions answered by all 1,000 respondents. There were three questions related to storm water quality on the 2008 survey. The results of these questions are summarized in Section 11 of this report. The entire report is available for download from the City s website. Surveys helped the City understand how the public perceives storm water which can help foster better planning and management programs.

9.4 Community Events and Volunteer Efforts

The City s Community Volunteer Coordinator administered outreach and involvement programs for Carlsbad residents. This position continued to find volunteers to assist the Storm Water Protection Program with various activities, including cleanup events. The City participated in several community events held in Carlsbad and other locations across the county. These events are summarized in Table 9.3.

Table 9.3: Community Events FY 2008-09

Event	Date	Type	Audience	Attendance
San Diego County Fair	6/21/08-07/06/08	Booth	General Public	1.2 million
Health Fair	7/12/08	Booth	General Public	500
Beach Cleanup	9/20/08	Booth	General Public	130
Citizen s Academy	10/9/08	Presentation	Carlsbad Residents	30
Aqua Hedionda Water Festival	3/21/09	Booth	General Public	850
Children s Day at The Flower Fields	3/28/09	Booth	General Public	4500
Citizen s Academy	4/2/09	Presentation	Carlsbad Residents	38
Earth Day Cleanup	4/18/09	Booth	General Public	250
Beach Cleanup	5/2/09	Booth	General Public	1000
Hosp Grove Cleanup	5/2/09	Booth	General Public	200

9.5 Other Public Participation Opportunities

During FY 2008-09 the Storm Water Protection Program had an intern working on various projects, including complaint response, commercial and industrial inspections, data management, outreach and education, and coastal storm drain monitoring. She participated in inspections, water quality studies and monitoring, data entry, and investigations. Her university background and coursework added valuable insight and academic perspective to overall programs.

10.0 FISCAL ANALYSIS

10.1 Introduction

This section provides a Fiscal Analysis of the Storm Water Pollution Prevention activities in the City of Carlsbad. This methodology was developed by the Copermittees in January 2009 in accordance with sections, G, J.1 a(3)(k) and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The data provided in this section is based on actual expenditures for the period from July 1, 2008 through June 30, 2009.

10.2 General Budget Information

In FY 2002-03 and 2003-04, the City conducted a fee study to evaluate possible financing mechanisms for the Storm Water Protection Program. The new financing mechanism was detailed in the □*City of Carlsbad Storm Water Pollution Protection Program Regulatory Fee Study Report*□, dated September 12, 2003. The report recommended funding the storm water program through an increase in the City□s Solid Waste Service fees and new development processing fees. Nearly all of the pollutants discharged into the MS4 are classified as solid waste under state and local codes. Based on this information and other findings, the City implemented a *Solid Waste Service* fee increase for residential and commercial service users to fund certain Storm Water Protection Program activities. The amount of the fee increase is calculated based upon the apportioned costs to the business and residential service users and their contribution to the pollutant loading. This fee was last reviewed in June 2007, and updated to reflect current workloads. The current fee is □3.46 per month for residential customers, and 23.09□ of the base trash rate for commercial customers.

The total operating costs to fund the storm water program activities related to existing development for FY 2008-09 were budgeted at □3,025,171. This is a slight reduction from FY 2007-08, due to lower costs of implementing the Permit in year two, coupled with the downturn in the economy and the City□s efforts to reduce budgets in lieu of having to lay-off staff, without any adverse impact to compliance levels. Additionally, expenditures were expected to decrease during this year due to having a better understanding of the resources necessary to implement the NPDES permit. A summary of expenditures for the City of Carlsbad□s Storm Water Program is included as Appendix 10.1.

10.3 Fiscal Analysis Methods

The data presented here was derived from the City of Carlsbad□s financial reporting system, IFAS. Some estimates are made where specific activities are not clearly delineated in the budget.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

For FY 2008-09 ending June 30, 2009, a total of □2,561,593 was spent, with □2,282,989 spent on JURMP activities, □184,956 spent on WURMP activities, and □93,647 spent on RURMP activities. A breakdown of expenses is reported in appendix 10.1.

10.4.2 Funding Sources

The Permit requires the City to secure the resources necessary to meet the requirements of the Permit and the JURMP, and to conduct an annual fiscal analysis. The analysis must evaluate the expenditures necessary to accomplish the activities identified in the JURMP and describe the sources of the funds used to meet the expenditures. The Storm Water Protection Program is comprised of numerous program activities funded from a variety of sources. Table 10.1 summarizes the storm water protection program activities and identifies the current funding source:

Table 10.1. Summary of Program Activities and Current Funding Sources

Program Activity	Funding Source(s)
Storm Water Facility Capital Improvement Program	Developer Impact Fees, Developer Exactions, General Fund, Gas Tax, TransNet Sales Tax, Federal and State Grants
Storm Water Facility Maintenance and Operation Program including Street Sweeping, Litter Removal and Storm Event Readiness and Patrolling	Solid Waste Service Fees, General Fund
Storm Water Program Administration	Solid Waste Service Fees
Illicit Detection and Illegal Discharge Enforcement Program	Solid Waste Service Fees
Commercial/Industrial SWPPP Inspection Program	Solid Waste Service Fees (charged to commercial service customers only)
Construction Related SWPPP Review and Inspection Program	Developer Fees

11.0 EFFECTIVENESS ASSESSMENT

The effectiveness assessment is based on data for Fiscal Year 2008-09 and focuses on the assessment of three areas, as required in Section I.1.a.(1) of Order No. R9-2007-0001: significant activities, components, and an integrated assessment.

- Section 11.1 assesses the significant activities as listed in the City s JURMP. Each significant activity has an associated measure and targeted outcome. These measures relate to various levels in the range of Levels 1-4 outcome levels, assessing permit compliance, changes in knowledge and awareness, changes in behavior/BMP implementation, and load reductions.

- Section 11.2 assesses each component identified in Section I.1.a.(1)(b). The components include Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education. Each component assessment uses various levels in the range of Levels 1-4 outcome levels where measures have been developed applicable to the component.

- Section 11.3 provides an integrated assessment, combining conclusions from the individual component assessments and water quality data. At this time, it is not always feasible to link jurisdictional activities and components to changes in discharge and receiving water quality. This assessment draws conclusions where possible and may be further developed as more water quality data is collected in future years.

11.1 Significant Activity Assessment

The identification of significant activities was performed during the development of the JURMP. These significant activities targeted measurable outcomes, and results for FY 2008-09 are listed in Table 11.1. Some of the measurable goals are related to Levels 1-4 of the Effectiveness Assessment Outcomes as defined in Attachment C of Order No. R9-2007-0001.

Level 1: Compliance with Activity Based Permit Requirements

Where required during this fiscal year, all compliance based permit activities were completed successfully at or above 100 compliance. These measures are effective at determining the City s compliance with the permit.

The compliance measure for the Land Development Category is a new permit requirement that must be completed prior to the onset of the rainy season, October 1 each year. All required inspections were performed prior to October 1, 2008 for the 2008 Dry Season. For 2009 Dry Season, 2/5 of the total number of inspections were required prior to June 30, 2009. Other measures appear to be appropriate for assessing compliance this year and the City was in compliance on all counts.

Level 2: Changes in Knowledge/Awareness

Changes in knowledge and awareness of storm water requirements were assessed using two significant activities or measures as described in Table 11.1.

As a part of the business inspection program, the City implemented a rating system to assess the general knowledge of storm water requirements during inspections. This measure has been used for several years in the industrial and commercial inspections programs. For this measure, data collected during FY 2008-09 was compared to data collected during FY 2007-08. As shown in the table, the average knowledge/awareness at these businesses remains consistent this year. Slight variances from year to year may reflect the difference in assessments by the various inspectors.

The second method to assess changes in knowledge and awareness compares quiz scores that are administered before and after class room presentations to school aged children. In general, the knowledge base before the presentation is low. Quizzes administered this year showed only 6 of the children had an awareness of storm water prior to the presentation. After the presentation, the number of children aware of storm water issues rose to 89 of the children. This demonstrates an increase in storm water awareness in 83 of the students that were present during the presentations. By measuring this change, it appears that the presentations are effective at increasing the children s knowledge of storm water issues.

Level 3: Behavioral Change/BMP Implementation

The mechanism the City used to assess behavior change is the BMP inspection ratings for industrial and commercial businesses, assessed during site inspections.

As a part of the business inspection program, the City used the one to five rating system to assess BMP implementation (i.e. behavior change) at the establishments during industrial and commercial inspections. Because this measure has been used for several years data collected during FY 2008-09 was compared to data collected during FY 2007-08. As shown in Table 11.1, the average measured BMP implementation at these businesses was consistent with previous years. In general, BMP implementation remained relatively high this fiscal year. A comparison of the changes over the past four years is discussed below in Section 11.2.

Level 4: Load Reductions

There are two significant activities that provide direct load reductions of various pollutants. These include storm drain cleaning and street sweeping activities, providing estimations of the removal of trash, sediments, and debris from these facilities. These activities account for the removal of 55 tons of trash, sediment, and debris from the storm drain system and 1080 tons from street sweeping activities.

Additionally, the City uses two estimations of load reductions related to residential outreach and education activities in an attempt to quantify the amount of nutrients and bacteria prevented from entering the MS4. These estimations are dependent on the types of education and outreach utilized and relate this education to reductions in fertilizer usage (i.e. nitrogen and phosphorous reductions) and reductions in pet waste (i.e. bacteria) entering the MS4.

Table 11.1 contains relevant information pertaining to the significant activities defined in the City's JURMP. This data is used to determine if these activities are considered effective.

Table 11.1 Significant Activity Assessment Table

Component	Significant Activity	Method	Measure	Level	Targeted Outcome	Data	Result	Program Effective? YES/NO			
								Compliance	Knowledge Change	Behavior Change	Load Reduction
								Level 1	Level 2	Level 3	Level 4
Land Development	1. Post construction BMP inspection: inspections performed/inspections required.[1]	Confirmation	Performed /Required	Compliance (1)	05/01/08 to 10/01/08 *100% High Priority *50% Medium Priority	85/85 H 81/41 M	100% H 197.6% M	Yes	N/A	N/A	N/A
					05/01/09 to 06/30/08 *40% High Priority *20% Medium Priority	112/52 H 228/65 M	215.4% H 351% M	Yes	N/A	N/A	N/A
Construction	1. Were all required inspections performed during the wet season?	Confirmation	Performed /Required	Compliance (1)	100%	1855 /1415	127%	Yes	N/A	N/A	N/A
Municipal	1. Were all required facility inspections performed under Order 2007-0001?	Confirmation	Performed/ Required	Compliance (1)	100%	63/63	100%	Yes	N/A	N/A	Yes
	2. Were all required catch basin inspections performed?	Confirmation	Performed /Required	Compliance (1)	100%	3446/ 3446	100%				
	3. How much debris was removed from the MS4?	Direct Measure	Tons	Load Reduction (4)	N/A	55	N/A				
	4. How much debris was removed from street sweeping activities?	Direct Measure	Tons	Load Reduction (4)	N/A	1080	N/A				

	5. Were all special events applications reviewed for potential coverage under City requirements?	Confirmation	# Reviewed /Total	Compliance (1)	100%	37/37	100%				
Commercial-Industrial	1. Were all inspections performed as required?	Confirmation	Performed /Required	Compliance (1)	100%	370/288	128%	Yes	Yes	Yes	N/A
	2. Were knowledge scores, on average, for current fiscal year higher than previous fiscal year?	Analysis	Average Score	Knowledge Change (2)	Upward Average	3.23 FY07-08, 3.87 FY 08-09	17%				
	3. Were behavioral change/BMP implementation scores, on average, for current fiscal year higher than previous fiscal year?	Analysis	Average Score	Behavior Change (3)	Upward Average	3.73 FY07-08, 4.12 FY 08-09	9.5%				
IDDE	1. Were all urban runoff related complaints responded to and resolved?	Confirmation	# Responses /Total Complaints	Compliance (1)	100%	195/195	100%	Yes	N/A	N/A	N/A
Education	1. Were changes in knowledge demonstrated or verified (i.e. quizzes?)[2]	Analysis	Average Score Before/After	Knowledge Change (2)	%Change	6% aware in pre-test, 89% aware in post test	67%	N/A	Yes	N/A	Yes
	2. How much nutrient load reduction occurred as a result of the "Lawn Care Education" Program?	WTM	Tons	Load Reduction (4)	N/A	N=5.2, P=0.11	N/A				
	3. How much bacteria load reduction occurred as a result of the "Pet Waste Education" Program?	WTM	billion/year	Load Reduction (4)	N/A	45,946	N/A				

[1]During the Dry Season of 2008 inspections performed met and exceeded Permit requirements and were conducted in FY 2008-09. For Dry Season 2009, a targeted outcome of 40% for High Priority and 20% for Medium Priority was used since only two months of the Dry Season was included in FY 2008-09.

[2]Quiz results based on acquisition of knowledge or not, as opposed to based on a raw score.

11.2 Component Assessment

11.2.1 Development Planning

During FY 2008-09, the City has experienced measurable changes in outcome levels 1, 2, and 3 regarding compliance with the Development Planning Component.

Level 1: Compliance with Activity Based Permit Requirements

Outcome Level 1 improvements included the adoption of new procedures for acquisition and management of the City's private treatment control BMP inventory and annual inspection and verification program.

Level 2: Changes in Knowledge/Awareness

The Outcome Level 2 improvements included the ongoing raising of awareness of existing and new storm water compliance requirements among City development review staff, developers and the City's Planning Commission. Through a combination of training during weekly staff meetings, webinars and outside training courses, City staff significantly increased their knowledge and understanding of the updated SUSMP requirements, LID designs, hydromodification principles and City storm water compliance processes. Developers were seen to increase their knowledge of the updated SUSMP requirements, LID designs, and City storm water compliance requirements through revised plan review checklists, City plan review comments, the City's updated Storm Water Standards Manual and outside training courses.

Level 3: Behavioral Change/BMP Implementation

Outcome Level 3 improvements were seen in the development community. An increased number of development project submittals included acceptable LID, source control and treatment control measures with the initial submittal resulting in fewer project re-designs. The LID designs submitted by developers are showing increased sophistication, effectiveness and cover more significant portions of the project design.

11.2.2 Construction

Outcome levels 1, 3, and 4 are used to assess the effectiveness of the City's Construction Component.

Level 1: Compliance with Activity Based Permit Requirements

Overall, the Construction, Management, and Inspections Division (CM&I) was successful at maintaining full compliance with the permit requirements during FY 2008-09. Table 11.2 contains examples of permit requirements and confirmation that these requirements were met.

Table 11.2 Examples of Construction Related Permit Requirements and Compliance

Permit Requirements	Requirement	Performed
Ordinance updates to comply with order	As Necessary	Yes
Designate a set of minimum BMPs	In JURMP	Yes
Require implementation of designated minimum BMPs	All sites	Yes
Maintain and update a watershed based inventory	Monthly	Yes
Require advanced treatment	Sites determined to be an exceptional threat to water quality	Yes, none identified.
Inspections of sites meeting criteria in D.2.d.(1)	Every 2 weeks during wet season	Yes
Implement follow-up actions	As needed based on inspection results	Yes
Inspect according to requirements in Section D.2.d.(6)	Each inspection	Yes
Track number of inspections for the inventoried sites	Continuous	Yes
Develop escalating enforcement process	JURMP	Yes
Implement escalating enforcement process	As needed based on inspections	Yes
Report non-compliant sites to Regional Board	Stop Work order or higher level of enforcement	Yes

Level 3: Behavioral Change/BMP Implementation

Changes in behavior and implementation of BMPs on construction sites are evident throughout the City. In general, contractors are more aware of the BMP requirements and are more willing to cooperate with inspectors, resulting in timely and proper implementation of the required BMPs. This may be due to increased presence and knowledge from the inspectors, allowing the inspectors to better understand and convey the necessary information to the contractors, and increased enforcement actions in previous years pertaining to erosion and sediment controls.

One method used to draw comparison of BMP implementation from year to year is to track the number and types of enforcement actions, normalized by the number of inspections each year. This may allow for a comparison of overall changes in compliance levels over time. Due to new

procedures and permit requirements, comparisons cannot be made from the current fiscal year to previous years. The enforcement information for FY 2008-09 may be used as a baseline for comparison with future years. Table 11.3 contains enforcement actions for FY 2008-09.

Table 11.3 Comparison of Enforcement Actions on Construction Sites

	FY 2008-09		
Enforcement Actions	Number	Total Inspections	Percentage
Written Warning / Correction Notice	160	1858	8.61
Stop Work	3		0.16

Staff will continue to develop ideas and implement those deemed appropriate in the future to assist in assessing the changes in knowledge and awareness in the construction community.

Level 4: Load Reductions

Load reductions are estimated for the construction program using a Watershed Treatment Model (WTM) developed by USEPA. The efficiency of the erosion and sediment control program is based on a best case scenario: a sediment control program that emphasizes erosion control measures, including practices that limit clearing and grading or use of phased construction methods (Brown and Caraco, 1997), and requires advanced sediment control measures to reduce sediment runoff from leaving the site. The WTM default efficiency for erosion and sediment control is 80 .

The user assigns the discount factors related to the fraction of the erosion practices installed and the fraction installed/maintained properly. There is a range of discount factors based on the level of program implementation and oversight. For example, if there were few inspectors, with no pre-construction meetings and poor practices allowed by codes and regulations, the input value would be 0.4. If inspectors visit sites weekly and if there are education programs for inspectors and contractors, the input value is 0.9 (the highest discount value in the WTM). City inspectors prioritize each grading site using approved procedures and perform inspections and enforcement actions as required in the permit. This allows for high discount input values. Due to continued improvements made to the program in FY 2008-09, as described in detail in Section 3 of this report, a discount value of 0.8 was used.

A discount factor is also calculated based on the fraction of practices installed and maintained properly. Based on input from CMI with regular inspections, education programs, and guidance on BMP selection, a high discount value of 0.8 was used. Based on the estimated acres under construction and the discount factors applied, this results in an annual loading reduction of 12,481 pounds of nitrogen, 37,444 pounds of phosphorus, and 12,481,275 pounds of Total Suspended Solids per year (Table 11.4).

Table 11.4: Loading Reduction from Existing Erosion and Sediment Control Programs

	N (lbs/year)	P (lbs/year)	TSS (lbs/year)
Erosion and Sediment Control	12,481	37,444	12,481,275

11.2.3 Municipal

Level 1: Compliance with Activity-Based Permit Requirements

This level of effectiveness assessment is based on compliance with Activity Based Permit Requirements. The City was in compliance with all municipal requirements of Order No. R9-2007-0001 during the past fiscal year. Table 11.5 tracks some of the City's Municipal Program activity measures, which are discussed in detail in the previous report sections. Tracking of many of these activities was useful in assessing compliance with the program, but is not yet tied to long-term assessment or improved water quality.

Table 11.5: FY 2008-09 Program Activity Measures

	Permit Requirements	Requirement	Performed
	Develop Inventory of Areas and Activities	Update with JURMP	Yes
	Develop and Implement Minimum BMPs	Update with JURMP	Yes
Special Events	Require Minimum BMPs	Establish and Require Implementation	Yes
	Inspections	Inspection all Special Event venues following events	Yes
MS4 Maintenance	Catch Basins	Inspect all, clean those exceeding 33% criteria	3446 inspections, cleaned all trash and 224 exceeding 33% criteria
	Pipelines (miles)	As needed	Cleaned 0.95 miles.
	Open Channels (miles)	Inspect all and clean in a timely manner	Inspected and removed trash from 6 miles
	Desilting Basins	Inspect all, clean as needed	Inspected 3, removed all trash from 3
	Treatment Controls	Inspection and Maintenance	Annually
	High Volumes of Trash	Inspection between May 1 and September 30	Yes
	Tracking of Quantities of Waste Removed	Track Quantities	Yes
Integrated Pest Management	Implement Program	Develop and Implement	Yes
Street Sweeping	High Volume Streets (miles)	2 times/month	weekly
	Moderate Volume Streets (miles)	monthly	biweekly
	Low Volume Streets (miles)	annual	biweekly
	Parking Lots (acres)	Depends on volume, see above	biweekly

	Permit Requirements	Requirement	Performed
Infiltration from Sanitary Sewer to MS4	Preventative Maintenance of Sanitary Sewer	Perform	Yes
	Preventative Maintenance of MS4	Perform	Yes
	High Priority Facilities	Inspect all facilities	63 of 63 inspected

Based on the permit requirements presented above in Table 11.5, the municipal program remains in compliance with the requirements of Order No. R9-2007-0001. Several of the measures will continue to be developed, and improved with better tracking mechanisms and improved coordination between departments.

Level 2: Changes in Knowledge / Awareness

Changes in knowledge and awareness of storm water requirements are evident across City staff. Although not specifically measured, all staff are trained regularly on storm water compliance, as required in Section D.5 of Order No. R9-2007-0001. Appendix 8.1 contains all municipal training performed for FY 2008-09.

An assessment of the numbers of complaints reported by City staff is one measurement that may lead to a better understanding of the effects of training on municipal staff. Over the last four years, the number of complaints related to storm water has shown an increasing trend. The numbers of complaints reported by City staff has also shown an increasing trend. See Figure 11.1 below for an illustration of these data.

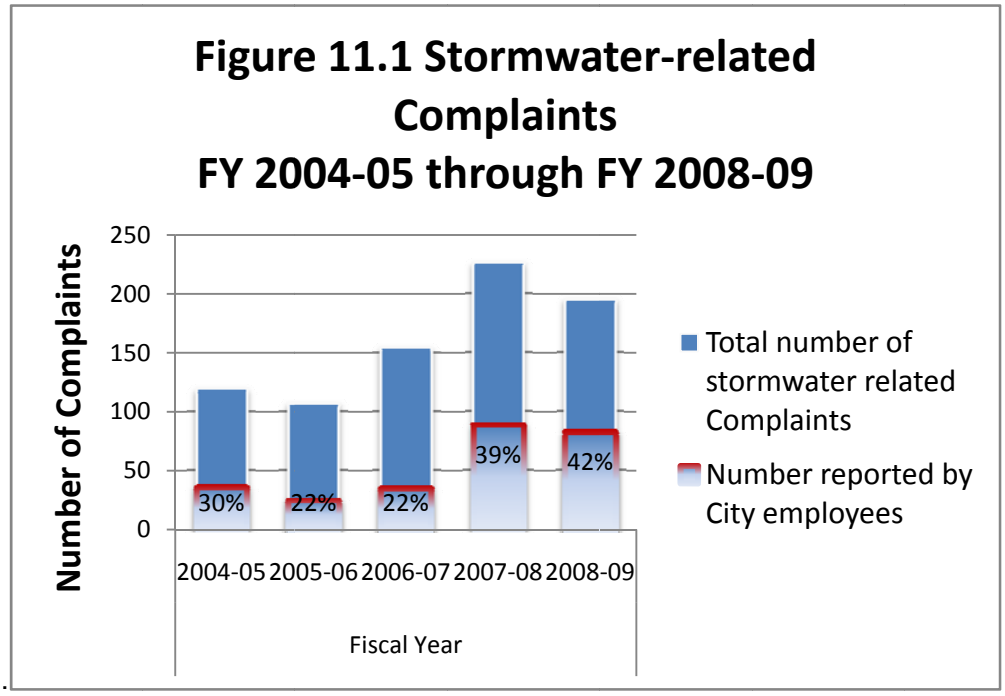

Each year for the past four years, a significant portion of the increase in complaints reported has been attributable to City staff. It is possible that the increase in complaints in general has caused the increase in staff reporting. However, assuming the number of actual storm water related incidents within the community is the same or decreasing, it is likely that more complaints are being reported by staff because of an increased awareness of storm water issues from improved, consistent training as the Storm Water Program has developed.

Level 3: Behavioral Change / BMP Implementation

One way to assess the amount of behavioral change and the actual implementation of BMPs for storm water is to look at the results of the municipal inspections. In general, all facilities have improved over the years. In past years, corrective actions have been more complicated and numerous. This year the most common corrective actions found during municipal inspections were minor and less numerous and pertained to organic debris (i.e. leaves) in the parking and storage areas, stenciling storm drains, and updating of SWPPP documents.

In addition, several departments and facilities have invested in new structural BMPs at their sites which are effective at mitigating potential pollutants at the sites. Three examples of new BMPs implemented this year include:

- Vacuum equipment was used to recover and contain wash water from vehicle washing activities occurring at the Fire Station 5.
- A pilot BMP was implemented using Drivable Grass which slows down the velocity of water from parking areas, allows rainwater to infiltrate through the BMP into a subsurface drainage system to reduce storm water flowing directly into MS4.
- Site specific SWPPPs were developed and updated for many of the high priority municipal facilities including: six fire stations, all maintenance yards, pump stations, and the Carlsbad Recycled Water Facility.
- Temporary tarps were replaced by permanent storage containers for outdoor storage at the Fleet Facility.

Level 4: Load Reductions

As described in Table 11.1, there are several methods of calculating load reductions available from data collected in the municipal program. Refer to Section 11.1 and Table 11.1 for more detail on estimated load reductions resulting from activities performed in the municipal program.

11.2.4 Industrial and Commercial

Level 1: Compliance with Activity Based Permit Requirements

As seen in Table 11.6, inspections completed during FY 2008-09 exceeded the requirements set forth by Order No. R9-2007-0001.

Table 11.6 Inspections of sites sources FY 2008-09

Order No. R9-2007-0001 (July 1, 2008 to June 30, 2009)				
High Threat to WQ	**Inventory**	**Inspected**	**Target Percentage**	**Percent Completed**
Ind/Comm Sites/Sources	566	370	50 [1]	65

[1] Based on requirement in Order No. R9-2007-0001 to inspect 50 of high priority businesses during Permit Year 1

Level 2: Changes in Knowledge / Awareness

For Knowledge Assessment, inspectors rank personnel from one to five. Refer to Section 5 of this report for details on the rating scale.

Since the implementation of the rating system, the majority of businesses have ranked at three or better for storm water knowledge and awareness. Figure 11.2 illustrates that on average the majority of the sites inspected had a relatively high knowledge of storm water and ranked greater than or equal to 3.

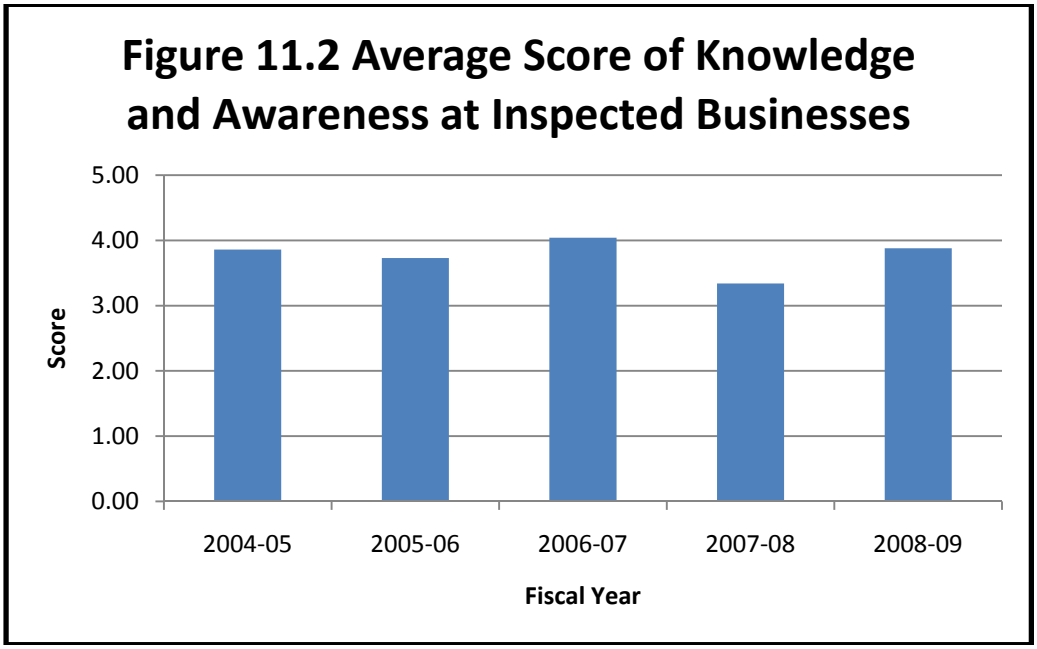

11.2.5 Residential

Level 1: Compliance with Activity-Based Requirements

Residential activities outlined in the March 2008 JURMP were completed as described in Section 6 of this report. Activities include various outreach events and activities, used oil and waste collection services, and complaint response followed by enforcement action.

Level 2: Changes in Knowledge/ Awareness

<u>City of Carlsbad Public Opinion Survey</u>
An annual public telephone survey was conducted this year by the City, as part of the *Performance Measurement Program* and *State-of-Effectiveness Report.* Carlsbad households were selected using *Random-Digit-Dial* methodology with a minimum sample size of 1,000. This survey had a margin of error of /- 3 at the 95 confidence level. Storm water pollution was addressed briefly in this survey. The City survey asked, *Have you seen or heard any information about how residents can prevent the pollution of creeks, lagoons, and the ocean?* This question was used to gauge the public s perception of ocean water pollution and was asked previously in 2003, 2006 and 2007. The results, with Don t Know or N/A factored out, are presented in Table 11.7 below.

Table 11.7: Results of Environmental Question 1

Answer:	2003 (%)	2006 (%)	2007 (%)	2008 (%)
1. Yes	58.1	64.6	61.1	59.2
2. No	41.9	35.4	38.9	40.8

This question illustrates a steady awareness of storm water and urban runoff pollution from 2003 to 2007 among residents.

An additional question was asked again this year to assess the most effective educational methods by asking, "Where do you recall seeing or hearing about ways to prevent pollution?" The top two responses were TV and newspaper, respectively comprising over 65% of the total responses. Newsletters, curb signs, and brochures were the next highest, making up over 35% of the responses. Other responses included radio, posters, website, word of mouth, schools, and public events.

Level 3: Behavioral Change/BMP Implementation

The City asked a behavioral question during the survey to those who answered affirmatively to the question, "*Have you seen or heard any information about how residents can prevent the pollution of creeks, lagoons, and the ocean?*" The 59.2% who answered question one affirmatively were asked the follow-up question, "*What things are you doing to reduce water pollution?*" Results for this question are presented in Table 11.8.

Table 11.8: Top Responses to "*What things are you doing to reduce water pollution*?"

Answer:	Percent
1. Properly disposing of hazardous waste.	27.9
2. Cleaned up trash at Beach, Roadside, Etc.	14.9
3. Using environmentally friendly soaps, pesticides, etc.	14.0
4. Used a commercial carwash.	14.9
5. Cleaned up animal waste.	4.4
6. Did nothing.	18.1
7. Other (recycling, reduced runoff)	31.3
8. Don't know.	6.1

Continued survey data should help to show if long-term behavior change has occurred. Over seventy-five percent of residents who answered question one affirmatively, consciously chose an environmentally friendly method over others in certain instances.

Level 4: Load Reduction

The primary goal of BMP implementation is to reduce pollutant loads in storm water discharges. An important emphasis of annual program assessments is to estimate the load reductions resulting from various program activities. Assuming that such reductions are properly targeted to existing or potential water quality problems, load reductions should in turn result in improvements to discharge and receiving water quality. Quantifying load reductions represents an important intermediate endpoint for assessments. The Regional Board wrote the following in October 2004:

> *Program effectiveness can be assessed by quantifying the pollutant load reductions attributable to various program activities. An effective program will compare pollutant load reductions of various program activities and implement*

those activities which result in the largest pollutant load reductions. It is expected that by implementing program activities which maximize pollutant load reductions, Copermittees will be implementing effective programs which will improve receiving water quality.

The City used the Watershed Treatment Model (WTM) as a tool for rapid assessment of effectiveness of the storm water programs. The WTM (version 3.1) was prepared by Deb Caraco of the Center for Watershed Protection for the U.S. EPA Region V - Office of Wetlands, Oceans and Watersheds. The 2008 WURMP identified bacteria, sediment, and nutrients as water quality problems. The WTM estimates the pollutant loading reductions for sediment, bacteria and nutrients for various program activities, such as residential education, erosion and sediment control programs, and street sweeping, among others. The results of some of these storm water management programs are discussed below. Complete explanations and assumptions are found in the WTM book.

Public Education

A variety of public education programs may help to reduce the concentration of nutrients, sediment and bacteria in urban streams. The model currently focuses only on a few of these, including programs to address lawn care, septic system maintenance, and pet waste. Several other residential pollution prevention programs improve water quality, but have little effect on nutrients, suspended solids, and bacteria. For example, HHW programs are effective at reducing toxics but do not have a quantifiable impact on pollutants such as suspended solids, nutrients, or bacteria.

Lawn Care: The ideal pollutant removal associated with lawn care would be achieved if all of the additional fertilizer applied to turf were eliminated. The model uses equations to estimate optimal nutrient load reduction from a lawn care program combined with a calculation of the residential lawn area. The model calculates the residential lawn area based on the City's input of residential acres taken from GIS. The user inputs the information on how the education campaign was conducted. Default values were given for the fraction of the audience willing to change behavior based on nationwide data. The City conducted lawn care education through brochure distribution, workshops and newspaper ads.

The model allows the user to input the media type, which determines the portion of the population that *remembers* the message ("Awareness of Message"). This number is largest with television (0.4), followed by newspaper (0.3), radio (0.25), billboard (0.13), brochures (0.08) and workshops (0.07). Because residents have been exposed to five of these mechanisms in FY 2007-08, the input value entered was an average for brochures, workshops and newspaper, radio, and television (0.22). This results in an annual nutrient load reduction of 6,068 pounds of nitrogen and 121 pounds of phosphorus (Table 11.9).

Table 11.9: Loading Reduction from Existing Lawn Care Education

	N (lbs/year)	P (lbs/year)
Lawn Care Education	6,068	121

Pet Waste: The Storm Water Protection Program also conducted a *Pet Waste Education Program* during FY 07-08. In the urban watershed, dogs are a significant contributor of bacteria and nutrients. Ideally, a *Pet Waste Education Program* would reduce this source to zero, with all homeowners properly disposing of waste. The model provides estimated values for the fraction of households with a dog, the fraction of owners who walk their dog, the fraction of owners who cleanup after their dog, and the fraction willing to change their behavior. As with

the lawn care education, the portion of the population that remembers the message is based on the media used for the education. This past year, the City delivered this message through brochures and the newspaper. Residents were also exposed to regional education efforts on television and radio. In addition, the City distributed free pet waste bag dispensers at local events and provided animal care facilities with these dispensers. These activities were considered similar to a workshop, so an averaged value of 0.22 was used for this calculation. This results in an annual pollutant loading removal of 3,059 pounds of nitrogen, 399 pounds of phosphorus, and 26,600 billion bacteria per year (Table 11.10).

Table 11.10: Loading Reduction from Existing Pet Waste Education Program

	N (lbs/year)	P (lbs/year)	Bacteria (billion/year)
Pet Waste Education	3,059	399	26,600

The overall assessments of these education programs show that the media significantly affected the associated pollutant removal due to the increased audience that *remembers* the message. For instance, if the City had the financial resources to use mass media (television and radio), the estimated pollutant reduction would be increased significantly. The City's annual phone survey confirms that most people recall hearing these messages through mass media. However, mass media is significantly more expensive than brochures and workshops. Large campaigns for mass media may be best conducted on a regional basis with Copermittees sharing the expense or pursuing grant funds for these expensive activities. Due to an increase in mass media educational tools used at the Regional level this year, it is expected that many of the residents in Carlsbad were exposed to these campaigns, accounting for the increase in load reductions associated with lawn care and pet waste.

11.2.6 Illicit Discharge Detection and Elimination

Effectiveness assessment for the IDDE Program will be submitted with Section 7 of this year's Annual Report to be submitted to the Regional Board by December 15, 2009.

11.2.7 Outreach and Education

Level 1: Compliance with Activity Based Permit Requirements

Table 11.11 below illustrates examples of the permit requirements in the outreach and education section and what activities the City implemented to comply with each.

Table 11.11 Outreach and Education Permit Requirements

Municipal Training	Compliance Activity
• Development Planning	Staff training specific to development planning activities 9/20/08
• Construction	Various staff training events specific to construction activities referenced in Appendix 8.2
• Inspection Staff (industrial/commercial)	Various training events specific to inspections of businesses referenced in Appendix 8.2
• Other Activities	Various activity specific training events for fire, water and waste water, parks departments
New Development and Construction	Various outreach activities as described in Section 8.3
Residential	
General Public	
School Children	

Level 2: Changes in Knowledge/Awareness

Measurably increase the knowledge/awareness of target communities:

- Municipal Departments and Personnel

  During FY 2008-09, a detailed municipal training program continued to be implemented to ensure compliance with Order No. R9-2007-0001. This training program assesses each position within the City to determine the applicable (i.e. required) training and groups the positions into separate modules to make training easier for the various departments. Staff will continue to determine ways to assess the changes in knowledge and awareness of municipal personnel throughout the permit cycle.

  In June 2007, the City implemented a new internal waste reduction strategy as a pilot program. This included the purchase and distribution of larger single stream recycling containers and a small trash can for employee work stations. There were also several new larger recycling containers placed in public meeting areas throughout the City. Seen as an effective program, the City implemented new waste reduction programs, promoted double siding copies and print jobs, and distributed reusable beverage containers at all City facilities. Rollout of these new programs included the development of posters, fact sheets and a presentation to educate and inform employees about the importance and benefits of recycling, reducing and reusing.

- Construction Site Owners and Developers

  The City conducts outreach activities specific to construction site owners and developers as described in Section 8.3. The activities occur throughout the development process.

- Industrial and Commercial Owners and Operators

  The City uses a program to assess changes in knowledge at industrial and commercial facilities based on a numeric ranking from one to five, with one representing a lack of knowledge and five representing adequate knowledge of storm water BMPs and requirements as applicable to their facility. The results are compiled each year and reported in the industrial/commercial section of the Annual Reports. Results are also presented in Figure 11.2 of this section. Over time, these site assessments can be compiled and compared.

- Residential Community, General Public, and School Children

  There are various outreach efforts in place to increase storm water knowledge and awareness for residents, the general public, and for school children. Changes in the knowledge and awareness of the residents and general public are assessed and tracked via an annual telephone survey of the citizens of Carlsbad. The survey includes several questions used to assess these changes in awareness. Survey results, tracked over the past three surveys are described above in Section 11.6.

Level 3: Changes in Behavior/BMP Implementation

Measurably change the behavior of target communities:

- Municipal Departments and Personnel

  Behavior changes are evident throughout municipal departments and personnel and can be attributed to targeted outreach and training for municipal staff. Awareness of Storm Water issues continues to increase, as evidenced by the numbers of calls to the storm water hotline by City staff. All levels of staff are continually seeking advice from the Storm Water Program on how to implement BMPs allowing them to continue to perform their necessary activities. There have also been programmatic changes in the Development Services Division, ensuring that required BMPs and submittals are provided on all projects, and are tracked and approved.

- Construction Site Owners and Developers

  Changes in behavior on construction sites and by developers are also evident throughout the development community. These changes are manifested throughout the development process, from submitting appropriate BMPs on plans and better Storm Water Management Plans, to installation and maintenance of proper BMPs during construction, to the development, installation, and maintenance of BMPs on projects after construction is complete.

- Industrial/Commercial Owners and Operators

  Industrial and commercial owners and operators are continually educated on storm water issues during inspections, mailers, and interactions during outreach events. Behavioral changes at industrial and commercial sites are most evident through assessment of proper BMP implementation during inspections and site visits. Using the rating system of one through five, with one being no implementation of BMPs and five being effective implementation of all BMPs, businesses have on average scored close to four, as shown in Figure 11.3. These results indicate that businesses owners and operators have altered and maintained behavior consistent with storm water rules and regulations. This method of assessment will continue to be used to measure behavior changes among industrial and commercial sites.

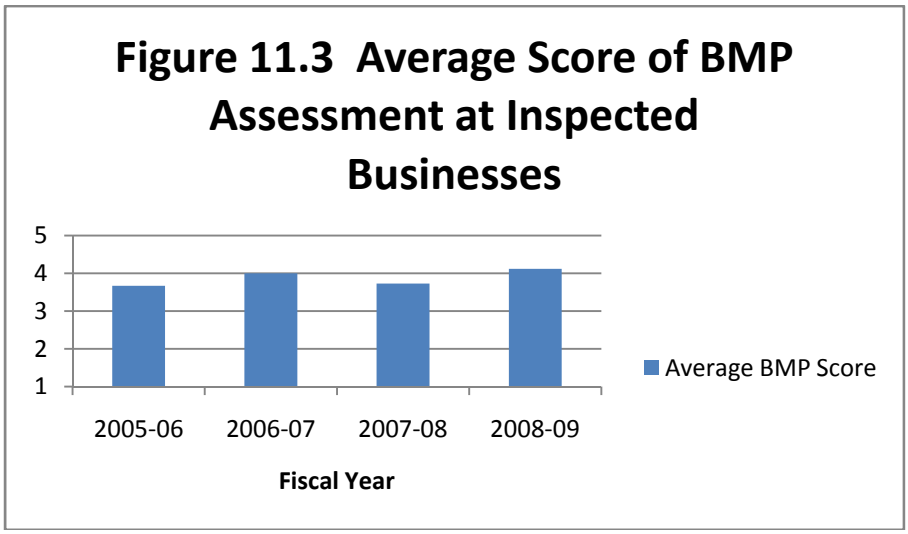

- Residential Community, General Public, and School Children

Outreach to the residential community, general public, and school children continues to be effective in conveying storm water information. At this time, it is difficult to measure the changes in BMP implementation in these target audience. Several methods have been discussed previously and will continue to be utilized. One of the best feedback mechanisms that the City has in place is its annual citizen survey. Answers to the question, What things are you doing to reduce water pollution? helps the Storm Water Program track BMP implementation over time and changes in the community, as discussed previously in the report.

The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent. The messages were delivered by various means including presentations, workshops, inspections, investigations, and outreach events, in addition to use of direct mail, the website and newspaper advertisements.

The City continued to actively promote and advertise the Storm Water Protection Program as part of Environmental Programs. This merger of programs has allowed the Storm Water Protection Program to work in conjunction with the *Used Oil Block Grant Funds* program to conduct related education and outreach. The merger also created a unified City Environmental Programs message to help foster a better understanding of the relationship between residential activities and sources of pollution.

The City conducted the annual (telephone) Public Opinion Survey in FY 2008-09, which included questions on storm water pollution prevention. The results from this survey provide important information on the public s awareness and knowledge of storm water pollution prevention issues and activities. This information can help focus future education and outreach messages and events, and is also used on a *Performance Measure* to gauge the effectiveness of the outreach and education program.

The Storm Water Protection Program and Environmental Programs staff worked with the Communications Department and the Information Technology Department to revise the web pages and provide updated information about pollution prevention.

During FY 2006-07, staff developed a new Environmental Programs education campaign entitled Think-Act targeting various environmental concerns, including storm water pollution. The program released advertisements in FY 2007-08 and they continued to be used in FY 2008-09.

Staff collaborated regionally with the Storm Water Regional Education and Residential Sources Workgroup, consisting of 21 Copermittees, throughout the year. During FY 08-09, the workgroup developed a Regional Residential Education Plan.

In addition to the development and completion of the documents, the workgroup also began to focus on the development of a regional brand, a regional website, mass media and public relations, materials development and distribution, underserved target audience, market research and assessment tools, partnership development and regional events. Staff will continue to participate in these areas with accomplishments reported in the next annual report.

11.3 Integrated Assessment

11.3.1 Changes in MS4 Discharge Water Quality

Dry Weather Field Screening and Analytical Monitoring Program

The City has conducted an annual *Dry Weather Field Screening and Analytical Monitoring Program* since 1995. The purpose of the monitoring program is to detect and eliminate illicit connections and illegal discharges to the storm drain system.

Historically, the results for field analyses indicate a decreasing trend in ammonia-nitrogen concentrations. No discernable trend is apparent for other field constituents. Bacteria levels have varied over the years, with a slight upward trend in Enterococcus counts. Diazinon and chlorpyrifos have only been detected once and oil and grease exceedances have been infrequent.

Over the course of the Dry Weather Monitoring Program, repeated testing at the same sampling sites can allow for a historical comparison of certain water quality parameters. While any trends or historical analysis of this data can be useful for current and future evaluations of potential pollutant sources to the MS4, this is not the stated purpose of the Dry Weather Monitoring Program. This program is designed to detect and eliminate illicit connections and/or acute discharges through sampling. Following a confirmed exceedance, an investigation is performed within two business days to determine and abate, if possible, the source of the exceedance.

The Dry Weather Monitoring Program report for FY 2008-09 and follow-up activities will be provided under separate cover, due to the Regional Board by December 15, 2009.

Coastal Outfall Monitoring Program

The City continued to collect samples from various storm drain outfalls as part of the *Coastal Outfall Monitoring Program*. As stated in the *Adaptive Monitoring Plan*, if water was flowing from a storm drain outfall, samples were collected and analyzed for total coliform, fecal coliform and enterococci and sample results were compared to the 95th percentile criteria. Where storm drain flow reaches the receiving water, protocol states to collect a paired receiving water sample to assess the impacts of the storm drains on the receiving waters. The receiving water samples would then be compared to Rec-1 standards to determine exceedances. Where storm drain bacteria concentrations exceeded 95th percentile criteria or receiving water samples exceeded Rec-1 objectives, follow-up sampling and/or investigations would be performed.

Recent years indicate a decrease in storm drain exceedances for all three bacterial indicators, showing possible improvements in water quality. In all cases, the flow from outfalls was intermittent, low volume and did not actually reach the receiving waters but dissipated into the sand or sediment. The City will continue to conduct the Coastal Outfall Monitoring Program and to conduct follow-up investigations as detailed in the Adaptive Plan.

11.3.2 Level 6: Changes in Receiving Water Quality

It is important to note that receiving water quality reflects considerably more than the quality of the City s MS4 discharges. In addition, receiving water quality can be adversely impacted by other events that are not under the control of the City, such as other permitted NPDES discharges, wildlife (impacting bacteria levels), atmospheric deposition, and other events and activities.

Watershed Receiving Water Additional Study

As part of the Carlsbad Watershed WURMP activities, the City conducted an Additional Study from 2003-2008 in four separate hydrologic areas in Buena Vista Creek, Agua Hedionda Creek, Encinas Creek and San Marcos Creek.

The program was performed concurrently with the Dry Weather Monitoring Program, using the same test methods and quality assurance/quality control measures. At each of the creek sites, the field crew measured flow rates, conducted field testing, and collected water samples for laboratory analyses. Field screening included testing for: temperature, pH, specific conductance, turbidity, ammonia-nitrogen, nitrate-nitrogen, orthophosphate-phosphorus, surfactants (MBAS). Water samples were collected and submitted for laboratory analysis for the following constituents: dissolved metals (cadmium, copper, lead, zinc), total hardness, total coliform, fecal coliform, enterococcus, diazinon, chlorpyrifos, oil and grease.

A brief summary is presented below:

- From 2003-08, turbidity levels in Buena Vista Creek and San Marcos Creek have showed statistically significant decreasing trends.
- Aside from the trends in turbidity, no other statistically significant trends have been observed.
- Orthophosphate-phosphorus measurements have been higher in Encinas Creek in recent years, but no statistically significant trend was observed. Orthophosphate-phosphorus levels have been relatively constant at other sites throughout the study.
- Nitrate-nitrogen levels have been relatively constant over the course of the study. No trend was observed for nitrate-nitrogen concentrations at any of the sites.

- Total coliform levels have been lower in recent years compared to the earlier years of the study.
- Fecal coliform and Enterococcus counts were highly variable, with standard deviations typically close to or above the mean and the median.
- Diazinon, chlorpyrifos, and oil and grease have not been detected since 2003. Dissolved lead and cadmium were not detected during the program, and dissolved copper and zinc were occasionally detected but always at low levels.

Overall, water quality in these creeks appears to be within both Basin Plan water quality objectives and dry weather action levels for the constituents monitored in this additional study. Other water chemistry constituents in the creeks appear to be within standards.

Coastal Outfall Monitoring Program Receiving Waters

During FY 2008-09, there were no samples collected in the receiving waters as part of the Coastal Outfall Monitoring Program, since no storm drain outfall discharges reached the receiving water.

11.3.3 Overall Assessment

Program implementation in areas of construction, residential, MS4 maintenance, and street sweeping are properly targeted for protection of and improvement of water quality, as evidenced by direct load reductions in these programs.

Other program implementation in areas of industrial and commercial inspections, municipal, residential, construction, and outreach and education appear to be properly targeted for the protection of and improvement of water quality, as evidenced by changes in knowledge and awareness and in behavior.

In addition, the City has had a steady revenue source to fund the Storm Water Protection Program over the past year. Adjustments to the Solid Waste Fee funding mechanism for Storm Water-related programs were made last year to ensure adequate funding for anticipated programs over the next fiscal year. City Staff will continue to monitor revenue and expenditures to determine if further adjustments are needed in FY 2009-10.

In FY 2008-09, the City also updated and restructured the development processing fees for the plan review and inspection of Construction Storm Water Pollution Prevention Plans and post-construction Storm Water Management Plans.

12.0 SPECIAL INVESTIGATIONS

12.1 Introduction

This section summarizes two special investigations conducted by the City of Carlsbad in FY 2008-09.

12.2 Special Investigations

Lagoon TMDL Investigative Order

The City of Carlsbad continued to participate in the San Diego Coastal Lagoon TMDL Monitoring Program that is described in San Diego Coastal Lagoons Monitoring Workplan (Mclauglin et al, June 2008). Results and conclusions of the monitoring program will be in the final report, written by Southern California Coastal Research Project, expected to be completed in the third quarter of 2010.

Watershed Receiving Water Additional Study

As part of the Carlsbad Watershed WURMP activities, the City conducted an Additional Study from 2003-2008 in four separate hydrologic areas in Buena Vista Creek, Agua Hedionda Creek, Encinas Creek and San Marcos Creek.

The program was performed concurrently with the Dry Weather Monitoring Program, using the same test methods and quality assurance/quality control measures. At each of the creek sites, the field crew measured flow rates, conducted field testing, and collected water samples for laboratory analyses. Field screening included testing for: temperature, pH, specific conductance, turbidity, ammonia-nitrogen, nitrate-nitrogen, orthophosphate-phosphorus, surfactants (MBAS). Water samples were collected and submitted for laboratory analysis for the following constituents: dissolved metals (cadmium, copper, lead, zinc), total hardness, total coliform, fecal coliform, enterococcus, diazinon, chlorpyrifos, oil and grease.

A brief summary is presented below:

- From 2003-08, turbidity levels in Buena Vista Creek and San Marcos Creek have showed statistically significant decreasing trends.
- Aside from the trends in turbidity, no other statistically significant trends have been observed.
- Orthophosphate-phosphorus measurements have been higher in Encinas Creek in recent years, but no statistically significant trend was observed. Orthophosphate-phosphorus levels have been relatively constant at other sites throughout the study.
- Nitrate-nitrogen levels have been relatively constant over the course of the study. No trend was observed for nitrate-nitrogen concentrations at any of the sites.
- Total coliform levels have been lower in recent years compared to the earlier years of the study.
- Fecal coliform and Enterococcus counts were highly variable, with standard deviations typically close to or above the mean and the median.
- Diazinon, chlorpyrifos, and oil and grease have not been detected since 2003. Dissolved lead and cadmium were not detected during the program, and dissolved copper and zinc were occasionally detected but always at low levels.

Overall, water quality in these creeks appears to be within both Basin Plan water quality objectives and dry weather action levels for the constituents monitored in this additional study. Other water chemistry constituents in the creeks appear to be within standards.

13.0 NON-EMERGENCY FIRE-FIGHTING

13.1 Introduction

The Carlsbad Fire Department (CFD) has developed the Non-Emergency Fire Fighting Program to meet the requirements of Order No. R9-2007-0001, as written in the City s 2008 JURMP. This section describes the City s program to reduce pollutants from non-emergency fire fighting flows (i.e., flows from controlled or practice blazes and maintenance activities) conducted in FY 2008-09 from July 1, 2008 to June 30, 2009.

13.2 Overall Program Definition

The CFD is a dedicated team of professionals whose mission is to enhance the quality of life in our community by delivering exceptional services in safeguarding lives, property and the environment. By default, the definition of non-emergency fire-fighting flows are flows generated by the Fire Department other than emergency situations. The duration of an emergency exists from alarm notification until, in the opinion of the Incident Commander, the emergency has concluded and equipment is returned to service. Outside of this duration of time, Fire Department flows are considered non-emergency.

13.3 BMP Implementation

In order to reduce pollutant discharges from non-emergency fire-fighting flows, the City of Carlsbad s Fire Department has implemented several BMPs. During this reporting period, the CFD maintained a Storm Water Manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water. The BMPs incorporated at Fire Stations are listed below:

Pollution Prevention

- Storm Water Manuals were developed for each station which include SWPPPs with site maps, inspection reports, facility specific spill response procedures, training records, and department policies. Training on storm water and spill response was provided regularly.
- Dry cleanup methods were used to reduce water use. The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations. Awareness was heightened at fire scenes to minimize the potential for excessive water flow.
- Materials were recycled where possible.
- Spill Prevention, Control, and Cleanup: Spill response equipment and materials are clearly identified and staged in accessible locations at each station. Awareness was heightened at incident scenes to contain potential discharges (once the scene had been stabilized) to prevent pollutants from entering the MS4. The Department continued implementation of the City s spill response procedure for incidents that occur on City streets. Absorbent materials are kept on all engines and at all the stations. The spill response plan is to apply absorbent, sweep material, place in bags, and remove from site for proper disposal.
- Vehicle and Equipment Cleaning: The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Vacuum equipment was purchased to recover and contain all wash water from washing activities occurring at the Fire Stations. Fire Station 5 currently has a pressure washer for

vehicle and equipment cleaning to minimize the amount of water being used. Five more pressure washers have been approved and purchased for the other five fire stations. Fire Station 6 is equipped with a strip drain in the driveway which allows Fire Department employees to wash Fire vehicles onsite, with any excess wash water diverted to sewer.

- Waste Handling and Disposal: Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter. Recycling was implemented where possible; bins were provided.
- Parking/Storage Area Maintenance: Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations.
- Housekeeping Practices: Fire stations were kept clean and orderly. Wash water was disposed of properly. Sweeping material was disposed of properly.
- Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever possible; pesticides, herbicides, and fertilizers are stored inside and used sparingly in accordance with required application practices.
-

13.4 Training and Education

The CFD continued to communicate with other City departments to improve coordination and education with regards to storm water. The CFD s Storm Water Committee met quarterly to address new and ongoing storm water topics and how they relate to the responsibilities of the Fire Department, and included personnel from each Fire Department rank. Other activities CFD participated in are as follows:

- A representative from the Fire Department attended and participated in the City s Storm Water Committee meetings as available.
- The CFD worked closely with the Storm Water Protection Program to conduct a series of meetings to review BMP implementation and perform one-on-one training;
- The City s Reclaimed Water Facility continued to be utilized for fire engineer training and testing. A training trailer facilitated engineer operations, pump testing, and other wet training opportunities. The Facility allowed for wet training and testing opportunities while ensuring that no water is discharged to the MS4;
- The CFD conducted training and testing at other fire agencies and training facilities which recycle the water that it is being discharged (i.e. Rancho Sante Fe and San Marcos Fire Departments). Suitable locations were selected to provide wet training opportunities for personnel, while ensuring that appropriate BMPs were in place to protect the storm drains and eliminate discharges to the MS4. These sites were generally located on pervious surfaces with no potential for discharge to the storm drain system;
- The CFD explored CIP opportunities for potential funding for permanent structural BMPs at the fire stations to serve wash areas;
- The CFD worked extensively with the design and construction committee for new fire stations to ensure that storm water requirements were 1) addressed early in the process and 2) met during and after construction.
- The CFD continued current annual training levels to ensure that all CFD personnel were versed in storm water as it relates to fire stations and fire fighting activities.

13.5 Fire Prevention Program

Fire prevention is itself a Best Management Practice (BMP). During this reporting period, fire prevention activities included those activities not directly associated with emergency scene operations, post fire scene or mop-up operations.

Perhaps the most effective way to eliminate water runoff from fires is to eliminate or reduce the magnitude of fires. The CFD has shown that an aggressive Fire Prevention Program has a significant impact on the number and magnitude of fires. Procedures or actions that lead to early fire detection/notification, automatic suppression, confinement, or enhanced suppression capabilities can reduce or control fires and ultimately reduce water runoff. The installation and maintenance of these procedures, devices, or features can significantly reduce potential flows in the event of an emergency.

An example of this type of prevention was weed abatement which included the encouragement of mowing. When mowing was not practical for perimeter breaks, and after considering topography, roughing the slope in a manner that would not increase soil or sediment releases was utilized, such as disking.

The City of Carlsbad continued its Fire Prevention Program during this reporting period.

14.0 JURMP REVISIONS

The City's 2008 JURMP was developed in response to the issuance of Order No. R9-2007-0001. The City began implementing the 2008 JURMP on March 24, 2008 as required under the new permit.

There were a few minor changes to the City's 2008 JURMP during FY 2008-09 and they are discussed below.

As stated in the Introduction of this JURMP Annual Report, the City of Carlsbad is now a Charter City as opposed to a General Law City as reported in the Introduction of the JURMP.

In Section 2 of this Annual Report, the Treatment Control BMP inventory was updated in accordance with the Permit.

In Section 3 of this JURMP Annual Report, changes were made to the Construction program including updating the construction site inspection inventory, creating a new procedure for Inventory Construction Site Prioritization, and revising the Construction Inspection Form.

In Section 4 of this Annual Report, changes were made to the Special Events Program. New procedures for Inspections and Inventory Management were implemented this fiscal year.

The City's Municipal inventory was updated in accordance with the Permit and the City's procedures. The updated inventory is contained in Section 4 of this Annual Report.

In Section 5 of this Annual Report, the Industrial/Commercial inventory was updated in accordance with the Permit and the City's procedures. The updated inventory is contained in Section 5 of the JURMP Annual Report.

15.0 CONCLUSIONS AND RECOMMENDATIONS

15.1 Overview

From July 1, 2008 to June 30, 2009, the City continued to implement Permit Order No. R9-2007-0001. This section of the JURMP Annual Report describes activities that the City undertook to reduce discharges of pollutants and urban runoff flow to the MS4 to the maximum extent practicable. It also provides an overall account of the activities conducted and the programs implemented to address the new Permit requirements for major components: Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education.

Several highlights are listed below, including specific discussion of activities conducted per Permit requirements, as well as those that exceeded requirements and are considered notable activities. Note that these are highlights only and do not represent all activities conducted by the City to maintain compliance. Comprehensive details are reported in the applicable preceding sections.

15.2 Highlighted Activities Performed to Meet Permit Requirements

The City continued activities that were consistent with Permit Order No. R9-2007-0001. For comprehensive details, please refer to the applicable preceding sections of the report. Highlights for July 1, 2008 to June 30, 2009 are listed below.

The City:

- Continued updating and revising the Treatment Control BMP (TCBMP) database of private and public TCBMPs.
- Continued to distribute a copy of the Pollution Prevention Guide to the Construction Industry with each construction related permit application.
- Inspected all high priority construction sites at required frequencies, conducted outreach to project proponents and City staff, and issued 164 enforcement actions to obtain compliance during 1858 inspections.
- Continued to review inventory management, prioritization practices, inspection and enforcement procedures, training programs, record-keeping, and reporting procedures related to construction activities.
- Updated and mapped the municipal inventory and inspected high priority municipal facilities.
- Conducted cleaning and maintenance activities to reduce pollutant discharges from the MS4.
- Inspected 100 of catch basins.
- Continued evaluating and inspecting Special Events.
- Updated and revised the Special Events inventory.
- Updated and mapped the High Threat to Water Quality Industrial/Commercial inventory, and conducted 370 inspections, or 65 of the total inventory. The City issued 46 enforcement actions to obtain compliance from July 1, 2008 to June 30, 2009.
- Continued using the *Knowledge and BMP Assessment*s at commercial and industrial facilities.
- Continued distributing the new brochure for mobile service providers, including carpet cleaners, plumbers, pressure washers, mechanics, porta-potty services, and any other mobile businesses that provide services at various off-site locations. This brochure was

designed for mobile service providers, their employees, and anyone that hires a mobile service provider.

- Distributed educational information for residential activities, continued an advertising campaign, hosted or participated in 10 community outreach events, and collaborated in offering five oil recycling and two HHW drop-off sites for residential use.
- Collaborated with other internal departments to assist with investigations and remediation during field incidents. The Storm Drain Maintenance Division was key to prompt, effective responses to complaints involving clean ups of incidents on public streets. Regular meetings and discussions about compliance issues and consistent contacts facilitates this inter-departmental coordination.
- Conducted a proactive program to detect and eliminate illegal discharges to the MS4. The public continued to use the storm water hotline and e-mail address to report illegal discharges to the storm drain system. The Storm Water Protection Program responded to 195 reports of illegal discharges to the storm drain system, discovered one illicit connection, and issued 86 enforcement actions.
- Continued implementation of the *Dry Weather Field Screening and Analytical Program*, analyzing conditions and samples from up to 60 sites in the MS4.
- Continued implementation of the *Coastal Outfall Program* by routinely monitoring 8 active outfall sites on a regular basis, and inactive sites semi-annually.
- Continued involvement in outreach and education at the local level, the watershed level, and the regional level with the Project Clean Water Outreach Workgroup, and the Think Blue campaign.
- Continued distributing storm water educational brochures and continued the Environmental Programs advertising campaign.
- Distributed information through direct mail, during inspections and investigations, on the website, at workshops, during presentations, training seminars, and other public outreach events.
- Conducted a Public Opinion Survey of 1,000 residents and included questions on storm water.
- Distributed promotional items such as notepads, pens, and Bags on Board with pollution prevention messages.

15.3 Notable Activities in Addition to Permit Requirements

The City implemented several initiatives in addition to the requirements of the Permit Order No. R9-2007-0001 which are considered Notable Activities. Some of these are internal program goals and should not be viewed as enforceable under the Permit, and will be continued and enhanced as resources allow. For comprehensive details on all City activities, please refer to the applicable preceding sections of this report. Notable Activities for FY 2008-09 are as follows:

The City:

- Continued educating Developers and applicants about the new Development Planning Permit requirements early to ensure compliance would be achieved.
- Continued using storm water BMP maintenance agreements as part of standard operating procedures. The BMP maintenance agreements provide increased control over property owner compliance with storm water BMP requirements. These agreements provide the City with legal authority to access, inspect and if necessary

maintain onsite BMPs. In addition, the agreements allow the City to place a lien on a property if BMPs are not maintained as required.

- During FY 2008-09, the City hired a qualified storm water professional to prepare and conduct an in-house training program for the City's Development Services staff (planning, engineering, building and inspection), specific to the City's requirements.
- During FY 2008-09, the City instituted a new procedure to define the process for inspecting, tracking, and enforcing compliance for structures listed on the privately owned treatment control BMP Inventory List (Procedure CMI-300).
- The City also instituted a new procedure that defines the process for managing and updating the privately owned treatment control BMP Inventory List (Procedure CMI-310).
- The City instituted a new procedure that defines the process for verifying and tracking compliance with the treatment control BMP verification of maintenance requirements (Procedure CMI-320).
- The City developed two new outreach handouts to assist private property owners in understanding and complying with the new annual treatment control BMP verification program including the "*What You Need to Know About Privately Owned Treatment Control BMPs*" brochure and the "*Frequently Asked Questions About Treatment Control BMPs*" fact sheet.
- In FY 2008-09, the City updated and restructured the development processing fees for the plan review and inspection of Construction Storm Water Pollution Prevention Plans and post-construction Storm Water Management Plans.
- This reporting period the City also initiated use of standard findings of storm water compliance on administrative minor subdivision approvals.
- Revised the construction site inspection form and developed three procedures for inspection and inventory maintenance.
- Conducted 1858 inspections of active construction sites, exceeding the Permit requirement of 1415 inspections.
- For the Municipal Program, continued using and adding treatment control BMPs to prevent pollutants from reaching receiving waters.
- The City completed and implemented a strip drain in the driveway at the new Fire Station 6 facility which allows Fire Department employees to wash Fire vehicles onsite, with any excess wash water diverted to sewer.
- The City's street sweeping program exceeded both Permit requirements throughout the fiscal year with twice weekly downtown sweeping routes.
- The City used the Reclaimed Water Facility and a training trailer which allowed the Fire Department to perform wet training and testing with no discharge to the MS4 and recapture 100% of the water used for reclamation.
- Swept both the Maintenance and Operations Yard and the Oak Yard parking lots twice a month by a street sweeper and weekly by hand when necessary.
- Spot-cleaned the Maintenance and Operations Yard parking areas for all spills weekly.
- The CMI department developed new procedures for inspecting, tracking and enforcing special events as well as managing and updating information on the special events inventory.
- Continued to implement a computerized asset management/work order system that allows the Storm Drain Maintenance Division to better manage the MS4 inventory, inspections, and maintenance activities conducted.
- Continued Storm Water Committee meetings which included members from Public Works, the Fire Department, Recreation, Planning, and the Building Department.

- Conducted 370 industrial/commercial inspections, or 65 of the total inventory. This exceeds the Permit requirement of 50 of businesses inspected.
- Continued using the Industrial/Commercial inspection report revised in FY 2007-08 so that businesses could promptly implement corrective actions. The revised inspection form includes spaces to report previous enforcement actions, new storm water contacts, and a detailed list of necessary corrective actions. The revised form has proven to be successful in attaining compliance from regulated facilities.
- Continued to maintain regular communications with the Industrial Compliance Unit of the Regional Board. In addition to copies of inspection reports and other correspondence with high and medium industries covered under the Permit, the City regularly coordinated compliance issues with Regional Board representatives over the phone and through emails. On several occasions, the Regional Board expressed their appreciation of the City s professionalism, responsiveness, and implementation of the storm water program.
- Posted minimum BMPs on the City s website for access by the public, permit applicants, developers, and property owners.
- Included storm water and BMP information in the annual Water Quality Report mailed to 38,000 households in the Carlsbad Municipal Water District.
- Sent four informational letters to a total of 198 households addressing storm water pollution issues in the neighborhood, in response to complaint investigations.
- Continued the Environmental Resources Management Team (ERMT) initiative to look at environmental resources from a City-wide perspective including storm water, open space, habitat management, energy use, and sustainable principles.
- Supported the ERMT s work implementing Environmental Guiding Principles for City decision-making approved by Council in August of 2007.
- Continued Storm Water Leadership Team (SWLT) meetings. Monthly meetings of the SWLT were conducted and attendees included Senior Management of the City s major service areas and Directors. Agenda items covered all areas of the City s compliance with Order No. R9-2007-0001.
- Continued to collect data for Performance Measures and the *Maintenance Assessment Program* to analyze improved work methods to balance scheduled versus unscheduled maintenance.

15.4 Recommendations for Improvements

As the City continued to implement the 2008 JURMP in this reporting period, some areas for improvement were noted for the future:

The City will:

- Continue to research, observe, and evaluate the performance of various types of BMPs.
- Continue to evaluate and update internal procedures for Industrial/Commercial inventory prioritization and management and revise as appropriate.
- Continue working on a *Best Management Practices Manual* that includes the minimum and required BMPs for activities and pollutant types.
- Continue to develop effectiveness assessment mechanisms for each significant activity, for each major component, as well as an integrated assessment of the overall program.
- Continue to work at the watershed level and help focus activities on high priority pollutants.

15.5 Water Quality Improvements or Degradation

The complete 2009 Dry Weather report and the full IDDE Section of the Annual Report will be submitted in December of 2009. Please refer to the *Carlsbad Watershed 2009 WURMP* for data trends supporting the focus on *High Priority Pollutants* on a watershed basis. The following text highlights some of the observations on water quality.

MS4 Water Quality
With seven years of data from the Dry Weather Program, ranging from nutrient and physical measurements to bio-available metals and pesticides, collected at 60 sites covering the entire MS4, a picture of water quality within the system is starting to appear. While data are only collected once annually, improvements can be seen for nutrient concentrations, pH, fecal coliform, ammonia, and surfactants within the MS4.

Exceedances of bacteria 95th percentile criteria in the *Coastal Storm Drain Monitoring Program* have stabilized or declined in recent years.

Receiving Water Quality
In FY 2008-09, programs assessing receiving water quality included the Coastal and Lagoon Outfall Monitoring Program, the Watershed Receiving Waters Additional Study, and mass loading station monitoring under the Regional program.

No receiving water samples were collected as part of the Coastal Monitoring Program because the flow from outfalls was intermittent, low volume and did not actually reach the receiving waters but dissipated into the sand or sediment.

In the Watershed Receiving Waters Additional Study, nearly all constituents were undetected in the four additional creek sites water samples including: MBAS, oil and grease, dissolved cadmium, dissolved copper, dissolved lead, diazinon, and chlorpyrifos. Water quality at the four locations was relatively good and appears to be within both Basin Plan Water Quality Objectives and Dry Weather Program Action Levels. Other water chemistry constituents appear to be within standards.

Data related to the Mass Loading Station will be submitted with the Copermittees Regional Monitoring Annual Report in January 2010.

15.6 Conclusion

The Storm Water Protection Program continues to evolve over time in response to the iterative process of implementing BMPs, assessing effectiveness, and evaluating results. As more procedures, programs and activities are implemented, there is a clear need for better databases to track and report activities and BMPs being implemented. Tying these activities to changes in water quality still presents a considerable challenge. This is part of the long-term assessment strategy that will take time to develop trends and to determine cause and effect relationships between pollution prevention and water quality management. The City will continue to work

individually and with the Copermittees to further develop existing compliance programs and create new opportunities for improvement.

This section of the Annual Report demonstrated the City s compliance with Permit Order No R9-2007-0001 and continued implementation of the 2008 JURMP. Other sections of this report show that knowledge has increased in target communities, BMP implementation and behavior changes are improving, pollutant loadings are being reduced from storm water management programs, the MS4 water quality is improving, and pollutant loads to receiving waters are being reduced. These are encouraging signs worth noting. The City recognizes that measurable changes occur over time and that continued program improvements and effectiveness measures are needed for long-term success.

Acronyms

BGPD	Billion gallons/day
BOY	Beginning of Year
BPJ	Best Professional Judgment
BMP	Best Management Practices
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CFD	Carlsbad Fire Department
CHU	Carlsbad Hydrologic Unit
CIP	Capital Improvement Project
CT	Carlsbad Tract
CUP	Conditional Use Permit
CWN	Carlsbad Watershed Network
DS	Dry Season
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
EOY	End of Year
ESA	Environmentally Sensitive Area
FC	Fecal Coliform
GIS	Geographical Information System
GPA	General Plan Amendment
GPM	Gallons Per Minute
HAZMAT	Hazardous Materials
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
IC/ID	Illicit Connections/Illegal Discharges
IDD&E	Illegal Discharge Detection and Elimination
JURMP	Jurisdictional Urban Runoff Management Plan
LCPA	Local Coastal Program Amendment
M&O	Maintenance & Operations
MCUP	Minor Conditional Use Permit
MEP	Maximum Extent Practicable
MP	Master Plan
MS	Minor Subdivision
MSA	Major Service Area
MSP	Monroe Street Pool
MS4	Municipal Separate Storm Sewer System
MSDS	Material Safety Data Sheet
NCSWP	North County Storm Water Program
NOI	Notice of Intent
NONA	Notice of Non-Applicability
NON-RCRA	Not related to the Resource Conservation and Recovery Act
NPDES	National Pollutant Discharge Elimination System
OES	Office of Emergency Services
PCB	Poly Chlorinated Bi-phenyl
PIP	Planned Industrial Permit
POST	Peace Officer Standards Training
PUD	Planned Unit Development
PVC	Poly Vinyl Chloride
RCD	Resource Conservation District of Greater San Diego

Acronyms

RFA	Request for Action
RV	Recreational Vehicle
RW	Receiving Water
RWQCB	Regional Water Quality Control Board Regional Board
SC	Source Control
SDP	Site Development Plan
SDRWQCB	San Diego Regional Water Quality Control Board
SDSU	San Diego State University
SIC	Standard Industrial Classification
SOPP	Sewer Overflow Prevention Plan
SUP	Special Use Permit
SUSMP	Standard Urban Stormwater Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Technical Advisory Committee
TC	Total Coliform or Treatment Control
URMP	Urban Runoff Management Plan
V	Variance
WS	Wet Season
WTM	Watershed Treatment Model
VCP	Vitrified Clay Pipe
ZC	Zone Change

2.0 Development Planning Component

Permit Annual Reporting Requirement Section J.3.a.(3).(a)	Section
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.1, 2.2.3, 2.3, 2.4.1
ii. Confirmation that all development projects were required to undergo the Copermittee s urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4, Appendix 2.12
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4, Appendix 2.2 and 2.3
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4, Appendix 2.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4. Appendix 2.4
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4
vii. An updated treatment control BMP inventory.	2.4.4 Appendix2.4
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4, Appendix 2.8
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4, Appendix 2.6, 2.7, 2.10
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4
xi. A listing of any projects which received a SUSMP waiver.	2.4.4
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4
xv. A listing of priority development projects not required to meet HMP require ments, including a description of why the projects were found to be exempt from the requirements.	2.4.4
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4
xvii. The number of violation and enforcement action (including types) taken for development projects, including information on any necessary follow-up action taken. The discussion should exhibit that compliance has been achieved, or describe action that are being taken to achieve compliance.	2.4.4
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.5

3.0 Construction

Permit Annual Reporting Requirement Section J.3.a.(3).(b)	Section
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.2
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
ii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iii. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4
iv. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.4
v. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.4
vi. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix 3.1
vii. A description of the general results of the inspections.	3.5
viii. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
ix. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5
x. A description of notable activities conducted to manage urban runoff from construction sites.	3.6

4.0 Municipal

Permit Annual Reporting Requirement Section J.3.a.(3).(c)	Section
i. Any updates to the municipal inventory and prioritization.	4.16.2, App 4.1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4, 4.8.4, 4.9.4, 4.10.4, 4.11.4, 4.12.4, 4.13.4, 4.15.4

iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.4
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding .	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal are as and activities.	4.11.4
x. Identification of the total distance of curb-miles of improved roads, streets, a nd highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads , streets, and highways.	4.3.4
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4
xiii. Identification of the total distance of curb-miles swept.	4.3.4
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, App. 4.1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.4.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.16.4, App 4.5
xviii. A description of the general results of the inspections.	App 4.5

xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	App 4.5
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.16.4, App 4.5
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.17

5.0 Industrial and Commercial

Permit Annual Reporting Requirement Section J.3.a.(3).(d)	Section
i. Any updates to the industrial and commercial inventory.	App 5.1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.3.2, 5.2.3.3, 5.2.4.1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.3.2, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.2
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.1
vii. Identification of the number of third party inspections conducted.	5.2.4.1
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.1
ix. A description of efforts implemented to address mobile businesses.	5.3
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.2
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.2
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.4

6.0 Residential

Permit Annual Reporting Requirement Section J.3.a.(3).(e)	Section
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3,6.4.2

iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.3
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.3
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4.4
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.5
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.1
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement Section J.3.a.(3).(f)	**Section**
i. Correction of any inaccuracies in either the MS4 map or Dry Weather Field Screening and Analytical Monitoring Stations Map.	To be submitted in December 2009
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order NO. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	To be submitted in December 2009
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	To be submitted in December 2009
iv. A brief description of any other investigation and follow-up activities for illicit discharges and connections.	To be submitted in December 2009
v. The number and brief description of illicit discharges and connections identified.	To be submitted in December 2009
vi. The number of illicit discharges and connections eliminated	To be submitted in December 2009
vii. Identification and description of all spills to the MS4 and response to the spills.	To be submitted in December 2009

viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	To be submitted in December 2009
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	To be submitted in December 2009
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	To be submitted in December 2009
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges	To be submitted in December 2009
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	To be submitted in December 2009
xiii. A description of notable activities conducted to manage illicit discharges and connections.	To be submitted in December 2009

8.0 Education

Permit Annual Reporting Requirement Section J.3.a.(3).(g)	Section
i. A description of education efforts conducted for each target community.	8.2, 8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and allowable behaviors and discharges.	8.3.5
iii. A description of education efforts conducted for municipal departments and personnel.	8.3
iv. A description of education efforts conducted for the new development and construction communities.	8.3.1, 8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.5

9.0 Public Participation

Permit Annual Reporting Requirement Section J.3.a.(3).(h)	Section
i. A description of public participation efforts conducted.	9.2 to 9.5

10.0 Fiscal Analysis

Permit Annual Reporting Requirement Section J.3.a.(3).(j)	Section
i. A fiscal analysis of the Copermittees urban runoff management programs which meets all requirements of section G of this Order.	10.1 to 10.4

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement Section J.3.a.(3).(i)	Section
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.1 to 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement Section J.3.a.(3).(k)	Section
i. A description of any special investigations conducted.	12.2

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement Section J.3.a.(3).(l)	Section
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.1 to 13.5

14.0 JURMP Revisions

Permit Annual Reporting Requirement Section J.3.a.(3).(m)	Section
i. A description of any proposed revisions to the JURMP.	14.0

City of Carlsbad
Standard Engineering Storm Water Compliance
Conditions of Development Approval

8. Developer shall submit to the City Engineer an acceptable instrument, via CC&R's and/or other recorded document, addressing the maintenance, repair, and replacement of shared private improvements within this subdivision, including but not limited to private (STREETS, UTILITIES, STREET TREES, SIDEWALKS, LANDSCAPING, STREET LIGHTING, RAISED MEDIANS, ENHANCED PAVING, WATER QUALITY TREATMENT MEASURES, LOW IMPACT DEVELOPMENT FEATURES, STORM DRAIN FACILITIES, etc.) located therein and to distribute the costs of such maintenance in an equitable manner among the owners of the properties within this subdivision.

18. Developer shall cause property owner to process, execute and submit an executed copy to the City Engineer for recordation a City standard Permanent Stormwater Quality Best Management Practice Maintenance Agreement for the perpetual maintenance of all treatment control, applicable site design and source control, post-construction permanent Best Management Practices prior to the issuance of a grading permit or building permit, or the recordation of a (FINAL/PARCEL) map, whichever occurs first for this Project.

35. Developer shall comply with the City's Stormwater Regulations, latest version, and shall implement best management practices at all times. Best management practices include but are not limited to pollution treatment practices or devices, erosion control to prevent silt runoff during construction, general housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants to stormwater, receiving water or stormwater conveyance system to the maximum extent practicable. Developer shall notify prospective owners and tenants of the above requirements.

(USE NEXT TWO CONDITIONS ONLY IF PROJECT QUALIFIES AS TIER 3 SWPPP)

36. Prior to the issuance of a grading permit, Developer shall submit to the City Engineer receipt of a Notice of Intention from the State Water Resources Control Board.

37. Prior to the issuance of grading permit or building permit, whichever occurs first, Developer shall submit for City approval a Tier 3 Storm Water Pollution Prevention Plan (TIER 3 SWPPP). The TIER 3 SWPPP shall be in compliance with current requirements and provisions established by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Requirements. The TIER 3 SWPPP shall address measures to reduce to the maximum extent practicable storm water pollutant runoff during construction of the project.

(USE NEXT CONDITION ONLY IF UNSURE WHICH TIER SWPPP IS NEEDED FOR PROJECT)

38. Developer shall complete and submit to the City Engineer a Project Threat Assessment Form (PTAF) pursuant to City Engineering Standards. Concurrent with the PTAF, Developer shall also submit the appropriate Tier level Storm Water Compliance form and Tier level Storm Water Pollution Prevention Plan (SWPPP) as determined by the completed PTAF all to the satisfaction of the City Engineer.

(USE NEXT CONDITION ONLY IF MEETS PRIORITY PROJECT DESIGNATION)

39. Developer shall submit for City approval a "Storm Water Management Plan (SWMP)." The SWMP shall demonstrate compliance with the City of Carlsbad Standard Urban Stormwater Mitigation Plan (SUSMP), Order R9-2007-0001 issued by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Municipal Code all to the satisfaction of the City Engineer.

(USE AS FYI FOR LID TECHNIQUES)

40. Developer shall incorporate Low Impact Development (LID) design techniques, on all final design plans submitted to the City, to reduce the amount of run-off by mimicking the natural hydrologic function of the site by preserving natural open-spaces and natural drainage channels, minimizing impervious surfaces, promoting infiltration and evaporation of run-off before run-off leaves the site. Developer shall incorporate LID techniques using current County of San Diego Low Impact Development Handbook (Stormwater Management Strategies). LID techniques include, but are not limited to: vegetated swale/strip, rain gardens, and porous pavement, which can greatly reduce the volume, peak flow rate, velocity and pollutants.

(USE IF PROJECT REQUIRES HYDROMODIFICATION THRESHOLDS)

41. Developer shall submit documentation, subject to City Engineer approval, demonstrating how this project complies with Interim Hydromodification requirements per the City's SUSMP, latest version. Documentation shall be included within the Storm Water Management Plan (SWMP).

(USE NEXT TWO CONDITIONS FOR CONDITIONAL USE PERMIT EXTENSIONS AS APPLICABLE)

42. Within 6 months of approval of this Conditional Use Permit extension, developer shall submit and receive approval for a Storm Water Management Plan (SWMP) to the City of Carlsbad Engineering Department. This project qualifies as a "priority project" as defined by City of Carlsbad Standard Urban Storm Water Mitigation Plan (SUSMP), and therefore, the project is required to capture and reduce pollutants to a level of insignificance. The organization and content of the SWMP shall be prepared in accordance with the guidelines established by the City of Carlsbad. The SWMP shall address the anticipated pollutants of concern associated with the Project. The SWMP shall also suggest the type(s) of post-construction (structural) Best Management Practices (BMP's) required to capture and filter said pollutants of concern and establish maintenance provisions for said BMP's.

43. Prior to the next annual review of this Conditional Use Permit, developer shall have constructed the BMP measures necessary to capture and filter the anticipated pollutants of concern associated with the project in accordance with the SWMP.

(FINDING TO BE ADDED TO ALL ADMINISTRATIVE APPROVALS FOR MINOR SUBDIVISIONS)

d) The design of the subdivision and improvements are not likely to cause serious public health problems, and the discharge of storm water from the subdivision complies with current California Regional Water Quality Control Board requirements and the City of Carlsbad Standard Urban Stormwater Mitigation Plan (SUSMP) requirements, (fill in reason why project complies with City storm water requirements): and,

City of Carlsbad
Storm Water Priority Project List
for
Development Project Approvals (July 1, 2007 to November 17, 2008)

			Recommending Authority				Approving Authority				
Project ID	Other Actions	Project Name	Date	Entity	Reso No.	Action	Date	Entity	Reso No.	Action	Project Priority Status
CDP 05-34	SUP 05-08, MS 05-14	Eucalyptus Estates	05/13/2009	CE	letter	Approval	12/17/2008	PC	6515, 6516	Approval	NP
CDP 06-27	V 06-02	Phipps Residence					08/06/2008	PC	6389, 6388	Approval	NP
CDP 07-09		Salem Residence Lot 8					11/19/2008	PC	6509	Approval	NP
CDP 07-10		Salem Residence Lot 9					11/19/2008	PC	6510	Approval	NP
CDP 08-01		James Drive estates					08/20/2008	PC	6455	Approval	NP
CDP 08-20		Garfield Beach Residence					02/18/2009	PC	6523	Approval	NP
CDP 08-22		Frassanito Residence					05/06/2009	PC	6552	Approval	NP
CDP 08-23		McKenzie Residence					05/06/2009	PC	6557	Approval	NP
CT 08-06	ZC 08-01, CDP 08-17, HDP 08-03	Highland James Subdivision	03/18/2009	PC	6540, 6541, 6542, 6543	Recommend Approval	05/19/2009	CC	Ord CS-030	Approval	NP
CUP 01-24x1		Marja Acres PCS Facility					05/06/2009	PC	6553	Approval	NP
CUP 03-06x1		Tamarack AT&T Wireless					06/17/2009	PC	6568	Approval	NP
CUP 05-28A		Bressi Ranch Self Storage Facility (sign)					01/21/2009	PC	6527	Approval	NP
CUP 08-13	CUP 08-14	Union Bank of California Drive-Thru					01/07/2009	PC	6517, 6518	Approval	NP
CUP 88-02		Verizon Cell Tower at CUSD					03/04/2009	PC	6536	Approval	NP
CUP 88-16x3		Hawthorne Rent-it Services (Extension)					02/18/2009	PC	6535	Approval	NP
CUP 99-14A		T-Mobile Tower at Carlsbad High School					02/04/2009	PC	6528	Approval	NP
MS 05-09x1		Eggebrecht MS (Extension					08/08/2008	CE	Letter	Approval	NP
MS 05-22		Carlsbad Airport Hotels MS (Extension)					07/03/2008	CE	Letter	Approval	NP
MS 08-02	CDP 08-06	Rhodes Minor Subdivision					10/29/2008	CE & PC	Letter & 6519	Approval	NP
MS 09-02		La Costa Glen Lot 10					05/07/2009	CE	Letter	Approval	NP
PCD 08-02		Newport Audiology Center					09/17/2008	PC	6488	Approval	NP
RP 05-01x1		Corner Grand Avenue (Extension)					09/23/2008	H&RDC	459	Approval	NP
RP 05-04	CUP 94-02	Army and Navy Academy Master Plan	11/05/2008	PC DRB	334, 335, 6493, 6495	Recommend Approval	01/06/2009	H&RDC	462	Approval	NP
RP 06-03A	CDP 06-09, RP 06-09A, CT 08-05	Roosevelt Center	01/26/2009	DRB	336, 337, 338	Recommend Approval	04/07/2009	H&RDC	2009-053, 465	Approval	NP
RP 07-03	CT 07-01	Roosevelt and Oak Mixed Use Project	06/28/2008	DRB	331, 332	Recommend Approval	07/22/2008	H&RD	456, 457	Approval	NP
RP 94-05Ax5		Farmers Market Extension	10/27/2008	DRB	333	Approval	12/16/2008	H&RDC	461	Approval	NP
SDP 05-07		Acacia Estates					10/15/2008	PC	6482	Approval	NP
SDP 06-17A		Bressi Ranch Village Center					12/17/2008	PC	6521	Approval	NP
SDP 96-14D	CDP 96-16D	Legoland Lost Kingdom Slide					3/18/098	PC	6545, 6546	Approval	NP
V 08-03		Toyota Carlsbad Service Center					12/17/2008	PC	6514	Approval	NP
MS 02-05x3		Carlsbad Oceanview Estates MS (Extension)					09/19/2008	CE	Letter	Approval	NP
CDP 07-11		Morrison Residence					08/06/2008	PC	6428	Approval	P
CT 02-06	PUD 02-02, HDP 02-01	Kirgis Subdivision					08/20/2008	PC	6440, 6441, 6442	Approval	P
CT 04-14Ax1	HDP 04-07x1, PUD 04-12x1	Trails End (Extension)					08/20/2008	PC	6452, 6453, 6454	Approval	P

City of Carlsbad
Storm Water Priority Project List
for
Development Project Approvals (July 1, 2007 to November 17, 2008)

Project ID	Other Actions	Project Name	Date	Entity	Reso No.	Action	Date	Entity	Reso No.	Action	Project Priority Status
CT 05-18	GPA 05-11, ZC 05-10, LCPA 05-06, PUD 05-14, SDP 05-12, CDP 05-37, HDP 06-02, HMP 07-09	Seascape	11/05/2008	PC	6498, 6499, 6500, 6501, 6502, 6503, 6505, 6506, 6507	Recommend Approval	01/06/2009	CC	2009-009, Ord CS-021	Approval	P
CT 06-16	CUP 06-16, SUP 07-05	Carlsbad Boat Club and Resort					09/16/2008	CC	2008-216, 2008-217	Denial	P
CT 07-03	GPA 08-01, MP 02-03, PUD 07-02	Robertson Ranch PA 14	10/15/2008	PC	6489, 6490, 6491, 6492	Recommend Approval	12/02/2008	CC	2008-320, Ord CS-020	Approval	P
CT 07-08	MP 03,02B, PUD 03-06B	La Costa Resort PA 1	10/01/2008	PC	6487, 6472, 6473	Recommend Approval	11/18/2009	CC	Ord. CS-017	Approval	P
CUP 07-03	CDP 07-07, MS 07-02	Carlsbad Paseo	07/16/2008	PC	6435,6436, 6437	Recommend Approval	08/12/2008	CC	2008-234	Approval	P
CUP 07-03A	CDP 07-07A	BJ's Restaurant & Brewhouse	02/18/2009	PC	6533, 6534	Recommend Approval	04/07/2009	CC	2009-052	Approval	P
CUP 08-08	CUP 08-08, CDP 08-13	Green Dragon Colonial Village	04/15/2009	PC	6549, 6550, 6551	Recommend Approval	06/02/2009	CC	2009-105	Approval	P
CUP 08-12		7-Eleven Gas Station (retroactive)					02/04/2009	PC	6529	Approval	P
CUP 08-19		Bressi Ranch Assisted Living					06/03/2009	PC	6567	Approval	P
CUP 139B		ST. Elizabeth Seton Catholic Church					12/17/2008	PC	6520	Approval	P
GPA 06-08	ZC 06-07, LCPA 06-08, HDP 05-12, HMP 07-04, MS 05-29	Adams Street Subdivision	10/01/2008	PC	6474, 6475, 6476, 6477, 6478, 6479, 6480	Recommend Approval	11/18/2008	CC	2008-305	Approval	P
GPA 07-01	ZC 07-01, LCPA 07-01, SP 07-01, PDP 01I, CDP 07-03	Carlsbad Encina Auto Plaza	10/15/2008	PC	6496, 6497	Recommend Denial	10/15/2008			Withdrawn	P
GPA 07-04	ZC 07-04, SP 07-02	Fenton Carlsbad Center	08/20/2008	PC	6431, 6432, 6433, 6434	Recommend Approval	10/07/2008	CC	2008-283	Approval	P
MP 178G	CUP 06-11A	Pacific Ridge School Expansion					02/04/2009	PC	6530, 6531, 6532	Approval	P
MS 04-06x1		Humphrey Residence MS (Extension)					09/08/2008	CE	Letter	Approval	P
MS 08-03		Nolan Minor Subdivision					08/28/2008	CE	Letter	Approval	P
PUD 05-12A		La Costa Oaks North Neighborhood 3.3					07/01/2008	CC	2008-201	Approval	P
PUD 06-06A		La Costa Oaks North Neighborhood 3.7					07/16/2008	PC	6438	Approval	P
PUD 06-12A	PUD 06-14A	Robertson Ranch PA 16 and PA 18					09/17/2008	PC	6461, 6462	Approval	P
PUD 06-13A		Robertson Ranch PA 17					10/01/2008	PC	6481	Approval	P
RP 05-11	SDP 05-14, CDP 05-43, CDP 09-04	Hilton Carlsbad Beach Resort	05/06/2009	PC	6555, 6556, 6558, 6559	Recommend Approval					P
RP 07-14	CDP 07-25, CT 07-11	Lumiere Carlsbad Village Hotel					07/15/2008	H&RDC	455	Approval	P
SDP 06-05x1	SUP 06-03x1	Pacific Athletic Club (extension)					03/18/2009	PC	6538, 6539	Approval	P
SDP 07-05	CDP 07-27	Garfield Street Apartments					09/17/2008	PC	6458, 6459	Approval	P

City of Carlsbad
Storm Water Priority Project List
for
Development Project Approvals (July 1, 2007 to November 17, 2008)

Project ID	Other Actions	Project Name	Date	Entity	Reso No.	Action	Date	Entity	Reso No.	Action	Project Priority Status
SDP 07-07	CDP 07-32, HDP 07-04, MS 07-11	3053 Ocean Street	01/02/2009	CE	Letter	Approval	11/05/2008	PC	6483, 6485, 6486	Approval	P
SDP 08-02		La Costa Oaks North 3.2 Daycare					11/19/2008	PC	6513	Approval	P
SDP 97-25Ax2		Kelly Corporate Center (extension)					03/04/2009	PC	6537	Approval	P
SP 207H	LCPA 08-01	Legoland Hotel California	01/21/2009	PC	6524, 6525, 6526	Recommend Approval	03/10/2009	CC	2009-047, Ord CS-025	Approval	P
SUP 07-06	PIP 07-06, PUD 08-06, MCUP 08-08, MS 07-10	Bressi Ranch Lots 10-13	07/29/2008	CE	Letter	Approval	07/16/2008	PC	6430	Approval	P
CUP 02-32x1		Bob Baker Vehicle Storage Lot (Extension)					09/03/2008	PC	6457	Approval	P

PC Planning Commission; CC City Council; H&RDC Housing and Redevelopment Commission; CE City Engineer; PD Planning Director; CCC Coastal Commission
P Priority Project; NP Non-Priority Project

City of Carlsbad
FY 08-09 Capital Improvement Program Project Approvals (Awarded Contracts)

No.	Project Name	Proj Cont. No.	Award of Contract	Priority Status
1	El Camino Real Water and Road Improvement	3920, 6001, 6013, 3843	07/15/2008	P
2	2008 Concrete and Hardscape Repairs	6021	07/22/2008	NP
3	Vista/Carlsbad Sewer Manhole Rehabilitation	3949	08/05/2008	NP
4	Maerkle Disinfection Facility Replacement	5009	09/09/2008	NP
5	Leo Carrillo Ranch Barn Stabilization	3961	09/16/2008	NP
6	Lake Calavera Habitat Mitigation	3821	10/07/2008	NP
7	Traffic Signal at Rancho Santa Fe and Avenida La Cima	6307	10/07/2008	NP
8	FY 08-09 Concrete Replacement Program	6013	12/02/2008	NP
9	North Agua Hedionda Sewer replacement	3537	12/02/2008	NP
10	Leo Carrillo Event Area Expansion	4503	12/16/2008	NP
11	Traffic Signal at Faraday Ave and Rutherford Road	6312	02/17/2009	NP
12	Poinsettia Park Phase II - Parking Lot Expansion	4504	05/19/2009	P
13	2009 Slurry Seal Project	6001	06/16/2009	NP
14	Palomar Airport Road Widening	3811	06/16/2009	P

P Priority Project; NP Non-Priority Project

FY 08-09

Inventory of Privately Owned Treatment Control BMPs

UNIT ID	Priority	Responsible Party	BMP Detail	2008 DS CONDITION	2008 DS Inspection Date	2008 DS Verification Received	2008 DS Verification Letter Sent	2008 DS Second Verification Sent	2009 DS CONDITION	2009 DS Inspection Date	2009 DS Verification Received	2009 Verification Letter Sent	2009 DS Second Verification Sent	CHU	Proximity to ESA	Approved/Signed Date
10D-38	Low	HIGHLAND FINANCE L L C	Vegetated Swale	Future		10/22/2008	09/10/2008	10/15/2008				05/04/2009	06/22/2009	904.31	No	06/22/2007
11C-49	High	Robert and Deborah Jennings	Wet Vault	Future	08/22/2008	10/31/2008	08/04/2008	10/16/2008	Future	06/30/2009	05/11/2009	05/04/2009		904.21	No	02/26/2007
12A-66	Medium	Mystic Point Homeowners Association	Drain Inserts	FAIR	09/23/2008	09/30/2008	08/04/2008					05/04/2009	06/22/2009	904.21	No	10/01/2003
12A-68	Medium	Mystic Point Homeowners Association	Drain Inserts	FAIR	09/23/2008	09/30/2008	08/04/2008					05/04/2009	06/22/2009	904.31	No	10/01/2003
12A-71	Medium	Mystic Point Homeowners Association	Drain Inserts						poor	06/23/2009		05/04/2009	06/22/2009	904.21	No	10/01/2003
12A-74	Medium	Mystic Point Homeowners Association	Drain Inserts	FAIR	09/23/2008	09/30/2008	08/04/2008					05/04/2009	06/22/2009	904.31	No	10/01/2003
12A-76	Medium	Mystic Point Homeowners Association	Drain Inserts						poor	06/23/2009		05/04/2009	06/22/2009	904.31	No	10/01/2003
12A-77	High	Mystic Point Homeowners Association	Vortex Separator						poor	06/23/2009		05/04/2009	06/22/2009	904.31	No	10/01/2003
12A-78	Medium	Mystic Point Homeowners Association	Weir						fair	06/23/2009		05/04/2009	06/22/2009	904.31	No	10/01/2003
12B-62	Medium	Mystic Point Homeowners Association	Drain Inserts						fair	06/23/2009		05/04/2009	06/22/2009	904.31	No	10/01/2003
12B-63	Medium	Mystic Point Homeowners Association	Drain Inserts						fair	06/23/2009		05/04/2009	06/22/2009	904.31	No	10/01/2003
12D-45	Medium	CIC CALAVERA LP	Drain Inserts						Poor	06/05/2009	06/26/09	05/04/2009	06/22/2009	904.31	No	06/30/2003
12D-46	Medium	CIC CALAVERA LP	Drain Inserts						Poor	06/05/2009	06/26/09	05/04/2009	06/22/2009	904.31	No	06/30/2003
12D-50	Medium	CIC CALAVERA LP	Drain Inserts						Poor	06/05/2009	06/26/09	05/04/2009	06/22/2009	904.31	No	06/30/2003
12D-52	Medium	CIC CALAVERA LP	Drain Inserts						Poor	06/05/2009	06/26/09	05/04/2009	06/22/2009	904.31	No	06/30/2003
15B-70	Medium	Maple Street Estates Inc.	Drain Insert	GOOD	09/18/2008	09/25/2008	09/04/2008				05/13/2009	05/04/2009		904.31	No	10/31/2003
15B-72	Medium	Maple Street Estates Inc.	Drain Inserts						poor	06/25/2009		05/04/2009	06/22/2009	904.21	No	10/31/2003
16C-111	Low	LAGOON BREEZE DEVELOPMENT CORP	Multiple Sytems						Future		05/07/2009	05/04/2009		904.21	No	07/06/2007
16D-101	Medium	ANASTASI DEVELOPMENT CO L L C	Drain Inserts						Poor	06/03/2009		05/04/2009	06/22/2009	904.31	No	10/05/2006
16D-103	Medium	ANASTASI DEVELOPMENT CO L L C	Drain Inserts						Good	06/03/2009		05/04/2009	06/22/2009	904.31	no	10/05/2006
16D-104	Medium	ANASTASI DEVELOPMENT CO L L C	Drain Inserts						Good	06/03/2009		05/04/2009	06/22/2009	904.31	no	10/05/2006
16D-108	Medium	ANASTASI DEVELOPMENT CO L L C	Drain Inserts						Good	06/03/2009		05/04/2009	06/22/2009	904.31	no	10/05/2005
16D-69	Medium	ANASTASI DEVELOPMENT CO L L C	Drain Inserts						Good	06/03/2009		05/04/2009	06/22/2009	904.31	No	10/05/2006
16D-70	Medium	ANASTASI DEVELOPMENT CO L L C	Drain Inserts						Good	06/03/2009		05/04/2009	06/22/2009	904.31	No	10/05/2006
18C-93	Low	FAMILY REAL ESTATE ENTERPRISES L L C	Vegetated Swale				09/10/2008	10/16/2008			05/07/2009	05/04/2009		904.31	No	06/22/2007
1D-35	Medium	KELLY RICHARD C TR&KELLY ROBERT P TR	Drain Inserts						Good	06/16/2009		05/04/2009	06/22/2009	904.21	No	08/17/2007
21D-33	Medium	San Diego Gas and Electric	Drain Inserts	GOOD							05/29/09	05/04/2009		904.31	No	01/01/1952
22A-65	Medium	J J L ENTERPRISES	Drain Inserts	POOR	09/25/2008	11/05/2008	08/01/2008	10/16/2008			06/15/2009	05/04/2009		904.51	No	08/25/2003
22A-73	Medium	LEWAK JERZY&JOLANTA R REVOCABLE LIV	Drain Inserts						future	06/25/2009		05/04/2009	06/22/2009	904.31		08/01/2007
22A-76	Medium	LEWAK JERZY&JOLANTA R REVOCABLE LIV	Drain Inserts	Future	09/25/2008	10/28/2008	08/04/2008	10/16/2008				05/04/2009	06/22/2009	904.31	Yes	08/01/2007
22A-78	Low	LEWAK JERZY&JOLANTA R REVOCABLE LIV	Vegetated Swale			10/28/2008	09/10/2008	10/16/2008	Future			05/04/2009	06/22/2009	904.31	No	08/01/2007

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22A-79	Low	LEWAK JERZY&JOLANTA R REVOCABLE LIV	Vegetated Swale			10/28/2008	09/10/2008	10/16/2008	Future			05/04/2009	06/22/2009	904.31	No	08/01/2007
22D-50	Medium	O C/S D HOLDINGS L L C	Drain Inserts	POOR	09/24/2008	11/01/2008	08/04/2008	10/16/2008			06/04/2009	05/04/2009		904.51	Yes	01/13/2003
23A-97	Medium	HERON BAY/SPYGLASS HILLS HOMEOWNER	Drain Insert						fair	06/18/2009	06/22/2009	05/04/2009	06/22/2009	904.31	Yes	12/19/2001
23A-98	Medium	HERON BAY/SPYGLASS HILLS HOMEOWNER	Drain Inserts		08/21/2008	11/06/2008	08/01/2008	10/16/2008			06/22/2009	05/04/2009	06/22/2009	904.31	Yes	12/19/2001
23A-99	Medium	HERON BAY/SPYGLASS HILLS HOMEOWNER	Drain Inserts	POOR	08/21/2008	11/06/2008	08/01/2008	10/16/2008			06/22/2009	05/04/2009	06/22/2009	904.31	Yes	12/19/2001
23D-107	Medium	Emerald Lake Corporate Center	Drain Insert	GOOD					Poor	06/10/2009		05/04/2009	06/22/2009	904.31	No	01/01/1952
23D-120	Low	Emerald Lake Corporate Center	VEGETATED SWALE			10/30/2008	09/10/2008	10/16/2008				05/04/2009	06/22/2009	904.31	Yes	07/11/2001
23D-122	Medium	Emerald Lake Corporate Center	Drain Inserts						Good	06/10/2009		05/04/2009	06/22/2009	904.31	No	07/11/2001
23D-134	Medium	System Machines Automation Components Cor	Drain Inserts	POOR	08/26/2008		07/30/2008	10/16/2008				05/04/2009	06/22/2009	904.31	Yes	04/07/2005
23D-137	Medium	System Machines Automation Components Cor	Drain Inserts									05/04/2009	06/22/2009	904.31	No	04/07/2005
23D-138	Medium	System Machines Automation Components Cor	Drain Inserts									05/04/2009	06/22/2009	904.31	No	04/07/2005
23D-139	Medium	System Machines Automation Components Cor	Drain Inserts									05/04/2009	06/22/2009	904.31	No	04/07/2005
23D-140	Medium	System Machines Automation Components Cor	Drain Inserts									05/04/2009	06/22/2009	904.31	No	04/07/2005
23D-141	Medium	System Machines Automation Components Cor	Drain Inserts									05/04/2009	06/22/2009	904.31	No	04/07/2005
24C-153	High	H.G. Fenton Company	Wet Vault	GOOD	08/21/2008	10/29/2008	08/01/2008	10/16/2008	poor	06/16/2009		05/04/2009	06/22/2009	904.31	Yes	07/20/2007
24D-105	Low	Rio SD Plaza II Master LLC	Water Quality Inlet								06/09/09	05/04/2009		904.40	No	09/20/2006
24D-111	Low	Rio SD Plaza II Master LLC	Vegetated Swale			10/30/2008	09/10/2008	10/16/2008			06/09/2009	05/04/2009		904.31	Yes	09/20/2006
24D-112	Low	Rio SD Plaza II Master LLC	Vegetated Swale			10/30/2008	09/10/2008	10/16/2008			06/09/2009	05/04/2009		904.31	No	09/20/2006
24D-113	Low	Rio SD Plaza II Master LLC	Vegetated Swale			10/30/2008	09/10/2008	10/16/2008			06/09/2009	05/04/2009		904.31	No	09/20/2006
24D-114	Low	Rio SD Plaza II Master LLC	Vegetated Swale			10/30/2008	09/10/2008	10/16/2008			06/09/2009	05/04/2009		904.31	Yes	09/20/2006
27B-108	Medium	WEST DEVELOPMENT INC	Drain Inserts								05/26/09	05/04/2009		904.31	No	10/19/2002
27B-109	Medium	WEST DEVELOPMENT INC	Drain Inserts								05/28/09	05/04/2009		904.31	No	10/19/2002
27B-110	Medium	WEST DEVELOPMENT INC	Infiltration Trench	GOOD	09/18/2008	09/15/2008	09/10/2008				05/26/2009	05/04/2009		904.31	No	10/17/2002
27B-87	Medium	Bob Baker Enterprises	Drain Insert	FAIR	09/25/2008	09/02/2008	07/30/2008				05/13/2009	05/04/2009		904.31	No	05/18/2004
27B-88	Medium	Bob Baker Enterprises	Drain Insert						Good	06/16/2009	05/13/09	05/04/2009		904.31		05/18/2004
27B-89	Low	Bob Baker Enterprises	VEGETATED SWALE			11/03/2008	09/10/2008	10/16/2008			05/13/2009	05/04/2009		904.31	No	05/18/2004
27B-94	Medium	San Diego Gas and Electric	Drain Inserts	POOR	09/25/2008	09/29/2008	09/09/2008				05/29/2009	05/04/2009		904.31	No	01/01/1952
28B-56	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						Poor	06/23/2009		05/04/2009	06/22/2009	904.31	yes	04/02/2007
28B-58	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						Poor	06/23/2009		05/04/2009	06/22/2009	904.31	Yes	04/02/2007
28B-59	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						Poor	06/23/2009		05/04/2009	06/22/2009	904.40	No	04/02/2007
28B-60	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts		09/25/2008	11/12/2008	08/01/2008	10/16/2008				05/04/2009	06/22/2009	904.40	No	04/02/2007

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28B-61	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						Poor	06/23/2009		05/04/2009	06/22/2009	904.40	No	04/02/2007
28B-65	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						poor	06/22/2009		05/04/2009	06/22/2009	904.31	Yes	09/27/2005
28B-66	High	GRAND PACIFIC CARLSBAD L P	Vortex Separator						poor	06/22/2009		05/04/2009	06/22/2009	904.31	Yes	09/27/2005
28B-67	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						poor	06/22/2009		05/04/2009	06/22/2009	904.40	Yes	09/27/2005
28B-73	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						poor	06/22/2009		05/04/2009	06/22/2009	904.31	no	09/27/2005
28B-99	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						Poor	06/23/2009		05/04/2009	06/22/2009	904.31	no	09/27/2005
28C-80	Medium	CPT/SC Title Holding Corp	Drain Insert						fair	06/16/2009	05/18/09	05/04/2009		904.31	no	10/15/2002
28D-64	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						Poor	06/23/2009		05/04/2009	06/22/2009	904.40	No	09/27/2005
28D-65	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						Poor	06/23/2009		05/04/2009	06/22/2009	904.40	no	09/27/2005
28D-68	High	GRAND PACIFIC CARLSBAD L P	Vortex Separator						fair	06/23/2009		05/04/2009	06/22/2009	904.40	no	09/27/2005
28D-71	High	GRAND PACIFIC CARLSBAD L P	Vortex Separator						Good	06/23/2009		05/04/2009	06/22/2009	904.40	no	03/30/2007
28D-79	Medium	GRAND PACIFIC CARLSBAD L P	Drain Inserts						poor	06/23/2009		05/04/2009	06/22/2009	904.40	No	03/30/2007
2C-31	Medium	VONS COMPANIES INC <LF> KELLY RICHAR	Drain Inserts									05/04/2009	06/22/2009	904.21	Yes	08/17/2007
30A-204	Medium	FARADAY SPECTRUM OWNERS ASSN INC	Drain Inserts						Poor	06/10/2009	06/01/09	05/04/2009		904.31	No	08/01/2005
30A-210	Medium	MULLER CENTERPOINT LLC	Drain Inserts						Poor	06/23/2009		05/04/2009	06/22/2009	904.31	No	10/03/2005
30B-117	Medium	FENTON CARLSBAD L L C	Drain Inserts						good	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-119	Medium	FENTON CARLSBAD L L C	Drain Inserts						fair	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-120	Medium	FENTON CARLSBAD L L C	Drain Inserts						good	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-121	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-122	Medium	FENTON CARLSBAD L L C	Drain Inserts						fair	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-123	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-124	Medium	FENTON CARLSBAD L L C	Drain Inserts						fair	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-125	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-126	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-127	Medium	FENTON CARLSBAD L L C	Drain Inserts						fair	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-128	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-129	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-130	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-131	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-132	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-133	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005

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30B-134	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-135	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-136	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-137	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-138	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-140	Medium	FENTON CARLSBAD L L C	Drain Inserts						good	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-141	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-142	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-143	Medium	FENTON CARLSBAD L L C	Drain Inserts						good	06/10/2009		05/04/2009	06/22/2009	904.31		08/22/2005
30B-144	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.51		08/10/2005
30B-145	Medium	FENTON CARLSBAD L L C	Drain Inserts						Good	06/10/2009		05/04/2009	06/22/2009	904.51		08/10/2005
30B-146	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.51		08/10/2005
30B-147	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.51		08/10/2005
30B-148	Medium	FENTON CARLSBAD L L C	Drain Inserts						good	06/10/2009		05/04/2009	06/22/2009	904.51		08/10/2005
30B-149	Medium	FENTON CARLSBAD L L C	Drain Inserts									05/04/2009	06/22/2009	904.51		08/10/2005
30B-150	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.51		08/10/2005
30B-151	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.51		08/10/2005
30B-152	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.51		08/10/2005
30B-153	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.51		08/10/2005
30B-154	Medium	FENTON CARLSBAD L L C	Drain Inserts						poor	06/10/2009		05/04/2009	06/22/2009	904.51		08/10/2005
30D-2	Low	CARLSBAD SELF STORAGE L L C	Vegetated Swale			09/22/2008	09/10/2008				06/24/2009	05/04/2009	06/22/2009	904.40	No	06/12/2007
30D-4	Low	CARLSBAD SELF STORAGE L L C	Vegetated Swale			09/22/2008	09/10/2008				06/24/2009	05/04/2009	06/22/2009	904.40	No	06/12/2007
31A-100	Medium	S F T CARLSBAD L L C	Drain Inserts						poor	06/29/2009	05/18/09	05/04/2009		904.31	No	12/22/2005
31A-3	Medium	Mark Brolaski	Drain Insert						fair	06/24/2009	05/15/09	05/04/2009		904.31	Yes	10/08/1987
31A-70	Low	C B L L L C	VEGETATED SWALE			10/13/2008	09/10/2008					05/04/2009	06/22/2009	904.31	Yes	05/29/2001
31A-73	Medium	Mark Brolaski	Drain Insert	POOR	08/19/2008	10/25/2008	07/29/2008	10/16/2008			05/15/2009	05/04/2009		904.31	Yes	08/01/2003
31A-88	Medium	S F T CARLSBAD L L C	Drain Inserts						fair	06/29/2009	05/18/09	05/04/2009		904.31	No	12/22/2005
31A-89	Medium	S F T CARLSBAD L L C	Drain Inserts						fair	06/29/2009	05/18/09	05/04/2009		904.31	No	12/22/2005
31A-90	Medium	S F T CARLSBAD L L C	Drain Inserts						fair	06/29/2009	05/18/09	05/04/2009		904.31	No	12/22/2005
31A-91	Medium	S F T CARLSBAD L L C	Drain Inserts						fair	06/29/2009	05/18/09	05/04/2009		904.31	No	12/22/2005
31A-92	Medium	S F T CARLSBAD L L C	Drain Inserts						poor	06/29/2009	05/18/09	05/04/2009		904.31	No	12/22/2005

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31A-93	Medium	S F T CARLSBAD L L C	Drain Inserts						Poor	06/29/2009	05/18/09	05/04/2009		904.31	No	12/22/2005
31A-94	Medium	S F T CARLSBAD L L C	Drain Inserts						fair	06/29/2009	05/18/2009	05/04/2009		904.31	No	12/22/2005
31A-95	Medium	S F T CARLSBAD L L C	Drain Inserts						fair	06/29/2009	05/18/2009	05/04/2009		904.31	No	12/22/2005
31A-96	Medium	S F T CARLSBAD L L C	Drain Inserts						fair	06/29/2009	05/18/09	05/04/2009		904.31	No	12/22/2005
31A-98	Medium	S F T CARLSBAD L L C	Drain Inserts						fair	06/29/2009	05/18/09	05/04/2009		904.31	No	12/22/2005
31A-99	Medium	S F T CARLSBAD L L C	Drain Inserts						poor	06/29/2009	05/18/09	05/04/2009		904.31	No	12/22/2005
31B-143	Medium	MAMMOTH CARLSBAD I LLC	Drain Inserts						good	06/24/2009		05/04/2009	06/22/2009	904.31	No	07/19/2006
31C-137	Medium	BRESSI OCEAN COLLECTION L L C	Water Quality Inlet	GOOD	09/23/2008		07/29/2008	10/17/2008				05/04/2009	06/22/2009	904.51	No	07/20/2007
31C-138	Low	BRESSI OCEAN COLLECTION L L C	Vegetated Swale			09/18/2008	09/10/2008					05/04/2009	06/22/2009	904.51	No	07/20/2007
31C-140	Low	BRESSI OCEAN COLLECTION L L C	Vegetated Swale			09/18/2008	09/10/2008					05/04/2009	06/22/2009	904.51	No	07/20/2007
31C-141	Low	BRESSI OCEAN COLLECTION L L C	Vegetated Swale			09/18/2008	09/10/2008					05/04/2009	06/22/2009	904.51	No	07/20/2007
31C-142	Low	BRESSI OCEAN COLLECTION L L C	Vegetated Swale			09/18/2008	09/10/2008					05/04/2009	06/22/2009	904.51	No	07/20/2007
31C-143	Low	BRESSI OCEAN COLLECTION L L C	Vegetated Swale			09/18/2008	09/10/2008					05/04/2009	06/22/2009	904.40	No	07/20/2207
31C-146	Medium	BRESSI OCEAN COLLECTION L L C	Water Quality Inlet						good	06/03/2009		05/04/2009	06/22/2009	904.51	No	09/25/2007
31C-149	Low	BRESSI OCEAN COLLECTION L L C	Vegetated Swale			09/18/2008	09/10/2008					05/04/2009	06/22/2009	904.51	No	09/25/2007
31C-150	Low	BRESSI OCEAN COLLECTION L L C	Vegetated Swale			09/18/2008	09/10/2008					05/04/2009	06/22/2009	904.51	No	09/25/2007
31C-152	Low	BRESSI OCEAN COLLECTION L L C	Vegetated Swale			09/18/2008	09/10/2008					05/04/2009	06/22/2009	904.51	No	09/25/2007
31C-161	Low	BRESSI OCEAN COLLECTION L L C	Vegetated Swale			09/18/2008	09/10/2008					05/04/2009	06/22/2009	904.51	Yes	03/25/2004
31C-162	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	06/23/2006
31C-163	Medium	Moderna Del Mar LLC - Cushman and Wakefiel	Drain Inserts						fair	06/22/2009		05/04/2009	06/22/2009	904.40	No	06/23/2006
31C-164	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	06/23/2006
31C-165	Medium	Moderna Del Mar LLC - Cushman and Wakefiel	Drain Inserts						fair	06/22/2009		05/04/2009	06/22/2009	904.40	No	06/23/2006
31C-166	Medium	Moderna Del Mar LLC - Cushman and Wakefiel	Drain Inserts						good	06/22/2009		05/04/2009	06/22/2009	904.40	No	06/23/2006
31C-168	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	06/23/2006
31C-169	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	06/23/2006
31C-170	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	06/23/2006
31C-171	Medium	Moderna Del Mar LLC - Cushman and Wakefiel	Drain Inserts						fair	06/22/2009		05/04/2009	06/22/2009	904.40	No	06/23/2006
31C-172	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	06/23/2006
31C-174	High	Moderna Del Mar LLC - Cushman and Wakefiel	Vortex Separator						fair	06/22/2009	06/10/2009	05/04/2009		904.51	No	10/16/2006
31C-175	High	Moderna Del Mar LLC - Cushman and Wakefiel	Wet Vault						good	06/22/2009		05/04/2009	06/22/2009			10/16/2006
31C-176	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	10/16/2006

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31C-178	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	10/16/2006
31C-179	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	10/16/2006
31C-181	High	Moderna Del Mar LLC - Cushman and Wakefiel	Vortex Separator						poor	06/22/2009	06/10/2009	05/04/2009		904.51	No	10/16/2006
31C-184	High	Moderna Del Mar LLC - Cushman and Wakefiel	Vortex Separator						good	06/22/2009	06/10/09	05/04/2009		904.51	No	10/16/2006
31C-186	Medium	V P I BRESSI STORAGE L L C	Drain Inserts									05/04/2009	06/22/2009	904.40		07/12/2007
31C-187	Medium	V P I BRESSI STORAGE L L C	Drain Inserts									05/04/2009	06/22/2009	904.40		07/12/2007
31C-188	High	V P I BRESSI STORAGE L L C	Vortex Separator									05/04/2009	06/22/2009	904.40		07/12/2007
31C-189	Medium	V P I BRESSI STORAGE L L C	Drain Inserts									05/04/2009	06/22/2009	904.40		07/12/2007
31C-190	Medium	V P I BRESSI STORAGE L L C	Drain Inserts									05/04/2009	06/22/2009	904.40		07/12/2007
31C-191	Medium	V P I BRESSI STORAGE L L C	Drain Inserts									05/04/2009	06/22/2009	904.31		07/12/2007
31C-192	Medium	V P I BRESSI STORAGE L L C	Drain Inserts									05/04/2009	06/22/2009	904.40		07/12/2007
31C-193	Medium	V P I BRESSI STORAGE L L C	Drain Inserts									05/04/2009	06/22/2009	904.40		07/12/2007
31C-194	Medium	V P I BRESSI STORAGE L L C	Drain Inserts									05/04/2009	06/22/2009	904.40		07/12/2007
31C-195	Medium	Moderna Del Mar LLC - Cushman and Wakefiel	Drain Inserts						poor	06/24/2009		05/04/2009	06/22/2009	904.40	no	06/23/2006
31C-198	Medium	Moderna Del Mar LLC - Cushman and Wakefiel	Drain Inserts						poor	06/22/2009		05/04/2009	06/22/2009	904.40	yes	06/23/2006
31C-199	Medium	Moderna Del Mar LLC - Cushman and Wakefiel	Drain Inserts						poor	06/22/2009		05/04/2009	06/22/2009	904.40		06/23/2006
31D-115	Medium	SPECTRUMFLEX LLC	Water Quality Inlet								05/28/2009	05/04/2009		904.51	NO	04/11/2007
31D-117	Medium	SPECTRUMFLEX LLC	Drain Inserts								05/28/2009	05/04/2009		904.51	NO	04/11/2007
31D-120	High	Pacific Ridge School	Vortex Separator	POOR	08/27/2008	11/05/2008	08/05/2008	10/17/2008	good	06/24/2009	05/15/2009	05/04/2009		904.51	Yes	02/22/2005
31D-121	Medium	Bressi Spectrum Owners Association	Drain Inserts						fair	06/03/2009		05/04/2009	06/22/2009	904.51	Yes	02/15/2006
31D-122	Medium	Bressi Spectrum Owners Association	Drain Inserts						good	06/03/2009		05/04/2009	06/22/2009	904.51	Yes	02/15/2006
31D-123	Medium	Bressi Spectrum Owners Association	Drain Inserts						Good	06/08/2009		05/04/2009	06/22/2009	904.51	Yes	02/15/2006
31D-124	Medium	Bressi Spectrum Owners Association	Drain Inserts						Good	06/08/2009		05/04/2009	06/22/2009	904.51	NO	02/15/2006
31D-128	Low	Mark Brolaski	Vegetated Swale			09/16/2008	09/10/2008				05/15/2009	05/04/2009		905.51	No	10/16/2006
31D-129	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	10/16/2006
31D-130	Low	Moderna Del Mar LLC - Cushman and Wakefiel	Vegetated Swale			09/24/2008	09/10/2008				06/10/2009	05/04/2009		904.51	No	10/16/2006
31D-131	High	Bressi Ranch Fuel Mart LLC	Vortex Separator						Poor	06/22/2009		05/04/2009	06/22/2009	904.51	NO	06/03/2007
31D-132	Medium	Bressi Ranch Fuel Mart LLC	Water Quality Inlet						Poor	06/22/2009		05/04/2009	06/22/2009	904.51	NO	06/03/2007
31D-133	High	BRESSI GARDENLANE LLC	Vortex Separator						Poor	06/03/2009		05/04/2009	06/22/2009	904.51	NO	06/30/2004
31D-134	High	BRESSI GARDENLANE LLC	Vortex Separator						Poor	06/03/2009		05/04/2009	06/22/2009	904.51	NO	06/30/2004
31D-135	Low	BRESSI GARDENLANE LLC	Vegetated Swale				09/10/2008	10/17/2008				05/04/2009	06/22/2009	904.51	No	06/30/2004

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32A-100	Medium	PALOMAR MELROSE L L C	Drain Inserts						poor	06/23/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-101	Medium	PALOMAR MELROSE L L C	Drain Inserts						poor	06/29/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-102	High	PALOMAR MELROSE L L C	Vortex Separator						good	06/29/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-105	Medium	PALOMAR MELROSE L L C	Drain Inserts						fair	06/25/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-106	Medium	PALOMAR MELROSE L L C	Drain Inserts						fair	06/25/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-107	Medium	PALOMAR MELROSE L L C	Drain Inserts						poor	06/23/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-108	Medium	PALOMAR MELROSE L L C	Drain Inserts						poor	06/23/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-109	Medium	PALOMAR MELROSE L L C	Drain Inserts						future	06/25/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-110	Medium	PALOMAR MELROSE L L C	Drain Inserts						future	06/25/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-111	Medium	PALOMAR MELROSE L L C	Drain Inserts						future	06/25/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-112	Medium	PALOMAR MELROSE L L C	Drain Inserts						future	06/25/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-113	Medium	PALOMAR MELROSE L L C	Drain Inserts						future	06/29/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-116	Medium	PALOMAR MELROSE L L C	Drain Inserts						fair	06/25/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-117	Medium	PALOMAR MELROSE L L C	Drain Inserts						fair	06/29/2009	06/04/09	05/04/2009		904.31	No	06/14/2007
32A-119	High	PALOMAR MELROSE L L C	Vortex Separator						good	06/23/2009	06/04/2009	05/04/2009		904.31	No	06/14/2007
32A-121	Medium	CONCOURSE ONE LLC	Drain Inserts	FAIR	09/22/2008	09/02/2008	07/30/2008				06/03/2009	05/04/2009		904.31	No	01/25/2006
32A-122	Medium	CONCOURSE ONE LLC	Drain Inserts						fair	06/08/2009	06/03/2009	05/04/2009		904.31	No	01/25/2006
32A-123	Medium	CONCOURSE ONE LLC	Drain Inserts						fair	06/11/2009	06/03/2009	05/04/2009		904.31	No	01/25/2006
32A-124	Medium	CONCOURSE ONE LLC	Drain Inserts						fair	06/08/2009	06/03/2009	05/04/2009		904.31	No	01/25/2006
32A-145	Medium	Opus West Corp	Drain Inserts						good	06/25/2009		05/04/2009	06/22/2009	904.51	No	06/28/2006
32A-150	Medium	Opus West Corp	Drain Inserts						good	06/25/2009		05/04/2009	06/22/2009	904.51	No	06/28/2006
32A-155	Medium	Opus West Corp	Drain Inserts						fair	06/25/2009		05/04/2009	06/22/2009	904.31	Yes	07/21/2006
32A-158	Medium	Opus West Corp	Drain Inserts						good	06/25/2009		05/04/2009	06/22/2009	904.31	Yes	07/21/2006
32A-164	Medium	Opus West Corp	Drain Inserts						fair	06/25/2009		05/04/2009	06/22/2009	904.31	Yes	07/21/2006
32A-167	Medium	PALOMAR MELROSE L L C	Drain Inserts						fair	06/29/2009	06/04/09	05/04/2009		904.51	no	06/14/2007
32A-168	Medium	PALOMAR MELROSE L L C	Drain Inserts						future	06/23/2009	06/04/09	05/04/2009		904.51	no	06/14/2007
32A-169	Medium	PALOMAR MELROSE L L C	Drain Inserts						fair	06/23/2009	06/04/09	05/04/2009		904.51	no	06/14/2007
32A-170	Medium	PALOMAR MELROSE L L C	Drain Inserts						fair	06/23/2009	06/04/09	05/04/2009		904.51	no	06/14/2007
32A-74	Medium	PALOMAR MELROSE L L C	Drain Inserts						poor	06/23/2009	06/04/09	05/04/2009		904.31		06/14/2007
32A-85	Medium	PALOMAR MELROSE L L C	Drain Inserts						poor	06/25/2009	06/04/09	05/04/2009		904.31		06/14/2007
32A-86	High	PALOMAR MELROSE L L C	Vortex Separator						poor	06/23/2009	06/04/09	05/04/2009		904.31		06/14/2007

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32A-89	Medium	PALOMAR MELROSE L L C	Drain Inserts						fair	06/23/2009	06/04/09	05/04/2009		904.31		06/14/2007
32A-91	Medium	PALOMAR MELROSE L L C	Drain Inserts						good	06/23/2009	06/04/09	05/04/2009		904.31		06/14/2007
32A-93	Medium	PALOMAR MELROSE L L C	Drain Inserts						poor	06/23/2009	06/04/09	05/04/2009		904.31		06/14/2007
32A-95	Medium	PALOMAR MELROSE L L C	Drain Inserts						poor	06/23/2009	06/04/09	05/04/2009		904.31		06/14/2007
32A-98	Medium	PALOMAR MELROSE L L C	Drain Inserts						Poor	06/23/2009	06/04/09	05/04/2009		904.31		06/14/2007
32A-99	Medium	PALOMAR MELROSE L L C	Drain Inserts						Poor	06/23/2009	06/04/09	05/04/2009		904.31		06/14/2007
32B-104	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/15/2007
32B-105	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/15/2007
32B-106	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/15/2007
32B-107	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/15/2007
32B-108	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/15/2007
32B-109	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/15/2007
32B-112	Medium	Opus West Corp	Drain Inserts						good	06/25/2009		05/04/2009	06/22/2009	904.31	No	05/22/2007
32B-118	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/22/2007
32B-119	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/22/2007
32B-120	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/22/2007
32B-121	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/22/2007
32B-123	Medium	GREYHAWK ASSOCIATES	Drain Inserts						good	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-125	Medium	GREYHAWK ASSOCIATES	Drain Inserts						good	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-127	Medium	GREYHAWK ASSOCIATES	Drain Inserts						fair	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-128	Medium	GREYHAWK ASSOCIATES	Drain Inserts						fair	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-129	Medium	GREYHAWK ASSOCIATES	Drain Inserts						fair	06/29/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-130	Medium	GREYHAWK ASSOCIATES	Drain Inserts						poor	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-131	Medium	GREYHAWK ASSOCIATES	Drain Inserts						poor	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-132	Medium	GREYHAWK ASSOCIATES	Drain Inserts						poor	06/11/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-133	Medium	GREYHAWK ASSOCIATES	Drain Inserts						fair	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-134	Medium	GREYHAWK ASSOCIATES	Drain Inserts						fair	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-135	Medium	GREYHAWK ASSOCIATES	Drain Inserts						poor	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-136	Medium	GREYHAWK ASSOCIATES	Drain Inserts						poor	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-137	Medium	GREYHAWK ASSOCIATES	Drain Inserts						fair	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
32B-138	Medium	GREYHAWK ASSOCIATES	Drain Inserts						good	06/10/2009	06/04/2009	05/04/2009		904.31	No	11/17/2005

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32B-139	Medium	GREYHAWK ASSOCIATES	Drain Inserts						good	06/10/2009	06/04/2009	05/04/2009		904.31	No	11/17/2005
32B-140	Medium	GREYHAWK ASSOCIATES	Drain Inserts						poor	06/11/2009	06/04/2009	05/04/2009		904.31	yes	11/17/2005
32B-141	Medium	GREYHAWK ASSOCIATES	Drain Inserts						fair	06/11/2009	06/04/2009	05/04/2009		904.31	yes	11/17/2005
32B-145	Medium	GREYHAWK ASSOCIATES	Drain Inserts						good	06/10/2009	06/04/2009	05/04/2009		904.31	No	11/17/2005
32B-146	Medium	GREYHAWK ASSOCIATES	Drain Inserts						good	06/10/2009	06/04/2009	05/04/2009		904.31	No	11/17/2005
32B-72	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	06/07/2007
32B-75	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	06/07/2007
32B-80	Medium	Opus West Corp	Drain Inserts						good	06/25/2009		05/04/2009	06/22/2009	904.31	no	06/07/2007
32B-82	Medium	Opus West Corp	Drain Inserts						good	06/25/2009		05/04/2009	06/22/2009	904.31	no	06/07/2007
32B-88	Medium	Opus West Corp	Drain Inserts						good	06/25/2009		05/04/2009	06/22/2009	904.51	no	05/22/2007
32B-89	Medium	Opus West Corp	Drain Inserts						good	06/25/2009		05/04/2009	06/22/2009	904.51	no	05/22/2007
32B-90	Medium	Opus West Corp	Drain Inserts						good	06/25/2009		05/04/2009	06/22/2009	904.51	yes	05/22/2007
32B-94	Medium	Opus West Corp	Drain Inserts						fair	06/25/2009		05/04/2009	06/22/2009	904.51	No	05/15/2007
32B-97	Low	Opus West Corp	Vegetated Swale			09/30/2008	09/10/2008		Future			05/04/2009	06/22/2009	904.31	No	05/15/2007
32C-106	Medium	PALOMAR MELROSE L L C	Drain Inserts						poor	06/23/2009	06/04/2009	05/04/2009		904.31	no	01/08/2007
32C-107	Medium	PALOMAR MELROSE L L C	Drain Inserts						poor	06/23/2009	06/04/09	05/04/2009		904.31	no	01/08/2007
32C-108	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/25/2009	06/04/09	05/04/2009		904.31	no	01/08/2007
32C-109	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/25/2009	06/04/09	05/04/2009		904.31	no	01/08/2007
32C-110	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/25/2009	06/04/09	05/04/2009		904.31	no	01/08/2007
32C-111	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/29/2009	06/04/09	05/04/2009		904.31	no	01/08/2007
32C-112	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/29/2009	06/04/09	05/04/2009		904.31	no	01/08/2007
32C-113	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/29/2009	06/04/09	05/04/2009		904.31	no	01/08/2007
32C-114	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/29/2009	06/04/09	05/04/2009		904.31	no	01/08/2007
32C-115	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/29/2009	06/04/09	05/04/2009		904.51	no	06/14/2007
32C-116	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/29/2009	06/04/09	05/04/2009		904.51	no	06/14/2007
32C-117	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/29/2009	06/04/09	05/04/2009		904.51	no	06/14/2007
32C-118	Medium	PALOMAR MELROSE L L C	Drain Inserts						Future	06/29/2009	06/04/09	05/04/2009		904.51	no	06/14/2007
32D-73	Medium	GREYHAWK ASSOCIATES	Drain Inserts						poor	06/10/2009	06/04/09	05/04/2009		904.31	No	11/17/2005
34B-13	Medium	Hilton Garden Inn	Drain Inserts	FAIR					fair	06/16/2009	05/07/09	05/04/2009		904.40	no	04/04/1999
34B-14	Medium	Hilton Garden Inn	Drain Inserts	POOR	09/24/2008	10/28/2008	09/09/2008	10/24/2008			05/07/2009	05/04/2009		904.31	No	04/04/1999
34B-16	Medium	Hilton Garden Inn	Drain Inserts	FAIR					good	06/16/2009	05/07/09	05/04/2009		904.40	no	04/04/1999

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35A-23	Medium	Hilton Garden Inn	Drain Inserts	GOOD					good	06/16/2009	05/07/09	05/04/2009		904.40	no	04/04/1999
35A-87	Medium	STELLAR PROPERTIES L L C	Water Quality Inlet								06/03/09	05/04/2009		904.40	no	02/19/2007
35A-88	Medium	STELLAR PROPERTIES L L C	Water Quality Inlet								06/03/09	05/04/2009		904.40	no	02/19/2007
35A-89	High	STELLAR PROPERTIES L L C	Multiple Sytsems								06/03/2009	05/04/2009		904.40	no	02/19/2007
36A-350	Medium	Kelly Corporation Center II LLC	Drain Inserts						fair	06/12/2009		05/04/2009	06/22/2009	904.40	Yes	05/18/2005
37C-116	High	CARLSBAD CORPORATE CENTER L P	Vortex Separator						poor	06/11/2009		05/04/2009	06/22/2009	904.40	no	01/30/2003
37D-123	Low	Franz-Yut El Camino, LLC	Vegetated Swale			12/03/2008	09/10/2008	10/20/2007				05/04/2009	06/22/2009	904.51	Yes	06/30/2006
37D-126	Medium	L C GREENS 1.3 L L C	Drain Inserts	FAIR	09/25/2008	09/02/2008	08/04/2008				05/20/2009	05/04/2009		904.51	Yes	01/29/2007
37D-127	Low	L C GREENS 1.3 L L C	Vegetated Swale			10/03/2008	09/10/2008				05/20/2009	05/04/2009		904.51	Yes	01/29/2007
37D-132	High	MANZANITA PARTNERS L L C	Vortex Separator						poor	06/16/2009		05/04/2009	06/22/2009	904.51	Yes	10/23/2003
37D-138	High	PALOMAR CONGREGATION OF JEHOVAHS \	Vortex Separator						fair	06/24/2009	05/27/09	05/04/2009		904.51	Yes	12/13/2006
38A-2	High	Bressi Gardenlane LLC	Multiple Systems	GOOD					Fair	06/08/2009		05/04/2009	06/22/2009	904.51	Yes	04/18/2003
38A-23	High	Bressi Gardenlane LLC	Multiple Systems						Fair	06/08/2009		05/04/2009	06/22/2009	904.51	yes	04/16/2003
38A-61	Medium	ASPIRATIONS INC	Drain Inserts						good	06/03/2009	06/24/09	05/04/2009	06/22/2009	904.51	yes	08/22/2007
38A-62	Medium	ASPIRATIONS INC	Drain Inserts						good	06/03/2009	06/24/09	05/04/2009	06/22/2009	904.51	yes	08/22/2007
38A-63	Medium	ASPIRATIONS INC	Drain Inserts						good	06/03/2009	06/24/09	05/04/2009	06/22/2009	904.51	yes	08/22/2007
38A-65	Medium	ASPIRATIONS INC	Drain Inserts						Poor	06/03/2009	06/24/09	05/04/2009	06/22/2009	904.51	no	08/22/2007
38A-66	Medium	ASPIRATIONS INC	Drain Inserts						good	06/03/2009	06/24/09	05/04/2009	06/22/2009	904.51	no	08/22/2007
38A-69	Medium	ASPIRATIONS INC	Drain Inserts						good	06/03/2009	06/24/09	05/04/2009	06/22/2009	904.51	no	08/22/2007
38A-70	Medium	ASPIRATIONS INC	Drain Inserts						good	06/03/2009	06/24/09	05/04/2009	06/22/2009	904.51	no	08/22/2007
38A-71	Medium	ASPIRATIONS INC	Drain Inserts						good	06/03/2009	06/24/09	05/04/2009	06/22/2009	904.51	no	08/22/2007
38A-72	Medium	ASPIRATIONS INC	Drain Inserts						good	06/03/2009	06/24/09	05/04/2009	06/22/2009	904.51	no	08/22/2007
38A-73	Medium	ASPIRATIONS INC	Drain Inserts						good	06/03/2009	06/24/09	05/04/2009	06/22/2009	904.51	no	08/22/2007
38A-77	High	BRESSI GARDENLANE LLC	Vortex Separator	Future	08/21/2008		07/29/2008	10/17/2008	Future	06/25/2009		05/04/2009	06/22/2009	904.51	No	08/04/2004
38B-92	Medium	The Church of Jesus Christ of Latter Day Saints	Drain Inserts	GOOD	09/22/2008	08/15/2008	07/31/2008					05/04/2009	06/22/2009	904.21	Yes	02/16/2007
38B-93	Medium	The Church of Jesus Christ of Latter Day Saints	Drain Inserts									05/04/2009	06/22/2009	904.51	yes	02/16/2007
38B-94	High	The Church of Jesus Christ of Latter Day Saints	Vortex Separator									05/04/2009	06/22/2009	904.51	yes	02/16/2007
38B-95	Low	Pacific Ridge School	Vegetated Swale			11/05/2008	09/10/2008	10/17/2008			05/15/2009	05/04/2009		904.51	Yes	06/22/2007
38B-97	High	BRESSI GARDENLANE LLC	Vortex Separator						poor	06/30/2009		05/04/2009	06/22/2009	904.51		08/04/2004
41A-80	Low	WATERS END HOMEOWNERS ASSN	Vegetated Swale				09/10/2008	10/24/2008				05/04/2009	06/22/2009	904.51	No	07/02/2007
42A-150	High	BAY COLLECTION HOMEOWNERS ASSN	Wet Vault	POOR	08/20/2008	08/20/2008	07/29/2008		good	06/08/2009		05/04/2009	06/22/2009	904.21	No	06/11/2004

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42A-160	High	BAY COLLECTION HOMEOWNERS ASSN	Vortex Separator	POOR	08/20/2008	08/20/2008	07/29/2008		Poor	06/08/2009		05/04/2009	06/22/2009	904.21	No	06/11/2004
42A-167	High	James and Diane Winter	Vortex Separator	POOR	09/18/2008	10/23/2008	09/10/2008	10/20/2008	poor	06/17/2009	06/26/2009	05/04/2009	06/22/2009	904.51	No	06/11/2004
42B-60	Low	BLACK RAIL RIDGE HOMEOWNERS ASSN	Vegetated Swale				09/10/2008	10/17/2008			06/02/2009	05/04/2009		904.51	No	06/30/2004
42C-123	High	BAY COLLECTION HOMEOWNERS ASSN	Vortex Separator						good	06/08/2009		05/04/2009	06/22/2009	904.51	no	06/11/2004
42C-124	High	BAY COLLECTION HOMEOWNERS ASSN	Vortex Separator						fair	06/08/2009		05/04/2009	06/22/2009	904.51	no	06/11/2004
42D-135	Low	SMITH FAMILY 2000 TRUST 01-31-00	Vegetated Swale				09/10/2008	10/24/2008			05/22/2009	05/04/2009		904.51	Yes	02/02/2007
42D-136	Low	SMITH FAMILY 2000 TRUST 01-31-00	Vegetated Swale				09/10/2008	10/24/2008			05/22/2009	05/04/2009		904.51	Yes	02/02/2007
42D-139	Low	SMITH FAMILY 2000 TRUST 01-31-00	Vegetated Swale				09/10/2008	10/24/2008			05/22/2009	05/04/2009		904.51	Yes	02/02/2007
43A-105	Medium	AVIARA BLACK RAIL ROAD 16 L L C	Media Filter	POOR	09/24/2008	10/29/2008	07/29/2008	10/16/2008				05/04/2009	06/22/2009	904.51	Yes	12/16/2006
43A-108	High	AVIARA BLACK RAIL ROAD 16 L L C	Wet Vault	FAIR	08/27/2008	10/29/2008	07/29/2008	10/16/2008	good	06/09/2009		05/04/2009	06/22/2009	904.51	Yes	12/16/2006
43B-40	High	MANZANITA PARTNERS L L C	Vortex Separator	GOOD	09/30/2008	09/03/2008	08/04/2008		fair	06/16/2009		05/04/2009	06/22/2009	904.51	No	10/23/2003
43B-49	High	MANZANITA PARTNERS L L C	Vortex Separator						poor	06/16/2009		05/04/2009	06/22/2009	904.51	yes	10/23/2003
44A-52	High	LA COSTA GREENS COMMUNITY ASSN	Vortex Separator	POOR	08/19/2008	10/25/2008	08/04/2008	10/20/2008	poor	06/17/2009		05/04/2009	06/22/2009	904.51	No	01/24/2003
44C-361	High	LA COSTA GREENS COMMUNITY ASSN	Multiple Sytems						fair	06/18/2009		05/04/2009	06/22/2009	904.51	Yes	03/03/2005
44C-379	High	DOVE FAMILY HOUSING ASSCS	Vortex Separator						Fair	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-380	High	DOVE FAMILY HOUSING ASSCS	Vortex Separator						Fair	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-382	Medium	DOVE FAMILY HOUSING ASSCS	Drain Inserts						Poor	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-384	Medium	DOVE FAMILY HOUSING ASSCS	Drain Inserts						Good	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-392	Medium	DOVE FAMILY HOUSING ASSCS	Drain Inserts						Good	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-394	Medium	DOVE FAMILY HOUSING ASSCS	Drain Inserts						Good	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-395	Medium	DOVE FAMILY HOUSING ASSCS	Drain Inserts						Good	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-396	Medium	DOVE FAMILY HOUSING ASSCS	Drain Inserts						Good	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-399	Medium	DOVE FAMILY HOUSING ASSCS	Drain Inserts						Good	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-401	Medium	DOVE FAMILY HOUSING ASSCS	Drain Inserts						Fair	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-402	Medium	DOVE FAMILY HOUSING ASSCS	Drain Inserts						Poor	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
44C-405	High	LA COSTA GREENS COMMUNITY ASSN	Vortex Separator						poor	06/30/2009		05/04/2009	06/22/2009	904.51	Yes	01/15/2004
45B-121	High	LA COSTA RIDGE COMMUNITY ASSN	Vortex Separator	POOR	08/20/2008		08/01/2008	10/20/2008	Poor	06/17/2009	05/20/2009	05/04/2009		904.51	Yes	04/06/2004
45D-30	High	LA COSTA RIDGE COMMUNITY ASSN	Vortex Separator						Fair	06/18/2009		05/04/2009	06/22/2009	904.51	no	04/06/2004
45D-31	High	LA COSTA GREENS COMMUNITY ASSN	Vortex Separator	FAIR	08/20/2008		08/01/2008	10/24/2008	fair	06/29/2009		05/04/2009	06/22/2009	904.51	Yes	04/06/2004
46B-40	Medium	RALPHS GROCERY CO	Drain Inserts	POOR	09/25/2008		08/05/2008	10/24/2008			06/15/2009	05/04/2009		904.51	No	01/01/1952
47B-65	Low	Four Seasons Resort - Aviara North San Diego	Vegetated Swale				09/10/2008	10/20/2008			05/18/2009	05/04/2009		904.51	Yes	02/02/2007

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48C-72	Medium	Four Seasons Resort - Aviara North San Diego	Infiltration Trench		09/22/2008		09/05/2008	10/20/2008			05/18/2009	05/04/2009		904.51	No	08/18/1988
49A-532	Medium	DOVE FAMILY HOUSING ASSCS	Drain Inserts						good	06/04/2009		05/04/2009	06/22/2009	904.51	no	06/10/2003
49A-535	High	LA COSTA GREENS COMMUNITY ASSN	Vortex Separator						good	06/18/2009		05/04/2009	06/22/2009	904.51	no	01/15/2004
50A-55	High	LA COSTA RIDGE COMMUNITY ASSN	Vortex Separator						fair	06/18/2009		05/04/2009	06/22/2009	904.51	yes	04/08/2004
50D-14	High	LC Oaks 3.3 LLC	Vortex Separator	Future	08/25/2008		08/04/2008	10/24/2008	fair	06/30/2009		05/04/2009	06/22/2009	904.51	Yes	07/12/2007
50E-13	High	CIC LA COSTA L P	Vortex Separator						Poor	06/04/2009	06/26/09	05/04/2009	06/22/2009	904.51	no	04/12/2006
50G-2	High	CIC La Costa LP	Vortex Separator						fair	06/11/2009	06/26/09	05/04/2009	06/22/2009	904.51		08/23/2006
50G-25	High	LC Oaks 3.3 LLC	Vortex Separator						fair	06/30/2009		05/04/2009	06/22/2009	904.51	Yes	11/10/2007
53B-20	High	K S L LA COSTA RESORT CORP	Vortex Separator	POOR	08/21/2008	08/25/2008	08/01/2008		good	06/17/2009	05/21/2009	05/04/2009		904.51	Yes	12/21/2005
54B-39	Medium	NEWKIRK FAMILY TRUST II 10-29-08	Drain Insert						good	06/30/2009	06/26/09	05/04/2009	06/22/2009	904.31	no	02/12/2002
54B-40	Medium	NEWKIRK FAMILY TRUST II 10-29-08	Drain Insert						fair	06/30/2009	06/26/09	05/04/2009	06/22/2009	904.31	no	02/12/2002
54B-56	Low	CREWS MICHAEL COMMERCIAL DEVELOPM	Vegetated Swale			11/03/2008	09/10/2008	10/17/2008				05/04/2009	06/22/2009	904.51	No	12/15/2005
54B-58	Low	CREWS MICHAEL COMMERCIAL DEVELOPM	Vegetated Swale			11/03/2008	09/10/2008	10/17/2008				05/04/2009	06/22/2009	904.51	No	12/15/2005
54B-59	High	CREWS MICHAEL COMMERCIAL DEVELOPM	MP-50 and MP-51						Poor	06/11/2009		05/04/2009	06/22/2009	904.51	No	12/15/2005
54B-61	High	CREWS MICHAEL COMMERCIAL DEVELOPM	MP-50 and MP-51						Poor	06/11/2009		05/04/2009	06/22/2009	904.51	No	12/15/2005
54B-63	Low	CREWS MICHAEL COMMERCIAL DEVELOPM	Vegetated Swale			11/03/2008	09/10/2008	10/17/2008				05/04/2009	06/22/2009	904.51	No	12/15/2005
55C-42	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Poor	06/03/2009	05/29/09	05/04/2009		904.51	No	08/21/2003
55D-22	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						good	06/03/2009	05/29/09	05/04/2009		904.51	no	08/21/2003
55D-23	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						good	06/03/2009	05/29/09	05/04/2009		904.51	no	08/21/2003
58C-131	Medium	COASTLINE COMMUNITY CHURCH	Drain Inserts						good	06/15/2009	06/22/09	05/04/2009	06/22/2009	904.51	yes	04/10/2006
58C-132	Medium	COASTLINE COMMUNITY CHURCH	Drain Inserts						good	06/15/2009	06/22/2009	05/04/2009	06/22/2009	904.51	yes	04/10/2006
58C-136	Medium	COASTLINE COMMUNITY CHURCH	Drain Inserts						good	06/15/2009	06/22/2009	05/04/2009	06/22/2009	904.51	no	04/10/2006
59A-294	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						good	06/03/2009	05/29/09	05/04/2009		904.51	no	08/21/2003
59A-297	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Good	06/03/2009	05/29/09	05/04/2009		904.51	no	08/21/2003
59A-298	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Good	06/03/2009	05/29/09	05/04/2009		904.51	no	08/21/2003
59A-299	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Good	06/03/2009	05/29/09	05/04/2009		904.51	no	08/21/2003
59A-300	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						good	06/03/2009	05/29/09	05/04/2009		904.51	no	08/21/2003
59B-102	High	The Church of Jesus Christ of Latter Day Saints	Vortex Separator									05/04/2009	06/22/2009	904.51	no	03/17/2003
59B-108	High	The Church of Jesus Christ of Latter Day Saints	MP-50 and MP-51									05/04/2009	06/22/2009	904.51	no	03/19/2003
59B-122	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Good	06/03/2009	05/29/09	05/04/2009		904.51	No	08/21/2003
59B-123	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Good	06/03/2009	05/29/2009	05/04/2009		904.51	No	08/21/2003

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59B-125	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Fair	06/03/2009	05/29/2009	05/04/2009		904.51	No	08/21/2003
59B-126	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Good	06/03/2009	05/29/09	05/04/2009		904.51	No	08/21/2003
59B-127	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Good	06/03/2009	05/29/09	05/04/2009		904.51	No	08/21/2003
59B-128	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Good	06/03/2009	05/29/2009	05/04/2009		904.51	No	08/21/2003
59B-129	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Good	06/03/2009	05/29/09	05/04/2009		904.51	No	08/21/2003
59B-130	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	Drain Insert						Good	06/03/2009	05/29/09	05/04/2009		904.51	No	08/21/2003
59C-146	High	LOS COCHES PROPERTIES L L C	Vortex Separator	POOR	08/21/2008	09/02/2008	08/04/2008				05/28/2009	05/04/2009		904.51	Yes	10/18/2004
62B-76	High	VILLAGIO HOMEOWNERS ASSOCIATION	Vortex Separator									05/04/2009	06/22/2009	904.51	Yes	09/20/2006
62B-77	High	VILLAGIO HOMEOWNERS ASSOCIATION	Vortex Separator									05/04/2009	06/22/2009	904.51	Yes	09/20/2006
62B-78	High	VILLAGIO HOMEOWNERS ASSOCIATION	Vortex Separator									05/04/2009	06/22/2009	904.51	Yes	09/20/2006
62B-79	High	VILLAGIO HOMEOWNERS ASSOCIATION	Vortex Separator									05/04/2009	06/22/2009	904.51	Yes	09/20/2006
9A-26	Medium	DONALD FAMILY TRUST 03-19-99	Drain Inserts			09/15/2008	09/04/2008		good	06/08/2009	06/02/2009	05/04/2009		904.21	Yes	06/14/2007
9B-73	High	Laguna Point HOA	Multiple Sytems	POOR	08/25/2008		08/04/2008	10/20/2008	good	06/23/2009	06/15/2009	05/04/2009		904.51	Yes	03/25/2004
9B-75	Low	DALY WILLIAM V&ROSA C	Vegetated Swale			09/18/2008	09/04/2008				06/17/2009	05/04/2009		904.21	No	06/22/2006
9B-77	Low	DALY WILLIAM V&ROSA C	Vegetated Swale			09/18/2008	09/10/2008				06/17/2009	05/04/2009		904.21	No	06/22/2006
9B-78	Low	DALY WILLIAM V&ROSA C	Vegetated Swale			09/18/2008	09/10/2008				06/17/2009	05/04/2009		904.21	No	06/22/2006
9B-79	Low	DALY WILLIAM V&ROSA C	Vegetated Swale			09/18/2008	09/10/2008				06/17/2009	05/04/2009		904.21	No	06/22/2006
9D-154	High	GOLDSTEIN FAMILY TRUST 03-27-98	Vortex Separator						Future	06/10/2009		05/04/2009	06/22/2009	904.21	yes	08/08/2007
9D-155	Medium	KFC NATIONAL MANAGEMENT CO	Drain Inserts						Poor	06/17/2009	06/12/09	05/04/2009		904.51	yes	09/20/2002
9D-156	Medium	KFC NATIONAL MANAGEMENT CO	Drain Inserts						Poor	06/17/2009		05/04/2009	06/22/2009	904.51	yes	09/20/2002
DB1	High	Eagle Canyon Evans Points Association	Extended Detentior	POOR	08/12/2008	09/04/2008	07/31/2008					05/04/2009	06/22/2009	904.31	Yes	08/02/1995
DB10	High	JRH Real Estate Company	Extended Detentior	POOR	08/11/2008	10/29/2008	07/28/2008	10/16/2008	Poor	06/16/2009	05/18/2009	05/04/2009		904.51	Yes	03/20/1992
DB101	High	Bressi Ranch Fuel Mart LLC	Extended Detentior	REMOVED	08/11/2008	10/23/2008	08/04/2008	10/17/2008	Removed	06/30/2009				904.51	Yes	
DB102	High	LNR CPI Bressi Retail LLC	Extended Detentior	REMOVED	08/22/2008	09/02/2008	08/04/2008		Removed	06/30/2009				904.51	Yes	
DB103	High	Aviara Master Association	Extended Detentior	Poor	08/25/2008		07/28/2008	10/16/2008	Fair	06/09/2009	06/12/2009	05/04/2009		904.51	Yes	
DB104	High	Kelly/JRM-Palomar Airport Road I LLC	Extended Detentior	POOR	08/08/2008	10/06/2008	08/01/2008		Poor	06/22/2009		05/04/2009	06/22/2009	904.51	Yes	
DB105	Medium	HCP Carlsbad LLC	Extended Detentior	Good	08/06/2008	08/29/2008	08/04/2008				06/03/2009	05/04/2009		904.51	No	
DB106	Medium	HCP Carlsbad LLC	Extended Detentior	Good	08/06/2008	08/29/2008	08/04/2008				06/03/2009	05/04/2009		904.51	No	
DB107	Medium	HCP Carlsbad LLC	Extended Detentior	Good	08/06/2008	08/29/2008	08/04/2008				06/02/2009	05/04/2009		904.51	No	
DB108	Medium	The Sunset Place Assn. of Carlsbad	Extended Detentior	Good	08/20/2008	11/04/2008	09/05/2008	10/24/2008				05/04/2009	06/22/2009	904.51	No	09/01/1987
DB11	High	CENTER FOR NATURAL LANDS MGMT	Extended Detentior	POOR	08/12/2008	09/03/2008	08/04/2008		Poor	06/08/2009	06/24/2009	05/04/2009	06/22/2009	304.31	Yes	11/17/1987

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DB110	High	Evans Point Homeowners Association	Extended Detentior	Poor	08/12/2008		07/29/2008	10/17/2008	Fair	06/16/2009		05/04/2009	06/22/2009	904.31	Yes	08/24/1994
DB112	High	The Villas of Calavera Hills Homeowners Assn	Infiltration Basin	Fair	08/27/2008		09/05/2008	10/02/2008				05/04/2009	06/22/2009	904.31	Yes	
DB114	High	Madison Square Properties	Infiltration Basin	Fair	08/07/2008		08/05/2008	10/20/2008	good	06/24/2009		05/04/2009	06/22/2009	904.40	Yes	
DB115	High	Madison Square Properties	Infiltration Basin	Fair	08/07/2008		08/05/2008	10/20/2008	Fair	06/24/2009		05/04/2009	06/22/2009	904.40	Yes	
DB116	High	Madison Square Properties	Infiltration Basin	Good	08/07/2008		08/05/2008	10/20/2008	good	06/24/2009		05/04/2009	06/22/2009	904.40	Yes	
DB117	High	CENTER FOR NATURAL LANDS MGMT	Infiltration Basin	Good	08/12/2008	09/03/2008	08/05/2008		fair	06/08/2009	06/24/2009	05/04/2009	06/22/2009	904.31	Yes	
DB118	High	Raceway Corporate Center Owners Association	Infiltration Basin	Good	08/12/2008		07/31/2008		good	06/29/2009	05/21/2009	05/04/2009		904.31	Yes	
DB119	High	Rancho Carrillo Master Association	Infiltration Basin	Fair	08/11/2008	11/04/2008	08/05/2008	10/24/2008	fair	06/30/2009	06/08/2009	05/04/2009		904.51	Yes	
DB120	High	Colinas De Oro Community Association	Infiltration Basin	Poor	08/11/2008		07/30/2008	10/17/2008	fair	06/04/2009		05/04/2009	06/22/2009	904.51	Yes	
DB121	High	La Costa Valley Master Association	Infiltration Basin	Fair	08/11/2008	10/25/2008	08/04/2008	10/20/2008	fair	06/17/2009	06/22/2009	05/04/2009	06/22/2009	904.51	Yes	
DB123	Medium	Danielson DSS LLC	Extended Detentior	REMOVED	08/06/2008	08/06/2008	07/31/2008		Removed	06/30/2009				904.51	No	
DB124	High	Kelly Capital Group Inc	Extended Detentior	REMOVED	08/06/2008		07/29/2008	10/20/2008	Removed	06/30/2009				904.51	Yes	
DB128	High	BRESSI GARDENLANE LLC	Extended Detentior	Fair	08/11/2008		07/29/2008	10/17/2008	Poor	06/03/2009		05/04/2009	06/22/2009	904.51	Yes	02/21/2003
DB129	High	Lanikai Management Corp.	Extended Detentior	Fair	08/26/2008	08/13/2008	08/04/2008		Good	06/22/2009	05/29/2009	05/04/2009		904.31	Yes	07/11/2007
DB13	High	Emerald Lake Corporate Center	Extended Detentior	Poor	08/19/2008	10/30/2008	08/04/2008	10/20/2008	Poor	06/10/2009		05/04/2009	06/22/2009	904.31	Yes	05/01/1991
DB130	High	ECR Corporate Center LP	Extended Detentior	REMOVED	08/06/2008	08/07/2008	07/31/2008		Removed	06/30/2009				904.51	Yes	07/11/2007
DB131	Medium	Calavera Hills II, LLC	SEDIMENT BASIN	GOOD	08/18/2008		07/30/2008	10/17/2008				05/04/2009	06/22/2009	904.31	No	04/05/2007
DB132	Medium	Calavera Hills II, LLC	SEDIMENT BASIN	GOOD	08/18/2008		07/30/2008	10/17/2008				05/04/2009	06/22/2009	904.31	No	04/05/2007
DB133	Medium	Calavera Hills II, LLC	SEDIMENT BASIN	Fair	08/18/2008		07/30/2008	10/17/2008				05/04/2009	06/22/2009	904.31	No	04/05/2007
DB134	Medium	Calavera Hills II, LLC	SEDIMENT BASIN	GOOD	08/19/2008		07/30/2008	10/17/2008				05/04/2009	06/22/2009	904.31	No	04/05/2007
DB135	Medium	Calavera Hills II, LLC	SEDIMENT BASIN	REMOVED	08/18/2008		07/30/2008	10/17/2008	Removed	06/30/2009				904.31	No	04/05/2007
DB136	Medium	Calavera Hills II, LLC	SEDIMENT BASIN	GOOD	08/18/2008		07/30/2008	10/17/2008				05/04/2009	06/22/2009	904.31	No	04/05/2007
DB137	High	Calavera Hills II, LLC	SEDIMENT BASIN	GOOD	08/19/2008		07/30/2008	10/17/2008	Removed	06/08/2009		05/04/2009	06/22/2009	904.31	Yes	04/05/2007
DB139	High	PALOMAR CONGREGATION OF JEHOVAHS \	Extended Detentior	Good	08/07/2008	09/02/2008	08/01/2008		Poor	06/24/2009	06/25/2009	05/04/2009	06/22/2009	904.51	Yes	
DB14	High	Plaza Paseo Real Asscs LLC	Extended Detentior	POOR	08/07/2008		08/01/2008	10/24/2008	fair	06/26/2009		05/04/2009	06/22/2009	904.51	Yes	09/11/1989
DB140	High	Real Estate Collateral Mgmt. Co.	Infiltration Basin	Unconfirmed	09/08/2008		08/04/2008	10/24/2008	Removed	06/30/2009	05/19/2009	05/04/2009		904.51	Yes	
DB141	Medium	Bressi Spectrum Owners Association	Extended Detentior	REMOVED	08/06/2008		07/31/2008	10/17/2008	Removed	06/30/2009				904.51	No	
DB142	Medium	Bressi Spectrum Owners Association	Extended Detentior	REMOVED	08/06/2008		07/31/2008	10/17/2008	Removed	06/30/2009				904.51	No	
DB143	Medium	Bressi Spectrum Owners Association	Extended Detentior	REMOVED	08/06/2008		07/31/2008	10/17/2008	Removed	06/30/2009				904.51	No	
DB15	High	Ayres Hotels Corporate Offices	Extended Detentior	Poor	08/12/2008	10/25/2008	08/04/2008	10/17/2008	Poor	06/09/2009	05/07/2009	05/04/2009		904.51	Yes	06/01/1981
DB152	Medium	Carlsbad Preschool Limited Partnership	Infiltration Basin	Good	09/19/2008		09/04/2008	10/24/2008				05/04/2009	06/22/2009	904.51	no	

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DB153	Medium	Palomar Forum Business Park	Infiltration Basin	Fair	08/12/2008	11/10/2008	08/05/2008	10/20/2008				05/04/2009	06/22/2009	904.31	no	03/28/2007
DB154	Medium	Greyhawk Associates	Infiltration Basin	Good	08/12/2008	11/10/2008	08/01/2008	10/20/2008			06/04/2009	05/04/2009		904.31	no	03/28/2007
DB155	Medium	Opus West Corp	Infiltration Basin	REMOVED	08/26/2008	11/19/2008	08/05/2008	10/20/2008	good	06/11/2009				904.51	No	10/26/2004
DB156	High	H.G. Fenton Company	Infiltration Basin	Fair	08/26/2008	09/02/2008	08/05/2008					05/04/2009	06/22/2009	904.51	Yes	11/03/2004
DB157	Medium	H.G. Fenton Company	Infiltration Basin	Good	08/12/2008	10/25/2008	07/31/2008	10/20/2008				05/04/2009	06/22/2009	904.31	no	11/03/2004
DB158	Medium	H.G. Fenton Company	Infiltration Basin	Good	08/12/2008	09/02/2008	08/04/2008					05/04/2009	06/22/2009	904.51	No	11/03/2004
DB159	High	H.G. Fenton Company	Infiltration Basin	Good	08/12/2008	09/02/2008	08/04/2008		good	06/11/2009		05/04/2009	06/22/2009	904.51	Yes	11/03/2004
DB16	High	Carlsbad Poinsetta Land Co	Extended Detentior	Poor	08/07/2008	08/18/2008	07/30/2008			06/12/2009	05/15/2009	05/04/2009		904.51	Yes	08/08/1997
DB160	High	H.G. Fenton Company	Infiltration Basin	Good	08/12/2008	09/02/2008	08/04/2008		good	06/11/2009		05/04/2009	06/22/2009	904.21	Yes	11/03/2004
DB161	Medium	CIC Glen Ridge LP	Extended Detentior	REMOVED	08/18/2008	08/04/2008	07/30/2008		Removed	06/30/2009				904.31	No	02/28/2007
DB162	Medium	Rio SD Plaza II Master LLC	Extended Detentior	Good	08/20/2008	10/30/2008	09/05/2008	10/24/2008			06/09/2009	05/04/2009		904.31	No	09/20/2006
DB163	High	Rio SD Plaza II Master LLC	Extended Detentior	Good	08/20/2008	10/30/2008	09/05/2008	10/24/2008	good	06/30/2009	06/09/2009	05/04/2009		904.31	Yes	09/20/2006
DB164	Medium	Rio SD Plaza II Master LLC	Extended Detentior	Good	08/20/2008	10/30/2008	09/05/2008	10/24/2008			06/09/2009	05/04/2009		904.31	No	09/20/2006
DB165	High	Moderna Del Mar LLC - Cushman and Wakefiel	Extended Detentior	Good	08/06/2008	09/03/2008	08/04/2008		Fair	06/22/2009	06/10/2009	05/04/2009		904.51	Yes	06/22/2006
DB166	High	Raceway Corporate Center Owners Association	Extended Detentior	Fair	08/28/2008		08/05/2008		good	06/29/2009	05/21/2009	05/04/2009		904.51	Yes	11/03/2004
DB167	Medium	Franz-Yut El Camino, LLC	Extended Detentior	Good	08/07/2008	12/03/2008	08/01/2008	10/20/2008				05/04/2009	06/22/2009	904.51	No	06/20/2006
DB168	Medium	L C GREENS 1.3 L L C	Extended Detentior	Good	08/07/2008	09/02/2008	08/01/2008				05/20/2009	05/04/2009		904.51	No	10/26/2004
DB169	High	Opus West Corp	Extended Detentior	Good	09/30/2008	11/19/2008	08/05/2008	10/20/2008	Poor	06/29/2009		05/04/2009	06/22/2009	904.51	Yes	10/26/2004
DB17	Medium	M&A Gabaee	Extended Detentior	Fair	08/18/2008	12/03/2008	08/04/2008	10/20/2008			06/08/2009	05/04/2009		904.31	No	08/11/1997
DB170	Medium	Mammoth Carlsbad I LLC	Extended Detentior	Good	08/06/2008		07/31/2008	10/20/2008				05/04/2009	06/22/2009	904.51	No	07/14/2006
DB171	Medium	KILROY REALTY FINANCE PARTNERSHIP LP	Extended Detentior	Good	08/12/2008		08/04/2008	10/20/2008				05/04/2009	06/22/2009	904.31	No	10/26/2004
DB172	High	CARLSBAD OAKS NORTH VENTURES L P	Extended Detentior	Good	08/12/2008		08/04/2008	10/17/2008	Good	06/08/2009	06/02/2009	05/04/2009		904.31	Yes	10/26/2004
DB173	Medium	KB Home Coastal Inc.	Extended Detentior	Fair	08/07/2008		08/01/2008	10/20/2008			06/03/2009	05/04/2009		904.51	No	
DB174	Medium	KB Home Coastal Inc.	Extended Detentior	Poor	08/07/2008		08/01/2008	10/20/2008			06/03/2009	05/04/2009		904.51	No	
DB175	High	La Costa Ridge Community Assn	Extended Detentior	Good	08/11/2008		08/01/2008	10/20/2008	fair	06/18/2009	05/20/2009	05/04/2009		904.51	Yes	04/08/2004
DB18	High	Kelly Corporate Center	Extended Detentior	Fair	09/26/2008		09/05/2008	10/20/2008	Poor	06/12/2009		05/04/2009	06/22/2009	904.51	Yes	10/03/1995
DB180	High	Opus West Corp	Extended Detentior	GOOD	09/30/2008	09/30/2008	09/05/2008		Poor	06/29/2009		05/04/2009	06/22/2009	904.51	Yes	10/26/2004
DB19	High	LEGOLAND CALIFORNIA INC	Extended Detentior	Good	08/08/2008	11/05/2008	08/01/2008	10/20/2008	fair	06/24/2009		05/04/2009	06/22/2009	904.31	Yes	08/11/1997
DB2	Medium	Carlsbad Shorepointe Homeowners Assn	Extended Detentior	Poor	08/08/2008	10/29/2008	07/30/2008	10/17/2008	Good	06/02/2009		05/04/2009	06/22/2009	904.21	No	
DB20	Medium	M&A Gabaee	Extended Detentior	Good	08/18/2008	12/03/2008	08/04/2008	10/20/2008			06/08/2009	05/04/2009		904.31	No	12/21/1993
DB21	Medium	Carlsbad Ranch Maintenance Association	Extended Detentior	Fair	08/18/2008	01/12/2009	08/04/2008	10/24/2008			05/28/2009	05/04/2009		904.31	No	10/16/1995

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DB22	Medium	Carlsbad Ranch Maintenance Association	Extended Detentior	Fair	08/18/2008	01/12/2009	08/04/2008	10/24/2008			05/28/2009	05/04/2009		904.31	No	10/16/1995
DB23	High	Evans Point Homeowners Association	Extended Detentior	Poor	08/12/2008		07/31/2008	10/17/2008	Poor	06/10/2009		05/04/2009	06/22/2009	904.31	Yes	08/24/1994
DB24	High	HIDDEN RIDGE AT CARLSBAD HOMEOWNEF	Extended Detentior	Good	08/19/2008		08/01/2008	10/20/2008	good	06/18/2009		05/04/2009	06/22/2009	904.31	Yes	11/06/1998
DB25	High	Hoffman Stephen Living Trust 01-12-05	Extended Detentior	Poor	08/12/2008		07/31/2008	10/20/2008	Poor	06/17/2009	06/08/2009	05/04/2009		904.31	Yes	05/01/1991
DB26	High	Tamarack Point Master Assn (CORP.)	Extended Detentior	Poor	08/20/2008		09/05/2008	10/24/2008	Poor	06/02/2009		05/04/2009	06/22/2009	904.31	Yes	12/13/1984
DB3	High	Aviara Master Association	Extended Detentior	Good	08/11/2008	09/02/2008	07/28/2008	10/17/2008	Fair	06/09/2009		05/04/2009	06/22/2009	904.51	Yes	07/29/1991
DB33	High	Cherry Walk Homeowners Association	Extended Detentior	Fair	08/07/2008	09/19/2008	08/05/2008		good	0612/09		05/04/2009	06/22/2009	904.51	Yes	04/07/1998
DB34	High	Kelly Land Company	Extended Detentior	Poor	08/26/2008	01/14/2009	08/01/2008	10/20/2008			06/19/2009	05/04/2009		904.31	Yes	08/19/1985
DB35	High	Coastline Community Church	Extended Detentior	Poor	08/11/2008	08/25/2008	07/30/2008		Poor	06/15/2009	06/22/2009	05/04/2009	06/22/2009	904.51	Yes	06/11/1999
DB36	High	Brickell Enterprise Inc	Extended Detentior	Poor	08/15/2008	08/16/2008	07/29/2008		Poor	05/21/2009	06/03/2009	05/04/2009		904.40	Yes	10/04/1991
DB37	High	Costco Wholesale Corporation	Extended Detentior	Poor	08/15/2008	09/02/2008	07/31/2008		good	06/12/2009	06/03/2009	05/04/2009		904.40	Yes	10/04/1991
DB4	High	EDBELL LLC	Extended Detentior	Poor	08/11/2008	09/10/2008	07/31/2008		Poor	06/15/2009	05/11/2009	05/04/2009		904.51	Yes	05/23/1983
DB44	High	Heron Bay/Spyglass Hills Homeowners Assc	Extended Detentior	Fair	08/26/2008	11/06/2008	08/01/2008	10/16/2008	good	06/18/2009	06/22/2009	05/04/2009	06/22/2009	904.31	Yes	08/19/1985
DB46	Medium	Carlsbad Airport Centre Owners Assn	Extended Detentior	Poor	08/08/2008	10/30/2008	07/30/2008	10/17/2008			05/15/2009	05/04/2009		904.31	No	10/01/1985
DB47	High	Carlsbad Airport Centre Owners Assn	Extended Detentior	Poor	08/07/2008	10/30/2008	07/30/2008	10/17/2008	Poor	06/12/2009	05/15/2009	05/04/2009		904.31	Yes	10/01/1985
DB49	Medium	San Dieguito Union High School District	Extended Detentior	Good	09/18/2008	10/30/2008	09/05/2008	10/24/2008			06/01/2009	05/04/2009		904.51	No	06/11/1999
DB50	Medium	San Dieguito Union High School District	Extended Detentior	Poor	09/18/2008	10/30/2008	09/05/2008	10/24/2008			06/01/2009	05/04/2009		904.51	No	06/11/1999
DB51	Medium	San Dieguito Union High School District	Extended Detentior	Fair	09/18/2008	10/30/2008	09/05/2008	10/24/2008			06/01/2009	05/04/2009		904.51	No	06/11/1999
DB53	High	San Dieguito Union High School District	Extended Detentior	Good	08/11/2008	09/30/2008	09/05/2008				06/01/2009	05/04/2009		904.51	Yes	06/11/1999
DB54	High	Palomar Korean Church	Extended Detentior	Poor	08/11/2008	09/02/2008	08/05/2008		Fair	06/24/2009		05/04/2009	06/22/2009	904.51	Yes	11/14/1996
DB55	High	Carlsbad Unified School District	Extended Detentior	POOR	08/14/2008	11/05/2008	07/30/2008	10/17/2008	Poor	06/18/2009	05/21/2009	05/04/2009		904.40	Yes	08/24/1989
DB57	Medium	Four Seasons Resort - Aviara North San Diego	Extended Detentior	Poor	09/23/2008	08/16/2008	07/29/2008				05/18/2009	05/04/2009		904.51	No	08/18/1988
DB58	High	Continuing Life Communities LLC	Extended Detentior	Good	08/11/2008	08/27/2008	07/31/2008		Fair	06/22/2009	05/07/2009	05/04/2009		904.51	Yes	06/22/1999
DB59	High	Borders Books and Music	Extended Detentior	Poor	08/21/2008		07/29/2008	10/17/2008	Fair	06/03/2009		05/04/2009	06/22/2009	904.51	Yes	06/22/1999
DB6	High	L S F 5 CARLSBAD HOLDINGS L L C	Extended Detentior	Poor	08/26/2008		07/28/2008	10/20/2008	Poor	06/22/2009		05/04/2009	06/22/2009	904.51	Yes	10/06/1994
DB60	Medium	CPT/SC Title Holding Corp	Extended Detentior	Good	09/18/2008	09/04/2008	07/31/2008				05/18/2009	05/04/2009		904.31	No	10/15/2002
DB61	Medium	La Costa Town Square LLC	Extended Detentior	Good	09/19/2008		08/04/2008	10/20/2008				05/04/2009	06/22/2009	904.51	No	
DB63	High	Calavera Hills II Homeowners Assn	Extended Detentior	Fair	08/19/2008	09/12/2008	07/30/2008		Fair	06/08/2009		05/04/2009	06/22/2009	904.31	Yes	
DB64	High	Standard Pacific Corporation	Extended Detentior	Poor	08/21/2008		07/31/2008	10/24/2008				05/04/2009	06/22/2009	904.31	Yes	06/08/1981
DB65	High	Kelly Corporation Center II LLC	Extended Detentior	Poor	08/08/2008		08/01/2008	10/20/2008	Poor	06/12/2009		05/04/2009	06/22/2009	904.31	Yes	12/07/2000
DB66	High	Kelly Corporate Center	Extended Detentior	Poor	08/08/2008		09/05/2008	10/20/2008	Poor	06/12/2009		05/04/2009	06/22/2009	904.51	Yes	

UNIT ID	Priority	Responsible Party	BMP Detail	2008 DS CONDITION	2008 DS Inspection Date	2008 DS Verification Received	2008 DS Verification Letter Sent	2008 DS Second Verification Sent	2009 DS CONDITION	2009 DS Inspection Date	2009 DS Verification Received	2009 Verification Letter Sent	2009 DS Second Verification Sent	CHU	Proximity to ESA	Approved/Signed Date
DB69	Medium	Four Seasons Resort - Aviara North San Diego	Extended Detentior	Good	09/22/2008	08/16/2008	07/29/2008				05/18/2009	05/04/2009		904.51	No	09/12/1996
DB7	High	State of California Lands Commission	Extended Detentior	Poor	08/20/2008		07/28/2008	10/24/2008				05/04/2009	06/22/2009	904.51	Yes	05/21/1986
DB70	High	Aviara Premier Collection	Extended Detentior	Good	08/12/2008		07/28/2008	10/17/2008	Fair	06/08/2009		05/04/2009	06/22/2009	904.51	Yes	07/23/1997
DB71	Medium	Sunrise Assisted Living at LaCosta	Extended Detentior	Fair	08/07/2008	08/22/2008	07/28/2008				05/20/2009	05/04/2009		904.51	No	06/05/1998
DB72	High	Kelly Corporation Center II LLC	Extended Detentior	Fair	08/08/2008		08/01/2008	10/20/2008	Removed	06/30/2009				904.31	Yes	
DB74	Medium	Kelly Corporation Center II LLC	Extended Detentior	Good	08/08/2008		08/01/2008	10/20/2008				05/04/2009	06/22/2009	904.31	No	12/07/2000
DB76	Medium	Carlson Family Trust 12-01-89	Extended Detentior	Fair	08/19/2008		07/30/2008	10/17/2008				05/04/2009	06/22/2009	904.31	No	04/04/1980
DB77	Medium	The Flower Fields at Carlsbad Ranch	Extended Detentior	Poor	08/25/2008	08/22/2008	07/30/2008				05/21/2009	05/04/2009		904.31	No	03/30/1988
DB79	High	LEGOLAND CALIFORNIA INC	Extended Detentior	Fair	08/20/2008	11/05/2008	08/01/2008	10/20/2008	Poor	06/24/2009		05/04/2009	06/22/2009	904.31	Yes	03/27/1997
DB8	Medium	Four Seasons Resort - Aviara North San Diego	Extended Detentior	Good	09/22/2008	08/15/2008	07/29/2008				05/18/2009	05/04/2009		904.51	no	05/03/1989
DB80	Removed	System Machines Automation Components Cor	Extended Detentior	REMOVED	08/19/2008		07/29/2008	10/24/2008	Removed	06/30/2009				904.31	No	
DB81	Medium	Hughes Investments-Managing Company	Extended Detentior	GOOD	09/24/2008	09/12/2008	08/01/2008				06/01/2009	05/04/2009		904.21	No	06/01/1970
DB84	High	Bressi Gardenlane LLC	Extended Detentior	Fair	08/06/2008		07/29/2008	10/17/2008	Poor	06/08/2009		05/04/2009	06/22/2009	904.51	Yes	01/23/2003
DB85	Medium	Bressi Ranch Medical Plaza	Extended Detentior	Poor	08/06/2008		07/29/2008	10/17/2008				05/04/2009	06/22/2009	904.51	No	01/23/2003
DB86	Medium	PIVOTAL 650 CALIFORNIA ST L L C	Extended Detentior	Good	08/06/2008		08/04/2008	10/24/2008			06/01/2009	05/04/2009		904.51	No	12/24/2003
DB87	Medium	PIVOTAL 650 CALIFORNIA ST L L C	Extended Detentior	Good	08/06/2008		08/04/2008	10/24/2008			06/01/2009	05/04/2009		904.51	No	12/24/2003
DB9	Medium	Four Seasons Resort - Aviara North San Diego	Extended Detentior	Poor	09/23/2008	08/15/2008	07/29/2008				05/18/2009	05/04/2009		904.51	No	05/03/1989
DB90	Medium	PIVOTAL 650 CALIFORNIA ST L L C	Extended Detentior	Good	08/06/2008		08/07/2008	10/24/2008			06/01/2009	05/04/2009		904.51	No	12/24/2003
DB92	Medium	Lot 23 Bressi Ranch LLC	Extended Detentior	Good	08/06/2008	08/27/2008	08/02/2008				05/07/2009	05/04/2009		904.51	No	01/23/2003
DB96	Medium	HCP Carlsbad LLC	Extended Detentior	Fair	08/06/2008	08/26/2008	08/04/2008				06/02/2009	05/04/2009		904.51	No	01/23/2003
DB97	Medium	HCP Carlsbad LLC	Extended Detentior	Good	08/06/2008	08/29/2008	08/04/2008				06/03/2009	05/04/2009		904.51	No	01/23/2003
DB99	Medium	HCP Carlsbad LLC	Extended Detentior	Good	08/06/2008	08/29/2008	08/04/2008				06/03/2009	05/04/2009		904.51	No	01/23/2003

City of Carlsbad
FY 08-09 Publicly Owned Treatment Control BMP Inventory

Count	FacilityID	Priority	Location	Drawing No.	Ownership	Owner Name	BMP Type	BMP Description	Drainage BASIN	Proximity to ESA	Installation Date
1	DB109	Medium	SW corner of Marron and Monroe	304-2	Public	City of Carlsbad	TC-22	Extended Detention Basin	904.21	No	1989
2	DB82	High	132 S OF Via De Canto at elbow	164-8	Public	City of Carlsbad	TC-22	Extended Detention Basin	904.21	Yes	1975
3	SDAH12679	Medium	Newland Ct.	419-8	Public	City of Carlsbad	MP-52	Drain Insert	904.21	No	07/07/2006
4	SDAH12680	Medium	Newland Ct.	419-8	Public	City of Carlsbad	MP-52	Drain Insert	904.21	No	07/07/2006
5	SDAH1845	High	Ocean Street W/O Rue Des Chateaux	233-8	Public	City of Carlsbad	DC-2	Debris Catcher	904.21	Yes	11/21/1983
6	SDAH1856	High	State Street S/O Laguan Drive	376-5	Public	City of Carlsbad	DC-2	Debris Catcher	904.21	No	04/21/1999
7	SDAH1908	High	Ocean Street SE/O Christiansen Way	374-2	Public	City of Carlsbad	DC-2	Debris Catcher	904.21	Yes	01/01/1952
8	DB111	High	Lake Calavera	N/A	Public	City of Carlsbad	TC-22	Extended Detention Basin	904.31	Yes	1940
9	DB113	High	Cannon Lake	N/A	Public	City of Carlsbad	TC-22	Extended Detention Basin	904.31	Yes	1954
10	DB62	High	660 ft NW of Cannon@College on College and 140 ft NE of c/l	390-9	Public	City of Carlsbad	TC-12	Retention Basin	904.31	Yes	2004
11	SDAH13369	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
12	SDAH13370	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
13	SDAH13372	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
14	SDAH13374	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
15	SDAH13375	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
16	SDAH13344	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
17	SDAH13345	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
18	SDAH13352	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
19	SDAH13354	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
20	SDAH13377	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
21	SDAH13379	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
22	SDAH13382	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
23	SDAH13384	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
24	SDAH13385	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
25	SDAH13396	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
26	SDAH13395	Medium	South of Cannon Road in Kelly Ranch Core Area	377-3	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	12/19/2001
27	SDAH13485	Medium	Whiptail Loop n/o Caribu Ct	415-9	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	10/26/2004
28	SDAH13487	Medium	Whiptail Loop n/o Caribu Ct	415-9	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	10/26/2004
29	SDAH1506	Medium	Chestnut Ave at Roosevelt St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
30	SDAH1508	Medium	Chestnut Ave at Roosevelt St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
31	SDAH3145	Medium	Chestnut Ave e/o Harding St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
32	SDAH3146	Medium	Chestnut Ave e/o Harding St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
33	SDAH3147	Medium	Chestnut Ave e/o Harding St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006

City of Carlsbad
FY 08-09 Publicly Owned Treatment Control BMP Inventory

Count	FacilityID	Priority	Location	Drawing No.	Ownership	Owner Name	BMP Type	BMP Description	Drainage BASIN	Proximity to ESA	Installation Date
34	SDAH1503	Medium	Chestnut Ave e/o Harding St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
35	SDAH1509	Medium	Chestnut Ave e/o Madison St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
36	SDAH3155	Medium	Chestnut Ave w/o Railroad	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
37	SDAH1522	Medium	Harding St at Avacado Lane	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
38	SDAH1526	Medium	Harding St at Magnolia St	360-5	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	06/22/2006
39	SDAH3166	Medium	Oak St E/O Railroad	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
40	SDAH3167	Medium	Oak St E/O Railroad	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
41	SDAH3163	Medium	Oak St E/O Roosevelt	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
42	SDAH3157	Medium	Oak St E/O Roosevelt	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
43	SDAH3168	Medium	Oak St W/O Roosevelt	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
44	SDAH3161	Medium	Oak St W/O Roosevelt	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
45	SDAH3159	Medium	Oak Street at Railroad	365-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/23/2006
46	SDAH1535	Medium	Walnut Ave E/O Lincoln St	277-2	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	03/18/1987
47	SDAH1536	Medium	Walnut Ave E/O Lincoln St	257-4	Public	City of Carlsbad	MP-52	Drain Insert	904.31	No	11/25/1986
48	SDAH1763	High	Carlsbad Bl. And Pine Av.	273-8	Public	City of Carlsbad	DC-2	Debris Catcher	904.31	Yes	08/07/1986
49	SDAH15136	High	Cannon Rd between Frost Av. And Hemingway Dr.	409-8	Public	City of Carlsbad	TC-50	Water Quality Inlet	904.31	Yes	10/20/2000
50	SDAH14471	High	Salk Av E/O Fermi Ct.	418-6	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	01/11/2006
51	SDAH14491	High	Salk Av E/O Fermi Ct.	418-6	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	01/11/2006
52	SDAH15108	High	Salk Av E/O Fermi Ct.	418-6	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	01/11/2006
53	SDAH13591	High	Salk Av E/O Fermi Ct.	415-9C	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	10/27/2004
54	SDAH13592	High	Faraday Av. E/O El Fuerte St.	415-9C	Public	City of Carlsbad	MP-52	Drain Insert	904.31	Yes	10/27/2004
55	SDAH1900	High	Ocean Street and Carlsbad Villange Drive	242-8	Public	City of Carlsbad	DC-2	Debris Catcher	904.31	Yes	12/02/1984
56	SDAH11572	High	N/O Gateway Rd E/O ECR	400-8D	Public	City of Carlsbad	TC-60	MP-50 & MP-51	904.40	No	10/07/2004
57	SDAH14126	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
58	SDAH14128	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
59	SDAH14129	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
60	SDAH14130	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
61	SDAH14131	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
62	SDAH14132	Medium	ECR between Cassia Dr and Poinsettia Lane	389-9	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	10/23/2003
63	SDAH12741	High	Alicante Road n/o Poinsettia Lane	397-2F	Public	City of Carlsbad	MP-51	CDS UNIT	904.51	Yes	01/16/2003
64	SDAH14724	High	Avenida Soledad and Rancho Santa Fe	429-7	Public	City of Carlsbad	MP-51	CDS UNIT	904.51	No	04/11/2006
65	SDAH3623	High	Batiquitos Dr. between Kingfisher Ln. and Spoonbill Ln.	286-9	Public	City of Carlsbad	DC-2	Debris Catcher	904.51	No	08/03/1992
66	SDAH10606	High	Corner of Paseo Lupino and Corte Brezo	397-1E	Public	City of Carlsbad	MP-51	CDS UNIT	904.51	No	02/22/2002

City of Carlsbad
FY 08-09 Publicly Owned Treatment Control BMP Inventory

Count	FacilityID	Priority	Location	Drawing No.	Ownership	Owner Name	BMP Type	BMP Description	Drainage BASIN	Proximity to ESA	Installation Date
67	SDAH12986	Medium	N/S PAR E/O Melrose Dr	399-4	Public	City of Carlsbad	MP-52	Drain Insert	904.51	No	06/22/2004
68	SDAH13845	High	Poinsettia Lane at Mica Rd	427-6B	Public	City of Carlsbad	MP-51	CDS UNIT	904.51	Yes	06/07/2005
69	SDAH13846	High	Poinsettia Lane at Quartz way	427-6B	Public	City of Carlsbad	MP-51	CDS UNIT	904.51	Yes	06/07/2005
70	SDAH13877	Medium	Rose Drive and Sagebrush Road	401-9H	Public	City of Carlsbad	MP-52	Drain Insert	904.51	No	06/11/2004
71	SDAH11082	High	SW Corner El fuerte and Poinsettia Lane	400-8F	Public	City of Carlsbad	TC-60	MP-50 & MP-51	904.51	Yes	02/21/2003
72	SDAH8503	High	Navigator Cr. W/O Navigator Cr	285-2	Public	City of Carlsbad	DC-2	Debris Catcher	904.51	Yes	05/21/1986
73	SDAH3630	High	La Costa Av. E/O Piraeus St.	308-5	Public	City of Carlsbad	DC-2	Debris Catcher	904.51	Yes	03/08/2001
74	SDAH5899	High	La Costa Av. E/O Piraeus St.	308-5	Public	City of Carlsbad	DC-2	Debris Catcher	904.51	Yes	03/08/2001
75	SDAH3583	High	La Costa Av. W/O El Camino Real	308-5	Public	City of Carlsbad	DC-2	Debris Catcher	904.51	Yes	03/08/2001
76	SDAH3587	High	La Costa Av. W/O El Camino Real	308-5	Public	City of Carlsbad	DC-2	Debris Catcher	904.51	Yes	03/08/2001
77	SDAH6633	High	La Costa Av. W/O El Camino Real	308-5	Public	City of Carlsbad	DC-2	Debris Catcher	904.51	Yes	03/08/2001
78	SDAH6634	High	La Costa Av. W/O El Camino Real	308.5	Public	City of Carlsbad	DC-2	Debris Catcher	904.51	Yes	03/08/2001
79	SDAH14784	High	Olivenhain Road and Camino Alvaro	399-1	Public	City of Carlsbad	MP-52	Drain Insert	904.51	Yes	06/22/2006

SAMPLE PRIORITY PROJECT APPROVAL

REPORTING PERIOD FROM

JULY 1, 2008 THROUGH JUNE 30, 2009

CARLSBAD PASEO (MS 07-02, CUP 07-03, CDP07-07)

PLANNING COMMISSION RESOLUTION NO. 6437

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARLSBAD, CALIFORNIA, RECOMMENDING APPROVAL OF A COASTAL DEVELOPMENT PERMIT TO CONSTRUCT A 7,511 SQUARE FOOT STAND ALONE RESTAURANT, A 44,391 SQUARE FOOT COMMERCIAL RETAIL CENTER, AND A VACANT PAD FOR A FUTURE STAND ALONE RESTAURANT ON A 6.96 ACRE PARCEL GENERALLY LOCATED ON THE WEST SIDE OF PASEO DEL NORTE, NORTH OF KING'S FISH HOUSE, SOUTH OF CAR COUNTRY DRIVE, AND EAST OF THE INTERSTATE 5 FREEWAY, WITHIN THE MELLO II SEGMENT OF THE LOCAL COASTAL PROGRAM AND LOCAL FACILITIES MANAGEMENT ZONE 3.

CASE NAME: CARLSBAD PASEO
CASE NO.: CDP 07-07

WHEREAS, **Strategic Property Advisors, Inc.,** "Developer," has filed a verified application with the City of Carlsbad regarding property owned by **CPT/SC Title Holding Corporation,** "Owner," described as

Portions of Parcel 2 and 3 of Parcel Map No. 11284, filed in the Office of the County Recorder of San Diego County, May 11, 1981 and lot 4 of Carlsbad Tract No. 92-7 (Carlsbad Ranch Unit 1 And Unit 2), according to map thereof No. 13078, filed in the Office of the County Recorder of San Diego County, December 28, 1993, all in the City of Carlsbad, County of San Diego, State of California, more particularly described as follows:

Beginning at the northeasterly corner of said Parcel 3, said corner being the most northerly corner of said Lot 4, said corner being the point of beginning; thence southerly along the easterly line of said Lot 4, south 22°29'26" east (south 22°29'26" east per said Map No. 13078) 925.00 feet to the beginning of a tangent curve concave northeasterly having a radius of 557.00 feet; thence southeasterly along said curve through a central angle of 11°20'36" a distance of 110.27 feet to a point on said easterly line, a radial through said point bears south 56°09'58" west; thence leaving said easterly line south 55°50'26" west 343.71 feet to the westerly line of said Parcel 2; thence northwesterly along the westerly line of said Parcels 2 and 3, north 26°48'03" west (north 26°47'14" west per said Parcel Map 11284) 738.65 feet to an angle point corner of said Parcel 3; thence continuing along said westerly line north 25°12'24" west 300.01 feet (north 25°11'47" west 300.01 feet per said parcel map) to an angle point corner of said parcel map; thence continuing along said westerly line north

26°15'29" west 68.05 feet (north 26°15'48" west 68.03 feet per said parcel map) to the northwest corner of said Parcel 3 of said parcel map; thence easterly along the northerly line of said Parcel 3, north 67°31'12" east 399.93 feet (north 67°31'17" east 400.00 feet per said parcel map) to the point of beginning.

Said land is also described as Parcel A in that certain Certificate of Compliance for Adjustment Plat, dated October 1, 2002, and recorded October 18, 2002, as Document No. 2002-0913260, Official Records of San Diego County, California.

("the Property"); and

WHEREAS, said verified application constitutes a request for a Coastal Development Permit as shown on Exhibits **"A" – "NN"** dated **July 16, 2008**, on file in the Planning Department, **CARLSBAD PASEO - CDP 07-07,** as provided by Chapter 21.201.040 of the Carlsbad Municipal Code; and

WHEREAS, the Planning Commission did, on **July 16, 2008**, hold a duly noticed public hearing as prescribed by law to consider said request; and

WHEREAS, at said public hearing, upon hearing and considering all testimony and arguments, if any, of all persons desiring to be heard, said Commission considered all factors relating to the CDP.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Planning Commission of the City of Carlsbad as follows:

A) That the foregoing recitations are true and correct.

B) That based on the evidence presented at the public hearing, the Commission **RECOMMENDS APPROVAL** of **CARLSBAD PASEO - CDP 07-07** based on the following findings and subject to the following conditions:

Findings:

1. That the proposed development is in conformance with the **Mello II Segment of the** Certified Local Coastal Program and all applicable policies in that **the proposed uses are consistent with the Travel Service (TS) LCP Land Use designation; there is no historic evidence of agricultural use of the property; the development does not obstruct views of the coastline as seen from any public lands or public rights-of-way; the project is consistent with the City of Carlsbad's HMP, which has been**

developed so as to implement and be consistent with all provisions of the LCP; the project has been designed to reduce the amount of runoff to the maximum extent practicable, utilizes Low Impact Design (LID), and has been conditioned to implement the National Pollution Discharge Elimination System (NPDES) standards; and the site is geologically stable.

2. The proposal is in conformity with the public access and recreation policies of Chapter 3 of the Coastal Act in that **the site is located on the east side of the first public street and no coastal access areas or water-oriented recreational activities exist on or near the project site.**

3. The project is consistent with the provisions of the Coastal Resource Protection Overlay Zone (Chapter 21.203 of the Zoning Ordinance) in that the project will adhere to the City's Master Drainage Plan, Grading Ordinance, Storm Water Ordinance, Standard Urban Storm Water Mitigation Plan (SUSMP), and Jurisdictional Urban Runoff Management Program (JURMP) to avoid increased urban runoff, pollutants, and soil erosion. No steep slopes or native vegetation is located on the subject property and the site is not located in an area prone to landslides, or susceptible to accelerated erosion, floods, or liquefaction.

4. The Planning Commission has reviewed each of the exactions imposed on the Developer contained in this resolution, and hereby finds, in this case, that the exactions are imposed to mitigate impacts caused by or reasonably related to the project, and the extent and the degree of the exaction is in rough proportionality to the impact caused by the project.

Conditions:

Note: Unless otherwise specified herein, all conditions shall be satisfied prior to **issuance of a grading permit or building permit, whichever occurs first.**

1. If any of the following conditions fail to occur, or if they are, by their terms, to be implemented and maintained over time, if any of such conditions fail to be so implemented and maintained according to their terms, the City shall have the right to revoke or modify all approvals herein granted; deny or further condition issuance of all future building permits; deny, revoke, or further condition all certificates of occupancy issued under the authority of approvals herein granted; record a notice of violation on the property title; institute and prosecute litigation to compel their compliance with said conditions or seek damages for their violation. No vested rights are gained by Developer or a successor in interest by the City's approval of this **Coastal Development Permit.**

2. Staff is authorized and directed to make, or require the Developer to make, all corrections and modifications to the **Coastal Development Permit** documents, as necessary to make them internally consistent and in conformity with the final action on the project. Development shall occur substantially as shown on the approved Exhibits. Any proposed development, different from this approval, shall require an amendment to this approval.

3. Developer shall comply with all applicable provisions of federal, state, and local laws and regulations in effect at the time of building permit issuance.

4. If any condition for construction of any public improvements or facilities, or the payment of any fees in-lieu thereof, imposed by this approval or imposed by law on this Project are challenged, this approval shall be suspended as provided in Government Code Section 66020. If any such condition is determined to be invalid, this approval shall be invalid unless the City Council determines that the project without the condition complies with all requirements of law.

5. Developer/Operator shall and does hereby agree to indemnify, protect, defend, and hold harmless the City of Carlsbad, its Council members, officers, employees, agents, and representatives, from and against any and all liabilities, losses, damages, demands, claims and costs, including court costs and attorney's fees incurred by the City arising, directly or indirectly, from (a) City's approval and issuance of this **Coastal Development Permit**, (b) City's approval or issuance of any permit or action, whether discretionary or nondiscretionary, in connection with the use contemplated herein, and (c) Developer/Operator's installation and operation of the facility permitted hereby, including without limitation, any and all liabilities arising from the emission by the facility of electromagnetic fields or other energy waves or emissions. This obligation survives until all legal proceedings have been concluded and continues even if the City's approval is not validated.

6. This approval is granted subject to the approval of **the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, and CUP 07-03** and is subject to all conditions contained in Planning Commission Resolutions No. **6435 and 6436** for those other approvals incorporated herein by reference.

7. This approval is granted subject to the approval of the **Minor Subdivision (MS 07-02)** and is subject to all conditions contained **in the City Engineer's approval letter** for this other approval incorporated herein by reference.

8. Developer shall implement, or cause the implementation of, the **CARLSBAD PASEO – CUP 07-03/CDP 07-07/MS 07-02** Project Mitigation Monitoring and Reporting Program.

9. The applicant shall apply for and be issued building permits for this project within two (2) years of approval or this coastal development permit will expire unless extended per Section 21.201.210 of the Zoning Ordinance.

10. Prior to the issuance of building permits, the applicant shall apply for and obtain a grading permit issued by the City Engineer.

NOTICE

Please take **NOTICE** that approval of your project includes the "imposition" of fees, dedications, reservations, or other exactions hereafter collectively referred to for convenience as "fees/exactions."

You have 90 days from date of final approval to protest imposition of these fees/exactions. If you protest them, you must follow the protest procedure set forth in Government Code Section 66020(a), and file the protest and any other required information with the City Manager for processing in accordance with Carlsbad Municipal Code Section 3.32.030. Failure to timely follow that procedure will bar any subsequent legal action to attack, review, set aside, void, or annul their imposition.

You are hereby FURTHER NOTIFIED that your right to protest the specified fees/exactions DOES NOT APPLY to water and sewer connection fees and capacity charges, nor planning, zoning, grading, or other similar application processing or service fees in connection with this project; NOR DOES IT APPLY to any fees/exactions of which you have previously been given a NOTICE similar to this, or as to which the statute of limitations has previously otherwise expired.

PASSED, APPROVED, AND ADOPTED at a regular meeting of the Planning Commission of the City of Carlsbad, California, held on **July 16, 2008**, by the following vote, to wit:

AYES: Commissioners Baker, Boddy, Dominguez, Douglas, Montgomery, and Chairperson Whitton

NOES:

ABSENT: Commissioner Cardosa

ABSTAIN:

FRANK H. WHITTON, Chairperson
CARLSBAD PLANNING COMMISSION

ATTEST:

DON NEU
Planning Director

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the flow rate or amount (volume) of surface runoff in a manner, which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood delineation map?	☐	☐	☐	☒
h) Place within 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

k) Increase erosion (sediment) into receiving surface waters.	☐	☐	☒	☐
l) Increase pollutant discharges (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, nutrients, oxygen-demanding substances and trash) into receiving surface waters or other alteration of receiving surface water quality (e.g. temperature, dissolved oxygen or turbidity?	☐	☐	☒	☐
m) Change receiving water quality (marine, fresh or wetland waters) during or following construction?	☐	☐	☒	☐
n) Increase any pollutant to an already impaired water body as listed on the Clean Water Act Section 303(d) list?	☐	☐	☒	☐
o) Increase impervious surfaces and associated runoff?	☐	☐	☒	☐
p) Impact aquatic, wetland, or riparian habitat?	☐	☐	☒	☐
q) Result in the exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?	☐	☐	☒	☐

a) Less Than Significant Impact. Federal, state and local agencies have established goals and objectives for storm water quality in the region. The proposed project prior to the start of construction, will comply with all federal, state and local permits including the Storm Water Management Plan (SWMP) required under the County of San Diego Watershed Protection, Storm Water Management, and Discharge Control Ordinance (WPO) (Section 67.871), the City of Carlsbad's Standard Urban Storm Water Management Plan (SUSMP), and the National Pollution Discharge Elimination System (NPDES) from the Regional Water Quality Control Board (RWQCB). The project will develop and implement specific erosion control and best management practices to protect downstream water quality. These plans will ensure that acceptable water quality standards will be maintained both during construction as well as post-development.

b) Less Than Significant Impact. The project does not propose to directly draw any groundwater; instead it will be served via existing public water distribution lines within the public right-of-way adjacent to the site. Existing water lines will adequately serve the project's water demands. Rainwater infiltration is needed to provide adequate groundwater recharge. Therefore, the project incorporates Low Impact Development (LID) design features, which promote infiltration of storm water run-off by proposing to minimize impervious surface areas, directing run-off to landscape areas, and proposing a detention/infiltration "Storm Chamber" system, which reduces the amount of discharge and velocity of run-off to pre-development levels, and serves as a treatment BMP to attain water quality objectives. The project will not significantly deplete groundwater supplies or quality. Therefore, impacts are considered to be less than significant.

c) No Impact. There are no streams or rivers within or adjacent to the site. Therefore, no impact is assessed.

d) Less Than Significant Impact. A Preliminary Hydrology Report dated March 17, 2008, and a Preliminary Storm Water Management Plan (SWMP) dated March 19, 2008, was prepared for the project by Aquaterra Engineering Inc. According to the reports, the proposed project does not substantially alter the existing drainage pattern of the site. The amount of discharge and velocity of run-off will not significantly exceed pre-development levels, and therefore will not cause substantial erosion or flooding. Project grading is designed to maintain the existing drainage pattern. The project incorporates LID design features, which promote infiltration of storm water run-off by proposing to minimize impervious surface areas, directing run-off to landscape areas, and proposing a

detention/infiltration "Storm Chamber" system, which reduces the amount of discharge and velocity of run-off to pre-development levels, and serves as a treatment BMP to attain water quality objectives.

e) Less Than Significant Impact. According to the Preliminary Hydrology Report dated March 17, 2008, and the Preliminary Storm Water Management Plan (SWMP) dated March 19, 2008, which was prepared for the project by Aquaterra Engineering Inc., the project will not significantly impact the existing or planned storm water systems, nor will the total post development run-off significantly exceed the pre-development levels. The project is proposing a detention/infiltration "Storm Chamber" system, which reduces the amount of discharge and velocity of run-off to pre-development levels, and serves as a treatment BMP to attain water quality objectives.

f) Less Than Significant Impact. The project will not substantially degrade the water quality as demonstrated in the Preliminary Hydrology Report dated March 17, 2008, and the Preliminary Storm Water Management Plan (SWMP) dated March 19, 2008, which was prepared for the project by Aquaterra Engineering Inc. The project incorporates LID design features, which promote infiltration of storm water run-off by proposing to minimize impervious surface areas, directing run-off to landscape areas, and proposing a detention/infiltration "Storm Chamber" system, which reduces the amount of discharge and velocity of run-off to pre-development levels, and serves as a treatment BMP to attain water quality objectives.

g-j) No Impact. The project site is not located within a 100-year flood hazard area according to the Flood Insurance Rate Map, Map No. 06073C1027F, June 19, 1997; and according to the City of Carlsbad Geotechnical Hazards Analysis and Mapping Study, Catastrophic Dam Failure Inundation, Tsunami and Seiche Hazard Zone Maps, September 1992, the project site is not located within an area affected by tsunami, seiche, or mudflow, nor is the site located within a Catastrophic Dam Failure Inundation Area. Therefore, no impact is assessed.

k) Less Than Significant Impact. The project does not significantly increase erosion into receiving surface waters as demonstrated in the Preliminary Hydrology Report dated March 17, 2008, and the Preliminary Storm Water Management Plan (SWMP) dated March 19, 2008, that were prepared for the project by Aquaterra Engineering Inc. According to these reports, the amount of discharge and velocity of run-off will not significantly exceed pre-development levels, and therefore will not cause substantial erosion into receiving surface waters. The project incorporates LID design features, which promote infiltration of storm water run-off by proposing to minimize impervious surface areas, directing run-off to landscape areas, and proposing a detention/infiltration "Storm Chamber" system, which reduces the amount of discharge and velocity of run-off to pre-development levels, and serves as a treatment BMP to attain water quality objectives. In addition, the project will be required to comply with the current NPDES requirements. A Storm Water Pollution Prevention Plan (SWPPP) will be required during construction phase to prevent short-term water quality impacts during or immediately after construction when graded areas are exposed to rain and storm water run-off.

l-p) Less Than Significant Impact. Storm water run-off drains from the site into the Agua Hedionda Lagoon and ultimately the Pacific Ocean. According to the California 2006 Clean Water Act Section 303(d) list published by the San Diego Regional Water Quality Control Board, Agua Hedionda Lagoon and the Pacific Ocean are listed as impaired water bodies by bacteria indicators. To address water quality of the project, BMP's will be implemented during construction and post construction phases, which specifically address bacteria and will also address sedimentation/siltation. In addition, other pollutants typically associated with the type of proposed development (i.e., nutrients from fertilizers, trash and debris, oxygen demanding substances, oil and grease from paved areas, and pesticides from landscaping) will be addressed through BMP's. As demonstrated in the project's Preliminary Storm Water Management Plan (SWMP), by Aquaterra Engineering Inc., dated March 19, 2008, the project will not significantly increase pollutant discharges and will not alter the water quality of the receiving surface waters, and the amount of discharge and velocity of run-off will not significantly exceed pre-development levels. The project is incorporating LID design features, which promote infiltration of storm water run-off by proposing to minimize impervious surface areas, directing run-off to landscape areas, and proposing a detention/infiltration "Storm Chamber" system, which reduces the amount of discharge and velocity of run-off to pre-development levels, and serves as a treatment BMP to attain water quality objectives.

q) Less Than Significant Impact. The project will not result in the exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses as demonstrated in the Preliminary Hydrology Report dated March 17, 2008, and the Preliminary Storm Water Management Plan (SWMP) dated March

19, 2008, which were prepared for the project by Aquaterra Engineering Inc. The project incorporates LID design features, which promote infiltration of storm water run-off by proposing to minimize impervious surface areas, directing run-off to landscape areas, and proposing a detention/infiltration "Storm Chamber" system, which reduces the amount of discharge and velocity of run-off to pre-development levels, and serves as a treatment BMP to attain water quality objectives.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. LANDUSE AND PLANNING - Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a-c) No Impact. The project is proposing commercial development, which is consistent with the existing and surrounding land uses. The site does not physically divide an established community, nor does the project conflict with any existing or proposed land use plans or policies of the City of Carlsbad. The proposed two-story retail center and two stand alone restaurants are appropriate land uses that are consistent with the Local Coastal Program land use designation of Travel Service (T-S). The project is consistent with the City of Carlsbad General Plan Land Use designation of Travel/Recreation Commercial (T-R), which designates areas for commercial uses that serve the travel and recreational needs of tourists, residents and employees of the business and industrial centers. The proposed two-story retail center and two stand alone restaurant uses will serve the travel and recreational needs of tourists, residents and employees of the surrounding businesses and industrial centers. The project is compatible with the City of Carlsbad Habitat Management Plan (see Section IV above). Therefore, no impact is assessed.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
X. MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

a-b) No Impact. There is no indication that the subject property contains any known mineral resources that would be of future value to the region or the residents of the State. Therefore, no impact is assessed.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. NOISE - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a) Potentially Significant Unless Mitigation Incorporated. An acoustical analysis was prepared for the proposed project by Urban Crossroads on December 11, 2007 (JN:05471-03) to determine compatibility with the City of Carlsbad's Noise Guidelines Manual. The report identifies vehicle noise from Interstate 5 and Paseo del Norte as the primary noise source in the vicinity of the project site. Building facade noise levels were found to be approximately 75 dBA or less at all buildings on the project site. The design of the buildings will be required to provide a minimum noise reduction of 20 dBA CNEL in order to comply with the City's interior Leg(h) standard of 55 dBA CNEL. According to the report, new construction will generally produce a "windows closed" noise reduction ranging from 25 dBA to 30 dBA. Therefore, with typical building construction, including a means of mechanical ventilation for all buildings onsite, the project will comply with the City of Carlsbad's 55 dBA CNEL interior noise standard for commercial uses. The following mitigation measure has been applied to the project and will reduce impacts to a level considered less than significant:

Mitigation Measure #1:

Mechanical ventilation shall be provided for all buildings as specified in the acoustical analysis prepared for the project by Urban Crossroads on December 11, 2007, to achieve a 55 dBA CNEL interior noise level. Prior to issuance of a building permit, the developer shall submit a supplemental acoustical analysis from the acoustical consultant stating that the architectural plans have been designed in compliance with the recommendations stated in the acoustical report.

The acoustical analysis also analyzed exterior noise impacts as they relate to the outdoor dining area proposed along the north side of Restaurant A (P.F. Chang's). In order to block the transmission path of the roadway noise to the outdoor dining area, a 4-foot high noise barrier is required along the northern edge of the dining area, which will mitigate noise levels to a "conditionally acceptable" noise level of between 68.6 dBA CNEL and 70.2 dBA CNEL. The noise barrier may be constructed of masonry block; stucco veneer over wood framing (or foam core), or 1 inch thick tongue and groove wood of sufficient weight per square foot; glass (¼-inch thick), or other transparent material with sufficient weight per square foot; earthen berm; or any combination of these materials. Restaurant A is designed with a 4-foot high wall consisting of a combination of ¼-inch thick tempered glass mounted on top of a masonry block wall with a stucco finish. With the 4-foot high noise barrier, the exterior noise levels at the outdoor dining area will fall between the City of Carlsbad's "normally acceptable" policy goal of 65 dBA CNEL and the "conditionally acceptable" 75 dBA CNEL goal for exterior areas. The following mitigation measure has been applied to the project and will reduce impacts to a level considered less than significant:

Mitigation Measure #2:

The project is required to include a 4-foot high noise barrier along the northern edge of the outdoor dining area of Restaurant A (P.F. Chang's). The barrier must have a surface density of at least 3.5 pounds per square foot of face area and shall have no decorative cutouts or line-of-site openings between shielded areas and the roadways. The noise control barrier may be constructed of masonry block; stucco veneer over wood framing (or foam core), or 1 inch thick tongue and groove wood of sufficient weight per square foot; glass (¼-inch thick), or other transparent material with sufficient weight per square foot; earthen berm; or any combination of these materials.

b & d) Less Than Significant Impact. The anticipated grading operation associated with the proposed project will result in a temporary and minor increase in groundborne vibration and ambient noise levels. Following the conclusion of grading, ambient noise level and vibrations are expected to return to pre-existing levels.

c) No Impact. The project is located on an infill lot surrounding by existing urban development and the Interstate 5 freeway. The proposed commercial retail center and restaurants are not expected to increase the ambient noise levels in the project vicinity above levels existing without the project. Therefore, no impact is assessed.

e-f) No Impact. The subject site is located approximately 1.9 miles west of the McClellan-Palomar Airport runway and approximately 270 feet below the surface of the runway. The project site is located within the Airport Influence Area as identified in the Airport Land Use Compatibility Plan (ALUCP) for the McClellan-Palomar Airport. The proposed retail center and restaurant uses fall into Land Use Category No. 8 of the ALUCP Noise/Land Use Compatibility Matrix (Commercial-Retail, Shopping Centers, Restaurants, and Movie Theaters). According to the ALUCP, the southern half of the project site is located within the 60 CNEL noise contour with the northern half located just outside. The types of uses proposed with the project are considered "compatible" according to the ALUCP with the aircraft noise exposure at the site. Therefore, no impact is assessed.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. POPULATION AND HOUSING - Would the project:				
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a-c) No Impact. The proposed project is located on an infill site surrounded by vehicle storage for Ken Grody Ford to the north, a stand alone restaurant (King's Fish House) to the south, Carlsbad Premium Outlets to the east, and Interstate 5 to the west. The area surrounding the proposed development is designated for Travel/Recreation Commercial (T-R) and Regional Commercial (R) General Plan land uses. The intensity of the proposed development is consistent with the surrounding land uses and is also consistent with the Travel/Recreation Commercial (T-R) General Plan Land Use designation for the site. The project is anticipated to capture the existing residential community along with servicing the retail needs of tourists visiting the area. The project will not induce substantial growth in area, thereby necessitating the need for new housing, the extension of roads or other infrastructure; nor will it displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere. Therefore, no impact is assessed.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, a need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

a.i.-a.v.) No Impact. The proposed Carlsbad Paseo project will not effect the provision and/or availability of public facilities (i.e., fire protection, police protection, schools, parks, etc.). The proposed project shall be subject to the conditions and facility service level requirements within the Local Facilities Management Plan for Zone 3, therefore no significant public service impacts will occur.

XIV. RECREATION	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a-b) No Impact. The proposed project is not considered a use that would increase the use of existing neighborhood and regional parks, nor does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. Therefore, no impact is assessed.

XV. TRANSPORTATION/TRAFFIC - Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☒	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in insufficient parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turn-outs, bicycle racks)?	☐	☐	☐	☒

a) Potentially Significant Impact Unless Mitigation Incorporated. A Traffic Impact Analysis was prepared for the project by Darnell & Associates, Inc., dated March 2008. The project will generate 3,752 Average Daily Trips (ADT), 71 AM peak hour trips and 300 PM peak hour trips. This traffic will utilize the following key roadways: Cannon Road, Palomar Airport Road, Paseo del Norte, and Interstate 5 (I-5). Existing traffic, design capacity(ies), project traffic, and percent of the existing traffic volume and the design capacity respectively on these arterials are listed in the table below:

Roadway	Existing Vol. (ADT)	Capacity (ADT)	Project Vol. (ADT)	% of Existing / % of Capacity
Palomar Airport Road	52,936	60,000	1,313	2.5 / 2.2
Cannon Road	28,237	40,000	1,313	4.5 / 3.2
Paseo del Norte	10,831	30,000	2,251	20.7 / 7.5

According to SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region, LOS D is an acceptable level of service for roadways and intersections. Traffic Impact on a roadway segment or intersection is considered significant and a mitigation measure must be provided if one of the following criteria is met:

1. The addition of trips generated by the proposed project results in a change of LOS from an acceptable level of service to unacceptable level of service.

2. When the intersection or roadway segment is operating at an acceptable level of service and the addition of the proposed project traffic results in a change in volume to capacity ratio of more than 2% (0.02), or results in an increase in delay of more than 2.0 seconds at a deficient intersection.

For freeway segments, an increase of more than .01 in volume to capacity ratio is considered significant.

Direct Impacts:

Under the Existing plus Project scenario, the traffic impact analysis indicates that the proposed project has no significant direct impacts to key roadway segments and/or intersections. All affected roadway segments will operate at LOS A (see Table 11 of the said traffic impact analysis). For the analyzed segments of Interstate 5 Freeway (Tamarack Avenue to Cannon Road, Cannon Road to Palomar Airport Road, and Palomar Airport Road to Poinsettia Lane), the increases in volume to capacity ratio are within the allowable 0.01 per SANTEC/ITE guidelines. All analyzed intersections will continue to operate at an acceptable LOS D or better.

Near Term Impacts:

The proposed project will have cumulative indirect impacts at the following intersections under the Near Term Cumulative plus Project scenario:

- Palomar Airport Road/Paseo del Norte,
- Palomar Airport Road/I-5 Northbound Ramp,
- Paseo del Norte/Carlsbad Company Stores Driveway,
- Eastbound Left Turn Queue at Palomar Airport Road/Paseo del Norte,
- Southbound I-5/Westbound Palomar Airport Road Ramp

Mitigation No. 1 & 2:

Palomar Airport Road/Paseo del Norte & Palomar Airport/I-5 Northbound Ramp .

To mitigate impacts to the Palomar Airport Road/Paseo del Norte intersection, the developer shall pay Traffic Impact Fee based on Section 18.42 of the City of Carlsbad Municipal Code prior to approval of a building permit.

The TIF program identifies the future addition of a westbound through lane at the Palomar Airport Road/Paseo del Norte intersection. If this improvement is completed, the Palomar Airport Road/Paseo del Norte intersection will operate at LOS D under the near term cumulative plus project scenario. The TIF improvements to the Palomar Airport Road/Paseo del Norte Road intersection will also result in improvements in delay at the Palomar Airport Road/I-5 northbound ramp intersection.

The LOS at Palomar Airport Road/I-5 northbound ramp intersection will still operate at LOS E even with the said TIF improvements. However, the peak AM peak hour delay increase is only 25.5 seconds, less than a 2 minute increase allowed by SANTEC/ITE standards.

Mitigation Measure No. 3:

Paseo del Norte/Carlsbad Company Stores Driveway.

Prior to recordation of the parcel map, developer shall execute a Traffic Signal Subdivision Improvement Agreement to design and install and post appropriate security as provided by law, a traffic signal constructed to the satisfaction of the City Engineer. The improvements consist of.

A. Design and construct a new fully actuated traffic signal including all appurtenances and traffic signal interconnect conduit and cable, at the intersection of Paseo Del Norte and Carlsbad Company Store Driveway at the entryway of the project. Developer acknowledges the necessity of this signal is to serve only this project and Developer will bear all costs associated with the design and construction of this signal, if warrants are met. The signal shall be interconnected with

adjacent signals to facilitate signal coordination.

Developer shall post security for the design and construction of said improvements. The traffic signal shall be installed only when written approval is received by the City Engineer. The Agreement shall be kept in force and security kept valid for a period of 5-years after the last building permit has been issued within this Development.

Mitigation Measure No. 4:

Eastbound Left Turn Queue at Palomar Airport Road/ Paseo del Norte

The queuing analysis for this intersection found that the 95th percentile queue is projected to exceed the 250 feet of available storage during the PM peak hour under the near term cumulative without project scenario. Prior to recordation of the parcel map. The developer shall pay a fair-share contribution for the lengthening of the eastbound Palomar Airport Road left turn pocket on the west leg of the intersection of Palomar Airport Road and Paseo del Norte, based on a pro-rata share, all the satisfaction of the City Engineer.

Mitigation Measure No. 5:

Palomar Airport Road/I-5 Northbound Ramp & Southbound I-5/Westbound Palomar Airport Road Ramp Meter:

The project resulted in the delay of over two minutes at Palomar Airport Road/I-5 Northbound Ramp & Southbound I-5/Westbound Palomar Airport Road Ramp. SANTEC/ITE standard allows an increase of up to two minutes. The proposed mitigations for this impact is to increase the ramp meter flow rate to reduce the number of vehicles entering Interstate 5 freeway. California Department of Transportation has reviewed the proposed mitigation and found it to be acceptable (see letter from Caltrans dated March, 28, 2008). The above future mitigation will only be installed if Caltrans determine that the traffic volume warrants the installation.

Mitigation Measure No. 6:

Future Impacts:

Per SANTEC/ITE guidelines, under a year 2030 scenario, the project will be part of the future impact at the following locations:

- Paseo Del Norte/Carlsbad Company Stores Driveway
- Northbound I-5/Cannon Road Ramp Meter
- Northbound I-5/Cannon Road Ramp Meter

Paseo Del Norte/Carlsbad Company Stores Driveway.

Prior to recordation of the parcel map, developer shall execute a Traffic Signal Subdivision Improvement Agreement to design and install and post appropriate security as provided by law, a traffic signal constructed to the satisfaction of the City Engineer. The improvements consist of.

B. Design and construct a new fully actuated traffic signal including all appurtenances and traffic signal interconnect conduit and cable, at the intersection of Paseo Del Norte and Carlsbad Company Store Driveway at the entryway of the project. Developer acknowledges the necessity of this signal is to serve only this project and Developer will bear all costs associated with the design and construction of this signal, if warrants are met. The signal shall be interconnected with adjacent signals to facilitate signal coordination.

Developer shall post security for the design and construction of said improvements. The traffic signal shall be installed only when written approval is received by the City Engineer. The Agreement shall be kept in force and security kept valid for a period of 5-years after the last building permit has been issued within this Development.

Northbound I-5/Cannon Road Ramp Meter & Northbound I-5/Cannon Road Ramp Meter

Mitigation Measure No. 7:

The project resultes in the delay of over two minutes at Palomar Airport Road/I-5 Northbound Ramp & Southbound I-5/Westbound Palomar Airport Road Ramp. The SANTEC/ITE standard allows an increase of up to two minutes. The proposed mitigations for these impacts are to increase the ramp meter flow rates to reduce the number of vehicles entering Interstate 5 freeway. California Department of Transportation has reviewed the proposed mitigation and found it to be acceptable (see letter from Caltrans dated March, 28, 2008). The above future mitigation will only be installed if Caltrans determine that the traffic volume warrants the installation.
.

b) Less Than Significant Impact. SANDAG acting as the County Congestion Management Agency has designated three roads (Rancho Santa Fe Rd., El Camino Real and Palomar Airport Rd.) and one highway segment in Carlsbad as part of the regional circulation system. The existing LOS on these designated roads and highway in Carlsbad is:

	LOS
Rancho Santa Fe Road	"A-D"
El Camino Real	"A-D"
Palomar Airport Road	"A-D"
SR 78	"F"

The Congestion Management Program's (CMP) acceptable Level of Service (LOS) standard is "E", or LOS "F" if that was the LOS in the 1990 base year (e.g., SR 78 in Carlsbad was LOS "F" in 1990). Accordingly, all designated roads and highway 78 is currently operating at or better than the acceptable standard LOS.

Achievement of the CMP acceptable Level of Service (LOS) "E" standard assumes implementation of the adopted CMP strategies. Based on the design capacity(ies) of the designated roads and highway and implementation of the CMP strategies, they will function at acceptable level(s) of service in the short-term and at buildout.

c) No Impact. The proposed project does not include any aviation components. The project is consistent with the Airport Land Use Compatibility Plan (ALUCP) for the McClellan-Palomar Airport. It would not, therefore, result in a change of air traffic patterns or result in substantial safety risks. Therefore, no impact is assessed.

d) No Impact. All project circulation improvements will be designed and constructed to City standards; and, therefore, would not result in design hazards. The proposed project is consistent with the City's general plan and zoning. Therefore, it would not increase hazards due to an incompatible use. Therefore, no impact is assessed.

e) No Impact. The proposed project has been designed to satisfy the emergency requirements of the Fire and Police Departments. Therefore, no impact is assessed.

f) No Impact. The proposed project is not requesting a parking variance. Additionally, the project would comply with the City's parking requirements to ensure an adequate parking supply. Therefore, no impact is assessed.

g) No Impact. The project is located on the west side of Paseo del Norte between Cannon Road to the north and Palomar Airport Road to the south. The project is served by the North County Transit District (NCTD) with Bus Route 321 serving Paseo del Norte. The project has been designed to include a new bus turnout along Paseo del Norte and bicycle parking onsite. A condition of approval will be added to the project requiring secure bicycle racks to be installed at each bicycle parking area within the project. Therefore, no impact is assessed.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. UTILITIES AND SERVICES SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☐	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☐
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☐

a-g) No Impact. The proposed project will be required to comply with all Regional Water Quality Control Board Requirements. In addition, the Zone 3 LFMP anticipated that the project site would be developed with travel/recreation commercial uses and therefore wastewater treatment facilities were planned and designed to accommodate this future use. All public facilities, including water facilities, wastewater treatment facilities and drainage facilities, have been planned and designed to accommodate the growth projections for the City at build-out. The project does not result in development that will require expansion or construction of new water facilities/supplies, wastewater treatment or storm water drainage facilities. Therefore, no impact is assessed.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?)	☐	☐	☒	☐
c) Does the project have environmental effects, which will cause the substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

b) Less Than Significant Impact. The San Diego Association of Governments (SANDAG) projects regional growth for the greater San Diego area, and local General Plan Land Use policies are incorporated into SANDAG projections. Based upon those projections, region-wide standards, including storm water quality control, air quality standards, habitat conservation, congestion management standards, etc., are established to reduce the cumulative impacts of development in the region. All of the City's development standards and regulations are consistent with the region wide standards. The City's standards and regulations, including grading standards, water quality and drainage standards, traffic standards, habitat and cultural resource protection regulations, and public facility standards, ensure that development within the City will not result in a significant cumulatively considerable impact.

There are two regional issues that development within the City of Carlsbad has the potential to have a cumulatively considerable impact on. Those issues are air quality and regional circulation. As described above, the project would contribute to a cumulatively considerable potential net increase in emissions throughout the air basin. However, the air quality would be essentially the same whether or not the development is implemented.

The County Congestion Management Agency (CMA) has designated three roads (Rancho Santa Fe Rd., El Camino Real and Palomar Airport Rd.) and two highway segments in Carlsbad as part of the regional circulation system. The CMA had determined, based on the City's growth projections in the General Plan, that these designated roadways will function at acceptable levels of service in the short-term and at build-out. The project is consistent with the City's growth projections, and therefore, the cumulative impacts from the project to the regional circulation system are less than significant.

With regard to any other potential impacts associated with the project, City standards and regulations will ensure that development of the site will not result in any significant cumulatively considerable impacts.

c) Less than Significant Impact. Based upon the fact that future development of the site will comply with all City standards, the project will not result in any direct or indirect substantial adverse environmental effects on human beings. However, the project site is located in an area where human beings are exposed to significant levels of noise

generated by traffic on the surrounding streets. As discussed above, any potential impacts from noise can be mitigated to a level less than significant. Those mitigation measures will be incorporated as conditions of project approval. Development of the site and structures will be required to comply with all applicable Federal, State, Regional and City regulations, which will ensure that development of the site will not result in adverse impacts on human beings, either directly or indirectly.

XVIII. EARLIER ANALYSES

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case a discussion should identify the following on attached sheets:

a) Earlier analyses used. Identify earlier analyses and state where they are available for review.

b) Impacts adequately addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation measures. For effects that are "Less Than Significant with Mitigation Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

EARLIER ANALYSIS USED AND SUPPORTING INFORMATION SOURCES

The following documents were used in the analysis of this project and are on file in the City of Carlsbad Planning Department located at 1635 Faraday Avenue, Carlsbad, California, 92008.

1. Final Master Environmental Impact Report for the City of Carlsbad General Plan Update (MEIR 93-01). City of Carlsbad Planning Department, March 1994.

2. Carlsbad General Plan, City of Carlsbad Planning Department, March 1994.

3. City of Carlsbad Municipal Code, Title 21 Zoning, City of Carlsbad Planning Department, as updated.

4. Habitat Management Plan for Natural Communities in the City of Carlsbad, City of Carlsbad Planning Department, final approval dated November 2004.

5. Airport Land Use Compatibility Plan for McClellan Palomar Airport, Carlsbad, California, San Diego County Regional Airport Authority, as amended October 4, 2004.

6. Geotechnical Engineering Investigation Report (Contract No. 148028), Testing Engineers San Diego, Inc., September 26, 2006.

7. Carlsbad Paseo Galleria Preliminary Noise Study (JN: 05471-03), Urban Crossroads, December 11, 2007.

8. Preliminary Vegetation Assessment, Carlsbad Paseo, Planning Systems, May 16, 2007.

9. Wetland Delineation for the Carlsbad Paseo, Planning Systems, May 16, 2007.

10. Preliminary Storm Water Management Plan for Strategic Property Advisers, Inc., Carlsbad Paseo, Aquaterra Engineering Inc., March 19, 2008.

11. Preliminary Hydrology Report for CPT/SC Title Holdings Corp, Carlsbad Paseo, Aquaterra Engineering Inc., March 17, 2008.

12. Flood Insurance Rate Map, Map No. 06073C1027F, June 19, 1997.

13.

LIST OF MITIGATING MEASURES (IF APPLICABLE)

APPLICANT CONCURRENCE WITH MITIGATION MEASURES

THIS IS TO CERTIFY THAT I HAVE REVIEWED THE ABOVE MITIGATING MEASURES AND CONCUR WITH THE ADDITION OF THESE MEASURES TO THE PROJECT.

Date

Signature

August 21, 2008

Strategic Property Advisers, Inc.
3250 Vista Diego Road
Jamul, CA 91935

MS 07-02, CARLSBAD PASEO MINOR SUBDIVISION

The City Engineer has made a preliminary decision, pursuant to Section 20.24.120 of the City of Carlsbad Municipal Code, to approve the Tentative Parcel Map of the subject minor subdivision, subject to the conditions listed below.

NOTE: Unless specifically stated in the condition, all of the following conditions, upon the approval of this proposed Tentative Parcel map, must be met prior to approval of a Parcel Map, building permit, or grading permit, whichever occurs first.

General

1. Prior to hauling dirt or construction materials to or from any proposed construction site within this project, Developer shall apply for and obtain approval from, the City Engineer for the proposed haul route.

2. This approval is granted subject to the approval of the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, **CUP 07-03, and CDP 07-07** and is subject to all conditions contained in Planning Commission Resolutions No. **6435, 6436, and 6437** for those other approvals incorporated herein by reference.

3. Developer shall submit to the City Engineer, a reproducible 24" x 36", mylar copy of the tentative map and a digital copy of said map (in AutoCAD format, latest version) reflecting the conditions approved by the final decision making body and any applicable coastal commission approvals. The reproducible shall be submitted to the City engineer, reviewed and, if acceptable, signed by the City's project engineer and project planner prior to submittal of the building plans, parcel map, improvement or grading plans, whichever occurs first. The digital file copy shall be submitted in a format as approved by the City Engineer.

4. Developer shall provide to the City Engineer, an acceptable means, CC&Rs and/or other recorded document, for maintaining the private easements within the subdivision and all the private improvements such as storm drain facilities and storm water Best Management Practice facilities, parking lot, sidewalks, etc. located therein and to

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distribute the costs of such maintenance in an equitable manner among the owners of the properties within the subdivision.

5. **The developer shall provide proof of a recorded private reciprocal access agreement with the adjacent property owner to the South.**

6. Developer shall and does hereby agree to indemnify, protect, defend and hold harmless the City of Carlsbad, its Council members, agents, officers, and representatives, from and against any and all liabilities, losses, damages, demands, claim and costs, including court costs and attorney's fees incurred by the City arising, directly or indirectly, from (a) City's approval and issuance of this Tentative Parcel Map, (b) City's approval or issuance of any permit or action, whether discretionary or non-discretionary, in connection with the use contemplated herein, including an action filed within the time period specified in Government Code Section 66499.37 and (c) Developer's installation and operation of the facility permitted hereby, including without limitation, any and all liabilities arising from the emission by the facility of electromagnetic fields or other energy waves or emissions.

7. Developer shall install sight distance corridors at all street intersections and driveways in accordance with City Engineering Standards.

8. **Developer shall apply for and obtain Right-of Way Permit from Caltrans for any work proposed within Caltrans' right-of-way.**

Fees/Agreements

9. Developer shall cause property owner to execute and submit to the City Engineer for recordation, the City's standard form Geologic Failure Hold Harmless Agreement.

10. Developer shall cause property owner to execute and submit to the City Engineer for recordation the City's standard form Drainage Hold Harmless Agreement.

11. Prior to approval of any grading or building permits for this project, Developer shall cause Owner to give written consent to the City Engineer to the annexation of the area shown within the boundaries of the site plan into the existing City of Carlsbad Street Lighting and Landscaping District No. 1 and/or to the formation or annexation into an additional Street Lighting and Landscaping District. Said written consent shall be on a form provided by the City Engineer.

12. Developer shall cause property owner to process, execute and submit an executed copy to the City Engineer for recordation a City standard Permanent Storm Water Quality Best Management Practice Maintenance Agreement for the perpetual maintenance of all treatment control, applicable site design and source control, post-construction permanent Best Management Practices prior to the issuance of a grading permit or building permit, whichever occurs first for this Project.

13. **Prior to issuance of a grading permit or building permit, whichever occurs first, the developer shall pay the existing Planned Local Drainage Area (PLDA) fee and enter into an agreement to pay the incremental increase in the PLDA fee as such fee may be established in the forthcoming revised Drainage Master Plan.**

14. **Developer shall cause property owner to execute and submit to the City Engineer for recordation, the City's standard Encroachment Agreement for the required enhanced paving for pedestrian crosswalk at the intersection of Paseo Del Norte and Carlsbad Company Store driveway.**

Grading

15. Based upon a review of the proposed grading and the grading quantities shown on the Site Plan, a grading permit for this project is required. Developer shall apply for and obtain a grading permit from the City Engineer prior to issuance of a building permit for the project.

16. This project requires off site grading. No grading for private improvements shall occur outside the limits of this approval unless Developer obtains, records and submits a recorded copy to the City Engineer a grading or slope easement or agreement from the owners of the affected properties. If Developer is unable to obtain the grading or slope easement, or agreement, no grading permit will be issued. In that case Developer must either apply for and obtain an amendment of this approval or modify the plans so grading will not occur outside the project and apply for and obtain a finding of substantial conformance from both the City Engineer and Planning Director.

17. **Developer shall verify infiltration rate by large-scale infiltration testing at each of the proposed storm water detention/infiltration system locations per the recommendations of the Soil's Engineer. Developer shall provide the design of the drainage systems to the satisfaction of the City Engineer.**

18. Prior to the issuance of grading permit or building permit, whichever occurs first, Developer shall submit for City approval a "Storm Water Management Plan (SWMP)." The SWMP shall demonstrate compliance with the City of Carlsbad Standard Urban Storm water Mitigation Plan (SUSMP), Order 2007-01 issued by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Municipal Code. The SWMP shall address measures to avoid contact or filter said pollutants from storm water, to the maximum extent practicable, for the post-construction stage of the project. At a minimum, the SWMP shall:

    a. Identify existing and post-development on-site pollutants-of-concern.

    b. Identify the hydrologic unit this project contributes to and impaired water bodies that could be impacted by this project.

c. **Incorporate Low Impact Development in the project design.**

d. Recommend source controls and treatment controls that will be implemented with this project to avoid contact or filter said pollutants from storm water to the maximum extent practicable before discharging offsite.

e. Establish specific procedures for handling spills and routine cleanup. Special considerations and effort shall be applied to resident education on the proper procedures for handling cleanup and disposal of pollutants.

f. Ensure long-term maintenance of all post-construction BMPs in perpetuity.

g. Identify how post-construction runoff rates and velocities from the site will not exceed the pre-construction runoff rates and velocities to the maximum extent practicable.

19. Prior to the issuance of a grading permit, Developer shall submit to the City Engineer receipt of a Notice of Intention from the State Water Resources Control Board.

20. **Prior to the issuance of grading permit or building permit, whichever occurs first, Developer shall submit for City approval a Tier 3 Storm Water Pollution Prevention Plan (TIER 3 SWPPP). The TIER 3 SWPPP shall be in compliance with current requirements and provisions established by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Requirements. The TIER 3 SWPPP shall address measures to reduce to the maximum extent practicable storm water pollutant runoff during construction of the project.**

Dedications/Improvements

21. Developer shall cause Owner to make an offer of dedication to the City for

a. **The public water easement shown on the Tentative Parcel Map.**

b. **The public street and utility easement for the proposed bus turnout along Paseo Del Norte as shown on the Tentative Parcel Map.**

c. **The pedestrian access easements for the proposed pedestrian ramps at the project's north and south driveway entrances along Paseo Del Norte as shown on the Tentative Parcel Map.**

The offer shall be made by a certificate on the Parcel Map or separate recorded document. All land so offered shall be free and clear of all liens and encumbrances and without cost to the City. Streets that are already public are not required to be rededicated.

22. Developer shall cause Owner to execute covenants of reciprocal private easements for **private access and parking, drainage, storm drain facilities, and best management practices (BMP) facilities for storm water treatment on each Parcel for the benefit of the other two parcels, as shown on the Tentative Parcel Map.** The obligation to execute and record the covenants of reciprocal private easements shall be shown and recording information called out on the Parcel Map. Developer shall provide City Engineer with proof of recordation prior to issuance of building permit.

23. Developer shall cause the property owner to process, execute and submit to the City Engineer for recordation the City's standard deed restriction on the property which relates to the cross-lot drainage as shown on the Tentative Parcel Map. The deed restriction shall be in a form acceptable to the City Engineer and shall:

    a. Clearly delineate the limits of the drainage course;

    b. State the drainage course is to be maintained in perpetuity by the underlying property owner; and

    c. State that all future use of the property along the drainage course will not restrict, impede, divert or otherwise alter drainage flows in a manner that will result in damage to the underlying and adjacent properties or the creation of public nuisance.

24. Developer shall provide to the City Engineer, an acceptable means, CC&Rs and/or other recorded document, for maintaining the private easements within the subdivision and all private improvements: paving, sidewalks, parking, street lights, storm water quality treatment BMPs, and storm drain facilities located therein and to distribute the costs of such maintenance in an equitable manner among the owners of the properties within the subdivision.

25. Additional drainage easements may be required. Developer shall dedicate and provide or install drainage structures, as may be required by the City Engineer, prior to or concurrent with any grading or building permit.

26. Drainage systems shall be inspected by the City. Developer shall pay the standard improvement plan check and inspection fees.

27. **The proposed 10' x 24' ADA boarding area at the proposed bus stop shown on the tentative map must be moved to the far south end of the turnout berth area parallel to the road to the satisfaction of NCTD.**

28. **The proposed ADA path that connects to the above mentioned 10'x24' ADA boarding pad must be extended to the east to join the new proposed sidewalk to the satisfaction of NCTD.**

31. **Developer shall pay a fair-share contribution for the lengthening of the eastbound to northbound left turn pocket at the intersection of Palomar Airport Road and Paseo Del Norte, based on a pro-rata share equivalent to thirteen percent of the actual cost to the satisfaction of the City Engineer.**

Parcel Map Notes

32. Add the following notes to the final map as non-mapping data.

A All improvements are privately owned and are to be privately maintained with the exception of the following:

a. **Full half width improvements of Paseo Del Norte, along the project frontage, to secondary arterial standard, including but not limited to driveways, paving, curb and gutter, sidewalk, stripping, under grounding or relocation of utilities, water & sewer services, drainage structures, all necessary transitions to existing improvements as shown on Tentative Parcel Map.**

b. **Onsite potable water lines and appurtenances as shown on the tentative parcel map.**

c. **Modification of the existing signalized intersection, including traffic signal and stripping, at Paseo Del Norte and Car Country Drive to include the proposed north access driveway of the project as the fourth leg of the intersection.**

B **Developer shall prepare and process improvement plans and, prior to approval, shall execute a City standard Subdivision Improvement Agreement to install and secure with appropriate security as provided by law, public traffic signal improvements shown on the tentative map. Said improvements shall be installed to City Standards to the satisfaction of the City Engineer. More specifically, these signal improvements include but are not limited to constructing a new fully actuated traffic signal including all appurtenances, traffic signal interconnect conduit and cable, and enhanced paving for pedestrian crosswalk at the intersection of Paseo Del Norte and Carlsbad Company Store driveway. The signal shall be interconnected with adjacent signals to facilitate signal coordination. Developer shall install the traffic signal only with written authorization from the City Engineer. Developer shall pay the standard improvement plan check and inspection fees. The improvements shall be constructed within 18 months of approval of the development improvement agreement or such other time as provided in said agreement.**

C **Developer shall pay a fair-share contribution for the lengthening of the eastbound to northbound left turn pocket at the intersection of Palomar Airport Road and Paseo Del Norte, based on a pro-rata share equivalent to thirteen percent of the actual cost**

to the satisfaction of the City Engineer.

D Building permits will not be issued for development of the subject property unless the appropriate agency determines that sewer and water facilities are available.

E The owner of this property on behalf of itself and all of its successors in interest has agreed to hold harmless and indemnify the City of Carlsbad from any action that may arise through any diversion of waters, the alteration of the normal flow of surface waters or drainage, or the concentration of surface waters or drainage from the drainage system or other improvements identified in the City approved development plans; or by the design, construction or maintenance of the drainage system or other improvements identified in the City approved development plans.

F Geotechnical Caution:

a. The owner of this property on behalf of itself and all of its successors in interest has agreed to hold harmless and indemnify the City of Carlsbad from any action that may arise through any geological failure, ground water seepage or land subsidence and subsequent damage that may occur on, or adjacent to, this subdivision due to its construction, operation or maintenance.

G No structure, fence, wall, tree, shrub, sign, or other object may be placed or permitted to encroach within the area identified as a sight distance corridor as defined by City of Carlsbad Engineering Standards.

Utilities

33. Prior to approval of improvement plans or final map, Developer shall meet with the Fire Marshal to determine if fire protection measures (fire flows, fire hydrant locations, building sprinklers) are required to serve the project. Fire hydrants, if proposed, shall be considered public improvements and shall be served by public water mains to the satisfaction of the District Engineer.

34. The Developer shall design and construct public facilities within public right-of-way or within minimum 20-foot wide easements granted to the District or the City of Carlsbad. At the discretion of the District Engineer, wider easements may be required for adequate maintenance, access and/or joint utility purposes.

35. The Developer shall design landscape and irrigation plans utilizing recycled water as a source and prepare and submit a colored recycled water use map to the Planning Department for processing and approval by the District Engineer.

36. Prior to issuance of building permits, Developer shall pay all fees, deposits, and charges for connection to public facilities. Developer shall pay the San Diego County Water Authority capacity charge(s) prior to issuance of Building Permits.

37. The Developer shall install potable water and recycled water services and meters at a locations approved by the District Engineer. The locations of said services shall be reflected on public improvement plans.

38. The Developer shall install sewer laterals and clean-outs at a location approved by the District Engineer. The locations of sewer laterals shall be reflected on public improvement plans.

Code Reminders

The project is subject to all applicable provisions of local ordinances, including but not limited to the following:

A. The tentative parcel map shall expire two years from the date of approval by the City engineer.

B. The Average Daily Trips (ADT) and floor area contained in the staff report and shown on the Site Plan are for planning purposes only. Developer shall pay traffic impact and sewer impact fees based on Section 18.42 and Section 13.10 of the City of Carlsbad Municipal Code, respectively.

The City Engineer has reviewed each of the exactions imposed on the developer contained in these conditions of approval, and hereby finds, in this case, that the exactions are imposed to mitigate impacts caused by or reasonably related to the project, and the extent and degree of the exaction is in rough proportionality to the impact caused by the project.

If you have any questions, you may contact Tecla Levy at (760) 602-2733.

Robert T. Johnson, Jr., PE
City Engineer

by: David A. Hauser, PE
Deputy City Engineer

c: Tecla Levy, Assistant Engineer
Senior Engineer, Glen Van Peski
Project Planner, Jason Goff
Fire Department, Gregory Ryan
File

TerraData

SWMP # 02-0025

professional land surveying
civil engineering · water resources

SCANNED

STORM WATER MANAGEMENT PLAN

FOR

RECORD COPY
RSS 3-2-09
Initial Date

CTP/SC Title Holding Corp.
533 S. Freemont, 7th Floor
Los Angeles, CA 90071

PROJECT:

Carlsbad Paseo

MS 07-02; CDP 07-07; **CUP 07-03**

5700 Paseo Del Norte

APN 211-021-30

Carlsbad, CA

DWG 460-1 ; DWG 460-1A ; DWG 460-1B

PREPARED BY:

TerraData, Inc.
P.O. Box 2993
Fallbrook, CA 92088
760 728 4406

January 23, 2007
Revised July 19, 2007
Revised January 8, 2007
Revised March 19, 2008
Revised November 10, 2008
Revised November 24, 2008
Revised January 8, 2009
Revised February 23, 2009

Prepared under the supervision of:

Kristin Lipska Borer, PE C57860 Exp. 6/30/10

MYLAR SUBMITTAL PBS & J

Licensed in: CA ✦ AZ ✦ CO
P.O. Box 2993, Fallbrook, CA 92088 ✦ Tel: 760.728.4406 ✦ Fax: 760.728.2604
E-mail: project@terra-data.org

Carlsbad Paseo
Storm Water Management Plan

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2. Vicinity Map

3. Project Description

4. Site Plan

5. Pollutants of Concern

6. Conditions of Concern

7. LID & Site Design BMPs

8. Source Control BMPs

9. BMPs for Individual Priority Projects

10. Structural Treatment Control BMPs

11. BMP Maintenance Provisions

ATTACHMENT LISTING
- A) Treatment BMP Specifications
- B) Operation and Maintenance Program for Treatment BMP
- C) Fiscal Resources
- D) Engineer's Certification

REFERENCES
1) Stormwater Standards Manual, Ordinance No. 9426 (N.S.)
2) Hydrology Manual, County of San Diego
3) CASQA Storm Water Quality Handbook, 2003

3. PROJECT DESCRIPTION

Project Location: The site, comprised of 6.96 acres, is situated on the north side of Palomar Airport Road between Paseo del Norte and Highway 5. A Vicinity Map and a USGS Map are attached for review on the following pages.

Project Description: The project site is currently vacant.

The proposed project will develop the site for 2 restaurants and a 2-story retail center. Access to the site will be from 2 driveways off Paseo del Norte. The building site has the following coverages:

Proposed Impervious Surfaces
Including Building footprint and parking areas **258,746 s.f. (5.94 ac.)**
85% coverage of impervious surface

Physical Features: The site is an existed graded pad with topography that slopes in the northwesterly direction with mild slope gradients. The development will not alter the existing drainage patterns from the existing pre-development condition. All drainage flows shall be collected via ribbons gutters and catch basins. Then transported via piping, and then detained in an underground storage system and outlet at existing flow levels.

Surrounding Land Use: The surrounding adjacent lands have been developed with a major retail center, a hotel, automobile retail center, and restaurants.

Proposed Project Land Use: The subject application will use the existing C-T-G designation. No land use or zoning change is required for approval of this project.

Hydrologic Unit: This project is located within Carlsbad Watershed and the Hydrologic Area numbered 904.3 (Agua Hedionda). The Carlsbad Hydrologic unit is approximately 210 square miles. This project is a minute portion of this hydrologic area at less than 0.000001% of the total area.

4. SITE PLAN (SEE ATTACHED)

5. POLLUTANTS OF CONCERN IN RECEIVING WATERS

WATERSHED

Please check the watershed(s) for the project.

__San Juan 901	__Santa Margarita 902	__San Luis Rey 903	X Carlsbad 904
__San Dieguito 905	__Penasquitos 906	__San Diego 907	__Sweetwater 909
__Otay 910	__Tijuana 911	__Whitewater 719	__Clark 720
__West Salton 721	__Anza Borrego 722	__Imperial 723	

Please provide the hydrologic sub-area and number(s)

Number	Name
904.31	Agua Hedionda Lagoon

Please provide the beneficial uses for Inland Surface Waters, Coastal Waters and Ground Waters. Beneficial Uses can be obtained from the Water Quality Control Plan for the San Diego Basin, which is available at the Regional Board office or at http://www.waterboards.ca.gov/sandiego/water issues/programs/basin plan/docs/update102207/chapters2 042507.pdf
This project drains directly to the Agua Hedionda Lagoon and does not impact any inland surface waters.

Coastal Waters	Hydrologic Unit Basin Number	IND	NAV	REC 1	REC 2	COMM	BIOL	EST	RWILD	RARE	MAR	AQUA	MIGR	SPWN	WARM	SHELL	MUN	AGR
Agua Hedionda Lagoon	904.31	X		X	X	X	X	X	X	X	X	X	X	X		X		
Ground Waters	904.31		X														X	X

X Existing Beneficial Use
0 Potential Beneficial Use

The project location and watersheds have been compared to the current published 303d list of impaired water bodies. The Agua Hedionda Lagoon is experiencing impairments to beneficial uses due to excessive coliform and sediment from upstream sources.

The project site drains directly to the Agua Hedionda Lagoon via impaired unnamed improved and unimproved drainage courses and therefore potentially contributes to the pollutants of concern.

Bacteria and Sedimentation are pollutants of concern anticipated from the proposed development as noted in Section 6 below. Adequate and appropriate BMPs, will be incorporated in to project design to maximize removal of bacteria and sedimentation to the Maximum Extent Practicable

6. CONDITIONS OF CONCERN

Using Table 1, identify pollutants that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

Table 6.1 Anticipated and Potential Pollutants Generated by Land Use Type

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >100,000 ft2	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Streets, Roads Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

The above shaded rows indicate this project's General Pollutant Categories.

SUMMARY TABLE OF HYDROLOGY CALCULATIONS
CARLSBAD PASEO
DATE: November 11, 2008
SHEET 1 OF 1

POST -CONSTRUCTION (AFTER DETENTION)	*PRE -CONSTRUCTION*	*C*	*Tc (min.)*	*I ("/hr)*	*A (acres)*	*Q (cfs)*	*V (fps)*	****ΔQ (cfs)*
BASIN A,B,C &F		0.80	5.0	6.58	4.7	1.78	-	
	BASIN A,B,C &F	0.20	15.3	3.20	5.2	3.33	-	<1.6>
BASIN D &E		0.80	5.3	6.34	1.3	0.65	-	
	BASIN B & E	0.20	11.4	3.87	1.6	1.25	-	<0.6>

**** VALUES AFTER DETENTION AND INFILTRATION*

Note: If other monitoring data that is relevant to the project is available. Please include as Attachment C.

NOTES ON POLLUTANTS OF CONCERN:

In Table 6.2, Pollutants of Concern are grouped as gross pollutants, pollutants that tend to associate with fine particles, and pollutants that remain dissolved:

Table 6.2

Pollutant	Course Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediments	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

EXPECTED DISCHARGES

There are no sampling data available for the existing site condition. In addition, the project is not expected to generate significant amounts of non-visible pollutants. However, the following constituents are commonly found on similar developments and could affect water quality:

- Sediment
- Nutrients
- Trash & Debris.
- Oxygen Demanding Substances
- Oil & Grease
- Bacteria & Viruses
- Pesticides from Landscaping use.

Pre and Post Development Runoff

The following pages list the Hydrologic Calculations for the Pre and Post Runoff values for the Q(100) – 6 hr. storm.

CONSTRUCTION BMPs

The following selected BMPs will be used in the Construction phase of this project and will be

CONSTRUCTION BMPs

The following selected BMPs will be used in the Construction phase of this project and will be shown on the Erosion Control Map included in the SWPPP (Tier 3).

_X_ Silt Fence

__ Fiber Rolls

_X_Street Sweeping and Vacuuming

__ Storm Drain Inlet Protection

_X_ Stockpile Management

_X_ Solid Waste Management

_X_ Stabilized Construction Entrance/Exit

__Dewatering Operations

__ Vehicle and Equipment Maintenance

__ Desilting Basin

_X_ Gravel Bag Berm

__ Sandbag Barrier

_X_ Material Delivery and Storage

___ Spill Prevention and Control

_X_ Concrete Waste Management

___Water Conservation Practices

_X_ Paving and Grinding Operations

__Any minor slopes created incidental to construction and not subject to a major or minor grading permit shall be protected by covering with plastic or tarp prior to a rain event, and shall have vegetative cover reestablished within 180 days of completion of the slope and prior to final building approval.

7. SITE & DESIGN BMPs

SITE DESIGN

To minimize stormwater impacts, site design measures must be addressed. The following checklist provides options for avoiding or reducing potential impacts during project planning. If YES is checked, it is assumed that the measure was used for this project. If NO is checked, please provide a brief explanation why the option was not selected in the text box below.

Table 7.1

	OPTIONS		YES	NO	N/A
1.	Can the project be relocated or realigned to avoid/reduce impacts to receiving waters or to increase the preservation of critical (or problematic) areas such as floodplains, steep slopes, wetlands, and areas with erosive or unstable soil conditions?				X
2.	Can the project be designed to minimize impervious footprint?		X		
3.	Conserve natural areas where feasible?		X		
4.	Where landscape is proposed, can rooftops, impervious sidewalks, walkways, trails and patios be drained into adjacent landscaping?		X		
5.	For roadway projects, can structures and bridges be designed or located to reduce work in live streams and minimize construction impacts?				X
6.	Can any of the following methods be utilized to minimize erosion from slopes:				
	6.a.	Disturbing existing slopes only when necessary?	X		
	6.b.	Minimize cut and fill areas to reduce slope lengths?	X		
	6.c.	Incorporating retaining walls to reduce steepness of slopes or to shorten slopes?	X		
	6.d.	Providing benches or terraces on high cut and fill slopes to reduce concentration of flows?	X		
	6.e.	Rounding and shaping slopes to reduce concentrated flow?	X		
	6.f.	Collecting concentrated flows in stabilized drains and channels?	X		

LOW IMPACT DEVELOPMENT (LID)

Each numbered item below is a LID requirement of the WPO. Please check the box(s) under each number that best describes the Low Impact Development BMP(s) selected for this project.

Table 8

1. Conserve natural Areas, Soils, and Vegetation-County LID Handbook 2.2.1
☐ Preserve well draining soils (Type A or B)
☐ Preserve Significant Trees
☐ Other. Description:
✓ 1. Not feasible. State Reason: This is a infill project. Thre are no well draining soils or significant trees on site.
2. Minimize Disturbance to Natural Drainage-County LID Handbook 2.2.2
☐ Set-back development envelope from drainages
☐Restrict heavy construction equipment access to planned green/open space areas
☐ Other. Description:
✓ 2. Not feasible. State Reason: There are no natural drainage features associated with this site.
3. Minimize and Disconnect Impervious Surfaces (see 5) –County LID Handbook 2.2.3
✓ Clustered Lot Design
✓ Items checked in 5?
☐ Other. Description:
☐ 3. Not feasible. State Reason
4. Minimize Soil Compaction-County LID Handbook 2.2.4
Restrict heavy construction equipment access to planned green/open space areas
✓ Re-till soils compacted by construction vehicles/equipment
✓Collect & re-use upper soil layers of development site containing organic materials
☐ Other. Description:
4. Not Feasible. State Reason:
5. Drain Runoff from Impervious Surfaces to Pervious Areas- LID Handbook 2.2.5

LID Street & Road Design
☐ Curb-cuts to landscaping
☐ Rural Swales
☐ Concave Median
☐ Cul-de-sac Landscaping Design
☐ Other. Description:
LID Parking Lot Design
☐ Permeable Pavements
☐ Curb-cuts to landscaping
☑ Other. Description: underground detention system.
LID Driveway, Sidewalk, Bike-Path Design
☐ Permeable Pavements
☐ Pitch pavements toward landscaping
☐ Other. Description:
LID Building Design
☐ Cisterns & Rain Barrels
✓ Downspout to swale
☐ Vegetated Roofs
☐ Other. Description: ☐ Not feasible. State Reason:
LID Landscaping Design
☐ Soil Amendments
☐ Reuse of Native Soils
✓ Smart Irrigation Systems
☐ Street Trees
☐ Other. Description:
☐ Not feasible. State Reason:

8. SOURCE CONTROL BMPs

. Design Outdoor Material Storage Areas to Reduce Pollution Introduction

- Non Applicable

Design Trash Storage Areas to Reduce Pollution Introduction

- Trash storage are shall be paved with an impervious surface, designed not to allow run-on from adjoining areas, screened or walled to prevent off-site transport of trash; or
  (1) Attached lids shall be provided on all trash containers that exclude rain;

Employ Integrated Pest Management Principles

- We shall eliminate and/or reduce the need for pesticide use in the project design by:
  (1) Planting pest-resistant or well adapted plant varieties such as native plants; and
  (2) Discourage pests by modifying the site and landscaping design. Pollution prevention is the primary "first line of defense" because pollutants that are never used do not have to be controlled or treated (methods which are inherently less efficient).
- We shall distribute IPM educational materials to future site residents/tenants. Minimally, educational materials must address the following topics:
  (1) Keeping pests out of the buildings and landscaping using barriers, screens and caulking;
  (2) Physical pest elimination techniques, such as, weeding, squashing, trapping, washing, or pruning out pests;
  (3) Relying on natural enemies to eat pests;
  (4) Proper use of pesticides as a last line of defense

Use Efficient Irrigation Systems & Landscape Design

- The following methods to reduce excessive irrigation runoff shall be considered, and incorporated and implemented where determined applicable and feasible:
  (1) Employing rain shutoff devises to prevent irrigation after precipitation;
  (2) Designing irrigation systems to each landscape area's specific water requirements;
  (3) Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.

Provide Storm Drain System Stenciling and Signage

- Provide Concrete stamping, or equivalent, of all storm water conveyance system inlets and catch basins within the project area with prohibitive language (e.g. "No Dumping – I live Downstream), satisfactory to the City Engineer. Stamping may also be required in Spanish.

- Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area, trailheads, parks and building entrances.

- Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area, trailheads, parks and building entrances.

9. BMPs FOR INDIVIDUAL PROJECTS

Private Roads

- Non Applicable

Residential Driveways & Guest Parking

- Not Applicable

Dock Areas

Loading/unloading dock areas shall include the following:

- Cover loading dock areas, or design drainage to preclude urban run-on and runoff.
- Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

Vehicle Wash Areas

- Non Applicable

Outdoor Processing Areas

- Non Applicable

Surface Parking Areas

- Where landscaping is proposed in surface parking areas (both covered and uncovered), landscape areas shall be incorporated into the drainage design.
- Overflow parking (parking in excess of project's minimum parking requirements) may be constructed with permeable paving.

Non Retail Fueling Area

- Non Applicable

Restaurants

A grease interceptor will be installed for the restaurants. Specifcations are included in Attachment "A".

10. STRUCTURAL TREATMENT CONTROL BMPs

To select a structural treatment BMP using Treatment Control BMP Selection Matrix (Table 10.1), each priority project shall compare the list of pollutants for which the downstream receiving waters are impaired (if any), with the pollutants anticipated to be generated by the project (as identified in Table 10.1). Any pollutants identified by Table 10.1, which are also causing a Clean Water Act section 303(d) impairment of the receiving waters of the project, shall be considered primary pollutants of concern. Priority projects that are anticipated to generate a primary pollutant of concern shall select a single or combination of stormwater BMPs from Table 11, which **maximizes pollutant removal** for the particular primary pollutant(s) of concern.

Table 10.1. Treatment Control BMP Selection Matrix

Pollutants of Concern	Bioretention Facilities (LID)*	Settling Basins (Dry Ponds)	Wet Ponds and Wetlands	Infiltration Facilities or Practices (LID)*	Media Filters	High-rate biofilters	High-rate media filters	Trash Racks & Hydro -dynamic Devices
Coarse Sediment and Trash	H	H	H	H	H	H	H	H
Pollutants that tend to associate with fine particles during treatment	H	H	H	H	H	M	L	L
Pollutants that tend to be dissolved following treatment	M	L	M	H	L	L	L	L

Please check the box(s) that best describes the Treatment BMP(s) selected for this project.

Biofilters
___ Bioretention Swale
Vegetated filter strip
___Stormwater Planter Box (open-bottomed)
___Stormwater Flow- Through planter (sealed bottom)
___ Bioretention Area
Vegetated Roofs/Modules/Walls
Detention Basins
___Extended/dry detention basin with grass/vegetated lining
_X_ Extended/dry detention basin with impervious lining
Infiltration Basins
___Infiltration basin
Infiltration trench
___Dry well
___Permeable asphalt
___Gravel
Permeable asphalt
Pervious concrete
___ Unit pavers, ungrouted, set on sand or gravel
Subsurface reservoir bed
Wet Ponds or Wetlands
Wet pond/basin (permanent pool)
Constructed wetland
Filtration
_X_ Media filtration
___Sand filtration
Hydrodynamic Separator Systems
Swirl Concentrator
Cyclone Separator
Trash Racks and Screens

note: Catch basin inserts and storm drain inserts are excluded from use on County maintained right-of-way and easements.

The Treatment BMPs selected for this project are Underground Detention Pipes (Storm Tank) with pre-treatment Baffle Boxes (Suntree) and the Water Polisher. These Treatment Control BMPs were selected for there efficiency (high) at removing the main pollutants of concern, bacteria, nutients and sediments, from the runoff water generated by this project. The Underground Storage Pipes, Baffle boxes & Water Polisher (Bioclean) are also easy to maintain and therefore will ensure the efficiency of the project long term. Other Treatment BMPs that were considered, Wet Pond and Filtration Trench did not provide the appropriate storage capacity and therefore the Storage Pipes with Pretreatment Baffle Boxes were chosen.

The Water Polisher will treat offsite water that drains from Paseo del Norte through the project and to the drainage swale adjacent Highway 5. The Pretreatment Baffle Boxes and Underground Detention Pipes will treat the onsite water and detain the difference between the pre- and post development flows.

SEE HYDROLOGY REPORT BY AQUATERRA ENG'G. dated Feb. 24, 2009. FOR NUMERIC SIZING OF STRUCTURAL BMPS.

11. BMP MAINTENANCE PROVISIONS

Please check the box that best describes the maintenance mechanism(s) for this project. 13

CATEGORY	SELECTED	
	YES	NO
First	X	
Second[1]		X
Third[1]		X
Fourth		X

Note:

1. Project in Category 2 or 3 may choose to establish or be included in a Stormwater Maintenance Assessment District for the long-term maintenance of treatment BMPs. Please briefly describe the long-term fiscal resources for the selected maintenance mechanism(s).

These Treatment BMPs (Underground Detention Pipes, Baffle Boxes & Water Polisher) are Category 1 BMPs and will be maintained by the owner as part of their normal maintenance routine. Please see Attachment "B" for the Maintenance Program and Costs.

The following person will be responsible for the Maintenance :

Name: **Matt Herril**

Address: **4529 Angeles Crest Highway**
Suite PH-B
La Canada, CA 91011

Phone: **888-832-5863**

ATTACHMENT A

Treatment BMP Specifications

1500 GALLON GREASE INTERCEPTOR

MODEL JP1500EE-G
ACCEPTED BY UPC®

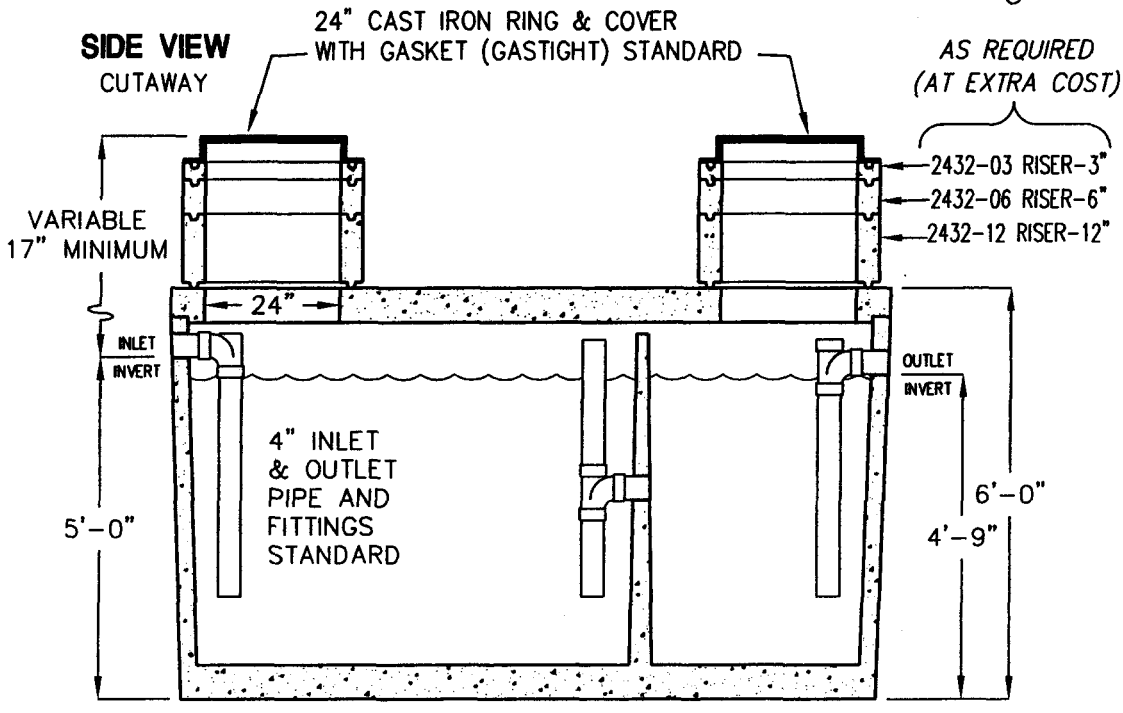

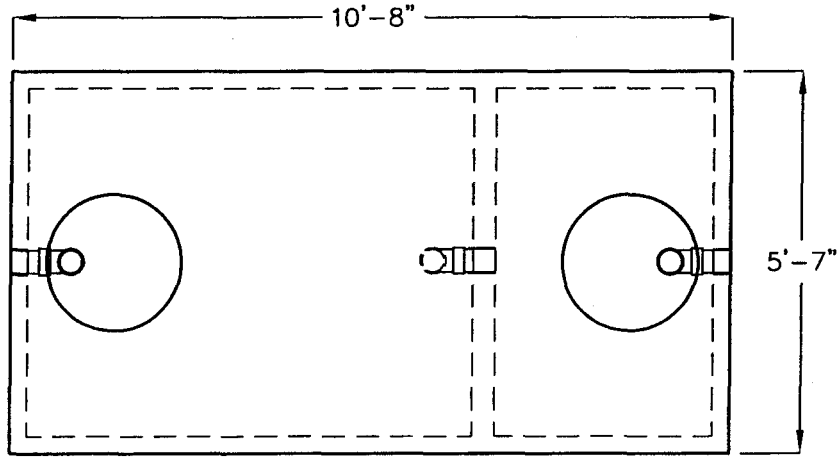

TOP VIEW
(COVERS & RISERS REMOVED)

LIQUID CAPACITY: 1,500 GALLONS.

BOX DESIGN LOAD: H-20 TRAFFIC FROM 1' TO 6' OF SOIL COVER.

FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT JENSEN PRECAST.

5/29/01
1500G_JP-v1.dwg
© 2001 Jensen Precast

JENSEN PRECAST®

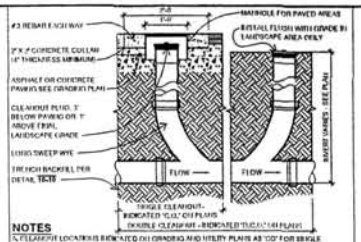

NOTES

A. FLEXIBLE LOCATIONS INDICATED ON GRADING AND UTILITY PLANS AS "CO" FOR SINGLE CLEANOUT AND "DCO" FOR DOUBLE CLEAN OUT.
B. PROVIDE CLEANOUTS AS SPECIFIED:
1. ZURN Z-1446 CLEANOUTS IN NON-TRAFFIC AREAS AND SIDEWALKS
2. ZURN Z-1446 CLEANOUTS IN LANDSCAPED AREAS
3. ZURN Z-1446 HD CLEANOUTS IN TRAFFIC AREAS WITH A "BERMICE STATION" TYPE MANHOLE, TYPE # RN A17 - DRIVER COMPANY

10-09 PIPE CLEANOUT
SCALE: 3/4" = 1'-0"

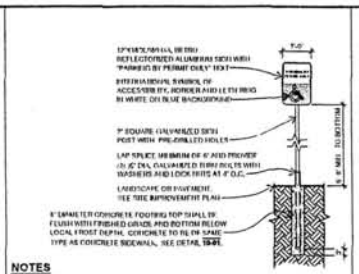

NOTES

A. SPECIFIC CODE SHOULD BE REFERENCED FOR LOCAL AND STATE REQUIREMENTS.
B. (1) SIGN AT EACH ACCESSIBLE SPACE. SEE SITE IMPROVEMENT PLAN FOR LOCATION

10-07 PARKING SIGN (NO BOLLARD)
SCALE: 1/2" = 1'-0"

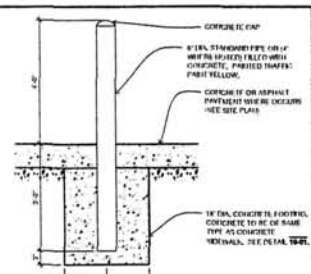

10-04 BOLLARD
SCALE: NTS

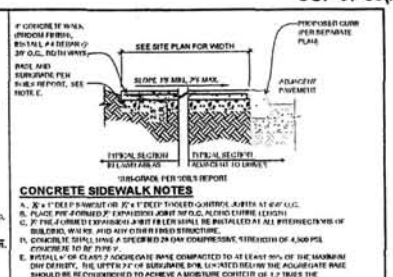

CONCRETE SIDEWALK NOTES

A. ½" x 1" DEEP SAWCUT OR ½" x 1" DEEP TOOLED CONTROL JOINTS AT 6'-0" O.C.
B. PLACE PRE-FORMED ½" EXPANSION JOINT NO O.C. ALONG ENTIRE LENGTH
C. ½" THE PRE-FORMED EXPANSION JOINT FILLER MATERIAL SHALL BE INSTALLED AT ALL INTERSECTIONS OF BUILDING, WALKS, AND ANY OTHER FIXED STRUCTURE.
D. CONCRETE SHALL HAVE A SPECIFIED 28 DAY COMPRESSIVE STRENGTH OF 4,500 PSI. CONCRETE TO BE TYPE V.
E. INSTALL 4" OF CLASS 2 AGGREGATE BASE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY. THE UPPER 2½" OF SUBGRADE SOIL LOCATED BELOW THE AGGREGATE BASE SHOULD BE RECONDITIONED TO ACHIEVE A MOISTURE CONTENT OF 1.2 TIMES THE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO 90% RELATIVE COMPACTION (ASTM D1557).

10-01 CONCRETE SIDEWALK
SCALE: NTS

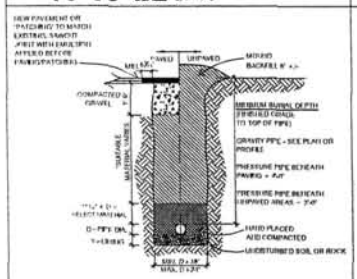

BACKFILL SCHEDULE

CONDITION & PIPE	"SELECT MATERIAL"	"LINING MATERIAL"	"H"
DUCTILE IRON PIPE BELOW/NEARBY SOIL	TYPE I, II, III	SAND OR TYPE III	1'
PCP PIPE IN UNSTABLE SOIL	TYPE I, II, III	SAND OR TYPE III	3'
ALL PIPE OVER BEDROCK OR LEDGE	TYPE I, II, III	SAND OR TYPE III	4"
DUCTILE IRON PIPE IN CLAY OR MUCK	TYPE I, II, III	SAND	4"
PCP PIPE IN CLAY	TYPE I, II, III	SAND	6"
PLAN DETAIL	SAND OR TYPE III	SAND OR TYPE III	6"

* SUITABLE MATERIAL SHOULD CONTAIN NO STONES GREATER THAN 4" IN DIAMETER, NO FROZEN LUMPS, AND ONLY MINOR AMOUNTS OF CLAY OR ORGANIC MATERIAL. ALL MATERIAL TO BE PLACED IN MAXIMUM OF 12" LIFTS AND COMPACTED BEFORE PLACING NEXT LIFT.
** TYPE I MATERIAL SHALL BE EITHER GRAVEL OR UNCRUSHED MATERIAL CONTAINING NO STONES GREATER THAN 1½" IN DIAMETER, NO FROZEN LUMPS, NO CLAY, AND NO ORGANIC MATERIAL.
** TYPE II MATERIAL SHALL BE CLEAN, HARD, CRUSHED OR NATURAL STONE WITH A GRADATION BY WEIGHT OF 100% PASSING A 1½" SQUARE OPENING, NOT MORE THAN 15% PASSING A ½" SQUARE OPENING AND NOT MORE THAN 5% PASSING A ¼" SQUARE OPENING.
** TYPE III MATERIAL SHALL BE CLEAN, HARD, CRUSHED STONE FREE FROM COATINGS AND THOROUGHLY WASHED WITH A GRADATION BY WEIGHT OF 100% PASSING A 1" SQUARE OPENING AND 0-5% PASSING A ¼" SQUARE OPENING.

NOTES

A. WHERE IN SOILS IN DESIGNATED "COMPACTED", THIS MEANS 90% TO 95% STANDARD PROCTOR, AASHTO T-99. ALL FILL PLACED BELOW PIPES AND STRUCTURES MUST MEET THIS REQUIREMENT.
B. FOR ALL TRENCHES WITH A GRADE GREATER THAN 4% AND/OR WHERE GROUNDWATER IS APPARENT, INSTALL CLAY DAMS AROUND PIPE AT 100' INTERVALS.

10-10 TRENCH INSTALLATION
SCALE: 3/8" = 1'-0"

SAMPLE BOX WITH PIPE CONNECTORS
MODEL EV200-H

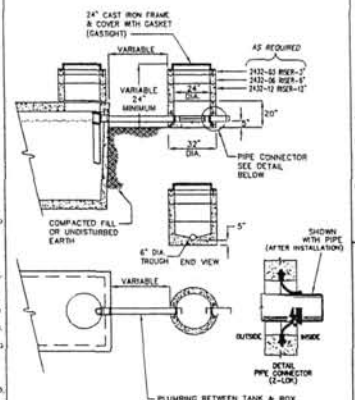

BOX WEIGHT: 1350 LBS.
BOX DESIGN LOAD: H-20 TRAFFIC

SAMPLE BOX MUST BE PLACED ON SUITABLE BASE OF COMPACTED SOIL OR UNDISTURBED EARTH IN TRAFFIC CONDITION. FOR COMPLETE DESIGN AND PRODUCT INFORMATION, CONTACT JENSEN PRECAST.

JANSEN PRECAST

10-08 SAMPLE BOX
SCALE: NTS

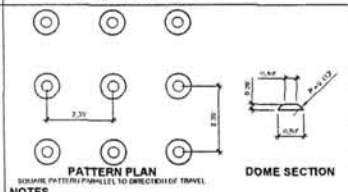

PATTERN PLAN
SQUARE PATTERN PARALLEL TO DIRECTION OF TRAVEL

DOME SECTION

NOTES

A. MATERIAL USED SHALL BE OF VISUAL CONTRAST (EIGHT ON DARK / DARK ON LIGHT) TO THE ADJACENT SURFACE AND SHALL BE AN INTEGRAL PART OF THE WARNING SURFACE.
B. WARNING SURFACE TO BE FIRM AND SLIP RESISTANT, MAY INCLUDE, BUT NOT LIMITED TO THE FOLLOWING SURFACES: VARIOUS STONE OR STONE COMPOSITE, CERAMIC TILE, DURABLE PRECAST CONCRETE SCALER, RUBBER OR FLEXIBLE COMPOSITES.
C. PATTERN ALSO SHALL BE MOUNTED APPLICATIONS IN STRICT ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
D. REFER TO ADA ACCESSIBILITY GUIDELINES SECTION 4.29 FOR SPECIFICATIONS AND INSTALLATION DETAILS. VERTICAL TRANSITIONS DUE TO INSTALLATION TO COMPLY WITH ALL APPLICABLE ADA/ANSI SPECIFICATIONS.

10-05 TRUNCATED DOMES
SCALE: 6" = 1'-0"

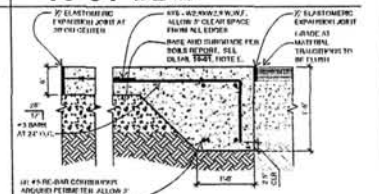

NOTES

A. PROVIDE PRE-MOLDED DOWELS AT ALL CONTRACTION JOINTS
B. FILL ALL JOINTS WITH BITUMINOUS SEALANT
C. CONCRETE TO BE OF SAME TYPE AS CONCRETE SIDEWALK, SEE DETAIL 10-01.
D. LIGHT BROOM FINISH ON ALL SURFACES
E. PROVIDE 4" WIDE x 1/4" DEEP CONTROL JOINT AT 10'-0" ON CENTER EACH DIRECTION
F. PROVIDE 2" CHAMFER AT CORNERS OF PAD WHERE CONCRETE MEETS ASPHALT. SEE THE SITE IMPROVEMENT PLAN FOR PAD DIMENSIONS AND ORIENTATION.

10-02 CONC TURN DOWN EDGE
SCALE: 1" = 1'-0"

1500 GALLON GREASE INTERCEPTOR
MODEL JP1500EE-G
ACCEPTED BY UPC®

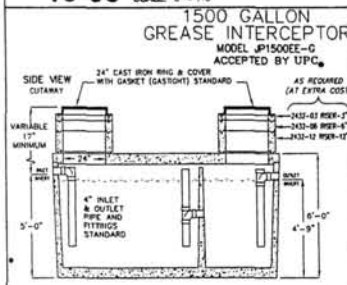

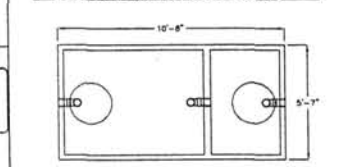

TOP VIEW
(COVERS & RISERS REMOVED)

LIQUID CAPACITY: 1,500 GALLONS.

BOX DESIGN LOAD: H-20 TRAFFIC FROM 1" TO 6" OF SOIL COVER.

FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT JENSEN PRECAST

JANSEN PRECAST®

10-06 GREASE TRAP
SCALE: NTS

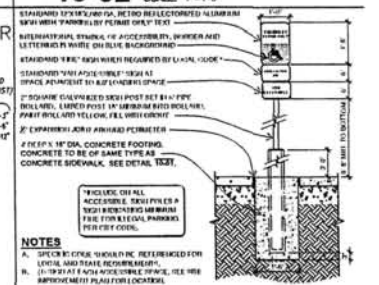

NOTES

A. SPECIFIC CODE SHOULD BE REFERENCED FOR LOCAL AND STATE REQUIREMENTS.
B. (1) SIGN AT EACH ACCESSIBLE SPACE. SEE SITE IMPROVEMENT PLAN FOR LOCATIONS.

10-03 BOLLARD PARKING SIGN
SCALE: 1/2" = 1'-0"

THIS DRAWING WAS PREPARED BY WD PARTNERS, INC. AND IS INCLUDED HEREIN THIS SET FOR REFERENCE ONLY AT THE REQUEST OF LOCAL AGENCY PERSONNEL AND/OR PERMITTING AGENCIES. WD PARTNERS, INC. DOES NOT CONSIDER THIS DRAWING TO BE A PROFESSIONAL STATEMENT OF ENGINEERING OR ARCHITECTURAL PRINCIPLES OR REPRESENTATIONS OF PRACTICE, OR MAKE A CERTIFICATION OF COMPLIANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL LAWS, CODES, ORDINANCES.
PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHOULD VERIFY THE INFORMATION IN THE DETAILS SHOWN HEREIN AND DETERMINE IF THE LATEST VERSION OF THE DETAIL SHOWN HEREIN IS APPLICABLE TO THE PROJECT.

wd partners
18818 Armstrong Ave., Suite 100
Irvine, CA 92612
949.753.7674 T
949.753.7678 F
wdpartners.com

Boston
Columbus
Los Angeles
Miami
Sacramento

WD PROJECT NUMBER
BJ08J0124

APNS 211-021-36

TENTATIVE MAP #
PARCEL C OF TENTATIVE PARCEL MAP MS 07-02

BJ's

PREPARED UNDER THE SUPERVISION OF

DATE 1/08/2009

REGISTERED ENGINEER, RCE # C68862, EXP. 06/30/2010

BENCH MARK

DESCRIPTION: # 25 NEW CAP (S.D. COUNTY COORDINATE) T-1310
LOCATION: EAST OF RAILROAD TRACKS (U.P.R.R.) R.O.W. (WEST E. CENTER OF PACIFIC SURFLINE ROAD)
RECORDED: NGS PDS
ELEVATION: 20.07 DATUM: NGVD

"AS BUILT"

RCE _____ EXP. _____ DATE

REVIEWED BY:

INSPECTOR DATE

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

SHEET 10 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS XX

ONSITE CIVIL PLANS FOR:
BJ'S RESTAURANT
CARLSBAD PASEO
5621 PASEO DEL NORTE, CARLSBAD, CA 92008

DETAILS SHEET

APPROVED: DAVID A. HAUSER

DEPUTY CITY ENGINEER PE 33081 EXPIRES 6/30/08 DATE

DWN BY: SSY
CHK'D BY: RNL
RVWD BY: RNL

PROJECT NO. MS 07-02 | DRAWING NO. XXX-XX

File: \\wdpartners.com\global\Irvine\Projects\0124_ca_carlsbad_paseo_carlsbad\04-civil\md-construction\bj0124b_sheet 10_details.dwg Saved: 1/8/2009 10:05 AM (wdadt22) Plotted: 1/8/2009 8:48 AM (wdpdc)

SAMPLE BOX WITH PIPE CONNECTORS

MODEL EV200-H

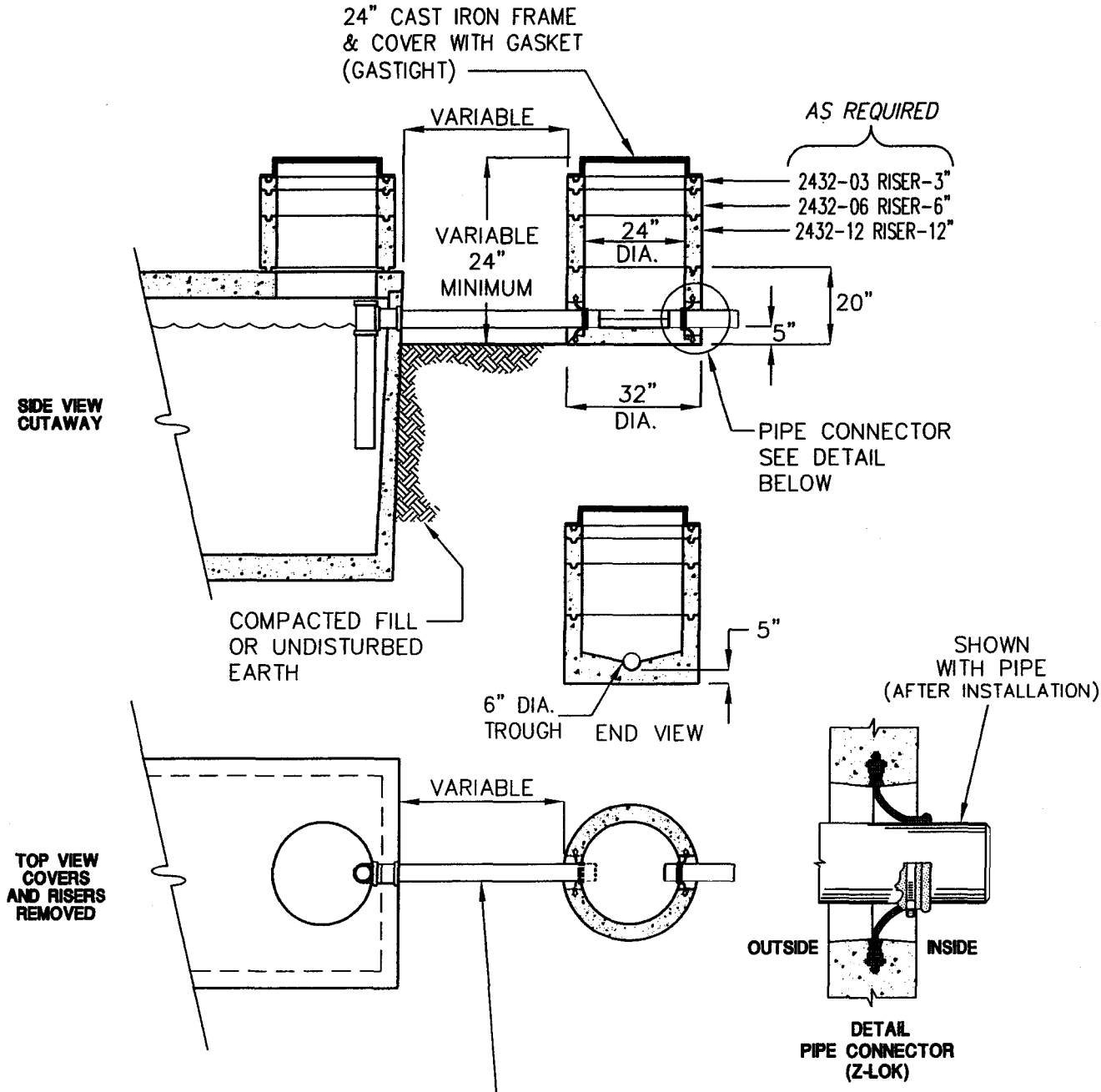

BOX WEIGHT: 1350 LBS.
BOX DESIGN LOAD: H-20 TRAFFIC

SAMPLE BOX MUST BE PLACED ON SUITABLE BASE OF COMPACTED SOIL OR UNDISTURBED EARTH IN TRAFFIC CONDITION. FOR COMPLETE DESIGN AND PRODUCT INFORMATION, CONTACT JENSEN PRECAST.

10/19/05
EV200SampleBox_H.dwg
© 2003 Jensen Precast

JENSEN PRECAST®

SPECIFICATIONS

Water Polisher – Up Flow Media Filter Offsite

I. Specifications

Coverage: The Water Polisher provides full coverage of incoming stormwater such that all influent, at rated flows, is conveyed to the filter. The filter will retain all windblown and swept debris entering separation and filtration chambers.

Non-Corrosive Materials: All components of the filter system, including mounting hardware, fasteners, support brackets, filtration material, and support frame are constructed of non-corrosive materials: 316 stainless steel and aluminum. Fasteners are stainless steel. Primary filter screen is ¾" flattened expanded aluminum metal and 316 stainless steel welded 10 x 10 mesh screen.

Durability: The structure of the box will be precast concrete. The concrete will be 28 day compressive strength fc = 5,000 psi. Steel reinforcing will be ASTM A – C857. Structure will support an H20 loading as indicted by AASHTO. The joint between the concrete sections will ship lap and joint sealed with ram-nek. Filter (excluding oil absorbent media) and support structures are of proven durability, with an expected service life of 15 to 20 years. The filter and mounting structures are of sufficient strength to support water, sediment, and debris loads when the filter is full, with no slippage, breaking, or tearing. All filters are warranted for a minimum of five (5) years.

The Water Polisher Filter Housing is constructed of an all aluminum frame and stainless steel screens backed by ¾" flattened expanded aluminum metal. Filter (excluding oil absorbent media) and support structures are of proven durability, with an expected service life of 10 to 15 years. The filter and mounting structures are of sufficient strength to support water, sediment, and debris loads when full without breaking, or tearing. All filters are warranted for a minimum of five (5) years.

Oil Absorbent Media: The Water Polisher is fitted with an absorbent media (BioMediaGREEN) for removal of pollutants from influent, and so placed in the filter assembly to treat influent at rated flow. Absorbent media is easily replaceable in the filter, without the necessity of removing fixed mounting brackets or mounting hardware. The media is placed in the filter housing of the unit which is suspended of the floor of the sedimentation chamber. The media encompasses the total horizontal area is front of the weir area of the unit and lie horizontal for maximum absorption. No polypropylene, monofilament netting or fabrics shall be used in the product.

Overflow Protection: The Water Polisher is designed so that it does not inhibit larger storm flows entering the concrete structure.

Filter Bypass: *Water will not bypass the filter at low flows, nor bypass through contact surfaces at low flows.*

Pollutant Removal Efficiency: The Water Polisher is designed to capture high levels of trash and litter, grass and foliage, sediments, hydrocarbons, grease and oil, metals, bacteria, and nutrients. The filter has a multistage filtration system, which incorporates durable screen and steel mesh filtering along with the media filtration (BioMediaGREEN). *The BioMediaGREEEN filter media capable of removing over 85% of super fine TSS based on a 20-micron particle size.* This performance information is based upon the results of extensive third party independent testing of the media. Following are tested removal efficiencies.

POLLUTANT	Removal Efficiency
TPH	99%
Oil & Grease	90%
Super Fine TSS	85%
Dissolved Cooper	79%
Dissolved Lead	98%
Dissolved Phosphorus	69%
Dissolved Zinc	78%

II. Installation

Installation: The Water Polisher Filter and Housing will be securely installed within the concrete structure, with contact surfaces sufficiently joined together so that no filter bypass can occur at low flow. All anchoring devices and fasteners are installed within the interior of the concrete structure. The Water Polisher is constructed according to the sizes shown on

the drawings and as specified herein. Install at elevations and locations shown on drawings or as otherwise directed by engineer. Place the pre-cast base unit on a granular subbase of minimum thickness of six inches (152mm) after compaction or of greater thickness and compaction if specified elsewhere. The granular subbase shall be checked for level at all four corners after it is set. If the slope from any corner to any other corner exceeds 0.5%, the base section shall be removed and the granular subbase material re-leveled.

Installation Notes:

1. Bio Clean Environmental Services, Inc. Water Polisher shall be installed pursuant to the manufacturer's recommendations and the details on this sheet.
2. Water Polisher Media Filter shall provide coverage of entire concrete structure to direct all flow through the filter.
3. Attachments to the concrete walls shall be made of non-corrosive hardware.
4. Placing filter in concrete structure, attach the scribe strips to the filter with pop rivets, and then attach the same scribe strips with concrete drive pins to the side of the wall.
5. Place filter media in media housing which is suspended of the bottom of the unit in a horizontal manner.
6. Close lid and latch when applicable.
7. Attachments to inlet walls shall be made of non-corrosive hardware.
8. Filtration basket fine screen and coarse containment screen shall be manufactured of stainless steel.
9. Prior to setting subsequent sections place bitumen sealant in conformance with ASTM C 990 along the construction joint in the section that is already in place.
10. Any holes made in the concrete sections for handling or other purposes shall be plugged with a non-shrink grout or by using grout in combination with concrete plugs.
11. Where holes must be cut in the pre-cast sections to accommodate pipes, do all cutting before setting the sections in place to prevent any subsequent jarring, which may loosen the mortar joints. The contractor shall make all pipe connections.

III. Maintenance

Maintenance: The Water Polisher is designed to allow for the use of vacuum removal of captured materials in the filter screens and sediment chambers, serviceable by centrifugal compressor vacuum units without causing damage to the filter or during normal cleaning and maintenance. Filters can be cleaned and vacuumed from the standard manhole access. The Water Polisher Media Filter is readily serviceable without removing. The filter's influent screen should be inspected and cleaned if necessary to maintain proper flow through the filter. This screen can easily be cleaned by brushing of its surface with a broom. To service the filter media, open the top hatch, clean and inspect and/or replace filter media.

Maintenance Notes:

1. Bio Clean Environmental Services, Inc. recommends cleaning and debris removal maintenance a minimum of twice a year, and replacement of filter media a minimum of once per year.
2. Following maintenance and/or inspection, the maintenance operator shall prepare a maintenance/inspection record. The record shall include any maintenance activities performed, amount and description of debris collected, and condition of filter.
3. The owner shall retain the maintenance/inspection record for a minimum of five years from the date of maintenance. These records shall be made available to the governing municipality for inspection upon request at any time.
4. Remove all trash, debris, organics, and sediments collected in front of the filter, then open the lid and remove trash and debris within the filter.
5. Evaluation of the filter media shall be performed at each cleaning. If the media is filled with pollutants it should be replaced. Remove media and replace.
6. Transport all debris, trash, organics and sediments to approved facility for disposal in accordance with local and state requirements.
7. The media boom is classified as hazardous material and will have to be picked up and disposed of as hazardous waste. Hazardous material can only be handled by a certified hazardous waste trained person (minimum 24-hour hazwoper).

BIO CLEAN
ENVIRONMENTAL SERVICES, INC.

P O Box 869, Oceanside, CA 92049
(760 433-7640 Fax (760) 433-3176
www.biocleanenvironmental.net

BIO CLEAN UPFLOW WATER POLISHING UNIT

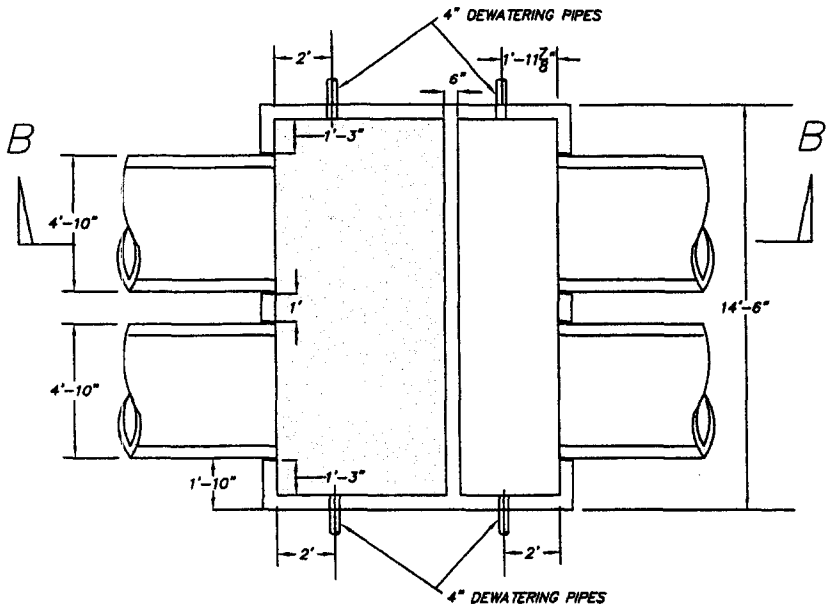

TOP VIEW

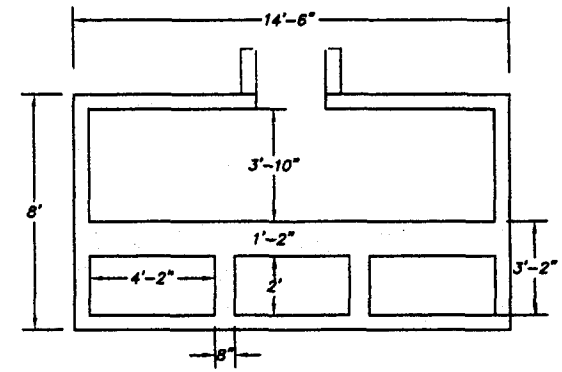

SECTION A-A

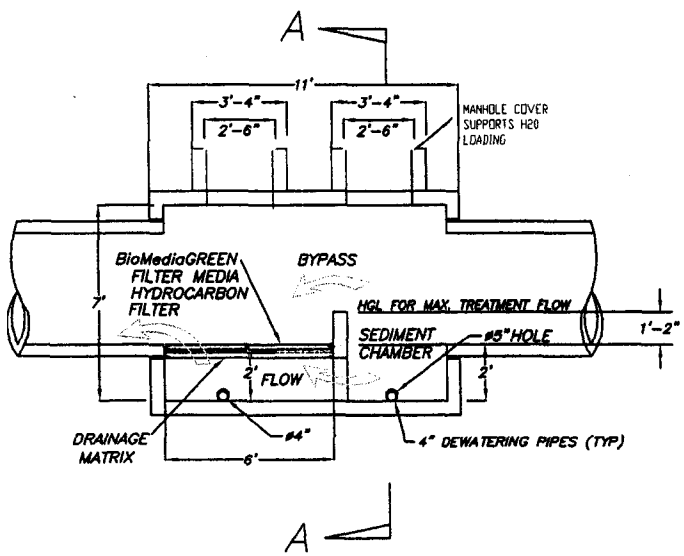

SECTION B-B

TREATMENT FLOW RATE

MEDIA HYDRAULIC CONDUCTIVITY = 363 METERS/DAY

GPM/SQ. FT. SURFACE AREA = 35 GPM

TOTAL TREATMENT FLOW RATE = 6.56 CFS

84 SQ. FT OF BIO GREEN MEDIA FILTER

MAXIMUM HEAD OVER MEDIA = 24'

PATENT PENDING

POLLUTANT REMOVAL PERFORMANCE

POLLUTANT	INFLUENT mg/L	EFFLUENT mg/L	REMOVAL %
TOTAL SUSPENDED SOLIDS (TSS)	84.6	12.4	85.4%
DISSOLVED PHOSPHORUS	2.07	.63	69.66%
ORTHO PHOSPHORUS	3.98	2.33	41.56%
DISSOLVED CADMIUM	.39	.19	52.16%
DISSOLVED COPPER	.57	.12	79.15%
DISSOLVED LEAD	.38	.01	98.19%
DISSOLVED ZINC	.75	.16	78.22%
DISSOLVED MERCURY	.007	.002	71.43%
OILS & GREASE	69.88	6.5	90.7%
TOTAL PETROLEUM HYDROCARBONS	1.4	0	100%
TURBIDITY (NTU)	36	.32	99.11%
FECAL COLIFORM (MPN/100 mL)			68%

BIO CLEAN
ENVIRONMENTAL SERVICES, INC.

SIZE	FSCM NO.	JOB. PASEO CARLSBAD PROJECT	REV
SCALE N.T.S.		SHEET SHT. 1 OF 1	

SUNTREE TECHNOLOGIES MODEL NO. NSBB-2-4-60

FLOW & BY-PASS SPECIFICATIONS FOR THE BIOMASS SEPARATING SCREEN SYSTEM, SEDIMENT STORAGE, AND SKIMMER SPECIFICATIONS.

1. Inflow Pipe Area (8" PVC AS DRAWN) ——— 0.35 sq.ft.

SCREEN SPECIFICATIONS:

2. Open orifice area in screen system ——— 4.07 sq.ft.
3. Open orifice area in screen system with 50% blockage ——— 2.03 sq.ft.
4. Open orifice area in screen system with 75% blockage ——— 1.01 sq.ft.
5. By-pass through screen system ——— 0.39 sq.ft.
6. Minimum by-pass around screen system ——— 1.54 sq.ft.
7. Screen system storage volume ——— 2.73 cu.ft.

SEDIMENT STORAGE:

8. Volume of first chamber ——— 5.16 cu.ft.
9. Volume of second chamber ——— 5.00 cu.ft.
10. Volume of third chamber ——— 5.16 cu.ft.

SKIMMER SPECIFICATIONS:

11. Flow area under skimmer ——— 2.25 sq.ft.
12. Area of pipe in line with skimmer ——— 0.35 sq.ft.
13. Area of between skimmer and outflow pipe parallel with the surface of the pipe ——— 1.04 sq.ft.

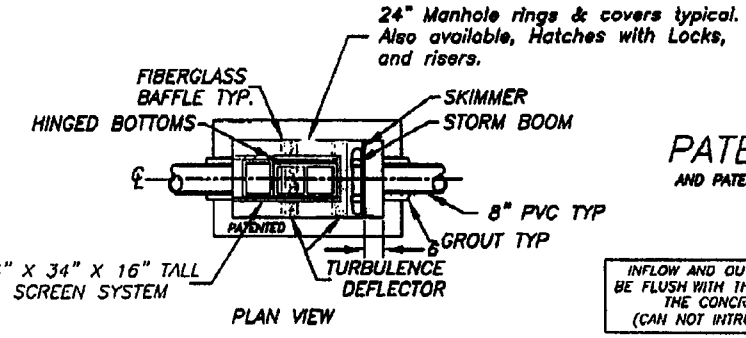

PLAN VIEW

PATENTED
AND PATENTS PENDING

INFLOW AND OUTFLOW PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE. (CAN NOT INTRUDE BEYOND FLUSH)

Suntree Technologies Inc.
798 Clearlake Road, Cocoa, Florida 32922
PH: 321-637-7352 Fax: 321-637-7354

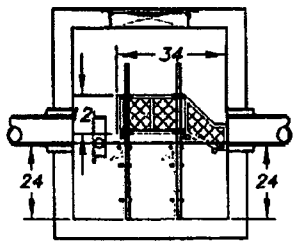

6"TO12" GRAVEL BEDDING FOR LEVELING

BACK VIEW

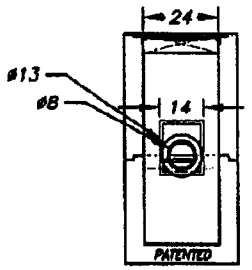

6"TO12"GRAVEL FOR LEVELING

LEFT END VIEW

FRONT VIEW

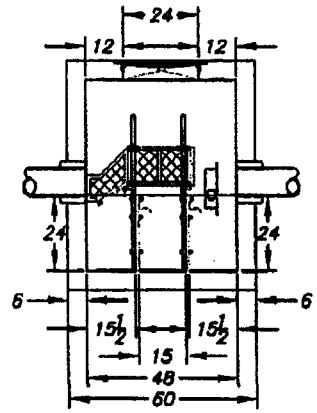

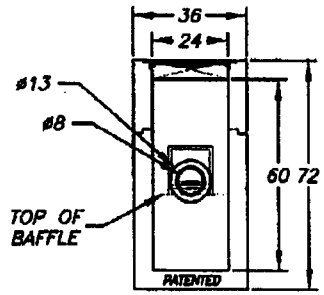

6"TO12"GRAVEL FOR LEVELING

RIGHT END VIEW

NOTES:

1. CONCRETE 28 DAY COMPRESSIVE STRENGTH fc=5,000 PSI.
2. REINFORCING:ASTM A-615, GRADE 60.
3. SUPPORTS AN H20 LOADING AS INDICATED BY AASHTO.
4. JOINT SEALANT: BUTYL RUBBER SS-S-00210
5. TOP, BOTTOM, +WALLS ARE 8" THICK.
6. LIDS FOR THE TOP OF THE SCREEN SYSTEM ARE AVAILABLE.

PEAK TREATMENT DESIGN FLOW
1 CUBIC FOOT PER SEC.

TREATMENT REFERS TO AT LEAST 80% REMOVAL OF TOTAL SUSPENDED PARTICLES FROM 0.125MM TO 2MM IN SIZE. BASED ON A MAXIMUM FLOW RATE OF 8 LINEAR FEET PER SECOND THROUGH PIPE.

PEAK DESIGN FLOW
2 CUBIC FEET PER SEC.

EXCLUSIVE CALIFORNIA DISTRIBUTOR:
BIO CLEAN ENVIRONMENTAL SERVICE
P.O. BOX 869, OCEANSIDE, CA. 92049
TEL. 760-433-7640 FAX:760-433-3176
Email: info@biocleanenvironmental.net

SUNTREE TECHNOLOGIES, INC. 798 CLEARLAKE RD, SUITE #2 COCOA, FL. 32922		PROJECT: STANDARD MODEL
NUTRIENT SEPARATING BAFFLE BOX MODEL NO. NSBB-2-4-60		DRAWING #: 4-07-21-05-03
DATE: 07/21/05	SCALE: - 57.6	REVISIONS / DATE
DRAFTER: T.H.2.	UNITS -INCHES	REVISIONS / DATE
		REVISIONS / DATE

Nov 12 08 08:08a Aquaterra Engr 760-439-2800 p.7

BIO CLEAN ENVIRONMENTAL SERVICES, INC.

STORMWATER FILTRATION AND BIO-AUGMENTATION SPECIALISTS

Nutrient Separating Baffle Box

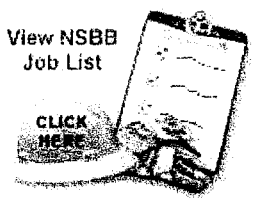

The 2nd generation Baffle Box design removes sediment, foliage and litter without head loss. It separates nutrients from stormwater and prevents bacterial build-up. Sediments settle to the bottom. The box can be made of either concrete construction or fiberlass in any size. In addition, it easily retrofits to existing pipe and is easy to clean.

Schematic Drawing - During Storm Event

- The inflow pipe is the same size as the ouflow.
- Turbulence deflectors prevent captured sediment from re-suspending.
- Hydrocarbons collect in front of skimmer and are absorbed by Storm Boom.

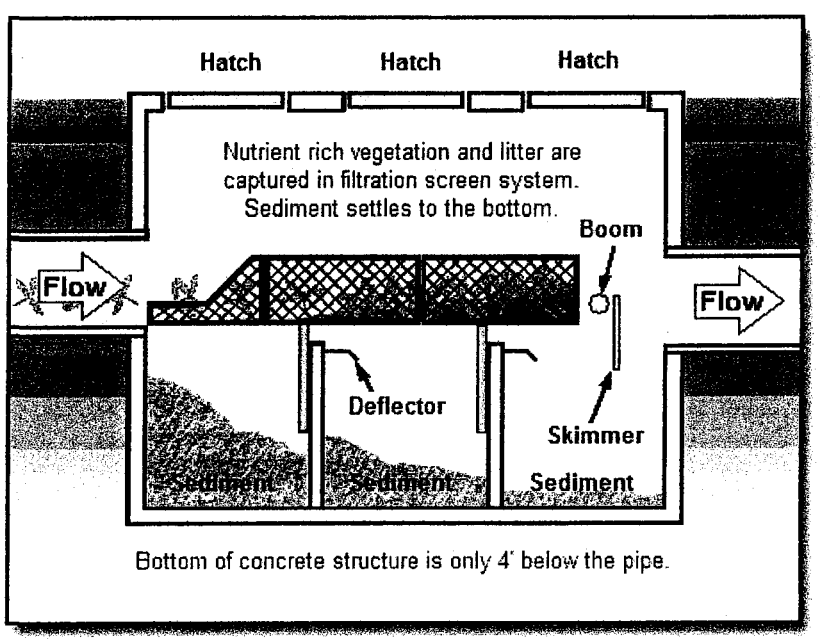

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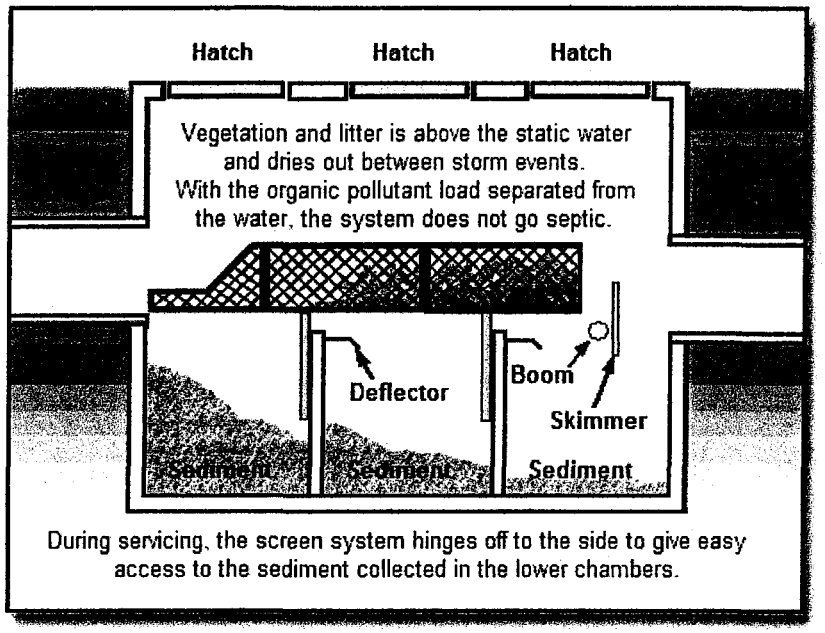

Patented

Schematic Drawing - After Storm Event

- Nutrient pollutant load is not lost to static water and flushed out at the next storm event.
- Separating organic matter from the static water prevents bacterial buildup.

To view installation photos of Nutrient Separating Baffle Boxes - CLICK HERE.

Size Determination

Because the entire flow is always treated and head loss is so minimal, determining the appropriate size of Nutrient Separating Baffle Box for a project is more an element of pipe size than treated cfs.

Model #	Inside Width	Inside Length	Standard Height *	Recommended Pipe Sizes
4-8	4'	8'	7'	12"-18"
5-10	5'	10'	7'	12"-24"
6-12	6'	12'	7'	18"-36"
8-12	8'	12'	8'	36"-48"
8-14	8"	14'	8'	40"-54"

Custom sizes are available. * Height can vary as needed.

- Because water flow is not ducted off line for treatment, head loss is minimal and comparable to a large square catchbasin. Because of this, existing stormwater systems can be retrofitted with a Nutrient Separating Baffle Box, without compromising the original design specifications of the existing stormwater system.
- All structures are load rated for at least H-20. Standard wall construction of the structure is 6" thick steel re-enforced concrete. Concrete wall thickness can be thicker upon request.
- Manhold lids, hatches, and dampers to block off water flow during servicing can be incorporated into the structure.
- Screen systems have stainless steel screens bolted into a heavy duty aluminum framework. The screen systems are hinged to give easy access to the lower chambers and have a wide range of adjustments to accommodate unforeseen variables during installation.

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STORMTANK STORMWATER STORAGE MODULES

StormTank™

Stormwater Storage Modules are a high-void, strong, affordable alternative to crushed stone, concrete structures, or pipe chambers for sub-surface stormwater detention or infiltration basins.

BRENTWOOD INDUSTRIES

STORMTANK STORMWATER STORAGE SYSTEM

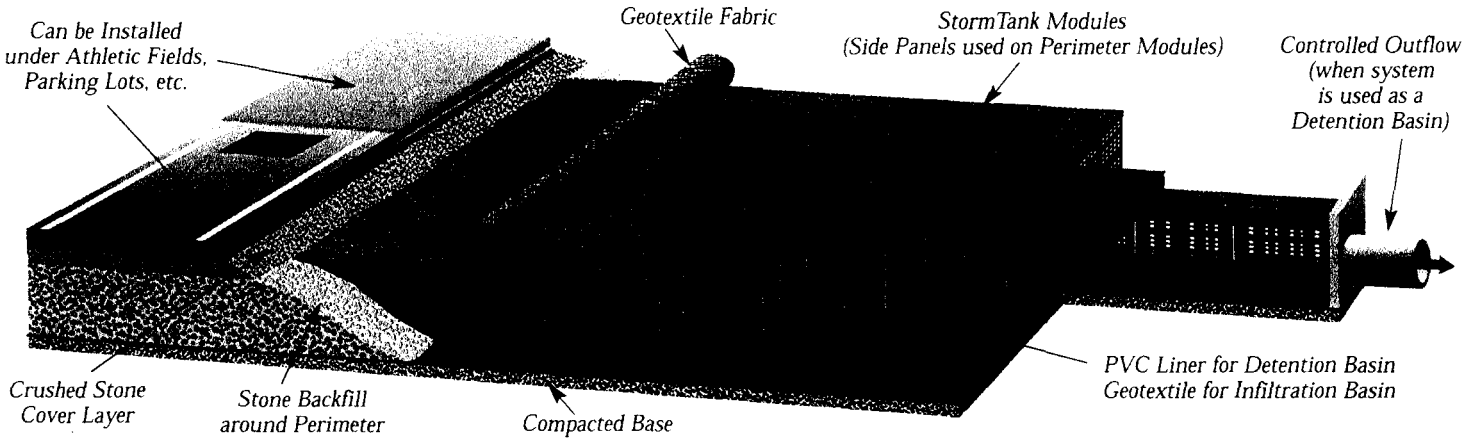

Brentwood's StormTank™ Stormwater Storage System is a high-void, strong, affordable alternative to crushed stone, concrete structures, or pipe chambers for sub-surface stormwater detention or infiltration basins.

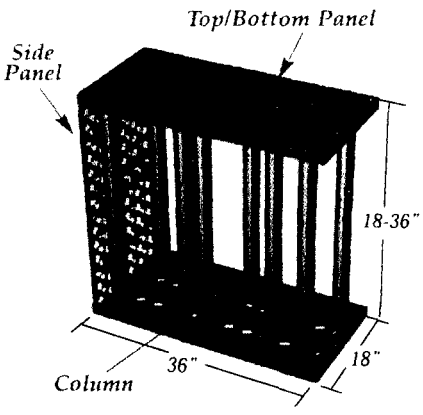

HIGH VOID, HIGH STRENGTH Our modules offer the largest void space of any underground stormwater storage units currently on the market (97%), and are load-rated for use under parking lots, athletic fields, parks, etc. (Designed to exceed H-25 loading criteria)!

EASY TO INSTALL The entire StormTank Storage System is built on-site from Top/Bottom Panels and Side Panels made of rugged, lightweight polypropylene and 2-3/8" diameter PVC columns. Combinations of these three components create all the module configurations needed for a fully-functioning underground system (see example at top). To minimize shipping costs, the StormTank components are delivered unassembled, but on-site assembly is a snap! No special equipment, tools, or bonding agents are needed to assemble or install the modules. All components easily attach with a secure concentric pressure fit.

EASY TO CLEAN The open tops/bottoms and sides of the modules makes flushing and cleaning easy ... a great advantage over storage systems where access is limited.

SAVES SPACE AND MONEY Because of its 97% void space, stackability, and H-25 strength, a StormTank system offers significant space and cost savings when compared to conventional stormwater storage solutions. For example:

- A StormTank installation requires a much smaller footprint than a crushed rock system with the same amount of stormwater storage capacity. And less space used also means less expense for excavation, geotextile, liner, installation, and backfill.
- Because a StormTank system is installed underground, it frees up surface space for uses that would be otherwise unavailable with a typical detention pond.
- StormTank's stackability and variable column height (18"-36") can maximize the use of a site with limited surface area.

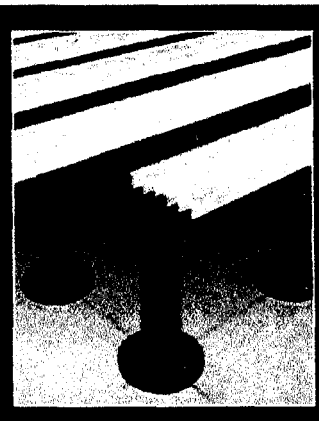

The Brentwood AccuPier Support System (above) has been in use for several years and is installed in over 50 biological oxidation towers throughout the U.S. and Canada. Each PVC AccuPier column, fitted with upper and lower base caps, can hold 7000 lbs. and has been compression-tested to 24,000 lbs. All the technology, materials, and experience gained from the AccuPier System have been applied to our new StormTank Modules.

BRENTWOOD INDUSTRIES

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ATTACHMENT B

OPERATION AND MAINTENANCE PROGRAM FOR TREATMENT BMP

(NOTE: INFORMATION REGARDING OPERATION AND MAINTENANCE CAN BE OBTAINED FROM THE FOLLOWING WEB SITE: HTTP://WWW.SDCOUNTY.CA.GOV/DPW/WATERSHEDS/LAND_DEV/SUSMP.HTML.)

SPECIFICATIONS

Water Polisher – Up Flow Media Filter (Offsite Drainage Treatment)

I. Specifications

Coverage: The Water Polisher provides full coverage of incoming stormwater such that all influent, at rated flows, is conveyed to the filter. The filter will retain all windblown and swept debris entering separation and filtration chambers.

Non-Corrosive Materials: All components of the filter system, including mounting hardware, fasteners, support brackets, filtration material, and support frame are constructed of non-corrosive materials: 316 stainless steel and aluminum. Fasteners are stainless steel. Primary filter screen is ¾" flattened expanded aluminum metal and 316 stainless steel welded 10 x 10 mesh screen.

Durability: The structure of the box will be precast concrete. The concrete will be 28 day compressive strength fc = 5,000 psi. Steel reinforcing will be ASTM A – C857. Structure will support an H20 loading as indicted by AASHTO. The joint between the concrete sections will ship lap and joint sealed with ram-nek. Filter (excluding oil absorbent media) and support structures are of proven durability, with an expected service life of 15 to 20 years. The filter and mounting structures are of sufficient strength to support water, sediment, and debris loads when the filter is full, with no slippage, breaking, or tearing. All filters are warranted for a minimum of five (5) years.

The Water Polisher Filter Housing is constructed of an all aluminum frame and stainless steel screens backed by ¾" flattened expanded aluminum metal. Filter (excluding oil absorbent media) and support structures are of proven durability, with an expected service life of 10 to 15 years. The filter and mounting structures are of sufficient strength to support water, sediment, and debris loads when full without breaking, or tearing. All filters are warranted for a minimum of five (5) years.

Oil Absorbent Media: The Water Polisher is fitted with an absorbent media (BioMediaGREEN) for removal of pollutants from influent, and so placed in the filter assembly to treat influent at rated flow. Absorbent media is easily replaceable in the filter, without the necessity of removing fixed mounting brackets or mounting hardware. The media is placed in the filter housing of the unit which is suspended of the floor of the sedimentation chamber. The media encompasses the total horizontal area is front of the weir area of the unit and lie horizontal for maximum absorption. No polypropylene, monofilament netting or fabrics shall be used in the product.

Overflow Protection: The Water Polisher is designed so that it does not inhibit larger storm flows entering the concrete structure.

Filter Bypass: Water will not bypass the filter at low flows, nor bypass through contact surfaces at low flows.

Pollutant Removal Efficiency: The Water Polisher is designed to capture high levels of trash and litter, grass and foliage, sediments, hydrocarbons, grease and oil, metals, bacteria, and nutrients. The filter has a multistage filtration system, which incorporates durable screen and steel mesh filtering along with the media filtration (BioMediaGREEN). The BioMediaGREEEN filter media capable of removing over 85% of super fine TSS based on a 20-micron particle size. This performance information is based upon the results of extensive third party independent testing of the media. Following are tested removal efficiencies.

POLLUTANT	Removal Efficiency
TPH	99%
Oil & Grease	90%
Super Fine TSS	85%
Dissolved Cooper	79%
Dissolved Lead	98%
Dissolved Phosphorus	69%
Dissolved Zinc	78%

II. Installation

Installation: The Water Polisher Filter and Housing will be securely installed within the concrete structure, with contact surfaces sufficiently joined together so that no filter bypass can occur at low flow. All anchoring devices and fasteners are installed within the interior of the concrete structure. The Water Polisher is constructed according to the sizes shown on

the drawings and as specified herein. Install at elevations and locations shown on drawings or as otherwise directed by engineer. Place the pre-cast base unit on a granular subbase of minimum thickness of six inches (152mm) after compaction or of greater thickness and compaction if specified elsewhere. The granular subbase shall be checked for level at all four corners after it is set. If the slope from any corner to any other corner exceeds 0.5%, the base section shall be removed and the granular subbase material re-leveled.

Installation Notes:

1. Bio Clean Environmental Services, Inc. Water Polisher shall be installed pursuant to the manufacturer's recommendations and the details on this sheet.
2. Water Polisher Media Filter shall provide coverage of entire concrete structure to direct all flow through the filter.
3. Attachments to the concrete walls shall be made of non-corrosive hardware.
4. Placing filter in concrete structure, attach the scribe strips to the filter with pop rivets, and then attach the same scribe strips with concrete drive pins to the side of the wall.
5. Place filter media in media housing which is suspended of the bottom of the unit in a horizontal manner.
6. Close lid and latch when applicable.
7. Attachments to inlet walls shall be made of non-corrosive hardware.
8. Filtration basket fine screen and coarse containment screen shall be manufactured of stainless steel.
9. Prior to setting subsequent sections place bitumen sealant in conformance with ASTM C 990 along the construction joint in the section that is already in place.
10. Any holes made in the concrete sections for handling or other purposes shall be plugged with a non-shrink grout or by using grout in combination with concrete plugs.
11. Where holes must be cut in the pre-cast sections to accommodate pipes, do all cutting before setting the sections in place to prevent any subsequent jarring, which may loosen the mortar joints. The contractor shall make all pipe connections.

III. Maintenance

Maintenance: The Water Polisher is designed to allow for the use of vacuum removal of captured materials in the filter screens and sediment chambers, serviceable by centrifugal compressor vacuum units without causing damage to the filter or during normal cleaning and maintenance. Filters can be cleaned and vacuumed from the standard manhole access. The Water Polisher Media Filter is readily serviceable without removing. The filter's influent screen should be inspected and cleaned if necessary to maintain proper flow through the filter. This screen can easily be cleaned by brushing of its surface with a broom. To service the filter media, open the top hatch, clean and inspect and/or replace filter media.

Maintenance Notes:

1. Bio Clean Environmental Services, Inc. recommends cleaning and debris removal maintenance a minimum of twice a year, and replacement of filter media a minimum of once per year.
2. Following maintenance and/or inspection, the maintenance operator shall prepare a maintenance/inspection record. The record shall include any maintenance activities performed, amount and description of debris collected, and condition of filter.
3. The owner shall retain the maintenance/inspection record for a minimum of five years from the date of maintenance. These records shall be made available to the governing municipality for inspection upon request at any time.
4. Remove all trash, debris, organics, and sediments collected in front of the filter, then open the lid and remove trash and debris within the filter.
5. Evaluation of the filter media shall be performed at each cleaning. If the media is filled with pollutants it should be replaced. Remove media and replace.
6. Transport all debris, trash, organics and sediments to approved facility for disposal in accordance with local and state requirements.
7. The media boom is classified as hazardous material and will have to be picked up and disposed of as hazardous waste. Hazardous material can only be handled by a certified hazardous waste trained person (minimum 24-hour hazwoper).

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SPECIFICATIONS

Nutrient Separating Baffle Box (Onsite Drainage Treatment)

I. Specifications

Track Record: The Nutrient Separating Baffle Box is manufactured by a company whom is regularly engaged in the engineering design and production of treatment systems for stormwater. The Nutrient Separating Baffle Box has been installed and in use as designed in field locations for a duration of over 10 years.

Coverage: The nutrient separating baffle box is of inline design and has the ability to treat the entire storm event. One hundred percent of low and high flows are treated. Thus, no bypass system is required.

Non-Corrosive Materials: Aluminum will be 6061-T6. The screen used to span the aluminum frame is described as follows: Flattened expanded stainless steel sheet ¾ No. 13; Open area = 75%; Grade = 304 Stainless Steel. The screen will be attached to the screen system frame by sandwiching the screen to the aluminum frame between a series of 1 ¼" x 1 ¼" x 3/16" aluminum angle beams and welded in place. A turbulence deflector will be attached near the top of each of the baffles with ½" stainless steel through bolts and stainless steel fender washers. The turbulence deflectors will be made of laminated fiberglass.

Durability: The structure of the box will be precast concrete. The concrete will be 28 day compressive strength fc = 5,000 psi. Steel reinforcing will be ASTM A – C857. Structure will support an H20 loading as indicted by AASHTO. The joint between the concrete sections will ship lap and joint sealed with ram-nek. Filter (excluding oil absorbent media) and support structures are of proven durability, with an expected service life of 15 to 20 years. The filter and mounting structures are of sufficient strength to support water, sediment, and debris loads when the filter is full, with no slippage, breaking, or tearing. All filters are warranted for a minimum of five (5) years.

Oil Absorbent Media: A skimmer and boom system will be positioned near the outflow end of the structure between the second baffle and the end wall of the concrete structure. The skimmer will consist of a steel reinforced concrete structure via keyways in the walls of the structure. The bottom of the skimmer will be positioned so that it is 6" below the static water level. Two storm booms type 4 will float in front of the skimmer and serve to capture hydrocarbons. The storm boom will be contained in an aluminum framed stainless steel screened basket with a hinged lid. The storm boom basket will be attached to the concrete skimmer with stainless steel fasteners.

Overflow Protection: The design of the Nutrient Separating Baffle Box allows the system to treat one-hundred percent of the flow at any level; therefore, no overflow protection is necessary.

Filter Bypass: Water will not bypass the Nutrient Separating Baffle Box at any flow rate.

Pollutant Removal Efficiency: The Nutrient Separating Baffle Box is capable of removing over 90% of the net annual total suspended solids (TSS) load based on a 380-micron particle size. Annual TSS removal efficiency models are based on documented removal efficiency performance from full-scale laboratory tests. Annual TSS removal efficiency models can be considered valid since they are corroborated by independent third party field-testing. Field-testing included influent composite samples from three or more storms at one location. The Nutrient Separating Baffle Box separates solids (e.g. floatable organic matter and trash) from static water within the system.

POLLUTANT	NSBB
Trash & Litter	90 to 95%
Oil & Grease	54% to 96%
Sediments/TSS	95%
Organics	90%
Total Nitrogen	47 to 71.65%
Total Phosphorus	53 to 60%
Total Metals	22 to 66%

Non-Scouring: During heavy storm events the filter water turbulence deflection shield prevents washout of debris and floatables in the filter basket. The system will not re-suspend solids at design flows.

II. Installation

Installation: The Nutrient Separating Baffle Box is constructed according to the sizes shown on the drawings and as specified herein. Install at elevations and locations shown on drawings or as otherwise directed by engineer. Place the pre-cast base unit on a granular subbase of minimum thickness of six inches (152mm) after compaction or of greater thickness and compaction if specified elsewhere. The granular subbase shall be checked for level at all four corners after it is set. If the slope from any corner to any other corner exceeds 0.5%, the base section shall be removed and the granular subbase material re-leveled.

Installation Notes:

1. The Nutrient Separating Baffle Box shall be installed pursuant to the manufacturer's recommendations and the details on this sheet.
2. Attachments to inlet walls shall be made of non-corrosive hardware.
3. Filtration basket fine screen and coarse containment screen shall be manufactured of stainless steel.
4. Prior to setting subsequent sections place bitumen sealant in conformance with ASTM C 990 along the construction joint in the section that is already in place.
5. Any holes made in the concrete sections for handling or other purposes shall be plugged with a non-shrink grout or by using grout in combination with concrete plugs.
6. *Where holes must be cut in the pre-cast sections to accommodate pipes, do all cutting before setting the sections in* place to prevent any subsequent jarring, which may loosen the mortar joints. The contractor shall make all pipe connections.

III. Maintenance

Maintenance: The Nutrient Separating Baffle Box is designed to allow for the use of vacuum removal of captured materials in the filter screens and sediment chambers, serviceable by centrifugal compressor vacuum units without causing damage to the filter or during normal cleaning and maintenance. Filters can be cleaned and vacuumed from the standard manhole access.

Maintenance Notes:

1. Bio Clean Environmental Services, Inc. recommends the Nutrient Separating Baffle Box be inspected a minimum of once every six months. The cleaning and debris removal maintenance a minimum of once year and replacement of hydrocarbon booms once a year. The procedure is easily done with the use of any standard vacuum truck.
2. Following maintenance and/or inspection, the maintenance operator shall prepare a maintenance/inspection record. The record shall include any maintenance activities performed, amount and description of debris collected, and condition of filter.
3. The owner shall retain the maintenance/inspection record for a minimum of five years from the date of maintenance. These records shall be made available to the governing municipality for inspection upon request at any time.
4. Any person performing maintenance activities must have completed a minimum of OSHA 24-hour hazardous waste worker (hazwoper) training.
5. Remove access manholes lid to gain access to filter screens and sediment chambers. Where possible the maintenance should be performed from the ground surface. Note: entry into an underground stormwater vault such as an inlet vault requires certification in confined space training.
6. Remove all trash, debris, and organics from the Nutrient Separating Screen with the vacuum hose.
7. The Nutrient Separating Screen has 3 hinged panels which will open into an upright position. This will expose the baffles. Using a vacuum hose, remove the sediment in the baffle chambers.
8. Evaluation of the hydrocarbon boom shall be performed at each cleaning. If the boom is filled with hydrocarbons and oils it should be replaced. Place new booms properly in media cage.
9. Transport all debris, trash, organics and sediments to approved facility for disposal in accordance with local and state requirements.
10. The hydrocarbon boom is classified as hazardous material and will have to be picked up and disposed of as hazardous waste. Hazardous material can only be handled by a certified hazardous waste trained person (minimum 24-hour hazwoper).

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STORMTANK

StormTank General Maintenance Guidelines

Brentwood industries StormTank Stormwater Storage System is a component in an overall stormwater collection, treatment, detention or infiltration system. Stormwater systems come in varying shapes sizes and configurations. Some systems offer pre-treatment to remove sediment and/or contaminants prior to entering the StormTank storage area and some do not. Systems without pre-treatment require greater attention to system functionality. In order to maximize the storage capacity of the StormTank for years to come, pre-treated or not, we offer the following general maintenance guidelines:

Determining if Maintenance is Required

1. Visual Inspection
   A visual inspection of the system should be performed semi-annually looking for any visual deficientcy in the system in the form of sedimentation and debris.

   Inspect the following:
   a. Man-holes before and/or after the StormTank
   b. Inlet and Outlet Pipe
   c. Discharge Area

2. System Operation
   a. Inspect the system while in operation making sure inlets remain open and the system doesn't back-up.
   b. If the system has a flow metering device confirm flow rates are not reduced or have changed drastically.

Maintenance Frequency

1. During Construction
   Care should be taken to avoid siltation of the system during the construction process.

2. Project Completion
   At completion of installation and all project related excavation the system should be flushed to rid the StormTank of any construction related debris and/or sedimentation.

3. Regular Maintenance
   Maintenance to the system shall be performed based on the findings of the semi-annual inspection or decrease in system performance as observed in the system operation.

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STORMTANK

Maintenance Procedures

1. Determine if maintenance is required. If maintenance is required proceed with the following steps. (If an upstream pretreatment system is being used and requires maintenance, follow maintenance guidelines for that particular product)
2. Using a vacuum pump truck evacuate debris from manholes, inlet and outlet piping and the discharge area.
3. Flush system with clean water (fire hydrant, tanker truck, etc.) forcing debris from the system.
4. Evacuate additional debris as in step 2.
5. Re-flush system
6. Repeat steps 2 and 3 until no additional debris is evident.

Maintenance Precautions

1. Be sure to conform to all safety regulations when performing maintenance.
2. Avoid extreme direct water pressure when flushing the system.

These Maintenance Guidelines were written by Brentwood Industries, Inc. with the express purpose of providing helpful hints. These Guidelines are not to be construed as the only Brentwood approved methods for StormTank system maintenance or the final authority in system maintenance. Check with the storm water system owner/ project engineer for their contract/specification requirements and or recommendations. Contact your local StormTank distributor or Brentwood Industries for additional technical support if required.

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ATTACHMENT C

FISCAL RESOURCES

The following is a discussion from the SUSMP manual to describe how each of the BMPs will be maintained via "Mechanisms to Assure Maintenance" and "Funding".

FIRST CATEGORY:

The City will have only minimal concern for ongoing maintenance. The proposed BMPs inherently "take care of themselves", or property owners can naturally be expected to do so as an incident of taking care of their property

Project BMPs

Underground Detention Pipes & Baffle Boxes & Water Polisher

Mechanisms to Assure Maintenance:

1. Stormwater Ordinance Requirement: The WPO requires this ongoing maintenance. In the event that the mechanisms below prove ineffective, or in addition to enforcing those mechanisms, civil action, criminal action or administrative citation could also be pursued for violations of the ordinance.
2. Public Nuisance Abatement: Under the WPO failure to maintain a BMP would constitute a public nuisance, which may be abated under the Uniform Public Nuisance Abatement Procedure. This provides an enforcement mechanism additional to the above, and would allow costs of maintenance to be billed to the owner, a lien placed on the property, and the tax collection process to be used.
3. Notice to Purchasers. Section 67.819(e) of the WPO requires developers to provide clear written notification to persons acquiring land upon which a BMP is located, or others assuming a BMP maintenance obligation, of the maintenance duty.
4. Conditions in Ongoing Land Use Permits: For those applications (listed in SO Section 67.804) upon whose approval ongoing conditions may be imposed, a condition will be added which requires the owner of the land upon which the stormwater facility is located to maintain that facility in accordance with the requirements specified in the SMP. Failure to perform maintenance may then be addressed as a violation of the permit, under the ordinance governing that permit process.
5. Subdivision Public Report: Tentative Map and Tentative Parcel Map approvals will be conditioned to require that, prior to approval of a Final or Parcel Map, the subdivider shall provide evidence to the Director of Public Works, that the subdivider has requested the California Department of Real Estate to include in the public report to be issued for the sales of lots within the subdivision, a notification regarding the maintenance requirement. (The requirement for this condition would not be applicable to subdivisions which are exempt from regulation under the Subdivided Lands Act, or for which no public report will be issued.)

Funding:

None Required.

SUNTREE TECHNOLOGIES MODEL NO. NSBB-3-6-72

FLOW & BY-PASS SPECIFICATIONS FOR THE BIOMASS SEPARATING SCREEN SYSTEM, SEDIMENT STORAGE, AND SKIMMER SPCIFICATIONS.

1. Inflow Pipe Area (12" RCP AS DRAWN) ——— 0.79 sq.ft.

SCREEN SPECIFICATIONS:
2. Open orifice area in screen system ——— 9.10 sq.ft.
3. Open orifice area in screen system with 50% blockage ——— 4.5 sq.ft.
4. Open orifice area in screen system with 75% blockage ——— 2.26 sq.ft.
5. By-pass through screen system ——— 1.24 sq.ft.
6. Minimum by-pass around screen system ——— 1.56 sq.ft.
7. Screen system storage volume ——— 8.5 cu.ft.

SEDIMENT STORAGE:
8. Volume of first chamber ——— 18.00 cu.ft.
9. Volume of second chamber ——— 18.50 cu.ft.
10. Volume of third chamber ——— 18.00 cu.ft.
11. Volume of total sediment storage ——— 52.50 cu.ft.

SKIMMER SPECIFICATIONS:
12. Flow area under skimmer ——— 2.28 sq.ft.
13. Area of pipe in line with skimmer ——— 0.79 sq.ft.
14. Area of between skimmer and outflow pipe parallel with the surface of the pipe ——— 2.35 sq.ft.

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798 Clearlake Road, Cocoa, Florida 32922
Ph: 321-637-7552 Fax: 321-637-7554

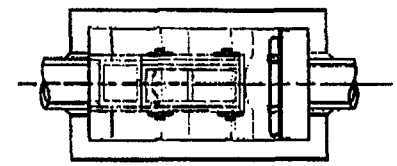

20" X 51" X 17" TALL SCREEN SYSTEM

PATENTED
AND PATENTS PENDING

INSTALLATION NOTES:

1. INFLOW AND OUTFLOW PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE. (CAN NOT INTRUDE BEYOND FLUSH)
2. INVERT OF OUTFLOW PIPE SHOULD BE EVEN WITH THE TOP OF THE BAFFLES.
4. THE BOTTOM OF THE SKIMMER SHOULD BE 6" BELOW THE INVERT OF THE OUTFLOW PIPE.
5. INVERT OF THE INFLOW PIPE SHOULD NOT BE BELOW THE INVERT OF THE OUTFLOW PIPE.

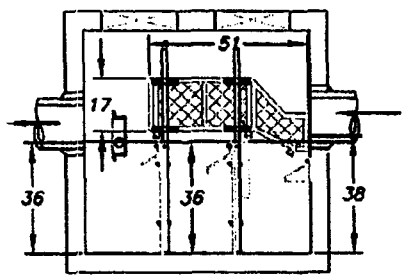

6"TO12" GRAVEL BEDDING FOR LEVELING

BACK VIEW

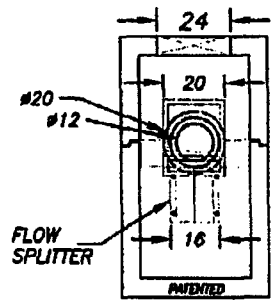

6"TO12" GRAVEL FOR LEVELING

LEFT END VIEW

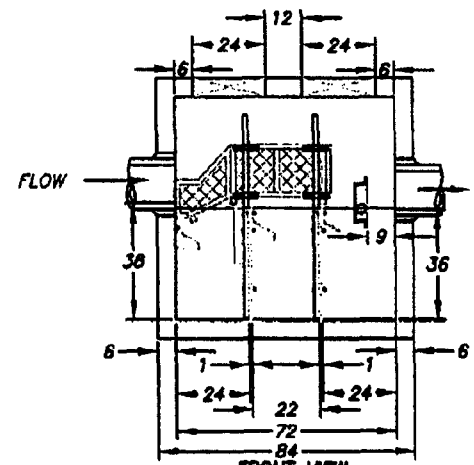

FRONT VIEW

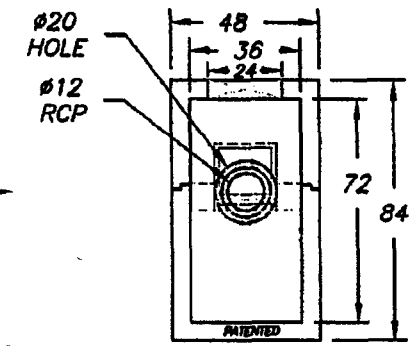

6"TO12" GRAVEL FOR LEVELING

RIGHT END VIEW

Notes:

1. CONCRETE 28 DAY COMPRESSIVE STRENGTH fc=5,000 PSI.
2. REINFORCING: ASTM A-615, GRADE 60.
3. SUPPORTS AN H20 LOADING AS INDICATED BY AASHTO.
4. JOINT SEALANT: BUTYL RUBBER SS-S-00210
5. ALL WALLS, TOP, AND BOTTOM ARE 6" THICK.
6. INFLOW AND OUTFLOW PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE. (CAN NOT INTRUDE BEYOND FLUSH)
7. HINGED LIDS FOR THE SCREEN SYSTEM ARE AVAILABLE UPON REQUEST.

TREATMENT DESIGN FLOW
3 cfs

PEAK DESIGN FLOW
5 cfs

EXCLUSIVE CALIFORNIA DISTRIBUTOR:
BIO CLEAN ENVIRONMENTAL SERVICE
P.O. BOX 869, OCEANSIDE, CA. 92049
TEL. 760-433-7640 FAX:760-433-3176
Email: info@bioclean environmental.net

SUNTREE TECHNOLOGIES, INC. 798 CLEARLAKE RD. SUITE #2 COCOA, FL. 32922		PROJECT
NUTRIENT SEPARATING BAFFLE BOX MODEL NO. NSBB-3-6-72		DRAWING # 2-07-02-08-01
		FILE NAME NSBB-3-6-72
DATE: 12/02/07	SCALE: = 57.6	REVISION / DATE
DRAFTER: T.H.H.	UNITS =INCHES	APPROVED / DATE

Nov 12 08 08:00a Aquaterra Engr p.1
760-433-3176

ATTACHMENT D

CERTIFICATION SHEET

This Stormwater Management Plan has been prepared under the direction of the following Registered Civil Engineer. The Registered Civil Engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

The combination of proposed construction and post-construction BMPs will reduce, to the maximum extent practicable, the expected pollutants and will not adversely impact the beneficial uses or water quality of the receiving waters.

2/20/09

Kristin Lipska Borer, PE
C 57860 Exp. 6/30/10

Date

REGISTERED PROFESSIONAL ENGINEER
KRISTIN LIPSKA BORER
NO. C57860
EXP. 6/30/10
CIVIL
STATE OF CALIFORNIA

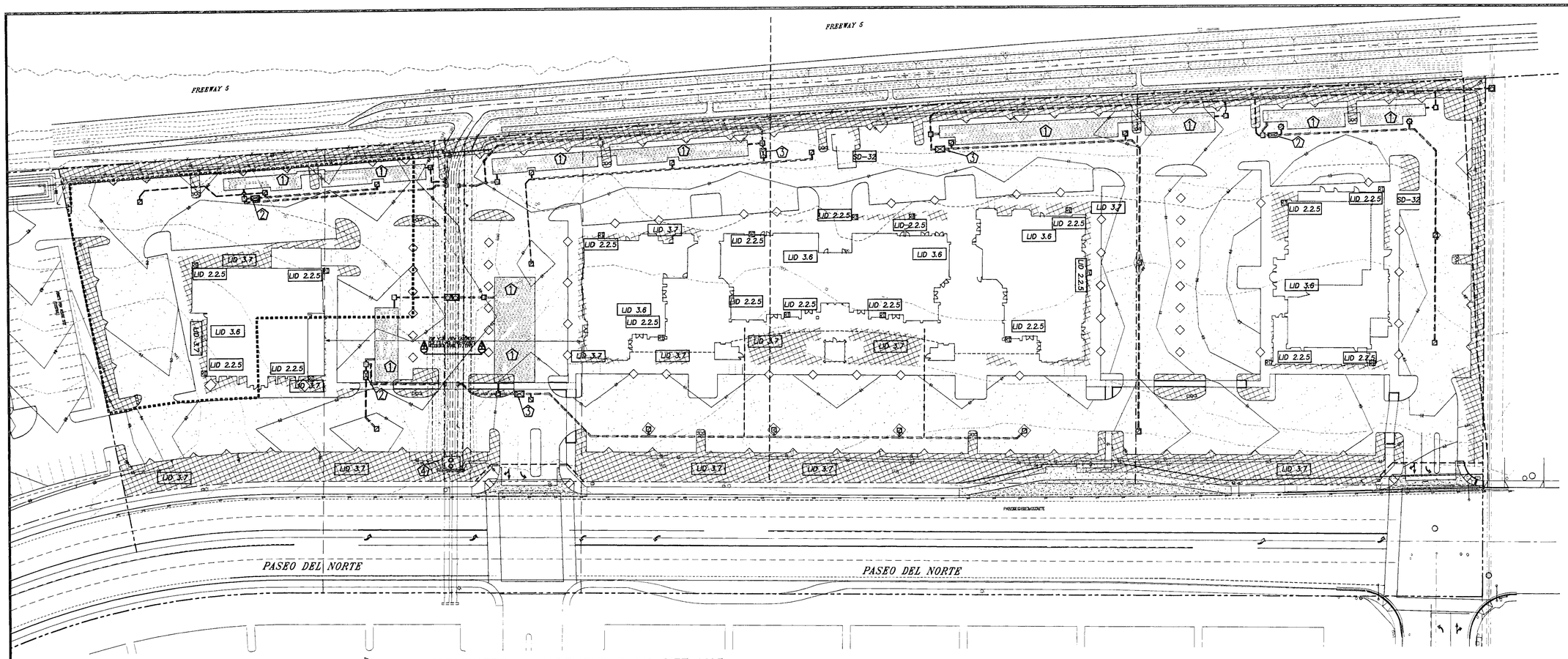

STORMWATER MANAGEMENT PLAN SITE MAP
SCALE: 1"=40'

APPLICANT AND OWNER

CPT/SC TITLE HOLDING CORP
533 SOUTH FREEMONT STREET
SEVENTH FLOOR
LOS ANGELES, CA 90071

ENGINEER OF WORK:

AQUATERRA ENGINEERING INC.
1843 CAMPESINO PLACE
OCEANSIDE, CA 92054
TELE: 760-439-2802

PERMANENT BMPs:

- SD-12 IMPLEMENTATION OF EFFICIENT IRRIGATION SYSTEMS
- SD-32 PROPER DESIGN OF TRASH STORAGE AREAS

LOW IMPACT DEVELOPMENT BMPs:

- LID 2.2.5 DRAIN RUNOFF FROM IMPERVIOUS SURFACES TO PERVIOUS AREAS
- LID 3.6 L.I.D. BUILDING DESIGN
- LID 3.7 L.I.D. LANDSCAPING DESIGN

TREATMENT CONTROL LEGEND

1. STORM TANKS UNDERGROUND DETENTION DEVICE PER DETAIL "C" AND "B" ON SHEET 1
2. SUNTREE PRETREATMENT BAFFLE BOX PER DETAIL "A" ON SHEET 1 NO DETAILS PROVIDED
3. SUNTREE PRETREATMENT BAFFLE BOX PER DETAIL "B" ON SHEET 1
4. FILTRATION STRUCTURE PER DETAIL "E" ON SHEET 1

CIVIL ENGINEERING • LAND PLANNING
Aquaterra Engineering Inc.
1843 Campesino Place
Oceanside, CA 92054
Tele: (760) 439-2802
Fax: (760) 439-2866

BMP TABLE						
ID#	TYPE	SYMBOL	DRAWING	SHEET NO.	CASQA DETAIL	CONSTRUCTION SIGN OFF
1	STORM TANKS UNDERGROUND DETENTION DEVICE		460-1A	5 & 6	N/A	
2	SUNTREE PRETREATMENT BAFFLE BOX (5.0 CFS)		460-1A	5 & 6	N/A	
3	SUNTREE PRETREATMENT BAFFLE BOX (10.6 CFS)		460-1A	5 & 6	N/A	
4	FILTRATION STRUCTURE		460-1	10 &11	N/A	

APPROVED: ENGINEERING INSPECTOR _____ DATE
APPROVED: LANDSCAPING INSPECTOR _____ DATE
APPROVED: BUILDING INSPECTOR _____ DATE
APPROVED: DAVID A. HAUSER
DEPUTY CITY ENGINEER PE 33081 EXPIRES 6/30/10 DATE

BENCH MARK
DESCRIPTION: 4" PLASTIC CAP (S. D. COUNTY CONTROL PT. T-1307)
LOCATION: EAST OF RAILROAD TRACKS IN RAILROAD R.O.W. 500 FT. NORTH OF PALOMAR AIRPORT ROAD.
RECORDED: 1980 ADJ.
ELEVATION: 46.67 DATUM: M.S.L.

PREPARED UNDER THE SUPERVISION OF:
DATE 3/24/09
GARY LIPSKA RCE 23080 EXPIRES 12/31/09

2/26/09 gp Under Submittal

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

SHEET 1 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS 1

STORMWATER MANAGEMENT PLAN SITE MAP:
CARLSBAD PASEO

APPROVED: DAVID A. HAUSER
DEPUTY CITY ENGINEER PE 33081 EXPIRES 6/30/10 DATE

DWN BY: _____ CHKD BY: _____ RVWD BY: _____
PROJECT NO. MS 07-02
DRAWING NO. XXX-XX

STORMWATER MANAGEMENT PLAN SITE MAP

PLOT DATE: 02-24-09

LID & SITE DESIGN NOTES

SITE DESIGN AND SOURCE CONTROL BMPs HAVE BEEN SHOWN ON THIS PERMANENT BMP PLAN. ADDITIONAL BMPs ARE AS FOLLOWS:

SITE DESIGN BMPs ARE DESIGNED TO MAINTAIN PRE-DEVELOPMENT RUNOFF CHARACTERISTICS. THE FOLLOWING CONCEPTS WERE APPLIED TO THIS PROJECT IN THE FOLLOWING MANNER:

1. MINIMIZE IMPERVIOUS FOOTPRINT BY DESIGNING NEW STRUCTURES IN MULTIPLE STORIES. LANDSCAPE AREAS HAVE BEEN ADDED TO MAXIMIZE INFILTRATION.

2. MINIMIZE DIRECTLY CONNECTED IMPERVIOUS AREA BY ALLOWING THE DRIVEWAY RUNOFF TO FLOW OVER PERVIOUS PAVING. ROOF DRAINS WILL DRAIN TO LANDSCAPED AREAS.

SOURCE CONTROL NOTES

NO HOSING OF PAVED AREA - PARKING SURFACES AND DRIVEWAYS WILL NOT BE CLEANED BY 'HOSING DOWN', BUT WILL INSTEAD BE SWIPED, CLEAN OR VACUUMED, WITH COLLECTED WASTE DISPOSED OF IN A COVERED CONTAINER. OIL STAINS WILL NOT BE CLEANED VIA AN ACID WASH OF THE DRIVEWAY. INSTEAD, OIL STAINS AND LEAKS WILL BE CLEANED USING RAGS OR ABSORBENTS, THEN SWEPT USING GRANULAR SOLVENT MATERIAL, AND FINALLY MOPPED. MOP WATER SHALL BE DISPOSED OF INTO A SANITARY SEWER FACILITY.

TRASH - NO, RUBBISH, TRASH, GARBAGE OR OTHER WASTE MATERIAL SHALL BE KEPT ON-SITE OR ON ANY PRIVATE STREET ABUTTING THE PROPERTIES, EXCEPT IN SANITARY CONTAINER LOCATED IN APPROPRIATE AREAS (TRASH CONTAINERS).

DRAINAGE - THERE SHALL BE NO INTERFERENCE WITH OR ALTERATION OF THE ESTABLISHED DRAINAGE PATTERN ON THE SITE UNLESS AN ADEQUATE ALTERNATIVE PROVISION IS MADE FOR PROPER DRAINAGE WITH THE PRIOR WRITTEN APPROVAL OF THE COUNTY.

OUTSIDE STORAGE - STORAGE OF MATERIALS WILL NOT BE ALLOWED OUTSIDE THE MAIN BUILDINGS UNLESS AUTHORIZED BY THE GOVERNING AGENCIES. A REVISED WQTR WILL BE ISSUED IN THIS EVENT DETAILING THE BMPs ASSOCIATED WITH OUTDOOR STORAGE.

PET WASTE - PET WASTE WILL BE DISPOSED OF IN TRASH CONTAINERS OR SEWERS AND NOT BE ALLOWED IN PUBLIC GUTTERS.

BMP MAINTENANCE - OWNER SHALL ASSIGN A PERSON WHO WILL BE RESPONSIBLE FOR IMPLEMENTATION OF EACH NON-STRUCTURAL BMP AND SCHEDULED CLEANING OF SLL STRUCTURAL BMP FACILITIES.

RUNOFF-MINIMIZING LANDSCAPE DESIGN - PLANTS WITH SIMILAR WATER REQUIREMENTS SHALL BE GROUPED IN ORDER TO MINIMIZE THE AMOUNT OF EXCESS WATER FLOW.

POLLUTANTS OF CONCERN

THE FOLLOWING ARE A LIST OF POLLUTANTS OF CONCERN FOR THIS PROJECT INCLUDING HILLSIDE DEVELOPMENT AND DRIVEWAY DEVELOPMENT:

SEDIMENTS
NUTRIENTS
HEAVY METALS
ORGANIC SUBSTANCES
TRASH & DEBRIS
OXYGEN DEMANDING SUBSTANCES
OIL & GREASE
BACTERIA & VIRUS'
PESTICIDES

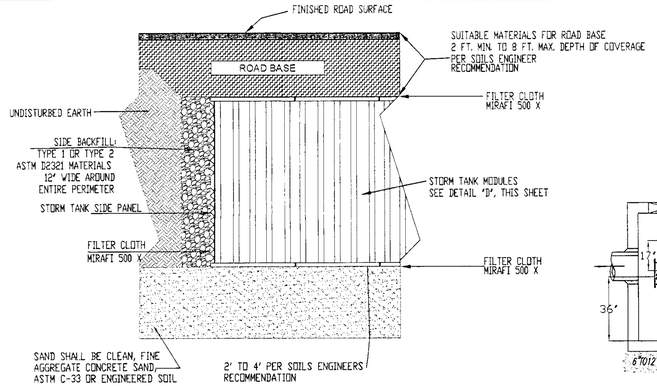

C/1 INSTALLATION DETAIL: STORM TANK
NO SCALE

AS MANUFACTURED BY BRENTWOOD INDUSTRIES
DISTRIBUTED BY:
BIO CLEAN ENVIRONMENTAL SERVICE
P.O. BOX 869, OCEANSIDE, CA. 92049
TEL. 760-433-7640 FAX:760-433-3176

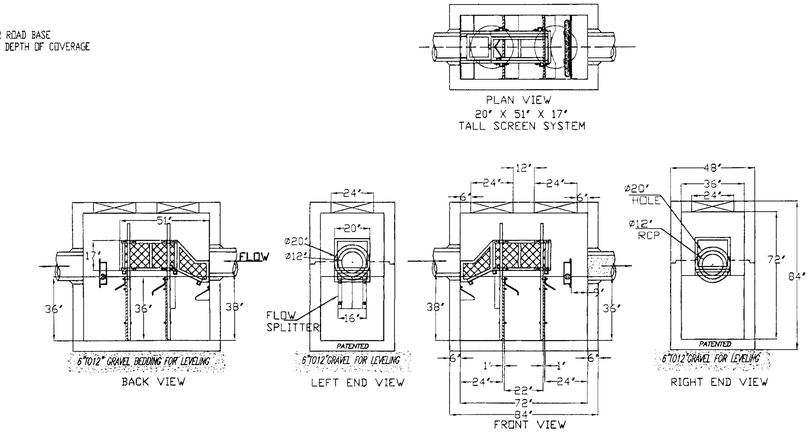

SUNTREE TECHNOLOGIES MODEL NO. NSBB-3-6-72
EXCLUSIVE CALIFORNIA DISTRIBUTOR:
BIO CLEAN ENVIRONMENTAL SERVICE
P.O. BOX 869, OCEANSIDE, CA. 92049
TEL. 760-433-7640 FAX:760-433-3176

A/1 DETAIL: PRETREATMENT BAFFLE BOX #1 (5 CFS-MAX)
NO SCALE

APPLICANT AND OWNER

CPT/SC TITLE HOLDING CORP
533 SOUTH FREEMONT STREET
SEVENTH FLOOR
LOS ANGELES, CA 90071

ENGINEER OF WORK:

AQUATERRA ENGINEERING INC.
1843 CAMPESINO PLACE
OCEANSIDE, CA 92054
TELE: 760-439-2802

PERMANENT BMPs:

SD-12 IMPLEMENTATION OF EFFICIENT IRRIGATION SYSTEMS
SD-32 PROPER DESIGN OF TRASH STORAGE AREAS

LOW IMPACT DEVELOPMENT BMPs:

LID 2.2.5 DRAIN RUNOFF FROM IMPERVIOUS SURFACES TO PERVIOUS AREAS
LID 3.6 L.I.D. BUILDING DESIGN
LID 3.7 L.I.D. LANDSCAPING DESIGN

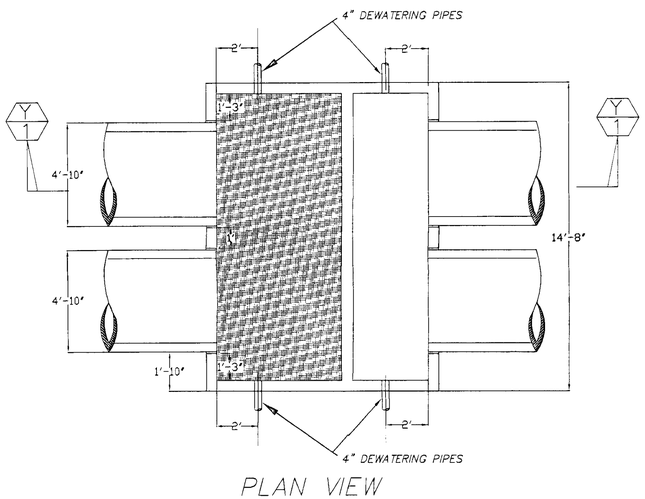

PLAN VIEW

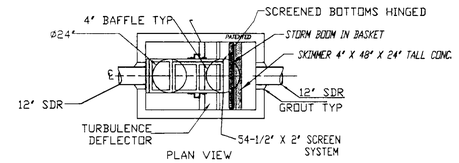

PLAN VIEW

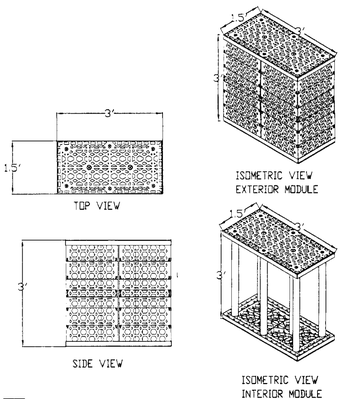

D/1 DETAIL: STORM TANK MODULE
NO SCALE

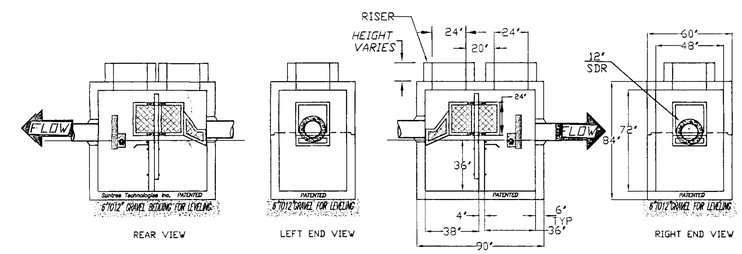

SUNTREE TECHNOLOGIES MODEL NO. NSBB-4-6.5-72-A-SDR
EXCLUSIVE CALIFORNIA DISTRIBUTOR:
BIO CLEAN ENVIRONMENTAL SERVICE
P.O. BOX 869, OCEANSIDE, CA. 92049
TEL. 760-433-7640 FAX:760-433-3176

B/1 DETAIL: PRETREATMENT BAFFLE BOX #2 (10.6 CFS-MAX)
NO SCALE

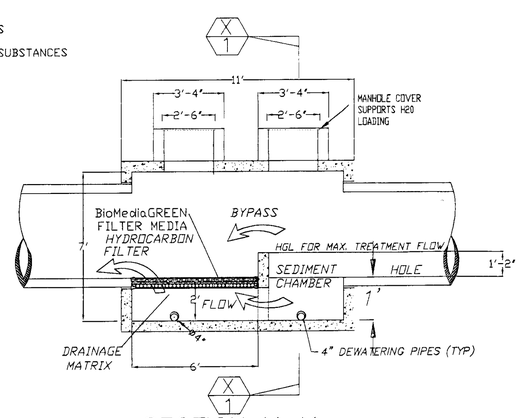

SECTION Y-Y

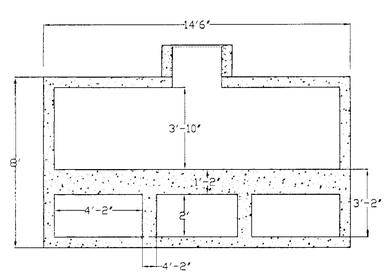

SECTION X-X

BMP TABLE						
ID#	TYPE	SYMBOL	DRAWING	SHEET NO.	CASQA DETAIL	CONSTRUCTION SIGN OFF
1	STORM TANKS UNDERGROUND DETENTION DEVICE		460-1A	5 & 6	N/A	
2	SUNTREE PRETREATMENT BAFFLE BOX (5.0 CFS)		460-1A	5 & 6	N/A	
3	SUNTREE PRETREATMENT BAFFLE BOX (10.6 CFS)		460-1A	5 & 6	N/A	
4	FILTRATION STRUCTURE		460-1	10+11	N/A	

REGISTERED PROFESSIONAL ENGINEER GARY LIPSKA No. 23080 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE SUPERVISION OF:
DATE 7/24/09
GARY LIPSKA RCE 23080 EXPIRES 12/31/09

CIVIL ENGINEERING • LAND PLANNING
Aquaterra Engineering Inc.
1843 Campesino Place
Oceanside, CA 92054
Tele: (760) 439-2802
Fax: (760) 439-2866

DISTRIBUTED BY:
BIO CLEAN ENVIRONMENTAL SERVICE
P.O. BOX 869, OCEANSIDE, CA. 92049
TEL. 760-433-7640 FAX:760-433-3176

E/1 DETAIL: FILTRATION STRUCTURE
NO SCALE

APPROVED: ENGINEERING INSPECTOR ____ DATE
APPROVED: LANDSCAPING INSPECTOR ____ DATE
APPROVED: BUILDING INSPECTOR ____ DATE
APPROVED: DAVID A. HAUSER
DEPUTY CITY ENGINEER PE 33081 EXPIRES 6/30/10 DATE

BENCH MARK
DESCRIPTION: 4' PLASTIC CAP (S. D. COUNTY CONTROL PT. T-1307)
LOCATION: EAST OF RAILROAD TRACKS IN RAILROAD R.O.W. 500 FT. NORTH OF PALOMAR AIRPORT ROAD.
RECORDED: 1980 ADJ.
ELEVATION: 46.67 DATUM: M.S.L.

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK		1	OTHER APPROVAL		CITY APPROVAL	

SHEET 1 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS 3

STORMWATER MANAGEMENT PLAN SITE MAP:
CARLSBAD PASEO

APPROVED: DAVID A. HAUSER
DEPUTY CITY ENGINEER PE 33081 EXPIRES 6/30/10 DATE

DWN BY: ____ CHKD BY: ____ RVWD BY: ____
PROJECT NO. MS 07-02
DRAWING NO. XXX-XX

STORMWATER MANAGEMENT PLAN SITE MAP

PLOT DATE: 02-24-09

FREEWAY 5

EXISTING CONCRETE CHANNEL

MATCH LINE SEE SHEET 3

BASIN BOUNDARY

PERMANENT BMPs:

SD-12	IMPLEMENTATION OF EFFICIENT IRRIGATION SYSTEMS
SD-32	PROPER DESIGN OF TRASH STORAGE AREAS

LOW IMPACT DEVELOPMENT BMPs:

LID 2.2.5	DRAIN RUNOFF FROM IMPERVIOUS SURFACES TO PERVIOUS AREAS
LID 3.6	L.I.D. BUILDING DESIGN
LID 3.7	L.I.D. LANDSCAPING DESIGN

TREATMENT CONTROL LEGEND

1. STORM TANKS UNDERGROUND DETENTION DEVICE PER DETAIL "C" AND "D" ON SHEET 1
2. SUNTREE PRETREATMENT BAFFLE BOX PER DETAIL "A" ON SHEET 1
3. SUNTREE PRETREATMENT BAFFLE BOX PER DETAIL "B" ON SHEET 1
4. FILTRATION STRUCTURE PER DETAIL "E" ON SHEET 1

SYMBOL LEGEND

DESCRIPTION	SYMBOL
ELEVATION, TOP OF FOOTING	TF
ELEVATION, TOP OF WALL	TW
ELEVATION, TOP OF CURB	TC
ELEVATION, TOP OF BERM	TB
ELEVATION, FINISH SURFACE	FS
ELEVATION, FINISH GRADE	FG
ELEVATION, TOP OF GRATE	TG
ELEVATION, HIGH POINT	HP
ELEVATION, LOW POINT	LP
ELEVATION, FLOW LINE	FL
ELEVATION, FINISHED FLOOR	FF
ELEVATION, TOP OF STRUCTURE	TOP
ELEVATION, INVERT ELEVATION	IE
ELEVATION, EXISTING	(950.50)
ELEVATION, PROPOSED	950.50

DETAIL REFERENCE C/2 — DETAIL LABEL / SHEET NO.

REGISTERED PROFESSIONAL ENGINEER GARY LIPSKA No. 23080 CIVIL STATE OF CALIFORNIA

APPROVED: ENGINEERING INSPECTOR	DATE
APPROVED: LANDSCAPING INSPECTOR	DATE
APPROVED: BUILDING INSPECTOR	DATE
APPROVED: DAVID A. HAUSER DEPUTY CITY ENGINEER PE 33081 EXPIRES 6/30/10	DATE

PREPARED UNDER THE SUPERVISION OF:

DATE 2/24/09

GARY LIPSKA RCE 23080 EXPIRES 12/31/09

SURFACE LEGEND

- AC PAVEMENT
- CONCRETE HARDSCAPE
- LANDSCAPE AREA

20 0 20 40

Scale: 1" = 20'

STORMWATER MANAGEMENT PLAN SITE MAP

SCALE: 1"=20'

BENCH MARK

DESCRIPTION: 4" PLASTIC CAP (S. D. COUNTY CONTROL PT. T-1307)
LOCATION: EAST OF RAILROAD TRACKS IN RAILROAD R.O.W. 500 FT. NORTH OF PALOMAR AIRPORT ROAD.
RECORDED: 1980 ADJ.
ELEVATION: 46.67 DATUM: M.S.L.

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

CIVIL ENGINEERING • LAND PLANNING
Aquaterra Engineering Inc.
1843 Campesino Place
Oceanside, CA 92054
Tele: (760) 439-2802
Fax: (760) 439-2866

SHEET 2	CITY OF CARLSBAD ENGINEERING DEPARTMENT	SHEETS 3

STORMWATER MANAGEMENT PLAN SITE MAP:

CARLSBAD PASEO

APPROVED: DAVID A. HAUSER

DEPUTY CITY ENGINEER PE 33081 EXPIRES 6/30/10 DATE

DWN BY:	PROJECT NO.	DRAWING NO.
CHKD BY:	MS 07-02	XXX-XX
RVWD BY:		

STORMWATER MANAGEMENT PLAN SITE MAP

PLOT DATE: 02-24-09

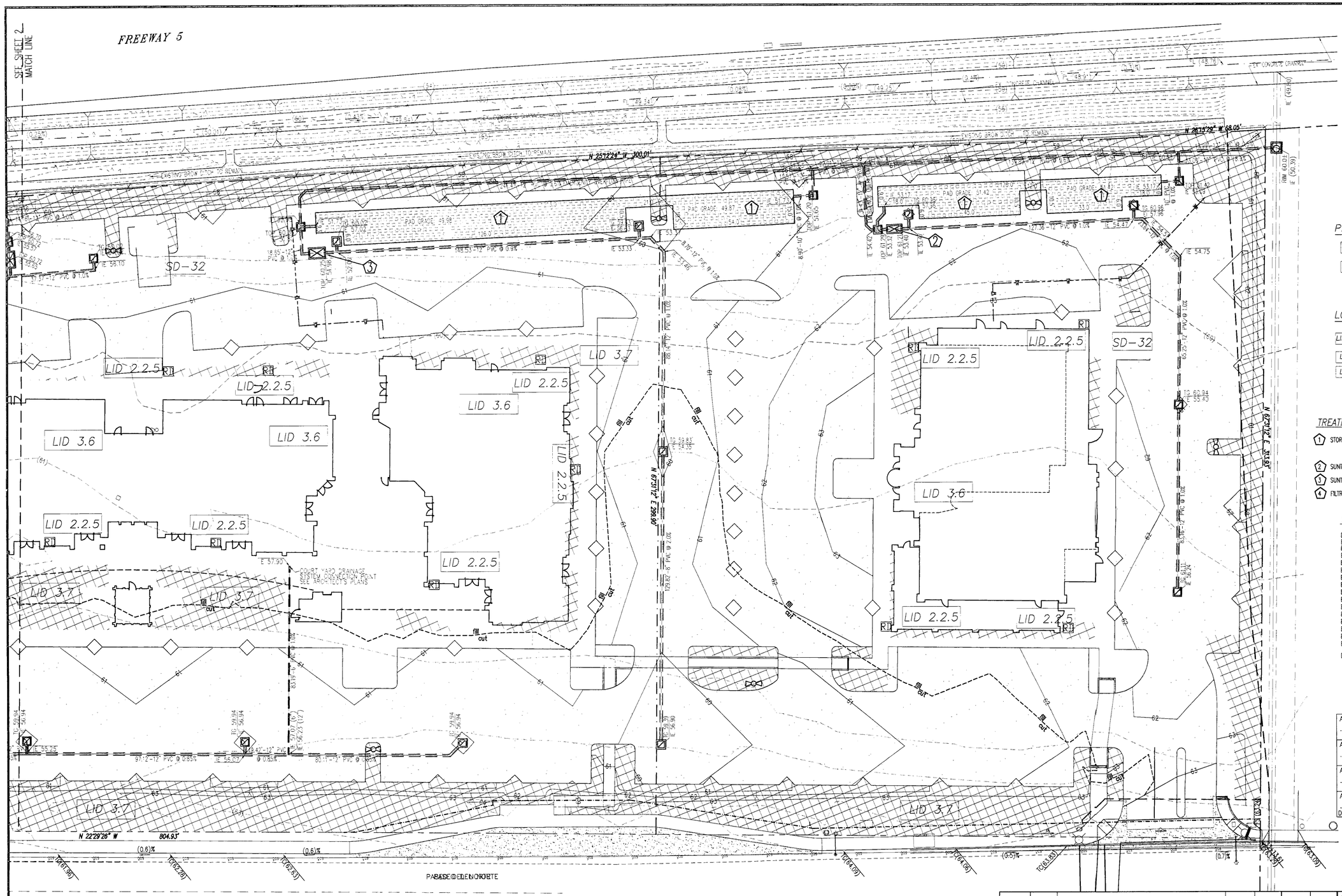

BASIN BOUNDARY

PERMANENT BMPs:

SD-12	IMPLEMENTATION OF EFFICIENT IRRIGATION SYSTEMS
SD-32	PROPER DESIGN OF TRASH STORAGE AREAS

LOW IMPACT DEVELOPMENT BMPs:

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TREATMENT CONTROL LEGEND

1. STORM TANKS UNDERGROUND DETENTION DEVICE PER DETAIL "C" AND "D" ON SHEET 1
2. SUNTREE PRETREATMENT BAFFLE BOX PER DETAIL "A" ON SHEET 1
3. SUNTREE PRETEATEMENT BAFFLE BOX PER DETAIL "B" ON SHEET 1
4. FILTRATION STRUCTURE PER DETAIL "E" ON SHEET 1

SYMBOL LEGEND

DESCRIPTION	SYMBOL
ELEVATION, TOP OF FOOTING	TF
ELEVATION, TOP OF WALL	TW
ELEVATION, TOP OF CURB	TC
ELEVATION, TOP OF BERM	TB
ELEVATION, FINISH SURFACE	FS
ELEVATION, FINISH GRADE	FG
ELEVATION, TOP OF GRATE	TG
ELEVATION, HIGH POINT	HP
ELEVATION, LOW POINT	LP
ELEVATION, FLOW LINE	FL
ELEVATION, FINISHED FLOOR	FF
ELEVATION, TOP OF STRUCTURE	TOP
ELEVATION, INVERT ELEVATION	IE
ELEVATION, EXISTING	(950.50)
ELEVATION, PROPOSED	950.50

DETAIL REFERENCE C DETAIL LABEL / 2 SHEET NO.

REGISTERED PROFESSIONAL ENGINEER GARY LIPSKA No. 23080 CIVIL STATE OF CALIFORNIA

APPROVED: ENGINEERING INSPECTOR	DATE
APPROVED: LANDSCAPING INSPECTOR	DATE
APPROVED: BUILDING INSPECTOR	DATE
APPROVED: DAVID A. HAUSER	
DEPUTY CITY ENGINEER PE 33081 EXPIRES 6/30/10	DATE

PREPARED UNDER THE SUPERVISION OF:

DATE 2/24/09

GARY LIPSKA RCE 23080 EXPIRES 12/31/09

SURFACE LEGEND

- AC PAVEMENT
- CONCRETE HARDSCAPE
- LANDSCAPE AREA

20 0 20 40

Scale: 1" = 20'

STORMWATER MANAGEMENT PLAN SITE MAP

SCALE: 1"=20'

CIVIL ENGINEERING • LAND PLANNING

Aquaterra Engineering Inc.

1843 Campesino Place

Oceanside, CA 92054

Tele: (760) 439-2802

Fax: (760) 439-2866

BENCH MARK

DESCRIPTION: 4" PLASTIC CAP (S. D. COUNTY CONTROL PT. T-1307)

LOCATION: EAST OF RAILROAD TRACKS IN RAILROAD R.O.W. 500 FT. NORTH OF PALOMAR AIRPORT ROAD.

RECORDED: 1980 AD.J.

ELEVATION: 46.67 DATUM: M.S.L.

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

SHEET	CITY OF CARLSBAD	SHEETS
3	ENGINEERING DEPARTMENT	3

STORMWATER MANAGEMENT PLAN SITE MAP:

CARLSBAD PASEO

DRAINAGE PLAN

APPROVED: DAVID A. HAUSER

DEPUTY CITY ENGINEER PE 33081 EXPIRES 6/30/10 DATE

DWN BY:	PROJECT NO.	DRAWING NO.
CHKD BY:	MS 07-02	XXX-XX
RVWD BY:		

PLOT DATE: 02-24-09

STORMWATER MANAGEMENT PLAN SITE MAP

EXCERPTS FROM HYDROLOGY REPORT.

Project Description

The 7± acre project site is currently vacant. The site topography generally is mildly sloping to the northwest due to previous grading. The adjacent land on the north has been developed as an automobile sales operation. Southerly of the site has been improved as a restaurant. Interstate 1-5 borders the site along the westerly edge and Paseo del Norte is along the easterly side.

The project is proposed to be developed for retail space and two restaurants with parking and driving surfaces. The proposed drainage pattern approximates the existing condition and outlets to an existing concrete drainage channel located along the west property line within the Caltrans right of way.

Purpose of Study

The purpose of this study is to identify the proposed method for capture of silt and debris from the storm drainage run off after the site has been improved. The attached hydrology map and calculations are provided to support the design for construction. Our selected approach to mitigate the increased peak of storm water leaving the site utilizes underground detentions storage systems located at six locations within the project site limits. The storage systems will mitigate the increased peak runoff and will reduce the post-construction run off values to be less than the pre-development level. The required storage volume for the storage systems has been calculated and the results for each basin are included in this report. To limit the transportation of silt and debris to downstream drainage systems a pre-treatment box shall be installed at the upstream end of the storage tubes to cleanse the flow before it enters the tubes. To evaluate the effectiveness of the detention systems, the discharge from the six drainage basins have been combined at two confluence locations. The following shows the comparative results of the storm discharge.

Basin	Pre-construction	Post-construction	Difference
D and E	Q100=1.25cfs	Q100=0.83cfs	<0.4cfs>
A, B, C. and F	Q100=3.33cfs	Q100=1.75cfs	<1.6cfs>

The post- construction values are less than the pre-construction values.

Pollution Control

The program to eliminate polluting elements from downstream drainage systems includes the above referenced permanently constructed detention I storage systems which have pre-treatment devices to remove both silt and debris. Additional Best Management Practices (BMP) shall be used during the construction phase of the site improvements. The BMP devices installed and maintained during the construction period shall include gravel bag berms around each drainage inlet or catch basin and gravel bag chevrons check dams at locations to control drainage flows which may generate silt, erosion and debris.

Post construction BMP's shall include fossil fuel filter inserts in the drainage catch basins to accept and trap silt and hydrocarbon pollutants. The filtration design of the fossil fuel filter shall be based on the "Flow based Criteria" using the established flow rate of 0.2" per hour intensity,

The proposed slopes are less than 4' in height, however shall be covered with irrigated landscaping material to control the erosion.

Low Impact Development

We have incorporated site elements in the project design for compliance with the requirements of the Regional Water Quality Control Board. The elements are landscaped areas near the building structures to filter the roof drainage and underground detention and infiltration devices (Storm Tank Stormwater Storage Systems) for the total site drainage. The site has been divided into six drainage sub-basins. The detention devices have been numerically sized to maintain the peak discharge at the 100 year frequency from each sub-basin to be less than the discharge level in the pre-developed condition.

In order to verify that the detention systems meet the requirements of Low Impact Development, we have applied the 40/0 ratio standard. Within this report, we have provided the summary of results that shows that the design meets or ' exceeds the LID strategies.

Water Table Clearance

The SUSUMP specifies that the filtration device and the ground water level must be separated by 10' unless it can be shown that beneficial uses of the groundwater are over 100 feet from the site. We have researched the adjacent parcels through the San Diego County Environmental Health Department and found that no domestic water wells exist within 100 feet from the site. Consequently, the subject clearance may be reduced to less than the 10' minimum. During the construction design phase and after additional soil testing has been completed, we will determine the calculated clearance at each detention I filtration device

We befieve that the above described design elements and programs will provide satisfactory drainage control to meet agency established requirements.

2

PROJECT Crissio Pasio DATE: 1/08/09

Summary of Detention Calcs

BASIN	TOTAL OUTFLOW AFTER DETENTION	INFILTRATION VALVE	DISCHARGE IN PIPE
BASIN "A"	0.46 cfs	0.13 cfs	0.33 cfs
BASIN "B"	1.06 cfs	0.18 cfs	0.88 cfs
BASIN "C"	1.39 cfs	0.24 cfs	1.15 cfs
BASIN "D"	0.18 cfs	0.08 cfs	0.10 cfs
BASIN "E"	0.90 cfs	0.15 cfs	0.75 cfs
BASIN "F"	0.64 cfs	0.20 cfs	0.44 cfs

28

PROJECT: Carlsbad Passo DATE: 12/17/08

Hydraulic Calcs

Determine Capacity of Rectangle Opening when Flow Level is at Top of Weir

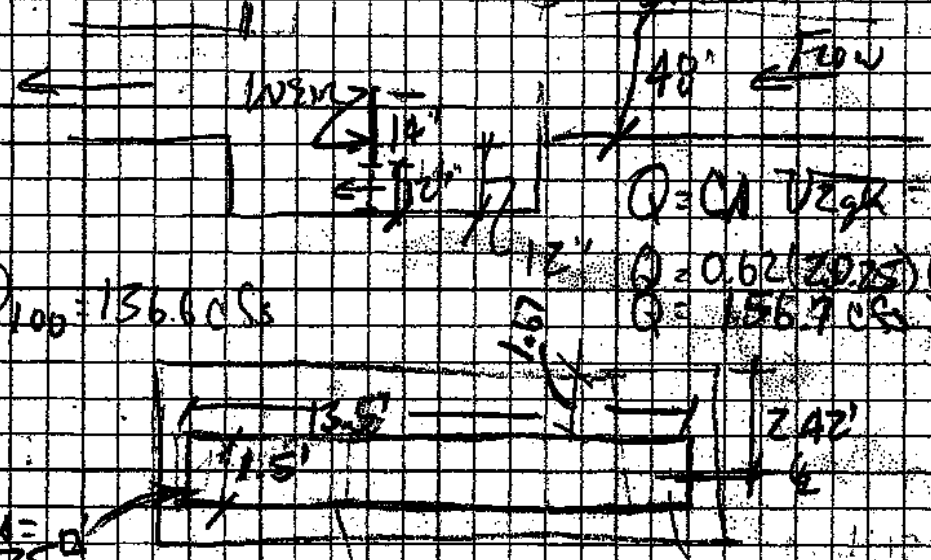

$Q = C_d A \sqrt{2gh}$ — $C = 0.62$

$Q = 0.62(20.25)(64.4 \times 1.42)^{1/2}$

$Q = 156.7$ cfs > 136.6 cfs OK

$Q_{100} = 136.6$ cfs

Minimum Head Needed in Orifices for 100yr Flow

$Q = C_d A \sqrt{2gh} \Rightarrow \left(\frac{Q}{C_d A}\right)^2 = 2gh$

$\Rightarrow \frac{Q^2}{(C_d A)^2 2g} = h = \frac{(136.6)^2}{(0.62 \times 20.25)^2 \times 64.4} = \frac{18659.6}{10154.2} = 1.8'$

$1.8' < 2.42'$ OK

Velocity Through Orifices $= \frac{136.6}{20.25} = 6.74$ ft/sec

PROJECT Cristo Rey Pasto DATE: 1/04/08

HYDRAULIC CALCS FOR FILTER BOX IN 48" CULVERT. DETERMINE BACKWATER DEPTH IF FILTERS ARE BLOCKED AT 100YR LEVEL. FLOW MUST PASS OVER WEIR

SHARP-CRESTED WEIR – SEE SJ RIVER COUNTY PERMANE DESIGN MANUAL PAGE 6-9

$$Q = C_{SCW} L H^{3/2} \Rightarrow \left(\frac{Q}{C_{SCW} L}\right)^{2/3} = H$$

Q = 136.6 cfs

L = 135'

$$C_{SCW} = 3.27 + 0.4 \frac{H}{HW}$$ ← (ASSUME) = 1.88' ← 1.17'

$$C_{SCW} = 3.27 + 0.4 \frac{1.88}{1.17}$$

$$C_{SCW} = 3.27 + 0.64 = 3.91$$

$$\left(\frac{Q}{C_{SCW} L}\right)^{2/3} = H \left(\frac{136.6}{(3.91)135}\right)^{2/3} = 1.89 = H$$

OK

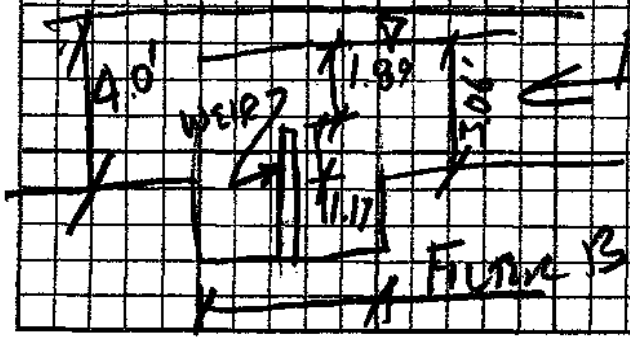

33

Carlsbad Paseo
Water surface profile of existing 48" RCP upstream of filter box (clogged filter condition)
January 4, 2009

Length (ft)	Discharge (cfs)	Diameter (ft)	Manning's n	Slope(ft/ft)	Control Depth (ft)
105	68.3	4	.013	.006	3.060

Normal Depth(ft)	XSec Area (s.f)	Crit. Depth (ft)	XSec Area (s.f)	Flow Type
2.265	7.341	2.497	8.249	subcritical

Station	Depth (ft)	Energy (ft)	Area (s.f)	Velocity(fps)	Top Width (ft)	Momentum
2+05.000	3.060	3.741	10.315	6.621	3.392	28.231
1+98.964	3.022	3.720	10.187	6.705	3.438	28.023
1+93.063	2.985	3.701	10.057	6.791	3.481	27.826
1+87.310	2.947	3.683	9.926	6.881	3.523	27.642
1+81.720	2.910	3.665	9.793	6.975	3.562	27.470
1+76.312	2.872	3.649	9.658	7.072	3.600	27.311
1+71.107	2.835	3.634	9.522	7.173	3.635	27.165
1+66.133	2.797	3.619	9.385	7.278	3.669	27.032
1+61.422	2.760	3.607	9.247	7.386	3.700	26.913
1+57.016	2.722	3.595	9.107	7.500	3.730	26.808
1+52.967	2.684	3.585	8.966	7.617	3.758	26.718
1+49.343	2.647	3.577	8.825	7.740	3.785	26.644
1+46.232	2.609	3.570	8.682	7.867	3.810	26.585
1+43.755	2.572	3.565	8.539	7.999	3.833	26.542
1+42.078	2.534	3.562	8.394	8.136	3.855	26.516
1+41.446	2.497	3.561	8.249	8.280	3.875	26.507

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BIORETENTION (DETENTION SYSTEM) TO ACCEPT STORM WATER FROM BASIN AREA

SUMMARY OF RESULTS

BASIN DESIGNATION	***BASIN AREA*** (S.F.)	***MINIMUM REQUIRED**** S.F.)	***STORM TANKS PROVIDED AREA*** (S.F)
A	32234	1289	1548
B	57499	2300	2552
C	70132	2805	2903
D	17860	714	1026
E	37462	1498	1613
F	46174	1847	2219

** 4% OF BASIN AREA

119

PROJECT Christian Basin DATE 8/26/08

WATER QUALITY CALCS

FLOW CONTROL FOR TREATMENT IN
DOUBLE 48" RCP (PASS THROUGH)

AREA = 90.9 ACRES
36.3 ACRES COMMERCIAL (C=0.85)
54.6 ACRES AGRICULTURE (C=0.20)

ASSUME COMMERCIAL IS 85% IMPERVIOUS
⇒ IMPERVIOUS AREA = 0.85 × 36.3 = 30.86 ACRES

$Q_{85} = C i A$ C = 1.0
i = 0.2 in/hr
A = 30.86

$Q_{85} = 1.0 (0.2)\ 30.86 = 6.2\ cfs$

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Frequently Asked Questions About Treatment Control Best Management Practices

Background

Did you know that storm drains are NOT connected to sanitary sewer systems or treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. As rainfall flows over the ground, it picks up a variety of pollutants which flow directly to our creeks, lagoons, and ocean. Storm water pollution comes from a variety of sources including oil and fluid leaks from vehicles and equipment, trash, lawn clippings, pet waste, pesticides, fertilizers, and improper erosion control. The City of Carlsbad is committed to improving water quality and reducing the amount of pollutants that enter our waterways.

On January 24, 2007, the City of Carlsbad (City) was issued a Municipal Storm Water Permit (Municipal Permit) by the California Regional Water Quality Control Board. The Municipal Permit requires the City to prevent storm water pollution during all three phases of urban land use planning: new development, construction, and existing development. The Municipal Permit also requires the City to improve the quality of the water flowing into the storm water conveyance system through the implementation and maintenance of treatment control best management practices (TCBMPs).

What are TCBMPs?

As land is developed, vegetation is replaced with paved surfaces and rooftops which results in a higher potential for storm water pollution to runoff into waterways. **Treatment Control Best Management Practices** or TCBMPs are structures that help to prevent pollutants from entering our storm drains. The intent of TCBMPs is to assure that storm water runoff from developed areas does not impact waterways.

What are some examples of TCBMPS?

TCBMPs fall into one of two categories - non-structural or structural. **Non-structural BMPs** are preventative actions that involve policies, ordinances, maintenance programs, requirements, practices, and standards that help prevent storm water pollution. Examples include directing urban growth to already developed areas, protecting, maintaining, and/or increasing open spaces, providing buffers zones along sensitive areas, minimizing impervious surfaces, and encouraging public education programs to reduce water quality impacts. **Structural BMPs** are designed to provide treatment of storm water either through storage, filtration, or infiltration. The most common types of TCBMPs found in Carlsbad include:

- Dry Extended Detention Basin (TC-22)
- Infiltration Basins (TC-11)
- Drain Inserts (MP-52)
- Media filters (TC-40 and MP-40)
- Vortex Separators (MP-51)
- Wet Vaults (MP-50)
- Vegetated Swales (TC-30)

Who is responsible for maintaining TCBMPs?

Maintenance of TCBMPs is a shared responsibility between the City and the community. TCBMPs and other storm drain structures on ***public*** streets, property, and some easements are monitored and maintained by the City. Private property owners are responsible for maintaining TCBMPs on their properties including keeping their portion of the storm drain system free of trash, sediments, excessive vegetation, and other materials that may contribute to storm water pollution.

Why is the City requiring private property owners to maintain TCBMPs?

The Municipal Permit requires the City to develop, implement, and enforce a program to inspect and verify maintenance of all privately owned TCBMPs. Inspection and verification of TCBMPs is a partnership between the City and private property owners, **however, private property owners are solely responsible for maintaining all TCBMPs on their property**. Routine inspection and maintenance is an efficient way to prevent potential nuisance situations (odors, mosquitoes, weeds, etc.), reduce the need for repairs, and decrease the potential for storm water runoff. Failure to properly maintain TCBMPs could result in enforcement actions such as citations, fines, nuisance declaration, and summary abatement.

Isn't the developer required to maintain the TCBMPs?

Often there is no long-term responsibility for the developer to assume maintenance of TCBMPs. For example, a developer builds a residential subdivision, installs TCBMPs, and then sells the lots. The roads and infrastructure are usually taken over by the City, but long term maintenance of TCBMPs becomes the responsibility of the homeowners association or the individual landowner. Private property owners are responsible for performing and verifying all maintenance activities on privately owned TCBMPs. The City will also conduct annual compliance inspections to ensure BMPs are maintained as required.

Is this covered under my maintenance agreement with the City of Carlsbad?

Maintenance agreements or covenants are legally binding agreements between public agencies and private property owners that ensure storm drainage systems are constructed and maintained in accordance with approved plans and development standards. Maintenance agreements identify the party responsible for maintaining the TCBMP(s) and outline a schedule for maintenance activities. The designation of a responsible party (i.e., property management company, homeowner associations, etc.) to maintain the TCBMP(s) does not relieve the private property owner of any compliance obligations.

The City has an easement on my property, does that include TCBMP maintenance?

Easements usually only allow the City to access private property to conduct inspections or provide emergency service/repairs to the storm drain system. In most cases, granting of an easement does not necessarily confer any responsibility for the City to maintain that portion of the storm drain system located on private property.

How do I know if my TCBMPs have been maintained?

If you are not sure if your TCBMPs have been maintained check with your HOA, property management company, facility maintenance staff, or landscaper to see if storm drain maintenance is a part of their routine operations. Be sure to save all receipts, maintenance schedules, inspection reports/forms, and other documentation that shows TCBMPs have been maintained. It is important that routine maintenance of TCBMPs is done according to schedule or as soon as a problem is discovered. Many TCBMPs are rendered ineffective if not installed and maintained properly. In some cases, TCBMP neglect can have detrimental effects that increase the potential for erosion and pollutant discharge.

Will the City be inspecting my property?

The City has developed an inventory of all privately owned TCBMPs and will be conducting storm water compliance inspections on an annual basis. These compliance inspections may include a meeting with the responsible party, visual observation of the structure(s), evaluation of the TCBMP(s), and recommendations for additional measures or corrective actions required to comply with the storm water regulations. During each inspection, the inspector will also document whether the TCBMP is performing correctly, if there is any damage since the last inspection, and if the TCBMP has been maintained as required.

What are the City's requirements for verifying the effective operation and maintenance of TCBMPs?

All TCBMPs should be regularly inspected by the property owner or responsible party to ensure continued effectiveness and structural integrity. In addition, the City will require private property owners to verify the maintenance of TCBMPs on an annual basis. The City has developed a verification form for private property owners and responsible parties to use. Verification of maintenance includes a signed statement from the property owner or responsible party confirming that the TCBMP(s) have been maintained as required. Generally, TCBMPs should be checked prior to and after each storm event in addition to regularly scheduled inspections. The verification form can be submitted by fax, email or mail to the City and can also be downloaded from the City's webpage at www.carlsbadcagov.

What are the minimum maintenance requirements for TCBMPs?

There are several things you can do to help maintain the TCBMPs and storm drains on your property. Before and after a heavy rain, please remember to:

- Check and clean the TCBMPs on property. Blockages can cause water to pond and damage your property and parking lots.
- Remove leaves, branches, roadside litter, weeds or any material that can block TCBMPs.
- NEVER use a hose to clean a storm drain or TCBMPs. Avoid using blowers that only displace residue. Dispose of waste and trash properly.
- Check the storm drains inlets to be sure they are free of any materials and debris. Check the drainage path and remove any debris.
- Report any unauthorized access or illegal dumping into drainage systems. Call the Storm Water Hotline at 760-602-2799 to report spills or illegal discharges.

How do I get more information about TCBMP maintenance, verification, and inspection?

City staff is available to assist you throughout program implementation. To schedule an appointment with a City inspector please call 760-602-2780 x7111. You can also find information about the TCBMP maintenance verification and inspection program at www.carlsbadca.gov/cmi. Storm water technologies are constantly changing and being improved. The City of Carlsbad recommends that you be proactive and stay informed about these changes, developments, and improvements in storm water pollution prevention and compliance.

Verification and Inspection of Treatment Control BMPs

All storm water BMPs should be regularly inspected by the property owner or responsible party to ensure continued effectiveness and structural integrity. In addition, the City will require private property owners to verify the maintenance of treatment control BMPs on an annual basis. The City has developed a verification form for private property owners and responsible parties to use. Verification includes a signed statement from the property owner or responsible party confirming that treatment control BMP(s) have been maintained as required. The verification form can be submitted by fax or mail to the City and can also be downloaded from the City's webpage at www.carlsbadca.gov. Please note that all private property owners are required to maintain their treatment control BMPs and comply with all applicable regulations outlined in the Carlsbad Municipal Code.

City of Carlsbad
5950 El Camino Real
Carlsbad, CA 92008

STENCIL A STORM DRAIN

Storm drain stenciling is an educational, interactive tool to engage people of all ages in community involvement for watershed pollution prevention. It is a ***pollution solution*** project for students and community involvement for adults. Stencil the storm drains that drain to the treatment control BMP on your private property. It's a great way to educate neighbors, residents, contractors, and visitors about pollution prevention. Distinguish your property as being environmentally conscious. The City has storm drain stencils for loan or you may develop your own signs.

Construction Management and Inspections
760-602-2780
tcbmp@carlsbadca.gov

Printed on Recycled Paper
2017

What You Need to Know About Privately Owned

Treatment Control BMPs

City of Carlsbad Storm Water Compliance Guidelines for Treatment Control Best Management Practices

A Clean Environment Is Important to all of Us!

What are Treatment Control BMP's?

Treatment control best management practices (BMPs) are structures or devices that help to prevent pollutants from entering our storm drain system. They are primarily designed to provide treatment of storm water either through storage, filtration, or infiltration. As land is developed, vegetation is replaced with paved surfaces and rooftops which results in a higher potential for storm water pollution. The intent of treatment control BMPs is to assure that storm water runoff from developed areas does not impact waterways.

Treatment Control BMPs can help protect our waters ways from:

Sediments
Trash and Debris
Oil and Grease
Bacteria and Viruses

Who is responsible for maintaining treatment control BMPs?

Maintenance of treatment control BMPs is a shared responsibility between the City and the community. Treatment control BMPs and other storm drain structures on ***public*** streets and property are maintained by the City. Private property owners are responsible for maintaining treatment control BMPs on their properties including keeping their portion of the storm drain system free of trash, sediments, excessive vegetation, and other materials that may contribute to storm water pollution.

What are the most common treatment control BMPS are found in Carlsbad?

- **Dry Extended Detention Basins**: Also known as dry ponds, dry extended detention basins are designed to hold storm water runoff while allowing pollutants to settle out.
- **Infiltration Basins:** An infiltration basin is a shallow pond that uses the natural filtering ability of the soil to remove pollutants in storm water runoff. Infiltration basins store runoff until it gradually filters through the soil and eventually into the water table. These basins have high pollutant removal efficiency and can also help recharge groundwater
- **Media Filters**: Storm water media filters are usually two-chambered pretreatment settling devices that include a sand filter or other absorptive filtering media. As storm water flows into the first chamber, large particles settle out, and then finer particles are removed as storm water flows through the filter in the second chamber.
- **Wet Vaults:** A wet vault is generally 3 to 5 feet deep and allows storm water flows in while constricting it at the outlet. This causes a temporary rise of the water level and slowly releases water while holding back pollutants.
- **Vortex Separator**: This treatment control BMP uses gravity to help separate pollutants from storm water. Vortex separators move water in a circular motion , rather than a straight line making, it possible to remove a significant amount of suspended sediments and pollutants
- **Drain Inserts**: They are filters or fabric placed in a storm drain inlets to help remove sediment and debris. There are a three main types of drain inserts; **fabric socks** attached to a frame or grate of the storm drain and filter out pollutants; boxes are plastic or wire mesh screens that filter out large particles; and trays hold different types of media filters that collect trash and debris.

Be Part of the Pollution Solution!

There are several things you can do to help maintain the treatment control BMPs on your property. Before and after a heavy rain, please remember to:

- ✓ Check and clean the gutters and drainage ditches around your property. Blockages can cause water to pond and damage your property and parking lots.
- ✓ Remove leaves, branches, roadside litter, weeds or any material that can block treatment control BMPs.
- ✓ NEVER use a hose to clean a storm drain or treatment control BMP. Avoid using blowers that only displace residue. Dispose of waste and trash properly.
- ✓ Check the storm drains inlets to be sure they are free of any materials and debris. Check the drainage path and remove any debris.
- ✓ Report any unauthorized access or illegal dumping into drainage systems. Call the Storm Water Hotline at 760-602-2799 to report spills or illegal discharges.
- ✓ You can also find information about the treatment control BMP maintenance verification and inspection program at www.carlsbadca.gov.

For more information or assistance, please call 760-602-2780

City of Carlsbad		CMI - 300	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR TREATMENT CONTROL BEST MANAGEMENT PRACTICES	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
		PAGE 1 OF 9	

CHANGE HISTORY

REV A

05/01/09 Initial creation of document

06/24/09 Completion and approval of Revision A

Publishers: Shawnetta Grandberry			Date: June 24, 2009		
Critical Review By	Signature	Date	Approved By	Signature	Date
Shawnetta Grandberry			Casey Arndt		
Approved By	Signature	Date			
Patrick Vaughan					

City of Carlsbad		CMI-300	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR TREATMENT CONTROL BEST MANAGEMENT PRACTICES	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
		PAGE 2 OF 9	

Purpose

The purpose of this procedure is to define the process for inspecting, tracking, and enforcing compliance with Treatment Control Best Management Practices (TCBMP) structures listed on the Construction Management and Inspection (CMI) active TCBMP Inventory List. CMI inspectors must have a basic understanding of the requirements of the NPDES inspection program. Please refer to procedure #CMI-310 for the creation, revision and maintenance of the active TCBMP Inventory List and procedure #CMI-320 for the TCBMP Verification of Maintenance Program.

Policy

The Construction Management and Inspection Department will conduct NPDES compliance inspections for structures listed on the active Treatment Control Best Management Practices Inventory List to assess their threat to water quality, potential to contribute to storm water pollution, applicability to the NPDES permit issued by the Regional Water Quality Control Board of the State of California, and compliance with the Carlsbad Municipal Code.

Scope

This procedure applies to the **Construction Management and Inspection Department** personnel and consultants at the City of Carlsbad, Public Works Department located in Carlsbad, CA.

Associated Documents

Municipal Storm Water Permit Order No. R9-2007-0001, NPDES No. CAS0108758

City of Carlsbad Jurisdictional Urban Runoff Management Program (JURMP) from March 2008

City of Carlsbad Engineering Inspection Manual

City of Carlsbad Municipal Code Chapter 15.12

City of Carlsbad Municipal Code Chapter 15.16

City of Carlsbad Municipal Code Chapter 6.08

Acronyms and Definitions

BMP	Best Management Practices
CON	Consultant designated by awarded City contract
CMC	Carlsbad Municipal Code
CM	Construction Manager
DCE	Deputy City Engineer
ESA	Environmentally Sensitive Area
Dry Season	May 1 to September 30
GIS	Geographical Information Systems
Inspection	Refers to onsite evaluation or investigation to determine the effectiveness and adequacy of BMPs – please refer to Appendix A for a copy of the inspection form.
PWI	Public Works Inspector I/II
JURMP	Jurisdictional Urban Runoff Management Program from March 2008
NPDES	National Pollutant Discharge Elimination System
RP	Responsible Party
RWQCB	Regional Water Quality Control Board
SCI	Senior Construction Inspector
SOS	Senior Office Specialist
SWPPP	Storm Water Pollution Prevention Plan
SWMP	Storm Water Management Plan
TCBMP	Treatment Control Best Management Practices
Wet Season	October 1 to April 30

Overview

The City of Carlsbad is committed to inspecting structures listed on the active TCBMP inventory list to evaluate compliance with applicable storm water regulations, SWPPP, SWMP, JURMP, General Construction Permit, and the CMC. TCBMP inspections are conducted using the inspection form referenced in Appendix A and pictures are taken when necessary.

City of Carlsbad		CMI-300	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR TREATMENT CONTROL BEST MANAGEMENT PRACTICES	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
		PAGE 4 OF 9	

Treatment Control Best Management Practices Inspections Procedure:

Step	Who	What	When
1.	SCI	Prioritizes TCBMPs on the inventory and sets an inspection schedule using the criteria and frequencies outlined in the "*Other Procedural Considerations*" section of this procedure.	By May 1
2.	SCI	Merges inspection report forms with the TCBMP inventory list, prints the inspection reports, and conducts/schedules inspections as required. Inspection forms can also be completed in the field as inspections are conducted. Please refer to Appendix A for inspection form and instructions.	By May 15
3.	SCI	Provides CON and/or PWI with inspection forms for TCBMPs requiring NPDES inspections.	During the Dry Season
4.	PWI CON SCI	Performs TCBMP inspection(s) using the procedures outlined in CMC 15.12.095, 15.12.100, 15.12.110, in this procedure, and in Section D.2.d.(6) of the Permit.	During the Dry Season
5.	PWI CON SCI	After completion of the inspection(s), returns to the office and provides the completed inspection reports to the SCI.	During the Dry Season
6.	SCI CM	Verifies accuracy of the information on the inspection reports and updates the TCBMP inventory. The SCI will maintain inspection reports filed by BMP ID#.	Within 30 days of receipt
7.	PWI CON SCI CM	Completes appropriate compliance documents including Warning Notices, Notice to Clean, Notice of Violation, Administrative Citations, Summary Abatement, Compliance Schedule and other related NPDES compliance actions. If an enforcement action is issued, the SCI will also update the Inventory List.	As needed
8.	SCI CM DCE	Reviews compliance documents for completeness and accuracy. All Notice of Violations and above must be reviewed by the SCI, CM and/or DCE before issuance.	As needed
9.	SCI SOS	Ensures all compliance documents are mailed and filed as required. If the document requires a response, the SOS will return the file to the SCI. If the correspondence does not require a response, the file is returned to the appropriate filing location.	As needed
10.	PWI CON SCI	Follow up per findings and corrective action schedule submitted by RP. Actions that require tracking should be provided to the SCI.	As needed

Other Procedural Considerations

- If immediate corrective action is required, the CMI inspector should contact the RP by phone or mail for a prompt response. A copy of the inspection report can be faxed, mailed, or emailed to the RP.

- After notifying the RP of the violation verbally or in writing, the CMI inspector should document the violation and notification in the TCBMP file and note any time frames given for corrective action or follow-up inspections. In judging the degree of severity, the CMI inspector may also take into account the compliance history of the RP.
- Each fiscal year, structures on the TCBMP Inventory List will be reviewed as time and resources permit. "High" threat to water quality structures will be treated with priority each year for scheduling inspections.
- When developing the annual TCBMP inspection schedules, inspections should be prioritized in the following order:
    1. All high priority structures.
    2. Medium priority structures found to be in "poor" condition during the last inspection.
    3. Medium priority structures that have not been previously inspected.
    4. Medium priority structures found to be in "fair" condition during the last inspection.
    5. All other medium priorities structures until the minimum inspection frequencies are achieved.
    6. Low priority structures found to be "poor" condition during the last inspection.
    7. Low priority structures that have not been inspected.
    8. All other low priority structures, as needed.
- Annual inspection goals per fiscal year are as follows:

Priority	Inspection Goal
High	100%
Medium	50%
Low	As Needed

Recordkeeping and Reporting

The SCI is responsible for maintaining all aspects of the TCBMP inspection and correspondence hardcopy filing system. Inactive or removed TCBMP structure files will be maintained for a minimum of 3 years.

On an annual basis, the SCI will provide a JURMP Annual Report submission to the CM and DCE that includes the following information:

- An updated treatment control BMP inventory.
- The number of treatment control BMPs inspected, including a summary of inspection results and findings.
- A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.
- The number of violations and enforcement actions (including types) taken for development projects (TCBMPS only), including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

All inspection related forms are located on the shared drive at:

K:\NPDES/TCBMP/Forms

Equipment List

In preparation for conducting TCBMP inspections and investigations, CMI inspectors should have the following equipment:

- Metal clip board
- Inspection forms
- Enforcement forms (Field memos, Stop Work Orders, etc.)
- Digital camera
- Pens and pencils
- Sharpie markers
- City identification
- Business cards
- Field notebook
- Thomas Guide
- If appropriate, applicable site plans and documents
- Copies of the CMC, Municipal Permit, and General Construction Permit
- Outreach materials
- If necessary, photos or copies of previous inspection reports

Safety Considerations

Hazards may exist at the various sites inspectors visit. These hazards could include sharp edges, falling objects, flying sparks, chemicals, noise, uneven pavement, and other potentially dangerous situations. Inspectors must be aware of their environment and take the appropriate precautions to protect themselves from potential hazards and injuries. Personal protective equipment, commonly referred to as "PPE", may be required at certain sites and in certain situations to minimize exposure to a variety of hazards. The following PPE should be available to the inspector during site visits:

- hard hat
- flashlight
- safety glasses
- ear plugs
- steel-toed boots
- rubber gloves
- storm drain puller
- safety vest
- orange traffic cones
- hand sanitizer
- leather work gloves
- first aid kit

Appendices

Appendix A: TCBMP Inspection Form and Instructions

Appendix A

NPDES Inspection Report Form and Instructions

Inspector: The last name and first initial of the person conducting the inspection.

Date: The date the inspection occurred.

Time: The time the inspection occurred.

Priority: The threat priority assigned to the TCBMP.

BMP Type: The type of BMP structure as defined by CASQA.

BMP Description: A description of the BMP type.

BMP ID#: The unique identification number assigned to the TCBMP structure.

Location: A description of where the TCBMP is located.

Address: If applicable, the physical address where the TCBMP is located.

BMP Manufacturer: The name of the company or person that manufactured or designed the TCBMP.

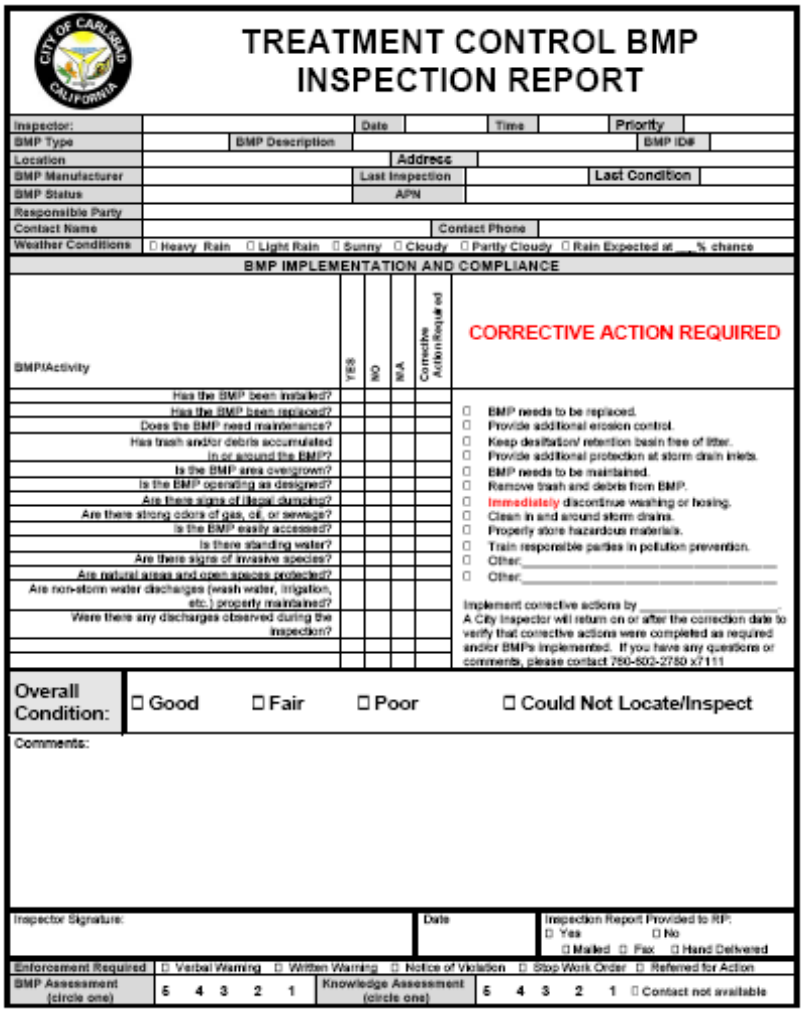

TREATMENT CONTROL BMP INSPECTION REPORT

Inspector:		Date		Time		Priority	
BMP Type		BMP Description				BMP ID#	
Location			Address				
BMP Manufacturer		Last Inspection				Last Condition	
BMP Status		APN					
Responsible Party							
Contact Name			Contact Phone				
Weather Conditions	☐ Heavy Rain ☐ Light Rain ☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain Expected at ___% chance						

BMP IMPLEMENTATION AND COMPLIANCE

BMP/Activity	YES	NO	N/A	Corrective Action Required	CORRECTIVE ACTION REQUIRED
Has the BMP been installed?					☐ BMP needs to be replaced.
Has the BMP been replaced?					☐ Provide additional erosion control.
Does the BMP need maintenance?					☐ Keep desilitation/ retention basin free of litter.
Has trash and/or debris accumulated in or around the BMP?					☐ Provide additional protection at storm drain inlets.
Is the BMP area overgrown?					☐ BMP needs to be maintained.
Is the BMP operating as designed?					☐ Remove trash and debris from BMP.
Are there signs of illegal dumping?					☐ Immediately discontinue washing or hosing.
Are there strong odors of gas, oil, or sewage?					☐ Clean in and around storm drains.
Is the BMP easily accessed?					☐ Properly store hazardous materials.
Is there standing water?					☐ Train responsible parties in pollution prevention.
Are there signs of invasive species?					☐ Other:_____
Are natural areas and open spaces protected?					☐ Other:_____
Are non-storm water discharges (wash water, irrigation, etc.) properly maintained?					Implement corrective actions by _____. A City Inspector will return on or after the correction date to verify that corrective actions were completed as required and/or BMPs implemented. If you have any questions or comments, please contact 760-602-2780 x7111
Were there any discharges observed during the inspection?					

Overall Condition:	☐ Good	☐ Fair	☐ Poor	☐ Could Not Locate/Inspect

Comments:

Inspector Signature:	Date	Inspection Report Provided to RP: ☐ Yes ☐ No ☐ Mailed ☐ Fax ☐ Hand Delivered
Enforcement Required	☐ Verbal Warning ☐ Written Warning ☐ Notice of Violation ☐ Stop Work Order ☐ Referred for Action	
BMP Assessment (circle one)	5 4 3 2 1	Knowledge Assessment (circle one) 5 4 3 2 1 ☐ Contact not available

Last Inspection: The date of the last inspection of the TCBMP.

Last Condition: The last known condition from the previous inspection.

BMP Status: The known status of the TCBMP as listed on the Inventory List.

APN: Assessor parcel number where the TCBMP is located.

Responsible Party: The name of the person or company responsible for the maintenance of the TCBMP.

Contact Name: The primary contact name of the person, company, or agency responsible for the maintenance of the TCBMP.

Contact Phone: The phone number of the contact name.

Weather Conditions: The inspector should note the weather conditions.

BMP IMPLEMETATION AND COMPLIANCE: The inspector should use this section to evaluate the condition of the TCBMP, its functionality, potential sources of pollution, and assess compliance with the CMC, JURMP, and Permit. The BMP/Activity questions should be answered using the appropriate responses in the column to the right.

CORRECTIVE ACTION REQUIRED: If the TCBMP requires maintenance or corrective action, the inspector should check the appropriate box. If the corrective action is not listed among the choices, the inspector can use the "Comments" area to list the specific BMP requirements. In addition, the inspector should note the date corrective actions must be completed.

Overall Condition: The inspector must use their best professional judgment to determine the condition of the TCBMP using the following criteria:

- **Good:** Currently no maintenance or corrective action is required for the TCBMP. No trees, large plants, excessive trash, stagnant water, blockages, or other major sources of pollutants were observed. The TCBMP appears to be functioning as designed. Re-inspect in one year.
- **Fair:** Light to minor maintenance required within the next year. Small amounts of trash, weeds, plants, debris, and/or silt has accumulated, but the TCBMP is functioning as designed. The structure should be re-inspected within one year by the RP or the City.
- **Poor:** Maintenance and/or repairs are required on the structure. Excessive trash, weeds, vegetation, stagnant water, trees, silt, and/or other pollutants were observed during the inspection. The TCBMP is blocked, needs repaired, and/or is not functioning as required. The RP should be notified and corrective actions implemented within six months of inspection. The structure should be re-inspected within six months by the RP or the City.
- **Could Not Locate/Inspector:** The inspector was not able to locate or gain access to the TCBMP for inspection.

Comments: The inspector can note additional information about the inspection or investigation including but not limited to specific BMPs needed, additional requirements, observations, etc.

Inspector Signature: The inspector must sign the inspection report.

Date: The date the inspection report was completed by the CMI inspector.

Inspection Report Provided to RP: The inspector should select the applicable box:

- Yes: The inspection report has been provided to the RP in the following manner:
  - ○ Mailed ○ Fax ○ Hand Delivered
- No: The inspection report was not provided to the RP.

Enforcement Required: If during the inspection, violations are observed the inspector can note the following types of enforcement actions that should follow the inspection:

- Verbal Warning: Note taken that verbal instruction requiring immediate corrective action was issued during the inspection.
- Written Warning: A Written Warning that corrective action must be completed by the specific date on the inspection report.
- Notice of Violation: A Notice of Violation should be issued.
- Stop Work Notice: A Stop Work Notice that corrective action must be completed by the specific date should be issued.
- Referred for Action: If the RP had violations that require notification to other City departments, RWQCB, or other agency the inspector should check this box. The CM and SCI are responsible for ensuring notifications are completed as required.

BMP Assessment: Numeric value field assessing the overall level of compliance with storm water pollution prevention. This assessment will be conducted during the inspection with or without contact with a RP.

- Level 5: All BMPs implemented effectively. No violations noted during the inspection.
- Level 4: BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices were noted during the inspection.
- Level 3: BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal warning was issued. A detailed inspection report or written Warning Notice may follow.
- Level 2: BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or enforcement action was issued.
- Level 1: **An illegal discharge was noted during the inspection**. Enforcement action (Stop Work Notice, NOV, or Administrative Citation, etc.) is required.

Knowledge Assessment: Numeric value assessing the overall level of knowledge of the RP related to storm water pollution prevention. This assessment will only be conducted during the inspection when there is contact with the RP.

- Level 5: Individual demonstrated an in depth knowledge of the storm water program and BMPs consistent with the structures' operations.
- Level 4: Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.
- Level 3: Individual has a general understanding of storm water issues ("*I've heard something about that*"), but not specific storm water requirements or BMPs required for the structure.
- Level 2: Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.
- Level 1: Individual has never heard of the storm water program, requirements, or BMPs. This individual does know what BMPs are or understand how to implement them.

City of Carlsbad		CMI - 310	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY LIST MANAGEMENT	☐ POLICY ☐ PROCESS ☒ PROCEDURE	NUMBER	REVISION
		PAGE 1 OF 10	

CHANGE HISTORY

REV A

05/18/09 Initial creation of document

06/24/09 Completion and approval of Revision A

Publisher: Shawnetta Grandberry			Date: 06-24-09		
Critical Review By	Signature	Date	Approved By	Signature	Date
Shawnetta Grandberry			Casey Arndt		
Approved By	Signature	Date			
John Maashoff			Patrick Vaughan		

Purpose

The purpose of this procedure is to define the process for managing and updating the Construction Management and Inspection Department's Treatment Control Best Management Practices Inventory List (Inventory List). The Inventory List is updated and reviewed for inspection applicability on a monthly basis, within each fiscal year. Please refer to procedure #CMI-300 for the procedure for inspecting TCBMPs and procedure #CMI-320 for the Treatment Control Best Management Practices Verification of Maintenance program.

Policy

The City of Carlsbad's Construction Management and Inspection Department will maintain a Treatment Control Best Management Practices Inventory List of structures to be inspected as required by the NPDES permit issued by the Regional Water Quality Control Board of the State of California and the Carlsbad Municipal Code.

Scope

This procedure applies to the **Construction Management and Inspection Department** personnel and consultants at the City of Carlsbad, Public Works Department located in Carlsbad, CA.

Associated Documents

Municipal Storm Water Permit Order No. R9-2007-0001, NPDES No. CAS0108758

City of Carlsbad Jurisdictional Urban Runoff Management Program (JURMP) from March 2008

City of Carlsbad Engineering Inspection Manual

City of Carlsbad Municipal Code Chapter 15.12

City of Carlsbad Municipal Code Chapter 15.16

City of Carlsbad Municipal Code Chapter 6.08

Definitions and Acronyms

BMP	Best Management Practices
CON	Consultant designated by awarded City contract
CMC	Carlsbad Municipal Code
CM	Construction Manager
DCE	Deputy City Engineer
ET	Engineering Technician I/II
ESA	Environmentally Sensitive Area
DS	Dry Season - May 1 to September 30
ET	Engineering Technician II
GIS	Geographical Information Systems
Inspection	Refers to onsite evaluation or investigation to determine the effectiveness and adequacy of BMPs – please refer to Appendix A for a copy of the inspection form.
PWI	Public Works Inspector I/II
JURMP	Jurisdictional Urban Runoff Management Program from March 2008
NPDES	National Pollutant Discharge Elimination System
RP	Responsible Party
RWQCB	Regional Water Quality Control Board
SCI	Senior Construction Inspector
SOS	Senior Office Specialist
SWPPP	Storm Water Pollution Prevention Plan
SWMP	Storm Water Management Plan
TCBMP	Treatment Control Best Management Practices
Wet Season	October 1 to April 30

Overview

The intent of the Inventory List is to satisfy the NPDES requirements as outlined in Section 4 of the 2008 JURMP update and Section D.1.e. of the Permit. The City of Carlsbad is required to track, assess, and prioritize all approved TCBMPs within its jurisdiction to determine their potential threat to water quality, applicability of storm water regulations (including NPDES requirements), and compliance with the Permit and CMC.

Threat Prioritization

Prioritization of TCBMPs includes a review and consideration of the TCBMP type, size, location, proximity to an ESA, past record of compliance by the RP, and potential to discharge non-storm water or pollutants. Typically, the following types of TCBMPs should be prioritized as follows:

BMP Detail	BMP Type	Within ESA	High	Medium	Low
Media filters	MP-40	◆		✓	
Wet Vaults	MP-50	◆	✓		
Vortex Separators	MP-51	◆	✓		
Drain Inserts	MP-52	◆		✓	
Sediment Basin	SE-2	✓	✓		
Sediment Basin	SE-2			✓	
Infiltration Trench	TC-10	✓	✓		
Infiltration Trench	TC-10			✓	
Infiltration Basins	TC-11	✓	✓		
Infiltration Basins	TC-11			✓	
Dry Extended Detention Basin	TC-22	✓	✓		
Dry Extended Detention Basin	TC-22			✓	
Vegetated Swales	TC-30	✓		✓	
Vegetated Swales	TC-30				✓
Water Quality Inlet	TC-50	◆		✓	
Multiple Systems	TC-60	◆	✓	✓	✓

◆ Proximity of ESA is not a consideration because of the maintenance frequency required and/or type of structure.

Inventory Management Procedure:

Step	Who	What	When
1.	SCI	Requests via email a TCBMP update from Public Works – Planning and Programs Department.	October 1 January 15
2.	ET	Downloads the current information from the GIS database, prepares an Excel formatted version of the inventory, and emails file to the SCI.	Within 30 days of the request
3.	SCI	TCBMPs are prioritized using the criteria outlined in this procedure, JURMP, and the Permit. GIS and RealQuest databases are used to verify property ownership and proximity to the ESA. TCBMPs located within 200 feet of an ESA will also be evaluated to determine if the ESA is a 303(d) listed water body and if the structure has the potential to generate pollutants for which the water body is impaired. If the TCBMP is not located within an ESA, "No" is entered into Column "AI" of the Inventory List.	Before May 1

Step	Who	What	When
4.	SCI	Updates the Inventory List. Updates can include removing duplicates and publicly owned structures, prioritizing TCBMPs, changing the status of TCBMPs, and adding new structures to the inventory.	Before May 15
5.	SCI	Sorts the Inventory List by column "I" - "Responsible Party" and merges it with the TCBMP inspection report merge file. Reviews the merged records for line shifts, makes corrections, and prints the inspection reports.	Before May 15
6.	SCI	Provides the inspector with pre-printed TCBMP inspection forms.	May 15 thru Sept. 15
7.	CON SCI PWI	Performs the inspection(s) using the procedures outlined in CMC 15.12.095, 15.12.100, 15.12.110, in this procedure, and in Section D.2.d.(6) of the Municipal Permit. TCBMP inspection reports are provided to the SCI upon completion.	Prior to October 1
8.	SCI CM	Reviews and verifies accuracy of the information on the inspection reports and updates the Inventory List.	Within 30 days of receipt
9.	SCI SOS	Files and maintains records of all TCBMP inspection reports.	Within 30 days of receipt
11.	SCI CM	At the end of each fiscal year (July 1 – June 30), closes and archives the current fiscal year inventory list and creates the new fiscal year inventory list. Please see "End of Year and Beginning of Year" procedures section.	By July 15

End of Year (EOY) and Beginning of Year (BOY) Procedures

Step	Who	What	When
1.	SCI	Ensures all updates and entries to the Inventory List are accurate and complete.	By July 15
2.	SCI	Saves and moves the EOY (as of June 30) to the appropriate archive folder. The EOY Inventory List will be used to develop the JURMP Annual Report.	By July 15
3.	SCI	The EOY inventory is copied, moved to the appropriate archive folder, and renamed for the new fiscal year (BOY). The Inventory List is sorted by "Status." Only those TCBMPs that are "Permanent", "Temporary, "or "Future" (see Appendix A) will be carried forward to the next fiscal year's Inventory List. All other entries will be deleted.	By July 15
4.	SCI PWI	Reviews the Inventory List to ensure that priority and status is current for the fiscal year. The SCI will update the Inventory List to reflect any changes.	By August 1
5.	SCI	Column "U" through "Y" will be deleted when the current fiscal year is two years greater and replaced with the information from the previous inspection year.	By July 15

Step	Who	What	When
6.	SCI	Five new columns will be inserted with headers that duplicate the titles of "U" though "Y", but for the current inspection year.	By July 15
7.	SCI	Saves the BOY Inventory List in the appropriate folder. The active Inventory List is moved to: K:/NPDES/TCBMP/Inventory/TCBMP '*FY*'	By July 15

Other Procedural Considerations

- For the purposes of the procedure the term "Inventory List" is used to describe the Excel spreadsheet maintained by CMI of all privately owned TCBMPs. The term database is used to describe the master database maintained by GIS that includes all publicly and privately owned TCBMPs. The Inventory List is created using the information from the GIS department database.
- On a quarterly basis the SCI will notify the ET and/or GIS, via email, of modifications and retirements of private owned TCBMP facilities using the form in Appendix B.
- Because the DS occurs over two fiscal years, this procedure uses the term "inspection year" to define the time when the dry season inspection occurred.

Recordkeeping and Reporting

- The SCI is responsible for maintaining all aspects of the Inventory List. Including information entered, changed, or deleted within columns and cells.
- Hard copies of records from retired TCBMP files will be maintained for a minimum of 3 years. Previous fiscal year Inventory Lists will be maintained electronically in an "Archive" file on the community drive.
- On an annual basis, the SCI will provide a JURMP Annual Report submission to the CM and DCE that includes the following information:
  - An updated treatment control BMP inventory.
  - The number of treatment control BMPs inspected, including a summary of inspection results and findings.

All Inventory List related information are located on the shared drive at:

K:\NPDES/TCBMP/Inventory/

Appendices

Appendix A: Inventory List Column Headings and Definitions

Appendix B: Modification and Retirements Form

APPENDIX A

Inventory List Column Headings and Definitions

A. UNIT ID#: The unique identification number assigned to the TCBMP structure by Development Services. This is downloaded from the master GIS database. This number does not change and cannot be modified by CMI.

B. STATUS: The current status of the TCBMP. Initially this information is downloaded from the master GIS database, but can be changed during the updating process. Only the following can be entered into this field.
- **Permanent**: The TCBMP has been installed as an approved permanent structural BMP.
- **Temporary**: The TCBMP was been installed as an approved temporary structural BMP.
- **Future**: The TCBMP has been approved, but has not been installed.
- **Removed**: Upon inspection the TCBMP has been verified as removed.
- **Excluded**: The TCBMP has been excluded from further inspection.

C. PRIORITY: The threat to water quality based on the prioritization criteria listed in JURMP and Permit. This field can only be populated with the following responses:
- High
- Medium
- Low

D. PROJECT NO.: The project number associated with the TCBMP. This is downloaded from the master GIS database. This number does not change and cannot be modified by CMI.

E. Drawing Sheet No.: The drawing number associated with the TCBMP. This is downloaded from the GIS master database and cannot be modified by CMI.

F. APN: The assessor parcel number where the TCBMP is located.

G. LOCATION: A descriptive location of where the TCBMP is located. Initially this information is downloaded from the master GIS database, but can be changed during the updating process.

H. Address: The physical address of where the BMP is located. This can only include the street number and street name.

I. Responsible Party: The name of the person, company, or agency responsible for the maintenance of the TCBMP.

J. Contact Name**:** The primary name of the person, company, or agency responsible for the maintenance of the TCBMP.

K. Contact Phone**:** The phone number of the person, company, or agency responsible for the maintenance of the TCBMP.

L. Mailing Address: The mailing address of the person, company, or agency responsible for the maintenance of the TCBMP.

M. Mail City/Zip: The city, state, and zip code associated with the mailing address of the person, company, or agency responsible for the maintenance of the TCBMP.

N. BMP Type**:** The type of BMP structure as defined by CASQA. Initially this information is downloaded from the master GIS database, but can be changed during the updating process.

O. BMP Detail: The specific description of the BMP that corresponds with the type of BMP structure.

P. BMP Description: Additional descriptive information about the BMP type and detail.

Q. BMP Manufacturer: The name of the company or person that manufactured or designed the TCBMP.

R. BMP Manufacturer Code: The manufacturing or design code assigned to the TCBMP.

S. BMP Maintenance Frequency: The minimum recommended frequency for maintenance as defined by CASQA, the manufacturer, or the SWMP.

T. BMP Inspection Frequency: The minimum recommended frequency for inspection as defined by the City, CASQA, the manufacturer, or the SWMP.

U. '*Previous Inspection Year'* DS Condition: The known condition the BMP was found to be in during the last DS inspection year. This is usually for the previous inspection year.

V. '*Previous Inspection Year* DS Inspection Date: The date the DS inspection occurred for that year. This is usually for the previous inspection year.

W. '*Previous Inspection Year*' DS Verification Received: The date the required maintenance verification form was received by the City for that DS inspection year.

X. '*Previous Inspection Year* DS Verification Letter Sent: The date the required maintenance verification form was mailed to the RP.

Y. '*Previous Inspection Year*' DS Second Verification Sent: The date the second or reminder maintenance verification letter was mailed to the RP.

Z. '*Current Inspection Year'* DS Condition: The known condition the TCBMP was found to be in during the current DS inspection year.

AA. '*Current Inspection Year*' DS Inspection Date: The date the inspection occurred for the current DS inspection year.

AB. '*Current Inspection Year*' DS Verification Received: The date the required maintenance verification form was received by the City for the current DS inspection year.

AC. '*Current Inspection Year*' DS Verification Letter Sent: The date the required maintenance verification form was mailed to the RP for the current DS inspection year.

AD. '*Current Inspection Year*' DS Second Verification Sent: The date the second or reminder maintenance verification letter/form was mailed to the RP.

AE. NTC Sent: The date the last Notice to Clean was sent to the RP.

AF**.** Last Cleaned/Maintained: The last known date maintenance of the TCBMP occurred.

AG. CHU: The water body or watershed with the Carlsbad Hydrologic Unit that receives run off from the TCBMP. Only the following can be entered into this field:

- **904.21:** Buena Vista Lagoon
- **904.31:** Agua Hedionda Lagoon
- **904.40:** Encinas Creek
- **904.51:** Batiquitos Lagoon

AH. PROXIMITY: Is the TCBMP within 200 feet of an ESA (as defined in Attachment C of the Permit)? This is determined by GIS mapping. The following entries are acceptable in this field:

- Yes: The TCBMP is located within 200 feet of an ESA.
- No: The TCBMP is not located within 200 feet of an ESA.

AI. Engineering ID: The identification number assigned to the TCBMP by the Engineering Department. This is downloaded from the master GIS database and cannot be modified by CMI.

AJ. BMP Maintenance Agreement: If a BMP maintenance agreement exists for the structure the GIS master database will provide that information in this field. This can also be updated by CMI.

AK. As Built: The date the as-built plans were signed by the City. This is downloaded from the master GIS database.

AL. Approved/Signed Date: The date the project and/or TCBMP was approved by the City. This is downloaded from the master GIS database.

City of Carlsbad		CMI - 310	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY LIST MANAGEMENT	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
		Page 10 of 10	

APPENDIX B

Modifications and Retirements Form

CMI Requestor: _____Date:_____

RETIREMENTS

BMP ID#	Status	Reason for Retirement

Modifications/Updates

BMP ID#	Type of Change	Reason for Modification

Prepared By:_____

Date Sent to GIS:_____

Sent Via: □ Email □ Inter-office □ Hand Delivered

APPENDIX A

STORM WATER STANDARDS QUESTIONNAIRE

INSTRUCTIONS:

This questionnaire must be completed by the applicant in advance of submitting for a development application (subdivision and land use planning approvals and construction permits). The results of the questionnaire determine the level of storm water pollution prevention standards applied to a proposed development or redevelopment project. Many aspects of project site design are dependent upon the storm water pollution protection standards applied to a project.

Applicant responses to the questionnaire represent an initial assessment of the proposed project conditions and impacts. City staff has responsibility for making the final assessment after submission of the development application. A staff determination that the development application is subject to more stringent storm water standards, than initially assessed by the applicant, will result in the return of the development application as incomplete.

If applicants are unsure about the meaning of a question or need help in determining how to respond to one or more of the questions, they are advised to seek assistance from Engineering Department Development Services staff.

A separate completed and signed questionnaire must be submitted for each new development application submission. Only one completed and signed questionnaire is required when multiple development applications for the same project are submitted concurrently. In addition to this questionnaire, applicants for construction permits must also complete, sign and submit a Construction Activity Storm Water Standards Questionnaire.

To address pollutants that may be generated from new development, the City requires that new development and significant redevelopment priority projects incorporate Permanent Storm Water Best Management Practices (BMPs) into the project design, which are described in Chapter 2 of the City's Storm Water Standards Manual This questionnaire should be used to categorize new development and significant redevelopment projects as priority or non-priority, to determine what level of storm water standards are required or if the project is exempt.

*1. Is your project a **significant redevelopment**?*

Definition:

***Significant redevelopment** is defined as the creation, addition or replacement of at least 5,000 square feet of impervious surface on an already existing developed site.*

***Significant redevelopment** includes, but is not limited to: the expansion of a building footprint; addition to or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction remodeling; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction.*

Note: If the Significant Redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in Table 3 of 2.3.3.4 applies only to the addition, and not to the entire development.

*2. If your project **IS** considered significant redevelopment, then please skip Section 1 and proceed with Section 2.*

*3. If your project **IS NOT** considered significant redevelopment, then please proceed to Section 1.*

SECTION 1

NEW DEVELOPMENT

PRIORITY PROJECT TYPE **Does you project meet one or more of the following criteria:**	**YES**	**NO**
1. *Home subdivision of 100 units or more.* Includes SFD, MFD, Condominium and Apartments		
2. *Residential development of 10 units or more.* Includes SFD, MFD, Condominium and Apartments		
3. *Commercial and industrial development greater than 100,000 square feet including parking areas.* Any development on private land that is not for heavy industrial or residential uses. Example: Hospitals, Hotels, Recreational Facilities, Shopping Malls, etc.		
4. *Heavy Industrial / Industry greater than 1 acre* (NEED SIC CODES FOR PERMIT BUSINESS TYPES) SIC codes 5013, 5014, 5541, 7532-7534, and 7536-7539		
5. *Automotive repair shop.* SIC codes 5013, 5014, 5541, 7532-7534, and 7536-7539		
6. *A New Restaurant where the land area of development is 5,000 square feet or more including parking areas.* SIC code 5812		
7. *Hillside development* (1) greater than 5,000 square feet of impervious surface area and (2) development will grade on any natural slope that is 25 or greater		
8. *Environmentally Sensitive Area (ESA).* Impervious surface of 2,500 square feet or more located within, directly adjacent[2] to (within 200 feet), or discharging directly to[3] receiving water within the ESA[1]		
9. *Parking lot.* Area of 5,000 square feet or more, or with 15 or more parking spaces, and potentially exposed to urban runoff		
10. *Retail Gasoline Outlets – serving more than 100 vehicles per day* Serving more than 100 vehicles per day and greater than 5,000 square feet		
11. *Streets, roads, driveways, highways, and freeways.* Project would create a new paved surface that is 5,000 square feet or greater.		
12. *Coastal Development Zone.* Within 200 feet of the Pacific Ocean and (1) creates more than 2500 square feet of impermeable surface or (2) increases impermeable surface on property by more than 10 .		

1 Environmentally Sensitive Areas include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and Count of San Diego; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees.

2 Directly adjacent means situated within 200 feet of the environmentally sensitive area.

3 Discharging directly to means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flow from adjacent lands.

Section 1 Results:
If you answered **YES** to **ANY** of the questions above you have a **PRIORITY** project and **PRIORITY** project requirements **DO** apply. A Storm Water Management Plan, prepared in accordance with City Storm Water Standards, must be submitted at time of application. Please check the MEETS PRIORITY REQUIREMENTS box in Section 3.

If you answered **NO** to **ALL** of the questions above, then you are a **NON-PRIORITY** project and **STANDARD** requirements apply. Please check the DOES NOT MEET PRIORITY Requirements box in Section 3.

SECTION 2

SIGNIFICANT REDEVELOPMENT:	YES	NO
1. Is the project redeveloping an existing priority project type? (Priority projects are defined in Section 1)		
If you answered **YES**, please proceed to question 2. If you answered **NO**, then you **ARE NOT a** significant redevelopment and you **ARE NOT** subject to **PRIORITY** project requirements, only **STANDARD** requirements. Please check the DOES NOT MEET PRIORITY Requirements box in Section 3 below.		
2. Is the project solely limited to one of the following:		
a. Trenching and resurfacing associated with utility work?		
b. Resurfacing and reconfiguring existing surface parking lots?		
c. New sidewalk construction, pedestrian ramps, or bike lane on public and/or private existing roads?		
d. Replacement of existing damaged pavement?		
If you answered **NO** to **ALL** of the questions, then proceed to Question 3. If you answered **YES** to **ONE OR MORE** of the questions then you **ARE NOT** a significant redevelopment and you **ARE NOT** subject to **PRIORITY** project requirements, only **STANDARD** requirements. Please check the DOES NOT MEET PRIORITY Requirements box in Section 3 below.		
3. Will the development create, replace, or add at least 5,000 square feet of impervious surfaces on an existing development or, be located within 200 feet of the Pacific Ocean and (1)create more than 2500 square feet of impermeable surface or (2) increases impermeable surface on property by more than 10 ?		
If you answered **YES**, you **ARE** a significant redevelopment, and you **ARE** subject to **PRIORITY** project requirements. Please check the MEETS PRIORITY REQUIREMENTS box in Section 3 below. If you answered **NO**, you **ARE NOT** a significant redevelopment, and you **ARE NOT** subject to **PRIORITY** project requirements, only **STANDARD** requirements. Please check the DOES NOT MEET PRIORITY Requirements box in Section 3 below.		

SECTION 3

Questionnaire Results:

- ❑ MY PROJECT **MEETS PRIORITY REQUIREMENTS,** MUST COMPLY WITH PRIORITY PROJECT STANDARDS AND MUST PREPARE A STORM WATER MANAGEMENT PLAN FOR SUBMITTAL AT TIME OF APPLICATION**.**
- ❑ MY PROJECT **DOES NOT MEET PRIORITY REQUIREMENTS** AND MUST ONLY COMPLY WITH STANDARD STORM WATER REQUIREMENTS.

Applicant Information and Signature Box

Address:	Assessors Parcel Number(s):
Applicant Name:	Applicant Title:
Applicant Signature:	Date:

This Box for City Use Only

City Concurrence:	YES	NO
By:		
Date:		
Project ID:		

Project Threat Assessment Worksheet for Determination of Construction SWPPP Tier Level

Project Storm Water Threat Assessment Criteria*	Construction SWPPP Tier Level
Significant Threat Assessment Criteria ❑ My project includes clearing, grading or other disturbances to the ground resulting in soil disturbance totaling one or more acres including any associated construction staging, equipment storage, stockpiling, pavement removal, refueling and maintenance areas; or, ❑ My project is part of a phased development plan that will cumulatively result in soil disturbance totaling one or more acres including any associated construction staging, equipment storage, refueling and maintenance areas; or, ❑ My project is located inside or within 200 feet of an environmentally sensitive area (see City ESA Proximity map) and has a significant potential for contributing pollutants to nearby receiving waters by way of storm water runoff or non-storm water discharge(s).	Tier 3
Moderate Threat Assessment Criteria My project does not meet any of the Significant Threat Assessment Criteria described above and meets one or more of the following criteria: ❑ Project requires a grading plan pursuant to the Carlsbad Grading Ordinance (Chapter 15.16 of the Carlsbad Municipal Code); or, ❑ Project will result in 2,500 square feet or more of soils disturbance including any associated construction staging, stockpiling, pavement removal, equipment storage, refueling and maintenance areas and project meets one or more of the additional following criteria: • located within 200 feet of an environmentally sensitive area or the Pacific Ocean; and/or, • disturbed area is located on a slope with a grade at or exceeding 5 horizontal to 1 vertical; and/or • disturbed area is located along or within 30 feet of a storm drain inlet, an open drainage channel or watercourse; and/or • construction will be initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30).	Tier 2
Low Threat Assessment Criteria ❑ My project does not meet any of the Significant or Moderate Threat criteria, is not an exempt permit type (see City's list of Permit Types Exempt from Construction SWPPP requirements) and project meets one or more of the following criteria: • results in some soil disturbance; and/or • includes outdoor construction activities (such as roofing, saw cutting, equipment washing, material stockpiling, vehicle fueling, waste stockpiling)	Tier 1
No Threat Project Assessment Criteria ❑ My project is in a category of permit types exempt from City Construction SWPPP requirements (see City's list of Permit Types Exempt from Construction SWPPP requirements) and/or does not meet any of the High, Moderate or Low Threat criteria described above.	Exempt

* The City Engineer may authorize minor variances from the Storm Water Threat Assessment Criteria in special circumstances where it can be shown that a lesser or higher Construction SWPPP Tier Level is warranted in the opinion of the City Engineer

Construction Threat Assessment Worksheet for Determination of a Project's Perceived Threat to Storm Water Quality

Construction SWPPP Tier Level	Construction Threat Assessment Criteria*	Perceived Threat to Storm Water Quality
Tier 3	Tier 3 – High Construction Threat Assessment Criteria ❑ Project site is 50 acres or more and grading will occur during the rainy season ❑ Project site is 1 acre or more in size and is located within the Buena Vista or Agua Hedionda Lagoon watershed, inside or within 200 feet of an environmentally sensitive area (ESA) or discharges directly to an ESA ❑ Soil at site is moderately to highly erosive (defined as having a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4) ❑ Site slope is 5 to 1 or steeper ❑ Construction is initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30). ❑ Owner/contractor received a Storm Water Notice of Violation within past two years	High
	Tier 3 – Medium Construction Threat Assessment Criteria ↑ All projects not meeting Tier 3 High Construction Threat Assessment Criteria	Medium
Tier 2	Tier 2 High Construction Threat Assessment Criteria ❑ Project is located within the Buena Vista or Agua Hedionda Lagoon watershed, inside or within 200 feet of an environmentally sensitive area (ESA) or discharges directly to an ESA ❑ Soil at site is moderately to highly erosive (defined as having a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4) ❑ Site slope is 5 to 1 or steeper ❑ Construction is initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30). ❑ Owner/contractor received a Storm Water Notice of Violation within past two years ❑ Site results in one half acre or more of soil disturbance	High
	Tier 2 – Medium Construction Threat Assessment Criteria ❑ All projects not meeting Tier 2 High Construction Threat Assessment Criteria	Medium
Tier 1	Tier 1 - Medium Inspection Threat Assessment Criteria ❑ Project is located within the Buena Vista or Agua Hedionda Lagoon watershed, within or directly adjacent to an environmentally sensitive area (ESA) or discharges directly to an ESA ❑ Soil at site is moderately to highly erosive (defined as having a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4) ❑ Site slope is 5 to 1 or steeper ❑ Construction is initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30). ❑ Owner/contractor received a Storm Water Notice of Violation within past two years ❑ Site results in one half acre or more of soil disturbance	Medium
	Tier 1 - Low Inspection Threat Assessment Criteria ❑ All projects not meeting Tier 1 Medium Construction Threat Assessment Criteria	Low
Exempt	- Not Applicable -	Exempt

* The City Engineer may authorize minor variances from the Construction Threat Assessment Criteria in special circumstances where it can be shown that a lesser or higher amount of storm water compliance inspection is warranted in the opinion of the City Engineer

FY 08-09
Grading Permit Inventory

Status	Priority	Project	Grading Permit	Issue Date	Inactive Date	Weeks Active WS	Weeks Active DS	Total WS Inspections	Total DS Inspections	Total 08-09 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
Active	High	CT 96-02	GR000008	04/26/00		30	22	14	5	19	14	5	19	904.51	Yes
Active	Low	CUP 258B	GR020040	12/12/02		30	22	4	3	7	2	2	4	904.51	No
Active	Low	SDP 98-19	GR020045	09/26/03		30	22	2	3	5	2	2	4	904.51	Yes
Active	Low	PD 02-07	GR020046	01/09/03		30	22	4	3	7	2	2	4	904.51	No
Finaled	Low	CUP 258C	GR030008	03/28/03	06/24/09	30	22	4	3	7	2	2	4	904.51	No
Finaled	Low	CT 99-06	GR030012	06/25/04	06/26/09	30	22	4	4	8	2	2	4	904.31	No
Active	Low	CT 97-23-2	GR030022	09/23/03		30	22	4	4	8	2	2	4	904.31	No
Finaled	Low	CDP 02-45	GR030043	09/18/03	06/10/09	30	19	4	5	9	2	2	4	904.31	No
Active	Medium	CDP 02-04	GR030053	08/30/05		30	22	9	4	13	7	2	9	904.31	No
Finaled	Medium	CT 98-10	GR030056	12/01/04	06/26/09	30	22	9	4	13	7	2	9	904.31	Yes
Active	Medium	CT 01-09	GR030071	01/07/04		30	22	9	4	13	7	2	9	904.51	NO
Finaled	Low	CT 02-24	GR040033	07/26/04	12/23/08	13	14	5	3	8	2	1	3	904.51	yes
Active	Low	CT 02-20	GR040034	07/08/04		30	22	5	3	8	2	2	4	904.51	yes
Active	Medium	CDP 02-04	GR040058	09/23/04		30	22	8	4	12	7	2	9	904.31	No
Active	Medium	CT 02-19	GR040059	08/11/04		30	22	9	3	12	7	2	9	904.51	No
Active	Low	CT 01-09	GR040063	11/19/04		30	22	4	5	9	2	2	4	904.51	Yes
Finaled	Low	CT 01-05	GR040065	10/25/06	05/29/09	30	22	4	3	7	2	2	4	904.31	Yes
Finaled	Medium	CDP 02-42	GR040067	08/09/04	05/12/09	30	22	9	3	12	7	2	9	904.31	No
Active	Low	CT 02-23	GR040070	03/20/08		30	22	5	3	8	2	2	4	904.51	yes

Status	Priority	Project	Grading Permit	Issue Date	Inactive Date	Weeks Active WS	Weeks Active DS	Total WS Inspections	Total DS Inspections	Total 08-09 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
Active	Medium	CT 99-04-02	GR040072	09/08/04		30	22	8	4	12	7	2	9	904.51	yes
Active	Low	CT 01-04	GR040073	09/08/04		30	22	4	4	8	2	2	4	904.31	Yes
Active	High	CT 02-27	GR040081	02/18/05		30	22	11	5	16	14	5	19	904.51	NO
Finaled	High	CT 97-13	GR040082	11/12/04	10/22/2008	3	14	2	3	5	2	3	5	904.31	Yes
Finaled	High	CT 97-13	GR040083	11/12/04	10/09/2008	1	14	1	3	4	3	3	6	904.31	Yes
Active	High	CT 97-13	GR040084	11/12/04		30	22	14	5	19	14	5	19	904.31	Yes
Finaled	low	PD 04-18	GR040096	03/29/05	04/15/09	28	14	6	3	9	2	2	4	904.21	no
Active	Low		GR040104	02/04/05		30	22	4	3	7	2	2	4	904.51	No
Active	Medium	CT 04-04	GR050005	10/12/05		30	22	9	4	10	7	2	9	904.51	Yes
Active	Low	CT 04-02	GR050006	11/03/05		30	22	4	4	8	2	2	4	904.51	Yes
Active	High	CT 99-00-03	GR050010	03/04/05		30	22	14	4	18	14	5	19	904.51	Yes
Active	Low	CT 04-15	GR050011	03/16/05		30	22	5	3	8	2	2	4	904.51	Yes
Active	Low	CT 02-24	GR050012	04/20/05		30	22	5	3	8	2	2	4	904.51	yes
Active	Low	CT 04-03	GR050025	09/29/05		30	22	8	4	12	2	2	4	904.51	Yes
Active	Medium	CDP 03-12	GR050034	08/30/05		30	22	9	3	12	7	2	9	904.31	No
Finaled	Low	CT 03-01-02	GR050036	08/29/05	12/05/2008	9	14	4	3	7	2	2	4	904.51	No
Active	High	CT 04-09	GR050037	11/03/05		30	22	16	4	20	14	5	19	904.51	Yes
Active	low	PD 05-08	GR050038	10/19/05		30	22	6	4	10	2	2	4	904.31	no
Active	Medium	CT 02-07	GR050043	03/21/06		30	22	7	4	11	7	2	9	904.40	Yes
Active	Low	PDP 00-1(G)	GR050044	08/09/05		30	22	4	3	7	2	2	4	904.40	Yes
Expired	Low	CDP 04-32	GR050047	09/23/08	11/01/08	5	1	4	0	4	1	0	1	904.31	No

Status	Priority	Project	Grading Permit	Issue Date	Inactive Date	Weeks Active WS	Weeks Active DS	Total WS Inspections	Total DS Inspections	Total 08-09 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
Active	Low	CT 03-02	GR050048	09/27/05		30	22	9	5	14	7	2	9	904.31	Yes
Finaled	low	CT 03-04	GR050054	02/24/06	04/07/09	27	14	6	3	9	2	2	4	904.21	no
Active	High	CT 97-13	GR050055	11/29/05		30	22	14	5	19	14	5	19	904.31	Yes
Finaled	High	MS 04-02	GR050057	06/30/06	02/24/09	21	14	10	3	13	10	3	13	904.51	Yes
Active	Low	CT 04-18	GR050060	09/30/05		30	22	4	2	6	2	2	4	904.21	No
Active	Low	PIP 05-01	GR050061	11/21/05		30	22	4	4	8	2	2	4	904.31	No
Finaled	Low	CT 99-03	GR050063	11/29/05	02/25/09	21	14	5	3	8	2	1	3	904.51	Yes
Finaled	Low	CT 04-01	GR050064	04/17/06	08/19/08	0	7	0	2	2	0	1	1	904.51	No
Active	Medium	CDP 04-58	GR050067	04/10/07		30	22	8	5	13	7	2	9	904.31	No
Finaled	Low	SDP 02-13	GR050068	11/29/05	02/10/09	20	14	5	3	8	2	2	4	904.51	Yes
Active	Low	CT 04-03	GR050070	01/31/06		30	22	3	4	7	2	2	4	904.51	Yes
Active	Low	SDP 04-10	GR050072	01/13/06		30	22	6	3	9	2	2	4	904.31	Yes
Active	Low	CT 03-10-2	GR050073	01/09/06		30	22	4	3	7	2	2	4	904.51	No
Finaled	HIGH	PD 05-10	GR050079	06/27/06	10/20/2008	3	14	1	3	4	1	3	4	904.51	No
Active	Low	CUP 04-22	GR060001	02/15/06		30	22	5	3	8	2	2	4	904.40	No
Active	Low	CT 99-04-03	GR060003	02/15/06		30	22	12	4	16	14	2	16	904.51	Yes
Active	Low	CT 05-07	GR060005	03/15/06		30	22	5	3	8	2	2	4	904.51	Yes
Finaled	Medium	PD 05-14	GR060007	07/19/06	10/20/2008	3	14	1	2	3	1	1	2	904.51	No
Active	High	SDP 96-14B	GR060008	02/23/06		30	22	14	6	20	14	5	19	904.31	No
Active	Medium	CT 04-03	GR060009	04/10/06		30	22	8	5	13	7	2	9	904.51	Yes
Active	Low	PIP 05-12	GR060011	06/01/06		30	22	4	4	8	2	2	4	904.31	Yes

Status	Priority	Project	Grading Permit	Issue Date	Inactive Date	Weeks Active		Total WS Inspections	Total DS Inspections	Total 08-09 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
						WS	DS								
Active	Low	PIP 05-13	GR060012	04/17/06		30	22	4	4	8	2	2	4	904.40	No
Active	Low	CT 99-04-03	GR060013	04/11/06		30	22	6	5	11	2	2	4	904.51	No
Active	High	CT 99-04-03	GR060014	04/11/06		30	22	10	4	14	14	5	19	904.51	Yes
Active	Low	PIP 08-10	GR060016	04/26/06		30	22	4	4	8	2	2	4	904.31	Yes
Active	Low	PIP 05-07	GR060017	05/10/06		30	22	4	4	8	2	2	4	904.31	Yes
Finaled	Low	PIP 05-08	GR060018	05/10/06	05/19/09	30	16	4	4	8	2	2	4	904.31	Yes
Active	Low	PIP 05-11	GR060019	04/27/06		30	22	4	4	8	2	2	4	904.31	Yes
Active	Low	PIP 05-09	GR060020	04/27/06		30	22	4	4	8	2	2	4	904.31	Yes
Active	Low	CT 04-02	GR060021	04/20/06		30	22	11	3	14	2	2	4	904.51	Yes
Finaled	Medium	PD 05-15	GR060022	04/12/06	09/16/08	0	12	0	3	3	0	1	1	904.51	NO
Finaled	Low	PD 05-12	GR060023	05/03/06	04/10/09	27	14	4	3	7	2	2	4	904.51	Yes
Finaled	Low	PIP 05-14	GR060024	07/25/06	11/14/08	6	14	0	2	2	1	1	2	904.31	NO
Finaled	Low	CT 05-06	GR060025	06/30/06	02/12/09	20	14	5	3	8	2	1	3	904.51	yes
Active	Low	PIP 05-17	GR060026	07/11/06		30	22	4	4	8	2	2	4	904.31	No
Finaled	Medium	PD 06-01	GR060027	01/08/07	12/22/08	13	14	5	3	8	3	1	4	904.51	NO
Finaled	Low	PIP 05-19	GR060029	07/06/06	10/20/08	3	14	1	3	4	0	1	1	904.51	Yes
Active	Low	PIP 05-18	GR060030	08/29/06		30	22	4	4	8	2	2	4	904.31	Yes
Finaled	Medium	RP 04-12	GR060031	09/06/06	06/02/09	30	22	9	4	13	7	2	9	904.21	No
Active	Low	PIP 05-16	GR060032	07/25/06		30	22	4	5	9	2	2	4	904.31	Yes
Active	Medium	MS 04-10	GR060034	02/22/08		30	22	9	4	13	7	2	9	904.21	No

Status	Priority	Project	Grading Permit	Issue Date	Inactive Date	Weeks Active WS	Weeks Active DS	Total WS Inspections	Total DS Inspections	Total 08-09 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
Active	Medium	MS 04-01	GR060035	03/27/09		5	8	0	2	2	1	1	2	904.31	No
Active	Medium	PIP 05-05	GR060040	01/22/07		30	22	9	4	13	7	1	8	904.31	No
Finaled	Low	PD 06-08	GR060044	08/31/06	03/19/09	24	14	5	3	8	2	2	4	904.51	No
Finaled	Low	MS 04-15	GR060045	10/03/06	10/09/08	1	14	1	3	4	0	1	1	904.31	No
Finaled	Low	PD 06-06	GR060046	10/12/06	03/17/09	24	14	5	3	8	2	1	3	904.51	Yes
Active	high	CT 05-01	GR060047	07/10/07		30	22	14	5	19	14	5	19	904.31	yes
Active	High	CT 97-13-02	GR060049	12/21/06		30	22	13	5	18	14	5	19	904.31	Yes
Finaled	low	MS 05-32	GR060052	09/15/06	03/06/09	23	14	5	3	8	2	1	3	904.31	No
Active	Medium	PUD 04-03A	GR060055	08/22/06		30	22	11	4	15	7	2	9	904.51	Yes
Active	Low	PIP 04-03	GR060056	09/22/06		30	22	8	5	13	7	2	9	904.31	No
Active	Low	PIP 05-24	GR060057	10/25/06		30	22	4	3	7	2	2	4	904.51	No
Active	High	CT 03-06	GR060058	02/07/07		30	22	14	6	20	14	5	19	904.51	Yes
Finaled	high	PD 05-09	GR060059	09/26/06	05/18/09	30	16	14	5	19	14	4	18	904.31	yes
Finaled	Low	PIP 04-05	GR060061	10/23/06	05/15/09	30	16	3	3	6	2	2	4	904.31	No
Active	High	CT 04-09	GR060063	10/06/06		30	22	16	4	20	14	5	19	904.51	yes
Active	High	CT 05-05	GR060064	10/08/08		29	8	14	1	15	14	2	16	904.51	
Active	Low	PD 06-04	GR060065	01/23/07		30	22	4	2	6	2	2	4	904.31	No
Finaled	Low	CDP 05-19	GR060066	02/21/07	05/13/09	30	16	4	3	7	2	2	4	904.40	No
Active	High	CT 04-16	GR060067	11/08/06		30	22	15	4	19	14	5	19	904.41	yes
Expired	High	MS 04-18	GR060071	07/05/07	03/20/09	25	14	12	3	15	12	3	15	904.31	Yes
Finaled	High	CUP 05-03	GR060072	02/12/07	02/25/09	20	14	10	3	13	10	3	13	904.51	Yes
Finaled	High	MS 05-05	GR060073	02/12/07	02/25/09	20	14	9	3	12	10	3	13	904.51	Yes
Finaled	Low	CT 05-19	GR060075	01/26/07	11/07/08	6	14	3	3	6	1	1	2	904.21	NO

Status	Priority	Project	Grading Permit	Issue Date	Inactive Date	Weeks Active WS	Weeks Active DS	Total WS Inspections	Total DS Inspections	Total 08-09 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
Active	Low	CT 02-16	GR060076	01/16/07		30	22	7	4	11	2	2	4	904.31	Yes
Finaled	low	CT 97-23	GR070001	03/12/07	05/13/09	30	16	4	3	7	2	2	4	904.21	no
Active	High	CT 04-11	GR070002	07/03/07		30	22	15	4	19	14	5	19	904.40	No
Active	High	CT 02-16	GR070003	03/28/07		30	22	15	5	20	14	5	19	904.31	Yes
Active	Low	MS 04-19A	GR070006	02/16/07		30	22	4	4	8	2	2	4	904.51	Yes
Active	Medium	CT 05-09	GR070009	04/23/07		30	22	7	2	9	7	2	9	904.31	Yes
Active	Low	CT 03-02	GR070010	05/04/07		30	22	9	5	14	7	2	9	904.31	Yes
Active	Low	CUP 260	GR070011	07/17/07		30	22	4	4	8	2	2	4	904.31	No
Withdrawn	Low	PD 07-02	GR070012	06/11/08	01/15/09	15	14	4	3	7	2	1	3	904.31	No
Finaled	Low	MS 03-07	GR070013	03/30/07	05/13/09	30	16	4	3	7	2	2	4	904.21	No
Finaled	Low	PD 06-22	GR070014	09/25/07	09/16/08	0	12	0	3	3	0	1	1	905.31	No
Active	Low	CUP 05-31	GR070015	08/24/07		30	22	4	4	8	2	2	4	904.51	Yes
Finaled	Low	PD 06-19	GR070016	07/12/07	11/25/08	8	14	5	3	8	1	1	2	904.51	Yes
Active	Low	PIP 06-11	GR070017	07/23/07		30	22	4	3	7	2	2	4	904.51	No
Active	Medium	MS 04-05	GR070018	07/18/08		30	20	8	4	12	7	2	9	904.31	Yes
Active	Medium	PIP 06-17	GR070019	04/07/08		30	22	10	4	14	7	2	9	904.31	No
Active	Low	MS 05-31	GR070021	06/15/07		30	22	7	3	10	7	2	9	904.21	yes
Active	Medium	PIP 06-18	GR070022	04/07/08		30	22	9	4	13	7	2	9	904.31	Yes
Active	Low	CUP 06-11	GR070025	07/18/07		30	22	4	4	8	2	2	4	904.51	Yes
Active	Low	CUP 05-28	GR070026	07/16/07		30	22	5	3	8	2	2	4	904.40	Yes
Active	high	CT 05-14	GR070028	01/30/08		30	22	14	6	20	14	5	19	904.51	yes
Active	high	CT 05-15	GR070029	12/11/07		30	22	14	5	19	14	5	19	904.51	yes
Active	high	CT 05-16	GR070030	01/30/08		30	22	14	4	18	14	5	19	904.51	yes
Active	Medium	PIP 06-15	GR070031	04/07/08		30	22	10	4	14	7	2	9	904.51	No
Active	medium	PIP 06-14	GR070033	04/07/08		30	22	9	4	13	7	2	9	904.31	No
Active	Medium	MS 05-12	GR070034	12/14/07		30	22	9	4	13	7	2	9	904.31	No
Active	High	CT 06-18	GR070035	10/12/07		30	22	14	4	18	14	5	19	904.21	No

Status	Priority	Project	Grading Permit	Issue Date	Inactive Date	Weeks Active WS	Weeks Active DS	Total WS Inspections	Total DS Inspections	Total 08-09 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
Active	Medium	CT 04-15	GR070036	06/20/07		30	22	10	3	13	7	2	9	904.51	Yes
Active	High	PD 07-06	GR070037	04/01/09		5	8	0	0	0	2	2	4	904.51	
Active	Low	SDP 06-03	GR070038	07/25/07		30	22	4	4	8	2	2	4	904.31	Yes
Active	low	CUP 05-26	GR070039	08/09/07		30	22	5	4	9	2	2	4	904.21	yes
Finaled	Low	SDP 06-04	GR070042	09/11/07	05/21/09	30	19	14	5	19	12	3	15	904.31	Yes
Finaled	Low	SDP 06-13	GR070043	08/27/07	12/12/08	10	14	5	3	8	2	1	3	904.51	Yes
Active	High	CT 06-06	GR070045	12/11/07		30	22	13	5	18	14	5	19	904.51	yes
Finaled	High	SUP 06-11	GR070046	12/27/07	08/08/08	0	5	0	1	1	0	1	1	904.31	Yes
Active	High	SUP 06-12	GR070047	01/11/08		30	22	15	5	20	14	5	19	904.31	Yes
Active	High	CT 02-28	GR070048	08/31/07		30	22	13	5	18	14	5	19	905.51	no
Active	Low	PD 06-21	GR070049	06/11/08		30	22	3	4	7	2	2	4	904.40	No
Finaled	Medium	SDP 05-18A	GR070051	10/17/07	02/13/09	20	14	7	3	10	5	1	6	904.51	Yes
Finaled	Low	PD 07-01	GR070052	12/07/07	05/15/09	30	16	4	3	7	2	2	4	904.31	3
Active	High	CT 03-02	GR070053	02/04/08		30	22	12	5	17	14	5	19	904.31	Yes
Active	High	CUP 06-08	GR070055	08/26/08		30	13	14	2	16	14	3	17	904.31	Yes
Active	High	PDP 05-01	GR070056	02/01/08		30	22	14	4	18	14	5	19	904.51	Yes
Active	low	RP 06-03	GR070059	11/16/07		30	22	5	4	9	2	2	4	904.21	No
Active	Medium	MS 04-17	GR070060	01/30/08		30	22	9	4	13	7	2	9	904.21	No
Finaled	Low	PD 03-06	GR070061	12/10/07	10/14/08	2	14	0	2	2	1	1	2	904.51	
Active	Medium	CDP 06-16	GR070065	05/06/08		30	22	9	3	12	7	2	9	904.31	No
Active	Low	CT 06-24	GR070066	01/10/08		30	22	13	3	16	14	5	19	904.31	Yes
Active	High	CT 05-15	GR070069	08/06/08		30	16	15	4	19	14	4	18	904.51	yes
Active	High	PUD 05-11A	GR070070	03/27/08		30	22	14	5	19	14	5	19	904.51	yes

Status	Priority	Project	Grading Permit	Issue Date	Inactive Date	Weeks Active WS	Weeks Active DS	Total WS Inspections	Total DS Inspections	Total 08-09 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
Active	High	SDP 06-06	GR080001	03/24/08		30	22	14	5	19	14	5	19	904.31	Yes
Active	High	CT 04-26	GR080002	03/24/08		30	22	15	5	20	14	5	19	904.31	Yes
Finaled	Low	PD 08-02	GR080003	06/24/08	03/03/09	21	14	5	3	8	2	2	4	904.31	No
Active	High	PIP 06-07	GR080004	05/08/08		30	22	14	4	18	14	5	19	904.51	Yes
Active	High	CT 07-04	GR080006	09/08/08		30	11	14	3	17	14	3	17	904.40	Yes
Active	High	CT 07-05	GR080008	08/06/08		30	16	11	3	14	14	4	18	904.31	
Active	High	CT 95-02	GR080012	07/17/08		30	20	13	3	16	14	4	18	904.51	Yes
Active	High	PIP 04-03	GR080014	03/16/09		4	8	3	2	5	2	2	4	904.31	Yes
Active	High	MS 07-02	GR080015	03/12/09		4	8	2	2	4	2	2	4	904.31	NO
Active	High	CT 06-06	GR080016	11/17/08		23	8	9	2	11	10	2	12	904.51	Yes
Active	High	PD 07-08	GR080017	10/21/08		27	8	13	2	15	12	2	14	904.51	Yes
Active	High	CT 05-15	GR080018	11/17/08		23	8	10	2	12	10	2	12	904.51	Yes
Active	high	PD 08-06	GR080019	10/20/08		27	8	11	2	13	12	2	14	904.31	no
Active	Medium	MS 07-03	GR080020	03/19/09		4	8	1	2	3	1	1	2	904.31	Yes
Active	Low	PD 08-03	GR090001	04/21/09		5	8	0	1	1	0	0	0	904.51	NO
Active	Medium	PD 08-06	GR090002	03/24/09		4	8	2	2	4	1	1	2	904.31	NO
Active	high	PD 08-06	GR090003	04/01/09		4	8	0	1	1	0	1	1	904.31	NO
Active	high	CT 04-26	GR090004	05/07/09		0	7	0	1	1	0	1	1	904.31	Yes
Active	high	CT 04-26	GR090005	05/07/09		0	7	0	1	1	0	1	1	904.31	Yes
TOTAL								1226	632	1855	995	420	1415		

WS: Wet Season DS: Dry Season

CAPTIAL IMPROVEMENT PROJECTS INVENTORY
FY 08-09

Status	Priority	Project	Project Names	Notice to Proceed	Notice of Completion	Weeks Active		Total WS Inspections	Total DS Inspections	Total 09-10 Inspections	Total WS Required	Total DS Required	Total Required
						WS	DS						
Completed	High	3771/4001	Library Learning Center	09/18/2006	10/24/2008	13	3	1	3	4	1	3	4
Completed	High	3901	Fire Station 6	07/27/2007	07/22/2008	0	3	0	1	1	0	1	1
Completed	High	3860-1	Widening Olivenhain & RSF	08/13/2007	01/28/2009	17	7	8	2	10	8	2	10
Completed	Medium	3667-15	2007 Pavement Overlay Project	09/04/2007	02/12/2009	19	13	5	2	7	5	2	7
Completed	Medium	3875-1	Poinsettia Sewer Lift Station Upgrade	12/10/2007	02/12/2009	19	13	5	2	7	5	2	7
Completed	Medium	4502	Poinsettia Community Pk -Ph 2A Tennis Courts	01/09/2008	02/23/2009	21	13	5	2	7	7	2	9
Completed	Medium	3936	Picnic Shelters Stagecoach & Calavera Hills Community Pk	03/03/2008	04/22/2009	29	13	7	2	9	7	2	9
Completed	Low	6601	Cynthia Lane Storm Drain Improvements	04/25/2008	10/01/2008	0	13	0	1	1	0	1	1
Completed	Low	3822	Reservoir Fencing	06/02/2008	08/05/2008	0	5	0	1	1	0	1	1
Completed	Medium	6013	Concrete Replacement Project	06/12/2008	08/13/2009	0	6	0	1	1	0	1	1
Completed	Medium	6001-0802	2008 Overlay	07/16/2008	10/03/2008	0	12	0	1	1	0	1	1
Completed	Low	6017	CVD/Avenida De Anita Crossgutter	07/18/2008	03/23/2009			2	1	3	2	1	3
Completed	Medium	55051	Upper & Lower Faraday Sewer Lift Station Removal	08/06/2008	10/03/2008	0	8	0	2	2	0	1	1
Completed	Low	6306	Traffic Signal Calle Barcelona	09/08/2008	03/03/2009			2	0	2	2	0	2
Active	Medium	3843 3920 3920-A	ECR Flow Control Station	09/15/2008		28	12	8	1	9	7	1	8
Completed	Medium	6001-0855	2008 Slurry Seal	10/06/2008	12/08/008	17	0	4	0	4	4	0	4
Active	Low	3949	Vista/Carlsbad Interceptor	10/16/2008		28	8	3	1	4	2	1	3
Completed	Medium	3927	Oak Avenue Sewer Replacement	11/17/2008	01/13/2009	12	0	3	0	3	3	0	3
Active	Low	5009-A	Maerkle Scrubber Replacement	12/01/2008		20	8	2	1	3	1	1	2
Completed	Low	6307-1	TS RSF AND AVENIDA LA CIMA	12/01/2008	04/21/2009	20	0	2	0	2	2	0	2
Active	Low	5006	Maerkle Bridge Replacement	12/01/2008		20	8	2	1	3	1	1	2
Active	Low	3961-1	Leo Carrillo Barn Stabilization	12/12/2008		22	8	2	1	3	1	1	2
Active	Low	3821-1A	Calavera Landscape	01/20/2009		12	8	2	1	3	1	1	2
Active	High	3537	NAHI Sewer	02/05/2009		12	8	8	2	10	6	2	8
TOTAL								71	29	100	65	28	93

NPDES INSPECTION REPORT

Construction Management and Inspection

Pursuant to CMC 15.12.100

Inspector		**Date**		**Project**	
		Time		**GR Permit**	
Inspection Type	☐ **Compliance** ☐ **Follow Up**	**Weather**	☐ **Heavy Rain** ☐ **Light Rain** ☐ **Sunny** ☐ **Cloudy** ☐ **Partly Cloudy** ☐ **Rain Expected at** ☐☐☐☐ **chance**		

BMP IMPLEMENTATION AND COMPLIANCE

BMP and Compliance Activity	YES	NO	N/A
Are all inactive slopes properly stabilized?			
Are areas flatter than 3:1 covered or protected?			
Are gravel bags, waddles, silt fences, and other erosion control BMPs in place and functioning properly?			
Do basins appear to be maintained as required?			
Are perimeter control BMPs maintained?			
Is the entrance stabilized to prevent tracking?			
Are storm drain inlets protected and BMPs maintained?			
Are all material and equipment handling, storage and repair areas clean and maintained?			
Are dumpsters and trash receptacles covered?			
Has trash and debris accumulated throughout the site?			
Are stockpiles and spoils protected from runoff?			
Are landscaped areas protected from erosion?			
Are natural areas and open spaces protected?			
Are washout areas maintained and protected?			
Were there any discharges observed during the inspection?			
Is the SWPPP wall map up to date and accurate?			
Was the SWPPP reviewed during this inspection?			
Other:			
Other:			

CORRECTIVE ACTION REQUIRED

- ☐ Provide additional erosion control.
- ☐ Repair/replace erosion control BMPs.
- ☐ Replace broken rock/sand bags.
- ☐ Desiltation/retention basin(s) requires maintenance.
- ☐ Provide additional perimeter controls.
- ☐ Repair/replace perimeter controls.
- ☐ Impervious surfaces need to be swept.
- ☐ Prevent sediment tracking on to street.
- ☐ Clean in and around storm drains.
- ☐ Provide additional protection at storm drain inlets.
- ☐ Discard unusable equipment and materials.
- ☐ Remove trash and debris from project site.
- ☐ Properly store hazardous materials.
- ☐ **Immediately** clean up spills and leaks.
- ☐ Maintenance required for washout areas.
- ☐ Protect/Cover materials stored outdoors.
- ☐ Provide spill kit(s) in equipment storage areas.
- ☐ Provide cover for dumpster and trash receptacles.
- ☐ **Immediately** discontinue washing or hosing.
- ☐ Train staff on pollution prevention.
- ☐ Other:_____

Implement corrective actions by _____. A City Inspector will return on or after the correction date to verify that corrective actions were completed and/or BMPs implemented as required. If you have any questions or comments, please contact your inspector.

Comments:

❒ **NO VIOLATIONS OBSERVED DURING THE INSPECTION.**

❒ **VIOLATIONS WERE NOTED DURING THE INSPECTION.**

- ❒ 15.12.050 Prohibited Discharge
- ❒ 15.12.080(E) Reduction of Pollutants
- ❒ 15.12.090 Storm Water Conveyance System Protection
- ❒ 15.12.110 Failure to Implement Corrective Actions
- ❒ 1512.120 Containment, cleanup, and notification of spills
- ❒ 15.16.170 Unlawful Acts
- ❒ 6.08.030 Receptacles Generally
- ❒ 6.08.040 Cleanliness of Solid Waste Receptacles
- ❒ 6.08.050 Solid Waste Receptacles to be Kept Covered
- ❒ 6.08.090 Unlawful Placement of Solid Waste
- ❒ Other_____ _____

Inspector Signature:	Received By ☐ Please Print	Received By - Signature ☐ Mailed	Date

The Notice Serves As:	☐ **Verbal Warning**		☐ **Written Warning**		☐ **Field Memo**		☐ **Referred for Action**				
BMP Assessment (circle one)	**5**	**4**	**3**	**2**	**1**	**Knowledge Assessment (circle one)**	**5**	**4**	**3**	**2**	**1** ☐ **Contact not available**

White: CMI Yellow: Job Site

INSPECTION SUMMARY

Comments Notes

NPDES INSPECTION REPORT

Construction Management and Inspection

Pursuant to CMC 15.12.100

Inspector		**Date**		**Project**	
		Time		**GR Permit**	
Inspection Type	☐ **Compliance** ☐ **Follow Up**	**Weather**	☐ **Heavy Rain** ☐ **Light Rain** ☐ **Sunny** ☐ **Cloudy** ☐ **Partly Cloudy** ☐ **Rain Expected at** ☐☐☐☐ **chance**		

BMP IMPLEMENTATION AND COMPLIANCE

BMP and Compliance Activity	YES	NO	N/A
Are all inactive slopes properly stabilized?			
Are areas flatter than 3:1 covered or protected?			
Are gravel bags, waddles, silt fences, and other erosion control BMPs in place and functioning properly?			
Do basins appear to be maintained as required?			
Are perimeter control BMPs maintained?			
Is the entrance stabilized to prevent tracking?			
Are storm drain inlets protected and BMPs maintained?			
Are all material and equipment handling, storage and repair areas clean and maintained?			
Are dumpsters and trash receptacles covered?			
Has trash and debris accumulated throughout the site?			
Are stockpiles and spoils protected from runoff?			
Are landscaped areas protected from erosion?			
Are natural areas and open spaces protected?			
Are washout areas maintained and protected?			
Were there any discharges observed during the inspection?			
Is the SWPPP wall map up to date and accurate?			
Was the SWPPP reviewed during this inspection?			
Other:			
Other:			

CORRECTIVE ACTION REQUIRED

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- ☐ Clean in and around storm drains.
- ☐ Provide additional protection at storm drain inlets.
- ☐ Discard unusable equipment and materials.
- ☐ Remove trash and debris from project site.
- ☐ Properly store hazardous materials.
- ☐ **Immediately** clean up spills and leaks.
- ☐ Maintenance required for washout areas.
- ☐ Protect/Cover materials stored outdoors.
- ☐ Provide spill kit(s) in equipment storage areas.
- ☐ Provide cover for dumpster and trash receptacles.
- ☐ **Immediately** discontinue washing or hosing.
- ☐ Train staff on pollution prevention.
- ☐ Other:_____

Implement corrective actions by _____. A City Inspector will return on or after the correction date to verify that corrective actions were completed and/or BMPs implemented as required. If you have any questions or comments, please contact your inspector.

Comments:

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- ❒ 15.12.050 Prohibited Discharge
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- ❒ 6.08.040 Cleanliness of Solid Waste Receptacles
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- ❒ 6.08.090 Unlawful Placement of Solid Waste
- ❒ Other_____ _____

Inspector Signature:	Received By ☐ Please Print	Received By - Signature ☐ Mailed	Date

The Notice Serves As:	☐ **Verbal Warning**		☐ **Written Warning**		☐ **Field Memo**		☐ **Referred for Action**				
BMP Assessment (circle one)	**5**	**4**	**3**	**2**	**1**	**Knowledge Assessment (circle one)**	**5**	**4**	**3**	**2**	**1** ☐ **Contact not available**

White: CMI Yellow: Job Site

Carlsbad Municipal Code - Storm Water Violations

- ❒ **CMC 15.12.050** - Prohibited Discharges. The discharge of non-storm water to the storm water conveyance system or to any other conveyance system which discharges into receiving water is prohibited.

- ❒ **CMC 15.12.080(E)** - Reduction of Pollutants. Any person engaged in development, grading or construction in the City of Carlsbad shall utilize best management practices to prevent pollutants from entering the storm water conveyance systems by complying with City Standards, all applicable local ordinances, including Chapter 15.16 of the CMC, the standard specifications for public works construction, when performing public work, and required provisions of all applicable NPDES Permits.

- ❒ **CMC 15.12.090** - Storm Water Conveyance System Protection. Every person owning property though which a storm water conveyance system passes, and such person's lessee or tenant, shall keep and maintain that part of the system within the property free of trash, debris, excessive vegetation, and other obstacles which would pollute, containment or significantly retard the flow of water through the system.

- ❒ **CMC 15.12.110** - Inspection Procedures: Additional Requirements. If corrective action is required, then the occupant, facility owner, and/or facility operator shall implement corrective action plan based upon a written corrective action plan. The corrective action plan shall be submitted to the enforcement agency for review and approval and should state the corrective actions to be taken and the dates of completion.

- ❒ **CMC 15.12.120** - Containment, Cleanup, and Notification of Spills. Any person owning or occupying any premises who has knowledge of any release of significant quantities of materials, pollutants, or waste which may result in pollutants or non-storm water discharges entering the city's storm water conveyance system shall immediately take all reasonable action to contain, minimize, and clean up such release. Such person shall notify the city of Carlsbad of the occurrence and any other appropriate agency of the occurrence as soon as possible, but no later than twenty-four hours from the time of the incident's occurrence

- ❒ **CMC 15.16.170** Unlawful Acts. It is unlawful to grade without application of appropriate storm water best management practices in accordance with the provisions of Title 15, City Standards and Municipal Permit.

- ❒ **CMC 6.08.030** - Receptacles Generally. No person shall deposit, keep or accumulate any solid waste in or upon any public or private premises unless enclosed in watertight receptacles designed to contain solid waste, which shall be of a type and size approved by the Public Work's Director.

- ❒ **CMC 6.08.040** - Cleanliness of Solid Waste Receptacles. No person shall allow grease to accumulate in the interior or on the exterior of a solid waste receptacle.

- ❒ **CMC 6.08.045** - Cleanliness of Solid Waste Receptacle Areas or Enclosures. No person shall allow pollutants or liquids to accumulate around solid waste enclosures or around and/or under solid waste receptacles such that storm water will carry these pollutants or liquids to the storm water conveyance system.

- ❒ **CMC 6.08.050** - Solid Waste Receptacles to be Kept Covered. No person shall permit a solid waste receptacle to remain uncovered or open, or in such condition that flies or vermin may obtain access thereto, except when necessary to place solid waste therein or remove solid waste there from.

- ❒ **CMC 6.08.090** - Unlawful Placement of Solid Waste. No person shall deposit or place any solid waste anywhere other than in an approved solid waste receptacle under his or her control.

- ❒ Other_____

Best management practices (BMP) *means scheduled activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water conveyance system and/or receiving waters.* Future violations may result in fines and/or penalties. Any business or individual that violates any provision of the storm water/trash ordinance or fails to implement corrective actions as directed by the enforcement official shall be punished, upon conviction, by a fine not to exceed one thousand dollars for each day in which such violation occurs.

City of Carlsbad		CMI - 100	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR ACTIVE GRADING AND CONSTRUCTION SITES	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
		PAGE 1 OF 13	

CHANGE HISTORY

REV A

04/27/09 Initial creation of document

06/24/09 Completion and approval of Revision A

Publisher: Shawnetta Grandberry			Date: 06-24-09		
Critical Review By	Signature	Date	Approved By	Signature	Date
Shawnetta Grandberry			Casey Arndt		
Approved By	Signature	Date			
John Maashoff			Patrick Vaughan		

Purpose

The purpose of this procedure is to define the process for inspecting, tracking, and enforcing grading and construction sites listed on the Construction Management and Inspection (CMI) Active Grading Permit and Construction Site Inventory List (Inventory List). CMI inspectors and consultants must have a basic understanding of the requirements of the NPDES inspection program. Please refer to procedure #CMI-120 for the creation, revision and maintenance of the Active Grading Permit and Construction Site Inventory List and #CMI-110 for the NPDES inspection procedure for sites on the Building Permit Inventory List.

Policy

The Construction Management and Inspection Department will conduct NPDES compliance inspections at construction sites listed on the Active Grading Permit and Construction Site Inventory List to assess their threat to water quality, potential to contribute to storm water pollution, applicability to the NPDES permit issued by the Regional Water Quality Control Board of the State of California, and compliance with the Carlsbad Municipal Code.

Scope

This procedure applies to the **Construction Management and Inspection Department** personnel and consultants at the City of Carlsbad, Public Works Department located in Carlsbad, CA.

Associated Documents

Municipal Storm Water Permit Order No. R9-2007-0001, NPDES No. CAS0108758

City of Carlsbad Jurisdictional Urban Runoff Management Program (JURMP) from March 2008

City of Carlsbad Engineering Inspection Manual

City of Carlsbad Municipal Code Chapter 15.12

City of Carlsbad Municipal Code Chapter 15.16

City of Carlsbad Municipal Code Chapter 6.08

Acronyms and Definitions

BMP	Best Management Practices
CON	Consultant designated by awarded City contract
CMC	Carlsbad Municipal Code
CM	Construction Manager
DCE	Deputy City Engineer
ESA	Environmentally Sensitive Area
Dry Season	May 1 to September 30
GIS	Geographical Information Systems
Inspection	Refers to onsite evaluation or investigation to determine the effectiveness and adequacy of BMPs – please refer to Appendix A for a copy of the inspection form.
PWI	Public Works Inspector I/II
JURMP	Jurisdictional Urban Runoff Management Program from March 2008
NPDES	National Pollutant Discharge Elimination System
RP	Responsible Party
RWQCB	Regional Water Quality Control Board
SCI	Senior Construction Inspector
SOS	Senior Office Specialist
SWPPP	Storm Water Pollution Prevention Plan
Wet Season	October 1 to April 30

Overview

The City of Carlsbad is committed to inspecting sites and sources listed on the Inventory List to evaluate compliance with applicable storm water regulations, JURMP, General Construction Permit, and the CMC. Site inspections are conducted using the inspection form referenced in Appendix A and pictures are taken when necessary.

City of Carlsbad		CMI - 100	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR ACTIVE GRADING AND CONSTRUCTION SITES	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
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Active Grading and Construction Site Inspections Procedure:

Step	Who	What	When
1.	SCI	Downloads a Permits Plus report of all active grading and construction sites. Saves the report as an excel file.	Last week of each month
2.	SCI	Reviews monthly active grading and construction site report and updates the active Inventory List. Updates can include removing duplicates and closed projects, prioritizing projects, changing the status of projects, and adding new construction sites to the inventory.	Last week of each month
3.	SCI	Provides PWIs with an updated NPDES inspection list (by inspector) and blank inspection forms for active construction sites requiring NPDES inspections for the current month (see format in Appendix B).	First week of each month
4.	PWI CON SCI	Prepares the NPDES inspection form(s), if necessary. Inspection forms can also be completed in the field as inspections are conducted. Please refer to Appendix A for inspection form and instructions.	At the required frequencies
5.	PWI CON SCI	Performs NPDES inspection(s) using the procedures outlined in CMC 15.12.100, 15.12.110, in this procedure, and in Section D.2.d.(6) of the Permit. A copy of the inspection report must be provided to the RP after the inspection or mailed when corrective actions are required.	At the required frequencies
6.	PWI CON SCI	After completion of the inspection(s), returns to the office and provides the completed inspection reports (white copy only) to the SCI.	End of the month
7.	SCI CM	Verifies accuracy of the information on the inspection reports, updates the Inventory List and Permits Plus. The SOS may also update the Permits Plus database. The SCI will maintain NPDES inspection reports by month for a period not to exceed one year.	Within 30 days of receipt
8.	PWI CON SCI CM	Completes appropriate compliance documents including Warning Notices, Stop Work Orders, Notice of Violation, Administrative Citations, Summary Abatement, and other related compliance actions. Some enforcement actions may also be issued in the field during the inspection. If an enforcement action is issued, the SCI will also update the Permits Plus database.	As needed
9.	PWI SCI CM	Reviews compliance documents for completeness and accuracy. All enforcement actions above a Stop Work Order must be reviewed by the SCI, CM and/or DCE before issuance.	As needed
10.	SCI	Ensures all compliance documents are mailed as required. Provides file to SOS for filing and/or mailing. If the document requires a response, the SOS will return the file to the SCI. If the correspondence does not require a response, the file is returned to the appropriate filing location.	As needed
11.	PWI SCI CM	Follow up per findings and corrective action schedule submitted by contractor of other construction site representative. Actions that require tracking should be provided to the SCI for Permits Plus updates.	As needed

Other Procedural Considerations

- If immediate corrective action is required and there is no staff onsite, the CMI inspector should use the emergency contact list to contact the RP for prompt response. A copy of the inspection report can be faxed or scanned and emailed to the RP. The yellow copy of the inspection report should be mailed to the RP.
- After notifying the RP of the violation, the CMI inspector should document the violation and notification in the project file and note any time frames given for corrective actions or follow-up inspections. In judging the degree of severity, the CMI inspector may also take into account any history of similar or repeated violations at the site. Follow-up activities will be conducted as deemed necessary by the enforcement official or contracted staff, and may be necessary for any enforcement action. After the site visit, the inspector should note the type, if any, of additional enforcement required for the site. This must also be noted in Permits Plus.
- During the rainy season the SCI will monitor the weather on a daily basis. When there is a storm event predicted at 40% or greater, the SCI will send a "Rain Event Alert" to all CMI inspectors and managers that includes the following language:

  There is a predicted 40% or greater chance of rain for Saturday night thru Tuesday morning. It looks like the heaviest part of the storm will start on Sunday night. Please continue to work with your job sites to ensure all areas are protected during the storm.
- Each fiscal year, sites on the Inventory List will be reviewed as time and resources permit. "High" threat to water quality sites and sources will be treated with priority each year for scheduling inspections.

Inspection goals for sites on the Inventory List per fiscal year are as follows:

Season	Frequency	Threat Priority	Inspection Goal
Wet Season	Bi-Weekly	High	100%
Dry Season	Monthly	High	100%
Wet Season	Monthly	Medium	50%
Dry Season	As Needed	Medium	50%
Wet Season	Monthly	Low	25%
Dry Season	As Needed	Low	25%

Inspection goals for sites on the active Inventory List per fiscal year for CMI are as follows:

Priority	Minimum Inspections Required												Minimum Wet Season Inspections	Minimum Dry Season Inspections	Minimum Required Inspections
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun			
High	1	1	1	2	2	2	2	2	2	2	1	1	14	5	19
Medium	1	0	1	1	1	1	1	1	1	1	0	1	6	3	9
Low	0	0	1	0	0	1	0	0	1	0	0	1	2	2	4

RWQCB Notifications

As required by the Permit and the JURMP, City staff will notify the RWQCB when a construction sites activities endangers health or the environment and when Stop Work Notices or higher enforcement actions are issued. The RWQCB should be notified by email using the form in Appendix D. For those violations that have the potential to endanger health or the environment, the RWQCB must be notified within 24 hours of the time the City becomes aware of the incident. In addition, the City must follow up with a written report of the incident and efforts taken to abate to violation. The CM and SCI are responsible for ensuring notifications are completed as required. The following RWQCB staff should be notified when required:

Laurie A. Walsh
California RWQCB – San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340
858-467-2970
lwalsh@waterboards.ca.gov

Eric Becker
California RWQCB – San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340
858-467-1785
ebecker@waterboards.ca.gov

In addition the following City staff should also be notified:

Public Works Director
City Engineer
Deputy City Engineer
Public Works Manager – Administration and Environmental Programs
Construction Manager

Recordkeeping and Reporting

The SCI and SOS are responsible for maintaining all aspects of the inspection and correspondence hardcopy filing system. Inactive grading permits and projects will be maintained for a minimum of 3 years. On an annual basis, the SCI will provide a JURMP Annual Report submission to the CM and DCE that includes the following information:

- Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.
- For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.
- A description of the general results of the inspections.
- Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.
- The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

All inspection related forms are located on the shared drive at:

Equipment List

In preparation for conducting site inspections and investigations, CMI inspectors should have the following equipment:

- Metal clip board
- Inspection and enforcement forms
- Digital camera
- Pens and pencils
- City identification
- Business cards
- Field notebook
- Thomas Guide
- If appropriate, applicable site plans and documents
- Copies of the CMC, Municipal Permit, and General Construction Permit
- If necessary, photos or copies of previous inspection reports

Safety Considerations

Hazards may exist at the various construction sites inspectors visit. These hazards could include sharp edges, falling objects, flying sparks, chemicals, noise, uneven pavement and a myriad of other potentially dangerous situations. Inspectors must be aware of their environment and take the appropriate precautions to protect themselves from potential hazards and injuries. Personal protective equipment, commonly referred to as "PPE", may be required at certain sites and in certain situations to minimize exposure to a variety of hazards. The following PPE should be available to the inspector during site visits:

- hard hat
- flashlight
- safety glasses
- ear plugs
- steel-toed boots
- storm drain puller
- safety vest
- hand sanitizer
- leather work gloves
- first aid kit

Appendices

Appendix A: Storm Water Inspection Form and Instructions
Appendix B: Sample Monthly NPDES Inspection List Format
Appendix C: NPDES Inspection Form
Appendix D: RWQCB Notification Form

Appendix A

NPDES Inspection Report Form and Instructions

Inspector: The last name and first initial of the person conducting the inspection.

Date: The date the inspection occurred. Must be entered in the following format:

Project #: The project number or building permit number used in Permits Plus to track the inspection.

Time: The time the inspection occurred.

GR Permit #: The grading permit number(s) assigned to the project. The GR Permit number(s) must be directly associated with the Project Number.

Inspection Type: The type of inspection or investigation conducted as follows:

- Compliance: Inspection conducted at the minimum required frequency necessary to verify compliance.
- Follow Up: An inspection, other than a compliance inspection, conducted to verify if corrective actions have been completed as required by the City.

Weather Conditions: The inspector should note the weather conditions while conducting an inspection.

NPDES INSPECTION REPORT
Construction Management and Inspection
Pursuant to CMC 15.12.100

Inspector		Date		Project #	
		Time		GR Permit#	
Inspection Type	☐ Compliance ☐ Follow Up	Weather	☐ Heavy Rain ☐ Light Rain ☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain Expected at % chance		

BMP IMPLEMENTATION AND COMPLIANCE

BMP and Compliance Activity	YES	NO	N/A	CORRECTIVE ACTION REQUIRED
Are all inactive slopes properly stabilized?				☐ Provide additional erosion control.
Are areas flatter than 3:1 covered or protected?				☐ Repair/replace erosion control BMPs.
Are gravel bags, waddles, silt fences, and other erosion control BMPs in place and functioning properly?				☐ Replace broken rock/sand bags.
Do basins appear to be maintained as required?				☐ Desiltation/retention basin(s) requires maintenance.
Are perimeter control BMPs maintained?				☐ Provide additional perimeter controls.
Is the entrance stabilized to prevent tracking?				☐ Repair/replace perimeter controls.
Are storm drain inlets protected and BMPs maintained?				☐ Impervious surfaces need to be swept.
Are all material and equipment handling, storage and repair areas clean and maintained?				☐ Prevent sediment tracking on to street.
Are dumpsters and trash receptacles covered?				☐ Clean in and around storm drains.
Has trash and debris accumulated throughout the site?				☐ Provide additional protection at storm drain inlets.
Are stockpiles and spoils protected from runoff?				☐ Discard unusable equipment and materials.
Are landscaped areas protected from erosion?				☐ Remove trash and debris from project site.
Are natural areas and open spaces protected?				☐ Properly store hazardous materials.
Are washout areas maintained and protected?				☐ **Immediately** clean up spills and leaks.
Were there any discharges observed during the inspection?				☐ Maintenance required for washout areas.
Is the SWPPP wall map up to date and accurate?				☐ Protect/Cover materials stored outdoors.
Was the SWPPP reviewed during this inspection?				☐ Provide spill kit(s) in equipment storage areas.
Other:				☐ Provide cover for dumpster and trash receptacles.
Other:				☐ **Immediately** discontinue washing or hosing.
				☐ Train staff on pollution prevention.
				☐ Other:_____

Implement corrective actions by _____. A City Inspector will return on or after the correction date to verify that corrective actions were completed and/or BMPs implemented as required. If you have any questions or comments, please contact your inspector.

Comments:

☐ NO VIOLATIONS OBSERVED DURING THE INSPECTION.

☐ VIOLATIONS WERE NOTED DURING THE INSPECTION.

- ☐ 15.12.050 Prohibited Discharge
- ☐ 15.12.080(E) Reduction of Pollutants
- ☐ 15.12.090 Storm Water Conveyance System Protection
- ☐ 15.12.110 Failure to Implement Corrective Actions
- ☐ 1512.120 Containment, cleanup, and notification of spills
- ☐ 15.16.170 Unlawful Acts
- ☐ 6.08.030 Receptacles Generally
- ☐ 6.08.040 Cleanliness of Solid Waste Receptacles
- ☐ 6.08.050 Solid Waste Receptacles to be Kept Covered
- ☐ 6.08.090 Unlawful Placement of Solid Waste
- ☐ Other_____ _____

Inspector Signature:	Received By – Please Print	Received By - Signature ☐ Mailed	Date

The Notice Serves As:	☐ Verbal Warning	☐ Written Warning	☐ Field Memo	☐ Referred for Action		
BMP Assessment (circle one)	5 4 3 2 1	Knowledge Assessment (circle one)	5 4 3 2 1	☐ Contact not available		

White: CMI Yellow: Job Site

BMP IMPLEMETATION AND COMPLIANCE: The inspector should use this section to evaluate potential sources of pollution from the construction site activities and operations to assess compliance. The activity questions should be answered using the appropriate responses in the column to the right. If the BMP compliance activity is not listed among the choices, the inspector can use the "Other" space to identify the specific BMP requirements.

CORRECTIVE ACTION REQUIRED: If the construction site is required to implement corrective action as a result of the inspection or investigation, the inspector should check the appropriate box. If the corrective action is not listed among the choices, the inspector can use the "Comments" area to list

the specific BMP requirements. In addition, the inspector should note the date corrective actions must be completed by in order for the site to be in compliance.
COMMENTS: The inspector can note additional information about the inspection or investigation including but not limited to, specific BMPs needed, additional requirements, observations, etc.

NO VIOLATIONS OBSERVED DURING THE INSPECTION: If no violations were observed during the inspection, the inspector should check this box.

VIOLATIONS WERE OBSERVED DURING THE INSPECTION: When violations of the CMC are noted the inspector should check the applicable boxes related the CMC citation.

Inspector Signature: The inspector must sign the inspection report.

Received By –Please Print: The inspector must print the name of the job site representative that received the report.

Received By – Signature: The signature of the job site representative that received the inspection report. If a representative is not available to receive the report or refuses to sign the report, the "Mailed" box should be checked and the report will be mailed to the job site primary contact.

Date: The date the inspection report was completed by the CMI inspector.

The Notice Serves As: If during the inspection, violations are observed the inspector can also note that the inspection report service as one of the following types of enforcement actions:

- Verbal Warning: Note taken that verbal instruction requiring immediate corrective action was issued during the inspection.
- Written Warning: Notice that the inspection report serves as Written Warning that corrective action that must be completed by the specific date noted on the report.
- Field Memo: An informal written reminder that BMPs must be maintained and/or that minor violations were noted during the inspection.
- Referred Action: If the construction site had violations that require notification to other City departments, RWQCB, or other agency, the inspector should check this box. The CM and SCI are responsible for ensuring notifications are completed as required.

BMP Assessment: Numeric value field assessing the overall level of BMP implementation for storm water pollution prevention. This assessment will be conducted during the inspection with or without contact with a site representative.

- Level 5: All BMPs implemented effectively. No violations noted during the inspection.
- Level 4: BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices (i.e., dumpsters open, leaves in the parking lot, etc.) were noted during the inspection.
- Level 3: BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal warning was issued. A detailed inspection report or written Warning Notice may follow.

- Level 2: BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or enforcement action was issued.
- Level 1: **An illegal discharge was noted during the inspection**. Enforcement action (Stop Work Notice, NOV, or Administrative Citation, etc.) is required.

Knowledge Assessment: Numeric value assessing the overall level of knowledge of the employee related to storm water pollution prevention. This assessment will only be conducted during the inspection when there is contact with a job site representative.

- Level 5: Individual demonstrated an in depth knowledge of the storm water program and BMPs consistent with the site's activities and operations.
- Level 4: Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.
- Level 3: Individual has a general understanding of storm water issues (*I've heard something about that*), but not specific storm water requirements or BMPs required for the site.
- Level 2: Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.
- Level 1: Individual has never heard of the storm water program, requirements, or BMPs. This individual does know what BMPs are or understand how to implement them.

City of Carlsbad		CMI - 100	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR ACTIVE GRADING AND CONSTRUCTION SITES	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
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Appendix B

Sample Monthly NPDES Inspection List Format

Jones, H.

Status	Priority	Project #	Grading Permit #	Location	Inspections Required		Inspector Comments
					1	2	
Active	High	CT 04-09	GR050037	ADJACENT TO ESTRELLA DE MAR RD SOUTH OF POINSETTIA			
Active	High	CT 04-16	GR060067	EAST SIDE OF ALICANTE RD BTWN POINSETTIA LN AND PALOMAR AIPORT RD			
Active	High	PDP 05-01	GR070056	1960 LA COSTA AV 1956 EL CAMINO REAL			
Active	High	PIP 06-07	GR080004	2530 CAMPBELL PL			
Active	High	CT 07-05	GR080008	EAST SIDE OF EL CAMINO REAL BTWN CAMINO VIDA ROBLE AND CASSIA RD			
Active	High	CT 95-02	GR080012	7100 BLUE HERON PL			
Active	High	CT 99-00-03	GR050010	WITHIN FACILITIES MANAGEMENT ZONE 10			
Active	High	CT 04-09	GR060063	SOUTH SIDE OF POINSETTIA LN BTWN EL CAMINO REAL AND ALICANTE RD			

Publisher: Shawnetta Grandberry			Date: 06-24-09		
Critical Review By	Signature	Date	Approved By	Signature	Date
Shawnetta Grandberry			Casey Arndt		
Approved By	Signature	Date			
John Maashoff			Patrick Vaughan		

Appendix C

NPDES Inspection Form

NPDES INSPECTION REPORT

Construction Management and Inspection

Pursuant to CMC 15.12.100

Inspector		Date		Project #	
		Time		GR Permit#	
Inspection Type	☐ Compliance ☐ Follow Up	Weather	☐ Heavy Rain ☐ Light Rain ☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain Expected at % chance		

BMP IMPLEMENTATION AND COMPLIANCE

BMP and Compliance Activity	YES	NO	N/A	CORRECTIVE ACTION REQUIRED
Are all inactive slopes properly stabilized?				☐ Provide additional erosion control.
Are areas flatter than 3:1 covered or protected?				☐ Repair/replace erosion control BMPs.
Are gravel bags, waddles, silt fences, and other erosion control BMPs in place and functioning properly?				☐ Replace broken rock/sand bags.
Do basins appear to be maintained as required?				☐ Desiltation/retention basin(s) requires maintenance.
Are perimeter control BMPs maintained?				☐ Provide additional perimeter controls.
Is the entrance stabilized to prevent tracking?				☐ Repair/replace perimeter controls.
Are storm drain inlets protected and BMPs maintained?				☐ Impervious surfaces need to be swept.
Are all material and equipment handling, storage and repair areas clean and maintained?				☐ Prevent sediment tracking on to street.
Are dumpsters and trash receptacles covered?				☐ Clean in and around storm drains.
Has trash and debris accumulated throughout the site?				☐ Provide additional protection at storm drain inlets.
Are stockpiles and spoils protected from runoff?				☐ Discard unusable equipment and materials.
Are landscaped areas protected from erosion?				☐ Remove trash and debris from project site.
Are natural areas and open spaces protected?				☐ Properly store hazardous materials.
Are washout areas maintained and protected?				☐ **Immediately** clean up spills and leaks.
Were there any discharges observed during the inspection?				☐ Maintenance required for washout areas.
Is the SWPPP wall map up to date and accurate?				☐ Protect/Cover materials stored outdoors.
Was the SWPPP reviewed during this inspection?				☐ Provide spill kit(s) in equipment storage areas.
Other:				☐ Provide cover for dumpster and trash receptacles.
Other:				☐ **Immediately** discontinue washing or hosing.
				☐ Train staff on pollution prevention.
				☐ Other:_____

Implement corrective actions by _____. A City Inspector will return on or after the correction date to verify that corrective actions were completed and/or BMPs implemented as required. If you have any questions or comments, please contact your inspector.

Comments:

☐ NO VIOLATIONS OBSERVED DURING THE INSPECTION.

☐ VIOLATIONS WERE NOTED DURING THE INSPECTION.

- ☐ 15.12.050 Prohibited Discharge
- ☐ 15.12.080(E) Reduction of Pollutants
- ☐ 15.12.090 Storm Water Conveyance System Protection
- ☐ 15.12.110 Failure to Implement Corrective Actions
- ☐ 1512.120 Containment, cleanup, and notification of spills
- ☐ 15.16.170 Unlawful Acts
- ☐ 6.08.030 Receptacles Generally
- ☐ 6.08.040 Cleanliness of Solid Waste Receptacles
- ☐ 6.08.050 Solid Waste Receptacles to be Kept Covered
- ☐ 6.08.090 Unlawful Placement of Solid Waste
- ☐ Other_____ _____

Inspector Signature:	Received By – Please Print	Received By - Signature ☐ Mailed	Date

The Notice Serves As:	☐ Verbal Warning	☐ Written Warning	☐ Field Memo	☐ Referred for Action		
BMP Assessment (circle one)	5 4 3 2 1	Knowledge Assessment (circle one)	5 4 3 2 1	☐ Contact not available		

White: CMI Yellow: Job Site

Publisher: Shawnetta Grandberry			Date: 06-24-09		
Critical Review By	Signature	Date	Approved By	Signature	Date
Shawnetta Grandberry			Casey Arndt		
Approved By	Signature	Date			
John Maashoff			Patrick Vaughan		

City of Carlsbad		CMI - 100	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR ACTIVE GRADING AND CONSTRUCTION SITES	☐ POLICY ☐ PROCESS X PROCEDURE	NUMBER	REVISION
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Appendix D
Sample RWQCB Notification Form

CITY OF CARLSBAD

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
San Diego Region

INCIDENT NOTIFICATION

CMI Incident Notification No. CB081283

Type of Notice Issued: Stop Work Notice **Date Issued:** April 10, 2009

Date of RWQCB Notification: April 13, 2009

Project: 1850 Tule Court – Baykal Residence (Single family lot remodel of existing dwelling)

Reason for Notice: Trash and construction waste and debris once again piled in the back yard and around the east side yard. Concrete washout and some type of resin was on the ground in the back yard. No washout facility available. Track out from the west entrance. Wet saw stored near the west opening in the wall was set on plastic but there were no BMPs in place to prevent any potential discharges. No discharge to the storm drain was observed.

Follow Up Actions: The project will be completely shut down until corrective actions are implemented. CMI inspectors are working with the property owner and contractor to ensure BMPs are adequately implemented in an expeditious manner.

Sent to RWQCB via: ■ **Email** ☐ **Fax** ☐ **Mailed Letter** ☐ **Phone**

To: Laurie Walsh and Eric Becker

Notes:

_____
_____
_____
_____
_____
_____

Prepared By Shawnetta Grandberry
Date: April 13, 2009

City of Carlsbad		CMI - 110	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR BUILDING PERMITS	☐ POLICY ☐ PROCESS ☒ PROCEDURE	NUMBER	REVISION
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Publishers: Shawnetta Grandberry			Date: June 15, 2009		
Critical Review By	Signature	Date	Approved By	Signature	Date
Shawnetta Grandberry			Casey Arndt		
Approved By	Signature	Date			
Patrick Vaughan					

City of Carlsbad		CMI - 110	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR BUILDING PERMITS	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
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Purpose

The purpose of this procedure is to define the process for inspecting, tracking, and enforcing building sites listed on the Construction Management and Inspection building permit inventory list. CMI inspectors need to have a basic understanding of the background and requirements of the NPDES inspection program to conduct effective site evaluations and investigations. Procedure #CMI-130 covers the creation, revision and maintenance of the building permit inventory list and will be developed in FY 09-10. All forms related to this procedure can be found in procedure #CMI-100.

Policy

The Construction Management and Inspection Department and Building Department will conduct storm water compliance inspections at and building sites listed on the active building permit inventory to assess their threat to water quality, potential to contribute to storm water pollution, applicability to the NPDES permit issued by the Regional Water Quality Control Board of the State of California, and compliance with the Carlsbad Municipal Code.

Scope

This procedure applies to the **Construction Management and Inspection Department and Building Department** personnel and consultants at the City of Carlsbad, Public Works Department, located in Carlsbad, CA.

Associated Documents

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City of Carlsbad		CMI - 110	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR BUILDING PERMITS	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
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Acronyms and Definitions

BI	Building Inspector I/II
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ESA	Environmentally Sensitive Area
DCE	Deputy City Engineer
Dry Season	May 1 to September 30
GIS	Geographical Information Systems
Inspection	Refers to onsite evaluation or investigation to determine the effectiveness and adequacy of BMPs – please refer to Appendix A for a copy of the inspection form.
PWI	Public Works Inspector I/II
JURMP	Jurisdictional Urban Runoff Management Program from March 2008
NPDES	National Pollutant Discharge Elimination System
RP	Responsible Party
RWQCB	Regional Water Quality Control Board
SCI	Senior Construction Inspector
SOS	Senior Office Specialist
SWPPP	Storm Water Pollution Prevention Plan
Wet Season	October 1 to April 30

Overview

The City of Carlsbad is committed to inspecting sites and sources listed on the active building permit inventory list to evaluate compliance with applicable storm water regulations, JURMP, and the CMC. Site inspections are conducted using the inspection form and instructions referenced in procedure #CMI-100.

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Building Site Inspections Procedure:

Step	Who	What	When
1.	CM SCI	Downloads a Permits Plus report of all "finaled" and new building permits issued within the previous month (e.g. July 1 through August 1).	First week of the month
2.	CON BI PWI SCI	Reviews building permit report and updates the active building permit inventory. Only those permits categorized as "Residential Building Sites" and "Tenant Improvements" will be considered for inspection. Updates can include removing duplicates and closed permits, prioritizing permits, changing the status of permits, and adding new building permits.	First week of the month
4.	CON BI PWI	Prepares the NPDES inspection form(s) prior to the site visit. Inspection forms can also be completed in the field as inspections are conducted. Please refer to Appendix A from procedure #CMI-100 for inspection form and instructions.	At the required frequencies
5.	CON BI PWI	Performs the NPDES inspection using the procedures outlined in CMC 15.12.100, 15.12.110, in this procedure, and in Section D.2.d.(6) of the Permit. The yellow copy of the inspection report must be provided to the RP after the inspection or mailed when corrective actions are required.	At the required frequencies
6.	CON BI PWI	After completion of the inspection(s), returns to the office and updates the building permit inventory.	At the required frequencies
8.	CON BI PWI SCI	Completes appropriate compliance documents including: inspection reports, Warning Notices, Stop Work Orders, Notice of Violation, Administrative Citations, Notice to Clean, and other related NPDES compliance actions. Some of these compliance actions (i.e. Stop Work Order, NOV, etc.) may also be issued in the field after the inspection.	As needed
9.	BI PWI SCI	Reviews compliance documents for completeness and accuracy. All enforcement actions above a Stop Work Order must be reviewed by the SCI, CM and/or DCE before issuance.	As needed
10.	CON BI SCI	Ensures all compliance documents are mailed as required. Provides file to SOS for filing and/or mailing. If the document requires a response, the SOS will return the file to the SCI. If the correspondence does not require a response, the file is returned to the appropriate filing location.	As needed
10.	CON BI PWI	Follow up per findings and corrective action schedule submitted by the RP. Updates building permits inventory.	As needed

Other Procedural Considerations

- If immediate corrective action is required for a building site and there is no staff onsite, the inspector should use the emergency contact list to contact the RP for prompt response. A copy of the inspection report can be faxed or scanned and emailed to the RP. The yellow copy of the inspection report should be mailed to the RP.

- During the rainy season the SCI will monitor the weather on a daily basis. When there is a storm event predicted at 40% or greater, the SCI will send a "Rain Event Alert" to all CMI staff that could include the following message:

  There is a predicted 40% chance or greater of rain for Saturday night thru Tuesday morning. It looks like the heaviest part of the storm will start on Sunday night. Please continue to work with your job sites to ensure all areas are protected during the storm.
- Each fiscal year, sites on the building permit inventory list will be regularly reviewed as time and resources permit. "High" threat to water quality sites and sources will be treated with priority each year for scheduling inspections until complete.
- After notifying the RP of a violation, the inspector should document the violation and notification in the inspection file. In judging the degree of severity, the inspector may also take into account any history of similar or repeated violations at the site. After the site visit, the inspector should note the type, if any, of additional enforcement required for the site.
- Inspection frequencies for sites on the building permits inventory list are as follows:

Inspection Frequencies by Month

Priority	Minimum Inspections Required												Minimum Wet Season Inspections	Minimum Dry Season Inspections	Minimum Required Inspections
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun			
High	1	1	1	2	2	2	2	2	2	2	1	1	14	5	19
Medium	1	0	1	1	1	1	1	1	1	1	0	1	6	3	9
Low	0	0	1	0	0	1	0	0	1	0	0	1	2	2	4

RWQCB Notifications

As required by the Permit and the JURMP, City staff will document observations of violations and will notify the RWQCB when non-compliance endangers health or the environment. Additionally, the SCI and/or CM will notify the RWQCB when Stop Work Notices or higher enforcement actions are issued. The RWQCB should be notified by email using the form in Appendix D from procedure #CMI-100. The RWQCB must be notified within 24 hours of the time the City becomes aware of the incident. In addition, the City must follow up with a written report of the incident and efforts taken to abate the violation. The CM and SCI are responsible for ensuring notifications are completed as required.

The following RWQCB staff should be notified when required:

Laurie A. Walsh
California RWQCB – San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340
858-467-2970
lwalsh@waterboards.ca.gov

Eric Becker
California RWQCB – San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340
858-467-1785
ebecker@waterboards.ca.gov

In addition the following City staff should also be notified:

Public Works Director
City Engineer
Deputy City Engineer
Public Works Manager – Administration and Environmental Programs
Construction Manager

Recordkeeping and Reporting

The CON and SCI are responsible for maintaining all aspects of the inspection and correspondence hardcopy filing system for the building permit inventory. Inactive building permits will be maintained for a minimum of 3 years. On an annual basis, the CM and SCI will provide a JURMP Annual Report submission to the DCE that includes the following information:

- Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.
- For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.
- A description of the general results of the inspections.
- Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.
- The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

All inspection related forms are located on the shared drive at:

K:/NPDES/Approved Procedures/CMI 110 NPDES Inspections – Building Permits

Equipment List

In preparation for conducting site inspections and investigations, inspectors should have the following equipment:

- Metal clip board
- Inspection and enforcement forms
- Digital camera
- Pens and pencils
- City identification
- Business cards
- Field notebook
- Thomas Guide
- If appropriate, applicable site plans and documents
- Copies of the CMC, Municipal Permit, and General Construction Permit
- If necessary, photos or copies of previous inspection reports

Safety Considerations

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Hazards may exist at the various sites throughout the City. These hazards could include sharp edges, falling objects, flying sparks, chemicals, noise, uneven pavement and a myriad of other potentially dangerous situations. Inspectors must be aware of their environment and take the appropriate precautions to protect themselves from potential hazards and injuries. Personal protective equipment, commonly referred to as "PPE", may be required at certain sites and in certain situations to minimize exposure to a variety of hazards. The following PPE should be available to the inspector during site visits:

- hard hat
- flashlight
- safety glasses
- ear plugs
- steel-toed boots
- storm drain puller
- safety vest
- leather work gloves
- first aid kit

City of Carlsbad		CMI - 120	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION ACTIVE GRADING PERMIT AND CONSTRUCTION SITE INVENTORY LIST MANAGEMENT	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
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CHANGE HISTORY

REV A

04/28/09 Initial creation of document

06/24/09 Completion and approval of Revision A

Publisher: Shawnetta Grandberry			Date: 06-24-09		
Critical Review By	Signature	Date	Approved By	Signature	Date
Shawnetta Grandberry			Casey Arndt		
Approved By	Signature	Date			
John Maashoff			Patrick Vaughan		

Purpose

The purpose of this procedure is to define the process for managing and updating data on the Construction Management and Inspection Department's Active Grading Permit and Construction Site Inventory List (Inventory List). The Inventory List is updated and reviewed for inspection applicability on a monthly basis, within each fiscal year.

Policy

The City of Carlsbad's Construction Management and Inspection Department will maintain an Active Grading Permit and Construction Site Inventory List of sites and sources within its jurisdiction that will be inspected as required by the NPDES permit issued by the Regional Water Quality Control Board of the State of California and the Carlsbad Municipal Code.

Scope

This procedure applies to the **Construction Management and Inspection Department** personnel and consultants at the City of Carlsbad, Public Works Department located in Carlsbad, CA.

Associated Documents

Municipal Storm Water Permit Order No. R9-2007-0001, NPDES No. CAS0108758

City of Carlsbad Jurisdictional Urban Runoff Management Program (JURMP) from March 2008

City of Carlsbad Engineering Inspection Manual

City of Carlsbad Municipal Code Chapter 15.12

City of Carlsbad Municipal Code Chapter 15.16

City of Carlsbad Municipal Code Chapter 6.08

Definitions and Acronyms

BMP	Best Management Practices
CMC	Carlsbad Municipal Code
CM	Construction Manager
ESA	Environmentally Sensitive Area
Dry Season (DS)	May 1 to September 30
GIS	Geographical Information Systems
Inspection	Refers to onsite visit of a construction site by City personnel – please refer to Appendix A of procedure #CMI-100 for a copy of the inspection form.
PWI	Public Works Inspector I/II
JURMP	Jurisdictional Urban Runoff Management Program from March 2008
NPDES	National Pollutant Discharge Elimination System
Permit	Municipal Storm Water Permit Order No. R9-2007-0001, NPDES No. CAS0108758
RWQCB	Regional Water Quality Control Board
SCI	Senior Construction Inspector
SOP	Standard Operating Procedure
SOS	Senior Office Specialist
SWPPP	Storm Water Pollution Prevention Plan
Wet Season (WS)	October 1 to April 30

Overview

The intent of the Inventory List is to satisfy the NPDES requirements as outlined in Section 5 of the JURMP and Section D.2 of the Permit. The City of Carlsbad is required to track, assess, and prioritize active grading permit and construction sites and sources within its jurisdiction to determine their potential threat to water quality, applicability of NPDES regulations, and compliance with the CMC. These assessments include a review and consideration of project size, planned period of grading, proximity of the project to an ESA, past record of compliance by the operators of the construction site, and potential to discharge non-storm water or pollutants. Please refer to JURMP for description of the applicable threat prioritization criteria.

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Inventory Management Procedure:

Step	Who	What	When
1.	SCI	Downloads a Permits Plus report of all active grading and construction sites. Saves the report as an excel file.	Last week of the month
2.	SCI	Reviews the monthly active grading and construction site report and updates the current Inventory List. Updates can include removing duplicates and closed project, prioritizing projects, changing the status of projects, and adding new sites to the Inventory List.	Last week of the month
3.	SCI	New grading permits are screened and prioritized using the prioritization criteria outlined in JURMP and the Permit. GIS is used to verify property ownership, lot size, and proximity to the ESA. Construction sites located within 200 feet of an ESA will also be evaluated to determine if the ESA is a 303(d) listed water body and if the site has the potential to generate pollutants for which that water body is impaired. If the construction site is not located within 200 feet of an ESA, "No" is entered into Column "AG" on the Inventory List.	Last week of the month
4.	SCI	Sorts the Inventory List by "Inspector", "Priority", and "Status". Uses the excel format to develop an updated NPDES inspection list (see procedure #CMI-100 Appendix B). The updated inspection list is compared to the previous month's inspection list for consistency.	Last week of the month
5.	SCI	Provides each PWI with an updated NPDES inspection list (by inspector) and blank inspection forms for sites requiring inspection.	First week of each month
6.	PWI	Conducts the required inspections. Completed NPDES inspection reports are provided to the SCI for the previous month.	First of every month
7.	SCI	Reviews completed NPDES inspection reports from the PWIs for the previous month. White hard copies are sorted by inspector and grading permit number. Yellow copies of inspection reports are mailed as time and resources are available.	Within 30 days of receipt
8.	SCI CM SOS	Verifies accuracy of the inspection reports and updates the Inventory List and Permits Plus database. When a required inspection report is missing, the data will be noted in red for the appropriate month and the inspector and/or CM notified. The SOS may also update the Permits Plus database. The SCI will maintain NPDES inspection reports by month for a period not to exceed one year.	Within 30 days of receipt
9.	SCI SOS	Files and maintains records of all NPDES inspection reports.	Within 30 days of receipt
10.	SCI CM	At the end of each fiscal year (July 1 – June 30), closes and archives the current fiscal year inventory list and creates the new fiscal year inventory list. Please see "End of Year and Beginning of Year" procedures section.	By July 15

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End of Year (EOY) and Beginning of Year (BOY) Procedures

Step	Who	What	When
1.	SCI	Ensures all updates and entries to the Inventory List are accurate and complete.	By July 15
2.	SCI	Saves and moves the EOY (as of June 30) to the appropriate archive folder. The EOY Inventory List will be used to calculate the NPDES inspection activities for the fiscal year.	By July 15
3.	SCI	The EOY inventory is copied, moved to the appropriate archive folder, and renamed for the new fiscal year (BOY). The inventory list is sorted by "Status." Only those grading permits that are "Active" (see Appendix A) will be carried forward to the next fiscal year's Inventory List. All other entries will be deleted.	By July 15
4.	SCI PWI	Reviews each active grading permit to ensure that priority and status is current. The SCI will update the Inventory List to reflect any changes.	By August 1
5.	SCI	The information in Columns "H" and I" will be changed to reflect the expected inspection frequencies for the current fiscal year. A complete fiscal year usually includes 30 wet season weeks and 22 dry season weeks.	By July 15
6.	SCI	The information in Columns "J" through U" will be deleted for the current fiscal year.	**By July 15**
7.	SCI	The name of column "X" will be updated for the current fiscal year.	**By July 15**
8.	SCI	The information in columns "Y" and "Z" will be changed to reflect the expected inspection frequencies for the current fiscal year. See the required "Inspection Frequencies by Month" table found in the ***Other Procedural Considerations*** section.	**By July 15**
9.	SCI	Saves the BOY Inventory List in the appropriate folder.	**By July 15**

Other Procedural Considerations

- If a grading permit is finaled, withdrawn, or the priority changes before the end of the fiscal year, the appropriate inactive months are shaded in columns "J' through "U" on the Inventory List. In addition columns "H", "I", "Y", and "Z" of the Inventory List must be updated to reflected the changes in the frequencies of required inspections.

Inspection frequencies for sites on the Inventory List per fiscal are as follows:

Priority	Minimum Inspections Required												Minimum Wet Season Inspections	Minimum Dry Season Inspections	Minimum Required Inspections
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun			
High	1	1	1	2	2	2	2	2	2	2	1	1	14	5	19
Medium	1	0	1	1	1	1	1	1	1	1	0	1	6	3	9
Low	0	0	1	0	0	1	0	0	1	0	0	1	2	2	4

- The priority of active permits can be changed if the project is completed but not yet finaled. When the priority of an active grading permit changes, columns “H”, “I”, “Y”, and “Z” of the Inventory List must be updated to reflected the changes in the frequencies of required inspections.
- Column headings that are noted in “Red” will remain so and are used for wet season delineation.

Recordkeeping and Reporting

The SCI is responsible for maintaining all aspects of the Inventory List, including information to be entered, changed, or deleted within cells, changes to column headings, definitions, or additions/deletions of columns.

Hard copies of records from “Finaled” and “Withdrawn” files will be maintained for a minimum of 3 years. Finaled “High Threat” sites and sources with a history of compliance problems will be maintained for no less than five years. Previous fiscal year Inventory Lists will be maintained electronically in an “Archive” file on the shared drive.

On an annual basis, the SCI will provide a JURMP Annual Report submission to the CM and DCE that includes the following information:

- Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.
- For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.
- A description of the general results of the inspections.

All Inventory List related information is located on the shared drive at:

K:/NPDES/Approved Procedures/CMI-120 NPDES Active Grading Inventory Management

Appendices

Appendix A: Inventory List Column Headings and Definitions

APPENDIX A

Inventory List Column Headings and Definitions

A. STATUS: Status of grading permit based on information from Permits Plus. Only the following can be entered into this field.
- **Active**: The grading permit has been verified as active and will inspected at the required frequencies by CMI.
- **Finaled**: The grading permit has been closed. The project has been completed and the bonds released. No additional NPDES inspections are required.
- **Withdrawn**: The grading permit application has been withdrawn. No additional NPDES inspections are required until further notice.
- **Expired**: The grading permit has expired and must be renewed before active grading or construction can begin. NPDES inspections are not required until further notice.

B. PRIORITY: The threat to water quality prioritization based on the criteria listed in JURMP and Permit. This field can only be populated with the following responses:
- High
- Medium
- Low

C. PROJECT #: The project number associated with the grading permit. This information can be found in Permits Plus.

D. GRADING PERMIT#: The grading permit number assigned to the project. This number is generated in Permits Plus.

E. INSPECTOR: The name of the inspector assigned to the project.

F. ISSUE DATE: The date the grading permit was issued. This information corresponds with Permits Plus.

G. INACTIVE DATE: The date the grading permit was "Finaled" or "Withdrawn". This information corresponds with Permits Plus.

H. WEEKS ACTIVE – WS: The number of weeks the grading permit is expected to be active during the wet season (WS). For an average fiscal year that number equals 30.

I. WEEKS ACTIVE – DS: The number of weeks the grading permit is expected to be active during the dry season (DS). For an average fiscal year that number equals 22.

J-U. INSPECTIONS CONDUCTED: The total number of inspections conducted for each month of the fiscal year. Those months with the wet season are noted in red. See the ***Other Procedural Considerations*** section for guidance on dealing with permits that are finaled or withdrawn before the end of the fiscal year.

V. TOTAL WS INSPECTIONS: Auto-formatted cell that quantifies the numeric values of columns "M" through "S", the total number of wet season inspection conducted.

W. TOTAL DS INSPECTIONS: Auto-formatted cell that quantifies the numeric values of columns "J" through "L" and columns "T" and "U", the total number of dry season inspections conducted.

X. TOTAL '*FY*' INSPECTIONS: Auto-formatted cell that quantifies the numeric values of columns "V" through "W", the total number of inspections conducted for the fiscal year.

Y. TOTAL WS REQUIRED: The total number of wet season inspections required for the FY. For the minimum required frequencies see the "Inspection Frequencies by Month" table found in the ***Other Procedural Considerations*** section of procedure #CMI-100.

Z. TOTAL DS REQUIRED: The total number of dry season inspections required for the fiscal year. For the minimum required frequencies see the "Inspection Frequencies by Month" table found in the ***Other Procedural Considerations*** section of procedure #CMI-100.

AA. TOTAL REQUIRED: Auto-formatted cell that quantifies the numeric values of columns "Y" through "Z", the total number of required inspections for the fiscal year.

AB. APN: The assessor parcel number associated with the grading permit.

AC. LOCATION: A descriptive physical location of the project.

AD. PROJECT DESCRIPTION: The primary project name as defined by Permits Plus.

AE. CHU: The water body or watershed within the Carlsbad Hydrologic Unit that receives run off from the construction site. Only the following can be entered into this field:

- **904.21:** Buena Vista Lagoon
- **904.31:** Agua Hedionda Lagoon
- **904.40:** Encinas Creek
- **904.51:** Batiquitos Lagoon

AF. ACRES: The approximate size of the construction project.

AG. PROXIMITY: Is the construction site within 200 feet of an ESA (as defined in Attachment C of the Permit), including receiving waters, habitat management areas, wildlife corridors, etc. (as determined by GIS mapping)? The following entries are acceptable in this field:

- Yes: The construction site is located within 200 feet of an ESA.
- No: The construction site is not located within 200 feet of an ESA.

AH. TRIBUTARY TO 303(d) LISTED: Is the site a tributary to a 303(d) listed receiving water (within an ESA buffer) and generates pollutants for which the water body is impaired? The following entries are acceptable in this field:

- Yes: The site discharges to a tributary to a 303(d) listed receiving water and generates pollutants for which the water body is impaired.
- No: The site does not discharge to a tributary to a 303(d) listed receiving water and/or does not generate pollutants for which the water body is impaired.

The following is a list of 303(d) listed water bodies in Carlsbad.

Receiving Waterbody	Pollutant Impairment
Agua Hedionda Creek	Manganese

Receiving Waterbody	Pollutant Impairment
	Selenium
	Sulfates
	TDS
Agua Hedionda Lagoon	Bacteria
	total coliform
	fecal coliform
	enterococcus
	Sedimentation/Siltation
Buena Vista Creek	Sediment Toxicity
Buena Vista Lagoon	Bacteria
	total coliform
	fecal coliform
	enterococcus
	Nutrients
	Sedimentation/Siltation
Pacific Ocean at Buena Vista Creek	Bacteria
Buena Vista Creek	total coliform
Carlsbad Village Drive	fecal coliform
Pine Avenue	enterococcus
Encinitas Creek	Phosphorus
Escondido Creek	DDT
	Mn
	Phosphate
	Se
	Sulfates
	TDS
San Marcos Creek	DDE
	Phosphorus
	Sediment Toxicity

City of Carlsbad

Construction Management and Inspections

September 3, 2008

MEMORANDUM

To: Property Owners/Developers/Contractors - All Active Construction Sites in the City of Carlsbad

From: Shawnetta Grandberry, Senior Construction Inspector, Storm Water Compliance

RAINY SEASON PREPARATION AND STORM WATER COMPLIANCE

The City of Carlsbad (City) would like to take this opportunity to remind you that the rainy season begins on **October 1, 2008**. As you are aware, additional storm water pollution prevention measures are required during the rainy season, which ends on May 1, 2009. Pursuant to Carlsbad Municipal Code (CMC) Chapter 15.16.120, the California Regional Water Quality Control Board (RWQCB) Order 2007-0001, and the City of Carlsbad 2008 Jurisdictional Urban Runoff Management Plan (JURMP) all erosion and sedimentation control measures shall be installed prior to and regularly maintained during the rainy season.

Property Owners/Developers/Contractors at all active construction sites in Carlsbad are required to comply with all applicable storm water regulations and implement BMPs to the maximum extent practicable. It is the City's goal to obtain your voluntary compliance with the applicable regulations and requirements. The following measures are required for all active construction sites during the rainy season:

- **All** exposed disturbed areas must have erosion protection BMPs properly installed. This includes all building pads, unfinished roads, and slopes.
- Perimeter protection and sediment control BMPs will be upgraded, if necessary, to provide sufficient protection from runoff during the rainy season.
- Adequate physical or vegetation erosion control BMPs will be installed and maintained for all completed slopes prior to the start of the rainy season.
- All disturbed areas that are not completed, but that are not being actively graded, must be fully protected from erosion if left for 10 or more days. The ability to install BMP materials in a prompt manner is **NOT** sufficient for these areas. **BMP's will actually need to be installed for these areas.**
- Deployment of physical or vegetation erosion control BMP's will commence as soon as slopes are completed for any portion of the site.
- When a ***Rain Event Action Plan*** is required it must updated on a weekly basis. The plan shall include, in detail, any and all actions to be taken in advance (40% chance or greater) of a rain event in the five (5) day forecast by the National Weather Service. A copy of each updated action plan shall be placed in the project SWPPP.
- All (temporary and permanent) treatment control BMPs must be inspected weekly and prior to a forecasted rain event of greater than 40%.
- Inspections of each site shall be conducted by the responsible party or designee prior to a forecasted event, during and after a rain event, at least bi-weekly during the rainy season, and as necessary to ensure site compliance.
- All construction employees must be strained on the importance of storm water pollution prevention and BMP maintenance prior to the rainy season.
- All construction and grading projects are required to emphasize erosion prevention as the most important measure for keeping sediment on-site during construction. Sediment controls are to be used as a supplement to erosion prevention never as the single or primary method.

The City will continue to conduct scheduled and unscheduled inspections to verify compliance with storm water regulations. Please keep in mind that compliance is dependent on the continued use of BMPs to prevent storm water pollution and the consistent implementation of an employee-training program. Please contact your Project Inspector to review your specific project requirements. Thank you in advance for your cooperation and compliance efforts.

5950 El Camino Real • Carlsbad, CA 92008-3009 • 760-602-2780 •FAX 760-438-4178

City of Carlsbad - Municipal Inventory FY 08-09

AREA NAME	ADDRESS	DESCRIPTION	Status	Activities (see descriptions below)															Pollutants									Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?	Hydrologic Area
				A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances				
ADULT LEARNING PROGRAM PARKING LOT	1207 CARLSBAD VILLAGE DR STE O	PARKING LOT	Moved				X		X						X			X											NO	NO	YES	904.21 (BV)
AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	6425 AMBROSIA LN	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	X	X	X	X	X	X						X			X											YES	NO	YES	904.51 (BA)
BATIQUITOS SEWER LIFT STATION	7382 GABBIANO LN	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											YES	NO	YES	904.51 (BA)
BUENA VISTA SEWER LIFT STATION	2140 JEFFERSON ST	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											YES	YES	YES	904.21 (BV)
CADENCIA PARK	3310 CADENCIA ST	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											YES	NO	YES	904.51 (BA)
CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	2997 GLASGOW DR	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	X	X		X	X	X						X			X											NO	NO	YES	904.31 (AH)
CALAVERA PUMP STATION	3600 BLOCK OF COLLEGE DR	RECLAIMED WATER	Active	X	X						X	X							X										YES	YES	YES	904.31 (AH)
CANNON SEWER LIFT STATION	2301 CANNON RD	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
CARLSBAD RECYCLED WATER FACILITY	6200 AVENIDA ENCINAS	RECLAIMED WATER	Active	X	X	X	X		X		X	X			X			X											NO	NO	YES	904.31 (AH)
CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE	PARKING LOT	Active				X		X						X			X											NO	NO	YES	904.31 (AH)
CARRILLO RANCH AND PARKING LOT	5200 FLYING LC LANE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	X	X		X	X	X						X			X											YES	NO	YES	904.51 (BA)
CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR	PARKING LOT	Active				X		X						X			X											NO	NO	YES	904.21 (BV)
CITY STREETS	CITY WIDE	ROADS	Active						X						X			X											YES	YES	YES	All
COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR	PARKING LOT	Active				X		X						X			X											NO	NO	YES	904.21 (BV)
DOVE LIBRARY PARKING LOT	1775 DOVE LN	PARKING LOT	Active				X		X						X			X											YES	NO	YES	904.51 (BA)
FARADAY CENTER PARKING LOT	1635 FARADAY AV	PARKING LOT	Active				X		X						X			X											YES	YES	YES	904.31 (AH)
FARMERS BUILDING PARKING LOT	FARADAY & EL CAMINO RL	PARKING LOT	Active				X		X						X			X											NO	NO	YES	904.31 (AH)
FIRE STATION 1	1275 CARLSBAD VILLAGE DR	FIRE PROTECTION	Active	X	X		X		X					X	X	X		X											NO	NO	YES	904.21 (BV)
FIRE STATION 2	1906 ARENAL RD	FIRE PROTECTION	Active	X	X		X		X					X	X	X		X											NO	NO	YES	904.51 (BA)
FIRE STATION 3	3701 CATALINA DR	FIRE PROTECTION	Active	X	X		X		X					X	X	X		X											NO	NO	YES	904.21 (BV)
FIRE STATION 4	6885 BATAQUITOS DR	FIRE PROTECTION	Active	X	X		X		X					X	X	X		X											YES	NO	YES	904.51 (BA)
FIRE STATION 5	2540 ORION WY	FIRE PROTECTION	Active	X	X		X		X					X	X	X		X											NO	NO	YES	904.31 (AH)
FIRE STATION 6	3131 LEVANTE ST	FIRE PROTECTION	Active	X	X		X		X					X	X	X		X											NO	NO	YES	904.51 (BA)
FLEET MAINTENANCE FACILITY AND PARKING LOT	2480 IMPALA DR	VEHICLE MAINTENANCE/ PARKING LOT	Active	X	X	X	X	X	X				X	X	X	X	X	X											NO	NO	YES	904.31 (AH)
FOXES LANDING LIFT STATION	4155 HARRISON ST	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD	SEWERAGE SYSTEMS	Active		X						X	X			X		X	X											YES	YES	YES	904.31 (AH)
HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST	PARKING LOT	Active				X		X						X			X											NO	NO	YES	904.31 (AH)
HELEN ALLMAN GIRLS CLUB PARKING LOT	3368 EUREKA PL	PARKING LOT	Active				X		X						X			X											NO	NO	YES	904.31 (AH)
HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	2685 VANCOUVER STREET	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	X	X		X	X	X						X			X											YES	YES	YES	904.21 (BV)

City of Carlsbad - Municipal Inventory FY 08-09

AREA NAME	ADDRESS	DESCRIPTION	Status	Activities (see descriptions below)															Pollutants									Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?	Hydrologic Area
				A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances				
HOLIDAY PARK AND PARKING LOTS	3200 PIO PICO DR	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	X	X		X		X						X			X											NO	NO	YES	904.31 (AH)
HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											NO	NO	YES	904.21 (BV)
HOSP GROVE PARK AND PARKING LOT	JEFFERSON & MONROE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active				X		X						X			X											YES	YES	YES	904.21 (BV)
HOUSING/REDEVELOPMENT OFFICE PARKING LOT	2965 ROOSEVELT ST B	PARKING LOT	Excluded				X		X						X			X											NO	NO	YES	904.21 (BV)
KNOTS SEWER LIFT STATION	501 KNOTS LN	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											NO	NO	YES	904.51 (BA)
LA COSTA CANYON PARK AND PARKING LOT	3020 PUEBLA ST	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	X	X		X		X						X			X											YES	NO	YES	904.51 (BA)
LA GOLONDRINA SEWER LIFT STATION	2516 LA GOLONDRINA ST	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											YES	NO	YES	904.51 (BA)
LAGUNA RIVIERA PARK	4900 KELLY DR	AMUSEMENT AND RECREATION SERVICES	Active	X	X		X		X						X			X											YES	YES	YES	904.31 (AH)
LANDSCAPE MAINTENANCE AND REPAIR	CITYWIDE	TRIMMING, CUTTING, FERTILIZING,	Active				X																						YES	YES	YES	All
M&O OPERATIONS YARD AND PARKING LOT	5950 EL CAMINO REAL	WATER SUPPLY/ MAINTENANCE YARD/ PARKING LOT	Active	X	X	X	X	X	X	X			X	X	X		X	X											YES	YES	YES	904.31 (AH)
MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	5203 SUNNY CREEK RD	WATER SUPPLY	Active	X	X	X	X		X		X				X			X	X										YES	YES	YES	904.31 (AH)
MAGEE PARK AND PARKING LOT	258 BEECH AVE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	X	X		X		X						X			X											NO	NO	YES	904.21 (BV)
MAXTON BROWN PARK	500 LAGUNA DR	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											YES	YES	YES	904.21 (BV)
MS4 MAINTENANCE	CITYWIDE	INSPECTION, CLEANING	Active																										YES	YES	YES	All
MUNICIPAL SEPARATE STORM SEWER SYSTEM	CITY WIDE	MS4	Active															X											YES	YES	YES	All
OAK OPERATIONS YARD AND PARKING LOT	405 OAK AV	MAINTENANCE YARD AND PARKING LOT	Active	X	X	X	X	X	X				X	X	X		X	X											NO	NO	YES	904.21 (BV)
PARKS MAINTENANCE/STORAGE/PARKING LOT	1166 CARLSBAD VILLAGE DR	MAINTENANCE YARD AND PARKING LOT	Active	X	X	X	X	X	X				X	X	X		X	X											NO	NO	YES	904.21 (BV)
PINE PARK AND PARKING LOT	3333 HARDING ST	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	X	X		X		X						X			X											NO	NO	YES	904.31 (AH)
POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	6600 HIDDEN VALLEY RD	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	X	X	X	X	X	X						X			X											NO	NO	YES	904.40 (EN)
POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											YES	NO	YES	904.51 (BA)
POWER WASHING	CITYWIDE	SIDEWALKS, STREETS, GRAFFITTI REMOVAL	Active																										YES	YES	YES	All
RAILROAD DEPOT VISITORS CENTER PARKING LOT	400 CARLSBAD VILLAGE DR	PARKING LOT	Active				X		X						X			X											NO	NO	YES	904.21 (BV)
RESERVOIR C	CALAVERA DR	WATER SUPPLY	Active																X										YES	YES	YES	904.31 (AH)
RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR	WATER SUPPLY	Active				X				X								X										YES	YES	YES	904.31 (AH)
RESERVOIR LA COSTA HI	ALGA RD	WATER SUPPLY	Active								X								X										YES	NO	YES	904.51 (BA)
RESERVOIR LA COSTA LO	ALGA RD	WATER SUPPLY	Active				X				X								X										YES	NO	YES	904.51 (BA)
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	2560 ORION WY	PUBLIC ORDER AND SAFETY	Active	X	X		X		X						X			X											YES	YES	YES	904.31 (AH)

City of Carlsbad - Municipal Inventory FY 08-09

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				A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances				
SAND SHELL SEWER LIFT STATION	613 SAND SHELL	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											YES	NO	YES	904.51 (BA)
SANITARY SEWAGE COLLECTION SYSTEM	CITY SERVICE AREA	SEWERAGE SYSTEMS	Active		X						X	X					X	X											YES	YES	YES	All
SANITARY SEWER MAINTENANCE AND OPERATIONS	CITY SERVICE AREA	JETTING, RODDING, LINE REPLACEMENT	Active									X																	YES	YES	YES	All
SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											YES	YES	YES	904.21 (BV)
STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	3420 CAMINO DE LOS COCHES	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	X	X	X	X	X	X						X			X											NO	NO	YES	904.51 (BA)
SWIM AND RECREATION COMPLEX	3401 MONROE ST	AMUSEMENT AND RECREATION SERVICES	Active	X	X	X	X	X		X					X			X											NO	NO	YES	904.21 (BV)
TAP PUMP STATION	6400 BLOCK OF EL CAMINO REAL	WATER SUPPLY	Active	X			X				X								X										YES	YES	YES	
TERRAMAR SEWER LIFT STATION	300 CANNON RD	SEWERAGE SYSTEMS	Active		X						X	X			X		X	X											YES	YES	YES	904.31 (AH)
VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST	SEWERAGE SYSTEMS	Active		X	X					X	X			X		X	X											YES	YES	YES	904.21 (BV)
VILLAS SEWER LIFT STATION	2860 WINTHROP AV	SEWERAGE SYSTEMS	Active		X						X	X			X		X	X											YES	YES	YES	904.21 (BV)

Activities:	
A. Building Maintenance and Repair	I. Sanitary Sewer Maintenance/ Operations
B. Equipment Storage	J. Vehicle and Equipment Fueling
C. Hazmat Storage	K. Vehicle and Equipment Maintenance
D. Landscape Maintenance and Repair	L. Vehicle Parking
E. Material Storage	M. Vehicle and Equipment Washing
F. Parking Lot Maintenance	N. Waste Management, Hazardous
G. Pool/Fountian Cleaning/Ser	O. Waste Management, Non-hazardous
H. Pump Maintenance, Replacement	P. Water Operations and Maintenance

City of Carlsbad - Municipal Inventory FY 08-09

AREA NAME	ADDRESS	DESCRIPTION	Status	Activities (see descriptions below)															Pollutants									Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?	Hydrologic Area
				A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances				
ADULT LEARNING PROGRAM	1207 CARLSBAD VILLAGE DR STE O	OFFICE BUILDING	Moved	X														X											NO	NO	NO	904.21 (BV)
ANN D. L'HEUREUX MEMORIAL DOG PARK	2700 BLOCK OF CARLSBAD VILLAGE DR	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											NO	NO	NO	904.21 (BV)
ARTS OFFICE	2955 ELMWOOD ST	MANAGEMENT SERVICES	Active	X														X											NO	NO	NO	904.21 (BV)
BEACH ACCESSES	NORTH OF TAMARACK	AMUSEMENT AND RECREATION SERVICES	Active				X											X											YES	NO	NO	
BEACH BLUFF TRIANGLE/PARK	CARLSBAD BLVD AT PINE	AMUSEMENT AND RECREATION SERVICES	Active				X											X											YES	NO	NO	
BRESSI RANCH RECLAIMED PUMP STATION	BRESSI RANCH	RECLAIMED WATER	Active						X		X	X			X				X										NO	NO	NO	904.51 (BA)
BRESSI RANCH WATER PUMP STATION	BRESSI RANCH	WATER SUPPLY	Active						X		X				X				X										NO	NO	NO	904.51 (BA)
BUENA VISTA WATER PUMP STATION AND RESERVOIR	1400 BLOCK BUENA VISTA DRIVE	WATER SUPPLY	Active		X						X							X	X										NO	NO	NO	904.21 (BV)
CALAVERA TREATMENT PLANT	2400 TAMARACK AV	INACTIVE SEWERAGE SYSTEMS	Inactive																										YES	NO	NO	904.21 (BV)
CANNON PARK	300 BLOCK OF CANNON	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											NO	NO	NO	904.31 (AH)
CAR COUNTRY PARK	PASEO DEL NORTE	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											NO	NO	NO	904.31 (AH)
CARLSBAD SENIOR CENTER	799 PINE AVE	AMUSEMENT AND RECREATION SERVICES	Active	X														X											NO	NO	NO	904.31 (AH)
CENTRO DE INFORMACION	3330 HARDING ST	LIBRARIES	Active	X														X											NO	NO	NO	904.31 (AH)
CHASE FIELD	3349 HARDING ST	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											NO	NO	NO	904.31 (AH)
CITY HALL FACILITY	1200 CARLSBAD VILLAGE DR	GENERAL ADMINISTRATION	Active	X														X											NO	NO	NO	904.21 (BV)
COLE LIBRARY	1250 CARLSBAD VILLAGE DR	LIBRARIES	Active	X														X											NO	NO	NO	904.21 (BV)
DOVE LIBRARY MAIN BRANCH & ADMINISTRATION	1775 DOVE LN	LIBRARIES	Active	X														X											YES	NO	NO	904.51 (BA)
EL FUERTE PARK	600 BLOCK OF EL FUERTE ST	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											NO	NO	NO	904.51 (BA)
ELLERY WATER PUMP STATION AND RESERVOIR	2300 BLOCK OF JANIS WY	WATER SUPPLY	Active		X		X				X							X	X										NO	NO	NO	904.21 (BV)
FARADAY CENTER	1635 FARADAY AV	MANAGEMENT SERVICES	Active	X														X											YES	NO	NO	904.31 (AH)
FARMERS BUILDING	FARADAY & EL CAMINO RL	OFFICE BUILDING	Active	X														X											NO	NO	NO	904.31 (AH)
HARDING COMMUNITY CENTER	3096 HARDING ST	AMUSEMENT AND RECREATION SERVICES	Active	X			X		X						X			X											NO	NO	NO	904.31 (AH)
HELEN ALLMAN GIRLS CLUB	3368 EUREKA PL	AMUSEMENT AND RECREATION SERVICES	Active	X														X											NO	NO	NO	904.31 (AH)
HIRING CENTER	5958 EL CAMINO REAL	OFFICE BUILDING	Active	X														X											NO	NO	NO	904.31 (AH)
HOSP GROVE-HI NOON ROTARY/PICNIC TABLE/TRAIL	2630 MONROE ST	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											NO	NO	NO	904.21 (BV)
HOUSING/REDEVELOPMENT OFFICE	2965 ROOSEVELT ST B	URBAN AND COMMUNITY DEVELOPMENT	Active	X														X											NO	NO	NO	904.21 (BV)
LAS PALMAS OFFICES	2075 LAS PALMAS DR	GENERAL ADMINISTRATION	Active	X														X											NO	NO	NO	904.40 (EN)
LEVANTE FIELD/PARK	3031 LEVANTE ST	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											NO	NO	NO	904.51 (BA)
LIBRARY STORAGE	2075 Q CORTE DEL NOGAL 9	OFFICE BUILDING	Active	X														X											NO	NO	NO	904.40 (EN)
LOWER FARADAY SEWER LIFT STATION	1507 FARADAY AV	INACTIVE SEWERAGE SYSTEMS	Inactive																										YES	NO	NO	904.40 (EN)
NON-EMERGENCY FIRE FIGHTING FLOWS	CITYWIDE	TRAINING EXCERCISES, SPRINKLER DISCHARGES	Active																										NO	NO	NO	All

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				A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances				
OAK PARK	PIO PICO DRIVE	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											NO	NO	NO	904.21 (BV)
PIO PICO PARK	2600 PIO PICO	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											NO	NO	NO	904.21 (BV)
RAILROAD DEPOT VISITORS CENTER	400 CARLSBAD VILLAGE DR	VISITOR CENTER	Active	X														X											NO	NO	NO	904.21 (BV)
RESERVOIR B	END OF BLUFF DR	WATER SUPPLY	Active																X										NO	NO	NO	904.31 (AH)
RESERVOIR D-1, D-2	6700 BLACK RAIL RD	RECLAIMED WATER	Active	X			X		X		X	X			X				X										NO	NO	NO	904.40 (EN)
RESERVOIR D-3	6580 BLACK RAIL ROAD	WATER SUPPLY	Active	X			X		X		X				X				X										NO	NO	NO	904.40 (EN)
RESERVOIR E	HIDDEN VALLEY	WATER SUPPLY	Active																X										NO	NO	NO	904.40 (EN)
RESERVOIR PAJAMA	PAJAMA DR	WATER SUPPLY	Active	X	X	X	X		X		X				X				X										NO	NO	NO	904.21 (BV)
RESERVOIR SANTA FE I	PYRENEES	INACTIVE WATER SUPPLY	Active	X			X												X										NO	NO	NO	904.40 (EN)
RESERVOIR SANTA FE II	PAR & BUSINESS PARK	WATER SUPPLY	Active								X								X										NO	NO	NO	904.40 (EN)
RESERVOIR SKYLINE	SKYLINE DR	WATER SUPPLY	Active				X				X								X										NO	NO	NO	904.31 (AH)
SEA WALL	CARLSBAD BLVD	AMUSEMENT AND RECREATION SERVICES	Active						X									X											NO	NO	NO	
SPECIAL EVENTS	CITYWIDE	STREET FAIR, ETC.	Active																										NO	NO	NO	All
SPINNAKER HILL BANK	1700 BATIQUITOS DR	OPEN SPACE	Active				X																						YES	NO	NO	904.51 (BA)
STREET MAINTENANCE (CLEANING/REPAIR)	CITYWIDE	POT HOLES, OVERLAYS, STRIPING	Active																										NO	NO	NO	All
TRAIL MAINTENANCE	CITYWIDE	EROSION REPAIR, PET WASTE	Active																										NO	NO	NO	All
UPPER FARADAY SEWER LIFT STATION	1711 FARADAY AV	INACTIVE SEWERAGE SYSTEMS	Inactive																										NO	NO	NO	904.40 (EN)
WATER OPERATIONS AND MAINTENANCE	CITY SERVICE AREA	FLUSHING, REPAIRS	Active																X										NO	NO	NO	All
ZONE 5 PARK	CAMINO HILLS AND FARADAY	AMUSEMENT AND RECREATION SERVICES	Active				X		X						X			X											NO	NO	NO	904.31 (AH)

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FY 08-09
City of Carlsbad
Special Events Inventoy

PRIORITY	EVENT TYPE	EVENT NAME	BEGIN DATE	END DATE	INSPECTION REQUIRED	PRE-EVENT INSPECTION DATE	POST-EVENT INSPECTION DATE	CHU	PROXIMITY TO ESA	ADDITIONAL CONTROLS REQUIRED	Potential Pollutants								
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
High	Concert	TGIF Jazz in the Parks	07/04/2008	07/04/2008	Yes	07/04/2008	07/08/2008	904.51	No	Yes	X	X							X
Low	Fireworks	Four Seasons Aviara Fireworks	07/04/2008	07/04/2008	No			904.51	No	No			X						
Low	Other	Legoland Fireworks	07/04/2008	07/04/2008	No			904.31	No	No									X
Low	Other	La Costa Resort Fireworks	07/05/2008	07/05/2008	No			904.51	Yes	No		X	X						X
High	Concert	TGIF Jazz in the Parks	07/11/2008	07/11/2008	Yes	0711/08	07/11/2009	904.51	No	Yes									
High	Exhibit	All American Car Show	07/12/2008	07/12/2008	Yes	07/12/2008	07/12/2008	904.21	No	Yes		X	X		X				X
High	Atheletic	Carlsbad Triathlon	07/13/2008	07/13/2008	Yes	07/11/2008	07/13/2008	904.31	Yes	Yes	X	X			X				X
High	Concert	TGIF Jazz in the Parks	07/18/2008	07/18/2008	Yes	07/18/2008	07/18/2008	904.51	No	Yes	X	x			x				x
High	Concert	TGIF Jazz in the Parks	07/25/2008	07/25/2008	Yes	07/25/2008	07/25/2008	904.51	No	Yes	X	x			x				x
High	Concert	TGIF Jazz in the Parks	08/01/2008	08/01/2008	Yes	08/01/2008	08/01/2008	904.51	No	Yes	X	x			x				x
High	Concert	TGIF Jazz in the Parks	08/08/2008	08/08/2008	Yes	08/08/2008	08/08/2008	904.51	No	Yes	X	x			x				x
High	Festival	CVBA's Art in the Village	08/10/2008	08/10/2008	Yes	08/10/2008	08/10/2008	904.21	No	Yes	x	x			x				x
High	Concert	TGIF Jazz in the Parks	08/15/2008	08/15/2008	Yes	08/15/2008	08/15/2008	904.31	No	Yes	X	x			x				x
High	Concert	TGIF Jazz in the Parks	08/22/2008	08/22/2008	Yes	08/22/2008	08/22/2008	904.31	No	Yes	x	x			x				x
Low	Festival	Carlsbad City Library Learning Center Opening Celebration	08/23/2008	08/23/2008	No			904.21	No	No	x	x	x		x				x
Medium	Atheletic	MS 3-Day Challenge Walk	09/04/2008	09/05/2008	No			904.21	No	No									X
Medium	Exhibit	Carlsbad Chamber of Commerce Business Expo	09/17/2008	09/17/2008	No			904.21	Yes	Yes	X	X			X				X
High	Festival	ArtSplash	09/20/2008	09/21/2008	Yes	09/20/2008	09/21/2008	904.31	No	Yes		x			x				x
Medium	Festival	Oktoberfest	10/04/2008	10/04/2008	Yes	10/04/2008	10/04/2008	904.31	No	Yes	x	x							x
Low	Parade	Carlsbad HS Lancer Day Parade	10/10/2008	10/10/2008	No			904.31											
Medium	Festival	Carlsbad Fire Department Open House	10/11/2008	10/11/2008	Yes	10/11/2008	10/11/2008	904.31	No	Yes		X							x
Medium	Atheletic	MS Bay to Bay Bike Tour	10/11/2008	10/12/2008	Yes	10/11/2008	10/12/2008	904.21	No	Yes	X	X	X		X				X
Low	Parade	La Costa Canyon HS Homecoming Parade	10/23/2008	10/23/2008	No			904.51	No	No		X							X
High	Festival	Carlsbad Village Fall Street Faire	11/02/2008	11/02/2008	Yes	11/02/2008	11/02/2008	904.21	No	Yes	X	X	X		X				X
Low	Other	Legoland Fireworks	12/01/2008	12/01/2008	No			904.31	No	No									X
Low	Other	Legoland Fireworks	12/20/2008	12/31/2008	No			904.31	No	No									X
High	Atheletic	Carlsbad Marathon	01/25/2009	01/25/2009	Yes	01/25/2009	01/25/2009	904.31	Yes										
High	Atheletic	Carlsbad Junior	04/04/2009	04/04/2009	Yes	04/04/2009	04/04/2009	904.21	No	Yes		X							X
High	Atheletic	Carlsbad 5000	04/05/2009	04/05/2009	Yes	04/05/2009	04/05/2009	904.21	No	Yes		X							X
Low	Festival	Eggstravaganza	04/11/2009	04/11/2009	no			904.31	No	No									
Medium	Parade	March of Dimes March for Babies	04/18/2009	04/18/2009	No			904.31	yes	Yes									x
High	Festival	Carlsbad Village Spring Street Faire	05/03/2009	05/03/2009	Yes	05/03/2009	05/03/2009	904.21	No	Yes	X	X	X		X				X
Medium	Atheletic	Police Officers' Memorial Run	05/16/2009	05/16/2009	No			904.31	No	No		X							X
Low	Atheletic	Law Enforcement Torch Run for Special Olympics	06/01/2009	06/01/2009	no			904.51	No	No									X
Medium	Parade	Cystic Fibrosis Foundation's Great Strides Walk	06/14/2009	06/14/2009	No			904.21	No	Yes		X							X
High	Concert	TGIF Jazz in the Parks	06/19/2009	06/19/2009	Yes	06/19/2009		904.51	No	Yes	X	X	X		X				X
High	Concert	TGIF Jazz in the Parks	06/26/2009	06/26/2009	Yes	06/26/2009		904.51	No	Yes	X	X	X		X				X

Storm Water Compliance Inspections

The City of Carlsbad has developed an inventory of special events. These special events have been prioritized according to type of event, number in attendance, proximity to the nearest water body, and potential threat to water quality. Based on this prioritization, the City will be conducting storm water compliance inspections of most **special events** within the City. These compliance inspections will include a pre-event inspection where storm water BMPs are evaluated. An event inspection is required to determine the effectiveness of BMPs, and a post-event inspection to ensure the site is properly cleaned. Compliance inspections may also include recommendations for additional measures that may be required to comply with the storm water regulations. Please note that all special events in the City of Carlsbad are required to implement all of the minimum special event BMPs and comply with all applicable regulations outlined in the Carlsbad Municipal Code.

City of Carlsbad
5950 El Camino Real
Carlsbad, CA 92008

Sanitary Sewer vs. Storm Drain What's the difference?

The water that drains down a sink or toilet flows to the sanitary sewer and is treated at a wastewater treatment plant before being discharged to the ocean. The storm drain system, on the other hand, is designed to carry rainwater away from streets, parking lots, and driveways to help prevent flooding during rain events. Water entering the storm drain system does not receive any treatment and flows directly to our creeks, lagoons, and ocean.

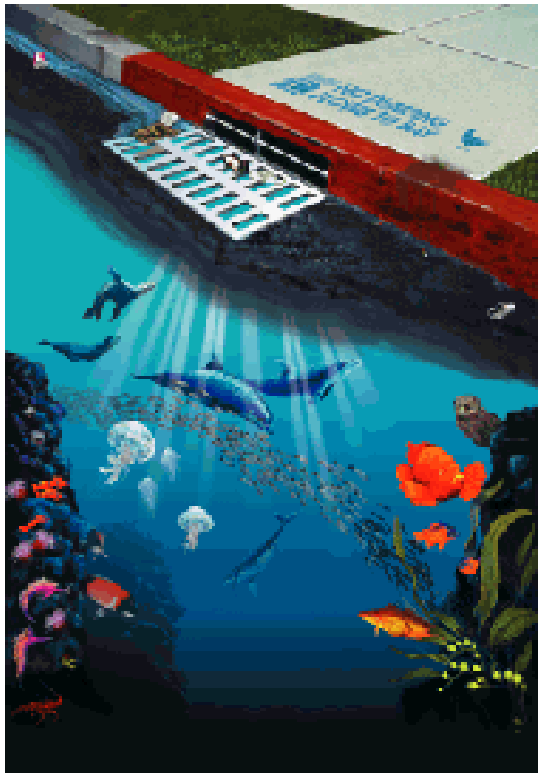

Construction Management and Inspection
760-602-2780

Best Management Practices

SPECIAL EVENTS

City of Carlsbad Storm Water Compliance Guidelines for Special Events

Only Rain in the Storm Drain!

Preventing Pollution Is Up To US!

Did you know that storm drains are NOT connected to sanitary sewer systems or other treatment plants? As rainfall flows over the ground, it picks up a variety of pollutants that flow directly to our creeks, lagoons, and ocean.

Special Event Pollutants o

- Sediments
- Metals
- Detergents
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

Best Management Practices Work!

Best Management Practices (BMPs) are procedures and practices that all special event organizers **are required** to implement to prevent pollutants from entering our storm drains. Once sources of pollution have been identified, the next step is to select BMPs that eliminate or reduce storm water pollution. Storm Water Compliance staff can work with you to develop BMPs for your specific special event.

Protection for All Seasons

Even when rain is not expected, event organizers are required to implement the designated BMPs. Depending on the size, location, number of participants, and other relevant factors, Storm Water Pollution Prevention Plan (SWPPP) may need to be developed. The SWPPP is intended to help demonstrate that appropriate measures are being actively implemented before, during, and after the event to reduce and prevent pollutants from leaving the event venue. The SWPPP must be approved by the City prior to Special Event Permit issuance.

Good House Keeping

- **Use dry clean-up methods first!** Never use a water hose or pressure washing system to clean up spills. Use mops, brooms, or wire brushes to clean sidewalks, pavement, and other impervious surfaces. Wash water must be disposed of to the sanitary sewer and never the storm drain.
- Minimize the use of cleaning solutions and chemical agents. Dispose of waste properly.
- Keep site free of litter. Place trash and recycling receptacles around the site to minimize litter.

Preventive Maintenance

- Inspect equipment and vehicles frequently and clean up leaks and spills immediately.
- Prior to the event, locate and protect all drainage points using storm drain protection devices such as sand bags, fabric filters, berms, containment booms, etc.
- Label or place signs at, around, or adjacent to storm drains with the following wording: *"No Dumping"* or other pollution prevention message.
- Regularly inspect storm drains during the event to prevent pollutants from accumulating.

Waste Management

- Reduce, Reuse, Recycle.
- Frequently inspect trash and recycling receptacles to ensure they do not overflow. Place trash inside dumpsters or plastic bags until it can be removed.
- Dumpsters must be kept closed when not in use.
- Never place liquid waste, leaky bags, or hazardous waste in dumpsters or trash bins.

Materials Storage and Handling

- Store materials in covered areas not exposed to rain.
- Keep outdoor storage areas clean.
- Clean around stored materials so that pollutants do not accumulate.

Food Preparation

- Food vendors must have spill kits in or adjacent to their work area. Spill kits include: towels, kitty litter, and/or clean-up materials. All spilled materials must be promptly cleaned up and disposed of properly.

Temporary Relief Stations

- Relief stations must be placed away from locations that have the potential to impact the storm drain system.
- All relief stations are required to have a secondary containment or additional BMPs to contain possible overflows.

Staff and Vendor Training

- Discuss and distribute information about storm water pollution prevention during staff (including contractor) training and vendor registration.

Post Event Clean Up

- All streets, sidewalks, and public areas must be cleaned (sweeping, litter pickup, etc.) and returned to the pre-event condition.
- Remove temporary public art (chalk, paint, charcoal, clay, etc) using dry clean-up methods only.

- If a street sweeper will be used , ensure they are onsite promptly after the event.
- Assign an appropriate number of staff to promptly and adequately clean-up after the event.
- After the site has been cleaned, storm drain containment and protection devices must be removed.

For more information or assistance, please call 760-602-2780

SPECIAL EVENTS

Inspection Report

Pursuant to CMC 15.12.100

Inspector:		Date		Season		Priority	
Event Name			Event Type				
Event Location			Event Address				
Contact Name			Contact Phone				
Weather Conditions	☐ Heavy Rain ☐ Light Rain ☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain Expected at ☐☐☐☐ chance						

PRE-EVENT (1)									POST-EVENT (2)								
Time:	NEEDS								NEEDS								Time:
SOURCE	N/A	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	N/A	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	COMMENTS
Solid Waste Storage and Disposal																	
Waste Containers																	
Grease Storage																	
Recycling Containers																	
Disposal Areas																	
Vehicles and Heavy Equipment																	
Washing Area																	
Spill Response																	
Storage Area																	
Outdoor Materials Handling and Storage																	
Storage Tanks																	
Other Liquid Containers																	
Equipment Storage																	
Food Preparation and Eating Areas																	
Spill Kits																	
Food Disposal																	
Eating Areas																	
Grounds Maintenance and Housekeeping																	
Storm Drains																	
Parking lots																	
Staff/Vendor Training and SWPPP																	
SWPPP																	
Training																	
Portable Restrooms																	
Storage Area																	

OBSERVATIONS

❒ **No violations observed during the inspection.**	❒ **No violations observed during the inspection.**
❒ **Violations observed during the inspection**	❒ **Violations observed during the inspection**
❒ **Implement Corrective Actions As Required Below**	❒ **Implement Corrective Actions As Required Below**

CORRECTIVE ACTION REQUIRED: ☐ Photos Taken

1	2		1	2	
☐	☐	Prevent trash/recycling from overflowing.	☐	☐	Sweep up trash and debris.
☐	☐	**Immediately** clean up oil/grease spills and leaks.	☐	☐	**Immediately** discontinue outdoor washing or hosing.
☐	☐	Post-event street sweeping required.	☐	☐	Dumpsters and trash receptacles must be covered during rain events.
☐	☐	Provide immediate protection for storm drain inlets.	☐	☐	Provide spill kit(s) in required areas.
☐	☐	Clean in and around storm drains.	☐	☐	Provide secondary containment for portable restroom(s).
☐	☐	Train staff, vendors, and participants on pollution prevention.			

Other _____

Implement corrective actions by_____. A City Inspector will return to verify that corrective actions implemented as required. If you have any questions or comments, please contact the Storm Water Inspector at 760-602-2780 x7111.

Inspector Signature:	Received By ☐ Please Print	Received By - Signature ☐ Mailed	Date

EVENT SUMMARY

PRE-EVENT	POST-EVENT

IMPROVEMENTS AND RECCOMENDATIONS

ADDITIONAL INFORMATION

Potential Pollutants	☐ **Bacteria** ☐ **Gross Pollutants** ☐ **Metals** ☐ **Nutrients** ☐ **Oil and Grease** ☐ **Organics** ☐ **Pesticides** ☐ **Sediments** ☐ **Trash** ☐ **Hazardous Materials** ☐ **Other**		
Enforcement Required	☐ Verbal Warning ☐ Written Warning ☐ Notice of Violation ☐ Stop Work Order ☐ Charge Back ☐ Administrative Citation/Fine ☐ Referred for Action		
BMP Assessment (circle one)	**5 4 3 2 1**	**Knowledge Assessment (circle one)**	**5 4 3 2 1** ☐ **Contact not available**

Comments/Notes

Carlsbad Municipal Facility Inspections - Corrective Actions FY 08-09

Tier	Facility	Corrective Action(s)	BMPs
1	AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	Keep pervious surfaces free of sediment and organic debris to maximum extent practicable.	Weekly scheduled sweeping, blowing, and raking underway
		Consider the addition of directional flow arrows to site map in SWPPP	SWPPP has been revised to show directional arrows indicating water flow
1	CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	Consider providing lids for trash cans in picnic area.	All metal cans removed from Park site
1	CARLSBAD RECYCLED WATER FACILITY	Keep discharge locations free of organic debris and sediment to maximum extent practicable.	Periodic site inspections conducted.
		Prevent over irrigation to the maximum extent practicable	Adjustments made by landscape company
1	FIRE STATION 1	Control erosion from landscaped areas to MEP	Adjustments made with irrigation timer on 06/08/09
		Provide annual training &/or update SWPPP with training	Training records placed in station SWPPP on 05/20/09
1	FIRE STATION 2	Provide annual training &/or update SWPPP with training	Training records placed in station SWPPP on 05/20/09
1	FIRE STATION 3	Keep parking area and catch basins free of sediment and debris to MEP	Noted on station daily maintenance routine
		Provide annual training &/or update SWPPP with training	Training records placed in station SWPPP on 05/20/09
1	FIRE STATION 4	Keep outdoor areas free of sediment and debris to MEP	Noted on station daily maintenance routine
		Promptly treat any spills	Noted on station daily maintenance routine
		Provide annual training &/or update SWPPP with training	Training records placed in station SWPPP on 05/20/09
1	FIRE STATION 5	Ensure no water from washing activities is discharging to the storm drain. Consider containing and collecting wash water closer to the wash area before it reaches the storm drains, rather than trying to redirect the water around the storm drains with sandbags as it flows across the site.	Additional sandbags set up to contain water before it reaches the storm drain inlet. Water can then evaporate or be removed by personel.
		Ensure storm water training is provided at least once a year and keep logs of employees who attended training in SWPPP	Training records placed in station SWPPP on 05/20/09
		Keep the dumpster area free of spills and debris	Noted on station daily maintenance routine
		Follow-up Inspection	Completed
1	FIRE STATION 6	Ensure storm water training is provided at least once a year and keep logs of employees who attended training in SWPPP	Training records placed in station SWPPP on 05/20/09
1	FLEET MAINTENANCE FACILITY AND PARKING LOT	Ensure storm water training is provided at least once a year and keep logs of employees who attended training in SWPPP. Provide an updated site map in the SWPPP.	Training is now in calendar and training schedule, attendance sheets are ready and placed in SWPPP, site map updates are in processto reflect all changes to the area
		Prevent fluids from vehicles and equipment in need of repair from contacting pavement to maximum extent practicable and treat vehicles/equipment and spills promptly.	The two fresh fluid spills were cleaned up after vehicle was moved into shop for service (both areas were aprox 10" dia), some area spots were from auctioned units that leaked before last years inspection, treatment of those areas is on going.
		Control erosion along eastern border of site to maximum extent practicable	Gravel bags are placed at area leading to the drain path to aid in erosion control where the curbing is broken and allows silt into parking area.
		Ensure that any spills from loading/ unloading activities are promptly addressed.	Promptly addressing spills will be topic items in daily practices for tailgate and safety meetings.
		Keep site free of sediment and debris accumulation, especially around storage areas to the maximum extent practicable.	Metal storage area is to be cleaned and transported on 05/21/09, box and debris near roof drain are moved out of drain area

Carlsbad Municipal Facility Inspections - Corrective Actions FY 08-09

Tier	Facility	Corrective Action(s)	BMPs
1	LANDSCAPE MAINTENANCE AND REPAIR	No corrective actions	N/A
1	M&O OPERATIONS YARD AND PARKING LOT	Keep pavement free of vehicle and equipment leaks by implementing proper BMPs until maintenance can be performed.	The vehicle has been sent outto auction and staff is trained to address spills.
		Update the facility s SWPPP and site map to reflect recent BMP additions.	The one item was added to the map.
1	MAERKLE DAM RESERVOIR/PUMP/ CHLORINATION STAT	Keep discharge locations free of sediment and debris to the maximum extent practicable.	Sediment & organic debris removed from ditch 06/09
		Ensure structural BMPs are regularly inspected and maintained as needed.	Gravel bags replaced.
		Implement appropriate material storage BMPs for all stockpiles onsite.	Responsible contractor removed pile and brushed away concrete staining.
		Ensure no water from washing activities is discharging to the MS4.	Contractor removed hose and wash down area to an approved site.
		Follow-up Inspection	Completed
1	MS4 MAINTENANCE	No corrective actions	N/A
1	OAK OPERATIONS YARD AND PARKING LOT	No corrective actions	N/A
1	PARKS MAINTENANCE/STORAGE/ PARKING LOT	No corrective actions	N/A
1	POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	Consider providing cover for trash cans in lower soccer field area.	Trash lids supplied for cans
		Consider adding directional flow arrows to SWPPP.	SWPPP has been revised to show directional arrows indicating water flow
1	POWER WASHING	No corrective actions	N/A
1	SANITARY SEWER MAINTENANCE AND OPERATIONS	No corrective actions	N/A
1	STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	Consider providing cover for trash bins in picnic areas.	Lids provided for trash cans
1	SWIM AND RECREATION COMPLEX	Consider adding directional flow arrows to the facility s site map.	SWPPP has been revised to show directional arrows indicating water flow
		Keep parking area and catch basins free of sediment and debris to maximum extent practicable.	Regularly scheduled sweeping, blowing, and raking underway
		Prevent irrigation water from discharging to the storm drain to the maximum extent practicable.	Irrigation controller monitored to prevent runoff
2	CADENCIA PARK	Consider providing cover for trash can at playground area.	Trash lid provided
2	CALAVERA PUMP STATION	No corrective actions	N/A
2	CARRILLO RANCH AND PARKING LOT	Keep all discharge locations free of sediment and debris to the maximum extent practicable.	Areas inspected weekly, cleaned as needed.
		Control erosion along slopes to maximum extent practicable.	Straw wattles installed to minimize runoff
		Maintain structural BMPs as needed.	Structural BMP's repaired as needed
2	HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	Ensure structural BMPs are installed properly as needed to prevent debris from entering catch basins to maximum extent practicable.	Rock bags re-installed around perimeters as needed

Carlsbad Municipal Facility Inspections - Corrective Actions FY 08-09

Tier	Facility	Corrective Action(s)	BMPs
2	HOLIDAY PARK AND PARKING LOTS	Keep parking and trash areas free of leaf litter, organic debris and trash to maximum extent practicable.	Three times a week scheduled sweeping, blowing, and raking underway
		Consider providing cover for all trash cans.	Lids provided for trash cans
2	HOSP GROVE PARK AND PARKING LOT	Keep parking areas and storm drains free of organic debris and sediment and control erosion on sloped areas to maximum extent practicable.	Weekly scheduled sweeping, blowing, and raking underway
		Consider providing cover for trash cans in playground and picnic area.	Lids provided for trash cans
		Consider providing secondary containment for portable restroom, if feasible	Sand bags and drain "socks" being considered
2	LA COSTA CANYON PARK AND PARKING LOT	Consider providing No Dumping signage for catch basin in parking area.	Appropriate signage has been applied
2	LAGUNA RIVIERA PARK	Keep drainage channels free of trash and debris to maximum extent practicable	Weekly inspections, cleaned as needed.
		Consider providing cover for trash cans in horseshoe pit area near tennis courts.	Lids provided for trash cans
		Control over- irrigation to maximum extent practicable.	Irrigation times have been changed to short "cycle & soak" periods
2	MAGEE PARK AND PARKING LOT	Keep outdoor areas free of sediment and debris to maximum extent practicable.	Twice a week scheduled sweeping, blowing, and raking underway
2	MAXTON BROWN PARK	Consider providing recycling bins at this location.	One can has been ordered and will be placed upon arrival.
2	PINE PARK AND PARKING LOT	Keep sediment contained in landscape areas to maximum extent practicable	Weekly scheduled sweeping, blowing, and raking underway. Sediment cleared as needed.
2	RESERVOIR C	No corrective actions	N/A
2	RESERVOIR ELM	No corrective actions	N/A
2	RESERVOIR LA COSTA HI	Keep site free of debris and leaves to the maximum extent practicable.	Periodic inspections conducted and removal made as needed.
2	RESERVOIR LA COSTA LO	Keep paved and discharge areas of the site free of sediment and organic debris to the maximum extent practicable.	Periodic inspections conducted and removal made as needed.
		Control erosion along un-landscaped slopes to maximum extent practicable.	Adjustments made by landscape company
2	SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	Keep and discharge locations free of organic debris to the maximum extent practicable.	Parking lot is swept semi monthly with a mechanical sweeper and the discharge points will be inspected and cleaned as needed, quarterly.
		Consider providing cover for trash can near building.	Trash can has new cover installed
2	TAP PUMP STATION	Keep site free of sediment and debris to maximum extent practicable.	Periodic inspections conducted and removal made as needed.
3	CARLSBAD SENIOR CENTER PARKING LOT	Keep discharge points free of sediment and debris to the maximum extent practicable.	Parking lot is swept semi monthly with a mechanical sweeper and the discharge points will be inspected and cleaned as needed, quarterly
		Consider providing lids for trash cans located in western parking area.	All metal trash cans to be removed and concrete receptacles installed.
3	CITY HALL FACILITY PARKING LOT	No corrective actions	N/A
3	COLE LIBRARY PARKING LOT	Keep parking lot free of sediment and organic debris to the maximum extent practicable.	Parking lot is swept semi monthly with a mechanical sweeper and the discharge points will be inspected and cleaned as needed, quarterly
		Control erosion and over-irrigation along slopes to the maximum extent practicable.	Irrigation controller monitored to prevent runoff

Carlsbad Municipal Facility Inspections - Corrective Actions FY 08-09

Tier	Facility	Corrective Action(s)	BMPs
3	DOVE LIBRARY PARKING LOT	Keep outdoor areas free of trash and debris to maximum extent practicable.	Maintenance contractor to clean parking lot per the terms of the maintenance agreement.
3	FARADAY CENTER PARKING LOT	No corrective actions	N/A
3	FARMERS BUILDING PARKING LOT	Keep outdoor areas and storm drain inlets free of trash and debris to maximum extent practicable.	Parking lot is swept semi monthly with a mechanical sweeper and the discharge points will be inspected and cleaned as needed, quarterly
		Minimize irrigation runoff from landscaped areas to maximum extent practicable.	Irrigation controller monitored to prevent runoff
3	HARDING COMMUNITY CENTER PARKING LOT	Keep all trash areas free of litter and debris to maximum extent practicable	Maintenance contractor to clean parking lot per the terms of the maintenance agreement.
3	ADULT LEARNING PROGRAM PARKING LOT	Keep outdoor areas and discharge locations free of litter and debris to maximum extent practicable.	Parking lot is swept semi monthly with a mechanical sweeper and the discharge points will be inspected and cleaned as needed, quarterly
		Control over irrigation to maximum extent practicable.	Irrigation controller monitored to prevent runoff
3	RAILROAD DEPOT VISITORS CENTER PARKING LOT	Keep outdoor areas and storm drains free of trash and debris to maximum extent practicable.	Parking lot is swept semi monthly with a mechanical sweeper and the discharge points will be inspected and cleaned as needed.
		Reduce runoff from over-irrigation to maximum extent practicable.	Irrigation controller monitored to prevent runoff
2 - In House	AGUA HEDIONDA SEWER LIFT STATION	Sweep up trash and debris in outdoor areas.	Swept up debris and disposed into trash bin.
2 - In House	BATIQUITOS SEWER LIFT STATION	Sweep up trash and debris in outdoor areas.	Swept up debris and disposed into trash bin.
2 - In House	BUENA VISTA SEWER LIFT STATION	N/A	N/A
2 - In House	CANNON SEWER LIFT STATION	Need to install hose reels.	Hose reels installed
2 - In House	CHINQUAPIN SEWER LIFT STATION	N/A	N/A
2 - In House	FOXES LANDING LIFT STATION	Need to build a berm around generator for fuel spill containment.	Installed 6 inch roll berm with asphalt material. Cleaned area where work was completed.
2 - In House	GATESHEAD SEWER LIFT STATION	Sweep up trash and debris in outdoor areas.	Swept up debri and disposed into trash bin.
2 - In House	HOME PLANT SEWER LIFT STATION	Sweep up trash and debris in outdoor areas.	Swept up debri and disposed into trash bin.
2 - In House	KNOTS SEWER LIFT STATION	N/A	N/A
2 - In House	LA GOLONDRINA SEWER LIFT STATION	Sweep up trash and debris in outdoor areas.	Swept up debris and disposed into trash bin.
2 - In House	POINSETTIA SEWER LIFT STATION	Parking lot needs repair.	Contacted CM&I about slurry repair, awaiting answer. Installed filter rock bags at exits points of conveyance system.
2 - In House	SAND SHELL SEWER LIFT STATION	N/A	N/A
2 - In House	SIMSBURY SEWER LIFT STATION	Sweep up trash and debris in outdoor areas.	Swept up debris and disposed into trash bin.
2 - In House	TERRAMAR SEWER LIFT STATION	N/A	N/A
2 - In House	VANCOUVER SEWER LIFT STATION	Sweep up trash and debris in outdoor areas.	Swept up debris and disposed into trash bin.
		Need to install trash can.	Trash bin purchased and installed.
2 - In House	VILLAS SEWER LIFT STATION	Sweep up trash and debris in outdoor areas.	Swept up debris and disposed into trash bin.

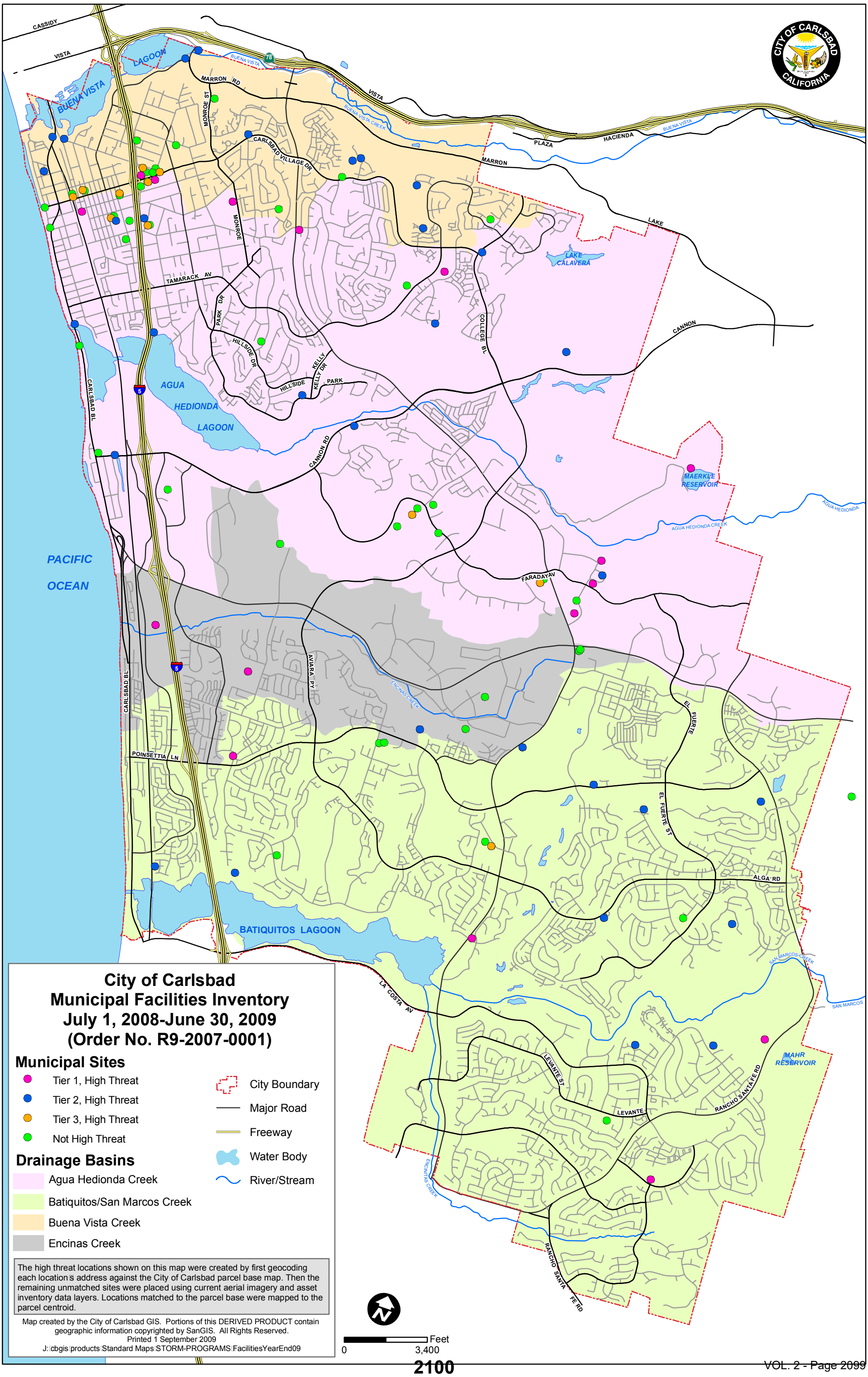
City of Carlsbad
Municipal Facilities Inventory
July 1, 2008-June 30, 2009
(Order No. R9-2007-0001)
Municipal Sites
Tier 1, High Threat
Tier 2, High Threat
Tier 3, High Threat
Not High Threat
City Boundary
Major Road
Freeway
Water Body
River/Stream
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
The high threat locations shown on this map were created by first geocoding each location's address against the City of Carlsbad parcel base map. Then the remaining unmatched sites were placed using current aerial imagery and asset inventory data layers. Locations matched to the parcel base were mapped to the parcel centroid.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
Printed 1 September 2009
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CITY OF CARLSBAD CALIFORNIA
PACIFIC OCEAN
BUENA VISTA
BUENA VISTA LAGOON
AGUA HEDIONDA LAGOON
BATIQUITOS LAGOON
LAKE CALAVERA
MAERKLE RESERVOIR
MAHR RESERVOIR
CASSIDY
VISTA
MARRON RD
MONROE ST
CARLSBAD VILLAGE DR
PLAZA
HACIENDA
LAKE
CANNON
TAMARACK AV
PARK DR
HILLSIDE DR
KELLY DR
COLLEGE BL
CARLSBAD BL
CANNON RD
FARADAYAV
AVIARA PY
POINSETTIA LN
EL FUERTE
EL FUERTE ST
ALGA RD
LA COSTA AV
LEVANTE ST
LEVANTE
RANCHO SANTA FE RD
BUENA VISTA CREEK
AGUA HEDIONDA CREEK
ENCINAS CREEK
SAN MARCOS CREEK
SAN MARCOS
Feet
0
3,400

City of Carlsbad		CMI - 200	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION NPDES INSPECTIONS FOR SPECIAL EVENTS	[ ] POLICY [ ] PROCESS [X] PROCEDURE	NUMBER	REVISION
		PAGE 1 OF 10	

CHANGE HISTORY

REV A

04/15/09 Initial creation of document

06/25/09 Completion and approval of Revision A

Publishers: Shawnetta Grandberry			Date: June 25, 2009		
Critical Review By	Signature	Date	Approved By	Signature	Date
Shawnetta Grandberry			Casey Arndt		
Approved By	Signature	Date			
Patrick Vaughan					

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Purpose

The purpose of this procedure is to define the process for inspecting, tracking, and enforcing NPDES compliance at special events on the Construction Management and Inspection (CMI) Special Events Inventory List. CMI inspectors must have a basic understanding of requirements of the NPDES inspection program to conduct effective site evaluations and inspections. Please refer to procedure #CMI-210 for the creation, revision, and maintenance of the Special Events Inventory List.

Policy

The Construction Management and Inspection Department will conduct NPDES compliance inspections at special event venues listed on the Special Events Inventory List to assess their threat to water quality, potential to contribute to storm water pollution, and compliance with the Carlsbad Municipal Code.

Scope

This procedure applies to the **Construction Management and Inspection Department** personnel and consultants at the City of Carlsbad, Public Works Department located in Carlsbad, CA.

Associated Documents

- Municipal Storm Water Permit Order No. R9-2007-0001, NPDES No. CAS0108758 (Permit)
- City of Carlsbad Jurisdictional Urban Runoff Management Program (JURMP) from March 2008
- City of Carlsbad Municipal Code Chapter 8.17
- City of Carlsbad Municipal Code Chapter 15.12
- City of Carlsbad Municipal Code Chapter 6.08
- City of Carlsbad Special Events Application and Instructions

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Acronyms and Definitions

BMP	Best Management Practices
CON	Consultant designated by awarded City contract
CMC	Carlsbad Municipal Code
CM	Construction Manager
DCE	Deputy City Engineer
ESA	Environmentally Sensitive Area
Dry Season	May 1 to September 30
GIS	Geographical Information Systems
Inspection	Refers to onsite visit of facility with facility personnel – please refer to Appendix A for a copy of the inspection form.
JURMP	Jurisdictional Urban Runoff Management Program from March 2008
NPDES	National Pollutant Discharge Elimination System
Permit	Municipal Storm Water Permit (January 2007)
PWI	Public Works Inspector I/II
RWQCB	Regional Water Quality Control Board
SCI	Senior Construction Inspector
SEC	Special Events Coordinator
SEOP	The Special Event Operation Plan outlines the City staff and activities the City will implement during the event. The operation plan also includes the contact numbers for all City personnel and organizers involved in the event.
SWPPP	Storm Water Pollution Prevention Plan
Wet Season	October 1 to April 30

Overview

Periodically the City is host to special events directly as City functions and indirectly as permitted events hosted by outside event organizers. Examples of typical special events held in Carlsbad include:

- Street Festivals and Carnivals
- Athletic/Recreation Events (Marathon, Triathlon, etc.)
- Art Exhibits
- Concerts/Performances
- Farmers/Outdoor Market
- Parades/Processions/Marches

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The City of Carlsbad is committed to inspecting special event venues and sources listed on the prioritized Special Events Inventory List (Inventory List) to evaluate compliance with applicable storm water regulations, JURMP, Permit, and the CMC. All event promoters and venues are required to implement the minimum BMPs outlined in the JURMP and the City's "*Best Management Practices for Special Events*" brochure. Site inspections are conducted using the inspection form referenced in Appendix A and pictures are taken when necessary.

Special Event Inspection Procedure:

Step	Who	What	When
1.	SEC	Provides SCI with the special event application package that includes pertinent information about the proposed event.	60 days prior to the event.
2.	SCI	Reviews the application and updates the Inventory List. If the special event is new, the SCI must prioritize the event using the criteria outlined in procedure #CMI-210, the JURMP, and the Permit.	As needed
3.	SCI SEC	Provides a copy of the minimum BMPs and additional required BMPs to the SEC using the Departmental Approval Form (Appendix B). The SCI may also request information directly from the promoter.	60 days prior to the event.
4.	SEC	Forwards the NPDES compliance requirements to the event promoter. Schedules pre-event planning meetings with the promoter(s) and Special Events Committee.	At least 60 days prior to the event.
5.	SCI	If required, reviews the SWPPP. If the SWPPP is found to be adequate, the Departmental Approval Form is signed and sent to the SEC for final processing. If the SWPPP is found to be incomplete or inadequate, it will be returned to the promoter with comments. Return to Step 4.	At least 15 days prior to the event.
6.	SEC	The special event application will be reviewed and approved by the Special Events Committee prior to permit issuance. Once approved, prepares the SEOP and provides to all relevant City staff.	At least 5 days prior to the event.
7.	SCI CON PWI	Prepares the Special Event NPDES inspection form(s). Please refer to Appendix A for inspection form and instructions.	As needed
8.	SCI CON PWI	Performs the NPDES inspection using the procedures outlined in CMC 15.12.100, 15.12.110, in this procedure, SEOP, and in Section D.3.b.(3) of the Permit.	Day of event
9.	SCI	After completion of the inspection, updates the Special Events Inventory List and files documents in the appropriate location.	As needed
10.	SCI	Provides inspection results to the SEC regarding any deficiencies or violations noted during the event.	As needed
11.	SEC	Provides written feedback to the event promoter and schedules follow up meetings to discuss the event and begin planning for next year (for annual events only).	As needed

Step	Who	What	When
12.	SCI CM	Completes appropriate compliance documents Warning Notices, Notice of Violation, Administrative Citations, etc. If an enforcement action is issued, the SCI will notify the SEC.	Within 2 weeks after the event
13.	SCI CM	Provides updates, follow up information, inspections findings, and corrective actions to the Special Events Committee during regularly scheduled meetings.	Monthly

Other Procedural Considerations

- High priority special events may be required to implement additional event specific BMPs which may include, but are not limited to:
  - **SWPPP**: Depending on the size, location, number of participants, and other relevant factors, high priority special events may be required to develop a Storm Water Pollution Prevention Plan. The SWPPP includes a list of BMPs to be implemented by the event organizer before, during, and after the event to reduce and/or prevent pollutants from leaving the event venue. The SWPPP must be approved by the City prior to Special Event Permit issuance. A copy of the sample SWPPP can be found in Appendix C.
  - **Storm Drain Site Map**: Event organizers must submit a site plan that identifies all of the drain inlets and/or discharge points. The storm drain map can also be included as a part of the SWPPP or requested separately. The storm drain map should include the following minimum elements:
    - An outline of the event venue including the names of all streets or areas that are part of the event and the surrounding area.
    - The location of all portable toilets, trash and recycling containers, and dumpsters.
    - Location of all storm drain inlets, including curb inlets, grates, and other discharge points. In addition, include all locations of storm drain protection devices and/or run-off containment features.
    - A detail of the food and/or cooking area and location of spill kits.
    - Fuel storage and/or generator locations.
    - Placement of vehicles and/or trailers.
    - Details of any inflatable rides, carnival or mechanical rides, and animals attractions.
    - The location of activities and materials that have the potential to contribute to pollution must be depicted.
  - **Street Sweeping**: Certain high priority events may be required to hire a professional mechanical street sweeper to remove accumulated trash and debris from City streets following an event. If the special event organizer fails to adequately clean the venue, the City will clean the site and seek reimbursement for all associated costs. The City has developed criteria based on the events potential threat to water quality. The criteria will be considered when determining whether an event is requires street sweeping. If an event meets two or more of the following criteria, street sweeping may be required:
    - Does the event have the potential to generate a significant amount of trash and debris?
    - Does the event occur during the rainy season?
    - Has the event had NPDES compliance problems within the last two years?
    - Does the event occur on Carlsbad Blvd. or within the Downtown area?

- Does the event occur within an ESA or ESA buffer zone?

- The SCI and/or CM will represent CMI at the monthly Special Events Committee meeting usually held on the 4th Thursday of every month. The SCI and/or CM will also attend pre- and post-event planning meetings, as needed.
- Special events held during the rainy season may need to prepare a Rain Event Action Plan when there is a storm event predicted at 40% or greater for the day of the event. When there is a storm event predicted at 40% or greater, the SCI will send a "Rain Event Alert" to the event organizer and SEC reminding them to be prepared to implement additional BMPs for prevailing weather conditions.

Inspection goals for events on the Special Events Inventory List are as follows:

Threat Priority	Minimum Inspection Frequency		Season	Inspection Goal
	Pre-Event	Post-Event		
High	✓	✓	Wet Season	100%
High	✓		Dry Season	100%
Medium	✓		Wet Season	As Needed
Medium		✓	Dry Season	As Needed
Low		✓	Wet Season	As Needed
Low		✓	Dry Season	As Needed

Recordkeeping and Reporting

The SCI is responsible for maintaining all aspects of the inspection and correspondence hardcopy filing system. Inactive special event files will be maintained for a minimum of 3 years. On an annual basis, the SCI will prepare a report to be included in the JURMP Annual Report to the CM:

- Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.
- Identification of the number of special events requiring inspections, the number of special events inspected, and the frequency of the inspections.
- A description of the general results of the inspections.
- Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Time spent working on special events must be reported on timesheets using the following codes:

Project Code	Activity Code	Description
Special Event	TRG	Training, conferences, education, including travel time if applicable.
Special Event	INS	Preparing for and conducting inspections including SWPPP reviews and travel time.
Special Event	ADM	Correspondence, filing, forms, procedures, mail, email, outreach and education, etc.
Special Event	MTG	Special event coordination meetings, including travel time.
Special Event	JURMP	JURMP and Annual Report preparation and review.

All inspection related forms are located on the shared drive at:

K:\NPDES\Special Events\Forms and Applications

Equipment List

In preparation for special event inspections, inspectors should have the following equipment:

- Metal clip board
- Inspection forms
- Digital camera
- Pens and pencils
- Sharpie markers
- City identification
- Business cards
- Field notebook
- Thomas Guide
- Operation Plan

Safety Considerations

Hazards may exist at the various event venues. These hazards could include sharp edges, falling objects, flying sparks, chemicals, noise, uneven pavement and other potentially dangerous situations. Inspectors must take the appropriate precautions to protect themselves from potential hazards and injuries. Personal protective equipment (PPE) may be required at in certain situations to minimize exposure to a variety of hazards. The following PPE should be available to the inspector:

- hard hat
- flashlight
- ear plugs
- steel-toed boots
- rubber gloves
- storm drain puller
- safety vest
- orange traffic cones
- hand sanitizer
- first aid kit

Appendices

Appendix A: Special Event Inspection Form and Instructions
Appendix B: Departmental Approval Form
Appendix C: Special Event SWPPP Template (Attached)

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APPENDIX A
Special Events Inspection Form and Instructions

Inspector: The name of the person conducting the inspection.

Date: The date the inspection occurred.

Season: The season in which the event occurs – Wet (October 1 to April 30) or Dry (May 1 – September 30).

Priority: The priority assigned to the event – High, Medium, or Low.

Event Name: The name of the event.

Event Type: The type of event (i.e. athletic, concert, etc.).

Event Location: A description of the location of the event.

Event Address: The physical address of where the event is held.

Contact Name: Name of the "day of event" contact.

Contact Phone: Phone number of the "day of event" contact.

Weather Conditions: The inspector should note the weather conditions while conducting the inspection.

SPECIAL EVENTS
Inspection Report
Pursuant to CMC 15.12.100

Inspector:		Date		Season		Priority	
Event Name				Event Type			
Event Location				Event Address			
Contact Name				Contact Phone			
Weather Conditions	☐ Heavy Rain ☐ Light Rain ☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain Expected at ___% chance						

PRE-EVENT (1)									POST-EVENT (2)								
Time:	NEEDS								NEEDS								Time:
SOURCE	N/A	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	N/A	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	COMMENTS
Solid Waste Storage and Disposal																	
Waste Containers																	
Grease Storage																	
Recycling Containers																	
Disposal Areas																	
Vehicles and Heavy Equipment																	
Washing Area																	
Spill Response																	
Storage Area																	
Outdoor Materials Handling and Storage																	
Storage Tanks																	
Other Liquid Containers																	
Equipment Storage																	
Food Preparation and Eating Areas																	
Spill Kits																	
Food Disposal																	
Eating Areas																	
Grounds Maintenance and Housekeeping																	
Storm Drains																	
Parking lots																	
Staff/Vendor Training and SWPPP																	
SWPPP																	
Training																	
Portable Restrooms																	
Storage Area																	

OBSERVATIONS

☐ No violations observed during the inspection.	☐ No violations observed during the inspection.
☐ Violations observed during the inspection	☐ Violations observed during the inspection
☐ Implement Corrective Actions As Required Below	☐ Implement Corrective Actions As Required Below

CORRECTIVE ACTION REQUIRED: ☐ Photos Taken

1	2		1	2	
☐	☐	Prevent trash/recycling from overflowing.	☐	☐	Sweep up trash and debris.
☐	☐	Immediately clean up oil/grease spills and leaks.	☐	☐	Immediately discontinue outdoor washing or hosing.
☐	☐	Post-event street sweeping required.	☐	☐	Dumpsters and trash receptacles must be covered during rain events.
☐	☐	Provide immediate protection for storm drain inlets.	☐	☐	Provide spill kit(s) in required areas.
☐	☐	Clean in and around storm drains.	☐	☐	Provide secondary containment for portable restroom(s).
☐	☐	Train staff, vendors, and participants on pollution prevention.			

Other _____

Implement corrective actions by_____. A City Inspector will return to verify that corrective actions implemented as required. If you have any questions or comments, please contact the Storm Water Inspector at 760-602-2780 x7111.

Inspector Signature:	Received By – Please Print	Received By - Signature ☐ Mailed	Date

Pre-Event (1) and Post- Event (2): This section is used to evaluate potential sources of pollution and assess compliance. The inspector should also note the time each inspection occurred in the space provided. The columns headings to the right are be used to evaluate potential pollutant sources:

- NA (Not Applicable): This activity does not apply to this event.
- Containment: This potential source of pollution needs containment (secondary or otherwise) in order to prevent an illegal discharge.
- Cover: This potential source of pollution needs to be covered in order to prevent an illegal discharge or protect materials from run-off.
- Cleaning: The area in or around this potential source of pollution needs to be cleaned (secondary sweeping, litter removal, etc.) in order to prevent an illegal discharge.

- Training: Employees, volunteers, and/or event organizers need to be trained on the proper implementation of BMPs for this potential source of pollution.
- Other BMP: This potential source of pollution needs a specific BMP (structural or otherwise) in order to prevent an illegal discharge or protect materials from run-off. The inspector should note the specific BMPS required in the comments section.
- Adequate: BMPs have been adequately implemented.
- ID Observed: An illegal discharge was observed from this source or activity.
- Comments: The inspector can note additional information about the inspection or investigation including but not limited to, specific BMPs needed, additional requirements, observations, etc.

Observations: When violations are noted pre-event and/or post-event, the inspector should check the applicable boxes. If no violations were observed the inspector should check the appropriate box.

Corrective Action Required: If the event is required to implement corrective action as a result of the inspection, the inspector should check the appropriate box(es). If the corrective action is not listed among the choices the inspector can use the "Other" space to list the specific BMP requirements. In addition, the inspector should note if photographs of the violations were taken and also the date the corrective actions must be completed.

Inspector Signature: The inspector must sign the inspection report.

Received By –Please Print: If the inspection report is to be signed and left onsite, the inspector must print the name of the event representative that received the report.

Received By – Signature: The signature of the person who received the inspection report. If a representative is not available to receive the report, the "mailed" box should be checked and the report will be mailed to the primary event contact.

Date: The date the inspection report was completed.

The back of the inspection report may be used to draw diagrams, make comments or recommendations, and document information relevant to the event.

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APPENDIX B

Departmental Approval Form

SPECIAL EVENTS
DEPARTMENTAL APPROVAL

Attached is a Special Events application for your approval. Please review all applicable areas, indicate any questions or conditions, and return to me as soon as possible. Thank you, Jessica Field x2297.

Event:

Date:

Location:

Contact:

Questions for promoter:

Attach additional page if necessary

Comments/Conditions for permit approval:

Attach additional page if necessary

Approved by:

Department: CMI	**Date:**

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CHANGE HISTORY

REV A

04/16/09 Initial creation of document

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Publisher: Shawnetta Grandberry			Date: 06-04-09		
Critical Review By	Signature	Date	Approved By	Signature	Date
Shawnetta Grandberry			Casey Arndt		
Approved By	Signature	Date			
Patrick Vaughan					

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Purpose

The purpose of this procedure is to define the process for managing and updating data on the Construction Management and Inspection Department's Special Event Inventory List (Inventory List). The Inventory List is updated and reviewed for inspection applicability on a regular basis, within each fiscal year.

Policy

The City of Carlsbad's Construction Management and Inspection Department will maintain the Special Event Inventory List of events within its jurisdiction that will need to be or have been inspected as required by the NPDES permit issued by the Regional Water Quality Control Board of the State of California.

Scope

This procedure applies to the **Construction Management and Inspection Department** personnel and consultants at the City of Carlsbad, Public Works Department, located in Carlsbad, CA.

Associated Documents

- Municipal Storm Water Permit Order No. R9-2007-0001, NPDES No. CAS0108758 (Permit)
- City of Carlsbad Jurisdictional Urban Runoff Management Program (JURMP) from March 2008
- City of Carlsbad Municipal Code Chapter 8.17
- City of Carlsbad Municipal Code Chapter 15.12
- City of Carlsbad Municipal Code Chapter 6.08
- City of Carlsbad Special Events Application and Instructions

Definitions and Acronyms

BMP	Best Management Practices
CON	Consultant designated by awarded City contract.
CMC	Carlsbad Municipal Code
CM	Construction Manager
DCE	Deputy City Engineer
ESA	Environmentally Sensitive Area
Dry Season	May 1 to September 30
GIS	Geographical Information Systems
Inspection	Refers to onsite inspection of the event and its associated activities – please refer to Appendix A of procedure CMI-200 for a copy of the inspection form.
JURMP	Jurisdictional Urban Runoff Management Program from March 2008
NPDES	National Pollutant Discharge Elimination System
Permit	Municipal Storm Water Permit (January 2007)
PWI	Public Works Inspector I/II
RWQCB	Regional Water Quality Control Board
SCI	Senior Construction Inspector
SEC	Special Events Coordinator
SWPPP	Storm Water Pollution Prevention Plan
Wet Season	October 1 to April 30

Overview

The intent of the Inventory List is to satisfy the municipal storm water requirements as outlined in Section 6 of the 2008 JURMP update and Section D.3 of the Permit. The City is required to track, assess, and prioritize special events and venues within its jurisdiction to determine their potential threat to water quality, applicability of storm water regulations, and compliance with the CMC.

Prioritization of Events

Prioritization of events includes a review and consideration of event size, number in attendance, location of event, type of event, activities during the event, season the event occurs, proximity of the event to an ESA, past record of compliance by event promoters, and potential to discharge significant non-storm water or pollutants to the storm water conveyance system. Potential sources of pollution from special events could include:

- Setup and teardown of equipment and booths
- Surface and equipment cleaning
- Booth operation
- Trash storage and disposal
- Food/drink preparation and consumption
- Setup, operation, and teardown of mechanical and hydraulic rides
- Temporary portable restrooms
- Hydration stations

Typically, the priority types for special events generally have three or more of the following potential threat characteristics:

Priority	Potential Threat Characteristics								
	> 1000 people in attendance	Occur 200 feet from an ESA	Occur during the wet season	Food Prepared Onsite	Compliance History	Portable Restrooms	Have mechanical rides	Include Animal Attractions	Significant trash generation
High	✓	✓	✓	✓	✓	✓	✓	✓	✓
Medium	✓		✓	✓	✓	✓			✓
Low			✓	✓		✓			

Annual high priority events include:

- Carlsbad Marathon
- Carlsbad Junior
- Carlsbad 5000
- Carlsbad Village Spring Street Faire
- TGIF Jazz in the Parks
- CVBA's Art in the Village
- ArtSplash
- Carlsbad Village Fall Street Faire

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Inventory Management Procedure:

Step	Who	What	When
1.	SCI	Receives new special event application from the SEC and adds the event to the inventory or updates the inventory with the most current information about the event. Updates can include removing duplicates and discontinued events, prioritizing events, changing the status of events, and adding new events to the inventory. All relevant fields within the Inventory List are updated as necessary.	As needed
2.	SCI	The special event application is screened and prioritized using the threat to water quality prioritization criteria outlined in in this procedure, the JURMP, and the Permit. Special events located within 200 feet of an ESA will also be evaluated to determine if the ESA is a 303(d) listed water body and if the event has the potential to generate pollutants for which the water body is impaired. If the event is not located within 200 feet of an ESA, "No" is entered into Column "O" on the Inventory List.	As needed
3.	SCI	Prepares inspection report and gathers other necessary documents (maps, operation plan, etc.) for the event.	At least 1 day before the event
4.	SCI CON CM	Performs the on-site NPDES inspection(s) using the procedures outlined in CMC 15.12.100, 15.12.110, in this procedure, and in Section D.3.a.(7) of the Permit.	Day of event
5.	SCI	If a consultant conducts the inspection, completed inspection reports are provided after the inspection.	Within 3 days after the event
6.	SCI	Verifies accuracy of the information on the inspection report and updates the Inventory List.	Within 30 days of the event
7.	SCI	Files and maintains records of all special event inspection reports.	Within 30 days of the event
8.	SCI CM	At the end of each fiscal year (July 1 – June 30), closes and archives the current fiscal year Inventory List and creates the new fiscal year Inventory List. Please see "End of Year and Beginning of Year" procedures section.	Annually
9.	SCI	On an annual basis the inventory list is merged with the inspection report format and saved. Inspection reports are printed as needed.	Annually

End of Year (EOY) and Beginning of Year (BOY) Procedures

Step	Who	What	When
1.	SCI	Ensures all updates and entries to the inventory are accurate and complete.	By July 15
2.	SCI	Saves and moves the EOY (as of June 30) to the appropriate archive folder. The EOY Inventory List is the final list that will be used to prepare the JURMP annual report for the fiscal year.	By July 15
3.	SCI	Saves the BOY Inventory list in the appropriate folder. The active Inventory List is moved to the shared drive.	By July 15

Recordkeeping and Reporting

The SCI is responsible for maintaining all aspects of the Inventory List, including information to be entered, changed, or deleted within cells and columns. On an annual basis, the SCI will provide a report to be included in the JURMP Annual Report to the CM:

- Identification of the number of special events requiring inspections, the number of special events inspected, and the frequency of the inspections.
- A description of the general results of the inspections.
- Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Please refer to procedure CMI-200 NPDES Inspections for Special Events for detailed instructions in conducting inspections. The Special Events Inventory List is located on the shared drive at:

K:\NPDES\Special Events\Special Events Inventory

Appendices

Appendix A: Inventory List Column Headings and Definitions

APPENDIX A

Inventory List Column Headings and Definitions

A. PRIORITY: The threat to water quality prioritization based on the criteria listed in JURMP, Permit, and this procedure. This field can only be populated with the following responses:
- High
- Medium
- Low

B. EVENT TYPE: The event type listed on the special events application. Only the following can be entered into this field.
- Athletic
- Concert
- Exhibit
- Festival
- Parade
- Fireworks
- Other

C. STATUS: Denotes stage of the special events permitting process. Only the following can be entered into this field.
- Pending: Event application received and reviewed, however the event has not occurred.
- Completed: Event application was reviewed, approved, and the event has occurred.
- Cancelled: The event application was received but was cancelled.

D. EVENT NAME: The name of the event as listed in the special event application.

E. LOCATION: A description of where the event will occur. Usually an area (e.g., Cannon Park), a street or cross streets (e.g., El Camino Real and Palomar Airport Road), or a quadrant of the City (e.g., the southeast quadrant).

F. LOCATION ADDRESS: If applicable, the physical location of the event including the street number and name.

G. LOCATION ZIP: The zip code where the event occurs.

H. BEGIN DATE: The date the event begins.

I. END DATE: The date the event ends. It may be the same day as the begin date.

J. SEASON: The season in which the event occurs.
- Wet (October 1 to April 30)
- Dry (May 1 – September 30)

K. INSPECTION REQUIRED: Is a NPDES compliance inspection required for this event?

L. PRE-EVENT INSPECTION DATE: The date the pre-event inspection occurred.

M. POST-EVENT INSPECTION DATE: The date the post-event inspection occurred.

N. HYDROLOGIC AREA: The watershed with the Carlsbad Hydrologic Unit that receives run off from the construction site. Only the following can be entered into this field:

- **904.21:** Buena Vista Lagoon
- **904.31:** Agua Hedionda Lagoon
- **904.40:** Encinas Creek
- **904.51:** Batiquitos Lagoon

O. PROXIMITY: Does the event occur within 200 feet of an ESA, including receiving waters, habitat management areas, wildlife corridors, etc.? This will be determined by GIS mapping. The following entries are acceptable in this field:
- Yes: The event is located within 200 feet of an ESA.
- No: The event is not located within 200 feet of an ESA.

P. TRIBUTARY TO 303(d) LISTED: Does the event venue occur in an area that discharges to a tributary to a 303(d) listed receiving water (within an ESA buffer) and generates pollutants for which the water body is impaired? The following entries are acceptable in this field:
- Yes
- No

Q. # OF PARTICIPANTS: The estimated number of people expected to participate in the event. This information can be found on the special event application.

R. ADDITIONAL CONTROLS REQUIRED: Are additional BMP controls required, in addition to the minimum BMPs, for this event?

S. BACTERIA*: Does the event or associated activities have the potential to generate bacteria? If so "X" is entered into the field. If not, the field is left blank.

T. GROSS POLLUTANTS*: Does the event or associated activities have the potential to generate gross pollutants? If so "X" is entered into the field. If not, the field is left blank.

U. METALS*: Does the event or associated activities have the potential to generate metals? If so "X" is entered into the field. If not, the field is left blank.

V. NUTRIENTS*: Does the event or associated activities have the potential to generate nutrients? If so "X" is entered into the field. If not, the field is left blank.

W. OIL & GREASE*: Does the event or associated activities have the potential to generate oil and grease? If so "X" is entered into the field. If not, the field is left blank.

X. ORGANICS*: Does the event or associated activities have the potential to generate organics? If so "X" is entered into the field. If not, the field is left blank.

Y. PESTICIDES*: Does the event or associated activities have the potential to generate pesticides? If so "X" is entered into the field. If not, the field is left blank.

Z. SEDIMENTS*: Does the event or associated activities have the potential to generate sediments? If so "X" is entered into the field. If not, the field is left blank.

AA. TRASH*: Does the event or associated activities have the potential to generate trash? If so "X" is entered into the field. If not, the field is left blank.

**(Potential Pollutants: Columns S through AA denote the potential pollutants. Initially the pollutants are selected based on the type of activities that are expected at the event. After inspection the actual pollutants generated are entered into the following fields).*

City of Carlsbad		CMI - 210	A
SUBJECT: CONSTRUCTION MANAGEMENT AND INSPECTION SPECIAL EVENT INVENTORY LIST MANAGEMENT	☐ POLICY ☐ PROCESS ☒ PROCEDURE	NUMBER	REVISION
		PAGE 9 OF 9	

AB. CONTACT LAST NAME: The last name of the primary contact for the event.

AC. CONTACT FIRST NAME: The first name of the primary contact for the event.

AD. ORGANIZATION: The name of the organization sponsoring the event.

AE. ADDRESS: The mailing address of the organization sponsoring the event.

AF. CITY: The city associated with the mailing address of the organization sponsoring the event.

AG. ZIP: The zip code associated with the mailing address.

AH. E-MAIL: The email address of the contact or organization sponsoring the event.

AI. PHONE #: The phone number of the contact or organization sponsoring the event.

AJ. FAX #: The fax number of the contact or organization sponsoring the event.

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
7-ELEVEN	901		PALOMAR AIRPORT RD	Active	5541		Gasoline Service Stations	Fixed	Yes		904.40
7-ELEVEN 32942-A	5802		VAN ALLEN WAY	Active	5541	5541	Gasoline Service Stations	Fixed	YES	YES	904.31
A & P AIRCRAFT DETAILING	2006		PALOMAR AIRPORT RD	Active	4581	4581	Aircraft Washing, Detailing	Fixed	YES	YES	904.31
A MOMENT IN TIME, BOTANICALS	6102		AVENIDA ENCINAS	Active	5193		Wholesale Trade Flowers & florists Supplies	Fixed	YES		904.40
A.R.M. PAINTING	2687		WATERBURY WAY	Active	1721		Special Trade Contractors	Mobile	YES		904.21
A-1 AUTO CARE	3193	11	TYLER ST	Active	7538		General Automotive Repair Shops	Fixed	YES		904.31
A-1 HAMILTON LANDSCAPE MAINTENANCE	3659		TRIESTE DR	Active	0781		Landscape Counseling and Planning	Mobile	YES		904.21
A1 QUALITY CARPET CLEANING	667		MAGNOLIA AVE	Active	7217		Carpet Cleaning	Mobile	YES		904.21
AALTO SCIENTIFIC LTD	1959		KELLOGG AVE	Active	2835	2835	In Vitro & In Vivo Diagnotsitc Subs	Fixed	YES	YES	904.40
ABSOLUTE POOL SERVICE	200		EL CAMINO REAL	Active	7389	7389	Pool Cleaning and Repair	Mobile	Yes	YES	
ACCENT PAINTING, INC.	7934		LA CAPELA LN	Active	1721		Painting And Paper Hanging	Mobile	YES		904.51
ACUSHNET COMPANY	1818		ASTON AVE	Active	8731	8731	Research and Development	Fixed	No	YES	904.31
ACUSHNET COMPANY	2819		LOKER AVE EAST	Active	3949	3949	Sporting and Athletic Goods, NEC	Fixed	YES	YES	904.31
ADDISON SHEET METAL	7238		PONTO DR	Active	3499		Sheet Metal Fabricator	Fixed	YES		904.51
ADT CONSTRUCTION INC.	1735		ROGUE ISLE CT	Active	1521		General Contractors--Single-Family Housing	Mobile	YES		904.31
A-ECONOMY CONCRETE PUMPING	1702		EVERGEEN CIR	Active	1771		Concrete Work	Mobile	YES		904.21
AFM	5816		DRYDEN PL	Inactive	3669	NA	Fabricated Metal Products, Not Elsewhere Classified	Fixed	YES	NO	904.31
AGRIWEST	6211	A	YARROW DR	Active	5193		Flowers, Nursery Stock, And Florists' Supplies	Fixed	YES		904.40
AL MITCHELL'S CLEANING	2945		VALLEY ST	Active	7217		Carpet And Upholstery Cleaning	Mobile	YES		904.21
ALBERTSONS # 6720	7660		EL CAMINO REAL	Active	5411	5411	Grocery Stores	Fixed	YES	YES	904.51
ALBERTSONS #6701	955		CARLSBAD VILLAGE DR	Active	5411		Supermarkets	Fixed	YES		904.21
ALEJANDRO'S MEXICAN FOOD	2952		HARDING ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
ALLEN'S NEW YORK PIZZA, INC.	6943	101	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
ALLEY, THE	421		GRAND AVE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
ALLGIRE BUILDING CONTRACTORS	3278		GREY HAWK CT	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
ALLIED WASTE COMPANY	5960		EL CAMINO REAL	Active	4953	4953	Refuse Systems	Fixed	YES	YES	904.31
ALLIE'S EDIBLES LLC	5671	J	PALMER WAY	Active	2064	2064	Candy & Other Confectionery Products	Fixed	YES	YES	904.31
ALOHA POOL SERVICE & REPAIR	2631	14	ROOSEVELT ST	Active	7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.21
ALPHATEC MANUFACTURING, INC.	6110		CORTE DEL CEDRO	Active	3842		Orhtopedic, Prosthetic & Surgical Appliances and	Fixed	YES		904.40
AL'S CAFE IN-THE-VILLAGE	795		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
AM/PM MINI MARKET #5366	1991		PALOMAR AIRPORT RD	Active	5541		Gasoline Service Stations	Fixed	YES		904.40
AMERICAN ARBOR TREE SERVICE	391		TAMARACK AVE	Active	0783		Ornamental Shrub & Tree Svc	Mobile	YES		904.31
AMERICAN RIM SUPPLY	1955		KELLOGG AVE	Active	3465	3465	Automotive Metal Stampings	Fixed	YES	YES	904.40
AMIGO CUSTOM SCREEN PRINTS	6351	A-B	YARROW DR	Active	2261		Finishers of Broadwoven Fabrics of Cotton	Fixed	YES		904.40
ANDRADE & COMPANY	2123		VUELTA CT	Active	1721		Painting Contractor	Mobile	YES		904.51
ANTBUSTERS	6803		CORINTIA ST	Active	7342		Disinfecting And Pest Control Services	Mobile	YES		904.51
ANTOLS NORTH COUNTY MASONRY	3429		DON COTA DR	Active	1741		Masonry Contractor	Mobile	YES		904.31
APS DYNAMICS INC.	5731		PALMER WAY	Active	3826		Laboratory Analytical Instruments	Fixed	YES		904.31
APS GENERAL CONTRACTORS, INC.	4005		SUNNYHILL DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
AQUA MOBILE DETAIL	5154		SHORE DR	Active	7542	7542	Carwashes	Mobile	YES	YES	904.31

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
AQUA-FRESH POOL SERVICE	2081		LEE CT	Active	7389		Business Services, NEC	Mobile	YES		904.31
AQUARIAN POOL SERVICE	1775		VALLEY PL	Active	7389		Business Services, NEC	Mobile	YES		904.21
AQUATIC QUALITY ASSURANCE	6062		CORTE DEL CEDRO	Active	7389		Business Services	Mobile	YES		904.31
ARAMARK SERVICE / TAYLOR-MADE	5545		FERMI CT	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
ARCADE, THE	2965		ROOSEVELT ST	Active	6512	6512	Commercial Shopping Center	Fixed	YES	YES	904.21
ARMENIAN CAFÉ, THE	3126		CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
ARMSTRONG GARDEN CENTERS,INC.	5702		PASEO DEL NORTE	Active	5261		Retail Nurseries, Lawn & Garden Sup Stores	Fixed	YES		904.31
ARNOLD'S LANDSCAPE	3610		KINGSTON ST	Active	0781		Landscape Counseling and Planning	Mobile	YES		904.21
ARRISCAPE, INC	4511		SAINT GEORGE CT		1799		Construction-Special Trade Contractors	Mobile	YES		904.51
ARTHUR A BROWN PLUMBING COMPANY	2697		STATE ST	Active	1711		Plumbing Contractor	Mobile	YES		904.21
ASHWORTH, INC.	2765		LOKER AV W	Active	5136		Clothing Distributor	Fixed	YES		904.31
ASLINE CONSTRUCTION	3008		SEGOVIA WAY	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
ASYMTEK	2762		LOKER AV W	Active	3699		Electrical Machinery, Equip & Sups, NEC	Fixed	YES		904.31
ATLANTIS POOL SERVICE	4023		CRESCENT POINT RD	Active	7389		Pool Service	Mobile	YES		904.31
ATTAWAY POOLS	2622		ROOSEVELT ST	Active	7389		Pool Contractor, Maintenance	Mobile	YES		904.51
AUTO GENOMICS, INC	2251		RUTHERFORD RD	Active	3841		Surgical and medical INSTRUMENTS	Fixed	YES		904.31
AUTOMOTIVE SOLUTIONS	945		TAMARACK AVE	Active	7549		Automotive Services, Except Repair And Carwashes	Fixed	YES		904.31
AVIARA FARMS	1205		AVIARA PKWY	Active	5159		Wholesale Distribution of Raw Farm Produce	Fixed	YES		904.31
AVIS RENT A CAR	2198		PALOMAR AIRPORT RD	Excluded	7514	N/A	Rental Car Agency	Fixed	YES		904.40
B & G TREE SERVICE	2631		ROOSEVELT ST	Active	0781		Landscaper	Mobile	YES		904.21
B & H CONSTRUCTION	2590		DAVIS	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
B.A. WORTHING, INC.	690	201	CARLSBAD VILLAGE DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
BAKEHOUSE FOODS, INC.	2270	U	CAMINO VIDA ROBLE	NLB	2052	N/A	Cookies & Crackers	Fixed	YES	YES	904.40
BAN'S CLEANERS	981		TAMARACK AVE	Active	7216	7216	Dry Cleaning Plant	Fixed	YES	YES	904.31
BARNSTORMING ADVENTURES	2206		PALOMAR AIRPORT RD	NLB	4522	N/A	Air Transportation, Nonscheduled	Fixed	YES	YES	904.31
BARRETT LANDSCAPE AND MAINTENANCE	6480		CORTE LA LUZ	Active	0782		Lawn And Garden Services	Mobile	YES		904.51
BASELINE TENNIS COURTS AND SUPPLIES	3218		AZAHAR PL	Active	1799		Special Trade Contractors, Nec	Mobile	YES		904.51
BASKIN ROBBINS	2540	D	EL CAMINO REAL	Active	5451	5451	Dairy Products Stores	Fixed	YES	YES	904.21
BASKIN ROBBINS	6949	101	EL CAMINO REAL	Active	5451	5451	Dairy Products Stores	Fixed	YES	YES	904.51
BECKMAN COULTER	2470		FARADAY AVE	Active	2835	2835	Invitro and Invitro Diagnostic Substances	Fixed	YES	YES	904.31
BELLEFLEUR CARLSBAD LLC	5610	100	PASEO DEL NORTE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
BEN LELAND CONSTRUCTION	132	297	N. EL CAMINO REAL	Active	1521	1521	Building Construction-General Building Contractors	Mobile	Yes	YES	
BENCHMARK STONEWORKS,INC.	5661		PALMER WAY	Active	1743		Terrazzo, Tile, Marble, Mosaic Work	Mobile	YES		904.31
BENIHANA	755	100	RAINTREE DR	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
BEST TERIYAKI	1818	104	MARRON RD	NLB	5812		Eating Places	Fixed	YES	YES	904.21
BHI-BUILDERS	7213		AVIARA DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
BIG FISH MOTORSPORTS	6060		AVENIDA ENCINAS	NLB	7538		Motor Vehicle Parts And Accessories	Fixed	YES	No	904.40

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
BIG O TIRES	2615		STATE ST	Active	7538		General Automotive Repair Shops	Fixed	YES		904.21
BISTRO WEST	4960		AVENIDA ENCINAS	Active	5812	5812	Eating and Drinking Places	Fixed	YES	YES	904.31
BLACK BOX INC	2777	A	LOKER AV W	Active	5091	5091	Sporting And Recreational Goods & Supplies	Fixed	YES	YES	904.31
BLACK FOREST DETAIL	7759		CALLE MEJOR	Active	7542		Mobile Car Wash	Mobile	YES		904.51
BLENDZ	2708	104	LOKER AV W	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
BLISSFULL CUSINE LLC	300	106	CARLSBAD VILLAGE DR	Active	5812	5812	Eating Places	Fixed	YES	YES	904.21
BLUE LAGOON POOL SERVICE	2665		LEVANTE ST	Active	7389		Pool Maintenance	Mobile	YES		904.51
BLUE WAVE SERVICES	1177		HIGHBLUFF AVE	Active	7349	7349	Powerwash, Building Cleaning	Mobile	Yes	YES	
BLW ROOFING	3306		AZAHAR PL	Active	1761		Roofing Contractor	Mobile	YES		904.51
BOAR CROSSn	390		GRAND AVE	Active	5813	5813	Drinking Places (Alcoholic Beverages)	Fixed	YES	YES	904.21
BOB BAKER CHRYSLER JEEP	5555		CAR COUNTRY DR	Active	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	YES	YES	904.31
BOB BAKER MAZDA	5515		CAR COUNTRY DR	Active	5511	5511	Motor Vehicle Dealers (New and Used)	Fixed	YES	YES	904.31
BOB BAKER VOLKSWAGEN/SUBARU	5500		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
BOBBY'S HIDEAWAY CAFE	4901	F	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
BOSTON MARKET # 637	2606		EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
BOVENZI CONSTRUCTION INC	343		OAK AVE	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
BOYS & GIRLS CLUB OF CARLSBAD	3115		ROOSEVELT ST	Active	7997	7997	Membership Sports and Recreation Clubs	Fixed	YES	YES	904.21
BRIGHTON GARDENS OF CARLSBAD	3140		EL CAMINO REAL	Active	8059		Nursing Home	Fixed	YES		904.21
BRISTISH MOTOR CARS	2725		STATE ST	Active	7538		General Automotive Repair Shops	Fixed	YES		904.21
BRITISH INDEPENDENT CAR COUNTRY CARLSBAD	1060	O	AUTO CENTER CT	Active	7538		General Automotive Repair Shops	Fixed	YES		904.31
BROKEN YOLK CAFÉ	7670	104	EL CAMINO REAL	Active	5812	5812	Eating Places	Fixed	YES	Yes	904.51
BROOKHART CONCRETE, INC.	2911	P	STATE ST	Active	1731		Concrete Contractor	Mobile	YES		904.21
BRUEGGER'S BAGELS	7680	102	EL CAMINO REAL	Active	5812	5812	Eating Places	Fixed	YES	Yes	904.51
B-STANG CONSTRUCTION	3490		CHARTE OAK	Active	1521		General Contractor	Mobile	YES		904.31
BUCA DI BEPPO	1921		CALLE BARCELONA	Active	5812	5812	Eating Places	Fixed	YES	Yes	904.51
BUDGET RENT A CAR	850		PALOMAR AIRPORT RD	Active	7514		Passenger Car Rental	Fixed	YES		904.40
BURTON'S CARPET CARE	6417	201	TOBRIA TR	Active	7217		Carpet Cleaning	Fixed	YES		904.51
BVP ASSOCIATES (DBA OCEAN AIR)	2206		PALOMAR AIRPORT RD	Active	6512	6512	Non-Residential Warehouse - Aiplane Storage	Fixed	Yes	YES	904.40
BYRNES CONSTRUCTION	3095	G	STATE ST	Active	1522		Contractor	Mobile	YES		904.31
C & C STEAMWAY	2735		WOODWIND RD	Active	7217		Carpet Cleaning	Mobile	YES		904.31
C.A. MASONRY	3729		JETTY PT		1731		Construction-Special Trade Contractors	Mobile	YES		904.31
CAFÉ ELYSA	3076		CARLSBAD BLVD	Active	5812	5812	Eating and Drinking Places	Fixed	YES	YES	904.21
CALDO POMODORO	2907		STATE ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
CALIBER COLLISION CENTERS	6050		AVENIDA ENCINAS	Active	7532	7532	Top, Body, Upholstery Repair, Paint	Fixed	YES	YES	904.40
CALIFORNIA FABWORKS	2101	G	LAS PALMAS DR	Active	7532		Top, Body, Upholstery Repair, Paint	Fixed	YES		904.40
CALIFORNIA LINEAR DEVICES, INC.	2236	119	RUTHERFORD RD	Active	3621		Motors and Generators	Fixed	YES		904.31
CALIFORNIA SENSOR CORP.	2075	P	CORTE DEL NOGAL	Active	3829		Measuring & Controlling Devices, NEC	Fixed	No		904.40
CALIPER CLUB WORKS, INC.	6361	E	YARROW DR	Active	3949	3949	Sporting/Athletic Goods, Not Elsewhere Classified	Fixed	YES	YES	904.40
CALLAWAY GOLF BALL COMPANY	2180		RUTHERFORD RD	Active	3949	3949	Sporting and Athletic Goods, NEC	Fixed	YES	YES	904.31
CALLAWAY GOLF COMPANY	5860		DRYDEN PL	Active	7999	7999	Amusement & Recreaton Services	Fixed	YES	YES	904.40
CALLAWAY GOLF COMPANY	5858		DRYDEN PL	Active	8731	8731	Sporting and Athletic Goods, NEC	Fixed	YES	YES	904.40

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
CALLAWAY GOLF COMPANY	2081		FARADAY AVE	Active	4225	4225	Sporting and Athletic Goods, NEC	Fixed	YES	YES	904.31
CALLAWAY GOLF COMPANY	2285		RUTHERFORD RD	Active	3949	3949	Sporting and Athletic Goods, NEC	Fixed	YES	YES	904.31
CALLAWAY GOLF COMPANY (HUNTER BUILD)	2261		RUTHERFORD RD	Active	8371	8731	Sporting and Athletic Goods, NEC	Fixed	YES	YES	904.31
CALLAWAY GOLF COMPANY (PASCAL BUILD)	5960	150	PASCAL CT	Active	3949	3949	Sporting and Athletic Goods, NEC	Fixed	YES	YES	904.31
CALPACIFIC POOL AND SPA	4145		HARBOR DR	Active	7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.31
CALTRANS/CARLSBAD MAINTENANCE	6050		PASEO DEL NORTE	Active	9621	9621	Transportation Programs Administration	Fixed	YES	YES	904.40
CAMPUS CAFE	5966		LA PLACE CT	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
CANNON PACIFIC SERVICES, LLC	6102	H/I	AVENIDA ENCINAS	Inactive	4212		Local Trucking Without Storage	Fixed	YES	no	904.40
CAP'S MOBILE SMALL ENGINE REPAIR	3580		TRIESTE DR	Active	7699		Repair Shops and Related Services, NEC	Mobile	YES		904.31
CARBITE GOLF	5816		DRYDEN PL	Inactive	5091	NA	Wholeslae Sprting Goods	Fixed	YES	no	904.31
CARLS JR	2608		EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
CARLS JR	5808	110	VAN ALLEN WAY	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
CARLS JR #117	950		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
CARLS JR.	925		PALOMAR AIRPORT RD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.40
CARLSBAD AIRPORT SELF STORAGE	1910		PALOMAR OAKS WAY	Active	4225		General Warehousing & Storage	Fixed	No		904.40
CARLSBAD AQUAFARM INC.	4600		CARLSBAD BLVD	Active	0182	812	Food Crops Grown Undercover	Fixed	YES	YES	904.31
CARLSBAD AUTO SERVICE.	3181		TYLER ST	Active	7538	7538	General Automotive Repair Shops	Fixed	YES	YES	904.31
CARLSBAD AUTO SUPPLY	3197		TYLER ST	Active	5531	5531	Auto & Home Supply Stores	Fixed	YES	YES	904.31
CARLSBAD AUTO TECHNOLOGY	2730		STATE ST	Active	7538		General Automotive Repair Shops	Fixed	YES		904.21
CARLSBAD BY THE SEA	2855		CARLSBAD BLVD	Active	6513		Operators of Apartment Bldgs	Fixed	YES		904.21
CARLSBAD CARPET CLEANING COMPANY	936		DAISY AVE	Active	7217		Carpet & Upholstery Cleaning	Mobile	YES		904.51
CARLSBAD COLLISION CARE	2598		STATE ST	Inactive	7532		Auto body Repair and Paint Shop	Fixed	No	no	904.21
CARLSBAD CUSTOM CABINETS	2719		LOKER AV W	Active	2434	2434	Cabinet Makers	Fixed	YES	YES	904.31
CARLSBAD DANISH BAKERY	2805		ROOSEVELT ST	Active	5461	5461	Retail Bakeries	Fixed	YES	YES	904.21
CARLSBAD EXCLUSIVE AUTOMOTIVE	1060	DEF	AUTO CENTER CT	Active	7538		General Automotive Repair Shops	Fixed	YES		904.31
CARLSBAD FRENCH PASTRY CAFE	1008	B/C	CARLSBAD VILLAGE DR	Active	5461	5461	Retail Bakeries	Fixed	YES	YES	904.21
CARLSBAD GAS & PROPANE	1089		CARLSBAD VILLAGE DR	Active	5541		Gasoline Service Stations	Fixed	YES		904.21
CARLSBAD GOLF CENTER	2711		HAYMAR	Active	7999	7999	Amusement & Recreation Svcs, NEC	Fixed	YES	Yes	904.21
CARLSBAD HYUNDAI	5285		CAR COUNTRY DR	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
CARLSBAD INTERNATIONAL EXPORT	1954		KELLOGG AVE	Active	3829		Measuring & Controlling Devices, NEC	Fixed	No		904.40
CARLSBAD LANDSCAPE CONSTRUCTION INC	2777		WILSON ST	Active	1799		Landscape Construction	Mobile	YES		904.51
CARLSBAD MAGNETICS	6086		CORTE DEL CEDRO	Active	3699		Electrical Machinery, Equip & Sups, NEC	Fixed	YES		904.40
CARLSBAD MUFFLER & BRAKES	1060	L	AUTO CENTER CT	Active	7533		Automotive Exhaust System Repair Shops	Fixed	YES		904.31
CARLSBAD PLAZA	2508		EL CAMINO REAL	Active	6512	6512	Operators of Nonresidential Buildings	Fixed	YES	YES	904.21
CARLSBAD PREMIUM OUTLETS	5620	100	PASEO DEL NORTE	Active	6512	6512	Operators of Nonresidential Buildings	Fixed	YES	YES	904.31
CARLSBAD RANCH MARKET	6118	D-F	PASEO DEL NORTE	Active	5431	5431	Fruit and Vegetable Markets	Fixed	YES	YES	904.40
CARLSBAD SELF STORAGE LLC	2235		PALOMAR AIRPORT RD	Active	4225	4225	General Warehousing & Storage	Fixed	No	Yes	904.40
CARLSBAD SELF-SVC CAR WASH INC	2608		STATE ST	Active	7542		Carwashes	Fixed	YES		904.21
CARLSBAD STRAWBERRY COMPANY (LESLIE FARM INC)			CANNON AND INTERSTATE 5	Active	0171	0171	Berry Crops	Fixed	YES	YES	904.31
CARLSBAD TECHNOLOGY INC.	5923		BALFOUR CT	Active	2834	2834	Pharmaceutical Preparations	Fixed	YES	YES	904.31
CARLSBAD TECHNOLOGY INC.	5922		FARNSWORTH CT	Active	2834	2834	Pharmaceutical Preparations	Fixed	YES	YES	904.31
CARLSBAD TOWING	3181		ROOSEVELT ST	Active	7549		Towing Service	Fixed	YES		904.21

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
CARLSBAD VILLAGE AUTO BODY & PAINT	3191		TYLER ST	Active	7532		Top, Body, Upholstery Repair, Paint	Fixed	YES		904.31
CARLSBAD VILLAGE INDEPENDENT MERCEDES AND VOLVO SERVICE INC	3045		ROOSEVELT ST	Active	7538		General Automotive Repair Shops	Fixed	YES		904.21
CARLSBAD VILLAGE SELF STORAGE	3235		TYLER ST	Active	4225		General Warehousing And Storage	Fixed	No		904.21
CARLSBAD VILLAGE SHELL	1145		CARLSBAD VILLAGE DR	Active	5541		Gasoline Service Stations	Fixed	YES		904.21
CARLSBAD VOLVO	6830		AVENIDA ENCINAS	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.40
CARPET CLEANER1.COM	6311		MONTECITO DR		7217		Carpet And Upholstery Cleaning	Mobile	YES		904.51
CARTER'S HAY AND GRAIN	1985		OLIVENHAIN RD	Active	5191	5191	Farm Supplies - Feed and Grain	Fixed	YES	YES	904.51
CARVED STONE INTERNATIONAL	2245		CAMINO VIDA ROBLE	Active	5032		Brick, Stone & Related Constr Mats	Fixed	YES		904.40
CASE CONSTRUCTION INC	2907		CORTE JARDIN	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
CAVALLO MOTOR SPORTS	6010		AVENIDA ENCINAS	Active	7538	7538	General Automotive Repair Shops	Fixed	YES	YES	904.40
CDS PRINTING	6971	203	EL CAMINO REAL	Active	2759	2759	Commercial Printing, NEC	Fixed	YES	YES	904.51
CESSY'S TACO SHOP	3016		CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
CHARLES T FARM	3008		SUNNY CREEK RD	Active	161		Flowers, Nursery Stock, And Florists' Supplies	Fixed	YES		904.31
CHARO CHICKEN	7680	103	EL CAMINO REAL	Active	5812	5812	Eating Places	Fixed	YES	Yes	904.51
CHEVRON #46	850		PALOMAR AIRPORT RD	Active	5541		Gasoline Service Stations	Fixed	YES		904.40
CHEVRON USA INC #93320	970		TAMARACK AVE	Active	5541	5541	Gasoline Service Stations	Fixed	YES	YES	904.31
CHINA GATE	2525	142	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
CHIN'S SZECHWAN RESTAURANT	2958		MADISON ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
CHRIS BARCA CONSTRUCTION	2441		LEVANTE ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
CHRIS CAVENY GENERAL CONTRACTOR	3946		LINMAR LN	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
CHUCKS PLUMBING	3800		WESTHAVEN DR	Active	1711		Plumbing Contractor	Mobile	YES		904.31
CHUCK'S TIRE CENTER	6060	A19	AVENIDA ENCINAS	Active	5531	5531	Auto & Home Supply Stores	Fixed	YES	YES	904.40
CILANTRO LIVE	300	106	CARLSBAD VILLAGE DR	NLB	5812		Eating Places	Fixed	YES	NO	904.21
CIRCLE K DBA CARLSBAD FUELS CORP	7602		EL CAMINO REAL	Active	5541	5541	Gasoline Service Stations	Fixed	YES	YES	904.51
CIVIC HELICOPTER INC	2206	H	PALOMAR AIRPORT RD	Active	4522	4522	Helicopter Maintenance & Operations	Fixed	YES	YES	904.31
CLAIM JUMPER RESTAURANT, 9LTD	5958		AVENIDA ENCINAS	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
CLEAN IMAGE POWER WASH	4129		ADAMS ST	Active	7349		Business Services, Not Elsewhere Classified	Mobile	YES		904.31
CLEANING COMPANY, THE	2605		JACARANDA AVE		7217		Carpet And Upholstery Cleaning	Mobile	YES		904.51
CLYD'S SEPTIC TANK SERVICE	7248		PONTO DR	Active	7699		Septic Tank Cleaning and Pumping	Mobile	YES		904.51
COAST COLLISION CENTERS	6030	C	AVENIDA ENCINAS	Active	7532	7532	Top, Body, And Upholstery Repair Shops & Paint Sh	Fixed	YES	YES	904.40
COAST WASTE MANAGEMENT	5960		EL CAMINO REAL	Active	4225	4225	General Warehousing & Storage	Fixed	YES	YES	904.31
COLD STONE CREAMERY	2967		CARLSBAD BLVD	Active	5451	5451	Retail Ice Cream Sales	Fixed	YES		904.31
COLONIAL PAINTING	2520	F	NAVARRA DR	Active	1721		Construction-Special Trade Contractors	Mobile	YES		904.51
COMPONENT CONCEPTS	6179	200	EL CAMINO REAL	Active	5065		Distribution and Assembling Battery Packs	Fixed	No		904.51
CONCRETE GROUP, THE	2205	F	FARADAY AVE		1731		Construction-Special Trade Contractors	Mobile	YES		904.31
CONCRETE JUNGLE CUTTING & CORING	4509	B	ADAMS ST	Active	1771		Concrete Cutting & Coring	Mobile	YES		904.31
CONCRETE RESTORATIONS	6134		PASEO ENSILLAR		1731		Construction-Special Trade Contractors	Mobile	YES		904.51
CONSOLIDATED ELEC. DIST. INC	6106	A	AVENIDA ENCINAS	Active	5063		Electrical Apparatus & Equpment Wiring Supplies	Fixed	YES		904.40

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CONWAY & ASSOC., INC.	2525	102	PIO PICO DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
COSTCO WHOLESALE	951		PALOMAR AIRPORT RD	Active	5399		Miscellaneous General Merchandise Stores	Fixed	YES		904.40
COTTRELL MACHINE	6102	B-C	AVENIDA ENCINAS	Active	3599	3599	Indl and Comml Machinery and Equip, NEC	Fixed	YES	YES	904.40
COYOTE BAR & GRILL	300		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
CPS PRINTING	2304		FARADAY AVE	Active	2759		Commercial Printing, NEC	Fixed	YES	YES	904.31
CRAZY BURRO DINING CANTINA	6996		EL CAMINO REAL	NLB	5812		Eating & Drinking Places	Fixed	YES		904.51
CREATIVE MACHINING LLC	6102	B & C	AVENIDA ENCINAS	Active	3599	3599	Indus./Commercial Equipment, Not Elsewhere Classi	Fixed	YES	Yes	904.40
CREATIVE STONE AND TILE	5234		AVENIDA ENCINAS	Active	1743		Tile and Stone Work	Mobile	YES		904.31
CRESTONE GROUP BAKING COMPANY	5927		FARNSWORTH CT	Active	2051		Bread & Other Baker Prods	Fixed	YES		904.31
CROSSINGS AT CARLSBAD, THE	5800		HIDDEN VALLEY ROAD	Active	7992	7992	Public Golf Courses	Fixed	YES	YES	904.31
CROSSROAD PETROLEUM (ARCO AM/PM)	810		TAMARACK AVE	Active	5541		Gasoline Service Stations	Fixed	YES		904.31
CROUTONS	5814	140	VAN ALLEN WAY	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
CRYSTAL RAIN POOL SERVICES	2894		WOODRIDGE CIR	Active	7389		Swimming Pool Maintenance	Mobile	YES		904.21
CURTIS CONSTRUCTION	3420		DONNA DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
CUSTOM HOME PAINTING	2138		TWAIN AVE	Active	1721		Special Trade Contractors	Mobile	YES		904.21
CUTTING EDGE CNC, INC.	6064		CORTE DEL CEDRO	Active	3599		Machine Shop	Fixed	YES		904.40
CVI MELLES GRIOT	2051	200	PALOMAR AIRPORT RD	Active	3674	3674	Semiconductors & Related Devices	Fixed	YES	YES	904.40
CVS PHARMACY #9479	2510	E	EL CAMINO REAL	Active	5912	5912	Drug Stores and Proprietary Stores	Fixed	YES	YES	904.21
D & H ENTERPRISES	7213		PLAZA DE LA COSTA	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
D M BUILDING	1825		MCCAULEY LN	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
D.C.C.	1492		OAK AVE	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
DAG BUILDERS INC	1535		SUNRISE CIR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
DAILY NEWS CAFE, THE	3001	A	CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
DAPHNE'S GREEK CAFE	6981	101	EL CAMINO REAL	Active	5812	5812	Eating Places	Fixed	YES	YES	904.51
DARIO'S MEDITERANEAN CUISINE	2508	D	EL CAMINO REAL	NLB	5812		Eating Places	Fixed	YES		904.21
DARTON INTERNATIONAL, INC.	2380	J/K	CAMINO VIDA ROBLE	Active	3599		Manufacturing Industrial Machinery	Fixed	YES		904.40
DAVE'S AUTO SERVICE AND REPAIR	3235		ROOSEVELT ST	Active	7538	7538	Automotive service and repair	Fixed	YES	YES	904.31
DAVID R. FUNKHOUSER GENERAL CONTRACTOR	1281		MAGNOLIA AVE	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
DAVID TAYLOR DEVELOPMENT INC.	4135		SKYLINE RD	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
DEAN PORTER CONSTRUCTION	3750		MONROE ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
DEGREGORIO SERVICE & REPAIR	2706		EL RASTRO LN	Active	7349		Building Cleaning & Maint Svc, NEC	Mobile	YES		904.51
DELI WISHES	5365	B	AVENIDA ENCINAS	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31

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DENNIS MATHIS, CONSTRUCTION, INC.	3128		LE VANTE ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
DENNY'S # 7517	1048		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
DEPT OF ANIMAL CONTROL	2481		PALOMAR AIRPORT RD	Active	0752		Animal Shelter	Fixed	YES		904.40
DINI'S BY THE SEA	3290		CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
DISCOUNT CARPET & UPHOLSTERY	2408		MAJANO PL	Active	7217		Carpet & Upholstery	Mobile	YES		904.51
DOCTOR OF THE HOUSE	2371		MARCA PL	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
DOMINO'S PIZZA # 8380	6986	A	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
DON'S COUNTRY KITCHEN	2885		ROOSEVELT ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
DONUT FAIR, THE	2540	C1	EL CAMINO REAL	Active	5461	5461	Retail Bakeries	Fixed	YES	YES	904.21
DOT HILL SYSTEMS CORPORATION	6305		EL CAMINO REAL	Active	3577		Computer Peripheral Equip, NEC	Fixed	YES		904.40
DR.'S OWN, INC	2270	100	COSMOS T	Active	3842		Orthopedic/Prosthetic/Surgical Appliances And Supp	Fixed	No		904.31
DRAGMASTER INC.	2725		STATE ST	Active	7538		General Automotive Repair Shops	Fixed	YES		904.21
DRAIN RUNNER	830		CITRUS PL	Active	1711		Construction-Special Trade Contractors	Mobile	YES		904.21
DREAM POOLS AND SPAS	3607		BARRANCA CT	Active	1799		Construction-Special Trade Contractors	Mobile	YES		904.51
DRYCLEAN AMERICA.NET	2708	105	LOKER AV W	Active	7216	7216	Drycleaning Plants, Except Rug Cleaning	Fixed	YES	YES	904.31
DUNN-EDWARDS PAINTS	2840	E	E LOKER AVE	Active	5231	5231	Paint, Glass, And Wallpaper Stores	Fixed	YES	YES	904.31
E/G ELECTRO-GRAPH INC.	2355		CAMINO VIDA ROBLE	Inactive	3674		Semiconductors and Related Devices	Fixed	YES		904.40
E/G ELECTRO-GRAPH INC.	2365		CAMINO VIDA ROBLE	Active	3674	3674	Semiconductors 7 Related Devices	Fixed	YES	YES	904.40
ECR GRILLE	7740	F	EL CAMINO REAL	NLB	5812		Eating and Drinking Places	Fixed	YES	NO	904.51
EDWARD SHEDLEY MASONRY	2445		SIERRA MORENA AVE	Active	1741		Special Trade Contractors	Mobile	YES		904.31
EL CAMINO RENTAL	5701		EL CAMINO REAL	Active	7359		Equipment Rental & Leasing, NEC	Fixed	YES		904.31
EL CARIBE	6965	205	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
EL POLLO LOCO #3423	7120		AVENIDA ENCINAS	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
EL PUERTO MEXICAN & SEAFOOD	1065	D	CARLSBAD VILLAGE DR	Active	5812	5812	Eating Places	Fixed	YES	YES	904.21
EL RINCON GARDEN CARE	3480	B	MONROE ST	Active	0781		Landscape Counseling And Planning	Mobile	YES		904.21
EL TORITO MARKET	3163		ROOSEVELT ST	Active	5411		Grocery Stores	Fixed	YES		904.21
ELECTRIC REGULATOR	6189		EL CAMINO REAL	Active	3625	3625	Electrical Indl Apparatus, NEC	Fixed	YES	YES	904.40
ELECTRO SURFACE TECHNOLOGIES INC.	2280	100	FARADAY AVE	Active	3679	3679	Electronic components, NEC	Fixed	YES	YES	904.31
ELITE GLASS & WINDOWS, INC.	1207	F	CARLSBAD VILLAGE DR	Active	1793		Glass And Glazing Work	Mobile	YES		904.21
ELTROL CORPORATION	5661		PALMER WAY	Active	3625		Relays & Industrial Controls	Fixed	YES		904.31
ELYS PLACE (CALLAWAY GOLF)	5928		PASCAL CT	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
EMBASSY INTERNATIONAL LIMOUSINE INC	6102	G	AVENIDA ENCINAS	Active	4119	4119	Local Passenger Transportation, NEC	Fixed	YES	YES	904.40
EMPIRE PIPELINE	1945	E	CAMINO VIDA ROBLE	Active	1711		Construction-Special Trade Contractors	Mobile	YES		904.31
ENCINA WATER FACILITY	6200		AVENIDA ENCINAS	Active	4952	4952	Sewerage Systems	Fixed	YES	YES	904.40
ENCINAS BUSINESS PARK/MCWIN CORP	6102	B	AVENIDA ENCINAS	Active	6512		Operators of Nonresidential Buildings	Fixed	YES		904.40
ENDLESS SUMMERSCAPES	2240	L	AVENIDA MAGNIFICA		781		Landscape Counseling And Planning	Mobile	YES		904.31
ENDRES CONSTRUCTION	2895		HIGHLAND DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
ENTERPRISE RENT A CAR L.A. #3246	1060	M	AUTO CENTER CT	Active	7514		Passenger Car Rental	Fixed	YES		904.31
EOTRON LLC	2215	D	FARADAY AVE	NLB	3674		Semiconductors And Related Devices	Fixed	YES	No	904.31

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ERIC PAGE PLUMBING	2833		FOREST VIEW WAY	Active	1711		Special Trade Contractors	Mobile	YES		904.21
EUFORA	2885	E	E LOKER AVE	Active	5122		Drugs, Drug Proprietaries, Sundries	Fixed	No		904.40
EWING IRRIGATION PRODUCTS INC.	6104	E	AVENIDA ENCINAS	Active	5083		Farm & Garden Machinery & Equipment	Fixed	YES		904.40
EXCELLENCE IN PAINTING	2781		BERKELEY AVE	Active	1721		Construction Specialist - Painting	Mobile	YES		904.31
EXPRESS AUTO CENTER	2676	A	STATE ST	Active	7538	7538	General Automotive Repair Shops	Fixed	YES	YES	904.21
FAMILY POOL SERVICE	1884		PALISADES DR		7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.31
FEDERAL EXPRESS CORPORATION	2495		FARADAY AVE	Active	4215		Air Courier Services	Fixed	YES	YES	904.31
FELIX A. LANDSCAPING	7782		PALENQUE ST	Active	0781		Landscape Counseling And Planning	Mobile	YES		904.31
FENWAY SPORTS BAR & GRILL	1814		MARRON RD	Active	5812	5812	Eating Places	Fixed	YES	YES	904.21
FIDELS NORTE INC	3003		CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
FINISH TECH CORPORATION	5993	101	AVENIDA ENCINAS		1521		Building Construction-General Building Contractors	Mobile	YES		904.31
FINNEGAN'S PUB AND GRILL	1814		MARRON RD	NLB	5812		Eating Places	Fixed	YES	No	904.21
FIRESTONE TIRES & SERVICE CENTER	2545		EL CAMINO REAL	Active	7538	7538	General Automotive Repair Shops	Fixed	YES	YES	904.21
FISH HOUSE VERA CRUZ	417		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
FLIPPIN PIZZAS	7662	103	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
FLORAL EXPRESS	5825	107	AVENIDA ENCINAS	Active	5193	5193	Flowers, Nursery Stock, Supplies	Fixed	YES	YES	904.31
FLOREXPO, LLC	1960		KELLOGG AVE	Active	5193		Flowers, Nursery Stock, Supplies	Fixed	YES		904.40
FLOWER FIELD, THE	5702		PASEO DEL NORTE	Active	181		Ornamental Floriculture	Fixed	YES		904.31
FLOWERS BY HI-LO	6211	F	YARROW DR	Active	5193		Wholesale Flower Distribution	Fixed	YES		904.40
FOCUSED AUTO DETAILING	3660		CATALINA DRIVE	Active	7542		Mobile Detailing/Washer	Mobile	YES		904.21
FORESIGHT DEVELOPMENT, INC.	2879	B	STATE ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
FOUR SEASONS AVIARA GOLF CLUB	7447		BATIQUITOS DR	Active	7997		Golf Club	Fixed	YES		904.51
FOUR SEASONS GOLF MAINT FACILITY	7227		AVIARA DR	Active	7997		Golf Course and Resort	Fixed	YES		904.51
FOUR SEASONS RESORT AVIARA	7100		FOUR SEASONS PT	Active	7011		Hotels and Motels	Fixed	YES		904.51
FOX POINT FARMS WHOLESALE	5600	11	AVENIDA ENCINAS	Active	5193		Wholesale Floral	Fixed	YES		904.31
FRAZEE PAINT	7040	100	AVENIDA ENCINAS	Active	5231	5231	Paint, Glass, And Wallpaper Stores	Fixed	YES	Yes	904.51
FRESCO TRATTORIA	3263	105	CAMINO DE LOS COCHES	Active	5812	5812	Eating Places	Fixed	YES	YES	904.51
FRESCO TRATTORIA & BAR	264		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
FROEDGE CONSTRUCTION	2240	H	AVENIDA MAGNIFICA	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
FRONTERA CONSTRUCTION INC	5993	101	AVENIDA ENCINAS		1521		Building Construction-General Building Contractors	Mobile	YES		904.31
FURNISHINGS 4 LESS	1960	D	KELLOGG AVE	Active	5712		Furniture Stores	Fixed	YES		904.31
G.P.M	5015		GARSDEN AVE	Active			HOA MAINTENANCE	Mobile	Yes	YES	
G.T. MACHINE SHOP	2790	100	LOKER AV W	Active	3599		Ind & Comml Machinery & Equip, NEC	Fixed	YES		904.31
GARCIAS MEXICAN RESTAURANT	2968		STATE ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
GARDEN GAL, THE	6617		VIREO CT	Active	0781		Landscape Counseling And Planning	Mobile	YES		904.51
GARDEN STATE BAGELS	5620	125	PASEO DEL NORTE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
GARRETT CONSTRUCTION COMPANY	3310		AVENIDA OBERTURA	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
GARY TEAM PAINTING INC.	3890		HIGHLAND DR	Active	1721		Special Trade Contractors	Mobile	YES		904.31

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GASCO GASOLINE	920		CARLSBAD VILLAGE DR	Active	5541		Gasoline Service Stations	Fixed	YES		904.21
GATES CONSTRUCTION	2735		SPOKANE WAY	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
GEMATRIA PRODUCTS, INC.	2075	H	CORTE DEL NOGAL	Active	2834		Vitamin & Nutrient Manufacturer	Fixed	No		904.40
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	5355		ARMADA DR	Active	3915		Lapidary Work, Mats, Jewelers, Finding	Fixed	No		904.31
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	1964		KELLOGG AVE	Active	2759		Commercial Printing	Fixed	No		904.31
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	1949		KELLOGG AVE	Active	3699		Electrical Machinery, Equip & Sups, NEC	Fixed	No		904.31
GEOMILL	2792	103	LOKER AV W	Active	3599	3599	Indus./Commercial Equipment, Not Elsewhere Classi	Fixed	YES	YES	904.31
GEORGIOS GREEK BURRITO WRAP	7720	F	EL CAMINO REAL	NLB	5812		Eating & Drinking Places	Fixed	YES	No	904.51
GET N' GO DONUTS	6986	E	EL CAMINO REAL	Active	5461	5461	Retail Bakeries	Fixed	YES	YES	904.51
GIGATREND INCORPORATED	5115	G	AVENIDA ENCINAS	NLB	3577	N/A	Computer Peripheral Equipment, NEC	Fixed	No	NO	904.31
GLOBAL MICROWAVE SYSTEMS, INC	1916	100	PALOMAR OAKS WAY	Active	3663		Radio and Television Broadcasting and Communications Equipment	Fixed	YES		904.40
GOMEZ PLBG, GERARDO	4765		GATESHEAD RD	Active	1711		Plumbing Contractor	Mobile	YES		904.31
GORILLA EQUIPMENT RENTALS	505		OAK AVE	Active	7359		Equipment Rental & Leasing, NEC	Fixed	YES		904.31
GOURMET SUSHI	5814	135	VAN ALLEN WAY	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
GRAFIKOM	5909		SEA OTTER PL	Moved	2759	NA	Commercial Printing	Fixed	YES	NO	904.31
GRAHAM ESPIE CONSTRUCTION	4717		GATESHEAD RD		1521		Building Construction-General Building Contractors	Mobile	YES		904.51
GRAND AVENUE BAR & GRILL	752		GRAND AVE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
GRAND DELI, THE	595		GRAND AVE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
GRAND PACIFIC PALISADES RESORT	5805		ARMADA DR	Active	7011	7011	Hotels and Motels	Fixed	No	YES	904.31
GRANT GENERAL CONTRACTORS	5051		AVENIDA ENCINAS	Active	1521		General Contractors--Single-Family Housing	Mobile	YES		904.31
GRAPHIC CONVERTING, INC.	5909		SEA OTTER PL	Excluded	2675		SALES OFFICE	Fixed	YES	NO	904.31
GREAT KHANS MONGOLIAN FESTIVAL	2525	236	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
GREEK CORNER CAFE	1854	100	MARRON RD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
GREEK VILLAGE L.L.C.	6030		PASEO DEL NORTE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.40
GREEN LAND COMPANY	3562		CALLE PALMITO	Active	0782		Landscape Construction	Mobile	YES		904.40
GREGG'S MOBILE REPAIR	5233		SHELLEY PL	Active	7699		Repair Shops and Related Services, NEC	Mobile	YES		904.31
GREGORIOS	300	208	CARLSBAD VILLAGE DR	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
GRUBER CONSTRUCTION	2412		LA TINADA CT	Active	1521		General Contractor	Mobile	YES		904.51
GS DREAMSCAPING	1370		PINE AVE	Active	0782		Landscape Contractor	Mobile	YES		904.31
GTR ENTERPRISES, INC.	6352	E	CORTE DEL ABETO	Active	3469		Fabricated Metal Parts	Fixed	YES		904.40
GUYON WEST	2101	C	LAS PALMAS DR	Active	5084		Wholesale Baking Equipment	Fixed	YES		904.40
HALL PEST MANAGEMENT	3572		MADISON ST		7342		Disinfecting And Pest Control Services	Mobile	YES		904.21
HANSON AGGREGATES	3750		HAYMAR DR	Active	2951	1429	Crushed Stone Sand and Gravel	Fixed	YES	YES	904.21
HARBOR FISH CAFE	3179		CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
HART CONCRETE CONSTRUCTION	4016		GARFIELD ST	Active	1771		Concrete Work	Mobile	YES		904.31
HARVEY INC.	7200	B	PONTO DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
HAWTHORNE RENT-IT SERVICE	2065		CAMINO VIDA ROBLE	Active	4212	4212	Local Trucking Without Storage	Fixed	YES	YES	904.40

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
HEAVENLY VIEWS WINDOW CLEANING	3221	37	CARINGA WAY	Active	7349		Building Cleaning And Maintenance Services, Not E	Mobile	YES		904.51
HEINZE CONSTRUCTION COMPANY	2501		JACARANDA AVE	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
HENDRIX PLUMBING	470		CHINQUAPIN AVE	Active	1711		Plumbing Contractor	Mobile	YES		904.31
HENNESSEY'S TAVERN	2777		ROOSEVELT ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
HENRY - FURNITURE MAKER, PAUL	2633		STATE ST	Active	7641		Reupholstery and Furniture Repair	Fixed	No		904.21
HENSLEY'S FLYING ELEPHANT PUB AND GRILL	850		TAMARACK AVE	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
HERTZ CORPORATION, THE	5555		PASEO DEL NORTE	Active	7514		Passenger Car Rental	Fixed	YES	YES	904.31
HETHERINGTON ROOFING CO	3265		VALLEY ST		1741		Construction-Special Trade Contractors	Mobile	YES		904.31
HILLS LANDSCAPE, INC	132	392	EL CAMINO REAL	Active				Mobile	Yes	YES	
HILLS LANDSCAPING	4264		SKYLINE RD	Active	0782		Lawn and Garden Services	Mobile	YES		904.31
HINTZ CONSTRUCTION	2535	8B	NAVARRA DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
HI-Q PAINTING COMPANY	2916	B	LUCIERNAGA ST	Active	1799		Special Trade Contractors	Mobile	YES		904.51
HOEHN ACURA	5556		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
HOEHN AUDI	5215		CAR COUNTRY DR	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
HOEHN HONDA	5454		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
HOEHN HONDA USED CARS	5566		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
HOEHN INFINITI	5245		CAR COUNTRY DR	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
HOEHN MERCEDES	5475		CAR COUNTRY DR	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
HOEHN PORSCHE	6800		AVENIDA ENCINAS	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.51
HOFFMANS CLASSIC CONSTRUCTION	4310		HORIZON DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
HOLIDAY INN CARLSBAD	850		PALOMAR AIRPORT RD	Active	7011		Hotels and Motels	Fixed	YES		904.31
HOMESPACE OF CALIFORNIA INC. (DBA PREMIER GARAGES)	2270	A	CAMINO VIDA ROBLE	Active	1752	1752	Floor Laying And Floor Work, Not Elsewhere Classi	Mobile	YES	YES	904.40
HONEST 1 AUTO CARE	3235		ROOSEVELT ST	NLB	7538		General Automotive Repair Shops	Fixed	YES	No	904.31
HONOURGROUP	4722		BIRCHWOOD CIT	Active	1542		General Contractors-Nonresidential Buildings, Oth	Mobile	YES		904.21
HOPKINS CONSTRUCTION	1201		TAMARACK AVE	Active	1799		Special Trade Contractors	Mobile	YES		904.31
HOT DOG ON A STICK	5620	C126	PASEO DEL NORTE	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
HUBBS SEA WORLD RESEARCH	4200		GARFIELD ST	Active	0921		Fish hatcheries & Preserves	Fixed	YES		904.31
HUDSON PRINTING INC	2780		LOKER AV W	Active	2759	2759	Commercial Printing, Not Elsewhere Classified	Fixed	YES	YES	904.31
HURLEYUP CONSTRUCTION	7108		PRIMROSE WAY	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
HYDRO-CHECK SYSTEMS INC.	5931	100	SEA LION PL	Active	3823	3823	Ind Instr for Measure, display & Control	Fixed	YES	YES	904.31
IBANEZ MAINTENANCE	3080		MONROE ST	Active	782		Lawn And Garden Services	Mobile	YES		904.21
INDUSTRA PAINT & CONST.	1145		TAMARACK AVE	Active	1721		Paint Contractor	Mobile	YES		904.31
INDUSTRIAL STRENGTH CORP	6115		CORTE DEL CEDRO	Active	3599		Indus./Commercial Equipment, Not Elsewhere Classi	Fixed	YES		904.40
INGHAM CONSTRUCTION	2440		PIO PICO DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31

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INGOLD TRACTOR SERVICE	4135		PARK DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
IN-N-OUT BURGER, A CALIF. CORP. #89	5950	150	AVENIDA ENCINAS	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
INNOVATIVE METAL PRODUCTS, INC.	6351	D-F	YARROW DR	Active	3444	3444	Sheet Metal Work	Fixed	YES	YES	904.40
INT SOFTBOARD TECHNOLOGY	1965		KELLOGG AVE	Active	3949	3949	Sporting/Athletic Goods, Not Elsewhere Classified	Fixed	YES	YES	904.40
INTEGRITY PLUS	2967		LEXINGTON CIR	Active	1711		Construction-Special Trade Contractors	Mobile	YES		904.51
INTERIOR SPECIALISTS INC.	1630		FARADAY AVE	Active	1752		Floor Laying & Floor Work	Mobile	YES		904.31
INVITROGEN CORPORATION	5781		VAN ALLEN WAY	Active	2836		Biological Products, Except Diagnostic Substances	Fixed	YES		904.31
IQ SCIENTIFIC INSTRUMENTS, INC	2075	E	CORTE DEL NOGAL	Active	3829		Measuring & Controlling Devices, NEC	Fixed	No		904.40
IRIS GROUP, INC., THE	1675		FARADAY AVE	Active	2752	2752	Commercial Printing, Lithographic	Fixed	YES	YES	904.31
ISAAC'S BAKERY DELI	2051	200	PALOMAR AIRPORT RD	Active	5812	5812	Eating Places	Fixed	YES	YES	904.40
ISIS PHARMACEUTICALS	2282		FARADAY AVE	Active	2834	2834	Pharmaceutical Preparations	Fixed	YES	YES	904.31
ISLANDS FINE BURGERS & DRINKS	889		PALOMAR AIRPORT RD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.40
ISLANDS@CARLSBAD	5814		VAN ALLEN WAY	Active	6512	6512	Operators of Nonresidential Buildings	Fixed	YES	YES	904.31
ITZEL'S CAFÉ	5600	110	AVENIDA ENCINAS	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
J & B GRAPHICS	6351	H/I	YARROW DR	Active	2396	2396	Automotive And Apparel Trimmings	Fixed	YES	Yes	904.40
J C CONSTRUCTION & RENOVATION	3110		DEL REY AVE	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
J H R CONSTRUCTION	5238		CARLSBAD BLVD	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
J.C. DELI AND CATERING	2382	A	CAMINO VIDA ROBLE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.40
J.C. PENNEY COMPANY	2555		EL CAMINO REAL	Active	5311	5311	Department Store	Fixed	YES	YES	904.21
JACK IN THE BOX #3006	7050		AVENIDA ENCINAS	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
JACK IN THE BOX #36	901		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
JACOBSON CONCRETE	1344		CYNTHIA LN	Active	1771		Special Trade Contractors	Mobile	YES		904.21
JARDINERA	2763		STATE ST	NLB	5261		Retail Nurseries, Lawn And Garden Supply Stores	Fixed	YES	NO	904.21
JAY'S GOURMET PIZZA AND SEAFOOD	2975	S-B	CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
JC BALDWIN CONSTRUCTION COMPANY	2469		IMPALA DR	Active	1521	1521	Building Construction-General Building Contractors	Fixed	YES	YES	904.31
JENSEN CONSTRUCTION CO	2151	A	LAS PALMAS DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.40
JESSUP TRANSPORT	5600	44	AVENIDA ENCINAS	Active	4212		Transport	Fixed	YES		904.31
JET SOURCE, INC.	2056		PALOMAR AIRPORT RD	Active	4581	4581	Airports, Flying Fields, Terminals	Fixed	YES	YES	904.31
JET SOURCE, INC.	2036		PALOMAR AIRPORT RD	Active	4581	4581	Airports, Flying Fields, Terminals	Fixed	YES	YES	904.31
JET SOURCE, INC.	2026		PALOMAR AIRPORT RD	Active	4581	4581	Airports, Flying Fields, Terminals	Fixed	YES	YES	904.31
JET SOURCE, INC.	2186		PALOMAR AIRPORT RD	Active	4581	4581	Airports, Flying Fields, Terminals	Fixed	YES	YES	904.31
JIFFY LUBE	6021		PASEO DEL NORTE	Active	7538		General Automotive Repair Shops	Fixed	YES		904.40
JIM AGNOS POOL & SPA SERVICE	7040		SNAPDRAGON DR	Active	7389		Business Services, NEC	Mobile	YES		904.51
JOE MOORE CONSTRUCTION COMPANY	3612		VALLEY ST	Active	1521		General Contractor	Mobile	YES		904.31
JOEY'S SMOKIN BBQ	6955	107	EL CAMINO REAL	Active	5812	5812	Eating Places	Fixed	YES	YES	904.51

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JOHN BIANCHI CONSTRUCTION	2910		MANAGUA PL	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
JOHN C. WALTERS & ASSOC. INC.	6320		MONTECITO DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
JOHN D. HEBERT CONSTRUCTION	5460		EL ARBOL DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
JOHN RYDEN CONSTRUCTION	376	10	JUNIPER AVE	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
JOHN STEVENSON PLUMBING	6351	A108	CORTE DEL ABETO	Active	1711		Special Trade Contractors	Mobile	YES		904.40
JOHNNY'S RUTHERFORD CAFE	2262	102	RUTHERFORD RD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
JOHNSON POOL SERVICE & REPAIR	3115		SERRANO DR	Active	7389		Business Services	Mobile	YES		904.51
JOHNSONS AUTO BODY AND PAINT	2677		STATE ST	Active	7532	7532	Auto Body Shop	Fixed	YES	YES	904.21
JON DORE CONSTRUCTION	3353		DEL RIO CT	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
JON MCANALLY CONSTRUCTION	5441		WOLVERINE TER		1521		General Contractors--Single-Family Housing	Mobile	YES		904.31
JOSEPH A. MEEHL'S SONS COMPANY	2717		VANCOUVER ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
JT SPORTS LLC	5818		EL CAMINO REAL	NLB	5091	N/A	Sporting And Recreational Goods & Supplies	Fixed	YES	No	904.31
JUAN C. MOBILE MECHANIC	7803	7	CENTELLA ST	Active	7538		General Automotive Repair Shops	Mobile	YES		904.51
JUDY'S DELI	2035	130	CORTE DEL NOGAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.40
K & K LABORATORIES INC	3305		TYLER ST	Active	2833	2833	Viatmins and Supplements	Fixed	YES	YES	904.31
K1 SPEED LLC	6212		CORTE DEL CEDRO	Active	7999	7999	Indoor Kart Racing	Fixed	YES	YES	904.40
KANINE KARE	1985		OLIVENHAIN RD	Active	0752	0752	Animal Specialty Services, Except Veterinary	Fixed	YES	YES	904.51
KARL STRAUSS BREWERY & RESTAURANT	5801		ARMADA DR	Active	2082	2082	Brewery and Restaurant	Fixed	YES	YES	904.31
KATONA PLUMBING	7076		MOTANES LN	Active	1711		Plumbing Contractor	Mobile	YES		904.51
KEN GRODY FORD	5555		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
KENNEDY MASONRY	7313		MELODIA TER	Active	1741		Masonry Contractor	Mobile	YES		904.51
KENT WATERS CABINET & MILLWORK	6074		CORTE DEL CEDRO	Active	1799		Special Trade Contractors	Fixed	YES		904.40
KEONI LANDSCAPES	1052		KNOWLES AVE	Active	1799		Landscape Construction	Mobile	YES		904.21
KFC #Y450066	745		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
KING'S FISH HOUSE	5625		PASEO DEL NORTE	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
KIPP'S LAWN SERVICE	7211		PLAZA DE LA COSTA	Active	0781		Landscape Counseling And Planning	Mobile	YES		904.51
KIWI DIG, INC.	3502		CALLE HIDALGO	Active	1521		Construction-Special Trade Contractors	Mobile	YES		904.51
KLAUS ENYEDI CONCRETE CONST	1715		CATALPA RD	Active	1741		Construction-Special Trade Contractors	Mobile	YES		904.51
KNOCKOUT BURGERS	2971		CARLSBAD BLVD	Active	5812	5812	Eating Places	Fixed	YES	YES	904.21
KNOCKOUT PIZZERIA	2959		CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
KNOLL DESIGN AND DEVELOPMENT	5751	G1	PALMER WAY	Active	1521		General Contractor	Mobile	YES		904.40
KNORR BEESWAX PROD. INC.	1965		KELLOGG AVE	Active	3999	3999	Manufacturing Industries, NEC	Fixed	YES	YES	904.40
KOKO BEACH	2858		CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
KOSKO CONSTRUCTION	919		BEGONIA CT	Active	1793		Glass & Glazing Work	Mobile	YES		904.51
KOTIJA TACO SHOP	1850	100	MARRON RD	NLB	5812		Eating & Drinking Places	Fixed	YES	No	904.21
KRESSIN POOL CLEANING	2803		VIA TOPACIO		7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.51
KVD COMPANY INC.	2465		IMPALA DR	Active	3825		Inst for Measure & Testing of electricity	Fixed	YES		904.31

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L & L PRINTERS	6200		YARROW DR	Active	2759	2759	Commercial Printing, NEC	Fixed	YES	YES	904.40
LA COSTA LIMOUSINE	2770		LOKER AV W	Active	4119	4119	Local Passenger Transportation, NEC	Fixed	YES	YES	904.31
LA COSTA RESORT AND SPA	2100		COSTA DEL MAR RD	Active	7997	7997	Golf Course and Resort	Fixed	YES	YES	904.51
LA COSTA SUBMARINA	6994	100	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
LA COSTA WHOLESALE FLOWERS	5600	12	AVENIDA ENCINAS	Active	5193	5193	Flowers, Nursery Stock, Supplies	Fixed	YES	YES	904.31
LA FIESTA DELI	5810	B	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
LA PLACE DELI	5950	150	LA PLACE CT	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
LABO CONSTRUCTION	1720		CATALPA RD		1521		General Contractors--Single-Family Housing	Mobile	YES		904.51
LANCE HOWARD DETAILING	2476		TORREJON PL		7542		Carwashes	Mobile	YES		904.51
LANDCO CONSTRUCTION COMPANY	3135		TYLER ST	Active	2431		Millwork	Fixed	YES		904.21
LAS OLAS CARLSBAD	2939		CARLSBAD BLVD	Active	5812	5812	Eating Places	Fixed	YES	YES	904.21
LATERAL DYNAMICS, LLC	5933	113	SEA LION PL	NLB	3499		Fabricated Metal Products, Not Elsewhere Classifi	Fixed	YES	No	904.31
LE PASSAGE	2961		STATE ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
LEADING EDGE AVIATION	2010	L	PALOMAR AIRPORT RD	NLB	4581	N/A	Airports, Flying Field & Airport Terminal Svc	Fixed	YES	YES	904.31
LEFT COAST WINDOW WASHING	1941	308	DOVE LN	Active	7349		Building Cleaning And Maintenance Services, Not E	Mobile	YES		904.51
LEGOLAND	1		LEGOLAND DR	Active	4119	4119	Local Passenger Transportation, NEC	Fixed	YES	YES	904.40
LEONARD SCHOLL INDUSTRIES, INC.	5751	A	PALMER WAY	Active	3599	3599	Ind & Comml Machinery & Equip, NEC	Fixed	YES	YES	904.31
LEUCADIA WASTE WATER DISTRICT	1960		LA COSTA AVE	Active	4941	4941	Water Supply	Fixed	YES	YES	904.51
LEXUS CARLSBAD	5444		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
LEXUS CARLSBAD	5434		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New And Used)	Fixed	YES		904.31
LLOYD'S AUTO SPECIALTIES	1050		AUTO CENTER CT	Active	7549		Automotive Services	Fixed	YES		904.31
LOLA'S 7 UP MARKET & DELI	3292		ROOSEVELT ST	Active	5411	5411	Grocery Stores	Fixed	YES	YES	904.21
LONE ROOTER, THE	2420		PIO PICO DR	Active	1711		Plumbing Contractor	Mobile	YES		904.21
LOPEZ LANDSCAPE	1332		MAGNOLIA AVE	Active	782		Lawn and Garden Services	Mobile	YES		904.31
LORCO	4488		SALISBURY DR	Active	1741		Masonry, Stone Setting	Mobile	YES		904.31
LORENZO'S PIZZERIA	5812	130	VAN ALLEN WAY	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
LOS COCHES CLEANERS	3235	105	CAMINO DE LOS COCHES	Active	7216	7216	Drycleaning Plants, Except Rug Cleaning	Fixed	YES	YES	904.51
LOS PRIMOS MEXICAN FOOD	2708	102	LOKER AV W	Active	5812	5812	Restaurant	Fixed	YES	YES	904.31
LOTUS THAI BISTRO	3050		PIO PICO DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
LUCAS & MERCIER CONSTRUCTION INC	5245	G	AVENIDA ENCINAS	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
LUCAS PLUMBING	2890		WOODRIDGE CIR		1711		Construction-Special Trade Contractors	Mobile	YES		904.31
LUMINORE INCORPORATED	6060		CORTE DEL CEDRO	Excluded	873	873	Research, Development, And Testing Services	Fixed	No	No	904.31
LUMINOUS MEDICAL INC.	2461		IMPALA DR	Excluded	8731	873	Research, Development, And Testing Services	Fixed	No	No	904.31
M C S CONSTRUCTION	7804		ESTANCIA ST		1521		Building Construction-General Building Contractors	Mobile	YES		904.51
M. M. PAINTING SERVICES	2424		LEVANTE ST	Active	1721		PAINTING/DECORATING	Mobile	YES		904.51
MAC PHERSON'S	1277		FOREST AVE	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
MACHINE VISION PRODUCTS, INC.	5940		DARWIN CT	Active	3629		Electrical Indl Apparatus, NEC	Fixed	YES		904.31
MACY'S - (Mens/Home)	2557		EL CAMINO REAL	Active	5311	5311	Department Store	Fixed	YES	YES	904.21

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MACY'S - PLAZA CAMINO REAL	2559		EL CAMINO REAL	Active	5311	5311	Department Store	Fixed	YES	YES	904.21
MAD ABOUT POOLS	1860		CANYON PL	Active	7389		Pool Maintenance	Mobile	YES		904.31
MAGELLAN AVIATION	2006	S	PALOMAR AIRPORT RD	Active	4522	4522	Air Transportation, Nonscheduled	Fixed	YES	YES	904.31
MAMA MELLACE'S OLD WORLD TREATS	6195		EL CAMINO REAL	Active	2064	2064	Confectionery Manufacturer	Fixed	YES	YES	904.40
MANLEY BUILDERS, INC.	2041		CUMBRE		1531		Operative Builders	Mobile	YES		904.51
MARDX DIAGNOSTICS, INC.	5919		FARNSWORTH CT	Active	2835	2835	Manufacturer of In Vitro Diagnostic	Fixed	No	YES	904.31
MARIAH'S WESTWIND	377		CARLSBAD VILLAGE DR	NLB	5812		Eating & Drinking Places	Fixed	YES	No	904.21
MARIANO'S LANDSCAPING	3422	B	MADISON ST	Active	0782		Lawn And Garden Services	Mobile	YES		904.31
MARIE CALLENDER'S #88	5780		AVENIDA ENCINAS	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
MAS FINA CANTINA	2780		STATE ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
MASSIE CONSTRUCTION CO	2652	A	JEFFERSON ST		1521		Building Construction-General Building Contractors	Mobile	YES		904.21
MATT MILLIN MACHINING	2270	F	CAMINO VIDA ROBLE	Active	3499		Fabricated metal Products	Fixed	YES		904.40
MCCLELLAN-PALOMAR AIRPORT	2192		PALOMAR AIRPORT RD	Active	4581	4581	Airports, Flying Field & Airport Terminal Svc	Fixed	YES	YES	904.40
MCCOURTNEY CABINETRY	6102	L	AVENIDA ENCINAS	Active	2434		Cabinets	Fixed	YES		904.40
MCDONALDs OF PALOMAR AIRPT RD	5990		AVENIDA ENCINAS	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
MCDONALDs PLAZA CAMINO REAL	2525	150	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
MCKITTRICK GRADING & EXCAVATING	3602		KINGSTON ST		1521		Building Construction-General Building Contractors	Mobile	YES		904.31
MEADOWLARK WATER RECLAMATION F	7941		CORINTIA ST	Active	4952	4952	Sewerage Systems	Fixed	YES	YES	904.51
MERCOTAC INC.	9195	100	CORTE DEL CEDRO	Active	3643		Current-Carrying Wiring Devices	Fixed	YES		904.40
MERCURY COMPUTER SYSTEMS INC	1815	107	ASTON AVE	Active	3674		Semiconductors And Related Devices	Fixed	YES		904.31
MEXICO VIEJO	2508	C1	EL CAMINO REAL	Active	5812	5812	Eating Places	Fixed	YES	YES	904.21
MG LANDSCAPE MAINTENANCE	3765		TRIESTE DR	Active	0781		Landscape Counseling And Planning	Mobile	YES		904.31
MH JONES DEVELOPMENT	6738		PASEO DEL VIS		1521		Building Construction-General Building Contractors	Mobile	YES		904.51
MICHAEL ABAD	7417		SITIO LIMA		1521		Building Construction-General Building Contractors	Mobile	YES		904.51
MICRO-PROBE, INCORPORATED	2281		LAS PALMAS DR	Active	3825		Inst for Measure & Testing of electricity	Fixed	YES		904.40
MIKKO JAPANESE CUISINE	1025		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
MILES PACIFIC NURSERY	1833		BUENA VISTA WAY	Active	5193		Ornamental Floriculture and Nursery Prods	Fixed	YES		904.21
MILES PACIFIC NURSERY	2375		PIO PICO DR	Active	0181		Ornamental Floriculture and Nursery Prods	Fixed	YES		904.21
MILLER BUILDING CO., THE	6434		EL PERICO LN	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
MINUTEMAN PRESS	6353	H/I	EL CAMINO REAL	Active	2752	2752	Commercial Printing, Lithographic	Fixed	YES	YES	904.51
MISSION AUTO, SALES & LEASE INC.	6060	C	AVENIDA ENCINAS	Excluded	5511	5511	Motor Vehicle Dealers (New And Used)	Fixed	No	NO	904.40
MISSION ELECTRIC SUPPLY INC	2225		CAMINO VIDA ROBLE	Active	5063		Electrical Apparatus & Equpment Wiring Supplies	Fixed	YES		904.40
MJR CONSTRUCTION, INC.	300	300	CARLSBAD VILLAGE DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES	YES	904.21
MOBILE CAR DOCTORS, THE	1010		HOME AVE		7538		General Automotive Repair Shops	Mobile	YES		904.31
MOBILE SHINE AUTO DETAILING	3320		CARLSBAD BLVD	Active	7542		Carwashes	Mobile	YES		904.51
MOLINA'S EXTERIORS	4869		ALONDRA WAY		781		Construction-Special Trade Contractors	Mobile	YES		904.31

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
MORGAN CONSTRUCTION COMPANY INC.	1910	101	PALOMAR OAKS WAY	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
MOSS REPLACEMENT WINDOWS INC	2790	109	LOKER AV W		1700		Construction-Special Trade Contractors	Mobile	YES		904.31
MOST CONSTRUCTON (Formally Frost Construction)	1380		CYNTHIA LN	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
MOTION PRODUCTS WEST INC. (Previously MPI INC.)	6102	J-K	AVENIDA ENCINAS	Active	7538		Automotive Repair & Restoration	Fixed	YES		904.40
MR. PEABODY'S	300	202	CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
MULLEN CONSTRUCTION	2890	202	PIO PICO DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
MUROYA GROWERS	6697		BLACK RAIL RD	Active	0191		Nursery - Wholesale	Fixed	YES		904.51
MV TECHNICAL SALES, LLC	1940		CAMINO VIDA ROBLE	Active	3825		General Warehousing	Fixed	YES		904.40
MYRON L COMPANY - A CALIF CORP	2450		IMPALA DR	Active	3829	3829	Measuring & Controlling Devices, NEC	Fixed	YES	YES	904.31
N. REX WILSON CONSTRUCTION, INC.	4600		PARK DR		1521		Building Construction-General Building Contractors	Mobile	YES		904.31
NAKED CAFÉ	300	107A	CARLSBAD VILLAGE DR	Active	5812	5812	Eating and Drinking Place	Fixed	Yes	YES	904.21
NATURE MAKER	6225		EL CAMINO REAL	Active	3999	3999	General Manufacturing	Fixed	YES	YES	904.40
NATURE'S SUPPLEMENTS	2270	Q	CAMINO VIDA ROBLE	Active	2833		Medicinal Chemicals and botanical Products	Fixed	YES		904.40
NAVIGANT INTERNATIONAL / WEST LLC	2180	2	RUTHERFORD RD	NLB	4724		Travel Agencies	Fixed	YES	No	904.31
NEAL HENNING CONSTRUCTION	3119		VERDE AVE	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
NESTI CONSTRUCTION	5631		PALMER WAY	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
NEW GROWTH LANDSCAPES	6676		BLUEBONNET DR		1799		Construction-Special Trade Contractors	Mobile	YES		904.51
NEW WORLD CAFÉ & RESTAURANT	2559		EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
NEW YORK PIZZERIA	3067		ROOSEVELT ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
NEWMAN REPLACEMENT WINDOWS	5845	133	AVENIDA ENCINAS	Active	1751		Window & Door Installation & Sales	Mobile	YES		904.40
NEXT PHARMACEUTICALS	5927	110	BALFOUR CT	Inactive	2023		Dry, Condensed, Evaporated Dairy Products	Fixed	YES		904.31
NICK BOWMAN CONSTRUCTION INC	7040		IVY ST		1521		Building Construction-General Building Contractors	Mobile	YES		904.51
NO FEAR, INC	1812		ASTON AVE	Active	5136		Mens & Boys Clothing & Furnishings	Fixed	No		904.31
NOBEL HOMES	2734	M	LOKER AV W	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
NORCO POWER WASHING	2751		TIBURON AVE	Active	7349		Building Cleaning And Maintenance Services, Not E	Mobile	YES		904.31
NORTH COASTAL (PALOMAR) LANDFILL	2198		PALOMAR AIRPORT RD	Active	4953		Refuse Systems	Fixed	YES		904.40
NORTH COUNTY COASTAL PLUMBING	3900		LINMAR LN	Active	1711		Plumbing Contractor	Mobile	YES		904.21
NORTH COUNTY GMC PONTIAC	5454		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
NORTH COUNTY PLAZA	1810		MARRON RD	Active	6552	6552	Operators of Nonresidential Buildings	Fixed	YES	YES	904.21
NORTH COUNTY POOL & SPA	5106		LYNCH CT	Active	7389		Pool & spa Maintenance Services	Mobile	YES		904.31
NOZOMI # 3	3050	A	PIO PICO DR	Active	5812	5812	Eating Places	Fixed	YES	YES	904.21
NRG CABRILLO POWER STATION	4600		CARLSBAD BLVD	Active	4911	4911	Electric Services	Fixed	YES	YES	904.31
OASIS NURSERY AND LANDSCAPING, INC.	4901		EL CAMINO REAL	Active	5193	5193	Flowers, Nursery Stock, Supplies	Fixed	YES	YES	904.31

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
OCEAN BREEZE CARPET CLEANING	1739		MALLOW CT		7217		Carpet And Upholstery Cleaning	Mobile	YES		904.51
OCEAN HOME REPAIR	6517		CAMINO DEL PARQUE		7349		Building Cleaning And Maintenance Services, Not E	Mobile	YES		904.51
OCEAN HOUSE	300	300	CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
OCEANS EDGE POOL SERVICE	6550	SPC 38	PONTO DR	Active	7389		Business Services, NEC	Mobile	YES		904.51
OFFICIAL PAINTING	2379		CARINGA WAY	Active	1721		Painting and Paperhanging	Mobile	YES		904.51
OGARA CONSTRUCTION	3200		JAMES DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
OLIVE GARDEN, THE #120	1884		MARRON RD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
OLIVENHAIN MUNICIPAL WATER DISTRICT	1966		OLIVENHAIN RD	Active	4941	4941	Water Systems	Fixed	YES	YES	904.51
OLYMPIC RESORT HOTEL	6111		EL CAMINO REAL	Active	7011		Hotels and Motels	Fixed	YES		904.40
ON A ROLL	2794	110	LOKER AV W	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
ON CALL DETAILING	2614		LUCIENAGA ST		7542		Carwashes	Mobile	YES		904.51
ORCO CONSTRUCTION COMPANY	6125		PASEO DEL NORTE	Active	5251	5251	Paint and Wallpaper Stores	Fixed	YES	YES	904.40
ORD & RODGERS CONSTRUCTION INC	5122		AVENIDA ENCINAS	Active	1521		Building Construction-General Building Contractors	Fixed	YES		904.31
ORGANICO PANE COMPANY	5671		PALMER WAY	NLB	5149		Groceries And Related Products, Not Elsewhere Cla	Fixed	No	NO	904.31
ORIZON	7190		AVENIDA ENCINAS	Inactive	1799		Special Trade Contractors, Nec	Fixed	YES	NO	904.40
ORTEGA'S SAIL AND CANVAS	6102	A	AVENIDA ENCINAS	Active	2394		Manufacture Metal Awnings, Covers	Fixed	YES		904.40
ORTHO ORGANIZERS INC.	1822		ASTON AVE	Active	3843		Dental Equipment And Supplies	Fixed	YES		904.31
OSCAR DIKE POOL REPAIR	841		CAMELLIA PL		7389		Construction-Special Trade Contractors	Mobile	YES		904.31
O'SULLIVAN'S IRISH PUB	640		GRAND AVE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
OUTSOURCE MANUFACTURING	2839		E LOKER AVE	Active	3699		Electrical Contract Manufacturing	Fixed	YES		904.31
OVERSEAS CHINESE RESTAURANT	2820		ROOSEVELT ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
P G SALES	2333	30	CARINGA WAY		1700		Construction-Special Trade Contractors	Mobile	YES		904.51
PACIFIC BLUE POOL SERVICE	7771		PENDON CT		7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.51
PACIFIC CNC MACHINE	6351	104	CORTE DEL ABETO	Active	3599	3599	Indus./Commercial Equipment, Not Elsewhere Classi	Fixed	YES	YES	904.40
PACIFIC COAST GRADING INC.	2726		MORNING CLORY LN	Active	1794		Special Trade Contractors	Mobile	YES		904.31
PACIFIC COAST PRINTING	3021		STATE ST	Active	2759	2759	Commercial Printing, NEC	Fixed	No	YES	904.21
PACIFIC COMMERCIAL CONSTRUCTION	2262	103	RUTHERFORD RD	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
PACIFIC CUSTOM HOMES INC	3429		CORTE VIEJO		1521		Building Construction-General Building Contractors	Mobile	YES		904.51
PACIFIC DETAILING CO.	43759		CORTE AMAYA	Active	7542	7542	Mobile Car Washing	Mobile	Yes	YES	
PACIFIC OIL SERVICES - CAMINO SHELL	2590		EL CAMINO REAL	Active	5541	5541	Gasoline Service Stations	Fixed	YES	YES	904.21
PACIFIC RESTORATION	5365	J	AVENIDA ENCINAS	Active	7349		Building Cleaning & Maint Svc, NEC	Mobile	YES		904.31
PACIFIC TRADES CONST. & DEV. INC.	2956	3	ROOSEVELT ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
PACIFIC WINDOW CLEANING	1802	202	NICOLIA DR	Active	7349		Building Cleaning And Maintenance Services, Not E	Mobile	YES		904.51
PACIFICA FLOWERS INC.	1785		CHESTNUT AVE	Active	0181	0181	Ornamental Floriculture	Fixed	Yes	YES	904.31

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PACIFICA FLOWERS INC.	2928		VALLEY ST	Active	0181	0181	Ornamental Floriculture	Fixed	YES	YES	904.21
PACWEST CONSTRUCTION	2525	102	PIO PICO DR	Active	1711		General Building Contractor	Mobile	YES		904.21
PALOMAR AUTOMOTUVE (FORMERLY: ABLE)	665		PALOMAR AIRPORT RD	Active	7549	7549	General Automotive Repair Shops	Fixed	YES	YES	904.40
PALOMAR CLEANERS	2221	F	LAS PALMAS DR	Active	7216		Drycleaning plants	Fixed	YES		904.40
PALOMAR DELI	6150	C	YARROW DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.40
PALOMAR DISPLAY PRODUCTS, INC.	1945		KELLOGG AVE	Active	3577		Computer Peripheral Equipment	Fixed	YES		904.40
PALOMAR HAND CAR WASH & DETAILING	6019		PASEO DEL NORTE	Active	7542	7542	Carwashes	Fixed	YES	YES	904.40
PALOMAR MOBIL	899		PALOMAR AIRPORT RD	Active	5541		Gasoline Service Stations	Fixed	YES		904.40
PALOMAR SIGN COMPANY	5205	G	AVENIDA ENCINAS	Active	3993	3993	Signs And Advertising Specialties	Fixed	YES	YES	904.31
PALOMAR TECHNOLOGIES, INC.	2726		LOKER AV W	Active	3674	3674	Semiconductors And Related Devices	Fixed	YES	YES	904.31
Palomar Transportation Inc.	800	AG-7	GRAND AVE	Active	4119		Local Passenger Transportation, NEC	Mobile	YES		904.31
PANDA EXPRESS # 393	2560		EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
PANDA EXPRESS #635	6951		EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
PANDA EXPRESS #729	5630	141	PASEO DEL NORTE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
PANERA BREAD	1935		CALLE BARCELONA	Active	5812	5812	Eating Places	Fixed	YES	YES	904.51
PAPA C'S MEXICAN FOOD	5806	105	VAN ALLEN WAY	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
PAPAYAS CAFE	5840	116	EL CAMINO REAL	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
PARK CARE	2744		AUBURN AVE	Active	0781		Landscape Counseling and Planning	Mobile	YES		904.31
PAT & OSCAR'S	2525		EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
PAT & OSCAR'S	965		PALOMAR AIRPORT RD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.40
PAUL MCGRATH CONSTRUCTION	6789		CAMINO DE AMIGOS	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
PAUL PARIZEAU	3218		EUREKA PL		1521		Building Construction-General Building Contractors	Mobile	YES		904.31
PAUL TURNER CONSTRUCTION	4062	D	GARFIELD ST		1521		Building Construction-General Building Contractors	Mobile	YES		904.31
PEKING GARDEN	6990	K	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
PELICAN GLASS CO	2680		STATE ST	Active	1793		Retail Glass Installation	Mobile	YES		904.21
PELICAN PACKAGING, INC.	5816		DRYDEN PL	Active	3669	3669	Communications Equipment	Fixed	YES	YES	904.31
PELLY'S FISH MARKET & DELI	7110	101	AVENIDA ENCINAS	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
PENTA	2091		RUTHERFORD RD	Active	2086	2086	Bottled And Canned Soft Drinks & Carbonated Waters	Fixed	YES	YES	904.31
PENTON OVERSEAS INC	2470	A	IMPALA DR	Active	5192		Books, Newpapers, Periodicals, Wholesale	Fixed	No		904.31
PERSONAL TRANPSORT LLC	3123		VISTA MAR	Active	4119		Limousine Service	Fixed	YES		904.51
PETER ANDREW PAINTING	7000		FORSTERS TERN DR		1721		Construction-Special Trade Contractors	Mobile	YES		904.51
PHILLIP MARRUJO (LANDSCAPE)	360	3	CHINQUAPIN AVE	Active	0781		Landscape Counseling and Planning	Mobile	YES		904.31
PHIL'S CARWASH / DETAILING	6041	107	PASEO DEL NORTE	Active	7542		Carwashes	Mobile	YES		904.40
PICK UP STIX	7750	101	RANCHO SANTA FE RD	Active	5812	5812	Eating Places	Fixed	YES	YES	904.51
PICK UP STIX # 7224	7150		AVENIDA ENCINAS	Active	5812	5812	Eating Places	Fixed	YES	YES	904.51
PICK UP STIX CARLSBAD INC.	2508		EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
PICKLES CATERING & DELI	5670	H	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
PITA PIT	300	120	CARLSBAD VILLAGE DR	Active	5812	5812	EATIING PLACES	Fixed	YES	yes	904.21
PIZZA HUT	2588	B/C	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21

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PIZZA PORT CARLSBAD BREWERY	571		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
PIZZA SHUTTLE & SUBS, TOO	959		TAMARACK AVE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
PLANTPLAY	4915		EL CAMINO REAL	Active	5261	5216	Retail Nurseries, Lawn And Garden Supply Stores	Fixed	Yes	YES	904.31
PLASTICS ENGINEERING & DEV.	2731	C	LOKER AV W	Active	3089		Plastic Products, NEC	Fixed	YES		904.31
PLAYGROUNDS WEST INC	3566		KNOLLWOOD DR		1521		Building Construction-General Building Contractors	Mobile	YES		904.51
PLAZA BUILDERS	5091		EL ARBOL DR		1521		Building Construction-General Building Contractors	Mobile	YES		904.31
PLAZA CAMINO CHEVRON CENTER	2500		EL CAMINO REAL	Active	5541		Gasoline Service Stations	Fixed	YES		904.21
PLAZA CAMINO REAL, L.P.	2525		EL CAMINO REAL	Active	6512	6512	Non-Residential Property Mangement	Fixed	YES	YES	904.21
PLAZA REAL CLEANERS INC	6949	108	EL CAMINO REAL	Active	7216	7216	Dry Cleaning Plant	Fixed	YES	YES	904.51
PLAZA SOUTH CLEANERS	2620		EL CAMINO REAL	Active	7212	7212	Laundry Cleaners	Fixed	YES	YES	904.21
PODS OF SAN DIEGO, LLC	2858	200	E LOKER AVE	Active	4225	4225	General Warehousing And Storage	Fixed	YES	YES	904.31
POINSETTIA PLAZA	7040		AVENIDA ENCINAS	Active	6512	6512	Operators of Nonresidential Buildings	Fixed	YES	YES	904.40
POINSETTIA VILLAGE CHEVRON	7170		AVENIDA ENCINAS	Active	5541	5541	Gasoline Service Stations	Fixed	YES	YES	904.51
POLISHED IMAGE MOBILE DETAILING	2454		JEFFERSON ST	Active	7349	7349	Building Cleaning And Maintenance Services, Not E	Mobile	YES	YES	904.31
POLLOS MARIA	3055		HARDING ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
POND AND AQUARIUM SOURCE	2599		STATE ST	Active	1521		Pond and Aquarium Installation	Fixed	YES		904.21
PONTO CLEANERS	690	101	CARLSBAD VILLAGE DR	Active	7216	7216	Drycleaning Plants, Except Rug Cleaning	Fixed	YES	Yes	904.21
PONTO STORAGE INC	7290		PONTO DR	Active	4225		General Warehousing & Storage	Fixed	No		904.51
PONTO'S BIG WAVE CAFÉ	7720	F	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
POOL SERVICE BY INDIGO	2292		AUDEN PL		7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.51
POOL TECH	3002		LEVANTE ST	Active	7389		Business Services, NEC	Mobile	YES		904.31
PORT BREWING CO	561		CARLSBAD VILLAGE DR	Active	2082	2082	Brewery	Fixed	YES	YES	904.21
POSH PETS GROOMING SERVICES	5515		FOXTAIL LOOP		752		Animal Specialty Services, Except Veterinary	Mobile	YES		904.31
POWER ONE INC.	5999	100	AVENIDA ENCINAS	Active	3629	3629	Electrical Indl Apparatus, NEC	Fixed	YES	YES	904.40
PRECISION KITCHEN AND BATH	2921		LANCASTER RD		1743		Terrazzo, Tile, Marble, Mosaic Work	Mobile	YES		904.31
PREMIER JET	2100		PALOMAR AIRPORT RD	Active	4581	4581	Airports, Flying Fields, And Airport Terminal Ser	Fixed	YES	YES	904.31
PREMIER POOLS & SPAS	2244	109	FARADAY AVE		1700		Construction-Special Trade Contractors	Mobile	YES		904.40
PRENTICE CONSTRUCTION INC.	7323		EL FUERTE ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
PRIMO PIZZA & PASTA	7110	103	AVENIDA ENCINAS	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
PRINTERY, THE	3138	C2	ROOSEVELT ST	Active	2759	2759	Commercial Printing, NEC	Fixed	No	YES	904.51
PRODUCT SLINGSHOT INC.	2221		RUTHERFORD RD	Active	3999	3999	Manufacturing Industries, NEC	Fixed	YES	YES	904.31
PROMONTORY BUSINESS PARK	2715		LOKER AV W	Inactive	6512		Property Management - Non - Residential	Fixed	YES	no	904.40
PRONTO CAR WASH OF CARLSBAD PREMIUM OUTLETS	5620		PASEO DEL NORTE	NLB	7542	NA	Carwashes	Fixed	YES	no	904.31
PRONTO WASH SOUTHERN CALIFORNIA	5620	127C	PASEO DEL NORTE		7542		Carwashes	Fixed	YES		904.51
PRONTOS GOURMET MARKET	2812		ROOSEVELT ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
PUBLIC STORAGE	6211		CORTE DEL CEDRO	Active	4225	4225	General Warehousing And Storage	Fixed	YES	YES	904.21
QUALIGEN, INC.	2042	A	CORTE DEL NOGAL	Active	3841		Surgical & Med Instr & Apparatus	Fixed	YES		904.40

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
QUALITY AIRCRAFT CARE	2056		PALOMAR AIRPORT RD	Active	4581	4581	Aircraft Washing	Fixed	YES	YES	904.31
QUALITY INN & SUITES	751		RAINTREE DR	Active	7011	7011	Hotels And Motels	Fixed	YES	YES	904.40
QUALITY SEALANTS	2180	109	CHABLIS CT.	Active			Concrete sealants	Mobile	Yes	YES	
R.D. BACON CONSTRUCTION	2800		WILSON ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
RACCOON ROUNDUP	3812		SIERRA MORENA AVE		7389		Pest Control	Mobile	YES		904.21
RACK CONSTRUCTION & CONSULTING INC	7967		CAMINO ALVARO	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51
RALPHS GROCERY COMPANY #175	7140	FRNT	AVENIDA ENCINAS	Active	5411	5411	Grocery Stores	Fixed	YES	YES	904.51
RAMIREZ FLOWERS	5600	28	AVENIDA ENCINAS	Active	5193		Flowers, Nursery Stock, Supplies	Fixed	YES		904.51
RAMOS CONSTRUCTION SERVICE	2358		PIO PICO DR		1521		Building Construction-General Building Contractors	Mobile	YES		904.31
RANCHO CARLSBAD EQUESTRIAN CENTER	2820		SUNNY CREEK RD	NLB	0752		Boarding and Training Horses	Fixed	YES	NO	904.31
RANCHO CARLSBAD GOLF COURSE	5200		EL CAMINO REAL	Active	7992		Public Golf Courses	Fixed	YES		904.31
RANCHO DEL ORO TOWING (CONTRACT SERVICES)	6050		AVENIDA ENCINAS	Active	7549	7549	Automotive Services	Fixed	YES	YES	904.31
RANCHO SANTA FE POOL & SPA	5146	213	WHITMAN WAY		7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.40
RANDALL INTERNATIONAL	2885	E	E LOKER AVE	Active	2844	2844	Perfumes, Cosmetics & Other Toilet Preps	Fixed	YES	YES	904.51
RAY'S POOL SERVICE	3251		AVEINIDA ANACAPA		7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.31
REBECCA NORMAN INC	2195	D	FARADAY AVE	Active	3961	3961	Jewelry Manufacturing	Fixed	YES	YES	904.31
REDLAND CLAY TILE	5365	J	AVENIDA ENCINAS	Active	5032	5032	Tile Cutting	Fixed	YES	YES	904.31
REEF CONCRETE	3646		CHESHIRE AV	Active	1771		Concrete	Mobile	YES		904.40
REFLEX CORPORATION	1825		ASTON AVE	Active	3199		Leather Goods, Manufacturing	Fixed	No		904.21
REPSHER DRYWALL	4795		NEBLINA DR	Active	1742		Drywall Contractor	Mobile	YES		904.31
RESPIRONICS CALIFORNIA INC.	2271		COSMOS T	Active	3842	3842	Orhtopedic, Prosthetic & Surgical Appliances and	Fixed	YES	YES	904.40
RESTORATION FLOORING	2304		ALTISMA WAY	Active	7217		Carpet And Upholstery Cleaning	Mobile	YES		904.40
RESTORE SOLUTIONS, INC.	2283		COSMOS T		7349		Building Cleaning And Maintenance Services, Not E	Mobile	YES		904.51
RESURFACING SPECIALISTS, INC.	2956	5	ROOSEVELT ST	Active	1771		Concrete Work	Mobile	YES		904.21
REY RIVER FARMS			CANNON RD & RR TRACKS	Active	0182	0182	Vegatable Grower	Fixed	Yes	YES	904.31
RICE KING	5808	115	VAN ALLEN WAY	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
RICHARD L. CHASE CONTRACTING	3147	2	JEFFERSON ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
RIEKER MACHINE INC.	5674	C	EL CAMINO REAL	Active	3599	3599	Indus./Commercial Equipment, Not Elsewhere Classi	Fixed	YES	YES	904.31
RIESTERS CARPET SERVICE	3207		AZAHAR PL	Active	7217		Carpet & Upholstery Cleaning	Mobile	YES		904.31
RINCON WEST	411	B	CHESHIRE AV		7389		Pool Maintenance	Mobile	YES		904.51
RITE AID #5621	955		TAMARACK AVE	Active	5912	5912	Drug Stores and Proprietary Stores	Fixed	YES	YES	904.31
RITE AID #5622	7100	C	AVENIDA ENCINAS	Active	5912	5912	Drug Stores and Proprietary Stores	Fixed	YES	YES	904.51
RIVERA'S GARDEN TREASURES	1211		CHESTNUT AVE		181		Ornamental Nursery Products	Mobile	YES		904.40
RIVIERA POOL & SPA SERVICE	2635	10	MADISON ST		7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.31
ROB WITTON GENERAL CONTRACTOR	6831		XANA WY	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.51

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ROBERT M. CHAMBERS CONSTRUCTION	2853		CEBU PL		1521		Building Construction-General Building Contractors	Mobile	YES		904.51
ROCKWELL COLLINS OPTRONICS, INC.	2752		LOKER AV W	Active	3827		Optical Instruments & Lenses	Fixed	No		904.31
ROGER ROBERSON CONSTRUCTION	2030		CORDOBA PL	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
ROMBOTIS BROTHERS CONSTRUCTION	325	C2	CARLSBAD VILLAGE DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
ROMER, INC.	5145	1	AVENIDA ENCINAS	Active	5089		Industrial Machinery and Equipment	Fixed	No		904.31
RORICK BUICK CADILLAC	5334		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
RORY O'NEAL POOL SERVICE	2022		LEE CT	Active	7389		Pool and Spa Maintenance	Mobile	YES		904.31
ROWLETT'S YARD CARE	3480		ADAMS ST	Active	0781		Landscape Counseling and Planning	Mobile	YES		904.31
RUBIO'S BAJA GRILL	5620	128	PASEO DEL NORTE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	yes	904.31
RUBIO'S BAJA GRILL	2604	A	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
RUB-KRETE	7331	C	ALICNTE RD	Active	1771		Concrete Contractor	Mobile	YES		904.31
RUBYS DINER, CARLSBAD	5630	128D	PASEO DEL NORTE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	yes	904.31
RUDVALIS ORCHIDS	6595		BLACK RAIL RD	Active	0182		Ornamental Floriculture & Nursery Products	Fixed	YES		904.31
RUDY'S TACO SHOP LA COSTA	7662	102	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
RUSTY JOHNSON CONSTRUCTION	5316		FORECASTLE CT		1521		Building Construction-General Building Contractors	Mobile	YES		904.51
S.P. WHITE CONSTRUCTION, INC.	5937	100	DARWIN CT	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
S.S. SMITH CO.	1743		MALLOW CT	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
SABRE SCIENCES, INC.	2233	K	FARADAY AVE	Active	2844	2844	Perfumes, Cosmetics, & Other Toilet Preparations	Fixed	No	YES	904.51
SAFC PHARMA	1890	200	RUTHERFORD RD	Active	2836		Biological Products	Fixed	YES		904.31
SAFC PHARMA	6219		EL CAMINO REAL	Active	2836		Biological Products, Except Diagnostic Substances	Fixed	YES		904.40
SAFELITE AUTO GLASS	1060	I	AUTO CENTER CT	Active	7536		Automotive Glass Replace Shops	Fixed	YES		904.31
SAGE RESEARCH LLC	4909		REFUGIO AE	Active	0781		Landscape Counseling And Planning	Mobile	YES		904.31
SAMMYS WOODFIRED PIZZA	5970		AVENIDA ENCINAS	Inactive	5812	5812	Eating & Drinking Places	Fixed	YES	NO	904.31
SAN DIEGO FLORIST SUPPLIES INC.	5600	1	AVENIDA ENCINAS	Active	5193		Flowers, Nursery Stock, Supplies	Fixed	YES		904.31
SAN DIEGO INTERNATIONAL FLORAL TRADE CENTER	5600	126	AVENIDA ENCINAS	Active	6531		Operators of Non-residential Buildings	Fixed	YES		904.31
SAN SAI JAPANESE GRILL	5600	115A	PASEO DEL NORTE	Active	5812	5812	Eating Places	Fixed	YES	yes	904.31
SANTORINI GREEK ISLAND GRILL	5812	125	VAN ALLEN WAY	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
SCHMUCKLE PAINTING INC	6084	100	CORTE DEL CEDRO		1721		Painting And Paper Hanging	Mobile	YES		904.31
SCHROEDER CONSTRUCTION & DEV	2691		STATE ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
SCHUBACH	2100	5	PALOMAR AIRPORT RD	Excluded	4581	4581	Airports, Flying Field & Airport Terminal Svc	Fixed	YES	YES	904.31
SCHUMACHER CO. (AIR PRODUCTS AND CHEMICALS)	1969		PALOMAR OAKS WAY	Active	2899	2899	Chemicals and Chemical Preparations, NEC	Fixed	YES	YES	904.41
SCHUMACHER CO. (AIR PRODUCTS AND CHEMICALS)	1979		PALOMAR OAKS WAY	Active	2899	2899	General Warehousing	Fixed	YES	YES	904.40

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SCOTT D PACKARD CONSTRUCTION	4620		TRIESTE DR		1521		Building Construction-General Building Contractors	Mobile	YES		904.40
SCOTT GUENDERT CONSTRUCTION	7116		AVIARA DR	Active	1521		General Contractor	Mobile	YES		904.51
SCOTT ROGERS POOL SERVICE	2715		MORNING CLORY LN	Active	7389		Pool Service	Mobile	YES		904.51
SCUDELLARO BREAD	2720	N	LOKER AV W	Active	2051	2051	Bread & Other Baker Prods	Fixed	YES	YES	904.21
SD FYXIT	3555		HASTINGS DR		7349		Building Cleaning And Maintenance Services, Not E	Mobile	YES		904.31
SDG&E - C/O SEMPRA ENERGY	5016		CARLSBAD BLVD	Active	4932	4932	Gas and Other Services Combined	Fixed	YES	YES	904.31
SEA ALOE, INC.	2794	103	LOKER AV W	NLB	5122		Drugs, Drug Proprietaries, And Druggists' Sundrie	Fixed	No	No	904.31
SEA BRIGHT COMPANY, THE	4322		SEA BRIGHT PL	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
SEACREST KENNELS	7250		PONTO DR	Active	0752		Animal Specialty Services, Except Veterinary	Fixed	YES		904.31
SEARS CONSTRUCTION CO.	1387		CYNTHIA LN	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
SEARS ROEBUCK & COMPANY	2561		EL CAMINO REAL	Active	5311	5311	General Merchandise Stores	Fixed	YES	YES	904.21
SELECT CABINETS AND FURNITURE MFG.	2270	T	CAMINO VIDA ROBLE	Active	2521		Wholesale Furniture and Cabinet Maker	Fixed	YES		904.40
SELECT MOBILE DETAILING	3533		ROCK RIDGE RD		7542		Carwashes	Mobile	YES		904.40
SELECT SUPPLEMENTS INC	5800		NEWTON DR	Active	2023		Dry, Condensed, Evaporated Dairy Products	Fixed	YES		904.31
SELTZER COMPANIES INC	5920	B	PASTEUR CT	NLB	5169		Chemicals And Allied Products, Not Elsewhere Clas	Fixed	YES	No	904.31
SELTZER NUTRITIONAL TECHNOLOGY	2840	101	E LOKER AVE	Active	2833		Manufacturer of Nutritional Supplements	Fixed	YES		904.31
SENDX MEDICAL, INC.	1945		PALOMAR OAKS WAY	Active	3841		Surgical and medical apparatus	Fixed	No		904.31
SENOR GRUBBY'S	377		CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	Yes	904.21
SETH HOENIG	2714		MADISON ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.40
SEVERINO CONSTRUCTION	2395		PIO PICO DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
SHAFFER CONSTRUCTION	6712		WHITESAIL ST	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
SHAMROCK POOL SERVICE	2706		GALICIA WAY	Active	7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.40
SHARPER IMAGE DETAILING	5508		FOXTAIL LOOP		7542		Carwashes	Mobile	YES		904.51
SHAWS AUTOSPORT LTD	2531	E	STATE ST	Active	7538		General Automotive Repair Shops	Fixed	YES		904.21
SHEICO (SGCA) USA	6150		CORTE DEL CEDRO	Active	2389		Apparel & Accessories, NEC	Fixed	No		904.21
SHELL (PALOMAR AIRPORT)	665		PALOMAR AIRPORT RD	Active	5541	5541	Gasoline Service Stations	Fixed	YES	YES	904.40
SHIELD X	6423		TOBRIA TER.	NLB	5963	7542	Mobile Car Washing	Mobile	YES	No	904.40
SHORE LINE GRAFIX, INC.	5245	C	AVENIDA ENCINAS	NLB	2759	N/A	Commercial Printing, NEC	Fixed	No	NO	904.51
SHORELINE POOL SERVICES	6527		CAMINO DEL PARQUE	Active	7389		Business Services, NEC	Mobile	YES		904.31
SIERRA CASCADE CONCRETE COMPANY	2382	L	CAMINO VIDA ROBLE	Active	1771		Concrete Contractor	Mobile	YES		904.51
SIERRA WIRELESS	2290		COSMOS T	Active	8731		Research, Development, And Testing Services	Fixed	YES		904.40
SIGNATURE SCAPES	4004		SKYLINE RD		1521		Building Construction-General Building Contractors	Mobile	YES		904.40
SIGNS ON TIME	5670		EL CAMINO REAL	Active	3993	3993	Sign Making & Painting	Fixed	YES	yes	904.31
SIR SPEEDY PRINTING CENTER	2227	A	FARADAY AVE	Inactive	2759		Commercial Printing, NEC	Fixed	YES	NO	904.21

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SMART & FINAL IRIS CO #339	2618		EL CAMINO REAL	Active	5411	5411	Grocery Stores	Fixed	YES	YES	904.21
SNA LANDSCAPING/DESIGN	3474		HARWICH DR	Active	0781		Landscape Counseling And Planning	Mobile	YES		904.21
SNUG HARBOR INC/CAL WATER SPORTS	4215		HARRISON ST	Active	7999		Amusement & Recreation Svcs, NEC	Fixed	YES		904.31
SO CAL CURB & ADDRESS PAINTING	2740	A	CIRCULO SANTIAGO		7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.31
SO CAL STONE CREATIONS	4215		HARRISON ST		7336		Commercial Art And Graphic Design	Mobile	YES		904.31
SO. CAL. SPA & SPA TECH SUPPLY	1445		FOREST AVE		7389		Women's Children's, And Infants' Clothing And Acc	Mobile	YES		904.31
SOIL RETENTION SYSTEMS INC	2501		STATE ST	Active	1521		Building Construction-General Building Contractors	Fixed	YES		904.21
SOMARC CONSTRUCTION	2417		APPIAN RD	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
SONARTEC	1930	105	PALOMAR POINT WAY	NLB	5091	N/A	Sporting And Recreational Goods & Supplies	Fixed	No		904.31
SOUPLANTATION	1860		MARRON RD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
SOUTH COUST CARPET CLEANING	961	J	MELALEUCA AVE	Active	7349		Building Cleaning And Maintenance Services, Not E	Mobile	YES		904.51
SPECIALTY CONSTRUCTION	3528		CORTE DELFINIO	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
SPECTRUM MARKETING, LLC	2796	100	LOKER AV W	Active	2759		Commercial Printing	Fixed	YES		904.51
SPORTS GIANT LLC	5928		FARNSWORTH CT	Active	5941		Sporting Goods Stores And Bicycle Shops	Fixed	YES		904.31
SQUADRA, INC.	2077		LAS PALMAS DR	Active	2389		Manufacturing Apparel Accessories	Fixed	YES		904.31
STAINED GLASS OVERLAY	2579		STATE ST	Active	3231		Stained Glass Design	Fixed	YES		904.31
STANDARD FILTER CORPORATION	5928		BALFOUR CT	Active	3564	3564	Purification & Dust Collection Equipment	Fixed	YES	YES	904.31
STAPLES THE OFFICE SUPERSTORE	2712		LOKER AV W	Active	5943	5943	Stationery Stores	Fixed	YES	Yes	904.31
STARBUCKS COFFEE # 10851	2708	100	LOKER AV W	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
STARBUCKS COFFEE #5363	2924		CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
STATER BROS. MARKET # 186	2687		GATEWAY ROAD	Active	5411	5411	Grocery Stores	Fixed	Yes	YES	904.51
STEAM KING	1290		LA FLORES DR	Active	7217		Carpet & Upholstery Cleaning	Mobile	YES		904.21
STEROGENE BIOSEPARATIONS, INC.	5922		FARNSWORTH CT	Active	2836		Biological Research	Fixed	YES		904.40
STILLMAN HEATING & AIR CONDITIONING	7200	A	PONTO DR	Active	1711		HVAC Contractor	Mobile	YES		904.31
STONE IMAGERY	3546		HIGHLAND DR	Active	1741		Stone Work	Mobile	YES		904.51
STREIGHT MOTORCYCLES, INC.	6108	A	AVENIDA ENCINAS	NLB	3751		Motorcycles, Bicycles, And Parts	Fixed	No	No	904.21
SUBMARINA CARLSBAD	300	201A	CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
SUBMARINA CARLSBAD FOOD COURT	5812	120	VAN ALLEN WAY	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
SUBWAY	7110	100	AVENIDA ENCINAS	Active	5812	5812	Eating & Drinking Places	Fixed	YES	Yes	904.31
SUBWAY	2708	101	LOKER AV W	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
SUBWAY #4584	6020	A19	PASEO DEL NORTE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.40
SUN PACIFIC DEVELOPMENT, INC.	3900 1/2		GARFIELD ST		1521		Building Construction-General Building Contractors	Mobile	YES		904.40
SUNNY FRESH CLEANERS	7040	112	AVENIDA ENCINAS	Active	7216	7216	Dry Cleaner	Fixed	YES	YES	904.21
SUNRISE WHOLESALE	5600	36	AVENIDA ENCINAS	Active	5193		Flowers, Nursery Stock, Supplies	Fixed	YES		904.51
SUPER CAFE	1854	104	MARRON RD	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
SUPER DONUTS	590		GRAND AVE	Active	5812	5812	Eating Places	Fixed	YES	YES	904.21
SUPERIOR RESTORATION	3957		JEFFERSON ST	Active	1799		Special Trade Contractor	Mobile	YES		904.21

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SURF BROTHERS TERIYAKI	2708	103	LOKER AV W	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
SURYA INC	6205		EL CAMINO REAL	Active	5137		Women's Children's, And Infants' Clothing And Acc	Fixed	YES		904.41
SUSHI FIX	7720	B	EL CAMINO REAL	Active	5812	5812	Eating Places	Fixed	YES	YES	904.51
SUSHI ON THE ROCK	1923	148	CALLE BARCELONA	NLB	5812		Eating & Drinking Places	Fixed	YES	No	904.51
SUSHI TAISHO	300	214	CARLSBAD VILLAGE DR	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.51
SWARTZY'S CARPET CARE	515		CARLSBAD VILLAGE DR		7217		Carpet And Upholstery Cleaning	Mobile	YES		904.21
SWIM CITY, INC.	3191		SEABURY ST	Active	7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.51
SYNERGEYES INC. (NEW NAME QUARTER LAMBDA TECHNOLOGIES, INC.)	2232		RUTHERFORD RD	Active	3851		Ophthalmic Goods	Fixed	YES		904.31
SYNERGEYES, INC.	2232		RUTHERFORD RD		3851		Ophthalmic Goods	Fixed	YES		904.51
SYNTRON BIORESEARCH, INC.	2774		LOKER AV W	Active	2835	2835	In Vitro & In Vitro Diagnostics	Fixed	YES	yes	904.31
SYSCO SAN DIEGO INC.	12180		KIRKHAM RD	Active			Food Delivery Restaurants	Mobile	Yes	YES	
SYSTEMS, MACHINES, AUTOMATION COMPONENTS CO	1695		FARADAY AVE	Active	3599		Indus/Commercial Establishments	Fixed	YES		904.31
SYSTEMS, MACHINES, AUTOMATION COMPONENTS CO.	5807		VAN ALLEN WAY	Active	3599		Ind & Comml Machinery & Equip, NEC	Fixed	YES		904.31
T REX CONSTRUCTION	2791		VISTA DEL ORO		1521		Building Construction-General Building Contractors	Mobile	YES		904.31
TACO BELL/JODIKA ENTERPRISES	6017		PASEO DEL NORTE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.40
TAMARACK POOL CENTER	2399		APPIAN RD	Active	1799		Swimming Pool Construction & Contractors	Mobile	YES		904.31
TAMARACK ST EXXON	945		TAMARACK AVE	Active	5541	5541	Gasoline Service Stations	Fixed	YES	YES	904.21
TAPPER DEVELOPMENT	2551	225	STATE ST	Active	1521		General Contractor	Mobile	YES		904.31
TARGET FRAMING INC	390	E	OAK AVE	Active	1751		Framing Contractor	Mobile	YES		904.31
TAYLOR MADE GOLF COMPANY INC	5545		FERMI CT	Active	3949	3949	Sporting and Athletic Goods, NEC	Fixed	YES	YES	904.31
TAYLOR MADE GOLF COMPANY INC	4155		SALK AV	Active	7999	7999	Amusement and Recreation Services	Fixed	Yes	YES	904.31
TERMINIX INTERNATIONAL	6350	A	YARROW DR	Active	7342		Disinfecting & Pest Control Svcs	Mobile	YES		904.40
TGI FRIDAY'S	850		PALOMAR AIRPORT RD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.40
THAT PIZZA PLACE	2622	B/C	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
THE FORUM	1935	137	CALLE BARCELONA	Active	6512	6512	Retail Shopping Center	Fixed	YES	YES	904.51
THE POOL GUY			P.O. BOX 230353	Active	7389	7389	Pool Cleaning and Repair	Mobile	Yes	YES	
THE WINE SPOT	2801	A	ROOSEVELT ST	Duplicate	5813		Drinking Places (Alcoholic Beverages)	Fixed	YES		904.51
THE WOOD WIZARD	6353	G	EL CAMINO REAL	Duplicate	2511		Construction-Special Trade Contractors	Fixed	YES		904.40
THERA LIGHT, INC.	2794	105	LOKER AV W	Active	3841		Commercial Physical and Biological Research	Fixed	YES		904.31
THREADS	5814	145	VAN ALLEN WAY	Active	7219	7216	Laundry And Garment Services, Not Elsewhere Class	Fixed	YES	YES	904.31
TIME WARNER CABLE	5720		EL CAMINO REAL	Active	4841	4841	Cable Provider	Fixed	YES	YES	904.31
TIMELY MEDICAL INNOVATIONS LLC.	5365	F	AVENIDA ENCINAS	Active	3851	3851	Ophthalmic Goods	Fixed	YES	YES	904.31
TIP TOP MEATS & EUROPEAN DELI	6118		PASEO DEL NORTE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	yes	904.40
TODD'S TINT SHOP (DENTWORKS)	1060	N	AUTO CENTER CT	Active	7538		General Automotive Repair Shops	Fixed	YES		904.40
TOGOs EATERY	6971	201	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
TOM GIBLINS IRISH PUB	640		GRAND AVE	NLB	5812		Eating & Drinking Places	Fixed	YES	No	904.51
TOM T HONDA	1565		CHESTNUT AVE	Active	0781		Landscape Maintenance	Mobile	YES		904.21

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
TOMMY'S PLUMBING	7926		LA CAPELA LN	Active	1711		Plumbing, Heating, Air-Conditioning	Mobile	YES		904.51
TOMOYAMA SUSHI	6949	201	EL CAMINO REAL	Active	5812	5812	Eating Places	Fixed	YES	YES	904.51
TOO TALL HANDYMAN AND WINDOW CLEANING	2561	A	NAVARRA DR		7349		Building Cleaning And Maintenance Services, Not E	Mobile	YES		904.51
TOP OF THE BAGEL	2540	E	EL CAMINO REAL	Active	5461	5461	Bagel Shop	Fixed	YES	YES	904.21
TOYOTA CARLSBAD	5434		PASEO DEL NORTE		5511		Motor Vehicle Dealers (New And Used)	Fixed	YES		904.51
TOYOTA CARLSBAD USED CAR DEPT.	5124		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
TOYOTA OF CARLSBAD	6030		AVENIDA ENCINAS	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
TOYOTA-CARLSBAD	5424		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.40
TRADE PRINTING SERVICES, LLC	2080		LAS PALMAS DR	Active	2752		Commercial Printing, Lithographic	Fixed	YES		904.31
TRICOR COMMERCIAL CLEANING	2471		UNICORNIO ST		7349		Building Cleaning And Maintenance Services, Not E	Mobile	YES		904.40
TRINAMIC MOBILE TRUCK SERVICES	3293		ROOSEVELT ST	Active	7538	7538	General Automotive Repair Shops	Fixed	YES	YES	904.31
TRUE BLUE POOLS	5355		AVENIDA ENCINAS		1700		Construction-Special Trade Contractors	Mobile	YES		904.21
TRUNK-IT, LLC	5924	101	BALFOUR CT	NLB	4214		Local Trucking With Storage	Fixed	YES	No	904.31
TURNER CONSTRUCTION	3197		JAMES DR	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.31
TUSCANY RESTAURANT	6981	103	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
TWINS FLOWER GROWER AND SUPPLIES	5600	42	AVENIDA ENCINAS	Active	5193		Wholesale Floral	Fixed	YES		904.31
U-HAUL CO OF CALIFORNIA	6175		PASEO DEL NORTE	Active	4225		General Warehousing & Storage	Fixed	No		904.31
ULTIMATE OUTDOOR ENVIRONMENTS	3459		CORTE BREZO		1521		Building Construction-General Building Contractors	Mobile	YES		904.40
UPSTAIRS/DOWNSTAIRS CARPET&CLEAN SERVICE	3465		CAMINO VLENCIA	Active	7217		Carpet & Upholstery Cleaning	Mobile	YES		904.31
US ALOE FORMERLY KILWA MANUFACTURING	2045		CORTE DEL NOGAL	Active	2086	2033	Canned Fruit, Vegetables, Preserves, Jams, Jellies	Fixed	YES	YES	904.40
US MICROBICS, INC.	6451		EL CAMINO REAL	Active	5049		Professional Equipment - Wholesale	Fixed	YES		904.31
VALDIVIA FARMS	4914		EL CAMINO REAL	Active	0181	0181	Crop Production	Fixed	YES		904.51
VAN HEFLIN GENERAL CONTRACTOR	2932		AVENIDA VALERA		1500		Building Construction-General Building Contractors	Mobile	YES		904.31
VAN-GO BUILDERS	2175		CHESTNUT AVE	Active	1521		Building Construction-General Building Contractors	Mobile	YES		904.21
VANGUARD INDUSTRIES WEST INC	2440		IMPALA DR	Active	5136		Apparel, Piece Goods, Notions	Fixed	No		904.31
VASQUEZ FLORAL	5600	21	AVENIDA ENCINAS	Active	5193		Flowers, Nursery Stock, Supplies	Fixed	YES		904.31
VIASAT INC	6155		EL CAMINO REAL	Active	8721		Commercial Physical & Biological Research	Fixed	YES		904.31
VIASAT INC	6167		EL CAMINO REAL	Active	3577		Research & Manufacturing	Fixed	YES		904.40
VIASAT INC	6161		EL CAMINO REAL	Active	8731		Research, computer Repair	Fixed	YES		904.40
VIASAT, INC	5791		VAN ALLEN WAY	Active	8731		Research, Develop, + Testing Services	Fixed	YES		904.40
VIASAT, INC.	6183	BLDG 5	EL CAMINO REAL		873		Research, Development, And Testing Services	Fixed	YES		904.31
VIASAT, INC.	6191		EL CAMINO REAL		8731		Research, Development, And Testing Services	Fixed	YES		904.40
VIGILUCCIS CUCINA ITALIANA	2943		STATE ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
VIGILUCCI'S SEAFOOD & STEAK HOUSE	3878		CARLSBAD BLVD	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21

FACILITY NAME	ADDRESS NUMBER	SUITE	STREET NAME	STATUS	BOY SIC	EOY SIC	PRINCIPAL PRODUCTS/SERVICES	BUSINESS TYPE	BOY THREAT TO WATER QUALITY	EOY THREAT TO WATER QUALITY	HYDRO-LOGIC AREA
VIKING COMMERICAL CONSTRUCTION.	1825		ASTON AVE	Active	1542		Building Construction-General Building Contractors	Mobile	YES		904.21
VILLAGE FAIRE (SIMA VILLAGE FAIRE)	300	108	CARLSBAD VILLAGE DR	Active	6512	6512	Operators of Nonresidential Buildings	Fixed	YES	yes	904.21
VILLAGE GRILLE, THE	2833		STATE ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
VILLAGE KITCHEN & PIE SHOPPE, INC.	950		TAMARACK AVE	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
VILLAGE LAWN CARE	2292		AUDEN PL	Active	0781		Landscaping	Mobile	YES		904.31
VILLAGE PUB, THE	2990		STATE ST	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
VISTA BIOLOGICALS CORP	2120	C	LAS PALMAS DR	Active	2836		Biological Products, Except Diagnostic Substances	Fixed	No		904.21
VONS GROCERY COMPANY #2065	6951		EL CAMINO REAL	Active	5411	5411	Grocery Stores	Fixed	YES	YES	904.51
VONS GROCERY COMPANY #2142	2560		EL CAMINO REAL	Active	5411	5411	Grocery Stores	Fixed	YES	YES	904.21
VONS GROCERY COMPANY #2165	7710		EL CAMINO REAL	Active	5411	5411	Grocery Stores	Fixed	YES	YES	904.51
VONS GROCERY COMPANY #2343	985		TAMARACK AVE	Active	5411	5411	Grocery Stores	Fixed	YES	YES	904.31
W.O.T. MARINE	4747	14	MARINA DR		3732		Boat Building And Repairing	Mobile	YES		904.31
WALBURNS CARPET CARE	2417		LA PLUMA LN	Active	7217		Carpet & Upholstery Cleaning	Mobile	YES		904.51
WASH-ALL	2443		TUTTLE ST	Active	7349		Powerwash Restaurants, Building Cleaning	Mobile	YES		904.51
WATANABE GARDENING, BILL	2560		GREGORY DR	Active	0781		Landscape Counseling and Planning	Mobile	YES		904.31
WATERFALL AMERICA INC	2253		TIGEREYE PL		1521		Building Construction-General Building Contractors	Mobile	YES		904.21
WAX RESEARCH INC	1965		KELLOGG AVE	Active	3999	3999	Manufacturer Surf Board Wax	Fixed	YES	YES	904.40
WAX-IT DETAILING	2667		REGENT RD	Active	7542		Car Washes	Mobile	YES		904.31
WAXX IT AUTOMOTIVE DETAILING	5215		CAR COUNTRY DR	Active	7542	7542	Car Washes	Fixed	YES	YES	904.31
WAYNE MINOR LANDSCAPE	3450		DONNA DR		0781		Landscape Counseling And Planning	Mobile	YES		904.31
WCM WASTE & COMPLIANCE MANAGEMENT	6054		CORTE DEL CEDRO	Active	5047	5047	Medical, Dental, And Hospital Equipment & Supplie	Fixed	YES	YES	904.40
WESELOH CHEVROLET HUMMER	5335		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
WEST BUFFET	2515		EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
WEST COAST JET SERVICES, LLC	2006	E	PALOMAR AIRPORT RD	Excluded	4581	N/A	Airports, Flying Field & Airport Terminal Svc	Fixed	YES		904.31
WEST COAST POOLS AND SPAS	2920	101	LUCIERNAGA ST		7389		Business Services, Not Elsewhere Classified	Mobile	YES		904.40
WEST INN & SUITES, LLC	4970		AVENIDA ENCINAS	Active	7011	7011	Hotels And Motels	Fixed	YES	YES	904.31
WEST STEAK SEAFOOD AND SPIRITS	4980		AVENIDA ENCINAS	Active	5812	5812	Eating Places	Fixed	YES	YES	904.31
WESTERN FLIGHT, INC.	2210	A	PALOMAR AIRPORT RD	Active	4581	4581	Airport Services	Fixed	YES	YES	904.31
WESTERN FLIGHT, INC.	2208		PALOMAR AIRPORT RD	Active	4581	4581	Airport Services	Fixed	YES	YES	904.31
WESTERN GARDENS	4616		PANNONIA RD	Active	0781		Landscape Counseling And Planning	Mobile	YES		904.40
WESTMART GAS	4990		AVENIDA ENCINAS	Active	5541	5541	Gasoline Service Stations	Fixed	YES	YES	904.31
WETZELS PRETZELS	5620	122	PASEO DEL NORTE	Active	5461	5461	Retail Bakeries	Fixed	YES	YES	904.31
WINE SPOT, THE	2801	A	ROOSEVELT ST	Active	5813	5813	Drinking Places (Alcoholic Beverages)	Fixed	YES	YES	904.21
WINGATE & CO INC	4008 1/2		GARFIELD ST	Active	782		Landscape Maintenance	Mobile	YES		904.31
WINGSTOP	2508	C1	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.21
WITCH CREEK WINERY	2906		CARLSBAD BLVD	Active	2084	2084	Wines, Brandy & Brandy Spirits	Fixed	YES	YES	904.31
WOOD WIZARD, THE	6353		EL CAMINO REAL	Active	2511		Carpentry Work	Fixed	YES		904.21
WOODWORKS PLUS	6104	C/D	AVENIDA ENCINAS	Active	2541		Mfg. Cabinets, Lockers, Shelving	Fixed	YES		904.40
WORTHINGTON DODGE OF CARLSBAD (USED)	5548		PASEO DEL NORTE	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.40

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WORTHINGTON DODGE OF CARLSBAD, INC.	5365		CAR COUNTRY DR	Active	5511		Motor Vehicle Dealers (New and Used)	Fixed	YES		904.31
WRNT INC	6211	E	YARROW DR	NLB	5093		No Entry	Fixed	No	No	904.31
XNERGY	2237	100	FARADAY AVE	Active	1541		Clean Room Construction	Mobile	YES		904.31
YANAGI SUSHI	6986	B	EL CAMINO REAL	Active	5812	5812	Eating & Drinking Places	Fixed	YES	YES	904.31
YARD FAIRY, THE	6163		PASEO PALERO	Active	0781		Landscape Counseling And Planning	Mobile	YES		904.51
YELLOW COYOTE FOOD CO. LP	1901		CALLE BARCELONA	Active	5812	5812	Eating Places	Fixed	YES	YES	904.51
YMCA	401		CHINQUAPIN AVE	Active	7999	7999	Youth Camp	Fixed	YES	YES	904.51
YOSHINO	2913		STATE ST	Active	5812	5812	Eating Places	Fixed	YES	YES	904.21
ZEN POOL SERVICE	2894		LANCASTER RD	Active	7389		Swimming Pool Maintenance	Mobile	YES		904.21
ZIMMER DENTAL INC.	1900		ASTON AVE	Active	3848		Manufacture Dental Implants	Fixed	No		904.31
ZIMMER DENTAL INC.	6221		EL CAMINO REAL	Active	3848		Manufacture Dental Implants	Fixed	No		904.31
ZIMMS DETAIL	7546	A	GIBRALTER ST		7542		Carwashes	Mobile	YES		904.40

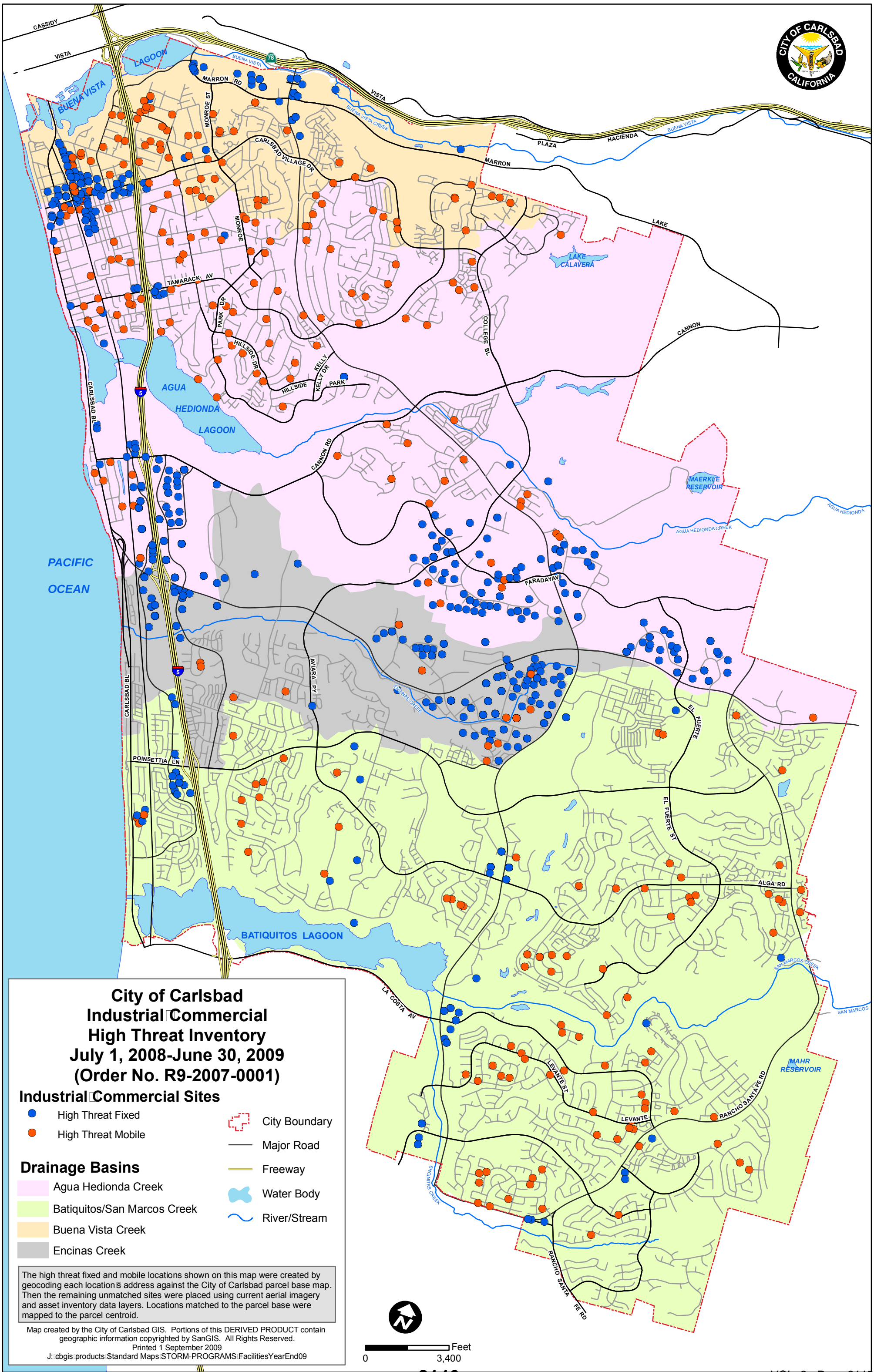
City of Carlsbad
Industrial Commercial
High Threat Inventory
July 1, 2008-June 30, 2009
(Order No. R9-2007-0001)
Industrial Commercial Sites
High Threat Fixed
High Threat Mobile
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
City Boundary
Major Road
Freeway
Water Body
River/Stream
The high threat fixed and mobile locations shown on this map were created by geocoding each location s address against the City of Carlsbad parcel base map. Then the remaining unmatched sites were placed using current aerial imagery and asset inventory data layers. Locations matched to the parcel base were mapped to the parcel centroid.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
Printed 1 September 2009
J: cbgis products Standard Maps STORM-PROGRAMS FacilitiesYearEnd09
Feet
0
3,400
PACIFIC OCEAN
BUENA VISTA LAGOON
AGUA HEDIONDA LAGOON
BATIQUITOS LAGOON
LAKE CALAVERA
MAERKLE RESERVOIR
MAHR RESERVOIR
CASSIDY
VISTA
MARRON RD
MONROE ST
CARLSBAD VILLAGE DR
PLAZA
HACIENDA
LAKE
CANNON
TAMARACK AV
PARK DR
HILLSIDE DR
KELLY DR
COLLEGE BL
CARLSBAD BL
CANNON RD
FARADAYAV
AVIARA PY
EL FUERTE
POINSETTIA LN
EL FUERTE ST
ALGA RD
LA COSTA AV
LEVANTE ST
LEVANTE
RANCHO SANTA FE RD
BUENA VISTA
BUENA VISTA CREEK
AGUA HEDIONDA
AGUA HEDIONDA CREEK
ENCINAS CREEK
SAN MARCOS CREEK
SAN MARCOS

Carlsbad Conserves
Environmental Programs Newsletter • Fall 2008

Water Conservation

Tips for Residents

THE CITY OF CARLSBAD Environmental Programs Division is committed to working together with the citizens of Carlsbad to effectively reduce our water consumption and conserve this precious resource. We encourage you to get involved:

8 Ways to Save Water Inside

- Check your toilets, faucets and pipes for leaks.
- Stop using your toilet as an ashtray or wastebasket.
- Take shorter showers.
- Install water-saving shower heads or flow restrictors.
- Take baths. (A partially filled tub uses less water than all but the shortest of showers).
- Turn off the water while brushing your teeth or while shaving.
- Use your automatic dishwasher or washing machine only for full loads.
- If you wash dishes by hand, turn off the water between rinsing.

9 Ways to Save Water Outside

- Water your lawn only when it needs it.
- Water during the cool part of the day, before 6 a.m. and after 8 p.m.
- Turn off sprinklers during rainstorms.
- Don't water the gutter, sidewalk or street.
- Plant drought-resistant trees and plants.
- Put a layer of mulch around trees and plants.
- Use a broom instead of a hose to clean driveways and sidewalks.
- Turn off the hose while washing your car.
- Check for leaks in pipes, hoses, faucets and couplings.

Water Use Audits Offered
Carlsbad Municipal Water District customers can call (760) 602-7585

Rebates for Residents

Carlsbad Environmental Programs, *www.carlsbadconserves.org*

Residents, get money back on clothes washers, toilets, smart controllers, sprinkler nozzles and synthetic turf!

- It just got easier through the new SoCal-Water$mart program launched by Metropolitan Water District and its member public agencies on July 1, 2008. Learn more by visiting *www.bewaterwise.com* and click on the Rebates tab.
- High-Efficiency Clothes Washers (HEW) use 65% less water, 55% less energy, and less detergent; clean better; and are gentler on clothes than standard clothes washers. The above rebate program offers a rebate of up to $185.
- High-efficiency Toilets save more than 60% every time you flush. Pre-1981 toilets use five to seven gallons of water per flush, compared to the 1.28 to 1.6 gallons per flush used by HETs. The above rebate program offers a rebate of up to $200 and up to $30 for a high-efficiency toilet upgrade. For more detailed information call 1-888-376-3314.
- A "Smart" or Weather-based Irrigation Controller can be an effective technology for reducing water usage outdoors. The "smart" controller uses weather data and site information such as plant type and sprinkler system output to adjust watering times and frequency. Professional installation is recommended. The rebate amount for single-family sites less than one acre is $230 and $630 for one acre or larger.
- Synthetic Turf can replace irrigated vegetation and may significantly reduce your outdoor watering needs. A 50¢ per spare foot incentive is available.
- Rotating Nozzle rebates are offered through this program at a rate of up to $4 per rotating nozzle for single-family properties.

753215

Storm Water Protection

Conserving water helps protect our storm drains…

MANY WATER CONSERVING ACTIONS also help protect our storm drains which in turn help to keep our creeks, lagoons, and ocean pollution-free. The majority of water pollution comes from common materials such as oil, fuel, and fluids leaked from cars, soaps from washing our cars, lawn and garden fertilizers, and sediments from a lack of erosion control. YOU have the power!

You could avoid over-irrigating lawns and gardens. Excessive watering washes fertilizers and pesticides into gutters and storm drains AND wastes water.

You could use a broom, not a hose. Rather than hosing off sidewalks, parking areas and garages which forces pollutants into our storm drains AND wastes water, sweep up yard waste and debris and dispose of them in appropriate trash receptacles.

You could take your car to a commercial car wash that recycles water. Washing vehicles at home results in soap in our storm drains AND wastes water.

…THEN ACT!

YOUR EVERYDAY ACTIONS IMPACT OUR ENVIRONMENT!

Storm drains flow directly into our creeks, lagoons and ocean without filtration. Storm drains and sewers are not connected. Prevent soap suds, pet waste, paint and pesticides from entering storm drains or soon they will be contaminating our water ways. For a clean environment, keep it out of the street! Think about it – rainwater should be the only thing going down in this town.

Recycling Tips

SINGLE FAMILY RESIDENTS are supplied with green and blue crates for the separation of their recyclable materials. The following materials can be placed in the green recyclable bin:

- Aluminum: beverage cans and foil
- Plastic: Beverage containers with recycling symbols #1-7, and non-beverage containers with #1, 2 and 7.
- Glass: jars and bottles
- Tin: food cans

All material needs to be emptied, clean and/or rinsed.

Additional containers for curbside service may be requested by calling Waste Management, Inc. at (760) 929-9400. Waste Management has a buyback center located at 5960 El Camino Real. Hours are Tuesday – Saturday, 8 a.m. to 4 p.m. Redeemable items include newspaper, CRV aluminum, glass, plastic 1-7 and bi-metal cans. The buyback center is closed for lunch.

A publication from

CITY OF CARLSBAD

CITY OF CARLSBAD PUBLIC WORKS
At Your Service!
ENVIRONMENTAL PROGRAMS
1635 Faraday Avenue • Carlsbad, CA 92008

think globally. act neighborly.
City of Carlsbad Environmental Programs
www.carlsbadconserves.org 760-602-4646

***www.carlsbadconserves.org* • Environmental Hotline (760) 602-4646**

Carlsbad Conserves
Environmental Programs Newsletter • Winter 2008

Water Conservation Tips

Household Hints to Conserve Water and Money

Why Conserve?

Water conservation is the most cost-effective and environmentally sound way to reduce our demand for water. This stretches our supplies further, and protects places like our lagoons and ocean. The entire U.S. uses less water than it did 25 years ago, even though there are more people! Using less water also puts less pressure on our sewage treatment facilities, and uses less energy for water heating.

What Can I Do?

There are many effective ways to conserve water in and around your home. Many of these tips were gleaned from materials published by the Metropolitan Water District of Southern California (MWD). Indoor savings are based on a family of two adults and one child.

How Much Will I Save?

1. Water your lawn only when it needs it. Step on your grass. If it springs back, when you lift your foot, it doesn't need water. So set your sprinklers for more days in between watering. **Saves 750-1,500 gallons** per month. Better yet, especially in times of drought, water with a hose.
2. Fix leaky faucets and plumbing joints. **Saves 20 gallons** per day for every leak stopped.

3. Install water-saving shower heads or flow restrictors. **Saves 500 to 800 gallons** per month.
4. Run only full loads in the washing machine and dishwasher. **Saves 300 to 800 gallons** per month.
5. Shorten your showers. Even a one or two minute reduction can **save up to 700 gallons** per month.
6. Use a broom instead of a hose to clean driveways and sidewalks. **Saves 150 gallons** or more each time. At once a week, that's **more than 600 gallons** a month.
7. Use an ashtray or wastebasket instead of the toilet. **Saves 400 to 600 gallons** per month.
8. Capture tap water. While you wait for hot water to come down the pipes, catch the flow in a watering can to use later on house plants or your garden. **Saves 200 to 300 gallons** per month.
9. Adjust your sprinklers so that water lands on your lawn or garden where it belongs – and only there, instead of the sidewalks, driveway or gutter. **Saves 500 gallons** per month.
10. Set sprinkler timers to a shorter winter schedule to water less often and you will save **1,000s of gallons** of water every month!

Household Hazardous Waste

Oceanside HHW Facility
Free Drop Off, By Appointment Only
(760) 929-9400, 2880 Industry Street, Oceanside, Alternating Saturdays, 9 am-1 pm

Vista HHW Facility
Free Drop-Off, (800) 444-4244, 1145 East Taylor Street, Vista, Saturdays, 9 am-3 pm

Door-to-Door HHW Collection
By Appointment Only, (800) 444-4244, Clean Harbors, $10 copayment per pickup

753529

Bulky Item Pick Up 2009 Schedule

Call Waste Management, Inc. at (760) 929-9400 or visit their website at *http://northcounty.wm.com* to schedule; limit of 2 bulky items per Carlsbad resident per quarter at no charge.

Saturday, January 24
Appointments accepted January 5-12 ONLY

Saturday, March 21
Appointments accepted March 2-9 ONLY

Saturday, June 20
Appointments accepted June 1-8 ONLY

Saturday, September 19h
Appointments accepted August 31- September 7 ONLY

Saturday, November 7
Appointments accepted October 19-26 ONLY

Please go to *www.carlsbadconserves.org* to find out which of your household items qualify for bulky item pickup.

Yard Waste Decals Available

Yard Waste should be placed in a separate trash container, not plastic bags. The yard waste can/container should be labeled with a yard waste decal.

Yard waste decals are available by contacting Waste Management at (760) 929-9400 or by calling the City of Carlsbad Environmental Programs at (760) 602-4646. On collection day, place container with decal facing the street. Please remember that there is a ten can/container limit.

Storm Water Protection

Learn how to protect our lagoons and ocean and pass your knowledge on so future generations can enjoy a clean and safe ocean!

Ten Simple Ways You Can Help Protect the Ocean

1. Use non-toxic or less hazardous products around the house.
2. Properly dispose of hazardous waste and avoid disposing in the in the trash, sewer system, or storm drains.
3. Conserve water. Install and use water saving plumbing fixtures.
4. Collect cooking grease in a can and throw away. Grease down the drain hardens in the city sewer lines and can cause sewer overflow that can pollute the ocean.
5. Minimize disposal of food waste and trash down the drain. Excessive food waste and other items can cause blockage to sewer lines and cause sewer overflow that can pollute the ocean.
6. Limit use of yard chemicals.
7. Check your car regularly for oil leaks and fix immediately. Remember only rain in the storm drain!
8. Pick up trash, cigarette butts or debris around your yard and streets. Rain can wash them down to the ocean where they can harm marine animals.
9. Pick up after your pets.
10. Take your expired medications to a Household Hazardous Waste Facility.

A publication from
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Environmental Hotline
(760) 602-4646

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Carlsbad Conserves

Environmental Programs Newsletter • Spring 2009

Only Rain in the Storm Drain!

The City of Carlsbad supports the implementation of environmental laws and regulations issued by the Environmental Protection Agency and the California Regional Water Quality Control Board. These regulations are put in place to protect and preserve our environment, specifically water quality.

Storm Drains are not connected to the Sanitary Sewer and therefore, have no treatment prior to discharge to our creeks, lagoons, and the ocean. The primary purpose of storm water drains is to carry rainwater away from developed areas to prevent flooding.

Pollutants generated from various sources and activities include oil, grease, trash, cigarette butts, excess fertilizers and pesticides, bacteria from pet waste, sediment, and hazardous materials. If these pollutants find their way through storm drains, initially or over time, these pollutants can cause beach closures, increase sediment into creeks and lagoons, reduce oxygen levels in the water, cause changes in water temperature and clarity, and can increase plant and algae growth which can create a toxic environment for aquatic life.

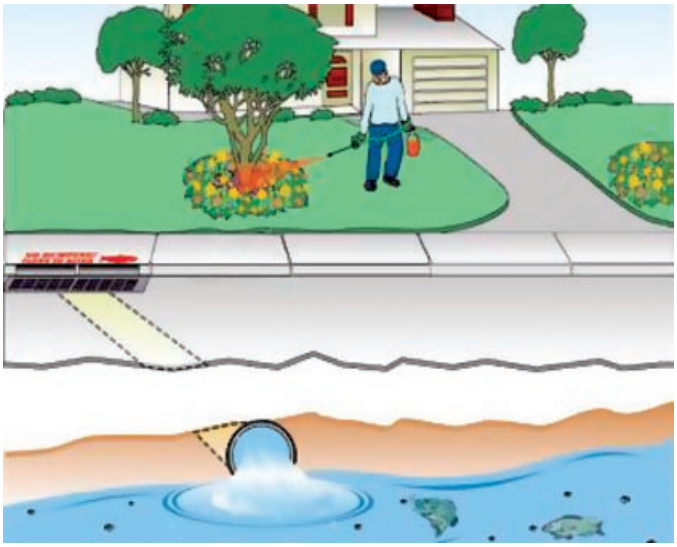

Pollutants must be reduced and/or removed BEFORE they enter the storm drain system.

Tips

- Use non-toxic products.
- Limit use of yard chemicals.
- Eliminate water run off from irrigation.
- Use the Household Hazardous Waste Facilities to dispose of hazardous materials.

Each of us can do small things to help clean up our environment and that adds up to a pollution solution! For more information on Storm Water Protection go to *www.carlsbadconserves.org*. Storm Water HOTline (760) 602-2799

A publication from

CITY OF CARLSBAD

CITY OF CARLSBAD **PUBLIC WORKS**

At Your Service!

ENVIRONMENTAL PROGRAMS

1635 Faraday Avenue • Carlsbad, CA 92008

www.carlsbadconserves.org

Environmental Hotline

(760) 602-4646

753624

Make Spring Cleaning Easy on the Environment

HHW One Day Event Coming Soon!

Saturday, April 18, 2009, 9 a.m. – 1 p.m.
2480 Impala Drive, Carlsbad

Appointments required:
www.carlsbadca.gov/waste/hhwsched.html **or call (760) 602-7559**
Appointment bookings will begin March 30.

As the long winter months wane and spring approaches, people everywhere are preparing for the season's ritual – spring cleaning.

Did you know that many common products used daily require special handling for disposal and may not be discarded in sinks, storm drains or household trash? These items are classified as "household hazardous waste" (HHW) and are typically labeled Caution, Warning, Danger, Poison, Toxic, Flammable or Corrosive.

For a list of common HHW items, please go to *www.carlsbadca.gov/waste/index.html*

Carlsbad offers many ways to dispose of HHW items, such as the upcoming Annual HHW Collection One Day Event. Limited space available. FREE to Carlsbad residents with proof of residency.

Carlsbad residents have several ongoing options for properly disposing of HHW.

Door-to-Door HHW Collection
By Appointment Only
(800) 444-4244
Clean Harbors
$10 copayment per pickup

Free Drop-Off
Vista HHW Facility
(800) 444-4244 Saturdays
1145 East Taylor Street, Vista

Oceanside HHW Facility
By Appointment Only
Alternating Saturdays
(760) 929-9400
2880 Industry Street, Oceanside

Will Winter Rain and Snow Impact the Drought?

Snowfall in the Sierra Nevada mountain range is a primary source of water for the state, but is down to about two-thirds of normal precipitation so far this year. Reservoirs are well below normal levels and conditions reflecting an oceanic and atmospheric condition known as La Niña are appearing, creating a high-pressure system that could keep storms out of California. In essence, the forecast is another dry year.

The state is encouraging individuals and businesses to restrict outdoor water use and to buy water-efficient products. The City of Carlsbad has recently adopted a Water Conservation Ordinance which contains four levels of response, depending on the severity of the water shortage. A number of conservation measures will be in force at all times.

- Washing down paved surfaces is allowed only when necessary for safety or sanitation.
- Eliminate water waste from inefficient landscape irrigation, and repair any water leaks as soon as possible.
- Wash vehicles with a bucket and hose equipped with a shut-off nozzle.
- Serve water in restaurants only on request.
- Offer hotel guests the option of not laundering towels and linens daily.

For more information on Water Conservation Programs go to *www.carlsbadconserves.org.*

PRINTED ON RECYCLED PAPER

Carlsbad Conserves

Environmental Programs Newsletter • Summer 2009

Keeping the Environment Clean

Pet Waste Disposal

Pet waste is a health risk to pets and people, especially children. It's a nuisance in our neighborhoods. Pet waste is full of bacteria that can make people sick. This bacteria gets washed into the storm drain and **ends up in our creeks, lagoons and ocean**. The bacteria ends up in shellfish living in these water bodies. People who eat those shellfish may get very sick.

Having a clean environment is of primary importance for our health and economy. Clean waterways provide commercial opportunities, recreation, fish habitat and adds beauty to our landscape. YOU can help keep our creeks, lagoons and ocean clean by applying these tips:

- **Carry a plastic bag when walking pets and be sure to pick up after them.**
- **Clean up pet waste in your yard frequently.**

The best way to dispose of pet waste is to flush it down the toilet because it gets treated by a sewage treatment plant.

Other disposal methods for pet waste include sealing it in a bag and placing it in the trash or burying small quantities in your yard to decompose. Be sure to keep it away from vegetable gardens.

The 3 R's

Reduce, Reuse, Recycle

Tips & Facts

✔ **Why should you recycle?**
- Recycling saves energy.
- Recycling saves our clean air and clean water.
- Recycling conserves our natural resources.
- Recycling saves landfill space.
- Recycling saves money and creates jobs.

✔ **Before you throw it away, ask yourself: Can this be recycled? Almost always, the answer will be yes.**

✔ **Nearly every beverage you drink comes in a container that can be recycled!**

✔ **Reduce means finding ways to decrease the amount of garbage we throw away.**

✔ **Buy bulk products or items that use little packaging. Cardboard is recyclable.**

✔ **Use a reusable lunch box or bag.**

✔ **Buy products that are durable and long-lasting.**

✔ **Try renting items you don't use very often.**

✔ **Use reusable bags when shopping.**

✔ **Find alternative ways to wrap gifts, such as a reusable cloth, a reusable decorative box or a reusable bag.**

✔ **Use reusable plastic containers for food instead of plastic bag.**

A publication from

CITY OF CARLSBAD

CITY OF CARLSBAD **PUBLIC WORKS**

At Your Service!

ENVIRONMENTAL PROGRAMS

1635 Faraday Avenue • Carlsbad, CA 92008

www.carlsbadconserves.org

Environmental Hotline

(760) 602-4646

753698

City of Carlsbad held 16th Annual Water Awareness Poster Contest

All 4th grade students in the Carlsbad Municipal Water District were invited to participate in the City of Carlsbad's Water Conservation Poster contest and the North County Water Agencies 2010 Calendar contest. This year's theme was "Water is Life."

Posters allowed each student to creatively interpret the use of water. We received many wonderful portraits and Carlsbad's top 20 will be on display at the Dove Library during the month of June 2009. These portraits give us insight on how we can conserve water. Here is a sneak peak at Carlsbad's First, Second and Third place winner's entries.

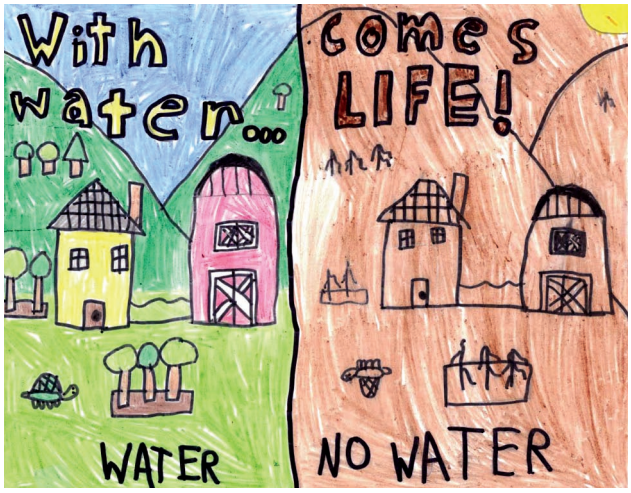

Second Place (above): Zach Lynch,
Hope Elementary School, Mrs. Miller

"WITH WATER...COMES LIFE"

- ✔ Plant native plants during the spring or fall when watering requirements are lower.
- ✔ Install a rain shut-off device on your automatic sprinklers to eliminate unnecessary watering.
- ✔ Use a layer of organic mulch around plants to reduce evaporation and save hundreds of gallons of water a year.

First Place (above): Olivia McLaughlin
St Patrick Parish School, Mrs. Richardson

"EVERYONE NEEDS WATER!"

- ✔ Pets need drinking water too!
- ✔ Turn the faucet off between rinses.
- ✔ Water your garden by hose, before 10 a.m. or after 6 p.m.
- ✔ Use discarded aquarium water for plants and flowers.

Third Place (right): Danielle Tweedy
St. Patrick Parish School, Mrs. Decottes

"DON'T WASTE WATER"

- ✔ Check your toilets for leaks and make sure it doesn't continue to run.
- ✔ Taking a shower uses less water than using the bathtub.
- ✔ Use a bucket to capture cold water from the shower while it's warming up and use on plants and flowers.

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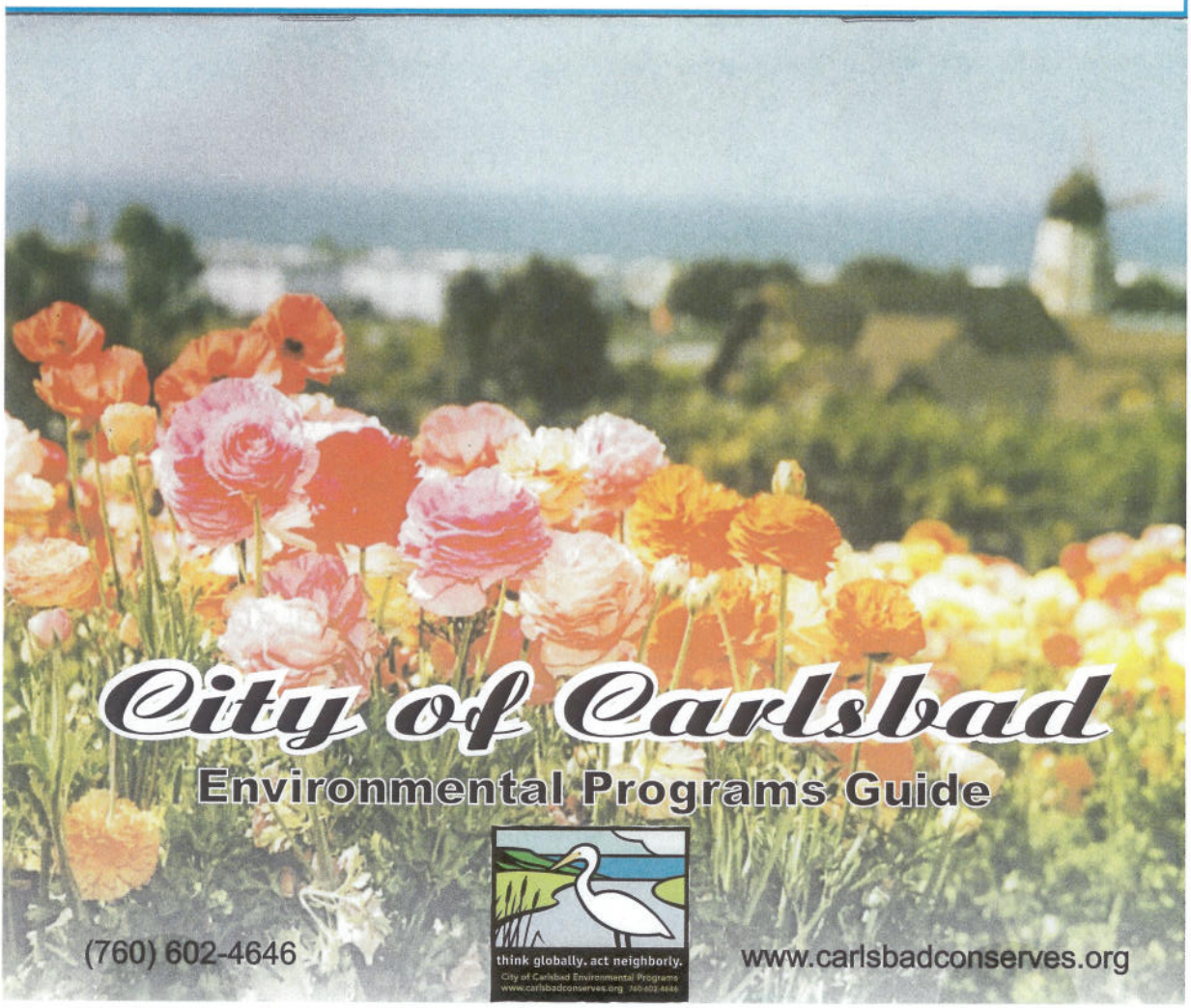

CITY OF CARLSBAD CALIFORNIA

1635 Faraday Avenue
Carlsbad, CA 92008
(760) 602 - 4646

WM WASTE MANAGEMENT
Think Green.

5960 El Camino Real
Carlsbad, CA 92008
(760) 929-9400

Printed on 100% Post Consumer Content Paper

184.0/0807

Pre-Sorted Std
US Postage
PAID
El Cajon, CA
Permit No. 299

Welcome to the City of Carlsbad

This brochure provides guidelines and helpful hints on the environmental services available to Carlsbad residents.

Solid Waste Collection

The Solid Waste section will assist residents in understanding the services provided for refuse, recycling and yard waste collection in the City of Carlsbad. The Additional Waste Services section of this flyer instructs residents how and where to properly dispose of household hazardous waste, electronic waste and used oil.

Water Conservation

This section provides residents with cost saving options that will aid them in their efforts to conserve water. Resources such as toilet and clothes washer voucher programs and free on-site water audits are available.

Storm Water Protection

Storm water pollution affects everyone who lives, works and plays in the City of Carlsbad. Litter, fertilizers, pet waste, oil and soap can be washed from our yards, driveways and streets into the storm drain system and directly into our creeks, lagoons, and onto our beaches. This pollutes our water and endangers wildlife. The Storm Water section of this flyer identifies some preventative measures residents can take to minimize the source of these pollutants and the number to call to report illegal discharges in the storm drain system.

Brought to you in partnership by the City of Carlsbad and Waste Management, the City´s refuse and recycling provider.

Storm Water Protection

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to prevent flooding by carring rainwater away from developed areas . Untreated storm water flows directly into our creeks, lagoons and the ocean, carrying any pollutants from the roads.

Storm water pollution comes from a variety of sources, including:

- Oil from vehicles
- Excess pesticides and fertilizer from landscaping
- Bacteria from pet waste
- Sediment from construction and landscaping projects
- Soap from car washing
- Litter
- Lawn and garden debris
- Improperly disposed home improvement products (paint, stucco, grout, cement, solvent)
- Washing driveways and sidewalks

Pollution prevention is up to YOU!

Please help us protect OUR environment. Here are some tips to help keep creeks, lagoons and the ocean clean:

- Bag and dispose of pet waste in a trash can, not a yard waste container
- Use fertilizers and pesticides sparingly
- Adjust sprinklers to prevent over-watering
- When possible, take your car to a commercial car wash

- Keep automobiles properly maintained to prevent fluid leaks
- Properly dispose of trash and cigarette butts
- Volunteer at cleanup events in Carlsbad

"Only rain in the storm drain"

To report an illegal discharge or for more information, call our hotline at (760) 602-4646.

www.carlsbadconserves.org

Water Conservation

The Carlsbad Water Ethic promotes responsible and efficient water use in our arid city. Our residents should follow this Water Ethic even when we are not in a drought situation. We encourage residents to adopt these behaviors as a way of life.

- Incorporate drought-tolerant plant materials and micro-irrigation (drip) systems wherever possible into new landscaping
- Water should not leave the user´s property due to over-irrigation of landscape
- Water during the early morning or evening hours to minimize evaporation
- Investigate and repair all leaks
- Water cannot be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards
- Recycled water shall be used wherever and whenever possible.

Residential Voucher Programs

Carlsbad participates in a voucher/rebate program with other San Diego County Water Agencies. The goal of this program is to reduce the amount of water residents use - thus increasing the available supply to all residents. Vouchers are available for money off of the purchase and installation of water saving devices like ultra low flow toilets, high-efficiency clothes washers, landscaping and Weather-Based Irrigation Controllers.
Interested residents and Home Owners Associations can contact the Voucher Processing Center at (800) 986-4538. The center is open Monday through Friday from 8:00 a.m. to 5:00 p.m., and Saturday from 8:00 a.m. to 3:00 p.m.

Residential Survey

Carlsbad residents can receive a free, on-site water conservation survey. This will include a review of indoor and outdoor water saving opportunities, a leak check, and an irrigation system and water schedule review. Customers are also shown how to read their water meter and are given literature promoting other conservation programs.
For ideas on water conservation at home refer to www.h2ouse.org

Contact your local Water Agency

Carlsbad Water Customers: (760) 602-4646

Vallecitos Water Customers: (760) 744-0460

Olivenhain Water Customers: (760) 753-6466

How to contact us

City of Carlsbad Environmental Programs
1635 Faraday Avenue
Carlsbad, California 92008
(760) 602-4646

Hours: Monday - Thursday 7:30 a.m. - 5:30 p.m.
Friday 8:00 a.m.- 5:00 p.m.

www.carlsbadconserves.org

Waste Management
5960 El Camino Real
Carlsbad, California 92008
(760) 929-9400

Hours: Monday - Friday 8:00 a.m. - 5:00 p.m

http://northcounty.wm.com

Holiday Schedule

Waste Management does not offer service on the following holidays:

- New Year's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day

When a holiday falls on a weekday, collection will be delayed one day for the remainder of the week.

Holiday announcements will be published in your local newspaper.

www.carlsbadconserves.org

Buyback Center

Redeemable items

- Newspaper
- CRV aluminum cans
- CRV glass bottles
- CRV plastic bottles
- CRV bi-metal cans

CRV = California Redemption Value. Ready-to-drink beverage containers which are packaged in aluminum, glass, plastic, bi-metal or any combination of these materials.

Also accepted:

- Electronic devices
- Household batteries

(For more information see Household Hazardous Waste)

Donation items

- Non CRV aluminum
- Non CRV glass
- Non CRV plastic
- Tin cans
- White ledger paper
- Computer paper
- Mixed paper
- Corrugated cardboard

Hours: Tuesday - Saturday
8:00 a.m. - 4:00 p.m.
Closed:
1:00 p.m. - 1:40 p.m.
(760) 929-9400

Bulky Item Pickup

Need to dispose of such items as furniture (couch, chair, dresser, cabinet, bookshelf, mattress) or appliances (toilet, washer, stove, sink)? FREE bulky item collection days are scheduled periodically in your community. Residents may dispose of two items per event. Special pickups are available for a fee. Call Waste Management at (760) 929-9400 to schedule an appointment or for additional information.

Electronic Waste

What is E-Waste?

The rapid advances in new technology and demand for new electronic equipment have increased the disposal of outdated electronic equipment known as "E-Waste."

Proper disposal of "E-Waste" through recycling and reuse prevents them from reaching landfills. This also helps to minimize waste, and provide usable items to organizations that need them as well as recapture valuable resources.

- Cell phones
- Computers
- Televisions
- VCRs/DVDs
- Stereos
- Printers
- Fax machines
- Monitors
- Microwaves ovens

Universal Waste

(Including household batteries)

As of February 9, 2006, it is now illegal in the State of California to dispose of common household items such as alkaline batteries*, mercury thermometers and thermostats, and fluorescent light bulbs into the trash. These items are now classified as Universal Waste, and must be disposed of properly through the Household Hazardous Waste (HHW) program. However, in an effort to make the disposal of common household batteries including re-chargeable ones, more efficient, the City has partnered with Waste Management to allow residents to drop off the batteries at the Waste Management Recycling Center located at 1145 East Taylor St., Vista, free of charge. The City recommends storing your used fluorescent light bulbs in a safe place until they can be brought to the HHW facilities or scheduled for a home pick-up.

**Note - rechargeable batteries can also be brought to a participating retail store that provides free drop-off bins for proper disposal.*

Where to recycle Electronic and Universal waste

Door-to-door: Call (800) 444-4244

Waste Management
5960 El Camino Real, Carlsbad
Hours: Tuesday - Saturday 8:00 a.m. - 4:00 p.m.
Closed: 1:00 p.m. - 1:40 p.m.
For additional information please call (760) 929-9400
COST: CRTs (television, laptops, monitors): no charge
All others electronic devices fee at drop-off.

Household Hazardous Waste Collection Facility
1145 East Taylor Street, Vista
Hours: Saturdays 9:00 a.m. - 3:00 p.m.
For additional information please call (800) 714-1195
COST: Currently there is no cost to Carlsbad residents.

www.carlsbadconserves.org

Household Hazardous Waste

MATERIALS ACCEPTED:

- Used motor oil and filters
- Pool cleaners
- Automobile fluids (antifreeze, gasoline, brake, transmission)
- Household cleaners
- Landscaping chemicals
- Automotive batteries
- Mercury thermostats
- Mercury thermometers
- Non-empty aerosol cans
- Lamps with fluorescent tubes, sodium vapor lamps
- Household batteries
- Paint
- Mercury switches(automotive or non-automotive light switches)
- Novelties such as some singing greeting cards or flashing athletic shoes

Drop-off

Residents may bring up to 15 gallons or 125 pounds per visit.

A proof of residency required (California driver license, utility bill or other).

No charge to residents at either location.

Door-to-door collection

The City has implemented a door-to-door program that allows residents to make an appointment to have their HHW picked up at their residence for a small co-pay of $10. This door-to-door program is available to all residents. For more information on this program, or to set up an appointment, call (800) 444-4244.

PUT TOXIC WASTE IN ITS PLACE

Drop-off locations

VISTA
Hours: Saturdays:
9:00 a.m.- 3:00 p.m.
No appointment necessary
(800) 714-1195

OCEANSIDE
Hours: Alternating Saturdays:
9:00 a.m. - 1:00 p.m.
Appointment ONLY.
For additional information, please call
(760) 929-9400.

Funded by a grant from the California Integrated Waste Management Board.

Overflow Trash

PALOMAR TRANSFER STATION
(760) 603-0153

Residents can dispose of overflow trash at the Palomar Transfer Station. A fee will be charged at the time of disposal. For additional information please call the Palomar Transfer Station at (760) 603-0153.

No hazardous or regulated waste is accepted at this facility including batteries, paint, tires, liquids and electronic waste.

Open to residents
Saturday & Sunday
7:30 a.m. to 4:00 p.m

Holiday Trees

The City, in partnership with Waste Management, has a holiday tree recycling and collection program that allows residents to drop off their trees for recycling or be picked up at the curb for collection. This service is free to all Carlsbad residents and it operates the day after Christmas through the first two weeks in January. For locations where residents may drop-off the trees for recycling check the City's website or the Community Services Guide.

For curbside pick-up remove stands, tinsel and ornaments from trees, cut in sections no longer than 4 feet and place out on the curb for collection. Flocked trees are not recyclable and will be collected by the trash drivers.

Holiday schedule announcements will be published.

www.carlsbadconserves.org

City of Carlsbad

Storm Water Protection Program

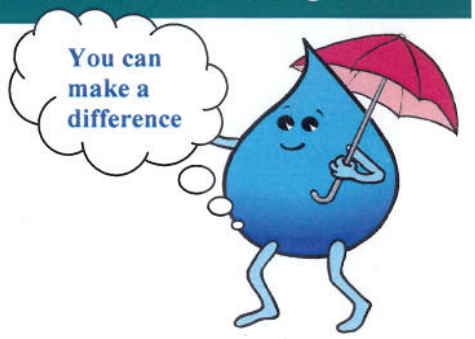

March 2, 2009

Carlsbad Resident

Dear Carlsbad Resident:

In compliance with the City's National Pollutant Discharge Elimination System Municipal Permit, and in consideration of the current drought in California, the City of Carlsbad is asking for your voluntary participation in an Irrigation Runoff Reduction Watershed Pilot Program in your neighborhood.

Irrigation water that runs off your property not only wastes our precious water, but can also contain pollutants such as fertilizer, pesticides, sediment, and bacteria. Once in the storm drain system, these pollutants are transported directly to our creeks, lagoons and ocean in Carlsbad. Through the end of April, we will be offering free onsite assessments in your neighborhood to review opportunities for irrigation runoff reduction.

While this is a voluntary project, the City will also be contacting you if there is evidence of irrigation runoff due to over-watering, leaks, or misaligned/broken sprinkler heads on your property. Our Water Conservation Specialist will work with you to develop recommended Best Management Practices to ensure pollution prevention and water conservation are practiced daily on your property. To sign up for your free assessment, please call our Storm Water Hotline at (760) 602-2799.

Like you, the City of Carlsbad ***is committed*** *to preventing pollution, improving water quality, and conserving water in our region. By working together we'll provide a cleaner and healthier environment for Carlsbad residents, businesses, and visitors. For more information about the City's Storm Water Protection or Water Conservation programs, please contact us at (760) 602-2799. You may also find additional storm water information on the City's website at* ***www.carlsbadconserves.org*** *or at* ***www.carlsbadca.gov****.*

Sincerely,

Glenn T. Pruim P.E.
Public Works Director

1635 Faraday Avenue • Carlsbad, CA 92008-3009 • 760-602-2799 •FAX 760-602-8562

City of Carlsbad

Environmental Programs

March 19, 2009

Dear Carlsbad Resident:

The City of Carlsbad's Storm Water Program works to protect the City's creeks, lagoons, and ocean from urban pollution. Through recent field investigations, there is evidence in your neighborhood of erosion and sedimentation issues in the storm drain system. During rain events, sediment from eroding slopes, garden edges, and other areas can wash off into the street, brow ditches, gutters, and storm drain system.

Sedimentation can create blockages in the storm drain system, increasing the possibility of flooding. In addition, it raises the level of suspended solids in our lagoons, which harm aquatic and marine life. Excess sediment from erosion also contributes to the infill of creeks and lagoons.

To reduce erosion from your property:

- Place sand bags, straw wattles, or silt fences along any slopes, lots, or other areas where erosion might occur, particularly along brow ditches, gutters, and any other storm water structure.
- Consider installing more permanent structures, such as retaining walls, brick, or stone in locations where erosion might consistently occur.
- Plants are a natural, inexpensive and highly effective means of controlling runoff, and can also act as a filter to remove pollutants from storm water. Consider using vegetation to protect slopes from runoff.

To reduce other pollutant discharges from your property:

- Frequently and properly dispose of grass, leaves, shrubs, and other green yard waste to prevent it from washing to the storm drain. Consider recycling yard waste or starting your own compost pile.
- Decrease the use of lawn and garden care products such as pesticides, insecticides, weed killers, fertilizers, herbicides, and other chemicals. Consider using organic fertilizers or non-toxic alternatives.
- During the rainy season, from November to March, alter your irrigation system to water less frequently and for shorter durations.

If you have any questions or would like additional information, please call me at the City's Storm Water Department at (760) 602-7583 or visit our website at www.carlsbadconserves.org. Thank you for doing your part to keep only rain in the storm drain.

Sincerely,

Hallie Thompson

Hallie Thompson
Environmental Specialist

City of Carlsbad

Environmental Programs

October 30, 2008

Dear Carlsbad Resident:

The City of Carlsbad's Storm Water Protection Program works to protect the City's creeks, lagoons, and ocean from urban pollution. Through water quality monitoring and/or field investigations, there is evidence in your neighborhood of over-irrigation. Over-irrigation not only wastes precious water during our current drought, but can also wash fertilizers and pesticides from landscaping activities off your property into the City's streets and storm drain system.

Untreated storm water transports pollutants directly into our creeks, lagoons, and ocean. Pollutants carried in irrigation water include landscape debris, pet waste, detergents or soaps from outdoor washing, and pesticides and fertilizers.

To reduce over-irrigation:

- Consider breaking up the irrigation cycles into 5-minute intervals which allow water to soak into the earth instead of running off.
- Look for leaks or misaligned sprinklers to reduce overspray.
- Contact the City for a consultation with our Water Conservation Specialist at (760) 602-4646.

To reduce other pollutant discharges from your property:

- Frequently and properly dispose of grass, leaves, shrubs, and other green yard waste to prevent it from washing to the storm drain. Consider recycling yard waste or starting your own compost pile.
- Decrease the use of lawn and garden care products such as pesticides, insecticides, weed killers, fertilizers, herbicides, and other chemicals. Consider using organic fertilizers or non-toxic alternatives.

For additional information on the City's Environmental Programs Department, please call us at 760-602-4646 or visit our website at **www.carlsbadconserves.org**.

The Environmental Programs Department
City of Carlsbad

(mailed to 80 homes in Rancho Carillo Estates)

City of Carlsbad

Environmental Programs

December 26, 2008

Dear Carlsbad Resident:

The City of Carlsbad's Storm Water Program works to protect the City's creeks, lagoons, and ocean from urban pollution. Through field investigations, there is evidence in your neighborhood of erosion and sedimentation issues. During rain events, sediment from eroding slopes, garden edges, and other areas can wash off into the street and storm drain system.

Sedimentation increases the level of suspended solids in our lagoons. This increase in suspended solids and turbidity can block light from reaching lower depths of creeks and lagoons, which can inhibit growth of submerged aquatic plants and consequently decrease oxygen levels, as well as disrupt the natural balance of aquatic and marine ecosystems. Excess sediment from erosion also contributes to the infill of creeks and lagoons.

To reduce erosion from your property:

- Place sand bags, straw wattles, or silt fences along any slopes, lots, or other areas where erosion might occur.
- Consider installing more permanent structures, such as retaining walls, brick, or stone in locations where erosion consistently occurs.
- Plants are a natural, inexpensive and highly effective means of controlling runoff, and can also act as a filter to remove pollutants from storm water. Consider using vegetation to protect slopes from runoff.

To reduce other pollutant discharges from your property:

- Frequently and properly dispose of grass, leaves, shrubs, and other green yard waste to prevent it from washing to the storm drain. Consider recycling yard waste or starting your own compost pile.
- Decrease the use of lawn and garden care products such as pesticides, insecticides, weed killers, fertilizers, herbicides, and other chemicals. Consider using organic fertilizers or non-toxic alternatives.
- During the rainy season, from November to March, alter your irrigation system to water less frequently and for shorter durations.

If you have any questions or would like additional information, please call the City's Storm Water Department at (760) 602-2799 or visit our website at www.carlsbadconserves.org. Thank you for doing your part to keep only rain in the storm drain.

The Storm Water Department
City of Carlsbad

2009 Water Quality Report

Conserve Water and Promote a Sustainable Lifestyle

Carlsbad Municipal Water District – A subsidiary district of the City of Carlsbad

Este informe contiene informacion muy importante sobre su agua potable.
Traduzcalo o hable con alguien que lo entienda bien.

What You Can Do To Help

Sweep or Rake

Sweep up debris and put it in a trash can. Hosing off sidewalks, parking areas and garages is not permitted. Rake up yard waste and start a compost pile.

Dispose of Yard Waste More Frequently

By disposing of grass, leaves, shrubs and other organic matter more frequently, less will wash into storm drains.

Reduce Use of Landscape Chemicals

Decrease the use of lawn and garden care products such as pesticides, insecticides, weed killers, fertilizers, herbicides and other chemicals. Over-irrigation is not permitted under the water conservation ordinance, and doing so can wash landscape chemicals into gutters and storm drains.

Use Soap Sparingly

When washing your car at home, use soap sparingly, divert wash water to landscaped areas, and pour your bucket of soapy water down the sink. Washing your car in the street is not permitted.

Clean up After Your Pets

Take a bag when you walk your pets and be sure to always clean up after them. Flush pet waste down the toilet or seal it in a plastic bag and throw it in the trash.

Buy Non-Toxic Products

When possible, use non-toxic products in household cleaning. If you must use a toxic cleaning product, buy small quantities, use it sparingly and properly dispose of unused portions. For the household hazardous waste collection facility nearest you, call: 800-CLEANUP or 760-602-4646.

Appendix 7 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The City s Illicit Discharge Detection and Elimination (IDDE) and Appendices will be submitted in December 2009 as approved by the Regional Board in Addendum 2, Order 2007-0001.

Only Rain in the Storm Drain!

Storm Water Protection... It's OUR Business!

Appendix 8.1

What You Need to Know...

The City of Carlsbad's storm water conveyance system consists of pipes, concrete ditches, basins, drains and inlets, as well as natural drainage areas, such as creeks, canyons, gullies and streams. The purpose of the system is to carry rainwater away from developed or urbanized areas to prevent flooding.

The storm water system is ***not*** connected to sanitary sewer systems or treatment plants. Rainwater and the pollutants it carries flow directly to our creeks, lagoons and ocean. Possible pollutants to storm water include:

- Sediments
- Organic Compounds
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses
- Pesticides
- Metals
- Fertilizers
- Detergents

How does urbanization affect the environment?

Urbanization increases impervious, or impenetrable, surfaces with parking lots, streets, and other developments. Rainwater no longer percolates into the soil, but runs off through the storm drain system, often increasing water volume and flood peaks. Effects include reduction in dissolved oxygen and clarity levels, changes in the water temperature, clogged breathing apparati of marine life, infill of creeks and lagoons, and amplified algae growth. These negative impacts can close beaches and degrade water quality over longer periods of time.

What is the Storm Water Protection Program?

The City's Storm Water Protection Program regulates storm water activities for existing residential, commercial, and industrial developments, investigates illegal discharges to the storm water system, educates the public about pollution prevention, and oversees the water quality monitoring program.

What does the Municipal Permit require?

The Municipal Permit requires the City to prevent storm water pollution during all three phases of urban development: construction, new development, and existing development.

The Permit also requires the City - ***employees, residents, and businesses*** - to improve the quality of the water flowing into the storm water system to the maximum extent practicable. In addition, the Municipal Permit requires the City to investigate and eliminate illegal discharges, develop an outreach and education program, and implement BMPs at municipal facilities.

I've heard the term NPDES. What does it mean?

NPDES stands for ***National Pollutant Discharge Elimination System*** created under the 1972 Federal Clean Water Act. The 1987 amendments to this Act required municipalities discharging storm water runoff into surface waters (i.e., ocean, lagoon, etc.) to obtain a permit. In California, these permits are issued and enforced by the Regional Water Quality Control Board.

Our current municipal storm water permit was issued on January 24, 2007 and applies to all 18 cities in San Diego County, the Unified Port District, the San Diego County Regional Airport Authority, and the County of San Diego. To view a copy of the Permit, please go to http://www.swrcb.ca.gov/rwqcb9/programs/sd_stormwater.html, or visit http://www.carlsbadca.gov/stormwater/conserve.html.

Who is responsible for protecting storm water?

EVERYONE! Storm water pollution prevention is a shared duty between the City of Carlsbad and the community. Storm drains on ***public*** streets, property, or easements are monitored and cleaned by the City. Everyone plays a part in keeping our storm drains free of trash, debris, and other materials that may pollute, contaminate or block the flow of water through the storm drain system:

- **City Employees**
- **Residents**
- **Business Community**
- **Developers and construction workers**
  - **YOU!!**

Storm Water Hotline: 760-602-2799

Only Rain in the Storm Drain!

What are Best Management Practices?

Best Management Practices (BMPs) are methods, measures, or practices designed to prevent or reduce water pollution. Once potential and existing sources of pollution have been identified, the next step is to select proper BMPs to eliminate or reduce storm water pollution.

What are some BMPs I can use?

- Instead of using a hose or pressure washing system, **try a dry clean up method!** Use mops, brooms or wire brushes to clean dumpsters, sidewalks, buildings, and other impervious surfaces. Never wash anything to the storm drain.
- Washwater should be dumped to indoor drains or to landscaping whenever possible.
- When possible, store materials indoors or under covered areas not exposed to rain. If materials cannot be stored under cover, place materials on pallets and cover with a tarp to avoid contact with storm water run-on and runoff.
- Dumpsters should always be kept closed to prevent rainwater from entering. Never place liquid waste, leaky garbage bags or hazardous waste in a dumpster or trash bin.
- Recycle whenever possible.
- Wash vehicles at a commercial car wash, whenever possible. City employees and/or mobile detailers cannot wash vehicles on public streets.
- Consider using safe, non-toxic products to reduce the use of hazardous products.
- Consider planting native vegetation whenever possible to reduce irrigation and water use and to conserve native habitats and wildlife.
- Regularly inspect storm drains for any accumulated trash, sediment, debris, or other materials that could pollute the storm drain system. Contain and clean any potential discharges immediately.

How do I report a storm water violation?

The Storm Water Protection Program operates a hotline and e-mail address to receive referrals about storm water pollution and illegal discharges. If you see someone dumping or washing waste or pollutants to the street or storm drain, please call the **hotline** at **760-602-2799** or send an email to stormwater ci.carlsbad.ca.us. This information is then routed to the appropriate person for response.

Storm Water Hotline
760-602-2799

What is the City doing to comply with the new Permit?

- A Jurisdictional Urban Runoff Management Plan (JURMP) has been developed and is being implemented.
- The Carlsbad Municipal Code cites regulations for storm water protection and pollution prevention.
- An extensive education and inspection program has been implemented to ensure the community is aware of and complying with the storm water requirements.
- Reports of illegal discharges are fully investigated and resolved to the maximum extent practicable.
- Storm water pollution prevention plans (SWPPP) have been developed and implemented at applicable high priority municipal facilities throughout the City.
- City employees have been and will continue to be trained on the requirements of the storm water program.
- The General Plan and Environmental Review process includes storm water pollution prevention requirements.
- Water quality monitoring is being conducted ocean outlets within the City s jurisdiction.
- The storm drain conveyance system has been mapped in GIS format.
- The City employs a Water Conservation Specialist to consult with residents regarding water use reduction and irrigation practices.
- The City seeks to purchase cleaner City vehicles such as hybrids to reduce fuel consumption and pollution and is researching alternative fuels and traffic reduction methods.
- The City has implemented a Waste Reduction Strategy to increase recycling while reducing waste generated. A partnership has also been created with Waste Management to encourage businesses to properly maintain trash areas.
- A Watershed Urban Runoff Management Plan (WURMP) has been developed and implemented in association with other North County cities within the Carlsbad watershed.

Be A Part of the Pollution Solution!!

Storm Water Training for Municipal Employees
July 1, 2008 - June 30, 2009

DATE	DEPT. DIV.	EMPLOYEES ATTENDING	TRAINING TYPE	NAME OF TRAINING OR TOPICS	LOCATION	SPONSOR PRESENTER
07/03/2008	Engineering DS	6	Staff Meeting	Review of 2nd draft Model SUSMP; Appliciblity of SWMP to municipal agencies	1635 Faraday	Steve Bobbett
07/10/2008	Engineering DS	7	Staff Meeting	Review of LID requirements for precise grading plans submitted for large developments	1635 Faraday	Steve Bobbett
07/14/2008	New Employees	4	Workshop	First Mondays - General Storm Water Training	Faraday	Storm Water
07/17/2008	Recreation	10	Presentation	Special Ecents and NPDES Compliance	Senior Center	Shawn Grandberry
07/17/2008	Engineering DS	7		Discussion or opportunities for updating water quality conditions for tentative map extensions	1635 Faraday	Steve Bobbett
07/24/2008	Engineering DS	5	Staff Meeting	Update on revised stormwater fees; review of LID design features on proposed Pacific Ridge High School.	1635 Faraday	Jeremy Riddle
07/30/2008	Engineering DS	5	Staff Meeting	Review of EIR, reclamation plan, and applicability of NPDES and General permit to Quarry Creek	1635 Faraday	Steve Bobbett
08/07/2008	PARKS	31	HAND-OUT	PET WASTE COLLECTION	PARK YARD	G. DAUSS
08/07/2008	Engineering DS	7	Staff Meeting	Announcement that Portland OR Stormwater Manual available for reference; discussion of measures for protection of permeable pavement during construction	1635 Faraday	Jeremy Riddle
08/14/2008	Engineering DS	7	Staff Meeting	Review of application for single family addition and requirement for threat assessment; review of Dos Colinas hydromodification design proposals and infiltration basins.	1635 Faraday	Steve Bobbett
08/21/2008	Engineering DS	7	Staff Meeting	Discussion of DPW's suggestions for tracking implementation effectiveness of various BMPs; review of grass swale proposed for non-priority project	1635 Faraday	Glen Van Peski
08/28/2008	Engineering DS	5	Staff Meeting	No announcements, discussions, or project reviews.	1635 Faraday	Steve Bobbett
09/03/2008	Engineering DS	5	Staff Meeting	Discussion of use and effectiveness of rain sensors proposed for inclusion on landscape/irrigation plans	1635 Faraday	Jeremy Riddle
09/04/2008	water dept	44	Presentation	fed,state,local water quality laws	CMWD	Clay Dobbs
09/04/2008	PARKS	6	HAND-OUT	ILLEGAL DUMPING CONTROL	STAGECOACH	J. PIMENTEL
09/05/2008	Construction Management Association of America	1	Seminar	Seminar: Construction Storm Water Compliance	San Diego, CA	Jeremy Riddle
09/08/2008	New Employees	8	Workshop	First Mondays - General Storm Water Training	Faraday	Storm Water
09/11/2008	Engineering DS	4	Staff Meeting	Discussion regarding draft order for construction	1635 Faraday	Steve Bobbett
09/18/2008	Engineering DS	6	Staff Meeting	Announcement regarding rainy season; letter from RWQCB; encouragement to properly condition all projects. Review of FY 07-08 stormwater priority determinations for discretionary approvals	1635 Faraday	Steve Bobbett
09/25/2008	Engineering DS	6	Staff Meeting	Discussion of use of underground PCC settling basing for treatment of parking lot runoff; proper BMPs for deli's, and review of La Costa Oaks 3.2 project	1635 Faraday	Steve Bobbett
10/02/2008	PARKS	6	DVD	XERISCAPE	POINSETTIA	C. SHANKEY
10/02/2008	Engineering DS	6	Staff Meeting	Discussed removal of post-construction BMPs (temporary basins) as construction advances. Reviewed handling of driveway ramp runoff into below ground parking garage area drains, perimeter french drains, all connected to sump pump.	1635 Faraday	Steve Bobbett
10/09/2008	Engineering DS	6	Staff Meeting	Announcement of regulation training, new legislation and internet implementation links. Discussed tracking mechanisms for temporary construction BMPs. Reviewed treatment of stormwater runnoff from Quarry Creek project prior to merging with stream flow.	1635 Faraday	Steve Bobbett
10/16/2008	PARKS	33	DVD	XERISCAPE	PARK YARD	G. DAUSS
10/16/2008	Engineering DS	4	Staff Meeting	Discussion of need to include engineered BMPs, not just numerically sized, format of list of treatment control BMPs, and determine BMP maitenaince schedule (manufacturer's recommendation or other).	1635 Faraday	Glen Van Peski

10/20/2008	Engineering DS	6	Staff Meeting	Review of changes in new Drainage Master Plan, effect of LID in reducing post development Q, and single sheet BMP plan sheet	1635 Faraday	Steve Bobbett
10/23/2008	Engineering DS	6	Staff Meeting	Discussion of new model SUSMP requirements; Reviewed and discussed BMP requirements for proposed projects.	1635 Faraday	Jeremy Riddle
10/28/2008	CM&I	10	Presentation	NPDES Compliance and Enforcement	M&O	Shawn Grandberry
10/28/2008	Engineering, Planning, Redevelopment, Construction Maintenance / Inspection and Engineering Design	32	Consultant	Presentation covering overview of training program, urban runoff, laws and regulations, requirements of R9-2007-0001, City's JURMP, general principals, general BMPs, WURMP, RURMP, and land use.	1635 Faraday	Miikhail Ogawa
10/29/2008	Facilities	13	Presentation	local municipal codes and NPDES comlpliances and BMP maintenance	Safety Center	Clayton Dobbs
10/29/2008	Streets	23	Staff Training	non storm water discharges; water law; bmp's	Safety Center	Clayton Dobbs
10/29/2008	Engineering, Planning, Redevelopment, Construction Maintenance / Inspection and Engineering Design	23	M Ogawa	StormWater Training for Land Dev 1	1635 Faraday	Steve Bobbett
10/30/2008	Engineering DS	7	Staff Meeting	Announcement of upcoming NPDES training; discussion of adding standard BMP best practices conditions for	1635 Faraday	Steve Bobbett
11/03/2008	New Employees	9	Workshop	First Mondays - General Storm Water Training	Faraday	Storm Water
11/06/2008	Engineering DS	7	Staff Meeting	Announcement of City Council approval of Drainage Master Plan, associated revisions and implementation of LID concepts; Review of request for LID on Lutheran Church submittal; Discussion of TIER 1 SWPPP for landscape plans and routing to inspection.	1635 Faraday	Steve Bobbett
11/13/2008	PARKS	29	HAND-OUT	ILLEGAL DUMPING CONTROL	PARK YARD	G. DAUSS
11/13/2008	Engineering DS	6	Staff Meeting	Announcement of co-permittee committee review of Carlsbad's single sheet SWMP with matrix and location of all BMPs constructed by improvement plans, grading [plans, building plans, etc.	1635 Faraday	Steve Bobbett
11/20/2008	Recreation	47	Presentation	Recreation All Hands Meeting, General Storm Water Training	Recreation Administration	Storm Water
12/04/2008	Engineering DS	7	Staff Meeting	No announcements, discussions, or project reviews.	1635 Faraday	Steve Bobbett
12/10/2008	water dept	40	Presentation	BMP maintenance	CMWD	Clay Dobbs
12/11/2008	PARKS	31	DVD	LANDSCAPE IRRIGATION MAINT.	PARK YARD	G. DAUSS
12/11/2008	Engineering DS	6	Staff Meeting	Discussion of hydromodification issues and retention basin BMP for CT 06-09 and review of CUP extention conditioned to submit SWMP prior to approval of extension	1635 Faraday	Steve Bobbett
01/05/2009	New Employees	9	Workshop	First Mondays - General Storm Water Training	Faraday	Storm Water
01/08/2009	Engineering DS	7	Staff Meeting	Discussed process to scan, record and track record copies of SWMPs and SWPPPs and discussed PRE 08-39s proposed wetlands, raingardens, bioswales, permeable pavement, and Filtera units.	1635 Faraday	Steve Bobbett
01/15/2009	Engineering DS	7	Staff Meeting	Review of grading plan for project adjacent to Aqua Hediondia Lagoon and appropriated BMPs.	1635 Faraday	Steve Bobbett
01/22/2009	Engineering DS	6	Staff Meeting	Discussion of process for implementation of revised drainage fees and review of RP 08-61 as a priority project.	1635 Faraday	Steve Bobbett
01/29/2009	Engineering DS	7	Staff Meeting	Announced GIS link to ESA map; Discussed permanent vs. interim hydromod criteria, dates for implementation of hydromod, model SUSMP and SUSMP; Reviewed proposed change to catch basin filter insert, high capacity sand filter in an underground basin to acheive LID, and an increase to impervious area for a 35 unit senior condo project.	1635 Faraday	Steve Bobbett
02/05/2009	water dept	41	Presentation	Pollution prevention	CMWD	Clay Dobbs
02/05/2009	Engineering DS	6	Staff Meeting	Discussed implementation of hydromod criteris, specifically Board review and approval of rainfall data.	1635 Faraday	Steve Bobbett
02/08/2009	PARKS	29	DVD	INTEGRATED PEST MANAGEMENT	PARK YARD	G. DAUSS

02/12/2009	Engineering DS	8	Staff Meeting	Announced rejection of stormwater fees by City Manager, discussed process to assign and link SWMP and SWPPP numbers	1635 Faraday	Steve Bobbett
02/12/2009	SD Co Permittees	1	HMP TAC mtg	Discussion of flow control threshold and HMP submittal appendices	City of SD	Glen Van Peski
02/19/2009	Engineering DS	6	Staff Meeting	Announced revision of BMP Maintenance Agreement and reviewed water quality basin and alternatives (pavers or pervious pavement for median island) on Dos Colinas project	1635 Faraday	Jeremy Riddle
02/23/2009	SD Co Permittees	1	HMP TAC mtg	Discussion of submittal requirements including SCCWRP effort.	5201 Ruffin Rd	Glen Van Peski
03/02/2009	New Employees	9	Workshop	First Mondays - General Storm Water Training	Faraday	Storm Water
03/05/2009	Engineering DS	8	Staff Meeting	Discussion of upcoming Hydromod criteria, computer models used (Clearwater software vs Brown and Caldwell); Discussion of one basin vs. series of basins; Discussion of gravel driveway for SFR.	1635 Faraday	Steve Bobbett
03/05/2009	Engineering, Planning, Redevelopment, Construction Maintenance / Inspection and Engineering Design	23	Presentation	Geotechnical Engineering including erosion control meas	1635 Faraday	Steve Bobbett
03/12/2009	water dept	42	Presentation	non storm water discharges	CMWD	Clay Dobbs
03/12/2009	Engineering DS	8	Staff Meeting	Review of storm water control and construction BMPs for CDP 09-07, Goetz Emergency Seawall	1635 Faraday	Steve Bobbett
03/19/2009	Engineering DS	8	Staff Meeting	Discussion of treatment rate for medai filters (high rate:5"/hr. vs 3-5'/day); Review of BMPs for SFR addition, mixed office/retail (pervious pvme, rainfall into ground level garage)	1635 Faraday	Steve Bobbett
03/25/2009	CM&I	10	Presentation	Inspections and BMP Implemtation	M&O	Shawn Grandberry
03/26/2009	STREETS	23	STAFF TRAINING	Maintenance, Permits, Ordinances, Housekeeping, Waste Disposal	Oak	Clayton Dobbs
03/26/2009	Engineering DS	6	Staff Meeting	Announcement of State Board adoption of Model SUSMP and adoption of co-permittees SUSMP by March 25, 2010	1635 Faraday	Steve Bobbett
04/02/2009	Engineering DS	7	Staff Meeting	Discussion of proprietary BMPs, field changes, 3rd party review, CALTARNS, and SD County; Carlsbad Paseo MS 07-01	1635 Faraday	Jeremy Riddle
04/06/2009	PARKS	42	HAND-OUT	GOOD HOUSEKEEPING	CITY HALL	C. DOBBS
04/09/2009	Engineering DS	6	Staff Meeting	Discussion of cost est for BMPs/erosion control, deletion of Vortechnics units, exemption for condo conversion.	1635 Faraday	Jeremy Riddle
04/14/2009	CMI and Engineering	15	Presentation	BMP Technology - Underground Storm Water Storage	Faraday	Bio-Clean Environmental Services
04/16/2009	Engineering DS	8	Staff Meeting	Discussion of Brentwood underground detention facility with pre-treatment at Paseo del Noerte	1635 Faraday	Steve Bobbett
04/20/2009	CMI et. Al.	36	Presentation	City Processess and NPDES Requirments	Faraday	Ogawa Consulting
04/21/2009	SD Co-permittees	1	HMP TAC mtg	Discussion of alternative low flow threshold	City of San Diego	Glen Van Peski
04/23/2009	Engineering DS	7	Staff Meeting	Review of Legoland SWMP and Life Technologies BMPs	1635 Faraday	Steve Bobbett
04/24/2009	Fire - C Platoon	25	Presentation	1)Equipment review. 2) Video training on watershead and the ocean impacts	Fire stations	Kennedy/video tapes
04/27/2009	Fire - A Platoon	24	Presentation	1)Equipment review. 2) Video training on watershead and the ocean impacts	Fire stations	Kennedy/video tapes
04/28/2009	Fire - B Platoon	24	Presentation	1)Equipment review. 2) Video training on watershead and the ocean impacts	Fire stations	Kennedy/video tapes
04/30/2009	Engineering DS	7	Staff Meeting	Announcment of StormCon Conf and ASCE LID training. Review of Legoland pool deck	1635 Faraday	Steve Bobbett
05/04/2009	New Employees	3	Workshop	First Mondays - General Storm Water Training	Faraday	Storm Water
05/07/2009	Engineering DS	8	Staff Meeting	Review of CUP 00-26A removal of parking lot and replacement with bldg and lawn.	1635 Faraday	Steve Bobbett
05/11/2009	Public Works Admin. Staff	6	Class	BMP Training	Faraday	Storm Water
05/14/2009	Engineering DS	8	Staff Meeting	Discussion of parking lot expansion and application of current rules to redevelopment project. Reviewed vertical pit proposal for dwg 432-8A.	1635 Faraday	Steve Bobbett

05/21/2009	Engineering DS	8	Staff Meeting	Announcement of oraganizational realignment and effect on City'sHabitat/Stormwater Mitigation Plan.		
05/21/2009	SD Co-permittees	1	Lnd Dev Wkshp	Discussion of S. Orange Co Tentative MS4 permit and state Gen Const Permit	5201 Ruffin Rd	Glen Van Peski
05/28/2009	water dept	43	Presentation	Housekeepig	CMWD	Clay Dobbs
05/28/2009	Engineering DS	6	Staff Meeting	Review of requirement for topo or spot elevations to determine drainage patterns	1635 Faraday	Steve Bobbett
05/28/2009	SD Co-permittees	1	HMP TAC mtg	Discussion of SD HMP process and Contra Costa sizing calculator/ C guidebook development	9192 Topaz Wy	Glen Van Peski
06/01/2009	SD Co-permittees	5	Model SUSMP	Application to development projects	9192 Topaz Wy	David Hauser
06/03/2009	Bio Clean	4	Presentation	Application and use of Bio Clean proprietary products	1635 Faraday	David Rick
06/04/2009	Engineering DS	8	Staff Meeting	Discussion of code requirements for auto wash to 'clarify' water prior todischarge	1635 Faraday	Steve Bobbett
06/08/2009	SD Co-permittees	5	Training	Hydrologic Simulation Program Fortran	City of San Diego Storm Water Department	Steve Bobbett
06/11/2009	Engineering DS	7	Staff Meeting	Announcement of Rick Engr proving HMP review for SD Co. Discussion of de-sal plante on-site LID. Review of applicibility of interim HMP criteria to Holly Springs and Cantarini	1635 Faraday	Steve Bobbett
06/11/2009	Engineering, Planning, Redevelopment, Construction Maintenance / Inspection and Engineering Design	20	Presentation	LEED design principals	1635 Faraday	Steve Bobbett
06/12/2009	Recreation-Aquatics	20	Presentation	STORM WATER POLLUTION PREVENTION PLAN; CITY WIDE GENERAL INFORMATION, Site Specific SWPPP	Council Chambers	Carl Pope
06/16/2009	Engineering, Planning, Redevelopment, Construction Maintenance / Inspection and Engineering Design	15	Presentation	Permeable Interlocking Concrete Pavement	1635 Faraday	Glen Van Peski
06/17/2009	SD Co-permittees	1	HMP TAC mtg	Discussion of low-flow threshold and sizing calculator	9192 Topaz Wy	Glen Van Peski
06/18/2009	Engineering DS	8	Staff Meeting	GVP presentation of HMP workshop. Review of Lowe's PAR/ECR LID, CUP 04-10 SWPPP/SWMP and PD 09-02 SFR LID	1635 Faraday	Steve Bobbett
06/23/2009	CMI, Building and CE	25	Meeting	Municipal Construction Actvities [per Sec. D.5b(1)(b)]	Faraday	Shawn Grandberry
06/25/2009	Engineering DS	6	Staff Meeting	Review of PRE 09-06 Alternative power plant site BMPs, LID and hydromod proposal; CDP 09-11 Goetz Emergency Seawall SWPPP	1635 Faraday	Steve Bobbett
09/30/2009	CMI, Building and CE	25	Presentation	Municipal Construction Actvities [per Sec. D.5b(1)(b)]	Faraday	Shawn Grandberry

Storm Water Committee Meetings Summary
July 1, 2008 - June 30, 2009

DATE	# in attendance	AGENDA ITEMS
07/29/2008	15	Municipal Inspections and Corrective Actions presented to Public Works Director, JURMP Annual Report Submittals: Status and Review
10/14/2008	13	JURMP Annual Report Submittals: Highlights; Debrief on process, what can we do better next time?; Effective Assessment Discussion; Regional Board Inspections
01/13/2009	16	JURMP Annual Report Submittals: Highlights; Regional Board Letter, Notable Activities and Response Letter
02/10/2009	14	JURMP AR Effectiveness Assessment permit requirements; JURMP Annual Report Procedure
03/10/2009	12	Review Permit Requirements for Municipal Inspections; Recommendations from previous Municipal Inspections in 07-08; Regional Board Update and Comments
05/12/2009	11	Review of Municipal Inspections and Corrective Actions due date (Dmax); JURMP Annual Report Procedure and due dates
06/09/2009	11	Municipal Inspections and Corrective Actions due; JURMP Annual Report and Procedure Update, Questions; Storm Water Video Library; RWQCB Comments from 07-08

Carlsbad Community Services Guide

Fall 2008

On the Cover 2
Grand Opening: Library Learning Center

Art Scene 4
Sleeping Beauties exhibit at William D. Cannon Art Gallery

Recreation 14
Enrichment classes for preschoolers to seniors

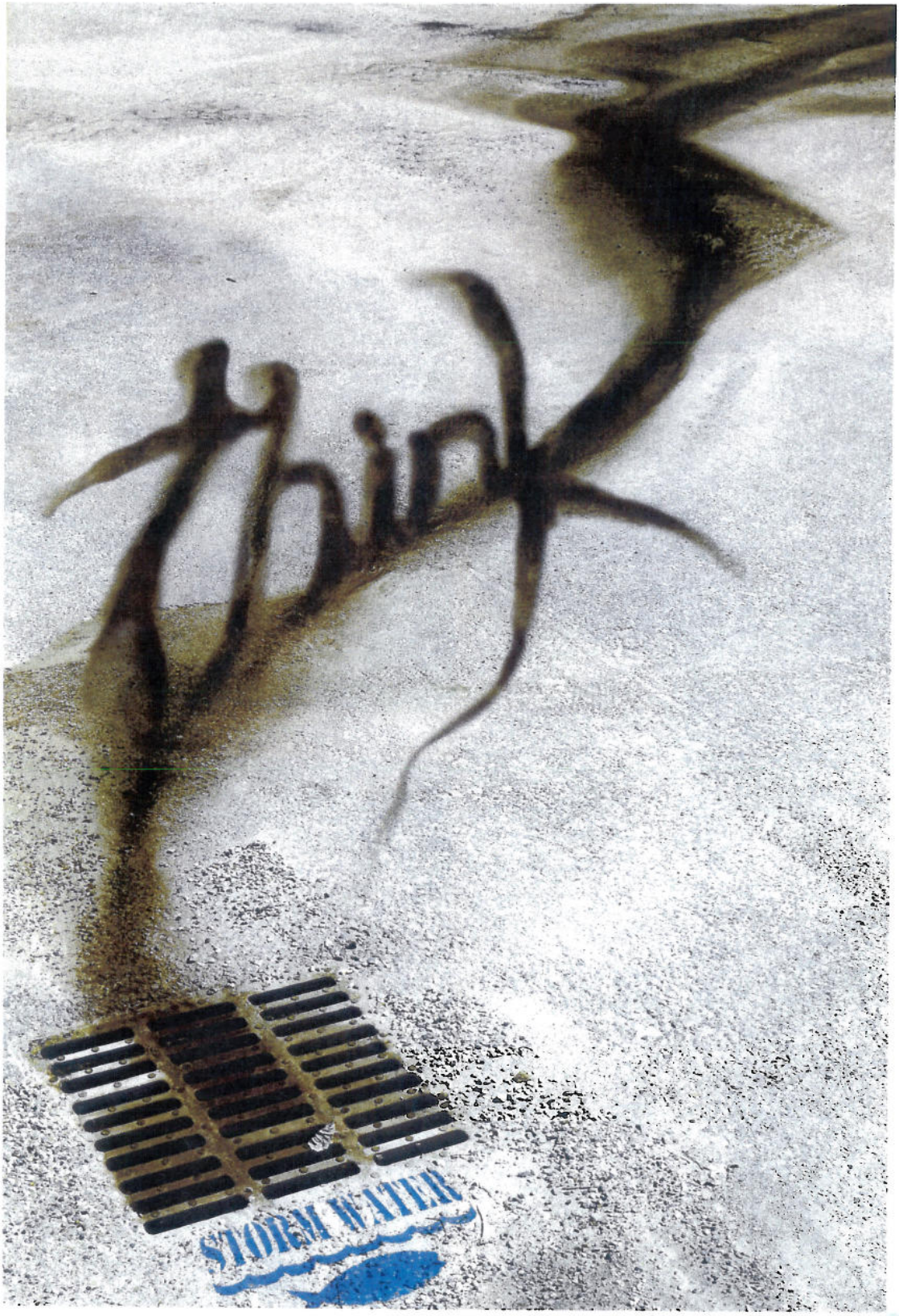

...THEN ACT!

YOUR EVERYDAY ACTIONS IMPACT OUR ENVIRONMENT!

Storm drains flow directly into our creeks, lagoons and ocean without filtration. Storm drains and sewers are not connected. Prevent soap suds, pet waste, paint, and pesticides from entering storm drains or soon they will be contaminating our water ways. For a clean environment, keep it out of the street! Think about it – rainwater should be the only thing going down in this town.

To report an illegal discharge or for more information call our hotline at 760-602-4646.

think globally. act neighborly.

brought to you by the

City of Carlsbad Environmental Programs

www.carlsbadconserves.org

760-602-4646

RECYCLE USED OIL

Funded by a grant from the California Integrated Waste Management Board

CITY OF CARLSBAD

Community Services Guide

Summer 2009

On the Cover
City Summer Day Camps

Art Scene
TGIF Jazz is back

Library
Sizzling summer reading

Recreation
Class registration begins May 13

Don't miss an issue!
See back cover for details.

Water connects us all,
from our homes and streets to our beaches and lagoons.

One way Carlsbad keeps local beaches and lagoons clean is by keeping motor oil off streets and out of the storm drains.

- Keep your car well maintained to prevent and fix leaks.
- Check for oil leaks regularly.
- Put a pan under your car if you have a leak.
- Dispose of used motor oil at household hazardous waste facilities or at certified sites.

Learn more about how you can join your neighbors in keeping our oceans and lagoons clean at

www.carlsbadconserves.org

CITY OF CARLSBAD

RECYCLE USED OIL

think globally. act neighborly.

Funded by a grant from the California Integrated Waste Management Board

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	
ADMINISTRATION	404,171
DEVELOPMENT PLANNING	37,195
CONSTRUCTION	417,715
MUNICIPAL	1,038,265
INDUSTRIAL AND COMMERCIAL	205,397
RESIDENTIAL	see above
IDDE	49,033
EDUCATION	26,173
PUBLIC PARTICIPATION	included elsewhere
SPECIAL INVESTIGATIONS	105,040
NON-EMERGENCY FIREFIGHTING	
Jurisdictional Total	***$2,282,989***

WATERSHED	
Watershed 1-Carlsbad Watershed	184,956
Watershed 2	
Watershed 3	
Watershed 4	
Watershed 5	
Watershed 6	
Watershed 7	
Watershed 8	
Watershed Total	**184,956**

REGIONAL	
Total Copermittee Cost Share	93,647
Regional Total	***$93,647***

TOTAL COSTS	***$2,561,593***

Notes:
Due to limitations fo the City's financial system, costs provided are best estimates. Not all categories are easily identifiable as specific to the category on this list. Staff believes that the information provided is as accurate as possible, given the constraints of the financial reporting system.
Carlsbad Watershed expenses reported here are total expenses for the City of Carlsbad, as lead. These expenses are offset by approximately 23,600 in revenues by other co-permittees within the Watershed.

Signed Certification Statement

City of Carlsbad
Jurisdictional Urban Runoff Management Plan
IDDE Section of the Annual Report for July 1, 2008 – June 30, 2009

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Glenn T. Pruim R.E.	
Name (printed)	Signature
Public Works Director	DEC. 08, 2009
Title	Date

7.0 IDDE

Permit Annual Reporting Requirement Section J.3.a.(3).(f)	Section
i. Correction of any inaccuracies in either the MS4 map or Dry Weather Field Screening and Analytical Monitoring Stations Map.	Section 7.6
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order NO. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	Section 7.4, Separate attachment
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	Attachment
iv. A brief description of any other investigation and follow-up activities for illicit discharges and connections.	Section 7.5. Appendix 7.3
v. The number and brief description of illicit discharges and connections identified.	Section 7.5
vi. The number of illicit discharges and connections eliminated	Section 7.5
vii. Identification and description of all spills to the MS4 and response to the spills.	Section 7.3
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	Section 7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	Section 7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	Section 7.2
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges	Section 7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Section 7.5
xiii. A description of notable activities conducted to manage illicit discharges and connections.	Section 7.7

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City continued to conduct a proactive program for detecting and eliminating illegal discharges and illicit connections into the MS4. This section describes the activities of the City with respect to implementation of the Illicit Discharge Detection and Elimination Component of the JURMP for FY 2008-09. The City's program actively seeks to identify and eliminate illicit discharges and connections by conducting illegal discharge investigations, responding to spills and sewage overflows, conducting monitoring, and performing routine cleaning and maintenance activities on the sewer and storm drain systems. Several additional activities occurred between July 1, 2008 and June 30, 2009 and are described below.

- Continued operation of a storm water hotline and complaint response 24 hour spill response for wastewater and storm drain emergencies
- Updated the Dry Weather Program Stations
- Conducted the Dry Weather Program from May 1 September 30, 2009
- Conducted the MS4 Monitoring Program

7.2 Public Reporting of Illicit Discharges and Connections

The City continued to publicize and facilitate public reporting of illicit discharges and water quality impacts. Methods to publicize and facilitate public reporting include the following:

- Brochures and Publications
- Outreach events
- The City's Website for both outgoing information and incoming requests from the public
- Internal training
- Operation of a Storm Water Hotline
- Operation of an Environmental Programs Hotline
- Operation of a Storm Water email account

All outreach methods utilized are described in detail in Sections 8.0 and 9.0, the Education and Public Participation Sections of the previously submitted report.

The City operated a Storm Water Hotline and email account; storm water staff answered the storm water hotline and checked email to the storm water account during regular office hours, 8 am to 5 pm, Monday through Friday. After office hours calls to the hotline were directed to voicemail or to an after hour duty phone in the case of emergency. The message provided information in English and Spanish. Figure 7.1 illustrates the types of storm water related complaints received in FY 2008-09.

Figure 7.1 Storm Water Complaints FY 2008-09

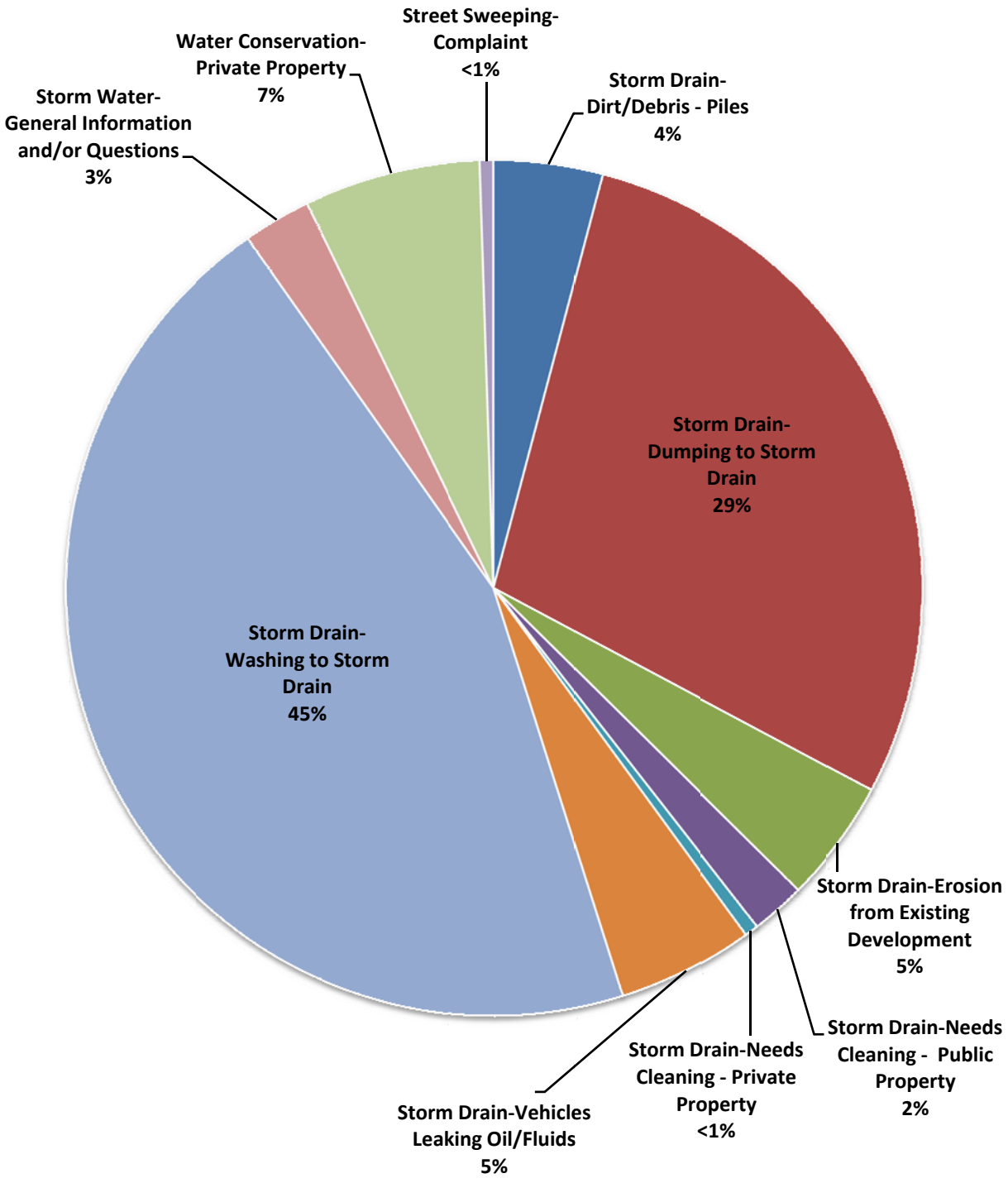

New methods to track calls were implemented on July 1, 2008. In FY 2008-09 there were a total of 564 calls to the storm water hotline. Comparison of total calls to previous years is not possible because the actual number of calls was not tracked in previous years, just complaints of potential storm water violations. In FY 2008-09 there were 195 storm water related complaints received, 106 of which were via the hotline. Other calls to the hotline ranged from information requests, to solid waste inquiries, to other City business. Compared to previous reporting periods, call volume decreased marginally. In FY 2007-08, there were 226 storm water related calls and 154 in FY 2006-07. Figure 7.2 illustrates FY 2008-09 storm water complaints by reporting mechanism. Potential storm water violations were reported by several categories of people including Storm Water Inspector, other City Staff, Outside Agency and the public. Figure 7.3 illustrates the storm water complaints by reporting party. Most of the 195 storm water related complaints in FY 2008-09 were related to washing or dumping to the storm drain.

Figure 7.2 Storm Water Complaints by Reporting Mechanism FY 2008-09

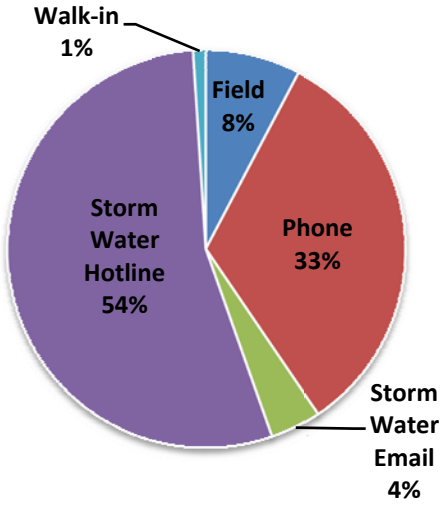

Figure 7.3 Storm Water Complaints by Reporting Party FY 2008-09

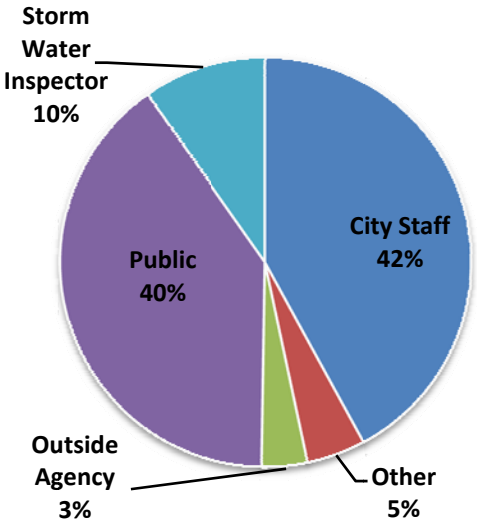

7.3 Spill Reporting, Response, and Prevention

Spill Response

City employees are trained to follow the City s Sewer Overflow Prevention Plan/Response Plan. Staff training was conducted semi-annually, either by tailgate or all-hands class format. All spill response incidents were tracked in the Hansen system or in spill reports. Sanitary sewage overflow responses were documented as required on the Sanitary Sewer Overflow Report Form, which was sent via fax to the Regional Board, County Health Department, and the Storm Water Protection Program. During this reporting period of July 1, 2008 to June 30, 2009, the City responded to 4 sewage overflows or spills of approximately 6,125 gallons, 98 of which was recovered. The overflow reports are found in Appendix 7.1.

The City Public Works Maintenance and Operations Division (M&O) continued to respond and coordinate sewage spill response with the Leucadia Waste Water District (LWWD) and Vallecitos Water District (VWD) for spills that occurred outside the M&O jurisdiction. During normal business hours, calls were dispatched by M&O to field units for immediate response and evaluation. After working hours, phone numbers were routed through police dispatch to M&O standby personnel.

A portion of the LWWD collection system is located within the City limits. LWWD is responsible for operating and maintaining their system, including responding to overflows and spills. However, M&O responds or provides assistance when requested. During this reporting period, LWWD responded to zero sewage overflows in Carlsbad.

A portion of the VWD sewage collection system is also located within the City limits. VWD is responsible for operating and maintaining their system, including responding to overflows and spills. However, M&O responds or provides assistance when requested. During this reporting period, Vallecitos Water District reported zero sewage overflows in the City of Carlsbad.

The City continued to actively prevent and respond to sewage spills and other spills, and to limit discharges from the sanitary sewer system to the MS4. This occurred through public education and outreach, inspections, preventive maintenance, complaint response, and spill response (containment and remediation). The City operated 283.5 miles of sewer mains, and City staff maintained 253 miles of 12 and under sewer mains. Large sewer trunk mains are maintained by both City staff and contract work. City staff maintained 14 sewer pump stations.

The City also added an additional Smart Cover to the existing nine, for a total of ten, to monitor flow levels in problem sewer manholes. Smart Cover alarms saved the City from one spill during this reporting period. The City entered into a joint project with Encina Wastewater Authority and installed new ADS Intelliserve flow monitoring systems to monitor sanitation flow rates 24 hours a day at selected areas.

Table 7.1 contains a summary of information associated with miles of sewer mains and spills.

Table 7.1 Summary

Time Period	Number of Reportable Spills[1]	Reportable Gallons Spilled	Total Miles of Sewer Mains
July 1, 2008 June 30, 2009	4	6125	283.5

[1] Includes all spills caused by a failure in the sewer system (excludes recycled water spills and/or spills from sewer laterals).

The following inspection and preventive maintenance activities were conducted during this reporting period.

Inspections

From Monday through Friday, all 14 sewer pump stations were inspected daily. The ten largest pump stations were also inspected on Saturdays and Sundays. The operator inspected the electrical systems quarterly and the pumps and shafts were serviced annually. In addition, outside services were contracted to inspect the electrical services annually. The wet wells were cleaned every six weeks or more frequently if necessary.

Eleven pump stations are equipped with telemetry which was inspected daily. This included checking the 24-hour history records, pump gallons per minute, wet well on-off cycles and pump alternating cycles. The City conducted most pump repair work; although any needed machine work was performed by outside services. In the case of emergencies, the City has a 24-hour duty person, and cell phones were issued to each member of the Wastewater Operations staff, and Supervisor. In the case of power failures, ten of the stations have onsite generators and three stations can be powered by the City s two trailer mounted generators. The remaining station has 24 hours of storage capacity and can be maintained by a vacuum or pumper truck.

Education

Educating the public on the proper disposal of fats, oils and grease is one of the BMPs used to prevent sewage spills. The City continued to distribute the Water Environment Federation brochure entitled *Fat-Free Sewers.* These brochures were distributed at various public events and during field visits. Workshops were conducted in FY 2008-09.

A new Fats, Oils and Grease (FOG) Program was implemented during FY 2008-09. A contractor was hired to conduct site inspections at restaurants in the City s sewer service area and a database was developed which details the type and size of the grease control device at each site. This program will be expanded in FY 2009-10 to include follow-up inspections and enforcement as necessary.

A doorhanger was developed in FY 2008-09 and distributed to a certain neighborhood that was flushing debris into the gravity sewer system, causing the lift station pumps to bind up and fail. This outreach, along with pump replacement, has eliminated the pump failures.

Preventive Maintenance

During this reporting period, the City performed routine preventative maintenance and inspections of the sanitary sewer system, which included video inspections, 4,200 manhole

inspections, semi-annual inspections of three major trunk lines, and routine cleaning of sewer mains. Regular monitoring of the sewer system was achieved with routine cleaning and manhole inspections. Sewer system surveillance was conducted on a regular basis. Flow monitoring was performed to compare the flows in dry and wet seasons. Anything unusual was reported and followed up on.

Approximately 273 miles of sewer lines were cleaned from July 1, 2008 to June 30, 2009. The maintenance schedule is designed to provide more frequent cleaning for identified trouble areas, with siphons being cleaned annually, low flow and flat lines cleaned semi-annually, and grease problem areas cleaned quarterly. City staff also performs checks of the Buena Vista Force Main every other day, walking the line from the lift station to I-5.

Complaint Response

The Storm Water Protection Program occasionally depends on other City departments to assist with investigations and remediation during field reviews. M&O and the Storm Drain Maintenance Division were key to prompt, effective responses to investigations involving spills and clean ups. Regular meetings and discussions about compliance issues facilitated this interdepartmental coordination effort.

In response to complaints, structural defects or obstructions of pipelines, the Storm Drain Maintenance crews conducted Closed Circuit Television (CCTV) inspections of the storm drain infrastructure. During FY 2008-09, approximately one mile of pipeline was videotaped.

M&O personnel responded to 69 sewer stoppage complaints during this reporting period. These requests and the City s response were tracked electronically in the Accela, Hansen systems, and the CIWQS website. The City responds to all emergencies where sewage has the potential to enter the storm drain system, regardless of whether the sewer stoppage originates from private structures such as private laterals, private lift stations or from the City s sewer system. The data shown in Table 7.1 represents overflows originating from the City s sewer system and does not reflect all sewer stoppage complaints that occurred during the reporting period.

Other Spills

The City s Emergency Services (Fire/Police Departments) continued to respond to reports of hazardous materials spills and discharges in Carlsbad. Fire Department personnel were trained in hazardous material emergency response and identification of hazardous materials and other City departments relied on the Fire Department to assume command during hazardous materials incidents. Emergency services may request assistance from the Streets Department or Storm Drain Maintenance Division (SDMD) to contain discharges that have the potential to endanger life, property, and/or the City right-of-way, control traffic, and provide secondary perimeter boundaries as directed by Emergency Services staff.

During this reporting period, the City s Spill Response Procedures continued to be used to detail the roles and responsibilities of Emergency Services, Streets Department, M&O, and the Storm Water Protection Program. If Emergency Services was first on the scene of an unidentified spill, and the Incident Commander suspected the substance to be of a hazardous nature, emergency response procedures were implemented. Incident Commanders retained a copy of the Department of Transportation s *Emergency Response Guidebook* which lists classifications of hazardous materials and recommendations for handling materials.

The San Diego County DEH HIRT, through a Joint Powers Agreement, was involved in any significant spills of a hazardous nature. The County maintains these records, as does the State OES. Minor petroleum or other small spills on City streets were handled by the Streets Department or SDMD using absorbents, sweeping, and proper waste disposal. These cleanup requests were documented in the City s RFA or work order systems. During this reporting period, there were 14 other spills (non-sewage related) in Carlsbad as reference in Appendix 7.2.

PREVENTION MEASURES OF SEWAGE INTRUSION INTO MS4

The City of Carlsbad s Engineering Standards have several measures to prevent sewage intrusion into municipal separate storm sewer systems (MS4).

1. All gravity sewer pipes and laterals are required to have gasketed joints, which create water tight joints (Volume 1, Chapter 6, Item 3.A, 3.C, and 3.F). The water tight joints are tested using the methods indicated in Standard Specifications for Public Works Construction (SSPWC) section 306-1.4. The water tight test methods include a post-installation closed circuit television (CCTV) inspection and an air pressure test where the sewer line must sustain 2.5 to 3.5 psi gage pressure for at least 2 minutes after being pressurized to 3.0 psi.

2. All gravity sewer lines are required to follow engineering standard for the amount of flow they can carry. During peak hour dry weather season the pipe shall be designed to carry a flow depth of 0.5 (or 0.75 depending on the pipe size) the diameter of the pipe (Volume 1, Chapter 6, Item 4.C). This design requirement prevents the pipe from becoming full, which would pressurize the pipe and potentially cause a leak.

3. Per Carlsbad s Engineering Standard GS-6 and GS-6A, the sewer lines are typically located at an elevation deeper than the storm drain line, which further prevents sewage intrusion into MS4. In the event of a sewage pipe leak, the leakage flow will naturally gravitate below the sewer line rather than up to the storm drain line.

4. The standard horizontal separation between sewer and storm drain is 13 feet, which further prevents sewage intrusion into MS4.

5. In special cases where storm drain lines are installed at a depth greater than that of sewer lines, additional design standards are required such as water tight joints or encasements (Volume 1, Chapter 5, Item 1.G).

Preventative maintenance of the sanitary sewer system, as described above is also effective at preventing infiltration from sanitary sewer lines into the MS4. Continued preventative maintenance prevents exfiltration of sewer water from the pipelines by ensuring that flow is maintained in the system and pressure does not build up causing water to leave the system.

In the storm drain system, ammonia test kits are utilized as part of the dry weather program, primarily to test for the presence of sewage. These tests are taken once per year at various points strategically placed throughout the MS4 to provide adequate coverage. Exceedances for ammonia may trigger source investigations, which may detect sewage infiltration, if present. The City s maintenance program also includes Closed Circuit Television (CCTV) inspections of the sewer system. During FY 2008-09, 28.5 miles of sewer pipelines were inspected.

7.4 Urban Runoff Monitoring

Dry Weather Monitoring

The Dry Weather Monitoring Program was implemented between May 1 and September 30, 2009. The program was designed to detect and eliminate illicit connections and illegal discharges to the MS4. This was accomplished by performing field screening at all monitoring locations and performing analytical monitoring at 25 of the locations. This program included monitoring at up to 60 MS4 locations throughout the City. The program continued an assessment for trash at each location, as required per Order No. R9-2007-0001.

All results and investigations are included under separate cover in the City s Dry Weather Monitoring Report for 2009. This report includes the Dry Weather Field Screening and Analytical Monitoring Map.

Water quality at almost 70 of sites had no exceedances. The most common field constituent to exceed action levels were nitrate-nitrogen. The most common analytical constituents to exceed action levels were bacteria. All follow up activities were performed as required under Order 2007-0001. Follow-up activities performed after the initial sampling efforts are described in the Dry Weather Report under separate cover. Required follow up actions were taken for all sites where water quality exceeded established action levels as described in the permit.

MS4 Outfall Monitoring

The MS4 Outfall Monitoring Program is part of the Regional Monitoring required in Order No. R9-2007-0001. During the summer of 2009, the monitoring program was performed in accordance with the Final Copermittee MS4 Outfall Monitoring Workplan. This workplan was developed by the Regional Copermittees and was implemented within the region as required. Sites were monitored in all watersheds throughout the County. Monitoring results will be summarized in the County of San Diego Storm Water Monitoring Annual Report, to be submitted in January 2010.

The objective of this monitoring program is to assess MS4 discharge water quality throughout the county and assess the relative contributions to receiving waters within each defined watershed management area.

The monitoring design is based on a combination of random and targeted sampling of MS4 outfalls in each watershed. Random sampling will be conducted to assess countywide conditions of MS4 outfall water quality. Targeted sampling will be conducted to assess the relative contribution of particular MS4 outfalls to receiving waters.

A detailed description of the program was submitted to the Regional Board prior to July 1, 2008 as required by the Order. The description includes monitoring locations, frequencies, analytes, sampling and analysis methods, procedures, and reporting strategies.

Targeted samples will be collected during FY 2008-09 and during subsequent years by the individual jurisdictions, independent of the regional group. The targeted approach includes six locations within the City of Carlsbad. These locations were selected based on criteria developed in the Regional Monitoring Workgroup. Table 7.2 lists the targeted locations, hydrologic area, and analytes to be monitored for the program.

Table 7.2 Targeted monitoring locations

Site ID	Hydrologic Area	Analytes
1D-21	904.2	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
1D-20	904.2	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
1C-21	904.2	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
16C-61	904.3	Bacteria, TSS
21C-14	904.3	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
19C-1	904.3	Bacteria, TDS, TSS, Manganese, Selenium, Sulfates

In 2009, MS4 Outfall sampling took place concurrently with the City of Carlsbad Dry Weather Monitoring Program. The goal of the MS4 Outfall Monitoring Program is to assess the quality of urban runoff at the targeted monitoring locations for high priority pollutants and over time, assess trends in the results to prioritize future monitoring efforts. Results will be summarized and submitted to the County of San Diego to be included in the Regional Monitoring Report submitted by the County of San Diego each year.

Coastal Storm Drain Monitoring

As required under the Permit, the City continued to monitor storm drains discharging to coastal waters. In FY 2008-09 the City began using engineering asset IDs for the Coastal Storm Drain Monitoring Program. This created a consistent labeling system across all monitoring programs. Table 7.3 summarizes the City Coastal Storm Drain Monitoring activities during FY 2008-09.

Table 7.3 Coastal Storm Drain Monitoring

Ocean Outfalls Monitored	Frequency	Total Site Visits	Routine Samples Collected		Sites With Exceedances		Findings
			Pairs	Singles	Storm Drain	Receiving Water	
8	Monthly	96	0	5	1	0	No flow was observed at the site when staff returned to collect confirmation samples. No further action

Results from this year of monitoring show that most of sites do not have sufficient flow to sample the majority of the time during dry weather. In FY 2008-09, 96 routine site visits were made and samples were collected on five of the visits, or only 6 of the time. Upstream investigations are performed at the time of sampling. During these five site visits, the storm drain flow did not reach the receiving water; therefore samples were only collected from the storm drain. Of the five monitoring events where samples were collected, one of the initial samples had exceedances of water quality criteria in the storm drain sample. On the follow-up visit there was no flow at the site.

All data collected and a full analysis of the Coastal Storm Drain Monitoring Program will be submitted in the San Diego County Storm Water Quality Monitoring Annual Report to be submitted in January 2010.

7.5 Follow-up and Enforcement

The City used one or any combination of education, inspections, complaint response or enforcement to achieve compliance. The ultimate goal is to eliminate the discharge or connection and to prevent future occurrences.

In FY 2008-09 the Storm Water Protection Program received 195 complaints of potential illegal discharges. As illustrated in Figure 7.3, 74 of the complaints involved alleged washing or dumping to the storm drain, totaling 144 of the 195 complaints. These types of complaints are representative of illegal discharges reported to the program. All reports were investigated, however not all reports of washing or dumping to the storm drain were illicit discharges. Of the 195 storm water related complaints, there were 86 illicit discharges and 1 illicit connection discovered. Table 7.4 provides a breakdown of illicit discharges and connections by source component. All 86 illicit discharges identified were eliminated as required. There was one illicit connection identified; it was eliminated as well.

Table 7.4 Illicit Discharges and Connections

Source Component	Number of Illicit Discharges	Number of Illicit Connections
Industrial/Commercial	16	0
Mobile Source	30	0
Residential	35	1
Municipal	0	0
Unknown	5	0
Total	**86**	**1**

All complaints were addressed according to the City s Enforcement Procedures as described in the 2008 JURMP, Section 2.4. In utilizing this escalating enforcement process, all illicit discharges and illicit connections were eliminated. Table 7.5 and Table 7.6 summarize the enforcement actions taken to eliminate illicit discharges and illicit connections. Ten illicit discharges were referred for action because the responsible party could not be found, or the issue was under the jurisdiction of another department. A complete summary of the storm water related complaints is provided in Appendix 7.3.

Table 7.5 Enforcement Action Related to Illicit Discharges

Enforcement Action	Number	Percentage
Verbal Warning	33	38
Informational Letter	20	23
Written Warning	3	3
Notice of Violation	17	20
Administrative Citation	1	1
Notice to Clean	2	2
Referred for Action	10	12
Total	**86**	**100**

Table 7.6 Enforcement Actions Related to Illicit Connections

Enforcement Action	Number	Percent
Verbal Warning	1	100

7.6 Effectiveness Assessment

Level 1: Compliance with Activity Based Permit Requirements

Overall, the City is compliant with activity based permit requirements.

- The City implemented a program to actively seek and eliminate illicit discharges and connections to the MS4: As described above in Sections 7.1-7.5.

- The City continued to verify the accuracy of its MS4 map and update it at least annually: The accuracy of the City s MS4 map is verified continually by field staff and updated with new information or as existing information is updated. A 2009 MS4 map is provided in Appendix 7.5.

- The City performed Dry Weather Screening and Analytical Monitoring: The City conducted a Dry Weather Monitoring Program inclusive of 71 monitoring locations throughout the drainage area in the City. The Dry Weather Report for 2008 is included under separate cover with this submission.

- Investigations and follow-up actions were performed in accordance with the Permit: Indications of illicit discharges and/or connections to the MS4 were investigated and followed up accordingly. Follow-up investigations to dry weather field screening exceedances were usually performed immediately and always within two business days of the field screening. Any results of analytical parameters were investigated within two business days of receipt of results from the laboratory.

- All illicit discharges and connections were investigated and eliminated.

- The City implemented and enforced the City s ordinances to prevent or eliminate illicit discharges and connections to the MS4: The City implemented an escalating enforcement process as described in its 2008 JURMP, Section 2. Enforcement actions related to illicit discharges are described above in Table 7.5.

- The City prevented and responded to sewage spills, including from private laterals and failing septic systems, and other spills: The City responded to all reported spills as described above in Section 7.3.

- The City facilitated public reporting of illicit discharges and connections via a public hotline: A storm water hotline was staffed year round. Complaints received via the storm water hotline are summarized above in Section 7.2.

Overall, the City s IDDE program is compliant with permit requirements.

Level 2: Changes in Knowledge/Awareness

Educational material is distributed in response to nearly all storm water related complaints, whether to residents or businesses within the City. Additionally, educational information is distributed to entire neighborhoods throughout the year, most often in response to complaints or

dry weather exceedances. Often, exceedances of nutrient action levels in residential areas will trigger the need for larger scale distribution of outreach materials. These efforts are described in Section 6 of the City's JURMP Annual Report for FY 2008-09, submitted in September 2009. While the City does not currently measure the changes in knowledge, educational materials provide a good source of information to citizens and businesses about the connection between their activities and water quality.

Level 3: Behavioral Change/BMP Implementation

Behavioral changes and BMP implementation are continually obtained through the IDDE program. Over the Fiscal Year 2008-09, 195 storm water related complaints were responded to by City staff. Of these, 144 pertained to illegal dumping or washing. In all cases, the discharges were discontinued immediately. Some of the incidents were one time occurrences, however, many were routine activities performed by the responsible parties. In these cases, through education and enforcement actions, BMPs were implemented and behavioral changes were evident. Follow-up inspections confirmed BMP implementation and behavioral changes.

Level 4: Load Reductions

Load reductions are difficult to estimate in relation to the IDDE program. Estimates of sewage recovered during spills can provide the number of gallons of raw sewage prevented from entering the environment. If correlated with bacteria data, rough estimates of load reductions of bacteria may be generated. Of an estimated 6125 gallons spilled during FY 2008-09 due to municipal infrastructure failure, 6015 gallons were recovered. If a conservative estimate of 1,000,000 cfu/100 ml of fecal coliform is used for raw sewage, a total of 22 trillion colony forming units of fecal coliform were prevented from entering the environment.

Level 5: Changes in Discharge Water Quality

<u>Dry Weather Field Screening and Analytical Monitoring Program</u>

The City has conducted an annual *Dry Weather Field Screening and Analytical Monitoring Program* since 1995. The purpose of the monitoring program is to detect and eliminate illicit connections and illegal discharges to the storm drain system. The Dry Weather Monitoring Program report for 2009 and follow-up activities are provided under separate cover. The following discussions summarize current and past dry weather results in order to assess changes in MS4 water quality, through the 2009 dry weather season.

Since 2002, no exceedances have been measured in water temperature, cadmium, copper, lead or zinc.

Fecal coliform concentrations have generally decreased since 2003, while enterococcus concentrations are slightly higher in recent years. In comparison to dry weather action levels, fecal coliform and enterococcus mean values are well below the established action levels across all years of data. With many variable factors unaccounted for, it is unclear if the recent results are due to improvements and BMP implementation or to the variable nature of bacteria concentrations.

The City has conducted field testing of surfactants since 1995. During this time, data shows a downward trend in detergent levels found in the MS4; however, a slight increase in results over the action level was found in 2009 over the previous three years.

The average pH levels have also shown a downward trend since 1995, with results generally below action levels.

Ammonia and nitrate concentrations have continued to indicate a decreasing trend. With the exception of 2002, all recent years have averaged well below the established action level for ammonia-nitrogen.

Lower in recent years, all orthophosphate averages are well below established dry weather action levels.

Over the course of the past seven years of dry weather programs, water quality parameters have been repeatedly analyzed at the same sites allowing for a comparison of data. In general, water quality within the MS4 is good, with concentrations of bacteria, nutrients, pH, and surfactants generally decreasing and below Action Levels. Efforts continue to focus on bacteria concentrations in the MS4 and their sources. In the future, increased efforts to understand bacteria concentrations and sources will be made through various TMDL activities. With an enhanced understanding of bacteria, the City will be better prepared to address and abate sources within the watershed.

Coastal Storm Drain Outfall Monitoring Program

The City continued to collect samples from various storm drain outfalls as part of the *Coastal Outfall Monitoring Program*. If water was flowing from a storm drain outfall, samples were collected and analyzed for total coliform, fecal coliform and enterococci. Storm drain sample results were compared to the 95th percentile criteria established in the previous year s annual report for the CSDM Program. Where required, a paired receiving water sample was collected to assess the impacts of the storm drains on the receiving waters. However, the majority of the time, storm drain flows, when present, did not reach the receiving water and only a single storm drain sample was collected. The receiving water samples were compared to Rec-1 standards to determine exceedances. Where storm drain bacteria concentrations exceeded 95th percentile criteria or receiving water samples exceeded Rec-1 objectives, follow-up sampling and/or investigations were performed.

Recent years indicate a decrease in storm drain exceedances for all three bacterial indicators, showing improvements in outfall water quality. In FY 2008-09 there was only one exceendance. In all cases, the flow from outfalls was non-existent, intermittent, low volume and/or did not actually reach the receiving waters but dissipated into the sand or sediment. The City will continue to conduct the Coastal Outfall Monitoring Program and to conduct follow-up investigations as detailed in the Monitoring Plan per permit requirements.

Level 6: Changes in Receiving Water Quality

It is important to note that receiving water quality reflects considerably more than the quality of the City s MS4 discharges. In addition, receiving water quality can be adversely impacted by other events that are not under the control of the City, such as other permitted NPDES discharges, wildlife (impacting bacteria levels), atmospheric deposition, and other events and activities.

Coastal Outfall Monitoring Program Receiving Waters

During FY 2008-09 sampling events, storm drain flows did not reach receiving waters and therefore no ocean samples were taken.

Overall, the City has remained in compliance with all permit requirements of the IDDE program. With full program implementation, evidence of knowledge and behavior changes is evident, although difficult to measure. Program implementation also results in immediate load reductions, through complaint response efforts, whether related to urban runoff, sewer overflows, or other spills. It is difficult to quantify these reductions at this time; however, the City will continue to develop assessment measures related to load reductions. Changes in discharge water quality are also evident, most often showing improvements during dry weather. While not fully attributable solely to the IDDE program, implementation of the monitoring programs provides useful data to make this assessment. As more data is collected in discharge waters and in receiving waters, assessments will show a more accurate picture of the changes in water quality and relationships to MS4 programs.

7.7 Notable Activities

As mentioned in the Executive Summary, the City considers a notable activity to be any activity above compliance requirements.

Notable activities for FY 2008-09 include:

- MS4 water quality continued to follow an overall trend of improvement as seen from the Dry Weather Monitoring Program, the Coastal Storm Drain Monitoring Program and the MS4 Monitoring Program.
- The City responded to 4 sewage overflows or spills of approximately 6,125 gallons of which 98 was recovered.
- The City added an additional Smart Cover this FY for a total of ten City-wide, to monitor flow levels in problem sewer manholes.
- The City entered into a joint project with Encina Wastewater Authority and installed ADS Intellliserve flow monitoring systems to monitor sanitation flow rates 24 hours a day at selected areas.
- Of 96 visits to coastal storm drain outfalls, there was only one outfall exceedance as part of the Coastal Storm Drain Monitoring Program.
- All illegal discharges were discontinued immediately upon discovery.

7.8 JURMP Revisions

The City s 2008 JURMP was developed in response to the issuance of Order No. R9-2007-0001. The City began implementing the 2008 JURMP on March 24, 2008 as required under the new permit. Section 14 of the previously submitted FY 2008-09 Annual Report summarizes revisions to the City s JURMP.

No changes were made to the IDDE Section of the JURMP.

Sanitary Sewer Overflows
July 1, 2008 to June 30, 2009

Date	Source	Substance	Volume	Enter	Enter RW?	Response
05/18/2009	Private Lateral	Sewage	100	No	Yes	City Crew Responded To 2598 Jefferson St. And Contained Spill Wash Down Sidewalk And Crub And Sucked Up All Waste And Wash down Water. Knocked on doors several times. Called Water Dept for contact phone number. No one available for contact. Left lateral policy and Water Dept door hanger, locked out water meter to eliminate any continued spill.
05/12/2009	Private Lateral	Sewage	10	No	Yes	Set Up Vactor And Made Dirt Berm To contain Spill, Waited For Plumber To clear Lateral.
04/21/2009	Private	Sewage	400	No	Yes	City crews damed upper spill site with
04/04/2009	Private Lateral	Sewage	50	No	No	Jetted sewer main, main clear. Told resident to call plumber to clear lateral.
03/27/2009*	Sewer MH	Sewage	75	No	Yes	Recapture overflow and CCTV sewer main to investigate cause
03/26/2009	Private Lateral	Sewage	10	No	No	Jetted and televised main line - clear. Lower lateral clear. Gave property
03/26/2009*	Sewer MH	Sewage	125	Yes	Yes	Set up vacuum and protect MS4 from additional spill. Balls of concrete or rocks blocked flow on sewer main causing overflow. Jet main to clear stoppage. Wash down roadway and CCTV main. Captured approximately 115 gallons of spill.
03/12/2009	Private Lateral	Sewage	6	No	No	Plumber on scene on arrival and cleared stoppage.
02/10/2009	Private Lateral	Sewage	75	Yes	Yes	City responded with 3 vac. trucks cleaned strom drain box and 600 feet of lines. also 300 feet of gutter line.blocked outfall down stream and cleaned all lines upstream. PRIVATE contractor cleared PRIVATE cleanout and lines.
01/27/2009	Private Lateral	Sewage	8	No	No	Jetted and CCTVed sewer main - all clear. CCTV showed roots in private lateral.
01/15/2009	Private Lateral	Sewage	20	No	No	Responded to investigate possible sewer spill. Found spill contained within residence. Resident complained that spill continued after water use stopped in residence. Found guest house shared sewer lateral. TV sewer main to find all clear, but residents lateral fully impacted by root intrusion.

01/16/2009	Private Lateral	Sewage	20	No	Yes	City crew cleaned up along gutter.
12/24/2008	Private Lateral	Sewage	75	No	No	Private lateral overflowed causing spill into alley. Contained spill on private
12/23/2008*	Sewer Force Main	Sewage	300	Yes	Yes	8" PVC force main failed causing overflow. Contained part of spill and vacuumed. Created capture area downstream, set up pumps and vacuumed spill. Repaired force main.
12/12/2008	Private Lateral	Sewage	50	Yes	Yes	Private sewer lateral clean out within driveway area of private property spilled to gutter where it was stopped and captured. Ran sewer main to assure clear; all clear. Wah down public areas with 125 gallons water, vacuum and remove debris.
12/11/2008	Private Lateral	Sewage	15	Yes	Yes	Small amount spilled out of cleanout, went down curb to storm drain box where crew recaptured.
12/09/2008	Private Lateral	Sewage	240	Yes	Yes	Closed portion of parking lot, dammed catch basin area, placed sanbags in downstream catch basin, vacuumed at private lateral cleanout. Ran City sewer main to assure good flow, no problems found. Shut off water and had restaraunt close, cleaned private storm drain system, standby until plumber cleared blockage. Had restaurant replace cleanout cap on clean out.
12/05/2008	Private Lateral	Sewage	150	No	Yes	Created dirt dam in downstream gutter. City crew vacuumed until plumber cleared stoppage. City crew washed down public right-of-way.
10/31/2008	Private Lateral	Sewage	50	No	No	City Crew vacuumed and washed down area. Contained spill on private property.
10/01/2008	Private Lateral	Sewage	45	No	No	City crews cleaned up overflow. Plumber cleared blockage.
08/07/2008	Private Lateral	Sewage	75	No	No	Contained spill and mitigated spill area with wash down and capture, standby until plumber cleared lateral.
8/4/2008*	Sewer Force	Sewage	5625	Yes	No	Plug and bypass operation to complete repair.
07/18/2008	Private Lateral	Sewage	20	No	Yes	Created spill capture area in gutter area, wash down and vacuum all entire spill area. Notified resident to call plumber.

07/19/2008	Private Lateral	Sewage	3	No	Yes	Water Duty person arrived first at 19:10 and shut off water. Collections Duty person picked up Vactor at 20:20 PM and cleaned area and performed partial vacuum and clean of intercepter. Sr Center manager advised to call plumber to clear lateral.
07/17/2208	Private Lateral	Sewage	5	No	No	Resident not home, turned off water, called plumber - on scene at 7:12 PM, stand-by until lateral cleared. Restored water, resident returned.
07/09/2008	Private Lateral	Sewage	75	No	Yes	City staff recaptured overflow. City staff recaptured overflow.
07/05/2008	Private Lift Station	Sewage	50	No	Yes	City crews responded with vactor truck and cleaned up overflow and also pumped out the wet well/sand.

*These spills were from the City of Carlsbad maintained sewer main.

Other Spills July 1, 2008 – June 30, 2009

Event Type	Cause	Volume (Gal) Spilled	Volume (Gal) Recovered	Incident Date	Street Number	Street	Responsible Party	Zip Code	Water Body Impact	Water Body
413	Human	0.5 Algaecide	n/a	7/9/08		Tamarack Av / El Camino Real	Unknown	92008	Agua Hedionda	Agua Hedionda
413	Human	5 Paint	5	7/9/08		Adams Ave / Chinquapin Av	Unknown	92008	n/a	Agua Hedionda
411	Vehicle	1 Diesel	1	7/12/08	2315	Via Platillo	Terry Moving (949)768-7239	92009	n/a	Buena Vista
413	Unknown	Unknown	Unknown	7/14/08	401	Chinquapin Av	Unknown	92008	Agua Hedionda	Agua Hedionda
411	Plane Crash	35 Aviation Gas	Unknown	9/22/08		College Av / Aston Av	Unknown	92011	n/a	Agua Hedionda
413	Unknown	1 Muriatic Acid	1	10/7/09	7100	Four Seasons Pt	Abcana Industries	92011	Batiquitos	Batiquitos
413	Human	Unknown Degreaser	None	10/20/08	2525	El Camino Real	AMPM Maintenance	92008	Buena Vista	Buena Vista
411	Vehicle	20 Diesel	None	1/23/08	4555	Chancery	Superior Sod (800)344-7317	92010	Agua Hedionda	Agua Hedionda
413	Unknown	1 Muriatic Acid	1	1/30/09		Carlsbad Village Dr / Tamarack Av	Unknown	92010	n/a	Agua Hedionda
411	Vehicle	5 Gasoline	5	2/3/09		Aviara Pkwy / Manzanita	Unknown	92009	n/a	Batiquitos
411	Vehicle	7 Gasoline	1	3/7/09	3091	Roosevelt Av	M. Miller 3160 Lincoln	92008	Agua Hedionda	Agua Hedionda
411	Vehicle	2 Gasoline	2	3/29/09	2560	El Camino Real	Unknown	92010	Buena Vista	Buena Vista
411	Vehicle	2 Gasoline	2	6/1/09	7660	El Camino Real	Unknown	92009	Batiquitos	Batiquitos
411	Vehicle	10 Diesel	10	6/17/09		I-5 / Tamarack	Cal Trans	92008	Agua Hedionda	Agua Hedionda

Detailed Issue Report

July 1 2008-June 1, 2009

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Recycling-Single Stream Request	7G5QPG	07/01/2008	Wants to kow when large bins for recycling will be available	7/1/2008 Transferred to CM ofice per callers request.
Storm Drain-Dumping to Storm Drain	7GBQF4	07/07/2008	SW4 Carpet Cleaning Discharge Carpet cleaner emptied waste water down the storm drain at 5:25 pm on 7/3/08. Report of Dumping to the Storm Drain	7/16/2008 Informational Letter
Solid Waste-General Information	7GCLC6	07/08/2008	7/7/08 - Customer at Pacific Vista Las Flores apartments refused to keep dumpster lids closed in the apartment complex. Customer pulls dumpsters out, flips lid over the back and then pushes them back agains the wall so that lids cannot be closed after W	7/8/2008 Called apt. manager and she will keep lids closed from now on.
Solid Waste-General Information	7GCVBT	07/08/2008	Questioning how to get rid of potted succulent plants.	7/8/2008 Sent resident the informaiton for properdisposal of succulent plants in pots. See attached email.
Storm Drain-Dumping to Storm Drain	7GDVP7	07/09/2008	SW21 Dumping - Hazardous Materials 7/9/08 12:45 PM - Bottle of chemicals (Algea Killer) fell off truck into street. Was picked up by motorist who put id on her car. Leaking. Report of Dumping to the Storm Drain	7/9/2008 Referred for Action Responsible party not located. Referred to streets department for cleanup of chemical.
Storm Drain-Dumping to Storm Drain	7GDVS6	07/09/2008	SW8 Paint / Stucco Discharge 5 gallon bucket of paint fell from truck onto road and busted open. Report of Dumping to the Storm Drain	7/10/2008 Referred for Action - Streets cleaned paint spill. No discharge to storm drain.
Recycling-Complaint	7GENM3	07/10/2008	People taking recyclables every Tuesday night and Wednesday morning	7/10/2008 Reason: Issue sent to code enforcement and letter sent to resident. See attached.
Recycling-Single Stream Request	7GENQZ	07/10/2008	Requesting large, mechanically picked up garbage and recyclables. Also thinks trash should be picked up twice a week.	7/10/2008 Letter sent to rsident. Please see attached.

Detailed Issue Report

July 1 2008-June 1, 2009

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain	7GFPRJ	07/11/2008	SW3 Vehicle Washing Mobile Car Washer - has 5 cars lined up in the street to be washed - business has been doing this for some time. It blocks the mailboxes too. Report of Dumping to the Storm Drain	7/15/2008 No issue / No violation
Storm Drain-Dumping to Storm Drain	7GFRYW	07/11/2008	SW17 Vehicle and equipment leaking Someone changed auto fluid on street in front of her home at above address. Report of Dumping to the Storm Drain	7/16/2008 Referred for Action - cleaned by Storm Drain Maintenance Crew.
Storm Drain-Dumping to Storm Drain	7GJPJK	07/14/2008	SW23 RV Waste Discharge Motor home parked on street dumping to the street. Report of Dumping to the Storm Drain	8/8/2008 Informational Letter
Storm Drain-Washing to Storm Drain	7GJLXJ	07/14/2008	Hoses down outdoor area. Water runs through floor drain and falls onto the pedestrian sidewalk one floor below in front of retail shops. Water is from condinsation on rooftop air conditioner. Report of Washing to the Storm Drain	7/15/2008 Follow-up in Permits Plus
Storm Drain-Dumping to Storm Drain	7GKMAM	07/15/2008	SW17 Vehicle and equipment leaking Emptied green liquid from auto into gutter Report of Dumping to the Storm Drain	7/15/2008 Verbal Notice - Vehicle owner removed the discharge.
Storm Drain-Dumping to Storm Drain	7GKMG8	07/15/2008	SW11 Pool / Spa / Fountain Discharge Emptying pool and no chlorine in water with ph 7 Report of Dumping to the Storm Drain	7/15/2008 No issue / No violation
Household Hazardous Waste-General Information	7GLL5X	07/16/2008	Requesting information regarding HHW disposal Household Hazardous Waste	7/16/2008 Please see attached email to resident with answeres to HHW disposal questions.
Storm Drain-Dumping to Storm Drain	7GMUPH	07/17/2008	Spill - 7/14/08 PM - into lagoon Report of Dumping to the Storm Drain	7/17/2008 No further investigation required.

Detailed Issue Report

July 1 2008-June 1, 2009

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Needs Cleaning - Public Property	7GMKBP	07/17/2008	SW28 Miscellaneous Incidents Rick Smock from the Beach Terrace Inn called stating storm drain in front of hotel has strong fowl odor. Guests of the hotel have been complaining about odor. Report that a storm drain needs cleaning.	7/17/2008 Referred for Action
Storm Drain-Washing to Storm Drain	7GML7W	07/17/2008	SW8 Paint / Stucco Discharge Green colored water observed flowing in storm drain while being televised. A Report of Washing to the Storm Drain	7/17/2008 Verbal Notice
Recycling-Complaint	7GRNVK	07/21/2008	Has lived in home for 5 years and has called both the city and WM to get recycling baskets and has not received them.	7/21/2008 Reason: Per WM..Route Supervisor will get the bins to the resident.
Storm Drain-Washing to Storm Drain	7GTTJL	07/23/2008	SW29 Complaint Not Found Reported that gutter and street are rust stained from drainage at a residence. No rust colored stain was found when investigation was conducted. Report of Washing to the Storm Drain	7/25/2008 Complaint Not Found
Storm Drain-Dumping to Storm Drain	7GVU46	07/25/2008	SW29 Complaint Not Found RP poured small amount of potable water into storm drain. Report of Dumping to the Storm Drain	7/25/2008 No issue / No violation
Storm Drain-Washing to Storm Drain	7GVP8A	07/25/2008	SW3 Vehicle Washing Washing car in street. Report of Washing to the Storm Drain	7/25/2008 Notice of Violation
Storm Drain-Washing to Storm Drain	7GYR6W	07/28/2008	SW29 Complaint Not Found Cement contractor may have let hose run on asphalt. No washing took place. Report of Washing to the Storm Drain	7/28/2008 Complaint Not Found
Storm Water-General Information/Questions	7GZSY3	07/29/2008	Fire at Sammy's Woodfired Pizza. Stormwater asked to be on scene by request of Fire Department.	7/29/2008 Exempt discharge no follow-up required.

Detailed Issue Report

July 1 2008-June 1, 2009

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Needs Cleaning - Public Property	7H3LR6	07/31/2008	SW29 Complaint Not Found Caller stated storm drain in alley and parking area needs cleaning. After site visit, determined location is on private property and no did not appear to need cleaning. Report that a storm drain needs cleaning.	7/31/2008 Complaint Not Found
Storm Drain-Washing to Storm Drain	7H3LTU	07/31/2008	SW8 Paint / Stucco Discharge Painters washing out sprayers into back yard storm drain at 5:30 pm on 7/30/08 see attachment. Report of Washing to the Storm Drain	8/4/2008 Notice of Violation 15.12.050 15.12.080
Storm Drain-Washing to Storm Drain	7H4T9Z	08/01/2008	SW7 Cement Discharge Cement truck washing out buggy into storm drain Report of Washing to the Storm Drain	8/4/2008 Informational Letter to homeowner with BMP brochure
Recycling-General Information	7H7L59	08/04/2008	Wants to know: It says: Plastic beverage containers with recycling symbols 1 through 7 (water, milk,soda, tea andjuices..does that mean you can recycle packaging/bags with a 4 on them or just containers?	11/28/2008 Reason: WM gave info. See attached email to resident.
Solid Waste-Complaint	7H7LUE	08/04/2008	Pick up schedule has changed..trash picked up late on Friday and early on Saturday..and on Monday..when dumpster full from weekend picked up between 12 and 6 - causing problems with overflowing trash	8/5/2008 See attached email to caller. Schedule is being revised to help alleviate problem.
Storm Drain-Washing to Storm Drain	7H9P53	08/06/2008	SW15 Water Line Break Water running to storm drain Report of Washing to the Storm Drain	8/6/2008 No issue / No violation potable water line break
Solid Waste-Missed collection/pick-up	7HAUTD	08/07/2008	Missed yard waste pick up.	8/7/2008 Yard waste being picked up today per WM.
Storm Drain-Washing to Storm Drain	7HASC4	08/07/2008	SW3 Vehicle Washing Caller observed mobile car washing near her place of employment. A silver truck doing the work and other cars in line. Report of Washing to the Storm Drain	8/7/2008 No issue / No violation

Detailed Issue Report

July 1 2008-June 1, 2009

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Dirt/Debris - Piles	7HERWF	08/11/2008	SW10 Landscape Material Dumping Report of possible storm water violation due to dirt or debris piles.	8/12/2008 Verbal Notice - no discharge to storm drain.
Storm Drain-Dumping to Storm Drain	7HEVLK	08/11/2008	SW7 Cement Discharge Contractor building walls between houses dumping excess cement to storm drain Report of Dumping to the Storm Drain	8/12/2008 Verbal Notice - No discharge to the storm drain.
Storm Drain-Washing to Storm Drain	7HEKX4	08/11/2008	SW1 Surface Cleaning Washed grease to storm drain Report of Washing to the Storm Drain	8/12/2008 Follow-up in Permits Plus
Storm Drain-Washing to Storm Drain	7HGTN5	08/13/2008	SW6 Saw Cutting Slurry Resident cut concrete in driveway and slurry ran to street and storm drain. Report of Washing to the Storm Drain	8/18/2008 Verbal Notice
Storm Drain-Washing to Storm Drain	7HHMVL	08/14/2008	SW7 Cement Discharge Contractor working at above address has washed all of ht concrete wash wate and demolition debris form the backyard hard scape project southerly towards Chinquapin where it has pooled in front of 3985 Stella Maris Report of Was	8/18/2008 Verbal Notice
Storm Drain-Washing to Storm Drain	7HHLGT	08/14/2008	8-28-08 SW11 Pool / Spa / Fountain Discharge 8/28/08 9:30 AM - more debris in the gutter 8-14-08 SW1 Surface Cleaning 8-14-08 Pressure Washing of red tile roof left red residue in gutter and on sidewalk. - 8. Report of Washing to the Storm Dra	8/29/2008 Informational Letter
Storm Drain-Washing to Storm Drain	7HJNFH	08/15/2008	SW28 Miscellaneous Incidents Black liquid coming out of outall at Christensen Report of Washing to the Storm Drain	8/18/2008 : No issue / No violation
Storm Drain-Washing to Storm Drain	7HJVQW	08/15/2008	SW2 Equipment Cleaning Concrete being washed down gutter and street Report of Washing to the Storm Drain	8/20/2008 Notice of Violation Issued to contractor and cc to homeowner with educational information to both.

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain	7HNR29	08/19/2008	SW10 Landscape Material Dumping Landscapers rake pine needles into the gutter. Street sweeper ahs to clean up with shovel. Happens twice a month. Report of Dumping to the Storm Drain	9/3/2008 Verbal Notice
Water Conservation-Private Property	7HNNR6	08/19/2008	Overwatering - running down street - sprinker heads also not directed properly - Sunny Creek Terraces	8/19/2008 New Way Landscape Co. fixed the problem.
Storm Drain-Washing to Storm Drain	7HPS5H	08/20/2008	SW1 Surface Cleaning Report of Washing to the Storm Drain working on floors, may be cleaning or sawcutting, tapped into fire hydrant for water, discharging into brow ditch.	8/21/2008 Notice of Violation
Recycling-Single Stream Request	7HRS8S	08/22/2008	When is City going to go to single stream?	8/22/2008 Advised caller that single stream being worked on.
Recycling-Single Stream Request	7HRVGH	08/22/2008	Request for single stream recycling. Please see attachment. Please include response before closing RFA. Thank you.	9/3/2008 Responded to Customer via e-mail.
Recycling-Single Stream Request	7HRVGH	08/22/2008	Request for single stream recycling. Please see attachment. Please include response before closing RFA. Thank you.	10/24/2008 Please refer to other RFA from resident with response attached.
Solid Waste-Complaint	7HRV87	08/22/2008	has 18 bulky items to be picked up - WM will only pick up 6.	8/22/2008 LS of WM calling resident to inform that WM will pick up all 18 items on 8/23/08.
Storm Drain-Washing to Storm Drain	7HUTYG	08/25/2008	SW7 Cement Discharge Contractor dumping concrete down the storm drain Report of Dumping to the Storm Drain	8/25/2008 Verbal Notice
Storm Drain-Vehicles Leaking Oil/Fluids	7HXP4U	08/28/2008	SW17 Vehicle and equipment leaking with BMPs (cardboard underneath leak) Car leaking oil in street Report of leaking oil or fluids	9/3/2008 No issue / No violation
Storm Drain-Dumping to Storm Drain	7HYTBT	08/29/2008	SW11 Pool / Spa / Fountain Discharge 8-28-08 White residue appeared to come from sub-drain outlet at southwestern corner of property. Report of Dumping to the Storm Drain	8/29/2008 Informational Letter

Detailed Issue Report

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain	7J5VFQ	09/03/2008	SW11 Pool / Spa / Fountain Discharge Report of Dumping to the Storm Drain	9/3/2008 Complaint Not Found BMP information left onsite.
Water Conservation-Private Property	7J6323	09/03/2008	Broken water line, likely on private property. Water discharge from slope running across sidewalk into street.	9/3/2008 Referred for Action to CMWD duty phone for after hours response.
Storm Drain-Dumping to Storm Drain	7J6TJL	09/04/2008	SW11 Pool / Spa / Fountain Discharge Report of Dumping to the Storm Drain Hose from back yard discharging water with a sewage smell to street. No Chlorine or solids in water.	9/4/2008 No issue / No violation (exempt discharge, swimming pool)
Storm Water-General Information/Questions	7J7UYX	09/05/2008	8:05am Lisa Urabe called SW Hotline to report unknown water source at BV Pump Station flowing outside fence line, possibly high in iron. EWA staff onsite 9/4/08 at 17:oo.	9/8/2008 Closed. No further actions required.
Storm Drain-Needs Cleaning - Private Property	7JANWA	09/08/2008	SW28 Miscellaneous Incidents Maintenance yard at Plaza Camino Real is lacking BMPs Request for storm drain cleaning - private property.	9/8/2008 Follow-up in Permits Plus Plaza Camino Real(SWP00872)
Recycling-Single Stream Request	7JBKGK	09/09/2008	When are we going to the large type trash and recycle bins	9/10/2008 See attached emails responding to resident.
Storm Drain-Dumping to Storm Drain	7JBQLL	09/09/2008	SW22 Dumping - Non-hazardous Materials Dumped paint on ground at corner of Ocean St and Beech Ave - from remodeling at above address - caller saw them do it Report of Dumping to the Storm Drain	9/9/2008 Verbal Notice - Non-stormwater issue due to dumping in vacant lot. No discharge to storm drain system.
Storm Drain-Washing to Storm Drain	7JCPPA	09/10/2008	SW11 Pool / Spa / Fountain Discharge Extended Stay America emptying swimming pool Report of Washing to the Storm Drain	9/15/2008 Verbal Notice HT tested water and found no measurable levels of chlorine. Pool water was allowed to be discharged to storm drain system.
Recycling-Complaint	7JEMRF	09/12/2008	Complaint about recycle scavenging	9/12/2008 Reason: See att'd response ot resident.

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Water Conservation-Private Property	7JENKR	09/12/2008	Neighbors spinklers spray onto residents property causing property damage to shed and complaining about over usag of water during drought.	9/12/2008 No violation.
Recycling-Comment/Suggestion	7JHT9U	09/15/2008	Information about what City is doing about recycling. Please see attachment. Please include response before closing RFA. Thank you.	9/16/2008 Reason: See response letter from SH to resident attached.
Storm Drain-Dumping to Storm Drain	7JHPDR	09/15/2008	SW29 Complaint Not Found Report of Dumping to the Storm Drain	9/16/2008 No issue / No violation - Inspector will follow up with full inspection and any followup information will be in Permits Plus.
Storm Drain-Dumping to Storm Drain	7JHTRY	09/15/2008	SW28 Miscellaneous Incidents - Ice maker draining to storm drain. Miscellaneous equipment stored outside uncovered. Report of Dumping to the Storm Drain	9/15/2008 5:16:58PM - Hallie Thompson Follow-up in Permits Plus (SWP00266). Informational letter.
Storm Drain-Dumping to Storm Drain	7JJV7U	09/16/2008	SW11 Pool / Spa / Fountain Discharge Report of Dumping to the Storm Drain Overflow from fountain has been tied directly into the storm drain manhole.	10/8/2008 Verbal Notice - Waterstone Apartments removed pipe connection and sealed holes, verified by Clayton Dobbs. No discharge has been observed.
Storm Drain-Washing to Storm Drain	7JKQ48	09/17/2008	SW8 Paint / Stucco Discharge Concrete work next to surf shop, slurry running to storm drain Report of Washing to the Storm Drain	9/18/2008 Verbal Notice - Stucco contractor had implemented BMPs following contact. No water discharged to storm drain.
Recycling-General Information	7JLTCV	09/18/2008	Questioned people taking bottles and other recycled materials out of trash when put out at curb. Is there a law about this? 11-17-08 Wants City ot go to locked containers..Has called police. Always different people taking recyclables from the curb.	9/18/2008 Reason: Noted latest info from Resident. Email attached. No action necessary.
Recycling-General Information	7JLTGY	09/18/2008	Someone stole her recycle bin and left an Oceanside bin in its place. Wants it replaced.	9/18/2008 Reason: Informatio given to WM. They will handle.
Storm Drain-Dumping to Storm Drain	7JQN5Q	09/22/2008	SW8 Paint / Stucco Discharge White liquid running down gutter to storm drain (paint)on weekend Report of Dumping to the Storm Drain	9/29/2008 Verbal Notice - HT spoke with homeowner who has cleaned gutter line to maximum extent possible.

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Vehicles Leaking Oil/Fluids	7JXNA5	09/29/2008	Maroon pickup leaking oil on the street Report of leaking oil or fluids	10/14/2008 Written Warning - Warning letter sent. No fresh oil stains. Vehicle is no longer parked on street.
Storm Drain-Dirt/Debris - Piles	7JYSP7	09/30/2008	SW28 Miscellaneous Incidents Working Pile of sand in gutter, street and sidewalk. ROW issue. Report of possible storm water violation - due to dirt or debris piles.	10/1/2008 Referred for Action (engineering) ROW violation
Storm Drain-Washing to Storm Drain	7JZVE3	10/01/2008	Power washing roofs. May be running to storm drain. Report of Washing to the Storm Drain	10/1/2008 No issue / No violation - No discharge to storm drain
Storm Drain-Dumping to Storm Drain	7K6SQM	10/06/2008	SW20 Oil & Grease Discharge - Food Facility grease dicharged to asphalt only. Contained onsite. Report of Dumping to the Storm Drain	10/6/2008 Follow-up in Permits Plus (SWP01380)
Storm Drain-Washing to Storm Drain	7K6KVC	10/06/2008	Mortar in gutter - dried Report of Washing to the Storm Drain	10/14/2008 Informational Letter - BMP information given to homeowner. Gutter line and street are clean.
Storm Drain-Washing to Storm Drain	7K6THQ	10/06/2008	SW28 Miscellaneous Incidents Report of Washing to the Storm Drain	10/14/2008 Informational Letter - Gutter line and street are clean 10/14/08
Recycling-General Information	7K7P3A	10/07/2008	Concerned over people taking recyclables from bins when set out for pick up. Please see attachment. Please include response before closing RFA. Thank you.	1-/16/2008 Reason: Response letter sent. See attached.
Storm Drain-Washing to Storm Drain	7K7QVL	10/07/2008	SW26 Accidental Spill Muriatic Acid spill at pool area of Aviara 4 Seasons Resort - to storm drain Report of Washing to the Storm Drain	10/16/2008 Referred for Action - Enforcement actions taken by DEH to vendor. No enforcement issued to Four Seasons Resort.
Storm Drain-Dumping to Storm Drain	7K9NT7	10/09/2008	SW29 Complaint Not Found Upstream of 58-A, turbidity was high. From Lader Court? Report of Dumping to the Storm Drain	10/9/2008 No issue / No violation

Detailed Issue Report

July 1 2008-June 1, 2009

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Street Sweeping-Complaint	7KAQM3	10/10/2008	Mr. O'C asked council member Ann Kulchin to find out for him if Public Works can put a sign up on his street to tell the residents the street-sweeping schedule. He said that people are always parked on the street when they come and the street doesn't	10/16/2008 action's taken to address Street sweeping issues
Storm Drain-Dirt/Debris - Piles	7KFQ2Q	10/15/2008	SW28 Miscellaneous Incidents pavement overlay and stockpiles with no BMPs Report of possible storm water violation - due to dirt or debris piles.	10/20/2008 Verbal Notice
Recycling-Single Stream Request	7KLV83	10/20/2008	Wants large recycling bins as in Oceanside. Please see attachment. Please include response before closing RFA. Thank you.	10/22/2008 See attached response from DS giving info re single stream.
Recycling-Single Stream Request	7KML73	10/21/2008	When is Carlsbad going to the large recycling bins as in other cities?	10/21/2008 Adivsed issue was being prepared for sometime after first of the year and to watch council agendas.
Household Hazardous Waste-General Information	7KNKJ6	10/22/2008	Wants info on disposal of paint, pipe and ocncrete. Household Hazardous Waste	10/22/2008 Reason: See attached email giving information requested.
Recycling-Complaint	7KNVTK	10/22/2008	Please see attachment. Please include response before closing RFA. Thank you. Request for recycling crates.	10/23/2008 Reason: WM is delivering the recycling crates. See attached.
Recycling-General Information	7KPKTZ	10/23/2008	Question about recycling batteries. See attached.	10/23/2008 Reason: Gave info re HHW disposal for batteries. See attached.
Storm Drain-Dumping to Storm Drain	7KPL3P	10/23/2008	Storm drain smells like cleaning fluids. Report of Dumping to the Storm Drain	10/23/2008 Referred for Action - SDMC will clean storm drain box Monday 10/27/08. BMP information given to Tamarack Beach Resort.
Storm Drain-Washing to Storm Drain	7KWNHC	10/30/2008	Report of Washing to the Storm Drain	10/30/2008 Follow-up in Permits Plus (SWP00593)
Household Hazardous Waste-General Information	7L2UVZ	11/03/2008	Where in Carlsbad can i take paint? Household Hazardous Waste	11/3/2008 Reason: See attached email from and to resident by SH giving locations of HHW sites.

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain	7L2MQY	11/03/2008	SW1 Surface Cleaning Power washing bus stops on 11-2-08 (Sunday). No BMPs in place..water running down storm drain. Report of Dumping to the Storm Drain	11/17/2008 Verbal Notice
Solid Waste-Complaint	7L4LQ9	11/05/2008	Complaint that trash was not picked up andwas told it would be adn it wasnt again. Now trash all over his yard.	11/6/2008 See attached email to resident frm SH. Issue resolved.
Storm Drain-Washing to Storm Drain	7LBT9T	11/12/2008	SW3 Vehicle Washing Report of Washing to the Storm Drain	11/24/2008 Folow up in Permits Plus
Storm Drain-Washing to Storm Drain	7LBUZ9	11/12/2008	SW1 Surface Cleaning Hosing patio Report of Washing to the Storm Drain	11/12/2008 Informational Letter
Storm Drain-Washing to Storm Drain	7LD3KX	11/13/2008	SW3 Vehicle Washing Report of Washing to the Storm Drain	11/24/2008 Written warning
Storm Drain-Washing to Storm Drain	7LD3G7	11/13/2008	SW3 Vehicle Washing - Mobile detailer Report of Washing to the Storm Drain	11/18/2008 Written Warning & Follow-up in Permits Plus
Recycling-General Information	7LDQDQ	11/14/2008	Please see attachment. Iquiring about recycling service in the City.	11/17/2008 E-mail sent to resident pointing to the City's website with the recycling information.
Storm Drain-Washing to Storm Drain	7LE2L6	11/14/2008	SW3 Vehicle Washing - Report of mobile detailer washing to the storm drain Report of Washing to the Storm Drain	11/14/2008 No issue / No violation - All appropriate BMPs in place. No wash water to the storm drain
Recycling-Complaint	7LGMMG	11/17/2008	Has been trying to get recycling service at above residence since October. Has been e-mailing WM's customer service. E-mail to City is attached.	11/18/2008 Reason: Per WM resident has been given recycling bins and is on schedule for pick up.
Recycling-Single Stream Request	7LHVNP	11/18/2008	Complaing of way trash is collected. Single stream request. Please see attachment. Please include response before closing RFA. Thank you.	11/18/2008 SH responding with info re single stream recycling.
Storm Drain-Dumping to Storm Drain	7LHQP9	11/18/2008	SW9 Tracking Soil sediment running off property to storm drain. Grey clay soil looks like cement or stucco when it is wet Report of Dumping to the Storm Drain	11/21/2008 Verbal Notice

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Solid Waste-Missed collection/pick-up	7LJTLZ	11/19/2008	Resident's green waste was not picked up last week. No note left. Resident said it was not 50 lbs. She wants to be assured it will be picked up today As of 1:40 p.m. no one's trash had been picked up.	11/21/2008 Green waste picked up by WM
Storm Drain-Dumping to Storm Drain	7LJQUD	11/19/2008	SW6 Saw Cutting Slurry cut sidewalk for replacement and discharged to storm drain. Report of Dumping to the Storm Drain	11/21/2008 Referred for action
Storm Drain-Needs Cleaning - Public Property	7LJP39	11/19/2008	SW28 Miscellaneous Incidents Storm drain has tree debris in it from park. Report that a storm drain needs cleaning.	11/19/2008 Referred for action
Storm Drain-Dumping to Storm Drain	7LLQTZ	11/21/2008	SW22 Dumping - Non-hazardous Materials □ 1 cup according to CFD Report of Dumping to the Storm Drain	11/24/2008 Referred for action
Recycling-Single Stream Request	7LPMEG	11/24/2008	Questioning use of single stream containers - why not in Carlsbad.	11/24/2008 - Hallie Thompson
Storm Drain-Dirt/Debris - Piles	7LPTUL	11/24/2008	SW10 Landscape Material Dumping About a cubic yard of dirt, half on the street and 1/2 on the curb. Report of possible storm water violation - due to dirt or debris piles.	11/24/2008 Referred for action
Storm Drain-Dumping to Storm Drain	7LPMQ3	11/24/2008	White stuff in gutter Report of Dumping to the Storm Drain	11/24/2008 Referred for action
Storm Drain-Dumping to Storm Drain	7LPQA5	11/24/2008	SW28 Miscellaneous Incidents Standing orange water in creek Report of Dumping to the Storm Drain	11/25/2008 No evidence of illegal dumping - Storm Drain crew advised of debris in creek
Storm Drain-Washing to Storm Drain	7LPPN4	11/24/2008	SW14 Cooling Water Discharge water line break and sediment discharge Water running down curb - grey Report of Washing to the Storm Drain	12/4/2008 Verbal Notice
Storm Drain-Dumping to Storm Drain	7LQMUK	11/25/2008	Grey wet subtance in gutter. Report of Dumping to the Storm Drain	11/25/2008 Verbal Notice
Solid Waste-General Information	7LXPWR	12/02/2008	Request for 3 yard waste stickers	12/2/2008 Referred to WM
Solid Waste-Missed collection/pick-up	7LXPSP	12/02/2008	Trash pick up was missed on Friday, 11/28	12/2/2008 WM picked up trash

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Erosion from Existing Development	7LXQ7H	12/02/2008	Large amount of silt washed from empty lot at above address blocking rainwater runoff at Crestview and Eucalyptus. Erosion from existing development, not new construction.	12/11/2008 Referred for action
Storm Drain-Needs Cleaning - Public Property	7LXPL3	12/02/2008	City of Carlsbad Contact Us: Storm drain at corner of Eureka Pl and Basswood is full of tree debris from the park across the street Report that a storm drain needs cleaning.	12/4/2008 Complaint not found
Storm Drain-Washing to Storm Drain	7LXQZA	12/02/2008	SW1 Surface Cleaning Red material in gutter Report of Washing to the Storm Drain	12/4/2008 Verbal Notice
Storm Drain-Washing to Storm Drain	7LZMKL	12/04/2008	Cleaning plugged drain in yard and washing debris into street Report of Washing to the Storm Drain	12/20/2008 Verbal Notice
Storm Drain-Washing to Storm Drain	7LZMT5	12/04/2008	Power washing buildings..no BMPs Report of Washing to the Storm Drain	12/8/2008 Verbal Notice
Storm Drain-Erosion from Existing Development	7M2U7A	12/05/2008	SW28 Miscellaneous Incidents Dirt in street coming from above address and stopping in street in front of 4270 Clearview Dr from last rain. Street sweeper can not clean...too much. Erosion from existing development, not new construction.	12/16/2008 Verbal Notice
Storm Drain-Washing to Storm Drain	7M6TUH	12/09/2008	Hosing down Patio to storm drain Report of Washing to the Storm Drain	12/9/2008 Follow up in Permits Plus
Storm Drain-Washing to Storm Drain	7M6U3E	12/09/2008	SW11 Pool / Spa / Fountain Discharge Draining pool without dechlorinating on 12/8/08. Report of Washing to the Storm Drain	12/11/2008 Verbal Notice
Storm Water-General Information/Questions	7M6LM8	12/09/2008	Wants names of storm drain cleaning companies to clean private dtorm drains.	12/9/2008 Email to resident advising how to find information in phone book or on web
Recycling-Single Stream Request	7M8UBE	12/11/2008	Questioning large blue bins for recycling. Single stream request.	12-11-2008 Request recurded
Solid Waste-Missed collection/pick-up	7M8UXK	12/11/2008	Called Oak St. office complaining that his recycling was not picked up today.	12/11/2008 Recycling picked up 12/12/2008

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain	7M8QSV	12/11/2008	Dry wall mud in curb going to storm drain coming from under sidewalk drain. Report of Washing to the Storm Drain	12/15/2008 Informational letter
Storm Drain-Erosion from Existing Development	7MCPJC	12/15/2008	SW28 Miscellaneous Incidents BMPs failed at lot next to 1635 Faraday...empty lot on south side of City building. Mud running to street. Erosion from existing development, not new construction.	12/15/2008 Follow up in Permits Plus (SWP00068)
Storm Drain-Erosion from Existing Development	7MCSJ8	12/15/2008	Mud leaving site and going to La Costa Creek. Grading? Erosion from existing development, not new construction.	12/18/2008 No issue/no violation
Recycling-Single Stream Request	7MFS5B	12/18/2008	Request for Single Stream Recycling in Carlsbad	12/18/2008 SH responded to email and request recorded
Storm Drain-Erosion from Existing Development	7MFPSE	12/18/2008	Mud from house on corner of Elmwood and Highland ran down street in gutter. Erosion from existing development, not new construction.	1/22/2009 Verbal Notice
Storm Drain-Vehicles Leaking Oil/Fluids	7MH2P3	12/19/2008	SW17 Vehicle and equipment leaking Car leaking diesel fuel Report of leaking oil or fluids	12/24/2008 Verbal Notice
Storm Drain-Dumping to Storm Drain	7MMSPR	12/24/2008	SW7 Cement Discharge Washing concrete to storm drain through french drain in yard Report of Dumping to the Storm Drain	12/26/2008 No issue/no violation
Water Conservation-Private Property	7MSRS4	12/29/2008	Water running into street. Seems to be in the last few weeks causing some erosion on bank.	12/31/2008 Referred for action to Leucadia water district
Storm Drain-Dumping to Storm Drain	7MTQW8	12/30/2008	Report of Dumping to the Storm Drain - Fountain being discharged directly to storm drain.	1/5/2009 Informational letter sent
Storm Drain-Dirt/Debris - Piles	7MUPC3	12/31/2008	Piles of dirt unprotected Report of possible storm water violation - due to dirt or debris piles.	12/31/2008 No issue/no violation

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain	7MWMUC	01/02/2009	SW10 Landscape Material Dumping Gardeners have put extensive amount of mulch/manure on planters and is running down storm drain when rains. They also dump it in the street to spred it around the neighborhood.□ Report of Washing to the Storm Drain	1/6/2009 No issue/no violation
Solid Waste-Missed collection/pick-up	7N3RRN	01/07/2009	Christmas tree was not picked up. See attached email.	1/7/2009 WM picked up tree
Storm Drain-Dumping to Storm Drain	7N3UU7	01/07/2009	SW11 Pool / Spa / Fountain Discharge Report of Dumping to the Storm Drain	1/9/09 No issue/no violation
Storm Water-General Information/Questions	7N3MD8	01/07/2009	Questioning street sweeping - not keeping to schedule -	2/6/2009 No further investigation required. Closed.
Water Conservation-Private Property	7N3UL8	01/07/2009	"When you currently call the Stormwater Hotline, they say that regulating lawn/yard runoff (which is everywhere-take a walk at 5am and view it for yourself) is not their job. I don't think it's right that avocado and other growers should be getting cut o	1/7/2009 Email to resident from SH
Solid Waste-Complaint	7N8QVH	01/12/2009	Complaining of having trash service stopped because of non-payment.	1/12/2009 Service resumed after payment
Storm Drain-Vehicles Leaking Oil/Fluids	7N8RM7	01/12/2009	Vehicle parked on street this weekend leaking oil. Oil still on street. White Buick. Report of leaking oil or fluids. See also RFAA-7HXP4U	6/5/2009 Notice of Violation
Storm Drain-Washing to Storm Drain	7N93GY	01/12/2009	SW18 Vehicle Repair Oil was spilled on driveway and washed to street. Report of Washing to the Storm Drain	2/4/2009 Notice of Violation
Storm Drain-Washing to Storm Drain	7NAQUK	01/14/2009	Emptying pool to storm drain Report of Washing to the Storm Drain	1/14/2009 No isue/no violation
Storm Drain-Washing to Storm Drain	7NBV2C	01/15/2009	Washing down driveway with unknown substance. Report of Washing to the Storm Drain	1/20/2009 Informational letter

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Erosion from Existing Development	7NGR7P	01/20/2009	SW28 Miscellaneous Incidents Constant erosion from this property which runs down to Jefferson St. City has to clean, put up barriers, etc. Ongoing Problem. Erosion from existing development, not new construction.	2/10/2009 Referred for Action to engineering per B. Johnson and G. Pruim
Storm Drain-Dumping to Storm Drain	7NHW4M	01/21/2009	SW11 Pool / Spa / Fountain Discharge Water running from curb outlet all day, running down street. Report of Dumping to the Storm Drain	1/22/2009 Verbal Notice
Storm Drain-Vehicles Leaking Oil/Fluids	7NKMVP	01/23/2009	SW17 Vehicle and equipment leaking - white truck leaking ATF LIC 7Z39789 US Concrete Report of leaking oil or fluids	2/4/2009 1Notice of Violation - issued to San Diego Precast Concrete. Vehicle not present 2/3/09, no evidence of recent leaks or spills
Storm Drain-Dumping to Storm Drain	7NNST6	01/26/2009	Water has been running down the street/sidewalk for several days. Report of Dumping to the Storm Drain	2/11/2009 No issue / No violation
Water Conservation-Private Property	7NNPLR	01/26/2009	Water flowing off yard from broken sprinklers?	1/26/2009 Homeowner repairing sprinklers
Storm Drain-Erosion from Existing Development	7NRUYA	01/29/2009	BMPs have been removed from site, potential for sediment into lagoon. Erosion from existing development, not new construction.	2/10/2009 Referred for Action to B. Johnson and G. Pruim
Storm Drain-Dumping to Storm Drain	7NT2M6	01/30/2009	using bobcat to clear and level, pushing debris into the lake Report of Dumping to the Storm Drain	2/11/2009 Referred for Action G. Pruim and B. Johnson will handle.
Storm Drain-Washing to Storm Drain	7NX2CQ	02/03/2009	SW1 Surface Cleaning Report of Washing to the Storm Drain	2/6/2009 Informational Letter
Storm Drain-Washing to Storm Drain	7NWP5N	02/03/2009	SW20 Oil & Grease Discharge - Food Facility Discharge to parking lot. BMPs protected storm drain. Report of Washing to the Storm Drain	2/3/2009 Follow-up in Permits Plus
Storm Drain-Dumping to Storm Drain	7NXP4H	02/04/2009	Water being scooped form a ditch along bike lane and dumped onto curb to go down storm drain. Report of Dumping to the Storm Drain	2/4/2009 Verbal Notice - Employee notified of storm water ordinance and will clean gutter line.
Water Conservation-Private Property	7NXNXP	02/04/2009	Water running down curb from over irrigation	2/11/2009 No problem found.
Storm Water-General Information/Questions	7NZURR	02/06/2009	SW28 Miscellaneous Incidents - Foam in creek	2/6/2009 No issue/no violation - Foam is not from any illegal discharge

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain	7P8Q8B	02/13/2009	SW1 Surface Cleaning no discharge City contractor was powerwashin gutter line. Report of Dumping to the Storm Drain	2/17/2009 No issue / No violation
Storm Drain-Erosion from Existing Development	7PCRY8	02/17/2009	SW28 Miscellaneous Incidents Sediment discharged to street from rains over the weekend. Need additional BMPs Erosion from existing development, not new construction.	2/17/2009 Follow-up in Permits Plus (SWP01148)
Storm Drain-Dumping to Storm Drain	7PDLUW	02/18/2009	Dumping dirty water into street Report of Dumping to the Storm Drain	2/18/2009 Written Warning - sent to contracting company Greyhound General Inc.
Storm Drain-Washing to Storm Drain	7PETSK	02/19/2009	Trucks dragging mud onto street from existing development. No BMPs in place. Report of Washing to the Storm Drain	3/18/2009 Verbal Notice - Joshua Dake of Brickman will implement proper BMPs. HT will conduct follow-up.
Storm Drain-Washing to Storm Drain	7PELK4	02/19/2009	SW1 Surface Cleaning Pressure washing building Report of Washing to the Storm Drain	2/19/2009 8:55:59AM - James Wood No issue / No violation
Storm Drain-Washing to Storm Drain	7PJTCB	02/23/2009	1. Manhole along College a few feet north of Cannon Rd construction improperly cleaned or no BMPs Discharge of Calavera Creek just before it reaches Agua Hedionda Creek 12 inch deposit of sand on the apron. Report of Washing to the Storm Drain	2/23/2009 Both issues turned over to CMI. See emails attached.
Storm Drain-Erosion from Existing Development	7PMQM7	02/26/2009	Erosion from existing development, not new construction.	3/4/2009 Follow-up in Permits Plus
Storm Drain-Vehicles Leaking Oil/Fluids	7PMTW9	02/26/2009	SW17 Vehicle and equipment (stains old not fresh) Some oil stains found on Paseo Report of leaking oil or fluids; Location: Paseo Descanso and Privado(a); unknown vehicle(s) may be leaking oil to street;	3/3/2009 No issue / No violation
Storm Drain-Washing to Storm Drain	7PNQHH	02/27/2009	SW3 Vehicle Washing mobile detailer washing vehicle in street. Report of Washing to the Storm Drain	3/3/2009 Verbal Notice

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain	7PRQ8B	03/02/2009	Painters washed paint into gutter - now dry Report of Washing to the Storm Drain	3/3/2009 Informational Letter
Storm Drain-Washing to Storm Drain	7PTQ5C	03/04/2009	Mobile washer using Farmers parking lot to wash vehicles. Report of Washing to the Storm Drain	3/4/2009 Follow-up in Permits Plus Notice of Violation
Storm Drain-Dumping to Storm Drain	7PULJ3	03/05/2009	Using sump pump to empty black water and has hit the system. Report of Dumping to the Storm Drain	3/9/2009 Follow-up in Permits Plus - NOV issued
Storm Drain-Washing to Storm Drain	7PUQ47	03/05/2009	SW19 Dumpster Discharge Trash compactor in back of store leaking fluids. Will wash to storm drain during rain. Report of Washing to the Storm Drain	3/5/2009 Follow-up in Permits Plus (SWP01426)
Storm Drain-Washing to Storm Drain	7PUPKH	03/05/2009	Recently moved car washing facilities and now overspray and other wash water drain to a clearly marked storm drain. Lexus of Carlsbad...behind dealership Report of Washing to the Storm Drain	3/9/2009 9:54:36AM - Hallie Thompson Previous: Open New: Closed Reason: Follow-up in Permits Plus - Citation will be issued
Storm Drain-Washing to Storm Drain	7PVPPM	03/06/2009	Report of Washing to the Storm Drain	3/23/2009 Referred for Action - referred to Engineering and Streets
Storm Drain-Washing to Storm Drain	7PZMXR	03/10/2009	SW28 Miscellaneous Incidents - Water running constantly from beneath wall Report of Washing to the Storm Drain	3/11/2009 No issue / No violation - Olivenhain Water District. No water crosses public ROW.
Water Conservation-Private Property	7Q7LCB	03/16/2009	Deep puddle of water in the landscaping box under the mailboxes and water all over sidewalks and dirveway/parking surfaces.	3/18/2009 Problems fixed.
Water Conservation-Private Property	7Q7T38	03/16/2009	Watering during rain and at 2 in the afternoon.	3/16/2009 JW to contact to explain how their watering using relaimed water looks to the public.
Storm Drain-Washing to Storm Drain	7Q9R78	03/18/2009	Report of Washing to the Storm Drain White paint coming from private drain on the beach.	3/23/2009 Informational Letter sent to contractor

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain	7QET69	03/23/2009	SW11 Pool / Spa / Fountain Discharge Report of resident dumping carpet cleaning water to street, after investigation it was determined that pool cleaner backwashed filter and deposited DE into street. Report of Washing to the Storm Drain	3/23/2009 Verbal Notice
Storm Drain-Washing to Storm Drain	7QFLBE	03/24/2009	SW1 Surface Cleaning Shopping center powerwashing to SD without containment. Drains to detention basin. Report of Washing to the Storm Drain	3/24/2009 Follow-up in Permits Plus (SWP01007)
Water Conservation-Private Property	7QFPHQ	03/24/2009	Constant flow of water from curb drain. Algae growing.	3/24/2009 Ground water. No Violation.
Storm Drain-Washing to Storm Drain	7QGLUF	03/25/2009	SW28 Miscellaneous Incidents Foam in BV creek below Quarry Falls, originated upstream of Carlsbad/Oceanside boarder. Report of Washing to the Storm Drain	3/25/2009 Referred for Action to the City of Oceanside
Storm Drain-Washing to Storm Drain	7QHLAV	03/26/2009	SW1 Surface Cleaning Power washing painted curb to storm drain. Report of Washing to the Storm Drain	3/26/2009 Informational Letter
Storm Drain-Vehicles Leaking Oil/Fluids	7QMVLF	03/30/2009	SW17 Vehicle and equipment leaking White cadillac leaking fluids on to street. Also, silver Cadillac and Land Rover. Land Rover parked on street after 4:30 PM. Report of leaking oil or fluids	6/10/2009 Informational Letter
Storm Drain-Washing to Storm Drain	7QNTY4	03/31/2009	Brown smelly liquid running down gutter to storm drain. Report of Washing to the Storm Drain	4/7/2009 Verbal Notice - Employees warned of storm water ordinance.
Storm Drain-Washing to Storm Drain	7QQLQA	04/02/2009	Lanscapers for HOA blowing debris into storm drain. Report of Washing to the Storm Drain	4/7/2009 Informational Letter
Storm Drain-Dumping to Storm Drain	7QUQ8X	04/06/2009	SW7 Cement Discharge Report of Dumping to the Storm Drain Concrete being dumped in the street prior to use in landscape.	4/7/2009 Referred for Action Dave Bunting via Shawnetta Grandberry
Storm Drain-Washing to Storm Drain	7QUQ6T	04/06/2009	SW1 Surface Cleaning Report of Washing to the Storm Drain Pressure Washer discharging with no BMPs.	4/7/2009 Notice of Violation 15.12.050 12.12.080

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain	7QVVMX	04/07/2009	SW3 Vehicle Washing Report of Washing to the Storm Drain	4/24/2009 No assistance from complainant regarding details of name/contact info. for alleged violator when requested.
Storm Drain-Washing to Storm Drain	7QWNY8	04/08/2009	SW4 Carpet Cleaning Discharge (unverified) Carpet washer running water down street. Report of Washing to the Storm Drain	4/9/2009 Verbal Notice (homeonwer)
Storm Drain-Dumping to Storm Drain	7QXR79	04/09/2009	SW19 Dumpster Discharge Report of Dumping to the Storm Drain - Sump pump broken, black foul-smelling water ponded in parking lot	4/23/2009 Notice of Violation and follow-up in Permits Plus
Storm Drain-Washing to Storm Drain	7QYLBK	04/10/2009	SW3 Vehicle Washing Washing car in driveway, using BMPs Report of Washing to the Storm Drain	4/10/2009 Follow-up in Permits Plus (SWP01293)
Water Conservation-Private Property	7QYUUM	04/10/2009	Washing car, overwatering at HOA	4/13/2009 Problems are being addressed.
Storm Drain-Washing to Storm Drain	7RDURC	04/23/2009	SW3 Vehicle Washing powerwashing vehicles in street in front of above address. Report of Washing to the Storm Drain	4/29/2009 Verbal Notice
Storm Drain-Washing to Storm Drain	7RDSML	04/23/2009	Red paint chips in gutter from scraping and repainting curbs. Not all swept up. Washing to storm drain by watering of lawns. Report of Washing to the Storm Drain	4/23/2009 No issue / No violation - No paint chips found in gutter line. Contracted company is aware of and implements proper BMPs when scraping.
Storm Drain-Washing to Storm Drain	7RENF8	04/24/2009	Washing down parking lot to street Report of Washing to the Storm Drain	4/24/2009 Arrived onsite at 10:40; evidence of water in parking lot; spoke to manager onsite about alleged washwater entering street; manager stated he was watering landscape; location of water indicat
Storm Drain-Dumping to Storm Drain	7RHSAG	04/27/2009	Pool being emptied to storm drain. Report of Dumping to the Storm Drain	4/27/2009 2:08:19PM - Hallie Thompson No issue / No violation - Pool water dechlorinated
Storm Drain-Dumping to Storm Drain	7RK279	04/28/2009	Report of Dumping to the Storm Drain from a pool draining. Citizen concerned that the pool draining contained tile dust and then when she mentioned it the tile cutter swept the tile dust it into the storm drain.	4/29/2009 Informational Letter

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Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain	7RJPGT	04/28/2009	SW28 Miscellaneous Incidents Report of porta potty near storm drain, in street secondary containment was present. Report of Dumping to the Storm Drain	4/30/2009 12:01:41PM - Tim Murphy Referred for Action to code enforcement for possible ROW violation.
Storm Drain-Dumping to Storm Drain	7RJPYL	04/28/2009	SW11 Pool / Spa / Fountain Discharge Report of Dumping to the Storm Drain	5/12/2009 Written Warning
Storm Drain-Washing to Storm Drain	7RKPF6	04/29/2009	SW1 Surface Cleaning Man hosing down driveway Report of Washing to the Storm Drain	5/4/2009 Informational Letter
Solid Waste-Complaint	7RLVYE	04/30/2009	Mr. Omar's 4 containers are missing sometime after noon on Tuesday, 4/28 (His regular trash day) - There were 4 containers 1 blue recycle bin, 1 green recycle bin and 2 personal large trash cans, one with a green waste sticker. This has never happened	5/4/2009 Called resident and confirmed that WM had delivered new recycling tubs to them. WM also gave them new garbage cans and yard waste stickers.
Storm Drain-Vehicles Leaking Oil/Fluids	7RLNN8	04/30/2009	Black BMW leaking oil in lot almost evey day. Report of leaking oil or fluids	5/12/2009 Complaint Not Found - RFA will be reopened if leaking vehicle is observed by SW inspector
Storm Drain-Washing to Storm Drain	7RLNK7	04/30/2009	SW2 Equipment Cleaning Water running in gutter form above address..Sediment laden . 5 gal min. Report of Washing to the Storm Drain	4/30/2009 Follow-up in Permits Plus (SWP00592)
Storm Drain-Dirt/Debris - Piles	7RMQKK	05/01/2009	SW22 Dumping - Non-hazardous Materials Report of possible storm water violation - due to dirt or debris piles.	6/11/2009 Follow-up in Permits Plus
Solid Waste-Missed collection/pick-up	7RTTWF	05/07/2009	Trash...missed pick up..	5/7/2009 WM picked up trash 9:15 AM on 5/7/09.
Storm Drain-Washing to Storm Drain	7RYP5F	05/12/2009	Carpet cleaner not using BMPs Report of Washing to the Storm Drain	5/12/2009 No issue / No violation
Storm Drain-Washing to Storm Drain	7RZPDX	05/13/2009	SW1 Surface Cleaning Power washing driveway with water Report of Washing to the Storm Drain	5/13/2009 Verbal Notice
Storm Drain-Washing to Storm Drain	7RZUL9	05/13/2009	On Maple Ave & Garfield there is a man washing his white BMW in the street. Report of Washing to the Storm Drain	5/19/2009 Informational Letter sent

Detailed Issue Report

July 1 2008-June 1, 2009

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Solid Waste-General Information	7S6QFM	05/18/2009	Wants to know how to dispose of cinderblocks.	5/18/2009 Advised via email to contact Waste Mangement for proper disposal instructions of cinder blocks.
Water Conservation-Private Property	7S6M7G	05/18/2009	Neighbor is wasting "tons" of water doing laundry from outside hose bib.	5/20/2009 No violation.
Storm Drain-Dumping to Storm Drain	7S7TPT	05/19/2009	SW11 Pool / Spa / Fountain Discharge no chlorine ph 7 Question about draining salt water swimming pool Report of Dumping to the Storm Drain	5/20/2009 No issue / No violation
Storm Drain-Washing to Storm Drain	7S7TJH	05/19/2009	Power washging house (second day) water running to storm drain Report of Washing to the Storm Drain	5/20/2009 Informational Letter. Sandbags provided.
Water Conservation-Private Property	7S7TE3	05/19/2009	Sprinklers on for over 30 minutes with nobody home. Back	5/19/2009 Irrigation valve shut off.
Storm Drain-Dumping to Storm Drain	7S8VNB	05/20/2009	SW28 Miscellaneous Incidents small amount Kitty litter in gutter from leaking trash bags Report of Dumping to the Storm Drain	5/22/2009 Kitty Litter cleaned up.
Storm Drain-Washing to Storm Drain	7S8UN8	05/20/2009	SW16 Over-irrigation possible broken sprinkler causing sediment to wash to sidewalk and street. Report of Washing to the Storm Drain	5/28/2009 Verbal Notice
Storm Drain-Dumping to Storm Drain	7S9NHN	05/21/2009	Oil and water mixture laying in gutter line in front of swim complex. Oil is light in color -Report of Dumping to the Storm Drain	5/21/2009 Referred for Action. CD confirmed clean up.
Storm Drain-Washing to Storm Drain	7S9LL8	05/21/2009	Washing out 18? trash cans on the deck with soapy water, running directly to storm drain Report of Washing to the Storm Drain	5/21/2009 Verbal Notice
Storm Drain-Washing to Storm Drain	7S9P9M	05/21/2009	Contractor washing down street - Building Dept. has management of this project. Report of Washing to the Storm Drain	5/26/2009 OK TO CLOSE PER INSPECTOR.
Storm Drain-Washing to Storm Drain	7S9NEP	05/21/2009	Driveway construction - demo and reconstruction irrigation turned on and mud runoff down street to catch basin - construction up to street - in right of way - no right of way permit Report of Washing to the Storm Drain	5/22/2009 Notice to Clean. BMPs implemented.

Detailed Issue Report

July 1 2008-June 1, 2009

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Washing to Storm Drain	7SENLE	05/26/2009	Powerwashing - on May 21 or 22 - roofs being washed per request of HOA Report of Washing to the Storm Drain	6/4/2009 Informational Letter
Storm Drain-Washing to Storm Drain	7SHLZV	05/29/2009	SUV car washing Report of Washing to the Storm Drain	5/29/2009 No issue / No violation
Storm Drain-Washing to Storm Drain	7SMQ7Z	06/02/2009	Every day rust colored liquid runs from this adddress, down the driveway, into the gutter. Has been happening for months. Staines can be seen if liquid is not running. Report of Washing to the Storm Drain	6/2/2009 No issue / No violation
Storm Drain-Washing to Storm Drain	7SMKCW	06/02/2009	SW20 Oil & Grease Discharge - Food Facility White material in storm drain Ranch Dressing. Report of Washing to the Storm Drain	6/3/2009 Notice of Violation
Storm Drain-Dirt/Debris - Piles	7SNU6F	06/03/2009	SW28 Miscellaneous Incidents Small dirt pile in driveway. Report of possible storm water violation - due to dirt or debris piles.	6/5/2009 Verbal Notice
Storm Drain-Washing to Storm Drain	7SNL94	06/03/2009	SW8 Paint / Stucco Discharge evidence of washing paint to storm drain behind building. Report of Washing to the Storm Drain	6/9/2009 Verbal Notice
Storm Drain-Washing to Storm Drain	7SPTUA	06/04/2009	SW4 Carpet Cleaning Discharge reported not verified Report of Washing to the Storm Drain	6/8/2009 Verbal Notice
Storm Drain-Dumping to Storm Drain	7SQU32	06/05/2009	SW7 Cement Discharge to landscaping not storm drain. Concrete being dumped over hillside Report of Dumping to the Storm Drain	6/8/2009 Referred for Action Engineering inspections
Storm Drain-Vehicles Leaking Oil/Fluids	7SUSK4	06/09/2009	Resident reports White Rental Truck - (Mira Rental)has been leaking brake fluid for 2 days on the street. Happening right now. Report of leaking oil or fluids Report of leaking oil or fluids	6/10/2009 Notice to Clean
Storm Drain-Vehicles Leaking Oil/Fluids	7SUUDK	06/09/2009	Red Toyota truck with license plate 3Y60262 constantly leaking oil into street and running down into storm drain. Report of leaking oil or fluids	6/12/2009 Informational Letter sent to vehicle owner.

Detailed Issue Report

July 1 2008-June 1, 2009

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain	7SWKYW	06/11/2009	SW29 Complaint Not Found Construction trailer parked in vacant lot dripping plumming liquids Report of Dumping to the Storm Drain	6/11/2009 No issue / No violation
Recycling-Single Stream Request	7SXTCW	06/12/2009	Request/complaint for single stream recycling - large container for glass & plastic as other cities have.	6/15/2009 Request recorded.
Recycling-Single Stream Request	7T2TEX	06/15/2009	Single stream recycling request via Contact Us	6/18/2009 Emailed response to customer.
Storm Drain-Dirt/Debris - Piles	7T2PK7	06/15/2009	SW28 Miscellaneous Incidents Landscaping, piles of dirt in the street Report of possible storm water violation due to dirt or debris piles.	6/17/2009 Verbal Notice
Storm Drain-Dumping to Storm Drain	7T2USL	06/15/2009	SW10 Landscape Material Dumping Reported that landscape company for HOA blows grass clippings into street and leaves them. Report of Dumping to the Storm Drain	6/19/2009 No issue / No violation
Storm Drain-Washing to Storm Drain	7T2NMS	06/15/2009	SW28 Miscellaneous Incidents Report of Orange water coming out of a 6" pipe. on investigation rust colored deposites from groundwater no pipes in area. Report of Washing to the Storm Drain	6/15/2009 No issue / No violation
Storm Drain-Washing to Storm Drain	7T3RLF	06/16/2009	SW27 Allowable Discharge Groundwater discharg-appears to be flowing continuously Report of Washing to the Storm Drain	6/17/2009 No issue / No violation
Storm Drain-Washing to Storm Drain	7T4RGZ	06/17/2009	POWER WASHING Report of Washing to the Storm Drain	6/18/2009 Verbal Notice. Addressed the issue and properly utilized BMPs.
Storm Drain-Dumping to Storm Drain	7T5UKY	06/18/2009	Pouring cement and running to storm drain Report of Dumping to the Storm Drain	6/19/2009 Notice of Violation
Storm Drain-Washing to Storm Drain	7T9MSD	06/22/2009	Draining pool - water tested - chlorine level high Report of Washing to the Storm Drain	6/22/2009 Verbal Notice
Storm Drain-Washing to Storm Drain	7TBTSM	06/24/2009	SW8 Paint / Stucco Discharge White paint going down gutter to storm drain Report of Washing to the Storm Drain	6/25/2009 Verbal Notice

Detailed Issue Report

July 1 2008-June 1, 2009

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain-Dumping to Storm Drain	7TDP7A	06/26/2009	Report of Dumping to the Storm Drain - Four inch blue pipe draining swimming pool from resident's back yard. Pipe runs down the driveway and into the gutter line where it is discharging the pool water.	6/26/2009 Previous No issue / No violation
Storm Drain-Washing to Storm Drain	7TGVNS	06/29/2009	SW1 Surface Cleaning Report that resident wash driveway after vehicle fire. Report of Washing to the Storm Drain	6/29/2009 Verbal Notice
Storm Drain-Dumping to Storm Drain	7THSGS	06/30/2009	New neighbors have been draining waste into storm drain - water runs off the way down Porta Place nad the water turns on Porta Lotta and exits by two canals. They just built a pool so it's not a pool draining. Report of Dumping to the Storm Drain	7/7/2009 Gutterline sufficiently cleaned.
Storm Drain-Dumping to Storm Drain	7THUZ8	06/30/2009	SW28 Miscellaneous Incidents Report that day laborers that hang out in parking lot use drainage channel behind nursery as a restroom. Report of Dumping to the Storm Drain	7/2/2009 Referred for Action (Code Enforcement)

City of Carlsbad
Municipal Separate Storm Sewer System (MS4) with Urban Runoff Monitoring Program Stations

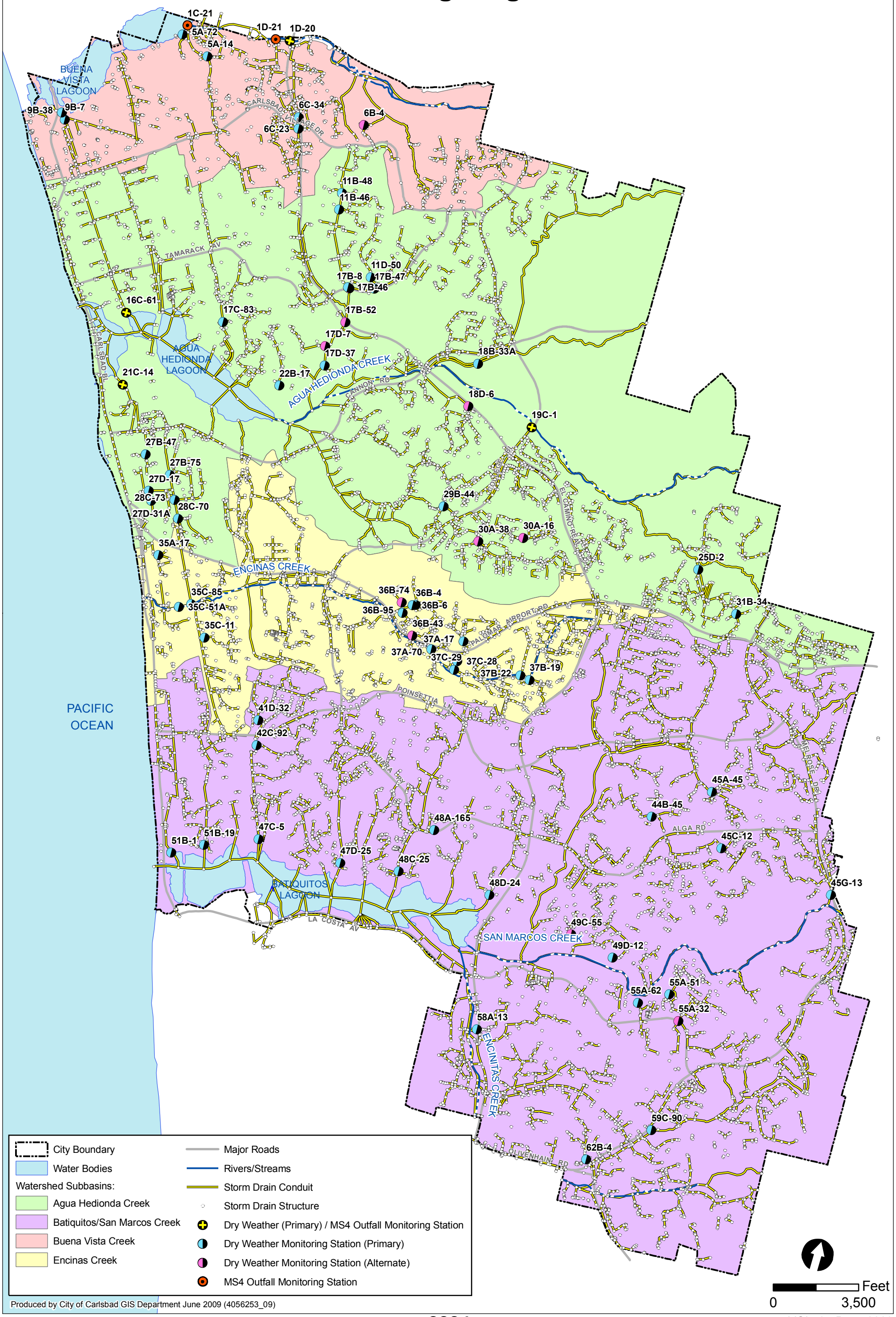

Produced by City of Carlsbad GIS Department June 2009 (4056253_09)

Jurisdictional Urban Runoff Management Program Annual Report

Section 7 - IDDE

July 1, 2009 – June 30, 2010

Signed Certification Statement

City of Carlsbad

Jurisdictional Urban Runoff Management Plan

IDDE Section of the Annual Report for July 1, 2009 – June 30, 2010

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David Hauser
Name (printed)

Signature

Director, Property and Environmental Management
Title

12/9/10
Date

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City continued to conduct a proactive program for detecting and eliminating illegal discharges and illicit connections into the MS4. This section describes the activities of the City with respect to implementation of the Illicit Discharge Detection and Elimination Component of the JURMP for FY 2009-10, including the following:

- Actively identified and eliminated illicit discharges and connections by conducting illegal discharge investigations
- Responded to spills and sewage overflows
- Conducted monitoring
- Performed routine cleaning and maintenance activities on the sewer and storm drain systems
- Continued operation of a storm water hotline and complaint response
- Provided 24 hour spill response for wastewater and storm drain emergencies
- Updated the Dry Weather Program Stations
- Conducted the MS4 Monitoring Program

The Dry Weather Monitoring Program was performed during the permit defined dry season (May 1 – September 30, 2010) and all information pertaining to this program is reported for this date range.

7.2 Public Reporting of Illicit Discharges and Connections

The City continued to promote and facilitate public reporting of illicit discharges and water quality impacts. Methods to promote and facilitate public reporting include the following:

- Brochures and Publications
- Outreach events
- The City's Website for both outgoing information and incoming requests from the public
- Internal training
- Operation of a Storm Water Hotline
- Operation of an Environmental Programs Hotline
- Operation of a Storm Water email account

All outreach methods utilized are described in detail in Sections 8.0 and 9.0, the Education and Public Participation Sections of the previously submitted report.

The City operated a Storm Water Hotline and email account; storm water staff answered the storm water hotline and checked email to the storm water account during regular office hours, 8 am to 5 pm, Monday through Friday. After office hours calls to the hotline were directed to voicemail or to an after hour duty phone in the case of emergency. The message provided information in English and Spanish. Figure 7.1 illustrates the types of storm water related complaints received in FY 2009-10.

In FY 2009-10 there were 178 storm water related complaints received, 99 of which were via the hotline. Compared to previous reporting periods, call volume decreased marginally. In FY 2008-09, there were 195 storm water related calls and 226 in FY 2007-08. Figure 7.2 illustrates FY 2009-10 storm water

complaints by reporting mechanism, including SW Hotline, phone, field discovery, web, email or walk-in. Figure 7.3 illustrates the storm water complaints by reporting party, including SW Inspector, City Staff, Outside Agency, Public or other. Most of the 178 storm water related complaints in FY 2009-10 were related to washing or dumping to the storm drain.

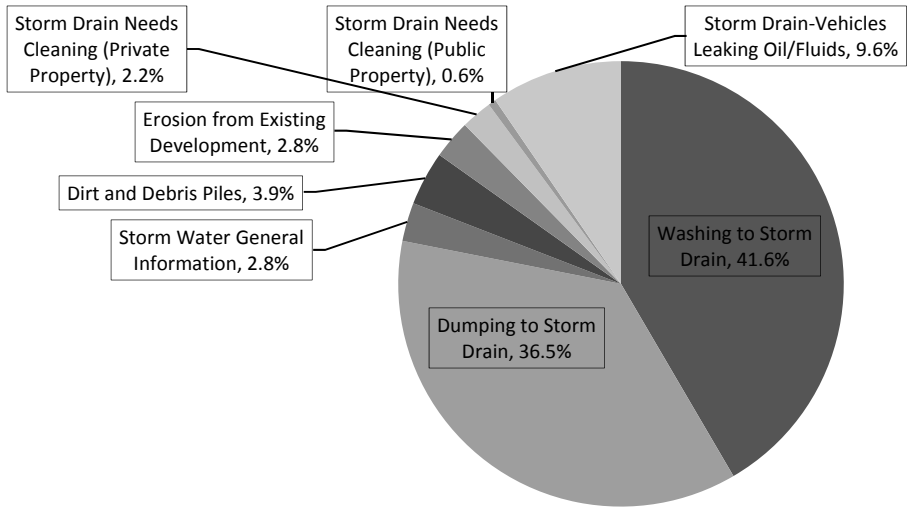

Figure 7.1 Storm Water Complaints FY 2009-10

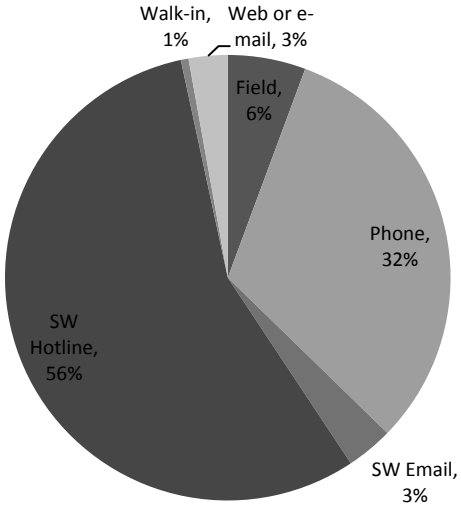

Figure 7.2 Storm Water Complaints by Reporting Mechanism FY 2009-10

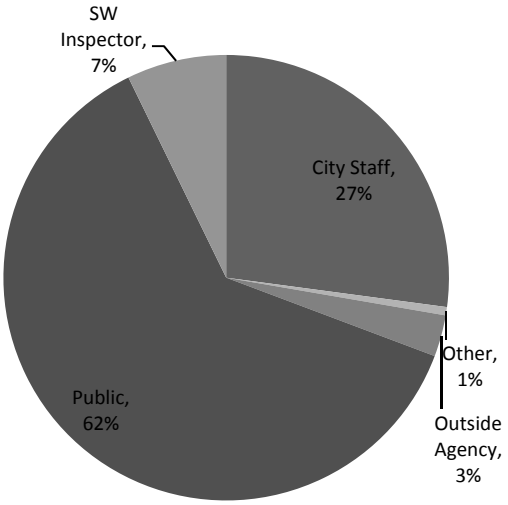

Figure 7.3 Storm Water Complaints by Reporting Party FY 2009-10 *

*Data was only collected for 166 of the 178 complaints.

7.3 Spill Reporting, Response, and Prevention

Spill Response

City employees are trained to follow the City's Sewer Overflow Prevention Plan/Response Plan. Staff training was conducted semi-annually, either by tailgate or all-hands class format. All spill response incidents were tracked in the Hansen system or in spill reports. Sanitary sewage overflow responses were documented as required on the Sanitary Sewer Overflow Report Form, which was sent via email to the Regional Board, County Health Department, and the Storm Water Protection Program. During this reporting period of July 1, 2009 to June 30, 2010, the City responded to 6 sewage overflows or spills of approximately 4697 gallons, 98% of which was recovered. The overflow reports are found in Appendix 7.1.

The City Utilities Maintenance and Operations Division (M&O) continued to respond and coordinate sewage spill response with the Leucadia Waste Water District (LWWD) and Vallecitos Water District (VWD) for spills that occurred outside the M&O jurisdiction. During normal business hours, calls were dispatched by M&O to field units for immediate response and evaluation. After working hours, phone numbers were routed through police dispatch to M&O standby personnel.

A portion of the LWWD collection system is located within the City limits. LWWD is responsible for operating and maintaining their system, including responding to overflows and spills. However, M&O responds or provides assistance when requested. During this reporting period, LWWD responded to five sewage overflows in Carlsbad.

A portion of the VWD sewage collection system is also located within the City limits. VWD is responsible for operating and maintaining their system, including responding to overflows and spills. However, M&O responds or provides assistance when requested. During this reporting period, Vallecitos Water District reported one public and one private sewage overflow in the City of Carlsbad.

The City continued to actively prevent and respond to sewage spills and other spills, and to limit discharges from the sanitary sewer system to the MS4. This occurred through public education and outreach, inspections, preventive maintenance, complaint response, and spill response (containment and remediation). The City operated 283.5 miles of sewer mains, and City staff maintained 253 miles of 12" and under sewer mains. Large sewer trunk mains are maintained by both City staff and contract work. City staff maintained 15 sewer pump stations.

The City maintains 10 Smart Covers to monitor flow levels in problem sewer manholes. Smart Cover alarms saved the City from one spill during this reporting period. The city also keeps one lid on standby for special situations. The City also participates in a joint project with Encina Wastewater Authority and using ADS Intelliserve flow monitoring systems to monitor sanitation flow rates 24 hours a day at selected areas.

Table 7.1 contains a summary of information associated with miles of sewer mains and spills.

Table 7.1 Summary

Time Period	Number of Reportable Spills[1]	Reportable Gallons Spilled	Total Miles of Sewer Mains
July 1, 2009 – June 30, 2010	6	4697	283.5

[1] Includes all spills caused by a failure in the sewer system (excludes recycled water spills and/or spills from sewer laterals).

The following inspection and preventive maintenance activities were conducted during this reporting period.

Inspections

Fifteen lift stations are inspected at least twice a week. The 10 largest pump stations were also inspected on Saturdays and Sundays. The operator inspected the electrical systems quarterly and the pumps and shafts were serviced annually. In addition, outside services were contracted to inspect the electrical services annually. The wet wells were cleaned every six weeks or more frequently if necessary.

Eleven pump stations are equipped with telemetry which was inspected daily. This included checking the 24-hour history records, pump gallons per minute, wet well on-off cycles and pump alternating cycles. The City conducted most pump repair work; although any needed machine work was performed by outside services. In the case of emergencies, the City has a 24-hour duty person, and cell phones were issued to each member of the Wastewater Operations staff, and Supervisor. In the case of power failures, 10 of the stations have onsite generators and three stations can be powered by the City's two trailer mounted generators. The remaining station has 24 hours of storage capacity and can be maintained by a vacuum or pumper truck.

Education

Educating the public on the proper disposal of fats, oils and grease is one of the BMPs used to prevent sewage spills. The City continued to distribute the Water Environment Federation brochure entitled "*Fat-Free Sewers.*" These brochures were distributed at various public events and during field visits. Workshops were conducted in FY 2009-10.

The Wastewater Division continued to collaborate with a consultant inspector to conduct site inspections at restaurants in the City's sewer service area. The database was updated and details the type and size of the grease control device at each site. This program was expanded in FY 2009-10 to include follow-up inspections and enforcement as necessary. The Wastewater Division also utilized volunteers to further address FOG Program compliance. Communication in the form of letters and phone calls assisted with obtaining FOG compliance.

Preventive Maintenance

During this reporting period, the City performed routine preventative maintenance and inspections of the sanitary sewer system, which included video inspections, 4,200 manhole inspections, semi-annual inspections of three major trunk lines, and routine cleaning of sewer mains. Regular monitoring of the sewer system was achieved with routine cleaning and manhole inspections. Sewer system surveillance

was conducted on a regular basis. Flow monitoring was performed to compare the flows in dry and wet seasons. Anything unusual was reported and followed up on.

Approximately 284 miles of sewer lines were cleaned from July 1, 2009 to June 30, 2010. The maintenance schedule is designed to provide more frequent cleaning for identified trouble areas, with siphons being cleaned annually, low flow and flat lines cleaned semi-annually, and grease problem areas cleaned quarterly. City staff also performs checks of the Buena Vista Force Main by walking the line from the lift station to I-5 three times per week.

Complaint Response

The Storm Water Protection Program occasionally depends on other City departments to assist with investigations and remediation during field reviews. M&O, the Storm Drain Maintenance Division and Carlsbad Fire Department were key to prompt, effective responses to investigations involving spills and clean ups. Regular meetings and discussions about compliance issues facilitated this interdepartmental coordination effort.

In response to complaints, structural defects or obstructions of pipelines, the Storm Drain Maintenance crews conducted Closed Circuit Television (CCTV) inspections of the storm drain infrastructure. During FY 2009-10, approximately three miles of pipeline was videotaped.

M&O personnel responded to 64 sewer stoppage complaints during this reporting period. These requests and the City's response were tracked electronically in the Accela, Hansen systems, and the CIWQS website. The City responds to all emergencies where sewage has the potential to enter the storm drain system, regardless of whether the sewer stoppage originates from private structures such as private laterals, private lift stations or from the City's sewer system. The data shown in Table 7.1 represents overflows originating from the City's sewer system and does not reflect all sewer stoppage complaints that occurred during the reporting period.

Other Spills

The City's Emergency Services (Fire/Police Departments) continued to respond to reports of hazardous materials spills and discharges in Carlsbad. Fire Department personnel were trained in hazardous material emergency response and identification of hazardous materials and other City departments relied on the Fire Department to assume command during hazardous materials incidents. Emergency services may request assistance from the Streets Department or Storm Drain Maintenance Division (SDMD) to contain discharges that have the potential to endanger life, property, and/or the City right-of-way, control traffic, and provide secondary perimeter boundaries as directed by Emergency Services' staff.

During this reporting period, the City's Spill Response Procedures continued to be used to detail the roles and responsibilities of Emergency Services, Streets Department, M&O, and the Storm Water Protection Program. If Emergency Services was first on the scene of an unidentified spill, and the Incident Commander suspected the substance to be of a hazardous nature, emergency response procedures were implemented. Incident Commanders retained a copy of the Department of Transportation's "*Emergency Response Guidebook*" which lists classifications of hazardous materials and recommendations for handling materials.

The San Diego County DEH HIRT, through a Joint Powers Agreement, was involved in any significant spills of a hazardous nature. The County maintains these records, as does the State OES. Minor petroleum or other small spills on City streets were handled by the Streets Department or SDMD using absorbents, sweeping, and proper waste disposal. These cleanup requests were documented in the City's RFA or work order systems. During this reporting period, there were 14 other spills (non-sewage related) in Carlsbad.

PREVENTION MEASURES OF SEWAGE INTRUSION INTO MS4

The City of Carlsbad's Engineering Standards have several measures to prevent sewage intrusion into municipal separate storm sewer systems (MS4).

1. All gravity sewer pipes and laterals are required to have gasketed joints, which create water tight joints (Volume 1, Chapter 6, Item 3.A, 3.C, and 3.F). The water tight joints are tested using the methods indicated in Standard Specifications for Public Works Construction (SSPWC) section 306-1.4. The water tight test methods include a post-installation closed circuit television (CCTV) inspection and an air pressure test where the sewer line must sustain 2.5 to 3.5 psi gage pressure for at least two minutes after being pressurized to 3.0 psi.

2. All gravity sewer lines are required to follow engineering standard for the amount of flow they can carry. During peak hour dry weather season the pipe shall be designed to carry a flow depth of 0.5 (or 0.75 depending on the pipe size) the diameter of the pipe (Volume 1, Chapter 6, Item 4.C). This design requirement prevents the pipe from becoming full, which would pressurize the pipe and potentially cause a leak.

3. Per Carlsbad's Engineering Standard GS-6 and GS-6A, the sewer lines are typically located at an elevation deeper than the storm drain line, which further prevents sewage intrusion into MS4. In the event of a sewage pipe leak, the leakage flow will naturally gravitate below the sewer line rather than up to the storm drain line.

4. The standard horizontal separation between sewer and storm drain is 13 feet, which further prevents sewage intrusion into MS4.

5. In special cases where storm drain lines are installed at a depth greater than that of sewer lines, additional design standards are required such as water tight joints or encasements (Volume 1, Chapter 5, Item 1.G).

Preventative maintenance of the sanitary sewer system, as described above is also effective at preventing infiltration from sanitary sewer lines into the MS4. Continued preventative maintenance prevents exfiltration of sewer water from the pipelines by ensuring that flow is maintained in the system and pressure does not build up causing water to leave the system.

In the storm drain system, ammonia test kits are utilized as part of the dry weather program, primarily to test for the presence of sewage. These tests are taken once per year at various points strategically placed throughout the MS4 to provide adequate coverage. Exceedances for ammonia may trigger source investigations, which may detect sewage infiltration, if present. The City's maintenance program also includes Closed Circuit Television (CCTV) inspections of the sewer system. During FY 2009-10, 59.3 miles of sewer pipelines were inspected.

7.4 Urban Runoff Monitoring

Dry Weather Monitoring

The Dry Weather Monitoring Program was implemented between May 1 and September 30, 2010. The program was designed to detect and eliminate illicit connections and illegal discharges to the MS4. This was accomplished by performing field screening at all monitoring locations and performing analytical monitoring at 25% of the locations. This program included monitoring at up to 60 MS4 locations throughout the City. The program continued an assessment for trash at each location, as required per Order No. R9-2007-0001.

All results and investigations are included under separate cover in the City's Dry Weather Monitoring Report for 2010. This report includes the Dry Weather Field Screening and Analytical Monitoring Map.

Water quality at almost 60% of sites had no exceedances. The most common field constituent to exceed action levels were ammonia-N. The most common analytical constituents to exceed action levels were bacteria. All follow up activities were performed as required under Order No. R9-2007-0001. Follow-up activities performed after the initial sampling efforts are described in the Dry Weather Report under separate cover. Required follow up actions were taken for all sites where water quality exceeded established action levels as described in the permit.

MS4 Outfall Monitoring

The MS4 Outfall Monitoring Program is part of the Regional Monitoring required in Order No. R9-2007-0001. During the summer of 2010, the monitoring program was performed in accordance with the Final Copermittee MS4 Outfall Monitoring Workplan. This workplan was developed by the Regional Copermittees and was implemented within the region as required. Sites were monitored in all watersheds throughout the County. Monitoring results will be summarized in the County of San Diego Storm Water Monitoring Annual Report, to be submitted in January 2011.

The objective of this monitoring program is to assess MS4 discharge water quality throughout the county and assess the relative contributions to receiving waters within each defined watershed management area.

The monitoring design is based on a combination of random and targeted sampling of MS4 outfalls in each watershed. Random sampling will be conducted to assess countywide conditions of MS4 outfall water quality. Targeted sampling will be conducted to assess the relative contribution of particular MS4 outfalls to receiving waters.

A detailed description of the program was submitted to the Regional Board prior to July 1, 2008 as required by the Order. The description includes monitoring locations, frequencies, analytes, sampling and analysis methods, procedures, and reporting strategies.

Targeted samples were collected by the individual jurisdictions, independent of the regional group. The targeted approach includes six locations within the City of Carlsbad. These locations were selected based on criteria developed in the Regional Monitoring Workgroup. Table 7.2 lists the targeted locations, hydrologic area, and analytes to be monitored for the program.

Table 7.2 Targeted monitoring locations

Site ID	Hydrologic Area	Analytes
1D-21	904.2	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
1D-20	904.2	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
1C-21	904.2	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
16C-61	904.3	Bacteria, TSS
21C-14	904.3	Bacteria, TSS, Total Nitrogen-N, Total Phosphate-P
19C-1	904.3	Bacteria, TDS, TSS, Manganese, Selenium, Sulfates

In 2010, MS4 Outfall sampling took place concurrently with the City of Carlsbad Dry Weather Monitoring Program. The goal of the MS4 Outfall Monitoring Program is to assess the quality of urban runoff at the targeted monitoring locations for high priority pollutants and over time, assess trends in the results to prioritize future monitoring efforts. Results will be summarized and submitted to the County of San Diego to be included in the Regional Monitoring Report submitted by the County of San Diego each year.

Coastal Storm Drain Monitoring

As required under the Permit, the City monitored storm drains discharging to coastal waters. In FY 2009-10 the City continued to use engineering asset IDs for the Coastal Storm Drain Monitoring Program, which creates a consistent labeling system across all monitoring programs. Table 7.3 summarizes the City Coastal Storm Drain Monitoring activities during FY 2009-10.

Table 7.3 Coastal Storm Drain Monitoring

Ocean Outfalls Monitored	Frequency	Total Site Visits	Routine Samples Collected		Sites With Exceedances	
			Pairs	Singles	Storm Drain	Receiving Water
8	Monthly	96	0	6	1	0

Results from this year of monitoring show that most of the sites do not have sufficient flow to sample the majority of the time during dry weather. In FY 2009-10, 96 routine site visits were made and samples were collected on six of the visits, or only 6% of the time. All six samples were taken at the same outfall. Upstream investigations are performed at the time of sampling. During these six site visits, the storm drain flow did not reach the receiving water; therefore samples were only collected from the storm drain. Of the six monitoring events where samples were collected, five of the initial samples had exceedances of water quality criteria in the storm drain sample. During the upstream investigation, the flow was traced to one business. The City worked with this business over several months to verify there were no illegal connections or unknown sources of flow entering the system. The City also required the business to clean and tv their private lines. The City continues to work with this

business to ensure BMPs are used properly and no non-exempt discharges entered the MS4 from their activities.

All data collected and a full analysis of the Coastal Storm Drain Monitoring Program will be submitted in the San Diego County Storm Water Quality Monitoring Annual Report to be submitted in January 2011.

7.5 Follow-up and Enforcement

The City used one or any combination of education, inspections, complaint response or enforcement to achieve compliance. The ultimate goal is to eliminate the discharge or connection and to prevent future occurrences.

In FY 2009-10 the Storm Water Protection Program received 178 complaints of potential illegal discharges. As illustrated in Figure 7.1, 78% of the complaints involved alleged washing or dumping to the storm drain, totaling 139 of the 178 complaints. All reports were investigated, however not all reports of washing or dumping to the storm drain were illicit discharges. Of the 178 storm water related complaints, there were 46 illicit discharges and one illicit connection discovered. Table 7.4 provides a breakdown of illicit discharges and connections by source component. All 46 illicit discharges identified were eliminated as required. There was one illicit connection identified and eliminated.

Table 7.4 Illicit Discharges and Connections

Source Component	Number of Illicit Discharges	Number of Illicit Connections
Industrial/Commercial	10	1
Mobile Source	19	0
Residential	17	0
Municipal	0	0
Unknown	0	0
Total	**46**	**1**

All complaints were addressed according to the City's Enforcement Procedures as described in the 2008 JURMP, Section 2.4. In utilizing this escalating enforcement process, all illicit discharges and illicit connections were eliminated. Table 7.5 and Table 7.6 summarize the enforcement actions taken to eliminate illicit discharges and illicit connections. Ten illicit discharges were "referred for action" because the responsible party could not be found, or the issue was under the jurisdiction of another department. A complete summary of the storm water related complaints is provided in Appendix 7.2.

Table 7.5 Enforcement Action Related to Illicit Discharges

Enforcement Action	Number	Percentage
Verbal Warning	15	33%
Informational Letter	12	26%
Written Warning	4	9%
Notice of Violation	12	26%
Administrative Citation	1	2%
Notice to Clean	0	0%
Referred for Action	2	4%
Total	**46**	**100%**

Table 7.6 Enforcement Actions Related to Illicit Connections

Enforcement Action	Number	Percent
Written Warning	1	100

7.6 Effectiveness Assessment

Level 1: Compliance with Activity Based Permit Requirements

Overall, the City is compliant with activity based permit requirements.

- The City implemented a program to actively seek and eliminate illicit discharges and connections to the MS4: As described above in Sections 7.1-7.5.

- The City continued to verify the accuracy of its MS4 map and update it at least annually: The accuracy of the City's MS4 map is verified continually by field staff and updated with new information or as existing information is updated. A 2010 MS4 map is provided in Appendix 7.3.

- The City performed Dry Weather Screening and Analytical Monitoring: The City conducted a Dry Weather Monitoring Program monitoring 60 locations throughout the drainage area in the City. The Dry Weather Report for 2010 is included under separate cover with this submission.

- Investigations and follow-up actions were performed in accordance with the Permit: Indications of illicit discharges and/or connections to the MS4 were investigated and followed up accordingly. Follow-up investigations to dry weather field screening exceedances were usually performed immediately and always began within two business days of the field screening. Any results of analytical parameters were investigated within two business days of receipt of results from the laboratory.

- All illicit discharges and connections were investigated and eliminated.

- The City implemented and enforced the City's ordinances to prevent or eliminate illicit discharges and connections to the MS4: The City implemented an escalating enforcement process as described in its 2008 JURMP, Section 2. Enforcement actions related to illicit discharges are described above in Table 7.5.

- The City prevented and responded to sewage spills, including from private laterals and failing septic systems, and other spills: The City responded to all reported spills as described above in Section 7.3.

- The City facilitated public reporting of illicit discharges and connections via a public hotline: A storm water hotline was staffed year round. Complaints received via the storm water hotline are summarized above in Section 7.2.

Overall, the City's IDDE program is compliant with permit requirements.

Level 2: Changes in Knowledge/Awareness

Educational material is distributed in response to nearly all storm water related complaints, whether to residents or businesses within the City. Additionally, educational information is distributed to entire neighborhoods throughout the year, most often in response to complaints or dry weather exceedances. Often, exceedances of nutrient action levels in residential areas will trigger the need for larger scale distribution of outreach materials. These efforts are described in Section 6 of the City's JURMP Annual Report for FY 2009-10, submitted in September 2010. While the City does not currently measure the changes in knowledge, educational materials provide a good source of information to citizens and businesses about the connection between their activities and water quality.

Level 3: Behavioral Change/BMP Implementation

Behavioral changes and BMP implementation are continually obtained through the IDDE program. Over FY 2009-10, 178 storm water related complaints were responded to by City staff. Of these, 78% pertained to illegal dumping or washing. In all cases, the discharges were discontinued immediately. Some of the incidents were one time occurrences, however, many were routine activities performed by the responsible parties. In these cases, through education and enforcement actions, BMPs were implemented and behavioral changes were evident. Follow-up inspections confirmed BMP implementation and behavioral changes.

Level 4: Load Reductions

Load reductions are difficult to estimate in relation to the IDDE program. Estimates of sewage recovered during spills can provide the number of gallons of raw sewage prevented from entering the environment. If correlated with bacteria data, rough estimates of load reductions of bacteria may be generated. Of an estimated 4695 gallons spilled during FY 2009-10 due to municipal infrastructure failure, 4595 gallons were recovered. If a conservative estimate of 1,000,000 cfu/100 ml of fecal coliform is used for raw sewage, a total of > 4.6 trillion colony forming units of fecal coliform were prevented from entering the environment.

Level 5: Changes in Discharge Water Quality

<u>Dry Weather Field Screening and Analytical Monitoring Program</u>

The City has conducted an annual *Dry Weather Field Screening and Analytical Monitoring Program* since 1995. The purpose of the monitoring program is to detect and eliminate illicit connections and illegal discharges to the storm drain system. The Dry Weather Monitoring Program report for 2010 and follow-up activities are provided under separate cover. The following discussions summarize current and past dry weather results in order to assess changes in MS4 water quality, through the 2010 dry weather season.

Since 2002, no exceedances have been measured in water temperature, cadmium, copper, lead or zinc.

Fecal coliform concentrations have generally decreased since 2003, while enterococcus concentrations are slightly higher in recent years. In comparison to dry weather action levels, fecal coliform and enterococcus mean values are well below the established action levels across all years of data. With

many variable factors unaccounted for, it is unclear if the recent results are due to improvements and BMP implementation or to the variable nature of bacteria concentrations.

The average pH levels have also shown a downward trend since 1995, with results generally below action levels.

Ammonia and nitrate concentrations have continued to indicate a decreasing trend. With the exception of 2002, all recent years have averaged well below the established action level for ammonia-nitrogen.

Lower in recent years, all orthophosphate averages are well below established dry weather action levels.

Over the course of the past eight years of dry weather programs, water quality parameters have been repeatedly analyzed at the same sites allowing for a comparison of data. In general, water quality within the MS4 is good, with concentrations of bacteria, nutrients, pH, and surfactants generally decreasing and below Action Levels. Efforts continue to focus on bacteria concentrations in the MS4 and their sources. In the future, increased efforts to understand bacteria concentrations and sources will be made through various TMDL activities. With an enhanced understanding of bacteria, the City will be better prepared to address and abate sources within the watershed.

Coastal Storm Drain Outfall Monitoring Program

The City continued to collect samples from various storm drain outfalls as part of the *Coastal Outfall Monitoring Program*. If water was flowing from a storm drain outfall, samples were collected and analyzed for total coliform, fecal coliform and enterococci. Storm drain sample results were compared to the 95th percentile criteria established in the previous year's annual report for the CSDM Program. As required, a paired receiving water sample would be collected to assess the impacts of the storm drains on the receiving waters. However, the storm drain flows, when present, did not reach the receiving water, therefore only storm drain samples were collected. The receiving water samples were compared to Rec-1 standards to determine exceedances. Where storm drain bacteria concentrations exceeded 95th percentile criteria or receiving water samples exceeded Rec-1 objectives, follow-up sampling and/or investigations were performed.

Recent years indicate a decrease in storm drain exceedances for all three bacterial indicators, showing improvements in outfall water quality. In FY 2009-10 there was only one exceendance. In all cases, the flow from outfalls was non-existent, intermittent, low volume and/or did not actually reach the receiving waters but dissipated into the sand or sediment. The City will continue to conduct the Coastal Outfall Monitoring Program and to conduct follow-up investigations as detailed in the Monitoring Plan per permit requirements.

Level 6: Changes in Receiving Water Quality

It is important to note that receiving water quality reflects considerably more than the quality of the City's MS4 discharges. In addition, receiving water quality can be adversely impacted by other events that are not under the control of the City, such as other permitted NPDES discharges, wildlife (impacting bacteria levels), atmospheric deposition, and other events and activities.

Coastal Outfall Monitoring Program – Receiving Waters

During FY 2009-10 sampling events, storm drain flows did not reach receiving waters and therefore no ocean samples were taken.

Overall, the City has remained in compliance with all permit requirements of the IDDE program. With full program implementation, evidence of knowledge and behavior changes is evident, although difficult to measure. Program implementation also results in immediate load reductions, through complaint response efforts, whether related to urban runoff, sewer overflows, or other spills. It is difficult to quantify these reductions at this time; however, the City will continue to develop assessment measures related to load reductions. Changes in discharge water quality are also evident, most often showing improvements during dry weather. While not fully attributable solely to the IDDE program, implementation of the monitoring programs provides useful data to make this assessment. As more data is collected in discharge waters and in receiving waters, assessments will show a more accurate picture of the changes in water quality and relationships to MS4 programs.

7.7 Notable Activities

As mentioned in the Executive Summary of the previously submitted report, the City considers a notable activity to be any activity above compliance requirements.

Notable activities for FY 2009-10 include:

- Under the CSDM program, there were no storm drain flows that reached the ocean. The City has been successful at decreasing illegal discharges in areas where outfalls discharge directly to the beach during dry weather.
- MS4 water quality continued to follow an overall trend of improvement as seen from the Dry Weather Monitoring Program, the Coastal Storm Drain Monitoring Program and the MS4 Monitoring Program.
- The City maintains ten Smart Covers City-wide, to monitor flow levels in problem sewer manholes.
- The City continued a joint project with Encina Wastewater Authority using ADS Intellliserve flow monitoring systems to monitor sanitation flow rates 24 hours a day at selected areas.

7.8 JURMP Revisions

The City's 2008 JURMP was developed in response to the issuance of Order No. R9-2007-0001. The City began implementing the 2008 JURMP on March 24, 2008 as required under the new permit. Section 14 of the previously submitted FY 2009-10 Annual Report summarizes revisions to the City's JURMP.

No changes were made to the IDDE Section of the JURMP.

Sanitary Sewer Overflows
July 1, 2009 - June 30, 2010

Date	Source	Substance	Volume	Enter MS4?	Enter RW?	Response
06/28/2010	Lateral	Sewage	20	Yes	No	Set up vacuum at downstream catch basin. Washed down public right-of-way areas. Large amount of additional roadside debris caused greater wash down and vacuum requirement.
05/06/2010	Lateral	Sewage	100	No	No	Contacted property owner to call plumber, renter left and water was turned off to assure no more sewer spill.
01/26/2010	Lateral	Sewage	20	No	No	Unknown blockage in private sewer lateral clean out in driveway. City stopped spill in curb line in front of residence, captured and cleaned area with 30 gals fresh water, remained monitoring spill until plumber cleared stoppage.
04/28/2010	Lateral	Sewage	300	Yes	No	Turned off building water to control spill, then captured all spill. Notified Via Sat of reoccurring issue and to call plumber.
03/11/2010	Public Main/Lateral	Sewage	40	No	No	Cleared stoppage, CCTV main to determine root blockage, ran main several times, called flood service for residence, cleaned private yard spill area.
02/22/2010	Public Manhole	Sewage	1000	Yes	Yes	Cleaned up public right-of-way areas affected by spill.
01/31/2010	Lateral	Sewage	5	No	No	Private lateral cleanout in residents garage backed up due to roots. Created dam in street and washed down public right-of-way and vacuumed.
01/29/2010	Lateral	Sewage	10	Yes	No	Private sewer lateral cleanout on private property, resident washed spill into street. Spill contained in storm drain catch basin. Crew created dam at catch basin entrance, clean public right-of-way and catch basin.
01/22/2010	Public Main/Lateral	Sewage	2	No	No	Contained very small spill to driveway, wash down and vacuumed spill area. City had developer install diversion manholes upstream to lower volume of wastewater flowing through this neighborhood.
01/21/2010	Lateral	Sewage	50	Yes	Yes	Attempted to dam spill flow, but heavy rains washed spill over and around dams. Clean sidewalk area and vacummed a small amount of debris.
01/07/2010	Lateral	Sewage	25	No	No	Ran sewer main, clear. Notified property of City policy and told owner to call plumber.
12/29/2009	Public Main/Lateral	Sewage	80	No	No	Cleared sewer line and restored flow. And recoverd all waste water and washed down street and back yard.
11/26/2009	Lateral	Sewage	500	Yes	Yes	Vacuumed at overflow cleanout until plumber cleared blockage. Created dams near storm drain catch basin to stop flow into storm drain. Began street/public right-of-way clean up. Created dam in tributary, vacuumed and flushed storm drain.
11/18/2009	Public Manhole	Sewage	75	Yes	No	Crew went to site with two Vactors; one to clear stoppage and one to capture spill. Will return to CCTV and locate storm drain outfall.
10/29/2009	Private Manhole	Sewage	100	Yes	No	Property manager notified to call sewer service company to clear blockage, wash and surface area, storm drain system affected and vacuum all debris and wash down.
10/06/2009	Lateral	Sewage	5	No	No	City crew created dirt dam to capture spill and wash water at north end of block. All debris and wash water captured.
09/29/2009	Public Manhole	Sewage	3500	No	No	Containment set in place, lift stations diverted, debris removed from manhole
09/25/2009	Lateral	Sewage	20	No	No	City Crew Responed And Contained Spill Maint-Man Responded And Clean Up Area.
09/15/2009	Lateral	Sewage	3	No	No	Owner notified to stop water usage, crew ran sewer main - clear. Owner called plumber.
08/31/2009	Lateral	Sewage	75	Yes	No	Crew set up vacuum at private cleanout to capture spill, backup crews followed storm drain system to locate the travel of sewage and mitigated spill prior to creek discharge.

*These spills were from the City of Carlsbad maintained sewer main.

Detailed Issue Report

July 1 2009-June 1, 2010

Appendix 7.2

Issue Type	RFA Number	Date Opened	Issue Description	Action History - Closed Action
Storm Drain- Dumping to Storm Drain	7TKRTD	07/02/2009	Allowable Discharge;water running down storm drain groundwater	7/2/2009 No issue / No violation
Storm Drain- Dumping to Storm Drain	7TQPZY	07/07/2009	Pool / Spa / Fountain Discharge; Emptying pool; water tested - high chlorine content	7/8/2009 No issue / No violation
Storm Drain- Dumping to Storm Drain	7TWNZQ	07/13/2009	Pool unattended - black from lacking of cleaning - mosiquitos	7/14/2009 Referral for Enforcement SD County Vector Control.
Storm Drain - Vehicles Leaking Oil/Fluids	7TWLKT	07/13/2009	Vehicle and equipment leaking Blue SUV Leaking Oil in street	7/20/2009 Informational Letter
Storm Drain- Dumping to Storm Drain	7TYMKX	07/15/2009	Miscellaneous Incidents Cigarette buts on ground	8/26/2009 Informational Letter
Storm Drain-Dirt/Debris - Piles	7TZPN5	07/16/2009	Miscellaneous Incidents Trash and debris stored outside and uncovered comm/ind no ID	7/30/2009 Follow-up in Permits Plus
Storm Drain- Dumping to Storm Drain	7TZPMZ	07/16/2009	Paint / Stucco Discharge Popcorn ceiling residue in gutter and storm drain after being scraped from home at above address over weekend.	7/30/2009 Notice of Violation
Storm Drain- Dumping to Storm Drain	7U6K8Y	07/21/2009	Complaint Not Found	7/21/2009 Complaint Not Found
Storm Drain- Dumping to Storm Drain	7U8ULL	07/23/2009	Pool / Spa / Fountain Discharge	11/30/2009 Verbal Notice
Storm Drain - Vehicles Leaking Oil/Fluids	7UDVZN	07/28/2009	Vehicle and equipment leaking Car continually leaking oil.	8/6/2009 Referral for Enforcement
Storm Drain - Vehicles Leaking Oil/Fluids	7UDVZN	07/28/2009	Vehicle and equipment leaking Car continually leaking oil.	4/30/2010 Informational Letter
Storm Drain - Vehicles Leaking Oil/Fluids	7UFN7M	07/30/2009	Vehicle Washing Mobile washer washing car and water running to storm drain.	7/30/2009 Informational Letter
Storm Drain - Washing to Storm Drain	7UKSUY	08/03/2009	Miscellaneous Incidents Mobile Washer Detailing interior of vehicle in ROW no ID observed	8/3/2009 No issue / No violation
Storm Drain - Washing to Storm Drain	7ULSG2	08/04/2009	Surface Cleaning	8/4/2009 Follow-up in Permits Plus
Storm Drain - Washing to Storm Drain	7UPQ4X	08/07/2009	Vehicle Washing Mobile Detailing	8/7/2009 Informational Letter

Storm Drain - Washing to Storm Drain	7USKEP	08/10/2009	Surface Cleaning; Pressure washing into street.	11/6/2009 Verbal Notice
Storm Drain - Washing to Storm Drain	7USKEP	08/10/2009	Surface Cleaning Pressure washing into street.	12/21/2009 No issue / No violation
Storm Drain - Washing to Storm Drain	7USKEP	08/10/2009	Surface Cleaning Pressure washing into street.	8/10/2009 Verbal Notice added to Inv
Storm Drain- Dumping to Storm Drain	7UTSVD	08/11/2009	Tracking Soil Dirt Driveway Alleged Soil Tracking not verifiedn	10/13/2009 Verbal Notice
Storm Drain - Washing to Storm Drain	7UTN8W	08/11/2009	Surface Cleaning Power washing sidewalks	8/11/2009 Notice to Clean
Storm Drain- Dumping to Storm Drain	7UUSR4	08/12/2009	Saw Cutting Slurry Resident saw cutting ID observed	8/20/2009 Verbal Notice
Storm Water - General Information/Questions	7UUKDV	08/12/2009	Is it allowed to power wash his underground garage?	8/12/2009 Question Answered
Storm Drain - Washing to Storm Drain	7UVPS3	08/13/2009	Vehicle Washing Mobile Detailer in business park no ID observed	8/13/2009 Verbal Notice
Storm Drain - Washing to Storm Drain	7UVQLC	08/13/2009	Surface Cleaning Mobile Business in business park window cleaning;no ID observed	8/14/2009 No issue / No violation
Storm Drain- Dumping to Storm Drain	7UZN3Z	08/17/2009	Draining Swimming Pool	8/17/2009 Verbal Notice/Information Letter
Storm Drain- Dumping to Storm Drain	7UZTD6	08/17/2009	Planes being detailed at Jet Source at Palomar Airport	8/17/2009 Closed-activities did not impact storm drain. Misinformation from original complaint.
Storm Drain- Dumping to Storm Drain	7UZNZW	08/17/2009	Illicit Connection	11/2/2009 Follow-up in Permits Plus
Storm Drain - Washing to Storm Drain	7UZKUB	08/17/2009	Paint / Stucco Discharge Washing white residue from home across sidewalk and into storm drain	8/18/2009 Notice to Clean
Storm Drain- Dumping to Storm Drain	7V2NX9	08/18/2009	Complaint Not Found Motor home was parked overnight and resident saw them dumping something into the street before they left.	8/18/2009 No issue / No violation
Storm Drain- Dumping to Storm Drain	7V4PCV	08/20/2009	Carpet Cleaning Discharge Carpet cleaner dumped materials into the storm drain	8/20/2009 Informational Letter
Storm Drain- Dumping to Storm Drain	7V5MFY	08/21/2009	Paint / Stucco Discharge Paint is running down fthe storm drian.	8/24/2009 Notice to Clean

Storm Drain- Dumping to Storm Drain	7V9SGG	08/25/2009	Water Line Break Resident reports clear water is running all day down Tamarack Avenue (Heading West)	8/25/2009 Referred for Action
Storm Water - General Information/Questions	7V9TRX	08/25/2009	Was told a year or so ago by a City employee that he could not pressure wash his parking lot at his business and could get a □10,000.00 fine. Wants to know if this is true and if so where can he see it in writing.	8/31/2009 Spoke with caller and answered all applicable questions.
Storm Drain - Washing to Storm Drain	7V9M59	08/25/2009	Complaint Not Found Request for handicap parking space on street - recent car bombings on street - chemicals from fire down dfrain?	8/26/2009 No issue / No violation
Storm Drain - Washing to Storm Drain	7V9M2A	08/25/2009	Saw Cutting Slurry White/Grey Residue ID to SD from commercial property busisness owner conducting tennant inprovement	8/28/2009 Verbal Notice
Storm Drain - Washing to Storm Drain	7VASST	08/26/2009	Saw Cutting Slurry White sediment in the parking lot	8/31/2009 Notice to Clean
Storm Drain- Dumping to Storm Drain	7VBS7P	08/27/2009	Pool / Spa / Fountain Discharge Report of water flowing from a curb drain into the storm drain	8/27/2009 No issue / No violation
Storm Drain - Washing to Storm Drain	7VBPNF	08/27/2009	Complaint Not Found Power washing driveway□	8/27/2009 Complaint Not Found
Storm Drain - Washing to Storm Drain	7VCMAT	08/28/2009	Vehicle Washing Report that Mobile detailer regularly discharges to various storm drains in Carlsbad. no ID observed	8/28/2009 Complaint Not Found
Storm Drain- Dumping to Storm Drain	7VGVJE	09/01/2009	Pool / Spa / Fountain Discharge No ID observed resident emptied pool into storm drain.	9/3/2009 No issue / No violation
Storm Drain - Washing to Storm Drain	7VGNYJ	09/01/2009	Allowable Discharge No ID Residential Vehicle Washing	9/2/2009 No issue / No violation
Storm Drain- Dumping to Storm Drain	7VJRST	09/03/2009	Anti Freeze is pooling in the curb near this address.	9/3/2009 No issue / No violation - Proper BMPs in place. No discharge to street or storm drain.

Storm Drain- Dumping to Storm Drain	7VJSG8	09/03/2009	Anti freeze pooling in front of curb dumping to storm drain.	9/3/2009 Duplicate..see RFAV-7VJRST
Storm Drain- Dumping to Storm Drain	7VJMMR	09/03/2009	Saw Cutting Slurry ID of saw cutting slurry from Mobile Business (Tile Contractor)	9/4/2009 Verbal Notice - RP cleaned street 9/4/09
Storm Drain- Dumping to Storm Drain	7VK259	09/03/2009	RV Waste Discharge ID from Motor home leaking waste on City street	9/9/2009 Notice of Violation
Storm Drain - Washing to Storm Drain	7VJTCB	09/03/2009	Someone at the apt complex is hosing off the trash can area and black water is running into the storm drain in front of 5166 Whitman Way.	9/3/2009 Verbal Notice
Storm Drain - Washing to Storm Drain	7VJVQZ	09/03/2009	Report of Washing to the Storm Drain - unknown green-blue fluid coming from french drain	9/3/2009 Informational Letter
Storm Drain- Dumping to Storm Drain	7VKTUK	09/04/2009	Dumpster Discharge	9/16/2009 Verbal Notice - PM disposed of paint after phone call
Storm Drain - Washing to Storm Drain	7VKS5J	09/04/2009	Vehicle Washing	9/4/2009 Verbal Notice
Storm Drain- Dumping to Storm Drain	7VPKUL	09/08/2009	Miscellaneous Incidents Outdoor shower and alleged vehicle washing.	9/10/2009 Referred for Action - Outside agency
Storm Drain - Vehicles Leaking Oil/Fluids	7VVN46	09/14/2009	Vehicle and equipment leaking Vehicle leaking oil in street for several months.	9/21/2009 Informational Letter
Storm Drain - Washing to Storm Drain	7VVNJD	09/14/2009	Allowable Discharge Condensation water flowing across concrete. No ID observed	9/15/2009 No issue / No violation
Storm Drain - Washing to Storm Drain	7VVSVD	09/14/2009	SW1 Surface Cleaning Report of Washing to the Storm Drain Power washing surfaces without BMPs	9/14/2009 Verbal Notice
Storm Drain- Dumping to Storm Drain	7VYMKX	09/17/2009	landscapers blowing debris into storm drain	9/17/2009 Follow-up in Permits Plus - added to inventory
Storm Drain- Dumping to Storm Drain	7VZ6CM	09/17/2009	Miscellaneous Incidents No ID observed at residence. Items temporarily kept in swale	10/19/2009 Informational Letter

Storm Drain - Washing to Storm Drain	7VYL4M	09/17/2009	Surface Cleaning Painting, sanding and grinding outside and fumes and dust entering neighbors office bldg. Workers hose down back area to storm drain every evening. Commercial business ID not verified.	9/17/2009 Follow-up in Permits Plus
Storm Drain Needs Cleaning - Private Property	7W4RPR	09/21/2009	SD outfall may require cleaning.	9/22/2009 Referred for Action
Storm Drain - Vehicles Leaking Oil/Fluids	7W5UG5	09/22/2009	Vehicle and equipment leaking Alleged that black truck leaking oil - parked on street everyday around 3 PM. Small oil stain	10/8/2009 Informational Letter
Storm Drain - Washing to Storm Drain	7W5L3G	09/22/2009	Paint in gutter line - from this weekend, children painted it - about 8 foot swath.	9/22/2009 Referred for Action to Streets
Storm Drain - Washing to Storm Drain	7W5PRQ	09/22/2009	Draining pool - chlorine in water	9/22/2009 Verbal Notice
Storm Drain - Washing to Storm Drain	7W6LLC	09/23/2009	Miscellaneous Incidents Grass clippings clogging storm drain. County says no mosquito problem.	12/4/2009 Notice to Clean
Storm Drain- Dumping to Storm Drain	7W7MNF	09/24/2009	SW8 Paint / Stucco Discharge Report of Dumping to the Storm Drain	9/24/2009 Verbal Notice
Storm Drain- Dumping to Storm Drain	7W8NRV	09/25/2009	Miscellaneous Incidents No ID. waste oil (2 gal) left in containers on side of road, City property	9/25/2009 Referred for Action
Storm Drain - Vehicles Leaking Oil/Fluids	7W8T76	09/25/2009	Vehicle and equipment leaking vehicle leaking while parked on city street. ID to street	10/14/2009 Notice of Violation
Storm Drain - Washing to Storm Drain	7WBL4C	09/28/2009	Surface Cleaning Washing windows to storm drain	9/28/2009 Follow-up in Permits Plus
Storm Water - General Information/Questions	7WEVU5	10/01/2009	Sewer overflow from clogged pipes - 9-30-09 Calavera Treatment Facilty off Tamarack and ECR	10/2/2009 Closed. NO further action required.
Storm Drain - Washing to Storm Drain	7WEUGH	10/01/2009	Vehicle Washing Report of Washing to the Storm Drain	10/1/2009 Verbal Notice

Storm Drain- Dumping to Storm Drain	7WFLB4	10/02/2009	Large volume of water continously flowing from curb drains into street and storm drain	10/2/2009 Informational Letter
Storm Drain - Washing to Storm Drain	7WJKVC	10/05/2009	Complaint Not Found Washed car and washed out garage and water ran down street to storm drain. Call came in on 10-3-09.	10/7/2009 Informational Letter
Storm Water - General Information/Questions	7WMV9H	10/08/2009	Info request on draining water heater	10/8/2009 Information given
Storm Drain - Washing to Storm Drain	7WSNLJ	10/13/2009	Concrete being washed out to stormdrain	10/14/2009 No issue / No violation - No concrete activity. Stain in street from groundwater pump-out (allowable discharge).
Storm Drain-Dirt/Debris - Piles	7WUSAE	10/15/2009	Two large dirt piles at the end of College Blvd. On private property	10/15/2009 No issue / No violation Dirt and gravel piles placed on pervious surface sloped away from street.
Storm Drain- Dumping to Storm Drain	7WVTQ2	10/16/2009	Miscellaneous Incidents	12/14/2009 Verbal Notice
Storm Drain - Vehicles Leaking Oil/Fluids	7WVS8X	10/16/2009	Vehicle and equipment leaking Report of leaking oil or fluids White Land Rover leaking oil. Vehicle present from 11pm-7am according to caller.	10/16/2009 Referred for Action SDMC used absorbant and cleaned up fresh oil stain.
Storm Drain - Vehicles Leaking Oil/Fluids	7WVS8X	10/16/2009	Vehicle and equipment leaking White Land Rover leaking oil. Vehicle present from 11pm-7am according to caller.	6/10/2010 Complaint Not Found
Storm Drain - Washing to Storm Drain	7WZVW4	10/20/2009	Pool / Spa / Fountain Discharge	10/20/2009 Complaint Not Found
Storm Drain - Washing to Storm Drain	7X2LSK	10/21/2009	White residue in gutter coming from above address. Happened a couple days ago	10/26/2009 Referred for Action - SDMD
Storm Drain - Vehicles Leaking Oil/Fluids	7X3VZJ	10/22/2009	Vehicle and equipment leaking Green Plymouth Van leaking oil residential street significant staining ID	10/28/2009 Informational Letter

Storm Drain - Washing to Storm Drain	7X4LCB	10/23/2009	Allowable Discharge - emergency fire suppression Vehicle and vegitation fire at Lake Calavera by dam.	10/27/2009 No issue / No violation
Storm Drain- Dumping to Storm Drain	7X7M4Z	10/26/2009	Cement Discharge White substance coming out of drain at above address and running down Tulip to Daisy and then into storm drain. Street is now a mess. Happened on Saturday	10/27/2009 Verbal Notice
Storm Drain- Dumping to Storm Drain	7X8SS3	10/27/2009	Fire Suppresion System Discharge of water from fire suppression system at Cabrillo Power Station	10/27/2009 Follow-up in Permits Plus
Storm Drain- Dumping to Storm Drain	7XAW5M	10/29/2009	Carpet Cleaning Discharge	11/2/2009 Complaint Not Found - No evidence of discharge
Storm Drain - Washing to Storm Drain	7XENFF	11/02/2009	Washing down pump area to storm drain.	11/2/2009 Notice of Violation
Storm Drain Needs Cleaning - Public Property	7XHUHP	11/05/2009	Dumping - Non-hazardous Materials Empty spray paint cans in drainage channel	11/5/2009 Referred for Action
Storm Drain - Washing to Storm Drain	7XHPN2	11/05/2009	Runoff from landscaping drains into street..black water?	12/9/2009 Notice of Violation
Storm Drain - Washing to Storm Drain	7XHPAR	11/05/2009	Cement? residue washed down street....dried now	11/9/2009 Informational Letter
Storm Drain- Dumping to Storm Drain	7XJMGS	11/06/2009	Washing awnings and pouring waste water down storm drain	11/6/2009 Referred for Action - RFAV-7USKEP
Storm Drain- Dumping to Storm Drain	7XMMRP	11/09/2009	Oily substance floating on the water	11/9/2009 No issue / No violation Sheen not caused by oil or petroleum product
Storm Drain-Dirt/Debris - Piles	7XQPVJ	11/12/2009	Blowing leaves off sidewalk into storm drain	12/1/2009 Complaint Not Found
Storm Drain- Dumping to Storm Drain	7XQRQX	11/12/2009	stucco, paint, concrete debris in storm drain.	11/16/2009 Informational Letter Street will be swept tomorrow (Tamarack) and Tuesday Nov. 24 (Adams)
Storm Drain- Dumping to Storm Drain	7XQPTA	11/12/2009	SW26 Accidental Spill dried Blue Paint spill in middle of road . No SW issue referred to streets	11/12/2009 Referred for Action

Storm Drain - Erosion from Existing Development	7Y4QCB	11/24/2009	Yard is all dirt, no bmps, starting to leave the site	12/30/2009 Verbal Notice - Homeowner has installed BMPs at location most likely to discharge sediment.
Storm Drain- Dumping to Storm Drain	7YALX3	11/30/2009	Allowable Discharge Water running from the slope across manhole and into the storm drain. Possible erosion or algae growth associated.	12/2/2009 Referred for Action to Mike Fairbanks
Storm Drain- Dumping to Storm Drain	7YCS7K	12/02/2009	LEFT OVER DEEP FRIED TURKEY REMAINS DOWN STORM DRAIN	12/7/2009 Informational Letter
Storm Drain Needs Cleaning - Private Property	7YCR5Z	12/02/2009	Report of clogged storm drain.	12/4/2009 Complaint Not Found
Storm Drain - Washing to Storm Drain	7YCPHY	12/02/2009	Fire Suppresion System Water coming from westfield shopping center, running across parking lot and going into street and drains.	12/2/2009 Follow-up in Permits Plus
Storm Drain- Dumping to Storm Drain	7YENUU	12/04/2009	Miscellaneous Incidents White material in drainage channel. Appeared to be paint. Unable to find RP SDMD conducted cleanup.	12/4/2009 Referred for Action
Storm Drain- Dumping to Storm Drain	7YLPRG	12/10/2009	Pouring paint in the storm drain	12/10/2009 Notice of Violation
Storm Drain- Dumping to Storm Drain	7YRUM4	12/15/2009	Dumping - Non-hazardous Materials	12/30/2009 Follow-up in Permits Plus
Storm Drain- Dumping to Storm Drain	7YUM6J	12/18/2009	Landscape Material Dumping Leaf blowers blowing derbris into street and all over cars	12/18/2009 No issue / No violation
Storm Drain- Dumping to Storm Drain	7YZUYR	12/23/2009	Dumping - Non-hazardous Materials White material running off hillside behind commercial building into parking area. Possibly construction related.	1/4/2010 Verbal Notice
Storm Drain- Dumping to Storm Drain	7Z6R8V	12/28/2009	Oil & Grease Discharge - Food Facility	1/11/2010 Complaint Not Found
Storm Drain- Dumping to Storm Drain	7ZFN75	01/06/2010	Miscellaneous Incidents Mobile business working near storm drain. No ID observed.	1/7/2010 No issue / No violation
Storm Drain - Washing to Storm Drain	7ZGS8K	01/07/2010	White liquid running down the street in the gutter	1/8/2010 Informational Letter

Storm Drain - Washing to Storm Drain	7ZJ28J	01/08/2010	Vehicle Washing	1/8/2010 Follow-up in Permits Plus
Storm Drain - Washing to Storm Drain	7ZPS7W	01/14/2010	Water constantly running down Porta Pl in gutter. Wants to know reason.	1/14/2010 See RFAV-7THSGS
Storm Drain-Dirt/Debris - Piles	7ZVN77	01/20/2010	Digging and placing dirt on road with no BMP'	1/21/2010 Verbal Notice
Storm Drain-Dirt/Debris - Piles	7ZW2VA	01/20/2010	Bundled tree limbs, etc. in gutter from fallen tree	1/21/2010 Verbal Notice
Storm Drain - Washing to Storm Drain	825RUG	01/28/2010	Pool / Spa / Fountain Discharge Pool being drained with chlorine in it. Could be overflow. 30 parts per million chlorine. Flow has stopped.	1/28/2010 Informational Letter
Storm Drain - Erosion from Existing Development	82GSCV	02/08/2010	Sediment coming off of retaining wall from property into storm drain.	2/8/2010 Informational Letter
Storm Drain - Washing to Storm Drain	82JUJ2	02/10/2010	Landscape Material Dumping compost/fertilizer piled too high on landscaped areas, running off to storm drain	2/16/2010 Informational Letter
Storm Drain - Washing to Storm Drain	82LQEP	02/12/2010	Miscellaneous Incidents White liquid running down curb.	2/12/2010 Notice to Clean.
Storm Drain- Dumping to Storm Drain	82QQEW	02/16/2010	Called on 2/15/10 and left message on hotline. someone did not pick up their dog waste on the sidewalk in front of his home.	2/16/2010 Reason: Resident ended the conversation when they could not get what they had wanted from the city, namely, a crew to come out and clean the sidewalk and a patrol to catch these people.
Storm Drain Needs Cleaning - Private Property	82RSM4	02/17/2010	Water running out of storm drain, not into storm drain.	2/18/2010 Informational Letter
Storm Drain- Dumping to Storm Drain	82TT9B	02/19/2010	Reported that A milky white acidic substance is coming from a hole in the building and running to the cross gutter eating through the gutter.	2/19/2010 No issue / No violation
Storm Drain-Dirt/Debris - Piles	82WR94	02/22/2010	Landscape Material Dumping Small pile (3'x2'x1') of green waste and dirt in driveway. No BMPs	2/25/2010 Informational Letter

Storm Drain- Dumping to Storm Drain	82WQBP	02/22/2010	Man in RV working on engine, engine fluids flowing to out to storm drain/street. Report of Dumping to the Storm Drain	2/22/2010 Notice of Violation
Storm Drain- Dumping to Storm Drain	82XPTY	02/23/2010	Reported Antifreeze dumped to street from car repair in driveway.	2/24/2010 Written Warning
Storm Drain- Dumping to Storm Drain	835SPH	03/01/2010	Carpet cleaner empties his waste water once a week into a storm drain grate at the above addressn	5/7/2010 Complaint Not Found
Storm Drain- Dumping to Storm Drain	835SPH	03/01/2010	Carpet cleaner empties his waste water once a week into a storm drain grate at the above address	3/2/2010 Written Warning
Storm Drain - Washing to Storm Drain	836V2L	03/02/2010	Dumping - Non-hazardous Materials Plaster washed to storm drain	3/4/2010 Notice of Violation
Storm Drain - Washing to Storm Drain	837VWC	03/03/2010	Surface Cleaning Power washing parking area at hotel ID	3/3/2010 Notice of Violation
Storm Drain - Washing to Storm Drain	837VUW	03/03/2010	Vehicle Washing Car Washing - five cars in driveway - SRV Detailing - water running down street	3/4/2010 Notice of Violation
Storm Drain - Washing to Storm Drain	839TU8	03/05/2010	Cement Discharge White residue in gutterline originating from 6723 Barberry. Appears to be concrete slurry.	3/11/2010 Verbal Notice
Storm Drain - Erosion from Existing Development	83CQ3Q	03/08/2010	Miscellaneous Incidents Sediment from private property onto private property. Private SD severly impacted with sediment. No ID observed.	3/18/2010 Verbal Notice
Storm Drain - Erosion from Existing Development	83DVZM	03/09/2010	Tracking Soil Sediment being tracked off of lot behind West Inn, between power plant and I5	3/11/2010 Verbal Notice
Storm Drain- Dumping to Storm Drain	83GSM3	03/12/2010	Paint / Stucco Discharge dried paint in private storm drain	3/18/2010 Follow-up in Permits Plus
Storm Drain - Washing to Storm Drain	83MPEJ	03/17/2010	Accidental Spill dried trail of unk material in driveway leading to SD behind address. Dried in SD	3/22/2010 Informational Letter

Storm Drain- Dumping to Storm Drain	83SNDN	03/22/2010	Paint / Stucco Discharge Id Mobile Business- Paint washed to gutter and down storm drain street and storm drain	3/29/2010 Informational Letter
Storm Drain - Washing to Storm Drain	83TPUK	03/23/2010	Paint / Stucco Discharge ID from Mobile business White paint from landscape drain	3/29/2010 Notice of Violation
Storm Drain- Dumping to Storm Drain	83UU2R	03/24/2010	Report of Dumping to the Storm Drain	3/26/2010 Informational Letter
Storm Drain - Washing to Storm Drain	83UVLV	03/24/2010	Vehicle Washing	3/24/2010 Verbal Notice
Storm Water - General Information/Questions	844NQ3	04/01/2010	Wants to talk to someone regarding their purchase of property at east end of lagoon. What the City can do to help regarding surface waters?	4/6/2010 Information provided over the phone.
Storm Drain - Washing to Storm Drain	848LPW	04/05/2010	Complaint Not Found aleged that Pool was drained into brow ditch from above address on 4-3 at 4:07 PM. Caller states that chemicals are still in the pool water	4/5/2010 Complaint Not Found
Storm Drain - Washing to Storm Drain	849PV2	04/06/2010	Vehicle and equipment leaking Changing oil in autos, oil being washed to storm drain	4/8/2010 Verbal Notice
Storm Drain - Washing to Storm Drain	849SQD	04/06/2010	Surface Cleaning ID mobile Business Power washer - red tile roofs - no BMPs	4/7/2010 Informational Letter
Storm Drain Needs Cleaning - Private Property	84BV2J	04/08/2010	Miscellaneous Incidents Trash in DB 7 owned by State Lands Commission	4/8/2010 Referred for Action - CDF&G
Storm Drain - Washing to Storm Drain	84CNLW	04/09/2010	Cement Discharge Water and concrete in street going to storm drain	4/9/2010 Informational Letter with Minimal BMP sheet and Inspection form
Storm Drain - Vehicles Leaking Oil/Fluids	84FN7R	04/12/2010	Vehicle and equipment leaking Old car parked in driveway - leaking oil - running to gutter	4/15/2010 Informational Letter
Storm Drain - Washing to Storm Drain	84FTTZ	04/12/2010	No issue / No violation Washing RV in driveway and soap running to storm drain.	4/12/2010 No issue / No violation

Storm Drain - Washing to Storm Drain	84FSTJ	04/12/2010	Complaint Not Found alleged Oil running into drainage ditch at north west corner of lot of Floral Trade Center None observed upon inspection	4/12/2010 Follow-up in Permits Plus
Storm Drain - Washing to Storm Drain	84JUZP	04/15/2010	Washing cars in the street - commercial operation	4/16/2010 Complaint Not Found
Storm Drain - Vehicles Leaking Oil/Fluids	84QKD8	04/21/2010	White SUV leaking oil in street	4/22/2010 Informational Letter
Storm Drain- Dumping to Storm Drain	84WSSW	04/27/2010	Landscapers dumping stuff into storm drain and washing brick colored liquid into drain.	4/29/2010 Referred for Action
Storm Drain- Dumping to Storm Drain	84WT2G	04/27/2010	Pool / Spa / Fountain Discharge Emptying pool, Residential No ID	4/29/2010 No issue / No violation
Storm Drain - Washing to Storm Drain	84WUKS	04/27/2010	Washing roofs and red water is going into the gutter	5/3/2010 Notice of Violation
Storm Drain - Washing to Storm Drain	84YKRT	04/29/2010	Tracking Soil	4/29/2010 Notice of Violation
Storm Drain - Vehicles Leaking Oil/Fluids	84ZTY7	04/30/2010	Vehicle and equipment leaking	5/4/2010 Informational Letter
Storm Drain - Washing to Storm Drain	854RFF	05/03/2010	Pressure washing equip parked on street in front of HOA	5/3/2010 Verbal Notice
Storm Drain - Vehicles Leaking Oil/Fluids	855PKN	05/04/2010	White truck leaking oil	5/13/2010 Informational Letter
Storm Drain - Washing to Storm Drain	855U4X	05/04/2010	White substance in gutter - from tile work?	5/4/2010 Informational Letter
Storm Drain-Dirt/Debris - Piles	856RG6	05/05/2010	Landscape Material Dumping Oil & Grease Discharge - Food Facility Maint. Bldg. at end of parking lot at Plaza Camino Real, fenced in yard, cooking oil spilled on ground and piles of dirt with no bmps.	5/5/2010 Follow-up in Permits Plus
Storm Drain- Dumping to Storm Drain	856PM8	05/05/2010	No RP found. ID to street in Res area White substance being poured in gutter by workers and running down street	5/7/2010 Referred for Action

Storm Drain- Dumping to Storm Drain	856U3Z	05/05/2010	ID mobile business in res area. SD Black thick liquid in gutter Report of Dumping to the Storm Drain	5/7/2010 Verbal Notice
Storm Drain- Dumping to Storm Drain	856QHJ	05/05/2010	Surface Cleaning Chemicals being poured into the street and storm drain.	5/6/2010 Verbal Notice. Discharge cleaned by City SDMC.
Storm Drain - Washing to Storm Drain	856NUQ	05/05/2010	Surface Cleaning Greenish/grey water coming from above address and running down the street.	5/5/2010 Informational Letter
Storm Drain - Vehicles Leaking Oil/Fluids	85DUQ8	05/12/2010	Vehicle and equipment leaking in residential area Oil in street from vehicles from this address.	5/18/2010 Verbal Notice
Storm Drain - Vehicles Leaking Oil/Fluids	85DTFE	05/12/2010	Vehicle and equipment leaking Terminix truck parked on street leaking oil	5/24/2010 Informational Letter
Storm Drain - Washing to Storm Drain	85JKKP	05/17/2010	Acid washing drive way - no bmps in place Report of Washing to the Storm Drain	5/18/2010 Referred for Action
Storm Drain- Dumping to Storm Drain	85LNEY	05/19/2010	Pool / Spa / Fountain Discharge Pool being dumped to gutter and smell of chlorine is strong	5/19/2010 Informational Letter
Storm Drain- Dumping to Storm Drain	85MMTB	05/20/2010	Miscellaneous Incidents Report of murky water in channel behind Air Products	5/24/2010 No issue / No violation
Storm Drain - Washing to Storm Drain	85NMJQ	05/21/2010	Saw Cutting Slurry White stain in gutter - dry	5/24/2010 Informational Letter
Storm Drain- Dumping to Storm Drain	85RLSX	05/24/2010	Pool / Spa / Fountain Discharge Residue in gutter from pool being drained	5/26/2010 Informational Letter
Storm Drain - Erosion from Existing Development	85RL5C	05/24/2010	Fire Suppresion System Water Line Break Water line broke for fire suppression system causing erosion.	5/24/2010 Referred for Action
Storm Drain - Vehicles Leaking Oil/Fluids	85TUEN	05/26/2010	Vehicle and equipment leaking Vehicle Leaking in ROW in residential neighborhood	6/2/2010 Informational Letter
Storm Drain - Washing to Storm Drain	85UNU8	05/27/2010	Pool / Spa / Fountain Discharge Report of Washing to the Storm Drain	5/27/2010 Informational Letter

Storm Drain - Washing to Storm Drain	85UNWH	05/27/2010	Vehicle Washing Mobile detailer washing cars without BMP	6/15/2010 Informational Letter
Storm Drain - Washing to Storm Drain	85VPA3	05/28/2010	Cement Discharge	5/28/2010 Verbal Notice
Storm Drain - Washing to Storm Drain	85VPG7	05/28/2010	Surface Cleaning	5/28/2010 Referred for Action
Storm Drain - Washing to Storm Drain	863TMY	06/03/2010	Vehicle Washing Power washing vehicles	6/3/2010 Follow-up in Permits Plus
Storm Drain - Washing to Storm Drain	867KNN	06/07/2010	Landscape Material Dumping Blue green stain leading from house to storm drain	6/14/2010 Informational Letter
Storm Drain - Washing to Storm Drain	869M7C	06/09/2010	Complaint Not Found Washing to storm drain, grease from Pat & Oscars	6/9/2010 Follow-up in Permits Plus
Storm Drain- Dumping to Storm Drain	86MNKA	06/21/2010	Cooling Water Discharge AC unit discharging to parking area. No violatons	6/21/2010 Follow-up in Permits Plus
Storm Drain - Washing to Storm Drain	86MNJZ	06/21/2010	Vehicle Washing Report of Washing to the Storm Drain	6/21/2010 Informational Letter
Storm Drain - Washing to Storm Drain	86RPT7	06/25/2010	Surface Cleaning Report of Washing to the Storm Drain	6/25/2010 Verbal Notice
Storm Drain - Washing to Storm Drain	86UR95	06/28/2010	Complaint Not Found Reporeted Concrete being washed to storm drain no evidence of discharge to street.	6/28/2010 No issue / No violation
Storm Drain- Dumping to Storm Drain	86WMRU	06/30/2010	Petroleum product in street, motorcycle officer spun out in it	6/30/2010 Referred for Action
Storm Drain - Washing to Storm Drain	86WTVA	06/30/2010	Saw Cutting Slurry Cutting concrete in driveway, washing to storm drain.	6/30/2010 Notice of Violation. Building Inspector will be provided with information regarding complaint.

City of Carlsbad
Municipal Separate Storm Sewer System (MS4)

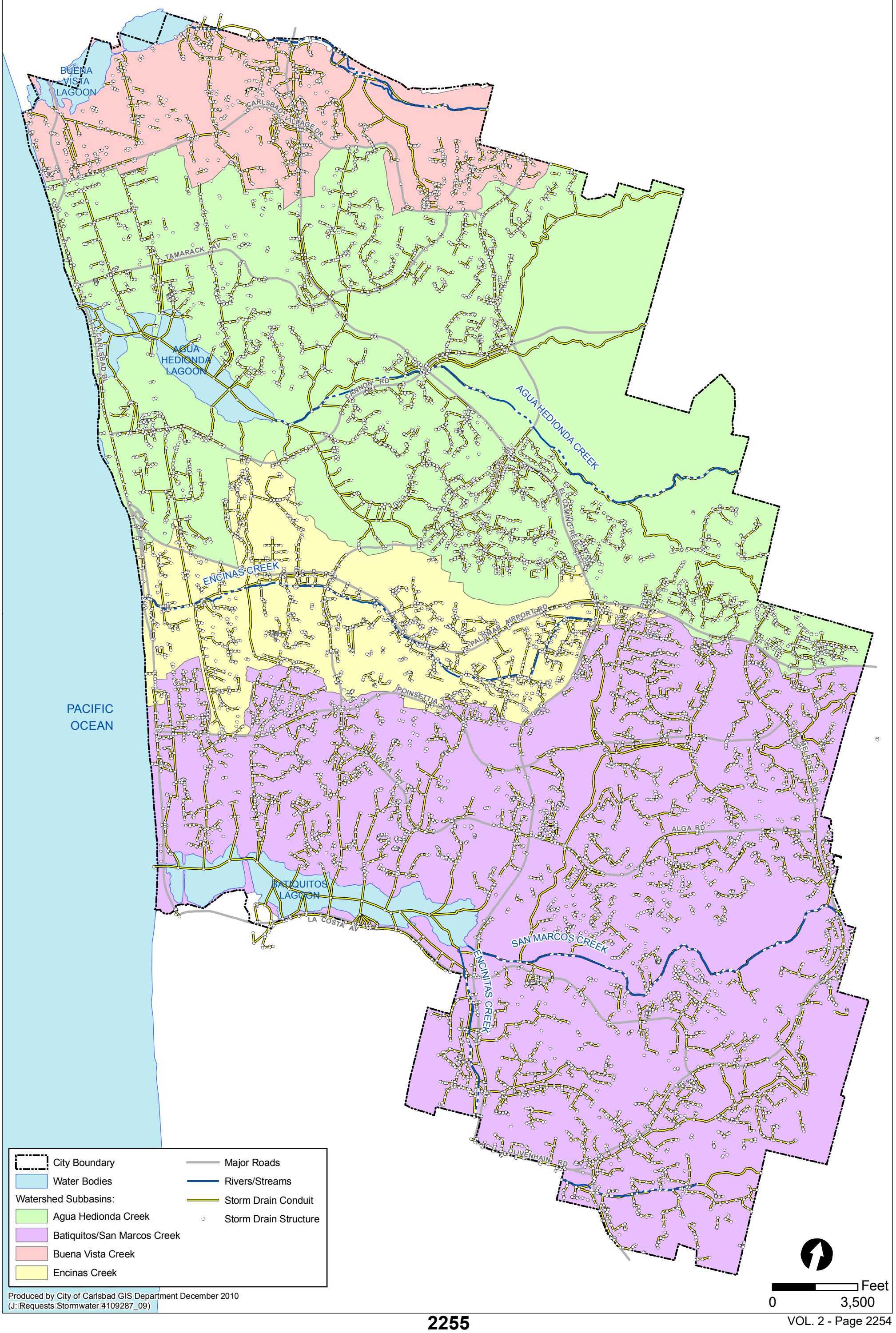

Produced by City of Carlsbad GIS Department December 2010
(J: Requests Stormwater 4109287_09)

Jurisdictional Urban Runoff Management Program Annual Report

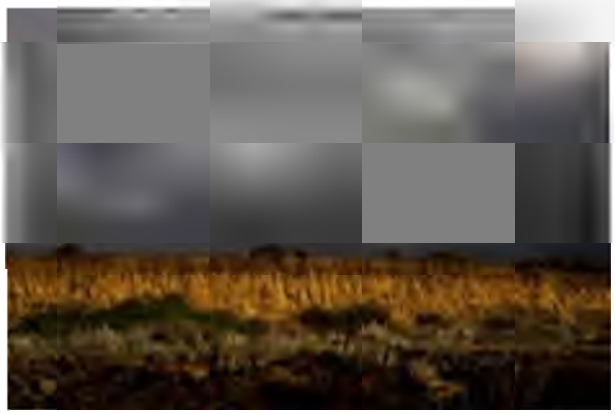

July 1, 2010 – June 30, 2011

Certification Statement

CITY OF
CARLSBAD
Property & Environmental Management

www.carlsbadca.gov

Signed Certification Statement

City of Carlsbad
Jurisdictional Urban Runoff Management Plan
Annual Report for July 1, 2010 – June 30, 2011

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David Hauser

Name (printed) | Signature

Director, Property and Environmental Management | 9-26-11

Title | Date

1635 Faraday Avenue, Carlsbad, CA 92008-7314 T 760-434-2943 F 760-602-8562

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Executive Summary

Executive Summary

Section 1: Introduction

The City of Carlsbad's (City) Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report addresses the implementation of the Municipal Storm Water Permit Order No. R9-2007-0001, issued January 24, 2007 and effective March 24, 2008. This Annual Report is covering Order No. R9-2007-0001 from July 1, 2010 to June 30, 2011, hereby listed as Fiscal Year 2010-11.

In the Fiscal Year 2010-11 (FY 2010-11), many procedures have been updated or streamlined to efficiently manage data, monitor sites, track inspections and investigations, and manage other storm water related activities. Planning, Construction, and Existing Development activities have implemented improved processes to further incorporate storm water pollution prevention practices into internal activities as well as activities enforced by City departments. Highlights of each major component of the JURMP are listed below, and correspond to Section headings in this JURMP Annual Report.

The City has defined Notable Activities as those that are above and beyond compliance requirements, and are highlighted in Sections 2, 3, 4, 5, 6, as well as 15 Conclusions. Section 7 Notable Activities will be included in the December submittal of that section.

The City has included a Compliance Reference Table located in Appendix 1.2 that links permit requirements with corresponding sections in the report where they are referenced.

Section 2: Development Planning

Permit Order No. R9-2007-0001 requires the City to describe amendments to the General Plan, evaluate land use planning policies and principles, revise the environmental review processes, and develop an approval process to minimize the impacts of development activities on receiving water quality. Land-use planning gives the community an opportunity to comment on and shape policies that guide community development and interests. The City has developed goals that balance environmental protection with smart, long-term economic growth. By laying out a vision for local growth and coastal development, projects are consistent with the state and federal regulatory requirements and the City's land-use planning efforts.

The City continued to implement the Standard Urban Stormwater Mitigation Plan (SUSMP), and all applicable projects were subject to a thorough discretionary and plan check review process to ensure compliance. During FY 2010-11, the Carlsbad SUSMP requirements were applied to 70 private development/redevelopment projects and 10 City Capital Improvement Program (CIP) projects. Of the 70 private development/redevelopment projects, 6 were subject to Priority Development Project requirements which required site design, source control and treatment control requirements and 64 were subject to Standard Stormwater requirements subject only to site design and source control BMP requirements. Of the 10 City CIP projects, there were no projects subject to Priority Development Project Requirements but all projects were subject to Standard Stormwater requirements.

During FY 2009-10, the City implemented the new development processing fees for the plan review and inspection of Construction Storm Water Pollution Prevention Plans and post-construction Storm Water Management Plans.

Section 3: Construction

Order No. R9-2007-0001 requires the City to implement activities that address and minimize short and long-term impacts on receiving water quality related to runoff from new construction sites. The City requires, prior to approval of a construction or grading permit, that project proponents implement measures to ensure that pollutants will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of water quality objectives. The City met these requirements by amending or conditioning existing permits, procedures and ordinances.

During FY 2010-11, the City updated the construction inventory, inspected all high priority sites, conducted outreach and education to developers, engineers, contractors, and City staff, and used enforcement actions to obtain compliance when necessary. All active grading permits were ranked as high, medium, or low priority and inspected as required during the rainy season. The required number of inspections was exceeded during this fiscal year. The City continued to distribute the "*Pollution Prevention Guide to the Construction Industry*" brochure.

Section 4: Municipal

The City's municipal facilities and their activities have the potential to contribute to water pollution if Best Management Practices (BMPs) are not properly implemented. City facilities include administration buildings, recreational areas, maintenance and storage yards, water reservoirs, water pump stations, sewer lift stations, a road system, parking facilities, the storm drain system, pressure regulator vaults, and fire stations. Municipal facilities maintain the City's infrastructure that supports Carlsbad's quality of life.

The Storm Water Committee comprised of various City departments including Public Works, Fire Department, Parks and Recreation, and the Building Department continued to meet and discuss municipal storm water BMPs and pollution prevention issues. The intent of the committee is to communicate problems and solutions among the group in order to share knowledge, discuss training opportunities, enhance compliance with the Permit, and to pass along any new information from the Regional Water Quality Control Board (Regional Board). SWPPPs were updated for High Priority municipal facilities, as needed.

The City of Carlsbad's City Manager continued support for the Storm Water Leadership Team (SWLT). Periodic meetings were conducted and attendees included Senior Management of the City's major service areas and Directors. Agenda items covered all areas of the City's compliance with Order No. R9-2007-001.

The City's street sweeping program exceeded both Permit requirements throughout FY 2010-11 with twice weekly downtown sweeping routes.

High Priority Municipal facility inspections were conducted by both internal City staff and external consultants. The combination of annual inspections by the State Department of Pesticide Regulations, municipal inspections by internal and external inspectors, and staff training on storm water BMPs, personnel are more aware of the required maintenance practices in preventing storm water pollution. During FY 2010-11 Annual Municipal Inspections, there were no NPDES violations noted.

Municipal facilities and departments also continued to implement Integrated Pest Management practices to reduce the City's use of pesticides.

Section 5: Industrial/Commercial

The City currently maintains an inventory of industrial and commercial sites and sources within its jurisdiction. Major industry types include airport services, refuse and sewage management, pharmaceutical research and development, high technology and electronics, golf apparel and equipment manufacturers, and several light industry parks. Major commercial types include automobile maintenance, restaurants, pressure washing, masonry and concrete work, carpet cleaning, and landscaping activities. The City continued to implement a comprehensive program to reduce urban runoff originating from existing sites and sources since industrial and commercial activities have the potential to contribute to water pollution, if BMPs are not implemented properly.

During this reporting period, the City updated the industrial/commercial inventory, mapped all facilities, provided education and outreach on BMPs, inspected 100% of fixed high threat to water quality facilities, and conducted 41 enforcement activities to ensure compliance.

The Storm Water Protection Program continues to use *Knowledge and BMP Effectiveness Assessment* measures for inspected sites and sources.

Section 6: Residential

The residential community has a significant potential to contribute to water quality degradation. Beyond year 2010, there will be nearly 54,599 residential units, housing approximately 135,000 residents. The focus of the City's pollution prevention strategy is a proactive information and education program that utilizes public presentations, fact sheets, direct mailers, brochures, website, and other media to increase knowledge and awareness of storm water pollution prevention efforts.

Targeted activities for residential areas include vehicle washing, storage and maintenance, lawn and garden care, home improvement projects, pet waste disposal, swimming pool maintenance, household hazardous waste (HHW) disposal, and trash and debris cleanup and disposal. The Storm Water Protection Program continued to distribute educational information addressing these residential BMPs and required several minimum BMPs to be implemented.

Between July 1, 2010 to June 30, 2011 the City distributed storm water educational information for residential activities, continued an advertising campaign, hosted or participated in residential outreach events, offered five oil recycling drop-off sites and two HHW collection sites for residential use, continued a door-to-door residential HHW pick up program, hosted a HHW drop-off disposal day for Carlsbad residents, responded to 119 reports of illegal discharge, and issued 23 enforcement actions to achieve compliance.

Two mailers were sent out to a total of 905 households regarding storm water pollution issues. Educational material was included on Utility bills, in bill stuffers and City newsletters. The Storm Water Protection Program continues to work closely with the City's Water Conservation Specialist to address runoff due to overirrigation.

Section 7: Illegal Discharge Detection and Elimination

The City continued to conduct a comprehensive and proactive program for detecting and eliminating illegal discharges to the storm drain system. The City's program actively seeks to identify and eliminate illicit discharges and connections by conducting investigations, responding to spills and sewage overflows, conducting monitoring, and performing routine cleaning and maintenance activities on the sewer and MS4.

The Illegal Discharge Detection and Elimination (IDDE) report will be submitted in December 2011, as per Addendum #2, Order No. R9-2007-0001, and will include Notable Activities in that section.

Section 8: Outreach and Education

The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent, though these messages often took varied forms. During FY 2010-11, the City continued to be actively involved in outreach and education at the local level, the watershed level, and at the regional level with the Project Clean Water Outreach Workgroup and the Think Blue campaign.

The City sent storm water educational information to all city employees distributed via paychecks in FY 2010-11, participated in EPA webcasts as training opportunities, collaborated with local non-governmental organizations, hosted or participated in outreach events, presented urban runoff and watershed concepts to 1058 school-aged children, and distributed information through various media. The City also distributed promotional items such as coloring books, pens, and pet waste Bags on Board with pollution prevention messages.

Section 9: Public Participation

The City led or assisted with several public participation opportunities this reporting period. During the reporting period, citizens, business owners and representatives, and other interested parties were invited to attend public meetings, outreach events, workshops, City Council meetings, and other events related to storm water pollution prevention at the local and watershed levels.

During this reporting period, the City conducted a Public Opinion Survey of 1,000 residents that included questions about storm water pollution, and held 6 community events.

Section 10: Fiscal Analysis

The total operating costs to fund the Storm Water Protection Program activities for FY 2010-11 was $2,449,072. This includes actual expenditures for personnel, operating costs, and capital outlay from the Storm Water Protection Program budget, Storm Drain Maintenance budget, Storm Water Engineering budget, and income from Engineering Plan Checks related to storm water, but does not include the *Storm Water Capital Improvement Program* costs.

Section 11: Effectiveness Assessment

Information collected in surveys, public comments, inspections, investigations, monitoring and other activities during the year were assessed on a full fiscal year basis to identify any trends and determine new or modified courses of action.

The City continued to make progress with effectiveness assessment measures during FY 2010-11, using the Watershed Treatment Model to assess the effectiveness of storm water pollution prevention. Assessment of each significant activity, each component, and an integrated assessment of the overall jurisdictional program is provided in Section 11 of this report.

Section 12: Special Investigations

There were no Special Investigations during FY 2010-11.

Section 13: Non-Emergency Fire-Fighting

The Carlsbad Fire Department (CFD) developed this section to meet the requirements of Order No. R9-2007-0001. Several BMPs have been developed and incorporated at all 6 of the City's Fire Stations. Each station has a storm water manual, spill response equipment, regular cleanup and removal of organic debris from parking lots, and portable or permanent BMPs to contain and collect equipment and vehicle wash water. Training is conducted on property with no runoff or discharge potential into the MS4, or at the City's Reclaimed Water Facility where water is collected into the Reclaimed Water reservoirs. Fire Prevention activities were also continued during this reporting period.

Section 14: JURMP Revisions

The City's 2008 JURMP was developed in response to the issuance of Order No. R9-2007-0001. The City began implementing the 2008 JURMP on March 24, 2008 as required under the new permit. There were a few minor changes to the City's 2008 JURMP during FY 2010-11 and they are discussed in Section 14.

Section 15: Conclusion

The City successfully implemented the Permit requirements and the program activities described in the JURMP. Information from JURMP activities, WURMP activities, as well as the 303(d) List indicated that bacteria, sediment, and nutrients are high priority pollutants in the Carlsbad Watershed. The City proposes to continue addressing these pollutants through a number of existing or new activities, which include education, inspections, monitoring and maintenance through implementation of Order No. R9-2007-0001.

This Section also highlights Notable Activities conducted over and above permit requirements.

Section 1

1.0 INTRODUCTION

1.1 Background

The San Diego Regional Water Quality Control Board issued the Municipal Storm Water Permit Order No. R9-2007-0001, NPDES No. CAS018758 on January 24, 2007 to control waste discharges in urban runoff from the Municipal Separate Storm Sewer System (MS4) draining the watersheds of the County of San Diego, the Incorporated Cities of San Diego County and the San Diego Unified Port District Copermittees.

The Regional Board issued this Permit to specify the requirements necessary to reduce the discharge of pollutants in urban runoff to the maximum extent practicable (MEP). Pollutants in urban runoff discharging to downstream water bodies can be prevented and controlled by effective implementation of best management practices (BMPs). The Permit requires the submittal of a Jurisdictional Urban Runoff Management Plan (JURMP) to the Regional Board in the first year of the permit, and an Annual Report each remaining year of the permit to document the progress and implementation of the JURMP.

The Permit requires the City of Carlsbad (City) to protect water quality during the three major phases of urban development: (1) land use planning for new development; (2) construction; and (3) the "use" or existing development phase.

In 2008, the City prepared a JURMP that addresses the requirements of Water Quality Order No. R9-2007-0001. The City officially began implementing the 2008 JURMP on March 24, 2008. The following report covers the implementation of the JURMP for Fiscal Year 2010-11 (July 1, 2010 to June 30, 2011).

1.2 Overview of the City of Carlsbad

The City encompasses just over 42 square miles and borders 6 miles of coastline. The entire city is contained within the Carlsbad Hydrologic Unit (Watershed) and encompasses four smaller hydrologic areas. These include Buena Vista Creek, Agua Hedionda, Encinas, and San Marcos. Major water bodies within the city are Buena Vista Creek, Buena Vista Lagoon, Agua Hedionda Creek, Agua Hedionda Lagoon, San Marcos Creek, and Batiquitos Lagoon. Several waterbodies within the city are listed as impaired under Section 303(d) of the Federal Clean Water Act.

The City is a municipal corporation, following the Council-Manager form of government. During FY 2008-09, the City changed from a General Law City to a Charter City. While the City created the Storm Water Protection Program to help implement the Permit, program implementation is carried out by several departments throughout the City. This allows for program implementation and new requirements to be incorporated into daily activities of City employees, instead of being viewed as completely new requirements without a connection to on-going services.

The City has an Environmental Management Department which brings together Storm Water, Habitat Management, energy and other environmental activities to promote a more sustainable approach for the City.

1.3 Purpose and Objectives

The purpose of the City's JURMP Annual Report is to provide a comprehensive account of activities conducted by the City to meet the requirements of Water Quality Order No. R9-2007-0001. In addition, the reporting process allows the City to evaluate the effectiveness of the program and make any changes necessary to improve the implementation and effectiveness of the JURMP.

1.4 Report Organization

This Annual Report was prepared in accordance with the requirements of the Permit. It contains a comprehensive description of the activities conducted by the City of Carlsbad to meet the requirements of the Permit; an accounting of illicit discharges reported, inspections conducted, enforcement actions taken, education efforts conducted; a description of the public participation mechanisms utilized during the JURMP implementation process; identification of management measures proven to be effective in reducing urban runoff pollutants and flow; identification of water quality improvements or degradation; and a fiscal analysis. A list of acronyms is provided in Appendix 1.1.

The organization of this report follows the Table of Contents agreed to and submitted by the Regional Copermittees to the Regional Board. The Annual Report is divided into sections matching major sections in the Permit and the JURMP. As with the JURMP, many of the activities described in separate JURMP sections overlap with one another, so an activity may be referenced in more than one report section. The Annual Report is organized as follows:

Section 1	Introduction
Section 2	Development Planning Component
Section 3	Construction Component
Section 4	Municipal Component
Section 5	Industrial/Commercial Component
Section 6	Residential Component
Section 7	Illicit Discharge Detection and Elimination Component
Section 8	Outreach and Education Component
Section 9	Public Participation Component
Section 10	Fiscal Analysis Component
Section 11	Assessment of JURMP Effectiveness Component
Section 12	Special Investigations Component
Section 13	Non Emergency Fire Fighting Flows
Section 14	JURMP Revisions
Section 15	Conclusions and Recommendations

Appendix 1.2 contains the JURMP Annual Report Requirements Checklist which shows the reporting requirements from the Permit and where each requirement can be found in the City's 2010-11 JURMP Annual Report.

Section 2

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

This section outlines the Development Planning actions implemented by the City under San Diego Municipal Permit Order No. R9-2007-001 (the "2007 Municipal Permit") and covers the portion of the annual reporting period from July 1, 2010 through June 30, 2011. During this reporting period, the City maintained compliance with all land-use planning requirements of the 2007 Municipal Permit. During the current reporting period, the City continued to implement the comprehensive development planning changes put into place during previous fiscal years.

Throughout FY 2010-11, the City also performed several development planning process changes to both enhance our internal/external communications regarding storm water and ensure the City's compliance with the 2007 Municipal Permit as more fully discussed and detailed in the following sections below.

During the reporting period, many items, including documents and procedures, were updated and placed on the city's website. In an effort to save paper, this annual report includes several hyperlinks to these updated documents. If there is a need to have a paper copy, please inform us and we will accommodate your request.

2.2 Land Use Planning

2.2.1 Background

In July 1986, the City adopted a "*Growth Management Plan"* into its General Plan to guide development and anticipate the types and numbers of facilities needed to accommodate the Carlsbad community at build out. Those facilities include: sewer plant capacity, sewage pipelines, reclaimed water system, and storm drain system that included flood and pollution control basins.

In September of 1994, the City adopted a Comprehensive Update of its General Plan. The General Plan includes goals that balance environmental protection with smart, long-term economic growth. By laying out a clear vision for environmentally sensitive development within this coastal community, development projects are required to be consistent with various City ordinances (i.e. Grading and Erosion Control, Storm Water Management, Hillside Development, Coastal Resource Protection) and other regulatory requirements.

The General Plan is reviewed annually and revised as necessary to ensure that the public facilities are considered and City goals are met. On February 19, 2002, the City Council adopted General Plan Amendment GPA 01-15. This General Plan Amendment revised and supplemented various policies regarding storm water quality protection in the Open Space and Conservation Element of the General Plan. The revised and supplemented policies reflect all storm water quality and watershed protection principles found in the 2007 Municipal Permits pertaining to storm water pollution prevention.

City staff reviewed the storm water protection policies of the General Plan in FY 2010-11 and no revisions were made. The existing General Plan storm water protection policies are listed below:

a) Develop and implement a JURMP consistent with the Permit and any amendments thereof.

b) Adopt and implement a Master Drainage Plan and a local Standard Urban Storm Water Mitigation Plan (SUSMP) consistent with the 2007 Municipal Permit and any amendments thereof.

c) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City requires development projects to incorporate structural and non-structural BMPs to mitigate any anticipated increases in pollutant loads.

d) Implement storm water pollution prevention methods to the maximum extent practicable, supplemented by pollutant source controls and treatment control measures. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into the municipal separate storm sewer system (MS4).

e) Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

f) Developments shall implement appropriate recommendations to protect water quality found in the San Diego Association of Government's (SANDAG's) Water Quality Element of its Regional Growth Management Strategy.

g) Development projects should be designed to comply with the following site design principles:

- Protect slopes and channels to decrease the potential for slopes and/or channels from eroding and impacting storm water runoff.
- To the extent practicable, cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones. Encourage land acquisition of such areas.
- Provide buffer zones for natural water bodies.
- Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment.
- Where feasible implement site design/landscape features to slow runoff and maximize on-site infiltration of runoff.
- Properly design outdoor material storage areas (including the use of roof or awning covers) to minimize the opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids and other pollutants from entering the storm water conveyance system.
- Incorporate roof or awning covers over trash storage areas to prevent off-site transport of trash and other pollutants from entering the storm water conveyance system.
- Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways and bridges.
- Design streets and circulation systems to reduce pollutants associated with vehicles and traffic resulting from development.

In addition to the General Plan, the City has adopted various storm water protection policies in other land use planning documents including the City's Local Coastal Program and Habitat Management Plan.

The Carlsbad Local Coastal Program (LCP) covers that part of the City lying within the coastal zone. The Carlsbad City Council adopted a Zone Code Amendment (ZCA 01-08), Local Coastal Program Amendment (LCPA 01-15) and Municipal Code Amendments (MCA 01-05, 01-06, and 02-01) to revise/add new policies, standards, procedures and requirements regarding water quality and watershed protection to the LCP Land Use Plans, Chapters 21.203 (Coastal Resource Protection Overlay Zone) and 21.205 (Coastal Resource Overlay Zone Mello I LCP Segment Local Coastal Program) of the Zoning Ordinance of Carlsbad's Municipal Code. One of the notable storm water requirements of the LCP is the inclusion of an additional criterion for determining a priority development project. Per the amended LCP, any project located within 200 feet of the Pacific Ocean that creates more than 2500 square feet of impervious surface or increases the project impervious area more than 10% over the existing impervious area is to be considered a priority development project.

Under the California Natural Community Conservation Program (NCCP), the City and six other cities in north San Diego County participated in the preparation of the Multiple Habitat Conservation Program (MHCP). The MHCP is a comprehensive planning program designed to develop an extensive ecological preserve in northwestern San Diego County. The City has prepared a subarea plan, called the Carlsbad Habitat Management Plan that was adopted in November 2004. The HMP contains the specific conservation, management, facility planning, land use, and other actions the City will take to implement the goals, guidelines, and standards of the MHCP plan. This HMP prohibits development in or near natural habitat areas including creeks and lagoons. Those areas act as a buffer between urban development pollutants and receiving waters. They also protect a significant percentage of natural areas that are pervious, leading to natural groundwater recharge and reduction in peak run off rates.

On November 1, 2002, the revised Zoning Ordinance, Municipal Code, and LCP Amendments were submitted to the California Coastal Commission. In August, 2006, the California Coastal Commission approved these municipal code amendments. All requirements of these documents continued to be implemented in FY 2010-11and previous years including the years the City waited for Coastal Commission approval. The LCP and Habitat Management Plan were evaluated during FY 2010-11 and no revisions were made.

2.2.2 Source Characterization

Land Use Planning is the process whereby the City determines appropriate land use designations for a property consistent with the City's General Plan requirements. As such, source characterization of pollutants is generally addressed in association with the type of land use proposed (i.e. low density residential, high density residential, commercial, and industrial, etc). Each land use decision made during FY 2010-11 was found consistent with the storm water protection policies as contained in the City's General Plan, Local Coastal Program (if applicable) and Habitat Management Plan.

In many cases, land use planning applications are accompanied by specific project development applications. In such cases, the project was required to identify specific project pollutant sources consistent with the City's Standard Urban Storm Water Mitigation Plan (SUSMP) and to identify project specific BMPs to eliminate or minimize any negative impacts to storm water quality.

In January 2011, the Carlsbad SUSMP was updated to incorporate hydromodification requirements. The SUSMP update included new information on hydromodification thresholds, criteria, application, and methodologies. In conjunction with the SUSMP update, processing forms for project submittals were also updated including the Storm Water Management Plan guidelines and Storm Water Standards Questionnaire (SWSQ) that applicants complete when submitting projects to the City.

By completing the SWSQ, applicants assess the level of storm water requirements that apply to their project. Upon application, city staff reviews the SWSQ and verify that it reflects the appropriate project characteristics and outcome. If the form is filled out incorrectly, it is returned to the applicant to be corrected and returned to the City before proceeding with further reviews. The updated SWSQ can be found at http://www.carlsbadca.gov/business/building/Documents/E-34.pdf.

For more specifics on source characterization applied to development projects during the project approval and verification process refer to Section 2.4.2.

2.2.3 Best Management Practice Requirements

To assist applicants, the Carlsbad SUSMP includes guidelines and design criteria to help applicants assess the effectiveness of BMPs they are considering for their project. Selecting the appropriate BMPs will vary from project to project depending on the physical site constraints, downstream impairments, development category, types of soil, and target pollutant(s) generated by their specific project.

The Carlsbad SUSMP includes integrated low impact design (integrated LID) technique for applicants to select and size BMPs for projects. The Carlsbad SUSMP also provides several treatment control BMP options that applicants may choose for their projects including raised planters, bio-retention facilities, pervious pavements, infiltration trenches, cisterns, and more.

During FY 2010-11, the City developed a brochure on low impact development (LID). The LID brochure is a tool to educate developers, contractors and homeowners regarding different types of LID features on a typical project. The brochure includes different LID features, what their purpose is, and where it could be employed on a project site. Refer to Appendix 2.1 for a copy of the LID brochure.

2.2.4 Program Implementation

Every General Plan Amendment and land use planning application approved by the City during FY 2010-11 was found in conformance with all applicable storm water protection policies of the Carlsbad General Plan, Local Coastal Program (as appropriate), Habitat Management Plan and the Carlsbad Municipal Code (CMC). This includes compliance findings for all the storm water quality goals and objectives of the City's Grading and Drainage Ordinances (Title 15 of the CMC) and the Carlsbad SUSMP.

During this reporting period, the typical land use planning review process began with the submittal of a planning application at the City's development services counter. Concurrent with the land use application the city requires submittal of the SWSQ which, once completed, determined if the project was subject to Priority Development Project or Standard Storm water requirements. Each project was then reviewed for conformance with the storm water protection policies, requirements of the Carlsbad SUSMP, the General Plan, any applicable Local Coastal Plan, the Habitat Management Plan and all applicable City Codes.

2.3 Environmental Review Process

The City's environmental review process begins with the Initial Study Checklist (CEQA Guidelines). Based on the results of the checklist, the City requires the project applicant to provide additional studies to elaborate on the environmental impacts or recommend denial of the permit that the project applicant is seeking.

The Initial Study Checklist provides an expanded section on potential water quality impacts for each project. Table 2.1 shows an excerpt of the updated Initial Study Checklist that includes specific hydrology and water quality analysis the City uses during the environmental review process.

Table 2.1: Hydrology and Water Quality Analysis Checklist

HYDROLOGY AND WATER QUALITY. *Could the project:*
a. Violate any water quality standards or waste discharge requirements?
b. Substantially deplete groundwater supplies or interfere substantially with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the flow rate or amount (volume) of surface runoff in a manner, which would result in flooding on- or off-site?
e. Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
f. Otherwise substantially degrade water quality?
g. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood delineation map?
h. Place within 100-year flood hazard area structures, which would impede or redirect flood flows?
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
j. Inundation by seiche, tsunami, or mudflow?
k. Increase erosion (sediment) into receiving surface waters?
l. Impact aquatic, wetland, or riparian habitat?
m. Change receiving water quality (marine, fresh or wetland waters) during or following construction?
n. Increase any pollutant to an already impaired water body as listed on the Clean Water Act Section 303(d) list?
o. Increase impervious surfaces and associated runoff?
p. Impact aquatic, wetland, or riparian habitat?
q. Result in the exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City uses integrated administrative and regulatory tools required to implement the Land-Use Planning requirements of the Carlsbad SUSMP and 2007 Municipal Permit. During the development review process, the City requires that new development and redevelopment projects evaluate their project against the required project SUSMP thresholds to determine the level of storm water requirements that apply to their project. To evaluate projects, applicants are required to fill out and submit a Storm Water Standards Questionnaire (SWSQ) to the City. City staff then reviews each SWSQ to evaluate the accuracy of the thresholds that may apply to the project and to ensure the proper outcome of the SWSQ and compliance with the Carlsbad SUSMP.

In general, the Carlsbad SUSMP requires applicants to incorporate storm water concepts at the initial design phase of a project prior to submittal to the City. Once the applicant submits the development application, the City reviews the application and development plans to ensure the project has appropriately considered storm water objectives and selected the appropriate BMPs and that it satisfies the applicable storm water requirements as outlined in the SUSMP.

During this reporting period, the City also developed or updated the following storm water program elements and/or procedures:

1. During FY 2010-11, the City continued to have internal meetings to discuss treatment control BMP compliance program improvements such as inspections, maintenance agreements, verification of maintenance requirements, improved departmental coordination, and transfer of information during the approval process, and other issues related to treatment control BMP compliance. As a result of these meetings, the City will establish a Storm Drain Inventory Management Committee that will meet quarterly to discuss issues related to storm drain maintenance, treatment control BMP inventory, GIS mapping, and other topics related to tracking and managing structures within the City's storm drain conveyance system.

2. During FY 2010-11, the City updated the Carlsbad SUSMP, Storm Water Management Plan (SWMP) guidelines, single sheet post construction BMP plan, and Storm Water Standards Questionnaire (SWSQ) per the 2007 Municipal Permit. Here the following links to each updated document:
    a. SUSMP - http://www.carlsbadca.gov/business/building/Documents/EngStandsw-stds-vol4-ch2.pdf
    b. SWMP guidelines - http://www.carlsbadca.gov/business/building/Documents/E-35.pdf
    c. SSPCBMP plan - http://www.carlsbadca.gov/business/building/Documents/BMP_Plan_Sheet.zip
    d. SWSQ - http://www.carlsbadca.gov/business/building/Documents/E-34.pdf

3. During FY 2010-11, similar to final drawings, the City began scanning storm water management plans into our digital management system (DMS). This allows these water quality reports to be accessed by others (inspectors, reviewers, researchers, etc.). This allows for more improved access and archiving of the water quality requirements for which a project was approved.

2.4.2 Source Characterization

Development project approval is the stage of the development process where storm water quality impacts are assessed and the project is designed to eliminate or minimize potential sources of storm water pollutants. Each "Priority Development Project" submitted during this reporting period, was required to prepare and submit a Storm Water Management Plan (SWMP) consistent with the Carlsbad SUSMP concurrent with any discretionary or ministerial permit application. Source identification is a required component of each SWMP.

During the FY 2010-11, project proponents for Priority Development Projects were required to identify potential pollutant sources generated by their particular land use and development design in accordance with the procedures outlined in the Carlsbad SUSMP. Table 2.1 of the Carlsbad SUSMP is used to assist applicants to identify potential pollutant sources for various project categories. These potential sources are discussed in the SWMP for each for Priority Development Project. Additionally, project proponents were required to identify the pollutants of concern or impairment for the receiving waters into which the project runoff contributes During the reporting period, the 2006 303(d) list of water quality impairments for receiving waters was used to review projects.. The project proponent was then required to determine if the project included any land use activity or development design that generated or potentially added to any water quality impairment within the receiving waters.

If projects were found to drain into one of the 303(d) listed receiving waters, they were required to analyze the potential for contributing the identified pollutants to the water body. If a potential source was identified, then the applicants were required to select an appropriate source control, site design or treatment control BMP measure and demonstrate how the selected BMP(s) eliminate or reduce the pollutant of concern to the MEP and that the project does not cause or contribute to an exceedance of receiving water quality objectives.

2.4.3 Best Management Practice Requirements

The Carlsbad SUSMP is incorporated into the Carlsbad Engineering Standards. The Carlsbad SUSMP is located in volume 4 which is entitled the "Storm Water Standards Manual". The Storm Water Standards Manual was originally designed to meet the requirements of the 2001 Municipal Permit, but has been revised to meet the requirements of the 2007 Municipal Permit. Among other things, the Carlsbad SUSMP addresses how projects are classified and which steps they must follow to meet storm water requirements. The Carlsbad SUSMP includes a clearly defined process to help applicants understand how projects trigger certain storm water requirements and how to comply with stormwater standards. Projects are either subject to "Standard Stormwater" or "Priority Development Project" requirements. For projects subject to Priority Development requirements, the Carlsbad SUSMP includes integrated LID criteria that allow applicants to satisfy multiple facets of the SUSMP including site design, treatment control, hydromodification and low impact development requirements.

The 2007 Municipal Permit required the City and other Copermittees to develop hydromodification criteria and measures to address how urban runoff affects erosion downstream of projects. To satisfy this requirement, the City and Copermittees developed the final Hydromodification Plan (final HMP). For a copy of the final HMP, refer to
http://www.projectcleanwater.org/images/stories/Docs/LDS/HMP/0311_SD_HMP_wAppendices.pdf

Once the final HMP was approved, the City worked with the other Copermittees to develop an updated Countywide Model SUSMP to incorporate the final HMP requirements. The model SUSMP was updated by the Copermittees January, 2011.

During FY 2010-11, the City modified its local SUSMP to incorporate the updated Countywide Model SUSMP and adopt the final HMP. As part of the update, the Carlsbad SUSMP includes background, objectives, thresholds and implementation requirements that address hydromodification. For those projects subject to the final HMP, the City added the web-based county BMP sizing calculator to the SUSMP. The calculator allows applicants to select and size BMPs that satisfies both treatment control and HMP requirements. The SUSMP also allows for applicants to use alternative approaches provided they address the final HMP requirements. A copy of the updated Carlsbad SUSMP can be found at the following City of Carlsbad web link
http://www.carlsbadca.gov/business/building/Documents/EngStandsw-stds-vol4-ch2.pdf.

Per the Carlsbad SUSMP, all projects subject to Standard Stormwater requirements are required to incorporate both site design and select from a list of applicable source control BMPs into their project design. The SUSMP includes a checklist of site design and source control BMPs that may apply to a project depending on the project use/ type. These include but are not limited to providing disconnects into the project design so runoff drains from impervious surfaces over landscape or pervious areas, minimizing the use of impervious surfaces, encouraging the use of vegetated swales or landscape planters, using trash enclosures with covered lids, using efficient irrigation control systems with rain sensors, etc.

In addition to complying with Standard Stormwater requirements, all projects subject to Priority Development Project requirements are also required to prepare a SWMP. The SWMP is a document where the applicant identifies project conditions, pollutants of concern, impairments to water bodies, site design BMPs, source control BMPs and, in accordance with the 2007 Municipal Permit, are also required to select, size and incorporate treatment control BMPs into the project design. After the SUSMP update (January 14, 2011) SWMP's must also demonstrate how the project satisfies hydromodification requirements. The SWMP's also include maintenance requirements for treatment control BMP/hydromodification controls to assure owners/tenants maintain post development BMPs for the life of the project.

During FY 2010-11, the City updated the requirements checklist for SWMP's to include applicable hydromodification requirements. This checklist is provided for applicants and engineers when preparing SWMP's and outlines all the required elements to include in the SWMP. The checklist is also used by staff when reviewing SWMP's for compliance against the SUSMP and consistency against the other associated development plans. This updated SWMP requirements checklist can be found on the City's webpage at: http://carlsbadca.gov

During this reporting period, the City participated in the development of the regional final HMP. The final HMP was submitted to the Regional Board on December 29, 2009 and was accepted by the RWQCB July 14, 2010. In accordance with the 2007 municipal permit, the City updated our local SUSMP on January 14, 2011 to incorporate the new requirements of the final HMP. Because the local SUSMP was updated during the reporting period, some projects were evaluated against the previous SUSMP requirements and others were reviewed against the updated SUSMP (after January 14, 2011). After

January 14, 2011, depending on project thresholds, Priority Development Projects may be subject to final HMP requirements.

During this reporting period, there have been several Regional meetings that the City has attended with other Copermittees. The Land Development Engineering Division has participated and will continue to participate in these meetings that include but are not limited to: the land development workgroup, the HMP technical advisory committee, and the reporting and assessment Workgroup.

Each development project was assessed for its potential to generate urban pollutants using the SWSQ. Those specific types of projects (or project components) identified as having a high potential to generate pollutants in accordance with the 2007 Municipal Permit and Local Coastal Program requirements were classified as a "Priority Development Projects". Each Priority Development Project was associated with one or more of the general pollutants categories as described in Table 2.1 of the Carlsbad SUSMP. Additional pollutant categories were then determined based upon their potential of being generated by the specific proposed Priority Development Project.

Each project subject to Priority Development Project requirements was then required to incorporate site design, source control, treatment control BMPs and applicable hydromodification features into the project design as specified in the Carlsbad SUSMP including the new applicable low impact design and meet interim hydromodification requirements, if applicable. Projects subject to Standard Stormwater Standards were required to incorporate site design and source control BMPs into their project design. The following is a brief listing and description of the types of BMPs incorporated into project designs during the reporting period:

Site design BMP features incorporated into development projects during the reporting period include the following:

- Incorporating disconnects so runoff from impervious surfaces drain across landscape or pervious surfaces to encourage evapo-transpiration, percolation, vegetative contact, and to reduce the downstream effects of development runoff.
- Minimization of building footprints and incorporation of impervious surfaces such as pervious pavements.
- Conservation of natural area by clustering of development and preservation of natural drainage systems.
- Directing flows from impervious surfaces across pervious pavements or landscape areas.
- Preservation of existing trees and planting of new trees to maintain and increase canopy coverage.
- Conveying of drainage away from slopes or provision of appropriate slope down drains.
- Vegetating slopes and open space areas with drought tolerant plants.
- Stabilization of permanent channel crossings and installation of energy dissipaters at drainage outlets.

Source Control BMP features incorporated into Carlsbad developments during the reporting period include the following:

- Enclosure of outdoor material storage areas.
- Trash enclosures that have impervious surfaces and do not allow drainage to flow through the enclosure and use of trash bins with lids that exclude rain.
- Use of efficient irrigation systems with moisture sensors and properly designed flow control systems.
- Stenciling and/or placement of tiles at every applicable storm drain inlet.

As with the previous reporting period, during FY 2010-11, for projects subject to Priority Development Project requirements, through the development review process, applicants could not select treatment control BMPs with low efficiency removal ratings (e.g.: hydrodynamic separator systems and filter inserts) without being subject to additional scrutiny by the City. Per the Carlsbad SUSMP, applicants may choose low efficiency treatment control BMPs, but only after providing additional analysis and backup information subject to approval by the City. In this circumstance, the applicant must provide a detailed analysis to demonstrate how all the other (more efficient) treatment control BMPs in the SUSMP could not be employed with the project. However, during the reporting period, there were no projects that were approved that solely used BMPs with low efficiency removal rates.

The development approvals processed during FY 2010-11 encompassed multiple project categories including residential, commercial and industrial projects. Each project subject to Priority Development Project requirements included appropriate treatment control BMPs from the list of allowable treatment controls included in Table 2-2 of the Carlsbad SUSMP. The types of treatment control BMPs approved for projects during the reporting period included bioretention areas, vegetated swales, vault structures, and bio-filtration basins.

Throughout FY 2010-11, all projects subject to Priority Development Project and Standard Stormwater requirements, including City Capital Improvement Program (CIP) projects, complied with the Carlsbad SUSMP.

2.5 SUSMP Program Implementation

2.5.1 Urban Runoff Approval Process

In FY 2010-11, all new development and redevelopment projects including public CIP projects were required to undergo the City's urban runoff approval process in accordance with the requirements of the Carlsbad SUSMP, 2007 Municipal Permit and Carlsbad JURMP.

The City has a comprehensive set of storm water pollution prevention activities which are incorporated into the project development approval and BMP installation verification process. The measures include everything from the development of urban runoff land use planning policies, development processing procedures, project submittal and review checklist, educational pamphlets, engineering standards, City Codes, database inventory control, monitoring requirements, staff and developer training and project tracking and reporting. Each activity has been carefully designed to help eliminate or reduce storm water pollution on projects to the maximum extent practicable (MEP) and to not cause or contribute to an exceedance of receiving water quality objectives.

The development process has many stages from concept review on through to construction completion and project operation and maintenance. The City conducts many activities meant to ensure development project compliance with the City's urban runoff management policies and requirements. Table 2.2 presents a brief description of the SUSMP activities undertaken at each stage of the development process. Also included in the table are a listing of the City reference materials and implementation documents available to developers and City staff which are applicable to each stage in the process.

Project compliance was tracked through a variety of paper and computer tracking systems. Conditions of Approval specify whether the project must comply with the Priority Development Project (PDP) or Standard Stormwater requirements of the Carlsbad SUSMP.

The City maintains a database of both private and public project approvals that are subject to Carlsbad SUSMP. For private development projects, the results of this database for FY 2010-11 include project name, approval date, approving authority, appropriate resolution numbers and the storm water standards (Priority Development Project, Standard Stormwater) that applied to each project. A list of the private development projects approvals for the reporting period is included as Appendix 2.2.

For the public projects, the results of this database for FY 2010-11 is called the 'CIP Project Approvals' which includes the project name, approval date, and the storm water standards (Priority Development Project, Standard Stormwater) that applied to each project. For the list of CIP Project Approvals subject to the Carlsbad SUSMP refer to Appendix 2.3.

As part of project development processing, during the construction plan review stage, a final design SWMP is submitted to the City for approval. In addition, each project's required treatment control BMPs are incorporated into the project construction drawings. The City created templates for title sheets that include a treatment control BMP table that is to be filled out for project subject to Priority Development Project requirements. For PDP projects, the table is located on the title sheet identifying each treatment control facility including information and BMP maintenance frequencies and specifying which plan sheet contains the additional details where each required treatment control BMP is installed within the project. A separate table is included on the detail sheet providing additional information including the number of BMP units located on that particular plan sheet. The tables are used to highlight the treatment control BMP requirements to the contractor, property owner, project inspector and are used for future inspections. The table also makes it easier for City GIS staff to locate treatment control BMPs for entry/confirmation with the City's GIS database.

Table 2.2 Development Process and SUSMP Activities

Development Process Stage	SUSMP Activity Description	Process Review Documents/References
Conceptual Project Design	Developer uses the Carlsbad SUSMP and Storm Water Standards Questionnaire to determine project priority and begins project layout and design. For priority projects the City recommends to developers that a preliminary SWMP should be prepared.	• Storm Water Standards Questionnaire • Storm Water Standards Manual which includes the Carlsbad SUSMP • 303(d) List
Pre-application Review	Developer submits the preliminary project proposal to staff to obtain input on conceptual project layout including storm water compliance issues.	• Preliminary site plan checklist • SWMP Fact Sheet
Application for Discretionary Review	City staff review application package at front Counter for completeness of submittal including storm water compliance documents. Project is logged into the City database for tracking. A completed Environmental Initial Assessment (EIA) form is submitted with the application package.	• Project Application Submittal Checklist • City review letter
Application Review	City staff reviews application, site plans and accompanying reports and documents including any SWMP, geotechnical and hydrology/hydraulic reports. Project is reviewed for consistency with General Plan, Local Coastal Plan (LCP), Habitat Management Plan (HMP1), Carlsbad SUSMP and City Codes and other Standards including all storm water protection policies and requirements including new LID and interim hydromodification requirements. Project location is reviewed for proximity to environmentally sensitive areas and to determine if project drains to a water body on the 303(d) list. Project EIA is reviewed and appropriate environmental review documents are requested and reviewed in compliance with California Environmental Quality Act (CEQA) requirements.	• Site plan review checklist • SWMP checklist • 303(d) List • General Plan • Local Coastal Plan • Habitat Management Plan • City Codes • Environmental Assessment Form • CEQA Guidelines • City review letter (if any)

Development Process Stage	SUSMP Activity Description	Process Review Documents/References
Discretionary Approval	City denies project or approves with conditions including storm water compliance conditions. Applicable standard conditions of approval are applied to the project together with any special conditions of approval as City staff determines necessary to reduce or eliminate the projects storm water pollution impacts to the MEP. Approving authority makes required findings that project complies with the General Plan, LCP, HMP1, SUSMP, City Codes and any other appropriate land use planning documents. Environmental documents are certified and any mitigation monitoring requirements are noted in the project approval.	• City's standard conditions of approval • Project Conditions of Approval • Environmental mitigation and monitoring plan (if any)
Final Project Design	Developer prepares project construction plans including grading, improvement, landscape and building detailing required BMPs. Construction SWPPP is prepared and SWMP is finalized. A single sheet post construction BMP site plan is prepared.	• Storm Water Standards Manual • Project Conditions of Approval • Environmental mitigation and monitoring plan (if any)
Construction Plan Check Application Submittal	City staff review application package for completeness of submittal including storm water compliance documents. Applicant completes and submits Project Storm Water Threat Assessment Worksheet included as part of the Storm Water Requirements Applicability Checklist.	• Plan Check Application Submittal Checklist • Project Threat Assessment Worksheet • Project Conditions of Approval
Construction Plan Check Review	City staff reviews construction plans and accompanying reports and documents including any SWMP, single sheet post construction BMP site plan, Construction SWPPP, geotechnical and hydrology/hydraulic reports. All storm water pollution prevention requirements are checked against construction plan checklist, SWMP checklist, Construction SWPPP checklist and project conditions of approval. Construction cost estimates are approved for bonding costs including costs for structural BMPs. For priority projects a BMP Maintenance Agreement is prepared.	• Construction Plan Checklist • SWMP Checklist • Construction SWPPP Checklist • Project conditions of approval • Project Threat Assessment • City Engineering plan review procedures • Environmental mitigation and monitoring plan (if any) • Cost estimates

Development Process Stage	SUSMP Activity Description	Process Review Documents/References
Construction Plan Approval	City approves construction plans and accompanying Construction SWPPP and SWMP including single sheet post construction BMP site plan. The executed BMP Maintenance Agreement is recorded and entered into the City's document management system database. All treatment control BMPs are noted on the construction plans and forwarded to the GIS group for entry into the BMP inventory. Any project design changes that differ from the approved site plan or project conditions of approval are reviewed in compliance with the City's Substantial Conformance Procedures to ensure that the project remains in compliance with all land use planning findings. Secured agreements to construct project improvements are obtained backed up with cash and/or other securities. Developer is required to note the WDID number on the project plans	• Plan check completion letter • BMP Maintenance Agreement • BMP Inventory update procedures • Substantial Conformance Procedures • Environmental mitigation and monitoring plan (if any) • Cost estimates • Secured Agreements • Single sheet post construction BMP site plan
Ministerial (Construction) Permit Issuance	City issues permit(s) for construction activities including grading, improvement, building, demolition and blasting. Any special storm water compliance requirements are noted on permit. City staff review plan check completion letter for any special storm water compliance requirements. Copies of the permit, construction plans, Construction SWPPP, single sheet post construction BMP site plan and SWMP are forwarded to the Construction Management and Inspection Division. A construction inspection level (low, medium or high) is assigned in accordance with the project's threat assessment form. The project tracking database is updated with the project threat assessment construction level and permit issuance status.	• Plan check completion letter • Project SWMP • Project Construction SWPPP • Construction Threat Assessment Worksheet • Pollution Prevention Guide for the Construction Industry • Construction SWPPP Fact Sheet • Single sheet post construction BMP site plan
Preconstruction Meeting	City staff meets with contractor and other parties to review project construction issues, schedule, and storm water BMP implementation, monitoring and testing requirements. Contractor is informed of storm water inspection and enforcement procedures and reminded to maintain compliance with the City's storm water pollution prevention requirements. City inspector verifies the NOI has been filed with the Regional Board and a WDID number has been assigned to the project.	• Preconstruction checklist • Construction SWPPP • SWMP • Construction plans • Pollution Prevention Guide for the Construction Industry • Single sheet post construction BMP site plan

Development Process Stage	SUSMP Activity Description	Process Review Documents/References
Construction and Inspection	Developer constructs project including temporary and permanent BMPs. City inspectors enforce compliance with SWPPP, SWMP and Municipal Permit. During construction City project inspector reviews construction for compliance with all plans, the Construction SWPPP, SWMP and City Standards. Regular storm water compliance inspections are scheduled and tracked per City procedures and the requirements of the 2007 JURMP. Enforcement actions are taken as necessary in accordance with City inspection and enforcement procedures. City inspector reviews and approves any minor construction revisions. Major construction revisions are referred to the Engineering Development Services Division for review and approval.	• Construction SWPPP • SWMP • Construction plans • City inspection and enforcement procedures • Pollution Prevention Guide for the Construction Industry • Inspection reports • Enforcement action reports • Secured Agreements • Single sheet post construction BMP site plan
Project Completion	Construction plans are "as-built", securities released, and BMP construction verified. As-Built plans prepared and forwarded to the GIS Group to update the BMP inventory. City inspector reviews project site to verify installation of permanent BMPs prior to occupancy permit and/or project acceptance using the single sheet post construction BMP site plan. Public Improvements are accepted for maintenance including any public structural control BMPs.	• Construction SWPPP • SWMP • Construction plans • Pollution Prevention Guide for the Construction Industry • Punch list • Secured Agreements • Project Acceptance Forms • Single sheet post construction BMP site plan
Post Construction Annual Treatment Control BMP Inspections	BMP owners maintain BMPs in accordance with recommended and regulatory maintenance schedules. Treatment Control BMP owners submit annual verification of effective operation and maintenance of installed treatment control BMPs. City staff inspects project sites with installed treatment control BMPs to verify compliance with storm water requirements. (New requirement was implemented in FY 2008-09).	• SWMP • BMP Inventory List • Site BMP Inspection Report • BMP Maintenance Agreement

The City process includes a single-sheet post construction BMP (SSPCBMP) plan that includes a project site plan and shows the comprehensive locations of each required BMP such as site design, source control, low impact development technique, treatment controls, and hydromodification features. The SSPCBMP plan contains a table that contains cross-references summarizing the selected BMPs together with the appropriate construction document (e.g.: grading, improvement, building or landscape) that is responsible to build each particular post-construction BMP. Upon permit issuance, a copy of the SSPCBMP plan is signed and distributed with the construction drawings for reference by the contractor and inspector. At the conclusion of the project and prior to issuance of an occupancy permit or acceptance of the improvements, the inspector uses the SSPCBMP plan to help ensure all required post-construction BMPs are installed as required. After verification, the inspector initials the plan and places a copy in the project inspection file. During FY 2010-11, the City updated the SSPCBMP plan procedure.

The SSPCBMP is required content for a SWMP. During FY 2010-11, the City updated the template for the SSPCBMP plan. The update added project information and other tables to help organize and present the different types of post construction BMPs for a project. The SSPCBMP serves as a comprehensive document displaying the project and the location of different post construction BMPs that are be installed along with calling out which construction document (grading, improvement, building, landscape plan, etc) that is responsible to install each listed BMP. The template is found on the City's website for use by applicants when preparing SWMP's. For a copy of the template SSPCBMP plan, refer to http://www.carlsbadca.gov/business/building/Documents/BMP_Plan_Sheet.zip.

In addition to the City's post-development storm water requirements, the City has integrated the review of construction BMPs into each stage of the development review process. At the project permitting stage, the applicant is required to submit a completed Construction Threat Assessment Worksheet for Determination of a Project's Perceived Threat to Storm Water Quality (Construction Threat Assessment Worksheet). The Construction Threat Assessment Worksheet is used to determine the inspection frequency level pursuant to the 2007 Municipal Permit requirements (low, medium or high). The required inspection level is entered into the City's Permits Plus software program for automated tracking. The Permits Plus program links the various ministerial construction permits (building, right-of-way, blasting and grading) to the "master" development project. The Permits Plus program is used to automatically generate storm water inspection requests for development projects with active permits. The program is also used to track inspection results and follow-up enforcement inspections.

2.5.2 SUSMP Requirements for Development Projects

During FY 2010-11, the Carlsbad SUSMP requirements were applied to 70 private development/redevelopment projects and 10 City Capital Improvement Program (CIP) projects. Of the 70 private development/redevelopment projects, 6 were subject to Priority Development Project requirements which required site design, source control and treatment control requirements and 64 were subject to Standard Stormwater requirements subject to site design and source control BMP requirements. Of the 10 City CIP projects, there were no projects subject to Priority Development Project requirements, but all were subject to Standard Stormwater requirements. Copies of the private development and CIP project approval list showing the type of storm water standards that were applied to each project are included in Appendices 2.2 and 2.3, respectively.

2.5.2.1 Confirmation that all applicable Carlsbad SUSMP BMP requirements were applied to all priority development projects, including a description of how the information was tracked

The City requires submittal of a completed SWSQ for every discretionary and non-discretionary application made to the City to establish how storm water requirements apply to each project. The submittal of a completed SWSQ signed by the applicant is part of the submittal requirements for both discretionary and plan check applications. Projects that are submitted without a completed SWSQ are considered incomplete and the applicant must respond before the City proceeds with project processing. If the outcome of the SWSQ shows the project is subject to Priority Development Project requirements the City required the applicant of these PDP projects to submit a preliminary SWMP and implement additional BMP measures as required by the Carlsbad SUSMP. All applicable requirements of the Carlsbad SUSMP were applied to all priority development projects. These application checklists also require that for those projects subject to Priority Development Project requirements also require the submittal of a SWMP to the City for review and approval. These process requirements help the City ensure that projects are evaluated against project criteria in the SWSQ and that the appropriate storm water requirements are applied as required by the Carlsbad SUSMP.

On projects that are approved at the discretionary stage, the City uses standard conditions that are included in the project conditions-of-approval for each project. These standard conditions are used by staff and are modified as required to address the unique merits of each project. The standard conditions include storm water-related conditions that help both the applicant and City staff understand how the project complies with the Carlsbad SUSMP. The conditions document whether the project is subject to Priority Development Project or Standard Stormwater requirements. For a copy of the standard conditions of approval that staff apply to discretionary projects refer to Appendix 2.4.

For discretionary projects subject to Priority Development Project requirements, a preliminary SWMP is prepared detailing all proposed site design, source control, low impact design and treatment control BMPs. Structural site design, source control and treatment control BMPs, including the low impact development and interim hydromodification requirements (if applicable) are also outlined in the preliminary SWMP and reflected on the site plan or tentative map. The tentative map/site plan, conditions of approval and preliminary SWMP document are used at the construction plan review and ministerial permitting stage of the project to ensure compliance with the appropriate storm water requirements. Although a preliminary SWMP is provided at the discretionary stage, during final design, the applicant submits the final SWMP and it is reviewed and approved together with the construction documents to ensure the project conforms against the tentative map/site plan and also meets the current SUSMP requirements before permit issuance.

The City maintains a database of both discretionary and ministerial project approvals which includes project approval date, approving authority, applicable resolution numbers and the project storm water standards (i.e.: Priority Development Project requirements, Standard Stormwater requirements). A list of the private development project approvals is included as Appendix 2.2.

Additionally, the City requires preparation of a single sheet post construction BMP (SSPCBMP) plan for all priority development projects that includes a project site plan and calls out the location of each required LID site design, source control, treatment control BMP, and applicable hydromodification facility. The single sheet post construction plan contains a matrix cross referencing the required BMP with the appropriate construction plan (grading, improvement, building or landscape) where the

specified BMP construction is detailed. A copy of the SSPCBMP plan is signed and distributed with each construction drawing for reference by the contractor and inspector. At the conclusion of the project and prior to issuance of an occupancy permit or acceptance of the improvements, the inspector uses the single sheet post construction to help ensure all required BMPs were installed as required. After verification, the inspector initials the plan and places a copy in the project inspection file.

2.5.3 SUSMP Implementation for FY 2010-11 – Priority Development Project

2.5.3.1 Example Priority Development Project that was conditioned to meet SUSMP requirements and a description of the required BMPs

Appendix 2.5 includes an example project subject to Priority Development Project requirements (Example PDP Project). The sample project is called Poinsettia Properties, CT 05-10. This project received discretionary approval in 2006, but received design approval during FY 2010-11. Therefore, the project was subject to SUSMP requirements in effect during FY 2010-11. This project includes 29 small lot single-family dwellings on a 5.12 acre lot. Based on project thresholds per the SWSQ, the project is subject to Priority Development Project requirements and a SWMP was required to address the storm water requirements for the project. The project involves grading, retaining walls, surface and utility improvements. Public street and utility access is provided by Lowder Lane and Poinsettia Lane. The site is located in Hydrologic Unit 904.51, and is tributary to the Batiquitos Lagoon. However, per the 2006 303(d) list, the Batiquitos lagoon is not impaired. Based on table 2-1 of the SUSMP, the project matches two land use categories: 1) Detached residential, and 2) Streets. Therefore, the anticipated and potential pollutants generated by the project include sediments, nutrients, heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides. Per the project conditions, the following BMPs were selected for this project:

1. Optimize Site layout
    a. Minimized Directly Connected Impervious Areas
        i. Roof drains directed to landscape areas
        ii. Clustered lot design (small lot)
    b. Use of efficient irrigation system
    c. Re-tilling of soils compacted by construction equipment
2. Use of Pervious surfaces
    a. The access road in the northwest corner will use a pervious surface (Grass Pave 2)
3. Dispersal of runoff to pervious surfaces
    a. Portions of roof runoff will be discharged over landscaped areas.
    b. Streets with non-contiguous sidewalks. Runoff from sidewalks discharge over pervious landscaped area to slow/filter runoff.
4. Integrated Management Practice (IMP)
    a. Project selected a treatment train approach using three (3) BMPs.
    b. A pre-treatment (bay separator) is the first BMP to remove coarse sediment, trash and debris.
    c. Then runoff enters a detention facility to slow the runoff rate from the site. The below grade detention facility uses a small orifice to ensure a drawdown time of 24-hours.
    d. After the detention facility runoff enters a bioretention basin before leaving the site. This bioretention basin provides runoff treatment through landscaping. This provides additional detention allowing water to pond, percolate through soil and encouraging

evapotranspiration . The basin includes overflows that allow for larger storm events to be conveyed.

5. Source Control
    a. Trash receptacles to be stored under cover and designed not to allow run-on water to enter enclosure
    b. Efficient irrigation with rain and water loss shut-off devices for landscaped areas
    c. All storm drain inlets in the project area to be stenciled
    d. Integrated pest management practices to be used

2.5.3.2 A listing of the priority development projects which were allowed to solely use treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible

No projects subject to Priority Development Project requirements were approved solely using treatment control BMPs with low removal efficiency rankings as the sole method of treatment control during FY 2010-11.

2.5.4. SUSMP Waivers

2.5.4.1 A description of any SUSMP waiver mitigation program

The Carlsbad SUSMP includes a waiver process (see Section 1 of the SUSMP). For projects subject to Priority Development Project requirements, the applicant may submit a SUSMP waiver request to the City Engineer. As part of the request, the applicant must clearly demonstrate how numerically-sized BMPs cannot be employed with the project and outline the infeasibility with using each available BMP and discuss why the project should not be required to meet the SUSMP requirements. Based on the information provided in the waiver request, the City Engineer may either approve or deny the SUSMP waiver request.

During the reporting period, no SUSMP waivers were requested or granted.

2.6 Hydromodification Management Plan

2.6.1 A description of Hydromodification Management Plan development collaboration and participation

During the reporting period, in accordance with the 2007 Municipal Permit, hydromodification standards were updated. The final HMP became effective into the Carlsbad SUSMP January 14, 2011. As a result, during FY 2010-11, there were two standards for hydromodification. All development projects were evaluated against either *interim* or final hydromodification requirements. Therefore, *interim* hydromodification requirements applied to projects for a portion of the reporting period (July 1, 2010-January 14, 2011). Final hydromodification requirements applied to projects from January 14, 2011 to June 30, 2011.

Per the *interim* hydromodification criteria, *interim* hydromodification requirements affect those projects that disturb more than 50-acres of land.

During this reporting period, city staff also attended numerous regional meetings to address SUSMP and HMP implementation. The City also participated in cost sharing for the consultant firms retained to address San Diego regional HMP issues. Once the final HMP was incorporated into the SUSMP (January 14, 2011), the city required development projects to evaluate their project against final HMP requirements.

If subject to final HMP, applicants must select and incorporate strategies and BMPs into their design to maximize infiltration and mimic pre-project hydrologic characteristics.

2.6.2 A listing of Priority Development Projects required to meet hydromodification requirements, including a description of hydrologic control measures implemented

During the reporting period from July 1, 2010 - January 13, 2011, there were no projects that met the 50 acre minimum requirement for implementation of the *interim* hydromodification requirements. Therefore, there were no projects subject to *interim* hydromodification requirements.

Final HMP requirements were adopted into the SUSMP January 14, 2011. During the reporting period from January 14, 2011 – June 30, 2011, there were no projects required to meet final HMP requirements.

2.6.3 A listing of priority development projects not required to meet the hydromodification requirements, including a description of why the projects were found to be exempt from the requirements

In FY 2010-11, one (1) Priority Development Project was approved subject to final HMP; however, the project was found to be exempt from the requirements. The following project along with the exemption criteria that was met is:

Project Name	HMP exemption criteria met
Poinsettia Properties, CT 05-10	-project discharges into a tidally influenced lagoon and includes a report from biologist stating impacts of hydromodification from the development offer no measurable impact.

2.6.4 A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project

During the reporting period from July 1, 2010 - January 13, 2011, there no projects that met the 50 acre minimum requirement for implementation of the *interim* hydromodification requirements. Therefore, there were no projects subject to *interim* hydromodification requirements.

2.7. Treatment Control BMP Program

2.7.1 Inventory Management

The City maintains a watershed-based inventory of publicly and privately owned treatment control BMPs. The inventory has been used to track and document information about each of these structures including BMP type, inspection dates and findings, maintenance frequencies and requirements, verifications, and other information as required by the 2007 Municipal Permit. Development of the inventory is an ongoing process, as new structures are researched, verified, and added on a continual basis.

During this reporting period, the City updated the watershed-based inventory and prioritized all verified structures into high, medium, and low categories as required by the 2007 Municipal Permit using BMP type, location, and proximity to the nearest ESA as prioritization criteria.

During FY 2010-11, the City verified 594 privately owned treatment control BMPs on the inventory, which includes 99 high priority, 391 medium priority, and 104 low priority structures (Appendix 2.6).

For privately owned treatment control BMPs, staff continued to confirm the accuracy of the inventory, research certifications and maintenance requirements, verify ownership and responsible parties, update inspection forms, and distribute outreach materials. The City continues to implement procedures that consistently define the process for managing and updating the privately owned treatment control BMP Inventory List (procedure #CMI-310). A copy of the procedure can be found in Appendix 2.4 of the FY 09-10 annual report.

The City continued to have internal meetings to discuss treatment control BMP program improvements such as inspections, maintenance agreements, verification of maintenance requirements, improved departmental coordination, transfer of information during the approval process, and other issues related to treatment control BMP compliance. As a result of these meetings, the City will establish a Storm Drain Inventory Management Committee that will meet quarterly to discuss issues related to storm drain maintenance, treatment control BMP inventory, GIS mapping, and other topics related to tracking and managing structures within the cities storm drain conveyance system. The committee will begin quarterly meetings in FY 2011-12. The results of this effort will be reported in the next annual report.

See Section 4 of this report for detailed information about the inspection and maintenance program for publicly owned treatment control BMPs.

2.7.2 Treatment Control BMP Inspection Program

During this reporting period, the City conducted compliance inspections of privately owned treatment control BMPs throughout the year and conducted inspections of high priority treatment control BMPs during the dry season only. During the 2010 dry season (May 1, 2010 through September 30, 2010), the City inspected 100% of the high priority, 83.64% of the medium priority, and 75% of the low priority privately owned treatment control BMPs (see Section 2.7.2.1).

During FY 2010-11, the City inspected 85.95% of the privately owned treatment control BMP inventory (see Section 2.7.2.2). Inspection of high priority privately owned treatment control BMPs identified on the updated inventory will continue to be conducted as required by the 2007 Municipal Permit through October 1, 2011 and results of those inspections will be reported in the FY 2011-12 annual report.

Inspectors continue to use the *Treatment Control BMP Inspection Form* developed in FY 2007-08 to determine the effectiveness of privately owned structures. During inspections, the inspector uses their best professional judgment to determine the condition of the treatment control BMP. The condition of each structure is rated using the following criteria:

- **Good:** Currently no maintenance or corrective action is required for the treatment control BMP. No trees, large plants, excessive trash, stagnant water, blockages, or other major sources of pollutants were observed. The treatment control BMP appears to be functioning as designed. Re-inspect in one year.
- **Fair:** Light to minor maintenance required within the next year. Small amounts of trash, weeds, plants, debris, and/or silt has accumulated, but the treatment control BMP is functioning as designed. The structure should be re-inspected within one year by the responsible party and/or the City.
- **Poor:** Maintenance, installation, replacement and/or repairs are required on the structure. Excessive trash, weeds, vegetation, stagnant water, trees, silt, and/or other pollutants were observed during the inspection. In addition, a treatment control BMP could be rated as "Poor" if the structure was blocked, needed repair, or is not functioning as required.

2.7.2.1 2010 Dry Season (May 1, 2010 – September 30, 2010) Treatment Control BMP Inspections

For the 2010 dry season, all high priority privately owned treatment control BMPs were inspected as required. In addition, all minimum inspection goals for privately owned treatment control BMPs were met or exceeded during the 2010 dry season inspections. Please note the number of structures as of October 1, 2010 is different from the total number of structures reported for FY 2010-11 because of the updates made to the inventory throughout the year. Table 2.3 includes a summary of the inspections and findings of the 2010 dry season inspections.

Table 2.3: Summary of 2010 Dry Season (May 1, 2010 – September 30, 2010) Inspections and Findings for Privately Owned Treatment Control BMPs

Classification	Total on Inv List	Condition	Total	Total Verified	% of Inventory Inspected 2010 Dry Season
High	139	Good	48		
		Fair	11		
		Poor	19		
		Future	9		
		Excluded	46		
		Removed	6		
		Not Inspected	0		
		Total High Inspected		**139**	**100%**
Medium	428	Good	100		
		Fair	38		
		Poor	77		
		Future	56		
		Removed	13		
		Excluded	74		
		Not Inspected	70		
		Total Med. Inspected		**358**	**83.64 %**
Low	88	Good	49		
		Fair	0		
		Poor	0		
		Future	11		
		Removed	0		
		Excluded	6		
		Not Inspected	22		
		Total Low Inspected		**66**	**75.00 %**
Total	**655**[1]			**563**	**85.95%**

[1] Please note the number of structures as of October 1, 2010 is different from the total number of structures reported for FY 2010-11 because of the updates made to the inventory throughout the year.

2.7.2.2 Treatment Control BMP Inspections FY 2010-11 (July 1, 2010 – June 30, 2011)

The City conducted inspections of privately owned treatment control BMPs throughout FY 2010-11. During this reporting period, the treatment control inventory was updated and additional structures were verified and added. Inspections of privately owned treatment control BMPs on the updated inventory will continue as required by the Permit. Complete inspection results for the 2011 dry season will be reported in the FY 2011-12 annual report. Table 2.4 includes a complete summary of the inspections and findings for FY 2010-11.

Table 2.4: Summary of July 1, 2010 – June 30, 2011 Inspections and Findings for Privately Owned Treatment Control BMPs

Classification	Total on Inv List	Condition	Total	Total Verified	% of Inventory Inspected FY 2010-11
High	99	Good	56		
		Fair	12		
		Poor	19		
		Future	6		
		Removed	2		
		Excluded	3		
		Not Inspected	1		
		Total High Inspected		**98**	**98.99%**
Medium	391	Good	111		
		Fair	44		
		Poor	48		
		Future	62		
		Removed	8		
		Excluded	16		
		Not Inspected	102		
		Total Med Inspected		**289**	**73.91%**
Low	104	Good	72		
		Fair	0		
		Poor	0		
		Fair	0		
		Removed	0		
		Excluded	1		
		Not Inspected	26		
		Total Low Inspected		**78**	**75.00%**
Total	**594**			**465**	**78.28%**

2.7.3 Treatment Control BMP Verification of Maintenance Program

During FY 2010-11, the City mailed verification of maintenance forms to all responsible parties on the treatment control BMP inventory list. The verification of maintenance form was revised during FY 2010-11 to help responsible parties more accurately provide information about the treatment control BMP maintenance. The form now includes new fields that clearly show the inspection findings for the current and previous year, along with the inspection dates and last known date of maintenance. The verification of maintenance form, along with a cover letter, were mailed to all private property owners and other responsible parties identified on the updated inventory during the FY 2010-11 as required by the 2007 Municipal Permit. A copy of the revised verification form can be found in Appendix 2.7.

Outreach materials were also included with the verification mailers. The "*What You Need to Know About Privately Owned Treatment Control BMPs*" brochure and the "*Frequently Asked Questions About Treatment Control BMPs*" factsheet were included in mailers to help responsible parties understand their maintenance responsibilities. In addition, the "*Treatment Control BMP Verification Form and Instructions*" handout was also included in the mailer to provide step by step and line by line instructions for the responsible parties to help ensure accuracy when completing the required verification of maintenance form(s).

The City continued to use the email address created in FY 2007-08 for the treatment control BMP verification program. Owners and responsible parties can send questions, verification forms, and other requests to the tcbmp@carlsbadca.gov email address, which is monitored by the Senior Construction Inspector. The City also continued to use and updated the treatment control BMP email list for responsible parties. The email list has been useful in providing information about treatment control BMP compliance program and notices about upcoming deadlines for maintenance verification submittals.

For 2010 dry season, mailers were sent out between May 3 and September 15, 2010. In addition to the first notification, those who did not comply with the initial request were sent reminder notices. As a result of the 2010 dry season effort,94.14% of the verification forms were returned as required prior to October 1, 2010. This return rate was higher than the FY 2009 dry season 71% rate of return.

For FY 2010-11, the first notifications were sent to all responsible parties listed on the updated treatment control BMP inventory on May 2, 2011, with a second reminder notice mailed on June 9, 2011. As of June 30, 2011, 69.83% of the verification forms were returned, which is nearly equal to the response rate reported at the end of FY 2009-10. The City will continue to work with the responsible parties through October 1, 2011 to ensure verifications are returned as required. In the event that a responsible party does not respond, the City will use its enforcement authority to escalate efforts.

2.7.4 Treatment Control BMP Verification of Installation Prior to Occupancy

During FY 2010-11, the installation of all structural BMPs required for priority projects were verified prior to occupancy. The process is initiated when the contractor/developer requests a pre-construction meeting with City inspectors. During the pre-construction meetings, the contractor/developer is notified of the BMP installation requirements and issued a copy of the memo outlining the City's requirements

for occupancy. In addition, the Pre-Construction Meeting Agenda Packet was revised to state that occupancy will not be granted until the engineer of work provides a letter verifying that all treatment control BMPs have been installed according to the plans and SWMP. Each contractor/developer is provided with a copy of the agenda packet during the pre-construction meeting.

When a request for occupancy is made to the City by the contractor or developer, City inspectors are notified of the request for occupancy and final inspections are scheduled. The CMI Division modified its Grading Partial Site Release checklist to include a checkbox to remind inspectors to review BMP installations prior to releasing the pad to for building. Inspectors review the project site for compliance with all City requirements including verification of BMP installation. If all the requirements are satisfactory the inspector signs off on the occupancy permit and occupancy is granted. The City maintains a copy of the signed occupancy permit in the building permit file. A copy of the updated Grading Partial Site Release checklist can be found in Appendix 2.8.

During FY 2010-11, similar to final drawings, the City began scanning storm water management plans into our digital management system (DMS). This allows these water quality reports to be accessed by CM&I inspectors, reviewers, researchers when to help identify the types and locations of approved post construction treatment control BMPs.

In addition, the City modified its inspection process in FY 2009-10 to require documentation on BMP installations prior to occupancy. This process requires written verification from the developer, engineer of work, or other responsible party that BMPs were installed in accordance with the SWMP. This verification must be submitted before a request for occupancy is made. After receiving the written verification, the City reviews the SWMP, maintenance responsibilities, and confirms that the BMP installation is in compliance. On May 2, 2011, an updated memorandum was sent to all developers and contractors with active grading permits informing them of the prior to occupancy verification procedure. A copy of the "*BMP Verification of Installation Required Prior to Occupancy*" memorandum can be found in Appendix 2.9.

2.8. Enforcement

In FY 2010-11, the City continued to escalate enforcement actions against treatment control BMP owners and other responsible parties that were not in compliance with the maintenance and/or verification requirements of the CMC, including not returning the verification forms. The City's CMI Division is responsible for implementing all enforcement actions related to treatment control BMP compliance. The City's goal is to obtain voluntary compliance with the CMC and 2007 Municipal Permit requirements through public education, outreach and inspections. However, enforcement actions may become necessary when these measures fail to result in compliance.

Appropriate enforcement actions used to achieve compliance should be proportional to the compliance issue, reflective of the responsible party's compliance history, and protective of human health and the environment. In addition, an appropriate enforcement action, which in some cases may include a civil penalty and recovery of economic benefit, sends a message of deterrence to the regulated community. To ensure fairness, the City will remain receptive to good-faith arguments - based on fact, law, or policy - that a given situation is different and should be treated differently, that a site is in fact in compliance, or that a severe penalty is not warranted given the specific circumstances of the violation. Table 2.5

includes a summary of all enforcement actions related to the privately owned treatment control BMP inspection, maintenance, and verification program.

Table 2.5: Summary of Treatment Control BMP Enforcement Actions for FY 2010-11

Type of Enforcement Action	Number Issued per Structure
Warning Notice	206
Notice of Violation	52
Administrative Citation - Warning	36
TOTAL	**294**

The City also achieved compliance with the updated Carlsbad SUSMP through the permitting process. Development approvals are not granted until the project shows complete compliance with the City's storm water standards. The City will not issue a construction permits until all applicable site design, source control and treatment control BMP requirements are incorporated into the project plans. For projects involving grading and/or street and utility improvements, the City requires that the developer enter into secured agreements to guarantee developer performance on the grading or improvement work including associated structural BMPs. City inspectors review the project sites during construction to ensure that all work is being done in compliance with the construction plans, City Standards and procedures. Prior to issuance of a certificate of occupancy or release of any security, the City inspector reviews the project site to ensure that all applicable structural BMPs have been installed per the approved plans and specifications. Only when the BMP installations have been verified will the certificate of occupancy be issued or any security is released.

2.9 Notable Activities

As mentioned in the Executive Summary, the City considers Notable Activities to be any activity above compliance requirements.

- During FY 2010-11, the City developed an informational brochure on low impact development (LID Brochure). The LID Brochure is a tool to educate developers, contractors and homeowners about low impact design and how water quality features can be incorporated into projects. The brochure includes different LID features, what their purpose is, and where it could be employed on a project site.

- In November 2010, CMI staff attended the annual CASQA conference in Palm Springs, Ca. This year's conference theme was "Rethinking Stormwater Management". The conference featured over 80 sessions and presentations covering a variety of topics including the new Construction General Permit, BMP Effectiveness Assessment, Regulations and Policies, Stormwater Treatment, and other related topics.

- On April 6, 2011, Development Services and CMI staff attended the "Maintaining LID in San Diego: Best Management Practice Inspection and Maintenance Workshop" held in San Diego. The workshop was hosted by the City of San Diego and included up to date information about new and proposed LID regulations, stormwater management devices including treatment control BMPs, inspection and maintenance requirements for BMPS, and design and implementation strategies for minimizing BMP maintenance requirements.

- On December 14, 2011 and on March 8, 2011 Development Services staff attended training seminars regarding the countywide BMP sizing calculator. This training served to train both private engineers and municipal staff on how the BMP calculator could be utilized to satisfy the new stormwater requirements, including hydromodification.

- During FY 2010-11, the City updated the Carlsbad SUSMP. On January 14, 2011 the update added final hydromodification criteria, thresholds and requirements. The City incorporated the countywide BMP sizing calculator to facilitate applicants when sizing BMPs that satisfy both numeric and hydromodification requirements. The updated Carlsbad SUSMP was made available on the City's website and emails were sent to those listed on the email notification list from the City's website. The City updated the SWSQ and SWMP guidelines.

- In January 2010, the Carlsbad City Council accepted the Carlsbad Community Vision, which was the result of a citywide community visioning process (Envision Carlsbad Phase 1). The Carlsbad Community Vision identifies the community's core values for the future, which include a strong desire to protect open space and the natural environment, both for its visual beauty, and for its ecological functions (clean air and water, habitats, animal movement corridors). As stated in the Carlsbad Community Vision, "Community members look forward to continued enjoyment of clean, healthy, and accessible lagoons, beaches, and natural habitat areas due to ongoing conservation, restoration, and active maintenance efforts." Carlsbad residents are very cognizant and proud of the ocean and lagoons, and how important it is to keep them clean.

- During FY 2010-11, the City continued to have internal meetings to discuss treatment control BMP compliance program improvements such as inspections, maintenance agreements, verification of maintenance requirements, improved departmental coordination, transfer of information during the approval process, and other issues related to treatment control BMP compliance.

- During FY 2010-11, the City updated the template for the SSPCBMP plan for applicants and engineers that prepare SWMP's. A SSPCBMP plan is required content for a SWMP. The SSPCBMP serves as a comprehensive document displaying the project and the location of different BMPs that are be installed along with calling out which construction document (grading, improvement, building, landscape plan, etc) that is responsible to install each listed BMP. The template was also added to the City's website for use by applicants when preparing SWMP's. For a copy of the template SSPCBMP plan, refer to http://www.carlsbadca.gov/business/building/Documents/BMP_Plan_Sheet.zip.

- During FY 2010-11, similar to final drawings, the City began scanning storm water management plans into our digital management system (DMS). The SWMP is a useful document as it is used to help identify the types and locations of approved post construction treatment control BMPs. It also contains maintenance obligations that are required for the post-construction BMPs located on the project. Scanning to DMS allows these water quality reports to be more readily accessed digitally by CM&I inspectors, homeowners, reviewers, researchers.

- During FY 2010-11, the City updated forms and uploaded them to the City's website. These forms are frequently used by applicants to evaluate projects for storm water requirements on projects. For a copy of the City's webpage showing the storm water forms, see http://www.carlsbadca.gov/business/building/permitting-process/Pages/Engineering_Applications.aspx.

Section 3

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City of Carlsbad continues to stress the importance of storm water pollution prevention throughout the implementation of the construction component. This section of the annual report identifies those activities which occurred from July 1, 2010 through June 30, 2011 and will cover the requirements of the Permit No. R9-2007-0001 (2007 Municipal Permit).

The City has implemented activities that address and minimize impacts to receiving water quality from construction sites. During this reporting period, the City updated the construction inventory on a monthly basis, inspected all construction sites at the required frequencies, responded to construction related inquiries and complaints, provided outreach and education to developers, engineers, contractors and City staff, and when necessary used escalated enforcement mechanisms to obtain compliance.

3.2 Source Characterization

All construction sites were required to undergo the City's construction urban runoff approval process and meet the applicable construction requirements. The City uses the Permits Plus database to update the watershed based inventory of all construction sites that required grading and/or construction permits. The Development Services Division updates the Permits Plus database until the project is ready to begin construction. The Construction Management and Inspection (CMI) Division then issues the permit and updates the database during the "active construction" phase of the project. The CMI inspectors are primarily responsible for conducting storm water compliance inspections during the active construction phase.

Construction sites with grading permits may include sites where activities such as grading, excavation, clearing, road construction, structure construction, or demolition results in the disturbance of soil. Construction permits that do not require a grading permit may include sites such as single family residence remodels or additions, home demolitions, tenant improvements, or commercial/industrial buildings that are constructed resulting in the need for water quality protection. An inventory of all active construction sites requiring a grading permit can be found in Appendix 3.1. At the end of FY 2010-11, there were 127 grading permits on the grading construction site inventory, of which 96 were active and 31 were inactive (finaled, expired, or withdrawn). Table 3.1 is a summary of the FY 2010-11 active grading permit inventory.

Table 3.1: Summary of the FY 2010-11 Active Grading Construction Site Inventory

Priority	Active	Finaled	Withdrawn	Expired	Total
High	33	1	0	0	34
Medium	15	6	0	0	21
Low	48	24	0	0	72
Total	**96**	**31**	**0**	**0**	**127**

3.3 Updates to Ordinances and Approval Processes

In FY 2010-11, all new development and redevelopment projects including CIP projects were required to undergo the City's urban runoff approval process in accordance with the requirements of the 2007 Municipal Permit and 2008 JURMP.

In January 2011, the Carlsbad SUSMP was updated to incorporate hydromodification requirements. The SUSMP update included new information on hydromodification thresholds, criteria, application, and methodologies. In conjunction with the SUSMP update, processing forms for project submittals were also updated including the Storm Water Management Plan guidelines and Storm Water Standards Questionnaire (SWSQ) applicants complete when submitting projects. The City also modified its local SUSMP to incorporate the new Countywide Model SUSMP and adopt the final HMP. As part of the update, the Carlsbad SUSMP includes objectives, thresholds and implementation requirements that address HMP. For those projects subject to HMP, the SUSMP adopted the web-based county BMP sizing calculator that allows applicants to select and size BMP's that satisfies both treatment control and hydromodification requirements. The SUSMP also allows for applicants to use alternative approaches provided they address the final HMP requirements.

The City updated the single-sheet BMP plan to include a revised project site plan and call out the comprehensive locations of each required site design, source control, low impact development technique, and treatment control BMP. The plan contains a cross referencing table that shows the selected BMPs, grading, improvements, building, and/or landscape. A copy of the plan is attached to each construction drawing for reference by the contractor and inspector. At the conclusion of the project and prior to issuance of an occupancy permit or acceptance of the improvements, the inspector uses the single-sheet BMP plan to help ensure all required BMPs are installed as required.

In addition to the City's post-development storm water requirements, the City has integrated the review of construction BMPs into the development review process. At the project permitting stage, the applicant is required to submit a completed Construction Threat Assessment Worksheet for Determination of a Project's Perceived Threat to Storm Water Quality (Construction Threat Assessment Worksheet).

During FY 2010-11, the installation of all structural BMPs required for priority projects continued to be verified prior to occupancy. When a request for occupancy is made to the City by the contractor or developer, City inspectors were notified of the request for occupancy and final inspections were scheduled. The CMI Division modified its Grading Partial Site Release checklist to include a checkbox to remind inspectors to review BMP installations prior to releasing the pad for building. Inspectors reviewed the project site for compliance with all City requirements including verification of BMP installation. If all the requirements were satisfactory the inspector signed off on the occupancy permit and occupancy was granted. The City maintains a copy of the signed occupancy permit in the building permit file. A copy of the updated Grading Partial Site Release checklist can be found in Appendix 2.8.

During this reporting period, the ordinances were reviewed and found to be adequate; therefore, no ordinance changes were made. Below is a complete listing of the grading and construction approval process and procedural changes made during FY 2010-11:

1. The City updated the Carlsbad SUSMP and Storm Water Standards Questionnaire (SWSQ) to comply with the requirements of the 2007 Municipal Permit. A link to the updated SUSMP and SWSQ can be found in Section 2.4.1 of this report.
2. The CMI Division modified its Grading Partial Site Release checklist to include a checkbox to remind inspectors to review BMP installations prior to releasing the pad for building. Inspectors reviewed the project site for compliance with all City requirements including verification of BMP installation. If all the requirements were satisfactory the inspector signed off on the occupancy permit and occupancy was granted.
3. The Building Division developed a new procedure to help inspectors effectively conduct NPDES inspections at sites covered by an active building permit. The "SWPPP Permit and Process Procedures" guides each building inspector and engineering tech through a step by step process to ensure NPDES compliance at each building site. A copy of the new procedure can be found in Appendix 3.2.
4. The Building Division, in coordination with the City's IT Department, modified the Permits Plus database to track NPDES inspections at building sites. NPDES inspection information about all permitted building sites is maintained in the database and inspectors are able to not only schedule inspections, but also track information about compliance, enforcement, and other relevant NPDES information.

3.4 Best Management Practice Requirements

SWPPPs and Erosion Control Plans are reviewed prior to commencement of construction activities to ensure that the required minimum BMPs will be implemented for all construction sites. The City has required the minimum BMPs be implemented, as identified in the 2008 JURMP and Carlsbad Municipal Code, for all construction sites. The seven required minimum BMPs include components that address the following:

1. Erosion control methods for graded slopes;
2. Erosion control method for graded flat areas (slope <5%);
3. Sediment control for perimeter boundaries;
4. Offsite tracking control of sediment;
5. Materials management control;
6. Waste management control; and
7. Non-storm water management control.

The City continues to utilize the pollution prevention measures contained in the Storm Water Best Management Practice Handbooks, published by the California Storm Water Quality Association (CASQA), Caltrans Storm Water Quality Handbooks, and Standards for Design & Construction of Public Works Improvements in the City of Carlsbad. All CMI staff are trained on construction site BMPs and their appropriate application.

Pollution prevention consists of procedures and practices that eliminate or reduce the pollutants at the source. The City has identified and required implementation of the following pollution prevention controls for all applicable construction sites:

- SWPPPs and Erosion Control Plans are required for grading permits and appropriate construction projects. These plans are checked by the City to ensure they adequately address

the provisions of the General Construction Permit.

- CMI inspectors enforce the implementation and effectiveness of BMPs described in approved erosion control plans and SWPPPs.

To address each of the required BMPs, the City ensures the SWPPPs and/or erosion control plans include implementation of several types of BMPs as applicable, depending on site-specific requirements. The list of BMPs can be referenced in the 2008 JURMP.

3.4.1 Maximum Allowed Disturbed Areas

Grading sites were held to the maximum allowable disturbed areas on all applicable sites.

3.4.2 Advanced Treatment Requirement

There were no projects that triggered the advanced treatment requirements.

3.5 Program Implementation

During FY 2010-11, the City continued to monitor and enforce storm water regulations by dividing construction compliance into three areas – Capital Improvement Projects (CIP), Building Construction Permits, and Grading Permits. For FY 2010-11, CMI continued to oversee the inspection of active grading sites and CIPs, while the Building Division ensured sites covered under active building permits (construction sites without a grading permit) were compliant. In addition, one Senior Construction Inspector has been designated with full responsibility for storm water compliance for all NPDES activities for CMI.

During FY 2010-11, the installation of all structural BMPs required for priority projects were verified prior to occupancy. The process is initiated when the contractor/developer requests a pre-construction meeting with City inspectors. During the pre-construction meetings, the contractor/developer is notified of the BMP installation requirements and issued a copy of the memo outlining the City's requirements for occupancy. In addition, the Pre-Construction Meeting Agenda Packet was revised to state that occupancy will not be granted until the engineer of work provides a letter verifying that all treatment control BMPs have been installed according to the plans and SWMP. Each contractor/developer is provided with a copy of the agenda packet during the pre-construction meeting.

3.5.1 Grading Construction Sites

3.5.1.1 Inventory Management

During FY 2010-11, all active grading sites continued to be prioritized into high, medium, and low categories and inspected at the minimum frequencies required by the 2007 Municipal Permit. All inspection protocols outlined in the 2007 Municipal Permit, 2008 JUMRP, CMI procedures, and the CMC were followed and implemented as required. The active grading permit inventory is maintained by CMI and updated on a monthly basis. The inventory helps to track each active grading site within each priority category (high, medium, and low) and identify the period of time (weeks) the site was active within the wet season, the number of inspections conducted during the wet season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all

active grading sites. A copy of the active grading permit inventory can be found in Appendix 3.3. For a complete description of how the grading construction site inventory is maintained please refer to procedure #CMI-120 found in the FY 2009-10 annual report.

3.5.1.2 Inspections and Compliance

Storm water compliance continues to be the focus of CMI inspectors during this reporting period, especially during the wet season. All required inspections were documented and placed in the project files. During required site visits, inspectors generally found sites to be compliant with SWPPPs, Erosion Control Plans, and BMP implementation. Most observed deficiencies were found with BMP maintenance (i.e. broken gravel bags, silt fences, etc.). These deficiencies were immediately brought to the attention of the site superintendent or other responsible party who was directed by the project inspector to immediately implement corrective action. This interaction has proven to be productive in correcting minor deficiencies.

Prior to the wet season, CMI inspectors hand delivered a memo to all site superintendents reminding them of the NPDES requirements and informing them to ensure all sites are in compliance by and throughout the wet season. A copy of the *Rainy Season Preparation and Storm Water Compliance* memorandum, issued on September 1, 2010, can be found in Appendix 3.4.

In addition, the City continued to verify the validity of a project's Notice of Intent (NOI) prior to issuance of a grading permit or Notice to Proceed for CIP projects. Prior to the pre-construction meeting and issuance of a grading permit, the Construction Manager reviews the State's online database to ensure a NOI, for applicable projects, had been issued prior to assigning the project to an inspector for grading permit issuance.

In an effort to identify and implement BMPs in a more effective manner, the City revised the NPDES inspection report in September 2009. The inspection form facilitates efficient inspector use, clarifies required corrective actions, tracks the numbers and types of violations, and identifies any necessary escalated actions. The NPDES inspection report covers all administrative requirements including inspection and evaluation of SWPPPs, wall maps, desiltation basins, materials and waste management, temporary BMPs, slope protection, and site conditions and interactions. A copy of the inspection report can be provided directly to the site representative upon completion of an inspection. This process has proven to be time saving, cost effective, and successful in attaining compliance from construction sites. If corrective actions were required, follow-up inspections were conducted to verify compliance.
All active grading sites were prioritized and inspected as required during this reporting period. CMI inspectors verified proper BMP implementation on a weekly, sometimes daily basis. Table 3.2 is a summary the grading permit inspections conducted during this reporting period:

Table 3.2: Inspections Required and Conducted for Sites Requiring a Grading Permit – FY 2010-11

Wet Season Inspections Required	Wet Season Inspections Conducted	Dry Season Inspections Required	Dry Season Inspections Conducted	**Total** Inspections Required	**Total** Inspections Conducted
624	**669**	**316**	**333**	**940**	**1002**

3.5.2 Building Construction Sites

On July 1, 2010, the City completed the transition of NPDES inspections at sites covered by an active building permit from outsourced contract services managed by CMI to the City's Building Division inspection staff. Inspections were conducted using the procedures outlined in the 2008 JURMP and CMC. In addition, the Building Division developed a new procedure to help inspectors effectively conduct NPDES inspections. The "SWPPP Permit and Process Procedures" guides each building inspector and engineering tech through a step by step process to ensure NPDES compliance at each building site. A copy of the new procedure can be found in Appendix 3.2. Building Division inspection staff also received additional training during this reporting period and developed departmental procedures to ensure compliance with the inventory, inspection, and reporting requirements of the 2007 Municipal Permit.

During this reporting period, the Building Division issued 478 SWPPP permits and began requiring pre-construction meetings for all projects prior to the commencement of building activities. As part of the divisions' outreach program, the pre-construction meeting allows the inspector to review the BMP's outlined on the Storm Water Compliance Form for Tier 1 Construction SWPPP (E-29) with the contractor and/or homeowner.

3.5.2.1 Inventory Management

The Building Division maintains an inventory of building permits in both a computer tracking system and on paper records. The inspector is responsible for maintaining copies of all NPDES information related to building permits, inspection results, and comments. The Building Division, in coordination with the City's IT Department, modified the Permits Plus database to track NPDES inspections at building sites. NPDES inspection information about all permitted building sites is maintained in the database and inspectors are able to schedule inspections, track information about compliance, issue enforcement actions, and document other relevant NPDES information. When new building permits are added to the database, they are prioritized into low, medium, or high categories and scheduled for inspection using the criteria outlined in the 2008 JURMP. In general, low priority sites were classified as sites that had only interior work and minimal to no material storage areas outside of the site..

3.5.2.2 Inspections and Compliance

Storm water compliance remained the focus of inspectors during this reporting period, especially during the wet season. All required inspections were documented and placed in the project files. NPDES building inspection requests are automatically generated by Permits Plus software based on the required inspection frequency during the wet and dry seasons. During the wet season high priority sites were inspected bi-weekly. All medium and low priority sites were inspected as needed. Building inspectors also reviewed site BMPs each time they performed inspections required by the California Building Code. As part of the new building permit inspection procedures, any additional inspections are recorded in Permits Plus using Form B-49 which specifies compliance issues related to the building permit. A copy of Form B-49 can be found in Appendix 3.5. In addition, the CMI NPDES inspection form was slightly modified for building permit site inspection use (Appendix 3.6). The total number of site inspections Form B-50 (Appendix 3.7) generated by the Building Division resulted in 283 total project inspections during the wet season and 109 total inspections during the dry season. 461 pre-construction meetings and 1745 routine site contacts were preformed and allowed inspectors to maintain a high level of oversight and was key in resolving compliance issues in an expeditious manner.

During site contacts, notable improvements were observed of the general condition of sites related to storm water compliance of most building sites. Contractors and owner builders appeared to be much more proactive in managing runoff from their sites as well as containment of pollutants within the site. The most noted compliance issue continues to be the maintenance of stucco and concrete washout areas. Through the City's educational program and other compliance efforts this issue continues to be addressed during follow up inspections and escalated enforcement actions.

3.5.3 Capital Improvement Projects

3.5.3.1 Inventory Management

During FY 2010-11, CIPs continued to be prioritized into high, medium, and low categories and inspected at the minimum frequencies required by the Permit. All inspection protocols outlined in the 2007 Municipal Permit, 2008 JUMRP, CMI procedures, contracts, and the CMC were followed and implemented as required. The active CIP inventory is maintained by CMI and updated on a monthly basis. The inventory helps to track each CIP within each priority category and identify the period of time (weeks) the site was active within the wet season, the number of inspections conducted during the wet season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all CIP sites. A copy of the CIP inventory can be found in Appendix 3.8.

3.5.3.2 Inspections and Compliance

Daily inspections were conducted for CIP project sites. These inspections cover a number of construction-related and storm water compliance issues. All medium and low priority sites were inspected as needed. Table 3.3 is a summary the CIP inspections conducted during this reporting period:

Table 3.3: Inspections Required and Conducted for CIP Sites for FY 2010-11

Wet Season Inspections Required	Wet Season Inspections Conducted	Dry Season Inspections Required	Dry Season Inspections Conducted	**Total** Inspections Required	**Total** Inspections Conducted
183	**190**	**73**	**73**	**256**	**263**

3.6 Enforcement

There were no changes in the City's enforcement escalation procedures as described in the 2008 JURMP during this reporting period. Table 3.4 is a summary of enforcement actions taken by the City from July 1, 2010 to June 30, 2011.

Table 3.4 Summary of Violations and Enforcement Actions at Construction and Building Sites

Actions Taken	Number of Actions CMI	Number of Actions Building Division	TOTAL
Verbal Notices	192	266	458
Written Warning	39	0	39
Stop Work Notice	0	0	0
Notice to Clean	0	93	93
Total Actions	231	359	590

If a site was found to have deficiencies in storm water compliance, it was generally corrected at the time of the inspection. If a verbal or written warning was issued, a specific deadline for correction action was noted on the inspection report. Follow up inspections were conducted to ensure construction sites complied with the required corrective actions. Most sites were found to have completed corrective actions and were in compliance at the time of the follow up inspection.

If a site was found to be out of compliance to the point where major deficiencies were noted, a Stop Work Notice was issued. Stop Work Notices prevent the contractor from continuing any construction related work until the corrective actions have been implemented. Stop Work Notices were found to be an immediate and effective mechanism to ensure non-compliance was corrected in an expeditious manner. There were zero Stop Work Notices issued during this reporting period.

On May 9, 2011, the City responded to a report of a water line break at The Tides (WDID: 9-37C359990) construction site located in Carlsbad. During a scheduled grading operation an unmarked and unknown 10 inch water line was inadvertently struck which caused water and sediment to be discharged off site. The discharge flowed into a nearby storm drain and eventually to Batiquitos Lagoon. The developer, contractor, the California Department of Transportation, and City inspectors immediately responded by shutting off the water main, blocking the storm drain inlets, and removing sediments from the road and storm drain system. The City estimates that approximately 350,000 gallons of water was discharged during the incident. A contractor retained by the developer was able to remove approximately 6,500 gallons of water and sediment from the storm drain system between the project site and Batiquitos Lagoon. Because the developer was proactive and expeditious in their response, no enforcement actions were pursued by the City. On May 12, 2011, the City as required by the Municipal Permit, submitted a written report to the RWQCB summarizing all efforts to respond to and mitigate the discharge.

3.7 Notable Activities

As mentioned in the Executive Summary, the City considers Notable Activities to be any activity above compliance requirements. The City has continued its strong stance on storm water pollution prevention and inspectors have obtained a high awareness among field personnel (superintendents, field labor, etc.) regarding the importance and application of BMPs for construction sites. Notable activities for FY 2010-11 include:

- The Building Division developed a new procedure to help inspectors effectively conduct NPDES inspections at sites covered by an active building permit. The "SWPPP Permit and Process Procedures" guides each building inspector and engineering tech through a step by step process to ensure NPDES compliance at each building site.

- In November 2010, CM&I staff attended the annual CASQA conference in Palm Springs, Ca. This year conference theme was "Rethinking Stormwater Management". The conference featured over 80 sessions and presentations covering a variety of topics including the new Construction General Permit, BMP Effectiveness Assessment, Regulations and Policies, Stormwater Treatment, and other related topics.

- In FY 2010-11, the required number of inspections for active construction sites was exceeded. CMI conducted 1,002 inspections, which exceeds the 940 inspections required for the wet and dry seasons.

Section 4

4.0 MUNICIPAL COMPONENT

4.1 Introduction

Municipal facilities are required to implement the minimum BMPs identified and described in the 2008 JURMP (good housekeeping, preventive maintenance, material handling and storage, employee training, solid waste handling, record keeping, self-inspection, and spill response), as applicable. Specific BMPs are identified in SWPPPs and/or inspection reports. Specific pollution prevention measures may vary from one site to another and are evaluated separately at each facility. The City implements and assesses the effectiveness of BMPs through regular staff training, self-inspections, third party inspections by a contractor, and SWPPP implementation. The following includes a description of specific pollution prevention activities and storm water BMPs implemented from July 1, 2010 to June 30, 2011 per Order R9-2007-0001 by various City departments. All BMPs were implemented as required by the 2008 JURMP.

Municipal areas and activities are subdivided by categories in the sections below. Prioritization of these municipal areas is presented in the High Priority column of the Municipal Inventory located in Appendix 4.1. Municipal facilities are mapped using GIS and can be found in Appendix 4.2.

4.2 Minimum BMP Requirements

The following minimum BMPs were implemented at the facilities in the Municipal Inventory provided in Appendix 4.1, where appropriate.

4.2.1 Employee Training

Municipal departments provided training at least annually to all employees with responsibility for actions that have a potential to cause storm water pollution. A list of all Municipal storm water training is included in Appendix 8.1. Training generally addresses, among other topics, the following:

- Storm water awareness
- Applicable regulations
- Discharge prohibitions
- Importance of pollution prevention practices (good housekeeping, recycling, waste management, source control, etc.)
- Applicable best management practices (including those called out in the facility storm water pollution prevention plan [SWPPP]), where applicable
- Integrated pest management
- Self-inspections
- Record keeping

Documentation of training is maintained on-site at the location(s) where operations or activities are conducted. Where the operations are covered in a SWPPP, training records are filed with the SWPPP.

4.2.2 Pollution Prevention

The City implements urban runoff pollution prevention practices that are generally recognized for that facility's activity as being effective.

Pollution prevention is defined in Order No. R9-2007-0001 "*as practices and processes that reduce or eliminate the generation of pollutants. Recycling, use of different types of products or chemicals, and altering operational procedures are all types of pollution prevention practices that reduce the amounts of pollutants generated by a facility.*"

The City's approach is to promote pollution prevention as an activity for all municipal employees and locations. Since 1991, the City has implemented a procurement policy that directs the purchase and use of recycled products. Purchasing staff are encouraged to use "*Green Purchasing*" principles. This refers to buying products and services with reduced effects on human health and the environment (also called "*Environmental Purchasing*"). While some of these products are office and janitorial supplies, the policy also applies to construction supplies, landscape materials and equipment, automotive, road and highway supplies.

Specific pollution prevention measures may vary from one site to another, so they are evaluated separately at each facility. Where appropriate, High Priority municipal facilities implemented site specific Storm Water Pollution Prevention Plans (SWPPP) and associated training programs. Furthermore, the pollution prevention BMPs identified in the JURMP were implemented at all municipal facilities. These pollution prevention BMPs include:

- Affirmative Procurement – Use alternative, safer, or recycled products.
- Reduce the amount of hazardous materials used by implementing natural controls.
- Redirect storm water flows away from areas of concern.
- Reduce use of water.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.

In addition, the City required the following minimum pollution prevention practices (detailed in SWPPPs or inspection reports) at all municipal facilities where appropriate:

- <u>Reduce use of water or use dry cleanup methods:</u> Employees used dry cleanup methods when possible (sweeping, etc.). Any washing activities required containment and recovery, with no discharge to the storm drain system. These BMPs are also required for City contractors.
- <u>Conduct storm drain maintenance:</u> Employees performed regular visual inspections of the storm drains to identify unauthorized discharges and clean as needed.
- <u>Recycle:</u> City departments recycled appropriate items and implemented the City procurement policy to purchase and use recycled products.
- <u>Move or cover potential pollution sources from storm water contact:</u> Corporate yards protected materials and products that could potentially contribute to storm water pollution by storing them indoors, or covering them, and providing them with secondary containment as needed.

4.2.3 Good Housekeeping

Good housekeeping practices employed simple common sense in creating and maintaining a clean, orderly environment that reduced the risk of accidents and urban runoff contamination.

- **Routine Housekeeping Inspections.** Locations with higher risk of impacting storm water quality (e.g., storm water outfalls, loading and unloading areas, materials, products and wastes storage areas, equipment and vehicle maintenance and cleaning areas) were inspected regularly. Inspections focused on leaks or conditions that may have led to discharges of pollutants to the Storm Water Conveyance System or Receiving Waters.

- **Maintenance of Clean Grounds Surfaces.** Sweeping of all paved areas exposed to precipitation or storm water was conducted on a regular basis. Litter controls of all exposed surface were conducted on a regular basis. The frequency of sweeping and litter control is based on site conditions.

- **Waste Management.** Each facility conducted regular pickup and disposal of garbage and waste materials/products to prevent overfill of waste storage containers.

- **Equipment Inspection.** Each facility conducted routine inspection of equipment to ensure proper functioning. Where problems were identified during inspection, proper and prompt maintenance or repair is conducted.

- **Storage.** Raw materials, intermediate products, finished products, byproducts and waste products were stored in covered areas or sealed containers unless the materials or products were not a threat to urban runoff quality. To prevent accidental spills, materials or products are stored away from direct traffic routes. All containers were stacked according to applicable federal, state, and city regulations as well as manufacturers' instructions to avoid damage from improper weight distribution. Pallets or similar devices were used to prevent corrosion of the containers that can result when containers come in contact with moisture on the ground.

- **Limitations on Handling Hazardous Materials.** Each facility limited the handling of hazardous materials to those personnel specially trained to handle these materials.

- **Employee Training.** All good housekeeping practices were incorporated into a facility's employee-training program.

In addition to the BMPs listed above, good housekeeping was addressed as a site specific BMP for each category of facilities listed below. See BMP SC-60 for site specific information on implementation.

4.2.4 Spill Response and Prevention

Municipal staff implemented BMPs at all fixed facilities and field programs to prevent, control and clean up spills. The following are general BMPs that were implemented:

- BMPs listed in SC-11, Spill Prevention, Control and Cleanup (City of Carlsbad JURMP 2008).
- Spill cleanup materials were readily available and in known locations.

- Spills were cleaned up immediately and dry methods are used where possible.
- Spill cleanup material was disposed of properly.

Spill response and prevention was also addressed as a site specific BMP for each category of facilities listed in Sections 4.3 – 4.14 of this report. See SC-11 for site specific information on implementation.

4.3 Roads, Streets, Highways, Parking Facilities

4.3.1 Background

This section includes BMPs and an inventory of roads, streets, highways, and parking facilities which are deemed High Priority according to Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City's 2008 JURMP. This section also includes information on the City's street sweeping program and BMPs for the City's street maintenance program.

4.3.2 Source Characterization

The table below lists the 10 High Priority roads, streets, highways, and parking facilities on the City's municipal inventory as updated in the 2008 JURMP.

Table 4.1 Roads, Streets, Highways, and Parking Facilities

1	ADULT LEARNING PROGRAM PARKING LOT	3368 EUREKA PL
2	CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE
3	CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR
4	CITY STREETS	CITY WIDE
5	COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR
6	DOVE LIBRARY PARKING LOT	1775 DOVE LN
7	FARADAY CENTER PARKING LOT	1635 FARADAY AV
8	FARMERS BUILDING PARKING LOT	FARADAY & EL CAMINO RL
9	HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST
10	RAILROAD DEPOT VISITORS CENTER PARKING LOT	400 CARLSBAD VILLAGE DR

4.3.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.2 were implemented at the 10 High Priority facilities listed above.

Table 4.2 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-70 Road and Street Maintenance
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.3.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.2 were implemented at the facilities listed in Table 4.1 and are described below:

- SC-11 – Spill Prevention, Control, and Cleanup: Spill kits were located in all vehicles.
- SC-33 – Outdoor Storage of Raw Materials: Plastic tarps covered raw materials in the yard, equipment was covered by canopies, and the material was covered by a permanent overhead structure or stored indoors. Materials associated with street maintenance activities were stored at the Maintenance and Operations Facility.
- SC-34 – Waste Handling and Disposal: Paint waste was returned to the maintenance yard where it was transferred directly from the generating vehicle to secured storage containers. This was done within a proper containment area in case of any accidental spillage. These containers were clearly marked and stored until arrangements were made for a certified waste management company to remove them and transfer them to an approved facility.
- SC-41 – Building and Grounds Maintenance: In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking and Storage Area Maintenance: Parking lots and storage areas were swept biweekly.
- SC-60 – Housekeeping Practices: All maintenance vehicles are equipped with spill kits. Work sites were swept and all debris was removed upon completion of any asphalt or concrete repair.
- SC-70 – Road and Street Maintenance: Storm drain inlets were protected using rock bags prior to the start of any maintenance activities. Concrete wash out was performed on a plastic tarp and contained to prevent any discharge to the storm drain. Street sweeping was performed for all curbed streets and municipal parking lots in the City. Table 4.3 below indicates the distance swept in curb miles, frequency, and amount of materials removed as a result of the street sweeping activities. In total, there were approximately 19,440 curb miles of streets swept from July 1, 2010 to June 30, 2011.

Table 4.3 Street Sweeping Data

Priority[1]	Description	Distance	Minimum Frequency	Material Removed
High[2]	Arterials/seawall/Downtown	54.5 curb miles	Four times Monthly	993 tons/ Annually
Medium	Residential	695 curb miles	Twice Monthly	
Low	Alleys	6.5 curb miles	Twice Monthly	
Parking Lots	54 lots	27 acres	Twice Monthly	

[1]Priority is based on the volume of trash and debris generated at these types of streets - streets which generate high volumes of trash are High Priority; streets which generate moderate and low volumes of trash are medium and low priority respectively.
[2]Downtown streets were swept twice weekly

- SC-71 – Plaza and Sidewalk Cleaning: A self-contained wet sweeper was used on all tile sidewalks in the downtown area on a scheduled basis.

- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers were stored inside and used sparingly in accordance with required application practices.
- SC-75 – Waste Handling and Disposal: All materials were hauled directly to the transfer station and were covered.

4.4 Flood Management Projects/Flood Control Devices

4.4.1 Background

This section includes BMPs and an inventory of the City's Flood Management Projects and Flood Control Devices which are deemed High Priority areas according to Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City's 2008 JURMP. This section also includes a description of the Storm Drain Maintenance Program activities.

4.4.2 Source Characterization

The municipal separate storm sewer system is the only High Priority Flood Management Projects and Flood Control Devices on the City's municipal inventory, as updated for the 2008 JURMP. The municipal separate storm sewer system is inclusive of the City's flood management projects and flood control devices.

4.4.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.4 were implemented throughout the City's MS4.

Table 4.4 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-21 Vehicle and Equipment Cleaning
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal

4.4.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.4 were implemented where applicable pertaining to the municipal separate storm sewer system and are described below.

- SC-11 – Spill prevention, Control, and Cleanup: All vehicles have spill kits and key vehicles carry hydrocarbon booms. All trash was placed in 55 gallon trash bags. The maintenance sweeper truck was called out to assist in spill cleanup when necessary.
- SC-21 – Vehicle and Equipment Cleaning: All vehicles used in flood control device cleaning were washed at fleet maintenance using an enclosed pressure wash system. The system has a secondary water and oil separator plumbed into the sanitary sewer system.

- SC-34 – Waste Handling and Disposal: Trash was hauled to transfer station. Debris and other organic material were transferred and deposited at 2400 Tamarack Avenue in three concrete covered bins. The material was then tested for contaminants and hauled to a landfill or appropriate facility upon receipt of permissible test results.
- SC-60 – Housekeeping Practices: Trash was removed from these areas of the MS4 on a routine basis.
- SC-74 – Drainage System Maintenance: A small self-contained vacuum with pressure washer was used to clean the inlets. All material in the drain box was removed by the vacuum. Disposal of the water and material occurred using a filter sock, allowing water to be decanted into the sanitary sewer system. The solid material was taken to the Tamarack site described above. All trash was removed from the MS4, placed in 55 gallon trash bags, and placed in a 40 cubic yard roll off dumpster that is covered. The material was then transported to Palomar Transfer Station for disposal. Data pertaining to maintenance activities of the MS4 is in Table 4.5 below.

Table 4.5 MS4 Maintenance

Structure	Inspected	Exceeding Cleaning Criteria	Cleaned	Amount of Material Removed (tons)
Catch Basin/Inlet	3476 units	234	Anthropogenic trash removed 100%	32
MS4 miles	4,000 linear feet	N/A	4,000 linear feet	0.25
Open Channel miles	32,000 linear feet	N/A	638 linear feet	2

- SC-75 – Waste Handling and Disposal: Described under SC-34 and SC-74 above.
- BMPs to limit infiltration from sanitary sewer to storm drain system: a preventive maintenance schedule was implemented that includes jet rodding, and vactoring the sanitary lines throughout the city of Carlsbad. Closed circuit television was used for investigations in sewer lines. In addition, engineering standards described below prevent infiltration of sewage to the MS4.

  The City of Carlsbad's Engineering Standards employed several measures to prevent sewage intrusion into municipal separate storm sewer systems (MS4).

  1. All gravity sewer pipes and laterals are required to have gasketed joints, which create water tight joints (Volume 1, Chapter 6, Item 3.A, 3.C, and 3.F). The water tight joints are tested using the methods indicated in Standard Specifications for Public Works Construction (SSPWC) section 306-1.4. The water tight test methods include a post-installation closed circuit television (CCTV) inspection and an air pressure test where the sewer line must sustain 2.5 to 3.5 psi gage pressure for at least 2 minutes after being pressurized to 3.0 psi.
  2. All gravity sewer lines are required to follow engineering standard for the amount of flow they can carry. During peak hour dry weather season the pipe shall be designed to carry a flow depth of 0.5 (or 0.75 depending on the pipe size) the diameter of the pipe (Volume 1, Chapter 6, Item 4.C). This design requirement prevents the pipe from becoming full, which would pressurize the pipe and potentially cause a leak.
  3. Per Carlsbad's Engineering Standard GS-6 and GS-6A, the sewer lines are typically located at an elevation deeper than the storm drain line, which further prevents sewage intrusion into MS4.

In the event of a sewage pipe leak, the leakage flow will naturally gravitate below the sewer line rather than up to the storm drain line.

4. The standard horizontal separation between sewer and storm drain is 13 feet, which further prevents sewage intrusion into MS4.
5. In special cases where storm drain lines are installed at a depth greater than that of sewer lines, additional design standards are required such as water tight joints or encasements (Volume 1, Chapter 5, Item 1.G).

- BMPs and Treatment Control BMPs: Storm Drain Inserts including fossil filters and rapid flow BMPs are in place at various storm drain locations throughout the City. Fossil filters removed trash and hydrocarbons, while debris catchers were installed to prohibit anthropogenic trash and debris from entering the storm drain system. City maintained desiltation basins were inspected annually prior to the rainy season and maintained as necessary. Table 4.6 lists the BMP or TCBMP, location, quantity, inspections required and inspections completed.

Table 4.6 Public BMPs and TCBMPs

Type	Location	Number	Inspections Required	Inspections Completed
Debris Catcher	Carlsbad Boulevard	9	9	9
	State Street	4	4	4
	Grand Avenue	3	3	3
	Carlsbad Village Drive	4	4	4
	Ocean Street	4	4	4
	Rancho Santa Fe	1	1	1
	Celinda Drive	1	1	1
Fossil Filter	Oak Avenue	4	4	4
	Chestnut Avenue	6	6	6
	Jefferson Street	5	5	5
	Fleet Maintenance	4	4	4
	Ocean Street	2	2	2
	Paseo del Norte	3	3	3
	Cannon Road	5	5	5
	Faraday Avenue	3	3	3
	Recycled Water Plant	4	4	4
	M&O Yard	2	2	2
Debris Filter at inlet entrance	Oak Avenue	3	24	24
	Valencia Avenue	1	24	24
	Chestnut Avenue	4	24	25
	Orion Street	3	52	52

Table 4.6 Public BMPs and TCBMPs (Cont.)

Type	Location	Number	Inspections Required	Inspections Completed
Desiltation Basins	SW End Faraday Avenue	1	1	1
	SW Corner Marron and Monroe	1	1	1
	NO of Via de Canto	1	1	1
	Gateway @ ECR	1	1	1
	Avenida Soledad @ RSF	1	1	1
CDS UNITS	Cannon Rd w/of Hemingway	1	1	1
	Alicante Rd	1	1	1
	El Fuerte @ Poinsetta Ln	1	1	1
	Calle Conifera @ Corte Brezo	1	1	1
	Sand Shell w/end	1	1	1
Total		**85**	**198**	**199**

Inspection results and findings for the Publicly owned BMPs and TCBMPs showed that 90 % were in good condition and approximately 11 tons of anthropogenic trash was removed during the reporting period.

4.5 Fire Stations

4.5.1 Background

There are six fire stations in the City, which are high priority areas according to the City's JURMP. The inventory and BMPs for these facilities are described below.

4.5.2 Source Characterization

Table 4.7 below lists the High Priority Fire Stations on the City's 2008 JURMP inventory.

Table 4.7 Fire Stations

1	FIRE STATION #1	1275 CARLSBAD VILLAGE DR
2	FIRE STATION #2	1906 ARENAL RD
3	FIRE STATION #3	3701 CATALINA DR
4	FIRE STATION #4	6885 BATIQUITOS DR
5	FIRE STATION #5	2540 ORION WY
6	FIRE STATION #6	7201 RANCHO SANTA FE ROAD

4.5.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.8 were implemented at the High Priority facilities listed above.

Table 4.8 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-21 Vehicle and Equipment Cleaning
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.5.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.8 were implemented at the facilities listed in Table 4.7 and are described below. In addition, training and pollution prevention BMPs specific to the Fire Department are described below.

Training:

- The City's Reclaimed Water Facility continued to be utilized for fire engineer training and testing. A training trailer facilitated engineer operations, pump testing, and other wet training opportunities. The Facility allowed for wet training and testing opportunities while ensuring that no water is discharged to the MS4.
- Conduct training and testing at other fire agencies Training Facilities which recycles the water that is being discharged (i.e. Rancho Santa Fe and San Marcos Fire Departments).Suitable locations were selected to provide "wet" training opportunities for personnel, while ensuring that appropriate BMPs were in place to protect the storm drains and eliminate discharges to the MS4. These sites were generally located on pervious surfaces with no potential for discharge to the storm drain system.
- A representative from the Fire Department attended and participated in the City's Storm Water Committee meetings when available.

Pollution Prevention:

- Dry cleanup methods were used to reduce water use. The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations. Awareness was heightened at fire scenes to minimize the potential for excessive water flow.
- Materials were recycled where possible.
- Storm Water Manuals were developed for each station which include SWPPPs with site maps, inspection reports, facility specific spill response procedures, training records, and department policies.
- SC-11 – Spill Prevention, Control, and Cleanup: Spill response equipment and materials are clearly identified and staged in accessible locations at each station. Awareness was heightened at incident scenes to contain potential discharges (once the scene had been stabilized) to prevent pollutants from entering the MS4. The Department continued implementation of the City's spill response procedure for incidents that occur on City streets. Absorbent materials are kept on all engines. The spill response plan is to apply absorbent, sweep material, place in bags, and remove from site for proper disposal.

- SC-21 – Vehicle and Equipment Cleaning: The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Vacuum equipment was purchased to recover and contain all wash water from vehicle washing activities occurring at the Fire Stations. Fire Station 5 currently has a pressure washer for vehicle and equipment cleaning to minimize the amount of water being used. Five more pressure washers have been approved and purchased for the other five fire stations. Pressure washers are now installed and in service at all six fire stations.
- SC-34 – Waste Handling and Disposal: Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter.
- SC-43 – Parking/Storage Area Maintenance: Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations.
- SC-60 – Housekeeping Practices: Fire stations are kept clean and orderly. Wash water was disposed of properly. Sweeping material was disposed of properly. Training on storm water and spill response was provided regularly.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-75 – Waste Handling and Disposal: Solid waste was collected and disposed of properly at appropriate disposal facilities (Palomar Transfer Station, Waste Management) in accordance with all applicable laws and regulations. Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter. Liquids were not disposed of in waste containers. Recycling was implemented where possible; bins were provided.

4.6 Recreation Facilities

4.6.1 Background

The Monroe Street Pool is the only Recreation facility on the City's municipal inventory listed as a High Priority area. This is primarily due to the chemicals stored on-site. The pool's chemical systems are liquid chlorine (sodium hypochlorite) and muriatic (hydrochloric) acid/carbon dioxide, with 500 and 300 gallon double wall containers, respectively. BMPs implemented at this facility are described below.

4.6.2 Source Characterization

The only High Priority Recreation facility on the City's 2008 JURMP inventory was the Monroe Street Pool.

4.6.3 Site Specific BMP Requirements

The site specific BMPs, listed below in Table 4.9, were implemented at the Monroe Street Pool.

Table 4.9 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-31 Outdoor Container Storage
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-60 Housekeeping Practices
SC-72 Fountains & Pools Maintenance
SC-73 Landscape Maintenance

4.6.4 Program Implementation

BMPs listed in Table 4.9 above were implemented at the Monroe Street Pool. BMPs implemented specific to this facility and its activities are described below.

- SC-11 – Spill Prevention, Control, and Cleanup: Commercial spill kits are kept onsite. A facility specific SWPPP was developed and is kept onsite. The SWPPP includes a spill response plan.
- SC-31 – Outdoor Container Storage: The majority of materials stored on-site are kept inside sheds. These areas were cleaned up and maintained regularly.
- SC-34 – Waste Handling and Disposal: Trash bins and containers are enclosed and covered. Lids remain closed and locked at all times and serviced weekly.
- SC-41 – Building and Grounds Maintenance: Staff performed daily parking lot inspections looking for litter, debris, and leaking vehicles. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-60 – Housekeeping Practices: Cleaning of pool decks was performed by sweeping in most cases. Occasionally, wash down was necessary and all wash water was directed to a daylighted sediment blocking maze swale.
- SC-72 – Fountains and Pools Maintenance: Water was de-chlorinated if discharging to the storm drain was necessary; however, this was a rare occurrence. All filter back wash was discharged to sewer. Overflow from pool decks was directed to the daylighted sediment blocking maze swale.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off. Soil testing was utilized to assess need for fertilizers and irrigation. Timing improvements on irrigation system have reduced water usage. Blowing and sweeping were used wherever possible. Pesticide, herbicide, and fertilizers were not stored onsite and used sparingly in accordance with required application practices.

4.7 Publicly Owned Treatment Works

4.7.1 Background

The City of Carlsbad is a member agency of the Encina Wastewater Authority which treats raw sewage to the secondary treatment level. The Carlsbad Water Recycling Facility intakes secondary treated water and treats it again to the tertiary level of treatment which is used as recycled water throughout the City

of Carlsbad. This facility was determined to be High Priority as required in Order No. R9-2007-0001, Section D.3.a.(7)(a). The BMPs listed below were implemented at the Carlsbad Recycled Water Facility.

4.7.2 Source Characterization

The Carlsbad Recycled Water Facility is the only High Priority Publicly Owned Treatment Works on the City's 2008 JURMP inventory.

4.7.3 Site Specific BMP Requirements

The site specific BMPs listed in Table 4.10 were implemented at the Recycled Water Facility.

Table 4.10 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices

4.7.4 Program Implementation

Each of the applicable BMPs listed above were implemented at the Carlsbad Recycled Water Facility and are described below.

- Employee Training: Employees were informed of activities that could potentially cause contamination of storm water and the importance of carefully conducting these activities in areas that do not discharge/drain to storm drains. Storm water pollution prevention and BMP brochures were available to everyone who works at the materials storage area. Subcontractors were informed about the storm water requirements and their responsibilities. Training consisted of informal "tailgate" meetings, formal classroom training, or self-guided training activities. Employees in targeted positions were trained annually on the requirements of the SWPPP. Employee training, at a minimum, included: SWPPP requirements; spill response and reporting; good housekeeping; BMP updates and implementation; and materials and waste handling and storage procedures.
- SC-11 – Spill Prevention, Control, and Clean-up: A current spill response plan was provided in the SWPPP. The spill response plan addressed measures to clean, abate, and prevent spills and leaks from entering the storm drain. Employees were trained on the elements of the plan. Rags and absorbents were readily accessible. Waste was disposed of properly. Dry cleanup methods were used whenever possible. Spills on dirt areas were cleaned up by digging up and properly disposing of contaminated soil. Spills over 10 gallons were reported to the Storm Water Protection Program and/or the appropriate spill response agencies immediately. Employees were trained to routinely check for leaks and spills.
- SC-22 – Vehicle and Equipment Repair: All vehicle repairs were performed off-site. When equipment repair was necessary, work was performed in covered, contained areas that were not susceptible to storm water runoff.
- SC-31 – Outdoor Container Storage: There were several chemical storage tanks stored outside under cover and in full secondary containment structures. See SC-33 below for more information.

- SC-33 – Outdoor Storage of Raw Materials: Secondary containment was implemented where materials are stored outside. Examples of temporary BMPs utilized are: a dike, berm, or filter on the down slope sides of any stockpiles. All containment devices used around stockpiles were maintained to work effectively and were replaced when necessary. The chemical storage tanks were contained within a concrete parapet wall enclosure. Spills within the chemical storage areas were contained within the concrete walls and drain to a sump. Where chemical deliveries occurred, a concrete pad conveyed flow to a curb inlet. From the curb inlet, flow was controlled by plug valves, directing the flow to the sump.
- SC-34 – Waste Handling and Disposal: Dumpsters were covered and maintained and checked frequently for leaks. Lids were kept closed at all times. Dumpsters were never cleaned out using water**.** When cleaning the containers, all rinse water from cleaning was routed to the sanitary sewer system. All wastes and construction debris were disposed of properly. Many materials and wastes were recycled including broken asphalt and concrete, cleared vegetation, scrap metals, aluminum cans, and plastic bottles. Materials and debris that could not be recycled were taken to an appropriate landfill or disposed of as hazardous waste. The waste storage area was swept or otherwise cleaned frequently using dry methods to collect all loose solids for proper disposal. If the amount of waste accumulated appeared to frequently exceed the capacity of the dumpster**,** then another container was obtained and utilized or collection frequency was increased. Green waste consisting of clippings, cuttings and droppings of leafy and woody materials was disposed of properly at an approved composting location or permitted landfill.
- SC-60 – Housekeeping Practices: Site was kept free of litter and debris. Trash cans and recycling receptacles were located around the site to minimize litter. Material moving and transfer activities were scheduled during dry weather periods, where possible. Heavy equipment was maintained in good working condition. Areas were inspected frequently for leaks and repaired as needed. Major equipment repairs were performed away from the storage area. Paved surfaces were swept that drain to storm drains, creeks, or channels. Cleanup materials such as brooms, shovels, dustpans, and sweepers are stocked near the storage area. Paved storage areas were swept weekly for collection and disposal of loose solid materials, and were not hosed into a storm drain or conveyance ditch. Information was distributed on good housekeeping practices during employee training sessions and discussed at employee meetings. Good housekeeping tips and reminders were posted on employee bulletin boards.
- Source Control BMPs (specific to the Recycled Water Facility):
  - Flo-Guard inlet baskets at all curb inlets on site to collect oil and grease and debris from site.
  - Vegetated swale (approximately 400 feet) collects and treats runoff from a portion of the site.
  - Roof over chemical storage area.
  - Permanent secondary containment is in place around all chemical storage areas.
  - By-pass valves are installed at containment areas to divert rain water.

4.8 Sanitary Sewer Facilities

4.8.1 Background

The facilities listed in Table 4.11 are sewer lift stations owned and operated by the City. The table also includes the City's collection system. These have been determined to be High Priority areas according to Order No. R9-2007-0001 and the City's 2008 JURMP, primarily due to the presence of sewage and potential for contamination of surface waters resulting from sewer overflows. BMPs implemented at these facilities and BMPs applicable to maintenance of the collection system are described below.

4.8.2 Source Characterization

Table 4.11 below lists the High Priority Sanitary Sewer Facilities on the City's JURMP inventory.

Table 4.11 Sanitary Sewer Facilities

1	AGUA HEDIONDA SEWER LIFT STATION*	SDGE PLANT SITE
2	BATIQUITOS SEWER LIFT STATION	7382 GABBIANO LN
3	BUENA VISTA SEWER LIFT STATION*	JEFFERSON ST
4	CANNON SEWER LIFT STATION	2301 CANNON RD
5	CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL
6	EL FUERTE SEWER LIFT STATION	5812 EL FUERTE ST
7	FOXES LANDING LIFT STATION	4155 HARRISON ST
8	GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD
9	HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL
10	KNOTS SEWER LIFT STATION	501 KNOTS LN
11	POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN
12	SAND SHELL SEWER LIFT STATION	613 SAND SHELL
13	SANITARY SEWAGE COLLECTION SYSTEM	CITY SERVICE AREA
14	SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV
15	TERRAMAR SEWER LIFT STATION	300 CANNON RD
16	VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST
17	VILLAS SEWER LIFT STATION	2860 WINTHROP AV

*Operation and maintenance performed by Encina Wastewater Authority

4.8.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.12 were implemented at all Sanitary Sewer Facilities.

Table 4.12 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-75 Waste Handling and Disposal
SC-76 Sewer Utility Maintenance

4.8.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.11 and are described below.

- SC-11 – Spill Prevention, Control, and Cleanup: Hazmat plans were drawn up and located in the SWPPP at each location. Spill kits are kept inside at all facilities. Secondary containment structures were implemented around generator fuel cells and around all chemicals stored on-site. Overflow response included immediate Vactor response, containment, and cleanup. For more details see City of Carlsbad SSORP spill mitigation and clean-up. All vehicles have spill kits.

- SC-20 – Vehicle and Equipment Fueling: Small equipment fueling was performed in secondary containment areas or over pervious surfaces. All locations have secondary containment for fuel spills or oil leaks. Fuel deliveries were performed by an outside contractor. Documentation is kept onsite.
- SC-22 – Vehicle and Equipment Repair: Pump repair occurred indoors Wet wells were cleaned every 6 weeks with Vactor equipment and staff ensured that there were no leaks or spills at the facilities.
- SC-31 – Outdoor Container Storage: The 55-gallon trash cans are covered with a liner.
- SC-34 – Waste Handling and Disposal: Trash and debris were removed on a regular basis.
- SC-60 - Good Housekeeping: Sweep and vacuuming were implemented instead of washing down. Blowers were used to clean off concrete and asphalt. All hoses are rolled up and stored off the ground.
- SC-75 – Waste Handling and Disposal: Trash and debris were removed on a regular basis. All trash cans or other containers are covered or closed.
- SC-76 – Sewer Utility Maintenance: All stations were inspected and cleaned daily. Vactors were checked for leaks during pre-trip inspections. All materials were discharged at Encina Wastewater Authority: solids into grit bin, liquids at headworks. Recently the City began to implement FOG requirements as per Order 2006-003, including revision of ordinances, public outreach, and inspections of FOG generating facilities.

4.9 Water Facilities

4.9.1 Background

There are seven High Priority water facilities on the City's JURMP inventory. The sites are High Priority facilities due to chemical storage on-site or due to their location in the watershed. BMPs implemented at the sites according to the JURMP are described below.

4.9.2 Source Characterization

The table below lists the High Priority Water Facilities on the City's JURMP inventory.

Table 4.13 Water Facilities

1	MAERKLE DAM RESERVOIR/ PUMP/ CHLORINATION STATION	5203 SUNNY CREEK RD
2	RESERVOIR C	CALAVERA DR
3	RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR
4	RESERVOIR LA COSTA HI	ALGA RD
5	RESERVOIR LA COSTA LO	ALGA RD
6	CALAVERA PUMP STATION	3600 BLOCK COLLEGE DR
7	TAP PUMP STATION	6400 BLOCK OF EL CAMINO REAL

4.9.3 Site Specific BMP Requirements

The site specific BMPs listed in Table 4.14 were implemented at the water facilities listed above.

Table 4.14 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-60 Housekeeping Practices
Water Operations and Maintenance

4.9.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.13 and are described below.

- Pollution Prevention: Automatic shut-off valves have been installed.
- SC-11 – Spill Prevention, Control, and Cleanup: At facility 1, specialized equipment has been implemented to mitigate a chlorine release; chlorine gas detectors, vacuum regulators, automatic shut-off valves, and chlorine scrubber systems. In addition to the equipment, all chemicals are stored in containment structures designed to contain stored amount. All chemicals are inspected prior to off-loading for containment defects and returned if any defects are noted. Operations Staff have the necessary hazardous materials training to be considered "qualified" to assess the severity of a chlorine leak. A site specific SWPPP was developed for Maerkle Reservoir.
- SC-20 – Vehicle and Equipment Fueling: Diesel deliveries were performed by outside contractors, following all required BMPs.
- SC-22 – Vehicle and Equipment Repair: All storm drain collectors were regularly inspected and cleaned accordingly. All building floor drains were inspected and verified to be isolated from discharge system.
- SC-31 – Outdoor Container Storage: The 55-gallon trash cans with liners were utilized and trash was removed on a regular basis.
- SC-33 – Outdoor Storage of Raw Materials: No raw materials are stored outdoors.
- SC-60 - Good Housekeeping – Increased sweeping schedule of asphalted areas was implemented. Chemicals supplies are kept at a minimum to reduce potential releases.
- Water Operations and Maintenance:
    - Repairs and New Line Installation: All flushing requirements follow established BMP's regarding de-chlorination and related sediment recovery concerns.
    - Reservoir Cleaning and Dewatering: All reservoir de-watering follows pre-established BMP's addressing daily water volume discharge amounts, de-chlorination, monitoring of chlorine residuals and sediment removal and disposal

4.10 Municipal Yards

4.10.1 Background

Table 4.15 below lists the City's municipal yards that were determined to be High Priority areas as required per Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City's JURMP. Site specific BMPs implemented at each facility are listed and described below.

4.10.2 Source Characterization

The table below lists the High Priority Municipal Yards on the City's JURMP inventory.

Table 4.15 MUNICIPAL YARDS

1	FLEET MAINTENANCE FACILITY AND PARKING LOT	2480 IMPALA DR
2	M&O OPERATIONS YARD AND PARKING LOT	5950 EL CAMINO REAL
3	OAK OPERATIONS YARD AND PARKING LOT	405 OAK AV
4	PARKS MAINTENANCE/STORAGE/PARKING LOT	1166 CARLSBAD VILLAGE DR

4.10.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.16 were implemented at Municipal Yards, where applicable. For example, vehicle and equipment repair is not performed at all facilities; therefore SC-22 does not apply to all yards.

Table 4.16 Best Management Practices

Storm Water Pollution Control Plan
SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-61 Safer Alternative Products
SC-70 Road and Street Maintenance
SC-71 Plaza and Sidewalk Cleaning
SC-72 Fountains & Pools Maintenance
SC-73 Landscape Maintenance
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal

4.10.4 Program Implementation

BMPs listed in Table 4.16 were implemented specific to each facility and are described below.

<u>FLEET MAINTENANCE YARD</u>

- Employee Training – Storm water protection was covered as part of safety meetings.
- Pollution Prevention – Recycling containers were provided at the ends of the fuel pump inlands.
- Storm Water Pollution Control Plan: A site specific SWPPP was developed and is maintained on-site.
- SC-11 – Spill Prevention: Spill kits containing absorbents and booms are located at the fuel island and south west of the fuel island within the yard, including the shop area.

- SC-20 – Vehicle and Equipment Fueling: Spill kits are located adjacent to the vehicle fueling area.
- SC-21 – Vehicle and Equipment Cleaning: All vehicle washing was performed on the wash rack, inside the wash bay. This included pressure washing and hand washing of vehicles and equipment. Wash waste water is treated prior to release to the sewer system.
- SC-22 – Vehicle and Equipment Repair: All maintenance and repairs to Fleet vehicles were performed inside the shop bays whenever possible. Any vehicle on the dead line that had a leak had a drip pan put under it until it is brought into the shop. Any leaks or spills were handled immediately, with either the drip pans or an absorbent. The absorbent was picked up immediately and stored in the drums labeled for waste absorbent. Damaged equipment and wrecked vehicles with a potential for discharge were covered with tarps.
- SC-31 – Outdoor Container Storage: Outdoor containers that include full coverage and containment of materials are utilized for storage of tires and motorcycles (two 40 yard containers) and for storage of fire extinguisher service items, used batteries, and oil filters for recycling (sheds).
- SC-33 – Outdoor Storage of Materials: All materials stored outside are kept under one of the provided canopies or in the shed. City-generated hazardous waste is stored in the hazardous waste shed (covered) in an appropriate container and on a pallet. This includes batteries and waste metals. A chain link fence was installed to prevent unauthorized dumping at the Facility. Signage was also in place to inform citizens that materials were not to be left at the Facility and provided information on proper disposal facilities.
- SC-34 – Waste Handling and Disposal: Waste oil was drained into the waste oil containers or into a drip pan and then into a waste oil container. The containers were emptied as needed into the waste oil in-ground tank as needed. Used batteries were stored in the provided container inside the shed. Used antifreeze was drained into one of the large drip pans, then transferred to the poly drums inside the shed. Scrap metal is stored in the provided container and covered. Used tires are stored in the covered tire storage bunker.
- SC-41 – Building and Grounds Maintenance: Language was included in contracts requiring storm water compliance and allowing the City to implement BMPs as needed with all associated costs recovered from the contractor. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking/Storage Area Maintenance: The Fleet Yard was swept via Sweeper-truck on a monthly schedule, clean ups of spills were done with dry absorbent and picked up directly, all leaks were captured with drip pans and brought into the shop for service.
- SC-60 – Housekeeping Practices: The shop was either swept or mopped. All debris was either picked up and put into appropriate containers or, in the case of wet mopping, all water was directed to the drains inside the shop that flow to our separator. All contaminated floor sweep was stored in labeled containers and removed by our hazardous waste contractor. The Fleet yard was inspected regularly as well as before and after storm events. Areas inspected were the shed and tire storage area at the north end of the shop, the waste tire and hazardous waste bunker along the north fence line, the two large dumpsters, the two trash and two recyclables cans at the fuel pumps, the spill kits for the fuel island, the storm drains on-site and the paved lot and dirt area at the east end (which is now fenced). Inspection criteria: all waste drums/containers are to have secondary containment, all materials are to be stored in covered areas. Appropriate areas included a shed and two canopies plus the hazardous waste container and waste metal containers. The dumpsters, trash cans, recyclables cans and metal storage were kept closed and no trash fell out of them. The filters at the

storm drains were inspected for cleaning or replacement. The lot was inspected for spills and cleaned up as needed. Vehicles in the lot were inspected for leaks; action was taken to contain leaks as needed. The wash rack area, trash containers area, and drains were inspected for clogging from debris. All employees always took immediate action to correct any issues found during inspections of the Fleet yard directly.

- SC-71 – Sidewalk Cleaning: Where power washing was necessary, wash water was not allowed to drain to the storm drain system and was directed to sanitary sewer or to pervious surfaces where possible.
- SC-72 – Fountain and Pools Maintenance: Not applicable.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off. Soil testing was utilized to assess need for fertilizers and irrigation. Timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever possible. Pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 – Drainage System Maintenance: Fossil filters have been installed at storm drain inlets in yard and were inspected and maintained regularly.
- SC-75 – Waste Handling and Disposal: Signage for proper Household Hazardous Waste disposal is posted on site.

MAINTENANCE AND OPERATIONS YARD

- Pollution Prevention – Native soils were used whenever possible to backfill trenches: the amount of dirt and soil stockpiled on site was minimized; filtration socks were used to dewater trenches.
- Storm Water Pollution Control Plan: A site specific SWPPP is kept on-site and maintained regularly.
- SC-11 – Spill Prevention, Control, and Cleanup: Secondary containment where fuel and oil are stored, also yard has spill kits in each vehicle. A hazmat plan has been implemented and is located in the SWPPP.
- SC-20 – Vehicle and Equipment Fueling: Small equipment fueling was performed in the secondary containment area or over pervious surfaces.
- SC-21 – Vehicle and Equipment Cleaning: Trash was removed daily from the work trucks, otherwise no cleaning or washing was allowed at M&O yard.
- SC-22 – Vehicle and Equipment Repair: No repairs were performed at yard.
- SC-31 – Outdoor Container Storage: Container storage areas are covered using overhead canopies.
- SC-33 –Outdoor Storage of Materials: Where necessary, plastic tarps cover raw materials in the yard; equipment is covered by canopies; material is covered by a permanent overhead structure or stored indoors.
- SC-34 – Waste Handling and Disposal: All material was put into a covered roll-off container.
- SC-41 – Building and Grounds Maintenance: The grounds and parking lot were swept twice a month by street sweeper and weekly by hand when necessary. Trash was removed daily. Erosive areas and slopes were protected by hydroseed, coconut mats, sand bags, and fiber rolls. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Where feasible, work was performed under cover and over pervious areas. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. Parking lots are spot cleaned for all spills weekly. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking/Storage Area Maintenance: The parking lot was swept twice a month by a street sweeper; ingress/egress to unpaved area of yard was protected by rocks and shaker plates.
- SC-60 – Housekeeping Practices: Recycle bins, dumpsters, and cans were covered and kept closed.

- SC-61 – Safer Alternative Products: Used less hazardous cleaning materials and water-soluble paints for mark outs.
- SC-70 – Road and Street Maintenance: Not Applicable
- SC-71 – Sidewalk Cleaning: Sweep and/or vacuum sidewalks.
- SC-72 – Fountain and Pools Maintenance: Contractor maintained fountain at facility. No water was discharged during maintenance activities; all filter material was retained on-site for proper disposal. Due to water restrictions to the fountain was turned off in August 2009
- SC-73 – Landscape Maintenance: All material was cut and carried off by hand in burlap bags; no residue remains on site. Irrigation systems were checked regularly to avoid run-off; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 – Drainage System Maintenance: Rapid Flow filters and storm drain structures were cleaned annually. A pilot program was implemented using the innovative "Drivable Grass" which drains the parking lot through subsurface drainage system to reduce storm water flowing directly into MS4. In March, 2011 we refurbished the storage lot with 10 yards of crushed rock and three tons of 3 inch minus rock at the ingress and egress. We also upgraded the drainage runoff area with straw waddles and installed silt fence around the perimeter of the lot.
- SC-75 – Waste Handling and Disposal: All material was handled properly and covered in yard roll-off dumpsters, or other appropriate containers. Also new paper recycling bins were installed.

<u>OAK YARD</u>

- Storm Water Pollution Control Plan (SWPPP description): A site specific SWPPP was implemented at the Oak Yard.
- SC-11 – Spill Prevention, Control, and Cleanup: All liquids and hazardous materials are stored in locked containment lockers. These are located within secondary containment areas. Large spill containment kits are strategically located within the yard. MSDS binders are strategically placed throughout the yard.
- SC-20 – Vehicle and Equipment Fueling: Small equipment fueling was done only in the secondary containment area.
- SC-21 – Vehicle and Equipment Cleaning: Trash was removed daily from the work trucks. No cleaning or washing was allowed in the Oak yard
- SC-22 – Vehicle and Equipment Repairs: No repairs were done at the Oak yard.
- SC-31 – Outdoor Container Storage: Oak yard has storage areas covered with overhead canopies.
- SC-33 – Outdoor Storage of Raw Materials: No raw materials are stored at the Oak yard.
- SC-34 – Waste Handling and Disposal: Paint waste was returned to the maintenance yard where it was transferred directly from the generating vehicle to secured storage containers. This was done within a proper containment area in case of any accidental spillage. These containers are clearly marked and stored until arrangements were made for a certified waste management company to remove them and transfer them to an approved facility. Any other debris was placed in a canopy covered 40 yd roll-off. Dumpsters were covered and all other trash receptacles had lids.
- SC-41 – Building and Grounds Maintenance: The Oak yard was swept twice a month by a self-contained street sweeper and weekly by hand. Trash was removed daily. SC-43 – Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control and lot was swept regularly.
- SC-60 – Housekeeping Practices: Recycle bins, dumpsters, and cans are covered. Yard clean-up was performed by-weekly with monthly site inspections.
- SC-61 – Safer Alternative Products: Not Applicable

- SC-70 – Road and Street Maintenance: Not Applicable
- SC-71 – Sidewalk Cleaning: Not Applicable
- SC-72 – Fountain and Pools Maintenance: Not Applicable
- SC-73 – Landscape Maintenance: Not Applicable
- SC-74 – Drainage System Maintenance: Debris was captured prior to entry into the vegetated swale.

PARKS MAINTENANCE YARD

- Storm Water Pollution Control Plan (SWPPP description): Site specific SWPPPs were developed and implemented at each of these sites.
- SC-11 – Spill Prevention, Control, and Clean-up; Spill kits are located on-site; drip pans were placed under all equipment kept on-site; spill kits are located in all vehicles; spill response plan is updated and kept on-site.
- SC-20 – Vehicle and Equipment Fueling: No vehicle or equipment fueling was performed on-site.
- SC-21 – Vehicle and Equipment Cleaning: Most equipment was dry-cleaned in designated areas located away from storm drains; where wet cleaning was necessary, it was performed over pervious surfaces in a manner that allowed all water to percolate, generating no runoff to the storm drain system.
- SC-22 – Vehicle and Equipment Repair: All equipment was repaired in designated areas away from storm drains; no vehicle repair was performed on-site.
- SC-31 – Outdoor Container Storage: All chemical products are kept in locked storage bins with overhead coverage and containment.
- SC-33 – Outdoor Storage of Raw Materials: All bagged materials are stored on pallets and covered with canopies; canopies are also used to cover scrap metals and equipment.
- SC-34 – Waste Handling and Disposal: All waste containers are covered.
- SC-41 – Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 – Housekeeping Practices: Weekly yard clean-up and litter removal and monthly site inspections were conducted.
- SC-61 – Safer Alternative Products: IPM practices and green waste applications were in use; artificial turf and permeable surfaces were implemented where feasible; organics from tree trimming were mulched or composted and used for landscaping.
- SC-70 – Road and Street Maintenance: Not applicable at yard sites.
- SC-71 – Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
- SC-72 – Fountains and Pools Maintenance: Not applicable at park sites.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on downtown

irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored in secure lockers and used sparingly in accordance with required application practices and only by qualified applicators.

- SC-74 – Drainage System Maintenance: Storm drain inlets were maintained by City's Storm Drain Maintenance Division on an annual basis.
- SC-75 – Waste Handling and Disposal: All non-recyclable waste was disposed of properly.
- Site Design - Parks Maintenance/Storage Yard drains to a pervious area allowing low flows to infiltrate into the soils instead of running into the storm drain.

4.11 Parks Facilities

4.11.1 Background

The table below lists City parks facilities that were determined to be High Priority areas based on the criteria established in Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City's JURMP. High Priority parks facilities were defined as developed park sites containing landscaping, building(s), and parking lot(s) and developed park sites within an Environmentally Sensitive Area.

Site specific BMPs implemented at each facility are listed and described below.

4.11.2 Source Characterization

The table below lists facilities on the inventory that are high priority and includes 16 parks and recreation facilities.

Table 4.17 Parks

1	AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	6425 AMBROSIA LN
2	BEACH BLUFF TRIANGLE/PARK	CARLSBAD BLVD AT PINE
3	CADENCIA PARK	3310 CADENCIA ST
4	CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	2997 GLASGOW DR
5	CARRILLO RANCH AND PARKING LOT	5200 FLYING LC LANE
6	CHASE FIELD	3349 HARDING ST
7	HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	2685 VANCOUVER STREET
8	HOLIDAY PARK AND PARKING LOTS	3200 PIO PICO DR
9	HOSP GROVE PARK AND PARKING LOT	JEFFERSON & MONROE
10	LA COSTA CANYON PARK AND PARKING LOT	3020 PUEBLO ST
11	LAGUNA RIVIERA PARK	4900 KELLY DR
12	MAGEE PARK AND PARKING LOT	258 BEECH AVE
13	PINE PARK AND PARKING LOT	3333 HARDING ST
14	POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	6600 HIDDEN VALLEY RD
15	STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	3420 CAMINO DE LOS COCHES
16	ZONE 5 PARK	CAMINO HILLS AND FARADAY AVE

4.11.3 Site Specific BMP Requirements

Site specific BMPs listed below were implemented at Parks Facilities.

Table 4.18 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-61 Safer Alternative Products
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.11.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.17 and are described below.

- SWPPP: Aviara, Poinsettia, and Stagecoach Parks also house small maintenance yards. Because of the added potential to contribute to storm water pollution, SWPPPs were required by the City for these facilities. Aviara, Poinsettia and Stagecoach Parks have developed and fully implemented SWPPPs. .
- SC-11 – Spill Prevention, Control, and Cleanup; Spills kits are located on-site; spill response plan was updated and kept on-site
- SC-20 – Vehicle and Equipment Fueling: Minor equipment fueling was performed over pervious surfaces when necessary.
- SC-21 – Vehicle and Equipment Cleaning: Most equipment was dry-cleaned in designated areas located away from storm drains; where wet cleaning was necessary, it was performed over pervious surfaces in a manner that allowed all water to percolate, generating no runoff to the storm drain system.
- SC-22 – Vehicle and Equipment Repair: Equipment was repaired in designated areas away from storm drains; no vehicle repair is performed on-site.
- SC-31 – Outdoor Container Storage: Chemical products are kept in locked storage bins with overhead coverage and containment.
- SC-33 – Outdoor Storage of Raw Materials: All bagged materials are stored on pallets and covered with canopies; canopies were also used to cover scrap metals and equipment.
- SC-34 – Waste Handling and Disposal: All waste containers are covered; pet waste bag dispensers and containers were provided at all parks where dogs are allowed.
- SC-41 – Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious

surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were are always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.

- SC-43 – Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 – Housekeeping Practices: Park sites are kept clean and orderly; all debris was removed in a timely fashion and hard-scape areas were swept or blown daily; wash water, sweepings, and sediments were disposed of properly; recyclable materials were recycled; spill response plans were reviewed as part of routine training with staff.
- SC-61 – Safer Alternative Products: Integrated Pest Management Practices (IPM) practices and green waste applications were in use and are described below.

In conjunction with the Integrated Pest Management (IPM) program, the Parks Maintenance Division continues to utilize slow release fertilizers in an effort to reduce the frequency of applications while minimizing the potential of fertilizer runoff. In some cases, staff reduced the recommended amount of fertilizer per 1,000 square feet by 50% to minimize flush of growth on turf which in turn reduces the amount of clippings. To help monitor fertilizer applications, the Parks Maintenance Division instituted a soil testing program which defines soil properties, allowing the correct monitoring of fertilization applications for proper use and desired outcome. In accordance with the new IPM , pesticide and herbicide applications were applied sparingly. Staff continues to search for alternative methods for pest control applications that are proven to be safe and effective.

As required by the Department of Pesticide Regulation, all chemical applications are reported to the County Agriculture Department on a monthly basis. As identified in the JURMP, all applicable BMPs were implemented to address pesticide, herbicide, and fertilizers for sources of pollution.

Specific BMPs implemented during FY 2010-11 include:

- **Education:** A training program for identifying and defining chemicals, proper handling, application, storage, disposal, irrigating, and using non-synthetic alternatives was implemented. At many of the training seminars, new (IPM) methods were often presented for consideration by the department. All training information including BMPs were provided to personnel to keep in personalized folders for individual use. In addition, a master application manual that includes all Storm Water BMPs, training, and inspections was also prepared.

- **Non-chemical applications:** Some pest problems can be eliminated or controlled by handpicking, pruning, or high pressure spraying with water. Many pest problems can be reduced or eliminated by removing affected leaves or plant parts. During FY 2010-11, efforts were made to improve upon our (IPM) system in the City's Parks and Downtown Village areas. The release of lady-bird beetles at City Parks and the Downtown Fountain areas to combat infestations of aphids have proven successful in eradicating the pests. Other methods used to decrease the department's dependency on chemical sprays during FY 2010-11 include:

    - Increased mulching of planter beds to smother weed germination
    - Increased tilling of planter beds to kill young weed sprouts

  - The use of organic plant derivative pesticide sprays such as Safer brand Products
  - The use of water to spray plants infested with giant whitefly
  - The removal of dying or diseased plant material to decrease the presence of harmful organisms.
  - Hand weeding when feasible
- Pesticide application was performed on an as needed basis and was performed internally or by an outside pest control contractor after diagnosis.

- **Native Vegetation:** The Parks Maintenance Division continued to explore opportunities to use native vegetation to control pests, reduce chemical application, and maintain the aesthetic values of the Parks and Downtown Village areas.

- **Schedules for Irrigation and Application** – Irrigation systems were monitored and inspected on a weekly basis in an effort to minimize water loss. In addition, the use of evapo-transpiration (ET) gauges for controlling the irrigation system helped to reduce watering times based on evaporation and transpiration of moisture from plants and turf. ET gauges were installed at Poinsettia, Stagecoach, Pine, Aviara and Calavera Park. These gauges also helped staff to adjust watering times at other locations that were not connected to the gauge. Most large community parks are controlled by a Central Command Irrigation Program (CAlSense). During FY 2010-11, all irrigation systems were inspected weekly and repaired as necessary to prevent excess runoff. At Poinsettia, Aviara, Stagecoach and Pine Parks, synthetic turf has been installed on the soccer and sports fields, which requires no fertilization, weeding, or watering. The synthetic turf has proven to be particularly successful in eliminating the use of water for irrigation.

- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilization ; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside secure lockers and used sparingly in accordance with required application practices only by qualified applicators. Refer to description of (IPM) practices in SC-61 above.
- SC-75 – Waste Handling and Disposal: All non-recyclable waste was disposed of at an appropriate landfill or transfer station.
- Site Design – Desiltation basin was retrofitted at La Costa Canyon Park; pervious concrete was installed at Pine Park.

4.12 Administrative Areas

4.12.1 Background

One administrative building was determined to be a high priority facility based on its proximity to an environmentally sensitive area (ESA). This facility is the Safety Center, which includes a parking lot, police and fire department headquarters, and a skatepark.

4.12.2 Source Characterization

The only administrative building on the inventory that is a High Priority is the Safety Center.

4.12.3 Site Specific BMP Requirements

Site specific BMPs listed below were implemented at the Safety Center.

Table 4.19 Best Management Practices

SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.12.4 Program Implementation

Each of the BMPs listed above were implemented at the Safety Center and are described below.

- SC-34 – Waste Handling and Disposal: Dumpsters were covered and maintained and checked frequently for leaks. Lids were kept closed at all times.
- SC-41 – Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 – Housekeeping Practices: Site was kept clean and orderly; all debris was removed in a timely fashion and hardscape areas were swept or blown routinely; wash water, sweepings, and sediments were disposed of properly; recyclable materials were recycled.
- SC-71 – Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-75 – Waste Handling and Disposal: All non-recyclable waste was disposed of properly.

4.13 Activities

4.13.1 Background

Four municipal activities were determined to be High Priority activities based on their potential to generate pollutants. These operations occur throughout the City and are required to implement BMPs as described in the JURMP.

4.13.2 Source Characterization

The table below lists the activities on the inventory that are considered High Priority.

Table 4.20 ACTIVITIES

1	LANDSCAPE MAINTENANCE AND REPAIR	CITYWIDE
2	MS4 MAINTENANCE	CITYWIDE
3	POWER WASHING	CITYWIDE
4	SANITARY SEWER MAINTENANCE AND OPERATIONS	CITY SERVICE AREA

4.13.3 Site Specific BMP Requirements

Each of the BMPs listed were implemented for the activities listed in Table 4.20 and are described below.

Table 4.21 Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-61 Safer Alternative Products
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal
SC-76 Sewer Utility Maintenance

4.13.4 Program Implementation

- SC-11 – Spill Prevention, Control & Cleanup: Spill kits are kept in all vehicles. Employees were trained in spill response as applicable to their activities. Absorbents were used for spill cleanup where possible and disposed of properly.
- SC-20 – Vehicle and Equipment Fueling: Minor equipment fueling was performed over pervious surfaces when necessary; larger equipment was fueled at the fleet maintenance facility (BMPs are described above for Fleet Yard).
- SC-34 – Waste Handling and Disposal:
    - Landscape Maintenance: All non-recyclable waste was disposed of properly.
    - MS4 Maintenance: Trash was hauled to transfer station. Debris and other organic material were transferred and deposited at 2400 Tamarack Avenue in three concrete covered bins. The material was then tested for contaminants and disposed of properly upon receipt of permissible test results.

  - Powerwashing: All wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
  - Sewer Utility Maintenance: Waste was contained in Vactor truck tanks and disposed of properly to sanitary sewer.
- SC-41 – Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-61 – Safer Alternative Products: IPM practices and green waste applications were in use. These practices are described in detail above.
- SC-71 – Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside secure lockers and used sparingly in accordance with required application practices only by qualified applicators.
- SC-74 – Drainage System Maintenance: A small self-contained vacuum with pressure washer was used to clean the drainage system. All material in the drain box was removed by the vacuum. Disposal of the water and material occurs using a filter sock, allowing water to be decanted into the sanitary sewer system through a permit from Encina Wastewater Authority. The solid material was taken to the Tamarack site described above. All trash was removed from the MS4, placed in 55 gallon trash bags, and placed in a 40 cubic yard roll off dumpster that is covered. The material was then transported to Palomar Transfer Station for disposal.
- SC-75 – Waste Handling and Disposal: See SC-34 above.
- SC-76 – Sewer Utility Maintenance: All lift stations were inspected and cleaned as needed; Vactors were checked for leaks during pre-trip inspections; all materials were discharged at Encina Wastewater Authority: solids into grit bin, liquids at head-works; recently the City has begun to implement FOG requirements as per Order 2006-003 including revision of ordinances, public outreach, and inspections of FOG generating facilities.

The collections system maintenance schedule is designed to provide more frequent cleaning for identified trouble areas, with siphons being cleaned annually, low flow and flat lines cleaned semi-annually, and grease problem areas cleaned quarterly.

4.14 Areas and Activities Categorized as Not High Priority

4.14.1 Background

The Municipal Inventory found in Appendix 4.1 lists City owned areas and activities that were determined NOT to be High Priority based on the criteria established in Order No. R9-2007-0001, Section D.3.a.(7)(a). Basic minimum BMPs were implemented at each facility listed below as per the City's JURMP.

4.14.2 Source Characterization

The Municipal Inventory found in Appendix 4.1, lists facilities that are NOT High Priority and includes 46 facilities that are administrative, small parks, medians, and water/wastewater stations that are small or out of service. These facilities are located outside of ESAs and do not generate significant pollutant loads.

4.14.3 Site Specific BMP Requirements

a. Employee Training
b. Pollution Prevention
c. Good Housekeeping
d. Spill Response and Prevention

4.14.4 Program Implementation

The BMPs listed above were implemented City wide at all facilities, including the facilities. A description of these BMPs and how each was implemented is provided in Section 4.2.

4.15 Special Events

4.15.1 Background

The City of Carlsbad hosts a multitude of events each year from major invitational sporting events to community based festivals. A Special Event Permit and SWPPP is required for any organized event involving 50 or more people on public property that travel or assemble together, cause a change in normal traffic flow or controls, and is not within the scope of a Facility Use Permit, other land use approval, or a private property permit. The City has organized a Special Events Committee to ensure events are held in a manner that is safe and does not adversely impact the Carlsbad community or the environment.

4.15.2 Source Characterization

The City manages an updated inventory of special events. These special events have been prioritized according to type of event, number in attendance, proximity to the nearest water body, and potential threat to water quality. During FY 2010-11, there were 28 special events on the inventory, which included 19 high priority, 2 medium priority, and 7 low priority events. Based on this prioritization, the City conducted storm water compliance inspections at all of the high and medium priority events. During this reporting period, there were 37 inspections conducted which included 19 pre-event inspections and 18 post-event inspections. In some cases inspectors were onsite for the duration of the event. A copy of the special events inventory can be found in Appendix 4.3.

4.15.3 BMP Requirements

All special events were required to implement the designated minimum special event BMPs and comply with all applicable regulations outlined in the Carlsbad Municipal Code. Event organizers were notified of the minimum BMPs during the event planning process, in outreach materials, and at pre-event

meetings. All special events, regardless of priority, submitted a SWPPP or BMP plan for City review and approval in FY 2010-11. The SWPPP/BMP Plan are intended to help demonstrate that appropriate measures and BMPs are being implemented before, during, and after the event to reduce and/or prevent pollution. All SWPPPs were approved by the City prior to Special Event Permit issuance. During compliance inspections, the City confirmed that the designated and specific BMPs were implemented as required.

The City continued to distribute the "Best Management Practices for Special Events" brochure during FY 2010-11, which was provided to all event promoters during the applications and planning process. A copy of the brochure can be found in Appendix 4.4 of the FY 2009-10 annual report.

4.15.4 Program Implementation

Generally, the City found that event organizers implemented BMPs as required. Event venues were well managed, BMPs were installed, and the impacted areas were cleaned as required. The City will continue to work closely with event organizers to ensure compliance.

Storm water compliance inspections include a pre-event inspection where storm water BMPs were evaluated, a during-event inspection to determine the effectiveness of BMPs, and a post-event inspection to ensure the site is properly cleaned. Compliance inspections may also include recommendations for additional measures that may be required to comply with the storm water regulations. The Special Events Inspection Form developed at the end of FY 2007-08 continued to be used throughout FY 2010-11.

During FY 2010-11, there were only a few minor violations noted at the 19 inspected events, all of which were immediately corrected. There were no enforcement actions for special events issued during FY 2010-11.

CMI continues to use NPDES inspections and inventory management procedures for special events. Procedure #CMI-200 defines the process for inspecting, tracking, and enforcing special events and procedure #CMI-210 defines the process for managing and updating information on the special events inventory. All special events are prioritized into high, medium, and low categories and inspected at the minimum frequencies required by the 2007 Municipal Permit. All inspection protocols outlined in the 2007 Municipal Permit, JURMP, CMI procedures, and the CMC were implemented as required.

4.16 Inspection of Municipal Facilities

4.16.1 Background

All High Priority municipal facilities were formally inspected during this fiscal year as required by the Permit. In addition, many departments will perform inspections of their facilities more frequently. Inspections of these facilities addressed all required inspection steps according to the Section D.3.b.(3)(a) including:

- Review of BMP implementation plans, if the site uses or is required to use such a plan;
- Review of facility monitoring data, if the site monitors its runoff;
- Coverage under the General Industrial Permit and NOI filing is checked;
- Compliance with the City of Carlsbad ordinances related to urban runoff is assessed;

- BMP implementation, maintenance, and effectiveness is assessed;
- Visual observations for non-storm water discharges, potential illicit connections, and potential discharges of pollutants in storm water are made;
- And education and training on storm water pollution prevention is performed as warranted.

4.16.2 Source Characterization

In total, there were 64 High Priority municipal areas and activities on the City's inventory list. These areas and activities included:

- Roads, Streets, Highways, and Parking facilities;
- Flood Management Projects and Flood Control Devices;
- Fire Stations;
- Recreation Facilities;
- Publicly Owned Treatment Works;
- Sanitary Sewer Faciliites;
- Water Facilities;
- Municipal Yards;
- Parks Facilities;
- Administrative Facilities; and
- Activities*.

*the activities include: landscape maintenance and repair, power washing, MS4 maintenance, and sanitary sewer maintenance.

Refer to Appendix 4.1, the City's Municipal Inventory, for a list of the City's High Priority municipal areas and activities.

4.16.3 BMP Requirements

All areas and activities implement site specific BMP requirements as per the City's JURMP, Appendix 6-A. The preceding sections include table of site specific BMPs required to be implemented for each area and activity listed above. For facilities that are not High Priority, minimum BMPs are required that are tailored specifically to those sites and activities occurring there. Required BMPs have been implemented at all City areas and activities as described it the City's JURMP.

4.16.4 Program Implementation

A total of 64 inspections were performed at high priority municipal facilities. Of the 64, 43 were performed by a third party contractor and 21 performed in-house. Third party inspections were performed at larger, more complex facilities such as Fire Stations, Fleet Maintenance, Parks Maintenance and Operations as well as simple parks, and parking lots. Facilities that are not High Priority are inspected on an as needed basis.

Of the 64 high priority facilities inspected, minor recommendations at some sites involved addressing the accumulation of sediment and organic debris and general housekeeping. One site required

corrective actions due to erosion and sediment issues. Corrective actions were implemented by the end of the fiscal year and a maintenance schedule was established to maintain compliance.

All four High Priority activities were inspected during field activities and were found to be in compliance with permit requirements and City ordinances. The contracted power washing services required corrective actions but all recommendations were implemented during the fiscal year.

For a listing of all corrective actions identified during inspections and their implementation, refer to Appendix 4.4. There were no violations of the Carlsbad Municipal Code observed during municipal inspections; therefore there were no necessary enforcement actions.

4.17 Notable Activities

As mentioned in the Executive Summary, the City considers a Notable Activity to be any activity above compliance requirements. Notable Activities for FY 2010-11 include:

- No signs of over-irrigation were noted at Municipal Facilities during inspection.

Section 5

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City of Carlsbad's Industrial and Commercial program is intended to reduce industrial and commercial discharges of pollutants from the MS4 to the maximum extent practicable, and prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards. This section covers activities occurring from July 1, 2010 to June 30, 2011 under the Permit Order No. R9-2007-0001.

5.2 Fixed Industrial and Commercial Sites / Sources Element

5.2.1 Background

Storm water inspectors identify pollution sources, assess the potential threat to water quality, and require BMP implementation to eliminate pollution sources from industrial and commercial businesses. Major industrial types in Carlsbad include high technology, multimedia and biomedical businesses, electronics, golf apparel and equipment manufacturers and several light industry parks. Fixed commercial types in Carlsbad consist of restaurants, automobile maintenance, gas stations, golf courses, and resorts, among others. Many of these industrial and commercial sites and their activities have the potential to generate significant amounts of pollutants, if proper BMPs are not implemented.

5.2.2 Source Characterization

Each year hundreds of new businesses are established in Carlsbad. During this reporting period, the Storm Water Protection Program worked closely with the Finance Department to obtain information about new businesses, including activities, SIC codes and descriptions, business types, and contact names and numbers. The Storm Water Protection Program downloaded, sorted, mapped, and prioritized new businesses by SIC, business type and other criteria per Investigative Order No. R9-2007-0001.

These new businesses were screened, evaluated, prioritized, and then added to the inventory list and scheduled for inspection. In some cases information provided on business license applications was not correct and a pre-inspection evaluation was necessary. Pre-inspection evaluations helped determine if a business' activities were subject to storm water requirements. Two types of pre-inspection source evaluations were used:

1. Reviews: During the review process, the inspector evaluated the source and activity using relevant information from other City departments, databases, or licensing programs to determine whether the site/source should be inspected and tracked by the Storm Water Protection Program. A business could be excluded during the review process if it was found that their activities are not regulated by the City or General Permit. The most common reason businesses were excluded was because of an incorrect SIC code designation or they were not a high threat to water quality.
2. Telephone Contacts: If the review failed to provide enough information, the inspector contacted the business by phone to determine its status and scheduled an inspection if necessary.

After physical inspections, reviews, or telephone contacts, any changes to a business' priority or status were recorded on the Storm Water Inventory List and/or in the Permits Plus database. New businesses

were also found by referral from other agencies, field discovery, complaint investigations, or business directories.

The City's Commercial/Industrial inventory is located in Appendix 5.1 (Fixed) and 5.2 (Mobile). A map of the fixed facilities is located in Appendix 5.3.

As required by the permit, the following applicable fixed sites/sources are included in the inventory:

1. Commercial Sites/Sources:
    - Automobile repair, maintenance, fueling, or cleaning;
    - Airplane repair, maintenance, fueling, or cleaning;
    - Boat repair, maintenance, fueling, or cleaning;
    - Equipment repair, maintenance, fueling, or cleaning;
    - Automobile and other vehicle body repair or painting;
    - Automobile (or other vehicle) parking lots and storage facilities;
    - Retail or wholesale fueling;
    - Pest control services;
    - Eating or drinking establishments, including food markets;
    - Cement mixing or cutting;
    - Masonry;
    - Painting and coating;
    - Botanical or zoological gardens and exhibits;
    - Landscaping;
    - Nurseries and greenhouses;
    - Golf courses, parks and other recreational areas/facilities;
    - Cemeteries;
    - Marinas;
    - Portable sanitary services;
    - Building material retailers and storage;
    - Animal facilities

2. Industrial Sites/Sources:
    - Industrial Facilities, as defined at 40 CFR § 122.26(b)(14), including those subject to the General Industrial Permit or other individual NPDES permit;
    - Operating and closed landfills;
    - Facilities subject to SARA Title III; and
    - Hazardous waste treatment, disposal, storage and recovery facilities.

3. All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired.

4. All other commercial or industrial sites/sources within or directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

5. All other commercial or industrial sites/sources that the Copermittee determines may contribute a significant pollutant load to the MS4.

Potential threats to water quality at each commercial and industrial site/source were determined by evaluating a variety of site-specific factors including the criteria outlined in the Permit. Commercial and industrial facilities will continue to be reviewed annually and prioritizations will be reviewed and updated annually in conjunction with the watershed-based inventory to reflect any changes in industrial and commercial uses. Individual prioritization criteria are described below in further detail:

Prioritization Criteria: Prioritization for high threat sites and sources involved two steps: (1) initially classifying a facility as being a high threat to water quality based on site information; and (2) subsequently confirming or reclassifying the facility based on field observations and additional information. Initial classification of sites/sources was accomplished administratively using the data provided in the existing industrial and commercial inventory. The confirmation and/or reclassification, when necessary, were and will be completed following the initial inspection of each site/source. In addition to the minimum criteria listed above, the City also considered the following site/source attributes to evaluate the potential threat to water quality:

i. Type of activity (SIC code): Standard Industrial Classification (SIC) codes were used primarily to prioritize and identify specific commercial and industrial activities/sites that have the potential to contribute to storm water pollution. In addition, the NPDES General Industrial Permit (General Permit) defines specific SIC codes such that (1) coverage under the General Permit is mandatory (as defined in Categories ii, iii, vi, and viii of the General Industrial Permit) or (2) coverage under the General Permit is conditional, required only if material, machinery, or products are exposed to storm water (as defined in Category 10 of the General Permit). Industries not listed with an SIC code were directly contacted and assigned an appropriate code based on a description of business activities.
ii. Materials used at the facility: Materials, including hazardous materials, used at industrial and commercial sites have the potential to contribute significant pollutant loads to receiving waters if transported by storm water. These materials and associated activities were considered during the prioritization process.
iii. Wastes generated: If not properly disposed of, industrial and commercial wastes have the potential to degrade receiving waters when transported by storm water. Types of wastes generated or stored onsite were considered during the prioritization process. Industrial Waste Permits issued by Encina Wastewater Authority may also be examined.
iv. Pollutant discharge potential: When evaluating a commercial or industrial site/source's potential to discharge pollutants, the inspector took into account all material handling equipment or activities, raw materials, intermediate products, final products, waste material, by-products, or industrial machinery exposed to storm water.
v. Non-storm water discharges: Authorized non-storm water discharges can contribute to water quality degradation by transporting pollutants into receiving waters. Non-storm water discharges were evaluated to determine whether they were a significant source of pollutants and whether the discharges may continue to be exempted from the prohibitions of Section B.1 of the Permit.
vi. Size of facility: Size of the facility affects the amount of runoff and pollutant loads generated from the industry. The size of a facility was taken into consideration during the threat evaluation process.

vii. Proximity to receiving water bodies: The potential for pollutant transport to sensitive receiving water bodies was evaluated by determining the proximity and sensitivity of receiving water bodies using the ESA definitions from the Permit.

viii. Sensitivity of receiving water bodies: All facilities directly discharging to or within 200 feet of an ESA were considered high priority. This criterion will be reviewed in FY 2010-11, to ensure that all sites/sources within an ESA are included on the current business inventory.

ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit: A listing of facilities located in Carlsbad that have filed a Notice of Intent (NOI) and are covered under the General Permit were classified as high priority threats to water quality.

x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability: Those facilities that were identified as "Conditional" (NONA and NEC filers) were evaluated using the "prioritization flowchart" included in the Threat to Water Quality Procedure and prioritized accordingly.

xi. Facility design: The design of a facility, including whether structural BMPs has been installed and maintained, or there are outdoor activities, was considered during the threat to water quality evaluation process.

xii. Total area of the site, area of the site where industrial or commercial activities occur, percentage of pervious surface, and area of the site exposed to rainfall and runoff was considered during the Threat to Water Quality evaluation process.

xiii. The facility's compliance history: Inspectors reviewed the compliance history of each commercial and industrial site and considered any relevant enforcement actions in determining the threat potential on activities conducted onsite.

xiv. Any other relevant factors: The City reserved the authority to consider any other relevant factors specific to the facility to utilize in the prioritization process.

5.2.3 Best Management Practice Requirements

5.2.3.1 Pollution Prevention

Pollution prevention eliminates or reduces polluted storm water runoff. Specific pollution prevention procedures and management guidelines may vary from one industrial or commercial facility to another, and the City informed these facilities of pollution prevention opportunities during site inspections. Nevertheless, the following pollution prevention principles applied to most industrial and commercial facilities:

- Affirmative Procurement – Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.
- Regular maintenance of on-site BMPs.

5.2.3.2 Minimum BMPs

Described below are minimum BMPs required to be implemented, during this reporting period, by fixed commercial and industrial facilities, as applicable:

1. Good housekeeping

   Specifically fixed facilities are required to:

   - Protect materials and products that could potentially pollute storm water from rain, run-on, runoff, and wind dispersal by storing them indoors or covering them, and providing them with secondary containment as needed. For industries with conditional SIC codes, moving stored materials indoors may allow an exemption from the General Permit requirements.
   - Use dry cleanup methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible) instead of using water hose or pressure washing system to conduct washing or cleaning activities.
   - Sweep up around dumpsters and other areas to prevent trash and debris from accumulating. Dumpsters must be kept closed when not in use. All trash must be kept in appropriate sized containers until it can be hauled away. When inspecting solid waste collection areas, inspectors will note if recyclable materials (cardboard, green waste, etc.) are placed in dumpsters.

2. Preventive maintenance

   Preventive maintenance includes the regular inspection and maintenance of storm water structures (drains, catch basins, etc.) as well as other facility equipment and systems. Structures should be maintained in good working order and cleaned as needed to prevent discharge of pollutants into the storm water system. Facility equipment or systems should be properly maintained to prevent leaks or discharges of pollutants into the storm water system.

3. Material Storage and Handling

   This includes all procedures to minimize exposure of significant materials to storm water and to minimize the potential for spills and leaks from storage, loading, unloading and transfer of materials.

4. Employee training

   Appropriate personnel should be trained in good housekeeping, preventive maintenance, materials storage and handling, solid waste handling and recycling, and spill response as applicable to the facility. Records should be retained of employees attending storm water training sessions and the topics covered.

5. Solid waste (non-hazardous) handling and recycling

   This includes the procedures or processes to handle, store, or dispose of waste or recyclable materials. Waste disposal areas should be kept free of litter and debris and waste and recyclable receptacles must have a cover or lid to prevent the contents from being dispersed by the wind or coming in contact with storm water.

6. Spill response

   Spills and leaks can be a major contributor to storm water pollution. Facilities should identify potential locations and quantities of significant materials that may spill or leak, and should write and implement a response plan addressing spill containment, clean up and

notification procedures. Appropriate spill clean-up equipment should be readily accessible to trained spill response personnel.

7. Record keeping
   This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel. Record keeping and internal reporting represent good operating practices as they increase the efficiency of the facility and the effectiveness of BMPs.

8. Self inspection/quality assurance
   This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures should be described to ensure adequate corrective actions are taken. Quality assurance includes the procedures to ensure that all elements of any required SWPPPs or monitoring plans are adequately conducted.

BMP information was made available during inspections, in printed materials and direct mailings, on the storm water website and hotline, during presentations and at outreach events. A listing of education and outreach events held during this reporting period can be found in Section 8 of this report.

5.2.3.3 BMP and Knowledge Assessment Tools

During this reporting period, the Storm Water Protection Program continued to use the *BMP and Knowledge Assessment* to measure knowledge of storm water issues and assess the implementation of BMPs onsite. The assessment tool rated a commercial operator and site using the following criteria:

Overall Knowledge Assessment:
Inspectors ranked personnel from 1-5 per the following *Knowledge Assessment* scale:

Level 1: Individual has never heard of the storm water program, requirements, or BMPs. This individual does not know what BMPs are or understand how to implement them.

Level 2: Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.

Level 3: Individual has a general understanding of storm water issues ("*I've heard something about that*"), but not specific storm water requirements or BMPs required for the facility.

Level 4: Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.

Level 5: Individual demonstrated an in-depth knowledge of the storm water program and BMPs consistent with the facility's activities and operations.

Overall BMP Assessment

Inspectors ranked the facility per the following 1-5 *BMP Assessment* scale:

Level 1: An illegal discharge was noted during the inspection. Enforcement actions such as a NOV and/or citation are required.

Level 2: BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or written warning were issued.

Level 3: BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal warning was issued. A detailed inspection report or written Warning Notice may follow.

Level 4: BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices (i.e., dumpsters open, leaves in the parking lot, etc.) were noted during the inspection.

Level 5: All BMPs implemented effectively. No violations noted during the inspection.

Table 5.1: HTTWQ Facilities Rated for Each Score – July 1, 2010 to June 30, 2011

Rating	Knowledge Assessment (raw score)	Knowledge Assessment (%)	BMP Implementation (raw score)	BMP Implementation (%)
1	7	2%	3	1%
2	69	19%	23	4%
3	100	27%	84	14%
4	91	25%	224	38%
5	101	27%	251	43%
TOTAL	368	100%	585	100%

Table 5.1 shows the number of instances in raw score and percentage that active HTTWQ businesses rated for each score, with 5 being the highest score possible. The number of *BMP Assessments* collected is usually higher than the number of *Knowledge Assessments* collected, because at some facilities, a company representative is not available to complete the *Knowledge Assessment*. BMP implementation results show that the City has been successful in ensuring that businesses implement BMPs throughout the sites at least 81% of the time during this reporting period. The City will continue to work with businesses to not only educate them about storm water issues, but also ensure BMPs are implemented and maintained.

5.2.4 Program Implementation

5.2.4.1 Inspections

The City conducted inspections at fixed Industrial and Commercial facilities to verify BMP implementation, Permit compliance, and municipal code compliance. Table 5.2 summarizes the inspections performed at active fixed Industrial and Commercial Businesses in FY 2010-11.

Table 5.2 Summary of Inspections Performed

	Total Number on Inventory	Number Inspected	Percentage of Total Inspected	In Compliance?
HTTWQ	585	585	100%	Yes
Not HTTWQ	12	1	1%	Yes
Total on Inventory	597	586	98%	Yes

The City conducted scheduled, unscheduled, follow-up, and compliance inspections at commercial and industrial sites/sources at the frequencies required by the Permit. During site visits, the inspector:

a. Reviewed the SWPPP or BMP implementation plans, if the site used or was required to use such a plan;
b. Reviewed facility monitoring data, if the site monitored its runoff
c. Checked for coverage under the General Industrial Permit (Notice of Intent (NOI), Waste Discharge Identification No., or No Exposure Certification), if applicable;
d. Assessed compliance with ordinances and permits related to urban runoff;
e. Assessed BMP implementation, maintenance and effectiveness;
f. Conducted visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
g. Evaluated education and training on storm water pollution prevention, as conditions warrant.

Copies of inspection reports and correspondence are maintained by the Storm Water Protection Program. No inspections were performed by a third party.

5.2.4.2 Enforcement

In cases where violations were noted and follow-up necessary, the City conducted follow-up inspections to determine compliance with corrective actions outlined in the inspection report or enforcement notices. When a storm water complaint was received about an industrial or commercial site/source or an illegal discharge was observed or suspected, the City conducted a storm water compliance inspection or investigation. If a significant and/or immediate threat to water quality was observed, appropriate actions were taken to require the responsible party to immediately cease the discharge and/or correct the situation. In judging the degree of severity, City inspectors also took into account any history of similar incidents or discharges. Table 5.3 includes a summary of businesses that received NOVs from July 1, 2010, to June 30, 2011.

Table 5.3: Summary of NOVs Issued during FY 2010-11

Business Name	SIC	Date of NOV	CMC Violations		Findings	Compliance Achieved
Ramada Inn & Suites	7011	7/28/10	15.12.050		Wash water discharged to storm drain	Yes
Casa de Bandini	5812	7/28/10	15.12.050		Grease spill to storm drain	Yes
Buca Di Beppo	5812	7/29/10	15.12.050		Soapy water dumped to storm drain	Yes
S.D. International Floral Trade Center		7/30/10	15.12.110		Did not correct previous violations outlined in a corrective action plan. Admin Citation issued for continued violations.	Yes
Nozomi #3	5812	8/4/10	15.12.080	6.08.030	Buckets of grease uncovered. Open grease bin. Materials not disposed of properly. Disposal area needs cleaning.	Yes
Lotus Thai Bistro	5812	8/4/10	15.12.080	6.08.030	Buckets of grease uncovered. Open grease bin. Materials not disposed of properly. Disposal area needs cleaning.	Yes
Senor Grubby's	5812	8/23/10	15.12.080 15.12.090		Private SD filled with water and greasy discharge. Sump pump not working, therefore did not discharge to City SD. Unusable materials stored indefinitely and debris around facility.	Yes
Coyote Bar and Grill	5812	8/24/10	15.12.050		Strip drain and area adjacent to building wet with wash water and food debris.	Yes
Alejandro's Mexican Food	5812	10/21/10	15.12.080	6.08.030	Grease bin caked with spills. Verbal warning issued in previous year.	Yes
SHAPELL HOMES (ROBERTSTON RANCH)	8181	12/22/10	15.12.050 15.12.080		Discharge of sediment to street and storm drain from significant rain event	Yes

Business Name	SIC	Date of NOV	CMC Violations		Findings	Compliance Achieved
Firestone Complete Auto Care	7538	1/10/11	15.12.080 15.12.110		Discolored water in a basin stored outdoors without cover. Unusable materials stored incorrectly. Failure to implement corrective actions.	Yes
Cessy's Taco Shop	5812	1/25/11	15.12.050 15.12.080		Wash water dumped to gutter.	Yes
NO FEAR INC	5136	2/15/11	15.12.050 15.12.081		EMPLOYEES HAD WASHED FLOOR RUGS BEHIND BUILDING ALLOWED WASH WATER TO ENTER STORM DRAIN	Yes
Carlsbad Muffler and Brakes	7533	3/1/11	15.12.050		Wash water dumped to storm drain.	Yes
S.D. International Floral Trade Center	6531	4/6/11	15.12.050		ID from dumping flower buckets in rear of building	Yes
Sheraton Carlsbad Resort & Spa	7011	6/9/11	15.12.050		Wash water flowing unabated to SD. Power washing parking lot.	Yes
Life Technologies		6/21/11	15.12.080		Leaking Trash Compactor. Poor housekeeping	Yes
Carlsbad Premium Outlets	6512	6/21/11	15.12.080 15.12.090	6.08.030 6.08.040 6.08.045	Evidence of leaking dumpsters. Grease spills not immediately cleaned up. Secondary containers impacted with grease and debris. Evidence of grease discharge to storm drains. Storm drains heavily impacted by grime and debris. SWPPP not implemented.	Yes

The Enforcement procedures outlined in the 2008 JURMP continued to be used by inspectors to identify, document, and respond to storm water violations.

For this reporting period, the Storm Water Protection Program had three full-time Environmental Specialists and one part-time intern. Environmental Specialists are continually trained on code enforcement, inspection procedures, applicable laws and regulations, and investigation techniques. These training courses, in addition to the Enforcement Response Plan, helped the Storm Water Protection Program appropriately identify and respond to storm water violations. The City took a total of 41 enforcement actions against industrial and commercial businesses during FY 2010-11. The types and numbers of enforcement actions for fixed industrial/commercial businesses are listed in Table 5.4.

Table 5.4 Enforcement Actions during FY 2010-11

Action	Total
Verbal Warning	22
Written Warning	0
Notice of Violation	18
Notice to Clean	0
Cease and Desist Order	0
Administrative Citation	1
TOTAL	**41**

During inspections and investigations completed during this reporting period, there were 15 illegal discharges found and eliminated at fixed businesses. All of the discharges were transient sources as shown in Table 5.3 and there was no evidence of the discharges reaching a receiving water during the inspection.

5.2.4.3 Third Party Inspections

There were no third party inspections conducted on any industrial or commercial facilities during FY 2010-11.

5.2.4.4 Industrial Non-Filers

The City takes the following steps to identify non-filers under the General Industrial Permit

- <u>During the threat to water quality prioritization</u>
  - <u>Facilities were checked for whether they are subject to the General Industrial Permit or an individual NPDES permit</u>: A listing of facilities located in Carlsbad that have filed a Notice of Intent (NOI) and are covered under the General Permit were classified as high priority threats to water quality.
- During inspection of high threat to water quality facilities:
  - The city Checked for coverage under the General Industrial Permit (Notice of Intent (NOI), Waste Discharge Identification No., or No Exposure Certification), if applicable;

In FY 2010-11 the City identified Life Technologies as a potential non-filer under the general industrial permit and provided applicable information to the facility.

5.3 Mobile Sources Element

5.3.1 Background

The City has participated in the development of a Regional Mobile Outreach and Education Strategy. The City will work with the Copermittees to ensure the implementation and success of this strategy. A copy of the *Regional Mobile Outreach and Education Strategy*, which includes a discussion of Carlsbad's jurisdictional efforts, can be found in the City's JURMP.

5.3.2 Source Characterization

A large percentage of businesses on the industrial and commercial inventories are mobile businesses, which include carpet cleaning, power washing, etc. Because site inspections are not required for mobile businesses, many were reviewed by City inspectors. During the review process the inspector evaluated a commercial business using any relevant information available in other City departments, databases, or licensing programs. A business could be excluded during a review if it was found that their activities were not regulated by the City or Permit. The most common reason businesses were excluded during the review process was because of an incorrect SIC code designation.

Telephone surveys continued to be used to determine the status of certain types of mobile businesses on the inventory. In most cases, this screening procedure determined that the wrong SIC code had been applied during the business license application process.

5.3.3 Best Management Practice Requirements

Implementing BMPs is a priority for all mobile businesses. Dry cleanup methods, diverting wash water, and covering or blocking drains are all required practices. The regional Industrial/Commercial Workgroup finalized a list of minimum BMPs that must be used by all mobile businesses in the region. Mobile facilities are notified of the requirements through mailings or onsite investigations/inspections.

5.3.4 Program Implementation

Inspections of mobile businesses were conducted based on complaints and field discovery of non-compliance. Upon arrival onsite to investigate a complaint of non-compliance, City staff conducted the following activities:

- Requested stop work if discharge was entering or had potential to enter the MS4 system.
- Requested to speak to the manager of the responsible party or property owner as necessary.
- Took photos and made observations.
- Educated the responsible party or person onsite as necessary regarding the City's NPDES permit, Federal and State requirements, Carlsbad Municipal Code (CMC), and required BMPs in order to continue work.
- Enforced the CMC as necessary.
- Followed up with documentation in Permits Plus Database and with written correspondence to the responsible party with a CC to the property owner.

In FY 2010-11 there were 18 storm water violations by mobile businesses. Table 5.5 summarizes the enforcement actions on mobile sources.

Table 5.5 Enforcement Actions on Mobile Sources

Action	Total
Informational Letter	6
Verbal Warning	5
Written Warning	
Notice of Violation	7
Notice to Clean	0
Cease and Desist Order	0
Administrative Citation	0
TOTAL	18

5.4 Notable Activities

As mentioned in the Executive Summary, the City considers a Notable Activity to be any activity above compliance requirements.

There were no Notable Activities for the Industrial and Commercial Program during FY 2010-11.

Section 6

6.0 RESIDENTIAL COMPONENT

#

6.1 Introduction

This section describes the activities of the City for the reporting period for FY 2010-11 with respect to implementation of the Residential Component of the JURMP. The program is intended to: (1) reduce residential discharges of pollutants from the MS4 to the maximum extent practicable, and; (2) prevent residential discharges from the MS4 from causing or contributing to a violation of water quality standards.

6.2 Source Characterization

In accordance with Order No. R9-2007-0001 and the City's JURMP, the City focused on all the high priority activities and areas outlined in the JURMP (March 2008). Since writing the JURMP, no amendments were made to source characterization or areas of focus.

6.3 Best Management Practice Requirements

In accordance with the City's JURMP, required BMPs were implemented in residential areas in compliance with the permit. The minimum BMPs addressing residential activities and areas, as detailed in various outreach materials, are the following:

- Residential auto repair, maintenance, washing and parking. Leaking vehicles must be parked in the residential driveway with BMPs in place to prevent oil and other liquids from leaking onto the street. No leaking vehicles can be parked on the street or right-of-way. No automotive repairs are permitted to be conducted in the street or right-of-way. Residents are allowed to wash vehicles in the driveway, and are encouraged to use soap sparingly, and to divert wash water to landscaping.
- Home and garden care activities and product use. Decrease the use of lawn and garden care products such as pesticides, weed killers and chemical fertilizers. Consider using non-toxic pest control methods. Avoid over-irrigation which washes these chemicals into the storm drain system. Avoid applying fertilizers and pesticides 3-5 days before any predicted rain event.
- Disposal of trash. All trash must be kept in appropriate sized containers until it can be hauled away. Frequently dispose of grass, debris, leaves, and other waste materials. Composting green waste is encouraged.
- Recycle, Reduce and Reuse. Recycle cans, bottles, paper and cardboard whenever possible.
- Disposal of pet waste. Clean up after pets. Use a bag to pick up waste when walking pets. Flush pet waste down the toilet or dispose of in a sealed plastic bag and deposit in the trash.
- Disposal of household hazardous waste. Residents are encouraged to properly dispose of household hazardous waste through the city's household hazardous waste pickup and disposal program.
- Move or cover potential pollution sources from storm water contact. Protect materials that could potentially contribute to storm water pollution by storing them indoors or covering them.
- Use dry cleanup methods. Instead of washing or hosing, use dry cleanup methods such as mops, brooms, rags or wire brushes to clean surfaces.

6.4 Program Implementation

The residential component of Carlsbad's Storm Water Program continued to address residential activities and pollutants through the implementation of outreach and education on proper BMPs, the household hazardous waste program and complaint investigations.

6.4.1 Regional Residential Education Program

The City of Carlsbad continued to participate in the regional workgroup targeting residential areas. Notable activities during this fiscal year include participation at the Hi-Tech High Fair in February 2011 and at the San Diego County EnviroFair during June 2011, PSA distribution at UltraStar cinemas, and continued development of the regional brand Think Blue San Diego Region.

6.4.2 BMP Implementation

During FY 2010-11 the City continued to implement its residential program aimed at reducing contaminants in urban runoff originating from residential areas and activities. BMP information was made available to residents via the following:

- Storm water website and hotline
- Outreach events
- Direct mailings
- During investigations of suspected storm water violations.

Outreach and Education activities for FY 2010-11 are further detailed in Section 8 of this report. Discussion of investigations and enforcement actions for residential areas and activities are discussed in Section 6.4.5 and Section 7 of this report.

Mass Media, Website and Hotline

A Public Service Announcement titled "Ants in Your Plants" that was developed through the regional outreach education workgroup Think Blue San Diego is now on the city's local television channel. The PSA discusses the use of pesticides and insecticides and storm water pollution, and displays the Storm Water Hotline telephone number and email at the end, encouraging residents to report illegal discharges to the storm drain system.

Information about water conservation, trash management, and storm water is located on the Environmental Programs web page accessed through the city's updated website at www.carlsbadca.gov. During FY 2010-11 there were a total 39,035 visits to the Environmental Programs site, with 1,160 visits to the Storm Water web pages.

The Environmental Programs and Storm Water hotlines provided information about storm water, trash, and water conservation for the public. The hotline was answered by the Storm Water Protection Program during business hours and provided a detailed voice message with information on reporting violations to a duty phone after hours.

Outreach Events

The City hosted or participated in several public events, which provided opportunities for residents to learn about pollution prevention and storm water BMPs. During these events residents had the opportunity to pick up printed materials, and to speak directly to storm water representatives. See Table 6.1 for a summary of outreach events occurring during FY 2010-11.

Table 6.1: Outreach Events for Residential Community (FY 2010-11)

Date	Event	Type	Audience	Attendance
09/25/2010	Beach Cleanup - California Coastal Cleanup Day	Event	Residents	102
01/01/2011	Storm Water Calendar in Spanish distribution	Outreach	Spanish-speaking residents	200
02/09/2011	High Tech Fair	Event	middle/high school students	2407
03/26/2011	Kids Day at the Flower Fields	Event	Residents	7000
04/30/2011	Household Hazardous Waste	Event	Residents	360
06/04/2011	Beach Fest	Event	Residents	3500

Direct Mailings

Table 6.2 outlines several direct mailings that were sent to Carlsbad Residents during FY 2010-11. Examples of the mailings can be found in Appendix 6.1, 6.2, 6.3, and 6.4.

Table 6.2: Direct Mailings for Residential Community (FY 2010-11)

Date	Type	Topic	Audience
Varies	Environmental Programs Guide	Solid Waste, Storm Water BMPS	All New Trash Customers
August 2010	Carlsbad Currents newsletter	Coastal Cleanup Day	All residents
September 2010	residential mailer	Storm Water BMPs	645 residents
October 2010	Carlsbad Currents newsletter	Household Haz. Waste/Used Oil	All residents
January 2011	Informational Letter	Storm Water BMPs	260
February 2011	Carlsbad Currents newsletter	Storm Water BMPs	All residents
March 2011	Utility Bill Message	Household Haz. Waste	All residents
June 2011	Carlsbad Currents newsletter	Pool BMPs	All residents

The "Environmental Programs Guide" was sent to all new customers requesting trash service during FY 2010-11. This publication offers information about proper disposal of many types of waste including trash, recycling, and household hazardous waste (HHW). Information also included ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution.

An informational letter was sent to a total of 645 residences, as part of monitoring investigations in residential areas where inspectors found multiple possible sources of storm water pollution. Issues addressed included erosion control, irrigation runoff, proper landscape and garden care and proper storm water BMPs. A copy of this letter can be found in Appendix 6.5.

Printed Materials

The residential storm water brochure was updated during this fiscal year. A copy of this brochure is

available in Appendix 6.6. Written materials were also distributed to residents through complaint investigations, outreach events and informational mailers. These materials included brochures and fact sheets on various residential activities and pollutants and appropriate BMPs.

Promotional Items

The Storm Water Protection Program distributed various promotional items with the storm water hotline and pollution prevention messages, such as crayons and coloring books, pencils, funnels for automotive oil and stickers. All items carried program contact information and environmental messages. In addition, numerous copies of "All the Way to the Ocean," a book illustrating storm water pollution, were raffled off at several outreach events.

6.4.3 HHW, Used Oil, Bulky Items, and Environmental Programs Hotline

The City continued to operate the Household Hazardous Waste (HHW) and used oil recycling program outlined in the JURMP.

On April 30, 2011, the City sponsored a free HHW disposal day during which Carlsbad residents could dispose of up to 15 gallons or 125 pounds of HHW materials. The City collected and disposed of 27,628 pounds of HHW during this event. Table 6.3 shows the types and quantities of HHW collected.

Table 6.3: Items Collected During April 30, 2011 HHW Event

Type of Material	Weight In Pounds
1. Flammable & Poison	10,600
2. Acid	200
3. Base	1,000
4. Oxidizer	0
5. PCB-containing	0
6. Reclaimable	10,850
7. Asbestos	0
8. Universal Waste	2,858
9. Other	2,120
Grand Total	**27,628**

Carlsbad residents may dispose of two large bulky household items at no charge five times per year. In FY 2010-11 bulky item pick-up days were August 28, 2010, November 20, 2010, January 29, 2011, March 19, 2011 and June 25, 2011.

Residents used the Solid Waste hotline and e-mail address to request information about the HHW program, trash, and recycling.

6.4.4 Oversight of Residential Areas

The Water Conservation Specialist continued to conduct patrols of different residential areas within the City. Evidence of excess runoff from irrigation was investigated on a case-by-case basis. Door hangers were left and a follow-up phone call or a site visit conducted to evaluate irrigation systems.

6.4.5 Enforcement in Residential Areas

Storm Water staff handled all residential complaints and subsequent enforcement actions in accordance with the City's existing procedures and Carlsbad Municipal Code. Each reported and observed violation was documented using the RFA database.

During FY 2010-11, the Storm Water Protection Program received 119 storm water related complaints. Of those complaints, 62 occurred in residential areas, with 17 of those complaints involving mobile business and/or sources. Of the 28 complaint investigations conducted in residential areas from residential pollutant sources, one complaint was not found, and two did not have an issue or violation. Three complaints were referred for action, meaning that the investigation or resolution of the issue was not covered by the Storm Water Protection Program's jurisdiction. Examples included wastewater discharge or cleanup of street or storm drain. Of the remaining 22 complaints investigated, inspectors issued 10 informational letters, eight verbal notices and five notices of violation. Table 6.4 and Figure 6.1 show a summary of residential enforcement actions. A summary of all complaints responded to can be found in Section 7, to be submitted in December 2011.

Table 6.4: Summary of Residential Enforcement Actions FY 2010-11

Enforcement Action	Number
Informational Letter	10
Verbal Warning	8
Notice of Violation	5
Total	**23**

Figure 6.1: Residential Complaint Types FY 2010-11

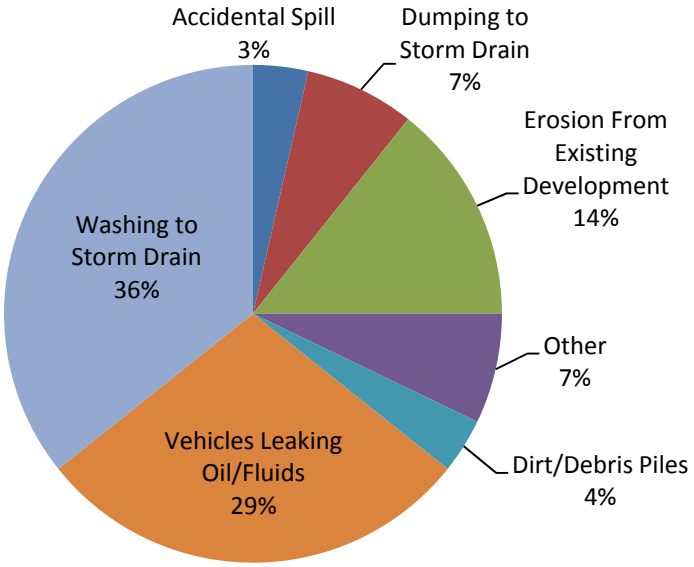

6.5 Notable Activities

As mentioned in the Executive Summary, the City considers a notable activity to be any activity above compliance requirements.

Notable activities for FY 2010-11 include:

- An informational letter was sent to 645 households that addressed storm water pollution issues in the neighborhood, in response to monitoring investigations.
- There was increased use of the website and mass media, with the launch of a PSA on the city TV channel and continuous updates of the city's website.

Section 7

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The City's Illicit Discharge Detection and Elimination (IDDE) will be submitted in December 2011 as approved by the Regional Board in Addendum 2, Order 2007-0001.

Appendix 8

8.0 OUTREACH AND EDUCATION COMPONENT

8.1 Introduction

Outreach and education are fundamental to the success of Carlsbad's urban runoff management program. The city continues to increase awareness about pollution prevention and promote behavioral changes and environmental stewardship. The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent. The city continues to be actively involved in outreach and education efforts at the local level, the watershed level, and the regional level (Project Clean Water – Outreach Workgroup). These efforts are further discussed in the following subsections by target audience.

8.2 Staff Training Element

Storm water training for municipal employees included general training and job specific training for designated departments and personnel. The objectives of the employee training programs are as follows:

- Promote a clear understanding of the urban runoff and water quality issues, including activities that can potentially pollute receiving water bodies.
- Identify and implement BMPs.
- Promote employee understanding and response.
- Integrate employee feedback into training and BMP implementation.

8.2.1 General Employee Training

During FY 2010-11, city employees received storm water training covering issues such as the causes of storm water pollution, how it affects the environment, and the overall structure of the storm water program. Messages may include, where applicable, the topics listed in the Permit. City staff received information and general storm water training through various communication methods including:

1. Storm Water Web Page: Employees were able to download BMP brochures and the JURMP directly from the city's website.
2. Intranet: The city's intranet was used to post messages and inform employees of various events and opportunities for participation, such as the Coastal Cleanup Day and Earth Day activities.
3. Employee Outreach: During FY 2010-11 the Carlsbad Currents newsletter was issued to all employees. Car window decals and notepads with the storm water hotline were available for employee use in the field.
4. First Mondays: During FY 2010-11, all new employees attended an orientation training called First Mondays. The training session included general information about the city, as well as NPDES regulations, the city's JURMP and Storm Water Pollution Prevention BMPs applicable to municipal personnel.

8.2.2 Job Specific Training

General, Development Planning, Construction and Environmental Management employees and relevant contractors are trained annually on Storm Water laws and regulations, BMPs, Runoff Concepts and other Storm Water related topics. See Appendix 8.1 for further details.

8.2.3 Storm Water Committee

The Storm Water Committee continued to meet on a regular basis to discuss storm water BMPs, activities for staff, coordinate inspections, compliance activities, documentation and reporting.

8.2.4 Storm Water Leadership Team

In FY 2010-11, the City of Carlsbad's City Manager continued the Storm Water Leadership Team (SWLT). Periodic meetings of the SWLT were conducted and attendees included Senior Management of the city's major service areas and Directors. Agenda items covered areas of the city's compliance with Order No. R9-2007-0001.

8.2.5 Utility Coordinating Committee Meeting

Engineering and Construction Management and Inspection (CMI) staff attended the bi-monthly Utility Coordinating Committee meetings with various utility agencies (SDGE, Cox Cable, ATT, etc.) throughout North County to discuss ongoing and upcoming projects that impact utilities in Carlsbad. As a standing agenda item, storm water and NPDES compliance are discussed at each meeting to ensure outside agencies understand their role in pollution prevention.

8.2.6 Special Events Committee

Construction Management and Inspection (CMI) staff and Utilities staff attended the monthly Special Events Committee meeting to coordinate upcoming event operations and activities. As a standing agenda item, storm water and NPDES compliance were discussed at each meeting to ensure staff understand their role in pollution prevention.

8.2.7 Other Committees and Meetings

During the reporting period, the city continued to participate in the regional outreach education workgroup meetings, held every other month. The city has participated and will continue to participate in these meetings that include but are not limited to: Technical Advisory Committee (TAC) and Development, Reporting and Assessment and watershed management meetings.

During this reporting period, there have been several regional meetings that the City has attended with other Copermittees. The Development Services Division has participated and will continue to participate in these meetings that include but are not limited to: the land development workgroup, the HMP technical advisory committee, and the reporting and assessment Workgroup.

During FY 2010-11, the City continued to have internal meetings to discuss treatment control BMP compliance program improvements such as inspections, maintenance agreements, verification of

maintenance requirements, improved departmental coordination, transfer of information during the approval process, and other issues related to treatment control BMP compliance. As a result of these meetings, the City will establish a Storm Drain Inventory Management Committee that will meet quarterly to discuss issues related to storm drain maintenance, treatment control BMP inventory, GIS mapping, and other topics related to tracking and managing structures within the cities storm drain conveyance system.

8.3 Educational Outreach Element

8.3.1 New Development and Construction Communities

The city continued to educate the new development and construction communities throughout FY 2010-11. CMI staff worked with new contractors, homeowners, developers, and others in the construction industry during inspections and investigations to identify storm water compliance issues, detail corrective actions and assess the appropriateness of BMPs. CMI continues to require pre-construction meetings with contractors and developers prior to the issuance of a new grading permit. The process is initiated when the contractor/developer requests a pre-construction meeting with City inspectors. During the pre-construction meetings, the contractor/developer is notified of the City's NPDES requirements and compliance efforts. In addition, the Pre-Construction Meeting Agenda Packet was revised to state that occupancy will not be granted until the engineer of work provides a letter verifying that all treatment control BMPs have been installed according to the plans and SWMP. Each contractor/developer is provided with a copy of the agenda packet during the pre-construction meeting.

Development and Planning Services provided information and education to applicants and developers during one-on-one or small group meetings, inspections, complaint investigations, and during pre-construction meetings. They also provided sample SWPPPs and SWMPs for engineers, developers, and applicants to use as guides when preparing documents for proposed development projects. Copies of these documents and the SUSMP are available at the city's permits counter. The SUSMP is also available through the city's website.

On April 6, 2011, City staff attended the "Maintaining LID in San Diego: Best Management Practice Inspection and Maintenance Workshop" held in San Diego. The workshop was hosted by the City of San Diego and included up-to-date information about new and proposed LID regulations, storm water management devices including treatment control BMPs, inspection and maintenance requirements, and design and implementation strategies for minimizing BMP maintenance requirements.

Outreach handouts designed to assist developers, contractors, and private property owners in understanding and complying with the new annual treatment control BMP verification program continued to be used throughout FY 2010-11. These include the "*What You Need to Know about Privately Owned Treatment Control BMPs*" brochure, "*Frequently Asked Questions About Treatment Control BMPs*" factsheet and the "*TCBMP Verification Form and Instructions*" handout.

In addition, the City continued to use the email address developed in FY 2007-08 for the treatment control BMP verification program. Owners and responsible parties can send questions, verification forms, and other requests to the tcbmp@carlsbadca.gov email address, which is monitored by the Senior Construction Inspector. The City has also developed an email address list for TCBMP responsible

parties. The email mailing list has been useful in providing immediate information about treatment control BMP compliance and other educational information.

The City modified its inspection process to require documentation on BMP installations prior to occupancy. Annually the City mails a memorandum to all developers and contractors working in the City educating them on the BMP installation prior to occupancy requirement. On May 2, 2011, an updated memorandum was sent to all developers and contractors with active grading permits informing them of the prior to occupancy verification procedure. A copy of the "*BMP Verification of Installation Required Prior to Occupancy*" memorandum can be found in Appendix 2.9.

8.3.2 Construction Site Owners and Developers

The greatest strength of Carlsbad's efforts to educate construction site owners and developers is its motivated and well-informed project review and inspection staff. The project review and CMI inspection staff holds staff meetings where issues of storm water requirements are discussed including issues of new regulatory requirements, new and evolving BMP standards, updates from training seminars, inventory collection and reporting, LID application in new development design and BMP effectiveness (a list of the Land Development Engineering staff training meetings is included in Appendix 8.1).

Prior to the wet season, CMI inspectors hand delivered a memo to all site superintendents reminding them of the NPDES requirements and informing them to ensure all sites are in compliance by and throughout the wet season. A copy of the *Rainy Season Preparation and Storm Water Compliance* memorandum, issued on September 1, 2010, can be found in Appendix 3.4.

During FY 2010-11, the City developed a brochure on low impact development (LID). The LID brochure is a tool to educate developers, contractors and homeowners regarding different types of LID features on a typical project. The brochure includes different LID features, what their purpose is, and where it could be employed on a project site. Refer to Appendix 2.1 for a copy of the LID brochure.

In November 2010, CMI staff attended the annual CASQA conference in Palm Springs, CA. This year the conference theme was "Rethinking Storm Water Management". The conference featured over 80 sessions and presentations covering a variety of topics including the new Construction General Permit, BMP Effectiveness Assessment, Regulations and Policies, Storm Water Treatment, and other related topics.

The City of Carlsbad is committed to working with developers and contractors to ensure that BMPs are implemented at all construction sites. The "*Pollution Prevention Guide for the Construction Industry*" brochure continued to be distributed at pre-construction meetings. In addition, storm water and NPDES compliance were a part of the regular agenda for each of the meetings. Pre-construction meetings are required for all new development, CIP, and major construction projects in Carlsbad.

The Storm Water Protection Program also continued to distribute the "*Pollution Prevention Guide for the Construction Industry*" brochure. This brochure was developed to provide BMP and pollution prevention information related to materials storage, perimeter controls, building and staging areas, dumpsters and port-a-potty services, tracking controls, concrete trucks and pumpers, washout areas, dirt and grading, earthmoving equipment, and storm drain protection. The brochure was distributed to commercial businesses that conduct small remodeling or home improvement projects.

The city continued to conduct and participate in workshops to educate external parties, which include project applicants, developers, contractors, and property owners on the implementation of the storm water program and requirements for construction sites.

8.3.3 Commercial and Industrial Owners and Operators

The city continued to educate commercial and industrial owners and operators through various methods. This included the distribution of printed materials, participation at workshops, presentations to business community groups, direct mailings, inspections and site visits. Accomplishments are detailed below.

1. Printed Material

During FY 2010-11, several printed materials were sent to industrial and commercial facilities in Carlsbad. The "*Best Management Practices for Mobile Service Providers*" brochure continued to be provided to residents and mobile business operators during complaint investigations related to mobile service provider discharges. The "*Best Management Practices for Businesses – Commercial and Industrial*" brochure was distributed to businesses during inspections and by direct mail. The industrial commercial facility brochure was updated during this fiscal year and will be distributed next fiscal year. Various Storm Water Protection Program brochures continued to be stocked at city kiosks and display racks.

In addition, 71 rainy season mailers for industrial and commercial sites were sent out prior to the beginning of the rainy season. Table 8.1 cites the publication and the number. A copy of the mailer can be found in Appendix 8.2.

2. Website and Hotline

The website and hotline are listed on all printed materials distributed by the city. The city launched an updated website in October 2009. During this fiscal year, there were 39,035 and 1,160 visits to the Environmental Programs and Storm Water web pages, respectively. All brochures also continued to be available through the city website.

The storm water hotline continued to be used to request information and report violations.

3. Inspections and Site Visits

City inspectors worked with businesses, construction sites, and special event promoters during inspections and investigations to educate, identify storm water compliance issues, detail corrective actions, and assess the appropriateness of BMPs.

4. Workshops

The City conducted a workshop on May 19, 2011, for the automotive industry. Nine representatives from various dealerships, service facilities and repair shops attended the hour-long workshop on storm water pollution and appropriate BMPs. In addition, two representatives who were unable to attend received a copy of the presentation via email.

8.3.4 Quasi-Government Agencies/Districts (i.e. Educational Institutions, Water Districts, Sanitation Districts, etc.)

The city continued to educate these communities during this reporting period through the distribution of printed materials in person and through the mail, as well as through website postings.

The city meets bi-monthly with agencies within the Carlsbad jurisdiction to discuss construction projects that impact various utility operations. As a standing item on the Utility Coordination Committee Meeting agenda, storm water and NPDES are discussed to ensure other agencies that work in Carlsbad understand the requirements of the Permit, JURMP, and CMC.

During this reporting period, the city inspected seven water and sanitation facilities as part of the industrial inspection program. Educational information was provided during the inspections, as well as in written inspection reports.

8.3.5 Residential Community, General Public, and School Children

Carlsbad continued its ongoing outreach to the residential community, school children, and the general public during this reporting period. This included the development and distribution of printed materials, public outreach events, presentations, published articles, videos, website access, and direct interaction with the public. Carlsbad actively pursued a comprehensive environmental education and outreach program, combining the activities of storm water, solid waste and water conservation under the umbrella of Environmental Programs. The purpose was to create a unified message, better educate the public, and allow easy access to information. These accomplishments are described below, and in Section 6 in more detail.

1. <u>Printed Material</u>

Since the spring of 2006, the City of Carlsbad has been offering a door-to-door Household Hazardous Waste(HHW) collection program. Residents gather their HHW and call for an appointment to have these items collected and disposed of properly. The city created a new Household Hazardous Waste brochure during this reporting period. This brochure contains information related to household hazardous waste, bulky item, electronic waste, and composting programs offered to Carlsbad residents. Staff has distributed this brochure at a Citizen's Academy, Beach Fest, and the annual Household Hazardous Waste collection event.

A storm water informational advertisement was placed in the Jazz in the Parks guide distributed during this summer's event. A copy of the ad can be found in Appendix 6.1.

Most of the storm water protection printed materials were available for download from the city's website and Environmental Programs website. There were 39,035 and 1,160 visits to the Environmental Programs and Storm Water web pages, respectively, during this reporting period.

Various Storm Water Protection Program brochures continued to be stocked at city kiosks and display racks.

2. <u>Direct Mailings</u>

"*Carlsbad Currents*", a newsletter on city issues and activities, was mailed to all residents four times

during FY 2010-11. The newsletter informs residents of environmental issues in Carlsbad, services provided by the city, tips on how to protect the environment, including storm water BMPs, and a calendar of important environmental dates (household hazardous waste disposal, bulky item pick up, etc.). Table 8.2 lists all direct mailings sent during FY 2010-11. Examples of the newsletter can be found in Appendices 6.2, 6.3 and 6.4.

Table 8.1 Direct Mailings

Date	Type	Topic	Audience
Varies	Environmental Programs Guide	Solid Waste, Storm Water BMPS	All New Trash Customers
August 2010	Carlsbad Currents newsletter	Coastal Cleanup Day	All residents
September 2010	Residential mailer	Storm Water BMPs	645 residents
October 2010	Carlsbad Currents newsletter	Household Haz. Waste/Used Oil	All residents
October 2010	Informational Letter	Rainy Season Preparations	71 businesses
January 2011	Informational Letter	Storm Water BMPs	260
February 2011	Carlsbad Currents newsletter	Storm Water BMPs	All residents
March 2011	Utility Bill Message	Household Haz. Waste	All residents
June 2011	Carlsbad Currents newsletter	Pool BMPs	All residents

The "Environmental Programs Guide" was sent to all new customers requesting trash service. This publication offers information about proper disposal of many types of waste including trash, recycling, and household hazardous waste (HHW). Information also included ways to conserve water and how to protect Carlsbad water quality by preventing storm water pollution.

3. Underserved Target Audiences, High Risk Behaviors, and "Allowable Behaviors and Discharges"

During this reporting period, the City of Carlsbad offered several brochures in the Spanish language, providing important information on Automotive Service and Repair Shops, Lawn and Garden Care and Restaurants. These brochures were developed to raise awareness in the Spanish-speaking community about the difference between storm water conveyance systems and sanitary sewer systems, the connection of storm drains to local waterways, and common residential sources of urban runoff. The brochures include BMPs, the city's logo, website address and the city's storm water phone number. These materials are available at various city facilities, through public events and the city's storm water web page.

Staff continued to collaborate with the Regional Education and Residential Sources workgroup focusing on the development of outreach and education materials targeting underserved target audiences. A 2011 calendar in Spanish was developed and 200 copies were distributed at the Housing and Neighborhood Services building, Library Learning Center and Dove Library.

4. Classroom Education

During this reporting period, the Solana Center for Environmental Innovation (Solana Center) continued to conduct the storm water education program for school children in the city. The Solana Center used the *EnviroScape* interactive model to teach students about watershed stewardship and pollution prevention. Outreach materials and workbooks were provided to the students and teachers. Storm water fliers announcing the free presentations were distributed to teachers.

Each classroom was given a watershed poster, handouts on ten simple ways to help protect the ocean, sponges, pencils and stickers. Each school received a book titled "All the Way to the Ocean," illustrating storm water pollution.

In addition, quizzes on watershed and storm drain systems were distributed before and after presentations. Table 8.3 lists all of the schools and the number of classrooms and students that attended the watershed classroom presentation during this reporting period.

Table 8.2 Carlsbad Elementary Schools Watershed Awareness Programs

Date	Elementary School	Number of Students
10/13/2010	Buena Vista Elementary	45
10/26/2010	Calavera Hills Elementary	72
10/27/2010	Calavera Hills Elementary	49
11/3/2010	El Camino Creek Elementary	66
11/4/2010	Hope Elementary School	80
11/5/2010	Hope Elementary School	44
11/10/2010	El Camino Creek Elementary	44
11/29/2010	Aviara Oaks Elementary	70
12/3/2010	Aviara Oaks Elementary	24
12/10/2010	Aviara Oaks Elementary	23
12/15/2010	Olivenhain Pioneer	22
1/25/2011	Carrillo Elementary School	66
2/7/2011	Carrillo Elementary School	94
2/22/2011	Olivenhain Pioneer	23
2/23/2011	Flora Vista Elementary	66
3/1/2011 3/8/2011 3/9/2011	Pacific Rim Elementary	144
4/18/2011 4/19/2011	La Costa Meadows Elementary	107
5/3/2011	Aviara Oaks Elementary	19
	Total	**1058**

City Stuff is an outreach program that evolved through a partnership between the City of Carlsbad and the Junior Achievement program. The program reaches over 50 third-grade classrooms in Carlsbad (across district lines) and information filters home to the parents/residents. Students learn how cities are planned, operated, and what services are offered. They also learn about important businesses in a city. Out of the six lessons taught, three of the lessons are Carlsbad specific, and one lesson is focused on municipal programs, including reference to Storm Water Pollution Prevention.

5. Website and Hotline

Most of the printed materials were available for download from the city's website and Environmental Programs website. There were 39,035 and 1,160 visits to the Environmental Programs and Storm Water web pages, respectively. Monthly tips were regularly updated on the city's website with storm water pollution prevention tips. When calls are queued on the storm water hotline, a continuous on-hold message provides residents with information about events in the city. Staff used the information line to inform residents of the Environmental Programs web page, telephone number, upcoming outreach events, city services, Bulky Item Collection Day, and HHW collection facilities.

6. Mass Media

A Public Service Announcement titled "Ants in Your Plants" developed through the regional outreach education workgroup Think Blue San Diego, is now on the city's local television channel. The PSA discusses the use of pesticides and insecticides and storm water pollution, and displays the Storm Water Hotline telephone number and email at the end, encouraging residents to report illegal discharges to the storm drain system.

7. Kiosks/Display Racks

Various Storm Water Protection Program brochures continued to be stocked at city kiosks and display racks.

8. Targeted Neighborhood Outreach Campaign

Table 8.4 summarizes outreach conducted to specific neighborhoods. A mailer was sent to 645 households during FY 2010-11 addressing residential storm water BMPs and proper pollution prevention.

Table 8.3 Targeted Neighborhood Education

Date	Number of Homes	Information Distributed
September 2010	645	Residential Storm Water BMPs

9. Prompts and Promotional items

Pencils, stickers and pet waste bag dispensers were purchased this fiscal year to distribute at all city events. In addition, copies of a children's book titled *All the Way to the Ocean* were purchased and raffled off at city events.

10. Public Events

The city hosted or participated in several public events, which provided opportunities for residents, school children, and the general public to learn about storm water pollution prevention. During most of these events, a staffed booth was set up, and residents and children had the opportunity to pick up printed materials, view an *EnviroScape* model demonstration, and speak directly with city storm water representatives. Table 8.5 includes a summary of these public events for FY 2010-11.

Table 8.4 Outreach Events for Residents, General Public, and School Children

Date	Event	Type	Audience	Attendance
09/25/2010	Beach Cleanup - California Coastal Cleanup Day	Event	Residents	102
01/01/2011	Storm Water Calendar in Spanish distribution	Outreach	Spanish-speaking residents	200
02/09/2011	High Tech Fair	Event	middle/high school students	2407
03/26/2011	Kids Day at the Flower Fields	Event	Residents	7000
04/30/2011	Household Hazardous Waste	Event	Residents	360
06/04/2011	Beach Fest	Event	Residents	3500

11. Direct Interactions

Residents were also educated about pollution prevention and BMPs during complaint investigations. During complaint investigations, city inspectors met with residents whenever possible to explain storm water regulations and pollution prevention. When a resident was not available, a door hanger and other outreach materials were left to provide information about the reported discharge, or follow-up informational letters were sent to homeowners and/or contractors after an investigation. These correspondences included brochures and fact sheets about storm water. Additional information on residential outreach and education is provided in Section 6.

Section 9

9.0 PUBLIC PARTICIPATION

9.1 Introduction

This section describes the activities of the City for the FY 2010-11 reporting period with respect to the implementation of the Public Participation component of the JURMP.

9.2 Public Meetings and Hearings

The public had numerous opportunities to attend meetings at the local, watershed and regional levels, in order to learn about the City's implementation of the Permit and to have their concerns addressed.

City Council Meetings were held in the Council Chambers at Carlsbad City Hall and were open to the public. The City of Carlsbad also offered residents and visitors the opportunity to view City Council meetings via the Internet and local cable channel, Time Warner channel 24 or 126. Regularly scheduled Carlsbad Council meetings aired live on Tuesday evenings at 6 pm. Each meeting and agenda was posted online approximately two hours after the conclusion of each meeting. Past meetings were available for up to a year on the City's own archive video portal. Users could conveniently "keyword search" through the audio/video content and "jump to" meeting discussion items in real-time by using a drop down menu. Agendas from previous meetings could also be accessed through the City's Document Management System.

During FY 2010-11, the Planning Commission was comprised of seven members appointed by the City Council. This commission made recommendations to the City Council regarding implementation and updating of the General Plan. When needed, they also provided recommendations to the Council regarding policy issues that affect long-range planning. They reviewed development projects, provided recommendations to the City Council, provided reports to the City Council on the Local Facilities Management Plan, reviewed the annual CIP for consistency with the Growth Management Program, identified potential problems and opportunities facing the City, made findings which conformed to Storm Water compliance, and suggested special studies when appropriate. During this reporting period the City also provided live streaming of Planning Meetings, typically held on the first and third Wednesday of each month at 6 p.m.

Residents could also become representatives on various City committees. The City Clerk's office maintained a list of City Boards, Commissions, and Committees, current vacancies, meeting dates and times, and coordinated all appointments to these positions.

In addition, the public could attend various Municipal Storm Water Copermittee meetings, such as the Management Committee Meetings, Outreach Workgroup, Regional Monitoring Workgroup, Coastal Storm Drain Monitoring Sub-Workgroup, and Dry Weather Monitoring Sub-Workgroup. Notices of these meetings were available from the Project Clean Water website at www.projectcleanwater.org.

9.3 Feedback Mechanisms

In addition to the public participation opportunities available through public meetings and hearings, numerous other feedback mechanisms promoted public involvement.

9.3.1 Hotline and e-mail address

The public was encouraged to provide input and feedback on the Storm Water Protection Program implementation. In addition to the public meeting opportunities detailed above, the public could call the storm water hotline to request information, provide comments, or make illegal discharge reports. The public could also send e-mails directly to the Storm Water Protection Program at stormwater@carlsbadca.gov. There were several other public contact phone numbers and City e-mail addresses available for public use. Other City departments forwarded comments and questions to the Storm Water Protection Program as needed. The public accessed the Storm Water Protection Program web page through the City's website, which provided information about storm water requirements and BMPs.

The public used the Solid Waste Services hotline and e-mail address to obtain information about HHW, trash, and recycling programs.

9.3.2 Direct interaction

The City relied on interactions between City staff and the public to convey messages about storm water and pollution prevention. City staff received targeted training to increase their understanding of urban runoff issues. Staff interaction with the public also provided additional opportunities for the City to obtain direct feedback about BMPs, ordinances, and pollution prevention efforts.

9.3.3 General outreach

Efforts through printed ads, newspapers, press releases, media interviews, PSA's, the Community Calendar, City guides, brochures, water bill stuffers, and other publications were used to keep the public informed of storm water requirements, updates, and public participation opportunities. Specific outreach efforts are discussed in section eight of this report.

9.3.4 Storm drain stenciling

Stenciling storm drain inlets with "*No Dumping – Drains to Ocean*" messages reminded citizens and businesses not to pollute waterways. Stencils were available upon request to businesses and residents who were interested in stenciling private storm drains. Public inlets were marked by the Streets Department.

9.3.5 Public surveys

The BW Research Partnership, on behalf of the City, conducted an annual *Public Opinion Survey* of Carlsbad residents. The city-wide telephone survey of residents was administered from September 8 through 16, 2010 and averaged 20 minutes in length. In total, a statistically representative sample of 1,000 Carlsbad residents 18 years and older completed a telephone survey, resulting in a maximum margin of error +/- 3.08 percent (at the 95 percent level of confidence) for questions answered by all 1,000 respondents. There were three questions related to storm water quality on the 2010 survey. The results of these questions are summarized in Section 11 of this report. The entire report was available for download from the City's website. Surveys helped the City understand how the public perceives storm water which can help foster better planning and management programs.

9.4 Community Events and Volunteer Efforts

The City's Community Volunteer Coordinator administered outreach and involvement programs for Carlsbad residents. This position continued to find volunteers to assist the Storm Water Protection Program with various activities. The City participated in several community events held in Carlsbad and other locations across the county. These events are summarized in Table 9.1.

Table 9.1: Community Events FY 2010-11

Date	Event	Type	Audience	Attendance
09/25/2010	Beach Cleanup - California Coastal Cleanup Day	Event	Residents	102
01/01/2011	Storm Water Calendar in Spanish distribution	Outreach	Spanish-speaking residents	200
02/09/2011	High Tech Fair	Event	middle/high school students	2407
03/26/2011	Kids Day at the Flower Fields	Event	Residents	7000
04/30/2011	Household Hazardous Waste	Event	Residents	360
06/04/2011	Beach Fest	Event	Residents	3500

Section 10

10.0 FISCAL ANALYSIS

10.1 Introduction

This section provides a Fiscal Analysis of the Storm Water Pollution Prevention activities in the City of Carlsbad. This methodology was developed by the Copermittees in January 2009 in accordance with sections, G, J.1 a(3)(k) and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The data provided in this section is based on actual expenditures for the period from July 1, 2010 through June 30, 2011.

10.2 General Budget Information

In FY 02-03 and 03-04, the City conducted a fee study to evaluate possible financing mechanisms for the Storm Water Protection Program. The new financing mechanism was detailed in the "*City of Carlsbad Storm Water Pollution Protection Program Regulatory Fee Study Report*", dated September 12, 2003. The report recommended funding the storm water program through an increase in the City's Solid Waste Service fees and new development processing fees. Nearly all of the pollutants discharged into the MS4 are classified as solid waste under state and local codes. Based on this information and other findings, the City implemented a *Solid Waste Service* fee increase for residential and commercial service users to fund certain Storm Water Protection Program activities. The amount of the fee increase is calculated based upon the apportioned costs to the business and residential service users and their contribution to the pollutant loading. This fee was last reviewed in June 2007, and updated to reflect current workloads. The current fee is $3.46 per month for residential customers, and 23.09% of the base trash rate for commercial customers.

The total operating costs to fund the storm water program activities related to existing development for FY 10-11 were budgeted at $3,098,977. This is a slight decrease from FY 09-10, due to a decrease in estimated costs for outside contracted services. A summary of expenditures for the City of Carlsbad's Storm Water Program is included as Appendix 10.1.

10.3 Fiscal Analysis Methods

The data presented here was derived from the City of Carlsbad's financial reporting system, IFAS. Some estimates are made where specific activities are not clearly delineated in the budget.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

For FY 10-11 ending June 30, 2011, a total of $2,449,072 was spent, with $2,311,672 spent on JURMP activities, $51,369 spent on WURMP activities, and $86,031 spent on RURMP activities. A breakdown of expenses is reported in Appendix 10.1.

10.4.2 Funding Sources

The Permit requires the City to secure the resources necessary to meet the requirements of the Permit and the JURMP, and to conduct an annual fiscal analysis. The analysis must evaluate the expenditures necessary to accomplish the activities identified in the JURMP and describe the sources of the funds used to meet the expenditures. The Storm Water Protection Program is comprised of numerous

program activities funded from a variety of sources. Table 10.1 summarizes the storm water protection program activities and identifies the current funding source:

Table 10.1. Summary of Program Activities and Current Funding Sources

Program/Activity	Funding Source(s)
Storm Water Facility Capital Improvement Program	Developer Impact Fees, Developer Exactions, General Fund, Gas Tax, TransNet Sales Tax, Federal and State Grants
Storm Water Facility Maintenance and Operation Program including Street Sweeping, Litter Removal and Storm Event Readiness and Patrolling	Solid Waste Service Fees, General Fund
Storm Water Program Administration	Solid Waste Service Fees
Illicit Detection and Illegal Discharge Enforcement Program	Solid Waste Service Fees
Commercial/Industrial SWPPP Inspection Program	Solid Waste Service Fees (charged to commercial service customers only)
Construction Related SWPPP Review and Inspection Program	Developer Fees

Section 11

11.0 EFFECTIVENESS ASSESSMENT

The effectiveness assessment is based on data for FY 2010-11 and focuses on the assessment of three areas, as required in Section I.1.a.(1) of Order No. R9-2007-0001: significant activities, components, and an integrated assessment.

- Section 11.1 assesses the significant activities as listed in the City's JURMP. Each significant activity has an associated measure and targeted outcome. These measures relate to various levels in the range of Levels 1-4 outcome levels, assessing permit compliance, changes in knowledge and awareness, changes in behavior/BMP implementation, and load reductions.

- Section 11.2 assesses each component identified in Section I.1.a.(1)(b). The components include Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education. Each component assessment uses various levels in the range of Levels 1-4 outcome levels where measures have been developed applicable to the component.

- Section 11.3 provides an integrated assessment, combining conclusions from the individual component assessments and water quality data. At this time, it is not always feasible to link jurisdictional activities and components to changes in discharge and receiving water quality. This assessment draws conclusions where possible and may be further developed as more water quality data is collected in future years.

11.1 Significant Activity Assessment

The identification of significant activities was performed during the development of the JURMP. These significant activities targeted measurable outcomes, and results for FY 2010-11 are listed in Table 11.1. Some of the measurable goals are related to Levels 1-4 of the Effectiveness Assessment Outcomes as defined in Attachment C of Order No. R9-2007-0001.

Level 1: Compliance with Activity Based Permit Requirements

Where required during this fiscal year, all compliance based permit activities were completed successfully at or above 100% compliance. These measures are effective at determining the City's compliance with the permit.

The compliance measure for the Land Development Category is a new permit requirement that must be completed prior to the onset of the rainy season, October 1 each year. All required inspections were performed prior to October 1, 2010 for the 2010 Dry Season. For 2011 Dry Season, 99% of the High Priority inspections were conducted prior to June 30, 2011. Other measures appear to be appropriate for assessing compliance this year and the City was in compliance on all counts.

Level 2: Changes in Knowledge/Awareness

Changes in knowledge and awareness of storm water requirements were assessed using two significant activities or measures as described in Table 11.1.

As a part of the business inspection program, the City implemented a rating system to assess the general knowledge of storm water requirements during inspections. This measure has been used for several years in the industrial and commercial inspection programs. For this measure, data collected during FY 2010-11 was compared to data collected during FY 2009-10. As shown in the table, the average knowledge/awareness at these businesses remains consistent this year. Slight variances from year to year may reflect the difference in assessments by the various inspectors.

The second method to assess changes in knowledge and awareness compares quiz scores that are administered before and after class room presentations to school aged children. In general, the knowledge base before the presentation is low. Quizzes administered this year showed 11.1% of the children had an awareness of storm water prior to the presentation. After the presentation, the number of children aware of storm water issues rose to 70.5% of the children. This demonstrates an increase in storm water awareness in 59.4% of the students that were tested. By measuring this change, it appears that the presentations are effective at increasing the children's knowledge of storm water issues.

Level 3: Behavioral Change/BMP Implementation

The mechanism the City used to assess behavior change is the BMP inspection ratings for industrial and commercial businesses, assessed during site inspections.

As a part of the business inspection program, the City used the one to five rating system to assess BMP implementation (i.e. behavior change) at the establishments during industrial and commercial inspections. Because this measure has been used for several years data collected during FY 2010-11 was compared to data collected during FY 2009-10. As shown in Table 11.1, the average measured BMP implementation at these businesses was consistent with previous years. In general, BMP implementation remained relatively high this fiscal year. A comparison of the changes over the past four years is discussed below in Section 11.2.

Level 4: Load Reductions

There are two significant activities that provide direct load reductions of various pollutants. These include storm drain cleaning and street sweeping activities, providing estimations of the removal of trash, sediments, and debris from these facilities. These activities account for the removal of 34.25 tons of trash, sediment, and debris from the storm drain system and 993 tons from street sweeping activities.

Additionally, the City uses two estimations of load reductions related to residential outreach and education activities in an attempt to quantify the amount of nutrients and bacteria prevented from entering the MS4. These estimations are dependent on the types of education and outreach utilized and relate this education to reductions in fertilizer usage (i.e. nitrogen and phosphorous reductions) and reductions in pet waste (i.e. bacteria) entering the MS4.

Table 11.1 contains relevant information pertaining to the significant activities defined in the City's JURMP. These data are used to determine if these activities are considered effective.

Table 11.1 Significant Activity Assessment Table

Component	Significant Activity	Method	Measure	Level	Targeted Outcome	Data	Result	Program Effective? YES/NO			
								Compliance	Knowledge Change	Behavior Change	Load Reduction
								Level 1	Level 2	Level 3	Level 4
Land Development	1. Post construction BMP inspection: inspections performed/inspections required.[1]	Confirmation	Performed /Required	Compliance (1)	05/01/10 to 09/30/10 100% High Priority 50% Medium Priority	139/139 H 358/428 M	100% H 83.6% M	Yes	N/A	N/A	N/A
					05/01/11 to 06/30/11 *40% High Priority 20% Medium Priority	98/99 H 289/391 M	99% H 74% M	Yes	N/A	N/A	N/A
Construction	1. Were all required inspections performed during the wet season?	Confirmation	Performed /Required	Compliance (1)	100%	677 /624	108.5 %	Yes	N/A	N/A	N/A

Municipal	1. Were all required facility inspections performed under Order 2007-0001?	Confirmation	Performed/ Required	Compliance (1)	100%	64/64	100%	Yes	N/A	N/A	Yes
	2. Were all required catch basin inspections performed?	Confirmation	Performed /Required	Compliance (1)	100%	3476/ 3476	100%				
	3. How much debris was removed from the MS4?	Direct Measure	Tons	Load Reduction (4)	N/A	34.25	N/A				
	4. How much debris was removed from street sweeping activities?	Direct Measure	Tons	Load Reduction (4)	N/A	993	N/A				
	5. Were all special events applications reviewed for potential coverage under City requirements?	Confirmation	# Reviewed /Total	Compliance (1)	100%	28/28	100%				
Commercial-Industrial	1. Were all inspections performed as required?	Confirmation	Performed /Required	Compliance (1)	100%	585/585	100%	Yes	Yes	Yes	N/A
	2. Were knowledge scores, on average, for current fiscal year higher than previous fiscal year? [2]	Analysis	Average Score	Knowledge Change (2)	Upward Average	3.55 FY09-10, 3.57 FY 10-11	0.6%				
	3. Were behavioral change/BMP implementation scores, on average, for current fiscal year higher than previous fiscal year? [2]	Analysis	Average Score	Behavior Change (3)	Upward Average	4.08 FY09-10, 4.19 FY 10-11	2.7%				

IDDE	1. Were all urban runoff related complaints responded to and resolved?	Confirmation	# Responses /Total Complaints	Compliance (1)	100%	119/119	100%	Yes	N/A	N/A	N/A
Education	1. Were changes in knowledge demonstrated or verified (i.e. quizzes?)[3]	Analysis	Average Score Before/ After	Knowledge Change (2)	%Change	11% aware in pre-test, 71% aware in post test	59%	N/A	Yes	N/A	Yes
	2. How much nutrient load reduction occurred as a result of the "Lawn Care Education" Program?	WTM	Tons	Load Reduction (4)	N/A	N=5.2, P=0.11	N/A				
	3. How much bacteria load reduction occurred as a result of the "Pet Waste Education" Program?	WTM	billion/year	Load Reduction (4)	N/A	45,946	N/A				

[1]During the Dry Season of 2010 inspections performed met and exceeded Permit requirements and were conducted in FY 2010-11. For Dry Season 2010, a targeted outcome of 40% for High Priority and 20% for Medium Priority was used since only two months of the Dry Season was included in FY 2010-11.

[2]See Section 11.2.4 and 11.2.7 for trends over time and explanations of these results.

[3]Quiz results based on acquisition of knowledge or not, as opposed to based on a raw score.

11.2 Component Assessment

11.2.1 Development Planning

During FY 2010-11, the City has experienced measurable changes in outcome levels 1, 2, and 3 regarding compliance with the Development Planning Component.

Level 1: Compliance with Activity Based Permit Requirements

Outcome Level 1 improvements included the updating of procedures for acquisition and management of the City's private treatment control BMP inventory and annual inspection and verification program.

Level 2: Changes in Knowledge/Awareness

The Outcome Level 2 improvements included the ongoing raising of awareness of existing and new storm water compliance requirements among City development review staff, developers and the City's Planning Commission. Through a combination of training during weekly staff meetings, webinars and outside training courses, City staff significantly increased their knowledge and understanding of the updated SUSMP requirements, LID designs, hydromodification principles and City storm water compliance processes. Developers were seen to increase their knowledge of the updated SUSMP requirements, LID designs, and City storm water compliance requirements through revised plan review checklists, City plan review comments, the City's Storm Water Standards Manual and outside training courses.

Level 3: Behavioral Change/BMP Implementation

Outcome Level 3 improvements were seen in the development community. An increased number of development project submittals included acceptable LID, source control and treatment control measures with the initial submittal resulting in fewer project re-designs. The LID designs submitted by developers are showing increased sophistication, effectiveness and cover more significant portions of the project design.

11.2.2 Construction

During FY 2010-11, the City has experienced measurable changes in outcome levels 1 and 3 regarding compliance with the Construction Component.

Level 1: Compliance with Activity Based Permit Requirements

Overall, the Construction, Management, and Inspections Division (CMI) was successful at maintaining full compliance with the permit requirements during FY 2010-11. Table 11.2 contains examples of permit requirements and confirmation that these requirements were met.

Table 11.2 Examples of Construction Related Permit Requirements and Compliance

Permit Requirements	Requirement	Performed
Ordinance updates to comply with order	As necessary	Yes
Designate a set of minimum BMPs	In JURMP	Yes
Require implementation of designated minimum BMPs	All sites	Yes
Maintain and update a watershed based inventory	Monthly	Yes
Require advanced treatment	Sites determined to be an exceptional threat to water quality	Yes, none identified.
Inspections of sites meeting criteria in D.2.d.(1)	Every 2 weeks during wet season	Yes
Implement follow-up actions	As needed based on inspection results	Yes
Inspect according to requirements in Section D.2.d.(6)	Each inspection	Yes
Track number of inspections for the inventoried sites	Continuous	Yes
Develop escalating enforcement process	JURMP	Yes
Implement escalating enforcement process	As needed based on inspections	Yes
Report non-compliant sites to Regional Board	Stop work order or higher level of enforcement	Yes

Level 3: Behavioral Change/BMP Implementation

Changes in behavior and implementation of BMPs on construction sites are evident throughout the City. In general, contractors are more aware of the BMP requirements and are more willing to cooperate with inspectors, resulting in timely and proper implementation of the required BMPs. If a site was found to have deficiencies in storm water compliance, it was generally corrected at the time of the inspection. If a verbal or written warning was issued, a specific deadline for correction action was noted on the inspection report. Follow up inspections were conducted to ensure construction sites complied with the required corrective actions. Most sites were found to have completed corrective actions and were in compliance at the time of the follow up inspection.

Table 11.3 contains enforcement actions for FY 2010-11.

Table 11.3 Enforcement Actions on Construction Sites

	FY 2010-11		
Enforcement Actions	Number	Total Inspections	Percentage
Verbal Notices	458	1285	35.6%
Written Warning / Correction Notice	39		3.0%
Notice to Clean	93		7.2%
Stop Work	0		0%

Staff will continue to develop ideas and implement those deemed appropriate in the future to assist in assessing the changes in knowledge and awareness in the construction community.

11.2.3 Municipal

During FY 2010-11, the City has experienced measurable changes in outcome levels 1 and 3 regarding compliance with the Municipal Component.

Level 1: Compliance with Activity-Based Permit Requirements

This level of effectiveness assessment is based on compliance with Activity Based Permit Requirements. The City was in compliance with all municipal requirements of Order No. R9-2007-0001 during the past fiscal year. Table 11.4 tracks some of the City's Municipal Program activity measures, which are discussed in detail in the previous report sections. Tracking of many of these activities was useful in assessing compliance with the program, but is not yet tied to long-term assessment or improved water quality.

Table 11.4: FY 10-11 Program Activity Measures

	Permit Requirements	Requirement	Performed
	Develop Inventory of Areas and Activities	Update with JURMP	Yes
	Develop and Implement Minimum BMPs	Update with JURMP	Yes
Special Events	Require Minimum BMPs	Establish and Require Implementation	Yes
	Inspections	Inspect all Special Event venues following events	Yes
MS4 Maintenance	Catch Basins	Inspect all, clean those exceeding 33% criteria	3476 inspections, cleaned all trash and 234 exceeding 33% criteria
	Pipelines (miles)	As needed	Cleaned 0.95 miles.

	Permit Requirements	Requirement	Performed
	Open Channels (miles)	Inspect all and clean in a timely manner	Inspected and removed trash from 6 miles
	Desilting Basins	Inspect all, clean as needed	Inspected 3, removed all trash from 3
	Treatment Controls	Inspection and Maintenance	Annually
	High Volumes of Trash	Inspection between May 1 and September 30	Yes
	Tracking of Quantities of Waste Removed	Track Quantities	Yes
Integrated Pest Management	Implement Program	Develop and Implement	Yes
Street Sweeping	High Volume Streets (miles)	2 times/month	4 times/month
	Moderate Volume Streets (miles)	monthly	Twice/month
	Low Volume Streets (miles)	annual	Twice/month
	Parking Lots (acres)	Depends on volume, see above	Twice/month
Infiltration from Sanitary Sewer to MS4	Preventative Maintenance of Sanitary Sewer	Perform	Yes
	Preventative Maintenance of MS4	Perform	Yes
	High Priority Facilities	Inspect all facilities	64 of 64 inspected

Based on the permit requirements presented above in Table 11.5, the municipal program remains in compliance with the requirements of Order No. R9-2007-0001. Several of the measures will continue to be developed, and improved with better tracking mechanisms and improved coordination between departments.

Level 3: Behavioral Change / BMP Implementation

One way to assess the amount of behavioral change and the actual implementation of BMPs for storm water is to look at the results of the municipal inspections. In general, all facilities have improved over the years. There were no violations at Municipal facilities during the 2011 Annual Inspections.

In addition, several departments and facilities have invested in new BMPs and continue to maintain BMPs at their sites which are effective at mitigating potential pollutants at the sites. Examples of these BMPs include:

- All of the City's Fire Stations purchased and use high pressure nozzles to reduce runoff and use vacuum equipment, if necessary, to recover and contain wash water from vehicle washing activities.
- Site specific SWPPPs were maintained for municipal facilities including fire stations, maintenance yards, pump stations, and the Carlsbad Recycled Water Facility.
- A new training video was developed with City staff participating in the filming activities.

Level 4: Load Reductions

As described in Table 11.1, there are several methods of calculating load reductions available from data collected in the municipal program. Refer to Section 11.1 and Table 11.1 for more detail on estimated load reductions resulting from activities performed in the municipal program. Examples of these load reductions include working to eliminate discharges from beach outfalls so that no flow reaches the beach and a street sweeping and catch basin cleaning program which removed approximately 1027 tons of debris.

11.2.4 Industrial and Commercial

During FY 2010-11, the City has experienced measurable changes in outcome levels 1 and 2 regarding compliance with the Industrial and Commercial component.

Level 1: Compliance with Activity Based Permit Requirements

As seen in Table 11.5, inspections completed during FY 2010-11 exceeded the requirements set forth by Order No. R9-2007-0001.

Table 11.5 Inspections of sites/sources FY 2010-11

Order No. R9-2007-0001 (July 1, 2010 to June 30, 2011)				
High Threat to WQ	**Inventory**	**# Inspected**	**Target Percentage**	**Percent Completed**
Ind/Comm Sites/Sources	585	585	100%	100%

Level 2: Changes in Knowledge / Awareness

For Knowledge Assessment, inspectors rank personnel from one to five. Refer to Section 5 of this report for details on the rating scale.

Since the implementation of the rating system, the majority of businesses have ranked at three or better for storm water knowledge and awareness. Figure 11.1 illustrates that on average the majority of the sites inspected had a relatively high knowledge of storm water and ranked greater than or equal to 3.

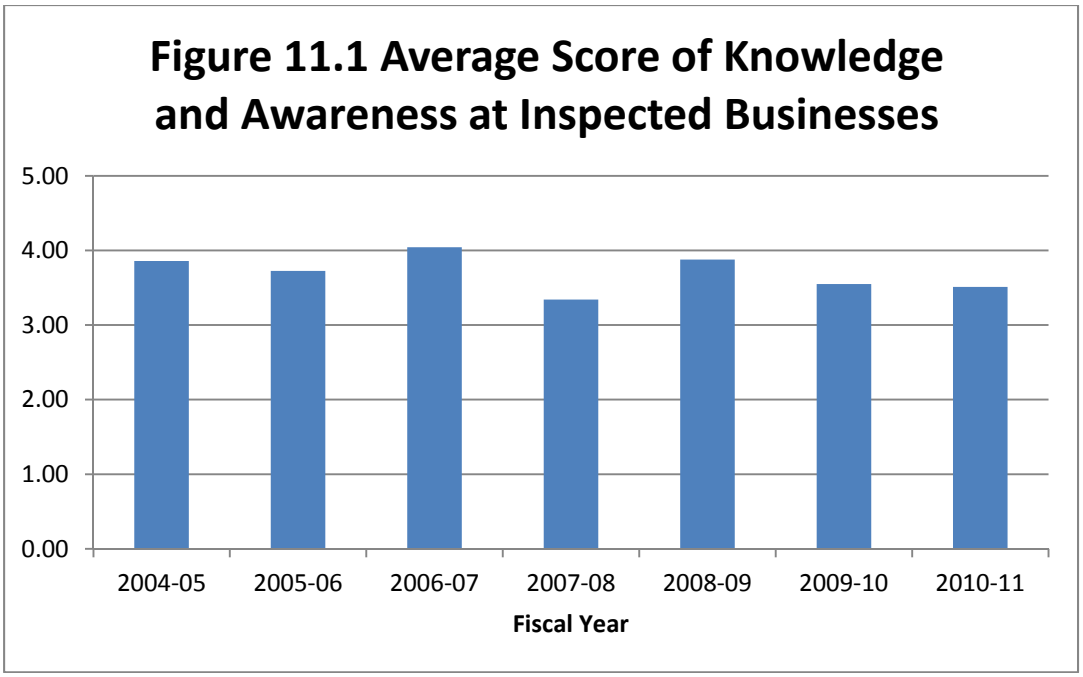

11.2.5 Residential

During FY 2010-11, the City has experienced measurable changes in outcome levels 1, 2, 3 and 4 regarding compliance with the Residential component.

Level 1: Compliance with Activity-Based Requirements

Residential activities outlined in the March 2008 JURMP were completed as described in Section 6 of this report. Activities include various outreach events and activities, used oil and waste collection services, and complaint response followed by enforcement action.

Level 2: Changes in Knowledge/ Awareness

City of Carlsbad Public Opinion Survey

An annual public telephone survey was conducted this year by the City, as part of the *Performance Measurement Program* and "*State-of-Effectiveness Report.*" Carlsbad households were selected using *Random-Digit-Dial* methodology with a minimum sample size of 1,000. This survey had a margin of error of +/- 3% at the 95% confidence level. Storm water pollution was addressed briefly in this survey. The City survey asked, "*Have you seen or heard any information about how residents can prevent the pollution of creeks, lagoons, and the ocean?*" This question was used to gauge the public's perception of ocean water pollution and was asked previously in 2003, 2006 to 2009. The results, with Don't Know or N/A factored out, are presented in Table 11.6 below.

Table 11.6: Results of Environmental Question 1

Answer:	2003 (%)	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)
1. Yes	58.1	64.6	61.1	59.2	75.3	65.2
2. No	41.9	35.4	38.9	40.8	24.7	33.9

The percentage of residents that had heard information in the past year about preventing the pollution of local creeks, lagoons, and the ocean decreased from 2009, but was statistically higher than 2008 and 2007 An additional question was asked again this year to assess the most effective educational methods by asking, "*Where do you recall seeing or hearing about ways to prevent pollution?"* The top three responses were TV, newsletters and newspaper, respectively comprising over 72% of the total responses. Other significantly higher responses included brochures, water or utility bills, curb signs, radio, and website.

Level 3: Behavioral Change/BMP Implementation

The City asked a behavioral question during the survey to those who answered affirmatively to the question, "*Have you seen or heard any information about how residents can prevent the pollution of creeks, lagoons, and the ocean?*" The 65.2% who answered this question affirmatively were asked the follow-up question, "*Given what you have seen or heard, what have you done, if anything, to reduce the amount of pollution in our creeks, lagoons, and oceans?*" Results for this question are presented in Table 11.7.

Table 11.7: Top Responses to follow-up question.

Answer:	Percent
1. Properly disposing of hazardous waste.	22.3
2. Used a commercial carwash	14.5
3. Using environmentally friendly soaps, pesticides, etc.	13.8
4. Cleaned up trash at Beach, Roadside, Etc.	9.2
5. Recycled	9.1
6. No longer dump down storm drain	6.9
7. Reduced water usage/used water more efficiently	6.7
8. Cleaned up animal waste	5.7
9. Did nothing.	20.1
10. Other (ex. don't litter, reduced runoff)	24.3
11. Don't know.	6.2

Continued survey data should help to show if long-term behavior change has occurred. Over eighty percent of residents who answered question one affirmatively, consciously chose an environmentally friendly method over others in certain instances.

Level 4: Load Reduction

The primary goal of BMP implementation is to reduce pollutant loads in storm water discharges. An important emphasis of annual program assessments is to estimate the load reductions resulting from various program activities. Assuming that such reductions are properly targeted to existing or potential water quality problems, load reductions should in turn result in improvements to discharge and receiving water quality. Quantifying load reductions represents an important intermediate endpoint for assessments. The Regional Board wrote the following in October 2004:

Program effectiveness can be assessed by quantifying the pollutant load reductions attributable to various program activities. An effective program will compare pollutant load reductions of various program activities and implement those activities which result in the largest pollutant load reductions. It is expected that by implementing program activities which maximize pollutant load reductions, Copermittees will be implementing effective programs which will improve receiving water quality.

The City used the Watershed Treatment Model (WTM) as a tool for rapid assessment of effectiveness of the storm water programs. The WTM (version 3.1) was prepared by Deb Caraco of the Center for Watershed Protection for the U.S. EPA Region V - Office of Wetlands, Oceans and Watersheds. The 2008 WURMP identified bacteria, sediment, and nutrients as water quality problems. The WTM estimates the pollutant loading reductions for sediment, bacteria and nutrients for various program activities, such as residential education, erosion and sediment control programs, and street sweeping, among others. The results of some of these storm water management programs are discussed below. Complete explanations and assumptions are found in the WTM book. Land Use amounts are from 2009 and provided by SANDAG and the City GIS department.

Public Education

A variety of public education programs may help to reduce the concentration of nutrients, sediment and bacteria in urban streams. The model currently focuses only on a few of these, including programs to address lawn care, septic system maintenance, and pet waste. Several other residential pollution prevention programs improve water quality, but have little effect on nutrients, suspended solids, and bacteria. For example, HHW programs are effective at reducing toxics but do not have a quantifiable impact on pollutants such as suspended solids, nutrients, or bacteria.

Lawn Care: The ideal pollutant removal associated with lawn care would be achieved if all of the additional fertilizer applied to turf were eliminated. The model uses equations to estimate optimal nutrient load reduction from a lawn care program combined with a calculation of the residential lawn area. The model calculates the residential lawn area based on the City's input of residential acres taken from GIS. The user inputs the information on how the education campaign was conducted. Default values were given for the fraction of the audience willing to change behavior based on nationwide data. The City conducted lawn care education through brochure distribution, workshops and newspaper ads.

The model allows the user to input the media type, which determines the portion of the population that *remembers* the message ("Awareness of Message"). This number is largest with television (0.4), followed by newspaper (0.3), radio (0.25), billboard (0.13), brochures (0.08) and workshops (0.07). Because residents have been exposed to five of these mechanisms in FY 2010-11, the input value entered was an average for brochures, workshops and newspaper, radio, and television (0.22). This results in an annual nutrient load reduction of 10,480 pounds of nitrogen and 210 pounds of phosphorus (Table 11.8).

Table 11.8: Loading Reduction from Existing Lawn Care Education

	N (lbs/year)	P (lbs/year)
Lawn Care Education	10,480	210

Pet Waste: The Storm Water Protection Program also conducted a *Pet Waste Education Program* during FY 2010-11. In the urban watershed, dogs are a significant contributor of bacteria and nutrients. Ideally, a *Pet Waste Education Program* would reduce this source to zero, with all homeowners properly

disposing of waste. The model provides estimated values for the fraction of households with a dog, the fraction of owners who walk their dog, the fraction of owners who cleanup after their dog, and the fraction willing to change their behavior. As with the lawn care education, the portion of the population that remembers the message is based on the media used for the education. This past year, the City delivered this message through brochures and the newspaper. Residents were also exposed to regional education efforts on television and radio. In addition, the City distributed free pet waste bag dispensers at local events and provided animal care facilities with these dispensers. These activities were considered similar to a workshop, so an averaged value of 0.22 was used for this calculation. This results in an annual pollutant loading removal of 5,284 pounds of nitrogen, 689 pounds of phosphorus, and 45,946 billion bacteria per year (Table 11.9).

Table 11.9: Loading Reduction from Existing Pet Waste Education Program

	N (lbs/year)	P (lbs/year)	Bacteria (billion/year)
Pet Waste Education	5,284	689	45,946

The overall assessments of these education programs show that the media significantly affected the associated pollutant removal due to the increased audience that *remembers* the message. For instance, if the City had the financial resources to use mass media (television and radio), the estimated pollutant reduction would be increased significantly. The City's annual phone survey confirms that most people recall hearing these messages through mass media. However, mass media is significantly more expensive than brochures and workshops. Large campaigns for mass media may be best conducted on a regional basis with Copermittees sharing the expense or pursuing grant funds for these expensive activities. Due to an increase in mass media educational tools used at the Regional level this year, it is expected that many of the residents in Carlsbad were exposed to these campaigns, accounting for the increase in load reductions associated with lawn care and pet waste.

11.2.6 Illicit Discharge Detection and Elimination

Effectiveness assessment for the IDDE Program will be submitted with Section 7 of this year's Annual Report to be submitted to the Regional Board by December 15, 2011.

11.2.7 Outreach and Education

During FY 2010-11, the City has experienced measurable changes in outcome levels 1, 2 and 3 regarding compliance with the Outreach and Education component.

Level 1: Compliance with Activity Based Permit Requirements

Table 11.10 below illustrates examples of the permit requirements in the outreach and education section and what activities the City implemented to comply with each.

Table 11.10 Outreach and Education Permit Requirements

Municipal Training	Compliance Activity
• Development Planning	Staff training specific to development planning activities referenced in Appendix 8.1
• Construction	Various staff training events specific to construction activities referenced in Appendix 8.1
• Inspection Staff (industrial/commercial)	Various training events specific to inspections of businesses referenced in Appendix 8.1
• Other Activities	Various activity specific training events for water, wastewater, and parks departments
New Development and Construction	Various outreach activities as described in Section 8.
Residential	
General Public	
School Children	

Level 2: Changes in Knowledge/Awareness

Measurably increase the knowledge/awareness of target communities:

- Municipal Departments and Personnel

  During FY 2010-11, a detailed municipal training program continued to be implemented to ensure compliance with Order No. R9-2007-0001. This training program assessed each position within the City to determine the applicable (i.e. required) training and groups the positions into separate modules to make training easier for the various departments. Staff will continue to determine ways to assess the changes in knowledge and awareness of municipal personnel throughout the permit cycle.

  In June 2007, the City implemented a new internal waste reduction strategy as a pilot program. This included the purchase and distribution of larger single stream recycling containers and a small trash can for employee work stations. There were also several new larger recycling containers placed in public meeting areas throughout the City. Seen as an effective program, the City implemented new waste reduction programs, promoted double siding copies and print jobs, and distributed reusable beverage containers at all City facilities. Rollout of these new programs included the development of posters, fact sheets and a presentation to educate and inform employees about the importance and benefits of recycling, reducing and reusing.

- Construction Site Owners and Developers

  The City conducts outreach activities specific to construction site owners and developers as described in Section 8.3. The activities occur throughout the development process.

- Industrial and Commercial Owners and Operators

  The City uses a program to assess changes in knowledge at industrial and commercial facilities based on a numeric ranking from one to five, with one representing a lack of

knowledge and five representing adequate knowledge of storm water BMPs and requirements as applicable to their facility. The results are compiled each year and reported in the industrial/commercial section of the Annual Reports. Results are also presented in Figure 11.2 of this section. Over time, these site assessments can be compiled and compared.

- Residential Community, General Public, and School Children

There are various outreach efforts in place to increase storm water knowledge and awareness for residents, the general public, and for school children. Changes in the knowledge and awareness of the residents and general public are assessed and tracked via an annual telephone survey of the citizens of Carlsbad. The survey includes several questions used to assess these changes in awareness. Survey results, tracked over the past three surveys are described above in Section 11.6.

Level 3: Changes in Behavior/BMP Implementation

Measurably change the behavior of target communities:

- Municipal Departments and Personnel

Behavior changes are evident throughout municipal departments and personnel and can be attributed to targeted outreach and training for municipal staff. Awareness of Storm Water issues is evidenced by calls from City staff to the storm water hotline. All levels of staff are continually seeking advice from the Storm Water Program on how to implement BMPs allowing them to continue to perform their necessary activities. There have also been programmatic changes in the Development Services Division, ensuring that required BMPs and submittals are provided on all projects, and are tracked and approved. In FY 2010-11, there were no NPDES violations noted during Municipal Inspections.

- Construction Site Owners and Developers

Changes in behavior on construction sites and by developers are also evident throughout the development community. These changes are manifested throughout the development process, from submitting appropriate BMPs on plans and better Storm Water Management Plans, to installation and maintenance of proper BMPs during construction, to the development, installation, and maintenance of BMPs on projects after construction is complete.

- Industrial/Commercial Owners and Operators

Industrial and commercial owners and operators are continually educated on storm water issues during inspections, mailers, and interactions during outreach events. Behavioral changes at industrial and commercial sites are most evident through assessment of proper BMP implementation during inspections and site visits. Using the rating system of one through five, with one being no implementation of BMPs and five being effective implementation of all BMPs, businesses have on average scored close to

four, as shown in Figure 11.2. These results indicate that business owners and operators have altered and maintained behavior consistent with storm water rules and regulations. This method of assessment will continue to be used to measure behavior changes among industrial and commercial sites.

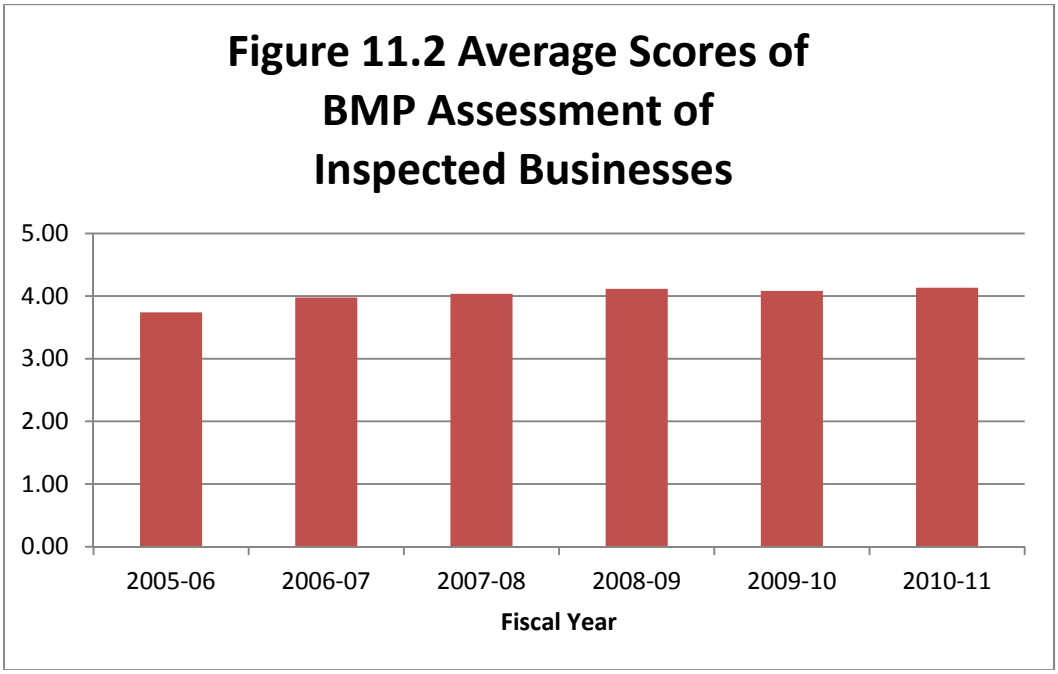

- Residential Community, General Public, and School Children

Outreach to the residential community, general public, and school children continues to be effective in conveying storm water information. At this time, it is difficult to measure the changes in BMP implementation in these target audiences. Several methods have been discussed previously and will continue to be utilized. One of the best feedback mechanisms that the City has in place is its annual citizen survey. Answers to the question, "What things are you doing to reduce water pollution?" helps the Storm Water Program track BMP implementation over time and changes in the community, as discussed previously in the report.

The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent. The messages were delivered by various means including presentations, workshops, inspections, investigations, and outreach events, in addition to use of direct mail, the website and newspaper advertisements.

The City conducted the annual (telephone) Public Opinion Survey in FY 2010-11, which included questions on storm water pollution prevention. The results from this survey provide important information on the public's awareness and knowledge of storm water pollution prevention issues and activities. This information can help focus future

education and outreach messages and events, and is also used on a *Performance Measure* to gauge the effectiveness of the outreach and education program.

The Storm Water Protection Program and Environmental Programs staff worked with the Communications Department and the Information Technology Department to continually revise the web pages and provide updated information about pollution prevention, including a tip of the month section.

Staff collaborated regionally with the Storm Water Regional Education and Residential Sources Workgroup, consisting of 21 Copermittees, throughout the year. During FY 2008-09, the workgroup developed a Regional Residential Education Plan that was implemented in FY 2009-10 and continued in FY 2010-11.

In addition to the development and completion of the documents, the workgroup also continued to focus on the development of a regional brand, a regional website, mass media and public relations, materials development and distribution, underserved target audience, market research and assessment tools, partnership development and regional events during FY 2010-11. Staff will continue to participate in these areas with accomplishments reported in the annual reports.

11.3 Integrated Assessment

11.3.1 Changes in MS4 Discharge Water Quality

Dry Weather Field Screening and Analytical Monitoring Program

The City has conducted an annual *Dry Weather Field Screening and Analytical Monitoring Program* since 1995. The purpose of the monitoring program is to detect and eliminate illicit connections and illegal discharges to the storm drain system.

Historically, the results for field analyses indicate a decreasing trend in ammonia-nitrogen concentrations. No discernable trend is apparent for other field constituents. Bacteria levels have varied over the years, with a slight upward trend in Enterococcus counts. Diazinon and chlorpyrifos have only been detected once and oil and grease exceedances have been infrequent.

Over the course of the Dry Weather Monitoring Program, repeated testing at the same sampling sites can allow for a historical comparison of certain water quality parameters. While any trends or historical analysis of this data can be useful for current and future evaluations of potential pollutant sources to the MS4, this is not the stated purpose of the Dry Weather Monitoring Program. This program is designed to detect and eliminate illicit connections and/or acute discharges through sampling. Following a confirmed exceedance, an investigation is performed within two business days to determine and abate, if possible, the source of the exceedance.

The Dry Weather Monitoring Program report for FY 2010-11 and follow-up activities will be provided under separate cover, due to the Regional Board by December 15, 2011.

Coastal Outfall Monitoring Program

The City continued to collect samples from various storm drain outfalls as part of the *Coastal Outfall Monitoring Program*. As stated in the *Adaptive Monitoring Plan*, if water was flowing from a storm drain

outfall, samples were collected and analyzed for total coliform, fecal coliform and enterococci and sample results were compared to the 95th percentile criteria. Where storm drain flow reaches the receiving water, protocol states to collect a paired receiving water sample to assess the impacts of the storm drains on the receiving waters. The receiving water samples would then be compared to Rec-1 standards to determine exceedances. Where storm drain bacteria concentrations exceeded 95th percentile criteria or receiving water samples exceeded Rec-1 objectives, follow-up sampling and/or investigations would be performed.

Recent years indicate a decrease in storm drain exceedances for all three bacterial indicators, showing possible improvements in storm drain water quality. In all cases, the flow from outfalls was intermittent, low volume and did not actually reach the receiving waters but dissipated into the sand or sediment. The City will continue to conduct the Coastal Outfall Monitoring Program and to conduct follow-up investigations as detailed in the Adaptive Plan.

During FY 2010-11, there were no storm drain flows that reached the ocean. The City has been successful at decreasing illegal discharges in areas where outfalls discharge directly to the beach during dry weather.

11.3.2 Level 6: Changes in Receiving Water Quality

It is important to note that receiving water quality reflects considerably more than the quality of the City's MS4 discharges. In addition, receiving water quality can be adversely impacted by other events that are not under the control of the City, such as other permitted NPDES discharges, wildlife (impacting bacteria levels), atmospheric deposition, and other events and activities.

<u>Coastal Outfall Monitoring Program – Receiving Waters</u>

During FY 2010-11, there were no samples collected in the receiving waters as part of the Coastal Outfall Monitoring Program, since no storm drain outfall discharges reached the receiving water.

11.3.3 Overall Assessment

Program implementation in areas of construction, residential, MS4 maintenance, and street sweeping are properly targeted for protection of and improvement of water quality, as evidenced by direct load reductions in these programs.

Other program implementation in areas of industrial and commercial inspections, municipal, residential, construction, and outreach and education appear to be properly targeted for the protection of and improvement of water quality, as evidenced by changes in knowledge and awareness and in behavior.

In addition, the City has had a steady revenue source to fund the Storm Water Protection Program over the past year. City Staff will continue to monitor revenue and expenditures to determine if adjustments are needed in future years.

In FY 2009-10, the City implemented the development processing fees for the plan review and inspection of Construction Storm Water Pollution Prevention Plans and post-construction Storm Water Management Plans.

Section 12

12.0 SPECIAL INVESTIGATIONS

12.1 Introduction

There were no special investigations conducted by the City of Carlsbad in FY 2010-11.

Section 13

13.0 NON-EMERGENCY FIRE-FIGHTING

13.1 Introduction

The Carlsbad Fire Department (CFD) has developed the Non-Emergency Fire Fighting Program to meet the requirements of Order No. R9-2007-0001, as written in the City's 2008 JURMP. This section describes the City's program to reduce pollutants from non-emergency fire-fighting flows (i.e., flows from controlled or practice blazes and maintenance activities) conducted in FY 2010-11 from July 1, 2010 to June 30, 2011.

13.2 Overall Program Definition

The CFD is a dedicated team of professionals whose mission is to enhance the quality of life in our community by delivering exceptional services in safeguarding lives, property and the environment. By default, the definition of non-emergency fire-fighting flows, are flows generated by the Fire Department other than in emergency situations. The duration of an emergency exists from alarm notification until, in the opinion of the Incident Commander, the emergency has concluded and equipment is returned to service. Outside of this duration of time, Fire Department flows are considered non-emergency.

13.3 BMP Implementation

In order to reduce pollutant discharges from non-emergency fire-fighting flows, the City of Carlsbad's Fire Department has implemented several BMPs. During this reporting period, the CFD maintained a Storm Water Manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water. The BMPs incorporated at Fire Stations are listed below:

Pollution Prevention

- Storm Water Manuals were developed for each station which include SWPPPs with site maps, inspection reports, facility specific spill response procedures, training records, and department policies. Training on storm water and spill response was provided regularly.
- Dry cleanup methods were used to reduce water use. The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations. Awareness was heightened at fire scenes to minimize the potential for excessive water flow.
- Materials were recycled where possible.
- Spill Prevention, Control, and Cleanup: Spill response equipment and materials are clearly identified and staged in accessible locations at each station. Awareness was heightened at incident scenes to contain potential discharges (once the scene had been stabilized) to prevent pollutants from entering the MS4. The Department continued implementation of the City's spill response procedure for incidents that occur on City streets. Absorbent materials are kept on all engines and at all the stations. The spill response plan is to apply absorbent, sweep material, place in bags, and remove from site for proper disposal.
- Vehicle and Equipment Cleaning: The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Vacuum equipment is used to recover and contain all wash water from washing activities occurring at Fire

Stations 1-5. Fire Station 6 is equipped with a strip drain in the driveway which allows Fire Department employees to wash Fire vehicles onsite, with any excess wash water diverted to sewer. All Fire Stations currently have a pressure washer for vehicle and equipment cleaning to minimize the amount of water being used.

- Waste Handling and Disposal: Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter. Recycling was implemented where possible; bins were provided.
- Parking/Storage Area Maintenance: Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations.
- Housekeeping Practices: Fire stations were kept clean and orderly. Wash water was disposed of properly. Sweeping material was disposed of properly.
- Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever possible; pesticides, herbicides, and fertilizers are stored inside and used sparingly in accordance with required application practices.

13.4 Training and Education

The CFD continued to communicate with other City departments to improve coordination and education with regards to storm water. The CFD's Storm Water Committee met quarterly to address new and ongoing storm water topics and how they relate to the responsibilities of the Fire Department, and included personnel from each Fire Department rank. Other activities CFD participated in are as follows:

- A representative from the Fire Department attended and participated in the City's Storm Water Committee meetings as available.
- The CFD worked closely with the Storm Water Protection Program to conduct a series of meetings to review BMP implementation and perform one-on-one training;
- The City's Reclaimed Water Facility continued to be utilized for fire engineer training and testing. A training trailer facilitated engineer operations, pump testing, and other wet training opportunities. The Facility allowed for wet training and testing opportunities while ensuring that no water is discharged to the MS4;
- The CFD conducted training and testing at other fire agencies and training facilities which recycle the water that it is being discharged (i.e. Rancho Santa Fe and San Marcos Fire Departments). Suitable locations were selected to provide "wet" training opportunities for personnel, while ensuring that appropriate BMPs were in place to protect the storm drains and eliminate discharges to the MS4. These sites were generally located on pervious surfaces with no potential for discharge to the storm drain system;
- The CFD explored CIP opportunities for potential funding for permanent structural BMPs at the fire stations to serve wash areas;
- The CFD worked extensively with the design and construction committee for new fire stations to ensure that storm water requirements were 1) addressed early in the process and 2) met during and after construction.
- The CFD continued current annual training levels to ensure that all CFD personnel were versed in storm water as it relates to fire stations and fire-fighting activities.

13.5 Fire Prevention Program

Fire Prevention is itself, a Best Management Practice (BMP). During this reporting period, fire prevention activities included those activities not directly associated with emergency scene operations, post fire scene or mop-up operations.

Perhaps the most effective way to eliminate water runoff from fires is to eliminate or reduce the magnitude of fires. The CFD has shown that an aggressive Fire Prevention Program has a significant impact on the number and magnitude of fires. Procedures or actions that lead to early fire detection/notification, automatic suppression, confinement, or enhanced suppression capabilities can reduce or control fires and ultimately reduce water runoff. The installation and maintenance of these procedures, devices, or features can significantly reduce potential flows in the event of an emergency.

An example of this type of prevention was weed abatement which included the encouragement of mowing. When mowing was not practical for perimeter breaks, and after considering topography, roughing the slope in a manner that would not increase soil or sediment releases was utilized, such as disking.

The City of Carlsbad continued its Fire Prevention Program during this reporting period.

Section 14

14.0 JURMP REVISIONS

The City's 2008 JURMP was developed in response to the issuance of Order No. R9-2007-0001. The City began implementing the 2008 JURMP on March 24, 2008 as required under the new permit.

There were a few minor changes to the City's 2008 JURMP during FY 2010-11 and they are discussed below.

In Section 2 of this Annual Report, the Treatment Control BMP inventory was updated in accordance with the Permit.

In Section 3 of this JURMP Annual Report, changes were made to the Construction program including updating the construction site inspection inventory, updating the inspection and inventory management procedure, and revising the Construction Inspection Form.

In Section 4 of this Annual Report, the municipal inventory and Special Events inventory were updated.

In Section 5 of this Annual Report, the Industrial/Commercial inventory was updated in accordance with the Permit and the City's procedures.

Section 15

15.0 CONCLUSIONS AND RECOMMENDATIONS

15.1 Overview

From July 1, 2010 to June 30, 2011, the City continued to implement Permit Order No. R9-2007-0001. This section of the JURMP Annual Report describes activities that the City undertook to reduce discharges of pollutants and urban runoff flow to the MS4 to the maximum extent practicable. It also provides an overall account of the activities conducted and the programs implemented to address the new Permit requirements for major components: Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education.

Several highlights are listed below, including specific discussion of activities conducted per Permit requirements, as well as those that exceeded requirements and are considered notable activities. Note that these are highlights only and do not represent all activities conducted by the City to maintain compliance. Comprehensive details are reported in the applicable preceding sections.

15.2 Highlighted Activities Performed to Meet Permit Requirements

The City continued activities that were consistent with Permit Order No. R9-2007-0001. For comprehensive details, please refer to the applicable preceding sections of the report. Highlights for July 1, 2010 to June 30, 2011 are listed below.

The City:

- continued updating and revising the Treatment Control BMP (TCBMP) database of private and public TCBMPs.
- continued to distribute a copy of the Pollution Prevention Guide to the Construction Industry with each construction related permit application.
- inspected all high priority construction sites at required frequencies, conducted outreach to project proponents and City staff, and issued 590 enforcement actions to obtain compliance during 1285 inspections.
- continued to review inventory management, prioritization practices, inspection and enforcement procedures, training programs, record-keeping, and reporting procedures related to construction activities.
- updated and mapped the municipal inventory and inspected high priority municipal facilities.
- conducted cleaning and maintenance activities to reduce pollutant discharges from the MS4.
- inspected 100% of catch basins.
- continued evaluating and inspecting Special Events.
- updated and revised the Special Events inventory.
- updated and mapped the High Threat to Water Quality Industrial/Commercial inventory, and conducted 541 inspections, or 100% of the total inventory. The City issued 18 enforcement actions to obtain compliance from July 1, 2010 to June 30, 2011.
- continued using the *Knowledge and BMP Assessment*s at commercial and industrial facilities.
- continued distributing the brochure for mobile service providers, including carpet cleaners, plumbers, pressure washers, mechanics, porta-potty services, and any other mobile businesses that provide services at various off-site locations. This brochure was designed for mobile service providers, their employees, and anyone that hires a mobile service provider.

- distributed educational information for residential activities, continued an advertising campaign, hosted or participated in community outreach events, and collaborated in offering five oil recycling and two HHW drop-off sites for residential use.
- collaborated with other internal departments to assist with investigations and remediation during field incidents. The Storm Drain Maintenance Division was key to prompt, effective responses to complaints involving clean ups of incidents on public streets. Regular meetings and discussions about compliance issues and consistent contact facilitates this inter-departmental coordination.
- conducted a proactive program to detect and eliminate illegal discharges to the MS4. The public continued to use the storm water hotline and e-mail address to report illegal discharges to the storm drain system. The Storm Water Protection Program responded to 119 reports of illegal discharges to the storm drain system and issued 23 enforcement actions.
- continued implementation of the *Dry Weather Field Screening and Analytical Program*, analyzing conditions and samples from up to 60 sites in the MS4.
- continued implementation of the *Coastal Outfall Program* by routinely monitoring 8 "active" outfall sites on a regular basis, and "inactive" sites semi-annually.
- continued involvement in outreach and education at the local level, the watershed level, and the regional level with the Project Clean Water Outreach Workgroup, and the Think Blue campaign.
- continued distributing storm water educational brochures.
- distributed information through direct mail, during inspections and investigations, on the website, at workshops, during presentations, training seminars, and other public outreach events.
- conducted a Public Opinion Survey of 1,000 residents and included questions on storm water.
- distributed promotional items such as coloring books, pens, and Bags on Board with pollution prevention messages.

15.3 Notable Activities in Addition to Permit Requirements

The City implemented several initiatives in addition to the requirements of the Permit Order No. R9-2007-0001 which are considered Notable Activities. Some of these are internal program goals and should not be viewed as enforceable under the Permit, and will be continued and enhanced as resources allow. For comprehensive details on all City activities, please refer to the applicable preceding sections of this report. Notable Activities for FY 2010-11 are as follows:

The City:

- developed an informational brochure on low impact development (LID Brochure). The LID Brochure is a tool to educate developers, contractors and homeowners about low impact design and how water quality features can be incorporated into projects. The brochure includes different LID features, what their purpose is, and where it could be employed on a project site.

- sent CMI staff to attended the annual CASQA conference in Palm Springs, Ca. in November 2010. This year's conference theme was "Rethinking Stormwater Management". The conference featured over 80 sessions and presentations covering a variety of topics including the new Construction General Permit, BMP Effectiveness Assessment, Regulations and Policies, Stormwater Treatment, and other related topics.

- sent Development Services and CMI staff to attend the "Maintaining LID in San Diego: Best Management Practice Inspection and Maintenance Workshop" held in San Diego in April 2011. The workshop was hosted by the City of San Diego and included up to date information about new and proposed LID regulations, stormwater management devices including treatment control BMPs, inspection and maintenance requirements for BMPS, and design and implementation strategies for minimizing BMP maintenance requirements.

- sent Development Services staff to attend training seminars regarding the countywide BMP sizing calculator on December 14, 2010 and March 8, 2011. This training served to train both private engineers and municipal staff on how the BMP calculator could be utilized to satisfy the new stormwater requirements, including hydromodification.

- updated the Carlsbad SUSMP. On January 14, 2011 the update added final hydromodification criteria, thresholds and requirements. The City incorporated the countywide BMP sizing calculator to facilitate applicants when sizing BMPs that satisfy both numeric and hydromodification requirements. The updated Carlsbad SUSMP was made available on the City's website and emails were sent to those listed on the email notification list from the City's website. The City updated the SWSQ and SWMP guidelines.

- accepted through Council action the Carlsbad Community Vision, which was the result of a citywide community visioning process (Envision Carlsbad Phase 1). The Carlsbad Community Vision identifies the community's core values for the future, which include a strong desire to protect open space and the natural environment, both for its visual beauty, and for its ecological functions (clean air and water, habitats, animal movement corridors). As stated in the Carlsbad Community Vision, "Community members look forward to continued enjoyment of clean, healthy, and accessible lagoons, beaches, and natural habitat areas due to ongoing conservation, restoration, and active maintenance efforts." Carlsbad residents are very cognizant and proud of the ocean and lagoons, and how important it is to keep them clean.

- continued to have internal meetings to discuss treatment control BMP compliance program improvements such as inspections, maintenance agreements, verification of maintenance requirements, improved departmental coordination, transfer of information during the approval process, and other issues related to treatment control BMP compliance.

- updated the template for the SSPCBMP plan for applicants and engineers that prepare SWMP's. A SSPCBMP plan is required content for a SWMP. The SSPCBMP serves as a comprehensive document displaying the project and the location of different BMPs that are to be installed along with calling out which construction document (grading, improvement, building, landscape plan, etc) that is responsible to install each listed BMP. The template was also added to the City's website for use by applicants when preparing SWMP's. For a copy of the template SSPCBMP plan, refer to the following site: http://www.carlsbadca.gov/business/building/Documents/BMP_Plan_Sheet.zip.

- began scanning storm water management plans into our digital management system (DMS), similar to the process for final drawings. The SWMP is a useful document as it is used to help identify the types and locations of approved post construction treatment control BMPs. It also

contains maintenance obligations that are required for the post-construction BMPs located on the project. Scanning to DMS allows these water quality reports to be more readily accessed digitally by CM&I inspectors, homeowners, reviewers, researchers.

- updated forms and uploaded them to the City's website. These forms are frequently used by applicants to evaluate projects for storm water requirements on projects. For a copy of the City's webpage showing the storm water forms, see http://www.carlsbadca.gov/business/building/permitting-process/Pages/Engineering_Applications.aspx.

- developed a new procedure in the Building Division to help inspectors effectively conduct NPDES inspections at sites covered by an active building permit. The "SWPPP Permit and Process Procedures" guides each building inspector and engineering tech through a step by step process to ensure NPDES compliance at each building site.

- exceeded the required number of inspections for active construction sites. CMI conducted 1,002 inspections, which exceeds the 940 inspections required for the wet and dry seasons.

- had no signs of over-irrigation at Municipal Facilities during inspection.

- had no violations of the permit or local ordinances, during inspections conducted at all high priority municipal inspections,

- used hand weeding techniques where feasible in place of chemical application during Parks maintenance,

- sent an informational letter to 645 households that addressed storm water pollution issues in the neighborhood, in response to monitoring investigations.

- increased our use of mass media, with the launch of a PSA on the city TV channel and continuous updates of the city's website.

15.4 Recommendations for Improvements

As the City continued to implement the 2008 JURMP in this reporting period, some areas for improvement were noted for the future:

The City will:

- continue to research, observe, and evaluate the performance of various types of BMPs.
- continue to evaluate and update internal procedures for Industrial/Commercial inventory prioritization and management and revise as appropriate.
- continue to develop effectiveness assessment mechanisms for each significant activity, for each major component, as well as an integrated assessment of the overall program.
- continue to work at the watershed level and help focus activities on high priority pollutants.

15.5 Water Quality Improvements or Degradation

The complete 2011 Dry Weather report and the full IDDE Section of the Annual Report will be submitted in December of 2011. Please refer to the *Carlsbad Watershed 2011 WURMP* for data trends supporting the focus on *High Priority Pollutants* on a watershed basis. The following text highlights some of the observations on water quality.

MS4 Water Quality

The MS4 program continued in this fiscal year. This program was implemented to characterize pollutant discharges from MS4 outfalls. Data was collected this year as required and will be submitted with the Regional Monitoring Report.

Exceedances of bacteria 95th percentile criteria in the *Coastal Storm Drain Monitoring Program* have stabilized or declined in recent years. During FY 2010-11, there were no storm drain flows that reached the ocean. The City has been successful at decreasing illegal discharges in areas where outfalls discharge directly to the beach during dry weather.

Receiving Water Quality

In FY 2010-11, programs assessing receiving water quality included the Coastal Storm Drain Monitoring Program and mass loading station monitoring under the Regional program.

No receiving water samples were collected as part of the Coastal Monitoring Program because in most cases, the outfalls were dry and had no discharge. If flow was observed, it was intermittent, low volume and did not actually reach the receiving waters but dissipated into the sand or sediment.

Data related to the Mass Loading Station will be submitted with the Copermittees' Regional Monitoring Annual Report in January 2012.

15.6 Conclusion

The Storm Water Protection Program continues to evolve over time in response to the iterative process of implementing BMPs, assessing effectiveness, and evaluating results. As more procedures, programs and activities are implemented, there is a clear need for better databases to track and report activities and BMPs being implemented. Tying these activities to changes in water quality still presents a considerable challenge. This is part of the long-term assessment strategy that will take time to develop trends and to determine cause and affect relationships between pollution prevention and water quality management. The City will continue to work individually and with the Copermittees to further develop existing compliance programs and create new opportunities for improvement.

This section of the Annual Report demonstrated the City's compliance with Permit Order No R9-2007-0001 and continued implementation of the 2008 JURMP. Other sections of this report show that knowledge has increased in target communities, BMP implementation and behavior changes are improving, pollutant loadings are being reduced from storm water management programs, the MS4 water quality is improving, and pollutant loads to receiving waters are being reduced. These are encouraging signs worth noting. The City recognizes that measurable changes occur over time and that continued program improvements and effectiveness measures are needed for long-term success.

Appendix 1

Acronyms

BGPD	Billion gallons/day
BOY	Beginning of Year
BPJ	Best Professional Judgment
BMP	Best Management Practices
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CFD	Carlsbad Fire Department
CHU	Carlsbad Hydrologic Unit
CIP	Capital Improvement Project
CT	Carlsbad Tract
CUP	Conditional Use Permit
CWN	Carlsbad Watershed Network
DS	Dry Season
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
EOY	End of Year
ESA	Environmentally Sensitive Area
FC	Fecal Coliform
GIS	Geographical Information System
GPA	General Plan Amendment
GPM	Gallons Per Minute
HAZMAT	Hazardous Materials
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
IC/ID	Illicit Connections/Illegal Discharges
IDD&E	Illegal Discharge Detection and Elimination
JURMP	Jurisdictional Urban Runoff Management Plan
LCPA	Local Coastal Program Amendment
M&O	Maintenance & Operations
MCUP	Minor Conditional Use Permit
MEP	Maximum Extent Practicable
MP	Master Plan
MS	Minor Subdivision
MSA	Major Service Area
MSP	Monroe Street Pool
MS4	Municipal Separate Storm Sewer System
MSDS	Material Safety Data Sheet
NCSWP	North County Storm Water Program
NOI	Notice of Intent
NONA	Notice of Non-Applicability
NON-RCRA	Not related to the Resource Conservation and Recovery Act
NPDES	National Pollutant Discharge Elimination System
OES	Office of Emergency Services
PCB	Poly Chlorinated Bi-phenyl
PIP	Planned Industrial Permit
POST	Peace Officer Standards Training
PUD	Planned Unit Development
PVC	Poly Vinyl Chloride
RCD	Resource Conservation District of Greater San Diego

Acronyms

RFA	Request for Action
RV	Recreational Vehicle
RW	Receiving Water
RWQCB	Regional Water Quality Control Board Regional Board
SC	Source Control
SDP	Site Development Plan
SDRWQCB	San Diego Regional Water Quality Control Board
SDSU	San Diego State University
SIC	Standard Industrial Classification
SOPP	Sewer Overflow Prevention Plan
SUP	Special Use Permit
SUSMP	Standard Urban Stormwater Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Technical Advisory Committee
TC	Total Coliform or Treatment Control
URMP	Urban Runoff Management Plan
V	Variance
WS	Wet Season
WTM	Watershed Treatment Model
VCP	Vitrified Clay Pipe
ZC	Zone Change

2.0 Development Planning Component

Permit Annual Reporting Requirement Section J.3.a.(3).(a)	Section
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.1, 2.2.3, 2.3, 2.4.1
ii. Confirmation that all development projects were required to undergo the Copermittee s urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.5.1
iii. A listing of the development projects to which SUSMP requirements were applied.	2.5.1
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.5.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.5.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.5.3.2
vii. An updated treatment control BMP inventory.	2.7.2
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.7.2, 2.7.3
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.7.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.3
xi. A listing of any projects which received a SUSMP waiver.	2.5.4.1
xii. A description of implementation of any SUSMP waiver mitigation program.	2.5.4.1
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.6.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.6.2
xv. A listing of priority development projects not required to meet HMP require ments, including a description of why the projects were found to be exempt from the requirements.	2.6.3
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.6.4
xvii. The number of violation and enforcement action (including types) taken for development projects, including information on any necessary follow-up action taken. The discussion should exhibit that compliance has been achieved, or describe action that are being taken to achieve compliance.	2.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.5

3.0 Construction

Permit Annual Reporting Requirement Section J.3.a.(3).(b)	Section
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.2
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
ii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iii. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4
iv. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.4.1
v. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.4.2
vi. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix 3.1
vii. A description of the general results of the inspections.	3.5
viii. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
ix. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.6
x. A description of notable activities conducted to manage urban runoff from construction sites.	3.7

4.0 Municipal

Permit Annual Reporting Requirement Section J.3.a.(3).(c)	Section
i. Any updates to the municipal inventory and prioritization.	4.16.2, App 4.1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4, 4.8.4, 4.9.4, 4.10.4, 4.11.4, 4.12.4, 4.13.4, 4.14.4, 4.15.4, 4.16.4

iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.4
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding .	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal are as and activities.	4.11.4
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently gene rating the highest volumes of trashand/or debris, as well as the frequency of s weeping conducted for such roads,streets, and highways.	4.3.4
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4
xiii. Identification of the total distance of curb-miles swept.	4.3.4
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, App. 4.1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.4.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.16.4, App 4.7
xviii. A description of the general results of the inspections.	App 4.7

xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	App 4.7
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.16.4, App 4.7
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.17

5.0 Industrial and Commercial

Permit Annual Reporting Requirement Section J.3.a.(3).(d)	Section
i. Any updates to the industrial and commercial inventory.	App 5.1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.3, App 5.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.3.2
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.1, Table 5.2
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.2
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.1
vii. Identification of the number of third party inspections conducted.	5.2.4.1
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.1
ix. A description of efforts implemented to address mobile businesses.	5.3
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.2
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.4
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.4

6.0 Residential

Permit Annual Reporting Requirement Section J.3.a.(3).(e)	Section
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2, 6.3
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3,6.4.2

iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.3
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.3
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4.4
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.5
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.1
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.5

7.0 IDDE

Permit Annual Reporting Requirement Section J.3.a.(3).(f)	**Section**
i. Correction of any inaccuracies in either the MS4 map or Dry Weather Field Screening and Analytical Monitoring Stations Map.	To be submitted in December 2011
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order NO. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	To be submitted in December 2011
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	To be submitted in December 2011
iv. A brief description of any other investigation and follow-up activities for illicit discharges and connections.	To be submitted in December 2011
v. The number and brief description of illicit discharges and connections identified.	To be submitted in December 2011
vi. The number of illicit discharges and connections eliminated	To be submitted in December 2011
vii. Identification and description of all spills to the MS4 and response to the spills.	To be submitted in December 2011

viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	To be submitted in December 2011
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	To be submitted in December 2011
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	To be submitted in December 2011
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges	To be submitted in December 2011
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	To be submitted in December 2011
xiii. A description of notable activities conducted to manage illicit discharges and connections.	To be submitted in December 2011

8.0 Education

Permit Annual Reporting Requirement Section J.3.a.(3).(g)	Section
i. A description of education efforts conducted for each target community.	8.2, 8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and allowable behaviors and discharges.	8.3.5
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.1, 8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.5

9.0 Public Participation

Permit Annual Reporting Requirement Section J.3.a.(3).(h)	Section
i. A description of public participation efforts conducted.	9.2 to 9.5

10.0 Fiscal Analysis

Permit Annual Reporting Requirement Section J.3.a.(3).(j)	Section
i. A fiscal analysis of the Copermittees urban runoff management programs which meets all requirements of section G of this Order.	10.1 to 10.4

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement Section J.3.a.(3).(i)	Section
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.1 to 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement Section J.3.a.(3).(k)	Section
i. A description of any special investigations conducted.	12.1

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement Section J.3.a.(3).(l)	Section
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.1 to 13.5

14.0 JURMP Revisions

Permit Annual Reporting Requirement Section J.3.a.(3).(m)	Section
i. A description of any proposed revisions to the JURMP.	14.0

Appendix 2

HOMEOWNER'S GUIDE TO

Standard Storm Water Requirements (Low Impact Development)

CITY OF CARLSBAD

Low Impact Development (LID)

Low impact development aims to protect pollution in our environment, emphasizing the use of existing natural site features and small scale storm water facilities to more closely mimic natural rainfall runoff patterns.

Keys to low impact development

Conserve and restore vegetation and soil

- Retain existing vegetation
- Restore vegetation on previously cleared land, where feasible
- Reduce runoff through vegetated surfaces that capture rainfall
- Look for opportunities to install rain gardens or bioretention cells

Minimize hardscaped/impervious area

- Avoid or minimize the use of impervious surfaces—like concrete or asphalt—in favor of permeable surfaces
- Use pavers or stepping stones for paths, driveways and patios
- Use permeable concrete and asphalt for driveways
- Create a vegetated roof

Disconnect hardscaped/impervious areas

- Route rain gutter and drain run off into a landscaped area, so rain water run off can soak in before flowing to the street
- Install gravel or landscaped areas under the drip line of your eaves, if you don't have a rain gutter

Harvest rain water

- Use rain barrels or underground cisterns to capture rainfall
- Create a rain garden to allow water to soak into the ground

Schematic Diagrams:

Bioretention cell:

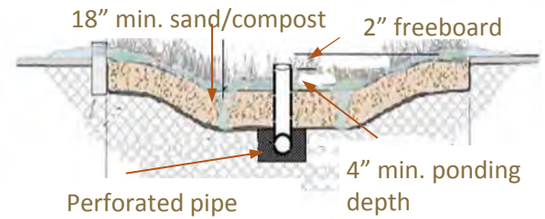

Cistern:

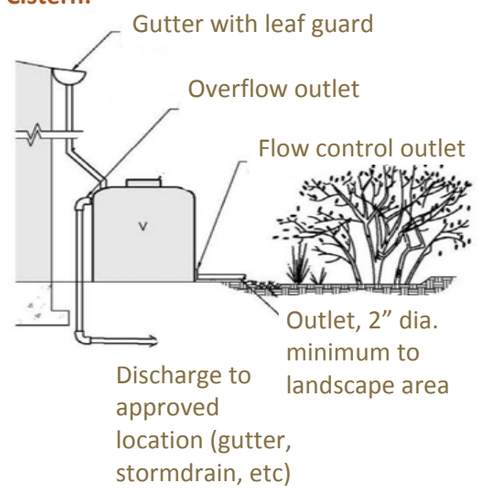

Pavers:

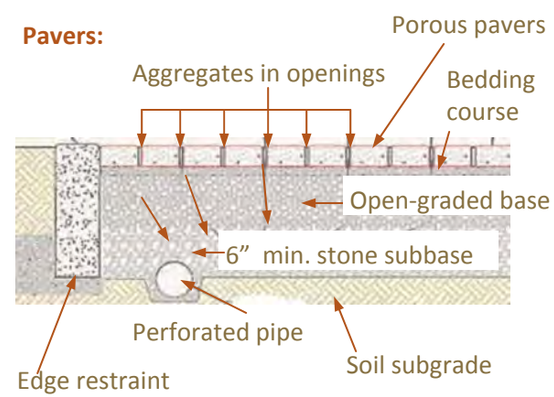

For more information

- San Diego County Low Impact Development Handbook, www.co.san-diego.ca.us, search "low impact development handbook"
- City of Carlsbad Engineering Standards, volume 4, Storm Water Best Management Practices, www.carlsbadca.gov, search "engineering standards"

City of Carlsbad
Land Development Engineering
1635 Faraday Ave.
Carlsbad, CA 92008

Phone 760-602-2740
Fax 760-602-1052
LandDev@carlsbadca.gov

CITY OF CARLSBAD

Low Impact Development (LID) Techniques

in Residential Development

1) Vegetated roof:

The benefits of a vegetated roof include reduced volume and improved quality of storm water runoff, increased energy efficiency, improved air quality, reduced temperatures, noise reduction and improved aesthetics. (LID fact sheet 29)

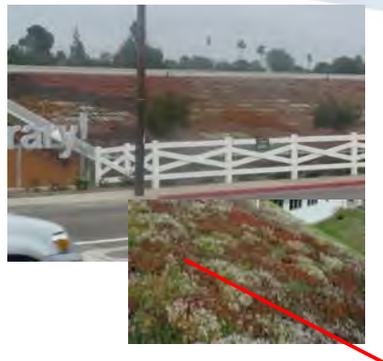

2) Rain water harvesting:

Cisterns and rain barrels capture roof runoff from roof downspouts and provide an effective way to store and slowly release run-off into the ground. Stored water can be used for irrigation and provides an opportunity for water conservation and reducing water utility costs. They can be located below ground or above ground. (LID fact sheet 26)

3) Bioretention cell or rain garden:

Landscape depressions that contain soil amendments that promote healthy vegetation and infiltration of storm water. Amended soil enriched with organic materials and sand increases capacity of soil to soak into the ground.
(LID fact sheets 1, 2, 7, 25, 30)

4) Preserve natural vegetation and natural drainage flow:

Enhances the aesthetic quality of community and improves the evaporation rate of storm water runoff. Reduces the need for grading and construction of drainage facilities.

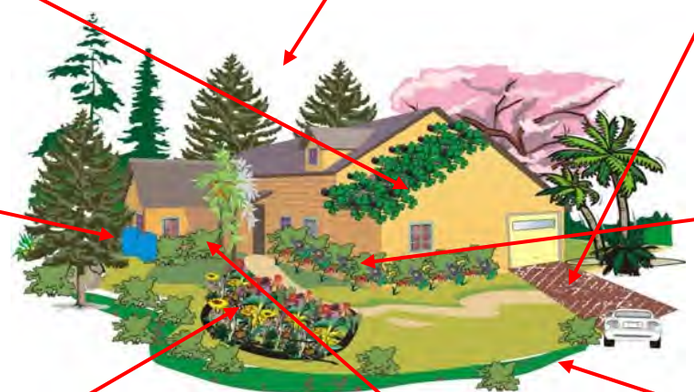

5) Downspout to landscaped area or flow-through planters:

Discharging downspouts to landscaped areas allows for retention and treatment of runoff. (LID fact sheets 4, 28)

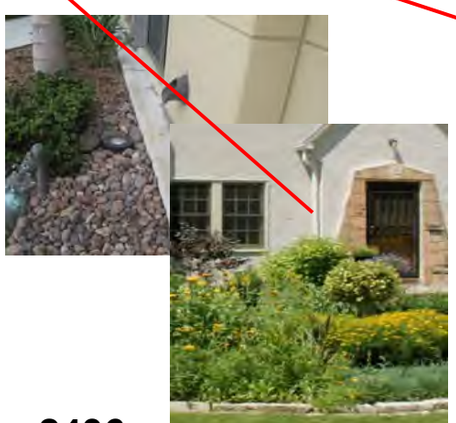

6) Pervious pavement:

Pervious pavements such as pervious concrete, pervious asphalt concrete and pavers can be used to infiltrate storm water, replenish groundwater and reduce runoff volume. Base course must be designed to provide a stable load-bearing surface for the intended loads.
(LID fact sheets 8-13, 17, 21-24)

7) Flow-through planter/ vegetated or rock drip line:

Runoff from eaves of non-guttered roofs can cause significant erosion and resulting moisture can harm foundations. Vegetated or rock drip line protection slows runoff and promotes infiltration. The ground must slope away from home's foundation.
(LID fact sheets 1, 27, 30, 32)

8) Vegetated swales / rock swales:

Swales act as linear biofilters along the perimeter of the lot or along the street front. Storm water travels slowly over rocks and vegetated surfaces allowing pollutants to settle and slowing runoff velocities. Check dams or gravel weirs can be added to further slow and spread concentrated flows.
(LID fact sheet 4)

City of Carlsbad
Storm Water Priority Project List
for
Development Project Approvals (July 1, 2010 to June 30, 2011)

			Recommending Authority				Approving Authority				
Project ID	Other Actions	Project Name	Date	Entity	Reso No.	Action	Date	Entity	Reso No.	Action	Project Priority Status
SDP 10-01		Jaguar Land Rover Carlsbad					08/04/2010	PC	6520	Approval	S
PUD 05-12(B)		La Costa Oaks North 3.3	07/07/2010	PC	6711	Recommend Approval	09/14/2010	CC	2010-222	Approval	P
CUP 09-07	GPA 04-03, ZC 09-08, SDP 09-05	Palomar Commons	07/07/2010	PC	6704	Recommend Approval	08/24/2010	CC	2010-213	Approval	P
CUP 10-07		Pacific Ridge Scool Gym Annex					09/01/2010	PC	6525	Approval	S
CDP 00-58(A)	SUP 00-11(A), CUP 00-32(A)	Marja Acres amendment					09/01/2010	PC	6722	Approval	S
CT 04-13	ZC 09-09, HDP 04-06, GPA 09-08	El Fuerte View					10/06/2010	PC	6672	Approval	P
CT 09-03	GPA 09-06, ZC 09-07, LCPA 09-06	Carlsbad Golf Course Mapping					09/05/2010	PC	6719	Approval	
V 10-01		Palomar Commons					10/06/2010	PC	6709	Approval	S
CDP 10-16		Moore Beach Residence					10/20/2010	PC	6728	Approval	S
CDP 10-18		1369 Magnolia Ave					10/20/2010	PC	6727	Approval	S
CUP 10-03		Floaties Aquatic Center					10/20/2010	PC	6729	Approval	S
CDP 10-12		1099 Buena Vista Way (smerud) Residence					12/01/2010	PC	6732	Approval	S
ZCA 09-02		Prop D Cannon Rd Open Space	12/01/2010	PC	6734	Recommend Approval	05/24/2011	CC	2011-112	Approval	S
CUP 02-19(B)x1		Vigilucci's Seafood & Streakhouse					01/19/2011	PC	6751	Approval	S
ZCA 10-06	LCPA 10-05	Reasonable Accomodations Ordinance	01/19/2011	PC	6749	Recommend Approval	03/22/2011	CC	2011-048	Approval	S
CDP 10-22		Barrelmann Property					01/19/2011	PC	6750	Approval	S
SUP 07-03	HDP 07-01, HMP 07-06	South Coast Materials Quarry					01/19/2011	PC	6743	Approval	P
CUP 10-13		Real Fit 4 Life Fitness Gym					03/16/2011	PC	6761	Approval	S
CDP 10-28	PCD 10-02	1369 Magnolia Ave Parcel Map					03/16/2011	PC	6765	Approval	S
CT 05-20(A)	RP 05-10(A), CDP 05-24(A)	State Street Mixed Use	03/16/2011	PC	6767	Recommend Approval	05/10/2011	CC	2011-088	Approval	S
CDP 10-27		Rozek Renovation					04/06/2011	PC	6770	Approval	S
V 11-01		Life Technologies Signage					04/06/2011	PC	6771	Approval	S
CDP 11-02		Tamarack NPI Residence					05/04/2011	PC	6775	Approval	S
CDP 10-20		Alyssum Road Lot 8					05/04/2011	PC	6774	Approval	S
CDP 10-19		Alyssum Road Lot 9					05/04/2011	PC	6773	Approval	S
CUP 10-12		New Jewish Community Complex					06/01/2011	PC	6776	Approval	S
CUP 10-11	SUP 10-04	Camino Shell					06/15/2011	PC	6777	Approval	S
CDP 10-02		LSF5 Carlsbad Holdings, LLC lot line adjustment					11/08/2010	PD	letter	Approval	S
CDP 10-09		Smith second ddwelling unit					09/09/2010	PD	letter	Approval	S
MCUP 10-12	CDP 10-13	CA-SDG5871 701 Palomar Airport Rd					10/27/2010	PD	letter	Approval	S
CDP 10-23		2625 Garfield Addition					11/17/2010	PD	letter	Approval	S
RP 10-34		Caf Topes parking agreement					01/05/2011	PC	6752	Approval	S
CUP 10-09		Christian City Church					01/05/2011	PC	6747	Approval	S

City of Carlsbad
Storm Water Priority Project List
for
Development Project Approvals (July 1, 2010 to June 30, 2011)

Project ID	Other Actions	Project Name	Date	Entity	Reso No.	Action	Date	Entity	Reso No.	Action	Project Priority Status
CDP 10-25		Lee Residence second dwelling unit					01/17/2011	PD	letter	Approval	S
MCUP 10-09	CDP 10-26	Verizon Inns of America WCF					09/02/2010	PD	letter	Approval	S
CT 10-01	CDP 10-11, PUD 10-03	Seabreeze Villas					01/05/2011	PC	6740	Approval	P
CDP 10-29		1099 Buena Vista Way second dwelling unit					12/03/2010	PD	letter	Approval	S
MS 10-05	CDP 10-30	Sharp Family minor subdivision					02/03/2011	CE	letter	Approval	S
CDP 10-31		Poinsettia Place Stockpile					12/07/2010	PD	letter	Approval	S
CD 10-17	CDP 97-10	.					04/28/2011	PD	letter	Approval	S
MS 08-06		Mashou minor subdivision					10/07/2010	CE	letter	Approval	S
MS 09-07	HDP 10-02	Ross minor subdivision					12/30/2010	CE	letter	Approval	S
MS 10-03	PUD 10-02	Sandwell residence					07/26/2010	CE	letter	Approval	S
MS 10-04		1369 Magnolia Ave					03/31/2011	CE	letter	Approval	S
MS 11-04		McCann parcel map					05/13/2011	CE	letter	Approval	S
MCUP 08-23		Nextel CA5152 Agua Hedionda					03/14/2011	PD	letter	Approval	S
MCUP 10-07		CA SDG5664 Remax Building					08/17/2010	PD	letter	Approval	S
MCUP 10-08		CA SDG5203 Cassia Offices					08/19/2010	PD	letter	Approval	S
MCUP 10-11		CA SDG5489A 1958 Kellog					09/07/2010	PD	letter	Approval	S
MCUP 10-12		CA SDG5871 701 Palomar Airport Rd					10/27/2010	PD	letter	Approval	S
MCUP 10-13		McClellan WCF					09/20/2010	PD	letter	Approval	S
MCUP 10-14		Gerico Communications Site					08/24/2010	PD	letter	Approval	S
MCUP 10-15		SD6744 Bank of America					07/27/2010	PD	letter	Approval	S
MCUP 10-16		SD06918 Faraday Executive					08/03/2010	PD	letter	Approval	S
MCUP 10-18		AT&T OMWD OPS Center WCF					08/30/2010	PD	letter	Approval	S
MCUP 10-19		CA SDG5616 CVS Pharmacy WCF					09/15/2010	PD	letter	Approval	S
MCUP 10-20		AT&T SD0344 College & ECR					11/24/2010	PD	letter	Approval	S
MCUP 10-21		Colliers International CA 7410					12/22/2010	PD	letter	Approval	S
MCUP 10-22		SD35XC126B Tamarack					01/26/2011	PD	letter	Approval	S
MCUP 10-23		CA7411 Loker Sprint Nextel					11/20/2010	PD	letter	Approval	S
MCUP 10-24		SDG&E Communication Facility					03/07/2011	PD	letter	Approval	S
MCUP 10-25		Stagecoach Verizon WCF					01/10/2011	PD	letter	Approval	S
MCUP 10-27		Verizon Wireless at Armada					03/16/2011	PD	letter	Approval	S
MCUP 10-28		Techbilt WCF					03/31/2011	PD	letter	Approval	S
MCUP 11-01		SD06088 Las Flores					03/14/2011	PD	letter	Approval	S
MCUP 11-02		SD06184 T Mobile					03/31/2011	PD	letter	Approval	S
MCUP 11-04		Carlsbad Pacific Center WCF					05/31/2011	PD	letter	Approval	S
MCUP 11-05		Aviara Four Seasons Verizon WCF					05/31/2011	PD	letter	Approval	S
DWG 469-8	CT 05-10	Poinsettia Properties					05/17/2006	PC	6096	Approval	P
DWG 470-1A	CT 03-01	La Costa Resort & Spa									S

PC Planning Commission; CC City Council; H&RDC Housing and Redevelopment Commission; CE City Engineer; PD Planning Director; CCC Coastal Commission
P Priority Development Project requirements; S Standard Stormwater requirements

CIP Project Approvals FY 2010-11

No.	Project Name	Proj/Cont. No.	Contract Executed	Stormwater Status
1	Concrete Replacement Program	6013	06/28/2010	S
2	College Blvd. Overlay	6001-10OL	07/23/2010	S
3	Inductive Street Light Installation	Bid 10-07	06/28/2010	S
4	Driveway Repairs at Fire Stations 2, 3 and 4	PWS10-40PEM	08/05/2010	S
5	Leo Carillo Ranch Park Barn Restoration	4505	09/20/2010	S
6	2010 Pavement Overlay	6001-10OL2	10/08/2010	S
7	Misc Sewer Rehabilitation, Northwest Quadrant	5503	12/08/2010	S
8	Audible Pedestrian and Countdown Pedestrian Signal Heads	6321	04/07/2011	S
9	Hosp Grove Park Access Road Repair	6609	02/28/2011	S
10	Campground Cavern Fill and Storm Drain Abandonmenet	PWS11-31UTIL	03/01/2011	S

CITY OF CARLSBAD

Memorandum

[INSERT DATE]

To: [PLANNER NAME], Project Planner
From: [YOUR NAME], Project Engineer

Subject : **[INSERT PROJECT ID, PROJECT NAME (APN NO.)]**

The engineering department has completed its review of the project. The engineering department is recommending that the project be approved, subject to the following conditions:

DO NOT USE FOR MS CONDITIONS..... USE PRELIMINARY DECISION LETTER!! [CLICK TO DELETE]

PROJECT ENGINEER INSTRUCTIONS: For items in (PARENTHESIS), once you have chosen an option make sure it is reformatted in lower case and the other options are eliminated. Special conditions should be typed in bold. [CLICK TO DELETE]

PROJECT ENGINEER INSTRUCTIONS: If you modify or add to a standard condition, bold type ONLY that portion of the condition modified or added. Do not use strikeout to remove words from a standard condition. Just simply remove them. [CLICK TO DELETE]

Engineering Conditions

NOTE: Unless specifically stated in the condition, all of the following conditions, upon the approval of this proposed (DEVELOPMENT OR SUBDIVISION), must be met prior to approval of a (FINAL MAP, BUILDING OR GRADING PERMIT WHICHEVER OCCURS FIRST).

General

1. Prior to hauling dirt or construction materials to or from any proposed construction site within this project, developer shall apply for and obtain approval from, the city engineer for the proposed haul route.

[USE FOR ALL PROJECTS]

2. This project is approved upon the express condition that building permits will not be issued for the development of the subject property, unless the district engineer has determined that adequate water and sewer facilities are available at the time of permit

issuance and will continue to be available until time of occupancy.

[USE IF LLA NEEDED TO CURE SUBDIVISION BOUNDARY CONCERNS OR LAND SWAPPING PROPOSED]

3. Prior to the approval of a (FINAL MAP, GRADING PERMIT, BUILDING PERMIT), the developer shall complete processing of a lot line adjustment between lot [NUMBER OR LETTER] and lot [NUMBER OR LETTER] as shown on the (SITE PLAN/TENTATIVE MAP).

[USE WHEN YOU NEED MORE THAN SITE PLAN FOR CONFORMING MYLAR]

4. Developer shall submit to the city planner, a reproducible 24" x 36", mylar copy of the Site Plan and (**CONCEPTUAL GRADING PLAN, PRELIMINARY UTILITY PLAN)** reflecting the conditions approved by the final decision making body. The reproducible shall be submitted to the city planner, reviewed and, if acceptable, signed by the city's project engineer and project planner prior to submittal of the building plans, improvement plans, grading plans, or final map, whichever occurs first.

5. Developer shall submit to the city engineer an acceptable instrument, via CC&R's and/or other recorded document, addressing the maintenance, repair, and replacement of shared private improvements within this subdivision, including but not limited to private (STREETS, UTILITIES, STREET TREES, SIDEWALKS, LANDSCAPING, STREET LIGHTING, RAISED MEDIANS, ENHANCED PAVING, WATER QUALITY TREATMENT MEASURES, LOW IMPACT DEVELOPMENT FEATURES, STORM DRAIN FACILITIES, etc.) located therein and to distribute the costs of such maintenance in an equitable manner among the owners of the properties within this subdivision.

[USE ONLY WHEN DRAINAGE CONDITIONS WARRANT]

6. Developer shall include rain gutters on the building plans subject to the city engineer's review and approval. Developer shall install rain gutters in accordance with said plans.

7. Developer shall prepare, submit and process for city engineer approval a final map to subdivide this project. There shall be one Final Map recorded for this project.

[USE NEXT TWO CONDITIONS FOR MULTIPLE/PHASED MAPS]

8. This project is approved for up to **[INSERT NUMBER OF MAPS]** Final Maps for the purposes of recordation in the order of phasing shown on the tentative map.

9. If developer desires to record a Final Map out of the phase approved on the tentative map, the new phasing may be approved or conditionally approved by the city engineer and city planner via substantial conformance exhibit.

10. Developer shall install sight distance corridors at all street intersections and driveways in accordance with City Engineering Standards. The property owner shall maintain this condition.

[USE IF PROJECT ABUTTING OR ADJACENT TO ARTERIAL STREETS WHERE BUS STOPS MAY BE NEEDED]

11. Prior to approval of Improvement Plans, Grading Plans or Final Map, developer shall submit to the city engineer written approval from North County Transit District (NCTD) demonstrating mass-transit improvement requirements for this project have been satisfied.

Fees/Agreements

12. Developer shall cause property owner to execute and submit to the city engineer for recordation, the city's standard form Geologic Failure Hold Harmless Agreement.

13. Developer shall cause property owner to execute and submit to the city engineer for recordation the city's standard form Drainage Hold Harmless Agreement.

14. Developer shall cause property owner to execute and submit to the city engineer for recordation, the city's standard form Panhandle Lot Hold Harmless Agreement.

15. Developer shall cause property owner to process, execute and submit an executed copy to the city engineer for recordation a city standard Permanent Stormwater Quality Best Management Practice Maintenance Agreement for the perpetual maintenance of all treatment control, applicable site design and source control, post-construction permanent Best Management Practices prior to the issuance of a grading permit or building permit, or the recordation of a (FINAL/PARCEL) map, whichever occurs first for this project.

16. Developer shall cause property owner to execute, and submit to the city engineer for recordation, a city standard deed restriction on the property which relates to the proposed cross lot drainage as shown on the (TENTATIVE MAP/SITE PLAN). The deed restriction document shall:

    A. Clearly delineate the limits of the drainage course; and
    B. State that the drainage course is to be maintained in perpetuity by the underlying property owner; and
    C. State that all future use of the property along the drainage course will not restrict, impede, divert or otherwise alter drainage flows in a manner that will result in damage to the underlying and adjacent properties or the creation of a public nuisance.

17. Developer shall cause property owner to apply for, execute, and submit, to the city engineer for recordation, an Encroachment Agreement covering private [LIST ENCROACHMENT(S)] located over (EXISTING OR PROPOSED) public right-of-way or easements as shown on the (TENTATIVE MAP/SITE PLAN). Developer shall pay

processing fees per the city's latest fee schedule.

[USE CONDITION FOR SUBDIVISION OR LOT LINE ADJUSTMENT WITHIN AN EXISTING ASSESSMENT DISTRICT]

18. Developer shall cause property owner to apply for and obtain reapportionment of the assessments imposed on the subject project in accordance with law governing the associated [INSERT NAME OF DISTRICT eg: Assessment District 2002-01 (Poinsettia Lane East)] Assessment District, or the assessments must be paid in full. Developer shall pay all associated costs of said reapportionment. The application shall be submitted to the city engineer with the application for the final map.

[USE CONDITION IF PROJECT WITHIN AD 2002-01]

19. The subject property is within the boundaries of Assessment District No. 2002-01 (Poinsettia Lane East). The owner of this property has previously executed a Special Assessment District Disclosure Agreement with the city. Said Agreement contains provisions requiring the current owner and any subsequent owner(s) to provide notice to potential buyers of the amount of the assessment and other provisions and requires owner to have each buyer receive, execute and deposit into escrow a Notice of Special Assessment and Prepayment Option Agreement. In the event that owner does not have the buyer execute the Notice of Special Assessment and Prepayment Option Agreement prior to close of escrow, the assessment on the subject property must be paid off in full by owner.

[TO DEFER IMPROVEMENTS ON "CT" PROJECTS ON COMPATIBLE DESIGN STREETS]

20. Developer shall cause property owner to enter into a lien contract with the city for the future public improvement of **[INSERT STREET NAME]** along the subdivision frontage for a half street width of **[INSERT DIMENSION]-**feet. Public improvements shall include but are not limited to (PAVING, BASE, SIDEWALKS, CURBS AND GUTTERS, MEDIANS, GRADING, CLEARING AND GRUBBING, UNDERGROUNDING OR RELOCATION OF UTILITIES, SEWER, WATER, FIRE HYDRANTS, STREET LIGHTS, RETAINING WALLS AND RECLAIMED WATER).

[TO DEFER IMPROVEMENTS ON TITLE 18 PROJECTS "BLDG PERMIT" ON ALTERNATIVE DESIGN STREETS]

21. Developer shall cause property owner to enter into a Neighborhood Improvement Agreement with the city on a city standard form for the future public improvement of **[INSERT STREET NAME]** along the property frontage for a half street width of **[INSERT DIMENSION]**-feet. Public improvements shall include but are not limited to (PAVING, BASE, SIDEWALKS, CURBS AND GUTTERS, MEDIANS, GRADING, CLEARING AND GRUBBING, UNDERGROUNDING OR RELOCATION OF UTILITIES, SEWER, WATER, FIRE HYDRANTS, STREET LIGHTS, PEDESTRIAN RAMP, RETAINING WALLS AND RECLAIMED WATER).

[USE CONDITION BELOW IF FINANCE DETERMINES YOUR PROJECT IS NOT TO BE ANNEXED INTO

SL&LD #2]

22. Prior to approval of any grading or building permits for this project, developer shall cause owner to give written consent to the city engineer for the annexation of the area shown within the boundaries of the (SUBDIVISION OR SITE PLAN) into the existing City of Carlsbad Street Lighting and Landscaping District No. 1 and/or to the formation or annexation into an additional Street Lighting and Landscaping District. Said written consent shall be on a form provided by the city engineer.

[USE CONDITION BELOW ONLY IF FINANCE DETERMINES YOUR PROJECT MUST BE ANNEXED INTO SL&LD #2]

23. This project shall be annexed into City of Carlsbad Street Lighting and Landscaping District No. 2 (SL&LD #2). Prior to approval of any grading, building permits or final map for this project, developer shall cause owner to execute an Agreement to annex the subject property into SL&LD #2. The Agreement shall be in a form approved by the assistant city finance director. Developer shall pay all fees necessary to annex the property into SL&LD #2.

[USE CONDITION BELOW ONLY IF PROJECT CONSTRUCTS STREET TREES IN CITY PARKWAYS]

24. Developer shall cause property owner to execute and submit to the city engineer for recordation the city's standard form Street Tree Maintenance Agreement.

[USE CONDITION BELOW ONLY IF PROJECT SUBDIVIDING WITHIN ZONE 11]

25. Prior to approval of the Final Map, developer shall cause property owner to execute and submit to the city for recordation a Prepayment Agreement with the city for prepayment of the obligation for funding to improve Rancho Santa Fe Road, which will satisfy the special condition in the Zone 11 LFMP requiring a financing plan guaranteeing construction of Rancho Santa Fe Road. The Prepayment Agreement shall be in a form to the satisfaction of the city attorney and city engineer.

[USE IF PROJECT FRONTS PUBLIC STREET, BUT IS LESS THAN 600-FT TO TRIGGER U/G]

26. Prior to issuance of building permits, or grading permit, whichever occurs first, developer shall cause owner to execute, for recordation, a city standard Local Improvement District Agreement to pay fair share contributions for undergrounding of all existing overhead utilities and installation of street lights, as needed, along the subdivision frontage, should a future district be formed.

Grading

[USE IF GRADING PERMIT REQUIRED]

27. Based upon a review of the proposed grading and the grading quantities shown on the (TENTATIVE MAP/SITE PLAN), a grading permit for this project is required. Developer shall prepare and submit plans and technical studies/reports, for city engineer review, and shall pay all applicable grading plan review fees per the city's latest fee schedule.

[USE IF GRADING PERMIT REQUIRED]

28. Developer shall apply for and obtain a grading permit from the city engineer. Developer shall pay all applicable grading permit fees per the city's latest fee schedule and shall post security per City Code requirements.

[USE ON RESIDENTIAL CT'S TO GET PRECISE GRADING PLANS]

29. Supplemental grading plans are required for precise grading associated with this project. Developer shall prepare, and submit for approval, grading plans for the precise grading as shown on the (TENTATIVE MAP/SITE PLAN) all subject to city engineer approval.

[USE FOLLOWING IF THE SOILS REPORT CALLS OUT SIGNIFICANT GEOLOGIC ISSUES]

30. Upon completion of grading, developer shall file an "as-graded" geologic plan with the city engineer. The plan shall clearly show all the geology as exposed by the grading operation, all geologic corrective measures as actually constructed and must be based on a contour map which represents both the pre and post site grading. The plan shall be signed by both the soils engineer and the engineering geologist, and shall be submitted on a 24" x 36" mylar or similar drafting film format suitable for a permanent record.

31. This project requires off site grading. No grading for private improvements shall occur outside the project unless developer obtains, records, and submits a recorded copy, to the city engineer, a temporary grading, construction or slope easement or agreement from the owners of the affected properties. If developer is unable to obtain the temporary grading or slope easement, or agreement, no grading permit will be issued. In that case developer must either apply for and obtain an amendment of this approval or modify the plans so grading will not occur outside the project and apply for and obtain a finding of substantial conformance and/or consistency determination from both the city engineer and city planner.

32. Developer shall comply with the city's Stormwater Regulations, latest version, and shall implement best management practices at all times. Best management practices include but are not limited to pollution control practices or devices, erosion control to prevent silt runoff during construction, general housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants to stormwater, receiving water or stormwater conveyance system to the maximum extent practicable. Developer shall notify prospective owners and tenants of the above requirements.

[USE NEXT TWO CONDITIONS ONLY IF PROJECT QUALIFIES AS TIER 3 SWPPP]

33. Prior to the issuance of a grading permit, developer shall submit to the city engineer receipt of a Notice of Intent from the State Water Resources Control Board.

34. Prior to the issuance of grading permit or building permit, whichever occurs first, developer shall submit for city approval a Tier 3 Storm Water Pollution Prevention Plan

(TIER 3 SWPPP). The TIER 3 SWPPP shall comply with current requirements and provisions established by the San Diego Regional Water Quality Control Board and City of Carlsbad Requirements. The TIER 3 SWPPP shall identify and incorporate measures to reduce storm water pollutant runoff during construction of the project to the maximum extent practicable. Developer shall pay all applicable SWPPP plan review and inspection fees per the city's latest fee schedule.

[USE NEXT CONDITION ONLY IF UNSURE WHICH TIER SWPPP IS NEEDED FOR PROJECT]

35. Developer shall complete and submit to the city engineer a Project Threat Assessment Form (PTAF) pursuant to City Engineering Standards. Concurrent with the PTAF, developer shall also submit the appropriate Tier level Storm Water Compliance form and appropriate Tier level Storm Water Pollution Prevention Plan (SWPPP) as determined by the completed PTAF all to the satisfaction of the city engineer. Developer shall pay all applicable SWPPP plan review and inspection fees per the city's latest fee schedule.

[USE NEXT CONDITION ONLY IF MEETS PRIORITY PROJECT DESIGNATION]

36. This project is subject to 'Priority Development Project' requirements. Developer shall prepare and process a Storm Water Management Plan (SWMP), subject to city engineer approval, to demonstrate how this project meets new/current storm water treatment requirements per the city's Standard Urban Storm Water Management Plan (SUSMP), latest version. In addition to new treatment control BMP selection criteria in the SUSMP, the developer shall use low impact development (site design) approaches to ensure that runoff from impervious areas (roofs, pavement, etc) are drained through landscaped (pervious) areas prior to discharge. Developer shall pay all applicable SWMP plan review and inspection fees per the city's latest fee schedule.

37. Developer acknowledges upcoming hydromodification (runoff reduction) requirements may impact how this project treats and/or retains storm runoff. Hydromodification involves detailed site design and analysis to reduce the amount of post-development run-off by mimicking the natural hydrologic function of the site, preserving natural open-spaces and natural drainage channels, minimizing use of new impervious surfaces, and promoting onsite infiltration and evaporation of run-off. During final design, developer shall demonstrate compliance with storm water requirements to the satisfaction of the city engineer.

38. Developer is responsible to ensure that all final design plans (grading plans, improvement plans, landscape plans, building plans, etc) incorporate all source control, site design, treatment control BMP, applicable hydromodification measures, and Low Impact Design (LID) facilities.

[USE FOR PROJECTS SUBJECT TO STANDARD STORMWATER REQUIREMENTS]

39. Developer shall incorporate measures with this project to comply with Standard Stormwater Requirements per the city's Standard Urban Stormwater Management Plan

(SUSMP). These measures include, but are not limited to: 1) reducing the use of new impervious surfaces (e.g.: paving), 2) designing drainage from impervious surfaces to discharge over pervious areas (e.g.: turf, landscape areas), 3) and designing trash enclosures to avoid contact with storm runoff, all to the satisfaction of the city engineer.

[USE IF PROJECT REQUIRES HYDROMODIFICATION THRESHOLDS]

40. Developer shall submit documentation, subject to city engineer approval, demonstrating how this project complies with Interim Hydromodification requirements per the city's SUSMP, latest version. Documentation shall be included within the Storm Water Management Plan (SWMP).

[USE NEXT TWO CONDITIONS FOR CONDITONAL USE PERMIT EXTENSIONS AS APPLICABLE]

41. Within 6 months of approval of this Conditional Use Permit extension, developer shall submit and receive approval for a Storm Water Management Plan (SWMP) to the City of Carlsbad Engineering Department. This project qualifies as a "Priority Development Project" as defined by City of Carlsbad Standard Urban Storm Water Mitigation Plan (SUSMP), and therefore, the project is required to capture and reduce pollutants to a level of insignificance. The organization and content of the SWMP shall be prepared in accordance with the guidelines established by the City of Carlsbad. The SWMP shall address the anticipated pollutants of concern associated with the project. The SWMP shall also suggest the type(s) of post-construction (structural) Best Management Practices (BMP's) required to capture and filter said pollutants of concern and establish maintenance provisions for said BMP's. Developer shall pay all applicable SWMP plan review and inspection fees per the city's latest fee schedule.

42. Prior to the next annual review of this Conditional Use Permit, developer shall have constructed the BMP measures necessary to capture and filter the anticipated pollutants of concern associated with the project in accordance with the SWMP.

Dedications/Improvements

43. Developer shall cause owner to submit to the city engineer for recordation a covenant of easement for private **[STATE PURPOSE:]** (SEWER, POTABLE WATER, DRAINAGE, PARKING, RECIPROCAL ACCESS, ETC.) purposes as shown on the (TENTATIVE MAP/SITE PLAN). Developer shall pay processing fees per the city's latest fee schedule.

[USE FOR STREETS THAT WILL BE EXTENDED IN THE FUTURE]

44. Developer shall install a barricade at the end of **[INSERT STREET NAME]**. A sign shall be placed on said barricade informing the public that the dead end is temporary. Specifications for said barricade and sign are subject to the city engineer's approval.

[USE WHEN IOD NEEDED AND CITY TO REJECT FOR FUTURE USE]

45. Developer shall cause owner to make an Irrevocable Offer of Dedication to the city and/or other appropriate entities for the **[STATE PURPOSE:]** (PUBLIC STREET & PUBLIC

UTILITY, ETC.) purposes as shown on the (TENTATIVE MAP/SITE PLAN). The offer shall be made by a (CERTIFICATE ON THE FINAL MAP OR SEPARATE RECORDED DOCUMENT). All land so offered shall be free and clear of all liens and encumbrances and without cost to the city. Additional easements may be required at final design to the satisfaction of the city engineer.

[USE WHEN DEDICATION NEEDED]

46. Developer shall cause owner to dedicate to the city and/or other appropriate entities for the **[STATE PURPOSE:]** (PUBLIC STREET & PUBLIC UTILITY, SEWER, DRAINAGE, TRAIL, ETC.) purposes as shown on the (TENTATIVE MAP/SITE PLAN). The offer shall be made by a (CERTIFICATE ON THE FINAL MAP OR SEPARATE RECORDED DOCUMENT). All land so offered shall be free and clear of all liens and encumbrances and without cost to the city. Streets that are already public are not required to be rededicated. Additional easements may be required at final design to the satisfaction of the city engineer.

47. Developer shall design the private streets, as shown on the (TENTATIVE MAP/SITE PLAN) to the satisfaction of the city engineer. The structural section of all private streets shall conform to City of Carlsbad Standards based on R-value tests. All private streets shall be inspected by the city. Developer shall pay the standard improvement plan check and inspection fees for private streets.

48. Developer shall design the private drainage systems, as shown on the (TENTATIVE MAP/SITE PLAN) to the satisfaction of the city engineer. All private drainage systems (12" diameter storm drain and larger) shall be inspected by the city. Developer shall pay the standard improvement plan check and inspection fees for private drainage systems.

[USE FOR PUBLIC IMPROVEMENTS OTHER THAN TRAFFIC SIGNALS (streets, sewer, water, storm drain, etc.]

49. Developer shall prepare and process public improvement plans and, prior to city engineer approval of said plans, shall execute a city standard (SUBDIVISION/DEVELOPMENT) Improvement Agreement to install and shall post security in accordance with C.M.C. Section 20.16.070 for public improvements shown on the (TENTATIVE MAP/SITE PLAN). Said improvements shall be installed to city standards to the satisfaction of the city engineer. These improvements include, but are not limited to:

    A. [LIST ALL IMPROVEMENTS HERE].

    B. .

    Developer shall pay the standard improvement plan check and inspection fees. Improvements listed above shall be constructed within 36 months of approval of the subdivision or development improvement agreement or such other time as provided in said agreement.

[USE PROPOSED TRAFFIC SIGNALS ONLY. PROVIDE SEPARATE CONDITION FOR EACH SEPARATE SIGNAL]

50. Developer shall prepare and process improvement plans and, prior to approval, shall execute a city standard (SUBDIVISION/DEVELOPMENT) Improvement Agreement to install and shall post security in accordance with C.M.C. Section 20.16.070 for public signal improvements shown on the (TENTATIVE MAP/SITE PLAN). Said improvements shall be installed to city standards to the satisfaction of the city engineer. More specifically, these signal improvements include but are not limited to constructing a new fully actuated traffic signal including all appurtenances and traffic signal interconnect conduit and cable, at the intersection of **[INSERT STREET NAME]** and **[INSERT STREET NAME]**. Developer shall install the traffic signal only with written authorization from the city engineer. Developer shall pay the standard improvement plan check and inspection fees. Improvements listed above shall be constructed within 18 months of approval of the subdivision or development improvement agreement or such other time as provided in said agreement.

[USE ONLY FOR 5-YEAR TRAFFIC SIGNALS. EACH SIGNAL REQUIRES A SEPARATE CONDITION]

51. Developer shall execute a city standard Traffic Signal Development Improvement Agreement for the design and construction of a traffic signal constructed to the satisfaction of the city engineer. Developer shall submit an construction cost estimate with contingency, subject to city engineer approval, for the design and construction of a new fully actuated traffic signal including all appurtenances and traffic signal interconnect conduit and cable, at the intersection **[INSERT STREET NAME]** and **[INSERT STREET NAME]**. Developer shall post security in accordance with C.M.C. Section 20.16.070 for the design and construction of said improvements. Developer shall bear all costs associated with the design and construction of this signal, if warrants are met. The Agreement shall be kept in force and security kept valid for a period of 5-years after the last building permit has been issued within this development. The traffic signal shall be installed only when written approval is received by the city engineer.

[USE IF PROJECT HAS MINOR FRONTAGE IMPROVEMENTS THAT DO NOT JUSTIFY AN IMPROVEMENT PLAN]

52. Developer shall design all proposed public improvements including but not limited to (sewer laterals, streetlights, pedestrian ramps, driveways, sidewalk, water services/meters, curb drains, etc.) as shown on the (TENTATIVE MAP/SITE PLAN). These improvements shall be shown on one of the following, subject to city engineer approval:
    A. Grading plans processed in conjunction with this project; or
    B. Construction Revision to an existing record public improvement drawing

    Developer shall pay plan check and inspection fees using improvement valuations in accordance with the city's current fee schedule. Developer shall apply for and obtain a right-of-way permit prior to performing work in the city right-of-way.

53. Prior to issuance of building permits, developer shall install separate sewer services to each unit proposed by this tentative parcel map. Sewer services shall be provided to the satisfaction of the city engineer.

54. Developer shall cause owner to waive direct access rights (ON THE FINAL MAP/PARCEL MAP/BY SEPARATE DOCUMENT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT) for all lots abutting **[INSERT NAME OF STREET]**.

[USE IF STREET FRONTAGE MORE THAN 600-FT OR PER CMC]

55. Prior to issuance of building permits, developer shall underground all existing overhead utilities (ALONG/WITHIN) the (PROJECT/SUBDIVISION) boundary.

[USE FOR SMALL PROJECTS THAT REQUIRE DEDICATION]

56. **[INSERT NAME OF STREET]** shall be dedicated by owner along the project frontage based on a street center line to right-of-way width of **[INSERT DIMENSION]**-feet and in conformance with City of Carlsbad Standards.

57. Developer shall design, and obtain approval from the city engineer, the structural section for the access aisles with a traffic index of 5.0 in accordance with city standards due to truck access through the parking area and/or aisles with an ADT greater than 500. Prior to completion of grading, the final structural pavement design of the aisle ways shall be submitted together with required R-value soil test information subject to the review and approval of the city engineer.

58. Developer shall provide all-weather maintenance access roads to the public drainage facilities (e.g.: headwalls, rip-rap field, etc.) for this project to the satisfaction of the city engineer. Where maintenance access roads are not practical and/or permitted, developer shall incorporate low-maintenance design features to the satisfaction of the city engineer.

Non-Mapping Notes

59. Add the following notes to the final map as non-mapping data:

    A. Developer has executed a city standard (SUBDIVISION/DEVELOPMENT) Improvement Agreement and has posted security in accordance with C.M.C. Section 20.16.070 to install public improvements shown on the (TENTATIVE MAP/SITE PLAN). These improvements include, but are not limited to:

        1) [LIST ALL IMPROVEMENTS HERE].
        2) .

    B. Developer has executed a city standard (SUBDIVISION/DEVELOPMENT) Improvement Agreement and has posted security in accordance with C.M.C. Section 20.16.070 to install public signal improvements shown on the (TENTATIVE MAP/SITE PLAN). These signal improvements include but are not limited to constructing a new fully actuated traffic signal including all appurtenances and traffic signal interconnect conduit and cable, at the

intersection of **[INSERT STREET NAME]** and **[INSERT STREET NAME]**.

C. This subdivision contains a remainder parcel. No building permit shall be issued for the remainder parcel until it is further subdivided pursuant to the provisions of Title 20 of the Carlsbad Municipal Code.

D. Building permits will not be issued for development of the subject property unless the appropriate agency determines that sewer and water facilities are available.

E. Geotechnical Caution:
   1) Slopes steeper than two parts horizontal to one part vertical exist within the boundaries of this subdivision.
   2) The owner of this property on behalf of itself and all of its successors in interest has agreed to hold harmless and indemnify the City of Carlsbad from any action that may arise through any geological failure, ground water seepage or land subsidence and subsequent damage that may occur on, or adjacent to, this subdivision due to its construction, operation or maintenance.

F. No structure, fence, wall, tree, shrub, sign, or other object may be placed or permitted to encroach within the area identified as a sight distance corridor as defined by City of Carlsbad Engineering Standards or line-of-sight per Caltrans standards.

G. The owner of this property on behalf of itself and all of its successors in interest has agreed to hold harmless and indemnify the City of Carlsbad from any action that may arise through any diversion of waters, the alteration of the normal flow of surface waters or drainage, or the concentration of surface waters or drainage from the drainage system or other improvements identified in the city approved development plans; or by the design, construction or maintenance of the drainage system or other improvements identified in the city approved development plans.

Utilities

60. Developer shall meet with the fire marshal to determine if fire protection measures (fire flows, fire hydrant locations, building sprinklers) are required to serve the project. Fire hydrants, if proposed, shall be considered public improvements and shall be served by public water mains to the satisfaction of the district engineer.

61. Developer shall design and construct public facilities within public right-of-way or within minimum 20-foot wide easements granted to the district or the City of Carlsbad. At the

discretion of the district or city engineer, wider easements may be required for adequate maintenance, access and/or joint utility purposes.

62. Prior to issuance of building permits, developer shall pay all fees, deposits, and charges for connection to public facilities.

63. The developer shall design landscape and irrigation plans utilizing recycled water as a source and prepare and submit a colored recycled water use map to the Planning Department for processing and approval by the district engineer.

64. Developer shall install potable water and/or recycled water services and meters at locations approved by the district engineer. The locations of said services shall be reflected on public improvement plans.

65. The developer shall install sewer laterals and clean-outs at locations approved by the city engineer. The locations of sewer laterals shall be reflected on public improvement plans.

66. The developer shall design and construct public water, sewer, and recycled water facilities substantially as shown on the (TENTATIVE MAP/SITE PLAN) to the satisfaction of the district engineer and city engineer.

67. The developer shall provide separate potable water meters for each separately owned unit within this subdivision.

[USE IF MASTER WATER METERS PROPOSED - SEE CMWD ORD 45]

68. Prior to using one potable water meter to serve a multi-ownership building, developer shall apply for and receive approval from the utilities director. Upon application for and good cause shown, the utilities director may allow a single potable water service connection and meter to a multi-ownership building within this (SUBDIVISION/PROJECT) provided:

    A. Developer shall record a deed restriction or other such document as approved by the public works director and general counsel placing future owners on notice that each and every residential or commercial/office unit is served by a single service connection and meter, and in the event that the water bill is not paid by the party or entity responsible for paying the monthly water service charges to CMWD for the respective building occupied by the multi-ownership , CMWD may at its direction shut off the water service to such multi-ownership building in accordance with CMWD adopted rules and regulations.

    B. Developer shall install a private sub-meter for each separately established residence or business within a multi-ownership building having a single potable water service connection and meter.

If denied, developer shall revise all design drawings to provide separate potable water meters for each separately owned unit within this (SUBDIVISION/PROJECT) per district requirements.

[EVALUATE USE OF NEXT THREE CONDITIONS WHEN PROJECT WITHIN OTHER SERVICE BOUNDARIES]

69. The developer shall meet with and obtain approval from the (LEUCADIA WASTEWATER DISTRICT/ VALLECITOS WATER DISTRICT) regarding sewer infrastructure available or required to serve this project.

70. The developer shall meet with and obtain approval from the (OLIVENHAIN MUNICIPAL WATER DISTRICT/VALLECITOS WATER DISTRICT) regarding potable water infrastructure available or required to serve this project.

71. The developer shall meet with and obtain approval from the Olivenhain Municipal Water District regarding recycled water infrastructure available or required to serve this project.

[USE IF PROJECT PROPOSES SIGNIFICANT SEWER DEMANDS OR CAPACITY ISSUES]

72. The developer shall submit a detailed sewer study, prepared by a registered engineer, that identifies the peak flows of the project, required pipe sizes, depth of flow in pipe, velocity in the main lines, and the capacity of the existing infrastructure. Said study shall be submitted concurrently with the improvement plans for the project and the study shall be prepared to the satisfaction of the district engineer.

[USE IF PROJECT PROPOSES SIGNIFICANT WATER DEMANDS OR CAPACITY ISSUES]

73. The developer shall submit a detailed potable water study, prepared by a registered engineer that identifies the peak demands of the project (including fire flow demands). The study shall identify velocity in the main lines, pressure zones, and the required pipe sizes. Said study shall be submitted concurrently with the improvement plans for the project and the study shall be prepared to the satisfaction of the district engineer.

[USE IF PROJECT PROPOSES SIGNIFICANT RECYCLED WATER DEMANDS OR CAPACITY ISSUES]

74. The developer shall submit a detailed recycled water study, prepared by a registered engineer that identifies the peak demands of the project. The study shall identify velocity in the main lines and the required pipe sizes. Said study shall be submitted concurrently with the improvement plans for the project and the study shall be prepared to the satisfaction of the district engineer.

75. The developer shall submit detailed design drawings and studies prepared by a registered engineer for the construction of a (SEWER LIFT STATION, POTABLE/RECYCLED WATER BOOSTER PUMP STATIONS, PRESSURE REDUCING STATION, ETC.) required to serve the project. Said drawings and studies shall be prepared to the satisfaction of the district engineer.

Cellular Antenna Sites

76. The Telecommunications Facility or related appurtenances shall not be constructed on any easement without the easement holder's permission.

77. The Telecommunications Facility or related appurtenances shall not be constructed in any drainage area or over any drainage structure.

Code Reminders
[CHOOSE APPLICABLE REMINDERS BELOW]
The project is subject to all applicable provisions of local ordinances, including but not limited to the following:

[USE ON CT'S - IF APPROVED AFTER 6/2/12, USE TWO YEAR APPROVAL TERM]

78. This tentative map shall expire three years from the date on which the (PLANNING COMMISSION OR CITY COUNCIL) voted to approve this application.

79. Some improvements shown on the tentative map and/or required by these conditions are located offsite on property which neither the city nor the owner has sufficient title or interest to permit the improvements to be made without acquisition of title or interest**.** The developer shall immediately initiate negotiations to acquire such property. The developer shall use its best efforts to effectuate negotiated acquisition. If unsuccessful, developer shall demonstrate to the city engineer its best efforts, and comply with the requirements of the Carlsbad Municipal Code Section 20.16.095 to notify and enable the city to successfully acquire said property by condemnation.

80. Developer shall pay traffic impact and sewer impact fees based on Section 18.42 and Section 13.10 of the City of Carlsbad Municipal Code, respectively. The Average Daily Trips (ADT) and floor area contained in the staff report and shown on the (SITE PLAN/TENTATIVE MAP) are for planning purposes only.

PLANNING COMMISSION RESOLUTION NO. 6096

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARLSBAD, CALIFORNIA, APPROVING A TENTATIVE TRACT MAP TO GRADE AND SUBDIVIDE A 5.12-ACRE SITE INTO 29 SMALL LOTS FOR SINGLE-FAMILY HOMES, 2 OPEN SPACE LOTS, AND 1 DRIVEWAY LOT ON PROPERTY GENERALLY LOCATED ON THE SOUTHWEST CORNER OF LOWDER LANE AND POINSETTIA LANE, IN THE MELLO II SEGMENT OF THE LOCAL COASTAL PROGRAM AND LOCAL FACILITIES MANAGEMENT ZONE 4.

CASE NAME: POINSETTIA PROPERTY
CASE NO.: CT 05-10

WHEREAS, **Cottage Development Company**, "Developer," has filed a verified application with the City of Carlsbad regarding property owned by **Eugene Boyland and Shelley Thayer**, "Owner," described as

> **Lot 171, of Carlsbad Tract No. 73-24, in the City of Carlsbad, County of San Diego, State of California, According to Map thereof No. 7996, filed in the Office of the County Recorder of San Diego County, August 2, 1974**

("the Property"); and

WHEREAS, said verified application constitutes a request for a Tentative Tract Map as shown on Exhibits **"A" – "BB"** dated **May 17, 2006**, on file in the Planning Department **POINSETTIA PROPERTY - CT 05-10,** as provided by **Chapter 20.12** of the Carlsbad Municipal Code; and

WHEREAS, the Planning Commission did, on the **17th** day of **May 2006**, hold a duly noticed public hearing as prescribed by law to consider said request; and

WHEREAS, at said public hearing, upon hearing and considering all testimony and arguments, if any, of persons desiring to be heard, said Commission considered all factors relating to the Tentative Tract Map.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Planning Commission of the City of Carlsbad as follows:

A) That the foregoing recitations are true and correct.

B) That based on the evidence presented at the public hearing, the Commission **APPROVES POINSETTIA PROPERTY – CT 05-10,** based on the following findings and subject to the following conditions:

Findings:

1. That the proposed map and the proposed design and improvement of the subdivision as conditioned, is consistent with and satisfies all requirements of the General Plan, any applicable specific plans, Titles 20 and 21 of the Carlsbad Municipal Code, and the State Subdivision Map Act, and will not cause serious public health problems, in that **the project is consistent with all requirements of the General Plan, and Titles 20 and 21 governing subdivisions and the design of planned developments.**

2. That the proposed project is compatible with the surrounding future land uses since surrounding properties are designated for **residential** development on the General Plan, in that **the proposed project consists of 29 small lot, single-family homes at densities similar and compatible with the surrounding residential land uses.**

3. That the site is physically suitable for the type and density of the development since the site is adequate in size and shape to accommodate residential development at the density proposed, in that **all required development standards and design criteria required by the applicable zoning standards are incorporated into the project with the exception of the "private rear yard" on lots 1-15, for which an approval of a Variance (V 05-01) is required.**

4. That the design of the subdivision or the type of improvements will not conflict with easements of record or easements established by court judgment, or acquired by the public at large, for access through or use of property within the proposed subdivision, in that **the project has been designed and conditioned such that there are no conflicts with established easements.**

5. That the property is not subject to a contract entered into pursuant to the Land Conservation Act of 1965 (Williamson Act).

6. That the design of the subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities in the subdivision, in that structures are oriented **in a manner that allows for solar exposure and will take advantage of shade and receive prevailing breezes.**

7. That the Planning Commission has considered, in connection with the housing proposed by this subdivision, the housing needs of the region, and balanced those housing needs against the public service needs of the City and available fiscal and environmental resources.

8. That the design of the subdivision and improvements are not likely to cause substantial environmental damage nor substantially and avoidably injure fish or wildlife or their habitat, in that **the proposed development is not within an existing or proposed**

preserve area of the adopted Habitat Conservation Plan and the site is a previously graded site.

9. That the discharge of waste from the subdivision will not result in violation of existing California Regional Water Quality Control Board requirements, in that **the project has been designed in accordance with the Best Management Practices for water quality protection in accordance with the City's sewer and drainage standards and the project is conditioned to comply with the National Pollutant Discharge Elimination System (NPDES) requirements.**

10. The **Planning Commission** finds that the project, as conditioned herein, is in conformance with the Elements of the City's General Plan based on the facts set forth in the staff report dated **May 17, 2006,** including, but not limited to, the following:

    a. Land Use - **The project is consistent with the City's General Plan since the proposed density of 5.66 du/ac is within the Residential Medium density range of 4 – 8 du/ac specified for the site as indicated in the Land Use Element of the General Plan. The project's proposed density of 5.88 du/ac is slightly below the Growth Management Control Point density (6 du/ac) used for the purpose of calculating the City's compliance with Government Code Section 65584. However, consistent with Program 3.8 of the City's certified Housing Element, all of the dwelling units which were anticipated toward achieving the City's share of the regional housing need that are not utilized by developers in approved projects are deposited in the City's Excess Dwelling Unit Bank. These excess dwelling units are available for allocation to other projects. Accordingly, there is no net loss of residential unit capacity and there are adequate properties identified in the Housing Element allowing residential development with a unit capacity, including second dwelling units, adequate to satisfy the City's share of the regional housing need.**

    b. Circulation – **The project will take access off of Lowder Lane and the project is required to construct full street improvements. On-site circulation consists of a private driveway which will be designed in accordance with City standards.**

    c. Noise - **The project is required to construct a six-foot masonry sound attenuation barrier along the north and west property lines fronting Interstate 5 and Poinsettia Lane and provide an acoustical analysis to ensure adequate interior noise attenuation below 45 dBA CNEL will be achieved.**

    d. Housing – **The project is consistent with the Housing Element of the General Plan and the Inclusionary Housing Ordinance as the applicant is proposing to purchase five affordable housing credits in the Villa Loma housing project.**

11. The project is consistent with the Citywide Facilities and Improvements Plan, the Local Facilities Management Plan for Zone **4,** and all City public facility policies and ordinances. The project includes elements or has been conditioned to construct or provide funding to ensure that all facilities and improvements regarding sewer collection

and treatment; water; drainage; circulation; fire; schools; parks and other recreational facilities; libraries; government administrative facilities; and open space, related to the project will be installed to serve new development prior to or concurrent with need. Specifically,

a. The project has been conditioned to provide proof from the **Carlsbad Unified** School District that the project has satisfied its obligation for school facilities.

b. Park-in-lieu fees are required by Carlsbad Municipal Code Chapter 20.44, and will be collected prior to issuance of building permit.

c. The Public Facility fee is required to be paid by Council Policy No. 17 and will be collected prior to the issuance of building permit.

12. The project has been conditioned to pay any increase in public facility fee, or new construction tax, or development fees, and has agreed to abide by any additional requirements established by a Local Facilities Management Plan prepared pursuant to Chapter 21.90 of the Carlsbad Municipal Code. This will ensure continued availability of public facilities and will mitigate any cumulative impacts created by the project.

13. This project has been conditioned to comply with any requirement approved as part of the Local Facilities Management Plan for Zone **4**.

14. The **Planning Commission** of the City of Carlsbad does hereby find:

a. It has reviewed, analyzed, and considered Mitigated Negative Declaration and **Mitigation Monitoring and Reporting Program Poinsettia Property – CT 05-10/PUD 05-08/CDP 05-23/V 05-01**, the environmental impacts therein identified for this project and said comments thereon, and the Program, on file in the Planning Department, prior to **APPROVING** the project.

b. The Mitigated Negative Declaration and **Mitigation Monitoring and Reporting Program** have been prepared in accordance with requirements of the California Environmental Quality Act, the State Guidelines, and the Environmental Protection Procedures of the City of Carlsbad.

c. They reflect the independent judgment of the **Planning Commission** of the City of Carlsbad.

d. Based on the EIA Part II and comments thereon, the **Planning Commission** finds that there is no substantial evidence the project will have a significant effect on the environment.

15. The Planning Commission has reviewed each of the exactions imposed on the Developer contained in this resolution, and hereby finds, in this case, that the exactions are imposed to mitigate impacts caused by or reasonably related to the project, and the extent and the degree of the exaction is in rough proportionality to the impact caused by the project.

Conditions:

Note: Unless otherwise specified herein, all conditions shall be satisfied prior to **final map recordation or issuance of grading permit, whichever occurs first**.

1. If any of the following conditions fail to occur, or if they are, by their terms, to be implemented and maintained over time, if any of such conditions fail to be so implemented and maintained according to their terms, the City shall have the right to revoke or modify all approvals herein granted; deny or further condition issuance of all future building permits; deny, revoke, or further condition all certificates of occupancy issued under the authority of approvals herein granted; record a notice of violation on the property title; institute and prosecute litigation to compel their compliance with said conditions or seek damages for their violation. No vested rights are gained by Developer or a successor in interest by the City's approval of this **Tentative Tract Map.**

2. Staff is authorized and directed to make, or require the Developer to make, all corrections and modifications to the **Tentative Tract Map** documents, as necessary to make them internally consistent and in conformity with the final action on the project. Development shall occur substantially as shown on the approved Exhibits. Any proposed development different from this approval, shall require an amendment to this approval.

3. Developer shall comply with all applicable provisions of federal, state, and local laws and regulations in effect at the time of building permit issuance.

4. If any condition for construction of any public improvements or facilities, or the payment of any fees in-lieu thereof, imposed by this approval or imposed by law on this Project are challenged, this approval shall be suspended as provided in Government Code Section 66020. If any such condition is determined to be invalid, this approval shall be invalid unless the City Council determines that the project without the condition complies with all requirements of law.

5. Developer/Operator shall and does hereby agree to indemnify, protect, defend, and hold harmless the City of Carlsbad, its Council members, officers, employees, agents, and representatives, from and against any and all liabilities, losses, damages, demands, claims and costs, including court costs and attorney's fees incurred by the City arising, directly or indirectly, from (a) City's approval and issuance of this **Tentative Tract Map**, (b) City's approval or issuance of any permit or action, whether discretionary or nondiscretionary, in connection with the use contemplated herein, and (c) Developer/Operator's installation and operation of the facility permitted hereby, including without limitation, any and all liabilities arising from the emission by the facility of electromagnetic fields or other energy waves or emissions. This obligation survives until all legal proceedings have been concluded and continues even if the City's approval is not validated.

6. Developer shall submit to **the Planning Department** a reproducible 24" x 36" mylar copy of the **Tentative Map** reflecting the conditions approved by the final decision-making body.

7. Prior to the issuance of a building permit, the Developer shall provide proof to the Director from the **Carlsbad Unified** School District that this project has satisfied its obligation to provide school facilities.

8. This project shall comply with all conditions and mitigation measures which are required as part of the Zone **4** Local Facilities Management Plan and any amendments made to that Plan prior to the issuance of building permits.

9. Building permits will not be issued for this project unless the local agency providing water and sewer services to the project provides written certification to the City that adequate water service and sewer facilities, respectively, are available to the project at the time of the application for the building permit, and that water and sewer capacity and facilities will continue to be available until the time of occupancy. **A note to this effect shall be placed on the Final Map.**

10. Developer shall implement, or cause the implementation of, the **Poinsettia Property** Project Mitigation Monitoring and Reporting Program.

11. Developer shall submit and obtain Planning Director approval of a Final Landscape and Irrigation Plan showing conformance with the approved Preliminary Landscape Plan and the City's Landscape Manual. Developer shall construct and install all landscaping as shown on the approved Final Plans, and maintain all landscaping in a healthy and thriving condition, free from weeds, trash, and debris.

12. The first submittal of Final Landscape and Irrigation Plans shall be pursuant to the landscape plan check process on file in the Planning Department and accompanied by the project's building, improvement, and grading plans.

13. Developer shall establish a homeowner's association and corresponding covenants, conditions, and restrictions. Said CC&Rs shall be submitted to and approved by the Planning Director prior to final map approval. Prior to issuance of a building permit the Developer shall provide the Planning Department with a recorded copy of the official CC&Rs that have been approved by the Department of Real Estate and the Planning Director. At a minimum, the CC&Rs shall contain the following provisions:

    a. <u>General Enforcement by the City</u>. The City shall have the right, but not the obligation, to enforce those Protective Covenants set forth in this Declaration in favor of, or in which the City has an interest.

    b. <u>Notice and Amendment</u>. A copy of any proposed amendment shall be provided to the City in advance. If the proposed amendment affects the City, City shall have the right to disapprove. A copy of the final approved amendment shall be transmitted to City within 30 days for the official record.

c. Failure of Association to Maintain Common Area Lots and Easements. In the event that the Association fails to maintain the "Common Area Lots and/or the Association's Easements" as provided in Article_____, Section _____ the City shall have the right, but not the duty, to perform the necessary maintenance. If the City elects to perform such maintenance, the City shall give written notice to the Association, with a copy thereof to the Owners in the Project, setting forth with particularity the maintenance which the City finds to be required and requesting the same be carried out by the Association within a period of thirty (30) days from the giving of such notice. In the event that the Association fails to carry out such maintenance of the Common Area Lots and/or Association's Easements within the period specified by the City's notice, the City shall be entitled to cause such work to be completed and shall be entitled to reimbursement with respect thereto from the Owners as provided herein.

d. Special Assessments Levied by the City. In the event the City has performed the necessary maintenance to either Common Area Lots and/or Association's Easements, the City shall submit a written invoice to the Association for all costs incurred by the City to perform such maintenance of the Common Area Lots and or Association's Easements. The City shall provide a copy of such invoice to each Owner in the Project, together with a statement that if the Association fails to pay such invoice in full within the time specified, the City will pursue collection against the Owners in the Project pursuant to the provisions of this Section. Said invoice shall be due and payable by the Association within twenty (20) days of receipt by the Association. If the Association shall fail to pay such invoice in full within the period specified, payment shall be deemed delinquent and shall be subject to a late charge in an amount equal to six percent (6%) of the amount of the invoice. Thereafter the City may pursue collection from the Association by means of any remedies available at law or in equity. Without limiting the generality of the foregoing, in addition to all other rights and remedies available to the City, the City may levy a special assessment against the Owners of each Lot in the Project for an equal pro rata share of the invoice, plus the late charge. Such special assessment shall constitute a charge on the land and shall be a continuing lien upon each Lot against which the special assessment is levied. Each Owner in the Project hereby vests the City with the right and power to levy such special assessment, to impose a lien upon their respective Lot and to bring all legal actions and/or to pursue lien foreclosure procedures against any Owner and his/her respective Lot for purposes of collecting such special assessment in accordance with the procedures set forth in Article _____ of this Declaration.

e. Landscape Maintenance Responsibilities. The HOAs and individual lot or unit owner landscape maintenance responsibilities shall be as set forth in Exhibit _____.

f. Balconies, trellis and decks. The individual lot or unit owner allowances and prohibitions regarding balconies, trellis, and decks shall be as set forth in Exhibit _____.

14. This approval is granted subject to the approval of **the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program, Planned Development Permit, Coastal Development Permit, and Variance** and is subject to all conditions contained

in Planning Commission Resolutions No. **6096, 6097, 6098, and 6099** for those other approvals incorporated herein by reference.

15. Prior to the approval of the final map for any phase of this project, or where a map is not being processed, prior to the issuance of building permits for any lots or units, the Developer shall enter into an Affordable Housing Agreement with the City to purchase **5** housing credits in the **Villa Loma housing project** to satisfy the project's affordable housing requirement, in accordance with the requirements and process set forth in Chapter 21.85 of the Carlsbad Municipal Code. The draft Affordable Housing Agreement shall be submitted to the Planning Director no later than 60 days prior to the request to final the map. The recorded Affordable Housing Agreement shall be binding on all future owners and successors in interest.

16. Prior to occupancy of the first dwelling unit, the Developer shall provide all required passive and active recreational areas per the approved plans, including landscaping and recreational facilities.

17. Developer shall report, in writing, to the Planning Director within 30 days, any address change from that which is shown on the permit application.

18. Prior to the issuance of the **Final Map**, Developer shall submit to the City a Notice of Restriction to be filed in the office of the County Recorder, subject to the satisfaction of the Planning Director, notifying all interested parties and successors in interest that the City of Carlsbad has issued a **Tentative Tract Map, Planned Development Permit, Coastal Development Permit, and Variance** by Resolutions No. **6096, 6097, 6098, and 6099** on the property. Said Notice of Restriction shall note the property description, location of the file containing complete project details, and all conditions of approval as well as any conditions or restrictions specified for inclusion in the Notice of Restriction. The Planning Director has the authority to execute and record an amendment to the notice which modifies or terminates said notice upon a showing of good cause by the Developer or successor in interest.

19. Developer shall submit a street name list consistent with the City's street name policy subject to the Planning Director's approval prior to final map approval.

20. Developer shall pay the citywide Public Facilities Fee imposed by City Council Policy #17, the License Tax on new construction imposed by Carlsbad Municipal Code Section 5.09.030, and CFD #1 special tax (if applicable), subject to any credits authorized by Carlsbad Municipal Code Section 5.09.040. Developer shall also pay any applicable Local Facilities Management Plan fee for Zone 4, pursuant to Chapter 21.90. All such taxes/fees shall be paid at issuance of building permit. If the taxes/fees are not paid, this approval will not be consistent with the General Plan and shall become void.

21. If satisfaction of the school facility requirement involves a Mello-Roos Community Facilities District or other financing mechanism which is inconsistent with City Council Policy No. 38, by allowing a pass-through of the taxes or fees to individual home buyers, then in addition to any other disclosure required by law or Council policy, the Developer shall disclose to future owners in the project, to the maximum extent possible, the

existence of the tax or fee, and that the school district is the taxing agency responsible for the financing mechanism. The form of notice is subject to the approval of the Planning Director and shall at least include a handout and a sign inside the sales facility stating the fact of a potential pass-through of fees or taxes exists and where complete information regarding those fees or taxes can be obtained.

22. Developer shall display a current Zoning and Land Use Map, or an alternative, suitable to the Planning Director, in the sales office at all times. All sales maps that are distributed or made available to the public shall include but not be limited to trails, future and existing schools, parks, and streets.

23. Developer shall post a sign in the sales office in a prominent location that discloses which special districts and school district provide service to the project. Said sign shall remain posted until ALL of the units are sold.

24. Prior to the recordation of the first final **tract** map or the issuance of building permits, whichever occurs first, the Developer shall prepare and record a Notice that this property may be subject to noise impacts from the proposed or existing Transportation Corridor **(Interstate 5 and Poinsettia Lane)**, in a form meeting the approval of the Planning Director and City Attorney (see Noise Form #1 on file in the Planning Department).

25. Prior to the recordation of the first final **tract** map or the issuance of building permits, whichever occurs first, the Developer shall prepare and record a Notice that this property is subject to overflight, sight, and sound of aircraft operating from McClellan-Palomar Airport, in a form meeting the approval of the Planning Director and the City Attorney (see Noise Form #2 on file in the Planning Department).

26. Developer shall post aircraft noise notification signs in all sales and/or rental offices associated with the new development. The number and locations of said signs shall be approved by the Planning Director (see Noise Form #3 on file in the Planning Department).

27. Developer shall submit and obtain Planning Director approval of an exterior lighting plan including parking areas. All lighting shall be designed to reflect downward and avoid any impacts on adjacent homes or property.

Engineering

NOTE: Unless specifically stated in the condition, all of the following conditions, upon the approval of this proposed tentative map, must be met prior to approval of a final map, building or grading permit whichever occurs first.

General

28. Prior to hauling dirt or construction materials to or from any proposed construction site within this project, Developer shall apply for and obtain approval from, the City Engineer for the proposed haul route.

29. Developer shall provide to the City Engineer an acceptable means, CC&Rs, and/or other recorded document, for maintaining the private easements within the subdivision and all the private improvements: streets, sidewalks, street lights, and storm drain facilities located therein and to distribute the costs of such maintenance in an equitable manner among the owners of the properties within the subdivision.

30. Prior to occupancy, Developer shall install rain gutters to convey roof drainage to an approved drainage course or street to the satisfaction of the City Engineer.

31. There shall be one Final Map recorded for this project.

32. Developer shall install sight distance corridors (see below for types) at all street intersections in accordance with Engineering Standards and shall record the following statement on the Final Map (and in the CC&Rs):

"No structure, fence, wall, tree, shrub, sign, or other object above the street level may be placed or permitted to encroach within the area identified as a sight distance corridor in accordance with City Standard Public Street-Design Criteria, Section 8.B.3. The underlying property owner shall maintain this condition."

The limits of these sight distance corridors shall be reflected on any improvement, grading, or landscape plan prepared in association with this development.

Fees/Agreements

33. Developer shall cause property owner to execute and submit to the City Engineer, for recordation, the City's standard form Geologic Failure Hold Harmless Agreement.

34. Developer shall cause property owner to execute and submit to the City Engineer for recordation the City's standard form Drainage Hold Harmless Agreement regarding drainage across the adjacent property.

35. Prior to approval of any grading or building permits for this project, Developer shall cause Owner to give written consent to the City Engineer to the annexation of the area shown within the boundaries of the subdivision into the existing City of Carlsbad Street Lighting and Landscaping District No. 1 **and/or to the formation or annexation into an additional Street Lighting and Landscaping District. Said written consent shall be on a form provided by the City Engineer**.

Grading

36. Prior to the issuance of a grading permit or building permit, whichever occurs first, Developer shall submit to the City Engineer proof that a Notice of Intention for the start of work has been submitted to the State Water Resources Control Board.

37. This project requires offsite grading. No grading for private improvements shall occur outside the limits of this approval unless Developer obtains, records, and submits a recorded copy to the City Engineer a grading or slope easement or agreement from the

owners of the affected properties. If Developer is unable to obtain the grading or slope easement, or agreement, no grading permit will be issued. In that case, Developer must either apply for and obtain an amendment of this approval or modify the plans so grading will not occur outside the project and apply for and obtain a finding of substantial conformance from both the City Engineer and Planning Director.

38. Based upon a review of the proposed grading and the grading quantities shown on the tentative map, a grading permit for this project is required. Developer shall apply for and obtain a grading permit from the City Engineer prior to issuance of a building permit for the project.

Dedications/Improvements

39. Developer shall cause Owner to make an offer of dedication to the City and/or other appropriate entities for all **public** easements shown on the tentative map. **More specifically, a public sewer and water easement shall be recorded over Driveway "A," "B," and "C." A public sewer easement shall be placed over Lot 6. All easements shall be deeded as shown on the tentative map unless otherwise directed by the City Engineer.** The offer shall be made by a certificate on the final map and/or separate recorded document. All land so offered shall be offered free and clear of all liens and encumbrances and without cost. Streets that are already public are not required to be rededicated.

40. Unless otherwise noted, the proposed storm drain system shall be privately owned and maintained within the boundaries of the subdivision.

41. Stop signs and related pavement graphics shall be added at the project exit points identified as **Driveways "A" and "C"** on the Tentative Tract Map.

42. Additional drainage easements may be required. Developer shall dedicate and provide or install drainage structures, as may be required by the City Engineer, prior to or concurrent with any grading or building permit.

43. Developer shall provide the design of all private streets and drainage systems to the satisfaction of the City Engineer. The structural section of all private streets shall conform to City of Carlsbad Standards based on R-value tests. All private streets and drainage systems shall be inspected by the City. Developer shall pay the standard improvement plancheck and inspection fees.

44. Developer shall execute and record a City standard Subdivision Improvement Agreement to install and secure with appropriate security as provided by law, public improvements shown on the tentative map and the following improvements including but not limited to grading, clearing and grubbing, relocation of utilities, sewer, water, fire hydrants, street lights, retaining walls, and reclaimed water, to City Standards to the satisfaction of the City Engineer. The improvements are:

a. **Installation of public potable and reclaimed water pipe, fire hydrants, and related appurtenances within Driveways "A – C" as shown on the tentative tract map and connections to Paseo Del Norte water mains.**
b. **Installation of public sewer pipe and appurtenances within Driveways "A - C" as shown on the tentative tract map, a portion of Lot 6 and a connection within Poinsettia Lane public right-of-way.**
c. **Any modifications to public street signs and/or striping necessary to accommodate the proposed development.**
d. **Modification to the traffic signal at the intersection of Paseo Del Norte and Poinsettia Lane, including signing and striping revisions, to convert the traffic signal to split-phase for north/south traffic movements.**

A list of the above shall be placed on an additional map sheet on the Final Map per the provisions of Sections 66434.2 of the Subdivision Map Act. Improvements listed above shall be constructed within 18 months of approval of the subdivision or development improvement agreement or such other time as provided in said agreement.

45. **Applicant will work with the City Engineer to accommodate an additional 4 feet in street width in the portion of Lowder Lane (Paseo Del Norte) from its intersection with Poinsettia Lane to midway between the project's two entrances. If additional street width cannot be provided by restriping and red curb, the applicant agrees to move the curb line back up to 4 feet within the City right-of-way to provide the necessary additional 4 feet in street width.**

46. **Prior to working within the CalTrans right-of-way, the developer shall submit to the City written approval from CalTrans for said work.**

47. Developer shall comply with the City's requirements of the National Pollutant Discharge Elimination System (NPDES) permit. Developer shall provide improvements constructed pursuant to best management practices as referenced in the "California Storm Water Best Management Practices Handbook" to reduce surface pollutants to an acceptable level prior to discharge to sensitive areas. Plans for such improvements shall be submitted to and subject to the approval of the City Engineer. Said plans shall include but not be limited to notifying prospective owners and tenants of the following:

a. All owners and tenants shall coordinate efforts to establish or work with established disposal programs to remove and properly dispose of toxic and hazardous waste products.
b. Toxic chemicals or hydrocarbon compounds such as gasoline, motor oil, antifreeze, solvents, paints, paint thinners, wood preservatives, and other such fluids shall not be discharged into any street, public or private, or into storm drain or storm water conveyance systems. Use and disposal of pesticides, fungicides, herbicides, insecticides, fertilizers, and other such chemical treatments shall meet Federal, State, County, and City requirements as prescribed in their respective containers.
c. Best Management Practices shall be used to eliminate or reduce surface pollutants when planning any changes to the landscaping and surface improvements.

48. Prior to the issuance of grading permit or building permit, whichever occurs first, Developer shall submit for City approval a "Storm Water Pollution Prevention Plan (SWPPP)." The SWPPP shall be in compliance with current requirements and provisions established by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Requirements. The SWPPP shall address measures to reduce to the maximum extent practicable storm water pollutant runoff during construction of the project. At a minimum, the SWPPP shall:

a. Include all content as established by the California Regional Water Quality Control Board requirements.
b. Include the receipt of "Notice of Intent" issued by the California Regional Water Quality Control Board.
c. Recommend source control and treatment control Best Management Practices (BMPs) that will be implemented with this project to avoid contact or filter said pollutants from storm water to the maximum extent practicable before discharging to City right-of-way or natural drainage course.
d. Establish specific procedures for handling spills and routine cleanup. Special considerations and effort shall be applied to employee education on the proper procedures for handling cleanup and disposal of pollutants.

49. Prior to the issuance of grading permit or building permit, whichever occurs first, Developer shall submit for City approval a "Storm Water Management Plan (SWMP)." The SWMP shall demonstrate compliance with the City of Carlsbad Standard Urban Stormwater Mitigation Plan (SUSMP), Order 2001-01 issued by the San Diego Region of the California Regional Water Quality Control Board and City of Carlsbad Municipal Code. The SWMP shall address measures to avoid contact or filter said pollutants from storm water, to the maximum extent practicable, for the post-construction stage of the project. At a minimum, the SWMP shall:

a. Identify existing and post-development on-site pollutants-of-concern.
b. Identify the hydrologic unit this project contributes to and impaired water bodies that could be impacted by this project.
c. Recommend source controls and treatment controls that will be implemented with this project to avoid contact or filter said pollutants from storm water to the maximum extent practicable before discharging to City right-of-way.
d. Establish specific procedures for handling spills and routine cleanup. Special considerations and effort shall be applied to resident education on the proper procedures for handling cleanup and disposal of pollutants.
e. Ensure long-term maintenance of all post-construction BMPs in perpetuity.
f. Identify how post-development runoff rates and velocities from the site will not exceed the pre-development runoff rates and velocities to the maximum extent practicable.

50. Prior to occupancy, Developer shall install street lights along all public and private street frontages abutting and/or within the subdivision boundary in conformance with City of Carlsbad standards.

51. Prior to occupancy, Developer shall install wheelchair ramps at the public street corners abutting the subdivision in conformance with City of Carlsbad Standards.

52. Prior to building permit or grading permit issuance, whichever occurs first, Developer shall have design, apply for and obtain approval of the City Engineer, for the structural section for the access aisles with a traffic index of 5.0 in accordance with City Standards due to truck access through the **sewer access easement over Lot 6**. The structural pavement design of the aisle ways shall be submitted together with required R-value soil test information and approved by the City Engineer as part of the building or grading plan review, whichever occurs first.

Final Map Notes

53. Developer shall show on Final Map the net developable acres for each parcel.

54. Note(s) to the following effect(s) shall be placed on the map as non-mapping data:

a. All improvements are privately owned and are to be privately maintained with the exception of the following:

1. **Installation of public potable and reclaimed water pipe, fire hydrants, and related appurtenances.**
2. **Installation of public sewer pipe and appurtenances.**

b. Building permits will not be issued for development of the subject property unless the appropriate agency determines that sewer and water facilities are available.

c. Geotechnical Caution:

The owner of this property, on behalf of itself and all of its successors in interest, has agreed to hold harmless and indemnify the City of Carlsbad from any action that may arise through any geological failure, ground water seepage, or land subsidence and subsequent damage that may occur on, or adjacent to, this subdivision due to its construction, operation, or maintenance.

d. No structure, fence, wall, tree, shrub, sign, or other object above the street level may be placed or permitted to encroach within the area identified as sight distance corridors.

Water

55. Prior to approval of improvement plans or final map, Developer shall meet with the Fire Marshal to determine if fire protection measures (fire flows, fire hydrant locations, building sprinklers) are required to serve the project. Fire hydrants, if proposed, shall be considered public improvements and shall be served by public water mains to the satisfaction of the District Engineer.

56. The Developer shall design and construct public facilities within public right-of-way or within minimum 20-feet-wide easements granted to the District or the City of Carlsbad.

At the discretion of the District Engineer, wider easements may be required for adequate maintenance, access, and/or joint utility purposes.

57. Prior to issuance of building permits, Developer shall pay all fees, deposits, and charges for connection to public facilities. Developer shall pay the San Diego County Water Authority capacity charge(s) prior to issuance of Building Permits.

58. The Developer shall prepare a colored recycled water use map and submit this map to the Planning Department for processing and approval by the District Engineer.

59. The Developer shall design landscape and irrigation plans utilizing recycled water as a source. Said plans shall be submitted to the satisfaction of the District Engineer.

60. The Developer shall install potable water and recycled water services and meters at a location approved by the District Engineer. The locations of said services shall be reflected on public improvement plans.

61. The Developer shall install sewer laterals and clean-outs at a location approved by the District Engineer. The locations of sewer laterals shall be reflected on public improvement plans.

62. The Developer shall design and construct public water, sewer, and recycled water facilities substantially as shown on the (Tentative Map/Site Plan) to the satisfaction of the District Engineer. Proposed public facilities shall be reflected on public improvement plans.

63. The Developer shall provide separate potable water meters for each separately owned unit.

64. Prior to Final Map approval or issuance of building permits, whichever is first, the entire potable water, recycled water, and sewer system shall be evaluated in detail to ensure that adequate capacity, pressure, and flow demands can be met to the satisfaction of the District Engineer.

65. The Developer shall coordinate with the District Engineer regarding the looped system and easements.

66. The Developer shall submit a detailed sewer study, prepared by a Registered Engineer, that identifies the peak flows of the project, required pipe sizes, depth of flow in pipe, velocity in the main lines, and the capacity of the existing infrastructure. Said study shall be submitted concurrently with the improvement plans for the project and the study shall be prepared to the satisfaction of the District Engineer.

67. The Developer shall submit a detailed potable water study, prepared by a Registered Engineer that identifies the peak demands of the project (including fire flow demands). The study shall identify velocity in the main lines, pressure zones, and the required pipe sizes. Said study shall be submitted concurrently with the improvement plans for the project and the study shall be prepared to the satisfaction of the District Engineer.

68. The Developer shall submit a detailed recycled water study, prepared by a Registered Engineer that identifies the peak demands of the project. The study shall identify velocity in the main lines and the required pipe sizes. Said study shall be submitted concurrently with the improvement plans for the project and the study shall be prepared to the satisfaction of the District Engineer.

Code Reminders

The project is subject to all applicable provisions of local ordinances, including but not limited to the following code requirements:

69. The tentative map shall expire twenty-four (24) months from the date this tentative map approval becomes final.

70. Developer shall exercise special care during the construction phase of this project to prevent offsite siltation. Planting and erosion control shall be provided in accordance with Carlsbad Municipal Code Chapter 15.16 (the Grading Ordinance) to the satisfaction of the City Engineer.

71. Approval of this request shall not excuse compliance with all applicable sections of the Zoning Ordinance and all other applicable City ordinances in effect at time of building permit issuance, except as otherwise specifically provided herein.

72. Premise identification (addresses) shall be provided consistent with Carlsbad Municipal Code Section 18.04.320.

73. Any signs proposed for this development shall at a minimum be designed in conformance with the City's Sign Ordinance and shall require review and approval of the Planning Director prior to installation of such signs.

74. Developer shall pay park-in-lieu fees to the City, prior to the approval of the final map as required by Chapter 20.44 of the Carlsbad Municipal Code.

75. Developer shall pay a landscape plan check and inspection fee as required by Section 20.08.050 of the Carlsbad Municipal Code.

76. Developer shall exercise special care during the construction phase of this project to prevent offsite siltation. Planting and erosion control shall be provided in accordance with Carlsbad Municipal Code Chapter 15.16 (the Grading Ordinance) to the satisfaction of the City Engineer.

. . .

. . .

NOTICE

Please take NOTICE that approval of your project includes the "imposition" of fees, dedications, reservations, or other exactions hereafter collectively referred to for convenience as "fees/exactions."

You have 90 days from date of approval to protest imposition of these fees/exactions. If you protest them, you must follow the protest procedure set forth in Government Code Section 66020(a), and file the protest and any other required information with the City Manager for processing in accordance with Carlsbad Municipal Code Section 3.32.030. Failure to timely follow that procedure will bar any subsequent legal action to attack, review, set aside, void, or annul their imposition.

You are hereby FURTHER NOTIFIED that your right to protest the specified fees/exactions DOES NOT APPLY to water and sewer connection fees and capacity charges, nor planning, zoning, grading or other similar application processing or service fees in connection with this project; NOR DOES IT APPLY to any fees/exactions of which you have previously been given a NOTICE similar to this, or as to which the statute of limitations has previously otherwise expired.

PASSED, APPROVED AND ADOPTED at a regular meeting of the Planning Commission of the City of Carlsbad, California, held on the **17th** day of **May 2006**, by the following vote, to wit:

AYES: Chairperson Montgomery, Commissioners Baker, Cardosa, Dominguez, Segall, and Whitton

NOES:

ABSENT: Commissioner Heineman

ABSTAIN:

MARTELL B. MONTGOMERY, Chairperson
CARLSBAD PLANNING COMMISSION

ATTEST:

DON NEU
Assistant Planning Director

RECORD COPY
DER 4/8/11
Initial Date

STORM WATER MANAGEMENT PLAN FOR POINSETTIA PROPERTIES (THE TIDES)

(FINAL ENGINEERING)

Job Number 14826-C

September 20, 2010
Revised: November 17, 2010
Revised: January 26, 2011
Revised: April 5, 2011

SWMP # 10-15

RICK ENGINEERING COMPANY

MYLAR SUBMITTAL

RICK
ENGINEERING COMPANY
rickengineering.com

STORM WATER MANAGEMENT PLAN
FOR
POINSETTIA PROPERTIES
(THE TIDES)

(FINAL ENGINEERING)

Job Number 14826-C

SWMP # 10-15

Jayne Janda-Timba
R.C.E. #70649
Exp. 06/11

REGISTERED PROFESSIONAL ENGINEER
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September 20, 2010
Revised: November 17, 2010
Revised: January 26, 2011
Revised: April 5, 2011

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STORM WATER MANAGEMENT PLAN
FOR
POINSETTIA PROPERTIES
(THE TIDES)

REVISION PAGE
April 5, 2011

This storm water management plan presents a revision to the January 26, 2010 report pursuant to plan check comments.

The following summarizes the plan check comments and how/if they have been addressed:

- Pg 9 & 10 – The text has been updated to include a brief summary of the biological evaluation results for the project and make reference to the copy of the biological evaluation letter, located in Appendix F of this report.
- App F – A copy of the biological evaluation letter, prepared by a biologist/wetland specialist (Glenn Lukos Associates, Inc.) to address the plancheck comments.

Revisions pursuant to the plan check comments are included within this revised SWMP.

STORM WATER MANAGEMENT PLAN
FOR
POINSETTIA PROPERTIES
(THE TIDES)

REVISION PAGE
January 26, 2011

This storm water management plan presents a revision to the November 17, 2010 report pursuant to plan check comments and a revised site plan layout.

The following summarizes the plan check comments and how/if they have been addressed:

- Title Page – The project title has been updated to "Poinsettia Properties (The Tides)." The text has been updated to reflect the change.
- Pg 1 – The text has been updated to address minor comments to reference the updated City of Carlsbad SUSMP date, January 14, 2011.
- Pg 9 – The text has been updated and elaborated to include additional description per the plancheck comments and to explain how the project meets hydromodification exemption from the final hydromodification management plan (HMP) requirement per the City of Carlsbad SUSMP, dated January 14, 2011, and final HMP, dated January 13, 2011.
- Pg 10 – The text has been updated to address minor comments.
- Pg 14 – The geotechnical supplemental letter has been revised by the geotechnical engineer (Earth-Strata, Inc.) to address the plancheck comments. A copy of the revised supplemental letter, prepared by the geotechnical engineer (Earth-Strata, Inc.), dated January 25, 2011, has been included in Appendix E of this report. The text has been revised to reference the revised date.
- Pg 24 – The Owner's Certification has been signed and dated.
- App A – The Applicant Information and Signature Box has been completed.

- App E – A copy of the revised supplemental letter, prepared by the geotechnical engineer (Earth-Strata, Inc.), dated January 25, 2011, has been included.
- Map Pocket 1 – The exhibit has been updated accordingly based on the redline comments and a revised site plan layout.
- Map Pocket 2 – The exhibit has been updated accordingly based on the redline comments and a revised site plan layout.
- Map Pocket 3 – A copy of Master Drainage Plan exhibit (Sheet 3 of 4) in the City of Carlsbad "Master Drainage and Storm Water Quality Management Plan," dated March 1994, has been included.

The plan check comments and revisions pursuant to the revised site plan are included within this revised SWMP.

STORM WATER MANAGEMENT PLAN
FOR
POINSETTIA PROPERTIES
(THE TIDES)

REVISION PAGE
November 17, 2010

This storm water management plan presents a revision to the September 20, 2010 report pursuant to first plan check comments and a revised site plan layout.

The following summarizes the plan check comments and how/if they have been addressed:

- Title Page – The project title has been updated to "La Marea" in lieu of "Carlsbad Tract CT 05-10." The text has been updated to reflect the change.
- Pg 1 – Page 1 of the report has been included to address project setting.
- Pg 9 – An explanation has been included to address how the project will be exempt from Hydromodification Criteria. Based on the as-built drawings, the project discharges into underground storm drains and directly discharges to Batiquitos Lagoon, which is located approximately 4000 feet south of the project.
- Pg 12 – The text has been updated to address minor comments.
- Pg 14 – A supplemental letter prepared by the geotechnical engineer (Earth-Strata, Inc.), dated November 11, 2010, explains that storm water is controlled and not allowed to infiltrate throughout the site. Therefore, infiltration approach was not utilized for the project. A copy of the supplemental letter has been included in Appendix E of this report. The text has been revised to include the explanation.
- Pg 15 – A brief description of the cistern with bioretention sizing has been included.
- Pg 18 – There will be two access points (i.e. inlet and outlet locations) for maintenance. An explanation has been included.
- Pg 24 – The owner's certification statement has been included. The signed certification sheet will be provided upon approval of the SWMP.

- App C – Due to the revised detention system (i.e. StormTrap), the IMP sizing calculations, rating curve, and HEC-1 analyses have been updated accordingly. A hand written backup calculation is provided on the IMP sizing calculation sheet to verify that the required water quality volume for cistern is correct.
- App D – In addition to the Cistern with Bioretention Facility details, the StormTrap detail also has been included in the Appendix.
- Map Pocket 1 – The exhibit has been updated accordingly based on the redline comments and a revised site plan layout.
- Map Pocket 2 – The exhibit has been updated accordingly based on the redline comments and a revised site plan layout.

The plan check comments and revisions pursuant to the revised site plan are included within this revised SWMP.

1.0 INTRODUCTION

This Storm Water Management Plan (SWMP) summarizes the post-construction storm water requirements for the Poinsettia Properties (The Tides) project (herein referred to as "the project") in support of final engineering. The project is located east of Interstate 5, at the southwest intersection of Poinsettia Lane and Lowder Lane in the City of Carlsbad. Please see the Vicinity Map at the end of Section 1.0 for the location of the project. The planned development consists of converting a vacant parcel that has been previously graded into a 31-lot development with roadway and utility improvements.

For the purposes of post-construction storm water quality management, the project will follow the guidelines and requirements set forth in the City of Carlsbad's "Standard Urban Storm Water Management Plan (SUSMP)," adopted January 14, 2011 (herein "SUSMP"). Based on the City of Carlsbad Storm Water Standards Questionnaire, the project is a "Priority Development Project." The following Priority Development Project category applies to the project: "Housing subdivisions of 10 or more dwelling units," "Streets, roads, highways, and freeways," and "More than 1-acre of disturbance." A copy of the City of Carlsbad Storm Water Standards Questionnaire for the project is located in Appendix A of this SWMP.

In the pre-project condition, storm water runoff from the site is conveyed in a westerly direction to an existing storm drain system under Interstate 5. As similar to the pre-project condition hydrologic characteristics, storm water runoff from the proposed site will be directed towards the northwest corner of the site prior to discharging to the existing storm drain system within Interstate 5 (I-5). The existing storm drain travels approximately 4000 feet south of the project site, where it ultimately discharges to Batiquitos Lagoon.

Constraints and opportunities for site design and selection of treatment and flow-control facilities have been identified for the project. Constraints to locating vegetated drainage facilities include a steep slope from east to west across the project site and slopes and walls along the front and sides of a majority of lots. Opportunities include utilizing non-contiguous sidewalks, landscaping within lots, and incorporating landscape/vegetated areas in the northwest corner lot that is proposed as a residential park for the project. This northwest park location provides a great opportunity as it is the lowest point of the project site and adjacent to the project discharge point.

An integrated Low Impact Development (LID) approach will be utilized to provide a long-term solution to water quality at the project site. This SWMP is also intended to ensure the effectiveness of the BMPs or IMPs through proper maintenance that is based on long-term fiscal planning.

Please refer to the DMA/IMP exhibit located in Map Pocket 1 of this report for locations of the drainage facilities and storm water LID/IMP facilities, including tributary drainage areas and flow patterns for the site. In addition, a copy of the Single-sheet BMP exhibit for the project has been provided in Map Pocket 2, which is intended for City use to verify construction and maintenance of the storm water facilities.

VICINITY MAP

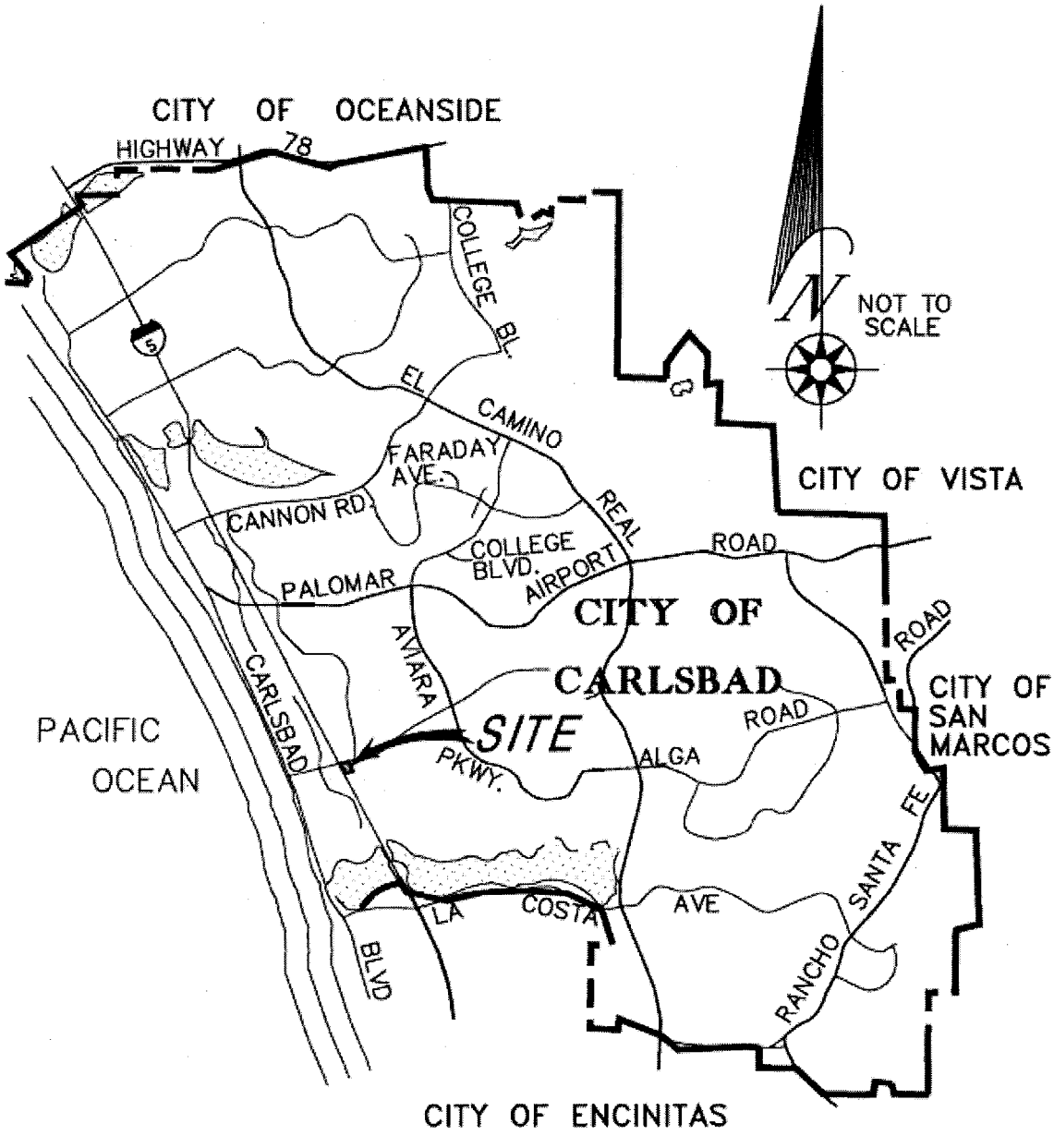

VICINITY MAP

NO SCALE

2.0 IDENTIFICATION OF POLLUTANTS & CONDITIONS OF CONCERN

Section 2 of the City of Carlsbad's SUSMP outlines the procedure for the selection of stormwater treatment facilities. The procedure begins with identification of pollutants with type of project/use, followed by identification of watershed and hydrologic unit basin number and receiving waters, list of impaired water bodies per the latest 303(d) List, and summary of primary pollutants of concern.

2.1 Identify Pollutants from the Project Area

Table 2-1 of the SUSMP, "Anticipated and Potential Pollutants Generated by Land Use Type" identifies general pollutant categories that are either anticipated or potential pollutants for general project categories. The following general project categories listed in Table 2-1 apply to the project: "Detached Residential Development" and "Streets, Highways & Freeways" categories shall be used to describe the anticipated or potential pollutants for the project. Table 2-1 of the SUSMP is reproduced on the following page, with the Priority Development Project categories applicable to the project highlighted.

Table 2-1. Anticipated and Potential Pollutants Generated by Land Use Type

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P(1)	X
Commercial Development > 100,000 ft^2	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry /Industrial Development	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Steep Hillside Development >5,000 ft^2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Source: City of Carlsbad Standard Urban Storm Water Mitigation Plan, 2010.

Based on the highlighted rows, the anticipated pollutants from the project include sediments, nutrients, heavy metals, organic compounds, trash & debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides.

2.2 Identify Pollutants of Concern in Receiving Waters

Based on Section 2 of the SUSMP, to identify pollutants of concern in receiving waters, the following analysis shall be conducted and reported in the project's SWMP: (1) for each of the proposed project discharge points, identify the receiving water(s), including hydrologic unit basin number(s), as identified in the most recent version of the "Water Quality Control Plan for the San Diego Basin," prepared by the SDRWQCB; and (2) identify any receiving waters, into which the developed area would discharge to, included in the "2006 CWA Section 303(d) List of Water Quality Limited Segments" approved by the SWRCB on October 25, 2006. List any and all pollutants for which the receiving waters are impaired.

Identification of Receiving Waters

According to the "Water Quality Control Plan for the San Diego Basin," dated September 8, 1994, prepared by the SDRWQCB, the project is located in the following hydrologic unit basin: Batiquitos Subarea in the San Marcos Hydrologic Area within the Carlsbad Hydrologic Unit. The corresponding hydrologic unit basin number designation is 904.51 (Region '9', Hydrologic Unit '04', Hydrologic Area '5', and Hydrologic Subarea '1'). An exhibit has been provided in Appendix B of this report titled, "Hydrologic Unit for Poinsettia Properties (The Tides)" which shows the project location within Hydrologic Unit 904.51. Project runoff discharges to an existing storm drain system in the I-5 corridor and ultimately discharges into Batiquitos Lagoon.

Identification of Receiving Water Impairments

On October 25, 2006, the SWRCB adopted the "2006 CWA Section 303(d) List of Water Quality Limited Segments" (2006 303(d) List). According to the 2006 303(d) List, several creeks within HU 904.51 are identified as an impaired water body, however, each is upstream of Batiquitos Lagoon and not a receiving water for this particular project. The Pacific Ocean Shoreline, specifically at Moonlight State Beach is listed for indicator bacteria.

Pollutants of Concern for the Project

Based on Table 2 and the 2006 CWA Section 303(d) List of Water Quality Limited Segments, the following are the project's pollutants of concern: sediments, nutrients, heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides. The Integrated Low Impact Development (LID) design approach and source control BMPs will be utilized to treat these pollutants to the maximum extent practicable (MEP).

3.0 SELECTION OF TREATMENT CONTROL BMPs

Treatment control BMPs are designed to remove pollutants contained in storm water runoff. Methods of pollutant removal include sedimentation settling, filtration, plant uptake, ion exchange, adsorption, and bacterial decomposition. Treatment control facilities may need to be used in series as a "Treatment Train" to achieve the desired level of pollutant removal for different pollutants.

In order to achieve compliance with the criteria in the SUSMP, the integrated Low Impact Development (LID) design approach has been selected for this project to size Integrated Management Practices (IMPs). Therefore, selection of treatment control BMPs is not required. The integrated LID design strategies are discussed in Section 6.0 of this report.

4.0 HYDROMODIFICATION STUDY AND FINDINGS

In accordance with the Municipal Permit and final hydromodification management plan (HMP), Section 2 of the SUSMP states that projects subject to Priority Development Project requirements might be required to implement measures so that post-development runoff rates and durations do not exceed pre-project conditions (hydromodification controls). The following methods may be used to meet HMP mitigation requirements: Design BMPs pursuant to standard sizing and specification criteria detailed in the SUSMP and the HMP/LID Sizing Calculator, use the automated sizing calculator (San Diego Sizing Calculator) that will allow project applicants to select and size IMP treatment devices or flow control basins, use a continuous simulation model to compare pre-project and mitigated post-project runoff and durations until compliance to flow control standards can be demonstrated, or identify a specified exemption defined in the SUSMP and final HMP.

The project discharges to a stabilized conveyance system that extends to a tidally-influenced area (Section 6.1 – Node 7 & 8 of the final Hydromodification Management Plan of San Diego County). Specifically, the project discharges into an existing storm drain system that ultimately discharges to Batiquitos Lagoon, located approximately 4000 feet south of the project site.

According to Section 6.1 of the final HMP, the project may be exempt from HMP criteria if the proposed project discharges to a hardened conveyance system that extends to the Pacific Ocean, San Diego Bay, a tidally-influenced area, an exempt river reach or reservoir. In order to qualify for this exemption (per Nodes 7 and 8), the SUSMP states that the existing hardened or rehabilitated conveyance system must continue uninterrupted to the exempt system. To help define the criteria, the final Hydromodification Management Plan (HMP) was referenced since Page 29 of the SUSMP states that the final HMP be referenced when more detailed information is needed. The alignment and continuation of the existing storm drain system was verified based on the City of Carlsbad Master Drainage Plan, titled "Master Drainage and Storm Water Quality Management Plan," dated March 1994. A copy of the exhibit from the Master Drainage Plan is included in Map Pocket 3 of this report for reference purposes.

In order to meet the exemption criteria per Node 7 and 8, the project proponent must demonstrate that the hardened or rehabilitated conveyance system has capacity to convey the 10-year ultimate condition flow through the conveyance system. According to Chapter 3 of the Master Drainage Plan, all existing storm drain lines were analyzed with respect to this criteria and recommendation made accordingly. Excerpts from the Master Drainage Plan are also included in Map Pocket 3 of this report for reference. As shown on the MDP Exhibit, the downstream system for this project was not identified as requiring improvements.

In addition to the exemption criteria for Node 7 and 8, the City of Carlsbad has requested that the project also meet the exemption criteria per Node 6. Therefore, a biological evaluation letter, titled "Biological Evaluation of Potential Effects to Biological Resources in Batiquitos Lagoon Associated with Increase in Stormwater Discharge to a Tributary Upstream of Batiquitos Lagoon Originating with the Carlsbad 27 project, Located in the City of Carlsbad; San Diego, California," dated April 1, 2011, was prepared by Glenn Lukos Associates, Inc. to identify and analyze any potential biological effects of the projects. The copy of the letter is included in Appendix F of this report. Based on the letter, it was determined that the increase in urban runoff leaving the project site will not have detrimental effect upon, or result in habitat conversion of, the receiving water body, Batiquitos Lagoon. Therefore, the project will be exempt from the final Hydromodification Management Criteria.

5.0 DRAINAGE STUDY

Pursuant to the Storm Water Management Plan (SWMP) Requirements Checklist, a drainage study is not required to compare pre-and post-development runoff rates since the project incorporates the integrated LID approach to meet the criteria in the SUSMP. However, a drainage study was prepared to compute storm water runoff from the project area and size proposed storm drains. A drainage study, titled "Drainage Study for Poinsettia Properties (The Tides)," dated January 26, 2011 or any revision thereafter (prepared by Rick Engineering Company, Job No. 14826-C), presents hydrologic and hydraulic analyses for the project.

6.0 INTEGRATED LOW IMPACT DEVELOPMENT (LID) DESIGN STRATEGIES

The following discussion addresses requirements of Section 4 of the SUSMP. As listed in the section, projects subject to Priority Development Project requirements, at minimum, must implement an integrated low impact development (LID) approach to develop and size Integrated Management Practices (IMPs) or "Alternatives to LID Design," which requires you to show how you satisfy each stormwater objective separately.

The project will implement an integrated LID approach to meet criteria described in the SUSMP. As an approach to Integrated LID design, the following sections will discuss LID strategies for managing runoff from the project.

6.1 Optimization of Site Layout

The project is located on the previously mass-graded lot and there are no creeks, wetlands and riparian habitats that the project needs to be set back from. Therefore, the project is not disturbing natural areas.

Wherever feasible, landscape and vegetated areas will be utilized to minimize directly connected impervious areas. In order to maximize canopy interception and water conservation, the project will provide native or drought tolerant vegetation for proposed landscape areas and include trees for canopy interception.

6.2 Use of Pervious Surfaces

The access road in the northwest corner of the project will utilize a pervious surface, specifically Grass Pave 2 (or equivalent).

6.3 Dispersal of Runoff to Pervious Areas

Where feasible, the project site incorporates landscaping areas on the site that collect runoff from impervious surfaces prior to collection into the storm drain system. Portions of roof top runoff will be discharged to the adjacent landscaping area before getting into the storm drain system. Also, the sidewalk is designed as non-contiguous, thereby allowing sidewalk runoff to flow across the vegetated parkway prior to conveyance within the street.

6.4 Use of Integrated Management Practices

The term "Integrated Management Practice" (IMP) refers to a facility that provides small-scale treatment, retention, and/or detention and is integrated into site layout, landscaping and drainage design. Following tables of the City SUSMP have been evaluated to determine appropriate IMPs for treatment of runoff potentially containing most pollutants of concern. The tables are renamed as Table 6-1 and 6-2 and reproduced below.

Table 6-1. Grouping of Potential Pollutants of Concern by Fate during Stormwater Treatment

Pollutants of Concern	*Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	High-rate biofilters	High-rate media filters	Trash Racks & Hydro-dynamic Devices
Coarse Sediment and Trash	High	High	High	High	High	High	*High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	*Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	*Low	Low

Source: City of Carlsbad Standard Urban Storm Water Mitigation Plan, 2010.

Table 6-2. Groups of Pollutants and Relative Effectiveness of Treatment Facilities

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

Source: City of Carlsbad Standard Urban Storm Water Mitigation Plan, 2010.

Following Integrated Management Practices (IMPs) are considered appropriate for treatment of runoff potentially containing most pollutants of concern and listed in Section 4 of the SUSMP:

- **Bioretention facilities**, which can be configured as swales, free-form areas, or planters to integrate with your landscape design – **Not Selected**
- **Flow-through planters**, which can be used near building foundations and other locations where infiltration to native soils is not desired – **Not Selected**
- **Dry wells**, which can be used only where soils are permeable – **Not Selected**
- **Cisterns**, in combination with a bioretention facility – **SELECTED**

In order to determine the most appropriate IMP (or combination thereof) for the project, several design alternatives were considered, including locating bioretention areas within each lot and within the parkway for the street; utilizing pervious pavement within the street; and utilizing the northwest corner of the project as a combined park and IMP location. The grades from east to west are steep and slopes along the front and side of the majority of lots made bioretention on each lot difficult to achieve. The street slopes allowed for pervious pavement along the north-south private driveway, however, a supplemental letter prepared by the geotechnical engineer (Earth-Strata, Inc.), dated January 25, 2011, explains that storm water should be controlled and not allowed to infiltrate throughout the site. A copy of the supplemental letter is included in Appendix E of this report. The northwest location is the low point for the project, therefore, it was determined as the most practical location for an IMP. The project layout required sump locations and did not allow for surface runoff of the entire 5-acre site to reach the park. As a result, an onsite storm drain system was needed, resulting in the selected IMP approach to utilize an underground cistern below the park, with an adjacent bioretention facility to treat the water quality storm event over approximately 24-hours of drawdown from the cistern.

Pursuant to the above descriptions of each category of IMPs, along with the constraints and opportunities that were evaluated with the project design, **cistern with bioretention facility** is the most suitable IMP for the project.

7.0 DOCUMENTATION OF DRAINAGE DESIGN

As stated in Section 4 of the SUSMP, the design documentation procedures begin with delineation of Drainage Management Areas (DMAs) prior to sizing each Integrated Management Practice (IMP). A brief description of the cistern with bioretention facility sizing is discussed below. For additional documentation of Drainage Management Areas (DMAs) and Integrated Management Practices (IMPs), please refer to the IMP sizing calculations in Appendix C and DMA/IMP exhibit in Map Pocket 1 of this report. A copy of the Single-sheet BMP exhibit has been included in Map Pocket 2 of this report for reference purposes.

Cistern with Bioretention Facility

- The cistern includes an orifice design at the outlet to restrict flow to provide a 24-hour drawdown time.
- Based on an orifice opening of 1.50 inches, the maximum discharge rate from the orifice is approximately 0.126 cfs.
- The minimum area of the bioretention facility is provided to treat the maximum discharge rate from the orifice based on a percolation rate of 5" per hour through the engineered soil.
- The outlet pipe from the cistern to the bioretention facility is 6" in diameter, which is greater than the minimum 2" requirement based on page 93 of the City SUSMP.
- The bioretention portion of the facility includes a perforated PVC underdrain and a 12"x12" atrium drain to adequately convey the maximum discharge rate entering the bioretention area.
- Since an orifice opening of 1.50 inches can be prone to clogging due to debris, several design features are included:
    - pre-treatment device upstream of cistern facility to help collect trash and debris
    - two (2) access points at the inlet and outlet locations of the cistern
    - a bypass system that ensures low-flows are conveyed to the cistern with bioretention facility; however, allows overflow and larger storm events to bypass directly to the downstream storm drain system.

8.0 SOURCE CONTROL BMPs

The term "source control BMP" refers to land use or site planning practices, or structures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff. The following discussion identifies the source control BMPs for the project.

Table 8-1. Permanent and Operational Source Control Measures

Potential source of runoff pollutants	Permanent source control BMPs	Operation source control BMPs
On-site storm drain inlets	• Mark all inlets with the words "No Dumping! Flows to Bay" or similar (i.e. Lagoon/Ocean)	• Maintain and periodically repaint or replace inlet markings. • Provide stormwater pollution prevention information to new site owners, lessees, or operators. • See applicable operation BMPs in Fact Sheet SC-44, "Drainage System Maintenance in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
Landscape / Outdoor Pesticide Use	• Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides. • Consider using pest-resistant plants. • To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	• Maintain landscaping using minimum or no pesticides. • See applicable operation BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com • Provide IPM information to new owners, lessees and operators.

9.0 OPERATION AND MAINTENANCE

The owner will ensure the ongoing maintenance for the permanent stormwater facilities proposed for the project. The owner will be responsible for properly disposing of waste material from their assumed areas within the project site, maintaining landscaping throughout those areas in a manner that will prevent soil erosion and minimize sediment transport, and maintaining drainage facilities located throughout the project area in a clean manner and in good repair. In addition, the owner will be responsible for maintaining all stormwater facilities

Typical Maintenance Procedures for Stormwater Facilities

The following stormwater facilities require permanent maintenance: pre-treatment facility (i.e. BaySeparator 4x4 System), underground detention facility as cistern (i.e. StormTrap - SingleTrap), and bioretention facility. The discussions below provide inspection criteria, maintenance indicators, and maintenance activities for the stormwater facilities.

Pre-treatment Facility (i.e. BaySeparator FS 4x4 Low-flow System)

The pre-treatment facility is intended only as pre-treatment purposes such as collecting sediments and large debris. The pre-treatment facility should require inspection, general maintenance and cleaning so it can remain free of litter, debris and sediment.

The following are typical maintenance activities for pre-treatment facility:

- Remove accumulated sediment, trash and debris from the vault. Remove any accumulated material obstructing inlet or outlet facilities.
- Inspect inlet and outlet facilities and/or other internal parts as applicable for structural integrity, and repair or replace if necessary.
- Refer to the manufacturer's specifications for maintenance procedures.

Underground Detention Facility (i.e. StormTrap – SingleTrap)

The underground detention facility is not intended as a treatment facility, however it will require maintenance. The underground detention system should require inspection, general maintenance and cleaning so it can remain free of litter, debris and sediment.

The following are typical maintenance activities for underground detention facility:

- Remove accumulated sediment, trash and debris from the vault. The vault can be accessed using two access points: at the inflow and outflow locations. Remove any accumulated material obstructing inlet or outlet facilities.
- Inspect inlet and outlet facilities and/or other internal parts as applicable for structural integrity, and repair or replace if necessary. This includes the restrictor plate located in the downstream cleanout structure of the detention system.
- For manufactured modular detention products, adhere to the manufacturer's specifications for maintenance procedures.

Refer to StormTrap for more information on maintenance activities.

Bioretention Facility

- Inspect bioretention areas at least twice annually for erosion, damage to vegetation, and sediment and debris accumulation, preferably at the start and end of the wet season to be sure the area is ready for winter and to schedule follow-up maintenance, if necessary. Inspection should also occur after periods of heavy runoff to ensure continued functionality of each system (i.e. – 0.5 inch storm events or greater).
- Grass height and mowing frequency (if appropriate) may not have a large impact on pollutant removal. Consequently, mowing may only be necessary once or twice a year for safety or aesthetics or to suppress weeds and woody vegetation.

- Trash tends to accumulate in bioretention areas. The need for litter removal is determined through periodic inspection, but litter should always be removed prior to mowing.
- Sediment accumulating in bioretention areas should be removed when it builds up to 75 mm (3 in.) at any spot, or covers vegetation.
- Regularly inspect bioretention areas for pools of standing water. Bioretention areas can become a nuisance and promote mosquito breeding in standing water if obstructions develop (e.g. debris accumulation, invasive vegetation) and/or if proper drainage is not implemented and maintained.
- Outfall locations that enter or exit facilities should be checked for erosion, ponding, trash/debris, and other structural damage.

In addition to the stormwater facilities intended as part of the IMP design, the following identifies additional LID and source control BMPs that required routine inspection and maintenance:

Landscaped Areas

Inspection and maintenance of the vegetated areas may be performed by the landscape maintenance contractor.

During inspection, the inspector shall check for the maintenance indicators given below:

- Erosion in the form of rills or gullies
- Ponding water
- Bare areas or less than 70% vegetation cover
- Animal burrows, holes, or mounds
- Trash

Routine maintenance of vegetated areas shall include mowing and trimming vegetation, and removal and proper disposal of trash.

If erosion, ponding water, bare areas, poor vegetation establishment, or disturbance by animals are identified during the inspection, additional (non-routine) maintenance will be required to correct the problem. For ponding water or erosion, see also inspection and maintenance measures for irrigation systems. In the event that any non-routine maintenance issues are persistently encountered such as poor vegetation establishment, erosion in the form of rills or gullies, or ponding water, the party responsible to ensure that maintenance is performed in perpetuity shall consult a licensed landscape architect or engineer as applicable.

As applicable, IPM procedures must be incorporated in any corrective measures that are implemented in response to damage by pests. This may include using physical barriers to keep pests out of landscaping; physical pest elimination techniques, such as, weeding, squashing, trapping, washing, or pruning out pests; relying on natural enemies to eat pests; or proper use of pesticides as a last line of defense. More information can be obtained at the UC Davis website (http://www.ipm.ucdavis.edu/WATER/U/index.html).

Concrete Stamping

Inspection/maintenance of the concrete stamping may be performed by the building/facilities maintenance contractor or other employees of the project owner, as applicable. In addition, there may be storm drain maintenance contractors who will perform this service for a fee.

During inspection, the inspector(s) shall check for the maintenance indicators given below:

- Faded, vandalized, or otherwise unreadable concrete stamping

There are no routine maintenance activities for the concrete stamping. If inspection indicates the concrete stamping is intact, no action is required.

If inspection indicates the concrete stamping is not legible, the concrete stamping shall be repaired or replaced as applicable.

Irrigation Systems

Inspection and maintenance of the irrigation system may be performed by the landscape maintenance contractor.

During inspection, the inspector shall check for the maintenance indicators given below:

- Eroded areas due to concentrated flow
- Ponding water
- Refer to proprietary product information for the irrigation system for other maintenance indicators, as applicable

Refer to proprietary product information for the irrigation system for routine maintenance activities for the irrigation system, as applicable. If none of the maintenance indicators listed above are identified during inspection of the irrigation system, no other action is required.

If any of the maintenance indicators listed above are identified during the inspection, additional (non-routine) maintenance will be required to restore the irrigation system to an operable condition. If inspection indicates breaks or leaks in the irrigation lines or individual sprinkler heads, the affected portion of the irrigation system shall be repaired. If inspection indicates eroded areas due to concentrated flow from the irrigation system, the eroded areas shall be repaired and the irrigation system shall be adjusted or repaired as applicable to prevent further erosion. If inspection indicates ponding water resulting from the irrigation system, the irrigation system operator shall identify the cause of the ponded water and adjust or repair the irrigation system as applicable to prevent ponding water. Refer to proprietary product information for the irrigation system for other non-routine maintenance activities as applicable.

Inspection and Maintenance Frequency

Typically, maintenance requirements are site and product specific, and will depend on the particular land use activities and the amount of gross pollutants and sediment generated within the drainage areas. If it is determined during the regularly scheduled inspection and routine maintenance that the BMPs/IMPs require more frequent maintenance to remove accumulated sediment, trash or debris, it may be necessary to increase the frequency of inspection and routine maintenance.

The Table below lists the stormwater facilities to be inspected and maintained and the minimum frequency of inspection and maintenance activities.

Table 9-1. Summary Table of Inspection and Maintenance Frequency (Minimum)

BMP / IMP	Inspection Frequency	Maintenance Frequency
Pre-treatment Facility (i.e. BaySeparator FS 4x4 Low-flow System)	Twice a year, and after major storm events	Routine maintenance to remove accumulated materials such as trash and debris: twice a year, on or before September 30th As-needed maintenance based on maintenance indicators in this section
Underground Detention Facility (i.e. StormTrap – SingleTrap)	Twice a year, and after major storm events	Routine maintenance to remove accumulated materials such as trash and debris: twice a year, on or before September 30th As-needed maintenance based on maintenance indicators in this section
Bioretention Facility	Twice a year, and after major storm events	Routine maintenance to remove accumulated materials such as trash and debris: twice a year, on or before September 30th As-needed maintenance based on maintenance indicators in this section
Landscaped Areas	Monthly	Routine mowing and trimming and trash removal: monthly Non-routine maintenance as-needed based on maintenance indicators in this section
Concrete Stamping	Annual	As-needed based on maintenance indicators in this section
Irrigation Systems	Monthly	As-needed based on maintenance indicators in this section

Qualifications of Maintenance Personnel

The LID and treatment control BMPs or IMPs are features that are integrated into site layout, landscaping and drainage design. The typical maintenance activities for landscaped areas and bioretention facility can generally be accomplished by typical landscape maintenance personnel. However, maintenance of the pre-treatment device and underground detention facility (i.e. StormTrap SingleTrap) may involve handing of potentially hazardous material; therefore, the maintenance operator must be trained in handling and disposing of hazardous waste. The contracting of additional services may be necessary if non-routine cleaning, disposal or repair is required for any of the project's stormwater facilities.

If evidence of illegal dumping of hazardous materials is identified in a stormwater facility, the illegally dumped materials shall be cleaned up and property disposed of. Specialized clean up and disposal of illegally dumped hazardous materials may be outside of the owner expertise. In this event, the owner shall contract for additional cleaning and disposal services as necessary if non-routine cleaning and disposal is required.

Record Keeping Requirements

The owner is responsible to ensure implementation and funding of maintenance of permanent BMPs and shall maintain records documenting the inspection and maintenance activities. Parties responsible for the operation and maintenacne shall retain records for at least 5 years.

10.0 SWMP CERTIFICATION STATEMENTS

Preparer's Certification

The selection, sizing, and preliminary design of stormwater treatment and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments.

Jayne Janda-Timba
R.C.E #70649, Exp. 06/11

4.7.11
Date

Owner's Certification

I certify that, as owner of the property described herein, I have read and understand the requirements of this Storm Water Management Plan (SWMP) and that I am responsible for ensuring that all storm water treatment measures described within said SWMP will be properly implemented, monitored and maintained.

Darren Bolton
1500 S. Haven Avenue, Suite 100
Ontario, CA 91761
(909) 937-3270

4-7-11
Date

APPENDIX A

City of Carlsbad
Storm Water Standards Questionnaire

CITY OF CARLSBAD

STORM WATER STANDARDS QUESTIONNAIRE E-34

Development Services
Land Development Engineering
1635 Faraday Avenue
760-602-2750
www.carlsbadca.gov

INSTRUCTIONS:

To address post-development pollutants that may be generated from development projects, the City requires that new development and significant redevelopment priority projects incorporate Permanent Storm Water Best Management Practices (BMP's) into the project design per the City's Standard Urban Stormwater Management Plan (SUSMP). To view the SUSMP, refer to the Engineering Standards (Volume 4, Chapter 2) at www.carlsbadca.gov/standards.

Initially this questionnaire must be completed by the applicant in advance of submitting for a development application (subdivision, discretionary permits and/or construction permits). The results of the questionnaire determine the level of storm water standards that must be applied to a proposed development or redevelopment project. Depending on the outcome, your project will either be subject to 'Standard Stormwater Requirements' or be subject to additional criteria called 'Priority Development Project Requirements'. Many aspects of project site design are dependent upon the storm water standards applied to a project.

Your responses to the questionnaire represent an initial assessment of the proposed project conditions and impacts. City staff has responsibility for making the final assessment after submission of the development application. If staff determines that the questionnaire was incorrectly filled out and is subject to more stringent storm water standards than initially assessed by you, this will result in the return of the development application as incomplete. In this case, please make the changes to the questionnaire and resubmit to the City.

If you are unsure about the meaning of a question or need help in determining how to respond to one or more of the questions, please seek assistance from Land Development Engineering staff.

A separate completed and signed questionnaire must be submitted for each new development application submission. Only one completed and signed questionnaire is required when multiple development applications for the same project are submitted concurrently. In addition to this questionnaire, you must also complete, sign and submit a Project Threat Assessment Form with construction permits for the project.

Please start by completing Section 1 and follow the instructions. When completed, sign the form at the end and submit this with your application to the city.

SECTION 1	NEW DEVELOPMENT	
Does your project meet one or more of the following criteria:	**YES**	**NO**
1. ***Housing subdivisions of 10 or more dwelling units.*** Examples: single family homes, multi-family homes, condominium and apartments	✓	
2. ***Commercial – greater than 1-acre.*** Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.		✓
3. ***Heavy Industrial / Industry- greater than 1 acre.*** Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).		✓
4. ***Automotive repair shop.*** A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, and 7536-7539		✓
5. ***Restaurants.*** Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.		✓

CITY OF CARLSBAD

STORM WATER STANDARDS QUESTIONNAIRE E-34

Development Services
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760-602-2750
www.carlsbadca.gov

6.	***Hillside development.*** Any development that creates more than 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent (25%) or greater.		✓
7.	***Environmentally Sensitive Area (ESA)***[1]. All development located within or directly adjacent[2] to or discharging directly[3] to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet or more of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site 10% or more of its naturally occurring condition.		✓
8.	***Parking lot***. Area of 5,000 square feet or more, or with 15 or more parking spaces, and potentially exposed to urban runoff		✓
9.	***Streets, roads, highways, and freeways***. Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles	✓	
10.	***Retail Gasoline Outlets.*** Serving more than 100 vehicles per day and greater than 5,000 square feet		✓
11.	***Coastal Development Zone.*** Any project located within 200 feet of the Pacific Ocean and (1) creates more than 2500 square feet of impervious surface or (2) increases impervious surface on property by more than 10%.		✓
12.	***More than 1-acre of disturbance.*** Project results in the disturbance of 1-acre or more of land and is considered a Pollutant-generating Development Project[4].	✓	

1 Environmentally Sensitive Areas include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees.

2 "Directly adjacent" means situated within 200 feet of the Environmentally Sensitive Area.

3 "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flow from adjacent lands.

4 Pollutant-generating Development Projects are those projects that generate pollutants at levels greater than background levels. In general, these include all projects that contribute to an exceedance to an impaired water body or which create new impervious surfaces greater than 5000 square feet and/or introduce new landscaping areas that require routine use of fertilizers and pesticides. In most cases linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered Pollutant-generating Development Projects if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces.

INSTRUCTIONS:

Section 1 Results:

If you answered **YES** to **ANY** of the questions above, your project is subject to **Priority Development Project** requirements. Skip Section 2 and please proceed to Section 3. Check the "meets PRIORITY DEVELOPMENT PROJECT requirements" box in Section 3. Additional storm water requirements will apply per the SUSMP.

If you answered **NO** to **ALL** of the questions above, then please proceed to Section 2 and follow the instructions.

CITY OF CARLSBAD

STORM WATER STANDARDS QUESTIONNAIRE E-34

Development Services
Land Development Engineering
1635 Faraday Avenue
760-602-2750
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SECTION 2	SIGNIFICANT REDEVELOPMENT	
INSTRUCTIONS: Complete the questions below regarding your project	**YES**	**NO**
1. Project results in the disturbance of 1-acre or more of land and is considered a Pollutant-generating Development Project *?		
INSTRUCTIONS: If you answered **NO**, please proceed to question 2. If you answered **YES**, then you **ARE** a significant redevelopment and you **ARE** subject to **PRIORITY DEVELOPMENT PROJECT** requirements. *Please check the "meets PRIORITY DEVELOPMENT PROJECT requirements" box in Section 3 below.*		
2. Is the project redeveloping an existing priority project type? (Priority projects are defined in Section 1)		
INSTRUCTIONS: If you answered **YES**, please proceed to question 3. If you answered **NO**, then you **ARE NOT a** significant redevelopment and your project is subject to **STANDARD STORMWATER REQUIREMENTS.** Please check the "does not meet PDP requirements" box in Section 3 below.		
3. Is the work limited to trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk; bike lane on existing road and/or routine maintenance of damaged pavement such as pothole repair? Resurfacing/reconfiguring parking lots is where the work does not expose underlying soil during construction.		
INSTRUCTIONS: If you answered **NO**, then proceed to question 4. If you answered **YES**, then you **ARE NOT** a significant redevelopment and your project is subject to **STANDARD STORMWATER REQUIREMENTS.** Please check the "does not meet PDP requirements" box in Section 3 below.		
4. Will your redevelopment project create, replace, or add at least 5,000 square feet of impervious surfaces on existing developed property **or** will your project be located within 200 feet of the Pacific Ocean and (1) create 2500 square feet or more of impervious surface or (2) increases impervious surface on the property by more than 10%? Replacement of existing impervious surfaces includes any activity that is not part of routine maintenance where impervious material(s) are removed, exposing underlying soil during construction.		
INSTRUCTIONS: If you answered **YES**, you **ARE** a significant redevelopment, and you **ARE** subject to **PRIORITY DEVELOPMENT PROJECT** requirements. Please check the "meets PRIORITY DEVELOPMENT PROJECT requirements" box in Section 3 below. Review SUSMP to find out if SUSMP requirements apply to your project envelope or the entire project site. If you answered **NO**, then you **ARE NOT a** significant redevelopment and your project is subject to **STANDARD STORMWATER REQUIREMENTS.** Please check the "does not meet PDP requirements" box in Section 3 below.		

**for definition see Footnote 4 on page 2*

SECTION 3	QUESTIONNAIRE RESULTS
☑	My project meets **PRIORITY DEVELOPMENT PROJECT (PDP)** requirements and must comply with additional stormwater criteria per the SUSMP and I understand I must prepare a Storm Water Management Plan for submittal at time of application. I understand flow control (hydromodification) requirements may apply to my project. Refer to SUSMP for details.
☐	My project **does not meet PDP** requirements and must only comply with **STANDARD STORMWATER REQUIREMENTS** per the SUSMP. As part of these requirements, I will incorporate low impact development strategies throughout my project.

Applicant Information and Signature Box

Address:	Assessor's Parcel Number(s): 214-471-53
Applicant Name: DARREN Bolton	Applicant Title: Director of Land Dev.
Applicant Signature:	Date: 2-4-11

This Box for City Use Only

City Concurrence:	YES	NO
By:		
Date:		
Project ID:		

APPENDIX B

Hydrologic Unit Map

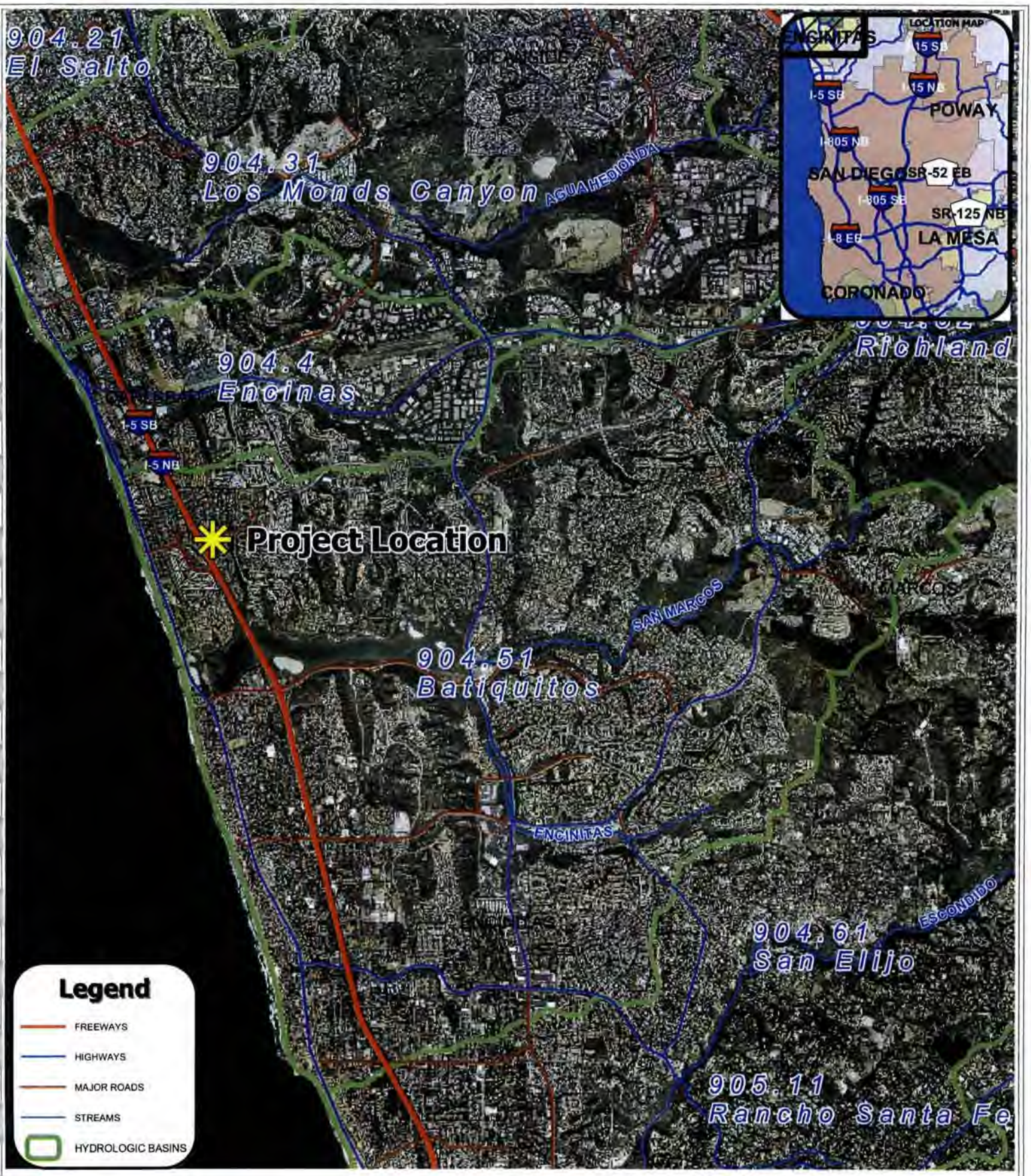

RICK ENGINEERING COMPANY

PREPARED BY GIS SERVICES DIVISION

1 inch equals 6,000 feet

0 3,000 6,000 12,000 Feet

EXHIBIT DATE: 1/26/2011 REC JN: 14826-C

R:\14826\GIS\x14826C_HydrologicUnitBaseMap.mxd

HYDROLOGIC UNIT FOR POINSETTIA PROPERTIES (THE TIDES)

THIS PROJECT LOCATED WITHIN THE CITY OF CARLSBAD

APPENDIX C

Water Quality Treatment Calculations

J-14826-C
Poinsettia Properties (The Tides)
January 26, 2011

Integrated Management Practice (IMP) Sizing Calculations

Cistern with Bioretention Facility

DMA Name	DMA (ft^2)	Surface Type	Runoff Factor	Area X Weighted Runoff Factor						
A-1	112603	Impervious Area (55%) - Roof, Sidewalk, Street	1.0	112603						
A-2	92129	Pervious Area (45%) - Landscaped/Vegetated Area, Grasscrete, Park	0.1	9213	85th Percentile Rainfall (inches)	Required WQ Volume for Cistern (ft^3)	Discharge Orifice Opening Size per HEC-1 Analyses (inches)	Maximum Outflow Q_{max} from the Orifice (cfs [1])	Minimum Size [2] (ft^2)	Size Planned (ft^2)
Total	204732			121816	0.60	6091	1.50	0.126	1089	1115

Note:

1. "cfs" = cubic feet per second
2. The calculation assumes areas from the northwest corner of the project (Lot 6) to drain to the IMP; however, in reality, runoff from this area will be collected by the downstream cleanout location. Therefore, this area will be considered as "self-treating" area. Areas from Lot 12 and 31 are also "self-treating" areas, but not considered in the sizing calculation.

Note: 121816 ft^2 x 0.60 in x (1 ft / 12 in) = 6091 ft^3

J-14826-C
Poinsettia Properties (The Tides)
January 26, 2011

Rating Curve - Backup

"d" of orifice opening (in): 1.5

Orifice Coefficient: 0.6

Basin Floor Elevation, h (ft): 0.0

SE (feet)	SV (ft^3)	SV (acres)	SQ (cfs)
0.0	0	0.000	0.000
0.5	532	0.012	0.039
1.0	1202	0.028	0.057
1.5	1870	0.043	0.071
2.0	2536	0.058	0.082
2.5	3204	0.074	0.092
3.0	3870	0.089	0.101
3.5	4540	0.104	0.110
4.0	5209	0.120	0.117
4.5	5877	0.135	0.124
5.0	6542	0.150	0.131

Note:
Orifice Equation: CA(2gh)^(1/2)

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November 9, 2010
Page 1 of 2

CARLSBAD TRACT CT 05-10 - CARLSBAD, CA
STAGE STORAGE BREAKDOWN
5'- 0" SINGLETRAP
TOTAL VOLUME: 6542 (C.F.)

Nobuya Murakami
Rick Engineering Company
5620 Friars Road
San Diego, CA 92110

.5' Storage

Type #	Volume	x	Quantity	=	Subtotal
1	36.00	x	6	=	216
2	16.00	x	6	=	96
3	38.00	x	4	=	152
4 & 5	17.00	x	4	=	68
6	40.50	x	0	=	0
7	18.50	x	0	=	0
Total Storage @ .5' of Depth:					532

1' Storage

Type #	Volume	x	Quantity	=	Subtotal
1	82.00	x	6	=	492
2	38.00	x	6	=	228
3	82.50	x	4	=	330
4 & 5	38.00	x	4	=	152
6	82.50	x	0	=	0
7	38.00	x	0	=	0
Total Storage @ 1' of Depth:					1202

1.5' Storage

Type #	Volume	x	Quantity	=	Subtotal
1	128.50	x	6	=	771
2	59.50	x	6	=	357
3	126.50	x	4	=	506
4 & 5	59.00	x	4	=	236
6	124.50	x	0	=	0
7	58.00	x	0	=	0
Total Storage @ 1.5' of Depth:					1870

2' Storage

Type #	Volume	x	Quantity	=	Subtotal
1	174.50	x	6	=	1047
2	81.50	x	6	=	489
3	170.50	x	4	=	682
4 & 5	79.50	x	4	=	318
6	166.50	x	0	=	0
7	77.50	x	0	=	0
Total Storage @ 2' of Depth:					2536

2.5' Storage

Type #	Volume	x	Quantity	=	Subtotal
1	220.50	x	6	=	1323
2	103.50	x	6	=	621
3	214.50	x	4	=	858
4 & 5	100.50	x	4	=	402
6	208.50	x	0	=	0
7	97.50	x	0	=	0
Total Storage @ 2.5' of Depth:					3204

3' Storage

Type #	Volume	x	Quantity	=	Subtotal
1	267.00	x	6	=	1602
2	125.00	x	6	=	750
3	258.50	x	4	=	1034
4 & 5	121.00	x	4	=	484
6	250.50	x	0	=	0
7	117.00	x	0	=	0
Total Storage @ 3' of Depth:					3870

3.5' Storage

Type #	Volume	x	Quantity	=	Subtotal
1	313.00	x	6	=	1878
2	147.00	x	6	=	882
3	303.00	x	4	=	1212
4 & 5	142.00	x	4	=	568
6	292.50	x	0	=	0
7	137.00	x	0	=	0
Total Storage @ 3.5' of Depth:					4540

4' Storage

Type #	Volume	x	Quantity	=	Subtotal
1	359.50	x	6	=	2157
2	169.00	x	6	=	1014
3	347.00	x	4	=	1388
4 & 5	162.50	x	4	=	650
6	334.50	x	0	=	0
7	156.50	x	0	=	0
Total Storage @ 4' of Depth:					5209

4.5' Storage

Type #	Volume	x	Quantity	=	Subtotal
1	405.50	x	6	=	2433
2	191.00	x	6	=	1146
3	391.00	x	4	=	1564
4 & 5	183.50	x	4	=	734
6	376.50	x	0	=	0
7	176.50	x	0	=	0
Total Storage @ 4.5' of Depth:					5877

5' Storage

Type #	Volume	x	Quantity	=	Subtotal
1	451.50	x	6	=	2709
2	212.50	x	6	=	1275
3	435.00	x	4	=	1740
4 & 5	204.50	x	4	=	818
6	418.50	x	0	=	0
7	196.00	x	0	=	0
Total Storage @ 5' of Depth:					6542

SINGLETRAP®
PRECAST CONCRETE MODULAR STORM WATER DETENTION

GET THE PRECAST ADVANTAGE!

DOUBLETRAP®
PRECAST CONCRETE MODULAR STORM WATER DETENTION

J-14826-C
Poinsettia Properties
January 26, 2011

Drawdown Time Calculations

Note: Following data were obtained from TAPE 21 as resulted from HEC-1 analyses.
Each ordinate = 10 minutes

WQ_v (acre-feet)	0.140	@	WSEL (ft)	4.67	→	$Q_{out, max}$ (cfs)	0.126

Ordinate	*1st*	*2nd*	*3rd*	*4th*	*5th*	*6th*	*7th*	*8th*	*9th*	*10th*
0	0	0.008	0.024	0.04	0.047	0.054	0.06	0.066	0.071	0.076
100	0.081	0.086	0.09	0.095	0.1	0.105	0.11	0.115	0.12	0.126
200	0.474	2.073	1.401	2.791	6.752	7.92	1.656	1.165	0.948	0.791
300	0.707	0.594	0.574	0.5	0.5	0.44	0.131	0.13	0.13	0.129
400	0.128	0.127	0.126	0.125	0.125	0.124	0.123	0.122	0.121	0.121
500	0.12	0.119	0.118	0.118	0.117	0.116	0.116	0.115	0.114	0.113
600	0.113	0.112	0.111	0.111	0.11	0.109	0.108	0.107	0.107	0.106
700	0.105	0.104	0.103	0.102	0.101	0.101	0.1	0.099	0.098	0.097
800	0.096	0.096	0.095	0.094	0.093	0.093	0.092	0.091	0.09	0.089
900	0.089	0.088	0.087	0.086	0.086	0.085	0.084	0.083	0.083	0.082
1000	0.081	0.08	0.08	0.079	0.078	0.077	0.076	0.076	0.075	0.074
1100	0.073	0.073	0.072	0.071	0.07	0.07	0.069	0.068	0.067	0.066
1200	0.065	0.064	0.064	0.063	0.062	0.061	0.06	0.06	0.059	0.058
1300	0.057	0.057	0.056	0.055	0.054	0.053	0.052	0.051	0.051	0.05
1400	0.049	0.048	0.048	0.047	0.046	0.045	0.045	0.044	0.043	0.043
1500	0.042	0.041	0.041	0.04	0.04	0.039	0.037	0.036	0.034	0.032
1600	0.031	0.03	0.028	0.027	0.026	0.025	0.024	0.023	0.022	0.021
1700	0.02	0.019	0.018	0.017	0.017	0.016	0.015	0.015	0.014	0.013
1800	0.013	0.012	0.012	0.011	0.011	0.01	0.01	0.009	0.009	0.008
1900	0.008	0.008	0.007	0.007	0.007	0.006	0.006	0.006	0.006	0.005
2000	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.003
2100	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002
2200	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001
2300	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
2400	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
2500	0.001	0.001	0.001	0	0	0	0	0	0	0
2600	0	0	0	0	0	0	0	0	0	0
2700	0	0	0	0	0	0	0	0	0	0
2800	0	0	0	0	0	0	0	0	0	0
2900	0	0	0	0	0	0	0	0	0	0
3000	0	0	0	0	0	0	0	0	0	0
3100	0	0	0	0	0	0	0	0	0	0
3200	0	0	0	0	0	0	0	0	0	0
3300	0	0	0	0	0	0	0	0	0	0
3400	0	0	0	0	0	0	0	0	0	0
3500	0	0	0	0	0	0	0	0	0	0
3600	0	0	0	0	0	0	0	0	0	0
3700	0	0	0	0	0	0	0	0	0	0
3800	0	0	0	0	0	0	0	0	0	0
3900	0	0	0	0	0	0	0	0	0	0

Drawdown Time (hours): **24.0** (Measured to Q_{out} = 0.01 cfs) (OK)

```
****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   18JAN11  TIME  13:42:08  *
*                                      *
****************************************
```

FOR DRAWDOWN TIME
CALCULATION
PURPOSE ONLY

(CISTERN AS A LOW FLOW STORAGE)

```
****************************************
*
*    U.S. ARMY CORPS OF ENGINEERS
*    HYDROLOGIC ENGINEERING CENTER
*          609 SECOND STREET
*       DAVIS, CALIFORNIA 95616
*           (916) 756-1104
*
****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

```
          LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

                        *DIAGRAM
*** FREE ***
             1          ID   J-14826-C; POINSETTIA PROPERTIES (THE TIDES)
             2          ID   INTEGRATED MANAGEMENT PRACTICE - CISTERN WITH BIORETENTION FACILITY
             3          ID   THE PURPOSE OF THIS ANALYSES IS TO DETERMINE A DRAWDOWN TIME - STORM TRAP
             4          ID   JANUARY 18, 2011  FILE NAME: CTPLF.HC1
             5          IT      10 01JAN90    1200     400
             6          IO       5       0

             7          KK   CTPLF
             8          KO       2       2       0       0      21
             9          KM   RUN DATE   9/16/2010
            10          KM   RATIONAL METHOD HYDROGRAPH PROGRAM
            11          KM   COPYRIGHT 1992, 2001, RICK ENGINEERING COMPANY
            12          KM   6HR RAINFALL IS  2.5  INCHES
            13          KM   RATIONAL METHOD RUNOFF COEFFICIENT IS  0.6
            14          KM   RATIONAL METHOD TIME OF CONCENTRATION IS  9  MIN.
            15          KM   FOR THIS DATA TO RUN PROPERLY THIS IT CARD MUST BE ADDED TO YOUR HEC-1
            16          KM   IT 2 01JAN90 1200 200
            17          BA  0.0073
            18          IN       9 01JAN90    1153
            19          QI       0       0     0.4     0.4     0.5     0.5     0.5     0.5     0.5     0.5
            20          QI     0.5     0.6     0.6     0.6     0.6     0.7     0.7     0.7     0.8     0.8
            21          QI     0.9       1     1.1     1.2     1.5     1.7     2.5     2.4    13.9       2
            22          QI     1.4     1.1     0.9     0.8     0.7     0.6     0.6     0.5     0.5     0.5
            23          QI     0.4       0       0       0       0       0       0       0       0      .0
            24          QI       0       0

            25          KK  DETAIN
            26          KO       2       2       0       0      21
            27          RS       1    STOR      -1
            28          SV       0   0.012   0.028   0.043   0.058   0.074   0.089   0.104   0.120   0.135
            29          SV   0.150   0.165
            30          SQ       0   0.039   0.057   0.071   0.082   0.092   0.101   0.110   0.117   0.124
            31          SQ   0.131    20.0
            32          SE       0     0.5     1.0     1.5     2.0     2.5     3.0     3.5     4.0     4.5
            33          SE     5.0     5.5
            34          ZZ
```

```
                 SCHEMATIC DIAGRAM OF STREAM NETWORK
INPUT
 LINE       (V) ROUTING           (--->) DIVERSION OR PUMP FLOW

  NO.       (.) CONNECTOR         (<---) RETURN OF DIVERTED OR PUMPED FLOW

    7        CTPLF
                 V
                 V
   25       DETAIN

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
```

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****************************************                    ****************************************
*                                      *                    *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *    U.S. ARMY CORPS OF ENGINEERS
*              JUN   1998              *                    *    HYDROLOGIC ENGINEERING CENTER
*           VERSION 4.1                *                    *          609 SECOND STREET
*                                      *                    *       DAVIS, CALIFORNIA 95616
*  RUN DATE   18JAN11  TIME  13:42:08  *                    *           (916) 756-1104
*                                      *                    *
****************************************                    ****************************************
```

```
                         J-14826-C; POINSETTIA PROPERTIES (THE TIDES)
                         INTEGRATED MANAGEMENT PRACTICE - CISTERN WITH BIORETENTION FACILITY
                         THE PURPOSE OF THIS ANALYSES IS TO DETERMINE A DRAWDOWN TIME - STORM TRAP
                         JANUARY 18, 2011  FILE NAME: CTPLF.HC1

  6 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN          10  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1JAN90  STARTING DATE
                      ITIME        1200  STARTING TIME
                         NQ         400  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      4JAN90  ENDING DATE
                     NDTIME        0630  ENDING TIME
                      ICENT          19  CENTURY MARK

                 COMPUTATION INTERVAL     .17 HOURS
                      TOTAL TIME BASE   66.50 HOURS

          ENGLISH UNITS
               DRAINAGE AREA          SQUARE MILES
               PRECIPITATION DEPTH    INCHES
               LENGTH, ELEVATION      FEET
               FLOW                   CUBIC FEET PER SECOND
               STORAGE VOLUME         ACRE-FEET
               SURFACE AREA           ACRES
               TEMPERATURE            DEGREES FAHRENHEIT


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** **


            **************
            *            *
  7 KK      *     CTPLF  *
            *            *
            **************

  8 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           2  PRINT CONTROL
                      IPLOT           2  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
```

```
IPNCH          0  PUNCH COMPUTED HYDROGRAPH
 IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
ISAV2        400  LAST ORDINATE PUNCHED OR SAVED
TIMINT      .167  TIME INTERVAL IN HOURS

    RUN DATE   9/16/2010
    RATIONAL METHOD HYDROGRAPH PROGRAM
    COPYRIGHT 1992, 2001, RICK ENGINEERING COMPANY
    6HR RAINFALL IS  2.5  INCHES
    RATIONAL METHOD RUNOFF COEFFICIENT IS  0.6
    RATIONAL METHOD TIME OF CONCENTRATION IS  9  MIN.
    FOR THIS DATA TO RUN PROPERLY THIS IT CARD MUST BE ADDED TO YOUR HEC-1
    IT 2 01JAN90 1200 200

18 IN        TIME DATA FOR INPUT TIME SERIES
      JXMIN          9  TIME INTERVAL IN MINUTES
     JXDATE     1JAN90  STARTING DATE
     JXTIME       1153  STARTING TIME

           SUBBASIN RUNOFF DATA

17 BA        SUBBASIN CHARACTERISTICS
      TAREA        .01  SUBBASIN AREA

                                        ***
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****

HYDROGRAPH AT STATION CTPLF

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DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW
1 JAN 1200	1	0.	*	2 JAN 0440	101	0.	*	2 JAN 2120	201	0.	*	3 JAN 1400	301	0.
1 JAN 1210	2	0.	*	2 JAN 0450	102	0.	*	2 JAN 2130	202	0.	*	3 JAN 1410	302	0.
1 JAN 1220	3	0.	*	2 JAN 0500	103	0.	*	2 JAN 2140	203	0.	*	3 JAN 1420	303	0.
1 JAN 1230	4	1.	*	2 JAN 0510	104	0.	*	2 JAN 2150	204	0.	*	3 JAN 1430	304	0.
1 JAN 1240	5	1.	*	2 JAN 0520	105	0.	*	2 JAN 2200	205	0.	*	3 JAN 1440	305	0.
1 JAN 1250	6	1.	*	2 JAN 0530	106	0.	*	2 JAN 2210	206	0.	*	3 JAN 1450	306	0.
1 JAN 1300	7	1.	*	2 JAN 0540	107	0.	*	2 JAN 2220	207	0.	*	3 JAN 1500	307	0.
1 JAN 1310	8	1.	*	2 JAN 0550	108	0.	*	2 JAN 2230	208	0.	*	3 JAN 1510	308	0.
1 JAN 1320	9	1.	*	2 JAN 0600	109	0.	*	2 JAN 2240	209	0.	*	3 JAN 1520	309	0.
1 JAN 1330	10	1.	*	2 JAN 0610	110	0.	*	2 JAN 2250	210	0.	*	3 JAN 1530	310	0.
1 JAN 1340	11	1.	*	2 JAN 0620	111	0.	*	2 JAN 2300	211	0.	*	3 JAN 1540	311	0.
1 JAN 1350	12	1.	*	2 JAN 0630	112	0.	*	2 JAN 2310	212	0.	*	3 JAN 1550	312	0.
1 JAN 1400	13	1.	*	2 JAN 0640	113	0.	*	2 JAN 2320	213	0.	*	3 JAN 1600	313	0.
1 JAN 1410	14	1.	*	2 JAN 0650	114	0.	*	2 JAN 2330	214	0.	*	3 JAN 1610	314	0.
1 JAN 1420	15	1.	*	2 JAN 0700	115	0.	*	2 JAN 2340	215	0.	*	3 JAN 1620	315	0.
1 JAN 1430	16	1.	*	2 JAN 0710	116	0.	*	2 JAN 2350	216	0.	*	3 JAN 1630	316	0.
1 JAN 1440	17	1.	*	2 JAN 0720	117	0.	*	3 JAN 0000	217	0.	*	3 JAN 1640	317	0.
1 JAN 1450	18	1.	*	2 JAN 0730	118	0.	*	3 JAN 0010	218	0.	*	3 JAN 1650	318	0.
1 JAN 1500	19	1.	*	2 JAN 0740	119	0.	*	3 JAN 0020	219	0.	*	3 JAN 1700	319	0.
1 JAN 1510	20	1.	*	2 JAN 0750	120	0.	*	3 JAN 0030	220	0.	*	3 JAN 1710	320	0.
1 JAN 1520	21	1.	*	2 JAN 0800	121	0.	*	3 JAN 0040	221	0.	*	3 JAN 1720	321	0.
1 JAN 1530	22	2.	*	2 JAN 0810	122	0.	*	3 JAN 0050	222	0.	*	3 JAN 1730	322	0.
1 JAN 1540	23	2.	*	2 JAN 0820	123	0.	*	3 JAN 0100	223	0.	*	3 JAN 1740	323	0.
1 JAN 1550	24	2.	*	2 JAN 0830	124	0.	*	3 JAN 0110	224	0.	*	3 JAN 1750	324	0.
1 JAN 1600	25	8.	*	2 JAN 0840	125	0.	*	3 JAN 0120	225	0.	*	3 JAN 1800	325	0.

1 JAN 1610	26	7.	*	2 JAN 0850	126	0.	*	3 JAN 0130	226	0.	*	3 JAN 1810	326	0.
1 JAN 1620	27	2.	*	2 JAN 0900	127	0.	*	3 JAN 0140	227	0.	*	3 JAN 1820	327	0.
1 JAN 1630	28	1.	*	2 JAN 0910	128	0.	*	3 JAN 0150	228	0.	*	3 JAN 1830	328	0.
1 JAN 1640	29	1.	*	2 JAN 0920	129	0.	*	3 JAN 0200	229	0.	*	3 JAN 1840	329	0.
1 JAN 1650	30	1.	*	2 JAN 0930	130	0.	*	3 JAN 0210	230	0.	*	3 JAN 1850	330	0.
1 JAN 1700	31	1.	*	2 JAN 0940	131	0.	*	3 JAN 0220	231	0.	*	3 JAN 1900	331	0.
1 JAN 1710	32	1.	*	2 JAN 0950	132	0.	*	3 JAN 0230	232	0.	*	3 JAN 1910	332	0.
1 JAN 1720	33	1.	*	2 JAN 1000	133	0.	*	3 JAN 0240	233	0.	*	3 JAN 1920	333	0.
1 JAN 1730	34	1.	*	2 JAN 1010	134	0.	*	3 JAN 0250	234	0.	*	3 JAN 1930	334	0.
1 JAN 1740	35	1.	*	2 JAN 1020	135	0.	*	3 JAN 0300	235	0.	*	3 JAN 1940	335	0.
1 JAN 1750	36	0.	*	2 JAN 1030	136	0.	*	3 JAN 0310	236	0.	*	3 JAN 1950	336	0.
1 JAN 1800	37	0.	*	2 JAN 1040	137	0.	*	3 JAN 0320	237	0.	*	3 JAN 2000	337	0.
1 JAN 1810	38	0.	*	2 JAN 1050	138	0.	*	3 JAN 0330	238	0.	*	3 JAN 2010	338	0.
1 JAN 1820	39	0.	*	2 JAN 1100	139	0.	*	3 JAN 0340	239	0.	*	3 JAN 2020	339	0.
1 JAN 1830	40	0.	*	2 JAN 1110	140	0.	*	3 JAN 0350	240	0.	*	3 JAN 2030	340	0.
1 JAN 1840	41	0.	*	2 JAN 1120	141	0.	*	3 JAN 0400	241	0.	*	3 JAN 2040	341	0.
1 JAN 1850	42	0.	*	2 JAN 1130	142	0.	*	3 JAN 0410	242	0.	*	3 JAN 2050	342	0.
1 JAN 1900	43	0.	*	2 JAN 1140	143	0.	*	3 JAN 0420	243	0.	*	3 JAN 2100	343	0.
1 JAN 1910	44	0.	*	2 JAN 1150	144	0.	*	3 JAN 0430	244	0.	*	3 JAN 2110	344	0.
1 JAN 1920	45	0.	*	2 JAN 1200	145	0.	*	3 JAN 0440	245	0.	*	3 JAN 2120	345	0.
1 JAN 1930	46	0.	*	2 JAN 1210	146	0.	*	3 JAN 0450	246	0.	*	3 JAN 2130	346	0.
1 JAN 1940	47	0.	*	2 JAN 1220	147	0.	*	3 JAN 0500	247	0.	*	3 JAN 2140	347	0.
1 JAN 1950	48	0.	*	2 JAN 1230	148	0.	*	3 JAN 0510	248	0.	*	3 JAN 2150	348	0.
1 JAN 2000	49	0.	*	2 JAN 1240	149	0.	*	3 JAN 0520	249	0.	*	3 JAN 2200	349	0.
1 JAN 2010	50	0.	*	2 JAN 1250	150	0.	*	3 JAN 0530	250	0.	*	3 JAN 2210	350	0.
1 JAN 2020	51	0.	*	2 JAN 1300	151	0.	*	3 JAN 0540	251	0.	*	3 JAN 2220	351	0.
1 JAN 2030	52	0.	*	2 JAN 1310	152	0.	*	3 JAN 0550	252	0.	*	3 JAN 2230	352	0.
1 JAN 2040	53	0.	*	2 JAN 1320	153	0.	*	3 JAN 0600	253	0.	*	3 JAN 2240	353	0.
1 JAN 2050	54	0.	*	2 JAN 1330	154	0.	*	3 JAN 0610	254	0.	*	3 JAN 2250	354	0.
1 JAN 2100	55	0.	*	2 JAN 1340	155	0.	*	3 JAN 0620	255	0.	*	3 JAN 2300	355	0.
1 JAN 2110	56	0.	*	2 JAN 1350	156	0.	*	3 JAN 0630	256	0.	*	3 JAN 2310	356	0.
1 JAN 2120	57	0.	*	2 JAN 1400	157	0.	*	3 JAN 0640	257	0.	*	3 JAN 2320	357	0.
1 JAN 2130	58	0.	*	2 JAN 1410	158	0.	*	3 JAN 0650	258	0.	*	3 JAN 2330	358	0.
1 JAN 2140	59	0.	*	2 JAN 1420	159	0.	*	3 JAN 0700	259	0.	*	3 JAN 2340	359	0.
1 JAN 2150	60	0.	*	2 JAN 1430	160	0.	*	3 JAN 0710	260	0.	*	3 JAN 2350	360	0.
1 JAN 2200	61	0.	*	2 JAN 1440	161	0.	*	3 JAN 0720	261	0.	*	4 JAN 0000	361	0.
1 JAN 2210	62	0.	*	2 JAN 1450	162	0.	*	3 JAN 0730	262	0.	*	4 JAN 0010	362	0.
1 JAN 2220	63	0.	*	2 JAN 1500	163	0.	*	3 JAN 0740	263	0.	*	4 JAN 0020	363	0.
1 JAN 2230	64	0.	*	2 JAN 1510	164	0.	*	3 JAN 0750	264	0.	*	4 JAN 0030	364	0.
1 JAN 2240	65	0.	*	2 JAN 1520	165	0.	*	3 JAN 0800	265	0.	*	4 JAN 0040	365	0.
1 JAN 2250	66	0.	*	2 JAN 1530	166	0.	*	3 JAN 0810	266	0.	*	4 JAN 0050	366	0.
1 JAN 2300	67	0.	*	2 JAN 1540	167	0.	*	3 JAN 0820	267	0.	*	4 JAN 0100	367	0.
1 JAN 2310	68	0.	*	2 JAN 1550	168	0.	*	3 JAN 0830	268	0.	*	4 JAN 0110	368	0.
1 JAN 2320	69	0.	*	2 JAN 1600	169	0.	*	3 JAN 0840	269	0.	*	4 JAN 0120	369	0.
1 JAN 2330	70	0.	*	2 JAN 1610	170	0.	*	3 JAN 0850	270	0.	*	4 JAN 0130	370	0.
1 JAN 2340	71	0.	*	2 JAN 1620	171	0.	*	3 JAN 0900	271	0.	*	4 JAN 0140	371	0.
1 JAN 2350	72	0.	*	2 JAN 1630	172	0.	*	3 JAN 0910	272	0.	*	4 JAN 0150	372	0.
2 JAN 0000	73	0.	*	2 JAN 1640	173	0.	*	3 JAN 0920	273	0.	*	4 JAN 0200	373	0.
2 JAN 0010	74	0.	*	2 JAN 1650	174	0.	*	3 JAN 0930	274	0.	*	4 JAN 0210	374	0.
2 JAN 0020	75	0.	*	2 JAN 1700	175	0.	*	3 JAN 0940	275	0.	*	4 JAN 0220	375	0.
2 JAN 0030	76	0.	*	2 JAN 1710	176	0.	*	3 JAN 0950	276	0.	*	4 JAN 0230	376	0.
2 JAN 0040	77	0.	*	2 JAN 1720	177	0.	*	3 JAN 1000	277	0.	*	4 JAN 0240	377	0.
2 JAN 0050	78	0.	*	2 JAN 1730	178	0.	*	3 JAN 1010	278	0.	*	4 JAN 0250	378	0.
2 JAN 0100	79	0.	*	2 JAN 1740	179	0.	*	3 JAN 1020	279	0.	*	4 JAN 0300	379	0.
2 JAN 0110	80	0.	*	2 JAN 1750	180	0.	*	3 JAN 1030	280	0.	*	4 JAN 0310	380	0.
2 JAN 0120	81	0.	*	2 JAN 1800	181	0.	*	3 JAN 1040	281	0.	*	4 JAN 0320	381	0.
2 JAN 0130	82	0.	*	2 JAN 1810	182	0.	*	3 JAN 1050	282	0.	*	4 JAN 0330	382	0.
2 JAN 0140	83	0.	*	2 JAN 1820	183	0.	*	3 JAN 1100	283	0.	*	4 JAN 0340	383	0.
2 JAN 0150	84	0.	*	2 JAN 1830	184	0.	*	3 JAN 1110	284	0.	*	4 JAN 0350	384	0.
2 JAN 0200	85	0.	*	2 JAN 1840	185	0.	*	3 JAN 1120	285	0.	*	4 JAN 0400	385	0.

2 JAN 0210	86	0.	*	2 JAN 1850	186	0.	*	3 JAN 1130	286	0.	*	4 JAN 0410	386	0.
2 JAN 0220	87	0.	*	2 JAN 1900	187	0.	*	3 JAN 1140	287	0.	*	4 JAN 0420	387	0.
2 JAN 0230	88	0.	*	2 JAN 1910	188	0.	*	3 JAN 1150	288	0.	*	4 JAN 0430	388	0.
2 JAN 0240	89	0.	*	2 JAN 1920	189	0.	*	3 JAN 1200	289	0.	*	4 JAN 0440	389	0.
2 JAN 0250	90	0.	*	2 JAN 1930	190	0.	*	3 JAN 1210	290	0.	*	4 JAN 0450	390	0.
2 JAN 0300	91	0.	*	2 JAN 1940	191	0.	*	3 JAN 1220	291	0.	*	4 JAN 0500	391	0.
2 JAN 0310	92	0.	*	2 JAN 1950	192	0.	*	3 JAN 1230	292	0.	*	4 JAN 0510	392	0.
2 JAN 0320	93	0.	*	2 JAN 2000	193	0.	*	3 JAN 1240	293	0.	*	4 JAN 0520	393	0.
2 JAN 0330	94	0.	*	2 JAN 2010	194	0.	*	3 JAN 1250	294	0.	*	4 JAN 0530	394	0.
2 JAN 0340	95	0.	*	2 JAN 2020	195	0.	*	3 JAN 1300	295	0.	*	4 JAN 0540	395	0.
2 JAN 0350	96	0.	*	2 JAN 2030	196	0.	*	3 JAN 1310	296	0.	*	4 JAN 0550	396	0.
2 JAN 0400	97	0.	*	2 JAN 2040	197	0.	*	3 JAN 1320	297	0.	*	4 JAN 0600	397	0.
2 JAN 0410	98	0.	*	2 JAN 2050	198	0.	*	3 JAN 1330	298	0.	*	4 JAN 0610	398	0.
2 JAN 0420	99	0.	*	2 JAN 2100	199	0.	*	3 JAN 1340	299	0.	*	4 JAN 0620	399	0.
2 JAN 0430	100	0.	*	2 JAN 2110	200	0.	*	3 JAN 1350	300	0.	*	4 JAN 0630	400	0.
			*				*				*			

****

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)		6-HR	24-HR	72-HR	66.50-HR
8.	4.00	(CFS)	1.	0.	0.	0.
		(INCHES)	1.476	1.477	1.477	1.477
		(AC-FT)	1.	1.	1.	1.

CUMULATIVE AREA = .01 SQ MI

STATION CTPLF

(O) OUTFLOW

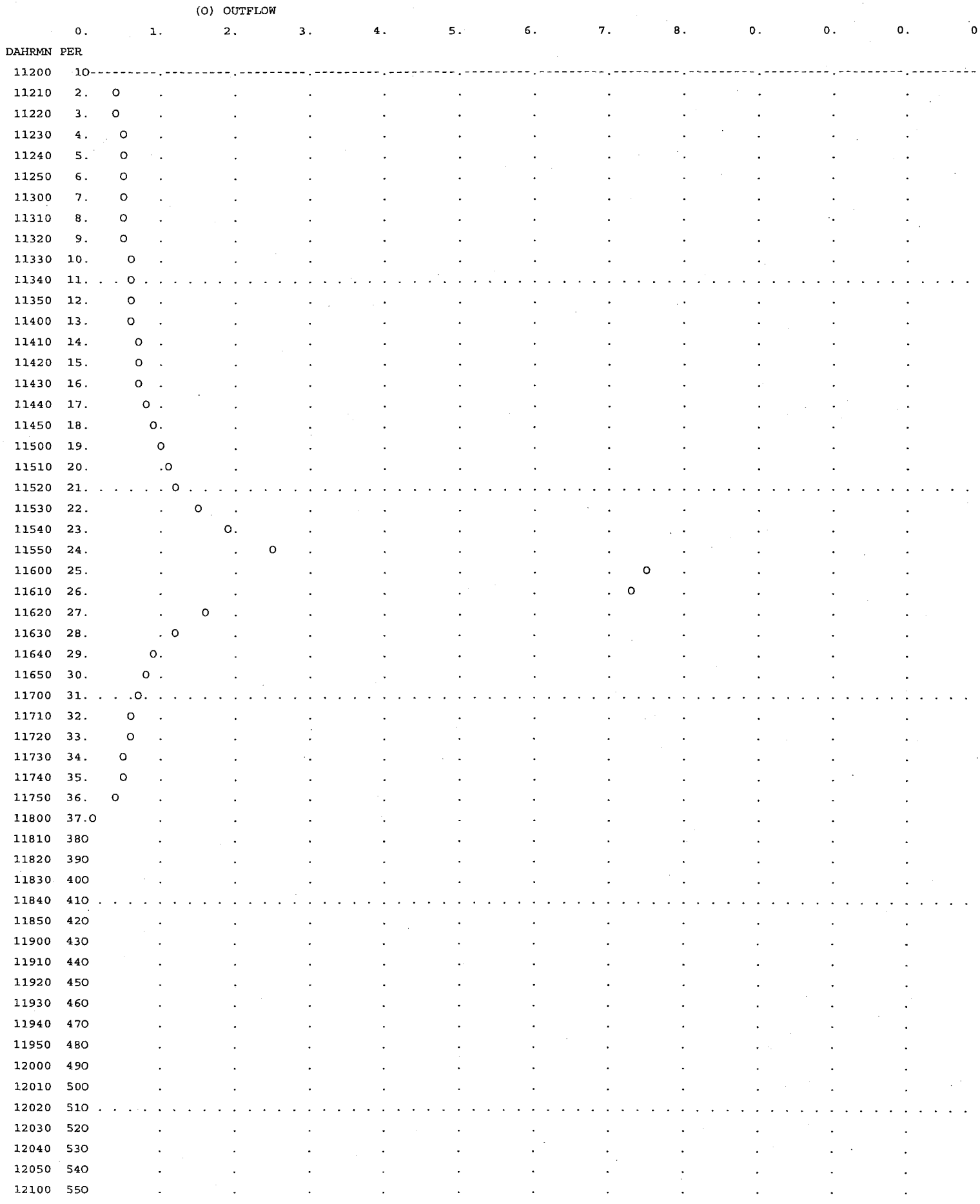

12110	560	.	.	.	.	.	.	.	.	.	.
12120	570	.	.	.	.	.	.	.	.	.	.
12130	580	.	.	.	.	.	.	.	.	.	.
12140	590	.	.	.	.	.	.	.	.	.	.
12150	600	.	.	.	.	.	.	.	.	.	.
12200	610	.	.	.	.	.	.	.	.	.	.
12210	620	.	.	.	.	.	.	.	.	.	.
12220	630	.	.	.	.	.	.	.	.	.	.
12230	640	.	.	.	.	.	.	.	.	.	.
12240	650	.	.	.	.	.	.	.	.	.	.
12250	660	.	.	.	.	.	.	.	.	.	.
12300	670	.	.	.	.	.	.	.	.	.	.
12310	680	.	.	.	.	.	.	.	.	.	.
12320	690	.	.	.	.	.	.	.	.	.	.
12330	700	.	.	.	.	.	.	.	.	.	.
12340	710	.	.	.	.	.	.	.	.	.	.
12350	720	.	.	.	.	.	.	.	.	.	.
20000	730	.	.	.	.	.	.	.	.	.	.
20010	740	.	.	.	.	.	.	.	.	.	.
20020	750	.	.	.	.	.	.	.	.	.	.
20030	760	.	.	.	.	.	.	.	.	.	.
20040	770	.	.	.	.	.	.	.	.	.	.
20050	780	.	.	.	.	.	.	.	.	.	.
20100	790	.	.	.	.	.	.	.	.	.	.
20110	800	.	.	.	.	.	.	.	.	.	.
20120	810	.	.	.	.	.	.	.	.	.	.
20130	820	.	.	.	.	.	.	.	.	.	.
20140	830	.	.	.	.	.	.	.	.	.	.
20150	840	.	.	.	.	.	.	.	.	.	.
20200	850	.	.	.	.	.	.	.	.	.	.
20210	860	.	.	.	.	.	.	.	.	.	.
20220	870	.	.	.	.	.	.	.	.	.	.
20230	880	.	.	.	.	.	.	.	.	.	.
20240	890	.	.	.	.	.	.	.	.	.	.
20250	900	.	.	.	.	.	.	.	.	.	.
20300	910	.	.	.	.	.	.	.	.	.	.
20310	920	.	.	.	.	.	.	.	.	.	.
20320	930	.	.	.	.	.	.	.	.	.	.
20330	940	.	.	.	.	.	.	.	.	.	.
20340	950	.	.	.	.	.	.	.	.	.	.
20350	960	.	.	.	.	.	.	.	.	.	.
20400	970	.	.	.	.	.	.	.	.	.	.
20410	980	.	.	.	.	.	.	.	.	.	.
20420	990	.	.	.	.	.	.	.	.	.	.
20430	1000	.	.	.	.	.	.	.	.	.	.
20440	1010	.	.	.	.	.	.	.	.	.	.
20450	1020	.	.	.	.	.	.	.	.	.	.
20500	1030	.	.	.	.	.	.	.	.	.	.
20510	1040	.	.	.	.	.	.	.	.	.	.
20520	1050	.	.	.	.	.	.	.	.	.	.
20530	1060	.	.	.	.	.	.	.	.	.	.
20540	1070	.	.	.	.	.	.	.	.	.	.
20550	1080	.	.	.	.	.	.	.	.	.	.
20600	1090	.	.	.	.	.	.	.	.	.	.
20610	1100	.	.	.	.	.	.	.	.	.	.
20620	1110	.	.	.	.	.	.	.	.	.	.
20630	1120	.	.	.	.	.	.	.	.	.	.
20640	1130	.	.	.	.	.	.	.	.	.	.
20650	1140	.	.	.	.	.	.	.	.	.	.
20700	1150	.	.	.	.	.	.	.	.	.	.

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21110 1400
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22020 1950
22030 1960
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22100 1990
22110 2000
22120 2010
22130 2020
22140 2030
22150 2040
22200 2050
22210 2060
22220 2070
22230 2080
22240 2090
22250 2100
22300 2110
22310 2120
22320 2130
22330 2140
22340 2150
22350 2160
30000 2170
30010 2180
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32000 3370
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32020 3390
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32100 3430
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32120 3450
32130 3460
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32150 3480
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32300 3550

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32320 3570
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32340 3590
32350 3600
40000 3610
40010 3620
40020 3630
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40200 3730
40210 3740
40220 3750
40230 3760
40240 3770
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40500 3910
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40540 3950
40550 3960
40600 3970
40610 3980
40620 3990
40630 4000

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              **************
              *            *
  25 KK       *    DETAIN  *
              *            *
              **************

  26 KO           OUTPUT CONTROL VARIABLES
                        IPRNT           2  PRINT CONTROL
                        IPLOT           2  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE
                        IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                         IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                        ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                        ISAV2         400  LAST ORDINATE PUNCHED OR SAVED
                       TIMINT        .167  TIME INTERVAL IN HOURS


                HYDROGRAPH ROUTING DATA

  27 RS           STORAGE ROUTING
                        NSTPS           1  NUMBER OF SUBREACHES
                         ITYP        STOR  TYPE OF INITIAL CONDITION
                       RSVRIC       -1.00  INITIAL CONDITION
                            X         .00 WORKING R AND D COEFFICIENT

  28 SV             STORAGE          .0        .0        .0        .0        .1        .1        .1        .1        .1        .1
                                     .2        .2

  30 SQ           DISCHARGE          0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                                     0.       20.

  32 SE           ELEVATION         .00       .50      1.00      1.50      2.00      2.50      3.00      3.50      4.00      4.50
                                   5.00      5.50

                                                                  ***

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO       20.
                THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
                THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*****************************************************************************************************************************

                                                HYDROGRAPH AT STATION   DETAIN

*****************************************************************************************************************************
                                          *                                          *
 DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE
                                          *                                          *
  1 JAN 1200   1       0.       .0      .0 *  2 JAN 1020 135       0.       .0      .9 *  3 JAN 0840 269       0.       .0      .0
  1 JAN 1210   2       0.       .0      .1 *  2 JAN 1030 136       0.       .0      .9 *  3 JAN 0850 270       0.       .0      .0
  1 JAN 1220   3       0.       .0      .3 *  2 JAN 1040 137       0.       .0      .9 *  3 JAN 0900 271       0.       .0      .0
  1 JAN 1230   4       0.       .0      .5 *  2 JAN 1050 138       0.       .0      .8 *  3 JAN 0910 272       0.       .0      .0
  1 JAN 1240   5       0.       .0      .7 *  2 JAN 1100 139       0.       .0      .8 *  3 JAN 0920 273       0.       .0      .0
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1	JAN	1250	6	0.	.0	.9	*	2	JAN	1110	140	0.	.0	.8	*	3	JAN	0930	274	0.	.0	.0
1	JAN	1300	7	0.	.0	1.1	*	2	JAN	1120	141	0.	.0	.8	*	3	JAN	0940	275	0.	.0	.0
1	JAN	1310	8	0.	.0	1.3	*	2	JAN	1130	142	0.	.0	.8	*	3	JAN	0950	276	0.	.0	.0
1	JAN	1320	9	0.	.0	1.5	*	2	JAN	1140	143	0.	.0	.7	*	3	JAN	1000	277	0.	.0	.0
1	JAN	1330	10	0.	.1	1.7	*	2	JAN	1150	144	0.	.0	.7	*	3	JAN	1010	278	0.	.0	.0
1	JAN	1340	11	0.	.1	2.0	*	2	JAN	1200	145	0.	.0	.7	*	3	JAN	1020	279	0.	.0	.0
1	JAN	1350	12	0.	.1	2.2	*	2	JAN	1210	146	0.	.0	.7	*	3	JAN	1030	280	0.	.0	.0
1	JAN	1400	13	0.	.1	2.4	*	2	JAN	1220	147	0.	.0	.7	*	3	JAN	1040	281	0.	.0	.0
1	JAN	1410	14	0.	.1	2.7	*	2	JAN	1230	148	0.	.0	.6	*	3	JAN	1050	282	0.	.0	.0
1	JAN	1420	15	0.	.1	2.9	*	2	JAN	1240	149	0.	.0	.6	*	3	JAN	1100	283	0.	.0	.0
1	JAN	1430	16	0.	.1	3.2	*	2	JAN	1250	150	0.	.0	.6	*	3	JAN	1110	284	0.	.0	.0
1	JAN	1440	17	0.	.1	3.5	*	2	JAN	1300	151	0.	.0	.6	*	3	JAN	1120	285	0.	.0	.0
1	JAN	1450	18	0.	.1	3.8	*	2	JAN	1310	152	0.	.0	.6	*	3	JAN	1130	286	0.	.0	.0
1	JAN	1500	19	0.	.1	4.2	*	2	JAN	1320	153	0.	.0	.6	*	3	JAN	1140	287	0.	.0	.0
1	JAN	1510	20	0.	.1	4.6	*	2	JAN	1330	154	0.	.0	.5	*	3	JAN	1150	288	0.	.0	.0
1	JAN	1520	21	0.	.2	5.0	*	2	JAN	1340	155	0.	.0	.5	*	3	JAN	1200	289	0.	.0	.0
1	JAN	1530	22	2.	.2	5.0	*	2	JAN	1350	156	0.	.0	.5	*	3	JAN	1210	290	0.	.0	.0
1	JAN	1540	23	1.	.2	5.0	*	2	JAN	1400	157	0.	.0	.5	*	3	JAN	1220	291	0.	.0	.0
1	JAN	1550	24	3.	.2	5.1	*	2	JAN	1410	158	0.	.0	.5	*	3	JAN	1230	292	0.	.0	.0
1	JAN	1600	25	7.	.2	5.2	*	2	JAN	1420	159	0.	.0	.4	*	3	JAN	1240	293	0.	.0	.0
1	JAN	1610	26	8.	.2	5.2	*	2	JAN	1430	160	0.	.0	.4	*	3	JAN	1250	294	0.	.0	.0
1	JAN	1620	27	2.	.2	5.0	*	2	JAN	1440	161	0.	.0	.4	*	3	JAN	1300	295	0.	.0	.0
1	JAN	1630	28	1.	.2	5.0	*	2	JAN	1450	162	0.	.0	.4	*	3	JAN	1310	296	0.	.0	.0
1	JAN	1640	29	1.	.2	5.0	*	2	JAN	1500	163	0.	.0	.4	*	3	JAN	1320	297	0.	.0	.0
1	JAN	1650	30	1.	.2	5.0	*	2	JAN	1510	164	0.	.0	.3	*	3	JAN	1330	298	0.	.0	.0
1	JAN	1700	31	1.	.2	5.0	*	2	JAN	1520	165	0.	.0	.3	*	3	JAN	1340	299	0.	.0	.0
1	JAN	1710	32	1.	.2	5.0	*	2	JAN	1530	166	0.	.0	.3	*	3	JAN	1350	300	0.	.0	.0
1	JAN	1720	33	1.	.2	5.0	*	2	JAN	1540	167	0.	.0	.3	*	3	JAN	1400	301	0.	.0	.0
1	JAN	1730	34	1.	.2	5.0	*	2	JAN	1550	168	0.	.0	.3	*	3	JAN	1410	302	0.	.0	.0
1	JAN	1740	35	0.	.2	5.0	*	2	JAN	1600	169	0.	.0	.3	*	3	JAN	1420	303	0.	.0	.0
1	JAN	1750	36	0.	.2	5.0	*	2	JAN	1610	170	0.	.0	.3	*	3	JAN	1430	304	0.	.0	.0
1	JAN	1800	37	0.	.1	5.0	*	2	JAN	1620	171	0.	.0	.3	*	3	JAN	1440	305	0.	.0	.0
1	JAN	1810	38	0.	.1	5.0	*	2	JAN	1630	172	0.	.0	.2	*	3	JAN	1450	306	0.	.0	.0
1	JAN	1820	39	0.	.1	4.9	*	2	JAN	1640	173	0.	.0	.2	*	3	JAN	1500	307	0.	.0	.0
1	JAN	1830	40	0.	.1	4.8	*	2	JAN	1650	174	0.	.0	.2	*	3	JAN	1510	308	0.	.0	.0
1	JAN	1840	41	0.	.1	4.8	*	2	JAN	1700	175	0.	.0	.2	*	3	JAN	1520	309	0.	.0	.0
1	JAN	1850	42	0.	.1	4.7	*	2	JAN	1710	176	0.	.0	.2	*	3	JAN	1530	310	0.	.0	.0
1	JAN	1900	43	0.	.1	4.7	*	2	JAN	1720	177	0.	.0	.2	*	3	JAN	1540	311	0.	.0	.0
1	JAN	1910	44	0.	.1	4.6	*	2	JAN	1730	178	0.	.0	.2	*	3	JAN	1550	312	0.	.0	.0
1	JAN	1920	45	0.	.1	4.5	*	2	JAN	1740	179	0.	.0	.2	*	3	JAN	1600	313	0.	.0	.0
1	JAN	1930	46	0.	.1	4.5	*	2	JAN	1750	180	0.	.0	.2	*	3	JAN	1610	314	0.	.0	.0
1	JAN	1940	47	0.	.1	4.4	*	2	JAN	1800	181	0.	.0	.2	*	3	JAN	1620	315	0.	.0	.0
1	JAN	1950	48	0.	.1	4.4	*	2	JAN	1810	182	0.	.0	.2	*	3	JAN	1630	316	0.	.0	.0
1	JAN	2000	49	0.	.1	4.3	*	2	JAN	1820	183	0.	.0	.1	*	3	JAN	1640	317	0.	.0	.0
1	JAN	2010	50	0.	.1	4.3	*	2	JAN	1830	184	0.	.0	.1	*	3	JAN	1650	318	0.	.0	.0
1	JAN	2020	51	0.	.1	4.2	*	2	JAN	1840	185	0.	.0	.1	*	3	JAN	1700	319	0.	.0	.0
1	JAN	2030	52	0.	.1	4.2	*	2	JAN	1850	186	0.	.0	.1	*	3	JAN	1710	320	0.	.0	.0
1	JAN	2040	53	0.	.1	4.1	*	2	JAN	1900	187	0.	.0	.1	*	3	JAN	1720	321	0.	.0	.0
1	JAN	2050	54	0.	.1	4.0	*	2	JAN	1910	188	0.	.0	.1	*	3	JAN	1730	322	0.	.0	.0
1	JAN	2100	55	0.	.1	4.0	*	2	JAN	1920	189	0.	.0	.1	*	3	JAN	1740	323	0.	.0	.0
1	JAN	2110	56	0.	.1	3.9	*	2	JAN	1930	190	0.	.0	.1	*	3	JAN	1750	324	0.	.0	.0
1	JAN	2120	57	0.	.1	3.9	*	2	JAN	1940	191	0.	.0	.1	*	3	JAN	1800	325	0.	.0	.0
1	JAN	2130	58	0.	.1	3.8	*	2	JAN	1950	192	0.	.0	.1	*	3	JAN	1810	326	0.	.0	.0
1	JAN	2140	59	0.	.1	3.8	*	2	JAN	2000	193	0.	.0	.1	*	3	JAN	1820	327	0.	.0	.0
1	JAN	2150	60	0.	.1	3.7	*	2	JAN	2010	194	0.	.0	.1	*	3	JAN	1830	328	0.	.0	.0
1	JAN	2200	61	0.	.1	3.7	*	2	JAN	2020	195	0.	.0	.1	*	3	JAN	1840	329	0.	.0	.0
1	JAN	2210	62	0.	.1	3.6	*	2	JAN	2030	196	0.	.0	.1	*	3	JAN	1850	330	0.	.0	.0
1	JAN	2220	63	0.	.1	3.6	*	2	JAN	2040	197	0.	.0	.1	*	3	JAN	1900	331	0.	.0	.0
1	JAN	2230	64	0.	.1	3.6	*	2	JAN	2050	198	0.	.0	.1	*	3	JAN	1910	332	0.	.0	.0
1	JAN	2240	65	0.	.1	3.5	*	2	JAN	2100	199	0.	.0	.1	*	3	JAN	1920	333	0.	.0	.0

1	JAN	2250	66	0.	.1	3.5	*	2	JAN	2110	200	0.	.0	.1	*	3	JAN 1930 334	0.	.0	.0
1	JAN	2300	67	0.	.1	3.4	*	2	JAN	2120	201	0.	.0	.1	*	3	JAN 1940 335	0.	.0	.0
1	JAN	2310	68	0.	.1	3.4	*	2	JAN	2130	202	0.	.0	.1	*	3	JAN 1950 336	0.	.0	.0
1	JAN	2320	69	0.	.1	3.3	*	2	JAN	2140	203	0.	.0	.1	*	3	JAN 2000 337	0.	.0	.0
1	JAN	2330	70	0.	.1	3.3	*	2	JAN	2150	204	0.	.0	.1	*	3	JAN 2010 338	0.	.0	.0
1	JAN	2340	71	0.	.1	3.2	*	2	JAN	2200	205	0.	.0	.1	*	3	JAN 2020 339	0.	.0	.0
1	JAN	2350	72	0.	.1	3.2	*	2	JAN	2210	206	0.	.0	.1	*	3	JAN 2030 340	0.	.0	.0
2	JAN	0000	73	0.	.1	3.1	*	2	JAN	2220	207	0.	.0	.1	*	3	JAN 2040 341	0.	.0	.0
2	JAN	0010	74	0.	.1	3.1	*	2	JAN	2230	208	0.	.0	.0	*	3	JAN 2050 342	0.	.0	.0
2	JAN	0020	75	0.	.1	3.0	*	2	JAN	2240	209	0.	.0	.0	*	3	JAN 2100 343	0.	.0	.0
2	JAN	0030	76	0.	.1	3.0	*	2	JAN	2250	210	0.	.0	.0	*	3	JAN 2110 344	0.	.0	.0
2	JAN	0040	77	0.	.1	2.9	*	2	JAN	2300	211	0.	.0	.0	*	3	JAN 2120 345	0.	.0	.0
2	JAN	0050	78	0.	.1	2.9	*	2	JAN	2310	212	0.	.0	.0	*	3	JAN 2130 346	0.	.0	.0
2	JAN	0100	79	0.	.1	2.8	*	2	JAN	2320	213	0.	.0	.0	*	3	JAN 2140 347	0.	.0	.0
2	JAN	0110	80	0.	.1	2.8	*	2	JAN	2330	214	0.	.0	.0	*	3	JAN 2150 348	0.	.0	.0
2	JAN	0120	81	0.	.1	2.7	*	2	JAN	2340	215	0.	.0	.0	*	3	JAN 2200 349	0.	.0	.0
2	JAN	0130	82	0.	.1	2.7	*	2	JAN	2350	216	0.	.0	.0	*	3	JAN 2210 350	0.	.0	.0
2	JAN	0140	83	0.	.1	2.7	*	3	JAN	0000	217	0.	.0	.0	*	3	JAN 2220 351	0.	.0	.0
2	JAN	0150	84	0.	.1	2.6	*	3	JAN	0010	218	0.	.0	.0	*	3	JAN 2230 352	0.	.0	.0
2	JAN	0200	85	0.	.1	2.6	*	3	JAN	0020	219	0.	.0	.0	*	3	JAN 2240 353	0.	.0	.0
2	JAN	0210	86	0.	.1	2.5	*	3	JAN	0030	220	0.	.0	.0	*	3	JAN 2250 354	0.	.0	.0
2	JAN	0220	87	0.	.1	2.5	*	3	JAN	0040	221	0.	.0	.0	*	3	JAN 2300 355	0.	.0	.0
2	JAN	0230	88	0.	.1	2.4	*	3	JAN	0050	222	0.	.0	.0	*	3	JAN 2310 356	0.	.0	.0
2	JAN	0240	89	0.	.1	2.4	*	3	JAN	0100	223	0.	.0	.0	*	3	JAN 2320 357	0.	.0	.0
2	JAN	0250	90	0.	.1	2.4	*	3	JAN	0110	224	0.	.0	.0	*	3	JAN 2330 358	0.	.0	.0
2	JAN	0300	91	0.	.1	2.3	*	3	JAN	0120	225	0.	.0	.0	*	3	JAN 2340 359	0.	.0	.0
2	JAN	0310	92	0.	.1	2.3	*	3	JAN	0130	226	0.	.0	.0	*	3	JAN 2350 360	0.	.0	.0
2	JAN	0320	93	0.	.1	2.3	*	3	JAN	0140	227	0.	.0	.0	*	4	JAN 0000 361	0.	.0	.0
2	JAN	0330	94	0.	.1	2.2	*	3	JAN	0150	228	0.	.0	.0	*	4	JAN 0010 362	0.	.0	.0
2	JAN	0340	95	0.	.1	2.2	*	3	JAN	0200	229	0.	.0	.0	*	4	JAN 0020 363	0.	.0	.0
2	JAN	0350	96	0.	.1	2.1	*	3	JAN	0210	230	0.	.0	.0	*	4	JAN 0030 364	0.	.0	.0
2	JAN	0400	97	0.	.1	2.1	*	3	JAN	0220	231	0.	.0	.0	*	4	JAN 0040 365	0.	.0	.0
2	JAN	0410	98	0.	.1	2.1	*	3	JAN	0230	232	0.	.0	.0	*	4	JAN 0050 366	0.	.0	.0
2	JAN	0420	99	0.	.1	2.0	*	3	JAN	0240	233	0.	.0	.0	*	4	JAN 0100 367	0.	.0	.0
2	JAN	0430	100	0.	.1	2.0	*	3	JAN	0250	234	0.	.0	.0	*	4	JAN 0110 368	0.	.0	.0
2	JAN	0440	101	0.	.1	2.0	*	3	JAN	0300	235	0.	.0	.0	*	4	JAN 0120 369	0.	.0	.0
2	JAN	0450	102	0.	.1	1.9	*	3	JAN	0310	236	0.	.0	.0	*	4	JAN 0130 370	0.	.0	.0
2	JAN	0500	103	0.	.1	1.9	*	3	JAN	0320	237	0.	.0	.0	*	4	JAN 0140 371	0.	.0	.0
2	JAN	0510	104	0.	.1	1.9	*	3	JAN	0330	238	0.	.0	.0	*	4	JAN 0150 372	0.	.0	.0
2	JAN	0520	105	0.	.1	1.8	*	3	JAN	0340	239	0.	.0	.0	*	4	JAN 0200 373	0.	.0	.0
2	JAN	0530	106	0.	.1	1.8	*	3	JAN	0350	240	0.	.0	.0	*	4	JAN 0210 374	0.	.0	.0
2	JAN	0540	107	0.	.1	1.7	*	3	JAN	0400	241	0.	.0	.0	*	4	JAN 0220 375	0.	.0	.0
2	JAN	0550	108	0.	.0	1.7	*	3	JAN	0410	242	0.	.0	.0	*	4	JAN 0230 376	0.	.0	.0
2	JAN	0600	109	0.	.0	1.7	*	3	JAN	0420	243	0.	.0	.0	*	4	JAN 0240 377	0.	.0	.0
2	JAN	0610	110	0.	.0	1.6	*	3	JAN	0430	244	0.	.0	.0	*	4	JAN 0250 378	0.	.0	.0
2	JAN	0620	111	0.	.0	1.6	*	3	JAN	0440	245	0.	.0	.0	*	4	JAN 0300 379	0.	.0	.0
2	JAN	0630	112	0.	.0	1.6	*	3	JAN	0450	246	0.	.0	.0	*	4	JAN 0310 380	0.	.0	.0
2	JAN	0640	113	0.	.0	1.5	*	3	JAN	0500	247	0.	.0	.0	*	4	JAN 0320 381	0.	.0	.0
2	JAN	0650	114	0.	.0	1.5	*	3	JAN	0510	248	0.	.0	.0	*	4	JAN 0330 382	0.	.0	.0
2	JAN	0700	115	0.	.0	1.5	*	3	JAN	0520	249	0.	.0	.0	*	4	JAN 0340 383	0.	.0	.0
2	JAN	0710	116	0.	.0	1.4	*	3	JAN	0530	250	0.	.0	.0	*	4	JAN 0350 384	0.	.0	.0
2	JAN	0720	117	0.	.0	1.4	*	3	JAN	0540	251	0.	.0	.0	*	4	JAN 0400 385	0.	.0	.0
2	JAN	0730	118	0.	.0	1.4	*	3	JAN	0550	252	0.	.0	.0	*	4	JAN 0410 386	0.	.0	.0
2	JAN	0740	119	0.	.0	1.4	*	3	JAN	0600	253	0.	.0	.0	*	4	JAN 0420 387	0.	.0	.0
2	JAN	0750	120	0.	.0	1.3	*	3	JAN	0610	254	0.	.0	.0	*	4	JAN 0430 388	0.	.0	.0
2	JAN	0800	121	0.	.0	1.3	*	3	JAN	0620	255	0.	.0	.0	*	4	JAN 0440 389	0.	.0	.0
2	JAN	0810	122	0.	.0	1.3	*	3	JAN	0630	256	0.	.0	.0	*	4	JAN 0450 390	0.	.0	.0
2	JAN	0820	123	0.	.0	1.2	*	3	JAN	0640	257	0.	.0	.0	*	4	JAN 0500 391	0.	.0	.0
2	JAN	0830	124	0.	.0	1.2	*	3	JAN	0650	258	0.	.0	.0	*	4	JAN 0510 392	0.	.0	.0
2	JAN	0840	125	0.	.0	1.2	*	3	JAN	0700	259	0.	.0	.0	*	4	JAN 0520 393	0.	.0	.0

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 2 JAN 0850 126      0.       .0     1.1 *  3 JAN 0710 260      0.       .0      .0 *  4 JAN 0530 394      0.       .0      .0
 2 JAN 0900 127      0.       .0     1.1 *  3 JAN 0720 261      0.       .0      .0 *  4 JAN 0540 395      0.       .0      .0
 2 JAN 0910 128      0.       .0     1.1 *  3 JAN 0730 262      0.       .0      .0 *  4 JAN 0550 396      0.       .0      .0
 2 JAN 0920 129      0.       .0     1.1 *  3 JAN 0740 263      0.       .0      .0 *  4 JAN 0600 397      0.       .0      .0
 2 JAN 0930 130      0.       .0     1.0 *  3 JAN 0750 264      0.       .0      .0 *  4 JAN 0610 398      0.       .0      .0
 2 JAN 0940 131      0.       .0     1.0 *  3 JAN 0800 265      0.       .0      .0 *  4 JAN 0620 399      0.       .0      .0
 2 JAN 0950 132      0.       .0     1.0 *  3 JAN 0810 266      0.       .0      .0 *  4 JAN 0630 400      0.       .0      .0
 2 JAN 1000 133      0.       .0     1.0 *  3 JAN 0820 267      0.       .0      .0 *
 2 JAN 1010 134      0.       .0      .9 *  3 JAN 0830 268      0.       .0      .0 *
                                          *                                          *
*****************************************************************************************************************************

 PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
   (CFS)        (HR)                  6-HR       24-HR       72-HR      66.50-HR
      8.        4.17        (CFS)      1.          0.          0.           0.
                          (INCHES)   1.124       1.433       1.477        1.477
                           (AC-FT)     0.          1.          1.           1.

PEAK STORAGE    TIME                          MAXIMUM AVERAGE STORAGE
  (AC-FT)       (HR)                  6-HR       24-HR       72-HR      66.50-HR
      0.        4.00                   0.          0.          0.           0.

 PEAK STAGE     TIME                          MAXIMUM AVERAGE STAGE
   (FEET)       (HR)                  6-HR       24-HR       72-HR      66.50-HR
     5.20       4.17                  4.74        2.74        1.03         1.03

                          CUMULATIVE AREA =      .01 SQ MI
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STATION DETAIN

(I) INFLOW, (O) OUTFLOW

(S) STORAGE

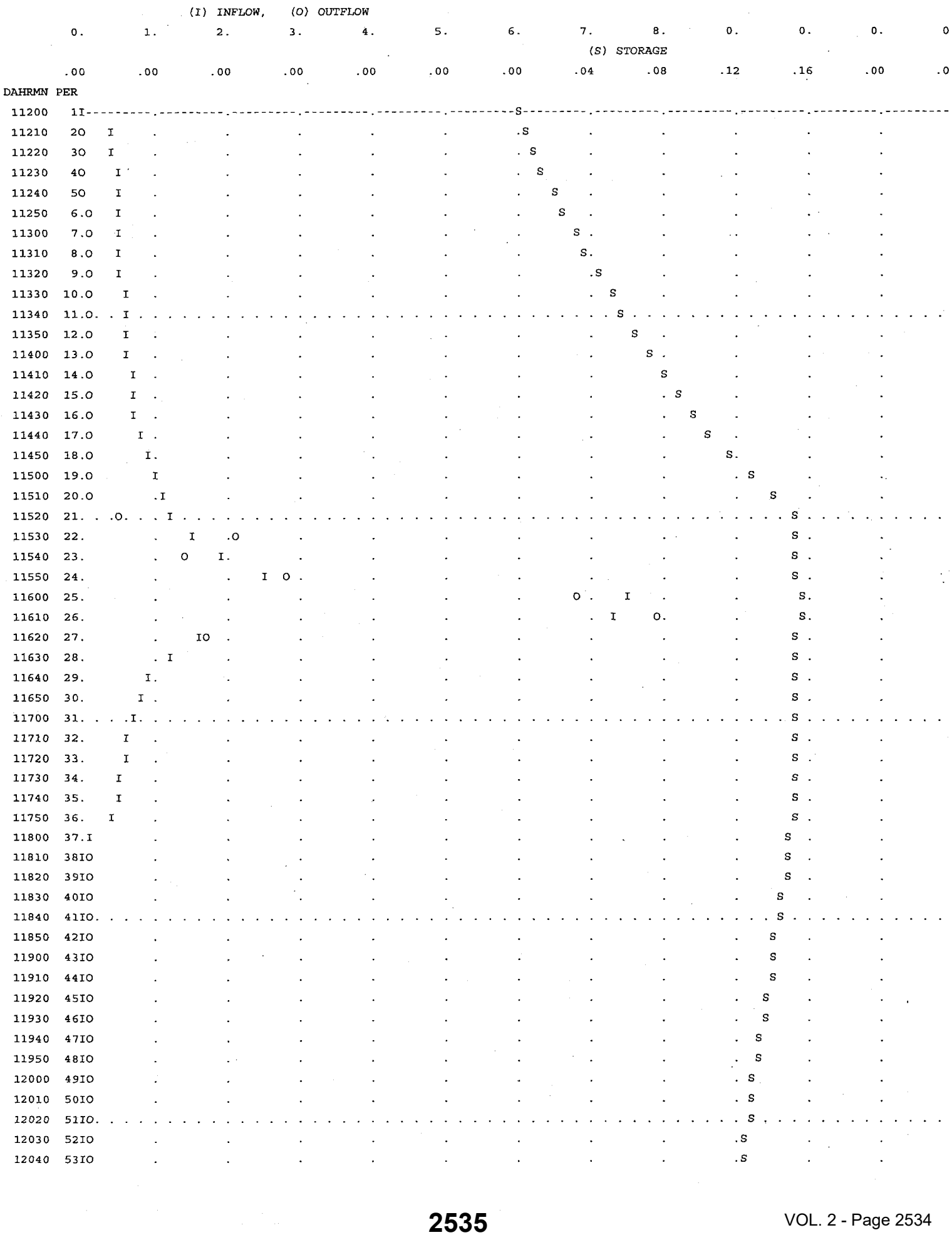

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12050  54IO                                                                  S
12100  55IO                                                                  S
12110  56IO                                                                  S
12120  57IO                                                                 S.
12130  58IO                                                                 S.
12140  59IO                                                                S
12150  60IO                                                                S
12200  61IO                                                                S
12210  62IO                                                               S
12220  63IO                                                               S
12230  64IO                                                              S
12240  65IO                                                              S
12250  66IO                                                              S
12300  67IO                                                            S
12310  68IO                                                            S
12320  69IO                                                            S
12330  70IO                                                          S
12340  71IO                                                          S
12350  72IO                                                        S
20000  73IO                                                        S
20010  74IO                                                        S
20020  75IO                                                      S
20030  76IO                                                      S
20040  77IO                                                      S
20050  78IO                                                     S
20100  79IO                                                     S
20110  80IO                                                     S
20120  81IO                                                    S
20130  82IO                                                    S
20140  83IO                                                    S
20150  84IO                                                   S.
20200  85IO                                                   S.
20210  86IO                                                   S.
20220  87IO                                                  S
20230  88IO                                                  S
20240  89IO                                                  S
20250  90IO                                                 S
20300  91IO                                                 S
20310  92IO                                                 S
20320  93IO                                                 S
20330  94IO                                                S
20340  95IO                                                S
20350  96IO                                                S
20400  97IO                                               S
20410  98IO                                               S
20420  99IO                                               S
20430 100IO                                               S
20440 101IO                                              S
20450 102IO                                              S
20500 103IO                                              S
20510 104IO                                             S
20520 105IO                                             S
20530 106IO                                             S
20540 107IO                                             S
20550 108IO                                            S
20600 109IO                                            S
20610 110IO                                            S
20620 111IO                                            S
20630 112IO                                           S
20640 113IO                                           S
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20650 114IO                                                  .S
20700 115IO                                                  .S
20710 116IO                                                  S
20720 117IO                                                  S
20730 118IO                                                  S
20740 119IO                                                  S
20750 120IO                                                 S.
20800 121IO                                                 .S
20810 122IO                                                 S.
20820 123IO                                                 S.
20830 124IO                                                 S.
20840 125IO                                                S
20850 126IO                                                S
20900 127IO                                                S
20910 128IO                                                S
20920 129IO                                               S
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20950 132IO                                               S
21000 133IO                                               S
21010 134IO                                               S
21020 135IO                                              S
21030 136IO                                              S
21040 137IO                                              S
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21100 139IO                                              S
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21210 146I                                             S
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21300 151I                                             S
21310 152I                                             S
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21330 154I                                            S
21340 155I                                            S
21350 156I                                            S
21400 157I                                            S
21410 158I                                            S
21420 159I                                            S
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21450 162I                                           S
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21510 164I                                           S
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21540 167I                                           S
21550 168I                                           S
21600 169I                                           S
21610 170I                                           S
21620 171I                                           S
21630 172I                                          .S
21640 173I                                          .S
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21650 174I                                   .S
21700 175I                                   .S
21710 176I                                   .S
21720 177I                                   .S
21730 178I                                   .S
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21800 181I                                   .S
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21950 192I                                   .S
22000 193I                                   .S
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22020 195I                                   .S
22030 196I                                   S
22040 197I                                   S
22050 198I                                   S
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22120 201I                                   S
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22140 203I                                   S
22150 204I                                   S
22200 205I                                   S
22210 206I                                   S
22220 207I                                   S
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22250 210I                                   S
22300 211I                                   S
22310 212I                                   S
22320 213I                                   S
22330 214I                                   S
22340 215I                                   S
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30000 217I                                   S
30010 218I                                   S
30020 219I                                   S
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30210 230I                                   S
30220 231I                                   S
30230 232I                                   S
30240 233I                                   S
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30900 271I                                                  S
30910 272I                                                  S
30920 273I                                                  S
30930 274I                                                  S
30940 275I                                                  S
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31000 277I                                                  S
31010 278I                                                  S
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31100 283I                                                  S
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31120 285I                                                  S
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31140 287I                                                  S
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31200 289I                                                  S
31210 290I                                                  S
31220 291I                                                  S
31230 292I                                                  S
31240 293I                                                  S
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32010 338I                                                  S
32020 339I                                                  S
32030 340I                                                  S
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32100 343I                                                  S
32110 344I                                                  S
32120 345I                                                  S
32130 346I                                                  S
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32150 348I                                                  S
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32210 350I                                                  S
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32230 352I                                                  S
32240 353I                                                  S
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40620 399I          .         .         .         .         .         S         .         .         .         .         .
40630 400I---------.---------.---------.---------.---------.---------S---------.---------.---------.---------.---------.---------
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	CTPLF	8.	4.00	1.	0.	0.	.01		
ROUTED TO	DETAIN	8.	4.17	1.	0.	0.	.01	5.20	4.17

*** NORMAL END OF HEC-1 ***

```
CTPLF   101200  1JAN90 0 1 1 400      .007
      .000       .356       .400       .500       .500       .500       .500       .500       .500       .578
      .600       .600       .611       .700       .700       .744       .800       .867       .978      1.089
     1.200      1.522      1.878      2.467      7.511      7.289      1.600      1.167       .922       .800
      .689       .600       .567       .500       .500       .433       .089       .000       .000       .000
      .000       .000       .000       .000       .000       .000       .000
```

.065	.064	.064	.063	.062	.061	.060	.060	.059	.058
.057	.057	.056	.055	.054	.053	.052	.051	.051	.050
.049	.048	.048	.047	.046	.045	.045	.044	.043	.043
.042	.041	.041	.040	.040	.039	.037	.036	.034	.032
.031	.030	.028	.027	.026	.025	.024	.023	.022	.021
.020	.019	.018	.017	.017	.016	.015	.015	.014	.013
.013	.012	.012	.011	.011	.010	.010	.009	.009	.008
.008	.008	.007	.007	.007	.006	.006	.006	.006	.005
.005	.005	.005	.005	.004	.004	.004	.004	.004	.003
.003	.003	.003	.003	.003	.003	.003	.002	.002	.002
.002	.002	.002	.002	.002	.002	.002	.002	.001	.001
.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
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APPENDIX D

Details
for
Cistern with Bioretention Facility
(Including Bayseparator, StormTrap, and Bioretention)

Cistern with Bioretention Facility

A cistern in series with a bioretention facility can meet treatment requirements where space is limited. In this configuration, the cistern is equipped with a flow-control orifice and the bioretention facility is sized to treat a trickle outflow from the cistern.

Best Uses

- In series with a bioretention facility to meet treatment requirement in limited space.
- Management of roof runoff
- Dense urban areas

Advantages

- Storage volume can be in any configuration

Limitations

- Somewhat complex to design, build, and operate
- Requires head for both cistern and bioretention facility

▶ CRITERIA

Cistern. The cistern must detain the volume calculated by Equation 4-8 and must include an orifice or other device designed for a 24-hour drawdown time.

Bioretention facility. See the design sheet for bioretention facilities. The area of the bioretention facility must be sized to treat the maximum discharge flow, assuming a percolation rate of 5" per hour through the engineered soil.

Use with sand filter. A cistern in series with a sand filter can meet treatment requirements. See the discussion of treatment facility selection in Section 2 and the design guidance for sand filters in Section 4.

▶ DETAILS

Flow-control orifice. The cistern must be equipped with an orifice plate or other device to limit flow to the bioretention area.

Preventing mosquito harborage. Cisterns should be designed to drain completely, leaving no standing water. Drains should be located flush with the bottom of the cistern. Alternatively—or in addition—all entry and exit points, should be provided with traps or sealed or screened to prevent mosquito entry. Note mosquitoes can enter through openings 1/16" or larger and will fly for many feet through pipes as small as 1/4".

Exclude debris. Provide leaf guards and/or screens to prevent debris from accumulating in the cistern.

Ensure access for maintenance. Design the cistern to allow for cleanout. Avoid creating the need for maintenance workers to enter a confined space. Ensure the outlet orifice can be easily accessed for cleaning and maintenance.

► APPLICATIONS

Shallow ponding on a flat roof. The "cistern" storage volume can be designed in any configuration, including simply storing rainfall on the roof where it falls and draining it away slowly. See the County of San Diego's 85th percentile isopluvial diagrams for required average depths.

Cistern attached to a building and draining to a planter. This arrangement allows a planter box to be constructed with a smaller area.

Vault with pumped discharge to bioretention facility. In this arrangement, runoff from a parking lot and/or building roofs can be captured and detained underground and then pumped to a bioretention facility on the surface. Alternatively, treatment can be accomplished with a sand filter. See the discussion of selection of stormwater treatment facilities in Section 2.

Water harvesting or graywater reuse. It may be possible to create a site-specific design that uses cisterns to achieve stormwater flow control, stormwater treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse. Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Design Checklist for Cistern

- ❒ Volume meets or exceeds minimum.
- ❒ Outlet with orifice or other flow-control device restricts flow and is designed to provide a 24-hour drawdown time.
- ❒ Outlet is piped to a bioretention facility designed to treat the maximum discharge from the cistern orifice.
- ❒ Cistern is designed to drain completely and/or sealed to prevent mosquito harborage.
- ❒ Design provides for exclusion of debris and accessibility for maintenance.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.

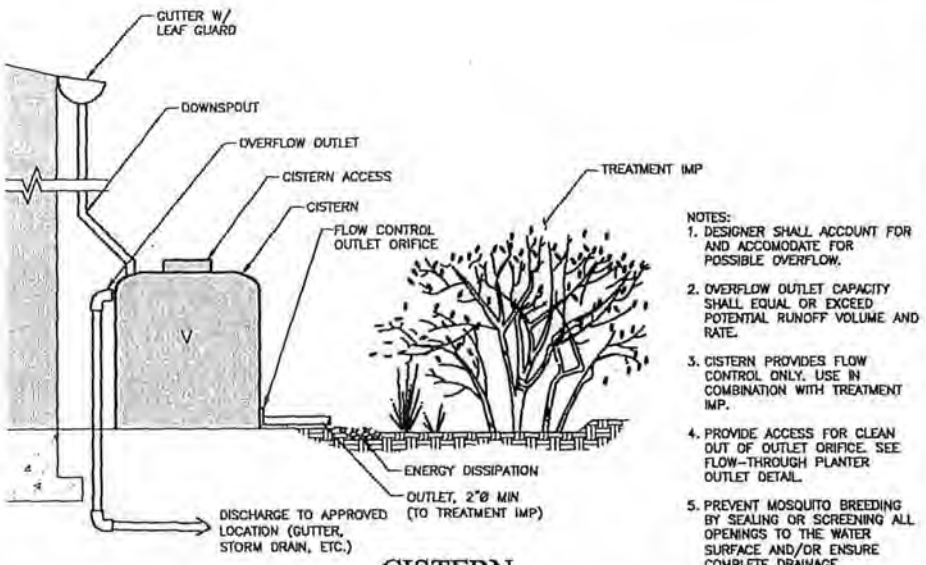

NOTES:
1. DESIGNER SHALL ACCOUNT FOR AND ACCOMODATE FOR POSSIBLE OVERFLOW.
2. OVERFLOW OUTLET CAPACITY SHALL EQUAL OR EXCEED POTENTIAL RUNOFF VOLUME AND RATE.
3. CISTERN PROVIDES FLOW CONTROL ONLY. USE IN COMBINATION WITH TREATMENT IMP.
4. PROVIDE ACCESS FOR CLEAN OUT OF OUTLET ORIFICE. SEE FLOW-THROUGH PLANTER OUTLET DETAIL.
5. PREVENT MOSQUITO BREEDING BY SEALING OR SCREENING ALL OPENINGS TO THE WATER SURFACE AND/OR ENSURE COMPLETE DRAINAGE.

CISTERN

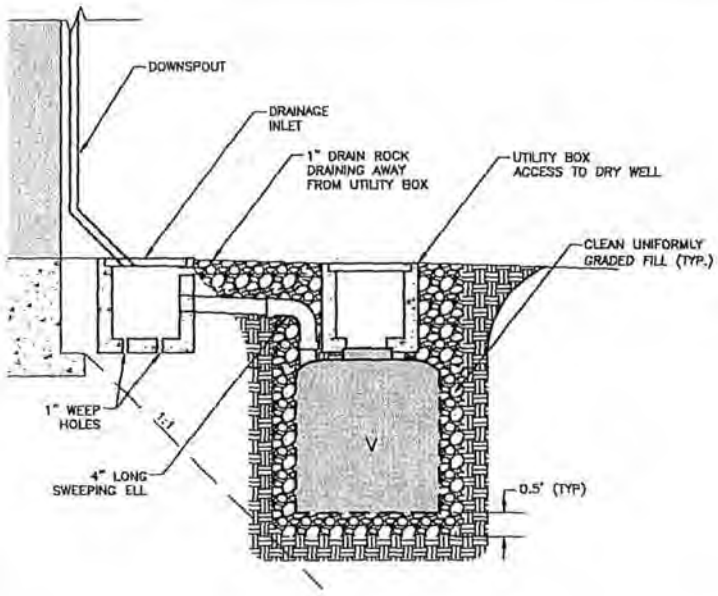

DRY WELL

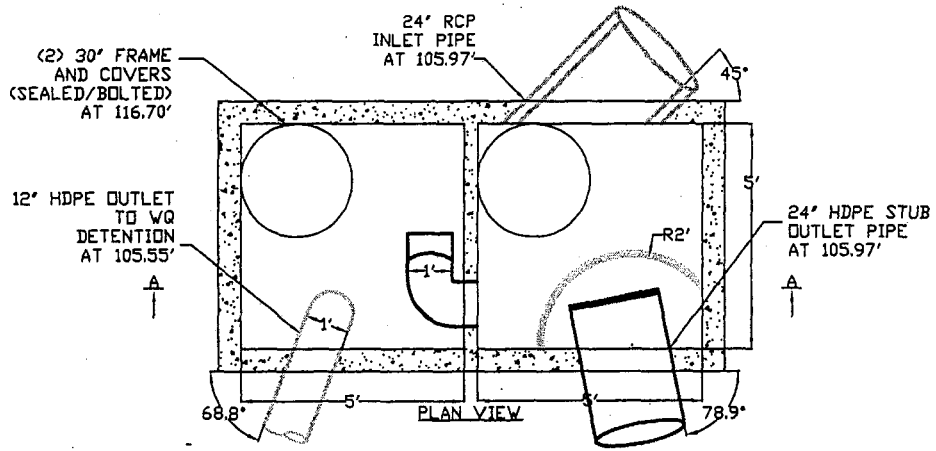

PLAN VIEW

INLET PIPE INVERT:	105.97'
INLET PIPE ID AND MATERIAL:	24" RCP
OUTLET PIPE INVERT:	105.97'
OUTLET PIPE ID AND MATERIAL:	24" RCP
RIM ELEVATION:	116.70'

GENERAL NOTES:

1. SEE BAYSAVER SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR FURTHER DETAIL.
2. USE NON-SHRINK GROUT TO SEAL THE INLET AND OUTLET PIPE IN TO THE VAULT STRUCTURE.
3. PROTECTED BY US PATENT NO. 5,746,911 INTERNATIONAL PATENTS AND PATENTS PENDING.

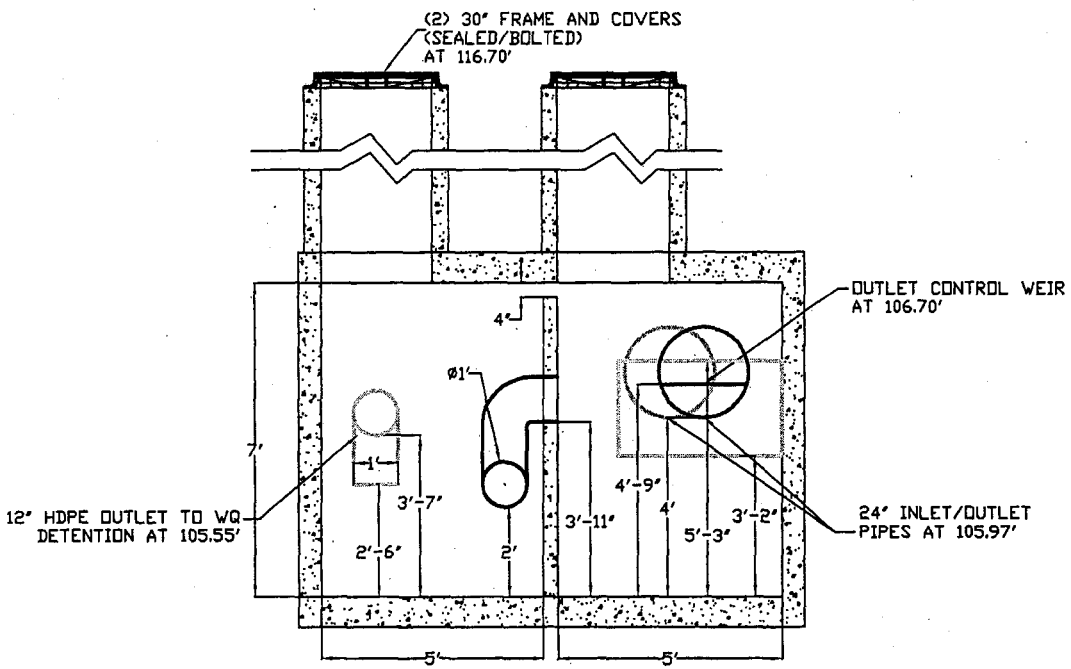

SECTION VIEW A-A

PRE-TREATMENT PORTION

REV	DESCRIPTION	DATE	APPR

NOTES:

1. MAX. TREATMENT CAPACITY 2.93 CFS
2. MAX. PEAK CAPACITY 16.04 CFS
3. 24" HDPE STUB OUTLET TO CONNECT TO RCP PIPE OUTSIDE VAULT.
4. 12" HDPE STUB OUTLET TO CONNECT TO RCP PIPE OUTSIDE VAULT.

BAYSAVER TECHNOLOGIES, INC.
Engineering Stormwater Solutions
www.BaySaver.com 800.229.7283

DESIGNED:	TEP	DATE:	1/24/11
DRAWN:	PR	SCALE:	N.T.S.
CHECKED:	EKH	DWG NO:	SV-FSA

POINSETTIA PROPERTIES–THE TIDES
BAYSEPARATOR FS 4X4 (LOW FLOW)
SUBMITTAL DETAIL

STORMTRAP® PATENTED

PRECAST CONCRETE MODULAR STORM WATER MANAGEMENT SYSTEMS

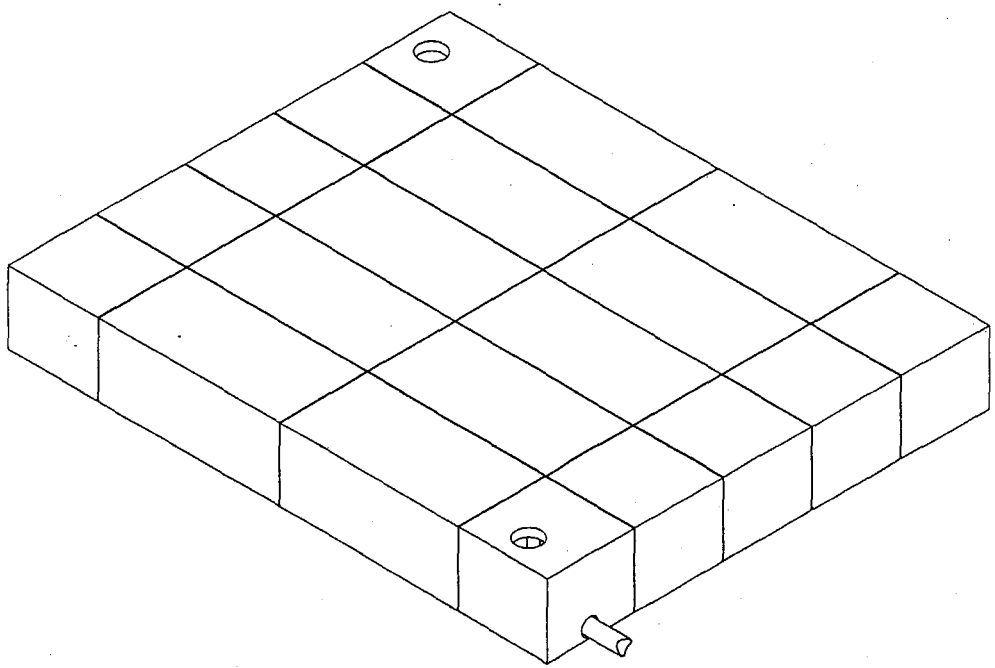

THE TIDES

CARLSBAD, CA

REGISTERED PROFESSIONAL ENGINEER
EDWARD D. LOSCH
C61294
CIVIL
STATE OF CALIFORNIA

Exp.06-30-11

SHEET INDEX

PAGE	DESCRIPTION		REV.
1	COVER SHEET		1
2	SINGLETRAP INSTALLATION SPECIFICATIONS		2
2.1	SINGLETRAP INSTALLATION SPECIFICATIONS		2
2.2	SINGLETRAP INSTALLATION SPECIFICATIONS		1
2.3	STORM LINER INSTALLATION SPECIFICATIONS		1
3	LAYOUT DETAIL		1
3.1	SINGLE TRAP INSTALLATION SPECIFICATIONS		1
4	STANDARD - 5'-0" SINGLETRAP	TYPE I	1
5	STANDARD - 5'-0" SINGLETRAP	TYPE II	1
6	STANDARD - 5'-0" SINGLETRAP	TYPE III	1
7	STANDARD - 5'-0" SINGLETRAP	TYPE IV	1
8	STANDARD - 5'-0" SINGLETRAP	TYPE V	1

JOB SITE INFORMATION

DESCRIPTION	
JOB NAME:	THE TIDES
JOB ADDRESS:	CARLSBAD, CA
ENGINEERING CO:	RICK ENGINEERING COMPANY
CONTACT NAME:	NOBUYA MURAKAMI
CONTACT PHONE:	619-291-0707
CONTACT FAX:	619-291-4165
STORM TRAP SUPPLIER:	STORMTRAP
CONTACT NAME:	TYLER KEEGAN
CONTACT PHONE:	815-941-4663
CONTACT FAX:	815-416-1100
WATER STORAGE REQ'D:	6,091.00 CUBIC FEET
WATER STORAGE PROV:	6,542.00 CUBIC FEET
UNIT HEADROOM:	5'-0" SINGLETRAP
UNIT QUANTITY:	20 UNITS - 20 TOTAL PIECES

CISTERN PORTION

STORMTRAP
2495 WEST BUNGALOW ROAD
MORRIS, IL 60450
P: 815-941-4663
F: 815-416-1100

ENGINEER INFORMATION:

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
Phone: 619-291-0707
Fax: 619-291-4165

PROJECT INFORMATION:

POINSETTIA PROPERTIES
(THE TIDES)
CARLSBAD, CA
TK-5268-CA-10

CURRENT ISSUE DATE:

18-JAN-2011

APPROVED BY:

ISSUED FOR:

REV. SBMTL.

REV.:	DATE:	DESC.	BY:
2	18-JAN-2011	ISSUED FOR REV. SBMTL	TK
1	29-DEC-2010	ISSUED FOR SUBMITTAL	TK

SCALE:

NTS

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

01

BIORETENTION PORTION

Bioretention Facilities

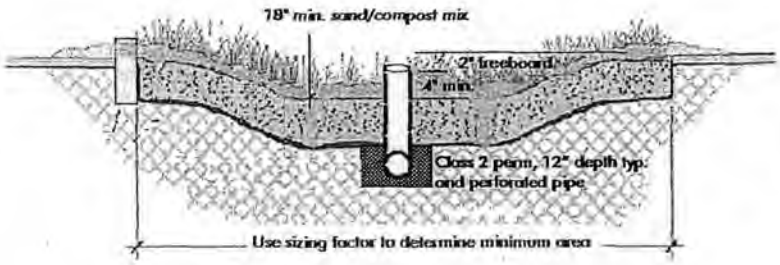

Bioretention facility configured for treatment-only requirements. Bioretention facilities can rectangular, linear, or nearly any shape.

Bioretention detains runoff in a surface reservoir, filters it through plant roots and a biologically active soil mix, and then infiltrates it into the ground. Where native soils are less permeable, an underdrain conveys treated runoff to storm drain or surface drainage.

Bioretention facilities can be configured in nearly any shape. When configured as linear **swales**, they can convey high flows while percolating and treating lower flows.

Bioretention facilities can be configured as in-ground or above-ground planter boxes, with the bottom open to allow infiltration to native soils underneath. If infiltration cannot be allowed, use the sizing factors and criteria for the Flow-Through Planter.

► CRITERIA

For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)
Soil mix surface area	0.04 times tributary impervious area (or equivalent)

Best Uses

- Commercial areas
- Residential subdivisions
- Industrial developments
- Roadways
- Parking lots
- Fit in setbacks, medians, and other landscaped areas

Advantages

- Can be any shape
- Low maintenance
- Can be landscaped

Limitations

- Require 4% of tributary impervious square footage
- Typically requires 3-4 feet of head
- Irrigation typically required

Parameter	Criterion
Surface reservoir depth	6 inches minimum; may be sloped to 4 inches where adjoining walkways.
Underdrain	Required in Group "C" and "D" soils. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► DETAILS

Plan. On the surface, a bioretention facility should be one level, shallow basin—or a series of basins. As runoff enters each basin, it should flood and fill throughout before runoff overflows to the outlet or to the next downstream basin. This will help prevent movement of surface mulch and soil mix.

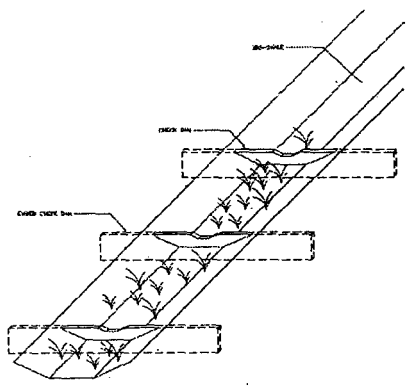

Use check dams for linear bioretention facilities (swales) on a slope.

In a linear swale, check dams should be placed so that the lip of each dam is at least as high as the toe of the next upstream dam. A similar principle applies to bioretention facilities built as terraced roadway shoulders.

Inlets. Paved areas draining to the facility should be graded, and inlets should be placed, so that runoff remains as sheet flow or as dispersed as possible. Curb cuts should be wide (12" is recommended) to avoid clogging with leaves or debris. Allow for a minimum reveal of 4"-6" between the inlet and soil mix elevations to ensure turf or mulch buildup does not block the inlet. In addition, place an apron of stone or concrete, a foot square or larger, inside each inlet to prevent vegetation from growing up and blocking the inlet.

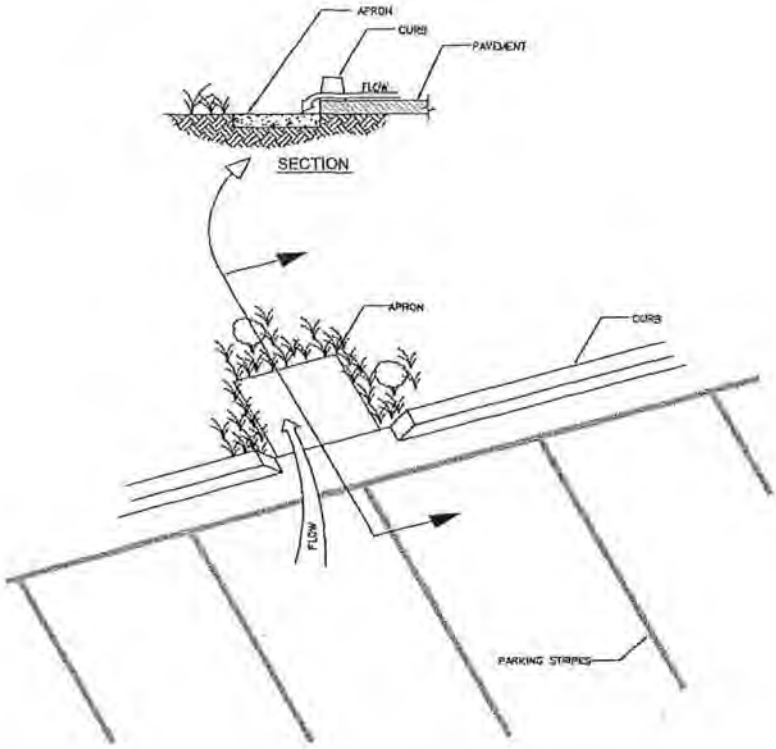

Recommended design details for bioretention facility inlets (see text).

Where runoff is collected in pipes or gutters and conveyed to the facility, protect the landscaping from high-velocity flows with energy-dissipating rocks. In larger installations, provide cobble-lined channels to better distribute flows throughout the facility.

Upturned pipe outlets can be used to dissipate energy when runoff is piped from roofs and upgradient paved areas.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" washed pea gravel be substituted at the top of the crushed rock gravel layers. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer or the gravel drainage layer from the native soil.

Underdrains. No underdrain is required where native soils beneath the facility are Hydrologic Soil Group A or B. For treatment-only facilities where native soils are Group C or D, a perforated pipe must be bedded in the gravel layer and must terminate at a storm drain or other approved discharge point.

Outlets. In treatment-only facilities, outlets must be set high enough to ensure the surface reservoir fills and the entire surface area of soil mix is flooded before the outlet elevation is reached. In swales, this can be achieved with appropriately placed check dams.

The outlet should be designed to exclude floating mulch and debris.

Vaults, utility boxes and light standards. It is best to locate utilities outside the bioretention facility—in adjacent walkways or in a separate area set aside for this purpose. If utility structures are to be placed within the facility, the locations should be anticipated and adjustments made to ensure the minimum bioretention surface area and volumes are achieved. Leaving the final locations to each individual utility can produce a haphazard, unaesthetic appearance and make the bioretention facility more difficult to maintain.

Emergency overflow. The site grading (construction) plan shall include details that demonstrate the bioretention basin can handle larger (up to 100-year) storm events and address potential clogging of the overflow and route emergency overflows safely.

Trees. Bioretention areas can accommodate small or large trees. There is no need to subtract the area taken up by roots from the effective area of the facility. Extensive tree roots maintain soil permeability and help retain runoff. Normal maintenance of a bioretention facility should not affect tree lifespan.

The bioretention facility can be integrated with a tree pit of the required depth and filled with structural soil. If a root barrier is used, it can be located to allow tree roots to spread throughout the bioretention facility while protecting adjacent pavement. Locations and planting elevations should be selected to avoid blocking the facility's inlets and outlets.

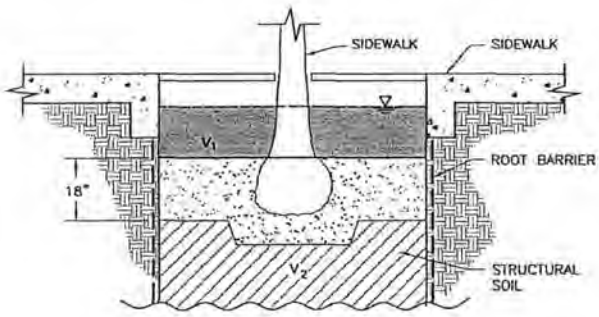

Bioretention facility configured as a tree well.
The root barrier is optional.

APPENDIX E

Supplemental Letter
by
Geotechnical Engineer

Earth - Strata, Inc.
Geotechnical, Environmental and Materials Testing Consultants
BETTER PEOPLE • BETTER SERVICE • BETTER RESULTS

January 25, 2011 Project No. 10707-10B

Mr. John Norum, P.E.
K. HOVNANIAN HOMES
1500 South Haven Avenue, Suite 100
Ontario, CA 91761

Subject: Revised Geotechnical Evaluation of Storm Water Management and Recommendations for Side Yard Drainage for the Proposed 31-Lot Residential Development, Located on the Southwest Corner of Poinsettia Lane and Pasceo Del Norte, City of Carlsbad, San Diego County, California

Pursuant to your request, Earth-Strata has reviewed the storm water management plan for the subject property. The review consisted of evaluating the plans for the single cistern/bio-retention concept within Lot 6 and Sheets No. 1 through 8, for the "Storm Trap Precast Concrete Modular Storm Water Management Systems" dated September 29, 2010. The design utilizes the concept that the majority of the storm water should only be allowed to infiltrate in designated areas.

We recommend that the minimum distance from the proposed house to the flow line of the adjacent swale as indicated in the Typical Side Yard w/ Retaining Wall Detail be increased from 3 to 4 feet.

In addition, it is our opinion that the proposed infiltration system in the revised plans noted above should not be detrimental to the long term stability of the proposed slopes and appurtenant structures. Additionally, any substantial alterations to the plans to include infiltration throughout the site is not recommended. As noted within the referenced geotechnical reports, we are concerned from a geotechnical point of view if storm water is not controlled and allowed to infiltrate throughout the site. After the site is rough graded geological contacts will exist between the native earth materials and the various artificial fill materials. If water is encouraged to infiltrate at numerous locations throughout the site, the groundwater could be considerably detrimental to the long term stability of the slopes and appurtenant structures.

We hope that this further clarifies the need for controlling and limiting areas where infiltration is permitted.

The opportunity to be of service is appreciated. Should you have any questions or require further clarification, please notify our office at your earliest convenience.

Respectfully submitted,

EARTH-STRATA, INC.

Exp. 2/28/11

Chad E. Welke, PG, CEG, PE
Principal Geologist/Engineer

Stephen M. Poole, PE, GE
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
STEPHEN MICHAEL POOLE
No. 692
Exp. 9/30/12
GEOTECHNICAL
STATE OF CALIFORNIA

CW/SMP/am

Attachment: APPENDIX A – References (Rear of Text)

Distribution: (2) Addressee
(3) Mr. Craig Kahlen – Rick Engineering

APPENDIX A

REFERENCES

APPENDIX A

References

Earth-Strata, Inc., 2010, *Interpretive Report for Infiltration System, Proposed 29-Lot Residential Development, Located on the Southwest Corner of Poinsettia Lane and Lowder Lane City of Carlsbad, San Diego County, California,* dated May 6.

_____, 2010a, *Preliminary Geotechnical Interpretive Report, Proposed 29-Lot Residential Development, Located on the Southwest Corner of Poinsettia Lane and Lowder Lane City of Carlsbad, San Diego County, California,* dated May 11.

_____, 2010b, *Geotechnical Review of Draft Retaining Wall Alternative Analysis Report, Proposed 29-Lot Residential Development, Located on the Southwest Corner of Poinsettia Lane and Lowder Lane City of Carlsbad, San Diego County, California*, dated May 25.

_____, 2010, *Preliminary Turf Block Recommendation Letter, Proposed Residential Development, Located on the Southwest Corner of Poinsettia Lane and Lowder Lane, City of Carlsbad, San Diego County, California*, dated September 14.

_____, 2010, *Geotechnical Review of Foundation Plans for the Proposed 25-Lot Residential Development, Located on the Southwest Corner of Poinsettia Lane and Pasceo Del Norte, City of Carlsbad, San Diego County, California*, dated October 20.

_____, 2010, *Supplemental Geotechnical Retaining Wall Design Recommendations, Proposed Poinsettia Residential Development, Located on the Southwest Corner of Poinsettia Lane and Lowder Lane City of Carlsbad, San Diego County, California*, dated October 20.

_____, 2010, *Update Geotechnical Retaining Wall Design Recommendations, Proposed La Marea Residential Development, Located on the Southwest Corner of Poinsettia Lane and Lowder Lane City of Carlsbad, San Diego County, California,* dated November 11.

_____, 2010, *Geotechnical Evaluation of Storm Water Management for the Proposed 25-Lot Residential Development, Located on the Southwest Corner of Poinsettia Lane and Pasceo Del Norte, City of Carlsbad, San Diego County, California*, dated November 11.

APPENDIX F

Biological Evaluation

GLENN LUKOS ASSOCIATES
Regulatory Services

April 1, 2011

Mr. Christopher Courtney
K. Hovnanian Companies, Inc.
1500 South Haven Avenue
Suite 100
Ontario, California 91761

SUBJECT: Biological Evaluation of Potential Effects to Biological Resources in Batiquitos Lagoon Associated with Increase in Stormwater Discharge to a Tributary Upstream of Batiquitos Lagoon Originating with the Carlsbad 27 Project, Located in the City of Carlsbad; San Diego County, California.

Dear Mr. Courtney:

A biologist from Glenn Lukos Associates, Inc. (GLA) visited the above mentioned tributary and adjacent areas of Batiquitos Lagoon on March 28, 2011 to identify and analyze any potential biological effects of the proposed Carlsbad 27 Project (also known as The Tides) [Project] relevant to the new Standard Urban Storm Water Management Plan (SUSMP). During several telephone calls with Martin Rasnick during the past two weeks, K. Hovnanian companies (KHOV) has requested that GLA prepare a letter report documenting the potential effect that the Project will have upon the Lagoon and its habitat. Based upon the information provided by KHOV, GLA conducted a one-day biological site review of the proposed discharge point extending from the discharge point to where the discharge would enter the Lagoon. This site review documents existing biological conditions beginning at the discharge point, extending to the lagoon.

Exhibit 1 is a site location map and Exhibit 2 depicts the proposed Carlsbad 27 Project area. Exhibit 3 consists of site photographs documenting the current biological conditions at the Study Area of the proposed discharge.

I. PROJECT DESCRIPTION

K. Hovnanian Companies, Inc. (KHOV) is processing a grading permit for the Carlsbad 27 Project (also known as The Tides) [Project] located in the City of Carlsbad (City); San Diego County, California. The Tides property consists of approximately 5.12 acres and is located offsite to the subject tributary, and is bounded by Interstate 5 to the west, Poinsettia Lane to the north, Lowder Lane to the east, and existing residential development to the south. The storm drain where

29 Orchard ▪ Lake Forest ▪ California 92630-8300
Telephone: (949) 837-0404 Facsimile: (949) 837-5834

stormwater originating on the Tides project site would discharge is located at the uppermost reach of a tributary of Batiquitos Lagoon, which is also located in the City of Carlsbad (City); San Diego County, California. The tributary to Batiquitos Lagoon includes areas of willow riparian habitat along with freshwater marsh which, combined cover approximately 1.79 acres. The slopes above the tributary are vegetated with a mosaic of native scrub and ornamental vegetation, which is bounded by existing residential development to the north, east, and west, and open salt marsh associated with Batiquitos Lagoon to the south (Exhibits 1 and 2). The tributary to the Batiquitos Lagoon extends from the outfall structure to the south and carries the discharge downstream for approximately 843 linear feet to where it exists the tributary and enters the saltwater marsh in the Batiquitos Lagoon.

Under existing conditions, freshwater discharge from the tributary drainage's watershed into Batiquitos Lagoon during a 100-year storm event totals 197 cfs. The Tides project site currently contributes 12.65 cfs of this 197 cfs total under existing conditions. With construction of the Tides project, the amount of fresh water discharge into the tributary during a 100-year storm event would be increased by approximately 1.37 cfs, or only a 0.7 percent (less than one percent) increase. As discussed below, this increase would not have a measurable impact on the biological resources within Batiquitos Lagoon.

Project Design Standards

The City has recently adopted a new Standard Urban Storm Water Management Plan (SUSMP) and will not issue a grading permit for the Project until it has been documented that the urban runoff originating on the Tides project site will not have a detrimental effect upon, or result in habitat conversion of, the receiving water body, Batiquitos Lagoon.

The Project Engineer, Rick Engineering (Rick), and KHOV have provided the hydrological data to assist GLA with the preparation of this letter report. Pre-project hydrologic calculations for the 5.12-acre project location indicate that currently, the site would generate approximately 12.65 cfs of freshwater discharge during a 100-year event. Post-project hydrologic calculations for discharge collection are estimated to increase by 1.37 cfs, for a combined total of 14.02 cfs at the proposed discharge location. Rick's information confirms that the Project will only add flows of 1.37 cfs, or 0.7 percent (less than one percent) to Batiquitos Lagoon during a 100-year event.

II. METHODOLOGY

In order to evaluate the potential impacts of the increased storm water discharge, GLA Senior Biologist Tony Bomkamp visited the site on March 28, 2011 to evaluate the conditions within

the tributary, which discharges into Batiquitos Lagoon as well as the conditions in the lagoon at the tributary/lagoon confluence. Exhibit 2 depicts the relationship of the outfall location, tributary, and Batiquitos Lagoon.

Upon arriving on site, the upper reach of the tributary was examined on foot, beginning at the outfall and moving downstream, past a channelized portion of the drainage, and into the lower area of southern arroyo willow forest. Because of the density of the willow, it was not possible to reach the area of dense cattails that dominates the lower 300+ feet of the tributary. These areas as well as the adjacent portions of Batiquitos Lagoon were evaluated from the adjacent slopes.

In order to conduct the evaluation, the wetland/riparian vegetation communities within the tributary were mapped as well as the adjacent areas of the Lagoon as depicted on Exhibit 2.

III. RESULTS

Site Conditions Between Existing Outfall Structure and Lagoon

As mentioned above, the field investigation focused on the characteristics of the tributary, which would receive discharge from the Tides project that would be co-mingled with other sources of discharge from surrounding areas. The tributary supports approximately 1.49 acres of freshwater riparian and wetland habitats dominated by willow forest and cattail marsh. From the discharge point of the outfall structure, the tributary extends for approximately 843 linear feet to where it discharges to Batiquitos Lagoon. The proposed Tides project will discharge storm flows and nuisance water to a storm drain that ultimately discharges to a tributary of Batiquitos Lagoon.

The outfall leaving the storm drain originates from adjacent housing development and fresh water storm flow. Discharge observed along the tributary bottom consists of fresh water habitat. The most common plant species observed within 150 feet downstream from the outfall include previously maintained giant reed (*Arundo donax*), white water cress (*Rorippa nasturtium-aquaticum*), and prickly sow thistle (*Sonchus asper*).

Immediately downstream of the area where the giant reed has been cut, the understory appears sparse from storm scour, while the canopy remains lush with arroyo willow (*Salix lasiolepis*) as the dominant species. Additional vegetation within the channel area includes non-native African umbrella sedge (*Cyperus involucratus),* and southern cattail (*Typha domingensis*). Below the first stand of willows, occurs a second stand that is much more dense and includes a dense understory. Downstream of the lower stand of willows is dense stands of southern cattail, which

extend to where there is an abrupt transition to salt marsh habitat within Batiquitos Lagoon. As noted, all of the vegetation observed within 843 linear feet downstream from the outfall, is freshwater species and is depicted on Exhibit 4.

The transition from freshwater habitat to saltwater habitat is observed at approximately 843 linear feet south of the drainage outfall. Salt marsh vegetation observed at the confluence is dominated by cord grass (*Spartina foliosa*) within the lower elevations and common pickleweed (*Salicornia virginica*) and other salt marsh species, such as salt grass (*Distichlis spicata*), at the higher elevations. It is noteworthy that the dominant vegetation at the transition from cattail marsh to salt marsh is the cord grass, which is highly tolerant of inundation but not tolerant of high salt contents (i.e., above the 35 parts per thousand) which is typical of seawater. Conversely, common pickleweed is tolerant of higher salinity concentrations, typical of salt marsh areas that do not receive regular tidal flushing or freshwater storm discharge (though pickleweed does need freshwater for germination).

Given that the tributary drainage contains 197 cfs of freshwater discharge during a 100-year storm event and the change in hydrology from 12.65 cfs that currently reaches the site during a 100-year event as compared to the 14.02 cfs that would be contributed to the area in the post-project 100-year storm event (0.7 percent of the total cfs, or less than one percent of the overall flow), there would be no change either to the freshwater riparian and marsh species that currently occupy the tributary or the salt marsh habitat at the confluence, given the dominance of cord grass at the transition area.

In conclusion, after completion of the biological site review, GLA has determined that proposed increase in urban fresh water runoff flows leaving the proposed Project site will not have a detrimental effect upon, or result in habitat conversion of, the receiving water body, Batiquitos Lagoon (Lagoon).

Should you have any questions regarding this proposal please call Tony Bomkamp (949) 837-0404.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

Tony Bomkamp
Senior Biologist/Wetland Specialist

s: 0558-16a.rpt.doc

Adapted from USGS Santa Ana quadrangle

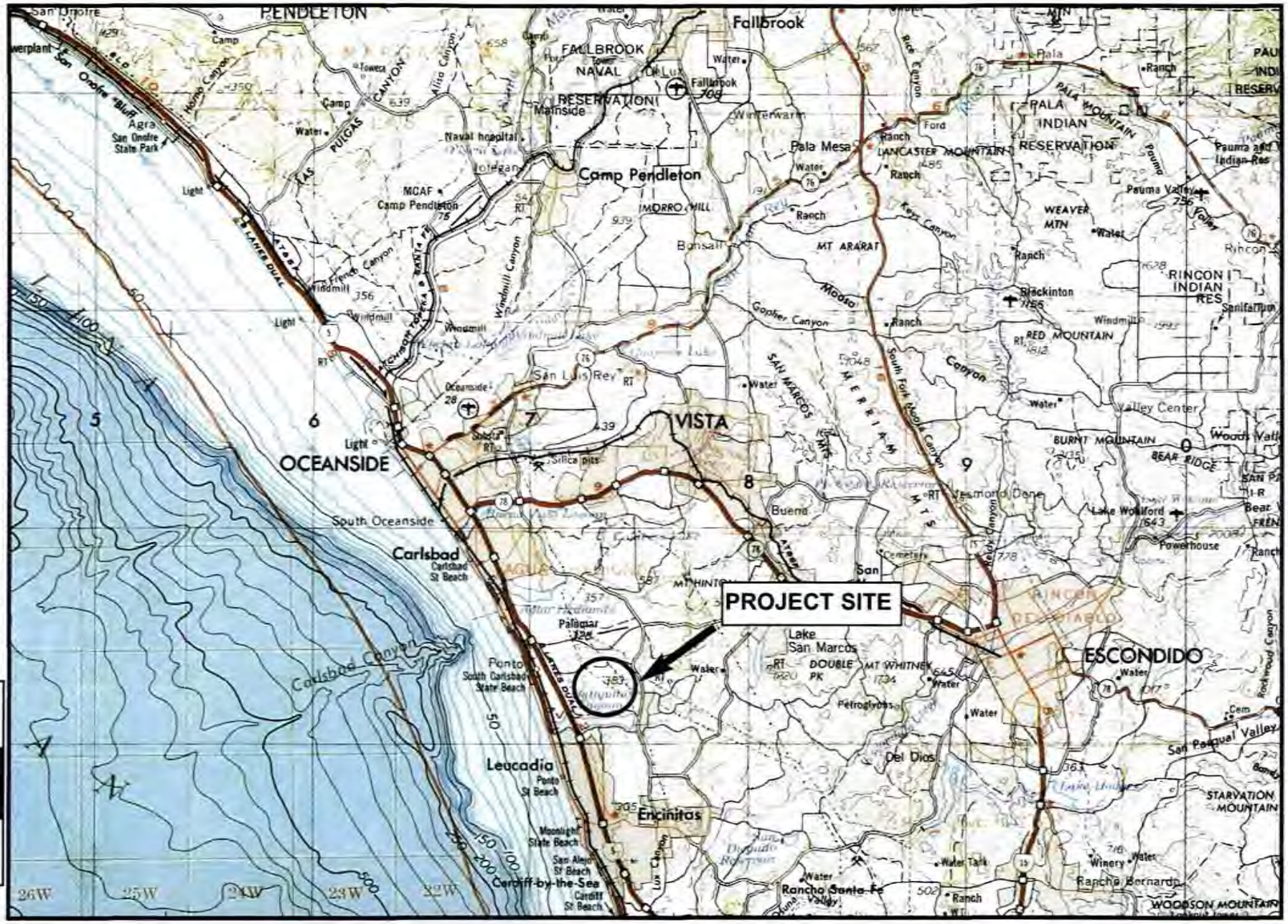

CARLSBAD 27 PROJECT

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1

Adapted from USGS Encinitas, CA quadrangle

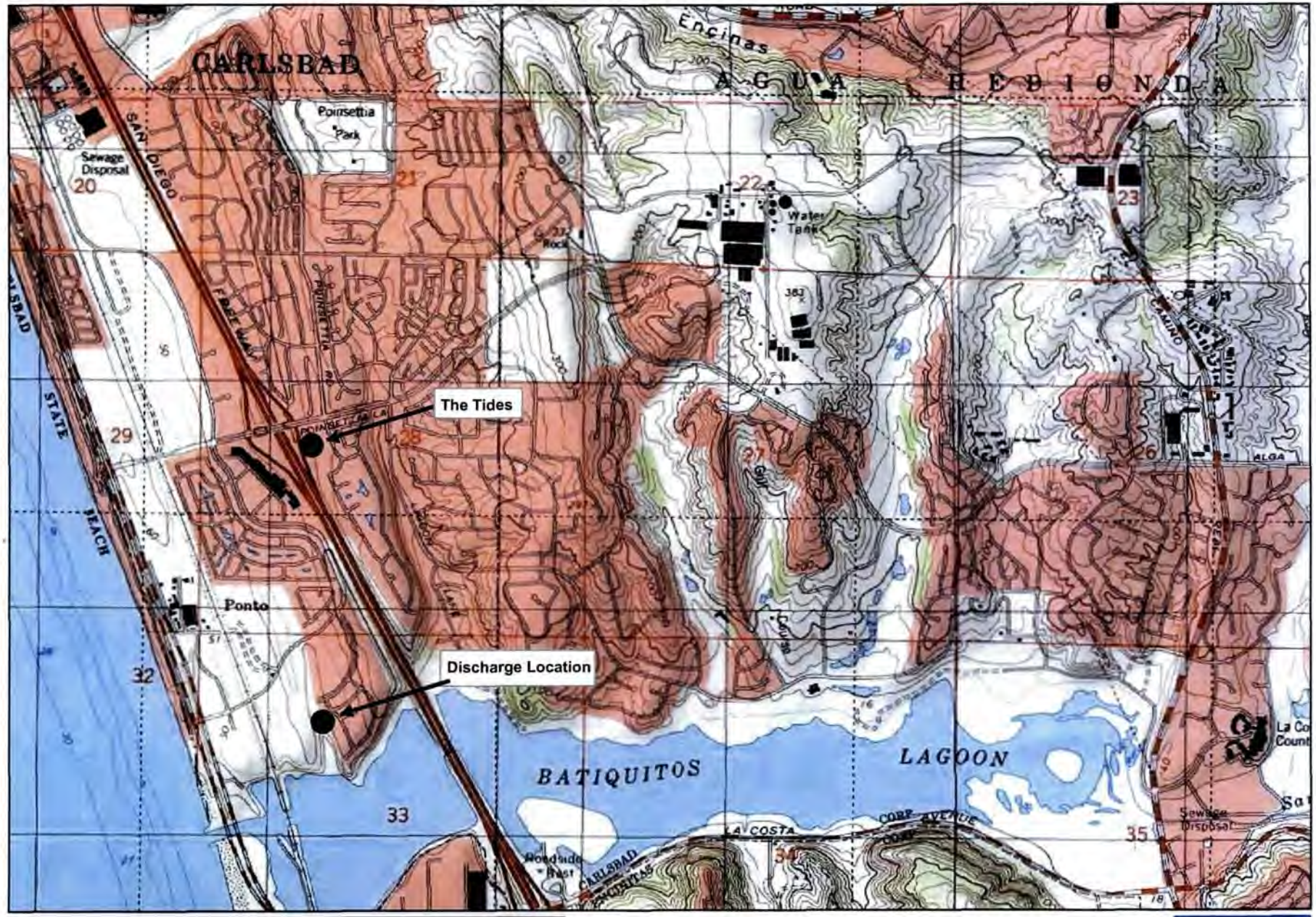

NORTH

0 1,000 2,000 4,000 Feet

CARLSBAD 27 PROJECT

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2

Photograph 1: Northern view depicting storm drain discharge point into tributary of Batiquitos Lagoon

Photograph 2: Southern view of tributary to Batiquitos Lagoon depicting willow forest habitat and previously maintained giant reed

GLENN LUKOS ASSOCIATES

EXHIBIT 3

CARLSBAD 27 PROJECT

Site Photographs

Photograph 3: Southern view depicting the confluence of the tributary and Batiquitos Lagoon

Photograph 4: Southwesterrn view depicting the confluence of the tributary and Batiquitos Lagoon

GLENN LUKOS ASSOCIATES

EXHIBIT 3

CARLSBAD 27 PROJECT

Site Photographs

Legend
Offsite Study Area
Onsite Study Area
Arroyo Willow
Giant Reed
Salt Marsh/Musflat
Southern Cattail
Unvegetated Streambed
Discharge Location
N
0 50 100
Feet
CARLSBAD 27 PROJECT
Vegetation Map
GLENN LUKOS ASSOCIATES
Exhibit 4
X:\0363-THE REST\0558-16BAT\558-16_GIS\VegetationGIS\558-16ZVegetation.mxd
March 30, 2011

MAP POCKET 1

DMA/IMP Exhibit
for
Poinsettia Properties
(The Tides)

Prepared By:
Rick Engineering Company – Water Resources Division

JJT:NM:vs/Report/14826-C.004
9-20-10
Revised: 11-17-10
Revised: 01-26-11
Revised: 04-05-11

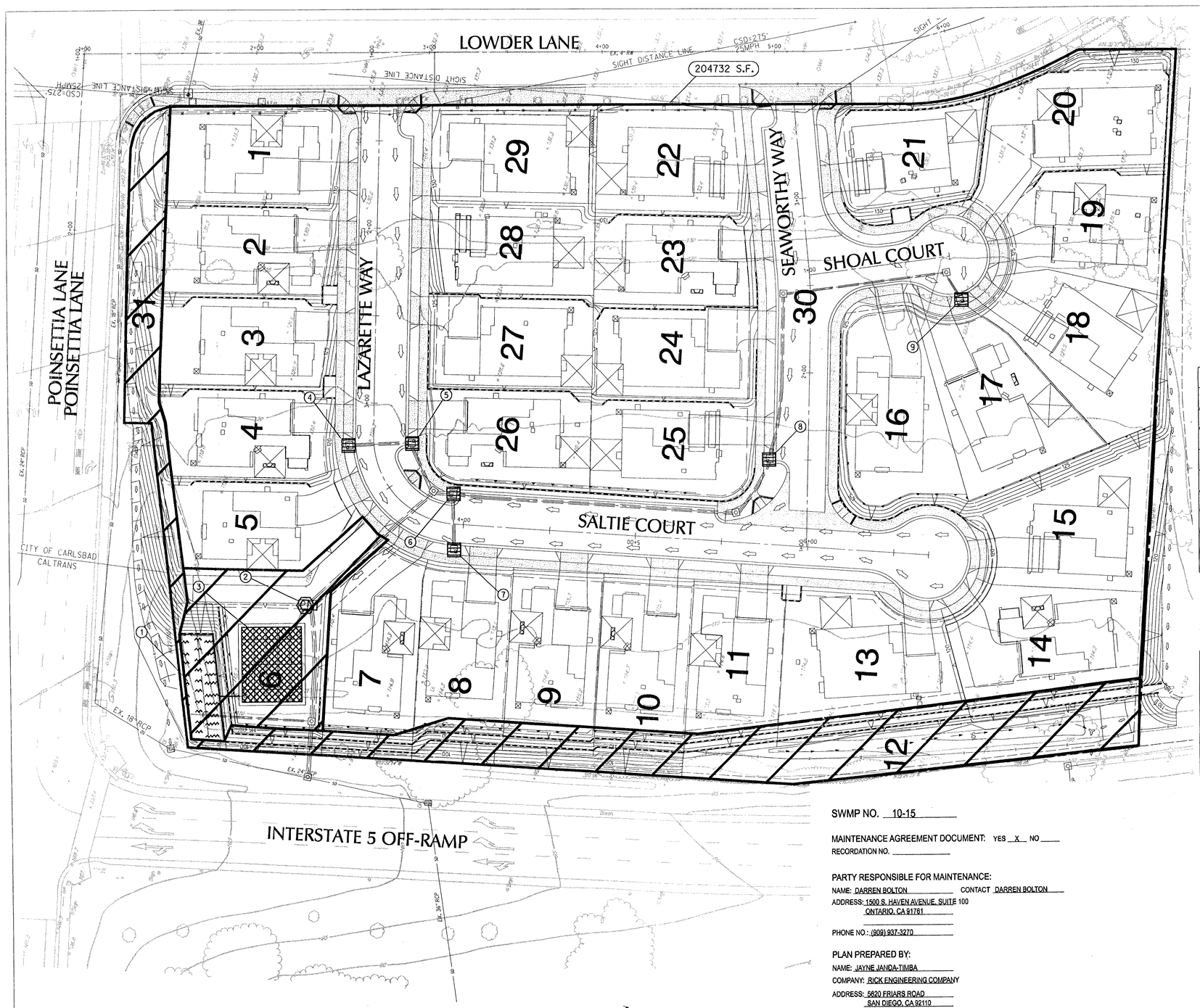

STORM WATER FACILITIES

- LOCATION OF PROPOSED BIORETENTION FACILITY TO TREAT OVERALL AREA WITH EXCEPTION OF SELF-TREATING AREAS
- LOCATION OF PROPOSED PRE-TREATMENT FACILITY (BAYSEPARATOR FS 4X4 LOW-FLOW SYSTEM)
- LOCATION OF PROPOSED CISTERN (STORMTRAP - SINGLETRAP)

LEGEND

- DRAINAGE MANAGEMENT AREA (DMA) TO INTEGRATED MANAGEMENT PRACTICE (IMP)
- FLOW DIRECTION
- XXXXXX S.F. — TRIBUTARY AREA TO INTEGRATED MANAGEMENT PRACTICE (IMP), IN SQUARE FEET
- LOCATION OF SELF-TREATING AREAS

BMP TABLE

BMP ID #	BMP TYPE	SYMBOL	CASQA NO.	QUANTITY	DRAWING NO.	SHEET NO.(S)	INSPECTION FREQUENCY	MAINTENANCE FREQUENCY	CONSTRUCTION SIGN OFF
TREATMENT CONTROL / IMP									
1	BIORETENTION FACILITY		TC-32	1			AS-NEEDED	AS-NEEDED	
2	PRE-TREATMENT (BAYSEPARATOR FS 4X4 LOW-FLOW)		N/A	1			PER MANUFACTURER	PER MANUFACTURER	
3	CISTERN (STORMTRAP - SINGLETRAP)		N/A	1			PER MANUFACTURER	PER MANUFACTURER	
LOW IMPACT DESIGN (L.I.D.)									
N/A									
SOURCE CONTROL									
4 - 9	STENCILING		SC-44	8			AS-NEEDED	AS-NEEDED	

NOTE: BMP ID # 1, 2, AND 3 ARE IMP'S TREATING DRAINAGE FROM DMA'S PER SECTION 4 OF THE CITY SUSMP.

INTEGRATED MANAGEMENT PRACTICE (IMP) SIZING CALCULATIONS

CISTERN WITH BIORETENTION FACILITY

DMA NAME	DMA (S.F.)[1]	SURFACE TYPE	RUNOFF FACTOR	AREA X WEIGHTED RUNOFF FACTOR
A-1	112803	IMPERVIOUS AREA (55%)	1.0	112603
A-2	92129	PERVIOUS AREA (45%)	0.1	9213
TOTAL	204732			121816

85TH PERCENTILE RAINFALL (INCHES)	REQUIRED WQ VOLUME FOR CISTERN (C.F.)[1]	DISCHARGE ORIFICE OPENING SIZE (INCHES)	MAX. OUTFLOW FROM THE ORIFICE (CFS)[1]	BIORETENTION MINIMUM SIZE (S.F.)[1]	BIORETENTION SIZE PLANNED (S.F.)[1]
0.60	6091	1.50	0.126	1089	1115

NOTE:
1. "CFS" = CUBIC FEET PER SECOND; "S.F." = SQUARE FEET; "C.F." = CUBIC FEET.
2. THE CALCULATION ASSUMES AREAS FROM THE NORTHWEST CORNER OF THE PROJECT (LOT 6) TO DRAIN TO THE IMP; HOWEVER, IN REALITY, RUNOFF FROM THIS AREA WILL BE COLLECTED BY THE DOWNSTREAM CLEANOUT LOCATION. THEREFORE, THIS AREA WILL BE CONSIDERED AS "SELF-TREATING" AREA. AREAS FROM LOT 12 AND 31 ARE ALSO "SELF-TREATING" AREAS, BUT NOT CONSIDERED IN THE SIZING CALCULATION.

NOTES

1. THESE STORMWATER FACILITIES ARE DISCUSSED IN MORE DETAIL WITHIN THIS STORM WATER MANAGEMENT PLAN (SWMP).

2. INTEGRATED MANAGEMENT PRACTICE (IMP) WAS SIZED TO TREAT OVERALL PROJECT (55% IMPERVIOUS AREAS AND 45% PERVIOUS AREAS). REFER TO APPENDIX C OF THIS REPORT FOR IMP SIZING CALCULATIONS.

SWMP NO. 10-15

MAINTENANCE AGREEMENT DOCUMENT: YES X NO ____
RECORDATION NO. ____

PARTY RESPONSIBLE FOR MAINTENANCE:
NAME: DARREN BOLTON CONTACT DARREN BOLTON
ADDRESS: 1500 S. HAVEN AVENUE, SUITE 100
ONTARIO, CA 91761
PHONE NO.: (909) 937-3270

PLAN PREPARED BY:
NAME: JAYNE JANDA-TIMBA
COMPANY: RICK ENGINEERING COMPANY
ADDRESS: 5620 FRIARS ROAD
SAN DIEGO, CA 92110
PHONE NO.: (619) 291-0707 CERTIFICATION: P.E.

BMP NOTES:
1. THESE BMPS ARE MANDATORY TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS OR THESE PLANS.
2. NO CHANGES TO THE PROPOSED BMPS ON THIS SHEET WITHOUT PRIOR APPROVAL FROM THE CITY ENGINEER.
3. NO SUBSTITUTIONS TO THE MATERIAL OR TYPES OR PLANTING TYPES WITHOUT PRIOR APPROVAL FROM THE CITY ENGINEER.
4. NO OCCUPANCY WILL BE GRANTED UNTIL THE CITY INSPECTION STAFF HAS INSPECTED THIS PROJECT FOR APPROPRIATE BMP CONSTRUCTION AND INSTALLATION.

30 15 0 30 60 90
GRAPHIC SCALE 1"= 30'

DMA/IMP EXHIBIT FOR POINSETTIA PROPERTIES (THE TIDES)

SEPTEMBER 20, 2010
REVISED: NOVEMBER 17, 2010
REVISED: JANUARY 26, 2011

J-14826-C

RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619.291.0707
(FAX)619.291.4165
rickengineering.com
Riverside - Orange - San Luis Obispo - Bakersfield - Sacramento - Phoenix - Tucson

© 2011 Rick Engineering Company

NOT FOR CONSTRUCTION - EXHIBIT FOR STORM WATER MANAGEMENT PLAN ONLY

MAP POCKET 2

Single-sheet BMP Exhibit
for
Poinsettia Properties
(The Tides)

Prepared By:
Rick Engineering Company – Water Resources Division

JJT:NM:vs/Report/14826-C.004
9-20-10
Revised: 11-17-10
Revised: 01-26-11
Revised: 04-05-11

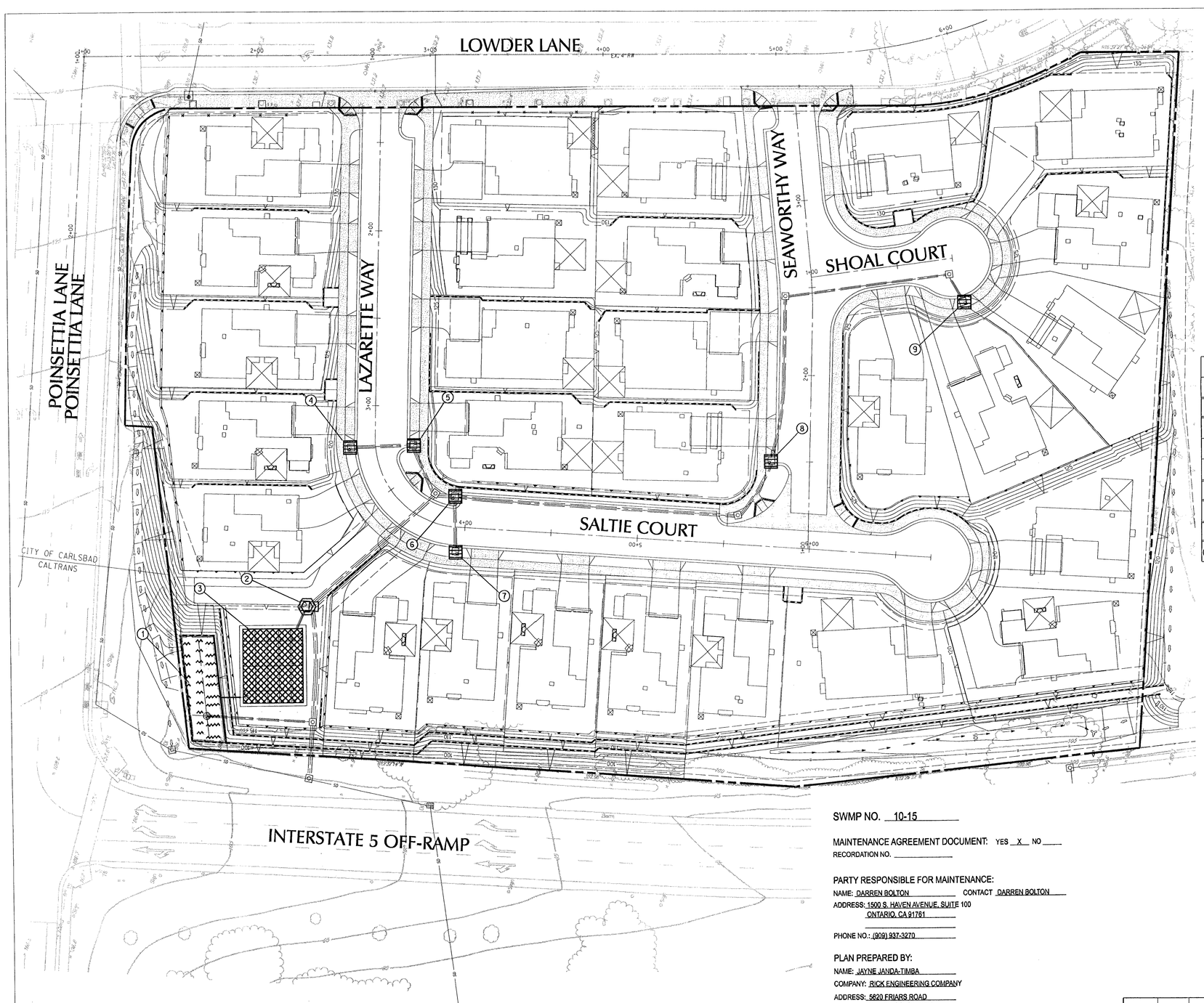

BMP TABLE

BMP ID #	BMP TYPE	SYMBOL	CASQA NO.	QUANTITY	DRAWING NO.	SHEET NO.(S)	INSPECTION FREQUENCY	MAINTENANCE FREQUENCY	CONSTRUCTION SIGN OFF
TREATMENT CONTROL / IMP									
1	BIORETENTION FACILITY		TC-32	1			AS-NEEDED	AS-NEEDED	
2	PRE-TREATMENT (BAYSEPARATOR FS 4X4 LOW-FLOW)		N/A	1			PER MANUFACTURER	PER MANUFACTURER	
3	CISTERN (STORMTRAP - SINGLETRAP)		N/A	1			PER MANUFACTURER	PER MANUFACTURER	
LOW IMPACT DESIGN (L.I.D.)									
N/A									
SOURCE CONTROL									
4 - 9	STENCILING		SC-44	6			AS-NEEDED	AS-NEEDED	

NOTE: BMP ID # 1,2 AND 3 ARE IMP'S TREATING DRAINAGE FROM DMA'S PER SECTION 4 OF THE CITY SUSMP.

SWMP NO. 10-15

MAINTENANCE AGREEMENT DOCUMENT: YES X NO ____
RECORDATION NO. _____

PARTY RESPONSIBLE FOR MAINTENANCE:
NAME: DARREN BOLTON CONTACT DARREN BOLTON
ADDRESS: 1500 S. HAVEN AVENUE, SUITE 100
ONTARIO, CA 91761
PHONE NO.: (909) 937-3270

PLAN PREPARED BY:
NAME: JAYNE JANDA-TIMBA
COMPANY: RICK ENGINEERING COMPANY
ADDRESS: 5620 FRIARS ROAD
SAN DIEGO, CA 92110
PHONE NO.: (619) 291-0707 CERTIFICATION: P.E.

BMP NOTES:

1. THESE BMPS ARE MANDATORY TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS OR THESE PLANS.
2. NO CHANGES TO THE PROPOSED BMPS ON THIS SHEET WITHOUT PRIOR APPROVAL FROM THE CITY ENGINEER.
3. NO SUBSTITUTIONS TO THE MATERIAL OR TYPES OR PLANTING TYPES WITHOUT PRIOR APPROVAL FROM THE CITY ENGINEER.
4. NO OCCUPANCY WILL BE GRANTED UNTIL THE CITY INSPECTION STAFF HAS INSPECTED THIS PROJECT FOR APPROPRIATE BMP CONSTRUCTION AND INSTALLATION.

30 15 0 30 60 90
GRAPHIC SCALE 1"= 30'

REGISTERED PROFESSIONAL ENGINEER JAYNE-MARIE JANDA-TIMBA NO. 70649 EXP. 6/30/11 CIVIL STATE OF CALIFORNIA

JAYNE JANDA-TIMBA R.C.E. 70649 DATE 2/10/11

VERIFIED BY:
INSPECTOR DATE

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

SHEET 1 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS 1

BMP SITE PLAN
POINSETTIA PROPERTIES
(THE TIDES)
V 05-01/PUD 0508/CDP 05-23

APPROVED: GLEN K. VAN PESKI
SENIOR CIVIL ENGINEER PE 41204 EXPIRES 3/31/13 DATE

DWN BY: REC
CHKD BY: ____
RVWD BY: ____
PROJECT NO. CT 05-10
DRAWING NO. 469-8A

RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
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(FAX)619.291.4165
rickengineering.com
Riverside - Orange - San Luis Obispo - Bakersfield - Sacramento - Phoenix - Tucson

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MAP POCKET 3

Excerpts from the City of Carlsbad Master Drainage Plan for Reference to HMP Exemption

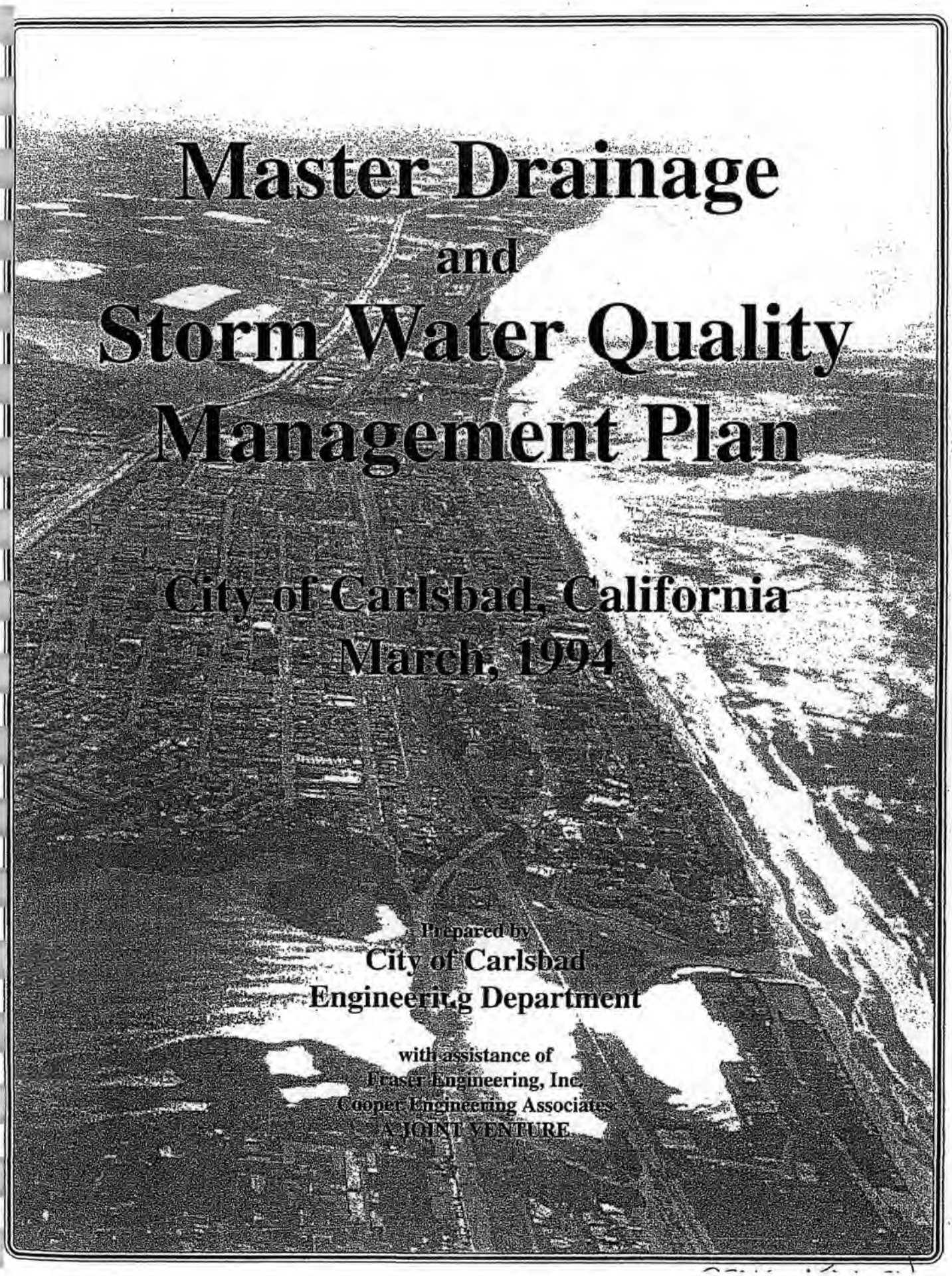

Master Drainage and Storm Water Quality Management Plan

City of Carlsbad, California

March, 1994

Prepared by
City of Carlsbad
Engineering Department

with assistance of
Fraser Engineering, Inc.
Cooper Engineering Associates
A JOINT VENTURE

CHAPTER 3

METHODOLOGY

A. Study Approach

The approach of this project was to utilize previous hydrology studies for the major water courses and to analyze tributary areas where storm drain deficiencies occur. Storm drain facilities are recommended where existing facilities are inadequate or where projected development will require drainage facilities.

B. Hydrologic Design Criteria

The design criteria, as found in the County of San Diego Department of Public Works Flood Control Division Hydrology Manual, specifies the design runoff conditions within the San Diego County Flood Control District will be based on the 100 year storm frequency as follows:

1. Design for areas over 1 square mile will be based on the 100 year frequency storm.

2. For areas under 1 square mile -

a) The storm drain system shall be designed so that the combination of storm drain system capacity and overflow both inside and outside the right of way will be able to carry the 100 year frequency storm without damaging adjacent existing buildings or potential building sites.

b) The storm drain system shall be designed so that the combination of storm drain system capacity and allowable street overflow will be able to carry the 50 year frequency storm within the street right-of-way.

c) Where a storm drain is required under headings 1 or 2 above, then as a minimum, the storm drain shall be designed to carry the 10 year frequency storm.

3. Sump areas are to be designed for a sump capacity or outfall of a 100 year frequency storm.

For this study, existing drainage systems were analyzed with respect to the above criteria and recommendations made accordingly. In undeveloped areas, where future street alignments and grades are unknown, the recommended storm drain lines are sized for 100 year flow capacity, based on the grades of existing flowlines. However, when these areas are developed the drainage system may actually carry the 10 year storm underground, the 50 year storm to top of curb, and the 100 year storm within the street right-of-way. Drains at sumps should convey 100 year storm flows.

The design flows were computed based on the following assumptions and data:

1. Ground cover was derived from the Soil Conservation Service 1969 survey maps updated with ultimate development data corresponding to the 1000 scale city of Carlsbad General Plan Map dated April 1987 and future land use densities projected in the City's Growth Management Program.

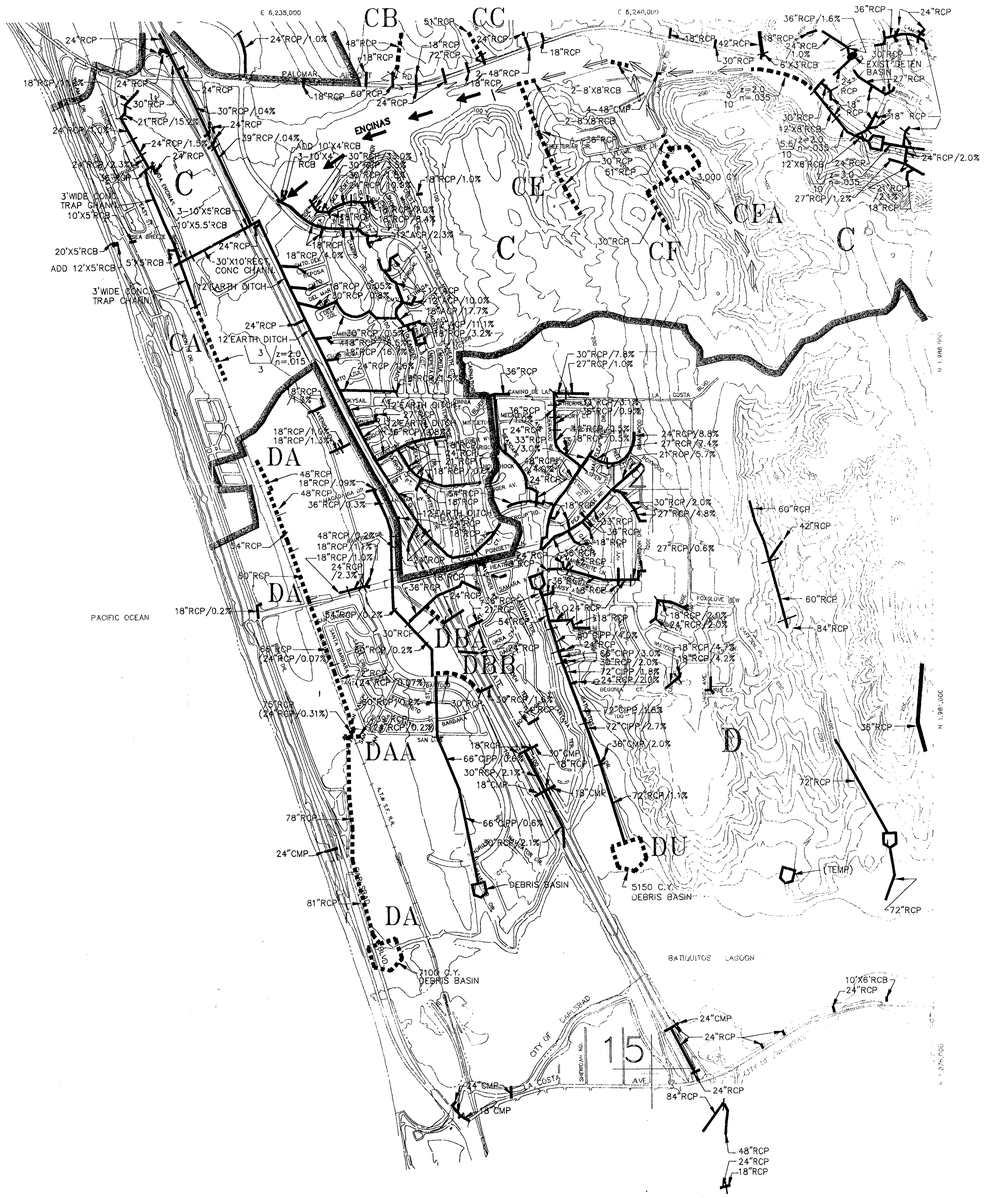

PLATE INDEX

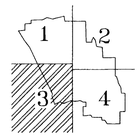

LEGEND

EXISTING STORM DRAIN	36"RCP
EXISTING STORM DRAIN (INCLUDED IN FEE PROGRAM)	36"RCP
PROPOSED STORM DRAIN	36"RCP
PROPOSED STORM DRAIN (REPLACING EXISTING)	54"RCP (30"CMP)
BASIN DESIGNATORS	
BUENA VISTA WATERSHED	A
AGUA HEDIONDA WATERSHED	B
ENCINAS CREEK WATERSHED	C
BATQUITOS WATERSHED	D
WATERSHED DIVIDE	
FACILITY DESIGNATION	AA (BASIN DESIGNATOR / FACILITY DESIGNATOR)
PROPOSED PLANNED LOCAL DRAINAGE (PLD) AREA BOUNDARY	
ENHANCED OR NATURAL CHANNEL (EXISTING)	
ENHANCED OR NATURAL CHANNEL (PROPOSED)	
MAJOR CREEK FLOW	
1"=400 MAP SCALE INDEX	8
PROPOSED SEDIMENTATION BASIN	
EXISTING SEDIMENTATION BASIN	
FLOW ATTENUATION REQUIRED	*
CITY OF CARLSBAD BOUNDARY	

MASTER PLAN of DRAINAGE

CITY OF CARLSBAD

ENGINEERING DEPARTMENT

0 1000 2000 3000

GRAPHIC SCALE : 1" = 1000'

Aerial Photo Date – Sept.–Oct. 1988. Aerial Photo Scale – 1 : 9600 .

This map was compiled by photogrammetric methods and meets national map standard accuracy specifications. Horizontal Control is Based On the California Coordinate System NAD 83. Vertical Control is Based On the 1929 MEAN SEA LEVEL DATUM.

N

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CITY OF CARLSBAD
ORTHOPHOTO MAPPING
1"=1000'

REVISION	DESCRIPTION	DATE	INITIAL

CITY APPROVAL

SHEET: 3 OF: 4

DRAWING NO.: 296-5

FY 10-11
Inventory of Privately Owned Treatment Control BMPs

UNIT ID	Status	Priority	Responsible Party	BMP Type	2010 DS Condition	2010 DS Inspection Date	2010 DS Verification Received	2011 DS Condition	2011 DS Inspection Date	2011 DS Verification Received	2011 Verification Letter Sent	CHU	Proximity to ESA	Approved/ Signed Date
10D-38	Excluded	Low	HIGHLAND FINANCE L L C	TC-30	Excluded	09/15/2010	9/15/10				N/A	904.31	No	06/22/2007
11C-49	Future	High	Robert and Deborah Jennings	MP-50	Future	03/25/2010	N/A					904.21	No	02/26/2007
12A-66	Permanent	Medium	Mystic Point Homeowners Association	MP-52	Poor	08/16/2010	6/23/10				05/02/2011	904.21	No	10/01/2003
12A-68	Permanent	Medium	Mystic Point Homeowners Association	MP-52	Good	08/16/2010	6/23/10				05/02/2011	904.31	No	10/01/2003
12A-69	Permanent	Medium	Mystic Point Homeowners Association	MP-52	Good	08/16/2010	9/20/10				05/02/2011	904.31	No	10/01/2003
12A-71	Permanent	Medium	Mystic Point Homeowners Association	MP-52	Good	08/16/2010	6/23/10				05/02/2011	904.21	No	10/01/2003
12A-74	Permanent	Medium	Mystic Point Homeowners Association	MP-52	Fair	08/16/2010	6/23/10				05/02/2011	904.31	No	10/01/2003
12A-76	Permanent	Medium	Mystic Point Homeowners Association	MP-52	Fair	08/16/2010	6/23/10				05/02/2011	904.31	No	10/01/2003
12A-77	Permanent	High	Mystic Point Homeowners Association	MP-51	Poor	08/16/2010	6/23/10				05/02/2011	904.31	No	10/01/2003
12A-78	Permanent	Medium	Mystic Point Homeowners Association	MP-60	Poor	08/16/2010	6/23/10				05/02/2011	904.31	No	10/01/2003
12B-62	Permanent	Medium	Mystic Point Homeowners Association	MP-52	Good	08/16/2010	6/23/10				05/02/2011	904.31	No	10/01/2003
12B-63	Permanent	Medium	Mystic Point Homeowners Association	MP-52	Good	08/16/2010	6/23/10				05/02/2011	904.31	No	10/01/2003
12B-99	Permanent	High	Mystic Point Homeowners Association	MP-51	Good	08/16/2010	9/17/10				05/02/2011	904.31	Yes	12/22/2003
12D-45	Permanent	Medium	CIC CALAVERA LP	MP-52			6/25/10			06/13/2011	05/02/2011	904.31	No	06/30/2003
12D-46	Permanent	Medium	CIC CALAVERA LP	MP-52			6/25/10			06/13/2011	05/02/2011	904.31	No	06/30/2003
12D-50	Permanent	Medium	CIC CALAVERA LP	MP-52			6/25/10			06/13/2011	05/02/2011	904.31	No	06/30/2003
12D-52	Permanent	Medium	CIC CALAVERA LP	MP-52			6/25/10			06/13/2011	05/02/2011	904.31	No	06/30/2003
15B-70	Permanent	Medium	Maple Street Estates Inc.	MP-52			5/24/10			05/25/2011	05/02/2011	904.31	No	10/31/2003
16C-111	Permanent	Low	LAGOON BREEZE DEVELOPMENT CORP	TC-60			9/17/10				05/02/2011	904.21	No	07/06/2007
16D-101	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Poor	05/10/2010	7/28/10				05/02/2011	904.31	No	10/05/2006
16D-102	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Good	05/10/2010	7/28/10				05/02/2011	904.31	no	10/05/2006
16D-103	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Good	05/10/2010	7/28/10				05/02/2011	904.31	no	10/05/2006
16D-104	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Good	05/10/2010	7/28/10				05/02/2011	904.31	no	10/05/2006
16D-108	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Poor	05/10/2010	7/28/10				05/02/2011	904.31	no	10/05/2005
16D-111	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Good	05/10/2010	7/28/10				05/02/2011	904.51	No	10/05/2005
16D-112	Permanent	Low	ANASTASI DEVELOPMENT CO L L C	TC-30	Good	05/10/2010	7/28/10				05/02/2011	904.51	No	01/05/2005

UNIT ID	Status	Priority	Responsible Party	BMP Type	2010 DS Condition	2010 DS Inspection Date	2010 DS Verification Received	2011 DS Condition	2011 DS Inspection Date	2011 DS Verification Received	2011 Verification Letter Sent	CHU	Proximity to ESA	Approved/ Signed Date
16D-113	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	TC-30							05/02/2011	904.31	NO	01/05/2005
16D-114	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	TC-30							05/02/2011	904.31	NO	01/05/2005
16D-115	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	TC-30							05/02/2011	904.31	NO	01/05/2005
16D-69	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Poor	05/10/2010	7/28/10				05/02/2011	904.31	No	10/05/2006
16D-70	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Good	05/10/2010	7/28/10				05/02/2011	904.31	No	10/05/2006
16D-76	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Good	05/10/2010	7/28/10				05/02/2011	904.31	No	10/05/2006
16D-77	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Poor	05/10/2010	7/28/10				05/02/2011	904.31	No	10/05/2006
16D-78	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Poor	05/10/2010	7/28/10				05/02/2011	904.31	No	10/05/2006
16D-80	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Poor	05/10/2010	7/28/10				05/02/2011	904.31	No	10/05/2006
16D-94	Permanent	Medium	ANASTASI DEVELOPMENT CO L L C	MP-52	Good	05/10/2010	7/28/10				05/02/2011	904.31	No	10/05/2006
18B-102	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	12/17/2007
18B-103	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	12/17/2007
18B-105	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-106	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-116	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-117	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-131	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-132	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-135	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-136	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-140	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-141	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-148	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-149	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-155	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-156	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-157	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-163	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	12/17/2007
18B-164	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	12/17/2007

UNIT ID	Status	Priority	Responsible Party	BMP Type	2010 DS Condition	2010 DS Inspection Date	2010 DS Verification Received	2011 DS Condition	2011 DS Inspection Date	2011 DS Verification Received	2011 Verification Letter Sent	CHU	Proximity to ESA	Approved/ Signed Date
18B-54	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-55	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-56	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-62	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-63	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-64	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-70	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-71	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-72	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-74	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-76	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-79	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-80	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	03/11/2008
18B-88	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	04/05/2007
18B-89	Future	Medium	Calavera Hills II, LLC	MP-52				Future	03/09/2011	N/A	N/A	904.31	NO	04/05/2007
18B-99	Future	Medium	Calavera Hills II, LLC	MP-52	Future	03/19/2010	N/A	Future	03/09/2011	N/A	N/A	904.31	No	12/17/2007
18C-93	Future	Low	FAMILY REAL ESTATE ENTERPRISES L L C	TC-30	Future	03/25/2010	N/A				N/A	904.31	No	06/22/2007
1D-35	Permanent	Medium	KELLY RICHARD C TR&KELLY ROBERT P TR	MP-52			6/28/10				05/02/2011	904.21	No	08/17/2007
21D-33	Permanent	Medium	San Diego Gas and Electric	MP-52			5/27/10			05/31/2011	05/02/2011	904.31	No	10/26/2005
21D-62	Permanent	Medium	WEST DEVELOPMENT INC	MP-52	Good	05/28/2010	5/27/10			06/13/2011	05/02/2011	904.31	No	10/17/2002
21D-63	Permanent	Medium	WEST DEVELOPMENT INC	MP-52	Good	05/28/2010	5/27/10			06/02/2011	05/02/2011	904.31	No	10/17/2002
21D-67	Permanent	Medium	WEST DEVELOPMENT INC	MP-52						06/02/2011	05/02/2011	904.31	NO	07/07/2004
21D-68	Permanent	Medium	WEST DEVELOPMENT INC	MP-52						06/02/2011	05/02/2011	904.31	NO	07/07/2004
22A-65	Permanent	Medium	J J L ENTERPRISES	MP-52						05/18/2011	05/02/2011	904.51	No	08/25/2003
22A-73	Future	Medium	LEWAK JERZY&JOLANTA R REVOCABLE LIVING TRUST 01-	MP-52	Future	04/14/2010	N/A					904.31	yes	08/01/2007
22A-76	Future	Medium	LEWAK JERZY&JOLANTA R REVOCABLE LIVING TRUST 01-	MP-52	Future	04/14/2010	N/A					904.31	Yes	08/01/2007
22A-78	Future	Low	LEWAK JERZY&JOLANTA R REVOCABLE LIVING TRUST 01	TC-30	Future	04/14/2010	N/A					904.31	No	08/01/2007
22A-79	Future	Low	LEWAK JERZY&JOLANTA R REVOCABLE LIVING TRUST 01	TC-30	Future	04/14/2010	N/A					904.31	No	08/01/2007

UNIT ID	Status	Priority	Responsible Party	BMP Type	2010 DS Condition	2010 DS Inspection Date	2010 DS Verification Received	2011 DS Condition	2011 DS Inspection Date	2011 DS Verification Received	2011 Verification Letter Sent	CHU	Proximity to ESA	Approved/ Signed Date
22D-50	Permanent	Medium	O C/S D HOLDINGS L L C	MP-52							05/02/2011	904.51	Yes	01/13/2003
23A-97	Excluded	Medium	City of Carlsbad	MP-52			5/14/10	Poor	06/15/2011	05/09/2011	05/02/2011	904.31	Yes	12/19/2001
23A-98	Excluded	Medium	HERON BAY/SPYGLASS HILLS HOMEOWNERS ASSN	MP-52			5/14/10	Excluded	06/15/2011	05/09/2011	05/02/2011	904.31	Yes	12/19/2001
23A-99	Excluded	Medium	HERON BAY/SPYGLASS HILLS HOMEOWNERS ASSN	MP-52			5/14/10	Excluded	06/15/2011	05/09/2011	05/02/2011	904.31	Yes	12/19/2001
23D-107	Permanent	Medium	Emerald Lake Corporate Center	MP-52			6/2/10	Poor	03/14/2011	05/19/2011	05/02/2011	904.31	No	10/26/2005
23D-120	Permanent	Low	Emerald Lake Corporate Center	TC-30			6/2/10	Good	03/14/2011	05/19/2011	05/02/2011	904.31	Yes	07/11/2001
23D-122	Permanent	Medium	Emerald Lake Corporate Center	MP-52			6/2/10	Good	03/14/2011	05/19/2011	05/02/2011	904.31	No	07/11/2001
23D-134	Permanent	Medium	System Machines Automation Components Corp	MP-52				Poor	03/04/2011		05/02/2011	904.31	Yes	04/07/2005
23D-137	Permanent	Medium	System Machines Automation Components Corp	MP-52				Poor	03/04/2011		05/02/2011	904.31	No	04/07/2005
23D-138	Permanent	Medium	System Machines Automation Components Corp	MP-52				Good	03/04/2011		05/02/2011	904.31	No	04/07/2005
23D-139	Permanent	Medium	System Machines Automation Components Corp	MP-52				Poor	03/04/2011		05/02/2011	904.31	No	04/07/2005
23D-140	Permanent	Medium	System Machines Automation Components Corp	MP-52				Fair	03/04/2011		05/02/2011	904.31	No	04/07/2005
23D-141	Permanent	Medium	System Machines Automation Components Corp	MP-52				Poor	03/04/2011		05/02/2011	904.31	No	04/07/2005
24C-153	Permanent	High	H.G. Fenton Company	MP-50	Good	09/20/2010	6/4/10	Good	06/15/2011	06/02/2011	05/02/2011	904.31	Yes	07/20/2007
24D-105	Permanent	Low	Rio SD Plaza II Master LLC	TC-50	Good	05/19/2010	6/2/10			05/19/2011	05/02/2011	904.40	No	09/20/2006
24D-111	Permanent	Low	Rio SD Plaza II Master LLC	TC-30	Good	05/19/2010	6/2/10			05/19/2011	05/02/2011	904.31	Yes	09/20/2006
24D-112	Permanent	Low	Rio SD Plaza II Master LLC	TC-30	Good	05/19/2010	6/2/10			05/19/2011	05/02/2011	904.31	No	09/20/2006
24D-113	Permanent	Low	Rio SD Plaza II Master LLC	TC-30	Good	05/19/2010	6/2/10			05/19/2011	05/02/2011	904.31	No	09/20/2006
24D-114	Permanent	Low	Rio SD Plaza II Master LLC	TC-30	Good	05/19/2010	6/2/10			05/19/2011	05/02/2011	904.31	Yes	09/20/2006
27B-110	Permanent	Medium	WEST DEVELOPMENT INC	MP-52	Good	05/28/2010	5/27/10			06/02/2011	05/02/2011	904.31	No	10/17/2002
27B-122	Permanent	Medium	WEST DEVELOPMENT INC	MP-52						06/02/2011	05/02/2011	904.31	NO	10/17/2002
27B-123	Permanent	Medium	WEST DEVELOPMENT INC	MP-52						06/02/2011	05/02/2011	904.31	NO	10/17/2002
27B-124	Permanent	Medium	WEST DEVELOPMENT INC	MP-52						06/02/2011	05/02/2011	904.31	NO	10/17/2002
27B-125	Permanent	Medium	WEST DEVELOPMENT INC	MP-52						06/02/2011	05/02/2011	904.31	NO	10/17/2002
27B-87	Permanent	Medium	Bob Baker Enterprises	MP-52			6/22/10	Good	03/09/2011	05/18/2011	05/02/2011	904.31	No	05/18/2004
27B-88	Permanent	Medium	Bob Baker Enterprises	MP-52			6/22/10	Good	03/09/2011	05/18/2011	05/02/2011	904.31	No	05/18/2004
27B-89	Permanent	Low	Bob Baker Enterprises	TC-30			6/22/10	Good	03/09/2011	05/18/2011	05/02/2011	904.31	No	05/18/2004
27B-94	Permanent	Medium	San Diego Gas and Electric	MP-52			5/27/10			05/31/2011	05/02/2011	904.31	No	10/26/2005

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28B-56	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	03/22/2010	06/21/2010				05/02/2011	904.31	yes	04/02/2007
28B-58	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	03/22/2010	06/21/2010				05/02/2011	904.31	Yes	04/02/2007
28B-59	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	03/22/2010	06/21/2010				05/02/2011	904.40	No	04/02/2007
28B-60	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	03/22/2010	06/21/2010				05/02/2011	904.40	No	04/02/2007
28B-61	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	03/22/2010	06/21/2010				05/02/2011	904.40	No	04/02/2007
28B-65	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	03/22/2010	06/10/2010				05/02/2011	904.31	Yes	09/27/2005
28B-66	Permanent	High	GRAND PACIFIC CARLSBAD L P	MP-51	Fair	08/18/2010	06/21/2010				05/02/2011	904.31	Yes	09/27/2005
28B-67	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Fair	03/22/2010	06/21/2010				05/02/2011	904.40	Yes	09/27/2005
28B-72	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Good	03/22/2010	06/21/2010				05/02/2011	904.40	No	09/27/2005
28B-73	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Good	03/22/2010	06/21/2010				05/02/2011	904.31	no	09/27/2005
28B-92	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	03/22/2010	06/21/2010				05/02/2011	904.31	no	09/27/2005
28B-97	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	03/22/2010	9/14/10				05/02/2011	904.31	no	09/27/2005
28B-98	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Fair	03/22/2010	9/14/10				05/02/2011	904.31	no	09/27/2005
28B-99	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Good	03/22/2010	9/14/10				05/02/2011	904.31	no	09/27/2005
28C-80	Permanent	Medium	CPT/SC Title Holding Corp	MP-52			9/14/10	Fair	03/09/2011	05/05/2011	05/02/2011	904.31	no	10/15/2002
28D-64	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Fair	03/22/2010	9/14/10				05/02/2011	904.40	No	09/27/2005
28D-65	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Fair	03/22/2010	9/14/10				05/02/2011	904.40	no	09/27/2005
28D-68	Permanent	High	GRAND PACIFIC CARLSBAD L P	MP-51	Good	08/18/2010	06/21/2010				05/02/2011	904.40	no	09/27/2005
28D-71	Permanent	High	GRAND PACIFIC CARLSBAD L P	MP-51	Good	08/18/2010	06/21/2010				05/02/2011	904.40	no	03/30/2007
28D-73	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	03/22/2010	9/14/10				05/02/2011	904.40	Yes	03/30/2007
28D-74	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	03/22/2010	9/14/10				05/02/2011	904.40	Yes	03/30/2007
28D-79	Permanent	Medium	GRAND PACIFIC CARLSBAD L P	MP-52	Good	03/22/2010	9/14/10				05/02/2011	904.40	No	03/30/2007
2C-31	Permanent	Medium	VONS COMPANIES INC <LF> KELLY RIC HARD C TR ET AL	MP-52			6/23/10			05/16/2011	05/02/2011	904.21	Yes	08/17/2007
30A-204	Permanent	Medium	FARADAY SPECTRUM OWNERS ASSN INC	MP-52			05/06/10			05/19/2011	05/02/2011	904.31	No	08/01/2005
30A-210	Permanent	Medium	MULLER CENTERPOINT LLC	MP-52			7/1/10	Good	03/04/2011	05/20/2011	05/02/2011	904.31	No	10/03/2005
30A-216	Permanent	Low	MULLER CENTERPOINT LLC	TC-30			6/16/10	Good	03/04/2011	05/20/2011	05/02/2011	904.31	No	10/03/2005
30A-217	Permament	Low	MULLER CENTERPOINT LLC	TC-30				Good	03/04/2011	05/20/2011	05/02/2011	904.31	NO	10/03/2005
30A-221	Permanent	High	CALLAWAY GOLF CO	MP-51	Fair	09/22/2010	6/21/10			06/01/2011	05/02/2011	904.31	No	12/06/2007
30B-117	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Poor	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.31	No	08/22/2005

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30B-119	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Poor	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.31	No	08/22/2005
30B-120	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Fair	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.31	No	08/22/2005
30B-122	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Poor	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.31	No	08/22/2005
30B-124	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Poor	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.31	No	08/22/2005
30B-140	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Poor	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.31	No	08/22/2005
30B-143	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Poor	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.31	No	08/22/2005
30B-148	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Fair	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.51	No	08/10/2005
30B-155	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Fair	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.31	no	08/22/2005
30B-157	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Poor	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.31	no	08/22/2005
30B-159	Permanent	Low	MULLER CENTERPOINT LLC	TC-30			6/16/10	Good	03/04/2011	05/20/2011	05/02/2011	904.31	no	10/03/2005
30B-38	Permanent	Medium	FENTON CARLSBAD L L C	MP-52	Poor	03/23/2010	6/4/10			06/02/2011	05/02/2011	904.31	No	08/10/2005
30D-2	Permanent	Low	CARLSBAD SELF STORAGE L L C	TC-30			5/31/10			05/16/2011	05/02/2011	904.40	No	06/12/2007
30D-4	Permanent	Low	CARLSBAD SELF STORAGE L L C	TC-30			5/31/10			05/16/2011	05/02/2011	904.40	No	06/12/2007
31A-103	Permanent	Low	S F T CARLSBAD L L C	TC-30	Good	03/15/2010	6/21/10	Good	06/20/2011	06/15/2011	05/02/2011	904.31	Yes	12/22/2005
31A-104	Permanent	Low	S F T CARLSBAD L L C	TC-30	Good	03/15/2010	6/21/10	Good	06/20/2011	06/15/2011	05/02/2011	904.31	No	12/22/2005
31A-105	Permanent	Low	S F T CARLSBAD L L C	TC-30	Good	03/15/2010	6/21/10	Good	06/20/2011	06/15/2011	05/02/2011	904.31	Yes	12/22/2005
31A-106	Permanent	Low	S F T CARLSBAD L L C	TC-30	Good	03/15/2010	6/21/10	Good	06/20/2011	06/15/2011	05/02/2011	904.31	Yes	12/22/2005
31A-70	Permanent	Low	C B L L L C	TC-30			6/22/10				05/02/2011	904.31	Yes	05/29/2001
31A-73	Permanent	Medium	MoBio Laboratories	MP-52			5/7/10			05/19/2011	05/02/2011	904.31	Yes	08/01/2003
31A-88	Permanent	Medium	S F T CARLSBAD L L C	MP-52	Good	03/15/2010	6/21/10	Poor	06/20/2011	06/15/2011	05/02/2011	904.31	No	12/22/2005
31A-89	Permanent	Medium	S F T CARLSBAD L L C	MP-52	Good	03/15/2010	6/21/10	Poor	06/20/2011	06/15/2011	05/02/2011	904.31	No	12/22/2005
31A-90	Permanent	Medium	S F T CARLSBAD L L C	MP-52	Good	03/15/2010	6/21/10	Poor	06/20/2011	06/15/2011	05/02/2011	904.31	No	12/22/2005
31A-91	Permanent	Medium	S F T CARLSBAD L L C	MP-52	Good	03/15/2010	6/21/10	Poor	06/20/2011	06/15/2011	05/02/2011	904.31	No	12/22/2005
31A-94	Permanent	Medium	S F T CARLSBAD L L C	MP-52	Good	03/15/2010	6/21/10	Fair	06/20/2011	06/15/2011	05/02/2011	904.31	No	12/22/2005
31A-95	Permanent	Medium	S F T CARLSBAD L L C	MP-52	Good	03/15/2010	6/21/10	Fair	06/20/2011	06/15/2011	05/02/2011	904.31	No	12/22/2005
31A-96	Permanent	Medium	S F T CARLSBAD L L C	MP-52	Good	03/15/2010	6/21/10	Fair	06/20/2011	06/15/2011	05/02/2011	904.31	No	12/22/2005
31A-98	Permanent	Medium	S F T CARLSBAD L L C	MP-52	Good	03/15/2010	6/21/10	Good	06/20/2011	06/15/2011	05/02/2011	904.31	No	12/22/2005
31B-143	Permanent	Medium	Mammoth Roseville II LLC	MP-52			6/2/10				05/02/2011	904.31	No	07/19/2006
31C-129	Permanent	Low	Moderna Del Mar LLC - Cushman and Wakefield	TC-30			6/2/10	Good	06/15/2011	06/02/2011	05/02/2011	904.51	No	06/23/2006

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31C-137	Permanent	High	Ocean Collection	TC-50	Good	03/24/2010	9/13/10				05/02/2011	904.51	No	07/20/2007
31C-138	Permanent	Low	Ocean Collection	TC-30	Good	03/24/2010	9/13/10	Good	06/01/2011		05/02/2011	904.51	No	07/20/2007
31C-140	Permanent	Low	Ocean Collection	TC-30	Good	03/24/2010	9/13/10	Good	06/01/2011		05/02/2011	904.51	No	07/20/2007
31C-141	Permanent	Low	Ocean Collection	TC-30	Good	03/24/2010	9/13/10	Good	06/01/2011		05/02/2011	904.51	No	07/20/2007
31C-142	Permanent	Low	Ocean Collection	TC-30	Good	03/24/2010	9/13/10	Good	06/01/2011		05/02/2011	904.51	No	07/20/2007
31C-143	Permanent	Low	Ocean Collection	TC-30	Good	03/24/2010	9/13/10	Good	06/01/2011		05/02/2011	904.40	No	07/20/2207
31C-146	Future	Medium	Slater Place, LP	TC-51	Future	03/24/2010	N/A	Future	06/16/2011		N/A	904.51	No	09/25/2007
31C-149	Future	Low	Slater Place, LP	TC-30	Future	03/24/2010	N/A	Future	06/16/2011		N/A	904.51	No	09/25/2007
31C-150	Future	Low	Slater Place, LP	TC-30	Future	03/24/2010	N/A	Future	06/16/2011		N/A	904.51	No	09/25/2007
31C-152	Future	Low	Slater Place, LP	TC-30	Future	03/24/2010	N/A	Future	06/16/2011		N/A	904.51	No	09/25/2007
31C-161	Future	Low	Slater Place, LP	TC-30	Future	03/24/2010	N/A	Future	06/16/2011		N/A	904.51	Yes	03/25/2004
31C-162	Permanent	Low	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/04/2010	7/23/10	Good	06/15/2011	06/02/2011	05/02/2011	904.51	No	06/23/2006
31C-163	Permanent	Medium	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Good	06/04/2010	6/2/10	Good	06/15/2011	06/02/2011	05/02/2011	904.40	No	06/23/2006
31C-164	Permanent	Low	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/04/2010	7/23/10	Good	06/15/2011	06/02/2011	05/02/2011	904.51	No	06/23/2006
31C-165	Permanent	Medium	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Good	06/04/2010	6/2/10	Poor	06/15/2011	06/02/2011	05/02/2011	904.40	No	06/23/2006
31C-166	Permanent	Medium	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Good	06/04/2010	6/2/10	Good	06/15/2011	06/02/2011	05/02/2011	904.40	No	06/23/2006
31C-167	Permanent	Medium	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Good	06/04/2010	7/22/10	Good	06/15/2011	06/02/2011	05/02/2011	904.40	No	06/23/2006
31C-168	Permanent	Low	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/04/2010	7/23/10	Good	06/15/2011	06/02/2011	05/02/2011	904.51	No	06/23/2006
31C-169	Permanent	Low	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/04/2010	7/23/10	Good	06/15/2011	06/02/2011	05/02/2011	904.51	No	06/23/2006
31C-170	Permanent	Low	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/04/2010	7/22/10	Good	06/15/2011	06/02/2011	05/02/2011	904.51	No	06/23/2006
31C-171	Permanent	Medium	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Good	06/04/2010	6/2/10	Good	06/15/2011	06/02/2011	05/02/2011	904.40	No	06/23/2006
31C-172	Permanent	Low	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/04/2010	6/2/10	Good	06/15/2011	06/02/2011	05/02/2011	904.51	No	06/23/2006
31C-174	Permanent	High	Towers at Bressi Ranch Owners Association	MP-51	Good	08/18/2010	9/20/10	Good	06/29/2011	05/20/2011	05/02/2011	904.51	No	10/16/2006
31C-175	Permanent	Low	Towers at Bressi Ranch Owners Association	TC-30	Good	08/13/2010	9/20/10	Good	06/29/2011	05/20/2011	05/02/2011	904.51	No	10/16/2006
31C-176	Permanent	Low	Towers at Bressi Ranch Owners Association	TC-30	Good	08/13/2010	9/20/10	Good	06/29/2011	05/20/2011	05/02/2011	904.51	No	10/16/2006
31C-178	Permanent	Low	Towers at Bressi Ranch Owners Association	TC-30	Good	08/13/2010	9/20/10	Good	06/29/2011	05/20/2011	05/02/2011	904.51	No	10/16/2006
31C-179	Permanent	Low	Towers at Bressi Ranch Owners Association	TC-30	Good	08/13/2010	9/20/10	Good	06/29/2011	05/20/2011	05/02/2011	904.51	No	10/16/2006

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31C-181	Permanent	High	Towers at Bressi Ranch Owners Association	MP-51	Good	08/13/2010	9/20/10	Fair	06/29/2011	05/20/2011	05/02/2011	904.51	No	10/16/2006
31C-184	Permanent	High	Towers at Bressi Ranch Owners Association	MP-51	Good	08/18/2010	9/20/10	Good	06/29/2011	05/20/2011	05/02/2011	904.51	No	10/16/2006
31C-186	Permanent	Medium	V P I BRESSI STORAGE L L C	MP-52	Good	08/20/2010	6/3/10				05/02/2011	904.40	No	07/12/2007
31C-187	Permanent	Medium	V P I BRESSI STORAGE L L C	MP-52	Good	08/20/2010	6/3/10				05/02/2011	904.40	No	07/12/2007
31C-188	Permanent	High	V P I BRESSI STORAGE L L C	MP-51	Good	08/31/2010	6/3/10				05/02/2011	904.40	No	07/12/2007
31C-189	Permanent	Medium	V P I BRESSI STORAGE L L C	MP-52	Good	08/20/2010	6/3/10				05/02/2011	904.40	No	07/12/2007
31C-190	Permanent	Medium	V P I BRESSI STORAGE L L C	MP-52	Good	08/20/2010	6/3/10				05/02/2011	904.40	No	07/12/2007
31C-191	Permanent	Medium	V P I BRESSI STORAGE L L C	MP-52	Good	08/20/2010	6/3/10				05/02/2011	904.31	No	07/12/2007
31C-192	Permanent	Medium	V P I BRESSI STORAGE L L C	MP-52	Fair	08/20/2010	6/3/10				05/02/2011	904.40	No	07/12/2007
31C-193	Permanent	Medium	V P I BRESSI STORAGE L L C	MP-52	Good	08/20/2010	6/3/10				05/02/2011	904.40	No	07/12/2007
31C-194	Permanent	Medium	V P I BRESSI STORAGE L L C	MP-52	Good	08/20/2010	6/3/10				05/02/2011	904.40	No	07/12/2007
31C-195	Permanent	Medium	Moderna Del Mar LLC - Cushman And Wakefield	MP-52	Good	06/04/2010	6/7/10	Good	06/15/2011	06/02/2011	05/02/2011	904.40	no	06/23/2006
31C-199	Permanent	Low	Moderna Del Mar LLC - Cushman And Wakefield	TC-30	Good	06/04/2010	6/2/10	Good	06/15/2011	06/02/2011	05/02/2011	904.40	No	06/23/2006
31C-210	Permanent	Low	Towers At Bressi Ranch Owners Association	TC-30	Good	08/13/2010	9/20/10	Good	06/29/2011	05/20/2011	05/02/2011	904.51	No	10/16/2006
31C-233	Permanent	Medium	V P I Bressi Storage L L C	MP-52	fair	08/20/2010	6/3/10				05/02/2011	904.51	No	09/10/2004
31C-238	Permanent	Low	Towers At Bressi Ranch Owners Association	TC-30	Good	08/13/2010	9/20/10	Good	06/29/2011	05/20/2011	05/02/2011	904.51	No	10/16/2006
31C-24	Future	High	LEVINE INVESTMENTS LTD PTNSHP	TC-60	Future	05/27/2010	6/10/10					904.40	No	10/07/2004
31D-115	Permanent	Medium	Bressi Ranch	TC-50			5/28/10	Good	03/04/2011	05/23/2011	05/02/2011	904.51	NO	04/11/2007
31D-117	Permanent	Medium	Bressi Ranch	MP-52			5/28/10	Poor	03/04/2011	05/23/2011	05/02/2011	904.51	NO	04/11/2007
31D-118	Permanent	Low	Bressi Ranch	TC-30				Good	03/04/2011	05/23/2011	05/02/2011	904.51	YES	04/11/2007
31D-120	Permanent	High	Pacific Ridge School	MP-51	fair	09/28/2010	6/28/10			06/15/2011	05/02/2011	904.51	Yes	02/22/2005
31D-121	Permanent	Medium	Bressi Spectrum Owners Association	MP-52	Good	06/11/2010	5/14/10			05/23/2011	05/02/2011	904.51	Yes	02/15/2006
31D-122	Permanent	Medium	Bressi Spectrum Owners Association	MP-52	Good	06/11/2010	5/14/10			05/23/2011	05/02/2011	904.51	Yes	02/15/2006
31D-123	Permanent	Medium	Bressi Spectrum Owners Association	MP-52	Good	06/11/2010	5/14/10			05/23/2011	05/02/2011	904.51	Yes	02/15/2006
31D-124	Permanent	Medium	Bressi Spectrum Owners Association	MP-52	Good	06/11/2010	5/14/10			05/23/2011	05/02/2011	904.51	NO	02/15/2006
31D-125	Permanent	Low	Bressi Spectrum Owners Association	TC-30	Good	06/11/2010	5/14/10			05/23/2011	05/02/2011	904.51	NO	02/15/2006
31D-128	Permanent	Low	MoBio Laboratories	TC-30			5/6/10			05/19/2011	05/02/2011	905.51	No	10/16/2006
31D-129	Permanent	Low	Bressi Ranch	TC-30	Good	08/13/2010	9/20/10	Good	06/29/2011	05/23/2011	05/02/2011	904.51	No	10/16/2006

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31D-131	Permanent	High	Bressi Ranch Fuel Mart LLC	MP-51	Fair	09/24/2010	6/4/10	Poor	06/15/2011	06/02/2011	05/02/2011	904.51	NO	06/03/2007
31D-133	Permanent	High	Mulberry at Bressi Ranch	MP-51	Good	08/31/2010	6/29/10			06/28/2011	05/02/2011	904.51	NO	06/30/2004
31D-134	Permanent	High	Mulberry at Bressi Ranch	MP-51	Poor	08/20/2010	6/29/10			06/28/2011	05/02/2011	904.51	NO	06/30/2004
31D-135	Permanent	Low	Mulberry at Bressi Ranch	TC-30	Good	08/20/2010	6/29/10			06/28/2011	05/02/2011	904.51	No	06/30/2004
31D-161	Permanent	Medium	Bressi Ranch	TC-50				Good	03/04/2011	05/23/2011	05/02/2011	904.51	YES	04/11/2007
31D-162	Permanent	Medium	Bressi Ranch	TC-50				Good	03/04/2011	05/23/2011	05/02/2011	904.51	NO	04/11/2007
31D-163	Permanent	Low	Bressi Ranch	TC-30				Good	03/04/2011	05/23/2011	05/02/2011	904.51	NO	04/11/2007
31D-164	Permanent	Low	Bressi Ranch	TC-30				Good	03/04/2011	05/23/2011	05/02/2011	904.51	YES	04/11/2007
31D-165	Permanent	Medium	Bressi Ranch	TC-50				Good	03/04/2011	05/23/2011	05/02/2011	904.51	NO	04/11/2007
31D-166	Permanent	Low	Bressi Ranch	TC-30				Good	03/04/2011	05/23/2011	05/02/2011	904.51	NO	04/11/2007
31D-167	Permanent	Low	Bressi Ranch	TC-30				Good	03/04/2011	05/23/2011	05/02/2011	904.51	NO	04/11/2007
32A-100	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	7/10/10	Good	03/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-101	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-102	Permanent	High	PALOMAR MELROSE L L C	MP-51	Good	05/04/2010	6/10/10	Good	06/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-104	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	9/17/10	Good	03/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-105	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	6/10/10	Good	03/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-106	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-107	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-108	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Fair	03/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-109	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	No	06/14/2007
32A-110	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	No	06/14/2007
32A-111	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	No	06/14/2007
32A-112	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	No	06/14/2007
32A-113	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	No	06/14/2007
32A-116	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-117	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-119	Permanent	High	PALOMAR MELROSE L L C	MP-51	Good	05/04/2010	8/4/10	Good	06/29/2011	06/11/2011	05/02/2011	904.31	No	06/14/2007
32A-120	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	9/17/10	Good	03/29/2011	06/01/2011	05/02/2011	904.31	No	06/14/2007
32A-121	Permanent	Medium	CONCOURSE ONE LLC	MP-52			9/23/10	Poor	03/09/2011	06/13/2011	05/02/2011	904.31	No	01/25/2006

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32A-122	Permanent	Medium	CONCOURSE ONE LLC	MP-52			9/23/10	Poor	03/09/2011	06/13/2011	05/02/2011	904.31	No	01/25/2006
32A-123	Permanent	Medium	CONCOURSE ONE LLC	MP-52			9/23/10	Poor	03/09/2011	06/14/2011	05/02/2011	904.31	No	01/25/2006
32A-124	Permanent	Medium	CONCOURSE ONE LLC	MP-52			9/23/10	Poor	03/09/2011	06/14/2011	05/02/2011	904.31	No	01/25/2006
32A-145	Permanent	Medium	Sabadicci LLC	MP-52	Good	05/07/2010	6/21/10			06/27/2011	05/02/2011	904.51	No	06/28/2006
32A-150	Permanent	Medium	Sabadicci LLC	MP-52	Good	05/07/2010	6/21/10			06/27/2011	05/02/2011	904.51	No	06/28/2006
32A-155	Permanent	Low	Redus Carlsbad - Colliers International	TC-20	Good	05/07/2010	6/21/10	Good	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-158	Permanent	Medium	Redus Carlsbad - Colliers International	MP-52	Fair	05/07/2010	6/21/10	Fair	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-164	Permanent	Low	Redus Carlsbad - Colliers International	TC-30	Good	05/07/2010	6/21/10	Good	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-167	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Fair	03/29/2011	06/02/2011	05/02/2011	904.51	no	06/14/2007
32A-169	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/02/2011	05/02/2011	904.51	no	06/14/2007
32A-170	Excluded	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Excluded	03/29/2011		N/A	904.51	no	06/14/2007
32A-173	Permanent	Medium	Redus Carlsbad - Colliers International	MP-52	Fair	05/07/2010	6/21/10	Poor	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-174	Permanent	Medium	Redus Carlsbad - Colliers International	MP-52	Fair	05/07/2010	6/21/10	Poor	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-175	Permanent	Medium	Redus Carlsbad - Colliers International	MP-52	Fair	05/07/2010	6/21/10	Good	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-176	Permanent	Medium	Redus Carlsbad - Colliers International	MP-52	Fair	05/07/2010	6/21/10	Fair	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-177	Permanent	Medium	Redus Carlsbad - Colliers International	MP-52	Fair	05/07/2010	6/21/10	Good	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-178	Permanent	Medium	Redus Carlsbad - Colliers International	MP-52	Fair	05/07/2010	6/21/10	Fair	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-179	Permanent	Medium	Redus Carlsbad - Colliers International	MP-52	Fair	05/07/2010	6/21/10	Fair	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-180	Permanent	Medium	Redus Carlsbad - Colliers International	MP-52	Fair	05/07/2010	6/21/10	Good	06/20/2011	06/02/2011	05/02/2011	904.31	Yes	07/21/2006
32A-86	Permanent	High	PALOMAR MELROSE L L C	MP-51	Good	03/18/2010	8/4/10	Good	06/29/2011	06/02/2011	05/02/2011	904.31	No	06/14/2007
32A-89	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/02/2011	05/02/2011	904.31	No	06/14/2007
32A-91	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/02/2011	05/02/2011	904.31	No	06/14/2007
32A-93	Excluded	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Excluded	03/29/2011		N/A	904.31	No	06/14/2007
32A-95	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/02/2011	05/02/2011	904.31	No	06/14/2007
32A-98	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/02/2011	05/02/2011	904.31	No	06/14/2007
32A-99	Permanent	Medium	PALOMAR MELROSE L L C	MP-52	Poor	03/18/2010	8/4/10	Good	03/29/2011	06/02/2011	05/02/2011	904.31	No	06/14/2007
32B-104	Permanent	Low	CRAVAN LLC	TC-30	Good	05/07/2010	5/28/10	Good	03/16/2011	05/16/2011	05/02/2011	904.31	No	05/15/2007
32B-105	Permanent	Low	CRAVAN LLC	TC-30	Good	05/07/2010	5/28/10	Good	03/16/2011	05/16/2011	05/02/2011	904.31	No	05/15/2007
32B-106	Permanent	Low	CRAVAN LLC	TC-30	Good	05/07/2010	5/28/10	Good	03/16/2011	05/16/2011	05/02/2011	904.31	No	05/15/2007

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32B-107	Permanent	Low	CRAVAN LLC	TC-30	Good	05/07/2010	5/28/10	Good	03/16/2011	05/16/2011	05/02/2011	904.31	No	05/15/2007
32B-108	Permanent	Low	CRAVAN LLC	TC-30	Good	05/07/2010	5/28/10	Good	03/16/2011	05/16/2011	05/02/2011	904.31	No	05/15/2007
32B-109	Permanent	Low	CRAVAN LLC	TC-30	Good	05/07/2010	5/28/10	Good	03/16/2011	05/16/2011	05/02/2011	904.31	No	05/15/2007
32B-111	Permanent	Medium	Beza Investments	MP-52	Good	05/07/2010	6/14/10	Fair	03/16/2011	06/15/2011	05/02/2011	904.31	No	05/22/2007
32B-114	Permanent	Medium	Beza Investments	MP-52	Good	05/07/2010	6/14/10	Poor	03/16/2011	06/15/2011	05/02/2011	904.31	No	05/22/2007
32B-118	Permanent	Low	Beza Investments	TC-30	Good	05/07/2010	6/14/10	Good	03/16/2011	06/15/2011	05/02/2011	904.31	No	05/22/2007
32B-119	Permanent	Low	Beza Investments	TC-30	Good	05/07/2010	6/14/10	Good	03/16/2011	06/15/2011	05/02/2011	904.31	No	05/22/2007
32B-120	Permanent	Low	Beza Investments	TC-30	Good	05/07/2010	6/14/10	Good	03/16/2011	06/15/2011	05/02/2011	904.31	No	05/22/2007
32B-121	Permanent	Low	Beza Investments	TC-30	Good	05/07/2010	6/14/10	Good	03/16/2011	06/15/2011	05/02/2011	904.31	No	05/22/2007
32B-123	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Poor	03/17/2010	5/14/10	Fair	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-125	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Good	03/17/2010	5/14/10	fair	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-126	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Fair	03/17/2010	5/14/10	Poor	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-127	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Fair	03/17/2010	5/14/10	Fair	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-128	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Good	03/17/2010	5/14/10	Fair	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-131	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Fair	03/17/2010	5/14/10	Fair	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-133	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Poor	03/17/2010	5/14/10	Good	05/04/2011	05/20/111	05/02/2011	904.31	No	11/17/2005
32B-134	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Poor	03/17/2010	5/14/10	Fair	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-135	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Fair	03/17/2010	5/14/10	Poor	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-136	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Fair	03/17/2010	5/14/10	Poor	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-137	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Good	03/17/2010	5/14/10	Poor	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-138	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Poor	03/17/2010	5/14/10	Fair	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-139	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Good	03/17/2010	5/14/10	Poor	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-141	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Fair	03/17/2010	5/14/10	Poor	05/04/2011	05/20/2011	05/02/2011	904.31	yes	11/17/2005
32B-145	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Good	03/17/2010	5/14/10	Fair	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-146	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Poor	03/17/2010	5/14/10	Poor	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-147	Excluded	Medium	GREYHAWK ASSOCIATES	MP-52	Poor	03/17/2010	5/14/10	Excluded	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32B-72	Permanent	Low	AETHERCOMM INC	TC-30			6/10/10	Good	03/16/2011	06/15/2011	05/02/2011	904.31	No	06/07/2007
32B-73	Permanent	Low	AETHERCOMM INC	TC-30				Good	03/16/2011	06/15/2011	05/02/2011	904.31	NO	06/07/2007
32B-75	Permanent	Low	AETHERCOMM INC	TC-30			6/10/10	Good	03/16/2011	06/15/2011	05/02/2011	904.31	No	06/07/2007

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32B-80	Permanent	Medium	AETHERCOMM INC	MP-52	Good	05/07/2010	6/21/10	Good	03/16/2011	06/15/2011	05/02/2011	904.31	no	06/07/2007
32B-82	Permanent	Medium	AETHERCOMM INC	MP-52	Good	05/07/2010	6/21/10	Fair	03/16/2011	06/15/2011	05/02/2011	904.31	no	06/07/2007
32B-88	Permanent	Medium	OWP Point Office LLC	MP-52				Fair	03/16/2011		05/02/2011	904.51	no	05/22/2007
32B-89	Permanent	Medium	OWP Point Office LLC	MP-52				Fair	03/16/2011		05/02/2011	904.51	no	05/22/2007
32B-90	Permanent	Medium	OWP Point Office LLC	MP-52				Good	03/16/2011		05/02/2011	904.51	yes	05/22/2007
32B-94	Permanent	Medium	CRAVAN LLC	MP-52	Poor	05/07/2010	5/28/10	Poor	03/16/2011	05/16/2011	05/02/2011	904.51	No	05/15/2007
32B-97	Permanent	Low	CRAVAN LLC	TC-30	Good	05/07/2010	5/28/10	Good	03/16/2011	05/16/2011	05/02/2011	904.31	No	05/15/2007
32C-106	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	no	01/08/2007
32C-107	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	no	01/08/2007
32C-108	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	no	01/08/2007
32C-109	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	no	01/08/2007
32C-110	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	no	01/08/2007
32C-111	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	no	01/08/2007
32C-112	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	no	01/08/2007
32C-113	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	no	01/08/2007
32C-114	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.31	no	01/08/2007
32C-115	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.51	no	06/14/2007
32C-116	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.51	no	06/14/2007
32C-117	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.51	no	06/14/2007
32C-118	Future	Medium	PALOMAR MELROSE L L C	MP-52	Future	03/18/2010	N/A	Future	03/14/2011		N/A	904.51	no	06/14/2007
32D-70	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52				Poor	05/04/2011	06/17/111	05/02/2011	904.31	No	11/17/2005
32D-73	Permanent	Medium	GREYHAWK ASSOCIATES	MP-52	Good	03/17/2010	5/14/10	Good	05/04/2011	05/20/2011	05/02/2011	904.31	No	11/17/2005
32D-S201	Permanent	Medium	CONCOURSE ONE LLC	MP-52				Fair	03/09/2011	06/13/2011	N/A	904.31	No	01/25/2006
32D-S202	Permanent	Medium	CONCOURSE ONE LLC	MP-52				Fair	03/09/2011	06/13/2011	N/A	904.31	No	01/25/2006
35A-87	Permanent	High	STELLAR PROPERTIES L L C	TC-51	Fair	09/28/2010	7/23/10			06/03/2011	05/02/2011	904.40	no	02/19/2007
35A-88	Removed	Medium	STELLAR PROPERTIES L L C	TC-50	Removed	09/24/2010	7/21/10				N/A	904.40	no	02/19/2007
35A-89	Permanent	High	STELLAR PROPERTIES L L C	TC-60	Good	09/28/2010	7/23/10			06/03/2011	05/02/2011	904.40	no	02/19/2007
35C-94	Permanent	Medium	Encinas Water Facility	MP-52							05/02/2011	904.40	NO	08/05/2005
35C-95	Permanent	High	Encinas Water Facility	MP-51							05/02/2011	904.40	NO	08/05/2005

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36A-347	Permanent	Medium	Kelly Corporation Center II LLC	MP-52			9/15/10			06/13/2011	05/02/2011	904.40	No	05/18/2005
36A-350	Permanent	Medium	Kelly Corporation Center II LLC	MP-52			6/18/10			06/13/2011	05/02/2011	904.40	Yes	05/18/2005
36A-83	Temporary	Low	Kelly/JRM-Palomar Airport Road I LLC	TC-30			6/28/10				05/02/2011	904.51	Yes	11/03/2006
36B-177	Permanent	High	Emerald Pointe Estates Homeowners Assn	MP-51	Fair	09/24/2010	9/14/10			06/11/2011	05/02/2011	904.40	Yes	03/07/2006
37C-116	Permanent	High	Carolina Properties	MP-51	Good	08/13/2010	6/21/10				05/02/2011	904.40	no	01/30/2003
37D-118	Excluded	Low	City of Carlsbad	TC-30							N/A	904.51	YES	11/21/2005
37D-119	Excluded	Low	City of Carlsbad	TC-30							N/A	904.51	YES	11/21/2005
37D-120	Excluded	Low	City of Carlsbad	TC-30							N/A	904.51	YES	11/21/2005
37D-123	Permanent	Low	Franz-Yut El Camino, LLC	TC-30			6/10/10			06/06/2011	05/02/2011	904.51	Yes	06/30/2006
37D-124	Permanent	Low	Franz-Yut El Camino, LLC	TC-30						06/06/2011	05/02/2011	904.51	NO	06/30/2006
37D-126	Future	Medium	L C GREENS 1.3 L L C	MP-52			5/14/10	Future	03/04/2011			904.51	Yes	01/29/2007
37D-127	Future	Low	L C GREENS 1.3 L L C	TC-30			5/14/10	Future	03/04/2011			904.51	Yes	01/29/2007
37D-130	Permanent	Medium	MANZANITA PARTNERS L L C	MP-52							05/02/2011	904.51	NO	10/23/2003
37D-132	Permanent	High	MANZANITA PARTNERS L L C	MP-51	Poor	08/31/2010	10/6/10				05/02/2011	904.51	Yes	10/23/2003
37D-134	Permanent	Low	Franz-Yut El Camino, LLC	TC-30			6/10/10			06/06/2011	05/02/2011	904.51	Yes	06/30/2006
37D-138	Permanent	High	PALOMAR CONGREGATION OF JEHOVAHS WITNESSES VISTA	MP-51	Poor	09/22/2010	6/3/10			06/03/2011	05/02/2011	904.51	Yes	12/13/2006
37D-152	Future	Medium	L C GREENS 1.3 L L C	MP-52				Future	03/04/2011			904.40	NO	11/07/2008
37D-153	Future	Medium	L C GREENS 1.3 L L C	MP-52				Future	03/04/2011			904.40	YES	11/07/2008
37D-154	Future	Medium	L C GREENS 1.3 L L C	MP-52				Future	03/04/2011			904.40	YES	11/07/2008
38A-141	Permanent	Medium	ASPIRATIONS INC	MP-52				Good	03/14/2011	05/17/2011	05/02/2011	904.51	no	08/22/2007
38A-2	Permanent	High	Bressi Ranch	MP-51	Good	08/13/2010	9/9/10	Poor	06/29/2011		05/02/2011	904.51	Yes	04/18/2003
38A-23	Permanent	High	Bressi Ranch	MP-51	Poor	09/28/2010	9/9/10	Poor	06/29/2011		05/02/2011	904.51	yes	04/16/2003
38A-61	Permanent	Medium	ASPIRATIONS INC	MP-52			6/1/10	Poor	03/14/2011	05/17/2011	05/02/2011	904.51	yes	08/22/2007
38A-62	Excluded	Medium	ASPIRATIONS INC	MP-52			6/1/10	Excluded	03/14/2011		N/A	904.51	yes	08/22/2007
38A-63	Excluded	Medium	ASPIRATIONS INC	MP-52			6/1/10	Excluded	03/14/2011		N/A	904.51	yes	08/22/2007
38A-64	Excluded	Medium	ASPIRATIONS INC	MP-52			6/1/10	Excluded	03/14/2011		N/A	904.51	no	08/22/2007
38A-65	Permanent	Medium	ASPIRATIONS INC	MP-52			6/1/10	Poor	03/14/2011	05/17/2011	05/02/2011	904.51	no	08/22/2007
38A-66	Excluded	Medium	ASPIRATIONS INC	MP-52			6/1/10	Excluded	03/14/2011		N/A	904.51	no	08/22/2007
38A-69	Excluded	Medium	ASPIRATIONS INC	MP-52			6/1/10	Excluded	03/14/2011		N/A	904.51	no	08/22/2007

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38A-70	Excluded	Medium	ASPIRATIONS INC	MP-52			6/1/10	Excluded	03/14/2011		N/A	904.51	no	08/22/2007
38A-71	Excluded	Medium	ASPIRATIONS INC	MP-52			6/1/10	Excluded	03/14/2011		N/A	904.51	no	08/22/2007
38A-72	Excluded	Medium	ASPIRATIONS INC	MP-52			6/1/10	Excluded	03/14/2011		N/A	904.51	no	08/22/2007
38A-73	Excluded	Medium	ASPIRATIONS INC	MP-52			6/1/10	Excluded	03/14/2011		N/A	904.51	no	08/22/2007
38A-77	Future	High	Bressi Ranch	MP-51	future	09/17/2010	9/9/10				N/A	904.51	No	08/04/2004
38B-92	Permanent	Medium	Pacific Ridge School	MP-52	Poor	09/24/2010	6/28/10			06/15/2011	05/02/2011	904.21	Yes	02/16/2007
38B-93	Permanent	Medium	Pacific Ridge School	MP-52	Poor	09/24/2010	6/28/10			06/15/2011	05/02/2011	904.51	yes	02/16/2007
38B-95	Permanent	Low	Pacific Ridge School	TC-30	Good	09/24/2010	6/28/10			06/15/2011	05/02/2011	904.51	Yes	06/22/2007
38B-97	Excluded	High	Bressi Ranch	MP-51	Excluded	08/18/2010	9/9/10				N/A	904.51		08/04/2004
38D-148	Excluded	High	City of Carlsbad	MP-51	Excluded	08/18/2010	6/3/10				N/A	904.51	Yes	06/07/2005
41A-80	Permanent	Low	WATERS END HOMEOWNERS ASSN	TC-30							05/02/2011	904.51	No	07/02/2007
42A-150	Permanent	High	BAY COLLECTION HOMEOWNERS ASSN	MP-50	Poor	08/31/2010	9/20/10				05/02/2011	904.21	No	06/11/2004
42A-160	Permanent	High	BAY COLLECTION HOMEOWNERS ASSN	MP-50	Poor	08/31/2010	9/20/10				05/02/2011	904.21	No	06/11/2004
42A-161	Permanent	High	BAY COLLECTION HOMEOWNERS ASSN	MP-51	Good	08/31/2010	6/18/10				05/02/2011	904.51	No	06/11/2004
42A-167	Permanent	High	BAY COLLECTION HOMEOWNERS ASSN	MP-51	fair	08/31/2010	9/20/10				05/02/2011	904.51	No	06/11/2004
42B-60	Permanent	Low	Black Rail Ridge Homeowners Assn	TC-30			5/10/10			06/13/2011	05/02/2011	904.51	No	06/30/2004
42B-68	Permanent	Medium	NORTH COAST CALVARY CHAPEL	MP-52	good	09/24/2010				06/02/2011	05/02/2011	904.31	yes	02/01/2004
42B-71	Permanent	Medium	NORTH COAST CALVARY CHAPEL	MP-52	good	09/24/2010				06/02/2011	05/02/2011	904.31	yes	02/01/2004
42B-73	Permanent	Medium	NORTH COAST CALVARY CHAPEL	MP-52	good	09/24/2010				06/02/2011	05/02/2011	904.31	yes	02/01/2004
42B-75	Permanent	Medium	NORTH COAST CALVARY CHAPEL	MP-52	good	09/24/2010				06/02/2011	05/02/2011	904.31	yes	02/01/2004
42B-93	Permanent	Medium	NORTH COAST CALVARY CHAPEL	MP-52	good	09/24/2010				06/02/2011	05/02/2011	904.31	yes	02/01/2004
42C-123	Permanent	High	BAY COLLECTION HOMEOWNERS ASSN	MP-51	Good	08/31/2010	9/20/10				05/02/2011	904.51	no	06/11/2004
42C-124	Permanent	High	BAY COLLECTION HOMEOWNERS ASSN	MP-51	Poor	08/31/2010	9/20/10				05/02/2011	904.51	no	06/11/2004
42D-135	Permanent	Low	SMITH FAMILY 2000 TRUST 01-31-00	TC-30			5/10/10			06/06/2011	05/02/2011	904.51	Yes	02/02/2007
42D-136	Permanent	Low	SMITH FAMILY 2000 TRUST 01-31-00	TC-30			5/10/10			06/06/2011	05/02/2011	904.51	Yes	02/02/2007
42D-138	Permanent	Low	SMITH FAMILY 2000 TRUST 01-31-00	TC-30						06/06/2011	05/02/2011	904.51	YES	02/02/2007
42D-139	Permanent	Low	SMITH FAMILY 2000 TRUST 01-31-00	TC-30			5/10/10			06/06/2011	05/02/2011	904.51	Yes	02/02/2007
43A-105	Future	Medium	AVIARA BLACK RAIL ROAD 16 L L C	MP-40	future	08/31/2010	6/15/10					904.51	Yes	12/16/2006
43A-108	Future	High	AVIARA BLACK RAIL ROAD 16 L L C	MP-50	future	08/31/2010	6/15/10					904.51	Yes	12/16/2006

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43B-36	Excluded	Medium	City of Carlsbad	MP-52				Excluded	03/11/2011	N/A	N/A	904.51	YES	11/21/2005
43B-40	Permanent	High	MANZANITA PARTNERS L L C	MP-51	Poor	08/31/2010	10/6/10				05/02/2011	904.51	No	10/23/2003
43B-49	Permanent	High	MANZANITA PARTNERS L L C	MP-51	Poor	08/31/2010	10/10/10				05/02/2011	904.51	yes	10/23/2003
44A-52	Permanent	High	LA COSTA GREENS COMMUNITY ASSN	MP-51	Good	08/20/2010	7/16/10			06/13/2011	05/02/2011	904.51	No	01/24/2003
44C-361	Permanent	High	LA COSTA GREENS COMMUNITY ASSN	MP-51	Good	08/20/2010	7/16/10			06/13/2011	05/02/2011	904.51	Yes	03/03/2005
44C-379	Permanent	High	DOVE FAMILY HOUSING ASSCS	MP-51	Good	05/04/2010	6/4/10			05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-380	Permanent	High	DOVE FAMILY HOUSING ASSCS	MP-51	Good	05/04/2010	6/4/10			05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-382	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Poor	04/14/2010	6/4/10	Fair	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-384	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Poor	04/14/2010	6/4/10	Fair	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-392	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	fair	04/14/2010	6/4/10	Fair	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-394	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Poor	04/14/2010	6/4/10	Poor	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-395	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Poor	04/14/2010	6/4/10	Poor	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-396	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Poor	04/14/2010	6/4/10	Poor	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-399	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	fair	04/14/2010	6/4/10	Poor	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-401	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Poor	04/14/2010	6/4/10	Poor	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-402	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Poor	04/14/2010	6/4/10	Poor	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-405	Excluded	High	LA COSTA GREENS COMMUNITY ASSN	MP-51	Excluded	08/20/2010	7/16/10				N/A	904.51	Yes	01/15/2004
44C-422	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Good	04/14/2010	9/15/10	Good	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-423	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Good	04/14/2010	9/15/10	Good	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-424	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Good	04/14/2010	9/15/10	Fair	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-425	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Good	04/14/2010	9/15/10	Good	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-426	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Good	04/14/2010	9/15/10	Good	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-427	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Good	04/14/2010	9/15/10	Fair	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
44C-432	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52				Fair	03/14/2011	05/31/2011	05/02/2011	904.51	NO	06/10/2003
44C-434	Permanent	Medium	KB Home Coastal Inc.	TC-32				Good	03/14/2011		05/02/2011	904.51	NO	08/20/2008
44C-435	Permanent	Medium	KB Home Coastal Inc.	TC-32				Good	03/14/2011		05/02/2011	904.51	NO	08/20/2008
44C-436	Permanent	Medium	KB Home Coastal Inc.	TC-32				Poor	06/29/2011		05/02/2011	904.51	YES	08/20/2008
44C-437	Permanent	Medium	KB Home Coastal Inc.	TC-32				Good	03/14/2011		05/02/2011	904.51	NO	08/20/2008
44C-438	Permanent	Medium	KB Home Coastal Inc.	TC-32				Good	03/14/2011		05/02/2011	904.51	NO	08/20/2008

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44C-439	Future	Medium	KB Home Coastal Inc.	TC-32				Future	06/29/2011		05/02/2011	904.51	YES	08/20/2008
44C-440	Future	Medium	KB Home Coastal Inc.	TC-32				Future	03/14/2011		N/A	904.51	NO	08/20/2008
44C-441	Permanent	Medium	KB Home Coastal Inc.	TC-32				Future	03/14/2011		05/02/2011	904.51	NO	08/20/2008
44C-442	Permanent	Medium	KB Home Coastal Inc.	TC-32				Good	03/14/2011		05/02/2011	904.51	NO	08/20/2008
44C-443	Permanent	Medium	KB Home Coastal Inc.	TC-32				Good	03/14/2011		05/02/2011	904.51	NO	08/20/2008
45B-121	Permanent	High	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Poor	08/31/2010	6/23/10			06/21/2011	05/02/2011	904.51	Yes	04/06/2004
45D-30	Permanent	High	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Good	08/31/2010	6/23/10			06/21/2011	05/02/2011	904.51	no	04/06/2004
45D-31	Permanent	High	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Good	08/31/2010	6/23/10			06/21/2011	05/02/2011	904.51	Yes	04/06/2004
45D-35	Permanent	High	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Good	08/31/2010	6/23/10			06/21/2011	05/02/2011	904.51	Yes	04/06/2004
47B-65	Permanent	Low	Four Seasons Resort - Aviara North San Diego	TC-30			5/28/10			05/16/2011	05/02/2011	904.51	Yes	02/02/2007
49A-532	Permanent	Medium	DOVE FAMILY HOUSING ASSCS	MP-52	Poor	04/14/2010	6/4/10	Poor	03/14/2011	05/31/2011	05/02/2011	904.51	no	06/10/2003
49A-535	Permanent	High	LA COSTA GREENS COMMUNITY ASSN	MP-51	Good	08/20/2010	7/16/10			06/13/2011	05/02/2011	904.51	no	01/15/2004
50A-55	Permanent	High	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Good	08/31/2010	6/23/10			06/21/2011	05/02/2011	904.51	yes	04/08/2004
50C-229	Permanent	Medium	ADMANI FAMILY 2002 TRUST 04-09-02	MP-52			6/29/10				05/02/2011	904.51	Yes	07/08/2007
50D-14	Future	High	LC Oaks 3.3 LLC	MP-51	Future	08/31/2010	6/29/10					904.51	Yes	07/12/2007
50E-1	Permanent	High	Real Estate Collateral Mgmt. Co.	MP-51							05/02/2011	904.51	NO	04/11/2006
50E-13	Permanent	High	CIC LA COSTA L P	MP-51	fair	08/18/2010	6/25/10				05/02/2011	904.51	no	04/12/2006
50E-43	Future	High	CARLSBAD PRESCHOOL LTD PTNSHP	MP-51	Future	08/16/2010						904.51	No	12/27/2006
50E-75	Future	High	Real Estate Collateral Mgmt. Co.	MP-51	Future	08/16/2010	6/3/10					904.51	No	06/18/2007
50G-14	Permanent	High	LC Oaks 3.3 LLC	MP-51	Good	09/22/2010	6/29/10			05/23/2011	05/02/2011	904.51	Yes	11/10/2007
50G-2	Permanent	High	CIC LA COSTA L P	MP-51	Poor	09/22/2010	6/25/10				05/02/2011	904.51	Yes	08/23/2006
50G-25	Permanent	High	LC Oaks 3.3 LLC	MP-51	fair	09/22/2010	6/29/10			05/23/2011	05/02/2011	904.51	Yes	11/10/2007
53B-20	Future	High	K S L LA COSTA RESORT CORP	MP-51	future	09/22/2010	5/27/10					904.51	Yes	12/21/2005
54B-39	Permanent	Medium	NEWKIRK FAMILY TRUST II 10-29-08	MP-52							05/02/2011	904.31	no	02/12/2002
54B-40	Permanent	Medium	NEWKIRK FAMILY TRUST II 10-29-08	MP-52							05/02/2011	904.31	no	02/12/2002
54B-56	Permanent	Low	Wells Fargo Bank	TC-30	Good	08/16/2010				06/02/2011	05/02/2011	904.51	No	12/15/2005
54B-58	Permanent	Low	Wells Fargo Bank	TC-30	Good	08/16/2010				06/02/2011	05/02/2011	904.51	No	12/15/2005
54B-59	Permanent	High	Wells Fargo Bank	TC-60	Poor	08/16/2010				06/02/2011	05/02/2011	904.51	No	12/15/2005
54B-61	Permanent	High	Wells Fargo Bank	TC-60	Poor	06/16/2010				06/02/2011	05/02/2011	904.51	No	12/15/2005

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54B-63	Permanent	Low	Wells Fargo Bank	TC-30	Good	08/16/2010				06/02/2011	05/02/2011	904.51	No	12/15/2005
55D-22	Permanent	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	MP-52	Poor	03/16/2010	6/2/10	Fair	03/02/2011	05/11/2011	05/02/2011	904.51	no	08/21/2003
55D-23	Permanent	Medium	AMERICAN DRUG STORES INC <LF> SO LLC	MP-52	Fair	03/16/2010	6/2/10	Good	03/02/2011	05/11/2011	05/02/2011	904.51	no	08/21/2003
58C-131	Permanent	Medium	COASTLINE COMMUNITY CHURCH	MP-52			5/28/10	Poor	06/15/2011	06/02/2011	05/02/2011	904.51	yes	04/10/2006
58C-132	Permanent	Medium	COASTLINE COMMUNITY CHURCH	MP-52			5/28/10	Good	06/15/2011	06/02/2011	05/02/2011	904.51	yes	04/10/2006
58C-135	Excluded	Medium	COASTLINE COMMUNITY CHURCH	MP-52				Excluded	06/15/2011	06/02/2011	05/02/2011	904.51	yes	04/10/2006
58C-136	Permanent	Medium	COASTLINE COMMUNITY CHURCH	MP-52			5/28/10	Poor	06/15/2011	06/02/2011	05/02/2011	904.51	no	04/10/2006
59A-294	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Fair	03/16/2010	6/3/10	Good	03/02/2011	05/11/2011	05/02/2011	904.51	no	08/21/2003
59A-295	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Fair	03/16/2010	6/2/10	Fair	03/02/2011	05/01/2011	05/02/2011	904.51	no	08/21/2003
59A-297	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Poor	03/16/2010	6/2/10	Good	03/02/2011	05/11/2011	05/02/2011	904.51	no	08/21/2003
59A-298	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Poor	03/16/2010	6/2/10	Good	03/02/2011	05/11/2011	05/02/2011	904.51	no	08/21/2003
59A-299	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Poor	03/16/2010	6/2/10	Poor	03/02/2011	05/11/2011	05/02/2011	904.51	no	08/21/2003
59A-300	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Poor	03/16/2010	6/2/10	Good	03/02/2011	05/11/2011	05/02/2011	904.51	no	08/21/2003
59A-304	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Fair	03/16/2010	6/2/10	Fair	03/02/2011	05/11/2011	05/02/2011	904.51	no	08/21/2003
59B-102	Permanent	High	The Church Of Jesus Christ Of Latter Day Saints	MP-51	Poor	08/31/2010					05/02/2011	904.51	no	03/17/2003
59B-108	Permanent	High	The Church Of Jesus Christ Of Latter Day Saints	TC-60	Poor	08/31/2010					05/02/2011	904.51	no	03/19/2003
59B-122	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Poor	03/16/2010	6/2/10	Good	03/02/2011	05/11/2011	05/02/2011	904.51	No	08/21/2003
59B-123	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Poor	03/16/2010	6/2/10	Fair	03/02/2011	05/11/2011	05/02/2011	904.51	No	08/21/2003
59B-125	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Poor	03/16/2010	6/2/10	Fair	03/02/2011	05/11/2011	05/02/2011	904.51	No	08/21/2003
59B-126	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Fair	03/10/2010	6/2/10	Poor	03/02/2011	05/11/2011	05/02/2011	904.51	No	08/21/2003
59B-127	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Poor	03/16/2010	6/2/10	Poor	03/02/2011	05/11/2011	05/02/2011	904.51	No	08/21/2003
59B-128	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Poor	03/16/2010	6/2/10	Fair	03/02/2011	05/11/2011	05/02/2011	904.51	No	08/21/2003
59B-129	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Fair	03/16/2010	6/2/10	Fair	03/02/2011	05/11/2011	05/02/2011	904.51	No	08/21/2003
59B-130	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Fair	03/16/2010	6/2/10	Fair	03/02/2011	05/11/2011	05/02/2011	904.51	No	08/21/2003
59B-131	Permanent	Medium	American Drug Stores Inc <Lf> So LLC	MP-52	Poor	03/16/2010	6/2/10	Poor	03/02/2011	05/11/2011	05/02/2011	904.51	No	08/21/2003
59C-146	Permanent	High	LOS COCHES PROPERTIES L L C	MP-51	Poor	09/28/2010	5/14/10				05/02/2011	904.51	Yes	10/18/2004
60A-47	Permanent	High	LaCosta Oaks Community Assn	TC-60	good	09/22/2010	6/23/10				05/02/2011	904.51	Yes	04/01/2002
9A-22	Permanent	Medium	Mark L Frazier Trust	MP-52						06/13/2011	05/02/2011	904.21	YES	06/14/2007

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9A-26	Permanent	Medium	Mark L Frazier Trust	MP-52			5/10/10			06/13/2011	05/02/2011	904.21	Yes	06/14/2007
9B-73	Permanent	High	Laguna Point HOA	MP-51	Good	09/24/2010	6/28/10			05/11/2011	05/02/2011	904.51	Yes	03/25/2004
9B-75	Future	Low	DALY WILLIAM V&ROSA C	TC-30	Future	03/25/2010	N/A					904.21	No	06/22/2006
9B-77	Future	Low	DALY WILLIAM V&ROSA C	TC-30	Future	03/25/2010	N/A					904.21	No	06/22/2006
9B-78	Future	Low	DALY WILLIAM V&ROSA C	TC-30	Future	03/25/2010	N/A					904.21	No	06/22/2006
9B-79	Future	Low	DALY WILLIAM V&ROSA C	TC-30	Future	03/25/2010	N/A					904.21	No	06/22/2006
9D-154	Future	High	GOLDSTEIN FAMILY TRUST 03-27-98	MP-51	Future	03/25/2010	N/A				N/A	904.21	yes	08/08/2007
9D-155	Permanent	Medium	M. Baker Management Inc.	MP-52			7/21/10			05/23/2011	05/02/2011	904.51	yes	09/20/2002
9D-156	Permanent	Medium	M. Baker Management Inc.	MP-52			7/21/10			06/29/2011	05/02/2011	904.51	yes	09/20/2002
9D-164	Permanent	Medium	Law Office of Thomas Hurley	MP-52							05/02/2011	904.21	NO	01/21/2009
9D-165	Permanent	Medium	Law Office of Thomas Hurley	MP-52							05/02/2011	904.21	NO	01/21/2009
DB103	Temporary	High	Aviara Master Association	TC-11	Good	09/28/2010	7/10/10				05/02/2011	904.51	Yes	10/09/1996
DB104	Temporary	High	Kelly/JRM-Palomar Airport Road I LLC	TC-11	Good	09/17/2010	6/28/10				05/02/2011	904.51	Yes	12/14/2005
DB105	Temporary	Medium	HCP Carlsbad LLC	TC-11	Good	03/24/2010	6/11/10	Good	06/15/2011	05/25/2011	05/02/2011	904.51	No	01/23/2003
DB106	Temporary	Medium	HCP Carlsbad LLC	TC-11	Good	03/24/2010	6/11/10	Good	06/15/2011	05/25/2011	05/02/2011	904.51	No	01/23/2003
DB107	Temporary	Medium	HCP Carlsbad LLC	TC-11	Good	03/24/2010	6/11/10	Good	06/15/2011	05/25/2011	05/02/2011	904.51	No	01/23/2003
DB117	Permanent	High	CENTER FOR NATURAL LANDS MGMT	TC-11	Good	08/13/2010	6/7/10	Good	06/15/2011	05/11/2011	05/02/2011	904.31	Yes	10/26/2004
DB118	Permanent	High	Raceway Corporate Center Owners Association	TC-11	Good	05/04/2010	5/12/10	Good	06/16/2011	05/09/2011	05/02/2011	904.31	Yes	11/03/2004
DB128	Permanent	High	Bressi Ranch	TC-22	Fair	08/18/2010		Good	06/29/2011		05/02/2011	904.51	Yes	02/21/2003
DB129	Permanent	High	Lanikai Management Corp.	TC-22	Good	08/13/2010	6/21/10			06/02/2011	05/02/2011	904.31	Yes	07/11/2007
DB134	Temporary	Medium	Calavera Hills II, LLC	SE-2			9/9/10				05/02/2011	904.31	No	04/05/2007
DB139	Temporary	High	PALOMAR CONGREGATION OF JEHOVAHS WITNESSES VISTA	TC-11	Good	09/22/2010	6/3/10			06/03/2011	05/02/2011	904.51	Yes	11/23/2005
DB144	Removed	Medium	Real Estate Collateral Mgmt. Co.	TC-22				Removed	06/15/2011	N/A	05/02/2011	904.51	No	02/22/2222
DB148	Removed	Medium	LC Oaks 3.3 LLC	TC-22	Good	08/16/2010	6/29/10	Removed	06/15/2011	06/27/2011	05/02/2011	904.51	no	
DB149	Removed	Medium	Real Estate Collateral Mgmt. Co.	TC-22	good	08/16/2010	6/3/10	Removed	06/15/2011	N/A	05/02/2011	904.51	no	
DB150	Removed	High	LC Oaks 3.3 LLC	TC-22	Good	08/16/2010	6/29/10	Removed	06/15/2011	06/27/2011	05/02/2011	904.51	Yes	
DB152	Temporary	Medium	Carlsbad Preschool Limited Partnership	TC-11	Fair	08/16/2010				06/21/2011	05/02/2011	904.51	no	04/10/2006
DB153	Temporary	Medium	PALOMAR MELROSE L L C	TC-11	Good	03/18/2010	6/10/10	Good	03/29/2011	06/02/2011	05/02/2011	904.31	no	03/28/2007
DB154	Temporary	Medium	Greyhawk Associates	TC-11	Good	03/17/2010	5/14/10	Good	05/04/2011	05/20/2011	05/02/2011	904.31	no	03/28/2007

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DB156	Temporary	High	H.G. Fenton Company	TC-11	Good	09/20/2010	6/4/10	Good	06/16/2011	05/12/2011	05/02/2011	904.51	Yes	11/03/2004
DB157	Temporary	Medium	H.G. Fenton Company	TC-11	Good	03/18/2010	6/4/10	Good	06/16/2011	05/12/2011	05/02/2011	904.31	no	11/03/2004
DB158	Temporary	Medium	H.G. Fenton Company	TC-11	Good	03/18/2010	6/4/10	Good	06/16/2011	05/12/2011	05/02/2011	904.51	No	11/03/2004
DB159	Temporary	High	H.G. Fenton Company	TC-11	Good	05/04/2010	6/4/10	Good	06/16/2011	05/12/2011	05/02/2011	904.51	Yes	11/03/2004
DB160	Temporary	High	H.G. Fenton Company	TC-11	Good	05/04/2010	6/4/10	Good	06/16/2011	05/12/2011	05/02/2011	904.21	Yes	11/03/2004
DB166	Permanent	High	Raceway Corporate Center Owners Association	TC-22	Good	05/04/2010	5/12/10	Good	06/16/2011	05/09/2011	05/02/2011	904.51	Yes	11/03/2004
DB167	Permanent	Medium	Franz-Yut El Camino, LLC	TC-22			6/10/10			06/06/2011	05/02/2011	904.51	No	06/20/2006
DB169	Temporary	High	Redus Carlsbad - Colliers International	TC11	poor	05/07/2010	6/21/10			06/02/2011	05/02/2011	904.51	Yes	10/26/2004
DB170	Permanent	Medium	Mammoth Roseville II LLC	TC11			6/2/10				05/02/2011	904.51	No	07/14/2006
DB171	Temporary	Medium	KILROY REALTY FINANCE PARTNERSHIP LP	TC-22	Good	03/19/2010	6/24/10	Good	03/09/2011		05/02/2011	904.31	No	10/26/2004
DB172	Temporary	High	Carlsbad Oaks North Ventures L P	TC-22	Good	05/04/2010	6/7/10	Good	05/02/2011	05/11/2011	05/02/2011	904.31	Yes	10/26/2004
DB173	Removed	Medium	KB Home Coastal Inc.	TC11			7/23/10	Removed	03/14/2011		N/A	904.51	No	03/03/2005
DB174	Removed	Medium	KB Home Coastal Inc.	TC11			7/23/10	Removed	03/14/2011		N/A	904.51	No	03/03/2005
DB175	Permanent	High	LA COSTA RIDGE COMMUNITY ASSN	TC-22	good	08/31/2010	6/23/10			06/21/2011	05/02/2011	904.51	Yes	04/08/2004
DB176	Permanent	High	BAY COLLECTION HOMEOWNERS ASSN	TC-22	fair	08/31/2010	9/14/10				05/02/2011	904.51	Yes	10/10/2007
DB177	Permanent	Medium	Emerald Pointe Estates Homeowners Assn	TC-22	good	09/24/2010	9/14/10			06/11/2011	05/02/2011	904.31	Yes	03/06/2006
DB178	Permanent	High	NORTH COAST CALVARY CHAPEL	TC-22	good	09/24/2010	5/17/10			06/02/2011	05/02/2011	904.51	Yes	02/01/2004
DB180	Temporary	High	AETHERCOMM INC	TC11	poor	05/07/2010	6/21/10			06/15/2011	05/02/2011	904.51	Yes	10/26/2004
DB181	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	06/13/2011	05/02/2011	904.31	No	11/29/2006
DB182	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	06/13/2011	05/02/2011	904.31	No	11/29/2006
DB183	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	06/13/2011	05/02/2011	904.31	No	11/29/2006
DB184	Removed	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Removed	09/24/2010	6/4/10				N/A	904.31	No	11/29/2006
DB185	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	06/13/2011	05/02/2011	904.31	No	11/29/2006
DB186	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	06/13/2011	05/02/2011	904.31	No	11/29/2006
DB187	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	05/11/2011	05/02/2011	904.31	No	11/29/2006
DB188	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	05/11/2011	05/02/2011	904.31	No	10/26/2004
DB189	Temporary	Medium	Kilroy Realty Finance Partnership LP	TC-22	Good	03/19/2010	6/24/10	Good	03/09/2011	06/20/2011	05/02/2011	904.31	No	10/26/2004
DB190	Temporary	Medium	Kilroy Realty Finance Partnership LP	TC-22	Good	03/19/2010	6/24/10	Good	03/09/2011	06/20/2011	05/02/2011	904.31	No	10/26/2004
DB191	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	05/11/2011	05/02/2011	904.31	No	10/26/2004

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DB192	Removed	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Removed	09/24/2010					N/A	904.31	No	11/29/2006
DB193	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	06/13/2011	05/02/2011	904.31	No	06/05/2007
DB194	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	06/13/2011	05/02/2011	904.31	No	06/05/2007
DB195	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	05/11/2011	05/02/2011	904.31	No	06/05/2007
DB196	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22	Good	03/19/2010	6/4/10	Good	03/09/2011	06/13/2011	05/02/2011	904.31	No	06/05/2007
DB197	Temporary	Medium	Fenton Carlsbad Research Center, LLC	TC-22	Good	05/19/2010	6/4/10			06/02/2011	05/02/2011	904.31	No	01/11/2006
DB198	Permanent	High	Fenton Carlsbad Research Center, LLC	TC-22	Good	05/19/2010	6/4/10			06/02/2011	05/02/2011	904.31	yes	01/11/2006
DB200	Temporary	High	Salk Owners Association	TC-22	Good	05/19/2010	6/7/10	Good	06/15/2011		05/02/2011	904.31	Yes	12/19/2005
DB201	Removed	High	L C GREENS 1.3 L L C	TC-22	Removed	08/16/2010	6/29/10				N/A	904.51	Yes	01/29/2007
DB204	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22				Good	03/09/2011	05/11/2011	05/02/2011	904.31	No	09/03/2008
DB205	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22				Good	03/09/2011	06/11/2011	05/02/2011	904.31	No	09/21/2009
DB206	Temporary	Medium	Carlsbad Oaks North Partners, L.P.	TC-22				Good	03/09/2011	05/11/2011	05/02/2011	904.31	No	09/21/2009
DB207	Temporary	High	Carlsbad Oaks North Partners, L.P.	TC-22				Good	05/11/2011	05/11/2011	05/02/2011	904.31	No	09/03/2008
DB208	Temporary	High	Carlsbad Oaks North Partners, L.P.	TC-22				Good	05/02/2011	05/11/2011	05/02/2011	904.31	No	09/03/2008
DB209	Temporary	High	Carlsbad Oaks North Partners, L.P.	TC-22				Good	05/02/2011	05/11/2011	05/02/2011	904.31	No	09/03/2008
DB210	Temporary	High	Carlsbad Oaks North Partners, L.P.	TC-22				Good	05/02/2011	05/11/2011	05/02/2011	904.31	No	09/03/2008
DB211	Temporary	High	Carlsbad Oaks North Partners, L.P.	TC-22				Good	05/02/2011	05/12/2011	05/02/2011	904.31	No	09/03/2008
DB212	Temporary	Medium	L C GREENS 1.3 L L C	TC11			5/14/10	Good	03/04/2011	05/23/2011	05/02/2011	904.51	No	10/26/2004
DB215	Temporary	Medium	SLOUGH CARLSBAD L L C	TC-22							05/02/2011	904.51	No	01/23/2003
DB216	Temporary	Medium	SLOUGH CARLSBAD L L C	TC-22							05/02/2011	904.51	No	01/25/2005
DB217	Temporary	Medium	SLOUGH CARLSBAD L L C	TC-22							05/02/2011	904.51	No	01/23/2003
DB218	Temporary	Medium	SLOUGH CARLSBAD L L C	TC-22							05/02/2011	904.51	No	01/25/2005
DB219	Temporary	Medium	SLOUGH CARLSBAD L L C	TC-22							05/02/2011	904.51	No	01/25/2005
DB220	Temporary	Medium	PIVOTAL 650 CALIFORNIA ST L L C	TC-22				Good	06/16/2011		05/02/2011	904.40	No	01/24/2005
DB221	Temporary	Medium	PIVOTAL 650 CALIFORNIA ST L L C	TC-22				Good	06/16/2011		05/02/2011	904.40	No	01/24/2005
DB222	Temporary	Medium	Slater Place, LP	TC-22							05/02/2011	904.51	No	12/24/2003
DB223	Temporary	Medium	Slater Place, LP	TC-22							05/02/2011	904.51	No	01/25/2005
DB224	Temporary	Medium	Slater Place, LP	TC-22							05/02/2011	904.51	No	01/25/2005
DB225	Temporary	Medium	Slater Place, LP	TC-22							05/02/2011	904.51	No	01/25/2005

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DB226	Temporary	Medium	SLOUGH CARLSBAD L L C	TC-22							05/02/2011	904.51	No	01/25/2005
DB227	Temporary	High	Roncelli Family Trust	TC-22							05/02/2011	904.51	No	01/25/2005
DB228	Permanent	Low	D P T PROPERTIES L L C	TC-10				Good	06/29/2011		05/02/2011	904.51	No	09/04/2008
DB229	Permanent	Low	D P T PROPERTIES L L C	TC-10				Good	06/29/2011		05/02/2011	904.51	No	09/04/2008
DB230	Permanent	Low	D P T PROPERTIES L L C	TC-10				Good	06/29/2011		05/02/2011	904.51	No	09/04/2008
DB232	Permanent	Low	ECR CORPORATE CENTER LP	TC-32				Good	06/29/2011	05/24/2011	05/02/2011	904.40	No	10/08/2007
DB233	Permanent	Low	ECR CORPORATE CENTER LP	TC-32				Good	06/29/2011	05/24/2011	05/02/2011	904.40	No	10/08/2007
DB234	Permanent	Low	ECR CORPORATE CENTER LP	TC-32				Good	06/29/2011	05/24/2011	05/02/2011	904.51	No	10/08/2007
DB235	Permanent	Low	ECR CORPORATE CENTER LP	TC-32				Good	06/29/2011	05/25/2011	05/02/2011	904.51	No	10/08/2007
DB236	Permanent	Low	ECR CORPORATE CENTER LP	TC-32				Good	06/29/2011	05/25/2011	05/02/2011	904.51	No	10/08/2007
DB237	Permanent	Low	ECR CORPORATE CENTER LP	TC-32				Good	06/29/2011	05/25/2011	05/02/2011	904.51	No	10/08/2007
DB238	Permanent	Low	ECR CORPORATE CENTER LP	TC-32				Good	06/29/2011	05/25/2011	05/02/2011	904.51	No	10/08/2007
DB60	Permanent	Medium	CPT/SC Title Holding Corp	TC-22			9/14/10	Good	03/11/2011	05/05/2011	05/02/2011	904.31	No	10/15/2002
DB63	Permanent	High	Calavera Hills II Homeowners Assn	TC-11	Good	09/20/2010	9/13/10	Good	06/29/2011	06/03/2011	05/02/2011	904.31	No	11/26/2002
DB83	Permanent	Medium	LaCosta Oaks Community Assn	TC-22	good	09/22/2010	6/24/10				05/02/2011	904.51	No	04/01/2001
DB84	Permanent	High	Bressi Ranch	TC-11	Good	05/04/2010		Good	06/15/2011		05/02/2011	904.51	No	01/23/2003
DB86	Temporary	Medium	PIVOTAL 650 CALIFORNIA ST L L C	TC-11	Good	03/24/2010	6/4/10	Good	06/16/2011		05/02/2011	904.51	No	12/24/2003
DB87	Temporary	Medium	PIVOTAL 650 CALIFORNIA ST L L C	TC-11			6/4/10	Good	06/16/2011		05/02/2011	904.51	No	12/24/2003
DB90	Temporary	Medium	PIVOTAL 650 CALIFORNIA ST L L C	TC-11	Good	03/24/2010	6/4/10	Good	06/16/2011		05/02/2011	904.51	No	12/24/2003
DB92	Temporary	Medium	Lot 23 Bressi Ranch LLC	TC-11	Good	03/24/2010	6/16/10			05/18/2011	05/02/2011	904.51	No	01/23/2003
DB96	Temporary	Medium	HCP Carlsbad LLC	TC-11	Good	03/24/2010	6/11/10	Good	06/15/2011	05/25/2011	05/02/2011	904.51	No	01/23/2003
DB97	Temporary	Medium	HCP Carlsbad LLC	TC-11	Good	03/24/2010	6/11/10	Good	06/15/2011	05/25/2011	05/02/2011	904.51	No	01/23/2003
DB99	Temporary	Medium	HCP Carlsbad LLC	TC-11	Good	03/24/2010	6/11/10	Good	06/15/2011	05/25/2011	05/02/2011	904.51	No	01/23/2003

TREATMENT CONTROL BMP
VERIFICATION FORM
Pursuant to CMC 15.12.095

GENERAL INFORMATION

Owner Name			
Owner Address		City and Zip	
Contact Name		Contact Phone	
New Contact		New Phone	
Email Address			

BMP INFORMATION

BMP ID#		BMP Type		Priority	
BMP Description		Manufacturer			
Project Number		Drawing Number			
BMP Location		BMP Address			
BMP Approval Date		2010 Inspection Date		2010 Condition	
Last Known Maintenance Date		2011 Inspection Date		2011 Condition	
Comments					

BMP VERIFICATION AND MAINTENANCE

BMP ACTIVITY	YES	NO	DON'T KNOW	N\A	COMMENTS
Has the BMP been installed?					
Has the BMP been removed?					
Is the BMP operating properly?					
Has the BMP been replaced? If so when?					
Is BMP covered under a maintenance agreement?					
Is the BMP on a regular maintenance schedule?					
Has the BMP been inspected during the last year?					
Has the BMP been maintained or cleaned during the last year?					

TCBMP Verification of Maintenance Records Requirement

If the 2010 or 2011 Condition of the TCBMP is **POOR**, you will need to submit documentation that the structure has been maintained since the last inspection. The structure was found to in POOR condition because of one or more of the following:

- **BMP has not been installed**
- **Accumulation of trash and debris**
- **BMP could not be accessed**
- **BMP needs repair**

Failure to submit the requested information could result in the issuance of a Notice of Violation and the assessment of administrative fines.

Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that the responsible party gathered and evaluated the information submitted. Based on my inquiry of the person or person who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate and complete, I am aware that there are significant penalties for submitting false information including the possibility of fines and other enforcement actions.

PRINT NAME:	SIGNATURE	DATE

Please return the completed and signed form to the
City of Carlsbad
CMI – Storm Water Compliance
5950 El Camino Real
Carlsbad, CA 92008
760-602-2780 x7111 or FAX 760-438-4178
tcbmp@carlsbadca.gov

CITY OF CARLSBAD
GRADING INSPECTION CHECKLIST
FOR PARTIAL SITE RELEASE

PROJECT INSPECTOR:_____ DATE:_____

PROJECT ID_____ GRADING PERMIT NO._____

LOTS REQUESTED FOR RELEASE:_____
N/A □ NOT APPLICABLE
√ □ COMPLETE
0 □ Incomplete or unacceptable

1st	2nd.		
		1.	Site access to requested lots adequate and logically grouped
		2.	Site erosion control measures adequate.
		3.	Overall site adequate for health, safety and welfare of public.
		4.	Letter from Owner/Dev. requesting partial release of specific lots, pads or bldg.
		5.	8□" x 11" site plan (attachment) showing requested lots submitted.
		6.	Compaction report from soils engineer submitted. (If soils report has been submitted with a previous partial release, a letter from soils engineer referencing the soils report and identifying specific lots for release shall accompany subsequent partial releases).
		7.	EOW certification of work done with finish pad elevations of specific lots to be released. Letter must state lot (s) is graded to within a tenth (.1) of the approved grading plan.
		8.	Geologic engineer's letter if unusual geologic or subsurface conditions exist.
		9.	Fully functional fire hydrants within 500 feet of building combustibles and an all weather roads access to site is required.
		10.	Letter from EOW that TCBMP□s are installed.

□ □ Partial release of grading for the above stated lots is approved for the purpose of building permit issuance. Issuance of building permits is still subject to all normal City requirements required pursuant to the building permit process.

□ Partial release of the site is denied for the following reasons:
_____

_____ _____
Project Inspector Date

_____ _____
Construction Manager Date

K:\FILE MASTER\Forms\PARTSITE.FRM.doc

CITY OF
CARLSBAD
Transportation Department

www.carlsbadca.gov

May 2, 2011

MEMORANDUM

TO: Property Owners/Developers/Contractors - All Active Construction Sites in the City of Carlsbad
FROM: Shawnetta Grandberry, Senior Construction Inspector, Construction Management and Inspections

RE: **BMP Verification of Installation Required Prior to Occupancy**

In order to comply with Regional Water Quality Control Board Order R9-2007-0001, the City has adopted an approach for ensuring verification that all permanent best management practices (BMPs), including LID, source control, and treatment control best management practices are installed and constructed per the requirements of approved plans prior to occupancy of the project. This requirement applies to all priority development projects subject to SUSMP requirements, including phased development projects. As a result of this requirement, project applicants must certify that constructed BMPs are in compliance with all specifications, plans, permits, ordinances, and are ready for inspection by the City. Verification of BMP installation can be certified by one of the following:

1. A California registered civil engineer;
2. A California registered geologist;
3. A California registered landscape architect;
4. A professional hydrologist registered through the American Institute of Hydrology;
5. A certified professional soil scientist registered through the Soil Science Society of America;
6. A certified professional in erosion and sediment control registered through Certified Professional in Erosion and Sediment Control, Inc.;
7. A certified professional in storm water quality registered through Certified Professional in Erosion and Sediment Control, Inc.; or
8. A certified professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies.

The City requires each project applicant to verify all treatment and flow-control facilities are adequately maintained. Facilities that are installed as part of the project will be verified for effectiveness and proper performance. Operation and maintenance of storm water BMP facilities is a six-stage process:

1. Determine who will own and be responsible for the maintenance of treatment facilities. Identify the means by which ongoing maintenance will be assured.
2. Identify anticipated maintenance requirements and allow for these requirements in project planning and preliminary design.
3. Prepare a maintenance plan incorporating detailed requirements for each treatment and flow-control facility.
4. Maintain the facilities from the time they are constructed until ownership and maintenance responsibility is formally transferred.
5. Formally transfer operation and maintenance responsibility to the site owner or occupant.
6. Maintain the facilities in perpetuity and keep records for self-inspection and verification requirements.

Project applicants in the City of Carlsbad are required to comply with all applicable storm water regulations and implement BMPs to the maximum extent practicable. It is the City's goal to obtain your compliance with the applicable regulations and requirements. Please contact your Project Inspector to review your specific project requirements. Thank you in advance for your cooperation and compliance efforts.

Construction Management and Inspection
5950 El Camino Real | Carlsbad, CA 92008 | 760-602-2780 | 760-438-4176 fax | tcbmp@carlsbadca.gov

Appendix 3

SWPPP PERMITS INVENTORY REPORT

7/1/2010-6/30/2011

Tier	Insp. Pri	SWPPP Nr.	Project Title Address	Inspector	Status	Date Issued	Date Finaled
1	L	SW100100	ALPHATEC SPINE	PD	FINAL	7/2/2010	9/23/2010
		SW100109	MENOR RESIDENCE	PY	FINAL	5/28/2010	12/13/2010
		SW100111	CULBERTSONS RESIDENCE	RB	FINAL	6/3/2010	10/19/2010
		SW100120	HOWARD RESIDENCE	MC	FINAL	7/1/2010	1/4/2011
		SW100128	OSMETECH	TP	FINAL	7/1/2010	1/12/2011
		SW100137	PERELMAN RES-64 SF GUNITE	PD	FINAL	7/9/2010	1/7/2011
		SW100140	WEATHERTON RESIDENCE	MC	FINAL	7/12/2010	5/13/2011
		SW100150	REED RESIDENCE	RB	FINAL	6/29/2010	3/7/2011
		SW100151	FOSTER RESIDENCE	PD	FINAL	7/6/2010	10/29/2010
		SW100155	TILL RESIDENCE	PY	FINAL	7/13/2010	5/18/2011
		SW100162	RISING GLENCC	PD	FINAL	6/30/2010	5/24/2011
		SW100167	HOWARD RESIDENCE	RB	FINAL	8/17/2010	11/16/2010
		SW100169	CARROLL RES	PY	FINAL	7/22/2010	10/4/2010
		SW100171	MANRIQUEZ: 558 SF POOL/SPA	PD	FINAL	7/13/2010	5/13/2011
		SW100172	EMBRY RESIDENCE	PD	FINAL	7/8/2010	11/15/2010
		SW100175	YOUNG RESIDENCE	RB	FINAL	7/28/2010	11/1/2010
		SW100177	MERCEDES BENZ OF	TP	FINAL	9/23/2010	6/7/2011
		SW100178	BRADY RESIDENCE	PD	FINAL	8/25/2010	1/24/2011
		SW100179	53 MELROSE - PHASE 3 - PLAN 2	MC	FINAL	7/27/2010	2/24/2011
		SW100180	53 MELROSE - PHASE 3 - PLAN 3	MC	FINAL	7/27/2010	2/25/2011
		SW100181	53 MELROSE - PHASE 3 - PLAN 2	MC	FINAL	7/27/2010	2/24/2011
		SW100182	53 MELROSE - PHASE 3 - PLAN 2	MC	FINAL	7/27/2010	3/8/2011
		SW100183	53 MELROSE - PHASE 3 - PLAN3	MC	FINAL	7/27/2010	3/8/2011
		SW100184	53 MELROSE - PHASE 3 - PLAN 1	MC	FINAL	7/27/2010	3/8/2011
		SW100185	53 MELROSE - PHASE 3 - PLAN 2	MC	ISSUED	7/27/2010	
		SW100186	53 MELROSE - PHASE 3 - PLAN 1	MC	ISSUED	7/27/2010	
		SW100187	53 MELROSE - PHASE 3 - PLAN 2	MC	ISSUED	7/27/2010	
		SW100188	53 MELROSE - PHASE 3 - PLAN 3	MC	FINAL	7/27/2010	6/23/2011
		SW100192	LOFGREN RES- CONVERT 202	RB	FINAL	7/23/2010	11/15/2010
		SW100193	YASHPAL RESIDENCE	MC	FINAL	8/18/2010	10/19/2010
		SW100194	ROBINSON RESIDENCE	PD	FINAL	7/29/2010	2/14/2011
		SW100195	BRIDGMAN RESIDENCE	MC	FINAL	7/13/2010	3/1/2011
		SW100196	JACKSON RESIDENCE	PD	FINAL	7/13/2010	11/16/2010
		SW100197	FICARA RESIDENCE	TP	ISSUED	7/22/2010	
		SW100198	SPIELMANN RESIDENCE	MC	FINAL	7/28/2010	4/26/2011
		SW100199	KRIKES RESIDENCE	MC	FINAL	7/27/2010	11/5/2010
		SW100200	BURCHFIELD RESIDENCE	PD	ISSUED	7/15/2010	
		SW100201	CHESNUT RESIDENCE	PD	FINAL	7/15/2010	4/29/2011
		SW100204	RABONOVICH: 570 SF POOLSPA	RB	FINAL	7/14/2010	1/5/2011
		SW100206	ROUBINA RESIDENCE	MC	FINAL	10/5/2010	1/7/2011
		SW100209	ESPIRITU RESIDENCE	MC	FINAL	7/16/2010	12/16/2010

Tier	Insp. Pri	SWPPP Nr.	Project Title Address	Inspector	Status	Date Issued	Date Finaled
		SW100211	BALDWIN PROJECT	PD	FINAL	8/18/2010	2/4/2011
		SW100212	MARKOWITZ	PY	FINAL	7/29/2010	11/1/2010
		SW100213	RAMOS RESIDENCE	PD	ISSUED	9/30/2010	
		SW100214	SCIACCA ADDITION	PY	FINAL	8/13/2010	12/29/2010
		SW100216	SAMRA RESIDENCE	PY	FINAL	8/2/2010	3/24/2011
		SW100219	BALDWIN RESIDENCE	PD	FINAL	8/18/2010	1/18/2011
		SW100220	SOLTERA - PHASE 4 - PLAN	PY	FINAL	7/16/2010	12/16/2010
		SW100221	SOLTERA - PHASE 4 - PLAN	PY	FINAL	7/16/2010	12/16/2010
		SW100222	SOLTERA - PHASE 4 - PLAN	PY	ISSUED	7/16/2010	
		SW100223	SOLTERA - PHASE 4 - PLAN	PY	ISSUED	7/16/2010	
		SW100224	SOLTERA - PHASE 4 - PLAN	PY	FINAL	7/16/2010	12/16/2010
		SW100225	SOLTERA - PHASE 4 - PLAN	PY	ISSUED	7/16/2010	
		SW100226	SOLTERA - PHASE 4 - PLAN	PY	ISSUED	7/16/2010	
		SW100227	PEDICINI	PY	FINAL	8/12/2010	1/12/2011
		SW100228	SINGH UPINDER RESIDENCE	MC	ISSUED	9/27/2010	
		SW100229	ROSS RES-456 SF RETAIN WALL	RB	FINAL	8/26/2010	9/27/2010
		SW100230	CAVANAUGH RESIDENCE	MC	FINAL	7/19/2010	12/6/2010
		SW100231	MIRASOL	PD	FINAL	7/28/2010	12/9/2010
		SW100232	SECOND STORY ADDITION-664	PD	ISSUED	9/2/2010	
		SW100233	COPPERWOOD / PHASE 6	PD	ISSUED	8/31/2010	
		SW100234	COPPERWOOD / PHASE 6	PD	FINAL	8/31/2010	2/7/2011
		SW100235	COPPERWOOD / PHASE 6	PD	FINAL	8/31/2010	1/31/2011
		SW100236	COPPERWOOD / PHASE 6	PD	FINAL	8/31/2010	2/9/2011
		SW100237	COPPERWOOD / PHASE 6	PD	FINAL	8/31/2010	1/21/2011
		SW100238	MIRASOL	PD	FINAL	7/28/2010	12/10/2010
		SW100239	MIRASOL	PD	FINAL	7/28/2010	12/10/2010
		SW100240	MIRASOL	PD	FINAL	7/28/2010	2/7/2011
		SW100241	MIRASOL	PD	FINAL	7/28/2010	12/10/2010
		SW100242	MIRASOL	PD	FINAL	7/28/2010	1/5/2011
		SW100243	ST ELIZABETH SETON	MC	ISSUED	9/21/2010	
		SW100257	DOLKAS RESIDENCE	PD	ISSUED	7/28/2011	
		SW100259	JENDERSON RESIDENCE	MC	FINAL	8/4/2010	12/27/2010
		SW100260	GOMEZ RESIDENCE	PY	FINAL	8/3/2010	12/30/2010
		SW100261	BENNETT RESIDENCE	MC	FINAL	7/22/2010	2/25/2011
		SW100262	MIRASOL	PD	FINAL	7/29/2010	12/10/2010
		SW100263	MIRASOL	PD	ISSUED	7/29/2010	
		SW100264	MIRASOL	PD	FINAL	7/29/2010	12/15/2010
		SW100265	MIRASOL	PD	FINAL	7/29/2010	12/15/2010
		SW100266	MIRASOL	PD	FINAL	7/29/2010	12/15/2010
		SW100267	MIRASOL	PD	FINAL	7/29/2010	12/15/2010
		SW100268	BARTLETT RESIDENCE	RB	FINAL	8/3/2010	12/2/2010
		SW100270	STIPE RESIDENCE	PY	FINAL	8/10/2010	11/29/2010
		SW100274	NIXON RES 409 SF POOL& SPA	PD	FINAL	8/17/2010	3/16/2011
		SW100277	INDRIERI RES-ADD 244 SF TO	PD	FINAL	9/14/2010	2/18/2011
		SW100279	LARSON: 600 SF POOL/SPA	PD	FINAL	8/30/2010	11/16/2010
		SW100280	RAMIREZ RES	PY	ISSUED	9/28/2010	
		SW100281	VAN NOSTROM RES- IN-	MC	FINAL	8/16/2010	2/10/2011

Tier	Insp. Pri	SWPPP Nr.	Project Title Address	Inspector	Status	Date Issued	Date Finaled
		SW100282	MEJIA-480 SF POOL	PY	FINAL	8/24/2010	6/2/2011
		SW100283	SMITH-700 SF POOL&SPA	PY	FINAL	8/24/2010	11/15/2010
		SW100284	LONG RESIDENCE	RB	FINAL	8/30/2010	1/19/2011
		SW100285	PRUETT RESIDENCE	PD	FINAL	8/30/2010	2/7/2011
		SW100287	SCHEINBLUM RESIDENCE	PY	ISSUED	9/1/2010	
		SW100288	SZYMANSKY RES-	PY	FINAL	8/31/2010	3/2/2011
		SW100289	SNIDER-1523SF POOL/SPA	PY	FINAL	9/1/2010	3/10/2011
		SW100290	TILL: 901 SF RETAINING WALLS/	PY	FINAL	9/9/2010	6/15/2011
		SW100291	SECHREST: NEW 770 SF	PD	FINAL	8/25/2010	3/8/2011
		SW100293	HAGEY RESIDENCE	RB	ISSUED	8/25/2010	
		SW100294	JENNY CRAIG - GENERATOR	TP	FINAL	8/26/2010	10/26/2010
		SW100295	JENNY CRAIG-GENERATOR	TP	FINAL	8/26/2010	10/26/2010
		SW100296	CITY OF CARLSBAD FIRST	PD	ISSUED	9/8/2010	
		SW100298	NORRBOHM RES 620 SF POOL &	PY	FINAL	9/16/2010	4/7/2011
		SW100300	OLYMPIC RESORT DEMOLITION	PD	ISSUED	8/31/2010	
		SW100301	MORI RESIDENCE	PY	FINAL	9/7/2010	1/13/2011
		SW100303	POLMAR RESIDENCE	PD	FINAL	9/30/2010	5/10/2011
		SW100304	ALVILLAR: 500 SF POOL/SPA	RB	ISSUED	9/9/2010	
		SW100306	ADAMS RES- BUILD 2 RET	PY	FINAL	9/14/2010	2/18/2011
		SW100307	CARLSBAD PASEO	TP	FINAL	9/2/2010	12/7/2010
		SW100308	DAVIS RESIDENCE	PD	FINAL	9/14/2010	2/1/2011
		SW100310	VERVAIR RES- 480 SF GARAGE	MC	ISSUED	9/13/2010	
		SW100314	MILLER RESIDENCE	RB	FINAL	9/24/2010	12/22/2010
		SW100316	CATHEY RES-DEMOLISH POOOL	RB	ISSUED	9/13/2010	
		SW100317	BRESSI ASSISTED LIVING	TP	ISSUED	9/16/2010	
		SW100319	WIELAND: 450 SF NEW	PY	FINAL	9/23/2010	1/5/2011
		SW100333	SMITH RES- NEW 440 SF	PD	FINAL	10/1/2010	1/13/2011
		SW100366	FLAHERTY: 64 SF SPA	PY	FINAL	11/1/2010	1/24/2011
		SW100503	PACIFIC RIDGE SCHOOL- BUILD	TP	ISSUED	6/8/2011	
		SW100506	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100507	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100508	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100509	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100510	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100511	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100512	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100513	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100514	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100515	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100516	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100517	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100518	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100519	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100520	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100521	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100522	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	
		SW100523	MIRASOL -PHASE 4	PD	ISSUED	7/18/2011	

Tier	Insp. Pri	SWPPP Nr.	Project Title Address	Inspector	Status	Date Issued	Date Finaled
		SW100557	CAMINO HILLS: 192 SF	MC	ISSUED	6/22/2011	
		SW100574	PENLEY RES	MC	ISSUED	7/11/2011	
		SW100576	BOB BAKER	TP	ISSUED	5/18/2011	
		SW110027	LEGOLAND	PD	FINAL	3/1/2011	5/26/2011
		SW110103	SCHENZ RES-	MC	ISSUED	5/18/2011	
		SW110107	WARBRICK RES:	PD	ISSUED	7/29/2011	
		SW110119	HEISERMAN ADDITION	PD	ISSUED	6/9/2011	
		SW110137	SCIOTTO RES- 300 SF PATIO	PY	ISSUED	6/9/2011	
		SW110152	NICHOL: RESIDENTIAL ADDIT/	PD	ISSUED	6/2/2011	
		SW110153	SMITH RESIDENCE	PY	ISSUED	5/9/2011	
		SW110154	GEIER RES- 1045 SF POOL/SPA	PD	ISSUED	5/5/2011	
		SW110155	BROWN: RES. ADDITION	MC	ISSUED	6/9/2011	
		SW110156	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110157	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110158	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110159	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110160	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110161	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110162	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110163	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110164	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110165	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110167	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110168	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110169	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110170	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110171	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110172	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110173	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110174	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110175	AMBERLY -LA COSTA OAKS	PD	ISSUED	5/20/2011	
		SW110176	LESAGE RESIDENCE	MC	ISSUED	5/31/2011	
		SW110188	SHEETS RES-ADD 386 SF TO	PD	ISSUED	6/20/2011	
		SW110190	BASS RESIDENCE	PD	ISSUED	6/30/2011	
		SW110191	GIBBONS RES POOL AND SPA	PY	ISSUED	5/13/2011	
		SW110192	ESLER POOL AND SPA	PY	ISSUED	5/25/2011	
		SW110196	JEFFERSON ST. APTS:	PD	FINAL	5/25/2011	6/23/2011
		SW110202	STANDARD PACIFIC	PD	ISSUED	7/15/2011	
		SW110203	STANDARD PACIFIC:	PD	ISSUED	7/15/2011	
		SW110204	ROCKROSE: LOT 179-RET WALL	PY	FINAL	6/10/2011	6/22/2011
		SW110205	ROCKROSE LOT 178 RET WALL	PY	FINAL	6/10/2011	6/22/2011
		SW110208	ST. JOHN RESIDENCE	PD	ISSUED	5/27/2011	
		SW110209	BRAMMELL 2ND DWELLING	PY	ISSUED	6/28/2011	
		SW110212	WILLETT ADDITION	PD	ISSUED	6/28/2011	
		SW110213	DUSSIN ADDITION	MC	ISSUED	7/27/2011	
		SW110214	ESTRADA: 96 SF ADDITION	MC	ISSUED	6/28/2011	
		SW110216	ZARIFIAN RES- ENCLOSE 155 SF	MC	ISSUED	6/21/2011	

Tier	Insp. Pri	SWPPP Nr.	Project Title Address	Inspector	Status	Date Issued	Date Finaled
		SW110218	SAVITT ARES- ADD 80 SF SPA	PD	ISSUED	6/3/2011	
		SW110219	SANDALWOOD-PHASE 2	PY	ISSUED	6/3/2011	
		SW110220	SANDALWOOD-PHASE 2	PY	ISSUED	6/3/2011	
		SW110221	SANDALWOOD-PHASE 2	PY	ISSUED	6/3/2011	
		SW110222	SANDALWOOD-PHASE 2	PY	ISSUED	6/3/2011	
		SW110223	SANDALWOOD-PHASE 2	PY	ISSUED	6/3/2011	
		SW110224	SANDALWOOD-PHASE 2	PY	ISSUED	6/3/2011	
		SW110225	SANDALWOOD-PHASE 2	PY	ISSUED	6/3/2011	
		SW110226	SANDALWOOD-PHASE 2	PY	ISSUED	6/3/2011	
		SW110227	WESTCOTT / PHASE 8	PD	ISSUED	6/20/2011	
		SW110228	WESTCOTT / PHASE 8	PD	ISSUED	6/20/2011	
		SW110229	WESTCOTT / PHASE 8	PD	ISSUED	6/20/2011	
		SW110230	WESTCOTT / PHASE 8	PD	ISSUED	6/20/2011	
		SW110231	WESTCOTT / PHASE 8	PD	ISSUED	6/20/2011	
		SW110232	WESTCOTT / PHASE 8	PD	ISSUED	6/20/2011	
		SW110233	COTTINGHAM POOLHOUSE/RET	PY	ISSUED	7/7/2011	
		SW110237	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110238	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110239	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110240	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110241	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110242	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110243	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110244	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110245	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110246	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110247	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110248	ROCKROSE - PHASE 5	PY	ISSUED	6/10/2011	
		SW110249	VONHUBEN RES:	PD	ISSUED	6/14/2011	
		SW110251	CINEMA INVESTMENTS	MC	ISSUED	7/26/2011	
		SW110252	PEARCE ADDITION	MC	ISSUED	6/20/2011	
		SW110253	KRISANTZ:	PY	ISSUED	6/23/2011	
		SW110254	POLMAR SPA AND RET WALLS	PD	ISSUED	7/18/2011	
		SW110255	GRAMATA RESIDENCE	PD	ISSUED	6/14/2011	
		SW110257	WINTER RES POOL	PD	ISSUED	6/28/2011	
		SW110259	SMALL: RETAINING WALLS	PD	ISSUED	6/16/2011	
		SW110260	CRUMBAKER POOL	PD	ISSUED	6/22/2011	
		SW110261	COLUCCI: 600 SF RETAIN	PD	ISSUED	6/24/2011	
		SW110263	BANK OF AMERICA: INSTALL	TP	ISSUED	6/17/2011	
		SW110266	SABOURI RESIDENCE	PD	ISSUED	7/6/2011	
		SW110267	SANCHEZ RES:	PD	ISSUED	7/6/2011	
		SW110268	ELEVATION BURGER	TP	ISSUED	7/7/2011	
		SW110284	KOPITZ REMODEL	PY	ISSUED	7/27/2011	
		SW110288	HOCKING RESIDENCE	PD	ISSUED	7/21/2011	
		SW110292	KEYSTONE	PY	ISSUED	7/28/2011	
		SW110301	COLUCCI RETAIN WALL	PD	ISSUED	8/1/2011	
		SW110305	TAMS RESIDENCE	MC	ISSUED	7/28/2011	

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	M	SW100165	AGUILAR RESIDENCE	PY	ISSUED	1/3/2011	
		SW100208	PIERSON RESIDENCE	PD	ISSUED	10/13/2010	
		SW100210	LEO CARRILLO RANCH BARN	PD	FINAL	10/26/2010	5/4/2011
		SW100244	DANNA RES-DEMO EXIST HOME	PY	ISSUED	11/5/2010	
		SW100246	CALABRESE: 1010 SF RES.	MC	ISSUED	12/27/2010	
		SW100251	POINSETTIA RIDGE	MC	FINAL	10/21/2010	4/12/2011
		SW100252	POINSETTIA RIDGE	MC	FINAL	10/21/2010	5/9/2011
		SW100253	POINSETTIA RIDGE	MC	FINAL	10/21/2010	5/9/2011
		SW100254	POINSETTIA RIDGE	MC	FINAL	10/21/2010	5/9/2011
		SW100269	VILLAS DE LA COSTA	PY	ISSUED	10/27/2010	
		SW100276	LIFE TECHNOLOGIES-ADD 6385	TP	ISSUED	10/6/2010	
		SW100299	ZIMMER DENTAL TI	TP	FINAL	10/13/2010	1/4/2011
		SW100302	JACINTO: ESTEND EXIST.	PY	FINAL	10/21/2010	2/10/2011
		SW100305	MCMILLEN RESIDENCE	PY	FINAL	10/12/2010	5/11/2011
		SW100311	ARMSTRONG RES- ADD 530 SF	MC	ISSUED	3/30/2011	
		SW100312	HILTON: OCEANFRONT HOTEL	MC	ISSUED	3/2/2011	
		SW100313	TAYLOR: 523 SF POOL/SPA	PY	FINAL	10/18/2010	4/5/2011
		SW100315	LAKESHORE GARDENS	PD	ISSUED	3/29/2011	
		SW100318	MEJIA: 400 SF SOLID ROOF	PY	FINAL	10/26/2010	3/24/2011
		SW100320	FLOR RESIDENCEC	MC	ISSUED	1/6/2011	
		SW100321	ALPNER RESIDENCE	PY	FINAL	12/14/2010	6/7/2011
		SW100322	MARBELLA	MC	FINAL	11/4/2010	1/31/2011
		SW100324	CHUN RES- GUNITE SPA,	PY	FINAL	9/29/2010	2/10/2011
		SW100326	SUBOTIC RES- ADD 817 SF 1ST	PY	ISSUED	2/8/2011	
		SW100328	OSTENDO TECH- ADD REAR	MC	FINAL	1/1/0001	5/9/2011
		SW100330	MURPHY RESIDENCE	MC	ISSUED	3/31/2011	
		SW100331	DRESOIS RETAINING WALL	PD	FINAL	10/4/2010	11/4/2010
		SW100337	HUBBS SEAWORLD-RUN GAS &	PY	FINAL	9/30/2010	12/9/2010
		SW100338	NEW 7-11	MC	FINAL	10/6/2010	3/28/2011
		SW100339	SCHREIBER RESIDENCE	PD	FINAL	10/13/2010	12/21/2010
		SW100340	HILL RES- 300 SF - 2 RETAINING	PY	FINAL	10/15/2010	5/18/2011
		SW100341	AMBERLY -LA COSTA OAKS	PD	ISSUED	1/31/2011	
		SW100342	AMBERLY- LA COSTA OAKS	PD	ISSUED	1/31/2011	
		SW100343	AMBERLY- LA COSTA OAKS	PD	ISSUED	1/31/2011	
		SW100344	CALIGUIRI: 709 SF GUEST	PY	FINAL	11/4/2010	3/10/2011
		SW100345	KERR RES- 470 SF POOL/SPA	PD	FINAL	10/20/2010	1/31/2011
		SW100346	BURKE RES- 500 SF POOL/SPA	PD	FINAL	10/20/2010	2/8/2011
		SW100347	ARMY & NAVY ACADEMY	PY	ISSUED	2/10/2011	
		SW100350	53 MELROSE - PHASE 4 - PLAN 1	MC	ISSUED	12/20/2010	
		SW100351	53 MELROSE - PHASE 4 - PLAN 2	MC	ISSUED	12/20/2010	
		SW100352	53 MELROSE - PHASE 4 - PLAN 2	MC	ISSUED	12/20/2010	
		SW100353	53 MELROSE - PHASE 4 - PLAN 2	MC	ISSUED	12/20/2010	
		SW100354	53 MELROSE - PHASE 4 - PLAN 2	MC	ISSUED	12/20/2010	
		SW100355	53 MELROSE - PHASE 4 - PLAN 2	MC	ISSUED	12/20/2010	
		SW100356	53 MELROSE - PHASE 4 - PLAN 3	MC	ISSUED	12/20/2010	
		SW100357	53 MELROSE - PHASE 4 - PLAN 3	MC	ISSUED	12/20/2010	
		SW100358	53 MELROSE - PHASE 4 - PLAN 3	MC	ISSUED	12/20/2010	

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		SW100359	53 MELROSE - PHASE 4 - PLAN 3	MC	ISSUED	12/20/2010	
		SW100360	BLUE: 315 SF POOL/SPA // GAS	MC	FINAL	10/25/2010	2/8/2011
		SW100361	SNIDER RESIDENCE	PY	FINAL	12/13/2010	5/27/2011
		SW100363	LEONARD RESIDENCE	PD	FINAL	11/2/2010	3/9/2011
		SW100364	BRILL RES-BUILD NEW 1,031 SF	PD	FINAL	12/20/2010	3/28/2011
		SW100365	2 STORY ADDITION/DETACHED	PD	FINAL	12/2/2010	6/1/2011
		SW100368	RANDAZZO RES - ADD 181 SF	PD	FINAL	11/4/2010	5/24/2011
		SW100369	53 MELROSE PHS 5- PLAN 1	MC	ISSUED	12/20/2010	
		SW100370	53 MELROSE PHS 5- PLAN 2	MC	ISSUED	12/20/2010	
		SW100371	53 MELROSE PHS 5- PLAN 2	MC	ISSUED	12/20/2010	
		SW100372	53 MELROSE PHS 5- PLAN 2	MC	ISSUED	12/20/2010	
		SW100373	53 MELROSE PHS 5- PLAN 3	MC	ISSUED	12/20/2010	
		SW100374	53 MELROSE PHS 5- PLAN 3	MC	ISSUED	12/20/2010	
		SW100375	53 MELROSE PHS 5- PLAN 3	MC	ISSUED	12/20/2010	
		SW100376	ORDWAY-600 SF POOL&SPA	MC	ISSUED	11/12/2010	
		SW100377	602 SF RETAINING WALL PER C-	PY	FINAL	11/12/2010	12/30/2010
		SW100378	NORRBOHM RESIDENCE	PY	FINAL	11/29/2010	4/7/2011
		SW100379	BLOSSOM GROVE - PHASE 3	PY	FINAL	12/16/2010	5/16/2011
		SW100380	BOULAN RES-534 SF ADDITION	PD	ISSUED	12/13/2010	
		SW100381	BLOSSOM GROVE - PHASE 3	PY	FINAL	12/16/2010	5/18/2011
		SW100382	BLOSSOM GROVE - PHASE 3	PY	FINAL	12/16/2010	5/16/2011
		SW100383	BLOSSOM GROVE - PHASE 3	PY	FINAL	12/16/2010	5/18/2011
		SW100384	BLOSSOM GROVE - PHASE 3	PY	FINAL	12/16/2010	5/16/2011
		SW100385	BLOSSOM GROVE - PHASE 3	PY	FINAL	12/16/2010	5/16/2011
		SW100386	BLOSSOM GROVE - PHASE 3	PY	FINAL	12/16/2010	5/16/2011
		SW100387	BLOSSOM GROVE - PHASE 3	PY	FINAL	12/16/2010	5/18/2011
		SW100388	BLOSSOM GROVE - PHASE 3	PY	FINAL	12/16/2010	5/18/2011
		SW100389	BLOSSOM GROVE - PHASE 3	PY	FINAL	12/16/2010	5/24/2011
		SW100391	MANN: 324 SF POOL	PD	FINAL	11/16/2010	2/18/2011
		SW100392	SANDALWOOD- MODEL PLAN 2	PY	ISSUED	11/10/2010	
		SW100393	SANDALWOOD- MODEL PLAN 3	PY	ISSUED	11/10/2010	
		SW100394	SANDALWOOD- MODEL PLAN 1	PY	ISSUED	11/10/2010	
		SW100395	TWOMBLY: CONVERT EXIST.	PD	ISSUED	11/23/2010	
		SW100397	SOLTERA - PHASE 5 - PLAN	PY	FINAL	11/24/2010	4/29/2011
		SW100398	SOLTERA - PHASE 5 - PLAN 3	PY	FINAL	11/24/2010	5/11/2011
		SW100400	SOLTERA - PHASE 5 - PLAN 3	PY	FINAL	11/24/2010	4/29/2011
		SW100401	SOLTERA - PHASE 5 - PLAN 2	PY	FINAL	11/24/2010	5/24/2011
		SW100413	GALLENO RES- 674 SF ROOM	PD	FINAL	1/3/2011	3/18/2011
		SW100429	SCHIEBEL RES- ADD 225 SF	PY	FINAL	3/4/2011	5/24/2011
		SW100430	WILLIAM CAVANAUGH RES-	PD	FINAL	12/6/2010	5/9/2011
		SW100439	CHAPPUIS-156 SF RET WALL	PY	FINAL	11/24/2010	3/16/2011
		SW100451	EIDENSCHINK RES- ADD 497 SF	PD	FINAL	1/18/2011	5/24/2011
		SW100453	CARTER:	MC	ISSUED	12/2/2010	
		SW100454	VANDAMERE 1000 SF	PD	ISSUED	11/24/2010	
		SW100455	STEVENS-ADD 733 SF	TP	FINAL	12/9/2010	5/6/2011
		SW100456	BAROUDI RESIDENCE	MC	FINAL	1/31/2011	5/5/2011
		SW100457	VIRIDIAN: PHS 6	PY	ISSUED	12/29/2010	

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		SW100458	VIRIDIAN: PHS. 6	PY	ISSUED	12/29/2010	
		SW100459	VIRIDIAN: PHS 6	PY	ISSUED	12/29/2010	
		SW100460	VIRIDIAN: PHS. 6	PY	ISSUED	12/29/2010	
		SW100461	VIRIDIAN: PHS 6	PY	ISSUED	12/29/2010	
		SW100462	VIRIDIAN: PHS. 7	PY	ISSUED	12/29/2010	
		SW100463	VIRIDIAN: PHS. 7	PY	ISSUED	12/29/2010	
		SW100464	VIRIDIAN: PHS. 7	PY	ISSUED	12/29/2010	
		SW100465	VIRIDIAN: PHS. 7	PY	ISSUED	12/29/2010	
		SW100466	VIRIDIAN: PHS. 7	PY	ISSUED	12/29/2010	
		SW100467	VIRIDIAN: PHS. 7	PY	ISSUED	12/29/2010	
		SW100468	VIRIDIAN: PHS. 8	PY	ISSUED	12/29/2010	
		SW100469	VIRIDIAN: PHS. 8	PY	ISSUED	12/29/2010	
		SW100470	VIRIDIAN: PHS. 8	PY	ISSUED	12/29/2010	
		SW100471	VIRIDIAN: PHS. 8	PY	ISSUED	12/29/2010	
		SW100472	VIRIDIAN: PHS. 8	PY	ISSUED	12/29/2010	
		SW100473	VIRIDIAN: PHS. 8	PY	ISSUED	12/29/2010	
		SW100474	VIRIDIAN: PHS. 9	PY	ISSUED	12/29/2010	
		SW100475	VIRIDIAN: PHS. 9	PY	ISSUED	12/29/2010	
		SW100476	VIRIDIAN: PHS. 9	PY	ISSUED	12/29/2010	
		SW100477	VIRIDIAN: PHS. 9	PY	ISSUED	12/29/2010	
		SW100478	VIRIDIAN: PHS. 9	PY	ISSUED	12/29/2010	
		SW100479	VIRIDIAN: PHS. 9	PY	ISSUED	12/29/2010	
		SW100480	VIRIDIAN: PHS. 9	PY	ISSUED	12/29/2010	
		SW100481	VIRIDIAN: PHS. 9	PY	ISSUED	12/29/2010	
		SW100482	VIRIDIAN: PHS. 9	PY	ISSUED	12/29/2010	
		SW100483	VIRIDIAN: PHS.10/BUILDOUT	PY	ISSUED	12/29/2010	
		SW100484	VIRIDIAN: PHS.10/BUILDOUT	PY	ISSUED	12/29/2010	
		SW100485	VIRIDIAN: PHS.10/BUILDOUT	PY	ISSUED	12/29/2010	
		SW100486	VIRIDIAN: PHS.10/BUILDOUT	PY	ISSUED	12/29/2010	
		SW100487	VIRIDIAN: PHS.10/BUILDOUT	PY	ISSUED	12/29/2010	
		SW100488	VIRIDIAN: PHS.10/BUILDOUT	PY	ISSUED	12/29/2010	
		SW100489	VIRIDIAN: PHS.10/BUILDOUT	PY	ISSUED	12/29/2010	
		SW100490	VIRIDIAN: PHS.10/BUILDOUT	PY	ISSUED	12/29/2010	
		SW100491	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100492	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100493	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100494	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100495	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100496	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100497	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100498	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100499	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100500	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100501	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100502	MIRASOL -PHASE 3	PD	ISSUED	3/24/2011	
		SW100504	DEMO PERMITS 7200 A, 7204,	TP	ISSUED	12/3/2010	
		SW100505	SCHLEHUBER RES-	PD	FINAL	12/6/2010	1/11/2011

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		SW100525	AVELLINO	PY	ISSUED	12/29/2010	
		SW100526	AVELLINO	PY	FINAL	12/29/2010	5/23/2011
		SW100527	AVELLINO	PY	ISSUED	12/29/2010	
		SW100528	AVELLINO	PY	ISSUED	12/29/2010	
		SW100529	AVELLINO	PY	FINAL	12/29/2010	5/5/2011
		SW100530	AVELLINO	PY	FINAL	12/29/2010	5/16/2011
		SW100532	AVELLINO	PY	ISSUED	12/29/2010	
		SW100547	MEISSNER RES- REMOVE AND	PD	ISSUED	12/13/2010	
		SW100548	RAHAVENDRAN ADDITION	PD	FINAL	12/21/2010	4/18/2011
		SW100549	SUNDSETH POOL	PY	ISSUED	12/13/2010	
		SW100550	LA COSTA CLUB HOUSE	PD	ISSUED	4/14/2011	
		SW100551	VIVIER: 588 SF POOL/SPA	TP	ISSUED	1/14/2011	
		SW100552	FORD RES:	PD	FINAL	12/29/2010	3/1/2011
		SW100553	MILLER-200 SF GUESTHOUSE	PY	FINAL	3/4/2011	4/5/2011
		SW100555	BRAMMELL RES-	PY	FINAL	1/4/2011	3/10/2011
		SW100556	URBAN OUTFITTERS-RETAIL TI	TP	ISSUED	2/16/2011	
		SW100562	AMBERLY -LA COSTA OAKS	PD	ISSUED	1/31/2011	
		SW100563	AMBERLY -LA COSTA OAKS	PD	ISSUED	1/31/2011	
		SW100564	AMBERLY -LA COSTA OAKS	PD	FINAL	1/31/2011	6/30/2011
		SW100565	AMBERLY -LA COSTA OAKS	PD	ISSUED	1/31/2011	
		SW100566	AMBERLY -LA COSTA OAKS	PD	ISSUED	1/31/2011	
		SW100567	AMBERLY -LA COSTA OAKS	PD	FINAL	1/31/2011	6/30/2011
		SW100568	AMBERLY -LA COSTA OAKS	PD	FINAL	1/31/2011	6/30/2011
		SW100569	AMBERLY -LA COSTA OAKS	PD	FINAL	1/31/2011	6/30/2011
		SW110001	WESTCOTT MODEL	PD	ISSUED	1/11/2011	
		SW110002	WESTCOTT MODEL	PD	ISSUED	1/11/2011	
		SW110003	WESTCOTT MODEL	PD	ISSUED	1/11/2011	
		SW110004	C 3 CHURCH	MC	ISSUED	4/18/2011	
		SW110005	BYUN: ADD 973 SF MAST	MC	ISSUED	4/11/2011	
		SW110006	NAGEL RESIDENCE	PD	FINAL	1/20/2011	6/23/2011
		SW110007	WRIGHT RESIDENCE	MC	ISSUED	2/15/2011	
		SW110008	NORRBOHM RES:	PY	FINAL	1/27/2011	4/7/2011
		SW110010	STEVENS RES- ADD 639 SF SDU	PY	ISSUED	4/1/2011	
		SW110012	BOSTIC:	PD	FINAL	1/25/2011	5/13/2011
		SW110013	CHENG: 105 SF SPA	MC	ISSUED	1/25/2011	
		SW110014	IBIS BIOSCIENCES- REMOVE 66	TP	ISSUED	4/6/2011	
		SW110015	SLATES RES- BUILD NEW 360	PY	ISSUED	5/5/2011	
		SW110018	MANGEN 204 SFADDITION	PD	ISSUED	2/25/2011	
		SW110019	RENNER: 425 SF POOL/SPA //	PY	FINAL	2/2/2011	6/30/2011
		SW110021	REMEDIAL FOUNDATION	MC	FINAL	2/7/2011	3/23/2011
		SW110022	ATAIE RES- ADDITION	PD	ISSUED	2/9/2011	
		SW110023	LAYMAN: ADD 96 SF TO BED &	PD	ISSUED	3/9/2011	
		SW110025	GOLDEY RES POOL/SPA	MC	FINAL	2/10/2011	4/28/2011
		SW110029	CONWAY RESIDENCE	PD	ISSUED	2/8/2011	
		SW110030	RICE RES	PY	ISSUED	2/14/2011	
		SW110031	VELCHEK RES:	MC	FINAL	2/14/2011	6/29/2011
		SW110034	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	

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		SW110036	SCHEILER:	MC	FINAL	2/11/2011	5/31/2011
		SW110037	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	
		SW110038	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	
		SW110039	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	
		SW110040	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	
		SW110041	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	
		SW110042	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	
		SW110043	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	
		SW110044	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	
		SW110045	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	
		SW110046	ROCKROSE - PHASE 4	PY	ISSUED	4/12/2011	
		SW110048	ISHIOKA RES-ADD NEW 198 SF	MC	FINAL	3/3/2011	6/14/2011
		SW110049	NOLAN ADDITION	MC	ISSUED	3/14/2011	
		SW110050	SANDALWOOD-PHASE 1	PY	ISSUED	2/23/2011	
		SW110051	SANDALWOOD-PHASE 1	PY	ISSUED	2/23/2011	
		SW110052	SANDALWOOD-PHASE 1	PY	ISSUED	2/23/2011	
		SW110053	SANDALWOOD- PHASE 1	PY	ISSUED	2/23/2011	
		SW110054	SANDALWOOD-PHASE 1	PY	ISSUED	2/23/2011	
		SW110055	SANDALWOOD-PHASE 1	PY	ISSUED	2/23/2011	
		SW110056	SANDALWOOD-PHASE 1	PY	ISSUED	2/23/2011	
		SW110057	SANDALWOOD-PHASE 1	PY	ISSUED	2/23/2011	
		SW110058	SANDALWOOD-PHASE 1	PY	ISSUED	2/23/2011	
		SW110060	TEMPLIN POOL & SPA	PY	ISSUED	2/18/2011	
		SW110061	URBINO RES-ADDITION	PY	ISSUED	5/18/2011	
		SW110062	WESTCOTT / PHASE 1	PD	ISSUED	3/23/2011	
		SW110063	WESTCOTT/ PHASE 1	PD	ISSUED	3/23/2011	
		SW110064	WESTCOTT / PHASE 1	PD	ISSUED	3/23/2011	
		SW110065	WESTCOTT/ PHASE 1	PD	ISSUED	3/23/2011	
		SW110066	WESTCOTT / PHASE 1	PD	ISSUED	3/23/2011	
		SW110067	WESTCOTT/ PHASE 1	PD	ISSUED	3/23/2011	
		SW110069	COHEN RES- GAS FOR BBQ &	PD	ISSUED	2/18/2011	
		SW110070	TSUI RES- BUILD NEW 511 SF	PD	FINAL	2/22/2011	5/16/2011
		SW110074	LANDES RESIDENCE	PY	ISSUED	4/1/2011	
		SW110076	CRUSE-MOHO GARAGE	MC	FINAL	3/17/2011	6/2/2011
		SW110078	ASTON RESIDENCE	MC	ISSUED	4/26/2011	
		SW110081	MEISSNER RES-252 SF MASTER	PD	ISSUED	4/20/2011	
		SW110082	CONNER RES ADDITION	PY	ISSUED	3/23/2011	
		SW110084	ANDREWS POOL & SPA	PY	FINAL	3/10/2011	6/15/2011
		SW110085	OWNER	PD	ISSUED	3/24/2011	
		SW110087	THE FORUM BLDG 1-EXTERIOR	TP	ISSUED	3/14/2011	
		SW110088	BRAMMELL RES:	MC	ISSUED	5/9/2011	
		SW110089	DUSSIN RES- 36 SF GUNITE SPA	MC	ISSUED	3/23/2011	
		SW110092	PALMOAR TRIAD- TI TO	MC	ISSUED	4/14/2011	
		SW110093	MAGNOLIA ESTATES-PHASE 4 &	PD	ISSUED	3/21/2011	
		SW110096	MAGNOLIA ESTATES-PHASE 4 &	PD	ISSUED	3/22/2011	
		SW110099	STALWICK ADDITION	PY	ISSUED	4/13/2011	
		SW110102	MERKLE POOL AND SPA	PY	ISSUED	3/21/2011	

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		SW110104	FLAHERTY RESIDENCE	PD	ISSUED	3/21/2011	
		SW110105	HOFFMAN ADDITION	MC	ISSUED	4/15/2011	
		SW110106	AETHERCOMM: EMERGENCY	PY	ISSUED	4/28/2011	
		SW110108	HANSON AGGREGATE	PY	ISSUED	3/23/2011	
		SW110111	SMALL RES POOL HOUSE	PD	ISSUED	4/25/2011	
		SW110120	YAGODIN RES- BUILD NEW 558	MC	ISSUED	4/11/2011	
		SW110121	DONOVAN RES- 200 SF FAM	PY	ISSUED	5/20/2011	
		SW110134	SMALL RES- 752 SF POOL/SPA	PD	ISSUED	4/15/2011	
		SW110135	KERN RESIDENCE	PY	ISSUED	4/6/2011	
		SW110136	MCLAURIN ADDITION	PY	ISSUED	4/26/2011	
		SW110138	KALKLOSCH RES- BUILD 664 SF	PD	ISSUED	4/20/2011	
		SW110141	AMBERLY -LA COSTA OAKS	PD	ISSUED	4/21/2011	
		SW110142	AMBERLY -LA COSTA OAKS	PD	ISSUED	4/21/2011	
		SW110143	AMBERLY -LA COSTA OAKS	PD	ISSUED	4/21/2011	
		SW110144	AMBERLY -LA COSTA OAKS	PD	ISSUED	4/21/2011	
		SW110145	AMBERLY -LA COSTA OAKS	PD	ISSUED	4/21/2011	
		SW110146	AMBERLY -LA COSTA OAKS	PD	ISSUED	4/21/2011	
		SW110147	AMBERLY -LA COSTA OAKS	PD	ISSUED	4/21/2011	
		SW110148	AMBERLY -LA COSTA OAKS	PD	ISSUED	4/21/2011	
		SW110149	SAPIEN: 350 SF POOL/SPA	PD	ISSUED	4/26/2011	
		Total Nr. of Projects: 484					
2	H	SW100119	CAVANAUGH RESIDENCE	MC	FINAL	6/29/2010	12/6/2010
		SW100278	PFANKUCH RES- 2857 SF, 675	PD	FINAL	11/10/2010	5/19/2011
		SW100336	JAGUAR LAND ROVER	TP	ISSUED	1/24/2011	
		SW110080	LEGOLAND	PD	FINAL	3/1/2011	5/26/2011
	M	SW100215	SMERUD:	PD	ISSUED	12/27/2010	
		SW110098	TAMARACK NPI RESIDENCE	PD	ISSUED	5/25/2011	
		Total Nr. of Projects: 6					
3	H	SW100164	ISIS PHARMACEUTICALS	TP	ISSUED	7/9/2010	
		Total Nr. of Projects: 1					
Grand Total		**Total Nr. of Projects: 491**					

STORM WATER PERMIT COUNTER PROCEDURES

Storm Water Permits

1. Storm Water Permit initialized with building permit by Building techs:

1.1 Verify in Permits Plus that the address does not have an "active" SWPPP. If it has a previously issued SWPPP for the property site, DO *not* proceed to (b). If an active SWPPP is attached to the address then initialize only a Building permit (CB) but attach the new building permit to the SW permit through the "relates" button in Permits Plus.

1.2 Initialize an SW permit when the CB permit is initialized, linking the two permits.

1.3 Enter a brief description of the project on the SWPPP and complete the emergency contact information (Owner, if no other name is known at this time. Owner name & (cell # if possible). Phone # is now **mandatory.** Owner will be the "default emergency contact" (if a good field contact # is not available at permit initialization).

1.4 Write the SW permit number on the Application and route to Engineering.

1.5 Review by **Engineering techs** when they do building plancheck:

1.6 Open up the SW permit in Permits Plus and verify the Tier and threat levels. For Tier levels other than Tier 1, check with the Senior Civil Engineer to see if adjustment is warranted.

1.7 Enter the hydrologic unit, check for proximity to an ESA, etc.

1.8 In cases where a grading permit has been issued for the pad being built upon and there is an existing active Tier 3 SWPPP document, a new Tier 1 or 2 permit will be created and issued. Only inspection fees charged, since the SWPPP document has already been reviewed and approved. Tier level is based on the *building* permit application, not any previous grading permit application. Relate the building permit and SWPP through the "relates" button on either permit.

1.9 Verify that the emergency contact on the Tier 1 and SW permit are the same. (*This individual will be contacted by the Building Inspector for a pre-con meeting so if a suitable person (i.e. general contractor) has not yet been named by the owner then the owner will be listed as the emergency contact.)*

1.10 If the building permit application is exempt from a SWPPP, the SW permit will be voided.

STORM WATER PERMIT COUNTER PROCEDURES

1.11 On LARGE commercial projects or residential tracts a SWPPP (Tier 2 or 3) was already created with the grading permit. A new SWPPP permit is required and related to the CB permit for the individual buildings.
If something slipped through the cracks and a SW permit is required but somehow didn't get initialized, one will be initialized and related to the CB at this stage.

1.12 When applicant pulls building permit, **Building Tech's** verify that the SW permit relates to the CB permit.

1.13 Check that emergency contact is filled in, and verify it is the same as the information entered on the Tier 1 form. (*This individual will be contacted by the Building Inspector for a pre-con meeting.)*

1.14 At issuance, change status to "ISSUED" in Permits Plus and print both the SW and CB receipts to the cashier.

1.15 After payment, cashier will print both the CB and the SW permits and insert a copy of each in the permit folder. File will then be placed in the basket for Building Admin to collect.

STORM WATER PERMIT ADMINISTRATIVE PROCEDURES

2. Storm Water Permit Administrative Procedures

2.1 Gather permits from cashier's basket. Sort the files that have SWPPP permits.

2.2 Confirm that the Emergency contact name and number on the SWPPP permit match the information on the SWPPP Inspection Request form and the Tier 1 form.
Make a copy of the SWPPP permit and the CB permit, 3 hole punch.

2.3 Print daily email (Issued SWPPP's Summary)

2.4 Schedule a Pre-Con meeting for each of the SWPPP for the next business day.

2.5 On the scheduled inspection date. Give the Senior Inspector the SWPPP Summary page as well as the photo copies of the CB's and SW's (paper clip together with the inspection request. (SI will take these to the next scheduled morning inspectors meeting and distribute to the appropriate inspectors), adding the Inspectors initials to the Daily SWPPP Issued Permits Summary,

2.6 The daily SWPPP Issued Permits Summary is then given to Admin support to assign the inspector to the permit number (CB) and the SW number in Permits Plus.

2.7 The Inspector will complete the SWPPP Inspection Request form after making contact and a site visit with the ER Contact including all necessary comments / actions, SWPPP Inspection Codes (B-50) Exhibit 1, and date the property will need to be re-inspected based on the tier / priority listed on the SWPPP permit. This information is entered into Permits Inspections / Access database. The form is then given back to the Building Inspector to place in his Storm Water Binder. The building inspector will also confirm the Emergency Contact information is correct. If a change needs to be made, he will write the new information the request form and Christine or I will update the information in Permits Plus.

2.8 Inspectors should complete the NPDES Inspection Report when in the inspector's judgments a verbal direction to correct the violation is not adequate to gain compliance. NPDES Inspection Reports are a tool to convey & educate to the applicant the need for BMP implementation and compliance.

2.9 B-49 Unscheduled SWPPP Inspection Form (Exhibit 2) can be filled out for any additional inspections that were not scheduled. This form will then be placed in the building file.

2.10 Once all construction work has been completed and signed off by all other departments, the building inspector will FINAL the CB permit. The SWPPP

permit will not be finaled if the property has other active CB's. The file will then be given to Laura to prepare for scanning.

Exhibit 1. SWPPP Inspection Codes (B-50)
Exhibit 2. Unscheduled SWPPP Inspection Form (B-49)
Exhibit 3. NPDES Inspection Report

STORM WATER PERMIT ADMINISTRATIVE PROCEDURES

3. Building Inspectors Storm Water Procedures

Each construction site must be inspected by City staff for compliance with Storm Water Standards at the minimum frequency as shown in Table 8 below. The need for additional inspections may vary depending upon several factors including:

- *Site conditions*
- *Previous violations*
- *History of developer or contractor past performance*
- *Grading during rainy season*
- *Weather patterns*

****EACH INSPECTOR IS RESPONSIBLE FOR CHECKING THEIR JOB SITES WHEN A 40% CHANCE OF A STORM EVENT OR GREATER IS EXPECTED!****

Table 8

		Inspection Frequency	
Site Threat to water Quality **Tier**		**Rainy Season** **Oct 1st – April 30th**	**Dry Season** **May 1st – September 30th**
2,3	**High**	**Bi-weekly**	**As – needed**
1,2,3	**Medium**	**Monthly**	**As – needed**
1	**Low**	**As - needed**	**As - needed**

3.1 Pre-Con meetings will be automatically scheduled for the next business day. Inspectors will call / meet with the emergency contact (EC) and discuss site BMP's and storm water protection. <u>The inspector will tell the Emergency Contact (EC) to request a follow up inspection at the time construction is commenced. The inspector will use code 603 to document this inspection.</u>

3.2 The next SWPPP inspection will be done as part of the **first initial building inspection**, using the appropriate codes from form B-50, attached

STORM WATER PERMIT ADMINISTRATIVE PROCEDURES

. The inspector shall write the SWPPP number, inspection code, result and re-check date on his building inspection request paper. (**Note**: The SWPPP number will be **highlighted** on the unassigned building request to remind the inspector to do the SWPPP inspection.)

3.3 Routine inspections should be scheduled every **2 months** during the "**Dry Season**" and **monthly** during the "**Rainy Season**". (**Note:** A permit issued during the rainy season is at least a Tier 1-Medium Threat, requiring a Monthly inspection during the rainy season and As-needed inspections during the dry season. If a permit is issued in the dry season and construction is commenced after October 1st, the priority will change to medium threat, per form E-33.)

3.4 If the inspector detects BMP *non-compliance* during a scheduled building inspection, use form B-49 "Unscheduled Inspection" form to document inspection or write the SWPPP number, the appropriate code (605, 610 etc), result and re-check date on the building inspection request paperwork.

3.5 If a Notice to Clean (Code 605) Verbal Warning (Code 610) etc. is used during any scheduled or unscheduled inspection, then a Follow-up inspection (Code 603) should be scheduled within **48 hours** to confirm compliance.

3.6 Use "NPDES INSPECTION REPORT" form to document and as a tool to communicate in writing any correction action that is required when verbal direction, in the judgment of the inspector, would be inadequate. Use code 607 when you use this form.

3.7 All inspection requests and unscheduled forms will be entered into the Access program and returned to the inspector to place in his Storm Water Binder.

3.8 Storm Water binders shall remain intact until the end of the fiscal year.

STORM WATER PERMIT ADMINISTRATIVE PROCEDURES

Form B-50 Codes

600	PRE-CON	Use this code for the first initial inspection of the job site.
601	NPDES	NPDS
602	ROUTINE INSPECTION	Use this code for standard everyday inspections. After Pre-Con Inspection.
603	FOLLOW-UP INSPECTION	Use this code if you are following up on a Insp. Report, notice to clean, verbal warning or Ill. discharge.
604	COMPLAINT INSPECTION	Use this code when you have received a complaint about the job site.
605	NOTICE TO CLEAN	Use this code when the site needs to be cleaned.
606	ILLEGAL DISCHARGE	Use this code when there is discharge coming from the site.
607	WRITTEN WARNING	Use this code when you write a NPDES Inspection Report.
608	STOP WORK NOTICE	Use this code when you issue a Stop Work Notice.
609	NOTICE OF VIOLATION	Use this code when you issue a Notice of Violation.
610	VERBAL WARNING	Use this code when you give a verbal warning.

Example of Fiscal Year Inspections

NOTE: DO NOT THROW OUT FINAL SWPPP PERMITS UNTIL THE ANNUAL JURMP REPORT IS COMPLETE!

FY 10-11
GRADING PERMIT INVENTORY

Status	Priority	Project #	Grading Permit #	Issue Date	Inactive Date	WS	DS	Total WS Inspections	Total DS Inspections	Total 10-11 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity	Tributary to 303(d) Listed
Active	High	CT 02-19	GR050029	04/29/11		0	7	0	2	2	0	2	2	904.51	No	No
Active	High	CT 05-01	GR060047	07/10/07		19	13	6	4	10	4	3	7	904.31	yes	No
Active	High	CT 97-13-02	GR060049	12/21/06		31	21	14	5	19	14	5	19	904.31	Yes	No
Active	high	CT 05-14	GR070028	01/30/08		31	21	14	5	19	14	5	19	904.51	yes	No
Active	high	CT 05-16	GR070030	01/30/08		31	21	14	5	19	14	5	19	904.51	yes	No
Active	High	CT 05-13	GR070032	07/09/09		31	21	14	5	19	14	5	19	904.51	No	No
Active	High	CT 06-06	GR070045	12/11/07		31	21	14	5	19	14	5	19	904.51	yes	No
Active	High	CT 02-28	GR070048	08/31/07		31	21	14	5	19	14	5	19	905.51	no	No
Active	High	CT 04-26	GR080002	03/24/08		31	21	15	6	21	14	5	19	904.31	Yes	No
Active	High	CT 02-28	GR080007	06/25/10		31	21	14	5	19	14	5	19	904.31	No	No
Active	high	CDP 06-25	GR080013	09/10/09		31	21	14	5	19	14	3	17	904.31	No	No
Active	High	PD 07-08	GR080017	10/21/08		31	21	12	4	16	12	4	16	904.51	Yes	No
Active	High	CT 06-25	GR080024	11/17/09		31	21	14	5	19	14	5	19	904.31	Yes	No
Active	high	CT 04-26	GR090004	05/07/09		31	21	14	5	19	14	5	19	904.31	Yes	No
Active	high	CT 04-26	GR090005	05/07/09		31	21	15	5	20	14	5	19	904.31	Yes	No
Finaled	High	CUP 02-01	GR090009	09/16/09	12/14/10	14	7	6	3	9	6	3	9	904.51	Yes	No
Active	High	CT 05-15	GR090014	01/05/10		31	21	14	5	19	14	5	19	904.51	Yes	No
Active	high	CUP 08-19	GR090019	08/12/10		31	15	14	3	17	14	3	17	904.51	No	No
Active	High	PC 08-07	GR090021	09/29/10		31	7	14	2	16	14	2	16	904.31	Yes	No
Active	High	CT 09-01	GR090025	05/27/10		31	21	14	5	19	14	5	19	904.31	Yes	No
Active	High	CUP 13-9B	GR100004	07/22/10		31	18	12	3	15	12	4	16	904.51	No	No
Active	High	PD 08-06	GR100007	03/16/10		31	21	15	5	20	14	5	19	904.31	No	No
Active	High	CT 07-03	GR100011	05/06/10		31	21	14	5	19	14	5	19	904.31	Yes	No
Active	High	PD 10-01	GR100012	01/04/11		16	7	5	3	8	4	2	6	904.31	No	No
Active	High	CT 04-01	GR100013	09/29/10		31	7	14	2	16	14	2	16	904.51	No	No
Active	High	PIP 09-02	GR100014	06/08/10		31	21	14	5	19	0	0	0	904.31	No	No
Active	High	SDP 05-14	GR100017	12/03/10		19	7	8	2	10	8	2	10	904.51	Yes	No
Active	High	CT 04-10A	GR100019	12/28/10		18	7	8	2	10	8	2	10	904.51	No	No
Active	High	CT 05-10	GR100021	04/20/11		1	7	0	2	2	0	2	2	904.51	No	No
Active	High	CT 05-14	GR100022	01/05/11		16	7	6	2	8	6	2	8	904.51	No	No
Active	High	CT 05-16	GR100023	01/12/11		15	7	6	2	8	6	2	8	904.51	No	No
Active	High	MS 08-02	GR110001	04/12/11		2	7	0	2	2	0	2	2	904.51	No	No
Active	High	CT 03-01	GR110002	02/11/11		8	7	4	1	5	4	2	6	904.51	Yes	No

FY 10-11
GRADING PERMIT INVENTORY

Status	Priority	Project #	Grading Permit #	Issue Date	Inactive Date	WS	DS	Total WS Inspections	Total DS Inspections	Total 10-11 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity	Tributary to 303(d) Listed
Active	High	SUP 07-03	GR110005	06/27/11		0	1	0	0	0	0	0	0	904.21	Yes	No
Finaled	Low	CT 96-02	GR000008	04/26/00	03/01/11	22	13	3	2	5	3	2	5	904.51	Yes	No
Active	Low	PD 02-07	GR020046	01/09/03		31	21	0	0	0	2	2	4	904.51	No	No
Active	Low	CT 02-20	GR040034	07/08/04		31	21	2	2	4	2	2	4	904.51	yes	No
Active	Low	CT 02-23	GR040070	03/20/08		31	21	2	2	4	2	2	4	904.51	yes	No
Active	Low	CT 02-27	GR040081	02/18/05		31	21	3	4	7	2	4	6	904.51	NO	No
Active	Low	CT 04-04	GR050005	10/12/05		31	21	2	2	10	2	2	4	904.51	Yes	No
Active	Low	CT 04-02	GR050006	11/03/05		31	21	2	2	4	2	2	4	904.51	Yes	No
Finaled	Low	CT 99-00-03	GR050010	03/04/05	10/07/10	31	21	0	1	1	0	1	1	904.51	Yes	No
Active	Low	CT 04-15	GR050011	03/16/05		31	21	1	2	3	2	2	4	904.51	Yes	No
Finaled	Low	CT 02-24	GR050012	04/20/05	10/29/10	31	21	0	1	1	0	1	1	904.51	yes	No
Active	Low	CT 04-03	GR050025	09/29/05		31	21	2	2	4	2	2	4	904.51	Yes	No
Finaled	Low	CT 04-09	GR050037	11/03/05	02/24/11	22	13	1	1	2	1	1	2	904.51	Yes	No
Active	Low	CT 02-07	GR050043	03/21/06		31	21	7	3	10	6	3	9	904.40	Yes	No
Finaled	Low	PIP 05-01	GR050061	11/21/05	09/30/10	0	13	0	1	1	0	1	1	904.31	No	No
Active	Low	CDP 04-58	GR050067	04/10/07		31	21	2	3	5	2	2	4	904.31	No	No
Active	Low	SDP 04-10	GR050072	01/13/06		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	CT 05-07	GR060005	03/15/06		31	21	2	2	4	2	2	4	904.51	Yes	No
Active	Low	SDP 96-14B	GR060008	02/23/06		31	21	2	3	5	2	2	4	904.31	No	No
Active	Low	CT 04-03	GR060009	04/10/06		31	21	2	3	5	2	2	4	904.51	Yes	No
Finaled	Low	PIP 05-12	GR060011	06/01/06	09/30/10	0	13	0	1	1	0	1	1	904.31	Yes	No
Finaled	Low	PIP 08-10	GR060016	04/26/06	11/03/10	5	13	0	1	1	0	1	1	904.31	Yes	No
Finaled	Low	PIP 05-07	GR060017	05/10/06	11/03/10	5	13	0	1	1	0	1	1	904.31	Yes	No
Finaled	Low	PIP 05-11	GR060019	04/27/06	11/03/10	5	13	0	1	1	0	1	1	904.31	Yes	No
Finaled	Low	PIP 05-09	GR060020	04/27/06	11/03/10	5	13	0	1	1	0	1	1	904.31	Yes	No
Active	Low	CT 04-02	GR060021	04/20/06		31	21	2	2	4	2	2	4	904.51	Yes	No
Finaled	Low	PIP 05-17	GR060026	07/11/06	11/03/10	5	13	0	1	1	0	1	1	904.31	No	No
Finaled	Low	PIP 05-18	GR060030	08/29/06	11/03/10	5	13	0	1	1	0	1	1	904.31	Yes	No
Finaled	Low	PIP 05-16	GR060032	07/25/06	11/03/10	5	13	0	1	1	0	1	1	904.31	Yes	No
Active	Low	MS 04-10	GR060034	02/22/08		31	21	7	3	10	6	3	9	904.21	No	No
Active	Low	PUD 04-03A	GR060055	08/22/06		31	21	2	2	4	2	2	4	904.51	Yes	No
Active	Low	PIP 04-03	GR060056	09/22/06		31	21	2	2	4	2	2	4	904.31	No	No
Active	Low	PIP 05-24	GR060057	10/25/06		31	21	2	2	4	2	2	4	904.51	No	No

FY 10-11
GRADING PERMIT INVENTORY

Status	Priority	Project #	Grading Permit #	Issue Date	Inactive Date	WS	DS	Total WS Inspections	Total DS Inspections	Total 10-11 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity	Tributary to 303(d) Listed
Active	Low	CT 04-09	GR060063	10/06/06		31	21	4	3	7	2	4	6	904.51	yes	No
Active	Low	CT 02-16	GR060076	01/16/07		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	CT 02-16	GR070003	03/28/07		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	MS 04-19A	GR070006	02/16/07		31	21	2	2	4	2	2	4	904.51	Yes	No
Active	Low	CT 05-09	GR070009	04/23/07		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	CT 03-02	GR070010	05/04/07		31	21	2	2	4	2	2	4	904.31	Yes	No
Finaled	Low	PIP 06-17	GR070019	04/07/08	11/03/10	5	13	9	2	11	1	2	3	904.31	No	No
Active	Low	PIP 06-18	GR070022	04/07/08		31	21	3	3	6	2	3	5	904.31	Yes	No
Active	Low	CUP 06-11	GR070025	07/18/07		31	21	2	2	4	2	2	4	904.51	Yes	No
Finaled	Low	CUP 05-28	GR070026	07/16/07	10/06/10	31	21	0	1	1	0	1	1	904.40	Yes	No
Finaled	Low	PIP 06-15	GR070031	04/07/08	11/03/10	5	13	0	1	1	0	1	1	904.51	No	No
Finaled	Low	PIP 06-14	GR070033	04/07/08	11/03/10	5	13	0	1	1	0	1	1	904.31	No	No
Finaled	Low	PD 07-06	GR070037	04/01/09	07/06/10	0	1	0	0	0	0	0	0	904.51	Yes	No
Active	low	CUP 05-26	GR070039	08/09/07		31	21	2	2	4	2	2	4	904.21	yes	No
Active	Low	SUP 06-12	GR070047	01/11/08		31	21	6	4	10	6	4	10	904.31	Yes	No
Active	Low	PD 06-21	GR070049	06/11/08		31	21	2	2	4	2	2	4	904.40	No	No
Active	Low	CT 03-02	GR070053	02/04/08		31	21	2	2	4	2	2	4	904.31	Yes	No
Finaled	Low	CUP 06-08	GR070055	08/26/08	03/31/11	27	13	4	3	7	2	1	3	904.31	Yes	No
Active	Low	PDP 05-01	GR070056	02/01/08		31	21	2	2	4	2	2	4	904.51	Yes	No
Finaled	Low	CT 06-24	GR070066	01/10/08	04/15/11	29	13	2	1	3	2	1	3	904.31	Yes	No
Active	Low	SDP 06-06	GR080001	03/24/08		31	21	2	4	6	2	2	4	904.31	Yes	No
Finaled	Low	PIP 06-07	GR080004	05/08/08	07/22/10	0	3	0	0	0	0	0	0	904.51	Yes	No
Active	Low	CT 95-02	GR080012	07/17/08		31	21	2	2	4	2	2	4	904.51	Yes	No
Active	Low	PIP 04-03	GR080014	03/16/09		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	CT 06-06	GR080016	11/17/08		31	21	6	4	10	6	4	10	904.51	Yes	No
Active	Low	CT 05-15	GR080018	11/17/08		31	21	14	4	18	14	4	18	904.51	Yes	No
Active	Low	SDP 05-15	GR080021	10/29/09		31	21	7	3	10	6	3	9	904.31	No	No
Finaled	Low	PD 08-03	GR090001	04/21/09	06/01/11	31	17	2	2	4	2	1	3	904.51	NO	No
Active	Low	PD 08-06	GR090002	03/24/09		31	21	2	2	4	2	2	4	904.31	NO	No
Active	Low	PD 08-06	GR090003	04/01/09		31	21	2	3	5	2	2	4	904.31	NO	No
Active	Low	CUP 06-11A	GR090006	08/28/09		31	21	4	4	8	2	4	6	904.51	No	No
Active	Low	PD 06-15	GR090012	10/07/09		31	21	4	4	8	2	1	3	904.51	No	No
Finaled	Low	PUD 09-02	GR090013	03/22/10	01/31/11	18	13	2	2	4	2	3	5	904.31	No	No

FY 10-11
GRADING PERMIT INVENTORY

Status	Priority	Project #	Grading Permit #	Issue Date	Inactive Date	WS	DS	Total WS Inspections	Total DS Inspections	Total 10-11 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity	Tributary to 303(d) Listed
Active	Low	CT 05-13	GR090017	10/16/09		31	21	4	3	7	4	3	7	904.51	No	No
Finaled	Low	PD 09-05	GR090022	11/16/09	06/30/11	31	21	3	3	6	2	3	5	904.51	No	No
Active	Low	PD 08-04	GR090027	12/29/09		31	21	7	3	10	6	3	9	904.51	no	No
Active	Low	CT 04-04	GR100001	01/11/10		31	21	7	3	10	6	3	9	904.51	Yes	No
Active	Low	SDP 00-06A	GR100002	05/13/10		31	21	6	3	9	4	3	7	904.51	No	No
Active	Low	PD 09-04	GR100003	04/09/10		31	21	6	3	9	5	3	8	904.51	No	No
Active	Low	CT 02-29	GR100018	10/01/10		31	7	10	1	11	10	1	11	904.51	No	No
Finaled	Medium	CDP 02-04	GR030053	08/30/05	03/01/11	22	13	5	2	7	5	2	7	904.31	No	No
Active	Medium	CT 01-09	GR030071	01/07/04		31	21	5	4	9	4	2	6	904.51	NO	No
Active	Medium	CT 02-19	GR040059	08/11/04		31	21	7	3	10	6	3	9	904.51	No	No
Finaled	Medium	CDP 03-12	GR050034	08/30/05	02/01/11	31	21	5	2	7	6	3	9	904.31	No	No
Active	Medium	PIP 05-05	GR060040	01/22/07		31	21	8	3	11	6	3	9	904.31	No	No
Active	Medium	CT 03-06	GR060058	02/07/07		31	21	7	3	10	6	3	9	904.51	Yes	No
Active	Medium	CT 05-05	GR060064	10/08/08		31	21	8	4	12	9	4	13	904.51	No	No
Active	Medium	CT 04-16	GR060067	11/08/06		31	21	8	4	12	9	4	13	904.41	Yes	No
Active	Medium	MS 04-18	GR060071	01/05/10		31	21	7	3	10	6	3	9	904.51	Yes	No
Active	Medium	MS 04-05	GR070018	07/18/08		31	21	7	3	10	6	3	9	904.31	Yes	No
Active	Medium	CT 04-15	GR070036	06/20/07		31	21	7	3	10	6	3	9	904.51	Yes	No
Finaled	Medium	MS 04-17	GR070060	01/30/08	07/14/10	0	2	0	1	1	0	1	1	904.21	No	No
Finaled	Medium	CT 05-15	GR070069	08/06/08	06/23/11	31	21	9	4	13	9	4	13	904.51	Yes	No
Active	Medium	CT 07-05	GR080008	08/06/08		31	21	9	4	13	9	4	13	904.31	No	No
Active	Medium	PD 08-06	GR080019	10/20/08		31	21	7	4	11	6	3	9	904.31	No	No
Finaled	Medium	PD 09-02	GR090015	02/03/10	04/27/11	31	13	7	2	9	6	2	8	904.51	No	No
Active	Medium	PD 09-03	GR090023	02/22/10		31	21	7	3	10	6	3	9	904.51	no	No
Active	Medium	PD 06-18	GR090026	05/22/10		31	21	6	2	8	6	3	9	904.31	No	No
Finaled	Medium	CT 06-24	GR100005	04/01/10	03/30/11	27	13	6	2	8	5	2	7	904.51	No	No
Active	Medium	PUD 09-02A	GR100006	10/06/10		30	7	6	1	7	6	1	7	904.31	No	No
Active	Medium	CDP 10-12	GR110007	06/09/11		0	3	0	0	0	0	0	0	904.21	Yes	No
TOTAL								**677**	**333**	**1016**	**624**	**316**	**940**			

Appendix 3.3

CITY OF
CARLSBAD
Transportation Department

www.carlsbadca.gov

September 1, 2010

MEMORANDUM

To: Property Owners/Developers/Contractors - All Active Construction Sites in the City of Carlsbad

From: Shawnetta Grandberry, Senior Construction Inspector, Construction Management and Inspections

RAINY SEASON PREPARATION AND STORM WATER COMPLIANCE

The City of Carlsbad (City) would like to take this opportunity to remind you that the rainy season begins on **October 1, 2010**. As you are aware, additional storm water pollution prevention measures are required during the rainy season, which ends on May 1, 2011. Pursuant to Carlsbad Municipal Code (CMC) Chapter 15.16.120, the California Regional Water Quality Control Board (RWQCB) Order 2007-0001, and the City of Carlsbad 2008 Jurisdictional Urban Runoff Management Plan all erosion control measures must be installed prior to and regularly maintained during the rainy season.

Property Owners/Developers/Contractors working at active construction sites in Carlsbad are required to comply with all applicable storm water regulations and implement BMPs to the maximum extent practicable. It is the City's goal to obtain your voluntary compliance with the applicable regulations and requirements. The following measures are required for all active construction sites during the rainy season:

- **All** exposed disturbed areas must have erosion protection BMPs properly installed. This includes all building pads, unfinished roads, and slopes.
- Perimeter protection and sediment control BMPs will be upgraded, if necessary, to provide sufficient protection from runoff during the rainy season.
- Adequate physical or vegetation erosion control BMPs will be installed and maintained for all completed slopes prior to the start of the rainy season.
- All disturbed areas that are not completed, but that are not being actively graded, must be fully protected from erosion if left for 10 or more days. The ability to install BMP materials in a prompt manner is **NOT** sufficient for these areas. **BMP's will actually need to be installed for these areas.**
- Deployment of physical or vegetation erosion control BMP's will commence as soon as slopes are completed for any portion of the site. BMPs must also be stockpiled and ready for deployment whenever there is a 40% chance or greater of a rain event within a five (5) day forecast.
- When a ***Rain Event Action Plan*** is required it must be updated on a weekly basis. The plan shall include, in detail, any and all actions to be taken in advance (40% chance or greater) of a rain event in the five (5) day forecast by the National Weather Service. A copy of each updated action plan shall be placed in the project SWPPP.
- All treatment and erosion control BMPs must be inspected weekly and prior to a forecasted rain event of greater than 40%. In addition, treatment control BMPs must be inspected and serviced, if necessary, prior to October 1.
- Inspections of each site shall be conducted by the responsible party or designee prior to a forecasted event, during and after a rain event, at least bi-weekly during the rainy season, and as necessary to ensure site compliance.
- All construction employees must be trained on the importance of storm water pollution prevention and BMP maintenance prior to the rainy season.
- All construction and grading projects are required to emphasize erosion prevention as the most important measure for keeping sediment on-site during construction. Sediment controls are to be used as a supplement to erosion prevention never as the single or primary method.

The City will continue to conduct scheduled and unscheduled inspections to verify compliance with storm water regulations. Please keep in mind that compliance is dependent on the continued use of BMPs to prevent storm water pollution and the consistent implementation of an employee-training program. Please contact your Project Inspector to review your specific project requirements. Thank you in advance for your cooperation and compliance efforts.

Construction Management and Inspection
5950 El Camino Real | Carlsbad, CA 92008 | 760-602-2780 | 760-438-4176 fax | tcbmp@carlsbadca.gov

CITY OF CARLSBAD

UNSCHEDULED SWPPP INSPECTION B-49

Development Services
Building Division
1635 Faraday Avenue
Carlsbad CA 92008
760-602-2700

DATE: _____ INSPECTOR: _____

PERMIT : SW_____ **EMER CONTACT**:_____

PHONE : _____

JOB ADDRESS: _____

CODE	DESCRIPTION	ACT	COMMENTS

600	**PRE-CON**
601	**NPDES**
602	**ROUTINE INSPECTION**
603	**FOLLOW-UP INSPECTION**
604	**COMPLAINT INSPECTION**
605	**NOTICE TO CLEAN**
606	**ILLEGAL DISCHARGE**
607	**WRITTEN WARNING**
608	**STOP WORK NOTICE**
609	**NOTICE OF VIOLATION**
610	**VERBAL WARNING**

AP	Approved
PA	Partial Approval
NR	Not Ready
CO	Correction
NS	No Stop
WC	Wrong Code
SW	Stop Work
FI	Final

RE-CHECK DATE: _____

NPDES INSPECTION REPORT

Building Division

Pursuant to CMC 15.12.100

Inspector		Date		Project #	
		Time		CB Permit#	
Inspection Type	☐ Compliance ☐ Follow Up	Weather	☐ Heavy Rain ☐ Light Rain ☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain Expected at ___% chance		

BMP IMPLEMENTATION AND COMPLIANCE

BMP and Compliance Activity	YES	NO	N/A
Are all inactive slopes properly stabilized?			
Are areas flatter than 3:1 covered or protected?			
Are gravel bags, waddles, silt fences, and other erosion control BMPs in place and functioning properly?			
Do basins appear to be maintained as required?			
Are perimeter control BMPs maintained?			
Is the entrance stabilized to prevent tracking?			
Are storm drain inlets protected and BMPs maintained?			
Are all material and equipment handling, storage and repair areas clean and maintained?			
Are dumpsters and trash receptacles covered?			
Has trash and debris accumulated throughout the site?			
Are stockpiles and spoils protected from runoff?			
Are landscaped areas protected from erosion?			
Are natural areas and open spaces protected?			
Are washout areas maintained and protected?			
Were there any discharges observed during the inspection?			
Is the SWPPP wall map up to date and accurate?			
Was the SWPPP reviewed during this inspection?			
Are portable restrooms located away from the storm drain and on level ground?			
Do portable restrooms have secondary containment?			
Are BMPs stockpiled for emergency deployment?			
Other:			

CORRECTIVE ACTION REQUIRED

- ☐ Provide additional erosion control.
- ☐ Repair/replace erosion control BMPs.
- ☐ Replace broken rock/sand bags.
- ☐ Desiltation/retention basin(s) requires maintenance.
- ☐ Provide additional perimeter controls.
- ☐ Repair/replace perimeter controls.
- ☐ Impervious surfaces need to be swept.
- ☐ Prevent sediment tracking on to street.
- ☐ Clean in and around storm drains.
- ☐ Provide additional protection at storm drain inlets.
- ☐ Discard unusable equipment and materials.
- ☐ Remove trash and debris from project site.
- ☐ Properly store hazardous materials.
- ☐ **Immediately** clean up spills and leaks.
- ☐ Maintenance required for washout areas.
- ☐ Protect/Cover materials stored outdoors.
- ☐ Provide spill kit(s) in equipment storage areas.
- ☐ Provide cover for dumpster and trash receptacles.
- ☐ **Immediately** discontinue washing or hosing.
- ☐ Relocate portable restrooms away from storm drains and/or to level areas.
- ☐ Provide secondary containment for portable restrooms.
- ☐ Provide additional emergency BMPs.
- ☐ Train staff on pollution prevention.
- ☐ Other:_____

THIS SERVES AS A WARNING NOTICE. Implement corrective actions by _____. A City Inspector will return on or after the correction date to verify that corrective actions were completed and/or BMPs implemented as required. If you have any questions or comments, please contact your inspector.

Comments:

☐ **NO VIOLATIONS OBSERVED DURING THE INSPECTION.**

☐ **VIOLATIONS WERE NOTED DURING THE INSPECTION.**

- ☐ 15.12.050 Prohibited Discharge
- ☐ 15.12.080(E) Reduction of Pollutants
- ☐ 15.12.090 Storm Water Conveyance System Protection
- ☐ 15.12.110 Failure to Implement Corrective Actions
- ☐ 1512.120 Containment, cleanup, and notification of spills
- ☐ 15.16.170 Unlawful Acts
- ☐ 6.08.030 Receptacles Generally
- ☐ 6.08.040 Cleanliness of Solid Waste Receptacles
- ☐ 6.08.050 Solid Waste Receptacles to be Kept Covered
- ☐ 6.08.090 Unlawful Placement of Solid Waste
- ☐ Other_____ _____

Inspector Signature:	Received By – Please Print	Received By - Signature ☐ Mailed	Date

The Notice Serves As:	☐ Verbal Warning	☐ Written Warning	☐ Field Memo	☐ Referred for Action	
BMP Assessment (circle one)	5 4 3 2 1	Knowledge Assessment (circle one)	5 4 3 2 1	☐ Contact not available	

White: BLDG Yellow: Job Site

CITY OF CARLSBAD

SWPPP INSPECTION CODES B-50

Development Services
Building Division
1635 Faraday Avenue
760-602-2719
www.carlsbadca.gov

600	PRE-CON	Use this code for the first initial inspection of the job site.
601	NPDES	NPDS
602	ROUTINE INSPECTION	Use this code for standard everyday inspections. After Pre-Con Inspection.
603	FOLLOW-UP INSPECTION	Use this code if you are following up on a Insp. Report, notice to clean, verbal warning or Ill. discharge.
604	COMPLAINT INSPECTION	Use this code when you have received a complaint about the job site.
605	NOTICE TO CLEAN	Use this code when the site needs to be cleaned.
606	ILLEGAL DISCHARGE	Use this code when there is discharge coming from the site.
607	WRITTEN WARNING	Use this code when you write a NPDES Inspection Report.
608	STOP WORK NOTICE	Use this code when you issue a Stop Work Notice.
609	NOTICE OF VIOLATION	Use this code when you issue a Notice of Violation.
610	VERBAL WARNING	Use this code when you give a verbal warning.

AP = Approved
PA = Partial Approval
NR = Not Ready
CO = Correction
NS = No Stop
WC = Wrong Code
SW = Stop Work
FI = Final

FY 10-11 Capital Improvement Project Inventory

Status	Priority	Project #	Project Names	Notice to Proceed	Notice of Completion	WS	DS	Total WS Inspections	Total DS Inspections	Total 10-11 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
Active	Medium	3487	Recycled Water Pump Station Removal at ECR and Cassia	03/29/10		31	21	7	3	10	6	3	9	904.51	No
Active	Low	3681	La Costa Avenue Subdrain	08/05/10	03/11/11	21	8	2	1	3	2	1	3	904.51	No
Active	High	3686	Joint First Responders Training Facility	06/28/10		31	21	14	5	19	14	5	19	904.31	Yes
Finaled	High	3860	Widening of Olivenhain Road and Rancho Santa Fe	07/18/07	05/26/11	31	17	14	4	18	14	3	17	904.51	Yes
Finaled	High	3860-1	Widening of Olivenhain Road and RSF	08/13/01	05/26/11	31	17	14	4	18	14	4	18	904.51	Yes
Active	Medium	3873	5512 Beech Avenue Sewer and Home Plant Lift Station Influent Sewer Replacement	07/28/10		31	17	7	3	10	6	3	9	904.31	No
Active	High	3907	Onsite Wetland Mitigation Restoration for RSF Road North	03/19/07		31	21	12	5	17	14	5	19	904.51	Yes
Finaled	High	3951-5500	La Golondrina and El Fuerte Street and HDD Sewer Extensions	05/26/10	04/13/11	29	13	14	3	17	14	3	17	904.51	Yes
Active	Medium	4505-1	Leo Carrillo Ranch Barn Restoration	10/18/10		31	21	7	3	10	6	3	9	904.51	Yes
Finaled	Low	5005	Maerkle Reservoir Cover Inspection, Cleaning, Repair and Rainwater System Upgrade	02/19/08	07/29/10	0	4	0	0	0	0	0	0	904.31	No
Finaled	Low	5009-A	Maerkle Scrubber Replacement	12/01/08	07/16/10	0	2	0	0	0	0	0	0	904.31	No
Active	Medium	5020-1	Terramar Pressure Reducing Station Removal	01/19/10	08/31/10	0	8	0	1	1	0	1	1	904.31	Yes
Active	Medium	5202	Gateway Road and Innovation Way Recycled Waterlines	07/12/10		31	21	7	3	10	6	3	9	904.51	No
Active	Medium	5503-1	Miscellaneous Sewer Rehabilitation NW Quadrant	03/23/11		5	8	7	3	10	6	3	9	904.21	No
Finaled	Medium	5503-2	Normandy Avenue Sewer Replacement	07/19/10	11/03/10	4	11	2	1	3	2	1	3	904.21	No
Finaled	High	5510	Tamarack Sewer Replacement	10/15/09	07/16/10	0	2	0	1	1	0	1	1	904.21	Yes
Active	Medium	6001-10 OL2	2010 Pavement Overlay	11/09/10		31	21	7	3	10	6	3	9	904.51	No
Finaled	Medium	6001-10 OL	College Boulevard Overlay Project	09/08/10	04/13/11	28	0	7	1	8	6	1	7	904.31	No
Finaled	Medium	6020	Marbella Wall Beautification Improvements	04/12/10	09/20/10	3	13	0	2	2	0	2	2	904.51	No
Active	Low	6032	Carlsbad Blvd Emergency Rip Rap Repairs	04/07/10		31	21	2	2	4	2	2	4	904.21	Yes

FY 10-11 Capital Improvement Project Inventory

Status	Priority	Project #	Project Names	Notice to Proceed	Notice of Completion	WS	DS	Total WS Inspections	Total DS Inspections	Total 10-11 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
Active	Low	6321	Installation of Audible Pedestrian Signals	06/29/11		0	0	0	0	0	0	0	0	N/A	No
Active	High	6606	Kelly Drive Channel Repair	06/01/10		31	21	14	5	19	14	5	19	904.31	Yes
Finaled	Medium	6607-3	Corrugated Metal Pipe Replacement Program	06/14/10	03/11/11	7	13	6	2	8	5	2	7	N/A	No
Finaled	Medium	08/01/6607	CMP Replacement Program State Street and Oak Ave	04/29/10	06/20/11	31	20	7	3	10	6	3	9	904.31	No
Active	High	6608	NW Quadrant Storm Drain Program	08/04/10		31	21	14	5	19	14	5	19	904.21	Yes
Active	Medium	6609	Hosp Grove Park Access Road Repair	05/10/11		31	21	7	3	10	6	3	9	904.21	No
Finaled	Low	6612	Rancho Carrillo Water Seepage Drainage Improvements	04/28/11	06/22/11	0	7	0	1	1	2	2	4	904.51	Yes
Finaled	High	38372	Alga Norte Community Park Mass Grading	03/29/10	03/11/11	25	13	12	3	15	12	3	15	904.51	Yes
Active	Medium	45031	Leo Carrillo Ranch Event Expansion Area	02/05/09		31	21	7	3	10	6	3	9	904.51	Yes
TOTAL								190	73	263	183	73	256		

Appendix 3.8

Appendix 4

City of Carlsbad - Municipal Inventory FY 2009-10

AREA NAME	ADDRESS	DESCRIPTION	Status	Annual Site Inspection	Activities (see descriptions below)															Pollutants									Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?	Hydrologic Area
					A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances				
ADULT LEARNING PROGRAM PARKING LOT	3368 EUREKA PL	PARKING LOT	Active	03/28/11				X		X						X			X											NO	NO	YES	904.31 (AH)
AGUA HEDIONDA SEWER LIFT STATION	SDGE POWER PLANT	SEWERAGE SYSTEMS	Active	05/20/10								X	X			X		X	X											YES	Yes	YES	904.31 (AH)
AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	6425 AMBROSIA LN	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/07/11	X	X	X	X	X	X						X			X											YES	NO	YES	904.51 (BA)
BATIQUITOS SEWER LIFT STATION	7382 GABBIANO LN	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											YES	Yes	YES	904.51 (BA)
BEACH BLUFF TRIANGLE/PARK	CARLSBAD BLVD AT PINE	AMUSEMENT AND RECREATION SERVICES	Active	03/29/11				X											X											YES	NO	Yes	
BUENA VISTA SEWER LIFT STATION	2140 JEFFERSON ST	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											YES	YES	YES	904.21 (BV)
CADENCIA PARK	3310 CADENCIA ST	AMUSEMENT AND RECREATION SERVICES	Active	03/28/11				X		X						X			X											YES	NO	YES	904.51 (BA)
CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	2997 GLASGOW DR	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/13/11	X	X		X	X	X						X			X											NO	NO	YES	904.31 (AH)
CALAVERA PUMP STATION	3600 BLOCK OF COLLEGE DR	RECLAIMED WATER	Active	04/12/11	X	X						X	X							X										YES	YES	YES	904.31 (AH)
CANNON SEWER LIFT STATION	2301 CANNON RD	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
CARLSBAD RECYCLED WATER FACILITY	6200 AVENIDA ENCINAS	RECLAIMED WATER	Active	04/07/11	X	X	X	X		X		X	X			X			X											NO	NO	YES	904.31 (AH)
CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE	PARKING LOT	Active	03/28/11				X		X						X			X											NO	NO	YES	904.31 (AH)
CARRILLO RANCH AND PARKING LOT	5200 FLYING LC LANE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/12/11	X	X		X	X	X						X			X											YES	NO	YES	904.51 (BA)
CHASE FIELD	3349 HARDING ST	AMUSEMENT AND RECREATION SERVICES	Active	03/29/11				X		X						X			X											NO	NO	Yes	904.31 (AH)
CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR	PARKING LOT	Active	03/29/11				X		X						X			X											NO	NO	YES	904.21 (BV)
COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR	PARKING LOT	Active	03/29/11				X		X						X			X											NO	NO	YES	904.21 (BV)
DOVE LIBRARY PARKING LOT	1775 DOVE LN	PARKING LOT	Active	04/06/11				X		X						X			X											YES	NO	YES	904.51 (BA)
El FUERTE LIFT STATION	5812 EL FUERTE ST	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
FARADAY CENTER PARKING LOT	1635 FARADAY AV	PARKING LOT	Active	03/30/11				X		X						X			X											YES	YES	YES	904.31 (AH)
FARMERS BUILDING PARKING LOT	FARADAY & EL CAMINO RL	PARKING LOT	Active	04/07/11				X		X						X			X											NO	NO	YES	904.31 (AH)
FIRE STATION 1	1275 CARLSBAD VILLAGE DR	FIRE PROTECTION	Active	04/08/11	X	X		X		X					X	X	X		X											NO	NO	YES	904.21 (BV)
FIRE STATION 2	1906 ARENAL RD	FIRE PROTECTION	Active	04/08/11	X	X		X		X					X	X	X		X											NO	NO	YES	904.51 (BA)
FIRE STATION 3	3701 CATALINA DR	FIRE PROTECTION	Active	04/08/11	X	X		X		X					X	X	X		X											NO	NO	YES	904.21 (BV)
FIRE STATION 4	6885 BATAQUITOS DR	FIRE PROTECTION	Active	04/08/11	X	X		X		X					X	X	X		X											YES	NO	YES	904.51 (BA)
FIRE STATION 5	2540 ORION WY	FIRE PROTECTION	Active	04/08/11	X	X		X		X					X	X	X		X											NO	NO	YES	904.31 (AH)
FIRE STATION 6	7201 RANCHO SANTA FE RD	FIRE PROTECTION	Active	04/08/11	X	X		X		X					X	X	X		X											NO	NO	YES	904.51 (BA)
FLEET MAINTENANCE FACILITY AND PARKING LOT	2480 IMPALA DR	VEHICLE MAINTENANCE/ PARKING LOT	Active	04/06/11	X	X	X	X	X	X				X	X	X	X	X	X											NO	NO	YES	904.31 (AH)
FOXES LANDING LIFT STATION	4155 HARRISON ST	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD	SEWERAGE SYSTEMS	Active	04/22/11		X						X	X			X		X	X											YES	YES	YES	904.31 (AH)
HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST	PARKING LOT	Active	03/29/11				X		X						X			X											NO	NO	YES	904.31 (AH)
HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	2685 VANCOUVER STREET	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	03/31/11	X	X		X	X	X						X			X											YES	YES	YES	904.21 (BV)
HOLIDAY PARK AND PARKING LOTS	3200 PIO PICO DR	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	03/28/11	X	X		X		X						X			X											NO	NO	YES	904.31 (AH)
HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											NO	NO	YES	904.21 (BV)
HOSP GROVE PARK AND PARKING LOT	JEFFERSON & MONROE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/11/11				X		X						X			X											YES	YES	YES	904.21 (BV)
KNOTS SEWER LIFT STATION	501 KNOTS LN	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											NO	NO	YES	904.51 (BA)
LA COSTA CANYON PARK AND PARKING LOT	3020 PUEBLA ST	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	03/28/11	X	X		X		X						X			X											YES	NO	YES	904.51 (BA)
LAGUNA RIVIERA PARK	4900 KELLY DR	AMUSEMENT AND RECREATION SERVICES	Active	03/28/11	X	X		X		X						X			X											YES	YES	YES	904.31 (AH)

City of Carlsbad - Municipal Inventory FY 2009-10

AREA NAME	ADDRESS	DESCRIPTION	Status	Annual Site Inspection	Activities (see descriptions below)															Pollutants									Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?	Hydrologic Area
					A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances				
LANDSCAPE MAINTENANCE AND REPAIR	CITYWIDE	TRIMMING, CUTTING, FERTILIZING,	Active	04/13/11				X																						YES	YES	YES	All
M&O OPERATIONS YARD AND PARKING LOT	5950 EL CAMINO REAL	WATER SUPPLY/ MAINTENANCE YARD/ PARKING LOT	Active	03/31/11	X	X	X	X	X	X	X			X	X	X		X	X											YES	YES	YES	904.31 (AH)
MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	5203 SUNNY CREEK RD	WATER SUPPLY	Active	04/07/11	X	X	X	X		X		X				X			X	X										YES	YES	YES	904.31 (AH)
MAGEE PARK AND PARKING LOT	258 BEECH AVE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	03/30/11	X	X		X		X						X			X											NO	NO	YES	904.21 (BV)
MS4 MAINTENANCE	CITYWIDE	INSPECTION, CLEANING	Active	03/31/11																										YES	YES	YES	All
OAK OPERATIONS YARD AND PARKING LOT	405 OAK AV	MAINTENANCE YARD AND PARKING LOT	Active		X	X	X	X	X	X				X	X	X		X	X											NO	NO	YES	904.21 (BV)
PARKS MAINTENANCE/STORAGE/PARKING LOT	1166 CARLSBAD VILLAGE DR	MAINTENANCE YARD AND PARKING LOT	Active	04/11/11	X	X	X	X	X	X				X	X	X		X	X											NO	NO	YES	904.21 (BV)
PINE PARK AND PARKING LOT	3333 HARDING ST	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	03/29/11	X	X		X		X						X			X											NO	NO	YES	904.31 (AH)
POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	6600 HIDDEN VALLEY RD	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/11/11	X	X	X	X	X	X						X			X											NO	NO	YES	904.40 (EN)
POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											YES	NO	YES	904.51 (BA)
POWER WASHING	CITYWIDE	SIDEWALKS, STREETS, GRAFFITTI REMOVAL	Active	04/13/11																										YES	YES	YES	All
RAILROAD DEPOT VISITORS CENTER PARKING LOT	400 CARLSBAD VILLAGE DR	PARKING LOT	Active	03/29/11				X		X						X			X											NO	NO	YES	904.21 (BV)
RESERVOIR C	CALAVERA DR	WATER SUPPLY	Active	04/12/11																X										YES	YES	YES	904.31 (AH)
RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR	WATER SUPPLY	Active	04/18/11				X				X								X										YES	YES	YES	904.31 (AH)
RESERVOIR LA COSTA HI	ALGA RD	WATER SUPPLY	Active	04/18/11								X								X										YES	NO	YES	904.51 (BA)
RESERVOIR LA COSTA LO	ALGA RD	WATER SUPPLY	Active	04/18/11				X				X								X										YES	NO	YES	904.51 (BA)
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	2560 ORION WY	PUBLIC ORDER AND SAFETY	Active	04/06/11	X	X		X		X						X			X											YES	YES	YES	904.31 (AH)
SAND SHELL SEWER LIFT STATION	613 SAND SHELL	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											YES	NO	YES	904.51 (BA)
SANITARY SEWER MAINTENANCE AND OPERATIONS	CITY SERVICE AREA	JETTING, RODDING, LINE REPLACEMENT	Active	03/31/11									X																	YES	YES	YES	All
SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											YES	YES	YES	904.21 (BV)
STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	3420 CAMINO DE LOS COCHES	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/12/11	X	X	X	X	X	X						X			X											NO	NO	YES	904.51 (BA)
MONROE STREET POOL	3401 MONROE ST	AMUSEMENT AND RECREATION SERVICES	Active	03/31/11	X	X	X	X	X		X					X			X											NO	NO	YES	904.21 (BV)
TAP PUMP STATION	6400 BLOCK OF EL CAMINO REAL	WATER SUPPLY	Active	04/05/11	X			X				X								X										YES	YES	YES	904.51 (BA)
TERRAMAR SEWER LIFT STATION	300 CANNON RD	SEWERAGE SYSTEMS	Active	04/22/11		X						X	X			X		X	X											YES	YES	YES	904.31 (AH)
VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST	SEWERAGE SYSTEMS	Active	04/22/11		X	X					X	X			X		X	X											YES	YES	YES	904.21 (BV)
VILLAS SEWER LIFT STATION	2860 WINTHROP AV	SEWERAGE SYSTEMS	Active	04/22/11		X						X	X			X		X	X											YES	YES	YES	904.21 (BV)
ZONE 5 PARK	CAMINO HILLS AND FARADAY	AMUSEMENT AND RECREATION SERVICES	Active	03/30/11				X		X						X			X											NO	NO	Yes	904.31 (AH)

City of Carlsbad - Municipal Inventory FY 2009-10

AREA NAME	ADDRESS	DESCRIPTION	Status	Annual Site Inspection	Activities (see descriptions below)															Pollutants									Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?	Hydrologic Area
					A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances				
ADULT LEARNING PROGRAM	3368 EUREKA PL	OFFICE BUILDING			X														X											NO	NO	NO	904.31 (AH)
ANN D. L'HEUREUX MEMORIAL DOG PARK	2700 BLOCK OF CARLSBAD VILLAGE DR	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.21 (BV)
ARTS OFFICE	2955 ELMWOOD ST	MANAGEMENT SERVICES			X														X											NO	NO	NO	904.21 (BV)
BEACH ACCESSES	NORTH OF TAMARACK	AMUSEMENT AND RECREATION SERVICES						X											X											YES	NO	NO	
BRESSI RANCH RECLAIMED PUMP STATION	BRESSI RANCH	RECLAIMED WATER		04/05/11						X		X	X			X				X										NO	NO	NO	904.51 (BA)
BRESSI RANCH WATER PUMP STATION	BRESSI RANCH	WATER SUPPLY		04/05/11						X		X				X				X										NO	NO	NO	904.51 (BA)
BUENA VISTA WATER PUMP STATION AND RESERVOIR	1400 BLOCK BUENA VISTA DRIVE	WATER SUPPLY		04/18/11		X						X							X	X										NO	NO	NO	904.21 (BV)
CALAVERA TREATMENT PLANT	2400 TAMARACK AV	INACTIVE SEWERAGE SYSTEMS	Inactive																											YES	NO	NO	904.21 (BV)
CANNON PARK	300 BLOCK OF CANNON	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.31 (AH)
CAR COUNTRY PARK	PASEO DEL NORTE	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.31 (AH)
CARLSBAD SENIOR CENTER	799 PINE AVE	AMUSEMENT AND RECREATION SERVICES			X														X											NO	NO	NO	904.31 (AH)
CENTRO DE INFORMACION	3330 HARDING ST	LIBRARIES			X														X											NO	NO	NO	904.31 (AH)
CITY HALL FACILITY	1200 CARLSBAD VILLAGE DR	GENERAL ADMINISTRATION			X														X											NO	NO	NO	904.21 (BV)
COLE LIBRARY	1250 CARLSBAD VILLAGE DR	LIBRARIES			X														X											NO	NO	NO	904.21 (BV)
DOVE LIBRARY MAIN BRANCH & ADMINISTRATION	1775 DOVE LN	LIBRARIES			X														X											YES	NO	NO	904.51 (BA)
EL FUERTE PARK	600 BLOCK OF EL FUERTE ST	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.51 (BA)
ELLERY WATER PUMP STATION AND RESERVOIR	2300 BLOCK OF JANIS WY	WATER SUPPLY		04/15/11		X		X				X							X	X										NO	NO	NO	904.21 (BV)
FARADAY CENTER	1635 FARADAY AV	MANAGEMENT SERVICES			X														X											YES	NO	NO	904.31 (AH)
FARMERS BUILDING	FARADAY & EL CAMINO RL	OFFICE BUILDING			X														X											NO	NO	NO	904.31 (AH)
HARDING COMMUNITY CENTER	3096 HARDING ST	AMUSEMENT AND RECREATION SERVICES			X			X		X						X			X											NO	NO	NO	904.31 (AH)
HELEN ALLMAN GIRLS CLUB	3368 EUREKA PL	AMUSEMENT AND RECREATION SERVICES			X														X											NO	NO	NO	904.31 (AH)
HIRING CENTER	5958 EL CAMINO REAL	OFFICE BUILDING			X														X											NO	NO	NO	904.31 (AH)
HOSP GROVE-HI NOON ROTARY/PICNIC TABLE/TRAIL	2630 MONROE ST	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.21 (BV)
HOUSING/REDEVELOPMENT OFFICE	2965 ROOSEVELT ST B	URBAN AND COMMUNITY DEVELOPMENT			X														X											NO	NO	NO	904.21 (BV)
LA GOLONDRINA SEWER LIFT STATION	2516 LA GOLONDRINA ST	SEWERAGE SYSTEMS	Inactive			X	X					X	X			X		X	X											YES	NO	No	904.51 (BA)
LAS PALMAS OFFICES	2075 LAS PALMAS DR	GENERAL ADMINISTRATION			X														X											NO	NO	NO	904.40 (EN)
LEVANTE FIELD/PARK	3031 LEVANTE ST	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.51 (BA)
LIBRARY STORAGE	2075 Q CORTE DEL NOGAL 9	OFFICE BUILDING	Inactive		X														X											NO	NO	NO	904.40 (EN)
LOWER FARADAY SEWER LIFT STATION	1507 FARADAY AV	INACTIVE SEWERAGE SYSTEMS	Inactive																											YES	NO	NO	904.40 (EN)
MAXTON BROWN PARK	500 LAGUNA DR	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											YES	YES	No	904.21 (BV)
NON-EMERGENCY FIRE FIGHTING FLOWS	CITYWIDE	TRAINING EXCERCISES, SPRINKLER DISCHARGES																												NO	NO	NO	All
OAK PARK	PIO PICO DRIVE	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.21 (BV)
PIO PICO PARK	2600 PIO PICO	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.21 (BV)
RAILROAD DEPOT VISITORS CENTER	400 CARLSBAD VILLAGE DR	VISITOR CENTER			X														X											NO	NO	NO	904.21 (BV)
RESERVOIR B	END OF BLUFF DR	WATER SUPPLY		04/05/11																X										NO	NO	NO	904.31 (AH)
RESERVOIR D-1, D-2	6700 BLACK RAIL RD	RECLAIMED WATER		04/18/11	X			X		X		X	X			X				X										NO	NO	NO	904.40 (EN)
RESERVOIR D-3	6580 BLACK RAIL ROAD	WATER SUPPLY		04/18/11	X			X		X		X				X				X										NO	NO	NO	904.40 (EN)
RESERVOIR E	HIDDEN VALLEY	WATER SUPPLY		04/18/11																X										NO	NO	NO	904.40 (EN)
RESERVOIR PAJAMA	PAJAMA DR	WATER SUPPLY		04/15/11	X	X	X	X		X		X				X				X										NO	NO	NO	904.21 (BV)
RESERVOIR SANTA FE I	PYRENEES	INACTIVE WATER SUPPLY		04/18/11	X			X												X										NO	NO	NO	904.40 (EN)
RESERVOIR SANTA FE II	PAR & BUSINESS PARK	WATER SUPPLY		04/18/11								X								X										NO	NO	NO	904.40 (EN)
RESERVOIR SKYLINE	SKYLINE DR	WATER SUPPLY		04/12/11				X				X								X										NO	NO	NO	904.31 (AH)
SEA WALL	CARLSBAD BLVD	AMUSEMENT AND RECREATION SERVICES								X									X											NO	NO	NO	

City of Carlsbad - Municipal Inventory FY 2009-10

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SPECIAL EVENTS	CITYWIDE	STREET FAIR, ETC.																					□		□					NO	NO	NO	All
SPINNAKER HILL BANK	7100 BATIQUITOS DR	OPEN SPACE						X													□	□	□		□		□	□	□	YES	NO	NO	904.51 (BA)
STREET MAINTENANCE (CLEANING/REPAIR)	CITYWIDE	POT HOLES, OVERLAYS, STRIPING																			□		□	□		□				NO	NO	NO	All
TRAIL MAINTENANCE	CITYWIDE	EROSION REPAIR, PET WASTE																			□		□		□		□			NO	NO	NO	All
UPPER FARADAY SEWER LIFT STATION	1711 FARADAY AV	INACTIVE SEWERAGE SYSTEMS	Inactive																											NO	NO	NO	904.40 (EN)
WATER OPERATIONS AND MAINTENANCE	CITY SERVICE AREA	FLUSHING, REPAIRS																		X	□			□		□		□	□	NO	NO	NO	All

□1 □Most complex, 2□Parks & pump stations, 3□Parking lots

□Activities:

A. Building Maintenance and Repair

B. Equipment Storage

C. Hazmat Storage

D. Landscape Maintenance and Repair

E. Material Storage

F. Parking Lot Maintenance

G. Pool/Fountian Cleaning/Ser

H. Pump Maintenance, Replacement

I. Sanitary Sewer Maintenance/ Operations

J. Vehicle and Equipment Fueling

K. Vehicle and Equipment Maintenance

L. Vehicle Parking

M. Vehicle and Equipment Washing

N. Waste Management, Hazardous

O. Waste Management, Non-hazardous

P. Water Operations and Maintenance

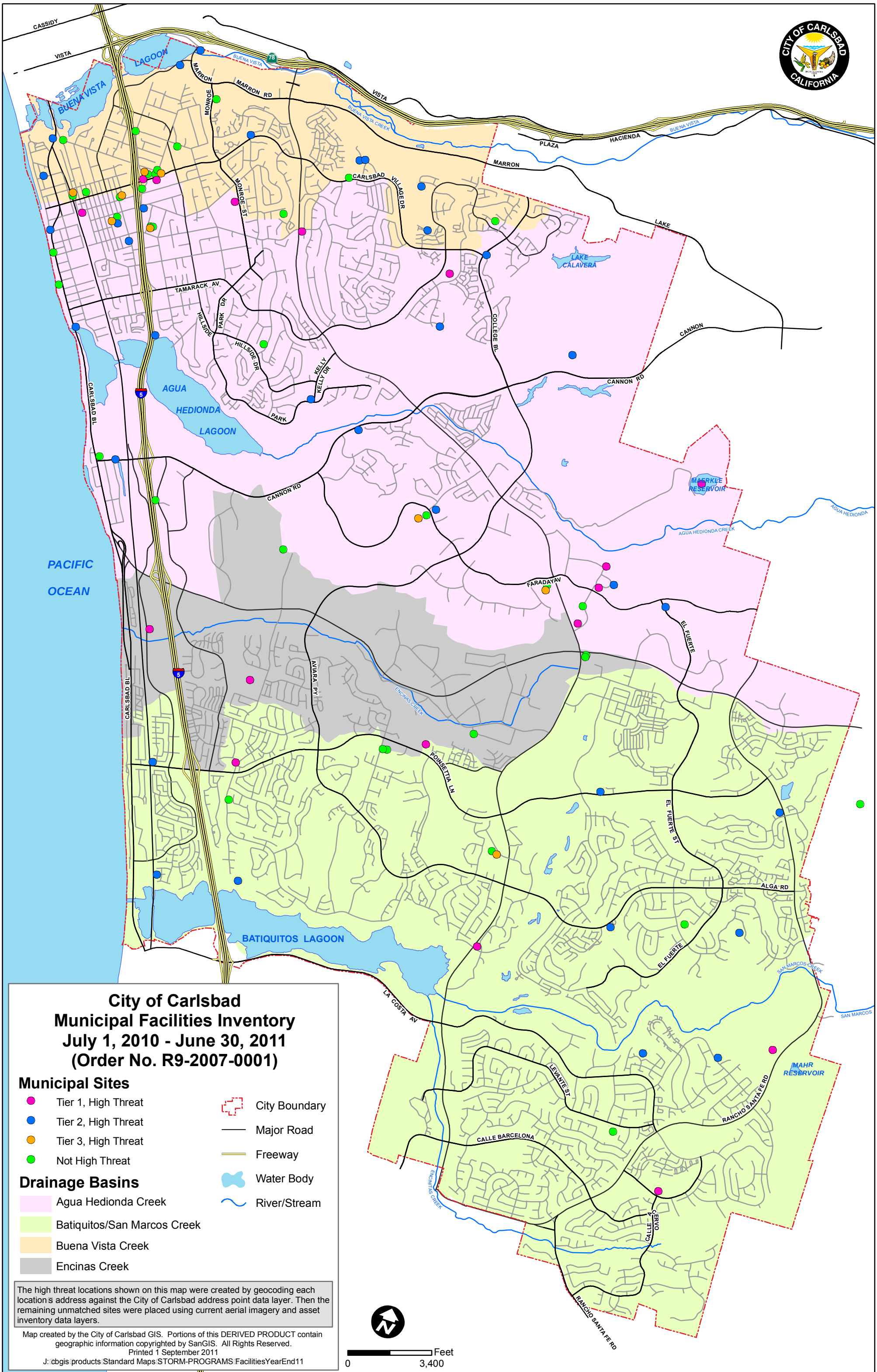
City of Carlsbad
Municipal Facilities Inventory
July 1, 2010 - June 30, 2011
(Order No. R9-2007-0001)
Municipal Sites
Tier 1, High Threat
Tier 2, High Threat
Tier 3, High Threat
Not High Threat
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
City Boundary
Major Road
Freeway
Water Body
River/Stream
The high threat locations shown on this map were created by geocoding each location's address against the City of Carlsbad address point data layer. Then the remaining unmatched sites were placed using current aerial imagery and asset inventory data layers.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
Printed 1 September 2011
J:\cbgis\products\Standard Maps\STORM-PROGRAMS\FacilitiesYearEnd11
CITY OF CARLSBAD
CALIFORNIA
PACIFIC OCEAN
BUENA VISTA LAGOON
AGUA HEDIONDA LAGOON
BATIQUITOS LAGOON
LAKE CALAVERA
MAERKLE RESERVOIR
MAHR RESERVOIR
CASSIDY
VISTA
MARRON RD
MONROE
MONROE ST
CARLSBAD VILLAGE DR
PLAZA
HACIENDA
LAKE
TAMARACK AV
HILLSIDE PARK DR
HILLSIDE DR
KELLY DR
PARK
COLLEGE BL
CANNON
CANNON RD
CARLSBAD BL
FARADAYAV
EL FUERTE
AVIARA PY
POINSETTIA LN
EL FUERTE ST
ALGA RD
LA COSTA AV
LEVANTE ST
RANCHO SANTA FE RD
CALLE BARCELONA
CALLE ALCERO
BUENA VISTA
BUENA VISTA CREEK
AGUA HEDIONDA
AGUA HEDIONDA CREEK
ENCINAS CREEK
SAN MARCOS CREEK
SAN MARCOS
Feet
0
3,400

FY 10-11
Special Events Inventory

PRIORITY	EVENT TYPE	EVENT NAME	BEGIN DATE	END DATE	SEASON	INSPECTION REQUIRED	PRE-EVENT INSPECTION DATE	POST-EVENT INSPECTION DATE	CHU	PROXIMITY TO ESA	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
High	Concert	TGIF Jazz in the Parks	07/02/2010	07/02/2010	Dry	Yes	07/02/2010	07/02/2010	904.51	No	X							X
Low	Fireworks	Four Seasons Aviara Fireworks	07/04/2010	07/04/2010	Dry	No			904.51	No		X						
Low	Other	Legoland Fireworks	07/04/2010	07/04/2010	Dry	No			904.31	No								X
Low	Other	La Costa Resort Fireworks	07/04/2010	07/04/2010	Dry	No			904.51	Yes	X	X						X
High	Concert	TGIF Jazz in the Parks	07/09/2010	07/09/2010	Dry	Yes	07/09/2010	07/09/2010	904.51	No								
High	Athletic	Carlsbad Triathlon	07/11/2010	07/11/2010	Dry	Yes	07/11/2010	07/11/2010	904.31	Yes	X			X				X
High	Concert	TGIF Jazz in the Parks	07/16/2010	07/16/2010	Dry	Yes	07/16/2010	07/16/2010	904.51	No	x			x				x
High	Exhibit	All American Car Show	07/17/2010	07/17/2010	Dry	Yes	07/17/2010	07/17/2010	904.21	No	X	X		X				X
High	Concert	TGIF Jazz in the Parks	07/23/2010	07/23/2010	Dry	Yes	07/23/2010	07/23/2010	904.51	No	x			x				x
High	Concert	TGIF Jazz in the Parks	07/30/2010	07/30/2010	Dry	Yes	07/30/2010	07/30/2010	904.51	No	x			x				x
High	Concert	TGIF Jazz in the Parks	08/06/2010	08/06/2010	Dry	Yes	08/06/2010	08/06/2010	904.51	No	x			x				x
High	Festival	CVBA's Art in the Village	08/08/2010	08/08/2010	Dry	Yes	08/08/2010	08/08/2010	904.21	No	x			x				x
High	Concert	TGIF Jazz in the Parks	08/13/2010	08/13/2010	Dry	Yes	08/13/2010	08/13/2010	904.31	No	x			x				x
High	Concert	TGIF Jazz in the Parks	08/20/2010	08/20/2010	Dry	No	08/20/2010	08/20/2010	904.31	No	x			x				x
Medium	Athletic	MS 3-Day Challenge Walk	09/24/2010	09/24/2010	Dry	No			904.21	No								X
High	Festival	ArtSplash	09/25/2010	09/26/2010	Dry	Yes	09/25/2010	09/26/2010	904.31	No	x			x				x
High	Festival	Oktoberfest	10/02/2010	10/02/2010	Wet	Yes	10/02/2010	10/02/2010	904.31	No	x							x
Low	Festival	Carlsbad Fire Department Open House	10/09/2010	10/10/2010	Wet	No			904.31	No	X							x
Medium	Athletic	MS Bay to Bay Bike Tour	10/16/2010	10/17/2010	Yes	No			904.21	No	X	X		X				X
Low	Parade	Carlsbad HS Lancer Day Parade	10/21/2010	10/21/2010	Wet	No			904.31	No								
High	Festival	Carlsbad Village Fall Street Faire	11/07/2010	11/07/2010	Wet	Yes	11/07/2010	11/07/2010	904.21	No	X	X		X				X
High	Athletic	Carlsbad Marathon	01/23/2011	01/23/2011	Wet	Yes	01/23/2011	01/23/2011	904.31	Yes								
High	Athletic	Carlsbad Junior	04/02/2011	04/03/2011	Wet	Yes	04/02/2011	04/03/2011	904.21	No	X							X
High	Athletic	Carlsbad 5000	04/03/2011	04/03/2011	Wet	Yes	04/02/2011	04/03/2011	904.21	No	X							X
High	Festival	Carlsbad Village Spring Street Faire	05/01/2011	05/01/2011	Dry	Yes	05/01/2011	05/01/2011	904.21	No	X	X		X				X
Low	Athletic	Police Officers' Memorial Run	05/14/2011	05/14/2011	Dry	No			904.31	No	X							X
Low	Athletic	Law Enforcement Torch Run for Special Olympics	06/01/2011	06/01/2011	Dry	no			904.51	No								X
High	Concert	TGIF Jazz in the Parks	06/24/2011	06/24/2011	Dry	Yes	06/24/2011		904.51	No	X	X		X				X

City of Carlsbad

Municipal Facilities Inspection - Corrective Actions

Tier	AREA/NAME	#	Corrective Action(s)	BMP's
3	ADULT LEARNING PROGRAM PARKING LOT	1	Keep dumpster area free of trash and other debris. It may be helpful to keep the area locked.	Custodial staff will clean dumpster area on a regular schedule. Contract will be let to address powerwashing enclosures.
1	AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	1	Keep brow ditch free of excessive sediment and leaf litter.	debris removed, bi-weekly inspections scheduled
		2	Ensure landscaping debris is prevented from entering all inlets and catch basins onsite.	noted as an existing BMP
		3	Keep current training log in SWPPP onsite.	current and onsite
		4	Maintain secondary containment free of rainwater.	water removed, cleanout after rains scheduled
		5	Replace gravel bags around Recreation Center catch basin.	replaced and monitored as needed
2	BATIQUITOS SEWER LIFT STATION	1	Sweep up trash and debris in outdoor areas.	swept up trash & debris
2	BEACH BLUFF TRIANGLE/PARK	1	Keep sidewalk drains free of excessive trash and organic debris.	drains are cleaned of litter and organic debris weekly
		2	Consider reapplying storm drain signage to inlet at Carlsbad Boulevard/Pine Avenue intersection and applying “no dumping” stencil to west sidewalk drains.	appropriate signage applied
2	BUENA VISTA SEWER LIFT STATION	2	No Corrective actions	NA
2	CADENCIA PARK	1	No corrective actions are recommended for this site.	N/A
1	CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	1	Remove gravel from northeast catch basin.	removed and monitored
		2	Keep baseball field catch basin free of landscaping debris.	daily cleaning scheduled
		3	Keep parking lot inlet and southwest swale free of leaf litter accumulation.	daily cleaning scheduled
		4	Keep dumpster enclosures free of trash, sediment, and debris.	weekly cleaning scheduled
		5	Replace sand bags along northwest swale and fiber rolls along southwest swale.	removed and will be replaced for Winter
		6	Consider storm drain signage for northwest and southwest corner drains and for northeast sidewalk catch basin.	appropriate signage applied
2	CALAVERA PUMP STATION	1	None	N/A
2	CANNON SEWER LIFT STATION	1	None	N/A
1	CARLSBAD RECYCLED WATER FACILITY	1	Keep inlet inserts free of leaf litter and organic debris accumulation.	Ongoing

Tier	AREA/NAME	#	Corrective Action(s)	BMP's
		2	Ensure that a current storm water training log is kept onsite in SWPPP.	Complete
		3	Keep dumpster enclosure free of sediment and organic debris.	Initial cleanup done and ongoing maintenance will be performed.
3	CARLSBAD SENIOR CENTER PARKING LOT	1	No corrective actions are recommended for this site.	n/a
2	CARRILLO RANCH AND PARKING LOT	1	Keep discharge locations free of excessive sediment and leaf litter.	area cleaned weekly
		2	Continue to stabilize and maintain exposed soil areas to prevent soil from eroding during rain events.	mulch and straw wattles utilized as necessary
		3	Keep most recent storm water training log and spill plan on site.	monthly updates as needed
		4	Keep dumpster enclosure free of sediment, trash, and debris.	area cleaned weekly
		5	Regularly inspect structural BMPs and move or replace as necessary to effectively protect drains.	rock bags replaced as needed
		6	Consider applying storm drain signage to remaining brow ditch inlets and to parking lot catch basins.	appropriate signage applied
2	CHASE FIELD	1	Keep bleacher areas free of food waste debris.	daily cleaning scheduled
		2	Provide permanent cover for all trash cans onsite.	lids supplied
		3	Keep dumpster enclosure free of trash and leaf litter.	weekly cleaning scheduled
2	CHINQUAPIN SEWER LIFT STATION	1	None	N/A
3	CITY HALL FACILITY PARKING LOT	1	Keep dumpster enclosure free of sediment and organic debris.	Custodial staff will clean dumpster area on a regular schedule. Contract will be let to address powerwashing enclosures.
3	COLE LIBRARY PARKING LOT	1	Ensure that all vehicle leaks are promptly addressed.	Parking lot is swept semi monthly. Reported vehicle oil leaks are addressed immediately by City staff.
		2	Keep the dumpster enclosure free of trash and leaf litter.	Custodial staff will clean dumpster area on a regular schedule. Contract will be let to address powerwashing enclosures.
		3	Control erosion to Carlsbad Village Drive sidewalk at the southwest area of site.	Parks staff will address the erosion control issues
3	DOVE LIBRARY PARKING LOT	1	Keep outdoor areas and discharge locations free of excessive leaf litter,trash, and sediment.	Parks and Facilties staff will keep the outdoor areas free of debris

City of Carlsbad
Municipal Facilities Inspection - Corrective Actions

Tier	AREA/NAME	#	Corrective Action(s)	BMP's
		2	Consider reapplying storm drain signage to dumpster enclosure catch basin and applying signage to southwest base of brow ditch.	Utilities staff will reapply the signage to catch basin and brow ditch
2	El FUERTE LIFT STATION	1	None	N/A
3	FARADAY CENTER PARKING LOT	1	Keep all outdoor areas and discharge locations free of excessive sediment and leaf litter.	Parks staff will keep the discharge locations free of sediment
3	FARMERS BUILDING PARKING LOT	1	Keep dumpster area free of trash and sediment.	Custodial staff will clean dumpster area on a regular schedule. Contract will be let to address powerwashing enclosures.
		2	Keep all outdoor areas and discharge locations free of excessive sediment, litter, and landscaping debris.	Parking lot is swept semi monthly. Reported vehicle oil leaks are addressed immediately by City staff. Parks staff will keep all other landscape areas free of debris
1	FIRE STATION #1	1	Store rusty materials to prevent contact with storm water.	Rusty material removed and disposed of.
1	FIRE STATION #2	1	No corrective actions are recommended for this site.	N/A
1	FIRE STATION #3	1	Consider applying “no dumping” signage to catch basin on site.	Clayton Dodds contacted on 6/27. His crews will handle.
1	FIRE STATION #4	1	Keep outdoor areas free of excessive sediment, focusing on west perimeter curb.	Added to the Stations weekly preventitive maintenance schedule.
1	FIRE STATION #5	1	Keep discharge location free of excessive sediment and leaf debris.	Added to the Stations weekly preventitive maintenance schedule.
1	FIRE STATION #6	1	Ensure all trash cans have permanent cover to protect from contact with storm water.	New lids in place
		2	Keep dumpster enclosure free of excessive leaf litter and debris.	Added to the Stations weekly preventitive maintenance schedule.
		3	Consider applying storm drain or specific informational signage to the trench storm drain with optional sewer diversion.	Station Captain ordered the sign through the city work order system.
1	FLEET MAINTENANCE FACILITY AND PARKING LOT	1	Ensure that annual storm water training is completed by employees.	SWPPP and Spills information (training)

City of Carlsbad

Municipal Facilities Inspection - Corrective Actions

Tier	AREA/NAME	#	Corrective Action(s)	BMP's
		2	Control erosion along northern border and prevent any sediment from discharging over curb.	After rains completed, staff swept area clear of sediment washing over curb at north end of lot fence line.
		3	Store rusty materials to prevent contact with storm water.	Auction Items with rust moved of pavement
		4	Keep spill plan on site and accessible.	Adopted spill plan from APCD & copied to binder
		5	Ensure trailers are part of routine vehicle washing to prevent sediment discharge to parking lot.	Discussed condition of vehicles left for service to inspect for dirt and contaminates with staff. Staff inspects condition of vehicles parked in the "service due" area for debris from use on trailers or equipment. Staff then report to equipment users for correction.
2	FOXES LANDING LIFT STATION	1	None	N/A
2	GATESHEAD SEWER LIFT STATION	1	None	N/A
3	HARDING COMMUNITY CENTER PARKING LOT	1	Provide permanent cover for entry/exit trash can.	Trash can lids have been installed
		2	Keep site free of excessive leaf litter and trash debris.	Parking lot is swept semi monthly and Parks staff will address the leaf litter
2	HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	1	Keep discharge locations free of excessive landscape debris, mulch,and sediment.	burlap covers applied to drains when mowing
		2	Replace broken gravel bags at northeast catch basin. Provide berms to protect southeast and southwest drains if necessary.	rock bags replaced
		3	Consider applying storm drain signage to parking lot drain and to catch basins within park.	appropriate signage in place
2	HOLIDAY PARK AND PARKING LOTS	1	Keep dumpster enclosures free of trash and debris.	area cleaned weekly
		2	Ensure prompt clean up of oil leaks in parking areas.	absorbents used on visible oil stains
2	HOME PLANT SEWER LIFT STATION	1	None	N/A
2	HOSP GROVE PARK AND PARKING LOT	1	Keep discharge locations along Marron Road free of excessive sediment, organic debris, and trash. Consider applying storm drain signage to the brow ditch drains.	areas cleaned, new gravel bags in place, weekly monitoring scheduled
		2	Control erosion from slope along Marron Road, and control sediment transport from Monroe Street parking lot to the road.	weekly cleaning scheduled
		3	Keep sidewalks and parking lots free of excessive sediment, leaf debris,and trash.	weekly cleaning scheduled

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Municipal Facilities Inspection - Corrective Actions

Tier	AREA/NAME	#	Corrective Action(s)	BMP's
		4	Ensure that gravel bags along brow ditch provide effective drain protection. Inspect and replace structural BMPs as necessary, including fiber rolls in Jefferson lot.	gravel bags and straw wattles will be monitored for structural integrity and replaced as needed
		5	Provide secondary containment for portable toilet unless this would prevent ADA compliance.	not feasible due to ADA requirements
		6	Clear debris surrounding Monroe Street picnic area drain.	area cleaned weekly
2	KNOTS SEWER LIFT STATION	1	None	N/A
2	LA COSTA CANYON PARK AND PARKING LOT	1	Keep discharge locations free of excessive sediment and organic debris.	area cleaned weekly
		2	Control erosion along tennis and basketball court slopes to minimize sediment transport to concrete ditch.	straw wattles installed, Hydroseeding applied to bare areas
		3	Regularly inspect structural BMPs and replace or move as necessary.	new rock bags installed
		4	Consider reapplying storm drain signage to parking lot catch basin.	appropriate signage applied
2	LAGUNA RIVIERA PARK	1	Consider reapplying “no dumping” signage to concrete ditch drain and applying to park catch basin.	appropriate signage applied
1	LANDSCAPE MAINTENANCE AND REPAIR	1	No corrective actions are recommended.	N/A
1	M&O OPERATIONS YARD AND PARKING LOT	1	No corrective actions are recommended for this site.	N/A
1	MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	1	Control slope erosion on eastern side of reservoir and prevent sediment discharge to concrete ditch. Continue to regularly remove any sediment accumulation in concrete ditch.	Ongoing
		2	Keep a current log of most recent storm water training in SWPPP on site.	Complete
		3	Consider storm drain signage for those catch basins that lack stenciling.	Complete
2	MAGEE PARK AND PARKING LOT	1	Keep dumpster enclosure free of excessive leaves and debris.	area cleaned weekly
		2	Consider applying “no dumping” signage to park catch basin.	appropriate signage applied
1	MS4 MAINTENANCE	1	No corrective actions are recommended.	N/A
1	OAK OPERATIONS YARD AND PARKING LOT	1	Keep inlet inserts free of excessive sediment.	Bi-weekly site inspections
1	PARKS MAINTENANCE/STORAGE/PARKING LOT	1	Keep trash area free of excessive sediment and organic debris.	area is cleaned after every dumpster removal

City of Carlsbad

Municipal Facilities Inspection - Corrective Actions

Tier	AREA/NAME	#	Corrective Action(s)	BMP's
2	PINE PARK AND PARKING LOT	1	Keep discharge locations within parking lot and within park catch basins free of excessive sediment, leaf debris, and trash.	areas cleaned and swept daily
		2	Control erosion at dirt lot west of soccer fields to prevent sediment transport to alley.	straw wattles in place
		3	Inspect and maintain structural BMPs; ensure that gravel bags and fiber rolls are effectively placed.	areas inspected weekly
		4	Consider applying storm drain signage to park catch basins, as is feasible.	appropriate signage applied
1	POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	1	Keep discharge locations free of excessive sediment.	area is cleaned weekly
		2	Remove broken glass from northeast parking lot drain.	glass removed
		3	Consider reapplying “no dumping” signage to northwest drain and to park catch basins.	signage applied
		4	Maintain vegetation around swale drain next to tennis courts.	vegetation monitored monthly
2	POINSETTIA SEWER LIFT STATION	1	Seal/Redo Parking Lot	continue to install a filter rock bags to contain residue on asphalt parking lot which is disintegrating
		2	Clean in and around storm drains.	Cleaned in and around storm drains
1	POWER WASHING		Ensure all contractors are provided with storm water training rergarding surface cleaning and proper techniques for spill containment and cleanup.	CMI conducts meetings with all contractors prior to the commencement of contracted work. During these meetings, contractors are provided with information about the City's NPDES requirements, including surface cleaning and proper clean up techniques. In addtion, all contracts include the following language "*Contractor will incorporate and comply with all appilcable Best Managemnent Practices (BMPs)....* ". Inspectors conduct daily site visits to ensure BMPs are implemented to the maximum extent practicable.
			Implement structural BMPs and dry cleanup prior to wet cleaning activity.	Inspectors ensure all required and necessary BMPs are in place proir to and during all contracted work activites.
			Provide labels for fuel containers and any other hazardous materials.	Contractors are responsible for ensuring all containers are properly labeled. During inspections, City staff will continue to monitor, whenever possible, the labeling and storage of hazardous materials.

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Municipal Facilities Inspection - Corrective Actions

Tier	AREA/NAME	#	Corrective Action(s)	BMP's
			Refer to section SC-71 of the City of Carlsbad Municipal BMPs for training purposes and maintain a training log or similar method to document training.	CMI conducts meetings with all contractors prior to the commencement of contracted work. During these meetings, contractors are provided with information about the City's NPDES requirments. The City maintains a log/sign in for all persons in attendance. Contractors are asked to pass training materials on to their staff.
3	RAILROAD DEPOT VISITORS CENTER PARKING LOT	1	Keep outdoor areas and discharge locations free of excessive sediment, organic debris, and litter.	Parks staff will keep the discharge locations free of sediment
2	RESERVOIR C	1	None	N/A
2	RESERVOIR ELM	1	None	N/A
2	RESERVOIR LA COSTA HI	1	Drainage culvert around reservior requires periodic cleaing	Ongoing
2	RESERVOIR LA COSTA LO	1	None	N/A
2	SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	1	Keep outdoor areas free of excessive cigarette butts and leaf debris.	Custodial staff will keep areas clean of cigarette butts and Parks staff will address the leaf debris
		2	Keep discharge locations free of excessive sediment and organic debris.	Parks staff will keep the discharge locations free of sediment
		3	Control erosion along concrete ditch to prevent sediment transport.	Parks staff will address the erosion control issues
		4	Provide permanent cover for all trash cans on site.	Trash can lids have been installed
		5	Consider applying “no dumping” signage to skate park catch basins.	Utilities staff will apply "no dumping" signage at skate park
2	SAND SHELL SEWER LIFT STATION	1	None	N/A
1	SANITARY SEWER MAINTENANCE AND OPERATIONS	1	No corrective actions are recommended.	N/A
2	SIMSBURY SEWER LIFT STATION	1	None	N/A
1	STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	1	No corrective actions are recommended for this site.	N/A
1	MONROE STREET POOL	1	Consider structural modification of the drainage layout from pool deck areas to reduce potential for pollutant discharge.	Sandbags and gravel were placed within the drainage basin and chennel to slow flow and trap sediments.
		2	Keep discharge locations free of excessive sediment and landscape debris.	All drains were cleaned.

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City of Carlsbad

Municipal Facilities Inspection - Corrective Actions

Tier	AREA/NAME	#	Corrective Action(s)	BMP's
		3	Maintain filter inserts to ensure maximum pollutant removal efficiency.	filter inserts were cleaned.
		4	Consider applying storm drain signage to northwest and northeast catch basins. Reapply to parking lot curb and gutter.	Stencil signage was applied to all drain locations.
2	TAP PUMP STATION	1	None	N/A
2	TERRAMAR SEWER LIFT STATION	1	None	N/A
2	VANCOUVER SEWER LIFT STATION	1	None	N/A
2	VILLAS SEWER LIFT STATION	1	Sweep up trash and debris in outdoor areas.	swept up trash and debris
2	ZONE 5 PARK	1	Keep discharge locations free of excessive sediment and leaf debris.	weekly cleaning scheduled
		2	Control erosion to sidewalk at Camino Hills/Faraday intersection.	structural BMP's added as necessary
		3	Provide secondary containment for portable toilet.	not feasible due to ADA requirements
		4	Consider applying “no dumping” stencil to concrete ditch and park catch basins.	appropriate signage applied

Appendix 5

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed**	
7-ELEVEN	901		PALOMAR AIRPORT RD	CARLSBAD	CA	92009-1110	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	No	904.40
7-ELEVEN 32942-A	5802		VAN ALLEN WAY	CARLSBAD	CA	92008-7300	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.31
A & P AIRCRAFT DETAILING	2006		PALOMAR AIRPORT RD	CARLSBAD	CA	92008-4812	4581	Aircraft Washing, Detailing	Yes	X	X	X		X	X		X	X	No	904.40
A-1 AUTO CARE	3193	11	TYLER ST	CARLSBAD	CA	92008-3025	7538	General Automotive Repair Shops	Yes		X	X		X				X	Yes	904.31
A-1 TOWING	3181		ROOSEVELT ST	CARLSBAD	CA	92008	7549	Towing Service	Yes		X	X		X	X		X	X	Yes	904.21
AALTO SCIENTIFIC LTD	1959		KELLOGG AVE	CARLSBAD	CA	92008-6582	2835	In Vitro & In Vivo Diagnotsitc Subs	Yes			X		X				X	No	904.40
ACE HARDWARE CARLSBAD	7188	#110	AVENIDA ENCINAS	CARLSBAD	CA	92011-4664	5251	Hardware Stores	Yes	X	X	X	X	X	X	X	X	X	Yes	904.51
ACUSHNET COMPANY	2819		LOKER AVE EAST	CARLSBAD	CA	92010	3949	Sporting and Athletic Goods, NEC	Yes		X	X		X				X	Yes	904.31
ADDISON SHEET METAL	7238		PONTO DR	CARLSBAD	CA	92009-4601	3499	Sheet Metal Fabricator	Yes		X	X		X				X	Yes	904.51
AETHERCOMM INC.	3205		LIONSHEAD AVE	CARLSBAD	CA	92010-4710	3663	Radio & Tv Broadcasting/Communications Equipme	Yes		X	X			X		X	X	Yes	904.31
AIR PRODUCTS AND CHEMICALS, INC.	1969		PALOMAR OAKS WAY	CARLSBAD	CA	92011-1307	2899	Chemicals and Chemical Preparations, NEC	Yes			X	X	X	X		X	X	Yes	904.40
AIR PRODUCTS AND CHEMICALS, INC.	1979		PALOMAR OAKS WAY	CARLSBAD	CA	92011-1307	2899	General Warehousing	Yes			X	X	X	X		X	X	Yes	904.40
ALBERTSONS # 6720	7660		EL CAMINO REAL	CARLSBAD	CA	92009-7901	5411	Grocery Stores	Yes	X	X	X	X	X	X	X	X	X	Yes	904.51
ALBERTSONS #6701	955		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1802	5411	Supermarkets	Yes	X	X	X	X	X	X	X	X	X	Yes	904.21
ALEJANDRO'S MEXICAN FOOD	2952		HARDING ST	CARLSBAD	CA	92008-1815	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
ALLEN'S NEW YORK PIZZA, INC.	6943	101	EL CAMINO REAL	CARLSBAD	CA	92009-4150	5812	Eating & Drinking Places	Yes	X	X							X	No	904.51
ALLEY, THE	421		GRAND AVE	CARLSBAD	CA	92008-2325	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
ALLIED WASTE COMPANY	5960		EL CAMINO REAL	CARLSBAD	CA	92008-3840	4953	Refuse Systems	Yes	X	X	X	X	X	X		X	X	Yes	904.31
ALLIE'S EDIBLES LLC	5671	J	PALMER WAY	CARLSBAD	CA	92010-7256	2064	Candy & Other Confectionery Products	No	X	X							X	Yes	904.31
ALPHAGRAPHICS #469	3132	STE 108	TIGER RUN CT	CARLSBAD	CA	92010-6650	2752	Commercial Printing, Lithographic	Yes									X	No	904.31
ALPHATEC MANUFACTURING, INC.	5830		EL CAMINO REAL	CARLSBAD	CA	92008	3842	Orhtopedic, Prosthetic & Surgical Appliances and S	Yes			X			X			X	Yes	904.31
AL'S CAFE IN-THE-VILLAGE	795		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2317	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
AMERICAN RIM SUPPLY	1955		KELLOGG AVE	CARLSBAD	CA	92008-6582	3465	Automotive Metal Stampings	Yes		X	X		X				X	No	904.40
AMIGO CUSTOM SCREEN PRINTS	6351	A-B	YARROW DR	CARLSBAD	CA	92011-1545	2261	Finishers of Broadwoven Fabrics of Cotton	Yes						X			X	No	904.40
ANCHOR AUDIO, INC	5931		DARWIN CT	CARLSBAD	CA	92008-7302	3651	Household Audio And Video Equipment	Yes		X	X		X				X	Yes	904.31
APS DYNAMICS INC.	5731	A	PALMER WAY	CARLSBAD	CA	92008-7247	3826	Laboratory Analytical Instruments	No		X	X		X				X	Yes	904.31
ARCADE, THE	2805		ROOSEVELT ST	CARLSBAD	CA	92008	6512	Commercial Shopping Center	Yes	X	X		X	X	X		X	X	Yes	904.21
ARMENIAN CAFÉ, THE	3126		CARLSBAD BLVD	CARLSBAD	CA	92008-2908	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
ARMSTRONG GARDEN CENTERS,INC.	5702		PASEO DEL NORTE	CARLSBAD	CA	92008-4435	5261	Retail Nurseries, Lawn & Garden Sup Stores	Yes	X	X		X		X	X	X	X	Yes	904.31
ARRAY WIRELESS INC	5631	STE B	PALMER WAY	CARLSBAD	CA	92010-7243	3663	Radio & Tv Broadcasting/Communications Equipme	Yes									X	No	904.31
ASYMTEK	2762		LOKER AV W	CARLSBAD	CA	92008-6603	3699	Electrical Machinery, Equip & Sups, NEC	Yes		X	X		X				X	Yes	904.31
AUTOMOTIVE SOLUTIONS	505	STE A	OAK AVE	CARLSBAD	CA	92008	7549	Automotive Services, Except Repair And Carwashe	Yes		X	X		X	X			X	Yes	904.31
AVIARA FARMS	1205		AVIARA PKWY	CARLSBAD	CA	92009-1276	5159	Wholesale Distribution of Raw Farm Produce	Yes	X	X	X	X	X	X	X	X	X	No	904.40
AVIARA GOLF CLUB	7447		BATIQUITOS DR	CARLSBAD	CA	92011	7997	Golf Club	Yes	X	X		X	X		X	X	X	Yes	904.51
AVIARA GOLF MAINT FACILITY	7227		AVIARA DR	CARLSBAD	CA	92011	7997	Golf Course and Resort	Yes		X	X		X	X	X	X	X	Yes	904.51
BAJA SESSIONS CATERING	2790	STE 115	LOKER AVE W	CARLSBAD	CA	92010-6614	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
BAN'S CLEANERS	981		TAMARACK AVE	CARLSBAD	CA	92008	7216	Dry Cleaning Plant	Yes		X							X	No	904.31
BASKIN ROBBINS	2540	D	EL CAMINO REAL	CARLSBAD	CA	92008-1286	5451	Dairy Products Stores	Yes	X	X		X					X	Yes	904.21
BASKIN ROBBINS	6949	101	EL CAMINO REAL	CARLSBAD	CA	92009-4140	5451	Dairy Products Stores	Yes	X	X							X	No	904.51
BEACH CITY SMOOTHIES	594		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008	5812	Eating and Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
BECKMAN COULTER	2470		FARADAY AVE	CARLSBAD	CA	92010	2835	Invitro and Invitro Diagnostic Substances	Yes			X	X	X	X	X	X	X	Yes	904.31
BELLEFLEUR CARLSBAD LLC	5610	100	PASEO DEL NORTE	CARLSBAD	CA	92008-4442	5812	Eating & Drinking Places	Yes	X	X			X				X	Yes	904.31
BENIHANA	755	100	RAINTREE DR	CARLSBAD	CA	92009-3216	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
BEST WESTERN BEACH VIEW LODGE	3180		CARLSBAD BLVD	CARLSBAD	CA	92008-2908	7011	Hotels and Motels	Yes	X	X			X		X		X	Yes	904.31

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
BIG FLY	6102	E-F	AVENIDA ENCINAS STE E & F	CARLSBAD	CA	92011-1005	7999	Amusement And Recreation Services, Not Elsewhe	Yes									X	No	904.40
BIG O TIRES	2615		STATE ST	CARLSBAD	CA	92008-1627	7538	General Automotive Repair Shops	Yes		X	X		X				X	Yes	904.21
BIOLIFE NATURE SUPPLEMENTS, INC	2270	STE Q	CAMINO VIDA ROBLE	CARLSBAD	CA	92011-1503	5099	Durable Goods, Not Elsewhere Classified	Yes		X							X	No	904.40
BISTRO WEST	4960		AVENIDA ENCINAS	CARLSBAD	CA	92008-4343	5812	Eating and Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
BJ'S RESTAURANT & BREWHOUSE	5613		PASEO DEL NORTE	CARLSBAD	CA	92008-4434	5812	Eating and Drinking Places	Yes	X	X			X			X	X	Yes	904.31
BLACK BOX INC	2777	A	LOKER AV W	CARLSBAD	CA	92010-6601	5091	Sporting And Recreational Goods & Supplies	Yes	X	X	X		X				X	Yes	904.31
BLENDZ OF CARLSBAD	2708	104	LOKER AV W	CARLSBAD	CA	92010	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
BOAR CROSSn	390		GRAND AVE	CARLSBAD	CA	92008-2925	5812	Drinking Places (Alcoholic Beverages)	Yes	X	X		X	X	X	X	X	X	Yes	904.21
BOARD & BREW	2675	103	GATEWAY ROAD	CARLSBAD	CA	92009-1726	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
BOB BAKER CHRYSLER JEEP	5555		CAR COUNTRY DR	CARLSBAD	CA	92008-4311	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
BOB BAKER DODGE	5515		CAR COUNTRY DR	CARLSBAD	CA	92008-4311	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
BOB BAKER MAZDA	5365		CAR COUNTRY DR	CARLSBAD	CA	92008-4310	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
BOB BAKER VOLKSWAGEN/SUBARU	5500		PASEO DEL NORTE	CARLSBAD	CA	92008-4428	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X				X	Yes	904.31
BOBBY'S HIDEAWAY CAFE	4901	F	EL CAMINO REAL	CARLSBAD	CA	92008-3748	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
BON APPETIT @ TAYLORMADE	5545		FERMI CT	CARLSBAD	CA	92008-7324	5812	Eating Places	Yes	X	X			X				X	Yes	904.31
BONY ACAI USA, LLC	3220		GREY HAWK CT	CARLSBAD	CA	92010-6651	5149	Groceries And Related Products, Not Elsewhere Cl	Yes									X	No	904.31
BOSTON MARKET # 637	2606		EL CAMINO REAL	CARLSBAD	CA	92008-1214	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
BOYS & GIRLS CLUB OF CARLSBAD	3115		ROOSEVELT ST	CARLSBAD	CA	92008	7997	Membership Sports and Recreation Clubs	Yes									X	No	904.21
BRESSI RANCH FUEL MART, LLC (SHELL)	2741		GATEWAY ROAD	CARLSBAD	CA	92009-1743	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.51
BRICKMAN GROUP, THE	2420		COUGAR DR.	CARLSBAD	CA	92010	1700	Landscape Maintenance	Yes				X		X	X	X	X	Yes	904.31
BRITISH INDEPENDENT CAR COUNTRY CARLSBAD	1060	P	AUTO CENTER CT	CARLSBAD	CA	92008-4321	7538	General Automotive Repair Shops	Yes		X	X		X				X	Yes	904.31
BROKEN YOLK CAFÉ	7670	104	EL CAMINO REAL	CARLSBAD	CA	92009-7931	5812	Eating Places	Yes	X	X		X	X				X	Yes	904.51
BRUEGGER'S BAGELS	7680	102	EL CAMINO REAL	CARLSBAD	CA	92009-7931	5812	Eating Places	Yes	X	X		X	X				X	Yes	904.51
BUCA DI BEPPO	1921		CALLE BARCELONA	CARLSBAD	CA	92009-8402	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
BVP ASSOCIATES (DBA OCEAN AIR AVIATION)	2220		PALOMAR AIRPORT RD	CARLSBAD	CA	92008	6512	Non-Residential Warehouse - Aiplane Storage	Yes	X	X	X		X	X		X	X	No	904.40
CAFÉ ELYSA	3076		CARLSBAD BLVD	CARLSBAD	CA	92008-4405	5812	Eating and Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
CAFE TOPES	3091	STE A	ROOSEVELT ST	CARLSBAD	CA	92008-2313	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
CALDO POMODORO	2907		STATE ST	CARLSBAD	CA	92008-2337	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CALIBER COLLISION CENTERS	6050		AVENIDA ENCINAS	CARLSBAD	CA	92009-1054	7532	Top, Body, Upholstery Repair, Paint	Yes		X	X		X				X	No	904.40
CALIFORNIA FABWORKS	2101	G	LAS PALMAS DR	CARLSBAD	CA	92011-1521	7532	Top, Body, Upholstery Repair, Paint	Yes		X	X		X				X	No	904.40
CALIFORNIA SENSOR CORP.	2075	P	CORTE DEL NOGAL	CARLSBAD	CA	92009-1415	3829	Measuring & Controlling Devices, NEC	Yes		X	X		X				X	No	904.40
CALIFORNIA WATERSPORTS/ WAKESPORTS UNLIMITED	4215		HARRISON ST	CARLSBAD	CA	92008-3558	7999	Amusement & Recreation Svcs, NEC	Yes	X	X	X	X	X			X	X	Yes	904.31
CALLAWAY GOLF BALL COMPANY	2180		RUTHERFORD RD	CARLSBAD	CA	92008	3949	Sporting and Athletic Goods, NEC	Yes		X	X		X				X	Yes	904.31
CALLAWAY GOLF COMPANY	2285		RUTHERFORD RD	CARLSBAD	CA	92008-8815	3949	Sporting and Athletic Goods, NEC	Yes		X	X		X				X	Yes	904.31
CALLAWAY GOLF COMPANY	2081		FARADAY AVE	CARLSBAD	CA	92008-7230	4225	Sporting and Athletic Goods, NEC	Yes		X	X		X				X	Yes	904.31
CALLAWAY GOLF COMPANY	5860		DRYDEN PL	CARLSBAD	CA	92008-6598	7999	Amusement & Recreaton Services	Yes				X	X		X		X	No	904.40
CALLAWAY GOLF COMPANY (PASCAL BUILD)	5960	150	PASCAL CT	CARLSBAD	CA	92008-8808	3949	Sporting and Athletic Goods, NEC	Yes		X	X		X				X	Yes	904.31
CALTRANS/CARLSBAD MAINTENANCE	6050		PASEO DEL NORTE	CARLSBAD	CA	92009	9621	Transportation Programs Administration	Yes		X	X		X	X		X	X	No	904.40
CAMINO SHELL	2590		EL CAMINO REAL	CARLSBAD	CA	92008-1201	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.21
CAMPUS CAFE	5966		LA PLACE CT	CARLSBAD	CA	92008-8842	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
CARLS JR	2608		EL CAMINO REAL	CARLSBAD	CA	92008-1214	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CARLS JR #117	950		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1801	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CARLS JR.	925		PALOMAR AIRPORT RD	CARLSBAD	CA	92009-1110	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	No	904.40
CARLSBAD 76	945		TAMARACK AVE	CARLSBAD	CA	92008-3414	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.21

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed**	
CARLSBAD AIRPORT SELF STORAGE	1910		PALOMAR OAKS WAY	CARLSBAD	CA	92008-6510	4225	General Warehousing & Storage	Yes									X	No	904.40
CARLSBAD AQUAFARM INC.	4600		CARLSBAD BLVD	CARLSBAD	CA	92008-4301	0812	Food Crops Grown Undercover	Yes	X			X		X		X	X	Yes	904.31
CARLSBAD AUTO SERVICE.	3181		TYLER ST	CARLSBAD	CA	92008-3025	7538	General Automotive Repair Shops	Yes		X	X		X	X			X	Yes	904.31
CARLSBAD AUTO SUPPLY	3197		TYLER ST	CARLSBAD	CA	92008-3025	5531	Auto & Home Supply Stores	Yes		X	X		X				X	Yes	904.31
CARLSBAD AUTOMOTIVE TECHNOLOGY	2730		STATE ST	CARLSBAD	CA	92008-1628	7538	General Automotive Repair Shops	Yes		X	X		X				X	Yes	904.21
CARLSBAD BEACH GRILL	2780		CARLSBAD BLVD	CARLSBAD	CA	92008-2209	5812	Eating and drinking places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CARLSBAD BRITISH MOTORCARS	2598		STATE ST	CARLSBAD	CA	92008	7538	General Automotive Repair Shops	Yes		X	X		X				X	Yes	904.21
CARLSBAD BY THE SEA	2855		CARLSBAD BLVD	CARLSBAD	CA	92008-2902	6513	Operators of Apartment Bldgs	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CARLSBAD BY THE SEA RESORT (CARLSBAD PROPERTIES INC.)	850		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-4443	7011	Hotels and Motels	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
CARLSBAD CHOCOLATE BAR	2963		STATE ST	CARLSBAD	CA	92008-2337	5812	Eating and Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CARLSBAD CUSTOM CABINETS	2719		LOKER AV W	CARLSBAD	CA	92010	2434	Cabinet Makers	Yes		X							X	No	904.31
CARLSBAD DANISH BAKERY	2805		ROOSEVELT ST	CARLSBAD	CA	92008-1620	5461	Retail Bakeries	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CARLSBAD EXCLUSIVE AUTOMOTIVE	1060	DEF	AUTO CENTER CT	CARLSBAD	CA	92008-4321	7538	General Automotive Repair Shops	Yes		X	X		X				X	Yes	904.31
CARLSBAD FRENCH PASTRY CAFE	1005	B/C	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1804	5461	Retail Bakeries	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CARLSBAD GAS & PROPANE	1089		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1804	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.21
CARLSBAD GOLF CENTER	2711		HAYMAR DR	CARLSBAD	CA	92008-1260	7999	Amusement & Recreation Svcs, NEC	Yes	X	X	X	X	X		X	X	X	Yes	904.21
CARLSBAD HYUNDAI	5285		CAR COUNTRY DR	CARLSBAD	CA	92008-4310	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
CARLSBAD INN BEACH/TENNIS RES	3075		CARLSBAD BLVD	CARLSBAD	CA	92008	7011	Hotels and Motels	Yes	X	X	X	X	X		X	X	X	Yes	904.31
CARLSBAD INTERNATIONAL EXPORT	1954		KELLOGG AVE	CARLSBAD	CA	92008	3829	Measuring & Controlling Devices, NEC	Yes		X	X		X				X	No	904.40
CARLSBAD LANDINGS, INC. DBA THE LANDINGS AT CARLSBAD	2198		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-4450	5812	Eating Places	Yes	X	X			X				X	No	904.40
CARLSBAD MAGNETICS	6086		CORTE DEL CEDRO	CARLSBAD	CA	92011	3699	Electrical Machinery, Equip & Sups, NEC	Yes		X	X		X				X	No	904.40
CARLSBAD MUFFLER & BRAKES	1060	L	AUTO CENTER CT	CARLSBAD	CA	92008-4321	7533	Automotive Exhaust System Repair Shops	Yes		X	X		X				X	Yes	904.31
CARLSBAD PARADISE PIZZA	2564	STE F	STATE ST	CARLSBAD	CA	92008-1662	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CARLSBAD PITAS	300	120	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Yes	X	X							X	Yes	904.21
CARLSBAD PLAZA	2508		EL CAMINO REAL	CARLSBAD	CA	92008	6512	Operators of Nonresidential Buildings	Yes	X	X		X	X	X		X	X	Yes	904.21
CARLSBAD PREMIUM OUTLETS	5620	100	PASEO DEL NORTE	CARLSBAD	CA	92008-4444	6512	Operators of Nonresidential Buildings	Yes	X	X		X	X	X		X	X	Yes	904.31
CARLSBAD RANCH MARKET	6118	D-F	PASEO DEL NORTE	CARLSBAD	CA	92009-1116	5431	Fruit and Vegetable Markets	Yes	X	X		X	X				X	No	904.40
CARLSBAD SELF STORAGE LLC	2235		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-1533	4225	General Warehousing & Storage	Yes		X	X		X			X	X	No	904.40
CARLSBAD SELF-SVC CAR WASH INC	2608		STATE ST	CARLSBAD	CA	92008-1626	7542	Carwashes	Yes			X		X				X	Yes	904.21
CARLSBAD STRAWBERRY COMPANY (LESLIE FARM INC)			CANNON AND INTERSTATE 5	CARLSBAD	CA	92009	0171	Berry Crops	Yes	X			X		X	X	X	X	Yes	904.31
CARLSBAD TECHNOLOGY INC.	5922		FARNSWORTH CT	CARLSBAD	CA	92008-7304	2834	Pharmaceutical Preparations	Yes									X	No	904.31
CARLSBAD TECHNOLOGY INC.	5923		BALFOUR CT	CARLSBAD	CA	92008	2834	Pharmaceutical Preparations	Yes			X		X	X			X	Yes	904.31
CARLSBAD VILLAGE AUTO BODY & PAINT	3191		TYLER ST	CARLSBAD	CA	92008-3025	7532	Top, Body, Upholstery Repair, Paint	Yes		X	X		X	X		X	X	Yes	904.31
CARLSBAD VILLAGE CLEANERS	1005	G	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1883	7216	Dry Cleaning Plant	Yes		X							X	No	904.31
CARLSBAD VILLAGE INDEPENDENT MERCEDES AND VOLVO SER	3045		ROOSEVELT ST	CARLSBAD	CA	92008-2313	7538	General Automotive Repair Shops	Yes		X	X		X	X		X	X	Yes	904.21
CARLSBAD VILLAGE SHELL	1145		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1908	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.21
CARLSBAD VOLVO	6830		AVENIDA ENCINAS	CARLSBAD	CA	92009-3201	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	No	904.40
CARTER'S HAY AND GRAIN	1985		OLIVENHAIN RD	CARLSBAD	CA	92024	5191	Farm Supplies - Feed and Grain	Yes		X		X				X	X	Yes	904.51
CASA DE BANDINI	1901		CALLE BARCELONA	CARLSBAD	CA	92009-8402	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
CASABLANCA RESTAURANT AND LOUNGE BAR	6030		PASEO DEL NORTE	CARLSBAD	CA	92009-1114	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	No	904.40
CAVALLO MOTOR SPORTS	6010		AVENIDA ENCINAS	CARLSBAD	CA	92011-1001	7538	General Automotive Repair Shops	Yes		X	X		X				X	No	904.40
CDS PRINTING	2262	106	RUTHERFORD RD	CARLSBAD	CA	92008-8818	2759	Commercial Printing, NEC	Yes									X	No	904.31
CESSY'S TACO SHOP	3016		CARLSBAD BLVD	CARLSBAD	CA	92008-2905	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
CHEVRON #1978	2500		EL CAMINO REAL	CARLSBAD	CA	92008-1201	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.21

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed**	
CHEVRON #46	850		PALOMAR AIRPORT RD	CARLSBAD	CA	92011	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.31
CHEVRON USA INC #93320	970		TAMARACK AVE	CARLSBAD	CA	92008-3413	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.31
CHINA GATE	2525	142	EL CAMINO REAL	CARLSBAD	CA	92008-1207	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CHIN'S SZECHWAN RESTAURANT	2958		MADISON ST	CARLSBAD	CA	92008-2359	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CHUCK'S TIRE CENTER	6060	A19	AVENIDA ENCINAS	CARLSBAD	CA	92009-1053	5531	Auto & Home Supply Stores	Yes		X	X		X				X	No	904.40
CHURCHILL GRAPHICS	2195	STE G	FARADAY AVE	CARLSBAD	CA	92008-7207	2759	Commercial Printing, Not Elsewhere Classified	Yes		X							X	No	904.31
CINNABON	2525	STE 0123	EL CAMINO REAL	CARLSBAD	CA	92008-1206	5461	Retail Bakeries	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CIRCLE K DBA CARLSBAD FUELS CORP	7602		EL CAMINO REAL	CARLSBAD	CA	92009-7901	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.51
CIVIC HELICOPTER INC	2206	H	PALOMAR AIRPORT RD	CARLSBAD	CA	92008	4522	Helicopter Maintenance & Operations	Yes	X	X	X		X	X		X	X	No	904.40
CLAIM JUMPER RESTAURANT, 9LTD	5958		AVENIDA ENCINAS	CARLSBAD	CA	92008-4405	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
COAST COLLISION CENTERS	6030	C	AVENIDA ENCINAS	CARLSBAD	CA	92009-1061	7532	Top, Body, And Upholstery Repair Shops & Paint S	Yes		X	X		X				X	No	904.40
COAST WASTE MANAGEMENT	5960		EL CAMINO REAL	CARLSBAD	CA	92008	4225	General Warehousing & Storage	Yes	X	X	X	X	X	X		X	X	Yes	904.31
COBRA GOLF INC.	1818		ASTON AVE	CARLSBAD	CA	92008	3949	GOFLF CLUB ASSEMBLY	Yes									X	No	904.31
COFFEE BEAN & TEA LEAF	1935	176	CALLE BARCELONA	CARLSBAD	CA	92009	5499	Miscellaneous Food Service	Yes	X	X		X	X	X	X	X	X	Yes	904.51
COFFEE BEAN & TEA LEAF	3231	100	CAMINO DE LOS COCHES	CARLSBAD	CA	92009	5499	Miscellaneous Food Service	Yes	X	X		X	X	X	X	X	X	Yes	904.51
COLD STONE CREAMERY	1935	175	CALLE BARCELONA	CARLSBAD	CA	92009	5451	Retail Ice Cream Sales	Yes	X					X			X	Yes	904.51
COLD STONE CREAMERY	2967		CARLSBAD BLVD	CARLSBAD	CA	92008-2904	5451	Retail Ice Cream Sales	Yes	X					X			X	Yes	904.21
COMMUNICATIONS TEST DESIGN INC.(CTDI)	2283		COSMOS CT	CARLSBAD	CA	92011-1517	7699	Repair Shops And Related Services, Not Elsewhere	Yes		X	X		X			X	X	No	904.40
CONSOLIDATED ELEC. DIST. INC	6106	A	AVENIDA ENCINAS	CARLSBAD	CA	92011	5063	Electrical Apparatus & Equipment Wiring Supplies	Yes			X						X	No	904.40
CORNER BAKERY CAFE	5617	# 110	PASEO DEL NORTE	CARLSBAD	CA	92008-4434	5812	Eating Places	Yes	X	X		X		X			X	Yes	904.31
COSTCO WHOLESALE	951		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-1110	5399	Miscellaneous General Merchandise Stores	Yes	X	X	X		X	X			X	No	904.40
COTTRELL MACHINE	6102	B-C	AVENIDA ENCINAS	CARLSBAD	CA	92011	3599	Indl and Comml Machinery and Equip, NEC	Yes			X		X				X	No	904.40
COYOTE BAR & GRILL	300		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2900	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CPS PRINTING	2304		FARADAY AVE	CARLSBAD	CA	92008-7216	2759	Commercial Printing, NEC	Yes	X	X	X		X				X	Yes	904.31
CREATIVE FLAVORS CATERING	5661	STE B	PALMER WAY	CARLSBAD	CA	92010-7255	5812	Eating Places	Yes	X	X			X			X	X	Yes	904.31
CREATIVE MACHINING LLC	6102	B & C	AVENIDA ENCINAS	CARLSBAD	CA	92011-0000	3599	Indus./Commercial Equipment, Not Elsewhere Clas	Yes			X		X				X	No	904.40
CRESTONE GROUP BAKING COMPANY	5927		FARNSWORTH CT	CARLSBAD	CA	92008-7303	2051	Bread & Other Baker Prods	Yes	X			X	X				X	Yes	904.31
CROSSCHEM LP	5816	STE 200	DRYDEN PL	CARLSBAD	CA	92008-6506	5169	Chemicals And Allied Products, Not Elsewhere Clas	Yes		X							X	No	904.40
CROSSINGS AT CARLSBAD, THE	5800		HIDDEN VALLEY ROAD	CARLSBAD	CA	92008	7992	Public Golf Courses	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
CROSSROAD PETROLEUM (ARCO AM/PM)	810		TAMARACK AVE	CARLSBAD	CA	92008-4140	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.31
CROUTONS	5814	140	VAN ALLEN WAY	CARLSBAD	CA	92008-7300	5812	Eating Places	Yes	X								X	Yes	904.31
CULINART	2605		CARLSBAD BLVD	CARLSBAD	CA	92008-2208	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
CVI MELLES GRIOT	2051	200	PALOMAR AIRPORT RD	CARLSBAD	CA	92011-1462	3674	Semiconductors & Related Devices	Yes		X	X		X				X	No	904.40
CVS PHARMACY #9479	2510	E	EL CAMINO REAL	CARLSBAD	CA	92008-1201	5912	Drug Stores and Proprietary Stores	Yes		X							X	No	904.21
DAILY NEWS CAFE, THE	3001	A	CARLSBAD BLVD	CARLSBAD	CA	92008-2964	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
DAPHNE'S GREEK CAFE	6981	101	EL CAMINO REAL	CARLSBAD	CA	92009-4149	5812	Eating Places	Yes	X	X		X	X				X	Yes	904.51
DARTON INTERNATIONAL, INC.	2380	J/K	CAMINO VIDA ROBLE	CARLSBAD	CA	92011-1507	3599	Manufacturing Industrial Machinery	Yes		X	X		X				X	No	904.40
DAVE'S AUTO SERVICE AND REPAIR	3235		ROOSEVELT ST	CARLSBAD	CA	92008	7538	Automotive service and repair	Yes		X	X		X	X		X	X	Yes	904.31
DENNY'S # 7517	1048		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1803	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
DEPT OF ANIMAL SERVICES	2481		PALOMAR AIRPORT RD	CARLSBAD	CA	92009-1531	0752	Animal Shelter	Yes	X	X		X		X	X	X	X	No	904.40
DINI'S BY THE SEA	3290		CARLSBAD BLVD	CARLSBAD	CA	92008-3101	5812	Eating & Drinking Places	Yes	X	X			X			X	X	Yes	904.31
DOMINO'S PIZZA # 8380	6986	A	EL CAMINO REAL	CARLSBAD	CA	92009	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
DON'S COUNTRY KITCHEN	2885		ROOSEVELT ST	CARLSBAD	CA	92008-1620	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
DONUT FAIR, THE	2540	C1	EL CAMINO REAL	CARLSBAD	CA	92008-1286	5461	Retail Bakeries	Yes	X	X		X	X	X	X	X	X	Yes	904.21

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed**	
DR.'S OWN, INC	2270	100	COSMOS T	CARLSBAD	CA	92011-1558	3842	Orthopedic/Prosthetic/Surgical Appliances And Sup	Yes	X	X	X		X				X	No	904.40
DRAGMASTER INC.	2725		STATE ST	CARLSBAD	CA	92008-1629	7538	General Automotive Repair Shops	Yes		X	X		X	X		X	X	Yes	904.21
DRYCLEAN AMERICA	2708	# B105	LOKER AV W	CARLSBAD	CA	92010-6602	7216	Drycleaning Plants, Except Rug Cleaning	Yes		X							X	No	904.31
E/G ELECTRO-GRAPH INC.	2365		CAMINO VIDA ROBLE	CARLSBAD	CA	92011-1505	3674	Semiconductors 7 Related Devices	Yes		X	X		X				X	No	904.40
EF COMPOSITE TECHNOLOGIES, LP	2151		LAS PALMAS DR STE D	CARLSBAD	CA	92011-1575	5091	Sporting And Recreational Goods & Supplies	Yes									X	No	904.40
EL CAMINO RENTAL	5701		EL CAMINO REAL	CARLSBAD	CA	92008-7202	7359	Equipment Rental & Leasing, NEC	Yes			X		X			X	X	Yes	904.31
EL CARIBE	6965	205	EL CAMINO REAL	CARLSBAD	CA	92009-4102	5812	Eating & Drinking Places	Yes	X	X							X	No	904.51
EL POLLO LOCO #3423	7120		AVENIDA ENCINAS	CARLSBAD	CA	92011	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
EL PUERTO MEXICAN & SEAFOOD	1065	D	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1884	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
EL TORITO MARKET	3163		ROOSEVELT ST	CARLSBAD	CA	92008-3018	5411	Grocery Stores	Yes	X	X		X	X	X	X	X	X	Yes	904.21
ELECTRIC REGULATOR	6189		EL CAMINO REAL	CARLSBAD	CA	92009	3625	Electrical Indl Apparatus, NEC	Yes		X	X		X				X	No	904.40
ELECTRO SURFACE TECHNOLOGIES INC.	2281	101	LAS PALMAS DR	CARLSBAD	CA	92011	3679	Electronic components, NEC	Yes		X	X		X				X	Yes	904.31
ELTROL CORPORATION	5661	E	PALMER WAY	CARLSBAD	CA	92008-7255	3625	Relays & Industrial Controls	No		X	X		X				X	Yes	904.31
ELYS PLACE (CALLAWAY GOLF)	5928		PASCAL CT	CARLSBAD	CA	92008-8808	5812	Eating & Drinking Places	Yes	X				X				X	Yes	904.31
EMERITUS AT CARLSBAD	3140		EL CAMINO REAL	CARLSBAD	CA	92008	8059	Nursing Home	Yes	X	X		X	X	X	X	X	X	Yes	904.21
ENCINA WATER FACILITY	6200		AVENIDA ENCINAS	CARLSBAD	CA	92011-1095	4952	Sewerage Systems	Yes	X	X	X	X	X	X		X	X	No	904.40
ENCINAS BUSINESS PARK/MCWIN CORP	6102	B	AVENIDA ENCINAS	CARLSBAD	CA	92011	6512	Operators of Nonresidential Buildings	Yes		X	X		X			X	X	No	904.40
ENTERPRISE RENT A CAR L.A. #3246	1060	M	AUTO CENTER CT	CARLSBAD	CA	92008-4321	7514	Passenger Car Rental	Yes		X	X		X				X	Yes	904.31
EPEIUS BIOTECHNOLOGIES CORPORATION	1890	STE 100	RUTHERFORD RD	CARLSBAD	CA	92008-7344	5122	Drugs, Drug Proprietaries, And Druggists' Sundrie	Yes		X	X			X			X	Yes	904.31
ES BEAUTY PRODUCTS LLC	2777	STE C	LOKER AV W	CARLSBAD	CA	92010-6518	5099	Durable Goods, Not Elsewhere Classified	Yes	X	X		X	X				X	Yes	904.31
ETALUMA, INC.	1914	STE 150	PALOMAR OAKS WAY	CARLSBAD	CA	92008-6509	3827	Optical Instruments And Lenses	Yes			X						X	No	904.40
EUROPEAN APPAREL LLC	2350	# C	CAMINO VIDA ROBLE	CARLSBAD	CA	92011-1500	2389	Apparel And Accessories, Not Elsewhere Classified	Yes									X	No	904.40
EWING IRRIGATION PRODUCTS INC.	6104	E	AVENIDA ENCINAS	CARLSBAD	CA	92011	5083	Farm & Garden Machinery & Equipment	Yes		X		X			X	X	X	No	904.40
EXPRESS AUTO CENTER	2676	A	STATE ST	CARLSBAD	CA	92008-1626	7538	General Automotive Repair Shops	Yes		X	X		X	X			X	Yes	904.21
FEDERAL EXPRESS CORPORATION	2495		FARADAY AVE	CARLSBAD	CA	92008-7225	4215	Air Courier Services	Yes		X	X		X				X	Yes	904.31
FIRESTONE COMPLETE AUTO CARE	2545		EL CAMINO REAL	CARLSBAD	CA	92008-1202	7538	General Automotive Repair Shops	Yes		X	X		X	X			X	Yes	904.21
FISH HOUSE VERA CRUZ	417		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2302	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
FLIPPIN PIZZAS	7662	103	EL CAMINO REAL	CARLSBAD	CA	92009	5812	Eating & Drinking Places	Yes	X	X		X	X				X	Yes	904.51
FLORAL TRADE CENTER RESTAURANT	5600	111	AVENIDA ENCINAS	CARLSBAD	CA	92008-4453	6512	Rental of restaurant space	Yes	X	X		X	X				X	Yes	904.31
FLOREXPO, LLC	1960		KELLOGG AVE	CARLSBAD	CA	92008-6581	5193	Flowers, Nursery Stock, Supplies	Yes	X	X	X	X	X	X	X	X	X	No	904.40
FLOWER FIELDS, THE	5702		PASEO DEL NORTE	CARLSBAD	CA	92008	0181	Ornamental Floriculture	Yes	X			X		X	X	X	X	Yes	904.31
FRAZEE PAINT	7040	100	AVENIDA ENCINAS	CARLSBAD	CA	92009	5231	Paint, Glass, And Wallpaper Stores	Yes	X	X	X	X	X	X	X	X	X	Yes	904.51
FROOTS	2675	STE 101	GATEWAY RD	CARLSBAD	CA	92009-1765	5812	Eating Places	Yes	X	X							X	No	904.51
G.T. MACHINE SHOP	2790	100	LOKER AV W	CARLSBAD	CA	92008-6613	3599	Ind & Comml Machinery & Equip, NEC	Yes		X	X		X				X	Yes	904.31
GARCIAS MEXICAN RESTAURANT	2968		STATE ST	CARLSBAD	CA	92008-2336	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
GARDEN STATE BAGEL	755		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2317	5461	Retail Bakeries	Yes	X	X		X		X	X	X	X	Yes	904.21
GASCO GASOLINE (VALERO)	920		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1801	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.21
GEMATRIA PRODUCTS, INC.	2260	101	RUTHERFORD RD	CARLSBAD	CA	92008	2834	Vitamin & Nutrient Manufacturer	Yes									X	No	904.31
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	1964		KELLOGG AVE	CARLSBAD	CA	92008-4602	2759	Commercial Printing	Yes	X	X	X	X	X	X	X	X	X	No	904.40
GEMOLOGICAL INSTITUTE OF AMERICA, INC.	5355		ARMADA DR	CARLSBAD	CA	92008-4602	3915	Lapidary Work, Mats, Jewelers, Finding	No	X	X	X	X	X	X	X	X	X	Yes	904.31
GERMAN AUTO WORKS	2730	STE B	STATE ST	CARLSBAD	CA	92008-1628	7538	General Automotive Repair Shops	Yes		X	X		X			X	X	Yes	904.21
GET N' GO DONUTS	6986	E	EL CAMINO REAL	CARLSBAD	CA	92009-4110	5461	Retail Bakeries	Yes	X	X		X	X	X	X	X	X	Yes	904.51
GLANBIA NUTRITIONALS	2840	101	E LOKER AVE	CARLSBAD	CA	92009	2833	Manufacturer of Nutritional Supplements	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
GLOBAL MICROWAVE SYSTEMS, INC	1916	100	PALOMAR OAKS WAY	CARLSBAD	CA	92008-5509	3663	Calculating and Accouting Machines, except Compu	Yes		X	X		X				X	No	904.40

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
GOLDEN SPOON	2606	B	EL CAMINO REAL	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
GOLDEN SPOON	7670	103	EL CAMINO REAL	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Yes	X	X							X	No	904.51
GOLDEN STATE NATURAL PRODUCTS INC	2080	#103	LAS PALMAS DR	CARLSBAD	CA	92011-1518	7389	Business Services, Not Elsewhere Classified	Yes		X				X			X	No	904.40
GRAND AVENUE BAR & GRILL	752		GRAND AVE	CARLSBAD	CA	92008-2330	5812	Eating & Drinking Places	Yes	X	X		X	X		X	X	X	Yes	904.21
GRAND DELI, THE	595		GRAND AVE	CARLSBAD	CA	92008-2327	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
GRAND PACIFIC PALISADES RESORT	5805		ARMADA DR	CARLSBAD	CA	92008	7011	Hotels and Motels	Yes	X	X			X	X	X	X	X	Yes	904.31
GREAT KHANS MONGOLIAN FESTIVAL	2525	236	EL CAMINO REAL	CARLSBAD	CA	92008-1209	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
GREEK CORNER CAFE	1854	100	MARRON RD	CARLSBAD	CA	92008-1172	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
GREENLEAF RENT-A-CAR	850	STE 119	PALOMAR AIRPORT RD	CARLSBAD	CA	92011-4443	7514	Passenger Car Rental	Yes			X		X				X	Yes	904.31
GREENWORLD RECYCLING INC.	2245	105	CAMINO VIDA ROBLE	CARLSBAD	CA	92011-1557	7378	Computer Repair	Yes		X	X						X	No	904.40
GREGORIOS	300	208	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2991	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
GTR ENTERPRISES, INC.	6352	C	CORTE DEL ABETO	CARLSBAD	CA	92011-1408	3469	Fabricated Metal Parts	Yes			X						X	No	904.40
GUYON WEST	2101	C	LAS PALMAS DR	CARLSBAD	CA	92011-1521	5084	Wholesale Baking Equipment	Yes		X	X		X				X	No	904.40
HANSON AGGREGATES	3750		HAYMAR DR	CARLSBAD	CA	92008	1429	Crushed Stone Sand and Gravel	Yes			X		X			X	X	Yes	904.21
HARBOR FISH CAFE	3179		CARLSBAD BLVD	CARLSBAD	CA	92008-2909	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
HD SUPPLY CONSTRUCTION SUPPLY LTD.	6125		PASEO DEL NORTE	CARLSBAD	CA	92011-1117	5211	Lumber and Other Construction Materials	Yes	X	X	X	X	X	X		X	X	No	904.40
HENNESSEY'S TAVERN	2777		ROOSEVELT ST	CARLSBAD	CA	92008-1617	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
HENRY - FURNITURE MAKER, PAUL	2633		STATE ST	CARLSBAD	CA	92008-1627	7641	Reupholstery and Furniture Repair	Yes		X	X		X			X	X	Yes	904.21
HENRY'S FARMERS MARKET	2618		EL CAMINO REAL	CARLSBAD	CA	92008-1259	5411	Grocery Stores	Yes	X	X		X	X	X	X	X	X	Yes	904.21
HENRY'S FARMERS MARKET	3243		CAMINO DE LOS COCHES	CARLSBAD	CA	92009	5411	Grocery Stores	Yes	X	X		X	X	X	X	X	X	Yes	904.51
HENSLEY'S FLYING ELEPHANT PUB AND GRILL	850		TAMARACK AVE	CARLSBAD	CA	92008-4140	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
HERTZ RENT A CAR	6030	STE E	AVENIDA ENCINAS	CARLSBAD	CA	92011-1061	7514	Passenger Car Rental	Yes		X	X		X	X		X	X	No	904.40
HOEHN ACURA	5556		PASEO DEL NORTE	CARLSBAD	CA	92008-4428	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
HOEHN AUDI	5215		CAR COUNTRY DR	CARLSBAD	CA	92008-4310	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
HOEHN BUICK - CADILLAC	5334		PASEO DEL NORTE	CARLSBAD	CA	92008-4338	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
HOEHN HONDA	5454		PASEO DEL NORTE	CARLSBAD	CA	92008-4426	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X				X	Yes	904.31
HOEHN HONDA USED CARS	5566		PASEO DEL NORTE	CARLSBAD	CA	92008-4428	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
HOEHN INFINITI	5245		CAR COUNTRY DR	CARLSBAD	CA	92008-4310	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
HOEHN MERCEDES	5475		CAR COUNTRY DR	CARLSBAD	CA	92008-4311	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
HOEHN PORSCHE	6800		AVENIDA ENCINAS	CARLSBAD	CA	92009-3201	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	No	904.40
HOMEWOOD SUITES CARLSBAD	2223		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-1553	7011	Hotels And Motels	Yes	X	X		X	X	X	X	X	X	No	904.40
HOOKED ON SUSHI INC	2508	STE A	EL CAMINO REAL	CARLSBAD	CA	92008-1203	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
HOT DOG ON A STICK	5620	C126	PASEO DEL NORTE	CARLSBAD	CA	92008-4444	5812	Eating Places	Yes	X	X		X	X				X	Yes	904.31
HUBBS SEA WORLD RESEARCH	4200		GARFIELD ST	CARLSBAD	CA	92008	0921	Fish hatcheries & Preserves	Yes	X			X		X		X	X	Yes	904.31
HUDSON PRINTING INC	2780		LOKER AV W	CARLSBAD	CA	92010-6611	2759	Commercial Printing, Not Elsewhere Classified	Yes		X			X				X	No	904.31
HYBRID PUMPS INC	2792	STE 106	LOKER AVE W	CARLSBAD	CA	92010-6615	3561	Pumps And Pumping Equipment	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
HYDRO-CHECK SYSTEMS INC.	5931	100	SEA LION PL	CARLSBAD	CA	92008-6622	3823	Ind Instr for Measure, display & Control	Yes		X	X		X				X	Yes	904.31
INDUSTRIAL STRENGTH CORP	6115		CORTE DEL CEDRO	CARLSBAD	CA	92011-1516	3599	Indus./Commercial Equipment, Not Elsewhere Clas	Yes		X	X		X				X	No	904.40
IN-N-OUT BURGER, A CALIF. CORP. #89	5950	150	AVENIDA ENCINAS	CARLSBAD	CA	92008-4405	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
INT SOFTBOARD TECHNOLOGY	1965		KELLOGG AVE	CARLSBAD	CA	92008	3949	Sporting/Athletic Goods, Not Elsewhere Classified	Yes		X			X				X	No	904.40
INTERNATIONAL COFFEE & TEA LLC	2508	F	EL CAMINO REAL	CARLSBAD	CA	92008	5499	Miscellaneous Food Service	Yes	X	X		X	X	X	X	X	X	Yes	904.21
IRIS GROUP, INC., THE	1675		FARADAY AVE	CARLSBAD	CA	92008-7314	2752	Commercial Printing, Lithographic	Yes		X			X			X	X	Yes	904.31
ISAAC'S BAKERY DELI	2051	200	PALOMAR AIRPORT RD	CARLSBAD	CA	92011-1490	5812	Eating Places	Yes	X			X	X				X	No	904.40
ISIS PHARMACEUTICALS	2282		FARADAY AVE	CARLSBAD	CA	92008	2834	Pharmaceutical Preparations	Yes			X	X	X	X		X	X	Yes	904.31

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										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
ISLANDS FINE BURGERS & DRINKS	889		PALOMAR AIRPORT RD	CARLSBAD	CA	92011	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	No	904.40
IT'S A GRIND COFEE HOUSE	2744	STE 100	CARLSBAD BLVD	CARLSBAD	CA	92008-2251	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
J BOX	5814	STE 135	VAN ALLEN WY	CARLSBAD	CA	92008-7359	5812	Eating Places	Yes	X	X		X	X		X	X	X	Yes	904.31
J.C. DELI AND CATERING	2382	A	CAMINO VIDA ROBLE	CARLSBAD	CA	92009-1508	5812	Eating & Drinking Places	Yes									X	No	904.40
J.C. PENNEY COMPANY	2555		EL CAMINO REAL	CARLSBAD	CA	92008	5311	Department Store	Yes	X	X	X			X			X	Yes	904.21
JACK IN THE BOX #3006	7050		AVENIDA ENCINAS	CARLSBAD	CA	92009-4651	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
JACK IN THE BOX #36	901		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1802	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
JAGUAR CARLSBAD	5548		PASEO DEL NORTE	CARLSBAD	CA	92008-4428	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
JAY'S GOURMET PIZZA AND SEAFOOD	2975	S-B	CARLSBAD BLVD	CARLSBAD	CA	92008-2904	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
JB GRAPHICS INC.	6351	H/I	YARROW DR	CARLSBAD	CA	92011-1545	2396	Automotive And Apparel Trimmings	Yes		X			X	X			X	No	904.40
JC BALDWIN CONSTRUCTION COMPANY	2469		IMPALA DR	CARLSBAD	CA	92008-7227	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	Yes	904.31
JET SOURCE, INC.	2056		PALOMAR AIRPORT RD	CARLSBAD	CA	92008	4581	Airports, Flying Fields, Terminals	Yes	X	X	X		X	X		X	X	No	904.40
JETZAEL ORTIZ	3055		HARDING ST	CARLSBAD	CA	92008-2321	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
JIFFY LUBE	6021		PASEO DEL NORTE	CARLSBAD	CA	92011	7538	General Automotive Repair Shops	Yes		X	X		X	X		X	X	No	904.40
JIMBO'S NATURAL FOODS	1923		CALLE BARCELONA	CARLSBAD	CA	92009	5411	Grocery Stores	Yes	X	X		X	X	X	X	X	X	Yes	904.51
JOEY'S SMOKIN BBQ	6955	107	EL CAMINO REAL	CARLSBAD	CA	92009-4141	5812	Eating Places	Yes	X	X		X	X				X	Yes	904.51
JOHNNY'S RUTHERFORD CAFE	2262	102	RUTHERFORD RD	CARLSBAD	CA	92008-8818	5812	Eating & Drinking Places	Yes	X	X							X	Yes	904.31
JOHNSONS AUTO BODY AND PAINT	2677		STATE ST	CARLSBAD	CA	92008-1627	7532	Auto Body Shop	Yes		X	X		X	X			X	Yes	904.21
JUDY'S DELI	2035	130	CORTE DEL NOGAL	CARLSBAD	CA	92009-1456	5812	Eating & Drinking Places	Yes	X	X		X					X	No	904.40
K & K LABORATORIES INC	3305		TYLER ST	CARLSBAD	CA	92008-3056	2833	Viatmins and Supplements	Yes		X	X						X	Yes	904.31
K1 SPEED LLC	6212		CORTE DEL ABETO	CARLSBAD	CA	92011	7999	Indoor Kart Racing	Yes			X						X	No	904.40
KANINE KARE	1985		OLIVENHAIN RD	CARLSBAD	CA	92024-5677	0752	Animal Specialty Services, Except Veterinary	Yes	X	X		X				X	X	Yes	904.51
KARL STRAUSS BREWERY & RESTAURANT	5801		ARMADA DR	CARLSBAD	CA	92008-4609	2082	Brewery and Restaurant	Yes	X	X			X	X	X		X	Yes	904.31
KEN GRODY FORD	5555		PASEO DEL NORTE	CARLSBAD	CA	92008-4429	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
KERR MARKETING INC	1815	STE 106	ASTON AVE	CARLSBAD	CA	92008-7340	5047	Medical, Dental, And Hospital Equipment & Supplie	Yes									X	No	904.31
KFC #Y450066	745		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2317	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
KING'S FISH HOUSE	5625		PASEO DEL NORTE	CARLSBAD	CA	92008-4434	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
KIWI AUDIO VISUAL	1950		KELLOGG AVE	CARLSBAD	CA	92008-6581	4225	General Warehousing And Storage	Yes			X						X	No	904.40
KNOCKOUT BURGERS	2971		CARLSBAD BLVD	CARLSBAD	CA	92008-2904	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
KNOCKOUT PIZZERIA	2959		CARLSBAD BLVD	CARLSBAD	CA	92008-2904	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
KOKO BEACH	2858		CARLSBAD BLVD	CARLSBAD	CA	92008-2901	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
KVD COMPANY INC.	2465		IMPALA DR	CARLSBAD	CA	92008-7227	3825	Inst for Measure & Testing of electricity	Yes		X	X		X				X	Yes	904.31
L & L PRINTERS	6200		YARROW DR	CARLSBAD	CA	92011-1537	2759	Commercial Printing, NEC	Yes		X			X	X			X	No	904.40
LA COSTA LIMOUSINE	2770		LOKER AV W	CARLSBAD	CA	92010	4119	Local Passenger Transportation, NEC	Yes		X	X		X				X	Yes	904.31
LA COSTA RESORT AND SPA	2100		COSTA DEL MAR RD	CARLSBAD	CA	92009-6898	7997	Golf Course and Resort	Yes	X	X	X	X	X	X	X	X	X	Yes	904.51
LA FIESTA DELI	5810	B	EL CAMINO REAL	CARLSBAD	CA	92008-8819	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
LA PLACE DELI	5950	150	LA PLACE CT	CARLSBAD	CA	92008-8831	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
LANDCO ARCHITECTURAL MILLWORKS, INC	3135		TYLER ST	CARLSBAD	CA	92008	2511	Wood Household Furniture	Yes		X	X		X				X	Yes	904.31
LAS OLAS CARLSBAD	2939		CARLSBAD BLVD	CARLSBAD	CA	92008-2904	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
LE PASSAGE	2961		STATE ST	CARLSBAD	CA	92008-2337	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
LEGENDS AUTO	1060	STE O	AUTO CENTER CT	CARLSBAD	CA	92008-4321	7538	General Automotive Repair Shops	Yes		X	X		X	X			X	Yes	904.31
LEGOLAND	1		LEGOLAND DR	CARLSBAD	CA	92008	4119	Local Passenger Transportation, NEC	Yes	X	X	X	X	X	X	X	X	X	No	904.40
LEONARD SCHOLL INDUSTRIES, INC.	5751	A	PALMER WAY	CARLSBAD	CA	92008-7249	3599	Ind & Comml Machinery & Equip, NEC	Yes		X	X		X				X	Yes	904.31
LEUCADIA WASTE WATER DISTRICT	1960		LA COSTA AVE	CARLSBAD	CA	92009-6810	4941	Water Supply	Yes	X	X	X	X	X	X		X	X	Yes	904.51

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
LEXUS CARLSBAD	5444		PASEO DEL NORTE	CARLSBAD	CA	92008-4426	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
LEXUS CARLSBAD	5434		PASEO DEL NORTE	CARLSBAD	CA	92008-4426	5511	Motor Vehicle Dealers (New And Used)	Yes		X	X		X	X		X	X	Yes	904.31
LIFE TECHNOLOGIES	5781		VAN ALLEN WAY	CARLSBAD	CA	92008-7331	2836	Biological Products, Except Diagnostic Substances	Yes			X	X	X	X		X	X	Yes	904.31
LITTLE ZEUS GREEK CUISINE	5812	125	VAN ALLEN WAY	CARLSBAD	CA	92008-7300	5812	Eating & Drinking Places	Yes	X								X	Yes	904.31
LLOYD'S AUTO SPECIALTIES	1050		AUTO CENTER CT	CARLSBAD	CA	92008-4320	7549	Automotive Services	Yes		X	X		X	X			X	Yes	904.31
LOLA'S 7 UP MARKET & DELI	3292		ROOSEVELT ST	CARLSBAD	CA	92008-3041	5411	Grocery Stores	Yes	X	X		X	X	X	X	X	X	Yes	904.21
LORENZO'S PIZZERIA	5812	130	VAN ALLEN WAY	CARLSBAD	CA	92008-7300	5812	Eating & Drinking Places	Yes	X								X	Yes	904.31
LOS COCHES CLEANERS	3235	105	CAMINO DE LOS COCHES	CARLSBAD	CA	92009-8969	7216	Drycleaning Plants, Except Rug Cleaning	Yes		X							X	No	904.51
LOS PRIMOS MEXICAN FOOD	2708	102	LOKER AV W	CARLSBAD	CA	91010	5812	Restaurant	Yes	X	X		X	X	X	X	X	X	Yes	904.31
LOTUS THAI BISTRO	3050		PIO PICO DR	CARLSBAD	CA	92008-1954	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
LUNA GRILL	2681	STE 101	GATEWAY RD	CARLSBAD	CA	92009-1767	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
MACHINE VISION PRODUCTS, INC.	5940		DARWIN CT	CARLSBAD	CA	92008	3629	Electrical Indl Apparatus, NEC	Yes		X	X		X				X	Yes	904.31
MACY'S - (Mens/Home)	2557		EL CAMINO REAL	CARLSBAD	CA	92008	5311	Department Store	Yes	X	X	X		X				X	Yes	904.21
MACY'S - PLAZA CAMINO REAL	2559		EL CAMINO REAL	CARLSBAD	CA	92008	5311	Department Store	Yes	X	X	X		X				X	Yes	904.21
MAGELLAN AVIATION	2006	S	PALOMAR AIRPORT RD	CARLSBAD	CA	92008	4522	Air Transportation, Nonscheduled	Yes	X	X	X		X	X		X	X	No	904.40
MAMA MELLACE'S OLD WORLD TREATS	6195		EL CAMINO REAL	CARLSBAD	CA	92009	2064	Food preparations, NEC	Yes	X			X	X			X	X	No	904.40
MARDX DIAGNOSTICS, INC.	5919		FARNSWORTH CT	CARLSBAD	CA	92008-7303	2835	Manufacturer of In Vitro Diagnostic	No		X						X	X	Yes	904.31
MAS FINA CANTINA	2780		STATE ST	CARLSBAD	CA	92008-1628	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
MATT MILLIN MACHINING	2270	F	CAMINO VIDA ROBLE	CARLSBAD	CA	92009-1503	3499	Fabricated metal Products	Yes			X						X	No	904.40
MCCLELLAN-PALOMAR AIRPORT	2192		PALOMAR AIRPORT RD	CARLSBAD	CA	92011	4581	Airports, Flying Field & Airport Terminal Svc	Yes	X	X	X		X	X		X	X	No	904.40
MCDONALDs OF PALOMAR AIRPT RD	5990		AVENIDA ENCINAS	CARLSBAD	CA	92008-4405	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
MCDONALDs PLAZA CAMINO REAL	2525	150	EL CAMINO REAL	CARLSBAD	CA	92008-1207	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
MEADOWLARK WATER RECLAMATION F	7941		CORINTIA ST	CARLSBAD	CA	92009	4952	Sewerage Systems	Yes	X	X	X	X	X	X		X	X	Yes	904.51
MEDITERRANEAN CAFÉ	300	106	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2990	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
MENCHIE'S FROZEN YOGURT	5617	STE 120	PASEO DEL NORTE	CARLSBAD	CA	92008-4434	5812	Eating Places	Yes	X	X		X		X			X	Yes	904.31
MERCOTAC INC.	6195	100	CORTE DEL CEDRO	CARLSBAD	CA	92011-1549	3643	Current-Carrying Wiring Devices	Yes		X	X						X	No	904.40
MEXICO VIEJO	2508	D	EL CAMINO REAL	CARLSBAD	CA	92008-1203	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
MEXICO VIEJO	3235	100	CAMINO DE LOS COCHES	CARLSBAD	CA	92009	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
MICRO-PROBE, INCORPORATED	2281		LAS PALMAS DR	CARLSBAD	CA	92011	3825	Inst for Measure & Testing of electricity	Yes		X	X		X			X	X	No	904.40
MIKKO JAPANESE CUISINE	1025		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1804	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
MILES PACIFIC NURSERY	2375		PIO PICO DR	CARLSBAD	CA	92008	0181	Ornamental Floriculture and Nursery Prods	Yes	X			X		X	X	X	X	Yes	904.21
MILES PACIFIC NURSERY	1833		BUENA VISTA WAY	CARLSBAD	CA	92008-1543	5193	Ornamental Floriculture and Nursery Prods	Yes	X	X		X	X	X	X	X	X	Yes	904.21
MILTON'S FINE FOODS	5875		AVENIDA ENCINAS	CARLSBAD	CA	92008-4457	5149	Groceries And Related Products, Not Elsewhere Cl	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
MINUTEMAN PRESS	6353	H/I	EL CAMINO REAL	CARLSBAD	CA	92009	2752	Commercial Printing, Lithographic	Yes		X			X	X			X	No	904.40
MISSION ELECTRIC SUPPLY INC	2225		CAMINO VIDA ROBLE	CARLSBAD	CA	92009-1502	5063	Electrical Apparatus & Equpment Wiring Supplies	Yes			X						X	No	904.40
MR. PEABODY'S	300	202	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2990	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
MVTS TECHNOLOGIES	1940		CAMINO VIDA ROBLE	CARLSBAD	CA	92008-6516	3825	General Warehousing	Yes		X	X						X	No	904.40
MYRON L COMPANY - A CALIF CORP	2450		IMPALA DR	CARLSBAD	CA	92010	3829	Measuring & Controlling Devices, NEC	Yes		X	X		X				X	Yes	904.31
NAKED CAFÉ	300	107A	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008	5812	Eating and Drinking Place	Yes	X	X		X	X	X		X	X	Yes	904.21
NATURE MAKER	6225		EL CAMINO REAL	CARLSBAD	CA	92009-1604	3999	Building Construction-General Building Contractors	Yes		X	X		X			X	X	No	904.40
NATURE'S SUPPLEMENTS	2270	Q	CAMINO VIDA ROBLE	CARLSBAD	CA	92009-1503	2833	Medicinal Chemicals and botanical Products	Yes		X							X	No	904.40
NEW WORLD CAFÉ & RESTAURANT	2559		EL CAMINO REAL	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Yes	X	X							X	Yes	904.21
NEW YORK PIZZERIA	3067		ROOSEVELT ST	CARLSBAD	CA	92008-2313	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
NO FEAR, INC	1812		ASTON AVE	CARLSBAD	CA	92008-7209	5136	Mens & Boys Clothing & Furnishings	Yes	X	X	X	X		X	X	X	X	Yes	904.31

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
NORTE INC	3003		CARLSBAD BLVD	CARLSBAD	CA	92008-2906	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
NORTH COASTAL (PALOMAR) LANDFILL	2198		PALOMAR AIRPORT RD	CARLSBAD	CA	92008	4953	Refuse Systems	Yes	X	X	X	X	X	X	X	X	X	No	904.40
NORTH COUNTY GMC PONTIAC	5454		PASEO DEL NORTE	CARLSBAD	CA	92008-4427	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
NORTH COUNTY PLAZA	1810		MARRON RD	CARLSBAD	CA	92008	6552	Operators of Nonresidential Buildings	Yes	X	X		X	X	X	X	X	X	Yes	904.21
NOVEN PHARMACEUTICALS, INC	2732		LOKER AVE W	CARLSBAD	CA	92010-6603	2834	Pharmaceutical Preparations	Yes			X	X	X	X		X	X	Yes	904.31
NOZOMI # 3	3050	A	PIO PICO DR	CARLSBAD	CA	92008-1954	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
NRG CABRILLO POWER STATION	4600		CARLSBAD BLVD	CARLSBAD	CA	92008-4301	4911	Electric Services	Yes		X	X		X				X	Yes	904.31
NUMINUS, LLC	2215	C	FARADAY AVE	CARLSBAD	CA	92008	3646	Commercial, Industrial, and Institutional Electric Ligl	Yes		X	X			X		X	X	Yes	904.31
OASIS NURSERY AND LANDSCAPING, INC.	4901		EL CAMINO REAL	CARLSBAD	CA	92008-3748	5193	Flowers, Nursery Stock, Supplies	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
OCEAN HOUSE	300	300	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2991	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
OLIVE GARDEN, THE #120	1884		MARRON RD	CARLSBAD	CA	92008-1172	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
OLIVENHAIN MUNICIPAL WATER DISTRICT	1966		OLIVENHAIN RD	CARLSBAD	CA	92024	4941	Water Systems	Yes		X	X	X	X			X	X	Yes	904.51
ON A ROLL	2794	110	LOKER AV W	CARLSBAD	CA	92008-6616	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
ON THE MED...	2525	STE 142	EL CAMINO REAL	CARLSBAD	CA	92008-1207	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
ORTEGA'S SAIL AND CANVAS	6102	A	AVENIDA ENCINAS	CARLSBAD	CA	92011	2394	Manufacture Metal Awnings, Covers	Yes			X						X	No	904.40
ORTHO ORGANIZERS INC.	1822		ASTON AVE	CARLSBAD	CA	92008-7306	3843	Dental Equipment And Supplies	Yes			X		X		X	X	X	Yes	904.31
O'SULLIVAN'S IRISH PUB	640		GRAND AVE	CARLSBAD	CA	92008-2365	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
OUTSOURCE MANUFACTURING	1600		FARADAY AVE	CARLSBAD	CA	92008-7313	3699	Electrical Contract Manufacturing	Yes			X						X	Yes	904.31
OVERSEAS CHINESE RESTAURANT	2820		ROOSEVELT ST	CARLSBAD	CA	92008-1619	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
P.F. CHANG'S CHINA BISTRO	5621		PASEO DEL NORTE	CARLSBAD	CA	92008-4434	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
PACIFIC CNC MACHINE	2702		GATEWAY ROAD	CARLSBAD	CA	92009-	3599	Indus./Commercial Equipment, Not Elsewhere Clas	Yes		X	X						X	Yes	904.31
PACIFIC COAST PRINTING	3021		STATE ST	CARLSBAD	CA	92008-2314	2759	Commercial Printing, NEC	Yes		X				X			X	Yes	904.21
PACIFICA FLOWERS INC.	1785		CHESTNUT AVE	CARLSBAD	CA	92008	0181	Ornamental Floriculture	Yes	X			X		X	X	X	X	Yes	904.31
PACIFICA FLOWERS INC.	2928		VALLEY ST	CARLSBAD	CA	92008-1152	0181	Ornamental Floriculture	Yes	X			X		X	X	X	X	Yes	904.21
PALOMAR AIRPORT ARCO	1991		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-1305	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	No	904.40
PALOMAR AUTOMOTIVE (FORMERLY: ABLE)	665		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-1024	7549	General Automotive Repair Shops	Yes		X	X		X	X		X	X	No	904.40
PALOMAR CLEANERS	2221	F	LAS PALMAS DR	CARLSBAD	CA	92011	7216	Drycleaning plants	Yes		X							X	No	904.40
PALOMAR DELI	6150	C	YARROW DR	CARLSBAD	CA	92009-1536	5812	Eating & Drinking Places	Yes									X	No	904.40
PALOMAR DISPLAY PRODUCTS, INC.	1945		KELLOGG AVE	CARLSBAD	CA	92008-6582	3577	Computer Peripheral Equipment	Yes		X	X		X				X	No	904.40
PALOMAR HAND CAR WASH & DETAILING	6019		PASEO DEL NORTE	CARLSBAD	CA	92011	7542	Carwashes	Yes			X		X	X			X	No	904.40
PALOMAR MOBIL	899		PALOMAR AIRPORT RD	CARLSBAD	CA	92011	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	No	904.40
PALOMAR SIGN COMPANY	5205	G	AVENIDA ENCINAS	CARLSBAD	CA	92008-4366	3993	Signs And Advertising Specialties	Yes		X	X		X				X	Yes	904.31
PALOMAR TECHNOLOGIES, INC.	2728		LOKER AV W	CARLSBAD	CA	92008-6603	3674	Semiconductors And Related Devices	Yes		X	X		X				X	Yes	904.31
PANDA EXPRESS # 393	2560		EL CAMINO REAL	CARLSBAD	CA	92008-1201	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
PANDA EXPRESS #635	6951		EL CAMINO REAL	CARLSBAD	CA	92009-4146	5812	Eating & Drinking Places	Yes	X	X			X				X	No	904.51
PANDA EXPRESS #729	5630	141	PASEO DEL NORTE	CARLSBAD	CA	92008-4484	5812	Eating & Drinking Places	Yes	X	X			X				X	Yes	904.31
PANERA BREAD	1935		CALLE BARCELONA	CARLSBAD	CA	92009-0000	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
PAPA C'S MEXICAN FOOD	5806	105	VAN ALLEN WAY	CARLSBAD	CA	92008-7300	5812	Eating & Drinking Places	Yes	X				X				X	Yes	904.31
PARK HYATT AVIARA	7100		FOUR SEASONS PT	CARLSBAD	CA	92011	7011	Hotels and Motels	Yes	X	X	X	X	X		X	X	X	Yes	904.51
PAT & OSCAR'S	2525		EL CAMINO REAL	CARLSBAD	CA	92008-1204	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
PAT & OSCAR'S	965		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-1110	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	No	904.40
PEET'S COFFEE AND TEA	2641	103	GATEWAY ROAD	CARLSBAD	CA	92009-1726	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
PEKING GARDEN	6990	K	EL CAMINO REAL	CARLSBAD	CA	92009-4112	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
PELICAN PACKAGING, INC.	5816		DRYDEN PL	CARLSBAD	CA	92008-6527	3669	Communications Equipment	Yes		X	X		X				X	No	904.40

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										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
PELLY'S FISH MARKET & DELI	7110	101	AVENIDA ENCINAS	CARLSBAD	CA	92009-4658	5812	Eating & Drinking Places	Yes	X	X			X				X	No	904.51
PER SE RESTAURANT & WINEBAR LLC	560		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2303	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
PFM MEDICAL, INC.	1815	STE 106	ASTON AVE	CARLSBAD	CA	92008-7340	5047	Medical, Dental, And Hospital Equipment & Supplie	Yes									X	No	904.31
PICK UP STIX	7150	STE 102	AVENIDA ENCINAS	CARLSBAD	CA	92009	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
PICK UP STIX	7750	STE A1	RANCHO SANTA FE RD	CARLSBAD	CA	92009-0000	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
PICKLES CATERING & DELI	5670	H	EL CAMINO REAL	CARLSBAD	CA	92008-7125	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
PIZZA HUT	2588	B/C	EL CAMINO REAL	CARLSBAD	CA	92008-1211	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
PIZZA PORT BREWING CO	561		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2304	2082	Brewery	Yes	X	X	X		X	X		X	X	Yes	904.21
PIZZA PORT CARLSBAD BREWERY	571		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2304	5812	Eating & Drinking Places	Yes	X	X			X	X		X	X	Yes	904.21
PIZZA SHUTTLE & SUBS, TOO	959		TAMARACK AVE	CARLSBAD	CA	92008-3414	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
PLANTPLAY	4915		EL CAMINO REAL	CARLSBAD	CA	92008-3731	5261	Retail Nurseries, Lawn And Garden Supply Stores	Yes				X			X	X	X	Yes	904.31
PLASTICS ENGINEERING & DEV.	2731	C	LOKER AV W	CARLSBAD	CA	92010-6601	3089	Plastic Products, NEC	Yes	X	X		X	X		X	X	X	Yes	904.31
PLAZA CAMINO REAL, L.P.	2525		EL CAMINO REAL	CARLSBAD	CA	92008	6512	Non-Residential Property Mangement	Yes	X	X	X	X	X	X	X	X	X	Yes	904.21
PLAZA PASEO REAL	6941		EL CAMINO REAL	CARLSBAD	CA	92009	6512	Operators of Nonresidential Buildings	Yes	X	X		X	X	X	X	X	X	Yes	904.51
PLAZA REAL CLEANERS INC	6949	108	EL CAMINO REAL	CARLSBAD	CA	92009	7216	Dry Cleaning Plant	Yes		X							X	No	904.51
PLAZA SOUTH CLEANERS	2620		EL CAMINO REAL	CARLSBAD	CA	92008-1214	7212	Laundry Cleaners	Yes		X							X	No	904.21
PODS OF SAN DIEGO, LLC	2858	200	E LOKER AVE	CARLSBAD	CA	92010-6608	4225	General Warehousing And Storage	Yes		X	X					X	X	Yes	904.31
POINSETTIA PLAZA	7040		AVENIDA ENCINAS	CARLSBAD	CA	92009	6512	Operators of Nonresidential Buildings	Yes	X	X		X	X	X	X	X	X	Yes	904.51
POINSETTIA VILLAGE CHEVRON	7170		AVENIDA ENCINAS	CARLSBAD	CA	92009-4656	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	Yes	904.51
POLLOS MARIA	3055		HARDING ST	CARLSBAD	CA	92008-2321	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
POND AND AQUARIUM SOURCE	2599		STATE ST	CARLSBAD	CA	92008	1521	Pond and Aquarium Installation	Yes	X	X		X	X			X	X	Yes	904.21
PONTO CLEANERS	690	101	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2307	7216	Drycleaning Plants, Except Rug Cleaning	Yes		X							X	No	904.21
PONTO STORAGE INC	7290		PONTO DR	CARLSBAD	CA	92009-4601	4225	General Warehousing & Storage	No		X						X	X	No	904.51
POWER ONE INC.	5999	100	AVENIDA ENCINAS	CARLSBAD	CA	92008	3629	Electrical Indl Apparatus, NEC	Yes		X							X	No	904.31
PREMIER JET	2100		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-4414	4581	Airports, Flying Fields, And Airport Terminal Ser	Yes	X	X	X		X	X		X	X	No	904.40
PREMIERE CLEANERS	2669	101	GATEWAY ROAD	CARLSBAD	CA	92009-1726	7216	Dry Cleaning Plant	Yes		X							X	No	904.51
PRIMO PIZZA & PASTA	7110	103	AVENIDA ENCINAS	CARLSBAD	CA	92009-4658	5812	Eating & Drinking Places	Yes	X	X			X				X	No	904.51
PRODUCT SLINGSHOT INC.	2221		RUTHERFORD RD	CARLSBAD	CA	92008	3999	Manufacturing Industries, NEC	Yes		X	X		X	X	X	X	X	Yes	904.31
PRONTOS GOURMET MARKET	2812		ROOSEVELT ST	CARLSBAD	CA	92008-1619	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
PROVISION HEALTH CORP	2270	STE P	CAMINO VIDA ROBLE	CARLSBAD	CA	92011-1503	5149	Groceries And Related Products, Not Elsewhere Cl	Yes		X							X	No	904.40
PUBLIC STORAGE	6211		CORTE DEL ABETO	CARLSBAD	CA	92009-1405	4225	General Warehousing And Storage	Yes		X						X	X	No	904.40
PUBLIC STORAGE	3235		TYLER ST	CARLSBAD	CA	92008-3026	4225	General Warehousing And Storage	No									X	No	904.21
QUALIGEN, INC.	2042	A	CORTE DEL NOGAL	CARLSBAD	CA	92009-1410	3841	Surgical & Med Instr & Apparatus	Yes		X	X		X				X	No	904.40
QUALITY AIRCRAFT CARE	2056		PALOMAR AIRPORT RD	CARLSBAD	CA	92008-4863	4581	Aircraft Washing	Yes	X	X	X		X	X		X	X	No	904.40
QUALITY INN & SUITES	751		RAINTREE DR	CARLSBAD	CA	92009-3206	7011	Hotels And Motels	Yes	X	X	X	X	X	X			X	No	904.40
RALPHS GROCERY COMPANY #175	7140	FRNT	AVENIDA ENCINAS	CARLSBAD	CA	92009-4656	5411	Grocery Stores	Yes	X	X		X	X	X	X	X	X	Yes	904.51
RAMADA INN & SUITES	751		MACADAMIA DR.	CARLSBAD	CA	92011	7011	Hotels And Motels	Yes	X	X		X	X				X	No	904.40
RANCHO CARLSBAD GOLF COURSE	5200		EL CAMINO REAL	CARLSBAD	CA	92010-7118	7992	Public Golf Courses	Yes				X	X	X	X	X	X	Yes	904.31
RANCHO DEL ORO TOWING (CONTRACT SERVICES)	6050		AVENIDA ENCINAS	CARLSBAD	CA	92009-1054	7549	Automotive Services	Yes		X	X		X				X	No	904.40
REFLEX CORPORATION	1825		ASTON AVE	CARLSBAD	CA	92008-7341	3199	Leather Goods, Manufacturing	Yes									X	No	904.31
RELM WINE & BEER BISTRO	2917		STATE ST	CARLSBAD	CA	92008-2337	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
RESPIRONICS CALIFORNIA INC. (PHILIPS HEALTHCARE)	2271		COSMOS T	CARLSBAD	CA	92011-1517	3842	Orhtopedic, Prosthetic & Surgical Appliances and S	Yes		X	X		X			X	X	No	904.40
REY RIVER FARMS			CANNON RD AND RAILROAD TRACKS	CARLSBAD	CA	92008	0182	Vegatable Grower	Yes	X	X		X			X	X	X	Yes	904.31
RICE KING	5808	115	VAN ALLEN WAY	CARLSBAD	CA	92008-7300	5812	Eating & Drinking Places	Yes	X								X	Yes	904.31

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
RIEKER MACHINE INC.	2796	108	LOKER AV W	CARLSBAD	CA	92010-6618	3599	Indus./Commercial Equipment, Not Elsewhere Clas	Yes			X						X	Yes	904.31
RITE AID #5621	955		TAMARACK AVE	CARLSBAD	CA	92008	5912	Drug Stores and Proprietary Stores	Yes		X							X	No	904.31
RITE AID #5622	7100	C	AVENIDA ENCINAS	CARLSBAD	CA	92009-4656	5912	Drug Stores and Proprietary Stores	Yes		X							X	No	904.51
ROCK & ROLL SUSHI	7720	B	EL CAMINO REAL	CARLSBAD	CA	92009-8509	5812	Eating Places	Yes	X	X			X				X	No	904.51
ROCK N ROLL TUMBLED STONE, LLC	6084	STE 105	CORTE DEL CEDRO	CARLSBAD	CA	92011-1555	3281	Cut Stone And Stone Products	Yes		X						X	X	No	904.40
ROCKWELL COLLINS OPTRONICS, INC.	2752		LOKER AV W	CARLSBAD	CA	92008-6603	3827	Optical Instruments & Lenses	Yes		X	X		X				X	Yes	904.31
ROMER, INC. - HEXAGON METROLOGY, INC	5145	I	AVENIDA ENCINAS	CARLSBAD	CA	92008-4322	5089	Industrial Machinery and Equipment	Yes		X	X	X	X	X		X	X	Yes	904.31
RUBIO'S BAJA GRILL	2604	A	EL CAMINO REAL	CARLSBAD	CA	92008-1214	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
RUBIO'S BAJA GRILL	5620	128	PASEO DEL NORTE	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Yes	X	X			X				X	Yes	904.31
RUBIO'S RESTAURANTS, INC	2675	104	GATEWAY ROAD	CARLSBAD	CA	92009-1726	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
RUBYS DINER, CARLSBAD	5630	128D	PASEO DEL NORTE	CARLSBAD	CA	92008-4456	5812	Eating & Drinking Places	Yes	X	X			X				X	Yes	904.31
RUDVALIS ORCHIDS	6595		BLACK RAIL RD	CARLSBAD	CA	92011-2602	182	Ornamental Floriculture & Nursery Products	Yes	X			X		X	X	X	X	Yes	904.31
RUDY'S TACO SHOP LA COSTA	7662	102	EL CAMINO REAL	CARLSBAD	CA	92009	5812	Eating & Drinking Places	Yes	X	X			X				X	No	904.51
SABEMOS BEVERAGES, LLC	5920	STE 100	PASTEUR CT	CARLSBAD	CA	92008-7317	5182	Wine And Distilled Alcoholic Beverages	Yes	X	X		X	X		X	X	X	Yes	904.31
SABRE SCIENCES, INC.	2233	K	FARADAY AVE	CARLSBAD	CA	92008	2844	Perfumes, Cosmetics, & Other Toilet Preparations	Yes			X	X	X	X		X	X	Yes	904.31
SAFC PHARMA	6211		EL CAMINO REAL	CARLSBAD	CA	92009-1904	2836	Biological Products	Yes		X							X	No	904.40
SAFC PHARMA	6219		EL CAMINO REAL	CARLSBAD	CA	92009-1904	2836	Biological Products, Except Diagnostic Substances	Yes		X		X				X	X	No	904.40
SAFELITE AUTO GLASS	1060	I	AUTO CENTER CT	CARLSBAD	CA	92008-4321	7536	Automotive Glass Replace Shops	Yes		X	X		X	X		X	X	Yes	904.31
SAMMYS WOODFIRED PIZZA	5970		AVENIDA ENCINAS	CARLSBAD	CA	92008-4405	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
SAN DIEGO INTERNATIONAL FLORAL TRADE CENTER	5600	126	AVENIDA ENCINAS	CARLSBAD	CA	92008	6531	Operators of Non-residential Buildings	Yes	X	X		X	X	X	X	X	X	Yes	904.31
SAN DIEGO N.C. FOIL & EMBOSS	6353	STE H	EL CAMINO REAL	CARLSBAD	CA	92009-1607	7389	Business Services, Not Elsewhere Classified	Yes		X	X		X				X	No	904.40
SAN DIEGO SIGN COMPANY, INC.	3201		LIONSHEAD AVE	CARLSBAD	CA	92010-4710	2759	Commercial Printing, Not Elsewhere Classified	Yes		X	X						X	Yes	904.31
SAN SAI JAPANESE GRILL	5600	115A	PASEO DEL NORTE	CARLSBAD	CA	92008-4441	5812	Eating Places	Yes	X	X			X				X	Yes	904.31
SCUDELLARO BREAD	2720	N	LOKER AV W	CARLSBAD	CA	92008-6606	2051	Bread & Other Baker Prods	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
SDG&E - C/O SEMPRA ENERGY	5016		CARLSBAD BLVD	CARLSBAD	CA	92008-4303	4932	Gas and Other Services Combined	Yes		X	X		X			X	X	Yes	904.31
SEARS ROEBUCK & COMPANY	2561		EL CAMINO REAL	CARLSBAD	CA	92008-1202	5311	General Merchandise Stores	Yes		X	X		X				X	Yes	904.21
SELECT CABINETS AND FURNITURE MFG.	2270	T	CAMINO VIDA ROBLE	CARLSBAD	CA	92009	2521	Wholesale Furniture and Cabinet Maker	Yes		X	X		X			X	X	No	904.40
SELECT SUPPLEMENTS INC	5800		NEWTON DR	CARLSBAD	CA	92008-7311	2023	Dry, Condensed, Evaporated Dairy Products	Yes		X						X	X	Yes	904.31
SENDX MEDICAL, INC.	1945		PALOMAR OAKS WAY	CARLSBAD	CA	92011-1300	3841	Surgical and medical apparatus	Yes			X						X	No	904.40
SENOR GRUBBY'S	377		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2918	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
SERO CARLSBAD, LLC (ISLAND@CARLSBAD)	5802-5814		VAN ALLEN WAY	CARLSBAD	CA	92008	6512	Operators of Nonresidential Buildings	Yes	X	X		X	X	X	X	X	X	Yes	904.31
SETTORE 64 LLC	3263		CAMINO DE LOS COCHES	CARLSBAD	CA	92009-8967	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
SHAPELL HOMES (ROBERSTON RANCH WEST VILLAGE)	5050		EL CAMINO REAL	CARLSBAD	CA	92008-3772	8181	Crop Production	Yes	X	X		X				X	X	Yes	904.31
SHAWS AUTOSPORT LTD	2531	E	STATE ST	CARLSBAD	CA	92008-1678	7538	General Automotive Repair Shops	Yes		X	X		X			X	X	Yes	904.21
SHEICO (SGCA) USA	6150		CORTE DEL CEDRO	CARLSBAD	CA	92011-1554	2839	Apparel & Accessories, NEC	Yes		X							X	No	904.40
SHELL (PALOMAR AIRPORT)	665		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-1024	5541	Gasoline Service Stations	Yes		X	X		X	X		X	X	No	904.40
SHERATON CARLSBAD RESORT & SPA	5480		GRAND PACIFIC DR	CARLSBAD	CA	92008-4723	7011	Hotels And Motels	Yes	X		X	X	X		X	X	X	Yes	904.31
SIERRA WIRELESS	2200	150	FARADAY AVE	CARLSBAD	CA	92008	8731	Research, Development, And Testing Services	Yes		X	X		X			X	X	Yes	904.31
SIGN ME UP	2225	STE E	FARADAY AV	CARLSBAD	CA	92008-7212	2759	Commercial Printing, Not Elsewhere Classified	Yes									X	No	904.31
SIGNS ON TIME	5670	K	EL CAMINO REAL	CARLSBAD	CA	92008-7125	3993	Sign Making & Painting	Yes		X			X	X			X	No	904.31
SIMA - VILLAGE FAIRE	300	108	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008	6512	Operators of Nonresidential Buildings	Yes	X	X		X	X	X	X	X	X	Yes	904.21
SOUPLANTATION	1860		MARRON RD	CARLSBAD	CA	92008-1172	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
SOUPLANTATION EXPRESS	2681	103	GATEWAY RD	CARLSBAD	CA	92009-1767	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
SPECTRUM ASSEMBLY INC	6300	# 100	YARROW DR	CARLSBAD	CA	92011-1542	3699	Elec. Mach./Equip./Supplies, Not Elsewhere Classi	Yes			X						X	No	904.40

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
SPIRIT GARDEN, LLC	6351	STE C	YARROW DR	CARLSBAD	CA	92011-1545	5149	Groceries And Related Products, Not Elsewhere Cl	Yes		X							X	No	904.40
SPIRITOS ITALIAN DINER	2508	E	EL CAMINO REAL	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
SPORTS GIANT LLC	5928		FARNSWORTH CT	CARLSBAD	CA	92008-7303	5941	Sporting Goods Stores And Bicycle Shops	Yes		X							X	No	904.31
SQUADRA, INC.	5900	140	SEA LION PL	CARLSBAD	CA	92010	2389	Men's And Boy's Clothing And Furnishings	Yes									X	No	904.31
ST. J INC / JJ'S DINING #6	6155		EL CAMINO REAL	CARLSBAD	CA	92009-1602	5812	Eating Places	Yes	X	X		X	X				X	No	904.40
STAINED GLASS OVERLAY	2579		STATE ST	CARLSBAD	CA	92008-1624	3231	Stained Glass Design	Yes		X	X		X				X	Yes	904.21
STANDARD FILTER CORPORATION	5928		BALFOUR CT	CARLSBAD	CA	92008-7304	3564	Purification & Dust Collection Equipment	Yes		X							X	No	904.31
STAPLES THE OFFICE SUPPLY STORE	2712		LOKER AV W	CARLSBAD	CA	92010-6603	5943	Stationery Stores	Yes		X							X	No	904.31
STARBUCKS COFFEE # 10851	2708	100	LOKER AV W	CARLSBAD	CA	92010-6603	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
STARBUCKS COFFEE #5363	2924		CARLSBAD BLVD	CARLSBAD	CA	92008-2903	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
STARBUCKS COFFEE #5767	7680	101	EL CAMINO REAL	CARLSBAD	CA	92009	5812	Eating & Drinking Places	Yes	X	X			X				X	No	904.51
STATER BROS. MARKET # 186	2687		GATEWAY ROAD	CARLSBAD	CA	92009-1726	5411	Grocery Stores	Yes	X				X				X	No	904.51
STEROGENE BIOSEPARATIONS, INC.	5922		FARNSWORTH CT	CARLSBAD	CA	92008-7303	2836	Biological Research	Yes									X	No	904.31
SUBMARINA CARLSBAD	300	201A	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2992	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
SUBMARINA CARLSBAD FOOD COURT	5812	120	VAN ALLEN WAY	CARLSBAD	CA	92008-7300	5812	Eating & Drinking Places	Yes	X								X	Yes	904.31
SUBWAY	2540	A	EL CAMINO REAL	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
SUBWAY	7110	100	AVENIDA ENCINAS	CARLSBAD	CA	92009-4658	5812	Eating & Drinking Places	Yes	X	X			X				X	No	904.51
SUBWAY	2708	101	LOKER AV W	CARLSBAD	CA	92010	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
SUBWAY #4584	6020	A19	PASEO DEL NORTE	CARLSBAD	CA	92009-1146	5812	Eating & Drinking Places	Yes	X				X				X	No	904.40
SUBWAY 50857	5620	127C	PASEO DEL NORTE	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Yes	X	X			X				X	Yes	904.31
SUN COAST TINT	1060	STE N	AUTO CENTER CT	CARLSBAD	CA	92008-4321	7549	Automotive Services, Except Repair And Carwashe	Yes		X	X		X	X			X	Yes	904.31
SUNNY FRESH CLEANERS	7040	112	AVENIDA ENCINAS	CARLSBAD	CA	92009	7216	Dry Cleaner	Yes		X							X	No	904.51
SUPER CAFE	1854	104	MARRON RD	CARLSBAD	CA	92008-1172	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
SUPER DONUTS	590		GRAND AVE	CARLSBAD	CA	92008-2326	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
SURF BROTHERS TERIYAKI	2708	103	LOKER AV W	CARLSBAD	CA	92010-6603	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
SURYA INC	6205		EL CAMINO REAL	CARLSBAD	CA	92009-1604	5137	Women's Children's, And Infants' Clothing And Acc	Yes					X				X	No	904.40
SUSHI TAISHO	300	214	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2991	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
SWIRLICIOUS YOGURT	2992		STATE ST	CARLSBAD	CA	92008-2336	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
SYNERGEYES INC.	2232		RUTHERFORD RD	CARLSBAD	CA	92008-6581	3851	Ophthalmic Goods	Yes									X	No	904.31
SYNERGEYES, INC.	2236	103-105	RUTHERFORD RD	CARLSBAD	CA	92008-8814	3851	Ophthalmic Goods	Yes										No	904.31
SYNTRON BIORESEARCH, INC.	2774		LOKER AV W	CARLSBAD	CA	92008-6610	5047	In Vitro & In Vitro Diagnostics	Yes			X	X	X	X		X	X	Yes	904.31
SYSTEMS, MACHINES, AUTOMATION COMPONENTS CO	1695		FARADAY AVE	CARLSBAD	CA	92008-7314	3599	Indus/Commercial Establishments	Yes		X	X		X				X	Yes	904.31
SYSTEMS, MACHINES, AUTOMATION COMPONENTS CO.	5807		VAN ALLEN WAY	CARLSBAD	CA	92008-7309	3599	Ind & Comml Machinery & Equip, NEC	Yes		X	X		X				X	Yes	904.31
TACO BELL/JODIKA ENTERPRISES	6017		PASEO DEL NORTE	CARLSBAD	CA	92011	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	No	904.40
TAMARACK BEACH RESORT	3200		CARLSBAD BLVD	CARLSBAD	CA	92008-3101	7011	Hotels And Motels	Yes	X	X		X	X	X	X	X	X	Yes	904.31
TAMER BEVERAGE CO.	5845	133	AVENIDA ENCINAS	CARLSBAD	CA	92008	5149	Groceries And Related Products, Not Elsewhere Cl	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
TAYLOR MADE GOLF COMPANY INC	5545		FERMI CT	CARLSBAD	CA	92008-7324	3949	Sporting and Athletic Goods, NEC	Yes	X								X	Yes	904.31
TAYLOR MADE GOLF COMPANY INC	4155		SALK AV	CARLSBAD	CA	92008	7999	Amusement and Recreation Services	Yes				X				X	X	Yes	904.31
TGI FRIDAY'S	890		PALOMAR AIRPORT RD	CARLSBAD	CA	92011-4443	5812	Eating & Drinking Places	Yes	X	X		X	X		X	X	X	No	904.40
THAI PASTA	7680	103	EL CAMINO REAL	CARLSBAD	CA	92009-7931	5812	Eating Places	Yes	X	X			X				X	No	904.51
THAT PIZZA PLACE	2622	B/C	EL CAMINO REAL	CARLSBAD	CA	92008-1214	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
THE COUNTER CUSTOM BUILT BURGERS	1923	STE 148	CALLE BARCELONA	CARLSBAD	CA	92009-8458	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
THE FORUM	1905	200	CALLE BARCELONA	CARLSBAD	CA	92009	6512	Retail Shopping Center	Yes	X	X		X	X	X	X	X	X	Yes	904.51
THERA LIGHT, INC.	2794	105	LOKER AV W	CARLSBAD	CA	92008-6616	3841	Commercial Physical and Biological Research	Yes					X				X	No	904.31

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
THREADS	5814	145	VAN ALLEN WAY	CARLSBAD	CA	92008-7359	7612	Laundry And Garment Services, Not Elsewhere Cla	Yes		X							X	No	904.31
TIBERIUS ANTRO RISTORANTE ITALIANO	264		CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2915	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
TIME WARNER CABLE	5720		EL CAMINO REAL	CARLSBAD	CA	92008	4841	Cable Provider	Yes		X	X	X	X			X	X	Yes	904.31
TIMELY MEDICAL INNOVATIONS LLC.	5365	F	AVENIDA ENCINAS	CARLSBAD	CA	92008-4361	3851	Ophthalmic Goods	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
TIN LEAF FRESH KITCHEN	6985	108	EL CAMINO REAL	CARLSBAD	CA	92009	5812	Eating & Drinking Places	Yes	X	X			X				X	No	904.51
TIP TOP MEATS & EUROPEAN DELI	6118		PASEO DEL NORTE	CARLSBAD	CA	92009-1116	5812	Eating & Drinking Places	Yes	X	X			X			X	X	No	904.40
TODO SUSHI	7180	100	AVENIDA ENCINAS	CARLSBAD	CA	92011	5812	Eating & Drinking Places	Yes	X	X			X				X	No	904.51
TOGOs EATERY	6971	201	EL CAMINO REAL	CARLSBAD	CA	92009-4114	5812	Eating & Drinking Places	Yes	X	X							X	No	904.51
TOMMY V'S URBAN KITCHEN	2659	STE 101	GATEWAY RD	CARLSBAD	CA	92009-1760	5812	Eating Places	Yes	X	X			X				X	No	904.51
TOMOYAMA SUSHI	6949	201	EL CAMINO REAL	CARLSBAD	CA	92009	5812	Eating Places	Yes	X	X							X	No	904.51
TOP OF THE BAGEL	2540	E	EL CAMINO REAL	CARLSBAD	CA	92008	5461	Bagel Shop	Yes	X	X		X	X	X	X	X	X	Yes	904.21
TOYOTA CARLSBAD (SERVICE CENTER)	6020		AVENIDA ENCINAS	CARLSBAD	CA	92011	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X				X	No	904.40
TOYOTA CARLSBAD USED CAR DEPT.	5124		PASEO DEL NORTE	CARLSBAD	CA	92008-4335	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X			X	X	Yes	904.31
TOYOTA CARLSBAD/ SCION CARLSBAD	5434		PASEO DEL NORTE	CARLSBAD	CA	92008-4426	5511	Motor Vehicle Dealers (New And Used)	Yes		X	X		X	X		X	X	Yes	904.31
TOYOTA CARLSBAD/ SCION CARLSBAD	5424		PASEO DEL NORTE	CARLSBAD	CA	92008-4426	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
TOYOTA OF CARLSBAD	6030		AVENIDA ENCINAS	CARLSBAD	CA	92011	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X				X	No	904.40
TRADER JOE'S	2629		GATEWAY ROAD	CARLSBAD	CA	92009-1726	5411	Grocery Stores	Yes	X	X				X	X	X	X	Yes	904.51
TRAVEL INN MOTEL	3666		PIO PICO DR	CARLSBAD	CA	92008-2554	7011	Hotels And Motels	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
TRINAMIC MOBILE TRUCK SERVICES	3293		ROOSEVELT ST	CARLSBAD	CA	92008-3042	7538	General Automotive Repair Shops	Yes		X	X		X	X			X	Yes	904.31
TUSCANY RESTAURANT	6981	103	EL CAMINO REAL	CARLSBAD	CA	92009-4149	5812	Eating & Drinking Places	Yes	X	X		X	X				X	Yes	904.51
TWENTY/20 GRILL & WINE BAR	5480		GRAND PACIFIC DR	CARLSBAD	CA	92008-4723	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
U-HAUL CO OF CALIFORNIA	6175		PASEO DEL NORTE	CARLSBAD	CA	92011-1117	4225	General Warehousing & Storage	Yes		X							X	No	904.40
UNITE EUROTHERAPY, INC.	6150	B	CORTE DEL CEDRO	CARLSBAD	CA	92011-1554	2844	Perfumes, Cosmetics, & Other Toilet Preparations	Yes		X							X	No	904.40
US ALOE (REAL ALOE, INC.; NUVONYX)	2045		CORTE DEL NOGAL	CARLSBAD	CA	92011-1411	2033	Canned Fruit, Vegetables, Preserves, Jams, Jellies	Yes	X				X				X	No	904.40
VALDIVIA FARMS	4914		EL CAMINO REAL	CARLSBAD	CA	92008-3746	0181	Crop Production	Yes	X			X		X	X	X	X	Yes	904.31
VANGUARD INDUSTRIES WEST INC	2440		IMPALA DR	CARLSBAD	CA	92008-7226	5136	Apparel, Piece Goods, Notions	Yes			X		X				X	Yes	904.31
VIASAT INC	6155		EL CAMINO REAL	CARLSBAD	CA	92009-1602	0873	Research Development and Testing Services	No			X		X				X	No	904.40
VIASAT INC	6161		EL CAMINO REAL	CARLSBAD	CA	92009-1604	0873	Research Development and Testing Services	No									X	No	904.40
VIASAT INC	6167		EL CAMINO REAL	CARLSBAD	CA	92009-1603	0873	Research Development and Testing Services	No									X	No	904.40
VIASAT, INC	6305		EL CAMINO REAL	CARLSBAD	CA	92009-1602	0873	Research, Develop, + Testing Services	Yes			X		X				X	No	904.40
VIASAT, INC.	6191		EL CAMINO REAL	CARLSBAD	CA	92009-1602	0873	Research, Development, And Testing Services	No			X		X				X	No	904.40
VIASAT, INC.	6183	BLDG 5	EL CAMINO REAL	CARLSBAD	CA	92009-1602	0873	Research, Development, And Testing Services	No			X						X	No	904.40
VIGILUCCI'S SEAFOOD & STEAK HOUSE	3878		CARLSBAD BLVD	CARLSBAD	CA	92008-4008	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
VILLA FRESH ITALIAN KITCHEN	5620	125c	PASEO DEL NORTE	CARLSBAD	CA	92008-4483	5812	Eating & Drinking Places	Yes	X	X			X				X	Yes	904.31
VILLAGE GRILLE, THE	2833		STATE ST	CARLSBAD	CA	92008-1631	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
VILLAGE KITCHEN & PIE SHOPPE, INC.	950		TAMARACK AVE	CARLSBAD	CA	92008-3413	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
VILLAGE PUB, THE	2990		STATE ST	CARLSBAD	CA	92008-2336	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
VINAKA - LIFE'S JUST DESSERTS	300	211	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
VINTAGE	2959		STATE ST	CARLSBAD	CA	92008-2337	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
VISTA BIOLOGICALS CORP	2120	C	LAS PALMAS DR	CARLSBAD	CA	92011-1523	2836	Biological Products, Except Diagnostic Substances	Yes					X				X	No	904.40
VONS GROCERY COMPANY #2065	6951		EL CAMINO REAL	CARLSBAD	CA	92009-4146	5411	Grocery Stores	Yes	X	X		X	X	X	X		X	Yes	904.51
VONS GROCERY COMPANY #2142	2560		EL CAMINO REAL	CARLSBAD	CA	92008-1201	5411	Grocery Stores	Yes	X	X		X	X	X	X	X	X	Yes	904.21
VONS GROCERY COMPANY #2343	985		TAMARACK AVE	CARLSBAD	CA	92008-3414	5411	Grocery Stores	Yes	X	X		X	X	X	X	X	X	Yes	904.31
WAVERLY TILE INC.	2091	STE A	LAS PALMAS DR	CARLSBAD	CA	92011-1551	7389	Business Services, Not Elsewhere Classified	Yes		X			X				X	No	904.40

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants* Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed**	HYDROLOGIC AREA
WAX RESEARCH INC	1965		KELLOGG AVE	CARLSBAD	CA	92008-6582	3999	Manufacturer Surf Board Wax	Yes		X			X	X		X	X	No	904.40
WAXX IT AUTOMOTIVE DETAILING	5215		CAR COUNTRY DR	CARLSBAD	CA	92008	7542	Car Washes	Yes			X		X	X			X	Yes	904.31
WCM WASTE & COMPLIANCE MANAGEMENT	6054		CORTE DEL CEDRO	CARLSBAD	CA	92011	5047	Medical, Dental, And Hospital Equipment & Supplie	Yes		X							X	No	904.40
WESELOH CHEVROLET HUMMER	5335		PASEO DEL NORTE	CARLSBAD	CA	92008-4339	5511	Motor Vehicle Dealers (New and Used)	Yes		X	X		X	X		X	X	Yes	904.31
WESELOH KIA CARLSBAD	5331		PASEO DEL NORTE	CARLSBAD	CA	92008-4339	5511	Motor Vehicle Dealers (New And Used)	Yes		X	X		X	X		X	X	Yes	904.31
WEST BUFFET	2515		EL CAMINO REAL	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
WEST INN & SUITES, LLC	4970		AVENIDA ENCINAS	CARLSBAD	CA	92008-4343	7011	Hotels And Motels	Yes	X	X	X	X	X	X	X	X	X	Yes	904.31
WEST STEAK SEAFOOD AND SPIRITS	4980		AVENIDA ENCINAS	CARLSBAD	CA	92008-4343	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.31
WESTERN FLIGHT, INC.	2210	A	PALOMAR AIRPORT RD	CARLSBAD	CA	92008-4816	4581	Airport Services	Yes	X	X	X		X	X		X	X	No	904.40
WESTERN FLIGHT, INC.	2208		PALOMAR AIRPORT RD	CARLSBAD	CA	92008-4816	4581	Airport Services	Yes	X	X	X		X	X		X	X	No	904.40
WESTMART GAS	4990		AVENIDA ENCINAS	CARLSBAD	CA	92008-0000	5541	Gasoline Service Stations	Yes		X	X		X	X			X	Yes	904.31
WETZELS PRETZELS	5620	122	PASEO DEL NORTE	CARLSBAD	CA	92008-4444	5461	Retail Bakeries	Yes	X	X			X				X	Yes	904.31
WHICH WICH	1935	172	CALLE BARCELONA	CARLSBAD	CA	92009	5812	Eating & Drinking Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
WING DOC I, INC	2508	C1	EL CAMINO REAL	CARLSBAD	CA	92008-1203	5812	Eating & Drinking Places	Yes	X	X		X	X				X	Yes	904.21
WITCH CREEK WINERY	2906		CARLSBAD BLVD	CARLSBAD	CA	92008	2084	Wines, Brandy & Brandy Spirits	Yes	X	X	X	X		X		X	X	Yes	904.31
WOODWORKS PLUS	6104	C/D	AVENIDA ENCINAS	CARLSBAD	CA	92011	2541	Mfg. Cabinets, Lockers, Shelving	Yes									X	No	904.40
XTREME FROZEN YOGURT	2659	# D106	GATEWAY ROAD	CARLSBAD	CA	92009-1726	5812	Eating & Drinking Places	Yes	X	X							X	No	904.51
YMCA	401		CHINQUAPIN AVE	CARLSBAD	CA	92008	7999	Youth Camp	Yes	X	X			X	X		X	X	Yes	904.31
YOGURT DREAM	3263	103	CAMINO DE LOS COCHES	CARLSBAD	CA	92009	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
YOGURT SHACK	6990	L	EL CAMINO REAL	CARLSBAD	CA	92009-4112	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.51
YOSHINO	2913		STATE ST	CARLSBAD	CA	92008-2337	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	Yes	904.21
ZIMMER DENTAL INC.	1900		ASTON AVE	CARLSBAD	CA	92008-7308	3848	Manufacture Dental Implants	Yes									X	No	904.31
ZIMMER DENTAL INC.	6221		EL CAMINO REAL	CARLSBAD	CA	92009	3848	Manufacture Dental Implants	Yes									X	No	904.40
ZONSON COMPANY INC	3197		LIONSHEAD AVE	CARLSBAD	CA	92010-4702	3161	Luggage	Yes		X	X						X	Yes	904.31

* Potential Pollutants - Potential Pollutatnts are constituent groups from the 2005 Baseline Long Term Effectiveness Assessment

** Tributary to a 303(d) Listed - Indicates the facility is tributary to a 2006 303(d) listed water body and potentially generates pollutants for which the water body is impaired.

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
4 DISPLAY DETAILING	1565		THO NINH PL	ESCONDIDO	CA	92027-1963	7542	DETAILING AUTO	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
888 CONSTRUCTION	7825		ENGINEER RD	SAN DIEGO	CA	92111-1924	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A - 1 SIGN MFG	5807		EL CAJON BLVD	SAN DIEGO	CA	92115-3741	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A & J ENVIRONMENTAL SERVICES INC	9085	# A1-85	MISSION BLVD	RIVERSIDE	CA	92509-2806	15	GENERAL CONSTRUCTION (GAS STATION REPAIR)	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A & R SUPERIOR POOL SERVICE	31730		CALLE CATALDO	TEMECULA	CA	92592-3938	7389	POOL CLEANING	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
A & S LANDSCAPIN	3706		PALO VERDE WAY	OCEANSIDE	CA	92056-4322	781	LANDSCAPING & MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A DUIN CONSTRUCTION, INC.	433		SANTA FE DR	ENCINITAS	CA	92024-5134	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A J CRISS INDUSTRIES	1418		GOLDEN CREST DR	ESCONDIDO	CA	92029-4314	17	LANDSCAPER	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A J HARRISON INC	1658		W 11TH ST	UPLAND	CA	91786-3568	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A PLUS CONTRACTORS	9113		CHESAPEAKE DR	SAN DIEGO	CA	92123-1002	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A. MENDOZA LANDSCAPING	1008		LA SOLANA DR	FALLBROOK	CA	92028-2311	782	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A.R.M. PAINTING	2687		WATERBURY WAY	CARLSBAD	CA	92008-1368	1721	Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A-1 HAMILTON LANDSCAPE MAINTENANCE	3659		TRIESTE DR	CARLSBAD	CA	92008-2842	781	Landscape Counseling and Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A-1 PATIO & REMODELING EXPERTS	1280		SANTA FE DR	ENCINITAS	CA	92024-3927	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A1 QUALITY CARPET CLEANING	667		MAGNOLIA AVE	CARLSBAD	CA	92008	7217	Carpet Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AAA LANDSCAPE SPECIALISTS, INC.	1261		SAN ELIJO RD S	SAN MARCOS	CA	92078-1073	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ABC PLUMBING	756		MYCORTE DR	ESCONDIDO	CA	92026-1893	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ABERG & SONS INC	250	STE 104	S PACIFIC ST	SAN MARCOS	CA	92078-2476	17	PLUMBING CONTRACTOR C-36	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ACCENT PAINTING, INC.	7934		LA CAPELA LN	CARLSBAD	CA	92009-9217	1721	Painting And Paper Hanging	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ACCO ENGINEERED SYSTEMS INC	6265		SAN FERNANDO RD	GLENDALE	CA	91201-2214	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ACCURATE PLUMBING	11632		RIVERSIDE DR	LAKESIDE	CA	92040-2316	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ACE EMPIRE PLUMBING	14897		MORNINGSIDE DR	POWAY	CA	92064-2859	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ACE WELDING	1325		S COAST HWY	OCEANSIDE	CA	92054-5121	17	WELDING REPAIRS & FABRICATION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ACG PLUMBING	3568		9TH ST	SAN MARCOS	CA	92078-2316	17	PLUMBING REPAIRS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ACTION AIR COND.& HEATING-S.D.	2750		S SANTA FE AVE	SAN MARCOS	CA	92069-5928	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AD AUTO DETAILING	4010		TRIESTE DR	CARLSBAD	CA	92010-2849	7542	Carwashes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AD IMPACT	19772	STE 110	MACARTHUR BLVD	IRVINE	CA	92612-2403	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ADAJJ PRO PAINTING,INC	30818		CHATEAU HAUT BRION	BONSALL	CA	92003	17	PAINTING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ADAMO CONSTRUCTION INC	11980	STE 5	WOODSIDE AVE	LAKESIDE	CA	92040-2924	15	GENERAL BUILDING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ADEPT PLUMBING	6333	UNIT 259	LA JOLLA BLVD	LA JOLLA	CA	92037-6614	17	PLUMBING	Yes	X	X	X		X			X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ADT CONSTRUCTION INC.	1735		ROGUE ISLE CT	CARLSBAD	CA	92008-3622	1521	General Contractors--Single-Family Housing	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ADT SECURITY SERVICES, INC.	3830		CALLE FORTUNADA	SAN DIEGO	CA	92123-1825	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ADVANTAGE BOBCAT RENTAL & SKILLED LABOR	3535		MADISON ST	CARLSBAD	CA	92008-5035	7359	Equipment Rental And Leasing, Not Elsewhere Class	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A-ECONOMY CONCRETE PUMPING	1702		EVERGEEN CIR	CARLSBAD	CA	92008-1148	1771	Concrete Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AFFORDABLE DETAIL SERVICES	315	#296	S. COAST HWY	ENCINITAS	CA	92024	7542	CARWASHES	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AFFORDABLE WATER HEATER	24663		SAN FERNANDO RD	SANTA CLARITA	CA	91321-1742	17	PLUMBING AND WATER HEATER INSTALL	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AGRICULTURAL PEST CONTROL	7766		ARJONS DR	SAN DIEGO	CA	92126-4391	7342	PEST CONTROL	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AHLEE BACKFLOW SERVICE	905		N 4TH ST	EL CAJON	CA	92019-1075	17	BACKFLOW TESTING, INSTALL & CERTIFICATION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AIR PLUS HEATING & AIR INC	12625		REED AVE	GRAND TERRACE	CA	92313-5947	17	SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AIR-TEK	9424	STE 1302	CHESAPEAKE DR	SAN DIEGO	CA	92123-1335	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AL MITCHELL'S CLEANING	2945		VALLEY ST	CARLSBAD	CA	92008-1153	7217	Carpet And Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AL SHANKLE CONSTRUCTION	3309		GRAPEVINE ST	MIRA LOMA	CA	91752-3503	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALADDIN MOBILE HOME	324		E VALLEY PKWY	ESCONDIDO	CA	92025-2815	15	GENERAL CONTRACT MOBILE HOME	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALI'S MOBILE CARWASH & AUTO DETAILING	1418		OLIVE ST	OCEANSIDE	CA	92058	7542	Carwashes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALL - SEASONS LANDSCAPE MAINT. CO.	1143		CYPRESS DR	VISTA	CA	92084-7216	17	LANDSCAPE & MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALL AMERICAN ASPHALT	400		E 6TH ST	CORONA	CA	92879-1521	15	CONTRACTOR, STREET IMPROVEMENT	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALL AMERICAN BUILDING SERVICES	2602		VIA MASADA	CARLSBAD	CA	92010-1395	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALL AMERICAN WINDOW SVS.	710		CLARK AVE	ENCINITAS	CA	92024-2313	7349	WINDOW CLEANING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALL STAR SERVICES CORPORATION	12250	STE 300	EL CAMINO REAL	SAN DIEGO	CA	92130-3001	1542	STORM DRAIN REPAIR. CONSTRUCTION WORK.	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
ALL STAR WATER HEATERS	30300		PUERT0 VALLARTA WAY	MENIFEE	CA	92584-9256	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALLGIRE BUILDING CONTRACTORS	3278		GREY HAWK CT	CARLSBAD	CA	92011-6651	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALL-PRO ASPHALT COMPANY	1512		COOLIDGE AVE.	NATIONAL CITY	CA	91950	1500	CONTRACTOR, STREET IMPROVEMENT	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALLTEC POOLS	1919		HILLCREST LN	FALLBROOK	CA	92028	7389	Pool Repair	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ALOHA POOL SERVICE & REPAIR	2631	14	ROOSEVELT ST	CARLSBAD	CA	92008-1654	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ALTA-DENA DAIRY	17637		VALLEY BLVD	CITY OF INDUSTRY	CA	91744-5731	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ALTERNATIVE ENERGY TECHNOLOGIES INC	9465	# B	MISSION PARK PL	SANTEE	CA	92071-2807	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMADOR LANDSCAPE	1424	APT 4	BONAIR RD	VISTA	CA	92084-4122	781	LANDSCAPE & MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMERICAN ARBOR TREE SERVICE	391		TAMARACK AVE	CARLSBAD	CA	92008-4064	783	Ornamental Shrub & Tree Svc	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMERICAN AUTO DETAILING	3016		AZAHAR ST	CARLSBAD	CA	92009	7542	Mobile Auto Detailing	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMERICAN BOBCAT & BACKHOE SERVICE, INC.	1334		DESCANSO AVE	SAN MARCOS	CA	92069-1306	1629	HEAVY EQUIPMENT RENTAL	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMERICAN CONCRETE	404		DISCOVERY ST	SAN MARCOS	CA	92078-1206	17	CONCRETE CONSTRUCTION OF CURB, GUTTER AND S	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMERICAN DESIGN COATINGS, INC.	12225	STE A	WORLD TRADE DR	SAN DIEGO	CA	92128-3719	17	PAINTING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMERICAN FENCE CO., INC.	1075		GRAND AVE	SAN MARCOS	CA	92078-2602	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMERICAN HOME REPAIRS	6160		PASEO TIENDA	CARLSBAD	CA	92009-2230	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMERICAN PLUMBING & BACKFLOW INC	4089	STE J	OCEANSIDE BLVD	OCEANSIDE	CA	92056-5814	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMERICAN WINDOW CLEANING	350		LA SOLEDAD WAY	OCEANSIDE	CA	92057-6858	7349	WINDOW CLEANING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AMPAM PARKS MECHANICAL, INC.	1060		N WILMINGTON BLVD	WILMINGTON	CA	90744-3207	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANASTASI CONSTRUCTION CO., INC.	511	# 200	TORRANCE BLVD	REDONDO BEACH	CA	90277-3414	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANDERSON DRILLING	10303		CHANNEL RD	LAKESIDE	CA	92040-1707	15	FOUNDATION DRILLING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANDERSON PLUMBING INC,WALTER	1150		N MARSHALL AVE	EL CAJON	CA	92020-1831	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANDING CONSTRUCTION	4886		MEADOWBROOK DR	OCEANSIDE	CA	92056-6639	15	GENERAL CONTRACTOR, ROOM ADDITIONS, REMODEI	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANDRADE & COMPANY	2123		VUELTA CT	CARLSBAD	CA	92009-8532	1721	Painting Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANGUS ASPHALT INC	9959		PROSPECT AVE	SANTEE	CA	92071-4318	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANNIN PLUMBING	4610		ARROWHEAD CT	OCEANSIDE	CA	92056-2234	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANTBUSTERS	6803		CORINTIA ST	CARLSBAD	CA	92009	7342	Disinfecting And Pest Control Services	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANTIMITE ASSOCIATES, INC.	1931		AVENIDA PLAZA REAL	OCEANSIDE	CA	92056-6024	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANTOLS NORTH COUNTY MASONRY	3429		DON COTA DR	CARLSBAD	CA	92008-3913	1741	Masonry Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ANY TYME PLUMBING	1064		LA MIRADA CT	VISTA	CA	92081-7874	17	PLUMBING SERVICES	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
A-PLUS WINDOW CLEANING							7349	Building Cleaning and Maintenance Services, Not Elsewher	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
APS GENERAL CONTRACTORS, INC.	4005		SUNNYHILL DR	CARLSBAD	CA	92008-2751	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
APX ALARM SECURITY SOLUTIONS, INC.	5132		N 300 W	PROVO	UT	84604-5614	17	DOOR TO DOOR SALES AND INSTALLATION OF HOME	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AQUA AZUL POOL TILING	519	STE 106	W LONE CACTUS DR	PHOENIX	CA	85027-2921	1799	POOL RESURFACING, POOL REMODELLING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AQUA MOBILE DETAIL	5154		SHORE DR	CARLSBAD	CA	92008-4346	7542	Carwashes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AQUA-FRESH POOL SERVICE	2081		LEE CT	CARLSBAD	CA	92008-2765	7389	Business Services, NEC	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
AQUARIAN POOL SERVICE	1775		VALLEY PL	CARLSBAD	CA	92008-1150	7389	Business Services, NEC	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
AQUATIC QUALITY ASSURANCE	6062		CORTE DEL CEDRO	CARLSBAD	CA	92008	7389	Business Services	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
AQUATIC TECHNOLOGIES	32244	STE A	PASEO ADELANTO	SAN JUAN CAPISTRANO	CA	92675-3617	17	SWIMMING POOL CONSTRUCTION COMPANY	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARBON EQUIPMENT CORP	1620		S SUNKIST ST	ANAHEIM	CA	92806-5811	15	SPECIALTY CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARBOR WEST	8553		AVENIDA COSTA BLANCA	SAN DIEGO	CA	92154-6265	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARC- ART	6540		PERSA ST	CARLSBAD	CA	92009-5318	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARCHER WESTERN CONTRACTORS	4747	# 210	VIEWRIDGE AVE	SAN DIEGO	CA	92123-1688	15	GENERAL CONTRACTOR - CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARIZAGA LANDSCAPE	3366	Apt 10	ROOSEVELT ST	CARLSBAD	CA	92008-3067	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARLEN B PAYNE CONST. MGMT	25		VIA VILLENA	SAN CLEMENTE	CA	92673-6512	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARNETT'S PLUMBING	4780	STE A	MISSION GORGE PL	SAN DIEGO	CA	92120-4229	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARNOLD'S LANDSCAPE	3610		KINGSTON ST	CARLSBAD	CA	92008-2181	781	Landscape Counseling and Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARRISCAPE, INC	4511		SAINT GEORGE CT	CARLSBAD	CA	92010-2880	1799	Construction-Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARROW CONSTRUCTION	15525	80	OLD HWY	EL CAJON	CA	92021-0000	17	SWIMMING POOL CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARROW PIPELINE REPAIR, INC.	1330	# 101	PARK CENTER DR	VISTA	CA	92081-8300	15	SEWER LINE REPAIR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
ARS OF SAN DIEGO	9895	STE A	OLSON DR	SAN DIEGO	CA	92121-2841	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARTHUR A BROWN PLUMBING COMPANY	2697		STATE ST	CARLSBAD	CA	92008-1627	1711	Plumbing Contractor	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ARTIFICIAL ROCK CONCEPTS	1041		REGAL RD		CA	92024	7389	Pool Service	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ARTLEY PLUMBING	778		VIA BAHIA	SAN MARCOS	CA	92069-7300	17	PLUMBING SERVICES & REPAIR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ASBURY ENVIRONMENTAL SERVICES	9119		BIRCH ST	SPRING VALLEY	CA	91977-4110	4953	HAZARDOUS WASTE MANAGEMENT	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ASHTON AWNINGS INC.	1200		HARBOR DR	NATIONAL CITY	CA	91950-1014	17	AWNINGS & CANOPIES	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ASI HASTINGS INC.	1250		GREENFIELD DR	EL CAJON	CA	92021-3316	17	A/C HEATING APPLIANCE REPAIR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ASLINE CONSTRUCTION	3008		SEGOVIA WAY	CARLSBAD	CA	92009-8354	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ATEL COMMUNICATIONS INC	8447		MIRAMAR MALL	SAN DIEGO	CA	92121-2571	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ATLANTIS POOL SERVICE	4023		CRESCENT POINT RD	CARLSBAD	CA	92008-3610	7389	Pool Service	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ATLAS ENVIRONMENTAL SERVICES, INC.	9032		OLIVE DR	SPRING VALLEY	CA	91977-2301	17	TREE TRIMMING, REMOVAL, TRANSPLANTING	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ATLAS FENCE COMPANY	1211		S 32ND ST	SAN DIEGO	CA	92113-3716	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ATLAS-ALLIED, INC.	1210		N LAS BRISAS ST	ANAHEIM	CA	92806-1823	15	PLUMBING - PIPING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ATTAWAY POOLS	2803		UNICORNIO ST	CARLSBAD	CA	92009	7389	Pool Contractor, Maintenance	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
AUSSIE PET MOBILE NORTH COUNTY	3928		TORTUGA CV	OCEANSIDE	CA	92054-7996	752	MOBILE PET GROOMING	Yes	X	X		X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AV BUILDER CORP.	6373		NANCY RIDGE RD.	SAN DIEGO	CA	92121	1500	Building construction	Yes		X	X	X	X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AVI SYSTEMS	7270	STE 102	TRADE ST	SAN DIEGO	CA	92121-2384	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AWN-GUARD INC	4503		CORONADO DR	OCEANSIDE	CA	92057-4252	7349	Powerwashing	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
AZURE CONSTRUCTION INC	7423		EL CAJON BLVD	LA MESA	CA	91941-3401	15	POOL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
B & B ELECTRIC	2353		LA MIRADA DR	VISTA	CA	92081-7863	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
B & G TREE SERVICE	2631		ROOSEVELT ST	CARLSBAD	CA	92008	781	Landscaper	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
B & H CONSTRUCTION	2590		DAVIS	CARLSBAD	CA	92008-1451	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
B. STANG CONSTRUCTION	3490		CHARTER OAK	CARLSBAD	CA	92008	1521	General Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
B.A. WORTHING, INC.	640	G	GRAND AVE	CARLSBAD	CA	92008	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
B.W. ENTERPRISES, INC	3848	STE 207	CAMPUS DR	NEWPORT BEACH	CA	92660-2628	17	CONCRETE SUB CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BABUSCIO CONST INC	33	STE 210	HAMMOND	IRVINE	UT	92618-1637	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BAJ BACKFLOW AND PLUMBING	125		WILLOWSIDE TER	ALPINE	CA	91901-1660	1711	PLUMBING CONTRACTOR, BACKFLOW TESTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BAJA PALAPAS INC	23604		SPRINGWOOD DR	RAMONA	TX	92065-4244	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BAR NONE BARBECUE, INC	7401	STE E	PRINCESS VIEW DR	SAN DIEGO	CA	92120-1338	7389	ON-SITE CATERING FOR COMPANY PICNICS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BARRETT LANDSCAPE AND MAINTENANCE	6480		CORTE LA LUZ	CARLSBAD	CA	92009-3043	782	Lawn And Garden Services	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BASELINE TENNIS COURTS AND SUPPLIES	3218		AZAHAR PL	CARLSBAD	CA	92009-8302	1799	Special Trade Contractors, Nec	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BASILE CONSTRUCTION INC	7840		DUNBROOK RD	SAN DIEGO	NJ	92126-4369	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BATH CO SHOWER DOOR	613		W MAIN ST	EL CAJON	CA	92020-3323	17	CONTRACTOR - SPECIALTY	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BAUTISTA GARDENING MAINTENANCE	1341		S CITRUS AVE	ESCONDIDO	CA	92027-4956	782	GARDENING MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BAY CAL COMMERCIAL PAINTING	4100	STE C	AVENIDA DE LA PLATA	OCEANSIDE	CA	92056-6027	17	PAINTING CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BAYSIDE CONCRETE CONSTRUCTION COMPANY	20631		CANADA RD	EL TORO	CA	92630-8100	1799	CONCRETE SUBCONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BB POOL & SPA MAINTENANCE	618		SONRISA ST	SOLANA BEACH	CA	92075-2437	17	POOL SERVICE, CLEANING & REPAIRS	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
B-CLEAN CARPETING	3587		HATFIELD CIR	OCEANSIDE	CA	92056-4902	7349	CARPET CLEANING	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BEAUTIFUL CARPETS CLEANING SERVICE	1504		COVE CT	SAN MARCOS	CA	92069-3528	7217	CARPET & UPHOLSTERY CLEANING SERVICE	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BELA BETYAR CONSTRUCTION	2265		VIEW ST	OCEANSIDE	NJ	92054-6123	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BELFOR USA GROUP INC	11545	STE 308	SORRENTO VALLEY RD	SAN DIEGO	FL	92121-1322	15	CONSTRUCTION CO	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BELLA LANDSCAPING	1310		N TWIN OAKS VALLEY RD	SAN MARCOS	CA	92069-1111	17	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BELTRAN CONSTRUCTION	799		HYGEIA AVE	ENCINITAS	MN	92024-2115	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BEN LELAND CONSTRUCTION	132	297	N. EL CAMINO REAL		CA		1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BEN LELAND CONSTRUCTION INC	132	# 297	N EL CAMINO REAL	ENCINITAS	TX	92024-2801	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BENCHMARK LANDSCAPE, INC.	12575		STOWE DR	POWAY	CA	92064-6805	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BENCHMARK STONEWORKS,INC.	5661		PALMER WAY	CARLSBAD	CA	92010	1743	Terrazzo, Tile, Marble, Mosaic Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BERCK'S FAMILY PLUMBING, HEATING & AIR	38415	UNIT E	INNOVATION CT	MURRIETA	CA	92563-2600	1711	PLUMBING/HVAC CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BERG ELECTRIC CORPORATION	650		OPPER ST	ESCONDIDO	CA	92029-1020	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
BERT'S PLUMBING	858		2ND ST	ENCINITAS	CA	92024-4408	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BEST LANDSCAPE	28338		MEADOW GLEN WAY W	ESCONDIDO	CA	92026-6830	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BEST MOBILE AUTO DETAIL 2	1275		BUENA VISTA WAY	CARLSBAD	CA	92008	7542	Mobile Auto Detailing	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BEST MOBILE AUTO DETAILING & HAND CAR WASH	1865		VIA PRIMERO		CA	92056	7542	Mobile Auto Detailing	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BEST SERVICE CO	903		WENTWORTH CIR	VISTA	CA	92081-5374	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BETZ CONCRETE INC	2301		VINEYARD AVE	ESCONDIDO	CA	92029-1218	17	CONCRETE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BHI-BUILDERS	7213		AVIARA DR	CARLSBAD	CA	92009	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BIG PINE CONSTRUCTION	2364		BIG PINE ROAD	ESCONDIDO	CA	92027	1542	General Contractor	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BINGHAM CONSTRUCTION COMPANY, INC.	10965		SAN DIEGO MISSION RD	SAN DIEGO	CA	92108-2431	1542	COMMERCIAL GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BIOSOURCES, INC.	11545	STE 311	SORRENTO VALLEY RD	SAN DIEGO	CA	92121-1322	1541	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BL LANDSCAPING & MAINTENANCE	328		ESTADA CIR	OCEANSIDE	CA	92057-6636	781	GARDENING & LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BLACK FOREST DETAIL	7759		CALLE MEJOR	CARLSBAD	CA	92009	7542	Mobile Car Wash	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BLACK ROCK POOLS INC	384		FLOWER HILL WAY	SAN MARCOS	CA	92078-6006	17	SWIMMING POOL CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BLAINE TECH SERVICES	20735		BELSHAW AVE	CARSON	CA	90746-3509	17	SUB- CONTRACTOR (GROUNDWATER MONITORING)	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BLAIR RASMUSSEN CONSTRUCTION INC	11305	STE 107	RANCHO BERNARDO RD	SAN DIEGO	CA	92127-1461	1542	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BLUE LAGOON POOL SERVICE	2665		LEVANTE ST	CARLSBAD	CA	92009-8119	7389	Pool Maintenance	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
BLUE MIST POOLS & SPAS			PO BOX 131181	CARLSBAD	CA	92013	7389	Pool Maintenance	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
BLUE RIBBON CARPET CLEANING	804		LEUCADIA BLVD	ENCINITAS	CA	92024-2337	7217	CARPET, UPHOLSTERY, TILE CLEANING	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BLUE WAVE SERVICES	1177		HIGHBLUFF AVE		CA	92078-1050	7349	Powerwash, Building Cleaning	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BLW ROOFING	3306		AZAHAR PL	CARLSBAD	CA	92009-8305	1761	Roofing Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BOB'S POOL PATROL	807		HITCHING POST RD	VISTA	CA	92081-6711	7389	POOL & SPA SERVICE & REPAIR	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
BONDED CARPET & WINDOW COVERINGS INC.	7831		OSTROW ST	SAN DIEGO	CA	92111-3602	17	CARPET & WINDOW COVERINGS CLEANING SALES & S	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BONITA PIPELINE, INC	2209		HIGHLAND AVE	NATIONAL CITY	CA	91950-6918	1623	WET UTILITIES CONSTRUCTION COMPANY	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BONSALL CONSTRUCTION SERVICES	30494		ROSE LN	BONSALL	UT	92003-5900	15	CONCRETE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BORNEMAN PLASTERING	13757		HIGHWAY 8 BUSINESS	EL CAJON	CA	92021-1936	1742	LATH AND PLASTERING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BOSWELL PAINTING	931		VIKING LN	SAN MARCOS	CA	92069-5811	17	RESIDENTIAL & COMMERCIAL PAINTING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BOVENZI CONSTRUCTION INC	343		OAK AVE	CARLSBAD	CA	92008-2945	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BOYD INC	1201		E EL SEGUNDO BLVD	EL SEGUNDO	NV	90245-4203	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BOYD ROGERS PLUMBING CO INC	2525	# B	FORTUNE WAY	VISTA	CA	92081-8441	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BP WEST COAST PRODUCTS LLC	2295		HARBOR DR	SAN DIEGO	CA	92113-3636	5172	DELIVERY OF GASOLINE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BRADBEER, ROBIN E.	664		ROJA ST	OCEANSIDE	CA	92057-3513	7389	MOBILE SIGN PAINTER	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BRADSHAW ENGINEERING CORP	8645		ARGENT ST	SANTEE	CA	92071-4173	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BRASSEUR CONSTRUCTION, INC.	1028		ROSECRANS ST	SAN DIEGO	CA	92106-3019	1542	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BRODY BUILDERS INC	3755	# 204	AVOCADO BLVD	LA MESA	MN	91941-7301	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BROOKFIELD UNIVERSITY COMMONS LLC	12865	STE 200	POINTE DEL MAR WAY	DEL MAR	NJ	92014-3860	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BROOKHART CONCRETE, INC.	2911	P	STATE ST	CARLSBAD	CA	92008-2343	1731	Concrete Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BTD CONSTRUCTION	1397		HERMES AVE	ENCINITAS	UT	92024-1611	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BUENA VISTA LANDSCAPING	2116		BROADWAY	OCEANSIDE	CA	92054-6517	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BUILDERS TERMITE & PEST CONTROL	1139		S PLACENTIA AVE	FULLERTON	CA	92831-5110	7342	TERMITE CONTROL	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BUILDING SERVICES	133		N PACIFIC ST	SAN MARCOS	NJ	92069-1270	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BURGER CONSTRUCTION	420	STE 100	STEVENS AVE	SOLANA BEACH	IN	92075-2074	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BURKS ELECTRIC, INC.	3581		PRESTWICK CIR	OCEANSIDE	CA	92056-4932	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BURL JORDAN LANDSCAPE	1608		MONTGOMERY DR	VISTA	CA	92084-7626	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BURTON'S CARPET CARE	6965	105	EL CAMINO REAL	CARLSBAD	CA	92009	7217	Carpet Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BUSH DECOR	4431		W 8200 S	WEST JORDAN	UT	84088-5942	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BUSY BROOM CLEANING SERVICES/EXPERT WINDOW CLEA	11227		CALLE JALAPA	SAN DIEGO	CA	92126	7349	Building Cleaning & Maint Svc, NEC	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BYCOR CORP-GENERAL CONTRACTORS	6490		MARINDUSTRY DR	SAN DIEGO	CA	92121-2563	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
BYRNES CONSTRUCTION	3870		HIGHLAND DR	CARLSBAD	CA	92008-2535	1522	Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
C & C POOL SERVICE	650	SPC 22	S RANCHO SANTA FE RD	SAN MARCOS	CA	92078-3946	7389	POOL SERVICE (WEEKLY) & SMALL REPAIRS	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
C & C STEAMWAY	2735		WOODWIND RD	CARLSBAD	CA	92008-1167	7217	Carpet Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
C & H TREE SERVICE, INC.	1244		BERRYMAN CYN	ENCINITAS	CA	92024-7915	17	LANDSCAPE & TREE SERVICE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
C & R DRAINS & PLUMBING INC	299		GANNET DR	VISTA	CA	92083-3010	17	PLUMBING & DRAINS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
C. B. SHEA, INC.	3965		SAN AUGUSTINE WAY	SAN DIEGO	CA	92130-2261	17	LANDSCAPE CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
C.E. WILSON CORP.	662		GRAND AVE	SPRING VALLEY	FL	91977-5009	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CALAVO GARDENS LANDSCAPE	1880		GROVE RD	EL CAJON	CA	92020-7834	17	LANDSCAPE INSTALLATION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CALDWELL HTG & AIR COND INC.	1401		CORTE LA MANTUA	ESCONDIDO	MI	92026-2248	15	RESIDENTIAL HEATING AND AIR CONDITIONING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CALI GENERAL CONSTRUCTION	4030		LONNIE ST	OCEANSIDE	MN	92056-4231	15	GENERAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CALIFORNIA ARCHITECTURAL MILLWORK SUPPLY	180	STE A	N JOY ST	CORONA	NV	92879-1358	15	DOORS, FRAMES, HARDWARE & MILLWORK	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CALIFORNIA COMFORT SYSTEMS USA, INC.	9750		DISTRIBUTION AVE	SAN DIEGO	CA	92121-2310	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CALIFORNIA DELTA MECHANICAL INC.	1235		GRAND AVE	SPRING VALLEY	CA	91977-4323	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CALIFORNIA DOORS & WINDOWS	4079	# 349	GOVERNOR DR	SAN DIEGO	WA	92122-2522	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CALIFORNIA EXPRESS PLUMBING	9245	STE 201	DOWDY DR	SAN DIEGO	AZ	92126-6386	15	PLUMBING & GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CALIFORNIA GLEAMIN	2462		GUM TREE LN	FALLBROOK	CA	92028-2530	7349	COMMERCIAL WINDOW WASHING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CALIFORNIA POOLS	1635		S RANCHO SANTA FE RD	SAN MARCOS	CA	92078-5158	17	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CAMBRIDGE COMMERCIAL & DEV	24619	STE 201	WASHINGTON AVE	MURRIETA	OR	92562-8228	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CANNON PACIFIC SERVICES, INC.	285	STE A	PAWNEE ST	SAN MARCOS	CA	92078-2458	4959	POWER SWEEP	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CAPITOL STEEL FABRICATORS, INC	3565		GREENWOOD AVE	COMMERCE	CA	90040-3305	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CAP'S MOBILE SMALL ENGINE REPAIR	3580		TRIESTE DR	CARLSBAD	CA	92008-2839	7699	Repair Shops and Related Services, NEC	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CARDIFF CONSTRUCTION INC.	6017		SEACREST VIEW RD	SAN DIEGO	CA	92121-4370	1521	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CARLITOS NUMERO UNO MEX FOOD	158	# 8	ROYMAR RD	OCEANSIDE	CA	92054-1310	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
CARLSBAD CARPET CLEANING COMPANY	936		DAISY AVE	CARLSBAD	CA	92009-4815	7217	Carpet & Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CARLSBAD LANDSCAPE CONSTRUCTION INC	2777		WILSON ST	CARLSBAD	CA	92008	1799	Landscape Construction	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CARLSBAD POOL SERVICE	1692		MOUNTAIN PASS CIR	VISTA	CA	92081-8811	7389	SWIMMING POOL SERVICE	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
CARLSBAD VILLAGE PARTNERSHIP	1272		PEACOCK HILL DR	SANTA ANA	HI	92705-2305	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CARLSBAD WINDOW CLEANING PRO	1385		SUNSET DR	VISTA	CA	92081-6528	7349	WINDOW CLEANING SERVICE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CARPET CLEANER1.COM	6311		MONTECITO DR	CARLSBAD	CA	92009-3075	7217	Carpet And Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CARROLL PLUMBING	1938		WILLOW RIDGE DR	VISTA	CA	92081-7370	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CASCO CONTRACTORS, INC.	18	STE 170	TECHNOLOGY DR	IRVINE	CA	92618-2313	1542	GENERAL CONTRACTOR - COMMERCIAL TENANT IMPF	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CASE CONSTRUCTION INC	2907		CORTE JARDIN	CARLSBAD	CA	92009-9253	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CASS PLUMBING & HTG	4569	# C	30TH ST	SAN DIEGO	CA	92116-4239	17	PLUMBING & HEATING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CAUDILLO'S LANDSCAPE	224		GUAJOME ST	VISTA	CA	92083-5907	781	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CAVINESS CONSTRUCTION COMPANY, INC.	12633	STE 3	N CAVE CREEK RD	PHOENIX	AZ	85022-5858	1522	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CCM ENTERPRISES	10848		WHEATLANDS AVE	SANTEE	CA	92071-2855	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CELL-CRETE CORPORATION	135		RAILROAD AVE	MONROVIA	CA	91016-4652	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CEMENT CUTTING INC.	3610		HANCOCK ST	SAN DIEGO	CA	92110-4335	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CENSOURCE, INC.	1790		N CASE ST	ORANGE	CA	92865-4212	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CENTRAL PLUMBING HTG & COOLING	6152	STE H	MISSION GORGE RD	SAN DIEGO	CA	92120-3416	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CENTRE BUILDERS, INC.	2901	STE 113	W MACARTHUR BLVD	SANTA ANA	CA	92704-6922	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CERTIFIED CONCRETE	120		N ANDREASEN DR	ESCONDIDO	CA	92029-1329	1771	CONCRETE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHAMPION WINDOWS INC	28472		WESTINGHOUSE PL	VALENCIA	CA	91355-0929	17	SUB-CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHARCO CONSTRUCTION	7065		EL CAJON BLVD	SAN DIEGO	CA	92115-1825	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHARLAINE ARCHITECTURAL SIGNS	8815		PRODUCTION AVE	SAN DIEGO	CA	92121-2219	17	SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHARLES DOHERTY CONCRETE	1302		CRESTRIDGE DR	OCEANSIDE	CA	92054-5723	15	GENERAL ENGINEERING CONTRACTOR - CONCRETE &	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHARLES E THOMAS CO	13701		ALMA AVE	GARDENA	CA	90249-2513	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHARTONY CONSTRUCTION	13392		ROBERTA CIR	GARDEN GROVE	CA	92843-2125	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHAVEZ CONTRACTING INC	34744		HERITAGE OAKS CT	WINCHESTER	CA	92596-8330	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHRIS BARCA CONSTRUCTION	2441		LEVANTE ST	CARLSBAD	CA	92009-8020	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHRIS CAVENY GENERAL CONTRACTOR	3946		LINMAR LN	CARLSBAD	CA	92008-4124	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
CHRIS COULTER LANDSCAPE	627		HOLLYRIDGE DR	ENCINITAS	CA	92024-4754	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHUCK POWERS CONST. CO.	2264		FIRE MOUNTAIN DR	OCEANSIDE	CA	92054-6115	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CHUCKS PLUMBING	3800		WESTHAVEN DR	CARLSBAD	CA	92008-2754	1711	Plumbing Contractor	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CI PLUMBING, INC.	1429	# A	LINCOLN BLVD	SANTA MONICA	CA	90401-2732	1799	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CIRO'S LANDSCAPING, INC.	1908		DON LEE PL	ESCONDIDO	CA	92029-1140	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CLARK CONSTRUCTION	1100		STARVIEW DR	VISTA	CA	92084-6532	15	RESIDENTIAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CLASSIC LIFESTYLES	33891		ANGELS LN	WILDOMAR	CA	92595-8766	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CLASSIC PAINTING INC	601	# C427	E PALOMAR ST	CHULA VISTA	CA	91911-6976	17	PAINTING CO	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CLEAN GREEN AUTO DETAIL	2470		TUTTLE ST	CARLSBAD	CA	92008-1445	7542	Carwashes	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CLEAN IMAGE POWER WASH	4129		ADAMS ST	CARLSBAD	CA	92008-3508	7349	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
CLEANING COMPANY, THE	2605		JACARANDA AVE	CARLSBAD	CA	92009-9116	7217	Carpet And Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CLEAR WATER POOLS	3570	APT D	CARLSBAD BL	CARLSBAD	CA	92008-3227	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
CLYD'S SEPTIC TANK SERVICE	7248		PONTO DR	CARLSBAD	CA	92010	7699	Septic Tank Cleaning and Pumping	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COAST AUTO DETAILING	1859		HARTWRIGHT RD	VISTA	CA	92084-7635	7542	AUTO MOBILE DETAILING SERVICE	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COASTAL CONCRETE INNOVATIONS, INC.	13685		HIGHWAY 8 BUSINESS	EL CAJON	CA	92021-1920	15	CONCRETE CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COASTAL CONSTRUCTION & REMODEL	4245		TRIESTE DR	CARLSBAD	CA	92010-3736	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COASTAL DESIGNS	2936		GARNET PL	CARLSBAD	CA	92009-4413	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COASTAL PLUMBING	1228		KEYSTONE WAY	VISTA	CA	92081-8316	17	PLUMBING SERVICE & REPAIR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COASTAL POOLS & REPAIRS	2705	Apt 28	AVENIDA DE ANITA	CARLSBAD	CA	92010-8304	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
COASTAL RANGE CRUSHING				LA MESA	CA	91931	1611	CONSTRUCTION/CRUSHING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COASTLINE DEVELOPMENT INC	13911		ENTERPRISE DR	GARDEN GROVE	CA	92843-4042	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COLE'S WEED CONTROL, STAN	2566		EL CAMINO DEL NORTE	ENCINITAS	CA	92024-6631	782	DISC WEEDS/FIRE BRAKES	Yes	X	X			X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COLONIAL PAINTING	2520	F	NAVARRA DR	CARLSBAD	CA	92009-7032	1721	Construction-Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COMMERCIAL A PLUS SERVICES INC.	13112	STE 109	HADLEY ST	CITY INDUSTRY	CA	90601-4583	15	PLUMBING AND PIPELINE SERVICES	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COMMERCIAL CONTRACTORS, INC.	16745		COMSTOCK ST	GRAND HAVEN	MI	49417-7949	1542	GENERAL CONTRACTOR - COMMERCIAL FINISH WORK	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COMMISSARIAT DESIGN & DEV CO	15062		BRASILIA DR	NORTHRIDGE	CA	91326-0000	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COMPLETE DOOR & TRIM	728		INDIGO ST	BEAUMONT	CA	92223-7185	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COMPLEX CATERING	4420		LA PORTALADA DR	CARLSBAD	CA	92010-2809	7299	Miscellaneous Personal Services, Not Elsewhere Cl	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CONCRETE GROUP, THE	2205	F	FARADAY AVE	CARLSBAD	CA	92008-7210	1731	Construction-Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CONCRETE JUNGLE CUTTING & CORING	4509	B	ADAMS ST	CARLSBAD	CA	92008-4208	1771	Concrete Cutting & Coring	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CONCRETE RESTORATIONS	31735	# C308	RIVERSIDE DR	LAKE ELSINORE	CA	92530-7816	17	CONCRETE RESTORATIONS - STAIN, SEAL, CLEAN COI	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CONTENDER PLUMBING INC	18689		PAMO WINTERCAMP RD	RAMONA	CA	92065-7432	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CONTINENTAL PLUMBING, INC.	11165		THURSTON LN	MIRA LOMA	CA	91752-1427	1711	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CONTROL TECHNOLOGY INC	2416		CADES WAY	VISTA	CA	92081-7830	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CONWAY & ASSOC., INC.	2525	102	PIO PICO DR	CARLSBAD	CA	92008-1567	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CORNELIUS ELECTRIC	6575	UNIT A	PASEO DEL NORTE	CARLSBAD	CA	92011-2471	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CORONADO'S AUTO DETAILING	1067	APT. 1204	FOURTH AVENUE		CA	91911	7542	Mobile Auto Detailing	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CORTEZ TREE SERVICE	2527		GUAJOME LAKE RD	VISTA	CA	92084-1610	17	TREE SERVICE (TREE PRUNING - TREE REMOVALS - S	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
COURTNEY INC	16781		MILLIKAN AVE	IRVINE	CA	92606-5009	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
COYOTE CONSTRUCTION	4507	# A	OHIO ST	SAN DIEGO	CA	92116-4346	15	INTERLOCKING PAVERS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CREATIVE FENCE COMPANY	605		VENTURE ST	ESCONDIDO	CA	92029-1215	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CREATIVE STONE AND TILE	5661	STE H	PALMER WAY	CARLSBAD	CA	92010-7255	1743	Tile and Stone Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CREW BUILDERS INC.	6191	STE 101	CORNERSTONE CT E	SAN DIEGO	CA	92121-4739	1542	COMMERCIAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CROSSMAN LANDSCAPE & MAINTENANCE INC	8617		CUYAMACA ST	SANTEE	CA	92071-4214	17	LANDSCAPE INSTALLATION & MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CRS COMPANY	1345		CAMINO LINDA DR	SAN MARCOS	CA	92078-5217	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CRYSTAL RAIN POOL SERVICES	2894		WOODRIDGE CIR	CARLSBAD	CA	92008-1162	7389	Swimming Pool Maintenance	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
CSI GENERAL INC	802	STE 105	N TWIN OAKS VALLEY RD	SAN MARCOS	CA	92069-1753	15	GENERAL CONTRACTOR - TENANT IMPROVEMENT	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CTW CONSTRUCTION	2051		RIVIERA DR	VISTA	CA	92084-2622	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CURECO, INC.	515		9TH ST	HUNTINGTON BEACH	CA	92648-4638	1542	BUILDING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
CURTIS CONSTRUCTION	3420		DONNA DR	CARLSBAD	CA	92008-2013	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CURTIS HOLE DRILLING CO.	2625		S SANTA FE AVE	SAN MARCOS	CA	92069-5927	17	DRILLING HOLES-LIGHT STANDARDS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CUSTOM HOME PAINTING	2138		TWAIN AVE	CARLSBAD	CA	92008	1721	Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
CUSTOM POOL PLASTERING	8045		WING AVE	EL CAJON	CA	92020	17	POOL PLASTERING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
D & D CONCRETE CONSTRUCTION, INC.	13795	# 201	BLAISDELL PL	POWAY	CA	92064-6837	17	CONCRETE PLACE & FINISH	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
D & D SERVICES, INC.	4105		BANDINI BLVD	LOS ANGELES	CA	90058-4208	4212	DEAD ANIMAL CARCASS PICKUP & DISPOSAL SERVICE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
D & E PLUMBING, INC.	1023		W BRIARDALE AVE	ORANGE	CA	92865-4111	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
D & H ENTERPRISES	7213		PLAZA DE LA COSTA	CARLSBAD	CA	92009-6258	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
D M BUILDING	1825		MCCAULEY LN	CARLSBAD	CA	92008-1171	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
D S R	2244	STE A1	S SANTA FE AVE	VISTA	CA	92084-7845	17	DOOR SERVICE & REPAIR/INSTALLATION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
D.A. WHITACRE CONST. INC.	1108		GREENFIELD DR	EL CAJON	CA	92021-3314	17	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
D.C.C.	1492		OAK AVE	CARLSBAD	CA	92008-1963	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
D.G. PLUMBING	206	STE G	GREENFIELD DR	EL CAJON	CA	92020-1962	1711	NEW AND REMODEL PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAG BUILDERS INC	1535		SUNRISE CIR	CARLSBAD	CA	92008-3648	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DALATI CO	1536		GLACIER RD	OCEANSIDE	CA	92056-1827	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DALEY CORPORATION	5370		EASTGATE MALL	SAN DIEGO	CA	92121-2804	15	GEN'L CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAN LEVY CONSTRUCTION INC	3435	STE 215	CAMINO DEL RIO S	SAN DIEGO	CA	92108-3911	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAN RAMOS / DISTINGUISHED POOLS	14320		MOUNTAIN RD	POWAY	CA	92064-2742	17	POOL / SPA	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DANIELS LANDSCAPE INC.	561		N TWIN OAKS VALLEY RD	SAN MARCOS	CA	92069-1710	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DARLING INTERNATIONAL INC.	8096		MIRAMAR RD	SAN DIEGO	CA	92126-4338	4212	Local Trucking Without Storage	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DARMOR CONSTRUCTION INC	1296		OLD HICKORY RD	CORONA	CA	92882-5860	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DARYL GRIFFIS ACOUSTICS INC	4958		NAPLES ST	SAN DIEGO	CA	92110-3820	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DATUM BUILDERS, INC.	14657		TWIN PEAKS PL	POWAY	CA	92064-3129	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAVACO, INC.	6688	STE 1400	N CENTRAL EXPY	DALLAS	TX	75206-3925	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAVE WHIPPLE SHEET METAL	1077		N CUYAMACA ST	EL CAJON	CA	92020-1803	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAVEY TREE EXPERT COMPANY, THE	6914		MISSION GORGE RD	SAN DIEGO	CA	92120-2420	782	TREE & LAWN CARE	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
DAVID R. FUNKHOUSER GENERAL CONTRACTOR	1281		MAGNOLIA AVE	CARLSBAD	CA	92008-2544	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAVID SCHULER, HANDYMAN	4344		ORCHID AVE	SAN DIEGO	CA	92107		Handyman	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAVID TAYLOR DEVELOPMENT INC.	4135		SKYLINE RD	CARLSBAD	CA	92008	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAVIDSON BUILDERS, INC.	1302		CAMINO DEL MAR	DEL MAR	CA	92014-2508	1521	HOME BUILDER	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAVIS & ADAMS CONSTRUCTION, INC.	7986		DAGGET ST	SAN DIEGO	CA	92111-2321	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAVIS STONE INC	519		VENTURE ST	ESCONDIDO	CA	92029-1213	1741	MARBLE AND GRANITE FABRICATION AND INSTALLATI	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DAVISREED CONSTRUCTION, INC.	12250	STE 325	EL CAMINO REAL	SAN DIEGO	CA	92130-3075	1542	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DBMC, INC.	814		N DODSWORTH AVE	COVINA	CA	91724-2409	15	GENERAL BUILDING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DCC GENERAL ENGINEERING CONTRACTORS, INC.	2295		MEYERS AVE	ESCONDIDO	CA	92029-1007	17	CONCRETE CONSTRUCTION (SITEWORK - CURB & GUT	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DCT	7034		CONVOY COURT CT	SAN DIEGO	CA	92111-0000	1542	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DE MARIA LANDTECH	1605		CAUDOR ST	ENCINITAS	CA	92024-1219	17	POOL CONST. & LANDSCAPING	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
DEAN PORTER CONSTRUCTION	3750		MONROE ST	CARLSBAD	CA	92008-2732	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DECADE PLUMBING SPECIALTIES	1940		ALTA VISTA DR	VISTA	CA	92084-6402	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DEEP BLUE CUSTOM PLUMBING				CARLSBAD	CA	92009	1711	Plumbing, Heating, Air-Conditioning	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DEFOREST CONSTRUCTION INC	2023		MYERS ST	RIVERSIDE	CA	92503-6829	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DEGREGORIO SERVICE & REPAIR	2706		EL RASTRO LN	CARLSBAD	CA	92009-9109	7349	Building Cleaning & Maint Svc, NEC	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DEL RANCHO POOL & SPA	1315		ENCINITAS BLVD	ENCINITAS	CA	92024-2845	15	POOL & SPA SRV/REPAIR CONST	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
DEMCON CONCRETE CONTRACTORS, INC.	13795	STE 202	BLAISDELL PL	POWAY	CA	92064-8896	17	CONCRETE (TILT UP)	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DENNIS MATHIS, CONSTRUCTION, INC.	3128		LE VANTE ST	CARLSBAD	CA	92008	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DEPENDABLE PLUMBING	12120	STE A	TECH CENTER DR	POWAY	CA	92064-7149	1711	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DESIGN BUILD	9770	STE B	CARROLL CENTRE RD	SAN DIEGO	CA	92126-6504	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DEVELOPMENT DREAM HOME	406		N CEDROS AVE	SOLANA BEACH	CA	92075-1255	15	DEVELOPMENT	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DEWEY PEST CONTROL	939		E UNION ST	PASADENA	CA	91106-1716	17	BUG CONTROL	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
DIAMOND ENVIROMENTAL	807		E MISSION RD	SAN MARCOS	CA	92069-3002	4959	PORTABLE RESTROOM SERVICE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DIAMOND VALLEY PLUMBING CO. INC.	937		ASTER ST	HEMET	CA	92545-4704	1711	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DICK MILLER, INC.	930	STE G	BOARDWALK	SAN MARCOS	CA	92078-2634	17	MASONRY CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DISCOUNT CARPET & UPHOLSTERY	2408		MAJANO PL	CARLSBAD	CA	92009-9137	7217	Carpet & Upholstery	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DISTINCTIVE CONCRETE INC	9320	STE 214	CHESAPEAKE DR	SAN DIEGO	CA	92123-1021	1771	CONCRETE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DITTMANN MASONRY, INC.	5320		EASTGATE MALL	SAN DIEGO	CA	92121-2804	17	MASONRY SUBCONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DIVERSIFIED CARPET/DIVERSIFIED SALES & MARKETING	3132		AVENIDA ALCOR	CARLSBAD	CA	92009-7603	1752	Floor Laying And Floor Work, Not Elsewhere Classi	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DIVERSIFIED WINDOW COVERINGS	8410		JUNIPER CREEK LN	SAN DIEGO	CA	92126-1074	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DIVINE PET CARE	12431	APT 250	HEATHERTON CT	SAN DIEGO	CA	92128-5179	752	MOBILE PET CARE / PET SITTING INCLUDING DOG WAI	Yes	X	X		X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DOCTOR OF THE HOUSE	2371		MARCA PL	CARLSBAD	CA	92009-8022	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DOG GONE PET PROS	740	APT 149	BREEZE HILL RD	VISTA	CA	92081-4309	7389	SERVICE / DOG WASTE REMOVAL COMPANY FOR RES	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DOGGIE DO RIGHT	103		MATAMOROS CT	SOLANA BEACH	CA	92075-2517	752	PET CARE Edited by MAPAR on 03/18/2004	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
DONALDSON PLUMBING	201		WISCONSIN AVE	OCEANSIDE	CA	92054-3921	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DONE RITE DETAIL	1790		AVENIDA VISTA LABERA	OCEANSIDE	CA	92056-6515	7542	MOBILE AUTO DETAILING /RECONDITIONING / WINDSH	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DOOLIN CONSTRUCTION INC	2333		ORANGE AVE	ESCONDIDO	CA	92029-4306	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DOOSE LANDSCAPE, INC.	785		E MISSION RD	SAN MARCOS	CA	92069-1903	15	GEMERAL LANDSCAPE	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
DOUG ALLEN PLUMBING INC	16611		HIGHLAND VALLEY RD	RAMONA	CA	92065-5713	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DOWNSTREAM SERVICES, INC.	2855		PROGRESS PL	ESCONDIDO	CA	92029-1516	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DPR CONSTRUCTION, INC.	6333	STE 170	GREENWICH DR	SAN DIEGO	CA	92122-5957	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DRAIN PATROL	7764		ARJONS DR	SAN DIEGO	CA	92126-4391	15	DRAIN CLEANING AND PLUMBING REPAIR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DRAIN RUNNER	830		CITRUS PL	CARLSBAD	CA	92008-4112	1711	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DREAM POOLS AND SPAS	3607		BARRANCA CT	CARLSBAD	CA	92010-7055	1799	Construction-Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DREAMSCAPE LANDSCAPE,INC	7192		MISSION GORGE RD	SAN DIEGO	CA	92120-1131	1799	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DREW LANDSCAPING	12099		OAKVIEW WAY	SAN DIEGO	CA	92128-5296	17	POOL / LANDSCAPING CONST.	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
D'ROYCE PETERSON - GENERAL CONTRACTOR	31830		RITSON RD	ESCONDIDO	CA	92026-5209	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DRUM PLUMBING, INC.	2550		FORTUNE WAY	VISTA	CA	92081-8441	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DYLAN LAMPRO'S AUTOMOTIVE ACCESSORIES	1462		WESTMORE PL	OCEANSIDE	CA	92056-6671	7538	AUTO GARAGE REPR(DONE@DELRSHP)	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DYNALECTRIC COMPANY	9505		CHESAPEAKE DR	SAN DIEGO	CA	92123-1304	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
DYNAMIX PAINTING, INC.	17080		HARVEST POINT WAY	RAMONA	CA	92065-5930	17	PAINTING CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
E & G BUILDERS	14106		HILLDALE RD	VALLEY CENTER	CA	92082-3431	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
E & H CONSTRUCTION CO INC	30110	STE 206	CROWN VALLEY PKWY	LAGUNA NIGUEL	CA	92677-2043	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
E AND W CONSTRUCTION	993	# 310	S SANTA FE AVE	VISTA	CA	92083-6910	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
E C S CONSTRUCTION	1880		BURNT MAPLE WAY	VISTA	CA	92081-7357	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
E. S. HUMPHREYS	4300		HOLLY LN	BONSALL	CA	92003-7107	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
E.G. MASONRY INC.	1185		E LEXINGTON AVE	EL CAJON	CA	92019-2192	1741	MASONRY CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EAST BROTHERS GROVE SERVICE	112		E AVIATION RD	FALLBROOK	CA	92028-3315	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EASY-TURF, INC.	2418		VINEYARD AVE	ESCONDIDO	CA	92029-1223	17	INSTALLER OF SYNTHETIC TURF Edited by MOBRI on 0	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ECHELON LANDSCAPES	20744		ELFIN FOREST RD	ESCONDIDO	CA	92029-3313	17	DESIGN / BUILD LANDSCAPE CONSTRUCTION	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
EDAW, INC.	150		CHESTNUT ST	SAN FRANCISCO	CA	94111-1004	781	LANDSCAPE COUNSELING AND PLANNING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EDIFICE ORNAMENTATION	4653		MERCURY ST	SAN DIEGO	CA	92111-2409	17	SPECIALTY CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EDWARD SHEDLEY MASONRY	2445		SIERRA MORENA AVE	CARLSBAD	CA	92008-2138	1741	Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EL RINCON GARDEN CARE	3480	B	MONROE ST	CARLSBAD	CA	92008-2058	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ELAN GENERAL CONTRACTING, INC.	4644	STE B	HAWLEY BLVD	SAN DIEGO	CA	92116-3416	1542	GENERAL CONTRACTING-TENANT IMPROVEMENT IN S	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ELD DEALER SERVICES	1366		VIA CIBOLA	OCEANSIDE	CA	92057-2622	7542	AUTO DETAILING	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ELDER-JONES, INC.	1120		E 80TH ST	BLOOMINGTON	MN	55420-1462	1542	GENERAL BUILDING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ELEVEN WESTERN BUILDERS, INC.	2862		EXECUTIVE PL	ESCONDIDO	CA	92029-1524	1542	COMMERCIAL GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ELITE GLASS & WINDOWS, INC.	1207	F	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-1958	1793	Glass And Glazing Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ELITE JANITORIAL SERVICE	305		CEDAR RD	VISTA	CA	92083-5122	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ELKEN CONTRACTING, INC.	1540	# 200	PIONEER WAY	EL CAJON	CA	92020-1638	15	GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
ELLIS CONTRACTING INC	4141	STE 110	JUTLAND DR	SAN DIEGO	CA	92117-3658	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ELYSIAN CONTRACTORS INC	143	# A-105	S CEDROS AVE	SOLANA BEACH	CA	92075-1970	15	GENERAL CONTRACTOR HOME BUILDER	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EMERALD LANDSCAPE	6705		LINDA VISTA RD	SAN DIEGO	CA	92111-7033	17	LANDSCAPE CONST & MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EMPIRE PIPELINE	1945	E	CAMINO VIDA ROBLE	CARLSBAD	CA	92008-6529	1711	Construction-Special Trade Contractors	Yes	x	x	x		x			x	x	NA	904.2, 904.3, 904.4, 904.5, 904.6
ENDLESS SUMMERSCAPES	2240	L	AVENIDA MAGNIFICA	CARLSBAD	CA	92008-6863	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ENDRES CONSTRUCTION	2895		HIGHLAND DR	CARLSBAD	CA	92008-1910	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ENDURING HOMES INC	2502		WORTH WAY	CAMARILLO	CA	93012-9086	15	GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ENGINE SAVERS	4305		SEA BRIGHT PL	CARLSBAD	CA	92008	7538	General Automotive Repair Shops	Yes		X	X		X				X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ENVIROTEK	2041		CIMA CT	CARLSBAD	CA	92009-8501	7217	Carpet And Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ERIC PAGE PLUMBING	2833		FOREST VIEW WAY	CARLSBAD	CA	92008-6845	1711	Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ESPINOZA CABLE CONSTRUCTION	1833		RANCHO VILLA RD	RAMONA	CA	92065-7652	17	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EXCEL COMMERCIAL CONSTRUCTORS	1605	STE 2	GRAND AVE	SAN MARCOS	CA	92078-2440	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EXCELLENCE IN PAINTING	2781		BERKELEY AVE	CARLSBAD	CA	92008-7920	1721	Construction Specialist - Painting	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EXECUTIVE LANDSCAPE, INC.	2131		HUFFSTATLER ST	FALLBROOK	CA	92028-8861	17	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EXECUTIVE MOBILE	3020		C AVE	NATIONAL CITY	CA	91950-7320	7542	AUTO RECONDITIONING	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EXECUTIVE POOLS & SPAS	2142	STE A	INDUSTRIAL CT	VISTA	CA	92081-7960	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
EXPERT PLUMBING CO	1056		OLD TAYLOR ST	VISTA	CA	92084-2630	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
E-ZEE MAINTENANCE	24662		ROLLINGWOOD RD	LAKE FOREST	CA	92630-3118	1542	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
F J BRAWLEY CONCRETE INC	1868		NATIONAL AVE	SAN DIEGO	CA	92113-2114	17	CONCRETE CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FAIN DRILLING & PUMP CO INC	12029		OLD CASTLE RD	VALLEY CENTER	CA	92082-4718	17	WELL DRILLING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FAIRWAY PEST CONTROL	567		SANDALWOOD DR	EL CAJON	CA	92021-5456	7342	PEST CONTROL SERVICE	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FALLBROOK GLASS, INC.	616	STE A	E ALVARADO ST	FALLBROOK	CA	92028-2350	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FAMILY CARPET AND WINDOW CLEANER	11188		NARDO RD		CA	92023	7217	Carpet Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FAMILY POOL SERVICE	1884		PALISADES DR	CARLSBAD	CA	92008-3758	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
FAR WEST INSULATION CONTRACTING	1375	STE A	S ACACIA AVE	FULLERTON	CA	92831-5311	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FELICE CONSTRUCTION CO	2135	# 100	FRANKFORT ST	SAN DIEGO	CA	92110-3412	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FELIX A. LANDSCAPING	7782		PALENQUE ST	CARLSBAD	CA	92009	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FERRELLGAS	1425		GRAND AVE	SAN MARCOS	CA	92078-2405	17	PROPANE GAS SALE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FINISH TECH CORPORATION	5993	101	AVENIDA ENCINAS	CARLSBAD	CA	92008-4459	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FIREPLACES PLUS	1833	STE 101	DIAMOND ST	SAN MARCOS	CA	92078-5130	17	SPECIALTY CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FISHER ROOFING & REPAIRS	1516		KURIZ ST	OCEANSIDE	CA	92054	17	Roofing Contractor	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.7
FLOYD & HOWERTON PLUMBING INC.	1269		GREENFIELD DR	EL CAJON	CA	92021-3357	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FOCUSED AUTO DETAILING	3872		GARFIELD ST	CARLSBAD	CA	92008	7542	Mobile Detailing/Washer	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FONSECA GENERAL CONTRACTORS	1379		CORTE BAGALSO	SAN MARCOS	CA	92069-7392	15	GENERAL BUILDING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FOOTHILL PROPERTY & CONST, INC.	2022		FOOTHILL DR	VISTA	CA	92084-4828	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FORESIGHT DEVELOPMENT, INC.	2784		JAMES DR	CARLSBAD	CA	92008	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FOSHAY ELECTRIC CO INC	7676		ENGINEER RD	SAN DIEGO	CA	92111-1516	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FOUR CORNERS CONCRETE, INC.	2317		AUTO PARK WAY	ESCONDIDO	CA	92029-1218	17	CONCRETE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FOWLERS IN CONTROL, INC.	4809	# 431	CLAIREMONT DR	SAN DIEGO	CA	92117-2706	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FRAN-BAR GENERAL ENGINEERING	712		STEWART CANYON RD	FALLBROOK	CA	92028-8996	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FRANCISCO GONZALEZ LANDSCAPE	4086		LAKE BLVD	OCEANSIDE	CA	92056-4603	781	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FRANK SCIARRINO MARBLE, GRANITE	7505		TRADE ST	SAN DIEGO	CA	92121-2411	17	STONE FABRICATION & INSTALLATION, TILE WORK	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FRANK'S LANDSCAPING	3897		MAGNOLIA RD	OCEANSIDE	CA	92058-1685	781	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FRED ANGUIANO CONSTRUCTION	20768		ELFIN FOREST RD	ESCONDIDO	CA	92029-3313	15	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FREDRICKS ELECTRIC INC	2211		NEWCASTLE AVE	CARDIFF BY THE SEA	CA	92007-1917	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FREEDOM FORESEEN INC.	1555	STE B	GRAND AVE	SAN MARCOS	CA	92078-2427	7349	COMMERCIAL WINDOW CLEANING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FREIDIN DESIGN AND CONSTRUCTION	359		SPRUCEWOOD DR	ENCINITAS	CA	92024-4132	1521	FULL SERVICE LANDSCAPING INSTALLATIONS, CONCF	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FRIARS REMODELING	1639		FOOTHILL DR	VISTA	CA	92084-4711	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FRONTERA CONSTRUCTION INC	5993	101	AVENIDA ENCINAS	CARLSBAD	CA	92008-4459	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
FRONTIER CONCRETE INC.	717		MERCANTILE ST	VISTA	CA	92083-5919	1771	FOUNDATION CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FRY SPECIALTY CO.	1488	STE 10	PIONEER WAY	EL CAJON	CA	92020-1633	1799	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FUELING SERVICES AND TECH.	7050	STE D	VILLAGE DR	BUENA PARK	CA	90621-2281	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
FULLER LATHING, INC	2181		ANDA LUCIA WAY	OCEANSIDE	CA	92056-3236	17	LATH & STUCCO	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
G E S I CONTRACTORS	2131	STE E	LAS PALMAS DR	CARLSBAD	CA	92011-1524	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
G O P CONSTRUCTION	8333		4TH ST	BUENA PARK	CA	90621-2507	15	RESIDENTIAL & COMMERCIAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
G P S PAINTING & WALLCOVERING	1307	STE C	E SAINT GERTRUDE PL	SANTA ANA	CA	92705-5228	17	PAINTING & WALLCOVERING SUB - CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
G&R CONSTRUCTION INC.	854		WASHINGTON HEIGHTS RD	EL CAJON	CA	92019-3090	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
G.P.M	5015		GARSDEN AVE		CA	91724		HOA MAINTENANCE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GALEN PAUELKO INC	234		27TH ST	DEL MAR	CA	92014-2026	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GARCIA LANDSCAPE SER.	10236	# A	MOORPARK ST	SPRING VALLEY	CA	91978-1514	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GARCIA'S LANDSCAPING SERVICE	3818		COMMODORE DR	SAN MARCOS	CA	92078-2339	782	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GARDEN GAL, THE	6617		VIREO CT	CARLSBAD	CA	92009-3962	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GARDENS AND LANDSCAPES	13855		GRANVILLE DR	POWAY	CA	92064-4819	17	SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GARDNER POOL PLASTERING	801		GABLE WAY	EL CAJON	CA	92020-1910	17	POOL PLASTERING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GARRETT CONSTRUCTION COMPANY	3310		AVENIDA OBERTURA	CARLSBAD	CA	92009-9328	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GARRIS PLASTERING	1130		W TRENTON AVE	ORANGE	CA	92867-3536	17	LATH,PLASTER OF HOMES	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GARY TEAM PAINTING INC.	1749		BONITA LN	CARLSBAD	CA	92008-1137	1721	Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GATES CONSTRUCTION	2735		SPOKANE WAY	CARLSBAD	CA	92008-2188	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GATEWAY PLASTERING INC.	966		N AMELIA AVE	SAN DIMAS	CA	91773-1401	17	LATHING AND PLASTER	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GBC CONCRETE & MASONRY	561		BIRCH ST	LAKE ELSINORE	CA	92530-2732	1771	CONCRETE AND MASONRY	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GEBCO GENERAL CONTRACTOR	1395		SUNSET GROVE RD	FALLBROOK	CA	92028-8332	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GENERAL COATING CORP.	6711		NANCY RIDGE DR	SAN DIEGO	CA	92121-2231	17	PAINTING & WATERPROOFING CONTR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GEOGRID RWS, INC.	1295		DISTRIBUTION WAY	VISTA	CA	92081-8817	15	CONSTRUCTION CO	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GEORGE WEIR ASPHALT INC	610		METCALF ST	ESCONDIDO	CA	92025-1665	17	SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GILBERT SANCHEZ CONSTRUCTION INC	2165		CALLE BUENA VENTURA	OCEANSIDE	CA	92056-3216	15	RESIDENTIAL REMODELING GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GLEASON ELECTRICK	974		CITRINE WAY	SAN MARCOS	CA	92078-1059	17	SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GLEN MAGGARD HANDYMAN	4075		HARBOR DR	CARLSBAD	CA	92008-4114	7349	Building Cleaning And Maintenance Services, Not E	Yes	X				X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GLENN ERBE CONSTRUCTION CO	240		S DITMAR ST	OCEANSIDE	CA	92054-3126	1542	GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GMI BUILDING SERVICES INC	8001		VICKERS ST	SAN DIEGO	CA	92111	7349	Building Cleaning And Maintenance Services, Not E	Yes	X				X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GOLDEN STAR CONSTRUCTION	15865		HIGHLAND CT	SOLANA BEACH	CA	92075-2467	1542	GENERAL CONSTRUCTION; TIS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GOMEZ PLBG, GERARDO	4765		GATESHEAD RD	CARLSBAD	CA	92008-6507	1711	Plumbing Contractor	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GOOD & ROBERTS INC.	1330		PARK CENTER DR	VISTA	CA	92081-8300	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GOODWIN CONSTRUCTION INC	12985		CAMINITO POINTE DEL MAR	DEL MAR	CA	92014-3852	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GORDON PAINTING CO INC	13755		STOCKTON AVE	CHINO	CA	91710-7021	17	PAINTING CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GOTHIC LANDSCAPE, INC.	27502		AVENUE SCOTT	VALENCIA	CA	91355-3965	17	LANDSCAPE CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GOULD BUILDING CONTRACTORS, INC	31034		VALLEY CENTER RD	VALLEY CENTER	CA	92082-6753	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GRAEBER CONSTRUTION	1943		COUNTRY GROVE LN	ENCINITAS	CA	92024-1930	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GRAHAM ESPIE CONSTRUCTION	4717		GATESHEAD RD	CARLSBAD	CA	92010-6507	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GRANT GENERAL CONTRACTORS	5051		AVENIDA ENCINAS	CARLSBAD	CA	92008-4363	1521	General Contractors--Single-Family Housing	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GREATER ALARM COMPANY	12265	STE G	WORLD TRADE DR	SAN DIEGO	CA	92128-3771	17	CONTRACTOR - SPECIALTY	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GREATER SAN DIEGO AIR CONDITIONING	8141		CENTER ST	LA MESA	CA	91942-2907	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GREEN HEAT INC	6921	UNIT E	QUAIL PL	CARLSBAD	CA	92009-4130	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GREEN HORIZONS LANDSCAPE & MAINTENANCE INC.	1530		INDUSTRIAL AVE	ESCONDIDO	CA	92029-1349	17	LANDSCAPE AND CONSTRUCTION AND MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GREEN LAND COMPANY	3213		FOSCA ST	CARLSBAD	CA	92009-7830	782	Landscape Construction	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GREEN MASTER LANDSCAPE INC	5005		BELLA COLLINA ST	OCEANSIDE	CA	92056-1924	17	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GREEN VALLEY LANDSCAPE	1182		INDUSTRIAL AVE	ESCONDIDO	CA	92029-1422	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GREENSCAPE FERTILIZATION, INC.	1119		FULTON RD	SAN MARCOS	CA	92069-2032	782	LANDSCAPE FERTILIZATION FOR TREES, SHRUBS & TU	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GREGG'S MOBILE REPAIR	5233		SHELLEY PL	CARLSBAD	CA	92008-3851	7699	Repair Shops and Related Services, NEC	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
GREGORIO RAMOS	3921		SCOTT DR	OCEANSIDE	CA	92056-4312	781	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GREYHOUND GENERAL INC	1402		CREENCIA PL	ESCONDIDO	CA	92027-1313	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GRUBER CONSTRUCTION	2412		LA TINADA CT	CARLSBAD	CA	92009-9133	1521	General Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GS DREAMSCAPING	1370		PINE AVE	CARLSBAD	CA	92008-1940	782	Landscape Contractor	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
GUTIERREZ CLASSIC MOBILE DETAILING	2817		VIA CARRIO	CARLSBAD	CA	92010	7542	Mobile Detailing/Washer	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HABITAT RESTORATION SCIENCES	650		ALPINE WAY	ESCONDIDO	CA	92029-1204	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HABITAT WEST, INC	2067	# B	WINERIDGE PL	ESCONDIDO	CA	92029-1931	17	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HALBERT CONSTRUCTION CO INC	330	STE 230	S MAGNOLIA AVE	EL CAJON	CA	92020-5224	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HALL PEST MANAGEMENT	3572		MADISON ST	CARLSBAD	CA	92008-5034	7342	Disinfecting And Pest Control Services	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HAMANN CONSTRUCTION	1000		PIONEER WAY	EL CAJON	CA	92020-1998	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HAMMOND & MASING GENERAL CONTRACTORS, INC.	26157		JEFFERSON AVE	MURRIETA	CA	92562-9561	1521	GENERAL CONTRACTORS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HANDA CONSTRUCTION INC	1677		RIDGE RD	VISTA	CA	92081-6521	15	GENERAL CONTRACTORS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HANNA PLUMBING & SUPPLY INC	643		S SANTA FE AVE	VISTA	CA	92083-5938	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HANS CONSTRUCTION MECHANICAL INC.	4501		OLIVE AVE	LA MESA	CA	91941-4828	1711	PLUMBING/ HVAC	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HANSON AGGREGATES PACIFIC SOUTHWEST INC	9229		HARRIS PLANT RD	SAN DIEGO	CA	92163-9069	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HAPPY PETS GROOMING	7511		BRAVA ST	CARLSBAD	CA	92009	752	Animal Specialty Services, Except Veterinary	Yes	X	X		X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HARBOR ROOFING	962		ALYSSUM RD	CARLSBAD	CA	92011-3912	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HARDY & HARPER, INC.	1312		E WARNER AVE	SANTA ANA	CA	92705-5416	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HARMONY LANDSCAPE INC	555		MATAGUAL DR	VISTA	CA	92081-6608	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HARRIS RECONDITIONING	1627		PEGASUS WAY	SAN MARCOS	CA	92069-4204	7542	AUTO DETAILER	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HART CONCRETE CONSTRUCTION	4016		GARFIELD ST	CARLSBAD	CA	92008-7432	1771	Concrete Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HARVEY INC.	7200	B	PONTO DR	CARLSBAD	CA	92009-4601	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HAWKINS CONSTRUCTION INC	4177		YALE AVE	LA MESA	CA	91941-7717	15	GENERAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HAZARD CONSTRUCTION COMPANY	6465		MARINDUSTRY DR	SAN DIEGO	CA	92121-2536	15	CONST-HEAVY CONST CONTRACTORS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HEATON MASONRY	10327		STONEHURST DR	ESCONDIDO	CA	92026-8625	17	MASONRY & CONCRETE	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HEAVENLY VIEWS WINDOW CLEANING	1123		GARDENA RD	ENCINITAS	CA	92024-4645	7349	WINDOW CLEANING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HEAVEN'S BEST CARPET & UPHOLSTERY CLEANING	4710		MYSTIK RD	OCEANSIDE	CA	92056-3025	7217	CARPET & UPHOLSTERY CLEANING	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HEAVILAND ENTERPRISES, INC	2180		LA MIRADA DR	VISTA	CA	92081-8815	17	LANDSCAPE COUNSELING & PLNG	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HEINZE CONSTRUCTION COMPANY	2501		JACARANDA AVE	CARLSBAD	CA	92009-9114	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HELIO POWER	25767		JEFFERSON AVE	MURRIETA	CA	92562-6903	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HELLENIC CONTRUCTION CO	7670	STE 206	OPPORTUNITY RD	SAN DIEGO	CA	92111-2222	15	GENERAL BUILDING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HENDRIX PLUMBING	470		CHINQUAPIN AVE	CARLSBAD	CA	92008-4103	1711	Plumbing Contractor	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HERNANDEZ LANDSCAPE	904		CAMELLIA ST	ESCONDIDO	CA	92027-1763	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HETHERINGTON ROOFING CO	3265		VALLEY ST	CARLSBAD	CA	92008-1158	1741	Construction-Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HILLS LANDSCAPE, INC	132	392	EL CAMINO REAL	CARLSBAD	CA	92024			Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HILLS LANDSCAPING	4264		SKYLINE RD	CARLSBAD	CA	92008-3642	782	Lawn and Garden Services	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HINTZ CONSTRUCTION	2535	8B	NAVARRA DR	CARLSBAD	CA	92009-7047	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HI-Q PAINTING COMPANY	2916	B	LUCIERNAGA ST	CARLSBAD	CA	92009-5953	1799	Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HOAGLUND & SONS CONCRETE	700		1/2 BARSBY ST	VISTA	CA	92084-2602	15	CONCRETE	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HOLY SMOKES! BBQ	2850		LUCIERNAGA ST	CARLSBAD	CA	92009-5947	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
HOME TO-DO'S, INC.	2009		EDINBURG AVE	CARDIFF	CA	92007-1742	1521	LICENSED GENERAL CONTRACTOR DOING HANDYMAN	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HOMESPACE OF CALIFORNIA INC. (DBA PREMIER GARAGES	2270	A	CAMINO VIDA ROBLE	CARLSBAD	CA	92011-1503	1752	Floor Laying And Floor Work, Not Elsewhere Classi	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HOMESPIRIT	1404		OX 1404	BLUE JAY	CA	92317-1404	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HOMESTEAD GARDENING	29735		DISNEY LN	VISTA	CA	92084-1223	782	LANDSCAPE MAINTANENCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HOMETEAM PEST DEFENSE	1185	STE A	PARK CENTER DR	VISTA	CA	92081-8304	1542	PEST CONTROL/SUBCONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HONG'S GARDENING	201		CAMINO DEL POSTIGO	ESCONDIDO	CA	92029-7442	782	YARD MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HONOURGROUP	4722		BIRCHWOOD CIT	CARLSBAD	CA	92008-3706	1542	General Contractors-Nonresidential Buildings, Oth	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HOPKINS CONSTRUCTION	1201		MAGNOLIA AVE	CARLSBAD	CA	92008	1799	Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HORIZON RETAIL CONSTRUCTION, INC.	1500		HORIZON DRIVE	STURTEVANT	WI	53177-0000	15	RETAIL CONSTRUCTION MANAGEMENT FIRM	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
HORIZON UNDERPINNING	25602	# 421	ALICIA PKWY	LAGUNA HILLS	CA	92653-5309	15	FOUNDATION REPAIR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HORTON CONSTRUCTION, INC	1169		NEWCASTLE CT	OCEANSIDE	CA	92056-6463	15	BUILDING CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HP GUNITE LP	970	# 427	W VALLEY PKWY	ESCONDIDO	CA	92025-2554	17	GUNITE SUBCONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HPS MECHANICAL INC	3100		E BALLE TERRANCE	BAKERSFIELD	CA	93263-0000	15	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HUBBARD CONTRACTING CO, DON	1015	# A	LINDA VISTA DR	SAN MARCOS	CA	92069-2613	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HUGHES PLUMBING	3665		HARDING ST	CARLSBAD	CA	92008-5010	1711	Plumbing, Heating, Air-Conditioning	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HUNTER STEAKHOUSE	1221		VISTA WAY	OCEANSIDE	CA	92054-6452	5812	CATERING IN CARLSBAD ONLY - RESTAURANT IN OCE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HURLEYUP CONSTRUCTION	7108		PRIMROSE WAY	CARLSBAD	CA	92009-4833	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HUY'S GARDENING	1653		RAVINE RD	VISTA	CA	92083-5561	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
HYDREX PEST CONTROL	9530		DOWDY DR	SAN DIEGO	CA	92126-4335	7342	TERMITE & PEST CONTROL	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
I C INTEGRITY CONSTRUCTION INC	4656		BRIAR RIDGE RD	OCEANSIDE	CA	92056-2232	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
IBANEZ MAINTENANCE	3080		MONROE ST	CARLSBAD	CA	92008-1132	782	Lawn And Garden Services	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
IDEAL PLUMBING & HEATING	5161		WARING RD	SAN DIEGO	CA	92120-2705	1711	PLUMBING, HEATING, AIR, ELECTRICAL SERVICES	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INDUSTRA PAINT & CONST.	1145		TAMARACK AVE	CARLSBAD	CA	92008-3418	1721	Paint Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INGHAM CONSTRUCTION	2440		PIO PICO DR	CARLSBAD	CA	92008-1039	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INGOLD TRACTOR SERVICE	4135		PARK DR	CARLSBAD	CA	92008-3636	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INK ELECTRIC INC	7845		NORTH AVE	LEMON GROVE	CA	91945-1825	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INTEGRITY CONCRETE	540		OPPER ST	ESCONDIDO	CA	92029-1018	17	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INTEGRITY LANDSCAPE	1758		GREEN BRIAR CIR	FALLBROOK	CA	92028-4368	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INTEGRITY PLUS	2967		LEXINGTON CIR	CARLSBAD	CA	92010-6564	1711	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INTEGRITY RESTORATION, INC.	4901	STE 502	MORENA BLVD	SAN DIEGO	CA	92117-7312	15	RESTORATION CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INTERIOR SPECIALISTS INC.	1630		FARADAY AVE	CARLSBAD	CA	92008-7313	1752	Floor Laying & Floor Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INTERSTATE STRIPING OF CALIFORNIA, INC.	8511	# B	ABLETTE RD	SANTEE	CA	92071-4503	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
INTERWEST PACIFIC, LTD.	990	STE 212F	HIGHLAND DR	SOLANA BEACH	CA	92075-3404	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
IRISH CONSTRUCTION	2641		RIVER AVE	ROSEMEAD	CA	91770-3301	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ISLAND BREEZE POOL & SPA	210		GREEN AVE	ESCONDIDO	CA	92025	7389	Swimming Pool Maintenance	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ITX CONSTRUCTION/CONSULTANTANTS, INC.	1285		S LEWIS ST	ANAHEIM	CA	92805-6429	1542	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J & M KEYSTONE, INC.	2709	# A	VIA ORANGE WAY	SPRING VALLEY	CA	91978-1745	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J & T BUILDERS, INC.	2228		W WHITTIER BLVD	LA HABRA	CA	90631-3403	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J C CONSTRUCTION & RENOVATION	3110		DEL REY AVE	CARLSBAD	CA	92009-7511	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J C GRADING, INC.	31504		VALLEY CENTER RD	VALLEY CENTER	CA	92082-6761	1629	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J GINGER MASONRY, LP	8188	STE 100	LINCOLN AVE	RIVERSIDE	CA	92504-4329	17	MASONRY SUBCONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J H O'BRIEN LANDSCAPING & MAINTENANCE INC	3435	STE 103	OCEAN PARK BLVD	SANTA MONICA	CA	90405-3316	17	LANDSCAPING & MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J P I CONSTRUCTION	7805		ROAN RD	SAN DIEGO	CA	92129-4512	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J R MASONRY INC	1447		PEACH AVE	EL CAJON	CA	92021-5829	17	MASONRY CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J R S PLUMBING INC	5681		OLIVE HILL RD	BONSALL	CA	92003-5008	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J W G CONSTRUCTION CO	10925	STE H	HARTLEY RD	SANTEE	CA	92071-2892	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J. D. PAVING, INC.	1412		BARHAM DR	SAN MARCOS	CA	92078-4504	15	CONSTRUCTION/ ASPHALT PAVING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J. R. ENDRES CONSTRUCTION	1526		GRANGER AVE	ESCONDIDO	CA	92027-1405	15	GENERAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
J. T. MONTEFORTE	14726		INTERLACHEN TRL	VALLEY CENTER	CA	92082-6672	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JACKSON DESIGN & REMODELING	4797	# B	MERCURY ST	SAN DIEGO	CA	92111-2102	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JACOBSON CONCRETE	1344		CYNTHIA LN	CARLSBAD	CA	92008-1507	1771	Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JACOR CONSTRUCTION, INC.	10612	STE 101	PROSPECT AVE	SANTEE	CA	92071-8500	1541	GENERAL CONTRACTOR. TENANT IMPROVEMENTS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JAKE & CO	1727		S HANNALEI DR	VISTA	CA	92083-7632	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JAMAR ELECTRIC SAN DIEGO, INC.	9830	STE D	PROSPECT AVE	SANTEE	CA	92071-4375	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JAMES AGRESTA CARPENTRY INC	150		ENGLISH ST	HACKENSACK	NJ	07601-3937	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JAMES P. WALSH	1220	# 428	ROSECRANS ST	SAN DIEGO	CA	92106-2674	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JANKS CONSTRUCTION, INC.	7887	STE H	DUNBROOK RD	SAN DIEGO	CA	92126-4382	1521	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JARED RECON	3610	# 3A	MARQUETTE PL	SAN DIEGO	CA	92101-0000	7532	MOBILE AUTOMOTIVE PAINT REPAIR	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
JASPER COMPANIES, THE	2970		GRACE LN	COSTA MESA	CA	92626-4120	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JAUREGUI & CULVER INC	959		W MISSION AVE	ESCONDIDO	CA	92025-1638	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JAYNES CORPORATION OF CALIFORNIA	111	FL 4	ELM ST	SAN DIEGO	CA	92101-2692	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JB HAULING INC.			PO BOX 4951	OCEANSIDE	CA	92052-4951		Demolition and hauling	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JB LANDSCAPING	7384		ALTIVA PL	CARLSBAD	CA	92009-6421	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JENAL ENGINEERING CORP	7959		LEMON GROVE WAY	LEMON GROVE	CA	91945-1828	1521	PETROLEUM CONTRACTING	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
JENSEN CONSTRUCTION CO	2151	A	LAS PALMAS DR	CARLSBAD	CA	92009	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JERICO POOLS INC	1954		ROSEWOOD ST	VISTA	CA	92081-7310	17	POOL BUILDER / CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JIM AGNOS POOL & SPA SERVICE	7040		SNAPDRAGON DR	CARLSBAD	CA	92011	7389	Business Services, NEC	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
JIM CLARK HANDYMAN	3336		CABO WAY	CARLSBAD	CA	92009-7851	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JIM WINCHESTER	15655		VISTA CATALINA	VALLEY CENTER	CA	92082-5229	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JMG CONSGTRUCTION	5027		CHERRYWOOD DR	OCEANSIDE	CA	92056-2017	15	GENEAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOE MOORE CONSTRUCTION COMPANY	3612		VALLEY ST	CARLSBAD	CA	92008-2639	1521	General Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOE'S PAVING COMPANY, INC.	28419		COLE GRADE RD	VALLEY CENTER	CA	92082	17	General Engineering Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOE'S TILE PROS	5985		DANDRIDGE LN	SAN DIEGO	CA	92115	17	Tile and Stone Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHN BIANCHI CONSTRUCTION	2910		MANAGUA PL	CARLSBAD	CA	92009-7105	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHN C. WALTERS & ASSOC. INC.	6320		MONTECITO DR	CARLSBAD	CA	92009-3272	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHN D. HEBERT CONSTRUCTION	5460		EL ARBOL DR	CARLSBAD	CA	92008-4418	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHN GRIFFIN CONST	244		JASON CT	CORONA	CA	92879-6101	15	GENERAL CONTRACTOR AND UNDERGROUND UTILITII	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHN KEITH MATTERA	29590		BIG RANGE RD	CANYON LAKE	CA	92587-7655	17	PLUMBLING /REMODELING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHN RYDEN CONSTRUCTION	376	10	JUNIPER AVE	CARLSBAD	CA	92008-8259	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHN SMITH EARTHWORKS, INC.	5216		ANNA AVE	SAN DIEGO	CA	92110-4002	17	CONSTRUCTION - GRADING C12, C21 (SUB)	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHN STEVENSON PLUMBING	6351	A108	CORTE DEL ABETO	CARLSBAD	CA	92009-1457	1711	Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHNSON AND JENNINGS GENERAL CONTRACTING	6165	STE 180	GREENWICH DR	SAN DIEGO	CA	92122-5910	1542	GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHNSON BARNES & FINCH, INC.	9749		CACTUS ST	LAKESIDE	CA	92040-4117	17	CONTRACTOR/SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHNSON CONTROLS INC	12393		SLAUSON AVE	WHITTIER	CA	90606-2824	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHNSON POOL SERVICE & REPAIR	3115		SERRANO DR	CARLSBAD	CA	92009-8365	7389	Business Services	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
JOHNSON, FINCH & MCCLURE CONSTRUCTION INC.	9749		CACTUS ST	LAKESIDE	CA	92040-4117	15	CONSTRUCTION SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JON DORE CONSTRUCTION	3353		DEL RIO CT	CARLSBAD	CA	92009-7816	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JONDEL CONSTRUCTION	9216	STE A	ABRAHAM WAY	SANTEE	CA	92071-5602	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOSEPH A. MEEHL'S SONS COMPANY	2717		VANCOUVER ST	CARLSBAD	CA	92008-1367	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOSEPH L BAUER CONST. CO.	2221		CATALINA AVE	VISTA	CA	92084-4807	15	GENERAL BUILDING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JOSH AUTO CARE	824	APT B	S RANCHO SANTA FE RD	SAN MARCOS	CA	92078-4667	7542	WASH CAR AT DEALER SHIP AND DETAIL	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JP WEIMAN CONSTRUCTION, INC.	20475		RANCHO VILLA RD	RAMONA	CA	92065-7658	15	GENERAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JR RESTORATION, INC	7869	# 212	ARJONS DR	SAN DIEGO	CA	92126-4368	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JSI DOOR, INC.	1701		MONARCH RIDGE CIR	EL CAJON	CA	92019-3887	1751	DOOR, FRAME AND HARDWARE INSTALL	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JUAN C. MOBILE MECHANIC	7803	7	CENTELLA ST	CARLSBAD	CA	92009-8319	7538	General Automotive Repair Shops	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JUST LIKE NEW CARPET & UPHOLSTRY CLEANING	6550	SPC 90	PONTO DR	CARLSBAD	CA	92011	7217	Carpet And Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JUST WATER HEATERS INC.	3400		INVESTMENT BLVD	HAYWARD	CA	94545-3811	1711	PLUMBING SERVICE AND REPAIR OF WATER HEATERS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JUST-STAR CONSTRUCTION INC	9292	# 100	CHESAPEAKE DR	SAN DIEGO	CA	92123-1022	17	MASONRY CONTRACTOR C-29	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
JWC CONSTRUCTION	2580		FORTUNE WAY	VISTA	CA	92081-8441	15	GENERAL CONTRACTOR HOA REPAIRS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
K D C CONSTRUCTION	218		W LINCOLN AVE	ORANGE	CA	92865-1019	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
K DRURY & SONS CONSTRUCTION	399		ESCONDIDO AVE	VISTA	CA	92084-6143	15	CLASS B GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
K R LANDSCAPE MAINTENANCE, INC.	662		CLARK AVE	ENCINITAS	CA	92024-2312	17	LANDSCAPE MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
K.E. CURTIS CONSTRUCTION CO., INC.	1400		OLD CONEJO RD	NEWBURY PARK	CA	91320-1023	1521	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
K.F. STEPHENS, INC.	1500	APT 24	W 11TH AVE	ESCONDIDO	CA	92029-2271	15	GEN'L BUILDING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
K.M.P. PLUMBING	435		S CEDROS AVE	SOLANA BEACH	CA	92075-1920	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KATONA PLUMBING	2519		LONGMONT RD	VISTA	CA	92084-5850	17	PLUMBING SERVICE - SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KEAVENY INC, J. F.	5465	STE 101	GAINES ST	SAN DIEGO	CA	92110-2627	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
KEENA CONSTRUCTION	13934		IPAVA DR	POWAY	CA	92064-3421	1542	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KEIFER-KEIFER ELECTRIC INC	649		RICHLAND RD	SAN MARCOS	CA	92069-2054	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KEN HOWARD LANDSCAPING	301		SANTA HELENA	SOLANA BEACH	CA	92075-1510	17	LANDSCAPE, CONCRETE & POOLS	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KENNEDY MASONRY	7040	204B	AVENIDA ENCINAS	CARLSBAD	CA	92009	1741	Masonry Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KEONI LANDSCAPES	1052		KNOWLES AVE	CARLSBAD	CA	92008-1457	1799	Landscape Construction	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KHAVARI CONSTRUCTION, INC.	4550	STE 118	KEARNY VILLA RD	SAN DIEGO	CA	92123-1574	1623	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KIEWIT PACIFIC CO.	10704		SHOEMAKER AVE	SANTA FE SPGS	CA	90670-4040	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KING CONSTRUCTION	10738		54TH ST	MIRA LOMA	CA	91752-2236	15	CONCRETE	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KIPP'S LAWN SERVICE	7211		PLAZA DE LA COSTA	CARLSBAD	CA	92009-6258	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KIRKWOOD CONSTRUCTION	12650		OPIMO DR	SAN DIEGO	CA	92128-3030	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KIWI DIG, INC.	3502		CALLE HIDALGO	CARLSBAD	CA	92009-4565	1521	Construction-Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KJI PLUMBING, INC	38904		SIERRA HWY	PALMDALE	CA	93550-3339	1711	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KL9 CONSTRUCTION	5908		ETON CT	SAN DIEGO	CA	92122-3203	1521	CONSTRUCTION AND REMODELING Appended: 7/22/20	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KLAUS ENYEDI CONCRETE CONST	1715		CATALPA RD	CARLSBAD	CA	92011-5107	1741	Construction-Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KLR BOBCAT & HAULING	1010		E E BOBIER DR	VISTA	CA	92084-3902	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KNOLL DESIGN AND DEVELOPMENT	5751	G1	PALMER WAY	CARLSBAD	CA	92008	1521	General Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KNORR SYSTEMS	2221		S STANDARD AVE	SANTA ANA	CA	92707-3036	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KOSKO CONSTRUCTION	919		BEGONIA CT	CARLSBAD	CA	92009-4807	1793	Glass & Glazing Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KRESSIN POOL CLEANING	2803		VIA TOPACIO	CARLSBAD	CA	92010-1358	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
KUNZIK & SARA CONSTRUCTION INC	1699	# 102	LA COSTA MEADOWS DR	SAN MARCOS	CA	92078-5195	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
KURT FORD CONSTRUCTION	3025		DEL REY AVE	CARLSBAD	CA	92009-7510	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
L & S CONSTRUCTION, INC.	674		N BATAVIA ST	ORANGE	CA	92868-1221	15	CONSTRUCTION OF UNDERGROUND UTILITIES-WATEF	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LABO CONSTRUCTION	1720		CATALPA RD	CARLSBAD	CA	92011-5106	1521	General Contractors--Single-Family Housing	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LANCE HOWARD DETAILING	2476		TORREJON PL	CARLSBAD	CA	92009-8033	7542	Carwashes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LANDSCAPE ARTISTRY	5171	STE F	SANTA FE ST	SAN DIEGO	CA	92109-1620	17	LANDSCAPE DESIGN/CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LANDSCAPE DEVELOPMENT INC	28447		WITHERSPOON PKWY	VALENCIA	CA	91355-4174	17	LANDSCAPE CONSTRUCTION, MAINTENANCE, EROSIO	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LANDSCAPE MASTERPIECE	181		PAWNEE ST	SAN MARCOS	CA	92078-2555	17	LANDSCAPE CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LANDSCAPE SOLUTIONS	1207		MONTE VISTA DR	VISTA	CA	92084-7051	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LANDSCAPES USA	9164		REHCO RD	SAN DIEGO	CA	92121-2269	17	LANDSCAPE MAINTENANCE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LANKFORD CONSTRUCTIO CO	1455		KARLENS WAY	JOHNSBURG	IL	60051-8413	15	GENERAL CONTRACTOR SPECIALIZING IN FIXTURING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LARS CONSTRUCTION	4703		SPRING ST	LA MESA	CA	91941-5207	15	RESIDENTIAL REMODELING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LARSEN CONSTRUCTORS	1253		BUCKWHEAT TRL	CAMPO	CA	91906-3155	17	CONCRETE	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LAVALLE GENERAL CONST. INC.	826		EUCALYPTUS AVE	VISTA	CA	92084-6259	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LAWNS & BEYOND	10531	# 461	4S COMMONS DR	SAN DIEGO	CA	92127-3517	1799	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LEDCOR CONSTRUCTION INC	6405	STE 100	MIRA MESA BLVD	SAN DIEGO	CA	92121-4120	15	BUILD COMMERCIAL STRUCTURES	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LEE AUSTIN CONSTRUCTION	7422		GIRARD AVE	LA JOLLA	CA	92037-5142	15	RESIDENTIAL REMODEL, GENERAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LEFT COAST WINDOW WASHING	1941	308	DOVE LN	CARLSBAD	CA	92008-6813	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LEON LANDSCAPING	813		UNO CT	VISTA	CA	92084-5054	781	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LEONARD'S SHINE-M-UP	120	STE L10	N PACIFIC ST	SAN MARCOS	CA	92069-1269	5099	AUTOMOTIVE DETAIL SUPPLY	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LEUCADIA GLASS	396		N COAST HIGHWAY 101	ENCINITAS	CA	92024-2527	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LEUCADIA PIZZA, INC.	315	STE V	S COAST HIGHWAY 101	ENCINITAS	CA	92024-3559	5812	RESTAURANT	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LEUCADIA PLUMBING	137		CADMUS ST	ENCINITAS	CA	92024-2030	17	PLUMBING/HEATING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LIFE GARDENING SERVICE	1803		MANZANITA CT	VISTA	CA	92083-7718	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LIFESTYLE LANDSCAPES, INC	85888	STE 200	UTICA AVE	RANCHO CUCAMONGA	CA	91730	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LIKE-NU CONCRETE RESTORATION, INC.	26429	STE 120	RANCHO PKWY S	LAKE FOREST	CA	92630-8356	17	CONCRETE RESTORATION SUB CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LLOYD PEST CONTROL	935		SHERMAN ST	SAN DIEGO	CA	92110-4016	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LOMACK SERVICE CORPORATION	2259	STE B	S SANTA FE AVE	VISTA	CA	92083-8075	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LOMBARDI CONTRACTING CORP	7744		FORMULA PL	SAN DIEGO	CA	92121-2419	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LONE ROOTER, THE	2420		PIO PICO DR	CARLSBAD	CA	92008-1039	1711	Plumbing Contractor	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
LOPEZ LANDSCAPE	1332		MAGNOLIA AVE	CARLSBAD	CA	92008-2545	782	Lawn and Garden Services	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LORCO	4488		SALISBURY DR	CARLSBAD	CA	92008-2868	1741	Masonry, Stone Setting	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LOS CABOS POOLS INC	253		WOODLAND DR	VISTA	CA	92083-7672	17	RESIDENTIAL LANDSCAPE	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
LOST DUTCHMAN POOLS	10944		2ND ST	LAKESIDE	CA	92040-2708	17	POOL AND SPA CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LOURO & JOHNSON LANDSCAPE, INC.	829	# B	2ND ST	ENCINITAS	CA	92024-4409	17	LANDSCAPE SUBCONTRACTOR Edited by BBRAN on 05	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LUCAS & MERCIER CONSTRUCTION INC	5245	G	AVENIDA ENCINAS	CARLSBAD	CA	92008	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LUCAS PLUMBING	2890		WOODRIDGE CIR	CARLSBAD	CA	92008-1162	1711	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LUGO GARDENING AND MAINTENANCE	424		CAMINITO AZUL	VISTA	CA	92083-3608	781	GARDENING MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LUIS GASTELUM ROOFING	4189		CHASIN ST	OCEANSIDE	CA	92056-3412	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LUSARDI CONSTRUCTION COMPANY	1570		LINDA VISTA DR	SAN MARCOS	CA	92078-3808	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LUTH & TURLEY INC	1350		HILL ST	EL CAJON	CA	92020-5735	15	GENERAL & FLOORING CONTRACTORS - FIRE & FLOOI	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LUZAICH STRIPING INC.	14219		OLDE HIGHWAY 80	EL CAJON	CA	92021-2826	17	PARKING/HWY IMPROVEMENT	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
LZ CONSTRUCTION	10051		QUAIL CANYON RD	EL CAJON	CA	92021-6040	15	GENERAL CONTRACTING CONSTRUCTION CO	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
M & W LANDSCAPING	952	STE 7	POSTAL WAY	VISTA	CA	92083-6934	17	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
M A C DESIGN AND DEVELOPMENT	471		CHESTERFIELD DR	CARDIFF	CA	92007-1933	15	RESIDENTIAL GENERAL CONTRACTORS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
M C S CONSTRUCTION	7804		ESTANCIA ST	CARLSBAD	CA	92009-8320	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
M E R CONSTRUCTION	35225		LINDA ROSEA RD	TEMECULA	CA	92592-9531	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
M H CONSTRUCTION	1198		ALPINE OAKS DR	ALPINE	CA	91901-3066	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
M S CONSTRUCTION	2835		CONTRA COSTA BLVD	CONCORD	CA	94523-4219	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
M W CONSTRUCTION INC.	615		N CITRACADO PKWY	ESCONDIDO	CA	92029-1133	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
M. C. WELCH PLUMBING	1447		PANORAMA RIDGE RD	OCEANSIDE	CA	92056-2202	17	PLUMBER	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
M. M. PAINTING SERVICES	2424		LEVANTE ST	CARLSBAD	CA	92009-8019	1721	PAINTING/DECORATING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MAC PHERSON'S	1277		FOREST AVE	CARLSBAD	CA	92008-1008	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MACHAN SIGN CO	1209		EUCLID AVE	LONG BEACH	CA	90804-4006	17	SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MACKENZIE KECK, INC.	301		ROUND HILL DR	ROCKAWAY	NJ	07866-1224	15	COMMERCIAL GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MACKENZIE LANDSCAPE	33380		BAILEY PARK BLVD	MENIFEE	CA	92584-9585	782	LAWN & GARDEN LANDSCAPE & IRRIGATION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MAD ABOUT POOLS	1860		CANYON PL	CARLSBAD	CA	92008-1175	7389	Pool Maintenance	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
MAINLINE PLUMBING	524		HOFGAARDEN ST	LA PUENTE	CA	91744-5529	1711	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MALCOLM DRILLING CO., INC.	4926		AZUSA CANYON RD	BALDWIN PARK	CA	91706-1940	17	DRILLING AND SHORING SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MANUEL FLORES	854		PASSIFLORA AVE	ENCINITAS	CA	92024-2342	17	BLACK WORK BRICK CONCRETE	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MARCOTTE + HEARNE BUILDERS, INC.	11696	STE 200	SORRENTO VALLEY RD	SAN DIEGO	CA	92121-1024	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MARIA VICTORIA PASION-KLEIN	2578		DISCOVERY RD	CARLSBAD	CA	92009-3062	5812	Eating Places	Yes	X	X		X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MARIANO'S LANDSCAPING	3422	B	MADISON ST	CARLSBAD	CA	92008-5032	782	Lawn And Garden Services	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MARK SAUER CONSTRUCTION, INC.	19712		TEMESCAL CANYON RD	CORONA	CA	92881-5656	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MARROKAL CONSTRUCTION COMPANY	9842		RIVER ST	LAKESIDE	CA	92040-3114	15	RESIDENTIAL REMODELING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MARVISTA CONSTRUCTION	603	STE G	E ALTON AVE	SANTA ANA	CA	92705-5646	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MASCO CONTRACTOR SERVICES OF CALIFORNIA INC	13000	STE 101	KIRKHAM WAY	POWAY	CA	92064-7148	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MASTER DESIGN DRYWALL	360		S SPRUCE ST	ESCONDIDO	CA	92025-4052	17	PLASTER/DRYWALL SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MASTER LANDSCAPE	1980		EATON AVE	HEMET	CA	92545-3307	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MASTER PLUMBING AND LEAK DETECTION	8726	STE B	PRODUCTION AVE	SAN DIEGO	CA	92121-2264	17	PLUMBING SERVICE AND REPAIR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MASTER SERV, INC.	560		LIBRARY ST	SAN FERNANDO	CA	91340-2524	17	PLUMBING / REPIPE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MASTERBRAND CABINETS, INC.	3645		LOSEE RD	N LAS VEGAS	NV	89030-3324	1751	RESIDENTIAL SUB-CONTRACTOR DELIVERING AND INS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MASTERPIECE BUILDERS INC	14329		SAWGRASS CIR	VALLEY CENTER	CA	92082-6643	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MATTHEW DAVID COTHAM CONSTRUCTION	351		EUCALYPTUS AVE	VISTA	CA	92084-6031	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MAVERICKCAULKING & COATING INC.	432		W MEATS AVE	ORANGE	CA	92865-2625	17	CONCRETE CAULKING & COATINGS CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MBC INC	742		ARDEN DR	ENCINITAS	CA	92024-4505	15	RESIDENTIAL / HOME BUILDER / REMODELS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MC CONNELL CABINETS, INC.	13110		LOUDEN LN	CITY OF INDUSTRY	CA	91746-1507	17	SUB-CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MCCARTHY BUILDING COMPANIES, INC.	20401		SW BIRCH ST	NEWPORT BEACH	CA	92660-1795	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MCGINNIS'S REMODELING INC.	1235		W 9TH ST	UPLAND	CA	91786-5706	1521	GENERAL CONTRACTOR B & C33.	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
MCKITTRICK GRADING & EXCAVATING	3602		KINGSTON ST	CARLSBAD	CA	92010-2181	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MENDENHALL CONCRETE	3405		LAURASHAWN LN	ESCONDIDO	CA	92026-8534	17	CONCRETE CONTRACTING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MERIT MASONRY, INC.	33915		ALMOND ST	WILDOMAR	CA	92595-8758	17	MASONRY SUBCONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MESA ENERGY SYSTEMS	5		VANDERBILT	IRVINE	CA	92618-2011	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
METCOE SKYLIGHT SPECIALTIES	1715		W 135TH ST	GARDENA	CA	90249-2507	17	OUT OF AREA SUBCONTRACTOR (HENRY'S MARKET (	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MG BUIDERS	745		BUICK AVE	SAN JACINTO	CA	92582-4508	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MG LANDSCAPE MAINTENANCE	3765		TRIESTE DR	CARLSBAD	CA	92008-2844	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MHS CUSTOMER SERVICE, INC.	7888	STE A	SILVERTON AVE	SAN DIEGO	CA	92126-6309	1521	CONSTRUCTION - BUILDER PREP & CUSTOMER SERVI	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MICHAEL ABAD	7417		SITIO LIMA	CARLSBAD	CA	92009-8469	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MICHAEL ELLIOTT LANDSCAPE ARCHITECT	637		ARDEN DR	ENCINITAS	CA	92024-4504	781	LANDSCAPE ARCHITECTURE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MICHAEL L. YOUNG CONST.	1725		STEWART ST	OCEANSIDE	CA	92054-6043	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MIDTOWN PLUMBING, INC.	8234		GARFIELD AVE	BELL GARDENS	CA	90201-6212	17	COMMERICAL/INDUSTRIAL PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MIGUEL GARDENING & JANITORIAL	380		LA PURISMA WAY	OCEANSIDE	CA	92057-6854	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MIKE COBIAN CONCRETE & MASONRY	830	STE 217	E VISTA WAY	VISTA	CA	92084-5246	1799	CONCRETE & MASONRY	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MIKE GOLLONG-GENERAL CONTRACTOR	1595		EOLUS AVE	ENCINITAS	CA	92024-1515	15	RESIDENTIAL CONST-REMODELER	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MIKE SAMPO INC	2302		FINCH LN	SAN DIEGO	CA	92123-3715	15	CONTRACTOR - CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MILLENNIUM BUILDING SERVICES	1068		LA MIRADA CT	VISTA	CA	92081-7874	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MILLER BUILDING CO., THE	6434		EL PERICO LN	CARLSBAD	CA	92009-4310	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MILLROCK BUILDERS / ECO-SAVE	3051		DON ROLANDO	ESCONDIDO	CA	92025-7705	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MIRAMAR SIGN WORKS	9040	STE 403	KENAMAR DR	SAN DIEGO	CA	92121-2433	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MIRANDA CAR CLEANER	4086		GALBAR ST	OCEANSIDE	CA	92056-3455	7542	AUTO DETAILER (MOBILE)	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MISSION GUNITE	12067		RIVERSIDE DR	LAKESIDE	CA	92040-2328	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MISSION PLUMBING & HEATING	1100		S EL CAMINO REAL	SAN CLEMENTE	CA	92672-4203	1711	PLUMBING AND HEATING AND BACKFLOW TESTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MISSION POOLS OF ESCONDIDO INC	755		W GRAND AVE	ESCONDIDO	CA	92025-2505	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MISSION VALLEY POOLS & SPAS INC.	8284		MIRAMAR RD	SAN DIEGO	CA	92126-4345	15	SWIMMING POOL CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MJR CONSTRUCTION, INC.	300	300	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2991	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOBILE AUTO DETAIL COMPANY	1913	APT 13	WEST DR	VISTA	CA	92083-6144	7542	CARWASH MOBILE	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOBILE CAR DOCTORS, THE	1010		HOME AVE	CARLSBAD	CA	92008-1831	7538	General Automotive Repair Shops	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOBILE ENVIRONMENTS	4167		THOMAS ST	OCEANSIDE	CA	92056-4223	15	GENERAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOBILE HOMES UNLIMITED	33421		OLD STATE HWY	HEMET	CA	92545-9105	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOBILE SHINE AUTO DETAILING	3320		CALLE SAN BLAS	CARLSBAD	CA	92009	7542	Carwashes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MODERN MASONRY	1168		GREENFIELD DR	EL CAJON	CA	92021-3314	17	MASONRY CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MODERN WEST, INC.	1031		REGAL RD	ENCINITAS	CA	92024-4637	15	POOL, SPA & LANDSCAPE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOLINA'S EXTERIORS	4869		ALONDRA WAY	CARLSBAD	CA	92008-3803	781	Construction-Special Trade Contractors	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MORLEY CONSTRUCTION COMPANY	2901	STE 100	28TH ST	SANTA MONICA	CA	90405-2975	1771	CONCRETE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOSS REPLACEMENT WINDOWS INC	5835	117	AVENIDA ENCINAS	CARLSBAD	CA	92008	1700	Construction-Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOST CONSTRUCTION	2598	STE B	FORTUNE WAY	VISTA	CA	92081-8442	15	RESIDENTIAL REMODELING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOTIVATIONAL SYSTEMS INC.	823		W 23RD ST	NATIONAL CITY	CA	91950-6403	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOTTA CONCRETE CONSTRUCTION	429	STE B	DAISY LN	SAN MARCOS	CA	92078-1153	1771	CONCONRETE CONSTRUCTION: CURB/GUTTER/SIDEV	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOUNTAIN AIR	616		W 3RD AVE	ESCONDIDO	CA	92025-4035	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MOUNTAIN MOVERS ENGINEERING CONTRACTORS	699		CASSOU RD	SAN MARCOS	CA	92069-9713	15	CONTRACTOR EARTHWORK	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MR NEON INC	3106		MAIN ST	SAN DIEGO	CA	92113-3732	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MULLEN CONSTRUCTION	2890	202	PIO PICO DR	CARLSBAD	CA	92008-1558	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MURRIETA DEVELOPMENT CO INC	42540		RIO NEDO	TEMECULA	CA	92590-3727	15	PIPELINE CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MW PELTZ + ASSOCIATES, INC.	143	STE B104	S CEDROS AVE	SOLANA BEACH	CA	92075-1941	781	LANDSCAPE ARCHITECTURE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
MY PLUMBER SAN DIEGO LLP	7150		CONVOY CT	SAN DIEGO	CA	92111-1019	17	PLUMBING SERVICE REPAIR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
N B BAKER ELECTRIC INC.	1298		PACIFIC OAKS PL	ESCONDIDO	CA	92029-1001	17	RESIDENTIAL ELECTRICAL CONTRACTORS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
N. REX WILSON CONSTRUCTION, INC.	4600		PARK DR	CARLSBAD	CA	92008-4243	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NATIVE LANDS GENERAL CONSTRUCTION	695		OLD STAGECOACH RUN	ALPINE	CA	91901-1467	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
NATIVE LANDSCAPE, INC.	9746		TAMARACK LN	ESCONDIDO	CA	92029-8134	17	LANDSCAPE MAINTENANCE/CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NATURE DESIGNS LANDSCAPING	116		HANNALEI DR	VISTA	CA	92083-7625	17	LANDSCAPE CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NATURES IMAGE, INC.	20472	STE 102	CRESCENT BAY DR	LAKE FOREST	CA	92630-8849	17	LANDSCAPE CONTRACTOR / HABITAT RESTORATION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NATURESCAPE	314		CHAPALITA DR	ENCINITAS	CA	92024-4807	17	LANDSCAPE CONTRACTING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NEAL HENNING CONSTRUCTION	3119		VERDE AVE	CARLSBAD	CA	92009-7530	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NERI'S GARDENING & LANDSCAPING	776		VIRGINIA PL	SAN MARCOS	CA	92078-6216	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NESTI CONSTRUCTION	5631		PALMER WAY	CARLSBAD	CA	92008	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NEW GROWTH LANDSCAPES	6676		BLUEBONNET DR	CARLSBAD	CA	92011-2502	1799	Construction-Special Trade Contractors	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NEWBERY CONSTRUCTION	1212		VISTA WAY	OCEANSIDE	CA	92054-6453	1542	COMMERCIAL GENERAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NEWEST CONSTRUCTION	7847		DUNBROOK RD	SAN DIEGO	CA	92126-6305	15	CONSTRUCTION GENERAL	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NEWMAN REPLACEMENT WINDOWS	6110		YARROW DR	CARLSBAD	CA	92011-1534	1751	Window & Door Installation & Sales	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NEW-WAY LANDSCAPE & TREE SERVICES	7485		RONSON RD		CA	92111		LANDSCAP MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NICK BOWMAN CONSTRUCTION INC	2121	STE 205	PALOMAR AIRPORT RD	CARLSBAD	CA	92011-1497	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NILSON WINTER CONST.	3509		CHAUNCEY RD	OCEANSIDE	CA	92056-4965	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NISSHO OF CALIFORNIA INC.	1902		S SANTA FE AVE	VISTA	CA	92083-7721	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NOLEN EXTRMNTR OF CA, TRULY	913		RANCHEROS DR	SAN MARCOS	CA	92069-3028	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NORCO POWER WASHING	2751		TIBURON AVE	CARLSBAD	CA	92010-7908	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NORTH COUNTY COASTAL PLUMBING	3900		LINMAR LN	CARLSBAD	CA	92008-4124	1711	Plumbing Contractor	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NORTH COUNTY DOOR	1485	STE 114	POINSETTIA AVE	VISTA	CA	92081-8537	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NORTH COUNTY GUNITE CO., LTD.	12562		HIGHWAY 67	LAKESIDE	CA	92040-1159	15	GUNITE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NORTH COUNTY POOL & SPA	5106		LYNCH CT	CARLSBAD	CA	92008-3865	7389	Pool & spa Maintenance Services	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
NORTH COUNTY POOLS	19915		FORTUNA DEL ESTE	ESCONDIDO	CA	92029-5917	17	SWIMMING POOL SRV/REPAIR/CONST	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
NORTHPAW INC	7367		FLOREY CT	SAN DIEGO	CA	92122-2816	1542	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NOVI ENVIRONMENTAL	31879	STE 140	CORYDON ST	LAKE ELSINORE	CA	92530-8517	1542	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NU- COTE	8969		COMPLEX DR	SAN DIEGO	CA	92123-1405	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
NU FLOW AMERICA INC.	7150	# 100	CARROLL RD	SAN DIEGO	CA	92121-3287	1711	PIPE RE-LINING/PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
O3 PEST TERMINATORS	7704	UNIT I201	CAMINITO TINGO	CARLSBAD	CA	92009-8657	7342	Disinfecting And Pest Control Services	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
OCEAN BREEZE CARPET CLEANING	1739		MALLOW CT	CARLSBAD	CA	92011-5122	7217	Carpet And Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
OCEAN BREEZE CONST	350		VIA DEL MONTE	OCEANSIDE	CA	92058-1226	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
OCEAN HOME REPAIR	6517		CAMINO DEL PARQUE	CARLSBAD	CA	92011-2466	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
OCEANBLUE POOLS & LANDSCAPE	7571		NORTHERN LGTS	SAN DIEGO	CA	92127-3800	17	POOL & LANDSCAPING	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
OCEANS EDGE POOL SERVICE	6550	SPC 38	PONTO DR	CARLSBAD	CA	92009-2306	7389	Business Services, NEC	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
OCHOA'S LANDSCAPE	811		SHELTER COVE WAY	OCEANSIDE	CA	92058-6931	781	LANDSCAPE MAINT, IRRIGATION SYSTEMS, SMALL TRE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
OFFICIAL PAINTING	2379		CARINGA WAY	CARLSBAD	CA	92009-6359	1721	Painting and Paperhanging	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
OGARA CONSTRUCTION	3200		JAMES DR	CARLSBAD	CA	92008-1961	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
OLESON CONSTRUCTION	2040		S DITMAR ST	OCEANSIDE	CA	92054-6526	15	B-1 REMODELS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ON CALL DETAILING	2614		LUCIENAGA ST	CARLSBAD	CA	92009-5823	7542	Carwashes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ON THE LEVEL	2982		ORA AVO TER	VISTA	CA	92084-6548	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ONE TRIPP TREE SERVICE	14218		BOUNTY WAY	POWAY	CA	92064-2779	15	TREE SERVICE	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ONLINE BUILDERS	110		MELBA RD	ENCINITAS	CA	92024-4520	15	COMMERCIAL GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
OPUS WEST CONSTRUCTION CORPORATION	4350	STE 110	LA JOLLA VILLAGE DR	SAN DIEGO	CA	92122-1244	15	GENERAL BUILDING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ORANGE COUNTY STRIPING SERVICE, INC.	183		N PIXLEY ST	ORANGE	CA	92868-2207	17	ROAD STRIPING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ORCHIDSOURCE LAB	1557		INDIAN SUMMER RD	SAN MARCOS	CA	92069-2231	181	HORTICULTURAL	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ORION CONSTRUCTION CORP	1232		KEYSTONE WAY	VISTA	CA	92081-8316	15	WET UTILIES GENERAL CONSTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ORKIN EXTERMINATING CO INC	2420	STE J	GRAND AVE	VISTA	CA	92083-7827	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ORLANDO MASONRY	656		MAR VISTA DR	VISTA	CA	92081-7521	17	MASONRY	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
OSCAR DIKE POOL REPAIR	841		CAMELLIA PL	CARLSBAD	CA	92008-5063	7389	Construction-Special Trade Contractors	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
OUTDOOR LIVING CREATIONS	6395		W LILAC RD	BONSALL	CA	92003-4102	17	LANDSCAPE CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
P G SALES	2333	30	CARINGA WAY	CARLSBAD	CA	92009-6372	1700	Construction-Special Trade Contractors	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
PABLO'S MAINTENANCE	5257		HUBBERT ST	OCEANSIDE	CA	92056-2353	781	YARD MAINTENANCE, MOW, EDGE, CLEAN	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC BLUE POOL SERVICE	1736	458	STATE ST	SAN DIEGO	CA	92101-2513	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC BUILDING GROUP	9752	STE 150	ASPEN CREEK CT	SAN DIEGO	CA	92126-1083	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC CLEAN JANITORIAL SRVCS	777		SEPIA CT	OCEANSIDE	CA	92057-6210	7349	COMMERCIAL / RESIDENTIAL JANITORIAL SERVICES	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC COAST DRYWALL & PAINT, INC.	536	STE E	S 2ND AVE	COVINA	CA	91723-3043	17	DRYWALL & PAINT CONTRACTORS	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC COAST GRADING INC.	2726		MORNING CLORY LN	CARLSBAD	CA	92008-1035	1794	Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC COMMERCIAL CONSTRUCTION	2262	103	RUTHERFORD RD	CARLSBAD	CA	92008	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC DENTS	21194		GLADIOLOS WAY	LAKE FOREST	CA	92630-7618	7532	PAINTLESS DENT REMOVAL	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC DETAILING CO.	43759		CORTE AMAYA	TEMECULA	CA	92592	7542	Mobile Car Washing	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC EMPIRE CONSTRUCTION GROUP INC	12937	# C	POMERADO RD	POWAY	CA	92064-5325	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC MASONRY, INC.	1007	STE J	W GROVE AVE	ORANGE	CA	92865-4153	1741	MASONRY	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC OIL SPREADING, INC.	610		METCALF ST	ESCONDIDO	CA	92025-1665	17	OIL SPREADING/TRANSPORTATION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC PATIO INC	8012		WONDER LN	EL CAJON	CA	92021-1522	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC POINTE PLUMBING	531		ROJA DR	OCEANSIDE	CA	92057-4318	17	SERVICE/REPAIR PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC PRODUCTION PLUMBING	4055		TRAIL CREEK RD	RIVERSIDE	CA	92505-5863	17	CONTRACTOR SPECIALTY - PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC REFRIGERATION INC.	1440		BROADWAY	EL CAJON	CA	92021-5128	17	COMM. REFRIG. SALES & SERVICE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC RESTORATION	5365	J	AVENIDA ENCINAS	CARLSBAD	CA	92008-4361	7349	Building Cleaning & Maint Svc, NEC	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC RIM HYDROSEEDING, INC.	28319		VALLEY CENTER RD	VALLEY CENTER	CA	92082-6562	1799	HYDRO APPLICATION OF SEED, EROSION CONTROL M	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC RIM MECHANICAL CONTRACTORS INC	7655		CONVOY CT	SAN DIEGO	CA	92111-1103	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC SUN POOL 'N SPA	8550		PRODUCTION AVE	SAN DIEGO	CA	92121-2288	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC TRANS ENVIRONMENTAL SERVICES, INC	1452		N JOHNSON AVE	EL CAJON	CA	92020-1616	4212	HAZARDOUS WASTE TRANSPORTATION AND SERVICE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACIFIC WINDOW CLEANING	1802	202	NICOLIA DR	CARLSBAD	CA	92009-2778	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PACWEST CONSTRUCTION	2525	102	PIO PICO DR	CARLSBAD	CA	92008	1711	General Building Contractor	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PADRE POOLS	9679		MARILLA DR	LAKESIDE	CA	92040-2816	17	SWIMMING POOL CONTRACTOR	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
PALLADEO	900		WESTERN AVE	GLENDALE	CA	91201-2353	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PALLMAR AND COMPANY	1830		N NEVILLE ST	ORANGE	CA	92865-4216	17	DOORS, FRAMES, HARDWARE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PALOMAR GRADING & PAVING INC	2150	STE C	N CENTRE CITY PKWY	ESCONDIDO	CA	92026-1347	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PALOMAR SPECIALISTS, INC.	1608		MADRONE GLN	ESCONDIDO	CA	92027-1146	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PALOMAR TRANSPORTATION INC	800	AG-7	GRAND AVE	CARLSBAD	CA	92008	4119	Local Passenger Transportation, NEC	Yes		X	X		X				X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PARAMOUNT MOBILE DETAIL	29854		HILLSIDE VIEW CT	ESCONDIDO	CA	92026-5945	7542	MOBILE AUTO DETAIL	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PARK CARE	2744		AUBURN AVE	CARLSBAD	CA	92008-2170	781	Landscape Counseling and Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PARK WEST LANDSCAPE, INC.	1011	STE C	E MISSION RD	SAN MARCOS	CA	92069-3039	17	LANDSCAPE & IRRIGATION CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PARTITIAN SPECIALTIES, INC	12342		MCCANN DR	SANTA FE SPGS	CA	90670-3333	15	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PATRIOT PLUMBING	870		N 2ND ST	EL CAJON	CA	92021-5806	1711	PLUMBING SERVICE & REPAIR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PATTERSON BROTHERS LIGHTING	12047		RIVERSIDE DR	LAKESIDE	CA	92040-2328	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PAUL M. WOLFF CO. INC.	460		N GENEVA RD	LINDON	UT	84042-1119	17	CONCRETE FLOOR SEALERS	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PAUL PARIZEAU	3218		EUREKA PL	CARLSBAD	CA	92008-2518	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PAUL TURNER CONSTRUCTION	4062	D	GARFIELD ST	CARLSBAD	CA	92008-7402	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PAW PRINTS DOG WALKING	137		SANTA CLARA DR	VISTA	CA	92083-6236	752	DOG WALKING	Yes	X	X			X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PAXTON TOWING INC	2496	STE D	S SANTA FE AVE	VISTA	CA	92084-8029	7549	TOWING SERVICE	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PAYCO SPECIALTIES INC	120		N 2ND AVE	CHULA VISTA	CA	91910-1127	17	HIWAY & AIRPORT STRIPING CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PAYNES SERVICES	718	SPC 114	SYCAMORE AVE	VISTA	CA	92083-7945	7342	RESTROOM CLEANING SERVICE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PBC RESIDENTIAL	1560		W LAMBERT RD	BREA	CA	92821-2826	15	SUB-CONTRACTOR MASONRY / CONCRETE	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PCL CONSTRUCTION SERVICES, INC.	4690	STE 100	EXECUTIVE DR	SAN DIEGO	CA	92121-3073	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PELICAN GLASS CO	2680		STATE ST	CARLSBAD	CA	92008-1626	1793	Retail Glass Installation	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PENHALL COMPANY	1801		W PENHALL WAY	ANAHEIM	CA	92801-6700	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PEREZ LANDSCAPING	3436		DE LEONE RD	SAN MARCOS	CA	92069-1230	781	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PESTMASTER SERVICES	751		W 4TH AVE	ESCONDIDO	CA	92025-4038	7342	PEST CONTROL	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PETER ANDREW PAINTING	7000		FORSTERS TERN DR	CARLSBAD	CA	92011-3969	1721	Construction-Special Trade Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
PETERSON BROTHERS CONST. INC.	1560		W LAMBERT RD	BREA	CA	92821-2826	17	CONCRETE FLATWORK	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PETERSON LIGHTING PRODUCTIONS INC	1965	STE 105	GILLESPIE WAY	EL CAJON	CA	92020-0500	17	SUB-CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PETE'S PLUMBING & REPAIR	16660		SKY VALLEY DR	RAMONA	CA	92065-5709	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PETRA SHOTCRETE INCORPORATED	33131		MONROY CIR	TEMECULA	CA	92592-7229	17	SHOTCRETE	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PETROLEUM P.E.T.S	13468		GRANITE CREEK RD	SAN DIEGO	CA	92128-4074	15	PETROLEUM SRV EQUIPMENT CONTR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PETRUSSE-NORRIS PAINTING, INC	801	STE 208	E CHAPMAN AVE	FULLERTON	CA	92831-3846	17	COMMERCIAL AND INDUSTRIAL PAINTING CONTRACTO	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PETZ ROCK PETSITTING	1784		STAR CREST PL	SAN MARCOS	CA	92078-0910	752	PETSITTING, DOG WALKING	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
PHILLIP MARRUJO (LANDSCAPE)	360	3	CHINQUAPIN AVE	CARLSBAD	CA	92008-7420	781	Landscape Counseling and Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PHIL'S CARWASH / DETAILING	6041	107	PASEO DEL NORTE	CARLSBAD	CA	92009	7542	Carwashes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PICK UP STIX, INC.	1330		CALLE AVANZADO	SAN CLEMENTE	CA	92673-6351	15	CONTRACTOR Edited by BBRAN on 07/31/2002	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PIPES PLUMBING, INC.	1145		LAW ST	SAN MARCOS	CA	92078-4004	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PLANT-TEK, INC.	20110	# B	ELFIN FOREST LN	ESCONDIDO	CA	92029-6006	783	LANDSCAPE PEST CONTROL	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PLASTER PROS, INC.	2834	STE 402	HAMNER AVE	NORCO	CA	92860-1929	1742	LATH & PLASTER CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PLATINUM PROPERTY SERVICE	1741		W LINCOLN AVE.	ANAHEIM	CA	92801	7349	Powerwashing services	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PLAYGROUNDS WEST INC	3566		KNOLLWOOD DR	CARLSBAD	CA	92010-5505	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PLAZA BUILDERS	5091		EL ARBOL DR	CARLSBAD	CA	92008-4313	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PLOTKE PLUMBING	321		LA COSTA AVE	ENCINITAS	CA	92024-1112	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
POLISHED IMAGE MOBILE DETAILING	2454		JEFFERSON ST	CARLSBAD	CA	92008-1410	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
POOL 1	11150		SOCORRO CT	SAN DIEGO	CA	92129-1315	17	POOL & SPA	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
POOL MANAGERS	4145		HARBOR DR	CARLSBAD	CA	92008-4115	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
POOL SERVICE BY INDIGO	2292		AUDEN PL	CARLSBAD	CA	92008-3856	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
POOL TECH	3002		LEVANTE ST	CARLSBAD	CA	92009-8228	7389	Business Services, NEC	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
POOLMASTER	1841		SHERIDAN RD	ENCINITAS	CA	92024-1141	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
POOLS OF PERFECTION	538		E 5TH AVE	ESCONDIDO	CA	92025-4313	7389	SWIM POOL MAINTAINENCE SERV.	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
POOLSAFE INC	1200		S ESCONDIDO BLVD	ESCONDIDO	CA	92025	7389	SWIM POOL MAINTAINENCE SERV.	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
POOLSCAPE UNLIMITED, INC.	11645	STE 123	RIVERSIDE DR	LAKESIDE	CA	92040-2367	17	SWIMMING POOL PLASTER	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PORTABLE WOOD BUILDING	8975	SPC 204	LAWRENCE WELK DR	ESCONDIDO	CA	92026-6435	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
POSH PETS GROOMING SERVICES	5515		FOXTAIL LOOP	CARLSBAD	CA	92010-7153	752	Animal Specialty Services, Except Veterinary	Yes	X	X		X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
POWERS, EARL K.	2121	STE 110	CHABLIS CT	ESCONDIDO	CA	92029-2075	15	CONCRETE MASONRY	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PRECISION CARPENTRY INC.	2620	# B	TEMPLE HEIGHTS DR	OCEANSIDE	CA	92056-3512	1541	GENERAL CONSTRUCTION - COMMERCIAL	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PRECISION KITCHEN AND BATH	2921		LANCASTER RD	CARLSBAD	CA	92010-6568	1743	Terrazzo, Tile, Marble, Mosaic Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PRECISION PLUMBING INC	2005		CAMINO CULEBRA	VISTA	CA	92084-3607	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PREMIER POOLS & SPAS	1945	C	CAMINO VIDA ROBLE	CARLSBAD	CA	92008	1700	Construction-Special Trade Contractors	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
PRENTICE CONSTRUCTION INC.	7323		EL FUERTE ST	CARLSBAD	CA	92009-6410	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PRESTIGE CONCRETE	13507		MIDLAND RD	POWAY	CA	92064-4711	17	CONCRETE FLATWORK	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PREVOST CONSTRUCTION	400	STE 201	S SIERRA AVE	SOLANA BEACH	CA	92075-2262	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PRICE BUILDERS, INC.	6351		NANCY RIDGE DR	SAN DIEGO	CA	92121-2247	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PRIMARY GENERAL	5345	STE I	TIMKEN ST	LA MESA	CA	91942-2945	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PRIME COMPANY PAINTING INC	1107		S. CLEVELAND ST.	OCEANSIDE	CA	92054		Paint and powerwashing	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.7
PRIZM JANITORIAL SERVICES	6161	# 160	EL CAJON BLVD	SAN DIEGO	CA	92115-3922	7349	COMPLETE JANITORIAL, CUSTODIAL, AND CLEANING S	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PRO EARTH LANDSCAPE, INC	2210	STE K	ENCINITAS BLVD	ENCINITAS	CA	92024-4359	17	LANDSCAPE CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PRO WALL LATH & PLASTER, INC.	360		S SPRUCE ST	ESCONDIDO	CA	92025-4052	17	EXTERIOR STUCCO	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PROCRAFT, INC.	43123		BUSINESS PARK DR	TEMECULA	CA	92590-3628	17	DOORS / HARDWARE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PROSCAPES BY R H C INC	1100		GREENWAY RD	OCEANSIDE	CA	92057-1918	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
PULIDO CLEANING & RESTORATION INC	26063		JEFFERSON AVE	MURRIETA	CA	92562-6983	15	GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
Q E CONSTRUCTION INC	13526		CELESTIAL RD	POWAY	CA	92064-3623	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
QUALIFIED MOBILE, INC.	1720		INDUSTRIAL AVE	NORCO	CA	92860-2976	7542	FLEET WASHING SERVICES Edited by BBRAN on 07/24/	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
QUALITY CUSTOM POOLS INC	30138		MARNE WAY	MENIFEE	CA	92584-8949	17	CONTRACTOR GUNITE POOLS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
QUALITY SEALANTS	2180	109	CHABLIS CT.		CA	92029		Concrete sealants	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
QUALTECH CONCRETE, INC.	40880	STE A	COUNTY CENTER DR	TEMECULA	CA	92591-6043	1771	CONCRETE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
QUICK-DRY FLOOD SERVICES	293		VENTURE ST	SAN MARCOS	CA	92078-4376	15	24 HOUR EMERGENCY RESTORATION COMPANY	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R A BOOKERBUILDER'S INC	2240	STE D	ENCINITAS BLVD	ENCINITAS	CA	92024-4345	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R A SCHREIBER PLUMBING INC	2358		TAVERN RD	ALPINE	CA	91901-3134	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R B E	1177	STE B	GREENFIELD DR	EL CAJON	CA	92021-3362	17	PAINTING CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R D ENGINEERING & CONSTRUCTION INC	1660		N MAGNOLIA AVE	EL CAJON	CA	92020-1288	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R E STEINHAUER CONSTRUCTION INC	7630	STE 2400	MIRAMAR RD	SAN DIEGO	CA	92126-4223	1541	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R G L DESIGN & CONSTRUCTION	2074		SILVERADO ST	SAN MARCOS	CA	92078-3200	15	GERERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R J ALLEN INC	10392		STANFORD AVE	GARDEN GROVE	CA	92840-6301	17	SAWCUTTING, DEMOLITION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R M MECHANICAL	1248		NORTH AVE	ESCONDIDO	CA	92026-8450	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R N M CONSTRUCTION	1442		ALTA VISTA DR	VISTA	CA	92084-5702	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R P LANDSCAPE & MAINTENANCE	210	APT 27	CHINABERRY LN	SAN MARCOS	CA	92069-2800	781	LANDSCAPE & MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R. DEUTSCHMAN & ASSOCIATES	631		LUNAR AVE	BREA	CA	92821-3113	1799	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R. J. DAUM CONSTRUCTION CO	7562		TRADE ST	SAN DIEGO	CA	92121-2412	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R. RIMMEN CONST.	2611	STE 103	S COAST HIGHWAY 101	CARDIFF	CA	92007-2100	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R.C. WENDT PAINTING	21612		SURVEYOR CIR	HUNTINGTN BCH	CA	92646-7068	17	PAINTING RESIDENTIAL	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R.C.R. PLUMBING, INC.	12620		MAGNOLIA AVE	RIVERSIDE	CA	92503-4636	17	SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
R.D. BACON CONSTRUCTION	2800		WILSON ST	CARLSBAD	CA	92008-1531	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RACCOON ROUNDUP	3812		SIERRA MORENA AVE	CARLSBAD	CA	92010-2819	7389	Pest Control	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RACK CONSTRUCTION & CONSULTING INC	7967		CAMINO ALVARO	CARLSBAD	CA	92009-9204	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RAFAEL VENTURA ROMAN	944		MELALEUCA AVE	CARLSBAD	CA	92011-3844	5511	Motor Vehicle Dealers (New And Used)	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RAIDER PAINTING COMPANY	16835	# 135	ALGONQUIN ST	HUNTINGTN BCH	CA	92649-3810	1721	PAINTING CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RAMOS CONSTRUCTION SERVICE	2358		PIO PICO DR	CARLSBAD	CA	92008-1038	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RANCHO ENERGY SERVICES COMPANY, INC.	647	STE A	AERO WAY	ESCONDIDO	CA	92029-1224	15	CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RANCHO SANTA FE POOL & SPA	5146	213	WHITMAN WAY	CARLSBAD	CA	92008-4663	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
RANCHO SANTA FE SECURITY SYSTEMS, INC.	1991	STE 100	VILLAGE PARK WAY	ENCINITAS	CA	92024-1966	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RANCHO WEST LANDSCAPE INC.	28325		SOMERS RD	MURRIETA	CA	92563-2402	782	LANDSCAPE INSTALLATION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RANDALL A MEANS LANDSCAPE	625		SUN CIR	VISTA	CA	92081-7551	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RAPID PLUMBING	5595	# Q	MAGNATRON BLVD	ANAHEIM	CA	92806-0000	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RAY WHITE CEMENT	3108		HIGHWAY 76	FALLBROOK	CA	92028-9318	17	CONCRETE CONT.	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RAYMOND - SAN DIEGO, INC.	5490	STE 604	COMPLEX ST	SAN DIEGO	CA	92123-1126	17	SPECIALTY CONTRACTORS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RAY'S POOL SERVICE	3251		AVEINIDA ANACAPA	CARLSBAD	CA	92009-9301	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
RBI LANDSCAPE, INC.	931		S BENSON AVE	ONTARIO	CA	91762-4704	17	LANDSCAPE & IRRIGATION CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
REC SOLAR	8545	STE H	ARJONS DR	SAN DIEGO	CA	92126-4361	17	PHOTO VOLTAIC GRID TIED SYSTEM INTEGRATOR	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
RECONSTRUCTION EXPERTS, INC.	2385	102	CAMINO VIDA ROBLE	CARLSBAD	CA	92011	1522	General Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
REDLINE TOWING	451		OLIVE AVE	VISTA	CA	92083-3437	7549	TOWING & STORAGE	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
REED & COMPANY, A O	4777		RUFFNER ST	SAN DIEGO	CA	92111-1519	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
REEF CONCRETE	3646		CHESHIRE AV	CARLSBAD	CA	92008-7021	1771	Concrete	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
REGAL CONCEPTS & DESIGN	11943		ROCOSO RD	LAKESIDE	CA	92040-1037	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
REGAL CULTURED MARBLE, INC.	1239		E FRANKLIN AVE	POMONA	CA	91766-5450	17	CULTURED MARBLE MFG/INSTALL	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
REGENCY PLUMBING INC	1039		W BARKLEY AVE	ORANGE	CA	92868-1210	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RELIABLE PLUMBING & DRAIN CLEANING INC.	1612		MARL AVE	CHULA VISTA	CA	91911-5911	1711	PLUMBING SERVICE CALLS, PLUMBING REPAIRS, AND	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
REMODEL WORKS BATH & KITCHEN	12147	STE B	KIRKHAM RD	POWAY	CA	92064-8836	15	RESIDENTIAL KITCHEN & BATH REMODELING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RENE MONTOY CONCRETE	2719		LOS ALISOS DR	FALLBROOK	CA	92028-3709	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RENO CONTRACTING, INC.	1450	STE 100	FRAZEE RD	SAN DIEGO	CA	92108-4341	15	COMMERCIAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
REPSHER DRYWALL	4795		NEBLINA DR	CARLSBAD	CA	92008	1742	Drywall Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RESCUE ROOTER	9895	STE B	OLSON DR	SAN DIEGO	CA	92121-2841	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RESIDENTIAL WALL SYSTEMS	21778		TEMESCAL CANYON RD	CORONA	CA	92883-5669	17	PLASTER SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RESTAURANT FACILITIES GROUP, INC.	17152		PALMDALE ST	HUNTINGTN BCH	CA	92647-5426	15	COMMERCIAL & RESIDENTIAL GENERAL CONTRACTOF	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
RESTAURANTS ON THE RUN	27432	# 200	ALISO CREEK RD	ALISO VIEJO	CA	92656-5337	7389	DELIVERY SERVICE - RESTAURANT	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RESTORATION FLOORING	2304		ALTISMA WAY	CARLSBAD	CA	92009-8812	7217	Carpet And Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RESTORE SOLUTIONS, INC.	2283		COSMOS T	CARLSBAD	CA	92011-1517	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RESURFACING SPECIALISTS, INC.	2956	5	ROOSEVELT ST	CARLSBAD	CA	92008	1771	Concrete Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RETAIL CONSTRUCTION SERVICES INC	11343		39TH ST N	LAKE ELMO	MN	55042-9586	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
REYES MAINTENANCE	1818		DEVON PL	VISTA	CA	92084-7624	781	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RHINOSCAPE LANDSCAPING	7820	UNIT 3	TOMMY DR	SAN DIEGO	CA	92119-1753	17	LANDSCAPING AND PAVERS	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RICHARD & RICHARD CONSTRUCTION	234	STE 100	VENTURE ST	SAN MARCOS	CA	92078-4399	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RICHARD L. CHASE CONTRACTING	3147	2	JEFFERSON ST	CARLSBAD	CA	92008-2406	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RICHARD MELTON CONSTRUCTION, INC.	1570		LAKE DR	CARDIFF	CA	92007-1137	1542	GENERAL CONTRACTING COMPANY WORKING AS A S	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RICK'S ELECTRIC	7560		TRADE ST	SAN DIEGO	CA	92121-2465	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RICK'S PLUMBING	854		CAPE BRETON	VISTA	CA	92084-6500	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RIDGE LANDSCAPE ARCHITECT	8841	STE 200	RESEARCH DR	IRVINE	CA	92618-4243	781	LANDSCAPE ARCHITECTURE DESIGN	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RIESTERS CARPET SERVICE	3207		AZAHAR PL	CARLSBAD	CA	92009	7217	Carpet & Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RIGHT TOUCH PROFESSIONAL MOBILE DETAILING	837		ARCADIA AVE	VISTA	CA	92084-3202	7542	MOBILE DETAILING	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RIHA CONSTRUCTION CO	8173		COMMERCIAL ST	LA MESA	CA	91942-2928	15	GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RINCON WEST	2827		ELMWOOD ST	CARLSBAD	CA	92008	7389	Pool Maintenance	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
RISER CONST	16131		WINTUN CT	APPLE VALLEY	CA	92307-2415	15	SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RITE-A-WAY SERVICES	14457		MERIDIAN PKWY	RIVERSIDE	CA	92518-3007	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RIVAS RECONDITIONING	740		HIGHLAND DR	VISTA	CA	92083-3304	7532	MOBILE AUTOMOTIVE INTERIOR REPAIR	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RIVERA'S GARDEN TREASURES	1211		CHESTNUT AVE	CARLSBAD	CA	92008-2514	181	Ornamental Nursery Products	Yes	X			X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RIVERO BUILDERS	1041		EUCALYPTUS AVE	VISTA	CA	92084-6330	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RIVERS LANDSCAPE CONSTRUCTION	1302	APT 108	OAK HILL DR	ESCONDIDO	CA	92027-3640	17	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RIVIERA BUILDING & DEVELOPMENT	1223		SAND KY	CORONA DEL MAR	CA	92625-1621	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RIVIERA POOL & SPA SERVICE	2635	10	MADISON ST	CARLSBAD	CA	92008-1738	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
RLT ROOFING	2424	STE 200	VISTA WAY	OCEANSIDE	CA	92054-6178	17	SUB-CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROADONE	1205	101	SO COAST HWY	ENCINITAS	CA	92024-0000	7549	TOWING	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROB WITTON GENERAL CONTRACTOR	3125		VERDE AVE	CARLSBAD	CA	92009-7530	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROBERT BROWN CONSTRUCTION	35848		NONNIE DR	WILDOMAR	CA	92595-7650	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROBERT M. CHAMBERS CONSTRUCTION	2853		CEBU PL	CARLSBAD	CA	92009-5905	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROBERT'S CONSTRUCTION INC	2454		HAMNER AVE	NORCO	CA	92860-1920	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROCKEY MURATA LANDSCAPING , INC.	6130		GRENADA AVE	CYPRESS	CA	90630-5345	17	LANDSCAPING & MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROCKWELL D. KING CONSTRUCTION, INC.	2575	STE F	FORTUNE WAY	VISTA	CA	92081-8413	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROEL CONSTRUCTION CO INC	3366		KURTZ ST	SAN DIEGO	CA	92110-4440	15	GEN. CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROGER BERRY-GENERAL CONTRACTOR	6482		SURFSIDE LN	CARLSBAD	CA	92011	1521	General Contractor	Yes		X	X		X	X	X	X	X	NA	
ROGER ROBERSON CONSTRUCTION	2030		CORDOBA PL	CARLSBAD	CA	92008-3710	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROMBOTIS BROTHERS CONSTRUCTION	325	C2	CARLSBAD VILLAGE DR	CARLSBAD	CA	92008-2928	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROMERO GENERAL CONSTRUCTION CORP.	2150	STE I	N CENTRE CITY PKWY	ESCONDIDO	CA	92026-1347	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROMERO'S CARPET CLEANING	1190	APT 146	ENCINITAS BLVD	ENCINITAS	CA	92024-5368	7217	CARPET CLEANING	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RON LEWIS	4135		LINDA VISTA DR	FALLBROOK	CA	92028-8415	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RORY O'NEAL POOL SERVICE	2022		LEE CT	CARLSBAD	CA	92008-2762	7389	Pool and Spa Maintenance	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ROSSI CONCRETE, INC.	31565	STE 200	RANCHO PUEBLO RD	TEMECULA	CA	92592-4839	17	ON SITE/OFF SITE CONCRETE	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROTO-ROOTER	2141	STE E	INDUSTRIAL CT	VISTA	CA	92083-7905	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROWLETT'S YARD CARE	3480		ADAMS ST	CARLSBAD	CA	92008-2503	781	Landscape Counseling and Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ROY DUNNING LANDSCAPE INC.	3650		CAMINO MARGLESA	ESCONDIDO	CA	92025-7953	17	LANDSCAPE CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RS WILSON PLUMBING	942		N AMELIA AVE	SAN DIMAS	CA	91773-1401	1711	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RUB-KRETE	7331	C	ALICNTE RD	CARLSBAD	CA	92009-6235	1771	Concrete Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RUDOLPH AND SLETTEN, INC	1600	STE 350	SEAPORT BLVD	REDWOOD CITY	CA	94063-5575	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
RUSTY JOHNSON CONSTRUCTION	5316		FORECASTLE CT	CARLSBAD	CA	92008-3800	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
RYAN COMPANIES US, INC.	9171	STE 460	TOWNE CENTRE DR	SAN DIEGO	CA	92122-6217	1542	DEVELOPER, DESIGN/BUILD GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
S & J BUILDERS & RESTORATION SERVICES, INC.	10815	STE J	WHEATLANDS AVE	SANTEE	CA	92071-2872	15	GEN'L CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
S K J BUILDERS INC	520	STE F	W VALLEY PKWY	ESCONDIDO	CA	92025-2544	15	CONTRACTOR Appended: 09/02/2009 2:26:06 PM By: D	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
S. AND J. PLASTERING CORP	10990	STE 13	LOWER AZUSA RD	EL MONTE	CA	91731-1353	17	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
S. C. WICHMANN	935		LAKE RIDGE DR	SAN MARCOS	CA	92078-5416	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
S.P. WHITE CONSTRUCTION, INC.	2540		GATEWAY RD.	CARLSBAD	CA	92009	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
S.S. SMITH CO.	1743		MALLOW CT	CARLSBAD	CA	92009-5122	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SABER PLUMBING, INC.	325		MARKET PL	ESCONDIDO	CA	92029-1302	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SAN DIEGO CALIFORNIA WINDOW CLEANING	7770	# 113-615	REGENTS RD	SAN DIEGO	CA	92122-1937	15	WINDOW CLEANING SERVICES	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SAN DIEGO FENCE COMPANY INC	7920		ENGINEER RD	SAN DIEGO	CA	92111-1904	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SAN DIEGO FIBERGLASS POOLS	1237		BENICIA ST	SAN DIEGO	CA	92110-2415	17	POOL (UNDERGROUND)	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SAN DIEGO FUME WORKS COMPANY	4131		AVENIDA DE LA PLATA	OCEANSIDE	CA	92056-6002	7342	TERMITE TARP FUMIGATION SERVICES	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SAN DIEGO HABITAT FOR HUMANITY	10222		SAN DIEGO MISSION RD	SAN DIEGO	CA	92108-2135	0	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SAN DIEGO OFFICE INTERIORS	3706		RUFFIN RD	SAN DIEGO	CA	92123-1812	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SAN DIEGO PLUMBING AND DRAINS/CHEAP ROOTER	4225	STE 181	OCEANSIDE BLVD	OCEANSIDE	CA	92056-3472	7349	PLUMBING AND DRAIN SERVICE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SANCON ENGINEERING INC	5841		ENGINEER DR	HUNTINGTN BCH	CA	92649-1127	15	SEWER & MANHOLE REHAB	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SANDPIPER POOLS INC.	300	STE A	ENTERPRISE ST	ESCONDIDO	CA	92029-1237	17	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SANTANA CONCRETE, INC.	18241		SLOVER AVE	BLOOMINGTON	CA	92316-2366	1771	CONCRETE CONTRACTOR, FOUNDATIONS AND FLATW	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCHILLING CORPORATION	697		GREENFIELD DR	EL CAJON	CA	92021-2983	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCHMIDT DESIGN GROUP, INC.	2655		4TH AVE	SAN DIEGO	CA	92103-6514	781	LANDSCAPE ARCHITECT SERVICES	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCHMIDT ELECTRIC	203		S RANCHO SANTA FE RD	ENCINITAS	CA	92024-4351	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCHMIDT FIRE PROTECTION CO INC	4760		MURPHY CANYON RD	SAN DIEGO	CA	92123-4321	17	SUB CONTRAACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCHMUCKLE PAINTING INC	6084	100	CORTE DEL CEDRO	CARLSBAD	CA	92009-1514	1721	Painting And Paper Hanging	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCHOTT ROOFING INC	225	# 1	E CARMEL ST	SAN MARCOS	CA	92078-4310	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCHROEDER CONSTRUCTION & DEV	2691		STATE ST	CARLSBAD	CA	92008	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCOTT D PACKARD CONSTRUCTION	4620		TRIESTE DR	CARLSBAD	CA	92010-3743	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCOTT GUENDERT CONSTRUCTION	7116		AVIARA DR	CARLSBAD	CA	92009	1521	General Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCOTT HAWES CONST INC	3602		FIREWAY DR	SAN DIEGO	CA	92111-4738	15	GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SCOTT ROGERS POOL SERVICE	2715		MORNING CLORY LN	CARLSBAD	CA	92008-1035	7389	Pool Service	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
SD FYXIT	3555		HASTINGS DR	CARLSBAD	CA	92010-7042	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SDA SECURITY SYSTEMS, INC.	2054		STATE ST	SAN DIEGO	CA	92101-1701	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SEA BRIGHT COMPANY, THE	4322		SEA BRIGHT PL	CARLSBAD	CA	92008-3650	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SEARS CONSTRUCTION CO.	1387		CYNTHIA LN	CARLSBAD	CA	92008-1507	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SEARS HOME IMPROVEMENTS	283		E AIRWAY BLVD	LIVERMORE	CA	94551-7664	17	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SEASCAPE POOLS	9265	STE 113	DOWDY DR	SAN DIEGO	CA	92126-6373	17	POOL CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SECRET GARDENS LANDSCAPE	2683	G703	VIA DEL LA VALLE	DEL MAR	CA	92014-0000	17	LANDSCAPE INSTALLATION & MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SEDIG MASONRY INC	17955		COLLIER AVE	LAKE ELSINORE	CA	92530-2623	15	GENERAL CONTRACTOR -MASONRY	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SELECT BUILD	340	STE 174	RANCHEROS DR	SAN MARCOS	CA	92069-2980	15	Building Construction-General Building Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SELECT BUILDERS	10035	STE C	CARROLL CANYON RD	SAN DIEGO	CA	92131-1113	15	GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SELECT MOBILE DETAILING	3533		ROCK RIDGE RD	CARLSBAD	CA	92010-7089	7542	Carwashes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SERGENT CONSTRUCTION	11101		LEA TERRACE DR	SANTEE	CA	92071-3230	15	GENERAL CONTRACTORS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SERVICE ELECTRIC	308		INDUSTRIAL WAY	FALLBROOK	CA	92028-2356	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SERVICE MASTER ABSOLUTE	6975	STE B	NORTH AVE	LEMON GROVE	CA	91945-1490	15	GENERAL CONTRACTOR/BUILDING RESTORATIONS	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SERVICE MASTER COMPLETE RESTORATION	2342		MEYERS AVE	ESCONDIDO	CA	92029-1008	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SETH HOENIG	2714		MADISON ST	CARLSBAD	CA	92008-1727	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SETTLE SECURITY	550		CROUCH ST	OCEANSIDE	CA	92054-4414	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SEVERINO CONSTRUCTION	2395		PIO PICO DR	CARLSBAD	CA	92008-1037	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SHAFFER CONSTRUCTION	6712		WHITESAIL ST	CARLSBAD	CA	92009-3414	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SHAMROCK POOL SERVICE	2706		GALICIA WAY	CARLSBAD	CA	92009-8141	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants								Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	
SHARPER IMAGE DETAILING	5508		FOXTAIL LOOP	CARLSBAD	CA	92010-7151	7542	Carwashes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SHARRATT CONSTRUCTION	16087		SAN DIEGUITO RD	RANCHO SANTA FE	CA	92091-9800	15	BUILDING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SHASTA LANDSCAPING, INC.	150		VALLECITOS DE ORO	SAN MARCOS	CA	92069-1435	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SHORELINE POOL SERVICES	3613		KINGSTON ST	CARLSBAD	CA	92010	7389	Business Services, NEC	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
SIERRA GROUP	560		RIVERDALE DR	GLENDALE	CA	91204-1475	1542	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SIERRA INSULATION CONTR	120		S WINEVILLE AVE	ONTARIO	CA	91761-8639	17	BUILDING INSULATION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SIERRA PACIFIC LANDSCAPE CONTRACTOR, INC.	22605	STE 514	LA PALMA AVE	YORBA LINDA	CA	92887-4764	17	LANDSCAPE/IRRIGATION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SIERRA PACIFIC WEST, INC.	2125		LA MIRADA DR	VISTA	CA	92081-8830	15	BUILDING CONSTRUCTION - GENERAL BUILDING CONT	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SIGNATURE SCAPES	4004		SKYLINE RD	CARLSBAD	CA	92008-2747	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SILVA ORTIZ CONTRACTING CO	4656		BRIGHTON AVE	SAN DIEGO	CA	92107-2220	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SIMMONS SHEET METAL FAB. INC.	2950		SAN LUIS REY RD	OCEANSIDE	CA	92054-1241	17	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SJS HOME IMPROVEMENT	630		STANLEY CT	ESCONDIDO	CA	92026-2816	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SKY HIGH	205	APT 8	W VERMONT AVE	ESCONDIDO	CA	92025-6251	7349	WINDOW CLEANING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SMITH & ASSOCIATES	41700		CALLE CONTENTO	TEMECULA	CA	92592-9328	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SMITH INC, BEN F	7120		MIRAMAR RD	SAN DIEGO	CA	92121-2316	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SNA LANDSCAPING/DESIGN	1286	18	DISCOVERY ST	SAN MARCOS	CA	92078	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SO CAL CURB & ADDRESS PAINTING	2740	A	CIRCULO SANTIAGO	CARLSBAD	CA	92008-6839	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
SO CAL STONE CREATIONS	4215		HARRISON ST	CARLSBAD	CA	92008-3558	7336	Commercial Art And Graphic Design	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SO CAL TREE CARE	323	STE D	EST BROADWAY	VISTA	CA	92084-0000	17	TREE SERVICES	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
SO. CAL. SPA & SPA TECH SUPPLY	1445		FOREST AVE	CARLSBAD	CA	92008-1012	7389	Women's Children's, And Infants' Clothing And Acc	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
SOCAL DETAIL & SUPPLY	1541		PROMONTORY RIDGE WAY	VISTA	CA	92081-5481	7542	MOBILE DETAIL	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOCAL DETAIL PROS	1020		C ST.	NATIONAL CITY	CA	91950	7542	Carwashes	Yes			X	X	X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOCAL PACIFIC CONSTRUCTION CORP.	29885	STE J	2ND ST	LAKE ELSINORE	CA	92532-2402	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SO-CAL PLUMBING & WATER HEATERS	4109		DIAMOND CIR	OCEANSIDE	CA	92056-3447	17	PLUMBING REPAIR & REMODEL - WATER HEATER REP.	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOIL RETENTION SYSTEMS INC	2501		STATE ST	CARLSBAD	CA	92008	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOLANA MAR	239		N ACACIA AVE	SOLANA BEACH	CA	92075-1105	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOMARC CONSTRUCTION	2417		APPIAN RD	CARLSBAD	CA	92008-2153	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOSA'S GARDENING	3412		THUNDER DR	OCEANSIDE	CA	92056-4743	781	GARDENING, LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTH BAY WELDING	781		OCONNER ST	EL CAJON	CA	92020-1644	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTH COUST CARPET CLEANING	961	J	MELALEUCA AVE	CARLSBAD	CA	92011-3851	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHCOAST ENERGY INC	6165		AGEE ST	SAN DIEGO	CA	92122-3601	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHERN CALIFORNIA POOLSCAPES	2925		CLAIREMONT DR	SAN DIEGO	CA	92117-6711	17	POOL CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHERN CALIFORNIA STONE COMPANY, INC.	20131		FERNDOC ST	CITY INDUSTRY	CA	91789-2317	1743	STONE CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHERN CONTRACTOR CO	559		N TWIN OAKS VALLEY RD	SAN MARCOS	CA	92069-1710	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHERN COUNTIES PLUMBING	7616	# 5100	MIRAMAR RD	SAN DIEGO	CA	92126-4202	17	SUB-CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHERN CUSTOM	849		W PALM AVE	REDLANDS	CA	92373-5837	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHLAND PAVING, INC.	361		N HALE AVE	ESCONDIDO	CA	92029-1716	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHLAND POOLS / SPAS INC	1327		EMERALD ST	SAN DIEGO	CA	92109-3045	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHWEST CONSTRUCTION CO, INC.	2909		RAINBOW VALLEY BLVD	FALLBROOK	CA	92028-8859	15	CONCRETE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHWEST PIPELINE AND TRENCHLESS CORP.	539		W 140TH ST	GARDENA	CA	90248-1509	1623	SEWER REHABILITATION BY TRENCHLESS METHODS.	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUTHWEST RESIDENTIAL SERVICES	1401	APT 360	E SANTO ANTONIO DR	COLTON	CA	92324-4239	7389	CURB ADDRESSING - SIGN PAINTER	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOUZA & SOUZA CONSTRUCTION, INC.	9222		CHESAPEAKE DR	SAN DIEGO	CA	92123-1026	1521	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SOWELL LANDSCAPING, INC.	855		SIDONIA ST	ENCINITAS	CA	92024-2357	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SPANKY'S PORTABLE SERVICES	555		ENTERPRISE ST	ESCONDIDO	CA	92029-1244	7359	PORTABLE RESTROOM SERVICES	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SPECTRUM DEVELOPERS	1241		FLEMINGTON RD	RIVERSIDE	CA	92506-5646	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SPECTRUM HOME SERVICES OF NORTH COUNTY	6353	STE 105	CORTE DEL ABETO	CARLSBAD	CA	92011-1437	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SPECTRUM MECHANICAL INC	9760	# DD	RESEARCH DR	IRVINE	CA	92618-4327	15	PLUMBING, HEATING, AIR-CONDITIONING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SPERRY CONSTRUCTION & ELECTRIC INC	9938		BLOSSOM VALLEY RD	EL CAJON	CA	92021-2203	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SPRING VALLEY INSULATION CONTR	3151		BANCROFT DR	SPRING VALLEY	CA	91977-2699	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
SSW CONSTRUCTION	1070	STE M	E DOMINGUEZ ST	CARSON	CA	90746-7230	15	CONSTRUCTION COMPANY	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STANDARD CLEANING SERVICES	5125	APT 204	WHITMAN WAY	CARLSBAD	CA	92008-4632	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STANLEY STEEMER	9655		VIA EXCELENCIA	SAN DIEGO	CA	92126-4555	7217	CARPET CLEANING Edited by BBRAN on 09/20/2004	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STANTEC CONSULTING CORPORATION	2655	STE 302	CAMINO DEL RIO N	SAN DIEGO	CA	92108-1633	15	CONSTRUCTION/ENVIRONMENTAL	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STARKEY PLUMBING INC	2919		CALLE HERALDO	SAN CLEMENTE	CA	92673-3542	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STARRETT CONSTRUCTION, INC.	1941	STE C	FRIENDSHIP DR	EL CAJON	CA	92020-1144	1542	GENERAL CONTRACTOR FOR COMMERICAL OFFICE BI	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STATEWIDE STRIPES, INC.	7320		MISSION GORGE RD	SAN DIEGO	CA	92120-1224	1611	PAVEMENT STRIPING, SEAL COAT AND SIGNAGE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STEFFEN CONSTRUCTION & DESIGN	1008		SAXONY RD	ENCINITAS	CA	92024-2223	15	GENERAL CONTRACTOR, CONSTRUCTION / REMODEL	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STEIGERWALD-DOUGHERTY INC	427	STE 202	S CEDROS AVE	SOLANA BEACH	CA	92075-1969	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STERNDAHL ENTERPRISES, INC.	11861		BRANFORD ST	SUN VALLEY	CA	91352-1032	1721	PAVEMENT DELINEATION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STEVE TESTI GENERAL CONTRACTOR	25818		FORE DR	HEMET	CA	92544-5282	15	GENERAL CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STEVEN SMITH LANDSCAPE, INC.	1916		COMMERCIAL ST	ESCONDIDO	CA	92029-1232	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STILLMAN HEATING & AIR CONDITIONING	7200	A	PONTO DR	CARLSBAD	CA	92009-4601	1711	HVAC Contractor	Yes	x	x	x		x			x	x	NA	904.2, 904.3, 904.4, 904.5, 904.6
STONE IMAGERY	3546		HIGHLAND DR	CARLSBAD	CA	92008-2526	1741	Stone Work	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STROUD ELECTRIC, ROBERT	1479		RONALD LN	VISTA	CA	92083-7169	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STRUC STEEL, INC.	1402		PRESIOCA ST	SPRING VALLEY	CA	91977-4222	17	SUB CONTRACTOR - STEEL FABRICATION & INSTALLA	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
STRUCTURAL TERMITE & PEST CONTROL, INC.	5012		ARLINGTON AVE	RIVERSIDE	CA	92504-2710	7342	TERMITE AND PEST CONTROL	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUMMIT DEVELOPMENT	2111		EDINBURG AVE	CARDIFF	CA	92007-1804	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUN BOSS CORP	3555		PACIFIC HWY	SAN DIEGO	CA	92101-1140	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUN PACIFIC DEVELOPMENT, INC.	3900.5		GARFIELD ST	CARLSBAD	CA	92008-4035	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUN WEST PLUMBING	9899	STE E	HIBERT ST	SAN DIEGO	CA	92131-1067	1799	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUNDANCE DEV GRP INC	11490		EDGEWOOD PL	SAN DIEGO	CA	92131-4264	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUNDANCER POOLS	728		INSPIRATION LN	ESCONDIDO	CA	92025-7939	17	SWIMMING POOL CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUNGATE ENERGY SOLUTIONS	6335	STE B	FERRIS SQ	SAN DIEGO	CA	92121-3249	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUNRISE LANDSCAPE	2658	# 443	DEL MAR HEIGHTS RD	DEL MAR	CA	92014-3100	781	LANDSCAPE AND TREE SERVICE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUNSET PAINTING INC.	1049		CALLE DE LEPANTO	ESCONDIDO	CA	92025-7680	17	PAINTING CONTRACTOR C-33	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUNSET PET CARE	170		1/2 ATHENA ST	ENCINITAS	CA	92024-2025	752	PET CARE, PET- SITTING, PET-TAXI	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
SUNWIZE TECHNOLOGIES	43	STE 202	CORPORATE PARK	IRVINE	CA	92606-5137	15	PHOTOVOLTAIC SOLAR SYSTEM INSTALLER	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUPERIOR DOOR INC	8059		WING AVE	EL CAJON	CA	92020-1245	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUPERIOR POOLS	1815		VISTA DE LA MONTANA	EL CAJON	CA	92019-1812	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUPERIOR READY MIX CNCRTE L.P.	1508		MISSION RD	ESCONDIDO	CA	92029-1105	5032	Brick, Stone, And Related Construction Materials	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUPERIOR RESTORATION	3135		ROOSEVELT ST	CARLSBAD	CA	92008	1799	Special Trade Contractor	Yes	X	X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SURECOAT, INC.	2875		EXECUTIVE PL	ESCONDIDO	CA	92029-1524	17	PAINTING CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SUTTON TREE SERVICE INC.	2236		S SANTA FE AVE	VISTA	CA	92084-7805	17	TREE TRIMMING/LANDSCAPE SERVICE Edited by BBRA	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
SWAN POOLS	24512		BRIDGER RD	LAKE FOREST	CA	92630-5248	17	POOL CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SWIM CITY, INC.	3191		SEABURY ST	CARLSBAD	CA	92010-7037	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
SWINERTON BUILDERS	17140	STE 216	BERNARDO CENTER DR	SAN DIEGO	CA	92128-2088	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SYSCO SAN DIEGO INC.	12180		KIRKHAM RD		CA	92064		Food Delivery Restaurants	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
SYSTEMS PAVING, INC.	7925	STE 501	SILVERTON AVE	SAN DIEGO	CA	92126-6350	15	CONSTRUCTION (PAVING)	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
T C P CO INC	3454	# A	HARRIS ST	LEMON GROVE	CA	91945-1519	15	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
T H A HEATING AND AIR INC	4888	STE O	RONSON CT	SAN DIEGO	CA	92111-1808	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
T I G A CONSTRUCTION INC	243	# 341	S ESCONDIDO BLVD	ESCONDIDO	CA	92025-4116	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
T V D INC	1447		SOMERSET AVE	CARDIFF	CA	92007-1643	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
T. B. PENICK & SONS, INC.	9747		OLSON DR	SAN DIEGO	CA	92121-2802	15	GEN'L CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
T. S. EMERT CONSTRUCTION	2351		VISTA LAGO TER	ESCONDIDO	CA	92029-5408	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TALMADGE BAKER PLUMBING	1810		AVENIDA SEGOVIA	OCEANSIDE	CA	92056-6232	17	PLUMBING WORK NEW CONST - SERVICE - REMODEL	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TAMARACK POOL CENTER	5246		COLERIDGE CT	CARLSBAD	CA	92008	1799	Swimming Pool Construction & Contractors	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TAPPER DEVELOPMENT	2551	225	STATE ST	CARLSBAD	CA	92008	1521	General Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TARGET FRAMING INC	390	E	OAK AVE	CARLSBAD	CA	92008-2967	1751	Framing Contractor	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
TAURUS BUILDERS	2281		VIA CASCABEL	ESCONDIDO	CA	92027-4819	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TAYLEX CORP	6772		LONICERA ST	CARLSBAD	CA	92011-3433	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TAYLOR MADE POOLS	3637		FLOWERWOOD LN	FALLBROOK	CA	92028-8025	17	SWIMMING POOL & LANDSCAPE CONSTRUCTION	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
TAYLOR RECONDITIONING	716		SILVER DR	VISTA	CA	92083-4242	7542	MOBILE DETAILING	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TC CONSTRUCTION COMPANY, INC.	10540		PROSPECT AVE	SANTEE	CA	92071-4529	15	PIPELINE CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TCR SC CONSTRUCTION	949	STE 400	S COAST DR	COSTA MESA	CA	92626-7836	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TECTONIC BUILDING & DESIGN INC	923		EUCALYPTUS AVE	VISTA	CA	92084-6325	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TEKTON MASTER BUILDERS	1010	STE 108	S COAST HIGHWAY 101	ENCINITAS	CA	92024-5072	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TELFORD JONES, INC.	25920	STE 13A-400	IRIS AVE	MORENO VALLEY	CA	92551-1658	15	PLUMBING, HEATING & AIR CONDITIONING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TEMECON GENERAL BUILDING CONTRACTOR INC	9715	STE 108	CARROLL CENTRE RD	SAN DIEGO	CA	92126-6506	15	GENERAL CONTRACTOR (ROOM ADDITIONS, REMODE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TEMP POWER SYSTEMS	625		FEE ANA ST	PLACENTIA	CA	92870-6704	17	CONTRACTOR - SPECIALITY C10	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TERESA'S PET GROOMING	809	SPC 43	OLIVE AVE	VISTA	CA	92083-3373	752	MOBILE DOG GROOMING	Yes	X	X		X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TERMINIX INTERNATIONAL	1234	B	SIMPSON WAY	ESCONDIDO	CA	92029-1438	7342	Disinfecting & Pest Control Svcs	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TERRA BELLA LAND DEVELOPMENT	7910		NATHANIEL CT	RANCHO SANTA FE	CA	92067	17	LANDSCAPING	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TERRA FIRMA LANDSCAPE CO	7710		KENAMAR CT	SAN DIEGO	CA	92121-2425	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TERRA NOVA INDUSTRIES	1607		TICE VALLEY BLVD	WALNUT CREEK	CA	94595-1625	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TERRAQUA, INC.	3691		54TH ST	SAN DIEGO	CA	92105-3208	17	LANDSCAPE CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THE BRICKMAN GROUP, LTD	6218		FAIRMOUNT AVE	SAN DIEGO	CA	92120-3302	17	LANDSCAPE MAINTENANCE & INSTALLATION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THE CREST COMPANY, INC.	1265		RUBENSTEIN AVE	CARDIFF	CA	92007-2409	17	POOL CONSTRUCTION AND SERVICE	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
THE CULINARY WIZARD LLC	1710		WILLOWSPRING DR N	ENCINITAS	CA	92024-5456	7389	CATERER	Yes	X	X		X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THE DOGGIE SPA	1415		ARCADIA AVE	VISTA	CA	92084-3418	752	MOBILE PET GROOMING	Yes	X	X		X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THE DOOR CO.	2345		ALTA VISTA DR	VISTA	CA	92084-7026	15	CONTRACTOR B,C-61, D-28	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THE FRANKLIN PLUMBING COMPANY	14907		WHITE BUTTE DR	POWAY	CA	92064-5225	17	PLUMBING SERVICE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THE GLASS GUY INC	4269		CORTE VERDE	OCEANSIDE	CA	92057-7541	7536	AUTO WINDSHIELD REPAIR	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THE GROUNDSKEEPER	671		LAS FLORES DR	SAN MARCOS	CA	92078-6221	781	LANDSCAPE MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THE MASONRY GROUP CALIFORNIA, INC.	8188	STE 100	LINCOLN AVE	RIVERSIDE	CA	92504-4329	17	MASONRY - VENEER / BLOCK	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THE POOL GUY			P.O. BOX 230353		CA	92023	7389	Pool Cleaning and Repair	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
THE SYGMA NETWORK, INC.	7125	STE 400	W JEFFERSON AVE	LAKEWOOD	OH	80235-2306	5149	WHOLESALE FOOD & SUPPLY DISTRIBUTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THEE PLUMBING CO	17155		MONTEREY RD	LAKE ELSINORE	CA	92530-7531	17	PLUMBING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
THUNDER JONES CONTRACTING GROUP, INC	2515	STE 1	PIONEER AVE	VISTA	CA	92081-8418	15	CONCRETE CONSTRUCTION	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TIDALWAVE ENTERPRISES	1915		PATTIZ AVE	LONG BEACH	CA	90815-3621	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TIERRA VERDE RESOURCES, INC.	1545		LAKE DR	ENCINITAS	CA	92024-5224	17	LANDSCAPE MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TIMERMAN LANDSCAPING	1354		EUCALYPTUS AVE	VISTA	CA	92084-6336	781	LANDSCAPING - CERTIFIED BACKFLOW TESTER	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TLC PLUMBING INC	4569	STE E	MISSION GORGE PL	SAN DIEGO	CA	92120-4112	17	PLUMBING SERVICES	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TOM C. DYKE DRILLING & BLASTING	1115		TAVERN RD	ALPINE	CA	91901-3817	15	DRLING & BLSTNG 4 SITE EXCAVTN	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TOM LINQUIST CONSTRUCTION INC	1145	STE F	INDUSTRIAL AVE	ESCONDIDO	CA	92029-1430	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TOM T HONDA	1565		CHESTNUT AVE	CARLSBAD	CA	92008-2612	781	Landscape Maintenance	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TONY SERVERA CO., INC.	11871	UNIT C	SHELDON ST	SUN VALLEY	CA	91352-1508	1799	CONCRETE SUBCONTRACTORS	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TOO TALL HANDYMAN AND WINDOW CLEANING	2561	A	NAVARRA DR	CARLSBAD	CA	92009-7063	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TREEBEARD LANDSCAPE	9909		CAMPO RD	SPRING VALLEY	CA	91977-1609	17	LANDSCAPE CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TRI CITY ACOUSTICS, INC.	465		IOWA ST	REDLANDS	CA	92373-8082	17	SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TRI-CITY MECHANICAL CONDITIONED AIR	4189		SANTA ANA ST	ONTARIO	CA	91761-1557	17	SUB CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TRICOR COMMERCIAL CLEANING	2471		UNICORNIO ST	CARLSBAD	CA	92009-5323	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TRI-COUNTY DRILLING, INC.	9631		CANDIDA ST	SAN DIEGO	CA	92126-4537	1799	DRILLING CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TRI-GROUP CONSTRUCTION AND DEVELOPMENT, INC.	13939	STE 10	POWAY RD	POWAY	CA	92064-4849	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TRIMCO FINISH INC	3130		W HARVARD ST	SANTA ANA	CA	92704-3937	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TRINITY GRADING, INC.	616	STE B	E ALVARADO ST	FALLBROOK	CA	92028-2350	1611	CONSTRUCTION; GRADING & EXCAVATING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TRUE BLUE POOLS	5355		AVENIDA ENCINAS	CARLSBAD	CA	92008-4323	1700	Construction-Special Trade Contractors	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
TRUESDELL CORPORATION OF CALIFORNIA, INC.	1310		W 23RD ST	TEMPE	AZ	85282-1837	1799	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
TRUGREEN LANDCARE	770		METCALF ST	ESCONDIDO	CA	92025-1667	15	LANDSCAPE MAINT & IRRIGATION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TRUGREEN LANDCARE A GENERAL PARTNERSHIP	216		N CLARA ST	SANTA ANA	CA	92703-3518	15	COMMERCIAL & RESIDENTIAL LANDSCAPING	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
TRUGREEN LANDCARE, A GENERAL PARTNERSHIP	5248		GOVERNOR DR	SAN DIEGO	CA	92122-2800	15	COMMERCIAL & RESIDENTIAL LANDSCAPING CONTRA	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
TSA CONTRACTING, INC.	9535	# 200	WAPLES ST	SAN DIEGO	CA	92121-2953	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TURN KEY TUBS	5920		WINTERHAVEN AVE	RIVERSIDE	CA	92504-1048	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
TURNER CONSTRUCTION	3197		JAMES DR	CARLSBAD	CA	92008-1952	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
U B C CONSTRUCTION	2147		E BRENTFORD AVE	ORANGE	CA	92867-2908	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ULTIMATE OUTDOOR ENVIRONMENTS	3459		CORTE BREZO	CARLSBAD	CA	92009-8696	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ULTIMATE PLUMBING	5938		LAUREL CANYON BLVD	N HOLLYWOOD	CA	91607-1208	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
UNDERGROUND UTILITIES INC	9102	STE B	HARNESS ST	SPRING VALLEY	CA	91977-3947	15	SEWER, WATER AND STORM DRAIN CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
UNITED SITE SERVICES	157		NETTLETON RD	VISTA	CA	92083-5126	7359	TEMP RENTAL OF: TOILETS, SINKS, SHEDS, FENCE, P	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
UPRIGHT CONTRACTORS	1918		SANTA CLARA CIR	SANTA ANA	CA	92706-1343	15	RESIDENTIAL REMODEL	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
UPSTAIRS/DOWNSTAIRS CARPET&CLEAN SERVICE	3465		CAMINO VLENCIA	CARLSBAD	CA	92009-6042	7217	Carpet & Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
URBACH ROOFING, ICN	445		PRODUCTION STREET	SAN MARCOS	CA	92078	17	Roofing Contractor	Yes	X	X	X	X	X	X	X	X	X	NA	
US HOME SERVICES	1320		DISTRIBUTION WAY	VISTA	CA	92081-8842	17	PLUMBING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
UTGARD CONSTRUCTION COMPANY INC	12225	STE L	WORLD TRADE DR	SAN DIEGO	CA	92128-3768	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VALLEY CREST LANDSCAPE MAINTENANCE, INC.	8500		MIRAMAR PL	SAN DIEGO	CA	92121-2530	17	LANDSCAPE MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VALLEY PACIFIC CONCRETE, INC.	27580		TABB LN	MENIFEE	CA	92584-9521	17	CONRETE CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VAN HEFLIN GENERAL CONTRACTOR	2932		AVENIDA VALERA	CARLSBAD	CA	92009-7114	1500	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VAN SLYKE LANDSCAPE INC.	442		RANCHO SANTA FE RD	ENCINITAS	CA	92024-6538	17	LANDSCAPE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VAN-GO BUILDERS	2175		CHESTNUT AVE	CARLSBAD	CA	92008-2791	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VAUGHN IRRIGATION SERVICES INC.	540	STE D	S ANDREASEN DR	ESCONDIDO	CA	92029-1916	17	IRRIGATION/RELATED TECH SERV	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VERDIN CONCRETE, INC.	4899		DESPERADO DR	RIVERSIDE	CA	92509-4009	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VERDUGO CONCRETE SPECIALIST INC	8664		TROY ST	SPRING VALLEY	CA	91977-2534	15	CONCRETE FOUNDATIONS	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VERTEX COATINGS	1291		W STATE ST	ONTARIO	CA	91762-4015	17	PAINTING CONTRACTOR	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VICTOR CONCRETE	6135		BARCELONA AVE	RIVERSIDE	CA	92509-1726	17	CONSTRUCTION - CONCRETE/CEMENT	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VIKING COMMERICAL CONSTRUCTION.	1825		ASTON AVE	CARLSBAD	CA	92008-7341	1542	Building Construction-General Building Contractors	Yes		X			X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VILLAGE LAWN CARE	2292		AUDEN PL	CARLSBAD	CA	92008-3256	781	Landscaping	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VINTAGE CONSTRUCTION SERVICES, INC.	240		N JOY ST	CORONA	CA	92879-1322	17	LATH & PLASTER	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VINYARD DOORS INC.	3605		PACIFIC HWY	SAN DIEGO	CA	92101-1144	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VIRIDIAN LANDSCAPE	970	# 415	W VALLEY PKWY	ESCONDIDO	CA	92025-2554	17	LANDSCAPE SUB-CONTRACTOR	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VISTA FIXTURES	623	STE C	S SANTA FE AVE	VISTA	CA	92083-5949	17	PLUMBING REPAIR & NEW CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
VISTA ROOFING CO. INC.	536	# B	OLIVE AVE	VISTA	CA	92083-3440	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
W.A. RASIC CONSTRUCTION COMPANY, INC.	7314		SCOUT AVE	BELL GARDENS	CA	90201-4904	15	PIPELINE INSTALLATION, REPAIR, AND MAINTENANCE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
W.O.T. MARINE	6361	G	YARROW DR	CARLSBAD	CA	92011	3732	Boat Building And Repairing	Yes		X	X		X				X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WAGS N' WHISKERS PET CARE	2821		CACATUA ST	CARLSBAD	CA	92009-4402	752	Animal Specialty Services, Except Veterinary	Yes	X	X		X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WALBURNS CARPET CARE	2417		LA PLUMA LN	CARLSBAD	CA	92009-9130	7217	Carpet & Upholstery Cleaning	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WALLACE R RODGERS CONSTRUCTION	1062		CHESTNUT DR	ESCONDIDO	CA	92025-5263	15	GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WANNA GO FOR A WALK	1668		CORTE ORCHIDIA	CARLSBAD	CA	92011-4065	752	Animal Specialty Services, Except Veterinary	Yes	X	X		X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WASH ALL	2443		TUTTLE ST	CARLSBAD	CA	92008-1446	7349	Building Cleaning And Maintenance Services, Not E	Yes	X					X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WASH-ALL	2443		TUTTLE ST	CARLSBAD	CA	92008	7349	Powerwash Restaurants, Building Cleaning	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WATANABE GARDENING, BILL	2560		GREGORY DR	CARLSBAD	CA	92008-1514	781	Landscape Counseling and Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WATCHLIGHT CORP	111		S MARSHALL AVE	EL CAJON	CA	92020-4251	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WATERFALL AMERICA INC	2253		TIGEREYE PL	CARLSBAD	CA	92009-0000	1521	Building Construction-General Building Contractors	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WATERSEDGE LANDSCAPE INC	4255		RUFFIN RD	SAN DIEGO	CA	92123-1821	17	LANDSCAPE / BACK FLOW SERVICE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WATERWORKS POOL CONCEPTS	209		OCEANSIDE BLVD	OCEANSIDE	CA	92054-4902	17	POOL & SPA BUILDING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WATKINS LANDMARK CONSTRUCTION	2262	STE F	CARMEL VALLEY RD	DEL MAR	CA	92014-3751	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WATKINS PAINTING & GENERAL CONTRACTING	682		AMIGOS RD	RAMONA	CA	92065-2915	15	PAINTING & GENERAL CONTRACTING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WAX-IT DETAILING	2667		REGENT RD	CARLSBAD	CA	92008	7542	Car Washes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6

FACILITY NAME	ADDRESS NUMBER	SUITE NUMBER	STREET NAME	CITY	STATE	ZIP CODE	CURRENT SIC CODE	PRINCIPAL PRODUCTS/SERVICES	THREAT TO WATER QUALITY	Potential Pollutants									Tributary to 303(d) Listed**	HYDROLOGIC AREA
										Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
WAYNE MINOR LANDSCAPE	3450		DONNA DR	CARLSBAD	CA	92008-2013	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WAYNE PERRY INC.	8281		COMMONWEALTH AVE	BUENA PARK	CA	90621-2537	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WEST COAST AIR CONDITIONING CO INC	12365		MAPLEVIEW ST	LAKESIDE	CA	92040-1737	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WEST COAST ARBORISTS, INC.	2200		E VIA BURTON	ANAHEIM	CA	92806-1221	17	TREE MAINTENANCE Edited by BBRAN on 03/09/2004	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
WEST COAST DRYWALL	538		FRONT ST	EL CAJON	CA	92020-4233	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WEST COAST INSTALLERS	12170		TECH CENTER DR	POWAY	CA	92064-7102	17	SUBCONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WEST COAST POOLS AND SPAS	2920	101	LUCIERNAGA ST	CARLSBAD	CA	92009-5946	7389	Business Services, Not Elsewhere Classified	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
WEST COAST TURF	75030		GERALD FORD DR	PALM DESERT	CA	92211-2080	17	SOD PRODUCER	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WEST COAST UNDERGROUND	7929	STE 613	SILVERTON AVE	SAN DIEGO	CA	92126-6351	15	WET UTILITIES SUB-CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WEST SCAPES	877		MARIGOLD CT	CARLSBAD	CA	92011-3822	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WESTERLY MECHANICAL CORP	9159		CHESAPEAKE DR	SAN DIEGO	CA	92123-1002	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WESTERN EXTERMINATOR COMPANY	563		N CITRACADO PARKWAY	ESCONDIDO	CA	92029-1293	7342	Disinfecting And Pest Control Services	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WESTERN FOUNDATIONS & SHORING, INC.	10875		HIGHWAY 67	LAKESIDE	CA	92040-1401	15	FOUNDATIONS, DRILLING & SHORNG	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WESTERN GARDENS	4616		PANNONIA RD	CARLSBAD	CA	92008-3666	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WESTERN PAVERS	1937	STE D	FRIENDSHIP DR	EL CAJON	CA	92020-1137	17	INSTALLING PAVING STONES	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WESTERN SUMMIT CONSTR. INC	2820	STE H	LA MIRADA DR	VISTA	CA	92081-8405	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WESTERN TREE SERVICE	10387	STE 302	FRIARS RD	SAN DIEGO	CA	92120-2302	17	TREE & LANDSCAPE SERVICE	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
WESTTURF LANDSCAPE MAINTENANCE	701		MERCANTILE ST	VISTA	CA	92083-5919	17	LANDSCAPE MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WHEELIHAN CONSTRUCTION, INC	2598	STE L	FORTUNE WAY	VISTA	CA	92081-8442	1542	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WHILLOCK LANDSCAPE DESIGN	3537		KNOLLWOOD DR	CARLSBAD	CA	92010-5506	17	Construction-Special Trade Contractors	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WHITNEY & COMPANY	337		E CARMEL ST	SAN MARCOS	CA	92078-4311	782	WEED ABATEMENT	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
WILDBROOK CONSTRUCTION	42243		VIA DEL GAVILAN	FALLBROOK	CA	92028-8594	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WIMMER YAMADA AND CAUGHEY	3067		5TH AVE	SAN DIEGO	CA	92103-5840	781	LANDSCAPE ARCHITECTURE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WINDRUSH CONSTRUCTION	3191		HEATHER LN	ALPINE	CA	91901-1568	15	CONSTRUCTION	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WINGATE & CO INC	4008.5		GARFIELD ST	CARLSBAD	CA	92008-7401	782	Landscape Maintenance	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WISEMAN CONSTRUCTION	3318		5TH AVE	SAN DIEGO	CA	92103-5713	15	CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WISNIEWSKI & ASSOCIATES	2036		COUNTRYWOOD WAY	ENCINITAS	CA	92024-5401	781	LANDSCAPE ARCHITECTURE & ARBORICULTURAL CON	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WK DEVELOPMENT	3456	STE 202	CAMINO DEL RIO N	SAN DIEGO	CA	92108-1715	15	GENERAL CONTRACTOR	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WM. M. PERKINS COMPANY INC.	3148		MARKET ST	SAN DIEGO	CA	92102-3232	1721	PAINTING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WOHURNINI LLC	2060		CAMBRIDGE AVE	CARDIFF	CA	92007-1708	781	LANDSCAPE / GARDEN DESIGN & MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WONG'S GARDENING	1044		PARK DR	ESCONDIDO	CA	92029-5721	781	YARD MAINTENANCE	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
WORKRIGHT PROPERTY SERVICES, INC	7837	STE 200	CONVOY CT	SAN DIEGO	CA	92111-1209	15	CONSTRUCTION AND MAINTENANCE	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
XNERGY	2721		LOKER WAY	CARLSBAD	CA	92010	1541	Clean Room Construction	Yes		X	X		X			X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
YARD FAIRY, THE	6163		PASEO PALERO	CARLSBAD	CA	92009-2234	781	Landscape Counseling And Planning	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
YUCAIPA TOWING INC	451		OLIVE AVE	VISTA	CA	92083-3437	7549	TOWING & STORAGE	Yes		X	X		X	X		X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ZEN POOL SERVICE	2894		LANCASTER RD	CARLSBAD	CA	92008-6567	7389	Swimming Pool Maintenance	Yes	X	X						X		NA	904.2, 904.3, 904.4, 904.5, 904.6
ZEPHYR PAINTING, INC.	4999	# A	BALTIMORE DR	LA MESA	CA	91941-5003	1721	PAINTING	Yes		X	X		X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ZIMMS DETAIL	7546	A	GIBRALTER ST	CARLSBAD	CA	92009-7412	7542	Carwashes	Yes			X		X	X			X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ZONDIROS CORPORATION	1833	STE 201	DIAMOND ST	SAN MARCOS	CA	92078-5130	17	GENERAL CONTRACTING	Yes	X	X	X	X	X	X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6
ZWACK LANDSCAPE	9842		W LILAC RD	ESCONDIDO	CA	92026-5107	17	LANDSCAPE CONSTRUCTION	Yes				X		X	X	X	X	NA	904.2, 904.3, 904.4, 904.5, 904.6

* Potential Pollutants - Potential Pollutatnts are constituent groups from the 2005 Baseline Long Term Effectiveness Assessment

** Tributary to a 303(d) Listed - Indicates the facility is tributary to a 2006 303(d) listed water body and potentially generates pollutants for which the water body is impaired. This field is marked NA for mobile businesses because the mobile business may opperate in all HSAs

904.2, 904.3, 904.4, 904.5, 904.6

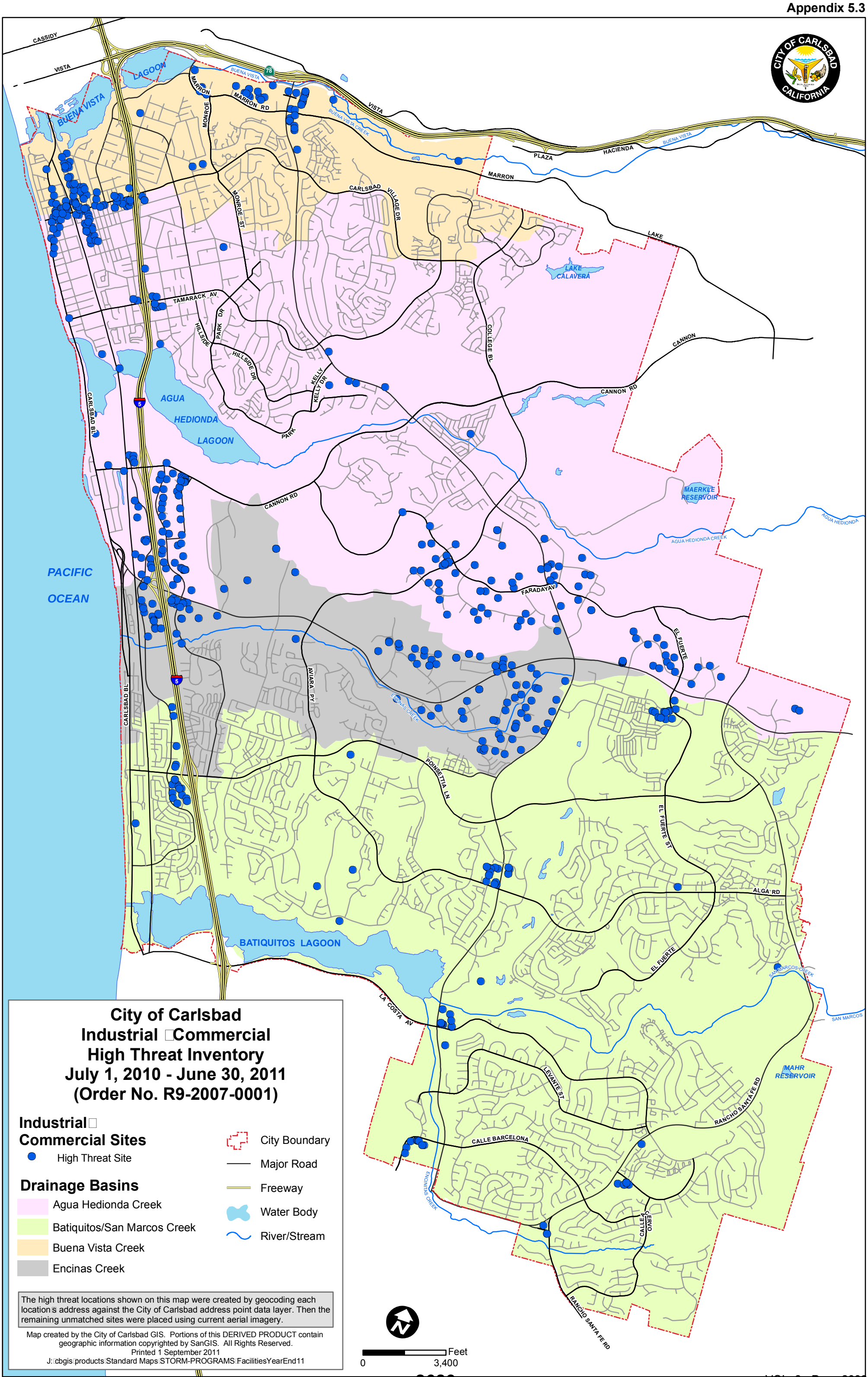
City of Carlsbad
Industrial Commercial
High Threat Inventory
July 1, 2010 - June 30, 2011
(Order No. R9-2007-0001)
Industrial
Commercial Sites
High Threat Site
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
City Boundary
Major Road
Freeway
Water Body
River/Stream
The high threat locations shown on this map were created by geocoding each location s address against the City of Carlsbad address point data layer. Then the remaining unmatched sites were placed using current aerial imagery.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
Printed 1 September 2011
J: cbgis products Standard Maps STORM-PROGRAMS FacilitiesYearEnd11
Feet
0
3,400
PACIFIC OCEAN
BUENA VISTA LAGOON
AGUA HEDIONDA LAGOON
BATIQUITOS LAGOON
LAKE CALAVERA
MAERKLE RESERVOIR
MAHR RESERVOIR
CASSIDY
VISTA
MARRON
MARRON RD
MONROE
MONROE ST
CARLSBAD VILLAGE DR
PLAZA
HACIENDA
LAKE
TAMARACK AV
HILLSIDE
PARK DR
HILLSIDE DR
KELLY
KELLY DR
PARK
COLLEGE BL
CANNON
CANNON RD
CARLSBAD BL
FARADAYAV
EL FUERTE
AVIARA PY
POINSETTIA LN
EL FUERTE ST
ALGA RD
LA COSTA AV
LEVANTE ST
RANCHO SANTA FE RD
CALLE BARCELONA
CALLE CERVO
BUENA VISTA
BUENA VISTA CREEK
AGUA HEDIONDA
AGUA HEDIONDA CREEK
ENCINAS CREEK
SAN MARCOS CREEK
SAN MARCOS

Appendix 6

Remember, only rain in the storm drain.

Storm water is not treated before reaching our creeks, lagoons and ocean.

To report illegal discharges to the storm drain system, please call **760-602-2799**.

www.carlsbadca.gov

CITY OF CARLSBAD

Appendix 6.1

KEEPS YOU **CONNECTED**

CITY OF CARLSBAD

CARLSBAD *Currents*

August 2010

*Welcome to Carlsbad Currents, an at-a-glance resource for the latest city news, issues and events. Want more information? Visit the City of Carlsbad website at **www.carlsbadca.gov**.*

Stay and play this summer

Summer is prime time for visitors to our great city, but who says tourists get to have all the fun? There is still time to take advantage of the warm weather, beautiful beaches and natural open spaces, all right here in our own backyard – not to mention all the new shops and restaurants that have recently popped up around town.

- **Explore city trails** – A new online trails map makes it easier than ever to explore the city's more than 40 miles of trails. Whether you're looking for an easy stroll or challenging hike, the city's trails system has something for you.
- **Enjoy a beach sunset** – Sure, beaches get a little crowded during the summer, but daylight saving time means there's still plenty of time to take in some sea air and a beautiful sunset from one of several scenic vantage points. Pine Avenue, South Ponto? Where's your favorite spot?
- **Shop 'til you drop** – Looking for a national retailer or is a specialty boutique more your style? Even in the down economy, Carlsbad has seen many new stores open in recent months, and more are on the way. An added bonus? Patronizing local shops means your tax money supports your own city services like libraries, parks, roads, police and fire.
- **Restaurant boom continues** – Carlsbad continues to attract new restaurants, from fine dining to more casual fare, in all parts of the city. Have a dining adventure this summer by trying some of these popular new eateries. Or, simply revisit an old favorite.
- **Art in the city** – Did you know that the village has become a center for arts and culture, featuring galleries, live music and hands on demonstrations? Have you ever visited the city's own sculpture garden and art gallery? Learn why Carlsbad is quickly becoming an art lover's paradise.

Ask the City of Carlsbad

The city answers questions from residents.

Is the cancer rate in Carlsbad higher than normal?

Some residents have expressed concern about what they believe could be a higher than normal rate of cancer in Carlsbad. The San Diego County Health and Human Services Agency and the California Cancer Registry have taken an active role in investigating these concerns, working closely with families who have been affected by cancer. After looking at cancer rates in the city as a whole and in specific neighborhoods where residents have expressed concern, state cancer experts have not found any indication of a cancer cluster. In other words, cancer rates in Carlsbad are not higher than normal. Because some residents continue to believe there could be a problem, health officials are conducting additional studies, with the goal of providing the most comprehensive, factual and reliable information to the public. The county has established a website with links to all the latest information: http://www.sdcounty.ca.gov/hhsa/programs/phs/cancer_concerns_in_carlsbad/

Residents with questions are encouraged to call the county at 619-515-6620 for more information.

Beat the summer sizzle

When the mercury soars this summer, take advantage of one of the city's Cool Zones. Cool Zones are free, air conditioned public gathering places where members of the community, particularly those with health problems aggravated by the heat, can gather free of cost.

Carlsbad City Library, 1775 Dove Lane
760-602-2049

- Monday to Thursday, 9 a.m. to 9 p.m.
- Friday and Saturday, 9 a.m. to 5 p.m.
- Sunday, 1 p.m. to 5 p.m.

Carlsbad Senior Center, 799 Pine Ave.
760-602-4650

- Monday to Thursday from 8 a.m. to 5:30 p.m.
- Friday, 8 a.m. to 5 p.m.

Free and fun city events

- **Friday, Aug. 6, 13 and 20, 6 to 8 p.m.**
  TGIF Jazz in the Parks

  Calavera Hills Park
  760-434-2904

  This year TGIF Jazz returns for its 25th season. Get ready to dance, picnic and listen to music all summer long! For more information, visit www.carlsbadca.gov/arts.

- **Friday Sept. 3, 10, 17 and 24, 6 to 10 p.m.**
  Leo Carrillo Film Festival

  Leo Carrillo Ranch Historic Park

  See rare, historic films from the Golden Age of Hollywood, featuring Leo Carrillo, at the star's legendary ranch. Films start promptly at sunset.

- **Thursday, Sept. 16, 7 p.m.**
  An Evening with Poet Laureate Kay Ryan

  Ruby G. Schulman Auditorium, Carlsbad City Library (Dove Lane)
  760-602-2026

  Former U.S. Poet Laureate Kay Ryan shares her award-winning work.

- **Saturday, Sept. 24, 8 p.m. and Sunday, Sept. 25, 2 p.m.**
  The 2010 Carlsbad Music Festival

  Ruby G. Schulman Auditorium, Carlsbad City Library (Dove Lane)
  760-809-5501 or www.carlsbadmusicfestival.org

  The seventh annual Carlsbad Music Festival offers adventurous music that crosses many boundaries, blending traditional classical music with experimental composition and new sound technologies.

- **Saturday, Sept. 25, 9 a.m. to noon**
  California Coastal Cleanup Day

  Tamarack State Beach

  Last year volunteers removed 3090 cigarette butts, 643 food wrappers, and 488 plastic caps and lids from Tamarack State Beach alone. Trash bags and gloves will be provided, and Tamarack Surf Beach parking fees will be waived for the duration of the event. For more information please visit the city's website at www.carlsbadca.gov or www.cleanupday.org.

CITY OF CARLSBAD

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City of Carlsbad
1200 Carlsbad Village Drive
Carlsbad, CA 92008

www.carlsbadca.gov

CARLSBAD *Currents*

KEEPS YOU **CONNECTED**

In this issue

- Stay and play this summer
- Beat the summer sizzle
- Fun and free events

State of the City

Carlsbad residents are invited to a free showing of the 2010 State of the City, a video presentation highlighting the latest city issues and initiatives.

Monday, Aug. 30, 2010
6 to 7 p.m.

Ruby G. Schulman Auditorium
Carlsbad City Library
(Dove Lane)

What's the **phone number** for…

City Hall	760-434-2820
Street repairs	760-434-2980
Utility billing	760-602-2420
Animal control	760-438-2312
Beach information	619-688-3385
City volunteer program	760-434-2906
Abandoned Vehicle Hotline	760-931-2289
Bee Hotline	800-200-2337

For a complete list of commonly requested phone numbers, click on "Carlsbad A-Z" on the city's home page, www.carlsbadca.gov. Not sure who to call? You can always call City Hall during regular business hours, and we'll get you to the right place.

Printed on recycled paper

KEEPS YOU **CONNECTED**

CITY OF CARLSBAD

CARLSBAD *Currents*

October 2010

*Welcome to Carlsbad Currents, an at-a-glance resource for the latest city news, issues and events. Want more information? Visit the City of Carlsbad website at **www.carlsbadca.gov**.*

Halloween on Elm *serves up family friendly fun*

Get ready for a spooktacular time at the city's first ever Halloween on Elm (did you know Carlsbad Village Drive used to be called Elm Avenue?). Taking place in the city's downtown Village, the family friendly event will feature a wide array of fun activities for the community—and even pets!

"Halloween on Elm is a great place for people to meet their neighbors and enjoy an afternoon of fun and activities in the heart of the Village," said Housing & Neighborhood Services Director Debbie Fountain. "From carnival games and costume contests to the outdoor movie and the farmers' market, there is something for everyone."

Halloween on Elm takes place on **Saturday, Oct. 30**, 2 p.m. to 9 p.m., at locations throughout the Village, but activities are primarily located on State and Roosevelt streets.
For more information on the event, visit the city's website, **www.carlsbadca.gov**, or call **760-434-2815**.

Free activities

- Halloween-themed carnival games and jump houses
- Costume contests for people and pets
- Safe trick or treat at local businesses
- Outdoor Halloween movie
- Food
- Safe costume checks
- Halloween "how-to" makeup demonstrations
- Live music and entertainment
- Farmers' market with Halloween activities (pumpkin patch, jumping for apples, pie baking contest)
- Haunted House at the Boys & Girls Club
- Themed storefront decorating contest

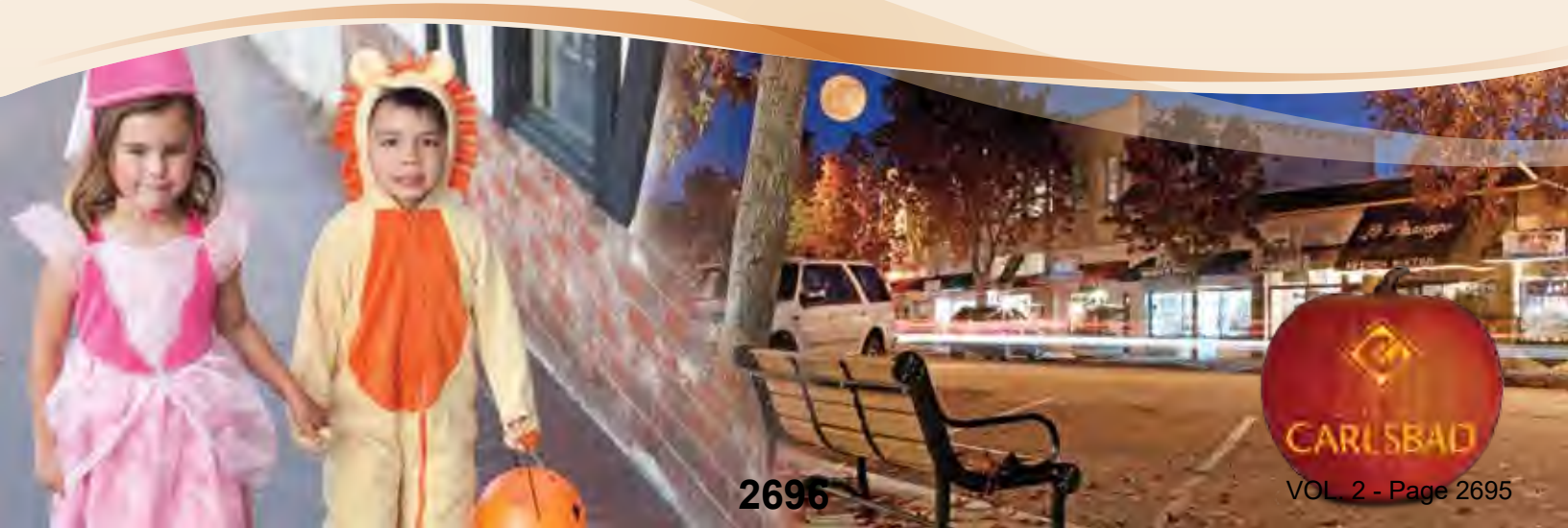

Be prepared: Create an EMERGENCY KIT

October is prime wildfire season in San Diego County and a perfect time to make sure you are prepared for emergencies, whether it be a fire, earthquake or other disaster.

A good first step is to assemble a home emergency supply kit, including:

- Water: one gallon of water per person, per day for at least three days for drinking and sanitation
- Food: at least a three-day supply of non-perishable food for each person
- Battery powered or hand crank radio and a NOAA weather radio
- Flash light
- Extra batteries
- First aid kit
- Dust mask, plastic sheeting and duct tape
- Moist towelettes, garbage bags and plastic ties for personal sanitation
- Wrench or pliers to turn off utilities
- Local maps
- Important documents, like insurance policies and passports, and a small supply of cash
- Pet food and other supplies

For a complete list of emergency preparedness kit items and other emergency planning information, visit www.ready.gov. You can also watch a video about how to put together a kit on the city's YouTube channel, www.youtube.com/cityofcarlsbadca.

Remember to check smoke detectors

Batteries don't last forever, and the change to standard time (coming up on Nov. 7) provides the perfect reminder to make sure that home smoke detectors are in working condition. A working smoke detector provides one of the best ways for people to be protected from fires.

Library Literacy Program changes lives

Does this sound familiar?

"I don't have time to complete this form. Can I take it home?"

"I forgot my glasses. Can you read this for me?"

"I hurt my hand. Can you fill out this form for me?"

Approximately one in five San Diego County residents cannot read and write well enough to get a job, help their children with homework or participate in community activities. There is help! The Carlsbad City Library Learning Center offers free tutoring in basic reading and writing for English-speaking adults. For more information, call **760-931-4510** or visit **www.carlsbadlibrary.org**. Services are friendly, confidential and free.

Free & fun city events

The World of Adonna Khare: Beasts, Backpacks and Curious Creatures

Now through Sunday, Nov. 7, Tuesday through Saturday, 11 a.m. to 5 p.m, and Sunday, 1 to 5 p.m.

William D. Cannon Art Gallery, Carlsbad City Library (Dove Lane)
760-602-2021

Los Angeles artist Adonna Khare is wild about animals. Her delightful works display both a stunning technical ability and a wild and woolly imagination.

Chilling Tales

Thursday, Oct. 28, 7 p.m.
Gowland Meeting Room,
Carlsbad City Library (Dove Lane)
760-602-2026

Just in time for Halloween, teens and adults are invited to an evening with storyteller Steven Henegar.

Halloween on Elm

Saturday, Oct. 30, 2 to 9 p.m.
Carlsbad Village, 760-434-2815

Dress up a day early and celebrate Carlsbad's first Halloween on Elm. (See page one for details.)

The Lighter Side of Aging

Saturday, Nov. 6, 11 a.m.
Georgina Cole Library, 760-602-2026

Based on his book *A Treasury for Seniors*, Richard Lederer will share his insights into the great adventure of becoming chronologically gifted.

Science Saturday

Saturday, Nov. 20, 2 p.m.
Carlsbad City Library (Dove Lane), 760-602-2047

Kids and their families are invited to a special program: The Science of Cooking at Your Library.

Keep the beaches clean, recycle used motor oil

Recycling used motor oil keeps it out of the city's creeks, lagoons, ocean and ground water. Help keep Carlsbad clean by disposing of used motor oil at one of the following facilities:

Door-to-door collection program

The city's contractor, PSC, can pick up used oil and other household hazardous waste at Carlsbad residences.
800-714-1195

A $10 co-payment is required. By appointment only.

Free drop off programs

Waste Management Recycling Facility
2880 Industry St., Oceanside
760-929-9400

Open alternating Saturdays, 9 a.m. – 1 p.m.
(by appointment only) www.northcounty.wm.com

PSC
1145 East Taylor St., Vista
800-714-1195

Saturdays, 9 a.m. – 3 p.m.

Other recyclables

Waste Management Buyback Center
5960 El Camino Real, Carlsbad
760-929-9400

Tuesday to Saturday, 8 a.m. – 4 p.m.
(closed noon – 12:40 p.m.)

This facility does not accept used motor oil or other household hazardous waste; however, it does accept recyclables such as aluminum, glass and plastic in exchange for cash. E-waste and household batteries are also accepted at this facility.

For more information on disposal locations and types of items that can be recycled, visit **www.carlsbadca.gov**.

New meters $ave water, money

The Carlsbad Municipal Water District is installing new automated water meters at homes and businesses throughout the city.

Using advanced wireless technology to keep track of water use, the new meters detect leaks more quickly than the existing system of manually checking meters.

The new meters detect leaks more quickly than the existing system of manually checking meters.

Before installing the new meters, water district staff will leave a door hanger at the residence several days in advance with information about what week the meter will be installed.

During the installation of the new meter, water will be turned off for approximately 30 minutes. A water district representative will alert the resident by knocking on the door prior to turning off the water. Residents do not need to be home during the installation (water meters are outside).

For more information, visit www.carlsbadca.gov/water or call 760-438-2722.

Watch it!

Watch the city's new "virtual water audit," a short video walking residents through water saving tips, indoors and out, just like the popular in person home water survey program.

www.youtube.com/cityofcarlsbadca

Ask the City

The city answers questions from residents.

Is I-5 going to be widened through Carlsbad?

A project is being proposed to widen I-5 by up to six additional lanes from La Jolla Village Drive to Harbor Drive in Oceanside. The project also includes building sound walls and new bridges. In most cases, Caltrans is proposing to use its right of way, but in some locations, particularly around onramps and off ramps, some private property will be affected.

The City of Carlsbad and all the other affected cities are providing input about what is being proposed, but cities do not have the final decision making power. Caltrans, a state agency, the Federal Highway Administration and SANDAG, our regional association of governments, will ultimately make the decision about how to proceed with this project. For more information and to provide your feedback, visit **www.KeepSanDiegoMoving.com** or call Caltrans at **619-688-6670**.

What's the **phone number** for…

City Hall	760-434-2820
Report broken/leaky irrigation	760-438-2722
Trash service/dump information	760-929-9400
Business license information	760-602-2495
City jobline	760-602-2480
Animal control	760-438-2312
Utility billing	760-602-2420
Storm water hotline	760-602-2799

For a complete list of commonly requested phone numbers, click on "Carlsbad A-Z" on the city's home page, www.carlsbadca.gov. Not sure who to call? You can always call City Hall during regular business hours, and we'll get you to the right place.

KEEPS YOU **CONNECTED**

CITY OF CARLSBAD

CARLSBAD *Currents*

February 2011

*Welcome to Carlsbad Currents, an at-a-glance resource for the latest city news, issues and events. Want more information? Visit the City of Carlsbad website at **www.carlsbadca.gov**.*

City programs for adults 50+ *good for mind and body*

Active adults can exercise their minds and bodies through a wide variety of specialized programs offered by the City of Carlsbad:

- Why not try a fitness class at one of the city's three community centers? Those interested in a high-energy workout can try cardio sculpt, Jazzercise or Zumba Fitness, which incorporates Latin beats and dance moves. Several unique, free or low-cost classes, like laughter yoga and soccer golf, are regularly offered at the Carlsbad Senior Center.
- Looking for something to strengthen body, mind and spirit? Tai Chi, yoga and qi-gong are more meditative forms of exercise that work to improve balance and flexibility.
- The city also offers a variety of adult dance classes, from country line dancing, to belly dancing, to salsa and meringue and traditional Hawaiian dance. No partner required!
- The Carlsbad Senior Center features a modern 1,202 square-foot fitness room exclusively for adults 50 and older. Day passes are $4 for Carlsbad residents; monthly, quarterly or annual passes are also available.
- Looking for a great read and lively discussions? Join one of the library's five book clubs.
- Need to brush up your computer skills? Take a free basic Internet, Beginning Word or MS Office basics class at the library, or try more specialized classes at the Carlsbad Senior Center, like Brain Fitness or digital photography.
- Learn about your family history and meet new friends through the city's popular genealogy program, offered through the Carlsbad City Library.
- Finally, sit back, relax and be entertained by attending a Carlsbad Playreaders event or one of the library's free Wednesday night movies.

For more information on these programs and classes, visit www.carlsbadca.gov or call the city's Parks & Recreation Department at **760-602-4650** or the Carlsbad City Library at **760-602-2038**.

Learn more about your city: *sign up for Citizens Academy*

Want to get a behind the scenes look at how your city operates? Sign up for Citizens Academy, a free seven week course that allows participants to:

- Meet City Council members, department heads and staff
- Learn how decisions are made, how city funds are allocated and how departments operate
- Enjoy comprehensive overviews of departments and programs and services
- Discover the current status and future plans for Carlsbad's development, traffic, growth management, recreation, the environment and other topics
- Tour city facilities
- Become an informed, involved citizen

Applications are being accepted for the next session, starting March 24. Classes meet Thursday evenings and for one daytime bus tour. Space is limited. Call 760-434-2800 today for information and registration.

Ask the City ?

The city answers questions from residents.

How can I get rid of stuff too big for my trash cans?

The City of Carlsbad provides free curbside pick up five times a year for large and bulky items.

The next date is:
Pick up: **Saturday, March 19**
Reservations: Feb. 28 to March 7

Call Waste Management, the city's trash contractor, at **760-929-9400**, or go online, http://northcounty.wm.com/, for a reservation.

For additional dates and a list of items accepted please visit www.carlsbadca.gov/environmental or call **760-602-4646**.

Fun and free city events

Here's a sampling of the many fun and interesting city events and activities. For a complete, searchable calendar of events and meetings, visit the city's website, www.carlsbadca.gov.

2011 Juried Biennial Exhibition

Now through March 18
Tuesday-Saturday, 11 a.m. – 5 p.m., Sunday, 1 – 5 p.m.
William D. Cannon Art Gallery, Carlsbad City Library (Dove Lane), 760-602-2021

Open to artists who live, work or have a studio in San Diego County, this exhibition, juried by Peter Frank, senior curator at the Riverside Museum of Art, and Larry Baza, co-director of Noel-Baza Art Gallery in San Diego, includes work by 61 regional artists.

This Is Jazz!

Saturday March 5, April 9 and May 21, 4 p.m.
Ruby G. Schulman Auditorium, Carlsbad City Library (Dove Lane), 760-434-2920

Jazz expert Dirk Sutro and guest performers trace the history of America's great contribution to music.

Community Play Date

Saturday, March 5, 10 a.m. – noon
Stagecoach Community Center, 760-602-4690

Sample classes, camps and activities offered at your community center.

Cinema Society of Carlsbad

Saturday, March 12, 2 p.m.
Carlsbad City Library (Dove Lane), 760-602-2012

Free screening of the award-winning foreign film *The Necessities of Life.*

Carlsbad Reads Together

April 2011
All three Carlsbad City Library locations, 760-602-2012

A communitywide reading event featuring Julia Child's *My Life in France*, with book discussions, foodie films, French music and more.

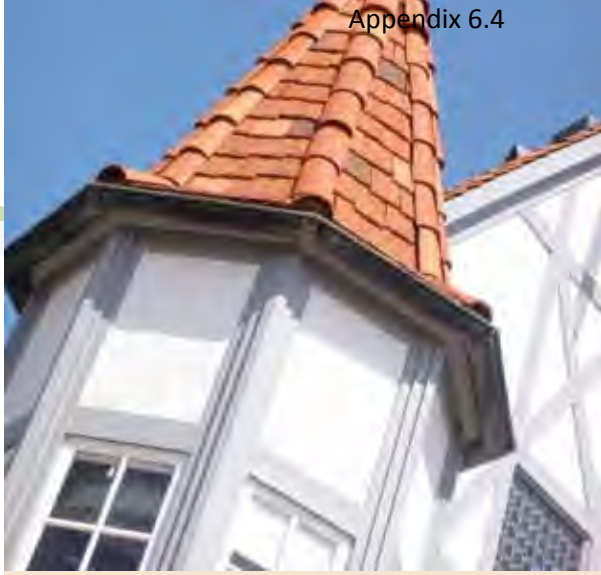

Village event has international flair, fun for the whole family

It's a small world in the Carlsbad Village on Saturday, March 19! The City of Carlsbad, Village businesses and community partners will celebrate world cultures through activities for all ages:

- Live music and performances
- Story telling
- Hands-on art
- Shopping
- Jump houses and other children's activities
- World cuisine, available at local restaurants

Experience the World in the Village

Saturday, March 19
1 to 5 p.m.

For more information, visit the city's website, ww.carlsbadca.gov, or call 730-434-2815.

Save time, pay utility bills online https://waterbill.carlsbadca.gov

Signing up is easy: A valid e-mail address and your bill in hand—it only takes a few minutes!

- Check your billing and usage history
- Pay your bill
- Have your blue City of Carlsbad bill ready and click "sign up now" on the Web page
- Enter your information exactly how it appears on your bill
- Use a valid e-mail address
- Use the ZIP code from the mailing address
- If you need help, call **760-602-2420**

New street lights
save energy and money

The city is in the process of switching out all 7,000 of its street lights with new energy efficient bulbs, which will save nearly $300,000 a year in taxpayer money from lower energy and maintenance costs. Once the new lights are in place, the city will see a reduction of 1,240 tons a year of greenhouse gas emissions, the equivalent of taking 170 cars off the road for a year, or planting 124,000 trees.

What's the **phone number** for…

City Hall	760-434-2820
Abandoned vehicles (public streets)	760-931-2289
Trash service/dump information	760-929-9400
Non-emergency police	760-931-2197
Barking dog complaints	760-438-2312
Graffiti removal	760-434-6700
Department of Motor Vehicles	800-777-0133
Storm water hotline	760-602-2799

For a complete list of commonly requested phone numbers, click on "Carlsbad A-Z" on the city's home page, www.carlsbadca.gov. Not sure who to call? You can always call City Hall during regular business hours, and we'll get you to the right place.

City of Carlsbad

Environmental Programs

September 2010

Dear Carlsbad Resident:

The City of Carlsbad's Storm Water Protection Program strives to protect our creeks, lagoons, and ocean from urban pollution. During rain events, untreated storm water, and the pollutants it carries, flow directly into our creeks, lagoons and ocean. Residential pollutants include everyday things like pet waste, wash water from cleaning sidewalks and cars, oil from leaking vehicles, and decomposing landscape debris, pesticides and fertilizers washed away by rain or over-irrigation.

The Storm Water Protection Program conducts regular water quality monitoring throughout Carlsbad to assess and identify potential sources of pollution. To do your part to protect water quality, please:

- Clean up after pets. Bring bags when walking pets. Flush pet waste down the toilet or dispose of it in a sealed plastic bag and throw into the trash.
- Ensure proper application of lawn and garden care products such as pesticides, insecticides, weed killers, fertilizers, herbicides, and other chemicals, and do not apply within three to five days prior to any forecast rain event.
- Avoid over-irrigation, which can wash lawn and garden chemicals into the gutter and storm drains, or carry other pollutants in the street to our creeks, lagoons and ocean.
- Regularly check for leaks on vehicles. If your vehicle is leaking, keep it off the street and use ground cloths or drip pans to prevent oil or other automotive fluids from entering the storm drain.
- Frequently and properly dispose of grass, leaves, shrubs, and other green yard waste to prevent it from washing to the storm drain.
- Use mops, brooms or wire brushes instead of a water hose to clean trashcans, sidewalks, buildings, driveways, or other impervious surfaces.
- Use brooms and absorbents such as cat litter, sawdust or vermiculite to clean up small spills before they reach the storm drain.

For additional information on pollution prevention, visit the City website at **www.carlsbadca.gov** and click on the Environmental Programs homepage. To report illegal discharges to the storm drain, please call the Storm Water Hotline at 760-602-2799.

Sincerely,

The Environmental Programs Department
City of Carlsbad

Car washing

Most soaps contain chemicals that can negatively affect water quality. The soap, together with dirt, metal, and oil washed off a car, flow into nearby storm drains and ultimately into our creeks, lagoons and ocean.

- Car washing is not allowed on city streets.
- Consider washing your vehicle at a commercial car wash.
- If you wash your car at home, try to prevent soap and water from running to the street or storm drain by washing your car over a pervious surface such as a lawn, and by using water sparingly.
- Use a hose with a nozzle that automatically turns off when left unattended.
- Wash water should be dumped to landscaped areas or to the sanitary sewer, never to the street or storm drain.

Pets

Pet waste is a threat to both human and environmental health. One gram of dog waste can harbor more than 23 million microorganisms of bacteria.

- Carry a bag when walking pets and be sure to pick up after them.
- Keep your pet on a leash for the health of our environment and for your pets' safety.

Pool, spa and fountain maintenance

- Only dechlorinated, pH-neutral water is allowed to be drained to the street and storm drain system.
- Ensure that the flow of water is controlled to prevent erosion.
- Do not backflush filters or filter materials to street or storm drain.

Printed on recycled paper
Photographs © City of Carlsbad and iStockphoto.com

CITY OF CARLSBAD

Storm Water Protection Program
1635 Faraday Ave.
Carlsbad, CA 92008

For more information, visit
www.carlsbadca.gov

To report storm drain issues,
please call 760-602-2799 or
e-mail stormwater@carlsbadca.gov.

CITY OF CARLSBAD

Storm Water Protection Program

Residential Guide to **Pollution Prevention**

The City of Carlsbad's storm water conveyance system is made up of streets, gutters, curb inlets, pipes, ditches, basins and drains, as well as natural drainage such as creeks and lagoons.

The storm water drainage system is not connected to sanitary sewer or treatment facilities. Rainwater and urban runoff transport pollutants directly into our creeks, lagoons and ocean.

Here are some simple best management practices to help keep pollutants out of our waterways.

For additional information, please visit the Storm Water Protection Program page on our website **www.carlsbadca.gov**.

General housekeeping

Some simple housekeeping methods can not only prevent storm water pollution, but can also conserve water and resources:

- Use a broom, wire brush, mop or other methods to clean outdoor surface areas. Never hose or wash anything to the street or storm drain.
- Dump wash water to landscaping or to the sanitary sewer. Check with your local water treatment facility if you have questions about what can be discharged to the sewer system.
- A good rule of thumb is to consider any outdoor drain as connected to the storm drain system, which flows directly into our creeks, lagoons and ocean.

Lawn and garden care

Landscaped areas can pollute our local waterways with fertilizers, pesticides, insecticides, sediment and green waste that run off from overwatering or during rain events.

- Do not apply fertilizers, pesticides or insecticides three to five days before any forecasted rain event. Always follow manufacturer's directions and apply sparingly.
- Consider using environmentally friendly approaches to pest management.
- Use mulch, edging or appropriate plantings to keep dirt and sediment from running off during rain events.
- Compost yard waste or place it in a curbside recycling container.
- Check irrigation systems frequently for leaks and overspray, and minimize watering times.
- Native, drought-tolerant plants reduce the need for water, fertilizers and other additives.

Home improvement projects

Do-it-yourself projects should be properly maintained to prevent illegal discharges to the storm drain system.

- Locate all landscape drains and storm drains within the project area. Consider covering them to ensure nothing flows to the street or storm drain.
- Store hazardous material such as paint or solvents in closed containers and protect from rain. Recycle at appropriate hazardous waste facilities.
- Always rinse or wash materials and equipment in an area where water cannot flow to landscape drains, street, gutter or storm drain.
- If materials such as dirt must be temporarily stored onsite, protect them from the rain and irrigation runoff.

Vehicle maintenance

Pollutants from vehicles such as oil and grease, copper and dirt can enter our storm drain system. It is estimated that 180 million gallons of oil enter waterways each year through urban runoff.

- Leaking vehicles cannot be parked on city streets.
- Vehicle maintenance cannot be performed on city streets. NEVER let any automotive fluids flow to the street or storm drain.
- Use rags or drip pans when repairing vehicles, or under leaking vehicles.

Appendix 7

Appendix 8

Storm Water Training for Municipal Employees
July 1, 2010 - June 30, 2011

DATE	DEPT. DIV.	EMPLOYEES ATTENDING	TRAINING TYPE	NAME OF TRAINING OR TOPICS	LOCATION	SPONSOR PRESENTER
07/23/2010	Parks	27	DVD	Xeriscape	Park Yard	G. Dauss
09/09/2010	SW	2	Class	GIS Interactive Map Training	mputer Training Ro	IT
09/16/2010	SW	2	Webcast	EPA Webcast - Stormwater Questionnaires for Regulated and Non-regulated MS4s	Faraday	EPA
09/21/2010	CMI, Building Dept. and DS	24	Presentation	Municipal Constrcution Activities - Pre-Rainy Season Training	1635 Faraday	Shawn Grandberry
09/28/2010	Parks	27	Handout	Good Housekeeping	Park Yard	G. Dauss
10/21/2010	Parks	26	DVD	IPM	Park Yard	G. Dauss
10/26/2010	CMI, Building Dept. and DS	11	Presentation	NPDES Compliance and Enforcement	CMWD	Shawn Grandberry
11/1-4/2010	CMI	2	Conference	CASQA Conference	Palm Springs, Ca	CASQA
11/2-3/2010	SW	2	Conference	CASQA Stormwater Conference	Rancho Mirage, CA	CASQA
11/18/2010	Parks	26	Handout	Illegal Dumping	Park Yard	G. Dauss
01/13/2011	Parks	25	Handout	Pet Waste Collection	Park Yard	G. Dauss
01/20/2011	CMI and Building	10	Presentation	Construction General Permit Compliance Update	CMWD	Shawn Grandberry
02/16/2011	Parks	27	DVD	Landscape Irrigation	Park Yard	G. Dauss
03/10/2011	Parks	27	Handout	Fertilizer Techniques	Park Yard	G. Dauss
03/17/2011	Parks	27	Handout	BMPs	Park Yard	G. Dauss
03/22/2011	CMI, Building Dept. and Streets	12	Presentation	NPDES Inspections and BMP Implementation	CMWD	Shawn Grandberry
04/06/2011	CMI and Engineering	2	Workshop	BMP Maintenance Workshop	San Diego	City of San Diego
05/24/2011	CMI	10	Presention	NPDES Procedure Review	CMWD	Shawn Grandberry
05/25/2011	SW	1	Webcast	Draft Industrial Storm Water Permit: Impacts to Industry and the Environment Web conference	Faraday	Foley & Lardner LLP
05/26/2011	Parks	25	DVD	Irrigation Repair	Park Yard	G. Dauss
06/27/2011	CMI, Building and CE	25	Presentation	Municipal Construction Actvities [per Sec. D.5b(1)(b)]	Faraday	Shawn Grandberry
06/27/2011	SW	2	Class	Hazwopper Training	Mira Mesa, CA	PSC
06/29/2011	SW	3	Class	Inspector Training	Faraday	SW

October 22, 2010

CAREN SIPIORA
CARLSBAD PREMIUM OUTLETS
5620 PASEO DEL NORTE STE 100
CARLSBAD, CA 92008

Re: Rainy Season Preparations

Dear CAREN SIPIORA,

The San Diego Regional Water Quality Control Board issued the City of Carlsbad, as well as other cities in San Diego County, a Municipal Storm Water Permit in January 2007, in an effort to reduce or eliminate pollutant discharges into the storm drain system. Storm drains are not connected to sanitary sewer systems or treatment plants, so the untreated water and the pollutants it carries flow directly into our creeks, lagoons, and ocean. There is increasing focus on the protection of our inland waters, creeks, and lagoons, as well as a growing awareness of the need to reduce pollutant discharges to the ocean.

The City of Carlsbad would like to remind you to implement and maintain appropriate Best Management Practices (BMPs) as we enter the rainy season:

- Storm drains, swales, ditches, culverts, catch basins, etc. should be inspected and cleaned if necessary. Protective measures should be taken to prevent potential discharges of waste such as trash, sediments or landscaping debris to the storm drain system.
- Outside storage areas should be inspected and cleaned and/or covered as needed to prevent pollutants from washing to the storm drain.
- Parking lots and boundary areas should be given particular attention to ensure that wastes have been removed to the maximum extent practicable.
- Dumpsters should be kept closed and the dumpster area clean and free of trash.
- Additional spill cleanup materials (absorbents, mops and buckets) should be kept in the loading bays and trash and/or grease storage areas. Employees should be trained in spill response procedures and the proper disposal of waste materials (such as mop water to the sanitary sewer).
- Regular visual inspections of the storm drain should be performed to identify unauthorized discharges or pollutants and cleaned as needed. Labeling a storm drain reminds people that anything discharged to the drain flows untreated to our surface waters (creeks, lagoons, and ocean). The City has storm drain stencils for loan, or you may develop your own signs.

If you would like more information or to report illegal discharges to the storm drain system, please contact the City's **Storm Water Hotline at 760-602-2799**. The City's website also has brochures and Fact Sheets available, by going to www.carlsbadca.gov, and clicking on Environmental Programs. The City of Carlsbad's Storm Water Pollution Protection Program thanks you for your concern with the health of our creeks, lagoons, and ocean.

Sincerely,

City of Carlsbad, Storm Water Pollution Protection Program
Enclosure

Appendix 10

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	
ADMINISTRATION	475,086
DEVELOPMENT PLANNING	129,026
CONSTRUCTION	191,607
MUNICIPAL	1,224,038
INDUSTRIAL AND COMMERCIAL	131,499
RESIDENTIAL	included elsewhere
IDDE	123,047
EDUCATION	37,369
PUBLIC PARTICIPATION	included elsewhere
SPECIAL INVESTIGATIONS	
NON-EMERGENCY FIREFIGHTING	
Jurisdictional Total	***$2,311,672***

WATERSHED	
Watershed 1-Carlsbad Watershed	51,369
Watershed 2	
Watershed 3	
Watershed 4	
Watershed 5	
Watershed 6	
Watershed 7	
Watershed 8	
Watershed Total	**51,369**

REGIONAL	
Total Copermittee Cost Share	86,031
Regional Total	***$86,031***

TOTAL COSTS	***$2,449,072***

Notes:
Due to limitations fo the City's financial system, costs provided are best estimates. Not all categories are easily identifiable as specific to the category on this list. Staff believes that the information provided is as accurate as possible, given the constraints of the financial reporting system.
Includes a small portion of MS4 monitoring costs
Carlsbad Watershed expenses reported here are total expenses for the City of Carlsbad. These expenses are offset by approximately 26,300 in revenues by other co-permittees within the Watershed.

Jurisdictional Urban Runoff Management Plan Annual Report

July 1, 2011 – June 30, 2012

Signed Certification Statement

City of Carlsbad
Jurisdictional Urban Runoff Management Plan
Annual Report for July 1, 2011 – June 30, 2012

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David Hauser

Name (printed)

Signature

Director, Property and Environmental Management

Title

9-25-12

Date

Executive Summary

Executive Summary

Section 1: Introduction

The City of Carlsbad's (City) Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report addresses the implementation of the Municipal Storm Water Permit Order No. R9-2007-0001, issued January 24, 2007 and effective March 24, 2008. This Annual Report is covering Order No. R9-2007-0001 from July 1, 2011 to June 30, 2012, hereby listed as Fiscal Year 2011-12.

In the Fiscal Year 2011-12 (FY 2011-12), many procedures have been updated or streamlined to efficiently manage data, monitor sites, track inspections and investigations, and manage other storm water related activities. Planning, Construction, and Existing Development activities have implemented improved processes to further incorporate storm water pollution prevention practices into internal activities as well as activities enforced by City departments. Highlights of each major component of the JURMP are listed below, and correspond to Section headings in this JURMP Annual Report.

The City has defined Notable Activities as those that are above and beyond compliance requirements, and are highlighted in Sections 2, 3, 4, 5, 6, as well as 15 Conclusions. Section 7 Notable Activities will be included in the December submittal of that section.

The City has included a Compliance Reference Table located in Appendix 1.2 that links permit requirements with corresponding sections in the report where they are referenced.

Section 2: Development Planning

Permit Order No. R9-2007-0001 requires the City to describe amendments to the General Plan, evaluate land use planning policies and principles, revise the environmental review processes, and develop an approval process to minimize the impacts of development activities on receiving water quality. Land-use planning gives the community an opportunity to comment on and shape policies that guide community development and interests. The City has developed goals that balance environmental protection with smart, long-term economic growth. By laying out a vision for local growth and coastal development, projects are consistent with the state and federal regulatory requirements and the City's land-use planning efforts.

The City continued to implement the Standard Urban Stormwater Mitigation Plan (SUSMP), and all applicable projects were subject to a thorough discretionary and plan check review process to ensure compliance. During FY 2011-12, the Carlsbad SUSMP requirements were applied to 64 private development/redevelopment projects and 10 City Capital Improvement Program (CIP) projects. Of the 64 private development/redevelopment projects, 12 were subject to Priority Development Project requirements which required site design, source control and treatment control requirements and 52 were subject to Standard Stormwater requirements subject only to site design and source control BMP requirements. Of the 26 City CIP projects, one project was subject to Priority Development Project Requirements but all other projects were subject to Standard Stormwater requirements.

During FY 2009-10, the City implemented the new development processing fees for the plan review and inspection of Construction Storm Water Pollution Prevention Plans and post-construction Storm Water Management Plans.

Section 3: Construction

Order No. R9-2007-0001 requires the City to implement activities that address and minimize short and long-term impacts on receiving water quality related to runoff from new construction sites. The City requires, prior to approval of a construction or grading permit, that project proponents implement measures to ensure that pollutants will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of water quality objectives. The City met these requirements by amending or conditioning existing permits, procedures and ordinances.

During FY 2011-12, the City updated the construction inventory, inspected all high priority sites, conducted outreach and education to developers, engineers, contractors, and City staff, and used enforcement actions to obtain compliance when necessary. All active grading permits were ranked as high, medium, or low priority and inspected as required during the rainy season. The required number of inspections was exceeded during this fiscal year. The City continued to distribute the "*Pollution Prevention Guide to the Construction Industry*" brochure.

Section 4: Municipal

The City's municipal facilities and their activities have the potential to contribute to water pollution if Best Management Practices (BMPs) are not properly implemented. City facilities include administration buildings, recreational areas, maintenance and storage yards, water reservoirs, water pump stations, sewer lift stations, a road system, parking facilities, the storm drain system, pressure regulator vaults, and fire stations. Municipal facilities maintain the City's infrastructure that supports Carlsbad's quality of life.

The Storm Water Committee comprised of various City departments including Public Works, Fire Department, Parks and Recreation, and the Building Department continued to meet and discuss municipal storm water BMPs and pollution prevention issues. The intent of the committee is to communicate problems and solutions among the group in order to share knowledge, discuss training opportunities, enhance compliance with the Permit, and to pass along any new information from the Regional Water Quality Control Board (Regional Board). SWPPPs were updated for High Priority municipal facilities, as needed.

The City of Carlsbad's City Manager continued support for the Storm Water Leadership Team (SWLT). Periodic meetings were conducted and attendees included Senior Management of the City's major service areas and Directors. Agenda items covered all areas of the City's compliance with Order No. R9-2007-001.

The City's street sweeping program exceeded both Permit requirements throughout FY 2011-12 with twice weekly downtown sweeping routes.

High Priority Municipal facility inspections were conducted by both internal City staff and external consultants. The combination of annual inspections by the State Department of Pesticide Regulations, municipal inspections by internal and external inspectors, and staff training on storm water BMPs, personnel are more aware of the required maintenance practices in preventing storm water pollution. During FY 2011-12 Annual Municipal Inspections, there were no NPDES violations noted.

Municipal facilities and departments also continued to implement Integrated Pest Management practices to reduce the City's use of pesticides.

Section 5: Industrial/Commercial

The City currently maintains an inventory of industrial and commercial sites and sources within its jurisdiction. Major industry types include airport services, refuse and sewage management, pharmaceutical research and development, high technology and electronics, golf apparel and equipment manufacturers, and several light industry parks. Major commercial types include automobile maintenance, restaurants, pressure washing, masonry and concrete work, carpet cleaning, and landscaping activities. The City continued to implement a comprehensive program to reduce urban runoff originating from existing sites and sources since industrial and commercial activities have the potential to contribute to water pollution, if BMPs are not implemented properly.

During this reporting period, the City updated the industrial/commercial inventory, mapped all facilities, provided education and outreach on BMPs, inspected 100% of fixed high threat to water quality facilities, and conducted 120 enforcement activities to ensure compliance.

The Storm Water Protection Program continues to use *Knowledge and BMP Effectiveness Assessment* measures for inspected sites and sources.

Section 6: Residential

The residential community has a significant potential to contribute to water quality degradation. Beyond year 2010, there will be nearly 54,599 residential units, housing approximately 135,000 residents. The focus of the City's pollution prevention strategy is a proactive information and education program that utilizes public presentations, fact sheets, direct mailers, brochures, website, and other media to increase knowledge and awareness of storm water pollution prevention efforts.

Targeted activities for residential areas include vehicle washing, storage and maintenance, lawn and garden care, home improvement projects, pet waste disposal, swimming pool maintenance, household hazardous waste (HHW) disposal, and trash and debris cleanup and disposal. The Storm Water Protection Program continued to distribute educational information addressing these residential BMPs and required several minimum BMPs to be implemented.

Between July 1, 2011 to June 30, 2012 the City distributed storm water educational information for residential activities, continued an advertising campaign, hosted or participated in multiple residential outreach events, responded to 93 reports of illegal discharge, and issued 22 enforcement actions to achieve compliance.

Educational material was included on Utility bills, in bill stuffers, City newsletters and direct mailers sent to targeted communities. The Storm Water Protection Program continues to work closely with the City's Water Conservation Specialist to address runoff due to overirrigation.

Section 7: Illegal Discharge Detection and Elimination

The City continued to conduct a comprehensive and proactive program for detecting and eliminating illegal discharges to the storm drain system. The City's program actively seeks to identify and eliminate

illicit discharges and connections by conducting investigations, responding to spills and sewage overflows, conducting monitoring, and performing routine cleaning and maintenance activities on the sewer and MS4.

The Illegal Discharge Detection and Elimination (IDDE) report will be submitted in December 2012, as per Addendum #2, Order No. R9-2007-0001, and will include Notable Activities in that section.

Section 8: Outreach and Education

The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent, though these messages often took varied forms. During FY 2011-12, the City continued to be actively involved in outreach and education at the local level, the watershed level, and at the regional level with the Project Clean Water Outreach Workgroup and the Think Blue campaign.

The City sent storm water educational information to all city employees distributed via paychecks in FY 2011-12, participated in EPA webcasts as training opportunities, collaborated with local non-governmental organizations, hosted or participated in outreach events, presented urban runoff and watershed concepts to 1058 school-aged children, and distributed information through various media. The City also distributed promotional items such as coloring books, pens, and pet waste Bags on Board with pollution prevention messages.

Section 9: Public Participation

The City led or assisted with several public participation opportunities this reporting period. During the reporting period, citizens, business owners and representatives, and other interested parties were invited to attend public meetings, outreach events, workshops, City Council meetings, and other events related to storm water pollution prevention at the local and watershed levels.

During this reporting period, the City conducted a Public Opinion Survey of 1,000 residents that included questions about storm water pollution, and held 6 community events.

Section 10: Fiscal Analysis

The total operating costs to fund the Storm Water Protection Program activities for FY 2011-12 was $2,449,072. This includes actual expenditures for personnel, operating costs, and capital outlay from the Storm Water Protection Program budget, Storm Drain Maintenance budget, Storm Water Engineering budget, and income from Engineering Plan Checks related to storm water, but does not include the *Storm Water Capital Improvement Program* costs.

Section 11: Effectiveness Assessment

Information collected in surveys, public comments, inspections, investigations, monitoring and other activities during the year were assessed on a full fiscal year basis to identify any trends and determine new or modified courses of action.

The City continued to make progress with effectiveness assessment measures during FY 2011-12, using the Watershed Treatment Model to assess the effectiveness of storm water pollution prevention.

Assessment of each significant activity, each component, and an integrated assessment of the overall jurisdictional program is provided in Section 11 of this report.

Section 12: Special Investigations

There were no Special Investigations during FY 2011-12.

Section 13: Non-Emergency Fire-Fighting

The Carlsbad Fire Department (CFD) developed this section to meet the requirements of Order No. R9-2007-0001. Several BMPs have been developed and incorporated at all 6 of the City's Fire Stations. Each station has a storm water manual, spill response equipment, regular cleanup and removal of organic debris from parking lots, and portable or permanent BMPs to contain and collect equipment and vehicle wash water. Training is conducted on property with no runoff or discharge potential into the MS4, or at the City's Reclaimed Water Facility where water is collected into the Reclaimed Water reservoirs. Fire Prevention activities were also continued during this reporting period.

Section 14: JURMP Revisions

The City's 2008 JURMP was developed in response to the issuance of Order No. R9-2007-0001. The City began implementing the 2008 JURMP on March 24, 2008 as required under the new permit. There were a few minor changes to the City's 2008 JURMP during FY 2011-12 and they are discussed in Section 14.

Section 15: Conclusion

The City successfully implemented the Permit requirements and the program activities described in the JURMP. Information from JURMP activities, WURMP activities, as well as the 303(d) List indicated that bacteria, sediment, and nutrients are high priority pollutants in the Carlsbad Watershed. The City proposes to continue addressing these pollutants through a number of existing or new activities, which include education, inspections, monitoring and maintenance through implementation of Order No. R9-2007-0001.

This Section also highlights Notable Activities conducted over and above permit requirements.

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Section 1

1.0 INTRODUCTION

1.1 Background

The San Diego Regional Water Quality Control Board issued the Municipal Storm Water Permit Order No. R9-2007-0001, NPDES No. CAS018758 on January 24, 2007 to control waste discharges in urban runoff from the Municipal Separate Storm Sewer System (MS4) draining the watersheds of the County of San Diego, the Incorporated Cities of San Diego County and the San Diego Unified Port District Copermittees.

The Regional Board issued this Permit to specify the requirements necessary to reduce the discharge of pollutants in urban runoff to the maximum extent practicable (MEP). Pollutants in urban runoff discharging to downstream water bodies can be prevented and controlled by effective implementation of best management practices (BMPs). The Permit requires the submittal of a Jurisdictional Urban Runoff Management Plan (JURMP) to the Regional Board in the first year of the permit, and an Annual Report each remaining year of the permit to document the progress and implementation of the JURMP.

The Permit requires the City of Carlsbad (City) to protect water quality during the three major phases of urban development: (1) land use planning for new development; (2) construction; and (3) the "use" or existing development phase.

In 2008, the City prepared a JURMP that addresses the requirements of Water Quality Order No. R9-2007-0001. The City officially began implementing the 2008 JURMP on March 24, 2008. The following report covers the implementation of the JURMP for Fiscal Year 2011-12 (July 1, 2011 to June 30, 2012).

1.2 Overview of the City of Carlsbad

The City encompasses just over 39 square miles and borders 6 miles of coastline. The entire city is contained within the Carlsbad Hydrologic Unit (Watershed) and encompasses four smaller hydrologic areas. These include Buena Vista Creek, Agua Hedionda, Encinas, and San Marcos. Major water bodies within the city are Buena Vista Creek, Buena Vista Lagoon, Agua Hedionda Creek, Agua Hedionda Lagoon, San Marcos Creek, and Batiquitos Lagoon. Several waterbodies within the city are listed as impaired under Section 303(d) of the Federal Clean Water Act.

The City is a municipal corporation, following the Council-Manager form of government. During FY 2008-09, the City changed from a General Law City to a Charter City. While the City created the Storm Water Protection Program to help implement the Permit, program implementation is carried out by several departments throughout the City. This allows for program implementation and new requirements to be incorporated into daily activities of City employees, instead of being viewed as completely new requirements without a connection to on-going services.

The City has an Environmental Management Department which brings together Storm Water, Habitat Management, energy and other environmental activities to promote a more sustainable approach for the City.

1.3 Purpose and Objectives

The purpose of the City's JURMP Annual Report is to provide a comprehensive account of activities conducted by the City to meet the requirements of Water Quality Order No. R9-2007-0001. In addition, the reporting process allows the City to evaluate the effectiveness of the program and make any changes necessary to improve the implementation and effectiveness of the JURMP.

1.4 Report Organization

This Annual Report was prepared in accordance with the requirements of the Permit. It contains a comprehensive description of the activities conducted by the City of Carlsbad to meet the requirements of the Permit; an accounting of illicit discharges reported, inspections conducted, enforcement actions taken, education efforts conducted; a description of the public participation mechanisms utilized during the JURMP implementation process; identification of management measures proven to be effective in reducing urban runoff pollutants and flow; identification of water quality improvements or degradation; and a fiscal analysis. A list of acronyms is provided in Appendix 1.1.

The organization of this report follows the Table of Contents agreed to and submitted by the Regional Copermittees to the Regional Board. The Annual Report is divided into sections matching major sections in the Permit and the JURMP. As with the JURMP, many of the activities described in separate JURMP sections overlap with one another, so an activity may be referenced in more than one report section. The Annual Report is organized as follows:

Section 1	Introduction
Section 2	Development Planning Component
Section 3	Construction Component
Section 4	Municipal Component
Section 5	Industrial/Commercial Component
Section 6	Residential Component
Section 7	Illicit Discharge Detection and Elimination Component
Section 8	Outreach and Education Component
Section 9	Public Participation Component
Section 10	Fiscal Analysis Component
Section 11	Assessment of JURMP Effectiveness Component
Section 12	Special Investigations Component
Section 13	Non Emergency Fire Fighting Flows
Section 14	JURMP Revisions
Section 15	Conclusions and Recommendations

Appendix 1.2 contains the JURMP Annual Report Requirements Checklist which shows the reporting requirements from the Permit and where each requirement can be found in the City's 2011-12 JURMP Annual Report.

Section 2

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

This section outlines the Development Planning actions implemented by the City under San Diego Municipal Permit Order No. R9-2007-001 (the "2007 Municipal Permit") and covers the portion of the annual reporting period from July 1, 2011 through June 30, 2012. During this reporting period, the City maintained compliance with all land-use planning requirements of the 2007 Municipal Permit. During the current reporting period, the City continued to implement the comprehensive development planning changes put into place during previous fiscal years.

Throughout FY 2011-12, the City also performed several development planning process changes to both enhance our internal/external communications regarding storm water and ensure the City's compliance with the 2007 Municipal Permit as more fully discussed and detailed in the following sections below.

During the reporting period, many items, including documents and procedures, were updated and placed on the city's website. In an effort to save paper, this annual report includes several hyperlinks to these updated documents. If there is a need to have a paper copy, please inform us and we will accommodate your request.

2.2 Land Use Planning

2.2.1 Background

In July 1986, the City adopted a "*Growth Management Plan"* into its General Plan to guide development and anticipate the types and numbers of facilities needed to accommodate the Carlsbad community at build out. Those facilities include: sewer plant capacity, sewage pipelines, reclaimed water system, and storm drain system that included flood and pollution control basins.

In September of 1994, the City adopted a Comprehensive Update of its General Plan. The General Plan includes goals that balance environmental protection with smart, long-term economic growth. By laying out a clear vision for environmentally sensitive development within this coastal community, development projects are required to be consistent with various City ordinances (i.e. Grading and Erosion Control, Storm Water Management, Hillside Development, Coastal Resource Protection) and other regulatory requirements.

The General Plan is reviewed annually and revised as necessary to ensure that the public facilities are considered and City goals are met. On February 19, 2002, the City Council adopted General Plan Amendment GPA 01-15. This General Plan Amendment revised and supplemented various policies regarding storm water quality protection in the Open Space and Conservation Element of the General Plan. The revised and supplemented policies reflect all storm water quality and watershed protection principles found in the 2007 Municipal Permits pertaining to storm water pollution prevention.

City staff reviewed the storm water protection policies of the General Plan in FY 2011-12 and no revisions were made. The existing General Plan storm water protection policies are listed below:

a) Develop and implement a JURMP consistent with the Permit and any amendments thereof.

b) Adopt and implement a Master Drainage Plan and a local Standard Urban Storm Water Mitigation Plan (SUSMP) consistent with the 2007 Municipal Permit and any amendments thereof.

c) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City requires development projects to incorporate structural and non-structural BMPs to mitigate any anticipated increases in pollutant loads.

d) Implement storm water pollution prevention methods to the maximum extent practicable, supplemented by pollutant source controls and treatment control measures. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into the municipal separate storm sewer system (MS4).

e) Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

f) Developments shall implement appropriate recommendations to protect water quality found in the San Diego Association of Government's (SANDAG's) Water Quality Element of its Regional Growth Management Strategy.

g) Development projects should be designed to comply with the following site design principles:

- Protect slopes and channels to decrease the potential for slopes and/or channels from eroding and impacting storm water runoff.
- To the extent practicable, cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones. Encourage land acquisition of such areas.
- Provide buffer zones for natural water bodies.
- Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment.
- Where feasible implement site design/landscape features to slow runoff and maximize on-site infiltration of runoff.
- Properly design outdoor material storage areas (including the use of roof or awning covers) to minimize the opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids and other pollutants from entering the storm water conveyance system.
- Incorporate roof or awning covers over trash storage areas to prevent off-site transport of trash and other pollutants from entering the storm water conveyance system.
- Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways and bridges.
- Design streets and circulation systems to reduce pollutants associated with vehicles and traffic resulting from development.

In addition to the General Plan, the City has adopted various storm water protection policies in other land use planning documents including the City's Local Coastal Program and Habitat Management Plan.

The Carlsbad Local Coastal Program (LCP) covers that part of the City lying within the coastal zone. The Carlsbad City Council adopted a Zone Code Amendment (ZCA 01-08), Local Coastal Program Amendment (LCPA 01-15) and Municipal Code Amendments (MCA 01-05, 01-06, and 02-01) to revise/add new policies, standards, procedures and requirements regarding water quality and watershed protection to the LCP Land Use Plans, Chapters 21.203 (Coastal Resource Protection Overlay Zone) and 21.205 (Coastal Resource Overlay Zone Mello I LCP Segment Local Coastal Program) of the Zoning Ordinance of Carlsbad's Municipal Code. One of the notable storm water requirements of the LCP is the inclusion of an additional criterion for determining a priority development project. Per the amended LCP, any project located within 200 feet of the Pacific Ocean that creates more than 2500 square feet of impervious surface or increases the project impervious area more than 10% over the existing impervious area is to be considered a priority development project.

Under the California Natural Community Conservation Program (NCCP), the City and six other cities in north San Diego County participated in the preparation of the Multiple Habitat Conservation Program (MHCP). The MHCP is a comprehensive planning program designed to develop an extensive ecological preserve in northwestern San Diego County. The City has prepared a subarea plan, called the Carlsbad Habitat Management Plan that was adopted in November 2004. The Habitat Management Plan contains the specific conservation, management, facility planning, land use, and other actions the City will take to implement the goals, guidelines, and standards of the MHCP plan. This Habitat Management Plan prohibits development in or near natural habitat areas including creeks and lagoons. Those areas act as a buffer between urban development pollutants and receiving waters. They also protect a significant percentage of natural areas that are pervious, leading to natural groundwater recharge and reduction in peak run off rates.

On November 1, 2002, the revised Zoning Ordinance, Municipal Code, and LCP Amendments were submitted to the California Coastal Commission. In August, 2006, the California Coastal Commission approved these municipal code amendments. All requirements of these documents continued to be implemented in FY 2011-12 and previous years including the years the City waited for Coastal Commission approval. The LCP and Habitat Management Plan were evaluated during FY 2011-12 and no revisions were made.

2.2.2 Source Characterization

Land Use Planning is the process whereby the City determines appropriate land use designations for a property consistent with the City's General Plan requirements. As such, source characterization of pollutants is generally addressed in association with the type of land use proposed (i.e. low density residential, high density residential, commercial, and industrial, etc). Each land use decision made during FY 2011-12 was found consistent with the storm water protection policies as contained in the City's General Plan, Local Coastal Program (if applicable) and Habitat Management Plan.

In many cases, land use planning applications are accompanied by specific project development applications. In such cases, the project was required to identify specific project pollutant sources

consistent with the City's Standard Urban Storm Water Mitigation Plan (SUSMP) and to identify project specific BMPs to eliminate or minimize any negative impacts to storm water quality.

By completing the Storm Water Standards Questionaire (SWSQ), applicants assess the level of storm water requirements that apply to their project. Upon application, city staff reviews the SWSQ and verifies that it reflects the appropriate project characteristics and outcome. If the form is filled out incorrectly, it is returned to the applicant to be corrected and returned to the City before proceeding with further reviews. The updated SWSQ can be found at http://www.carlsbadca.gov/business/building/Documents/E-34.pdf.

The Carlsbad SUSMP includes procedures for applicants to assess whether hydromodification (flow-control) requirements apply to a project. When a project is subject to hydromodification, the SUSMP includes information on hydromodification thresholds, criteria, application, screening and other methodologies to address potential impacts to natural downstream channels.

For more specifics on source characterization applied to development projects during the project approval and verification process refer to Section 2.4.2.

2.2.3 Best Management Practice Requirements

To assist applicants, the Carlsbad SUSMP includes guidelines and design criteria to help applicants assess the effectiveness of BMPs they are considering for their project. Selecting the appropriate BMPs will vary from project to project depending on the physical site constraints, downstream impairments, development category, types of soil, and target pollutant(s) generated by their specific project.

The Carlsbad SUSMP includes integrated low impact design (integrated LID) technique for applicants to select and size BMPs for projects. The Carlsbad SUSMP also provides several treatment control BMP options that applicants may choose for their projects including raised planters, bio-retention facilities, pervious pavements, infiltration trenches, cisterns, and more.

During FY 2011-12, the City continued to use the low impact development (LID) brochure developed in FY 2010-11. The LID brochure is a tool to educate developers, contractors and homeowners regarding different types of LID features on a typical project. The brochure includes different LID features, what their purpose is, and where it could be employed on a project site.

2.2.4 Program Implementation

Every General Plan Amendment and land use planning application approved by the City during FY 2011-12 was found in conformance with all applicable storm water protection policies of the Carlsbad General Plan, Local Coastal Program (as appropriate), Habitat Management Plan and the Carlsbad Municipal Code (CMC). This includes compliance findings for all the storm water quality goals and objectives of the City's Grading and Drainage Ordinances (Title 15 of the CMC) and the Carlsbad SUSMP.

During this reporting period, the typical land use planning review process began with the submittal of a planning application at the City's development services counter. Concurrent with the land use application the city requires submittal of the SWSQ which, once completed, determined if the project was subject to Priority Development Project or Standard Storm water requirements. Each project was

then reviewed for conformance with the storm water protection policies, requirements of the Carlsbad SUSMP, the General Plan, any applicable Local Coastal Plan, the Habitat Management Plan and all applicable City Codes.

2.3 Environmental Review Process

The City's environmental review process begins with the Initial Study Checklist (CEQA Guidelines). Based on the results of the checklist, the City requires the project applicant to provide additional studies to elaborate on the environmental impacts or recommend denial of the permit that the project applicant is seeking.

The Initial Study Checklist provides an expanded section on potential water quality impacts for each project. Table 2.1 shows an excerpt of the updated Initial Study Checklist that includes specific hydrology and water quality analysis the City uses during the environmental review process.

Table 2.1: Hydrology and Water Quality Analysis Checklist

HYDROLOGY AND WATER QUALITY. *Could the project:*
a. Violate any water quality standards or waste discharge requirements?
b. Substantially deplete groundwater supplies or interfere substantially with ground water recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the flow rate or amount (volume) of surface runoff in a manner, which would result in flooding on- or off-site?
e. Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?
f. Otherwise substantially degrade water quality?
g. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood delineation map?
h. Place within 100-year flood hazard area structures, which would impede or redirect flood flows?
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
j. Inundation by seiche, tsunami, or mudflow?
k. Increase erosion (sediment) into receiving surface waters?
l. Impact aquatic, wetland, or riparian habitat?
m. Change receiving water quality (marine, fresh or wetland waters) during or following construction?
n. Increase any pollutant to an already impaired water body as listed on the Clean Water Act Section 303(d) list?
o. Increase impervious surfaces and associated runoff?
p. Impact aquatic, wetland, or riparian habitat?
q. Result in the exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City uses integrated administrative and regulatory tools required to implement the Land-Use Planning requirements of the Carlsbad SUSMP and 2007 Municipal Permit. During the development review process, the City requires that new development and redevelopment projects evaluate their project against the required project SUSMP thresholds to determine the level of storm water requirements that apply to their project. To evaluate projects, applicants are required to fill out and

submit a Storm Water Standards Questionnaire (SWSQ) to the City. City staff then reviews each SWSQ to evaluate the accuracy of the thresholds that may apply to the project and to ensure the proper outcome of the SWSQ and compliance with the Carlsbad SUSMP.

In general, the Carlsbad SUSMP requires applicants to incorporate storm water concepts at the initial design phase of a project prior to submittal to the City. Once the applicant submits the development application, the City reviews the application and development plans to ensure the project has appropriately considered storm water objectives and selected the appropriate BMPs and that it satisfies the applicable storm water requirements as outlined in the SUSMP.

During this reporting period, the City also implemented the following storm water program elements and/or procedures:

1. During FY 2011-12, the City continued to have internal meetings to discuss treatment control BMP compliance program improvements such as inspections, maintenance agreements, verification of maintenance requirements, improved departmental coordination, and transfer of information during the approval process, and other issues related to treatment control BMP compliance.

2. During FY 2011-12, the City ensured development projects met the requirements of the Carlsbad SUSMP. Priority Development Projects were required to comply with Storm Water Management Plan (SWMP) guidelines, single sheet post construction BMP plan (SSPCBMP plan), and Storm Water Standards Questionnaire (SWSQ) per the 2007 Municipal Permit. Here the following links to each document:
    a. SUSMP - http://www.carlsbadca.gov/business/building/Documents/EngStandsw-stds-vol4-ch2.pdf
    b. SWMP guidelines - http://www.carlsbadca.gov/business/building/Documents/E-35.pdf
    c. SSPCBMP plan - http://www.carlsbadca.gov/business/building/Documents/BMP_Plan_Sheet.zip
    d. SWSQ - http://www.carlsbadca.gov/business/building/Documents/E-34.pdf

3. During FY 2011-12, similar to final drawings, the City continues to scan Storm Water Management Plans into our digital management system (DMS). This allows these water quality reports to be accessed by interested parties (inspectors, reviewers, property owners, researchers, etc.). This allows for more improved access and archiving of the water quality requirements for which a project was approved.

2.4.2 Source Characterization

Development project approval is the stage of the development process where storm water quality impacts are assessed and the project is evaluated to maximize site design measures that promote LID techniques. These LID techniques include minimizing impervious areas, having impervious areas drain to landscape areas and installing integrated management practices (IMP's). All these features allow runoff from the urban development to slow down, which allows for settling out of sediment, while encouraging infiltration, percolation, evapo-transpiration, root uptake, etc. This evaluation includes identifying potential sources of storm water pollutants and selecting BMP measures that either 1) avoid pollutant contact with storm water, or 2) are well-suited to filter/remove the target pollutants-of-concern specific to the project under review. Each "Priority Development Project" submitted during this reporting period, was required to prepare and submit a Storm Water Management Plan (SWMP) consistent with

the Carlsbad SUSMP concurrent with any discretionary or ministerial permit application. Source identification is a required component of each SWMP.

During the FY 2011-12, project proponents for Priority Development Projects were required to identify potential pollutant sources generated by their particular land use and development design in accordance with the procedures outlined in the Carlsbad SUSMP. Table 2.1 of the Carlsbad SUSMP is used to assist applicants to identify potential pollutant sources for various project categories. These potential sources are discussed in the SWMP for each for Priority Development Project. Additionally, project proponents were required to identify the pollutants of concern regarding impairment for the receiving waters into which the project runoff contributes. During the reporting period, the 2006 303(d) list of water quality impairments for receiving waters was used to review projects until October 2011. From November 2011, the 2011 303(d) list was used to review projects. The project proponent then determines if the project included any land use activity or development design that generates or potentially adds to any water quality impairment within the receiving waters.

If projects drain to one of the 303(d) listed receiving waters, they were required to analyze the potential for contributing the identified pollutants to the water body. If a potential source was identified, then the applicants were required to avoid the source or select an appropriate source control, site design or treatment control BMP measure and demonstrate how the selected BMP(s) eliminate or reduce the pollutant of concern to the MEP. With these efforts, the applicant demonstrates that the project does not cause or contribute to an exceedance of receiving water quality objectives. These explanations on source controls for a project are included in the Storm Water Management Plan.

2.4.3 Best Management Practice Requirements

The Carlsbad SUSMP is incorporated into the Carlsbad Engineering Standards. The Carlsbad SUSMP is located in volume 4 which is entitled the “Storm Water Standards Manual”. The Storm Water Standards Manual was originally designed to meet the requirements of the 2001 Municipal Permit, but has been revised to meet the requirements of the 2007 Municipal Permit. Among other things, the Carlsbad SUSMP addresses how projects are classified and which steps they must follow to meet storm water requirements. The Carlsbad SUSMP includes a clearly defined process to help applicants understand how projects trigger certain storm water requirements and how to comply with storm water standards. The SUSMP also educates applicants on how to design their projects using effective BMP’s that also match the characteristics of the project. Projects are either subject to “Standard Storm water” or “Priority Development Project” requirements. For projects subject to Priority Development requirements, the Carlsbad SUSMP includes integrated LID criteria that allow applicants to satisfy multiple facets of the SUSMP including site design, treatment control, hydromodification and low impact development requirements. The SUSMP, as an option, also allows for applicants to use alternative approaches. However, the applicant must still demonstrate how their project satisfies each category for site design, treatment control, hydromodification and LID techniques.

Per the 2007 Municipal Permit, the City and other Copermittees developed hydromodification criteria and measures to address how urban runoff affects erosion downstream of projects. To satisfy this requirement, the City and Copermittees developed the final Hydromodification Plan (final HMP). For a copy of the final HMP, refer to
http://www.projectcleanwater.org/images/stories/Docs/LDS/HMP/0311_SD_HMP_wAppendices.pdf

Once the final HMP was approved, the City worked with the other Copermittees to develop an updated Countywide Model SUSMP to incorporate the final HMP requirements into local SUSMP's. The model SUSMP was updated by the Copermittees January, 2011.

During FY 2010-11, the City modified its local SUSMP to incorporate the updated Countywide Model SUSMP and adopt the final HMP. As part of the update, the Carlsbad SUSMP includes background, objectives, thresholds and implementation requirements that address hydromodification. For those projects subject to the final HMP, the City added the web-based county BMP sizing calculator to the SUSMP. The calculator allows applicants to select and size BMPs that satisfies both treatment control and HMP requirements. A copy of the Carlsbad SUSMP can be found at the following City of Carlsbad web link
http://www.carlsbadca.gov/business/building/Documents/EngStandsw-stds-vol4-ch2.pdf.

Per the Carlsbad SUSMP, all projects subject to Standard Storm water requirements are required to incorporate both site design and applicable source control BMPs into their project design. The SUSMP includes a checklist of site design and source control BMPs that may apply to a project depending on the project use/type. These include but are not limited to providing disconnects into the project design so runoff drains from impervious surfaces over landscape or pervious areas, minimizing the use of impervious surfaces, encouraging the use of vegetated swales or landscape planters, using trash enclosures with covered lids, using efficient irrigation control systems with rain sensors, etc.

In addition to complying with Standard Storm water requirements, all projects subject to Priority Development Project requirements are also required to prepare a SWMP. The SWMP is a document where the applicant identifies project conditions, infiltration opportunities, pollutants of concern, impairments to water bodies, site design BMPs, source control BMPs and, in accordance with the 2007 Municipal Permit, are also required to select, size and incorporate treatment control BMPs into the project design. Since January 14, 2011, SWMP's must also demonstrate how the project satisfies hydromodification requirements. The SWMP's also include maintenance requirements for treatment control BMP/hydromodification controls to assure owners/tenants maintain post development BMPs for the life of the project.

During FY 2011-12, the City used the requirements checklist for SWMP's to include applicable hydromodification requirements. This checklist is provided for applicants and engineers when preparing SWMP's and outlines all the required elements to include in the SWMP. The checklist is also used by staff when reviewing SWMP's for compliance against the SUSMP and consistency against the other associated development plans. This updated SWMP requirements checklist can be found on the City's webpage at: http://carlsbadca.gov.

During this reporting period, there have been several Regional meetings that the City has attended with other Copermittees. The Land Development Engineering Division participates in these meetings that include but are not limited to the land development workgroup and the HMP technical advisory committee.

Each development project was assessed for its potential to generate urban pollutants using the SWSQ. Those specific types of projects (or project components) identified as having a high potential to generate pollutants in accordance with the 2007 Municipal Permit and Local Coastal Program requirements were classified as a "Priority Development Projects". Each Priority Development Project was associated with

one or more of the general pollutants categories as described in Table 2.1 of the Carlsbad SUSMP. Additional pollutant categories were then determined based upon their potential of being generated by the specific proposed Priority Development Project.

Each project subject to Priority Development Project requirements was then required to incorporate site design, source control, treatment control BMPs and applicable hydromodification features into the project design as specified in the Carlsbad SUSMP including the new applicable low impact design and meet interim hydromodification requirements, if applicable. Projects subject to Standard Storm water Standards were required to incorporate site design and source control BMPs into their project design. The following is a brief listing and description of the types of BMPs incorporated into project designs during the reporting period:

Site design BMP features incorporated into development projects during the reporting period include the following:

- Incorporating disconnects so runoff from impervious surfaces drain across landscape or pervious surfaces to encourage evapo-transpiration, percolation, vegetative contact, and to reduce the downstream effects of development runoff.
- Minimization of building footprints and incorporation of pervious surfaces such as pervious pavements.
- Conservation of natural area by clustering of development and preservation of natural drainage systems.
- Directing flows from impervious surfaces across pervious pavements or landscape areas.
- Preservation of existing trees and planting of new trees to maintain and increase canopy coverage.
- Conveying of drainage away from slopes or provision of appropriate slope down drains.
- Vegetating slopes and open space areas with drought tolerant plants.
- Stabilization of permanent channel crossings and installation of energy dissipaters at drainage outlets.

Source Control BMP features incorporated into Carlsbad developments during the reporting period include the following:

- Enclosure of outdoor material storage areas.
- Trash enclosures that have pervious surfaces and do not allow drainage to flow through the enclosure and use of trash bins with lids that exclude rain.
- Use of efficient irrigation systems with moisture sensors and properly designed flow control systems.
- Stenciling and/or placement of tiles at every applicable storm drain inlet.

As with the previous reporting period, during FY 2011-12, for projects subject to Priority Development Project requirements, through the development review process, applicants were not permitted to select treatment control BMPs with low efficiency removal ratings (e.g.: hydrodynamic separator systems and filter inserts) without being subject to additional scrutiny by the City. Per the Carlsbad SUSMP,

applicants may choose low efficiency treatment control BMPs, but only after providing additional analysis (in the SWMP) and backup information subject to approval by the City. In this circumstance, the applicant must provide a detailed analysis to demonstrate how all the other (more efficient) treatment control BMPs in the SUSMP could not be employed with the project. However, during the reporting period, there were no projects that were approved that solely used BMPs with low efficiency removal rates.

The development approvals processed during FY 2011-12 encompassed multiple project categories including residential, commercial and industrial projects. Each project subject to Priority Development Project requirements included appropriate treatment control BMPs from the list of allowable treatment controls included in Table 2-2 of the Carlsbad SUSMP. The types of treatment control BMPs approved for projects during the reporting period included bioretention areas, vegetated swales, vault structures, and bio-filtration basins.

Throughout FY 2011-12, all projects subject to Priority Development Project and Standard Storm water requirements, including City Capital Improvement Program (CIP) projects, complied with the Carlsbad SUSMP.

2.5 SUSMP Program Implementation

2.5.1 Urban Runoff Approval Process

In FY 2011-12, all new development and redevelopment projects including public CIP projects were required to undergo the City's urban runoff approval process in accordance with the requirements of the Carlsbad SUSMP, 2007 Municipal Permit and Carlsbad JURMP.

The City has a comprehensive set of storm water pollution prevention activities which are incorporated into the project development approval and BMP installation verification process. The measures include everything from the development of urban runoff land use planning policies, development processing procedures, project submittal and review checklist, educational pamphlets, engineering standards, City Codes, database inventory control, monitoring requirements, staff and developer training and project tracking and reporting. Each activity has been carefully designed to help eliminate or reduce storm water pollution on projects to the maximum extent practicable (MEP) and to not cause or contribute to an exceedance of receiving water quality objectives.

The development process has many stages from concept review on through to construction completion and project operation and maintenance. The City conducts many activities meant to ensure development project compliance with the City's urban runoff management policies and requirements. Table 2.2 presents a brief description of the SUSMP activities undertaken at each stage of the development process. Also included in the table are a listing of the City reference materials and implementation documents available to developers and City staff which are applicable to each stage in the process.

Project compliance was tracked through a variety of paper and computer tracking systems. Conditions of Approval specify whether the project must comply with the Priority Development Project (PDP) or Standard Storm water requirements of the Carlsbad SUSMP.

The City maintains a database of both private and public project approvals that are subject to Carlsbad SUSMP. For private development projects, the results of this database for FY 2011-12 include project name, approval date, approving authority, appropriate resolution numbers and the storm water standards (Priority Development Project, Standard Storm water) that applied to each project. A list of the private development projects approvals for the reporting period is included as Appendix 2.1.

For public projects, the database for FY 2011-12 is called the 'CIP Project Approvals' which includes the project name, approval date, and the storm water standards (Priority Development Project, Standard Storm water) that applied to each project. For the list of CIP Project Approvals subject to the Carlsbad SUSMP refer to Appendix 2.2.

As part of project development processing, during the construction plan review stage, a final design SWMP is submitted to the City for approval. In addition, each project's required treatment control BMPs are incorporated into the project construction drawings. The City created templates for title sheets that include a treatment control BMP table that is to be filled out for project subject to Priority Development Project requirements. For PDP projects, the table is located on the title sheet identifying each treatment control facility including information and BMP maintenance frequencies and specifying which plan sheet contains the additional details where each required treatment control BMP is installed within the project. A separate table is included on the detail sheet providing additional information including the number of BMP units located on that particular plan sheet. The tables are used to highlight the treatment control BMP requirements to the contractor, property owner, project inspector and are used for future inspections. The table also makes it easier for City GIS staff to locate treatment control BMPs for entry/confirmation with the City's GIS database.

Table 2.2 Development Process and SUSMP Activities

Development Process Stage	SUSMP Activity Description	Process Review Documents/References
Conceptual Project Design	Developer uses the Carlsbad SUSMP and Storm Water Standards Questionnaire to determine project priority and begins project layout and design. For priority projects the City recommends to developers that a preliminary SWMP should be prepared.	• Storm Water Standards Questionnaire • Storm Water Standards Manual which includes the Carlsbad SUSMP • 303(d) List
Pre-application Review	Developer submits the preliminary project proposal to staff to obtain input on conceptual project layout including storm water compliance issues.	• Preliminary site plan checklist • SWMP Fact Sheet
Application for Discretionary Review	City staff review application package at front Counter for completeness of submittal including storm water compliance documents. Project is logged into the City database for tracking. A completed Environmental Initial Assessment (EIA) form is submitted with the application package.	• Project Application Submittal Checklist • City review letter
Application Review	City staff reviews application, site plans and accompanying reports and documents including any SWMP, geotechnical and hydrology/hydraulic reports. Project is reviewed for consistency with General Plan, Local Coastal Plan (LCP), Habitat Management Plan, Carlsbad SUSMP and City Codes and other Standards including all storm water protection policies and requirements including new LID and interim hydromodification requirements. Project location is reviewed for proximity to environmentally sensitive areas and to determine if project drains to a water body on the 303(d) list. Project EIA is reviewed and appropriate environmental review documents are requested and reviewed in compliance with California Environmental Quality Act (CEQA) requirements.	• Site plan review checklist • SWMP checklist • 303(d) List • General Plan • Local Coastal Plan • Habitat Management Plan • City Codes • Environmental Assessment Form • CEQA Guidelines • City review letter (if any)

Development Process Stage	SUSMP Activity Description	Process Review Documents/References
Discretionary Approval	City denies project or approves with conditions including storm water compliance conditions. Applicable standard conditions of approval are applied to the project together with any special conditions of approval as City staff determines necessary to reduce or eliminate the projects storm water pollution impacts to the MEP. Approving authority makes required findings that project complies with the General Plan, LCP, Habitat Management Plan, SUSMP, City Codes and any other appropriate land use planning documents. Environmental documents are certified and any mitigation monitoring requirements are noted in the project approval.	• City's standard conditions of approval • Project Conditions of Approval • Environmental mitigation and monitoring plan (if any)
Final Project Design	Developer prepares project construction plans including grading, improvement, landscape and building detailing required BMPs. Construction SWPPP is prepared and SWMP is finalized. A single sheet post construction BMP site plan is prepared.	• Storm Water Standards Manual • Project Conditions of Approval • Environmental mitigation and monitoring plan (if any)
Construction Plan Check Application Submittal	City staff review application package for completeness of submittal including storm water compliance documents. Applicant completes and submits Project Storm Water Threat Assessment Worksheet included as part of the Storm Water Requirements Applicability Checklist.	• Plan Check Application Submittal Checklist • Project Threat Assessment Worksheet • Project Conditions of Approval
Construction Plan Check Review	City staff reviews construction plans and accompanying reports and documents including any SWMP, single sheet post construction BMP site plan, Construction SWPPP, geotechnical and hydrology/hydraulic reports. All storm water pollution prevention requirements are checked against construction plan checklist, SWMP checklist, Construction SWPPP checklist and project conditions of approval. Construction cost estimates are approved for bonding costs including costs for structural BMPs. For priority projects a BMP Maintenance Agreement is prepared.	• Construction Plan Checklist • SWMP Checklist • Construction SWPPP Checklist • Project conditions of approval • Project Threat Assessment • City Engineering plan review procedures • Environmental mitigation and monitoring plan (if any) • Cost estimates

Development Process Stage	SUSMP Activity Description	Process Review Documents/References
Construction Plan Approval	City approves construction plans and accompanying Construction SWPPP and SWMP including single sheet post construction BMP site plan. The executed BMP Maintenance Agreement is recorded and entered into the City's document management system database. All treatment control BMPs are noted on the construction plans and forwarded to the GIS group for entry into the BMP inventory. Any project design changes that differ from the approved site plan or project conditions of approval are reviewed in compliance with the City's Substantial Conformance Procedures to ensure that the project remains in compliance with all land use planning findings. Secured agreements to construct project improvements are obtained backed up with cash and/or other securities. Developer is required to note the WDID number on the project plans	• Plan check completion letter • BMP Maintenance Agreement • BMP Inventory update procedures • Substantial Conformance Procedures • Environmental mitigation and monitoring plan (if any) • Cost estimates • Secured Agreements • Single sheet post construction BMP site plan
Ministerial (Construction) Permit Issuance	City issues permit(s) for construction activities including grading, improvement, building, demolition and blasting. Any special storm water compliance requirements are noted on permit. City staff review plan check completion letter for any special storm water compliance requirements. Copies of the permit, construction plans, Construction SWPPP, single sheet post construction BMP site plan and SWMP are forwarded to the Construction Management and Inspection Division. A construction inspection level (low, medium or high) is assigned in accordance with the project's threat assessment form. The project tracking database is updated with the project threat assessment construction level and permit issuance status.	• Plan check completion letter • Project SWMP • Project Construction SWPPP • Construction Threat Assessment Worksheet • Pollution Prevention Guide for the Construction Industry • Construction SWPPP Fact Sheet • Single sheet post construction BMP site plan
Preconstruction Meeting	City staff meets with contractor and other parties to review project construction issues, schedule, and storm water BMP implementation, monitoring and testing requirements. Contractor is informed of storm water inspection and enforcement procedures and reminded to maintain compliance with the City's storm water pollution prevention requirements. City inspector verifies the NOI has been filed with the Regional Board and a WDID number has been assigned to the project.	• Preconstruction checklist • Construction SWPPP • SWMP • Construction plans • Pollution Prevention Guide for the Construction Industry • Single sheet post construction BMP site plan

Development Process Stage	SUSMP Activity Description	Process Review Documents/References
Construction and Inspection	Developer constructs project including temporary and permanent BMPs. City inspectors enforce compliance with SWPPP, SWMP and Municipal Permit. During construction City project inspector reviews construction for compliance with all plans, the Construction SWPPP, SWMP and City Standards. Regular storm water compliance inspections are scheduled and tracked per City procedures and the requirements of the 2007 JURMP. Enforcement actions are taken as necessary in accordance with City inspection and enforcement procedures. City inspector reviews and approves any minor construction revisions. Major construction revisions are referred to the Engineering Development Services Division for review and approval.	• Construction SWPPP • SWMP • Construction plans • City inspection and enforcement procedures • Pollution Prevention Guide for the Construction Industry • Inspection reports • Enforcement action reports • Secured Agreements • Single sheet post construction BMP site plan
Project Completion	Construction plans are “as-built”, securities released, and BMP construction verified. As-Built plans prepared and forwarded to the GIS Group to update the BMP inventory. City inspector reviews project site to verify installation of permanent BMPs prior to occupancy permit and/or project acceptance using the single sheet post construction BMP site plan. Public Improvements are accepted for maintenance including any public structural control BMPs.	• Construction SWPPP • SWMP • Construction plans • Pollution Prevention Guide for the Construction Industry • Punch list • Secured Agreements • Project Acceptance Forms • Single sheet post construction BMP site plan
Post Construction Annual Treatment Control BMP Inspections	BMP owners maintain BMPs in accordance with recommended and regulatory maintenance schedules. Treatment Control BMP owners submit annual verification of effective operation and maintenance of installed treatment control BMPs. City staff inspects project sites with installed treatment control BMPs to verify compliance with storm water requirements. (New requirement was implemented in FY 2008-09).	• SWMP • BMP Inventory List • Site BMP Inspection Report • BMP Maintenance Agreement

The City process includes a single-sheet post construction BMP (SSPCBMP) plan that includes a project site plan and shows the comprehensive locations of each required BMP such as site design, source control, low impact development technique, treatment controls, and hydromodification features. The SSPCBMP plan contains a table that contains cross-references summarizing the selected BMPs together with the appropriate construction document (e.g.: grading, improvement, building or landscape) that is responsible to build each particular post-construction BMP. Upon permit issuance, a copy of the SSPCBMP plan is signed and distributed with the construction drawings for reference by the contractor and inspector. At the conclusion of the project and prior to issuance of an occupancy permit or acceptance of the improvements, the inspector uses the SSPCBMP plan to help ensure all required post-construction BMPs are installed as required. After verification, the inspector initials the plan and places a copy in the project inspection file.

The SSPCBMP is required content for a SWMP. The SSPCBMP includes project information and other tables to help organize and present the different types of post construction BMPs for a project. The SSPCBMP serves as a comprehensive document displaying the project and the location of different post construction BMPs that are be installed along with calling out which construction document (grading, improvement, building, landscape plan, etc) that is responsible to install each listed BMP. The template is found on the City's website for use by applicants when preparing SWMP's. For a copy of the template SSPCBMP plan, refer to http://www.carlsbadca.gov/business/building/Documents/BMP_Plan_Sheet.zip.

In addition to the City's post-development storm water requirements, the City has integrated the review of construction BMPs into each stage of the development review process. At the project permitting stage, the applicant is required to submit a completed Construction Threat Assessment Worksheet for Determination of a Project's Perceived Threat to Storm Water Quality (Construction Threat Assessment Worksheet). The Construction Threat Assessment Worksheet is used to determine the inspection frequency level pursuant to the 2007 Municipal Permit requirements (low, medium or high). The required inspection level is entered into the City's Permits Plus software program for automated tracking. The Permits Plus program links the various ministerial construction permits (building, right-of-way, blasting and grading) to the "master" development project. The Permits Plus program is used to automatically generate storm water inspection requests for development projects with active permits. The program is also used to track inspection results and follow-up enforcement inspections.

2.5.2 SUSMP Requirements for Development Projects

During FY 2011-12, the Carlsbad SUSMP requirements were applied to 64 private development/redevelopment projects and 26 City Capital Improvement Program (CIP) projects. Of the 64 private development/redevelopment projects, 12 were subject to Priority Development Project requirements which required site design, source control and treatment control requirements and 52 were subject to Standard Storm water requirements subject to site design and source control BMP requirements. Of the 26 City CIP projects, 1 project was subject to Priority Development Project requirements, while 25 were subject to Standard Storm water requirements. Copies of the private development and CIP project approval list showing the type of storm water standards that were applied to each project are included in Appendices 2.1 and 2.2, respectively.

2.5.2.1 Confirmation that all applicable Carlsbad SUSMP BMP requirements were applied to all priority development projects, including a description of how the information was tracked

The City requires submittal of a completed SWSQ for every discretionary and non-discretionary application made to the City to establish how storm water requirements apply to each project. The submittal of a completed SWSQ signed by the applicant is part of the submittal requirements for both discretionary and plan check applications. Projects that are submitted without a completed SWSQ are considered incomplete and the applicant must respond before the City proceeds with project processing. If the outcome of the SWSQ shows the project is subject to Priority Development Project requirements the City required the applicant of these PDP projects to submit a preliminary SWMP and implement additional BMP measures as required by the Carlsbad SUSMP. All applicable requirements of the Carlsbad SUSMP were applied to all priority development projects. These application checklists also require that for those projects subject to Priority Development Project requirements also require the submittal of a SWMP to the City for review and approval. These process requirements help the City ensure that projects are evaluated against project criteria in the SWSQ and that the appropriate storm water requirements are applied as required by the Carlsbad SUSMP.

On projects that are approved at the discretionary stage, the City uses standard conditions that are included in the project conditions-of-approval for each project. These standard conditions are used by staff and are modified as required to address the unique merits of each project. The standard conditions include storm water-related conditions that help both the applicant and City staff understand how the project complies with the Carlsbad SUSMP. The conditions document whether the project is subject to 'Priority Development Project' or 'Standard Storm water' requirements.

For discretionary projects subject to Priority Development Project requirements, a preliminary SWMP is prepared detailing all proposed site design, source control, low impact design and treatment control BMPs. Structural site design, source control and treatment control BMPs, including the low impact development and interim hydromodification requirements (if applicable) are also outlined in the preliminary SWMP and reflected on the site plan or tentative map. The tentative map/site plan, conditions of approval and preliminary SWMP document are used at the construction plan review and ministerial permitting stage of the project to ensure compliance with the appropriate storm water requirements. Although a preliminary SWMP is provided at the discretionary stage, during final design, the applicant submits the final SWMP and it is reviewed and approved together with the construction documents to ensure the project conforms against the tentative map/site plan and also meets the current SUSMP requirements before permit issuance.

The City maintains a database of both discretionary and ministerial project approvals which includes project approval date, approving authority, applicable resolution numbers and the project storm water standards (i.e.: Priority Development Project requirements, Standard Storm water requirements). A list of the private development project approvals is included as Appendix 2.1.

Additionally, the City requires preparation of a single sheet post construction BMP (SSPCBMP) plan for all priority development projects that includes a project site plan and calls out the location of each required LID site design, source control, treatment control BMP, and applicable hydromodification facility. The single sheet post construction plan contains a matrix cross referencing the required BMP with the appropriate construction plan (grading, improvement, building or landscape) where the specified BMP construction is detailed. A copy of the SSPCBMP plan is signed and distributed with each

construction drawing for reference by the contractor and inspector. At the conclusion of the project and prior to issuance of an occupancy permit or acceptance of the improvements, the inspector uses the single sheet post construction to help ensure all required BMPs were installed as required. After verification, the inspector initials the plan and places a copy in the project inspection file.

2.5.3 SUSMP Implementation for FY 2011-12 – Priority Development Project

2.5.3.1 Example Priority Development Project that was conditioned to meet SUSMP requirements and a description of the required BMPs

Appendix 2.3 includes an example project subject to Priority Development Project requirements (Example PDP Project). The sample project is called La Posada de Guadalupe, CUP 10-08. This project received discretionary approval in October of 2011, and received design approval in May of 2012. Therefore, the project was subject to SUSMP requirements in effect during FY 2011-12. This project includes demolition of an existing 50-bed farm worker housing and the reconstruction of a new 120-bed farm worker housing project on a 3.62 acre lot. Based on project thresholds per the SWSQ, the project is subject to Priority Development Project requirements (under redevelopment thresholds) and a SWMP was required to address the storm water requirements for the project. The project involves grading, building, surface and utility improvements. Public street and utility access is provided by Impala Drive. The site is located in Hydrologic Unit 904.31, and is tributary to the Agua Hedionda Creek and Lagoon. Per the 2011 303(d) list, the Agua Hedionda creek is impaired for pathogens, metals, nutrients, and toxicity. Based on table 2-1 of the SUSMP, the project matches the land use category of detached residential. Therefore, the anticipated pollutants generated by the project include sediments, nutrients, and trash and debris. The potential pollutants of concern include organic compounds, oil and grease, bacteria and viruses, and pesticides. Per the project conditions and downstream impairments, the following BMPs were selected for this project as they were found have medium to high efficiency at removing the potential target pollutants:

1. Optimize Site layout
    a. Minimized Directly Connected Impervious Areas
        i. Roof drains directed to landscape areas
    b. Use of efficient irrigation system
2. Use of Pervious surfaces
    a. The parking lot includes the use of pervious pavement
3. Dispersal of runoff to pervious surfaces
    a. Roof runoff (downspounts) either discharge over landscaped areas or are directed to treatment BMP's (bioretention facilities).
    b. Runoff from sidewalks are pitched to drain over pervious landscaped area to slow/filter runoff.
    c. Use of curb cuts that drain to landscape areas.
    d. Use of cistern and/or rain barrels
4. Integrated Management Practice (IMP)
    a. Use of flow-through planter as a BMP sized per the BMP calculator.
    b. Use of bioretention facility as a BMP sized per the BMP calculator.
    c. Use of bioretention with cistern facility as a BMP sized per the BMP calculator.
    d. Use of linear bioretention facility (vegetated swale) as a BMP sized per the BMP calculator.

5. Source Control
    a. Trash receptacles include bin covers and are designed not to allow run-on water to enter enclosure
    b. Efficient irrigation with rain and water loss shut-off devices for landscaped areas
    c. All storm drain inlets in the project area to be stenciled
    d. Integrated pest management practices to be used

2.5.3.2 A listing of the priority development projects which were allowed to solely use treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible

No projects subject to Priority Development Project requirements were approved solely using treatment control BMPs with low removal efficiency rankings as the sole method of treatment control during FY 2011-12.

2.5.4. SUSMP Waivers

2.5.4.1 A description of any SUSMP waiver mitigation program

The Carlsbad SUSMP includes a waiver process (see Section 1 of the SUSMP). For projects subject to Priority Development Project requirements, the applicant may submit a SUSMP waiver request to the City Engineer. As part of the request, the applicant must clearly demonstrate how numerically-sized BMPs cannot be employed with the project and outline the infeasibility with using each available BMP and discuss why the project should not be required to meet the SUSMP requirements. Based on the information provided in the waiver request, the City Engineer may either approve or deny the SUSMP waiver request.

During the reporting period, no SUSMP waivers were requested or granted.

2.6 Hydromodification Management Plan

2.6.1 A description of Hydromodification Management Plan development collaboration and participation

After several cooperative meetings with the Copermittees during previous reporting periods, the final HMP was adopted into the Carlsbad SUSMP on January 14, 2011. The SUSMP, together with the final Hydromodification Plan, includes guidance materials and procedures for applicants to guage whether projects are subject to hydromodification. If subject to hydromodification, applicants must select and incorporate strategies and BMPs into their design to maximize infiltration and mimic pre-project hydrologic characteristics. These include using Integrated Management Practices (IMP's) identified in the SUSMP that are designed to satisfy all four categories for Priority Development Project requirements as previously discussed. Incorporating hydromodification (flow-control) facilities affects the design of each project. For those projects subject to hydromodification, the procedures include options and design guidance for how to select and deploy several IMP/LID facilities throughout their project. These IMP/LID facilities are generally placed so they treat the new/redeveloped impervious areas within the project. Placing these facilities in strategic locations allow for the IMP/LID facilties to both target/filter

urban polluants and address increases in runoff by providing hydromodification (flow-control) to these areas.

When sizing IMP/LID facilties to satisfy hydromodification, the SUSMP includes options for the applicant to perform a downstream channel assessment using established procedures from the Southern California Coastal Water Research Project (SCCWRP). Using the channel screening tools from SCCWRP may provide results that allow the applicant to use different lower flow thresholds. These lower flow thresholds may result in smaller IMP/LID facilities than would normally be required. If SCCRWP is performed for a project, this documentation is included within the SWMP for the project. To continue staff education and knowledge on storm water regulations, during FY 2011-12, staff attended a workshop regarding SCCWRP methodologies, channel screening and field analysis.

For certain projects, applicants may demonstate their projects are exempt from hydromodification, however, this requires the applicant provide documentation (per the final HMP), subject to review and approval by Land Development Engineering staff. Any HMP exemption documentation is included in the SWMP for the project, as required by SWMP submittal requirements.

During the reporting period, all projects subject to Priority Development Project requirements were evaluated against the final hydromodification requirements. Staff took considerable effort (project by project) to educate homeowners, developers, engineers and other city staff on the thresholds, criteria and solutions to satisfy hydromodification requirements.

During FY 2011-12, staff attended a full-day workshop regarding the San Diego Hydrology Model (SDHM) which is a software program discussed in the final HMP. The SDHM uses historical rainfall records and continuous simulation modeling to size different types of IMP/LID facilities that satisfy hydromodification (flow-control) requirements.

2.6.2 A listing of Priority Development Projects required to meet hydromodification requirements, including a description of hydrologic control measures implemented

During this reporting period, there were seven (7) Priority Development Projects that were required to meet hydromodification requirements. For a list of these projects and type of hydrologic controls incorporated for each project, refer to the List of Projects Subject to Hydromodification as Appendix 2.4.

2.6.3 A listing of priority development projects not required to meet the hydromodification requirements, including a description of why the projects were found to be exempt from the requirements

In FY 2011-12, six (6) Priority Development Projects were approved, but found to be exempt from the hydromodification requirements. For a list of these projects and exemptions identified for each project, refer to the List of Projects not required to meet Hydromodification as Appendix 2.5.

2.6.4 A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project

During FY 2010-11, *interim* hydromodification requirements were superceded by final HMP requirements. Final HMP requirements were adopted into the City SUSMP on January 14, 2011. Therefore, there were no projects subject to *interim* hydromodification requirements.

2.7. Treatment Control BMP Program

2.7.1 Inventory Management

The City maintains a watershed-based inventory of publicly and privately owned treatment control BMPs. The inventory has been used to track and document information about each of these structures including BMP type, inspection dates and findings, maintenance frequencies and requirements, verifications, and other information as required by the 2007 Municipal Permit. Development of the inventory is an ongoing process, as new structures are researched, verified, and added on a continual basis.

During this reporting period, the City updated the watershed-based inventory and prioritized all verified structures into high, medium, and low categories as required by the 2007 Municipal Permit using BMP type, location, and proximity to the nearest ESA as prioritization criteria.

During FY 2011-12, the City verified 655 privately owned treatment control BMPs on the inventory, which includes 106 high priority, 436 medium priority, and 113 low priority structures (Appendix 2.6).

For privately owned treatment control BMPs, staff continued to confirm the accuracy of the inventory, research certifications and maintenance requirements, verify ownership and responsible parties, update inspection forms, and distribute outreach materials.

The City continued to have internal meetings to discuss treatment control BMP program improvements such as inspections, maintenance agreements, verification of maintenance requirements, improved departmental coordination, transfer of information during the approval process, and other issues related to treatment control BMP compliance.

See Section 4 of this report for detailed information about the inspection and maintenance program for publicly owned treatment control BMPs.

2.7.2 Treatment Control BMP Inspection Program

During this reporting period, the City conducted compliance inspections of privately owned treatment control BMPs throughout the year and conducted inspections of high priority treatment control BMPs during the dry season only. During the 2011 dry season (May 1, 2011 through September 30, 2011), the City inspected 100% of the high priority, 72.91% of the medium priority, and 77.88% of the low priority privately owned treatment control BMPs (see Section 2.7.2.1).

During FY 2011-12, the City inspected 53.13% of the privately owned treatment control BMP inventory (see Section 2.7.2.2). Inspections of high priority privately owned treatment control BMPs identified on the updated inventory will continue to be conducted as required by the 2007 Municipal Permit through October 1, 2012 and results of those inspections will be reported in the FY 2012-13 annual report.

The *Treatment Control BMP Inspection Form* developed in FY 2007-08 was updated in FY 2011-12. The new form was modified to improve inspection time, include information about previous enforcement actions, and includes the most relevant information about the condition of a structure. A copy of the updated TCBMP inspection form can be found in Appendix 2.7. During inspections, the inspector uses their best professional judgment to determine the condition of the treatment control BMP. The condition of each structure is rated using the following criteria:

- **Good:** Currently no maintenance or corrective action is required for the treatment control BMP. No trees, large plants, excessive trash, stagnant water, blockages, or other major sources of pollutants were observed. The treatment control BMP appears to be functioning as designed. Re-inspect in one year.
- **Fair:** Light to minor maintenance required within the next year. Small amounts of trash, weeds, plants, debris, and/or silt has accumulated, but the treatment control BMP is functioning as designed. The structure should be re-inspected within one year by the responsible party and/or the City.
- **Poor:** Maintenance, installation, replacement and/or repairs are required on the structure. Excessive trash, weeds, vegetation, stagnant water, trees, silt, and/or other pollutants were observed during the inspection. In addition, a treatment control BMP could be rated as "Poor" if the structure was blocked, needed repair, or is not functioning as required.

2.7.2.1 2011 Dry Season (May 1, 2011 – September 30, 2011) Treatment Control BMP Inspections

For the 2011 dry season, all high priority privately owned treatment control BMPs were inspected as required. In addition, all minimum inspection goals for privately owned treatment control BMPs were met or exceeded during the 2011 dry season inspections. Please note the number of structures as of October 1, 2011 is different from the total number of structures reported for FY 2011-12 because of the updates made to the inventory throughout the year. Table 2.3 includes a summary of the inspections and findings of the 2011 dry season inspections.

Table 2.3: Summary of 2011 Dry Season (May 1, 2011 – September 30, 2011) Inspections and Findings for Privately Owned Treatment Control BMPs

Classification	Total on Inv List	Condition	Total	Total Verified	% of Inventory Inspected 2010 Dry Season
High	99	Good	34		
		Fair	10		
		Poor	19		
		Future	7		
		Excluded	4		
		Removed	2		
		Not Inspected	0		
		Total High Inspected		**99**	**100%**
Medium	395	Good	102		
		Fair	41		
		Poor	59		
		Future	64		
		Removed	17		
		Excluded	17		
		Not Inspected	107		
		Total Med. Inspected		**288**	**72.91 %**
Low	104	Good	65		
		Fair	0		
		Poor	0		
		Future	12		
		Removed	0		
		Excluded	4		
		Not Inspected	23		
		Total Low Inspected		**81**	**77.88 %**
Total	**598**[1]			**468**	**78.26%**

[1] Please note the number of structures as of October 1, 2011 is different from the total number of structures reported for FY 2011-12 because of the updates made to the inventory throughout the year.

2.7.2.2 Treatment Control BMP Inspections FY 2011-12 (July 1, 2011 – June 30, 2012)

The City conducted inspections of privately owned treatment control BMPs throughout FY 2011-12. During this reporting period, the treatment control inventory was updated and additional structures were verified and added. Inspections of privately owned treatment control BMPs on the updated inventory will continue as required by the Permit. Complete inspection results for the 2012 dry season will be reported in the FY 2012-13 annual report. Table 2.4 includes a complete summary of the inspections and findings for FY 2011-12.

Table 2.4: Summary of July 1, 2011 – June 30, 2012 Inspections and Findings for Privately Owned Treatment Control BMPs

Classification	Total on Inv List	Condition	Total	Total Verified	% of Inventory Inspected FY 11-12
High	106	Good	44		
		Fair	11		
		Poor	21		
		Future	7		
		Removed	0		
		Excluded	0		
		Not Inspected	23		
		Total High Inspected		**83**	**78.30%**
Medium	436	Good	76		
		Fair	35		
		Poor	50		
		Future	66		
		Removed	0		
		Excluded	7		
		Not Inspected	202		
		Total Med Inspected		**234**	**53.67%**
Low	113	Good	24		
		Fair	0		
		Poor	0		
		Fair	0		
		Future	7		
		Excluded	0		
		Not Inspected	82		
		Total Low Inspected		**31**	**27.43%**
Total	**655**			**348**	**53.13%**

2.7.3 Treatment Control BMP Verification of Maintenance Program

During FY 2011-12, the City mailed verification of maintenance forms to all responsible parties on the treatment control BMP inventory list. The verification of maintenance form, revised in FY 2010-11, continues to be used to help responsible parties more accurately provide information about the treatment control BMP maintenance. The form includes fields that clearly show the inspection findings for the current and previous year, along with the inspection dates and last known date of maintenance. The verification of maintenance form, along with a cover letter, were mailed to all private property owners and other responsible parties identified on the updated inventory during the FY 2011-12 as required by the 2007 Municipal Permit. A copy of the revised verification form can be found in Appendix 2.8.

Outreach materials were also included with the verification mailers. The "*What You Need to Know About Privately Owned Treatment Control BMPs*" brochure and the "*Frequently Asked Questions About Treatment Control BMPs*" factsheet were included in mailers to help responsible parties understand their maintenance responsibilities.

The City continued to use the email address created in FY 2007-08 for the treatment control BMP verification program. Owners and responsible parties can send questions, verification forms, and other requests to the tcbmp@carlsbadca.gov email address, which is monitored by the Senior Construction Inspector. The City also continued to use and updated the treatment control BMP email list for responsible parties. The email list has been useful in providing information about treatment control BMP compliance program and notices about upcoming deadlines for maintenance verification submittals.

For 2011 dry season, mailers were sent out between May 2 and September 8, 2011. In addition to the first notification, those who did not comply with the initial request were sent reminder notices. As a result of the 2011 dry season effort, 88.84% of the verification forms were returned as required prior to October 1, 2011. This return rate exceeds the City's goal rate of 75%.

For FY 2011-12, the first notifications were sent to all responsible parties listed on the updated treatment control BMP inventory on May 1, 2012, with a second reminder notice mailed on June 4, 2012. As of June 30, 2012, 83.86% of the verification forms were returned, which is nearly equal to the total response rate reported at the end of dry season 2011. The City will continue to work with the responsible parties through October 1, 2012 to ensure verifications are returned as required. In the event that a responsible party does not respond, the City will use its enforcement authority to escalate efforts.

2.7.4 Treatment Control BMP Verification of Installation Prior to Occupancy

During FY 2011-12, the installation of all structural BMPs required for priority projects continued to be verified prior to occupancy. The process is initiated when the contractor/developer requests a pre-construction meeting with City inspectors. During the pre-construction meetings, the contractor/developer is notified of the BMP installation requirements and issued a copy of the memo outlining the City's requirements for occupancy. In addition, the Pre-Construction Meeting Agenda Packet was revised to state that occupancy will not be granted until the engineer of work provides a letter verifying that all treatment control BMPs have been installed according to the plans and SWMP. Each contractor/developer is provided with a copy of the agenda packet during the pre-construction meeting.

In addition, the City's inspection process requires documentation on BMP installations prior to occupancy. This process requires written verification from the developer, engineer of work, or other responsible party that BMPs were installed in accordance with the SWMP. This verification must be submitted before a request for occupancy is made. After receiving the written verification, the City reviews the SWMP, maintenance responsibilities, and confirms that the BMP installation is in compliance. On May 1, 2012, an updated memorandum was sent to all developers and contractors with active grading permits informing them of the prior to occupancy verification procedure. A copy of the "*BMP Verification of Installation Required Prior to Occupancy*" memorandum can be found in Appendix 2.9.

When a request for occupancy is made to the City by the contractor or developer, City inspectors are notified of the request for occupancy and final inspections are scheduled. The Grading Partial Site Release checklist includes a checkbox to remind inspectors to review BMP installations prior to releasing the pad for building. Inspectors review the project site for compliance with all City requirements including verification of BMP installation. If all the requirements are satisfactory the inspector signs off on the occupancy permit and occupancy is granted. The City maintains a copy of the signed occupancy permit in the building permit file.

The City continued to scan Storm Water Management Plans (SWMP's) into our digital management system (DMS). This allows these water quality reports to be accessed by CM&I inspectors, reviewers, and researchers. Having access to SWMP's helps verify the types and locations of approved post construction treatment control BMPs.

2.8. Enforcement

In FY 2011-12, the City continued to escalate enforcement actions against treatment control BMP owners and other responsible parties that were not in compliance with the maintenance and/or verification requirements of the CMC, including not returning the verification forms. The City's CMI Division is responsible for implementing all enforcement actions related to treatment control BMP compliance. The City's goal is to obtain voluntary compliance with the CMC and 2007 Municipal Permit requirements through public education, outreach and inspections. However, enforcement actions may become necessary when these measures fail to result in compliance.

Appropriate enforcement actions used to achieve compliance should be proportional to the compliance issue, reflective of the responsible party's compliance history, and protective of human health and the environment. In addition, an appropriate enforcement action, which in some cases may include a civil penalty and recovery of economic benefit, sends a message of deterrence to the regulated community. To ensure fairness, the City will remain receptive to good-faith arguments - based on fact, law, or policy - that a given situation is different and should be treated differently, that a site is in fact in compliance, or that a severe penalty is not warranted given the specific circumstances of the violation. Table 2.5 includes a summary of all enforcement actions related to the privately owned treatment control BMP inspection, maintenance, and verification program.

Table 2.5: Summary of Treatment Control BMP Enforcement Actions for FY 2011-12

Type of Enforcement Action	Number Issued per Structure
Warning Notice	107
Notice of Violation	83
Notice to Clean	2
Administrative Citation - Warning	9
Adminstrative Citation – Fine	14
TOTAL	**215**

FY 2011-12 was the first year the City issued administrative fines for failure to comply with the maintenance of verification requirments of the Municipal Permit and the CMC. Three parties responsible for 14 structures were issued fines totaling $800.00. The City will continue to escalate enforment actions to ensure compliance with the TCBMP program.

The City also achieved compliance with the updated Carlsbad SUSMP through the permitting process. Development approvals are not granted until the project shows complete compliance with the City's storm water standards. The City will not issue a construction permit until all applicable site design, source control and treatment control BMP requirements are incorporated into the project plans. For projects involving grading and/or street and utility improvements, the City requires that the developer enter into secured agreements to guarantee developer performance on the grading or improvement work including associated structural BMPs. City inspectors review the project sites during construction to ensure that all work is being done in compliance with the construction plans, City Standards and procedures. Prior to issuance of a certificate of occupancy or release of any security, the City inspector reviews the project site to ensure that all applicable structural BMPs have been installed per the approved plans and specifications. Only when the BMP installations have been verified will the certificate of occupancy be issued or any security is released.

2.9 Notable Activities

As mentioned in the Executive Summary, the City considers Notable Activities to be any activity above compliance requirements.

- In August of 2011, CMI and Land Development Engineering staff attended the annual StormCon conference in Anaheim, Ca. The conference featured over 80 sessions and presentations covering a variety of topics including Low Impact Development, Storm water Pollution Modeling, the new Construction General Permit, BMP Effectiveness Assessment, Regulations and Policies, Storm water Treatment, and other related topics.

- During FY 2011-12, City staff attended full-day workshop, hosted by the floodplain management association, regarding hydromodification screening tools. This included training on methodologies, criteria and channel screening procedures by SCCWRP. This training and supplemental knowledge assists staff on the review of potential channel assessments when they are submitted by applicants.

- During FY 2011-12, staff attended a full-day workshop regarding the San Diego Hydrology Model (SDHM) which is a software program discussed in the final HMP. The SDHM uses historical

rainfall records and continuous simulation modeling to size different types of IMP/LID facilities that satisfy hydromodification (flow-control) requirements.

- During FY 2011-12, the City continued to have internal meetings to discuss treatment control BMP compliance program improvements such as inspections, maintenance agreements, verification of maintenance requirements, improved departmental coordination, transfer of information during the approval process, and other issues related to treatment control BMP compliance.

Section 3

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City of Carlsbad continues to stress the importance of storm water pollution prevention throughout the implementation of the construction component. This section of the annual report identifies those activities which occurred from July 1, 2011 through June 30, 2012 and will cover the requirements of the Permit No. R9-2007-0001 (2007 Municipal Permit).

The City has implemented activities that address and minimize impacts to receiving water quality from construction sites. During this reporting period, the City updated the construction inventory on a monthly basis, inspected all construction sites at the required frequencies, responded to construction related inquiries and complaints, provided outreach and education to developers, engineers, contractors and City staff, and when necessary used escalated enforcement mechanisms to obtain compliance.

3.2 Source Characterization

All construction sites were required to undergo the City's construction urban runoff approval process and meet the applicable construction requirements. The City uses the Permits Plus database to update the watershed based inventory of all construction sites that required grading and/or construction permits. The Development Services Division updates the Permits Plus database until the project is ready to begin construction. The Construction Management and Inspection (CMI) Division then issues the permit and updates the database during the "active construction" phase of the project. The CMI inspectors are primarily responsible for conducting storm water compliance inspections during the active construction phase.

Construction sites with grading permits may include sites where activities such as grading, excavation, clearing, road construction, structure construction, or demolition result in the disturbance of soil. Construction permits that do not require a grading permit may include sites such as single family residence remodels or additions, home demolitions, tenant improvements, or commercial/industrial buildings that are constructed resulting in the need for water quality protection. An inventory of all active construction sites requiring a grading permit can be found in Appendix 3.1. At the end of FY 2011-12, there were 124 grading permits on the grading construction site inventory, of which 99 were active and 25 were inactive (finaled, expired, or withdrawn). Table 3.1 is a summary of the FY 2011-12 grading permit inventory.

Table 3.1: Summary of the FY 2011-12 Active Grading Construction Site Inventory

Priority	Active	Finaled	Withdrawn	Expired	Total
High	36	1	0	0	37
Medium	21	5	1	0	27
Low	42	18	0	0	60
Total	**99**	**24**	**1**	**0**	**124**

3.3 Updates to Ordinances and Approval Processes

In FY 2011-12, all new development and redevelopment projects including CIP projects were required to undergo the City's urban runoff approval process in accordance with the requirements of the 2007 Municipal Permit and 2008 JURMP.

The City updated the single-sheet BMP plan to include a revised project site plan and call out the comprehensive locations of each required site design, source control, low impact development technique, and treatment control BMP. The plan contains a cross referencing table that shows the selected BMPs, grading, improvements, building, and/or landscape. A copy of the plan is attached to each construction drawing for reference by the contractor and inspector. At the conclusion of the project and prior to issuance of an occupancy permit or acceptance of the improvements, the inspector uses the single-sheet BMP plan to help ensure all required BMPs are installed as required.

During FY 2011-12, the installation of all structural BMPs required for priority projects continued to be verified prior to occupancy. When a request for occupancy is made to the City by the contractor or developer, City inspectors were notified of the request for occupancy and final inspections were scheduled.

During this reporting period, the ordinances were reviewed and found to be adequate; therefore, no ordinance changes were made.

3.4 Best Management Practice Requirements

SWPPPs and Erosion Control Plans are reviewed prior to commencement of construction activities to ensure that the required minimum BMPs will be implemented for all construction sites. The City has required the minimum BMPs be implemented, as identified in the 2008 JURMP and Carlsbad Municipal Code, for all construction sites. The seven required minimum BMPs include components that address the following:

1. Erosion control methods for graded slopes;
2. Erosion control method for graded flat areas (slope <5%);
3. Sediment control for perimeter boundaries;
4. Offsite tracking control of sediment;
5. Materials management control;
6. Waste management control; and
7. Non-storm water management control.

The City continues to utilize the pollution prevention measures contained in the Storm Water Best Management Practice Handbooks, published by the California Storm Water Quality Association (CASQA), Caltrans Storm Water Quality Handbooks, and Standards for Design & Construction of Public Works Improvements in the City of Carlsbad. All CMI staff are trained on construction site BMPs and their appropriate application.

Pollution prevention consists of procedures and practices that eliminate or reduce the pollutants at the source. The City has identified and required implementation of the following pollution prevention controls for all applicable construction sites:

- SWPPPs and Erosion Control Plans are required for grading permits and appropriate construction projects. These plans are checked by the City to ensure they adequately address the provisions of the General Construction Permit.
- CMI inspectors enforce the implementation and effectiveness of BMPs described in approved erosion control plans and SWPPPs.

To address each of the required BMPs, the City ensures the SWPPPs and/or erosion control plans include implementation of several types of BMPs as applicable, depending on site-specific requirements. The list of BMPs can be referenced in the 2008 JURMP.

3.4.1 Maximum Allowed Disturbed Areas

Grading sites were held to the maximum allowable disturbed areas on all applicable sites.

3.4.2 Advanced Treatment Requirement

There were no projects that triggered the advanced treatment requirements.

3.5 Program Implementation

During FY 2011-12, the City continued to monitor and enforce storm water regulations by dividing construction compliance into three areas – Capital Improvement Projects (CIP), Building Construction Permits, and Grading Permits. For FY 2011-12, CMI continued to oversee the inspection of active grading sites and CIPs, while the Building Division ensured sites covered under active building permits (construction sites without a grading permit) were compliant. In addition, one Senior Construction Inspector has been designated with full responsibility for storm water compliance for all NPDES activities for CMI.

During FY 2011-12, the installation of all structural BMPs required for priority projects were verified prior to occupancy. The process is initiated when the contractor/developer requests a pre-construction meeting with City inspectors. The Pre-Construction Meeting Agenda Packet also includes a memo stating that occupancy will not be granted until the engineer of work provides a letter verifying that all treatment control BMPs have been installed according to the plans and SWMP. Each contractor/developer is provided with a copy of the agenda packet during the pre-construction meeting.

3.5.1 Grading Construction Sites

3.5.1.1 Inventory Management

During FY 2011-12, all active grading sites continued to be prioritized into high, medium, and low categories and inspected at the minimum frequencies required by the 2007 Municipal Permit. All inspection protocols outlined in the 2007 Municipal Permit, 2008 JUMRP, CMI procedures, and the CMC were followed and implemented as required. The active grading permit inventory is maintained by CMI and updated on a monthly basis. The inventory helps to track each active grading site within each priority category (high, medium, and low) and identify the period of time (weeks) the site was active within the wet season, the number of inspections conducted during the wet season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all

active grading sites. A copy of the FY 2011-12 grading permit inventory can be found in Appendix 3.1. For a complete description of how the grading construction site inventory is maintained please refer to procedure #CMI-120 found in the FY 2009-10 annual report.

3.5.1.2 Inspections and Compliance

Storm water compliance continues to be the focus of CMI inspectors during this reporting period, especially during the wet season. All required inspections were documented and placed in the project files. During required site visits, inspectors generally found sites to be compliant with SWPPPs, Erosion Control Plans, and BMP implementation. The most common compliance deficiencies were found with BMP maintenance (i.e. broken gravel bags, silt fences, etc.). These deficiencies were immediately brought to the attention of the site superintendent or other responsible party who was directed by the project inspector to immediately implement corrective action. This interaction has proven to be productive in correcting minor deficiencies.

Prior to the wet season, CMI inspectors hand delivered a memo to all site superintendents reminding them of the NPDES requirements and informing them to ensure all sites are in compliance by and throughout the wet season. A copy of the *Rainy Season Preparation and Storm Water Compliance* memorandum, issued on September 1, 2011, can be found in Appendix 3.2.

In addition, the City continued to verify the validity of a project's Notice of Intent (NOI) prior to issuance of a grading permit or Notice to Proceed for CIP projects. Prior to the pre-construction meeting and issuance of a grading permit, the Construction Manager reviews the State's online database to ensure a NOI, for applicable projects, had been issued prior to assigning the project to an inspector for grading permit issuance.

CMI inspectors continued to use the NPDES Inspection Report form to verifiy BMP compliance and effectiviness at project sites. The inspection form facilitates efficient inspector use, clarifies required corrective actions, tracks the numbers and types of violations, and identifies any necessary escalated actions. The NPDES inspection report covers all administrative requirements including inspection and evaluation of SWPPPs, wall maps, desiltation basins, materials and waste management, temporary BMPs, slope protection, and site conditions and interactions. A copy of the inspection report can be provided directly to the site representative upon completion of an inspection.

All active grading sites were prioritized and inspected as required during this reporting period. CMI inspectors verified proper BMP implementation on a weekly, sometimes daily basis. Table 3.2 is a summary the grading permit inspections conducted during this reporting period:

Table 3.2: Inspections Required and Conducted for Sites Requiring a Grading Permit – FY 2011-12

Wet Season Inspections Required	Wet Season Inspections Conducted	Dry Season Inspections Required	Dry Season Inspections Conducted	**Total** Inspections Required	**Total** Inspections Conducted
658	**683**	**308**	**320**	**966**	**1,003**

3.5.2 Building Division Sites

Buiding Division storm water inspections were conducted using the procedures outlined in the 2008 JURMP and CMC. In addition, the Building Division developed new procedures in FY 2010-11 to help inspectors effectively conduct NPDES inspections. The "SWPPP Permit and Process Procedures" guides each building inspector and engineering tech through a step by step process to ensure NPDES compliance at each building site. A copy of the procedure can be found in previous annual reports. Building Division inspection staff also received training during this reporting period and continued to implement departmental procedures to ensure compliance with the inventory, inspection, and reporting requirements.

During this reporting period, the Building Division issued 453 SWPPP permits and required pre-construction meetings for all projects prior to the commencement of building activities. As part of the divisions' outreach program, the pre-construction meeting allows the inspector to review the BMP's outlined on the Storm Water Compliance Form for Tier 1 Construction SWPPP (E-29) with the contractor and/or homeowner. A copy of this form can be found in Appendix 3.3.

3.5.2.1 Inventory Management

The Building Division maintains an inventory of building permits in both a computer tracking system and on paper records. The inspector is responsible for maintaining copies of all NPDES information related to building permits, inspection results, and comments. The Building Division, in coordination with the City's IT Department, modified the Permits Plus database to track NPDES inspections at building sites. NPDES inspection information about all permitted building sites is maintained in the database and inspectors are able to schedule inspections, track information about compliance, issue enforcement actions, and document other relevant NPDES information. When new building permits are added to the database, they are prioritized into low, medium, or high categories and scheduled for inspection. In general, low priority sites were classified as sites that had only interior work and minimal to no material storage areas outside of the site.

3.5.2.2 Inspections and Compliance

Storm water compliance remained the focus of inspectors during this reporting period, especially during the wet season. All required inspections were documented and placed in the project files. NPDES building inspection requests are automatically generated by Permits Plus software based on the required inspection frequency during the wet and dry seasons. During the wet season high priority sites were inspected bi-weekly. All medium and low priority sites were inspected as needed. Building inspectors also reviewed site BMPs each time they performed inspections consistent with CASQA Standards outlined for Tier 1 Construction SWPPPs. As part of the building permit inspection procedures, any additional inspections are recorded in Permits Plus. The total number of site inspections conducted by the Building Division resulted in 703 total project inspections during the wet season and 147 total inspections during the dry season. In addition, there were 398 pre-construction meetings and 1,405 routine site contacts were preformed allowing inspectors to maintain a high level of oversight and was key in resolving compliance issues in an expeditious manner.

During site contacts, notable improvements were observed of the general condition of sites related to storm water compliance of most building sites. Contractors and owner builders appeared to be much more proactive in managing runoff from their sites as well as containment of pollutants within the site.

The most noted compliance issue continues to be the maintenance of stucco and concrete washout areas. Through the City's educational program and other compliance efforts this issue continues to be addressed during follow up inspections and escalated enforcement actions.

3.5.3 Capital Improvement Projects

3.5.3.1 Inventory Management

During FY 2011-12, CIPs continued to be prioritized into high, medium, and low categories and inspected at the minimum frequencies required by the Permit. All inspection protocols outlined in the 2007 Municipal Permit, 2008 JUMRP, CMI procedures, contracts, and the CMC were followed and implemented as required. The active CIP inventory is maintained by CMI and updated on a monthly basis. The inventory helps to track each CIP within each priority category and identify the period of time (weeks) the site was active within the wet season, the number of inspections conducted during the wet season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all CIP sites. A copy of the CIP inventory can be found in Appendix 3.4.

3.5.3.2 Inspections and Compliance

Daily inspections were conducted for CIP project sites. These inspections cover a number of construction-related and storm water compliance issues. All medium and low priority sites were inspected as needed. Table 3.3 is a summary the CIP inspections conducted during this reporting period:

Table 3.3: Inspections Required and Conducted for CIP Sites for FY 2011-12

Wet Season Inspections Required	Wet Season Inspections Conducted	Dry Season Inspections Required	Dry Season Inspections Conducted	**Total** Inspections Required	**Total** Inspections Conducted
108	**107**	**45**	**46**	**153**	**153**

3.6 Enforcement

There were no changes in the City's enforcement escalation procedures as described in the 2008 JURMP during this reporting period. Table 3.4 is a summary of enforcement actions taken by the City from July 1, 2011 to June 30, 2012.

Table 3.4 Summary of Violations and Enforcement Actions at Construction and Building Sites

Actions Taken	Number of Actions CMI	Number of Actions Building Division	TOTAL
Verbal Notices	200	63	263
Written Warning	31	7	38
Notice of Violation	3	0	3
Notice to Clean	0	7	7
Stop Work Notice	1	0	1
Total Actions	235	77	312

If a site was found to have deficiencies in storm water compliance, it was generally corrected at the time of the inspection. If a verbal or written warning was issued, a specific deadline for correction action was noted on the inspection report. Follow up inspections were conducted to ensure construction sites complied with the required corrective actions. Most sites were found to have completed corrective actions and were in compliance at the time of the follow up inspection.

If a site was found to be out of compliance to the point where major deficiencies were noted, a Stop Work Notice was issued. Stop Work Notices prevent the contractor from continuing any construction related work until the corrective actions have been implemented. Stop Work Notices were found to be an immediate and effective mechanism to ensure non-compliance was corrected in an expeditious manner. There was one Stop Work Notice and three NOVs issued during this reporting period. The following includes a brief summary of the NOVs issued during FY 2011-12.

GR110030

On February 28, 2012, a City inspector observed an illegal discharge at the Grand Pacific Carlsbad resort construction project. The Project Superintendent had directed staff to pump out a temporary detention basin located at the southeast quadrant of the project site. The pump was connected directly from the basin to the storm drain system causing approximately 1,000 gallons of sediment laden water to be discharged offsite. The entire discharge was completely contained within the storm drain system and basin. Upon discovery by the City, the pumping activity was immediately stopped. The Project Superintendent was directed to discontinue all pumping activities until appropriate BMPS could be implemented. On February 29, 2012, the Project Superintendent contracted a water truck to remove the water from the basin and deposit it on an adjacent agricultural field. In addition, Grand Pacific Carlsbad was issued an NOV and required to clean the storm drain conveyance from the inlet to the discharge point. The City inspector monitored the pumping operation, remediation, and the compliance efforts for the duration of the project.

GR110008

The City issued an NOV to Taylor Morrison Developers on April 16, 2012. The project site, known as Muroya Vista Del Mar, is located on Blackrail Road between Poinsettia Avenue and Aviara Parkway in Carlsbad. On April 13, 2012, the City received a complaint from the RWQCB that a slope failure had occurred at the site. The City immediately dispatched an inspector to conduct an investigation. The inspector did not observe a slope failure or a discharge from the site; however he did observe that

several BMPs needed maintenance and/or repair. On April 16, 2012, the City conducted a follow-up inspection of the site and found that the site operators were in violation of several NPDES requirements which warranted the issuance of a NOV. The contractor initiated corrective actions which included repairing the perimeter silt fence, installing additional erosion control for two slopes, updating the SWPPP records, and providing additional maintenance to the onsite desiltation basins. Taylor Morrison Developers completed all of the required corrective actions and CMI inspectors continued to work with the contractor to ensure BMPs were adequately maintained for the duration of the project.

GR100017

On May 24, 2012, the City received a complaint that BMPs were not being maintained at the Hilton Resort construction site located at 7250 Ponto Drive in Carlsbad. The Construction Manager directed staff to conduct a complete storm water compliance inspection and make recommendations on how to proceed. On May 25, 2012, the City inspector found the site to be out of compliance with the SWPPP and the Carlsbad Municipal Code (CMC). Specifically, silt fences along the perimeter of the site needed to be repaired and/or maintained, stockpiles and slopes needed additional protection, driveway areas needed sweeping, trash and dumpster areas needed to be managed throughout the site, and the washout area needed to be maintained. No discharge to the storm drain was observed. As a result of the inspection, an NOV was issued listing seven violations of the CMC and required corrective actions to be completed or significantly accomplished by May 30, 2012. A follow up inspection was conducted on May 30, 2012 to verify compliance, and corrective actions had been implemented as required. For the duration of the project SWPPP inspections were conducted on a weekly basis.

3.7 Notable Activities

As mentioned in the Executive Summary, the City considers Notable Activities to be any activity above compliance requirements. The City has continued its strong stance on storm water pollution prevention and inspectors have obtained a high awareness among field personnel (superintendents, field labor, etc.) regarding the importance and application of BMPs for construction sites. Notable activities for FY 2011-12 include:

- In August 2011, CM&I staff attended the annual StormCon conference in Anaheim, Ca. The conference featured over 80 sessions and presentations covering a variety of topics including the new Construction General Permit, BMP Effectiveness Assessment, Regulations and Policies, Storm water Treatment, and other related topics.

- In FY 2011-12, the required number of inspections for active construction sites was exceeded. CMI conducted 1,003 inspections, which exceeds the 966 inspections required for the wet and dry seasons.

Section 4

4.0 MUNICIPAL COMPONENT

4.1 Introduction

Municipal facilities are required to implement the minimum BMPs identified and described in the 2008 JURMP (good housekeeping, preventive maintenance, material handling and storage, employee training, solid waste handling, record keeping, self-inspection, and spill response), as applicable. Specific BMPs are identified in SWPPPs and/or inspection reports. Specific pollution prevention measures may vary from one site to another and are evaluated separately at each facility. The City implements and assesses the effectiveness of BMPs through regular staff training, self-inspections, third party inspections by a contractor, and SWPPP implementation. The following includes a description of specific pollution prevention activities and storm water BMPs implemented from July 1, 2011 to June 30, 2012 per Order R9-2007-0001 by various City departments. All BMPs were implemented as required by the 2008 JURMP.

Municipal areas and activities are subdivided by categories in the sections below. Prioritization of these municipal areas is presented in the High Priority column of the Municipal Inventory located in Appendix 4.1. Municipal facilities are mapped using GIS and can be found in Appendix 4.2.

4.2 Minimum BMP Requirements

The following minimum BMPs were implemented at the facilities in the Municipal Inventory provided in Appendix 4.1, where appropriate.

4.2.1 Employee Training

Municipal departments provided training at least annually to all employees with responsibility for actions that have a potential to cause storm water pollution. A list of all Municipal storm water training is included in Appendix 8.1. Training generally addresses, among other topics, the following:

- Storm water awareness
- Applicable regulations
- Discharge prohibitions
- Importance of pollution prevention practices (good housekeeping, recycling, waste management, source control, etc.)
- Applicable best management practices (including those called out in the facility storm water pollution prevention plan [SWPPP]), where applicable
- Integrated pest management
- Self-inspections
- Record keeping

Documentation of training is maintained on-site at the location(s) where operations or activities are conducted. Where the operations are covered in a SWPPP, training records are filed with the SWPPP.

4.2.2 Pollution Prevention

The City implements urban runoff pollution prevention practices that are generally recognized for that facility's activity as being effective.

Pollution prevention is defined in Order No. R9-2007-0001 "*as practices and processes that reduce or eliminate the generation of pollutants. Recycling, use of different types of products or chemicals, and altering operational procedures are all types of pollution prevention practices that reduce the amounts of pollutants generated by a facility.*"

The City's approach is to promote pollution prevention as an activity for all municipal employees and locations. Since 1991, the City has implemented a procurement policy that directs the purchase and use of recycled products. Purchasing staff are encouraged to use "*Green Purchasing*" principles. This refers to buying products and services with reduced effects on human health and the environment (also called "*Environmental Purchasing*"). While some of these products are office and janitorial supplies, the policy also applies to construction supplies, landscape materials and equipment, automotive, road and highway supplies.

Specific pollution prevention measures may vary from one site to another, so they are evaluated separately at each facility. Where appropriate, High Priority municipal facilities implemented site specific Storm Water Pollution Prevention Plans (SWPPP) and associated training programs. Furthermore, the pollution prevention BMPs identified in the JURMP were implemented at all municipal facilities. These pollution prevention BMPs include:

- Affirmative Procurement – Use alternative, safer, or recycled products.
- Reduce the amount of hazardous materials used by implementing natural controls.
- Redirect storm water flows away from areas of concern.
- Reduce use of water.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.

In addition, the City required the following minimum pollution prevention practices (detailed in SWPPPs or inspection reports) at all municipal facilities where appropriate:

- <u>Reduce use of water or use dry cleanup methods:</u> Employees used dry cleanup methods when possible (sweeping, etc.). Any washing activities required containment and recovery, with no discharge to the storm drain system. These BMPs are also required for City contractors.
- <u>Conduct storm drain maintenance:</u> Employees performed regular visual inspections of the storm drains to identify unauthorized discharges and clean as needed.
- <u>Recycle:</u> City departments recycled appropriate items and implemented the City procurement policy to purchase and use recycled products.
- <u>Move or cover potential pollution sources from storm water contact:</u> Corporate yards protected materials and products that could potentially contribute to storm water pollution by storing them indoors, or covering them, and providing them with secondary containment as needed.

4.2.3 Good Housekeeping

Good housekeeping practices employed simple common sense in creating and maintaining a clean, orderly environment that reduced the risk of accidents and urban runoff contamination.

- **Routine Housekeeping Inspections.** Locations with higher risk of impacting storm water quality (e.g., storm water outfalls, loading and unloading areas, materials, products and wastes storage areas, equipment and vehicle maintenance and cleaning areas) were inspected regularly. Inspections focused on leaks or conditions that may have led to discharges of pollutants to the Storm Water Conveyance System or Receiving Waters.

- **Maintenance of Clean Grounds Surfaces.** Sweeping of all paved areas exposed to precipitation or storm water was conducted on a regular basis. Litter controls of all exposed surface were conducted on a regular basis. The frequency of sweeping and litter control is based on site conditions.

- **Waste Management.** Each facility conducted regular pickup and disposal of garbage and waste materials/products to prevent overfill of waste storage containers.

- **Equipment Inspection.** Each facility conducted routine inspection of equipment to ensure proper functioning. Where problems were identified during inspection, proper and prompt maintenance or repair is conducted.

- **Storage.** Raw materials, intermediate products, finished products, byproducts and waste products were stored in covered areas or sealed containers unless the materials or products were not a threat to urban runoff quality. To prevent accidental spills, materials or products are stored away from direct traffic routes. All containers were stacked according to applicable federal, state, and city regulations as well as manufacturers' instructions to avoid damage from improper weight distribution. Pallets or similar devices were used to prevent corrosion of the containers that can result when containers come in contact with moisture on the ground.

- **Limitations on Handling Hazardous Materials.** Each facility limited the handling of hazardous materials to those personnel specially trained to handle these materials.

- **Employee Training.** All good housekeeping practices were incorporated into a facility's employee-training program.

In addition to the BMPs listed above, good housekeeping was addressed as a site specific BMP for each category of facilities listed below. See BMP SC-60 for site specific information on implementation.

4.2.4 Spill Response and Prevention

Municipal staff implemented BMPs at all fixed facilities and field programs to prevent, control and clean up spills. The following are general BMPs that were implemented:

- BMPs listed in SC-11, Spill Prevention, Control and Cleanup (City of Carlsbad JURMP 2008).
- Spill cleanup materials were readily available and in known locations.
- Spills were cleaned up immediately and dry methods are used where possible.

- Spill cleanup material was disposed of properly.

Spill response and prevention was also addressed as a site specific BMP for each category of facilities listed in Sections 4.3 – 4.14 of this report. See SC-11 for site specific information on implementation.

4.3 Roads, Streets, Highways, Parking Facilities

4.3.1 Background

This section includes BMPs and an inventory of roads, streets, highways, and parking facilities which are deemed High Priority according to Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City's 2008 JURMP. This section also includes information on the City's street sweeping program and BMPs for the City's street maintenance program.

4.3.2 Source Characterization

Table 4.1 below lists the 10 High Priority roads, streets, highways, and parking facilities on the City's municipal inventory as updated in the 2008 JURMP.

Table 4.1: Roads, Streets, Highways, and Parking Facilities

1	ADULT LEARNING PROGRAM PARKING LOT	3368 EUREKA PL
2	CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE
3	CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR
4	CITY STREETS	CITY WIDE
5	COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR
6	DOVE LIBRARY PARKING LOT	1775 DOVE LN
7	FARADAY CENTER PARKING LOT	1635 FARADAY AV
8	FARMERS BUILDING PARKING LOT	FARADAY & EL CAMINO RL
9	HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST
10	RAILROAD DEPOT VISITORS CENTER PARKING LOT	400 CARLSBAD VILLAGE DR

4.3.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.2 were implemented at the 10 High Priority facilities listed above.

Table 4.2: Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-70 Road and Street Maintenance
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.3.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.2 were implemented at the facilities listed in Table 4.1 and are described below:

- SC-11 – Spill Prevention, Control, and Cleanup: Spill kits were located in all vehicles.
- SC-33 – Outdoor Storage of Raw Materials: Plastic tarps covered raw materials in the yard, equipment was covered by canopies, and the material was covered by a permanent overhead structure or stored indoors. Materials associated with street maintenance activities were stored at the Maintenance and Operations Facility.
- SC-34 – Waste Handling and Disposal: Paint waste was returned to the maintenance yard where it was transferred directly from the generating vehicle to secured storage containers. This was done within a proper containment area in case of any accidental spillage. These containers were clearly marked and stored until arrangements were made for a certified waste management company to remove them and transfer them to an approved facility.
- SC-41 – Building and Grounds Maintenance: In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking and Storage Area Maintenance: Parking lots and storage areas were swept biweekly.
- SC-60 – Housekeeping Practices: All maintenance vehicles are equipped with spill kits. Work sites were swept and all debris was removed upon completion of any asphalt or concrete repair.
- SC-70 – Road and Street Maintenance: Storm drain inlets were protected using rock bags prior to the start of any maintenance activities. Concrete wash out was performed on a plastic tarp and contained to prevent any discharge to the storm drain. Street sweeping was performed for all curbed streets and municipal parking lots in the City. Table 4.3 below indicates the distance swept in curb miles, frequency, and amount of materials removed as a result of the street sweeping activities. In total, there were approximately 19,440 curb miles of streets swept from July 1, 2011 to June 30, 2012.

Table 4.3: Street Sweeping Data

Priority[1]	Description	Distance	Minimum Frequency	Material Removed
High[2]	Arterials/seawall/Downtown	54.5 curb miles	Four times Monthly	1160 tons/ Annually
Medium	Residential	1000 curb miles	Twice Monthly	
Low	Alleys	6.5 curb miles	Twice Monthly	
Parking Lots	54 lots	27 acres	Twice Monthly	

[1]Priority is based on the volume of trash and debris generated at these types of streets - streets which generate high volumes of trash are High Priority; streets which generate moderate and low volumes of trash are medium and low priority respectively.
[2]Downtown streets were swept twice weekly

- SC-71 – Plaza and Sidewalk Cleaning: A self-contained wet sweeper was used on all tile sidewalks in the downtown area on a scheduled basis.

- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers were stored inside and used sparingly in accordance with required application practices.
- SC-75 – Waste Handling and Disposal: All materials were hauled directly to the transfer station and were covered.

4.4 Flood Management Projects/Flood Control Devices

4.4.1 Background

This section includes BMPs and an inventory of the City's Flood Management Projects and Flood Control Devices which are deemed High Priority areas according to Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City's 2008 JURMP. This section also includes a description of the Storm Drain Maintenance Program activities.

4.4.2 Source Characterization

The municipal separate storm sewer system is the only High Priority Flood Management Projects and Flood Control Devices on the City's municipal inventory, as updated for the 2008 JURMP. The municipal separate storm sewer system is inclusive of the City's flood management projects and flood control devices.

4.4.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.4 were implemented throughout the City's MS4.

Table 4.4: Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-21 Vehicle and Equipment Cleaning
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal

4.4.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.4 were implemented where applicable pertaining to the municipal separate storm sewer system and are described below.

- SC-11 – Spill prevention, Control, and Cleanup: All vehicles have spill kits and key vehicles carry hydrocarbon booms. All trash was placed in 55 gallon trash bags. The maintenance sweeper truck was called out to assist in spill cleanup when necessary.

- SC-21 – Vehicle and Equipment Cleaning: All vehicles used in flood control device cleaning were washed at fleet maintenance using an enclosed pressure wash system. The system has a secondary water and oil separator plumbed into the sanitary sewer system.
- SC-34 – Waste Handling and Disposal: Trash was hauled to transfer station. Debris and other organic material were transferred and deposited at 2400 Tamarack Avenue in three concrete covered bins. The material was then tested for contaminants and hauled to a landfill or appropriate facility upon receipt of permissible test results.
- SC-60 – Housekeeping Practices: Trash was removed from these areas of the MS4 on a routine basis.
- SC-74 – Drainage System Maintenance: A small self-contained vacuum with pressure washer was used to clean the inlets. All material in the drain box was removed by the vacuum. Disposal of the water and material occurred using a filter sock, allowing water to be decanted into the sanitary sewer system. The solid material was taken to the Tamarack site described above. All trash was removed from the MS4, placed in 55 gallon trash bags, and placed in a 40 cubic yard roll off dumpster that is covered. The material was then transported to Palomar Transfer Station for disposal. Data pertaining to maintenance activities of the MS4 is in Table 4.5 below.

Table 4.5: MS4 Maintenance

Structure	Inspected	Exceeding Cleaning Criteria	Cleaned	Amount of Material Removed (tons)
Catch Basin/Inlet	3,407 units	331	Anthropogenic trash removed 100%	37
MS4 miles	2,000 linear feet	N/A	2000 linear feet	0.10
Open Channel miles	32,000 linear feet	N/A	0 linear feet	0

- SC-75 – Waste Handling and Disposal: Described under SC-34 and SC-74 above.
- BMPs to limit infiltration from sanitary sewer to storm drain system: a preventive maintenance schedule was implemented that includes jet rodding, and vactoring the sanitary lines throughout the city of Carlsbad. Closed circuit television was used for investigations in sewer lines. In addition, engineering standards described below prevent infiltration of sewage to the MS4.

  The City of Carlsbad's Engineering Standards employed several measures to prevent sewage intrusion into municipal separate storm sewer systems (MS4).

  1. All gravity sewer pipes and laterals are required to have gasketed joints, which create water tight joints (Volume 1, Chapter 6, Item 3.A, 3.C, and 3.F). The water tight joints are tested using the methods indicated in Standard Specifications for Public Works Construction (SSPWC) section 306-1.4. The water tight test methods include a post-installation closed circuit television (CCTV) inspection and an air pressure test where the sewer line must sustain 2.5 to 3.5 psi gage pressure for at least 2 minutes after being pressurized to 3.0 psi.
  2. All gravity sewer lines are required to follow engineering standard for the amount of flow they can carry. During peak hour dry weather season the pipe shall be designed to carry a flow depth of 0.5 (or 0.75 depending on the pipe size) the diameter of the pipe (Volume 1, Chapter 6, Item

4.C). This design requirement prevents the pipe from becoming full, which would pressurize the pipe and potentially cause a leak.

3. Per Carlsbad's Engineering Standard GS-6 and GS-6A, the sewer lines are typically located at an elevation deeper than the storm drain line, which further prevents sewage intrusion into MS4. In the event of a sewage pipe leak, the leakage flow will naturally gravitate below the sewer line rather than up to the storm drain line.
4. The standard horizontal separation between sewer and storm drain is 13 feet, which further prevents sewage intrusion into MS4.
5. In special cases where storm drain lines are installed at a depth greater than that of sewer lines, additional design standards are required such as water tight joints or encasements (Volume 1, Chapter 5, Item 1.G).

- BMPs and Treatment Control BMPs: Storm Drain Inserts including fossil filters and rapid flow BMPs are in place at various storm drain locations throughout the City. Fossil filters removed trash and hydrocarbons, while debris catchers were installed to prohibit anthropogenic trash and debris from entering the storm drain system. City maintained desiltation basins were inspected annually prior to the rainy season and maintained as necessary. Table 4.6 lists the BMP or TCBMP, location, quantity, inspections required and inspections completed.

Table 4.6: Public BMPs and TCBMPs

Type	Location	Number	Inspections Required	Inspections Completed
Debris Catcher	Carlsbad Boulevard	12	12	12
	State Street	4	4	4
	Grand Avenue	3	3	3
	Juniper	1	1	1
	Park	1	1	1
	Romeria	1	1	1
	Walnut	2	2	2
	Carlsbad Village Drive	4	4	4
	Ocean Street	4	4	4
	Rancho Santa Fe	1	1	1
	Celinda Drive	1	1	1
Fossil Filter	Oak Avenue	9	9	9
	Chestnut Avenue	13	13	13
	Jefferson Street	5	5	5
	Fleet Maintenance	5	5	5
	Ocean Street	2	2	2
	Paseo del Norte	3	3	3
	Cannon Road	10	10	10
	Faraday Avenue	10	10	10
	Recycled Water Plant	4	4	4
	Utilities Yard	2	2	2
	Arapaho	6	6	6

	Avenida Encinas	4	4	4
	Clemens	1	1	1
	Coleridge	1	1	1
	College	6	6	6
	Delaney	2	2	2
	Dickenson	3	3	3
	Dove	3	3	3
	El Camino Real	4	4	4
	El Fuerte	2	2	2
	Fisherman	2	2	2
	Glen	4	4	4
	Harrison	1	1	1
	Hemingway	11	11	11
	Hilltop	2	2	2
	Levante	2	2	2
	Newland	3	3	3
	Newton	2	2	2
	Orion	2	2	2
	Poinsettia	2	2	2
	Safety Center	2	2	2
	Salk	7	7	7
	Sheridan	2	2	2
	Steinbeck	2	2	2
	Tolkien	8	8	8
	Twain	5	5	5
	Whitman	8	8	8
	Wind Trail	2	2	2
	Van Allen	1	1	1
Debris Filter at inlet entrance	Oak Avenue	3	24	24
	Valencia Avenue	1	24	24
	Chestnut Avenue	4	24	24
	Orion Street	3	52	52
	Coastal Rail Trail	10	24	24
Desiltation Basins	SW End Faraday Avenue	1	1	1
	SW Corner Marron and Monroe	1	1	1
	NO of Via de Canto	1	1	1
	Gateway @ ECR	1	1	1
	Avenida Soledad @ RSF	1	1	1
CDS UNITS	Cannon Rd w/of Hemingway	1	1	1
	Alicante Rd	1	1	1

	El Fuerte @ Poinsetta Ln	1	1	1
	Calle Conifera @ Corte Brezo	1	1	1
	Sand Shell w/end	1	1	1
	Mica & Poinsettia	1	1	1
	NE corner of ECR & Gateway	1	1	1
	Quartz & Poinsettia	1	1	1
Total		231	358	358

Inspection results and findings for the Publicly owned BMPs and TCBMPs showed that 90 % were in good condition and approximately 11 tons of anthropogenic trash was removed during the reporting period.

4.5 Fire Stations

4.5.1 Background

There are six fire stations in the City, which are high priority areas according to the City's JURMP. The inventory and BMPs for these facilities are described below.

4.5.2 Source Characterization

Table 4.7 below lists the High Priority Fire Stations on the City's 2008 JURMP inventory.

Table 4.7: Fire Stations

1	FIRE STATION #1	1275 CARLSBAD VILLAGE DR
2	FIRE STATION #2	1906 ARENAL RD
3	FIRE STATION #3	3701 CATALINA DR
4	FIRE STATION #4	6885 BATIQUITOS DR
5	FIRE STATION #5	2540 ORION WY
6	FIRE STATION #6	7201 RANCHO SANTA FE ROAD

4.5.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.8 were implemented at the High Priority facilities listed above.

Table 4.8: Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-21 Vehicle and Equipment Cleaning
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices

SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.5.4 Program Implementation

Each of the applicable BMPs listed above in Table 4.8 were implemented at the facilities listed in Table 4.7 and are described below. In addition, training and pollution prevention BMPs specific to the Fire Department are described below.

Training:

- The City's Reclaimed Water Facility continued to be utilized for fire engineer training and testing. A training trailer facilitated engineer operations, pump testing, and other wet training opportunities. The Facility allowed for wet training and testing opportunities while ensuring that no water is discharged to the MS4.
- Conduct training and testing at other fire agencies Training Facilities which recycles the water that is being discharged (i.e. Rancho Santa Fe and San Marcos Fire Departments).Suitable locations were selected to provide "wet" training opportunities for personnel, while ensuring that appropriate BMPs were in place to protect the storm drains and eliminate discharges to the MS4. These sites were generally located on pervious surfaces with no potential for discharge to the storm drain system.
- A representative from the Fire Department attended and participated in the City's Storm Water Committee meetings when available.

Pollution Prevention:

- Dry cleanup methods were used to reduce water use. The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations. Awareness was heightened at fire scenes to minimize the potential for excessive water flow.
- Materials were recycled where possible.
- Storm Water Manuals were developed for each station which include SWPPPs with site maps, inspection reports, facility specific spill response procedures, training records, and department policies.
- SC-11 – Spill Prevention, Control, and Cleanup: Spill response equipment and materials are clearly identified and staged in accessible locations at each station. Awareness was heightened at incident scenes to contain potential discharges (once the scene had been stabilized) to prevent pollutants from entering the MS4. The Department continued implementation of the City's spill response procedure for incidents that occur on City streets. Absorbent materials are kept on all engines. The spill response plan is to apply absorbent, sweep material, place in bags, and remove from site for proper disposal.
- SC-21 – Vehicle and Equipment Cleaning: The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Vacuum equipment was purchased to recover and contain all wash water from vehicle washing activities occurring at the Fire Stations. Fire Station 5 currently has a pressure washer for vehicle and equipment cleaning to minimize the amount of water being used. Five more pressure washers have been approved and purchased for the other five fire stations. Pressure washers are now installed and in service at all six fire stations.

- SC-34 – Waste Handling and Disposal: Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter.
- SC-43 – Parking/Storage Area Maintenance: Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations.
- SC-60 – Housekeeping Practices: Fire stations are kept clean and orderly. Wash water was disposed of properly. Sweeping material was disposed of properly. Training on storm water and spill response was provided regularly.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-75 – Waste Handling and Disposal: Solid waste was collected and disposed of properly at appropriate disposal facilities (Palomar Transfer Station, Waste Management) in accordance with all applicable laws and regulations. Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter. Liquids were not disposed of in waste containers. Recycling was implemented where possible; bins were provided.

4.6 Recreation Facilities

4.6.1 Background

The Monroe Street Pool is the only Recreation facility on the City's municipal inventory listed as a High Priority area. This is primarily due to the chemicals stored on-site. The pool's chemical systems are liquid chlorine (sodium hypochlorite) and muriatic (hydrochloric) acid/carbon dioxide, with 500 and 300 gallon double wall containers, respectively. BMPs implemented at this facility are described below.

4.6.2 Source Characterization

The only High Priority Recreation facility on the City's 2008 JURMP inventory was the Monroe Street Pool.

4.6.3 Site Specific BMP Requirements

The site specific BMPs, listed below in Table 4.9, were implemented at the Monroe Street Pool.

Table 4.9: Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-31 Outdoor Container Storage
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-60 Housekeeping Practices
SC-72 Fountains & Pools Maintenance
SC-73 Landscape Maintenance

4.6.4 Program Implementation

BMPs listed in Table 4.9 above were implemented at the Monroe Street Pool. BMPs implemented specific to this facility and its activities are described below.

- SC-11 – Spill Prevention, Control, and Cleanup: Commercial spill kits are kept onsite. A facility specific SWPPP was developed and is kept onsite. The SWPPP includes a spill response plan.
- SC-31 – Outdoor Container Storage: The majority of materials stored on-site are kept inside sheds. These areas were cleaned up and maintained regularly.
- SC-34 – Waste Handling and Disposal: Trash bins and containers are enclosed and covered. Lids remain closed and locked at all times and serviced weekly.
- SC-41 – Building and Grounds Maintenance: Staff performed daily parking lot inspections looking for litter, debris, and leaking vehicles. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-60 – Housekeeping Practices: Cleaning of pool decks was performed by sweeping in most cases. Occasionally, wash down was necessary and all wash water was directed to a daylighted sediment blocking maze swale.
- SC-72 – Fountains and Pools Maintenance: Water was de-chlorinated if discharging to the storm drain was necessary; however, this was a rare occurrence. All filter back wash was discharged to sewer. Overflow from pool decks was directed to the daylighted sediment blocking maze swale.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off. Soil testing was utilized to assess need for fertilizers and irrigation. Timing improvements on irrigation system have reduced water usage. Blowing and sweeping were used wherever possible. Pesticide, herbicide, and fertilizers were not stored onsite and used sparingly in accordance with required application practices.

4.7 Publicly Owned Treatment Works

4.7.1 Background

The City of Carlsbad is a member agency of the Encina Wastewater Authority which treats raw sewage to the secondary treatment level. The Carlsbad Water Recycling Facility intakes secondary treated water and treats it again to the tertiary level of treatment which is used as recycled water throughout the City of Carlsbad. This facility was determined to be High Priority as required in Order No. R9-2007-0001, Section D.3.a.(7)(a). The BMPs listed below were implemented at the Carlsbad Recycled Water Facility.

4.7.2 Source Characterization

The Carlsbad Recycled Water Facility is the only High Priority Publicly Owned Treatment Works on the City's 2008 JURMP inventory.

4.7.3 Site Specific BMP Requirements

The site specific BMPs listed in Table 4.10 were implemented at the Recycled Water Facility.

Table 4.10: Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices

4.7.4 Program Implementation

Each of the applicable BMPs listed above were implemented at the Carlsbad Recycled Water Facility and are described below.

- Employee Training: Employees were informed of activities that could potentially cause contamination of storm water and the importance of carefully conducting these activities in areas that do not discharge/drain to storm drains. Storm water pollution prevention and BMP brochures were available to everyone who works at the materials storage area. Subcontractors were informed about the storm water requirements and their responsibilities. Training consisted of informal "tailgate" meetings, formal classroom training, or self-guided training activities. Employees in targeted positions were trained annually on the requirements of the SWPPP. Employee training, at a minimum, included: SWPPP requirements; spill response and reporting; good housekeeping; BMP updates and implementation; and materials and waste handling and storage procedures.
- SC-11 – Spill Prevention, Control, and Clean-up: A current spill response plan was provided in the SWPPP. The spill response plan addressed measures to clean, abate, and prevent spills and leaks from entering the storm drain. Employees were trained on the elements of the plan. Rags and absorbents were readily accessible. Waste was disposed of properly. Dry cleanup methods were used whenever possible. Spills on dirt areas were cleaned up by digging up and properly disposing of contaminated soil. Spills over 10 gallons were reported to the Storm Water Protection Program and/or the appropriate spill response agencies immediately. Employees were trained to routinely check for leaks and spills.
- SC-22 – Vehicle and Equipment Repair: All vehicle repairs were performed off-site. When equipment repair was necessary, work was performed in covered, contained areas that were not susceptible to storm water runoff.
- SC-31 – Outdoor Container Storage: There were several chemical storage tanks stored outside under cover and in full secondary containment structures. See SC-33 below for more information.
- SC-33 – Outdoor Storage of Raw Materials: Secondary containment was implemented where materials are stored outside. Examples of temporary BMPs utilized are: a dike, berm, or filter on the down slope sides of any stockpiles. All containment devices used around stockpiles were maintained to work effectively and were replaced when necessary. The chemical storage tanks were contained within a concrete parapet wall enclosure. Spills within the chemical storage areas were contained within the concrete walls and drain to a sump. Where chemical deliveries occurred, a concrete pad conveyed flow to a curb inlet. From the curb inlet, flow was controlled by plug valves, directing the flow to the sump.
- SC-34 – Waste Handling and Disposal: Dumpsters were covered and maintained and checked frequently for leaks. Lids were kept closed at all times. Dumpsters were never cleaned out using water. When cleaning the containers, all rinse water from cleaning was routed to the sanitary sewer system. All wastes and construction debris were disposed of properly. Many materials and wastes

were recycled including broken asphalt and concrete, cleared vegetation, scrap metals, aluminum cans, and plastic bottles. Materials and debris that could not be recycled were taken to an appropriate landfill or disposed of as hazardous waste. The waste storage area was swept or otherwise cleaned frequently using dry methods to collect all loose solids for proper disposal. If the amount of waste accumulated appeared to frequently exceed the capacity of the dumpster**,** then another container was obtained and utilized or collection frequency was increased. Green waste consisting of clippings, cuttings and droppings of leafy and woody materials was disposed of properly at an approved composting location or permitted landfill.

- SC-60 – Housekeeping Practices: Site was kept free of litter and debris. Trash cans and recycling receptacles were located around the site to minimize litter. Material moving and transfer activities were scheduled during dry weather periods, where possible. Heavy equipment was maintained in good working condition. Areas were inspected frequently for leaks and repaired as needed. Major equipment repairs were performed away from the storage area. Paved surfaces were swept that drain to storm drains, creeks, or channels. Cleanup materials such as brooms, shovels, dustpans, and sweepers are stocked near the storage area. Paved storage areas were swept weekly for collection and disposal of loose solid materials, and were not hosed into a storm drain or conveyance ditch. Information was distributed on good housekeeping practices during employee training sessions and discussed at employee meetings. Good housekeeping tips and reminders were posted on employee bulletin boards.
- Source Control BMPs (specific to the Recycled Water Facility):
  - Flo-Guard inlet baskets at all curb inlets on site to collect oil and grease and debris from site.
  - Vegetated swale (approximately 400 feet) collects and treats runoff from a portion of the site.
  - Roof over chemical storage area.
  - Permanent secondary containment is in place around all chemical storage areas.
  - By-pass valves are installed at containment areas to divert rain water.

4.8 Sanitary Sewer Facilities

4.8.1 Background

The facilities listed in Table 4.11 are sewer lift stations owned and operated by the City. The table also includes the City's collection system. These have been determined to be High Priority areas according to Order No. R9-2007-0001 and the City's 2008 JURMP, primarily due to the presence of sewage and potential for contamination of surface waters resulting from sewer overflows. BMPs implemented at these facilities and BMPs applicable to maintenance of the collection system are described below.

4.8.2 Source Characterization

Table 4.11 below lists the High Priority Sanitary Sewer Facilities on the City's JURMP inventory.

Table 4.11: Sanitary Sewer Facilities

1	AGUA HEDIONDA SEWER LIFT STATION*	SDGE PLANT SITE
2	BATIQUITOS SEWER LIFT STATION	7382 GABBIANO LN
3	BUENA VISTA SEWER LIFT STATION*	JEFFERSON ST
4	CANNON SEWER LIFT STATION	2301 CANNON RD
5	CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL
6	EL FUERTE SEWER LIFT STATION	5812 EL FUERTE ST

7	FOXES LANDING LIFT STATION	4155 HARRISON ST
8	GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD
9	HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL
10	KNOTS SEWER LIFT STATION	501 KNOTS LN
11	POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN
12	SAND SHELL SEWER LIFT STATION	613 SAND SHELL
13	SANITARY SEWAGE COLLECTION SYSTEM	CITY SERVICE AREA
14	SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV
15	TERRAMAR SEWER LIFT STATION	300 CANNON RD
16	VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST
17	VILLAS SEWER LIFT STATION	2860 WINTHROP AV

*Operation and maintenance performed by Encina Wastewater Authority

4.8.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.12 were implemented at all Sanitary Sewer Facilities.

Table 4.12: Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-34 Waste Handling and Disposal
SC-60 Housekeeping Practices
SC-75 Waste Handling and Disposal
SC-76 Sewer Utility Maintenance

4.8.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.11 and are described below.

- SC-11 – Spill Prevention, Control, and Cleanup: Hazmat plans were drawn up and located in the SWPPP at each location. Spill kits are kept inside at all facilities. Secondary containment structures were implemented around generator fuel cells and around all chemicals stored on-site. Overflow response included immediate Vactor response, containment, and cleanup. For more details see City of Carlsbad SSORP spill mitigation and clean-up. All vehicles have spill kits.
- SC-20 – Vehicle and Equipment Fueling: Small equipment fueling was performed in secondary containment areas or over pervious surfaces. All locations have secondary containment for fuel spills or oil leaks. Fuel deliveries were performed by an outside contractor. Documentation is kept onsite.
- SC-22 – Vehicle and Equipment Repair: Pump repair occurred indoors Wet wells were cleaned every 6 weeks with Vactor equipment and staff ensured that there were no leaks or spills at the facilities.
- SC-31 – Outdoor Container Storage: The 55-gallon trash cans are covered with a liner.
- SC-34 – Waste Handling and Disposal: Trash and debris were removed on a regular basis.

- SC-60 - Good Housekeeping: Sweep and vacuuming were implemented instead of washing down. Blowers were used to clean off concrete and asphalt. All hoses are rolled up and stored off the ground.
- SC-75 – Waste Handling and Disposal: Trash and debris were removed on a regular basis. All trash cans or other containers are covered or closed.
- SC-76 – Sewer Utility Maintenance: All stations were inspected and cleaned daily. Vactors were checked for leaks during pre-trip inspections. All materials were discharged at Encina Wastewater Authority: solids into grit bin, liquids at headworks. Recently the City began to implement FOG requirements as per Order 2006-003, including revision of ordinances, public outreach, and inspections of FOG generating facilities.

4.9 Water Facilities

4.9.1 Background

There are seven High Priority water facilities on the City's JURMP inventory. The sites are High Priority facilities due to chemical storage on-site or due to their location in the watershed. BMPs implemented at the sites according to the JURMP are described below.

4.9.2 Source Characterization

The table below lists the High Priority Water Facilities on the City's JURMP inventory.

Table 4.13: Water Facilities

1	MAERKLE DAM RESERVOIR/ PUMP/ CHLORINATION STATION	5203 SUNNY CREEK RD
2	RESERVOIR C	CALAVERA DR
3	RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR
4	RESERVOIR LA COSTA HI	ALGA RD
5	RESERVOIR LA COSTA LO	ALGA RD
6	CALAVERA PUMP STATION	3600 BLOCK COLLEGE DR
7	TAP PUMP STATION	6400 BLOCK OF EL CAMINO REAL

4.9.3 Site Specific BMP Requirements

The site specific BMPs listed in Table 4.14 were implemented at the water facilities listed above.

Table 4.14: Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-60 Housekeeping Practices
Water Operations and Maintenance

4.9.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.13 and are described below.

- Pollution Prevention: Automatic shut-off valves have been installed.
- SC-11 – Spill Prevention, Control, and Cleanup: At facility 1, specialized equipment has been implemented to mitigate a chlorine release; chlorine gas detectors, vacuum regulators, automatic shut-off valves, and chlorine scrubber systems. In addition to the equipment, all chemicals are stored in containment structures designed to contain stored amount. All chemicals are inspected prior to off-loading for containment defects and returned if any defects are noted. Operations Staff have the necessary hazardous materials training to be considered "qualified" to assess the severity of a chlorine leak. A site specific SWPPP was developed for Maerkle Reservoir.
- SC-20 – Vehicle and Equipment Fueling: Diesel deliveries were performed by outside contractors, following all required BMPs.
- SC-22 – Vehicle and Equipment Repair: All storm drain collectors were regularly inspected and cleaned accordingly. All building floor drains were inspected and verified to be isolated from discharge system.
- SC-31 – Outdoor Container Storage: The 55-gallon trash cans with liners were utilized and trash was removed on a regular basis.
- SC-33 – Outdoor Storage of Raw Materials: No raw materials are stored outdoors.
- SC-60 - Good Housekeeping – Increased sweeping schedule of asphalted areas was implemented. Chemicals supplies are kept at a minimum to reduce potential releases.
- Water Operations and Maintenance:
    - Repairs and New Line Installation: All flushing requirements follow established BMP's regarding de-chlorination and related sediment recovery concerns.
    - Reservoir Cleaning and Dewatering: All reservoir de-watering follows pre-established BMP's addressing daily water volume discharge amounts, de-chlorination, monitoring of chlorine residuals and sediment removal and disposal

4.10 Municipal Yards

4.10.1 Background

Table 4.15 below lists the City's municipal yards that were determined to be High Priority areas as required per Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City's JURMP. Site specific BMPs implemented at each facility are listed and described below.

4.10.2 Source Characterization

The table below lists the High Priority Municipal Yards on the City's JURMP inventory.

Table 4.15: Municipal Yards

1	FLEET MAINTENANCE FACILITY AND PARKING LOT	2480 IMPALA DR
2	M&O OPERATIONS YARD AND PARKING LOT	5950 EL CAMINO REAL
3	OAK OPERATIONS YARD AND PARKING LOT	405 OAK AV
4	PARKS MAINTENANCE/STORAGE/PARKING LOT	1166 CARLSBAD VILLAGE DR

4.10.3 Site Specific BMP Requirements

Site specific BMPs listed in Table 4.16 were implemented at Municipal Yards, where applicable. For example, vehicle and equipment repair is not performed at all facilities; therefore SC-22 does not apply to all yards.

Table 4.16: Best Management Practices

Storm Water Pollution Control Plan
SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-61 Safer Alternative Products
SC-70 Road and Street Maintenance
SC-71 Plaza and Sidewalk Cleaning
SC-72 Fountains & Pools Maintenance
SC-73 Landscape Maintenance
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal

4.10.4 Program Implementation

BMPs listed in Table 4.16 were implemented specific to each facility and are described below.

4.10.4.1 FLEET MAINTENANCE YARD

- Employee Training – Storm water protection was covered as part of safety meetings.
- Pollution Prevention – Recycling containers were provided at the ends of the fuel pump inlands.
- Storm Water Pollution Control Plan: A site specific SWPPP was developed and is maintained on-site.
- SC-11 – Spill Prevention: Spill kits containing absorbents and booms are located at the fuel island and south west of the fuel island within the yard, including the shop area.
- SC-20 – Vehicle and Equipment Fueling: Spill kits are located adjacent to the vehicle fueling area.
- SC-21 – Vehicle and Equipment Cleaning: All vehicle washing was performed on the wash rack, inside the wash bay. This included pressure washing and hand washing of vehicles and equipment. Wash waste water is treated prior to release to the sewer system.
- SC-22 – Vehicle and Equipment Repair: All maintenance and repairs to Fleet vehicles were performed inside the shop bays whenever possible. Any vehicle on the dead line that had a leak had a drip pan put under it until it is brought into the shop. Any leaks or spills were handled immediately, with either the drip pans or an absorbent. The absorbent was picked up immediately

and stored in the drums labeled for waste absorbent. Damaged equipment and wrecked vehicles with a potential for discharge were covered with tarps.

- SC-31 – Outdoor Container Storage: Outdoor containers that include full coverage and containment of materials are utilized for storage of tires and motorcycles (two 40 yard containers) and for storage of fire extinguisher service items, used batteries, and oil filters for recycling (sheds).
- SC-33 – Outdoor Storage of Materials: All materials stored outside are kept under one of the provided canopies or in the shed. City-generated hazardous waste is stored in the hazardous waste shed (covered) in an appropriate container and on a pallet. This includes batteries and waste metals. A chain link fence was installed to prevent unauthorized dumping at the Facility. Signage was also in place to inform citizens that materials were not to be left at the Facility and provided information on proper disposal facilities.
- SC-34 – Waste Handling and Disposal: Waste oil was drained into the waste oil containers or into a drip pan and then into a waste oil container. The containers were emptied as needed into the waste oil in-ground tank as needed. Used batteries were stored in the provided container inside the shed. Used antifreeze was drained into one of the large drip pans, then transferred to the poly drums inside the shed. Scrap metal is stored in the provided container and covered. Used tires are stored in the covered tire storage bunker.
- SC-41 – Building and Grounds Maintenance: Language was included in contracts requiring storm water compliance and allowing the City to implement BMPs as needed with all associated costs recovered from the contractor. In the event that any pressure washing was necessary, all wash water was recovered for proper disposal. Where painting, scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking/Storage Area Maintenance: The Fleet Yard was swept via Sweeper-truck on a monthly schedule, clean ups of spills were done with dry absorbent and picked up directly, all leaks were captured with drip pans and brought into the shop for service.
- SC-60 – Housekeeping Practices: The shop was either swept or mopped. All debris was either picked up and put into appropriate containers or, in the case of wet mopping, all water was directed to the drains inside the shop that flow to our separator. All contaminated floor sweep was stored in labeled containers and removed by our hazardous waste contractor. The Fleet yard was inspected regularly as well as before and after storm events. Areas inspected were the shed and tire storage area at the north end of the shop, the waste tire and hazardous waste bunker along the north fence line, the two large dumpsters, the two trash and two recyclables cans at the fuel pumps, the spill kits for the fuel island, the storm drains on-site and the paved lot and dirt area at the east end (which is now fenced). Inspection criteria: all waste drums/containers are to have secondary containment, all materials are to be stored in covered areas. Appropriate areas included a shed and two canopies plus the hazardous waste container and waste metal containers. The dumpsters, trash cans, recyclables cans and metal storage were kept closed and no trash fell out of them. The filters at the storm drains were inspected for cleaning or replacement. The lot was inspected for spills and cleaned up as needed. Vehicles in the lot were inspected for leaks; action was taken to contain leaks as needed. The wash rack area, trash containers area, and drains were inspected for clogging from debris. All employees always took immediate action to correct any issues found during inspections of the Fleet yard directly.
- SC-71 – Sidewalk Cleaning: Where power washing was necessary, wash water was not allowed to drain to the storm drain system and was directed to sanitary sewer or to pervious surfaces where possible.

- SC-72 – Fountain and Pools Maintenance: Not applicable.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off. Soil testing was utilized to assess need for fertilizers and irrigation. Timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever possible. Pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 – Drainage System Maintenance: Fossil filters have been installed at storm drain inlets in yard and were inspected and maintained regularly.
- SC-75 – Waste Handling and Disposal: Signage for proper Household Hazardous Waste disposal is posted on site.

4.10.4.2 MAINTENANCE AND OPERATIONS YARD

- Pollution Prevention – Native soils were used whenever possible to backfill trenches: the amount of dirt and soil stockpiled on site was minimized; filtration socks were used to dewater trenches.
- Storm Water Pollution Control Plan: A site specific SWPPP is kept on-site and maintained regularly.
- SC-11 – Spill Prevention, Control, and Cleanup: Secondary containment where fuel and oil are stored, also yard has spill kits in each vehicle. A hazmat plan has been implemented and is located in the SWPPP.
- SC-20 – Vehicle and Equipment Fueling: Small equipment fueling was performed in the secondary containment area or over pervious surfaces.
- SC-21 – Vehicle and Equipment Cleaning: Trash was removed daily from the work trucks, otherwise no cleaning or washing was allowed at M&O yard.
- SC-22 – Vehicle and Equipment Repair: No repairs were performed at yard.
- SC-31 – Outdoor Container Storage: Container storage areas are covered using overhead canopies.
- SC-33 –Outdoor Storage of Materials: Where necessary, plastic tarps cover raw materials in the yard; equipment is covered by canopies; material is covered by a permanent overhead structure or stored indoors.
- SC-34 – Waste Handling and Disposal: All material was put into a covered roll-off container.
- SC-41 – Building and Grounds Maintenance: The grounds and parking lot were swept twice a month by street sweeper and weekly by hand when necessary. Trash was removed daily. Erosive areas and slopes were protected by hydroseed, coconut mats, sand bags, and fiber rolls. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Where feasible, work was performed under cover and over pervious areas. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. Parking lots are spot cleaned for all spills weekly. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking/Storage Area Maintenance: The parking lot was swept twice a month by a street sweeper; ingress/egress to unpaved area of yard was protected by rocks and shaker plates. In FY 2011-12 a new concrete driveway was installed, installed 3 tons of three-inch minus rock, and installed 200 feet silt fence.
- SC-60 – Housekeeping Practices: Recycle bins, dumpsters, and cans were covered and kept closed.
- SC-61 – Safer Alternative Products: Used less hazardous cleaning materials and water-soluble paints for mark outs.
- SC-70 – Road and Street Maintenance: Not Applicable
- SC-71 – Sidewalk Cleaning: Sweep and/or vacuum sidewalks.

- SC-72 – Fountain and Pools Maintenance: Contractor maintained fountain at facility. No water was discharged during maintenance activities; all filter material was retained on-site for proper disposal. Due to water restrictions to the fountain was turned off in August 2009
- SC-73 – Landscape Maintenance: All material was cut and carried off by hand in burlap bags; no residue remains on site. Irrigation systems were checked regularly to avoid run-off; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-74 – Drainage System Maintenance: Rapid Flow filters and storm drain structures were cleaned annually. A pilot program was implemented using the innovative "Drivable Grass" which drains the parking lot through subsurface drainage system to reduce storm water flowing directly into MS4. In March, 2011 we refurbished the storage lot with 10 yards of crushed rock and three tons of 3 inch minus rock at the ingress and egress. We also upgraded the drainage runoff area with straw waddles and installed silt fence around the perimeter of the lot.
- SC-75 – Waste Handling and Disposal: All material was handled properly and covered in yard roll-off dumpsters, or other appropriate containers. Also new paper recycling bins were installed.

4.10.4.3 <u>OAK YARD</u>

- Storm Water Pollution Control Plan (SWPPP description): A site specific SWPPP was implemented at the Oak Yard.
- SC-11 – Spill Prevention, Control, and Cleanup: All liquids and hazardous materials are stored in locked containment lockers. These are located within secondary containment areas. Large spill containment kits are strategically located within the yard. MSDS binders are strategically placed throughout the yard.
- SC-20 – Vehicle and Equipment Fueling: Small equipment fueling was done only in the secondary containment area.
- SC-21 – Vehicle and Equipment Cleaning: Trash was removed daily from the work trucks. No cleaning or washing was allowed in the Oak yard
- SC-22 – Vehicle and Equipment Repairs: No repairs were done at the Oak yard.
- SC-31 – Outdoor Container Storage: Oak yard has storage areas covered with overhead canopies.
- SC-33 – Outdoor Storage of Raw Materials: No raw materials are stored at the Oak yard.
- SC-34 – Waste Handling and Disposal: Paint waste was returned to the maintenance yard where it was transferred directly from the generating vehicle to secured storage containers. This was done within a proper containment area in case of any accidental spillage. These containers are clearly marked and stored until arrangements were made for a certified waste management company to remove them and transfer them to an approved facility. Any other debris was placed in a canopy covered 40 yd roll-off. Dumpsters were covered and all other trash receptacles had lids.
- SC-41 – Building and Grounds Maintenance: The Oak yard was swept twice a month by a self-contained street sweeper and weekly by hand. Trash was removed daily.
- SC-43 – Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control and lot was swept weekly.
- SC-60 – Housekeeping Practices: Recycle bins, dumpsters, and cans are covered. Yard clean-up was performed by-weekly with monthly site inspections.
- SC-61 – Safer Alternative Products: Not Applicable
- SC-70 – Road and Street Maintenance: Not Applicable
- SC-71 – Sidewalk Cleaning: Not Applicable

- SC-72 – Fountain and Pools Maintenance: Not Applicable
- SC-73 – Landscape Maintenance: Not Applicable
- SC-74 – Drainage System Maintenance: Debris was captured prior to entry into the vegetated swale. The drainage swale at the south end of the property was paved.

4.10.4.4 PARKS MAINTENANCE YARD

- Storm Water Pollution Control Plan (SWPPP description): Site specific SWPPPs were developed and implemented at each of these sites.
- SC-11 – Spill Prevention, Control, and Clean-up; Spill kits are located on-site; drip pans were placed under all equipment kept on-site; spill kits are located in all vehicles; spill response plan is updated and kept on-site.
- SC-20 – Vehicle and Equipment Fueling: No vehicle or equipment fueling was performed on-site.
- SC-21 – Vehicle and Equipment Cleaning: Most equipment was dry-cleaned in designated areas located away from storm drains; where wet cleaning was necessary, it was performed over pervious surfaces in a manner that allowed all water to percolate, generating no runoff to the storm drain system.
- SC-22 – Vehicle and Equipment Repair: All equipment was repaired in designated areas away from storm drains; no vehicle repair was performed on-site.
- SC-31 – Outdoor Container Storage: All chemical products are kept in locked storage bins with overhead coverage and containment.
- SC-33 – Outdoor Storage of Raw Materials: All bagged materials are stored on pallets and covered with canopies; canopies are also used to cover scrap metals and equipment.
- SC-34 – Waste Handling and Disposal: All waste containers are covered.
- SC-41 – Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 – Housekeeping Practices: Weekly yard clean-up and litter removal and monthly site inspections were conducted.
- SC-61 – Safer Alternative Products: IPM practices and green waste applications were in use; artificial turf and permeable surfaces were implemented where feasible; organics from tree trimming were mulched or composted and used for landscaping.
- SC-70 – Road and Street Maintenance: Not applicable at yard sites.
- SC-71 – Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
- SC-72 – Fountains and Pools Maintenance: Not applicable at park sites.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on downtown irrigation system have reduced water usage; blowing and sweeping were used wherever possible;

pesticide, herbicide, and fertilizers are stored in secure lockers and used sparingly in accordance with required application practices and only by qualified applicators.

- SC-74 – Drainage System Maintenance: Storm drain inlets were maintained by City's Storm Drain Maintenance Division on an annual basis.
- SC-75 – Waste Handling and Disposal: All non-recyclable waste was disposed of properly.
- Site Design - Parks Maintenance/Storage Yard drains to a pervious area allowing low flows to infiltrate into the soils instead of running into the storm drain.

4.11 Parks Facilities

4.11.1 Background

The table below lists City parks facilities that were determined to be High Priority areas based on the criteria established in Order No. R9-2007-0001, Section D.3.a.(7)(a) and the City's JURMP. High Priority parks facilities were defined as developed park sites containing landscaping, building(s), and parking lot(s) and developed park sites within an Environmentally Sensitive Area.

Site specific BMPs implemented at each facility are listed and described below.

4.11.2 Source Characterization

The table below lists facilities on the inventory that are high priority and includes 16 parks and recreation facilities.

Table 4.17: Parks

	Park Name	Location
1	AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	6425 AMBROSIA LN
2	BEACH BLUFF TRIANGLE/PARK	CARLSBAD BLVD AT PINE
3	CADENCIA PARK	3310 CADENCIA ST
4	CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	2997 GLASGOW DR
5	CARRILLO RANCH AND PARKING LOT	5200 FLYING LC LANE
6	CHASE FIELD	3349 HARDING ST
7	HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	2685 VANCOUVER STREET
8	HOLIDAY PARK AND PARKING LOTS	3200 PIO PICO DR
9	HOSP GROVE PARK AND PARKING LOT	JEFFERSON & MONROE
10	LA COSTA CANYON PARK AND PARKING LOT	3020 PUEBLO ST
11	LAGUNA RIVIERA PARK	4900 KELLY DR
12	MAGEE PARK AND PARKING LOT	258 BEECH AVE
13	PINE PARK AND PARKING LOT	3333 HARDING ST
14	POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	6600 HIDDEN VALLEY RD
15	STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	3420 CAMINO DE LOS COCHES

	Park Name	Location
16	ZONE 5 PARK	CAMINO HILLS AND FARADAY AVE

4.11.3 Site Specific BMP Requirements

Site specific BMPs listed below were implemented at Parks Facilities.

Table 4.18: Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-21 Vehicle and Equipment Cleaning
SC-22 Vehicle and Equipment Repair
SC-31 Outdoor Container Storage
SC-33 Outdoor Storage of Raw Materials
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-61 Safer Alternative Products
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.11.4 Program Implementation

Each of the BMPs listed above were implemented at the facilities listed in Table 4.17 and are described below.

- SWPPP: Aviara, Poinsettia, and Stagecoach Parks also house small maintenance yards. Because of the added potential to contribute to storm water pollution, SWPPPs were required by the City for these facilities. Aviara, Poinsettia and Stagecoach Parks have developed and fully implemented SWPPPs. .
- SC-11 – Spill Prevention, Control, and Cleanup; Spills kits are located on-site; spill response plan was updated and kept on-site
- SC-20 – Vehicle and Equipment Fueling: Minor equipment fueling was performed over pervious surfaces when necessary.
- SC-21 – Vehicle and Equipment Cleaning: Most equipment was dry-cleaned in designated areas located away from storm drains; where wet cleaning was necessary, it was performed over pervious surfaces in a manner that allowed all water to percolate, generating no runoff to the storm drain system.
- SC-22 – Vehicle and Equipment Repair: Equipment was repaired in designated areas away from storm drains; no vehicle repair is performed on-site.
- SC-31 – Outdoor Container Storage: Chemical products are kept in locked storage bins with overhead coverage and containment.
- SC-33 – Outdoor Storage of Raw Materials: All bagged materials are stored on pallets and covered with canopies; canopies were also used to cover scrap metals and equipment.

- SC-34 – Waste Handling and Disposal: All waste containers are covered; pet waste bag dispensers and containers were provided at all parks where dogs are allowed.
- SC-41 – Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting were necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were are always cleaned in a way that prevents any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 – Housekeeping Practices: Park sites are kept clean and orderly; all debris was removed in a timely fashion and hard-scape areas were swept or blown daily; wash water, sweepings, and sediments were disposed of properly; recyclable materials were recycled; spill response plans were reviewed as part of routine training with staff.
- SC-61 – Safer Alternative Products: Integrated Pest Management Practices (IPM) practices and green waste applications were in use and are described below.

  In conjunction with the Integrated Pest Management (IPM) program, the Parks Maintenance Division continues to utilize slow release fertilizers in an effort to reduce the frequency of applications while minimizing the potential of fertilizer runoff. In some cases, staff reduced the recommended amount of fertilizer per 1,000 square feet by 50% to minimize flush of growth on turf which in turn reduces the amount of clippings. To help monitor fertilizer applications, the Parks Maintenance Division instituted a soil testing program which defines soil properties, allowing the correct monitoring of fertilization applications for proper use and desired outcome. In accordance with the new IPM , pesticide and herbicide applications were applied sparingly. Staff continues to search for alternative methods for pest control applications that are proven to be safe and effective.

  As required by the Department of Pesticide Regulation, all chemical applications are reported to the County Agriculture Department on a monthly basis. As identified in the JURMP, all applicable BMPs were implemented to address pesticide, herbicide, and fertilizers for sources of pollution.

  Specific BMPs implemented during FY 2011-12 include:

  - **Education:** A training program for identifying and defining chemicals, proper handling, application, storage, disposal, irrigating, and using non-synthetic alternatives was implemented. At many of the training seminars, new (IPM) methods were often presented for consideration by the department. All training information including BMPs were provided to personnel to keep in personalized folders for individual use. In addition, a master application manual that includes all Storm Water BMPs, training, and inspections was also prepared.

  - **Non-chemical applications:** Some pest problems can be eliminated or controlled by handpicking, pruning, or high pressure spraying with water. Many pest problems can be reduced or eliminated by removing affected leaves or plant parts. During FY 2010-11, efforts were made to improve upon our (IPM) system in the City's Parks and Downtown Village areas. The release of lady-bird beetles at City Parks and the Downtown Fountain

areas to combat infestations of aphids have proven successful in eradicating the pests. Other methods used to decrease the department's dependency on chemical sprays during FY 2011-12 include:

- Increased mulching of planter beds to smother weed germination
- Increased tilling of planter beds to kill young weed sprouts
- The use of organic plant derivative pesticide sprays such as Safer brand Products
- The use of water to spray plants infested with giant whitefly
- The removal of dying or diseased plant material to decrease the presence of harmful organisms.
- Hand weeding when feasible

- Pesticide application was performed on an as needed basis and was performed internally or by an outside pest control contractor after diagnosis.

- **Native Vegetation:** The Parks Maintenance Division continued to explore opportunities to use native vegetation to control pests, reduce chemical application, and maintain the aesthetic values of the Parks and Downtown Village areas.

- **Schedules for Irrigation and Application** – Irrigation systems were monitored and inspected on a weekly basis in an effort to minimize water loss. In addition, the use of evapo-transpiration (ET) gauges for controlling the irrigation system helped to reduce watering times based on evaporation and transpiration of moisture from plants and turf. ET gauges were installed at Poinsettia, Stagecoach, Pine, Aviara and Calavera Park. These gauges also helped staff to adjust watering times at other locations that were not connected to the gauge. Most large community parks are controlled by a Central Command Irrigation Program (CAlSense). During FY 2011-12, all irrigation systems were inspected weekly and repaired as necessary to prevent excess runoff. At Poinsettia, Aviara, Stagecoach and Pine Parks, synthetic turf has been installed on the soccer and sports fields, which requires no fertilization, weeding, or watering. The synthetic turf has proven to be particularly successful in eliminating the use of water for irrigation.

- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilization ; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside secure lockers and used sparingly in accordance with required application practices only by qualified applicators. Refer to description of (IPM) practices in SC-61 above.
- SC-75 – Waste Handling and Disposal: All non-recyclable waste was disposed of at an appropriate landfill or transfer station.
- Site Design – Desiltation basin was retrofitted at La Costa Canyon Park; pervious concrete was installed at Pine Park.

4.12 Administrative Areas

4.12.1 Background

One administrative building was determined to be a high priority facility based on its proximity to an environmentally sensitive area (ESA). This facility is the Safety Center, which includes a parking lot, police and fire department headquarters, and a skatepark.

4.12.2 Source Characterization

The only administrative building on the inventory that is a High Priority is the Safety Center.

4.12.3 Site Specific BMP Requirements

Site specific BMPs listed below were implemented at the Safety Center.

Table 4.19 Best Management Practices

SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-43 Parking/Storage Area Maintenance
SC-60 Housekeeping Practices
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-75 Waste Handling and Disposal

4.12.4 Program Implementation

Each of the BMPs listed above were implemented at the Safety Center and are described below.

- SC-34 – Waste Handling and Disposal: Dumpsters were covered and maintained and checked frequently for leaks. Lids were kept closed at all times.
- SC-41 – Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. Where painting, scraping, or sandblasting was necessary, all material was disposed of properly and drop cloths were used where possible. Paint brushes and tools were always cleaned in a way that prevented any discharge from entering the storm drain. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-43 – Parking/Storage Area Maintenance: Dry-cleaning methods were used for debris control.
- SC-60 – Housekeeping Practices: Site was kept clean and orderly; all debris was removed in a timely fashion and hardscape areas were swept or blown routinely; wash water, sweepings, and sediments were disposed of properly; recyclable materials were recycled.
- SC-71 – Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water

was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.

- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside and used sparingly in accordance with required application practices.
- SC-75 – Waste Handling and Disposal: All non-recyclable waste was disposed of properly.

4.13 Activities

4.13.1 Background

Four municipal activities were determined to be High Priority activities based on their potential to generate pollutants. These operations occur throughout the City and are required to implement BMPs as described in the JURMP.

4.13.2 Source Characterization

The table below lists the activities on the inventory that are considered High Priority.

Table 4.20: Activities

1	LANDSCAPE MAINTENANCE AND REPAIR	CITYWIDE
2	MS4 MAINTENANCE	CITYWIDE
3	POWER WASHING	CITYWIDE
4	SANITARY SEWER MAINTENANCE AND OPERATIONS	CITY SERVICE AREA

4.13.3 Site Specific BMP Requirements

Each of the BMPs listed were implemented for the activities listed in Table 4.20 and are described below.

Table 4.21: Best Management Practices

SC-11 Spill Prevention, Control & Cleanup
SC-20 Vehicle and Equipment Fueling
SC-34 Waste Handling and Disposal
SC-41 Building and Grounds Maintenance
SC-61 Safer Alternative Products
SC-71 Plaza and Sidewalk Cleaning
SC-73 Landscape Maintenance
SC-74 Drainage System Maintenance
SC-75 Waste Handling and Disposal
SC-76 Sewer Utility Maintenance

4.13.4 Program Implementation

- SC-11 – Spill Prevention, Control & Cleanup: Spill kits are kept in all vehicles. Employees were trained in spill response as applicable to their activities. Absorbents were used for spill cleanup where possible and disposed of properly.
- SC-20 – Vehicle and Equipment Fueling: Minor equipment fueling was performed over pervious surfaces when necessary; larger equipment was fueled at the fleet maintenance facility (BMPs are described above for Fleet Yard).
- SC-34 – Waste Handling and Disposal:
    - Landscape Maintenance: All non-recyclable waste was disposed of properly.
    - MS4 Maintenance: Trash was hauled to transfer station. Debris and other organic material were transferred and deposited at 2400 Tamarack Avenue in three concrete covered bins. The material was then tested for contaminants and disposed of properly upon receipt of permissible test results.
    - Powerwashing: All wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
    - Sewer Utility Maintenance: Waste was contained in Vactor truck tanks and disposed of properly to sanitary sewer.
- SC-41 – Building and Grounds Maintenance: Mulch was used extensively for erosion control and weed suppression; pervious areas were landscaped to reduce erosion. In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system. For grounds maintenance, refer to SC-73, landscape maintenance.
- SC-61 – Safer Alternative Products: IPM practices and green waste applications were in use. These practices are described in detail above.
- SC-71 – Plaza and Sidewalk Cleaning: In the event that pressure washing was necessary, all wash water was recovered for proper disposal or redirected to a pervious surface to ensure that no water was allowed to enter the storm drain system; any storm drains in proximity were protected from discharges.
- SC-73 – Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; soil testing was utilized to assess need for fertilizers and irrigation; timing improvements on irrigation system have reduced water usage; blowing and sweeping were used wherever possible; pesticide, herbicide, and fertilizers are stored inside secure lockers and used sparingly in accordance with required application practices only by qualified applicators.
- SC-74 – Drainage System Maintenance: A small self-contained vacuum with pressure washer was used to clean the drainage system. All material in the drain box was removed by the vacuum. Disposal of the water and material occurs using a filter sock, allowing water to be decanted into the sanitary sewer system through a permit from Encina Wastewater Authority. The solid material was taken to the Tamarack site described above. All trash was removed from the MS4, placed in 55 gallon trash bags, and placed in a 40 cubic yard roll off dumpster that is covered. The material was then transported to Palomar Transfer Station for disposal. See SC-34 above
- SC-75 – Waste Handling and Disposal: See SC-34 above.
- SC-76 – Sewer Utility Maintenance: All lift stations were inspected and cleaned as needed; Vactors were checked for leaks during pre-trip inspections; all materials were discharged at Encina Wastewater Authority: solids into grit bin, liquids at head-works; recently the City has begun to implement FOG requirements as per Order 2006-003 including revision of ordinances, public outreach, and inspections of FOG generating facilities.

The collections system maintenance schedule is designed to provide more frequent cleaning for identified trouble areas, with siphons being cleaned annually, low flow and flat lines cleaned semi-annually, and grease problem areas cleaned quarterly.

4.14 Areas and Activities Categorized as Not High Priority

4.14.1 Background

The Municipal Inventory found in Appendix 4.1 lists City owned areas and activities that were determined NOT to be High Priority based on the criteria established in Order No. R9-2007-0001, Section D.3.a.(7)(a). Basic minimum BMPs were implemented at each facility listed below as per the City's JURMP.

4.14.2 Source Characterization

The Municipal Inventory found in Appendix 4.1, lists facilities that are NOT High Priority and includes 49 facilities that are administrative, small parks, medians, and water/wastewater stations that are small or out of service. These facilities are located outside of ESAs and do not generate significant pollutant loads.

4.14.3 Site Specific BMP Requirements

a. Employee Training
b. Pollution Prevention
c. Good Housekeeping
d. Spill Response and Prevention

4.14.4 Program Implementation

The BMPs listed above were implemented City wide at all facilities, including the facilities. A description of these BMPs and how each was implemented is provided in Section 4.2.

4.15 Special Events

4.15.1 Background

The City of Carlsbad hosts a multitude of events each year from major invitational sporting events to community based festivals. A Special Event Permit and SWPPP is required for any organized event involving 50 or more people on public property that travel or assemble together, cause a change in normal traffic flow or controls, and is not within the scope of a Facility Use Permit, other land use approval, or a private property permit. The City has organized a Special Events Committee to ensure events are held in a manner that is safe and does not adversely impact the Carlsbad community or the environment.

4.15.2 Source Characterization

The City manages an updated inventory of special events. These special events have been prioritized according to type of event, number in attendance, proximity to the nearest water body, and potential

threat to water quality. During FY 2011-12, there were 25 special events on the inventory, which included 19 high priority, 1 medium priority, and 5 low priority events. Based on this prioritization, the City conducted storm water compliance inspections at all of the high and medium priority events. During this reporting period, there were 40 inspections conducted which included 20 pre-event inspections and 20 post-event inspections. In some cases inspectors were onsite for the duration of the event. A copy of the special events inventory can be found in Appendix 4.3.

4.15.3 BMP Requirements

All special events were required to implement the designated minimum special event BMPs and comply with all applicable regulations outlined in the Carlsbad Municipal Code. Event organizers were notified of the minimum BMPs during the event planning process, in outreach materials, and at pre-event meetings. All special events, regardless of priority, submitted a SWPPP or BMP plan for City review and approval in FY 2011-12. The SWPPP/BMP Plan are intended to help demonstrate that appropriate measures and BMPs are being implemented before, during, and after the event to reduce and/or prevent pollution. All SWPPPs were approved by the City prior to Special Event Permit issuance. During compliance inspections, the City confirmed that the designated and specific BMPs were implemented as required.

The City continued to distribute the "Best Management Practices for Special Events" brochure during FY 2011-12, which was provided to all event promoters during the applications and planning process. A copy of the brochure can be found in Appendix 4.4 of the FY 2009-10 annual report.

4.15.4 Program Implementation

Generally, the City found that event organizers implemented BMPs as required. Event venues were well managed, BMPs were installed, and the impacted areas were cleaned as required. The City will continue to work closely with event organizers to ensure compliance.

Storm water compliance inspections include a pre-event inspection where storm water BMPs were evaluated, a during-event inspection to determine the effectiveness of BMPs, and a post-event inspection to ensure the site is properly cleaned. Compliance inspections may also include recommendations for additional measures that may be required to comply with the storm water regulations. The Special Events Inspection Form developed at the end of FY 2007-08 continued to be used throughout FY 2011-12.

During FY 2011-12, there were only a few minor violations noted at the inspected events, all of which were immediately corrected. There were no enforcement actions for special events issued during FY 2011-12.

CMI continues to use NPDES inspections and inventory management procedures for special events. All inspection protocols outlined in the 2007 Municipal Permit, JURMP, CMI procedures, and the CMC were implemented as required.

4.16 Inspection of Municipal Facilities

4.16.1 Background

All High Priority municipal facilities were formally inspected during this fiscal year as required by the Permit. In addition, many departments will perform inspections of their facilities more frequently. Inspections of these facilities addressed all required inspection steps according to the Section D.3.b.(3)(a) including:

- Review of BMP implementation plans, if the site uses or is required to use such a plan;
- Review of facility monitoring data, if the site monitors its runoff;
- Coverage under the General Industrial Permit and NOI filing is checked;
- Compliance with the City of Carlsbad ordinances related to urban runoff is assessed;
- BMP implementation, maintenance, and effectiveness is assessed;
- Visual observations for non-storm water discharges, potential illicit connections, and potential discharges of pollutants in storm water are made;
- And education and training on storm water pollution prevention is performed as warranted.

4.16.2 Source Characterization

In total, there were 64 active High Priority municipal areas and activities on the City's inventory list. These areas and activities included:

- Roads, Streets, Highways, and Parking facilities;
- Flood Management Projects and Flood Control Devices;
- Fire Stations;
- Recreation Facilities;
- Publicly Owned Treatment Works;
- Sanitary Sewer Faciliites;
- Water Facilities;
- Municipal Yards;
- Parks Facilities;
- Administrative Facilities; and
- Activities*.

*the activities include: landscape maintenance and repair, power washing, MS4 maintenance, and sanitary sewer maintenance.

Refer to Appendix 4.1, the City's Municipal Inventory, for a list of the City's High Priority municipal areas and activities.

4.16.3 BMP Requirements

All areas and activities implement site specific BMP requirements as per the City's JURMP, Appendix 6-A. The preceding sections include table of site specific BMPs required to be implemented for each area and activity listed above. For facilities that are not High Priority, minimum BMPs are required that are tailored specifically to those sites and activities occurring there. Required BMPs have been implemented at all City areas and activities as described it the City's JURMP.

4.16.4 Program Implementation

A total of 64 inspections were performed at high priority municipal facilities. Of the 64, 42 were performed by a third party contractor and 22 performed in-house. Third party inspections were performed at larger, more complex facilities such as Fire Stations, Fleet Maintenance, Parks Maintenance and Operations as well as simple parks, and parking lots. Facilities that are not High Priority are inspected on an as needed basis.

Of the 64 high priority facilities inspected, minor recommendations at some sites involved addressing the accumulation of sediment and organic debris and general housekeeping. One site required corrective actions due to erosion and sediment issues. Corrective actions were implemented by the end of the fiscal year and a maintenance schedule was established to maintain compliance.

Three of four High Priority activities were inspected during field activities and were found to be in compliance with permit requirements and City ordinances. There was no City contracted power washing services during the time of inspections.

For a listing of all corrective actions identified during inspections and their implementation, refer to Appendix 4.4. There were three minor violations of the Carlsbad Municipal Code observed during municipal inspections; they were corrected and did not require enforcement.

4.17 Notable Activities

As mentioned in the Executive Summary, the City considers a Notable Activity to be any activity above compliance requirements. Notable Activities for FY 2011-12 include:

- No signs of over-irrigation were noted at Municipal Facilities during inspection.

Section 5

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City of Carlsbad's Industrial and Commercial program is intended to reduce industrial and commercial discharges of pollutants from the MS4 to the maximum extent practicable, and prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards. This section covers activities occurring from July 1, 2011 to June 30, 2012 under the Permit Order No. R9-2007-0001.

5.2 Fixed Industrial and Commercial Sites / Sources Element

5.2.1 Background

Storm water inspectors identify pollution sources, assess the potential threat to water quality, and require BMP implementation to eliminate pollution sources from industrial and commercial businesses. Major industrial types in Carlsbad include high technology, multimedia and biomedical businesses, electronics, golf apparel and equipment manufacturers and several light industry parks. Fixed commercial types in Carlsbad consist of restaurants, automobile maintenance, gas stations, golf courses, and resorts, among others. Many of these industrial and commercial sites and their activities have the potential to generate significant amounts of pollutants, if proper BMPs are not implemented.

5.2.2 Source Characterization

Each year hundreds of new businesses are established in Carlsbad. During this reporting period, the Storm Water Protection Program worked closely with the Finance Department to obtain information about new businesses, including activities, SIC codes and descriptions, business types, and contact names and numbers. The Storm Water Protection Program downloaded, sorted, mapped, and prioritized new businesses by SIC, business type and other criteria per Order No. R9-2007-0001.

These new businesses were screened, evaluated, prioritized, and then added to the inventory and scheduled for inspection. In some cases information provided on business license applications was not correct and a pre-inspection evaluation was necessary. Pre-inspection evaluations helped determine if a business' activities were subject to storm water requirements. Two types of pre-inspection source evaluations were used:

1. Reviews: During the review process, the inspector evaluated the source and activity using relevant information from other City departments, databases, or licensing programs to determine whether the site/source should be inspected and tracked by the Storm Water Protection Program. A business could be excluded during the review process if it was found that their activities are not regulated by the City or General Permit. The most common reason businesses were excluded was because of an incorrect SIC code designation or they were not a high threat to water quality.
2. Telephone Contacts: If the review failed to provide enough information, the inspector contacted the business by phone to determine its status and scheduled an inspection if necessary.

After physical inspections, reviews, or telephone contacts, any changes to a business' threat to water quality or status were recorded on the Storm Water Inventory. New businesses were also found by referral from other agencies, field discovery, complaint investigations, or business directories.

The City's Commercial/Industrial inventory is located in Appendix 5.1 (Fixed) and 5.2 (Mobile). A map of the fixed facilities is located in Appendix 5.3.

As required by the permit, the following applicable fixed sites/sources are included in the inventory:

- Commercial Sites/Sources:
    - Automobile repair, maintenance, fueling, or cleaning;
    - Airplane repair, maintenance, fueling, or cleaning;
    - Boat repair, maintenance, fueling, or cleaning;
    - Equipment repair, maintenance, fueling, or cleaning;
    - Automobile and other vehicle body repair or painting;
    - Automobile (or other vehicle) parking lots and storage facilities;
    - Retail or wholesale fueling;
    - Pest control services;
    - Eating or drinking establishments, including food markets;
    - Cement mixing or cutting;
    - Masonry;
    - Painting and coating;
    - Botanical or zoological gardens and exhibits;
    - Landscaping;
    - Nurseries and greenhouses;
    - Golf courses, parks and other recreational areas/facilities;
    - Cemeteries;
    - Marinas;
    - Portable sanitary services;
    - Building material retailers and storage;
    - Animal facilities

- Industrial Sites/Sources:
    - Industrial Facilities, as defined at 40 CFR § 122.26(b)(14), including those subject to the General Industrial Permit or other individual NPDES permit;
    - Operating and closed landfills;
    - Facilities subject to SARA Title III; and
    - Hazardous waste treatment, disposal, storage and recovery facilities.

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired.

- All other commercial or industrial sites/sources within or directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

- All other commercial or industrial sites/sources that the Copermittee determines may contribute a significant pollutant load to the MS4.

Potential threats to water quality at each commercial and industrial site/source were determined by evaluating a variety of site-specific factors including the criteria outlined in the Permit. Individual prioritization criteria are described below in further detail:

Threat to Water Quality Determination: Threat to water quality determination involved two steps: (1) initially classifying a facility as being a high threat to water quality based on site information; and (2) subsequently confirming or reclassifying the facility based on field observations and/or additional information. Initial classification of sites/sources was accomplished administratively using the data provided in the existing industrial and commercial inventory. The confirmation and/or reclassification, when necessary, were completed following the initial inspection of each site/source. The city considered the following site/source attributes to evaluate the potential threat to water quality:

i. Type of activity (SIC code): Standard Industrial Classification (SIC) codes were used primarily to prioritize and identify specific commercial and industrial activities/sites that have the potential to contribute to storm water pollution. In addition, the NPDES General Industrial Permit (General Permit) defines specific SIC codes such that (1) coverage under the General Permit is mandatory (as defined in Categories ii, iii, vi, and viii of the General Industrial Permit) or (2) coverage under the General Permit is conditional, required only if material, machinery, or products are exposed to storm water (as defined in Category 10 of the General Permit). Industries not listed with an SIC code were directly contacted and assigned an appropriate code based on a description of business activities.

ii. Materials used at the facility: Materials, including hazardous materials, used at industrial and commercial sites have the potential to contribute significant pollutant loads to receiving waters if transported by storm water. These materials and associated activities were considered during the prioritization process.

iii. Wastes generated: If not properly disposed of, industrial and commercial wastes have the potential to degrade receiving waters when transported by storm water. Types of wastes generated or stored onsite were considered during the prioritization process. Industrial Waste Permits issued by Encina Wastewater Authority may also be examined.

iv. Pollutant discharge potential: When evaluating a commercial or industrial site/source's potential to discharge pollutants, the inspector took into account all material handling equipment or activities, raw materials, intermediate products, final products, waste material, by-products, or industrial machinery exposed to storm water.

v. Non-storm water discharges: Authorized non-storm water discharges can contribute to water quality degradation by transporting pollutants into receiving waters. Non-storm water discharges were evaluated to determine whether they were a significant source of pollutants and whether the discharges may continue to be exempted from the prohibitions of Section B.1 of the Permit.

vi. Size of facility: Size of the facility affects the amount of runoff and pollutant loads generated from the industry. The size of a facility was taken into consideration during the threat evaluation process.

vii. Proximity to receiving water bodies: The potential for pollutant transport to sensitive receiving water bodies was evaluated by determining the proximity and sensitivity of receiving water bodies using the ESA definitions from the Permit.

viii. Sensitivity of receiving water bodies: All facilities directly discharging to or within 200 feet of an ESA were considered high priority. This criterion will be reviewed in FY 2011-12, to ensure that all sites/sources within an ESA are included on the current business inventory.

ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit: A listing of facilities located in Carlsbad that have filed a Notice of Intent (NOI) and are covered under the General Permit were classified as high priority threats to water quality.

x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability: Those facilities that were identified as "Conditional" (NONA and NEC filers) were evaluated using the "prioritization flowchart" included in the Threat to Water Quality Procedure and prioritized accordingly.

xi. Facility design: The design of a facility, including whether structural BMPs has been installed and maintained, or there are outdoor activities, was considered during the threat to water quality evaluation process.

xii. Total area of the site, area of the site where industrial or commercial activities occur, percentage of pervious surface, and area of the site exposed to rainfall and runoff was considered during the Threat to Water Quality evaluation process.

xiii. The facility's compliance history: Inspectors reviewed the compliance history of each commercial and industrial site and considered any relevant enforcement actions in determining the threat potential on activities conducted onsite.

xiv. Any other relevant factors: The City reserved the authority to consider any other relevant factors specific to the facility to utilize in the prioritization process.

5.2.3 Best Management Practice Requirements

5.2.3.1 Pollution Prevention

Pollution prevention eliminates or reduces polluted storm water runoff. Specific pollution prevention procedures and management guidelines may vary from one industrial or commercial facility to another, and the City informed these facilities of pollution prevention opportunities during site inspections. The following pollution prevention principles applied to most industrial and commercial facilities:

- Affirmative Procurement – Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.
- Regular maintenance of on-site BMPs.

5.2.3.2 Minimum BMPs

The following are minimum BMPs required to be implemented, by fixed commercial and industrial sites and sources, as applicable:

1. Good housekeeping
    - Protect materials and products that could potentially pollute storm water from rain, run-on, runoff, and wind dispersal by storing them indoors or covering them, and providing them with secondary containment as needed. For industries with conditional

SIC codes, moving stored materials indoors may allow an exemption from the General Permit requirements.

- Use dry cleanup methods (mops, brooms, rags or wire brushes to clean pavement, buildings and equipment as much as possible) instead of using water hose or pressure washing system to conduct washing or cleaning activities.
- Sweep up around dumpsters and other areas to prevent trash and debris from accumulating. Dumpsters must be kept closed when not in use. All trash must be kept in appropriate sized containers until it can be hauled away. When inspecting solid waste collection areas, inspectors will note if recyclable materials (cardboard, green waste, etc.) are placed in dumpsters.

2. Preventive maintenance
   - Preventive maintenance includes the regular inspection and maintenance of storm water structures (drains, catch basins, etc.) as well as other facility equipment and systems. Structures should be maintained in good working order and cleaned as needed to prevent discharge of pollutants into the storm water system. Facility equipment or systems should be properly maintained to prevent leaks or discharges of pollutants into the storm water system.

3. Material Storage and Handling
   - This includes all procedures to minimize exposure of significant materials to storm water and to minimize the potential for spills and leaks from storage, loading, unloading and transfer of materials.

4. Employee training
   - Appropriate personnel should be trained in good housekeeping, preventive maintenance, materials storage and handling, solid waste handling and recycling, and spill response as applicable to the facility. Records should be retained of employees attending storm water training sessions and the topics covered.

5. Solid waste (non-hazardous) handling and recycling
   - This includes the procedures or processes to handle, store, or dispose of waste or recyclable materials. Waste disposal areas should be kept free of litter and debris and waste and recyclable receptacles must have a cover or lid to prevent the contents from being dispersed by the wind or coming in contact with storm water.

6. Spill response
   - Spills and leaks can be a major contributor to storm water pollution. Facilities should identify potential locations and quantities of significant materials that may spill or leak, and should write and implement a response plan addressing spill containment, clean up and notification procedures. Appropriate spill clean-up equipment should be readily accessible to trained spill response personnel.

7. Record keeping
   - This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel. Record

keeping and internal reporting represent good operating practices as they increase the efficiency of the facility and the effectiveness of BMPs.

8. Self inspection/quality assurance
   - This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures should be described to ensure adequate corrective actions are taken. Quality assurance includes the procedures to ensure that all elements of any required SWPPPs or monitoring plans are adequately conducted.

BMP information was made available during inspections, in printed materials and direct mailings, on the storm water website and hotline, during presentations and at outreach events. A listing of education and outreach events held during this reporting period can be found in Section 8 of this report.

5.2.3.3 BMP and Knowledge Assessment Tools

During this reporting period, the Storm Water Protection Program used the BMP and Knowledge Assessment to measure knowledge of storm water issues and assess the implementation of BMPs onsite. The assessment tool rated a commercial operator and site using the following criteria:

Overall Knowledge Assessment:
Inspectors ranked personnel from 1-5 per the following *Knowledge Assessment* scale:

Level 1: Individual has never heard of the storm water program, requirements, or BMPs. This individual does not know what BMPs are or understand how to implement them.

Level 2: Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.

Level 3: Individual has a general understanding of storm water issues ("*I've heard something about that*"), but not specific storm water requirements or BMPs required for the facility.

Level 4: Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.

Level 5: Individual demonstrated an in-depth knowledge of the storm water program and BMPs consistent with the facility's activities and operations.

Overall BMP Assessment
Inspectors ranked the facility per the following 1-5 *BMP Assessment* scale:

Level 1: An illegal discharge was noted during the inspection. Enforcement actions such as a NOV and/or citation are required.

Level 2: BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or written warning were issued.

Level 3: BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal warning was issued. A detailed inspection report or written Warning Notice may follow.

Level 4: BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices (i.e., dumpsters open, leaves in the parking lot, etc.) were noted during the inspection.

Level 5: All BMPs implemented effectively. No violations noted during the inspection.

Table 5.1, 5.2, and 5.3 show the number of instances in raw score and percentage that active businesses rated for each score; 5 is the highest score possible. The number of BMP Assessments collected is usually higher than the number of Knowledge Assessments collected, because at some facilities, a company representative is not available to complete the Knowledge Assessment. BMP implementation results show that the City has been successful in ensuring that businesses implement BMPs throughout the sites at least 72% of the time during this reporting period. The City will continue to work with businesses to educate them about storm water issues, and ensure BMPs are implemented and maintained.

Table 5.1: HTTWQ Facilities Rated for Each Score – July 1, 2011 to June 30, 2012

Level	Knowledge Assessment (raw score)	Knowledge Assessment (%)	BMP Implementation (raw score)	BMP Implementation (%)
1	5	1%	6	1%
2	56	14%	48	10%
3	141	34%	108	22%
4	111	27%	220	45%
5	96	23%	103	21%
TOTAL	409	100%	485	100%

Table 5.2: Not HTTWQ Facilities Rated for Each Score – July 1, 2011 to June 30, 2012

Level	Knowledge Assessment (raw score)	Knowledge Assessment (%)	BMP Implementation (raw score)	BMP Implementation (%)
1	0	0%	0	0%
2	2	4%	0	0%
3	11	22%	2	2%
4	15	30%	18	21%
5	22	44%	66	77%
TOTAL	50	100%	86	100%

Table 5.3: All Facilities Rated for Each Score – July 1, 2011 to June 30, 2012

Rating	Knowledge Assessment (raw score)	Knowledge Assessment (%)	BMP Implementation (raw score)	BMP Implementation (%)
1	5	1%	6	1%
2	58	13%	48	8%
3	152	33%	110	19%
4	126	27%	238	42%
5	118	26%	169	30%
TOTAL	459	100%	571	100%

5.2.4 Program Implementation

5.2.4.1 Inspections

The City conducted inspections at fixed Industrial and Commercial facilities to verify BMP implementation, Permit compliance, and municipal code compliance. Table 5.2 summarizes the inspections performed at active fixed Industrial and Commercial Businesses in FY 2011-12.

Table 5.4: Summary of Inspections Performed

	Total Number on Inventory	Number Inspected	Percentage of Total Inspected	In Compliance?
HTTWQ	485	485	100%	Yes
Not HTTWQ	225	86	38%	Yes
Total on Inventory	710	571	80%	Yes

The City conducted compliance inspections at commercial and industrial sites and sources at the frequencies required by the Permit. During site visits, the inspector:

- Reviewed the SWPPP or BMP implementation plans, if the site used or was required to use such a plan;
- Reviewed facility monitoring data, if the site monitored its runoff
- Checked for coverage under the General Industrial Permit (Notice of Intent (NOI), Waste Discharge Identification No., or No Exposure Certification), if applicable;
- Assessed compliance with ordinances and permits related to urban runoff;
- Assessed BMP implementation, maintenance and effectiveness;
- Conducted visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
- Evaluated education and training on storm water pollution prevention, as conditions warrant.

Copies of inspection reports and correspondence are maintained by the Storm Water Protection Program.

5.2.4.2 Enforcement

In cases where violations were noted and follow-up necessary, the City conducted follow-up inspections to determine compliance with corrective actions outlined in the inspection report or enforcement notices. When a storm water complaint was received about an industrial or commercial site/source or an illegal discharge was observed or suspected, the City conducted a storm water compliance inspection or investigation. If a significant and/or immediate threat to water quality was observed, appropriate actions were taken to require the responsible party to immediately cease the discharge and/or correct the situation. In judging the degree of severity, City inspectors also took into account any history of similar incidents or discharges. Appendix 5.4 is a summary of individual enforcement actions taken by the city.

The Enforcement procedures outlined in the 2008 JURMP continued to be used by inspectors to identify, document, and respond to storm water violations.

For this reporting period, the Storm Water Protection Program had three full-time Environmental Specialists and one part-time intern. Environmental Specialists are continually trained on code enforcement, inspection procedures, applicable laws and regulations, and investigation techniques. These training courses, in addition to the Enforcement Response Plan, helped the Storm Water Protection Program appropriately identify and respond to storm water violations. The City took a total of 120 enforcement actions against industrial and commercial businesses during FY 2011-12. The types and numbers of enforcement actions for fixed industrial/commercial businesses are listed in Table 5.5.

Table 5.5: Enforcement Actions during FY 2011-12

Action	Total
Verbal Warning	90
Written Warning	19
Notice of Violation	11
Notice to Clean	0
Cease and Desist Order	0
Administrative Citation	0
TOTAL	**120**

During inspections and investigations completed during this reporting period, there were 15 illegal discharges found and eliminated at fixed businesses. All of the discharges were transient sources as shown in Appendix 5.4 and there was no evidence of the discharges reaching a receiving water during the inspection.

5.2.4.3 Third Party Inspections

There were no third party inspections conducted on any industrial or commercial facilities during FY 2011-12.

5.2.4.4 Industrial Non-Filers

The City takes the following steps to identify non-filers under the General Industrial Permit:

- During the threat to water quality prioritization
  - Facilities were checked for whether they are subject to the General Industrial Permit or an individual NPDES permit: A listing of facilities located in Carlsbad that have filed a Notice of Intent (NOI) and are covered under the General Permit were classified as high priority threats to water quality.
- During inspection of high threat to water quality facilities:
  - The city Checked for coverage under the General Industrial Permit (Notice of Intent (NOI), Waste Discharge Identification No., or No Exposure Certification), if applicable;

In FY 2011-12 the City did not identify any industrial non-filers

5.3 Mobile Sources

5.3.1 Background

The City has participated in the development of a Regional Mobile Outreach and Education Strategy. The City will work with the Copermittees to ensure the implementation and success of this strategy. A copy of the *Regional Mobile Outreach and Education Strategy*, which includes a discussion of Carlsbad's jurisdictional efforts, can be found in the City's JURMP.

5.3.2 Source Characterization

A large percentage of businesses on the industrial and commercial inventory are mobile businesses, which include carpet cleaning, power washing, etc. Because site inspections are not required for mobile businesses, many were reviewed by City inspectors. During the review process the inspector evaluated a commercial business using any relevant information available in other City departments, databases, or licensing programs. A business could be excluded during a review if it was found that their activities were not regulated by the City or Permit. The most common reason businesses were excluded during the review process was because of an incorrect SIC code designation.

5.3.3 Best Management Practice Requirements

Implementing BMPs is a priority for all mobile businesses. Dry cleanup methods, diverting wash water, and covering or blocking drains are all required practices. The regional Industrial/Commercial Workgroup finalized a list of minimum BMPs that must be used by all mobile businesses in the region. Mobile facilities are notified of the requirements through mailings or onsite investigations/inspections.

5.3.4 Program Implementation

Inspections of mobile businesses were conducted as needed based on complaints and field discovery of non-compliance. Upon arrival onsite to investigate a complaint of non-compliance, City staff conducted the following activities:

- Requested stop work if discharge was entering or had potential to enter the MS4 system.

- Requested to speak to the manager of the responsible party or property owner as necessary.
- Took photos and made observations.
- Educated the responsible party or person onsite as necessary regarding the City's NPDES permit, Federal and State requirements, Carlsbad Municipal Code (CMC), and required BMPs in order to continue work.
- Enforced the CMC as necessary.
- Followed up with documentation in Permits Plus Database and with written correspondence to the responsible party with a CC to the property owner.

In FY 2010-11 there were 15 storm water violations by mobile businesses. Table 5.5 summarizes the enforcement actions on mobile sources.

Table 5.6: Enforcement Actions on Mobile Sources

Action	Total
Informational Letter	3
Verbal Warning	5
Written Warning	0
Notice of Violation	7
Notice to Clean	0
Cease and Desist Order	0
Administrative Citation	0
TOTAL	15

5.4 Notable Activities

As mentioned in the Executive Summary, the City considers a Notable Activity to be any activity above compliance requirements.

There were no Notable Activities for the Industrial and Commercial Program during FY 2011-12.

Section 6

6.0 RESIDENTIAL COMPONENT

#

6.1 Introduction

This section describes the activities of the City for the reporting period for FY 2011-12 with respect to implementation of the Residential Component of the JURMP. The program is intended to: (1) reduce residential discharges of pollutants from the MS4 to the maximum extent practicable, and; (2) prevent residential discharges from the MS4 from causing or contributing to a violation of water quality standards.

6.2 Source Characterization

In accordance with Order No. R9-2007-0001 and the City's JURMP, the City focused on all the high priority activities and areas outlined in the JURMP (March 2008). Since writing the JURMP, no amendments were made to source characterization or areas of focus.

6.3 Best Management Practice Requirements

In accordance with the City's JURMP, required BMPs were implemented in residential areas in compliance with the permit. The minimum BMPs addressing residential activities and areas, as detailed in various outreach materials, are the following:

- Residential auto repair, maintenance, washing and parking. Leaking vehicles must be parked in the residential driveway with BMPs in place to prevent oil and other liquids from leaking onto the street. No leaking vehicles can be parked on the street or right-of-way. No automotive repairs are permitted to be conducted in the street or right-of-way. Residents are allowed to wash vehicles in the driveway, and are encouraged to use soap sparingly, and to divert wash water to landscaping.
- Home and garden care activities and product use. Decrease the use of lawn and garden care products such as pesticides, weed killers and chemical fertilizers. Consider using non-toxic pest control methods. Avoid over-irrigation which washes these chemicals into the storm drain system. Avoid applying fertilizers and pesticides 3-5 days before any predicted rain event.
- Disposal of trash. All trash must be kept in appropriate sized containers until it can be hauled away. Frequently dispose of grass, debris, leaves, and other waste materials. Composting green waste is encouraged.
- Recycle, Reduce and Reuse. Recycle cans, bottles, paper and cardboard whenever possible.
- Disposal of pet waste. Clean up after pets. Use a bag to pick up waste when walking pets. Flush pet waste down the toilet or dispose of in a sealed plastic bag and deposit in the trash.
- Disposal of household hazardous waste. Residents are encouraged to properly dispose of household hazardous waste through the city's household hazardous waste pickup and disposal program.
- Move or cover potential pollution sources from storm water contact. Protect materials that could potentially contribute to storm water pollution by storing them indoors or covering them.
- Use dry cleanup methods. Instead of washing or hosing, use dry cleanup methods such as mops, brooms, rags or wire brushes to clean surfaces.

6.4 Program Implementation

The residential component of Carlsbad's Storm Water Program continued to address residential activities and pollutants through the implementation of outreach and education on proper BMPs, the household hazardous waste program and complaint investigations.

6.4.1 Regional Residential Education Program

The City of Carlsbad continued to participate in the regional workgroup targeting residential areas. Notable activities during this fiscal year include participation at the Paws in the Park event in March 2012, and at the San Diego County EnviroFair during June 2012, PSA distribution at UltraStar cinemas, and continued distribution of outreach materials promoting storm water education.

6.4.2 BMP Implementation

During FY 2011-12 the City continued to implement its residential program aimed at reducing contaminants in urban runoff originating from residential areas and activities. BMP information was made available to residents via the following:

- Storm water website and hotline
- City outreach through social media
- Outreach events
- Direct mailings
- During investigations of suspected storm water violations.

Outreach and Education activities for FY 2011-12 are further detailed in Section 8 of this report. Discussion of investigations and enforcement actions for residential areas and activities are discussed in Section 6.4.5 and Section 7 of this report.

Mass Media, Website and Hotline

Information about water conservation, trash management, and storm water pollution prevention is located on the Environmental Programs web page accessed through the city's website at www.carlsbadca.gov. During FY 2011-12 there were a total 1,447 visits to the Environmental Programs and Storm Water web pages.

The Environmental Programs and Storm Water hotlines provided information about storm water, trash, and water conservation for the public. The hotline was answered by the Storm Water Protection Program during business hours, and a detailed voice message provided information on reporting violations to a duty phone after hours.

Outreach Events

The City hosted or participated in several public events, which provided opportunities for residents to learn about pollution prevention and storm water BMPs. During these events residents had the opportunity to pick up printed materials, and to speak directly to storm water representatives. See Table 6.1 for a summary of outreach events occurring during FY 2011-12.

Table 6.1: Outreach Events for Residential Community (FY 2011-12)

DATE	NAME	TYPE	TARGET AUDIENCE	ATTENDANCE/ DISTRIBUTION	LOCATION
09/17/2011	Beach Cleanup - California Coastal Cleanup Day	Public event	Residential	113	Tamarack State Beach
04/01/2012	Kids Day at the Flower Fields	Public event	Residential	5,000	Carlsbad
05/19/2012	Family Open Studios	Public event	Residential	170	Carlsbad
06/09/2012	Carlsbad Beach Fest	Public event	Residential	10,000	Carlsbad

Printed Materials and Media

Storm water information was also conveyed through a variety of printed materials such as mailers and print media. Informational brochures continued to be distributed during outreach events and complaint investigations in residential areas. All printed materials distribution and media are shown in the table below and examples are in Appendices 6.1 and 6.2.

Table 6.2: Printed Materials and Media

DATE	NAME	TYPE	TARGET AUDIENCE	ATTENDANCE/ DISTRIBUTION
03/01/2012	Carlsbad Currents	Media	Residential	100,000
05/01/2012	Carlsbad Currents	Media	Residential	100,000
06/01/2012	TGIF Jazz in the Parks	Media	Residential	50,000
06/01/2012	Carlsbad Currents	Media	Residential	100,000

Promotional Items

The Storm Water Protection Program distributed various promotional items with the storm water hotline and pollution prevention messages, such as crayons and coloring books, pencils, Frisbees, lip balm and stickers. All items carried program contact information and environmental messages. In addition, numerous copies of "All the Way to the Ocean," a book by Joel Harper illustrating storm water pollution, were raffled off at several outreach events.

6.4.3 HHW, Used Oil, Bulky Items, and Environmental Programs Hotline

The City continued to operate the Household Hazardous Waste (HHW) and used oil recycling program outlined in the JURMP.

On April 28, 2012, the City sponsored a free HHW disposal day during which Carlsbad residents could dispose of up to 15 gallons or 125 pounds of HHW materials. The City collected and disposed of 47, 691 pounds of HHW during this event. Table 6.3 shows the types and quantities of HHW collected.

Table 6.3: Items Collected During April 30, 2011 HHW Event

Type of Material	Weight In Pounds
1. Flammable & Poison	12,350
2. Acid	400
3. Base	1,330
4. Oxidizer	80
5. PCB-containing	0
6. Reclaimable	22,700
7. Asbestos	0
8. Universal Waste	8,331
9. Other	2,500
Grand Total	47,691

In addition, Carlsbad residents were allowed to dispose of bulky items and household hazardous waste through the residential pick up service.

Residents used the Solid Waste hotline and e-mail address to request information about the HHW program, trash and recycling.

6.4.4 Oversight of Residential Areas

The Water Conservation Specialist continued to conduct patrols of different residential areas within the City. Evidence of excess runoff from irrigation was investigated on a case-by-case basis. Door hangers were left and a follow-up phone call or a site visit conducted to evaluate irrigation systems.

6.4.5 Enforcement in Residential Areas

Storm Water staff handled all residential complaints and subsequent enforcement actions in accordance with the City's existing procedures and Carlsbad Municipal Code. Each reported and observed violation was documented using the Permits Plus database. See the tables below for information on residential complaints.

A total of 22 residential complaints from residential sources were documented during FY 2011-12. See the following tables for more information on complaint investigations and enforcement in residential areas.

Table 6.4: Complaints in Residential Areas

Total number of complaints during FY 2011-12	93
Number occurring in residential area	49
Total number of complaints dealing with pollutants from residential sources (mobile businesses in residential areas excluded)	22

During FY 2011-12, the Storm Water Protection Program received 93 total storm water related complaints. Of those complaints, 49 occurred in residential areas. Twenty-two complaints concerned residential sources of pollution, while 27 concerned mobile businesses operating in residential areas. Table 6.4 and Table 6.5 show a summary of residential enforcement actions. A summary of all complaints responded to can be found in Section 7, to be submitted in December 2011.

Table 6.5: Summary of Residential Enforcement Actions FY 2011-12

Enforcement action	Number
Informational Letter	7
Verbal Warning	7
Written Warning	0
NOV	0
Admin Citation	0
Cease and Desist	0
Notice to Clean	0
Total	14

Table 6.6: Residential Complaint Types FY 2011-12

Type of complaint	Number
Accident	2
Dumping to storm drain	6
Erosion	1
Other	2
Piles without proper BMPs	1
Leaking vehicle	2
Washing to storm drain	8
Total	22

6.5 Notable Activities

As mentioned in the Executive Summary, the City considers a notable activity to be any activity above compliance requirements.

Notable activities for FY 11-12 are:

- Increased interdepartmental coordination on outreach and education activities, in particular the Family Open Studios event.

Section 7

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The City's Illicit Discharge Detection and Elimination (IDDE) will be submitted in December 2012 as approved by the Regional Board in Addendum 2, Order 2007-0001.

Section 8

8.0 OUTREACH AND EDUCATION COMPONENT

8.1 Introduction

Public outreach and education are fundamental to the success of Carlsbad's urban runoff management program. The city continues to increase awareness about pollution prevention, and promote behavioral changes and environmental stewardship. The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent. The city continues to be actively involved in outreach and education efforts at the local level, the watershed level, and the regional level (Project Clean Water – Outreach Workgroup). These efforts are further discussed in the following subsections by target audience.

8.2 Staff Training Element

Storm water training for municipal employees included general training and job specific training for designated departments and personnel. The objectives of the employee training programs are as follows:

- Promote a clear understanding of the urban runoff and water quality issues, including activities that can potentially pollute receiving water bodies.
- Identify and implement BMPs.
- Promote employee understanding and response.
- Integrate employee feedback into training and BMP implementation.

8.2.1 General Employee Training

During FY 2011-12, city employees received training on the storm water program and pollution prevention. Messages include, where applicable, the topics listed in the Permit. City staff received information and general storm water training through various communication methods including:

1. Storm Water Web Page: Employees were able to download BMP brochures and the JURMP directly from the city's website.
2. Intranet: The city's intranet was used to post messages and inform employees of various events and opportunities for participation, such as the Coastal Cleanup Day and Earth Day activities.
3. Employee Outreach: During FY 2011-12 the Carlsbad Currents newsletter was issued to all employees. Car window decals and notepads with the storm water hotline were available for employee use in the field.
4. First Mondays: During FY 2011-12, all new employees attended an orientation training called First Mondays. The training session included general information about the city, as well as NPDES regulations, the city's JURMP and Storm Water Pollution Prevention BMPs applicable to municipal personnel.

8.2.2 Job Specific Training

General, Development Planning, Construction and Environmental Management employees and relevant contractors are trained annually on storm water laws and regulations, BMPs, runoff concepts and other storm water related topics. See Appendix 8.1 for further details.

8.2.3 Storm Water Committee

The Storm Water Committee continued to meet on a regular basis to discuss storm water BMPs, activities for staff, coordinate inspections, compliance activities, documentation and reporting.

8.2.4 Storm Water Leadership Team

In FY 2011-12, the City of Carlsbad's City Manager continued the Storm Water Leadership Team (SWLT). Periodic meetings of the SWLT were conducted and attendees included Senior Management of the city's major service areas and Directors. Agenda items covered areas of the city's compliance with Order No. R9-2007-0001.

8.2.5 Utility Coordinating Committee Meeting

Engineering and Construction Management and Inspection (CMI) staff attended the bi-monthly Utility Coordinating Committee meetings with various utility agencies (SDGE, Cox Cable, ATT, etc.) throughout North County to discuss ongoing and upcoming projects that impact utilities in Carlsbad. As a standing agenda item, storm water and NPDES compliance are discussed at each meeting to ensure outside agencies understand their role in pollution prevention.

8.2.6 Special Events Committee

Construction Management and Inspection (CMI) staff and Utilities staff attended the monthly Special Events Committee meeting to coordinate upcoming event operations and activities. As a standing agenda item, storm water and NPDES compliance were discussed at each meeting to ensure staff understand their role in pollution prevention.

8.2.7 Other Committees and Meetings

During the reporting period, the city continued to participate in the regional outreach education workgroup meetings. The city has participated and will continue to participate in these meetings that include but are not limited to: Technical Advisory Committee (TAC) and Development, Reporting and Assessment and watershed management meetings.

During this reporting period, there have been several regional meetings that the City has attended with other Copermittees. The Development Services Division has participated and will continue to participate in these meetings that include but are not limited to: the land development workgroup, the HMP technical advisory committee, and the reporting and assessment Workgroup.

8.3 Educational Outreach Element

8.3.1 New Development and Construction Communities

The City continued to educate the new development and construction communities throughout FY 2011-12. CMI staff worked with new contractors, homeowners, developers, and others in the construction industry during inspections and investigations to identify storm water compliance issues,

detail corrective actions and assess the appropriateness of BMPs. CMI continues to require pre-construction meetings with contractors and developers prior to the issuance of a new grading permit. The process is initiated when the contractor/developer requests a pre-construction meeting with City inspectors. During the pre-construction meetings, the contractor/developer is notified of the City's NPDES requirements and compliance efforts. In addition, the Pre-Construction Meeting Agenda Packet was revised to state that occupancy will not be granted until the engineer of work provides a letter verifying that all treatment control BMPs have been installed according to the plans and SWMP. Each contractor/developer is provided with a copy of the agenda packet during the pre-construction meeting.

Development and Planning Services provided information and education to applicants and developers during one-on-one or small group meetings, inspections, complaint investigations, and during pre-construction meetings. They also provided sample SWPPPs and SWMPs for engineers, developers, and applicants to use as guides when preparing documents for proposed development projects. Copies of these documents and the SUSMP are available at the city's permits counter. The SUSMP is also available through the city's website.

In addition, the City continued to use the email address developed in FY 2007-08 for the treatment control BMP verification program. Owners and responsible parties can send questions, verification forms, and other requests to the tcbmp@carlsbadca.gov email address, which is monitored by the Senior Construction Inspector. The City has also developed an email address list for TCBMP responsible parties. The email mailing list has been useful in providing immediate information about treatment control BMP compliance and other educational information.

The City's inspection guidelines require documentation of BMP installations prior to occupancy. Annually the City mails a memorandum to all developers and contractors working in the City educating them on the BMP installation prior to occupancy requirement. On May 1, 2012, an updated memorandum was sent to all developers and contractors with active grading permits informing them of the prior to occupancy verification procedure. A copy of the "*BMP Verification of Installation Required Prior to Occupancy*" memorandum can be found in Appendix 2.9.

8.3.2 Construction Site Owners and Developers

The greatest strength of Carlsbad's efforts to educate construction site owners and developers is its motivated and well-informed project review and inspection staff. The project review and CMI inspection staff holds staff meetings where issues of storm water requirements are discussed including issues of new regulatory requirements, new and evolving BMP standards, updates from training seminars, inventory collection and reporting, LID application in new development design and BMP effectiveness (a list of the Land Development Engineering staff training meetings is included in Appendix 8.1).

Prior to the wet season, CMI inspectors hand delivered a memo to all site superintendents reminding them of the NPDES requirements and informing them to ensure all sites are in compliance by and throughout the wet season. A copy of the *Rainy Season Preparation and Storm Water Compliance* memorandum, issued on September 1, 2011, can be found in Appendix 3.2.

In August 2012, CMI staff attended the annual StormCon conference in Anaheim, CA. The conference featured over 80 sessions and presentations covering a variety of topics including the new Construction

General Permit, BMP Effectiveness Assessment, Regulations and Policies, Storm Water Treatment, and other related topics.

The City of Carlsbad is committed to working with developers and contractors to ensure that BMPs are implemented at all construction sites. The "*Pollution Prevention Guide for the Construction Industry*" brochure continued to be distributed at pre-construction meetings. In addition, storm water and NPDES compliance were a part of the regular agenda for each of the meetings. Pre-construction meetings are required for all new development, CIP, and major construction projects in Carlsbad.

The Storm Water Protection Program also continued to distribute the "*Pollution Prevention Guide for the Construction Industry*" brochure. This brochure was developed to provide BMP and pollution prevention information related to materials storage, perimeter controls, building and staging areas, dumpsters and port-a-potty services, tracking controls, concrete trucks and pumpers, washout areas, dirt and grading, earthmoving equipment, and storm drain protection. The brochure was distributed to commercial businesses that conduct small remodeling or home improvement projects.

The City continued to conduct and participate in workshops to educate external parties, which include project applicants, developers, contractors, and property owners on the implementation of the storm water program and requirements for construction sites.

8.3.3 Commercial and Industrial Owners and Operators

The city continued to educate commercial and industrial owners and operators through various methods. This included the distribution of printed materials, participation at workshops, presentations to business community groups, direct mailings, inspections and site visits. Accomplishments are detailed below.

1. <u>Printed Material</u>
During FY 2011-12, several printed materials were distributed to industrial and commercial facilities in Carlsbad. The "*Mobile Business Guide to Pollution Prevention*" brochure continued to be provided to residents and mobile business operators during complaint investigations related to mobile service provider discharges. The "*Industrial/Commercial Business Guide to Pollution Prevention*" brochure was distributed to businesses during inspections. See Appendix 8.2 for an example of these brochures. Various Storm Water Protection Program brochures continued to be stocked at city kiosks and display racks.

2. <u>Website and Hotline</u>
Industrial and commercial businesses were directed to use the website and hotline for more information. The website and hotline are listed on all printed materials distributed by the city. During this fiscal year, there were 1,447 to the Environmental Programs and Storm Water web pages. The storm water hotline continued to be used to request information and report violations.

3. <u>Inspections and Site Visits</u>
Education is a central component to commercial and industrial inspections and site visits. City inspectors educated businesses owners during inspections and investigations to identify storm water compliance issues, detail corrective actions, and assess the effectiveness of BMPs.

4. Workshops

The City conducted a pollution prevention workshop for employees of Weseloh Chevrolet and Kia on January 3, 2012. The workshop provided an opportunity to address pollution prevention and BMPs with employees, as well as answer any questions.

8.3.4 Quasi-Government Agencies/Districts (i.e. Educational Institutions, Water Districts, Sanitation Districts, etc.)

The city continued to educate these communities during this reporting period through the distribution of printed materials in person and through the mail, as well as through website postings.

The city meets bi-monthly with agencies within the Carlsbad jurisdiction to discuss construction projects that impact various utility operations. As a standing item on the Utility Coordination Committee Meeting agenda, storm water and NPDES are discussed to ensure other agencies that work in Carlsbad understand the requirements of the Permit, JURMP, and CMC.

Educational information was provided during water and sanitary facility inspections, as well as in written inspection reports.

8.3.5 Residential Community, General Public, Underserved Target Audiences and School Children

Carlsbad continued outreach to the residential community, school children, and the general public during this reporting period. This included the development and distribution of printed materials, public outreach events, presentations, published articles, videos, website access, and direct interaction with the public. Accomplishments for FY 2011-12 are described below.

1. Residential Community and General Public

Please refer to Section 6 of this Annual Report for outreach and education targeting the residential community.

The city hosted or participated in several public events, which provided opportunities for residents and the general public to learn about storm water pollution prevention. During most of these events, a staffed booth was set up, and residents and children had the opportunity to pick up printed materials, view an *EnviroScape* model demonstration, and speak directly with city storm water representatives. Table 8.1 summarizes education activities for the residential community and general public during FY 11-12.

Table 8.1: Outreach Events for Residential Community and General Public (FY 2011-12)

DATE	NAME	TYPE	TARGET AUDIENCE	ATTENDANCE/ DISTRIBUTION	LOCATION
09/17/2011	Beach Cleanup - California Coastal Cleanup Day	Public event	Residential	113	Tamarack State Beach
04/01/2012	Kids Day at the Flower Fields	Public event	Residential	5,000	Carlsbad
05/19/2012	Family Open Studios	Public event	Residential	170	Carlsbad
06/09/2012	Carlsbad Beach Fest	Public event	Residential	10,000	Carlsbad

Printed materials were available for download from the city's website and Environmental Programs website. There were 1,447 visits to the Environmental Programs and Storm Water web pages. Monthly tips were regularly updated on the city's website with storm water pollution prevention tips.

Publications were also used to convey storm water information. Carlsbad Currents, a city publication distributed to all residents, contained articles on storm water pollution prevention. The Jazz in the Parks guide contained an advertisement highlighting the importance of water quality. See Table 8.2 for a list of printed materials and mass media, and Appendices 6.1 and 6.2 for examples of these publications.

Table 8.2: Printed Materials and Media

DATE	NAME	TYPE	TARGET AUDIENCE	ATTENDANCE/ DISTRIBUTION
03/01/2012	Carlsbad Currents	Media	Residential	100,000
05/01/2012	Carlsbad Currents	Media	Residential	100,000
06/01/2012	TGIF Jazz in the Parks	Media	Residential	50,000
06/01/2012	Carlsbad Currents	Media	Residential	100,000

Brochures addressing storm water pollution prevention were made available during residential complaint investigations, through mailings, during outreach events and at all city facilities.

Pencils, stickers, lip balm, Frisbees and pet waste bag dispensers were purchased and/or distributed this fiscal year at all city events. All promotional items are labeled with the Storm Water Hotline and/or the website. In addition, copies of a children's book titled *All the Way to the Ocean* were purchased and raffled off at city events.

Various Storm Water Protection Program brochures continued to be stocked at city kiosks and display racks.

Direct interactions provide another opportunity for education. During complaint investigations, city inspectors met with residents whenever possible to explain storm water regulations and pollution prevention. When a resident was not available, a door hanger and other outreach materials were left to provide information about the reported discharge. Follow-up informational letters were sent to homeowners and/or contractors after an investigation. These correspondences included brochures and fact sheets about storm water.

2. Underserved Target Audiences, High Risk Behaviors, and "Allowable Behaviors and Discharges"

During this reporting period, the City of Carlsbad offered several brochures in the Spanish language, providing important information on Automotive Service and Repair Shops, Lawn and Garden Care and Restaurants. These brochures were developed to raise awareness in the Spanish-speaking community about the difference between storm water conveyance systems and sanitary sewer systems, the connection of storm drains to local waterways, and common residential sources of urban runoff. In addition, one storm water inspector is qualified as proficient in Spanish, ensuring appropriate communication in Spanish when necessary.

Staff continued to collaborate with the Regional Education and Residential Sources workgroup focusing on the development of outreach and education materials targeting underserved target audiences.

3. School Children

During this reporting period, the Solana Center for Environmental Innovation (Solana Center) continued to conduct the storm water education program for school children in the city. The Solana Center used the *EnviroScape* interactive model to teach students about watershed stewardship and pollution prevention. Outreach materials and workbooks were provided to the students and teachers. Storm water fliers announcing the free presentations were distributed to teachers.

Each classroom was given a watershed poster, handouts on ten simple ways to help protect the ocean, pencils and stickers. Each school received a book titled "All the Way to the Ocean," illustrating storm water pollution.

In addition, quizzes on watershed and storm drain systems were distributed before and after presentations. Table 8.3 lists all of the schools and the number of classrooms and students that attended the watershed classroom presentation during this reporting period.

Table 8.3 Carlsbad Elementary Schools Watershed Awareness Programs

Date of presentation	School	Number of students
9/13/11 and 9/15/11	El Camino Creek Elementary School	83
09/14/2011	Carillo Elementary School	125
11/08/2011	Aviara Oaks Elementary School	122
03/01/2012	Calavera Hills Elementary School	32
03/08/2012	Calavera Hills Elementary School	24
03/15/2012	Calavera Hills Elementary School	30
04/05/2012	La Costa Meadows Elementary School	63
04/27/2012	La Costa Meadows Elementary School	86
06/05/2012	La Costa Meadows Elementary School	21
	Total	586

City Stuff is an outreach program that evolved through a partnership between the City of Carlsbad and the Junior Achievement program. The program reaches over 50 third-grade classrooms in Carlsbad (across district lines) and information filters home to the parents/residents. Students learn how cities are planned, operated, and what services are offered. They also learn about important businesses in a city. Out of the six lessons taught, three of the lessons are Carlsbad specific, and one lesson is focused on municipal programs, including reference to Storm Water Pollution Prevention.

8.4 Notable Activities

As mentioned in the Executive Summary, the City considers a notable activity to be any activity above compliance requirements.

Notable activities for FY 11-12 are:

- Increased interdepartmental coordination on outreach and education activities, in particular the Family Open Studios event.

Section 9

9.0 PUBLIC PARTICIPATION

9.1 Introduction

This section describes the activities of the City for the FY 2011-12 reporting period with respect to the implementation of the Public Participation component of the JURMP.

9.2 Public Meetings and Hearings

The public had numerous opportunities to attend meetings at the local, watershed and regional levels, in order to learn about the City's implementation of the Permit and to have their concerns addressed.

City Council Meetings were held in the Council Chambers at Carlsbad City Hall and were open to the public. The City of Carlsbad also offered residents and visitors the opportunity to view City Council meetings via the Internet and local cable channel, Time Warner channel 24 or 126. Regularly scheduled Carlsbad Council meetings aired live on Tuesday evenings at 6 pm. Each meeting and agenda was posted online approximately two hours after the conclusion of each meeting. Past meetings were available for up to a year on the City's own archive video portal. Users could conveniently "keyword search" through the audio/video content and "jump to" meeting discussion items in real-time by using a drop down menu. Agendas from previous meetings could also be accessed through the City's Document Management System.

During FY 2011-12, the Planning Commission was comprised of seven members appointed by the City Council. This commission made recommendations to the City Council regarding implementation and updating of the General Plan. When needed, they also provided recommendations to the Council regarding policy issues that affect long-range planning. They reviewed development projects, provided recommendations to the City Council, provided reports to the City Council on the Local Facilities Management Plan, reviewed the annual CIP for consistency with the Growth Management Program, identified potential problems and opportunities facing the City, made findings which conformed to Storm Water compliance, and suggested special studies when appropriate. During this reporting period the City also provided live streaming of Planning Meetings, typically held on the first and third Wednesday of each month at 6 p.m.

Residents could also become representatives on various City committees. The City Clerk's office maintained a list of City Boards, Commissions, and Committees, current vacancies, meeting dates and times, and coordinated all appointments to these positions.

In addition, the public could attend various Municipal Storm Water Copermittee meetings, such as the Management Committee Meetings, Outreach Workgroup, Regional Monitoring Workgroup, Coastal Storm Drain Monitoring Sub-Workgroup, and Dry Weather Monitoring Sub-Workgroup. Notices of these meetings were available from the Project Clean Water website at www.projectcleanwater.org.

9.3 Feedback Mechanisms

In addition to the public participation opportunities available through public meetings and hearings, numerous other feedback mechanisms promoted public involvement.

9.3.1 Hotline and e-mail address

The public was encouraged to provide input and feedback on the Storm Water Protection Program implementation. In addition to the public meeting opportunities detailed above, the public could call the storm water hotline to request information, provide comments, or make illegal discharge reports. The public could also send e-mails directly to the Storm Water Protection Program at stormwater@carlsbadca.gov. There were several other public contact phone numbers and City e-mail addresses available for public use. Other City departments forwarded comments and questions to the Storm Water Protection Program as needed. The public accessed the Storm Water Protection Program web page through the City's website, which provided information about storm water requirements and BMPs.

The public used the Solid Waste Services hotline and e-mail address to obtain information about HHW, trash, and recycling programs.

9.3.2 Direct interaction

The City relied on interactions between City staff and the public to convey messages about storm water and pollution prevention. City staff received targeted training to increase their understanding of urban runoff issues. Staff interaction with the public also provided additional opportunities for the City to obtain direct feedback about BMPs, ordinances, and pollution prevention efforts.

9.3.3 General outreach

Efforts through printed ads, newspapers, press releases, media interviews, PSA's, the Community Calendar, City guides, brochures, water bill stuffers, and other publications were used to keep the public informed of storm water requirements, updates, and public participation opportunities. Specific outreach efforts are discussed in section eight of this report.

9.3.4 Storm drain stenciling

Stenciling storm drain inlets with "*No Dumping – Drains to Ocean*" messages reminded citizens and businesses not to pollute waterways. Stencils were available upon request to businesses and residents who were interested in stenciling private storm drains. Public inlets were marked by the Streets Department.

9.3.5 Public surveys

The BW Research Partnership, on behalf of the City, conducted an annual *Public Opinion Survey* of Carlsbad residents. The city-wide telephone survey of residents was administered from September 13 through October 2, 2011 and averaged 20 minutes in length. In total, a statistically representative sample of 1,000 Carlsbad residents 18 years and older completed a telephone survey, resulting in a maximum margin of error +/- 3.08 percent (at the 95 percent level of confidence) for questions answered by all 1,000 respondents. There were three questions related to storm water quality on the 2011 survey. The results of these questions are summarized in Section 11 of this report. The entire report was available for download from the City's website. Surveys helped the City understand how the public perceives storm water which can help foster better planning and management programs.

9.4 Community Events and Volunteer Efforts

The City's Community Volunteer Coordinator administered outreach and involvement programs for Carlsbad residents. This position continued to find volunteers to assist the Storm Water Protection Program with various activities. The City participated in several community events held in Carlsbad and other locations across the county. These events are summarized in Table 9.1.

Table 9.1: Community Events FY 2011-12

DATE	NAME	TYPE	TARGET AUDIENCE	ATTENDANCE/ DISTRIBUTION	LOCATION
09/17/2011	Beach Cleanup - California Coastal Cleanup Day	Public event	Residential	113	Tamarack State Beach
04/01/2012	Kids Day at the Flower Fields	Public event	Residential	5,000	Carlsbad
05/19/2012	Family Open Studios	Public event	Residential	170	Carlsbad
06/09/2012	Carlsbad Beach Fest	Public event	Residential	10,000	Carlsbad

Section 10

10.0 FISCAL ANALYSIS

10.1 Introduction

This section provides a Fiscal Analysis of the Storm Water Pollution Prevention activities in the City of Carlsbad. This methodology was developed by the Copermittees in January 2009 in accordance with sections, G, J.1 a(3)(k) and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The data provided in this section is based on actual expenditures for the period from July 1, 2011 through June 30, 2012.

10.2 General Budget Information

In FY 02-03 and 03-04, the City conducted a fee study to evaluate possible financing mechanisms for the Storm Water Protection Program. The new financing mechanism was detailed in the "*City of Carlsbad Storm Water Pollution Protection Program Regulatory Fee Study Report*", dated September 12, 2003. The report recommended funding the storm water program through an increase in the City's Solid Waste Service fees and new development processing fees. Nearly all of the pollutants discharged into the MS4 are classified as solid waste under state and local codes. Based on this information and other findings, the City implemented a *Solid Waste Service* fee increase for residential and commercial service users to fund certain Storm Water Protection Program activities. The amount of the fee increase is calculated based upon the apportioned costs to the business and residential service users and their contribution to the pollutant loading. This fee was last reviewed in June 2007, and updated to reflect current workloads. The current fee is $3.46 per month for residential customers, and 23.09% of the base trash rate for commercial customers.

The total operating costs to fund the storm water program activities related to existing development for FY 11-12 were budgeted at $3,357,402. This is a slight increase from FY 10-11, due to an increasein fees from the San Diego Regional Water Quality Board, as well as increases in estimated costs for outside contracted services. A summary of expenditures for the City of Carlsbad's Storm Water Program is included as Appendix 10.1.

10.3 Fiscal Analysis Methods

The data presented here was derived from the City of Carlsbad's financial reporting system, IFAS. Some estimates are made where specific activities are not clearly delineated in the budget.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

For FY 11-12 ending June 30, 2012, a total of $2,695,098 was spent, with $2,529,052 spent on JURMP activities, $40,327 spent on WURMP activities, and $125,718 spent on RURMP activities. A breakdown of expenses is reported in Appendix 10.1.

10.4.2 Funding Sources

The Permit requires the City to secure the resources necessary to meet the requirements of the Permit and the JURMP, and to conduct an annual fiscal analysis. The analysis must evaluate the expenditures necessary to accomplish the activities identified in the JURMP and describe the sources of the funds

used to meet the expenditures. The Storm Water Protection Program is comprised of numerous program activities funded from a variety of sources. Table 10.1 summarizes the storm water protection program activities and identifies the current funding source:

Table 10.1 Summary of Program Activities and Current Funding Sources

Program/Activity	Funding Source(s)
Storm Water Facility Capital Improvement Program	Developer Impact Fees, Developer Exactions, General Fund, Gas Tax, TransNet Sales Tax, Federal and State Grants
Storm Water Facility Maintenance and Operation Program including Street Sweeping, Litter Removal and Storm Event Readiness and Patrolling	Solid Waste Service Fees, General Fund
Storm Water Program Administration	Solid Waste Service Fees
Illicit Detection and Illegal Discharge Enforcement Program	Solid Waste Service Fees
Commercial/Industrial SWPPP Inspection Program	Solid Waste Service Fees (charged to commercial service customers only)
Construction Related SWPPP Review and Inspection Program	Developer Fees

Section 11

11.0 EFFECTIVENESS ASSESSMENT

The effectiveness assessment is based on data for FY 2011-12 and focuses on the assessment of three areas, as required in Section I.1.a.(1) of Order No. R9-2007-0001: significant activities, components, and an integrated assessment.

- Section 11.1 assesses the significant activities as listed in the City's JURMP. Each significant activity has an associated measure and targeted outcome. These measures relate to various levels in the range of Levels 1-4 outcome levels, assessing permit compliance, changes in knowledge and awareness, changes in behavior/BMP implementation, and load reductions.

- Section 11.2 assesses each component identified in Section I.1.a.(1)(b). The components include Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education. Each component assessment uses various levels in the range of Levels 1-4 outcome levels where measures have been developed applicable to the component.

- Section 11.3 provides an integrated assessment, combining conclusions from the individual component assessments and water quality data. At this time, it is not always feasible to link jurisdictional activities and components to changes in discharge and receiving water quality. This assessment draws conclusions where possible and may be further developed as more water quality data is collected in future years.

11.1 Significant Activity Assessment

The identification of significant activities was performed during the development of the JURMP. These significant activities targeted measurable outcomes, and results for FY 2011-12 are listed in Table 11.1. Some of the measurable goals are related to Levels 1-4 of the Effectiveness Assessment Outcomes as defined in Attachment C of Order No. R9-2007-0001.

Level 1: Compliance with Activity Based Permit Requirements

Where required during this fiscal year, all compliance based permit activities were completed successfully at or above 100% compliance. These measures are effective at determining the City's compliance with the permit.

The compliance measure for the Land Development Category is a new permit requirement that must be completed prior to the onset of the rainy season, October 1 each year. All required inspections were performed prior to October 1, 2011 for the 2011 Dry Season. For 2012 Dry Season, 78% of the High Priority inspections were conducted prior to June 30, 2012. Other measures appear to be appropriate for assessing compliance this year and the City was in compliance on all counts.

Level 2: Changes in Knowledge/Awareness

Changes in knowledge and awareness of storm water requirements were assessed using two significant activities or measures as described in Table 11.1.

As a part of the business inspection program, the City implemented a rating system to assess the general knowledge of storm water requirements during inspections. This measure has been used for several years in the industrial and commercial inspection programs. For this measure, data collected during FY 2011-12 was compared to data collected during FY 2010-11. As shown in the table, the average knowledge/awareness at these businesses remains consistent this year. Slight variances from year to year may reflect the difference in assessments by the various inspectors.

The second method to assess changes in knowledge and awareness compares quiz scores that are administered before and after class room presentations to school aged children. In general, the knowledge base before the presentation is low. Quizzes administered this year showed 46% of the children had an awareness of storm water prior to the presentation. After the presentation, the number of children aware of storm water issues rose to 84% of the children. This demonstrates an increase in storm water awareness in 37% of the students that were tested. By measuring this change, it appears that the presentations are effective at increasing the children's knowledge of storm water issues.

Level 3: Behavioral Change/BMP Implementation

The mechanism the City used to assess behavior change is the BMP inspection ratings for industrial and commercial businesses, assessed during site inspections.

As a part of the business inspection program, the City used the one to five rating system to assess BMP implementation (i.e. behavior change) at the establishments during industrial and commercial inspections. Because this measure has been used for several years data collected during FY 2011-12 was compared to data collected during FY 2010-11. As shown in Table 11.1, the average measured BMP implementation at these businesses was consistent with previous years. In general, BMP implementation remained relatively high this fiscal year. A comparison of the changes over the past four years is discussed below in Section 11.2.

Level 4: Load Reductions

There are two significant activities that provide direct load reductions of various pollutants. These include storm drain cleaning and street sweeping activities, providing estimations of the removal of trash, sediments, and debris from these facilities. These activities account for the removal of 47 tons of trash, sediment, and debris from the storm drain system and 1160 tons from street sweeping activities.

Additionally, the City uses two estimations of load reductions related to residential outreach and education activities in an attempt to quantify the amount of nutrients and bacteria prevented from entering the MS4. These estimations are dependent on the types of education and outreach utilized and relate this education to reductions in fertilizer usage (i.e. nitrogen and phosphorous reductions) and reductions in pet waste (i.e. bacteria) entering the MS4.

Table 11.1 contains relevant information pertaining to the significant activities defined in the City's JURMP. These data are used to determine if these activities are considered effective.

Table 11.1 Significant Activity Assessment Table

Component	Significant Activity	Method	Measure	Level	Targeted Outcome	Data	Result	Program Effective? YES/NO			
								Compliance	Knowledge Change	Behavior Change	Load Reduction
								Level 1	Level 2	Level 3	Level 4
Land Development	1. Post construction BMP inspection: inspections performed/inspections required.[1]	Confirmation	Performed /Required	Compliance (1)	05/01/11 to 09/30/11 100% High Priority 50% Medium Priority	99/99 H 283/395 M	100% H 72.9% M	Yes	N/A	N/A	N/A
					07/01/11 to 06/30/12 *40% High Priority 20% Medium Priority	83/106 H 234/436 M	78.3% H 53.7% M	Yes	N/A	N/A	N/A
Construction	1. Were all required inspections performed during the wet season?	Confirmation	Performed /Required	Compliance (1)	100%	683 /658	103.8 %	Yes	N/A	N/A	N/A

Municipal	1. Were all required facility inspections performed under Order 2007-0001?	Confirmation	Performed/ Required	Compliance (1)	100%	64/64	100%	Yes	N/A	N/A	Yes
	2. Were all required catch basin inspections performed?	Confirmation	Performed /Required	Compliance (1)	100%	3407/ 3407	100%				
	3. How much debris was removed from the MS4?	Direct Measure	Tons	Load Reduction (4)	N/A	47	N/A				
	4. How much debris was removed from street sweeping activities?	Direct Measure	Tons	Load Reduction (4)	N/A	1160	N/A				
	5. Were all special events applications reviewed for potential coverage under City requirements?	Confirmation	# Reviewed /Total	Compliance (1)	100%	25/25	100%				
Commercial-Industrial	1. Were all inspections performed as required?	Confirmation	Performed /Required	Compliance (1)	100%	485/485	100%	Yes	Yes	Yes	N/A
	2. Were knowledge scores, on average, for current fiscal year higher than previous fiscal year? [2]	Analysis	Average Score	Knowledge Change (2)	Upward Average	3.57 FY 10-11, 3.64 FY 11-12	1.9%				
	3. Were behavioral change/BMP implementation scores, on average, for current fiscal year higher than previous fiscal year? [2]	Analysis	Average Score	Behavior Change (3)	Upward Average	4.19 FY 10-11, 3.90 FY 11-12	-7.4%				

IDDE	1. Were all urban runoff related complaints responded to and resolved?	Confirmation	# Responses /Total Complaints	Compliance (1)	100%	93/93	100%	Yes	N/A	N/A	N/A
Education	1. Were changes in knowledge demonstrated or verified (i.e. quizzes?)[3]	Analysis	Average Score Before/ After	Knowledge Change (2)	%Change	46% aware in pre-test, 84% aware in post test	37%	N/A	Yes	N/A	Yes
	2. How much nutrient load reduction occurred as a result of the "Lawn Care Education" Program?	WTM	Tons	Load Reduction (4)	N/A	N=5.2, P=0.11	N/A				
	3. How much bacteria load reduction occurred as a result of the "Pet Waste Education" Program?	WTM	billion/year	Load Reduction (4)	N/A	45,946	N/A				

[1]During the Dry Season of 2011 inspections performed met and exceeded Permit requirements and were conducted in FY 2011-12. For Dry Season 2011, a targeted outcome of 40% for High Priority and 20% for Medium Priority was used since only two months of the Dry Season was included in FY 2011-12.

[2]See Section 11.2.4 and 11.2.7 for trends over time and explanations of these results.

[3]Quiz results based on acquisition of knowledge or not, as opposed to based on a raw score.

11.2 Component Assessment

11.2.1 Development Planning

During FY 2011-12, the City has experienced measurable changes in outcome levels 1, 2, and 3 regarding compliance with the Development Planning Component.

Level 1: Compliance with Activity Based Permit Requirements

Outcome Level 1 improvements included the updating of procedures for acquisition and management of the City's private treatment control BMP inventory and annual inspection and verification program.

Level 2: Changes in Knowledge/Awareness

The Outcome Level 2 improvements included the ongoing raising of awareness of existing and new storm water compliance requirements among City development review staff, developers and the City's Planning Commission. Through a combination of training during weekly staff meetings, webinars and outside training courses, City staff significantly increased their knowledge and understanding of the updated SUSMP requirements, LID designs, hydromodification principles and City storm water compliance processes. Developers continue to show increases in knowledge of the updated SUSMP requirements, LID designs, and City storm water compliance requirements through revised plan review checklists, City plan review comments, the City's Storm Water Standards Manual and outside training courses.

Level 3: Behavioral Change/BMP Implementation

Outcome Level 3 improvements were seen in the development community. An increased number of development project submittals included acceptable LID, source control and treatment control measures with the initial submittal resulting in fewer project re-designs. The LID designs submitted by developers are showing increased sophistication, effectiveness and cover more significant portions of the project design.

11.2.2 Construction

During FY 2011-12, the City has experienced measurable changes in outcome levels 1 and 3 regarding compliance with the Construction Component.

Level 1: Compliance with Activity Based Permit Requirements

Overall, the Construction, Management, and Inspections Division (CMI) was successful at maintaining full compliance with the permit requirements during FY 2011-12. Table 11.2 contains examples of permit requirements and confirmation that these requirements were met.

Table 11.2 Examples of Construction Related Permit Requirements and Compliance

Permit Requirements	Requirement	Performed
Ordinance updates to comply with order	As necessary	Yes
Designate a set of minimum BMPs	In JURMP	Yes
Require implementation of designated minimum BMPs	All sites	Yes
Maintain and update a watershed based inventory	Monthly	Yes
Require advanced treatment	Sites determined to be an exceptional threat to water quality	Yes, none identified.
Inspections of sites meeting criteria in D.2.d.(1)	Every 2 weeks during wet season	Yes
Implement follow-up actions	As needed based on inspection results	Yes
Inspect according to requirements in Section D.2.d.(6)	Each inspection	Yes
Track number of inspections for the inventoried sites	Continuous	Yes
Develop escalating enforcement process	JURMP	Yes
Implement escalating enforcement process	As needed based on inspections	Yes
Report non-compliant sites to Regional Board	Stop work order or higher level of enforcement	Yes

Level 3: Behavioral Change/BMP Implementation

Changes in behavior and implementation of BMPs on construction sites are evident throughout the City. In general, contractors are more aware of the BMP requirements and are more willing to cooperate with inspectors, resulting in timely and proper implementation of the required BMPs. If a site was found to have deficiencies in storm water compliance, it was generally corrected at the time of the inspection. If a verbal or written warning was issued, a specific deadline for correction action was noted on the inspection report. Follow up inspections were conducted to ensure construction sites complied with the required corrective actions. Most sites were found to have completed corrective actions and were in compliance at the time of the follow up inspection.

Table 11.3 contains enforcement actions for FY 2011-12.

Table 11.3 Enforcement Actions on Construction Sites

	FY 2011-12		
Enforcement Actions	**Number**	**Total Inspections**	**Percentage**
Verbal Notices	200	1003	19.9%
Written Warning	31		3.1%
Notice of Violation	3		0.3%
Notice to Clean	0		0%
Stop Work Notice	1		0.1%

Staff will continue to develop ideas and implement those deemed appropriate in the future to assist in assessing the changes in knowledge and awareness in the construction community.

11.2.3 Municipal

During FY 2011-12, the City has experienced measurable changes in outcome levels 1 and 3 regarding compliance with the Municipal Component.

Level 1: Compliance with Activity-Based Permit Requirements

This level of effectiveness assessment is based on compliance with Activity Based Permit Requirements. The City was in compliance with all municipal requirements of Order No. R9-2007-0001 during the past fiscal year. Table 11.4 tracks some of the City's Municipal Program activity measures, which are discussed in detail in the previous report sections. Tracking of many of these activities was useful in assessing compliance with the program, but is not yet tied to long-term assessment or improved water quality.

Table 11.4: FY 2011-12 Program Activity Measures

	Permit Requirements	**Requirement**	**Performed**
	Develop Inventory of Areas and Activities	Update with JURMP	Yes
	Develop and Implement Minimum BMPs	Update with JURMP	Yes
Special Events	Require Minimum BMPs	Establish and Require Implementation	Yes
	Inspections	Inspect all Special Event venues following events	Yes
MS4 Maintenance	Catch Basins	Inspect all, clean those exceeding 33% criteria	3407 inspections, cleaned all trash and 331 exceeding 33% criteria
	Pipelines (miles)	As needed	Cleaned 0.2000 linear feet.

	Permit Requirements	Requirement	Performed
	Open Channels (miles)	Inspect all and clean in a timely manner	Inspected and removed trash from 32,000 linear feet
	Desilting Basins	Inspect all, clean as needed	Inspected 3, removed all trash from 3
	Treatment Controls	Inspection and Maintenance	Annually
	High Volumes of Trash	Inspection between May 1 and September 30	Yes
	Tracking of Quantities of Waste Removed	Track Quantities	Yes
Integrated Pest Management	Implement Program	Develop and Implement	Yes
Street Sweeping	High Volume Streets (miles)	2 times/month	4 times/month
	Moderate Volume Streets (miles)	monthly	Twice/month
	Low Volume Streets (miles)	annual	Twice/month
	Parking Lots (acres)	Depends on volume, see above	Twice/month
Infiltration from Sanitary Sewer to MS4	Preventative Maintenance of Sanitary Sewer	Perform	Yes
	Preventative Maintenance of MS4	Perform	Yes
	High Priority Facilities	Inspect all facilities	64 of 64 inspected

Based on the permit requirements presented above in Table 11.5, the municipal program remains in compliance with the requirements of Order No. R9-2007-0001. Several of the measures will continue to be developed, and improved with better tracking mechanisms and improved coordination between departments.

Level 3: Behavioral Change / BMP Implementation

One way to assess the amount of behavioral change and the actual implementation of BMPs for storm water is to look at the results of the municipal inspections. In general, all facilities have improved over the years. There were only a few minor violations at Municipal facilities during the 2012 Annual Inspections, all of which were immediately corrected.

In addition, several departments and facilities have invested in new BMPs and continue to maintain BMPs at their sites which are effective at mitigating potential pollutants at the sites. Examples of these BMPs include:

- All of the City's Fire Stations purchased and use high pressure nozzles to reduce runoff and use vacuum equipment, if necessary, to recover and contain wash water from vehicle washing activities.
- Site specific SWPPPs were maintained for municipal facilities including fire stations, maintenance yards, pump stations, and the Carlsbad Recycled Water Facility.
- A new training video was developed with City staff participating in the filming activities.

Level 4: Load Reductions

As described in Table 11.1, there are several methods of calculating load reductions available from data collected in the municipal program. Refer to Section 11.1 and Table 11.1 for more detail on estimated load reductions resulting from activities performed in the municipal program. Examples of these load reductions include working to eliminate discharges from beach outfalls so that no flow reaches the beach and a street sweeping and catch basin cleaning program which removed approximately 1197 tons of debris.

11.2.4 Industrial and Commercial

During FY 2011-12, the City has experienced measurable changes in outcome levels 1 and 2 regarding compliance with the Industrial and Commercial component.

Level 1: Compliance with Activity Based Permit Requirements

As seen in Table 11.5, inspections completed during FY 2011-12 exceeded the requirements set forth by Order No. R9-2007-0001.

Table 11.5 Inspections of sites/sources FY 2011-12

Order No. R9-2007-0001 (July 1, 2011 to June 30, 2012)				
High Threat to WQ	**Inventory**	**# Inspected**	**Target Percentage**	**Percent Completed**
Ind/Comm Sites/Sources	485	485	100%	100%

Level 2: Changes in Knowledge / Awareness

For Knowledge Assessment, inspectors rank personnel from one to five. Refer to Section 5 of this report for details on the rating scale.

Since the implementation of the rating system, the majority of businesses have ranked at three or better for storm water knowledge and awareness. Figure 11.1 illustrates that on average the majority of the sites inspected had a relatively high knowledge of storm water and ranked greater than or equal to 3.

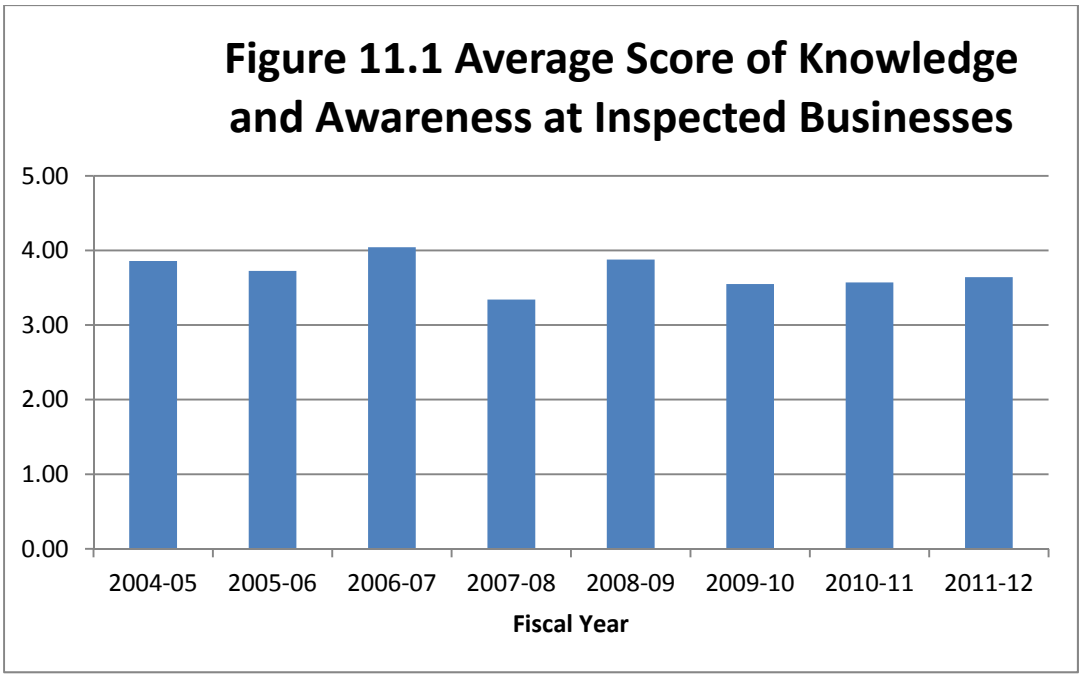

11.2.5 Residential

During FY 2011-12, the City has experienced measurable changes in outcome levels 1, 2, 3 and 4 regarding compliance with the Residential component.

Level 1: Compliance with Activity-Based Requirements

Residential activities outlined in the March 2008 JURMP were completed as described in Section 6 of this report. Activities include various outreach events and activities, used oil and waste collection services, and complaint response followed by enforcement action.

Level 2: Changes in Knowledge/ Awareness

City of Carlsbad Public Opinion Survey

An annual public telephone survey was conducted this year by the City, as part of the *Performance Measurement Program* and "*State-of-Effectiveness Report.*" Carlsbad households were selected using *Random-Digit-Dial* methodology with a minimum sample size of 1,000. This survey had a margin of error of +/- 3% at the 95% confidence level. Storm water pollution was addressed briefly in this survey. The City survey asked, "*Have you seen or heard any information about how residents can prevent the pollution of creeks, lagoons, and the ocean?*" This question was used to gauge the public's perception of ocean water pollution and was asked previously in 2003, 2006 to 2009. The results, with Don't Know or N/A factored out, are presented in Table 11.6 below.

Table 11.6: Results of Environmental Question 1

Answer:	2003 (%)	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	2011 (%)
1. Yes	58.1	64.6	61.1	59.2	75.3	65.2	63.8
2. No	41.9	35.4	38.9	40.8	24.7	33.9	34.5

The percentage of residents that had heard information in the past year about preventing the pollution of local creeks, lagoons, and the ocean decreased from 2009, but was statistically higher than 2008 and 2007 An additional question was asked again this year to assess the most effective educational methods by asking, "*Where do you recall seeing or hearing about ways to prevent pollution?"* The top five responses were TV, newspaper newsletters curb signs and brochures, respectively comprising over 86% of the total responses. Other significantly higher responses included water or utility bills, radio, and website.

Level 3: Behavioral Change/BMP Implementation

The City asked a behavioral question during the survey to those who answered affirmatively to the question, "*Have you seen or heard any information about how residents can prevent the pollution of creeks, lagoons, and the ocean?*" The 65.2% who answered this question affirmatively were asked the follow-up question, "*Given what you have seen or heard, what have you done, if anything, to reduce the amount of pollution in our creeks, lagoons, and oceans?*" Results for this question are presented in Table 11.7.

Table 11.7: Top Responses to follow-up question.

Answer:	Percent
1. Properly disposing of hazardous waste.	22.2
2. Used a commercial carwash	16.3
3. Using environmentally friendly soaps, pesticides, etc.	12.6
4. Cleaned up trash at Beach, Roadside, Etc.	10.9
5. Recycled	14.2
6. No longer dump down storm drain	7.7
7. Reduced water usage/used water more efficiently	6.5
8. Cleaned up animal waste	4.2
9. Did nothing.	20.8
10. Other (ex. don't litter, reduced runoff)	12.9
11. Don't know.	3.9

Continued survey data should help to show if long-term behavior change has occurred. Over eighty percent of residents who answered question one affirmatively, consciously chose an environmentally friendly method over others in certain instances.

Level 4: Load Reduction

The primary goal of BMP implementation is to reduce pollutant loads in storm water discharges. An important emphasis of annual program assessments is to estimate the load reductions resulting from various program activities. Assuming that such reductions are properly targeted to existing or potential water quality problems, load reductions should in turn result in improvements to discharge and receiving water quality. Quantifying load reductions represents an important intermediate endpoint for assessments. The Regional Board wrote the following in October 2004:

Program effectiveness can be assessed by quantifying the pollutant load reductions attributable to various program activities. An effective program will compare pollutant load reductions of various program activities and implement those activities which result in the largest pollutant load reductions. It is expected that by implementing program activities which maximize pollutant load reductions, Copermittees will be implementing effective programs which will improve receiving water quality.

The City used the Watershed Treatment Model (WTM) as a tool for rapid assessment of effectiveness of the storm water programs. The WTM (version 3.1) was prepared by Deb Caraco of the Center for Watershed Protection for the U.S. EPA Region V - Office of Wetlands, Oceans and Watersheds. The 2008 WURMP identified bacteria, sediment, and nutrients as water quality problems. The WTM estimates the pollutant loading reductions for sediment, bacteria and nutrients for various program activities, such as residential education, erosion and sediment control programs, and street sweeping, among others. The results of some of these storm water management programs are discussed below. Complete explanations and assumptions are found in the WTM book. Land Use amounts are from 2009 and provided by SANDAG and the City GIS department.

Public Education

A variety of public education programs may help to reduce the concentration of nutrients, sediment and bacteria in urban streams. The model currently focuses only on a few of these, including programs to address lawn care, septic system maintenance, and pet waste. Several other residential pollution prevention programs improve water quality, but have little effect on nutrients, suspended solids, and bacteria. For example, HHW programs are effective at reducing toxics but do not have a quantifiable impact on pollutants such as suspended solids, nutrients, or bacteria.

Lawn Care: The ideal pollutant removal associated with lawn care would be achieved if all of the additional fertilizer applied to turf were eliminated. The model uses equations to estimate optimal nutrient load reduction from a lawn care program combined with a calculation of the residential lawn area. The model calculates the residential lawn area based on the City's input of residential acres taken from GIS. The user inputs the information on how the education campaign was conducted. Default values were given for the fraction of the audience willing to change behavior based on nationwide data. The City conducted lawn care education through brochure distribution, workshops and newspaper ads.

The model allows the user to input the media type, which determines the portion of the population that *remembers* the message ("Awareness of Message"). This number is largest with television (0.4), followed by newspaper (0.3), radio (0.25), billboard (0.13), brochures (0.08) and workshops (0.07). Because residents have been exposed to five of these mechanisms in FY 2010-11, the input value entered was an average for brochures, workshops and newspaper, radio, and television (0.22). This results in an annual nutrient load reduction of 10,480 pounds of nitrogen and 210 pounds of phosphorus (Table 11.8).

Table 11.8: Loading Reduction from Existing Lawn Care Education

	N (lbs/year)	P (lbs/year)
Lawn Care Education	10,480	210

Pet Waste: The Storm Water Protection Program also conducted a *Pet Waste Education Program* during FY 2011-12. In the urban watershed, dogs are a significant contributor of bacteria and nutrients. Ideally, a *Pet Waste Education Program* would reduce this source to zero, with all homeowners properly

disposing of waste. The model provides estimated values for the fraction of households with a dog, the fraction of owners who walk their dog, the fraction of owners who cleanup after their dog, and the fraction willing to change their behavior. As with the lawn care education, the portion of the population that remembers the message is based on the media used for the education. This past year, the City delivered this message through brochures and the newspaper. Residents were also exposed to regional education efforts on television and radio. In addition, the City distributed free pet waste bag dispensers at local events and provided animal care facilities with these dispensers. These activities were considered similar to a workshop, so an averaged value of 0.22 was used for this calculation. This results in an annual pollutant loading removal of 5,284 pounds of nitrogen, 689 pounds of phosphorus, and 45,946 billion bacteria per year (Table 11.9).

Table 11.9: Loading Reduction from Existing Pet Waste Education Program

	N (lbs/year)	P (lbs/year)	Bacteria (billion/year)
Pet Waste Education	5,284	689	45,946

The overall assessments of these education programs show that the media significantly affected the associated pollutant removal due to the increased audience that *remembers* the message. For instance, if the City had the financial resources to use mass media (television and radio), the estimated pollutant reduction would be increased significantly. The City's annual phone survey confirms that most people recall hearing these messages through mass media. However, mass media is <u>significantly</u> more expensive than brochures and workshops. Large campaigns for mass media may be best conducted on a regional basis with Copermittees sharing the expense or pursuing grant funds for these expensive activities. Due to an increase in mass media educational tools used at the Regional level this year, it is expected that many of the residents in Carlsbad were exposed to these campaigns, accounting for the increase in load reductions associated with lawn care and pet waste.

11.2.6 Illicit Discharge Detection and Elimination

Effectiveness assessment for the IDDE Program will be submitted with Section 7 of this year's Annual Report to be submitted to the Regional Board by December 15, 2012.

11.2.7 Outreach and Education

During FY 2011-12, the City has experienced measurable changes in outcome levels 1, 2 and 3 regarding compliance with the Outreach and Education component.

Level 1: Compliance with Activity Based Permit Requirements

Table 11.10 below illustrates examples of the permit requirements in the outreach and education section and what activities the City implemented to comply with each.

Table 11.10 Outreach and Education Permit Requirements

Municipal Training	Compliance Activity
• Development Planning	Staff training specific to development planning activities referenced in Appendix 8.1
• Construction	Various staff training events specific to construction activities referenced in Appendix 8.1
• Inspection Staff (industrial/commercial)	Various training events specific to inspections of businesses referenced in Appendix 8.1
• Other Activities	Various activity specific training events for water, wastewater, and parks departments
New Development and Construction	Various outreach activities as described in Section 8.
Residential	
General Public	
School Children	

Level 2: Changes in Knowledge/Awareness

Measurably increase the knowledge/awareness of target communities:

- Municipal Departments and Personnel

  During FY 2011-12, a detailed municipal training program continued to be implemented to ensure compliance with Order No. R9-2007-0001. This training program assessed each position within the City to determine the applicable (i.e. required) training and groups the positions into separate modules to make training easier for the various departments. Staff will continue to determine ways to assess the changes in knowledge and awareness of municipal personnel throughout the permit cycle.

  In June 2007, the City implemented a new internal waste reduction strategy as a pilot program. This included the purchase and distribution of larger single stream recycling containers and a small trash can for employee work stations. There were also several new larger recycling containers placed in public meeting areas throughout the City. Seen as an effective program, the City implemented new waste reduction programs, promoted double siding copies and print jobs, and distributed reusable beverage containers at all City facilities. Rollout of these new programs included the development of posters, fact sheets and a presentation to educate and inform employees about the importance and benefits of recycling, reducing and reusing.

- Construction Site Owners and Developers

  The City conducts outreach activities specific to construction site owners and developers as described in Section 8.3. The activities occur throughout the development process.

- Industrial and Commercial Owners and Operators

  The City uses a program to assess changes in knowledge at industrial and commercial facilities based on a numeric ranking from one to five, with one representing a lack of

knowledge and five representing adequate knowledge of storm water BMPs and requirements as applicable to their facility. The results are compiled each year and reported in the industrial/commercial section of the Annual Reports. Results are also presented in Figure 11.2 of this section. Over time, these site assessments can be compiled and compared.

- Residential Community, General Public, and School Children

There are various outreach efforts in place to increase storm water knowledge and awareness for residents, the general public, and for school children. Changes in the knowledge and awareness of the residents and general public are assessed and tracked via an annual telephone survey of the citizens of Carlsbad. The survey includes several questions used to assess these changes in awareness. Survey results, tracked over the past three surveys are described above in Section 11.6.

Level 3: Changes in Behavior/BMP Implementation

Measurably change the behavior of target communities:

- Municipal Departments and Personnel

Behavior changes are evident throughout municipal departments and personnel and can be attributed to targeted outreach and training for municipal staff. Awareness of Storm Water issues is evidenced by calls from City staff to the storm water hotline. All levels of staff are continually seeking advice from the Storm Water Program on how to implement BMPs allowing them to continue to perform their necessary activities. There have also been programmatic changes in the Development Services Division, ensuring that required BMPs and submittals are provided on all projects, and are tracked and approved. In FY 2011-12, there were only minor violations noted during Municipal Inspections, of which all were corrected immediately.

- Construction Site Owners and Developers

Changes in behavior on construction sites and by developers are also evident throughout the development community. These changes are manifested throughout the development process, from submitting appropriate BMPs on plans and better Storm Water Management Plans, to installation and maintenance of proper BMPs during construction, to the development, installation, and maintenance of BMPs on projects after construction is complete.

- Industrial/Commercial Owners and Operators

Industrial and commercial owners and operators are continually educated on storm water issues during inspections, mailers, and interactions during outreach events. Behavioral changes at industrial and commercial sites are most evident through assessment of proper BMP implementation during inspections and site visits. Using the rating system of one through five, with one being no implementation of BMPs and five being effective implementation of all BMPs, businesses have on average scored close to

four, as shown in Figure 11.2. These results indicate that business owners and operators have altered and maintained behavior consistent with storm water rules and regulations. This method of assessment will continue to be used to measure behavior changes among industrial and commercial sites.

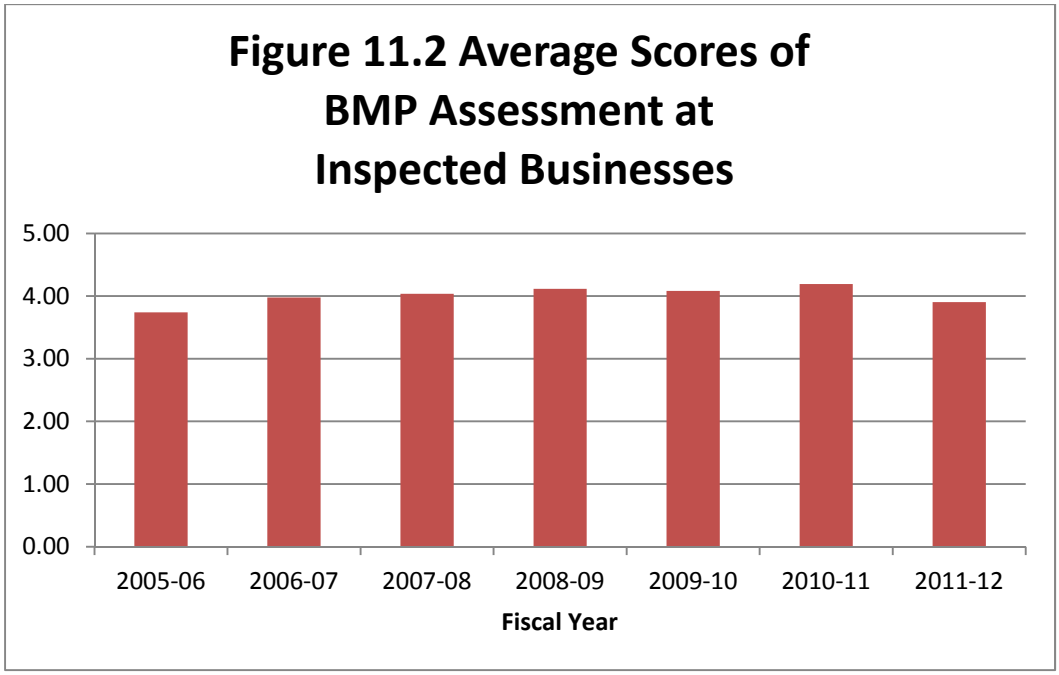

- Residential Community, General Public, and School Children

Outreach to the residential community, general public, and school children continues to be effective in conveying storm water information. At this time, it is difficult to measure the changes in BMP implementation in these target audiences. Several methods have been discussed previously and will continue to be utilized. One of the best feedback mechanisms that the City has in place is its annual citizen survey. Answers to the question, "What things are you doing to reduce water pollution?" helps the Storm Water Program track BMP implementation over time and changes in the community, as discussed previously in the report.

The Storm Water Protection Program collaborated locally and regionally to ensure outreach efforts and messages for storm water pollution prevention were consistent. The messages were delivered by various means including presentations, workshops, inspections, investigations, and outreach events, in addition to use of direct mail, the website and newspaper advertisements.

The City conducted the annual (telephone) Public Opinion Survey in FY 2011-12, which included questions on storm water pollution prevention. The results from this survey provide important information on the public's awareness and knowledge of storm water pollution prevention issues and activities. This information can help focus future

education and outreach messages and events, and is also used on a *Performance Measure* to gauge the effectiveness of the outreach and education program.

The Storm Water Protection Program and Environmental Programs staff worked with the Communications Department and the Information Technology Department to continually revise the web pages and provide updated information about pollution prevention, including a tip of the month section.

Staff collaborated regionally with the Storm Water Regional Education and Residential Sources Workgroup, consisting of 21 Copermittees, throughout the year. During FY 2008-09, the workgroup developed a Regional Residential Education Plan that was implemented in FY 2009-10 and continued in FY 2011-12.

In addition to the development and completion of the documents, the workgroup also continued to focus on the development of a regional brand, a regional website, mass media and public relations, materials development and distribution, underserved target audience, market research and assessment tools, partnership development and regional events during FY 2011-12. Staff will continue to participate in these areas with accomplishments reported in the annual reports.

11.3 Integrated Assessment

11.3.1 Changes in MS4 Discharge Water Quality

Dry Weather Field Screening and Analytical Monitoring Program

The City has conducted an annual *Dry Weather Field Screening and Analytical Monitoring Program* since 1995. The purpose of the monitoring program is to detect and eliminate illicit connections and illegal discharges to the storm drain system.

Historically, the results for field analyses indicate a decreasing trend in ammonia-nitrogen concentrations. No discernible trend is apparent for other field constituents. Bacteria levels have varied over the years, with a slight upward trend in Enterococcus counts. Diazinon and chlorpyrifos have only been detected once and oil and grease exceedances have been infrequent.

Over the course of the Dry Weather Monitoring Program, repeated testing at the same sampling sites can allow for a historical comparison of certain water quality parameters. While any trends or historical analysis of this data can be useful for current and future evaluations of potential pollutant sources to the MS4, this is not the stated purpose of the Dry Weather Monitoring Program. This program is designed to detect and eliminate illicit connections and/or acute discharges through sampling. Following a confirmed exceedance, an investigation is performed within two business days to determine and abate, if possible, the source of the exceedance.

The Dry Weather Monitoring Program report for FY 2011-12 and follow-up activities will be provided under separate cover, due to the Regional Board by December 15, 2012.

Coastal Outfall Monitoring Program

The City continued to collect samples from various storm drain outfalls as part of the *Coastal Outfall Monitoring Program*. As stated in the *Adaptive Monitoring Plan*, if water was flowing from a storm drain

outfall, samples were collected and analyzed for total coliform, fecal coliform and enterococci and sample results were compared to the 95th percentile criteria. Where storm drain flow reaches the receiving water, protocol states to collect a paired receiving water sample to assess the impacts of the storm drains on the receiving waters. The receiving water samples would then be compared to Rec-1 standards to determine exceedances. Where storm drain bacteria concentrations exceeded 95th percentile criteria or receiving water samples exceeded Rec-1 objectives, follow-up sampling and/or investigations would be performed.

Recent years indicate a decrease in storm drain exceedances for all three bacterial indicators, showing possible improvements in storm drain water quality. In all cases, the flow from outfalls was intermittent, low volume and did not actually reach the receiving waters but dissipated into the sand or sediment. The City will continue to conduct the Coastal Outfall Monitoring Program and to conduct follow-up investigations as detailed in the Adaptive Plan.

During FY 2011-12, there were no storm drain flows that reached the ocean. The City has been successful at decreasing illegal discharges in areas where outfalls discharge directly to the beach during dry weather.

11.3.2 Level 6: Changes in Receiving Water Quality

It is important to note that receiving water quality reflects considerably more than the quality of the City's MS4 discharges. In addition, receiving water quality can be adversely impacted by other events that are not under the control of the City, such as other permitted NPDES discharges, wildlife (impacting bacteria levels), atmospheric deposition, and other events and activities.

<u>Coastal Outfall Monitoring Program – Receiving Waters</u>

During FY 2011-12, there were no samples collected in the receiving waters as part of the Coastal Outfall Monitoring Program, since no storm drain outfall discharges reached the receiving water.

11.3.3 Overall Assessment

Program implementation in areas of construction, residential, MS4 maintenance, and street sweeping are properly targeted for protection of and improvement of water quality, as evidenced by direct load reductions in these programs.

Other program implementation in areas of industrial and commercial inspections, municipal, residential, construction, and outreach and education appear to be properly targeted for the protection of and improvement of water quality, as evidenced by changes in knowledge and awareness and in behavior.

In addition, the City has had a steady revenue source to fund the Storm Water Protection Program over the past year. City Staff will continue to monitor revenue and expenditures to determine if adjustments are needed in future years.

In FY 2009-10, the City implemented the development processing fees for the plan review and inspection of Construction Storm Water Pollution Prevention Plans and post-construction Storm Water Management Plans.

Section 12

12.0 SPECIAL INVESTIGATIONS

12.1 Introduction

There were no special investigations conducted by the City of Carlsbad in FY 2011-12.

Section 13

13.0 NON-EMERGENCY FIRE-FIGHTING

13.1 Introduction

The Carlsbad Fire Department (CFD) has developed the Non-Emergency Fire Fighting Program to meet the requirements of Order No. R9-2007-0001, as written in the City's 2008 JURMP. This section describes the City's program to reduce pollutants from non-emergency fire-fighting flows (i.e., flows from controlled or practice blazes and maintenance activities) conducted in FY 2011-12 from July 1, 2011 to June 30, 2012.

13.2 Overall Program Definition

The CFD is a dedicated team of professionals whose mission is to enhance the quality of life in our community by delivering exceptional services in safeguarding lives, property and the environment. By default, the definition of non-emergency fire-fighting flows, are flows generated by the Fire Department other than in emergency situations. The duration of an emergency exists from alarm notification until, in the opinion of the Incident Commander, the emergency has concluded and equipment is returned to service. Outside of this duration of time, Fire Department flows are considered non-emergency.

13.3 BMP Implementation

In order to reduce pollutant discharges from non-emergency fire-fighting flows, the City of Carlsbad's Fire Department has implemented several BMPs. During this reporting period, the CFD maintained a Storm Water Manual specific to each fire station to serve as a central location for all storm water documents, training, and BMP descriptions, as well as departmental policies related to storm water. The BMPs incorporated at Fire Stations are listed below:

Pollution Prevention

- Storm Water Manuals were developed for each station which include SWPPPs with site maps, inspection reports, facility specific spill response procedures, training records, and department policies. Training on storm water and spill response was provided regularly.
- Dry cleanup methods were used to reduce water use. The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations. Awareness was heightened at fire scenes to minimize the potential for excessive water flow.
- Materials were recycled where possible.
- Spill Prevention, Control, and Cleanup: Spill response equipment and materials are clearly identified and staged in accessible locations at each station. Awareness was heightened at incident scenes to contain potential discharges (once the scene had been stabilized) to prevent pollutants from entering the MS4. The Department continued implementation of the City's spill response procedure for incidents that occur on City streets. Absorbent materials are kept on all engines and at all the stations. The spill response plan is to apply absorbent, sweep material, place in bags, and remove from site for proper disposal.
- Vehicle and Equipment Cleaning: The department continued to implement a department policy limiting outside water use as applicable to vehicle, hose, and equipment washing. Vacuum equipment is used to recover and contain all wash water from washing activities occurring at Fire

Stations 1-5. Fire Station 6 is equipped with a strip drain in the driveway which allows Fire Department employees to wash Fire vehicles onsite, with any excess wash water diverted to sewer. All Fire Stations currently have a pressure washer for vehicle and equipment cleaning to minimize the amount of water being used.

- Waste Handling and Disposal: Waste containers were inspected regularly for leaks and to ensure that lids remained closed. Waste container areas were inspected and swept as necessary to keep area free of trash and litter. Recycling was implemented where possible; bins were provided.
- Parking/Storage Area Maintenance: Sweeping and removal of organic material from parking lots and walkways were completed on a weekly or as needed basis at all fire stations.
- Housekeeping Practices: Fire stations were kept clean and orderly. Wash water was disposed of properly. Sweeping material was disposed of properly.
- Landscape Maintenance: Irrigation systems were checked regularly to avoid run-off; timing improvements on irrigation system have reduced water usage; blowing and sweeping are used wherever possible; pesticides, herbicides, and fertilizers are stored inside and used sparingly in accordance with required application practices.

13.4 Training and Education

The CFD continued to communicate with other City departments to improve coordination and education with regards to storm water. The CFD's Storm Water Committee met quarterly to address new and ongoing storm water topics and how they relate to the responsibilities of the Fire Department, and included personnel from each Fire Department rank. Other activities CFD participated in are as follows:

- A representative from the Fire Department attended and participated in the City's Storm Water Committee meetings as available.
- The CFD worked closely with the Storm Water Protection Program to conduct a series of meetings to review BMP implementation and perform one-on-one training;
- The City's Reclaimed Water Facility continued to be utilized for fire engineer training and testing. A training trailer facilitated engineer operations, pump testing, and other wet training opportunities. The Facility allowed for wet training and testing opportunities while ensuring that no water is discharged to the MS4;
- The CFD conducted training and testing at other fire agencies and training facilities which recycle the water that it is being discharged (i.e. Rancho Santa Fe and San Marcos Fire Departments). Suitable locations were selected to provide "wet" training opportunities for personnel, while ensuring that appropriate BMPs were in place to protect the storm drains and eliminate discharges to the MS4. These sites were generally located on pervious surfaces with no potential for discharge to the storm drain system;
- The CFD explored CIP opportunities for potential funding for permanent structural BMPs at the fire stations to serve wash areas;
- The CFD worked extensively with the design and construction committee for new fire stations to ensure that storm water requirements were 1) addressed early in the process and 2) met during and after construction.
- The CFD continued current annual training levels to ensure that all CFD personnel were versed in storm water as it relates to fire stations and fire-fighting activities.

13.5 Fire Prevention Program

Fire Prevention is itself, a Best Management Practice (BMP). During this reporting period, fire prevention activities included those activities not directly associated with emergency scene operations, post fire scene or mop-up operations.

Perhaps the most effective way to eliminate water runoff from fires is to eliminate or reduce the magnitude of fires. The CFD has shown that an aggressive Fire Prevention Program has a significant impact on the number and magnitude of fires. Procedures or actions that lead to early fire detection/notification, automatic suppression, confinement, or enhanced suppression capabilities can reduce or control fires and ultimately reduce water runoff. The installation and maintenance of these procedures, devices, or features can significantly reduce potential flows in the event of an emergency.

An example of this type of prevention was weed abatement which included the encouragement of mowing. When mowing was not practical for perimeter breaks, and after considering topography, roughing the slope in a manner that would not increase soil or sediment releases was utilized, such as disking.

The City of Carlsbad continued its Fire Prevention Program during this reporting period.

Section 14

14.0 JURMP REVISIONS

The City's 2008 JURMP was developed in response to the issuance of Order No. R9-2007-0001. The City began implementing the 2008 JURMP on March 24, 2008 as required under the new permit.

There were a few minor changes to the City's 2008 JURMP during FY 2011-12 and they are discussed below.

In Section 2 of this Annual Report, the Treatment Control BMP inventory was updated in accordance with the Permit.

In Section 3 of this JURMP Annual Report, changes were made to the construction site inspection inventory..

In Section 4 of this Annual Report, the municipal inventory and Special Events inventory were updated.

In Section 5 of this Annual Report, the Industrial/Commercial inventory was updated in accordance with the Permit and the City's procedures.

Section 15

15.0 CONCLUSIONS AND RECOMMENDATIONS

15.1 Overview

From July 1, 2011 to June 30, 2012, the City continued to implement Permit Order No. R9-2007-0001. This section of the JURMP Annual Report describes activities that the City undertook to reduce discharges of pollutants and urban runoff flow to the MS4 to the maximum extent practicable. It also provides an overall account of the activities conducted and the programs implemented to address the new Permit requirements for major components: Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education.

Several highlights are listed below, including specific discussion of activities conducted per Permit requirements, as well as those that exceeded requirements and are considered notable activities. Note that these are highlights only and do not represent all activities conducted by the City to maintain compliance. Comprehensive details are reported in the applicable preceding sections.

15.2 Highlighted Activities Performed to Meet Permit Requirements

The City continued activities that were consistent with Permit Order No. R9-2007-0001. For comprehensive details, please refer to the applicable preceding sections of the report. Highlights for July 1, 2011 to June 30, 2012 are listed below.

The City:

- continued updating and revising the Treatment Control BMP (TCBMP) database of private and public TCBMPs.
- continued to distribute a copy of the Pollution Prevention Guide to the Construction Industry with each construction related permit application.
- inspected all high priority construction sites at required frequencies, conducted outreach to project proponents and City staff, and issued 312 enforcement actions to obtain compliance during 1,156 inspections.
- continued to review inventory management, prioritization practices, inspection and enforcement procedures, training programs, record-keeping, and reporting procedures related to construction activities.
- updated and mapped the municipal inventory and inspected high priority municipal facilities.
- conducted cleaning and maintenance activities to reduce pollutant discharges from the MS4.
- inspected 100% of catch basins.
- continued evaluating and inspecting Special Events.
- updated and revised the Special Events inventory.
- updated and mapped the High Threat to Water Quality Industrial/Commercial inventory, and conducted 485 inspections, or 100% of the total inventory. The City issued 120 enforcement actions to obtain compliance from July 1, 2011 to June 30, 2012.
- continued using the *Knowledge and BMP Assessment*s at commercial and industrial facilities.
- continued distributing the brochure for mobile service providers, including carpet cleaners, plumbers, pressure washers, mechanics, porta-potty services, and any other mobile businesses that provide services at various off-site locations. This brochure was designed for mobile service providers, their employees, and anyone that hires a mobile service provider.

- distributed educational information for residential activities, continued an advertising campaign, hosted or participated in community outreach events, and collaborated in offering five oil recycling and two HHW drop-off sites for residential use.
- collaborated with other internal departments to assist with investigations and remediation during field incidents. The Storm Drain Maintenance Division was key to prompt, effective responses to complaints involving clean ups of incidents on public streets. Regular meetings and discussions about compliance issues and consistent contact facilitates this inter-departmental coordination.
- conducted a proactive program to detect and eliminate illegal discharges to the MS4. The public continued to use the storm water hotline and e-mail address to report illegal discharges to the storm drain system. The Storm Water Protection Program responded to 93 reports of illegal discharges to the storm drain system and issued enforcement actions.
- continued implementation of the *Dry Weather Field Screening and Analytical Program*, analyzing conditions and samples from up to 60 sites in the MS4.
- continued implementation of the *Coastal Outfall Program* by routinely monitoring 8 "active" outfall sites on a regular basis, and "inactive" sites semi-annually.
- continued involvement in outreach and education at the local level, the watershed level, and the regional level with the Project Clean Water Outreach Workgroup, and the Think Blue campaign.
- continued distributing storm water educational brochures.
- distributed information through direct mail, during inspections and investigations, on the website, at workshops, during presentations, training seminars, and other public outreach events.
- conducted a Public Opinion Survey of 1,000 residents and included questions on storm water.
- distributed promotional items such as coloring books, pens, and Bags on Board with pollution prevention messages.

15.3 Notable Activities in Addition to Permit Requirements

The City implemented several initiatives in addition to the requirements of the Permit Order No. R9-2007-0001 which are considered Notable Activities. Some of these are internal program goals and should not be viewed as enforceable under the Permit, and will be continued and enhanced as resources allow. For comprehensive details on all City activities, please refer to the applicable preceding sections of this report. Notable Activities for FY 2011-12 are as follows:

The City:

- sent CMI and Land Development Engineering staff to the annual StormCon conference in Anaheim, Ca In August of 2011,. The conference featured over 80 sessions and presentations covering a variety of topics including Low Impact Development, Storm water Pollution Modeling, the new Construction General Permit, BMP Effectiveness Assessment, Regulations and Policies, Storm water Treatment, and other related topics.

- sent staff to a full-day workshop, hosted by the floodplain management association, regarding hydromodification screening tools. This included training on methodologies, criteria and channel screening procedures by SCCWRP. This training and supplemental knowledge assists staff on the review of potential channel assessments when they are submitted by applicants.

- sent staff to a full-day workshop regarding the San Diego Hydrology Model (SDHM) which is a software program discussed in the final HMP. The SDHM uses historical rainfall records and continuous simulation modeling to size different types of IMP/LID facilities that satisfy hydromodification (flow-control) requirements.

- continued to have internal meetings to discuss treatment control BMP compliance program improvements such as inspections, maintenance agreements, verification of maintenance requirements, improved departmental coordination, transfer of information during the approval process, and other issues related to treatment control BMP compliance.

- exceeded the required number of inspections for active construction sites. CMI conducted 1,003 inspections, which exceeds the 966 inspections required for the wet and dry seasons.

- had no signs of over-irrigation noted during inspections at Municipal Facilities.

- increased interdepartmental coordination on outreach and education activities with events like the Family Open Studios event.

15.4 Recommendations for Improvements

As the City continued to implement the 2008 JURMP in this reporting period, some areas for improvement were noted for the future:

The City will:

- continue to research, observe, and evaluate the performance of various types of BMPs.
- continue to evaluate and update internal procedures for Industrial/Commercial inventory prioritization and management and revise as appropriate.
- continue to develop effectiveness assessment mechanisms for each significant activity, for each major component, as well as an integrated assessment of the overall program.
- continue to work at the watershed level and help focus activities on high priority pollutants.

15.5 Water Quality Improvements or Degradation

The complete 2012 Dry Weather report and the full IDDE Section of the Annual Report will be submitted in December of 2012. Please refer to the *Carlsbad Watershed 2011 WURMP* for data trends supporting the focus on *High Priority Pollutants* on a watershed basis. The following text highlights some of the observations on water quality.

MS4 Water Quality

The MS4 program continued in this fiscal year. This program was implemented to characterize pollutant discharges from MS4 outfalls. Data was collected this year as required and will be submitted with the Regional Monitoring Report.

Exceedances of bacteria 95th percentile criteria in the *Coastal Storm Drain Monitoring Program* have stabilized or declined in recent years. During FY 2011-12, there were no storm drain flows that reached the ocean. The City has been successful at decreasing illegal discharges in areas where outfalls discharge directly to the beach during dry weather.

Receiving Water Quality

In FY 2011-12, programs assessing receiving water quality included the Coastal Storm Drain Monitoring Program and mass loading station monitoring under the Regional program.

No receiving water samples were collected as part of the Coastal Monitoring Program because in most cases, the outfalls were dry and had no discharge. If flow was observed, it was intermittent, low volume and did not actually reach the receiving waters but dissipated into the sand or sediment.

Data related to the Mass Loading Station will be submitted with the Copermittees' Regional Monitoring Annual Report in January 2013.

15.6 Conclusion

The Storm Water Protection Program continues to evolve over time in response to the iterative process of implementing BMPs, assessing effectiveness, and evaluating results. As more procedures, programs and activities are implemented, there is a clear need for better databases to track and report activities and BMPs being implemented. Tying these activities to changes in water quality still presents a considerable challenge. This is part of the long-term assessment strategy that will take time to develop trends and to determine cause and affect relationships between pollution prevention and water quality management. The City will continue to work individually and with the Copermittees to further develop existing compliance programs and create new opportunities for improvement.

This section of the Annual Report demonstrated the City's compliance with Permit Order No R9-2007-0001 and continued implementation of the 2008 JURMP. Other sections of this report show that knowledge has increased in target communities, BMP implementation and behavior changes are consistent or improving, pollutant loadings are being reduced from storm water management programs, the MS4 water quality is improving, and pollutant loads to receiving waters are being reduced. These are encouraging signs worth noting. The City recognizes that measurable changes occur over time and that continued program improvements and effectiveness measures are needed for long-term success.

Appendix 1

Acronyms

BGPD	Billion gallons/day
BOY	Beginning of Year
BPJ	Best Professional Judgment
BMP	Best Management Practices
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CFD	Carlsbad Fire Department
CHU	Carlsbad Hydrologic Unit
CIP	Capital Improvement Project
CT	Carlsbad Tract
CUP	Conditional Use Permit
CWN	Carlsbad Watershed Network
DS	Dry Season
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
EOY	End of Year
ESA	Environmentally Sensitive Area
FC	Fecal Coliform
GIS	Geographical Information System
GPA	General Plan Amendment
GPM	Gallons Per Minute
HAZMAT	Hazardous Materials
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
IC/ID	Illicit Connections/Illegal Discharges
IDD&E	Illegal Discharge Detection and Elimination
JURMP	Jurisdictional Urban Runoff Management Plan
LCPA	Local Coastal Program Amendment
M&O	Maintenance & Operations
MCUP	Minor Conditional Use Permit
MEP	Maximum Extent Practicable
MP	Master Plan
MS	Minor Subdivision
MSA	Major Service Area
MSP	Monroe Street Pool
MS4	Municipal Separate Storm Sewer System
MSDS	Material Safety Data Sheet
NCSWP	North County Storm Water Program
NOI	Notice of Intent
NONA	Notice of Non-Applicability
NON-RCRA	Not related to the Resource Conservation and Recovery Act
NPDES	National Pollutant Discharge Elimination System
OES	Office of Emergency Services
PCB	Poly Chlorinated Bi-phenyl
PIP	Planned Industrial Permit
POST	Peace Officer Standards Training
PUD	Planned Unit Development
PVC	Poly Vinyl Chloride
RCD	Resource Conservation District of Greater San Diego

Acronyms

RFA	Request for Action
RV	Recreational Vehicle
RW	Receiving Water
RWQCB	Regional Water Quality Control Board Regional Board
SC	Source Control
SDP	Site Development Plan
SDRWQCB	San Diego Regional Water Quality Control Board
SDSU	San Diego State University
SIC	Standard Industrial Classification
SOPP	Sewer Overflow Prevention Plan
SUP	Special Use Permit
SUSMP	Standard Urban Stormwater Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Technical Advisory Committee
TC	Total Coliform or Treatment Control
URMP	Urban Runoff Management Plan
V	Variance
WS	Wet Season
WTM	Watershed Treatment Model
VCP	Vitrified Clay Pipe
ZC	Zone Change

2.0 Development Planning Component

Permit Annual Reporting Requirement Section J.3.a.(3).(a)	Section
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.1, 2.2.3, 2.3, 2.4.1
ii. Confirmation that all development projects were required to undergo the Copermittee s urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.5.1
iii. A listing of the development projects to which SUSMP requirements were applied.	2.5.1
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.5.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.5.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.5.3.2
vii. An updated treatment control BMP inventory.	2.7.2
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.7.2, 2.7.3
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.7.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.3
xi. A listing of any projects which received a SUSMP waiver.	2.5.4.1
xii. A description of implementation of any SUSMP waiver mitigation program.	2.5.4.1
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.6.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.6.2
xv. A listing of priority development projects not required to meet HMP require ments, including a description of why the projects were found to be exempt from the requirements.	2.6.3
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.6.4
xvii. The number of violation and enforcement action (including types) taken for development projects, including information on any necessary follow-up action taken. The discussion should exhibit that compliance has been achieved, or describe action that are being taken to achieve compliance.	2.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.5

3.0 Construction

Permit Annual Reporting Requirement Section J.3.a.(3).(b)	Section
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.2
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
ii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iii. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4
iv. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.4.1
v. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.4.2
vi. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix 3.1
vii. A description of the general results of the inspections.	3.5
viii. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
ix. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.6
x. A description of notable activities conducted to manage urban runoff from construction sites.	3.7

4.0 Municipal

Permit Annual Reporting Requirement Section J.3.a.(3).(c)	Section
i. Any updates to the municipal inventory and prioritization.	4.16.2, App 4.1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4, 4.8.4, 4.9.4, 4.10.4, 4.11.4, 4.12.4, 4.13.4, 4.14.4, 4.15.4,

	4.16.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.4
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding .	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal are as and activities.	4.11.4
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently gene rating the highest volumes of trashand/or debris, as well as the frequency of s weeping conducted for such roads,streets, and highways.	4.3.4
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4
xiii. Identification of the total distance of curb-miles swept.	4.3.4
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, App. 4.1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.4.4

xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.16.4, App 4.7
xviii. A description of the general results of the inspections.	App 4.7
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	App 4.7
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.16.4, App 4.7
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.17

5.0 Industrial and Commercial

Permit Annual Reporting Requirement Section J.3.a.(3).(d)	Section
i. Any updates to the industrial and commercial inventory.	App 5.1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.3, App 5.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.3.2
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.1, Table 5.2
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.2
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.1
vii. Identification of the number of third party inspections conducted.	5.2.4.1
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.1
ix. A description of efforts implemented to address mobile businesses.	5.3
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.2
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.4
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.4

6.0 Residential

Permit Annual Reporting Requirement Section J.3.a.(3).(e)	Section
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2, 6.3

ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3,6.4.2
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.3
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.3
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4.4
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.5
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.1
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.5

7.0 IDDE

Permit Annual Reporting Requirement Section J.3.a.(3).(f)	Section
i. Correction of any inaccuracies in either the MS4 map or Dry Weather Field Screening and Analytical Monitoring Stations Map.	To be submitted in December 2012
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order NO. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	To be submitted in December 2012
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	To be submitted in December 2012
iv. A brief description of any other investigation and follow-up activities for illicit discharges and connections.	To be submitted in December 2012
v. The number and brief description of illicit discharges and connections identified.	To be submitted in December 2012

vi. The number of illicit discharges and connections eliminated	To be submitted in December 2012
vii. Identification and description of all spills to the MS4 and response to the spills.	To be submitted in December 2012
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	To be submitted in December 2012
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	To be submitted in December 2012
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	To be submitted in December 2012
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges	To be submitted in December 2012
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	To be submitted in December 2012
xiii. A description of notable activities conducted to manage illicit discharges and connections.	To be submitted in December 2012

8.0 Education

Permit Annual Reporting Requirement Section J.3.a.(3).(g)	Section
i. A description of education efforts conducted for each target community.	8.2, 8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and allowable behaviors and discharges.	8.3.5
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.1, 8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.5

9.0 Public Participation

Permit Annual Reporting Requirement Section J.3.a.(3).(h)	Section
i. A description of public participation efforts conducted.	9.2 to 9.5

10.0 Fiscal Analysis

Permit Annual Reporting Requirement Section J.3.a.(3).(j)	Section
i. A fiscal analysis of the Copermittee s urban runoff management programs which meets all requirements of section G of this Order.	10.1 to 10.4

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement Section J.3.a.(3).(i)	Section
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.1 to 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement Section J.3.a.(3).(k)	Section
i. A description of any special investigations conducted.	12.1

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement Section J.3.a.(3).(l)	Section
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.1 to 13.5

14.0 JURMP Revisions

Permit Annual Reporting Requirement Section J.3.a.(3).(m)	Section
i. A description of any proposed revisions to the JURMP.	14.0

Appendix 2

City of Carlsbad
Storm Water Priority Project List
for
Development Project Approvals (July 1, 2011 to June 30, 2012)

			Recommending Authority				Approving Authority				
Project ID	Other Actions	Project Name	Date	Entity	Reso No.	Action	Date	Entity*	Reso No.	Action	Stormwater Standard**
CDP 11-04		Corbin Residence					07/06/2011	PC	6780	Approval	S
CT 06-25(A)		The Foothills Alcea Tot Lot Gate	07/20/2011	PC	6791	Recommend Approval	10/25/2011	CC	2011-256	Approval	S
RP 10-46	CDP 10-32	Seaside Village Corner	08/03/2011	PC	6794	Recommend Approval	09/13/2011	RP	2011-215	Approval	S
CUP 10-08	HMP 11-01	La Posada de Guadalupe	08/03/2011	PC	6,796	Recommend Approval	10/25/2011	CC	2011-228	Approval	P
CUP 09-03(A)		North Cavalry Church expansion					09/07/2011	PC	6799	Approval	S
V 11-04		Santacrangelo addition					09/07/2011	PC	6800	Approval	S
SUP 11-01		Bristol Cove Sediment Removal					09/21/2011	PC	6802	Approval	S
SDP 06-12(A)		Tavarua Apartments					09/21/2011	PC	6808	Approval	P
CDP 11-11	CDP 11-11A	Guglielmo Home					10/25/2011	PC	6809, 6879	Approval	S
CUP 03-06x1(A)		Tamarack AT&T Wireless					10/05/2011	PC	6811	Approval	S
SDP 11-03	CDP 10-15/V 11-02	3015 Ocean Street Addition					10/05/2011	PC	6812	Approval	S
CDP 11-15		Barelmann Juniper Residence					10/05/2011	PC	6815	Approval	S
EIR 09-01	GPA 09-02/ZC 09-02/LFMP 15E/CUP 09-02	Dos Colinas	10/19/2011	PC	6825	Recommend Approval	01/10/2012	CC	2011-285	Approval	P
RP 11-14	CDP 11-14	Catch Restaurant					10/25/2011	RP	2011-254	Approval	S
SDP 11-04		La Costa Bluffs Lot 406					12/07/2011	PC	6844	Approval	S
SDP 11-05		La Costa Bluffs Lot 407					12/07/2011	PC	6845	Approval	S
SDP 11-06		La Costa Bluffs Lot 408					12/07/2011	PC	6846	Approval	S
SDP 11-07		La Costa Bluffs Lot 409					12/07/2011	PC	6847	Approval	S
CUP 00-36x1(A)		AT&T La Costa Residence WCF					12/07/2011	PC	6851	Approval	S
CDP 11-18		Palenscar Residence					01/04/2012	PC	6854	Approval	S
GPA 06-03	ZC 06-02/CT 06-04/SUP 06-05	Rancho Milagro	02/15/2012	PC	6860	Recommend Approval	03/27/2012	CC	2012-076	Approval	P
MS 08-01	CDP 08-04/SDP 08-01/PUD 12-01	Blue Condominiums					05/02/2012	CE	letter	Approval	S
CUP 12-01		Carlsbad Crossfit					04/04/2012	PC	6869	Approval	S
RP 11-35	CUP 11-07	SDGE Ops Center	04/04/2012	PC	6870	Approval	05/08/2012	CC	2012-105	Approval	S
CDP 12-02		Magnolia Ave Residence 2					04/18/2012	PC	6872	Approval	S
CDP 12-03		Magnolia Ave Residence 3					04/18/2012	PC	6873	Approval	S
SDP 98-01B	CUP 98-01B/CDP 98-04B	La Costa Glen Skilled Nursing Facility					04/18/2012	PC	6874	Approval	P
CUP 10-10	SUP 10-03	Carlsbad Kingdom Hall					05/02/2012	PC	6880	Approval	P
CDP 11-20	SUP 11-05	Eucalyptus Lane					06/06/2012	PC	6882	Approval	S
SDP 00-06B	CUP 00-06B/CDP 00-09B	Daybreak Community Church					06/06/2012	PC	6884	Approval	P
SDP 12-03		La Costa Oaks North 3.2 Daycare					06/06/2012	PC	6887	Approval	P
CUP 11-06	HMP 11-05	Fairfield Inn					06/06/2012	PC	6888	Approval	S

City of Carlsbad
Storm Water Priority Project List
for
Development Project Approvals (July 1, 2011 to June 30, 2012)

Project ID	Other Actions	Project Name	Date	Entity	Reso No.	Action	Date	Entity*	Reso No.	Action	Stormwater Standard**
CDP 10-14	HDP 10-04/HMP 10-02	Poinsettia Place Borrow Site					07/29/2011	PD	letter	Approval	S
CDP 11-08		Bowman SDU					07/18/2011	PD	letter	Approval	S
CP 00-10A		Ocean Villas B					08/31/2011	PD	letter	Approval	S
MCUP 06-05x1		T Mobile SD 06367 Westbluff					08/25/2011	PD	letter	Approval	S
MCUP 11-03		CA SDG5664 remax bldg					08/08/2011	PD	letter	Approval	S
MS 11-02	PUD 11-01/CDP 11-03	Sohaei Minor Sub					08/19/2011	CE	letter	Approval	S
CDP 07-06		La Costa Glen Stockpile					09/19/2011	PD	letter	Approval	S
MCUP 09-05		Itsuko Yada Farms					10/26/2011	PD	letter	Approval	S
CDP 10-25A		Lee Residence SDU					11/14/2011	PD	letter	Approval	S
MP 03-02A		La Costa Resort & Spa minor amendment					11/01/2011	PD	letter	Approval	S
MS 11-01	PUD 11-06	Harding Street					11/04/2011	CE	letter	Approval	S
AV 11-02		Waters Residence					12/12/2011	PD	letter	Approval	S
CAR 11-02		Matty's Coffee Cart					12/06/2011	PD	letter	Approval	S
MCUP 06-08x1		VZW Palomar Airport Rd					12/29/2011	PD	letter	Approval	S
MCUP 07-14x1		Weseloh Chevrolet					12/01/2011	PD	letter	Approval	S
PIP 11-01	CUP 11-05	Production Facility at Bressi Ranch					12/08/2011	PD	letter	Approval	P
MCUP 10-02A		AT&T SD0039 Grand Pacific Resort					12/29/2011	PD	letter	Approval	S
SP 187B		North County Plaza architectual changes					12/27/2011	PD	letter	Approval	S
MS 04-08A		La Costa Town Square					02/16/2012	CE	letter	Approval	S
MS 11-03	PUD 11-02	Madsen Parcel Map					08/22/2011	CE	letter	Approval	S
MS 12-01	PUD 12-02	Pacific Ridge School Minor Subdivision					03/27/2012	CE	letter	Approval	S
CDP 11-21		Kairath Addition					01/30/2012	PD	letter	Approval	S
MCUP 11-09		SD0483 LTE Poinsettia					01/13/2012	PD	letter	Approval	S
CDP 12-01		Burgos Residence					02/27/2012	PD	letter	Approval	S
SDP 11-02	CDP 11-09	Legoland California Pirate Island					02/06/2012	PD	letter	Approval	P
MCUP 07-02x1		North Batiquitos WCF					03/22/2012	PD	letter	Approval	S
MCUP 12-01		Verizon Palomar Gateway					03/22/2012	PD	letter	Approval	S
MCUP 07-06x1		Dowtown Carlsbad PCS Facility					04/13/2012	PD	letter	Approval	S
DWG 428-9F/G	CT 03-02	Carlsbad Ranch Planning Area 5					02/16/2012	CE	n/a	Approval	P
DWG 462-3A	PD 08-11	Santa Fe Sonata Slope Repair					08/31/2011	CE	n/a	Approval	S
DWG 470-9A	PD 11-01	Takenori Muraoka Residence					08/22/2011	CE	n/a	Approval	S
DWG 451-7/A	CT 05-03	Lincoln & Oak Mixed Use					10/13/2011	CE	n/a	Approval	P

* PC = Planning Commission; CC = City Council; H&RDC = Housing and Redevelopment Commission; CE = City Engineer; PD = Planning Director; CCC = Coastal Commission

** P = Priority Development Project requirements; S = Standard Stormwater requirements

CIP Project Approvals FY 11-12

No.	Project Name	Proj/Cont. No.	Contract Executed	Stormwater Status
1	Buena Vista Lift Station Force Main (VC4)	5508	08/26/2011	S
2	2011 Concrete Replacment Program	6013	08/16/2011	S
3	2011 Street Sealing	6001-11SS	08/15/2011	S
4	CMP Replacement Program (Holly Brae, Highland/James, Mallor	6607	08/16/2011	S
5	Calavera Hills Wastewater Treatment Plant Demolition	5507	10/13/2011	S
6	Lake Calavera Preserve EMP Fencing	SS 09-01(B)	10/12/2011	S
7	Pine Park Madison Properties Phase 1	PWS11-34PKS	08/17/2011	S
8	2011 Pavement Overlay	6001-11OL	11/04/2011	S
9	Beach Access Improvements	3896	10/05/2011	S
10	Carlsbad Village Drive Guardrail Replacement	6041	12/14/2011	S
11	Occidental Sewer Rehabilitation	5522	02/01/2012	S
12	Hemlock Avenue Sewer Replacement	5503-3	11/30/2011	S
13	Foxes Landing Sewer Lift Station Wetwell and MH Rehab	3840-8	01/04/2012	S
14	NW Quadrant Storm Drains - Roosevelt and Madision	6608/6621/6001	03/05/2012	S
15	Water Reservoir Repair/Maintenance Program, (D1 and D2)	5024	03/16/2012	S
16	NW Quadrant Storm Drains - Mountain View Roosevelt, etc.	6608	05/30/2012	S
17	CMP Replacement - Washington, Elmwood, La Costa, etc.	6607	06/18/2012	S
18	2012 Concrete Replacement Program	6013	04/20/2012	S
19	2012 Street Sealing	6001-12SS	05/09/2012	S
20	Traffic Signal - El Fuerte and Loker	6324	05/30/2012	S
21	Alga Norte Park - Phase 1	3837/3925	04/24/2012	P
22	The Crossings - Erosion Control	PWI 12-26PKS		S
22	Rancho Carlsbad PR Station and Meter Replacement.	5020	06/25/2012	S
23	Pine Park - Prefabricated Restroom	4506	05/25/2012	S
24	Sewer Pipeline Rehab (Basswood, Chestnut, Monroe, Sierra Mor	3927/5503	06/28/2012	S
25	Sewer MH Rehab (ECR and Avenida Encinas)	3927/5503	06/28/2012	S
26	Carlsbad Blvd Pedestrian Crossing Islands	6322	05/04/2012	S

PLANNING COMMISSION RESOLUTION NO. 6796

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARLSBAD, CALIFORNIA, RECOMMENDING APPROVAL OF A CONDITIONAL USE PERMIT TO ALLOW FOR THE DEMOLITION OF AN EXISTING 50 BED TEMPORARY AGRICULTURAL FARM WORKER HOUSING FACILITY AND ALLOW FOR THE CONSTRUCTION AND OPERATION OF A NEW 120 BED TEMPORARY AGRICULTURAL FARM WORKER HOUSING FACILITY ON PROPERTY LOCATED AT 2480 IMPALA DRIVE IN LOCAL FACILITIES MANAGEMENT ZONE 5.

CASE NAME: LA POSADA DE GUADALUPE DE CARLSBAD

CASE NO.: CUP 10-08

WHEREAS, **Catholic Charities, a Non-Profit Religious Corporation,** "Developer/Owner," has filed a verified application with the City of Carlsbad regarding property," described as

> **Parcel 2 of Parcel Map No. 15247 in the City of Carlsbad, County of San Diego, State of California, filed in the Office of the County Recorder of San Diego, May 25, 1988 as file number 88-247094**

("the Property"); and

WHEREAS, said verified application constitutes a request for a Conditional Use Permit as shown on Exhibits **"A" – "GG"** dated **August 3, 2011**, on file in the Planning Department, **CUP 10-08 – LA POSADA DE GUADALUPE DE CARLSBAD,** as provided by Chapter 21.42 of the Carlsbad Municipal Code; and

WHEREAS, the Planning Commission did, on **August 3, 2011**, hold a duly noticed public hearing as prescribed by law to consider said request; and

WHEREAS, at said public hearing, upon hearing and considering all testimony and arguments, if any, of all persons desiring to be heard, said Commission considered all factors relating to the CUP; and

WHEREAS, on **August 3, 2011**, the Planning Commission recommended approval of CUP **10-08**, as described and conditioned in Planning Commission Resolution No. **6796**.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Planning Commission of the City of Carlsbad as follows:

A) That the foregoing recitations are true and correct.

B) That based on the evidence presented at the public hearing, the Commission **RECOMMENDS APPROVAL OF CUP 10-08 - LA POSADA DE GUADALUPE DE CARLSBAD**, based on the following findings and subject to the following conditions:

Findings:

1. That the requested use is necessary or desirable for the development of the community, and is in harmony with the various elements and objectives of the general plan, including, if applicable, the certified local coastal program, specific plan or master plan, in that **the proposed use (Agricultural Farm Worker Housing) is allowed within the Industrial (M) Zone with the approval of a CUP, which implements the Planned Industrial (PI) General Plan Land Use designation, and furthermore is necessary and desirable to the community in that the shelter will continue a use which provides temporary housing for homeless seasonal agricultural farm workers.**

2. That the requested use is not detrimental to existing uses or to uses specifically permitted in the zone in which the proposed use is to be located in that **the proposed Agricultural Farm Worker Housing is not detrimental to the existing surrounding non-residential, open space, industrial office and City Facility uses or to uses specifically permitted in the zone in that the use is an existing use for which the occupancy is proposed to be intensified and has had no enforcement issues in the 20 years of operation at this site. Furthermore, to ensure compatibility of the project with the surrounding community, the project as designed will meet or exceed the required development standards of the Industrial (M) Zone and Q Overlay zone.**

3. That the site for the proposed conditional use is adequate in size and shape to accommodate the yards, setbacks, walls, fences, parking, loading facilities, buffer areas, landscaping and other development features prescribed in this code and required by the Planning Director, planning commission or city council, in order to integrate the use with other uses in the neighborhood, in that **the 3.62-acre project site, and more precisely the 1.17 acre existing pad is adequate in size and shape to accommodate the proposed use in that the project can be fit within the proposed development area without the need for any variances. Furthermore, the project complies with all of the required development standards of the Industrial (M) Zone and the Qualified Overlay Zone in that the project meets or exceeds the building setbacks and height**

restrictions; temporary residents of the site are expected to arrive by bus, bicycle, or on foot and a bus stop is nearby and bicycle racks are being provided, therefore the 10 parking spaces can accommodate the employees and visitors; and, the buildings as proposed meet or exceed the slope edge setback.

4. That the street system serving the proposed use is adequate to properly handle all traffic generated by the proposed use, in that **the existing street system, Impala Drive, is adequate to properly handle the limited amount of traffic (265 ADT) that is generated by the project. No levels of service are expected to change on surrounding roadways in that this use is existing and the temporary residents of the site are expected to arrive by bus, bicycle, or on foot and there are bus stops nearby and bicycle racks are being provided, therefore the 10 parking spaces can accommodate the employees and visitors.**

5. The project is consistent with the adopted Airport Land Use Compatibility Plan for the McClellan-Palomar Airport (ALUCP), dated October 2004, in that the project is conditioned to record a notice concerning aircraft noise. The project is compatible with the projected noise levels of the ALUCP; and, based on the noise/land use compatibility matrix of the ALUCP, the proposed land use is compatible with the airport, in that **it is located outside of the 60 dB CNEL noise contour and will therefore not require any interior or exterior noise attenuation and is identified as a compatible land use within Safety Zone 6. Furthermore, because the maximum 25' tall building on the proposed 355' tall pad (380' MSL) will be below the Federal Aviation Administration's 481' MSL Part 77 notification elevation, no FAA notification is required.**

6. That the project is consistent with the City's Landscape Manual (Carlsbad Municipal Code Section 14.28.020 and Landscape Manual Section I B).

7. That the Planning Director has determined that the project belongs to a class of projects that the State Secretary for Resources has found do not have a significant impact on the environment, and it is therefore categorically exempt from the requirement for the preparation of environmental documents pursuant to Section 15332, In-Fill Development Projects, in that, the project is consistent with the General Plan & Zoning Ordinance; the project is within the City limits; is less than five (5) acres in size; and is surrounded by urban uses.

8. The Planning Commission has reviewed each of the exactions imposed on the Developer contained in this resolution, and hereby finds, in this case, that the exactions are imposed to mitigate impacts caused by or reasonably related to the project, and the extent and the degree of the exaction is in rough proportionality to the impact caused by the project.

Conditions:

Note: Unless otherwise specified herein, all conditions shall be satisfied prior to **issuance of grading permits or building plans, whichever occurs first**.

. . .

1. If any of the following conditions fail to occur, or if they are, by their terms, to be implemented and maintained over time, if any of such conditions fail to be so implemented and maintained according to their terms, the City shall have the right to revoke or modify all approvals herein granted; deny or further condition issuance of all future building permits; deny, revoke, or further condition all certificates of occupancy issued under the authority of approvals herein granted; record a notice of violation on the property title; institute and prosecute litigation to compel their compliance with said conditions or seek damages for their violation. No vested rights are gained by Developer or a successor in interest by the City's approval of this **Conditional Use Permit.**

2. Staff is authorized and directed to make, or require the Developer to make, all corrections and modifications to the **Conditional Use Permit** documents, as necessary to make them internally consistent and in conformity with the final action on the project. Development shall occur substantially as shown on the approved Exhibits. Any proposed development, different from this approval, shall require an amendment to this approval.

3. Developer shall comply with all applicable provisions of federal, state, and local laws and regulations in effect at the time of building permit issuance.

4. If any condition for construction of any public improvements or facilities, or the payment of any fees in-lieu thereof, imposed by this approval or imposed by law on this Project are challenged, this approval shall be suspended as provided in Government Code Section 66020. If any such condition is determined to be invalid, this approval shall be invalid unless the City Council determines that the project without the condition complies with all requirements of law.

5. Developer/Operator shall and does hereby agree to indemnify, protect, defend, and hold harmless the City of Carlsbad, its Council members, officers, employees, agents, and representatives, from and against any and all liabilities, losses, damages, demands, claims and costs, including court costs and attorney's fees incurred by the City arising, directly or indirectly, from (a) City's approval and issuance of this **Conditional Use Permit**, (b) City's approval or issuance of any permit or action, whether discretionary or nondiscretionary, in connection with the use contemplated herein, and (c) Developer/Operator's installation and operation of the facility permitted hereby, including without limitation, any and all liabilities arising from the emission by the facility of electromagnetic fields or other energy waves or emissions. This obligation survives until all legal proceedings have been concluded and continues even if the City's approval is not validated.

6. Developer shall submit to **Planning Director** a reproducible 24" x 36" mylar copy of the **Site Plan** reflecting the conditions approved by the final decision-making body.

7. This project shall comply with all conditions and mitigation measures which are required as part of the Zone **5** Local Facilities Management Plan and any amendments made to that Plan prior to the issuance of building permits.

. . .

8. This approval is granted subject to the approval of **HMP 11-01** and is subject to all conditions contained in Planning Commission Resolution No. **6797** for those other approvals incorporated herein by reference.

9. This approval shall become null and void if building permits are not issued for this project within **36 months** from the date of project approval.

10. Building permits will not be issued for this project unless the local agency providing water and sewer services to the project provides written certification to the City that adequate water service and sewer facilities, respectively, are available to the project at the time of the application for the building permit, and that water and sewer capacity and facilities will continue to be available until the time of occupancy.

11. Developer shall pay the citywide Public Facilities Fee imposed by City Council Policy #17, the License Tax on new construction imposed by Carlsbad Municipal Code Section 5.09.030, and CFD #1 special tax (if applicable), subject to any credits authorized by Carlsbad Municipal Code Section 5.09.040. Developer shall also pay any applicable Local Facilities Management Plan fee for Zone **5,** pursuant to Chapter 21.90. All such taxes/fees shall be paid at issuance of building permit. If the taxes/fees are not paid, this approval will not be consistent with the General Plan and shall become void.

12. Prior to the issuance of the **Building Permit**, Developer shall submit to the City a Notice of Restriction executed by the owner of the real property to be developed. Said notice is to be filed in the office of the County Recorder, subject to the satisfaction of the Planning Director, notifying all interested parties and successors in interest that the City of Carlsbad has issued a **Conditional Use Permit** by Resolution No. **6796** on the property. Said Notice of Restriction shall note the property description, location of the file containing complete project details and all conditions of approval as well as any conditions or restrictions specified for inclusion in the Notice of Restriction. The Planning Director has the authority to execute and record an amendment to the notice which modifies or terminates said notice upon a showing of good cause by the Developer or successor in interest.

13. **CUP 10-08** shall be reviewed by the Planning Director annually to determine if all conditions of this permit have been met and that the use does not have a substantial negative effect on surrounding properties or the public health, safety and general welfare. If the Planning Director determines that: 1) the Conditional Use Permit was obtained by fraud or misrepresentation; or 2) the use for which such approval was granted is not being exercised; or 3) the Conditional Use Permit is being or recently has been exercised contrary to any of the terms or conditions of approval or the conditions of approval have not been met; or 4) the use for which such approval was granted has ceased to exist or has been suspended for one year or more; or 5) the use is in violation of any statute, ordinance, law or regulation; or 6) the use permitted by the Conditional Use Permit is being or has been so exercised as to be detrimental to the public health, safety or welfare or so as to constitute a nuisance, the Planning Director shall recommend that the Planning Commission hold a public hearing and after providing the permittee the opportunity to be heard, the Planning Commission may revoke and terminate the Conditional Use Permit in

whole or in part, reaffirm the Conditional Use Permit, modify the conditions or impose new conditions.

14. This Conditional Use Permit is granted for a period of **ten (10)** years from **August 3, 2011** through **August 2, 2021**. This permit may be revoked at any time after a public hearing, if it is found that the use has a substantial detrimental effect on surrounding land uses and the public's health and welfare, or the conditions imposed herein have not been met. This permit may be extended for a reasonable period of time not to exceed **ten (10)** years upon written application of the permittee made no less than 90 days prior to the expiration date. The Planning Commission may not grant such extension, unless it finds that there are no substantial negative effects on surrounding land uses or the public's health and welfare. If a substantial negative effect on surrounding land uses or the public's health and welfare is found, the extension shall be denied or granted with conditions which will eliminate or substantially reduce such effects. There is no limit to the number of extensions the Planning Commission may grant.

15. Developer shall submit and obtain Planning Director approval of a Final Landscape and Irrigation Plan showing conformance with the approved Preliminary Landscape Plan and the City's Landscape Manual. Developer shall construct and install all landscaping as shown on the approved Final Plans, and maintain all landscaping in a healthy and thriving condition, free from weeds, trash, and debris.

16. The first submittal of Final Landscape and Irrigation Plans shall be pursuant to the landscape plancheck process on file in the Planning Department and accompanied by the project's building, improvement, and grading plans.

17. Prior to the issuance of grading permit or the issuance of building permits, whichever occurs first, the Developer shall prepare and record a Notice that this property is subject to overflight, sight and sound of aircraft operating from McClellan-Palomar Airport, in a form meeting the approval of the Planning Director and the City Attorney (see Noise Form #2 on file in the Planning Department).

18. Developer shall construct trash receptacle and recycling areas enclosed by a six-foot-high masonry wall with gates pursuant to City Engineering Standards and Carlsbad Municipal Code Chapter 21.105. Location of said receptacles shall be approved by the Planning Director. Enclosure shall be of similar colors and/or materials to the project to the satisfaction of the Planning Director.

19. No outdoor storage of materials shall occur onsite unless required by the Fire Chief. When so required, the Developer shall submit and obtain approval of the Fire Chief and the Planning Director of an Outdoor Storage Plan, and thereafter comply with the approved plan.

Engineering:

Unless specifically stated in the condition, all of the following conditions, upon the approval of this proposed development, must be met prior to approval of a building or grading permit whichever occurs first.

General

1. Prior to hauling dirt or construction materials to or from any proposed construction site within this project, developer shall apply for and obtain approval from, the city engineer for the proposed haul route.

2. This project is approved upon the express condition that building permits will not be issued for the development of the subject property, unless the district engineer has determined that adequate water and sewer facilities are available at the time of permit issuance and will continue to be available until time of occupancy.

3. Developer shall install sight distance corridors at all street intersections and driveways in accordance with City Engineering Standards. The property owner shall maintain this condition.

Fees/Agreements

4. Developer shall cause property owner to execute and submit to the city engineer for recordation, the city's standard form Geologic Failure Hold Harmless Agreement.

5. Developer shall cause property owner to execute and submit to the city engineer for recordation the city's standard form Drainage Hold Harmless Agreement.

6. Developer shall cause property owner to process, execute and submit an executed copy to the city engineer for recordation a city standard Permanent Stormwater Quality Best Management Practice Maintenance Agreement for the perpetual maintenance of all treatment control, applicable site design and source control, post-construction permanent Best Management Practices prior to the issuance of a grading permit or building permit, whichever occurs first for this project.

7. Developer shall cause the property owner to process a street vacation to vacate the excess street dedication of Impala Drive along the project frontage as shown on the site plan.

Grading

8. Based upon a review of the proposed grading and the grading quantities shown on the site plan, a grading permit for this project is required. Developer shall prepare and submit plans and technical studies/reports, for city engineer review, and shall pay all applicable grading plan review fees per the city's latest fee schedule.

9. Developer shall apply for and obtain a grading permit from the city engineer. Developer shall pay all applicable grading permit fees per the city's latest fee schedule and shall post security per City Code requirements.

10. Developer shall comply with the city's Stormwater Regulations, latest version, and shall implement best management practices at all times. Best management practices include but are not limited to pollution control practices or devices, erosion control to prevent silt runoff during construction, general housekeeping practices, pollution prevention and

educational practices, maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants to stormwater, receiving water or stormwater conveyance system to the maximum extent practicable. Developer shall notify prospective owners and tenants of the above requirements.

11. Prior to the issuance of a grading permit, developer shall submit to the city engineer receipt of a Notice of Intent from the State Water Resources Control Board.

12. Prior to the issuance of grading permit or building permit, whichever occurs first, developer shall submit for city approval a Tier 3 Storm Water Pollution Prevention Plan (TIER 3 SWPPP). The TIER 3 SWPPP shall comply with current requirements and provisions established by the San Diego Regional Water Quality Control Board and City of Carlsbad Requirements. The TIER 3 SWPPP shall identify and incorporate measures to reduce storm water pollutant runoff during construction of the project to the maximum extent practicable. Developer shall pay all applicable SWPPP plan review and inspection fees per the city's latest fee schedule.

13. This project is subject to 'Priority Development Project' requirements. Developer shall prepare and process a Storm Water Management Plan (SWMP), subject to city engineer approval, to demonstrate how this project meets new/current storm water treatment requirements per the city's Standard Urban Storm Water Management Plan (SUSMP), latest version. In addition to new treatment control BMP selection criteria in the SUSMP, the developer shall use low impact development (site design) approaches to ensure that runoff from impervious areas (roofs, pavement, etc) are drained through landscaped (pervious) areas prior to discharge. Developer shall pay all applicable SWMP plan review and inspection fees per the city's latest fee schedule.

14. Developer is subject to hydromodification (runoff reduction) requirements. Hydromodification involves detailed site design and analysis to reduce the amount of post-development run-off by mimicking the natural hydrologic function of the site, preserving natural open-spaces and natural drainage channels, minimizing use of new impervious surfaces, and promoting onsite infiltration and evaporation of run-off. During final design, developer shall demonstrate compliance with hydromodification requirements in accordance with the city's Standard Urban Storm Water Management Plan (SUSMP) to the satisfaction of the city engineer.

15. Developer is responsible to ensure that all final design plans (grading plans, improvement plans, landscape plans, building plans, etc) incorporate all source control, site design, treatment control BMP, hydromodification, and Low Impact Design (LID) facilities.

Dedications/Improvements

16. Developer shall design the private drainage systems, as shown on the site plan to the satisfaction of the city engineer. All private drainage systems (12" diameter storm drain and larger) shall be inspected by the city. Developer shall pay the standard improvement plan check and inspection fees for private drainage systems.

. . .

17. Developer shall design all proposed public improvements including but not limited to (pedestrian ramps, driveways, curb and gutter, sidewalk, water services/meters, curb drains, etc.) as shown on the site plan. These improvements shall be shown on one of the following, subject to city engineer approval:

    A. Grading plans processed in conjunction with this project; or
    B. Construction Revision to an existing record public improvement drawing, DWG 248-5.

    Developer shall pay plan check and inspection fees using improvement valuations in accordance with the city's current fee schedule. Developer shall apply for and obtain a right-of-way permit prior to performing work in the city right-of-way.

Utilities

18. Developer shall meet with the fire marshal to determine if fire protection measures (fire flows, fire hydrant locations, building sprinklers) are required to serve the project. Fire hydrants, if proposed, shall be considered public improvements and shall be served by public water mains to the satisfaction of the district engineer.

19. Prior to issuance of building permits, developer shall pay all fees, deposits, and charges for connection to public facilities.

20. Developer shall install potable water services and meters at locations approved by the district engineer. The locations of said services shall be reflected on public improvement plans, grading plans, or construction revision to existing improvement plan DWG 248-5.

21. The developer shall install sewer laterals and clean-outs at locations approved by the city engineer. The locations of sewer laterals shall be reflected on public improvement plans, grading plans, or construction revision to existing improvement plan DWG 248-5.

Code Reminders:

The project is subject to all applicable provisions of local ordinances, including but not limited to the following:

22. Developer shall pay traffic impact and sewer impact fees based on Section 18.42 and Section 13.10 of the City of Carlsbad Municipal Code, respectively. The Average Daily Trips (ADT) and floor area contained in the staff report and shown on the site plan are for planning purposes only.

23. Developer shall pay a landscape plancheck and inspection fee as required by Section 20.08.050 of the Carlsbad Municipal Code.

24. Approval of this request shall not excuse compliance with all applicable sections of the Zoning Ordinance and all other applicable City ordinances in effect at time of building permit issuance, except as otherwise specifically provided herein.

25. Premise identification (addresses) shall be provided consistent with Carlsbad Municipal Code Section 18.04.320.

26. Any signs proposed for this development shall at a minimum be designed in conformance with the City's Sign Ordinance and shall require review and approval of the Planning Director prior to installation of such signs.

NOTICE

Please take **NOTICE** that approval of your project includes the "imposition" of fees, dedications, reservations, or other exactions hereafter collectively referred to for convenience as "fees/exactions."

You have 90 days from date of final approval to protest imposition of these fees/exactions. If you protest them, you must follow the protest procedure set forth in Government Code Section 66020(a), and file the protest and any other required information with the City Manager for processing in accordance with Carlsbad Municipal Code Section 3.32.030. Failure to timely follow that procedure will bar any subsequent legal action to attack, review, set aside, void, or annul their imposition.

You are hereby FURTHER NOTIFIED that your right to protest the specified fees/exactions DOES NOT APPLY to water and sewer connection fees and capacity charges, nor planning, zoning, grading, or other similar application processing or service fees in connection with this project; NOR DOES IT APPLY to any fees/exactions of which you have previously been given a NOTICE similar to this, or as to which the statute of limitations has previously otherwise expired.

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PASSED, APPROVED, AND ADOPTED at a regular meeting of the Planning Commission of the City of Carlsbad, California, held on **August 3, 2011** by the following vote, to wit:

AYES: Vice Chairperson Schumacher, Commissioners Arnold, Black, Nygaard, Scully and Siekmann

NOES:

ABSENT: Chairperson L'Heureux

ABSTAIN:

MICHAEL SCHUMACHER, Vice Chairperson
CARLSBAD PLANNING COMMISSION

ATTEST:

DON NEU
Planning Director

CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT

GRADING NOTES

(IN ADDITION TO THE REQUIREMENTS OF CHAPTER 15.16 OF THE CARLSBAD MUNICIPAL CODE.)

1. THIS PLAN SUPERSEDES ALL OTHER PLANS PREVIOUSLY APPROVED BY THE CITY OF CARLSBAD REGARDING GRADING SHOWN ON THIS SET OF PLANS.
2. APPROVAL OF THIS PLAN DOES NOT LESSEN OR WAIVE ANY PORTION OF THE CARLSBAD MUNICIPAL CODE, RESOLUTION OF CONDITIONAL APPROVAL, CITY STANDARDS OR OTHER ADDITIONAL DOCUMENTS LISTED HEREON AS THEY MAY PERTAIN TO THIS PROJECT. THE ENGINEER IN RESPONSIBLE CHARGE SHALL REVISE THESE PLANS WHEN NON-CONFORMANCE IS DISCOVERED.
3. CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER OR ENGINEER-OF-WORK FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS AND OMISSIONS DISCOVERED DURING CONSTRUCTION. ALL PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.
4. A RIGHT-OF-WAY PERMIT FROM THE CITY ENGINEER WILL BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY PRIOR TO PERMIT ISSUANCE. A CERTIFICATE OF INSURANCE AS WELL AS ADDITIONAL INSURED ENDORSEMENT MUST BE FILED NAMING THE CITY OF CARLSBAD AS AN ADDITIONAL INSURED ON THE PERMITTEE'S POLICY IN THE MINIMUM AMOUNT OF $1,000,000.00 FOR EACH OCCURRENCE OF LIABILITY. THE INSURANCE COMPANY WRITING THE POLICY MUST HAVE A RATING OF "A-" OR BETTER AND A SIZE CATEGORY OF CLASS VII OR BETTER AS ESTABLISHED BY "BEST'S" KEY RATING GUIDE.
5. UNLESS EXEMPTED BY SECTION 301.(b)5 OF THE UNIFORM BUILDING CODE, RETAINING WALLS OUTSIDE OF PUBLIC RIGHT OF WAY REQUIRE SEPARATE PERMITS FROM THE BUILDING DEPARTMENT.
6. NO WORK SHALL BE COMMENCED UNTIL ALL PERMITS HAVE BEEN OBTAINED FROM THE CITY AND OTHER APPROPRIATE AGENCIES.
7. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK OR GRADING TO BE PERFORMED UNTIL THE PROPERTY OWNER'S PERMISSION HAS BEEN OBTAINED AND A VALID GRADING PERMIT HAS BEEN ISSUED.
8. NO REVISIONS WILL BE MADE TO THESE PLANS WITHOUT THE WRITTEN APPROVAL OF THE CITY ENGINEER, NOTED WITHIN THE REVISION BLOCK, ON THE APPROPRIATE SHEET OF THE PLANS AND THE TITLE SHEET.
9. ORIGINAL DRAWINGS SHALL BECOME THE PROPERTY OF THE CITY UPON BEING SIGNED BY THE CITY ENGINEER.
10. THE ORIGINAL DRAWING SHALL BE REVISED TO REFLECT AS-BUILT CONDITIONS BY THE ENGINEER-OF-WORK PRIOR TO FINAL ACCEPTANCE OF THE WORK BY THE CITY.
11. ACCESS FOR FIRE AND OTHER EMERGENCY VEHICLES SHALL BE MAINTAINED TO THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
12. WHERE TRENCHES ARE WITHIN CITY EASEMENTS, A SOILS REPORT COMPRISED OF: (A) SUMMARY SHEET, (B) LABORATORY WORK SHEETS AND (C) COMPACTION CURVES, SHALL BE SUBMITTED BY A PROFESSIONAL ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOILS MECHANICS. THE SOILS REPORT WILL BE SUBMITTED TO THE CITY ENGINEERING INSPECTOR WITHIN TWO WORKING DAYS OF THE COMPLETION OF FIELD TESTS.
13. A SOILS COMPACTION REPORT AND COMPLIANCE VERIFICATION REGARDING ADHERENCE TO RECOMMENDATIONS OUTLINED IN THE SOILS REPORT IS REQUIRED PRIOR TO THE ISSUANCE OF A GRADING PERMIT. ALL CONTROLLED GRADING SHALL BE DONE UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER OF THE STATE OF CALIFORNIA PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOILS MECHANICS. ALL FILL OR FUTURE FILL AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF CARLSBAD STANDARD SPECIFICATIONS AND THE " EARTHWORK SPECIFICATIONS " ATTACHED TO THE PRELIMINARY SOILS INVESTIGATION. DAILY FIELD COMPACTION REPORTS WILL BE SUBMITTED TO THE PROJECT INSPECTOR.
14. A PRECONSTRUCTION MEETING SHALL BE HELD AT THE SITE PRIOR TO THE BEGINNING OF WORK AND SHALL BE ATTENDED BY ALL REPRESENTATIVES RESPONSIBLE FOR CONSTRUCTION, INSPECTION, SUPERVISION, TESTING AND ALL OTHER ASPECTS OF THE WORK. THE CONTRACTOR SHALL REQUEST A PRECONSTRUCTION MEETING BY CALLING THE INSPECTION LINE AT (760) 438-3891 AT LEAST FIVE(5) WORKING DAYS PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR WILL THEN BE CONTACTED BY THE PROJECT INSPECTOR TO COORDINATE A DATE AND TIME FOR THE PRECONSTRUCTION MEETING. APPROVED DRAWINGS MUST BE AVAILABLE PRIOR TO SCHEDULING. THE GRADING PERMIT WILL BE PROVIDED BY THE PROJECT INSPECTOR AT THE MEETING.
15. AN INSPECTION REQUESTS FOR THE PRECONSTRUCTION MEETING WILL BE MADE BY CALLING THE ENGINEERING 24-HOUR INSPECTION REQUEST LINE AT (760) 438-3891. INSPECTION REQUEST MUST BE RECEIVED PRIOR TO 2:00 P.M. ON THE DAY BEFORE THE INSPECTION IS NEEDED. INSPECTIONS WILL BE MADE THE NEXT WORK DAY UNLESS YOU REQUEST OTHERWISE. REQUESTS MADE AFTER 2:00 P.M. WILL BE SCHEDULED FOR TWO FULL WORK DAYS LATER.
16. THE OWNER AND/OR APPLICANT THROUGH THE DEVELOPER AND/OR CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
17. THE CONTRACTOR SHALL CONFORM TO LABOR CODE SECTION 6705 BY SUBMITTING A DETAIL PLAN TO THE CITY ENGINEER AND/OR CONCERNED AGENCY SHOWING THE DESIGN OF SHORING, BRACING SLOPING OR OTHER PROVISIONS TO BE MADE OF WORKER PROTECTION FROM THE HAZARD OF CAVING GROUND DURING THE EXCAVATION OF SUCH TRENCH OR TRENCHES OR DURING THE PIPE INSTALLATION THEREIN. THIS PLAN MUST BE PREPARED FOR ALL TRENCHES FIVE FEET (5') OR MORE IN DEPTH AND APPROVED BY THE CITY ENGINEER AND/OR CONCERNED AGENCY PRIOR TO EXCAVATION. IF THE PLAN VARIES FROM THE SHORING SYSTEM STANDARDS ESTABLISHED BY THE CONSTRUCTION SAFETY ORDERS, TITLE 8 CALIFORNIA ADMINISTRATIVE CODE, THE PLAN SHALL BE PREPARED BY A REGISTERED ENGINEER AT THE CONTRACTORS EXPENSE. A COPY OF THE OSHA EXCAVATION PERMIT MUST BE SUBMITTED TO THE INSPECTOR PRIOR TO EXCAVATION.
18. NO BLASTING SHALL BE PERFORMED UNTIL A VALID BLASTING PERMIT HAS BEEN OBTAINED FROM THE CITY OF CARLSBAD. SUBMIT APPLICATION FOR BLASTING PERMIT WELL IN ADVANCE OF THE SCHEDULING OF BLASTING OPERATIONS.
19. IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED WITHIN ANY WORK AREA DURING CONSTRUCTION, OPERATIONS WILL CEASE IMMEDIATELY, AND THE PERMITTEE WILL NOTIFY THE CITY ENGINEER. OPERATIONS WILL NOT RESTART UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE CITY ENGINEER TO DO SO.
20. ALL OPERATIONS CONDUCTED ON THE SITE OR ADJACENT THERETO, INCLUDING WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR OPERATION OF TRUCKS, EARTHMOVING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED GRADING EQUIPMENT SHALL BE LIMITED TO THE PERIOD BETWEEN 7:00 A.M. AND SUNSET EACH DAY, MONDAY THRU FRIDAY AND NO EARTHMOVING OR GRADING OPERATIONS SHALL BE CONDUCTED ON WEEKENDS OR HOLIDAYS. (A LIST OF CITY HOLIDAYS IS AVAILABLE AT THE ENGINEERING DEPARTMENT COUNTER.)
21. ALL OFF-SITE HAUL ROUTES SHALL BE SUBMITTED BY THE CONTRACTOR TO THE CITY ENGINEER FOR APPROVAL TWO FULL WORKING DAYS PRIOR TO BEGINNING OF WORK.
22. IMPORT MATERIAL SHALL BE OBTAINED FROM, AND WASTE MATERIAL SHALL BE DEPOSITED AT, A SITE APPROVED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEBRIS OR DAMAGE OCCURRING ALONG THE HAUL ROUTES OR ADJACENT STREETS AS A RESULT OF THE GRADING OPERATION.
23. BRUSH SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED. NO TREES ARE TO BE REMOVED UNLESS SPECIFICALLY NOTED ON THE PLAN.
24. ALL AREAS SHALL BE GRADED TO DRAIN. GRADING RESULTING IN THE PONDING OF WATER IS NOT PERMITTED. ALL EARTHEN SWALES AND DITCHES SHALL HAVE A MINIMUM ONE PERCENT SLOPE.
25. THESE PLANS ARE SUBJECT TO A SIGNED AND APPROVED SET OF EROSION CONTROL PLANS. EROSION CONTROL SHALL BE AS SHOWN AND AS APPROVED BY THE CITY ENGINEER OR AS DIRECTED BY THE PROJECT INSPECTOR.
26. ALL SLOPES SHALL BE TRIMMED TO A FINISH GRADE TO PRODUCE A UNIFORM SURFACE AND CROSS SECTION. THE SITE SHALL BE LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS OR OTHER DEBRIS SHALL BE REMOVED AND DISPOSED OF AT A SITE APPROVED OF BY THE CITY ENGINEER.
27. ALL SLOPES SHALL BE IRRIGATED, STABILIZED, PLANTED AND/OR HYDROSEEDED WITHIN TEN (10) DAYS OF THE TIME WHEN EACH SLOPE IS BROUGHT TO GRADE AS SHOWN ON THE APPROVED GRADING PLANS.
28. LANDSCAPING SHALL BE ACCOMPLISHED ON ALL SLOPES AND PADS AS REQUIRED BY THE CITY OF CARLSBAD LANDSCAPE MANUAL. THE LANDSCAPING PLANS FOR THIS PROJECT, DRAWING NO. DWG 473-4L, AND/OR AS DIRECTED BY THE CITY ENGINEER OR PLANNING DIRECTOR.
29. THE OWNER/APPLICANT SHALL INSURE THAT ALL CONTRACTORS SHALL COORDINATE THE WORK OF THESE GRADING PLANS WITH THAT SHOWN ON BOTH THE LANDSCAPE AND IRRIGATION PLANS AND THE IMPROVEMENT PLANS AS REQUIRED FOR THIS WORK IN ACCORDANCE WITH THE LANDSCAPE MANUAL TIME REQUIREMENTS.
30. WHERE AN EXISTING PIPE LINE IS TO BE ABANDONED AS A RESULT OF THE GRADING OPERATION, IT SHALL BE REMOVED WITHIN TWENTY FEET OF BUILDING OR STREET AREAS AND REPLACED WITH PROPERLY COMPACTED SOILS. IN OTHER AREAS THE PIPE WILL BE PLUGGED WITH CONCRETE OR REMOVED AS APPROVED BY THE CITY ENGINEER.
31. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVE GROUND AND UNDER GROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF GRADING TO PERMIT THE REVISION OF THE GRADING PLANS IF IT IS FOUND THAT THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.
32. THE CONTRACTOR SHALL NOTIFY AFFECTED UTILITY COMPANIES (SEE BELOW) AT LEAST 2 FULL WORKING DAYS PRIOR TO STARTING GRADING NEAR THEIR FACILITIES AND SHALL COORDINATE THE WORK WITH A COMPANY REPRESENTATIVE.

UNDERGROUND SERVICE ALERT	(800)422-4133
SDG&E	(800)660-7343
PACIFIC BELL	(800)892-0123
TIME WARNER CABLE	(760)438-7741
COX COMMUNICATIONS	(760)806-9809
CITY OF CARLSBAD(STREETS & STORM DRAIN)	(760)434-2980
*CITY OF CARLSBAD(SEWER,WATER & RECLAIMED WATER)	(760)438-2722
*SAN DIEGUITO WATER DISTRICT	(760)633-2650
*LEUCADIA WASTEWATER DISTRICT	(760)753-0155
*VALLECITOS WATER DISTRICT	(760)744-0460
*OLIVENHAIN WATER DISTRICT	(760)753-6466
*BUENA SANITATION DISTRICT	(760)726-1340

*AS APPROPRIATE

33. PERMIT COMPLIANCE REQUIREMENTS:
    A. FOR CONTROLLED GRADING – THE APPLICANT HIRES A CIVIL ENGINEER, SOILS ENGINEER, AND/OR GEOLOGIST TO GIVE TECHNICAL ADVICE, OBSERVE AND CONTROL THE WORK IN PROGRESS {15.16.120 A.8} CARLSBAD MUNICIPAL CODE.
    B. PRIOR TO FINAL APPROVAL OF A GRADING PERMIT – THE FOLLOWING REPORTS MUST BE SUBMITTED TO THE CITY ENGINEER VIA THE PROJECT INSPECTOR {15.16.120 A.10} CARLSBAD MUNICIPAL CODE:
        (1) FINAL REPORT BY SUPERVISING GRADING ENGINEER STATING ALL GRADING IS COMPLETE. ALL EROSION CONTROL, SLOPE PLANTING AND IRRIGATION ARE INSTALLED IN CONFORMANCE WITH CITY CODE AND THE APPROVED PLANS (OBTAIN SAMPLE OF COMPLIANCE LETTER FROM CITY ENGINEERING DEPARTMENT).
        (2) AS-BUILT GRADING PLAN.
        (3) REPORT FROM THE SOILS ENGINEER, WHICH INCLUDES RECOMMENDED SOIL BEARING CAPACITIES, A STATEMENT AS TO THE EXPANSIVE QUALITY OF THE SOIL, AND SUMMARIES OF FIELD AND LABORATORY TESTS. THE REPORT SHALL ALSO INCLUDE A STATEMENT BY THE SOILS ENGINEER THAT THE GRADING WAS DONE IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS OUTLINED IN THE PRELIMINARY SOILS REPORT AND ANY SUPPLEMENTS THERETO.
        (4) REPORT WITH AS-BUILT GEOLOGC PLAN, IF REQUIRED BY THE CITY.
34. UNLESS A GRADING PERMIT FOR THIS PROJECT IS ISSUED WITHIN ONE (1) YEAR AFTER THE CITY ENGINEER'S APPROVAL, THESE PLANS MAY BE REQUIRED TO BE RESUBMITTED FOR PLANCHECK. PLANCHECK FEES WILL BE REQUIRED FOR ANY SUCH RECHECK.
35. THE SOILS REPORT TITLED GEOTECHNICAL PLAN REVEW, LA POSADA MEN'S SHELTER, IMPALA DRIVE, CARLSBAD, CA (JOB#09-224-P) PREPARED BY VINJE & MIDDLETON ENGINEERING, INC. DATED APRIL 8, 2011, SHALL BE CONSIDERED AS A PART OF THIS GRADING PLAN. ALL GRADING SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN SAID SOILS REPORT.

SOILS ENGINEER'S CERTIFICATE

I, S. MEHDI S. SHARIAT, A REGISTERED (CIVIL/GEOTECHNICAL) ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOILS MECHANICS, HEREBY CERTIFY THAT A SAMPLING AND STUDY OF THE SOIL CONDITIONS PREVALENT WITHIN THIS SITE WAS MADE BY ME OR UNDER MY DIRECTION BETWEEN THE DATES OF August 17, 2009 AND April 20 11. TWO COPIES OF THE SOILS REPORT COMPILED FROM THIS STUDY, WITH MY RECOMMENDATIONS, HAS BEEN SUBMITTED TO THE OFFICE OF THE CITY ENGINEER.

REGISTERED PROFESSIONAL ENGINEER SEYED M. SAMSAM SHARIAT No. 2885 Exp. 12/31/12 GEOTECHNICAL STATE OF CALIFORNIA

SIGNED:
G.E./P.E. NO.: GE # 2885
DATE: 5-3-12
LICENSE EXPIRATION DATE: DEC. 31, 2012

PROJECT LOCATION

THIS PROJECT IS LOCATED AT 2478 IMPALA DRIVE, CARLSBAD CA WITH ASSESSORS PARCEL NUMBER 209-041-28

THE CALIFORNIA COORDINATE INDEX OF THIS PROJECT IS: N 33° 68' 22" W 117° 16' 06"

APPROXIMATE EARTHWORK

THE EARTHWORK SHOWN HERE IS AN ESTMATION, WHICH MAY NOT INCLUDE EXACT NUMBERS FOR PAVEMENT SECTIONS, FOUNDATION, UTILITY AND OTHER EARTHMOVING SPOILS, NOR DOES IT TAKE INTO ACCOUNT ANY SHRINKAGE OR LIME TREATMENT. IT IS UP TO THE GENERAL CONTRACTOR TO PROJECT ACCURATE EARTHWORK NUMBERS IN EFFORT TO ENSURE THE SITE BALANCES PROPERLY.

REMEDIAL GRADING

CUT	5,000 CY
FILL	5,000 CY

* VOLUME IS BASED ON THE ASSUMPTION OF REMOVING AND REPLACING THE TOP 2' OF SOIL

PRECISE GRADING

CUT	1,965 CY
FILL	615 CY
EXPORT	1,350 CY

REQUIRED TREATMENT CONTROL BMP TABLE

TYPE	DESCRIPTION	OWNERSHIP	MAINTENANCE AGREEMENT	SHEET NO.	MAINTENANCE FREQUENCY
CISTERN		PVT	BMP MAINTENANCE AGREEMENT	4,8	DEBRIS REMOVAL EVERY QUARTER
BIOSWALE	TC-30	PVT	BMP MAINTENANCE AGREEMENT	3,4,9	WEEKLY
BIO-RETENTION	TC-32	PVT	BMP MAINTENANCE AGREEMENT	3,9	SEMI ANNUAL VEGETATION MGT.
FLOW THROUGH PLANTERS	TC-32	PVT	BMP MAINTENANCE AGREEMENT	3,4,8	SEMI ANNUAL VEGETATION MGT.

SUSMP PROJECT PRIORITY HIGH

REFERENCE DRAWINGS:

DWG 248-5 SHEET 9
DWG 215-7

CITY OF CARLSBAD FIRE DEPARTMENT REQUIREMENTS
NO. OF F.H.(S) ___ F.FLOW 2250 G.P.M. OUT OF 2 F.H.(S)
BLDG. SPRINKLED (YES) NO F.FLOW ___ G.P.M.
FIRE MARSHAL 5.17.2012 DATE

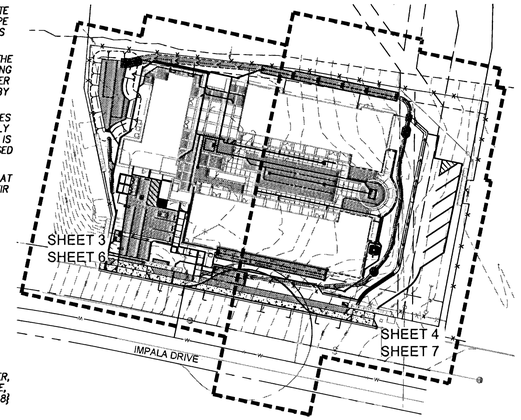

INDEX MAP

LEGAL DESCRIPTION

PARCEL 2 OF PARCEL MAP 15247 IN THE CITY OF CARLSBAD, FILES IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, MAY 25 1988, AS FILE No. 88-247094 OF OFFICIAL RECORDS.
A.P.N.: 209-041-28

SHEET INDEX

SHEET 1 ..... TITLE
SHEET 2 ..... NOTE SHEET
SHEET 3 ..... GRADING PLAN
SHEET 4 ..... GRADING PLAN
SHEET 5 ..... BMP PLAN
SHEET 6 ..... UTILITY PLAN
SHEET 7 ..... UTILITY PLAN
SHEET 8 ..... DETAIL SHEET
SHEET 9 ..... DETAIL SHEET

BENCHMARK

CLSB 108
FOUND 2.5" BRASS DISC IN DRAINAGE BOX INLET ON NORTH SIDE OF PALMER WAY, 100 FT EASTERLY OF COUGAR DRIVE.
NAVD 88 ELEVATION: 248.59

CONVERSION FROM NAVD 88 TO NAVD 29 IS EQUAL TO SUBTRACTING (2.241')
NAVD29 = (NAVD 88 – 2.241')

BASIS OF BEARINGS

THE BASIS OF BEARINGS IS TAKEN AS THE CENTERLINE OF IMPALA DRIVE NORTH 78°14'55" EAST, PER PARCEL MAP 15247, FILED 88-247094, CITY OF CARLSBAD, SAN DIEGO COUNTY OFFICIAL RECORDS.

"DECLARATION OF RESPONSIBLE CHARGE"

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CARLSBAD DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

FIRM: WAREMALCOMB
ADDRESS: 6363 GREENWICH DR. STE. 175
CITY, STATE: SAN DIEGO, CA
TELEPHONE: 858-638-7277
BY: FELIX GONZALEZ DATE: 5/2/12
R.C.E. NO.: 67660
REGISTRATION EXPIRATION DATE: JUNE 30, 2013

PLANS PREPARED BY:

REGISTERED PROFESSIONAL ENGINEER FELIX GONZALEZ No. 67660 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA

architecture
planning
interiors
graphics
civil engineering

WARE MALCOMB
Leading Design for Commercial Real Estate
6363 greenwich dr. ste. 175
san diego, california 92122
p 858.638.7277 · f 858.638.7506

PREPARED UNDER THE DIRECT SUPERVISION OF:
FELIX GONZALEZ RCE NO. 67660 DATE: 5/2/12 EXP. 6/30/13

VICINITY MAP

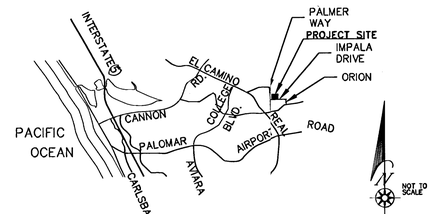

CITY OF CARLSBAD

SOURCE OF TOPOGRAPHY

TOPOGRAPHY SHOWN ON THESE PLANS WAS GENERATED BY GROUND EXPLORATION AND TOTAL STATION METHODS FROM INFORMATION GATHERED ON 2004 BY ATLAS GEOSPACIAL. TOPOGRAPHY SHOWN HEREON CONFORMS TO NATONAL MAP ACCURACY STANDARDS.

CONTINUED FROM LOWER RIGHT

DRAINAGE DITCHES	TYPE D STD. D-75***	121 LF.
DRIVEWAY	STD. GS-12	560 SF.
6" CURB AND GUTTER	STD G-2*	240 LF.
6" CURB ONLY-DEEPEND		63 LF.
6" CURB ONLY		200 LF
RECTANGULAR STEEL PIPE 3"x12" CURB-O-LET STD. TCD 414		7 LF.
CIRCULAR PIPE TO RECTANGULAR PIPE ADAPTER CURB-O-LET STRAIGHT ADAPTER STD. CP-SPA 12		1 EA.
RECTANGULAR STEEL PIPE 4"x14" CURB-O-LET STD. TCD 414		7 LF.
CIRCULAR PIPE TO RECTANGULAR PIPE ADAPTER CURB-O-LET STRAIGHT ADAPTER STD. CP-SPA 14		1 EA.
8" SD-35 STORM DRAIN LINE		490 LF
6" SD-35 STORM DRAIN LINE		1,362 LF
4" PERFORATED SD-35 STORM DRAIN LINE		388 LF
4" SD-35 STORM DRAIN LINE		20 LF
4" WIDE WHITE CONCRETE PAVER		144 LF.
POROUS PAVERS		5,372 SF.
4"THICK P.C. CONCRETE SIDE WALK	G-7*	835 SF.
GREASE INTERCEPTOR		1 EA.
2" WATER SERVICE CONNECTION (DOMES)	W-4	1 EA.
1" WATER SERVICE CONNECTION (IRRIG.)	W-3	1 EA.
6" DOUBLE DETECTOR CHECK VALVE ASSEMBLY	W-22	1 EA.
2" BACK FLOW PREVENTER	W-20	1 EA.
1" BACK FLOW PREVENTER	W-20	1 EA.
FIRE SERVICE		1 EA.
GATE VALVE	W-16	3 EA.
THRUST BLOCK	W-15,W-19	2 EA.
2" WATER METER AND BOX (DOMESTIC)		1 EA.
RELOCATED 1"WATER METER AND BOX (IRRIGATION)		1 EA.
2" VALVE HOT TAP W/ STAINLESS STEEL TAPPNG SLEEVE		1 EA.
6" VALVE HOT TAP W/ STAINLESS STEEL TAPPNG SLEEVE		1 EA.
KRISTAR FLO GARD CATCH BASIN (FG-M1818)		7 EA.
PLANTER OVERFLOW OUTLET (BROOKS 1212CB)		4 EA.
PLANTER OVERFLOW OUTLET (BROOKS 2424CB)		3 EA.
PLANTER OVERFLOW OUTLET (BROOKS 3636CB)		1 EA.
POP-UP DRAINAGE EMITTER (NDS#620 6")		2 EA.
TURF BLOCK MATERIAL		3,679 SF.
PROVIDE 24" CURB OPENING		15 LF.
RIBBON GUTTER	STD. G-12*	27 LF.

WORK TO BE DONE

THE GRADING WORK SHALL CONSIST OF THE CONSTRUCTION OF ALL CUTS AND FILLS, REMEDIAL GRADING, DRAINAGE FACILITIES, EROSION CONTROL FACILITIES, AND PLANTING OF PERMANENT LANDSCAPING AND PREPARATION OF AS-BUILT GRADING PLANS, AS-BUILT GEOLOGIC MAPS AND REPORTS, ALL AS SHOWN OR REQUIRED ON THIS SET OF PLANS AND THE CITY STANDARDS, SPECIFICATIONS, REQUIREMENTS, RESOLUTIONS AND ORDINANCES CITED ON THESE PLANS. THE GRADING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS, CURRENT AT THE TIME OF CONSTRUCTION, AS DIRECTED BY THE CITY ENGINEER.

WORK TO BE DONE CONTINUED

1. CARLSBAD MUNICIPAL CODE
2. CITY OF CARLSBAD ENGINEERING STANDARDS
3. THIS SET OF PLANS
4. RESOLUTION NO. 6796 & 6797 DATED AUG 3, 2011
5. THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK).
6. SOILS REPORT AND RECOMMENDATIONS BY VINJE & MIDDLETON ENGINEERING, INC. JOB# 09-224-P DATED APRIL 6, 2011
7. THE SAN DIEGO REGIONAL STANDARD DRAWINGS AND AS MAY BE MODIFIED BY THE CITY OF CARLSBAD STANDARDS.
8. CALIFORNIA COASTAL COMMISSION DEVELOPMENT PERMIT CONDITIONS DATED N/A
9. ENVIRONMENTAL APPROVAL DOCUMENTS DATED N/A
10. STORM WATER POLLUTION PREVENTION PLAN PREPARED BY WARE MALCOMB DATED: FEB 2012
    SWPPP NO. 110411 WDID NO. 9 37C363579
11. STORM WATER MANAGEMENT PLAN PREPARED BY WARE MALCOMB DATED: JANUARY 2, 2011 SWMP NO. 110014
12. CALIFORNIA STORM WATER QUALITY ASSOCIATION BMP CONSTRUCTION HANDBOOK AND CALTRANS CONSTRUCTION SITE BMP MANUAL.

LEGEND

DESCRIPTION	STD DWG.NO.*	SYMBOL	QUANTITY
PROPERTY LINE			
BUILDING PERIMETER			
EXISTING SPOT ELEVATION		(1750.22)	
EXISTING CONTOUR		(1750)	
EXISTING TOP OF SLOPE			
EXISTING FENCE			
EXISTING CURB TO BE REMOVED			300 LF.
EXISTING FIRE HYDRANT			
RELOCATE EXISTING FIRE HYDRANT	STD W-12		1 EA.
EXISTING 1.5" WATER METER TO BE REMOVED			1 EA.
EXISTING 1.5" BACK FLOW PREVENTER TO BE REMOVED			1 EA.
EXISTING 1" WATER METER TO BE RE-LOCATED			1 EA.
EXISTING 1" BACK FLOW PREVENTER TO BE RE-LOCATED			1 EA.
EXISTING TRANSFORMER			
EXISTING ELECTRICAL BOX			
EXISTING OVERHEAD LINE			
PROPOSED CONTOUR		1750	
PROPOSED SPOT ELEVATION		1750.22	
GRADE BREAK		GB	
RIDGE LINE		R	
CUT SLOPE (PER GRADING PLAN)			
DIRECTION OF DRAINAGE(1% MIN.)			
FOUNDATION DRAIN		FD	164 LF.
BIO-SWALE	PER DETAIL		393 LF.
RIP RAP ENERGY DISSIPATER			192 SF..
CONSTRUCT FLOW THRU PLANTER			1,769 SF.
ADA PARKING STALLS	STD. M-27A*		1 EA.
PARKING STALLS			9 EA.
NEW TRASH ENCLOSURE			2 EA.
ADA CURB RAMP			1 EA.
TRENCHING	GS-25,GS-26		177 SF.
CONCRETE PAD FOR BIKE RACK			54 SF.
ROOF DRAIN DOWNSPOUT SPLASH BLOCK			9 EA.
RETAINING WALL	STD. C-4*		1,260 SF.
GUARDRAILS	STD. M-24,*		140 LF
SPILLWAY FOR BIO SWALE			99 SF.

CONTINUE LEGEND ON UPPER LEFT

STANDARD PLANS PER CITY OF CARLSBAD STANDARDS UNLESS OTHERWISE NOTED.
*SAN DIEGO REGIONAL STANDARD DRAWINGS.
***MODIFIED BY CITY STANDARDS.

OWNER'S CERTIFICATE

I (WE) HEREBY CERTIFY THAT A REGISTERED SOILS ENGINEER OR GEOLOGIST HAS BEEN OR WILL BE RETAINED TO SUPERVISE OVER-ALL GRADING ACTIVITY AND ADVISE ON THE COMPACTION AND STABILITY OF THIS SITE.

SISTER RAYMONDA DUVALL 5/04/2012 DATE

PLANNING DEPARTMENT APPROVAL

(SIGNED) DATE: 5/17/2012
CITY PLANNER
(SIGNED) DATE: 05/16/2012
RECOMMENDED BY: DAN HALVERSON (PRINT NAME)

"AS BUILT"

FELIX GONZALEZ
RCE: NO. 67660 EXP. 6/30/13 DATE

REVIEWED BY:
INSPECTOR DATE

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

SHEET 1 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS 9

GRADING PLANS FOR:
LA POSADA DE GUADALUPE DE CARLSBAD
2478 IMPALA DRIVE, CARLSBAD, CA
TITLE

APPROVED: GLEN K. VAN PESKI 4/23/13
ENGINEERING MANAGER, PE 41204 EXPIRES 3/31/13 DATE

DWN BY:
CHKD BY:
RVWD BY:

PROJECT NO. CUP 10-08 | DRAWING NO. 473-4A

DWG 473-4A
1 of 9

I:\admin\Site Development\Site Development-San Diego\SDG09-0013-00 La Posada\Site Development\CD\SHEET 1&2- TITLE SHEET.dwg rgerges Apr 30, 2012 - 9:46am

CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT

LETTER OF PERMISSION FOR GRADING AND CONSTRUCTION OF GRADING IMPROVEMENTS

SAN DIEGO GAS & ELECTRIC COMPANY (SDG&E) IS THE OWNER OF VARIOUS ELECTRIC AND NATURAL GAS TRANSMISSION EASEMENTS LOCATED IN AND ADJACENT TO THE PROPERTY MORE PARTICULARLY DESCRIBED AS: 2478 IMPALA DRIVE, CARLSBAD, CA 92008, APN 209-041-28. SAID SDG&E EASEMENTS FILED AS DOCUMENT 157924 ON JULY 4, 1960 AND IN OFFICIAL RECORDS OF THE OFFICE OF THE COUNTY RECORDER, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA. SAN DIEGO GAS AND DOCUMENTS FILED AS 157934 ON AUGUST 4, 1960, AND DOCUMENTS FILED AS 65560 AND 65561 ON MARCH 31, 1960 IN OFFICIAL RECORDS OF THE OFFICE OF THE COUNTY RECORDER, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA.

UPON REVIEW OF THIS PLAN FOR THE PROPOSED DEVELOPMENT, RECEIVED, THIS DATE BY SAN DIEGO GAS AND ELECTRIC, WHICH SHOW THE PROPOSED GRADING AND IMPROVEMENTS ON THE PROPERTY SUBJECT TO OUR EASEMENTS; GRADING PLANS FOR: LA POSADA MEN'S SHELTER.

PERMISSION IS HEREBY GRANTED TO RSM CONTRACTORS, INC, A CALIFORNIA LIMITED LIABILITY COMPANY (PERMITTEE) TO GRUB, GRADE, AND INSTALL IMPROVEMENTS ONLY AS SHOWN ON THE ATTACHED PLANS, SUBJECT TO THE FOLLOWING CONDITIONS:

1. EXPIRATION: THIS "PERMISSION TO GRADE" TO GRADE SHALL EXPIRE IF GRADING DOES NOT COMMENCE WITHIN 6 MONTHS FROM THE DATE OF THIS LETTER AND WORK IS NOT DILIGENTLY PURSUED TO COMPLETION.
2. SUBMITTALS:
   - 2.1. FINAL SIGNED APPROVED PLANS MUST BE SUBMITTED TO SDG&E'S LAND MANAGEMENT REPRESENTATIVE A MINIMUM OF 10 WORKING DAYS BEFORE COMMENCEMENT OF GRADING AND CONSTRUCTION OF IMPROVEMENTS WITHIN THE EASEMENT AREA.
   - 2.2. PERMITTEE AGREES TO SUPPLY SDG&E TRANSMISSION ENGINEERING WITH 'AS BUILT' PROFILE MAPS, IF REQUESTED, OF THE GRADE CHANGES WITHIN ITS EASEMENTS. PROFILES SHALL BE AT THE SPECIFICATIONS OF SDG&E'S TRANSMISSION ENGINEERING DEPARTMENT.
   - 2.3. SITE IMPROVEMENT PLANS AND LANDSCAPE PLANS HAVE NOT BEEN REVIEWED OR APPROVED AT THIS TIME. PERMITTEE AGREES TO SUPPLY SITE PLANS AND LANDSCAPE PLANS FOR REVIEW, APPROVAL AND ISSUANCE OF A "PERMISSION TO GRADE AND CONSTRUCT IMPROVEMENTS" LETTER WHEN THE PLANS ARE COMPLETED.
3. PRE-CONSTRUCTION MEETING: SDG&E'S LAND MANAGEMENT REPRESENTATIVE MUST BE INVITED WITH AT LEAST FORTY-EIGHT (48) HOURS PRIOR NOTICE, WHETHER BY TELEPHONE, FAX OR OTHERWISE, TO ANY PRE-CONSTRUCTION MEETINGS HELD BEFORE THE START OF CONSTRUCTION.
4. GRADING:
   - 4.1. AT LEAST TWENTY-FOUR (24) HOURS NOTICE MUST BE GIVEN TO SDG&E'S LAND MANAGEMENT REPRESENTATIVE BEFORE START OF WORK OR MAKING FIELD CHANGES TO PLANS WITHIN SAID EASEMENT.
   - 4.2. PERMITTEE IS RESPONSIBLE TO CALL DIG ALERT AT 1-800-227-2600 FOR ALL UNDERGROUND MARK-OUT LOCATIONS.
   - 4.3. CLEARANCE OF (35) FEET MINIMUM BETWEEN THE SDG&E ELECTRIC TRANSMISSION WIRES AND THE NATURAL GROUND SHALL BE MAINTAINED ON ANY GIVEN DAY, NOTING LINE SAGS VARY DEPENDING ON AMBIENT TEMPERATURE AND LINE CURRENT. ALL CAL-OSHA REQUIREMENTS FOR CLEARANCES BETWEEN HIGH VOLTAGE WIRES AND HEAVY EQUIPMENT MUST BE MAINTAINED.
   - 4.4. NO GRADING SHALL BE ALLOWED WITHIN TEN (10) FEET OF A SINGLE WOOD POLE STRUCTURE OR ANCHOR, WITHIN FIFTEEN (15) FEET OF MULTI-WOOD POLES, WITHIN TWENTY (20) FEET OF STEEL LATTICE TOWERS OR WITHIN THIRTY (30) FEET OF STEEL POLES.
5. EROSION CONTROL:
   - 5.1. ALL DISTURBED AND CREATED SLOPES, WITHIN THE SDG&E ELECTRIC TRANSMISSION EASEMENT, SHALL BE HYDRO-SEEDED OR PLANTED BY PERMITTEE WITH AN SDG&E APPROVED MIX.
   - 5.2. PERMITTEE SHALL DESIGN, IMPLEMENT AND MAINTAIN EROSION CONTROL TO MEET THE COUNTY OF SAN DIEGO'S AND THE CITY OF SAN DIEGO'S REQUIREMENTS.
   - 5.3. ALL DRAINAGE SHALL BE DESIGNED TO PREVENT EROSION OF SDG&E ACCESS ROADS.
6. STORAGE: THIS PERMISSION TO GRADE LETTER DOES NOT PERMIT STORAGE OF EQUIPMENT, MATERIALS, DIRT OR DEBRIS ON THE EASEMENT OR FEE OWNED PROPERTY.
7. ACCESS:
   - 7.1. SDG&E RESERVES THE RIGHT TO INSPECT AND PERFORM QUALITY CONTROL WORK DURING CONSTRUCTION.
   - 7.2. 24 HOUR PER DAY ACCESS TO ALL EXISTING SDG&E FACILITIES SHALL BE MAINTAINED.
   - 7.3. ALL GATES SHALL PROVIDE FOR SDG&E ACCESS BY PADLOCK, LOCK-BOX OR KEYED BYPASS BOTH DURING CONSTRUCTION AND UPON COMPLETION OF CONSTRUCTION.
8. GATES: PIPE GATE CONSTRUCTION AND THE LOCATION OF THE GATES RELATIVE TO THE STREET TO BE APPROVED BY SDG&E'S LAND MANAGEMENT REPRESENTATIVE.
9. OUTSTANDING AGREEMENTS: PERMITTEE AGREES TO PAY FOR, SIGN AND/OR HAVE SIGNED ALL CONSENT AGREEMENTS, RIGHT-OF-WAY USE AGREEMENTS AND/OR JOINT USE AGREEMENTS BETWEEN SDG&E AND OWNER, COMPANY, OR PUBLIC AGENCIES WHO ENCROACH UPON THE SDG&E EASEMENTS WHICH WILL BE SUBJECT TO THE REVOCABILITY CLAUSE AS STATED IN THE CALIFORNIA PUBLIC UTILITY'S GENERAL ORDER 69-C AS SHOWN ON WEB SITE: HTTP://WWW.CPUC.CA.GOV/PUBLISHED/GRAPHICS/645.PDF.
10. CHANGES: THIS LETTER SHALL NOT BE CONSTRUED AS APPROVAL OF ANY FIELD CHANGES. SPECIFIC APPROVAL OF ANY CHANGES WITHIN THE SDG&E EASEMENT MUST BE APPROVED IN WRITING BY SDG&E'S LAND MANAGEMENT REPRESENTATIVE.
11. SPECIAL CONDITIONS:
   - 11.1. WHEN RELOCATING ACCESS ROADS PERMITTEE SHALL ALWAYS PROVIDE AT LEAST ONE PASSABLE WAY ALONG THE EASEMENT FOR SDG&E VEHICLES.
   - 11.2. ALL TREES AND BUSHES PLANTED IN EASEMENT SHALL BE NO TALLER THAN FIFTEEN (15) FOOT AT MATURITY. VEGETATION EXCEEDING THIS HEIGHT MAY BE REMOVED OR TRIMMED AT PERMITTEE'S EXPENSE IF IT CREATES A VIOLATION OF SDG&E LINE CLEARANCE REQUIREMENTS. EASEMENT LANGUAGE AND THIS DOCUMENT SHALL PREVAIL OVER DIAGRAMMATIC PLANS SHOULD THERE BE A CONFLICT THAT VIOLATES SDG&E OR PUC STANDARDS.
   - 11.3. IRRIGATION SYSTEMS LOCATED IN SDG&E EASEMENTS OR IN SDG&E ACCESS ROADS WILL BE THE SOLE COST AND RESPONSIBILITY OF THE PERMITTEE. DAMAGED MAINLINES, LATERALS, VALVES, SPRINKLER HEADS, ETC. SHALL BE PROMPTLY REPAIRED BY PERMITTEE TO PREVENT EROSION OR WATER DAMAGE TO SDG&E ROADS OR FACILITIES.
   - 11.4. PERMITTEE AGREES TO SUBMIT FOR REVIEW AND APPROVAL A BLASTING PLAN, IF BLASTING IS REQUIRED, MEETING ALL REQUIREMENTS OF SDG&E CIVIL STRUCTURAL DEPARTMENT PRIOR TO ANY BLASTING.
   - 11.5. ALL GRUBBING, GRADING AND BLASTING OPERATIONS WILL USE ADEQUATE DUST CONTROL MEASURES TO PREVENT DUST ACCUMULATION ON TRANSMISSION INSULATORS. IF IN THE OPINION OF SDG&E THESE OPERATIONS CREATES A NEED FOR ADDITIONAL WASHING OF INSULATORS PERMITTEE AGREES TO REIMBURSE SDG&E FOR THOSE COSTS.
   - 11.6. SDG&E WILL NOT BE RESPONSIBLE FOR ANY DAMAGE DONE BY SDG&E OR ITS CONTRACTORS TO ANY FACILITIES LOCATED IN THE TRANSMISSION EASEMENT INCLUDING ACCESS ROADS AND WORK PADS.
12. CONTINGENCIES:
   - 12.1. IF THE PERMITTEE HAS NOT RECEIVED A "GUIDE FOR ENCROACHMENTS ON TRANSMISSION RIGHTS-OF-WAY," PERMITTEE SHALL ACQUIRE A COPY FROM SDG&E'S LAND MANAGEMENT REPRESENTATIVE.
   - 12.2. THIS LETTER IS SUBJECT TO PERMITTEE OBTAINING THE NECESSARY GRADING AND IMPROVEMENT PERMITS FROM THE CITY OF CARLSBAD.
13. INDEMNIFICATION:
   - 13.1. PERMITTEE AGREES TO ASSUME ALL RISK OF LOSS, DAMAGE TO PROPERTY AND/OR INJURY AND/OR DEATH TO PERSONS, AND TO INDEMNIFY AND HOLD SDG&E HARMLESS FROM ANY AND ALL LIABILITY IN ANY WAY ARISING FROM THE PROPOSED GRADING OR CONSTRUCTION OF IMPROVEMENTS.
   - 13.2. SDG&E SHALL NOT BE RESPONSIBLE IN ANY MANNER FOR ANY MAINTENANCE OR REPAIR OF THE PROPOSED GRADING OR IMPROVEMENTS. THIS INCLUDES, BUT IS NOT LIMITED TO, DRAINAGE AND/OR EROSION PROBLEMS OR DAMAGE CAUSED TO IMPROVEMENTS THAT WERE NOT CONSTRUCTED TO TAKE THE WEIGHT OR ACTIVITIES OF VEHICLES AND EQUIPMENT OWNED BY OR WORKING ON BEHALF OF SDG&E.
   - 13.3. PERMITTEE IS RESPONSIBLE FOR ADHERING TO ALL APPLICABLE CAL-OHSA REQUIREMENTS FOR WORKING AROUND ENERGIZED ELECTRICAL FACILITIES.
14. REGULATIONS: ALL APPLICABLE LAWS AND REGULATIONS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND THEIR AGENCIES SHALL BE COMPLIED WITH.
15. TERMS AND CONDITIONS: THE TERMS AND CONDITIONS OF THE DOCUMENT SHALL BENEFIT AND BIND PERMITTEE ITS SUCCESSORS, ASSIGNS, AGENTS OR CONTRACTORS.
16. POSTING: THIS PERMISSION LETTER SHALL BE POSTED ON THE JOB SITE AT ALL TIMES.

SHOULD YOU HAVE ANY QUESTIONS OR REQUIRE ADDITIONAL ASSISTANCE, PLEASE CALL ME AT (858) 654-1235.

SAN DIEGO GAS & ELECTRIC COMPANY

BY: Jeff Sykes

JEFF SYKES
RIGHT OF WAY SUPERVISOR

SAN DIEGO GAS & ELECTRIC COMPANY
GAS TRANSMISSION
NOTIFICATION TO MUNICIPALITIES/DEVELOPERS/CONTRACTORS

INSTRUCTIONS:
1. ADD THE BOXED NOTE BELOW IMMEDIATELY NEXT TO SDG&E'S GAS TRANSMISSION PIPELINES ON EACH DRAWING PREPARED BY YOU INCLUDING, BUT NOT LIMITED TO, GRADING, IMPROVEMENT, ELECTRICAL, LANDSCAPING AND IRRIGATION PLANS WHEN PLOTTING SDG&E'S GAS TRANSMISSION LINES.

> WARNING!!
> EXISTING HIGH PRESSURE
> GAS LINE TO REMAIN
> IN PLACE
>
> ANY WORK IN GAS EASEMENT SHALL BE
> PER SDG&E NOTES IN GENERAL NOTES.

2. ADD THE NOTES BELOW, VERBATIM, TO THE GENERAL NOTES ON YOUR PLANS:

SDG&E NOTES:

YOU ARE DIGGING IN THE VICINITY OF AN UNDERGROUND HIGH PRESSURE GAS TRANSMISSION PIPELINE. SDG&E'S STANDBY PERSONNEL ARE AUTHORIZED TO STOP EXCAVATION IF THESE PRECAUTIONS ARE NOT STRICTLY ADHERED TO.

1. SDG&E STANDBY PERSONNEL ARE REQUIRED WHEN DIGGING WITHIN THE GAS EASEMENT OR WITHIN 10 FEET OF THE GAS LINE WHEN IN FRANCHISE POSITION. UNDERGROUND SERVICE ALERT AT 1-800-227-2600 MUST BE CALLED 48 HOURS BEFORE BEGINNING ANY EXCAVATION.
2. WORK SHALL CONFORM TO THE CONDITIONS SET FORTH IN SDG&E'S PERMISSION TO GRADE LETTER, IF APPLICABLE.
3. THE EXCAVATOR SHALL CAREFULLY HAND DIG IF WITHIN 2-FEET OF THE GAS LINE. NO POWER-OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN 2-FEET OF ANY PORTION OF THE GAS LINE.
4. IF CONTACT IS MADE WITH THE GAS LINE OR ITS COATING, SDG&E MUST BE NOTIFIED IMMEDIATELY AT 1-800-411-7343.
5. THE GAS EASEMENT SHALL BE STAKED WITH RIBBONED LATH AT 50' INCREMENTS AND THE STAKING SHALL BE MAINTAINED AT ALL TIMES DURING GRADING AND CONSTRUCTION OF THE PROJECT.

SAN DIEGO GAS & ELECTRIC COMPANY
REVIEWED BY: Jeff Sykes DATE: 5/14/12
JEFF SYKES
RIGHT OF WAY SUPERVISOR

(619) 725-7335
858-382-0414

VALID FOR 18 MONTHS FROM DATE OF SIGNATURE

> SPECIAL NOTE TO CONTRACTOR:
>
> 1. ALL REQUIRED EXCAVATION WITHIN THE 30" GAS TRANSMISSION EASEMENT SHALL BE PERFORMED WITH EQUIPMENT NO LARGER THAN A ROAD GRADER.
>
> 2. PRIOR TO CONSTRUCTION, TWO ADDITIONAL POTHOLES SHALL BE DUG AT THE NORTH END OF THE GRADING.

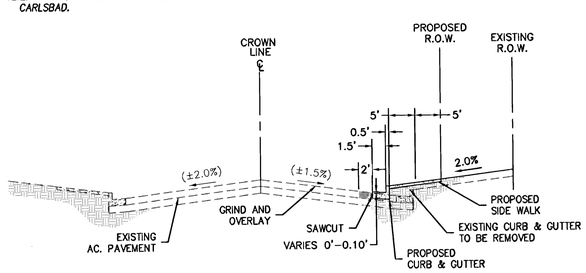

TYP.SECTION IMPALA DRIVE

N.T.S.

EROSION CONTROL NOTES

1. IN CASE EMERGENCY WORK IS REQUIRED, CONTACT MIKE COLARUSSO AT (PHONE NUMBER)
2. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS EMINENT.
3. DEVICES SHOWN ON PLANS SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE ENGINEERING INSPECTOR.
4. THE CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
5. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY ARISE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
7. ALL EROSION CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON.
8. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
9. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE (5) DAY RAIN PROBABILITY FORECAST EXCEEDS FORTY PERCENT (40%). SILT AND OTHER DEBRIS SHALL BE REMOVED AFTER EACH RAINFALL.
10. ALL GRAVEL BAGS SHALL BE BURLAP TYPE WITH 3/4 INCH MINIMUM AGGREGATE.
11. SHOULD GERMINATION OF HYDROSEEDED SLOPES FAIL TO PROVIDE EFFECTIVE COVERAGE OF GRADED SLOPES (90% COVERAGE) PRIOR TO NOVEMBER 15, THE SLOPES SHALL BE STABILIZED BY PUNCH STRAW INSTALLED IN ACCORDANCE WITH SECTION 35.023 OF THE EROSION AND SEDIMENT CONTROL HANDBOOK OF THE DEPARTMENT OF CONSERVATION, STATE OF CALIFORNIA.

TEMPORARY EROSION CONTROL PLANTING AND IRRIGATION

ALL PERMANENT AND TEMPORARY EROSION CONTROL PLANTING AND IRRIGATION SHALL BE INSTALLED AND MAINTAINED AS REQUIRED IN SECTION 212 OF THE STANDARD SPECIFICATIONS AND THE FOLLOWING:

A. HYDROSEEDING SHALL BE APPLIED TO:
   1. ALL SLOPES THAT ARE GRADED 6:1 (HORIZONTAL TO VERTICAL) OR STEEPER WHEN THEY ARE:
      a. THREE FEET OR MORE IN HEIGHT AND ADJACENT TO A PUBLIC WALL OR STREET.
      b. ALL SLOPES 4 FEET OR MORE IN HEIGHT.
   2. AREAS GRADED FLATTER THAN 6:1 WHEN ANY OF THE FOLLOWING CONDITIONS EXIST:
      a. NOT SCHEDULED FOR IMPROVEMENTS (CONSTRUCTION OR GENERAL LANDSCAPING) WITHIN 60 DAYS OF ROUGH GRADING.
      b. IDENTIFIED BY THE PARKS AND RECREATION DIRECTOR AS HIGHLY VISIBLE TO THE PUBLIC.
      c. HAVE ANY SPECIAL CONDITION IDENTIFIED BY THE CITY ENGINEER THAT WARRANTS IMMEDIATE TREATMENT.
B. HYDROSEEDED AREAS SHALL BE IRRIGATED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
   1. ALL SLOPES THAT ARE GRADED 6:1 OR STEEPER AND THAT ARE:
      a. THREE TO EIGHT FEET IN HEIGHT SHALL BE IRRIGATED BY HAND WATERING FROM QUICK COUPLERS/HOSE BIBS OR A CONVENTIONAL SYSTEM OF LOW PRECIPITATION SPRINKLER HEADS PROVIDING 100% COVERAGE.
      b. GREATER THAN 8 FEET IN HEIGHT SHALL BE WATERED BY CONVENTIONAL SYSTEM OF LOW PRECIPITATION SPRINKLER HEADS PROVIDING 100% COVERAGE.
   2. AREAS SLOPED LESS THAN 6:1 SHALL BE IRRIGATED AS APPROVED BY THE CITY ENGINEER, PRIOR TO HYDROSEEDING. THE DEVELOPER SHALL SUBMIT A PROPOSED SCHEME TO PROVIDE IRRIGATION TO THE CITY ENGINEER. THE PROPOSAL SHALL BE SPECIFIC REGARDING THE NUMBERS, TYPES AND COSTS OF THE ELEMENTS OF THE THE PROPOSED SYSTEM.
   3. IRRIGATION SHALL MAINTAIN THE MOISTURE LEVEL OF THE SOIL AT THE OPTIMUM LEVEL FOR THE GROWTH OF THE HYDROSEEDED GROWTH.
C. HYDROSEEDING MIX SHALL CONSIST OF ALL OF THE FOLLOWING:
   1. SEED MIX SHALL CONSIST OF NO LESS THAN:
      a. 20 lbs. PER ACRE OF ROSE CLOVER
      b. 20 lbs. PER ACRE OF ZORRO FESCUE
      c. 3 lbs. PER ACRE OF E SCHOOL CIA CALIFORNIA
      d. 4 lbs. PER ACRE OF ACHILLEA MILLEFOLIA
      e. 3 lbs. PER ACRE OF ALYSSUM (CARPET OF SNOW)
      f. 1/2 lb. PER ACRE OF DIMORPHOLECA
      g. ITEMS c,d,e, AND f OF THIS SUBSECTION MAY BE OMITTED ON LOCATIONS WHERE THE AREA BEING HYDROSEEDED IS NOT VISIBLE FROM EITHER A PUBLIC STREET OR RESIDENTIAL STRUCTURES.
      h. ITEM a OF THIS SUBSECTION MUST BE INOCULATED WITH A NITROGEN FIXING BACTERIA AND APPLIED DRY EITHER BY DRILLING OR BROADCASTING BEFORE HYDROSEEDING.
      i. ALL SEED MATERIALS SHALL BE TRANSPORTED TO THE JOBSITE IN UNOPENED CONTAINERS WITH THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE CERTIFICATION TAG ATTACHED TO, OR PRINTED ON SAID CONTAINERS.
      j. NON-PHYTO-TOXIC WETTING AGENTS MAY BE ADDED TO THE HYDROSEED SLURRY AT THE DISCRETION OF THE CONTRACTOR.
   2. TYPE 1 MULCH APPLIED AT THE RATE OF NO LESS THAN 2000 lbs PER ACRE. TYPE 6 MULCH (STRAW) MAY BE SUBSTITUTED, ALL OR PART, FOR HYDRAULICALLY APPLIED FIBER MATERIAL. WHEN STRAW IS USED IT MUST BE ANCHORED TO THE SLOPE BY MECHANICALLY PUNCHING NO LESS THAN 50% OF THE STRAW INTO THE SOIL.
   3. FERTILIZER CONSISTING OF AMMONIUM PHOSPHATE SULFATE, 16-20-0, WITH 15% SULPHUR APPLIED AT THE RATE OF 500 lbs. PER ACRE.

CONTINUE ON UPPER RIGHT

CONTINUED FROM LOWER LEFT

D. AREAS TO BE HYDROSEEDED SHALL BE PREPARED PRIOR TO HYDROSEEDING BY:
   1. ROUGHENING THE SURFACE TO BE PLANTED BY ANY OR COMBINATION OF:
      a. TRACK WALKING SLOPES STEEPER THAN 6:1
      b. HARROWING AREAS 6:1 OR FLATTER THAT ARE SUFFICIENTLY FRIABLE.
      c. RIPPING AREAS THAT WILL NOT BREAK UP USING ITEMS a OR b ABOVE.
   2. CONDITIONING THE SOILS SO THAT IT IS SUITABLE FOR PLANTING BY:
      a. ADJUSTING THE SURFACE SOIL MOISTURE TO PROVIDE A DAMP
      b. THE ADDITION OF SOIL AMENDMENTS, PH ADJUSTMENT, LEACHING COVERING SALINE SOILS TO PROVIDED VIABLE CONDITIONS FOR GROWTH. BUT NOT SATURATED SEED BED.

E. HYDROSEEDED AREAS SHALL BE MAINTAINED TO PROVIDE A VIGOROUS GROWTH UNTIL THE PROJECT IS PERMANENTLY LANDSCAPED OR, FOR AREAS WHERE HYDROSEEDING IS THE PERMANENT LANDSCAPING, UNTIL THE PROJECT IS COMPLETED AND ALL BONDS RELEASED.

"AS BUILT"

FELIX GONZALEZ — DATE
RCE: NO. 67660 EXP. 6/30/13
REVIEWED BY:
INSPECTOR — DATE

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

PLANS PREPARED BY:
REGISTERED PROFESSIONAL ENGINEER FELIX GONZALEZ No. 67660 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA

architecture
planning
interiors
graphics
civil engineering

WARE MALCOMB
Leading Design for Commercial Real Estate
6363 greenwich dr. ste. 175
san diego, california 92122
p 858.638.7277 - f 858.638.7506

PREPARED UNDER THE DIRECT SUPERVISION OF:
FELIX GONZALEZ RCE NO. 67660 DATE: 5/2/12 EXP. 6/30/13

SHEET 2 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS 9

GRADING PLANS FOR:
LA POSADA DE GUADALUPE DE CARLSBAD
2478 IMPALA DRIVE, CARLSBAD, CA
NOTES

APPROVED: GLEN K. VAN PESKI 5/23/12
ENGINEERING MANAGER, PE 41204 EXPIRES 3/31/13 DATE

DWN BY:
CHKD BY:
RVWD BY:

PROJECT NO. CUP 10-08

DRAWING NO. 473-4A

DWG 473-4A
2 of 9

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CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT

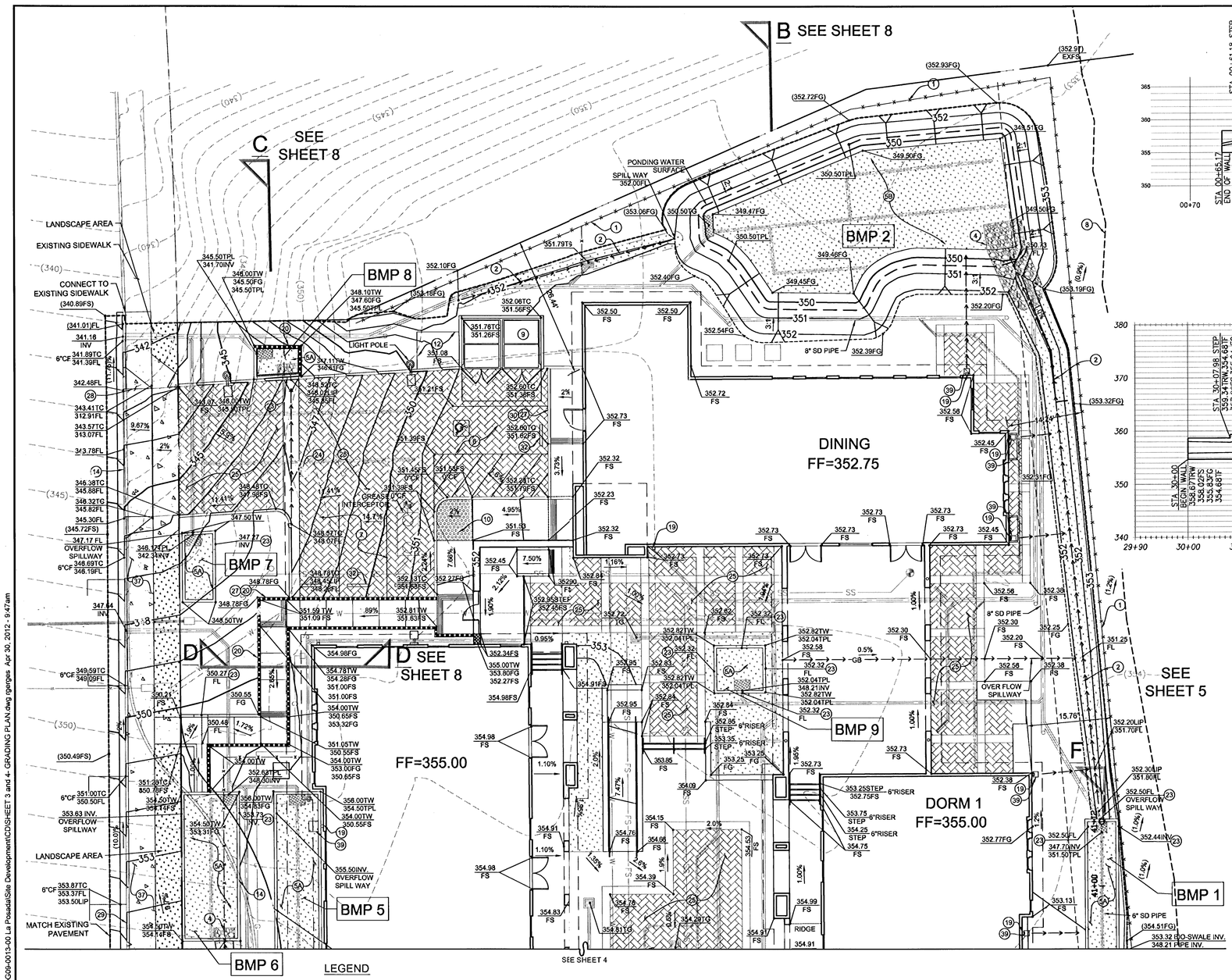

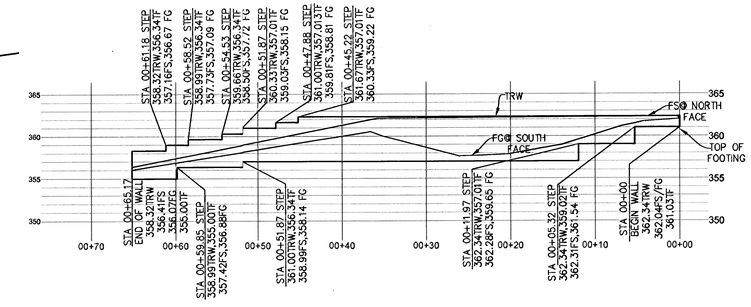

RETAINING WALL "A" PROFILE (SEE SHEET 4)
SCALE 1"= 8'

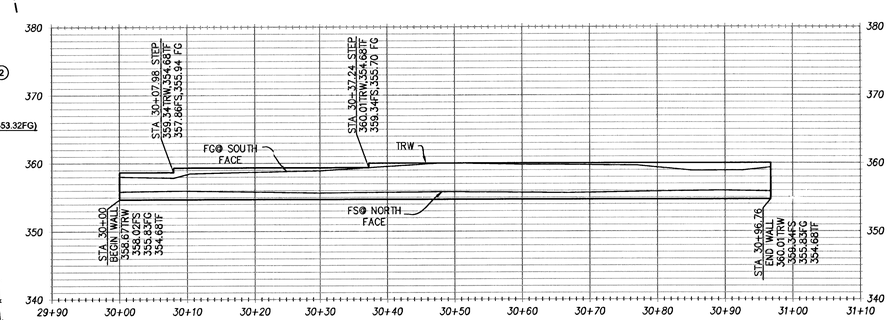

RETAINING WALL "B" PROFILE (SEE SHEET 4)
SCALE 1"= 10'

CONSTRUCTION NOTES:

1. EXISTING FENCE
2. CONSTRUCT GRADED BIOSWALE PER DETAIL 1, SHEET 9.
4. CONSTRUCT RIP RAP ENERGY DISSIPATOR,NO. 2 BACKING,T=1.1FT,FILTER BLANKET LAYERS OPTION: 1,2 OR 3.
5A. CONSTRUCT FLOW-THROUGH PLANTER (BMP) PER DETAIL 5, SHEET 8.
5B. CONSTRUCT BIO-RETENTION SYSTEM (BMP) PER DETAIL 5B,SHEET 9.
6. INSTALL ADA STALLS SAN DIEGO REGIONAL STD. DWG. M-27A.
7. NEW PARKING STALLS, SEE ARCHITECTURAL PLANS
8. EXISTING TOP OF SLOPE
9. CONSTRUCT NEW TRASH ENCLOSURE PER ARCHITECTURAL PLANS
10. CONSTRUCT NEW ADA CURB RAMP, 1:12 MAX SLOPE WITH CAST-IN-PLACE TRUNCATED DOMES.
12. NEW CONCRETE PAD FOR BIKE RACK (4" PCC/4" AB)
14. EXISTING CURB TO BE REMOVED
19. ROOF DRAIN, TYPICAL, SEE ARCH ROOF PLAN
20. CONSTRUCT RETAINING WALL PER SAN DIEGO REGIONAL STD. DWG. C-4.
23. PROVIDE 12" CURB OPENING.
24. CONSTRUCT RIBBON GUTTER PER SAN DIEGO REGIONAL STD. DWG. G-12.
25. CONSTRUCT POROUS PAVERS PER DETAIL 25,SHEET 8.
27. INSTALL GUARDRAILS PER SAN DIEGO REGIONAL STD. DWG. M-24, POST TYPE.
28. CONSTRUCT DRIVEWAY PER CITY OF CARLSBAD STD. DWG. GS-12.
29. CONSTRUCT 6" CURB AND GUTTER PER SAN DIEGO REGIONAL STD. DWG. G-2.
30. CONSTRUCT 6" CURB ONLY-DEEPEND PER DETAIL 30,SHEET 8.
31. CONSTRUCT 6" CURB ONLY PER DETAIL SHOWN ON SHEET 8.
32. WHEEL STOP PER ARCHITECTURAL PLAN.
37. INSTALL 4" THICK P.C. CONCRETE SIDE WALK PER SAN DIEGO REGIONAL STD. DWG. G-7
39. ROOF DRAIN DOWN SPOUT SPLASH BLOCK

LEGEND

- TURF-BLOCK MATERIAL
- POROUS PAVERS
- 4" THICK P.C. CONCRETE SIDEWALK
- LANDSCAPING

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

NOTE:
DATUM USED FOR THIS PROJECT IS NAVD88

REQUIRED TREATMENT CONTROL BMP TABLE	
DESCRIPTION	QUANTITY
BIOSWALE	124 LF
BIO-RETENTION	1065 SF
FLOW-THROUGH PLANTER	446 SF

PLANS PREPARED BY:
REGISTERED PROFESSIONAL ENGINEER FELIX GONZALEZ No. 67660 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA
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p 858.638.7277 - f 858.638.7506
PREPARED UNDER THE DIRECT SUPERVISION OF:
FELIX GONZALEZ RCE NO. 67660 DATE: 5/2/12 EXP. 6/30/13

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

"AS BUILT"
FELIX GONZALEZ
RCE: NO. 67660 EXP. 6/30/13 DATE
REVIEWED BY:
INSPECTOR DATE

SHEET 3 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS 9

GRADING PLANS FOR:
LA POSADA DE GUADALUPE DE CARLSBAD
2478 IMPALA DRIVE, CARLSBAD, CA
GRADING PLAN

APPROVED: Glen K. Van Peski GLEN K. VAN PESKI 5/23/12
ENGINEERING MANAGER, PE 41204 EXPIRES 3/31/13 DATE

DWN BY:
CHKD BY:
RVWD BY:
PROJECT NO. CUP 10-08
DRAWING NO. 473-4A

DWG 473-4A
3 of 9

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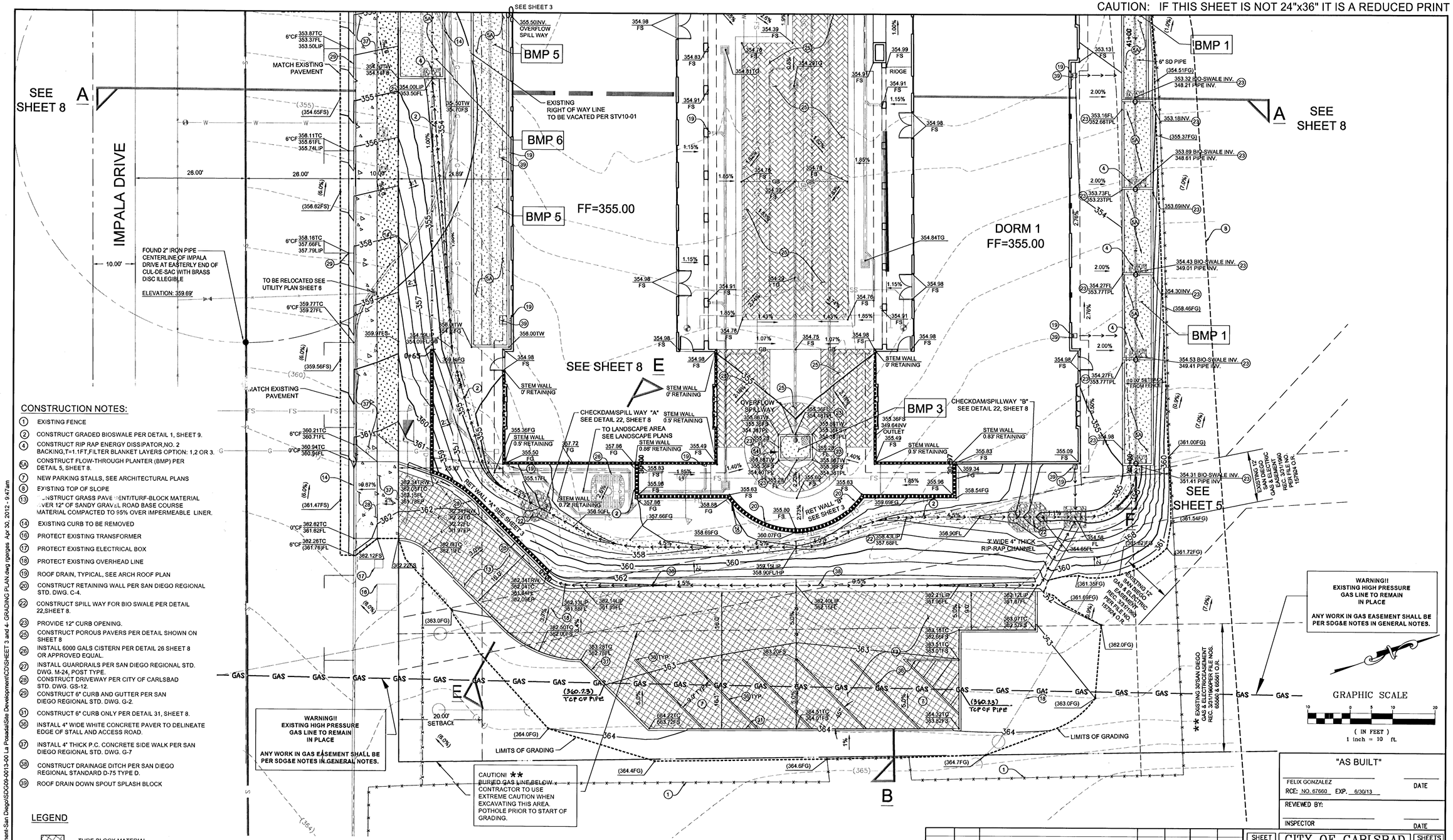

CONSTRUCTION NOTES:

1. EXISTING FENCE
2. CONSTRUCT GRADED BIOSWALE PER DETAIL 1, SHEET 9.
4. CONSTRUCT RIP RAP ENERGY DISSIPATOR,NO. 2 BACKING,T=1.1FT,FILTER BLANKET LAYERS OPTION: 1,2 OR 3.
5A. CONSTRUCT FLOW-THROUGH PLANTER (BMP) PER DETAIL 5, SHEET 8.
7. NEW PARKING STALLS, SEE ARCHITECTURAL PLANS
9. EXISTING TOP OF SLOPE
13. CONSTRUCT GRASS PAVEMENT/TURF-BLOCK MATERIAL OVER 12" OF SANDY GRAVEL ROAD BASE COURSE MATERIAL COMPACTED TO 95% OVER IMPERMEABLE LINER.
14. EXISTING CURB TO BE REMOVED
16. PROTECT EXISTING TRANSFORMER
17. PROTECT EXISTING ELECTRICAL BOX
18. PROTECT EXISTING OVERHEAD LINE
19. ROOF DRAIN, TYPICAL, SEE ARCH ROOF PLAN
20. CONSTRUCT RETAINING WALL PER SAN DIEGO REGIONAL STD. DWG. C-4.
22. CONSTRUCT SPILL WAY FOR BIO SWALE PER DETAIL 22,SHEET 8.
23. PROVIDE 12" CURB OPENING.
25. CONSTRUCT POROUS PAVERS PER DETAIL SHOWN ON SHEET 8
26. INSTALL 6000 GALS CISTERN PER DETAIL 26 SHEET 8 OR APPROVED EQUAL.
27. INSTALL GUARDRAILS PER SAN DIEGO REGIONAL STD. DWG. M-24, POST TYPE.
28. CONSTRUCT DRIVEWAY PER CITY OF CARLSBAD STD. DWG. GS-12.
29. CONSTRUCT 6" CURB AND GUTTER PER SAN DIEGO REGIONAL STD. DWG. G-2.
31. CONSTRUCT 6" CURB ONLY PER DETAIL 31, SHEET 8.
36. INSTALL 4" WIDE WHITE CONCRETE PAVER TO DELINEATE EDGE OF STALL AND ACCESS ROAD.
37. INSTALL 4" THICK P.C. CONCRETE SIDE WALK PER SAN DIEGO REGIONAL STD. DWG. G-7
38. CONSTRUCT DRAINAGE DITCH PER SAN DIEGO REGIONAL STANDARD D-75 TYPE D.
39. ROOF DRAIN DOWN SPOUT SPLASH BLOCK

LEGEND

- TURF-BLOCK MATERIAL
- POROUS PAVERS
- 4" THICK P.C. CONCRETE SIDEWALK
- LANDSCAPING

NOTE: DATUM USED FOR THIS PROJECT IS NAVD88

SAN DIEGO GAS & ELECTRIC COMPANY
Review Date: 5/14/12
Jeff Sykes
Right of Way Supervisor
Valid for 18 Month from Date of Signature

REQUIRED TREATMENT CONTROL BMP TABLE	
DESCRIPTION	QUANTITY
CISTERN	1 EA
BIOSWALE	262 LF
FLOW-THROUGH PLANTERS	1,432 SF

PLANS PREPARED BY:
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FELIX GONZALEZ RCE NO. 67660 DATE: 5/2/12 EXP. 6/30/13

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RCE: NO. 67660 EXP. 6/30/13 DATE
REVIEWED BY:
INSPECTOR DATE

SHEET 4 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS 9

GRADING PLANS FOR:
LA POSADA DE GUADALUPE DE CARLSBAD
2478 IMPALA DRIVE, CARLSBAD, CA
GRADING PLAN

APPROVED: Glen K. Van Peski 5/23/12
GLEN K. VAN PESKI
ENGINEERING MANAGER, PE 41204 EXPIRES 3/31/13 DATE

DWN BY:
CHKD BY: JE
RVWD BY:
PROJECT NO. CUP 10-08
DRAWING NO. 473-4A

DWG 473-4A
4 of 9

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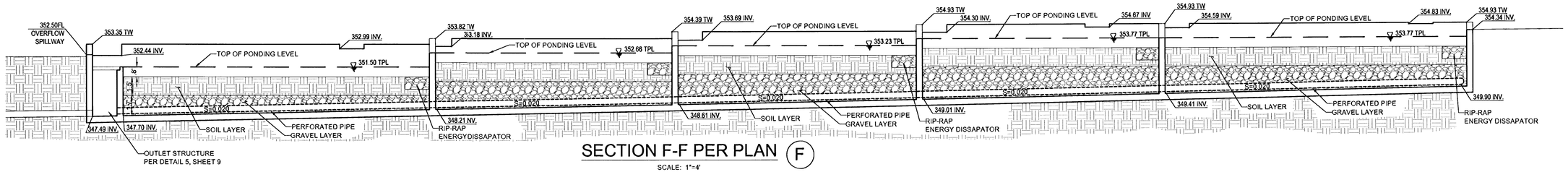

SECTION F-F PER PLAN (F)

SCALE: 1"=4'

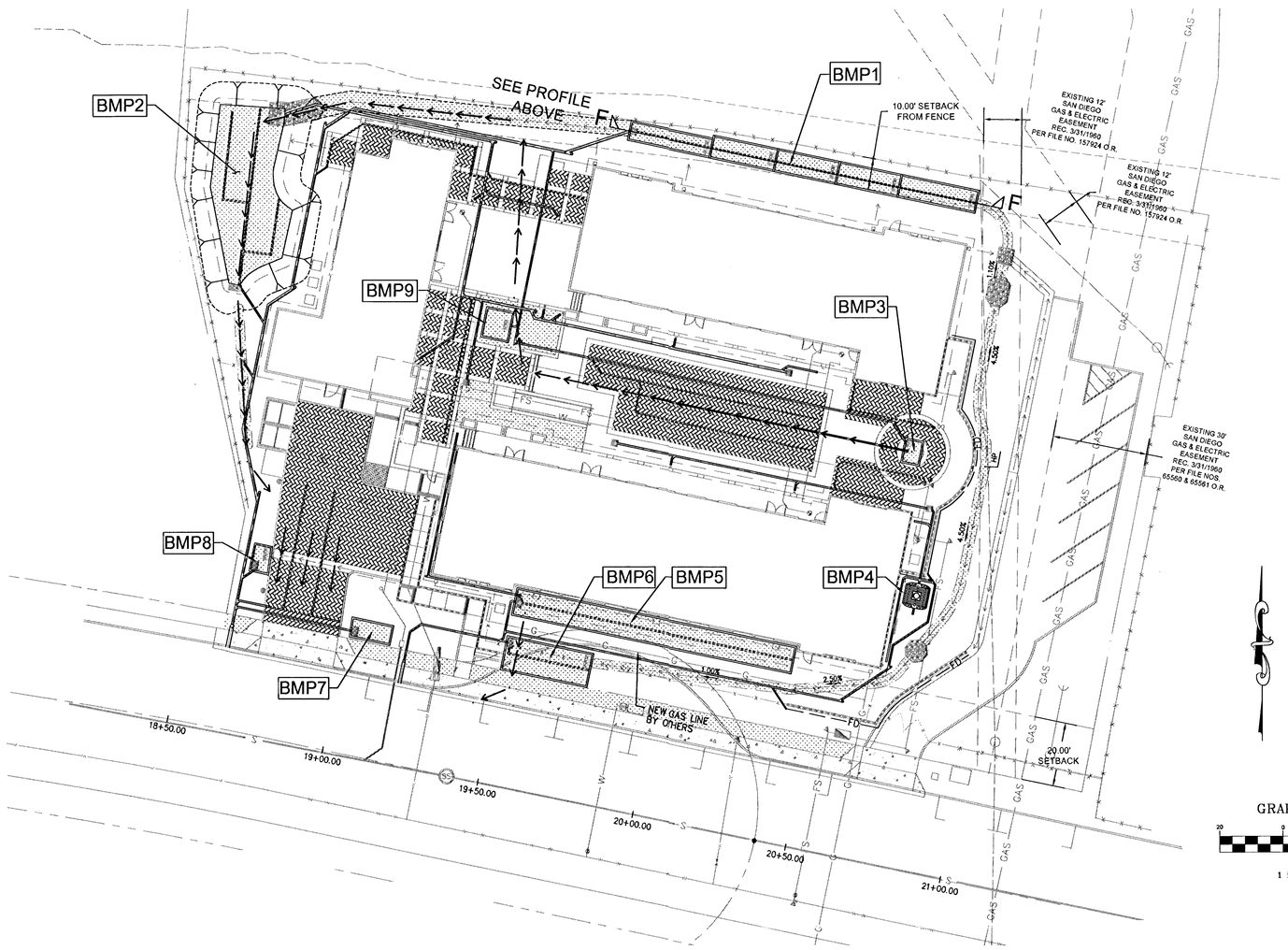

BMP SIZING TABLE									
BMP	DESCRIPTION	LENGTH	WIDTH	TOTAL HEIGHT (TOP OF WALL TO PIPE INVERT)	d1(PONDING DEPTH)	d2(STORAGE DEPTH)	ORIFICE (in)	VOLUME (gal)	DETAILS SEE SHEETS
BMP1	FLOW-THROUGH PLANTER	112 FT	VARIES	VARIES **	10 IN	1.50 Ft	0.30 IN	na	5,8
BMP2	BIORETENTION	PER PLAN	PER PLAN	4.92 FT	13 IN	2.00 FT	0.30 IN	na	9
BMP3	FLOW-THROUGH PLANTER	7 FT	5 FT	4.48 Ft	10 IN	1.50 FT	0.30 IN	na	8
BMP4	CISTERN	na	na	na	na	na	na	2,000	8
BMP5	FLOW-THROUGH PLANTER	90 FT	7.84 FT	7.14 FT	10 IN	1.50 FT	0.20 IN	na	8
BMP6	FLOW-THROUGH PLANTER	27 FT	10 FT	6.5 FT	10 IN	1.50 FT	0.30 IN	na	8
BMP7	FLOW-THROUGH PLANTER	12.5 FT	5.3 FT	5.16 FT	10 IN	1.50 FT	0.20 IN	na	8
BMP8	FLOW-THROUGH PLANTER	8.0 FT	5.38 FT	4.30 FT	10 IN	1.50 FT	0.20 IN	na	8
BMP9	FLOW-THROUGH PLANTER	8.75 FT	8 FT	4.61 FT	10 IN	1.50 FT	0.20 IN	na	8

** FOR ACTUAL DIMENSIONS FOR BMP1, SEE LONGITUDINAL PROFILE ABOVE.

Terms:

TR	Top of Rim
TG	Top Grade
TPL	Top Ponding Level
INV	Invert
TW	Top of Wall
HP	High Point

LEGEND

- TURF-BLOCK MATERIAL
- POROUS PAVERS
- 4" THICK P.C. CONCRETE SIDEWALK
- LANDSCAPING
- OVERFLOW PATH

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.

"AS BUILT"

FELIX GONZALEZ
RCE: NO. 67660 EXP. 6/30/13 DATE

REVIEWED BY:

INSPECTOR DATE

SAN DIEGO GAS & ELECTRIC COMPANY
Reviewed by: Date:
Jeff Sykes
Right of Way Supervisor
Valid for 18 Months from Date of Signature

PLANS PREPARED BY:
REGISTERED PROFESSIONAL ENGINEER FELIX GONZALEZ No. 67660 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA

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FELIX GONZALEZ RCE NO. 67660 DATE: 5/2/12 EXP. 6/30/13

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SHEET 5 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS 9

GRADING PLANS FOR:
LA POSADA DE GUADALUPE DE CARLSBAD
2478 IMPALA DRIVE, CARLSBAD, CA
BMP PLAN

APPROVED: GLEN K. VAN PESKI 5/23/12
ENGINEERING MANAGER, PE 41204 EXPIRES 3/31/13 DATE

DWN BY:
CHKD BY:
RVWD BY:

PROJECT NO. CUP 10-08

DRAWING NO. 473-4A

DWG 473-4A
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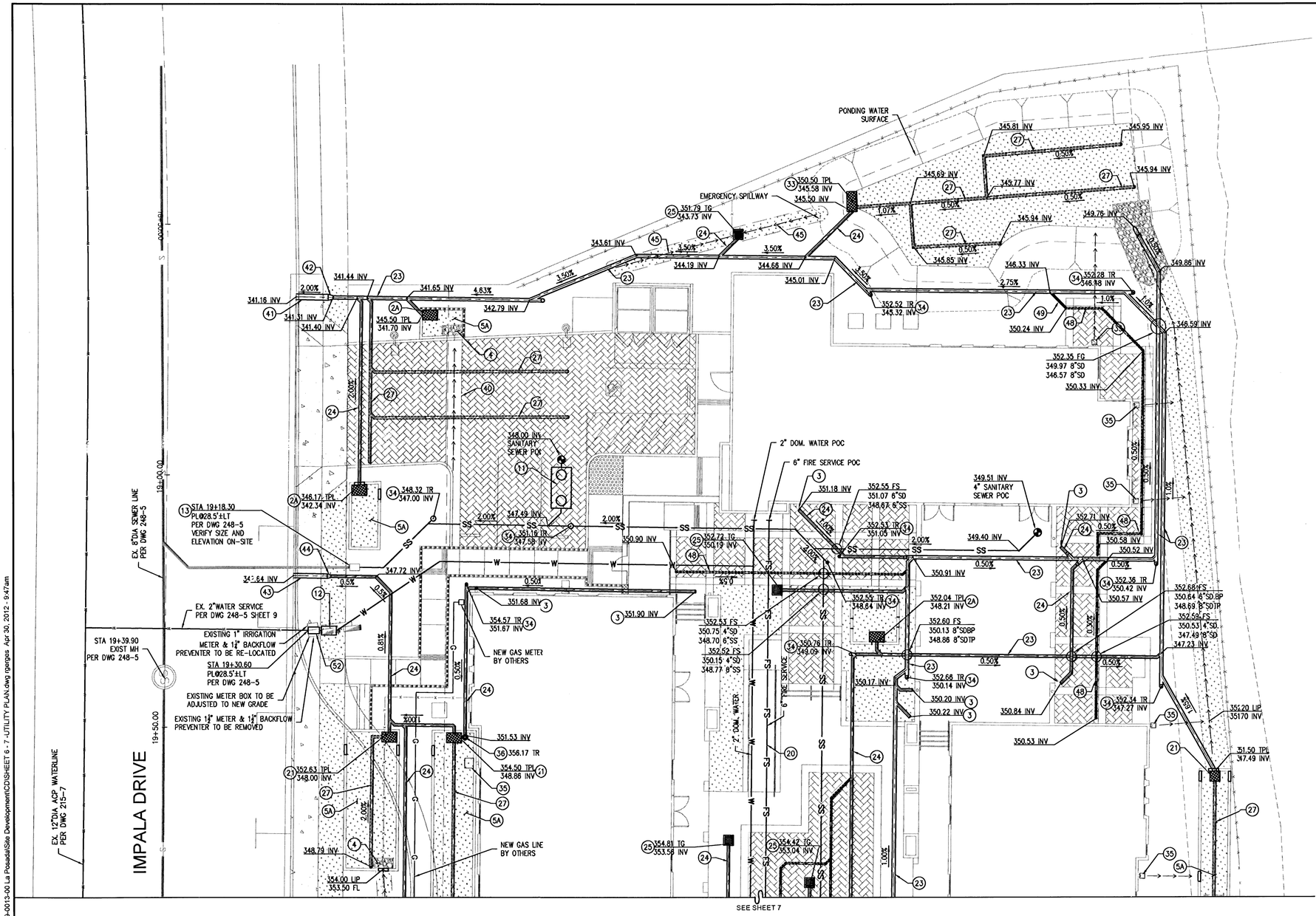

PLAN SPECIFIC NOTES:

- (3) ROOF DRAIN POINT OF CONNECTION
- (11) NEW 1500 GAL. GREASE INTERCEPTOR, INV IN 348.90, INV OUT 348.50
- (12) INSTALL 2" BACKFLOW PREVENTOR, PER CITY OF CARLSBAD STD. DWG. W-20
- (13) EXISTING C.O. PER DWG 248-5 SHT 9, CONTRACTOR TO VERIFY IN FIELD DEPTH & SIZE
- (2A) PLANTER OVERFLOW OUTLET(BROOKS 1212CB),SEE DETAIL 5, SHEET 8.
- (21) PLANTER OVERFLOW OUTLET(BROOKS 2424CB),SEE DETAIL 5, SHEET 8.
- (23) INSTALL 8" SD-35 STORM DRAIN LINE.
- (24) INSTALL 6" SD-35 STORM DRAIN LINE.
- (25) INSTALL KRISTAR FLO GARD LO PRO SHALLOW CATCH BASIN WITH NON-TRAFFIC GRATED INLET AND FILTER INSERT (FG-M1818).
- (27) INSTALL 6" PERFORATED SD-35 STORM DRAIN LINE.
- (33) BIORETENTION BASIN OUTLET(BROOKS 36X36CB) DETAIL 2, SHEET 9
- (34) CLEANOUT PER DETAIL 34, SHEET 9.
- (35) ROOF DOWNSPOUT SPLASH BLOCK.
- (36) POP-UP DRAINAGE EMITTER(NDS #620 6") PER DETAIL 5, SHEET 8.
- (41) INSTALL RECTANGULAR STEEL PIPE, 4"X14" CURB-O-LET TCD 414 AND NECESSARY ACCESSORIES. DETAIL 32, SHEET 9.
- (42) INSTALL CIRCULAR PIPE TO RECTANGULAR PIPE ADAPTER CURB-O-LET CP-SPA 14. DETAIL 33 SHEET 9.
- (43) INSTALL RECTANGULAR STEEL PIPE, 3"X12" CURB-O-LET TCD 414 AND NECESSARY ACCESSORIES. DETAIL 32 SHEET 9.
- (44) INSTALL CIRCULAR PIPE TO RECTANGULAR PIPE ADAPTER CURB-O-LET CP-SPA 12. DETAIL 33, SHEET 9
- (48) INSTALL 4" PERFORATED SD-35 STORM DRAIN LINE
- (49) INSTALL 4" SD-35 STORM DRAIN LINE
- (52) REMOVE EXISTING 1½" WATER METER AND REPLACE WITH 2" METER. CONNECT NEW METER TO EXISTING 2" SERVICE AND ADJUST EXISTING METER BOX TO SIDEWALK GRADE.

(A)

LEGEND

- TURF-BLOCK MATERIAL
- POROUS PAVERS
- 4" THICK P.C. CONCRETE SIDEWALK
- LANDSCAPING

Terms:

TR	Top of Rim
TG	Top Grade
TPL	Top Ponding Level
INV	Invert
FD	Foundation Drain

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10 ft.

"AS BUILT"

FELIX GONZALEZ
RCE: NO. 67660 EXP. 6/30/13 DATE

REVIEWED BY:

INSPECTOR DATE

PLANS PREPARED BY:

REGISTERED PROFESSIONAL ENGINEER FELIX GONZALEZ No. 67660 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA

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SHEET 6 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS 9

GRADING PLANS FOR:
LA POSADA DE GUADALUPE DE CARLSBAD
2478 IMPALA DRIVE, CARLSBAD, CA
UTILITY PLAN

APPROVED: Glen K. Van Peski 5/23/12
GLEN K. VAN PESKI
ENGINEERING MANAGER, PE 41204 EXPIRES 3/31/13 DATE

DWN BY:
CHKD BY:
RVWD BY:

PROJECT NO. CUP 10-08

DRAWING NO. 473-4A

DWG 473-4A
6 of 9

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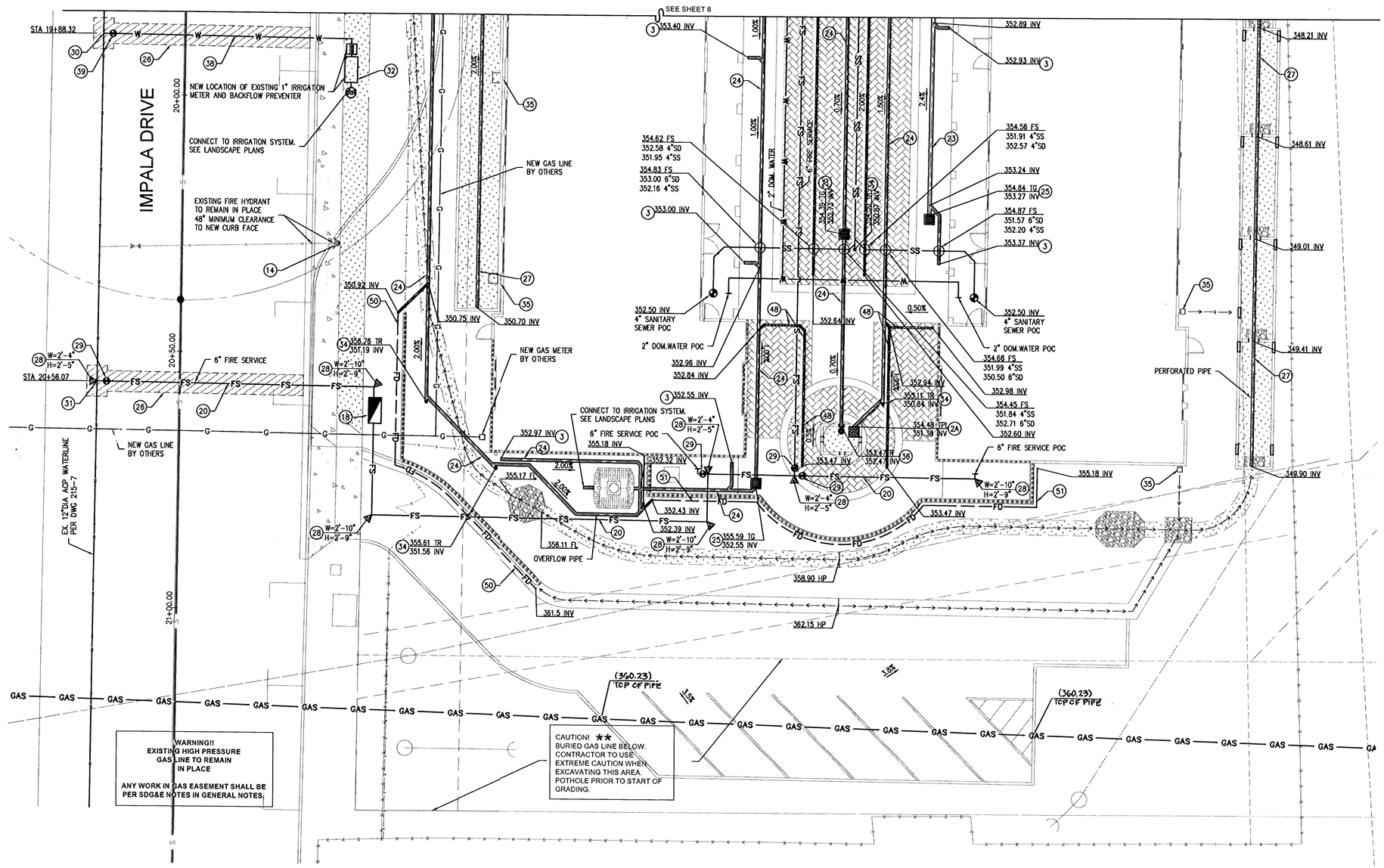

PLAN SPECIFIC NOTES:

- (3) ROOF DRAIN POINT OF CONNECTION
- (13) EXISTING C.O. PER DWG 248-5 SHT 9, CONTRACTOR TO VERIFY IN FIELD DEPTH & SIZE
- (14) EXISTING FIRE HYDRANT TO REMAIN, PROTECT IN PLACE.
- (18) CITY STANDARD DOUBLE DETECTOR CHECK VALVE ASSEMBLY WITH 6" PIV & FDC, SEE STD. DTL. W-22
- (20) NEW 6" FIRE SERVICE CONNECTION
- (2A) PLANTER OVERFLOW OUTLET(BROOKS 1212CB),SEE DETAIL 5, SHEET 8.
- (21) PLANTER OVERFLOW OUTLET(BROOKS 2424CB),SEE DETAIL 5, SHEET 8.
- (23) INSTALL 8" SD-35 STORM DRAIN LINE.
- (24) INSTALL 6" SD-35 STORM DRAIN LINE.
- (25) INSTALL KRISTAR FLO GARD LO PRO SHALLOW CATCH BASIN WITH NON-TRAFFIC GRATED INLET AND FILTER INSERT (FG-M1818).
- (26) CONTRACTOR TO USE CARLSBAD STD DWG GS-25 OR GS-28 BASED ON FIELD TRENCHING WIDTHS .
- (27) INSTALL 6" PERFORATED SD-35 STORM DRAIN LINE.
- (28) INSTALL THRUST BLOCK PER CARLBAD STD DWG W-15,W-19. BASED ON 2,000 PSF SOIL; TEES = 5.5 SF & 90°BENDS = 7.7 S.F.
- (29) INSTALL 6" FL X FL GATE VALVE PER CARLSBAD STD DWG W-16. INSTALL VALVE BOX PER CARLSBAD STD DWG W-13.
- (30) 2" VALVE HOT TAP W/ STAINLESS STEEL TAPPING SLEEVE
- (31) 6" VALVE HOT TAP W/ STAINLESS STEEL TAPPING SLEEVE.
- (32) RELOCATE 1" IRRIGATION AND BACKFLOW PREVENTOR, PER CITY OF CARLSBAD STD. DWG. W-20
- (34) CLEANOUT PER DETAIL 34, SHEET 9.
- (35) ROOF DOWNSPOUT SPLASH BI OCK.
- (36) POP-UP DRAINAGE EMITTER(NDS #620 6") PER DETAIL 36, SHEET 8.
- (38) NEW 2" IRRIGATION SERVICE CONNECTION PER CARLSBAD STD PLAN W-4.
- (39) INSTALL 2" FL X FL GATE VALVE PER CARLSBAD STD DWG W-16. INSTALL VALVE BOX PER CARLSBAD STD DWG W-13.
- (48) INSTALL 4" PERFORATED SD-35 STORM DRAIN LINE
- (49) INSTALL 4" SD-35 STORM DRAIN LINE
- (50) 3" P.V.C. DRAIN LINE W/1 C.Y. GRAVEL WRAP, PER DETAIL 40, SHEET 9.
- (51) 3" P.V.C. DRAIN LINE W/1 C.Y. GRAVEL WRAP, PER DETAIL 41, SHEET 9.

LEGEND

- TURF-BLOCK MATERIAL
- POROUS PAVERS
- 4" THICK P.C. CONCRETE SIDEWALK
- LANDSCAPING
- TRENCHING

Terms:	
TR	Top of Rim
TG	Top Grade
TPL	Top Ponding Level
INV	Invert
FD	Foundation Drain

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10 ft.

"AS BUILT"

FELIX GONZALEZ
RCE: NO. 67660 EXP. 6/30/13 DATE

REVIEWED BY:

INSPECTOR DATE

SAN DIEGO GAS & ELECTRIC COMPANY
Reviewed By: Date: 5/14/12
Jeff Sykes
Right of Way Supervisor
Valid for 18 Months from Date of Signature

PLANS PREPARED BY:
REGISTERED PROFESSIONAL ENGINEER FELIX GONZALEZ No. 67660 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA

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PREPARED UNDER THE DIRECT SUPERVISION OF:
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ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

SHEET 7 | CITY OF CARLSBAD ENGINEERING DEPARTMENT | SHEETS 9

GRADING PLANS FOR:
LA POSADA DE GUADALUPE DE CARLSBAD
2478 IMPALA DRIVE, CARLSBAD, CA
UTILITY PLAN

APPROVED: GLEN K. VAN PESKI 5/23/13
ENGINEERING MANAGER, PE 41204 EXPIRES 3/31/13 DATE

DWN BY:
CHKD BY:
RVWD BY:

PROJECT NO. CUP 10-08

DRAWING NO. 473-4A

DWG 473-4A
7 of 9

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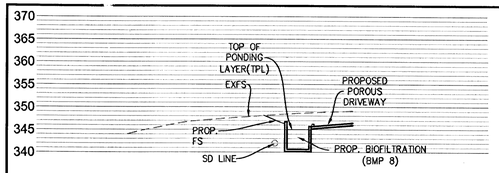

SECTION C PER PLAN (C)

N.T.S.

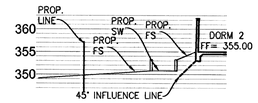

SECTION D-D PER PLAN (D)

N.T.S.

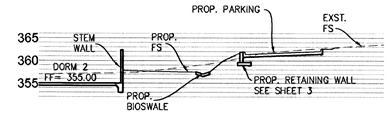

SECTION E-E PER PLAN (E)

N.T.S.

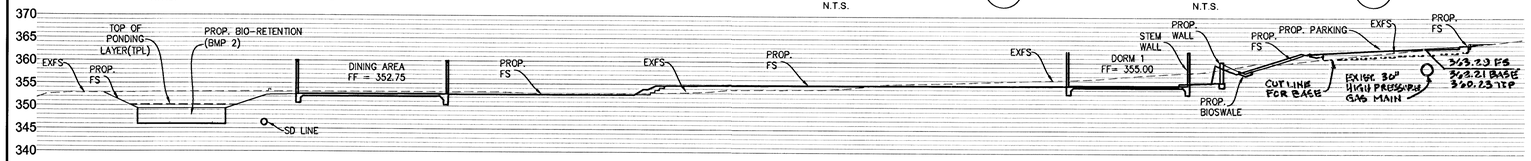

SECTION B-B PER PLAN (B)

N.T.S.

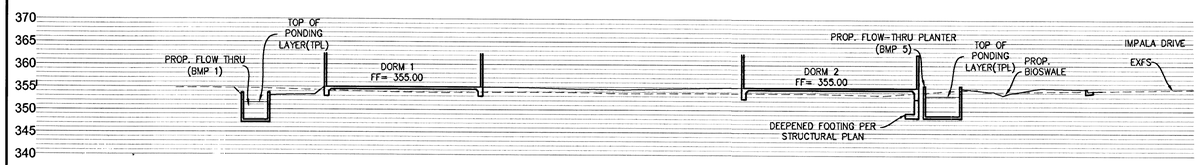

SECTION A-A PER PLAN (A)

N.T.S.

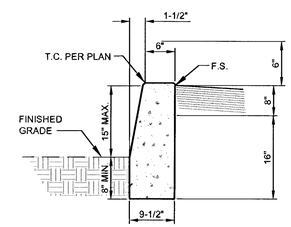

(30) 6"CURB ONLY-DEEPEND DETAIL

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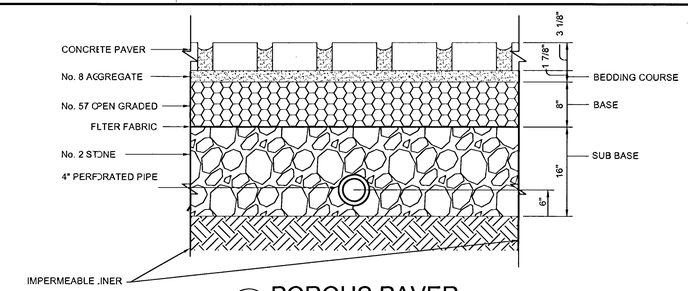

(25) POROUS PAVER

N.T.S.

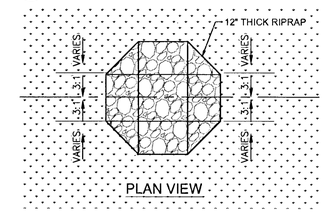

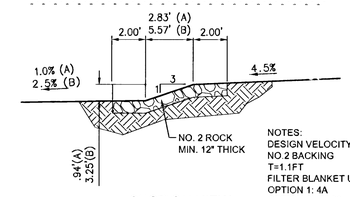

NOTES:
DESIGN VELOCITY=8.4FT/SEC
NO.2 BACKING
T=1.1FT
FILTER BLANKET UPPER LAYERS:
OPTION 1: 4A
OPTION 2: (5) B3
OPTION 3: (6) D.G.

(22) ROCK SPILLWAY FOR BIOSWALE

N.T.S.

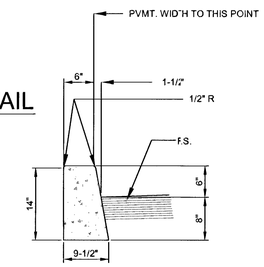

(31) 6" CURB ONLY

N.T.S.

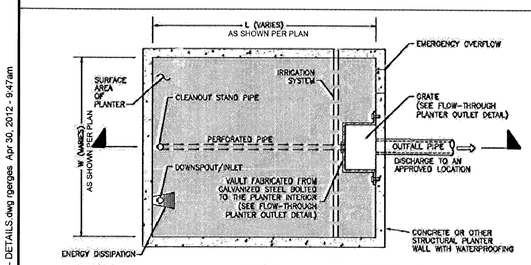

PLAN

N.T.S.

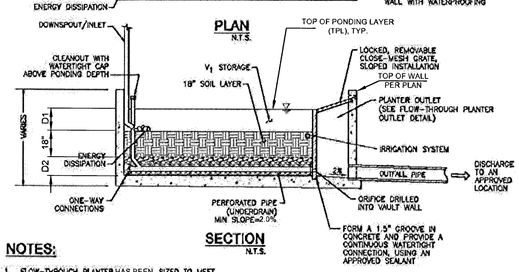

SECTION

N.T.S.

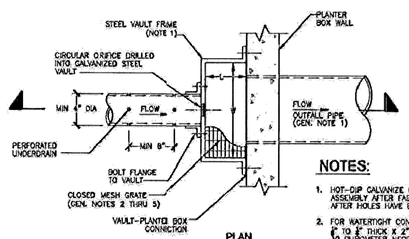

NOTES:

1. HOT-DIP GALVANIZE ENTIRE FRAME ASSEMBLY AFTER FABRICATION AND AFTER HOLES HAVE BEEN DRILLED.
2. FOR WATERTIGHT CONNECTION, INSTALL 1/8" TO 3/8" THICK X 2" WIDE CONTINUOUS 50 DUROMETER NEOPRENE GASKET, ALL AROUND VAULT FRAME.

PLAN

N.T.S.

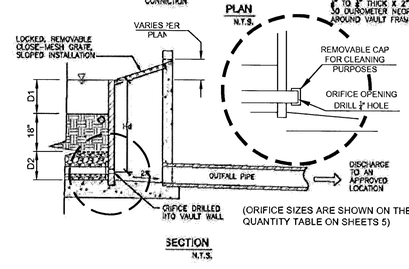

(ORIFICE SIZES ARE SHOWN ON THE BMP QUANTITY TABLE ON SHEETS 5)

SECTION

N.T.S.

NOTES:

1. FLOW-THROUGH PLANTER HAS BEEN SIZED TO MEET CCCWP CRITERIA FOR TREATMENT AND/OR FLOW CONTROL.
2. MINIMUM SURFACE AREA OF PLANTER IS 4% OF TRIBUTARY IMPERVIOUS AREA FOR TREATMENT ONLY DESIGN. FOR FLOW CONTROL AND TREATMENT, REFER TO CCCWP SIZING TOOL CRITERIA.
3. ~~SHAPE OF PLANTER CAN VARY TO MEET PROJECT DESIGN REQUIREMENTS AND LOCATION.~~
4. CLASS 2 PERMEABLE MATERIAL
5. DOWNSPOUTS/INLET PIPES REQUIRE ENERGY DISSIPATION.
6. USE COUNTY APPROVED ADDITIVE MIXTURE FOR WATERPROOFING CONCRETE.
7. PLANTINGS: SEE CCCWP RECOMMENDED PLANT LIST AND GUIDELINES.
8. ~~PLANTER DESIGN MAY REQUIRE STRUCTURAL ENGINEERING DESIGN.~~
9. AREA = W x L (ABOVE). EXCLUDES AREA OF VAULT
10. D1 & D2 DIMENSIONS ARE SHOWN IN BMP QUANTITY TABLE ON SHEET 5.

GENERAL OUTLET DETAIL NOTES:

1. (ORIFICE SIZES ARE SHOWN ON THE BMP QUANTITY TABLE ON SHEETS 5)
2. GRATE SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
3. GRATE SHALL BE STAINLESS STEEL, ALUMINUM OR STEEL. STEEL GRATES SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER PAINTED AFTER GALVANIZING.
4. GRATE SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
5. STRUCTURAL DESIGN OF GRATE SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF GRATE.

(5) FLOW-THRU PLANTER (BMP)

(NOTE: PROVIDE GRILL-TYPE COVER TO SUNKEN PLANTER BOX)

N.T.S.

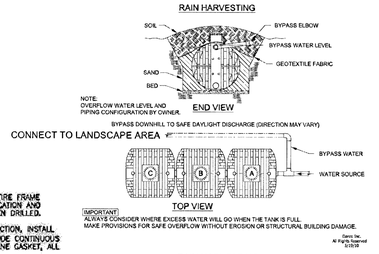

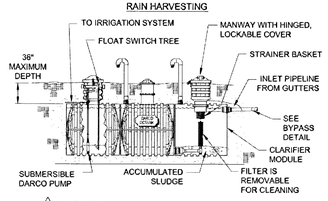

(26) UNDERGROUND CISTERN DETAIL

N.T.S.

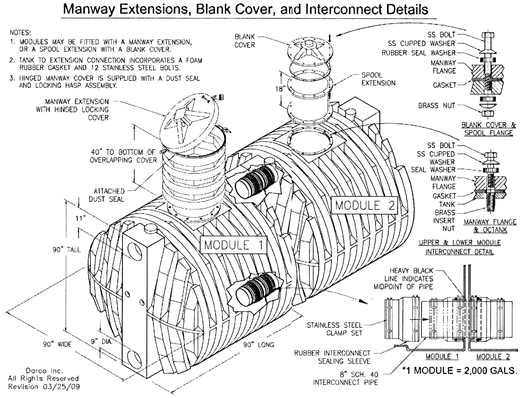

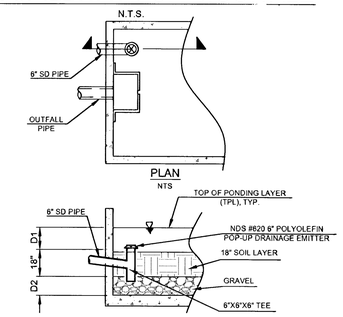

(36) POP-UP DRAINAGE EMITTER(BMP5)

N.T.S.

"AS BUILT"

FELIX GONZALEZ
RCE: NO. 67660 EXP. 6/30/13 DATE

REVIEWED BY:

INSPECTOR DATE

PLANS PREPARED BY:

REGISTERED PROFESSIONAL ENGINEER FELIX GONZALEZ No. 67660 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA

architecture
planning
interiors
graphics
civil engineering

WARE MALCOMB
Leading Design for Commercial Real Estate
6363 greenwich dr. ste. 175
san diego, california 92122
p 858.638.7277 - f 858.638.7506

PREPARED UNDER THE DIRECT SUPERVISION OF:
FELIX GONZALEZ RCE NO. 67660 DATE: 5/2/12 EXP. 6/30/13

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

SHEET 8 — CITY OF CARLSBAD, ENGINEERING DEPARTMENT — SHEETS 9

GRADING PLANS FOR:
LA POSADA DE GUADALUPE DE CARLSBAD
2478 IMPALA DRIVE, CARLSBAD, CA
DETAIL SHEET

APPROVED: GLEN K. VAN PESKI 5/23/12
ENGINEERING MANAGER, PE 41204 EXPIRES 3/31/13 DATE

DWN BY: KS
CHKD BY: KS
RVWD BY:

PROJECT NO. CUP 10-08
DRAWING NO. 473-4A

DWG 473-4A
8 of 9

I:\admin\Site Development\Site Development-San Diego\SDG09-0013-00 La Posada\Site Development\CD\SHEET 8- DETAILS.dwg rgerges Apr 30, 2012 - 9:47am

CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT

NOTES

1. SEE PROJECT PLANS FOR INVERT ELEVATION.
2. PIPE AND FITTINGS, EXCEPT AS OTHERWISE SHOWN ON HEREON, SHALL BE OF THE SAME MATERIAL AS THE SEWER, UNLESS APPROVED ADAPTERS ARE UTILIZED AND MAY BE ANY OF THE FOLLOWING:

VC PIPE
PE PIPE
ABS SOLID PIPE
ABS COMPOSITE PIPE
PVC PLASTIC PIPE

3. PIPES AND FITTINGS SHALL BE PROPERLY ALIGNED AND MAINTAINED WHILE CONCRETE IS BEING PLACED AND ALLOWED TO HARDEN. JOINTS FOR PIPES AND FITTINGS SHALL BE MADE PRIOR TO PLACING CONCRETE. CONCRETE FOR BEDDING, ENCASEMENT, AND WALL SUPPORT FOR PIPES AND FITTINGS SHALL BE PLACED UNIFORMLY AROUND THE PIPE AND FITTINGS AS SHOWN HEREON TO MAINTAIN PROPER ALIGNMENT, AND SHALL BE CLASS 420-C-2000.
4. THE ACCESS FRAME, COVER AND CAP SHALL BE CAST IRON. THE FINGER HOLES MAY BE DRILLED OUT OR MAY BE BLOCKED OUT PRIOR TO CASTING; THEY SHALL NOT BE PUNCHED OUT.
5. THE CONTRACTOR, AT HIS OPTION, MAY PLACE EITHER CIRCULAR OR SQUARE CONCRETE PIPE WALL SUPPORTS AS SHOWN HEREON.

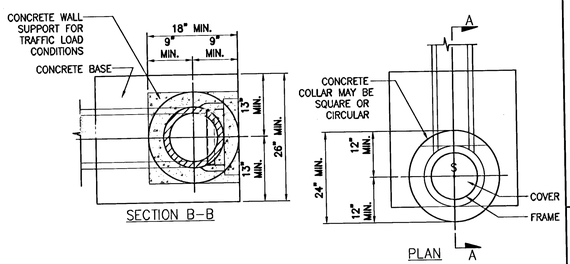

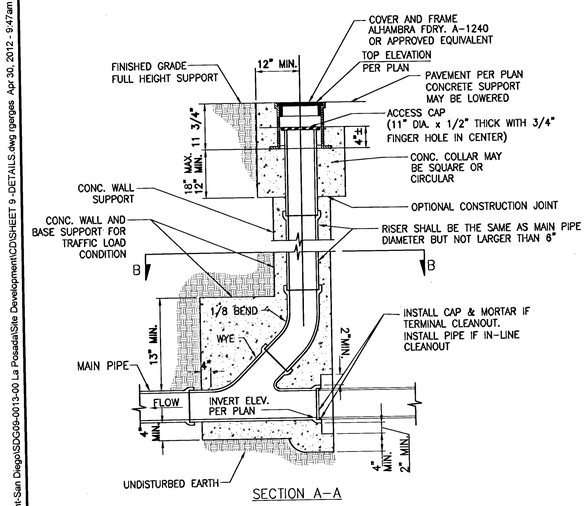

STANDARD CLEANOUT

34 SCALE: NO SCALE

Curb-O-Let™ Thru The Curb Drain

Rectangular Steel Pipe and Fittings Product List:

Product #	Size	Round Equivalent	Round Transverse Area
CP-SPA 05	3" x 5"	4"Ø	13.06 Sq. In.
CP-SPA 08	3" x 8"	5"Ø	20.02 Sq. In.
CP-SPA 12	3" x 12"	6"Ø	30.52 Sq. In.
CP-SPA 14	4" x 14"	8"Ø	50.75 Sq. In.
CP-SPA 17	3" x 17"	8"Ø	50.75 Sq. In.
CP-SPA 22	4" x 22"	10"Ø	78.54 Sq. In.

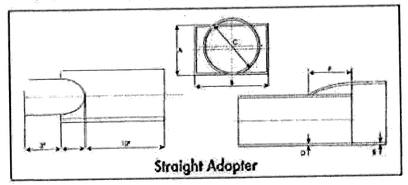

Product Specification

Product #	A	B	C	D	E	F
CP-SPA 05	3"	5"	4 3/8"	1/8"	3/16"	2"
CP-SPA 08	3"	8"	5 3/8"	3/16"	3/16"	4"
CP-SPA 12	3"	12"	6 3/8"	3/16"	3/16"	6"
CP-SPA 14	4"	14 3/8"	8 3/8"	3/16"	3/16"	8"
CP-SPA 17	3"	17 3/8"	8 3/8"	3/16"	3/16"	8"
CP-SPA 22	4"	21 3/4"	10 3/8"	3/16"	3/16"	10"

CIRCULAR PIPE RETANGULAR PIPE ADAPTER CP-SPA 14

33 SCALE: NO SCALE

Curb-O-Let™ Thru The Curb Drain

Architects and Engineers Curb-O-Let Thru the Curb Drain Specifications & Cut Sheet

Visit our website at: http://www.curbletgroduct.com

Install As Per Manufacturer's Recommendations

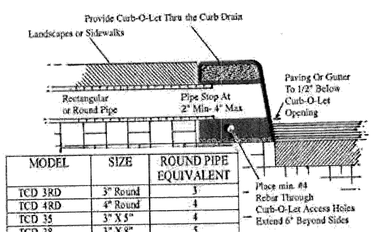

MODEL	SIZE	ROUND PIPE EQUIVALENT
TCD 3RD	3" Round	3
TCD 4RD	4" Round	4
TCD 35	3" X 5"	4
TCD 38	3" X 8"	5
TCD 312	3" X 12"	6
TCD 414	4" X 14"	8
TCD 420	4" X 20"	10

NOT TO SCALE

Curb-O-Let Thru The Curb Drain

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(714) 903-2468
(562) 867-4587
Fax (562) 920-1994

RECTANGULAR STEEL PIPE (TCD 414)

32 SCALE: NO SCALE

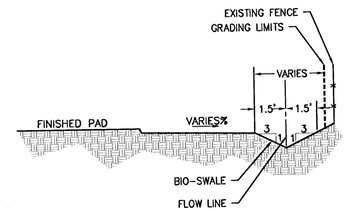

TYP. BIO-SWALE SECTION

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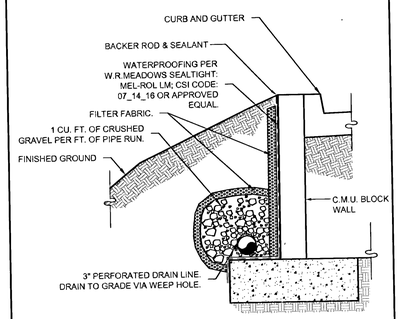

FOUNDATION DRAIN

40 SCALE: NO SCALE

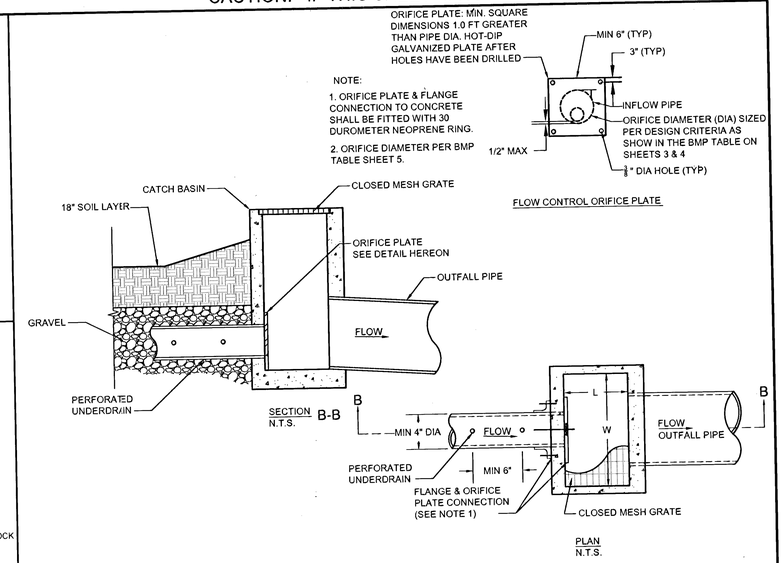

BIORETENTION BASIN OUTLET

2 SCALE: NO SCALE

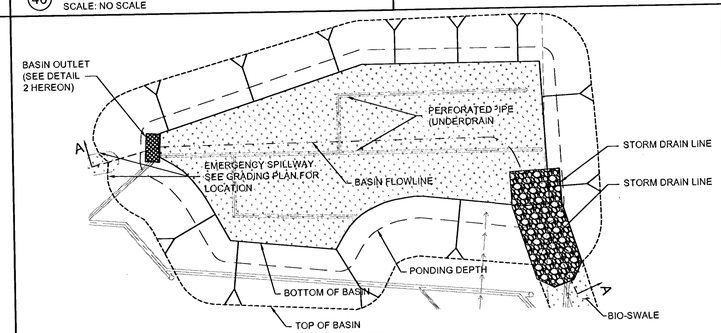

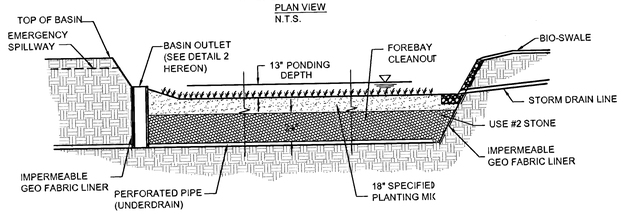

SECTION A-A BIORETENTION BASIN SYSTEM

5B SCALE: NO SCALE

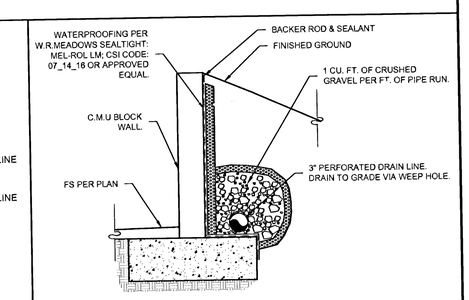

FOUNDATION DRAIN

41 SCALE: NO SCALE

SAN DIEGO GAS & ELECTRIC COMPANY
Reviewed by: Date: 5/11/12
Jeff Sykes
Right of Way Supervisor
Valid for 18 Months from Date of Signature

"AS BUILT"
FELIX GONZALEZ DATE
RCE: NO. 67660 EXP. 6/30/13
REVIEWED BY:
INSPECTOR DATE

PLANS PREPARED BY:
REGISTERED PROFESSIONAL ENGINEER FELIX GONZALEZ No. 67660 Exp. 6-30-2013 CIVIL STATE OF CALIFORNIA
architecture planning interiors graphics civil engineering
WARE MALCOMB
Leading Design for Commercial Real Estate
6363 greenwich dr. ste. 175
san diego. california 92122
p 858.638.7277 - f 858.638.7506
PREPARED UNDER THE DIRECT SUPERVISION OF:
FELIX GONZALEZ RCE NO. 67660 DATE: 5/2/12 EXP. 6/30/13

DATE	INITIAL	REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL
ENGINEER OF WORK			OTHER APPROVAL		CITY APPROVAL	

SHEET 9 — CITY OF CARLSBAD ENGINEERING DEPARTMENT — SHEETS 9

GRADING PLANS FOR:
LA POSADA DE GUADALUPE DE CARLSBAD
2478 IMPALA DRIVE, CARLSBAD, CA
DETAIL SHEET

APPROVED: Glen K. Van Peski 5/23/12
GLEN K. VAN PESKI
ENGINEERING MANAGER, PE 41204 EXPIRES 3/31/13 DATE

DWN BY:
CHKD BY: JK
RVWD BY:
PROJECT NO. CUP 10-08
DRAWING NO. 473-4A

DWG 473-4A
9 of 9

I:\admin\Site Development\Site Development-San Diego\SDG08-0013-00 La Posada\Site Development\CD\SHEET 9 -DETAILS.dwg gpenges Apr 30, 2012 - 9:47am

Stormwater Management Plan (SWMP) La Posada Men's Shelter

Preparation Date: 01-12-2011
Rev. 07-11-11
Rev. 02-10-12
Rev. 05-11-12

Prepared for:

Catholic Charities
349 Cedar Street
San Diego, CA 92101

Prepared by:

Felix Gonzalez, Senior Project Manager
Civil Engineering
Ware Malcomb
10 Edelman Irvine, CA 92618
(949) 660-9128

MYLAR SUBMITTAL FILE COPY

Record Copy
5/22/12
JL

Stormwater Management Plan
(SWMP)
La Posada Men's Shelter

CUP 10-08 ; DWG 473-4A ; SWMP NO. 110014

Preparation Date: 01-12-2011

Rev. 07-11-11

Rev. 02-10-12

Rev. 05-11-12

Prepared for:

Catholic Charities
349 Cedar Street
San Diego, CA 92101

RECEIVED
MAY 22 2012
LAND DEVELOPMENT
ENGINEERING

REGISTERED PROFESSIONAL ENGINEER
FELIX GONZALEZ
C 67660
EXP 6/30/2013
CIVIL
STATE OF CALIFORNIA

Prepared by:

Felix Gonzalez, Senior Project Manager
Civil Engineering
Ware Malcomb
10 Edelman Irvine, CA 92618
(949) 660-9128

Project Name:	LaPosada Men's Shelter
Project Location:	2472 Impala Drive, Carlsbad, CA
Permit Number (Land Development Projects):	C.U.P. 10-08
Work Authorization Number (**CIP only**):	
Applicant:	Andrew Dzuzlinsky
Applicant's Address:	10 Edelman, Irvine, CA
Plan Prepared By (*Leave blank if same as applicant*):	Felix Gonzalez
Preparer's Address:	10 Edelman, Irvine, CA 92618
Date:	Rev. 04/04/11

Revision History:

Project Stages	Does the SWMP need revisions?		If YES, Provide Revision Date
	YES	NO	

Completion of the following checklists and attachments will fulfill the requirements of a Major SWMP for the project listed above.

CITY OF CARLSBAD

STORM WATER STANDARDS QUESTIONNAIRE E-34

Development Services
Land Development Engineering
1635 Faraday Avenue
760-602-2750
www.carlsbadca.gov

INSTRUCTIONS:

To address post-development pollutants that may be generated from development projects, the City requires that new development and significant redevelopment priority projects incorporate Permanent Storm Water Best Management Practices (BMP's) into the project design per the City's Standard Urban Stormwater Management Plan (SUSMP). To view the SUSMP, refer to the Engineering Standards (Volume 4, Chapter 2) at www.carlsbadca.gov/standards.

Initially this questionnaire must be completed by the applicant in advance of submitting for a development application (subdivision, discretionary permits and/or construction permits). The results of the questionnaire determine the level of storm water standards that must be applied to a proposed development or redevelopment project. Depending on the outcome, your project will either be subject to 'Standard Stormwater Requirements' or be subject to additional criteria called 'Priority Development Project Requirements'. Many aspects of project site design are dependent upon the storm water standards applied to a project.

Your responses to the questionnaire represent an initial assessment of the proposed project conditions and impacts. City staff has responsibility for making the final assessment after submission of the development application. If staff determines that the questionnaire was incorrectly filled out and is subject to more stringent storm water standards than initially assessed by you, this will result in the return of the development application as incomplete. In this case, please make the changes to the questionnaire and resubmit to the City.

If you are unsure about the meaning of a question or need help in determining how to respond to one or more of the questions, please seek assistance from Land Development Engineering staff.

A separate completed and signed questionnaire must be submitted for each new development application submission. Only one completed and signed questionnaire is required when multiple development applications for the same project are submitted concurrently. In addition to this questionnaire, you must also complete, sign and submit a Project Threat Assessment Form with construction permits for the project.

Please start by completing Section 1 and follow the instructions. When completed, sign the form at the end and submit this with your application to the city.

SECTION 1: NEW DEVELOPMENT

Does your project meet one or more of the following criteria:	YES	NO
1. ***Housing subdivisions of 10 or more dwelling units***. Examples: single family homes, multi-family homes, condominium and apartments		
2. ***Commercial – greater than 1-acre.*** Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.		
3. ***Heavy Industrial / Industry- greater than 1 acre.*** Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).		
4. ***Automotive repair shop.*** A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, and 7536-7539		
5. ***Restaurants.*** Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.		

CITY OF CARLSBAD

STORM WATER STANDARDS QUESTIONNAIRE E-34

Development Services
Land Development Engineering
1635 Faraday Avenue
760-602-2750
www.carlsbadca.gov

6.	***Hillside development.*** Any development that creates more than 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent (25%) or greater.		
7.	***Environmentally Sensitive Area (ESA)***[1]. All development located within or directly adjacent[2] to or discharging directly[3] to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet or more of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site 10% or more of its naturally occurring condition.		
8.	***Parking lot***. Area of 5,000 square feet or more, or with 15 or more parking spaces, and potentially exposed to urban runoff		
9.	***Streets, roads, highways, and freeways***. Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles		
10.	***Retail Gasoline Outlets.*** Serving more than 100 vehicles per day and greater than 5,000 square feet		
11.	***Coastal Development Zone.*** Any project located within 200 feet of the Pacific Ocean and (1) creates more than 2500 square feet of impervious surface or (2) increases impervious surface on property by more than 10%.		
12.	***More than 1-acre of disturbance.*** Project results in the disturbance of 1-acre or more of land and is considered a Pollutant-generating Development Project[4].		

1 Environmentally Sensitive Areas include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees.

2 "Directly adjacent" means situated within 200 feet of the Environmentally Sensitive Area.

3 "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flow from adjacent lands.

4 Pollutant-generating Development Projects are those projects that generate pollutants at levels greater than background levels. In general, these include all projects that contribute to an exceedance to an impaired water body or which create new impervious surfaces greater than 5000 square feet and/or introduce new landscaping areas that require routine use of fertilizers and pesticides. In most cases linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered Pollutant-generating Development Projects if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces.

INSTRUCTIONS:

Section 1 Results:

If you answered **YES** to **ANY** of the questions above, your project is subject to **Priority Development Project** requirements. Skip Section 2 and please proceed to Section 3. Check the "meets PRIORITY DEVELOPMENT PROJECT requirements" box in Section 3. Additional storm water requirements will apply per the SUSMP.

If you answered **NO** to **ALL** of the questions above, then please proceed to Section 2 and follow the instructions.

CITY OF CARLSBAD

STORM WATER STANDARDS QUESTIONNAIRE E-34

Development Services
Land Development Engineering
1635 Faraday Avenue
760-602-2750
www.carlsbadca.gov

SECTION 2 SIGNIFICANT REDEVELOPMENT

INSTRUCTIONS: Complete the questions below regarding your project	**YES**	**NO**
1. Project results in the disturbance of 1-acre or more of land and is considered a Pollutant-generating Development Project *?	✓	
INSTRUCTIONS: If you answered **NO**, please proceed to question 2.		
If you answered **YES**, then you **ARE** a significant redevelopment and you **ARE** subject to **PRIORITY DEVELOPMENT PROJECT** requirements. Please check the "meets PRIORITY DEVELOPMENT PROJECT requirements" box in Section 3 below.		
2. Is the project redeveloping an existing priority project type? (Priority projects are defined in Section 1)	✓	
INSTRUCTIONS: If you answered **YES**, please proceed to question 3.		
If you answered **NO**, then you **ARE NOT** a significant redevelopment and your project is subject to **STANDARD STORMWATER REQUIREMENTS**. Please check the "does not meet PDP requirements" box in Section 3 below.		
3. Is the work limited to trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk; bike lane on existing road and/or routine maintenance of damaged pavement such as pothole repair? Resurfacing/reconfiguring parking lots is where the work does not expose underlying soil during construction.		✓
INSTRUCTIONS: If you answered **NO**, then proceed to question 4.		
If you answered **YES,** then you **ARE NOT** a significant redevelopment and your project is subject to **STANDARD STORMWATER REQUIREMENTS.** Please check the "does not meet PDP requirements" box in Section 3 below.		
4. Will your redevelopment project create, replace, or add at least 5,000 square feet of impervious surfaces on existing developed property **or** will your project be located within 200 feet of the Pacific Ocean and (1) create 2500 square feet or more of impervious surface or (2) increases impervious surface on the property by more than 10%? Replacement of existing impervious surfaces includes any activity that is not part of routine maintenance where impervious material(s) are removed, exposing underlying soil during construction.	✓	
INSTRUCTIONS: If you answered **YES**, you **ARE** a significant redevelopment, and you **ARE** subject to **PRIORITY DEVELOPMENT PROJECT** requirements. Please check the "meets PRIORITY DEVELOPMENT PROJECT requirements" box in Section 3 below. Review SUSMP to find out if SUSMP requirements apply to your project envelope or the entire project site.		
If you answered **NO**, then you **ARE NOT** a significant redevelopment and your project is subject to **STANDARD STORMWATER REQUIREMENTS.** Please check the "does not meet PDP requirements" box in Section 3 below.		

*for definition see Footnote 4 on page 2

SECTION 3 QUESTIONNAIRE RESULTS

☑ My project meets **PRIORITY DEVELOPMENT PROJECT (PDP)** requirements and must comply with additional stormwater criteria per the SUSMP and I understand I must prepare a Storm Water Management Plan for submittal at time of application. I understand flow control (hydromodification) requirements may apply to my project. Refer to SUSMP for details.

☐ My project **does not meet PDP** requirements and must only comply with **STANDARD STORMWATER REQUIREMENTS** per the SUSMP. As part of these requirements, I will incorporate low impact development strategies throughout my project.

Applicant Information and Signature Box

Address: 2472 Impala Drive Carlsbad, CA	Assessor's Parcel Number(s): 209-041-28
Applicant Name: Andrew Bauzlinsky	Applicant Title: Project Manager
Applicant Signature:	Date: 4.4.11

This Box for City Use Only

City Concurrence:	YES	NO
	✓	
By: Tecle Levy		
Date: 2/28/12		
Project ID: CUP 10-08		

STEP 1
PROJECT SETTING

Total Project Site Area 1.219 Acres(Acres or ft^2)

Estimated amount of disturbed acreage: 1.01 Acres (Acres or ft^2)
(If >1 acre, you must also provide a WDID number from the SWRCB) WDID: Pending

Complete A through C and the calculations below to determine the amount of impervious surface on your project before and after construction.

A. Total size of project site: 1.219 (Acres or ft^2)

B. Total impervious area (including roof tops) before construction 0.316 (Acres or ft^2)

C. Total impervious area (including roof tops) after construction 0.418 (Acres or ft^2)

Calculate percent impervious before construction: B/A = 25.9 %
Calculate percent impervious after construction: C/A = 39.46%

Project Site Address:	2478 Impala Drive, Carlsbad, CA 92008
APN Number(s):	209-041-28
Zoning:	M-Q Industrial
Land Use :	Shelter Facility
Project Watershed:	Carlsbad Watershed (Hydrologic Unit No. 904.00)
Sub-Watershed:	Agua Hedionda Creek Watershed (Hydrologic Area 904.30)
Soil Type :	D (See Attached Soil Hydrology Groups)

Project Description

This Stormwater Management Plan (SWMP) is being prepared by Ware Malcomb for Catholic Charities who is developing the La Posada Men's shelter at 2478 Impala Drive, Carlsbad, CA 92008. It sits north of Impala Drive and bounded to the west by Palmer Way and east by Orion St. Existing parking and building structures and improvements at the property are planned for demolition to allow for constructions of a new men's shelter facility and the associated structures and improvements.

Existing structures and improvements will be demolished and a new facility consisting of two large dormitory-type buildings and administrative office will be constructed. Associated improvements are expected to consist of surface and paving improvements and underground utilities. All planned new buildings will maintain a minimum 20-foot setback from the top of nearby descending slopes. Significant grade alterations are not anticipated over the majority of the property and finish grades are expected to be at or very near the existing surfaces. Some minor cutting and filling are locally anticipated to achieve fine pad grades with deeper cuts.

Refer to Appendix B for Vicinity Map and Site Plan.

TEMPORARY CONSTRUCTION BMPS

Please check the construction BMPs that may be implemented during construction of the project. The applicant will be responsible for the placement and maintenance of the BMPs incorporated into the final project design.

- ☒ Silt Fence
- ☒ Basin Fiber Rolls
- ☒ Street Sweeping and Vacuuming
- ☒ Storm Drain Inlet Protection
- ☒ Stockpile Management
- ☐ Solid Waste Management
- ☒ Stabilized Construction Entrance/Exit
- ☒ Dewatering Operations
- ☒ Vehicle and Equipment Maintenance
- ☐ Desilting
- ☒ Gravel Bag Berm
- ☒ Sandbag Barrier
- ☒ Material Delivery and Storage
- ☒ Spill Prevention and Control
- ☒ Concrete Waste Management
- ☒ Water Conservation Practices
- ☒ Paving and Grinding Operations

Any minor slopes created incidental to construction and not subject to a major or minor grading permit shall be protected by covering with plastic or tarp prior to a rain event, and shall have vegetative cover reestablished within 180 days of completion of the slope and prior to final building approval.

STEP 2
IDENTIFY CONSTRAINTS AND OPPORTUNITIES:

CONSTRAINTS: The project property is generally under Type D soil which has very low porosity and is very difficult to excavate. However, significant cutting into the bedrock is not planned. There is also a very steeply descending natural slope at the northern portion of the property. The slopes descend more than 250 feet, at gradients approaching 1:1 maximum, into Agua Hedionda Creek below. The west property is also marked by a graded cut embankment that descends at 2:1 gradients approximately 20 feet to a developed commercial lot below.

OPPORTUNITES: Geologic hazards are not presently indicated at the project site per the Geotechnical Investigation report by Vinje & Middleton Engineering, Inc. under Job # 09-224-P. It states that the nearby natural and graded slopes are underlain by massive hard and competent crystalline bedrock. Thus gross geologic instability or hazards due to landslides, faults, unstable natural hillside terrain or graded embankments are not present at the project property. The project site is also considered non-corrosive and has no contaminated or hazardous soils within the area. There is approximately 20 feet difference in elevation from the north-east portion of the property and the south-west point which can give good amount of hydraulic head.

STEP 3

SPECIFY SOURCE CONTROL BMPs

TABLE 3-1: TABLE FOR PERMANENT AND OPERATIONAL SOURCE CONTROL MEASURES

Potential source of runoff pollutants	*Permanent source control BMPs*	*Operational source control BMPs*
On-Site Storm Drain Inlet	See plan for locations	Inlets to be marked "No Dumping Drains to Ocean"
		Property Owner will enter into an Operation & Maintenance Agreement
Landscape/Outdoor Pesticide Use	Self treating areas and stormwater treatment facilities shown on Attachment B	Landscape is designed to minimize runoff and irrigation, detain stormwater, planting has been selected for pest control, and appropriate planting has been selected for ecosystem
Food Service	Grease Interceptor is shown on Attachment B	Kitchen is main cleaning area
Refuse areas	Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run- on and show locations of berms to prevent runoff from the area.	State how site refuse will be handled and provide supporting detail to what is shown on plans. State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.

	Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	
Fire Sprinkler Test Water	Provide a means to drain fire sprinkler test water to the sanitary sewer.	See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
Plazas, sidewalks, and parking lots.		Plazas, sidewalks, and parking lots shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing shall be collected to prevent entry into the storm drain system. Washwater containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain
Misc. Drains: Roofing, gutters and trim	Roof mounted equipment with potential to produce pollutants shall be roofed and/or have secondary containment. Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. Avoid roofing, gutters, and trim made of cupper or other unprotected metals that may leach into runoff.	See the note in the Fact Sheet SC-41 "Building and Grounds Maintenance" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

STEP 4

IDENTITY ANTICIPATED POLLUTANTS AND BMP SIZING REQUIREMENTS

WATERSHED

Please check the watershed(s) for the project.

San Juan 901	Santa Margarita 902	San Luis Rey 903	☒Carlsbad 904
San Dieguito 905	Penasquitos 906	San Diego 907	Sweetwater 909
Otay 910	Tijuana 911	Whitewater 719	Clark 720
West Salton 721	Anza Borrego 722	Imperial 723	

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

HYDROLOGIC SUB-AREA NAME AND NUMBER(S)

Number	Name
904.30	Agua Hedionda Creek

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

SURFACE WATERS that each project discharge point proposes to discharge to. List the impairments identified in Table 7.

SURFACE WATERS (river, creek, stream, etc.)	Hydrologic Unit Basin Number	Impairment(s) listed [303(d) listed waters or waters with established TMDLs]	Distance to Project
Agua Hedionda Creek	904.31	Manganese, Selenium, Sulfates, Total dissolved solids	7 mi
Agua Hedionda Lagoon	904.31	Indicator Bacteria, Sedimentation/Siltation	7 mi.

http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303dlists2006/epa/r9_06_303d_reqtmdls.pdf

GROUND WATERS

Ground Waters	Hydrologic Unit Basin Number	MUN	AGR	IND	PROC	GWR	FRESH	POW	REC1	REC2	BIOL	WARM	COLD	WILD	RARE	SPWN
Agua Hedionda Creek	904.31	●	●	●					●	●		●		●		

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

+ Excepted from Municipal ● Existing Beneficial Use ○ Potential Beneficial Use

PROJECT ANTICIPATED AND POTENTIAL POLLUTANTS

Using Table 2-1, identify pollutants that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

TABLE 2-1: ANTICIPATED AND POTENTIAL POLLUTANTS GENERATED BY LAND USE TYPE

	General Pollutant Categories								
PDP Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development 1 acre or greater	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Heavy industry /industrial development	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft^2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

PROJECT POLLUTANTS OF CONCERN SUMMARY TABLE

Please summarize the identified project pollutant of concern by checking the appropriate boxes in the table below and list any surface water impairments identified. Pollutants anticipated to be generated by the project, which are also causing impairment of receiving waters, shall be considered the primary pollutants of concern. For projects where no primary pollutants of concern exist, those pollutants identified as anticipated shall be considered secondary pollutants of concern.

TABLE 7: PROJECT POLLUTANTS OF CONCERN

Pollutant Category	Anticipated (X)	Potential (P)	Surface Water Impairments
Sediments	X		
Nutrients	X		
Heavy Metals			
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding Substances			
Oil & Grease		X	
Bacteria & Viruses		X	
Pesticides		X	

POLLUTANTS OF CONCERN

The expected or potential Urban Runoff Pollutants of concern are:

- ***Metals*** – The primary source of metal pollution in Urban Runoff is typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. Metals are also raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. At low concentrations naturally occurring in soil, metals may not be toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

- ***Nutrients*** – Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in Urban Runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.
- ***Organic Compounds*** – Organic compounds are carbon-based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to the MS4. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.
- ***Sediments*** – Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.
- ***Trash and Debris*** – Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash and debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. In addition, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.
- ***Oxygen-Demanding Substances*** – This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.
- ***Oil and Grease*** – Oil and grease are characterized as high-molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.
- ***Pathogens (Bacteria/Virus)*** – Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess waste causes increased growth of undesirable organisms in the water.

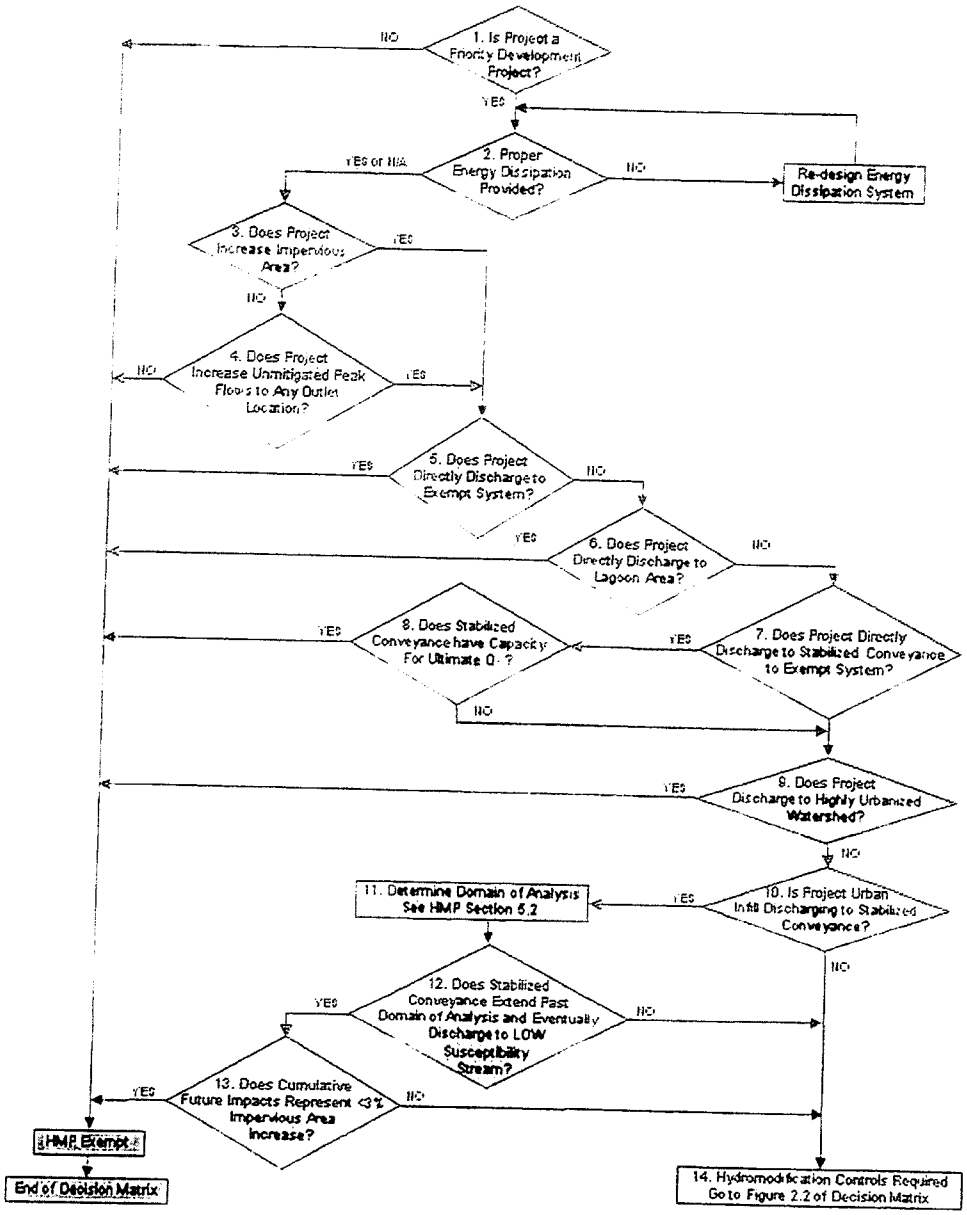

FIGURE 2-1. HMP Applicability Determination*

*refer to expanded HMP exemption criteria below for justifications required on each node

HMP APPLICABILITY DETERMINATION:

Based on Figure 2-1: HMP Applicability Determination AND FIGURE 2-2: Mitigation Criteria and Implementation, the project is subject to flow-control (hydromodification). The project will increase the impervious area from 0.316 Ac (25.9%) to 0.481 Ac (39.45%). SCCWRP channel assessment was not conducted. Therefore, the project would be held to the 0.1Q2 lower flow threshold. IMP and extended detention facilities must be sized to that the mitigates post project flow and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of 0.1Q2 to Q10.

STEP 5

LID AND SITE DESIGN STRATEGIES

Each numbered item below is a Low Impact Development (LID) requirement of the WPO. Please check the box(s) under each number that best describes the LID BMP(s) and Site Design Strategies selected for this project.

TABLE 8: LID AND SITE DESIGN

1.	Conserve natural Areas, Soils, and Vegetation
	☒ Preserve well draining soils (Type A or B)
	☐ Preserve Significant Trees
	☒ Preserve critical (or problematic) areas such as floodplains, steep slopes, wetlands, and areas with erosive or unstable soil conditions
	☐ Other. Description:
2.	Minimize Disturbance to Natural Drainages
	☒ Set-back development envelope from drainages
	☐ Restrict heavy construction equipment access to planned green/open space areas
	☐ Other. Description:
3.	Minimize and Disconnect Impervious Surfaces (see 5)
	☐ Clustered Lot Design
	☒ Items checked in 5?
	☐ Other. Description:
4.	Minimize Soil Compaction
	☐ Restrict heavy construction equipment access to planned green/open space areas
	☐ Re-till soils compacted by construction vehicles/equipment
	☐ Collect & re-use upper soil layers of development site containing organic Materials
	Other. Description:
5.	Drain Runoff from Impervious Surfaces to Pervious Areas
	LID Street & Road Design
	☐ Curb-cuts to landscaping
	☐ Rural Swales
	☐ Concave Median
	☐ Cul-de-sac Landscaping Design
	☐ Other. Description:
	LID Parking Lot Design
	☒ Permeable Pavements

☒ Curb-cuts to landscaping
☐ Other. Description:
LID Driveway, Sidewalk, Bike-path Design
☐ Permeable Pavements
☒ Pitch pavements toward landscaping
☐ Other. Description:
LID Building Design
☒ Cisterns & Rain Barrels
☒ Downspout to swale
☐ Vegetated Roofs
☐ Other. Description:
LID Landscaping Design
☐ Soil Amendments
☒ Reuse of Native Soils
☒ Smart Irrigation Systems
☐ Street Trees
☐ Other. Description:
6. Minimize erosion from slopes
☒ Disturb existing slopes only when necessary
☐ Minimize cut and fill areas to reduce slope lengths
☒ Incorporate retaining walls to reduce steepness of slopes or to shorten slopes
☐ Provide benches or terraces on high cut and fill slopes to reduce concentration of flows
☒ Rounding and shaping slopes to reduce concentrated flow
☐ Collect concentrated flows in stabilized drains and channels
☐ Other. Description:

LID AND TREATMENT CONTROL SELECTION

A treatment control BMP and/or LID facility must be selected to treat the project pollutants of concern identified in Table 7 "Project Pollutants of Concern". A treatment control facility with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. It is recommended to use the design procedure in Chapter 4 of the SUSMP to meet NPDES permit LID requirements, treatment requirements, and flow control requirements. If your project does not utilize this approach, the project will need to demonstrate compliance with LID, treatment and flow control requirements. Review Chapter 2 "Selection of Stormwater Treatment Facilities" in the SUSMP to assist in determining the appropriate treatment facility for your project.

Will this project be utilizing the unified LID design procedure as described in Chapter 4 of the Local SUSMP? *(If yes, please document in Attachment E following the steps in Chapter 4 of the City's SUSMP)*	
Yes	
If this project is not utilizing the unified LID design procedure, please describe how the alternative treatment facilities will comply with applicable LID criteria, stormwater treatment criteria, and hydromodification management criteria.	

➢ Indicate the project pollutants of concern (POCs) from Table 7 in Column 2 below.

TABLE 10: GROUPING OF POTENTIAL POLLUTANTS of Concern (POCs) by fate during stormwater treatment

Pollutant	Check Project Specific POCs	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	X	
Nutrients	X		X	X
Heavy Metals			X	
Organic Compounds	X		X	
Trash & Debris	X	X		
Oxygen Demanding			X	
Bacteria	X		X	
Oil & Grease	X		X	
Pesticides			X	

- Indicate the treatment facility(s) chosen for this project in the following table.

TABLE 11: GROUPS OF POLLUTANTS and relative effectiveness of treatment facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters[1]	Higher-rate media filters[2]	Trash Racks & Hydro-dynamic Devices	Vegetated Swales
Coarse Sediment and Trash	High	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low	Medium
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low	Low

- Please check the box(s) that best describes the Treatment BMP(s) and/or LID BMP selected for this project.

TABLE 12: PROJECT LID AND TC-BMPS

Bioretention Facilites (LID)
☒ Bioretention area
☒ Flow-through Planter
☒ Cistern with Bioretention Facility
Settling Basins (Dry Ponds)
☐ Extended/dry detention basin with grass/vegetated lining
☐ Extended/dry detention basin with impervious lining
Infiltration Facilities or Practices (LID)
☐ Infiltration basin
☐ Dry well
☐ Infiltration trench
Wet Ponds and Constructed Wetlands
☐ Wet pond/basin (permanent pool)
☐ Constructed wetland
Vegetated Swales (LID[1])
☒ Vegetated Swale

Media Filters
Austin Sand Filter
Delaware Sand Filter
Multi-Chambered Treatment Train (MCTT)
Higher-rate Biofilters
Tree-pit-style unit
Other_____
Higher-rate Media Filters
Vault-based filtration unit with replaceable cartridges
Other_____
Hydrodynamic Separator Systems
Swirl Concentrator
Cyclone Separator
Trash Racks
Catch Basin Insert
Catch Basin Insert w/ Hydrocarbon boom
Other_____
Self-Treating or Self-Retaining Areas (LID)
Pervious Pavements
Vegetated Roofs
Other Landscape areas, vegeatated swales, biorention

(1) Must be designed per SUSMP "Vegetated Swales" design criteria for LID credit (p. 65).

For design guidelines and calculations refer to Chapter 4 "Low Impact Development Design Guide" in the SUSMP. Please show all calculations and design sheets for all treatment facilities proposed in Attachment E.

- Please describe why the chosen treatment BMP(s) was selected for this project. For projects utilizing a low performing BMP, please provide a feasibility analysis that demonstrates utilization of a treatment facility with a high or medium removal efficiency ranking is infeasible.

The site has significant amount of landscape making it ideal for using Detention ponds, planters, and vegetated swales. Also, each of these Facilities can be incorporated into the landscape design to create an Aesthically pleasing amenity for the site and remain economical to the Client. The site's lack of existing infrastructure and existing slopes, do not Lend itself to be treated with cisterns, rain barrels, pourous concrete or Large underground vaults for treating and collecting stormwater runoff.

Treatment BMP must address runoff from developed areas. Please provide the post-construction water quality treatment volume or flow values for the selected project Treatment BMP(s). Guidelines for design calculations are located in Chapter 4 of the County SUSMP. Label outfalls on the BMP map. The Water Quality peak rate of discharge flow (Q_{WQ}) and the Water Quality storage volume (V_{WQ}) is dependent on the type of treatment BMP selected for the project.

Outfall	Tributary Area (acres)	Q_{WQ} (cfs)	V_{WQ} (ft^3)
BMP 1	0.260	0.03	0.007
BMP 2	0.290	0.04	0.011
BMP 3	0.110	0.01	0.002
BMP 4	0.091	0.02	0.005
BMP 5	0.091	0.02	0.005
BMP 6	0.230	0.03	0.008
BMP 7	0.040	0.003	0.001
BMP 8	0.073	0.01	0.001
BMP 9	0.040	0.003	0.001

Project Summary

Project Name	LA POSADA MEN'S SHELTER
Project Applicant	Catholic Charities
Jurisdiction	City of Carlsbad
Parcel (APN)	20904128
Hydrologic Unit	Carlsbad

Compliance Basin Summary

Basin Name:	BASIN 1-OVERALL
Receiving Water:	SW Portion of Property along Impala Dr.
Rainfall Basin	Oceanside
Mean Annual Precipitation (inches)	13.3
Project Basin Area (acres):	1.23
Watershed Area (acres):	0.00
SCCWRP Lateral Channel Susceptiblity (H, M, L):	
SCCWRP Vertifical Channel Susceptiblity (H, M, L):	
Overall Channel Susceptibility (H, M, L):	HIGH
Lower Flow Threshold (% of 2-Year Flow):	0.1

Drainage Management Area Summary

ID	Type	BMP ID	Description	Area (ac)	Pre-Project Cover	Post Surface Type	Drainage Soil	Slope
7602	Drains to LID	BMP 1	A1: Roof to Biofiltration	0.0	Pervious (Pre)	Roofs	Type D (high runoff - clay soi...	Flat - slope (less ...
7729	Drains to LID	BMP 1	A2: Landscape to Biofiltration	0.1	Pervious (Pre)	Landscaping	Type D (high runoff - clay soi...	Flat - slope (less ...

7730	Drains to LID	BMP 1	A3: Turfblock(Portion of Fire Access) to Biofiltration	0.0	Pervious (Pre)	Turfblock	Type D (high runoff - clay soi...	Flat - slope (less ...
7731	Drains to LID	BMP 2	B1: Roof to Biofiltration	0.1	Pervious (Pre)	Roofs	Type D (high runoff - clay soi...	Flat - slope (less ...
7732	Drains to LID	BMP 2	B2: Pavers to Biofiltration	0.0	Pervious (Pre)	Grouted unit pavers	Type D (high runoff - clay soi...	Flat - slope (less ...
7733	Drains to LID	BMP 2	B3: Landscape to Biofiltration	0.1	Pervious (Pre)	Landscaping	Type D (high runoff - clay soi...	Flat - slope (less ...
7734	Drains to LID	BMP 3	C1a: Turf to Biofiltration (Pre-Impervious)	0.0	Impervious (Pre)	Landscaping	Type D (high runoff - clay soi...	Flat - slope (less ...
7735	Drains to LID	BMP 9	C2a: Pavers to Biofiltration (Pre-Impervious)	0.0	Impervious (Pre)	Grouted unit pavers	Type D (high runoff - clay soi...	Flat - slope (less ...
7736	Drains to LID	BMP 4	D1a: Roof to Cistern (Pre-Impervious)	0.0	Impervious (Pre)	Roofs	Type D (high runoff - clay soi...	Flat - slope (less ...
7737	Drains to LID	BMP 5	E1: Roof to Flow-Through Planter	0.0	Pervious (Pre)	Roofs	Type D (high runoff - clay soi...	Flat - slope (less ...
7739	Drains to LID	BMP 6	F1: Landscape to Biofiltration	0.1	Pervious (Pre)	Landscaping	Type D (high runoff - clay soi...	Flat - slope (less ...
7740	Drains to LID	BMP 6	F2: Turfblock to Biofiltration	0.0	Pervious (Pre)	Turfblock	Type D (high runoff - clay soi...	Flat - slope (less ...
7741	Drains to LID	BMP 7	F3: Walkway to Biofiltration	0.0	Impervious (Pre)	Concrete or asphalt	Type D (high runoff - clay soi...	Moderate (5 - 10%)
7742	Drains to LID	BMP 7	G1a: Porous Parking and Landscape to Biofiltration (Pre-Impervious)	0.0	Impervious (Pre)	Pervious concrete or asphalt	Type D (high runoff - clay soi...	Moderate (5 - 10%)
7743	Drains to LID	BMP 8	H1a: Porous Driveway and Landscape to Biofiltration (Pre-Impervious)	0.0	Pervious (Pre)	Pervious concrete or asphalt	Type D (high runoff - clay soi...	Steep (greater 10%)
7753	Drains to LID	BMP 9	C2b: Pavers to Biofiltration (Pre-pervious)	0.0	Pervious (Pre)	Grouted unit pavers	Type D (high runoff - clay soi...	Flat - slope (less ...
7754	Drains to LID	BMP 3	C1b: Turf to Biofiltration (Pre-Pervious)	0.0	Pervious (Pre)	Landscaping	Type D (high runoff - clay soi...	Flat - slope (less ...
7755	Drains to LID	BMP 4	D1b: Roof to Cistern (Pre-Pervious)	0.0	Pervious (Pre)	Roofs	Type D (high runoff - clay soi...	Flat - slope (less ...
			G1b: Porous Parking and Landscape to				Type D (high runoff - clay	

7756	Drains to LID	BMP 7	Biofiltration (Pre-Pervious)	0.0	Pervious (Pre)	Pervious concrete or asphalt	soi...	Moderate (5 - 10%)
7757	Drains to LID	BMP 8	H1b: Porous Driveway and Landscape to Biofiltration (Pre-Pervious)	0.0	Pervious (Pre)	Pervious concrete or asphalt	Type D (high runoff - clay soi...	Steep (greater 10%)

LID Facility Summary

BMP ID	Type	Description	Plan Area (sqft)	Volume 1(cft)	Volume 2(cft)	Orifice Flow (cfs)	Orifice Size (inch)
BMP 1	Flow-Through Planter	Covers: DMAs A1, A2 and A3	648	540	388	0.004	0.3
BMP 2	Flow-Through Planter	Covers: DMAs B1, B2 and B3	1375	1146	825	0.005	0.3
BMP 3	Flow-Through Planter	Covers: DMAs C1a and C1b	34	29	20	0.004	0.3
BMP 4	Bioretention + Cistern	Covers: DMAs D1a and D1b	26	261	0.00	0.003	0.2
BMP 5	Flow-Through Planter	Covers. DMA E1	634	528	380	0.001	0.2
BMP 6	Flow-Through Planter	Covers: DMAs F1and F2	161	134	97	0.004	0.3
BMP 7	Flow-Through Planter	Covers: DMAs F3, G1a and G1b	6	5	4	0.002	0.2
BMP 8	Flow-Through Planter	Covers: DMAs H1a and H1b	32	26	19	0.001	0.2
BMP 9	Flow-Through Planter	Covers: DMAs C2a and C2b	69	58	41	0.001	0.2

Project Name	:	LA POSADA MEN'S SHELTER
Project Location	:	2472 Impala Drive, Carlsbad, CA 92008
Jurisdiction	:	City of Carlsbad
Hydrologic Unit	:	Carlsbad

LID SIZER SCREEN SHOTS – BMP1

San Diego County

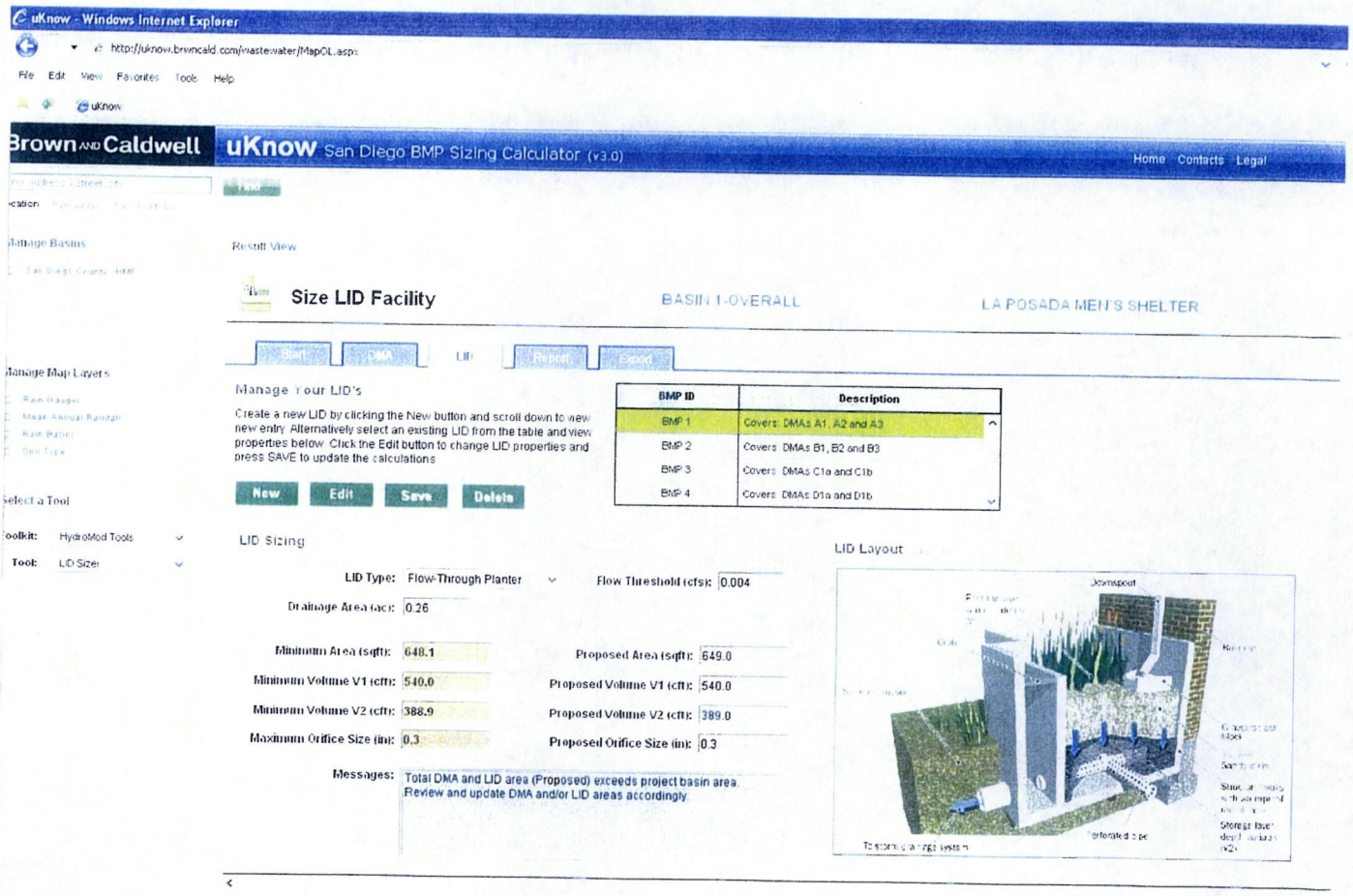

Project Name	:	LA POSADA MEN'S SHELTER
Project Location	:	2472 Impala Drive, Carlsbad, CA 92008
Jurisdiction	:	City of Carlsbad
Hydrologic Unit	:	Carlsbad

LID SIZER SCREEN SHOTS – BMP2

San Diego County

uKnow - Windows Internet Explorer

http://uknow.brwncald.com/wastewater/MapOL.aspx

File Edit View Favorites Tools Help

Brown AND Caldwell **uKnow** San Diego BMP Sizing Calculator (v3.0) Home Contacts Legal

Manage Basins

Result View

Size LID Facility BASIN 1-OVERALL LA POSADA MEN'S SHELTER

Start | DMA | LID | Report | Export

Manage Map Layers

Manage Your LID's

Create a new LID by clicking the New button and scroll down to view new entry. Alternatively select an existing LID from the table and view properties below. Click the Edit button to change LID properties and press SAVE to update the calculations

BMP ID	Description
BMP 1	Covers: DMAs A1, A2 and A3
BMP 2	Covers: DMAs B1, B2 and B3
BMP 3	Covers: DMAs C1a and C1b
BMP 4	Covers: DMAs D1a and D1b

New Edit Save Delete

Select a Tool

Toolkit: HydroMod Tools

Tool: LID Sizer

LID Sizing

LID Type: Flow-Through Planter

Flow Threshold (cfs): 0.005

Drainage Area (ac): 0.30

Minimum Area (sqft):	1375.8	Proposed Area (sqft):	1376.0
Minimum Volume V1 (cft):	1146.2	Proposed Volume V1 (cft):	1147.0
Minimum Volume V2 (cft):	825.5	Proposed Volume V2 (cft):	826.0
Maximum Orifice Size (in):	0.3	Proposed Orifice Size (in):	0.3

Messages: Total DMA and LID area (Proposed) exceeds project basin area. Review and update DMA and/or LID areas accordingly.

LID Layout

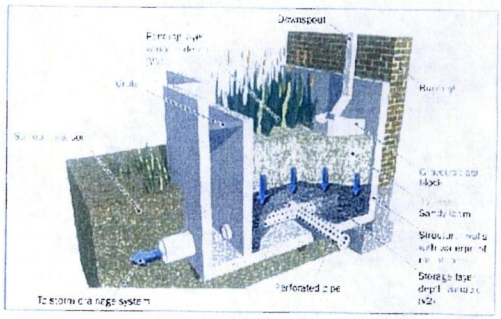

Project Name	:	LA POSADA MEN'S SHELTER
Project Location	:	2472 Impala Drive, Carlsbad, CA 92008
Jurisdiction	:	City of Carlsbad
Hydrologic Unit	:	Carlsbad

LID SIZER SCREEN SHOTS – BMP3

San Diego County

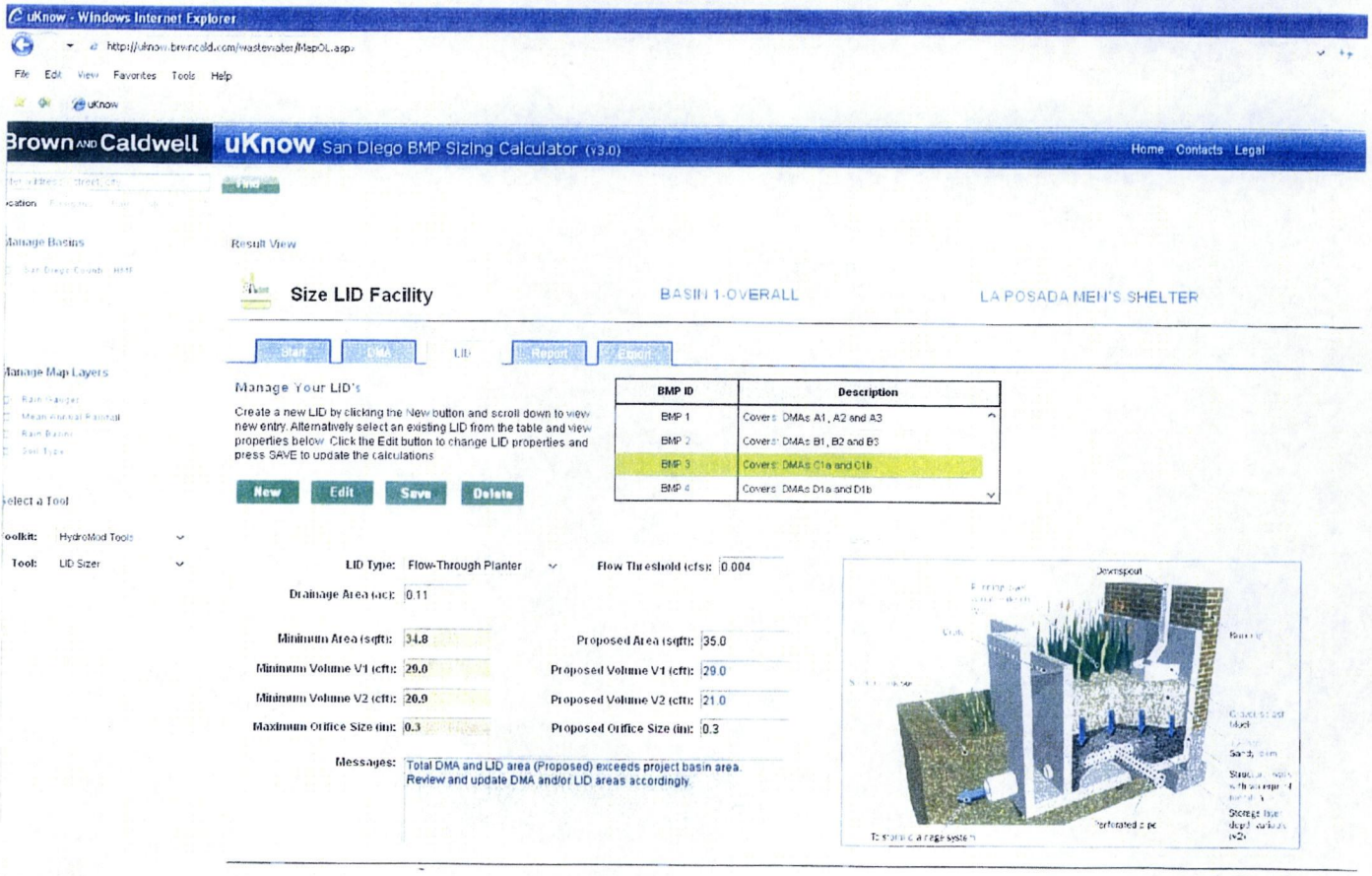

Project Name	:	LA POSADA MEN'S SHELTER
Project Location	:	2472 Impala Drive, Carlsbad, CA 92008
Jurisdiction	:	City of Carlsbad
Hydrologic Unit	:	Carlsbad

LID SIZER SCREEN SHOTS – BMP4

San Diego County

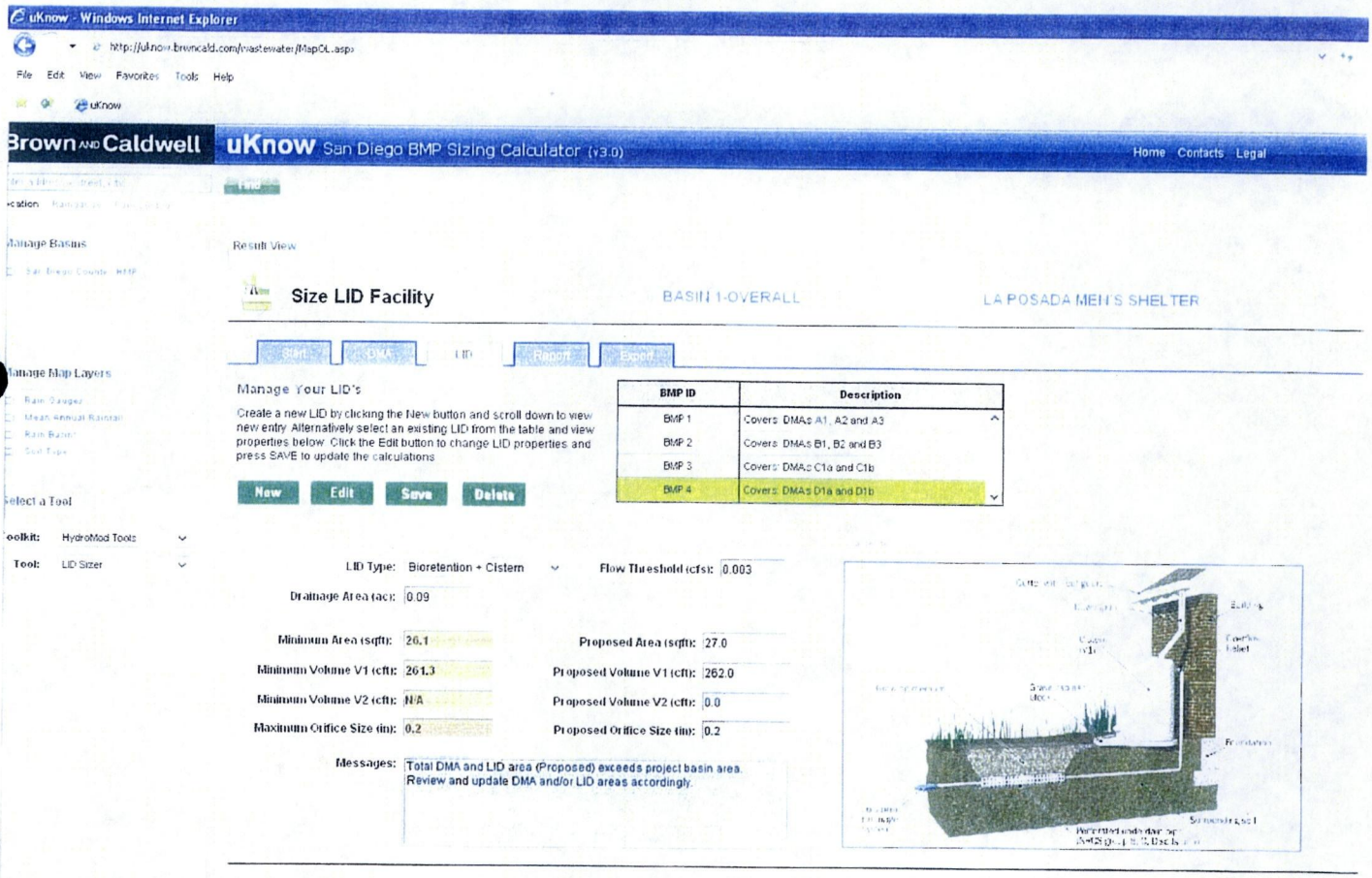

Project Name	:	LA POSADA MEN'S SHELTER
Project Location	:	2472 Impala Drive, Carlsbad, CA 92008
Jurisdiction	:	City of Carlsbad
Hydrologic Unit	:	Carlsbad

LID SIZER SCREEN SHOTS – BMP5

San Diego County

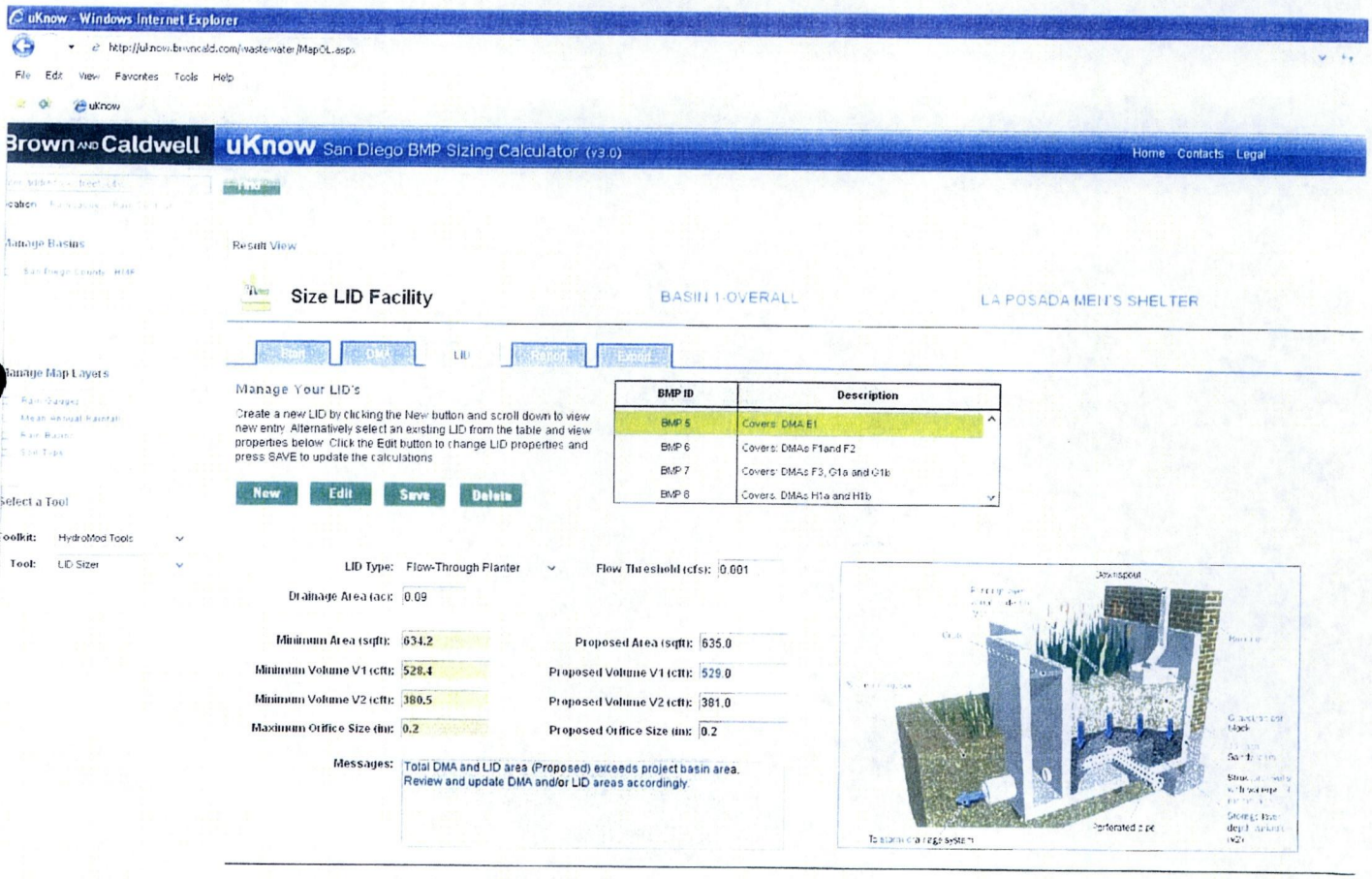

Project Name	:	LA POSADA MEN'S SHELTER
Project Location	:	2472 Impala Drive, Carlsbad, CA 92008
Jurisdiction	:	City of Carlsbad
Hydrologic Unit	:	Carlsbad

LID SIZER SCREEN SHOTS – BMP6

San Diego County

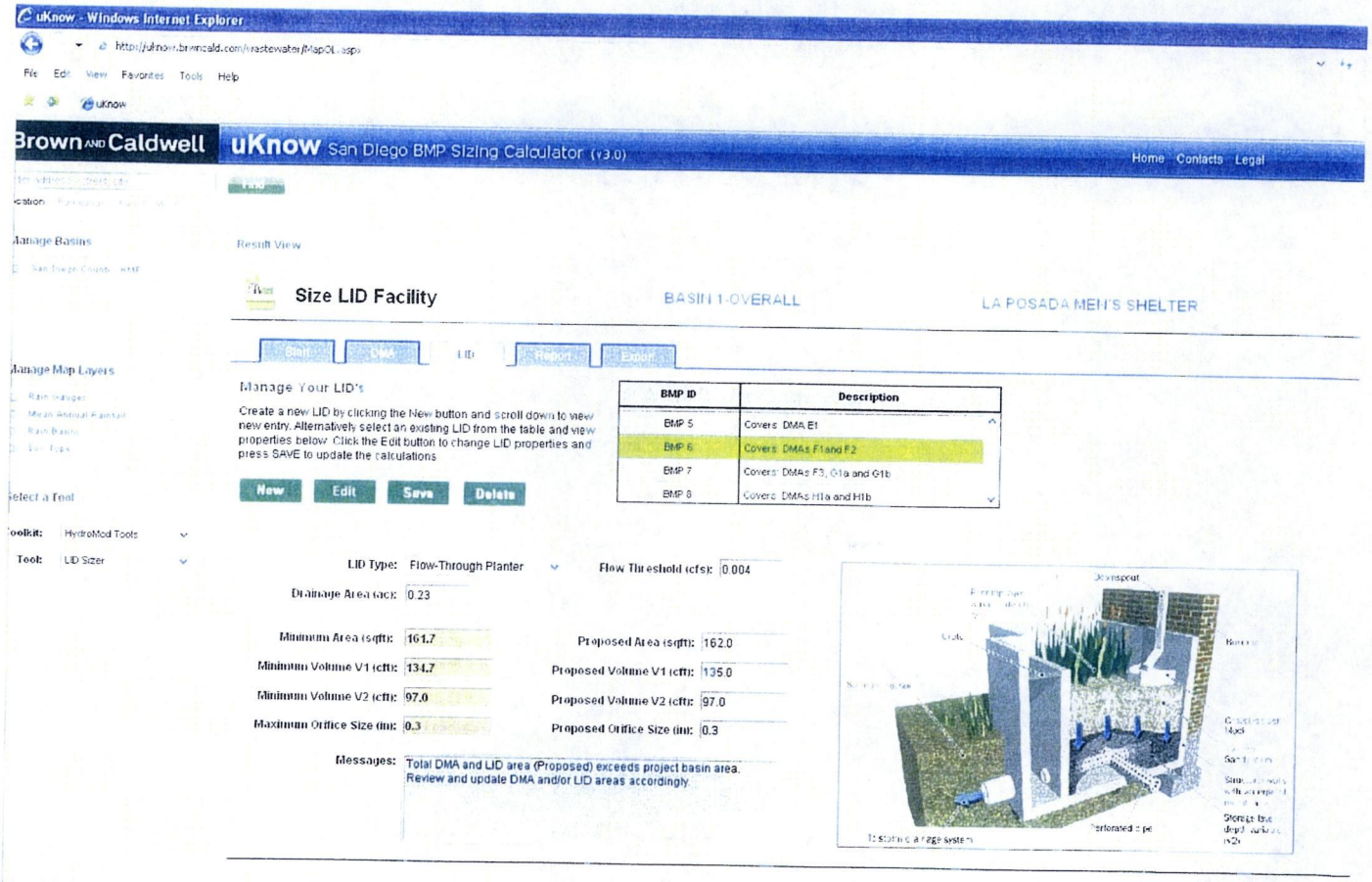

Project Name	:	LA POSADA MEN'S SHELTER
Project Location	:	2472 Impala Drive, Carlsbad, CA 92008
Jurisdiction	:	City of Carlsbad
Hydrologic Unit	:	Carlsbad

LID SIZER SCREEN SHOTS – BMP7

San Diego County

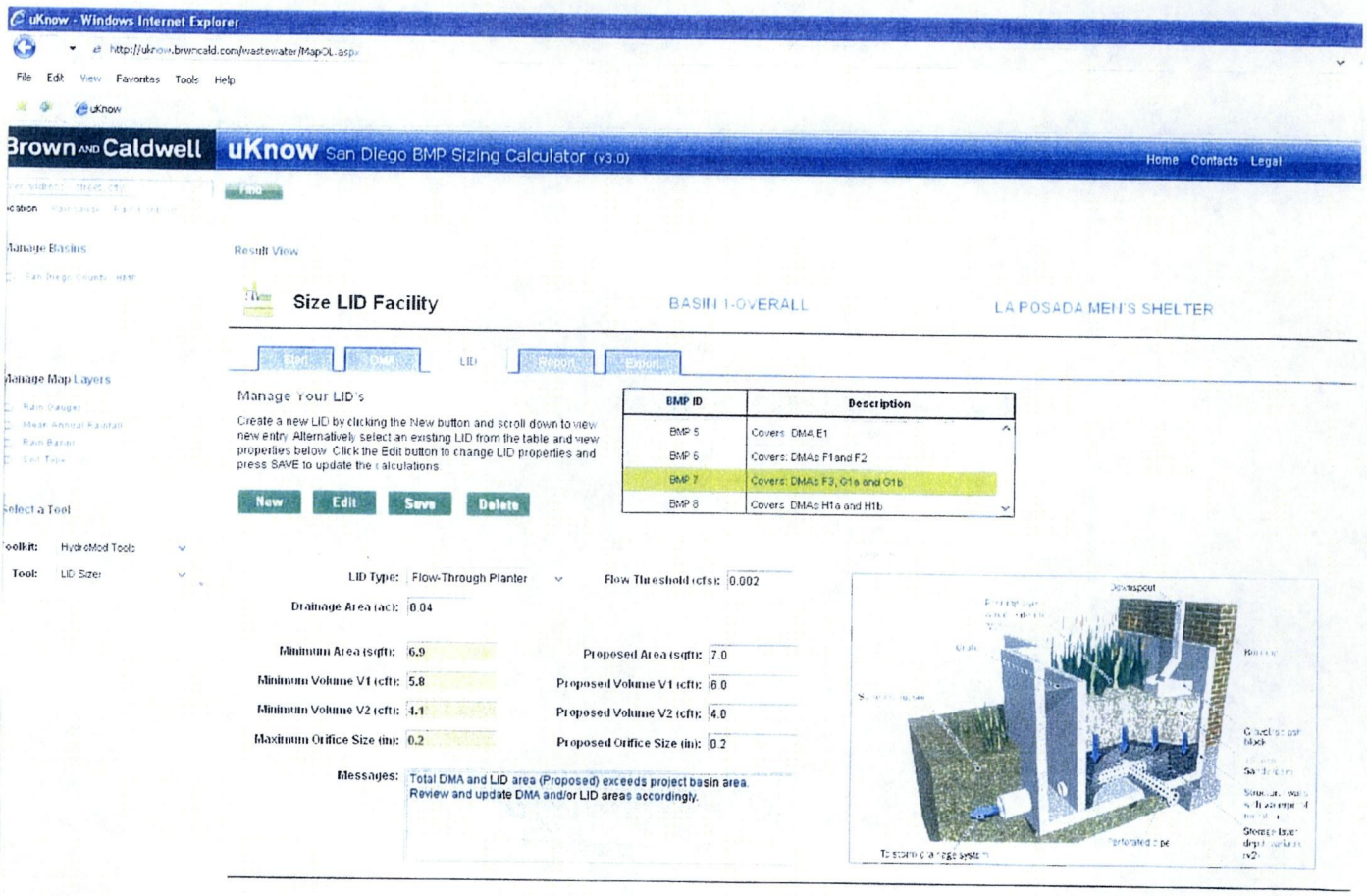

Project Name	:	LA POSADA MEN'S SHELTER
Project Location	:	2472 Impala Drive. Carlsbad, CA 92008
Jurisdiction	:	City of Carlsbad
Hydrologic Unit	:	Carlsbad

LID SIZER SCREEN SHOTS – BMP8

San Diego County

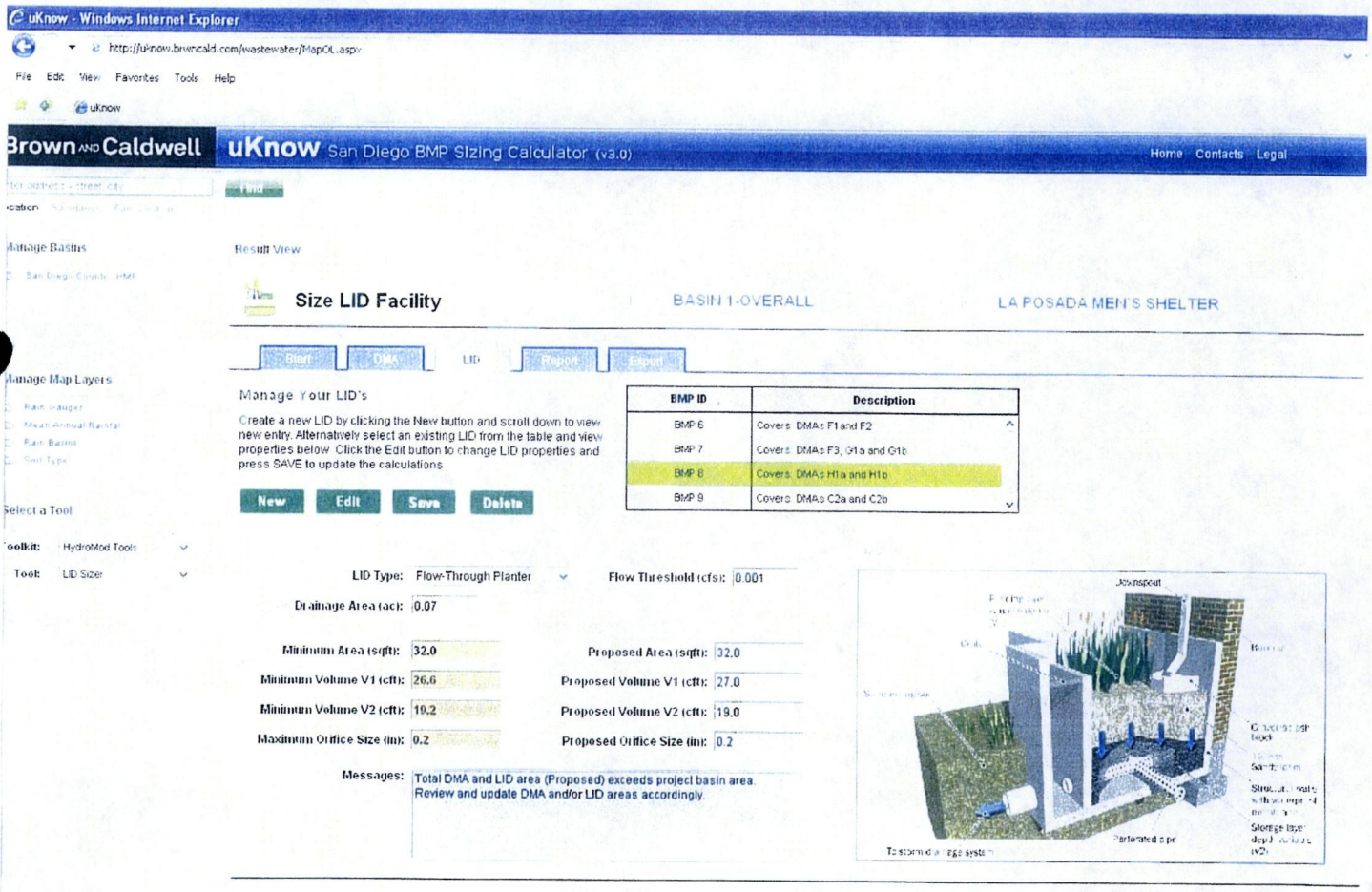

Project Name	:	LA POSADA MEN'S SHELTER
Project Location	:	2472 Impala Drive, Carlsbad, CA 92008
Jurisdiction	:	City of Carlsbad
Hydrologic Unit	:	Carlsbad

LID SIZER SCREEN SHOTS – BMP9

San Diego County

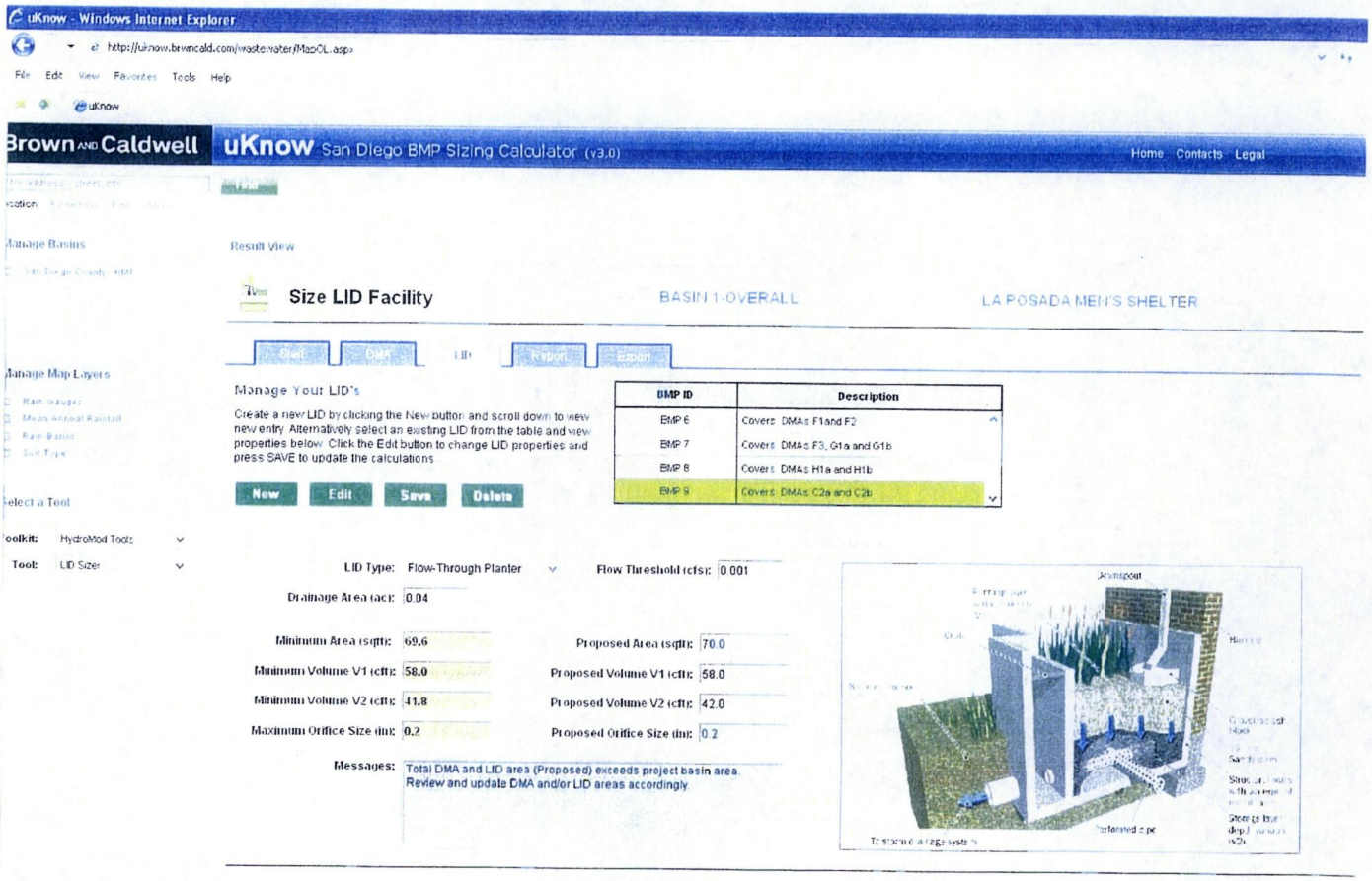

STEP 6

SINGLE SHEET POST-CONSTRUCTION BMP EXHIBIT

STEP 7

STORMWATER FACILITY MAINTENANCE

➢ Responsible Party for Long-term Maintenance:

Identify the parties responsible for long-term maintenance of the BMPs identified above and Source Controls specified in this report.

Name: Sister Raymonda DuVall
Company Name: Catholic Charities
Phone Number: 619-231-2828
Street Address: 349 Cedar Street
City/State/Zip: San Diego, CA 92101
Email Address: SRMDuVall@ccdsd.org

➢ Funding

Source:

Provide the funding source or sources for long-term operation and maintenance of each BMP identified above. By certifying the Major SWMP the applicant is certifying that the funding responsibilities have been addressed and will be transferred to future owners.

Grant funded

OPERATION AND MAINTENANCE RESPONSIBILITY

The Operation and maintenance (O&M) requirement of the treatment facilities shall be performed by the owners or owner's representative per the City of Carlsbad requirements & recommendations or as assessment requires it. The owner or owner's representative shall provide specifications for the handling and placement of any wastes. As well as providing a schedule and frequency for the O & M.

Prior to the approval of SWMP, the facility manager shall:

- Identify the parties (name, address, and telephone number) responsible for O&M, including a written agreement with the entities responsible for O&M. This agreement can take the form of a Covenant and Agreement recorded by the Project Proponent with the County Recorder, POA CC&Rs, or other instrument sufficient to guarantee perpetual O&M.
- Provide self-inspections and record-keeping requirements for BMPs (review local specific requirements regarding self-inspections and/or annual reporting), including identification of responsible parties for inspection and record- keeping.
- Provide thorough descriptions of water quality monitoring, if required by the City.

Inspection and Maintenance Matrix

Code	BMP Description	Activity (Frequency)	Responsibility
		Source Control Structural BMPs	
SD-10	**Site Design & Landscaping Planning**	Verify that the irrigation system is working properly. Check for broken sprinkler heads and verify proper coverage. Listen for water flowing through valves when system is off as a check for possible leaks. Adjust valve run times to avoid over-watering and/or ponding in landscape areas. Review instruction manuals and consult with the system manufacturer for system repairs. (Twice per month)	Owner and/or Site Landscaping Contractor
SD-12	**Efficient Irrigation**	Verify that the irrigation system is working properly. Check for broken sprinkler heads and verify proper coverage. Listen for water flowing through valves when system is off as a check for possible leaks. Adjust valve run times to avoid over-watering and/or ponding	Owner and/or Site Landscaping Contractor

		in landscape areas. Review instruction manuals and consult with the system manufacturer for system repairs. (Twice per month)	
SD-32	**Trash Enclosures**	Trash storage areas are covered and enclosed to prevent introduction of trash & debris to site runoff. Proper receptacles will be used and the area kept clean. (Weekly)	Owner

Routine Non-Structural BMPs

N1	**Education for Property Owners**	Owner assumes financial responsibility for property maintenance and implementation of practices set forth in this WQMP. Whenever possible, the Owner shall relay this information to other employees and occupants of the facility in order to increase their understanding of stormwater quality, sources of pollutants, and what they can do to reduce pollutants in Stormwater. (Annually at a minimum)	Owner
N4	**BMP Maintenance**	Owner and contracted personnel are responsible for knowledge and implementation of all site requirements specified in this WQMP. WQMP shall be reviewed by owner and any contracted maintenance personnel. (Annually)	Owner and/or contracted site maintenance personnel
N11	**Litter Control**	Pick up debris and trash to maintain a clean	Owner and/or

		site. (Weekly) Sweep hardscape areas to prevent accumulation of debris and pollutants. (Once per month, after heavy winds, and prior to forecasted storm events)	contracted site maintenance personnel
N14	**Drainange Facility Inspection**	Inspect drain inlets and catch basins. Clean prior to storm season and as necessary no later than October 1st each year. (Annually) Keep grates in landscape areas clear of debris. (Weekly) Contact County Department of Environmental Health in case vector concerns are observed (i.e. standing water in or around a BMP for more than 72 hours) Inspection and Maintenance records should be kept for five (5) years.	Owner and/or Site Landscaping Contractor

Treatment Control BMPs

MP-52	**Drain Inserts**	Check the debris level in the drain inserts prior to, immediately after, and once per month during the rainy season (Oct 1st to Apr 30th). Remove accumulated debris at each inspection and replace the filter media once per year during the pre-season inspection. (Annually) Waste generated from cleaning the iinserts and drain inlets shall be disposed of properly and not discharged into the storm drain system. See Appendices A & B for product and service information specific to each insert type.	Owner and/or contracted site maintenance personnel

➢ PRIVATE OWNERSHIP AND MAINTENANCE:

For Priority Development Projects (PDP), the owner will be required to execute a Permanent Stormwater Quality BMP Maintenance Agreement.

TABLE 5-1. SCHEDULE for Planning Operation and Maintenance of stormwater treatment BMPs.

STAGE	DESCRIPTION	SCHEDULE
1	Determine facility ownership and maintenance responsibility	Discuss with planning staff at pre-application meeting.
2	Identify typical maintenance requirements.	In initial submittal, coordinate with land-use application.
3	Develop detailed operation and maintenance plan.	Prior to plan check submittal
4	Interim operation and maintenance facilities.	During and following construction including warranty period.
5	Formal transfer of operation and maintenance responsibility	On sale ad transfer of property or permanent occupancy.
6	Ongoing maintenance and compliance with inspection & reporting requirements.	In perpetuity.

STEP 8

SWMP CERTIFICATION

"The selection and preliminary design of stormwater treatment and other control measures in this plan have been prepared under the direction of the following Registered Civil Engineer and meet the requirements of Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments. Our preliminary assessment indicated that the project site can provide adequate room to accommodate the required sizes for the on-site LID and Hydromodification facilities. Sizing calculations will be provided later, prior to planning commission hearing."

Felix Gonzalez

Name, RCE # 67660

5/17/12

Date

OWNER'S CERTIFICATION

Project Name: La Posada De Guadalupe De Carlsbad

Project Number: SDG09-0013-00

"I certify that, as owner of the property described herein, I have read and understand the requirements of this Storm Water Management Plan (SWMP) and that I am responsible for ensuring that all storm water treatment measures described within said SWMP will be properly implemented, monitored and maintained."

Catholic Charities Diocese of San Diego
Owner

Sr Raymonda Duvall
Signature of Owner/Approved Signatory

5/21/2012
Date

Sister RayMonda Duvall
Name of Owner/Approved Signatory

619.231.2828
Telephone Number

ATTACHMENT A	Vicinity Map/Google Map/ GIS Map Info
ATTACHMENT B	Appendix 1: Stormwater Pollutant Sources and Source Control Checklist
ATTACHMENT C	2006 CWA Section 303d List of Water Quality Limited Segments Requiring TMDLS
ATTACHMENT D	Table 2.2 – Beneficial Uses
ATTACHMENT E	Post Development Drainage Map/DMA Map
ATTACHMENT F	Pre-Development Drainage Map
ATTACHMENT G	Operation and Maintenance Verification Forms
ATTACHMENT H	Tracking and Inventory Report Forms

ATTACHMENT A

Vicinity Map/Google Map/GIS Map Info

IT IS NOT 24"x36" IT IS A REDUCED PRINT

LA POSADA MEN'S SHELTER

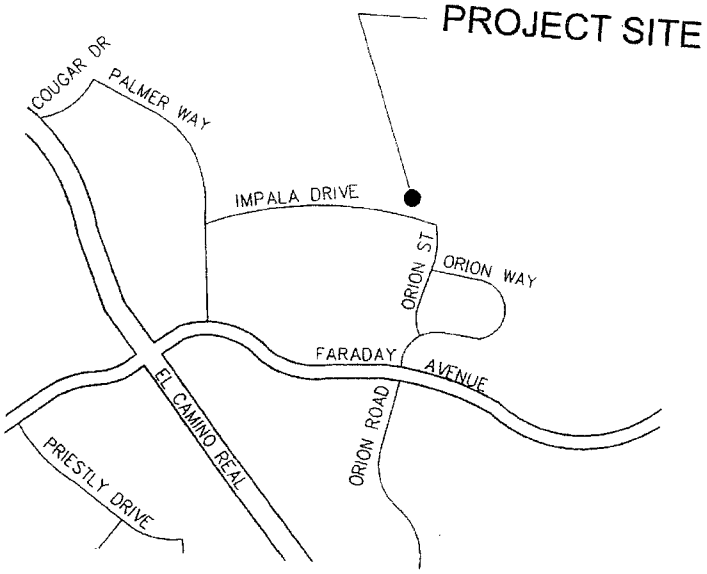

VICINITY MAP

SCALE: N.T.S

N

2478 IMPALA DRIVE
CARLSBAD, CA 92008

Google maps Address **2472 Impala Dr**
Carlsbad, CA 92010

Notes LA POSADA MEN'S SHELTER

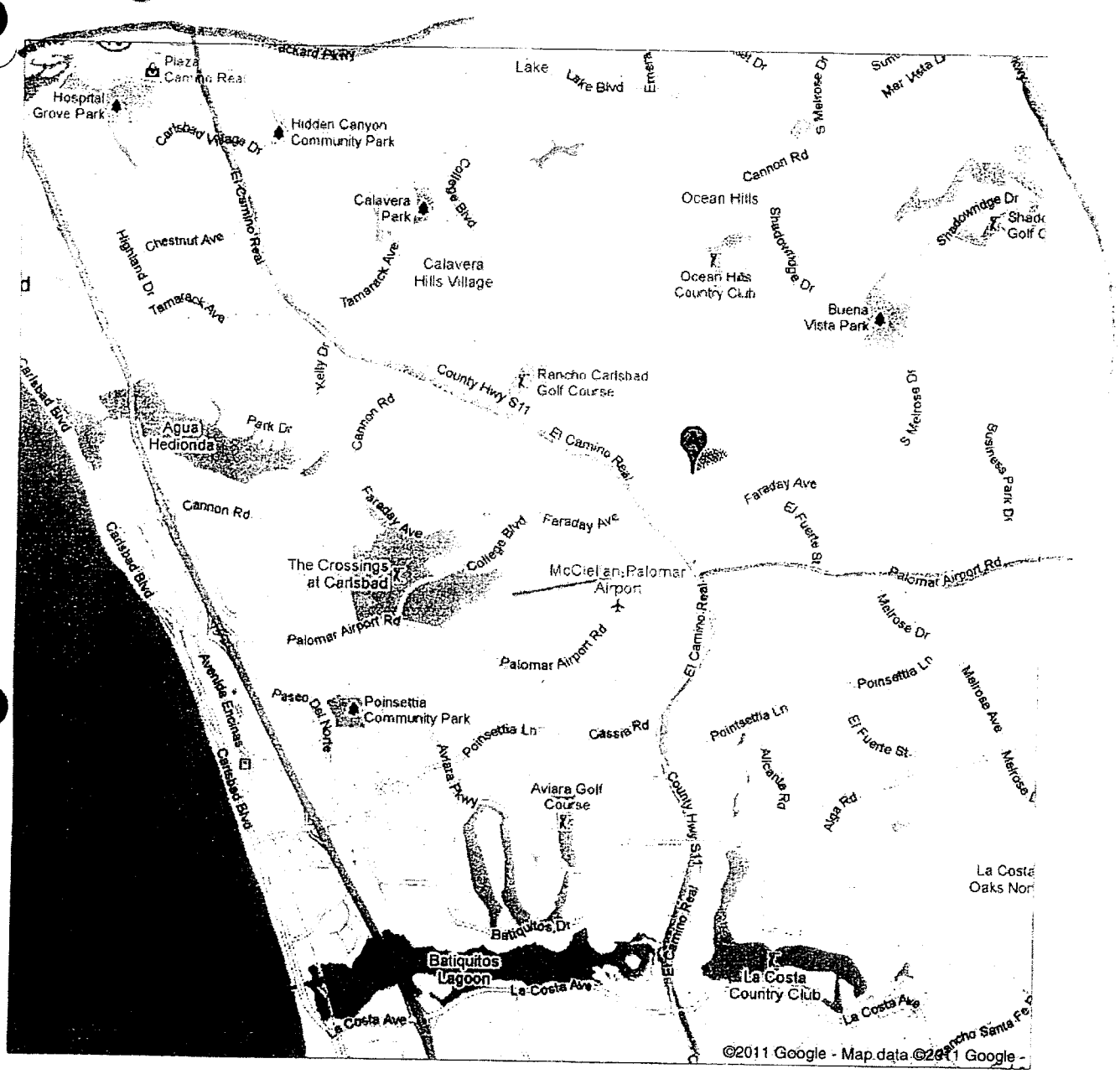

Work With Map

Selection List

Please click on number at left of check box below to view information about it

Parcel Boundary

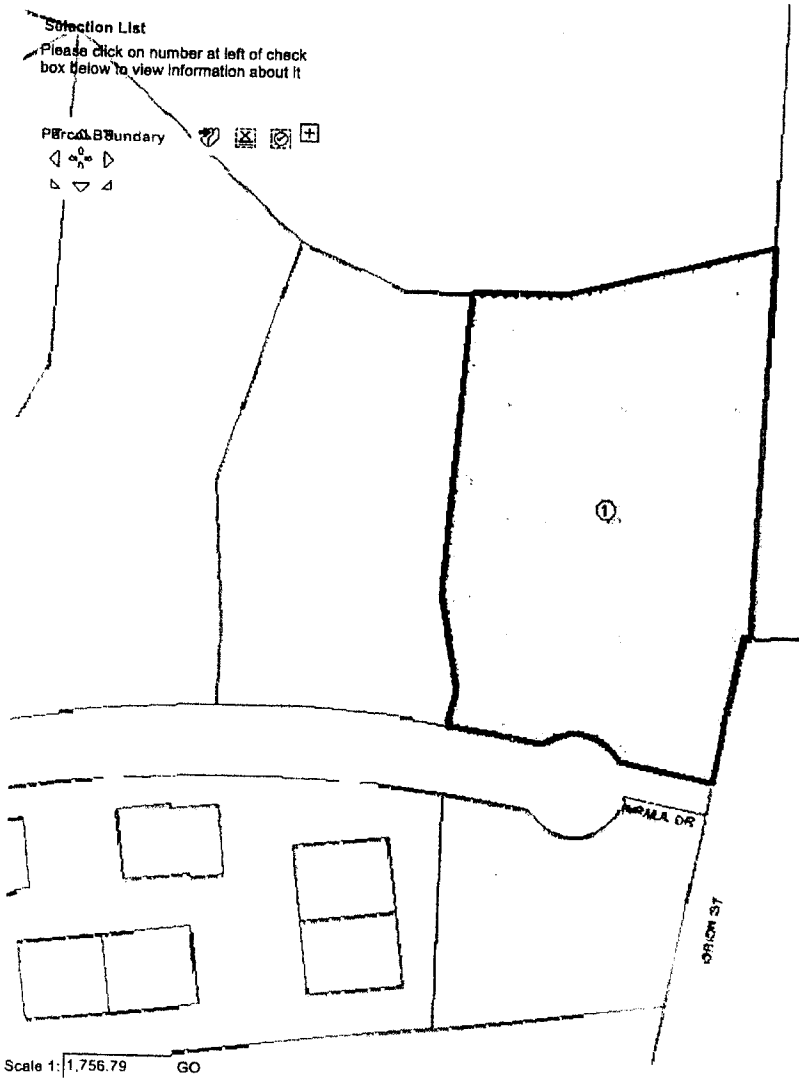

Scale 1: 1,756.79 GO

More Information

Attribute Details For

Select Reports eZoning View

1 features found. Displaying 1 To 1

Attribute	Value
Property Identification	
APN	2090412800
Address	IMPALA DR
Property Information	
Assessed Acreage	3.62
Calculated Acreage	3.7
Zoning	M-Q
General Plan	PI/OS
Water District	CA
Sewer District	CA
School District	CA
Drainage District	B
Quadrant	NE
Local Facility Management Zone	5
Park District	2
Fire District	5
Bridge Thoroughfare District	1
Is Absentee Owner	Y
Census Tract	198.02
Asesessed Land Value	$447,798
Assessed Improvement Value	
Tax Rate Area	09013
Sewer Benefit Area	E
Overlay Zone	

x : -117.268788 , y : 33.141169

Search

APN Search

Address Search

Map Content

* Right-click a layer for more functions

eZoning Map

- FEMA Flood Zone/Floodway 2(
- Zoning
- Parcel Boundary

Apply

ATTACHMENT B

Appendix 1: Stormwater Pollutant Sources and Source Control Checklist

Stormwater Pollutant Sources and Source Control Checklist

How to Use this Checklist:

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your project. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your SUSMP Drawings.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in a table in your SUSMP Drawings. For PDP's, in your SWMP, use the format shown in Table 3-1. In the SWMP, describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternatives.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR PROJECT SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SWMP Table and Narrative**	**4** **Operational BMPs—Include in SWMP Table and Narrative**
☑ **A.** On-site storm drain inlets	☑ Locations of inlets.	☑ Mark all inlets with the words "No Dumping! Flows to Bay" or similar.	☑ Maintain and periodically repaint or replace inlet markings. ☑ Provide stormwater pollution prevention information to new site owners, lessees, or operators. ☑ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ☑ Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."

☐ **B.** Interior floor drains and elevator shaft sump pumps		☐ State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	☐ Inspect and maintain drains to prevent blockages and overflow.
☐ **C.** Interior parking garages		☐ State that parking garage floor drains will be plumbed to the sanitary sewer.	☐ Inspect and maintain drains to prevent blockages and overflow.
☐ **D1.** Need for future indoor & structural pest control		☐ Note building design features that discourage entry of pests.	☐ Provide Integrated Pest Management information to owners, lessees, and operators.
☑ **D2.** Landscape/ Outdoor Pesticide Use	☑ Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. ☑ Show self-retaining landscape areas, if any. ☐ If a PDP, show stormwater treatment facilities.	State that final landscape plans will accomplish all of the following. ☑ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ☑ Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. ☑ Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. ☑ Consider using pest-resistant plants, especially adjacent to hardscape. ☑ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	☑ Maintain landscaping using minimum or no pesticides. ☑ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ☑ Provide IPM information to new owners, lessees and operators.
☐ **E.** Pools, spas, ponds, decorative fountains, and other water features.	☐ Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet.	☐ If the local municipality requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.	☐ See applicable operational BMPs in Fact Sheet SC-72, "Fountain and Pool Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

☑ **F.** Food service	☐ For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. ☑ On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	☑ Describe the location and features of the designated cleaning area. ☐ Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	☐
☑ **G.** Refuse areas	☑ Show where site refuse and recycled materials will be handled and stored for pickup. See city standard drawing GS-16. ☑ If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. ☐ Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	☑ State how site refuse will be handled and provide supporting detail to what is shown on plans. ☑ State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	☑ State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
☐ **H.** Industrial processes.	☐ Show process area.	☐ If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."	☐ See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

❑ I. Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	❑ Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. ❑ Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. ❑ Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	❑ Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains. Where appropriate, reference documentation of compliance with the requirements of local Hazardous Materials Programs for: ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank	❑ See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials " in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

❑ **J. Vehicle and Equipment Cleaning**	❑ Show on drawings as appropriate: (1) Commercial/industrial facilities having vehicle /equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses. (2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use). (3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer. (4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.	❑ If a car wash area is not provided, describe measures taken to discourage on-site car washing and explain how these will be enforced.	Describe operational measures to implement the following (if applicable): ❑ Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system. ❑ Car dealerships and similar may rinse cars with water only. ❑ See Fact Sheet SC-21, "Vehicle and Equipment Cleaning," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

❑ **K.** Vehicle/Equipment Repair and Maintenance	❑ Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater. ❑ Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. ❑ Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.	❑ State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. ❑ State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. ❑ State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	In the SUSMP report, note that all of the following restrictions apply to use the site: ❑ No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains. ❑ No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. ❑ No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.

❑ L. Fuel Dispensing Areas	❑ Fueling areas[1] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable. ❑ Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.		❑ The property owner shall dry sweep the fueling area routinely. ❑ See the Business Guide Sheet, "Automotive Service—Service Stations" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

[1] The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

☐ **M.** Loading Docks	☐ Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas should be drained to the sanitary sewer where feasible. Direct connections to storm drains from depressed loading docks are prohibited. ☐ Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. ☐ Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.		☐ Move loaded and unloaded items indoors as soon as possible. ☐ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
☑ **N.** Fire Sprinkler Test Water		☑ Provide a means to drain fire sprinkler test water to the sanitary sewer.	☑ See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

O. Miscellaneous Drain or Wash Water ☐ Boiler drain lines ☐ Condensate drain lines ☑ Rooftop equipment ☐ Drainage sumps ☑ Roofing, gutters, and trim.		☑ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. ☑ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. ☑ Rooftop mounted equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ☐ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. ☑ Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.	
☑ **P.** Plazas, sidewalks, and parking lots.			☑ Plazas, sidewalks, and parking lots shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing shall be collected to prevent entry into the storm drain system. Washwater containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain.

ATTACHMENT C

2006 CWA Section 303d List of Water Quality Limited Segments Requiring TMDLS

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS REQUIRING TMDLS

USEPA APPROVAL DATE: JUNE 28, 2007

REGION	TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
				Toxaphene		7.8 Miles	2019
					Source Unknown		
8	R	San Diego Creek Reach 2	80111000				
				Metals		6.3 Miles	2007
					Urban Runoff/Storm Sewers		
8	R	Santa Ana River, Reach 4	80127000				
				Pathogens		14 Miles	2019
					Nonpoint Source		
8	R	Santiago Creek, Reach 4	80112000				
				Salinity/TDS/Chlorides		9.8 Miles	2019
					Source Unknown		
8	C	Seal Beach	80111000				
				Enterococcus *Impaired 50 yards around drain at 1st Street.*		0.53 Miles	2019
					Source Unknown		
				PCBs (Polychlorinated biphenyls)		0.53 Miles	2019
					Source Unknown		
8	R	Silverado Creek	80112000				
				Pathogens		11 Miles	2019
					Unknown Nonpoint Source		
				Salinity/TDS/Chlorides		11 Miles	2019
					Unknown Nonpoint Source		
8	R	Summit Creek	80171000				
				Nutrients		1.5 Miles	2008
					Construction/Land Development		
9	R	Agua Hedionda Creek	90431000				
				Manganese		7 Miles	2019
					Source Unknown		

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS REQUIRING TMDLS

USEPA APPROVAL DATE: JUNE 28, 2007

REGION	TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
				Selenium		7 Miles	2019
					Source Unknown		
				Sulfates		7 Miles	2019
					Source Unknown		
				Total Dissolved Solids		7 Miles	2019
					Urban Runoff/Storm Sewers		
					Unknown Nonpoint Source		
					Unknown point source		
9	E	Agua Hedionda Lagoon	90431000				
				Indicator bacteria		6.8 Acres	2006
					Nonpoint/Point Source		
				Sedimentation/Siltation		6.8 Acres	2019
					Nonpoint/Point Source		
9	R	Aliso Creek	90113000				
				Indicator bacteria		19 Miles	2005
				This listing for indicator bacteria applies to the Aliso Creek mainstem and all the major tributaries of Aliso Creek which are Sulphur Creek, Wood Canyon, Aliso Hills Canyon, Dairy Fork, and English Canyon.			
					Urban Runoff/Storm Sewers		
					Unknown point source		
					Nonpoint/Point Source		
				Phosphorus		19 Miles	2019
				This listing for phosphorus applies to the Aliso Creek mainstem and all the major tributaries of Aliso Creek which are Sulphur Creek, Wood Canyon, Aliso Hills Canyon, Dairy Fork, and English Canyon.			
					Urban Runoff/Storm Sewers		
					Unknown Nonpoint Source		
					Unknown point source		
				Toxicity		19 Miles	2019
				This listing for toxicity applies to the Aliso Creek mainstem and all the major tributaries of Aliso Creek which are Sulphur Creek, Wood Canyon, Aliso Hills Canyon, Dairy Fork, and English Canyon.			
					Urban Runoff/Storm Sewers		
					Unknown Nonpoint Source		
					Unknown point source		

ATTACHMENT D

Table 2.2 – Benefecial Uses

Table 2-2. BENEFICIAL USES OF INLAND SURFACE WATERS

Inland Surface Waters [1, 2]	Hydrologic Unit Basin Number	BENEFICIAL USE														
		MUN	AGR	IND	PROC	GWR	FRSH	POW	REC1	REC2	BIOL	WARM	COLD	WILD	RARE	SPWN
San Diego County Coastal Streams																
Loma Alta Creek	4.10	+							○	●		●		●		
Loma Alta Slough	4.10	See Coastal Waters – Table 2-3														
Buena Vista Lagoon	4.21	See Coastal Waters – Table 2-3														
Buena Vista Creek	4.22	+	●	●					●	●		●		●		
Buena Vista Creek	4.21	+	●	●					●	●		●		●	●	
Agua Hedionda	4.31	See Coastal Waters – Table 2-3														
Agua Hedionda Creek	4.32	●	●	●					●	●		●		●		
Buena Creek	4.32	●	●	●					●	●		●		●		
Agua Hedionda Creek	4.31	●	●	●					●	●	●	●		●		
Letterbox canyon	4.31	●	●	●					●	●		●		●		
Canyon de las Encinas	4.40	+							○	●		●		●		
Cottonwood Creek	4.51	+	●						●	●		●		●		
Moonlight Creek	4.51	+	●						●	●		●		●		

● Existing Beneficial Use

○ Potential Beneficial Use

\+ Excepted from MUN (See Text)

[1] Waterbodies are listed multiple times if they cross hydrologic area or sub area boundaries.

[2] Beneficial use designations apply to all tributaries to the indicated waterbody, if not listed separately.

ATTACHMENT E

Post Development Drainage Map

CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT

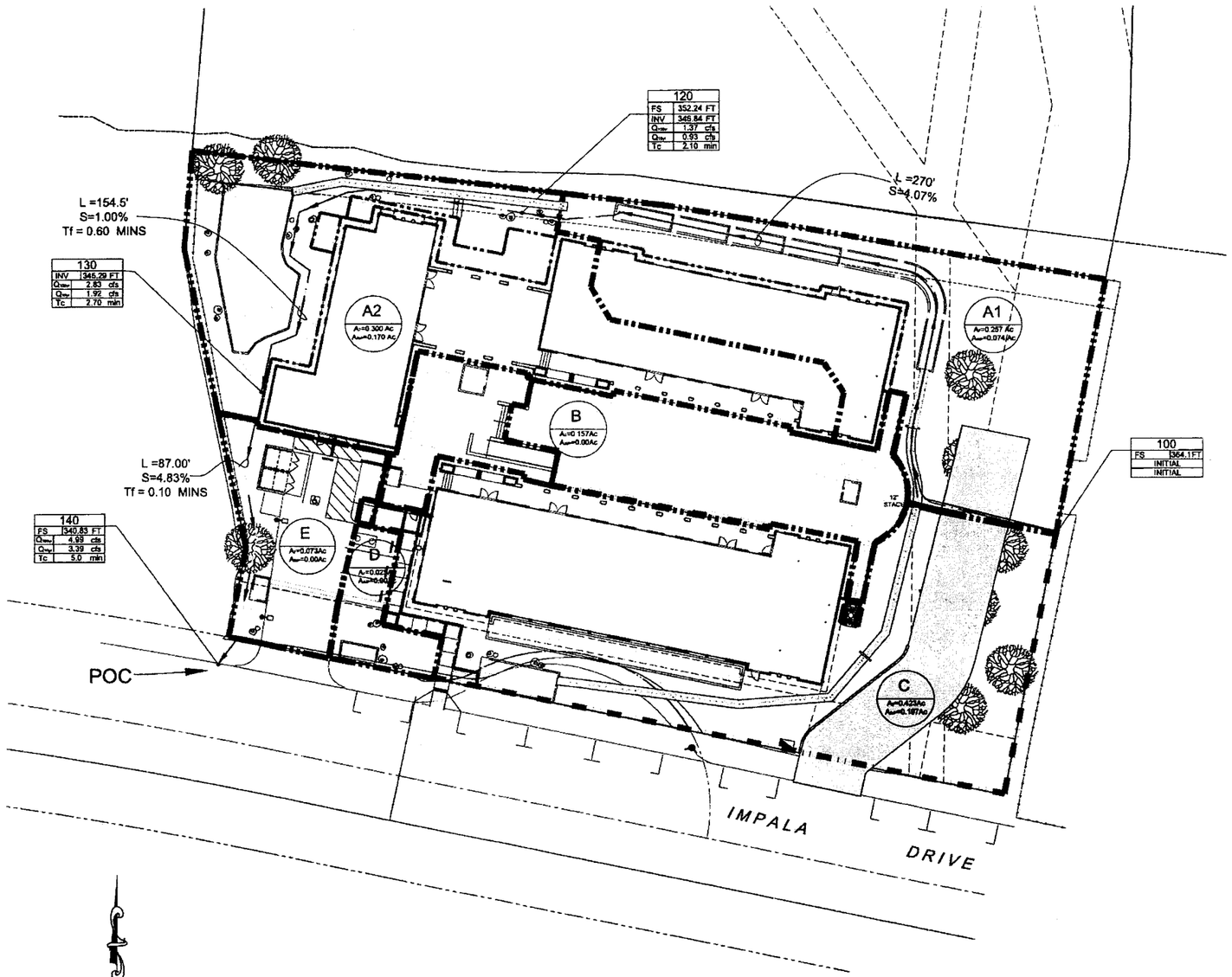

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

LEGEND:

- DRAINAGE BOUNDARY
- L = XXX' — RUNOFF TRAVEL LENGTH (FT)
- A / X.X AC — NAME OF DRAINAGE AREA; DRAINAGE ACREAGE
- FLOWLINE
- 210 / FS XXX.X FT / Q100 X.XX cfs / Q10 X.XX cfs / Tc X.XX min — NODE NUMBER; FINISH SURFACE ELEVATION; Q VALUE (CFS) - 100 YR; Q VALUE (CFS) - 10 YR; TOTAL TIME OF CONCENTRATION

DRAINAGE AREA	IMPERVIOUS AREA	PERVIOUS AREA	% IMP.	C
A1 (0.257 Ac)	(0.074 Ac)	LANDSCAPE = 0.183 Ac ROOF = 0.074 Ac TOTAL = 0.257 Ac	28.79%	0.51
A2 (0.300 Ac)	(0.170 Ac)	LANDSCAPE = 0.114 Ac PAVERS = 0.016 Ac ROOF = 0.170 Ac TOTAL = 0.300 Ac	56.67%	0.66
B (0.157 Ac)	(0.00 Ac)	PAVERS/TURF = 0.157 Ac	00.00 %	0.35
C (0.423 Ac)	(0.197 Ac)	LANDSCAPE = 0.152 Ac ROOF = 0.182 Ac WALKWAY = 0.015 Ac TURF = 0.074 Ac TOTAL = 0.423 Ac	46.57%	0.61
D (0.025 Ac)	(0.00 Ac)	LANDSCAPE/ POROUS PARKING = 0.025 Ac	00.00%	0.35
E (0.073 Ac)	(0.00 Ac)	LANDSCAPE/ POROUS DRWY = 0.073 Ac	00.00%	0.35

POST DEVELOPMENT DRAINAGE MAP
LA POSADA MEN'S SHELTER

WARE MALCOMB
Leading Design for Commercial Real Estate

REGISTERED PROFESSIONAL ENGINEER
DONALD J. WHITAKER
No. 56320
Exp. 6-30-2011
CIVIL
STATE OF CALIFORNIA

PROJECT ENGINEER DATE

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ATTACHMENT F

Pre-Development Drainage Map

CAUTION: IF THIS SHEET IS NOT 24"x36" IT IS A REDUCED PRINT

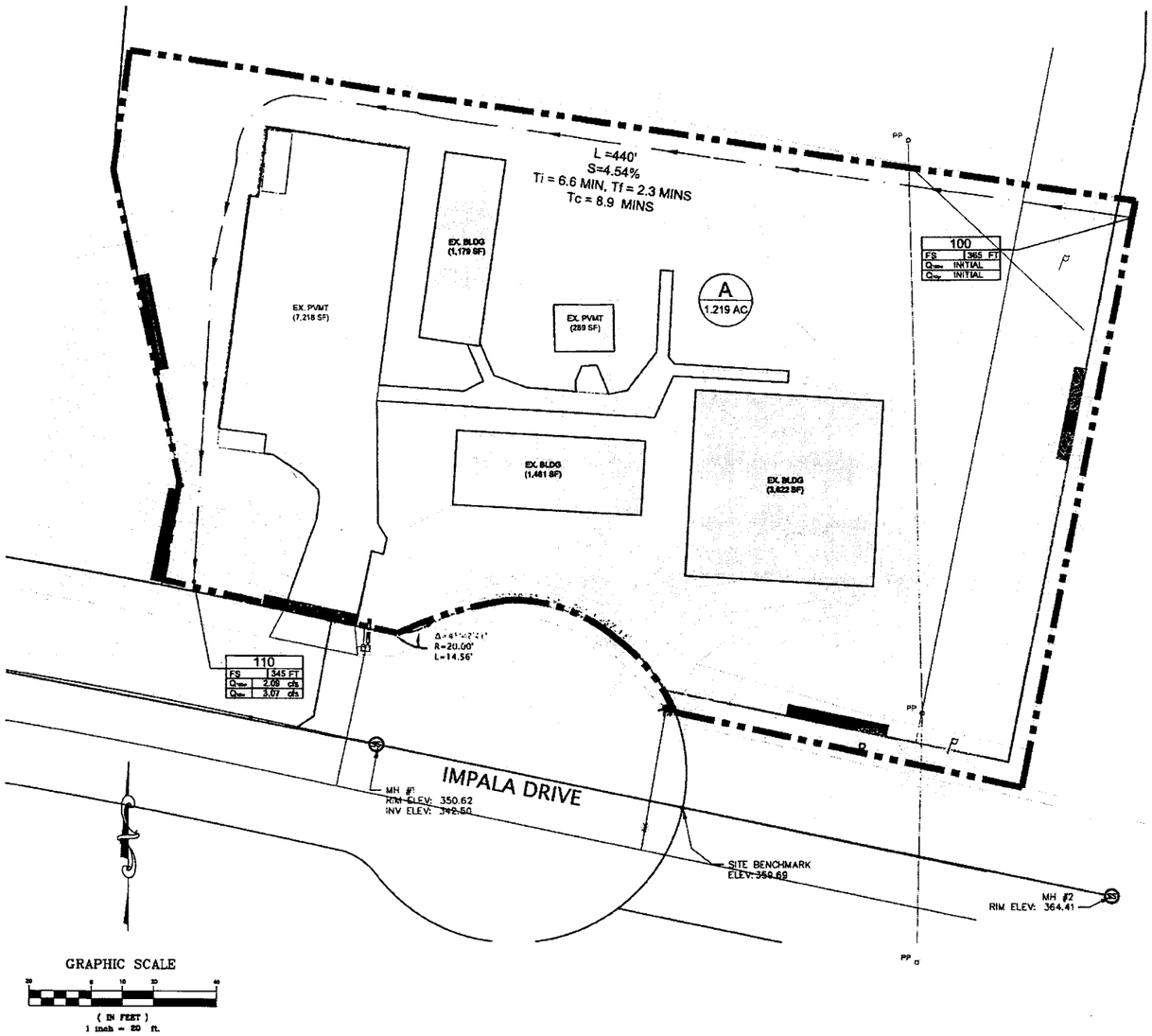

LEGEND:

- DRAINAGE BOUNDARY
- L = XXX' — RUNOFF TRAVEL LENGTH (FT)
- A — NAME OF DRAINAGE AREA
- X.X AC — DRAINAGE ACREAGE
- FLOWLINE
- 210 — NODE NUMBER
- FS XXX.X FT — FINISH SURFACE ELEVATION
- Q100= X.XX cfs — Q VALUE (CFS) - 50 YR
- Q10= X.XX cfs — Q VALUE (CFS) - 10 YR

DRAINAGE AREA	IMPERVIOUS AREA	PERVIOUS AREA	% IMP.	C
A 53,083 SF (1.219 Ac)	EX. BLDG. = 6,282 S.F. EX. PAVEMENT = 7,507 S.F. TOTAL =13,769 S.F. (0.316 Ac)	39,314 S.F. (0.903 Ac)	25.9 %	0.49

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THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF WARE MALCOMB AND SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH WARE MALCOMB. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF WARE MALCOMB PRIOR TO THE COMMENCEMENT OF ANY WORK.

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La POSADA MEN'S SHELTER
IMPALA DRIVE
CARLSBAD, CALIFORNIA

PRE DEVELOPMENT DRAINAGE MAP

DATE	REMARKS

PA / PM:	
DRAWN BY:	
JOB NO.:	SD009-0013-00

SHEET
C-10.0

ATTACHMENT G

Operation and Maintenance Verification Forms

PRIVATE TREATMENT CONTROL BMP OPERATION AND MAINTENANCE VERIFICATION FORM
BIOFILTER

Biofilters Include:

☑ **Vegetated Filter Strip** ☑ **Vegetated Swale** ☑ **Bioretention Facility**

Routine maintenance is needed to ensure that flow is unobstructed, that erosion is prevented, and that soils are held together by plant roots and are biologically active. Typical maintenance consists of the following:

Bioretention BMPs Inspection and Maintenance Checklist	
Typical Maintenance Indicators	**Typical Maintenance Actions**
Accumulation of sediment, litter, or debris	Remove and properly dispose of accumulated materials, without damage to the vegetation.
Poor vegetation establishment	Examine the vegetation to ensure that it is healthy and dense enough to provide filtering and to protect soils from erosion. Replenish mulch as necessary, remove fallen leaves and debris, prune large shrubs or trees, and mow turf areas.
Overgrown vegetation	Mow or trim as appropriate, but not less than the design height of the vegetation (typically 4-6 inches for grass). Confirm that irrigation is adequate and not excessive and that sprays do not directly enter overflow grates. Replace dead plants and remove noxious and invasive vegetation.
Erosion due to concentrated irrigation flow	Repair/re-seed eroded areas and adjust the irrigation system.
Erosion due to concentrated stormwater runoff flow	Repair/re-seed eroded areas and make appropriate corrective measures such as adding erosion control blankets, adding stone at flow entry points, or re-grading where necessary.
Standing water (BMP not draining)	Abate any potential vectors by filling holes in the ground in and around the biofilter facility and by insuring that there are no areas where water stands longer than 48 hours following a storm. If mosquito larvae are present and persistent, contact the San Diego County Vector Control Program at (858) 694-2888. Mosquito larvicides should be applied only when absolutely necessary and then only by a licensed individual or contractor.
Obstructed inlet or outlet structure	Clear obstructions.
Damage to structural components such as weirs, inlet, or outlet structures	Repair or replace as applicable.

PRIVATE TREATMENT CONTROL BMP OPERATION AND MAINTENANCE VERIFICATION FORM

DRAINAGE INSERTS – SIDE 2

The following list of typical maintenance indicators and maintenance activities for drainage inserts is provided for your reference.

Drainage Insert BMPs Inspection and Maintenance Checklist	
Typical Maintenance Indicators	**Typical Maintenance Actions**
Accumulation of sediment, litter, or debris	Remove and properly dispose of accumulated materials.
Spent or clogged sorbent material or media pack	Remove and properly dispose of sorbent material or media pack, and replace with fresh material. These materials/media are potentially hazardous and must be handled by a properly trained contractor.
Damage to components of the drainage insert	Repair or replace as applicable.

Maintenance of drainage inserts involves handling of potentially hazardous material (oil sorbent material), which requires special disposal. Additionally, maintenance may involve entry into the storm drain inlet underground. Therefore the maintenance operator must be trained in handling and disposal of hazardous waste, and must also be certified for confined space entry if the maintenance will require entry into the storm drain inlet. Therefore it is recommended that private BMP owners obtain a maintenance contract with a qualified contractor to provide inspection and maintenance. There are several storm drain cleaning service providers who are able to inspect and/or maintain drainage inserts. Contact the manufacturer of the drainage insert to find qualified service providers.

PRIVATE TREATMENT CONTROL BMP
OPERATION AND MAINTENANCE VERIFICATION FORM
FILTRATION – SIDE 2

The following list of typical maintenance indicators and maintenance activities for filtration BMPs is provided for your reference.

Filtration BMPs Inspection and Maintenance Checklist	
Typical Maintenance Indicators	**Typical Maintenance Actions**
Accumulation of sediment, litter, or debris	Remove and properly dispose of accumulated materials.
Accumulation of floating oil and grease	Remove and properly dispose of oil and grease.
Clogged filter media	Remove and properly dispose of filter media, and replace with fresh media.
Damage to components of the filtration system	Repair or replace as applicable.

Maintenance of filtration BMPs involves handling of potentially hazardous material (oil and/or oil sorbent material), which requires special disposal. Additionally, maintenance may involve entry into the filtration BMP underground. Therefore the maintenance operator must be trained in handling and disposal of hazardous waste, and must also be certified for confined space entry if the maintenance will require entry into the filtration BMP. Therefore it is recommended that private BMP owners obtain a maintenance contract with a qualified contractor to provide inspection and maintenance. There are several storm drain cleaning service providers who are able to inspect and/or maintain filtration BMPs. Contact the manufacturer of the filtration system to find qualified service providers.

PRIVATE TREATMENT CONTROL BMP OPERATION AND MAINTENANCE VERIFICATION FORM

PLANTER BOXES

Planter boxes capture runoff from downspouts or sheet flow from plazas and paved areas. The runoff briefly floods the surface of the box and then percolates through an active soil layer to drain rock below. Typical maintenance consists of the following:

Planter Box BMP Inspection and Maintenance Checklist	
Typical Maintenance Indicators	**Typical Maintenance Actions**
Accumulation of sediment, litter, or debris	Check that the soil is at the appropriate depth to allow a reservoir above the soil surface and is sufficient to effectively filter stormwater. Remove any accumulations of sediment, litter, and debris. Till or replace soil as necessary. Confirm that soil is not clogging and that the planter will drain within 3-4 hours after a storm event.
Poor vegetation establishment	Determine whether the vegetation is dense and healthy. Replace dead plants. Prune or remove any overgrown plants or shrubs that may interfere with planter operation. Clean up fallen leaves or debris and replenish mulch. Remove any nuisance or invasive vegetation.
Standing water (BMP not draining)	Check the underdrain piping to make sure it is intact and unobstructed. If mosquito larvae are present and persistent, contact the San Diego County Vector Control Program at (858) 694-2888. Mosquito larvicides should be applied only when absolutely necessary and then only by a licensed individual or contractor.
Erosion due to concentrated stormwater runoff flow	Examine downspouts from rooftops or sheet flow from paving to ensure that flow to the planter is unimpeded. Remove any debris and repair any damaged pipes. Check splash blocks or rocks and repair, replace, or replenish as necessary.
Damage to structural components such as the box, inlet, or outlet structures	Observe the structure of the box and fix any holes, cracks, rotting, or failure.
Obstructed inlet or outlet structure	Clear obstructions. Examine the overflow pipe to make sure that it can safely convey excess flows to a storm drain. Repair or replace any damaged or disconnected piping.

ATTACHMENT H

Tracking and Inventory Report Forms

Source BMPs – Step 6 *(check all that apply)*

- ☐ Stormdrain Signage and Stenciling
- ☐ Trash Storage Areas
- ☐ Private Road Drainage System
- ☐ Dock Areas
- ☐ Vehicle Wash Areas
- ☐ Equipment Wash Areas
- ☐ Fueling Areas
- ☐ Outdoor Storage Areas
- ☐ Efficient Landscape Irrigation Design
- ☐ Residential Driveways & Guest Parking
- ☐ Maintenance Bays
- ☐ Outdoor Processing Areas
- ☐ Parking Areas

Post-construction Treatment Control BMP Information

Responsible Party for Maintenance – Step 8:
Name _____ Phone Number (___) _____
Street Number _____ Street Name _____
City _____ State _____ Zip _____
Email Address: _____

Project Maintenance Category (1, 2, 3 or 4): ___

Project Specific Treatment Control BMPs

BMP Identifier*	BMP Type	BMP Pollutant of Concern Efficiency (H,M,L) – Table 11	Final Construction Date *(to be completed by County inspector)*	Final Construction Inspector Name *(to be completed by County inspector)*

* For location of BMP's, see approved Record Plan dated _____, plan sheet ____.

City of Carlsbad
Projects Subject to Hydromodification Requirements
(July 1, 2011 to June 30, 2012)

Project ID	Project Name	Description of Hydrologic Control Measures
CUP 10-08	La Posada de Guadalupe	bioretention basin, cistern w/ bioretention, pervious pavement
EIR 09-01	Dos Colinas	bioretention basins, pervious pavement
GPA 06-03	Rancho Milagro	bioretention basins , linear bioretention swales
SDP 98-01B	La Costa Glen Skilled Nursing Facility	bioretention basins
CUP 10-10	Carlsbad Kingdom Hall	bioretention basins
SDP 12-03	La Costa Oaks North 3.2 Daycare	bioretention basin, wet vault
PIP 11-01	Production Facility at Bressi Ranch	flow-thru planter, gravel detention basin

City of Carlsbad
List of Projects not required to meet Hydromodification
(July 1, 2011 to June 30, 2012)

Project ID	Project Name	Description of HMP exemption criteria met
SDP 06-12(A)	Tavarua Apartments	post development impervious equal or less than pre-development impervious area; no increase in unmitigated peak runoff from project
SDP 00-06B	Daybreak Community Church	post development impervious equal or less than pre-development impervious area; no increase in unmitigated peak runoff from project
SDP 11-02	Legoland California Pirate Island	post development impervious equal or less than pre-development impervious area; no increase in unmitigated peak runoff from project
DWG 428-9F/G	Carlsbad Ranch Planning Area 5	lawful prior approval; development permits issued prior to HMP adoption; vegetated swales designed and constructed prior to January 14, 2011
DWG 451-7/A	Lincoln & Oak Mixed Use	project discharges to a tidally influenced lagoon
3837/3925	Alga Norte Park - Phase 1	lawful prior approval; development permits issued prior to HMP adoption; site rough graded with swales and utilities constructed prior to January 14, 2011

FY 11-12
Inventory of Privately Owned Treatment Control BMPs

Unit ID	Status	Priority	Project No	Responsible Party	BMP Type	2011 DS Condition	2011 DS Inspection Date	2011 DS Verification Received	2012 DS Condition	2012 DS Inspection Date	2012 DS Verification Received	CHU	Prox To ESA	Approved/ Signed Date
11C-49	Future	High	MS 04-10	Robert and Deborah Jennings	MP-50	Future	08/31/2011				N/A	904.21	No	02/26/2007
12A-66	Permanent	Medium	CT 01-03	Mystic Point Homeowners Association	MP-52						05/23/2012	904.21	No	10/01/2003
12A-68	Permanent	Medium	CT 01-03	Mystic Point Homeowners Association	MP-52						05/23/2012	904.31	No	10/01/2003
12A-69	Permanent	Medium	CT 01-03	Mystic Point Homeowners Association	MP-52						05/23/2012	904.31	No	10/01/2003
12A-71	Permanent	Medium	CT 01-03	Mystic Point Homeowners Association	MP-52						05/23/2012	904.21	No	10/01/2003
12A-74	Permanent	Medium	CT 01-03	Mystic Point Homeowners Association	MP-52						05/23/2012	904.31	No	10/01/2003
12A-76	Permanent	Medium	CT 01-03	Mystic Point Homeowners Association	MP-52						05/23/2012	904.31	No	10/01/2003
12A-77	Permanent	High	CT 01-03	Mystic Point Homeowners Association	MP-51	Fair	09/28/2011				05/23/2012	904.31	No	10/01/2003
12A-78	Permanent	Medium	CT 01-03	Mystic Point Homeowners Association	MP-60						05/23/2012	904.31	No	10/01/2003
12B-62	Permanent	Medium	CT 01-03	Mystic Point Homeowners Association	MP-52						05/23/2012	904.31	No	10/01/2003
12B-63	Permanent	Medium	CT 01-03	Mystic Point Homeowners Association	MP-52						05/23/2012	904.31	No	10/01/2003
12B-99	Permanent	High	CT 01-04	Mystic Point Homeowners Association	MP-51	Fair	09/28/2011				05/23/2012	904.31	Yes	12/22/2003
12D-45	Permanent	Medium	SDP 01-05	CIC CALAVERA LP	MP-52			06/13/2011			05/29/2012	904.31	No	06/30/2003
12D-46	Permanent	Medium	SDP 01-05	CIC CALAVERA LP	MP-52			06/13/2011			05/29/2012	904.31	No	06/30/2003
12D-50	Permanent	Medium	SDP 01-05	CIC CALAVERA LP	MP-52			06/13/2011			05/29/2012	904.31	No	06/30/2003
12D-52	Permanent	Medium	SDP 01-05	CIC CALAVERA LP	MP-52			06/13/2011			05/29/2012	904.31	No	06/30/2003
15B-70	Permanent	Medium	MS 02-12	Maple Street Estates Inc.	MP-52			05/25/2011			06/28/2012	904.31	No	10/31/2003
16C-111	Permanent	Low	CT 05-01	LAGOON BREEZE DEVELOPMENT CORP	TC-60			07/25/2011				904.21	No	07/06/2007
16D-101	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Fair	04/21/2012	05/10/2012	904.31	No	10/05/2006
16D-102	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Good	04/12/2012	05/10/2012	904.31	no	10/05/2006
16D-103	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Good	04/12/2012	05/10/2012	904.31	no	10/05/2006
16D-104	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Good	04/12/2012	05/10/2012	904.31	no	10/05/2006
16D-108	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Fair	04/12/2012	05/10/2012	904.31	no	10/05/2005
16D-111	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Fair	04/12/2012	05/10/2012	904.51	No	10/05/2005
16D-112	Permanent	Low	CT 02-18	Lordon Management	TC-30			09/29/2011	Good	04/12/2012	05/10/2012	904.51	No	01/05/2005
16D-113	Permanent	Medium	CT 02-18	Lordon Management	TC-30			09/29/2011	Good	04/12/2012	05/10/2012	904.31	NO	01/05/2005
16D-114	Permanent	Medium	CT 02-18	Lordon Management	TC-30			09/29/2011	Good	04/12/2012	05/10/2012	904.31	NO	01/05/2005
16D-115	Permanent	Medium	CT 02-18	Lordon Management	TC-30			09/29/2011	Good	04/12/2012	05/10/2012	904.31	NO	01/05/2005
16D-69	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Fair	04/12/2012	05/10/2012	904.31	No	10/05/2006
16D-70	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Fair	04/12/2012	05/10/2012	904.31	No	10/05/2006
16D-76	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Good	04/12/2012	05/10/2012	904.31	No	10/05/2006
16D-77	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Poor	04/12/2012	05/10/2012	904.31	No	10/05/2006
16D-78	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Fair	04/12/2012	05/10/2012	904.31	No	10/05/2006
16D-80	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Fair	04/12/2012	05/10/2012	904.31	No	10/05/2006
16D-94	Permanent	Medium	CT 02-18	Lordon Management	MP-52			09/29/2011	Good	04/12/2012	05/10/2012	904.31	No	10/05/2006
18B-102	Future	Medium	CT 02-16	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	12/17/2007
18B-103	Future	Medium	CT 02-16	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	12/17/2007
18B-105	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-106	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-116	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-117	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-131	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-132	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-135	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-136	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008

Unit ID	Status	Priority	Project No	Responsible Party	BMP Type	2011 DS Condition	2011 DS Inspection Date	2011 DS Verification Received	2012 DS Condition	2012 DS Inspection Date	2012 DS Verification Received	CHU	Prox To ESA	Approved/ Signed Date
18B-140	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-141	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-148	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-149	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-155	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-156	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-157	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-163	Future	Medium	CT 02-16	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	12/17/2007
18B-164	Future	Medium	CT 02-16	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	12/17/2007
18B-54	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-55	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-56	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-62	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-63	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-64	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-70	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-71	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-72	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-74	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-76	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-79	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-80	Future	Medium	CT 04-26	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	03/11/2008
18B-88	Future	Medium	CT 02-16	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	04/05/2007
18B-89	Future	Medium	CT 02-16	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	NO	04/05/2007
18B-99	Future	Medium	CT 02-16	Calavera Hills II, LLC	MP-52	Future	03/09/2011	N/A			N/A	904.31	No	12/17/2007
18B-S400	Permanent	Medium	SDP 06-04	C I C GLEN RIDGE L P	MP-52						05/29/2012	904.31	NO	09/07/2007
18B-S401	Permanent	Medium	SDP 06-04	C I C GLEN RIDGE L P	MP-52						05/29/2012	904.31	NO	09/07/2007
18B-S405	Permanent	Medium	SDP 06-04	C I C GLEN RIDGE L P	MP-52						05/29/2012	904.31	NO	09/07/2007
18C-93	Future	Low	MS 04-18	FAMILY REAL ESTATE ENTERPRISES	TC-30	Future	08/31/2011	N/A			N/A	904.31	No	06/22/2007
1D-35	Permanent	Medium	CUP 05-26	KELLY RICHARD C TR& ROBERT P TR	MP-52			09/16/2011				904.21	No	08/17/2007
21D-33	Permanent	Medium	SP 01-44	San Diego Gas and Electric	MP-52			05/31/2011				904.31	No	10/26/2005
21D-62	Permanent	Medium	CUP 99-30	WEST DEVELOPMENT INC	MP-52			06/13/2011			05/08/2012	904.31	No	10/17/2002
21D-63	Excluded	Medium	CUP 99-30	WEST DEVELOPMENT INC	MP-52			06/02/2011	Excluded	04/12/2012	N/A	904.31	No	10/17/2002
21D-64	Permanent	Medium	CUP 99-30	WEST DEVELOPMENT INC	MP-52				Poor	04/12/2012	05/08/2012	904.31	No	10/17/2002
21D-67	Permanent	Medium	CUP 99-30	WEST DEVELOPMENT INC	MP-52			06/02/2011	Poor	04/12/2012	05/08/2012	904.31	NO	07/07/2004
21D-68	Permanent	Medium	CUP 99-30	WEST DEVELOPMENT INC	MP-52			06/02/2011	Poor	04/12/2012	05/08/2012	904.31	NO	07/07/2004
22A-65	Permanent	Medium	MS 01-03	J J L ENTERPRISES	MP-52			05/18/2011			05/08/2012	904.51	No	08/25/2003
22A-73	Future	Medium	MS 04-05	LEWAK JERZY&JOLANTA R REVOCABLE LIVING TRUST 01-	MP-52	Future	08/31/2011					904.31	yes	08/01/2007
22A-76	Future	Medium	MS 04-05	LEWAK JERZY&JOLANTA R REVOCABLE LIVING TRUST 01-	MP-52	Future	08/31/2011					904.31	Yes	08/01/2007
22A-78	Future	Low	MS 04-05	LEWAK JERZY&JOLANTA R REVOCABLE LIVING TRUST 01	TC-30	Future	08/31/2011					904.31	No	08/01/2007
22A-79	Future	Low	MS 04-05	LEWAK JERZY&JOLANTA R REVOCABLE LIVING TRUST 01	TC-30	Future	08/31/2011					904.31	No	08/01/2007
22D-50	Permanent	Medium	CT 97-16A	O C/S D HOLDINGS L L C	MP-52			07/07/2011			05/15/2012	904.51	Yes	01/13/2003
23D-107	Permanent	Medium	PD 00-15	Emerald Lake Corporate Center	MP-52	Poor	03/14/2011	05/19/2011			05/24/2012	904.31	No	10/26/2005
23D-120	Permanent	Low	PD 00-15	Emerald Lake Corporate Center	TC-30	Good	03/14/2011	05/19/2011			05/24/2012	904.31	Yes	07/11/2001
23D-122	Permanent	Medium	PD 00-15	Emerald Lake Corporate Center	MP-52	Good	03/14/2011	05/19/2011			05/24/2012	904.31	No	07/11/2001
23D-134	Permanent	Medium	PD 04-19	System Machines Automation Components	MP-52	Poor	03/04/2011					904.31	Yes	04/07/2005

Unit ID	Status	Priority	Project No	Responsible Party	BMP Type	2011 DS Condition	2011 DS Inspection Date	2011 DS Verification Received	2012 DS Condition	2012 DS Inspection Date	2012 DS Verification Received	CHU	Prox To ESA	Approved/ Signed Date
23D-137	Permanent	Medium	PD 04-19	System Machines Automation Components	MP-52	Poor	03/04/2011					904.31	No	04/07/2005
23D-138	Permanent	Medium	PD 04-19	System Machines Automation Components	MP-52	Good	03/04/2011					904.31	No	04/07/2005
23D-139	Permanent	Medium	PD 04-19	System Machines Automation Components	MP-52	Poor	03/04/2011					904.31	No	04/07/2005
23D-140	Permanent	Medium	PD 04-19	System Machines Automation Components	MP-52	Fair	03/04/2011					904.31	No	04/07/2005
23D-141	Permanent	Medium	PD 04-19	System Machines Automation Components	MP-52	Poor	03/04/2011					904.31	No	04/07/2005
24C-153	Permanent	High	SDP 06-03	H.G. Fenton Company	MP-50	Good	06/15/2011	06/02/2011			05/30/2012	904.31	Yes	07/20/2007
24D-105	Permanent	Low	PIP 04-03	Ventana Real LLC	TC-50			05/19/2011			05/24/2012	904.40	No	09/20/2006
24D-111	Permanent	Low	PIP 04-03	Ventana Real LLC	TC-30			05/19/2011			05/24/2012	904.31	Yes	09/20/2006
24D-112	Permanent	Low	PIP 04-03	Ventana Real LLC	TC-30			05/19/2011			05/24/2012	904.31	No	09/20/2006
24D-113	Permanent	Low	PIP 04-03	Ventana Real LLC	TC-30			05/19/2011			05/24/2012	904.31	No	09/20/2006
24D-114	Permanent	Low	PIP 04-03	Ventana Real LLC	TC-30			05/19/2011			05/24/2012	904.31	Yes	09/20/2006
5B-DB204	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22				Good	05/24/2012	05/15/2012	904.31	NO	01/08/2010
27B-110	Excluded	Medium	CUP 99-30	WEST DEVELOPMENT INC	MP-52			06/02/2011	Excluded	04/12/2012		904.31	No	10/17/2002
27B-122	Permanent	Medium	CUP 99-30	WEST DEVELOPMENT INC	MP-52			06/02/2011	Good	04/12/2012	05/08/2012	904.31	NO	10/17/2002
27B-123	Permanent	Medium	CUP 99-30	WEST DEVELOPMENT INC	MP-52			06/02/2011	Fair	04/12/2012	05/08/2012	904.31	NO	10/17/2002
27B-124	Permanent	Medium	CUP 99-30	WEST DEVELOPMENT INC	MP-52			06/02/2011	Fair	04/12/2012	05/08/2012	904.31	NO	10/17/2002
27B-125	Permanent	Medium	CUP 99-30	WEST DEVELOPMENT INC	MP-52			06/02/2011	Poor	04/12/2012	05/08/2012	904.31	NO	10/17/2002
27B-87	Permanent	Medium	CUP 02-32	Bob Baker Enterprises	MP-52	Good	03/09/2011	05/18/2011			05/31/2012	904.31	No	05/18/2004
27B-88	Permanent	Medium	CUP 02-32	Bob Baker Enterprises	MP-52	Good	03/09/2011	05/18/2011			05/31/2012	904.31	No	05/18/2004
27B-89	Permanent	Low	CUP02-32	Bob Baker Enterprises	TC-30	Good	03/09/2011	05/18/2011			05/31/2012	904.31	No	05/18/2004
27B-94	Permanent	Medium	SP 01-44	San Diego Gas and Electric	MP-52			05/31/2011				904.31	No	10/26/2005
28B-56	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	08/31/2011	08/17/2011				904.31	yes	04/02/2007
28B-58	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	08/31/2011	08/17/2011				904.31	Yes	04/02/2007
28B-59	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	08/31/2011	08/17/2011				904.40	No	04/02/2007
28B-60	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	08/31/2011	08/17/2011				904.40	No	04/02/2007
28B-61	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	08/31/2011	08/17/2011				904.40	No	04/02/2007
28B-65	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Fair	08/31/2011	08/17/2011				904.31	Yes	09/27/2005
28B-66	Permanent	High	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-51	Good	09/07/2011	08/17/2011				904.31	Yes	09/27/2005
28B-67	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Good	08/31/2011	08/17/2011				904.40	Yes	09/27/2005
28B-72	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Good	08/31/2011					904.40	No	09/27/2005
28B-73	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	08/31/2011	08/17/2011				904.31	no	09/27/2005
28B-92	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	08/31/2011	08/17/2011				904.31	no	09/27/2005
28B-97	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	08/31/2011	08/17/2011				904.31	no	09/27/2005
28B-98	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Good	08/31/2011	08/17/2011				904.31	no	09/27/2005
28B-99	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Good	08/31/2011	08/17/2011				904.31	no	09/27/2005
28C-80	Permanent	Medium	CUP 01-06	CPT/SC Title Holding Corp	MP-52	Fair	03/09/2011	05/05/2011	Fair	04/04/2012	05/31/2012	904.31	no	10/15/2002
28C-DB200	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	TC-11				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-DB202	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	TC-11				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-DB204	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	TC-11				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-DB205	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	TC-11				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-DB207	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	TC-11				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-DB208	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	TC-11				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S211	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S212	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S213	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	MP-50				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S215	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S216	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009

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28C-S217	Permanent	High	MS 07-02	CPT/SC Title Holding Corp	TC-50				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S219	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S220	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S221	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S222	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S224	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	MP-50				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S225	Permanent	High	MS 07-02	CPT/SC Title Holding Corp	TC-60				Fair	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S226	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Fair	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S227	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S228	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S229	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Fair	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S230	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S232	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	MP-50				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S233	Permanent	High	MS 07-02	CPT/SC Title Holding Corp	TC-60				Poor	05/01/2012	05/31/2012	904.40	NO	06/12/2009
28C-S234	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S235	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S236	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S237	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S240	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	MP-50				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S241	Permanent	High	MS 07-02	CPT/SC Title Holding Corp	TC-60				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S242	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S243	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	MP-50				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S244	Permanent	High	MS 07-02	CPT/SC Title Holding Corp	TC-50				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S249	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Fair	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S250	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S251	Permanent	Medium	MS 07-02	CPT/SC Title Holding Corp	MP-52				Fair	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S252	Permanent	Low	MS 07-02	CPT/SC Title Holding Corp	MP-50				Good	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S253	Permanent	High	MS 07-02	CPT/SC Title Holding Corp	TC-50				Poor	04/04/2012	05/31/2012	904.40	NO	06/12/2009
28C-S254	Permanent	High	MS 07-02	CPT/SC Title Holding Corp	TC-40				Poor	04/04/2012	05/31/2012	904.40	NO	03/06/2009
28D-64	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Good	08/31/2011	08/17/2011				904.40	No	09/27/2005
28D-65	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Good	08/31/2011	08/17/2011				904.40	no	09/27/2005
28D-68	Permanent	High	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-51	good	08/31/2011	08/17/2011				904.40	no	09/27/2005
28D-71	Permanent	High	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-51	Fair	09/07/2011	08/17/2011				904.40	no	03/30/2007
28D-73	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Good	08/31/2011	08/17/2011				904.40	Yes	03/30/2007
28D-74	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Poor	08/31/2011	08/17/2011				904.40	Yes	03/30/2007
28D-79	Permanent	Medium	CT 03-02	GRAND PACIFIC CARLSBAD L P	MP-52	Good	08/31/2011	08/17/2011				904.40	No	03/30/2007
2C-28	Permanent	High	SDP 00-17	IRVINE CO LLC	MP-51						05/22/2012	904.21	YES	10/16/2003
2C-31	Permanent	Medium	CUP 05-26	VONS COMPANIES INC	MP-52			05/16/2011			05/08/2012	904.21	Yes	08/17/2007
30A-204	Permanent	Medium	MS 03-09	FARADAY SPECTRUM OWNERS ASSN	MP-52			05/19/2011			05/08/2012	904.31	No	08/01/2005
30A-210	Permanent	Medium	SDP 05-02	MULLER CENTERPOINT LLC	MP-52	Good	03/04/2011	05/20/2011				904.31	No	10/03/2005
30A-216	Permanent	Low	SDP 05-02	MULLER CENTERPOINT LLC	TC-30	Good	03/04/2011	05/20/2011				904.31	No	10/03/2005
30A-217	Permament	Low	SDP 05-02	MULLER CENTERPOINT LLC	TC-30	Good	03/04/2011	05/20/2011				904.31	NO	10/03/2005
30A-221	Permanent	High	PD 07-01	CALLAWAY GOLF CO	MP-51	Fair	09/21/2011	06/01/2011			05/08/2012	904.31	No	12/06/2007
30A-228	Permanent	Medium	PD 463	CHILDS FAMILY INVESTMENT PARTN/GARDNER FAMILY 03-05-81	MP-52							904.31	NO	05/20/1997
30B-117	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52			06/02/2011	Poor	05/08/2012	05/29/2012	904.31	No	08/22/2005
30B-119	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52			06/02/2011	Poor	05/08/2012	05/29/2012	904.31	No	08/22/2005
30B-120	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52			06/02/2011	Poor	05/08/2012	05/29/2012	904.31	No	08/22/2005

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30B-122	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52			06/02/2011	Poor	05/08/2012	05/29/2012	904.31	No	08/22/2005
30B-124	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52			06/02/2011	Poor	05/08/2012	05/29/2012	904.31	No	08/22/2005
30B-127	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52				Poor	05/08/2012		904.31	No	08/22/2005
30B-140	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52			06/02/2011	Poor	05/08/2012	05/29/2012	904.31	No	08/22/2005
30B-143	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52			06/02/2011	Poor	05/08/2012	05/29/2012	904.31	No	08/22/2005
30B-148	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52			06/02/2011	Poor	05/08/2012	05/29/2012	904.51	No	08/10/2005
30B-155	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52			06/02/2011	Poor	05/08/2012	05/29/2012	904.31	no	08/22/2005
30B-157	Permanent	Medium	SDP 97-08B	FENTON CARLSBAD L L C	MP-52			06/02/2011	Poor	05/08/2012	05/29/2012	904.31	no	08/22/2005
30B-159	Permanent	Low	SDP 05-02	MULLER CENTERPOINT LLC	TC-30	Good	03/04/2011	05/20/2011			05/29/2012	904.31	no	10/03/2005
30B-38	Permanent	Medium	CUP 06-13	FENTON CARLSBAD L L C	MP-52			06/02/2011	Fair	05/08/2012	05/29/2012	904.31	No	08/10/2005
30D-2	Permanent	Low	CUP 04-22	CARLSBAD SELF STORAGE L L C	TC-30			05/16/2011			05/24/2012	904.40	No	06/12/2007
30D-4	Permanent	Low	CUP 04-22	CARLSBAD SELF STORAGE L L C	TC-30			05/16/2011			05/24/2012	904.40	No	06/12/2007
30D-S200	Permanent	Medium	CUP 04-22	ALPS LODGING 2 INC	MP-52							904.40	NO	02/09/2006
30D-S201	Permanent	Medium	CUP 04-22	ALPS LODGING 2 INC	MP-52							904.40	NO	06/12/2007
30D-S202	Permanent	Medium	CUP 04-22	ALPS LODGING 2 INC	MP-52							904.40	NO	06/12/2007
30D-S205	Permanent	Medium	CUP 04-22	ALPS LODGING 2 INC	MP-52							904.40	NO	06/12/2007
31A-103	Permanent	Low	MS 04-04	S F T CARLSBAD L L C	TC-30	Good	06/20/2011	06/15/2011			06/26/2012	904.31	Yes	12/22/2005
31A-104	Permanent	Low	MS 04-04	S F T CARLSBAD L L C	TC-30	Good	06/20/2011	06/15/2011			06/26/2012	904.31	No	12/22/2005
31A-105	Permanent	Low	MS 04-04	S F T CARLSBAD L L C	TC-30	Good	06/20/2011	06/15/2011			06/26/2012	904.31	Yes	12/22/2005
31A-106	Permanent	Low	MS 04-04	S F T CARLSBAD L L C	TC-30	Good	06/20/2011	06/15/2011			06/26/2012	904.31	Yes	12/22/2005
31A-70	Permanent	Low	MS 00-10	C B L L L C	TC-30			07/07/2011			06/06/2012	904.31	Yes	05/29/2001
31A-73	Permanent	Medium	PIP 02-05	MoBio Laboratories	MP-52			05/19/2011			06/25/2012	904.31	Yes	08/01/2003
31A-88	Permanent	Medium	MS 04-04	S F T CARLSBAD L L C	MP-52	Poor	06/20/2011	06/15/2011			06/26/2012	904.31	No	12/22/2005
31A-89	Permanent	Medium	MS 04-04	S F T CARLSBAD L L C	MP-52	Poor	06/20/2011	06/15/2011			06/26/2012	904.31	No	12/22/2005
31A-90	Permanent	Medium	MS 04-04	S F T CARLSBAD L L C	MP-52	Poor	06/20/2011	06/15/2011			06/26/2012	904.31	No	12/22/2005
31A-91	Permanent	Medium	MS 04-04	S F T CARLSBAD L L C	MP-52	Poor	06/20/2011	06/15/2011			06/26/2012	904.31	No	12/22/2005
31A-94	Permanent	Medium	MS 04-04	S F T CARLSBAD L L C	MP-52	Fair	06/20/2011	06/15/2011			06/26/2012	904.31	No	12/22/2005
31A-95	Permanent	Medium	MS 04-04	S F T CARLSBAD L L C	MP-52	Fair	06/20/2011	06/15/2011			06/26/2012	904.31	No	12/22/2005
31A-96	Permanent	Medium	MS 04-04	S F T CARLSBAD L L C	MP-52	Fair	06/20/2011	06/15/2011			06/26/2012	904.31	No	12/22/2005
31A-98	Permanent	Medium	MS 04-04	S F T CARLSBAD L L C	MP-52	Good	06/20/2011	06/15/2011			06/26/2012	904.31	No	12/22/2005
31B-143	Permanent	Medium	PIP 05-14	Mammoth Roseville II LLC	MP-52							904.31	No	07/19/2006

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31C-129	Permanent	Low	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/15/2011	06/02/2011			06/29/2012	904.51	No	06/23/2006
31C-137	Permanent	High	PIP 06-11	Ocean Collection	TC-50	Good	09/14/2011	07/01/2011			05/17/2012	904.51	No	07/20/2007
31C-138	Permanent	Low	PIP 06-11	Ocean Collection	TC-30	Good	06/01/2011	07/01/2011			05/17/2012	904.51	No	07/20/2007
31C-140	Permanent	Low	PIP 06-11	Ocean Collection	TC-30	Good	06/01/2011	07/01/2011			05/17/2012	904.51	No	07/20/2007
31C-141	Permanent	Low	PIP 06-11	Ocean Collection	TC-30	Good	06/01/2011	07/01/2011			05/17/2012	904.51	No	07/20/2007
31C-142	Permanent	Low	PIP 06-11	Ocean Collection	TC-30	Good	06/01/2011	07/01/2011			05/17/2012	904.51	No	07/20/2007
31C-143	Permanent	Low	PIP 06-11	Ocean Collection	TC-30	Good	06/01/2011	07/01/2011			05/17/2012	904.40	No	07/20/2207
31C-146	Future	Medium	PIP 06-10	Slater Place, LP	TC-51	Future	06/16/2011				N/A	904.51	No	09/25/2007
31C-149	Future	Low	PIP 06-10	Slater Place, LP	TC-30	Future	06/16/2011				N/A	904.51	No	09/25/2007
31C-150	Future	Low	PIP 06-10	Slater Place, LP	TC-30	Future	06/16/2011				N/A	904.51	No	09/25/2007
31C-152	Future	Low	PIP 06-10	Slater Place, LP	TC-30	Future	06/16/2011				N/A	904.51	No	09/25/2007
31C-161	Future	Low	CT 01-13	Slater Place, LP	TC-30	Future	06/16/2011				N/A	904.51	Yes	03/25/2004
31C-162	Permanent	Low	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/15/2011	06/02/2011			06/29/2012	904.51	No	06/23/2006
31C-163	Permanent	Medium	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Good	06/15/2011	06/02/2011			06/29/2012	904.40	No	06/23/2006
31C-164	Permanent	Low	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/15/2011	06/02/2011			06/29/2012	904.51	No	06/23/2006
31C-165	Permanent	Medium	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Poor	06/15/2011	06/02/2011			06/29/2012	904.40	No	06/23/2006
31C-166	Permanent	Medium	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Good	06/15/2011	06/02/2011			06/29/2012	904.40	No	06/23/2006
31C-167	Permanent	Medium	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Good	06/15/2011	06/02/2011			06/29/2012	904.40	No	06/23/2006
31C-168	Permanent	Low	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/15/2011	06/02/2011			06/29/2012	904.51	No	06/23/2006
31C-169	Permanent	Low	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/15/2011	06/02/2011			06/29/2012	904.51	No	06/23/2006
31C-170	Permanent	Low	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/15/2011	06/02/2011			06/29/2012	904.51	No	06/23/2006
31C-171	Permanent	Medium	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Good	06/15/2011	06/02/2011			06/29/2012	904.40	No	06/23/2006
31C-172	Permanent	Low	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/15/2011	06/02/2011			06/29/2012	904.51	No	06/23/2006
31C-174	Permanent	High	PIP 05-24	Towers at Bressi Ranch Owners Association	MP-51	Good	06/29/2011	05/20/2011			05/03/2012	904.51	No	10/16/2006
31C-175	Permanent	Low	PIP 05-24	Towers at Bressi Ranch Owners Assn.	TC-30	Good	06/29/2011	05/20/2011			05/03/2012	904.51	No	10/16/2006
31C-176	Permanent	Low	PIP 05-24	Towers at Bressi Ranch Owners Assn.	TC-30	Good	06/29/2011	05/20/2011			05/03/2012	904.51	No	10/16/2006
31C-178	Permanent	Low	PIP 05-24	Towers at Bressi Ranch Owners Assn.	TC-30	Good	06/29/2011	05/20/2011			05/03/2012	904.51	No	10/16/2006
31C-179	Permanent	Low	PIP 05-24	Towers at Bressi Ranch Owners Assn.	TC-30	Good	06/29/2011	05/20/2011			05/03/2012	904.51	No	10/16/2006

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31C-181	Permanent	High	PIP 05-24	Towers at Bressi Ranch Owners Assn.	MP-51	Fair	06/29/2011	05/20/2011			05/03/2012	904.51	No	10/16/2006
31C-184	Permanent	High	PIP 05-24	Towers at Bressi Ranch Owners Assn.	MP-51	Good	06/29/2011	05/20/2011			05/03/2012	904.51	No	10/16/2006
31C-186	Permanent	Medium	CUP 05-28	Carlsbad Self Storage Investors	MP-52			07/14/2011			05/31/2012	904.40	No	07/12/2007
31C-187	Permanent	Medium	CUP 05-28	Carlsbad Self Storage Investors	MP-52			07/14/2011			05/31/2012	904.40	No	07/12/2007
31C-188	Permanent	High	CUP 05-28	Carlsbad Self Storage Investors	MP-51	Good	09/14/2011	07/14/2011			05/31/2012	904.40	No	07/12/2007
31C-189	Permanent	Medium	CUP 05-28	Carlsbad Self Storage Investors	MP-52			07/14/2011			05/31/2012	904.40	No	07/12/2007
31C-190	Permanent	Medium	CUP 05-28	Carlsbad Self Storage Investors	MP-52			07/14/2011			05/31/2012	904.40	No	07/12/2007
31C-191	Permanent	Medium	CUP 05-28	Carlsbad Self Storage Investors	MP-52			07/14/2011			05/31/2012	904.31	No	07/12/2007
31C-192	Permanent	Medium	CUP 05-28	Carlsbad Self Storage Investors	MP-52			07/14/2011			05/31/2012	904.40	No	07/12/2007
31C-193	Permanent	Medium	CUP 05-28	Carlsbad Self Storage Investors	MP-52			07/14/2011			05/31/2012	904.40	No	07/12/2007
31C-194	Permanent	Medium	CUP 05-28	Carlsbad Self Storage Investors	MP-52			07/14/2011			05/31/2012	904.40	No	07/12/2007
31C-195	Permanent	Medium	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	MP-52	Good	06/15/2011	06/02/2011			06/29/2012	904.40	no	06/23/2006
31C-199	Permanent	Low	PIP 05-19	Moderna Del Mar LLC - Cushman and Wakefield	TC-30	Good	06/15/2011	06/02/2011			06/29/2012	904.40	No	06/23/2006
31C-210	Permanent	Low	PIP 05-24	Towers at Bressi Ranch Owners Assn.	TC-30	Good	06/29/2011	05/20/2011			05/03/2012	904.51	No	10/16/2006
31C-233	Permanent	Medium	3889/3910	Carlsbad Self Storage Investors	MP-52			07/14/2011			05/31/2012	904.51	No	09/10/2004
31C-238	Permanent	Low	PIP 05-24	Towers at Bressi Ranch Owners Assn.	TC-30	Good	06/29/2011	05/20/2011			05/03/2012	904.51		10/16/2006
31C-24	Future	High	CT 00-06	LEVINE INVESTMENTS LTD PTNSHP	TC-60	Future	08/31/2011					904.40	No	10/07/2004
31C-DB404	Permanent	High	PIP 06-07	LICHTER EQUITIES L P	TC-22						05/31/2012	904.31	YES	05/05/2008
31C-DB405	Permanent	High	PIP 06-07	LICHTER EQUITIES L P	TC-22						05/31/2012	904.40	YES	05/05/2008
31C-DB406	Permanent	Medium	PIP 06-07	LICHTER EQUITIES L P	TC-22						05/31/2012	904.40	NO	05/05/2008
31C-DB407	Permanent	Medium	PIP 06-07	LICHTER EQUITIES L P	TC-22						05/31/2012	904.40	NO	05/05/2008
31C-S416	Permanent	Medium	PIP 06-07	LICHTER EQUITIES L P	MP-52						05/31/2012	904.40	NO	05/05/2008
31C-S421	Permanent	Medium	PIP 06-07	LICHTER EQUITIES L P	MP-52						05/31/2012	904.40	NO	05/05/2008
31D-115	Permanent	Medium	CT 05-09	The SpectrumFlex Owners Association	TC-50	Good	03/04/2011	05/23/2011			06/21/2012	904.51	NO	04/11/2007
31D-117	Permanent	Medium	PIP 05-06	The SpectrumFlex Owners Association	MP-52	Poor	03/04/2011	05/23/2011			06/21/2012	904.51	NO	04/11/2007
31D-118	Permanent	Low	CT 05-09	The SpectrumFlex Owners Association	TC-30	Good	03/04/2011	05/23/2011			06/27/2012	904.51	YES	04/11/2007
31D-120	Permanent	High	MS 04-19	Pacific Ridge School	MP-51	Fair	09/21/2011	06/15/2011			06/06/2012	904.51	Yes	02/22/2005
31D-121	Permanent	Medium	CT 05-07	Bressi Spectrum Owners Association	MP-52			05/23/2011			05/03/2012	904.51	Yes	02/15/2006
31D-122	Permanent	Medium	CT 05-07	Bressi Spectrum Owners Association	MP-52			05/23/2011			05/03/2012	904.51	Yes	02/15/2006
31D-123	Permanent	Medium	CT 05-07	Bressi Spectrum Owners Association	MP-52			05/23/2011			05/03/2012	904.51	Yes	02/15/2006

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31D-124	Permanent	Medium	CT 05-07	Bressi Spectrum Owners Association	MP-52			05/23/2011			05/03/2012	904.51	NO	02/15/2006
31D-125	Permanent	Low	CT 05-07	Bressi Spectrum Owners Association	TC-30			05/23/2011			05/03/2012	904.51	NO	02/15/2006
31D-128	Permanent	Low	PIP 05/24	MoBio Laboratories	TC-30			05/19/2011			06/26/2012	905.51	No	10/16/2006
31D-129	Permanent	Low	PIP 05-24	The SpectrumFlex Owners Association	TC-30	Good	06/29/2011	05/23/2011			06/26/2012	904.51	No	10/16/2006
31D-131	Permanent	High	CUP 05-31	Bressi Ranch Fuel Mart LLC	MP-51	Poor	06/15/2011	06/02/2011			06/01/2012	904.51	NO	06/03/2007
31D-133	Permanent	High	CT 03-03	Mulberry at Bressi Ranch	MP-51	Good	09/21/2011	06/28/2011			05/31/2012	904.51	NO	06/30/2004
31D-134	Permanent	High	CT 03-03	Mulberry at Bressi Ranch	MP-51	Poor	09/21/2011	06/28/2011			05/31/2012	904.51	NO	06/30/2004
31D-135	Permanent	Low	CT 03-03	Mulberry at Bressi Ranch	TC-30	Good	09/21/2011	06/28/2011			05/31/2012	904.51	No	06/30/2004
31D-161	Permanent	Medium	CT 05-09	The SpectrumFlex Owners Association	TC-50	Good	03/04/2011	05/23/2011			06/21/2012	904.51	YES	04/11/2007
31D-162	Permanent	Medium	CT 05-09	The SpectrumFlex Owners Association	TC-50	Good	03/04/2011	05/23/2011			06/21/2012	904.51	NO	04/11/2007
31D-163	Permanent	Low	CT 05-09	The SpectrumFlex Owners Association	TC-30	Good	03/04/2011	05/23/2011			06/26/2012	904.51	NO	04/11/2007
31D-164	Permanent	Low	CT 05-09	The SpectrumFlex Owners Association	TC-30	Good	03/04/2011	05/23/2011			06/26/2012	904.51	YES	04/11/2007
31D-165	Permanent	Medium	CT 05-09	The SpectrumFlex Owners Association	TC-50	Good	03/04/2011	05/23/2011			06/21/2012	904.51	NO	04/11/2007
31D-166	Permanent	Low	CT 05-09	The SpectrumFlex Owners Association	TC-30	Good	03/04/2011	05/23/2011			06/21/2012	904.51	NO	04/11/2007
31D-167	Permanent	Low	CT 05-09	The SpectrumFlex Owners Association	TC-30	Good	03/04/2011	05/23/2011			06/21/2012	904.51	NO	04/11/2007
32A-100	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007
32A-101	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007
32A-102	Permanent	High	PIP 05-05	PALOMAR MELROSE L L C	MP-51	Good	06/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007
32A-104	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007
32A-105	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007
32A-106	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007
32A-107	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007
32A-108	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Fair	03/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007
32A-109	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	No	06/14/2007
32A-110	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	No	06/14/2007
32A-111	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	No	06/14/2007
32A-112	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	No	06/14/2007
32A-113	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	No	06/14/2007
32A-116	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007
32A-117	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007

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32A-119	Permanent	High	PIP 05-05	PALOMAR MELROSE L L C	MP-51	Good	06/29/2011	06/11/2011			05/23/2012	904.31	No	06/14/2007
32A-120	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/01/2011			05/23/2012	904.31	No	06/14/2007
32A-121	Permanent	Medium	PIP 05-04	CONCOURSE ONE LLC	MP-52	Poor	03/09/2011	06/13/2011			05/07/2012	904.31	No	01/25/2006
32A-122	Permanent	Medium	PIP 05-04	CONCOURSE ONE LLC	MP-52	Poor	03/09/2011	06/13/2011			05/07/2012	904.31	No	01/25/2006
32A-123	Permanent	Medium	PIP 05-04	CONCOURSE ONE LLC	MP-52	Poor	03/09/2011	06/14/2011			05/07/2012	904.31	No	01/25/2006
32A-124	Permanent	Medium	PIP 05-04	CONCOURSE ONE LLC	MP-52	Poor	03/09/2011	06/14/2011			05/07/2012	904.31	No	01/25/2006
32A-145	Permanent	Medium	PIP 05-17	Sabadicci LLC	MP-52			06/27/2011			05/29/2012	904.51	No	06/28/2006
32A-150	Permanent	Medium	PIP 05-17	Sabadicci LLC	MP-52			06/27/2011			05/29/2012	904.51	No	06/28/2006
32A-155	Permanent	Low	PIP 05-16	Redus Carlsbad - Colliers International	TC-20	Good	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-158	Permanent	Medium	PIP 05-16	Redus Carlsbad - Colliers International	MP-52	Fair	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-164	Permanent	Low	PIP 05-16	Redus Carlsbad - Colliers International	TC-30	Good	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-167	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Fair	03/29/2011	06/02/2011			05/23/2012	904.51	no	06/14/2007
32A-169	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/02/2011			05/23/2012	904.51	no	06/14/2007
32A-173	Permanent	Medium	PIP 05-16	Redus Carlsbad - Colliers International	MP-52	Poor	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-174	Permanent	Medium	PIP 05-16	Redus Carlsbad - Colliers International	MP-52	Poor	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-175	Permanent	Medium	PIP 05-16	Redus Carlsbad - Colliers International	MP-52	Good	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-176	Permanent	Medium	PIP 05-16	Redus Carlsbad - Colliers International	MP-52	Fair	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-177	Permanent	Medium	PIP 05-16	Redus Carlsbad - Colliers International	MP-52	Good	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-178	Permanent	Medium	PIP 05-16	Redus Carlsbad - Colliers International	MP-52	Fair	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-179	Permanent	Medium	PIP 05-16	Redus Carlsbad - Colliers International	MP-52	Fair	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-180	Permanent	Medium	PIP 05-16	Redus Carlsbad - Colliers International	MP-52	Good	06/20/2011	06/02/2011			05/04/2012	904.31	Yes	07/21/2006
32A-86	Permanent	High	PIP 05-05	PALOMAR MELROSE L L C	MP-51	Good	06/29/2011	06/02/2011			05/23/2012	904.31	No	06/14/2007
32A-89	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/02/2011			05/23/2012	904.31	No	06/14/2007
32A-91	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/02/2011			05/23/2012	904.31	No	06/14/2007
32A-95	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/02/2011			05/23/2012	904.31	No	06/14/2007
32A-98	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/02/2011			05/23/2012	904.31	No	06/14/2007
32A-99	Permanent	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Good	03/29/2011	06/02/2011			05/23/2012	904.31	No	06/14/2007
32A-S404	Permanent	Medium	PIP 05-17	Sabadicci LLC	MP-52						05/23/2012	904.31	NO	06/28/2006
32B-104	Permanent	Low	PIP 06-14	CRAVAN LLC	TC-30	Good	03/16/2011	05/16/2011			05/04/2012	904.31	No	05/15/2007
32B-105	Permanent	Low	PIP 06-14	CRAVAN LLC	TC-30	Good	03/16/2011	05/16/2011			05/04/2012	904.31	No	05/15/2007

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32B-106	Permanent	Low	PIP 06-14	CRAVAN LLC	TC-30	Good	03/16/2011	05/16/2011			05/04/2012	904.31	No	05/15/2007
32B-107	Permanent	Low	PIP 06-14	CRAVAN LLC	TC-30	Good	03/16/2011	05/16/2011			05/04/2012	904.31	No	05/15/2007
32B-108	Permanent	Low	PIP 06-14	CRAVAN LLC	TC-30	Good	03/16/2011	05/16/2011			05/04/2012	904.31	No	05/15/2007
32B-109	Permanent	Low	PIP 06-14	CRAVAN LLC	TC-30	Good	03/16/2011	05/16/2011			05/04/2012	904.31	No	05/15/2007
32B-111	Permanent	Medium	PIP 06-15	Beza Investments	MP-52	Fair	03/16/2011	06/15/2011			06/19/2012	904.31	No	05/22/2007
32B-114	Permanent	Medium	PIP 06-15	Beza Investments	MP-52	Poor	03/16/2011	06/15/2011			06/19/2012	904.31	No	05/22/2007
32B-118	Permanent	Low	PIP 06-15	Beza Investments	TC-30	Good	03/16/2011	06/15/2011			06/19/2012	904.31	No	05/22/2007
32B-119	Permanent	Low	PIP 06-15	Beza Investments	TC-30	Good	03/16/2011	06/15/2011			06/19/2012	904.31	No	05/22/2007
32B-120	Permanent	Low	PIP 06-15	Beza Investments	TC-30	Good	03/16/2011	06/15/2011			06/19/2012	904.31	No	05/22/2007
32B-121	Permanent	Low	PIP 06-15	Beza Investments	TC-30	Good	03/16/2011	06/15/2011			06/19/2012	904.31	No	05/22/2007
32B-123	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Fair	05/04/2011	05/20/2011	Fair	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-125	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	fair	05/04/2011	05/20/2011	Fair	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-126	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Poor	05/04/2011	05/20/2011	Fair	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-127	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Fair	05/04/2011	05/20/2011	Fair	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-128	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Fair	05/04/2011	05/20/2011	Fair	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-131	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Fair	05/04/2011	05/20/2011	Fair	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-133	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Good	05/04/2011	05/20/2011	Fair	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-134	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Fair	05/04/2011	05/20/2011	Good	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-135	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Poor	05/04/2011	05/20/2011	Good	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-136	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Poor	05/04/2011	05/20/2011	Fair	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-137	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Poor	05/04/2011	05/20/2011	Good	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-138	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Fair	05/04/2011	05/20/2011	Good	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-139	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Poor	05/04/2011	05/20/2011	Good	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-141	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Poor	05/04/2011	05/20/2011	Good	05/24/2012	05/17/2012	904.31	yes	11/17/2005
32B-145	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Fair	05/04/2011	05/20/2011	Fair	05/24/2021	05/17/2012	904.31	No	11/17/2005
32B-146	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Poor	05/04/2011	05/20/2011	Good	05/24/2012	05/17/2012	904.31	No	11/17/2005
32B-72	Permanent	Low	PIP 06-17	AETHERCOMM INC	TC-30	Good	03/16/2011	06/15/2011			05/02/2012	904.31	No	06/07/2007
32B-73	Permanent	Low	PIP 06-17	AETHERCOMM INC	TC-30	Good	03/16/2011	06/15/2011			05/02/2012	904.31	NO	06/07/2007
32B-75	Permanent	Low	PIP 06-17	AETHERCOMM INC	TC-30	Good	03/16/2011	06/15/2011			05/02/2012	904.31	No	06/07/2007
32B-80	Permanent	Medium	PIP 06-17	AETHERCOMM INC	MP-52	Good	03/16/2011	06/15/2011			05/02/2012	904.31	no	06/07/2007

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32B-82	Permanent	Medium	PIP 06-17	AETHERCOMM INC	MP-52	Fair	03/16/2011	06/15/2011			05/02/2012	904.31	no	06/07/2007
32B-88	Permanent	Medium	PIP 06-18	LBA RIV CO XIV LLC	MP-52	Fair	03/16/2011				05/21/2012	904.51	no	05/22/2007
32B-89	Permanent	Medium	PIP 06-18	LBA RIV CO XIV LLC	MP-52	Fair	03/16/2011				05/21/2012	904.51	no	05/22/2007
32B-90	Permanent	Medium	PIP 06-18	LBA RIV CO XIV LLC	MP-52	Good	03/16/2011				05/21/2012	904.51	yes	05/22/2007
32B-94	Permanent	Medium	PIP 06-14	CRAVAN LLC	MP-52	Poor	03/16/2011	05/16/2011			05/04/2012	904.51	No	05/15/2007
32B-97	Permanent	Low	PIP 06-14	CRAVAN LLC	TC-30	Good	03/16/2011	05/16/2011			06/06/2012	904.31	No	05/15/2007
32B-S407	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Fair	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S408	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Fair	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S409	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Good	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S410	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Fair	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S411	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Good	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S412	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Poor	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S413	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Poor	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S415	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Good	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S416	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Fair	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S417	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Good	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S418	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Good	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S419	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Good	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S420	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Poor	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S421	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Good	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32B-S422	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Good	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32C-106	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	no	01/08/2007
32C-107	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	no	01/08/2007
32C-108	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	no	01/08/2007
32C-109	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	no	01/08/2007
32C-110	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	no	01/08/2007
32C-111	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	no	01/08/2007
32C-112	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	no	01/08/2007
32C-113	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	no	01/08/2007
32C-114	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.31	no	01/08/2007

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32C-115	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.51	no	06/14/2007
32C-116	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.51	no	06/14/2007
32C-117	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.51	no	06/14/2007
32C-118	Future	Medium	PIP 05-05	PALOMAR MELROSE L L C	MP-52	Future	03/14/2011				N/A	904.51	no	06/14/2007
32C-S201	Permanent	Medium	PIP 05-04	CONCOURSE ONE LLC	MP-52						05/07/2012	904.31	NO	01/25/2006
32D-70	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Poor	05/04/2011	06/17/2011	Good	05/24/2012	05/17/2012	904.31	No	11/17/2005
32D-73	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52	Good	05/04/2011	05/20/2011	Good	05/24/2012	05/17/2012	904.31	No	11/17/2005
32D-S200	Permanent	Medium	PIP 05-04	CONCOURSE ONE LLC	MP-52						05/07/2012	904.31	NO	01/25/2006
32D-S201	Permanent	Medium	PIP 05-04	CONCOURSE ONE LLC	MP-52	Fair	03/09/2011	06/13/2011			05/07/2012	904.31	No	01/25/2006
32D-S202	Permanent	Medium	PIP 05-04	CONCOURSE ONE LLC	MP-52	Fair	03/09/2011	06/13/2011			05/07/2012	904.31	No	01/25/2006
32D-S205	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Fair	05/24/2012	05/17/2012	904.31	NO	11/17/2005
32D-S206	Permanent	Medium	PIP 05-01	GREYHAWK ASSOCIATES	MP-52				Poor	05/24/2012	05/17/2012	904.31	NO	11/17/2005
35A-87	Permanent	High	CDP 05-19	STELLAR PROPERTIES L L C	TC-51	Fair	09/14/2011	06/03/2011			06/27/2012	904.40	no	02/19/2007
35A-89	Permanent	High	CDP 05-19	STELLAR PROPERTIES L L C	TC-60	Good	09/14/2011	06/03/2011			06/27/2012	904.40	no	02/19/2007
35C-110	Permanent	High	PDP 1(G)	Encinas Water Facility	MP-51						06/26/2012	904.40	YES	08/05/2005
35C-94	Permanent	Medium	PDP 1(G)	Encinas Water Facility	MP-52			07/08/2011			06/26/2012	904.40	NO	08/05/2005
35C-95	Permanent	High	PDP 1(G)	Encinas Water Facility	MP-51	Good	09/14/2011	07/08/2011			06/26/2012	904.40	NO	08/05/2005
36A-347	Permanent	Medium	SDP 97-25	Kelly Corporation Center II LLC	MP-52			06/13/2011			05/14/2012	904.40	No	05/18/2005
36A-350	Permanent	Medium	SDP 97-25	Kelly Corporation Center II LLC	MP-52			06/13/2011			05/14/2012	904.40	Yes	05/18/2005
36A-83	Temporary	Low	SDP01-01B	Kelly/JRM-Palomar Airport Road I LLC	TC-30			07/14/2011				904.51	Yes	11/03/2006
36B-177	Permanent	High	CT 02-07	EMERALD POINTE ESTATES HOA	MP-51	Fair	09/21/2011	06/11/2011				904.40	Yes	03/07/2006
37C-116	Permanent	High	PIP 02-03	Carlsbad Corporate Center Owners Association	MP-51	Good	09/14/2011	10/12/2011			06/19/2012	904.40	no	01/30/2003
37D-123	Permanent	Low	CT 05-06	Harris-Yut LLC	TC-30			06/06/2011			06/19/2012	904.51	Yes	06/30/2006
37D-124	Permanent	Low	CT 05-06	Harris-Yut LLC	TC-30			06/06/2011			06/19/2012	904.51	NO	06/30/2006
37D-126	Future	Medium	CUP 05-03	L C GREENS 1.3 L L C	MP-52	Future	03/04/2011				N/A	904.51	Yes	01/29/2007
37D-127	Future	Low	CUP 05-03	L C GREENS 1.3 L L C	TC-30	Future	03/04/2011				N/A	904.51	Yes	01/29/2007
37D-130	Permanent	Medium	SDP 98-19	MANZANITA PARTNERS L L C	MP-52	Fair	09/07/2011					904.51	Yes	10/23/2003
37D-132	Permanent	High	SDP 98-19	MANZANITA PARTNERS L L C	MP-51	Poor	09/07/2011	09/23/2011			05/31/2012	904.51	Yes	10/23/2003
37D-134	Permanent	Low	CT 05-06	Harris-Yut LLC	TC-30			06/06/2011			06/19/2012	904.51	Yes	06/30/2006
37D-138	Permanent	High	MS 05-05	PALOMAR CONGREGATION OF JEHOVAHS WITNESSES VISTA	MP-51	Poor	09/07/2011	06/03/2011			06/04/2012	904.51	Yes	12/13/2006

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37D-152	Future	Medium	CT 07-05	L C GREENS 1.3 L L C	MP-52	Future	03/04/2011				N/A	904.40	NO	11/07/2008
37D-153	Future	Medium	CT 07-05	L C GREENS 1.3 L L C	MP-52	Future	03/04/2011				N/A	904.40	YES	11/07/2008
37D-154	Future	Medium	CT 07-05	L C GREENS 1.3 L L C	MP-52	Future	03/04/2011				N/A	904.40	YES	11/07/2008
38A-132	Excluded	Medium	SDP 05-18(A)	ECR CORPORATE CENTER LP	MP-52				Excluded	05/08/2012	05/31/2012	904.40	NO	10/08/2007
38A-133	Excluded	Medium	SDP 05-18(A)	ECR CORPORATE CENTER LP	MP-52				Excluded	05/08/2012	05/31/2012	904.40	NO	10/08/2007
38A-134	Permanent	Medium	SDP 05-18(A)	ECR CORPORATE CENTER LP	MP-52				Fair	05/08/2012	05/31/2012	904.51	NO	10/08/2007
38A-135	Permanent	Medium	SDP 05-18(A)	ECR CORPORATE CENTER LP	MP-52				Fair	05/08/2012	05/31/2012	904.51	NO	10/08/2007
38A-136	Excluded	Medium	SDP 05-18(A)	ECR CORPORATE CENTER LP	MP-52				Excluded	05/08/2012	05/31/2012	904.51	YES	10/08/2007
38A-137	Permanent	Medium	SDP 05-18(A)	ECR CORPORATE CENTER LP	MP-52				Fair	05/08/2012	05/31/2012	904.51	YES	10/08/2007
38A-138	Excluded	Medium	SDP 05-18(A)	ECR CORPORATE CENTER LP	MP-52				Excluded	05/08/2012	05/31/2012	904.51	YES	10/08/2007
38A-139	Excluded	Medium	SDP 05-18(A)	ECR CORPORATE CENTER LP	MP-52				Excluded	05/08/2012	05/31/2012	904.51	YES	10/08/2007
38A-141	Permanent	Medium	SDP06-13	ASPIRATIONS INC	MP-52	Good	03/14/2011	05/17/2011			05/21/2012	904.51	no	08/22/2007
38A-2	Permanent	High	CT 00-06	The SpectrumFlex Owners Association	MP-51	Poor	06/29/2011	07/07/2011			05/22/2012	904.51	Yes	04/18/2003
38A-23	Permanent	High	CT 00-06	The SpectrumFlex Owners Association	MP-51	Poor	06/29/2011	07/07/2011			05/22/2012	904.51	yes	04/16/2003
38A-61	Permanent	Medium	SDP06-13	ASPIRATIONS INC	MP-52	Poor	03/14/2011	05/17/2011			05/21/2012	904.51	yes	08/22/2007
38A-65	Permanent	Medium	SDP06-13	ASPIRATIONS INC	MP-52	Poor	03/14/2011	05/17/2011			05/21/2012	904.51	no	08/22/2007
38A-77	Future	High	CT 02-19	The SpectrumFlex Owners Association	MP-51	Future	07/01/2011				N/A	904.51	No	08/04/2004
38B-132	Permanent	Low	CUP 06-11A	Pacific Ridge School	TC-30						06/06/2012	904.51	YES	08/24/2009
38B-134	Permanent	Low	CUP 06-11A	Pacific Ridge School	TC-30						06/06/2012	904.51	YES	08/24/2009
38B-92	Permanent	Medium	MS 04-19A	Pacific Ridge School	MP-52	Good	09/21/2011	06/15/2011			06/06/2012	904.21	Yes	02/16/2007
38B-93	Permanent	Medium	MS 04-19A	Pacific Ridge School	MP-52	Good	09/21/2011	06/15/2011			06/06/2012	904.51	yes	02/16/2007
38B-95	Permanent	Low	CUP 06-11	Pacific Ridge School	TC-30	Good	09/21/2011	06/15/2011			06/06/2012	904.51	Yes	06/22/2007
41A-80	Permanent	Low	CT 04-11	WATERS END HOMEOWNERS ASSN	TC-30						05/22/2012	904.51	No	07/02/2007
42A-150	Permanent	High	CT 98-14	BAY COLLECTION HOMEOWNERS ASSN	MP-50	Good	09/21/2011				05/09/2012	904.21	No	06/11/2004
42A-160	Permanent	High	CT 98-14	BAY COLLECTION HOMEOWNERS ASSN	MP-50	Poor	09/21/2011				05/09/2012	904.21	No	06/11/2004
42A-161	Permanent	High	CT 98-14	BAY COLLECTION HOMEOWNERS ASSN	MP-51	Poor	09/21/2011				05/09/2012	904.51	No	06/11/2004
42A-167	Permanent	High	CT 98-14	BAY COLLECTION HOMEOWNERS ASSN	MP-51	Good	09/21/2011				05/09/2012	904.51	No	06/11/2004
42A-177	Permanent	Medium	MS 04-02	NORTH COAST CALVARY CHAPEL	MP-52	Good	09/28/2011	N/A			05/14/2012	904.31	yes	
42B-60	Permanent	Low	CT 03-13	Black Rail Ridge Homeowners Assn	TC-30			06/13/2011			06/28/2012	904.51	No	06/30/2004
42B-68	Permanent	Medium	MS 04-02	NORTH COAST CALVARY CHAPEL	MP-52	Poor	09/28/2011	06/02/2011			05/14/2012	904.31	yes	

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42B-74	Permanent	Medium	MS 04-02	NORTH COAST CALVARY CHAPEL	MP-52	Fair	09/28/2011	06/02/2011			05/14/2012	904.31	yes	
42B-75	Permanent	Medium	MS 04-02	NORTH COAST CALVARY CHAPEL	MP-52	Poor	09/28/2011	06/02/2011			05/14/2012	904.31	yes	
42B-76	Permanent	Medium	MS 04-02	NORTH COAST CALVARY CHAPEL	MP-52	Poor	09/28/2011	N/A			05/14/2012	904.31	yes	
42B-78	Permanent	Medium	MS 04-02	NORTH COAST CALVARY CHAPEL	MP-52	Poor	09/28/2011	N/A			05/14/2012	904.31	yes	
42B-93	Permanent	Medium	MS 04-02	NORTH COAST CALVARY CHAPEL	MP-52	Poor	09/28/2011	06/02/2011			05/14/2012	904.31	yes	
42B-S205	Permanent	Medium	MS 04-02	NORTH COAST CALVARY CHAPEL	MP-52						05/14/2012	904.51	NO	06/21/2006
42B-S206	Permanent	Medium	MS 04-02	NORTH COAST CALVARY CHAPEL	MP-52	Poor	09/28/2011	06/02/2011			05/14/2012	904.31	yes	
42B-S207	Permanent	Medium	MS 04-02	NORTH COAST CALVARY CHAPEL	MP-52	Good	09/28/2011	N/A			05/14/2012	904.31	yes	
42C-123	Permanent	High	CT 98-14	BAY COLLECTION HOMEOWNERS ASSN	MP-51	Good	09/21/2011				05/09/2012	904.51	no	06/11/2004
42C-124	Permanent	High	CT 98-14	BAY COLLECTION HOMEOWNERS ASSN	MP-51	Good	09/21/2011				05/09/2012	904.51	no	06/11/2004
42D-135	Permanent	Low	PD 05-12	SMITH FAMILY 2000 TRUST 01-31-00	TC-30			06/06/2011			05/30/2012	904.51	Yes	02/02/2007
42D-136	Permanent	Low	PD 05-12	SMITH FAMILY 2000 TRUST 01-31-00	TC-30			06/06/2011			05/30/2012	904.51	Yes	02/02/2007
42D-138	Permanent	Low	PD 05-12	SMITH FAMILY 2000 TRUST 01-31-00	TC-30			06/06/2011			05/30/2012	904.51	YES	02/02/2007
42D-139	Permanent	Low	PD 05-12	SMITH FAMILY 2000 TRUST 01-31-00	TC-30			06/06/2011			05/30/2012	904.51	Yes	02/02/2007
43A-105	Future	Medium	CT 03-06	AVIARA BLACK RAIL ROAD 16 L L C	MP-40	Future	07/01/2011				N/A	904.51	Yes	12/16/2006
43A-108	Future	High	CT 03-06	AVIARA BLACK RAIL ROAD 16 L L C	MP-50	Future	07/01/2011				N/A	904.51	Yes	12/16/2006
43B-40	Permanent	High	SDP 98-19	MANZANITA PARTNERS L L C	MP-51	Poor	09/07/2011	09/23/2011			05/31/2012	904.51	No	10/23/2003
43B-49	Permanent	High	SDP 98-19	MANZANITA PARTNERS L L C	MP-51	Poor	09/07/2011	09/23/2011			05/31/2012	904.51	yes	10/23/2003
44A-52	Permanent	High	CT 99-03	LA COSTA GREENS COMMUNITY ASSN	MP-51	Good	09/14/2011	06/13/2011			05/29/2012	904.51	No	01/24/2003
44C-361	Permanent	High	CT 99-03	LA COSTA GREENS COMMUNITY ASSN	MP-51	Good	09/14/2011	06/13/2011			05/29/2012	904.51	Yes	03/03/2005
44C-379	Permanent	High	SDP01-17	LaCosta Paloma Apartments	MP-51	Good	09/14/2011	05/31/2011				904.51	no	06/10/2003
44C-382	Permanent	Medium	SDP01-17	LaCosta Paloma Apartments	MP-52	Fair	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-384	Permanent	Medium	SDP01-17	LaCosta Paloma Apartments	MP-52	Fair	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-392	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Fair	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-394	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Poor	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-395	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Poor	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-396	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Poor	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-399	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Poor	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-401	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Poor	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-402	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Poor	03/14/2011	05/31/2011				904.51	no	06/10/2003

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44C-422	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Good	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-423	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Good	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-424	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Fair	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-425	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Good	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-426	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Good	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-427	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Fair	03/14/2011	05/31/2011				904.51	no	06/10/2003
44C-432	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Fair	03/14/2011	05/31/2011				904.51	NO	06/10/2003
44C-434	Permanent	Medium	CT 05-05	KB Home Coastal Inc.	TC-32	Good	03/14/2011	07/08/2011			06/11/2012	904.51	NO	08/20/2008
44C-435	Permanent	Medium	CT 05-05	KB Home Coastal Inc.	TC-32	Good	03/14/2011	07/08/2011			06/11/2012	904.51	NO	08/20/2008
44C-436	Permanent	Medium	CT 05-05	KB Home Coastal Inc.	TC-32	Poor	06/29/2011	07/08/2011			06/11/2012	904.51	YES	08/20/2008
44C-437	Permanent	Medium	CT 05-05	KB Home Coastal Inc.	TC-32	Good	03/14/2011	07/08/2011			06/11/2012	904.51	NO	08/20/2008
44C-438	Permanent	Medium	CT 05-05	KB Home Coastal Inc.	TC-32	Good	03/14/2011	07/08/2011			06/11/2012	904.51	NO	08/20/2008
44C-439	Future	Medium	CT 05-05	KB Home Coastal Inc.	TC-32	Future	06/29/2011	07/08/2011			N/A	904.51	YES	08/20/2008
44C-440	Future	Medium	CT 05-05	KB Home Coastal Inc.	TC-32	Future	03/14/2011				N/A	904.51	NO	08/20/2008
44C-441	Permanent	Medium	CT 05-05	KB Home Coastal Inc.	TC-32	Future	03/14/2011	07/08/2011			06/11/2012	904.51	NO	08/20/2008
44C-442	Permanent	Medium	CT 05-05	KB Home Coastal Inc.	TC-32	Good	03/14/2011	07/08/2011			06/11/121	904.51	NO	08/20/2008
44C-443	Permanent	Medium	CT 05-05	KB Home Coastal Inc.	TC-32	Good	03/14/2011	07/08/2011			06/11/2012	904.51	NO	08/20/2008
44C-474	Permanent	High	CT 99-03	LA COSTA GREENS COMMUNITY ASSN	MP-51						05/29/2012	904.51	YES	01/15/2004
45B-121	Permanent	High	CT 99-04-02	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Fair	09/21/2011	06/21/2011				904.51	Yes	04/06/2004
45D-30	Permanent	High	CT 99-04-02	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Poor	09/21/2011	06/21/2011				904.51	no	04/06/2004
45D-31	Permanent	High	CT 99-04-02	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Good	09/21/2011	06/21/2011				904.51	Yes	04/06/2004
45D-35	Permanent	High	CT 99-04-02	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Good	09/21/2011	06/21/2011				904.51	Yes	04/06/2004
47B-65	Permanent	Low	PD 05-12	Four Seasons Resort	TC-30			05/16/2011			06/28/2012	904.51	Yes	02/02/2007
49A-532	Permanent	Medium	SDP 01-17	LaCosta Paloma Apartments	MP-52	Poor	03/14/2011	05/31/2011				904.51	no	06/10/2003
49A-535	Permanent	High	CT 99-03	LA COSTA GREENS COMMUNITY ASSN	MP-51	Good	09/14/2011	06/13/2011			05/29/2012	904.51	no	01/15/2004
50A-55	Permanent	High	CT 99-04-02	LA COSTA RIDGE COMMUNITY ASSN	MP-51	Good	09/21/2011	06/21/2011				904.51	yes	04/08/2004
50C-229	Permanent	Medium	PD 06-19	ADMANI FAMILY 2002 TRUST 04-09-02	MP-52			07/07/2011			06/15/2012	904.51	Yes	07/08/2007
50D-14	Permanent	High	CT 05-16	LC Oaks 3.3 LLC	MP-51	Good	09/07/2011	N/A				904.51	Yes	07/12/2007
50E-1	Permanent	High	CT 99-04-03	LaCosta Oaks Community Assn	MP-51	Good	09/07/2011				05/22/2012	904.51	NO	04/11/2006
50E-13	Permanent	High	CT 99-04-3	CIC LA COSTA L P	MP-51	Poor	09/21/2011				05/29/2012	904.51	no	04/12/2006

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50E-43	Future	High	CUP 05-06	Carlsbad Preschool Limited Partnership	MP-51	Future	09/07/2011	N/A			N/A	904.51	No	12/27/2006
50E-75	Permanent	High	CT 99-04-03	LaCosta Oaks Community Assn	MP-51	Good	09/07/2011	N/A			05/22/2012	904.51	No	06/18/2007
50G-14	Permanent	High	CT 06-06	LC Oaks 3.3 LLC	MP-51	Good	09/07/2011	05/23/2011			05/31/2012	904.51	Yes	11/10/2007
50G-2	Permanent	High	SDP 04-13	CIC LA COSTA L P	MP-51	Poor	09/21/2011				05/29/2012	904.51	Yes	08/23/2006
50G-25	Permanent	High	CT 06-06	LC Oaks 3.3 LLC	MP-51	Good	09/07/2011	05/23/2011			05/31/2012	904.51	Yes	11/10/2007
53B-20	Future	High	CT 03-01	K S L LA COSTA RESORT CORP	MP-51	Future	07/01/2011	N/A			N/A	904.51	Yes	12/21/2005
54B-39	Permanent	Medium	SDP 00-16	NEWKIRK FAMILY TRUST II 10-29-08	MP-52							904.31	no	02/12/2002
54B-40	Permanent	Medium	SDP 00-16	NEWKIRK FAMILY TRUST II 10-29-08	MP-52							904.31	no	02/12/2002
54B-56	Permanent	Low	CT 04-02	KIRSCHMAN J R LIVING TRUST	TC-30	Good	09/07/2011	06/02/2011				904.51	No	12/15/2005
54B-58	Permanent	Low	CT 04-02	KIRSCHMAN J R LIVING TRUST	TC-30	Good	09/07/2011	06/02/2011				904.51	No	12/15/2005
54B-59	Permanent	High	CT 04-02	KIRSCHMAN J R LIVING TRUST	TC-60	Poor	09/07/2011	06/02/2011				904.51	No	12/15/2005
54B-61	Permanent	High	CT 04-02	KIRSCHMAN J R LIVING TRUST	TC-60	Poor	09/07/2011	06/02/2011				904.51	No	12/15/2005
54B-63	Permanent	Low	CT 04-02	KIRSCHMAN J R LIVING TRUST	TC-30	Good	09/07/2011	06/02/2011				904.51	No	12/15/2005
55D-22	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Fair	03/02/2011	05/11/2011			05/14/2012	904.51	no	08/21/2003
55D-23	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Good	03/02/2011	05/11/2011			05/14/2012	904.51	no	08/21/2003
58C-131	Permanent	Medium	SDP 02-16	COASTLINE COMMUNITY CHURCH	MP-52	Poor	06/15/2011	06/02/2011			05/31/2012	904.51	yes	04/10/2006
58C-132	Permanent	Medium	SDP 02-16	COASTLINE COMMUNITY CHURCH	MP-52	Good	06/15/2011	06/02/2011			05/31/2012	904.51	yes	04/10/2006
58C-136	Permanent	Medium	SDP 02-16	COASTLINE COMMUNITY CHURCH	MP-52	Poor	06/15/2011	06/02/2011			05/31/2012	904.51	no	04/10/2006
59A-294	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Good	03/02/2011	05/11/2011			05/14/2012	904.51	no	08/21/2003
59A-295	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Fair	03/02/2011	05/01/2011			05/14/2012	904.51	no	08/21/2003
59A-297	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Good	03/02/2011	05/11/2011			05/14/2012	904.51	no	08/21/2003
59A-298	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Good	03/02/2011	05/11/2011			05/14/2012	904.51	no	08/21/2003
59A-299	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Poor	03/02/2011	05/11/2011			05/14/2012	904.51	no	08/21/2003
59A-300	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Good	03/02/2011	05/11/2011			05/12/2012	904.51	no	08/21/2003
59A-304	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Fair	03/02/2011	05/11/2011			05/14/2012	904.51	no	08/21/2003
59B-102	Permanent	High	CUP 01-04	The Church of Jesus Christ of Latter Day Saints	MP-51	Poor	09/07/2011				05/10/2012	904.51	no	03/17/2003
59B-108	Permanent	High	CUP 01-04	The Church of Jesus Christ of Latter Day Saints	TC-60	Poor	09/07/2011				05/10/2012	904.51	no	03/19/2003
59B-122	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Good	03/02/2011	05/11/2011			05/14/2012	904.51	No	08/21/2003

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59B-123	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Fair	03/02/2011	05/11/2011			05/14/2012	904.51	No	08/21/2003
59B-125	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Fair	03/02/2011	05/11/2011			05/14/2012	904.51	No	08/21/2003
59B-126	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Poor	03/02/2011	05/11/2011			05/14/2012	904.51	No	08/21/2003
59B-127	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Poor	03/02/2011	05/11/2011			05/14/2012	904.51	No	08/21/2003
59B-128	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Fair	03/02/2011	05/11/2011			05/14/2012	904.51	No	08/21/2003
59B-129	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Fair	03/02/2011	05/11/2011			05/14/2012	904.51	No	08/21/2003
59B-130	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Fair	03/02/2011	05/11/2011			05/14/2012	904.51	No	08/21/2003
59B-131	Permanent	Medium	SDP 99-07	AMERICAN DRUG STORES INC	MP-52	Poor	03/02/2011	05/11/2011			05/14/2012	904.51	No	08/21/2003
59C-146	Permanent	High	MS 02-08	LOS COCHES PROPERTIES L L C	MP-51	Fair	09/07/2011	07/07/2011			05/08/2012	904.51	Yes	10/18/2004
60A-47	Permanent	High	CT 99-04	LaCosta Oaks Community Assn	TC-60	Good	09/14/2011	07/07/2011				904.51	Yes	04/01/2002
6A-132	Permanent	High	SDP 00-17	IRVINE CO LLC	MP-51						05/22/2012	904.21	NO	10/16/2003
9A-22	Permanent	Medium	MS 05-31	Mark L Frazier Trust	MP-52			06/13/2011			05/02/2012	904.21	YES	06/14/2007
9A-26	Permanent	Medium	MS 05-31	Mark L Frazier Trust	MP-52			06/13/2011			05/02/2012	904.21	Yes	06/14/2007
9B-73	Permanent	High	CT 01-13	Laguna Point HOA	MP-51	Good	09/14/2011	05/11/2011			05/31/2012	904.51	Yes	03/25/2004
9B-75	Future	Low	RP 04-12	DALY WILLIAM V&ROSA C	TC-30	Future	08/31/2011				N/A	904.21	No	06/22/2006
9B-77	Future	Low	RP 04-12	DALY WILLIAM V&ROSA C	TC-30	Future	08/31/2011				N/A	904.21	No	06/22/2006
9B-78	Future	Low	RP 04-12	DALY WILLIAM V&ROSA C	TC-30	Future	08/31/2011				N/A	904.21	No	06/22/2006
9B-79	Future	Low	RP 04-12	DALY WILLIAM V&ROSA C	TC-30	Future	08/31/2011				N/A	904.21	No	06/22/2006
9D-154	Future	High	CT 04-22	GOLDSTEIN FAMILY TRUST 03-27-98	MP-51	Future	08/31/2011				N/A	904.21	yes	08/08/2007
9D-155	Permanent	Medium	RP 00-17	M. Baker Management Inc.	MP-52			05/23/2011			05/07/2012	904.51	yes	09/20/2002
9D-156	Permanent	Medium	RP 00-17	M. Baker Management Inc.	MP-52			06/29/2011			05/07/2012	904.51	yes	09/20/2002
9D-164	Permanent	Medium	RP 06-03	T&G Insurance Services	MP-52						06/26/2012	904.21	NO	01/21/2009
9D-165	Permanent	Medium	RP 06-03	T&G Insurance Services	MP-52						06/26/2012	904.21	NO	01/21/2009
DB103	Temporary	High	CT 00-06	Aviara Master Association	TC-11	Good	08/31/2011	09/13/2011			05/08/2012	904.51	Yes	10/09/1996
DB104	Temporary	High	SDP01-01B	Kelly/JRM-Palomar Airport Road I LLC	TC-11	Good	08/31/2011	07/14/2011				904.51	Yes	12/14/2005
DB105	Temporary	Medium	CT 00-06	HCP Carlsbad LLC	TC-11	Good	06/15/2011	05/25/2011	Good	05/25/2012	05/31/2012	904.51	No	01/23/2003
DB106	Temporary	Medium	CT 00-06	HCP Carlsbad LLC	TC-11	Good	06/15/2011	05/25/2011	Good	05/25/2012	05/31/2012	904.51	No	01/23/2003
DB107	Temporary	Medium	CT 00-06	HCP Carlsbad LLC	TC-11	Good	06/15/2011	05/25/2011	Good	05/25/2012	05/31/2012	904.51	No	01/23/2003

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DB117	Permanent	High	CT 97-13	CENTER FOR NATURAL LANDS MGMT	TC-11	Good	06/15/2011	05/11/2011			06/11/2012	904.31	Yes	10/26/2004
DB118	Permanent	High	CT 98-10	Raceway Corporate Center Owners Association	TC-11	Good	06/16/2011	05/09/2011			05/14/2012	904.31	Yes	11/03/2004
DB128	Permanent	High	CT 00-06	The SpectrumFlex Owners Association	TC-22	Good	06/29/2011	07/07/2011			05/22/2012	904.51	Yes	02/21/2003
DB129	Permanent	High	CT 04-06	Lanikai Management Corp.	TC-22	Good	09/14/2011	06/02/2011			05/24/2012	904.31	Yes	07/11/2007
DB134	Temporary	Medium	CT 02-16	Calavera Hills II, LLC	SE-2			09/19/2011			06/14/2012	904.31	No	04/05/2007
DB139	Temporary	High	CT 99-03	PALOMAR CONGREGATION OF JEHOVAHS WITNESSES VISTA	TC-11	Good	09/07/2011	06/03/2011			06/04/2012	904.51	Yes	11/23/2005
DB152	Temporary	Medium	CT 99-04-03	Carlsbad Preschool Limited Partnership	TC-11			06/21/2011				904.51	no	04/10/2006
DB153	Temporary	Medium	CT 99-06	PALOMAR MELROSE L L C	TC-11	Good	03/29/2011	06/02/2011			05/23/2012	904.31	no	03/28/2007
DB154	Temporary	Medium	CT 99-06	Greyhawk Associates	TC-11	Good	05/04/2011	05/20/2011	Good	05/24/2012	05/17/2012	904.31	no	03/28/2007
DB156	Temporary	High	CT 98-10	H.G. Fenton Company	TC-11	Good	06/16/2011	05/12/2011	Good	05/25/2012	05/30/2012	904.51	Yes	11/03/2004
DB157	Temporary	Medium	CT 98-10	H.G. Fenton Company	TC-11	Good	06/16/2011	05/12/2011	Good	05/25/2012	05/30/2012	904.31	no	11/03/2004
DB158	Temporary	Medium	CT 98-10	H.G. Fenton Company	TC-11	Good	06/16/2011	05/12/2011	Good	05/25/2012	05/30/2012	904.51	No	11/03/2004
DB159	Temporary	High	CT 98-10	H.G. Fenton Company	TC-11	Good	06/16/2011	05/12/2011	Good	05/25/2012	05/30/2012	904.51	Yes	11/03/2004
DB160	Temporary	High	CT 98-10	H.G. Fenton Company	TC-11	Good	06/16/2011	05/12/2011	Good	05/25/2012	05/30/2012	904.21	Yes	11/03/2004
DB166	Permanent	High	CT 98-10	Raceway Corporate Center Owners Assn	TC-22	Good	06/16/2011	05/09/2011			05/14/2012	904.51	Yes	11/03/2004
DB167	Permanent	Medium	CT 05-06	Franz-Yut El Camino, LLC	TC-22			06/06/2011			05/09/2012	904.51	No	06/20/2006
DB169	Temporary	High	CT 98-10	Redus Carlsbad - Colliers International	TC11	Poor	09/28/2011	06/02/2011			05/04/2012	904.51	Yes	10/26/2004
DB170	Permanent	Medium	PIP 05-14	Mammoth Roseville II LLC	TC11							904.51	No	07/14/2006
DB171	Temporary	Medium	CT 97-13	KILROY REALTY FINANCE PARTNERSHIP LP	TC-22	Good	03/09/2011	09/15/2011	Good	05/24/2012	05/14/2012	904.31	No	10/26/2004
DB172	Temporary	High	CT 97-13	CARLSBAD OAKS NORTH VENTURES	TC-22	Good	05/02/2011	05/11/2011	Good	05/24/2012	06/26/2012	904.31	Yes	10/26/2004
DB175	Permanent	High	CT 99-04-02	LA COSTA RIDGE COMMUNITY ASSN	TC-22	Good	09/21/2011	06/21/2011			05/15/2012	904.51	Yes	04/08/2004
DB176	Permanent	High	CT 98-14	BAY COLLECTION HOMEOWNERS ASSN	TC-22	Good	09/21/2011					904.51	Yes	10/10/2007
DB177	Permanent	Medium	CT 02-07	EMERALD POINTE ESTATES HOMEOWN ERS ASSN	TC-22			06/11/2011				904.31	Yes	03/06/2006
DB178	Permanent	High	MS 04-02	NORTH COAST CALVARY CHAPEL	TC-22	Fair	09/28/2011	06/02/2011			05/14/2012	904.51	Yes	
DB180	Temporary	High	CT 98-10	AETHERCOMM INC	TC11	Poor	09/28/2011	06/15/2011			05/02/2012	904.51	Yes	10/26/2004
DB181	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	06/13/2011	Good	05/24/2012	05/15/2012	904.31	No	11/29/2006
DB182	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	06/13/2011	Good	05/24/2012	05/15/2012	904.31	No	11/29/2006
DB183	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	06/13/2011	Good	05/24/2012	05/15/2012	904.31	No	11/29/2006
DB185	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	06/13/2011	Good	05/24/2012	05/15/2012	904.31	No	11/29/2006
DB186	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	06/13/2011	Good	05/24/2012	05/15/2012	904.31	No	11/29/2006

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DB187	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS.	TC-22	Good	03/09/2011	05/11/2011	Good	05/24/2012	05/15/2012	904.31	No	11/29/2006
DB188	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	05/11/2011	Good	05/24/2012	05/15/2012	904.31	No	10/26/2004
DB189	Temporary	Medium	CT 97-13	KILROY REALTY FINANCE PARTNERSHIP LP	TC-22	Good	03/09/2011	06/20/2011	Good	05/24/2012		904.31	No	10/26/2004
DB190	Temporary	Medium	CT 97-13	KILROY REALTY FINANCE PARTNERSHIP LP	TC-22	Good	03/09/2011	06/20/2011	Good	05/24/2012	05/14/2012	904.31	No	10/26/2004
DB191	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	05/11/2011	Good	05/24/2012	05/15/2012	904.31	No	10/26/2004
DB193	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	06/13/2011	Good	05/24/2012	05/15/2012	904.31	No	06/05/2007
DB194	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	06/13/2011	Good	05/24/2012	05/15/2012	904.31	No	06/05/2007
DB195	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	05/11/2011	Good	05/24/2012	05/15/2012	904.31	No	06/05/2007
DB196	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	06/13/2011	Good	05/24/2012	05/15/2012	904.31	No	06/05/2007
DB197	Temporary	Medium	CT 00-20	Scripps Health	TC-22			06/02/2011			06/11/2012	904.31	No	01/11/2006
DB198	Permanent	High	CT 00-20	Scripps Health	TC-22	Good	08/31/2011	06/02/2011			06/11/2012	904.31	yes	01/11/2006
DB200	Temporary	High	CT 00-20	Salk Owners Association	TC-22	Good	06/15/2011	07/07/2011			05/03/2012	904.31	Yes	12/19/2005
DB204	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	05/11/2011	Good	05/24/2012	05/15/2012	904.31	No	09/03/2008
DB205	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	06/11/2011	Good	05/24/2012	05/15/2012	904.31	No	09/21/2009
DB206	Temporary	Medium	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	03/09/2011	05/11/2011	Good	05/24/2012	05/15/2012	904.31	No	09/21/2009
DB207	Temporary	High	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	05/11/2011	05/11/2011	Good	05/24/2012	05/15/2012	904.31	No	09/03/2008
DB208	Temporary	High	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	05/02/2011	05/11/2011	Good	05/24/2012	05/15/2012	904.31	No	09/03/2008
DB209	Temporary	High	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	05/02/2011	05/11/2011	Good	05/24/2012	05/15/2012	904.31	No	09/03/2008
DB210	Temporary	High	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	05/02/2011	05/11/2011	Good	05/24/2012	05/15/2012	904.31	No	09/03/2008
DB211	Temporary	High	CT 97-13	CARLSBAD OAKS NORTH PARTNERS	TC-22	Good	05/02/2011	05/12/2011	Good	05/24/2012	05/15/2012	904.31	No	09/03/2008
DB212	Temporary	Medium	CT 98-10	L C GREENS 1.3 L L C	TC11	Good	03/04/2011	05/23/2011			05/21/2012	904.51	No	10/26/2004
DB215	Temporary	Medium	CT 00-06	SLOUGH CARLSBAD L L C	TC-22				Good	05/25/2012		904.51	No	01/23/2003
DB216	Temporary	Medium	CT 02-15	SLOUGH CARLSBAD L L C	TC-22				Good	05/25/2012		904.51	No	01/25/2005
DB217	Temporary	Medium	CT 00-06	SLOUGH CARLSBAD L L C	TC-22				Good	05/25/2012		904.51	No	01/23/2003
DB218	Temporary	Medium	CT 02-15	SLOUGH CARLSBAD L L C	TC-22				Good	05/25/2012		904.51	No	01/25/2005
DB219	Temporary	Medium	CT 02-15	SLOUGH CARLSBAD L L C	TC-22				Good	05/25/2012		904.51	No	01/25/2005
DB220	Temporary	Medium	CT 02-15	PIVOTAL 650 CALIFORNIA ST L L C	TC-22	Good	06/16/2011	09/30/2011			06/27/2012	904.40	No	01/24/2005
DB221	Temporary	Medium	CT 02-15	PIVOTAL 650 CALIFORNIA ST L L C	TC-22	Good	06/16/2011	09/30/2011			06/27/2012	904.40	No	01/24/2005
DB222	Temporary	Medium	CT 00-06	Slater Place, LP	TC-22						05/03/2012	904.51	No	12/24/2003
DB223	Temporary	Medium	CT 02-15	Slater Place, LP	TC-22						05/03/2012	904.51	No	01/25/2005

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DB224	Temporary	Medium	CT 02-15	Slater Place, LP	TC-22						05/03/2012	904.51	No	01/25/2005
DB225	Temporary	Medium	CT 02-15	Slater Place, LP	TC-22						05/03/2012	904.51	No	01/25/2005
DB226	Temporary	Medium	CT 02-15	SLOUGH CARLSBAD L L C	TC-22				Good	05/25/2012		904.51	No	01/25/2005
DB227	Temporary	High	CT 02-15	Roncelli Family Trust	TC-22	Good	09/21/2011	10/03/2011				904.51	Yes	01/25/2005
DB228	Permanent	Low	CT 07-04	Bressi Ranch Medical Plaza Association	TC-10	Good	06/29/2011	09/19/2011			05/08/2012	904.51	no	09/04/2008
DB229	Permanent	Low	CT 07-04	Bressi Ranch Medical Plaza Association	TC-10	Good	06/29/2011	09/19/2011			05/08/2012	904.51	no	09/04/2008
DB230	Permanent	Low	CT 07-04	Bressi Ranch Medical Plaza Association	TC-10	Good	06/29/2011	09/19/2011			05/08/2012	904.51	no	09/04/2008
DB232	Permanent	Low	SDP 05-18(A)	ECR CORPORATE CENTER LP	TC-32	Good	06/29/2011	05/24/2011	Good	05/08/2012	05/31/2012	904.40	No	10/08/2007
DB233	Permanent	Low	SDP 05-18(A)	ECR CORPORATE CENTER LP	TC-32	Good	06/29/2011	05/24/2011	Good	05/08/2012	05/31/2012	904.40	No	10/08/2007
DB234	Permanent	Low	SDP 05-18(A)	ECR CORPORATE CENTER LP	TC-32	Good	06/29/2011	05/24/2011	Good	05/08/2012	05/31/2012	904.51	No	10/08/2007
DB235	Permanent	Low	SDP 05-18(A)	ECR CORPORATE CENTER LP	TC-32	Good	06/29/2011	05/25/2011	Good	05/08/2012	05/31/2012	904.51	No	10/08/2007
DB236	Permanent	Low	SDP 05-18(A)	ECR CORPORATE CENTER LP	TC-32	Good	06/29/2011	05/25/2011	Good	05/08/2012	05/31/2012	904.51	No	10/08/2007
DB237	Permanent	Low	SDP 05-18(A)	ECR CORPORATE CENTER LP	TC-32	Good	06/29/2011	05/25/2011	Good	05/08/2012	05/31/2012	904.51	No	10/08/2007
DB238	Permanent	Low	SDP 05-18(A)	ECR CORPORATE CENTER LP	TC-32	Good	06/29/2011	05/25/2011	Good	05/08/2012	05/31/2012	904.51	No	10/08/2007
DB60	Permanent	Medium	CUP 01-06	CPT/SC Title Holding Corp	TC-22	Good	03/11/2011	05/05/2011	Good	04/04/2012	05/31/2012	904.31	No	10/15/2002
DB63	Permanent	High	CT 00-02	Calavera Hills II Homeowners Assn	TC-11	Good	06/29/2011	06/03/2011			06/06/2012	904.31	Yes	11/26/2002
DB83	Permanent	Medium	CT 99-04	LaCosta Oaks Community Assn	TC-22			07/07/2011				904.51	no	
DB84	Permanent	High	CT 00-06	The SpectrumFlex Owners Association	TC-11	Good	06/15/2011	07/07/2011			05/22/2012	904.51	Yes	01/23/2003
DB86	Temporary	Medium	CT 00-06	PIVOTAL 650 CALIFORNIA ST L L C	TC-11	Good	06/16/2011	09/30/2011			06/27/2012	904.51	No	12/24/2003
DB87	Temporary	Medium	CT 05-07	PIVOTAL 650 CALIFORNIA ST L L C	TC-11	Good	06/16/2011	09/30/2011			06/27/2012	904.51	No	12/24/2003
DB90	Temporary	Medium	CT 00-06	PIVOTAL 650 CALIFORNIA ST L L C	TC-11	Good	06/16/2011	09/30/2011			06/27/2012	904.51	No	12/24/2003
DB92	Temporary	Medium	CT 00-06	Lot 23 Bressi Ranch LLC	TC-11			05/18/2011			05/10/2012	904.51	No	01/23/2003
DB96	Temporary	Medium	CT 00-06	HCP Carlsbad LLC	TC-11	Good	06/15/2011	05/25/2011	Good	05/25/2012	05/31/2012	904.51	No	01/23/2003
DB97	Temporary	Medium	CT 00-06	HCP Carlsbad LLC	TC-11	Good	06/15/2011	05/25/2011	Good	05/25/2012	05/31/2012	904.51	No	01/23/2003
DB99	Temporary	Medium	CT 00-06	HCP Carlsbad LLC	TC-11	Good	06/15/2011	05/25/2011	Good	05/25/2012	05/31/2012	904.51	No	01/23/2003

TREATMENT CONTROL BMP INSPECTION REPORT

Inspector:		**Date**		**Time**		**Priority**	
BMP Type		**BMP Description**				**BMP ID**	
Location			**Address**				
Last Maintained		**Last Inspection**			**Last Condition**		
Last Enforcement Action	NOV / ADMIN CITE						
BMP Status		**APN**					
Owner Name							
Contact Name		**Contact Phone**					
Weather Conditions							

BMP IMPLEMENTATION AND COMPLIANCE

BMP Activity	YES	NO	N/A	Corrective Action Required
Has the BMP been installed?				
Does the BMP need maintenance?				
Has trash and/or debris accumulated in or around the BMP?				
Is the BMP area overgrown?				
Is the BMP operating as designed?				
Are there signs of illegal dumping?				
Are there strong odors of gas, oil, or sewage?				
Is there standing water?				
Are there signs of invasive species?				
Were there any discharges observed during the inspection?				

CORRECTIVE ACTION REQUIRED

- ☐ BMP needs to be installed.
- ☐ BMP needs to be replaced.
- ☐ Provide additional erosion control.
- ☐ Keep desiltation/ retention basin free of litter.
- ☐ Provide additional protection at storm drain inlets.
- ☐ BMP needs to be maintained.
- ☐ Remove trash and debris from BMP.
- ☐ **Immediately** discontinue washing or hosing.
- ☐ Clean in and around storm drains.
- ☐ BMP could not be accessed. (stuck or heavy lid)
- ☐ Train responsible parties in pollution prevention.
- ☐ Other:_____
- ☐ Other:_____

Implement corrective actions by _____.
A City Inspector will return on or after the correction date to verify that corrective actions were completed as required and/or BMPs implemented. If you have any questions or comments, please contact 760-602-2780 x7111

Overall Condition: ☐ **Good** ☐ **Fair** ☐ **Poor** ☐ **Could Not Locate/Inspect**

Comments:

	Date

TREATMENT CONTROL BMP
VERIFICATION FORM
Pursuant to CMC 15.12.095

GENERAL INFORMATION

Owner Name			
Owner Address		City and Zip	
Contact Name		Contact Phone	
New Contact		New Phone	
Email Address			

BMP INFORMATION

BMP ID#		BMP Type		Priority	
BMP Description		Manufacturer			
Project Number		Drawing Number			
BMP Location		BMP Address			
BMP Approval Date		2011 Inspection Date		2011 Condition	
Last Known Maintenance Date		2012 Inspection Date		2012 Condition	
Comments					

BMP VERIFICATION AND MAINTENANCE

BMP ACTIVITY	YES	NO	DON'T KNOW	N\A	COMMENTS
Has the BMP been installed?					
Is the BMP operating properly?					
Has the BMP been replaced? If so when?					
Is the BMP on a regular maintenance schedule?					
Has the BMP been inspected during the last year?					
Has the BMP been maintained or cleaned during the last year?					

TCBMP Verification of Maintenance Records Requirement

If the 2011 or 2012 Condition of the TCBMP is **POOR**, you will need to submit documentation that the structure has been maintained since the last inspection. The structure was found to in POOR condition because of one or more of the following:

- **BMP has not been installed**
- **Accumulation of trash and debris**
- **BMP could not be accessed**
- **BMP needs repair**

Failure to submit the requested information could result in the issuance of a Notice of Violation and the assessment of administrative fines.

Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that the responsible party gathered and evaluated the information submitted. Based on my inquiry of the person or person who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate and complete, I am aware that there are significant penalties for submitting false information including the possibility of fines and other enforcement actions.

PRINT NAME:	SIGNATURE	DATE

Please return the completed and signed form to the
City of Carlsbad
CMI – Storm Water Compliance
5950 El Camino Real
Carlsbad, CA 92008
760-602-2780 x7111 or FAX 760-438-4178
tcbmp@carlsbadca.gov

CITY OF
CARLSBAD
Transportation Department

www.carlsbadca.gov

May 1, 2012

MEMORANDUM

TO: Property Owners/Developers/Contractors - All Active Construction Sites in the City of Carlsbad
FROM: Shawnetta Grandberry, Senior Construction Inspector, Construction Management and Inspections

RE: **BMP Verification of Installation Required Prior to Occupancy**

In order to comply with Regional Water Quality Control Board Order R9-2007-0001, the City has adopted an approach for ensuring verification that all permanent best management practices (BMPs), including LID, source control, and treatment control best management practices are installed and constructed per the requirements of approved plans prior to occupancy of the project. This requirement applies to all priority development projects subject to SUSMP requirements, including phased development projects. As a result of this requirement, project applicants must certify that constructed BMPs are in compliance with all specifications, plans, permits, ordinances, and are ready for inspection by the City. Verification of BMP installation can be certified by one of the following:

1. A California registered civil engineer;
2. A California registered geologist;
3. A California registered landscape architect;
4. A professional hydrologist registered through the American Institute of Hydrology;
5. A certified professional soil scientist registered through the Soil Science Society of America;
6. A certified professional in erosion and sediment control registered through Certified Professional in Erosion and Sediment Control, Inc.;
7. A certified professional in storm water quality registered through Certified Professional in Erosion and Sediment Control, Inc.; or
8. A certified professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies.

The City requires each project applicant to verify all treatment and flow-control facilities are adequately maintained. Facilities that are installed as part of the project will be verified for effectiveness and proper performance. Operation and maintenance of storm water BMP facilities is a six-stage process:

1. Determine who will own and be responsible for the maintenance of treatment facilities. Identify the means by which ongoing maintenance will be assured.
2. Identify anticipated maintenance requirements and allow for these requirements in project planning and preliminary design.
3. Prepare a maintenance plan incorporating detailed requirements for each treatment and flow-control facility.
4. Maintain the facilities from the time they are constructed until ownership and maintenance responsibility is formally transferred.
5. Formally transfer operation and maintenance responsibility to the site owner or occupant.
6. Maintain the facilities in perpetuity and keep records for self-inspection and verification requirements.

Project applicants in the City of Carlsbad are required to comply with all applicable storm water regulations and implement BMPs to the maximum extent practicable. It is the City's goal to obtain your compliance with the applicable regulations and requirements. Please contact your Project Inspector to review your specific project requirements. Thank you in advance for your cooperation and compliance efforts.

Construction Management and Inspection
5950 El Camino Real | Carlsbad, CA 92008 | 760-602-2780 | 760-438-4178 fax | tcbmp@carlsbadca.gov

Appendix 3

FY 11-12
GRADING PERMIT INVENTORY

Status	Priority	Project #	Grading Permit #	Issue Date	Inactive Date	WS	DS	Total WS Inspections	Total DS Inspections	Total 11-12 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity	Tributary to 303(d) Listed
Finaled	Low	PD 02-07	GR020046	01/09/03	03/12/12	24	13	1	0	1	0	0	0	904.51	No	No
Finaled	Medium	CT 01-09	GR030071	01/07/04	02/27/12	22	13	4	1	5	5	2	7	904.51	NO	No
Active	Low	CT 02-20	GR040034	07/08/04		31	21	2	2	4	2	2	4	904.51	yes	No
Active	Medium	CT 02-19	GR040059	08/11/04		31	21	10	2	12	6	3	9	904.51	No	No
Finaled	Low	CT 02-23	GR040070	03/20/08	10/25/11	3	13	0	1	1	0	1	1	904.51	yes	No
Active	Low	CT 02-27	GR040081	02/18/05		31	21	3	2	5	2	2	4	904.51	NO	No
Finaled	Low	CT 04-04	GR050005	10/12/05	07/20/11	0	3	0	0	0	0	0	0	904.51	Yes	No
Active	Low	CT 04-02	GR050006	11/03/05		31	21	3	2	5	2	2	4	904.51	Yes	No
Active	Low	CT 04-15	GR050011	03/16/05		31	21	3	2	5	2	2	4	904.51	Yes	No
Finaled	Low	CT 04-03	GR050025	09/29/05	07/27/11	0	4	0	0	0	0	0	0	904.51	Yes	No
Active	Low	CT 02-19	GR050029	04/29/11		31	21	14	5	19	14	5	19	904.51	No	No
Finaled	Low	CT 02-07	GR050043	03/21/06	03/26/12	26	13	2	2	4	2	1	3	904.40	Yes	No
Active	Low	CDP 04-58	GR050067	04/10/07		31	21	2	2	4	2	2	4	904.31	No	No
Active	Low	SDP 04-10	GR050072	01/13/06		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	CT 05-07	GR060005	03/15/06		31	21	2	2	4	2	2	4	904.51	Yes	No
Active	Low	SDP 96-14B	GR060008	02/23/06		31	21	2	2	4	2	2	4	904.31	No	No
Active	Low	CT 04-03	GR060009	04/10/06		31	21	3	2	5	2	2	4	904.51	Yes	No
Active	Low	CT 04-02	GR060021	04/20/06		31	21	3	2	5	2	2	4	904.51	Yes	No
Finaled	Low	MS 04-10	GR060034	02/22/08	03/12/12	24	13	2	2	4	2	1	3	904.21	No	No
Active	Medium	PIP 05-05	GR060040	01/22/07		31	21	7	3	10	6	3	9	904.31	No	No
Finaled	Medium	CT 05-01	GR060047	07/10/07	06/13/12	31	21	9	3	12	8	4	12	904.31	yes	No
Active	High	CT 97-13-02	GR060049	12/21/06		31	21	14	5	19	14	5	19	904.31	Yes	No
Finaled	Low	PUD 04-03A	GR060055	08/22/06	09/02/11	0	8	0	1	1	2	2	4	904.51	Yes	No
Active	Low	PIP 04-03	GR060056	09/22/06		31	21	2	2	4	2	2	4	904.31	No	No
Finaled	Low	PIP 05-24	GR060057	10/25/06	12/29/11	15	13	1	1	2	1	1	2	904.51	No	No
Active	Medium	CT 03-06	GR060058	02/07/07		31	21	7	3	10	6	3	9	904.51	Yes	No
Finaled	Low	CT 04-09	GR060063	10/06/06	10/25/11	3	13	0	0	0	0	1	1	904.51	yes	No
Active	Low	CT 05-05	GR060064	10/08/08		31	21	7	3	10	6	3	9	904.51	No	No
Active	Medium	CT 04-16	GR060067	11/08/06		31	21	7	3	10	6	3	9	904.41	yes	No
Active	Low	MS 04-18	GR060071	01/05/10		31	21	4	3	7	4	2	6	904.31	Yes	No
Active	Low	CT 02-16	GR060076	01/16/07		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	CT 02-16	GR070003	03/28/07		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	MS 04-19A	GR070006	02/16/07		31	21	3	2	5	2	2	4	904.51	Yes	No
Active	Low	CT 05-09	GR070009	04/23/07		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	CT 03-02	GR070010	05/04/07		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Medium	MS 04-05	GR070018	07/18/08		31	21	7	3	10	6	3	9	904.31	Yes	No

FY 11-12
GRADING PERMIT INVENTORY

Status	Priority	Project #	Grading Permit #	Issue Date	Inactive Date	WS	DS	Total WS Inspections	Total DS Inspections	Total 11-12 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity	Tributary to 303(d) Listed
Active	Low	PIP 06-18	GR070022	04/07/08		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	CUP 06-11	GR070025	07/18/07		31	21	2	2	4	2	2	4	904.51	Yes	No
Active	high	CT 05-14	GR070028	01/30/08		31	21	14	5	19	14	5	19	904.51	yes	No
Active	high	CT 05-16	GR070030	01/30/08		31	21	14	5	19	14	5	19	904.51	yes	No
Active	High	CT 05-13	GR070032	07/09/09		31	21	14	5	19	14	5	19	904.51	No	No
Active	Medium	CT 04-15	GR070036	06/20/07		31	21	7	3	10	6	3	9	904.51	Yes	No
Active	low	CUP 05-26	GR070039	08/09/07		31	21	2	2	4	2	2	4	904.21	yes	No
Active	Medium	CT 06-06	GR070045	12/11/07		31	21	9	4	13	8	4	12	904.51	yes	No
Active	Low	SUP 06-12	GR070047	01/11/08		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	High	CT 02-28	GR070048	08/31/07		31	21	14	6	20	14	5	19	905.51	no	No
Active	Low	PD 06-21	GR070049	06/11/08		31	21	2	2	4	2	2	4	904.40	No	No
Active	Low	CT 03-02	GR070053	02/04/08		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	PDP 05-01	GR070056	02/01/08		31	21	2	2	4	2	2	4	904.51	Yes	No
Active	Low	SDP 06-06	GR080001	03/24/08		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	High	CT 04-26	GR080002	03/24/08		31	21	14	6	20	14	5	19	904.31	Yes	No
Active	High	CT 02-28	GR080007	06/25/10		31	21	14	5	19	14	5	19	904.31	No	No
Active	Low	CT 07-05	GR080008	08/06/08		31	21	4	4	8	3	3	6	904.31		No
Active	Low	CT 95-02	GR080012	07/17/08		31	21	2	2	4	2	2	4	904.51	Yes	No
Active	high	CDP 06-25	GR080013	09/10/09		31	21	14	5	19	14	5	19	904.31	No	No
Active	Low	PIP 04-03	GR080014	03/16/09		31	21	2	2	4	2	2	4	904.31	Yes	No
Active	Low	CT 06-06	GR080016	11/17/08		31	21	2	2	4	2	2	4	904.51	Yes	No
Active	High	PD 07-08	GR080017	10/21/08		31	21	14	5	19	14	5	19	904.51	Yes	No
Active	Low	CT 05-15	GR080018	11/17/08		31	21	2	2	4	2	2	4	904.51	Yes	No
Active	Low	PD 08-06	GR080019	10/20/08		31	21	8	4	12	6	3	9	904.31	no	No
Active	Low	SDP 05-15	GR080021	10/29/09		31	21	2	3	5	2	2	4		No	No
Active	High	CT 06-25	GR080024	11/17/09		31	21	14	5	19	14	5	19	904.31	Yes	No
Finaled	Medium	PD 08-11	GR080028	09/08/11	03/12/12	24	3	6	0	6	5	0	5	904.51	No	No
Active	Low	PD 08-06	GR090002	03/24/09		31	21	2	3	5	2	2	4	904.31	NO	No
Active	Low	PD 08-06	GR090003	04/01/09		31	21	2	2	4	2	2	4	904.31	NO	No
Active	high	CT 04-26	GR090004	05/07/09		31	21	14	5	19	14	5	19	904.31	Yes	No
Active	high	CT 04-26	GR090005	05/07/09		31	21	12	5	17	14	5	19	904.31	Yes	No
Active	Low	CUP 06-11A	GR090006	08/28/09		31	21	2	2	4	2	2	4	904.51	No	No
Finaled	Low	PD 06-15	GR090012	10/07/09	12/29/11	15	13	1	1	2	1	1	2	904.31	No	No
Active	High	CT 05-15	GR090014	01/05/10		31	21	15	5	20	14	5	19	904.51	Yes	No
Active	Low	CT 05-13	GR090017	10/16/09		31	21	2	2	4	2	2	4	904.51	No	No
Finaled	Low	CUP 08-19	GR090019	08/12/10	02/24/12	21	13	10	3	13	10	3	13	904.51	No	No
Active	High	PD 08-07	GR090021	09/29/10		31	21	14	6	20	14	5	19	904.31	Yes	No

FY 11-12
GRADING PERMIT INVENTORY

Status	Priority	Project #	Grading Permit #	Issue Date	Inactive Date	WS	DS	Total WS Inspections	Total DS Inspections	Total 11-12 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity	Tributary to 303(d) Listed
Finaled	Medium	PD 09-03	GR090023	02/22/10	02/13/12	19	13	4	2	6	4	2	6	904.51	No	No
Finaled	High	CT 09-01	GR090025	05/27/10	01/19/12	15	13	10	3	13	10	2	12	904.31	Yes	No
Finaled	Medium	PD 06-18	GR090026	05/22/10	03/12/12	24	13	6	2	8	5	2	7	904.31	No	No
Finaled	Low	PD 08-04	GR090027	12/29/09	06/07/12	31	21	2	3	5	2	2	4	904.51	No	No
Finaled	Low	CT 04-04	GR100001	01/11/10	11/29/11	8	13	0	2	2	1	1	2	904.51	Yes	No
Finaled	Low	SDP 00-06A	GR100002	05/13/10	08/10/11	0	6	0	0	0	0	0	0	904.51	No	No
Finaled	Low	PD 09-04	GR100003	04/09/10	07/20/11	0	3	0	0	0	0	0	0	904.51	No	No
Finaled	Low	CUP 13-9B	GR100004	07/22/10	01/31/12	17	13	5	3	8	2	3	5	904.51	No	No
Active	Medium	PUD 09-02A	GR100006	10/06/10		31	21	7	3	10	6	3	9	904.31	No	No
Active	Medium	PD 08-06	GR100007	03/16/10		31	21	14	6	20	14	5	19	904.31	No	No
Active	High	CT 07-03	GR100011	05/06/10		31	21	14	6	20	14	5	19	904.31	Yes	No
Active	High	PD 10-01	GR100012	01/04/11		31	21	14	5	19	14	5	19	904.31	No	No
Active	High	CT 04-01	GR100013	09/29/10		31	21	14	5	19	14	5	19	904.51	No	No
Finaled	Low	PIP 09-02	GR100014	06/08/10	10/20/11	3	13	4	3	7	0	1	1	904.31	No	No
VOID	Medium	CT 04-10A	GR100016	11/21/11	01/01/12	5	0	1	0	1	1	0	1	904.51	No	No
Active	High	SDP 05-14	GR100017	12/03/10		31	21	15	6	21	14	5	19	904.51	Yes	No
Finaled	Low	CT 02-29	GR100018	10/01/10	11/01/11	4	13	0	1	1	0	1	1	904.51	No	No
Active	Low	CT 04-10A	GR100019	11/30/11		22	8	5	1	6	2	2	4	904.51	No	No
Active	High	CT 05-10	GR100021	04/20/11		31	21	14	5	19	14	5	19	904.51	No	No
Active	High	CT 05-14	GR100022	01/05/11		31	21	14	5	19	14	5	19	904.51	No	No
Active	High	CT 05-16	GR100023	01/12/11		31	21	14	5	19	14	5	19	904.51	No	No
Active	Medium	MS 08-02	GR110001	04/12/11		31	21	14	5	19	11	4	15	904.51	No	No
Active	Low	CT 03-01	GR110002	02/11/11		31	21	4	4	8	4	4	8	904.51	Yes	No
Active	High	CT 10-01	GR110003	12/28/11		17	8	4	2	6	8	2	10	904.31	No	No
Active	Medium	MS 08-04	GR110004	05/24/12		0	5	0	0	0	0	1	1	904.31	No	No
Active	High	SUP 07-03	GR110005	06/27/11		31	21	14	6	20	14	5	19	904.21	Yes	No
Active	High	CT 04-08	GR110006	03/06/12		7	8	2	2	4	2	2	4	904.51	No	No
Active	Medium	CDP 10-12	GR110007	06/09/11		31	21	7	3	10	6	3	9	904.21	Yes	No
Active	High	CT 06-27	GR110008	11/14/11		25	8	9	2	11	10	2	12	904.51	NO	No
Active	Medium	CT 05-03	GR110011	10/17/11		29	8	6	1	7	6	1	7	904.31	No	No
Active	Low	PD 11-01	GR110012	09/22/11		31	8	7	1	8	6	1	7	904.51	No	No
Active	High	SDP 96-14C	GR110013	12/22/11		17	8	8	2	10	8	2	10	904.31	No	No
Active	High	MS 10-04	GR110014	04/04/12		3	8	0	2	2	0	2	2	904.31	No	No
Active	Medium	CT 04-10A	GR110016	11/21/11		21	8	11	2	13	10	2	12	904.51	No	No
Active	High	CT 04-10A	GR110017	02/09/12		12	88	6	2	8	4	2	6	904.51	No	No
Active	Medium	PD 11-03	GR110020	10/20/11		28	8	5	1	6	12	2	14	904.51	No	No
Active	High	SDP 09-05	GR110021	05/21/12		0	7	0	1	1	0	1	1	904.31	No	No
Active	Medium	PD 11-02	GR110022	10/12/11		29	8	12	2	14	12	2	14	904.51	No	No

FY 11-12
GRADING PERMIT INVENTORY

Status	Priority	Project #	Grading Permit #	Issue Date	Inactive Date	WS	DS	Total WS Inspections	Total DS Inspections	Total 11-12 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity	Tributary to 303(d) Listed
Active	high	CUP 10-08	GR110023	05/23/12		0	5	0	1	1	0	1	1	904.31	No	No
Active	Low	Minor	GR110024	11/15/11		25	8	5	1	6	5	1	6	904.51	No	No
Active	Medium	CB111738	GR110025	05/23/12		0	6	0	1	1	0	1	1	904.31	No	No
Active	High	SDP 06-12A	GR110026	12/22/11		17	8	8	2	10	8	2	10	904.31	No	No
Active	High	CT 03-02	GR110030	02/09/12		13	8	4	2	6	4	2	6	904.31	No	No
Active	High	CT 06-27	GR110031	01/17/12		16	8	4	2	6	6	2	8	904.31	No	No
Active	High	CUP 11-05	GR120001	04/25/12		1	8	0	2	2	0	2	2	904.51	No	No
Active	High	SDP 11-05	GR120003	05/15/12		0	6	0	1	1	0	1	1	904.51	No	No
Active	Medium	SDP 11-06	GR120004	04/16/12		2	8	0	2	2	0	2	2	904.51	No	No
Active	Medium	SDP 11-07	GR120005	03/22/12		5	8	2	2	4	2	2	4	904.51	No	No
Active	High	CDP 11-15	GR120010	04/18/12		2	8	0	2	2	0	2	2	904.51	No	No
Active	Medium	CDP 12-02	GR120011	05/02/12		0	8	0	1	1	0	1	1	904.51	No	No
Active	Medium	CDP 10-03	GR120012	05/02/12		0	8	0	1	1	0	1	1	904.51	No	No
TOTAL								**683**	**320**	**1003**	**658**	**308**	**966**			

CITY OF
CARLSBAD
Transportation Department

www.carlsbadca.gov

September 1, 2011

MEMORANDUM

To: Property Owners/Developers/Contractors - All Active Construction Sites in the City of Carlsbad

From: Shawnetta Grandberry, Senior Construction Inspector, Construction Management and Inspections

RAINY SEASON PREPARATION AND STORM WATER COMPLIANCE

The City of Carlsbad (City) would like to take this opportunity to remind you that the rainy season begins on **October 1, 2011**. As you are aware, additional storm water pollution prevention measures are required during the rainy season, which ends on May 1, 2012. Pursuant to Carlsbad Municipal Code (CMC) Chapter 15.16.120, the California Regional Water Quality Control Board (RWQCB) Order 2007-0001, and the City of Carlsbad 2008 Jurisdictional Urban Runoff Management Plan all erosion control measures must be installed prior to and regularly maintained during the rainy season.

Property Owners/Developers/Contractors working at active construction sites in Carlsbad are required to comply with all applicable storm water regulations and implement BMPs to the maximum extent practicable. It is the City's goal to obtain your voluntary compliance with the applicable regulations and requirements. The following measures are required for all active construction sites during the rainy season:

- **All** exposed disturbed areas must have erosion protection BMPs properly installed. This includes all building pads, unfinished roads, and slopes.
- Perimeter protection and sediment control BMPs will be upgraded, if necessary, to provide sufficient protection from runoff during the rainy season.
- Adequate physical or vegetation erosion control BMPs will be installed and maintained for all completed slopes prior to **October 1, 2011**.
- All disturbed areas that are not completed, but that are not being actively graded, must be fully protected from erosion if left for 10 or more days. The ability to install BMP materials in a prompt manner is **NOT** sufficient for these areas. **BMPs will actually need to be installed for these areas.**
- Deployment of physical or vegetation erosion control BMPs will commence as soon as slopes are completed for any portion of the site. BMPs must also be stockpiled and ready for deployment whenever there is a 40% chance or greater of a rain event within a five (5) day forecast.
- When a ***Rain Event Action Plan*** is required it must be updated on a weekly basis. The plan shall include, in detail, any and all actions to be taken in advance (50% chance or greater) of a rain event in the five (5) day forecast by the National Weather Service. A copy of each updated action plan shall be placed in the project SWPPP.
- All treatment and erosion control BMPs must be inspected weekly and prior to a forecasted rain event of greater than 40%. In addition, treatment control BMPs must be inspected and/or serviced prior to October 1.
- Inspections of each site shall be conducted by the QSD/QSP or designee prior to a forecasted event, during and after a rain event, at least bi-weekly during the rainy season, and as necessary to ensure site compliance.
- All construction employees must be trained on the importance of storm water pollution prevention and BMP maintenance prior to the rainy season.
- All construction and grading projects are required to emphasize erosion prevention as the most important measure for keeping sediment on-site during construction. Sediment controls are to be used as a supplement to erosion prevention never as the single or primary method.

The City will continue to conduct scheduled and unscheduled inspections to verify compliance with storm water regulations. Please keep in mind that compliance is dependent on the continued use of BMPs to prevent storm water pollution and the consistent implementation of an employee-training program. Please contact your Project Inspector to review your specific project requirements. Thank you in advance for your cooperation and compliance efforts.

Construction Management and Inspection
5950 El Camino Real | Carlsbad, CA 92008 | 760-602-2780 | 760-438-4178 fax | tcbmp@carlsbadca.gov

CITY OF CARLSBAD

STORM WATER COMPLIANCE FORM
TIER 1 CONSTRUCTION SWPPP
E-29

Development Services
Land Development Engineering
1635 Faraday Avenue
760-602-2750
www.carlsbadca.gov

STORM WATER COMPLIANCE CERTIFICATE

- ✓ My project is not in a category of permit types exempt from the Construction SWPPP requirements
- ✓ My project is not located inside or within 200 feet of an environmentally sensitive area with a significant potential for contributing pollutants to nearby receiving waters by way of storm water runoff or non-storm water discharge(s).
- ✓ My project does not require a grading plan pursuant to the Carlsbad Grading Ordinance (Chapter 15.16 of the Carlsbad Municipal Code)
- ✓ My project will not result in 2,500 square feet or more of soils disturbance including any associated construction staging, stockpiling, pavement removal, equipment storage, refueling and maintenance areas that meets one or more of the additional following criteria:
  - located within 200 feet of an environmentally sensitive area or the Pacific Ocean; and/or,
  - disturbed area is located on a slope with a grade at or exceeding 5 horizontal to 1 vertical; and/or
  - disturbed area is located along or within 30 feet of a storm drain inlet, an open drainage channel or watercourse; and/or
  - construction will be initiated during the rainy season or will extend into the rainy season (Oct. 1 through April 30).

I CERTIFY TO THE BEST OF MY KNOWLEDGE THAT ALL OF THE ABOVE CHECKED STATEMENTS ARE TRUE AND CORRECT. I AM SUBMITTING FOR CITY APPROVAL A TIER 1 CONSTRUCTION SWPPP PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF CITY STANDARDS.

I UNDERSTAND AND ACKNOWLEDGE THAT I MUST: (1) IMPLEMENT BEST MANAGEMENT PRACTICES (BMPS) DURING CONSTRUCTION ACTIVITIES TO THE MAXIMUM EXTENT PRACTICABLE TO MINIMIZE THE MOBILIZATION OF POLLUTANTS SUCH AS SEDIMENT AND TO MINIMIZE THE EXPOSURE OF STORM WATER TO CONSTRUCTION RELATED POLLUTANTS; AND, (2) ADHERE TO, AND AT ALL TIMES, COMPLY WITH THIS CITY APPROVED TIER 1 CONSTRUCTION SWPPP THROUGHOUT THE DURATION OF THE CONSTRUCTION ACTIVITIES UNTIL THE CONSTRUCTION WORK IS COMPLETE AND APPROVED BY THE CITY OF CARLSBAD.

_____
OWNER(S)/OWNER'S AGENT NAME (PRINT)

_____ _____
OWNER(S)/OWNER'S AGENT NAME (SIGNATURE) DATE

STORM WATER POLLUTION PREVENTION NOTES

1. ALL NECESSARY EQUIPMENT AND MATERIALS SHALL BE AVAILABLE ON SITE TO FACILITATE RAPID INSTALLATION OF EROSION AND SEDIMENT CONTROL BMPS WHEN RAIN IS EMINENT.
2. THE OWNER/CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
3. THE OWNER/CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEERING OR BUILDING INSPECTOR DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY ARISE.
4. ALL REMOVABLE PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE (5) DAY RAIN PROBABILITY FORECAST EXCEEDS FORTY PERCENT (40%). SILT AND OTHER DEBRIS SHALL BE REMOVED AFTER EACH RAINFALL.
5. ALL GRAVEL BAGS SHALL BE BURLAP TYPE WITH 3/4 INCH MINIMUM AGGREGATE.
6. ADEQUATE EROSION AND SEDIMENT CONTROL AND PERIMETER PROTECTION BEST MANAGEMENT PRACTICE MEASURES MUST BE INSTALLED AND MAINTAINED.

SPECIAL NOTES

PROJECT INFORMATION

Site Address: _____

Assessor's Parcel Number: _____

Project ID: _____

Construction Permit No.: _____

Estimated Construction Start Date _____

Project Duration _____ Months

Emergency Contact:

Name: _____

24 hour Phone: _____

Perceived Threat to Storm Water Quality

☐ Medium

☐ Low

If medium box is checked, must attach a site plan sheet showing proposed work area and location of proposed structural BMPs

For City Use Only

CITY OF CARLSBAD
STANDARD TIER 1 SWPPP

Approved By: _____

Date: _____

	Erosion Control BMPs					Sediment Control BMPs									Tracking Control BMPs			Non-Storm Water Management BMPs					Waste Management and Materials Pollution Control BMPs							
Best Management Practice (BMP) Description →	Geotextiles & Mats	Wood Mulching	Earth Dikes and Drainage Swales	Slope Drains		Silt Fence	Sediment Trap	Check Dam	Fiber Rolls	Gravel Bag Berm	Street Sweeping and Vacuuming	Sandbag Barrier	Storm Drain Inlet Protection		Stabilized Construction Ingress/Egress	Stabilized Construction Roadway		Water Conservation Practices	Paving and Grinding Operations	Potable Water/Irrigation	Vehicle and Equipment Cleaning		Material Delivery and Storage	Material Use	Stockpile Management	Spill Prevention and Control	Solid Waste Management	Hazardous Waste Management	Concrete Waste Management	
CASQA Designation →	EC-7	EC-8	EC-9	EC-11		SE-1	SE-3	SE-4	SE-5	SE-6	SE-7	SE-8	SE-10		TR-1	TR-2		NS-1	NS-3	NS-7	NS-8		WM-1	WM-2	WM-3	WM-4	WM-5	WM-6	WM-8	
Construction Activity																														
Grading/Soil Disturbance																														
Trenching/Excavation																														
Stockpiling																														
Drilling/Boring																														
Concrete/Asphalt Saw cutting																														
Concrete flatwork																														
Paving																														
Conduit/Pipe Installation																														
Stucco/Mortar Work																														
Waste Disposal																														
Staging/Lay Down Area																														
Equipment Maintenance and Fueling																														
Hazardous Substance Use/Storage																														
Dewatering																														
Site Access Across Dirt																														
Other (list):																														

Instructions: Begin by reviewing the list of construction activities and checking the box to the left of any activity that will occur during the proposed construction. Add any other activity descriptions in the blank activity description boxes provided for that purpose and place a check in the box immediately to the left of the added activity description. For each activity descrribed, pick one or more best management practices (BMPs) from the list located along the top of the form. Then place an X in the box at the place where the activity row intersects with the BMP column. Do this for each activity that was checked off and for each of the selected BMPs selected from the list. For Example – If the project includes site access across dirt, then check the box to the left of "Site Access Across Dirt". Then review the list for something that applies such as "Stabilized Construction Ingress/Egress" under Tracking Control. Follow along the "Site Access Across Dirt" row until you get to the "Stabilized Construction Ingress/Egress" column and place an X in the box where the two meet. As another example say the project included a stockpile that you intend to cover with a plastic sheet. Since plastic sheeting is not on the list of BMPs, then write in "Cover with Plastic" in the blank column under the heading Erosion Control BMPs. Then place an X in the box where the "Stockpiling" row intersects the new "Cover with Plastic" column.

To learn more about what each BMP description means, you may wish to review the BMP Reference Handout prepared to assist applicants in the selection of appropriate Best Management Practice measures. The reference also explains the California Stormwater Quality Association (CASQA) designation and how to apply the various selected BMPs to a project.

Scale of map

Site Map

Features displayed on the map must include:

- An outline of the entire property
- Location and brief description of construction activity areas (e.g. grading, building, trenching, fueling areas, waste container area, wash racks, hazardous material storage areas, etc.)
- Location and flow direction arrows for existing drainage facilities (ditches, channels, inlets, storm drains, etc.)
- Location of existing storm water BMP controls (sediment basins, oil/ water separators, sumps, etc.)
- Location of proposed storm water BMP controls with brief description or legend reference

Legend

FY 11-12 Capital Improvement Project Inventory

Status	Priority	Project #	Project Names	Notice to Proceed	Notice of Completion	WS	DS	Total WS Inspections	Total DS Inspections	Total 11-12 Inspections	Total WS Required	Total DS Required	Total Required	CHU	Proximity
Active	High	3686	Joint First Responders Training Facility	06/28/10		31	21	14	5	19	14	5	19	904.31	Yes
Closed	Medium	3873	5512 Beech Avenue Sewer and Home Plant Lift Station Influent Sewer Replacement	07/28/10	09/19/11	0	11	0	2	2	0	2	2	904.31	No
Closed	Low	3896	Beach Access Improvements	11/16/11	03/20/12	18	0	2	0	2	0	2	2	904.31	Yes
Active	Medium	3840-8	Foxes Landing Lift Station Wetwell and Manhole Rehabilitations	03/20/12		6	8	1	1	2	1	1	2	904.51	Yes
Active	High	3907	Onsite Wetland Mitigation Restoration for RSF Road	03/19/07		31	21	14	5	19	14	5	19	904.51	Yes
Closed	Medium	4505-1	Leo Carrillo Ranch Barn Restoration	10/18/10	09/19/11	0	11	0	2	2	0	2	2	904.51	Yes
Active	Medium	5024-1	D1 and D2 Steel Water Tanks Interior and Exterior Coatsing and Misc. Repairs	05/14/12		0	6	0	1	1	0	1	1	904.51	No
Closed	Medium	5202	Gateway Road and Innovation Way Recycled Waterlines	07/12/10	08/05/11	0	5	0	1	1	0	1	1	904.51	No
Active	High	5522	Occidental Interceptor Sewer Rehabilitation	04/24/12		1	8	0	2	2	0	2	2	904.51	No
Active	Medium	5503-1	Miscellaneous Sewer Rehabilitation NW Quadrant	03/23/11		31	21	14	5	19	14	5	19	904.21	No
Closed	Medium	5503-3	Hemlock Avenue Sewer Replacement	03/12/12	06/20/12	7	6	1	1	2	1	1	2	904.21	No
Active	High	5507-1	Calavera Hills Wastewater Treatment Plant Demolition	01/17/12		15	8	6	2	8	6	2	8	904.31	Yes
Active	High	5508-1	Buena Vista Lift Station	11/01/11		27	8	10	2	12	10	2	12	904.51	No
Closed	Medium	6001-11 OL	2011 Pavement Overlay Project	12/05/11	06/20/12	20	6	4	1	5	4	1	5	904.51	No
Active	Medium	6001-11-SS	2011 Slurry Seal Project	10/03/11		31	8	7	1	8	7	1	8	904.51	No
Active	Medium	6013	2011 Concrete Replacement	08/26/11		31	14	7	2	9	8	1	9	904.31	No
Active	Medium	6021	2011 Concrete Replacement	05/21/12		0	6	0	1	1	0	1	1	904.31	No
Active	Low	6041	Carlsbad Village Drive Guardrail Replacement	02/21/12		9	8	1	1	2	1	1	2	904.21	Yes
Closed	Low	6321	Installation of Audible Pedestrian Signals	06/29/11	03/20/12	25	13	2	1	3	2	1	3	904.31	No
Closed	High	6606	Kelly Drive Channel Repair	06/01/10	07/19/11	0	3	0	1	1	0	1	1	904.31	Yes
Closed	Medium	6607	Corrugated Metal Pipe Replacement Porgram	09/19/11	03/01/11	22	2	6	0	6	6	0	6	904.51	No
Active	High	6608	NW Quadrant Storm Drain Program	08/04/10		31	21	14	5	19	14	5	19	904.21	Yes
Active	Medium	6609	Hosp Grove Park Access Road Repair	05/10/11	01/17/12	17	13	4	2	6	4	2	6	904.21	No
Active	Low	PWM12-11TRAN	Removal and Replacement of Street Light Pole	01/30/12		13	8	1	1	2	1	1	2	904.31	No
TOTALS								108	45	153	107	46	153		

Appendix 4

City of Carlsbad - Municipal Inventory FY 2011-12

					Activities (see descriptions below)															Pollutants											
AREA NAME	ADDRESS	DESCRIPTION	Status	Annual Site Inspection	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances	Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?	Hydrologic Area
ADULT LEARNING PROGRAM PARKING LOT	3368 EUREKA PL	PARKING LOT	Active	04/16/12				X		X						X			X											NO	NO	YES	904.31 (AH)
AGUA HEDIONDA SEWER LIFT STATION	SDGE POWER PLANT	SEWERAGE SYSTEMS	Active	06/07/12								X	X			X		X	X											YES	Yes	Yes	904.31 (AH)
AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	6425 AMBROSIA LN	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/11/12	X	X	X	X	X	X						X			X											YES	NO	YES	904.51 (BA)
BATIQUITOS SEWER LIFT STATION	7382 GABBIANO LN	SEWERAGE SYSTEMS	Active	05/11/12		X	X					X	X			X		X	X											YES	Yes	YES	904.51 (BA)
BEACH BLUFF TRIANGLE/PARK	CARLSBAD BLVD AT PINE	AMUSEMENT AND RECREATION SERVICES	Active	04/16/12				X											X											YES	NO	Yes	904.31 (AH)
BUENA VISTA SEWER LIFT STATION	2140 JEFFERSON ST	SEWERAGE SYSTEMS	Active	05/17/12		X	X					X	X			X		X	X											YES	YES	YES	904.21 (BV)
CADENCIA PARK	3310 CADENCIA ST	AMUSEMENT AND RECREATION SERVICES	Active	04/27/12				X		X						X			X											YES	NO	YES	904.51 (BA)
CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	2997 GLASGOW DR	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/11/12	X	X		X	X	X						X			X											NO	NO	YES	904.31 (AH)
CALAVERA PUMP STATION	3600 BLOCK OF COLLEGE DR	RECLAIMED WATER	Active	05/07/12	X	X						X	X							X										YES	YES	YES	904.31 (AH)
CANNON SEWER LIFT STATION	2301 CANNON RD	SEWERAGE SYSTEMS	Active	05/11/12		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
CARLSBAD RECYCLED WATER FACILITY	6200 AVENIDA ENCINAS	RECLAIMED WATER	Active	04/27/12	X	X	X	X		X		X	X			X			X											NO	NO	YES	904.31 (AH)
CARLSBAD SENIOR CENTER PARKING LOT	799 PINE AVE	PARKING LOT	Active	04/17/12				X		X						X			X											NO	NO	YES	904.31 (AH)
CARRILLO RANCH AND PARKING LOT	5200 FLYING LC LANE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/18/12	X	X		X	X	X						X			X											YES	NO	YES	904.51 (BA)
CHASE FIELD	3349 HARDING ST	AMUSEMENT AND RECREATION SERVICES	Active	04/16/12				X		X						X			X											NO	NO	Yes	904.31 (AH)
CHINQUAPIN SEWER LIFT STATION	4010 CARLSBAD BL	SEWERAGE SYSTEMS	Active	05/14/12		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
CITY HALL FACILITY PARKING LOT	1200 CARLSBAD VILLAGE DR	PARKING LOT	Active	04/19/12				X		X						X			X											NO	NO	YES	904.21 (BV)
COLE LIBRARY PARKING LOT	1250 CARLSBAD VILLAGE DR	PARKING LOT	Active	04/19/12				X		X						X			X											NO	NO	YES	904.21 (BV)
DOVE LIBRARY PARKING LOT	1775 DOVE LN	PARKING LOT	Active	04/17/12				X		X						X			X											YES	NO	YES	904.51 (BA)
El FUERTE LIFT STATION	5812 EL FUERTE ST	SEWERAGE SYSTEMS	Active	05/14/12		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
FARADAY CENTER PARKING LOT	1635 FARADAY AV	PARKING LOT	Active	04/11/12				X		X						X			X											YES	YES	YES	904.31 (AH)
FARMERS BUILDING PARKING LOT	FARADAY & EL CAMINO RL	PARKING LOT	Active	04/16/12				X		X						X			X											NO	NO	YES	904.31 (AH)
FIRE STATION 1	1275 CARLSBAD VILLAGE DR	FIRE PROTECTION	Active	04/16/12	X	X		X		X					X	X	X		X											NO	NO	YES	904.21 (BV)
FIRE STATION 2	1906 ARENAL RD	FIRE PROTECTION	Active	04/17/12	X	X		X		X					X	X	X		X											NO	NO	YES	904.51 (BA)
FIRE STATION 3	3701 CATALINA DR	FIRE PROTECTION	Active	04/16/12	X	X		X		X					X	X	X		X											NO	NO	YES	904.21 (BV)
FIRE STATION 4	6885 BATAQUITOS DR	FIRE PROTECTION	Active	04/17/12	X	X		X		X					X	X	X		X											YES	NO	YES	904.51 (BA)
FIRE STATION 5	2540 ORION WY	FIRE PROTECTION	Active	04/16/12	X	X		X		X					X	X	X		X											NO	NO	YES	904.31 (AH)
FIRE STATION 6	7201 RANCHO SANTA FE RD	FIRE PROTECTION	Active	04/17/12	X	X		X		X					X	X	X		X											NO	NO	YES	904.51 (BA)
FLEET MAINTENANCE FACILITY AND PARKING LOT	2480 IMPALA DR	VEHICLE MAINTENANCE/ PARKING LOT	Active	4/1612	X	X	X	X	X	X				X	X	X	X	X	X											NO	NO	YES	904.31 (AH)
FOXES LANDING LIFT STATION	4155 HARRISON ST	SEWERAGE SYSTEMS	Active	05/14/12		X	X					X	X			X		X	X											YES	YES	YES	904.31 (AH)
GATESHEAD SEWER LIFT STATION	4779 GATESHEAD RD	SEWERAGE SYSTEMS	Active	05/14/12		X						X	X			X		X	X											YES	YES	YES	904.31 (AH)
HARDING COMMUNITY CENTER PARKING LOT	3096 HARDING ST	PARKING LOT	Active	04/17/12				X		X						X			X											NO	NO	YES	904.31 (AH)
HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	2685 VANCOUVER STREET	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/17/12	X	X		X	X	X						X			X											YES	YES	YES	904.21 (BV)
HOLIDAY PARK AND PARKING LOTS	3200 PIO PICO DR	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/16/12	X	X		X		X						X			X											NO	NO	YES	904.31 (AH)
HOME PLANT SEWER LIFT STATION	2359 CARLSBAD BL	SEWERAGE SYSTEMS	Active	05/14/12		X	X					X	X			X		X	X											NO	NO	YES	904.21 (BV)
HOSP GROVE PARK AND PARKING LOT	JEFFERSON & MONROE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/19/12				X		X						X			X											YES	YES	YES	904.21 (BV)
KNOTS SEWER LIFT STATION	501 KNOTS LN	SEWERAGE SYSTEMS	Active	05/14/12		X	X					X	X			X		X	X											NO	NO	YES	904.51 (BA)
LA COSTA CANYON PARK AND PARKING LOT	3020 PUEBLA ST	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/17/12				X		X						X			X											YES	YES	YES	904.21 (BV)
LAGUNA RIVIERA PARK	4900 KELLY DR	AMUSEMENT AND RECREATION SERVICES	Active	04/18/12	X	X		X		X						X			X											YES	YES	YES	904.31 (AH)
LANDSCAPE MAINTENANCE AND REPAIR	CITYWIDE	TRIMMING, CUTTING, FERTILIZING,	Active	04/16/12				X																						YES	YES	YES	All

Revised: 08/15/2012

City of Carlsbad - Municipal Inventory FY 2011-12

					Activities (see descriptions below)															Pollutants											
AREA NAME	ADDRESS	DESCRIPTION	Status	Annual Site Inspection	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances	Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?	Hydrologic Area
M&O OPERATIONS YARD AND PARKING LOT	5950 EL CAMINO REAL	WATER SUPPLY/ MAINTENANCE YARD/ PARKING LOT	Active	04/18/12	X	X	X	X	X	X	X			X	X	X		X	X											YES	YES	YES	904.31 (AH)
MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	5203 SUNNY CREEK RD	WATER SUPPLY	Active	04/27/12	X	X	X	X		X		X				X			X	X										YES	YES	YES	904.31 (AH)
MAGEE PARK AND PARKING LOT	258 BEECH AVE	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/17/12	X	X		X		X						X			X											NO	NO	YES	904.21 (BV)
MONROE STREET POOL	3401 MONROE ST	AMUSEMENT AND RECREATION SERVICES	Active	04/17/12	X	X	X	X	X		X					X			X											NO	NO	YES	904.21 (BV)
MS4 MAINTENANCE	CITYWIDE	INSPECTION, CLEANING	Active	05/15/12																										YES	YES	YES	All
OAK OPERATIONS YARD AND PARKING LOT	405 OAK AV	MAINTENANCE YARD AND PARKING LOT	Active	04/19/12	X	X	X	X	X	X				X	X	X		X	X											NO	NO	YES	904.21 (BV)
PARKS MAINTENANCE/STORAGE/PARKING LOT	1166 CARLSBAD VILLAGE DR	MAINTENANCE YARD AND PARKING LOT	Active	04/16/12	X	X	X	X	X	X				X	X	X		X	X											NO	NO	YES	904.21 (BV)
PINE PARK AND PARKING LOT	3333 HARDING ST	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/17/12	X	X		X		X						X			X											NO	NO	YES	904.31 (AH)
POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	6600 HIDDEN VALLEY RD	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/11/12	X	X	X	X	X	X						X			X											NO	NO	YES	904.40 (EN)
POINSETTIA SEWER LIFT STATION	2425 POINSETTIA LN	SEWERAGE SYSTEMS	Active	05/14/12		X	X					X	X			X		X	X											YES	NO	YES	904.51 (BA)
POWER WASHING	CITYWIDE	SIDEWALKS, STREETS, GRAFFITTI REMOVAL	Active	NA																										YES	YES	YES	All
RAILROAD DEPOT VISITORS CENTER PARKING LOT	400 CARLSBAD VILLAGE DR	PARKING LOT	Active	04/17/12				X		X						X			X											NO	NO	YES	904.21 (BV)
RESERVOIR C	CALAVERA DR	WATER SUPPLY	Active	04/05/12																X										YES	YES	YES	904.31 (AH)
RESERVOIR ELM	CARLSBAD VILLAGE DR & DONNA DR	WATER SUPPLY	Active	05/07/12				X				X								X										YES	YES	YES	904.31 (AH)
RESERVOIR LA COSTA HI	ALGA RD	WATER SUPPLY	Active	05/07/12								X								X										YES	NO	YES	904.51 (BA)
RESERVOIR LA COSTA LO	ALGA RD	WATER SUPPLY	Active	05/07/12				X				X								X										YES	NO	YES	904.51 (BA)
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	2560 ORION WY	PUBLIC ORDER AND SAFETY	Active	04/16/12	X	X		X		X						X			X											YES	YES	YES	904.31 (AH)
SAND SHELL SEWER LIFT STATION	613 SAND SHELL	SEWERAGE SYSTEMS	Active	05/14/12		X	X					X	X			X		X	X											YES	NO	YES	904.51 (BA)
SANITARY SEWER MAINTENANCE AND OPERATIONS	CITY SERVICE AREA	JETTING, RODDING, LINE REPLACEMENT	Active	04/18/12									X																	YES	YES	YES	All
SIMSBURY SEWER LIFT STATION	3086 TAMARACK AV	SEWERAGE SYSTEMS	Active	05/11/12		X	X					X	X			X		X	X											YES	YES	YES	904.21 (BV)
STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	3420 CAMINO DE LOS COCHES	AMUSEMENT AND RECREATION SERVICES/PARKING LOT	Active	04/19/12	X	X	X	X	X	X						X			X											NO	NO	YES	904.51 (BA)
TAP PUMP STATION	COLLEGE AV AND CARLSBAD VILLAGE DRIVE	WATER SUPPLY	Active	05/07/12	X			X				X								X										YES	YES	YES	904.51 (BA)
TERRAMAR SEWER LIFT STATION	300 CANNON RD	SEWERAGE SYSTEMS	Active	05/14/12		X						X	X			X		X	X											YES	YES	YES	904.31 (AH)
VANCOUVER SEWER LIFT STATION	2690 VANCOUVER ST	SEWERAGE SYSTEMS	Active	05/14/12		X	X					X	X			X		X	X											YES	YES	YES	904.21 (BV)
VILLAS SEWER LIFT STATION	2860 WINTHROP AV	SEWERAGE SYSTEMS	Active	05/14/12		X						X	X			X		X	X											YES	YES	YES	904.21 (BV)

City of Carlsbad - Municipal Inventory FY 2011-12

					Activities (see descriptions below)															Pollutants											
AREA NAME	ADDRESS	DESCRIPTION	Status	Annual Site Inspection	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances	Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?	Hydrologic Area
ZONE 5 PARK	CAMINO HILLS AND FARADAY	AMUSEMENT AND RECREATION SERVICES	Active	04/11/12				X		X						X			X											NO	NO	Yes	904.31 (AH)
ADULT LEARNING PROGRAM	3368 EUREKA PL	OFFICE BUILDING			X														X											NO	NO	NO	904.31 (AH)
ANN D. L'HEUREUX MEMORIAL DOG PARK	2700 BLOCK OF CARLSBAD VILLAGE DR	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.21 (BV)
ARTS OFFICE	2955 ELMWOOD ST	MANAGEMENT SERVICES			X														X											NO	NO	NO	904.21 (BV)
BEACH ACCESSES	NORTH OF TAMARACK	AMUSEMENT AND RECREATION SERVICES						X											X											YES	NO	NO	
BRESSI RANCH RECLAIMED PUMP STATION	BRESSI RANCH	RECLAIMED WATER								X		X	X			X				X										NO	NO	NO	904.51 (BA)
BRESSI RANCH WATER PUMP STATION	BRESSI RANCH	WATER SUPPLY								X		X				X				X										NO	NO	NO	904.51 (BA)
BUENA VISTA WATER PUMP STATION AND RESERVOIR	1400 BLOCK BUENA VISTA DRIVE	WATER SUPPLY				X						X							X	X										NO	NO	NO	904.21 (BV)
CALAVERA TREATMENT PLANT	2400 TAMARACK AV	INACTIVE SEWERAGE SYSTEMS	Inactive																											YES	NO	NO	904.21 (BV)
CANNON PARK	300 BLOCK OF CANNON	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.31 (AH)
CAR COUNTRY PARK	PASEO DEL NORTE	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.31 (AH)
CARLSBAD SENIOR CENTER	799 PINE AVE	AMUSEMENT AND RECREATION SERVICES			X														X											NO	NO	NO	904.31 (AH)
CENTRO DE INFORMACION	3330 HARDING ST	LIBRARIES			X														X											NO	NO	NO	904.31 (AH)
CITY HALL FACILITY	1200 CARLSBAD VILLAGE DR	GENERAL ADMINISTRATION			X														X											NO	NO	NO	904.21 (BV)
COLE LIBRARY	1250 CARLSBAD VILLAGE DR	LIBRARIES			X														X											NO	NO	NO	904.21 (BV)
DOVE LIBRARY MAIN BRANCH & ADMINISTRATION	1775 DOVE LN	LIBRARIES			X														X											YES	NO	NO	904.51 (BA)
EL FUERTE PARK	600 BLOCK OF EL FUERTE ST	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.51 (BA)
ELLERY WATER PUMP STATION AND RESERVOIR	2300 BLOCK OF JANIS WY	WATER SUPPLY				X		X				X							X	X										NO	NO	NO	904.21 (BV)
FARADAY CENTER	1635 FARADAY AV	MANAGEMENT SERVICES			X														X											YES	NO	NO	904.31 (AH)
FARMERS BUILDING	FARADAY & EL CAMINO RL	OFFICE BUILDING			X														X											NO	NO	NO	904.31 (AH)
HARDING COMMUNITY CENTER	3096 HARDING ST	AMUSEMENT AND RECREATION SERVICES			X			X		X						X			X											NO	NO	NO	904.31 (AH)
HELEN ALLMAN GIRLS CLUB	3368 EUREKA PL	AMUSEMENT AND RECREATION SERVICES			X														X											NO	NO	NO	904.31 (AH)
HIRING CENTER	5958 EL CAMINO REAL	OFFICE BUILDING			X														X											NO	NO	NO	904.31 (AH)
HOSP GROVE-HI NOON ROTARY/PICNIC TABLE/TRAIL	2630 MONROE ST	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.21 (BV)
HOUSING/REDEVELOPMENT OFFICE	2965 ROOSEVELT ST B	URBAN AND COMMUNITY DEVELOPMENT			X														X											NO	NO	NO	904.21 (BV)
LA GOLONDRINA SEWER LIFT STATION	2516 LA GOLONDRINA ST	SEWERAGE SYSTEMS	Inactive			X	X					X	X			X		X	X											YES	NO	No	904.51 (BA)
LAS PALMAS OFFICES	2075 LAS PALMAS DR	GENERAL ADMINISTRATION			X														X											NO	NO	NO	904.40 (EN)
LEVANTE FIELD/PARK	3031 LEVANTE ST	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.51 (BA)
LIBRARY STORAGE	2075 Q CORTE DEL NOGAL 9	OFFICE BUILDING	Inactive		X														X											NO	NO	NO	904.40 (EN)
LOWER FARADAY SEWER LIFT STATION	1507 FARADAY AV	INACTIVE SEWERAGE SYSTEMS	Inactive																											YES	NO	NO	904.40 (EN)
MAXTON BROWN PARK	500 LAGUNA DR	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											YES	YES	No	904.21 (BV)
NON-EMERGENCY FIRE FIGHTING FLOWS	CITYWIDE	TRAINING EXCERCISES, SPRINKLER DISCHARGES																												NO	NO	NO	All
OAK PARK	PIO PICO DRIVE	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.21 (BV)
PIO PICO PARK	2600 PIO PICO	AMUSEMENT AND RECREATION SERVICES						X		X						X			X											NO	NO	NO	904.21 (BV)
RAILROAD DEPOT VISITORS CENTER	400 CARLSBAD VILLAGE DR	VISITOR CENTER			X														X											NO	NO	NO	904.21 (BV)
RESERVOIR B	END OF BLUFF DR	WATER SUPPLY																		X										NO	NO	NO	904.31 (AH)
RESERVOIR D-1, D-2	6700 BLACK RAIL RD	RECLAIMED WATER			X			X		X		X	X			X				X										NO	NO	NO	904.40 (EN)
RESERVOIR D-3	6580 BLACK RAIL ROAD	WATER SUPPLY			X			X		X		X				X				X										NO	NO	NO	904.40 (EN)
RESERVOIR E	HIDDEN VALLEY	WATER SUPPLY																		X										NO	NO	NO	904.40 (EN)
RESERVOIR PAJAMA	PAJAMA DR	WATER SUPPLY			X	X	X	X		X		X				X				X										NO	NO	NO	904.21 (BV)
RESERVOIR SANTA FE I	PYRENEES	INACTIVE WATER SUPPLY			X			X												X										NO	NO	NO	904.40 (EN)
RESERVOIR SANTA FE II	PAR & BUSINESS PARK	WATER SUPPLY										X								X										NO	NO	NO	904.40 (EN)
RESERVOIR SKYLINE	SKYLINE DR	WATER SUPPLY						X				X								X										NO	NO	NO	904.31 (AH)

City of Carlsbad - Municipal Inventory FY 2011-12

					Activities (see descriptions below)															Pollutants											
AREA NAME	ADDRESS	DESCRIPTION	Status	Annual Site Inspection	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances	Tributary to 303(d) Listed Water Body (within ESA Buffer)	Generates 303(d) Listed Pollutants	High Priority?	Hydrologic Area
SEA WALL	CARLSBAD BLVD	AMUSEMENT AND RECREATION SERVICES								X									X											NO	NO	NO	
SPECIAL EVENTS	CITYWIDE	STREET FAIR, ETC.																												NO	NO	NO	All
SPINNAKER HILL BANK	7100 BATIQUITOS DR	OPEN SPACE						X																						YES	NO	NO	904.51 (BA)
STREET MAINTENANCE (CLEANING/REPAIR)	CITYWIDE	POT HOLES, OVERLAYS, STRIPING																												NO	NO	NO	All
TRAIL MAINTENANCE	CITYWIDE	EROSION REPAIR, PET WASTE																												NO	NO	NO	All
UPPER FARADAY SEWER LIFT STATION	1711 FARADAY AV	INACTIVE SEWERAGE SYSTEMS	Inactive																											NO	NO	NO	904.40 (EN)
WATER OPERATIONS AND MAINTENANCE	CITY SERVICE AREA	FLUSHING, REPAIRS																		X										NO	NO	NO	All

1 Most complex, 2 Parks & pump stations, 3 Parking lots

Activities:

A. Building Maintenance and Repair

B. Equipment Storage

C. Hazmat Storage

D. Landscape Maintenance and Repair

E. Material Storage

F. Parking Lot Maintenance

G. Pool/Fountian Cleaning/Ser

H. Pump Maintenance, Replacement

I. Sanitary Sewer Maintenance/ Operations

J. Vehicle and Equipment Fueling

K. Vehicle and Equipment Maintenance

L. Vehicle Parking

M. Vehicle and Equipment Washing

N. Waste Management, Hazardous

O. Waste Management, Non-hazardous

P. Water Operations and Maintenance

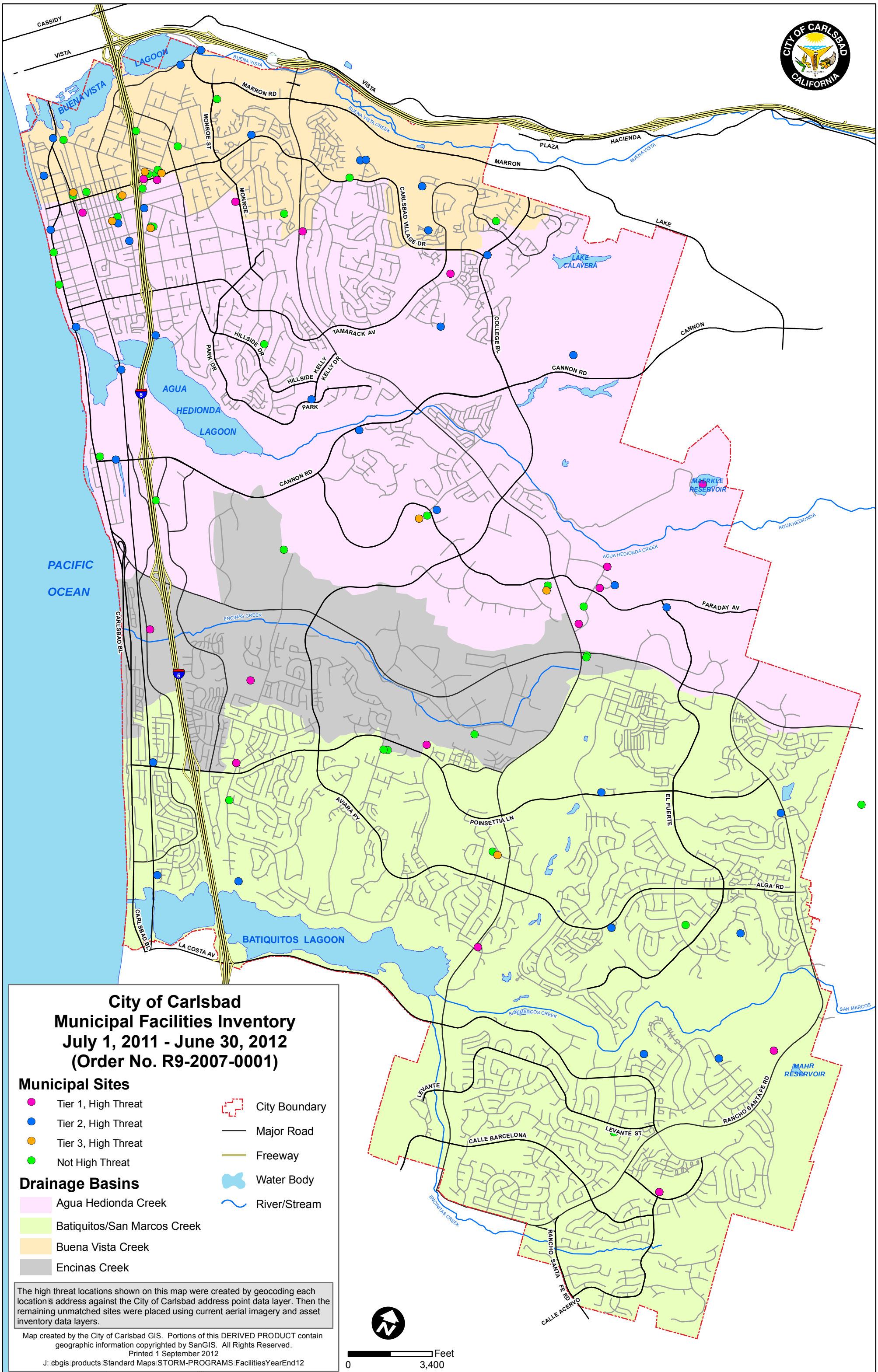
City of Carlsbad
Municipal Facilities Inventory
July 1, 2011 - June 30, 2012
(Order No. R9-2007-0001)
Municipal Sites
Tier 1, High Threat
Tier 2, High Threat
Tier 3, High Threat
Not High Threat
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
City Boundary
Major Road
Freeway
Water Body
River/Stream
The high threat locations shown on this map were created by geocoding each location's address against the City of Carlsbad address point data layer. Then the remaining unmatched sites were placed using current aerial imagery and asset inventory data layers.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
Printed 1 September 2012
J:\cbgis\products\Standard Maps\STORM-PROGRAMS\FacilitiesYearEnd12
CITY OF CARLSBAD CALIFORNIA
PACIFIC OCEAN
BUENA VISTA LAGOON
AGUA HEDIONDA LAGOON
BATIQUITOS LAGOON
LAKE CALAVERA
MAERKLE RESERVOIR
MAHR RESERVOIR
CASSIDY
VISTA
MARRON RD
MONROE ST
MONROE
CARLSBAD VILLAGE DR
PLAZA
HACIENDA
MARRON
LAKE
CANNON
CANNON RD
TAMARACK AV
HILLSIDE DR
PARK DR
KELLY DR
PARK
COLLEGE BL
FARADAY AV
CARLSBAD BL
AVIARA PY
POINSETTIA LN
EL FUERTE
ALGA RD
LA COSTA AV
LEVANTE
CALLE BARCELONA
LEVANTE ST
RANCHO SANTA FE RD
CALLE ACERVO
BUENA VISTA
BUENA VISTA CREEK
AGUA HEDIONDA
AGUA HEDIONDA CREEK
ENCINAS CREEK
SAN MARCOS CREEK
SAN MARCOS
Feet
0
3,400

FY 11-12
Special Events Inventory

PRIORITY	EVENT TYPE	EVENT NAME	BEGIN DATE	END DATE	SEASON	INSP REQUIRED	PRE-EVENT INSPECTION DATE	POST-EVENT INSPECTION DATE	CHU	PROXIMITY TO ESA	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
High	Concert	TGIF Jazz in the Parks	07/01/2011	07/01/2011	Dry	Yes	07/01/2011	07/01/2011	904.51	Yes	X							X
Low	Other	La Costa Resort Fireworks	07/03/2011	07/03/2011	Dry	No			904.51	No	X	X						X
High	Concert	TGIF Jazz in the Parks	07/08/2011	07/08/2011	Dry	Yes	07/08/2011	07/08/2011	904.51	Yes	X			X				X
High	Atheletic	Carlsbad Triathlon	07/09/2011	07/10/2011	Dry	Yes	07/09/2011	07/10/2011	904.31	Yes	X			X				X
High	Concert	TGIF Jazz in the Parks	07/15/2011	07/15/2011	Dry	Yes	07/15/2011	07/15/2011	904.51	Yes	x			x				x
High	Exhibit	All American Car Show	07/16/2011	07/16/2011	Dry	Yes	07/16/2011	07/16/2011	904.21	Yes	X	X		X				X
High	Concert	TGIF Jazz in the Parks	07/22/2011	07/22/2011	Dry	Yes	07/22/2011	07/22/2011	904.51	Yes	x			x				x
High	Concert	TGIF Jazz in the Parks	07/29/2011	07/29/2011	Dry	Yes	07/29/2011	07/29/2011	904.51	Yes	x			x				x
High	Concert	TGIF Jazz in the Parks	08/05/2011	08/05/2011	Dry	No	08/05/2011	08/05/2011	904.31	Yes	x			x				x
High	Concert	TGIF Jazz in the Parks	08/12/2011	08/12/2011	Dry	Yes	08/12/2011	08/12/2011	904.51	Yes	x			x				x
High	Festival	CVBA's Art in the Village	08/14/2011	08/14/2011	Dry	Yes	08/14/2011	08/14/2011	904.21	Yes	x			x				x
Low	Atheletic	MS 3-Day Challenge Walk	09/23/2011	09/23/2011	Dry	No			904.21	No								X
High	Festival	ArtSplash	09/24/2011	09/25/2011	Dry	Yes	09/24/2011	09/25/2011	904.31	Yes	x			x				x
High	Festival	Oktoberfest	10/01/2011	10/01/2011	Wet	Yes	10/01/2011	10/01/2011	904.31	Yes	x							x
High	Festival	Agua Hedionda Lagoon Foundations Kayak regatta and Poker Run	10/22/2011	10/22/2011	Wet	Yes	10/22/2011	10/22/2011	904.31	No	x							x
Medium	Atheletic	MS Bay to Bay Bike Tour	10/23/2011	10/23/2011	Yes	Yes	10/23/2011	10/23/2011	904.21	Yes	X	X		X				X
High	Festival	Carlsbad Village Fall Street Faire	11/06/2011	11/06/2011	Wet	Yes	11/06/2011	11/06/2011	904.21	Yes	X	X		X				X
Low	Parade	Carlsbad HS Lancer Day Parade	11/14/2011	11/14/2011	Wet	No			904.31					X				X
High	Atheletic	Carlsbad Marathon	01/22/2012	01/22/2012	Wet	Yes	01/22/2012	01/22/120	904.31		X			X				X
High	Atheletic	Carlsbad Junior	03/31/2012	03/31/2012	Wet	Yes	03/31/2012	03/31/2012	904.21	Yes	X							X
High	Atheletic	Carlsbad 5000	04/01/2012	04/01/2012	Wet	Yes	04/01/2012	04/01/2012	904.21	Yes	X							X
High	Festival	Carlsbad Village Spring Street Faire	05/06/2012	05/06/2012	Dry	Yes	05/06/2012	05/06/2012	904.21	Yes	X	X		X				X

FY 11-12
Special Events Inventory

Low	Atheletic	Police Officers' Memorial Run	05/12/2012	05/12/2012	Dry	No			904.31	No	X							X
Low	Atheletic	Law Enforcement Torch Run for Special Olympics	06/06/2012	06/06/2012	Dry	no			904.51	No								X
High	Concert	TGIF Jazz in the Parks	06/29/2012	06/24/2011	Dry	Yes	06/24/2012	06/24/2012	904.51	Yes	X	X		X				X

AREA/NAME	Corrective Action(s)	BMPS IMPLEMENTED
ADULT LEARNING PROGRAM PARKING LOT	Keep dumpster area free of standing water.	Scheduled for ongoing routine cleaning
ADULT LEARNING PROGRAM PARKING LOT	Keep parking lot and concrete ditch free of sediment and leaf debris.	Scheduled for ongoing routine cleaning
AGUA HEDIONDA SEWER LIFT STATION	No Corrective Actions Recommended for this site	NA
AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	Keep concrete ditch free of excessive sediment.	sweeping/raking
AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	Keep catch basins and curb inlets free of grass clippings, sediment, and leaf debris.	sweeping/raking
AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	Ensure adequate erosion control methods are employed on the landscaped slope on the west side of the property by the restrooms.	Wattles deployed in run-off prone areas
AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	Ensure the stockpiles and green waste bin are covered when feasible.	Tarps used to cover exposed stockpiles
AVIARA COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOTS	Keep the secondary containment pallet free of rainwater.	Staff to drain tray as necessary
BATIQUITOS SEWER LIFT STATION	No corrective actions are recommended for this site.	NA
BEACH BLUFF TRIANGLE/PARK	Consider applying appropriate storm drain signage to the trench drain along the east end of the grass area, near the intersection of Carlsbad Blvd and Pine Ave.	Stenciled signage applied
BUENA VISTA SEWER LIFT STATION	No corrective actions are recommended for this site.	NA
CADENCIA PARK	Consider directing drinking fountain wastewater to sewer or landscaped area.	Existing drinking fountain drains into a french drain system.
CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	Keep storm drain by basketball courts free of sediment and leaf debris. Keep inlet pipe at the north end of the property near the stockpiles free of leaf debris, sediment, and mulch.	Area is monitored in wet and dry weather raked and swept
CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	Ensure landscaping material stockpiles and green waste dumpster are covered as feasible.	Tarps used to cover exposed stockpiles
CALAVERA HILLS PARK, COMMUNITY CENTER, AND PARKING LOT	Ensure filter inserts are adequately maintained to remove landscaping debris and sediment to retain capacity.	Filters replaced as needed
CALAVERA PUMP STATION	No corrective actions are recommended.	NA
CANNON SEWER LIFT STATION	No corrective actions are recommended for this site.	NA
CARLSBAD RECYCLED WATER FACILITY	Keep trench drain free of leaf sediment and leaf debris.	Landscaping contract in place. Contacted Encina staff to have them monitor.
CARLSBAD SENIOR CENTER PARKING LOT	Keep curb gutters free of sediment and leaf debris.	Scheduled for ongoing routine cleaning

AREA/NAME	Corrective Action(s)	BMPS IMPLEMENTED
CARLSBAD SENIOR CENTER PARKING LOT	Keep catch basins in west parking lot free of sediment and leaf debris.	Scheduled for ongoing routine cleaning
CARRILLO RANCH AND PARKING LOT	Keep discharge locations free of excessive sediment and gravel.	Area is monitored in wet and dry weather rock/gravel bags used as needed
CARRILLO RANCH AND PARKING LOT	Stabilize and maintain exposed soil areas to prevent soil from eroding during rain events.	Wattles deployed in run-off prone areas
CARRILLO RANCH AND PARKING LOT	Consider applying storm drain signage to the concrete ditch inlets and parking lot catch basins.	Stenciled signage applied
CARRILLO RANCH AND PARKING LOT	Consider repairing the damaged portion of the concrete ditch along the north bordering trail to prevent sediment transport.	Damaged areas patched
CHASE FIELD	Consider redirecting drinking fountain waste water flow to the landscaping or to the sewer system.	Existing drinking fountain drains into a french drain system.
CHINQUAPIN SEWER LIFT STATION	No corrective actions are recommended.	NA
CITY HALL FACILITY PARKING LOT	Keep parking lot free of leaf debris.	Scheduled for ongoing routine cleaning
COLE LIBRARY PARKING LOT	No corrective actions are recommended for this site.	Scheduled for ongoing routine cleaning
DOVE LIBRARY PARKING LOT	Keep outdoor areas, discharge locations, and filter inserts free of excessive trash, leaf debris, cigarette butts, and sediment, especially the filter insert inside the curb inlet in the northern parking area by the Dove Lane entrance.	Scheduled for ongoing routine cleaning
DOVE LIBRARY PARKING LOT	Keep outdoor areas free of oil spills/leaks.	Scheduled for ongoing routine cleaning
DOVE LIBRARY PARKING LOT	Consider reapplying storm drain signage to the catch basin at the southwest corner of the library by the trash enclosure and the circular storm drain in the northern parking area by the Dove Lane entrance.	Signage scheduled for installation
DOVE LIBRARY PARKING LOT	Consider providing recycling containers.	To be considered
DOVE LIBRARY PARKING LOT	Consider replacing/repairing the sand bag at the curb inlet south of the library.	Scheduled for repair/replacement prior to rainy season
El FUERTE LIFT STATION	Sweep up trash and debris in outdoor areas.	Swept up trash and debris
FARADAY CENTER PARKING LOT	Keep outdoor areas and discharge locations free of excessive sediment and leaf debris.	Scheduled for ongoing routine maintenance
FARADAY CENTER PARKING LOT	Keep outdoor areas free of oil stains.	Scheduled for ongoing routine sweeping
FARMERS BUILDING PARKING LOT	Consider repairing asphalt to prevent excessive sediment from entering the storm drain system.	BMPs to be installed at storm drains prior to rainy season; parking lot scheduled for slurry repair
FARMERS BUILDING PARKING LOT	Keep all outdoor areas and discharge locations free of excessive sediment and landscaping debris.	Scheduled for ongoing routine maintenance

AREA/NAME	Corrective Action(s)	BMPS IMPLEMENTED
FARMERS BUILDING PARKING LOT	Ensure stock piles and landscaping debris are adequately covered and contained.	Scheduled for ongoing routine inspection
FIRE STATION #1	Cover and elevate, or coat, rusty materials to prevent contact with storm water.	Materials moved inside for storage
FIRE STATION #2	No corrective actions are recommended for this site.	NA
FIRE STATION #3	Consider applying appropriate storm drain signage to the catch basin in the rear of the station.	Will consider
FIRE STATION #4	Keep outdoor areas and trash enclosure free of excessive sediment and leaf debris.	Daily inspection and cleaning as needed
FIRE STATION #5	Keep site and all catch basins free of leaves and sediment.	Daily inspection and cleaning as needed
FIRE STATION #5	Keep used tires adequately covered.	Tire was there for training and is not stored onsite.
FIRE STATION #5	Ensure waste water from fire hose rinsing activity is contained disposed of to the sewer system or landscaping.	Sand bags are used to block storm drain and vacuumed used to reclaim water.
FIRE STATION #5	Ensure truck washing is performed in an area where runoff cannot enter the MS4.	Sand bags replaced and vacuum used to reclaim water. Water observed may have been from landscaping.
FIRE STATION #5	Ensure filter insert in catch basin by hose wash area is adequately maintained and installed correctly.	Scheduled for ongoing maintenance
FIRE STATION #6	Keep trench drain free of sediment and leaf debris.	Daily inspection and cleaning as needed
FIRE STATION #6	Consider applying storm drain signage to trench drain.	Will consider
FLEET MAINTENANCE FACILITY AND PARKING LOT	Keep site and parking lot free of sediment and leaf debris.	vendor contacted to address lot area debris and sediment. Cleaned as part of service.
FLEET MAINTENANCE FACILITY AND PARKING LOT	Keep catch basin behind maintenance building free of sediment, leaf debris, and gravel.	BMP's for catch basin 2490 renewed, debris at area is collected by vendor service.
FLEET MAINTENANCE FACILITY AND PARKING LOT	Keep scrap metal bin and area around the bin free of oil leaks/spills. Consider improving cover for bin or moving under a permanent structure.	Scrap metal bit cleaned of oil residue and no oily items allowed.
FLEET MAINTENANCE FACILITY AND PARKING LOT	Ensure hazardous waste is adequately covered. Consider repairing the roof structures of the sheds containing hazardous materials. Ensure containment trays inside shed are kept free of rainwater and any accumulated liquid in the trays is disposed of properly.	Hazardous waste area was wet from foam to disperse rodent population and reduce risk of inhalation of materials. No leaks on structure. Accumulated material has been collected and shipped by Veolia.
FLEET MAINTENANCE FACILITY AND PARKING LOT	Provide secondary containment for the portable toilets by the maintenance bay.	Vendor serviced portable toilets same day and installed containment.
FLEET MAINTENANCE FACILITY AND PARKING LOT	Consider replacing fiber rolls at the three curb inlets, which appear to be wearing and may have reduced functionality.	Storm drain filters are in consideration for replacement by an improved BMP system to collect materials.
FOXES LANDING LIFT STATION	Repair broken A/C	Crews repaired broken asphalt
GATESHEAD SEWER LIFT STATION	Repair fence	Contractor to replace in June

AREA/NAME	Corrective Action(s)	BMPS IMPLEMENTED
HARDING COMMUNITY CENTER PARKING LOT	No corrective actions are recommended for this site.	NA
HARDING COMMUNITY CENTER PARKING LOT	Consider applying storm drain signage to some catch basins around the perimeter of the site.	Signage scheduled for installation
HARDING COMMUNITY CENTER PARKING LOT	Control sediment erosion from slope along concrete channel and parking medians in the west park.	Scheduled for ongoing routine maintenance
HARDING COMMUNITY CENTER PARKING LOT	Protect rusty metal material from contact with rainwater.	Scheduled for maintenance
HIDDEN CANYON PARK (LARWIN) AND PARKING LOT	Keep discharge locations free of excessive woodchips and leaf debris.	Area is monitored in wet and dry weather raked and swept
HOLIDAY PARK AND PARKING LOTS	Ensure parking areas remain free of oil spills.	Absorbents applied as needed
HOME PLANT SEWER LIFT STATION	No corrective actions are recommended.	NA
HOSP GROVE PARK AND PARKING LOT	Keep west parking lot free of sediment and leaf debris.	Area is monitored in wet and dry weather raking and sweeping as needed
KNOTS SEWER LIFT STATION	Repair secondary containment door	Contractor contacted to repair containment
LA COSTA CANYON PARK AND PARKING LOT	Keep discharge locations free of excessive sediment and organic debris, particularly the inlet at the base of the slope located southeast of the tennis courts and north of the basketball court	Area is monitored in wet and dry weather; raking and sweeping as needed
LA COSTA CANYON PARK AND PARKING LOT	Control erosion along walking trails, around the detention basin, along the slopes north of the basketball court and southeast of the tennis courts, and along the concrete ditch north of the basketball court to minimize sediment transport to the storm drain system.	Wattles deployed in run-off prone areas
LA COSTA CANYON PARK AND PARKING LOT	Provide cover for trash cans in northern picnic area and tennis court.	Trash lids provided
LA COSTA CANYON PARK AND PARKING LOT	Consider replacing the gravel bags and straw wattles in poor condition, and restricting water flow, throughout the site.	Wattle and gravel bags replaced as needed
LA COSTA CANYON PARK AND PARKING LOT	Consider redirecting drinking fountain waste water flow to the landscaping or to the sewer system.	Existing drinking fountain drains into a french drain system.
LAGUNA RIVIERA PARK	Consider applying storm drain signage to the catch basin near the park restrooms.	Staff to stencil catch basin with storm drain signage
LAGUNA RIVIERA PARK	Consider redirecting drinking fountain waste water flow to the landscaping or to the sewer system.	To install french drain under drinking fountain 6-30-2012
LANDSCAPE MAINTENANCE AND REPAIR	No corrective actions are recommended.	NA
M&O OPERATIONS YARD AND PARKING LOT	No corrective actions are recommended for this site.	NA
MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	Control slope erosion on eastern side of reservoir and prevent sediment discharge to the concrete ditch. Continue to regularly remove any sediment accumulation in concrete ditch.	In contact with Urban Corps to get a large crew to clear sediment near ditch.

AREA/NAME	Corrective Action(s)	BMPS IMPLEMENTED
MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	Keep lower lot and north end of upper lot free of sediment.	We will increase our sweeping intervals.
MAERKLE DAM RESERVOIR/PUMP/CHLORINATION STAT	Consider providing storm drain signage for those catch basins that lack or have faded signage.	Repainted markings at drains.
MAGEE PARK AND PARKING LOT	No corrective actions are recommended for this site.	NA
MONROE STREET POOL	Consider structural modification of the drainage layout from pool deck areas to reduce potential for pollutant discharge.	The catch basin for the deck drains is being inspected and cleaned 3 to 4 times a week. Sediment and debris is vacuumed out of the basin and deposited where they will not enter the storm drains.
MONROE STREET POOL	Prevent sediment erosion from the slope at the southwest corner and the landscaped strip in the north end of the parking lot.	Additional plants and physical barriers have been installed in these areas. Plants are being irrigated by hand as necessary.
MONROE STREET POOL	Consider applying storm drain signage to the southwest and northwest catch basins.	Request has been put in to have the drains stenciled.
MONROE STREET POOL	Provide an adequate container and cover for bags of recyclables.	Bags are located above a permeable gravel field with no possibility of contaminants reaching the storm drain system.
MS4 MAINTENANCE	No corrective actions are recommended.	NA
OAK OPERATIONS YARD AND PARKING LOT	Consider repaving the south edge of the site to prevent sediment transport.	The drainage swale at the south end of the property was paved.
PARKS MAINTENANCE/STORAGE/PARKING LOT	Keep site free of sediment and debris.	Area is monitored in wet and dry weather; raking and sweeping as needed
PINE PARK AND PARKING LOT	Keep discharge locations free of excessive sediment and organic debris.	Area is monitored in wet and dry weather; raking and sweeping as needed
POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	Keep concrete area and drain by baseball field bleachers free of sediment and gravel. Consider structural BMPs to protect the drain.	Area swept as needed
POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	Ensure adequate maintenance of vegetation around drains in landscaped area. Consider structural BMPs to prevent sediment from accumulating in drains in landscaped areas.	Vegetation cut as needed / Wattles used as needed
POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	Keep drains throughout site free of leaf debris and grass clippings.	Area swept and raked as needed
POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	Consider providing lids for uncovered trash cans.	Trash lids provided
POINSETTIA COMMUNITY PARK, MAINTENANCE STATION AND PARKING LOT	Ensure green waste containers are covered when feasible.	Containers covered with tarps
POINSETTIA SEWER LIFT STATION	Palletize drum, three-story parking lot	Completed
POWER WASHING	NA	NA

AREA/NAME	Corrective Action(s)	BMPS IMPLEMENTED
RAILROAD DEPOT VISITORS CENTER PARKING LOT	Keep outdoor areas and discharge locations free of excessive leaf debris and sediment	Scheduled for ongoing routine maintenance
RAILROAD DEPOT VISITORS CENTER PARKING LOT	Prevent sediment erosion from slope at northern exit driveway.	Scheduled for ongoing routine maintenance
RESERVOIR C	No corrective actions are recommended.	NA
RESERVOIR ELM	No corrective actions are recommended.	NA
RESERVOIR LA COSTA HI	No corrective actions are recommended.	NA
RESERVOIR LA COSTA LO	No corrective actions are recommended.	NA
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	Consider redirecting flow of skate park drinking fountain wastewater to the sewer system or landscaping.	Will evaluate flow of drinking water
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	Keep all outdoor areas free of excessive sediment, leaf debris, trash, and cigarette butts.	Scheduled for routine cleaning
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	Keep discharge locations free of excessive sediment, trash, leaves, and wood debris.	Scheduled for routine cleaning
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	Control erosion along the concrete ditch east of skate park lot, the hillside on the west and south side of skate park, and on the west side of the Safety Center to prevent sediment transport.	Scheduled for routine inspection and maintenance as necessary
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	Consider providing recycling containers in the skate park.	Will consider
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	Provide permanent cover for trash cans in the skate park and parking lot, in front of Safety Center, and by the Safety Center trash enclosure.	Will design and implement permanent cover
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	Ensure an accessible, appropriate spill response kit and plan are kept on site.	Spill Kit available
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	Maintain filter inserts at curb inlets in the skate park lot, at the entrance to the Safety Center employee parking lot, and at the northeast corner of the Safety Center to remove sediment, leaves, and trash and maintain capacity.	Scheduled for routine maintenance
SAFETY CENTER (POLICE & FIRE HEADQUARTERS), PARKING LOT, SKATEPARK	Consider applying appropriate storm drain signage to the curb inlet in the Safety Center employee parking area towards the entrance.	Signage scheduled for installation
SAND SHELL SEWER LIFT STATION	Sweep up trash and debris in outdoor areas.	Completed and placed on weekly cleaning schedule
SANITARY SEWER MAINTENANCE AND OPERATIONS	No corrective actions are recommended.	NA
SIMSBURY SEWER LIFT STATION	No corrective actions are recommended.	NA
STAGECOACH COMMUNITY PARK, MAINTENANCE STATION, AND PARKING LOT	Consider applying storm drain signage to the inlets within the concrete ditch around the perimeter of the park and to the catch basin near the tennis courts.	Stenciled signage applied
TAP PUMP STATION	No corrective actions are recommended.	NA
TERRAMAR SEWER LIFT STATION	No corrective actions are recommended.	NA

AREA/NAME	**Corrective Action(s)**	BMPS IMPLEMENTED
VANCOUVER SEWER LIFT STATION	Replace Fence	Department will work on contract to repair fence
VILLAS SEWER LIFT STATION	Fence in bad shape	Contactor to replace in June
ZONE 5 PARK	Keep concrete ditch and drain in the northeast corner of site free of sediment and landscaping debris.	Area swept as needed
ZONE 5 PARK	Ensure adequate erosion control methods are employed along concrete ditch.	Contractor installed wattles and gravel bags
ZONE 5 PARK	Keep street free of sediment from vehicle tracking from dirt parking lot.	Area swept as needed
ZONE 5 PARK	Provide secondary containment for non-ADA compliant portable toilet.	Secondary containment tray installed
ZONE 5 PARK	Consider applying appropriate storm drain signage to the inlet within the concrete ditch, and to the park catch basin by the drinking fountain.	Stenciled signage applied
ZONE 5 PARK	Consider redirecting drinking fountain waste water flow to the landscaping or to the sewer system.	To install french drain under drinking fountain

Appendix 5

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Fixed)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTW Q (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area	Coverage Under Industrial Permit
7-11	1089 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5541	GAS STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
7-ELEVEN	901 PALOMAR AIRPORT RD		CARLSBAD	CA	92011	5541	GAS STATION AND CONVENIENCE STORE	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
7-ELEVEN 32942-A	5802 VAN ALLEN WY		CARLSBAD	CA	92008	5541	GASOLINE STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
A & P AIRCRAFT DETAILING	2006 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	4581	AIRCRAFT WASHING & DETAILING	N	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
A-1 AUTO CARE	3193 TYLER ST		CARLSBAD	CA	92008	7538	GENERAL AUTOMOTIVE REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
AALTO SCIENTIFIC	1959 KELLOGG AV		CARLSBAD	CA	92008	2835	IN VITRO AND IN VIVO DIAGNOSTIC SUB	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	Y
ACE HARDWARE CARLSBAD	7188 AVENIDA ENCINAS	STE 110	CARLSBAD	CA	92011	5251	HARDWARE STORES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
ACUSHNET COMPANY	2819 LOKER AV EAST		CARLSBAD	CA	92010	3949	SPORTING & ATHLETIC GOODS, NEC	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	Y
ADDISON SHEET METAL	7238 PONTO DR		CARLSBAD	CA	92011	3499	SHEET METAL FABRICATION	N	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.51	N
ADVIC CONSTRUCTION COMPANY	2710 LOKER AV WEST	STE 100	CARLSBAD	CA	92010	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
AEA TECHNOLOGY, INC.	5933 SEA LION PL	STE 112	CARLSBAD	CA	92010	3825	Instruments For Measuring/Testing Of E	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
AETHERCOMM INC.	3205 LIONSHEAD AV		CARLSBAD	CA	92010	3663	ASEMBLY OF COMM EQUIPMENT	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
AIR PRODUCTS & CHEMICALS, INC	1969 PALOMAR OAKS WY		CARLSBAD	CA	92009	2899	CHEMICALS AND CHEMICAL PREPARATIONS	Y	N	N	Y	Y	Y	Y	N	Y	Y	N	904.4	Y
AIR PRODUCTS AND CHEMICALS, IN	1979 PALOMAR OAKS WY		CARLSBAD	CA	92011	2899	GENERAL WAREHOUSING	Y	N	N	Y	Y	Y	Y	N	Y	Y	N	904.4	Y
AIROPTIONS AVIATION	2006 PALOMAR AIRPORT RD	STE 206	CARLSBAD	CA	92008	4522	AIR TRANSPORTATION, NONSCHEDULED	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
ALBERTSONS 6701	955 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5411	SUPERMARKET	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
ALBERTSON'S 6720	7660 EL CAMINO REAL		CARLSBAD	CA	92009	5411	GROCERY STORES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
ALEJANDROS MEXICAN FOOD	2952 HARDING ST		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
ALLENS NEW YORK PIZZA	6943 EL CAMINO REAL	101	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
ALLGIRE BUILDERS, INC.	3278 GREY HAWK CT		CARLSBAD	CA	92010	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ALLGIRE GNRL CONTRACTORS INC	3278 GREY HAWK CT	STE 200	CARLSBAD	CA	92010	1521	GENERAL CONTRACTOR	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.31	N
ALLIE'S EDIBLES	5671 PALMER WY	STE J	CARLSBAD	CA	92008	2064	CANDY AND CONFECTIONARY PRODUCTS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ALPHAGRAPHICS 469	3132 TIGER RUN CT	STE 108	CARLSBAD	CA	92010	2752	Commercial Printing	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ALPHATEC MANUFACTURING	5830 EL CAMINO REAL		CARLSBAD	CA	92008	3842	ORTHOPEDIC, PROTHETIC, AND SURGICAL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ALPHATEC SPINE, INC.	5818 EL CAMINO REAL		CARLSBAD	CA	92008	3842	ORTHOPEDIC/PROSTHETIC/SURGICAL APPLIAN	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ALS CAFE IN THE VILLAGE	795 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING & DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
AMERICAN RIM SUPPLY	1955 KELLOGG AV		CARLSBAD	CA	92008	3465	AUTOMOTIVE METAL STAMPINGS	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
AMIGO CUSTOM SCREEN PRINTS	6351 YARROW DR	A-B	CARLSBAD	CA	92011	2261	SCREEN PRINTING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
ANCHOR AUDIO INC	5931 DARWIN CT		CARLSBAD	CA	92008	3651	Household Audio and Video Equipment	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ARMSTRONG GARDEN CENTER	5702 PASEO DEL NORTE		CARLSBAD	CA	92008	5261	FLOWER NURSERY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ARRAY WIRELESS	5631 PALMER WY	B	CARLSBAD	CA	92008	3663	RADIO &TV BROADCASTING/COMMUNICATIONS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ASTEC AMERICA	5810 VAN ALLEN WY		CARLSBAD	CA	92008	3679	Electronic Components, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ASYMTEK	2762 LOKER AV WEST		CARLSBAD	CA	92010	3699	ELECTRICAL MACHINERY, EQUIPMENT, SUPPL	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
AURORALIGHT INC	2742 LOKER AV WEST	STE 100	CARLSBAD	CA	92008	3648	Lighting Equipment, NEC	N	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
AUTOMOTIVE SOLUTIONS	505 OAK AV	STE A	CARLSBAD	CA	92008	7549	AUTOMOTIVE SERVICES	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
AVIARA FARMS	6145 LAUREL TREE LN		CARLSBAD	CA	92011	5159	WHOLESALE DISTRIBUTION OF RAW FARM PRO	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
AVIARA GOLF CLUB	7447 BATIQUITOS DR		CARLSBAD	CA	92011	7011	HOTEL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
AVIARA GOLF MAINT. FAC	7227 AVIARA DR		CARLSBAD	CA	92009	7997	GOLF COURSE & RESORT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
AVIS RENT A CAR	2198 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	0751	AUTOMOTIVE RENTAL AND LEASING/O DRIVER	N	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
B 'N' K CHEM-DRY	390 OAK AV		CARLSBAD	CA	92008	7217	CARPET & UPHOLSTERY CLEANING	N	Y	N	N	N	N	Y	Y	Y	Y	Y	904.21	N
B.A. WORTHING, INC.	690 CARLSBAD VILLAGE DR	STE 201	CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.21	N
BAJA SESSIONS CATERING	2790 LOKER AV WEST	STE 115	CARLSBAD	CA	92010	5812	EATING AND DRINKING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
BAN'S CLEANERS	981 TAMARACK AV		CARLSBAD	CA	92008	7216	DRY CLEANING AGENTS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
BASKIN ROBBINS	2540 EL CAMINO REAL	D	CARLSBAD	CA	92008	5451	ICE CREAM STORE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
BASKIN ROBBINS	6949 EL CAMINO REAL	STE 101	CARLSBAD	CA	92009	5451	DAIRY PRODUCTS STORE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
BATA BASEBALL MACHINES	6189 EL CAMINO REAL	STE 101	CARLSBAD	CA	92009	3949	SPORTING/ATHLECITC GOODS, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Fixed)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTW Q (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area	Coverage Under Industrial Permit
BEACH CITY SMOOTHIES	594 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
BECKMAN COULTER	2470 FARADAY AV		CARLSBAD	CA	92010	2835	IN VITRO & VIVO DIAGNOSTIC SUBSTANCES	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	904.31	Y
BELLEFLEUR	5610 PASEO DEL NORTE	100	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
BENCHMARK STONEWORKS, INC.	5674 EL CAMINO REAL	STE D	CARLSBAD	CA	92008	1743	TERRAZZO, TILE, MARBLE, MOSAIC INSTALL	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.31	N
BENIHANA	755 RAINTREE DR	100	CARLSBAD	CA	92011	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
BEST WESTERN BEACH VIEW LODGE	3180 CARLSBAD BL		CARLSBAD	CA	92008	7011	HOTELS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
BETTER BUZZ COFFEE	2525 EL CAMINO REAL	STE 101	CARLSBAD	CA	92008	5499	MISC FOOD STORES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
BIG O TIRES	2615 STATE ST		CARLSBAD	CA	92008	7538	General Automotive repair shops	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
BIOSYN CORPORATION	5939 DARWIN CT	STE 114	CARLSBAD	CA	92008	2834	Pharmaceutical Preparations	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
BISTRO WEST	4960 AVENIDA ENCINAS		CARLSBAD	CA	92011	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
BJS RESTAURANT & BREWHOUSE	5613 PASEO DEL NORTE	300	CARLSBAD	CA	92008	5812	EATING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
BLENDZ ON THE GO	6215 EL CAMINO REAL		CARLSBAD	CA	92009	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
BOAR CROSSN	390 GRAND AV		CARLSBAD	CA	92008	5813	DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
BOARD & BREW	2675 GATEWAY RD	103	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
BOB BAKER CHRYSLER JEEP DODGE	5555 CAR COUNTRY DR		CARLSBAD	CA	92008	5511	NEW AND USED CAR DEALERS	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
BOB BAKER FIAT	5515 CAR COUNTRY DR		CARLSBAD	CA	92008	5511	NEW AND USED CAR DEALER	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
BOB BAKER MAZDA	5365 CAR COUNTRY DR		CARLSBAD	CA	92008	5511	CAR DEALERSHIP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
BOB BAKER VOLKSWAGEN SUBARU	5500 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	MOTOR VEHICLE DEALER (NEW & USED)	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
BOBBY'S HIDEAWAY CAFE	4901 EL CAMINO REAL	F	CARLSBAD	CA	92008	5812	EATING & DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
BON APPETIT □ TAYLORMADE	5545 FERMI CT		CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
BOSTON MARKET 637	2606 EL CAMINO REAL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
BOYS AND GIRLS CLUB OF CARLSBA	3115 ROOSEVELT ST		CARLSBAD	CA	92008	7997	MEMBERSHIP SPORTS AND RECREATION CLUBS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
BRESSI RANCH FUEL MART, LLC	2741 GATEWAY RD		CARLSBAD	CA	92009	5541	GAS STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.51	N
BRITISH INDEPENDENT CAR COUNTR	1060 AUTO CENTER CT	STE O	CARLSBAD	CA	92008	7538	GENERAL AUTOMOTIVE	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
BROKEN YOLK CAFE	7670 EL CAMINO REAL	104	CARLSBAD	CA	92009	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
BROOKHART CONCRETE INC., RAY F	2911 STATE ST		CARLSBAD	CA	92008	1731	CONCRETE CONTRACTOR	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.21	N
BRUEGGER'S BAGELS	7680 EL CAMINO REAL	102	CARLSBAD	CA	92009	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
BUCA DI BEPPO	1921 CALLE BARCELONA		CARLSBAD	CA	92009	5812	EATING & DRINKNING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
BVP ASSOCIATES (DBA OCEAN AIR)	2192 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	6512	OPPERATORS OF NON-RESIDENTIAL BUILDING	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
CAFE ELYSA	3076 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CALDO POMODORO	2907 STATE ST		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CALIBER COLLISION CENTERS	6050 AVENIDA ENCINAS	STE 100	CARLSBAD	CA	92011	7532	AUTO REPAIR/BODY WORK	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
CALIFORNIA CAFE	2205 FARADAY AV	STE C	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
CALIFORNIA FABWORKS	2101 LAS PALMAS DR	G	CARLSBAD	CA	92009	7532	TOP, BODY, UPHOLSTERY REPAIR,PAINT	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
CALIFORNIA SENSOR CORP	2075 CORTE DEL NOGAL	STE P	CARLSBAD	CA	92011	3829	MEASURING AND CONTROLLING DEVICES	N	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
CALIFORNIA WATERSPORTS	4215 HARRISON ST		CARLSBAD	CA	92008	7999	RECREATION SERVICES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CALIFORNIA WEST CONSTRUCTION,	5927 PRIESTLY DR	STE 103	CARLSBAD	CA	92008	1521	GENERAL CONTRACTORS-SINGLE FAMILY HOUS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CALLAWAY GOLF COMPANY	2180 RUTHERFORD RD		CARLSBAD	CA	92008	3949	SPORTING& ATHLETIC GOODS, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	Y
CALLAWAY GOLF COMPANY	2285 RUTHERFORD RD		CARLSBAD	CA	92008	3949	SPORTING& ATHLETIC GOODS, NEC	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	Y
CALLAWAY GOLF COMPANY	5860 DRYDEN PL		CARLSBAD	CA	92008	7999	AMUSEMENT & RECREATION SERVICES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
CALLAWAY GOLF COMPANY	5960 PASCAL CT		CARLSBAD	CA	92008	3949	SPORTING & ATHLETIC GOODS, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	Y
CALTRANS/CARLSBAD MAINTENANCE	6050 PASEO DEL NORTE		CARLSBAD	CA	92011	9621	TRANSPORTATION PROGRAMS ADMINISTRATION	Y	N	Y	Y	N	N	Y	N	Y	Y	N	904.4	N
CAMINO SHELL	2590 EL CAMINO REAL		CARLSBAD	CA	92008	5541	GASOLINE STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
CAMPUS CAFE	5966 LA PLACE CT	190	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
CARLBAD SMOG	1060 AUTO CENTER CT	STE R	CARLSBAD	CA	92008	7549	AUTOMOTIVE SERVCIES, EXCEPT REPAIR AND	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CARLS JR	2608 EL CAMINO REAL		CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N

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CARLS JR	925 PALOMAR AIRPORT RD		CARLSBAD	CA	92011	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
CARLS JR	950 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CARLSBAD 76	945 TAMARACK AV		CARLSBAD	CA	92008	5541	GASOLINE SERVICE STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
CARLSBAD AIRPORT SELF STORAGE	1910 PALOMAR OAKS WY		CARLSBAD	CA	92008	4225	GENERAL WAREHOUSING AND STORAGE	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
CARLSBAD AQUAFARM INC.	4600 CARLSBAD BL		CARLSBAD	CA	92008	0182	FOOD CROPS GROWN UNDERCOVER	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	904.31	Y
CARLSBAD AUTO SERVICE	3181 TYLER ST		CARLSBAD	CA	92008	7538	AUTOMOTIVE REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
CARLSBAD AUTO TECHNOLOGY	2730 STATE ST		CARLSBAD	CA	92008	7538	AUTOMOTIVE REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
CARLSBAD BEACH GRILL	2780 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CARLSBAD BRITISH MOTORCARS	2598 STATE ST		CARLSBAD	CA	92008	7538	GENERAL AUTOMOTIVE REPAIR	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
CARLSBAD BY THE SEA	2855 CARLSBAD BL		CARLSBAD	CA	92008	6513	OPERATORS OF APARTMENT BUILDINGS	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
CARLSBAD BY THE SEA RESORT	850 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	7011	HOTEL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CARLSBAD CHOCOLATE BAR	2998 STATE ST		CARLSBAD	CA	92008	5812	Eating& Drinking Places	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CARLSBAD COLLISION CENTER LLC	6030 AVENIDA ENCINAS	STE C	CARLSBAD	CA	92011	7532	TOP, BODY, & UPHOLSTERY REPAIR SHOPS	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
CARLSBAD CUSTOM CABINETS	2719 LOKER AV WEST	STE A	CARLSBAD	CA	92010	2434	CABINET MAKING	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CARLSBAD DANISH BAKERY	2805 ROOSEVELT ST		CARLSBAD	CA	92008	5461	BAKERY	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CARLSBAD EXCLUSIVE AUTOMOTIVE	1060 AUTO CENTER CT	STE D-F	CARLSBAD	CA	92008	7538	GENERAL AUTOMOTIVE	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
CARLSBAD FRENCH PASTRY CAFE	1005 CARLSBAD VILLAGE DR	B	CARLSBAD	CA	92008	5461	BAKERY ESTABLISHMENT	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CARLSBAD FUEL CORP (CIRCLE K)	7602 EL CAMINO REAL		CARLSBAD	CA	92009	5541	GAS SERVICE STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.51	N
CARLSBAD GOLF CENTER	2711 HAYMAR DR		CARLSBAD	CA	92010	7999	AMUSEMENT AND RECREATION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
CARLSBAD HYUNDAI, LLC	5285 CAR COUNTRY DR		CARLSBAD	CA	92008	5511	NEW & USED CAR DEALER	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
CARLSBAD INN	3075 CARLSBAD BL		CARLSBAD	CA	92008	7011	HOTEL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
CARLSBAD INTERNATIONAL EXPORT	1954 KELLOGG AV		CARLSBAD	CA	92008	3829	MEASURING AND CONTROLLING DEVICES	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
CARLSBAD LANDINGS, INC	2198 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
CARLSBAD MUFFLER & BRAKES, INC	1060 AUTO CENTER CT	STE L	CARLSBAD	CA	92008	7533	MUFFLER/BRAKES REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
CARLSBAD PARADISE PIZZA	2564 STATE ST	F	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CARLSBAD PLAZA LLC	2508 EL CAMINO REAL		CARLSBAD	CA	92008	6512	SHOPPING CENTER	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
CARLSBAD PREMIUM OUTLETS	5620 PASEO DEL NORTE		CARLSBAD	CA	92008	6512	OPERATORS OF NONRESIDENTIAL BUILDINGS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CARLSBAD RANCH MARKET	6118 PASEO DEL NORTE	D/E	CARLSBAD	CA	92011	5431	FRUIT AND VEGETABLE MARKET	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
CARLSBAD SELF STORAGE	2235 PALOMAR AIRPORT RD		CARLSBAD	CA	92011	4225	GENERAL WAREHOUSING AND STORAGE	N	N	Y	Y	N	N	Y	N	Y	Y	N	904.4	N
CARLSBAD SELF-SERVICE CAR WASH	2608 STATE ST		CARLSBAD	CA	92008	7542	CARWASHES	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
CARLSBAD STRAWBERRY CO.	I-5 AND CANNON RD		CARLSBAD	CA	92008	0171	BERRY CROPS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CARLSBAD TECHNOLOGY	5923 BALFOUR CT		CARLSBAD	CA	92008	2834	Pharmaceutical Preparations	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CARLSBAD TECHNOLOGY, INC	5922 FARNSWORTH CT	STE 102	CARLSBAD	CA	92008	2834	PHARMACEUTICAL PREPARATION	N	N	N	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
CARLSBAD VILLA ITALIAN KITCHEN	5620 PASEO DEL NORTE	STE 125L	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
CARLSBAD VILLAGE AUTO BODY, IN	3191 TYLER ST		CARLSBAD	CA	92008	7532	AUTO BODY AND PAINT REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
CARLSBAD VILLAGE INDEPENDENT M	3045 ROOSEVELT ST		CARLSBAD	CA	92008	7538	GENERAL AUTO REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
CARLSBAD VILLAGE SHELL	1145 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5541	GASOLINE SERVICE STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
CARLSBAD VOLVO	6830 AVENIDA ENCINAS		CARLSBAD	CA	92011	5511	MOTOR VEHICLE DEALER	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.51	N
CARTER'S HAY AND GRAIN	1985 OLIVENHAIN RD		CARLSBAD	CA	92009	5191	FARM SUPPLIES -FEED AND GRAIN	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
CASA DE BANDINI	1901 CALLE BARCELONA		CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
CASABLANCA RESTAURANT AND LOUN	6030 PASEO DEL NORTE		CARLSBAD	CA	92011	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
CAVALLO MOTOR SPORTS	6010 AVENIDA ENCINAS		CARLSBAD	CA	92011	7538	AUTO REPAIR AND CUSTOMIZATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
CDM CONSTRUCTIONINCORPORATED	1925 PALOMAR OAKS WY	STE 300	CARLSBAD	CA	92008	1629	HEAVY CONSTRUCTION, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
CDS PRINTING	2262 RUTHERFORD RD	STE 106	CARLSBAD	CA	92008	2759	COMMERCIAL PRINTING, NEC	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
CERTAPRO PAINTERS	5671 PALMER WY	STE G	CARLSBAD	CA	92008	1500	Building Construction-General Building	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.31	N
CESSY'S MEXICAN FOOD	3016 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N

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CHEVRON 1978	2500 EL CAMINO REAL		CARLSBAD	CA	92010	5541	GASOLINE SERVICE STATION/AUTOMOTIVE	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
CHEVRON 46	850 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	5541	GASOLINE SERVICE STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
CHEVRON USA INC. 93320	970 TAMARACK AV		CARLSBAD	CA	92008	5541	GASOLINE SERVICE STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
CHINEX GRILL	2525 EL CAMINO REAL	STE 142	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CHINS SZECHWAN RESTUARANT	2958 MADISON ST		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CHUAO CHOCOLATIER	2345 CAMINO VIDA ROBLE		CARLSBAD	CA	92011	2066	CHOCOLATE AND COCOA PRODUCTS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
CHUCKS TIRE CENTER	6060 AVENIDA ENCINAS	STE A	CARLSBAD	CA	92011	5531	AUTO AND HOME SUPPLY	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
CHURCHILL GRAPHICS	2195 FARADAY AV	G & H	CARLSBAD	CA	92008	2759	Commercial Printing	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CICKINSON CAMERON CONSTRUCTION	6184 INNOVATION WY		CARLSBAD	CA	92009	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
CINNABON	2525 EL CAMINO REAL	STE 123	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CIVIC HELICOPTERS	2206 PALOMAR AIRPORT RD	STE H	CARLSBAD	CA	92008	4522	HELICOPTER MAINTENANCE & OPERATIONS	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
CLAIM JUMPER RESTAURANT	5958 AVENIDA ENCINAS		CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
CLD DYNAMICS INC	5731 PALMER WY	STE A	CARLSBAD	CA	92008	3826	Lanoratory Analytical Instruments	N	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
CMI INTEGRATED TECHNOLOGIES, I	6086 CORTE DEL CEDRO		CARLSBAD	CA	92011	3621	MOTORS & GENERATORS	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
COAST WASTE MANAGEMENT	5960 EL CAMINO REAL		CARLSBAD	CA	92008	4212	Refuse Systems	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	Y
COBRA GOLF INCORPORATED	1818 ASTON AV		CARLSBAD	CA	92008	3949	ASSYMBLY OF GOLF CLUBS	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
COFFEE BEAN & TEA LEAF	2508 EL CAMINO REAL		CARLSBAD	CA	92008	5499	MISCELLANEOUS FOOD STORES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
COLD STONE CREAMERY	2967 CARLSBAD BL		CARLSBAD	CA	92008	5451	RETAIL ICE CREAM	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
COLDSTONE CREAMERY	1935 CALLE BARCELONA	STE 175	CARLSBAD	CA	92009	5451	DAIRY PRODUCT STORES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
COMMUNICATIONS TEST DESIGN INC	2283 COSMOS CT		CARLSBAD	CA	92011	7699	REPAIR SHOPS AND RELATED SERVICES NEC	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
CONSOLIDATED ELEC. DIST., INC.	6106 AVENIDA ENCINAS	A	CARLSBAD	CA	92011	5063	WHOLESALE TRADE OF ELECTRICAL EQUIP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
CORNER BAKERY CAFE	5617 PASEO DEL NORTE		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
COSTCO WHOLESALE	951 PALOMAR AIRPORT RD		CARLSBAD	CA	92011	5399	GENERAL MERCHANDISE STORE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
COTTRELL MACHINE	6102 AVENIDA ENCINAS	STE B &	CARLSBAD	CA	92011	3599	INDUSTRIAL & COMMERCIAL MACHINE SHOP	N	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
COUNTRY WINE AND LIQUOR	4901 EL CAMINO REAL	STE A	CARLSBAD	CA	92008	5411	Grocery Stores	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
COUSIN'S SIGNS	6353 EL CAMINO REAL	STE E	CARLSBAD	CA	92009	3993	SIGNS AND ADVERTISING SPECIALTIES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
COYOTE BAR AND GRILL	300 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CREATIVE FLAVORS CATERING	5661 PALMER WY	STE B	CARLSBAD	CA	92008	5812	CATERING	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
CRESTONE GROUP, LLC	5927 FARNSWORTH CT		CARLSBAD	CA	92008	2051	BREAD AND OTHER BAKED GOODS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CROSSCHEM, LP	5816 DRYDEN PL	200	CARLSBAD	CA	92008	5169	CHEMICAL AND ALLIED PRODUCTS, NEC	Y	N	Y	Y	N	N	Y	N	Y	Y	N	904.4	N
CROSSROAD PETROLEUM (ARCO AM/P	810 TAMARACK AV		CARLSBAD	CA	92008	5541	GASOLINE SERVICE STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
CROUTON'S	5814 VAN ALLEN WY	140	CARLSBAD	CA	92008	5812	RESTAURANT	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
CROWNAIR CRQ, LLC	2006 PALOMAR AIRPORT RD	STE 101	CARLSBAD	CA	92008	4581	AIRPORTS, FLYING FIELDS, AND AIRPORT T	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
CRUST PIZZERIA	3263 CAMINO DE LOS COCHES	STE 105	CARLSBAD	CA	92009	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
CULINART	2605 CARLSBAD BL		CARLSBAD	CA	92008	5812	Eating and Drinking Places	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
CUSTOM MARKING & ASSEMBLY, INC	2233 FARADAY AV	STE H	CARLSBAD	CA	92008	2759	Commercial Printing, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CUTTING EDGE GRADING, INC.	3132 TIGER RUN CT	STE 114	CARLSBAD	CA	92010	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
CVI MELLES GRIOT	2051 PALOMAR AIRPORT RD	STE 200	CARLSBAD	CA	92011	3674	SEMICONDUCTORS AND RELATED DEVICES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	Y
CVS/PHARMACY 9479	2510 EL CAMINO REAL		CARLSBAD	CA	92008	5912	DRUGSTORE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
DAILY NEWS CAFE, THE	3001 CARLSBAD BL	A	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
DAIRY QUEEN/ORANGE JULIUS	2525 EL CAMINO REAL	STE 133	CARLSBAD	CA	92008	5812	NON-RESIDENTIAL PROP. MGMNT	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
DAPHNE'S CALIFORNIA GREEK	6981 EL CAMINO REAL	101	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
DARTON INTERNATIONAL, INC.	2380 CAMINO VIDA ROBLE	J/K	CARLSBAD	CA	92009	3599	MACHINE SHOP - JOBBING & REPAIR	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
DAVE'S AUTO SERVICE AND REPAIR	3235 ROOSEVELT ST		CARLSBAD	CA	92008	7538	AUTOMOTIVE REPAIR	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
DENAULT'S TRUE VALUE HARDWARE	975 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5251	HARDWARE STORE	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
DENNYS 7517	1048 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING & DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N

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Industrial Commercial Inventory (Fixed)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTW Q (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area	Coverage Under Industrial Permit
DEPARTMENT OF ANIMAL CONTROL	2481 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	0752	ANIMAL SHELTER	Y	Y	N	N	N	N	Y	Y	Y	Y	N	904.4	N
DG LIGHTS	2380 CAMINO VIDA ROBLE	STE H	CARLSBAD	CA	92009	3648	LIGHTING EQUIPMENT, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
DIAMOND AVIATION	2100 PALOMAR AIRPORT RD	STE 200B	CARLSBAD	CA	92008	4522	AIR TRANSPORTATION, NONSCHEDULED	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
DINI'S BY THE SEA	3290 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
DIVERSIFIED CONSTRUCTION, INC.	2979 STATE ST	STE D	CARLSBAD	CA	92008	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
DOMINO'S PIZZA 8380	6986 EL CAMINO REAL	A	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
DONS COUNTRY KITCHEN	2885 ROOSEVELT ST		CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
DRAGMASTER INC	2725 STATE ST		CARLSBAD	CA	92008	7538	GENERAL AUTOMOTIVE REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
DREAM DINNERS	1905 CALLE BARCELONA	SUITE	CARLSBAD	CA	92009	2099	FOOD PREPARATIONS, NOT ELSEWHERE CLASS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
DR'S OWN, INC (DBA GOOD FEET)	2270 COSMOS CT	100	CARLSBAD	CA	92009	3842	INJECTION MOLDING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
DRYCLEAN AMERICA	2708 LOKER AV WEST	STE B105	CARLSBAD	CA	92010	7216	DRYCLEANING PLANT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
DUNCAN PARKING TECHNOLOGIES, I	5924 BALFOUR CT	STE 102	CARLSBAD	CA	92008	3600	ELEC. MACH./EQUIP./SUPPLIES, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
DUTCH TOUCH	5651 PALMER WY	STE E	CARLSBAD	CA	92008	7349	BUILDING CLEANING AND MAINTENANCE SERV	N	Y	N	N	N	N	Y	Y	Y	Y	Y	904.31	N
E/G ELECTRO-GRAPH	2365 CAMINO VIDA ROBLE		CARLSBAD	CA	92011	3674	SEMICONDUCTERS AND RELATED DEVIICES	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
ECCELEMENTAL09000	2105 CAMINO VIDA ROBLE	STE E	CARLSBAD	CA	92011	1500	Building Construction-General Building	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	904.4	N
ECONO LODGE INN & SUITES	3666 PIO PICO DR		CARLSBAD	CA	92008	7011	HOTELS AND MOTELS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
EL CAMINO RENTAL	5701 EL CAMINO REAL		CARLSBAD	CA	92008	7359	EQUIPMENT RENTAL AND LEASING	Y	N	Y	Y	N	N	Y	N	Y	Y	Y	904.21	N
EL CORIBE GRILL	6965 EL CAMINO REAL	205	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
EL POLLO LOCO	7120 AVENIDA ENCINAS		CARLSBAD	CA	92011	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
EL PUERTO MEXICAN & SEAFOOD	1065 CARLSBAD VILLAGE DR	D	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
EL TORITO MARKET	3163 ROOSEVELT ST		CARLSBAD	CA	92008	5411	GROCERY STORE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
ELECTRIC REGULATOR	6189 EL CAMINO REAL		CARLSBAD	CA	92009	3625	RELAYS AND INDUSTRIAL CONTROLS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
ELECTRO SURFACE TECH INC.	2281 LAS PALMAS DR	101	CARLSBAD	CA	92011	3679	ELECTRONIC COMPONENTS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
ELEVATION BURGER	2641 GATEWAY RD	102	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
EMERITUS AT CARLSBAD	3140 EL CAMINO REAL		CARLSBAD	CA	92008	8059	NURSING HOME	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
EMMERSON CONSTRUCTION, INC.	5993 AVENIDA ENCINAS	STE 101	CARLSBAD	CA	92008	1522	GENERAL CONTRACTORS-RESIDENTIAL BUILDI	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ENCINA WASTERWATER AUTHORITY	6200 AVENIDA ENCINAS		CARLSBAD	CA	92011	4952	SEWERAGE SYSTEMS	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	Y
ENCINAS BUSINESS PARK	6102 AVENIDA ENCINAS		CARLSBAD	CA	92011	6512	OPERATORS OF NONRESIDENTIAL BUILDINGS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
ENTERPRISE RENT A CAR	1060 AUTO CENTER CT	G	CARLSBAD	CA	92008	7514	PASSENGER CAR RENTAL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ENTERPRISE RENT-A-CAR	2100 COSTA DEL MAR RD		CARLSBAD	CA	92009	0751	AUTOMITIVE RENTAL AND LEASING W/O DRIV	N	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.51	N
EPEIUS BIOTECHNOLOGIES CORP	1890 RUTHERFORD RD		CARLSBAD	CA	92008	5122	Drugs, Drug Proprietaries, And Druggis	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ESBENSEN, PHILIP G.	6150 YARROW DR	STE H	CARLSBAD	CA	92011	15	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
ETALUMA, INC	1914 PALOMAR OAKS WY	150	CARLSBAD	CA	92008	3827	OPTICAL INSTRUMENTS AND LENSES	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
EUREST DINING □ CALLAWAY GOLF	2180 RUTHERFORD RD		CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
EWING IRRIGATION PRODUCTS INC	6104 AVENIDA ENCINAS	E	CARLSBAD	CA	92011	5083	WHOLESALE TRADE LAWN & GARDEN MACHINES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
EXPRESS AUTO CENTER	2676 STATE ST		CARLSBAD	CA	92008	7538	GENERAL AUTO REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
FAIRCO DEVELOPER LANDSCAPE SER	2928 JEFFERSON ST	STE 2D	CARLSBAD	CA	92008	1500	Building Construction-General Building	N	N	N	N	Y	N	Y	Y	Y	Y	Y	904.21	N
FASTENAL COMPANY	5421 AVENIDA ENCINAS	STE J	CARLSBAD	CA	92008	5072	HARDWARE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
FEDERAL EXPRESS CORPORATION	2495 FARADAY AV		CARLSBAD	CA	92010	4215	BUSINESS SERVICES NEC	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	Y
FINISH TECH CORPORATION	5993 AVENIDA ENCINAS	STE 101	CARLSBAD	CA	92008	1521	BUILDING CONSTRUCTION-GENERAL BUILDING	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
FIRESTONE COMPLETE AUTO CARE	2545 EL CAMINO REAL		CARLSBAD	CA	92008	7538	GENERAL AUTOMOTIVE REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
FISH HOUSE VERA CRUZ	417 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING & DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
FLIPPIN PIZZAS	7662 EL CAMINO REAL	103	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
FLORAL TRADE CENTER RESTAURANT	5600 AVENIDA ENCINAS		CARLSBAD	CA	92008	6512	MANAGER OF RESTAURANT SPACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
FLORENTINA MENDEZ(FARM/FLORAL)	3100 VALLEY ST	APT 38	CARLSBAD	CA	92008	5992	FLORISTS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
FLOREXPO,LLC	1960 KELLOGG AV		CARLSBAD	CA	92008	5193	Flowers, Nursery Stock, & Florist Sup	Y	Y	N	N	N	N	Y	Y	Y	Y	N	904.4	N

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FOURSQUARE PROPERTIES, INC.	5850 AVENIDA ENCINAS	STE A	CARLSBAD	CA	92008	1500	Building Construction-General Building	N	N	N	N	N	N	N	N	N	Y	N	904.31	N
FRAZEE PAINT	7040 AVENIDA ENCINAS	100	CARLSBAD	CA	92011	5231	RETAIL PAINT STORE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
FRAZIER MASONRY CORP	5841 EDISON PL	STE 100	CARLSBAD	CA	92008	1500	BUILDING CONSTRUCTION-GENL BUILDING CO	N	N	Y	N	N	N	N	N	Y	N	N	904.4	N
FRESCO TRATTORIA & BAR	264 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
FRONTERA CONSTRUCTION INC	5993 AVENIDA ENCINAS	STE 101	CARLSBAD	CA	92008	1521	BUILDING CONSTRUCTION-GENERAL CONTRACT	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
FROOTS	2675 GATEWAY RD	101	CARLSBAD	CA	92009	5812	EATING AND DRINKING ESTABLISHMENT	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
GARCIA'S MEXICAN RESTAURANT	2968 STATE ST		CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
GARDEN STATE BAGELS	755 CARLSBAD VILLAGE DR	STE 106	CARLSBAD	CA	92008	5461	RETAIL BAKERIES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
GASCO GASOLINE (VALERO)	920 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5541	GAS STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
GEMATRIA PRODUCTS, INC.	2260 RUTHERFORD RD	STE 101	CARLSBAD	CA	92011	2834	MANUFACTURING OF VITAMINS & NUTRIENTS	N	N	N	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
GEMOLOGICAL INSTITUTE OF AMERI	5355 ARMADA DR		CARLSBAD	CA	92008	3915	LAPIDARY WORK, MATS, JEWELERS, FINDING	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
GERMAN AUTO WORKS	2730 STATE ST	B	CARLSBAD	CA	92008	7538	GENERAL AUTOMOTIVE REPAIR	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
GET N' GO DONUTS	6986 EL CAMINO REAL	E	CARLSBAD	CA	92009	5461	DONUT SHOP AND BAKERY	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
GLANBIA NUTRITIONALS (NA), INC	2840 LOKER AV EAST		CARLSBAD	CA	92010	2833	MANUFACTURER	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
GLOBAL AQUA SCIENCE LLC	6352 CORTE DEL ABETO	STE A	CARLSBAD	CA	92011	5083	FARM & GARDEN MACHINERY & EQUIPMENT	Y	N	N	Y	Y	Y	Y	N	Y	Y	N	904.4	N
GLOBAL MICROWAVE SYSTEMS INC	1916 PALOMAR OAKS WY	STE 100	CARLSBAD	CA	92008	3578	CALCULATING AND ACCOUNTING MACHINES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
GOLDEN SPOON	2606 EL CAMINO REAL	STE B	CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
GOLDEN SPOON	7670 EL CAMINO REAL	STE 103	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
GOLDEN SPOON FROZEN YOGURT	7150 AVENIDA ENCINAS	STE 100	CARLSBAD	CA	92011	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
GOLDEN STATE NATURAL PRODUCTS	2080 LAS PALMAS DR	103	CARLSBAD	CA	92011	7389	BUSINESS SERVICES, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
GOLDEN TEE COCKTAILS	1065 CARLSBAD VILLAGE DR	STE F	CARLSBAD	CA	92008	5813	DRINKING PLACE	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
GRAND AVENUE BAR & GRILL	752 GRAND AV		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
GRAND DELI, THE	595 GRAND AV		CARLSBAD	CA	92008	5812	EATING& DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
GRAND PACIFIC PALISADES RESORT	5805 ARMADA DR		CARLSBAD	CA	92008	7011	HOTEL	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
GRANT GENERAL CONTRACTORS, INC	5051 AVENIDA ENCINAS		CARLSBAD	CA	92008	1521	General Contractor	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.31	N
GREAT KHANS MONGOLIAN FESTIVAL	2525 EL CAMINO REAL	STE 236	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
GREEK CORNER CAFE	1854 MARRON RD	100	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
GREENLEAF RENT A CA	850 PALOMAR AIRPORT RD	STE 119	CARLSBAD	CA	92008	7514	RENTAL CAR SERVICE	N	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
GREENWORLD RECYCLING INC.	2245 CAMINO VIDA ROBLE	105	CARLSBAD	CA	92011	7378	BUSINESS SERVICES NEC	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
GREGORIO'S	300 CARLSBAD VILLAGE DR	208	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
GTR ENTERPRISES, INC.	6352 CORTE DEL ABETO	STEC	CARLSBAD	CA	92011	3469	FABRICATED METAL PARTS	N	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
GUYON WEST	2101 LAS PALMAS DR	C	CARLSBAD	CA	92009	3556	FOOD PRODUCTS MACHINERY	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
HAAGEN DAZS	5620 PASEO DEL NORTE	STE	CARLSBAD	CA	92008	5451	DIARY PRODUCTS STORES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
HABITAT RESTORATION SCIENCES	4901 EL CAMINO REAL	STE D	CARLSBAD	CA	92008	1500	Building Construction-General Building	N	N	N	N	Y	N	Y	Y	Y	Y	Y	904.31	N
HANGAR ONE AVIONICS INC.	2100 PALOMAR AIRPORT RD	STE 211	CARLSBAD	CA	92008	4581	AIRPORTS,FLYING FIELDS & AIRPORT TERMI	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
HANGAR ONE, INC	2100 PALOMAR AIRPORT RD	STE 211	CARLSBAD	CA	92008	4581	AIRPORTS, FLYING FIELDS, AND AIRPORT T	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
HANSON AGGREGATES	3701 HAYMAR DR		CARLSBAD	CA	92010	3273	READY MIX CONCRETE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	Y
HARBOR FISH CAFE	3179 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
HD SUPPLY CONSTRUCTION SUPPLY	6125 PASEO DEL NORTE		CARLSBAD	CA	92011	5211	CONSTRUCTION SUPPLY	Y	N	Y	Y	N	N	Y	N	Y	Y	N	904.4	N
HENDO'S LOCAL	2675 GATEWAY RD	102	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
HENNESSEY'S TAVERN	2777 ROOSEVELT ST		CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
HENRY - FURNITURE MAKER, PAUL	2633 STATE ST		CARLSBAD	CA	92008	7641	REUPHOLSTERY AND FURNITURE REPAIR	N	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
HENSLEY'S FLYING ELEPHANT PUB	850 TAMARACK AV		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
HERTZ RENT A CAR	6030 AVENIDA ENCINAS	E	CARLSBAD	CA	92011	7514	RENTAL CARS	N	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
HICKORY FARMS, INC.	2525 EL CAMINO REAL		CARLSBAD	CA	92008	5499	MISC FOOD STORES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
HOEHN INFINITI	5245 CAR COUNTRY DR		CARLSBAD	CA	92008	5511	NEW AND USED CAR DEALER	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTW Q (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area	Coverage Under Industrial Permit
HOEHN ACURA	5556 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	MOTOR VEHICLE DEALERS (NEW & USED)	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
HOEHN AUDI	5215 CAR COUNTRY DR		CARLSBAD	CA	92008	5511	MOTOR VEHICEL DEALERS (NEW & USED)	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
HOEHN BUICK GMC CADILLAC	5334 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	CAR DEALERSHIP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
HOEHN HONDA	5454 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	MOTOR VEHICLE DEALERS	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
HOEHN HONDA CERTIFIED USED CAR	5566 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	MOTOR VEHICLE DEALERS (NEW & USED)	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
HOEHN MERCEDES-BENZ	5475 CAR COUNTRY DR		CARLSBAD	CA	92008	5511	MOTOR VEHICLE DEALER (NEW& USED)	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
HOEHN PORSCHE	6800 AVENIDA ENCINAS		CARLSBAD	CA	92011	5511	NEW AND USED CAR DEALER	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.51	N
HOOKED ON SUSHI	2508 EL CAMINO REAL	APT A	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
HORTICULTURAL SALES, INC.	1328 MAGNOLIA AV		CARLSBAD	CA	92008	5261	RETAIL NURSERIES, LAWN AND GARDEN SUP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
HOT DOG ON A STICK	2525 EL CAMINO REAL	STE 282	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
HOT DOG ON A STICK	5620 PASEO DEL NORTE	126-C	CARLSBAD	CA	92008	5812	EATING PLACE	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
HST MANUFACTURING	5835 AVENIDA ENCINAS	STE 126	CARLSBAD	CA	92008	5199	NONDURABLE GOODS, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
HUBBS SEA WORLD RESEARCH	4200 GARFIELD ST		CARLSBAD	CA	92008	0921	FISH HATCHERIES AND PRESERVES	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	904.31	N
HUDSON PRINTING	2780 LOKER AV WEST		CARLSBAD	CA	92010	2759	COMMERCIAL PRINTING	Y	N	N	N	N	N	N	N	N	Y	N	904.31	N
HYDRO-CHECK SYSTEMS	5931 SEA LION PL	STE 100	CARLSBAD	CA	92010	3823	PROCESS CONTROL INSTRUMENTS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
HYDROLINX DIVING COMMUNICATION	5933 SEA LION PL	STE 108	CARLSBAD	CA	92010	3669	COMMUNICATIONS EQUIPMENT, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
IGNITE! WOODFIRE BAR & GRILL	6996 EL CAMINO REAL		CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
IN & OUT SMOG CENTER	2590 EL CAMINO REAL		CARLSBAD	CA	92008	7549	AUTOMOTIVE SERVCIES, EXCEPT REPAIR AND	N	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
INDIANA PLUMBING SUPPLY CO	2785 LOKER AV WEST		CARLSBAD	CA	92010	5072	WHOLESALE PLUMBING SUPPLIES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
INDUSTRIAL MAINTENANCE SUPPLY	2105 CAMINO VIDA ROBLE	D	CARLSBAD	CA	92011	5072	HARDWARE	N	N	Y	Y	N	N	Y	N	Y	Y	N	904.4	N
INDUSTRIAL STRENGTH	6115 CORTE DEL CEDRO		CARLSBAD	CA	92011	3599	Jewelry Manufacturing (piercing)	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
IN-N-OUT	5950 AVENIDA ENCINAS		CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
INT SOFTBOARD TECHNOLOGY LLC	1965 KELLOGG AV		CARLSBAD	CA	92008	3949	SURFBOARD MANUFACTURE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
INTERIOR SPECIALISTS INC	1630 FARADAY AV		CARLSBAD	CA	92008	1752	FLOOR LAYING & FLOOR WORK	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.31	N
INTERNATIONAL MERCANTILE	5115 AVENIDA ENCINAS	STE D	CARLSBAD	CA	92008	5531	AUTO AND HOME SUPPLY STORES	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
INTEVAC PHOTONICS INC	5909 SEA LION PL	STE A-B	CARLSBAD	CA	92010	3999	Manufacturing Industries, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
IRIS GROUP (MODERN POSTCARD)	1675 FARADAY AV		CARLSBAD	CA	92008	2752	COMMERCIAL PRINTING, LITHOGRAPHIC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ISAAC'S BAKERY DELI	2051 PALOMAR AIRPORT RD	200	CARLSBAD	CA	92011	5812	RESTAURANT AND CATERING	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
ISIS PHARMACEUTICALS	2282 FARADAY AV		CARLSBAD	CA	92008	2834	COMMERCIAL PHYSICAL AND BIOLOGICAL RES	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	904.31	Y
ISLAND'S FINE BURGERS & DRINKS	889 PALOMAR AIRPORT RD	120	CARLSBAD	CA	92011	5812	EATING AND DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
IT'S A GRIND COFFEE HOUSE	2744 CARLSBAD BL	UNIT 200	CARLSBAD	CA	92008	5812	EATING AND DRINKNIG PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
J BOX	5814 VAN ALLEN WY	STE 135	CARLSBAD	CA	92008	5812	RESTAURANT	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
J. A. BUZA CORP.	5796 ARMADA DR	STE 300	CARLSBAD	CA	92008	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
J.C. PENNY COMPANY	2555 EL CAMINO REAL		CARLSBAD	CA	92008	5311	DEPARTMENT STORE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
JACK IN THE BOX 3006	7050 AVENIDA ENCINAS		CARLSBAD	CA	92011	5812	EATING & DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
JACK IN THE BOX 36	901 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
JAGUAR LAND ROVER CARLSBAD	5550 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	CAR DEALERSHIP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
JAMBA JUICE	300 CARLSBAD VILLAGE DR	STE 201B	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
JAX CUSTOM SURFACES, INC.	7248 PONTO DR		CARLSBAD	CA	92009	3272	CONCRETE PRODUCTS, EXCEPT BLOCK & BRIC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
JAY'S GOURMET PIZZA, SEAFOOD	2975 CARLSBAD BL	B	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
JB GRAPHICS INC	6361 YARROW DR	STE B-C	CARLSBAD	CA	92011	2396	SCREEN PRINTING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
JC BALDWIN CONSTRUCTION COMPAN	2469 IMPALA DR		CARLSBAD	CA	92010	1521	GEN. BUILDING CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
JC DELI & CATERING	2382 CAMINO VIDA ROBLE	STE A	CARLSBAD	CA	92009	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
JCG AUTOMOTIVE, INC.	505 OAK AV	STE B	CARLSBAD	CA	92008	7538	GENERAL AUTOMOTIVE REPAIR SHOPS	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
JENSEN CONSTRUCTION CO	2151 LAS PALMAS DR	STE A	CARLSBAD	CA	92011	1521	GENERAL CONTRACTOR	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	904.4	N
JET METHODS INC	2006 PALOMAR AIRPORT RD	STE 106	CARLSBAD	CA	92008	4522	AIR TRANSPORTATION, NONSCHEDULED	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N

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JET SOURCE INC	2056 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	4581	AIRPORTS, FLYING FIELDS, AND TERMINAL	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
JIFFY LUBE 1621	6021 PASEO DEL NORTE		CARLSBAD	CA	92011	7538	GENERAL AUTOMOTIVE REPAIR SHOPS	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
JIMBO'S NATURAL FOODS	1923 CALLE BARCELONA	149	CARLSBAD	CA	92009	5411	GROCERY STORE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
JOEY'S SMOKIN BBQ	6955 EL CAMINO REAL	107	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
JOHNSONS AUTO BODY	2677 STATE ST		CARLSBAD	CA	92008	7532	AUTOMOTIVE BODY SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
JORDAN & COMPANY	2270 CAMINO VIDA ROBLE	SUITE F	CARLSBAD	CA	92011	3599	INDUS/COMMERCIAL EQUIPMENT, NEC	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
JOSE'S TACO SHOP	5806 VAN ALLEN WY	STE 105	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
JUDY'S DELI	2035 CORTE DEL NOGAL	STE 130	CARLSBAD	CA	92011	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
K & K LABORATORIES INC.	3305 TYLER ST		CARLSBAD	CA	92008	2833	VITAMINS AND SUPPLEMENTS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
K1 SPEED,LLC	6212 CORTE DEL ABETO		CARLSBAD	CA	92011	7999	INDOOR KART RACING	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
KAMAR BUILDERS, INC.	325 CARLSBAD VILLAGE DR	STE C2	CARLSBAD	CA	92008	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
KANINE KARE	1985 OLIVENHAIN RD		CARLSBAD	CA	92009	0752	ANIMAL DAY CARE	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	904.51	N
KARL STRAUSS BREWERY & RESTAUR	5801 ARMADA DR		CARLSBAD	CA	92008	2082	Brewery and restuarant	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
KAUAI BIKINI	6353 EL CAMINO REAL	STE L	CARLSBAD	CA	92009	5137	WOMEN'S CHILDREN'S AND INFANTS' CLOTHI	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
KEN GRODY FORD	5555 PASEO DEL NORTE		CARLSBAD	CA	92009	5511	MOTOR VEHICLE DEALERS (NEW & USED)	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
KENNEDY MASONRY	7040 AVENIDA ENCINAS	STE 204B	CARLSBAD	CA	92011	1741	MASONRY CONTRACTOR	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	904.4	N
KFC/TACO BELL	745 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
KING'S FISH HOUSE	5625 PASEO DEL NORTE		CARLSBAD	CA	92008	5812	EATING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
KI'S KITCHEN	5671 PALMER WY	SUITE B-	CARLSBAD	CA	92008	2099	FOOD PREPARATIONS NOT ELSEWHERE CLASSI	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
KIWI AUDIO VISUAL	1950 KELLOGG AV		CARLSBAD	CA	92008	4225	General Warehousing and Storage	Y	N	Y	Y	N	N	Y	N	Y	Y	N	904.4	N
KNOCKOUT BURGERS	2971 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
KNOCKOUT PIZZERIA	2937 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
KOKO BEACH	2858 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
KVD COMPANY, INC.	2465 IMPALA DR		CARLSBAD	CA	92010	3825	INSTRUMENTS FOR MEASURING ELECTRONICS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
L □ L PRINTERS	6200 YARROW DR		CARLSBAD	CA	92011	2759	COMMERICAL PRINTING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
L. F. INDUSTRIES, INC.	6352 CORTE DEL ABETO	SUITE G	CARLSBAD	CA	92011	3399	PRIMARY METAL PRODUCTS, NEC	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
L3 COMMUNICATIONS PHOTONICS	5928 GEIGER CT		CARLSBAD	CA	92008	3769	SPACE/AUXILIARY EQUIP./PARTS, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
L3 COMMUNICATIONS PHOTONICS	5957 LANDAU CT		CARLSBAD	CA	92008	3769	SPACE/AUXILIARY EQUIP./PARTS, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
LA COSTA COFFEE ROASTING CO	6965 EL CAMINO REAL	STE 208	CARLSBAD	CA	92009	5499	MISCELLANEOUS FOOD STORES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
LA COSTA LIMOUSINE	2770 LOKER AV WEST		CARLSBAD	CA	92010	4119	LOCAL PASSENGER TRANSPORTATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	Y
LA COSTA RESORT AND SPA	2100 COSTA DEL MAR RD		CARLSBAD	CA	92009	7011	GOLF COURSE AND RESORT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
LA COSTA TOWING INC.	3155 TYLER ST		CARLSBAD	CA	92008	7549	TOWING SERVICE	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
LA PLACE DELI	5950 LA PLACE CT	150	CARLSBAD	CA	92008	5812	EATING PLACE	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
LAS OLAS CARLSBAD	2939 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
LE PASSAGE FRENCH BISTRO	2961 STATE ST		CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
LEGENDS AUTO	1060 AUTO CENTER CT	O	CARLSBAD	CA	92008	7538	AUTOMOTIVE REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
LEGOLAND	1 LEGOLAND DR		CARLSBAD	CA	92008	4119	LOCAL PASSENGER TRANSPORTATION, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	Y
LEO CRUZ	2923 ELMWOOD ST		CARLSBAD	CA	92008	0182	FOOD CROPS GROWN UNDER COVER	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	904.21	N
LEONARD SCHOLL INDUSTRIES, INC	5751 PALMER WY	STE A	CARLSBAD	CA	92010	3599	MACHINE SHOP	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
LEUCADIA WASTE WATER DISTRICT	1960 LA COSTA AV		CARLSBAD	CA	92009	4941	WATER SUPPLY	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	904.51	Y
LEXUS CARLSBAD	5434 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	CAR DEALERSHIP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
LEXUS CARLSBAD	5444 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	MOTOR VEHICLE DEALERS (NEW & USED)	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
LIFE TECHNOLOGIES	5781 VAN ALLEN WY		CARLSBAD	CA	92008	2836	BIOLOGICAL PRODS, EXCEPT DIAGNOSTIC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
LIFE TECHNOLOGIES	5791 VAN ALLEN WY		CARLSBAD	CA	92008	2836	BIOLOGICAL PRODUCTS, EXCEPT DIAGNOSTIC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
LIFE TECHNOLOGIES	5823 NEWTON DR		CARLSBAD	CA	92008	2836	Sporting and Recreational Goods and Su	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
LINDA'S FROZEN YOGURT	3001 CARLSBAD BL	STE B	CARLSBAD	CA	92008	5812	EATING PALCES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N

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LITTLE ZEUS GREEK CUISINE	5812 VAN ALLEN WY	STE 125	CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
LLOYD'S AUTO SPECIALTIES	1050 AUTO CENTER CT		CARLSBAD	CA	92008	7549	AUTOMOTIVE SERVICES	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
LOLA'S 7 UP MARKET& DELI	3292 ROOSEVELT ST		CARLSBAD	CA	92008	5411	CONVENIENCE STORE & DELI	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
LORENZO'S PIZZERIA	5812 VAN ALLEN WY	130	CARLSBAD	CA	92008	5812	FOOD ESTABLISHMENT	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
LOS COCHES CLEANERS	3235 CAMINO DE LOS COCHES	105	CARLSBAD	CA	92009	7216	DRY CLEANERS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
LOS PRIMOS MEXICAN FOOD	2708 LOKER AV WEST	STE 102	CARLSBAD	CA	92010	5812	RESTAURANT	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
LOTUS THAI BISTRO	3050 PIO PICO DR		CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
LUNA GRILL	2681 GATEWAY RD	101	CARLSBAD	CA	92009	5812	RESTAURANT	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
LUXTERA INC.	2320 CAMINO VIDA ROBLE	STE 100	CARLSBAD	CA	92011	3674	SEMICONDUCTORS AND RELATED DEVICES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
MACHINE VISION PRODUCTS	5940 DARWIN CT		CARLSBAD	CA	92008	3629	ELECTRICAL INDUSTRIAL APPARTUS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
MACHINETEK	1985 PALOMAR OAKS WY		CARLSBAD	CA	92011	3728	AIRCRAFT PARTS/AUXILIARY EQUIPMENT, NE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
MACK PRECISION	2680 STATE ST		CARLSBAD	CA	92008	3599	INDUS/COMMERCIAL EQUIPMENT NEC	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.21	N
MACY'S (MENS/HOME)	2557 EL CAMINO REAL		CARLSBAD	CA	92008	5311	Department Store	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
MACY'S DEPARTMENT STORE	2559 EL CAMINO REAL		CARLSBAD	CA	92008	5311	DEPARTMENT STORE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
MAGELLAN AVIATION	2006 PALOMAR AIRPORT RD	STE J	CARLSBAD	CA	92008	4522	AIR TRANSPORTATION	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
MANCAVE	5845 AVENIDA ENCINAS	138	CARLSBAD	CA	92008	7389	BUSINESS SERVICES NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
MARDX DIAGNOSTICS	5919 FARNSWORTH CT		CARLSBAD	CA	92008	2835	MANUFACTURER OF IN VITRO DIAGNOSTIC KI	N	N	N	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
MAS FINA CANTINA	2780 STATE ST		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
MATT MILLIN MACHINING	2270 CAMINO VIDA ROBLE	STE F	CARLSBAD	CA	92011	3499	FABRICATED METAL PRODUCTS	N	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
MC3 CONSTRUCTION CONSULTING	2055 CORTE DEL NOGAL		CARLSBAD	CA	92011	1500	BUILDING CONSTRUCTION - GENERAL BUILDI	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
MCCLELLAN-PALOMAR AIRPORT	2198 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	4581	AIRPORTS, FLYING FIELDS, AND TERMINAL	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	904.4	Y
MCDONALDS OF PALOMAR AIRPORT	5990 AVENIDA ENCINAS		CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
MCDONALDS PLAZA CAMINO REAL	2525 EL CAMINO REAL	STE 150	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
MCMURPHY DEVELOPMENTS	630 GRAND AV	I	CARLSBAD	CA	92008	6531	REAL ESTATE AGENTS AND MANAGERS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
MEADOWLARK WATER RECLAMATION	7941 CORINTIA ST		CARLSBAD	CA	92009	4952	SEWERAGE SYSTEMS	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	904.51	Y
MEDITERRANEAN CAFE	300 CARLSBAD VILLAGE DR	STE 106	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
MEDTRONIC ABLATION FRONTIERS L	2210 FARADAY AV	STE 100	CARLSBAD	CA	92008	3845	ELECTROMEDICAL/ELECTROTHERAPEUTIC APPA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
MELLACE FAMILY BRANDS CALIFORN	6195 EL CAMINO REAL		CARLSBAD	CA	92009	2099	CANDY COATED NUTS MAKERS/DISTRIBUTERS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
MENCHIES FROZEN YOGURT	5617 PASEO DEL NORTE		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
MERCOTAC	6195 CORTE DEL CEDRO	100	CARLSBAD	CA	92011	3643	WIRING DEVICES	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
MEXICO VIEJO	2508 EL CAMINO REAL	D	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
MEXICO VIEJO	3235 CAMINO DE LOS COCHES	100	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
MEXICO VIEJO	6986 EL CAMINO REAL	STE B	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
MICRO-PROBE INC.	2281 LAS PALMAS DR		CARLSBAD	CA	92011	3825	INSTRUMENTS FOR MEASURING/TESTING ELEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
MIKKO JAPANESE CUISINE	1025 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
MILES PACIFIC NURSERY	1833 BUENA VISTA WY		CARLSBAD	CA	92008	0181	ORNAMENTAL FLORICULTURE AND NURSERY PR	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	904.21	N
MILES PACIFIC NURSERY	2375 PIO PICO DR		CARLSBAD	CA	92008	0181	ORNAMENTAL FLORICULTURE AND NURSERY PR	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	904.21	N
MINUTEMAN PRESS	6353 EL CAMINO REAL	H	CARLSBAD	CA	92009	2752	COMMERCIAL PRINTING, LITHOGRAPY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
MISSION ELECTRIC SUPPLY, INC.	2225 CAMINO VIDA ROBLE		CARLSBAD	CA	92011	5063	WHOLESALE TRADE OF ELEC. APPARATUS & E	Y	N	Y	Y	N	N	Y	N	Y	Y	N	904.4	N
MONAGHAN CONSTRUCTION CO	3125 TIGER RUN CT	STE 105-	CARLSBAD	CA	92010	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
MR. PEABODY'S	300 CARLSBAD VILLAGE DR	202	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
MRS. FIELDS COOKIES	2525 EL CAMINO REAL	STE 254	CARLSBAD	CA	92008	5461	RETAIL BAKERIES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
MULLEN CONSTRUCTION	2890 PIO PICO DR	202	CARLSBAD	CA	92008	1521	HOUSE BUILDER	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.21	N
MVTS TECHNOLOGIES	1940 CAMINO VIDA ROBLE		CARLSBAD	CA	92008	3825	INSTRUMENTS FOR MEASURING/TESTING ELEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
MYRON L. COMPANY	2450 IMPALA DR		CARLSBAD	CA	92010	3829	MEASURING/CONTROLLING WATER DEVICES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
NAKED CAFE	300 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N

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Industrial Commercial Inventory (Fixed)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTW Q (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area	Coverage Under Industrial Permit
NATEL ENGINEERING CO, INC.	6350 PALOMAR OAKS CT		CARLSBAD	CA	92011	3559	SPECIAL INDUSTRY MACHINERY, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
NATUREMAKER	6225 EL CAMINO REAL		CARLSBAD	CA	92009	1500	GENERAL MANAUFACTURING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
NATURE'S SUPPLEMENTS	2270 CAMINO VIDA ROBLE	Q	CARLSBAD	CA	92011	2833	VITAMIN SUPPLEMENT MANUFACTURING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
NEW WORLD RESTAURANT / CAFE	2559 EL CAMINO REAL		CARLSBAD	CA	92008	5812	EATING & DRINKING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
NEW YORK PIZZERIA	3067 ROOSEVELT ST		CARLSBAD	CA	92008	5812	EATING & DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
NEWMAN REPLACEMENT WINDOWS	6110 YARROW DR		CARLSBAD	CA	92011	1751	WINDOW & DOOR INSTALLATION	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	904.4	N
NEWPORT WHOLESALE FLORAL	6211 YARROW DR	F	CARLSBAD	CA	92009	0182	FOOD CROPS GROWN UNDER COVER	Y	Y	N	N	N	N	Y	Y	Y	Y	N	904.4	N
NEXCYCLE	985 TAMARACK AV		CARLSBAD	CA	92008	8999	SERVICES NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
NICK BOWMAN CONSTRUCTION INC	2121 PALOMAR AIRPORT RD	STE 205	CARLSBAD	CA	92011	1521	BUILDING CONSTRUCTION-GENERAL BUILDING	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
NORMAN CONSTRUCTION	855 GRAND AV		CARLSBAD	CA	92008	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
NORTE INC.	3003 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING & DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
NORTH COAST AUTO GLASS	2725 STATE ST		CARLSBAD	CA	92008	7536	AUTOMOTIVE GLASS REPLACEMENT SHOPS	N	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
NORTH COASTAL - PALOMAR	2198 PALOMAR AIRPORT RD	SUITE D	CARLSBAD	CA	92008	4953	REFUSE SYSTEMS	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	Y
NORTH COUNTY PLAZA	1810 MARRON RD		CARLSBAD	CA	92008	6552	OPERATORS OF NON-RESIDENTIAL PROPERTIE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
NOVEN PHARMACEUTICALS, INC.	2732 LOKER AV WEST		CARLSBAD	CA	92010	2834	Pharmaceutical Manufacturing	N	N	N	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
NOZOMI 4	3050 PIO PICO DR	STE A	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
NRG CABRILLO POWER OPERATIONS	4600 CARLSBAD BL		CARLSBAD	CA	92008	4911	ELECTRIC SERVICES	Y	N	N	N	N	N	N	N	N	Y	N	904.31	Y
OASIS NURSERY & LANDSCAPING IN	4901 EL CAMINO REAL	G	CARLSBAD	CA	92008	5193	FLOWERS & NURSERY STOCK	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	904.31	N
OCEAN HOUSE	300 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING AND DRINKNIG PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
OCEANSIDE GLASSTILE COMPANY	2293 COSMOS CT		CARLSBAD	CA	92011	3231	GLASS PRODUCTS MADE OF PURCHASED GLASS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
OLIVENHAIN MUNICIPAL WATER DIS	1966 OLIVENHAIN RD		CARLSBAD	CA	92009	4941	WATER SYSTEMS	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	904.51	N
ON A ROLL	2794 LOKER AV WEST	STE 110	CARLSBAD	CA	92010	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
ON-THE-TRACKS-BREWERY LLC	5674 EL CAMINO REAL	STE G	CARLSBAD	CA	92008	2082	MALT BEVERAGES	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ORTEGA'S CANVAS	6102 AVENIDA ENCINAS	STE A	CARLSBAD	CA	92011	2394	SAIL REPAIR, MFG METAL AWNINGS,COVERS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
ORTHO ORGANIZERS INC.	1822 ASTON AV		CARLSBAD	CA	92008	3843	Manufacturer of Dental equipment.	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
OSTENDO TECHNOLOGIES, INC	6231 YARROW DR		CARLSBAD	CA	92009	3674	SEMICONDUCTORS AND RELATED DEVICES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
O'SULLIVAN'S IRISH PUB	640 GRAND AV		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
OUTSOURCE MANUFACTURING	1600 FARADAY AV		CARLSBAD	CA	92008	3699	Conract Manufacturing, Electrical	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
OVERSEAS CHINESE RESTAURANT	2820 ROOSEVELT ST		CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
P F CHANG'S	5621 PASEO DEL NORTE		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
PACIFIC CNC MACHINE CO, INC.	2702 GATEWAY RD		CARLSBAD	CA	92009	3599	INDUSTRIAL/COMMERCIAL MACHINERY	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.51	N
PACIFIC COAST PRINTING	3021 STATE ST		CARLSBAD	CA	92008	2759	COMMERCIAL PRINTING SHOP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
PACIFIC COMMERCIAL CONSTRUCTIO	2262 RUTHERFORD RD	103	CARLSBAD	CA	92008	1521	MANAGEMENT SERVICES	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.31	N
PACIFIC VIEW BUILDERS	300 CARLSBAD VILLAGE DR	STE 177	CARLSBAD	CA	92008	1500	BUILDING CONSTRUCTION-GENERAL BUILDING	N	N	Y	N	Y	N	N	N	Y	Y	Y	904.21	N
PACIFIC VIEW BUILDERS	300 CARLSBAD VILLAGE DR	STE 177	CARLSBAD	CA	92008	15	BUILDING CONSTRUCTION - GEN CONTRACTOR	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
PACIFICA FLOWERS INC.	1785 CHESTNUT AV		CARLSBAD	CA	92008	0181	Ornamental Floriculture and Nursery Pr	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	904.31	N
PACIFICA FLOWERS INC.	2928 VALLEY ST		CARLSBAD	CA	92008	0181	ORNAMENTAL FLORICULTURE	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	904.21	N
PALOMAR AIRPORT ARCO	1991 PALOMAR AIRPORT RD		CARLSBAD	CA	92011	5541	GAS STATION AND CONVENIENCE STORE	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
PALOMAR AUTOMOTIVE	665 PALOMAR AIRPORT RD		CARLSBAD	CA	92011	7538	General Automotive Repair Shop	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
PALOMAR CLEANERS	2221 LAS PALMAS DR	F	CARLSBAD	CA	92011	7216	DRYCLEANING PLANT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
PALOMAR DELI	6150 YARROW DR	STE C	CARLSBAD	CA	92011	5812	EATING & DRINKING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
PALOMAR DISPLAY PRODUCTS	1945 KELLOGG AV		CARLSBAD	CA	92008	3699	Elec. Mach./Equip./Supplies, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
PALOMAR HAND CAR WASH & DETAIL	6019 PASEO DEL NORTE		CARLSBAD	CA	92011	7542	CARWASHES	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
PALOMAR MOBIL	899 PALOMAR AIRPORT RD		CARLSBAD	CA	92011	5541	GASOLINE SERVICE STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
PALOMAR REPROGRAPHICS INC	3282 GREY HAWK CT		CARLSBAD	CA	92010	2759	COMMERCIAL PRINTING, NEC	N	N	N	N	N	N	N	N	N	Y	N	904.31	N
PALOMAR SIGN COMPANY	5205 AVENIDA ENCINAS	STE G	CARLSBAD	CA	92009	3993	Making Signs	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N

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PALOMAR TECHNOLOGIES INC.	2728 LOKER AV WEST		CARLSBAD	CA	92010	3674	MANUFACTURER	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
PALOMAR TRANSFER STATION INC.	5960 EL CAMINO REAL		CARLSBAD	CA	92008	4953	REFUSE SYSTEMS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	Y
PALOMAR TRANSPORTATION	800 GRAND AV	108A-156	CARLSBAD	CA	92008	4119	LOCAL PASSENGER TRANSPORTATION	N	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.21	N
PANDA EXPRESS 393	2560 EL CAMINO REAL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
PANDA EXPRESS 635	6951 EL CAMINO REAL		CARLSBAD	CA	92009	5812	EATING AND DRINKIN PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
PANDA EXPRESS 729	5630 PASEO DEL NORTE	141	CARLSBAD	CA	92008	5812	RESTAURANT	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
PANERA BREAD	1935 CALLE BARCELONA		CARLSBAD	CA	92009	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
PAON RESTAURANT & WINE BAR	560 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
PARK HYATT AVIARA	7100 FOUR SEASONS PT		CARLSBAD	CA	92011	7011	HOTEL AND GOLF CLUB	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
PEAK SERVO CORPORATION	5931 SEA LION PL	SUITE E	CARLSBAD	CA	92010	3629	ELECTRIAL INDUSTRIAL APPARATUS, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
PEET'S COFFEE AND TEA	2641 GATEWAY RD	103	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
PEKING GARDEN	6990 EL CAMINO REAL	K	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
PELLY'S FISH MARKET	7110 AVENIDA ENCINAS	101	CARLSBAD	CA	92011	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
PETROCHEM MANUFACTURING, INC.	5205 AVENIDA ENCINAS	STE K	CARLSBAD	CA	92009	5032	BRICK, STONE AND RELATED CONSTRUCTION	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
PHOTO MEDEX, INC.	2375 CAMINO VIDA ROBLE	STE B	CARLSBAD	CA	92011	3845	ELECTROMEDICAL DEVICES	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
PICK UP STIX	7750 RANCHO SANTA FE RD	STE A1	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
PICK UP STIX 7224	7150 AVENIDA ENCINAS	STE 102	CARLSBAD	CA	92011	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
PICKLES CAFE & DELI INC	5670 EL CAMINO REAL	STE H	CARLSBAD	CA	92008	5812	FOOD ESTABLISHMENT AND CATERING SERVIC	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
PIZZA HUT	2588 EL CAMINO REAL	STE B	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
PIZZA PORT BREWING CO.	561 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	2082	BREWERY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
PIZZA PORT CARLSBAD BREWERY	571 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
PIZZA SHUTTLE & SUBS	959 TAMARACK AV		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
PLANTPLAY	4915 EL CAMINO REAL		CARLSBAD	CA	92008	5261	PLANT NURSERY	Y	N	N	N	Y	N	Y	Y	Y	Y	Y	904.31	N
PLASTIC ENG & DEVELOPMENT	2731 LOKER AV WEST		CARLSBAD	CA	92010	3089	PLASTIC PRODUCTS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
PLAZA CAMINO REAL, L.P.	2525 EL CAMINO REAL	100	CARLSBAD	CA	92008	6512	NON-RESIDENTIAL PROP. MGMNT	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
PLAZA PASEO REAL	6941 EL CAMINO REAL		CARLSBAD	CA	92009	6512	OPERATORS OF NON-RESIDENTIAL BUILDINGS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
PLAZA REAL CLEANERS	6949 EL CAMINO REAL	108	CARLSBAD	CA	92009	7216	LAUNDRY & DRYCLEANER AGENTS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
PLAZA SOUTH CLEANERS	2620 EL CAMINO REAL	STE B	CARLSBAD	CA	92008	7216	LAUNDRY & DRY CLEANING	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
PODS OF SAN DIEGO, LLA	2858 LOKER AV EAST	STE 200	CARLSBAD	CA	92010	4225	GENERAL WAREHOUSING AND STORAGE	N	N	N	N	N	N	N	N	N	Y	N	904.31	N
POINSETTA PLAZA	7040 AVENIDA ENCINAS	100	CARLSBAD	CA	92011	6512	OPERATORS OF NONRESIDENTIAL BUILDINGS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
POINSETTIA VILLAGE CHEVRON	7170 AVENIDA ENCINAS		CARLSBAD	CA	92011	5541	GASOLINE SERVICE STATIONS	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.51	N
POLLOS MARIA	3055 HARDING ST		CARLSBAD	CA	92008	5812	EATING DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
PONTO STORAGE INC	7290 PONTO DR		CARLSBAD	CA	92011	4225	GENERAL WAREHOUSING & STORAGE	N	N	Y	Y	N	N	Y	N	Y	Y	Y	904.51	N
POWER ONE INC.	5999 AVENIDA ENCINAS	STE 100	CARLSBAD	CA	92008	3629	ELECTRICAL INDUSTRIAL APPARATUS	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
PREMIER JET	2100 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	4581	Airports, Flying Fields, and Airport T	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
PREMIERE CLEANERS	2669 GATEWAY RD	101	CARLSBAD	CA	92009	7216	DRYCLEANING PLANTS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
PRIMO PIZZA & PASTA	7110 AVENIDA ENCINAS	103	CARLSBAD	CA	92011	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
PRODUCT SLINGSHOT, INC.	2221 RUTHERFORD RD		CARLSBAD	CA	92008	3999	GENERAL MANUFACTURING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
PRONTOS GOURMET MARKET	2812 ROOSEVELT ST		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
PROVISION HEALTH CORP	2270 CAMINO VIDA ROBLE	P	CARLSBAD	CA	92011	5149	Groceries And Related Products, NEC	Y	N	Y	Y	N	N	Y	N	Y	Y	N	904.4	N
PUBLIC STORAGE	3235 TYLER ST		CARLSBAD	CA	92008	4225	GENERAL WAREHOUSING AND STORAGE	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
PUBLIC STORAGE	6211 CORTE DEL ABETO		CARLSBAD	CA	92011	4225	GENERAL STORAGE & WAREHOUSING	N	N	Y	Y	N	N	Y	N	Y	Y	N	904.4	N
QUALIGEN, INC	2042 CORTE DEL NOGAL	A	CARLSBAD	CA	92011	3841	SURGICAL AND MEDICAL INSTRUMENTS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
QUALITY AIRCRAFT CARE	2056 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	372	Aircraft And Parts	N	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
QUALITY INN & SUITES	751 RAINTREE DR		CARLSBAD	CA	92011	7011	MOTEL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
R Q CONSTRUTION INC	3194 LIONSHEAD AV		CARLSBAD	CA	92010	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTW Q (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area	Coverage Under Industrial Permit
RA MEDICAL SYSTEMS, INC	2270 CAMINO VIDA ROBLE	STE L	CARLSBAD	CA	92011	3845	ELECTROMEDICAL/ELECTROTHERAPEUTIC APP	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	904.4	N
RALPHS GROCERY CO, STORE 175	7140 AVENIDA ENCINAS		CARLSBAD	CA	92011	5411	GROCERY STORE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
RAMADA INN & SUITES	751 MACADAMIA DR		CARLSBAD	CA	92011	7011	HOTELS AND MOTELS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
RANCHO CARLSBAD GOLF COURSE	5200 EL CAMINO REAL		CARLSBAD	CA	92008	7999	PUBLIC GOLF COURSES	Y	N	N	N	Y	N	Y	Y	Y	Y	Y	904.31	N
RANCHO DEL ORO TOWING	6050 AVENIDA ENCINAS		CARLSBAD	CA	92011	7549	AUTOMOTIVE SERVICES	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
REALEYES ART	5661 PALMER WY	SUITE C	CARLSBAD	CA	92008	2261	FINISHERS OF BROADWOVEN FABRICS OF COT	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
RECONSTRUCTION EXPERTS, INC.	2385 CAMINO VIDA ROBLE	STE 102	CARLSBAD	CA	92011	1522	GENERAL CONTRACTOR	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
REEF, A DIVISION OF VF OUTDOOR	5935 DARWIN CT		CARLSBAD	CA	92008	3140	FOOTWEAR, EXCEPT RUBBER, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
REFLEX CORPORATION	1825 ASTON AV		CARLSBAD	CA	92008	3199	LEATHER GOODS - MANUFACTURING	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
RELM WINE& BEER BISTRO	2917 STATE ST		CARLSBAD	CA	92008	5813	DRINKING ESTABLISHMENT	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
RESPIRONICS (PHILIPS HEALTHCAR	2271 COSMOS CT		CARLSBAD	CA	92009	3842	ORTHOPEDIC, PROSTHETIC,&SURGICAL APPLI	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
REY RIVER FARMS	CANNON RD AND RR TRACKS		CARLSBAD	CA	92008	0182	Vegetable Grower	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	904.31	N
RICE KING	5808 VAN ALLEN WY	STE 115	CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
RIEKER MACHINE INC.	2796 LOKER AV WEST	STE 108	CARLSBAD	CA	92010	3599	Machine Shop	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
RIGAKU AUTOMATION, INC.	5999 AVENIDA ENCINAS	STE 150	CARLSBAD	CA	92008	3845	ELECTROMEDICAL APPARATUS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
RITE AID STORE 5622	7100 AVENIDA ENCINAS	C	CARLSBAD	CA	92011	5912	DRUG STORE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
RITE AIDE 5621	955 TAMARACK AV		CARLSBAD	CA	92008	5912	DRUG AND PROPRIETARY STORE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ROBOTIS BROTHERS CONSTRUCTION	325 CARLSBAD VILLAGE DR	C2	CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTORS	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.21	N
ROCK & ROLL SUSHI	7720 EL CAMINO REAL	B	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
ROCK N ROLL TUMBLED STONE	6084 CORTE DEL CEDRO	STE 105	CARLSBAD	CA	92011	3281	CUT STONE AND STONE PRODUCTS	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	904.4	N
ROCKEY MURATA LANDSCAPING, INC	6241 YARROW DR	STE E	CARLSBAD	CA	92009	1500	Building Construction-General Building	N	N	N	N	Y	N	Y	Y	Y	Y	N	904.4	N
ROCKWELL COLLINS OPTRONICS	2752 LOKER AV WEST		CARLSBAD	CA	92010	3827	OPTICAL INSTRMENTS AND LENSES	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
RUBIO'S BAJA GRILL	2604 EL CAMINO REAL	STE A	CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
RUBIO'S FRESH MEXICAN GRILL 1	5620 PASEO DEL NORTE	STE 128	CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
RUBIO'S RESTAURANTS, INC	2675 GATEWAY RD	104	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
RUBY'S DINER, CARLSBAD	5630 PASEO DEL NORTE	128D	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
RUDVALIS ORCHIDS	6595 BLACK RAIL RD		CARLSBAD	CA	92011	0182	WHOLESALE OF CUT FLOWERS	Y	Y	N	N	N	N	Y	Y	Y	Y	Y	904.51	N
RUDY'S TACO SHOP	7662 EL CAMINO REAL	102	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
RUTHERFORD CAFE	2262 RUTHERFORD RD	102	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
S & R TOWING	3199 TYLER ST		CARLSBAD	CA	92008	7549	AUTOMOTIVE SERVICES	N	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
S.D. INTL. FLORAL TRADE CENTER	5600 AVENIDA ENCINAS	STE 126	CARLSBAD	CA	92008	6531	FLOWERS, NURSERY STOCK, AND SUPPLIES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SABRE SCIENCES	2233 FARADAY AV	K	CARLSBAD	CA	92008	2844	COSMETIC MANUFACTURING, RESEARCH	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SAFC PHARMA	6211 EL CAMINO REAL	STE 200	CARLSBAD	CA	92009	2836	Biological Products	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
SAFC PHARMA	6219 EL CAMINO REAL		CARLSBAD	CA	92009	2836	Biological Products	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
SAFELITE AUTO GLASS 6228	1060 AUTO CENTER CT	I	CARLSBAD	CA	92008	7536	WINDSHIELD REPLACEMENT SHOP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SAMMY'S WOODFIRED PIZZA	5970 AVENIDA ENCINAS		CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
SAN DIEGO GAS AND ELECTRIC	5016 CARLSBAD BL		CARLSBAD	CA	92008	4932	GAS & ELECTRIC SERVICES	Y	N	N	N	N	N	N	N	N	Y	N	904.31	N
SAN DIEGO N. C. FOIL & EMBOSS	6353 EL CAMINO REAL		CARLSBAD	CA	92009	7389	DIE CUTTING FOIL STAMPING& EMBOSSING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
SAN DIEGO SIGN COMPANY, INC	3201 LIONSHEAD AV		CARLSBAD	CA	92010	2759	INTERNET BASED SIGN BUSINESS	N	N	N	N	N	N	N	N	N	Y	N	904.31	N
SAN SAI JAPANESE RESTAURANT	5600 PASEO DEL NORTE	STE 115A	CARLSBAD	CA	92008	5812	RESTAURANT	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
SANTOS RESEARCH LABORATORIES	2453 IMPALA DR		CARLSBAD	CA	92010	2834	PHARMACEUTICAL PREPARATIONS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SCHMUCKLE PAINTING INC	6084 CORTE DEL CEDRO	STE 100	CARLSBAD	CA	92011	1721	PAINTING AND PAPER HANDING	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	904.4	N
SCHROEDER CONSTRUCTION & DEV	2691 STATE ST		CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.21	N
SCHUBACH AVIATION	2100 PALOMAR AIRPORT RD	STE 211	CARLSBAD	CA	92008	4522	AIR TRANSPORTATION, NONSCHEDULED	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
SCIENCELL RESEARCH LABORATORIE	6076 CORTE DEL CEDRO		CARLSBAD	CA	92011	2836	BIOLOGICAL PRODUCTS, EXCEPT DIAGNOSTIC	N	N	N	Y	Y	Y	Y	N	Y	Y	N	904.4	N
SCRIPPS AVIATION	2150 PALOMAR AIRPORT RD	STE 202	CARLSBAD	CA		4522	AIR TRANSPORTATION NONSCHEDULED	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTW Q (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area	Coverage Under Industrial Permit
SEA COUNTRY HOMES	2451 IMPALA DR	STE A	CARLSBAD	CA	92010	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SEARS ROEBUCK & COMPANY	2561 EL CAMINO REAL		CARLSBAD	CA	92008	5311	RETAIL STORE WITH AUTOMOTIVE	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
SECURE WIRELESS	5817 DRYDEN PL	SUITE	CARLSBAD	CA	92008	3669	COMMUNICATIONS EQUIPMENT, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
SELECT CABINETS AND FURNITURE	2270 CAMINO VIDA ROBLE	T	CARLSBAD	CA	92011	2511	WOOD HOUSEHOLD FURNITURE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
SELECT SUPPLEMENTS INC	5800 NEWTON DR		CARLSBAD	CA	92008	2023	DRY, CONDENSED AND EVAPORATED PRODUCTS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SENDX MEDICAL, INC.	1945 PALOMAR OAKS WY		CARLSBAD	CA	92011	3841	Surgical and Medical Appartus	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
SENOR GRUBBY'S	377 CARLSBAD VILLAGE DR		CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SERO CARLSBAD (ISLAND□ CARLSBAD	5814 VAN ALLEN WY	208	CARLSBAD	CA	92008	6512	OPERATORS OF NONRESIDENTIAL BUILDINGS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SGCA INC	6150 CORTE DEL CEDRO		CARLSBAD	CA	92011	2389	APPAREL AND ACCESSORIES, NEC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
SHAPELL LAND CO	5056 EL CAMINO REAL	700	CARLSBAD	CA		0181	Crop Production	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SHAW'S AUTOSPORT LTD.	2531 STATE ST	STE E	CARLSBAD	CA	92008	7532	AUTO BODY REPAIR & PAINT SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.21	N
SHELL (PALOMAR AIRPORT)	665 PALOMAR AIRPORT RD		CARLSBAD	CA	92011	5541	GASOLINE STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
SHERATON CARLSBAD RESORT & SPA	5480 GRAND PACIFIC DR	200	CARLSBAD	CA	92008	7011	Hotels	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SIERRA WIRELESS	2200 FARADAY AV	STE 150	CARLSBAD	CA	92008	8731	RESEARCH & DEVELOPMENT WIRELESS MODULE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SIGN ME UP	2225 FARADAY AV	STE E	CARLSBAD	CA	92008	2759	LARGE FORMAT PRINTING SEALED INC CART.	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SIGNS ON TIME	5670 EL CAMINO REAL	STE K	CARLSBAD	CA	92008	3993	SIGN MAKING & PAINTING	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SIMA - VILLAGE FAIRE, LLC	300 CARLSBAD VILLAGE DR	STE 108	CARLSBAD	CA	92008	6512	OPERATORS OF NONRESIDENTIAL BUILDINGS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
SOIL RETENTION SYSTEMS INC	2501 STATE ST		CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTORS	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.21	N
SOUPLANTATION	1860 MARRON RD		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SOUPLANTATION EXPRESS	2681 GATEWAY RD	103	CARLSBAD	CA	92009	5812	EATING & DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
SP WHITE CONSTRUCTION, INC	2540 GATEWAY RD		CARLSBAD	CA	92009	1521	GENERAL BUILDING CONTRACTORS	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.51	N
SPEARS CONSTRUCTION	6005 HIDDEN VALLEY RD	STE 260	CARLSBAD	CA	92011	1500	Building Construction-General Building	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SPECTRUM ASSEMBLY INC	6300 YARROW DR	100	CARLSBAD	CA	92011	3699	Elec. Mach./Equip./Supplies, Not Elsew	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
SPECTRUM POOL AND CONSTRUCTION	5751 PALMER WY	STE G-1	CARLSBAD	CA	92010	1500	Building Construction-General Building	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.31	N
SPIRITO'S ITALIAN DINER	2508 EL CAMINO REAL	E	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SPROUTS FARMERS MARKET	2618 EL CAMINO REAL		CARLSBAD	CA	92008	5411	GROCERY STORES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SPROUTS FARMERS MARKET	3243 CAMINO DE LOS COCHES		CARLSBAD	CA	92009	5411	GROCERY STORE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
ST. J INC / JJ'S DINING 6	6155 EL CAMINO REAL		CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
STAINED GLASS OVERLAY	2579 STATE ST		CARLSBAD	CA	92008	3231	GLASS PRODUCTS MADE FROM PURCHASED GL	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.21	N
STANDARD FILTER CORPORATION	5928 BALFOUR CT		CARLSBAD	CA	92008	3564	PURIFICATION & DUST COLLECT EQUIPMENT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
STAPLES THE OFFICE SUPPLY STOR	2712 LOKER AV WEST		CARLSBAD	CA	92010	5943	OFFICE SUPPLY STORE	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
STARBUCKS 5767	7680 EL CAMINO REAL	101	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
STARBUCKS COFFEE 10180	7130 AVENIDA ENCINAS		CARLSBAD	CA	92011	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
STARBUCKS COFFEE 10851	2708 LOKER AV WEST	STE 100	CARLSBAD	CA	92010	5812	EATING AND DRINKING ESTABLISHMENT	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
STARBUCKS COFFEE 5363	2924 CARLSBAD BL		CARLSBAD	CA	92008	5812	COFFEE SHOP	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
STARBUCKS COFFEE 5454	5620 PASEO DEL NORTE	STE 124	CARLSBAD	CA	92008	5812	EATING & DRINKING PLACE	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
STATER BROS. MARKET 186	2687 GATEWAY RD		CARLSBAD	CA	92009	5411	Grocery Store	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
STEROGENE BIOSEPARATIONS, INC.	5922 FARNSWORTH CT	STE 101	CARLSBAD	CA	92008	2836	BIOLOGICAL RESEARCH	N	N	N	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
STEVE'S SCREEN CO.	2700 STATE ST		CARLSBAD	CA	92008	3442	METAL DOORS, SASH, FRAMES, MOLDING,TRI	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
SUBMARINA CARLSBAD	300 CARLSBAD VILLAGE DR	STE 201A	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SUBMARINA CARLSBAD F	5812 VAN ALLEN WY	120	CARLSBAD	CA	92008	5812	EATING PLACE	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
SUBWAY	2525 EL CAMINO REAL		CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SUBWAY	2540 EL CAMINO REAL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SUBWAY	2708 LOKER AV WEST	STE 101	CARLSBAD	CA	92010	5812	EATING AND DRINKING ESTABLISHMENT	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
SUBWAY	6994 EL CAMINO REAL	100	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
SUBWAY	7110 AVENIDA ENCINAS	100	CARLSBAD	CA	92011	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTW Q (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area	Coverage Under Industrial Permit
SUBWAY 4584	6020 PASEO DEL NORTE	A	CARLSBAD	CA	92011	5812	RESTAURANT	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
SUBWAY 50857	5620 PASEO DEL NORTE	127C	CARLSBAD	CA	92008	5812	RESTAURANT	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
SUN FLOUR BAGEL	6955 EL CAMINO REAL	STE 105	CARLSBAD	CA	92009	5461	RETAIL BAKERIES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
SUNNY FRESH CLEANERS	7040 AVENIDA ENCINAS	112	CARLSBAD	CA	92011	7216	DRY CLEANING AGENTS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
SUPER CAFE	1854 MARRON RD	STE 104	CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SUPER DONUTS	590 GRAND AV		CARLSBAD	CA	92008	5461	RETAIL BAKERIES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SUPERIOR RESTORATION	3135 ROOSEVELT ST		CARLSBAD	CA	92008	1799	EMERGENCY WATER DAMAGE SERVICE	N	Y	N	N	N	N	Y	Y	Y	Y	Y	904.31	N
SURF BROTHERS TERIYAKI	2708 LOKER AV WEST	STE 103	CARLSBAD	CA	92010	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
SURF CITY SQUEEZE	2525 EL CAMINO REAL	STE 9018	CARLSBAD	CA	92008	5812	NON-RESIDENTIAL PROP. MGMNT	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SUSHI TAISHO	300 CARLSBAD VILLAGE DR	101	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SWAMI'S CAFE	2780 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SWIRLICIOUS YOGURT	2992 STATE ST		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
SYNERGEYES INC	2236 RUTHERFORD RD	STE 103-	CARLSBAD	CA	92008	3851	CONTACT LENSE MANUFACTURING	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SYNERGIES, INC.	2232 RUTHERFORD RD		CARLSBAD	CA	92008	3851	Contact lense manufacturing	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SYNTRON BIORESEARCH, INC	2774 LOKER AV WEST		CARLSBAD	CA	92010	2835	IN VTRO AND IN VITRO DIAGNOSTICS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
SYSTEMS, MACHINES, AUTOMATION	1695 FARADAY AV		CARLSBAD	CA	92008	3599	INDUSTRIAL & COMMERCIAL MACHINERY	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
SYSTEMS, MACHINES, AUTOMATION	5807 VAN ALLEN WY		CARLSBAD	CA	92008	3599	INDUSTRIAL & COMMERCIAL MACHINERY	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
TACO BELL/JODIKA ENT. INC.	6017 PASEO DEL NORTE		CARLSBAD	CA	92011	5812	EATING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
TACUPETO CHIPS & SALSA	5600 AVENIDA ENCINAS		CARLSBAD	CA	92008	2096	POTATO CHIPS, CORN SHIPS AND SIMILAR S	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
TAMARACK BEACH RESORT	3200 CARLSBAD BL		CARLSBAD	CA	92008	7011	HOTELS AND MOTELS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
TAPPER DEVELOPMENT	2551 STATE ST	225	CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.21	N
TAYLOR MADE GOLF	2153 SALK AV		CARLSBAD	CA	92008	7999	AMUSEMENT AND RECREATION SERVICES	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
TAYLOR MADE GOLF	5545 FERMI CT		CARLSBAD	CA	92008	3949	SPORTS AND ATHELIC GOODS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
TCQ HEALTH FOOD, INC	2525 EL CAMINO REAL	STE 101A	CARLSBAD	CA	92008	5812	EATING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
TGI FRIDAY'S	850 PALOMAR AIRPORT RD		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
THAI PASTA	7680 EL CAMINO REAL	103	CARLSBAD	CA	92009	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
THAT PIZZA PLACE	2622 EL CAMINO REAL	STE B	CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
THE ALLEY	421 GRAND AV		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
THE ARCADE (BENCHMARK PACIFIC)	2965 ROOSEVELT ST	SUITE B	CARLSBAD	CA	92008	6512	COMMERCIAL SHOPPING CENTER	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
THE ARMENIAN CAFE	3126 CARLSBAD BL		CARLSBAD	CA	92008	5812	FOOD PREPARATION AND SERVICE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
THE BRICKMAN GROUP LTD	2420 COUGAR DR		CARLSBAD	CA	92008	17	LANDSCAPE MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	Y	904.31	N
THE COFFEE BEAN & TEA LEAF	3231 CAMINO DE LOS COCHES	100	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
THE COFFEE BEAN& TEA LEAF	1935 CALLE BARCELONA	176	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
THE COUNTER CUSTOM BUILT BURGE	1923 CALLE BARCELONA	148	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
THE CROSSINGS AT CARLSBAD	5800 HIDDEN VALLEY RD		CARLSBAD	CA	92008	7992	GOLF COURSE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
THE DONUT FAIR	2540 EL CAMINO REAL		CARLSBAD	CA	92008	5461	BAKERY	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
THE FLOWER FIELD	5702 PASEO DEL NORTE	106	CARLSBAD	CA	92008	0181	ORNAMENTAL HORTICULTURE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
THE FORUM	1935 CALLE BARCELONA	200	CARLSBAD	CA	92009	6512	RETAIL SHOPPING CENTER	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.51	N
THE OLIVE GARDEN 3120	1884 MARRON RD		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
THE PERFECT FIELD	2075 CORTE DEL NOGAL	STE X	CARLSBAD	CA	92011	1700	CONSTRUCTION-SPECIAL TRADE CONTRACTORS	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	904.4	N
THE VILLAGE GRILLE	2833 STATE ST		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
THE VILLAGE PUB	2990 STATE ST		CARLSBAD	CA	92008	5813	DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
THERA LIGHT, INC.	2794 LOKER AV WEST	STE 105	CARLSBAD	CA	92010	3826	MANUFACTURING OF ANALYTICAL INSTRUMENT	N	N	Y	Y	Y	Y	Y	N	Y	Y	Y	904.31	N
THREADS	5814 VAN ALLEN WY	STE 145	CARLSBAD	CA	92008	7216	LAUNDRY AND GARMENTSERVICES	N	N	N	N	N	N	Y	N	N	Y	N	904.31	N
TIME WARNER CABLE (ADELPHIA)	5720 EL CAMINO REAL		CARLSBAD	CA	92008	4841	CABLE PROVIDER	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
TIN LEAF FRESH KITCHEN	6985 EL CAMINO REAL	108	CARLSBAD	CA	92009	5812	EATING AND DRINKING ESTABLISHMENT	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N

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TIP TOP MEATS & EUROPEAN DELI	6118 PASEO DEL NORTE		CARLSBAD	CA	92011	5812	MEAT MARKET, DELI, EATERY	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	904.4	N
TODAY'S RACING DIGEST LLC	1945 CAMINO VIDA ROBLE	H	CARLSBAD	CA	92008	2741	MISCELLANEOUS PUBLISHING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
TODO SUSHI	7180 AVENIDA ENCINAS	100	CARLSBAD	CA	92011	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
TOGO'S EATERY	6971 EL CAMINO REAL	201	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
TOM & VAREE	2775 STATE ST		CARLSBAD	CA	92008	5812	EATING & DRINKING PLACES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
TOMMY V'S URBAN KITCHEN	2659 GATEWAY RD	101	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
TOMOYAMA	6949 EL CAMINO REAL	201	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
TOP OF THE BAGEL	2540 EL CAMINO REAL	E	CARLSBAD	CA	92008	5461	BAGEL STORES RETAIL	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
TOYOTA CARLSBAD	6030 AVENIDA ENCINAS	200	CARLSBAD	CA	92011	5511	Collision Repair	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
TOYOTA CARLSBAD SERVICE CENTER	6020 AVENIDA ENCINAS	200	CARLSBAD	CA	92011	5511	Auto Service Center	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
TOYOTA CARLSBAD USED CAR DEAL	5124 PASEO DEL NORTE		CARLSBAD	CA	92009	5511	NEW & USED CAR DEALERS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
TOYOTA CARLSBAD/SCION CARLSBAD	5424 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	NEW & USED CAR DEALERS	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
TOYOTA CARLSBAD/SCION CARLSBAD	5434 PASEO DEL NORTE	200	CARLSBAD	CA	92008	5511	CAR DEALERSHIP	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
TRADER JOE'S	2629 GATEWAY RD		CARLSBAD	CA	92009	5411	GROCERY STORE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
TRINAMIC MOBILE TRUCK SERVICES	3293 ROOSEVELT ST		CARLSBAD	CA	92008	7538	MOBILE VEHICLE MECHANIC	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
TUSCANY RISTORANTE	6981 EL CAMINO REAL	103	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
TWENTY/20 GRILL & WINE BAR	5480 GRAND PACIFIC DR	200	CARLSBAD	CA	92008	5812	Eating & Drinking Places	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
U-HAUL OF CALIFORNIA	6175 PASEO DEL NORTE		CARLSBAD	CA	92011	4225	GENERAL STORAGE	N	N	Y	Y	N	N	Y	N	Y	Y	N	904.4	N
VALDIVIA FARMS	4914 EL CAMINO REAL		CARLSBAD	CA		0181	Crop Production	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
VANGUARD INDUSTRIES WEST INC	2440 IMPALA DR		CARLSBAD	CA	92010	5136	APPARREL, PIECE GOODS AND NOTIONS	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
VERDEZYNE	2715 LOKER AV WEST		CARLSBAD	CA	92010	2836	BIOLOGICAL PRODUCTS, EXCEPT DIAGNOSTIC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
VERDEZYNE	2717 LOKER AV WEST	STE A	CARLSBAD	CA	92010	2836	BIOLOGICAL PRODUCTS, EXCEPT DIAGNOSTIC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
VIASAT, INC	6305 EL CAMINO REAL		CARLSBAD	CA	92009	8731	RESEARCH, DEVELOPMENT, TESTING SERVICE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
VIGILUCCI'S CUCINA ITALIANA	2943 STATE ST		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
VIGILUCCI'S SEAFOOD & STEAKHOU	3878 CARLSBAD BL		CARLSBAD	CA	92008	5812	EATING & DRINKING PLACE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
VIKING COMMERCIAL CONST.	1825 ASTON AV		CARLSBAD	CA	92008	1542	General Contractor Nonresidential Buil	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	904.31	N
VILA'S SALSA CO	5600 AVENIDA ENCINAS	STE 111	CARLSBAD	CA	92008	2033	Canned Fruits, Vegetables, Preserves,	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
VILLAGE KITCHEN & PIE SHOPPE,	950 TAMARACK AV		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
VINAKA - LIFE'S JUST DESSERTS	300 CARLSBAD VILLAGE DR	211	CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
VINTAGE	2959 STATE ST		CARLSBAD	CA	92008	5812	EATIING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
VISTA BIOLOGICAL CORPORATION	2120 LAS PALMAS DR	STE C	CARLSBAD	CA	92011	2836	BIOLOGICAL PRODUCTS	N	N	N	Y	Y	Y	Y	N	Y	Y	N	904.4	N
VONS 2343	985 TAMARACK AV		CARLSBAD	CA	92008	5411	GROCERY STORE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
VONS GROCERY CO. 2065	6951 EL CAMINO REAL		CARLSBAD	CA	92009	5411	GROCERY STORE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
VONS GROCERY COMPANY	2560 EL CAMINO REAL		CARLSBAD	CA	92008	5411	GROCERY STORE	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
W.O.T. MARINE	6361 YARROW DR	STE G	CARLSBAD	CA	92011	3732	BOATBUILDING AND REPAIRING	Y	N	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
WATERWORKS AQUATICS WB	2704 GATEWAY RD		CARLSBAD	CA	92009	7999	AMUSEMENT AND RECREATION SERVICES NEC	Y	Y	Y	N	N	N	N	N	Y	N	N	904.51	N
WAVERLY TILE INC.	2091 LAS PALMAS DR	A	CARLSBAD	CA	92011	7389	BUSINESS SERVICES NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
WAX RESEARCH	1965 KELLOGG AV		CARLSBAD	CA	92008	3999	SURF WAX MANUFACTURING	Y	N	N	Y	Y	Y	Y	N	Y	Y	N	904.4	N
WAXX IT AUTOMOTIVE DETAILING	5215 CAR COUNTRY DR		CARLSBAD	CA	92008	7542	CAR WASH	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
WCM WASTE & COMPLIANCE MANAGEM	6054 CORTE DEL CEDRO		CARLSBAD	CA	92011	5047	WASTE &COMPLIANCE MANAGEMENT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
WESELOH CHEVROLET HUMMER	5335 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	MOTOR VEHICLE DEALER	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
WESELOH KIA CARLSBAD	5331 PASEO DEL NORTE		CARLSBAD	CA	92008	5511	MOTOR VEHICLE DEALER	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
WEST BUFFET	2515 EL CAMINO REAL		CARLSBAD	CA	92008	5812	RESTAURANT	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
WEST DEV. EQUESTRIAN FACILITY	2820 SUNNY CREEK RD		CARLSBAD	CA	92010	0272	HORSES AND OTHER EQUINES	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	904.31	N
WEST DEV. RESTAURANT GARDEN	2820 SUNNY CREEK RD		CARLSBAD	CA	92010	0181	ood Crops Grown Under Cover	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
WEST INN & SUITES, LLC	4970 AVENIDA ENCINAS		CARLSBAD	CA	92008	7011	HOTELS & MOTELS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N

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WEST STEAK SEAFOOD AND SPIRITS	4980 AVENIDA ENCINAS		CARLSBAD	CA	92008	5812	EATING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
WESTERN FLIGHT, INC.	2208 PALOMAR AIRPORT ROAD	A	CARLSBAD	CA	92008	4581	AIRPORT SERVICES	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	Y
WESTERN FLIGHT, INC.	2210 PALOMAR AIRPORT RD	STE A	CARLSBAD	CA	92008	4581	AIRPORT SERVICES	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	904.4	N
WESTMART	4990 AVENIDA ENCINAS		CARLSBAD	CA	92008	5541	GAS STATION	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	904.31	N
WETZELS PRETZELS	5620 PASEO DEL NORTE	STE 122	CARLSBAD	CA	92008	5461	BAKERY	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.31	N
WETZEL'S PRETZELS PLAZA CAMINO	2525 EL CAMINO REAL	STE	CARLSBAD	CA	92008	5461	RETAIL BAKERIES	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
WHICH WICH?	1935 CALLE BARCELONA	172	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
WHOLESALE SHADE SAILS INC	5621 PALMER WY	STE F	CARLSBAD	CA	92008	2262	FINISHERS OF BROADWOVEN FABRICS OF MAN	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
WING DOC DBA WINGSTOP	2508 EL CAMINO REAL		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
WITCH CREEK WINERY	2906 CARLSBAD BL		CARLSBAD	CA	92008	2084	WINES, BRANDY, AND BRANDY SPIRITS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.21	N
WOODWORKS PLUS	6104 AVENIDA ENCINAS	D	CARLSBAD	CA	92011	2541	MANU. CABINETS, LOCKERS, & SHELVING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
XTREME FROZEN YOGURT	2659 GATEWAY RD	107	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
YMCA AQUATIC PARK	N SHORE AH LAGOON AND		CARLSBAD	CA	92008	7999	RECREATIONAL CAMP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
YOGURT DREAM	3263 CAMINO DE LOS COCHES	103	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
YOGURT SHACK	6990 EL CAMINO REAL	L	CARLSBAD	CA	92009	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.51	N
YOSHINO	2913 STATE ST		CARLSBAD	CA	92008	5812	EATING AND DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	904.21	N
ZIMMER DENTAL	1900 ASTON AV		CARLSBAD	CA	92008	3848	WHOLESALE DENTAL EQUIP & SUPPLIES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ZIMMER DENTAL	6221 EL CAMINO REAL		CARLSBAD	CA	92009	3843	MANUFACTURE DENTAL IMPLANTS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	904.4	N
ZONSON COMPANY INC	3197 LIONSHEAD AV		CARLSBAD	CA	92010	3161	GOLF BAG MANUFACTURING	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
ZUZA (CPS PRINTING)	2304 FARADAY AV		CARLSBAD	CA	92008	2759	COMMERCIAL PRINTING, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	904.31	N
Potential Pollutants - Potential Pollutatnts are constituent groups from the 2005 Baseline Long Term Effectiveness Assessment																				
Tributary to a 303(d) Listed - Indicates the facility is tributary to a 2010 303(d) listed water body and potentially generates pollutants for which the water body is impaired.																				

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Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
"URIBES" JANITORIAL SERVICES	999 PINE AVE APT B	APT B	CARLSBAD	CA	92008-2459	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
1ST CHOICE EQUIPMENT RENTALS INC	5940 PACIFIC MESA CT STE 211	STE 211	SAN DIEGO	CA	92121-4317	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
360 CONSTRUCTION CO	1625 ALVARADO ST		OCEANSIDE	CA	92054-5903	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
888 CONSTRUCTION	7969 ENGINEER RD		SAN DIEGO	CA	92111-1920	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A & E CONSTRUCTION SERVICES, INC.	538 FRONT ST		EL CAJON	CA	92020-4233	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A & R SUPERIOR POOL SERVICE	31730 CALLE CATALDO		TEMECULA	CA	92592-3938	7389	POOL CLEANING	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A BETTER SPRINKLER REPAIR	4332 STANFORD ST		CARLSBAD	CA	92010-7922	7389	Business Services, Not Elsewhere Classified	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A CLEAN GETAWAY	3176 QUIET HILLS DR		ESCONDIDO	CA	92029-7304	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A DUIN CONSTRUCTION, INC.	433 SANTA FE DR		ENCINITAS	CA	92024-5134	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A PLUS CONTRACTORS	303 GREENVIEW RD		ESCONDIDO	CA	92026-3932	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A T O M ENGINEERING CONSTRUCTION	40410 VISTA RD		HEMET	CA	92544-9761	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A TOUCH OF CLASS HOME IMPROVEMENT	2730 INVERNESS DR		CARLSBAD	CA	92010-6520	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A.M. ORTEGA	10125 CHANNEL RD		LAKESIDE	CA	92040-1703	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A.R.M. PAINTING	2687 WATERBURY WY		CARLSBAD	CA	92010	1721	CONSTRUCTION SPECIAL TRADE CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A-1 HAMILTON LANDSCAPE MAINTEN	3659 TRIESTE DR		CARLSBAD	CA	92010	0781	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A-1 PATIO & REMODELING EXPERTS	1280 SANTA FE DR		ENCINITAS	CA	92024-3927	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A-1 TOWING	3155 TYLER ST		CARLSBAD	CA	92008-3025	7549	Automotive Services, Except Repair And Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AAA LANDSCAPE SPECIALISTS, INC.	1261 SAN ELIJO RD S		SAN MARCOS	CA	92078-1073	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AAA PAVING CO.	3330 N LOCUST AVE		RIALTO	CA	92377-3705	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AAA PROPERTY SERVICES	25007 ANZA DR		SANTA CLARIT/	CA	91355-3414	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AB CONSTRUCTION	15614 SUMMER SAGE RD		POWAY	CA	92064-2239	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ABLE BUILDING MAINTENANCE	868 FOLSOM ST		SAN FRANCISC	CA	94107-1123	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ACCENT PAINTING, INC.	7934 LA CAPELA PL		CARLSBAD	CA	92009	1721	PAINTING AND PAPER HANGING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ACCURATE PLUMBING	11632 RIVERSIDE DR		LAKESIDE	CA	92040-2316	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ACOSTA CLEANING	4934 VERDE DR		OCEANSIDE	CA	92057-4324	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ACTION BUILDING MAINT/COAST CARPET CLEAN	2408 MAJANO PL		CARLSBAD	CA	92009-9137	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ADAIR STRIPING INC	2240 1/2 BUENA CREEK RD		VISTA	CA	92084-7318	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ADAMO CONSTRUCTION INC	11980 WOODSIDE AVE STE 5	STE 5	LAKESIDE	CA	92040-2924	15	GENERAL BUILDING CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ADVANCED INDUSTRIAL SERVICES, INC.	7831 ALONDRA BLVD		PARAMOUNT	CA	90723-5005	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ADVIC CONSTRUCTION COMPANY	2710 LOKER AV WEST	STE 100	CARLSBAD	CA	92010	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A-ECONOMY CONCRETE PUMPING	1702 EVERGREEN CR		CARLSBAD	CA	92008	1771	CONCRETE WORK	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AFC ALL FREEZE CONST	1019 RHEA PL		VISTA	CA	92084-4343	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AFFORDABLE DETAIL SERVICES	315 S. COAST HWY #296	#296	ENCINITAS	CA	92024	7542	CARWASHES	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AFFORDABLE TURN KEY CONSTRUCTION	81 BISHOP ST		CHULA VISTA	CA	91911-4405	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AGRICULTURAL PEST CONTROL	7766 ARJONS DR		SAN DIEGO	CA	92126-4391	7342	PEST CONTROL	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AGUA TIERA	5149 ESPINOZA RD		EL CAJON	CA	92021-2200	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AHOY POOL SERVICE	2506 VIA ROJO		CARLSBAD	CA	92010-1376	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AIR MANAGEMENT SYSTEMS	9302 BOND AVE		EL CAJON	CA	92021-2850	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AJ CONSTRUCTION SPECIALTIES INC	3480 W WARNER AVE STE G	STE G	SANTA ANA	CA	92704-5319	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AJMS - AGAPE JANITORIAL & MAINTENANCE SERVI(	170 W MISSION AVE		ESCONDIDO	CA	92025-1709	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AK CONSTRUCTORS INC	1828 RAILROAD ST		CORONA	CA	92880-2512	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AKAMAI POOL CARE	2625 KREMEYER CIR APT 5	APT 5	CARLSBAD	CA	92008-1634	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AL & HA PINE CONSTRUCTION INC	509 E ST		CHULA VISTA	CA	91910-2312	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AL MITCHELL'S CLEANING	2945 VALLEY ST		CARLSBAD	CA	92008	7217	Carpet/Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALADDIN MOBILE HOME	324 E VALLEY PKWY		ESCONDIDO	CA	92025-2815	15	GENERAL CONTRACT MOBILE HOME	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALBERT CRUZ JR CONCRETE	794 WINDRIDGE CIR		SAN MARCOS	CA	92078-6900	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALESSI - MAGNUSSON CONST CO	154 SIERRA ST		ESCONDIDO	CA	92025-7337	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALETO CONSTRUCTION CO INC.	11535 WOODSIDE TER		SANTEE	CA	92071-4730	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALEX'S HANDYMAN SERVICES	2841 UNICORNIO ST APT B	APT B	CARLSBAD	CA	92009-4411	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALI'S MOBILE CARWASH & AUTO DETAILING	1418 OLIVE ST		OCEANSIDE	CA	92058	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALIVIZIA CORPORATION	34439 HILLINGDON CT		WINCHESTER	CA	92596-8482	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALL AMERICAN KITCHENS	13901 SATICOY ST		VAN NUYS	CA	91402-6521	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALL AMERICAN TRADITIONS	2413 VICTORIA ST		SIMI VALLEY	CA	93065-3603	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALL CLEAR FLOOD SERVICE	31186 OLD TRAIL CIR		MURRIETA	CA	92563-6272	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALL- PRO REMODELING	706 N TUSTIN ST		ORANGE	CA	92867-7149	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALLGIRE BUILDERS, INC.	3278 GREY HAWK CT		CARLSBAD	CA	92010	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALLGIRE GNRL CONTRACTORS INC	3278 GREY HAWK CT	STE 200	CARLSBAD	CA	92010	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALL-PRO ASPHALT COMPANY	1512 COOLIDGE AVE.		NATIONAL CITY	CA	91950	1500	CONTRACTOR, STREET IMPROVEMENT	Y	X	X	X	X	X	X	X	X	X	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALLTEC POOLS	1919 HILLCREST LN		FALLBROOK	CA	92028	7389	Pool Repair	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALM PAINTING	31551 CAMINO CAPISTRANO STE B	STE B	MISSION VIEJO	CA	92675-2646	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALMOST RAIN	4909 REFUGIO AVE		CARLSBAD	CA	92008-3730	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALPINE LANDSCAPE	249 CROWLEY LAKE DR		CROWLEY LAK(	CA	93546-9756	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ALTERNATIVE ENERGY TECHNOLOGIES INC	9465 MISSION PARK PL # B	# B	SANTEE	CA	92071-2807	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AMERICAN AUTO DETAILING	3016 AZAHAR ST		CARLSBAD	CA	92009	7542	Mobile Auto Detailing	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
AMERICAN CONCRETE	404 DISCOVERY ST		SAN MARCOS	CA	92078-1206	17	CONCRETE CONSTRUCTION OF CURB, GUTTER AND	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AMERICAN HOME REPAIRS	6160 PASEO TIENDA		CARLSBAD	CA	92009-2230	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AMERICAN PLUMBING & BACKFLOW INC	4089 OCEANSIDE BLVD STE J	STE J	OCEANSIDE	CA	92056-5814	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AMERICAN TRIM & RESURFACING	8 ARGONAUT STE 140	STE 140	ALISO VIEJO	CA	92656-1454	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AMERICAN WESTERN DOOR & TRIM	7240 SYCAMORE CANYON BLVD STE	STE 102	RIVERSIDE	CA	92508-2314	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AMERICAN WINDOW CLEANING	350 LA SOLEDAD WAY		OCEANSIDE	CA	92057-6858	7349	WINDOW CLEANING	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AMERICA'S CREW YACHT SERVICES	944 DAISY AVE		CARLSBAD	CA	92011-4815	7349	Building Cleaning And Maintenance Services, Not E	Y	N	Y	Y	Y	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AMERISCAPE	663 S RANCHO SANTA FE RD STE 119	STE 119	SAN MARCOS	CA	92078-3973	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANAS CLEANING SERV	2005 CASSIA RD APT 112	APT 112	CARLSBAD	CA	92009-4203	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANASTASI CONSTRUCTION CO., INC.	511 TORRANCE BLVD # 200	# 200	REDONDO BEA	CA	90277-3414	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANCHOR FIELD SERVICES INC	3340 GARFIELD ST		CARLSBAD	CA	92008-3127	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANDERSON DRILLING	10303 CHANNEL RD		LAKESIDE	CA	92040-1707	15	FOUNDATION DRILLING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANDRADE AND COMPANY	2123 VUELTA CT		CARLSBAD	CA	92009	1700	PAINTING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANDY OLAS	872 DEL VALLE DR		FALLBROOK	CA	92028-9393	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANGUIANO LANDSCAPE	471 COLE RANCH RD		ENCINITAS	CA	92024-6518	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANGUS ASPHALT INC	9959 PROSPECT AVE		SANTEE	CA	92071-4318	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANNING-JOHNSON COMPANY	13250 TEMPLE AVE		CITY OF INDUS	CA	91746-1511	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANTIMITE TERMITE & PEST CONTROL	350 PAUMA PL		ESCONDIDO	CA	92029-1702	7342	Disinfecting And Pest Control Services	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ANTIN CONSTRUCTION GROUP	1453 LA HABRA DR		SAN MARCOS	CA	92078-4708	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
A-PLUS WINDOW CLEANING						7349	Building Cleaning and Maintenance Services, Not Elsewh	Y	N	Y	N	N	Y	N	N	N	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
AQUA MOBILE DETAIL	5154 SHORE DR		CARLSBAD	CA	92008	7542	CARWASHES	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AQUA-LINK POOLS AND SPAS	1076 SEAHORSE CT		CARLSBAD	CA	92011-3413	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AQUAMAN AQUARIUM SERVICES	3506 HASTINGS DR		CARLSBAD	CA	92010-7040	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AQUAPRO	8660 MIRAMAR RD STE A	STE A	SAN DIEGO	CA	92126-4362	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AQUARIAN POOL SERVICE	1775 VALLEY PL		CARLSBAD	CA	92008	7389	POOL SERVICE & MAINTENANCE	Y	Y	Y	N	N	N	N	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
AQUATIC TECHNOLOGIES	32244 PASEO ADELANTO STE A	STE A	SAN JUAN CAP	CA	92675-3617	17	SWIMMING POOL CONSTRUCTION COMPANY	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARBOR WEST	8553 AVENIDA COSTA BLANCA		SAN DIEGO	CA	92154-6265	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARBORWELL LP	2337 AMERICAN AVE		HAYWARD	CA	94545-1807	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARC- ART	6540 PERSA ST		CARLSBAD	CA	92009-5318	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARCHER WESTERN CONTRACTORS	4747 VIEWRIDGE AVE # 210	# 210	SAN DIEGO	CA	92123-1688	15	GENERAL CONTRACTOR - CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARIEL'S UPHOLSTERY & REFINISHING	2051 CHESTNUT AVE		CARLSBAD	CA	92008-2716	7641	Reupholstery And Furniture Repair	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARIZAGA LANDSCAPE	3366 ROOSEVELT ST Apt 10	Apt 10	CARLSBAD	CA	92008-3067	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARLEN B PAYNE CONST. MGMT	25 VIA VILLENA		SAN CLEMENTE	CA	92673-6512	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARMSTRONG LANDSCAPING SERVICES	6840 VIA VERANO		CARLSBAD	CA	92009-6019	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARNOLD'S LANDSCAPE	3610 KINGSTON ST		CARLSBAD	CA	92010	0781	LANDSCAPE COUNSELING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARROW CONSTRUCTION	15525 OLD HWY 80	80	EL CAJON	CA	92021-0000	17	SWIMMING POOL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARROW PIPELINE REPAIR, INC.	1330 PARK CENTER DR # 101	# 101	VISTA	CA	92081-8300	15	SEWER LINE REPAIR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ARTMSTRONG CONSTRUCTION	840 W FRONT ST		COVINA	CA	91722-3614	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ASLINE CONSTRUCTION	3008 SEGOVIA WY		CARLSBAD	CA	92009	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ASM CLEANING SERVICE INC	2801 VIA CARRIO		CARLSBAD	CA	92010-8340	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ASPEN GOLF CONSTRUCTION	2400 RITTER DR		DANIELS	WV	25832-9732	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ASPHALT AND CONCRETE ENTERPRISES, INC	11366 WOODSIDE AVE N STE B	STE B	SANTEE	CA	92071-4768	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ASSOCIATED BUILDER	9550 RIDGECREST DR		LA MESA	CA	91941-4214	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ATLANTIS POOL SERVICE	4023 CRESCENT POINT RD		CARLSBAD	CA	92008	7389	POOL SERVICE	Y	Y	Y	N	N	N	N	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
ATLAS ENVIRONMENTAL SERVICES, INC.	9032 OLIVE DR		SPRING VALLE	CA	91977-2301	17	TREE TRIMMING, REMOVAL, TRANSPLANTING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ATLAS GENERAL CONSTRUCTION	601 N CEDROS AVE		SOLANA BEACH	CA	92075-1257	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ATP GENERAL ENGINEERING CONTRACTORS	187 MACE ST		CHULA VISTA	CA	91911-5891	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ATTERHOLT CONSTRUCTION & INTERIORS	175 W ORANGETHORPE AVE		PLACENTIA	CA	92870-6922	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AUGUST POOLS	2145 CHESTNUT AVE		CARLSBAD	CA	92008-2719	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AUSSIE PET MOBILE NORTH COUNTY	3928 TORTUGA CV		OCEANSIDE	CA	92054-7996	752	MOBILE PET GROOMING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AUTO IMAGE USA, INC.	3611 KINGSTON ST		CARLSBAD	CA	92010-2182	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AUTOSMART MOBILE DETAILING	221 SIMILAX RD		VISTA	CA	92083-	7542	CARWASHES	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AV BUILDER CORP.	6373 NANCY RIDGE DR		SAN DIEGO	CA	92121-2247	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AWARD WINDOW CLEANING	3955 PARK DR		CARLSBAD	CA	92008-2634	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AWN-GUARD INC	PO BOX 2757		OCEANSIDE	CA	92051-	7349	Building Cleaning and Maintenance Svcs	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AWNING MATRIX	325 W MAIN ST		MONTCLAIR	CA	91762-3843	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AWNING SOLUTIONS INC	9161 HARNESS ST		SPRING VALLE	CA	91977-3948	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AZIM HANDYMAN	2011 CASSIA RD APT 114	APT 114	CARLSBAD	CA	92009-4205	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
AZURE CONSTRUCTION INC	7423 EL CAJON BLVD		LA MESA	CA	91942-7401	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
B B DEALER SERVICES, INC	2848 JEFFERSON ST APT 204	APT 204	CARLSBAD	CA	92008-1757	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
B 'N' K CHEM-DRY	390 OAK AV		CARLSBAD	CA	92008	7217	CARPET & UPHOLSTERY CLEANING	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
B.A. WORTHING, INC.	690 CARLSBAD VILLAGE DR	STE 201	CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BACK'S CONSTRUCTION INC	2882 POPLAR MEADOW LN		JAMUL	CA	91935-3100	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BACKYARD VACATIONS	206 CALGARY CT		VISTA	CA	92083-5593	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
BAJA PACIFIC LANDCARE	2381 CARINGA WAY APT E	APT E	CARLSBAD	CA	92009-6361	782	Lawn And Garden Services	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BAKER WINDOWS & DOORS	17985 COLLIER AVE		LAKE ELSINOR	CA	92530-2623	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BARNETT ENTERPRISES	3420 DON JOSE DR		CARLSBAD	CA	92010-3918	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BARNHART-BALFOUR BEATTY	10760 THORNMINT RD		SAN DIEGO	CA	92127-2700	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BARRETT LANDSCAPE & MAINTENANC	6480 CORTE LA LUZ		CARLSBAD	CA	92009	0782	LAWN AND GARDEN SERVICES	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BART UDINK CONSTRUCTION	5601 ENGINEER DR		HUNTINGTN BC	CA	92649-1123	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BASILE CONSTRUCTION INC	7840 DUNBROOK RD		SAN DIEGO	NJ	92126-4369	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BATH CO SHOWER DOOR	613 W MAIN ST		EL CAJON	CA	92020-3323	17	CONTRACTOR - SPECIALTY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BAUTISTA GARDENING MAINTENANCE	1341 S CITRUS AVE		ESCONDIDO	CA	92027-4956	782	GARDENING MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BAY CITY ELECTRIC WORKS	12208 INDUSTRY RD		LAKESIDE	CA	92040-1747	7699	Repair Shops And Related Services, Not Elsewhere	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BAYSIDE CONCRETE CONSTRUCTION COMPANY	20631 CANADA RD		EL TORO	CA	92630-8100	1799	CONCRETE SUBCONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BB POOL & SPA MAINTENANCE	618 SONRISA ST		SOLANA BEACH	CA	92075-2437	17	POOL SERVICE, CLEANING & REPAIRS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
B-CLEAN CARPETING	3587 HATFIELD CIR		OCEANSIDE	CA	92056-4902	7349	CARPET CLEANING	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BEACH CITY BUILDERS	6090 PASEO SALINERO		CARLSBAD	CA	92009-2269	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BEACHAM CONSTRUCTION MANAGEMENT SERVICE	405 VIA DEL NORTE		LA JOLLA	CA	92037-6751	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BEAUTIFUL CARPETS CLEANING SERVICE	1504 COVE CT		SAN MARCOS	CA	92069-3528	7217	CARPET & UPHOLSTERY CLEANING SERVICE	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BECKY'S HOUSECLEANING SERVICE	2408 MAJANO PL		CARLSBAD	CA	92009-9137	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BEHIND THE 8 MACHINE WORKS	6327 CHORLITO ST		CARLSBAD	CA	92009-4409	3599	Indus./Commercial Equipment, Not Elsewhere Classi	Y	N	Y	Y	Y	Y	Y	N	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BELLA LANDSCAPING	1310 N TWIN OAKS VALLEY RD		SAN MARCOS	CA	92069-1111	17	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BENCHMARK LANDSCAPE, INC.	12575 STOWE DR		POWAY	CA	92064-6805	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BENCHMARK STONEWORKS, INC.	5674 EL CAMINO REAL	STE D	CARLSBAD	CA	92008	1743	TERRAZZO, TILE, MARBLE, MOSAIC INSTALL	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BENN MARK CONSTRUCTION CA	726 MARYLAND DR		VISTA	CA	92083-3333	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BENNETT PLUMBING	3031 VIA SABINAS		CARLSBAD	CA	92010-1384	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BENOIT EXTERIOR DESIGN	6908 PEACH TREE RD		CARLSBAD	CA	92011-3934	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BERKLEY POOL & SPA	1741 SORREL CT		CARLSBAD	CA	92011-5146	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BEST LANDSCAPE	28338 MEADOW GLEN WAY W		ESCONDIDO	CA	92026-6830	17	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BEST MOBILE AUTO DETAIL 2	4406 SIERRA MORENA AV		CARLSBAD	CA	92010	7542	CARWASHES	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BEST MOBILE AUTO DETAILING & HAND CAR WASH	1865 VIA PRIMERO		OCEANSIDE	CA	92056	7542	Mobile Auto Detailing	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BEST SERVICE CO	903 WENTWORTH CIR		VISTA	CA	92081-5374	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BEST-RATE REPAIR	4694 ALVARADO CANYON RD STE K	STE K	SAN DIEGO	CA	92120-4313	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BETTER HOMES 4 U	6044 CORNERSTONE CT W STE B	STE B	SAN DIEGO	CA	92121-4730	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BEVERSON CONSTRUCTION & MASONRY, INC.	9054 MONTE MAR DR		LOS ANGELES	CA	90035-4227	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BHI-BUILDERS	810 LOS VALLECITOS BLVD STE D		SAN MARCOS	CA	92069-	1521	GENERAL BUILDING CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BID CONSTRUCTION INC	9400 ACTIVITY RD STE G	STE G	SAN DIEGO	CA	92126-4414	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BIG PINE CONSTRUCTION	2364 BIG PINE ROAD		ESCONDIDO	CA	92027	1542	General Contractor	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BILL BRAZEAU HANDYMAN SERVICE	2696 GLASGOW DR		CARLSBAD	CA	92010-6572	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BINGHAM CONSTRUCTION COMPANY, INC.	10965 SAN DIEGO MISSION RD		SAN DIEGO	CA	92108-2431	1542	COMMERCIAL GENERAL CONTRACTOR	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BIOSOURCES, INC.	11545 SORRENTO VALLEY RD STE 31	STE 311	SAN DIEGO	CA	92121-1322	1541	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BISHOP DESIGN & CONSTRUCTION	3022 VIA DE CABALLO		ENCINITAS	CA	92024-6924	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BL LANDSCAPING & MAINTENANCE	328 ESTADA CIR		OCEANSIDE	CA	92057-6636	781	GARDENING & LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BLACK ROCK POOLS INC	384 FLOWER HILL WAY		SAN MARCOS	CA	92078-6006	17	SWIMMING POOL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BLAIR RASMUSSEN CONSTRUCTION INC	11305 RANCHO BERNARDO RD STE 1	STE 107	SAN DIEGO	CA	92127-1461	1542	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BLESSED CLEANING	3420 MONROE ST APT B	APT B	CARLSBAD	CA	92008-2050	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BLOCK ISLAND REMODELING INC	13001 TREECREST ST		POWAY	CA	92064-6415	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BLUE DOLPHIN POOL SERVICE	4106 SIERRA MORENA AVE		CARLSBAD	CA	92010-2825	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BLUE MIST POOLS & SPAS	6442 TERRAZA PORTICO		CARLSBAD	CA	92009-3045	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BLUE OCEAN CONSTRUCTION, INC.	241 W 35TH ST STE A	STE A	NATIONAL CITY	CA	91950-7920	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BLUE RIBBON CARPET CLEANING	804 LEUCADIA BLVD		ENCINITAS	CA	92024-2337	7217	CARPET, UPHOLSTERY, TILE CLEANING	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BLUE SPECTRUM POOL / SPA, INC.	1138 CALLE EMPARRADO		SAN MARCOS	CA	92069-7325	7699	Repair Shops And Related Services, Not Elsewhere	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BLUE WATERS CONSTRUCTION & DEVELOPMENT	4201 WOODLAND DR		LA MESA	CA	91941-6710	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
								Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		904.21, 904.31, 904.4, 904.51, 904.61
BMC	340 RANCHEROS DR STE 174	STE 174	SAN MARCOS	CA	92069-2980	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BMG CONSTRUCTION	1623 MARITIME DR		CARLSBAD	CA	92011-4077	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BOGART CONSTRUCTION	9980 IRVINE CENTER DR STE 200	STE 200	IRVINE	CA	92618-4365	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BONITA AUTO DETAIL	3862 ANTIEM ST		SAN DIEGO	CA	92111-3507	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BOW TILE CORP	7749 DENSMORE AVE		VAN NUYS	CA	91406-1920	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BP WEST COAST PRODUCTS LLC	2295 HARBOR DR		SAN DIEGO	CA	92113-3636	5172	DELIVERY OF GASOLINE	Y	N	Y	Y	Y	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BRADY CO. / SAN DIEGO	8100 CENTER ST		LA MESA	CA	91942-2925	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BRADY CO. LOS ANGELES INC	2245 CAMINO VIDA ROBLE		CARLSBAD	CA	92011	6512	OPERATORS OF NON RESIDENTIAL BUILDINGS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BRENDAN THIRKELL	1080 PALM AVE		CARLSBAD	CA	92008-2547	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BRENZEL LAWN AND GARDEN	2378 PIO PICO DR		CARLSBAD	CA	92008-1038	782	Lawn And Garden Services	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BRIAN POTTER CONSTRUCTION	28362 MARGUERITE PKWY STE 13	STE 13	MISSION VIEJO	CA	92692-3725	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BRIAN ROBBINS CONSTRUCTION AND DESIGN	2124 SALIENTE WAY		CARLSBAD	CA	92009-7922	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BRIGHTER DAY CLEANING SERVICES	200 S EMERALD DR SPC 52	SPC 52	VISTA	CA	92081-4537	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BROOKFIELD DEL MAR BUILDERS INC	12865 POINTE DEL MAR WAY STE 200	STE 200	DEL MAR	CA	92014-3860	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BROOKHART CONCRETE INC., RAY F	2911 STATE ST		CARLSBAD	CA	92008	1731	CONCRETE CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BROS WINDOW CLEANING	2800 WILSON ST		CARLSBAD	CA	92008-1531	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BRUCE HIRSCH	7507 VIEJO CASTILLA WAY		CARLSBAD	CA	92009-7351	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BRUIN PAINTING CORPORATION	38820 SKY CANYON DR # B	# B	MURRIETA	CA	92563-2540	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BSD BUILDERS, INC	8825 REHCO RD		SAN DIEGO	CA	92121-3266	1542	General Contractors-Nonresidential Buildings, Oth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BTS EQUIPMENT UNLIMITED INC	14372 OLD HWY 80 STE E	STE E	BOSTONIA	CA	92021	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BUILDERS TERMITE & PEST CONTROL	1139 S PLACENTIA AVE		FULLERTON	CA	92831-5110	7342	TERMITE CONTROL	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BUILDING INNOVATIONS	7722 CALLE MADERO		CARLSBAD	CA	92009-8203	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BULLET CONCRETE PUMPING	815 1/2 PLEASANT LN		NATIONAL CITY	CA	91950-3927	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BURGER CONSTRUCTION	420 STEVENS AVE STE 100	STE 100	SOLANA BEACH	IN	92075-2074	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BURTECH PIPELINE	102 2ND ST		ENCINITAS	CA	92024-3203	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BURTON'S CARPET CARE	266 COUNTRYHAVEN RD		ENCINITAS	CA	92024-3107	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BUSY BROOM CLEANING SERVICES/EXPERT WINDO	11227 CALLE JALAPA		SAN DIEGO	CA	92126	7349	Building Cleaning & Maint Svc, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BUSY B'S ENTERPRIZES	2196 DICKINSON DR		CARLSBAD	CA	92008-4667	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BWB CONTRACTORS INC	1068 GALLERY DR		OCEANSIDE	CA	92057-7922	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
BYCOR CORP-GENERAL CONTRACTORS	6490 MARINDUSTRY DR		SAN DIEGO	CA	92121-2563	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BYE BYE BED BUGS	3464 CORTE PANORAMA		CARLSBAD	CA	92009-2037	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BYRNES CONSTRUCTION	3870 HIGHLAND DR		CARLSBAD	CA	92008	1522	CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
BYROM-DAVEY, INC.	13220 EVENING CREEK DR S STE 103	STE 103	SAN DIEGO	CA	92128-4103	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
C & C POOL SERVICE	650 S RANCHO SANTA FE RD SPC 22	SPC 22	SAN MARCOS	CA	92078-3946	7389	POOL SERVICE (WEEKLY) & SMALL REPAIRS	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
C & H TREE SERVICE, INC.	1244 BERRYMAN CYN		ENCINITAS	CA	92024-7915	17	LANDSCAPE & TREE SERVICE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
C & H TREE SERVICES	1244 BERRYMAN CYN		ENCINITAS	CA	92024-7915	17	CONTRUCTION- SPECIAL TRADE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
C A CONSTRUCTION	981 IOWA AVE STE A	STE A	RIVERSIDE	CA	92507-1615	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
C R E SPRAY BOOTHS & METAL BUILDINGS	14260 GARDEN RD # 308	# 308	POWAY	CA	92064-4945	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
C SCHELL CONST	4519 COVE DR APT 4	APT 4	CARLSBAD	CA	92008-4219	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
C. B. SHEA, INC.	3965 SAN AUGUSTINE WAY		SAN DIEGO	CA	92130-2261	17	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
C.E. WILSON CORP.	662 GRAND AVE		SPRING VALLE	FL	91977-5009	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
C.W. CONSTRUCTION, INC	8380 MAPLE PL STE 100	STE 100	RANCHO CUCA	CA	91730-7664	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
C.W. DRIVER, INC.	468 N ROSEMEAD BLVD		PASADENA	CA	91107-3010	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CABRILLO CRAFTMAN	4168 HAMILTON ST		SAN DIEGO	CA	92104-1719	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CACY ELECTRIC	14398 RIOS CANYON RD		EL CAJON	CA	92021-2725	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CAL-AUTO RECONDITIONING/AUTO COLORS	2738 MADISON ST		CARLSBAD	CA	92008-1727	2396	Automotive And Apparel Trimmings	Y	N	Y	Y	N	Y	Y	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALAVO LANDSCAPE, INC	1880 GROVE RD		EL CAJON	CA	92020-7834	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALI GENERAL CONSTRUCTION	4030 LONNIE ST		OCEANSIDE	MN	92056-4231	15	GENERAL CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIBER CONCRETE	42185 SANTA FE TRL		MURRIETA	CA	92562-5228	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIFORNIA BUILDERS GROUP INC.	6133 BRISTOL PKWY STE 270	STE 270	CULVER CITY	CA	90230-6629	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIFORNIA CLEANING SERVICES	6858 VIA VERANO		CARLSBAD	CA	92009-6021	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIFORNIA COMFORT SYSTEMS USA, INC.	9750 DISTRIBUTION AVE		SAN DIEGO	CA	92121-2310	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIFORNIA CONTRACT SERVICES INC	18655 MAHOGANY RANCH RD		RAMONA	CA	92065-7452	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIFORNIA FINEST CARPET CLEANING	3289 DONNA DR		CARLSBAD	CA	92008-1127	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIFORNIA HOME BLDRS, INC	11305 RANCHO BERNARDO RD STE 1	STE 103	SAN DIEGO	CA	92127-1461	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIFORNIA POOLS	1635 S RANCHO SANTA FE RD		SAN MARCOS	CA	92078-5158	17	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIFORNIA SKATEPARKS	273 N BENSON AVE		UPLAND	CA	91786-5614	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIFORNIA WEST CONSTRUCTION,	5927 PRIESTLY DR	STE 103	CARLSBAD	CA	92008	1521	GENERAL CONTRACTORS-SINGLE FAMILY HOUS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALIFORNIA'S OWN NATIVE LANDSCAPE	25950 LOS ARBOLES RANCH RD		ESCONDIDO	CA	92026-8330	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALLOWAY POOL CO	1106 ARIANA RD		SAN MARCOS	CA	92069-8121	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CALM WATER POOL SERVICE	4335 YOSEMITE ST		CARLSBAD	CA	92010-7911	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CAMBRIDGE PROPERTIES	2142 CAMBRIDGE AVE		CARDIFF	CA	92007-1803	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CANYON RIDGE CONSTRUCTION INC	1750 DENTRO DE LOMAS		BONSALL	CA	92003-6805	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CAPITOL STEEL FABRICATORS, INC	3565 GREENWOOD AVE		COMMERCE	CA	90040-3305	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CAP'S MOBILE SMALL REPAIR SHOP	3580 TRIESTE DR		CARLSBAD	CA	92010	7699	REPAIR SHOP	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARD CONSTRUCTION	57828 HIDDEN GOLD DR		YUCCA VALLEY	CA	92284-4430	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARDIFF CONSTRUCTION INC.	6017 SEACREST VIEW RD		SAN DIEGO	CA	92121-4370	1521	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARDINAL CONSTRUCTION	3542 CAZADOR LN		FALLBROOK	CA	92028-9426	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARLSBAD CARPET CLEANING CO	936 DAISY AV		CARLSBAD	CA	92011	7217	CARPET/UPHOLSTERY CLEANING	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARLSBAD LANDSCAPE CONSTRUCTIO	2777 WILSON ST		CARLSBAD	CA	92008	1799	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARLSBAD POOL SERVICE	1692 MOUNTAIN PASS CIR		VISTA	CA	92081-8811	7389	SWIMMING POOL SERVICE	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARLSBAD VILLAGE PARTNERSHIP	1272 PEACOCK HILL DR		SANTA ANA	HI	92705-2305	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARLSBAD WINDOW CLEANING PRO	1385 SUNSET DR		VISTA	CA	92081-6528	7349	WINDOW CLEANING SERVICE	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARMENOOCHS POOL AND SPA SERVICE AND REP	3518 CARLSBAD BLVD		CARLSBAD	CA	92008-3226	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARPINELLI CONSTRUCTION INC	326 VISTA VILLAGE DR		VISTA	CA	92083-4999	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CARRION CONSTRUCTION INC	3432 FENELON ST		SAN DIEGO	CA	92106-2137	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CASE CONSTRUCTION INC	2907 CORTE JARDIN		CARLSBAD	CA	92009	1521	GENERAL BUILDING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CASS CONSTRUCTION, INC.	1100 WAGNER DR		EL CAJON	CA	92020-3047	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CATSPAW CONSTRUCTION	245 BEAUMONT DR		VISTA	CA	92084-5633	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CAUDILLO'S LANDSCAPE	224 GUAJOME ST		VISTA	CA	92083-5907	781	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CCM ENTERPRISES	10848 WHEATLANDS AVE		SANTEE	CA	92071-2855	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CD PAINTING, INC.	4080 MISSION BLVD		MONTCLAIR	CA	91763-6011	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CDM CONSTRUCTIONINCORPORATED	1925 PALOMAR OAKS WY	STE 300	CARLSBAD	CA	92008	1629	HEAVY CONSTRUCTION, NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CEDARS ENTERPRISES	18757 TURFWAY PARK		YORBA LINDA	CA	92886-7019	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CELL-CRETE CORPORATION	135 RAILROAD AVE		MONROVIA	CA	91016-4652	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CEMENT CUTTING INC.	3610 HANCOCK ST		SAN DIEGO	CA	92110-4335	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CENTAUR GENERAL ENGINEERING INC	2166 VICTORIA PARK TER		ALPINE	CA	91901-1433	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CENTRAL CONTRACTING CO	31375 STATION RD		VALLEY CENTE	CA	92082-6709	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CERAMICSTYLE, INC	4066 ALAMO ST		RIVERSIDE	CA	92501-1008	1743	Terrazzo, Tile, Marble, Mosaic Work	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CERTAPRO PAINTERS	5671 PALMER WY	STE G	CARLSBAD	CA	92008	1500	Building Construction-General Building	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
CERTIFIED CONCRETE	120 N ANDREASEN DR		ESCONDIDO	CA	92029-1329	1771	CONCRETE CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CGP MAINTENANCE & CONSTRUCTION	8614 SIESTA RD		SANTEE	CA	92071-4537	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHAD GRIMM CONSTRUCTION	3248 AVENIDA ANACAPA		CARLSBAD	CA	92009-9301	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHAD OF ALL TRADES, INC.	120 PACIFIC AVE # A-7	# A-7	CARLSBAD	CA	92008-2243	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHAMPION WINDOWS INC	28472 WESTINGHOUSE PL		VALENCIA	CA	91355-0929	17	SUB-CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHARLAINE ARCHITECTURAL SIGNS	8815 PRODUCTION AVE		SAN DIEGO	CA	92121-2219	17	SUB CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHARLES E THOMAS CO	13701 ALMA AVE		GARDENA	CA	90249-2513	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHARMET TILE	8505 COMMERCE AVE		SAN DIEGO	CA	92121-2610	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHIUZZI BUILDING MAINT., OMAR	727 VALE VIEW DR		VISTA	CA	92081-6724	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHRIS COULTER LANDSCAPE	627 HOLLYRIDGE DR		ENCINITAS	CA	92024-4754	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHRIS DO	4582 W 5TH ST		SANTA ANA	CA	92703-3167	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHRISTA'S CLEANING	315 ACACIA AVE APT 103	APT 103	CARLSBAD	CA	92008-3267	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHUCK DERRICK CONSTRUCTION	1050 PALM AVE		CARLSBAD	CA	92008-2547	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CHUCK POWERS CONST. CO.	2264 FIRE MOUNTAIN DR		OCEANSIDE	CA	92054-6115	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CICKINSON CAMERON CONSTRUCTION	6184 INNOVATION WY		CARLSBAD	CA	92009	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CIRCLE M CONTRACTORS INC	946 CALLE AMANECER STE D	STE D	SAN CLEMENTE	CA	92673-6221	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CIRO'S LANDSCAPING, INC.	1908 DON LEE PL		ESCONDIDO	CA	92029-1140	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CITY VENTURES	2850 RED HILL AVE STE 200	STE 200	SANTA ANA	CA	92705-5543	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CITY VENTURES, LLC	2850 RED HILL AVE STE 200	STE 200	SANTA ANA	CA	92705-5543	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CITY WIDE RESTORATION SERVICES	30409 LILAC RD		VALLEY CENTE	CA	92082-3324	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CLARK CONSTRUCTION	1100 STARVIEW DR		VISTA	CA	92084-6532	15	RESIDENTIAL CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CLASSIC PAINTING INC	601 E PALOMAR ST # C427	# C427	CHULA VISTA	CA	91911-6976	17	PAINTING CO	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CLEANING COMPANY, THE	2605 JACARANDA AVE		CARLSBAD	CA	92009-9116	7217	Carpet And Upholstery Cleaning	Y	Y	N	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CLEANWATER STORM DRAIN	12421 RUE FOUNTAINBLEAU		SAN DIEGO	CA	92131-2265	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CLEAR WATER POOLS INC	3518 CARLSBAD BLVD		CARLSBAD	CA	92008-3226	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CNH FLOORING, INC	1864 E POINTE AVE		CARLSBAD	CA	92008-3774	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COAST AUTO DETAILING	1859 HARTWRIGHT RD		VISTA	CA	92084-7635	7542	AUTO MOBILE DETAILING SERVICE	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COAST CONSTRUCTION & MAINTENANCE	6945 SANDPIPER PL		CARLSBAD	CA	92009-4132	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COAST ENGINEERING CONTRACTORS INC	22 SHADY LN		IRVINE	CA	92603-0128	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COAST HOME BUILDING SERVICES	2998 LEXINGTON CIR		CARLSBAD	CA	92010-6565	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTAL BUILDING SERVICES, INC.	1295 N TUSTIN AVE		ANAHEIM	CA	92807-1645	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTAL COLORS	7785 FALDA PL		CARLSBAD	CA	92009-8520	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTAL CONCRETE INNOVATIONS, INC.	13685 HIGHWAY 8 BUSINESS		EL CAJON	CA	92021-1920	15	CONCRETE CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTAL CONSTRUCTION & REMODEL	4245 TRIESTE DR		CARLSBAD	CA	92010-3736	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTAL DESIGNS	2936 GARNET PL		CARLSBAD	CA	92009-4413	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTAL FLOORING, INC	377 E ST		CHULA VISTA	CA	91910-2682	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTAL PACIFIC CONSTRUCTION INC	23121 LA CADENA DR STE L	STE L	LAGUNA HILLS	CA	92653-1421	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTAL WINDOW WASHING SERVICES	393 DATE AVE		CARLSBAD	CA	92008-7432	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTAL-INLAND WINDOW CLEANING	2060 GAYLE WAY		CARLSBAD	CA	92008-2016	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTLINE CONSTRUCTION & AWNING INC	5742 RESEARCH DR		HUNTINGTN BC	CA	92649-1617	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COASTLINE CONSTRUCTION AND DESIGN	2292 AUDEN PL		CARLSBAD	CA	92008-3856	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COLE'S WEED CONTROL, STAN	2566 EL CAMINO DEL NORTE		ENCINITAS	CA	92024-6631	782	DISC WEEDS/FIRE BRAKES	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COLONIAL PAINTING	2520 NAVARRA DR	UNIT F	CARLSBAD	CA	92009	1721	SPECIAL TRADE CONTRACTORS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COLORS IN MOTION	1790 BASSWOOD AV		CARLSBAD	CA	92008	1721	PAINTING CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COLRICH RESIDENTIAL CONSTRUCTION INC	4747 MORENA BLVD STE 100	STE 100	SAN DIEGO	CA	92117-3466	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COMMERCIAL INTERIOR RESOURCES	1761 REYNOLDS AVE		IRVINE	CA	92614-5784	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COMMERCIAL INTERIORS ACOUSTICS INC	5617 WHITNALL HWY		N HOLLYWOOD	CA	91601-2212	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COMMERCIAL MANAGEMENT SERVICES	8961 APPALOOSA CT		ALTA LOMA	CA	91737-1456	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COMMUNITY HOME HANDYMAN	348 LAS FLORES DR		SAN MARCOS	CA	92078-6119	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CONCRETE RESTORATIONS	31735 RIVERSIDE DR # C308	# C308	LAKE ELSINOR	CA	92530-7816	17	CONCRETE RESTORATIONS - STAIN, SEAL, CLEAN C	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CONDO CARE, INC	3160 SCOTT ST		VISTA	CA	92081-8318	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CONNELLY'S LIGHTING	1278 4TH ST		NORCO	CA	92860-2000	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CONSOLIDATED CONSTRUCTION SERVICES, INC.	8 HAMMOND STE 100	STE 100	IRVINE	CA	92618-1601	1542	General Contractors-Nonresidential Buildings, Oth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CONSOLIDATED GROUP INC	7118 DE CELIS PL		LAKE BALBOA	CA	91406-3703	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CONVERGENCE SYSTEMS INC	9275 TRADE PL STE H	STE H	SAN DIEGO	CA	92126-6318	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COOLHAUS INC	426 N CEDROS AVE		SOLANA BEACH	CA	92075-1255	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CORAL REEF CONTRACTORS, INC.	347 PINE AVE		CARLSBAD	CA	92008-3163	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CORNERSTONE CONCRETE INC	255 BENJAMIN DR		CORONA	CA	92879-6509	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CORNERSTONE MANAGING PARTNERS	2438 OVIEDO PL		CARLSBAD	CA	92009-8023	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CORNERSTONE MASONRY	11070 FLEETWOOD ST STE A	STE A	SUN VALLEY	CA	91352-2754	1741	Masonry Stone Setting, & Other Stone Work	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CORONADO'S AUTO DETAILING	1067 FOURTH AVENUE APT. 1204	APT. 1204	CHULA VISTA	CA	91911	7542	Mobile Auto Detailing	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
CORTEZ TREE SERVICE	2527 GUAJOME LAKE RD		VISTA	CA	92084-1610	17	TREE SERVICE (TREE PRUNING - TREE REMOVALS -	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COSTELLO BUILDERS	127 CROUCH ST		OCEANSIDE	CA	92054-3721	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COURT CONCEPTS INC	5134 ESPINOZA RD		EL CAJON	CA	92021-2200	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
COURTNEY INC	16781 MILLIKAN AVE		IRVINE	CA	92606-5009	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CRAIG E. ISRAEL	1749 CHESTNUT AVE		CARLSBAD	CA	92008-2709	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CREATIVE CONCEPTS LTD	430 N ANDREASEN DR		ESCONDIDO	CA	92029-1408	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CREATIVE FLAVORS CATERING	5661 PALMER WY	STE B	CARLSBAD	CA	92008	5812	CATERING	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CREW BUILDERS INC.	6191 CORNERSTONE CT E STE 101	STE 101	SAN DIEGO	CA	92121-4739	1542	COMMERCIAL CONSTRUCTION	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CRISTY*S HOUSE CLEANING	243 PALA VISTA DR APT 4	APT 4	VISTA	CA	92083-5217	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CROSS CONSTRUCTION	1142 MAR VISTA DR		VISTA	CA	92081-7433	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CROSSMAN LANDSCAPE & MAINTENANCE INC	8617 CUYAMACA ST		SANTEE	CA	92071-4214	17	LANDSCAPE INSTALLATION & MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CRS COMPANY	1345 CAMINO LINDA DR		SAN MARCOS	CA	92078-5217	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CRYSTAL RAIN POOL SERVICES	2894 WOODRIDGE CR		CARLSBAD	CA	92008	7389	SWIMMING POOL MAINTENANCE	Y	Y	Y	N	N	N	N	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
CURTIS CONSTRUCTION	3571 DONNA DR		CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CUSTOM AUTO SHINE	1022 WEST ST		SANTA ANA	CA	92703-1639	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CUSTOM CONSTRCUTION INC	12011 REDCLIFF CT		SAN DIEGO	CA	92131-2617	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CUSTOM HOME PAINTING	2138 TWAIN AV		CARLSBAD	CA	92008	1721	PAINT CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CUSTOM HOME SVC	9 GOLDENBUSH		IRVINE	CA	92604-2820	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CUSTOM POOL PLASTERING	8045 WING AVE		EL CAJON	CA	92020	17	POOL PLASTERING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CUTTING EDGE GRADING, INC.	3132 TIGER RUN CT	STE 114	CARLSBAD	CA	92010	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
CVA SECURITY	6175 PROGRESSIVE DR STE 400	STE 400	SAN DIEGO	CA	92154-6648	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D & D CONCRETE CONSTRUCTION, INC.	13795 BLAISDELL PL # 201	# 201	POWAY	CA	92064-6837	17	CONCRETE PLACE & FINISH	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D C WEST CONSTRUCTION INC	1117 AMADOR AVE		VISTA	CA	92083-5619	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D D L TRAFFIC INC	4677 WILLOW BEND CT		CHINO HILLS	CA	91709-3383	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D M BUILDING	1825 MCCAULEY LN		CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D. G. HANDYMAN	2805 VIA PAJARO		CARLSBAD	CA	92010-1348	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D. H. MAINTENANCE SERVICES	2320 BACK NINE ST		OCEANSIDE	CA	92056-1701	7349	Building Cleaning And Maintenance Services, Not E	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D. VAUGHN CONSTRUCTION	6590 SCAUP ST		CARLSBAD	CA	92011-2523	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D.A. WHITACRE CONST. INC.	1108 GREENFIELD DR		EL CAJON	CA	92021-3314	17	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D.C.C.	1492 OAK AV		CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D.R. HORTON LOS ANGELES HOLDING CO., INC. - AL	3643 GLEN AVE		CARLSBAD		92010-5518	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		904.21, 904.31, 904.4, 904.51, 904.61
DAG BUILDERS INC	1535 SUNRISE CR		CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAMIAN GULAK CONSTRUCTION	30314 CASTLECREST DR		VALLEY CENTE	CA	92082-4979	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAN LEVY CONSTRUCTION INC	3435 CAMINO DEL RIO S STE 215	STE 215	SAN DIEGO	CA	92108-3911	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAN THE CARPET MAN	4461 MOUNT CASTLE AVE		SAN DIEGO	CA	92117-4804	7217	Carpet And Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAN VAUGHN MASONRY & CONCRETE	1781 COSTA VERDE LN		VISTA	CA	92084-7600	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DANIELS LANDSCAPE INC.	561 N TWIN OAKS VALLEY RD		SAN MARCOS	CA	92069-1710	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DARRCO BUILDING MAINTENANCE, INC.	4599 MISSION GORGE PL STE C	STE C	SAN DIEGO	CA	92120-4144	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DARYL GRIFFIS ACOUSTICS INC	4958 NAPLES ST		SAN DIEGO	CA	92110-3820	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVACO, INC.	6688 N CENTRAL EXPY STE 1400	STE 1400	DALLAS	TX	75206-3925	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVE HANSON	991 PHILLIPS ST		VISTA	CA	92083-7110	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVE KEENA PAINTING	2350 CARDINAL DR		SAN DIEGO	CA	92123-4102	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVEY TREE EXPERT COMPANY, THE	6914 MISSION GORGE RD		SAN DIEGO	CA	92120-2420	782	TREE & LAWN CARE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVID & SONS	7812 GAVIOTA CIR		CARLSBAD	CA	92009-8219	7699	Repair Shops And Related Services, Not Elsewhere	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVID EDER	1861 PUERTA DE LOMAS		BONSALL	CA	92003-0000	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVID G ALEXANDER INC	1986 AUGUSTA CT		MERCED	CA	95340-0741	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVID R. FUNKHOUSER GENERAL CO	1281 MAGNOLIA AV		CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVID SCHULER, HANDYMAN	4344 ORCHID AVE		SAN DIEGO	CA	92107		Handyman	Y	N	Y	Y	N	Y	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVID TAYLOR DEVELOPMENT INC.	4135 SKYLINE RD		CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVIDSON BUILDERS, INC.	1302 CAMINO DEL MAR		DEL MAR	CA	92014-2508	1521	HOME BUILDER	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVIS & ADAMS CONSTRUCTION, INC.	7986 DAGGET ST		SAN DIEGO	CA	92111-2321	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVIS STONE INC	519 VENTURE ST		ESCONDIDO	CA	92029-1213	1741	MARBLE AND GRANITE FABRICATION AND INSTALLA	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DAVISREED CONSTRUCTION, INC.	12250 EL CAMINO REAL STE 325	STE 325	SAN DIEGO	CA	92130-3075	1542	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DBL CONSTRUCTION CORP	380 N LAKEDALE DR		ANAHEIM	CA	92807-2927	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DBMC, INC.	814 N DODSWORTH AVE		COVINA	CA	91724-2409	15	GENERAL BUILDING CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DCC GENERAL ENGINEERING CONTRACTORS, INC.	2295 MEYERS AVE		ESCONDIDO	CA	92029-1007	17	CONCRETE CONSTRUCTION (SITEWORK - CURB & G	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DCT	7034 CONVOY COURT CT		SAN DIEGO	CA	92111-0000	1542	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DE MOTT CONSTRUCTION	357 CHESTNUT AVE APT 18	APT 18	CARLSBAD	CA	92008-3119	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DEAN PORTER CONSTRUCTION	3750 MONROE ST		CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DEFOREST CONSTRUCTION INC.	2023 MYERS ST		RIVERSIDE	CA	92503-6829	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DEHART CONSTRUCTION	696 HILO WAY		VISTA	CA	92081-7508	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
DEL MAR BUILDERS INC	13025 CALLCOTT WAY		SAN DIEGO	CA	92130-1329	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DEL MAR PACIFIC ACQUISITION CORP	153 N HIGHWAY 101 STE 200	STE 200	SOLANA BEACH	CA	92075-1196	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DEL MAR PLASTERING INC	7085 JURUPA AVE STE 2	STE 2	RIVERSIDE	CA	92504-1044	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DEL RANCHO POOL & SPA	1315 ENCINITAS BLVD		ENCINITAS	CA	92024-2845	15	POOL & SPA SRV/REPAIR CONST	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DELANEY CONST. CO.	112 LA VETA AVE		ENCINITAS	CA	92024-3233	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DELTA CONSTRUCTION & IMPROVEMENTS INC	1810 BROADWAY APT 22	APT 22	CAMP PENDLET	CA	92054-5368	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DEMATIC CORP	333 CITY BLVD W STE 1700	STE 1700	ORANGE	CA	92868-5905	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DESIGN - RITE CONST.	1611 S MELROSE DR STE 343-A	STE 343-A	VISTA	CA	92081-5407	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DESIGN MASONRY, INC.	20703 SANTA CLARA ST		CANYON CNTR	CA	91351-2424	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DEWEY PEST CONTROL	939 E UNION ST		PASADENA	CA	91106-1716	17	BUG CONTROL	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DIAMOND ENVIROMENTAL	807 E MISSION RD		SAN MARCOS	CA	92069-3002	4959	PORTABLE RESTROOM SERVICE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DIAMOND ONE CONSTRUCTION INC	14168 POWAY RD STE 204	STE 204	POWAY	CA	92064-4939	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DICK MILLER, INC.	930 BOARDWALK STE G	STE G	SAN MARCOS	CA	92078-2634	17	MASONRY CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DINA'S CLEANING SERVICES	1945 DOVE LN APT 106	APT 106	CARLSBAD	CA	92009-4084	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DISCOUNT CARPET AND UPHOLSTERY	2408 MAJANO PL		CARLSBAD	CA	92009	7217	CARPET CLEANING SERVICE	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DISTINCTIVE SCAPES	131 S INDIANA AVE STE 2	STE 2	VISTA	CA	92084-6043	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DITTMANN MASONRY, INC.	5320 EASTGATE MALL		SAN DIEGO	CA	92121-2804	17	MASONRY SUBCONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DIVERSIFIED CONSTRUCTION, INC.	2979 STATE ST	STE D	CARLSBAD	CA	92008	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DIVERSIFIED CONTRACTING	940 WIND DRIFT DR		CARLSBAD	CA	92011-1130	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DIVERSIFIED MASTERS	29243 RIDGELINE CT		TEMECULA	CA	92590-3380	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DIVERSIFIED METAL WORKS	332 W BRENNA LN		ORANGE	CA	92867-5637	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DIVINE PET CARE	12431 HEATHERTON CT APT 250	APT 250	SAN DIEGO	CA	92128-5179	752	MOBILE PET CARE / PET SITTING INCLUDING DOG W	Y	Y	Y	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DK PAINTING	2002 AVENUE OF THE TREES		CARLSBAD	CA	92008-1104	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DK SHOWER PANS	7141 THOMAS ST STE A	STE A	BUENA PARK	CA	90621-3850	1721	Painting And Paper Hanging	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DON NICHOLS CONST	2726 NAPLES CT		CARLSBAD	CA	92010-2128	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DONE RITE DETAIL	1790 AVENIDA VISTA LABERA		OCEANSIDE	CA	92056-6515	7542	MOBILE AUTO DETAILING /RECONDITIONING / WIND	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DOOSE LANDSCAPE, INC.	785 E MISSION RD		SAN MARCOS	CA	92069-1903	15	GEMERAL LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DOROTHY ORTEGA CLEANING SERVICE	1605 CHESTNUT AVE		CARLSBAD	CA	92008-2614	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DOUBLE D PIPELINE, INC.	42166 RIO NEDO		TEMECULA	CA	92590-3704	1623	Water, Sewer, Pipeline, & Communications & Power	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DOWLING CONSTRUCTION, INC	5735 KEARNY VILLA RD STE 103	STE 103	SAN DIEGO	CA	92123-1138	1542	General Contractors-Nonresidential Buildings, Oth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DOWNSTREAM SERVICES, INC.	2855 PROGRESS PL		ESCONDIDO	CA	92029-1516	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DPR CONSTRUCTION A GENERAL PARTNERSHIP	5010 SHOREHAM PL		SAN DIEGO	CA	92122-5905	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DPR CONSTRUCTION, INC.	6333 GREENWICH DR STE 170	STE 170	SAN DIEGO	CA	92122-5957	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DREAM DESIGN BUILDERS	16990 VIA TAZON STE 125	STE 125	SAN DIEGO	CA	92127-1649	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DREAM POOLS AND SPAS	3607 BARRANCA CT		CARLSBAD	CA	92010	1700	SPECIAL TRADE CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DREW LANDSCAPING	12099 OAKVIEW WAY		SAN DIEGO	CA	92128-5296	17	POOL / LANDSCAPING CONST.	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DRF CONTRACTING	1749 ALVARADO ST		OCEANSIDE	CA	92054-6026	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DRINKWOOD ELECTRIC INC	1015 ONTARIO ST		ESCONDIDO	CA	92025-3820	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DRM LANDSCAPES	2442 ASHFORD GLN		ESCONDIDO	CA	92027-2977	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
D'ROYCE PETERSON - GENERAL CONTRACTOR	31830 RITSON RD		ESCONDIDO	CA	92026-5209	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DRUM PLUMBING, INC.	2550 FORTUNE WAY		VISTA	CA	92081-8441	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DUKES CUSTOM CONSTRUCTION	2035 CORDOBA PL		CARLSBAD	CA	92008-3713	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DUSTY WHITE	3645 PARK BLVD # 321	# 321	SAN DIEGO	CA	92103-4523	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DUTCH TOUCH	5651 PALMER WY	STE E	CARLSBAD	CA	92008	7349	BUILDING CLEANING AND MAINTENANCE SERV	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DYK INCORPORATED	351 CYPRESS LN		EL CAJON	CA	92020-1603	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DYLAN LAMPRO'S AUTOMOTIVE ACCESSORIES	1462 WESTMORE PL		OCEANSIDE	CA	92056-6671	7538	AUTO GARAGE REPR(DONE@DELRSHP)	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DYNAMIC CONTRACTING SERVICES, INC	241 W 35TH ST		NATIONAL CITY	CA	91950-7920	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
DYNAMIX PAINTING, INC.	17080 HARVEST POINT WAY		RAMONA	CA	92065-5930	17	PAINTING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
E & G BUILDERS	14106 HILLDALE RD		VALLEY CENTE	CA	92082-3431	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
E & S CONTRUCTION CORP	7750 BURNET AVE		VAN NUYS	CA	91405-1007	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
E.G. MASONRY INC.	1185 E LEXINGTON AVE		EL CAJON	CA	92019-2192	1741	MASONRY CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EARL FLORES AND SONS MASONRY	653 REQUEZA ST		ENCINITAS	CA	92024-3704	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EARTHS PAW MOBILE PET GROOMING	31940 DEL CIELO ESTE APT B6	APT B6	BONSALL	CA	92003-3936	752	Animal Specialty Services, Except Veterinary	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EARTHWORKS PLUS INC	2512 PIMLICO PL		ALPINE	CA	91901-3955	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EAST BROTHERS GROVE SERVICE	112 E AVIATION RD		FALLBROOK	CA	92028-3315	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EAST COUNTY TILE AND MARBLE, INC.	9855 PROSPECT AVE		SANTEE	CA	92071-4316	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ECCELEMENTAL09000	2105 CAMINO VIDA ROBLE	STE E	CARLSBAD	CA	92011	1500	Building Construction-General Building	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ECHELON LANDSCAPES	7408 BRAVA ST		CARLSBAD	CA	92009-7501	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ECLIPSE CONSTRUCTION OF SAN DIEGO	6550 AMBROSIA LN APT 1025	APT 1025	CARLSBAD	CA	92011-2612	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ECO G PAINTERS	7969 ENGINEER RD STE 213	STE 213	SAN DIEGO	CA	92111-1922	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ECS CONSTRUCTION	1185 PARK CENTER DR STE T	STE T	VISTA	CA	92081-8344	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
EDAW, INC.	150 CHESTNUT ST		SAN FRANCISC	CA	94111-1004	781	LANDSCAPE COUNSELING AND PLANNING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EDGAR PONCE JANITORIAL SERVICE	920 SYCAMORE AVE APT 2	APT 2	VISTA	CA	92081-7843	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EDSON'S CLEANING SERVICE	867 WANDERING RD APT 3	APT 3	VISTA	CA	92081-6415	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EDUARDO PONCE JANITORIAL	920 SYCAMORE AVE APT 2	APT 2	VISTA	CA	92081-7843	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EDWARD SHEDLEY MASONRY	2445 SIERRA MORENA AV		CARLSBAD	CA	92010	1741	MASONRY CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EIFFEL CONSTRUCTION INC	1270 S LYON ST		SANTA ANA	CA	92705-4510	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EL RINCON GARDEN CARE	3480 MONROE ST	APT B	CARLSBAD	CA	92008	0781	LAWN AND GARDEN CARE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ELEPHANT BUILDER, INC.	4938 SANTA CRUZ AVE		SAN DIEGO	CA	92107-3311	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ELEVEN WESTERN BUILDERS, INC.	2862 EXECUTIVE PL		ESCONDIDO	CA	92029-1524	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ELITE FINISH DETAILING	6959 VIA MARIPOSA NORTE		BONSALL	CA	92003-5610	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ELITE JANITORIAL SERVICE	305 CEDAR RD		VISTA	CA	92083-5122	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ELIZABETH GANE	3152 VIA PUERTA		CARLSBAD	CA	92009-6080	782	Lawn And Garden Services	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EMINENT POOL SERVICE	6432 OLEA LN UNIT 103	UNIT 103	CARLSBAD	CA	92011-2739	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EMMERSON CONSTRUCTION, INC.	5993 AVENIDA ENCINAS	STE 101	CARLSBAD	CA	92008	1522	GENERAL CONTRACTORS-RESIDENTIAL BUILDI	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EMPIRE INSULATION	4211 LATHAM ST		RIVERSIDE	CA	92501-1712	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ENDRES CONSTRUCTION	2895 HIGHLAND DR		CARLSBAD	CA	92008	1521	BUILDING CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ENDURING HOMES INC	2502 WORTH WAY		CAMARILLO	CA	93012-9086	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ENVIRONMENTAL PARTNERS LANDSCAPE DESIGN	7211 MANZANITA ST		CARLSBAD	CA	92011-5128	7389	Business Services, Not Elsewhere Classified	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ERIC K. WILLIAMS	972 LAGUNA DR		CARLSBAD	CA	92008-1853	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ERIKS POOL SERVICE	4225 FIESTA WA # 4	# 4	CARLSBAD	CA	92008-8263	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ERRECA'S INC.	12570 SLAUGHTERHOUSE CANYON RD		LAKESIDE	CA	92040-0000	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ESBENSEN, PHILIP G.	6150 YARROW DR	STE H	CARLSBAD	CA	92011	15	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ESCONDIDO OVERHEAD GARAGE DOORS	1851 COMMERCIAL ST		ESCONDIDO	CA	92029-1231	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ESN RESTORATION	1585 CREEK ST		SAN MARCOS	CA	92078-2442	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ESOO GENERAL BUILDING	10833 CHALLENGE BLVD		LA MESA	CA	91941-7244	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ESPINOZA CABLE CONSTRUCTION	1833 RANCHO VILLA RD		RAMONA	CA	92065-7652	17	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ETCHELLS TILE	367 HEMLOCK AVE UNIT A	UNIT A	CARLSBAD	CA	92008-8239	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EURO CAL CONSTRUCTION INC	17151 NEWHOPE ST STE 205	STE 205	FOUNTAIN VAL	CA	92708-4226	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EVANS & SON	25812 SPRINGBROOK AVE		AGUA DULCE	CA	91350-2565	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EVOLVE BUILDERS	31642 VIA QUIXOTE		MISSION VIEJO	CA	92675-3336	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EXCAVATING ENGINEERS, INC.	5461 RAINBOW CREEK RD		FALLBROOK	CA	92028-9616	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EXCELLENCE IN PAINTING	2781 BERKELEY AV		CARLSBAD	CA	92010	1721	CONSTRUCTION SPECIALIST: PAINTING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EXECUTIVE AUTO RESTORATION	3020 C AVE		NATIONAL CITY	CA	91950-7320	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EXECUTIVE LANDSCAPE, INC.	2131 HUFFSTATLER ST		FALLBROOK	CA	92028-8861	17	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EXPERT ELECTRIC, INC.	16414 N 91ST ST STE B-101	STE B-101	SCOTTSDALE	CA	85260-1575	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
EXTRAORDINARY BUILDERS INC	461 ESTRELITA DR		VISTA	CA	92084-7833	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
E-ZEE MAINTENANCE	24662 ROLLINGWOOD RD		LAKE FOREST	CA	92630-3118	1542	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
F J ZAM COMPANY	20160 PASEO DEL PRADO STE A	STE A	WALNUT	CA	91789-2670	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
F. RODGERS CORPORATION	341 BONNIE CIR STE 100	STE 100	CORONA	CA	92880-2895	1742	Plastering, Drywall, Acoustical & Insulation Work	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FABRICATION ARTS	2952 MAIN ST		SAN DIEGO	CA	92113-3730	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FAIRCO DEVELOPER LANDSCAPE SER	2928 JEFFERSON ST	STE 2D	CARLSBAD	CA	92008	1500	Building Construction-General Building	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FAIRWAY PEST CONTROL	567 SANDALWOOD DR		EL CAJON	CA	92021-5456	7342	PEST CONTROL SERVICE	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FALK & ASSOCIATES, INC	3 BREAKERS LN		ALISO VIEJO	CA	92656-6007	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FAMILY CARPET AND WINDOW CLEANER	11188 NARDO RD		ENCINITAS	CA	92023	7217	Carpet Cleaning	Y	Y	N	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FAMILY POOL SERVICE	1884 PALISADES DR		CARLSBAD	CA	92008-3758	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FELIPE HUGUET	5150 WHITMAN WAY APT 202	APT 202	CARLSBAD	CA	92008-4665	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FELIX A. LANDSCAPING	7782 PALENQUE ST		CARLSBAD	CA	92009	0781	LANDSCAPE COUNSELING AND PLANNING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FENCECORP INC	111 MAIN ST		RIVERSIDE	CA	92501-1058	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FERANDELL TENNIS COURTS INC	2120 JIMMY DURANTE BLVD STE 102	STE 102	DEL MAR	CA	92014-2269	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FILTERRA	210 STONE SPRING RD		HARRISONBUR	CA	22801-9651	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FINEST CITY ACOUSTICS, INC.	7965 SILVERTON AVE STE 1311	STE 1311	SAN DIEGO	CA	92126-6358	1742	Plastering, Drywall, Acoustical & Insulation Work	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FINISH TECH CORPORATION	5993 AVENIDA ENCINAS	STE 101	CARLSBAD	CA	92008	1521	BUILDING CONSTRUCTION-GENERAL BUILDING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FIRE SPRINKLER SYSTEMS, INC.	705 E HARRISON ST # 200	# 200	CORONA	CA	92879-1350	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FISHER ROOFING & REPAIRS	1516 KURIZ ST		OCEANSIDE	CA	92054	17	Roofing Contractor	Y	N	Y	Y	N	N	N	N	N	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
FITZSIMONS FIELDS	1722 CATALPA RD		CARLSBAD	CA	92011-5106	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FIVE STAR POOL AND SPA	1190 TAMARACK AVE		CARLSBAD	CA	92008-3417	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FIX A HOME	774 CLARK AVE		ENCINITAS	CA	92024-2313	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FIX IT 4 U HANDYMAN	1740 TAMARACK AVE		CARLSBAD	CA	92008-3628	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FLEMING AND SONS CONCRETE PUMPING INC	911 E WALNUT ST		SANTA ANA	CA	92701-6420	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FONSECA GENERAL CONTRACTORS	1379 CORTE BAGALSO		SAN MARCOS	CA	92069-7392	15	GENERAL BUILDING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FORESIGHT DEVELOPMENT, INC.	2784 JAMES DR		CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTORS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
FOUR CORNERS CONCRETE, INC.	2317 AUTO PARK WAY		ESCONDIDO	CA	92029-1218	17	CONCRETE CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FOUR SEASONS TREE CARE INC	822 DAYBREAK PL		VISTA	CA	92084-3347	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FOURSQUARE PROPERTIES, INC.	5850 AVENIDA ENCINAS	STE A	CARLSBAD	CA	92008	1500	Building Construction-General Building	Y	N	N	N	N	N	N	N	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FOWLERS IN CONTROL, INC.	4809 CLAIREMONT DR # 431	# 431	SAN DIEGO	CA	92117-2706	17	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRANCISCO GONZALEZ LANDSCAPE	4086 LAKE BLVD		OCEANSIDE	CA	92056-4603	781	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRANK SCIARRINO MARBLE, GRANITE	7505 TRADE ST		SAN DIEGO	CA	92121-2411	17	STONE FABRICATION & INSTALLATION, TILE WORK	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRANK'S LANDSCAPING	3897 MAGNOLIA RD		OCEANSIDE	CA	92058-1685	781	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRAZIER MASONRY CORP	5841 EDISON PL	STE 100	CARLSBAD	CA	92008	1500	BUILDING CONSTRUCTION-GENL BUILDING CO	Y	N	Y	N	N	N	N	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRED ANGUIANO CONSTRUCTION	20768 ELFIN FOREST RD		ESCONDIDO	CA	92029-3313	15	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRED GONZALES CONCRETE, INC.	354 PACIFIC AVE		SOLANA BEACH	CA	92075-1158	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FREEDOM FORESEEN INC.	1555 GRAND AVE STE B	STE B	SAN MARCOS	CA	92078-2427	7349	COMMERCIAL WINDOW CLEANING	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FREIDIN DESIGN AND CONSTRUCTION	1808 MEADOWLARK RANCH RD		SAN MARCOS	CA	92078-5162	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRIARS REMODELING	1639 FOOTHILL DR		VISTA	CA	92084-4711	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRIGON CONSTRUCTION INC	142 N CEDROS AVE		SOLANA BEACH	CA	92075-1253	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRONTERA CONSTRUCTION INC	5993 AVENIDA ENCINAS	STE 101	CARLSBAD	CA	92008	1521	BUILDING CONSTRUCTION-GENERAL CONTRACT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRONTIER CONCRETE INC.	717 MERCANTILE ST		VISTA	CA	92083-5919	1771	FOUNDATION CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRP CONSTRUCTION, LLC.	2055 E 17TH ST		TUCSON	AZ	85719-6947	1799	Special Trade Contractors, Nec	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FRY SPECIALTY CO.	1488 PIONEER WAY STE 10	STE 10	EL CAJON	CA	92020-1633	1799	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
FUELING SERVICES AND TECH.	7050 VILLAGE DR STE D	STE D	BUENA PARK	CA	90621-2281	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
F-Y INC	4810 REFUGIO AVE		CARLSBAD	CA	92008-3728	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
G & H SUPPLY CO	3281 CELINDA DR		CARLSBAD	CA	92008-2070	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
G M S MAINTENANCE	4216 LOCHLOMOND ST		SAN DIEGO	CA	92111-3628	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
G P S PAINTING & WALLCOVERING	1307 E SAINT GERTRUDE PL STE C	STE C	SANTA ANA	CA	92705-5228	17	PAINTING & WALLCOVERING SUB - CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
G S CUSTOM PAINTING	2746 VICTORIA AVE		CARLSBAD	CA	92010-2190	1721	Painting And Paper Hanging	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
G&R CONSTRUCTION INC.	854 WASHINGTON HEIGHTS RD		EL CAJON	CA	92019-3090	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
G.P.M	5015 GARSDEN AVE		COVINA	CA	91724		HOA MAINTENANCE	Y	Y	Y	N	N	N	N	N	N	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
G.S. CUSTOM PAINTING	2746 VICTORIA AVE		CARLSBAD	CA	92010-2190	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GAFCON, INC.	701 B ST STE 1600	STE 1600	SAN DIEGO	CA	92101-8195	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GALLEGOS JANITORIAL SERVICE	569 GLENHEATHER DR		SAN MARCOS	CA	92069-2004	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GARCIA LANDSCAPE SER.	10236 MOORPARK ST # A	# A	SPRING VALLEY	CA	91978-1514	17	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GARCIA'S LANDSCAPING SERVICE	3818 COMMODORE DR		SAN MARCOS	CA	92078-2339	782	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GARCIA'S PRECISION ACOUSTICS INC	2558 DISCOVERY RD		CARLSBAD	CA	92009-3062	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GARDEN N' ROSE LANDSCAPE	5420 SONOMA PL		SAN DIEGO	CA	92130-5754	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GARDNER POOL PLASTERING	801 GABLE WAY		EL CAJON	CA	92020-1910	17	POOL PLASTERING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GARRISON CONSTRUCTION	380 HILLCREST DR		ENCINITAS	CA	92024-1527	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GARTH PACKARD CONST INC	2030 GAYLE WAY		CARLSBAD	CA	92008-2016	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GARY C. HAZZARD CONSTRUCTION	3233 CALLE VALLARTA		CARLSBAD	CA	92009-9310	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GARY GLEASON'S HANDYMAN SERVICES	18 GREENVIEW DR		CARLSBAD	CA	92009-6913	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GARY TEAM PAINTING INC.	1749 BONITA LN		CARLSBAD	CA	92008	1721	PAINT - CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GATES CONSTRUCTION	2735 SPOKANE WY		CARLSBAD	CA	92010	1521	BUILDING CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GBC CONCRETE & MASONRY	561 BIRCH ST		LAKE ELSINORE	CA	92530-2732	1771	CONCRETE AND MASONRY	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GEBCO GENERAL CONTRACTOR	1395 SUNSET GROVE RD		FALLBROOK	CA	92028-8332	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GENE L. BONAS, INC.	1955 N MAIN ST		ORANGE	CA	92865-4101	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GENERAL COATING CORP.	6711 NANCY RIDGE DR		SAN DIEGO	CA	92121-2231	17	PAINTING & WATERPROOFING CONTR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GENERATION CONTRACTING & EMERGENCY SERVI	13750 DANIELSON ST # 100	# 100	POWAY	CA	92064-8851	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GENTLE TOUCH CAT GROOMING	146 PHOEBE ST		ENCINITAS	CA	92024-1459	752	Animal Specialty Services, Except Veterinary	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GEOGRID RWS, INC.	1295 DISTRIBUTION WAY		VISTA	CA	92081-8817	15	CONSTRUCTION CO	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GEORGE BECHTLOFF	7056 WHITEWATER ST		CARLSBAD	CA	92011-5434	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GEORGE WEIR ASPHALT INC	610 METCALF ST		ESCONDIDO	CA	92025-1665	17	SUB CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GHA CONSTRUCTION	1270 BUENA VISTA WAY		CARLSBAD	CA	92008-1533	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GIRLZ GONE GREEN	6917 WATERS END DR		CARLSBAD	CA	92011-3253	782	Lawn And Garden Services	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GJ CONSTRUCTION	2200 FIRE MOUNTAIN DR		OCEANSIDE	CA	92054-6115	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GLEN MAGGARD HANDYMAN	4075 HARBOR DR		CARLSBAD	CA	92008-4114	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GLENN JONES PLUMBING	143 HESMAY DR		VISTA	CA	92083-7716	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GLOBAL POOLS	1648 N MAGNOLIA AVE STE 107	STE 107	EL CAJON	CA	92020-1252	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GMI BUILDING SERVICES INC	8001 VICKERS ST		SAN DIEGO	CA	92111	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GOLD MEDAL CLEANING	357 CHESTNUT AVE APT 45	APT 45	CARLSBAD	CA	92008-3122	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GOOD & ROBERTS INC.	1330 PARK CENTER DR		VISTA	CA	92081-8300	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GOOD LIVING POOLS	21861 OLIVE AVE		PERRIS	CA	92570-7870	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GOODWIN CONSTRUCTION INC	12985 CAMINITO POINTE DEL MAR		DEL MAR	CA	92014-3852	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GOTHIC LANDSCAPE, INC.	27502 AVENUE SCOTT		VALENCIA	CA	91355-3965	17	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
GOULD BUILDING CONTRACTORS, INC	31034 VALLEY CENTER RD		VALLEY CENTE	CA	92082-6753	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GRAFFLIN CONST	13888 MAGNOLIA AVE		CHINO	CA	91710-7027	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GRAHAM ESPIE CONSTRUCTION	4717 GATESHEAD RD		CARLSBAD	CA	92010-6507	1521	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GRAHOVAC CONSTRUCTION	8418 LA MESA BLVD		LA MESA	CA	91942-5306	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GRAND PACIFIC BUILDING SERVICES INC	9453 9TH ST STE A	STE A	RANCHO CUCA	CA	91730-4588	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GRANT GENERAL CONTRACTORS, INC	5051 AVENIDA ENCINAS		CARLSBAD	CA	92008	1521	General Contractor	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREATER ALARM COMPANY	12265 WORLD TRADE DR STE G	STE G	SAN DIEGO	CA	92128-3771	17	CONTRACTOR - SPECIALTY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREEN HORIZONS LANDSCAPE & MAINTENANCE IN	1530 INDUSTRIAL AVE		ESCONDIDO	CA	92029-1349	17	LANDSCAPE AND CONSTRUCTION AND MAINTENAN	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREEN LAND COMPANY	3562 CALLE PALMITO		CARLSBAD	CA	92009	0782	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREEN MASTER LANDSCAPE INC	5005 BELLA COLLINA ST		OCEANSIDE	CA	92056-1924	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREEN STAR ENTERPRISE	1818 BUENA VISTA WAY		CARLSBAD	CA	92008-1542	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREEN STREAM	31995 CORTE DE PINOS		WINCHESTER	CA	92596-8401	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREEN THUMB	11139 GATEMOORE WAY		SAN DIEGO	CA	92131-3645	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREEN VALLEY LANDSCAPE	1182 INDUSTRIAL AVE		ESCONDIDO	CA	92029-1422	17	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREENFIELD FENCE INC	33860 ZEIDERS RD		MENIFEE	CA	92584-9615	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREENLINE CONSTRUCTION INC	2022 CIMA CT		CARLSBAD	CA	92009-8501	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREG MCKEE CONSTRUCTION	10771 PORTLAND AVE		HESPERIA	CA	92345-2540	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREGG'S MOBILE REPAIR	5233 SHELLEY PL		CARLSBAD	CA	92008	7699	REPAIR SHOPS AND SERVICES	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREGORIO RAMOS	3921 SCOTT DR		OCEANSIDE	CA	92056-4312	781	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GREYHOUND GENERAL INC	1402 CREENCIA PL		ESCONDIDO	CA	92027-1313	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GRIFFIE BROTHERS EXPRESS PAINTING	1313 LAUREL TREE LN APT 153	APT 153	CARLSBAD	CA	92011-1284	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GROUND LEVEL INC	1217 VIA LA RANCHITA		SAN MARCOS	CA	92069-3140	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GROUND SERVICE TECHNOLOGY INC	2280 MICRO PL		ESCONDIDO	CA	92029-1011	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GROUNDFORCE	9095 HARNESS ST STE F	STE F	SPRING VALLE	CA	91977-6612	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GROVE LANDSCAPE ARCHITECTURE	2644 BRESSI RANCH WAY		CARLSBAD	CA	92009-3057	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GS DREAMSCAPING	1370 PINE AV		CARLSBAD	CA	92008	0782	LANDSCAPE COUNSELING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GUARDIAN WATERPROOFING & CAULKING	8622 ARGENT ST STE D	STE D	SANTEE	CA	92071-4176	1721	Painting And Paper Hanging	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GUTHRIE AND SONS INC	3914 HICOCK ST		SAN DIEGO	CA	92110-4316	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GUTIERREZ CLASSIC MOBILE DETAILING	2817 VIA CARRIO		CARLSBAD	CA	92010	7542	Mobile Detailing/Washer	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GUY EVANS CONTRACTOR SERVICES	82585 SHOWCASE PKWY		INDIO	CA	92203-9628	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
GUZMAN	1995 WHITE OAK CT		SAN MARCOS	CA	92078-5464	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
H2K CONSTRUCTION INC	6886 TRADEWINDS DR		CARLSBAD	CA	92011-3223	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HABITAT RESTORATION SCIENCES	4901 EL CAMINO REAL	STE D	CARLSBAD	CA	92008	1500	Building Construction-General Building	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HABITAT WEST, INC	2067 WINERIDGE PL # B	# B	ESCONDIDO	CA	92029-1931	17	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HALBERT CONSTRUCTION CO INC	330 S MAGNOLIA AVE STE 230	STE 230	EL CAJON	CA	92020-5224	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HALLIN & HERRERA, INC	502 CHANEY ST STE L	STE L	LAKE ELSINOR	CA	92530-2768	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HAMILTON DESIGN GROUP	905 HAWTHORNE AVE		CARLSBAD	CA	92011-3929	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HAMMON CONSTRUCTION	3840 GARFIELD ST		CARLSBAD	CA	92008-4031	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HANDY DAN'S MAINT	7913 CALLE JALISCO		CARLSBAD	CA	92009-9333	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HANDY HANDS SERVICES	2705 YORK RD		CARLSBAD	CA	92010-2148	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HANDY MATT'S HANDYMAN SERVICE	6550 PONTO DR SPC 78	SPC 78	CARLSBAD	CA	92011-2309	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HANDYMAN & HAUL AWAY	4244 PARK DR		CARLSBAD	CA	92008-3638	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HANDYMAN MATTERS SAN DIEGO	2820 VIA ORANGE WAY STE A	STE A	SPRING VALLE	CA	91978-1742	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HANDYMAN MCCANN	276 CARLSBAD VILLAGE DR APT A	APT A	CARLSBAD	CA	92008-2978	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HANDYMAN OF NORTH COUNTY	1743 SORREL CT		CARLSBAD	CA	92011-5146	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HANLEY'S WELDING	3202 W ROSECRANS AVE		HAWTHORNE	CA	90250-8225	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HAPPY PETS GROOMING	7511 BRAVA ST		CARLSBAD	CA	92009	752	Animal Specialty Services, Except Veterinary	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HAR-BRO CONSTRUCTION	455 54TH ST # 101	# 101	SAN DIEGO	CA	92114-2220	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HARDWOOD CREATIONS	800 COLUMBIA ST STE B	STE B	BREA	CA	92821-2953	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HARLOW LANDSCAPE	1922 CASABLANCA CT		VISTA	CA	92081-	17	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HARMONY LANDSCAPE INC	555 MATAGUAL DR		VISTA	CA	92081-6608	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HARRIS CONSTRUCTION	215 KNOLL RD		VISTA	CA	92083-5814	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HARRIS FENCE COMPANY	15188 VISTA DEL RIO AVE		CHINO	CA	91710-9694	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HARRIS RECONDITIONING	1627 PEGASUS WAY		SAN MARCOS	CA	92069-4204	7542	AUTO DETAILER	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HART CONCRETE CONSTRUCTION	4016 GARFIELD ST		CARLSBAD	CA	92008	1771	CONCRETE WORK	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HARVEST HOME IMPROVEMENTS	1563 TIBIDABO DR		ESCONDIDO	CA	92027-1040	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HARVEY INC.	8973 COMPLEX DR		SAN DIEGO	CA	92123-1405	1521	CONSTRUCTION CONTRACTORS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HAWK MSC	32897 CEDAR DR		LAKE ELSINOR	CA	92530-0619	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HAWKINS CONSTRUCTION	1414 EASTVIEW CT		OCEANSIDE	CA	92056-6102	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HAWKINS DOOR & TRIM INC	1320 GRAND AVE STE 6	STE 6	SAN MARCOS	CA	92078-2432	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HAYES CONSTRUCTION AND DESIGN	1802 EUCALYPTUS AVE		ENCINITAS	CA	92024-1106	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
HAZARD CONSTRUCTION COMPANY	6465 MARINDUSTRY DR		SAN DIEGO	CA	92121-2536	15	CONST-HEAVY CONST CONTRACTORS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HB BUILDERS INC	2277 BUENA CREEK RD		VISTA	CA	92084-7319	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HEAVENLY VIEWS WINDOW CLEANING	7104 SAN BARTOLO ST		CARLSBAD	CA	92011-4605	7349	WINDOW CLEANING	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HEAVEN'S BEST CARPET & UPHOLSTERY CLEANIN	4710 MYSTIK RD		OCEANSIDE	CA	92056-3025	7217	CARPET & UPHOLSTERY CLEANING	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HEAVILAND ENTERPRISES INC.	2180 LA MIRADA DR.		VISTA	CA	92081-8815	1700	LANDSCAPE COUNSELING AND PLANNING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HELIO POWER	25767 JEFFERSON AVE		MURRIETA	CA	92562-6903	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HENRY'S LANDSCAPE AND CLEAN POOLS SERVICE	341 N MELROSE DR UNIT H	UNIT H	VISTA	CA	92083-4845	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HERCA SOLAR	580 AIRPORT RD STE A	STE A	OCEANSIDE	CA	92058-1207	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HERCA TELECOMM SERVICES, INC.	18610 BECK ST		PERRIS	CA	92570-9185	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HERITAGE PLASTERING INC	1230 N JEFFERSON ST STE C	STE C	ANAHEIM	CA	92807-1631	1742	Plastering, Drywall, Acoustical & Insulation Work	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HERITAGE POOLS INC	11434 SHADOW RANCH RD		LA MESA	CA	91941-8204	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HERNANDEZ LANDSCAPE	904 CAMELLIA ST		ESCONDIDO	CA	92027-1763	17	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HERNANDEZ MAINTENANCE	3485 PONTIAC DR		CARLSBAD	CA	92010-2135	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HILLS LANDSCAPE, INC	132 EL CAMINO REAL 392	392	ENCINITAS	CA	92024			Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HILLS LANDSCAPING	4264 SKYLINE RD		CARLSBAD	CA	92008	0782	LANDSCAPER	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HINTZ CONSTRUCTION	2535 NAVARRA DR	UNIT 8B	CARLSBAD	CA	92009	1521	GENERAL CONTRACTOR - SING FAM HOMES	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HI-POINT CONSTRUCTION INC	1333 LITTLE GOPHER CANYON RD		VISTA	CA	92084-1111	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HOAGLUND & SONS CONCRETE	700 1/2 BARSBY ST		VISTA	CA	92084-2602	15	CONCRETE	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HOLCOMBE DESIGN INC	4407 MANCHESTER AVE STE 104	STE 104	ENCINITAS	CA	92024-4941	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HOME FRONT LIGHTING INC	4683 PARK DR # B	# B	CARLSBAD	CA	92008-4244	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HOME STYLE	1805 NICOLIA DR UNIT 202	UNIT 202	CARLSBAD	CA	92011-2778	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HOME TO-DO'S, INC.	2009 EDINBURG AVE		CARDIFF	CA	92007-1742	1521	LICENSED GENERAL CONTRACTOR DOING HANDYM	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HOMESITE SERVICES INC	13659 CENTRAL AVE		CHINO	CA	91710-5108	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HOMESMITH INC	7907 FORRESTAL RD		SAN DIEGO	CA	92120-1711	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HOMETEAM PEST DEFENSE	1185 PARK CENTER DR STE A	STE A	VISTA	CA	92081-8304	7342	Disinfecting And Pest Control Services	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HONG'S GARDENING	201 CAMINO DEL POSTIGO		ESCONDIDO	CA	92029-7442	782	YARD MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HONOUR GROUP	4722 BIRCHWOOD CR		CARLSBAD	CA	92008	1542	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HOPKINS CONTRUCTION	1201 MAGNOLIA AV		CARLSBAD	CA	92008	1799	SPECIAL TRADE CONTRACTOR, NEC	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HORTISCULPTURE	2826 UNICORNIO ST APT B	APT B	CARLSBAD	CA	92009-4427	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HTL DESIGN AND REMODELING SERVICES	3609 STRATA DR		CARLSBAD	CA	92010-6589	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HUBBARD CONTRACTING CO, DON	1015 LINDA VISTA DR # A	# A	SAN MARCOS	CA	92069-2613	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HUBSURF PROPERTIES	3075 VALLEY ST		CARLSBAD	CA	92008-1155	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HUGH FOLEY CONSTRUCTION SERVICES	450 JENNILEAH LN STE B	STE B	SAN MARCOS	CA	92069-1131	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HUGHES AERO MARINE	2345 CARINGA WAY APT 2	APT 2	CARLSBAD	CA	92009-6385	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HURLEY'S POOL SERVICE	4038 SAND COVE WAY		CARLSBAD	CA	92008-3591	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HURRICANE & POWAY FENCE CO INC	209 10TH ST		RAMONA	CA	92065-2151	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HURST SIEBERT	2377 S EL CAMINO REAL STE 103	STE 103	SAN CLEMENTE	CA	92672-3290	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HUY'S GARDENING	1653 RAVINE RD		VISTA	CA	92083-5561	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HYDREX PEST CONTROL	9530 DOWDY DR		SAN DIEGO	CA	92126-4335	7342	TERMITE & PEST CONTROL	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HYDRO-PLANT HYDROSEEDING INC	356 S PACIFIC ST		SAN MARCOS	CA	92078-3829	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
HY-LANG ELECTRIC CA INC	7181 CONSTRUCTION CT		SAN DIEGO	CA	92121-2615	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
I C INTEGRITY CONSTRUCTION INC	4656 BRIAR RIDGE RD		OCEANSIDE	CA	92056-2232	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
IBANEZ MAINTENANCE, INC.	3080 MONROE ST		CARLSBAD	CA	92008	0782	LAWN AND GARDEN SERVICES	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ICE BUILDERS INC	421 E CERRITOS AVE		ANAHEIM	CA	92805-6320	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
IN FULL BLOOM LANDSCAPE AND DESIGN	3232 CALLE VALLARTA		CARLSBAD	CA	92009-9309	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INDUSTRA PAINT AND CONSTRUCTIO	1145 TAMARACK AV		CARLSBAD	CA	92008	1721	SPECIAL TRADE CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INFINITY CONSTRUCTION	30395 AINSWORTH PL		LAKE ELSINORE	CA	92530-7419	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INLAND VALLEY PIPELINE	40271 BERLIE ST		MURRIETA	CA	92562-9375	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INNER SPACE CONSTRUCTORS	2250 S CENTRAL AVE		COMPTON	CA	90220-5311	1542	General Contractors-Nonresidential Buildings, Oth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INNOVATIVE CONCRETE DESINGS INC	405 MERIDIAN AVE		SAN JOSE	CA	95126-3420	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INNOVATIVE DRYWALL SYSTEMS INC	116 MARKET PL		ESCONDIDO	CA	92029-1352	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INNOVATIVE TENANT IMPROVEMENTS INC.	9195 CHESAPEAKE DR		SAN DIEGO	CA	92123-1002	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INSITUFORM TECHNOLOGIES INC	17988 EDISON AVE		CHESTERFIELD	MO	63005-3700	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INSTAR	4955 E HUNTER AVE		ANAHEIM	CA	92807-2058	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INSUL-FLOW, INC.	2330 N LARKIN AVE		FRESNO	CA	93727-8645	1771	Concrete Work	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INTEGRITY CLEANING SERVICE	6927 WHITECAP DR		CARLSBAD	CA	92011-3745	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INTEGRITY CONCRETE	540 OPPER ST		ESCONDIDO	CA	92029-1018	17	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INTERIOR EXPERTS GEN. BUILDERS, INC	4534 CARTER CT		CHINO	CA	91710-5060	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INTERIOR SPECIALISTS INC	1630 FARADAY AV		CARLSBAD	CA	92008	1752	FLOOR LAYING & FLOOR WORK	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INTERSTATE STRIPING OF CALIFORNIA, INC.	8511 ABLETTE RD # B	# B	SANTEE	CA	92071-4503	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
INTERWEST PACIFIC, LTD.	990 HIGHLAND DR STE 212F	STE 212F	SOLANA BEACH	CA	92075-3404	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
IRISH CONSTRUCTION	2641 RIVER AVE		ROSEMEAD	CA	91770-3301	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ISLAND BREEZE POOL & SPA	210 GREEN AVE		ESCONDIDO	CA	92025	7389	Swimming Pool Maintenance	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J & D CONSTRUCTION	4782 CAMINITO BORREGO		SAN DIEGO	CA	92130-2481	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J & J BUILDERS, INC	2228 W WHITTIER BLVD		LA HABRA	CA	90631-3403	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J & J ENTERPRISES	27260 PEACH ST		PERRIS	CA	92570-7055	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J & M KEYSTONE, INC.	2709 VIA ORANGE WAY # A	# A	SPRING VALLE	CA	91978-1745	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J AND M INTERIOR SPECIALTIES, INC	1308 N MAGNOLIA AVE STE D	STE D	EL CAJON	CA	92020-1646	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J B HOME IMPROVEMENT INC	219 S SANTA FE AVE		VISTA	CA	92083-5853	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J C ENTERPRISES	197 WOODLAND PKWY STE 104	STE 104	SAN MARCOS	CA	92069-3020	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J GINGER MASONRY, LP	8188 LINCOLN AVE STE 100	STE 100	RIVERSIDE	CA	92504-4329	17	MASONRY SUBCONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J H O'BRIEN LANDSCAPING & MAINTENANCE INC	3435 OCEAN PARK BLVD STE 103	STE 103	SANTA MONICA	CA	90405-3316	17	LANDSCAPING & MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J J & K BUILDERS, INC	2050 WILSON AVE STE C	STE C	NATIONAL CITY	CA	91950-6500	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J L N CARPET CLEANING	6550 PONTO DR SPC 90	SPC 90	CARLSBAD	CA	92011-2309	7217	Carpet And Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J R MASONRY INC	1447 PEACH AVE		EL CAJON	CA	92021-5829	17	MASONRY CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J W G CONSTRUCTION CO	10925 HARTLEY RD STE H	STE H	SANTEE	CA	92071-2892	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J. A. BUZA CORP.	5796 ARMADA DR	STE 300	CARLSBAD	CA	92008	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J. D. PAVING, INC.	1412 BARHAM DR		SAN MARCOS	CA	92078-4504	15	CONSTRUCTION/ ASPHALT PAVING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J. LEON CONSTRUCTION	4785 N RIVER RD		OCEANSIDE	CA	92057-5943	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J. REESE CONSTRUCTION, INC.	10805 THORNMINT RD STE 200	STE 200	SAN DIEGO	CA	92127-2429	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J. T. MONTEFORTE	14726 INTERLACHEN TRL		VALLEY CENTE	CA	92082-6672	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J.C. LANDSCAPE & IRRIGATION	435 N PACIFIC ST		SAN MARCOS	CA	92069-1330	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J.D. & ASSOCIATES	3710 ADAMS ST		CARLSBAD	CA	92008-3401	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J.E. MCGINNIS	1907 NORTHBROOK CT		VISTA	CA	92083-7734	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J.E.M. GROUNDS CONTROL	1260 YORELL AVE		CARLSBAD	CA	92008-1047	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
J.R.' S MOBILE AUTO REPAIR	2801 VIA MAGIA		CARLSBAD	CA	92010-1346	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JACKSON DESIGN & REMODELING	4797 MERCURY ST # B	# B	SAN DIEGO	CA	92111-2102	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JACOBSON CONCRETE	1344 CYNTHIA LN		CARLSBAD	CA	92008	1771	CONCRETE WORK AND MASONRY	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JACOBSSON ENGINEERING CONSTRUCTION	77590 ENFIELD LN		PALM DESERT	CA	92211-0404	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JACOR CONSTRUCTION, INC.	10612 PROSPECT AVE STE 101	STE 101	SANTEE	CA	92071-8500	1541	GENERAL CONTRACTOR. TENANT IMPROVEMENTS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JAMES ARMSTRONG	7583 DEHESA CT		CARLSBAD	CA	92009-7704	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JAMES CAMPBELL RECYCLING	1516 GLACIER RD		OCEANSIDE	CA	92056-1825	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JAMES M. BARB CONSTRUCTION INC	10701 RANCHITOS RD NE		ALBUQUERQUE	CA	87122-2516	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JANKS CONSTRUCTION, INC.	7887 DUNBROOK RD STE H	STE H	SAN DIEGO	CA	92126-4382	1521	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JAN-PRO OF SAN DIEGO	270 PIPPIN DR		FALLBROOK	CA	92028-3470	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JANUS PLUMBING	16907 LOS MORROS		RANCHO SANT	CA	92067	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JASPER COMPANIES, THE	2970 GRACE LN		COSTA MESA	CA	92626-4120	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JAY KRATT / GENERAL CONTRACTOR	1570 BASSWOOD AVE		CARLSBAD	CA	92008-1945	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JB HAULING INC.	PO BOX 4951		OCEANSIDE	CA	92052-4951		Demolition and hauling	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JB LANDSCAPING	7384 ALTIVA PL		CARLSBAD	CA	92009-6421	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JBI	6745 LIMONITE CT		CARLSBAD	CA	92009-5202	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JC'S SERVICES	4228 MYRTLE AVE		SAN DIEGO	CA	92105-3408	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JENSEN CONSTRUCTION CO	2151 LAS PALMAS DR	STE A	CARLSBAD	CA	92011	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JERICO DESIGN INC	1954 ROSEWOOD ST		VISTA	CA	92081-7310	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JIM AGNOS POOL & SPA SERVICE	7040 SNAPDRAGON DR		CARLSBAD	CA	92011	7389	BUSINESS SERVICE, NOT ELSEWHERE	Y	Y	Y	N	N	N	N	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
JIM FORGERSON PAINTING	23402 MOUNT ASHLAND CT		MURRIETA	CA	92562-5015	1721	Painting And Paper Hanging	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JIM RUBY COMPANY INC	1856 LOTUS CT		CARLSBAD	CA	92011-5121	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JIM TODD & ASSOCIATES INC	1206 PRICE AVE		POMONA	CA	91767-5840	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JJ REMODELING AND NEW HOME CONSTRUCTION I	3512 EL PASO ALTO		VISTA	CA	92084-6641	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JME POOL SERVICE	4145 HARBOR DR		CARLSBAD	CA	92008-4115	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JMI CLEANING	1325 LAUREL TREE LN APT 234	APT 234	CARLSBAD	CA	92011-1288	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOELS TILE AND CARPET CARE	2408 MAJANO PL		CARLSBAD	CA	92009-9137	7217	Carpet And Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOE'S PAVING COMPANY, INC.	28419 COLE GRADE RD		VALLEY CENTE	CA	92082	17	General Engineering Contractor	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOE'S POOL SERVICE	3640 GARFIELD ST		CARLSBAD	CA	92008-8218	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOE'S TILE PROS	5985 DANDRIDGE LN		SAN DIEGO	CA	92115	17	Tile and Stone Work	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOHN BIANCHI CONSTRUCTION	2910 MANAGUA PL	105-519	CARLSBAD	CA	92009	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOHN C WALTERS & ASSOC INC	6320 MONTECITO DR		CARLSBAD	CA	92009-3075	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOHN D. HEBERT CONSTRUCTION	5460 EL ARBOL DR		CARLSBAD	CA	92008	1799	GENERAL BUILDING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOHN FERRI GENERAL CONTRACTOR	8920 NEW SEABURY DR		SANTEE	CA	92071-2010	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOHN SMITH EARTHWORKS, INC.	5216 ANNA AVE		SAN DIEGO	CA	92110-4002	17	CONSTRUCTION - GRADING C12, C21 (SUB)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOHN'S R & R	3612 BARRANCA CT		CARLSBAD	CA	92010-7054	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOHNSON AND JENNINGS GENERAL CONTRACTING	6165 GREENWICH DR STE 180	STE 180	SAN DIEGO	CA	92122-5910	1542	GENERAL CONTRACTING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
JOHNSON, FINCH & MCCLURE CONSTRUCTION INC	9749 CACTUS ST		LAKESIDE	CA	92040-4117	15	CONSTRUCTION SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JONAS JANITORIAL SERVICES	3420 VALE BLOSSOM CT APT 104	APT 104	CARLSBAD	CA	92010-4681	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JONDEL CONSTRUCTION	9216 ABRAHAM WAY STE A	STE A	SANTEE	CA	92071-5602	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOSE ANTONIO RAMIREZ JANITORIAL	920 SYCAMORE AVE APT 5	APT 5	VISTA	CA	92081-7843	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOSEPH L WHITE GENERAL CONTRACTOR	1764 TROY LN		OCEANSIDE	CA	92054-5648	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOSH AUTO CARE	824 S RANCHO SANTA FE RD APT B	APT B	SAN MARCOS	CA	92078-4667	7542	WASH CAR AT DEALER SHIP AND DETAIL	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JOY'S HOUSE CLEANING	390 CHINQUAPIN AVE		CARLSBAD	CA	92008-7415	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JP WEIMAN CONSTRUCTION INC	20475 RANCHO VILLA RD		RAMONA	CA	92065-7658	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JR GARZA CONSTRUCTION & MANAGEMENT INC	2181 S EL CAMINO REAL STE 207	STE 207	CAMP PENDLET	CA	92054-6288	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JRW HANDYMAN	7959 CALLE POSADA		CARLSBAD	CA	92009-9306	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JTH CONSTRUCTION	31459 SONOMA LN		TEMECULA	CA	92591-2116	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JUAN HURTADO SERVICES	5154 WHITMAN WAY APT 105	APT 105	CARLSBAD	CA	92008-4642	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JUC BUILDERS	733 GREENERY CIR		OCEANSIDE	CA	92057-3636	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JUST CALL ED	3358 DON DIABLO DR		CARLSBAD	CA	92010-3914	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JUST CALL ROBERT	7824 QUEBRADA CIR		CARLSBAD	CA	92009-8341	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JUST GREEN LANDSCAPING	250 KNOLL RD APT 97	APT 97	SAN MARCOS	CA	92069-1585	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JUST LIKE NEW CARPET & UPHOLSTRY CLEANING	6550 PONTO DR SPC 90	SPC 90	CARLSBAD	CA	92011	7217	Carpet And Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JV BUILDERS & RESTORATIONS INC	950 DENISE LN		EL CAJON	CA	92020-6417	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JWC CONSTRUCTION	2580 FORTUNE WAY		VISTA	CA	92081-8441	15	GENERAL CONTRACTOR HOA REPAIRS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
JWD INCORPORATED	3710 ADAMS ST		CARLSBAD	CA	92008-3401	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
K BEDDOE BOATS	7130 SURFBIRD CIR		CARLSBAD	CA	92011-4019	3732	Boat Building And Repairing	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
K DRURY & SONS CONSTRUCTION	399 ESCONDIDO AVE		VISTA	CA	92084-6143	15	CLASS B GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
K H MINTON PAINTING INC	2518 CAMINO LAGARTO		ALPINE	CA	91901-3046	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
K HOVNANIAN COMPANIES IF CA INC	1500 S HAVEN AVE STE 100	STE 100	ONTARIO	CA	91761-2970	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
K R COMMERCIAL INTERIORS INC	754 N BATAVIA ST		ORANGE	CA	92868-1223	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
K R LANDSCAPE MAINTENANCE, INC.	662 CLARK AVE		ENCINITAS	CA	92024-2312	17	LANDSCAPE MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
K. D. STAHL CONSTRUCTION GROUP, INC.	13771 DANIELSON ST STE B	STE B	POWAY	CA	92064-8839	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KAD PAVING COMPANY	12173 10TH ST		YUCAIPA	CA	92399-2082	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KAL PACIFIC & ASSOC	31045 TEMECULA PKWY STE 201	STE 201	TEMECULA	CA	92592-3085	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KAMAR BUILDERS, INC.	325 CARLSBAD VILLAGE DR	STE C2	CARLSBAD	CA	92008	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KAMINSKIY CONSTRUCTION INC.	12396 WORLD TRADE DR # STE.108	# STE.108	SAN DIEGO	CA	92128-3786	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KANE GENERAL CONTRACTING	7117 MANZANITA ST		CARLSBAD	CA	92011-5126	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KB CLEANING SERVICES	417 PRAIRIE ROSE WAY		SAN MARCOS	CA	92078-7941	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KB HOME COASTAL, INC.	36310 INLAND VALLEY DR		WILDOMAR	CA	92595-7511	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KBM BUILDING SERVICES	7976 ENGINEER RD # 200	# 200	SAN DIEGO	CA	92111-1904	1542	General Contractors-Nonresidential Buildings, Oth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KEAVENY INC, J. F.	5465 GAINES ST STE 101	STE 101	SAN DIEGO	CA	92110-2627	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KEENAN,HOPKINS,SUDER & STOWELL CONTR INC	5109 E LA PALMA AVE STE A	STE A	ANAHEIM	CA	92807-2066	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KELCOR CONTRUCTION	3019 CAMARILLO AVE		OCEANSIDE	CA	92056-4342	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KEMBAR CONSTRUCTION	827 W CITRON ST		CORONA	CA	92882-4134	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KEN HAYS CONSTRUCTION	1675 BASSWOOD AVE		CARLSBAD	CA	92008-1948	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KENCO RESTORATION INC	7668 EL CAMINO REAL STE 104	STE 104	CARLSBAD	CA	92009-7932	7217	Carpet And Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KENNEDY MASONRY	7040 AVENIDA ENCINAS	STE 204B	CARLSBAD	CA	92011	1741	MASONRY CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KEONI LANDSCAPES	1052 KNOWLES AV		CARLSBAD	CA	92008	1799	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KESSEL SERVICES	1716 COUNTRYSIDE PL		VISTA	CA	92081-8722	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KEVIN'S MOBILE MECHANIC SERVICE	1630 JAMES DR		CARLSBAD	CA	92008-1956	7699	Repair Shops And Related Services, Not Elsewhere	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KEYSTONE CONTRACTING INC	23172 ALCALDE DR STE H	STE H	ALISO VIEJO	CA	92653-1452	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KHANH CONSTRUCTION COMPANY	12683 PALM VIEW WAY		RIVERSIDE	CA	92503-7086	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KIEWIT PACIFIC CO.	10704 SHOEMAKER AVE		SANTA FE SPG	CA	90670-4040	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KIEWIT SHEA DESALINATION, A JOINT VENTURE	10704 SHOEMAKER AVE		SANTA FE SPG	CA	90670-4040	1542	General Contractors-Nonresidential Buildings, Oth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KIMO'S LANDSCAPING	210 ACACIA AVE		CARLSBAD	CA	92008-3205	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KING MASONRY	1137 OAK DR		VISTA	CA	92084-4660	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KING'S WINDOW CLEANING	2676 ALAMEDA CIR		CARLSBAD	CA	92009-3051	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KITCHEN BARN	780 MAIN ST STE G	STE G	RAMONA	CA	92065-2079	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KKG INC.	4650 ARROW HWY STE F1	STE F1	MONTCLAIR	CA	91763-1218	1522	General Contractors-Residential Buildings, Other	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KLAUS ENYEDI CONCRETE CONSTR	1715 CATALPA RD		CARLSBAD	CA	92009	1741	SPECIAL TRADE CONTRACTOR - CONCRETE	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KNOCKOUT CLEANING AND RESTORATION, LLC	7040 AVENIDA ENCINAS STE 104	STE 104	CARLSBAD	CA	92011-4653	7217	Carpet And Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KNORR SYSTEMS	2221 S STANDARD AVE		SANTA ANA	CA	92707-3036	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KOLOA PACIFIC CONSTRUCTION, INC.	12527 KIRKHAM CT		POWAY	CA	92064-6815	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KONSTRUKT DEVELOPMENT INC	9434 CHESAPEAKE DR STE 1207	STE 1207	SAN DIEGO	CA	92123-1322	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KRESSIN POOL CLEANING	2803 VIA TOPACIO		CARLSBAD	CA	92010-1358	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
KTA CONST. INC.	1920 CORDELL CT STE 105	STE 105	EL CAJON	CA	92020-0900	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KUNZIK & SARA CONSTRUCTION INC	1699 LA COSTA MEADOWS DR # 102	# 102	SAN MARCOS	CA	92078-5195	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KURT FORD CONSTRUCTION	3025 DEL REY AVE		CARLSBAD	CA	92009-7510	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
KYLER CONSTRUCTION INC.	38218 CLEAR CREEK ST		MURRIETA	CA	92562-9353	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
L.D. MAHLUM	1629 1/2 S TREMONT ST		OCEANSIDE	CA	92054-5306	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
L.E. WATERS CONSTRUCTION	6100 WILSHIRE BLVD STE 830	STE 830	LOS ANGELES	CA	90048-5198	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
L.H. WOODS & SONS, INC.	2115 LA MIRADA DR		VISTA	CA	92081-8830	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LA COSTA AUTO DETAIL	740 AVENIDA CORDORNIZ		SAN MARCOS	CA	92069-	7542	MOBILE DETAILING	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LA JOLLA POOLS INC	5700 BALTIMORE DR UNIT 64	UNIT 64	LA MESA	CA	91942-1633	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LA MESA GLASS, INC.	6691 FEDERAL BLVD		LEMON GROVE	CA	91945-1336	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LA PLACA & SONS CONTRACTING	6699 CORTE MARIA		CARLSBAD	CA	92009-5917	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LAIRD AQUATICS	297 ACACIA AVE APT C	APT C	CARLSBAD	CA	92008-3290	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LAKEVIEW CONSTRUCTION INC	10505 CORPORATE DR STE 200	STE 200	PLEASANT PRA	WI	53158-1605	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LANCE HOWARD DETAILING	2476 TORREJON PL		CARLSBAD	CA	92009-8033	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LANDCARE LOGIC	7348 TRADE ST STE B	STE B	SAN DIEGO	CA	92121-3434	15	Building Construction-General Building Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LANDRETH CONSTRUCTION	2914 SOMBROSA ST		CARLSBAD	CA	92009-9245	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LANDSCAPE ARTISTRY	5171 SANTA FE ST STE F	STE F	SAN DIEGO	CA	92109-1620	17	LANDSCAPE DESIGN/CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LANDSCAPE DEVELOPMENT INC	28447 WITHERSPOON PKWY		VALENCIA	CA	91355-4174	17	LANDSCAPE CONSTRUCTION, MAINTENANCE, EROS	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LANDSCAPE LOGIC	4640 JEWELL ST STE 234W	STE 234W	SAN DIEGO	CA	92109-3100	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LANDSCAPE SERVICES	3781 ADAMS ST		CARLSBAD	CA	92008-3402	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LANDSCAPE SOLUTIONS	1207 MONTE VISTA DR		VISTA	CA	92084-7051	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LANDSCOPE	510 N MELROSE DR SPC P18	SPC P18	VISTA	CA	92083-3459	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LARS CONSTRUCTION	4703 SPRING ST		LA MESA	CA	91941-5207	15	RESIDENTIAL REMODELING CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LAUBACH CONSTRUCTION, INC.	9841 IRVINE CENTER DR STE 120	STE 120	IRVINE	CA	92618-4314	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LAURENCE-HOVENIER, INC.	179 N MAPLE ST		CORONA	CA	92880-1760	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LAURIE M. ESTES	2241 S STAGE COACH LN		FALLBROOK	CA	92028-4455	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LAVALLE GENERAL CONST. INC.	826 EUCALYPTUS AVE		VISTA	CA	92084-6259	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LAWNCRAFT LANDSCAPE	4934 AVILA AVE		CARLSBAD	CA	92008-3704	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LAWNS & BEYOND	10531 4S COMMONS DR # 461	# 461	SAN DIEGO	CA	92127-3517	1799	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LBL CONSTRUCTORS INC	2180 SUMMIT DR		ESCONDIDO	CA	92025-6732	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LEDCOR CONSTRUCTION INC	6405 MIRA MESA BLVD STE 100	STE 100	SAN DIEGO	CA	92121-4120	15	BUILD COMMERCIAL STRUCTURES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LEE AUSTIN CONSTRUCTION	7422 GIRARD AVE		LA JOLLA	CA	92037-5142	15	RESIDENTIAL REMODEL, GENERAL CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LEE LIMPERIS CONSTRUCTION	159 J ST		CHULA VISTA	CA	91910-5916	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LEE MASTERS	3215 RICEWOOD DR		OCEANSIDE	CA	92058-7039	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LEGACY BUILDING SERVICES, INC.	2505 CONGRESS ST		SAN DIEGO	CA	92110-2847	1522	General Contractors-Residential Buildings, Other	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LEON LANDSCAPING	813 UNO CT		VISTA	CA	92084-5054	781	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LEWIS RACICOT CONST	3728 PERDIDO ST		SAN MARCOS	CA	92078-2334	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LIFE GARDENING SERVICE	1803 MANZANITA CT		VISTA	CA	92083-7718	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LIFESTYLE LANDSCAPES, INC	85888 UTICA AVE STE 200	STE 200	RANCHO CUCA	CA	91730	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LIGHTHOUSE HOMES, INC.	5110 MOCHA CT		OCEANSIDE	CA	92056-7285	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LINA'S RESIDENTIAL & COMMERCIAL	920 REGAL RD APT 8	APT 8	ENCINITAS	CA	92024-4600	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LINEAR CONSTRUCTION	4435 TRIESTE DR		CARLSBAD	CA	92010-3740	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LJ ROTUNNO CONCRETE CONSTRUCTION	224 AVENIDA VAQUERO		SAN CLEMENTE	CA	92672-3602	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LLOYD PEST CONTROL	935 SHERMAN ST		SAN DIEGO	CA	92110-4016	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LOMACK SERVICE CORPORATION	2259 S SANTA FE AVE STE B	STE B	VISTA	CA	92083-8075	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LOMBARDI CONTRACTING CORP	7744 FORMULA PL		SAN DIEGO	CA	92121-2419	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LONG BEACH ROOFING, INC	3265 E 59TH ST		LONG BEACH	CA	90805-4501	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LOPEZ ENGINEERING	421 FLEETWOOD PL		GLENDORA	CA	91740-5969	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LOPEZ LANDSCAPE	1332 MAGNOLIA AV		CARLSBAD	CA	92008	0782	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LORCO	4488 SALISBURY DR		CARLSBAD	CA	92010	1741	MASONRY STONEWORK CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LOREN ELECTRIC SIGN CORP	12226 COAST DR		CITY INDUSTRY	CA	90601-1607	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LORENA IBANEZ CLEANING SERVICE	813 CAREY RD APT C	APT C	OCEANSIDE	CA	92058-2310	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LOS CABOS POOLS INC	253 WOODLAND DR		VISTA	CA	92083-7672	17	RESIDENTIAL LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LOURO & JOHNSON LANDSCAPE, INC.	829 2ND ST # B	# B	ENCINITAS	CA	92024-4409	17	LANDSCAPE SUBCONTRACTOR□□Edited by BBRAN (	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LOYLAND CONSTRUCTION INC	3452 CORTE CLARITA		CARLSBAD	CA	92009-9500	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LRC LOCKE REMODELING AND CONSTRUCTION	5161 CERULEAN WAY		OCEANSIDE	CA	92057-1842	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LTD SHEET METAL, INC.	11222 WOODSIDE AVE N		SANTEE	CA	92071-4716	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LUCAS GENERAL CONTRACTING CORP.	1111 QUAIL ST		NEWPORT BEA	CA	92660-2705	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LUIS GASTELUM ROOFING	4189 CHASIN ST		OCEANSIDE	CA	92056-3412	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LUISA DIAZ	5261 MANDARIN DR		OCEANSIDE	CA	92056-6447	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LUSA SD LP	9164 REHCO RD		SAN DIEGO	CA	92121-2269	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
LUSARDI CONSTRUCTION COMPANY	1570 LINDA VISTA DR		SAN MARCOS	CA	92078-3808	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
LUZAICH STRIPING INC.	14219 OLDE HIGHWAY 80		EL CAJON	CA	92021-2826	17	PARKING/HWY IMPROVEMENT	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
M & C CONSTRUCTION	1733 GREENTREE RD		ENCINITAS	CA	92024-3023	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
M & W LANDSCAPING	952 POSTAL WAY STE 7	STE 7	VISTA	CA	92083-6934	17	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
M A C DESIGN AND DEVELOPMENT	471 CHESTERFIELD DR		CARDIFF	CA	92007-1933	15	RESIDENTIAL GENERAL CONTRACTORS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
M E R CONSTRUCTION	35225 LINDA ROSEA RD		TEMECULA	CA	92592-9531	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
M W CONSTRUCTION INC.	615 N CITRACADO PKWY		ESCONDIDO	CA	92029-1133	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
M.M. PAINTING SERVICES	2424 LEVANTE ST		CARLSBAD	CA	92009	1721	PAINTING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MAC KENZIE LANDSCAPE	33380 BAILEY PARK BLVD		MENIFEE	CA	92584-9585	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MAC PHERSONS	1277 FOREST AV		CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR, SINGLE FAMILY HOME	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MANA'S CLEANING	679 MAGNOLIA AVE APT C	APT C	CARLSBAD	CA	92008-5102	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MANCAVE	5845 AVENIDA ENCINAS	138	CARLSBAD	CA	92008	7389	BUSINESS SERVICES NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARATHON CONSTRUCTION CORPORATION	10108 RIVERFORD RD		LAKESIDE	CA	92040-2740	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARCO A DIAZ	1625 MICHAEL LN		PACIFIC PALISA	CA	90272-2032	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARGARITA GALAN DIAZ	769 COPPER DR		VISTA	CA	92083-4402	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARIANO'S LANDSCAPING	3231 MADISON ST	STE B	CARLSBAD	CA	92008	0782	LAWN AND GARDEN SERVICE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARJAN STONE INC	2758 VIA ORANGE WAY		SPRING VALLE	CA	91978-1744	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARK SAUER CONSTRUCTION, INC.	19712 TEMESCAL CANYON RD		CORONA	CA	92881-5656	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARK VAN AELSTYN ENTERPRISES	2684 LEIGHTON CIR		CARLSBAD	CA	92009-3053	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARROKAL CONSTRUCTION COMPANY	9842 RIVER ST		LAKESIDE	CA	92040-3114	15	RESIDENTIAL REMODELING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARSALA LANDSCAPE	819 OKRA CT		CARLSBAD	CA	92011-4728	782	Lawn And Garden Services	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARTIN BROS. / MARCOWALL, INC.	17104 S FIGUEROA ST		GARDENA	CA	90248-3021	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARTINEZ CONSTRUCTION	836 WILER DR		CHULA VISTA	CA	91910-6419	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MARZOLA CONSTRUCTION CO INC	17025 INDUSTRY PL		LA MIRADA	CA	90638-5819	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MASCO CONTRACTOR SERVICES OF CALIFORNIA I	13000 KIRKHAM WAY STE 101	STE 101	POWAY	CA	92064-7148	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MASING CONSTRUCTION	1790 LA COSTA MEADOWS DR STE 10	STE 101	SAN MARCOS	CA	92078-5177	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MASONRY INNOVATIONS, INC.	40432 VIA CABALLOS		MURRIETA	CA	92562-8613	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MASSIV CONSTRUCTION	1450 N SANTA FE AVE STE C-524	STE C-52	VISTA	CA	92083-3203	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MASTERPIECE BUILDERS INC	14329 SAWGRASS CIR		VALLEY CENTE	CA	92082-6643	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MATHIS, CONSTRUCTION, INC., DENNIS	3128 LEVANTE ST		CARLSBAD	CA	92009-8332	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MATIAS MAINTENANCE & LANDSCAPING	3410 HARDING ST APT 8	APT 8	CARLSBAD	CA	92008-5002	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MATTHEW DAVID COTHAM CONSTRUCTION	351 EUCALYPTUS AVE		VISTA	CA	92084-6031	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MAURO TAMAYO GARDENING SERVICE	2405 STROMBERG CIR		CARLSBAD	CA	92010-2838	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MAXWELL S. DEL RIO APPLIANCE REPAIR	1979 OLIVINE CT		CARLSBAD	CA	92009-5206	7623	Refrigeration And Air-Conditioning Service And Rep	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MBC INC	742 ARDEN DR		ENCINITAS	CA	92024-4505	15	RESIDENTIAL / HOME BUILDER / REMODELS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MC CAIN, INC	2365 OAK RIDGE WAY		VISTA	CA	92081-8348	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MC CONNELL CABINETS, INC.	13110 LOUDEN LN		CITY OF INDUS	CA	91746-1507	17	SUB-CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MC NALLY REMODELING CORP	1103 ALBERTA AVE		CAMP PENDLE	CA	92054-4204	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MC RILLING	2041 LADERA CT		CARLSBAD	CA	92009-8521	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MC3 CONSTRUCTION CONSULTING	2055 CORTE DEL NOGAL		CARLSBAD	CA	92011	1500	BUILDING CONSTRUCTION - GENERAL BUILDI	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCBRIDE CLEANING	2906 JODY LN		OCEANSIDE	CA	92056-4353	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCBRIDE CLEANING SERVICE	2906 JODY LN		OCEANSIDE	CA	92056-	7349	BUILDING CLEANING AND MAINTENANCE NEC	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCC CONTROL SYSTEMS, LP	859 COTTING CT STE G	STE G	VACAVILLE	CA	95688-9354	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCCANN CONSTRUCTION	1320 TOWER DR		VISTA	CA	92083-7131	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCCARTHY BUILDING COMPANIES, INC.	20401 SW BIRCH ST		NEWPORT BEA	CA	92660-1795	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCCAULEY BUILDERS	2526 MEADOWMIST LN		ENCINITAS	CA	92024-6532	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCCLUSKEY CONSTRUCTION	1649 BOULDER CREEK RD		OCEANSIDE	CA	92056-2927	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCFARLAND CONSTRUCTION INC	2091 RIO VISTA DR		FALLBROOK	CA	92028-9329	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCGUFFIE CONTRACTING INC	3539 VIA LOMA VIS		ESCONDIDO	CA	92029-7727	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCMURPHY DEVELOPMENTS	630 GRAND AV	I	CARLSBAD	CA	92008	6531	REAL ESTATE AGENTS AND MANAGERS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MCZ CONSTRUCTION INC	1200 ARIZONA ST STE A9	STE A9	REDLANDS	CA	92374-4538	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MENDENHALL CONCRETE	3405 LAURASHAWN LN		ESCONDIDO	CA	92026-8534	17	CONCRETE CONTRACTING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MENDOZA LANDSCAPING	1008 LA SOLANA DR		FALLBROOK	CA	92028-2311	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MERIT MASONRY INC.	33915 ALMOND ST		WILDOMAR	CA	92595-8758	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MERZ CONSTRUCTION INC	646 GRAND AVE		SPRING VALLE	CA	91977-5009	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MESA ENERGY SYSTEMS	5 VANDERBILT		IRVINE	CA	92618-2011	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MEZA CONSTRUCTION CO	205 OXFORD ST		CHULA VISTA	CA	91911-3352	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MGH PAINTING, INC	27762 ANTONIO PKWY # L1-276	# L1-276	LADERA RANC	CA	92694-1140	1799	Special Trade Contractors, Nec	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MHS CUSTOMER SERVICE, INC.	7888 SILVERTON AVE STE A	STE A	SAN DIEGO	CA	92126-6309	1521	CONSTRUCTION - BUILDER PREP & CUSTOMER SER	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MHS-WORKS,INC.	3441 CORTE ALTURA		CARLSBAD	CA	92009-2034	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MICHAEL ELLIOTT LANDSCAPE ARCHITECT	637 ARDEN DR		ENCINITAS	CA	92024-4504	781	LANDSCAPE ARCHITECTURE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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MICHAEL MAGNET CONSTRUCTION	152 4TH ST		ENCINITAS	CA	92024-3209	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MICHAEL ROTH GENERAL CONTRACTOR INC	11605 LEGENDALE DR		LAKESIDE	CA	92040-1021	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MICHEL BUYS QUALITY BUILDERS	3535 LINDA VISTA DR SPC 266	SPC 266	SAN MARCOS	CA	92078-6339	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MIGUEL GARDENING & JANITORIAL	380 LA PURISMA WAY		OCEANSIDE	CA	92057-6854	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MIKE CASSARA MASONRY INC	16891 HARKNESS CIR		HUNTINGTN BC	CA	92649-3077	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MIKE COBIAN CONCRETE & MASONRY	830 E VISTA WAY STE 217	STE 217	VISTA	CA	92084-5246	1799	CONCRETE & MASONRY	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MIKE GOLLONG-GENERAL CONTRACTOR	1595 EOLUS AVE		ENCINITAS	CA	92024-1515	15	RESIDENTIAL CONST-REMODELER	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MIKE SAMPO INC	2302 FINCH LN		SAN DIEGO	CA	92123-3715	15	CONTRACTOR - CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MIKE SARKOZY CONSTRUCTION	126 TURNER AVE		ENCINITAS	CA	92024-2926	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MILESTONE BUILDING GROUP	4165 EXECUTIVE DR UNIT 308	UNIT 308	LA JOLLA	CA	92037-1367	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MILLER BUILDING CO.,THE	6434 EL PERICO LN		CARLSBAD	CA	92009	1521	GENERAL CONTRACTOR SINGLE FAMILY HOMES	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MIRABELLA DESIGN BUILD	140 WOODWARD AVE		ESCONDIDO	CA	92025-2637	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MIRANDA CAR CLEANER	4086 GALBAR ST		OCEANSIDE	CA	92056-3455	7542	AUTO DETAILER (MOBILE)	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MISSION GUNITE	12067 RIVERSIDE DR		LAKESIDE	CA	92040-2328	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MISSION POOLS OF ESCONDIDO INC	755 W GRAND AVE		ESCONDIDO	CA	92025-2505	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MISSION VALLEY POOLS & SPAS INC.	8284 MIRAMAR RD		SAN DIEGO	CA	92126-4345	15	SWIMMING POOL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MISTER TILE, INC.	352 ENGEL ST STE A	STE A	ESCONDIDO	CA	92029-1724	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MITCHELL DEAN COLLINS CONST INC	12771 MONARCH ST		GARDEN GROV	CA	92841-3920	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MITCHELL GENERAL CONTRACTORS, INC.	546 WALD		IRVINE	CA	92618-4637	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MITSUBISHI ELECTRIC & ELECTRONICS USA, INC.	5665 PLAZA DR		CYPRESS	CA	90630-5023	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MOBILE DETAILING BY JZ	19181 SAMUEL DR		LAKE ELSINORE	CA	92530-	7542	MOBILE AUTO DETAILER	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MOBILE ENVIRONMENTS	4167 THOMAS ST		OCEANSIDE	CA	92056-4223	15	GENERAL CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MOBILE HOMES UNLIMITED	33421 OLD STATE HWY		HEMET	CA	92545-9105	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MOBILE SHINE AUTO DETAILING	3320 CALLE SAN BLAS		CARLSBAD	CA	92009	7542	CARWASHES	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MODERN MASONRY	1168 GREENFIELD DR		EL CAJON	CA	92021-3314	17	MASONRY CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MODERN WEST, INC.	1031 REGAL RD		ENCINITAS	CA	92024-4637	15	POOL, SPA & LANDSCAPE CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MOHR POWER SOL	1452 POMONA RD		CORONA	CA	92882-1709	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MONAGHAN CONSTRUCTION CO	3125 TIGER RUN CT	STE 105-280	CARLSBAD	CA	92010	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MONARCH POOLS	3602 TRIESTE DR		CARLSBAD	CA	92010-2841	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MORALES HOUSE CLEANING	2801 VIA CLAREZ		CARLSBAD	CA	92010-8345	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MORENO'S HOUSE CLEANING	4293 BONITA DR		OCEANSIDE	CA	92056-4736	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MORGAN FAMILY POOLS	4516 SALISBURY DR		CARLSBAD	CA	92010-2869	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MOST CONSTRUCTION	2598 FORTUNE WAY STE B	STE B	VISTA	CA	92081-8442	15	RESIDENTIAL REMODELING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MOUNTAIN AIR	616 W 3RD AVE		ESCONDIDO	CA	92025-4035	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MOUNTAIN SHORES IRRIGATION	913 BRIGHTON CT		VISTA	CA	92081-8921	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MTR HORTICULTURE	7074 PRIMENTEL LN		CARLSBAD	CA	92009-6612	782	Lawn And Garden Services	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MULLEN CONSTRUCTION	2890 PIO PICO DR	202	CARLSBAD	CA	92008	1521	HOUSE BUILDER	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MURRAY LAMPERT CONSTRUCTION	3545 CAMINO DEL RIO S STE C	STE C	SAN DIEGO	CA	92108-4025	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MW PELTZ + ASSOCIATES, INC.	143 S CEDROS AVE STE B104	STE B104	SOLANA BEACH	CA	92075-1941	781	LANDSCAPE ARCHITECTURE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
MY GREEN HOME INC	5098 CARLSBAD BLVD		CARLSBAD	CA	92008-4353	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NARCY CONSTRUCTION	603 SEAGAZE DR # 178	# 178	OCEANSIDE	CA	92054-3005	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NARRA DESIGNS	7506 GIBRALTAR ST APT D	APT D	CARLSBAD	CA	92009-7462	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NATHAN SMITH LANDSCAPE DESIGN	826 LA MIRADA AVE		ENCINITAS	CA	92024-2330	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NATIONAL CONTRACTORS INC	4300 BAKER RD		EDEN PRAIRIE	MN	55343-8600	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NATIONAL SIGN & MARKETING	13580 5TH ST		CHINO	CA	91710-5113	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NATIONAL T.I.	2755 S NELLIS BLVD STE 10	STE 10	LAS VEGAS	CA	89121-7551	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NATIVE SAN DIEGO PLUMBING	5851 COLLEGE AVE		SAN DIEGO	CA	92120-3016	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NATON ENGINEERING INC.	4935 2ND ST		FALLBROOK	CA	92028-9790	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NATURAL GARDENS LANDSCAPING COMPANY	3765 TRIESTE DR		CARLSBAD	CA	92010-2844	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NATURE DESIGNS LANDSCAPING	116 HANNALEI DR		VISTA	CA	92083-7625	17	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NATURES IMAGE, INC.	20472 CRESCENT BAY DR STE 102	STE 102	LAKE FOREST	CA	92630-8849	17	LANDSCAPE CONTRACTOR / HABITAT RESTORATIO	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NB CONSTRUCTION INC	4780 CHINO AVE STE D	STE D	CHINO	CA	91710-5123	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEAL HENNING CONSTRUCTION	3119 VERDE AV		CARLSBAD	CA	92009	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEED - A- FIX	3571 LAKE PARK AVE		FALLBROOK	CA	92028-7859	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEED-A-FIX	3571 LAKE PARK AVE		FALLBROOK	CA	92028-	17	SUB-CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NERI'S GARDENING & LANDSCAPING	776 VIRGINIA PL		SAN MARCOS	CA	92078-6216	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEUBECKER GENERAL SERVICES	1570 COVE CT		SAN MARCOS	CA	92069-3528	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEW CENTURY CONSTRUCTION INC	9119 EMERALD GROVE AVE		LAKESIDE	CA	92040-3605	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEW DIMENSION MASONRY, INC.	1018 CUDAHY PL STE A	STE A	SAN DIEGO	CA	92110-3938	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
NEW GROWTH LANDSCAPES	6676 BLUEBONNET DR		CARLSBAD	CA	92011-2502	1799	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEW LIFE CONSTRUCTION CO INC	6550 NANCY RIDGE DR		SAN DIEGO	CA	92121-2250	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEW POINTE COMMUNITIES, INC	16883 W BERNARDO DR STE 230	STE 230	SAN DIEGO	CA	92127-1603	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEWBERY CONSTRUCTION	1212 VISTA WAY		OCEANSIDE	CA	92054-6453	1542	COMMERCIAL GENERAL CONSTRUCTION	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEWEST CONSTRUCTION	7847 DUNBROOK RD		SAN DIEGO	CA	92126-6305	15	CONSTRUCTION GENERAL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEWMAN REPLACEMENT WINDOWS	6110 YARROW DR		CARLSBAD	CA	92011	1751	WINDOW & DOOR INSTALLATION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEW-WAY LANDSCAPE & TREE SERVICES	7485 RONSON RD			CA	92111		LANDSCAP MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEX ERA CLEANING INC	2490 COUNTRY VIEW GLN		ESCONDIDO	CA	92026-3827	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NEXT WORLD POOLS & LANDSCAPE	3010 BONITA MESA RD		BONITA	CA	91902-1016	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NICADEMASA PROPERTIES LLC	2179 AVENIDA TORONJA		CARLSBAD	CA	92009-8707	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NICK BOWMAN CONSTRUCTION INC	2121 PALOMAR AIRPORT RD	STE 205	CARLSBAD	CA	92011	1521	BUILDING CONSTRUCTION-GENERAL BUILDING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NICOLET CONSTRUCTION	311 SIMPLICITY		IRVINE	CA	92620-2849	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NILSON WINTER CONST	3509 CHAUNCEY RD		OCEANSIDE	CA	92056-4965	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NILSON WINTER CONST.	3509 CHAUNCEY RD		OCEANSIDE	CA	92056-4965	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NISSHO OF CALIFORNIA INC.	1902 S SANTA FE AVE		VISTA	CA	92083-7721	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NOEMID FLORES JANITORIAL SERVICES	920 SYCAMORE AVE APT 2	APT 2	VISTA	CA	92081-7843	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NOLEN EXTRMNTR OF CA, TRULY	913 RANCHEROS DR		SAN MARCOS	CA	92069-3028	17	Construction-Special Trade Contractors	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORMAN CONSTRUCTION	855 GRAND AV		CARLSBAD	CA	92008	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORTH COAST ARBORIST INC	1780 LA COSTA MEADOWS DR		SAN MARCOS	CA	92078-9101	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORTH COAST AUTO GLASS	2725 STATE ST		CARLSBAD	CA	92008	7536	AUTOMOTIVE GLASS REPLACEMENT SHOPS	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORTH COUNTY DOOR	1485 POINSETTIA AVE STE 114	STE 114	VISTA	CA	92081-8537	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORTH COUNTY GUNITE CO., LTD.	12562 HIGHWAY 67		LAKESIDE	CA	92040-1159	15	GUNITE CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORTH COUNTY HANDYS	3980 PARK DR		CARLSBAD	CA	92008-2633	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORTH COUNTY HOME MAINTENANCE HANDYMAN	6971 SWEETWATER ST		CARLSBAD	CA	92011-3267	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORTH COUNTY MAINTENANCE	1666 GARNET AVE STE 910	STE 910	SAN DIEGO	CA	92109-3116	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORTH COUNTY PLUMBING	1330 N MELROSE DR STE C	STE C	VISTA	CA	92083-2921	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORTH COUNTY POOL AND SPA	5080 CIARDI CT		CARLSBAD	CA	92008	7389	POOL AND SPA MAINTENANCE	Y	Y	Y	N	N	N	N	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
NORTH COUNTY POOLS	19915 FORTUNA DEL ESTE		ESCONDIDO	CA	92029-5917	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NPG CORPORATION	1354 JET WAY		PERRIS	CA	92571-7466	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
NU- COTE	8969 COMPLEX DR		SAN DIEGO	CA	92123-1405	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
O3 PEST TERMINATORS	7704 CAMINITO TINGO UNIT I201	UNIT I201	CARLSBAD	CA	92009-8657	7342	Disinfecting And Pest Control Services	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OAKHURST BUILDERS, INC	663 VALLEY AVE STE 300	STE 300	SOLANA BEACH	CA	92075-4404	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OAKSTONE CONSTRUCTION, INC.	4065 YOSEMITE PL		PLACERVILLE	CA	95667-8891	1542	General Contractors-Nonresidential Buildings, Oth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OCEANBLUE POOLS & LANDSCAPE	7571 NORTHERN LGTS		SAN DIEGO	CA	92127-3800	17	POOL & LANDSCAPING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OCEANSIDE JANITORIAL SERVICE	1218 SUNGLOW DR		OCEANSIDE	CA	92056-2527	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OCHOA'S LANDSCAPE	811 SHELTER COVE WAY		OCEANSIDE	CA	92058-6931	781	LANDSCAPE MAINT, IRRIGATION SYSTEMS, SMALL T	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
O'CONNOR & SONS CONSTRUCTION	366 CAMINO PARQUE		OCEANSIDE	CA	92057-7334	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OGARA CONSTRUCTION	3200 JAMES DR		CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OH SWEET & DREAM PAINTING	2680 ALAMEDA CIR		CARLSBAD	CA	92009-3051	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OKESON CONSTRUCTION INC	16334 WOODSON VIEW RD		POWAY	CA	92064-1739	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OLD CROW PAINTING	2635 MADISON ST APT 5	APT 5	CARLSBAD	CA	92008-1724	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OMEGA INDUSTRIAL MARINE	605 W 12TH ST		NATIONAL CITY	CA	91950-1005	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ON THE LEVEL	2982 ORA AVO TER		VISTA	CA	92084-6548	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ON-CALL MECHANIC	1630 JAMES DR		CARLSBAD	CA	92008-1956	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ONE CALL HANDYMAN	6555 PASEO FRONTERA APT G	APT G	CARLSBAD	CA	92009-4540	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ONE SOURCE SECURITY	2040 CECILIA CIR		CORONA	CA	92881-3389	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ONE TRIPP TREE SERVICE	14218 BOUNTY WAY		POWAY	CA	92064-2779	15	TREE SERVICE□□	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ONLINE BUILDERS	110 MELBA RD		ENCINITAS	CA	92024-4520	15	COMMERCIAL GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OREGON TRAIL REMODELING	6020 PASEO AIROSO		CARLSBAD	CA	92009-2221	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ORKIN EXTERMINATING CO INC	2420 GRAND AVE STE J	STE J	VISTA	CA	92083-7827	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ORLANDO MASONRY	656 MAR VISTA DR		VISTA	CA	92081-7521	17	MASONRY	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ORVILLE JOHNSON CONST CO	309 N CLEMENTINE ST		CAMP PENDLET	CA	92054-2806	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
OUTDOOR LIVING CREATIONS	6395 W LILAC RD		BONSALL	CA	92003-4102	17	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
P R CONSTRUCTION	1995 N BATAVIA ST		ORANGE	CA	92865-4107	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
P.B. DEVELOPMENT INC	25827 JEFFERSON AVE		MURRIETA	CA	92562-6961	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PABLO'S MAINTENANCE	5257 HUBBERT ST		OCEANSIDE	CA	92056-2353	781	YARD MAINTENANCE, MOW, EDGE, CLEAN	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC AQUASCAPE, INC.	17520 NEWHOPE ST STE 120	STE 120	FOUNTAIN VAL	CA	92708-8203	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC BLUE POOL SERVICE	1736 STATE ST 458	458	SAN DIEGO	CA	92101-2513	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC BUILDING GROUP	9752 ASPEN CREEK CT STE 150	STE 150	SAN DIEGO	CA	92126-1083	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC COAST DRYWALL & PAINT, INC.	536 S 2ND AVE STE E	STE E	COVINA	CA	91723-3043	17	DRYWALL & PAINT CONTRACTORS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC COMMERCIAL BUILDING CARE	6809 WATERCOURSE DR		CARLSBAD	CA	92011-3710	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
PACIFIC COMMERCIAL CONSTRUCTIO	2262 RUTHERFORD RD	103	CARLSBAD	CA	92008	1521	MANAGEMENT SERVICES	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC DETAILING CO.	43759 CORTE AMAYA		TEMECULA	CA	92592	7542	Mobile Car Washing	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC EMPIRE CONSTRUCTION GROUP INC	12937 POMERADO RD # C	# C	POWAY	CA	92064-5325	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC ENVIROMENTAL	135 ENTERPRISE CT		CORONA	CA	92882-7124	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC HOMEWORKS, INC.	4898 RONSON CT STE H	STE H	SAN DIEGO	CA	92111-1807	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC MASONRY, INC.	1007 W GROVE AVE STE J	STE J	ORANGE	CA	92865-4153	1741	MASONRY	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC SHORELINE GENERAL CONTRACTORS, INC	6327 DI VITA DR		CARLSBAD	CA	92009-3078	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC SHORES CO INC	4130 FLAT ROCK DR STE 160	STE 160	RIVERSIDE	CA	92505-5865	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC SOUTHWEST	6631 LITTLER DR		SAN DIEGO	CA	92119-2435	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC STRUCTURES CONSTRUCTION, INC.	101 STATE PL STE E	STE E	ESCONDIDO	CA	92029-1365	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC SUN POOL 'N SPA	8550 PRODUCTION AVE		SAN DIEGO	CA	92121-2288	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PACIFIC VIEW BUILDERS	300 CARLSBAD VILLAGE DR	STE 177	CARLSBAD	CA	92008	15	BUILDING CONSTRUCTION - GEN CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PADRE POOLS	9679 MARILLA DR		LAKESIDE	CA	92040-2816	17	SWIMMING POOL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PAINT IT ON	3222 FOSCA ST		CARLSBAD	CA	92009-7831	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PAL GENERAL ENGINEERING INC	2615 CAMINO DEL RIO S STE 308	STE 308	SAN DIEGO	CA	92108-3713	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PALADIN CONCRETE CUTTING	30924 MISSION RD # C	# C	BONSALL	CA	92003-6003	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PALISADE CONSTRUCTION INC	505 S MADISON DR		TEMPE	AZ	85281-7213	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PALM ENGINEERING CONST CO INC	7330 OPPORTUNITY RD STE J	STE J	SAN DIEGO	CA	92111-2221	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PALMER	31202 OLD RIVER RD		BONSALL	CA	92003-5105	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PALOMAR DELI	6150 YARROW DR	STE C	CARLSBAD	CA	92011	5812	EATING & DRINKING PLACES	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PALOMAR TRANSPORTATION	800 GRAND AV	108A-156	CARLSBAD	CA	92008	4119	LOCAL PASSENGER TRANSPORTATION	Y	N	Y	Y	Y	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PAM PIERSON	1235 STRATFORD LN		CARLSBAD	CA	92008-1524	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PANETT CORPORATION	24318 OWL CT		CORONA	CA	92883-9195	1741	Masonry Stone Setting, & Other Stone Work	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PAR CONSTRUCTION CO	1243 MARIPOSA RD		CARLSBAD	CA	92011-4207	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PARK CARE	2744 AUBURN AV		CARLSBAD	CA	92010	0781	LANDSCAPE COUNSELING AND PLANNING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PARK WEST LANDSCAPE MAINTENANCE INC	529 W 4TH AVE		ESCONDIDO	CA	92025-4037	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PARKS POOLS	11 ALLYSSUM		RANCHO SANT	CA	92688-5410	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PATIOS PLUS OF CARLSBAD	3210 SAN TOMAS DR		OCEANSIDE	CA	92056-3250	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PATRICK KELLEY CONSTRUCTION	1368 CYNTHIA LN		CARLSBAD	CA	92008-1507	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PATRIOT GENERAL ENG	5480 BALTIMORE DR STE 212	STE 212	LA MESA	CA	91942-2066	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PAUL M. WOLFF CO. INC.	460 N GENEVA RD		LINDON	UT	84042-1119	17	CONCRETE FLOOR SEALERS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PAUL MERRICK CONST	702 KARENA CT		VISTA	CA	92083-3300	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PAVE WEST	551 S HARBOR BLVD		LA HABRA	CA	90631-6184	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PAYNES SERVICES	718 SYCAMORE AVE SPC 114	SPC 114	VISTA	CA	92083-7945	7342	RESTROOM CLEANING SERVICE	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PBC COMMERCIAL INC	1560 W LAMBERT RD		BREA	CA	92821-2826	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PBC COMPANIES	1560 W LAMBERT RD		BREA	CA	92821-2826	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PBC RESIDENTIAL	1560 W LAMBERT RD		BREA	CA	92821-2826	15	SUB-CONTRACTOR MASONRY / CONCRETE	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PCH AUTOMOTIVE DENT REPAIR	413 S MYERS ST APT 6	APT 6	CAMP PENDLET	CA	92054-2966	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PCL CONSTRUCTION SERVICES, INC.	4690 EXECUTIVE DR STE 100	STE 100	SAN DIEGO	CA	92121-3073	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PENHALL COMPANY	1801 W PENHALL WAY		ANAHEIM	CA	92801-6700	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PEREZ LANDSCAPING	3436 DE LEONE RD		SAN MARCOS	CA	92069-1230	781	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PERFECTION PAINTING	3818 E CORONADO ST		ANAHEIM	CA	92807-1607	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PERKS DETAILING	506 CALLE MONTECITO UNIT 34	UNIT 34	OCEANSIDE	CA	92057-5248	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PERSONAL POOL CARE	4378 SHASTA PL		CARLSBAD	CA	92010-7914	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PESTMASTER SERVICES	751 W 4TH AVE		ESCONDIDO	CA	92025-4038	7342	PEST CONTROL	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PETRA SHOTCRETE INCORPORATED	33131 MONROY CIR		TEMECULA	CA	92592-7229	17	SHOTCRETE	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PETRUSSE-NORRIS PAINTING, INC	801 E CHAPMAN AVE STE 208	STE 208	FULLERTON	CA	92831-3846	17	COMMERCIAL AND INDUSTRIAL PAINTING CONTRAC	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PHOENIX CONSTRUCTION	20596 MANZANITA WAY		JAMUL	CA	91935-7958	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PHOENIX POOLS	40940 VIA LOS ALTOS		TEMECULA	CA	92591-1782	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PIOTROWSKI CONSTRUCTION	3547 ROCK RIDGE RD		CARLSBAD	CA	92010-7089	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PIPERIN CORPORATION	1472 GOLDEN SUNSET DR		SAN MARCOS	CA	92078-4242	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PIPES PLUMBING, INC.	1145 LAW ST		SAN MARCOS	CA	92078-4004	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PLANTS IN THE RANCH	3562 HASTINGS DR		CARLSBAD	CA	92010-7040	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PLANT-TEK, INC.	20110 ELFIN FOREST LN # B	# B	ESCONDIDO	CA	92029-6006	783	LANDSCAPE PEST CONTROL	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PLATINUM LANDSCAPE, INC.	77588 EL DUNA CT STE F	STE F	PALM DESERT	CA	92211-4128	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PLATINUM PROPERTY SERVICE	1741 W LINCOLN AVE.		ANAHEIM	CA	92801	7349	Powerwashing services	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PLUMBING ENTERPRISES	12175 FOLSOM BLVD STE B	STE B	RANCHO CORD	CA	95742-6312	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PNH RESTORATIONS	7109 MIMOSA DR		CARLSBAD	CA	92011-5134	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
POLISHED IMAGE MOBILE DETAILIN	2454 JEFFERSON ST		CARLSBAD	CA	92008	7349	Mobile Detailer	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PONCHO'S LANDSCAPE MAINTENANCE	3687 CAMEO DR		OCEANSIDE	CA	92056-6340	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
POOL MANAGERS	4145 HARBOR DR		CARLSBAD	CA	92008-4115	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
POOL REPAIRS ONLY	829 CAMINITO VERDE		CARLSBAD	CA	92011-3306	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
POOL TECH	3002 LEVANTE ST		CARLSBAD	CA	92009	7389	BUSINESS SERVICE-MISC	Y	Y	Y	N	N	N	N	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
POOLMASTER	1841 SHERIDAN RD		ENCINITAS	CA	92024-1141	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
POOLS OF PERFECTION	538 E 5TH AVE		ESCONDIDO	CA	92025-4313	7389	SWIM POOL MAINTAINENCE SERV.	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
POOLSAFE, INC	1200 S ESCONDIDO BLVD		ESCONDIDO	CA	92025-5722	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
POOLSCAPE UNLIMITED, INC.	11645 RIVERSIDE DR STE 123	STE 123	LAKESIDE	CA	92040-2367	17	SWIMMING POOL PLASTER	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
POULSON BUILDERS CORP	14249 JEROME DR		POWAY	CA	92064-2739	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
POWERS, EARL K.	2121 CHABLIS CT STE 110	STE 110	ESCONDIDO	CA	92029-2075	15	CONCRETE MASONRY	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRAGER STONE & TILE	2020 CORDOBA PL		CARLSBAD	CA	92008-3710	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRECISION CARPENTRY INC.	2620 TEMPLE HEIGHTS DR # B	# B	OCEANSIDE	CA	92056-3512	1541	GENERAL CONSTRUCTION - COMMERCIAL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRECISION CONCRETE CONSTRUCTION	540 S ANDREASEN DR STE E	STE E	ESCONDIDO	CA	92029-1916	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRECISION JANITORIAL	415 CHESTNUT AVE APT B	APT B	CARLSBAD	CA	92008-5086	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRECISION LANDSCAPE MAINT INC	5730 KEARNY VILLA RD		SAN DIEGO	CA	92123-1112	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRECISION PLUMBING INC	2005 CAMINO CULEBRA		VISTA	CA	92084-3607	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PREMIER POOLS, SPAS & PATIOS	6876 EMBARCADERO LN		CARLSBAD	CA	92011-3227	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRENTICE CONSTRUCTION	7323 EL FUERTE ST		CARLSBAD	CA	92009	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRENTICE ROOFING CONSTRUCTION	2917 ANAHEIM ST		ESCONDIDO	CA	92025-7758	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRESTIGE CONCRETE	13507 MIDLAND RD		POWAY	CA	92064-4711	17	CONCRETE FLATWORK	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRESTIGE POOLS	970 W VALLEY PKWY # 179	# 179	ESCONDIDO	CA	92025-2554	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PREVOST CONSTRUCTION	400 S SIERRA AVE STE 201	STE 201	SOLANA BEACH	CA	92075-2262	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRIMARY GENERAL	5345 TIMKEN ST STE I	STE I	LA MESA	CA	91942-2945	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRIME COMPANY PAINTING INC.	1107 S CLEVELANS ST		OCEANSIDE	CA	92054-	1799	Special Trade Contractors, NEC	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRIMECO PAINTING INC	1107 S CLEVELAND ST		OCEANSIDE	CA	92054-5109	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRO COAT, INC.	1131 N CITRUS ST		ORANGE	CA	92867-3510	1799	Special Trade Contractors, Nec	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRO EARTH LANDSCAPE, INC	2210 ENCINITAS BLVD STE K	STE K	ENCINITAS	CA	92024-4359	17	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PROFESSIONAL HOUSEKEEPING SERVICE	1190 ENCINITAS BLVD # P170	# P170	ENCINITAS	CA	92024-2829	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PROFESSIONAL TRADESMAN	4319 YUKI LN		CARLSBAD	CA	92008-4279	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PROGRESSIVE GARDENS LANDSCAPE	1117 MULLEN WAY		VISTA	CA	92083-7107	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PROMISED PATH LANDSCAPE INC	1756 YALE ST		CHULA VISTA	CA	91913-2632	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PROPACIFIC BUILDERS	1738 CEREUS CT		CARLSBAD	CA	92011-5119	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PROPACIFIC BUILDERS, INC	1738 CEREUS CT		CARLSBAD	CA	92011-5119	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PROSCAPES BY R H C INC	1100 GREENWAY RD		OCEANSIDE	CA	92057-1918	17	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRO-TECH PAINTING	7566 TRADE ST.		SAN DIEGO	CA	92121-	17	PAINTING CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PRO-VLAD CONSTRUCTION	11733 STONEY PEAK DR APT 122	APT 122	SAN DIEGO	CA	92128-4215	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PULIDO CLEANING & RESTORATION INC	26063 JEFFERSON AVE		MURRIETA	CA	92562-6983	15	GENERAL CONTRACTING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PULLMAN COMMUNICATIONS INC	2530 LYNN WAY		VISTA	CA	92083-4601	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PURETEC	4721 GATESHEAD RD		CARLSBAD	CA	92010-6507	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
PYRO SPECTACULARS INC	3196 N LOCUST AVE		RIALTO	CA	92377-3723	7999	Amusement And Recreation Services, Not Elsewhere	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
QUALIFIED MOBILE, INC.	1720 INDUSTRIAL AVE		NORCO	CA	92860-2976	7542	FLEET WASHING SERVICES□□Edited by BBRAN on 07	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
QUALITY ASSURED	1340 LA MIRADA DR		SAN MARCOS	CA	92078-2443	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
QUALITY BUILT CONSTRUCTION	8095 PASEO ARRAYAN		CARLSBAD	CA	92009-6963	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
QUALITY FIBERGLASS POOLS	32497 STATE HIGHWAY 74	74	HEMET	CA	92545-9637	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
QUALITY LIVING LANDSCAPE	1054 BRIGHTWOOD DR		SAN MARCOS	CA	92078-1057	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
QUALITY POOL & SPA CO	15476 MARKAR RD		POWAY	CA	92064-2313	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
QUALITY SEALANTS	2180 CHABLIS CT. 109	109	ESCONDIDO	CA	92029		Concrete sealants	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
QUALPAC SERVICES INC	4809 CLAIREMONT DR # 363	# 363	SAN DIEGO	CA	92117-2706	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
QUEEN B CLEANING SERVICE	858 LOMA ALTA TER		VISTA	CA	92083-3327	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
QUICK-DRY FLOOD SERVICES	293 VENTURE ST		SAN MARCOS	CA	92078-4376	15	24 HOUR EMERGENCY RESTORATION COMPANY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R & C HEATING & AIR INC	23935 BERRYESSA CT		RAMONA	CA	92065-4115	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R A ZORICH	7071 WARNER AVE # F131	# F131	HUNTINGTN BC	CA	92647-5495	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R A BOOKERBUILDER'S INC	2240 ENCINITAS BLVD STE D	STE D	ENCINITAS	CA	92024-4345	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R C FOSTER CORPORATION	264 CORPORATE TERRACE ST		CORONA	CA	92879-6001	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R D ENGINEERING & CONSTRUCTION INC	1660 N MAGNOLIA AVE		EL CAJON	CA	92020-1288	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R E STEINHAUER CONSTRUCTION INC	7630 MIRAMAR RD STE 2400	STE 2400	SAN DIEGO	CA	92126-4223	1541	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R J ALLEN INC	10392 STANFORD AVE		GARDEN GROV	CA	92840-6301	17	SAWCUTTING, DEMOLITION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R K C CONSTRUCTION INC	9272 JOVIC RD		LAKESIDE	CA	92040-4504	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R L W CONSTRUCTION	1635 SAN LUIS REY AVE		VISTA	CA	92084-3111	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R M MECHANICAL	1248 NORTH AVE		ESCONDIDO	CA	92026-8450	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R P LANDSCAPE & MAINTENANCE	210 CHINABERRY LN APT 27	APT 27	SAN MARCOS	CA	92069-2800	781	LANDSCAPE & MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R Q CONSTRUTION INC	3194 LIONSHEAD AV		CARLSBAD	CA	92010	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R.C. STORE MAINTENANCE INC	569 BATEMAN CIR		CORONA	CA	92880-2012	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
R.C. WENDT PAINTING	21612 SURVEYOR CIR		HUNTINGTN BC	CA	92646-7068	17	PAINTING RESIDENTIAL	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R.C.R. PLUMBING, INC.	12620 MAGNOLIA AVE		RIVERSIDE	CA	92503-4636	17	SUB CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R.D. OLSON CONSTRUCTION, INC	2955 MAIN ST		IRVINE	CA	92614-5909	1542	General Contractors-Nonresidential Buildings, Oth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R.E. HUGHES CONST. INC.	1556 CERRO DE ORO		VISTA	CA	92084-3600	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RACK CONSTRUCTION & CONSULTING	7967 CAMINO ALVARO		CARLSBAD	CA	92009	1521	GENERAL CONTRACTING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RAD CONSTRUCTION INC	3479 CITRUS ST STE A	STE A	LEMON GROVE	CA	91945-1541	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RAM PLUMBING HTG & AIR INC	18875 STATE ST		CORONA	CA	92881-3787	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RAMON HURTADO	5154 WHITMAN WAY APT 105	APT 105	CARLSBAD	CA	92008-4642	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RAMOS HOUSEKEEPING SERVICES	2400 ALTISMA WAY APT G	APT G	CARLSBAD	CA	92009-6331	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RANCHO DEL SOL HOUSE CLEANING	2585 JEFFERSON ST APT 30	APT 30	CARLSBAD	CA	92008-1470	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RANCHO ENVIROMENTAL SERVICE	425 REDLANDS ST		VISTA	CA	92083-3626	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RANCHO ESPERANZA LANDSCAPE	2652 MARQUITA PL		CARLSBAD	CA	92009-8135	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RANCHO HILLS LANDSCAPE, INC.	4747 CAMINITO DE LOS CEPILLOS		BONSALL	CA	92003-5025	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RANCHO WEST LANDSCAPE INC.	28325 SOMERS RD		MURRIETA	CA	92563-2402	782	LANDSCAPE INSTALLATION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RAND ENGINEERING	2959 NIGHT WATCH WAY		ALPINE	CA	91901-4116	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RANDALL MEANS LANDSCAPE	1540 HARBOR DR		VISTA	CA	92081-8703	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RANDY JACKSON COMPANY	8969 ROSE AVE		MONTCLAIR	CA	91763-1644	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RAPID FIX, INC	7573 CALOMA CIR		CARLSBAD	CA	92009-7714	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RAY WHITE CEMENT	3108 HIGHWAY 76		FALLBROOK	CA	92028-9318	17	CONCRETE CONT.	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RC CONSTRUCTION	3080 MADISON ST		CARLSBAD	CA	92008-2310	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RCH CONSTRUCTION INC	26170 ENTERPRISE WAY STE 100	STE 100	LAKE FOREST	CA	92630-8419	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RE - LEAF LANDSCAPE	30880 CURZULLA RD		WINCHESTER	CA	92596-9794	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REAL ESTATE RENOVATIONS, INC.	105 COPPERWOOD WAY STE A	STE A	OCEANSIDE	CA	92058-3870	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REAL GOODS SOLAR	41567 CHERRY ST		MURRIETA	CA	92562-9193	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REBECCA POLLARD	1301 PANORAMA RIDGE RD		OCEANSIDE	CA	92056-2218	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REBECCA'S CLEANING SERVICES	2251 GROVE PARK PL		CHULA VISTA	CA	91915-2221	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RECONSTRUCTION EXPERTS, INC.	2385 CAMINO VIDA ROBLE	STE 102	CARLSBAD	CA	92011	1522	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REED & COMPANY, A O	4777 RUFFNER ST		SAN DIEGO	CA	92111-1519	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REFINED SIGNS & MAILBOXES	1446 VANESSA CIR		ENCINITAS	CA	92024-2440	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REGAL CULTURED MARBLE, INC.	1239 E FRANKLIN AVE		POMONA	CA	91766-5450	17	CULTURED MARBLE MFG/INSTALL	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REISTERS CARPET SERVICE	3207 AZAHAR PL		CARLSBAD	CA	92009	7217	carpet upholstery cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REMODEL WORKS BATH & KITCHEN	12147 KIRKHAM RD STE B	STE B	POWAY	CA	92064-8836	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RENO CONTRACTING, INC.	1450 FRAZEE RD STE 100	STE 100	SAN DIEGO	CA	92108-4341	15	COMMERCIAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RE-NU BUILDING	3573 ROOSEVELT ST APT 100	APT 100	CARLSBAD	CA	92008-5043	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REPIPE 1	23679 CALABASAS RD # 691	# 691	CALABASAS	CA	91302-1502	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RESIDENTIAL DESIGN SERVICES	4900 E HUNTER AVE		ANAHEIM	CA	92807-2057	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RESIDENTIAL MAINTENANCE	4778 BROOKWOOD CT		CARLSBAD	CA	92010-6577	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RETAIL CONSTRUCTION SERVICES, INC.	11343 39TH ST N		LAKE ELMO	MN	55042-9586	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REYES MAINTENANCE	1818 DEVON PL		VISTA	CA	92084-7624	781	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
REYNOLD'S CLEANING	2308 ALTISMA WAY APT 217	APT 217	CARLSBAD	CA	92009-6312	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RICEBUILTCONSTRUCTION CO.	1730 CEREUS CT		CARLSBAD	CA	92011-5119	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RICHARD & RICHARD CONSTRUCTION	234 VENTURE ST STE 100	STE 100	SAN MARCOS	CA	92078-4399	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RICHARD L. CHASE CONTRACTING	3147 JEFFERSON ST	APT 2	CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RICHARD PAUL VALGARDSON	1947 N CHAPPEL DR		BENJAMIN	UT	84660-1318	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RICHARD THAISZ CONST INC	1403 CAMINITO SEPTIMO		CARDIFF	CA	92007-1013	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RICHIE'S MOBILE AUTO REPAIR	257 N EMERALD DR # C	# C	VISTA	CA	92083-6109	7538	General Automotive Repair Shops	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RICJO ENTERPRISES INC	1302 HIDDEN PLATEAU CT		EL CAJON	CA	92019-3656	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RICKY MOBILE DETAILING	UNK				-	7542	MOBILE DETAILING	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RICO PAGUIO CLEANING SOLUTION	1483 N LAS FLORES DR		SAN MARCOS	CA	92069-5943	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RIDGE LANDSCAPE ARCHITECT	8841 RESEARCH DR STE 200	STE 200	IRVINE	CA	92618-4243	781	LANDSCAPE ARCHITECTURE DESIGN	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RIGHT TOUCH PROFESSIONAL MOBILE DETAILING	837 ARCADIA AVE		VISTA	CA	92084-3202	7542	MOBILE DETAILING	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RIMMER CONSTRUCTION INC	2611 S COAST HIGHWAY 101 STE 103	STE 103	CARDIFF	CA	92007-2100	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RINCON WEST	2827 ELMWOOD ST		CARLSBAD	CA	92008	7389	Pool Maintenance	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RISING SUN LANDSCAPE	218 EL VALLE OPULENTO		VISTA	CA	92083-7710	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RITE-A-WAY SERVICES INC	14457 MERIDIAN PKWY		MARCH AIR RE	CA	92518-3007	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RIVERS LANDSCAPE CONSTRUCTION	1302 OAK HILL DR APT 108	APT 108	ESCONDIDO	CA	92027-3640	17	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RIVIERA BUILDING & DEVELOPMENT	1223 SAND KY		CORONA DEL M	CA	92625-1621	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RIVIERA POOL & SPA SERVICE	846 BORDEN RD		SAN MARCOS	CA	92069-1911	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RK HOME REPAIR INC	5315 SWINDON RD		ROCKLIN	CA	95765-5120	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RLH CONSTRUCTION, INC.	13465 CAMINO CANADA # 106-257	# 106-257	EL CAJON	CA	92021-8813	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RLT ROOFING	2424 VISTA WAY STE 200	STE 200	OCEANSIDE	CA	92054-6178	17	SUB-CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
RMV CONSTRUCTION INC	4079 HUERFANO AVE		SAN DIEGO	CA	92117-5225	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROADONE	1205 SO COAST HWY 101	101	ENCINITAS	CA	92024-0000	7549	TOWING	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROB WITTON GENERAL CONTRACTOR	6831 XANA WY		CARLSBAD	CA	92009	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROBERT CRAIG CONST	535 YUCCA RD		FALLBROOK	CA	92028-2651	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROBERT P MASTNY	1714 CATALPA RD		CARLSBAD	CA	92011-5106	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROBERT THAYER	7255 PASEO PLOMO APT 201	APT 201	CARLSBAD	CA	92009-2012	782	Lawn And Garden Services	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROBINS AIR SYSTEMS	343 LOS ARBOLITOS BLVD		OCEANSIDE	CA	92058-1526	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROBOTIS BROTHERS CONSTRUCTION	325 CARLSBAD VILLAGE DR	C2	CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTORS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROCK ENTERPRISES CONSTRUCTION CO	7645 LEMON AVE		LEMON GROVE	CA	91945-1620	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROCKEY MURATA LANDSCAPING, INC	6241 YARROW DR	STE E	CARLSBAD	CA	92009	1500	Building Construction-General Building	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROCKSTAR POOL SERVICE	6921 QUAIL PL UNIT E	UNIT E	CARLSBAD	CA	92009-4130	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROEL CONSTRUCTION CO INC	3366 KURTZ ST		SAN DIEGO	CA	92110-4440	15	GEN. CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROGER BERRY-GENERAL CONTRACTOR	6482 SURFSIDE LN		CARLSBAD	CA	92011	1521	General Contractor	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROGER ROBERSON CONSTRUCTION	2030 CORDOBA PL		CARLSBAD	CA	92008	1521	CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROLLIE'S MOBILE AUTO WASH	3130 CANYON ST		CARLSBAD	CA	92008-1120	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROMERO'S CARPET CLEANING	1190 ENCINITAS BLVD APT 146	APT 146	ENCINITAS	CA	92024-5368	7217	CARPET CLEANING	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RON LEA CONSTRUCTION	1453 BUENA VISTA WAY		CARLSBAD	CA	92008-1538	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROY DUNNING LANDSCAPE INC.	3650 CAMINO MARGLESA		ESCONDIDO	CA	92025-7953	17	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ROYS AUTO BUMPER REPAIR MOBILE	7204 PONTO DR		CARLSBAD	CA	92011-4601	7532	Top, Body, And Upholstery Repair Shops & Paint Sh	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RPM POOL SERVICE	1714 CATALPA RD		CARLSBAD	CA	92011-5106	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
R-QUAD CONSTRUCTION	2340 LOVELAND DR		RIVERSIDE	CA	92509-1635	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RUDKO PAINTING & CUSTOM FINISHES	7106 COLUMBINE DR		CARLSBAD	CA	92011-5110	1721	Painting And Paper Hanging	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RUDOLPH AND SLETTEN, INC	1600 SEAPORT BLVD STE 350	STE 350	REDWOOD CIT	CA	94063-5575	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RUSTY JOHNSON CONSTRUCTION	5316 FORECASTLE CT		CARLSBAD	CA	92008	15	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
RYAN COMPANIES US, INC.	9171 TOWNE CENTRE DR STE 460	STE 460	SAN DIEGO	CA	92122-6217	1542	DEVELOPER, DESIGN/BUILD GENERAL CONTRACTO	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
S & H CONTRACTING INC	470 CORPORATE DR		ESCONDIDO	CA	92029-1509	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
S & J BUILDERS & RESTORATION SERVICES, INC.	10815 WHEATLANDS AVE STE J	STE J	SANTEE	CA	92071-2872	15	GEN'L CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
S & R TOWING	3199 TYLER ST		CARLSBAD	CA	92008	7549	AUTOMOTIVE SERVICES	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
S & S GENERAL CONTRACTOR	2827 ELMWOOD ST		CARLSBAD	CA	92008-1510	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
S R CORNERSTONE CONSTRUCTION	329 PACIFIC COAST HWY		HERMOSA BEA	CA	90254-4833	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
S. AND J. PLASTERING CORP	10990 LOWER AZUSA RD STE 13	STE 13	EL MONTE	CA	91731-1353	17	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
S. C. WICHMANN	935 LAKE RIDGE DR		SAN MARCOS	CA	92078-5416	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
S.D. EXPERT PLUMBING & DRAIN CLEANING	797 BEACON DR		SAN DIEGO	CA	92114-4708	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
S.S. SMITH CO.	1743 MALLOW CT		CARLSBAD	CA	92011	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAFE CONSTRUCTION	41861 PATTON PL		MURRIETA	CA	92562-9584	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAK CONSTRUCTION OF CA LP	13405 TELEGRAPH RD # 407	# 407	WHITTIER	CA	90605-3435	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SALZANO ENGINEERING	1282 GREENFIELD DR		EL CAJON	CA	92021-3316	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAM RAMMAHA PAINTING CO., INC,	1655 COMMERCE ST		CORONA	CA	92880-1732	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAN DIEGO CONCRETE PUMPING INC	8534 HUBBLES LN		SANTEE	CA	92071-4408	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAN DIEGO DESIGN & BUILD	7145 STANFORD AVE		LA MESA	CA	91942-5826	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAN DIEGO FACILITY SOLUTIONS	5745 KEARNY VILLA RD STE 111	STE 111	SAN DIEGO	CA	92123-1171	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAN DIEGO FUME WORKS COMPANY	4131 AVENIDA DE LA PLATA		OCEANSIDE	CA	92056-6002	7342	TERMITE TARP FUMIGATION SERVICES	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAN DIEGO HOME IMPROVEMENTS	1939 FRIENDSHIP DR STE D	STE D	EL CAJON	CA	92020-1138	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAN DIEGO KEN KING	8070 LA JOLLA SHORES DR # 433	# 433	LA JOLLA	CA	92037-3230	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAN DIEGO LANDSCAPE SYSTEMS INC	15839 MUSSEY GRADE RD		RAMONA	CA	92065-7441	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAN DIEGO OFFICE INTERIORS	3706 RUFFIN RD		SAN DIEGO	CA	92123-1812	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAN DIEGO, CA. WINDOW CLEANING	7770 REGENTS RD # 113-615	# 113-615	SAN DIEGO	CA	92122-1937	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAN MARCOS PLUMBING AND DRAIN SERVICE	3568 9TH ST		SAN MARCOS	CA	92078-2316	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SANDRA MC KENNA	4670 WOODSTOCK ST		CARLSBAD	CA	92010-6571	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SANTANA CONCRETE, INC.	18241 SLOVER AVE		BLOOMINGTON	CA	92316-2366	1771	CONCRETE CONTRACTOR, FOUNDATIONS AND FLA	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SATURN ELECTRIC INC	7552 TRADE ST		SAN DIEGO	CA	92121-2412	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAVANAH LANDSCAPE	4399 SERENA AVE		OCEANSIDE	CA	92056-5017	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SAVINO CONSTRUCTION INC	810 LOS VALLECITOS BLVD STE J	STE J	SAN MARCOS	CA	92069-1448	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SBM MANAGEMENT SERVICES LP	5241 ARNOLD AVE		MCCLELLAN	CA	95652-1025	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SBM SITE SERVICES, LLC	5241 ARNOLD AVE		MCCLELLAN	CA	95652-1025	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SC CONSTRUCTION	3821 SKYLINE RD		CARLSBAD	CA	92008-2744	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SCHMUCKLE PAINTING INC	6084 CORTE DEL CEDRO	STE 100	CARLSBAD	CA	92011	1721	PAINTING AND PAPER HANDING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SCHROEDER CONSTRUCTION & DEV	2691 STATE ST		CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SCM CONSTRUCTION INC	1030 N MOUNTAIN AVE # 203	# 203	MONTCLAIR	CA	91762-2114	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SCOTT ROGERS POOL SERVICE	2715 MORNING GLORY LN		CARLSBAD	CA	92008	7389	POOL SERVICE	Y	Y	Y	N	N	N	N	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
SCOTT T WOODS	2709 FIRE MOUNTAIN DR		OCEANSIDE	CA	92054-6243	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
SDB TRIMMER	3781 ADAMS ST		CARLSBAD	CA	92008-3402	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEA BREEZE CARPET CARE	1572 WHISPER DR		CHULA VISTA	CA	91915-1907	7217	Carpet And Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEA BRIGHT COMPANY, THE	4322 SEA BRIGHT PL		CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEA COUNTRY HOMES	2451 IMPALA DR	STE A	CARLSBAD	CA	92010	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEARS CONSTRUCTION CO.	1387 CYNTHIA LN		CARLSBAD	CA	92008	1521	GENERAL CONTRACTING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEARS HOME IMPROVEMENTS	283 E AIRWAY BLVD		LIVERMORE	CA	94551-7664	17	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEASCAPE POOLS	9265 DOWDY DR STE 113	STE 113	SAN DIEGO	CA	92126-6373	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEASIDE POOL SERVICE	3445 RAVINE DR		CARLSBAD	CA	92010-5558	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEASIDE SPECIALTY CONSTRUCTION	6716 WHITESAIL ST		CARLSBAD	CA	92011-3414	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SECOND NATURE LANDSCAPES	1690 VIA CANCION		SAN MARCOS	CA	92078-5148	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SECURE HOME IMPROVEMENTS INC	627 E MISSION RD		SAN MARCOS	CA	92069-1901	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEDIG MASONRY INC	17955 COLLIER AVE		LAKE ELSINOR	CA	92530-2623	15	GENERAL CONTRACTOR -MASONRY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEI CLEANING SERVICES	2713 VIENTO VALLE		ESCONDIDO	CA	92025	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SELECT BUILD	340 RANCHEROS DR STE 174	STE 174	SAN MARCOS	CA	92069-2980	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SENIOR'S PROFESSIONAL HANDYMAN SERVICES	2638 FLOWER FIELDS WAY		CARLSBAD	CA	92010-8330	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SENORITAS MARGARITAS	1344 CYNTHIA LN		CARLSBAD	CA	92008	7359	Equipment Rental and Leasing NEC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SERVICE ELECTRIC	308 INDUSTRIAL WAY		FALLBROOK	CA	92028-2356	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SERVICE MASTER ABSOLUTE	6975 NORTH AVE STE B	STE B	LEMON GROVE	CA	91945-1490	15	GENERAL CONTRACTOR/BUILDING RESTORATIONS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SERVICE MASTER COMPLETE RESTORATION	2342 MEYERS AVE		ESCONDIDO	CA	92029-1008	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SETH HOENIG	2714 MADISON ST		CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR, REMODELING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SETTLE SECURITY	550 CROUCH ST		OCEANSIDE	CA	92054-4414	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SEVERINO CONSTRUCTION	2395 PIO PICO DR		CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SHAFFER CONSTRUCTION	6712 WHITESAIL ST		CARLSBAD	CA	92011	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SHAMROCK POOL SERVICE	2706 GALICIA WY		CARLSBAD	CA	92009	7389	POOL CLEANING SERVICE	Y	Y	Y	N	N	N	N	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
SHASTA LANDSCAPING, INC.	150 VALLECITOS DE ORO		SAN MARCOS	CA	92069-1435	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SHEA CONSTRUCTION	4401 TWAIN AVE STE 25	STE 25	SAN DIEGO	CA	92120-3420	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SHEA HOMES LIMITED PARTNERSHIP	9990 MESA RIM RD		SAN DIEGO	CA	92121-3932	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SHEA HOMES, INC	9990 MESA RIM RD		SAN DIEGO	CA	92121-3932	1522	General Contractors-Residential Buildings, Other	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SHERWOOD MECHANICAL, INC.	6630 TOP GUN ST		SAN DIEGO	CA	92121-4112	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SHRADER AND MARTINEZ CONSTRUCTION INC	160 DRY CREEK RD		SEDONA	CA	86336-4307	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SIERRA GROUP	560 RIVERDALE DR		GLENDALE	CA	91204-1475	1542	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SIERRA PACIFIC LANDSCAPE CONTRACTOR, INC.	22605 LA PALMA AVE STE 514	STE 514	YORBA LINDA	CA	92887-4764	17	LANDSCAPE/IRRIGATION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SIERRA PACIFIC WEST, INC.	2125 LA MIRADA DR		VISTA	CA	92081-8830	15	BUILDING CONSTRUCTION - GENERAL BUILDING CC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SIERRA SERVICES	3443 ISLA VISTA DR		SAN DIEGO	CA	92105-2932	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SIGNATURE CONST	739 MOCKINGBIRD CIR		ESCONDIDO	CA	92025-7455	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SILVA ORTIZ CONTRACTING CO	4656 BRIGHTON AVE		SAN DIEGO	CA	92107-2220	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SILVEIRA CONSTRUCTION, INC.	3960 WILDWOOD RD		SAN DIEGO	CA	92107-3752	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SILVERIA DESIGN BUILD CONSULTANT	1565 WILSHIRE RD		FALLBROOK	CA	92028-9221	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SIM ENGINEERING, INC	3658 PALOMAR DR		FALLBROOK	CA	92028-8324	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SIMAC CONSTRUCTION, INC.	2067 WINERIDGE PL STE A	STE A	ESCONDIDO	CA	92029-1952	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SISSON CONST.	407 TAMARACK AVE		CARLSBAD	CA	92008-4128	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SISTER CLEANING SERVICES	7597 CALOMA CIR		CARLSBAD	CA	92009-7714	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SIVADGE, INC	1745 SUNBURST DR		EL CAJON	CA	92021-1543	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SKS, INC	1730 MISSION RD		ESCONDIDO	CA	92029-1111	5172	Petroleum And Petroleum Products Wholesalers	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SKY HIGH	205 W VERMONT AVE APT 8	APT 8	ESCONDIDO	CA	92025-6251	7349	WINDOW CLEANING	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SKYLINE SUNROOMS, INC.	5710 KEARNY VILLA RD STE C	STE C	SAN DIEGO	CA	92123-1100	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SMITH LANDSCAPE CONSTRUCTION	3593 NEWLAND RD		OCEANSIDE	CA	92056-4923	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SNA LANDSCAPING	3574 HARWICH DR		CARLSBAD	CA	92010	0781	LANDSCAPING & DESIGN	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SNS BUILDING SERVICES	1588 NORRAN AVE		EL CAJON	CA	92019-2590	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SO CAL CUSTOM POOLS AND SPAS	3730 HIBISCUS CIR		CARLSBAD	CA	92008-3372	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SO CAL LANDSCAPES	3262 SAN TOMAS DR		OCEANSIDE	CA	92056-3247	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SO CAL STONEWORKS INC	79768 ARNOLD PALMER		LA QUINTA	CA	92253-4717	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOCAL DETAIL & SUPPLY	1541 PROMONTORY RIDGE WAY		VISTA	CA	92081-5481	7542	MOBILE DETAIL	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOCAL DETAIL PROS	1020 C ST		NATIONAL CITY	CA	91950-	7542	Mobile detailer	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SO-CAL MFG HOUSING CONSTRUCTION INC	4605 WADE AVE		PERRIS	CA	92571-7494	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOCAL PACIFIC CONSTRUCTION CORP.	29885 2ND ST STE J	STE J	LAKE ELSINOR	CA	92532-2402	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOIL RETENTION SYSTEMS INC	2501 STATE ST		CARLSBAD	CA	92008	1521	GENERAL BUILDING CONTRACTORS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOL HOUSEKEEPING	2585 JEFFERSON ST APT 30	APT 30	CARLSBAD	CA	92008-1470	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOLARE ENERGY INC	9520 PADGETT ST STE 218	STE 218	SAN DIEGO	CA	92126-4452	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOLEX CONTRACTING, INC	42146 REMINGTON AVE		TEMECULA	CA	92590-2547	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
SOLTEK PACIFIC CONSTRUCTION COMPANY	2424 CONGRESS ST		SAN DIEGO	CA	92110-2819	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOSA'S GARDENING	3412 THUNDER DR		OCEANSIDE	CA	92056-4743	781	GARDENING, LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOUTH BAY WELDING	781 OCONNER ST		EL CAJON	CA	92020-1644	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOUTH COAST CONCRETE CONSTRUCTION	4223 FAIRGROUNDS ST		RIVERSIDE	CA	92501-1771	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOUTHERN CALIFORNIA ROOMS	14104 FIRESTONE BLVD		SANTA FE SPG	CA	90670-5810	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOUTHERN CONTRACTOR CO	559 N TWIN OAKS VALLEY RD		SAN MARCOS	CA	92069-1710	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOUTHERN COUNTIES PLUMBING	7616 MIRAMAR RD # 5100	# 5100	SAN DIEGO	CA	92126-4202	17	SUB-CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOUTHLAND PAVING, INC.	361 N HALE AVE		ESCONDIDO	CA	92029-1716	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOUTHWEST COMMERCIAL CLEANING	240 WOODLAWN AVE STE 5	STE 5	CHULA VISTA	CA	91910-2139	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOUTHWEST CONSTRUCTION CO, INC.	2909 RAINBOW VALLEY BLVD		FALLBROOK	CA	92028-8859	15	CONCRETE CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOUTHWEST CUSTOM CONTRACTORS	24385 VIA PRIMERO		MURRIETA	CA	92562-3827	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SOUTHWEST PIPELINE $ TRENCHLES	539 W 140TH ST		GARDENA	CA	90248-1509	15	BUILDING CONSTRUCTION -GENERAL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SP WHITE CONSTRUCTION, INC	2540 GATEWAY RD		CARLSBAD	CA	92009	1521	GENERAL BUILDING CONTRACTORS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SPANKY'S PORTABLE SERVICES	555 ENTERPRISE ST		ESCONDIDO	CA	92029-1244	7359	PORTABLE RESTROOM SERVICES	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SPARKLE PET, LLC	810 MAGNOLIA AVE		CARLSBAD	CA	92008-5081	752	Animal Specialty Services, Except Veterinary	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SPEARS CONSTRUCTION	6005 HIDDEN VALLEY RD	STE 260	CARLSBAD	CA	92011	1500	Building Construction-General Building	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SPECTRA COMPANY	2510 SUPPLY ST		POMONA	CA	91767-2113	1541	General Contractors-Industrial Buildings & Warehou	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SPECTRUM POOL AND CONSTRUCTION	5751 PALMER WY	STE G-1	CARLSBAD	CA	92010	1500	Building Construction-General Building	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SPOTT PEST PREVENTION	310 STATE PL		ESCONDIDO	CA	92029-1362	7342	Disinfecting And Pest Control Services	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SSW CONSTRUCTION	1070 E DOMINGUEZ ST STE M	STE M	CARSON	CA	90746-7230	15	CONSTRUCTION COMPANY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STANLEY STEEMER	9655 VIA EXCELENCIA		SAN DIEGO	CA	92126-4555	7217	CARPET CLEANING□□Edited by BBRAN on 09/20/2004	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STANTEC CONSULTING CORPORATION	2655 CAMINO DEL RIO N STE 302	STE 302	SAN DIEGO	CA	92108-1633	15	CONSTRUCTION/ENVIRONMENTAL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STARRETT CONSTRUCTION, INC.	1941 FRIENDSHIP DR STE C	STE C	EL CAJON	CA	92020-1144	1542	GENERAL CONTRACTOR FOR COMMERICAL OFFICE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STATEWIDE STRIPES, INC.	7320 MISSION GORGE RD		SAN DIEGO	CA	92120-1224	1611	PAVEMENT STRIPING, SEAL COAT AND SIGNAGE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STAUFFER'S LANDSCAPE INC	525 NEW JERSEY ST STE D	STE D	REDLANDS	CA	92373-6251	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STAVISH CONSTRUCTION INC	384 STARLIGHT CIR # 4337	# 4337	BIG BEAR LAKE	CA	92315	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STEAM CARPET CLEANING SYSTEMS	119 N. EL CAMINO REAL APT. E-122		ENCINITAS	CA	92024-	7217	Carpet and Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STEAM 'N CLEAN	101 Market Street		SAN DIEGO	CA	92101-	7217	Carpet and Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STEIGERWALD-DOUGHERTY INC	427 S CEDROS AVE STE 202	STE 202	SOLANA BEACH	CA	92075-1969	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STEP ON IT	329 COLE WAY		OCEANSIDE	CA	92054-5671	7538	General Automotive Repair Shops	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STEVE JULIUS CONSTRUCTION	230 CALLE PINTORESCO		SAN CLEMENTE	CA	92672-7503	1542	General Contractors-Nonresidential Buildings, Oth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STEVEN SMITH LANDSCAPE, INC.	1916 COMMERCIAL ST		ESCONDIDO	CA	92029-1232	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STEVES IRRIGATION	2763 LEVANTE ST		CARLSBAD	CA	92009-8121	7699	Repair Shops And Related Services, Not Elsewhere	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STILL WATERS POOL & SPA SERVICE	2782 JEFFERSON ST		CARLSBAD	CA	92008-1703	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STONE IMAGERY	3546 HIGHLAND DR		CARLSBAD	CA	92008	1741	STONE WORK	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STONEBROOK LANDSCAPES	414 CAMINO HERMOSO		SAN MARCOS	CA	92078-8901	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STOTLER CONSTR INC	3531 RIDGECREST DR		CARLSBAD	CA	92008-2034	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STOTTS BUILT GENERAL CONTRACTORS	25241 KERRI LN		RAMONA	CA	92065-4744	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STRONGSIDE BUILDERS INC	2835 PROGRESS PL		ESCONDIDO	CA	92029-1516	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
STRUCTURAL GROUP INC	15552 COMMERCE LN		HUNTINGTN BC	CA	92649-1602	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUFFOLK ROEL INC	38 DISCOVERY STE 200	STE 200	IRVINE	CA	92618-3128	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUFFOLK-ROEL	3366 KURTZ ST		SAN DIEGO	CA	92110-4414	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUKUT CONSTRUCTION, INC.	3156 VISTA WAY STE 205	STE 205	OCEANSIDE	CA	92056-3622	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SULLY-MILLER CONTRACTING	135 S STATE COLLEGE BLVD # 400	# 400	BREA	CA	92821-5823	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUMMIT SERVICES INC	1430 VALLE GRANDE		ESCONDIDO	CA	92025-7637	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUNDANCER POOLS	728 INSPIRATION LN		ESCONDIDO	CA	92025-7939	17	SWIMMING POOL CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUNGATE ENERGY SOLUTIONS	6335 FERRIS SQ STE B	STE B	SAN DIEGO	CA	92121-3249	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUNRISE LANDSCAPE	2658 DEL MAR HEIGHTS RD # 443	# 443	DEL MAR	CA	92014-3100	781	LANDSCAPE AND TREE SERVICE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUNSCAPE LAND DESIGNS	6456 PASEO CERRO		CARLSBAD	CA	92009-1904	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUNSET JANITORIAL	2390 RISING GLEN WAY APT 305	APT 305	CARLSBAD	CA	92008-2067	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUNSET PAINTING INC.	1049 CALLE DE LEPANTO		ESCONDIDO	CA	92025-7680	17	PAINTING CONTRACTOR C-33	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUNSTAR COMMERCIAL CONST	1414 HAWK PKWY # H2-430	# H2-430	MONTROSE	CA	81401-6461	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUNSTATE TILE CONTRACTORS INC	7579 CONVOY CT		SAN DIEGO	CA	92111-1113	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUNWEST FIELD PAINTING	832 KALPATI CIR APT A	APT A	CARLSBAD	CA	92008-4163	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUPERCLEAN BBQ	2303 OCEAN ST APT 22	APT 22	CARLSBAD	CA	92008-2228	7349	Building Cleaning And Maintenance Services, Not E	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUPERIOR DOOR SYSTEMS	8059 WING AVE		EL CAJON	CA	92020-1245	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUPERIOR ELECTRICAL MECH. & PLUMBING	8613 HELMS AVE		RANCHO CUCA	CA	91730-4521	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUPERIOR GENERAL CONSTRUCTION	1438 ALTA VISTA DR		VISTA	CA	92084-5702	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUPERIOR RESTORATION	3135 ROOSEVELT ST		CARLSBAD	CA	92008	1799	EMERGENCY WATER DAMAGE SERVICE	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUPERLATIVE CLEANING SERVICE	3341 CUESTA PL		CARLSBAD	CA	92009-7715	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SURE SHINE JANITORIAL	3199 RED HILL AVE STE B	STE B	COSTA MESA	CA	92626-3445	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
SURECRAFT DOOR & HARDWARE INC	2875 EXECUTIVE PL		ESCONDIDO	CA	92029-1524	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SURFACE DESIGNS, LLC	4941 AVILA AVE		CARLSBAD	CA	92008-3705	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SUTTON TREE SERVICE INC.	2236 S SANTA FE AVE		VISTA	CA	92084-7805	17	TREE TRIMMING/LANDSCAPE SERVICE□□Edited by E	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SWIM ZONE POOLS	2760 CARLSBAD BLVD UNIT 103	UNIT 103	CARLSBAD	CA	92008-2264	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SWINERTON BUILDERS	17140 BERNARDO CENTER DR STE 21	STE 216	SAN DIEGO	CA	92128-2088	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SYNERGY EE	28436 SATELLITE ST		HAYWARD	CA	94545-4863	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SYNERGY POOL & SPA SERVICE	1661 CHAMISAL CT		CARLSBAD	CA	92011-5031	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SYSCO SAN DIEGO INC.	12180 KIRKHAM RD		POWAY	CA	92064		Food Delivery Restaurants	Y	Y	Y	N	N	Y	N	N	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SYSTEMS PAVING, INC.	7925 SILVERTON AVE STE 501	STE 501	SAN DIEGO	CA	92126-6350	15	CONSTRUCTION (PAVING)□□	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
SYSTEMS WATERPROOFING, INC.	2905 E MIRALOMA AVE STE 10	STE 10	ANAHEIM	CA	92806-1837	1799	Special Trade Contractors, Nec	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
T & M CONSTRUCTION	140 E STETSON AVE # 301	# 301	HEMET	CA	92543-7139	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
T & R CONSTRUCTION GROUP	7116 VALJEAN AVE		LAKE BALBOA	CA	91406-3901	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
T AND T JANITORIAL	2959 FRANKEL WAY		SAN DIEGO	CA	92111-5430	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
T I G A CONSTRUCTION INC	243 S ESCONDIDO BLVD # 341	# 341	ESCONDIDO	CA	92025-4116	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
T V D INC	1447 SOMERSET AVE		CARDIFF	CA	92007-1643	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
T. B. PENICK & SONS, INC.	9747 OLSON DR		SAN DIEGO	CA	92121-2802	15	GEN'L CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TALBOT CUSTOM BUILDING	2240 ENCINITAS BLVD # D430	# D430	ENCINITAS	CA	92024-4345	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TAMARACK POOL CENTER	5246 COLERIDGE CT		CARLSBAD	CA	92008	1799	SWIMMING POOL CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TAPPER DEVELOPMENT	2551 STATE ST	225	CARLSBAD	CA	92008	1521	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TARZIAN LANDSCAPE, INC	1402 MONTGOMERY DR		VISTA	CA	92084-7245	15	Building Construction-General Building Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TAURUS BUILDERS	2281 VIA CASCABEL		ESCONDIDO	CA	92027-4819	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TAYLOR MORRISON OF CA, LLC	15 CUSHING		IRVINE	CA	92618-4220	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TECH CONTRACTORS	3575 KENYON ST		SAN DIEGO	CA	92110-5333	1541	General Contractors-Industrial Buildings & Warehou	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TEKNIK INC	11545 VIA PLAYA DE CORTES		SAN DIEGO	CA	92124-1531	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TEKTON MASTER BUILDERS	1010 S COAST HIGHWAY 101 STE 108	STE 108	ENCINITAS	CA	92024-5072	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TEMECON GENERAL BUILDING CONTRACTOR INC	9715 CARROLL CENTRE RD STE 108	STE 108	SAN DIEGO	CA	92126-6506	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TEMP POWER SYSTEMS	625 FEE ANA ST		PLACENTIA	CA	92870-6704	17	CONTRACTOR - SPECIALITY C10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TERMINIX INTERNATIONAL	860 RIDGE LAKE BLVD		MEMPHIS	TN	38120-9434	7342	PEST CONTROL SERVICES	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TERRA FIRMA LANDSCAPE CO	7710 KENAMAR CT		SAN DIEGO	CA	92121-2425	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TERRA PIPE LINE INC.	1953 ALMANOR ST		OXNARD	CA	93036-2666	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TERRAQUA, INC.	3691 54TH ST		SAN DIEGO	CA	92105-3208	17	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE BRICKMAN GROUP LTD	2420 COUGAR DR		CARLSBAD	CA	92008	17	LANDSCAPE MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE CREST COMPANY, INC.	1265 RUBENSTEIN AVE		CARDIFF	CA	92007-2409	17	POOL CONSTRUCTION AND SERVICE	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE DOMESTIC DOCTOR	1690 BRADY CIR		CARLSBAD	CA	92008-2574	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE DOOR CO.	2345 ALTA VISTA DR		VISTA	CA	92084-7026	15	CONTRACTOR B,C-61, D-28	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE GLASS GUY INC	4269 CORTE VERDE		OCEANSIDE	CA	92057-7541	7536	AUTO WINDSHIELD REPAIR	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE LONE DRAINER	7704 CAMINITO TINGO UNIT I-201	UNIT I-201	CARLSBAD	CA	92009-8657	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE MORGAN GROUP	1347 OAK AVE		CARLSBAD	CA	92008-1932	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE PERFECT FIELD	2075 CORTE DEL NOGAL	STE X	CARLSBAD	CA	92011	1700	CONSTRUCTION-SPECIAL TRADE CONTRACTORS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE POOL GUY	P.O. BOX 230353		ENCINITAS	CA	92023	7389	Pool Cleaning and Repair	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE ROOF EXPERTS	28223 RED STONE LN		ESCONDIDO	CA	92026-	17	CONTRUCTION- SPECIAL TRADE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE SCREEN LADY	3234 RANCHO QUARTILLO		CARLSBAD	CA	92009-2227	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THE SHOWER PAN MAN INC.	1316 N MELROSE DR STE G	STE G	VISTA	CA	92083-2920	1799	Special Trade Contractors, Nec	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THOMAS LEE CLOUD	1930 W SAN MARCOS BLVD SPC 343	SPC 343	SAN MARCOS	CA	92078-3928	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THOMAS ROBERTSON CONST.	228 HOOVER ST		OCEANSIDE	CA	92054-4551	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THOR DESIGN BUILDING & DEVELOPMENT INC	13446 JAMUL DR		JAMUL	CA	91935-1633	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THORPE CONSTRUCTION	3085 MADISON ST		CARLSBAD	CA	92008-2311	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
THUNDER JONES CONTRACTING GROUP, INC	2515 PIONEER AVE STE 1	STE 1	VISTA	CA	92081-8418	15	CONCRETE CONSTRUCTION	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TIERRA BELLA LANDSCAPE	1202 COUNTRY ESTATES DR		VISTA	CA	92084-3342	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TIERRA VERDE RESOURCES, INC.	1545 LAKE DR		ENCINITAS	CA	92024-5224	17	LANDSCAPE MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TILE TRENDS	1311 LAWRENCE DR		NEWBURY PAR	CA	91320-1308	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TIM CHAPMAN	150 CREGAR ST		OCEANSIDE	CA	92054-3608	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TIM GEORGE CONSTRUCTION	428 E ST		RAMONA	CA	92065-2465	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TIMERMAN LANDSCAPING	1354 EUCALYPTUS AVE		VISTA	CA	92084-6336	781	LANDSCAPING - CERTIFIED BACKFLOW TESTER	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TINO'S CUSTOM DETAILING	346 ACACIA AVE APT B	APT B	CARLSBAD	CA	92008-3245	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TLD CONTRACTORS INC.	310 PAUMA PL		ESCONDIDO	CA	92029-1702	1521	General Contractors--Single-Family Housing	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TLM PETRO LABOR FORCE INC	909 N ALAMEDA ST		COMPTON	CA	90220-2303	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TNT BLANCHARD GENERAL ENGINEERING, INC	529 W 4TH AVE		ESCONDIDO	CA	92025-4037	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TNT BUILDERS INC	746 S MAIN AVE		FALLBROOK	CA	92028-3391	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TNT CONSTRUCTION	32290 CALLE AVELLA		TEMECULA	CA	92592-3860	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TOOLSON CONSTRUCTION CO. INC.	761 GARDEN VIEW CT STE 201	STE 201	ENCINITAS	CA	92024-2400	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
TOP NOTCH WINDOW WASHING	1204 STRATFORD LN		CARLSBAD	CA	92008-1524	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TORRES TILE, INC	250 SARTORI WAY		VISTA	CA	92083-8072	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TOTAL MAINTENANCE, INC.	1046 COMMERCE ST STE J	STE J	SAN MARCOS	CA	92078-2623	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TOUCH OF CLASS	8760 CAMPO RD		LA MESA	CA	91941-8002	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TOWNE CONSTRUCTION, INC.	12115 LAKESIDE AVE		LAKESIDE	CA	92040-1712	15	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TR CONSTRUCTION	9335 MIRA MESA BLVD		SAN DIEGO	CA	92126-4816	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TRACY FARIS POOL SERVICE	6921 QUAIL PL UNIT E	UNIT E	CARLSBAD	CA	92009-4130	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TRANSCAL CONSTRUCTION	2102 HANCOCK ST # 202	# 202	SAN DIEGO	CA	92110-2011	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TRAVCON BUILDER INC	4553 TONI LN		LA MESA	CA	91942-5854	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TREEBEARD LANDSCAPE	9909 CAMPO RD		SPRING VALLE	CA	91977-1609	17	LANDSCAPE CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TRI VISTA, INC.	1392 W 11TH AVE		ESCONDIDO	CA	92029-3226	1542	General Contractors-Nonresidential Buildings, Oth	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TRINAMIC MOBILE TRUCK SERVICES	3293 ROOSEVELT ST		CARLSBAD	CA	92008	7538	MOBILE VEHICLE MECHANIC	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TRUE WINDOW WASHING	2947 UNICORNIO ST APT C	APT C	CARLSBAD	CA	92009-4441	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TRUGREEN LANDCARE	770 METCALF ST		ESCONDIDO	CA	92025-1667	15	LANDSCAPE MAINT & IRRIGATION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TRUGREEN LANDCARE A GENERAL PARTNERSHIP	216 N CLARA ST		SANTA ANA	CA	92703-3518	15	COMMERCIAL & RESIDENTIAL LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TRUGREEN LANDCARE, A GENERAL PARTNERSHIP	5248 GOVERNOR DR		SAN DIEGO	CA	92122-2800	15	COMMERCIAL & RESIDENTIAL LANDSCAPING CONTI	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TSA CONTRACTING, INC.	9535 WAPLES ST # 200	# 200	SAN DIEGO	CA	92121-2953	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TUDOR CONSTRUCTION	735 SAN DIEGUITO DR		ENCINITAS	CA	92024-4539	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TURN PRO	5121 WHITMAN WAY APT 205	APT 205	CARLSBAD	CA	92008-4629	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TURNER CONSTRUCTION	3197 JAMES DR		CARLSBAD	CA	92008	1521	GENERAL CONTRACTING, CUSTOM HOMES	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TWG CONSTRUCTION SERVICES INC	20596 FORTUNA DEL SUR		ESCONDIDO	CA	92029-4506	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TWR ENTERPRISES, INC	1661 RAILROAD ST		CORONA	CA	92880-2503	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TY LANDSCAPE AND MAINTENANCE	2914 SOMBROSA ST		CARLSBAD	CA	92009-9245	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TYCONN SERVICES	1919 CAMBRIDGE AVE		CARDIFF	CA	92007-1617	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
TYECOR CONSTRUCTION	12605 EL CAMINO REAL UNIT D	UNIT D	SAN DIEGO	CA	92130-4071	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ULTIMATE OUTDOOR ENVIRONMENTS	3459 CORTE FRESA	104-329	CARLSBAD	CA	92009	15	GENERAL CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ULTRA BRITE CARPET CLEANING INC	3775 VIA CABRILLO		OCEANSIDE	CA	92056-7241	7217	Carpet And Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ULTRA CLEAN POOLS INC.	669 MAGNOLIA AVE		CARLSBAD	CA	92008-5070	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
UNDER PRESSURE INDUSTRIAL CLEANING	5186 DON RODOLFO DR		CARLSBAD	CA	92010-3949	7542	Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
UNIQUE BUILDING SERVICES	741 VIA FLORA RD		SAN MARCOS	CA	92069-3521	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
UNIQUE LANDSCAPING CO	1424 SWEETBRIAR CIR		CARLSBAD	CA	92011-1207	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
UNIVERSAL BUILDING MAINTENANCE	1551 N TUSTIN AVE STE 650	STE 650	COWAN HEIGH	CA	92705-8664	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
UNIVERSAL REMODELING INC	545 W AVENUE 26 # 201	# 201	GLASSELL	CA	90065-1033	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
URBACH ROOFING, ICN	445 PRODUCTION STREET		SAN MARCOS	CA	92078	17	Roofing Contractor	Y	N	Y	Y	N	N	N	N	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
URBAN HOUSING BUILDERS INC	9484 MISSION PARK PL		SANTEE	CA	92071-5610	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
URBAN ORGANICS	7538 GIBRALTAR ST APT E	APT E	CARLSBAD	CA	92009-7411	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
UTGARD CONSTRUCTION COMPANY INC	12225 WORLD TRADE DR STE L	STE L	SAN DIEGO	CA	92128-3768	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
V V L CONSTRUCTION	6049 PASEO ACAMPO APT 257	APT 257	CARLSBAD	CA	92009-2268	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VADNAIS CORPORATION	2130 LA MIRADA DR		VISTA	CA	92081-8815	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VALENTE CONCRETE INC	255 BENJAMIN DR		CORONA	CA	92879-6509	1771	Concrete Work	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VALLEY CREST LANDSCAPE MAINTENANCE, INC.	8500 MIRAMAR PL		SAN DIEGO	CA	92121-2530	17	LANDSCAPE MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VALLEY DOOR & TRIM	43300 BUSINESS PARK DR STE 101	STE 101	TEMECULA	CA	92590-3660	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VALLEY PACIFIC CONCRETE, INC.	27580 TABB LN		MENIFEE	CA	92584-9521	17	CONRETE CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VALLEYCREST LANDSCAPE DEVELOPMENT, INC.	8450 MIRAMAR PL		SAN DIEGO	CA	92121-2528	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VAN SLYKE LANDSCAPE INC.	442 RANCHO SANTA FE RD		ENCINITAS	CA	92024-6538	17	LANDSCAPE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VAUGHAN'S INDUSTRIAL REPAIR CO INC	16224 GARFIELD AVE		PARAMOUNT	CA	90723-4804	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VERDIN CONCRETE, INC.	4899 DESPERADO DR		RIVERSIDE	CA	92509-4009	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VERDUGO CONCRETE SPECIALIST INC	8664 TROY ST		SPRING VALLE	CA	91977-2534	15	CONCRETE FOUNDATIONS	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VERTEX COATINGS	1291 W STATE ST		ONTARIO	CA	91762-4015	17	PAINTING CONTRACTOR	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VIACON, INC	270 TROTTERS RDG		FAYETTEVILLE	GA	30215-6538	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VICTOR PADILLA ROOFING	2026 OCEANSIDE BLVD		OCEANSIDE	CA	92054-4404	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VIKING COMMERCIAL CONST.	1825 ASTON AV		CARLSBAD	CA	92008	1542	General Contractor Nonresidential Buil	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VILLAGE LAWN CARE	2292 AUDEN PL		CARLSBAD	CA	92008	0781	LANDSCAPING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VINCENT JONES CONST	419 MAIN ST # 113	# 113	HUNTINGTON E	CA	92648-5199	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VIP COMMERCIAL CLEANING SERVICES	342 JUNIPER AVE APT 7	APT 7	CARLSBAD	CA	92008-8252	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VIRIDIAN LANDSCAPE	970 W VALLEY PKWY # 415	# 415	ESCONDIDO	CA	92025-2554	17	LANDSCAPE SUB-CONTRACTOR	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VISTA HOME IMPROVEMENT	5391 VIA VICENTE		YORBA LINDA	CA	92887-2543	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
VWC BUILDERS, INC	425 W LA CADENA DR STE 12	STE 12	RIVERSIDE	CA	92501-1230	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WALBURN'S CARPET CARE, INC.	2417 LA PLUMA LN		CARLSBAD	CA	92009-9130	7217	Carpet And Upholstery Cleaning	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WALL DIMENSIONS, INC.	43540 NANTES CT		TEMECULA	CA	92592-4338	1721	Painting And Paper Hanging	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WALL SPLASH DECOR AND MORE	1328 CORVIDAE ST		CARLSBAD	CA	92011-4851	7349	Building Cleaning And Maintenance Services, Not E	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

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Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
WANKE INDUSTRIAL COMMERCIAL RESIDENTIAL IN	400 S FARRELL DR STE B106	STE B106	PALM SPRINGS	CA	92262-7961	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WARD GENERAL BUILDING & MGMT INC	2635 LEVANTE ST		CARLSBAD	CA	92009-8119	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WARMINGTON RESIDENTIAL CALIFORNIA INC	3090 PULLMAN ST		COSTA MESA	CA	92626-5901	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WASH ALL	2443 TUTTLE ST		CARLSBAD	CA	92008-1446	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WASHNET	6890 MIMOSA DR		CARLSBAD	CA	92011-4057	7389	Business Services, Not Elsewhere Classified	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WATANABE GARDENING, BILL	2560 GREGORY DR		CARLSBAD	CA	92008	0781	LANDSCAPE COUNSELING	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WATCHLIGHT CORP	111 S MARSHALL AVE		EL CAJON	CA	92020-4251	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WATERFALL AMERICA INC	2253 TIGEREYE PL		CARLSBAD	CA	92009-0000	1521	Building Construction-General Building Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WATERLINE POOLS AND SPAS, INC	741 SANTA BARBARA DR		SAN MARCOS	CA	92078-7945	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WATERSEDGE LANDSCAPE INC	4255 RUFFIN RD		SAN DIEGO	CA	92123-1821	17	LANDSCAPE / BACK FLOW SERVICE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WATERTITE DECK COATINGS	732 PALETTE CT		OCEANSIDE	CA	92057-6374	17	Construction-Special Trade Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WATERWORKS POOL CONCEPTS	209 OCEANSIDE BLVD		OCEANSIDE	CA	92054-4902	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WATKINS LANDMARK CONSTRUCTION	2262 CARMEL VALLEY RD STE F	STE F	DEL MAR	CA	92014-3751	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WATSON DEVELOPMENT COMPANY	2401 GRANADA WAY		CARLSBAD	CA	92010-2160	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WAYNE PERRY INC.	8281 COMMONWEALTH AVE		BUENA PARK	CA	90621-2537	15	CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WEST COAST AIR CONDITIONING CO INC	12365 MAPLEVIEW ST		LAKESIDE	CA	92040-1737	15	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WEST COAST ARBORISTS, INC.	2200 E VIA BURTON		ANAHEIM	CA	92806-1221	17	TREE MAINTENANCE□□Edited by BBRAN on 03/09/20(	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WEST COAST CONSTRUCTION SERVICES INC	9295 CHESAPEAKE DR STE J	STE J	SAN DIEGO	CA	92123-1020	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WEST COAST DRYWALL	538 FRONT ST		EL CAJON	CA	92020-4233	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WEST COAST INSTALLERS	12170 TECH CENTER DR		POWAY	CA	92064-7102	17	SUBCONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WEST COAST MAINTENANCE	2438 SACADA CIR		CARLSBAD	CA	92009-8032	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WEST COAST POOL SERVICE	1798 GUEVARA RD		CARLSBAD	CA	92008-1019	7389	Business Services, Not Elsewhere Classified	Y	Y	Y	N	N	N	N	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WEST SCAPES	877 MARIGOLD CT		CARLSBAD	CA	92011-3822	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WESTERN EXTERMINATOR COMPANY	563 N CITRACADO PARKWAY		ESCONDIDO	CA	92029-1293	7342	Disinfecting And Pest Control Services	Y	Y	Y	N	Y	N	Y	Y	N	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WESTERN FOUNDATIONS & SHORING, INC.	10875 HIGHWAY 67		LAKESIDE	CA	92040-1401	15	FOUNDATIONS, DRILLING & SHORNG	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WESTERN GARDENS	4616 PANNONIA RD		CARLSBAD	CA	92008	0781	GARDEN SERVICES	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WESTERN OILFIELD SUPPLY CO.	3404 STATE RD		BAKERSFIELD	CA	93308-4538	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WESTERN SUMMIT CONSTR. INC	2820 LA MIRADA DR STE H	STE H	VISTA	CA	92081-8405	15	CONSTRUCTION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WESTERN TOWING	4370 PACIFIC HWY		SAN DIEGO	CA	92110-3106	7549	Automotive Services, Except Repair And Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WESTERN TREE SERVICE	10387 FRIARS RD STE 302	STE 302	SAN DIEGO	CA	92120-2302	17	TREE & LANDSCAPE SERVICE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WESTTURF LANDSCAPE MAINTENANCE	701 MERCANTILE ST		VISTA	CA	92083-5919	17	LANDSCAPE MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WHEELIHAN CONSTRUCTION, INC	2598 FORTUNE WAY STE L	STE L	VISTA	CA	92081-8442	1542	GENERAL CONTRACTOR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WHILLOCK LANDSCAPE DESIGN	3537 KNOLLWOOD DR		CARLSBAD	CA	92010-5506	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WHITE'S STEEL INC	45524 TOWNE ST		CHIRIACO SMT	CA	92201-4446	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WHITNEY & COMPANY	337 E CARMEL ST		SAN MARCOS	CA	92078-4311	782	WEED ABATEMENT	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WILDCAT CONSTRUCTION INC	1097 E VALLEY PKWY		ESCONDIDO	CA	92025-4618	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WILLIAM LYON HOMES, INC	3710 GLEN AVE		CARLSBAD	CA	92010-5522	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WILLIAMS TECHNIQUE	4326 NAVAJO AVE		OCEANSIDE	CA	92056-2902	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WIMMER YAMADA AND CAUGHEY	3067 5TH AVE		SAN DIEGO	CA	92103-5840	781	LANDSCAPE ARCHITECTURE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WINDOR INC	2220 E ORANGEWOOD AVE		ANAHEIM	CA	92806-6110	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WINDOWS BY JAMES	6550 PONTO DR SPC 14	SPC 14	CARLSBAD	CA	92011-2304	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WINDRUSH CONSTRUCTION	3191 HEATHER LN		ALPINE	CA	91901-1568	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WINGATE AND COMPANY	4008 GARFIELD ST		CARLSBAD	CA	92008	0782	LANDSCAPE MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WISNIEWSKI & ASSOCIATES	2036 COUNTRYWOOD WAY		ENCINITAS	CA	92024-5401	781	LANDSCAPE ARCHITECTURE & ARBORICULTURAL C	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WM. M. PERKINS COMPANY INC.	3148 MARKET ST		SAN DIEGO	CA	92102-3232	1721	PAINTING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WOA BUILDERS INC	110 REQUEZA ST APT A	APT A	ENCINITAS	CA	92024-4528	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WOHURNINI LLC	2060 CAMBRIDGE AVE		CARDIFF	CA	92007-1708	781	LANDSCAPE / GARDEN DESIGN & MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WOLFF WINDOW CLEANING	2082 SEA VILLAGE CIR		CARDIFF	CA	92007-1219	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	N	N	N	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WOLVERINE CONST	28118 WINDSOR DR		MENIFEE	CA	92586-2555	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WOLVERTON LANDSCAPE INC	830 SUNSET DR		VISTA	CA	92081-6826	17	Construction-Special Trade Contractors	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WONG'S GARDENING	1044 PARK DR		ESCONDIDO	CA	92029-5721	781	YARD MAINTENANCE	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WOODLAND NURSERY	962 POINSETTIA AVE		SAN MARCOS	CA	92078-6201	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WOODMARK CONST	15688 HAWLEY CRK		EL CAJON	CA	92021-2627	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WOODSCAPE DESIGN & CONSTRUCTION	714 VIA BARQUERO		SAN MARCOS	CA	92069-7368	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
WORKRIGHT PROPERTY SERVICES, INC	7837 CONVOY CT STE 200	STE 200	SAN DIEGO	CA	92111-1209	15	CONSTRUCTION AND MAINTENANCE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
Y9 CONSTRUCTION INC	1455 KETTNER BLVD APT 301	APT 301	SAN DIEGO	CA	92101-2462	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
Z- MAN CONSTRUCTION	1441 E TAYLOR ST		VISTA	CA	92084-3309	15	Building Construction-General Building Contractors	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
Z-BEST CONCRETE, INC	2575 MAIN ST		RIVERSIDE	CA	92501-2238	17	Construction-Special Trade Contractors	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ZEN POOL SERVICE	2894 LANCASTER RD		CARLSBAD	CA	92010	7389	MISC BUSINESS SERVICE	Y	Y	Y	N	N	N	N	N	Y	N	NA	904.21, 904.31, 904.4, 904.51, 904.61
ZIMZ HANDYMAN	610 E 9TH AVE		ESCONDIDO	CA	92025-5134	7349	Building Cleaning And Maintenance Services, Not E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ZOLEZZI MOBILE CAR & TRUCK SERVICE	6842 MAPLE LEAF DR		CARLSBAD	CA	92011-3947	7549	Automotive Services, Except Repair And Carwashes	Y	N	Y	Y	N	Y	Y	N	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

City of Carlsbad JURMP Annual Report FY 2011-12
Industrial Commercial Inventory (Mobile)

Facility Name	Site Address or Location	Suite	City	State	Zip	SIC Code	SSIC Description	HTTWQ (Y/N)	Bacteria	Gross	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Tributary to a 303(d) Listed Waterbody?	Hydrologic Area
ZONDIROS CORPORATION	1833 DIAMOND ST STE 201	STE 201	SAN MARCOS	CA	92078-5130	17	GENERAL CONTRACTING	Y	N	Y	Y	N	Y	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ZOQUIAPA LANDSCAPING	1925 LINDSLEY PARK DR		SAN MARCOS	CA	92069-3336	781	Landscape Counseling And Planning	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61
ZWACK LANDSCAPE	9842 W LILAC RD		ESCONDIDO	CA	92026-5107	17	LANDSCAPE CONSTRUCTION	Y	N	N	N	Y	N	Y	Y	Y	Y	NA	904.21, 904.31, 904.4, 904.51, 904.61

* Potential Pollutants - Potential Pollutatnts are constituent groups from the 2005 Baseline Long Term Effectiveness Assessment

** Tributary to a 303(d) Listed - Indicates the facility is tributary to a 2006 303(d) listed water body and potentially generates pollutants for which the water body is impaired. This field is marked NA

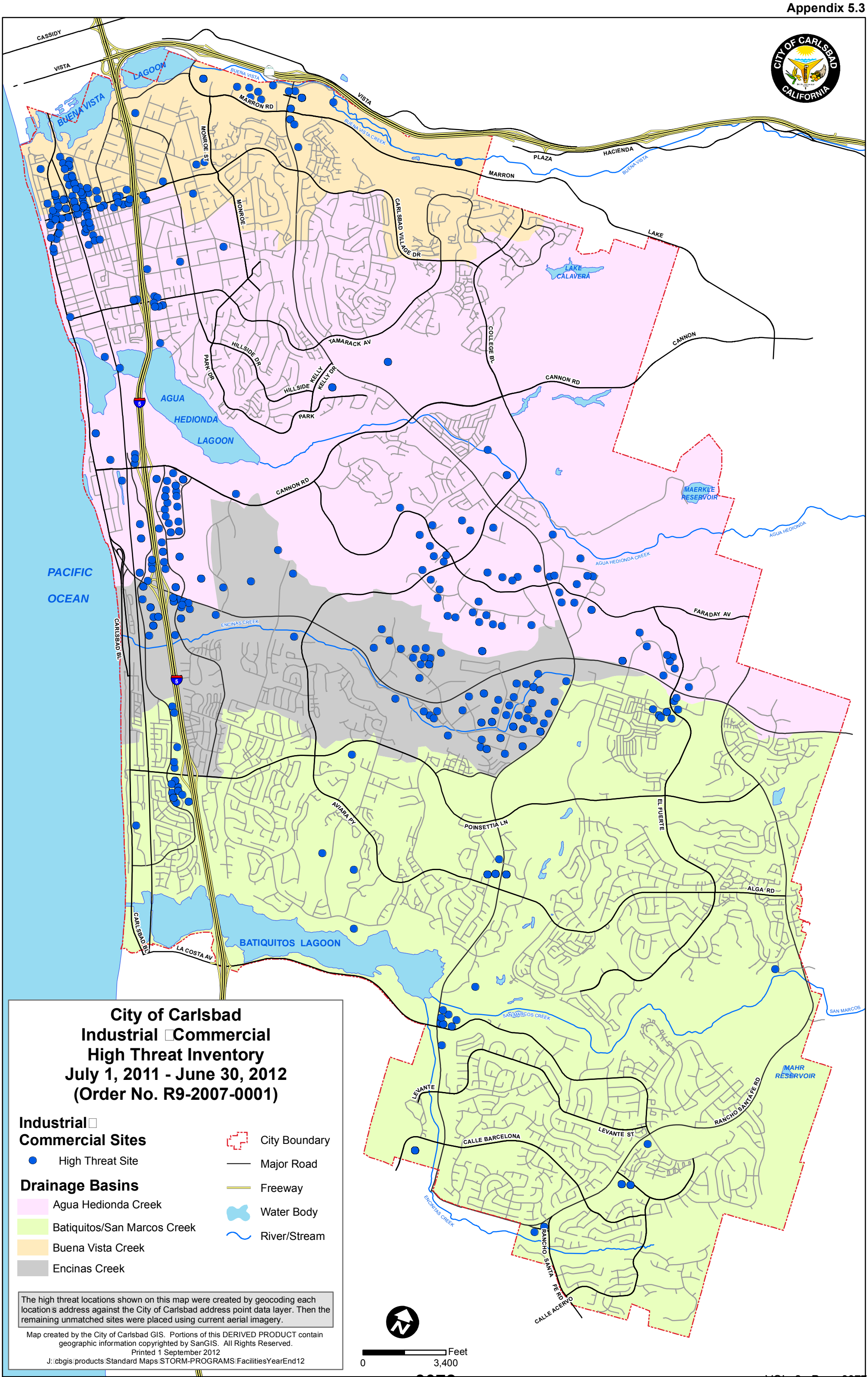
City of Carlsbad
Industrial Commercial
High Threat Inventory
July 1, 2011 - June 30, 2012
(Order No. R9-2007-0001)
Industrial
Commercial Sites
High Threat Site
Drainage Basins
Agua Hedionda Creek
Batiquitos/San Marcos Creek
Buena Vista Creek
Encinas Creek
City Boundary
Major Road
Freeway
Water Body
River/Stream
The high threat locations shown on this map were created by geocoding each location's address against the City of Carlsbad address point data layer. Then the remaining unmatched sites were placed using current aerial imagery.
Map created by the City of Carlsbad GIS. Portions of this DERIVED PRODUCT contain geographic information copyrighted by SanGIS. All Rights Reserved.
Printed 1 September 2012
J:\cbgis\products\Standard Maps\STORM-PROGRAMS\FacilitiesYearEnd12
Feet
0
3,400
CITY OF CARLSBAD
CALIFORNIA
PACIFIC
OCEAN
BUENA VISTA
LAGOON
AGUA
HEDIONDA
LAGOON
BATIQUITOS LAGOON
LAKE
CALAVERA
MAERKLE
RESERVOIR
MAHR
RESERVOIR
CASSIDY
VISTA
MARRON RD
MONROE ST
MONROE
CARLSBAD VILLAGE DR
PLAZA
HACIENDA
MARRON
LAKE
CANNON
CANNON RD
TAMARACK AV
HILLSIDE DR
PARK DR
HILLSIDE
KELLY
KELLY DR
PARK
COLLEGE BL
FARADAY AV
CARLSBAD BL
AVIARA PY
POINSETTIA LN
EL FUERTE
ALGA RD
LA COSTA AV
LEVANTE
CALLE BARCELONA
LEVANTE ST
RANCHO SANTA FE RD
CALLE ACERVO
BUENA VISTA
BUENA VISTA CREEK
AGUA HEDIONDA CREEK
AGUA HEDIONDA
ENCINAS CREEK
SAN MARCOS CREEK
SAN MARCOS
ENCINITAS CREEK

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y□N)
CESSY'S MEXICAN FOOD	5812	7/5/2011	FIXED	Verbal Warning	15.12.050	DISCHARGE ICEMELT TO PLANTER OVERFLOW TO GUTTER	Y
SENORITAS MARGARITAS	7359	7/5/2011	MOBILE	Informational Letter	15.12.050 (Alleged)	Mobile business BMP info provided.	N/A
BUCA DI BEPPO	5812	7/7/2011	FIXED	Written Warning	6.08.045 6.08.050	GREASE AND DEBRIS IN DISPOSAL AREA. TRAINING RECOMMENDED	Y
JIMBO'S NATURAL FOODS	5411	7/7/2011	FIXED	Verbal Warning	15.12.080	EXCESSIVE DEBRIS AROUND LOADING BAY SD.	Y
NEXCYCLE	8999	7/7/2011	FIXED	Notice of Violation	15.12.050 15.12.080	EMPOYEE WASHED OUT TRASH CANS ID OF WASH WATER TO SD	Y
SPROUTS FARMERS MARKET	5411	7/7/2011	FIXED	Verbal Warning	15.12.080	GENERAL HOUSEKEEPING. DEBRIS IN LOADING BAY. SPILLS NOT IMMEDIATELY CLEANED UP.	Y
VONS 2343	5411	7/7/2011	FIXED	Verbal Warning	15.12.080	DUMPSTER OPEN. DEBRIS IN LOADING BAY.	Y
VILLAGE KITCHEN & PIE SHOPPE,	5812	7/8/2011	FIXED	Verbal Warning	15.12.080	GREASE	Y
GREEK CORNER CAFE	5812	7/12/2011	FIXED	Verbal Warning	15.12.080	GREASE PROBLEMS	Y
SOUTHWEST PIPELINE □TRENCHLES	15	7/12/2011	MOBILE	Verbal Warning	15.12.050 15.12.080	DISCHARGE DID NOT REACH SD. ACTIVITY STOPPED PRIOR TO VM ARRIVAL. BMP INFORMATION PROVIDED. POTABLE WATER USED TO PRIME MACHINERY.GAVE BMP INFO.	Y
BROKEN YOLK CAFE	5812	7/14/2011	FIXED	Verbal Warning	15.12.080	EXCESSIVE GREASE ON AND AROUND BIN. EVIDENCE OF ILLEGAL DUMPING.	Y
DRAGMASTER INC	7538	7/15/2011	FIXED	Verbal Warning	15.12.080	HOUSEKEEPING, DEBRIS AND STORAGE	Y

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y N)
JOEY'S SMOKIN BBQ	5812	7/15/2011	FIXED	Verbal Warning	15.12.080	GREASE SPILL AND DISPOSAL TO BE CLEANED IMMEDIATELY.	Y
PLAZA PASEO REAL	6512	7/15/2011	FIXED	Written Warning	15.12.080	DEBRIS IN DISPOSAL AREAS	Y
STAINED GLASS OVERLAY	3231	7/15/2011	FIXED	Verbal Warning	15.12.080	IMPROPERLY STORED MATERIALS	Y
TIN LEAF FRESH KITCHEN	5812	7/15/2011	FIXED	Verbal Warning	15.12.080	GREASE SPILLS ON AND AROUND BIN IN DISPOSAL AREA	Y
TUSCANY RISTORANTE	5812	7/15/2011	FIXED	Verbal Warning	15.12.080	REDUCTION OF POLLUTANTS IN DISPOSAL AREA	Y
EXPRESS AUTO CENTER	7538	7/18/2011	FIXED	Verbal Warning	15.12.080	HYDROLIC PUMP LEAKING	Y
POINSETTA PLAZA	6512	7/18/2011	FIXED	Written Warning	15.12.080	REGARDING TENANTS. RECOMMEND REMINDING TENANTS OF BMPS	Y
RALPHS GROCERY CO, STORE 175	5411	7/18/2011	FIXED	Verbal Warning	15.12.080	SUMP PUMP NOT PROPERLY MAINTAINED. STANDING WATER IN LOADING BAY. DEBRIS AROUND FACILITY.	Y
7-ELEVEN 32942-A	5541	7/19/2011	FIXED	Verbal Warning	15.12.080	EVIDENCE OF SPILL IN DISPOSAL AREA.	Y
FLORENTINA MENDEZ(FARM/FLORAL)	5992	7/19/2011	FIXED	Verbal Warning	15.12.080 6.08.090	TRASH ISSUES AG LOT	Y
ECONO LODGE INN & SUITES	7011	7/20/2011	FIXED	Notice of Violation	15.12.050 15.12.080	VEHICLE WASHING WITH NO BMPS. DISCHARGE TO SD.	Y
NOZOMI 4	5812	7/20/2011	FIXED	Verbal Warning	15.12.080 6.08.030	HOUSEKEEPING	Y
PACIFICA FLOWERS INC.	0181	7/20/2011	FIXED	Written Warning	15.12.080 6.08.090	Improve erosion control BMPs and discard unusable equipment No follow-up necessary.	Y
ALBERTSONS 6701	5411	7/22/2011	FIXED	Verbal Warning	15.12.080	HOUSEKEEPING	Y

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y N)
EL PUERTO MEXICAN & SEAFOOD	5812	7/22/2011	FIXED	Verbal Warning	15.12.080	GREASE	Y
CHINS SZECHWAN RESTUARANT	5812	7/25/2011	FIXED	Verbal Warning	15.12.080	DISPOSAL AREA/ GREASE	Y
KFC/TACO BELL	5812	7/25/2011	FIXED	Verbal Warning	15.12.080 6.08.030	RE: GREASE BIN AND DISPOSAL AREA.	Y
PIZZA PORT BREWING CO.	2082	7/26/2011	FIXED	Verbal Warning	15.12.080 6.08.030	MATERIALS STORAGE VIOLATIONS	Y
STEAM CARPET CLEANING SYSTEMS	7217	7/27/2011	MOBILE	Notice of Violation	15.12.050 15.12.080	SURFACE CLEANING DISCHARGE TO STREET. DID NOT REACH SD	Y
SENOR GRUBBY'S	5812	7/28/2011	FIXED	Verbal Warning	15.12.080	MATERIALS STORAGE AND HOUSKEEPING	Y
CAMINO SHELL	5541	8/8/2011	FIXED	Verbal Warning	15.12.080	MAINTAIN HOUSKEEPING BMPS	Y
S.D. INTL. FLORAL TRADE CENTER	6531	8/8/2011	FIXED	Notice of Violation	15.12.080 6.08.045	REDUCTION OF POLLUTANTS AND CLEANLINESS OF SOLID WASTE ENCLOSURES.	Y
HARBOR FISH CAFE	5812	8/9/2011	FIXED	Written Warning	15.12.080	GREASE AND DISPOSAL AREA.	Y
BRADY CO. LOS ANGELES INC	6512	8/11/2011	MOBILE	Verbal Warning	15.12.080	REGARDING STAINING IN LOADING AREA AND DUMPING OF UNUSABLE MATERIALS.	Y
CVS/PHARMACY 9479	5912	8/12/2011	FIXED	Verbal Warning	15.12.080	DEBRIS AROUND FACILITY	Y
BASKIN ROBBINS	5451	8/15/2011	FIXED	Verbal Warning	15.12.080	DUMPSTER OPEN. MINOR DEBRIS IN DISPOSAL AREA	Y
CARLSBAD PLAZA LLC	6512	8/15/2011	FIXED	Written Warning	15.12.080 6.08.030 6.08.040	TRASH AND GREASE HOUSEKEEPING	Y
SUBWAY	5812	8/15/2011	FIXED	Verbal Warning	15.12.080	DUMPSTER OPEN. MINOR DEBRIS IN DISPOSAL AREA	Y
THE DONUT FAIR	5461	8/15/2011	FIXED	Verbal Warning	15.12.080	DUMPSTER OPEN. DEBRIS IN DISPOSAL AREA	Y
TOP OF THE BAGEL	5461	8/15/2011	FIXED	Verbal Warning	15.12.080	DUMPSTER OPEN. MINOR DEBRIS IN DISPOSAL AREA	Y

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y N)
BOARD & BREW	5812	8/16/2011	FIXED	Verbal Warning	6.08.030 6.08.045	DEBRIS AND SPILLS IN DISPOSAL ENCLOSURE AND SURROUNDING AREA. TRAINING RECOMMENDED	Y
HENDO'S LOCAL	5812	8/16/2011	FIXED	Verbal Warning	6.08.030 6.08.045	TRASH ISSUES - CLEANLINESS OF SHARED DISPOSAL AREA.	Y
MACY'S DEPARTMENT STORE	5311	8/16/2011	FIXED	Verbal Warning	15.12.080	Houskeeping in loading doc.	Y
PLAZA CAMINO REAL, L.P.	6512	8/16/2011	FIXED	Notice of Violation	15.12.080 6.08040 6.08.045	HOUSEKEEPING BMPS IN TRASH AREAS. TRASH DEBRIS AND GREASE.	Y
RUBIO'S RESTAURANTS, INC	5812	8/16/2011	FIXED	Notice of Violation	15.12.050, 6.08.030, 6.08.045	PROHIBITED DISCHARGE AND EXCESSIVE GREASE.	Y
SOUPLANTATION EXPRESS	5812	8/16/2011	FIXED	Verbal Warning	6.08.030 6.08.045	DEBRIS AND SPILLS IN DISPOSAL ENCLOSURE AND SURROUNDING AREA. TRAINING RECOMMENDED	Y
TOMMY V'S URBAN KITCHEN	5812	8/16/2011	FIXED	Notice of Violation	6.08.040, 6.08.045	CLEANLINESS OF WASTE CONTAINERS AND DISPOSAL AREA. EXCESSIVE GREASE.	Y
FIRESTONE COMPLETE AUTO CARE	7538	8/17/2011	FIXED	Verbal Warning	15.12.080	HOUSEKEEPING IN STORAGE AREA AND HAZ WASTE	Y
J.C. PENNY COMPANY	5311	8/17/2011	FIXED	Verbal Warning	15.12.080 15.12.090 6.08.030 6.08.040	TRASH AND DEBRIS IN LOADING DOC AREA AND SD	Y
BEST WESTERN BEACH VIEW LODGE	7011	8/22/2011	FIXED	Verbal Warning	15.12.080.	DEBRIS IN DISPOSAL AREA. UNUSABLE EQUIPMENT STORED NEAR DUMPSTER.	Y
TAMARACK BEACH RESORT	7011	8/22/2011	FIXED	Verbal Warning	15.12.080	SD NEEDS REGULAR MAINTENANCE	Y
CARLSBAD AUTO SERVICE	7538	8/24/2011	FIXED	Verbal Warning	15.12.080 6.08.030	Housekeeping	Y
C & H TREE SERVICES	17	8/26/2011	MOBILE	Notice of Violation	15.12.050 15.12.080	DISCHARGED SAW CUTTING SLURRY TO SD	Y

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y N)
PACIFICA FLOWERS INC.	0181	8/31/2011	FIXED	Verbal Warning	15.12.080	DUMPSTERS OPEN. RECOMMEND REPLACING SAND BAGS ON PERIMETER	Y
THE ROOF EXPERTS	17	8/31/2011	MOBILE	Notice of Violation	15.12.050 15.12.080	POWER WASHING ROOFS. DISCHARGE REACHED SD.	Y
NEED-A-FIX	17	9/1/2011	MOBILE	Notice of Violation	15.12.050 15.12.080	DISCHARGE CONSTRUCTION MATERIAL TO STREET	Y
MACY'S (MENS/HOME)	5311	9/7/2011	FIXED	Verbal Warning	15.12.080	HOUSEKEEPING IN LOADING AREA	Y
LUNA GRILL	5812	9/20/2011	FIXED	Verbal Warning	6.08.030 6.08.045	HOUSEKEEPING IN DISPOSAL AREAS	Y
BLENDZ OF CARLSBAD	5812	10/5/2011	FIXED	Verbal Warning	15.12.080	Housekeeping in disposal area	Y
DRYCLEAN AMERICA	7216	10/5/2011	FIXED	Verbal Warning	15.12.080	HOUSEKEEPING IN COMMON AREA	Y
LOS PRIMOS MEXICAN FOOD	5812	10/5/2011	FIXED	Verbal Warning	15.12.080 6.08.030	GREASE BIN AND TRASH HOUSEKEEPING	Y
STARBUCKS COFFEE 10851	5812	10/5/2011	FIXED	Verbal Warning	15.12.080	HOUSEKEEPING	Y
SUBWAY	5812	10/5/2011	FIXED	Verbal Warning	15.12.080	HOUSEKEEPING	Y
SURF BROTHERS TERIYAKI	5812	10/5/2011	FIXED	Verbal Warning	15.12.080	HOUSEKEEPING	Y
HOOKED ON SUSHI	5812	10/19/2011	FIXED	Verbal Warning	15.12.080	MINOR DEBRIS IN DISPOSAL AREA.	Y
MACY'S (MENS/HOME)	5311	10/20/2011	FIXED	Verbal Warning	15.12.090	SD NEEDS CLEANING	Y
MACY'S DEPARTMENT STORE	5311	10/20/2011	FIXED	Verbal Warning	15.12.080	Leaking Hydrolic pump on trash compactor.	Y
SERO CARLSBAD (ISLAND CARLSBAD	6512	12/13/2011	FIXED	Verbal Warning	15.12.080	Report of wash water discharged to storm drain. Illegal discharge not verified.	Y
SHELL (PALOMAR AIRPORT)	5541	12/21/2011	FIXED	Verbal Warning	15.12.080	DEBRIS AROUND FACILITY. IMPROPERLY STORED HAZ WASTE.	Y

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y□N)
7-ELEVEN	5541	1/4/2012	FIXED	Verbal Warning	15.12.080	EXCESSIVE DEBRIS AND UNUSABLE EQUIPMENT STORED INDEFINITELY. F/U 2/4/12	Y
HEAVILAND ENTERPRISES INC.	1700	1/4/2012	MOBILE	Notice of Violation	15.12.050 15.12.080	Small gasoline spill washed to storm drain.	Y
TGI FRIDAY'S	5812	1/4/2012	FIXED	Written Warning	6.08.030	GREASE SPILLS ON AND AROUND BIN. HEAVILY IMPACTED. DUMPSTERS OPEN. F/U 2/4/12.	Y
CASABLANCA RESTAURANT AND LOUN	5812	1/5/2012	FIXED	Written Warning	15.12.080 6.08.030	DEBRIS AND UNUSABLE MATERIALS AROUND EXTABLISHMENT. GREASE BIN OPEN WITH SPILLS ON AND AROUND EXTERIOR OF BIN. TRAINING RECOMMENDED FOR GREASE DISPOSAL. F/U 2/3/12	Y
IRIS GROUP (MODERN POSTCARD)	2752	1/5/2012	FIXED	Verbal Warning	15.12.080	Broken sand bags and trash around compactor	Y
OUTSOURCE MANUFACTURING	3699	1/5/2012	FIXED	Verbal Warning	15.12.080 6.08.045	Trash and debris.	Y
SERO CARLSBAD (ISLAND□ CARLSBAD	6512	1/9/2012	FIXED	Written Warning	15.12.080 6.08.045	Minor trash issues and open dumpsters.	Y
BOB BAKER VOLKSWAGEN SUBARU	5511	1/18/2012	FIXED	Verbal Warning	15.12.080	HAZ WASTE AREA NEEDS CLEANING AND COVER. DUMPSTERS OPEN. MAINTENANCE WORK PERFORMED OUTDOORS WITHOUT COVER. RECOMMEND CLEANING THESE AREAS REGULARLY.	Y
CARLSBAD HYUNDAI, LLC	5511	1/18/2012	FIXED	Verbal Warning	15.12.050 15.12.080	RINSE WATER DRIPPING OF VEHICLES TO SD	Y
HOEHN INFINITI	5511	1/18/2012	FIXED	Verbal Warning	15.12.050	WATER DRIPPING FROM WET VEHICLES DRIPPING TO SD	Y

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y N)
HOEHN HONDA	5511	1/18/2012	FIXED	Verbal Warning	15.12.080	DEBRIS AND UNUASABLE EQUIPMENT. PAINT CANS IMPROPERLY STORED. WASH WATER NOT COMPLETELY CONTAINED TO WASH BAY.	Y
HOEHN HONDA CERTIFIED USED CAR	5511	1/18/2012	FIXED	Written Warning	15.12.080	SUMP PUMP NEEDS CLEANING AND MAINTENANCE. UNUSABLE MATERIAL IN STORAGE AREA. EMPLOYEES NEED TRAINING ON CIGARETTE DISPOSAL. WASH WATER NOT COMPLETELY CONTAINED.	Y
HOEHN MERCEDES-BENZ	5511	1/18/2012	FIXED	Verbal Warning	15.12.050 15.12.080	RINSE WATER DRIPS OF VEHICLES ENTERS SD. VERY LOW VOLUME	Y
KEN GRODY FORD	5511	1/18/2012	FIXED	Verbal Warning	15.12.080 15.12.090	Parts stored outside uncovered. Storm drains need cleaning and maintenance.	Y
WESELOH CHEVROLET HUMMER	5511	1/18/2012	FIXED	Verbal Warning	15.12.080	Housekeeping issues - parts and materials storage.	Y
WESELOH KIA CARLSBAD	5511	1/18/2012	FIXED	Verbal Warning	15.12.080	Housekeeping - parts and materials storage	Y
CARLSBAD VOLVO	5511	1/19/2012	FIXED	Written Warning	15.12.080 15.12.090	Trash, debris, cigarette butts in storm drains.	Y
HOEHN PORSCHE	5511	1/19/2012	FIXED	Notice of Violation	15.12.050	Wash water from sales lot and wash bay.	Y
MCMURPHY DEVELOPMENTS	6531	1/19/2012	FIXED	Verbal Warning	15.12.050	DISCHARGE OF TILE SLURRY TO GUTTER. DID NOT REACH SD.	Y
TOYOTA CARLSBAD	5511	1/19/2012	FIXED	Written Warning	15.12.080	Storm drain maintenance and wash bay BMPs	Y
TOYOTA CARLSBAD SERVICE CENTER	5511	1/19/2012	FIXED	Written Warning	15.12.080	Water not contained to wash bay. No discharge to storm drain.	Y

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y N)
AMERICAN RIM SUPPLY	3465	1/24/2012	FIXED	Verbal Warning	15.12.080	METAL SHAVINGS AND EXCESSIVE DEBRIS.	Y
KIWI AUDIO VISUAL	4225	1/24/2012	FIXED	Verbal Warning	15.12.080	EXCESSIVE DEBRIS AROUND FACILITY AND IN ADJACENT DRAINAGE DITCH. PAINT CANS STORED OUTDOORS	Y
SYSTEMS, MACHINES, AUTOMATION	3599	1/24/2012	FIXED	Verbal Warning	15.12.080	Debris in storm drains. Cleaning and employee training required.	Y
SYSTEMS, MACHINES, AUTOMATION	3599	1/24/2012	FIXED	Verbal Warning	15.12.080 6.08.045	Storm drains impacted with sediment, debris and trash. Plastic nurdles in trash enclosure.	Y
ORTHO ORGANIZERS INC.	3843	1/25/2012	FIXED	Notice of Violation	15.12.080	WASTE MATERAIL ON GROUND AROUND SD.	Y
PLASTIC ENG & DEVELOPMENT	3089	1/25/2012	FIXED	Verbal Warning	15.12.050 15.12.080	Cooling tower overflow caused discharge to SD.	Y
MACHINE VISION PRODUCTS	3629	1/26/2012	FIXED	Verbal Warning	15.12.080	Metal shavings, trash and debris in back parking lot and loading bay.	Y
PALOMAR CLEANERS	7216	1/26/2012	FIXED	Written Warning	15.12.080	DEBRIS AROUND FACILITY. MACHINERY AND MATERIALS STORED OUTDOORS UNPROTECTED. HAZ WASTE BARRELS STORED IMPROPERLY.	Y
PALOMAR MOBIL	5541	1/27/2012	FIXED	Notice of Violation	15.12.050	DISCHARGE OF WATER AND SOAP TO STORM DRAIN FROM EQUIPMENT MALFUNCTION OF CARWASH.	Y

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y N)
SUPERIOR RESTORATION	1799	1/30/2012	MOBILE	Informational Letter	NO VIOLATION VERIFIED MINIMUM BMP INFO SENT	NO VIOLATION VERIFIED	Y
PACIFIC CNC MACHINE CO, INC.	3599	2/1/2012	FIXED	Verbal Warning	15.12.080	EXCESSIVE METAL SHAVINGS IN LOADING AREA.	Y
CALIBER COLLISION CENTERS	7532	2/2/2012	FIXED	Verbal Warning	15.12.080	Trash and debris in parking lot. Exposed engines.	Y
KANINE KARE	0752	2/6/2012	FIXED	Verbal Warning	15.12.050	SEPTIC TANK LEAKING TO PERVIOUS SURFACE. DOES NOT REACH SD. ACCIDENTAL LEAK	y
CONSOLIDATED ELEC. DIST., INC.	5063	2/8/2012	FIXED	Verbal Warning	15.12.080	Debris, leaves in drainage swale of storage area.	Y
EWING IRRIGATION PRODUCTS INC	5083	2/8/2012	FIXED	Verbal Warning	15.12.050 15.12.080 6.08.050	Soapy water dumped to parking lot (did not enter storm drain). Debris in outdoor storage area. Dumpster lids open.	Y
ORTEGA'S CANVAS	2394	2/8/2012	FIXED	Verbal Warning	15.12.080	Materials, debris stored in drainage path.	Y
DG LIGHTS	3648	2/15/2012	FIXED	Verbal Warning	15.12.080	METAL SHAVINGS ADJACENT TO LOADING AREA.	Y
S.D. INTL. FLORAL TRADE CENTER	6531	2/15/2012	FIXED	Verbal Warning	15.12.080	Minor trash violations.	Y
PACIFICA FLOWERS INC.	0181	2/17/2012	FIXED	Written Warning	15.12.080 15.12.110	Evidence of sediment erosion to street. BMPs not maintained	Y
JCG AUTOMOTIVE, INC.	7538	2/22/2012	FIXED	Notice of Violation	15.12.050	Vehicle washing	y
AVIARA FARMS	5159	2/28/2012	FIXED	Verbal Warning	15.12.080 6.08.040	DEBRIS AROUND FACILITY. DUMPSTER LEAKING	Y

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y N)
CARLSBAD PREMIUM OUTLETS	6512	2/28/2012	FIXED	Written Warning	15.12.080 6.08.030 6.08.045 6.08.050	Storm drain filter boxes need cleaning. Trash and grease bin areas need cleaning.	Y
PRO-TECH PAINTING	17	2/28/2012	MOBILE	Verbal Warning	15.12.050	ID AS A RESULT OF PRESSURE WASHING.	Y
PRODUCT SLINGSHOT, INC.	3999	3/7/2012	FIXED	Verbal Warning	15.12.080 6.08.045	Minor trash and debris in dumpster area.	Y
CRESTONE GROUP, LLC	2051	3/8/2012	FIXED	Written Warning	15.12.080	Minor spills, trash and debris.	Y
BJS RESTAURANT & BREWHOUSE	5812	3/14/2012	FIXED	Written Warning	15.12.080 6.08.030	Leaking dumpsters, trash in landscaping and in storm drains.	Y
ACUSHNET COMPANY	3949	3/28/2012	FIXED	Verbal Warning	15.12.080	Housekeeping and record keeping	Y
ACUSHNET COMPANY	3949	3/28/2012	FIXED	Verbal Warning	15.12.080	Housekeeping and record keeping	Y
CALIFORNIA WATERSPORTS	7999	3/29/2012	FIXED	Verbal Warning	15.12.080	TRASH AND DEBRIS THROUGHOUT SITE	Y
MOBILE DETAILING BY JZ	7542	3/29/2012	MOBILE	Verbal Warning	15.12.050	WASHING WITHOUT BMPS. DID NOT REACH SD.	Y
ALEJANDROS MEXICAN FOOD	5812	4/12/2012	FIXED	Verbal Warning	15.12.080	Caller reported soapy water flowing to street on 4/11/12. HT informed manager of storm water regulations.	Y
CARLSBAD PREMIUM OUTLETS	6512	4/17/2012	FIXED	Notice of Violation	15.12.050 15.12.080	SOAPY WATER DISCHARGED TO STORM DRAIN.	Y
CARLSBAD GOLF CENTER	7999	4/24/2012	FIXED	Verbal Warning	15.12.050	SEDIMENT WASH WATER DISCHARGED TO SD.	Y
CARLSBAD STRAWBERRY CO.	0171	4/26/2012	FIXED	Verbal Warning	15.12.080	EROSION CONTROL BMPS NEED TO BE REPLACED	Y
BEST MOBILE AUTO DETAIL 2	7542	5/4/2012	MOBILE	Notice of Violation	15.12.050 15.12.080	SOAPY WASH WATER DISCHARGED TO SD. NO BMPS IMPLEMENTED TO CONTAIN POLLUTANTS FROM ENTERING DRAIN.	Y
THE BRICKMAN GROUP LTD	17	5/8/2012	FIXED	Verbal Warning	15.12.080	HOUSKEEPING AND MATERIALS STORAGE	Y

Facility Name	SIC	Date	Facility Type	Enforcement Type	CMC Section(s)	Violation Descripton	Compliance (Y N)
ZUZA (CPS PRINTING)	2759	5/9/2012	FIXED	Verbal Warning	15.12.080	PAPER DEBRIS IN BALER AREA AND LOADING BAY.	Y
ENCINA WASTERWATER AUTHORITY	4952	5/11/2012	FIXED	Written Warning	15.12.080	BROKEN STORM WATER BMPS AND OVERWATERING.	Y
STEAM 'N CLEAN	7217	5/15/2012	MOBILE	Informational Letter			N/A
AUTOSMART MOBILE DETAILING	7542	5/18/2012	MOBILE	Notice of Violation	15.12.050 15.12.080	MOBILE DETAILER WASHING VEHICLE IN PUBLIC STREET NO BMPS	Y
CARLSBAD BY THE SEA RESORT	7011	5/25/2012	FIXED	Verbal Warning	15.12.080	TRASH ISSUES.	Y
LIFE TECHNOLOGIES	2836	6/19/2012	FIXED	Verbal Warning	15.12.080	LEAVES, ROOF AGGREGATE, CIGARETTE BUTTS AND DEBRIS AROUND BUILDING AND IN DRAINAGE AREAS.	Y
LIFE TECHNOLOGIES	2836	6/19/2012	FIXED	Verbal Warning	15.12.080	CONSTRUCTION DEBRIS IN DUMPSTER AREA.	Y

Appendix 6

Remember: **pick up** *after your pet*

Did you know pet waste can be a major cause of water pollution? Dog waste contains bacteria, harmful viruses and parasites.

Rain and sprinkler runoff wash pet waste off lawns and recreational areas through our storm drain system and into our creeks, lagoons and ocean. Bacteria in the water not only pose a threat to human health, but also to the environment by consuming oxygen that fish and aquatic organisms need to survive.

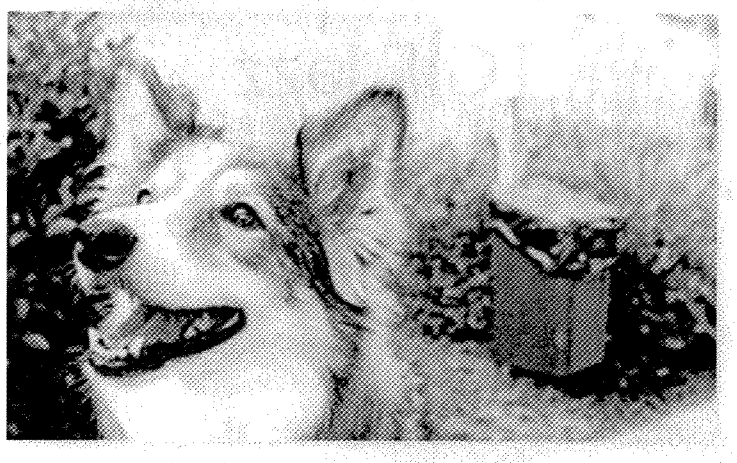

To keep our pets and our environment safe, follow some simple rules:

- Use a bag to collect pet waste, and dispose of it in the trash can.
- Do not wash or dump pet waste, aquarium water, kitty litter or any other pet waste material down the storm drain.
- Keep your pets on a leash. Leashes protect dogs from wilderness hazards such as rattlesnakes or rabid animals.

By minding these simple rules we can keep our pets safe and our environment clean. For more information, visit the city's website: **www.carlsbadca.gov**. To report washing or dumping into the storm drain, please call the city's storm water hotline at **760-602-2799**.

Preschool/toddler fall registration underway

The City of Carlsbad is currently registering students for the fall semester of preschool. Classes fill quickly so get your applications in soon. The City of Carlsbad's preschool program is an exciting, fun and enriching experience for young children, ages 1-5. We emphasize language development, socialization, problem solving and school readiness in a nurturing environment. Daily activities include music and movement, art projects, story time, cooking, sharing and indoor and outdoor play. Children will learn about the world from teacher developed thematic units that include sea life, seasons, zoo animals and plant life. Field trips are also taken to enhance these learning experiences. For more information search for "preschool" on the city website or pick up a copy of the summer Community Services Guide.

> The City of Carlsbad's preschool program is an exciting, fun and enriching experience for young children, ages 1-5.

CITY OF CARLSBAD

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Clean water is *music to our ears*

To report dumping or washing to the storm drain, please call the City of Carlsbad Storm Water hotline at **760-602-2799**.

Do your part to keep pollution out of storm drains.

- Pick up pet waste.
- Apply fertilizers and pesticides sparingly.
- Sweep up or use a mop instead of hosing or washing to the street.
- Properly dispose of household hazardous waste.

CITY OF
CARLSBAD
Environmental Management

www.carlsbadca.gov

Appendix 7

Appendices for Section 7 will be submitted in December 2012 as approved by the Regional Board in Addendum 2, Order 2007-0001.

Appendix 8

Storm Water Training Log

FY 2011-12

DATE	DEPT/DIV	ATTENDANCE	TRAINING TYPE	NAME OF TRAINING	LOCATION	SPONSOR/PRESENTER
07/07/2011	LDE	5	Staff meeting	Discussed updating hydroseed note; misalignment of ESA on GIS maps; curb painting;upcoming inspector SWPPP training; consideration of Clearwater BMP as media filter.	1635 Faraday	Jeremy Riddle
07/12/2011	EM	1	Conference	ESRI International User Conference	SD Convention Center	ESRI
07/13/2011	EM	1	Conference	ESRI International User Conference	SD Convention Center	ESRI
07/14/2011	LDE	7	Staff meeting	Reviewed Tabata 10 HMP/DMA plan;Isis LID/BMP items;Legoland HMP increase in perviousness due to development	1635 Faraday	Steve Bobbett
07/21/2011	LDE	7	Staff meeting	Reviewed Palomar Commons rough grading plan; CUP 10-08 La Posada DMA exhibit with turfblock, bio-infiltration and bio-retention	1635 Faraday	Steve Bobbett
07/28/2011	LDE	7	Staff meeting	Discussed methodology for capturing/reporting priority projects granted exemption from hydromodification; addition of new file in the Q drive for exemptions so granted.	1635 Faraday	Steve Bobbett
08/04/2011	LDE	5	Staff meeting	Discussed available programs/software to determine hydromodofication runoff volumes; temporary desiltation basin details with anti-seepage ring, trash rack; Palomwa Commons SWMP owner/lease transfer;comparisions of hydromodification solutions for missing link of College (new full width street) and widening of El Camino Real (landscaped median).	1635 Faraday	Steve Bobbett
08/11/2011	LDE	6	Staff meeting	Reviewed CIP CMP replacement and lining plans; cross gutter removal and replacement; Agua Hediondia Lagoon foundation proposal to expand parking lot	1635 Faraday	Steve Bobbett
08/18/2011	LDE	7	Staff meeting	Announced revision to procedure establishing BMP?Erosion Control security; Reviewed PIP 11-01 Bressi Ranch hydromodification/filtration (flow-through planter); various CMP replacement ideas, discussions and suggestions	1635 Faraday	Steve Bobbett Glen Van PeskiJeromey Riddle
08/24/2011	EM	1	Conference	Stormcon	Anaheim Marriot	Storm Con

08/25/2011	LDE	7	Staff meeting	Announced upcoming SCWRP workshop; Discussed Palomar Commons plan review; Reviewed top of slope-basin-pumps-outfalls; Moroya hydromodification review; use of existing paved medians to remove pavement and obtain credit for street widening.	1635 Faraday	Steve Bobbett
08/31/2011	U.S. Water Prize Winners Webinar Series	1	Webinar	The City of Los Angeles	On-line, 1635 Faraday	Frank Jimeno
08/31/2011	U.S. Water Prize Winners Webinar Series	1	Webinar	The City of Los Angeles	On-line, 1635 Faraday	Frank Jimeno
09/01/2011	LDE	5	Staff meeting	Discussed SCWRP seminar and follow up field workshop; review of transfer of maintenance responsibility for re-subdivided properlty	1635 Faraday	Steve Bobbett
09/01/2011	LDE	5	Staff meeting	Discussed SCWRP seminar and follow up field workshop; review of transfer of maintenance responsibility for re-subdivided properlty	1635 Faraday	Steve Bobbett
09/08/2011	LDE	7	Staff meeting	Presentation be D Rick re SCWRP analysis and the workshop attended by D Rick and J Riddle. Discussed request to determine site bedrock as reason to hydromodification exemption.	1635 Faraday	Steve Bobbett
09/08/2011	LDE	7	Staff meeting	Presentation be D Rick re SCWRP analysis and the workshop attended by D Rick and J Riddle. Discussed request to determine site bedrock as reason to hydromodification exemption.	1635 Faraday	Steve Bobbett
09/15/2011	LDE	7	Staff meeting	Group discussion of SCWRP analysis including POC. Reviewed Sepring Hills Suites, re-dev of existing site and SDP 09-05.	1635 Faraday	Steve Bobbett
09/15/2011	LDE	7	Staff meeting	Group discussion of SCWRP analysis including POC. Reviewed Sepring Hills Suites, re-dev of existing site and SDP 09-05.	1635 Faraday	Steve Bobbett
09/22/2011	LDE	5	Staff meeting	nnounced CSD certifications avalable vis CASQA; Reviewed Robertson Ranch West Village bioretention for El Camino Real widening	1635 Faraday	Jeremy Riddle
09/22/2011	LDE	5	Staff meeting	nnounced CSD certifications avalable vis CASQA; Reviewed Robertson Ranch West Village bioretention for El Camino Real widening	1635 Faraday	Jeremy Riddle
09/27/2011	EM	1	Webinar	Industrial Permit	Work station	Foley & Lardner LLP

09/29/2011	LDE	6	Staff meeting	Presentation by J Riddle re items HMP subgroup is considering for clarification, ie POC domain of analysis, orifice size, etc. Reviewed Fairfield Inn bioretention proposal and SDP 09-05 temp desiltaton basins	1635 Faraday	Steve Bobbett
09/29/2011	LDE	6	Staff meeting	Presentation by J Riddle re items HMP subgroup is considering for clarification, ie POC domain of analysis, orifice size, etc. Reviewed Fairfield Inn bioretention proposal and SDP 09-05 temp desiltaton basins	1635 Faraday	Steve Bobbett
10/06/2011	LDE	6	Staff meeting	Announcement that CASQA fees to increase and Filtrexx Green Infrastructure / LID seminar 10-13-11. Reviewed Tetratec softward and user guide for San Diego Hydro Model	1635 Faraday	Steve Bobbett
10/06/2011	LDE	6	Staff meeting	Announcement that CASQA fees to increase and Filtrexx Green Infrastructure / LID seminar 10-13-11. Reviewed Tetratec softward and user guide for San Diego Hydro Model	1635 Faraday	Steve Bobbett
10/13/2011	LDE	5	Staff meeting	Reviewed CT 11-02 pervious pavement and bioswale	1635 Faraday	Steve Bobbett
10/13/2011	LDE	5	Staff meeting	Reviewed CT 11-02 pervious pavement and bioswale	1635 Faraday	Steve Bobbett
10/20/2011	LDE	7	Staff meeting	Discussed building department inspection of project sites, CT 06-15 Tabata Ranch flow through planters and Rancho Costera BMP calculations.	1635 Faraday	Steve Bobbett
10/20/2011	LDE	7	Staff meeting	Discussed building department inspection of project sites, CT 06-15 Tabata Ranch flow through planters and Rancho Costera BMP calculations.	1635 Faraday	Steve Bobbett
12/14/2011	EM	1	Webinar	Evaluating Stormwater Outreach: Is anyone listening?	Work station	Stormwater Magazine
01/05/2012	LDE	6	Staff meeting	Discussed Tabata 10; Legoland proposal to consider entier site as project with individual sub-projects for SWMP purposes. Reviewed PIP 05-25A's need of PUD to propose comon BMPs	1635 Faraday	Steve Bobbett
01/12/2012	LDE	6	Staff meeting	Announced training for stormwater modeling and stormwater inspection, Discussed Jellyfish BMP, Reviewed Dos Colinas council presentation, Butcher's Brewery as retail commercial outlet, Encinas Creek basins adjacent to r/w and top of slopes, Fire Station #3 basin with 72" CSP underground hydromod storage.	1635 Faraday	Steve Bobbett

01/19/2012	LDE	6	Staff meeting	Discussed commercial tenant improvements with conversion of delivery/landscape areas to additional parking; Quarry Creek BMPs and their proposal to construct hyudromod BMPs at time of superpad grading. Reviewed Inns at Buena Vista Creek a development in Oceanside with BMP within Carlsbad (north of PCR and BV Creek srb)	1635 Faraday	Steve Bobbett
01/26/2012	EM	2	Webinar	5 Steps to Effective Public Outreach	Work station	Stormwater Magazine
01/26/2012	LDE	6	Staff meeting	Discussed applicibility of required treatment control BMP table for non-priority projects: Leave table with NA and blank for SUSMP project priority designation.	1635 Faraday	Steve Bobbett
02/02/2012	LDE	6	Staff meeting	Announced attendance at county hydromod seminar. Reviewed click-drag options for rainfall, BMP and infiltraton input data. Discussed Type F inlets with orifice; Reviewed potential for evaluation priority project for hydromod that may also increase downstream 100 year Q that may not be contained within downstream facilities.	1635 Faraday	Steve Bobbett
02/09/2012	LDE	6	Staff meeting	Reviewed Daybreak bioretention basins and determination of PDP. PAR/College right turn lane and storm drain extension not a priority project.	1635 Faraday	Steve Bobbett
02/16/2012	LDE	6	Staff meeting	Discussed proper follow up of stormwater requiremenst in the Mitigation & Monitoring Program for projects with mitigated negative declarations.	1635 Faraday	Steve Bobbett
02/23/2012	LDE	7	Staff meeting	Discussed hydromodification criteria for CT expansions; Reviewed espansion of Life Technologies CD 12-xx for addition of 14 new parking spaces with an area less than 5,000 sf; Reviewed bioretention anf flow through planters.	1635 Faraday	Steve Bobbett
03/01/2012	LDE	6	Staff meeting	Discussed BMP Maint Agrmt for Palomar Commons, SDP 09-05	1635 Faraday	Steve Bobbett
03/08/2012	LDE	6	Staff meeting	Reviewed Plaza Camino Real bioretention along El Camino Real, discussed potential for priority project subject to treatment control but not subject to hydromodification due to decrease in impervious area.	1635 Faraday	Steve Bobbett

03/15/2012	LDE	7	Staff meeting	Discussed BMP documentation and inventory possibilities; choosing std CASQA codes for SSBMP; need for inventory of inspected sites to be consistent. SSBMP sheet needs consistent input for Treatment Control, Source Control, and LID CASQA code.	1635 Faraday	Steve Bobbett
03/21/2012	EM	1	Webinar	History and Evolution of the Clean Water Act	Work station	EPA
03/21/2012	EM	1	Webinar	History and Evolution of the Clean Water Act	Work station	EPA
03/22/2012	LDE	6	Staff meeting	Reviewed examples of SSBMP eshibits to standardize CASQA callouts and definitions	1635 Faraday	Steve Bobbett
03/29/2012	LDE	6	Staff meeting	Reviewed CASQA codes for use on SSBMP; Considered applicable SWPPP criteria for desalination plant; Reviewed addition of carwash to existing gas station at Cannon and I-15	1635 Faraday	Steve Bobbett
03/30/2012	EM	1	Training	Hazwoper 24hour	San Diego	Pacific Safety Center
04/05/2012	LDE	6	Staff meeting	Reviewed: 2010 CA 303d water quality segments with required TMDL; Kirgis scheduling/phasing and inplementation of various hydromodification facilities; Daycare facility on College ave regarding review of preliminary hydromodification and DMA exhibit; Fresh & Easy with regard to priority project and possibility of hardened channel to Pacific; La Costa Oaks 2.3 use of former 100 year storage tank for hydromodification purposes only.	1635 Faraday	Steve Bobbett
04/12/2012	LDE	7	Staff meeting	Announced new draft board order available on-line;city financed study to identify stabilized channels and stormwater committed meeting review by J Riddle.	1635 Faraday	Steve Bobbett
04/17/2012	EM	1	Webinar	Using the Clean Water Act State Revolving Fund for Nonpoint Source and National Estuary Projects	Work station	EPA
04/19/2012	LDE	7	Staff meeting	Discussed as-builting TCBMP on precise grading plans; review of City of Vista proposed standard detail for pervious gutter. Reviewed PIP 05-23Ax2 regarding notification to applicant that implementation of hydromodificaton requirements will significantly affect the design of the project; SDP 09-05 review of SSBMP exhibit; CT 08-07 regarding leverl of SWPPP required for mass grading only.	1635 Faraday	Steve Bobbett
04/26/2012	LDE	6	Staff meeting	Reviewed La Costa Villas on Gibralter regarding inclusion of hydromodification measures; Floral Trade Center preliminary review of wide bioretention facilities and ervious areas.	1635 Faraday	Glen Van Peski

05/03/2012	LDE	6	Staff meeting	Reviewed hydroseed mixes for basins; PIP 05-25Ax1 phasing of hydromodificaton basins; CDP 12-07 Ocean Estates determination of std or priority project; SDP 05-04 regarding hydromod requirements and possible use of green roof on constrained site.	1635 Faraday	Steve Bobbett
05/10/2012	LDE		Staff meeting	Meeting attendance and discussion notes not available	1635 Faraday	Steve Bobbett
05/17/2012	LDE	7	Staff meeting	Reviewed redevelopment of a portion of the Costco site; SDP 10-10A with courtyard BMPs, lined pervious pavement, and channel analysis of Encinas Creekl	1635 Faraday	Steve Bobbett
05/24/2012	LDE	6	Staff meeting	Discussed PD 12-01, a PIP grading plan with BMP and hydromod measures, bio retention areas at 4% for treatment of site and enlareged basin for hydromod. Discussed FloGuard presentation. Discussed non-applicability to change time of concentration to reduce 100 year Q and therefore find project exempt from hydromod. Discusste bio retention / flo thru BMP sized for both treatment and hydromod, i.e. treatment in 18" of engineered soil with crate boxes below for hydro mod storage. Becomes bioretention with vault.	1635 Faraday	Steve Bobbett
05/31/2012	LDE	6	Staff meeting	Announced upcomming co-permittee meeting to discuss DRAFT permit, changes to PDP descriptions and hydromodificaton exemptiong which would require retention of 85 %tile storm event. Reviewed project where unlined basin water could co-mingle with rock bedding in utility trenches.	1635 Faraday	Steve Bobbett
06/07/2012	LDE	7	Staff meeting	Reviewed Robertson Ranch West Village vesting TM with desilting basins for mass grading and future streets.	1635 Faraday	Steve Bobbett
06/14/2012	LDE	6	Staff meeting	Reviewed prelim SWMP/Hydromod for Bressi Ranch two hotel PIP proposal; City Compliance with hydromod criteria for traffic circle at State St and Coast Highway.	1635 Faraday	Steve Bobbett
06/21/2012	LDE	5	Staff meeting	Discussed use of San diego Hydrology Model in lieu of calculator.	1635 Faraday	Steve Bobbett
06/28/2012	LDE	6	Staff meeting	Announced collabrative workshops with NRDC, Coast Keepper, Surfrider, co permittees; discussed combination sizing factors for bioretention plus cistern facilities; reviewed revision to stormwater treatment facilities at La Costa Condominiums.	1635 Faraday	Steve Bobbett

07/19/2012	EM	1	Webinar	Stream Pollution Trends Monitoring Program (SPoT)	Work station	CDPR
09/27-28/2011	EM	1	Conference	CASQA Conference	Monterey, CA	CASQA
09/27-28/2011	EM	1	Conference	CASQA Conference	Monterey, CA	CASQA

Spill response

Quick and efficient response to spills is the most effective way to avoid contaminated runoff to the storm drain system.

- Use mops and absorbents, such as cat litter or sawdust to clean up small spills.
- Keep spill response kits readily available.
- Write and keep a current spill response plan. Be sure that all appropriate contacts are updated.
- Ensure employees are trained on appropriate spill response.

Employee training

- Train employees on storm water pollution prevention.
- Post information in employee areas
- Keep records of employee training events.

Other BMPs may be required to prevent pollutants from entering the storm drain system.

To report illegal discharges, call
760-602-2799.

CITY OF CARLSBAD

Storm Water Protection Program
1635 Faraday Ave.
Carlsbad, CA 92008

For more information visit
www.carlsbadca.gov,
call the Storm Water Hotline at
760-602-2799,
or email
stormwater@carlsbadca.gov.

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CITY OF CARLSBAD

Storm Water Protection Program

Industrial/Commercial Business
Guide to Pollution Prevention

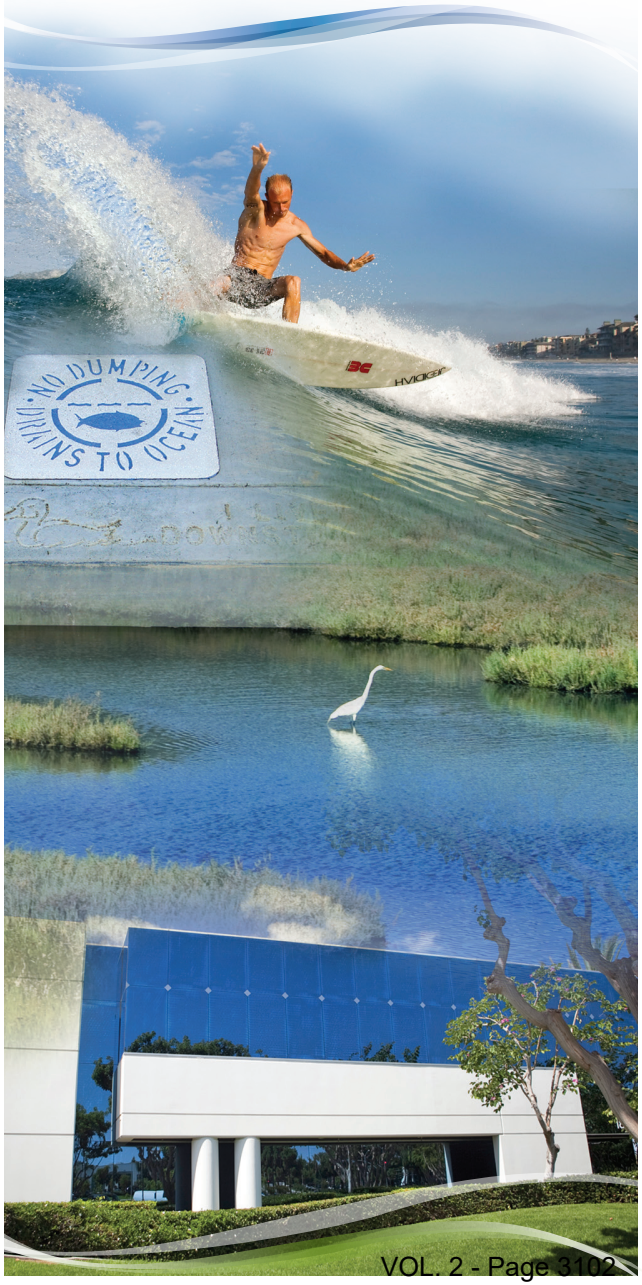

Industrial and commercial businesses are required to comply with municipal storm water rules and regulations to prevent storm water pollution. Potential pollutants from industrial and commercial facilities include trash, bacteria, hazardous materials, sediment, nutrients, pesticides, organics, oil and grease, and metals. The storm water conveyance system is not connected to sanitary sewer or treatment facilities. Rainwater and urban runoff transport pollutants directly into our creeks, lagoons and ocean.

All businesses are subject to storm water regulations. Violations of these regulations can result in enforcement action and penalties. Best Management Practices (BMPs) are methods and behaviors to prevent pollution. Proper implementation of the following BMPs can prevent storm water pollution.

Good housekeeping

Simple housekeeping practices are very effective at preventing polluted runoff:

- Use mops, brooms or wire brushes to clean dumpsters, sidewalks, buildings and other surfaces. Wash water is never allowed to drain to the street, gutter or storm drain.
- Sweep up trash and debris, including organic matter such as leaves and dirt.

Preventative maintenance

Proper maintenance of equipment, vehicles, building structures and storm drains can prevent larger problems from occurring.

- Keep equipment and vehicles properly serviced. Inspect frequently and clean and repair as needed.
- Gutters, storm drains, catch basins and other drainage should be regularly inspected and cleaned. Filters, drain covers, sand bags and other materials should be regularly inspected and replaced as necessary.

- Regularly inspect and maintain BMPs as needed.

Materials storage and handling

Improperly stored materials can spill or run off during rain events.

- When possible, store materials, especially liquids, hazardous waste and other chemicals, indoors or under covered and contained areas.

- Cover materials stored outdoors to protect them from rain run-on and run-off.
- Dispose of unused materials properly.

Waste disposal and management

Disposal areas must be properly maintained to prevent trash, liquids and other pollutants from entering the storm drain system.

- Keep dumpsters closed when not in use.
- Sweep up trash and debris in outdoor areas.
- Ensure that trash is properly secured to prevent spills and leaks.

- Immediately clean up spills and leaks.
- If no recycling program is in place, consider contacting your waste hauler about recycling programs.

Appendix 10

COPERMITEE NAME: City of Carlsbad

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR URBAN RUNOFF MANAGEMENT PROGRAMS

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	FY 11-12
ADMINISTRATION	645,278
DEVELOPMENT PLANNING	126,997
CONSTRUCTION	140,041
MUNICIPAL	1,360,839
INDUSTRIAL AND COMMERCIAL	123,900
RESIDENTIAL	included elsewhere
IDDE	96,699
EDUCATION	35,299
PUBLIC PARTICIPATION	included elsewhere
SPECIAL INVESTIGATIONS	
NON-EMERGENCY FIREFIGHTING	
Jurisdictional Total	***$2,529,052***

WATERSHED	
Watershed 1-Carlsbad Watershed	40,327
Watershed 2	
Watershed 3	
Watershed 4	
Watershed 5	
Watershed 6	
Watershed 7	
Watershed 8	
Watershed Total	**40,327**

REGIONAL	
Total Copermittee Cost Share	125,718
Regional Total	***$125,718***

TOTAL COSTS	***$2,695,098***

Notes:

Due to limitations fo the City's financial system, costs provided are best estimates. Not all categories are easily identifiable as specific to the category on this list. Staff believes that the information provided is as accurate as possible, given the constraints of the financial reporting system.

*Includes a small portion of MS4 monitoring costs

COPERMITEE NAME: City of Carlsbad

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR URBAN RUNOFF MANAGEMENT PROGRAMS

**Carlsbad Watershed expenses reported here are total expenses for the City of Carlsbad. These expenses are offset by approximately $20,462 in revenues by other co-permittees within the Watershed.

CITY OF CHULA VISTA
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2008

Submitted to:

City of Chula Vista
Storm Water Management Section
1800 Maxwell Road
Chula Vista, CA 91911

Prepared by:

D-MAX Engineering, Inc.
7220 Trade Street, Suite 119
San Diego, CA 92121
Tel: (858) 586-6600
Fax: (858) 586-6644

September 22, 2008
Project No. 200838W

Mr. Khosro Aminpour, P.E.
City of Chula Vista
Department of Public Works Operations
1800 Maxwell Road
Chula Vista, CA 91911

Re: 2008 Dry Weather Field Screening and Analytical Monitoring Program
City of Chula Vista, California

Dear Mr. Aminpour:

Per your request D-MAX Engineering, Inc (D-MAX) conducted the routine phase of the Dry Weather Field Screening and Analytical Monitoring Program for the City of Chula Vista during the summer of 2008. Subsequently, we conducted follow-up investigations to identify the sources of pollutants detected during the monitoring program.

This report presents the results of the monitoring program and upstream investigations. The contents include field screening data and analytical laboratory test results, analysis of collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations and our recommendations for additional actions.

It has been our pleasure working with the City of Chula Vista on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering, Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

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1 INTRODUCTION

1.1 Program Overview

The principal goal of the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) is to identify and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain conveyance system, minimizing the negative impacts of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following three components:

- Field screening observations
- Field analytical testing
- Laboratory analytical testing

Information gathered from dry weather monitoring is used to characterize dry weather discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. As needed, follow-up studies and source investigations are conducted to detect and eliminate the sources of these pollutants. This report presents the results of the City of Chula Vista 2008 Dry Weather Monitoring Program.

1.2 Regulatory Requirements

In accordance with Order No. R9-2007-0001 (Permit), the most recent permit issued by the San Diego Regional Water Quality Control Board (RWQCB), each of the Copermittees, including the City of Chula Vista (City), must annually perform dry weather monitoring of discharges into its storm drain system. This procedure is comprised of recording field observations, estimating observed flow rates, and conducting field testing at selected locations along the storm drain conveyance system during the dry weather season, May 1 through September 30. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station should be visited. The Permit also necessitates that Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days.

1.3 Hydrologic Setting

The City of Chula Vista is in the southern portion of the County of San Diego and is bordered by the cities of National City, San Diego, and unincorporated areas of the County of San Diego. The City covers an area of approximately 52 square miles and maintains a population of about 228,000. The majority of the land use in the City is residential; other land uses include commercial, industrial, municipal facilities, streets, highways, and open spaces.

The City of Chula Vista lies within the Sweetwater River Hydrologic Unit (HU 909) and the Otay River Hydrologic Unit (HU 910). These two Hydrologic Units, along with the Pueblo San Diego Hydrologic Unit, form the San Diego Bay Watershed and ultimately drain into the San Diego Bay. The City is located in the Lower Sweetwater Hydrologic Area (HA 909.1) and the Otay Valley Hydrologic Area (HA 910.2).

The City of Chula Vista is naturally divided by topography into several basins from which runoff flows into the City's major receiving water bodies, including San Diego Bay,

Sweetwater River, Otay River, and the Lower Otay Reservoir. A complete drainage map for the City of Chula Vista is included as Figure A. The drainage basins, along with abbreviations used to identify field sampling stations, are listed in Table 1-1.

TABLE 1-1
OUTFALL DESIGNATIONS AND DRAINAGE BASINS

Site Name Abbreviation	Basin
BAY	Bay Boulevard Outfalls
BLC	Long Canyon Basin
CEN	Central Area Basin
JUD	Judson Basin
MGC	Chula Vista Municipal Golf Course
OLR	Otay Lakes Basin
OVR	Otay Valley Road Outfalls
POG	Poggi Canyon Basin
PRD	Palm Road Basin
RCC	Rice Canyon Basin
SCR	Salt Creek Basin
SUN	Sunnyside Basin
SVS	Sunny Vista Basin
SWB	Southwest Basin
SWR	Sweetwater River
TCC	Telegraph Canyon Basin
TCS	Telegraph Canyon, southern Branch
WIL	Upstream of the Willow Street Bridge
WOL	Wolf Canyon Basin

Based primarily on wet weather data from mass loading stations (MLS), ambient bay and lagoon monitoring, bioassessments, Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) List), and/or TMDL programs for the San Diego Bay Watershed, the high priority constituents of concern (COC) for the San Diego Bay Watershed were identified in the 2008 Watershed Urban Runoff Management Plan (WURMP). COCs for the Sweetwater River Hydrologic Unit (HU 909) are bacteria and pesticides, and for the Otay River Hydrologic Unit (HU 910) they are bacteria and gross pollutants. Receiving water bodies that lie within the jurisdiction of the City of Chula Vista and are 303(d)listed include: Pogi Canyon Creek for DDT, and the Lower Otay Reservoir for color, iron, manganese, nitrogen ammonia (total ammonia), and high pH – both are in the Otay River HU. The San Diego Bay Shoreline at Chula Vista Marina is 303(d) listed for copper and the shoreline along Bay Park for bacteria; both are within the jurisdiction of the Port of San Diego.

1.4 Previous Work

The City of Chula Vista has conducted dry weather monitoring programs since 1994. The results of the previous programs (1994 through 2007) are summarized in Table 1-2.

TABLE 1-2
SUMMARY OF HISTORICAL DRY WEATHER MONITORING

Year	Number of Field Screening Sites [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1994-R1	14	Data not available [2]		40	0
1994-R2	17			42	0
1995-R1	23			36	0
1995-R2	27			33	0
1996-R1	18			40	0
1996-R2	22			38	0
1997-R1	33			22	0
1997-R2	31			23	0
1998-R1	39			15	0
1998-R2	32			12	0
1999-R1	39			13	0
1999-R2	40			16	0
2000-R1	40	26	14	0	0
2000-R2	45	28	17	0	0
2001-R1	43	28	15	0	0
2001-R2	43	32	11	0	0
2002-R1	42	26	16	16	15
2002-R2	45	30	15	12	13
2003	50	34	16	4	15
2004	50	34	16	2	15
2005	50	38	12	3	15
2006	57	37	20	4	15
2007	57	41	16	0	15

Notes:
The City of Chula Vista conducted two separate rounds of dry weather monitoring in years 1994-2002.
R1 = Round one
R2 = Round two
[1] Number of Field Screening Sites = Number Flowing + Number Ponded. Field screening cannot be conducted at sites found to be dry. Dry sites are replaced by either a flowing or ponded site.
[2] Laboratory testing commenced in 2002 as required by San Diego Regional Water Quality Control Board Order 2001-001.
[3] Available information does not distinguish between flowing and ponded sites during this period.

1.5 Report Outline

Section 1, Introduction, includes regulatory background, a program overview, a discussion of the City of Chula Vista's hydrologic setting and constituents of concern, a summary of historical field screening data, and the report outline.

Section 2, Sampling Locations, describes the field screening sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and results of the field screening analyses.

Section 5, Trash Assessment discusses the procedure and results of the trash assessment.

Section 6, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 7, Data Analysis, provides an analysis of field and laboratory data collected in 2008, as well as a comparison of past results.

Section 8, Upstream Investigations, details the results of follow-up investigations undertaken to isolate the sources of water contamination detected during initial field and laboratory screenings.

Section 9, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Figure A is a drainage map for the City of Chula Vista.

Figure B is a map showing the 2008 Dry Weather sample locations.

Figure C is a watershed map of the Chula Vista area, broken into hydrologic subareas.

Appendix A contains historical dry weather monitoring data.

Appendix B contains photographs of each of the investigated sites.

Appendix C contains the laboratory analytical reports.

Appendix D contains original copies of the field data sheet.

2 SAMPLING LOCATIONS

During the 2008 Dry Weather Monitoring Program, all 57 primary sampling sites located in the San Diego Hydrologic Units 909 and 910 were visited. Site Bay-01 was found to be dry, thus an alternate sampling site was chosen to replace the dry site. Site SWR-03 was considered but did not have a measurable flow. Therefore water was sampled approximately 200 feet east of Site SWR-03, and this new location was named SWR-03-E.

Table 2-1 provides the site number, location, conveyance configuration, primary and secondary land uses, hydrological unit, and GPS coordinates of the sampling locations that were visited. Photographs of sampling locations are included as Appendix B. A City map with sampling locations is included as Figure B. A map of the watersheds in and around Chula Vista, broken down into HSAs, is included as Figure C.

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS

Site I.D.	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrological Subarea	Latitude	Longitude
BAY-01	West side of Bay Boulevard across from 1075 Complex	Outlet	Commercial	Commercial	910.20	32.60820	-117.09325
BAY-02	West of intersection of Palomar Street and Bay Boulevard	Earthen Channel	Commercial	Industrial	910.20	32.60479	-117.09248
BAY-03	West of intersection of Ada Street and Bay Boulevard	Earthen Channel	Industrial	Residential	910.20	32.60267	-117.09251
BLC-01	Chula Vista Municipal Gold Coarse, west of Bonita/ Acacia intersection	Concrete Channel	Residential	Residential	909.12	32.66562	-117.02414
BLC-02	Long Canyon Channel south of Bonita Road and west of southern end of Acacia Avenue	Earthen Channel	Residential	Open	909.12	32.65556	-117.00859
CEN-01	South of H Street and east of I-5 and Trolley tracks	Concrete Channel	Commercial	Residential	909.12	32.62922	-117.09507
CEN-03	South of "J" Street, behind 726 and 728 Colorado Avenue	Concrete Channel	Residential	Residential	909.11	32.62153	-117.09212
CEN-04	Memorial Park west of 3rd Avenue and west of Park Way	Outlet	Commercial	Residential	909.12	32.63869	-117.07956
CEN-07	West of 5th Avenue, between Center Street and Park Way	Concrete Channel	Residential	Commercial	909.12	32.63713	-117.08782
CEN-08	100 ft. West of Mariana Parkway, North of "G" Street	Catch Basin	Industrial	Residential	909.12	32.63144	-117.10330
CEN-10	Northwest of the intersection of Hilltop Drive and Whitney Street	Catch Basin	Residential	Commercial	909.12	32.63643	-117.06439

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site I.D.	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrological Subarea	Latitude	Longitude
JUD-01	South of intersection of Fresno Avenue and Main Street	Concrete Channel	Commercial	Residential	910.20	32.59465	-117.06675
JUD-02	Southwest of intersection of Reed Court and Main Street	Outlet	Industrial	Commercial	910.20	32.59450	-117.05599
JUD-03	Southwest of Main/ Mace intersection	Manhole	Industrial	Commercial	910.20	32.59466	-117.05380
LAK-01	North east of the intersection of Proctor Valley Road and Agua Vista Drive in the canyon	Outlet	Residential	Open	910.32	32.66023	-116.94138
OLR-01	South of Chula Vista Municipal Golf Coarse, north of Otay Lakes Road/ Bonita intersection	Outlet	Commercial	Residential	909.12	32.66144	-117.03146
OLR-02	South of Chula Vista Municipal Golf Coarse, north of Otay Lakes Road/ Bonita intersection	Natural Creek	Commercial	Residential	909.12	32.66145	-117.03152
OVR-04	South of Main Street, 50 ft east of Nirvana Avenue	Outlet	Industrial	Commercial	910.20	32.59273	-117.01730
OVR-07	East of Property at 1879 Nirvana	Outlet	Industrial	Commercial	910.20	32.59479	-117.01437
OVR-09	South of property at 850 Energy Way in city easement at base of the slope	Outlet	Industrial	Commercial	910.20	32.59452	-117.01199
OVR-10	South end of Brandywine Avenue, south of Auto Park Drive, at base of slope	Outlet	Commercial	Commercial	910.20	32.59285	-117.02994
OVR-14	Northwest of Main Street and Maxwell Road	Manhole	Industrial	Commercial	910.20	32.59406	-117.01933
POG-01	South of Main Street, 100 ft., west of Melrose Avenue	Earthen Channel	Residential	Commercial	910.20	32.59455	-117.04153

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site I.D.	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrological Subarea	Latitude	Longitude
POG-02	Intersection of Eastlake Parkway and Trinidad Cove, near entrance to housing tract "Antigua"	Manhole	Residential	Open	910.20	32.63610	-116.96748
POG-02-E	Intersection of Clubhouse Drive and N/S Greensview Drive at northwest corner	Manhole	Residential	Parks	910.20	32.64073	-116.96430
POG-02-N	Intersection of Clubhouse Drive and N/S Greensview Drive at northwest corner	Manhole	Residential	Residential	910.20	32.64073	-116.96430
POG-02-S	Intersection of Clubhouse Drive and N/S Greensview Drive at northwest corner	Manhole	Residential	Parks	909.12	32.64073	-116.96430
POG-03	Olympic Parkway, across from Heritage Road	Natural Creek	Open	Residential	909.12	32.61643	-117.00220
PRD-02	West of Aries Court and 200ft., south of Rienstra Street in SDG&E easement	Outlet	Residential	Commercial	909.12	32.60622	-117.04353
RCC-01	Southeast of Bonita Road and I-805. 500 ft. south of Bonita Road	Outlet	Open	Residential	909.12	32.64677	-117.05845
RCC-02	Northwest corner of east H Street and Del Rey Boulevard	Outlet	Commercial	Open	910.20	32.63881	-117.03551
RCC-03	Downstream of Discovery Park, west Rancho Del Rey Parkway in Rice Canyon open space hiking trail	Outlet	Residential	Open	910.20	32.64418	-117.01191
RCC-04	East H Street and Otay Lakes Road intersection, west side of shopping center, in canyon	Outlet	Commercial	Residential	910.20	32.64436	-117.00253
SCR-01	North of Otay Lakes Road and 300', west of private Otay Ranch Road, east of Hunte Parkway	Outlet	Residential	Open	910.20	32.64567	-116.94713

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site I.D.	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrological Subarea	Latitude	Longitude
SCR-02	Salt Creek, as it passes under Otay Lakes Road, east of Hunte Parkway (north side of street)	Natural Creek	Open	Residential	910.20	32.64548	-116.94671
SCR-03	Olympic Parkway, about 200 ft. east of Hunte Parkway, on the Salt Creek	Natural Creek	Open	Residential	909.11	32.63333	-116.94444
SCR-04	Southwest of the Eastlake Parkway and Hunte Parkway in Canyon	Outlet	Residential	Open	909.12	32.61261	-116.95940
SCR-05	Approx. 200 ft. south of Hunte Parkway, across from Exploration Falls, in Canyon	Outlet	Open	Residential	909.12	32.61857	-116.95093
SUN-02	North of East H Street and 50' west of SR-125, at base of slope, east of SUN-05	Outlet	Residential	Open	909.12	32.65924	-116.97750
SUN-03	Chula Vista Municipal Golf Coarse, southwest of Bonita and Central Avenue intersection	Natural Creek	Residential	Residential	909.12	32.66685	-117.02338
SUN-05	North of east H Street and 50' west of SR-125, at base of slope, western most outfall	Outlet	Open	Residential	909.12	32.65917	-116.97767
SUN-06	Southwest of the intersection of Proctor Valley Road and San Miguel Ranch Road	Outlet	Residential	Open	909.12	32.67141	-116.99702
SUN-07	East of the end of Jonel Way, inlet to detention basin at base of slope, west of SR125	Outlet	Residential	Open	910.20	32.67688	-116.98830
SVS-01	Rear of Ramada Inn at intersection of Bonita Road and Bonita Glen north of Bonita Road	Outlet	Commercial	Residential	910.20	32.64912	-117.06474
SVS-02	East of # 65 Flower Street, behind units 297& 320. West of I-805	Catch Basin	Residential	Residential	909.12	32.65010	-117.06696
SWB-03	West of 2446 Main Street (Tile Force)	Manhole	Industrial	Commercial	909.11	32.59512	-117.08089

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site I.D.	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrological Subarea	Latitude	Longitude
SWR-03-E	South of Third Avenue and N. Glover Avenue in back of CVS Pharmacy	Outlet	Commercial	Residential	909.11	32.64999	-117.08655
SWR-04	Northwest of 5th avenue and "C" Street, south of Wal-Mart parking lot	Outlet	Commercial	Parks	909.11	32.65010	-117.09266
TCC-01-01	Telegraph Canyon Channel, southwest of Bay Boulevard/ "L" Street intersection inside Duke Energy Plant, easternmost outlet	Outlet	Commercial	Residential	909.11	32.61457	-117.09232
TCC-01-02	Telegraph Canyon Channel, southwest of Bay Boulevard/ "L" Street intersection inside Duke Energy Plant, to the right of TCC-01-01	Outlet	Commercial	Residential	909.11	32.61457	-117.09232
TCC-01-03	Telegraph Canyon Channel, southwest of Bay Boulevard/ "L" Street intersection inside Duke Energy Plant, to-the right of TCC-01-02	Outlet	Commercial	Residential	909.11	32.61457	-117.09232
TCC-01-04	Telegraph Canyon Channel, southwest of Bay Boulevard/ "L" Street intersection inside Duke Energy Plant, westernmost outlet, to the right of TCC-01-03	Outlet	Commercial	Residential	909.11	32.61457	-117.09232
TCC-02	Telegraph Canyon Channel, west of Hilltop Drive in Hilltop Park	Concrete Channel	Residential	Commercial	909.11	32.62821	-117.06138
TCC-03	Telegraph Canyon Channel 500' west of East Lake Parkway., 100' north of Otay Lakes Road: Across from Mobil Gas Station	Outlet	Commercial	Residential	909.11	32.64726	-116.96885
TCC-04	Telegraph Canyon Channel west of 3rd Avenue and south of "L" Street under Mobil gas station	Natural Creek	Commercial	Residential	909.12	32.62016	-117.07230
TCC-05	Telegraph Canyon Road and Heritage/ Paseo Rachero northeast of intersection	Natural Creek	Open	Residential	909.12	32.62605	-117.00806

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site I.D.	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrological Subarea	Latitude	Longitude
TCC-06	Telegraph Canyon Road and Paseo Del Rey intersection northwest corner	Concrete Channel	Open	Residential	910.20	32.62774	-117.03429
TCS	Moss Street and Trolley tracks intersection inside property located west of SD Pallet facility	Catch Basin	Commercial	Residential	910.20	32.61283	-117.08840
WIL-01	Chula Vista Municipal Golf Coarse south of Sweet Water Road 100ft. east of Willow Street	Natural Creek	Residential	Open	910.20	32.66082	-117.04306
WOL-02	West of La Media Road, across from detention basin in canyon	Outlet	Residential	Open	910.20	32.61194	-116.98443
WOL-03	South of Santa Luna Street, approx. 500 ft west Magdelena Avenue	Outlet	Residential	Residential	910.20	32.60779	-116.97800

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of qualitative field observations, flow measurement, and quantitative field analyses of selected water quality parameters. Information relating to weather conditions, the amount of time since last rainfall, and the type of storm water conveyance are recorded. Specific observations and results of the field water quality analyses are documented on field data sheets, which are included in Appendix D. The data sheets also serve as a record of the field visit and are completed for every site visit regardless of whether or not samples were collected.

For 2008, field data sheets have been updated to include three categories of visits. Previously there were check boxes for either routine field screening or follow-up visits. This year there are check boxes for routine field screening, confirmation and IC/ID follow-up visits. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Irrespective of flow, qualitative field observations are made during each site visit. These observations provide a general site assessment and describe factors like water odor, clarity, the presence of floatables, visible deposits or stains, vegetation and biological organisms. Evidence of present or past illicit connections and illegal discharges to the storm drain system may also be ascertained through careful field observations. Each field screening location is photographed to provide additional information and documentation of site conditions. Photographs are included in Appendix B.

Flow Measurement

Flow measurements can be utilized to estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may indicate an illegal discharge upstream. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples are collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Surfactants, measured as methylene blue active substances (MBAS)*

- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)
- Orthophosphate-Phosphorus (Orthophosphate-P)
- Glycol

* Surfactants are also referred to as detergents, specifically with respect to discussion of field test kit results.

The methods used to perform the above field tests, along with the detection limit, range and accuracy of each method, are listed in Table 3-1 3.2 Laboratory Analytical Methods

In accordance with Order R9-2007-0001, laboratory samples were collected at 15 sites, representing more than 25 percent of the sites where ponded or flowing water was observed. Samples are submitted to EnviroMatrix Analytical, Inc, a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Total hardness
- Oil and grease
- Diazinon and Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01 mS/cm	0 – 20 mS/cm	± 2% of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.1 °C	0.0 °C – 60.0 °C	± 0.5 °C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703 Portable Turbidity Meter***	0.01 NTU	0.01 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.0 mg/L – 3.0 mg/L*	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[3]***	2.26 mg/L**	2.26 mg/L –13.6 mg/L**	± 30%of practical detection limit[4]
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate***	0.10 mg/L**	0.10 mg/L – 3.00 mg/L**	Varies with measured concetration[4,5]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[6]***	0.25 mg/L**	0.25 mg/L – 2.61 mg/L**	Varies with measured concetration[4,5]
Glycol	CHEMetrics V-2000 Multi-Analyte LED Photometer – Glycol Vacu-vials® (K-4403) Purpald/periodate***	0.60 mg/L**	0.60 mg/L – 10.00 mg/L	Varies with measured concetration[4,5]

Notes:

EC = electrical conductivity
TDS = total dissolved solids
mS/cm = millisiemens per centimeter
°C = Degrees Celsius
NTU = nephelometric turbidity unit
mg/L = milligrams per liter
LED = light-emitting diode

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The detection limit for nitrate is 10.0 mg/L; however, the detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The detection limit for orthophosphate is 0.75 mg/L; however, the detection limit for orthophosphate-phosphorus is lowered due to the conversion.

*Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Reporting limit, range, and accuracy information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Maximum Holding Time [1]
Oil and grease	EPA 1664	5 mg/L	28 days
Total Hardness	EPA 200.7	10 mg/L	14 days
Dissolved Cadmium	EPA 6010, 6020, 200.8	5 µg/L	24 hours
Dissolved Copper	EPA 6010, 6020 200.8	5 µg/L	24 hours
Dissolved Lead	EPA 6010, 6020 200.8	5 µg/L	24 hours
Dissolved Zinc	EPA 6010, 6020, 200.8	20 µg/L	24 hours
Diazinon	EPA 8141A	0.05 µg/L	7 days
Chlorpyrifos	EPA 8141A	0.05 µg/L	7 days
Total Coliforms	SM 9221 B, E	[2] 20** – 1,600,000 MPN/100 mL	6 hours
Fecal Coliforms	SM 9221 B, E	[2] 20** – 160,000 MPN/100 mL	6 hours
Enterococcus	SM 9230 A, B	[2] 20** – 160,000 MPN/100 mL	6 hours
Total Coliforms	SM9223 (IDEXX Colilert)[4]	10 – 2,400,000 MPN/100mL	6 hours
E. coli [3]	SM9223 (IDEXX Colilert)[4]	10 – 2,400,000 MPN/100mL	6 hours
Enterococcus	IDEXX Enterolert [4]	10 – 240,000 MPN/100mL	6 hours

Notes:

[1] Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the QA/QC procedures listed in Section 3.3.2.

[2] For the Dry Weather Program for D-Max Engineering, Inc., EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 MPN/100 mL. For fecal coliforms and *Enterococcus*, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the most probable number index table (MPN) from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20 and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes set up for the sample is set up.

[3] Number of fecal coliforms is derived from the *E. coli* count using the following formula: Number of fecal coliforms = (Number of *E. coli*) / 0.85. The converted fecal coliform count, not the *E. coli* count, is repeated in the data tables in this report.

[4] IDEXX Colilert and Enterolert tests are performed by EnviroMatrix Analytical. These tests used during upstream investigations only.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project includes the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters are calibrated periodically with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter is calibrated and periodically checked for accuracy using standard solutions. The conductivity meter is checked periodically with standard solutions and calibrated as necessary.

Field sample collection containers are first rinsed with distilled water and then with the sample water before sample collection. Upon completion of sampling at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water and dried.

The accuracy of field analytical techniques is assessed at the beginning of each sampling week by analyzing solutions of known concentrations for ammonia-nitrogen, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration (mg/L)	Acceptable Range* (mg/L)	Field Test Kit Results (mg/L)
07/01/08	Ammonia-Nitrogen	1.0	0.8 – 1.2	0.9
07/01/08	Surfactants	1.0	0.75 – 1.25	1.0
07/01/08	Nitrate **	44.3	31.0 – 57.6	52.8
07/01/08	Orthophosphate **	1.0	0.75 – 1.25	0.8
07/01/08	Glycol	2.0	1.6 – 2.4	1.8
07/07/08	Ammonia-Nitrogen	1.0	0.8 – 1.2	1.0
07/07/08	Surfactants	1.0	0.75 – 1.25	1.0
07/07/08	Nitrate **	44.3	31.0 – 57.6	54.5
07/07/08	Orthophosphate **	1.0	0.75 – 1.25	1.0
07/07/08	Glycol	2.0	1.6 – 2.4	2.3
07/14/08	Ammonia-Nitrogen	1.0	0.8 – 1.2	1.0
07/14/08	Surfactants	1.0	0.75 – 1.25	1.0
07/14/08	Nitrate **	44.3	31.0 – 57.6	52.6
07/14/08	Orthophosphate **	1.0	0.75 – 1.25	0.9
07/14/08	Glycol	2.0	1.6 – 2.4	2.0

Notes:
* Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1.

** Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by dividing the results by 4.43 for nitrate and 3.26 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis are collected concurrently with field samples and utilize the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed, and samples are delivered and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain of custody forms are included in Appendix C.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation was necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination was present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), a source identification investigation is initiated immediately. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a re-sampling is conducted within 24 hours. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by the laboratory analyses, a comprehensive follow-up pollutant source investigation is conducted within two days of receiving the analytical reports from the lab. The results of these investigations are included in Section 8 of this report. Recommendations based on these investigations are included in Section 9.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (see Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. The current set of numeric action levels in this report are based on county-wide sampling data and have been used by all Copermittees since the 2003 dry weather season. If pH, orthophosphate-P, nitrate-N, ammonia-N, or surfactants are observed above the numeric action level, a follow-up investigation is conducted within 24 hours to investigate the source unless best professional judgment indicated otherwise. If oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, or *Enterococcus* laboratory analytical results exceeded numeric action levels, then source investigations are conducted within two business days of receiving the test results from the lab.

California Toxics Rule
The CTR criterion maximum concentration (CMC) is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment
Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the field crew due to their familiarity with the City of Chula Vista's Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters. Best professional judgment may indicate that results which either exceed certain action levels or statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
pH	<6.5 or >9.0	Basin Plan, with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Glycol (mg/L)	1.0	Not naturally present; main source is coolant systems.
Surfactants (MBAS) (mg/L)	1.0	Basin Plan with allowance based on workgroup field experience and possible field reagent interfaces.
Turbidity (NTU)[2]	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity), and unusual odors.
Temperature (°C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Values > 5.0 mS/cm may indicate IC/ID; however, EC may be highly elevated in some regions due to high TDS groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values < 0.75 mS/cm may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg /L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin; source identification investigations should also be undertaken.
Chlorpyrifos (µg /L)	0.5	
Dissolved Cadmium (mg/L)	California Toxics Rule	Use California Toxics Rule Table, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (mg/L)	California Toxics Rule	
Dissolved Lead (mg/L)	California Toxics Rule	
Dissolved Zinc (mg/L)	California Toxics Rule	
Total Coliform (MPN/100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliform (MPN/100 mL)	20,000	
Enterococcus (MPN/100 mL)	10,000	

Notes

[1]The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

°C	degrees Celsius
mS/cm	millisiemens per centimeter
mg/L	milligram per liter
IC/ID	illegal connection/illicit discharge
MBAS	methylene blue active substances
MPN/100 mL	most probable number (of colony forming units) per 100 milliliters
NTU	nephelometric turbidity unit
ppb	parts per billion
USEPA	United States Environment Protection Agency
WQO	Water Quality Objectives

4 FIELD SCREENING RESULTS

The Dry Weather Monitoring Program was started on July 2, 2008, and completed on July 24, 2008. A total of 58 monitoring stations were visited, and field screening was conducted at the sites where ponded or flowing water was observed. 42 sites had measurable flow, 15 sites were ponded, and one site was dry. A total of 119 site visits were performed, including 32 confirmation visits to sites where one or more constituents were found to exceed specified action levels and 30 upstream investigation visits.

4.1 Qualitative Observations

Qualitative observations are summarized below and presented in Table 4-1. These observations are based on routine and confirmation site visits only. Upstream investigation data is not included.

Light Conditions
The majority of the program was conducted under sunny light conditions. Several days were party cloudy or overcast, and there was one incident of fog.

Odor
Most sites had no observable odors. Two sites displayed a musty odor, two smelled of sewage and one site had a chemical odor.

Color
Water samples were mainly colorless, however many yellow samples were also observed.

Clarity
The majority of the water samples were clear, with negligible suspended particles observed. Seven sites were observed having slightly cloudy water.

Floatable Materials
Trash was seen in the water at more than half of the sites visited. Some sites also showed bubbles, foam or sheen.

Vegetation
Depending upon the type of conveyance and access to sunlight and soil, vegetative growth varied naturally from no growth to normal. Five sites showed excessive vegetative growth, in some cases impeding the flow of water.

Biology
Algae, insects, and snails were prevalent organisms witnessed at sites. In some cases fish, frogs, larvae, crustaceans and a snake were noted. The presence of biological organisms typically indicates healthy water conditions. Specifically, the presence of algae implies a persistent water flow at the site. Excessive algae, however, may be a result of nutrient enrichment (eutrophication) and may diminish the dissolved oxygen available to other organisms.

Deposits
Sediment, gravel and fine particulates were observed at most sites.

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
BAY-01	07/23/08	10:00	Sunny	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	Normal	Insects
BAY-02	07/15/08	9:40	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Excessive	Insects, Fish
BAY-02 (Confirmation)	07/16/08	10:45	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Excessive	Insects, Fish
BAY-03	07/15/08	8:50	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Fish, Crustaceans
BAY-03 (Confirmation)	07/16/08	10:10	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Fish, Crustaceans
BLC-01	07/18/08	11:30	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects, Algae
BLC-02	07/18/08	10:45	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
CEN-01	07/10/08	12:20	Partly Cloudy	Musty	Yellow	Clear	Trash, Sheen (oil)	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails, Larvae
CEN-01 (Confirmation)	07/11/08	8:40	Overcast	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails, Larvae
CEN-01 (Confirmation)	07/17/08	13:40	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
CEN-03	07/10/08	8:40	Overcast	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	None	Insects, Algae, Larvae
CEN-04	07/14/08	9:40	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
CEN-07	07/14/08	10:40	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
CEN-08	07/14/08	11:45	Sunny	None	None	Clear	None	None	None	None

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
CEN-08 (Confirmation)	07/15/08	11:00	Sunny	None	None	Clear	None	None	None	None
CEN-10	07/16/08	8:45	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects
JUD-01	07/8/08	11:45	Overcast	None	Yellow	Clear	Trash, Sheen (oil)	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
JUD-01 (Confirmation)	07/16/08	14:30	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
JUD-02	07/9/08	8:45	Overcast	Musty	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Excessive	Insects, Snails
JUD-02 (Confirmation)	07/16/08	15:20	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Excessive	Insects, Larvae
JUD-03	07/17/08	9:20	Overcast	None	Yellow	Slightly Cloudy	None	Sediment/Gravel, Fine Particulates	None	Insects
LAK-01	07/10/08	16:20	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
LAK-01 (Confirmation)	07/11/08	10:20	Overcast	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
OLR-01	07/18/08	9:30	Partly Cloudy	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
OLR-02	07/18/08	8:45	Overcast	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
OVR-04	07/21/08	11:30	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects
OVR-07	07/21/08	10:00	Sunny	None	None	Clear	Trash	Sediment/Gravel	Normal	Insects, Algae
OVR-07 (Confirmation)	07/22/08	12:10	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
OVR-09	07/8/08	8:50	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
OVR-10	07/21/08	12:20	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Larvae
OVR-14	07/21/08	9:00	Sunny	None	None	Slightly Cloudy	None	Sediment/Gravel, Fine Particulates	None	None
POG-01	07/11/08	14:30	Partly Cloudy	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails, Larvae
POG-02	07/3/08	10:10	Sunny	None	Yellow	Clear	None	Fine Particulates	None	None
POG-02 (Confirmation)	07/14/08	14:45	Sunny	None	None	Clear	None	None	None	None
POG-02 (Confirmation)	07/7/08	15:20	Sunny	None	Yellow	Clear	None	Fine Particulates	None	None
POG-03	07/11/08	13:30	Overcast	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Excessive	Insects, Algae
PRD-02	07/8/08	10:30	Partly Cloudy	None	Yellow	Clear	Sheen (dust)	Sediment/Gravel, Fine Particulates	Normal	Insects, Snails
PRD-02 (Confirmation)	07/9/08	14:00	Sunny	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Snails
RCC-01	07/9/08	11:30	Overcast	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Excessive	Insects
RCC-02	07/7/08	12:50	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
RCC-03	07/7/08	11:45	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Snake in water
RCC-03 (Confirmation)	07/8/08	15:00	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
RCC-03 (Confirmation)	07/15/08	15:30	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects
RCC-04	07/10/08	14:40	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
RCC-04 (Confirmation)	07/11/08	9:45	Overcast	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
SCR-01	07/7/08	9:45	Sunny	Sewage	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Snails
SCR-01 (Confirmation)	07/8/08	14:10	Partly Cloudy	Sewage	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Snails
SCR-01 (Confirmation)	07/15/08	13:40	Sunny	Sewage	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Snails
SCR-02	07/15/08	14:45	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	Excessive	Insects, Algae
SCR-02 (Confirmation)	07/16/08	16:20	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	None	Algae
SCR-03	07/2/08	15:45	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
SCR-03 (Confirmation)	07/7/08	14:30	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
SCR-04	07/2/08	14:40	Sunny	None	Yellow	Slightly Cloudy	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
SCR-05	07/2/08	13:30	Sunny	None	Yellow	Slightly Cloudy	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
SCR-05 (Confirmation)	07/3/08	16:00	Sunny	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
SUN-02	07/3/08	11:30	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Larvae

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
SUN-02 (Confirmation)	07/7/08	16:10	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
SUN-02 (Confirmation)	07/9/08	15:50	Sunny	Chemical	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
SUN-02 (Confirmation)	07/14/08	13:30	Sunny	Chemical	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
SUN-03	07/21/08	15:15	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Fish
SUN-05	07/3/08	12:20	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
SUN-05 (Confirmation)	07/7/08	16:30	Sunny	None	None	Clear	Trash, Bubbles/Foam	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
SUN-06	07/16/08	11:30	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
SUN-06 (Confirmation)	07/17/08	11:00	Sunny	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
SUN-07	07/16/08	12:20	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
SUN-07 (Confirmation)	07/17/08	12:15	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	No	Insects, Algae
SVS-01	07/9/08	10:30	Overcast	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	None	Snails
SVS-01 (Confirmation)	07/17/08	15:00	Sunny	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Snails
SVS-02	07/17/08	15:30	Partly Cloudy	Sewage	Yellow	Slightly Cloudy	Trash	Sediment/Gravel, Fine Particulates	None	Larvae
SWB-03	07/17/08	8:40	Overcast	None	Yellow	Slightly Cloudy	None	Sediment/Gravel, Fine Particulates	None	None

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
SWR-03-E	07/23/08	9:00	Sunny	None	None	Clear	Trash	Fine Particulates	Normal	Insects, Algae, Snails
SWR-04	07/21/08	16:15	Sunny	None	Yellow	Slightly Cloudy	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects
TCC-01-01	07/22/08	9:00	Overcast	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
TCC-01-02	07/22/08	9:45	Overcast	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Fish, Snails
TCC-01-03	07/22/08	10:50	Sunny	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects
TCC-01-04	07/22/08	10:25	Partly Cloudy	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Snails
TCC-02	07/22/08	16:45	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae
TCC-02 (Confirmation)	07/23/08	15:40	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae
TCC-03	07/22/08	14:00	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
TCC-03 (Confirmation)	07/23/08	10:45	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
TCC-04	07/10/08	10:45	Partly Cloudy	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects
TCC-05	07/22/08	14:45	Sunny	None	None	Clear	Trash, Bubbles/Foam	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
TCC-05 (Confirmation)	07/23/08	15:10	Sunny	None	None	Clear	Trash, Bubbles/Foam	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
TCC-06	07/22/08	16:00	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
TCS	07/21/08	14:00	Sunny	None	Yellow	Clear	Trash, Sheen (grease or oil)	Sediment/Gravel, Fine Particulates	None	None
TCS (Confirmation)	07/22/08	11:50	Sunny	N/A	N/A	N/A	N/A	Sediment/Gravel, Fine Particulates	None	None
WIL-01	07/18/08	12:15	Sunny	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Fish, Toads/Frogs
WOL-02	07/2/08	10:00	Sunny	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
WOL-02 (Confirmation)	07/3/08	9:00	Fog	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
WOL-03	07/2/08	11:30	Sunny	None	Yellow	Clear	Bubbles	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae

Notes:
N/A = not applicable
ns = not sampled (dry site)
Yellow shaded areas denote confirmation investigations

4.2 Field Analytical Results

Field analyses were conducted at all sites with ponded or flowing water. Definitions of constituents measured by the field crew are stated below.

Flow rates are the measurements of the volume of fluid passing through a given surface per unit time. Flow rate measurements are particularly important because they are needed when calculating the load or particular amount of a pollutant discharged.

Water temperature is needed to assess the significance of other parameters such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. Water temperature was measured in the field immediately upon sample collection at each site with ponded or flowing water.

The **pH** is an expression of the acidity or alkalinity of a water sample. This is a critical factor in determining water quality, as the pH of an aquatic system will drive a multitude of chemical reactions, including the availability of nutrients and the solubility of chemical substances, especially heavy metals.

Turbidity indicates the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation (thus reducing photosynthetic capacity), but excessive suspended particles can also absorb heat and elevate water temperatures.

Conductivity values indicate the total concentration of ions in an aquatic system and the ability of water to conduct electricity. This parameter can be used to assess the mineral content of water or to help determine the presence of dissolved pollutants.

Ammonia-nitrogen is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment, however, in higher quantities it can become toxic to fish and other organisms.

Surfactants in water samples often indicate illegal discharges from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms.

Nitrate-nitrogen is a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, which can later cause the suffocation of fish and other aquatic organisms by depleting oxygen from the water during decomposition. During field analysis, nitrate is measured in mg/L NO_3 and converted into mg/L nitrate nitrogen using a conversion factor of 0.226. This process is explained in Note 3 of Table 3-1.

Orthophosphate-phosphorus, also known as reactive phosphorus, is also a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate, phosphate pollution can cause eutrophication, which stimulates algal growth and eventually lowers aquatic dissolved oxygen to levels that are dangerous for aquatic life. Because it is commonly the limiting nutrient in plant growth, even low levels of phosphate can cause significant algal growth. During the field analysis, orthophosphate was measured

in mg/L PO_4 and converted into mg/L orthophosphate-P using a conversion factor of 0.326. This process is explained in note 6 of Table 3-1.

Glycol is associated with radiator coolant discharges. Glycol is not naturally found in water. Its presence in water from the MS4 indicates an illegal discharge or illicit connection.

A statistical summary of the field analytical results is presented in Table 4-2. The data for this table is from routine visits only; confirmation and upstream investigation visit data has not been included. Table 4-3 presents the results of routine field analyses conducted at the sampled sites. Graphs of each parameter analyzed and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
INITIAL FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceed-ances	Graph Number
Flow Rate (gpm)	281	0 (Ponded)	32.4	2.0	63.4	0	4-1
Temperature (ºC)	32.7	19.8	23.3	22.8	2.6	0	4-2
pH	8.9	7.0	8.0	8.0	0.5	0	4-3
Turbidity (NTU)	41.0	0.01	6.17	3.4	9.30	0	4-4
Conductivity (mS/cm)	> 20	0.94	4.35	4.22	3.34	0	4-5
Ammonia-N (mg/L)	5.0	nd	0.4	0.2	0.9	2	4-6
Surfactants (mg/L MBAS)	1.25	0.13	0.54	0.50	0.21	2	4-7
Nitrate-N (mg/L NO_3-N)	38.87	0.29 *	7.38	2.78	8.97	16	4-8
Orthophosphate-P (mg/L PO_4-P)	1.70	nd	0.39	0.20	0.41	0	4-9
Glycol (mg/L)	10.0	nd	0.7	0.5	1.3	5	4-10

Note:
Table includes routine screening data only. Dry sites not incorporated.
nd = not detected, considered to behalf of detection limit in statistical calculations
* Nitrate-N reporting limit is 2.26 mg/L. Measurements below the limit are reported but flagged as being below the practical detection limit.

TABLE 4-3
FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow (gpm)	Temp. (ºC)	pH	Turbidity NTU	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH3-N)	Nitrate-N (mg/L NO3-N)	Orthophosphate-P (mg/L PO4-P)	Glycol (mg/L)
BAY-01	07/23/08	10:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
BAY-02	07/15/08	9:40	Ponded	23.7	7.0	4.88	3.21	0.50	0.9	8.14	1.56	**1.3**
BAY-02 (Confirmation)	07/16/08	10:45	Ponded	24.2	7.9	na	14.47	na	na	na	na	0.7
BAY-03	07/15/08	8:50	Ponded	23.5	7.1	2.37	5.60	0.50	0.3	**23.50**	0.03 *	0.2 *
BAY-03 (Confirmation)	07/16/08	10:10	Ponded	24.9	7.2	na	5.60	na	na	**20.79**	na	na
BLC-01	07/18/08	11:30	16	23.3	8.2	0.18	4.22	0.38	0.3	0.75 *	nd	0.3 *
BLC-02	07/18/08	10:45	5	22.3	7.9	0.01	5.16	0.50	0.2	3.23	0.13 *	0.2 *
CEN-01	07/10/08	12:20	Ponded	32.7	8.7	5.36	1.93	**1.00**	**5.0**	0.77 *	1.04	**1.8**
CEN-01 (Confirmation)	07/11/08	8:40	4	21.7	7.9	na	1.21	0.50	0.1	na	na	0.4 *
CEN-01 (Confirmation)	07/17/08	13:40	< 1	23.3	8.2	na	1.53	na	na	na	na	na
CEN-03	07/10/08	8:40	< 1	22.2	8.6	1.17	1.40	0.25	0.1	0.47 *	0.36	0.6
CEN-04	07/14/08	9:40	< 1	29.0	8.9	9.04	1.27	0.38	0.2	0.75 *	0.26	0.7
CEN-07	07/14/08	10:40	< 1	23.7	8.7	8.77	1.36	0.25	0.1	0.75 *	0.62	0.7
CEN-08	07/14/08	11:45	Ponded	25.5	7.7	0.01	>20	**1.25**	0.3	3.32	0.09 *	0.2 *

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp. (ºC)	pH	Turbidity NTU	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH3-N)	Nitrate-N (mg/L NO3-N)	Orthophosphate-P (mg/L PO4-P)	Glycol (mg/L)
CEN-08 (Confirmation)	07/15/08	11:00	Ponded	25.3	7.8	na	>20	**1.00**	na	na	na	na
CEN-10	07/16/08	8:45	< 1	25.7	8.2	11.56	1.87	0.75	0.4	1.22 *	1.17	0.8
JUD-01	07/8/08	11:45	1	20.8	8.5	2.12	1.85	0.75	nd	0.47 *	0.06 *	0.6
JUD-01 (Confirmation)	07/16/08	14:30	1	23.7	8.3	na	1.41	na	na	na	na	na
JUD-02	07/9/08	8:45	1	23.0	7.2	7.29	1.33	0.75	0.2	0.45 *	0.39	0.7
JUD-02 (Confirmation)	07/16/08	15:20	Ponded	25.6	7.8	na	1.49	na	na	na	na	na
JUD-03	07/17/08	9:20	Ponded	26.7	7.8	31.87	1.38	0.50	0.3	0.81 *	0.59	0.7
LAK-01	07/10/08	16:20	10	22.6	7.4	9.50	4.24	0.50	0.3	**18.31**	0.19 *	0.6
LAK-01 (Confirmation)	07/11/08	10:20	10	21.6	7.2	na	5.01	na	na	**18.08**	na	na
OLR-01	07/18/08	9:30	< 1	22.0	7.8	3.97	1.53	0.50	0.1	0.79 *	0.72	0.7
OLR-02	07/18/08	8:45	3	22.0	8.3	2.74	5.29	0.50	0.1	0.41 *	0.03 *	0.2 *
OVR-04	07/21/08	11:30	Ponded	20.4	7.5	1.23	1.09	0.13	0.2	0.95 *	0.36	0.5 *
OVR-07	07/21/08	10:00	1	19.8	8.3	1.52	13.53	0.75	0.2	**21.92**	0.07 *	0.2 *
OVR-07 (Confirmation)	07/22/08	12:10	1	21.1	8.1	na	13.15	na	na	**25.99**	na	na

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp. (ºC)	pH	Turbidity NTU	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH3-N)	Nitrate-N (mg/L NO3-N)	Orthophosphate-P (mg/L PO4-P)	Glycol (mg/L)
OVR-09	07/8/08	8:50	< 1	20.1	8.3	6.48	6.32	0.75	0.5	1.06 *	0.59	0.6
OVR-10	07/21/08	12:20	Ponded	22.2	7.7	6.39	1.35	0.25	0.2	1.72 *	0.36	0.5 *
OVR-14	07/21/08	9:00	< 1	22.0	8.1	26.34	1.10	0.38	0.3	1.08 *	0.46	0.6
POG-01	07/11/08	14:30	109	25.5	8.1	0.01	7.90	0.75	0.2	0.57 *	nd	0.2 *
POG-02	07/3/08	10:10	3	23.2	7.7	9.81	1.53	0.50	nd	6.53	1.07	**1.2**
POG-02 (Confirmation)	07/14/08	14:45	2	25.4	8.2	na	1.94	na	na	Na	na	na
POG-02 (Confirmation)	07/7/08	15:20	2	24.3	8.4	na	1.77	na	na	Na	na	0.1
POG-03	07/11/08	13:30	93	21.1	8.0	0.36	5.34	0.50	0.2	4.90	0.10 *	0.2 *
PRD-02	07/8/08	10:30	2	20.5	8.1	3.76	1.67	0.75	0.3	0.72 *	0.65	**10**
PRD-02 (Confirmation)	07/9/08	14:00	2	20.9	7.7	na	4.09	na	na	na	na	0.4 *
RCC-01	07/9/08	11:30	164	21.2	8.0	0.48	6.05	0.50	0.2	1.18 *	0.10 *	0.4 *
RCC-02	07/7/08	12:50	80	21.3	8.0	0.34	7.55	0.75	0.3	1.31 *	0.03 *	0.3 *
RCC-03	07/7/08	11:45	20	22.2	7.4	3.85	5.00	0.50	0.2	**17.18**	0.16 *	0.6
RCC-03 (Confirmation)	07/8/08	15:00	20	26.2	7.2	na	4.64	na	na	**13.33**	na	na

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp. (ºC)	pH	Turbidity NTU	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH3-N)	Nitrate-N (mg/L NO3-N)	Orthophosphate-P (mg/L PO4-P)	Glycol (mg/L)
RCC-03 (Confirmation)	07/15/08	15:30	15	27.0	7.2	na	4.65	na	na	na	na	na
RCC-04	07/10/08	14:40	8	24.5	7.8	0.01	6.19	0.75	0.2	**38.87**	0.10	0.2 *
RCC-04 (Confirmation)	07/11/08	9:45	8	21.9	7.7	na	6.10	na	na	**39.55**	na	na
SCR-01	07/7/08	9:45	2	21.0	7.3	3.05	1.93	0.63	0.2	2.40	1.11	**2.0**
SCR-01 (Confirmation)	07/8/08	14:10	1	22.1	7.3	na	2.46	na	na	na	na	0.5 *
SCR-01 (Confirmation)	07/15/08	13:40	< 1	22.9	7.4	na	1.97	na	na	na	na	na
SCR-02	07/15/08	14:45	125	23.3	8.0	0.01	6.38	0.50	0.2	**16.27**	0.13 *	nd
SCR-02 (Confirmation)	07/16/08	16:20	140	23.3	8.0	na	6.60	na	na	**21.92**	na	na
SCR-03	07/2/08	15:45	112	22.6	7.7	0.01	5.29	0.38	0.2	**11.16**	0.23 *	0.1 *
SCR-03 (Confirmation)	07/7/08	14:30	120	21.1	7.8	na	5.41	na	na	**19.66**	na	na
SCR-04	07/2/08	14:40	< 1	25.6	8.9	41.0	2.09	0.62	0.3	7.84	1.01	0.6
SCR-05	07/2/08	13:30	2	24.7	8.2	17.31	2.45	0.50	0.3	**12.20**	0.78	0.7
SCR-05 (Confirmation)	07/3/08	16:00	2	22.6	8.3	na	2.98	na	na	**16.95**	na	na
SUN-02	07/3/08	11:30	5	22.9	8.2	6.91	5.57	0.75	0.2	**22.37**	0.20 *	0.2 *

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp. (ºC)	pH	Turbidity NTU	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH3-N)	Nitrate-N (mg/L NO3-N)	Orthophosphate-P (mg/L PO4-P)	Glycol (mg/L)
SUN-02 (Confirmation)	07/7/08	16:10	5	23.3	8.0	na	6.56	na	na	**17.40**	na	na
SUN-02 (Confirmation)	07/9/08	15:50	5	22.3	8.0	na	7.21	na	na	**16.27**	na	na
SUN-02 (Confirmation)	07/14/08	13:30	5	23.8	8.0	0.01	8.07	na	na	na	na	na
SUN-03	07/21/08	15:15	3	23.5	8.2	3.66	3.08	0.25	0.3	0.47 *	0.10 *	0.8
SUN-05	07/3/08	12:20	5	22.1	8.4	0.80	3.43	0.25	0.1	**18.08**	0.20 *	0.5 *
SUN-05 (Confirmation)	07/7/08	16:30	10	24.0	8.3	na	1.87	na	na	**21.47**	na	na
SUN-06	07/16/08	11:30	3	25.4	7.9	0.52	5.13	0.50	0.3	**12.88**	0.10 *	0.3 *
SUN-06 (Confirmation)	07/17/08	11:00	3	23.7	7.6	na	5.31	na	na	**10.85**	na	na
SUN-07	07/16/08	12:20	1	26.9	7.8	3.68	7.35	0.68	0.3	**25.54**	0.10 *	0.2 *
SUN-07 (Confirmation)	07/17/08	12:15	1	23.0	7.5	na	6.86	na	na	**23.96**	na	na
SVS-01	07/9/08	10:30	Ponded	19.9	7.8	5.27	2.08	0.50	0.1	0.66 *	0.46	0.6
SVS-01 (Confirmation)	07/17/08	15:00	Ponded	22.5	7.6	na	1.63	na	na	na	na	na
SVS-02	07/17/08	15:30	Ponded	22.5	7.2	17.84	1.58	0.50	0.1	0.45 *	1.70	0.7
SWB-03	07/17/08	8:40	Ponded	22.5	8.0	29.77	1.19	0.25	0.2	2.78	0.65	0.5 *

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp. (ºC)	pH	Turbidity NTU	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH3-N)	Nitrate-N (mg/L NO3-N)	Orthophosphate-P (mg/L PO4-P)	Glycol (mg/L)
SWR-03-E	07/23/08	9:00	Ponded	20.8	8.0	4.73	1.31	0.50	0.9	1.13 *	0.85	0.5 *
SWR-04	07/21/08	16:15	Ponded	23.0	7.1	34.39	0.94	0.13	0.7	0.72 *	0.39	0.4 *
TCC-01-01	07/22/08	9:00	4	21.0	8.1	0.01	6.68	0.75	0.2	7.64	0.03 *	0.2 *
TCC-01-02	07/22/08	9:45	47	21.4	7.9	0.35	6.57	0.50	0.2	9.04	nd	0.2 *
TCC-01-03	07/22/08	10:50	Ponded	21.5	8.0	0.01	6.55	0.50	0.2	8.29	0.03 *	0.3 *
TCC-01-04	07/22/08	10:25	112	21.7	7.9	0.01	6.53	0.50	0.2	7.32	nd	0.1 *
TCC-02	07/22/08	16:45	175	28.0	8.6	0.01	6.56	0.50	0.2	**12.43**	nd	0.1 *
TCC-02 (Confirmation)	07/23/08	15:40	156	30.1	8.5	na	6.10	na	na	**11.75**	na	na
TCC-03	07/22/08	14:00	85	22.8	8.1	1.87	7.41	0.75	0.2	**32.54**	0.16 *	0.2 *
TCC-03 (Confirmation)	07/23/08	10:45	75	21.8	8.0	na	5.98	na	na	**32.09**	na	na
TCC-04	07/10/08	10:45	125	22.8	8.1	3.40	6.20	0.50	0.3	8.61	0.03 *	0.4 *
TCC-05	07/22/08	14:45	234	23.0	8.2	3.97	6.40	0.68	0.2	**16.50**	0.20 *	0.1 *
TCC-05 (Confirmation)	07/23/08	15:10	245	22.3	8.1	na	5.79	na	na	**23.28**	na	na
TCC-06	07/22/08	16:00	281	26.0	8.5	0.14	6.56	0.50	0.2	6.33	nd	0.1 *

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp. (ºC)	pH	Turbidity NTU	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L NH3-N)	Nitrate-N (mg/L NO3-N)	Orthophosphate-P (mg/L PO4-P)	Glycol (mg/L)
TCS	07/21/08	14:00	Ponded	31.2	8.1	3.99	1.96	0.75	**5.0**	0.29 *	0.55	0.5 *
TCS (Confirmation)	07/22/08	11:50	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
WIL-01	07/18/08	12:15	Ponded	23.6	7.6	2.60	5.89	0.50	0.3	0.93 *	0.07 *	0.2 *
WOL-02	07/2/08	10:00	1	23.7	8.5	3.63	2.80	0.38	0.2	**11.53**	0.36	0.9
WOL-02 (Confirmation)	07/3/08	9:00	1	20.3	8.7	na	4.49	na	na	**27.35**	na	na
WOL-03	07/2/08	11:30	2	21.6	7.3	1.49	1.73	0.25	nd	2.17 *	0.65	0.5 *

Notes:

na = not analyzed
nd = not detected
ns = not sampled (dry site)
Red values were at or above the measured constituent's action level
Yellow shaded areas denote confirmation investigations
Light blue shaded areas denote field and laboratory sampling location
* Measurements below the practical detection limit are reported but flagged

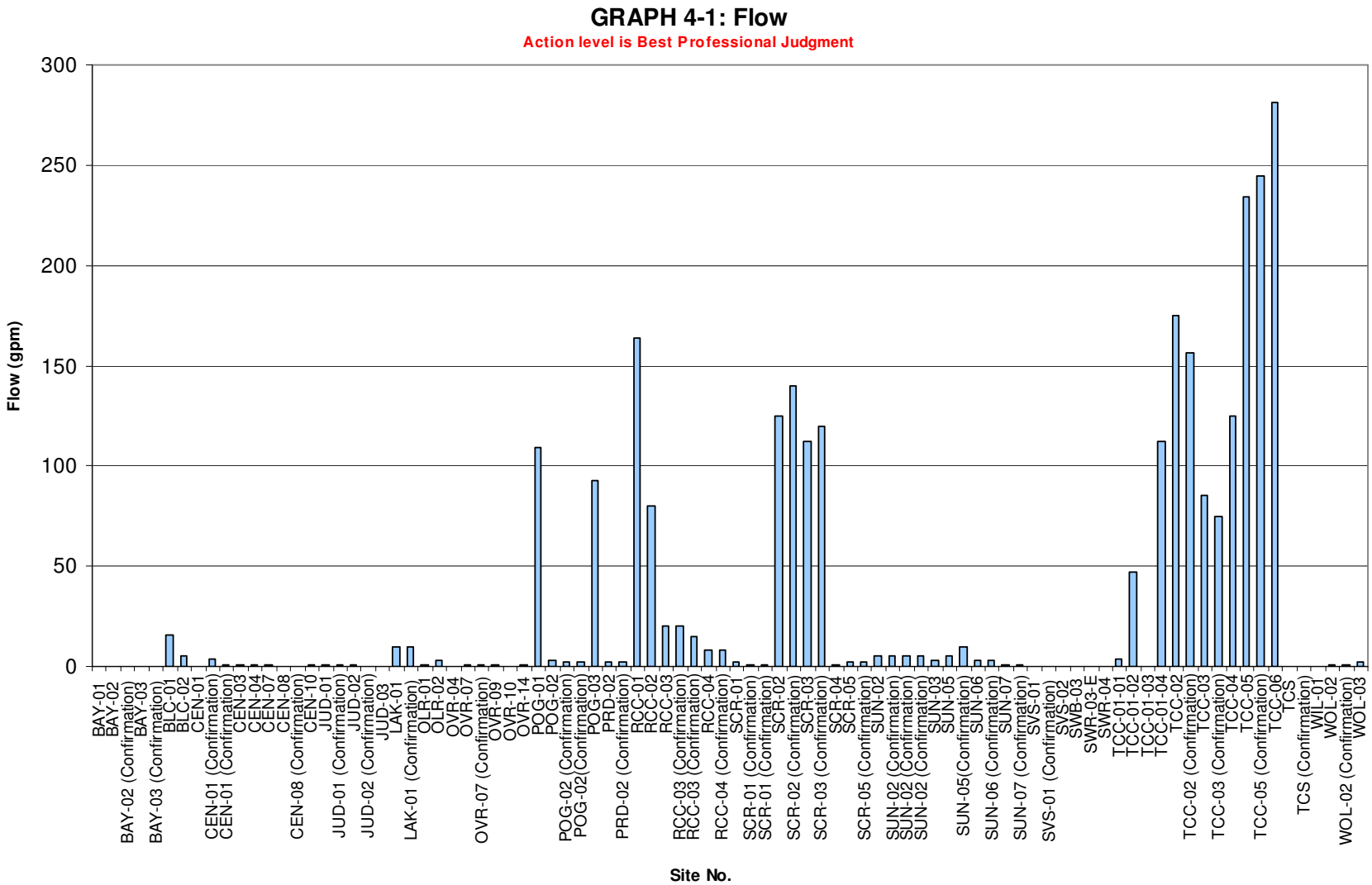
GRAPH 4-1: Flow
Action level is Best Professional Judgment
Flow (gpm)
300
250
200
150
100
50
0
BAY-01
BAY-02
BAY-02 (Confirmation)
BAY-03
BAY-03 (Confirmation)
BLC-01
BLC-02
CEN-01
CEN-01 (Confirmation)
CEN-01 (Confirmation)
CEN-03
CEN-04
CEN-07
CEN-08
CEN-08 (Confirmation)
CEN-10
JUD-01
JUD-01 (Confirmation)
JUD-02
JUD-02 (Confirmation)
JUD-03
LAK-01
LAK-01 (Confirmation)
OLR-01
OLR-02
OVR-04
OVR-07
OVR-07 (Confirmation)
OVR-09
OVR-10
OVR-14
POG-01
POG-02
POG-02 (Confirmation)
POG-02(Confirmation)
POG-03
PRD-02
PRD-02 (Confirmation)
RCC-01
RCC-02
RCC-03
RCC-03 (Confirmation)
RCC-03 (Confirmation)
RCC-04
RCC-04 (Confirmation)
SCR-01
SCR-01 (Confirmation)
SCR-01 (Confirmation)
SCR-02
SCR-02 (Confirmation)
SCR-03
SCR-03 (Confirmation)
SCR-04
SCR-05
SCR-05 (Confirmation)
SUN-02
SUN-02 (Confirmation)
SUN-02 (Confirmation)
SUN-02 (Confirmation)
SUN-03
SUN-05
SUN-05(Confirmation)
SUN-06
SUN-06 (Confirmation)
SUN-07
SUN-07 (Confirmation)
SVS-01
SVS-01 (Confirmation)
SVS-02
SWB-03
SWR-03-E
SWR-04
TCC-01-01
TCC-01-02
TCC-01-03
TCC-01-04
TCC-02
TCC-02 (Confirmation)
TCC-03
TCC-03 (Confirmation)
TCC-04
TCC-05
TCC-05 (Confirmation)
TCC-06
TCS
TCS (Confirmation)
WIL-01
WOL-02
WOL-02 (Confirmation)
WOL-03
Site No.

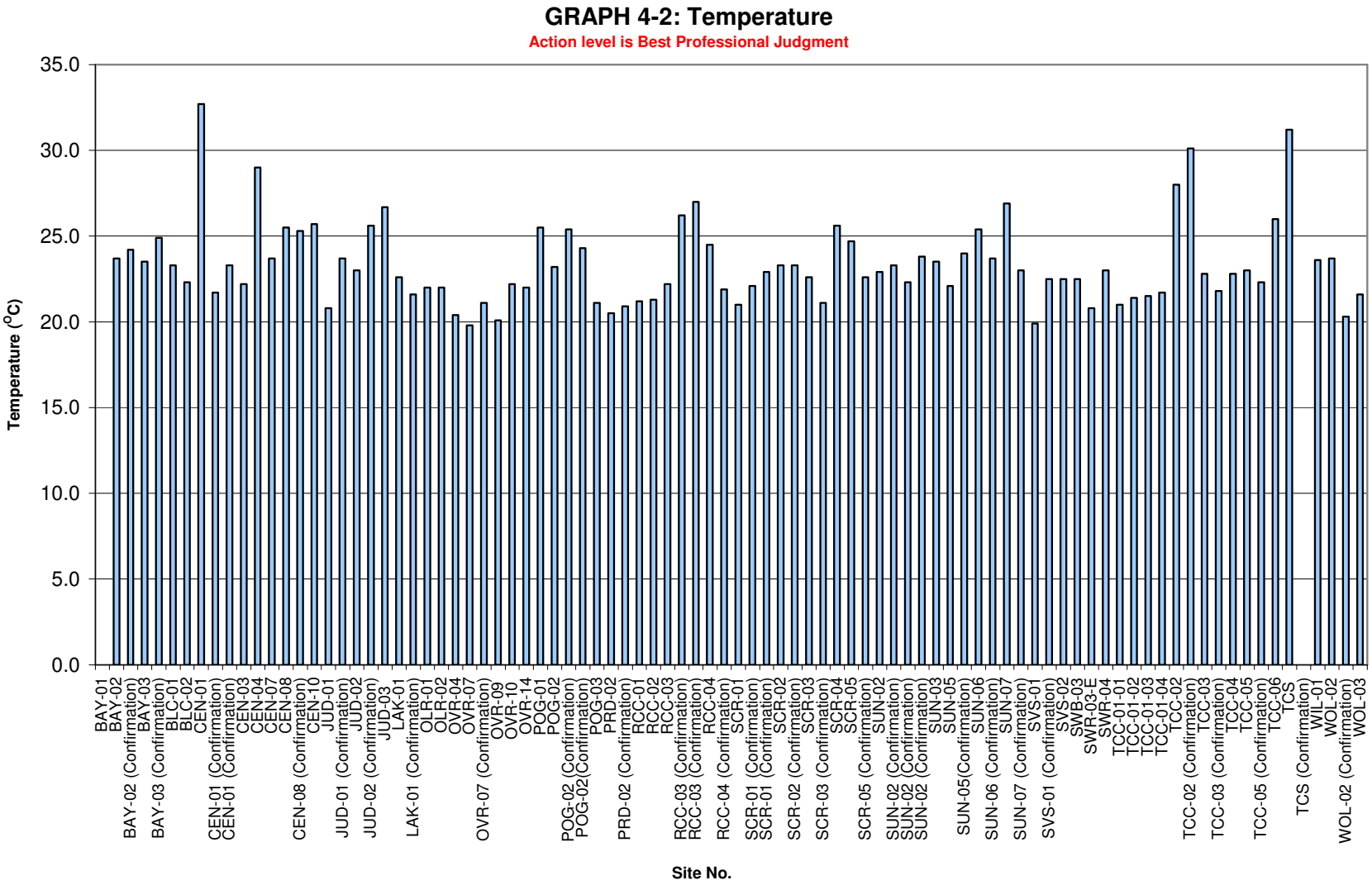
GRAPH 4-2: Temperature
Action level is Best Professional Judgment
Temperature (°C)
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
BAY-01
BAY-02
BAY-02 (Confirmation)
BAY-03
BAY-03 (Confirmation)
BLC-01
BLC-02
CEN-01
CEN-01 (Confirmation)
CEN-01 (Confirmation)
CEN-03
CEN-04
CEN-07
CEN-08
CEN-08 (Confirmation)
CEN-10
JUD-01
JUD-01 (Confirmation)
JUD-02
JUD-02 (Confirmation)
JUD-03
LAK-01
LAK-01 (Confirmation)
OLR-01
OLR-02
OVR-04
OVR-07
OVR-07 (Confirmation)
OVR-09
OVR-10
OVR-14
POG-01
POG-02
POG-02 (Confirmation)
POG-02(Confirmation)
POG-03
PRD-02
PRD-02 (Confirmation)
RCC-01
RCC-02
RCC-03
RCC-03 (Confirmation)
RCC-03 (Confirmation)
RCC-04
RCC-04 (Confirmation)
SCR-01
SCR-01 (Confirmation)
SCR-01 (Confirmation)
SCR-02
SCR-02 (Confirmation)
SCR-03
SCR-03 (Confirmation)
SCR-04
SCR-05
SCR-05 (Confirmation)
SUN-02
SUN-02 (Confirmation)
SUN-02 (Confirmation)
SUN-02 (Confirmation)
SUN-03
SUN-05
SUN-05(Confirmation)
SUN-06
SUN-06 (Confirmation)
SUN-07
SUN-07 (Confirmation)
SVS-01
SVS-01 (Confirmation)
SVS-02
SWB-03
SWR-03-E
SWR-04
TCC-01-01
TCC-01-02
TCC-01-03
TCC-01-04
TCC-02
TCC-02 (Confirmation)
TCC-03
TCC-03 (Confirmation)
TCC-04
TCC-05
TCC-05 (Confirmation)
TCC-06
TCS
TCS (Confirmation)
WIL-01
WOL-02
WOL-02 (Confirmation)
WOL-03
Site No.

GRAPH 4-3: pH

Action level is > 9.0 or < 6.5

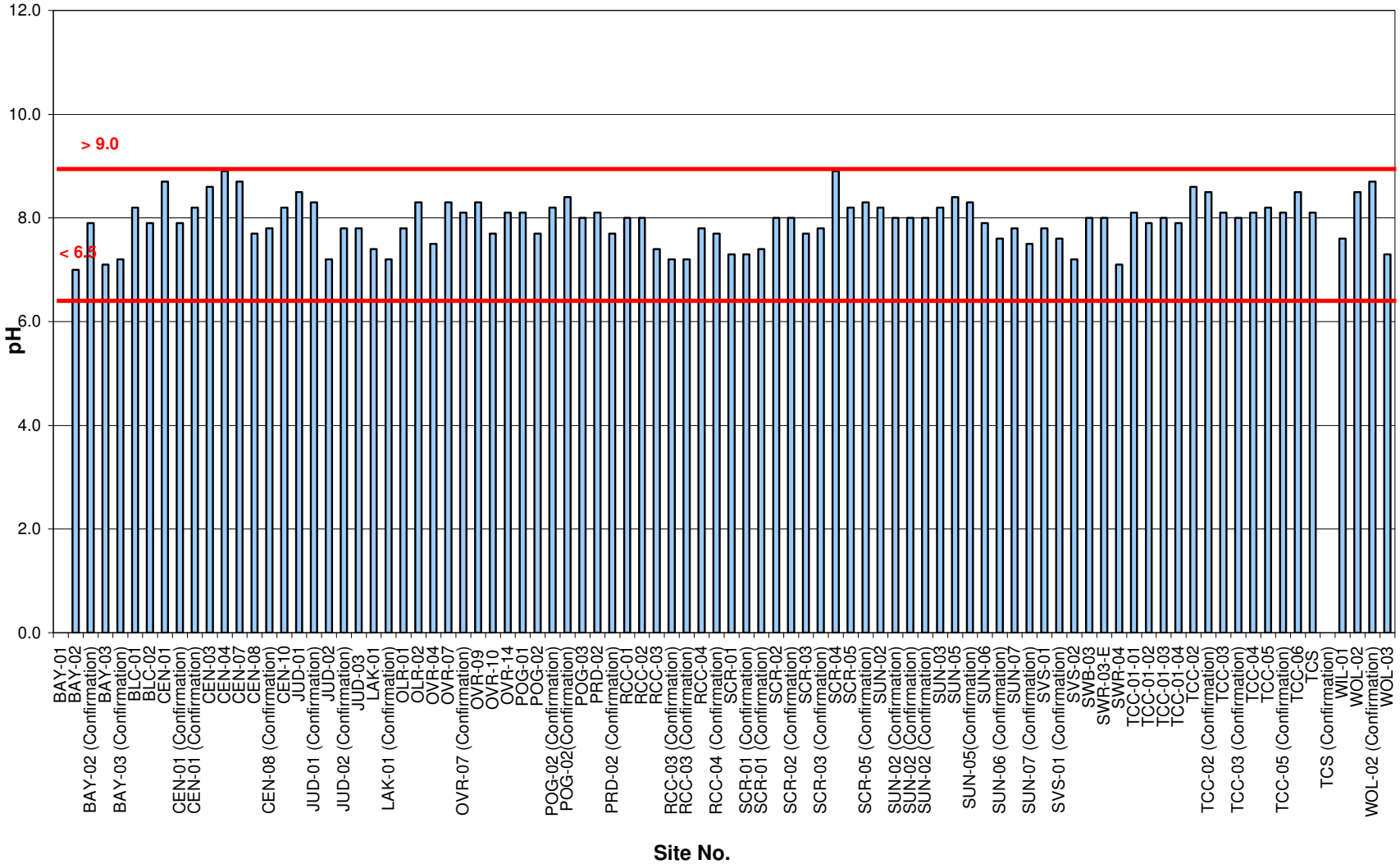

GRAPH 4-4: Turbidity

Action level is Best Professional Judgment

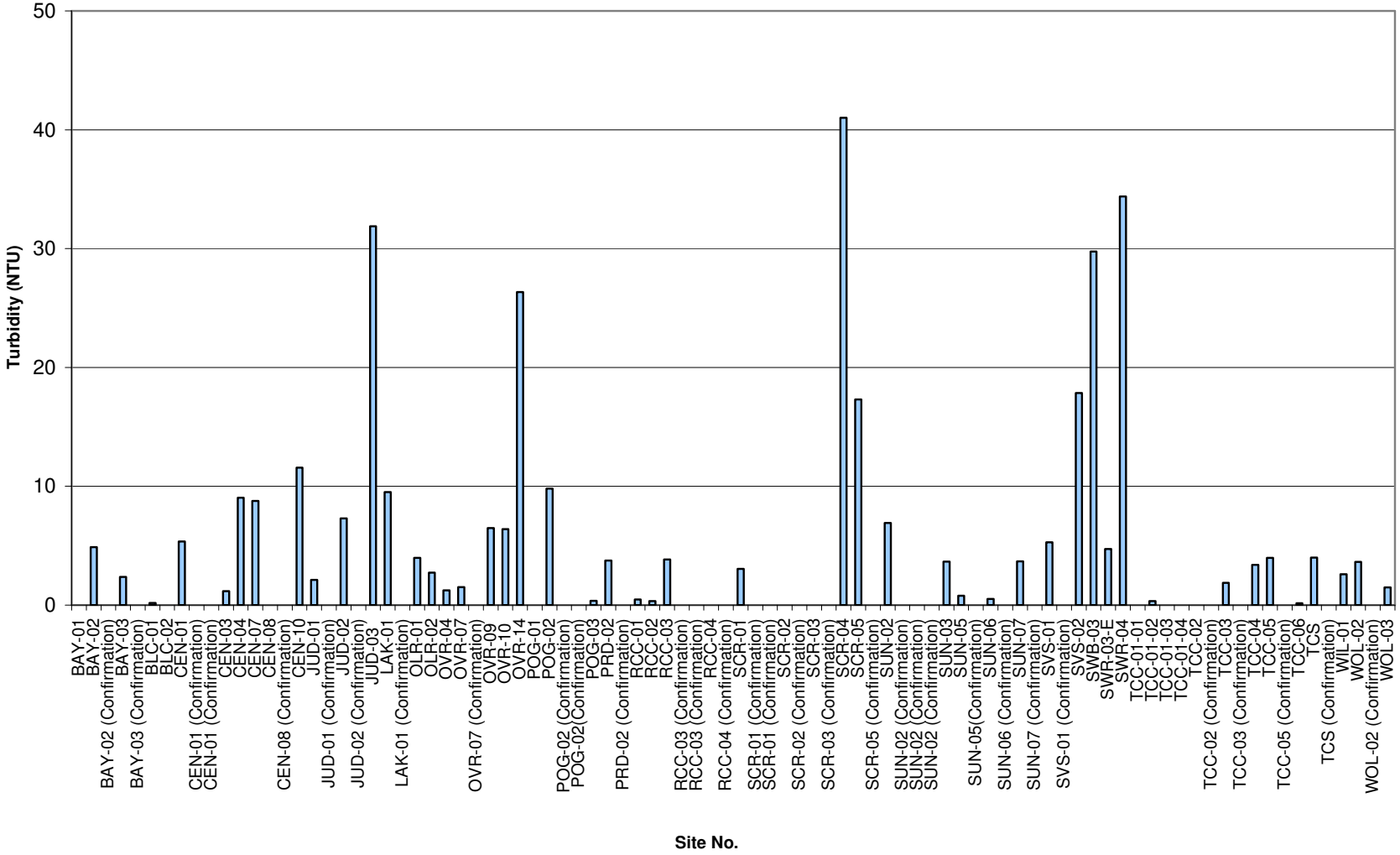

GRAPH 4-5: Conductivity

Action level is Best Professional Judgment

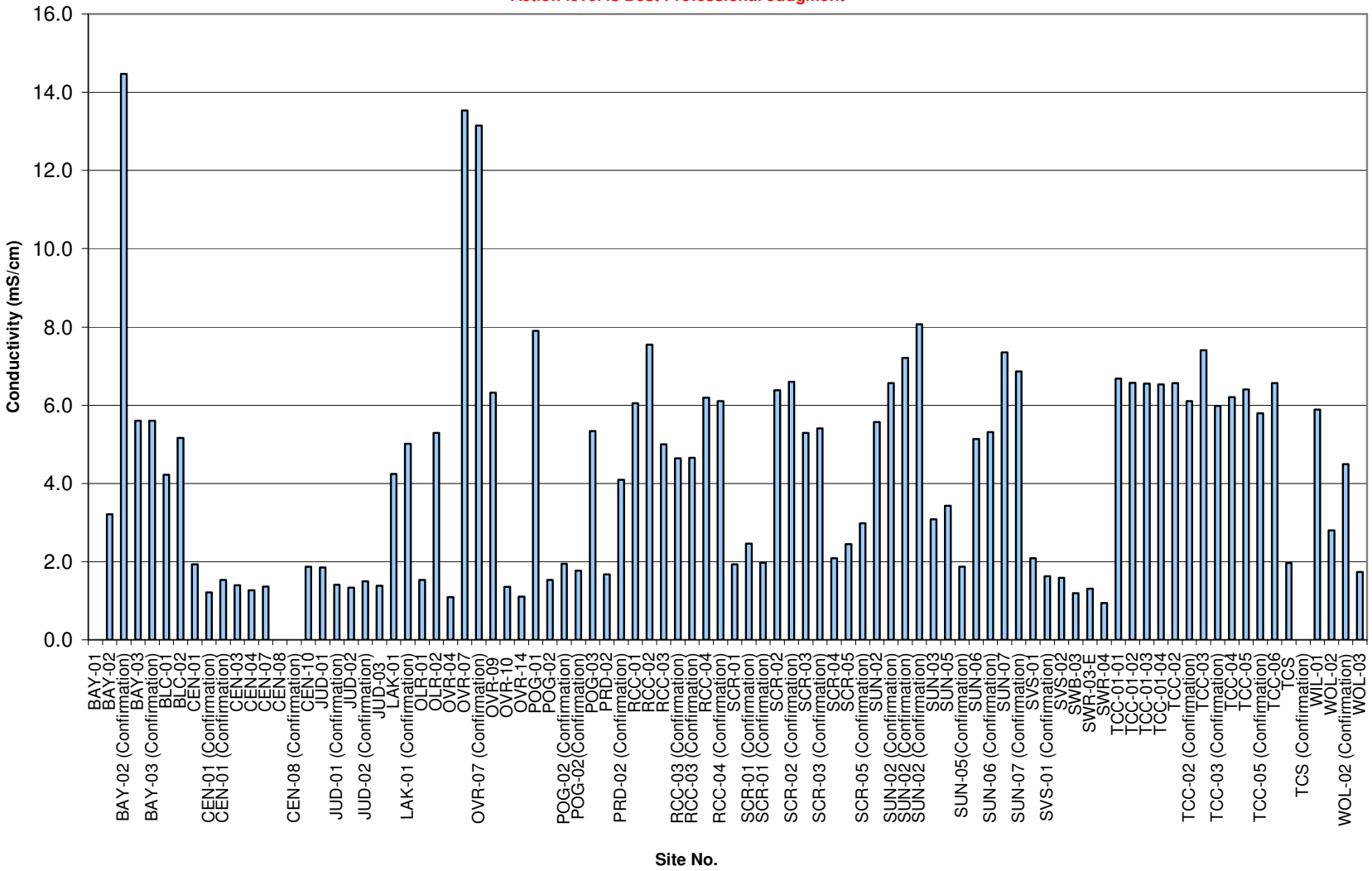

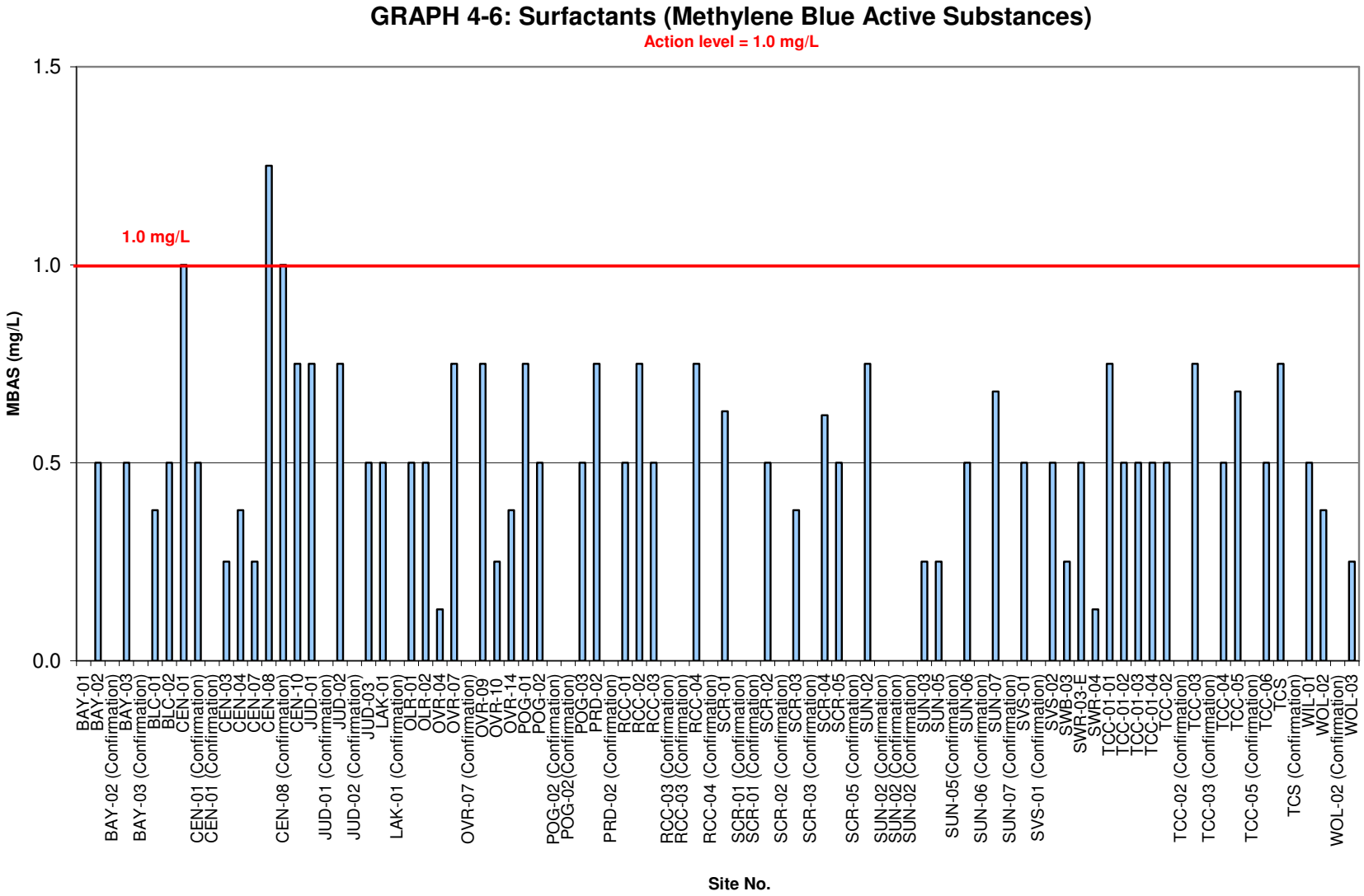
GRAPH 4-6: Surfactants (Methylene Blue Active Substances)
Action level = 1.0 mg/L
1.0 mg/L
MBAS (mg/L)
1.5
1.0
0.5
0.0
BAY-01
BAY-02
BAY-02 (Confirmation)
BAY-03
BAY-03 (Confirmation)
BLC-01
BLC-02
CEN-01
CEN-01 (Confirmation)
CEN-01 (Confirmation)
CEN-03
CEN-04
CEN-07
CEN-08
CEN-08 (Confirmation)
CEN-10
JUD-01
JUD-01 (Confirmation)
JUD-02
JUD-02 (Confirmation)
JUD-03
LAK-01
LAK-01 (Confirmation)
OLR-01
OLR-02
OVR-04
OVR-07
OVR-07 (Confirmation)
OVR-09
OVR-10
OVR-14
POG-01
POG-02
POG-02 (Confirmation)
POG-02(Confirmation)
POG-03
PRD-02
PRD-02 (Confirmation)
RCC-01
RCC-02
RCC-03
RCC-03 (Confirmation)
RCC-03 (Confirmation)
RCC-04
RCC-04 (Confirmation)
SCR-01
SCR-01 (Confirmation)
SCR-01 (Confirmation)
SCR-02
SCR-02 (Confirmation)
SCR-03
SCR-03 (Confirmation)
SCR-04
SCR-05
SCR-05 (Confirmation)
SUN-02
SUN-02 (Confirmation)
SUN-02 (Confirmation)
SUN-02 (Confirmation)
SUN-03
SUN-05
SUN-05(Confirmation)
SUN-06
SUN-06 (Confirmation)
SUN-07
SUN-07 (Confirmation)
SVS-01
SVS-01 (Confirmation)
SVS-02
SWB-03
SWR-03-E
SWR-04
TCC-01-01
TCC-01-02
TCC-01-03
TCC-01-04
TCC-02
TCC-02 (Confirmation)
TCC-03
TCC-03 (Confirmation)
TCC-04
TCC-05
TCC-05 (Confirmation)
TCC-06
TCS
TCS (Confirmation)
WIL-01
WOL-02
WOL-02 (Confirmation)
WOL-03
Site No.

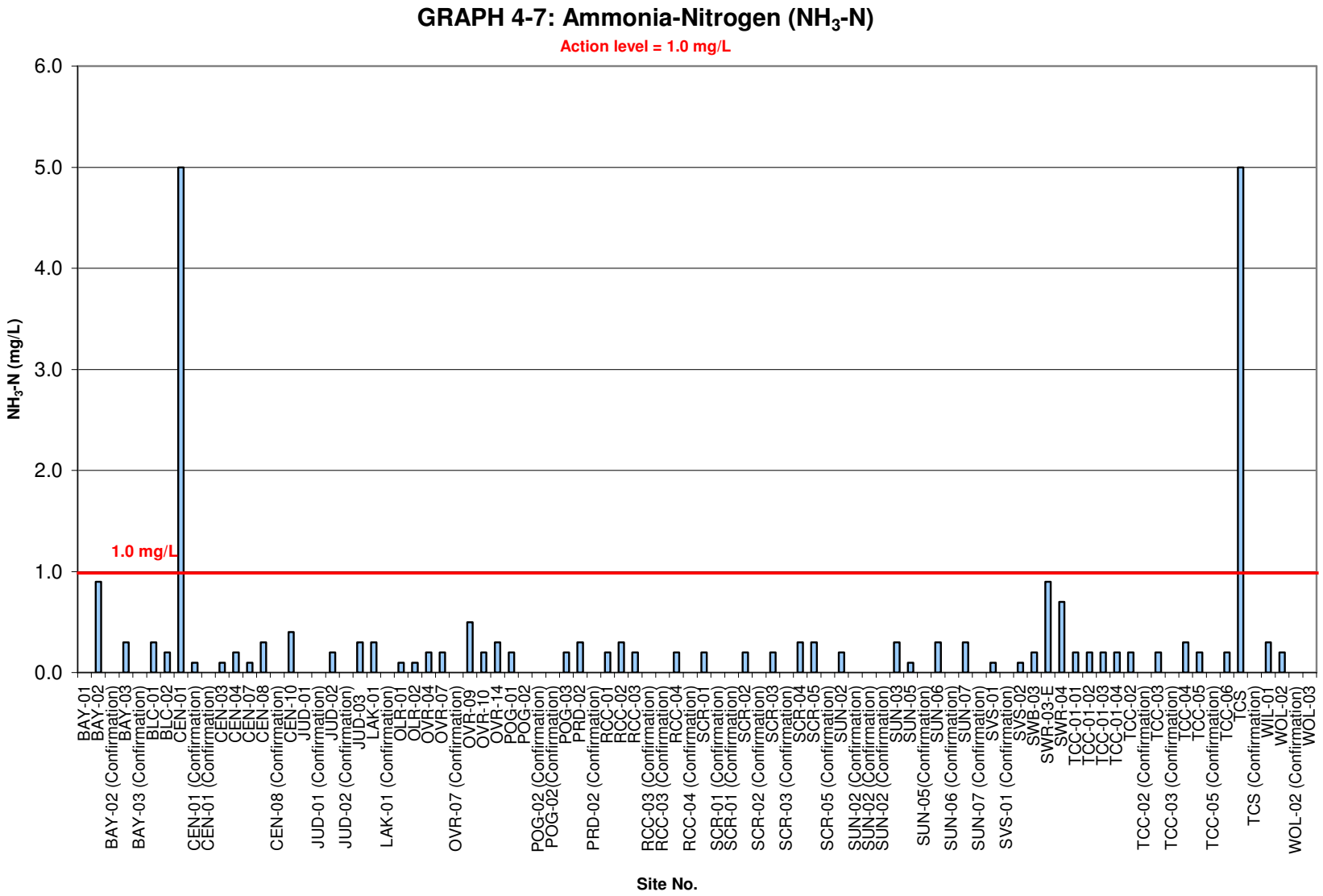
GRAPH 4-7: Ammonia-Nitrogen (NH_3-N)
Action level = 1.0 mg/L
NH_3-N (mg/L)
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1.0 mg/L
BAY-01
BAY-02
BAY-02 (Confirmation)
BAY-03
BAY-03 (Confirmation)
BLC-01
BLC-02
CEN-01
CEN-01 (Confirmation)
CEN-01 (Confirmation)
CEN-03
CEN-04
CEN-07
CEN-08
CEN-08 (Confirmation)
CEN-10
JUD-01
JUD-01 (Confirmation)
JUD-02
JUD-02 (Confirmation)
JUD-03
LAK-01
LAK-01 (Confirmation)
OLR-01
OLR-02
OVR-04
OVR-07
OVR-07 (Confirmation)
OVR-09
OVR-10
OVR-14
POG-01
POG-02
POG-02 (Confirmation)
POG-02(Confirmation)
POG-03
PRD-02
PRD-02 (Confirmation)
RCC-01
RCC-02
RCC-03
RCC-03 (Confirmation)
RCC-03 (Confirmation)
RCC-04
RCC-04 (Confirmation)
SCR-01
SCR-01 (Confirmation)
SCR-01 (Confirmation)
SCR-02
SCR-02 (Confirmation)
SCR-03
SCR-03 (Confirmation)
SCR-04
SCR-05
SCR-05 (Confirmation)
SUN-02
SUN-02 (Confirmation)
SUN-02 (Confirmation)
SUN-02 (Confirmation)
SUN-03
SUN-05
SUN-05(Confirmation)
SUN-06
SUN-06 (Confirmation)
SUN-07
SUN-07 (Confirmation)
SVS-01
SVS-01 (Confirmation)
SVS-02
SWB-03
SWR-03-E
SWR-04
TCC-01-01
TCC-01-02
TCC-01-03
TCC-01-04
TCC-02
TCC-02 (Confirmation)
TCC-03
TCC-03 (Confirmation)
TCC-04
TCC-05
TCC-05 (Confirmation)
TCC-06
TCS
TCS (Confirmation)
WIL-01
WOL-02
WOL-02 (Confirmation)
WOL-03
Site No.

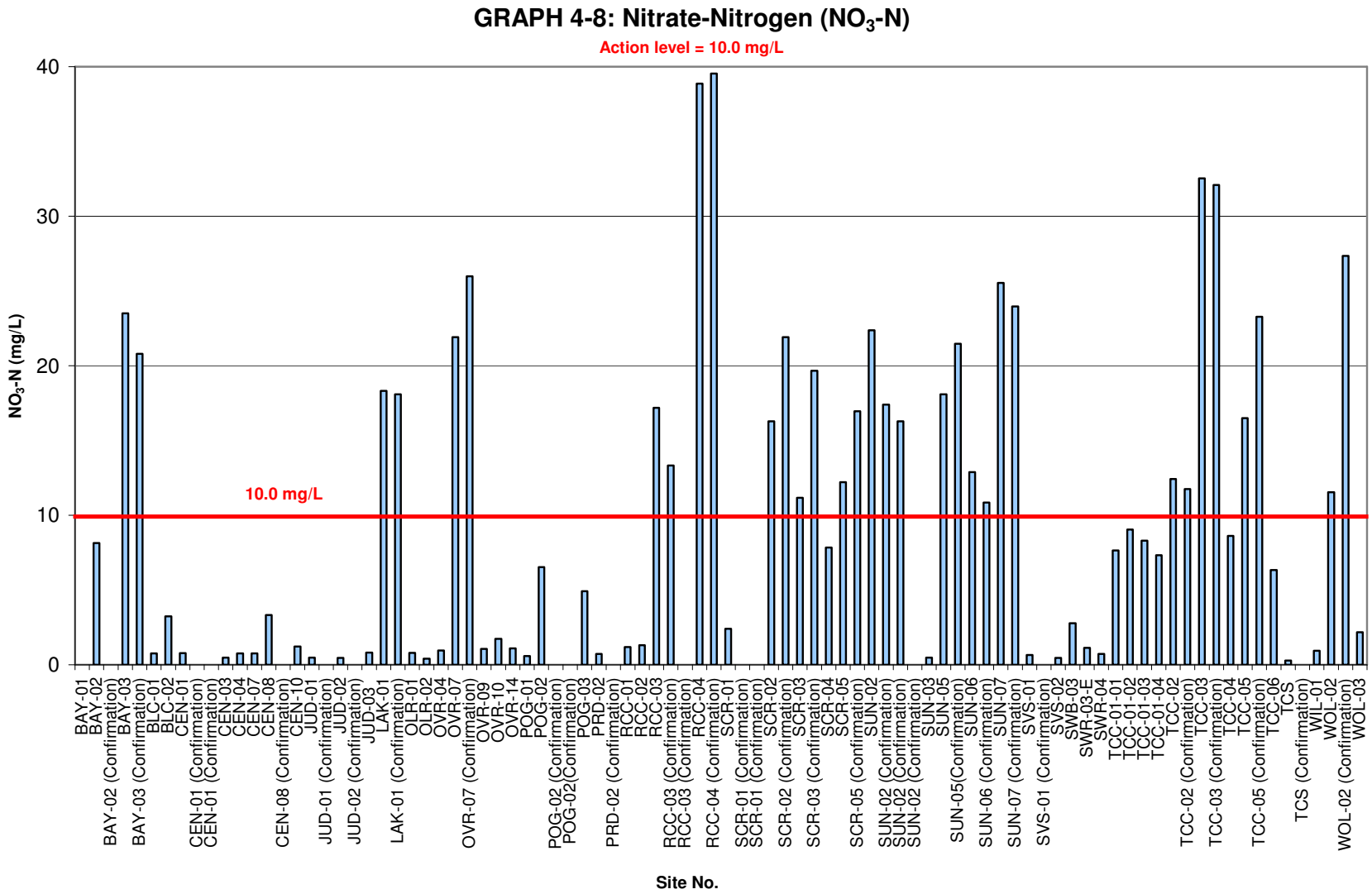
GRAPH 4-8: Nitrate-Nitrogen (NO_3-N)
Action level = 10.0 mg/L
10.0 mg/L
NO_3-N (mg/L)
0
10
20
30
40
BAY-01
BAY-02
BAY-02 (Confirmation)
BAY-03
BAY-03 (Confirmation)
BLC-01
BLC-02
CEN-01
CEN-01 (Confirmation)
CEN-01 (Confirmation)
CEN-03
CEN-04
CEN-07
CEN-08
CEN-08 (Confirmation)
CEN-10
JUD-01
JUD-01 (Confirmation)
JUD-02
JUD-02 (Confirmation)
JUD-03
LAK-01
LAK-01 (Confirmation)
OLR-01
OLR-02
OVR-04
OVR-07
OVR-07 (Confirmation)
OVR-09
OVR-10
OVR-14
POG-01
POG-02
POG-02 (Confirmation)
POG-02(Confirmation)
POG-03
PRD-02
PRD-02 (Confirmation)
RCC-01
RCC-02
RCC-03
RCC-03 (Confirmation)
RCC-03 (Confirmation)
RCC-04
RCC-04 (Confirmation)
SCR-01
SCR-01 (Confirmation)
SCR-01 (Confirmation)
SCR-02
SCR-02 (Confirmation)
SCR-03
SCR-03 (Confirmation)
SCR-04
SCR-05
SCR-05 (Confirmation)
SUN-02
SUN-02 (Confirmation)
SUN-02 (Confirmation)
SUN-02 (Confirmation)
SUN-03
SUN-05
SUN-05(Confirmation)
SUN-06
SUN-06 (Confirmation)
SUN-07
SUN-07 (Confirmation)
SVS-01
SVS-01 (Confirmation)
SVS-02
SWB-03
SWR-03-E
SWR-04
TCC-01-01
TCC-01-02
TCC-01-03
TCC-01-04
TCC-02
TCC-02 (Confirmation)
TCC-03
TCC-03 (Confirmation)
TCC-04
TCC-05
TCC-05 (Confirmation)
TCC-06
TCS
TCS (Confirmation)
WIL-01
WOL-02
WOL-02 (Confirmation)
WOL-03
Site No.

GRAPH 4-9: Orthophosphate-Phosphorus (PO_4-P)

Action level = 2.0 mg/L

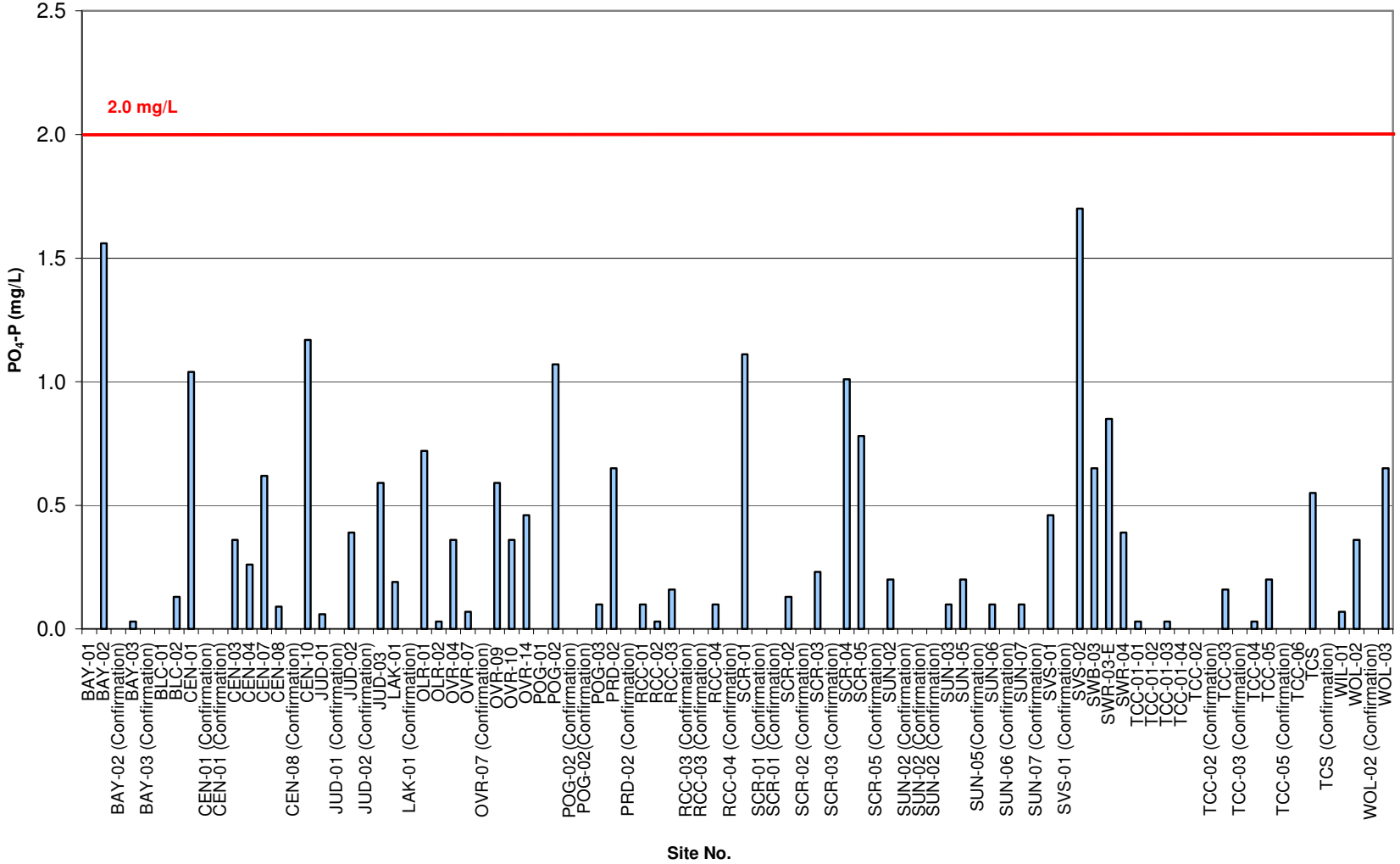

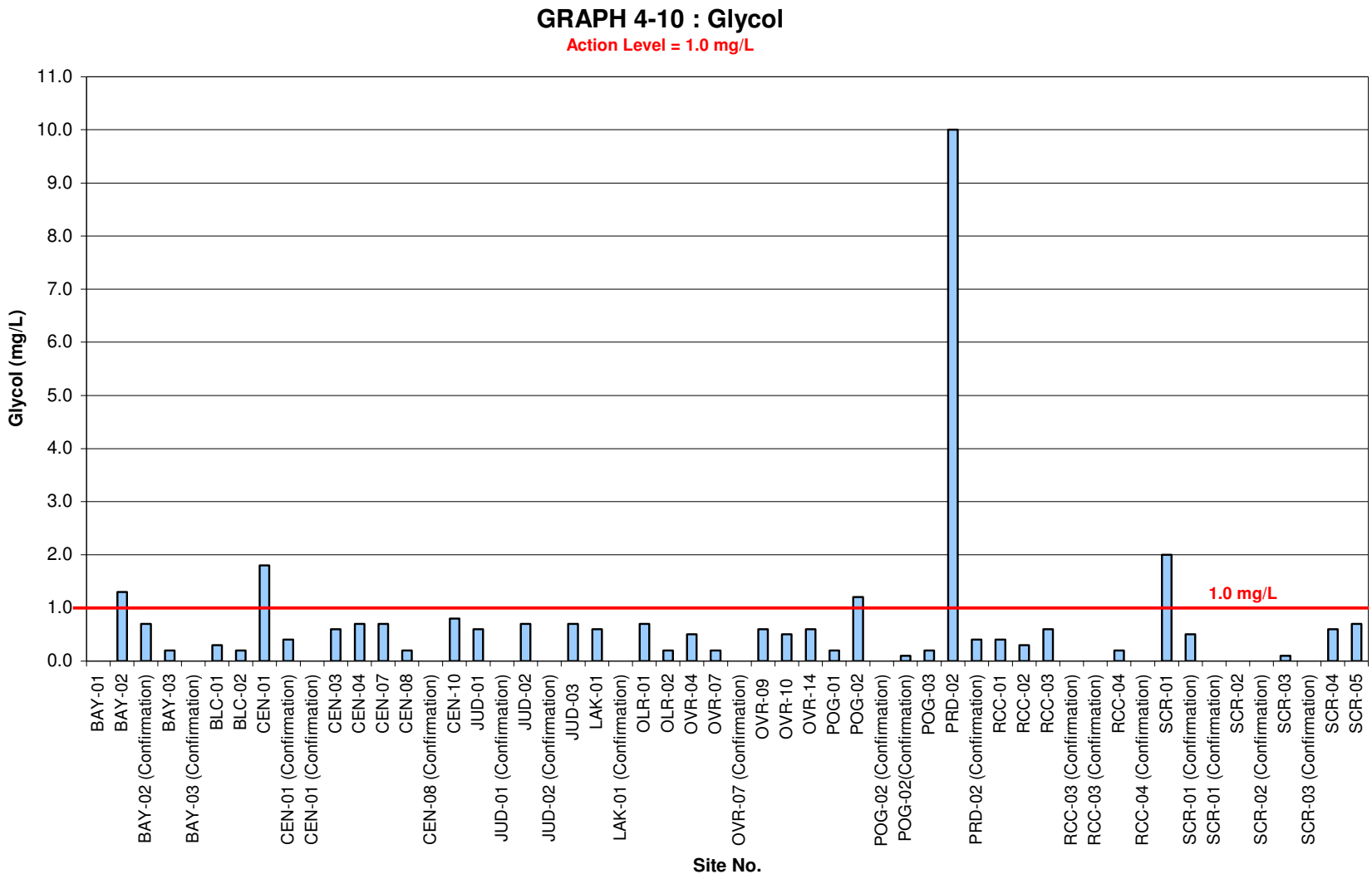
GRAPH 4-10 : Glycol
Action Level = 1.0 mg/L
Glycol (mg/L)
11.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1.0 mg/L
BAY-01
BAY-02
BAY-02 (Confirmation)
BAY-03
BAY-03 (Confirmation)
BLC-01
BLC-02
CEN-01
CEN-01 (Confirmation)
CEN-01 (Confirmation)
CEN-03
CEN-04
CEN-07
CEN-08
CEN-08 (Confirmation)
CEN-10
JUD-01
JUD-01 (Confirmation)
JUD-02
JUD-02 (Confirmation)
JUD-03
LAK-01
LAK-01 (Confirmation)
OLR-01
OLR-02
OVR-04
OVR-07
OVR-07 (Confirmation)
OVR-09
OVR-10
OVR-14
POG-01
POG-02
POG-02 (Confirmation)
POG-02(Confirmation)
POG-03
PRD-02
PRD-02 (Confirmation)
RCC-01
RCC-02
RCC-03
RCC-03 (Confirmation)
RCC-03 (Confirmation)
RCC-04
RCC-04 (Confirmation)
SCR-01
SCR-01 (Confirmation)
SCR-01 (Confirmation)
SCR-02
SCR-02 (Confirmation)
SCR-03
SCR-03 (Confirmation)
SCR-04
SCR-05
Site No.

5 TRASH ASSESSMENT

5.1 Regulatory Requirements

One of the new requirements in the recently updated Municipal Permit is the addition of a trash monitoring program. Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather field screening site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form to document the amount and extent of trash and the threat to human and aquatic health. The first page is completed at every site. The second page, which includes information about the types, prevalence, potential routes, and the sources of trash, is completed at sites where a larger amount of trash is observed.

A qualitative estimate of trash abundance is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although a number of trash pieces is also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.

- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.

- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.

- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.

- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g., medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).

- *Threat to Aquatic Health* – Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category.

In the event that a potential threat to human or aquatic health is noted, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Form. If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which the trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

Table 5-1 and Graph 5-1 summarize the assessments of trash levels at the sites sampled in 2008. Figure 5-1 presents the trash assessment results on a GIS map.

TABLE 5-1
TRASH ASSESSMENT RESULTS

Optimal (24 sites)	**Suboptimal** (19 sites)	**Marginal** (10 sites)	**Submarginal** (2 sites)	**Poor** (3 sites)
BLC-02	BAY-01	BAY-02	CEN-03	JUD-01
CEN-08	BAY-03	BLC-01	RCC-04	SWR-04
JUD-03	CEN-07	CEN-01		TCS
LAK-01	CEN-10	CEN-04		
OVR-04	JUD-02	OVR-09		
OVR-14	OLR-01	POG-01		
POG-02	OLR-02	RCC-01		
POG-03	OVR-07	RCC-03		
PRD-02	OVR-10	SCR-04		
RCC-02	SCR-03	SWR-03-E		
SCR-01	SCR-05			
SCR-02	SUN-02			
SUN-03	SUN-05			
SUN-07	SUN-06			
SVS-01	SVS-02			
SWB-03	TCC-03			
TCC-01-01	TCC-05			
TCC-01-02	TCC-06			
TCC-01-03	WOL-02			
TCC-01-04				
TCC-02				
TCC-04				
WIL-01				
WOL-03				

GRAPH 5-1
TRASH ASSESSMENT SUMMARY

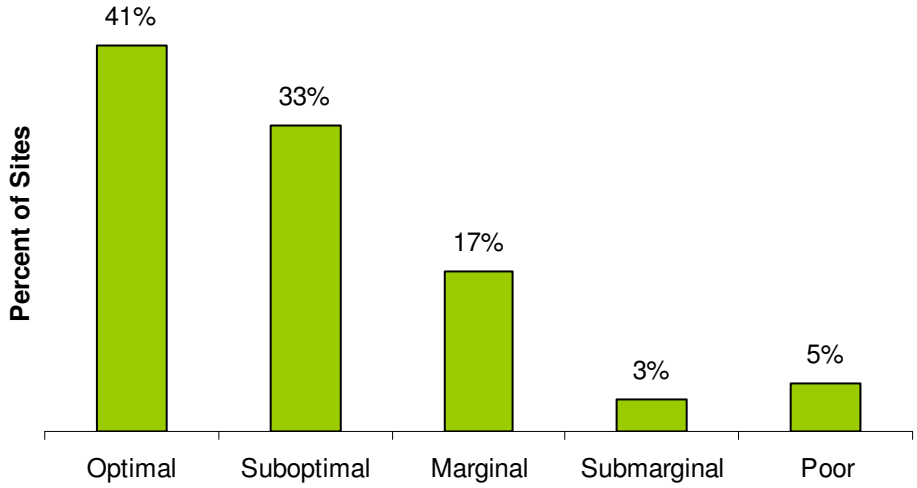

5.3.1 Threat to Human or Aquatic Health

Site JUD-01 is part of a concrete channel located in a primarily commercial area. The site contained a significant accumulation of trash, which included: styrofoam and plastic food and beverage containers; plastic/metal light bulb fixtures; toys; and at least one empty can of brake fluid.

Upstream of the site, accumulation of trash was even greater. A significant amount of dumping had occurred in the channel just east of the 3rd Avenue and Orange Avenue intersection, and transients were observed occupying the area under the bridge. In addition to the types of trash seen at the primary site, animal waste, full detergent containers, garbage bags with food waste, and clothing were observed. The conditions of the site were reported to Chula Vista city officials immediately, and the site was cleared shortly thereafter.

Site TCS is a catch basin located inside of a gated property, immediately northeast of the intersection of the trolley tracks and Moss Street. A significant amount of food and beverage containers had accumulated here, along with various other pieces of styrofoam and litter. Access to the site is relatively limited since it is within a gated property and there is a grate covering the catch basin, it appears that the trash within the basin must come from upstream. There is a drainage grate within the site that appears to have been clogged by the trash. A film of food grease was visible on the water surface and the area had a very strong sewage-like odor. The conditions at this site were immediately reported to city officials.

FIGURE 5-1
TRASH ASSESSMENT GIS MAP

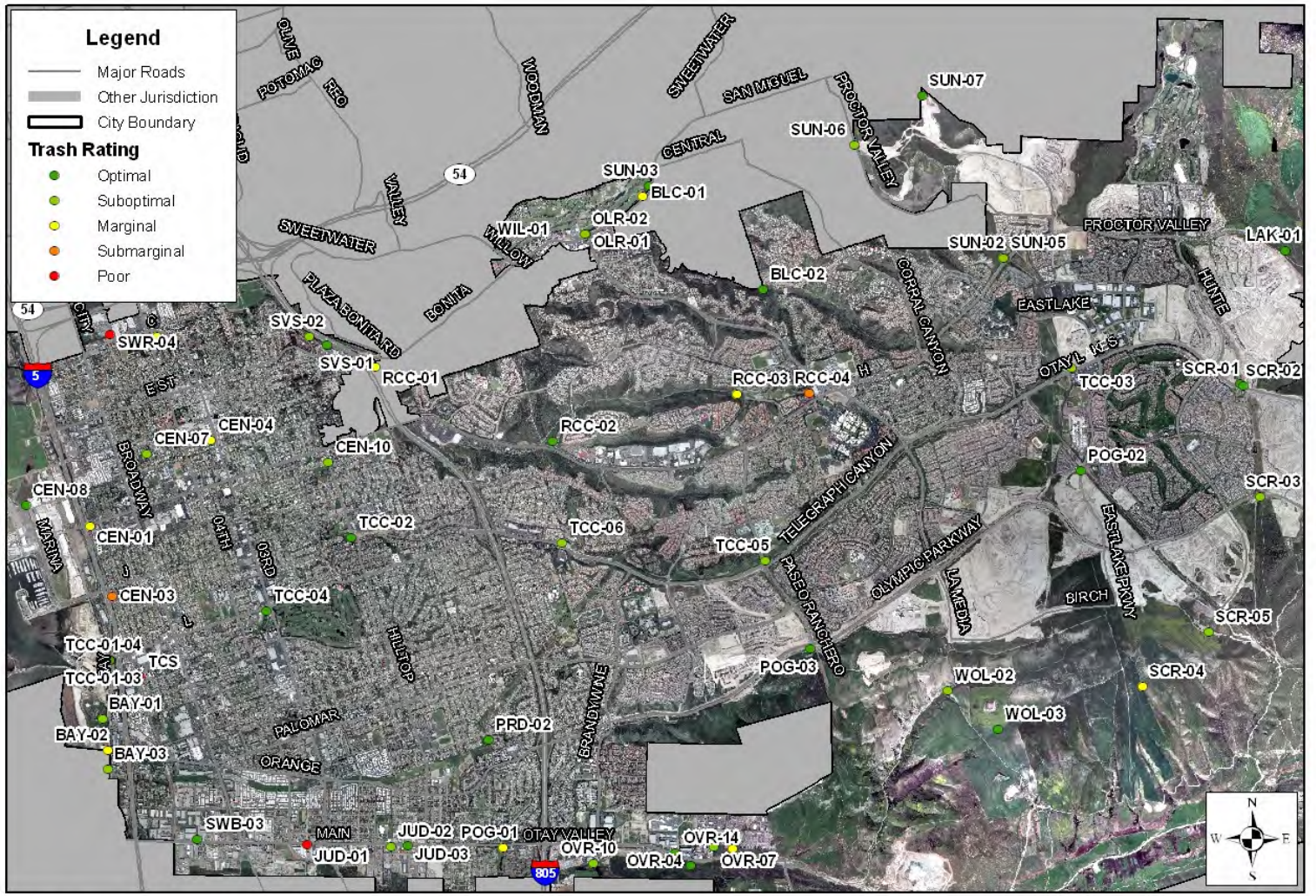

Base Data Sources: USGS, SanGIS, SANDAG

5.3.2 Submarginal and Poor Sites

In addition to sites JUD-01 and TCS, listed above, the following sites were rated as submarginal or poor.

Site CEN-03 is located downstream of a residential area. A substantial accumulation of yard clippings and a plastic chair were observed here, most likely the result of illegal dumping into the channel, by nearby residents. Several food and beverage containers were also observed, as a result of littering either at the site or upstream.

Site RCC-04 is located immediately downstream of a shopping center and a high school, on an undeveloped lot of land. Several shopping carts and a substantial amount of food and beverage containers were observed in the immediate vicinity of the site. This accumulation of trash is likely the result of dumping and littering, possibly by teenagers observed occupying the area.

Site SWR-04 is located in an area with nearby shopping centers and businesses as well as a nearby park. A significant accumulation of trash and litter were noted within the immediate vicinity of the site. Several shopping carts, a substantial amount of clothing, household items, cardboard boxes, and food and beverage containers were observed, and are likely the result of dumping by transients in the area.

TABLE 5-2
BREAKDOWN OF SUBMARGINAL/POOR SITES

Site	Types of Trash	Ranking	Potential Route 1	Potential Route 2	Potential Source
CEN-03	Yard Waste	1	Dumping		Household
	Food Packaging	2	Littering	Upstream	Unable to determine
	Household	3	Dumping		Household
RCC-04	Food Packaging	1	Littering		School
	Shopping Carts	2	Littering		School
JUD-01	Food Packaging	1	Littering	Upstream	Unable to determine
	Construction	2	Dumping		Construction
	Household	3	Upstream		Household
	Automotive	4	Littering		Unable to determine
SWR-04	Fabric/Clothing	1	Dumping		Transient
	Household	2	Dumping		Transient
	Food Packaging	3	Dumping		Transient
	Shopping Carts	4	Dumping		Transient
TCS	Food Packaging	1	Upstream		Unable to determine
	Business Related	2	Upstream		Unable to determine
	Household	3	Upstream	Dumping	Household

6 LABORATORY ANALYTICAL RESULTS

Laboratory analyses were conducted at 15 sites, representing over 25 percent of all sites with ponded or flowing water. The laboratory constituents measured are defined below.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Although it is not itself considered a pollutant, total hardness is measured in order to calculate CTR (California Toxics Rule) limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Diazinon and **chlorpyrifos** are organophosphate pesticides that are detrimental to birds, mammals, beneficial insects, freshwater fish, invertebrates, and other aquatic organisms.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms, including fish and waterfowl.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness, with toxicity decreasing as hardness increases. Therefore, each dissolved metal has an action level or CMC (criterion maximum concentration) for a particular total hardness. The laboratory samples collected were analyzed for the presence of dissolved cadmium, copper, lead, and zinc. All samples collected had dissolved metal concentrations below applicable action levels as calculated using CTR criteria. Table 6-1 provides a summary of those sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

TABLE 6-1
CTR – CMC FOR DISSOLVED METALS

Dissolved Copper			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
CEN-01	536	0.065	0.023
CEN-03	375	0.047	0.011
JUD-01	422	0.052	0.013
OVR-09	973	0.115	0.008
POG-02	297	0.037	0.008
PRD-02	382	0.048	0.007
SVS-01	707	0.085	0.008
Dissolved Zinc			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
PRD-02	382	0.365	0.021
SCR-01	487	0.448	0.021
OVR-09	973	0.806	0.037
POG-02	297	0.295	0.062
SVS-01	707	0.615	0.069

Note: -Only those sites where a particular dissolved metal was detected are listed. Cadmium and lead were not detected in any of the samples.
- For equations and constants used in California Toxics Rule calculations, see http://www.epa.gov/ost/standards/ctr/toxic.pdf

Coliform bacteria are relatively harmless to humans and are typically present at high levels in mammalian digestive tracts, as well as naturally found in most surface waters and soils. Testing water samples for total coliform bacteria is a standard practice in public health because a high level of total coliform bacteria often, although not always, indicates the presence of other more harmful, pathogenic organisms, usually from fecal contamination. Total coliform is used as a surrogate for these pathogens because they are generally present in much smaller quantities and are therefore difficult to test for directly. Upstream investigations for total coliforms were conducted at two sites; the results are detailed in Section 8 of this report.

Fecal coliform, a subset of coliform bacteria, and ***Enterococcus*** are found primarily in the gastro-intestinal (GI) tracts of humans and animals, so they are commonly used as indicators of water contamination by fecal matter. A host of human diseases, particularly those of the GI tract, are spread through water contaminated with fecal matter. Upstream investigations were conducted at two sites for *Enterococcus*. The results of these investigations are described in Section 8.

A summary of the laboratory analytical results is presented in Table 6-2. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included as Appendix C.

TABLE 6-2
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Number of Exceedances
Oil and Grease (mg/L)	nd	nd	0
Total Hardness (mg/L CaCO3)	2,180	297	*
Cadmium (dissolved, mg/L)	nd	nd	0
Copper (dissolved, mg/L)	0.023	0.007	0
Lead (dissolved, mg/L)	nd	nd	0
Zinc (dissolved, mg/L)	0.069	0.021	0
Diazinon (µ/L)	nd	nd	0
Chlorpyrifos (µ/L)	nd	nd	0
Total Coliform (MPN/100 mL)	500,000	170	7
Fecal Coliform (MPN/100 mL)	90,000	nd	2
Enterococcus (MPN/100 mL)	50,000	20	4

Notes:
nd = not detected
* Total hardness is not considered a pollutant and thus has no exceedances

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site ID	Date	Time	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms MPN/100ml	Fecal Coliforms MPN/100ml	Enterococcus MPN/100ml
CEN-01	07/10/08	12:20	nd	536	nd	0.023	nd	nd	nd	nd	**80,000**	8,000	**13,000**
CEN-01 (Confirmation)	07/17/08	13:40	na	na	na	na	na	na	na	na	**98,000**	**45,529** *	670
CEN-03	07/10/08	8:40	nd	375	nd	0.011	nd	nd	nd	nd	13,000	230	500
JUD-01	07/8/08	11:45	nd	422	nd	0.013	nd	nd	nd	nd	**80,000**	2,300	2,300
JUD-01 (Confirmation)	07/16/08	14:30	na	na	na	na	na	na	na	na	19,900	115 *	na
JUD-02	07/9/08	8:45	nd	378	nd	nd	nd	nd	nd	nd	**500,000**	**24,000**	3,000
JUD-02 (Confirmation)	07/16/08	15:20	na	na	na	na	na	na	na	na	**105,000**	324 *	na
OVR-09	07/8/08	8:50	nd	973	nd	0.008	nd	0.037	nd	nd	170	nd	20
POG-02	07/3/08	10:10	nd	297	nd	0.008	nd	0.062	nd	nd	**170,000**	**90,000**	**50,000**
POG-02 (Confirmation)	07/14/08	14:45	na	na	na	na	na	na	na	na	**98,000**	2,682 *	**24,196**
PRD-02	07/8/08	10:30	nd	382	nd	0.007	nd	0.021	nd	nd	30,000	1,700	1,300
RCC-01	07/9/08	11:30	nd	1,480	nd	nd	nd	nd	nd	nd	23,000	800	2,200
RCC-02	07/7/08	12:50	nd	2,180	nd	nd	nd	nd	nd	nd	7,000	170	2,200
RCC-03	07/7/08	11:45	nd	1,370	nd	nd	nd	nd	nd	nd	**110,000**	1,400	9,200
RCC-03 (Confirmation)	07/15/08	15:30	na	na	na	na	na	na	na	na	**112,000**	3,624 *	na

TABLE 6-3
LABORATORY ANALYTICAL RESULTS (CONTINUED)

Site ID	Date	Time	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms MPN/100ml	Fecal Coliforms MPN/100ml	Enterococcus MPN/100ml
SCR-01	07/7/08	9:45	nd	487	nd	nd	nd	0.021	nd	nd	**130,000**	5,000	**30,000**
SCR-01 (Confirmation)	07/15/08	13:40	na	na	na	na	na	na	na	na	**579,000**	12,353 *	**14,136**
SUN-02	07/3/08	11:30	nd	1,340	nd	nd	nd	nd	nd	nd	**50,000**	5,000	500
SUN-02 (Confirmation)	07/14/08	13:30	na	na	na	na	na	na	na	na	18,600	61 *	na
SUN-05	07/3/08	12:20	nd	412	nd	nd	nd	nd	nd	nd	30,000	5,000	1,700
SVS-01	07/9/08	10:30	nd	707	nd	0.008	nd	0.069	nd	nd	17,000	5,000	**17,000**
SVS-01 (Confirmation)	07/17/08	15:00	na	na	na	na	na	na	na	na	na	na	146
TCC-04	07/10/08	10:45	nd	1350	nd	nd	nd	nd	nd	nd	8,000	700	300
Reporting Limits			**1.0**	**10**	**0.005**	**0.005**	**0.005**	**0.02**	**0.05**	**0.05**	**20**	**20**	**20**
Action Levels			**15.0**	**	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**50,000**	**20,000**	**10,000**

Notes:

Red values were at or above the measured constituent's action level

Yellow shaded areas denote confirmation investigations

na = not analyzed

nd = not detected

CTR = California Toxics Rule (based on hardness)

* Results from calculation: Number of Fecal Coliforms = (Number of *E. coli*) / (0.85)

** = Total hardness is not considered a pollutant (see section 3.4 for details), and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependent on the total hardness value of the water sample.

7 DATA ANALYSIS

This first part of this section provides an overall evaluation of test results obtained from the 2008 Dry Weather Monitoring Program. The second portion describes historical trends for various constituent exceedances.

7.1 2008 Results

This year, nitrate-nitrogen was the constituent with the greatest number of exceedances, testing above the action level at 16 sites. Also, bacteria were elevated at eight sites. All five of the glycol action level exceedances were within normal range at the confirmation visit. In addition, ammonia and surfactants tested above the action level at two sites. Upon the confirmation visit to the sites, both ammonia and surfactant levels had decreased to below the action level. Table 7-1 presents the sites at which one or more parameter tested above the respective action level.

TABLE 7-1
2008 EXCEEDANCES SUMMARY

Site No.	Surfactants	Ammonia-N	Nitrate-N	Glycol	Total Coliforms	Fecal Coliforms	*Entero-coccus*
BAY-02				✓			
BAY-03			✓				
CEN-01	✓	✓		✓	✓		✓
CEN-08	✓						
JUD-01					✓		
JUD-02					✓	✓	
LAK-01			✓				
OVR-07			✓				
POG-02				✓	✓	✓	✓
PRD-02				✓			
RCC-03			✓		✓		
RCC-04			✓				
SCR-01				✓	✓		✓
SCR-02			✓				
SCR-03			✓				
SCR-05			✓				
SUN-02			✓		✓		
SUN-05			✓				
SUN-06			✓				
SUN-07			✓				
SVS-01							✓
TCC-02			✓				
TCC-03			✓				
TCC-05			✓				
TCS		✓					
WOL-02			✓				

Note: Table reflects exceedances occurring during routine visits only, not confirmation or follow-up visits.

7.2 Previous Results

Historical results regarding exceedances are presented in Table 7-2, Graph 7-1 and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances for field constituents, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

Since 2002, no exceedances have been measured for temperature, turbidity, cadmium, copper, lead, or chlorpyrifos. Thus, these constituents are not included in the following table and graphs.

The historical data for the results of field analyses presented in Graph 7-1 indicates a decreasing trend in ammonia concentrations. Orthophosphate exceedances have been very rare in all years since 2002. No discernable trend is apparent for glycol, nitrate, or surfactants results, which have fluctuated from year to year.

Historical data for laboratory analyses presented in Graph 7-2 indicates relatively high bacteria exceedance rates, although the fecal coliform exceedance rate has decreased somewhat over the years. Zinc and diazinon have not been detected over their action levels since 2003. Prior to 2003 the rates of exceedances were approximately 10 percent per year. Surfactants and oil & grease have generally had no exceedances or only a minimal number of exceedances over the years.

TABLE 7-2
PERCENT OF SITES WITH EXCEEDANCES BY YEAR

	Field Screening									Laboratory Analyses							
Year	**Number of Sites**	*pH*	*Turbidity*	*Conductivity **	*Surfactants*	*Ammonia-N*	*Nitrate-N*	*Orthophosphate-P*	*Glycol*	**Number of Sites**	Surfactants	*Oil & Grease*	*Zinc*	*Diazinon*	*Total Coliforms*	*Fecal Coliforms*	*Enterococcus*
2002- *Round 1*	42	2	7	40	5	14	21	0	7	13	0	31	0	8	77	77	31
2002- *Round 2*	45	9	4	38	16	13	22	2	9	15	8	7	7	13	87	87	27
2003	50	4	2	2	2	18	20	0	4	15	0	7	7	13	87	87	27
2004	50	4	0	6	8	16	10	2	22	15	0	0	0	0	60	20	27
2005	50	0	8	8	14	12	12	0	2	15	0	7	0	0	87	13	20
2006	57	5	2	0	9	5	11	0	5	15	7	0	0	0	33	7	20
2007	57	2	2	2	12	9	14	0	9	15	7	0	0	0	67	33	33
2008	57	0	0	0	4	4	28	0	9	15	na	0	0	0	47	13	27

Notes:

Results based on complete routine visits only. Confirmation visits, follow-up visits and dry sites not included.

* By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

GRAPH 7-1
PERCENT OF SITES WITH FIELD CONSTITUENTS EXCEEDANCES BY YEAR

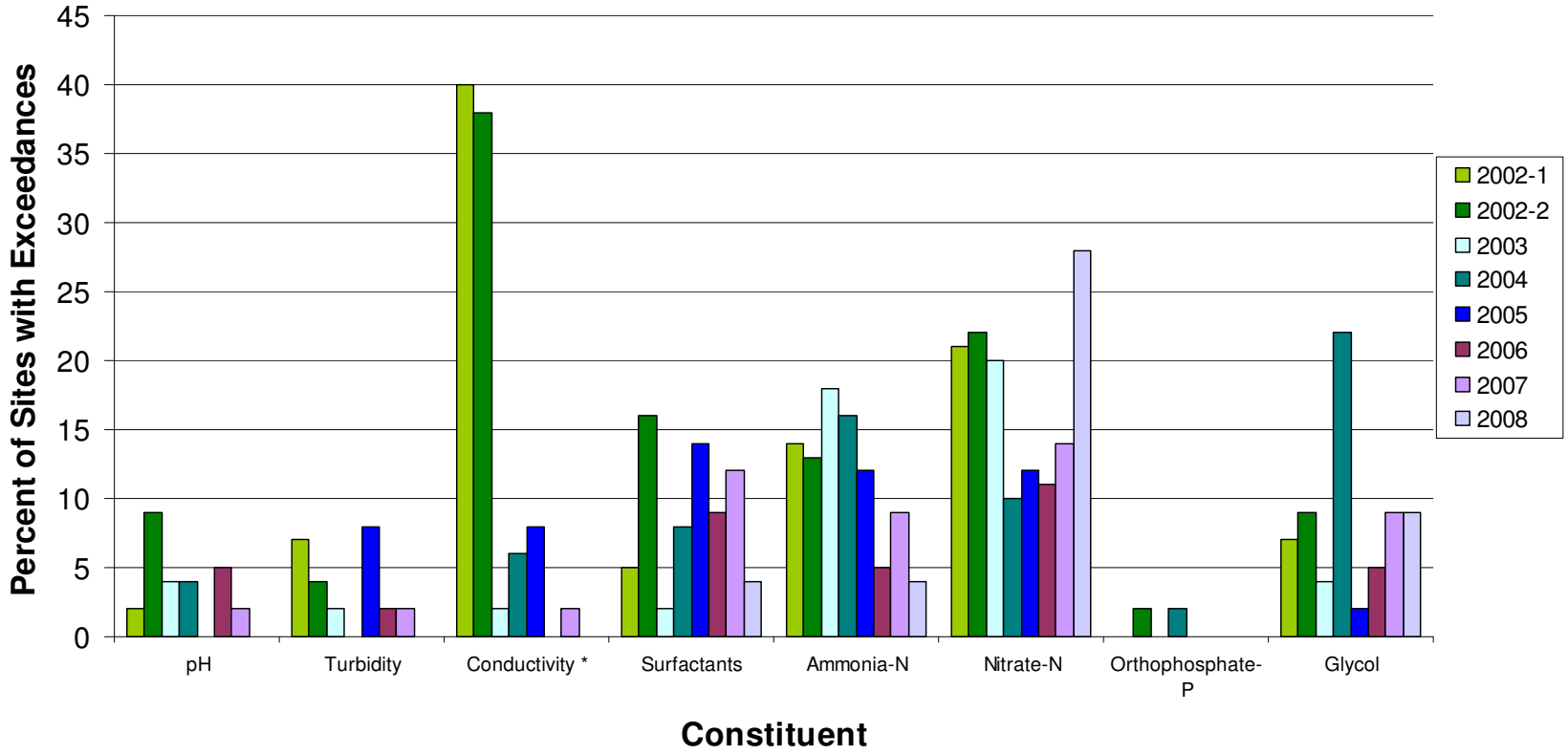

* The action level for conductivity was numeric in the past but was later changed to best professional judgment. See footnote in Table 7-2.

GRAPH 7-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

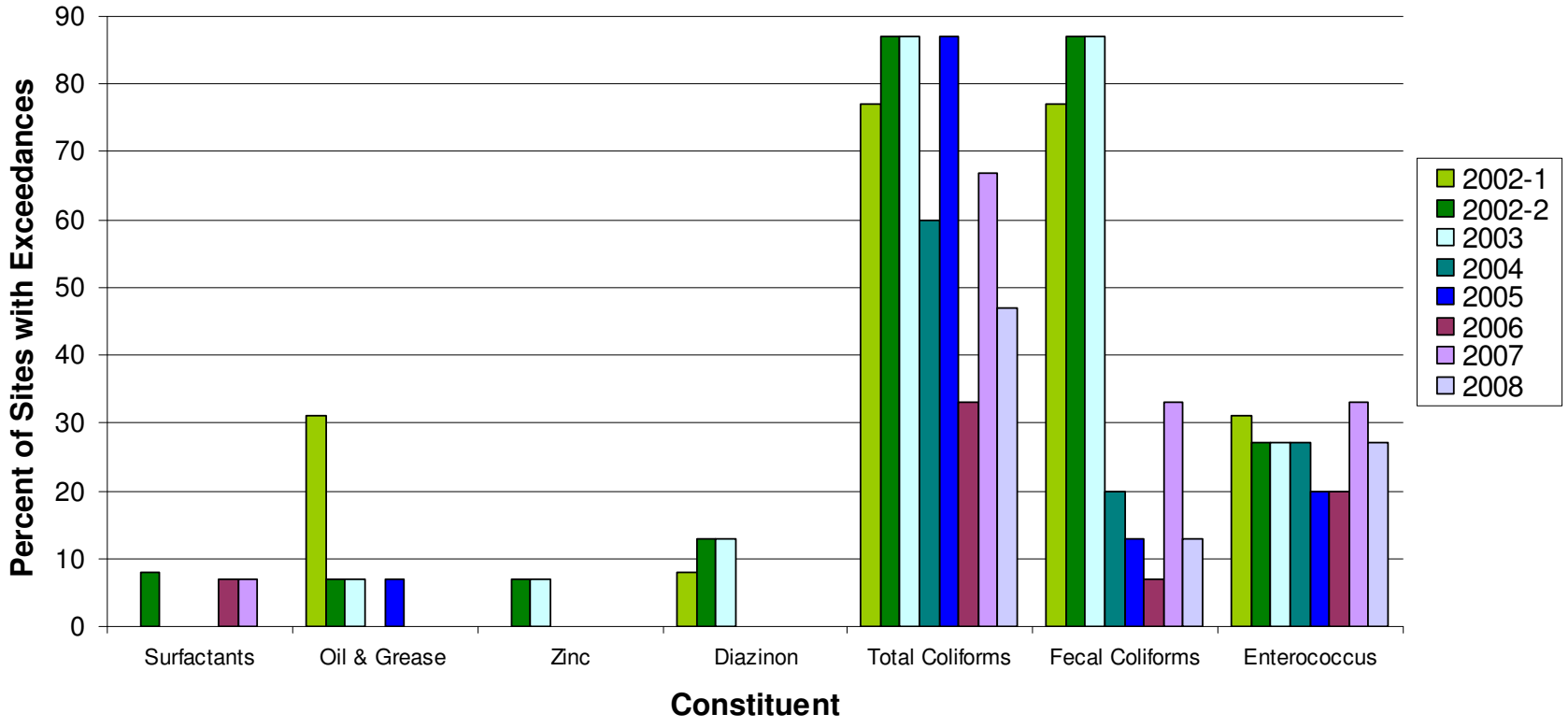

8 UPSTREAM INVESTIGATIONS

The purpose of upstream investigations is to find the sources of the pollutants identified during the initial round of field screening and laboratory testing. Photographs of all primary sampling sites are provided in Appendix B.

8.1 Investigation Procedure

Follow-up investigations are conducted in two rounds. The first follow-up investigations are for the sites at which field tests indicates action level exceedances. These investigations are in the form of additional field testing and are conducted within 24 hours of the initial findings. The second round of follow-up investigations are carried out for the sites at which laboratory testing shows elevated constituent levels. These investigations are conducted within two business days of receiving the laboratory test results.

During the follow-up investigations, flow rates are measured, visual observations are performed, and field testing is conducted. Visual observations, such as water color, clarity, odor, floatable materials, vegetation and biology are recorded on field data sheets at each site. Field data sheets are included in Appendix D.

Source identification investigations begin by testing the water at the site again. This is referred to as a "confirmation" visit, as it is to confirm the initial findings. If follow-up testing at a site results in constituent concentrations below specified action levels, the pollution found during the initial field screening and laboratory analysis phase may have been due to a transient flow. If follow-up testing at a site finds constituent concentrations again above the specified action levels, an upstream investigation will be conducted. The field crew will progress upstream until the potential pollutant source(s) is isolated or identified.

Upstream investigations are also referred to as "IC/ID follow-up" visits, as the purpose is to identify illicit connections and illegal discharges. They are conducted by checking a number of upstream branches for any potential sources of the constituent of concern. The estimated flow rate in each branch and any relevant observations are recorded. Depending upon the constituent(s) under investigation, laboratory samples may be collected for analysis.

The laboratory test for investigating upstream bacteria sources differs from routine field screening bacteria testing by using the IDEXX Colilert and IDEXX Enterolert tests. Information about these methods is provided in Table 3-2. Results for the Colilert and Enterolert tests are typically available within 24 hours, as opposed to the five days needed for routine testing. The quicker turnaround time allows for additional upstream investigations as needed.

8.2 Investigated Sites

Site BAY-02

Site BAY-02 is an earthen channel located west of the intersection of Palomar Street and Bay Boulevard. During the first visit to the site, water was present at the site, but there was no active source of water from upstream. The sample collected appeared clear and conductivity measured 3.21 mS/cm. The site is close to San Diego Bay and is influenced by water from the bay during high tide. The glycol concentration was measured at 1.3 mg/L, above the action level of 1.0 mg/L. Trash and litter were noted in the area surrounding the site.

The following day, closer inspection of trash around the site revealed a discarded container of antifreeze next to the channel (Photo 8-1 and 8-2). Field tests indicated that the glycol concentration had fallen to 0.7 mg/L, below the action level, while the conductivity had

PHOTOS 8-1 AND 8-2: Discarded antifreeze container at Site BAY-02.

increased to 14.47 mS/cm. It was concluded that the discarded container of antifreeze was likely the source of glycol and that tidal changes had flushed the site, diluting the glycol concentration. The corresponding rise in conductivity supports this conclusion.

Site BAY-03

Site BAY-03 is an earthen channel located west of the intersection of Ada Street and Bay Boulevard. During the initial visit the water was found to be clear and ponded, with no active source of water from upstream. Like Site BAY-02, this site is close to San Diego Bay and is also influenced by bay water during high tide. Algae, insects, fish, and small crustaceans were observed at the site. On the initial visit to the site, the nitrate-nitrogen concentration was measured at 23.50 mg/L, above the action level of 10.00 mg/L.

By the following day, the nitrate-nitrogen concentration had diminished slightly to 20.79 mg/L, but was still measured above the action level. There was no obvious source of nitrate at the site and the field crew was unable to locate any ponded or flowing water upstream of the site.

Site CEN-01

Site CEN-01 is a concrete channel located south of H Street and east of I-5. When the field crew visited the site, they observed low to medium levels of trash in and around the ponded water. Samples were collected for both field and laboratory analyses and had a yellow color and musty odor. Field screening results revealed that ammonia, surfactants, and glycol were all at or above their action levels. Ammonia was measured at 5.0 mg/L, MBAS at 1.00 mg/L, and glycol at 1.8 mg/L. Laboratory analyses of the sample indicated total coliforms and *Enterococcus* to be in exceedance of their action levels as well. Total coliforms were measured at 80,000 MPN/100 mL and *Enterococcus* at 13,000 MPN/100 mL.

Upon returning to the site the following day, the field crew noted that the water was no longer ponded; it was observed to be clear and flowing at approximately 4 gpm. The ammonia, surfactant, and glycol levels had all diminished and were below their respective action levels. According to available historical data, these constituents are not consistently

PHOTO 8-3: Food grease in catch basin upstream of CEN-01.

in exceedance at this site. It was therefore concluded that the initial readings were the result of a transient flow.

A separate follow-up investigation was conducted in order to determine the source of bacteria to the site. During this investigation the flow rate at the site was observed to be approximately 1 gpm. A sample was collected, and total coliforms were measured at 98,000 MPN/100 mL. The *Enterococcus* count had fallen well below the action level, and the initial reading was likely due to the stagnant water conditions at that time. Upstream of the site, the crew was able to find only one location to sample flowing or ponded water. This sample was taken from CEN-01-01, a catch basin located on Jefferson Avenue. At CEN-01-01 food grease was noted on the grate covering the catch basin and in the basin itself (Photo 8-3). The sample collected here had a very high total coliform count of 1,990,000 MPN/ 100mL, and it was concluded that Site CEN-01-01 was the main source of bacteria to Site CEN-01. A table and map summarizing the investigations of the site are presented in Table 8-1 and the following Figure 8-1.

TABLE 8-1
SITE CEN-01 BACTERIA UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
CEN-01 (Routine Visit)	South of H Street and east of I-5 and Trolley tracks	Ponded	**80,000**	8,000	**13,000**
CEN-01 (Confirmation)	South of H Street and east of I-5 and Trolley tracks	1	**98,000**	**45,529**	670
CEN-01-01	Between 536 and 542 Jefferson Avenue	1	**1,990,000**	**28,471**	**12,997**

Notes:
-**Red** values were at or above the measured constituent's action level.
-Fecal coliform counts for confirmation and follow-up visits derived from *E. coli* counts. See Table 3-3 for more information.

FIGURE 8-1
SITE CEN-01 BACTERIA UPSTREAM INVESTIGATION MAP

Base Data Sources: USGS, SanGIS, SANDAG

Site CEN-08

PHOTO 8-4: Ponded water in the car wash area upstream from Site CEN-08.

Site CEN-08 is a catch basin located approximately 100 feet west of Mariana Parkway, just north of G Street. On the initial visit to the site a sample was collected from the clear ponded water. Surfactant levels were measured at 1.25 mg/L, above the 1.00 mg/L action level. BF Goodrich, a large industrial facility located adjacent to and upstream of the site, was investigated as a possible source of the surfactants on the same day the sample was taken, but no evidence of contribution was found there.

The following day a confirmation visit to the site indicated that the surfactant level had diminished slightly to 1.0 mg/L, but this value is still at the action level. The field crew investigated upstream of the site and found a designated car wash area in the residential community of Cabrillo Mobile Lodge, at 731 G Street. The wash area is located directly adjacent to an open concrete channel and appears to drain directly into it. A sample was collected from the ponded water at this washing location and yielded surfactant measurements above the upper detection limit of the 3 mg/L

MBAS test kit. Washing activities at this location are likely the main source of the elevated surfactant levels measured downstream at Site CEN-08.

Site JUD-01

Site JUD-01 is an open concrete channel located south of the Fresno Avenue and Main Street intersection. Upon arrival at the site, a substantial amount of litter was observed. The site had an active flow of approximately 1 gpm and samples were taken for both field and laboratory analyses. The water was noted to be yellow in color, and a thin oil sheen was noted on the surface. Field screening tests indicated that all constituents were below their respective action levels. Laboratory results indicated a total coliform count of 80,000 MPN/100 mL, above the action level of 50,000 MPN/mL. Upstream of the site, more significant levels of litter were observed in the channel.

Food waste and packaging, clothing, containers of automotive fluids and detergents, animal feces, and evidence of human inhabitation were all present (Photo 8-5). City officials were notified of the conditions within the channel and shortly thereafter the field crew noted that the litter and debris had been removed from the channel.

Photo 8-5: Dumping in channel upstream of JUD-01

During the follow-up investigation, total coliforms were measured at 19,000 MPN/100 mL. Two additional samples were taken upstream of the site to identify the source of bacteria. Water was ponded at the location at which the highest bacteria count was noted, but some trash and debris were noted in the storm drain system upstream of that location (JUD-01-01). Results from the upstream samples and visual observations indicate that the main sources of bacteria to the site are trash and debris in the main channel upstream of the site and urban runoff affected by trash from the area bounded by the channel just south of Orange Avenue, 4th Avenue, Palomar Street, and 3rd Avenue. A table and map summarizing the investigations is presented in Table 8-2 and Figure 8-2.

TABLE 8-2
SITE JUD-01 TOTAL COLIFORMS UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)
JUD-01 (Routine Visit)	South of intersection of Fresno Avenue and Main Street	1	**80,000**	2,300
JUD-01 (Confirmation)	South of intersection of Fresno Avenue and Main Street	1	**19,900**	115
JUD-01-01	North side of concrete channel in back of Orange Glen Apt. Complex south of Orange Avenue and 3rd Avenue	Ponded	**980,000**	**28,471**
JUD-01-02	Under 3rd Avenue just south of 3rd Avenue and Orange Avenue intersection	Ponded	912	nd

Notes:
Red values were at or above the measured constituent's action level
nd = not detected
Fecal coliform counts for confirmation and follow-up visits derived from *E. coli* counts. See Table 3-3 for more information.

FIGURE 8-2
SITE JUD-01 BACTERIA UPSTREAM INVESTIGATION MAP

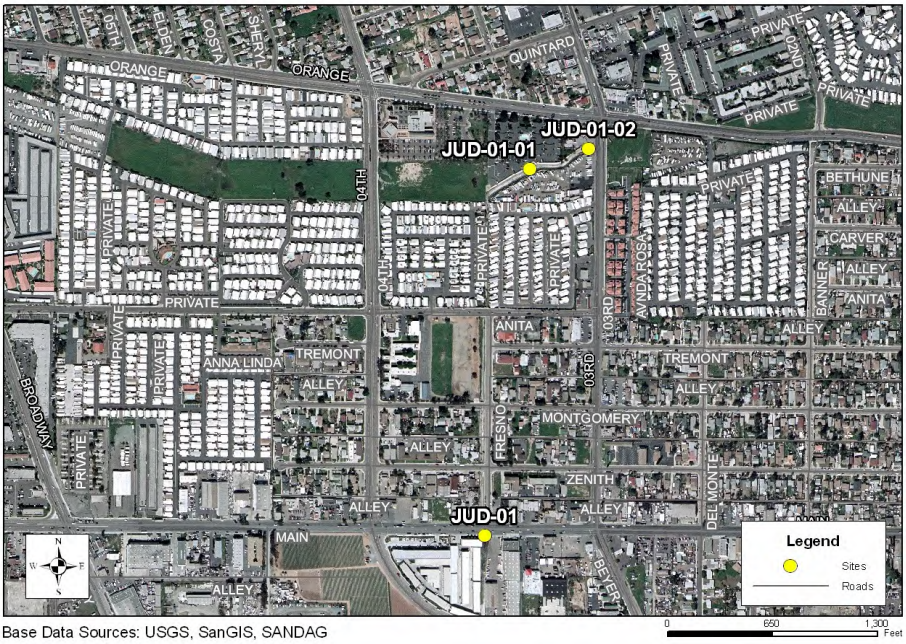

Base Data Sources: USGS, SanGIS, SANDAG

Site JUD-02

Site JUD-02 is an outlet southwest of the intersection of Main Street and Reed Court. During the initial visit to the site water was flowing at approximately 1 gpm and appeared to be slightly obstructed by the dense vegetation in front of the outlet. The sample collected for both field and lab analyses had a musty odor and yellow color. Field screening analyses indicated no action level exceedances.

Historically Site JUD-02 has elevated bacteria counts, and initial lab results indicated both total and fecal coliforms to be in exceedance of their action levels. Total coliforms were measured at 500,000 MPN/100 mL and fecal coliforms at 24,000 MPN/100 mL. At the confirmation visit, the total coliform count had dropped to approximately one-fifth of its initial value, and the fecal coliform count had fallen below the action level, indicating that the main source of the initially elevated counts was a transient flow and had been flushed from the site. Upstream of the site, no ponded or flowing water could be identified in order to collect additional samples. However, a significant amount of decaying vegetation and litter was observed in a storm drain inlet on Connelly Circle, an upstream location that has also recorded historically high bacteria counts. It is likely that contaminated irrigation runoff from this residential area transports bacteria downstream to the site. However, the slow-moving water and excessive vegetation at the site itself are likely the main source of the elevated total coliform count measured at the site during the follow-up investigation.

TABLE 8-3
SITE JUD-02 TOTAL COLIFORMS UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)
JUD-02 (Routine Visit)	South of intersection of Fresno Avenue and Main Street	1	**500,000**	**24,000**
JUD-02 (Confirmation)	South of intersection of Fresno Avenue and Main Street	1	**105,000**	324

Notes:
Red values were at or above the measured constituent's action level.
Fecal coliform counts for confirmation and follow-up visits derived from *E. coli* counts. See Table 3-3 for more information.

Site LAK-01

Site LAK-01 is an outlet northeast of the intersection of Proctor Valley Road and Agua Vista Drive, in the canyon. During the initial site visit minimal amounts of trash were noted and the 10 gpm flow was colorless and odorless. The nitrate-nitrogen concentration was measured at 18.31 mg/L, above the action level. A return visit to the site, the following day, yielded approximately the same elevated nitrate concentration. An upstream investigation was conducted; two samples were taken from the risers in the detention basin upstream of the site. Though both samples yielded nitrate concentrations below the action level, concentration levels increased as the flow moved downstream.

This area has been recently undergone substantial residential development. It is likely that the irrigation and fertilization of the associated landscaping have enriched the runoff with nitrates.

PHOTOS 8-6 AND 8-7: Site LAK-01

Site OVR-07

Site OVR-07 is a corrugated metal pipe (CMP) outfall located in a City easement at the base of a 30-foot slope, just east of the property at 1879 Nirvana Avenue. A sample taken from the 1 gpm flow was clear, colorless, odorless, and yielded high nitrate and conductivity values. The nitrate concentration was measured at 21.92 mg/L, and conductivity at 13.53 mS/cm. During the follow-up visit the nitrate concentration was measured at 25.99 mg/L and the conductivity at 13.15 mS/cm. This site has recorded consistently high nitrate concentrations, as well as conductivity values. Previous investigations have identified groundwater infiltration along the main pipe, between Energy Way and 1869 Nirvana Avenue (F.J. Willert Contracting Company, Inc), as the source of both high nitrate levels and conductivity.

Upstream a sample was taken from the manhole inside of the property at 1869 Nirvana Avenue, yielding high nitrate concentrations, consistent with those measured at the site. Lines upstream this location were checked and found to be dry, and it was therefore concluded that the groundwater infiltration that had been previously observed was the source of the elevated nitrate and conductivity measurements at the site.

Site POG-02

Site POG-02 is a manhole located on the north side of the intersection of Eastlake Parkway and Trinidad Cove, near the entrance to the Antigua housing tract. During the initial visit to the site, samples were taken from the 3 gpm flow for both field and laboratory analyses. Field screening analysis yielded glycol concentrations at 1.2 mg/L, above the action level of 1.0 mg/L. During the follow-up visit the next day, glycol was not detected at the site. It was concluded that the source of the initially high glycol concentration was transient, and an upstream investigation for its source was not necessary.

Historically this site has recorded high levels of bacteria, and laboratory results indicated elevated bacteria levels similar to past results. Samples taken at the site during the bacteria follow-up investigation indicated that the fecal coliform count had fallen below the action level; however, total coliforms and *Enterococcus* were still measured in exceedance of their action levels. The field crew traced the flow upstream, north on Eastlake Drive to Clubhouse Drive, then east to the intersection of Clubhouse Drive and Greensview Drive. Here lines converged from the north, south, and east. Samples were taken from each line and lab results indicated that the southern line was the main source of the elevated bacteria levels. Historically both the southern and eastern lines have been identified as the main source of bacteria to the site. The majority of surface runoff from the Eastlake Country Club

drains to these lines. It appears likely that irrigation runoff is transporting bacteria, from the fecal material left behind by the water foul that inhabit the area, downstream to site POG-02. A summary of the upstream investigation is presented in the map and table that follow. TABLE 8-4

SITE POG-02 BACTERIA UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
POG-02 (Routine Visit)	Intersection of Eastlake Parkway and Trinidad Cove, near entrance to housing tract "Antigua"	3	**170,000**	**90,000**	**50,000**
POG-02 (Confirmation)	Intersection of Eastlake Parkway and Trinidad Cove, near entrance to housing tract "Antigua"	2	**98,000**	2,682	**24,196**
POG-02-E (Follow-Up Visit)	Intersection of Clubhouse Drive and N/S Greensview Drive at northwest corner	1	13,000	36	134
POG-02-N	Intersection of Clubhouse Drive and N/S Greensview Drive at northwest corner	1	19,900	422	363
POG-02-S	Intersection of Clubhouse Drive and N/S Greensview Drive at northwest corner	1	**141,900**	279	**10,462**

Note:
Red values were at or above the measured constituent's action level
Fecal coliform counts for confirmation and follow-up visits derived from *E. coli* counts. See Table 3-3 for more information.

FIGURE 8-3
SITE POG-02 BACTERIA UPSTREAM INVESTIGATION MAP

Base Data Sources: USGS, SanGIS, SANDAG

Site PRD-02

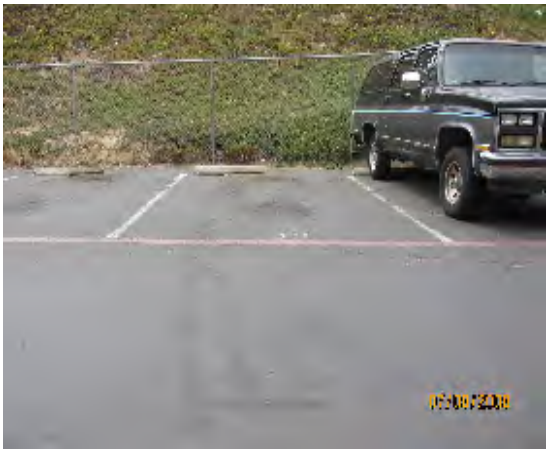

PHOTO 8-8: Auto fluid stains upstream of PRD-02.

Site PRD-02 is an outlet located just west of Aires Court and approximately 200 feet south of Rienstra Street. The site is located in an open grassy area and is within a SDG&E easement. During the initial visit a thin sheen of dust was noted on the water surface, flow was measured to be approximately 2 gpm, and the sampled water exhibited a yellow color. Samples were collected for both field and laboratory analyses. All parameters tested for in the lab analysis were measured below their action levels. Field screening tests yielded a glycol concentration of 10 mg/L, above the action level of 1.0 mg/L. Immediately following this result, the area directly upstream of the site was surveyed for possible sources. Numerous automotive fluid stains were found throughout the residential community located at 1450 Melrose Avenue (Photo 8-8).

Upon returning to the site for confirmation of the initial results, conditions at the site appeared the same as the previous day, except that the dust sheen on the water surface was no longer observed. The glycol concentration was below the action level at 0.4 mg/L. A return visit to the residential complex was made and irrigation runoff was observed there. This supported the conclusion that the initially elevated glycol concentration was due to recent automotive fluid spills in the residential complex immediately upstream and was

carried by irrigation runoff. Since the initial visit most of the automotive fluid had been washed downstream, thus cleaner runoff flowed through the site at the confirmation visit.

Site RCC-03

Site RCC-03 is a 90-inch diameter CMP outfall located downstream of Discovery Park and west of Rancho Del Rey Parkway, in the Rice Canyon open space hiking trail. Upon arrival to the site, the field crew noted a thick layer of aquatic plant material on the surface of the water just below the outfall, and a snake was seen swimming through it. Samples were collected from the approximately 20 gpm flow for both field and laboratory analyses. The water was noted to be clear, colorless, and odorless. Initial field screening results yielded an elevated nitrate concentration of 17.18 mg/L, while lab results indicated total coliform counts were in exceedance of 110,000 MPN/100 mL.

A follow-up visit to the site for nitrate testing indicated that the concentration was still in exceedance of the action level. Measurements of the nitrate concentration were shown to increase as the flow was traced upstream to RCC-04. Previous investigations by the City of Chula Vista have shown nitrate-laden groundwater infiltrating the line upstream of Site RCC-04. Infiltration of nitrate enriched groundwater upstream of the site was concluded to be the main source of the elevated nitrate concentration measured at site RCC-03.

During the follow-up visit for the bacteria investigation total coliforms were counted at 112,000 MPN/100 mL. An upstream investigation was conducted to locate the source of bacteria. A sample was taken immediately upstream from Site RCC-03-01, a manhole at the intersection of Cima Del Rey and Rancho Del Rey Parkway. This sample showed an elevated total coliform count of 141,000 MPN/100 mL. Upstream of this site, storm drain inlets and street gutters were observed to contain moderate amounts of food wrappers, yard clippings, over irrigation and car washing evidence. This combination of materials and activities creates an environment for bacterial growth. As this flow constitutes only a minor portion of the flow to Site RCC-03, it should be considered a contributing factor, but not the main source of elevated bacteria levels at the site.

Further upstream another sample was taken from RCC-03-02. (Site RCC-04 will be referred to as RCC-03-02 here in order to identify it as part of the RCC-03 upstream investigation.) An approximate 8 gpm flow was observed here and the total coliform count was 54,800 MPN/100 mL. Wildlife waste and the substantial amount of food and beverage containers observed at this site are likely sources of bacteria in this open section of the creek. The contribution of bacteria from upstream of RCC-03 does not appear to be the main source of bacteria to the site. It is likely that conditions at the site itself are responsible for the elevated levels of total coliforms.

TABLE 8-5

SITE RCC-03 TOTAL COLIFORMS UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)
RCC-03 (Routine Visit)	Downstream of Discovery Park, west Rancho Del Rey Parkway in Rice Canyon open space hiking trail	20	**110,000**	1,400

Site ID	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)
RCC-03 (Confirmation)	Downstream of Discovery Park, west Rancho Del Rey Parkway in Rice Canyon open space hiking trail	15	**112,000**	3,624
RCC-03-01	Intersection of Cima Del Rey and Rancho Del Rey Parkway	2	**141,000**	86
RCC-03-02	East H Street and Otay Lakes Road intersection, west side of shopping center, in canyon	8	**54,800**	24

Notes:

Red values were at or above the measured constituent's action level

Fecal coliform counts for confirmation and follow-up visits derived from *E. coli* counts. See Table 3-3 for more information.

FIGURE 8-4
SITE RCC-03 TOTAL COLIFORMS UPSTREAM INVESTIGATION

Site RCC-04

Site RCC-04 is a 60-inch diameter RCP outfall that discharges into an open natural creek, Rice Creek. It is located west of the shopping center at the East H Street and Otay Lakes Road intersection, down in the canyon. During the initial visit to the site a flow of approximately 8 gpm was measured, and the water was noted to be clear, colorless, and

odorless. Field screening tests yielded nitrate concentrations in exceedance of the action level. A follow-up visit to the site produced similar measurements. As mentioned earlier, regarding elevated nitrate measurements at RCC-03, previous investigations by the City of Chula Vista have revealed an infiltration of nitrate laden groundwater upstream of this site. This infiltration appears to be the main source of elevated nitrate levels recorded at the site.

PHOTO 8-9: Coolant stains in parking area upstream from SCR-01

Site SCR-01

Site SCR-01 is an outlet located northeast of the Otay Lakes Road and Hunte Parkway intersection, approximately 300 feet west of Woods Drive. Vegetation around this site was quite dense and though the flow path was not obstructed by vegetation the site was heavily shaded. A strong sewage-like odor was evident before even reaching the outfall. Both field and laboratory samples were collected from the approximately 2 gpm flow which exhibited the same sewage-like odor as well as a yellow color. It is believed that the strong smell is due to decomposition of organic materials and possibly activities by transients.

Initial field screening tests yielded a glycol concentration of 2.0 mg/L, in exceedance of the 1.0 mg/L action level. An immediate upstream investigation revealed automotive fluid spills in the parking area of the Eastlake Greens residential community, along Torrey Pines Road. During the return visit the following day the glycol concentration was measured at 0.5 mg/L, below the action level. Frequently, an initially high concentration of glycol is measured, followed by a measurement which is below the action level. This often occurs due to automotive fluid spills being rinsed from street and parking surfaces by irrigation runoff, as appeared to be the case at this site (Photo 8-9).

Lab results from the initial visit indicated that both total coliforms and *Enterococcus* were measured in exceedance of their action level. A total coliform count of 130,000 MPN/100 mL was measured, and 30,000 MPN/100 mL for *Enterococcus*. Elevated bacteria levels have been recorded at this site four of the last five years. Similarly to past investigations the field crew traced the primary source of the flow upstream to the Eastlake Greens residential community, and a sample was taken from a manhole at the La Costa Avenue and Torrey Pines Road intersection. The count for total coliforms was measured at 1,050,000 MPN/100 mL, significantly higher than at the site. The lab results also indicated elevated levels of *Enterococcus*. Storm drain inlets and street gutters in this area were noted to contain yard clippings, excess irrigation was observed in some street gutters, and people were observed walking their dogs. This area appears to be the main source of bacteria to Site SCR-01. It has recorded consistently high bacteria counts and has also historically been the primary source of flow to the site. A table and map summarizing the investigations of the site are presented below.

TABLE 8-6
SITE SCR -01 BACTERIA UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
SCR-01 (Routine Visit)	North of Otay Lakes Road and 300', west of private Otay Ranch Road, east of Hunte Parkway	2	**130,000**	5,000	**30,000**
SCR-01 (Confirmation)	North of Otay Lakes Road and 300', west of private Otay Ranch Road, east of Hunte Parkway	1	**579,000**	12,353	**14,136**
SCR-01-01	Intersection of La Costa Avenue and Torrey Pines Road	1	**1,050,000**	**40,588**	**42,250**

Note:
-**Red** values were at or above the measured constituent's action level
-Fecal coliform counts for confirmation and follow-up visits derived from *E. coli* counts. See Table 3-3 for more information.

FIGURE 8-5
SITE SCR -01 BACTERIA UPSTREAM INVESTIGATION

Base Data Sources: USGS, SanGIS, SANDAG

Site SCR-02

Site SCR-02 is located northeast of the Hunte Parkway and Otay Lakes road intersection. It is a section of Salt Creek, just before the natural creek passes underneath Otay Lakes Road. On the initial visit to the site the flow was measured at approximately 125 gpm, vegetation was excessive, the water was clear and colorless, and nitrate levels were measured at 16.27 mg/L. By the following day vegetation had been cleared from the site and the flow had increased slightly. The nitrate concentration had also risen slightly to 21.92 mg/L (Photos 8-10 and 8-11).

PHOTOS 8-10 AND 8-11: Site SCR-02 before and after vegetation was cleared.

A sample further upstream, SCR-02-1, yielded an even higher nitrate concentration of 44.75 mg/L. This location is at the base of a steep slope and it is likely that nitrate-laden groundwater, enriched from the landscaping activities associated with the recent residential development, is seeping into the creek in at this low point.

Site SCR-03

Site SCR-03 is part of Salt Creek, and is located approximately 200 feet east of Hunte Parkway, where it passes under Olympic Parkway. During the initial visit to the site the water was noted to have a yellow color, the flow was measured at approximately 112 gpm, and the nitrate concentration was measured at 11.16 mg/L. Conditions appeared similar during the follow up visit, though the nitrate concentration had increased to 19.66 mg/L. There are several new residential developments in this area, and fertilization of the associated landscaping is likely the main source of the elevated nitrates at site SCR-03.

Site SCR-05

Site SCR-05 is an outlet located 200 feet south of Hunte Parkway, across from Exploration Falls Drive, in the canyon. During the initial visit a sample was collected from the 2 gpm flow, the water exhibited a yellow color, and elevated levels of nitrates were detected (12.20 mg/L). A follow up visit was made and conditions at the site appeared similar to the previous visit, though nitrate levels had risen to 16.95 mg/L.

An upstream investigation was conducted, and the primary source of the flow was traced to the intersection of Trellis Street and Exploration Falls Drive. A sample was collected from the manhole at this intersection and a nitrate concentration of 17.85 mg/L was measured, nearly the same as the site. Upstream of the sample location the field crew observed irrigation of newly installed landscaping at the Winding Oaks Recreation Center (see photo 8-12). The sprinklers had turned on just as the field crew reached the area. Although no runoff was observed reaching the storm drain, over irrigation and fertilization of the landscaping in the newly developed residential areas upstream of Site SCR-05 is likely the main source of the elevated nitrate levels detected.

PHOTO 8-12: Irrigation of new landscaping in front of Winding Oaks Recreation Center.

Site SUN-02

Site SUN-02 is an outlet that drains into a detention basin north of East H Street and approximately 50 ft west of SR-125 (photos 8-13 and 8-14). There are two outfalls at this location; site SUN-02 is the easternmost of the two and site SUN-05 is the westernmost. During the initial visit to the site, the field crew collected samples for both field and laboratory analyses. Results indicated exceedances for both nitrate-nitrogen and total coliforms.

PHOTOS 8-13 AND 8-14: Site SUN-02

The initial nitrate concentration measured at 22.37 mg/L. Upon returning to the site for a follow-up visit, the field crew measured the nitrate at 17.40 mg/L. An upstream investigation was conducted, and the only line found to be contributing flow to the site was along Mount Miguel Road. The flow was estimated to be less than 2 gpm, less than half of the 5 gpm flow observed at the site. A water sample was collected from a manhole just south of the intersection of Mount Miguel Road and East H Street/Proctor Valley Road. The nitrate concentration of this sample was measured below the action level, at 7.23 mg/L. Elevated

nitrate levels and the higher flow rate were reconfirmed at the primary site and seepage of nitrate laden groundwater was concluded to be the primary source of elevated nitrate levels at the site. It appears likely that groundwater seepage is occurring along the landscaped hillside on the south side of East H Street/Proctor Valley Road (see discussion below regarding SUN-05 for further indications).

In addition, laboratory results from the initial visit yielded a count for total coliforms at the action level of 50,000 MPN/ 100 mL. Follow-up and upstream samples for bacteria showed that total coliforms had fallen well below the action level, indicating that the initially elevated count was from a transient source and had been flushed from the system.

TABLE 8-7
SITE SUN-02 TOTAL COLIFORMS UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms * (MPN/100 mL)
SUN-02 (Routine Visit)	North of East H Street and 50' west of SR-125, at base of slope, east of SUN-05	5	**50,000**	5,000
SUN-02 (Confirmation)	North of East H Street and 50' west of SR-125, at base of slope, east of SUN-05	5	18,600	61
SUN-02-01	Manhole in center lane of south bound Mount Miguel Road just south of intersection East H Street and Proctos Valley Road	2	29,100	268

Red values were at or above the measured constituent's action level

FIGURE 8-6
SITE SUN-02 TOTAL COLIFORMS UPSTREAM INVESTIGATION

Site SUN-05

Site Sun-05 is an outlet that drains into a detention basin north of East H Street and approximately 50 ft west of SR-125. Site SUN-05 is the westernmost of the two outfalls at this location; SUN-02 (discussed above) is the other. During the initial visit samples were collected for both field and laboratory analyses. Initial field screening results indicated an elevated nitrate concentration of 18.08 mg/L, while laboratory analyses indicated none of the tested parameters were in exceedance of action levels.

The follow-up visit and upstream investigation into the source of nitrates at Site SUN-05 yielded very similar results to the investigation for nitrates at Site SUN-02. Elevated nitrate levels were confirmed at the site during the follow up visit, and a sample from the only flow detected upstream yielded a concentration below the action level (6.10 mg/L). Between the upstream site and the primary site, the storm drain pipe appears to pass through the landscaped hillside along the south side of East H Street/Proctor Valley Road. As at Site SUN-02, infiltration of nitrate-laden groundwater appears to be the most likely source of elevated nitrate levels recorded at the site.

Site SUN-06

Site SUN-06 is an outlet located southwest of the intersection of Proctor Valley and San Miguel Ranch Roads. During the initial visit to the site field screening results indicated an elevated nitrate concentration of 12.88 mg/L. The follow up visit to the site confirmed an elevated nitrate concentration, and an upstream investigation was conducted.

Directly upstream from the outlet, on the eastern side of Proctor Valley Rd. is a detention basin. Inside of the detention basin there are two outfalls, one from the northeast and one from the southeast. The southeastern line was observed to have ponded water but no flow appeared to be reaching the drainage pipe that leads to Site SUN-06. A flow of

approximately 2 gpm was observed discharging from the northern line and a sample was collected. This sample yielded a nitrate measurement of 11.53 mg/L.

During the upstream investigation the field crew had the opportunity to speak with a landscaper who was maintaining the common area of a new upstream community. He indicated that a 15-15-27 (N-P-K) fertilizer is commonly used. Landscaping activities (over irrigation and fertilization) associated with the newly developed residential areas upstream of Site SUN-06 are likely the main source of the elevated nitrate concentrations.

Site SUN-07

Site SUN-07 is an outlet which drains into a detention basin located at the eastern end of Jonel Way, and west of SR-125. Field screening results at the initial visit to the site yielded a measurement of 25.54 mg/L for nitrate nitrogen. A follow up visit confirmed an elevated nitrate concentration and an upstream investigation was conducted. No flowing or ponded water was located upstream; however, both newly developed residential areas and ongoing construction were observed. The most likely source of the elevated nitrate concentration measured at Site SUN-07 is fertilization and over-irrigation of the new landscaping associated with this residential development.

Site SVS-01

Site SVS-01 is a box culvert located north of the rear parking lot at the Ramada Inn, north of the Bonita Road and Bonita Glenn Drive intersection. During the initial visit to the site, samples were collected for both field and laboratory analyses. The ponded water at this heavily shaded site exhibited a yellow color, had no odor, and was observed to contain snails. Field screening analyses indicated that all tested parameters measured below their action level. Laboratory analyses indicated an elevated count for *Enterococcus* of 17,000 MPN/ 100 mL. By the follow up visit the *Enterococcus* count had diminished to 146 MPN/ 100 mL, well below the action level, indicating that the source of the bacteria was likely transient and had been flushed from the system.

Site TCC-02, TCC-03, and TCC-05

Site TCC-03 is a concrete outlet eight feet in diameter discharging into an open area on the north side of Otay Lakes Road, approximately 500 feet west of Eastlake Parkway (see Appendix A for photo). Site TCC-03 has historically recorded elevated nitrate concentrations. Initial and follow up visits this year confirmed the elevated nitrate levels which had been recorded in the past. Site TCC-03 is at the upstream end of Telegraph Canyon Channel, and the elevated nitrate concentration observed here is transported downstream. All sites sampled downstream of TCC-03 measured nitrate concentrations of 6.0 mg/L or higher.

An upstream investigation was conducted in order to identify the source of nitrates to Site TCC-03 and it appears likely that seepage of nitrate laden groundwater, enriched from landscaping activities at the Eastlake Country Club and Golf Course, is the main source of nitrate pollution the Telegraph Canyon Channel. A table summarizing the upstream investigation of TCC-03 is presented below.

TABLE 8-8
SITE TCC-03 NITRATE UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Nitrate mg/L NO_3-N
TCC-03 (Routine Visit)	Telegraph Canyon Channel 500' west of East Lake Parkway., 100' north of Otay Lakes Road: Across from Mobil Gas Station	85	**32.50**
TCC-03 (Confirmation)	Telegraph Canyon Channel 500' west of East Lake Parkway., 100' north of Otay Lakes Road: Across from Mobil Gas Station	75	**32.10**
TCC-03-01 (Follow-Up)	South side of Otay Lakes Road between Mobil Gas Station and East Lake Parkway	15	**46.30**
TCC-03-02 (Follow-Up)	North side of intersection of Otay Lakes Road and East Lake Parkway	60	**26.40**
TCC-03-03 (Follow-Up)	Behind Vons in Eastlake Village Center	1	**65.09**
TCC-03-04 (Follow-Up)	In grass south east of intersection of Greensgate Drive and Greensview Drive	3	**52.21**
TCC-03-05 (Follow-Up)	On east sidewalk approximately 150 feet north of Fenton Street and Eastlake Parkway intersection	20	**34.80**

Site TCC-05 is a natural creek located northeast of the Telegraph Canyon Road and Heritage/Paseo Ranchero Road intersection. It is the first site located downstream, approximately three miles, of Site TCC-03. During the initial visit to the site the flow was observed to be approximately 234 gpm and the nitrate concentration was measured at 16.50 mg/L. During the follow up visit the conditions appeared similar and an elevated nitrate concentration was confirmed at 23.28 mg/L. The main source of the elevated nitrate concentration measured at this site is likely the transport of nitrates from Site TCC-03. The flow at this site is significantly higher than at Site TCC-03, the addition of water appears to dilute the concentration of nitrate transported from upstream.

Site TCC-02 is a concrete channel located west of the Telegraph Canyon Road and Hilltop Drive intersection, in Hilltop Park (see Appendix A for photo). Initial and follow up nitrate concentrations were measured at 12.43 mg/L and 11.75 mg/L, respectively. In addition to the nitrate contributed from upstream Site TCC-03, it is likely that fertilization and irrigation of the surrounding park grounds contribute to the elevated nitrate level measured here.

Site TCS

Site TCS is a catch basin located just north of the Moss Street and the trolley tracks intersection, in the parking area west of 694 Moss Street. During the initial visit to the site water was found to be ponded, the site was significantly impacted by trash, and the general area had a sewage like odor, though the sample itself did not (Photo 8-10). The samples exhibited a yellow color and a thin sheen of grease was noted on the water' surface.

PHOTO 8-10: **Trash and debris at Site TCS**.

Field screening results yielded an ammonia concentration of 5.0 mg/L. During the follow-up visit the next day, the site was dry and no ponded or flowing water could be located upstream in order to conduct further testing.

This site has historically recorded elevated ammonia concentrations. A previous investigation by the City of Chula Vista yielded details about the configuration of the site and its connection with the main storm drain. On the north wall of the catch basin is a door that opens when the hydraulic pressure of the water in the catch basin surpasses a specific level. Water is then released through this door and merges with the Telegraph Canyon Channel downstream. This door was installed to prevent water from Telegraph Canyon Channel from backing up into this line during periods of high flow. Grates at the bottom of the door that were designed to drain water out of this catch basin were clogged in the past. The substantial amount of trash in the site has likely clogged the drains again, allowing the water to pond. The shallow ponded water likely evaporates rapidly during the day, concentrating the ammonia level at the site.

Site WOL-02

Site WOL-02 is an outlet located along the west side of La Media Boulevard, in the canyon, across from the detention basin. During the first visit to the site, a flow of approximately 1 gpm was observed, and nitrate levels were measured to be 11.53 mg/L, above the action level. All other parameters were measured below their respective action levels.

During the follow-up visit the next day, the flow was approximately the same, and seepage water was beneath the outfall, at the bottom of the structure. A sample taken from this area yielded a nitrate concentration of 27.35 mg/L, significantly higher than the initial results. Upstream of the site, on the east side of La Media Boulevard, there is a detention basin with four outfalls draining into it. Three of these lines were found to be dry, while one, the northern most line, had a flow of approximately 1 gpm. Nitrate levels here were measured at 32.77 mg/L. Several manholes upstream of this outfall, north along La Media Boulevard, were opened and the inlet pipe was dry. Then the manhole in the center divide, at the bottom of the slope, was opened and revealed seepage water flowing from the base of the concrete wall.

The field crew concluded that the elevated nitrate levels at Site WOL-02 are likely due to the irrigation runoff in the conveyance system. It should also be noted that as the area surrounding this site has been developed in the last several years, a significant amount of

new landscaping and irrigation have been installed. It is likely that over irrigation and fertilization of these landscaped areas are a main source of nitrogen to the groundwater in this area.

9 SUMMARY AND RECOMMENDATIONS

9.1 Summary

9.1.1 Summary of Field Screening and Laboratory Analysis Data

58 primary monitoring sites were visited during the 2008 Dry Weather Monitoring Program. Because Site BAY-01 was dry, Site SWR-03-E was selected as a replacement; 42 sites had measurable flow and 15 sites were ponded. A total of 15 sites were sampled for laboratory analyses. A summary of action level exceedances is presented in Table 9-1.

TABLE 9-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (57 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedances**	**Site(s) Exceeding Action Level**
pH	0	0	---
Conductivity	0	0	---
Turbidity	0	0	---
Surfactants	2	4	CEN-01, CEN-08
Ammonia-N	4	7	CEN-01, TCC-04, TCC-05, TCS
Nitrate-N	16	28	BAY-03, LAK-01, OVR-07, RCC-03, RCC-04, SCR-02, SCR-03, SCR-05, SUN-02, SUN-05, SUN-06, SUN-07, TCC-02, TCC-03, TCC-05, WOL-02
Orthophosphate-P	0	0	---
Glycol	5	9	BAY-02, CEN-01, POG-02, PRD-02, SCR-01
Laboratory Analyses (15 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedances**	**Site(s) Exceeding Action Level**
Oil & Grease	0	0	---
Cadmium	0	0	---
Copper	0	0	---
Lead	0	0	---
Zinc	0	0	---
Diazinon	0	0	---
Chlorpyrifos	0	0	---
Total Coliforms	7	47	CEN-01, JUD-01, JUD-02, POG-02, RCC-03, SCR-01, SUN-02
Fecal Coliforms	2	13	JUD-02, POG-02
Enterococcus	4	27	CEN-01, POG-02, SCR-01, SVS-01

Note: Table data is based on routine visits only. Confirmation, follow-up and dry site visits not included.

9.1.2 Summary of Upstream Investigation Data

Taking into account both field screening and lab sampling, 26 sites showed parameters above one or more corresponding action level. Table 9-2 shows the conclusions based on the results of the follow up investigations for these sites.

TABLE 9-2
SUMMARY OF UPSTREAM INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results / Probable Source
	Field	Laboratory	
BAY-02	Glycol	----	Discarded container of antifreeze
BAY-03	Nitrate-N	----	Unknown
CEN-01	Surfactants, Ammonia-N, Glycol	Total Coliforms, *Enterococcus*	Surfactants, ammonia-N, glycol—transient flow; Bacteria—catch basin with food grease located on Jefferson Avenue
CEN-08	Surfactants	----	Car wash area in Cabrillo Mobile Lodge residential community
JUD-01	----	Total Coliforms	Significant trash at the site itself and from water discharging to the site from the west
JUD-02	----	Total Coliforms, Fecal Coliforms	Decaying vegetation and litter in a storm drain inlet on Connelly Circle, washed down by irrigation runoff. Bacteria are likely amplified in the site's slow-moving water and excessive vegetation.
LAK-01	Nitrate-N	----	Nitrate-enriched flow from landscaping activities
OVR-07	Nitrate-N	----	Nitrate-enriched groundwater seepage, possibly secondary to landscaping
POG-02	Glycol	Total Coliforms, Fecal Coliforms, *Enterococcus*	Glycol—transient flow; Bacteria- significant amounts of water fowl waste transported by irrigation runoff
PRD-02	Glycol	----	Recent automotive fluid spills in the residential complex immediately upstream, carried by irrigation runoff
RCC-03	Nitrate-N	Total Coliforms	Nitrate-N— nitrate-enriched groundwater seepage; Total Coliforms— thick layer of aquatic plant material at site, trash and wildlife waste upstream
RCC-04	Nitrate-N	----	Nitrate-enriched groundwater seepage
SCR-01	Glycol	Total Coliforms, *Enterococcus*	Glycol—automotive fluid spills on nearby streets; Bacteria—combination of lawn clippings, excess irrigation, and possibly pet waste
SCR-02	Nitrate-N	----	Landscaping fertilization in new residential developments
SCR-03	Nitrate-N	----	Landscaping fertilization in new residential developments
SCR-05	Nitrate-N	----	Landscaping fertilization in new residential developments and over-irrigation
SUN-02	Nitrate-N	Total Coliforms	Nitrate-N—Groundwater seepage along landscaped hillside on the south side of East H Street/Proctor Valley Road; Total Coliforms—transient flow

Site	Upstream Investigation Target Constituent(s)		Results / Probable Source
	Field	Laboratory	
SUN-05	Nitrate-N	----	Nitrate-enriched groundwater seepage
SUN-06	Nitrate-N	----	Landscaping fertilization in new residential developments and over-irrigation
SUN-07	Nitrate-N	----	Landscaping fertilization in nearby developments
SVS-01	----	*Enterococcus*	Transient flow
TCC-02	Nitrate-N	----	Nitrate-enriched groundwater seepage; landscaping fertilization of park
TCC-03	Nitrate-N	----	Nitrate-enriched groundwater seepage
TCC-05	Nitrate-N	----	Nitrate-enriched groundwater seepage
TCS	Ammonia-N	----	Storm drain clogged with trash allowing water to pond; shallow ponded water likely evaporates during the day, concentrating ammonia levels
WOL-02	Nitrate-N	----	Nitrate-enriched due to landscape seepage

9.2 Recommendations

Based on the results of the 2008 Dry Weather Monitoring Program for the City of Chula Vista, the following actions are recommended for consideration.

9.2.1 Education

- Provide educational material to the residents of Jefferson Avenue, upstream from Site CEN-01, regarding best management practices (BMPs) for household grease disposal.
- Provide educational material to the residents at Cabrillo Mobile Lodge (731 G Street), upstream from Site CEN-08, regarding vehicle washing BMPs.
- Provide educational material regarding proper disposal of trash and debris to residents and businesses in the area bounded by Palomar Street, 4th Avenue, 3rd Avenue, and the channel just south of Orange Avenue. This area is upstream of site JUD-01.
- Provide educational material to the residents of Connelley Circle, upstream from Site JUD-02, regarding the storm water conveyance system and BMPs for green waste and litter disposal.
- Provide educational material to the residents of Rolling Hills Ranch (particularly in the area of the subdivision bound by Coastal Hills Drive on the west, Proctor Valley Road on the south, and Agua Vista Drive on the east), upstream from LAK-01, regarding BMPs for fertilizer use and minimizing over-irrigation.
- Provide educational material to the Eastlake Greens Country Club and Golf Course, upstream of POG-02, regarding BMP's for minimizing over-irrigation and animal waste clean-up.
- Provide educational material regarding BMP's for automotive fluids to the residents of the complex located upstream of Site PRD-02, where extensive automotive fluid stains were observed. This complex is located south of Reinstra

Court and north of Orange Avenue, on the west side of Melrose Avenue (no name for the community or street could be identified).

- Provide educational material to the residents upstream of Site RCC-03, particularly those residing along Ridgeback Road and Cima Del Rey, regarding BMPs for green waste and vehicle washing.
- Provide educational material regarding the storm water conveyance system and BMPs for litter control to Bonita Vista High School, and to the businesses in the shopping center located adjacent to RCC-04, and upstream of RCC-03.
- Provide educational material to the residents of Torrey Pines Road and La Costa Avenue, upstream of Site SCR-01, regarding BMPs for automotive fluid spills and leaks.
- Provide educational material regarding BMP's for landscape fertilization and minimizing over-irrigation to the residents/HOA's of the sections of the Rolling Hills Ranch and Eastlake Woods communities which contribute runoff to SCR-02. The area of Rolling Hills Ranch is to the east of Hunte Parkway and the area in Eastlake Woods is bound by Stone Gate Street, Hawthorne Creek Drive, and Silver Oak Place.
- Provide educational material regarding BMP's for landscape fertilization and minimization of over-irrigation to the residents of Eastlake Trails and Eastlake Vistas, upstream of SCR-03. The area is bound on the north by Otay Lakes Road, Olympic Parkway in the south, Hunte Parkway in the west, and Lake Crest Drive and Paradise Ridge Way in the east.
- Provide educational material to the residents upstream of Site SCR-05, particularly in the area bound by Eastlake, Hunte, and Olympic Parkways, regarding BMPs fertilizer application and minimization of over-irrigation.
- Provide educational material regarding BMPs for fertilization and minimization of over-irrigation to the residents and HOAs in the portion of the San Miguel Ranch community which appears to be contributing to the elevated nitrate levels measured at Sites SUN-06 and SUN-07.
- Provide educational material regarding irrigation and fertilization BMP's to businesses (including Eastlake Country Club and Golf Course), residents, and/or HOA's in the area upstream of Site TCC-03. One area is in the Eastlake Greens community, bound by Eastlake Parkway, Greensview Drive, and Greensgate Drive. The other area is north of Otay Lakes Road, bound by Eastlake Parkway, Miller Drive, and Fenton Street.
- Provide educational material regarding the storm water conveyance system to the residents living in the motor home and/or the property owners of the lot that Site TCS is located on.
- Provide educational material regarding fertilization and irrigation BMP's to the residents and HOA's of the Otay Ranch community, upstream of WOL-02 (particularly the area along La Media Drive, south of Olympic Parkway, and north of Fleishbein Street).

9.2.2 Inspection and Maintenance

- Establish and maintain a regular schedule for the removal of trash from Sites CEN-03, JUD-01, RCC-04, SWR-04 and TCS. Ensure that physical pollution at these sites is regularly assessed, and implement preventative measures where possible to decrease the introduction of debris to the storm water conveyance system.
- Establish and maintain a regular schedule for inspection of Site TCS to ensure that the drainage grates are clear.
- Routinely clean up trash located inside the concrete channel at and upstream of Site JUD-01.
- Clear vegetation blocking the outlet at Site JUD-02. Vegetation in channel and downstream is impairing proper flow from the site.

9.2.3 Further Investigations

- Conduct further investigation into the source of nitrates measured at Site BAY-03.

FIGURE A
CITY OF CHULA VISTA 2008 DRAINAGE MAP

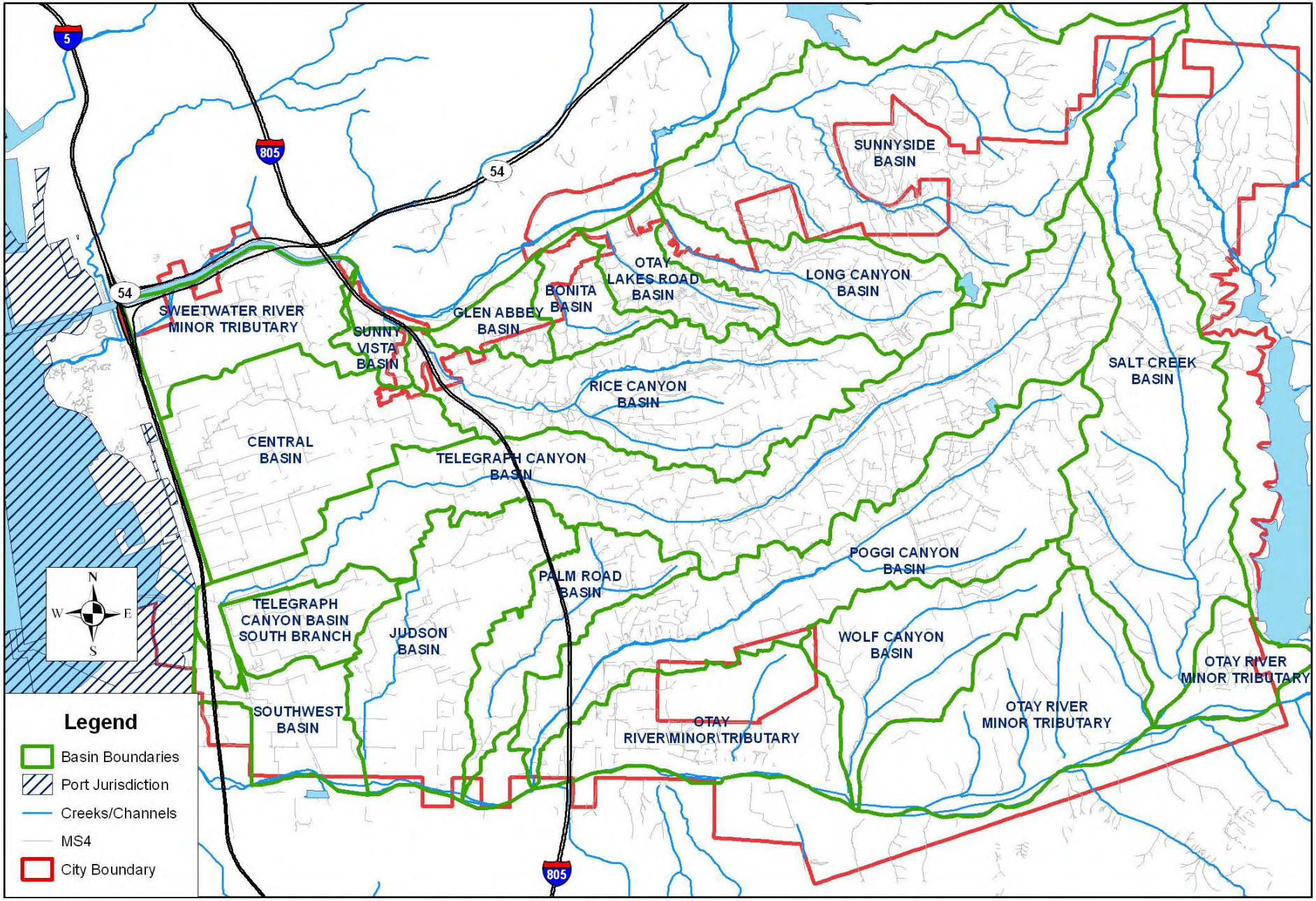

Base Data Sources: City of Chula Vista, SanGIS, SANDAG

0 1 2 4 Miles

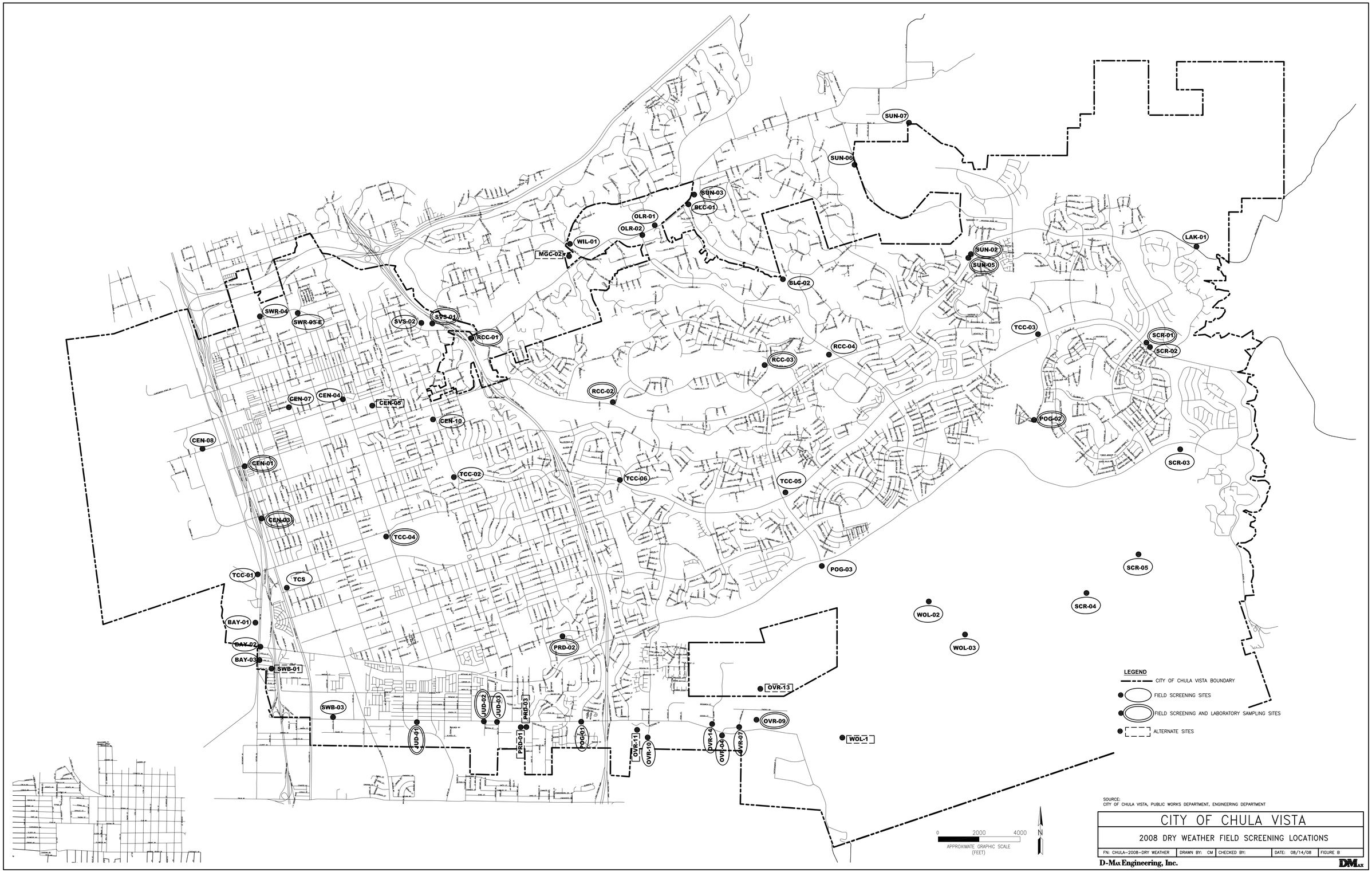
SUN-07
SUN-06
SUN-03
BLC-01
OLR-01
OLR-02
WIL-01
MGC-02
SUN-02
SUN-05
LAK-01
BLC-02
SWR-04
SWR-03-E
SVS-02
SVS-01
RCC-01
TCC-03
SCR-01
SCR-02
RCC-04
RCC-03
RCC-02
CEN-07
CEN-04
CEN-05
CEN-10
POG-02
CEN-08
CEN-01
TCC-02
TCC-06
TCC-05
SCR-03
CEN-03
TCC-04
POG-03
SCR-05
TCC-01
TCS
SCR-04
WOL-02
BAY-01
BAY-02
BAY-03
SWB-01
PRD-02
WOL-03
OVR-13
SWB-03
JUD-02
JUD-03
PRD-03
JUD-01
PRD-01
POG-01
OVR-11
OVR-10
OVR-14
OVR-04
OVR-07
OVR-09
WOL-1
LEGEND
CITY OF CHULA VISTA BOUNDARY
FIELD SCREENING SITES
FIELD SCREENING AND LABORATORY SAMPLING SITES
ALTERNATE SITES
0
2000
4000
APPROXIMATE GRAPHIC SCALE
(FEET)
N
SOURCE:
CITY OF CHULA VISTA, PUBLIC WORKS DEPARTMENT, ENGINEERING DEPARTMENT
CITY OF CHULA VISTA
2008 DRY WEATHER FIELD SCREENING LOCATIONS
FN: CHULA-2008-DRY WEATHER
DRAWN BY: CM
CHECKED BY:
DATE: 08/14/08
FIGURE B
D-Max Engineering, Inc.
DMax

FIGURE C
WATERSHED MAP OF THE CHULA VISTA AREA, BROKEN INTO HYDROLOGIC SUBAREAS

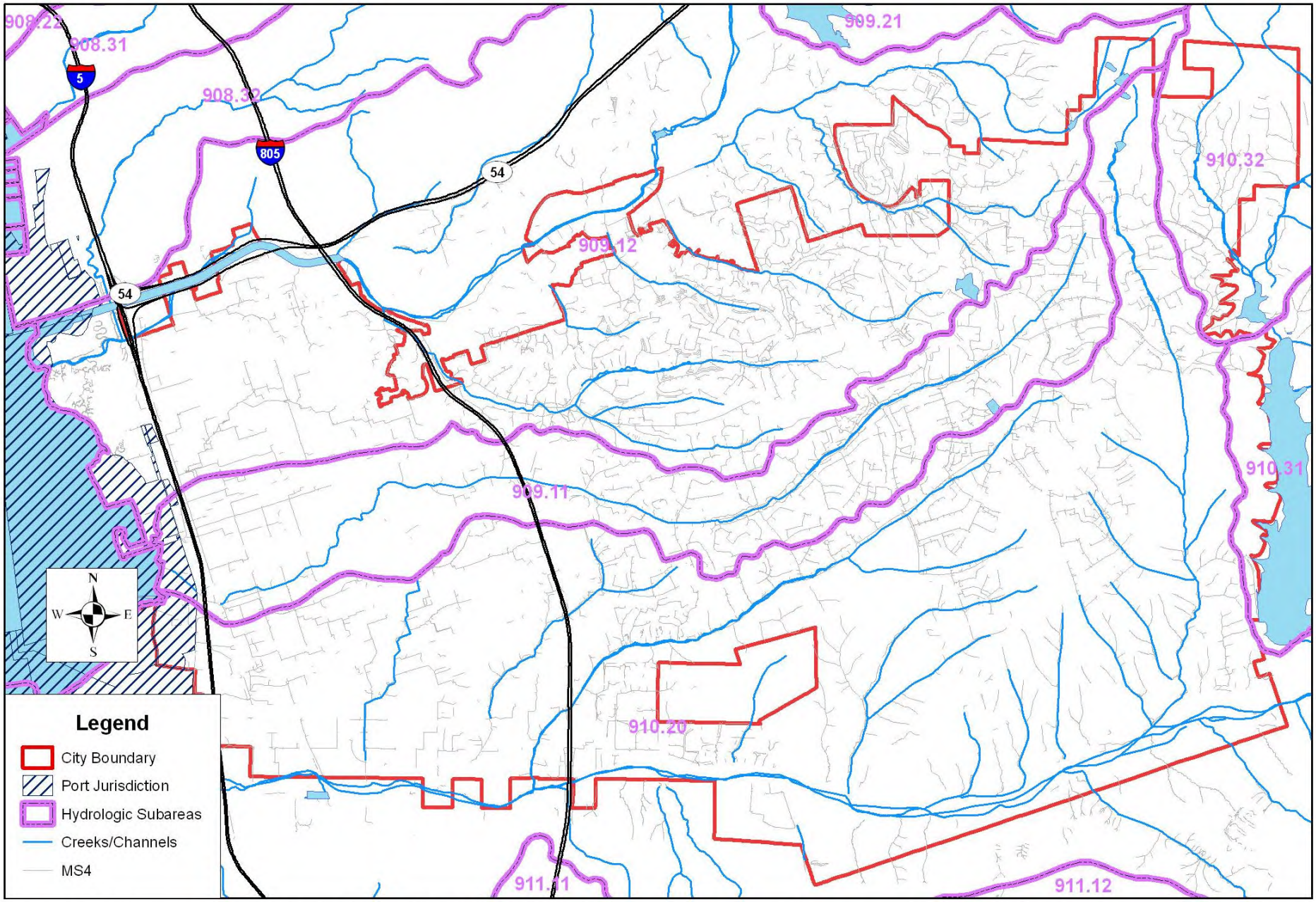

Base Data Sources: City of Chula Vista, SanGIS, SANDAG

0 1 2 4 Miles

Appendix A

Historical Dry Weather Monitoring Data

Appendix A:
Historical Dry Weather Monitoring Data (1994-2007)

Site No.	BAY-01	BAY-02	BAY-02-1	BAY-02-2	BAY-03	BLC-01	BLC-02	CEN-01	CEN-02	CEN-03	CEN-04	CEN-05	CEN-07	CEN-08	CEN-09	CEN-10	GLA-01	GLA-02	JUD-01	JUD-02	JUD-02a	JUD-03	JUD-04	MGC-01	MGC-02	OLR-01	OLR-02	OLR-03	OVR-01	OVR-02	OVR-03	OVR-04	OVR-05	OVR-06	OVR-07	OVR-08	OVR-09	OVR-10	OVR-11	OVR-12	OVR-13
1994 Round One																																									
Phenols(mg/L)	Dry		Dry	Dry	Dry	ND	Dry	ND	Dry	ND	Dry						Dry	Dry	Dry	Dry							ND	Dry	0.4	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Detergents(mg/L)	Dry		Dry	Dry	Dry	0.5	Dry	0.75	Dry	2	Dry						Dry	Dry	Dry	Dry							0.25	Dry	3	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Chlorine (mg/L)	Dry		Dry	Dry	Dry	0.7	Dry	ND	Dry	0.1	Dry						Dry	Dry	Dry	Dry							0.1	Dry	1	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Copper(mg/L)	Dry		Dry	Dry	Dry	ND	Dry	ND	Dry	ND	Dry						Dry	Dry	Dry	Dry							ND	Dry	ND	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Ammonia(mg/L)	Dry		Dry	Dry	Dry	ND	Dry	ND	Dry	0.1	Dry						Dry	Dry	Dry	Dry							ND	Dry	0.2	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Glycol(mg/L)	Dry		Dry	Dry	Dry	0-30	Dry	0-30	Dry	0-30	Dry						Dry	Dry	Dry	Dry							0-30	Dry	0-30	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Zinc(mg/L)	Dry		Dry	Dry	Dry	1.8	Dry	0.15	Dry	0.15	Dry						Dry	Dry	Dry	Dry							0.1	Dry	0.4	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
1994 Round Two																																									
Phenols(mg/L)	Dry		Dry	Dry	Dry	ND	Dry	ND	Dry	Dry	Dry						Dry	Dry	Dry	Dry				Dry	Dry		ND	ND	ND	Dry	Dry	Dry	Dry		Dry	Dry	ND	ND	Dry		
Detergents(mg/L)	Dry		Dry	Dry	Dry	0.5	Dry	0.75	Dry	Dry	Dry						Dry	Dry	Dry	Dry				Dry	Dry		0.25	0.25	>3.0	Dry	Dry	Dry	Dry		Dry	Dry	>3.0	0.4	Dry		
Chlorine (mg/L)	Dry		Dry	Dry	Dry	0.3	Dry	0.1	Dry	Dry	Dry						Dry	Dry	Dry	Dry				Dry	Dry		0.2	0.5	ND	Dry	Dry	Dry	Dry		Dry	Dry	0.2	ND	Dry		
Copper(mg/L)	Dry		Dry	Dry	Dry	ND	Dry	ND	Dry	Dry	Dry						Dry	Dry	Dry	Dry				Dry	Dry		ND	ND	ND	Dry	Dry	Dry	Dry		Dry	Dry	ND	ND	Dry		
Ammonia(mg/L)	Dry		Dry	Dry	Dry	0.1	Dry	0.6	Dry	Dry	Dry						Dry	Dry	Dry	Dry				Dry	Dry		ND	ND	3	Dry	Dry	Dry	Dry		Dry	Dry	0.8	0.2	Dry		
Glycol(mg/L)	Dry		Dry	Dry	Dry	0-30	Dry	0-30	Dry	Dry	Dry						Dry	Dry	Dry	Dry				Dry	Dry		0-30	0-30	0-30	Dry	Dry	Dry	Dry		Dry	Dry	30-100	0-30	Dry		
Zinc(mg/L)	Dry		Dry	Dry	Dry	1.5	Dry	0.2	Dry	Dry	Dry						Dry	Dry	Dry	Dry				Dry	Dry		0.4	0.4	1.25	Dry	Dry	Dry	Dry		Dry	Dry	1.3	0.12	Dry		
1995 Round One																																									
Phenols(mg/L)	Dry		Dry	1	0.2	ND	ND	0.2	Dry	Dry	Dry						Dry	Dry	Dry	ND				Dry	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry		ND	Dry	ND	Dry	Dry		
Detergents(mg/L)	Dry		Dry	>3.0	>3.0	0.75	0.75	>3.0	Dry	Dry	Dry						Dry	Dry	Dry	0.25				Dry	0.25		0.25	Dry	Dry	Dry	Dry	Dry	Dry		1.5	Dry	1.5	Dry	Dry		
Chlorine (mg/L)	Dry		Dry	ND	ND	ND	ND	ND	Dry	Dry	Dry						Dry	Dry	Dry	ND				Dry	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry		ND	Dry	ND	Dry	Dry		
Copper(mg/L)	Dry		Dry	ND	ND	ND	ND	ND	Dry	Dry	Dry						Dry	Dry	Dry	ND				Dry	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry		ND	Dry	ND	Dry	Dry		
Ammonia(mg/L)	Dry		Dry	1.4	ND	ND	ND	0.1	Dry	Dry	Dry						Dry	Dry	Dry	0.2				Dry	ND		0.1	Dry	Dry	Dry	Dry	Dry	Dry		ND	Dry	ND	Dry	Dry		
Glycol(mg/L)	Dry		Dry	0-30	100-150	NT	NT	>150	Dry	Dry	Dry						Dry	Dry	Dry	0-30				Dry	NT		0-30	Dry	Dry	Dry	Dry	Dry	Dry		0-30	Dry	0-30	Dry	Dry		
Zinc(mg/L)	Dry		Dry	4	2	0.3	1.5	0.25	Dry	Dry	Dry						Dry	Dry	Dry	0.25				Dry	0.1		0.25	Dry	Dry	Dry	Dry	Dry	Dry		1	Dry	0.5	Dry	Dry		
1995 Round Two																																									
Phenols(mg/L)	Dry		ND	Dry	ND	ND	ND	ND	Dry	ND	Dry	ND					Dry	Dry	Dry	ND				ND	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	Dry	Dry		
Detergents(mg/L)	Dry		0.75	Dry	>3.0	2	0.75	>3.0	Dry	0.5	Dry	0.75					Dry	Dry	Dry	0.75				0.5	0.35		0.3	Dry	Dry	Dry	Dry	Dry	Dry	Dry	2	Dry	2.5	Dry	Dry		
Chlorine (mg/L)	Dry		ND	Dry	ND	ND	ND	ND	Dry	ND	Dry	ND					Dry	Dry	Dry	ND				ND	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	Dry	Dry		
Copper(mg/L)	Dry		ND	Dry	ND	ND	ND	ND	Dry	ND	Dry	ND					Dry	Dry	Dry	ND				ND	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	Dry	Dry		
Ammonia(mg/L)	Dry		0.1	Dry	ND	ND	ND	0.4	Dry	0.4	Dry	0.6					Dry	Dry	Dry	0.6				ND	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	Dry	Dry		
Glycol(mg/L)	Dry		NT	Dry	100-150	0-30	NT	0-30	Dry	NT	Dry	NT					Dry	Dry	Dry	0-30				NT	NT		NT	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0-30	Dry	0-30	Dry	Dry		
Zinc(mg/L)	Dry		0.1	Dry	3	0.15	0.2	0.2	Dry	0.05	Dry	0.05					Dry	Dry	Dry	0.2				0.3	0.1		0.1	Dry	Dry	Dry	Dry	Dry	Dry	Dry	1.3	Dry	0.2	Dry	Dry		
1996 Round One																																									
Phenols(mg/L)	Dry		Dry	Dry	Dry	ND	ND	0.1	Dry	Dry	Dry	Dry					Dry	Dry	Dry	ND				Dry	Dry		0	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND				
Detergents(mg/L)	Dry		Dry	Dry	Dry	0.5	>3.0	1.5	Dry	Dry	Dry	Dry					Dry	Dry	Dry	2				Dry	Dry		0.5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	3	Dry	Lab only				
Chlorine (mg/L)	Dry		Dry	Dry	Dry	0.6	0.1	0	Dry	Dry	Dry	Dry					Dry	Dry	Dry	ND				Dry	Dry		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	0.5				
Copper(mg/L)	Dry		Dry	Dry	Dry	ND	ND	ND	Dry	Dry	Dry	Dry					Dry	Dry	Dry	ND				Dry	Dry		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND				
Ammonia(mg/L)	Dry		Dry	Dry	Dry	ND	ND	ND	Dry	Dry	Dry	Dry					Dry	Dry	Dry	0.1				Dry	Dry		0.3	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND				
Glycol(mg/L)	Dry		Dry	Dry	Dry	0-30	0-30	0-30	Dry	Dry	Dry	Dry					Dry	Dry	Dry	0-30				Dry	Dry		0-30	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0-30	Dry	0-30				
Zinc(mg/L)	Dry		Dry	Dry	Dry	0.2	0.3	0.1	Dry	Dry	Dry	Dry					Dry	Dry	Dry	0.2				Dry	Dry		0.1	Dry	Dry	Dry	Dry	Dry	Dry	Dry	1	Dry	0.2				
1996 Round Two																																									
Phenols(mg/L)	Dry		Dry	Dry	Dry	ND	ND	ND	Dry	ND	Dry	ND					Dry	Dry	Dry	Dry				Dry	ND		Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	0.1	0.1		
Detergents(mg/L)	Dry		Dry	Dry	Dry	1	0.8	1.5	Dry	0.8	Dry	0.8					Dry	Dry	Dry	Dry				Dry	3		Dry	Dry	>3.0	Dry	Dry	Dry	Dry	Dry	Dry	Dry	1	>3.0	0.5		
Chlorine (mg/L)	Dry		Dry	Dry	Dry	ND	ND	0.1	Dry	ND	Dry	ND					Dry	Dry	Dry	Dry				Dry	ND		Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND		
Copper(mg/L)	Dry		Dry	Dry	Dry	ND	ND	ND	Dry	ND	Dry	ND					Dry	Dry	Dry	Dry				Dry	ND		Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND		
Ammonia(mg/L)	Dry		Dry	Dry	Dry	ND	0.1	0.7	Dry	ND	Dry	0.8					Dry	Dry	Dry	Dry				Dry	ND		Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0.3	0.4	ND		
Glycol(mg/L)	Dry		Dry	Dry	Dry	0-30	0-30	0-30	Dry	0-30	Dry	0-30					Dry	Dry	Dry	Dry				Dry	0-30		Dry	Dry	0-30	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0-30	0-30	0-30		
Zinc(mg/L)	Dry		Dry	Dry	Dry	0.1	0.3	0.2	Dry	0.1	Dry	ND					Dry	Dry	Dry	Dry				Dry	ND		Dry	Dry	0.3	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0.1	1.4	0.1		
1997 Round One																																									
Phenols(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	ND					Dry		ND	Dry	ND	ND	ND	ND	ND	Dry	ND	Dry	ND	Dry	Dry		
Detergents(mg/L)	Dry	Dry			Dry	0.25	0.25	0.75	Dry	Dry	1								Dry	3.0/2.0					Dry		0.25	Dry	0.25	0.25	0.25	0.75	0.5	Dry	1.5	Dry	2	Dry	Dry		
Chlorine (mg/L)	Dry	Dry			Dry	0.4	0.2	ND	Dry	Dry	ND								Dry	0.1					Dry		0.4	Dry	ND	ND	ND	ND	ND	Dry	0.1	Dry	0.2	Dry	Dry		
Copper(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	ND					Dry		ND	Dry	ND	ND	ND	ND	ND	Dry	ND	Dry	ND	Dry	Dry		
Ammonia(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	0.2					Dry		0.3	Dry	0.1	0.1	0.1	ND	ND	Dry	ND	Dry	ND	Dry	Dry		
Glycol(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	ND					Dry		ND	Dry	ND	ND	ND	ND	ND	Dry	ND	Dry	ND	Dry	Dry		
Zinc(mg/L)	Dry	Dry			Dry	0.01	0.03	ND	Dry	Dry	ND								Dry	0.01					Dry		0.01	Dry	ND	ND	ND	ND	0.03	Dry	0.23	Dry	0.06	Dry	Dry		
Conductivity (mS/cm)	Dry	Dry			Dry	7.95	7.48	1.4	Dry	Dry	1.17								Dry	1.4					Dry		1.43	Dry	1.33	1.33	1.33	0.98	1.11	Dry	15.77	Dry	6.33	Dry	Dry		
1997 Round Two																																									
Phenols(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	<0.1								Dry	ND					Dry		ND	Dry	ND	Dry	Dry	ND	Dry	Dry	ND	Dry	ND	Dry	ND		
Detergents(mg/L)	Dry	Dry			Dry	0.75	0.5	0.5	Dry	Dry	0.5								Dry	3					Dry		0.5	Dry	1	Dry	Dry	1	Dry	Dry	1	Dry	10	Dry	20		
Chlorine (mg/L)	Dry	Dry			Dry	0.8	0.1	ND	Dry	Dry	ND								Dry	10					Dry		0.3	Dry	ND	Dry	Dry	ND	Dry	Dry	0.1	Dry	0.1	Dry	ND		
Copper(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	ND					Dry		ND	Dry	ND	Dry	Dry	ND	Dry	Dry	ND	Dry	ND	Dry	ND		
Ammonia(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	1.4					Dry		ND	Dry	ND	Dry	Dry	0.6	Dry	Dry	ND	Dry	ND	Dry	0.5		
Glycol(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	ND					Dry		ND	Dry	ND	Dry	Dry	ND	Dry	Dry	ND	Dry	ND	Dry	5.0-6.0		
Zinc(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	0.14					Dry		ND	Dry	0.14	Dry	Dry	0.01	Dry	Dry	0.21	Dry	0.01	Dry	0.41		
Conductivity (mS/cm)	Dry	Dry			Dry	7.1	7.24	1.34	Dry	Dry	1.39								Dry	1.55					Dry		1.4	Dry	1.1	Dry	Dry	1.39	Dry	Dry	16.11	Dry	5.09	Dry	0.88		
1998 Round One																																									
Phenols(mg/L)	ND	ND			ND	ND	ND	ND	Dry	Dry	ND	ND							Dry	ND	ND	ND			ND		ND			Dry	Dry	Dry	Dry	Dry	ND	Dry	0.1	ND	ND		
Detergents(mg/L)	0.25	0.5			ND	0.25	0.5	0.25	Dry	Dry	0.25	0.25							Dry	3	>3	2			0.25		0.5			Dry	Dry	Dry	Dry	Dry	1	Dry	1	<0.25	1.5		
Chlorine (mg/L)	0.2	0.1			ND	0.4	0.4	0.1	Dry	Dry	ND	ND							Dry	0.3	ND	0.1			0.1		ND			Dry	Dry	Dry	Dry	Dry	0.9	Dry	0.2	0.3	1		
Copper(mg/L)	ND	ND			ND	ND	ND	ND	Dry	Dry	ND	ND							Dry	0.1	ND	ND			ND		ND			Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	ND	ND		
Ammonia(mg/L	ND	ND			ND	ND	ND	ND	Dry	Dry	ND	1.3							Dry	ND	ND	2.3			ND		ND			Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	0.2	ND		
Glycol(mg/L)	ND	ND			ND	ND	ND	ND	Dry	Dry	ND	ND							Dry	1	1	<1			ND		ND			Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	ND	ND		
Zinc(mg/L)	ND	0.03			ND	0.01	ND	ND	Dry	Dry	ND	0.09							Dry	0.05	ND	ND			0.18		ND			Dry	Dry	Dry	Dry	Dry	0.26	Dry	0.01	ND	ND		
Conductivity (mS/cm)	1.24	20.1			151.4	6.56	6.99	1.11	Dry	Dry	0.94	5.93							Dry	1.45	ND	1.28			3.82		3.71			Dry	Dry	Dry	Dry	Dry	16.29	Dry	9.64	1.22	0.99		
1998 Round Two																																									
Phenols(mg/L)	ND	ND			ND	0.1	ND	ND	Dry	ND	ND	ND							ND	ND		ND			0.1		0.1		Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry					
Detergents(mg/L)	0.5	0.5			1	0.25	0.25	0.5	Dry	0.25	0.5	1							1	>3		0.5			0.25		0.5		Dry	Dry	Dry	Dry	Dry	Dry	1	Dry					
Chlorine (mg/L)	0.2	0.3			0.2	2	ND	0.3	Dry	0.4	ND	ND							0.2	0.2		0.8			0.1		ND		Dry	Dry	Dry	Dry	Dry	Dry	0.3	Dry					
Copper(mg/L)	ND	ND			ND	ND	ND	ND	Dry	ND	ND	ND							ND	ND		ND			ND		ND		Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry					
Ammonia(mg/L)	ND	0.1			ND	ND	ND	0.6	Dry	ND	ND	0.1							ND	0.7		1.6			ND		ND		Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry					
Glycol(mg/L)	ND	ND			ND	ND	ND	ND	Dry	ND	ND	ND							ND	ND		ND			ND		ND		Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry					
Zinc(mg/L)	ND	ND			ND	ND	ND	ND	Dry	ND	ND	ND							ND	ND		ND			ND		0.01		Dry	Dry	Dry	Dry	Dry	Dry	0.01	Dry					
Conductivity (mS/cm)	1.05	1.91			7.41	6.67	6.96	1.31	Dry	0.94	0.92	0.93							1.53	1.31		1.09			3.74		3.51		Dry	Dry	Dry	Dry	Dry	Dry	15.58	Dry					
1999 Round One																																									
Phenols(mg/L)	0.1	Dry	Dry		2	ND	ND	ND		ND	ND	Dry	0.011	0.2	0.004	Dry			0.1	0.1		0.2	Dry		0.1		ND						Dry			ND		0.008	ND	ND	Dry	Dry
Detergents(mg/L)	0.5	Dry	Dry		10	0.5	0.5	0.5		0.5	0.25	Dry	1.25	1.5	20	Dry			0.75	1.5		3.75	Dry		0.25		0.25						Dry			1		0.5	0.25	0.25	Dry	Dry
Chlorine (mg/L)	0.8	Dry	Dry		2.5	0.6	ND	ND		0.4	0.1	Dry	0.5	ND	0.5	Dry			0.5	0.6		0.6	Dry		0.2		0.2						Dry			0.6		1.5	0.1	0.1	Dry	Dry
Copper(mg/L)	ND	Dry	Dry		ND	ND	ND	ND		ND	ND	Dry	0.03	ND	0.06	Dry			ND	ND		ND	Dry		ND		ND						Dry			ND		ND	ND	ND	Dry	Dry
Ammonia(mg/L)	0.4	Dry	Dry		INT	ND	ND	0.2		0.3	0.1	Dry	ND	0.3	0.1	Dry			1	2		10	Dry		0.4		0.4						Dry			ND		5	1.5	1.5	Dry	Dry
Glycol(mg/L)	ND	Dry	Dry		INT	ND	ND	ND		ND	ND	Dry	ND	ND	2	Dry			ND	ND		2	Dry		ND		ND						Dry			ND		ND	ND	ND	Dry	Dry
Zinc(mg/L)	0.09	Dry	Dry		0.88	ND	0.05	0.01		ND	ND	Dry	0.41	0.7	0.31	Dry			0.28	0.09		0.28	Dry		0.01		0.16						Dry			0.28		0.43	0.11	0.12	Dry	Dry
Conductivity (mS/cm)	1.08	Dry	Dry		135.9	6.99	6.91	1.43		1.12	1.14	Dry	1.74	50.7	1.99	Dry			1.93	1.6		1.5	Dry		4.06		1.61						Dry			16.99		9.99	1.11	0.95	Dry	Dry

Appendix A:
Historical Dry Weather Monitoring Data (1994-2007)

Site No.	OVR-14	OVR-15	POG-01	POG-02	POG-03	PRD-01	PRD-02	PRD-03	RCC-01	RCC-02	RCC-03	RCC-04	SCR-01	SCR-02	SCR-03	SUN-01	SUN-02	SUN-03	SUN-04	SUN-05	SVS-01	SVS-02	SWB-01	SWB-02	SWB-03	SWR-01	SWR-02	SWR-03	SWR-04	TCC-01-1	TCC-01-2	TCC-01-3	TCC-01-4	TCC-02	TCC-03	TCC-04	TCC-05	TCC-06	TCS	WIL-01	WIL-02
1994 Round One																																									
Phenols(mg/L)			Dry	ND		Dry	Dry	Dry	0.1	0.1			ND	Dry		Dry	0.1	Dry	Dry		ND		Dry	Dry		Dry	Dry	Dry		Dry	0.1	0.1	Dry	Dry	ND	Dry				Dry	Dry
Detergents(mg/L)			Dry	0.6		Dry	Dry	Dry	1	1.5			3	Dry		Dry	0.25	Dry	Dry		0.5		Dry	Dry		Dry	Dry	Dry		Dry	0.5	0.75	Dry	Dry	0.5	Dry				Dry	Dry
Chlorine (mg/L)			Dry	0.5		Dry	Dry	Dry	0.4	0.1			0.3	Dry		Dry	0.3	Dry	Dry		0.1		Dry	Dry		Dry	Dry	Dry		Dry	ND	0.1	Dry	Dry	0.4	Dry				Dry	Dry
Copper(mg/L)			Dry	ND		Dry	Dry	Dry	ND	ND			ND	Dry		Dry	ND	Dry	Dry		ND		Dry	Dry		Dry	Dry	Dry		Dry	ND	ND	Dry	Dry	ND	Dry				Dry	Dry
Ammonia(mg/L)			Dry	ND		Dry	Dry	Dry	0.1	0.6			2.5	Dry		Dry	1.5	Dry	Dry		ND		Dry	Dry		Dry	Dry	Dry		Dry	ND	ND	Dry	Dry	0.2	Dry				Dry	Dry
Glycol(mg/L)			Dry	0-30		Dry	Dry	Dry	0-30	0-30			0-30	Dry		Dry	0-30	Dry	Dry		0-30		Dry	Dry		Dry	Dry	Dry		Dry	0-30	0-30	Dry	Dry	0-30	Dry				Dry	Dry
Zinc(mg/L)			Dry	0.1		Dry	Dry	Dry	0.15	2.5			4	Dry		Dry	0.2	Dry	Dry		0.15		Dry	Dry		Dry	Dry	Dry		Dry	0.2	0.25	Dry	Dry	0.25	Dry				Dry	Dry
1994 Round Two																																									
Phenols(mg/L)			ND	Dry		ND	ND	Dry	ND	0.2			ND	Dry		Dry	ND	Dry	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	0.1	Dry	Dry	Dry	Dry	Dry				Dry	ND
Detergents(mg/L)			0.5	Dry		0.5	0.75	Dry	0.4	0.75			0.25	Dry		Dry	0.5	Dry	Dry	0.5	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	1	Dry	Dry	Dry	Dry	Dry				Dry	1
Chlorine (mg/L)			ND	Dry		ND	ND	Dry	0.2	0.1			ND	Dry		Dry	0.1	Dry	Dry	0.1	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	0.2	Dry	Dry	Dry	Dry	Dry				Dry	ND
Copper(mg/L)			ND	Dry		ND	0.1	Dry	0.1	ND			ND	Dry		Dry	ND	Dry	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry				Dry	ND
Ammonia(mg/L)			ND	Dry		ND	2.5	Dry	ND	0.1			ND	Dry		Dry	0.4	Dry	Dry	0.3	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry				Dry	ND
Glycol(mg/L)			0-30	Dry		0-30	0-30	Dry	0-30	0-30			0-30	Dry		Dry	0-30	Dry	Dry	0-30	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	0-30	Dry	Dry	Dry	Dry	Dry				Dry	0-30
Zinc(mg/L)			0.22	Dry		0.05	0.4	Dry	0.3	0.2			1.5	Dry		Dry	0.2	Dry	Dry	0.4	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	0.2	Dry	Dry	Dry	Dry	Dry				Dry	0.05
1995 Round One																																									
Phenols(mg/L)			Dry	ND		Dry	0.2	Dry	ND	Dry			Dry	Dry		Dry	0.2	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Detergents(mg/L)			Dry	ND		Dry	1	Dry	0.75	Dry			Dry	Dry		Dry	3	0.75	Dry	>3.0	Dry		Dry	Dry		Dry	Dry	Dry	0.75	Dry	0.25	0.5	Dry	1.75	1	>3.0				Dry	0.25
Chlorine (mg/L)			Dry	ND		Dry	ND	Dry	ND	Dry			Dry	Dry		Dry	ND	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Copper(mg/L)			Dry	ND		Dry	ND	Dry	ND	Dry			Dry	Dry		Dry	ND	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Ammonia(mg/L)			Dry	ND		Dry	0.8	Dry	ND	Dry			Dry	Dry		Dry	0.1	1.5	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	2.5	ND				Dry	ND
Glycol(mg/L)			Dry	0-30		Dry	NT	Dry	NT	Dry			Dry	Dry		Dry	NT	NT	Dry	NT	Dry		Dry	Dry		Dry	Dry	Dry	0-30	Dry	NT	0-30	Dry	0-30	NT	0-30				Dry	0-30
Zinc(mg/L)			Dry	0.2		Dry	0.1	Dry	0.05	Dry			Dry	Dry		Dry	0.1	0.15	Dry	0.1	Dry		Dry	Dry		Dry	Dry	Dry	0.1	Dry	0	0.2	Dry	ND	0.1	0.1				Dry	0.25
1995 Round Two																																									
Phenols(mg/L)			Dry	ND		Dry	ND	Dry	ND	Dry			0.1	Dry		Dry	0.1	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Detergents(mg/L)			Dry	>3.0		Dry	1	Dry	0.5	Dry			1.5	Dry		Dry	1	0.5	Dry	0.5	Dry		Dry	Dry		Dry	Dry	Dry	0.5	Dry	0.75	0.75	Dry	1.5	1	0.4				Dry	0.3
Chlorine (mg/L)			Dry	3		Dry	ND	Dry	ND	Dry			>3.0	Dry		Dry	0.05	ND	Dry	0.1	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	0.2	ND				Dry	ND
Copper(mg/L)			Dry	ND		Dry	ND	Dry	ND	Dry			ND	Dry		Dry	ND	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Ammonia(mg/L)			Dry	>2.5		Dry	1.8	Dry	ND	Dry			0.6	Dry		Dry	ND	nd.5	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Glycol(mg/L)			Dry	0-30		Dry	NT	Dry	NT	Dry			0-30	Dry		Dry	NT	NT	Dry	NT	Dry		Dry	Dry		Dry	Dry	Dry	0-30	Dry	NT	0-30	Dry	NT	NT	0-30				Dry	NT
Zinc(mg/L)			Dry	0.2		Dry	0.2	Dry	0.1	Dry			0.2	Dry		Dry	1.4	0.1	Dry	0.2	Dry		Dry	Dry		Dry	Dry	Dry	0.1	Dry	0.2	0.1	Dry	0.2	0.1	0.1				Dry	0.2
1996 Round One																																									
Phenols(mg/L)			Dry	0.2		Dry	Dry	Dry	0.1	Dry			ND	Dry		Dry	ND	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	ND	Dry	0.1	Dry	ND	ND	Dry				Dry	Dry
Detergents(mg/L)			Dry	0.8		Dry	Dry	Dry	0.3	Dry			0.8	Dry		Dry	0.8	0.5	Dry	1	Dry		Dry	Dry		Dry	Dry	Dry	1	1	Dry	2	Dry	3	2	Dry				Dry	Dry
Chlorine (mg/L)			Dry	0.2		Dry	Dry	Dry	ND	Dry			ND	Dry		Dry	0.1	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	0.3	Dry	0.1	Dry	ND	ND	Dry				Dry	Dry
Copper(mg/L)			Dry	ND		Dry	Dry	Dry	ND	Dry			ND	Dry		Dry	ND	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	ND	Dry	ND	Dry	ND	ND	Dry				Dry	Dry
Ammonia(mg/L)			Dry	0.3		Dry	Dry	Dry	0	Dry			0.02	Dry		Dry	ND	ND	Dry	1.3	Dry		Dry	Dry		Dry	Dry	Dry	1	1.6	Dry	2.3	Dry	ND	0.25	Dry				Dry	Dry
Glycol(mg/L)			Dry	NT		Dry	Dry	Dry	NT	Dry			NT	Dry		Dry	NT	0-30	Dry	NT	Dry		Dry	Dry		Dry	Dry	Dry	NT	0-30	Dry	0-30	Dry	ND	0-30	Dry				Dry	Dry
Zinc(mg/L)			Dry	0.01		Dry	Dry	Dry	0.1	Dry			0.01	Dry		Dry	0.2	0.1	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	0.75	Dry	0.1	Dry	0.1	0.4	Dry				Dry	Dry
1996 Round Two																																									
Phenols(mg/L)			Dry	ND		Dry	Dry	Dry	ND	Dry			Dry	ND		Dry	ND	ND	Dry	ND	ND		Dry	Dry		Dry	Dry	Dry	Dry	0.1	ND	ND	Dry	ND	ND	Dry				Dry	Dry
Detergents(mg/L)			Dry	0.3		Dry	Dry	Dry	0.8	Dry			Dry	1		Dry	0.8	0.5	Dry	1	ND		Dry	Dry		Dry	Dry	Dry	>3.0	0.5	0.5	0.5	Dry	>3.0	1.5	Dry				Dry	Dry
Chlorine (mg/L)			Dry	ND		Dry	Dry	Dry	ND	Dry			Dry	0.3		Dry	ND	ND	Dry	0.1	ND		Dry	Dry		Dry	Dry	Dry	Dry	ND	ND	ND	Dry	ND	ND	Dry				Dry	Dry
Copper(mg/L)			Dry	ND		Dry	Dry	Dry	ND	Dry			Dry	ND		Dry	ND	ND	Dry	ND	ND		Dry	Dry		Dry	Dry	Dry	Dry	ND	ND	ND	Dry	ND	ND	Dry				Dry	Dry
Ammonia(mg/L)			Dry	2		Dry	Dry	Dry	0.3	Dry			Dry	0.3		Dry	0	0.3	Dry	ND	ND		Dry	Dry		Dry	Dry	Dry	Dry	0.5	ND	ND	Dry	ND	ND	Dry				Dry	Dry
Glycol(mg/L)			Dry	0-30		Dry	Dry	Dry	0-30	Dry			Dry	0-30		Dry	NT	0-30	Dry	0-30	0-30		Dry	Dry		Dry	Dry	Dry	Dry	0-30	0-30	0-30	Dry	NT	0-30	Dry				Dry	Dry
Zinc(mg/L)			Dry	0.1		Dry	Dry	Dry	0.1	Dry			Dry	0.1		Dry	0.1	0.3	Dry	0.2	0.1		Dry	Dry		Dry	Dry	Dry	Dry	0.2	0.1	0.2	Dry	0.2	0.2	Dry				Dry	Dry
1997 Round One																																									
Phenols(mg/L)			Dry	ND		ND	ND	ND	ND	ND	ND		ND	0.2		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				ND	Dry
Detergents(mg/L)			Dry	0.25		0.75	0.75	0.75	0.25	0.25	0.5		0.25	0.25		Dry	1.5	0.25		1.5	0.25		Dry	Dry		Dry	Dry	Dry	0.25	Dry	1.5	1	Dry	0.75	0.25	0.75				ND	Dry
Chlorine (mg/L)			Dry	0.2		ND	ND	ND	0.3	ND	2.0/1.5		0.4	0.6		Dry	0.6	0.2		0.6	1		Dry	Dry		Dry	Dry	Dry	0.1	Dry	ND	ND	Dry	ND	0.4	ND				0.3	Dry
Copper(mg/L)			Dry	ND		ND	ND	ND	ND	ND	ND		ND	ND		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				ND	Dry
Ammonia(mg/L)			Dry	2.1		ND	0.2	ND	ND	0.3	ND		ND	ND		Dry	0.4	ND		ND	0.5		Dry	Dry		Dry	Dry	Dry	0.4	Dry	0.5	ND	Dry	ND	ND	ND				ND	Dry
Glycol(mg/L)			Dry	ND		ND	ND	ND	5	10	ND		ND	ND		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				ND	Dry
Zinc(mg/L)			Dry	0.03		ND	0.01	ND	0.03	0.23	0.23		0.07	ND		Dry	0.09	0.05		0.18	0.03		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	0.05	Dry	0.03	0.07	ND				ND	Dry
Conductivity (mS/cm)			Dry	1.22		1.95	1.8	1.95	4.05	1	7.2		1.34	1.42		Dry	2.75	2.57		4.11	1		Dry	Dry		Dry	Dry	Dry	1.54	Dry	2.71	2.86	Dry	4.46	8.22	4.36				1.04	Dry
1997 Round Two																																									
Phenols(mg/L)			Dry	ND		ND	ND	Dry	ND	0.2	ND		ND	ND		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	ND	ND	ND	ND	ND	Dry	ND	ND	ND				ND	Dry
Detergents(mg/L)			Dry	0.5		1	0.5	Dry	0.25	1.5	0.25		0.25	0.25		Dry	0.25	0.5		0.25	0.25		Dry	Dry		Dry	Dry	1.5	0.25	2	1.5	1.5	Dry	1.5	0.25	2				ND	Dry
Chlorine (mg/L)			Dry	0.3		ND	ND	Dry	0.2	0.3	0.2		0.1	0.2		Dry	ND	0.3		0.2	0.8		Dry	Dry		Dry	Dry	ND	ND	ND	ND	ND	Dry	ND	0.2	ND				0.1	Dry
Copper(mg/L)			Dry	ND		ND	ND	Dry	ND	ND	ND		ND	ND		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	ND	ND	ND	ND	ND	Dry	ND	ND	ND				ND	Dry
Ammonia(mg/L)			Dry	2.4		ND	0.1	Dry	ND	0.2	ND		ND	ND		Dry	ND	ND		ND	0.2		Dry	Dry		Dry	Dry	ND	ND	0.4	1	0.2	Dry	ND	1.8	0.2				ND	Dry
Glycol(mg/L)			Dry	ND		ND	ND	Dry	ND	3	ND		ND	ND		Dry	ND	ND		ND	0.4		Dry	Dry		Dry	Dry	ND	ND	ND	1.25	15	Dry	ND	ND	ND				ND	Dry
Zinc(mg/L)			Dry	0.09		ND	ND	Dry	ND	ND	0.09		ND	ND		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	ND	ND	0.36	ND	ND	Dry	ND	0.05	0.05				ND	Dry
Conductivity (mS/cm)			Dry	1.61		1.6	1.08	Dry	4.5	1.48	7.02		1.58	1.74		Dry	5.73	2.2		4.21	1		Dry	Dry		Dry	Dry	1.8	1.5	3.03	2.9	2.6	Dry	6.74	6.69	9.01				1	Dry
1998 Round One																																									
Phenols(mg/L)			ND	ND		Dry	ND	ND	ND	ND	ND		ND	ND			ND	ND		ND	ND		Dry	Dry		Dry		Dry	ND	ND	ND	ND	Dry	ND	ND	ND				ND	ND
Detergents(mg/L)			<0.25	0.25		Dry	0.75	0.25	0.5	0.5	0.25		0.25	0.25			2	0.25		0.25	0.5		Dry	Dry		Dry		Dry	0.25	0.25	0.25	0.25	Dry	0.25	0.5	0.25				<0.25	0.25
Chlorine (mg/L)			0.1	0.6		Dry	0.2	ND	0.4	0.8	0.4		0.8	0.2			0.6	0.2		0.3	ND		Dry	Dry		Dry		Dry	0.6	0.1	0.1	0.2	Dry	0.1	0.8	0.1				0.8	0.4
Copper(mg/L)			ND	ND		Dry	ND	ND	ND	ND	ND		ND	ND			ND	ND		ND	ND		Dry	Dry		Dry		Dry	ND	ND	ND	ND	Dry	0.1	ND	ND				ND	ND
Ammonia(mg/L)			ND	2.5		Dry	0.1	ND	ND	0.1	ND		2.5	ND			ND	ND		ND	ND		Dry	Dry		Dry		Dry	0.5	ND	ND	ND	Dry	ND	ND	ND				ND	ND
Glycol(mg/L)			ND	ND		Dry	<1	ND	ND	ND	ND		ND	ND			ND	5.6		ND	ND		Dry	Dry		Dry		Dry	ND	ND	ND	ND	Dry	ND	ND	ND				ND	ND
Zinc(mg/L)			ND	ND		Dry	ND	ND	ND	0.07	0.01		ND	ND			0.05	ND		ND	0.16		Dry	Dry		Dry		Dry	0.12	0.01	0.05	ND	Dry	0.06	ND	ND				0.12	ND
Conductivity (mS/cm)			1.24	1.78		Dry	1.19	2.06	5	7.64	3.69		2.5	4.74			9.77	2.31		3.79	1.07		Dry	Dry		Dry		Dry	1.93	3.48	3.44	3.4	Dry	3.62	10.27	3.7				4.46	1.1
1998 Round Two																																									
Phenols(mg/L)													0.1	0.1			ND	0.1		ND	0.1		ND	ND		Dry	Dry	0.1	ND	ND	ND	ND	Dry	ND	0.1	ND				0.1	Dry
Detergents(mg/L)													0.25	0.25			0.75	0.25		0.25	0.5		1	2		Dry	Dry	0.5	2	0.5	0.5	0.75	Dry	0.5	0.5	0.5				ND	Dry
Chlorine (mg/L)													ND	ND			0.1	0.1		0.1	ND		ND	1.5		Dry	Dry	ND	ND	0.3	0.2	0.4	Dry	0.3	0.2	0.8				1	Dry
Copper(mg/L)													ND	ND			ND	ND		ND	ND		ND	ND		Dry	Dry	ND	ND	ND	ND	ND	Dry	ND	ND	ND				ND	Dry
Ammonia(mg/L)													1.6	0.1			ND	ND		ND	1.4		0.6	0.8		Dry	Dry	ND	1.5	0.1	0.2	0.1	Dry	ND	ND	0.2				ND	Dry
Glycol(mg/L)													ND	ND			ND	ND		ND	ND		ND	ND		Dry	Dry	ND	ND	ND	ND	ND	Dry	ND	ND	ND				ND	Dry
Zinc(mg/L)													ND	0.05			0.03	ND		ND	ND		0.15	0.03		Dry	Dry	0.15	0.05	ND	ND	ND	Dry	ND	ND	ND				ND	Dry
Conductivity (mS/cm)													2.38	3.45			9.52	2.45		3.33	1.44		0.41	0.73		Dry	Dry	0.96	0.85	6.86	6.68	6.45	Dry	7.31	8.22	6.19				4.42	Dry
1999 Round One																																									
Phenols(mg/L)	0.1	Dry	ND	ND		ND	ND	Dry	ND	ND	0.1		ND				ND			ND	ND	ND	Dry	Dry	Dry			Dry		ND	0.1	0.1		0.1	ND	0.1				ND	
Detergents(mg/L)	0.5	Dry	0.25	0.25		0.25	0.25	Dry	0.25	0.5	0.75		0.25					1		0.5	0.25	0.25	Dry	Dry	Dry			Dry		1	0.5	1		0.25	1	0.5				0.25	
Chlorine (mg/L)	0.6	Dry	0.8	0.5		ND	0.4	Dry	0.1	0.4	0.2		0.2					0.5		0.6	ND	0.1	Dry	Dry	Dry			Dry		0.8	0.4	0.4		0.3	1	0.6				ND	
Copper(mg/L)	ND	Dry	ND	ND		ND	ND	Dry	ND	ND	ND		ND					ND		ND	ND	ND	Dry	Dry	Dry			Dry		ND	ND	ND		ND	ND	ND				ND	
Ammonia(mg/L)	0.8	Dry	0.2	3		1.5	0.7	Dry	ND	0.3	ND		1					0.4		0.3	0.3	0.8	Dry	Dry	Dry			Dry		0.6	0.4	0.6		0.3	ND	0.5				0.3	
Glycol(mg/L)	ND	Dry	ND	3		1100	ND	Dry	ND	6	ND		ND					ND		ND	ND	1	Dry	Dry	Dry			Dry		ND	ND	ND		ND	ND	ND				ND	
Zinc(mg/L)	0.21	Dry	0.3	0.09		0.05	0.07	Dry	0.03	0.01	ND		ND					ND		ND	0.01	ND	Dry	Dry	Dry			Dry		0.05	0.16	ND		ND	0.14	0.01				0.23	
Conductivity (mS/cm)	3.79	Dry	1.29	2.03		1.4	1.16	Dry	5.54	1.32	5.88		2.5					2.25		3.45	1.22	1.24	Dry	Dry	Dry			Dry		6.52	5.45	5.63		4.61	8.15	6.33				5.63	

Appendix A:
Historical Dry Weather Monitoring Data (1994-2007)

Site No.	BAY-01	BAY-02	BAY-02-1	BAY-02-2	BAY-03	BLC-01	BLC-02	CEN-01	CEN-02	CEN-03	CEN-04	CEN-05	CEN-07	CEN-08	CEN-09	CEN-10	GLA-01	GLA-02	JUD-01	JUD-02	JUD-02a	JUD-03	JUD-04	MGC-01	MGC-02	OLR-01	OLR-02	OLR-03	OVR-01	OVR-02	OVR-03	OVR-04	OVR-05	OVR-06	OVR-07	OVR-08	OVR-09	OVR-10	OVR-11	OVR-12	OVR-13
1999 Round Two																																									
Phenols(mg/L)	Dry	Dry	Dry		0.049	0.1	ND	ND		Dry	ND	Dry	ND	0.1	ND	Dry			Dry	ND		ND	Dry		ND		ND					Dry			ND		0.2	ND	ND	Dry	Dry
Detergents(mg/L)	Dry	Dry	Dry		1.78	0.5	0.5	0.25		Dry	0.25	Dry	1.25	1.5	3	Dry			Dry	1		1.5	Dry		0.5		0.25					Dry			0.75		0.75	0.25	0.5	Dry	Dry
Chlorine (mg/L)	Dry	Dry	Dry		INT	0.1	0.1	ND		Dry	ND	Dry	ND	ND	ND	Dry			Dry	ND		ND	Dry		0.1		ND					Dry			0.3		0.2	0.1	ND	Dry	Dry
Copper(mg/L)	Dry	Dry	Dry		0.04	ND	ND	ND		Dry	ND	Dry	ND	ND	ND	Dry			Dry	ND		ND	Dry		ND		ND					Dry			ND		ND	ND	ND	Dry	Dry
Ammonia(mg/L)	Dry	Dry	Dry		<0.2	ND	0.2	0.2		Dry	1	Dry	3	0.3	0.4	Dry			Dry	ND		4	Dry		0.1		ND					Dry			ND		0.3	0.2	3	Dry	Dry
Glycol(mg/L)	Dry	Dry	Dry		<10	0.2	ND	ND		Dry	ND	Dry	ND	ND	ND	Dry			Dry	ND		ND	Dry		ND		ND					Dry			ND		ND	ND	ND	Dry	Dry
Zinc(mg/L)	Dry	Dry	Dry		0.07	ND	ND	ND		Dry	ND	Dry	0.43	0.01	0.23	Dry			Dry	0.09		0.07	Dry		0.23		ND					Dry			0.23		0.28	ND	0.12	Dry	Dry
Conductivity (mS/cm)	Dry	Dry	Dry		145.1	6.94	6.91	1.07		Dry	1.25	Dry	2.17	50.9	1.67	Dry			Dry	1.59		1.42	Dry		4.26		3.27					Dry			13.78		9.56	1.17	0.98	Dry	Dry
2000 Round One																																									
Phenols(mg/L)	Dry	0.1			ND	ND	ND	0.1		Dry	ND	Dry	Dry	ND	Dry	0.4			ND	ND		0.1	Dry		0.1	Dry	0.1					Dry			ND		0.1	ND	ND	Dry	Dry
Detergents(mg/L)	Dry	2			3	0.25	0.25	0.5		Dry	0.25	Dry	Dry	2	Dry	1.5			1.5	3		3	Dry		0.25	Dry	0.25					Dry			0.5		0.5	3.0	30	Dry	Dry
Chlorine (mg/L)	Dry	ND			0.4	ND	0.1	ND		Dry	ND	Dry	Dry	ND	Dry	ND			ND	0.1		ND	Dry		ND	Dry	ND					Dry			0.1		0.6	ND	ND	Dry	Dry
Copper(mg/L)	Dry	ND			ND	ND	ND	0.1		Dry	ND	Dry	Dry	ND	Dry	ND			ND	ND		ND	Dry		ND	Dry	ND					Dry			ND		0.1	ND	ND	Dry	Dry
Ammonia(mg/L)	Dry	1			ND	0.4	0.8	5		Dry	0.9	Dry	Dry	0.8	Dry	2			0.3	0.5		4	Dry		0.3	Dry	0.4					Dry			0.8		1.0	0.8	1.0	Dry	Dry
Glycol(mg/L)	Dry	ND			ND	ND	ND	0.1		Dry	ND	Dry	Dry	ND	Dry	4.5			1	ND		1	Dry		ND	Dry	ND					Dry			ND		ND	1.0	2.0	Dry	Dry
Zinc(mg/L)	Dry	0.27			0.23	0.07	0.11	0.12		Dry	0.13	Dry	Dry	0.16	Dry	0.2			0.09	0.39		0.31	Dry		0.27	Dry	0.03					Dry			0.3		0.51	0.21	0.5	Dry	Dry
Conductivity (mS/cm)	Dry	14.17			20	5.48	5.83	1.37		Dry	1.15	Dry	Dry	20	Dry	1.27			16	1.6		2.33	Dry		4.07	Dry	3.69					Dry			13.99		3.8	2.3	1.15	Dry	Dry
2000 Round Two																																									
Phenols(mg/L)	Dry	ND			ND	ND	ND	0.1		ND	Dry	Dry	ND	ND	Dry	ND			ND	ND		ND	Dry		ND	ND	ND					ND			ND		0.1	ND	0.1	Dry	ND
Detergents(mg/L)	Dry	0.25			3	0.25	0.25	0.5		0.5	Dry	Dry	0.25	1.5	Dry	0.25			0.75	0.75		3	Dry		0.25	0.5	0.25					0.5			2.0		2.0	0.25	3.0	Dry	0.75
Chlorine (mg/L)	Dry	ND			0.8	ND	0.1	ND		ND	Dry	Dry	ND	ND	Dry	0.1			ND	0.1		ND	Dry		ND	ND	ND					0.8			0.2		0.1	0.1	ND	Dry	ND
Copper(mg/L)	Dry	0.1			0.1	ND	ND	0.1		ND	Dry	Dry	ND	ND	Dry	ND			ND	ND		ND	Dry		ND	ND	ND					ND			ND		0.1	ND	ND	Dry	ND
Ammonia(mg/L)	Dry	0.7			0.2	0.3	0.1	0.2		0.2	Dry	Dry	0.4	ND	Dry	0.4			0.4	1		1	Dry		0.3	0.5	0.3					1.0			0.3		0.8	0.4	2.0	Dry	0.7
Glycol(mg/L)	Dry	1			ND	ND	ND	1		ND	Dry	Dry	ND	ND	Dry	ND			1	ND		1	Dry		ND	ND	ND					ND			ND		ND	3.0	2.0	Dry	ND
Zinc(mg/L)	Dry	0.14			0.5	0.06	0.06	0.18		0.18	Dry	Dry	0.27	0.21	Dry	0.38			0.14	0.11		0.13	Dry		0.18	0.12	0.13					0.3			0.48		0.49	0.13	0.33	Dry	0.19
Conductivity (mS/cm)	Dry	3.58			20	5.6	5.88	1.48		1.45	Dry	Dry	0.96	20.0	Dry	1.29			1.83	1.31		1.08	Dry		4.36	1.84	2.98					1.04			12.46		5.65	2.46	0.82	Dry	12.44
2001 Round One																																									
Phenols(mg/L)	Dry	ND			ND	ND	0.1	ND		ND	ND	Dry	ND	0.1	Dry	Dry			0.1	0.1		ND	Dry		Dry	ND	ND					0.1			0.1		0.1	ND	ND	Dry	Dry
Detergents(mg/L)	Dry	0.25			2.5	0.25	0.25	0.5		0.5	0.25	Dry	0.75	1.0	Dry	Dry			0.5	0.75		0.5	Dry		Dry	0.5	0.25					0.75			0.78		0.75	0.25	2	Dry	Dry
Chlorine (mg/L)	Dry	ND			ND	ND	0.1	ND		ND	ND	Dry	ND	ND	Dry	Dry			0.3	ND		0.3	Dry		Dry	ND	ND					ND			0.1		0.1	ND	ND	Dry	Dry
Copper(mg/L)	NA	ND			ND	ND	ND	ND		ND	ND	Dry	ND	ND	Dry	Dry			ND	ND		ND	Dry		Dry	ND	ND					ND			ND		0.1	ND	ND	Dry	Dry
Ammonia(mg/L)	NA	0.2			0.1	0.3	0.2	0.2		0.5	0.4	Dry	0.2	0.8	Dry	Dry			0.6	0.5		0.7	Dry		Dry	0.3	0.2					2.0			0.3		0.5	0.2	0.6	Dry	Dry
Glycol(mg/L)	NA	1.0			ND	1.0	ND	1.0		15	1.0	Dry	ND	ND	Dry	Dry			1.0	1.0		1.0	Dry		Dry	1.0	1.0					1.0			ND		1.0	1.0	3.0	Dry	Dry
Zinc(mg/L)	NA	0.2			0.26	0.16	0.16	0.1		0.12	0.14	Dry	0.26	0.12	Dry	Dry			0.09	0.19		0.16	Dry		Dry	0.13	0.12					0.28			0.31		0.39	0.14	0.17	Dry	Dry
Conductivity (mS/cm)	NA	1.36			>20	7.25	7.26	1.40		1.23	1.17	Dry	1.34	>20	Dry	Dry			1.83	1.37		1.47	Dry		Dry	0.92	4.46					0.93			13.33		6.72	3.42	1.14	Dry	Dry
2001 Round Two																																									
Phenols(mg/L)	0.1	ND			Dry	ND	ND	ND		ND	Dry	Dry	ND	ND	Dry	ND			ND	ND		ND	ND		Dry	ND	ND					ND			ND		ND	ND	ND	Dry	Dry
Detergents(mg/L)	0.25	0.5			Dry	0.25	0.25	0.25		0.75	Dry	Dry	0.75	1.5	Dry	0.25			0.75	0.5		0.5	0.5		Dry	1.5	0.25					0.25			0.75		0.5	0.75	0.25	Dry	Dry
Chlorine (mg/L)	NA	0.6			Dry	0.1	0.2	ND		ND	Dry	Dry	ND	ND	Dry	ND			0.1	0.8		0.2	0.3		Dry	ND	0.2					0.6			0.6		1	ND	ND	Dry	Dry
Copper(mg/L)	ND	ND			Dry	ND	ND	ND		ND	Dry	Dry	ND	ND	Dry	ND			ND	ND		ND	ND		Dry	ND	ND					ND			ND		ND	ND	ND	Dry	Dry
Ammonia(mg/L)	0.5	0.4			Dry	0.3	0.6	1.0		0.8	Dry	Dry	0.8	2.0	Dry	0.6			0.8	0.8		1.0	0.7		Dry	0.5	0.5					1.0			0.6		0.4	0.5	0.8	Dry	Dry
Glycol(mg/L)	15.0	1.0			Dry	1.0	1.0	1.0		>15	Dry	Dry	1.0	ND	Dry	8.0			5.0	4.0		6.0	7.0		Dry	15.0	1.0					ND			ND		ND	5.0	3.0	Dry	Dry
Zinc(mg/L)	0.43	0.2			Dry	0.02	0.09	0.17		0.1	Dry	Dry	0.16	0.19	Dry	0.42			0.21	0.36		0.25	0.33		Dry	0.44	0.02					0.46			0.23		0.12	0.25	0.15	Dry	Dry
Conductivity (mS/cm)	1.34	20.00			Dry	6.53	6.48	1.75		1.26	Dry	Dry	1.39	19.00	Dry	1.74			2.45	1.52		1.53	1.44		Dry	1.77	5.65					1.64			9.42		7.31	2.36	0.97	Dry	Dry
2002 Round One																																									
Temperature (℃)	Dry	30			Dry	24	19	23		Dry	25	Dry	31	24	Dry	24.5			20	25		26	Dry		Dry	21	24					20			19		18	22	Dry	Dry	Dry
pH	Dry	7.9			Dry	7.9	7.7	7.9		Dry	8.1	Dry	9.4	8.0	Dry	7.7			7.9	7.7		7.7	Dry		Dry	7.5	8.0					7.2			7.7		7.8	7.2	Dry	Dry	Dry
Conductivity (µmhos/cm)	Dry	>20000			Dry	5710	6270	1407		Dry	1162	Dry	1128	6750	Dry	1364			1677	1302		1143	Dry		Dry	1095	6150					1096			14960		6680	1810	Dry	Dry	Dry
Turbidity (NTU)	Dry	50			Dry	1.77	6.5	6.51		Dry	16.56	Dry	19.95	1.05	Dry	9.23			11.02	96		17.51	Dry		Dry	12.98	9.12					100			1.07		3.32	4.64	Dry	Dry	Dry
Ammonia (mg/L)	Dry	1.0			Dry	0.6	0.7	0.6		Dry	3	Dry	0.8	0.4	Dry	2			1.0	1.5		0.8	Dry		Dry	1.0	0.4					4.5			0.3		0.8	0.6	Dry	Dry	Dry
Nitrate (mg/L)	Dry	< 0.05			Dry	0.5	5.0	< 0.05		Dry	2.8	Dry	< 0.05	0.4	Dry	2.5			< 0.05	< 0.05		1.0	Dry		Dry	< 0.05	0.2					< 0.05			>40		0.1	0.5	Dry	Dry	Dry
Phosphorus (mg/L)	Dry	0.16			Dry	0.03	0.13	2.0		Dry	2	Dry	0.33	0.16	Dry	1.1			1.3	1.3		0.98	Dry		Dry	0.65	0.07					1.1			0.03		0.07	0.65	Dry	Dry	Dry
Detergents (mg/L)	Dry	2.0			Dry	0.5	0.5	0.5		Dry	0.75	Dry	1.0	0.5	Dry	0.37			0.75	1.5		0.5	Dry		Dry	1.0	0.5					0.25			0.75		0.5	0.25	Dry	Dry	Dry
Glycol (mg/L)	Dry	< 0.5			Dry	< 0.5	< 0.5	< 0.5		Dry	3	Dry	1.0	1.0	Dry	1.0			< 0.5	3		< 0.5	Dry		Dry	2.0	< 0.5					1.0			< 0.5		< 0.5	< 0.5	Dry	Dry	Dry
Surfactants (mg/L)						0.06		< 0.50												0.9							0.14										< 0.50				
Oil and grease (mg/L)						22		52												59							123										21				
Total hardness (mg/L)						1030		418												361							1350										852				
Cadmium (mg/L)						< 0.10		< 0.10												< 0.10							< 0.10										< 0.10				
Copper (mg/L)						< 0.10		< 0.10												< 0.10							< 0.10										< 0.10				
Lead (mg/L)						< 0.10		< 0.10												< 0.10							0.12										< 0.10				
Zinc (mg/L)						< 0.10		0.19												0.79							< 0.10										< 0.10				
Diazinon (µg/L)						< 0.50		< 0.50												< 0.50							< 0.50										< 0.50				
Chlorpyrifos (µg/L)						< 0.50		< 0.50												< 0.50							< 0.50										< 0.50				
Total Coliform (MPN/100ml)						24000		8000												> 160000							2300										50000				
Fecal Coliform (MPN/100ml)						13000		5000												90000							2300										24000				
Enterococcus (MPN/100ml)						2300		50000												3000							130										3000				
2002 Round Two																																									
Temperature (℃)	Dry	21			26	25	20	28		19.5	25	Dry	29	22	Dry	21.5			21	21		Dry	Dry		Dry	22	22					20.5			20		19	23	22	Dry	Dry
pH	Dry	7.7			8.3	9	8.8	9.6		8.2	8.2	Dry	9.8	7.4	Dry	8.2			8.2	7.4		Dry	Dry		Dry	7.7	8.1					7.4			8		8.1	7.8	7.8	Dry	Dry
Conductivity (µmhos/cm)	Dry	14180			>20000	5010	5690	1259		1414	1343	Dry	1184	303	Dry	1112			3990	1176		Dry	Dry		Dry	2130	5080					1116			14450		6060	1743	968	Dry	Dry
Turbidity (NTU)	Dry	3.65			7.6	2.11	11.6	20.68		3.73	15.62	Dry	4.89	7.62	Dry	16.76			5.69	26.42		Dry	Dry		Dry	2.94	2.34					58			5.59		2.42	4.84	9.88	Dry	Dry
Ammonia (mg/L)	Dry	0.2			0.5	0.3	0.3	1.0		0.8	1.5	Dry	0.4	1.0	Dry	0.4			3.5	1.0		Dry	Dry		Dry	0.2	0.3					1.5			0.2		0.7	0.8	0.6	Dry	Dry
Nitrate (mg/L)	Dry	0.1			< 0.05	< 0.05	5.0	< 0.05		< 0.05	1.5	Dry	< 0.05	0.1	Dry	1.5			2.5	< 0.05		Dry	Dry		Dry	< 0.05	0.2					1.0			> 40		14	1.0	2.0	Dry	Dry
Phosphorus (mg/L)	Dry	0.49			< 0.02	0.03	0.2	0.49		1.6	1.3	Dry	0.98	0.2	Dry	0.98			0.65	2.0		Dry	Dry		Dry	0.33	0.08					0.65			0.07		0.07	0.49	0.33	Dry	Dry
Detergents (mg/L)	Dry	0.5			2.0	0.25	0.25	0.25		0.75	0.5	Dry	0.25	0.5	Dry	0.5			2.0	0.5		Dry	Dry		Dry	0.5	0.5					3.0			1.0		1.5	0.25	0.37	Dry	Dry
Glycol (mg/L)	Dry	< 0.5			< 0.5	1.0	< 0.5	< 0.5		< 0.5	4.0	Dry	< 0.5	< 0.5	Dry	< 0.5			15	< 0.5		Dry	Dry		Dry	< 0.5	< 0.5					< 0.5			< 0.5		< 0.5	1.0	< 0.5	Dry	Dry
Surfactants (mg/L)							< 0.50			0.55									0.97																0.59							
Oil and grease (mg/L)							23			7									3																5							
Total hardness (mg/L)							978			366									662																2170							
Cadmium (mg/L)							< 0.10			< 0.10									< 0.10																< 0.10							
Copper (mg/L)							< 0.10			< 0.10									< 0.10																< 0.10							
Lead (mg/L)							< 0.10			< 0.10									< 0.10																0.1							
Zinc (mg/L)							< 0.10			< 0.10									0.35																< 0.10							
Diazinon (µg/L)							< 0.50			< 0.50									0.71																< 0.50							
Chlorpyrifos (µg/L)							< 0.50			< 0.50									< 0.50																< 0.50							
Total Coliform (MPN/100ml)							11000			90000									> 160000																17000							
Fecal Coliform (MPN/100ml)							8000			90000									90000																8000							
Enterococcus (MPN/100ml)							3000			11000									35000																1300							

Appendix A:
Historical Dry Weather Monitoring Data (1994-2007)

Site No.	OVR-14	OVR-15	POG-01	POG-02	POG-03	PRD-01	PRD-02	PRD-03	RCC-01	RCC-02	RCC-03	RCC-04	SCR-01	SCR-02	SCR-03	SUN-01	SUN-02	SUN-03	SUN-04	SUN-05	SVS-01	SVS-02	SWB-01	SWB-02	SWB-03	SWR-01	SWR-02	SWR-03	SWR-04	TCC-01-1	TCC-01-2	TCC-01-3	TCC-01-4	TCC-02	TCC-03	TCC-04	TCC-05	TCC-06	TCS	WIL-01	WIL-02
1999 Round Two																																									
Phenols(mg/L)	Dry	Dry	ND	ND		0.1	ND	Dry	0.1	ND	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	Dry			ND	ND	ND	ND	0.1		ND	ND	0.1				ND	
Detergents(mg/L)	Dry	Dry	0.5	0.25		0.25	0.5	Dry	0.5	0.5	0.5		0.75	0.5			0.75	0.25		0.25	0.25	0.5	Dry	Dry	*4.44			1.25	0.25	0.5	0.5	0.75		0.5	0.25	0.5				1.25	
Chlorine (mg/L)	Dry	Dry	ND	0.2		ND	ND	Dry	0.1	0.2	0.1		ND	0.1			0.4	ND		0.3	ND	0.1	Dry	Dry	Dry			ND	ND	ND	ND	0.1		0.4	0.4	0.1				0.2	
Copper(mg/L)	Dry	Dry	ND	ND		ND	ND	Dry	ND	ND	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	*0.06			ND	ND	ND	ND	ND		ND	ND	ND				ND	
Ammonia(mg/L)	Dry	Dry	2	5		ND	0.1	Dry	0.1	1	0.2		0.6	0.1			0.1	2		0.1	0.2	0.8	Dry	Dry	*2.4			2	0.6	ND	0.1	ND		0.1	0.1	ND				0.2	
Glycol(mg/L)	Dry	Dry	ND	ND		ND	ND	Dry	ND	800	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	*<10			ND	ND	ND	ND	ND		ND	ND	ND				ND	
Zinc(mg/L)	Dry	Dry	0.01	ND		0.12	0.23	Dry	ND	0.03	0.9		ND	ND			ND	ND		ND	0.07	ND	Dry	Dry	*0.22			0.92	0.01	0.05	0.01	0.07		ND	ND	0.05				0.12	
Conductivity (mS/cm)	Dry	Dry	1.18	1.8		1.79	1.07	Dry	5.93	4.11	6.84		1.23	9.04			7.53	4.04		3.28	1.23	1.17	Dry	Dry	Dry			1.23	1.29	7.38	6.24	6.13		6.91	7.56	6.55				5.46	
2000 Round One																																									
Phenols(mg/L)	0.1	Dry	Dry	ND		Dry	ND	Dry	ND	ND	ND		0.1	ND			0.1	0.1		ND	ND	0.1	Dry	Dry	0.2			0.2	0.1	ND	ND	ND		ND	0.1	ND				ND	
Detergents(mg/L)	0.25	Dry	Dry	0.50		Dry	3.00	Dry	0.50	0.50	0.50		0.25	0.50			1.50	0.25		0.50	0.50	0.25	Dry	Dry	0.25			3.00	3.0	0.50	0.75	1.0		2.0	0.50	0.75				0.50	
Chlorine (mg/L)	0.1	Dry	Dry	ND		Dry	0.1	Dry	ND	0.1	ND		ND	ND			0.1	ND		0.1	ND	ND	Dry	Dry	ND			0.1	ND	ND	ND	ND		0.2	ND	0.1				ND	
Copper(mg/L)	ND	Dry	Dry	ND		Dry	0.1	Dry	ND	ND	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	ND			ND	ND	ND	ND	ND		0.1	ND	ND				ND	
Ammonia(mg/L)	0.2	Dry	Dry	0.5		Dry	0.8	Dry	0.3	0.7	0.3		0.1	0.8			0.5	3		0.2	0.8	6	Dry	Dry	0.6			2	0.9	0.8	0.8	0.8		0.8	0.3	0.8				0.8	
Glycol(mg/L)	1.00	Dry	Dry	3.00		Dry	ND	Dry	ND	ND	ND		ND	ND			ND	ND		ND	3.00	1.00	Dry	Dry	1.50			10.00	ND	2.0	ND	ND		5.0	ND	ND				ND	
Zinc(mg/L)	0.25	Dry	Dry	0.11		Dry	0.27	Dry	0.03	0.1	0.19		0.07	0.46			0.16	0.07		0.29	0.1	0.11	Dry	Dry	0.1			0.33	0.33	0.17	0.07	0.12		0.12	0.09	0.26				0.36	
Conductivity (mS/cm)	3.15	Dry	Dry	3.38		Dry	1.43	Dry	6.76	6.33	6.86		1.25	11.24			5.28	3.32		3.46	1.35	I.48	Dry	Dry	9.49			2.81	1.15	5.39	5.46	5.42		5.34	7.3	5.5				7.79	
2000 Round Two																																									
Phenols(mg/L)	ND	Dry	ND	ND		ND	ND	Dry	ND	ND	0.1		0.1	ND			ND	ND		ND	ND	0.1	Dry	Dry	ND			ND	ND	ND	ND	ND		ND	ND	ND				Dry	
Detergents(mg/L)	0.25	Dry	1	0.75		0.75	0.75	Dry	0.25	0.25	0.25		0.5	0.5			0.5	0.25		0.75	0.25	0.75	Dry	Dry	0.25			0.25	0.25	0.25	0.5	0.25		0.25	0.5	0.25				Dry	
Chlorine (mg/L)	0.1	Dry	0.1	ND		0.5	ND	Dry	ND	0.1	0.1		ND	ND			0.1	ND		ND	ND	ND	Dry	Dry	ND			ND	ND	ND	ND	ND		0.1	ND	0.1				Dry	
Copper(mg/L)	ND	Dry	ND	ND		ND	ND	Dry	ND	ND	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	0.1			ND	ND	ND	ND	ND		ND	ND	ND				Dry	
Ammonia(mg/L)	0.2	Dry	0.6	0.3		0.5	2	Dry	0.2	1.00	ND		0.8	0.2			0.2	0.2		0.3	1	2	Dry	Dry	0.5			0.3	0.6	0.3	1.0	0.4		0.4	0.3	0.7				Dry	
Glycol(mg/L)	ND	Dry	1	ND		1.5	ND	Dry	ND	ND	ND		ND	ND			2.5	ND		ND	1	1	Dry	Dry	ND			3	1	ND	ND	1.0		ND	ND	ND				Dry	
Zinc(mg/L)	0.12	Dry	0.52	0.08		0.21	0.41	Dry	0.09	0.13	0.23		0.16	0.35			0.2	0.09		0.2	0.16	0.19	Dry	Dry	0.1			0.13	0.16	0.04	0.13	0.07		0.08	0.15	0.2				Dry	
Conductivity (mS/cm)	2.8	Dry	2.86	2.88		1.17	1.07	Dry	6.98	4.52	5.08		1.15	12.02			7.84	1.89		3.85	1.27	1.89	Dry	Dry	1.1			1.05	1.15	4.97	4.82	4.85		4.74	7.39	4.95				Dry	
2001 Round One																																									
Phenols(mg/L)	Dry	Dry	0.1	ND		Dry	ND	Dry	ND	ND	ND		ND	0.1			0.1	ND		ND	ND	0.2	Dry	Dry	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND				ND	
Detergents(mg/L)	Dry	Dry	0.25	0.25		Dry	0.5	Dry	0.5	0.25	0.25		0.25	0.25			0.75	0.25		0.25	0.25	ND	Dry	Dry	0.25			0.75	0.25	0.5	0.5	0.25	0.5	0.5	0.5	0.25				0.5	
Chlorine (mg/L)	Dry	Dry	ND	ND		Dry	ND	Dry	ND	ND	ND		0.1	0.2			ND	ND		ND	ND	ND	Dry	Dry	0.2			ND	ND	ND	ND	ND	ND	0.1	0.1	0.1				ND	
Copper(mg/L)	Dry	Dry	ND	ND		Dry	ND	Dry	ND	ND	ND		ND	ND			ND	0.1		ND	ND	ND	Dry	Dry	ND			ND	0.1	ND	ND	ND	ND	ND	ND	ND				ND	
Ammonia(mg/L)	Dry	Dry	0.2	0.3		Dry	0.8	Dry	0.4	0.8	0.5		0.5	0.6			0.4	0.2		2.0	0.4	3.0	Dry	Dry	0.8			0.2	0.2	0.3	0.2	0.2	0.3	0.8	0.3	0.3				0.3	
Glycol(mg/L)	Dry	Dry	ND	1.0		Dry	4.0	Dry	ND	1.0	1.0		1.0	1.0			1.0	1.0		1.0	>15	1.0	Dry	Dry	1.0			1.0	1.0	ND	ND	ND	ND	ND	15.0	ND				1.0	
Zinc(mg/L)	Dry	Dry	0.15	0.17		Dry	0.15	Dry	0.14	0.12	0.3		0.19	0.14			0.18	0.19		0.1	0.29	0.24	Dry	Dry	0.15			0.4	0.21	0.02	0.05	0.09	0.5	0.09	0.19	0.1				0.08	
Conductivity (mS/cm)	Dry	Dry	1.24	3.56		Dry	1.27	Dry	6.82	7.48	6.35		1.10	7.04			4.21	2.49		3.64	1.42	1.64	Dry	Dry	1.37			1.02	1.25	6.44	6.64	6.38	6.41	6.38	8.16	6.31				0.20	
2001 Round Two																																									
Phenols(mg/L)	ND	Dry	ND	ND		ND	0.1	Dry	ND	ND	0.2		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	Dry			Dry	ND	ND	ND	ND	ND	ND	ND	ND				Dry	
Detergents(mg/L)	>3	Dry	0.25	0.025		0.5	0.25	Dry	0.25	0.25	0.5		0.75	0.25			0.5	0.25		0.25	0.25	0.5	Dry	Dry	Dry			Dry	0.5	0.25	0.25	0.25	0.25	0.25	0.5	0.25				Dry	
Chlorine (mg/L)	ND	Dry	ND	0.4		0.1	0.4	Dry	0.2	0.6	0.6		0.1	ND			0.1	ND		0.1	ND	0.4	Dry	Dry	Dry			Dry	0.8	0.3	0.3	0.4	ND	0.4	0.6	0.1				Dry	
Copper(mg/L)	ND	Dry	ND	ND		ND	ND	Dry	ND	ND	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	Dry			Dry	ND	ND	ND	ND	ND	ND	ND	ND				Dry	
Ammonia(mg/L)	1.0	Dry	0.2	0.8		0.2	0.5	Dry	0.6	0.2	0.2		0.8	0.3			0.5	0.8		0.1	0.4	0.8	Dry	Dry	Dry			Dry	0.8	0.5	0.8	0.2	0.8	0.2	0.3	0.3				Dry	
Glycol(mg/L)	ND	Dry	ND	1.0		6.0	ND	Dry	ND	ND	ND		1.0	ND			6.0	1.0		1.0	8.0	1.0	Dry	Dry	Dry			Dry	1.0	1.0	1.0	8.0	5.0	10.0	1.0	8.0				Dry	
Zinc(mg/L)	0.44	Dry	0.09	0.02		0.11	0.13	Dry	0.04	0.08	0.21		0.04	0.05			0.03	0.08		0.1	0.1	0.1	Dry	Dry	Dry			Dry	0.16	0.04	0.12	0.02	0.09	0.08	0.12	0.13				Dry	
Conductivity (mS/cm)	8.98	Dry	1.18	2.25		1.71	1.52	Dry	6.92	7.48	6.96		1.37	8.19			6.62	2.25		3.67	1.32	1.50	Dry	Dry	Dry			Dry	1.40	4.79	4.54	4.69	4.73	4.41	9.30	5.04				Dry	
2002 Round One																																									
Temperature (°C)	Dry	Dry	21	21	18	21	18	Dry	20	21	22		18.5	24			22.5	30		22	21	21	Dry	Dry	21			23	24	21	21	21	Dry	29.5	22	29				27	
pH	Dry	Dry	8.2	7.9	7.8	7	7.9	Dry	7.9	7.6	7.1		7.2	7.5			8.2	8.1		7.9	7.3	7.5	Dry	Dry	7.2			7.6	7.9	7.9	7.8	7.9	Dry	9.3	7.8	8.7				7.9	
Conductivity (µmhos/cm)	Dry	Dry	2850	2510	3890	1351	1405	Dry	5950	8140	6990		1133	10140			3610	2420		3670	1250	1431	Dry	Dry	984			945	1478	6300	6320	6360	Dry	6210	11080	6260				5000	
Turbidity (NTU)	Dry	Dry	3.88	2.45	6.48	36.34	3.16	Dry	3.72	0.47	3.21		2.19	10.61			7.92	17.12		5.04	7.2	2.98	Dry	Dry	8.81			8.75	14.47	12.63	4.28	4.22	Dry	3.78	3.37	3.79				6.95	
Ammonia (mg/L)	Dry	Dry	0.4	0.6	0.4	0.5	0.4	Dry	0.3	0.5	1.0		0.2	0.6			0.6	0.6		0.4	0.5	2	Dry	Dry	0.8			0.7	4.0	1.0	0.6	0.8	Dry	0.7	0.4	0.6				0.7	
Nitrate (mg/L)	Dry	Dry	< 0.05	28	5	< 0.05	< 0.05	Dry	0.6	0.1	28		1.5	0.4			8	< 0.05		10	0.3	0.2	Dry	Dry	0.1			0.2	< 0.05	14	14	14	Dry	24	> 40	20				< 0.05	
Phosphorus (mg/L)	Dry	Dry	0.13	1.1	0.03	0.82	0.2	Dry	0.1	0.23	0.23		0.82	0.03			0.98	0.13		0.49	0.82	1.3	Dry	Dry	0.23			0.33	0.65	0.03	0.03	0.03	Dry	0.03	0.16	0.07				0.2	
Detergents (mg/L)	Dry	Dry	0.5	0.5	0.25	0.5	0.37	Dry	0.5	0.75	0.75		0.5	0.75			0.75	0.25		0.5	0.25	0.75	Dry	Dry	0.5			0.25	0.5	0.5	0.5	0.5	Dry	0.5	0.75	0.75				0.5	
Glycol (mg/L)	Dry	Dry	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	Dry	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5			1.0	< 0.5		1.0	1.0	1.0	Dry	Dry	1.0			< 0.5	1.0	< 0.5	< 0.5	< 0.5	Dry	< 0.5	< 0.5	< 0.5				1.0	
Surfactants (mg/L)			< 0.50		< 0.50	< 0.50			0.12					0.06				0.08			< 0.05								0.36	< 0.50				< 0.50							
Oil and grease (mg/L)			24		25	33			371					60				415			116								24	24				82							
Total hardness (mg/L)			548		827	398			1340					2330				462			317								313	1060				1280							
Cadmium (mg/L)			< 0.10		< 0.10	< 0.10			< 0.10					< 0.10				< 0.10			< 0.10								< 0.10	< 0.10				< 0.10							
Copper (mg/L)			< 0.10		< 0.10	< 0.10			< 0.10					< 0.10				< 0.10			< 0.10								< 0.10	< 0.10				< 0.10							
Lead (mg/L)			< 0.10		< 0.10	< 0.10			< 0.10					0.19				< 0.10			< 0.10								< 0.10	< 0.10				< 0.10							
Zinc (mg/L)			< 0.10		< 0.10	< 0.10			< 0.10					< 0.10				< 0.10			< 0.10								< 0.10	< 0.10				< 0.10							
Diazinon (µg/L)			< 0.50		< 0.50	< 0.50			< 0.50					< 0.50				< 0.50			< 0.50								< 0.50	< 0.50				< 0.50							
Chlorpyrifos (µg/L)			< 0.50		< 0.50	< 0.50			< 0.50					< 0.50				< 0.50			< 0.50								< 0.50	< 0.50				< 0.50							
Total Coliform (MPN/100ml)			13000		30000	8000			50000					300				2200			> 160000								30000	17000				7000							
Fecal Coliform (MPN/100ml)			8000		24000	5000			30000					230				1300			90000								17000	8000				7000							
Enterococcus (MPN/100ml)			500		2300	2300			1300					230				500			17000								1700	1700				2300							
2002 Round Two																																									
Temperature (°C)	24	Dry	22	20.5		22	19.5	Dry	21	18	22		21.5	27			25	30		21	22	21.5	20	Dry	21			23.5	24.5	21	21	21	Dry	29	23	28				24.5	
pH	8.0	Dry	8.5	7.8		7.5	8.5	Dry	8.5	7.7	7.8		8.6	9			8.9	8.4		8.9	8	7.1	7.6	Dry	8.3			8.0	6.3	8.1	8.7	8.8	Dry	9.5	8.9	8.9				7.9	
Conductivity (µmhos/cm)	1558	Dry	4290	1666		1240	2580	Dry	6890	8430	6870		1580	8750			4790	2390		3510	1023	1211	420	Dry	1025			723	596	6490	6660	6670	Dry	6260	9900	6190				4150	
Turbidity (NTU)	478	Dry	3.48	6.83		18.1	7.48	Dry	2.58	2.49	7.75		20.62	1.87			2.57	2.36		3.92	6.17	30.99	4.52	Dry	8.17			34.08	20.23	0.7	1.46	2.1	Dry	3.33	1.23	3.08				4.2	
Ammonia (mg/L)	0.8	Dry	1.0	0.2		1.5	0.3	Dry	0.3	0.2	0.4		0.6	0.2			0.2	0.2		0.3	0.5	2.0	2.0	Dry	0.4			0.6	0.8	0.3	0.3	0.4	Dry	0.3	0.4	0.4				0.3	
Nitrate (mg/L)	5.0	Dry	ND	5.0		< 0.05	0.2	Dry	1.5	< 0.05	28		1.5	2.0			14	< 0.05		7.0	1.5	< 0.05	< 0.05	Dry	1.5			< 0.05	< 0.05	28	28	28	Dry	28	> 40	28				3.5	
Phosphorus (mg/L)	1.3	Dry	0.1	0.49		2.6	0.26	Dry	0.07	0.05	0.23		1.1	0.03			0.13	0.26		0.65	0.65	2.0	1.1	Dry	0.26			0.65	0.03	0.03	0.03	0.03	Dry	0.03	0.2	0.05				0.23	
Detergents (mg/L)	>24	Dry	0.25	0.5		1.5	0.5	Dry	0.37	0.5	0.5		2.0	0.5			0.25	0.25		0.25	0.25	0.5	0.5	Dry	0.25			0.25	0.25	0.5	0.5	0.5	Dry	0.5	0.75	0.5				0.25	
Glycol (mg/L)	2.5	Dry	< 0.5	< 0.5		< 0.5	< 0.5	Dry	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5			< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5	Dry	< 0.5			2.0	< 0.5	< 0.5	< 0.5	< 0.5	Dry	< 0.5	< 0.5	< 0.5				< 0.5	
Surfactants (mg/L)				0.67			< 0.50			< 0.50	< 0.50		1.86				< 0.50			< 0.50															< 0.50	< 0.50					
Oil and grease (mg/L)				< 1			4			15	< 1		12				172			1															102	306					
Total hardness (mg/L)				368			485			2290	1200		316				870			430															2090	1190					
Cadmium (mg/L)				< 0.10			< 0.10			< 0.10	< 0.10		< 0.10				< 0.10			< 0.10															< 0.10	< 0.10					
Copper (mg/L)				< 0.10			< 0.10			< 0.10	< 0.10		< 0.10				< 0.10			< 0.10															< 0.10	< 0.10					
Lead (mg/L)				< 0.10			< 0.10			< 0.10	< 0.10		< 0.10				< 0.10			< 0.10															< 0.10	< 0.10					
Zinc (mg/L)				< 0.10			< 0.10			< 0.10	< 0.10		< 0.10				< 0.10			< 0.10															< 0.10	< 0.10					
Diazinon (µg/L)				< 0.50			< 0.50			< 0.50	< 0.50		< 0.50				< 0.50			< 0.50															< 0.50	< 0.50					
Chlorpyrifos (µg/L)				< 0.50			< 0.50			< 0.50	< 0.50		< 0.50				< 0.50			< 0.50															< 0.50	< 0.50					
Total Coliform (MPN/100ml)				160000			160000			160000	50000		160000				160000			90000															17000	160000					
Fecal Coliform (MPN/100ml)				160000			90000			90000	30000		90000				90000			50000															8000	160000					
Enterococcus (MPN/100ml)				13000			5000			5000	2300		8000				3000			5000															2300	3000					

Appendix A:
Historical Dry Weather Monitoring Data (1994-2007)

Site No.	BAY-01	BAY-02	BAY-03	BLC-01	BLC-02	CEN-01	CEN-03	CEN-04	CEN-07	CEN-08	CEN-10	JUD-01	JUD-02	JUD-03	LAK-01	OLR-01	OLR-02	OVR-04	OVR-07	OVR-09	OVR-10	OVR-11	OVR-12	OVR-13	OVR-14	POG-01	POG-02	POG-03	PRD-01	PRD-02	PRD-03	RCC-01	RCC-02	RCC-03	RCC-04	SCR-01	SCR-02	SCR-03	SCR-04	SCR-05
2003																																								
Temperature (°C)		22	NA	27	25	23.5	27.5	30	29	24	24	22	24	27		24.5	23.5	24.5	23.5	22	23	22		NA	26.5	27	22.5	25.5	NA	21.7	NA	21.5	21.5	24.5	24	23	29.5	24.5		
pH		7.5	NA	8.8	8.3	8.1	8.6	9.8	7.6	7.3	8.1	8.4	7.7	7.9		7.9	8.4	7.7	8.1	8.3	7.7	7.6		NA	7.9	8.7	8.3	8.5	NA	8.3	NA	8.3	8.1	7.3	7.8	7.5	8.9	7.8		
Conductivity (µmhos/cm)		2,600	NA	5970	6670	1680	2310	1630	1630	7520	2090	2430	1680	1500		1650	4370	1530	14090	8200	2270	1310		NA	1160	4660	1560	5990	NA	1290	NA	7490	9300	6440	7790	1240	6750	7980		
Turbidity (NTU)		12.9	NA	3.2	4.5	19.2	13.4	7.9	17.7	7.3	84.0	16.8	12.2	39.8		4.8	7.0	22.9	2.9	2.5	7.9	49.4		NA	235.0	1.6	4.4	10.1	NA	5.2	NA	3.1	1.3	4.7	1.8	5.3	3.9	5.9		
Ammonia (mg/L)		0.4	NA	0.6	0.6	1.0	1.0	0.4	1.0	0.6	2.0	2.0	3.0	8.0		1.0	0.4	6.0	0.6	0.3	0.6	1.5		NA	2.0	0.5	0.2	0.3	NA	0.4	NA	0.4	0.4	0.4	0.4	0.3	0.4	0.4		
Nitrate (mg/L)		0.2	NA	0.6	6.4	0.4	0.1	0.1	0.1	0.1	1.0	0.3	0.6	0.3		0.6	0.3	ND	32.0	3.2	0.4	ND		NA	2.4	0.2	6.4	10.0	NA	1.3	NA	1.0	0.2	12.0	40.0	2.5	4.8	16.0		
Phosphorus (mg/L)		0.33	NA	ND	0.03	0.65	1.30	0.10	0.98	0.07	1.30	0.65	0.65	1.63		0.65	0.10	1.30	0.07	0.07	0.07	1.63		NA	0.49	0.07	0.65	ND	NA	0.65	NA	0.07	0.03	0.10	0.26	0.65	0.07	0.07		
Detergents (mg/L)		0.25	NA	0.25	0.25	0.75	0.50	0.50	0.75	0.50	3.00	0.75	1.0	1.0		0.75	0.25	0.50	0.75	0.75	0.50	0.50		NA	1.0	0.38	0.25	0.25	NA	0.25	NA	0.50	0.50	0.50	0.50	0.13	0.25	0.50		
Glycol (mg/L)		<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.0	2.5	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		NA	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Surfactants (mg/L)						ND	ND					0.5	0.6							ND							ND			ND		ND	ND	ND		ND				
Oil and grease (mg/L)						ND	ND					1	3							ND							ND			ND		ND	ND	ND		2				
Total hardness (mg/L)						467	594					582	298							991							360			286		1,450	1,820	1,260		299				
Cadmium (mg/L)						ND	ND					ND	ND							ND							ND			ND		ND	ND	ND		ND				
Copper (mg/L)						0.012	0.005					0.038	0.015							ND							0.005			0.005		ND	ND	ND		0.005				
Lead (mg/L)						ND	ND					0.018	ND							ND							ND			ND		ND	ND	ND		ND				
Zinc (mg/L)						0.049	0.044					0.785	0.215							ND							ND			0.040		ND	ND	ND		ND				
Diazinon (µg/L)						1.11	ND					ND	ND							ND							0.39			0.06		0.06	ND	ND		0.08				
Chlorpyrifos (µg/L)						ND	ND					ND	0.27							ND							ND			ND		ND	ND	ND		ND				
Total Coliform (MPN/100ml)						160,000	160,000					160,000	160,000							8,000							160,000			160,000		90,000	160,000	90,000		160,000				
Fecal Coliform (MPN/100ml)						90,000	90,000					90,000	90,000							2,300							160,000			90,000		30,000	90,000	30,000		50,000				
Enterococcus (MPN/100ml)						800	5,000					50,000	50,000							300							13,000			2,200		1,300	13,000	8,000		1,300				
2004																																								
Temperature (°C)		23.4	27.3	22	20	29.6	28.2	26.1	29.8	24.6	21.8	26.1	26	27.1			23	25.4	23	21	25	23.4		NA	25	22.7	22	25	21.5	21.5	NA	21	20	22	23	22	27	22		
pH		7.3	8.2	8.2	8.1	9.5	7.9	7.5	9.3	7.4	8.0	8.2	7.1	7.9			8.4	7.8	8.0	8.4	7.8	7.7		NA	8.1	8.2	7.8	7.8	8.5	8.0	NA	7.7	7.7	8.6	7.8	7.3	8.1	8.8		
Conductivity (µmhos/cm)		4,010	18370	5290	5340	1210	1417	1271	1433	20000	1920	2220	1867	1294			5180	995	12900	6100	1710	1273		NA	1783	4550	1260	3630	1909	1338	NA	6100	7730	3120	6340	1460	5530	5680		
Turbidity (NTU)		8.2	16.8	4.4	2.9	9.2	13.9	12.6	7.6	33.7	23.9	10.1	32.7	72.0			4.7	3.4	0.8	6.2	13.8	18.5		NA	71.0	5.4	6.7	0.6	12.3	5.7	NA	0.7	2.3	10.1	4.5	4.6	2.1	8.5		
Ammonia (mg/L)		0.6	0.3	0.2	0.3	0.3	0.4	0.8	0.4	0.7	2.0	0.8	2.0	2.0			0.3	4.0	0.2	0.7	0.5	1.5		NA	2.0	0.3	0.4	0.3	0.8	0.8	NA	0.4	0.1	0.2	0.3	0.8	0.2	0.2		
Nitrate (mg/L)		1.25	2.50	1.25	3.80	2.50	2.50	2.50	1.25	1.25	1.25	2.50	3.75	2.50			1.25	3.75	37.50	3.75	3.75	3.75		NA	1.25	1.25	5.00	5.00	1.25	3.75	NA	1.25	1.25	7.50	31.25	2.50	5.00	8.38		
Phosphorus (mg/L)		0.2	0.07	0.03	0.03	0.65	0.33	1.96	0.82	0.49	1.3	0.49	0.82	0.82			0.03	1.14	0.03	1.63	1.47	2.61		NA	0.98	0.03	0.96	0.03	0.26	1.3	NA	0.06	0.03	0.19	0.33	0.70	0.03	0.13		
Detergents (mg/L)		0.50	0.75	0.75	0.75	0.38	0.25	0.50	0.50	0.75	2.00	0.75	1.5	0.3			0.75	0.25	0.75	1.25	0.25	0.25		NA	1.3	0.75	0.25	0.50	0.63	0.38	NA	0.50	0.50	0.50	0.75	0.25	0.38	0.50		
Glycol (mg/L)		<1.0	<1.0	<1.0	<1.0	>15.0	<1.0	1.5	<1.0	<1.0	3.0	<1.0	>15.0	2.0			<1.0	<1.0	<1.0	3.5	2.0	<1.0		NA	1.5	<1.0	<1.0	<1.0	<1.0	2.5	NA	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0		
Surfactants (mg/L)						ND	ND					ND	0.80							ND							ND			ND		ND	ND	ND		ND				
Oil and grease (mg/L)						1	4					2	2							ND							2			3		ND	1	3		ND				
Total hardness (mg/L)						366	367					581	421							996							346			381		1,430	2,130	735		360				
Cadmium (mg/L)						ND	ND					ND	ND							ND							ND			ND		ND	ND	ND		ND				
Copper (mg/L)						0.008	ND					0.007	ND							ND							ND			ND		ND	ND	ND		ND				
Lead (mg/L)						ND	ND					ND	ND							ND							ND			ND		ND	ND	ND		ND				
Zinc (mg/L)						0.03	ND					0.033	ND							ND							ND			ND		ND	ND	ND		ND				
Diazinon (µg/L)						0.08	ND					ND	ND							ND							ND			ND		ND	ND	ND		ND				
Chlorpyrifos (µg/L)						ND	ND					ND	ND							ND							ND			ND		ND	ND	ND		ND				
Total Coliform (MPN/100ml)						8,000	13,000					17,000	160,000							4,000							240,000			130,000		70,000	23,000	80,000		80,000				
Fecal Coliform (MPN/100ml)						1,300	400					5,000	160,000							200							30,000			13,000		2,300	700	1,100		13,000				
Enterococcus (MPN/100ml)						2300	3,000					5,000	30,000							3000							22,000			160,000		1,300	5,000	5,000		17,000				
2005																																								
Temp.		26.6	27.8	28.1	25.3	22.2	24.2	20.9	27.2	24.4	20.8	22.8	25.8	26.7		22.8	21.7	22.9	22.4	20.7	24.7	22.8		na	21.7	29	24.4	23.4	na	22.6	na	21.1	23.3	23.2	25.1	23.9	25.3	22		
pH		7.4	8.2	8.4	8.2	8.5	8.3	7.6	8.5	8.1	8.1	8.6	7.8	8.3		8.2	8.2	7.6	8.1	8.2	7.7	7.9		na	8.5	8.4	8.3	8.1	na	8.1	na	8.3	8.0	7.2	7.9	7.5	8.2	7.9		
Conductivity		4,490	12,600	5,770	6,030	1,410	1,390	1,260	1,370	11,560	1,660	2,230	1,510	1,400		2,390	4,840	1,470	13,890	7,320	1,390	1,700		na	12,330	5,590	1,810	5,160	na	1,140	na	5,960	6,660	4,360	5,910	1,800	6,240	5,490		
Turbidity		12.85	3.89	1	1.71	4.73	0.64	5.97	4.86	0.66	20.92	4.49	21.43	41.52		1.88	1.96	6.06	8.07	8.15	10.58	75		na	28.32	1.4	8.54	1.93	na	3.85	na	5.12	4.73	4.77	138	7.62	0.29	2.16		
Ammonia		0.8	0.3	0.6	0.40	0.4	0.3	0.8	0.4	0.2	1	0.6	1.5	1		0.3	0.4	0.3	0.4	0.6	0.6	6		na	0.3	0.6	0.5	0.3	na	0.4	na	0.4	0.3	0.4	0.3	0.4	0.4	0.3		
Nitrate		1.25	2.5	5	5.00	2.5	1.25	1.25	1.25	7.5	1.25	1.5	1.25	1.25		1.25	2.5	2.5	62.5	1.25	1.25	1.25		na	1.25	2.5	7.5	7.5	na	1.25	na	1.25	1.25	7.5	50	7.5	8.75	7.5		
Reactive Phosphorus		0.26	nd	0.03	0.10	0.49	0.20	0.49	0.49	0.10	0.65	0.07	0.82	0.20		0.26	0.10	0.20	0.10	0.82	0.49	1.30		na	0.10	0.03	0.49	0.10	na	0.33	na	0.10	0.06	0.20	0.03	0.41	0.07	0.10		
Detergents		0.75	0.87	0.67	0.67	0.67	0.25	0.37	0.5	0.75	0.75	1	0.75	0.5		0.5	0.5	0.5	1.5	0.75	1.5	3.00		na	1	0.67	0.67	0.75	na	0.25	na	0.75	0.75	0.5	0.75	0.25	0.75	0.75		
Glycol		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8		na	<1.0	<1.0	<1.0	<1.0	na	<1.0	na	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Surfactants (MBAS)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd				
Oil and Grease						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd				
Total Hardness						415	400					510	430							1390							412			485		1,690	2,170	1180		482				
Cadmium (diss)						nd	nd					nd	nd							nd							nd			0.005		nd	nd	nd		nd				
Copper (diss)						0.013	0.005					0.008	nd							0.005							0.008			nd		nd	nd	nd		0.007				
Lead (diss)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd				
Zinc (diss)						0.067	0.026					0.026	0.029							0.097							0.024			nd		nd	nd	0.028		0.034				
Diazinon						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		0.11				
Chlorpyrifos						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd				
Total Coliform						1,600,000	30,000					140,000	170,000							130,000							>1600000			900,000		>1600000	500,000	1,600,000		900,000				
Fecal Coliform						5,000	5000					5,000	3,000							1100							80,000			300		2,300	2300	8,000		2,300				
Enterococcus						1,300	800					5,000	2,200							30,000							24,000			2,300		500	13,000	1,300		1,300				
2006																																								
Temp.	25.3	25.8	27.2	20.5	24.0	29.9	24.7	32.0	33.6	26.8	22.8	22.9	24.4	27.0	26.2	24	23.1	25	24.3	22.2	25.5	ns		ns	25	25.5	24.5	24.7	ns	23.8	ns	22.4	21.4	23.9	24.1	25	24.8	23	27	22
pH	7.3	7.0	7.9	8.4	8.3	10.1	9.3	10.1	8.8	8.4	8.5	8.3	8.0	8.3	8.8	8.5	8.4	7.6	8.3	8.3	7.9	ns		ns	8.6	8.5	8.4	8.4	ns	8.3	ns	8.3	8.1	7.8	8.1	8.0	8.4	8.1	8.4	8.4
Conductivity	1.38	1.17	6.50	5.22	5.60	1.44	2.64	1.53	1.04	12.50	1.37	1.34	1.40	1.15	4.28	1.40	4.90	0.88	13.76	6.97	1.44	ns		ns	1.33	5.10	1.34	4.53	ns	1.48	ns	6.22	7.07	2.94	6.01	1.29	5.72	5.33	0.81	1.16
Turbidity	3.43	3.57	1.8	1.72	1.52	9.05	5.52	14.43	4.02	1.44	45.84	8.71	9.5	53	8.43	3.62	2.21	4.9	2.17	21.17	4.69	ns		ns	20.5	1.84	4.1	1.44	ns	5.63	ns	1.62	2.37	74	1.8	0.56	1.32	2.24	19.47	4.28
Ammonia	0.6	0.4	0.2	0.1	0.30	0.6	0.8	0.8	0.4	0.1	0.8	0.4	0.8	1.5	0.4	0.2	0.6	0.3	0.2	0.6	0.2	ns		ns	0.8	0.3	0.8	0.15	ns	1.5	ns	0.1	0.1	0.4	0.2	0.1	0.2	0.4	0.2	0.3
Nitrate	1.25	1.25	5	3.75	3.75	2.5	2.5	1.25	1.25	8.75	1.25	1.25	1.25	1.25	7.5	1.25	1.25	1.25	40	3.75	1.25	ns		ns	1.25	1.25	5	8.75	ns	2.5	ns	2.5	2.5	6.75	30	2.5	6.75	7.5	1.3	3.8
Reactive Phosphorus	0.49	0.10	<0.016	0.03	0.13	0.26	0.13	1.30	0.65	0.13	0.82	0.33	0.65	0.98	0.03	0.26	0.07	0.26	0.03	0.33	0.65	ns		ns	1.47	0.03	0.20	0.08	ns	0.82	ns	0.49	0.10	0.26	0.13	0.10	0.03	0.10	0.03	0.26
Detergents	0.50	0.25	0.62	0.5	0.50	0.75	2	1	0.5	0.75	0.75	0.5	0.5	0.5	0.25	0.5	0.5	0.75	0.875	0.75	0.25	ns		ns	1.5	0.75	0.25	0.5	ns	2.5	ns	0.5	0.63	0.25	0.75	0.5	0.5	0.50	0.13	0.25
Glycol	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ns		ns	<1.0	<1.0	<1.0	<1.0	ns	1	ns	<1.0	<1.0	2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Surfactants (MBAS)						nd	nd					nd	nd							nd							nd			2		nd	nd	nd		nd				
Oil and Grease						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd				
Total Hardness						335	536					426	433							1050							342			305		1,060	2,010	730		367				
Cadmium (diss)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd				
Copper (diss)						0.027	0.01					0.009	0.005							0.013							0.009			0.007		nd	nd	0.007		nd				
Lead (diss)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd				
Zinc (diss)						0.029	0.035					0.041	0.05							0.093							nd			0.056		0.034	0.046	0.043		nd				
Diazinon						nd	nd					nd	nd							nd							0.16			0.33		nd	nd	nd		nd				
Chlorpyrifos						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd				
Total Coliform						1,300	30,000					500,000	23,000							800							30,000			900,000		80,000	22,000	50,000		11,000				
Fecal Coliform						800	13,000					5,000	500							40							24,000			11,000		1,700	1100	13,000		3,000				
Enterococcus						1,300	8,000					8,000	1,300							230							30,000			28,000		17,000	1,100	2,300		330				

Appendix A:
Historical Dry Weather Monitoring Data (1994-2007)

Site No.	BAY-01	BAY-02	BAY-03	BLC-01	BLC-02	CEN-01	CEN-03	CEN-04	CEN-07	CEN-08	CEN-10	JUD-01	JUD-02	JUD-03	LAK-01	OLR-01	OLR-02	OVR-04	OVR-07	OVR-09	OVR-10	OVR-11	OVR-12	OVR-13	OVR-14	POG-01	POG-02	POG-03	PRD-01	PRD-02	PRD-03	RCC-01	RCC-02	RCC-03	RCC-04	SCR-01	SCR-02	SCR-03	SCR-04	SCR-05
2007																																								
Temp.	24	26.6	25.4	26.5	23.4	22.9	24.9	30.7	30	27.2	26.3	21.7	24.7	29.3	22.8	25.2	24.4	23.2	24.2	20.1	26.2				26	22.8	23.2	22.1		21.1		22.2	20.1	22.7	25.1	21.6	21.3	20.1	23.7	21.8
pH	7.9	7.4	7	8.6	8	8	9.2	8.8	8.3	8	7.8	7.9	7.3	7.5	7.1	8.2	8.4	7.2	8.3	7.7	7.6				8.1	8.1	8	7.7		7.9		8	7.9	7.3	7.7	7.3	7.8	7.7	8.2	8.3
Conductivity	1.22	1	5.26	4.47	4.88	1.44	1.48	1.03	1.1	20	4.75	1.41	1.23	1.17	5.35	1.63	3.59	0.89	7.61	6.27	1.33				1.22	6.24	1.06	3.91		1.54		5.48	6.74	4.19	1.73	14.3	5.58	4.24	1.01	1.8
Turbidity	7.82	3.04	2.92	4.89	0.33	1.23	3.1	3.62	1.15	1.5	2.13	19.63	6.66	7.79	0.75	0.1	1.73	1.84	5.53	10.83	1.75				17.66	0.39	1.77	0.1		2.25		1.19	0.1	2.57	104	0.83	0.48	0.35	12.57	1.65
Ammonia	1.5	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.5	0.6	0.4	0.2	0.3	0.2	0.3	0.2	0.1	0.2	0.2	0.1				2.6	0.2	0.1	0.1		0.2		0.2	0.2	0.1	1.2	nd	0.2	0.1	0.3	nd
Nitrate	0.27	3.84	6.78	0.36	2.64	0.32	nd	0.34	0.11	6.94	6.55	3.54	0.25	0.32	16.1	1.54	0.2	0.25	8.36	nd	0.29				0.88	0.2	1.79	4.76		3.21		0.36	0.226	16.95	4.75	4.25	16.5	8.59	0.45	11.03
Reactive Phosphorus	1.08	0.75	0.03	0.07	0.13	1.01	0.326	0.39	0.46	0.2	0.42	1.53	0.52	0.75	0.13	0.52	0.16	0.23	0.39	0.95	0.36				0.57	0.03	0.29	0.03		1.3		0.07	nd	0.16	0.42	0.98	0.07	0.2	0.2	0.26
Detergents	0.5	0.25	0.5	0.5	0.5	0.63	1	3	0.75	2	0.75	3	1	0.5	0.75	0.38	0.5	0.25	1.25	0.75	0.25				2	0.63	0.5	0.5		0.75		0.63	0.68	0.75	0.13	0.5	0.75	0.75	0.5	0.63
Glycol	0.9	0.70	0.3	0.5	0.2	0.5	0.8	4.3	0.8	0.5	0.2	1.9	0.8	0.8	0.5	0.3	0.2	0.5	0.7	0.3	0.4				2.2	0.2	0.9	0.5		0.5		0.3	0.5	0.5	0.6	0.8	0.2	0.3	0.9	0.3
Surfactants (MBAS)						nd	0.5					8	nd							nd							nd			nd		nd	nd	nd		nd				
Oil and Grease						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd				
Total Hardness						419	391					340	367							1070							284			353		1540	1990	1130		411				
Cadmium (diss)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd				
Copper (diss)						0.028	0.025					0.021	0.005							0.006							0.005			0.007		nd	nd	nd		0.007				
Lead (diss)						nd	nd					0.005	nd							nd							nd			nd		nd	nd	nd		nd				
Zinc (diss)						0.029	nd					0.128	0.046							0.069							nd			0.036		nd	nd	nd		0.02				
Diazinon						nd	nd					nd	nd							nd							nd			nd			nd	nd		nd				
Chlorpyrifos						nd	nd					nd	nd							nn							nd			nd			nd	nd		nd				
Total Coliform						50000	240000					90000	130000							nd							170000			50000		80000	8000	17000		80000				
Fecal Coliform						17000	160000					>160000	24000							nd							24000			13000		130	500	2800		13000				
Enterococcus						24000	13000					24000	2300							20							22000			24000		2800	500	2800		3500				

Appendix A:
Historical Dry Weather Monitoring Data (1994-2007)

Site No.	SUN-02	SUN-03	SUN-05	SUN-06	SUN-07	SVS-01	SVS-02	SWB-03	SWR-03	SWR-04	TCC-01-1	TCC-01-2	TCC-01-3	TCC-01-4	TCC-02	TCC-03	TCC-04	TCC-05	TCC-06	TCS	WIL-01	WOL-02	WOL-03
2003																							
Temperature (℃)	24.5	24	25			22.6	23.5	24	24.5	26	23	23	22.5	22	29.5	23.5	28	23.5	26	24.5	24		
pH	8.4	7.4	8.3			7.9	7.4	7.8	7.5	6.9	8.2	8.3	8.3	8.3	9.1	8.2	8.9	8.3	8.6	7.7	8.3		
Conductivity (µmhos/cm)	4470	1640	3380			1560	1660	1330	1390	1370	6740	6780	6800	6800	6780	8230	6110	7370	6990	1810	5490		
Turbidity (NTU)	7.3	0.8	14.3			10.8	6.6	42.4	21.0	11.5	12.6	9.5	9.0	14.5	4.3	11.5	8.1	18.3	10.0	41.6	9.0		
Ammonia (mg/L)	0.4	0.2	0.3			0.5	1.0	2.5	0.8	0.5	0.2	0.3	0.4	0.5	0.4	0.6	0.4	0.5	0.6	4.0	0.8		
Nitrate (mg/L)	4.8	0.1	6.4			0.6	0.2	0.2	0.6	0.1	12.0	12.0	10.0	10.0	12.0	40.0	8.0	28.0	24.0	nd	0.2		
Phosphorus (mg/L)	0.16	0.03	0.33			0.65	0.98	0.65	1.30	0.03	0.03	ND	ND	ND	ND	0.13	0.03	0.20	0.07	1.63	0.26		
Detergents (mg/L)	0.25	0.13	0.25			0.25	0.25	0.38	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.50	0.25	0.50	0.50	0.25	0.25		
Glycol (mg/L)	<1.0	<1.0	<1.0			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Surfactants (mg/L)	ND		ND			ND											ND						
Oil and grease (mg/L)	ND		18			ND											ND						
Total hardness (mg/L)	643		404			383											1,100						
Cadmium (mg/L)	ND		ND			ND											ND						
Copper (mg/L)	ND		ND			ND											ND						
Lead (mg/L)	ND		ND			ND											ND						
Zinc (mg/L)	ND		ND			0.020											ND						
Diazinon (µg/L)	ND		ND			0.76											ND						
Chlorpyrifos (µg/L)	ND		ND			ND											ND						
Total Coliform (MPN/100ml)	90,000		17,000			90,000											160,000						
Fecal Coliform (MPN/100ml)	30,000		5,000			30,000											90,000						
Enterococcus (MPN/100ml)	1,300		1,700			5,000											300						
2004																							
Temperature (℃)	25	22	24			20	22	21.3		23.7	22.2	22.3	22.2	21.4	29	23	25	23	28	22.7	24		
pH	7.9	7.8	7.8			7.4	7.3	8.1		6.6	8.0	8.1	8.1	8.8	8.2	7.8	8.2	8.0	8.3	8.1	7.9		
Conductivity (µmhos/cm)	6000	2470	2960			1350	1480	1262		910	5900	5430	5500	5520	6110	8470	5630	6380	6090	1680	6030		
Turbidity (NTU)	4.0	4.0	1.9			5.6	3.3	69.0		16.8	0.9	2.3	2.8	14.3	5.0	2.2	2.7	20.7	9.4	2.9	82.0		
Ammonia (mg/L)	0.6	0.4	0.8			0.4	2.0	0.4		0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.2	0.1	8.0	0.5		
Nitrate (mg/L)	7.50	2.50	3.80			1.25	2.50	1.25		2.50	7.50	7.50	7.50	7.50	8.80	50.00	8.80	25.00	25.00	2.50	1.25		
Phosphorus (mg/L)	0.13	0.03	0.82			0.64	1.28	0.65		0.03	0.03	0.03	0.03	0.03	0.03	0.10	0.03	0.26	0.03	0.98	0.06		
Detergents (mg/L)	0.75	0.38	0.50			0.25	0.50	0.50		0.25	0.50	0.50	0.50	0.50	0.50	0.75	0.50	0.75	0.75	0.38	0.50		
Glycol (mg/L)	<1.0	<1.0	<1.0			<1.0	<1.0	1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Surfactants (mg/L)	ND		ND			ND											ND						
Oil and grease (mg/L)	2		1			2											ND						
Total hardness (mg/L)	1250		528			405											1,230						
Cadmium (mg/L)	ND		ND			ND											ND						
Copper (mg/L)	ND		ND			ND											ND						
Lead (mg/L)	ND		ND			ND											ND						
Zinc (mg/L)	ND		ND			ND											ND						
Diazinon (µg/L)	ND		ND			ND											ND						
Chlorpyrifos (µg/L)	ND		ND			ND											ND						
Total Coliform (MPN/100ml)	130,000		300,000			80,000											30,000						
Fecal Coliform (MPN/100ml)	22,000		17,000			270											1,100						
Enterococcus (MPN/100ml)	7,000		2,600			900											1300						
2005																							
Temp.	24.1	26.9	25.8			23.5	23.5	22.4		24.3	21.3	20.9	20.3	21.3	27.8	24.3	20.5	21.5	25.9	28.1	25.7		
pH	8.3	8.1	8.2			8.1	7.6	7.4		7.8	7.5	8.1	8.1	8.1	8.7	8.1	8.1	8.0	8.3	8.3	7.8		
Conductivity	2,940	4,040	3,400			1,370	1,460	1,420		1,300	6,710	6,480	6,350	6,060	5,750	8,780	6,870	6,790	6,980	1,220	6,080		
Turbidity	0.49	2.94	16			9.47	6.32	8.27		7.88	4.77	3.03	10.17	5.96	4.18	1.26	2	7.5	6.87	61	15.02		
Ammonia	0.2	0.4	0.4			0.5	2	0.2		0.8	0.4	0.3	0.4	0.3	0.2	0.4	0.4	0.3	0.4	1	0.4		
Nitrate	2.5	1.25	7.5			1.25	1.25	1.25		2.5	6.25	7.5	8.75	8.75	8.75	65	15	37.5	37.5	1.25	1.25		
Reactive Phosphorus	0.10	0.03	0.26			0.65	0.98	0.13		0.81	0.03	nd	nd	nd	nd	0.10	0.03	0.13	0.07	0.07	0.03		
Detergents	0.25	0.5	0.5			0.5	0.67	0.5		0.5	0.75	0.75	0.75	0.75	0.75	1	1	0.75	0.75	0.75	0.5		
Glycol	<1.0	<1.0	<1.0			<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Surfactants (MBAS)	nd		nd			nd											nd						
Oil and Grease	nd		nd			nd											16						
Total Hardness	564		566			411											1690						
Cadmium (diss)	nd		nd			nd											nd						
Copper (diss)	nd		nd			nd											nd						
Lead (diss)	nd		nd			nd											nd						
Zinc (diss)	0.122		0.022			0.024											nd						
Diazinon	nd		nd			nd											nd						
Chlorpyrifos	nd		nd			nd											nd						
Total Coliform	500,000		500,000			900,000											30,000						
Fecal Coliform	5,000		5,000			140,000											500						
Enterococcus	1,700		5,000			3,000											300						
2006																							
Temp.	24.4	27.2	24.2	26	32.2	23.9	24.5	24.2		24	20.7	22.3	21.6	21.9	29.6	24.1	22.85	21.5	27	25.3	22.6	26	29.1
pH	7.9	8.8	8.5	8.0	8.5	8.2	8.0	8.4		7.4	8.1	8.2	8.2	8.2	8.9	8.3	8.5	8.3	8.6	8.4	7.9	8.5	8.1
Conductivity	7.31	3.31	2.89	3.01	3.12	1.25	1.13	1.19		1.13	6.69	6.24	6.22	6.18	6.72	8.45	6.14	5.73	6.77	1.18	5.52	3.10	0.76
Turbidity	1.3	3.78	3.59	25.85	1.55	25.78	4.21	14.04		4.83	12.86	1.49	3.05	1.89	2.63	4.33	2.52	4.56	2.37	12.54	5.93	98	11.64
Ammonia	0.3	0.3	0.1	0.5	0.1	0.4	0.4	0.3		2.5	0.8	0.3	0.2	0.2	0.4	0.1	0.2	0.4	0.2	0.8	0.6	0.3	0.8
Nitrate	6.75	1.25	3.75	1.25	1.25	1.25	0.4	2.5		1.25	7.5	6.75	6.75	6.75	7.5	40	12.5	25	15	1.25	1.25	1.25	1.25
Reactive Phosphorus	0.07	0.03	0.13	0.03	0.03	0.70	0.82	0.98		0.98	0.03	0.03	<0.016	<0.016	0.03	0.16	0.07	0.26	0.07	0.20	0.03	0.07	0.03
Detergents	0.5	0.37	0.25	0.25	0.25	0.25	0.25	0.5		0.5	0.75	0.75	0.75	0.75	0.5	0.75	0.75	0.75	0.75	0.75	0.5	0.13	**1.5**
Glycol	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Surfactants (MBAS)	nd		nd			nd											nd						
Oil and Grease	nd		nd			nd											nd						
Total Hardness	1,370		496			403											1140						
Cadmium (diss)	nd		nd			nd											nd						
Copper (diss)	nd		0.005			0.008											nd						
Lead (diss)	nd		nd			nd											nd						
Zinc (diss)	0.024		0.02			0.066											0.095						
Diazinon	nd		nd			nd											nd						
Chlorpyrifos	nd		nd			nd											nd						
Total Coliform	23,000		30,000			80,000											30,000						
Fecal Coliform	800		3,000			1,100											1,300						
Enterococcus	300		3,000			5,000											800						

Appendix A:
Historical Dry Weather Monitoring Data (1994-2007)

Site No.	SUN-02	SUN-03	SUN-05	SUN-06	SUN-07	SVS-01	SVS-02	SWB-03	SWR-03	SWR-04	TCC-01-1	TCC-01-2	TCC-01-3	TCC-01-4	TCC-02	TCC-03	TCC-04	TCC-05	TCC-06	TCS	WIL-01	WOL-02	WOL-03
2007																							
Temp.	22.3	26.6	23	27.7	25.6	22.5	23.8	23.7		25.3	25.6	24	24.9	25	31	23.7	25	25.2	27.1	25.1	26.7	22.8	23.6
pH	7.9	8.1	8.2	8.2	8.1	7.9	7.4	8		7.3	8.2	8.1	8.1	8.1	8.9	8	7.9	8	8.3	7.8	7.4	8.3	7.6
Conductivity	5.72	4.52	2.93	6.69	8.74	1.21	1.46	1.1		1.47	5.25	5.19	5.17	5.09	5.31	6.35	4.88	5.05	5.67	1.32	5.2	6.2	1.14
Turbidity	0.1	1.2	2.07	2.52	2.15	6.33	9.31	1.49		3.57	7.75	0.84	2.57	1.54	1.84	1.14	10.21	4.85	1.12	3.14	2.53	2.39	6.02
Ammonia	0.1	0.2	0.1	0.2	0.2	0.1	0.3	0.1		2.2	0.3	0.1	0.2	0.2	0.1	0.2	1	0.2	0.2	0.2	0.7	0.2	nd
Nitrate	6.1	2.03	5.81	21.47	24.6	0.23	0.14	0.63		0.2	3.84	5.65	6.01	7.01	7.62	27.71	8.36	16.27	8.81	0.45	0.02	3.03	0.76
Reactive Phosphorus	0.29	0.03	0.2	0.07	0.07	0.65	1.24	0.59		1.11	0.16	0.07	0.07	0.03	0.03	0.33	0.16	0.39	0.2	0.46	0.1	0.07	0.49
Detergents	0.75	0.25	0.38	0.63	0.75	0.5	0.75	0.38		0.5	0.5	0.75	0.63	0.75	0.63	0.75	0.75	0.5	0.25	0.63	0.5	0.75	0.25
Glycol	0.5	0.3	2.2	0.2	0.3	0.8	0.7	0.7		1.6	0.2	0.2	0.2	0.2	0.1	0.4	0.2	0.2	0.2	0.7	0.3	0.8	0.6
Surfactants (MBAS)	nd		nd			nd											0.5						
Oil and Grease	nd		nd			nd											nd						
Total Hardness	406		1340			335											1570						
Cadmium (diss)	nd		nd			nd											nd						
Copper (diss)	0.011		nd			0.008											nd						
Lead (diss)	nd		nd			nd											nd						
Zinc (diss)	0.032		nd			nd											nd						
Diazinon	nd		nd			nd											nd						
Chlorpyrifos	nd		nd			nd											nd						
Total Coliform	3000		13000			50000											240000						
Fecal Coliform	800		3500			30000											5000						
Enterococcus	500		1700			1400											2800						

Appendix B

Photographs of Sampling Locations

Site BAY-01 **Photo 167**	
Site BAY-02 **Photo 98**	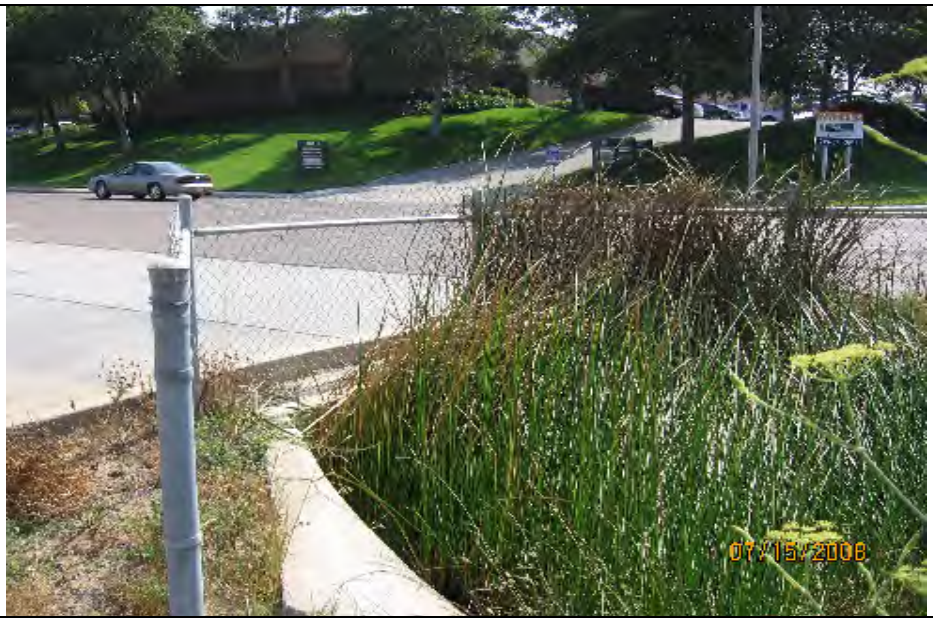
Site BAY-03 **Photo 96**	

Site BLC-01 **Photo 126**	
Site BLC-02 **Photo 125**	
Site CEN-01 **Photo 71**	

Site CEN-03 **Photo 68**	
Site CEN-04 **Photo 89**	
Site CEN-07 **Photo 91**	

Site CEN-08 **Photo 94**	
Site CEN-10 **Photo 104**	
Site JUD-01 **Photo 43**	

Site JUD-02 **Photo 58**	
Site JUD-03 **Photo 114**	
Site LAK-01 **Photo 79**	

Site OLR-01 **Photo 123**	
Site OLR-02 **Photo 120**	
Site OVR-04 **Photo 134**	

Site OVR-07 **Photo 132**	
Site OVR-09 **Photo 34**	
Site OVR-10 **Photo 135**	

Site OVR-14 **Photo 131**	
Site POG-01 **Photo 87**	
Site POG-02 **Photo 14**	

Site POG-03 **Photo 85**	
Site PRD-02 **Photo 36**	
Site RCC-01 **Photo 62**	

Site RCC-02 **Photo 32**	
Site RCC-03 **Photo 29**	
Site RCC-04 **Photo 75**	

Site SCR-01 **Photo 25**	
Site SCR-02 **Photo 101**	
Site SCR-03 **Photo 12**	

Site SCR-04 **Photo 10**	
Site SCR-05 **Photo 6**	
Site SUN-02 **Photo 15**	

Site SUN-03 **Photo 141**	
Site SUN-05 **Photo 17**	
Site SUN-06 **Photo 107**	

Site SUN-07 **Photo 109**	
Site SVS-01 **Photo 61**	
Site SVS-02 **Photo 118**	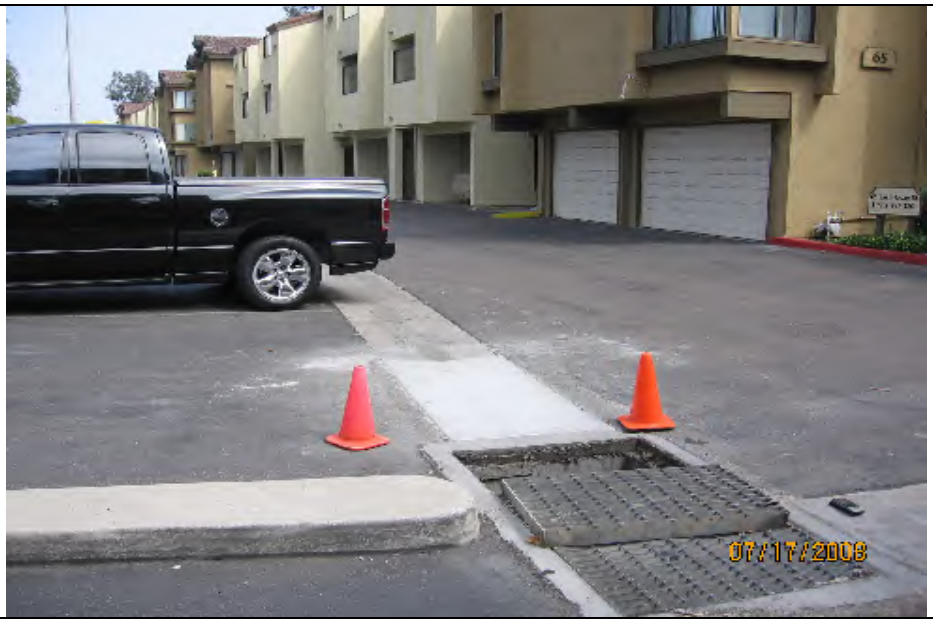

Site SWB-03 **Photo 113**	
Site SWR-03-E **Photo 165**	
Site SWR-04 **Photo 142**	

Site TCC-01-01 **Photo 150**	
Site TCC-01-02 **Photo 151**	
Site TCC-01-03 **Photo 152**	

Site TCC-01-04 **Photo 153**	
Site TCC-02 **Photo 163**	
Site TCC-03 **Photo 156**	

Site TCC-04 **Photo 69**	
Site TCC-05 **Photo 160**	
Site TCC-06 **Photo 161**	

Site TCS **Photo 137**	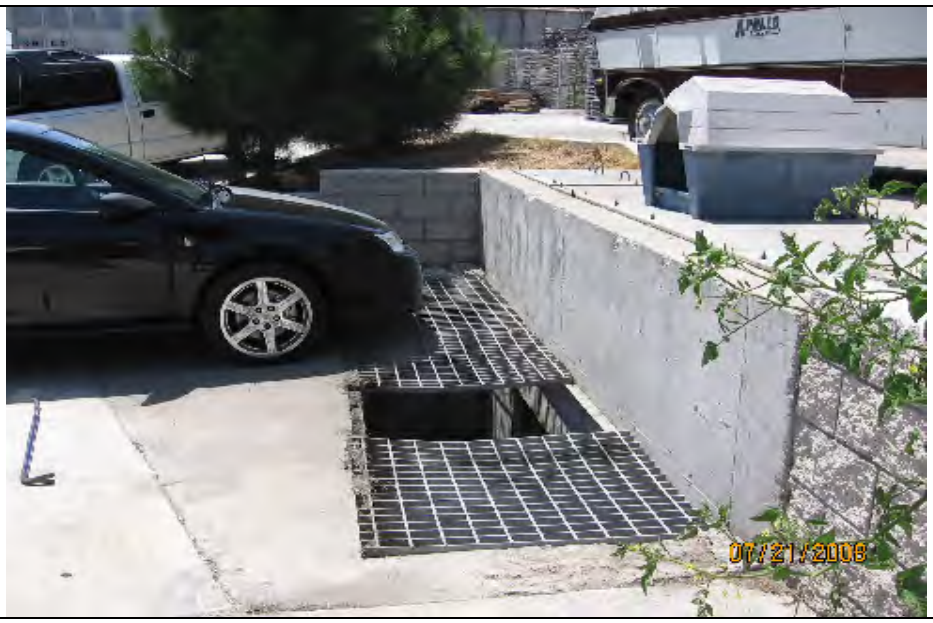
Site WIL-01 **Photo 119**	
Site WOL-02 **Photo 2**	

Site WOL-03 **Photo 4**	

Appendix C

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

11 July 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807072

Project Name: Chula Vista Dry Weather
Project Desc./#:200838W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/03/08 13:58. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807072

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
POG-02	0807072-01	Water	07/03/08 10:10	07/03/08 13:58
SUN-02	0807072-02	Water	07/03/08 11:30	07/03/08 13:58
SUN-05	0807072-03	Water	07/03/08 12:20	07/03/08 13:58

3235

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807072

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
POG-02 (0807072-01) Water Sampled: 07/03/08 10:10 Received: 07/03/08 13:58									
Cadmium	ND	0.005	mg/l	1	8070306	07/07/08	07/07/08	EPA 6020	
Copper	**0.008**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	**0.062**	0.020	"	"	"	"	"	"	
SUN-02 (0807072-02) Water Sampled: 07/03/08 11:30 Received: 07/03/08 13:58									
Lead	ND	0.005	mg/l	1	8070306	07/07/08	07/07/08	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
SUN-05 (0807072-03) Water Sampled: 07/03/08 12:20 Received: 07/03/08 13:58									
Cadmium	ND	0.005	mg/l	1	8070306	07/07/08	07/07/08	EPA 6020	
Zinc	ND	0.020	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	

3236

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807072

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
POG-02 (0807072-01) Water Sampled: 07/03/08 10:10 Received: 07/03/08 13:58									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8070725	07/07/08	07/08/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*118 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*126 %*	*60-130*		"	"	"	"	
SUN-02 (0807072-02) Water Sampled: 07/03/08 11:30 Received: 07/03/08 13:58									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8070725	07/07/08	07/08/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*102 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*97 %*	*60-130*		"	"	"	"	
SUN-05 (0807072-03) Water Sampled: 07/03/08 12:20 Received: 07/03/08 13:58									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8070725	07/07/08	07/08/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*102 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*96 %*	*60-130*		"	"	"	"	

3237

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807072

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
POG-02 (0807072-01) Water Sampled: 07/03/08 10:10 Received: 07/03/08 13:58									
Hardness (Total)	**297**	10	mg CaCO3/L	1	8070735	07/07/08	07/08/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	"	8070311	07/03/08	07/03/08	EPA 1664A	
SUN-02 (0807072-02) Water Sampled: 07/03/08 11:30 Received: 07/03/08 13:58									
Hardness (Total)	**1340**	100	mg CaCO3/L	10	8070735	07/07/08	07/08/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070311	07/03/08	07/03/08	EPA 1664A	
SUN-05 (0807072-03) Water Sampled: 07/03/08 12:20 Received: 07/03/08 13:58									
Hardness (Total)	**412**	10	mg CaCO3/L	1	8070735	07/07/08	07/08/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	"	8070311	07/03/08	07/03/08	EPA 1664A	

3238

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807072

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
POG-02 (0807072-01) Water Sampled: 07/03/08 10:10 Received: 07/03/08 13:58									
Total Coliforms	**170000**	2000	MPN/100 ml	1000	8070710	07/03/08	07/07/08	SM 9221 B, E	
Fecal Coliforms	**90000**	200	"	100	"	"	07/06/08	"	
Enterococcus	**50000**	200	"	"	8070711	"	07/07/08	SM 9230 A, B	
SUN-02 (0807072-02) Water Sampled: 07/03/08 11:30 Received: 07/03/08 13:58									
Total Coliforms	**50000**	2000	MPN/100 ml	1000	8070710	07/03/08	07/07/08	SM 9221 B, E	
Fecal Coliforms	**5000**	200	"	100	"	"	07/06/08	"	
Enterococcus	**500**	20	"	10	8070711	"	07/07/08	SM 9230 A, B	
SUN-05 (0807072-03) Water Sampled: 07/03/08 12:20 Received: 07/03/08 13:58									
Total Coliforms	**30000**	2000	MPN/100 ml	1000	8070710	07/03/08	07/07/08	SM 9221 B, E	
Fecal Coliforms	**5000**	200	"	100	"	"	07/06/08	"	
Enterococcus	**1700**	20	"	10	8070711	"	07/07/08	SM 9230 A, B	

3239

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807072

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070306										
Blank (8070306-BLK1)				Prepared: 07/03/08		Analyzed: 07/07/08				
Copper	ND	0.005	mg/l							
Zinc	ND	0.020	"							
Lead	ND	0.005	"							
Cadmium	ND	0.005	"							
LCS (8070306-BS1)				Prepared: 07/03/08		Analyzed: 07/07/08				
Copper	0.109	0.005	mg/l	0.100		109	75-125			
Lead	0.120	0.005	"	0.100		120	75-125			
Zinc	0.119	0.020	"	0.100		119	75-125			
Cadmium	0.116	0.005	"	0.100		116	75-125			
LCS Dup (8070306-BSD1)				Prepared: 07/03/08		Analyzed: 07/07/08				
Cadmium	0.121	0.005	mg/l	0.100		121	75-125	5	20	
Copper	0.111	0.005	"	0.100		111	75-125	2	20	
Lead	0.116	0.005	"	0.100		116	75-125	3	20	
Zinc	0.122	0.020	"	0.100		122	75-125	3	20	
Duplicate (8070306-DUP1)		**Source: 0807026-03**		Prepared: 07/03/08		Analyzed: 07/07/08				
Lead	ND	0.005	mg/l		ND				20	
Zinc	ND	0.020	"		ND				20	
Copper	0.002	0.005	"		0.002			7	20	
Cadmium	ND	0.005	"		ND				20	
Matrix Spike (8070306-MS1)		**Source: 0807026-03**		Prepared: 07/03/08		Analyzed: 07/07/08				
Copper	0.102	0.005	mg/l	0.100	0.002	100	75-125			
Lead	0.117	0.005	"	0.100	ND	117	75-125			
Zinc	0.110	0.020	"	0.100	ND	110	75-125			
Cadmium	0.105	0.005	"	0.100	ND	105	75-125			

3240

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807072

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070306										
Matrix Spike Dup (8070306-MSD1)		**Source: 0807026-03**		Prepared: 07/03/08	Analyzed: 07/07/08					
Cadmium	0.104	0.005	mg/l	0.100	ND	104	75-125	0.8	20	
Copper	0.104	0.005	"	0.100	0.002	102	75-125	1	20	
Lead	0.120	0.005	"	0.100	ND	120	75-125	3	20	
Zinc	0.111	0.020	"	0.100	ND	111	75-125	1	20	

3241

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807072

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070725										
Blank (8070725-BLK1)				Prepared: 07/07/08	Analyzed: 07/08/08					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.245*		*"*	*0.250*		*98*	*60-130*			
Surrogate: Tribuytlphosphate	*0.185*		*"*	*0.250*		*74*	*60-130*			
LCS (8070725-BS1)				Prepared: 07/07/08	Analyzed: 07/08/08					
Bolstar	0.39	0.10	ug/l	0.500		78	60-130			
Diazinon	0.39	0.05	"	0.500		79	60-130			
Ethoprop	0.41	0.05	"	0.500		81	60-130			
Mevinphos	0.37	0.25	"	0.500		74	60-130			
Methyl parathion	0.42	0.10	"	0.500		83	60-130			
Phorate	0.36	0.05	"	0.500		72	60-130			
Ronnel	0.40	0.25	"	0.500		80	60-130			
Trichlorinate	0.40	0.05	"	0.500		80	60-130			
Surrogate: Triphenyl phosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.228*		*"*	*0.250*		*91*	*60-130*			
LCS Dup (8070725-BSD1)				Prepared: 07/07/08	Analyzed: 07/08/08					
Bolstar	0.38	0.10	ug/l	0.500		76	60-130	2	30	
Diazinon	0.40	0.05	"	0.500		80	60-130	2	30	
Ethoprop	0.38	0.05	"	0.500		76	60-130	6	30	
Mevinphos	0.37	0.25	"	0.500		73	60-130	1	30	
Methyl parathion	0.40	0.10	"	0.500		80	60-130	4	30	
Phorate	0.36	0.05	"	0.500		73	60-130	2	30	
Ronnel	0.38	0.25	"	0.500		77	60-130	4	30	
Trichlorinate	0.41	0.05	"	0.500		82	60-130	2	30	
Surrogate: Triphenyl phosphate	*0.220*		*"*	*0.250*		*88*	*60-130*			
Surrogate: Tribuytlphosphate	*0.215*		*"*	*0.250*		*86*	*60-130*			

3242

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807072

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070311										
Blank (8070311-BLK1)				Prepared & Analyzed: 07/02/07						
Oil & Grease	ND	5	mg/l							
LCS (8070311-BS1)				Prepared & Analyzed: 07/02/07						
Oil & Grease	32	5	mg/l	40.0		79	75-125			
LCS Dup (8070311-BSD1)				Prepared & Analyzed: 07/02/07						
Oil & Grease	33	5	mg/l	40.0		84	75-125	6	20	
Matrix Spike (8070311-MS1)		**Source: 0806470-02**		Prepared & Analyzed: 07/02/07						
Oil & Grease	36	5	mg/l	40.0	ND	89	0-200			
Batch 8070735										
Blank (8070735-BLK1)				Prepared: 07/07/08 Analyzed: 07/08/08						
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8070735-DUP1)		**Source: 0807083-01**		Prepared: 07/07/08 Analyzed: 07/08/08						
Hardness (Total)	186	10	mg CaCO3/L		187			0.6	20	

3243

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

EnviroMatrix Analytical, Inc.

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

3244

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0807072

Client: D-MAX Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr
Address: 7220 Trade street, suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: Chula Vista Dry Weather
Project #: 200838W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type
01	PoG-02	7/3/08	10:10	Water	3/4 G/p
02	SUN-02	~	11:50	~	2/4 G/p
03	SUN-05	~	12:20	~	2/4 G/p
04					
05					
06					
07					
08					
09					
10					

REQUESTED ANALYSIS

#	Oil & Grease ☐413.1 ☐413.2 X1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) Dia/chlor	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) X Dissolved	Coliform, X Total (MTF) X Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, X MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness						Microbiology Notes:
01	X							X							X	X	X		X						Sample Comments:
02	X							X							X	X	X		X						
03	X							X							X	X	X		X						
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☑STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]**Sample Disposal:** ☑By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please do not include Malathion results in the report.
Lab.

CHAIN-OF-CUSTODY RECORD

	RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature	Manouchehr Dadkhah	Kelly Leyden	7/3/08
Print	Manouchehr Dadkhah	Kelly Leyden	13:30
Company	D-Max Eng.	EMA	
Signature	Kelly Leyden	[signature]	7/3/08
Print	Kelly Leyden	Sam Flory	13:58
Company	EMA	EMA Inc.	
Signature			
Print			
Company			

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T=8° On ice

EnviroMatrix Analytical, Inc.

14 July 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807107

Project Name: Chula Vista Dry Weather
Project Desc./#:200838W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/07/08 14:36. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807107

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SCR-01	0807107-01	Water	07/07/08 09:45	07/07/08 14:36
RCC-03	0807107-02	Water	07/07/08 11:45	07/07/08 14:36
RCC-02	0807107-03	Water	07/07/08 12:50	07/07/08 14:36

3247

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807107

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (0807107-01) Water Sampled: 07/07/08 09:45 Received: 07/07/08 14:36									
Cadmium	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	**0.021**	0.020	"	"	"	"	"	"	
RCC-03 (0807107-02) Water Sampled: 07/07/08 11:45 Received: 07/07/08 14:36									
Lead	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
RCC-02 (0807107-03) Water Sampled: 07/07/08 12:50 Received: 07/07/08 14:36									
Cadmium	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Zinc	ND	0.020	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807107

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (0807107-01) Water Sampled: 07/07/08 09:45 Received: 07/07/08 14:36									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8070725	07/07/08	07/09/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*113 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*110 %*	*60-130*		"	"	"	"	
RCC-03 (0807107-02) Water Sampled: 07/07/08 11:45 Received: 07/07/08 14:36									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8070725	07/07/08	07/09/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*122 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*101 %*	*60-130*		"	"	"	"	
RCC-02 (0807107-03) Water Sampled: 07/07/08 12:50 Received: 07/07/08 14:36									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8070725	07/07/08	07/09/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*102 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*92 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807107

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (0807107-01) Water Sampled: 07/07/08 09:45 Received: 07/07/08 14:36									
Hardness (Total)	**487**	100	mg CaCO3/L	10	8070816	07/08/08	07/09/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	
RCC-03 (0807107-02) Water Sampled: 07/07/08 11:45 Received: 07/07/08 14:36									
Hardness (Total)	**1370**	100	mg CaCO3/L	10	8070816	07/08/08	07/09/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	
RCC-02 (0807107-03) Water Sampled: 07/07/08 12:50 Received: 07/07/08 14:36									
Hardness (Total)	**2180**	100	mg CaCO3/L	10	8070816	07/08/08	07/09/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807107

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (0807107-01) Water Sampled: 07/07/08 09:45 Received: 07/07/08 14:36									
Total Coliforms	**130000**	2000	MPN/100 ml	1000	8071128	07/07/08	07/11/08	SM 9221 B, E	
Fecal Coliforms	**5000**	200	"	100	"	"	07/10/08	"	
Enterococcus	**30000**	200	"	"	8071129	"	07/11/08	SM 9230 A, B	
RCC-03 (0807107-02) Water Sampled: 07/07/08 11:45 Received: 07/07/08 14:36									
Total Coliforms	**110000**	2000	MPN/100 ml	1000	8071128	07/07/08	07/11/08	SM 9221 B, E	
Fecal Coliforms	**1400**	20	"	10	"	"	07/10/08	"	
Enterococcus	**9200**	20	"	"	8071129	"	07/11/08	SM 9230 A, B	
RCC-02 (0807107-03) Water Sampled: 07/07/08 12:50 Received: 07/07/08 14:36									
Total Coliforms	**7000**	200	MPN/100 ml	100	8071128	07/07/08	07/11/08	SM 9221 B, E	
Fecal Coliforms	**170**	20	"	10	"	"	07/10/08	"	
Enterococcus	**2200**	20	"	"	8071129	"	07/11/08	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807107

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071005										
Blank (8071005-BLK1)				Prepared & Analyzed: 07/10/08						
Copper	ND	0.005	mg/l							
Cadmium	ND	0.005	"							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
LCS (8071005-BS1)				Prepared & Analyzed: 07/10/08						
Cadmium	0.088	0.005	mg/l	0.100		88	75-125			
Zinc	0.092	0.020	"	0.100		92	75-125			
Lead	0.093	0.005	"	0.100		93	75-125			
Copper	0.085	0.005	"	0.100		85	75-125			
LCS Dup (8071005-BSD1)				Prepared & Analyzed: 07/10/08						
Zinc	0.089	0.020	mg/l	0.100		89	75-125	2	20	
Cadmium	0.085	0.005	"	0.100		85	75-125	3	20	
Lead	0.087	0.005	"	0.100		87	75-125	7	20	
Copper	0.082	0.005	"	0.100		82	75-125	3	20	
Duplicate (8071005-DUP1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Zinc	0.163	0.020	mg/l		0.162			0.5	20	
Cadmium	0.001	0.005	"		0.001			5	20	
Copper	0.006	0.005	"		0.006			2	20	
Lead	ND	0.005	"		ND				20	
Matrix Spike (8071005-MS1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Zinc	0.263	0.020	mg/l	0.100	0.162	101	75-125			
Lead	0.117	0.005	"	0.100	ND	117	75-125			
Copper	0.104	0.005	"	0.100	0.006	99	75-125			
Cadmium	0.108	0.005	"	0.100	0.001	107	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807107

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071005										
Matrix Spike Dup (8071005-MSD1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Cadmium	0.112	0.005	mg/l	0.100	0.001	111	75-125	4	20	
Lead	0.121	0.005	"	0.100	ND	121	75-125	3	20	
Copper	0.110	0.005	"	0.100	0.006	104	75-125	5	20	
Zinc	0.284	0.020	"	0.100	0.162	121	75-125	7	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807107

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070725										
Blank (8070725-BLK1)				Prepared: 07/07/08 Analyzed: 07/08/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.245*		*"*	*0.250*		*98*	*60-130*			
Surrogate: Tribuytlphosphate	*0.185*		*"*	*0.250*		*74*	*60-130*			
LCS (8070725-BS1)				Prepared: 07/07/08 Analyzed: 07/08/08						
Bolstar	0.39	0.10	ug/l	0.500		78	60-130			
Diazinon	0.39	0.05	"	0.500		79	60-130			
Ethoprop	0.41	0.05	"	0.500		81	60-130			
Mevinphos	0.37	0.25	"	0.500		74	60-130			
Methyl parathion	0.42	0.10	"	0.500		83	60-130			
Phorate	0.36	0.05	"	0.500		72	60-130			
Ronnel	0.40	0.25	"	0.500		80	60-130			
Trichlorinate	0.40	0.05	"	0.500		80	60-130			
Surrogate: Triphenyl phosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.228*		*"*	*0.250*		*91*	*60-130*			
LCS Dup (8070725-BSD1)				Prepared: 07/07/08 Analyzed: 07/08/08						
Bolstar	0.38	0.10	ug/l	0.500		76	60-130	2	30	
Diazinon	0.40	0.05	"	0.500		80	60-130	2	30	
Ethoprop	0.38	0.05	"	0.500		76	60-130	6	30	
Mevinphos	0.37	0.25	"	0.500		73	60-130	1	30	
Methyl parathion	0.40	0.10	"	0.500		80	60-130	4	30	
Phorate	0.36	0.05	"	0.500		73	60-130	2	30	
Ronnel	0.38	0.25	"	0.500		77	60-130	4	30	
Trichlorinate	0.41	0.05	"	0.500		82	60-130	2	30	
Surrogate: Triphenyl phosphate	*0.220*		*"*	*0.250*		*88*	*60-130*			
Surrogate: Tribuytlphosphate	*0.215*		*"*	*0.250*		*86*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807107

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070816										
Blank (8070816-BLK1)				Prepared: 07/08/08	Analyzed: 07/09/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8070816-DUP1)		**Source: 0807128-02**		Prepared: 07/08/08	Analyzed: 07/09/08					
Hardness (Total)	297	10	mg CaCO3/L		305			3	20	
Batch 8070920										
Blank (8070920-BLK1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	ND	5	mg/l							
LCS (8070920-BS1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	32	5	mg/l	40.0		79	75-125			
LCS Dup (8070920-BSD1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	36	5	mg/l	40.0		90	75-125	13	20	
Matrix Spike (8070920-MS1)		**Source: 0807108-02**		Prepared & Analyzed: 07/09/08						
Oil & Grease	24	5	mg/l	40.0	ND	60	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering	**EMA Log #: 0807107**
Project Name: Chula Vista Dry Weather	

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0807107

Client: D-Max Engineering
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: Chula Vista Dry weather
Project #: 200838W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 X1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Diazinon	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Dissolved	Coliform, X Total (MTF) X Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, X MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness						Microbiology Notes: / Sample Comments:
01	SCR-01	7/7/08 9:45	water	3/4 G/P	X							X						X	X	X		X						
02	RCC-03	" 11:45	"	2/4 "	X							X						X	X	X		X						
03	RCC-02	" 12:50	"	2/4 "	X							X						X	X	X		X						
04																												
05																												
06																												
07																												
08																												
09																												
10																												

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☒STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please do not include Malathion results in the Lab. Report.

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature Manouchehr Dadkhah	Signature [illegible]	7-7-08
Print Manouchehr Dadkhah	Print Louis Lugo	2:08
Company D-Max Eng.	Company EMA	
Signature [illegible]	Signature [illegible]	7-7-08
Print Louis Lugo	Print Sean Flores	2:36
Company EMA	Company EMA Inc.	
Signature	Signature	
Print	Print	
Company	Company	

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 6°C on ice

EnviroMatrix Analytical, Inc.

15 July 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807152

Project Name: Chula Vista Dry Weather
Project Desc./#:200838W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/08/08 13:35. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807152

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OVR-09	0807152-01	Water	07/08/08 08:50	07/08/08 13:35
PRD-02	0807152-02	Water	07/08/08 10:30	07/08/08 13:35
JUD-01	0807152-03	Water	07/08/08 11:45	07/08/08 13:35

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807152

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
OVR-09 (0807152-01) Water Sampled: 07/08/08 08:50 Received: 07/08/08 13:35									
Cadmium	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Copper	**0.008**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	**0.037**	0.020	"	"	"	"	"	"	
PRD-02 (0807152-02) Water Sampled: 07/08/08 10:30 Received: 07/08/08 13:35									
Lead	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Copper	**0.007**	0.005	"	"	"	"	"	"	
Zinc	**0.021**	0.020	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
JUD-01 (0807152-03) Water Sampled: 07/08/08 11:45 Received: 07/08/08 13:35									
Cadmium	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Zinc	ND	0.020	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	**0.013**	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807152

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
OVR-09 (0807152-01) Water Sampled: 07/08/08 08:50 Received: 07/08/08 13:35									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8070811	07/08/08	07/10/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*107 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*102 %*	*60-130*		"	"	"	"	
PRD-02 (0807152-02) Water Sampled: 07/08/08 10:30 Received: 07/08/08 13:35									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8070811	07/08/08	07/10/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*112 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*110 %*	*60-130*		"	"	"	"	
JUD-01 (0807152-03) Water Sampled: 07/08/08 11:45 Received: 07/08/08 13:35									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8070811	07/08/08	07/10/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*111 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*111 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807152

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
OVR-09 (0807152-01) Water Sampled: 07/08/08 08:50 Received: 07/08/08 13:35									
Hardness (Total)	**973**	100	mg CaCO3/L	10	8070816	07/08/08	07/09/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	
PRD-02 (0807152-02) Water Sampled: 07/08/08 10:30 Received: 07/08/08 13:35									
Hardness (Total)	**382**	100	mg CaCO3/L	10	8070816	07/08/08	07/09/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	
JUD-01 (0807152-03) Water Sampled: 07/08/08 11:45 Received: 07/08/08 13:35									
Hardness (Total)	**422**	100	mg CaCO3/L	10	8070816	07/08/08	07/09/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807152

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
OVR-09 (0807152-01) Water Sampled: 07/08/08 08:50 Received: 07/08/08 13:35									
Total Coliforms	**170**	20	MPN/100 ml	10	8071304	07/08/08	07/12/08	SM 9221 B, E	
Fecal Coliforms	ND	20	"	"	"	"	07/11/08	"	
Enterococcus	**20**	20	"	"	8071305	"	07/12/08	SM 9230 A, B	
PRD-02 (0807152-02) Water Sampled: 07/08/08 10:30 Received: 07/08/08 13:35									
Total Coliforms	**30000**	2000	MPN/100 ml	1000	8071304	07/08/08	07/12/08	SM 9221 B, E	
Fecal Coliforms	**1700**	20	"	10	"	"	07/11/08	"	
Enterococcus	**1300**	20	"	"	8071305	"	07/12/08	SM 9230 A, B	
JUD-01 (0807152-03) Water Sampled: 07/08/08 11:45 Received: 07/08/08 13:35									
Total Coliforms	**80000**	2000	MPN/100 ml	1000	8071304	07/08/08	07/12/08	SM 9221 B, E	
Fecal Coliforms	**2300**	200	"	100	"	"	07/11/08	"	
Enterococcus	**2300**	200	"	"	8071305	"	07/12/08	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807152

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071005										
Blank (8071005-BLK1)				Prepared & Analyzed: 07/10/08						
Copper	ND	0.005	mg/l							
Cadmium	ND	0.005	"							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
LCS (8071005-BS1)				Prepared & Analyzed: 07/10/08						
Cadmium	0.088	0.005	mg/l	0.100		88	75-125			
Zinc	0.092	0.020	"	0.100		92	75-125			
Lead	0.093	0.005	"	0.100		93	75-125			
Copper	0.085	0.005	"	0.100		85	75-125			
LCS Dup (8071005-BSD1)				Prepared & Analyzed: 07/10/08						
Zinc	0.089	0.020	mg/l	0.100		89	75-125	2	20	
Cadmium	0.085	0.005	"	0.100		85	75-125	3	20	
Lead	0.087	0.005	"	0.100		87	75-125	7	20	
Copper	0.082	0.005	"	0.100		82	75-125	3	20	
Duplicate (8071005-DUP1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Zinc	0.163	0.020	mg/l		0.162			0.5	20	
Cadmium	0.001	0.005	"		0.001			5	20	
Copper	0.006	0.005	"		0.006			2	20	
Lead	ND	0.005	"		ND				20	
Matrix Spike (8071005-MS1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Zinc	0.263	0.020	mg/l	0.100	0.162	101	75-125			
Lead	0.117	0.005	"	0.100	ND	117	75-125			
Copper	0.104	0.005	"	0.100	0.006	99	75-125			
Cadmium	0.108	0.005	"	0.100	0.001	107	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807152

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071005										
Matrix Spike Dup (8071005-MSD1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Cadmium	0.112	0.005	mg/l	0.100	0.001	111	75-125	4	20	
Lead	0.121	0.005	"	0.100	ND	121	75-125	3	20	
Copper	0.110	0.005	"	0.100	0.006	104	75-125	5	20	
Zinc	0.284	0.020	"	0.100	0.162	121	75-125	7	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807152

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070811										
Blank (8070811-BLK1)				Prepared: 07/08/08 Analyzed: 07/10/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.221*		*"*	*0.250*		*88*	*60-130*			
Surrogate: Tribuytlphosphate	*0.212*		*"*	*0.250*		*85*	*60-130*			
LCS (8070811-BS1)				Prepared: 07/08/08 Analyzed: 07/10/08						
Bolstar	0.44	0.10	ug/l	0.500		89	60-130			
Diazinon	0.49	0.05	"	0.500		97	60-130			
Ethoprop	0.46	0.05	"	0.500		92	60-130			
Mevinphos	0.37	0.25	"	0.500		73	60-130			
Methyl parathion	0.44	0.10	"	0.500		87	60-130			
Phorate	0.41	0.05	"	0.500		82	60-130			
Ronnel	0.45	0.25	"	0.500		90	60-130			
Trichlorinate	0.48	0.05	"	0.500		97	60-130			
Surrogate: Triphenyl phosphate	*0.253*		*"*	*0.250*		*101*	*60-130*			
Surrogate: Tribuytlphosphate	*0.238*		*"*	*0.250*		*95*	*60-130*			
LCS Dup (8070811-BSD1)				Prepared: 07/08/08 Analyzed: 07/10/08						
Bolstar	0.38	0.10	ug/l	0.500		76	60-130	16	30	
Diazinon	0.48	0.05	"	0.500		97	60-130	0.4	30	
Ethoprop	0.45	0.05	"	0.500		89	60-130	3	30	
Mevinphos	0.39	0.25	"	0.500		77	60-130	5	30	
Methyl parathion	0.43	0.10	"	0.500		85	60-130	3	30	
Phorate	0.40	0.05	"	0.500		79	60-130	4	30	
Ronnel	0.40	0.25	"	0.500		81	60-130	11	30	
Trichlorinate	0.46	0.05	"	0.500		92	60-130	5	30	
Surrogate: Triphenyl phosphate	*0.217*		*"*	*0.250*		*87*	*60-130*			
Surrogate: Tribuytlphosphate	*0.202*		*"*	*0.250*		*81*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807152

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070816										
Blank (8070816-BLK1)				Prepared: 07/08/08	Analyzed: 07/09/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8070816-DUP1)		**Source: 0807128-02**		Prepared: 07/08/08	Analyzed: 07/09/08					
Hardness (Total)	297	10	mg CaCO3/L		305			3	20	
Batch 8070920										
Blank (8070920-BLK1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	ND	5	mg/l							
LCS (8070920-BS1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	32	5	mg/l	40.0		79	75-125			
LCS Dup (8070920-BSD1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	36	5	mg/l	40.0		90	75-125	13	20	
Matrix Spike (8070920-MS1)		**Source: 0807108-02**		Prepared & Analyzed: 07/09/08						
Oil & Grease	24	5	mg/l	40.0	ND	60	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering	**EMA Log #: 0807152**
Project Name: Chula Vista Dry Weather	

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0807152

Client: D-Max Engineering
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: (858)586-6600 Fax: (858)586-6644
Email:
Billing Address: Same
Project ID: Chula Vista Dry Weather
Project #: 200838W-1 PO#:

SAMPLE DETAILS

REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 X1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Dia/Chlor	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn X Dissolved	Coliform, X Total (MTF) X Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, X MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness						Microbiology Notes: / Sample Comments:
01	OVR-09	7/8/08 8:50	Water	3/4 G/p	X							X						X	X	X		X						
02	PRD-02	~ 10:30	~	2/4 G/p	X							X						X	X	X		X						
03	JUD-01	~ 11:45	~	2/4 G/p	X							X						X	X	X		X						
04																												
05																												
06																												
07																												
08																												
09																												
10																												

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ✓STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please do not include malathion results in the lab report.

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: Kelly Leyden	7/8/08
Print: Manouchehr Dadkhah	Print: Kelly Leyden	13:00
Company: D-Max Eng.	Company: EMA	
Signature: Kelly Leyden	Signature: [illegible]	7/8/08
Print: Kelly Leyden	Print: Sam Flory	13:35
Company: EMA	Company: EMA Inc.	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T 5° On Ice

EnviroMatrix Analytical, Inc.

16 July 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807176

Project Name: Chula Vista Dry Weather
Project Desc./#:200838W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/09/08 12:58. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807176

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JUD-02	0807176-01	Water	07/09/08 08:45	07/09/08 12:58
SVS-01	0807176-02	Water	07/09/08 10:30	07/09/08 12:58
RCC-01	0807176-03	Water	07/09/08 11:30	07/09/08 12:58

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807176

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-02 (0807176-01) Water Sampled: 07/09/08 08:45 Received: 07/09/08 12:58									
Cadmium	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
SVS-01 (0807176-02) Water Sampled: 07/09/08 10:30 Received: 07/09/08 12:58									
Lead	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Copper	**0.008**	0.005	"	"	"	"	"	"	
Zinc	**0.069**	0.020	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
RCC-01 (0807176-03) Water Sampled: 07/09/08 11:30 Received: 07/09/08 12:58									
Cadmium	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Zinc	ND	0.020	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807176

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-02 (0807176-01) Water Sampled: 07/09/08 08:45 Received: 07/09/08 12:58									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8071006	07/10/08	07/15/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*146 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*112 %*	*60-130*		"	"	"	"	
SVS-01 (0807176-02) Water Sampled: 07/09/08 10:30 Received: 07/09/08 12:58									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8071006	07/10/08	07/15/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*114 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*119 %*	*60-130*		"	"	"	"	
RCC-01 (0807176-03) Water Sampled: 07/09/08 11:30 Received: 07/09/08 12:58									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8071006	07/10/08	07/15/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*106 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*100 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807176

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-02 (0807176-01) Water Sampled: 07/09/08 08:45 Received: 07/09/08 12:58									
Hardness (Total)	**378**	100	mg CaCO3/L	10	8070932	07/09/08	07/10/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	
SVS-01 (0807176-02) Water Sampled: 07/09/08 10:30 Received: 07/09/08 12:58									
Hardness (Total)	**707**	100	mg CaCO3/L	10	8070932	07/09/08	07/10/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	
RCC-01 (0807176-03) Water Sampled: 07/09/08 11:30 Received: 07/09/08 12:58									
Hardness (Total)	**1480**	100	mg CaCO3/L	10	8070932	07/09/08	07/10/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807176

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-02 (0807176-01) Water Sampled: 07/09/08 08:45 Received: 07/09/08 12:58									
Total Coliforms	**500000**	2000	MPN/100 ml	1000	8071319	07/09/08	07/13/08	SM 9221 B, E	
Fecal Coliforms	**24000**	200	"	100	"	"	07/12/08	"	
Enterococcus	**3000**	200	"	"	8071320	"	07/13/08	SM 9230 A, B	
SVS-01 (0807176-02) Water Sampled: 07/09/08 10:30 Received: 07/09/08 12:58									
Total Coliforms	**17000**	200	MPN/100 ml	100	8071319	07/09/08	07/13/08	SM 9221 B, E	
Fecal Coliforms	**5000**	200	"	"	"	"	07/12/08	"	
Enterococcus	**17000**	200	"	"	8071320	"	07/13/08	SM 9230 A, B	
RCC-01 (0807176-03) Water Sampled: 07/09/08 11:30 Received: 07/09/08 12:58									
Total Coliforms	**23000**	2000	MPN/100 ml	1000	8071319	07/09/08	07/13/08	SM 9221 B, E	
Fecal Coliforms	**800**	20	"	10	"	"	07/12/08	"	
Enterococcus	**2200**	20	"	"	8071320	"	07/13/08	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807176

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071005										
Blank (8071005-BLK1)				Prepared & Analyzed: 07/10/08						
Cadmium	ND	0.005	mg/l							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
LCS (8071005-BS1)				Prepared & Analyzed: 07/10/08						
Cadmium	0.088	0.005	mg/l	0.100		88	75-125			
Copper	0.085	0.005	"	0.100		85	75-125			
Lead	0.093	0.005	"	0.100		93	75-125			
Zinc	0.092	0.020	"	0.100		92	75-125			
LCS Dup (8071005-BSD1)				Prepared & Analyzed: 07/10/08						
Copper	0.082	0.005	mg/l	0.100		82	75-125	3	20	
Lead	0.087	0.005	"	0.100		87	75-125	7	20	
Cadmium	0.085	0.005	"	0.100		85	75-125	3	20	
Zinc	0.089	0.020	"	0.100		89	75-125	2	20	
Duplicate (8071005-DUP1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Cadmium	0.001	0.005	mg/l		0.001			5	20	
Copper	0.006	0.005	"		0.006			2	20	
Lead	ND	0.005	"		ND				20	
Zinc	0.163	0.020	"		0.162			0.5	20	
Matrix Spike (8071005-MS1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Zinc	0.263	0.020	mg/l	0.100	0.162	101	75-125			
Cadmium	0.108	0.005	"	0.100	0.001	107	75-125			
Copper	0.104	0.005	"	0.100	0.006	99	75-125			
Lead	0.117	0.005	"	0.100	ND	117	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807176

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071005										
Matrix Spike Dup (8071005-MSD1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Zinc	0.284	0.020	mg/l	0.100	0.162	121	75-125	7	20	
Copper	0.110	0.005	"	0.100	0.006	104	75-125	5	20	
Lead	0.121	0.005	"	0.100	ND	121	75-125	3	20	
Cadmium	0.112	0.005	"	0.100	0.001	111	75-125	4	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807176

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071006										
Blank (8071006-BLK1)				Prepared: 07/10/08 Analyzed: 07/15/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.247*		*"*	*0.250*		*99*	*60-130*			
Surrogate: Tribuytlphosphate	*0.211*		*"*	*0.250*		*84*	*60-130*			
LCS (8071006-BS1)				Prepared: 07/10/08 Analyzed: 07/15/08						
Bolstar	0.41	0.10	ug/l	0.500		83	60-130			
Diazinon	0.43	0.05	"	0.500		86	60-130			
Ethoprop	0.40	0.05	"	0.500		79	60-130			
Mevinphos	0.38	0.25	"	0.500		76	60-130			
Methyl parathion	0.41	0.10	"	0.500		82	60-130			
Phorate	0.38	0.05	"	0.500		77	60-130			
Ronnel	0.42	0.25	"	0.500		84	60-130			
Trichlorinate	0.43	0.05	"	0.500		85	60-130			
Surrogate: Triphenyl phosphate	*0.236*		*"*	*0.250*		*94*	*60-130*			
Surrogate: Tribuytlphosphate	*0.247*		*"*	*0.250*		*99*	*60-130*			
LCS Dup (8071006-BSD1)				Prepared: 07/10/08 Analyzed: 07/15/08						
Bolstar	0.43	0.10	ug/l	0.500		87	60-130	4	30	
Diazinon	0.44	0.05	"	0.500		89	60-130	3	30	
Ethoprop	0.40	0.05	"	0.500		80	60-130	2	30	
Mevinphos	0.39	0.25	"	0.500		78	60-130	3	30	
Methyl parathion	0.42	0.10	"	0.500		85	60-130	4	30	
Phorate	0.41	0.05	"	0.500		82	60-130	6	30	
Ronnel	0.43	0.25	"	0.500		86	60-130	2	30	
Trichlorinate	0.46	0.05	"	0.500		93	60-130	9	30	
Surrogate: Triphenyl phosphate	*0.269*		*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.216*		*"*	*0.250*		*86*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807176

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070920										
Blank (8070920-BLK1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	ND	5	mg/l							
LCS (8070920-BS1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	32	5	mg/l	40.0		79	75-125			
LCS Dup (8070920-BSD1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	36	5	mg/l	40.0		90	75-125	13	20	
Matrix Spike (8070920-MS1)		**Source: 0807108-02**		Prepared & Analyzed: 07/09/08						
Oil & Grease	24	5	mg/l	40.0	ND	60	0-200			
Batch 8070932										
Blank (8070932-BLK1)				Prepared: 07/09/08 Analyzed: 07/10/08						
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8070932-DUP1)		**Source: 0807127-01**		Prepared: 07/09/08 Analyzed: 07/10/08						
Hardness (Total)	276	10	mg CaCO3/L		283			2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering	**EMA Log #: 0807176**
Project Name: Chula Vista Dry Weather	

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page ____ of ____

EMA LOG #: 0807176

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: (858) 586-8600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: Chula Vista Dry weather
Project #: 200838W-1 PO#:

SAMPLE DETAILS

REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 X1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Dia/Chlor	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn X Dissolved	Coliform, X Total (MTF) X Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, X MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness						Microbiology Notes:	Sample Comments:
01	SUD-02	7/9/08 8:45	water	3/4 G/p	X							X							X	X	X		X						
02	SVS-01	" 10:30	"	2/4 G/p	X							X							X	X	X		X						
03	RCC-01	" 11:30	"	2/4 G/p	X							X							X	X	X		X						
04																													
05																													
06																													
07																													
08																													
09																													
10																													

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other ____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: ____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please dont include Malathion results in the Lab report.

CHAIN-OF-CUSTODY RECORD

	RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature	Manouchehr Dadkhah	[signature]	7/9/08
Print	Manouchehr Dadkhah	Adam Queen	12:36
Company	D-Max Eng.	EMA Inc	
Signature	[signature]	[signature]	7/9/08
Print	Adam Queen	Sean Flore	12:58
Company	EMA Inc	EMA Inc.	
Signature			
Print			
Company			

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 6°C on ice

EnviroMatrix Analytical, Inc.

16 July 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807199

Project Name: Chula Vista Dry Weather
Project Desc./#:200838W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/10/08 13:36. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CEN-03	0807199-01	Water	07/10/08 08:40	07/10/08 13:36
TCC-04	0807199-02	Water	07/10/08 10:45	07/10/08 13:36
CEN-01	0807199-03	Water	07/10/08 12:20	07/10/08 13:36

3283

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-03 (0807199-01) Water Sampled: 07/10/08 08:40 Received: 07/10/08 13:36									
Cadmium	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Copper	**0.011**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
TCC-04 (0807199-02) Water Sampled: 07/10/08 10:45 Received: 07/10/08 13:36									
Lead	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
CEN-01 (0807199-03) Water Sampled: 07/10/08 12:20 Received: 07/10/08 13:36									
Cadmium	ND	0.005	mg/l	1	8071005	07/10/08	07/10/08	EPA 6020	
Zinc	ND	0.020	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	**0.023**	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-03 (0807199-01) Water Sampled: 07/10/08 08:40 Received: 07/10/08 13:36									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8071404	07/14/08	07/16/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*122 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*180 %*	*60-130*		"	"	"	"	*S-02, S-04*
TCC-04 (0807199-02) Water Sampled: 07/10/08 10:45 Received: 07/10/08 13:36									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8071404	07/14/08	07/16/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*108 %*	*60-130*		"	"	"	"	
CEN-01 (0807199-03) Water Sampled: 07/10/08 12:20 Received: 07/10/08 13:36									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8071404	07/14/08	07/16/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*116 %*	*60-130*		"	"	"	"	

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Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-03 (0807199-01) Water Sampled: 07/10/08 08:40 Received: 07/10/08 13:36									
Hardness (Total)	**375**	100	mg CaCO3/L	10	8071013	07/10/08	07/11/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8071143	07/11/08	07/11/08	EPA 1664A	
TCC-04 (0807199-02) Water Sampled: 07/10/08 10:45 Received: 07/10/08 13:36									
Hardness (Total)	**1350**	100	mg CaCO3/L	10	8071013	07/10/08	07/11/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	
CEN-01 (0807199-03) Water Sampled: 07/10/08 12:20 Received: 07/10/08 13:36									
Hardness (Total)	**536**	100	mg CaCO3/L	10	8071013	07/10/08	07/11/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8070920	07/10/08	07/10/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-03 (0807199-01) Water Sampled: 07/10/08 08:40 Received: 07/10/08 13:36									
Total Coliforms	**13000**	200	MPN/100 ml	100	8071325	07/10/08	07/14/08	SM 9221 B, E	
Fecal Coliforms	**230**	20	"	10	"	"	07/13/08	"	
Enterococcus	**500**	20	"	"	8071326	"	07/14/08	SM 9230 A, B	
TCC-04 (0807199-02) Water Sampled: 07/10/08 10:45 Received: 07/10/08 13:36									
Total Coliforms	**8000**	200	MPN/100 ml	100	8071325	07/10/08	07/14/08	SM 9221 B, E	
Fecal Coliforms	**700**	20	"	10	"	"	07/13/08	"	
Enterococcus	**300**	20	"	"	8071326	"	07/14/08	SM 9230 A, B	
CEN-01 (0807199-03) Water Sampled: 07/10/08 12:20 Received: 07/10/08 13:36									
Total Coliforms	**80000**	2000	MPN/100 ml	1000	8071325	07/10/08	07/14/08	SM 9221 B, E	
Fecal Coliforms	**8000**	200	"	100	"	"	07/13/08	"	
Enterococcus	**13000**	200	"	"	8071326	"	07/14/08	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071005										
Blank (8071005-BLK1)				Prepared & Analyzed: 07/10/08						
Cadmium	ND	0.005	mg/l							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
LCS (8071005-BS1)				Prepared & Analyzed: 07/10/08						
Cadmium	0.088	0.005	mg/l	0.100		88	75-125			
Copper	0.085	0.005	"	0.100		85	75-125			
Lead	0.093	0.005	"	0.100		93	75-125			
Zinc	0.092	0.020	"	0.100		92	75-125			
LCS Dup (8071005-BSD1)				Prepared & Analyzed: 07/10/08						
Lead	0.087	0.005	mg/l	0.100		87	75-125	7	20	
Zinc	0.089	0.020	"	0.100		89	75-125	2	20	
Copper	0.082	0.005	"	0.100		82	75-125	3	20	
Cadmium	0.085	0.005	"	0.100		85	75-125	3	20	
Duplicate (8071005-DUP1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Copper	0.006	0.005	mg/l		0.006			2	20	
Lead	ND	0.005	"		ND				20	
Zinc	0.163	0.020	"		0.162			0.5	20	
Cadmium	0.001	0.005	"		0.001			5	20	
Matrix Spike (8071005-MS1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Cadmium	0.108	0.005	mg/l	0.100	0.001	107	75-125			
Copper	0.104	0.005	"	0.100	0.006	99	75-125			
Lead	0.117	0.005	"	0.100	ND	117	75-125			
Zinc	0.263	0.020	"	0.100	0.162	101	75-125			

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Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071005										
Matrix Spike Dup (8071005-MSD1)		**Source: 0807108-01**		Prepared & Analyzed: 07/10/08						
Zinc	0.284	0.020	mg/l	0.100	0.162	121	75-125	7	20	
Lead	0.121	0.005	"	0.100	ND	121	75-125	3	20	
Cadmium	0.112	0.005	"	0.100	0.001	111	75-125	4	20	
Copper	0.110	0.005	"	0.100	0.006	104	75-125	5	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071404										
Blank (8071404-BLK1)				Prepared: 07/14/08 Analyzed: 07/16/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.267*		*"*	*0.250*		*107*	*60-130*			
Surrogate: Tribuytlphosphate	*0.224*		*"*	*0.250*		*90*	*60-130*			
LCS (8071404-BS1)				Prepared: 07/14/08 Analyzed: 07/16/08						
Bolstar	0.39	0.10	ug/l	0.500		79	60-130			
Diazinon	0.40	0.05	"	0.500		80	60-130			
Ethoprop	0.40	0.05	"	0.500		80	60-130			
Mevinphos	0.42	0.25	"	0.500		84	60-130			
Methyl parathion	0.40	0.10	"	0.500		79	60-130			
Phorate	0.40	0.05	"	0.500		80	60-130			
Ronnel	0.41	0.25	"	0.500		82	60-130			
Trichlorinate	0.42	0.05	"	0.500		83	60-130			
Surrogate: Triphenyl phosphate	*0.225*		*"*	*0.250*		*90*	*60-130*			
Surrogate: Tribuytlphosphate	*0.243*		*"*	*0.250*		*97*	*60-130*			
LCS Dup (8071404-BSD1)				Prepared: 07/14/08 Analyzed: 07/16/08						
Bolstar	0.45	0.10	ug/l	0.500		90	60-130	13	30	
Diazinon	0.50	0.05	"	0.500		100	60-130	22	30	
Ethoprop	0.46	0.05	"	0.500		92	60-130	14	30	
Mevinphos	0.39	0.25	"	0.500		77	60-130	9	30	
Methyl parathion	0.45	0.10	"	0.500		90	60-130	13	30	
Phorate	0.42	0.05	"	0.500		85	60-130	6	30	
Ronnel	0.44	0.25	"	0.500		87	60-130	6	30	
Trichlorinate	0.50	0.05	"	0.500		100	60-130	18	30	
Surrogate: Triphenyl phosphate	*0.270*		*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.259*		*"*	*0.250*		*104*	*60-130*			

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Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070920										
Blank (8070920-BLK1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	ND	5	mg/l							
LCS (8070920-BS1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	32	5	mg/l	40.0		79	75-125			
LCS Dup (8070920-BSD1)				Prepared & Analyzed: 07/09/08						
Oil & Grease	36	5	mg/l	40.0		90	75-125	13	20	
Matrix Spike (8070920-MS1)		**Source: 0807108-02**		Prepared & Analyzed: 07/09/08						
Oil & Grease	24	5	mg/l	40.0	ND	60	0-200			
Batch 8071013										
Blank (8071013-BLK1)				Prepared: 07/10/08 Analyzed: 07/11/08						
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8071013-DUP1)		**Source: 0807003-01**		Prepared: 07/10/08 Analyzed: 07/11/08						
Hardness (Total)	ND	100	mg CaCO3/L		ND				20	
Batch 8071143										
Blank (8071143-BLK1)				Prepared & Analyzed: 07/11/08						
Oil & Grease	ND	5	mg/l							
LCS (8071143-BS1)				Prepared & Analyzed: 07/11/08						
Oil & Grease	31	5	mg/l	40.0		78	75-125			

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Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8071143										
LCS Dup (8071143-BSD1)				Prepared & Analyzed: 07/11/08						
Oil & Grease	32	5	mg/l	40.0		80	75-125	2	20	
Matrix Spike (8071143-MS1)		**Source: 0807199-01**		Prepared & Analyzed: 07/11/08						
Oil & Grease	30	5	mg/l	40.0	ND	74	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807199

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0807199

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same
Project ID: Chula Vista Dry Weather
Project #: 200838W-1 PO#:

REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) Dia/chlor	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) ☒Dissolved	Coliform, ☒Total (MTF) ☒Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☒MTF ☐dexx	Heterotrophic Plate Count (HPC)	Total Hardness					
01	CEN-03	7/10/08	8:40	Water	3/4 G/P							X							X	X	X		X				
02	TCC-04	~	10:45	~	2/4 G/P	X						X							X	X	X		X				
03	CEN-01	~	12:20	~	2/4 G/P	X						X							X	X	X		X				
04																											
05																											
06																											
07																											
08																											
09																											
10																											

Microbiology Notes: JUL 10 '08 13:53

Sample Comments:

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
Please do not include Malathion result in the Lab report.

CHAIN-OF-CUSTODY RECORD

	RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature	Manouchehr Dadkhah	[signature]	7/10/08
Print	Manouchehr Dadkhah	Adam Queen	1305
Company	D-Max Eng.	EMA INC	
Signature	[signature]	[signature]	7/10/08
Print	Adam Queen	Sam Flores	1336
Company	EMA INC	EMA Inc.	
Signature			
Print			
Company			

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 8°C ~~[illegible]~~ AG On ice

EnviroMatrix Analytical, Inc.

17 July 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807259

Project Name: Chula Vista Dry Weather
Project Desc./#: 200838W-3

Enclosed are the results of analyses for samples received by the laboratory on 07/14/08 17:12. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807259

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SUN-02	0807259-01	Water	07/14/08 13:30	07/14/08 17:12
SUN-02-1	0807259-02	Water	07/14/08 13:50	07/14/08 17:12
POG-02	0807259-03	Water	07/14/08 14:45	07/14/08 17:12
POG-02-S	0807259-04	Water	07/14/08 15:10	07/14/08 17:12
POG-02-E	0807259-05	Water	07/14/08 15:25	07/14/08 17:12
POG-02-N	0807259-06	Water	07/14/08 15:40	07/14/08 17:12

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807259

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
SUN-02 (0807259-01) Water Sampled: 07/14/08 13:30 Received: 07/14/08 17:12								
Total Coliforms	**18600**	100	MPN/100 ml	100	8071514	07/14/08 18:25 07/15/08 19:30	SM9223	
E. Coli	**52**	10	"	10	"	07/14/08 18:25 07/15/08 19:30	"	
SUN-02-1 (0807259-02) Water Sampled: 07/14/08 13:50 Received: 07/14/08 17:12								
Total Coliforms	**29100**	100	MPN/100 ml	100	8071514	07/14/08 18:25 07/15/08 19:30	SM9223	
E. Coli	**228**	10	"	10	"	07/14/08 18:25 07/15/08 19:30	"	
POG-02 (0807259-03) Water Sampled: 07/14/08 14:45 Received: 07/14/08 17:12								
Total Coliforms	**98000**	100	MPN/100 ml	100	8071514	07/14/08 18:25 07/15/08 19:30	SM9223	
E. Coli	**2280**	10	"	10	"	07/14/08 18:25 07/15/08 19:30	"	
Enterococcus	**24196**	10	"	"	8071515	07/14/08 19:30 07/15/08 19:30	Idexx	
POG-02-S (0807259-04) Water Sampled: 07/14/08 15:10 Received: 07/14/08 17:12								
Total Coliforms	**141000**	100	MPN/100 ml	100	8071514	07/14/08 18:25 07/15/08 19:30	SM9223	
E. Coli	**238**	10	"	10	"	07/14/08 18:25 07/15/08 19:30	"	
Enterococcus	**10462**	10	"	"	8071515	07/14/08 19:30 07/15/08 19:30	Idexx	
POG-02-E (0807259-05) Water Sampled: 07/14/08 15:25 Received: 07/14/08 17:12								
Total Coliforms	**13000**	10	MPN/100 ml	10	8071514	07/14/08 18:25 07/15/08 19:30	SM9223	
E. Coli	**31**	10	"	"	"	07/14/08 18:25 07/15/08 19:30	"	
Enterococcus	**134**	10	"	"	8071515	07/14/08 19:30 07/15/08 19:30	Idexx	
POG-02-N (0807259-06) Water Sampled: 07/14/08 15:40 Received: 07/14/08 17:12								
Total Coliforms	**19900**	10	MPN/100 ml	10	8071514	07/14/08 18:25 07/15/08 19:30	SM9223	
E. Coli	**359**	10	"	"	"	07/14/08 18:25 07/15/08 19:30	"	
Enterococcus	**363**	10	"	"	8071515	07/14/08 19:30 07/15/08 19:30	Idexx	

3297

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

3298

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0807258

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr Dadkhah
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: (858) 586-0600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: Chula Vista Dry Weather
Project #: 200838W-3 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type
01	SUN-02	7/14/08	13:30	Water	1 P
02	SUN-02-1	"	13:50	"	1 P
03	POG-02	"	14:45	"	1 P
04	POG-02-S	"	15:10	"	1 P
05	POG-02-E	"	15:25	"	1 P
06	POG-02-N	"	15:40	"	1 P
07					
08					
09					
10					

REQUESTED ANALYSIS

#	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Dissolved	Coliform, Total (MTF) ☐Fecal (MTF) X Colilert T+E Coli	Enterococcus, ☐MTF, X Idexx	Heterotrophic Plate Count (HPC)	Microbiology Notes:	Sample Comments:
01																X				
02																X				
03																X	X			
04																X	X			
05																X	X			
06																X	X			
07																				
08																				
09																				
10																				

JUL 14 '08 17:20

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other_____
[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
From Sample 3 to 6 T&F and Entro

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: [signature]	7/14/08
Print: Manouchehr Dadkhah	Print: Sam Flores	17:12
Company: D-Max Eng.	Company: EMA Inc	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T=10°C on ice.

EnviroMatrix Analytical, Inc.

21 July 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807292

Project Name: Chula Vista Dry Weather
Project Desc./#: 200838W-3

Enclosed are the results of analyses for samples received by the laboratory on 07/15/08 16:48. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807292

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SCR-01	0807292-01	Water	07/15/08 13:40	07/15/08 16:48
SCR-01-1	0807292-02	Water	07/15/08 14:20	07/15/08 16:48
RCC-03	0807292-03	Water	07/15/08 15:30	07/15/08 16:48
RCC-03-1	0807292-04	Water	07/15/08 15:50	07/15/08 16:48
RCC-03-2	0807292-05	Water	07/15/08 16:10	07/15/08 16:48

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807292

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
SCR-01 (0807292-01) Water Sampled: 07/15/08 13:40 Received: 07/15/08 16:48								
Total Coliforms	**579000**	1000	MPN/100 ml	1000	8071720	07/15/08 19:10 07/16/08 19:30	SM9223	
E. Coli	**10500**	10	"	10	"	07/15/08 19:10 07/16/08 19:30	"	
Enterococcus	**14136**	10	"	"	8071716	07/15/08 19:20 07/16/08 19:30	Idexx	
SCR-01-1 (0807292-02) Water Sampled: 07/15/08 14:20 Received: 07/15/08 16:48								
Total Coliforms	**1050000**	1000	MPN/100 ml	1000	8071720	07/15/08 19:10 07/16/08 19:30	SM9223	
E. Coli	**34500**	100	"	100	"	07/15/08 19:10 07/16/08 19:30	"	
Enterococcus	**42250**	100	"	"	8071716	07/15/08 19:20 07/16/08 19:30	Idexx	
RCC-03 (0807292-03) Water Sampled: 07/15/08 15:30 Received: 07/15/08 16:48								
Total Coliforms	**112000**	100	MPN/100 ml	100	8071720	07/15/08 19:10 07/16/08 19:30	SM9223	
E. Coli	**3080**	10	"	10	"	07/15/08 19:10 07/16/08 19:30	"	
RCC-03-1 (0807292-04) Water Sampled: 07/15/08 15:50 Received: 07/15/08 16:48								
Total Coliforms	**141000**	100	MPN/100 ml	100	8071720	07/15/08 19:10 07/16/08 19:30	SM9223	
E. Coli	**73**	10	"	10	"	07/15/08 19:10 07/16/08 19:30	"	
RCC-03-2 (0807292-05) Water Sampled: 07/15/08 16:10 Received: 07/15/08 16:48								
Total Coliforms	**54800**	100	MPN/100 ml	100	8071720	07/15/08 19:10 07/16/08 19:30	SM9223	
E. Coli	**20**	10	"	10	"	07/15/08 19:10 07/16/08 19:30	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807292

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0807292

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr
Address: 7220 Trade street, Suite 119
San Diego, CA 92127
Phone: (858) 586-6600 Fax: (858) 586-6600
Email:
Billing Address: Same
Project ID: Chula Vista Dry Weather
Project #: 200838W-3 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type
01	SCR-01	7/15/08 13:40	water	2P
02	SCR-01-1	~ 14:20	~	~
03	RCC-03	~ 15:30	~	1P
04	RCC-03-1	~ 15:50	~	1P
05	RCC-03-2	~ 16:10	~	1P
06				
07				
08				
09				
10				

REQUESTED ANALYSIS

#	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Coliliert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)							Microbiology Notes:
01																X	X									Sample Comments:
02																X	X									
03																X										
04																X										
05																X										
06																										
07																										
08																										
09																										
10																										

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☑STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: 4°C on ice
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature Manouchehr Dadkhah	Signature [signature]	7/15/08 1648
Print Manouchehr Dadkhah	Print Christina Rink	
Company D-Max Eng	Company EMA	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

23 July 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807318

Project Name: Chula Vista Dry Weather
Project Desc./#: 200838W-3

Enclosed are the results of analyses for samples received by the laboratory on 07/16/08 17:17. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807318

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JUD-01	0807318-01	Water	07/16/08 14:30	07/16/08 17:17
JUD-01-1	0807318-02	Water	07/16/08 14:50	07/16/08 17:17
JUD-01-2	0807318-03	Water	07/16/08 15:00	07/16/08 17:17
JUD-02	0807318-04	Water	07/16/08 15:20	07/16/08 17:17

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807318

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
JUD-01 (0807318-01) Water Sampled: 07/16/08 14:30 Received: 07/16/08 17:17								
Total Coliforms	**19900**	10	MPN/100 ml	10	8071905	07/16/08 18:00 07/17/08 18:00	SM9223	
E. Coli	**98**	10	"	"	"	07/16/08 18:00 07/17/08 18:00	"	
JUD-01-1 (0807318-02) Water Sampled: 07/16/08 14:50 Received: 07/16/08 17:17								
Total Coliforms	**980000**	1000	MPN/100 ml	1000	8071905	07/16/08 18:00 07/17/08 18:00	SM9223	
E. Coli	**24200**	10	"	10	"	07/16/08 18:00 07/17/08 18:00	"	
JUD-01-2 (0807318-03) Water Sampled: 07/16/08 15:00 Received: 07/16/08 17:17								
Total Coliforms	**912**	10	MPN/100 ml	10	8071905	07/16/08 18:00 07/17/08 18:00	SM9223	
E. Coli	ND	10	"	"	"	07/16/08 18:00 07/17/08 18:00	"	
JUD-02 (0807318-04) Water Sampled: 07/16/08 15:20 Received: 07/16/08 17:17								
Total Coliforms	**105000**	100	MPN/100 ml	100	8071905	07/16/08 18:00 07/17/08 18:00	SM9223	
E. Coli	**275**	10	"	10	"	07/16/08 18:00 07/17/08 18:00	"	

3307

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

3308

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0807318

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr Dadkhah
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone (858) 586-6600 Fax (858) 586-6644
Email:
Billing Address: Same

Project ID: Chula Vista Dry Weather
Project #: 200838W-3 PO#:

SAMPLE DETAILS

REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐1664 ☐413.1 ☐413.2	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☒Colilert,T+E.Coli	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)
01	JUD-01	7/16/08 14:30	water	1P																X			
02	JUD-01-1	" 14:50	"	1P																X			
03	JUD-01-2	" 15:00	"	1P																X			
04	JUD-02	" 15:20	"	2P																X			
05																							
06																							
07																							
08																							
09																							
10																							

Microbiology Notes:

Sample Comments:

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☒STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature Manouchehr Dadkhah	Signature	7/16/08
Print Manouchehr Dadkhah	Print Sam Flores	17:17
Company D-Max Eng.	Company EMA	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

Temp on ice

EnviroMatrix Analytical, Inc.

28 July 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807342

Project Name: Chula Vista Dry Weather
Project Desc./#: 200838W-3

Enclosed are the results of analyses for samples received by the laboratory on 07/17/08 16:41. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807342

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CEN-01	0807342-01	Water	07/17/08 13:40	07/17/08 16:41
CEN-01-1	0807342-02	Water	07/17/08 14:20	07/17/08 16:41
SVS-01	0807342-03	Water	07/17/08 15:00	07/17/08 16:41

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 0807342

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
CEN-01 (0807342-01) Water Sampled: 07/17/08 13:40 Received: 07/17/08 16:41								
Total Coliforms	**98000**	100	MPN/100 ml	100	8071907	07/17/08 17:30 07/18/08 17:30	SM9223	
E. Coli	**38700**	100	"	"	"	07/17/08 17:30 07/18/08 17:30	"	
Enterococcus	**670**	10	"	10	8071908	07/17/08 17:45 07/18/08 17:45	Idexx	
CEN-01-1 (0807342-02) Water Sampled: 07/17/08 14:20 Received: 07/17/08 16:41								
Total Coliforms	**1990000**	1000	MPN/100 ml	1000	8071907	07/17/08 17:30 07/18/08 17:30	SM9223	
E. Coli	**24200**	10	"	10	"	07/17/08 17:30 07/18/08 17:30	"	
Enterococcus	**12997**	10	"	"	8071908	07/17/08 17:45 07/18/08 17:45	Idexx	
SVS-01 (0807342-03) Water Sampled: 07/17/08 15:00 Received: 07/17/08 16:41								
Enterococcus	**146**	10	MPN/100 ml	10	8071908	07/17/08 17:45 07/18/08 17:45	Idexx	

3312

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

3313

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0807342

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr D
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: Chula Vista Dry Weather
Project #: 200838W-3 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type
01	CEN-01	7/17/08 13:40	water	2 P
02	CEN-01-1	~ 14:20	~	1 P
03	SVS-01	~ 15:00	~	1 P
04				
05				
06				
07				
08				
09				
10				

REQUESTED ANALYSIS

#	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☒Coliform,T+E.Coli	Enterococcus, ☐MTF ☒dexx	Heterotrophic Plate Count (HPC)
01																X	X	
02																X	X	
03																	X	
04																		
05																		
06																		
07																		
08																		
09																		
10																		

Microbiology Notes:

Sample Comments:

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A	Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A	Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: [signature]	7/17/08 16:41
Print: Manouchehr Dadkhah	Print: Sean Flory	
Company: D-Max Engi	Company: EMA Inc.	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T=5°C on ice

Appendix D

Field Data Sheets

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	BAY-01			Latitude	32.600820	Watershed: Hydrologic Unit	910
Location	West side of Bay Blvd, across from 1075 complex			Longitude	-117.09325	Hydrologic Area	910.2
				TB Page	1330-A3	Hydrologic Subarea (Optional)	910.2
Date	7/23/08	Time	10:00 am	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other NS	
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other NS	
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☒ Other NS	
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other	
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☒ Yes ☐ No **Photo #** 167, 168

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	DRY	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: BAY-01 DATE: 7/23/08

LOCATION: West side of Bay Blvd across from 1075 Complex TIME: 10:00 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	BAY-02		Latitude	32.60479	Watershed	Hydrologic Unit	910
Location	West of Intersection of Palomar Street and Bay Blvd.		Longitude	-117.09248		Hydrologic Area	910.2
			TB Page	1330-A4		Hydrologic Subarea (Optional)	910.20
Date	7/15/08	Time 9:40am	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ~~☒ N/A~~ ☐ Low ☒ Incoming ☐ High ☐ Outgoing **Tide Height:** 3.0 ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☒ Excessive		☐ Other
Biology	☐ None	☒ Insects ☐ Algae	☒ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 98, 99

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.7	NH_3-N (mg/L)	0.9	NO_3 (mg/L)	36	Ortho-PO_4 (mg/L)	4.8
pH (pH units)	7.0	TURB (NTU)	4.88	NO_3-N (mg/L)	8.14	Ortho-PO_4-P (mg/L)	1.56
COND (mS/cm)	3.21	MBAS (mg/L)	0.5	Glycol (mg/L)	1.3		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: Bay-02 DATE: 7/15/08

LOCATION: West of Intersection of Palomar St. and Bay Blvd TIME: 9:40 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Glycol ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	BAY -02			Latitude	32.60479	Watershed: Hydrologic Unit	910
Location	West of Intersection of Palomar St & Bay Blvd			Longitude	-117.09248	Hydrologic Area	910.2
				TB Page	1330 -A4	Hydrologic Subarea (Optional)	910.20
Date	7/16/08	Time	10:45	Observer	JP / MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☒ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☒ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 105.106

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.2	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.9	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4 -P (mg/L)	na
COND (mS/cm)	14.47	MBAS (mg/L)	na	Glycol (mg/L)	0.7		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	BAY-03		Latitude	32.60267	Watershed	Hydrologic Unit	910
Location	West of Intersection of Ada St. and Bay Blvd.		Longitude	-117.09251		Hydrologic Area	910.2
			TB Page	1330-A4		Hydrologic Subarea (Optional)	910.20
Date	7/15/08	Time 8:50a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ~~☒ N/A~~ ☐ Low ☒ Incoming ☐ High ☐ Outgoing **Tide Height:** 3.1 ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☒ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☒ Other ~~lobster~~ crustaceans

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 96, 97

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.5	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	104	Ortho-PO_4 (mg/L)	0.1
pH (pH units)	7.1	TURB (NTU)	2.37	NO_3-N (mg/L)	23.50	Ortho-PO_4-P (mg/L)	0.03
COND (mS/cm)	5.60	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: BAY - 03 DATE: 7/15/08

LOCATION: West of Intersection of Ada St. and Bay Blvd. TIME: 8:50 a.m.

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	BAY-03		Latitude	32.602607	Watershed	Hydrologic Unit	910
Location	West of Intersection of Aden St. and Bay Blvd.		Longitude	-117.09259		Hydrologic Area	910.2
			TB Page	1330-A4		Hydrologic Subarea (Optional)	910.20
Date	7/16/08	Time 10:10	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☒ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☐ N/A	☐ Low	☒ Incoming	☐ High	☐ Outgoing	**Tide Height:** _____ ft.
Last Rain	☒ > 72 hours	☐ < 72 hours				
Rainfall	☒ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☒ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other crustaceas

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)	24.9	NH_3-N (mg/L)	NA	NO_3 (mg/L)	92	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.2	TURB (NTU)	NA	NO_3-N (mg/L)	20.79	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	5.160	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	BLC-01		Latitude	32.66562	Watershed	Hydrologic Unit	909
Location	Chula Vista Municipal Golf Course West of Bonita/Acacia Intersection		Longitude	-117.02414		Hydrologic Area	909.1
			TB Page	1310-J2		Hydrologic Subarea (Optional)	909.12
Date	7/18/08	Time 11:30	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 126, 127

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	3.3	Ortho-PO_4 (mg/L)	ND
pH (pH units)	8.2	TURB (NTU)	0.18	NO_3-N (mg/L)	0.75	Ortho-PO_4 -P (mg/L)	ND
COND (mS/cm)	4.22	MBAS (mg/L)	0.38	Glycol (mg/L)	0.3		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	0.5	in
Velocity	15/15	ft/sec
Flow	16	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: BLC-01 DATE: 7/18/08

LOCATION: Chula Vista Municipal Golf Course, West of Bonita/Acacia Intersection TIME: 11:30 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT): 15 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

126, 127

food pack.

3

Grass clipp

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	BLC-02			Latitude	32.65556	Watershed: Hydrologic Unit	909
Location	Long Canyon channel south of Bonita Rd. West of Southern end of Acacia Avenue			Longitude	117.00859	Hydrologic Area	909.1
				TB Page	1311-A4	Hydrologic Subarea (Optional)	909.12
Date	7/18/08	Time	10:45	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 124, 125

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	14.3	Ortho-PO_4 (mg/L)	0.4
pH (pH units)	7.9	TURB (NTU)	0.01	NO_3-N (mg/L)	3.23	Ortho-PO_4-P (mg/L)	0.13
COND (mS/cm)	5.16	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: BLC-02 DATE: 7/18/08

LOCATION: Long Canyon Channel, south of Bonita Rd and West of southern end of Acacia Ave. TIME: 10:45 a

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	CEN - 01		Latitude	32.62922	Watershed	Hydrologic Unit	909.
Location	South of H St. and E. of I-5 and Trolley tracks		Longitude	-117.09507		Hydrologic Area	909.1
			TB Page	1329-J1		Hydrologic Subarea (Optional)	909.12
Date	7/10/08	Time 12:20p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☒ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☒ Sheen oil ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☒ Other Larvae

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 71, 72

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	32.7	NH_3-N (mg/L)	5.0	NO_3 (mg/L)	3.4	Ortho-PO_4 (mg/L)	3.2
pH (pH units)	8.7	TURB (NTU)	5.36	NO_3-N (mg/L)	0.77	Ortho-PO_4-P (mg/L)	1.04
COND (mS/cm)	1.93	MBAS (mg/L)	1.0	Glycol (mg/L)	1.8		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: CEN-01 DATE: 7/10/08

LOCATION: south of 'H' St. and E. of I-5 and Trolley tracks TIME: 12:20p

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For MBAS, Glycol, NH_3-N ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	CEN-01		Latitude	32.62922	Watershed	Hydrologic Unit	909.
Location	South of H St. and East of I-5 and trolley tracks		Longitude	-117.09507		Hydrologic Area	909.1
			TB Page	1329-J1		Hydrologic Subarea (Optional)	909.12
Date	7/10/08	Time 8:40AM	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☒ Other larvae

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.7	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.9	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.21	MBAS (mg/L)	0.5	Glycol (mg/L)	0.4		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	CEN-01			Latitude	32.62922	Watershed: Hydrologic Unit	909
Location	South of H St. and East of I-5 and Trolley tracks			Longitude	-117.09507	Hydrologic Area	909.1
				TB Page	1329-J1	Hydrologic Subarea (Optional)	909.12
Date	7/17/08	Time	13:40	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.2	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	1.53	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	CEN-01-1			Latitude	32.62887	Watershed: Hydrologic Unit	909.
Location	between 536 and 542 Jefferson Ave			Longitude	-117.09140	Hydrologic Area	909.1
				TB Page	1330-A1	Hydrologic Subarea (Optional)	909.12
Date	7/17/08	Time	14:20	Observer	JP / MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ~~☒ Residential~~ ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☒ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☒ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	**Tide Height:** _____ ft.
Last Rain	☒ > 72 hours	☐ < 72 hours				
Rainfall	☒ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☐ None	☒ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other ~~Food Grease~~
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	~~☒ Clear~~		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 116, 117

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	21	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	CEN-03		Latitude	32.62153	Watershed	Hydrologic Unit	909
Location	south of J. Street behind 726 and 728 Colorado Avenue		Longitude	-117.09212		Hydrologic Area	909.1
			TB Page	1329-A1		Hydrologic Subarea (Optional)	909.11
Date	7/10/08	Time 8:40a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☒ Other Larvae

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 67,68

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	2.1	Ortho-PO_4 (mg/L)	1.1
pH (pH units)	8.6	TURB (NTU)	1.17	NO_3-N (mg/L)	0.47	Ortho-PO_4-P (mg/L)	0.36
COND (mS/cm)	1.40	MBAS (mg/L)	0.25	Glycol (mg/L)	0.6		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: CEN-03 DATE: 7/10/08

LOCATION: south of J. St. behind 726 and 728 Colorado Ave. TIME: 8:40 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 18 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☒ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) : Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging	2		X	X								X
Food Waste												
Household	3	X				X						X
Shopping Carts												
Toxic												
Yard Waste	1	X				X						

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	CEN-04		Latitude	32.63869	Watershed	Hydrologic Unit	909
Location	Memorial Park west of 3rd Ave and West of Park Way		Longitude	-117.07956		Hydrologic Area	909.1
			TB Page	1310-B6		Hydrologic Subarea (Optional)	909.12
Date	7/14/08	Time 9:40am	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 89, 90

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	29.0	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	3.3	Ortho-PO_4 (mg/L)	0.8
pH (pH units)	8.9	TURB (NTU)	9.04	NO_3-N (mg/L)	0.75	Ortho-PO_4 -P (mg/L)	~~0.26~~ 0.36
COND (mS/cm)	1.27	MBAS (mg/L)	0.38	Glycol (mg/L)	0.7		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: CEN-04 DATE: 7/14/08

LOCATION: Memorial Park West of 3rd Ave and West of Park Way TIME: 9:40 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 25 x 15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	CEN-07			Latitude	32.63713	Watershed: Hydrologic Unit	909
Location	West of 5th Ave between Center St. and Park Way			Longitude	-117.08782	Hydrologic Area	909.1
				TB Page	1310-A6	Hydrologic Subarea (Optional)	909.12
Date	7/14/08	Time	10:40am	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ~~☒ Other:~~ _____

Photo Taken ☒ Yes ☐ No **Photo #** 91, 92

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.7	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	3.3	Ortho-PO_4 (mg/L)	1.9
pH (pH units)	8.7	TURB (NTU)	8.77	NO_3-N (mg/L)	0.75	Ortho-PO_4-P (mg/L)	0.62
COND (mS/cm)	1.36	MBAS (mg/L)	0.25	Glycol (mg/L)	0.7		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: CEN-07 DATE: 7/14/08

LOCATION: west of 5th Ave. between Center St. and Park Way TIME: 10:40 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30X5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	CEN-08		Latitude	32.63144	Watershed	Hydrologic Unit	909
Location	100 ft. West of Marina Parkway - North of G Street		Longitude	-117.10330		Hydrologic Area	909.1
			TB Page	1309-H7		Hydrologic Subarea (Optional)	909.12
Date	7/14/08	Time 11:45a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ~~☒ N/A~~ ☒ Low ~~☒ Incoming~~ ☐ High ☐ Outgoing **Tide Height:** 3.1 ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 93,94

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	14.7	Ortho-PO_4 (mg/L)	0.3
pH (pH units)	7.7	TURB (NTU)	0.01	NO_3-N (mg/L)	3.32	Ortho-PO_4-P (mg/L)	0.09
COND (mS/cm)	>20.00	MBAS (mg/L)	1.25	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: OEN - 08 DATE: 7/14/08

LOCATION: 100 ft. West of Marina Parkway, North of G St. TIME: 11:45 am

OBSERVER: JP / MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☒ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
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☐ Field Screening ☒ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	CEN-08		Latitude	32.63144	Watershed	Hydrologic Unit	909
Location	100 ft. West of Marina Parkway - North of G Street.		Longitude	-117.10330		Hydrologic Area	909.1
			TB Page	1309-H7		Hydrologic Subarea (Optional)	909.12
Date	7/15/08	Time 11:00am	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ~~☒ N/A~~ ☒ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.8	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	> 20.00	MBAS (mg/L)	1.0	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
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☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For MBAS

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	CEN-08-1		Latitude	32.63114	Watershed	Hydrologic Unit	909
Location	East of Intersection of Marina Parkway and G. St, Northside of street		Longitude	-117.10279		Hydrologic Area	909.1
			TB Page	1309-H7		Hydrologic Subarea (Optional)	909.12
Date	7/15/08	Time 11:30a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☒ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.1	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	>20.00	MBAS (mg/L)	1.0	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For MBAS

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	CEN-08-2		Latitude	32.63299	Watershed	Hydrologic Unit	909
Location	G. St. East of 5 at Railroad tracks, at Cabrillo Mobile Lodge LLC 781 G. St.		Longitude	-117.09650		Hydrologic Area	909.1
			TB Page	1309-J7		Hydrologic Subarea (Optional)	909.12
Date	7/15/08	Time 1200	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☒ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 100

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	>3	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	CEN-10			Latitude	32.63643	Watershed: Hydrologic Unit	909
Location	Northwest of the Intersection of Hilltop Drive and Whitney Street			Longitude	-117.06439	Hydrologic Area	90.1
				TB Page	1310-D6	Hydrologic Subarea (Optional)	909.12
Date	7/16/08	Time	845a	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☒ ~~Brown~~	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	~~☒ None~~	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 103,104

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.7	NH_3-N (mg/L)	0.4	NO_3 (mg/L)	5.4	Ortho-PO_4 (mg/L)	3.6
pH (pH units)	8.2	TURB (NTU)	11.56	NO_3-N (mg/L)	1.22	Ortho-PO_4 -P (mg/L)	~~1.2~~
COND (mS/cm)	1.87	MBAS (mg/L)	0.75	Glycol (mg/L)	0.8		1.17

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: CEN-10 DATE: 7/16/08

LOCATION: Northwest of the Intersection of Hilltop Drive and Whitney St. TIME: 8:45 am

OBSERVER: JP / MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	JUD-01			Latitude	32.59465	Watershed: Hydrologic Unit	910
Location	South of intersection of Fresno Ave and Main Street			Longitude	-117.06675	Hydrologic Area	910.2
				TB Page	1330-D5	Hydrologic Subarea (Optional)	910.20
Date	7/8/08	Time	11:45a	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	~~☒ Brown~~	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☒ Sheen oil	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 43-46

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.8	NH_3-N (mg/L)	ND	NO_3 (mg/L)	2.1	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	8.5	TURB (NTU)	2.12	NO_3-N (mg/L)	0.47	Ortho-PO_4-P (mg/L)	0.06
COND (mS/cm)	1.85	MBAS (mg/L)	0.75	Glycol (mg/L)	0.6		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: JUD-01. DATE: 7/8/08

LOCATION: South of intersection of Fresno Ave and Main St. TIME: 11:45 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 X 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☒ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☒ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive	4		X		X							X
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction	2	X			X		X					X
Fabric/Clothing												
Food Packaging	1		X	X								X
Food Waste												
Household	3			X	X	X						
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Styrofoam and plastic food and beverage containers, several light bulb fixtures, house hold trash consisted of balls/childrens toys, and atleast one ~~can of~~ empty can of brake fluid.

Upstream, at 3rd Ave and Orange Ave, dumping and trash increased significantly. Transients occupying area - site reported to city and cleaned.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	JUD -01			Latitude	32.59465	Watershed: Hydrologic Unit	910
Location	South of intersection of Fresno Ave. and Main St.			Longitude	-117.06675	Hydrologic Area	910.2
				TB Page	1330-D5	Hydrologic Subarea (Optional)	910.20
Date	7/16/08	Time	14:30	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.7	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.3	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	1.41	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	JUD-01-1		Latitude	32.60093	Watershed	Hydrologic Unit	910
Location	north side of concrete channel in back of Orange Glen Apt. Complex south of Orange Ave and 3rd Ave		Longitude	-117.06591		Hydrologic Area	910.2
			TB Page	1330-D5		Hydrologic Subarea (Optional)	910.20
Date	7/16/08	Time 2:50pm	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☒ Other Larvae

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	JUD-01-2		Latitude	32.60128	Watershed	Hydrologic Unit	910
Location	under 3rd Ave just south of 3rd Ave and Orange Ave Intersection		Longitude	-117.06473		Hydrologic Area	910.2
			TB Page	1330-D5		Hydrologic Subarea (Optional)	910.20
Date	7/16/08	Time 3:00pm	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ~~☒ Flowing~~ ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	JUD-02		Latitude	32.59450	Watershed	Hydrologic Unit	910
Location	southwest of intersection of Reed Ct. and Main St.		Longitude	-117.05599		Hydrologic Area	910.2
			TB Page	1330-E5		Hydrologic Subarea (Optional)	910.20
Date	7/9/08	Time 8:45am	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☒ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☒ Excessive ☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 58,59

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	2.0	Ortho-PO_4 (mg/L)	1.2
pH (pH units)	7.2	TURB (NTU)	7.29	NO_3-N (mg/L)	0.45	Ortho-PO_4-P (mg/L)	0.39
COND (mS/cm)	1.33	MBAS (mg/L)	0.75	Glycol (mg/L)	0.7		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: JUD-02 DATE: 7/9/08

LOCATION: southwest of intersection of Reed Ct. and Main St. TIME: 8:45 am

OBSERVER: JP / MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	JUD-02		Latitude	32.59450	Watershed	Hydrologic Unit	910
Location	southwest of intersection of Reed Ct. and Main St.		Longitude	-117.05599		Hydrologic Area	910.2
			TB Page	1330-E5		Hydrologic Subarea (Optional)	910.20
Date	7/16/08	Time 3:20p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☒ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other larvae.

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.6	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.8	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.49	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	JUD-03			Latitude	32.59466	Watershed: Hydrologic Unit	910
Location	Southwest of Main St. and Mace St. Intersection			Longitude	-117.05380	Hydrologic Area	910.2
				TB Page	1330-E5	Hydrologic Subarea (Optional)	910.20
Date	7/17/08	Time	9:20a	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ~~☒ No~~ ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 114, 115

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.7	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	3.6	Ortho-PO_4 (mg/L)	1.8
pH (pH units)	7.8	TURB (NTU)	31.87	NO_3-N (mg/L)	0.81	Ortho-PO_4-P (mg/L)	0.59
COND (mS/cm)	1.38	MBAS (mg/L)	0.5	Glycol (mg/L)	0.7		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: JUD-03 DATE: 7/17/08

LOCATION: Southwest of Main St. and Mace St. Intersection TIME: 9:20 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	LAK-01		Latitude	32.66023	Watershed	Hydrologic Unit	910
Location	Northeast of the intersection of Proctor Valley Rd and Agua Vista Drive, in the canyon		Longitude	-116.94138		Hydrologic Area	910.3
			TB Page	1311-J3		Hydrologic Subarea (Optional)	910.32
Date	7/10/08	Time 4:20p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 79, 80, 81

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.6	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	81	Ortho-PO_4 (mg/L)	0.6
pH (pH units)	7.4	TURB (NTU)	9.50	NO_3-N (mg/L)	18.31	Ortho-PO_4-P (mg/L)	~~0.2~~
COND (mS/cm)	4.24	MBAS (mg/L)	0.5	Glycol (mg/L)	0.6		0.19

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: LAK-01 DATE: 7/10/08

LOCATION: Northeast of the intersection of Proctor Valley Rd and Aqua Vista Drive, in the canyon TIME: 4:20p

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 X 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	LAK-01		Latitude	32.066023	Watershed	Hydrologic Unit	910
Location	Northeast of the intersection of Proctor Valley Rd and Agua Vista Drive, in the canyon		Longitude	-116.94138		Hydrologic Area	910.3
			TB Page	1311-J3		Hydrologic Subarea (Optional)	910.32
Date	7/11/08	Time 10:20am	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.6	NH_3-N (mg/L)	NA	NO_3 (mg/L)	80	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.25	TURB (NTU)	NA	NO_3-N (mg/L)	18.08	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	5.01	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

1 ✓

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3-N

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	LAK-01-1		Latitude	32.66046	Watershed	Hydrologic Unit	910
Location E	West of LAK-01 west of Agua Vista Dr.		Longitude	-116.94194		Hydrologic Area	910.3
			TB Page	1311-J3		Hydrologic Subarea (Optional)	910.32
Date	7/11/08	Time 11:35	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ~~☒ Overcast~~ ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 83, 84

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.9	NH_3-N (mg/L)	NA	NO_3 (mg/L)	~~34~~ 28	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.5	TURB (NTU)	NA	NO_3-N (mg/L)	6.33	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.76	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3-N

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	LAK-01-2			Latitude	32.66114	Watershed: Hydrologic Unit	910
Location	West of LAK-01-1 far West of LAK-01			Longitude	-116.94296	Hydrologic Area	910.3
W				TB Page	1311-J3	Hydrologic Subarea (Optional)	910.32
Date	7/11/08	Time	11:15	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 82

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	34	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.7	TURB (NTU)	NA	NO_3-N (mg/L)	7.68	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.48	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	OLR-01			Latitude	32.66144	Watershed: Hydrologic Unit	909
Location	South of Chula Vista Municipal Golf Course North of Otay Lakes Rd Bonita Rd. Intersection			Longitude	-117.03146	Hydrologic Area	909.1
				TB Page	1310-H3	Hydrologic Subarea (Optional)	909.12
Date	7/18/08	Time	9:30	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 122, 123

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	3.5	Ortho-PO_4 (mg/L)	2.2
pH (pH units)	7.8	TURB (NTU)	3.97	NO_3-N (mg/L)	0.79	Ortho-PO_4-P (mg/L)	0.72
COND (mS/cm)	1.53	MBAS (mg/L)	0.5	Glycol (mg/L)	0.7		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: OLR-01 ~~south of Chula Vista~~ **DATE:** 7/18/08

LOCATION: Municipal Golf Course North of Otay Lakes Rd/Bonita Rd Intersection **TIME:** 9:30 a

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): ~~5x2~~ 7x3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	OLR - 02			Latitude	32.66145	Watershed: Hydrologic Unit	909
Location	south of Chula Vista municipal Golf Course, North of Otay Lakes Road Bonita Rd Intersection			Longitude	-117.03152	Hydrologic Area	909.1
				TB Page	1310-H3	Hydrologic Subarea (Optional)	909.12
Date	7/18/08	Time	8:45a	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 120, 121

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	1.8	Ortho-PO_4 (mg/L)	0.1
pH (pH units)	8.3	TURB (NTU)	2.74	NO_3-N (mg/L)	0.41	Ortho-PO_4-P (mg/L)	0.03
COND (mS/cm)	5.29	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: OLR-02 DATE: 7/18/08

LOCATION: TIME: 8:45a

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 12

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	OVR-04			Latitude	32.59273	Watershed: Hydrologic Unit	910
Location	South of Main St. 50ft. east of Nirvana Ave.			Longitude	117.01730	Hydrologic Area	910.2
				TB Page	1331-A5	Hydrologic Subarea (Optional)	910.20
Date	7/21/08	Time	11:30am	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 134

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.4	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	4.2	Ortho-PO_4 (mg/L)	1.1
pH (pH units)	7.5	TURB (NTU)	1.23	NO_3-N (mg/L)	0.95	Ortho-PO_4-P (mg/L)	0.36
COND (mS/cm)	1.09	MBAS (mg/L)	0.13	Glycol (mg/L)	0.5		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: OVR-04 DATE: 7/21/08

LOCATION: South of Main St. 50 ft. East of Nirvana Ave. TIME: 11:30 am

OBSERVER: ~~EB~~/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	OVR-07		Latitude	32.59479	Watershed	Hydrologic Unit	910
Location	East of property at 1879 Nirvana Ave.		Longitude	-117.01437		Hydrologic Area	910.2
			TB Page	1331-A5		Hydrologic Subarea (Optional)	910.20
Date	7/21/08	Time 10:00a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 132, 133

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)	19.8	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	97	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	8.3	TURB (NTU)	1.52	NO_3-N (mg/L)	21.92	Ortho-PO_4-P (mg/L)	0.07
COND (mS/cm)	13.53	MBAS (mg/L)	0.75	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	✓	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: OVR-07 DATE: 7/21/08

LOCATION: East of Property at 1879 Nirvana Ave TIME: 10:00am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10X5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NO_3 ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	OVR-07		Latitude	32.59479	Watershed	Hydrologic Unit	910
Location	East of property at 1879 Nirvana Avenue		Longitude	-117.01437		Hydrologic Area	910.2
			TB Page	1331-A5		Hydrologic Subarea (Optional)	910.20
Date	7/22/08	Time 12:10p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.1	NH_3-N (mg/L)	NA	NO_3 (mg/L)	115	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.1	TURB (NTU)	NA	NO_3-N (mg/L)	25.99	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	13.15	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	OVR-07-01			Latitude	32.59546	Watershed: Hydrologic Unit	910
Location	1869 Nirvana Ave, F.J. Willert Contracting Co., Inc.			Longitude	117.01436	Hydrologic Area	910.2
				TB Page	1331-A5	Hydrologic Subarea (Optional)	910.20
Date	7/22/08	Time	12:40p	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	113	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	25.54	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	OVR-09			Latitude	32.59452	Watershed: Hydrologic Unit	910
Location	South of property at 850 Energy Way, in City easement at base of slope			Longitude	-117.01199	Hydrologic Area	910.2
				TB Page	1331-A5	Hydrologic Subarea (Optional)	910.20
Date	7/8/08	Time	8:50am	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/Barnacles ☒ Insect/Algae ☐ Insect/Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 34, 35

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.1	NH_3-N (mg/L)	0.5	NO_3 (mg/L)	4.7	Ortho-PO_4 (mg/L)	1.8
pH (pH units)	8.3	TURB (NTU)	6.48	NO_3-N (mg/L)	1.06	Ortho-PO_4-P (mg/L)	0.59
COND (mS/cm)	6.32	MBAS (mg/L)	0.75	Glycol (mg/L)	0.6		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: OVR-09 DATE: 7/8/08

LOCATION: South of property at 850 Energy Way in city easement at base of slope TIME: 8:50 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	OVR-10			Latitude	32.59285	Watershed: Hydrologic Unit	910
Location	South end of Brandywine Ave, South of Auto Park Dr, at base of slope			Longitude	-117.02994	Hydrologic Area	910.2
				TB Page	1330-H5	Hydrologic Subarea (Optional)	910.20
Date	7/21/08	Time	12:20p	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other Larvae

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 135

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	7.6	Ortho-PO_4 (mg/L)	1.1
pH (pH units)	7.7	TURB (NTU)	6.39	NO_3-N (mg/L)	1.72	Ortho-PO_4-P (mg/L)	0.36
COND (mS/cm)	1.35	MBAS (mg/L)	0.25	Glycol (mg/L)	0.5		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: OVR-10 DATE: 7/21/08

LOCATION: Southend of Brandywine Ave South of Auto Park Dr, at base of slope TIME: 12:20p

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	OVR-14			Latitude	32.59406	Watershed: Hydrologic Unit	910
Location	Northwest of Main St. and Maxwell Rd.			Longitude	-117.01933	Hydrologic Area	910.2
				TB Page	1330-J5	Hydrologic Subarea (Optional)	910.20
Date	7/21/08	Time	9:00 am	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☒ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 130, 131

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	4.8	Ortho-PO_4 (mg/L)	1.4
pH (pH units)	8.1	TURB (NTU)	26.34	NO_3-N (mg/L)	1.08	Ortho-PO_4-P (mg/L)	0.46
COND (mS/cm)	1.10	MBAS (mg/L)	0.38	Glycol (mg/L)	0.6		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: OVR - 14 DATE: 7/21/08

LOCATION: Northwest of Main St. and Maxwell Rd. TIME: 9:00 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	POG-01			Latitude	32.59455	Watershed: Hydrologic Unit	910
Location	south of main St. 100 ft. west of Melrose Ave.			Longitude	-117.04153	Hydrologic Area	910.2
				TB Page	1330-65	Hydrologic Subarea (Optional)	910.20
Date	7/11/08	Time	2:30p	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☒ Other larvae

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 87, 88

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	2.5	Ortho-PO_4 (mg/L)	ND
pH (pH units)	8.1	TURB (NTU)	0.01	NO_3-N (mg/L)	0.57	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	7.90	MBAS (mg/L)	0.75	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	70	in
Depth	0.5	in
Velocity	10/10	ft/sec
Flow	109	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: POG-01 DATE: 7/11/08

LOCATION: South of Main St., 100 ft. West of Melrose Ave. TIME: 2:30 pm

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

87, 88

San Diego Stormwater Copermittees
City of Chula Vista
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	POG-02		Latitude	32.63610	Watershed	Hydrologic Unit	910
Location	Intersection of Eastlake Parkway and Trinidad Cove near entrance to housing tract "Antigua"		Longitude	-116.96748		Hydrologic Area	910.2
			TB Page	1311-F6		Hydrologic Subarea (Optional)	910.20
Date	7/3/08	Time 10:10a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 13, 14

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.2	NH_3-N (mg/L)	ND	NO_3 (mg/L)	28.9	Ortho-PO_4 (mg/L)	3.3
pH (pH units)	7.7	TURB (NTU)	9.81	NO_3-N (mg/L)	6.53	Ortho-PO_4-P (mg/L)	1.07
COND (mS/cm)	1.53	MBAS (mg/L)	0.5	Glycol (mg/L)	1.2		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: POG-02 DATE: 7/3/08

LOCATION: TIME: 10:10 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): ~~3x5~~ 3x3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
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☐ Field Screening ☒ Confirmation For Glycol ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	POG-02		Latitude	32.63610	Watershed	Hydrologic Unit	910
Location	Intersection of Eastlake Pkwy and Trinidad Cove near entrance to housing tract "Antigua"		Longitude	-116.96748		Hydrologic Area	910.2
			TB Page	13.11 F6		Hydrologic Subarea (Optional)	910.20
Date	7/7/08	Time 3:20p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.4	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.77	MBAS (mg/L)	NA	Glycol (mg/L)	0.1		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	POG-02		Latitude	32.63610	Watershed	Hydrologic Unit	910
Location	Intersection of Eastlake Pkwy and Trinidad, near entrance to housing tract "Antigua"		Longitude	-116.96748		Hydrologic Area	910.2
			TB Page	1311 – F6		Hydrologic Subarea (Optional)	910.20
Date	7/14/08	Time 1445	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.4	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.2	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.94	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	POG-02 -E		Latitude	32.64073	Watershed	Hydrologic Unit	910
Location	Intersection of Clubhouse Drive and N/S Greensview Drive, at NW corner		Longitude	-116.96480		Hydrologic Area	910.2
			TB Page	1311-G6		Hydrologic Subarea (Optional)	910.20
Date	7/14/08	Time 1525	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	~~☒ None~~	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	POG-02-N			Latitude	32.64073	Watershed: Hydrologic Unit	910
Location	Intersection of Clubhouse Drive and N/S Greensview Drive, at NW corner			Longitude	-116.96430	Hydrologic Area	910.2
				TB Page	1311-G6	Hydrologic Subarea (Optional)	910.20
Date	7/14/08	Time	1540	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	POG-02-S			Latitude	32.64073	Watershed: Hydrologic Unit	910
Location	Intersection of Clubhouse Dr. and N/S Greensview Drive, at NW corner			Longitude	-116.96430	Hydrologic Area	910.2
				TB Page	1311-B6	Hydrologic Subarea (Optional)	910.20
Date	7/14/08	Time	1510	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ ~~Sewage~~	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: convergance of 3 pipes one from N, S, and E.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	POG-03			Latitude	32.611643	Watershed: Hydrologic Unit	910.
Location	Olympic Parkway across from Heritage Rd.			Longitude	-117.002200	Hydrologic Area	910.2
				TB Page	1331-B2	Hydrologic Subarea (Optional)	910.20
Date	7/11/08	Time	1:30pm	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☒ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 85, 86

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.1	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	21.7	Ortho-PO_4 (mg/L)	0.3
pH (pH units)	8.0	TURB (NTU)	0.36	NO_3-N (mg/L)	4.90	Ortho-PO_4-P (mg/L)	0.10
COND (mS/cm)	3.24	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	40	in
Depth	0.75	in
Velocity	10/10	ft/sec
Flow	93	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: POG-03 DATE: 7/11/08

LOCATION: Olympic Parkway across from Heritage Road TIME: 1:30 pm

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	PRD-02		Latitude	32.60622	Watershed	Hydrologic Unit	910
Location	West of Aries Court and 200 ft. south of E. Rienstra St. in SDG+E easement		Longitude	-117.04353		Hydrologic Area	910.2
			TB Page	1330-63		Hydrologic Subarea (Optional)	910.20
Date	7/8/08	Time 10:30a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☒ Sheen DUST ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 36, 37, 38, upstream 39, 40, 41, 42

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.5	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	3.2	Ortho-PO_4 (mg/L)	2.0
pH (pH units)	8.1	TURB (NTU)	3.76	NO_3-N (mg/L)	0.72	Ortho-PO_4-P (mg/L)	0.65
COND (mS/cm)	1.67	MBAS (mg/L)	0.75	Glycol (mg/L)	10		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: PRD-02 DATE: 7/8/08

LOCATION: West of Aries Court and 200ft. south of Rieastra St in SDGE easement TIME: 10:30 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): ~~10 x 6~~ 6 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

✓1

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Glycol ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	PRD-02			Latitude	32.60622	Watershed: Hydrologic Unit	910
Location	West of Aries Ct. and 200 ft South of E. Rienstra SE. in SDG+E easement			Longitude	-117.04353	Hydrologic Area	910.2
				TB Page	1330-63	Hydrologic Subarea (Optional)	910.20
Date	7/9/08	Time	2:00 pm	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	~~☒ None~~	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☒ Yes ~~☐ No~~ ☒ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.9	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.7	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	4.09	MBAS (mg/L)	NA	Glycol (mg/L)	0.4		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	RCC-01			Latitude	32.604677	Watershed: Hydrologic Unit	909
Location	Southeast of Bonita Rd. and I-805, 500ft. South of Bonita Rd.			Longitude	-117.05845	Hydrologic Area	909.1
				TB Page	1310-D5	Hydrologic Subarea (Optional)	909.12
Date	7/9/08	Time	11:30a	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits		☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☒ Excessive			☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 102, 103

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.2	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	5.2	Ortho-PO_4 (mg/L)	0.3
pH (pH units)	8.0	TURB (NTU)	0.48	NO_3-N (mg/L)	1.18	Ortho-PO_4-P (mg/L)	0.10
COND (mS/cm)	0.05	MBAS (mg/L)	0.5	Glycol (mg/L)	0.4		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	30	in
Depth	1.75	in
Velocity	10/10	ft/sec
Flow	164	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: RCC-01

DATE: 7/9/08

LOCATION: southeast of Bonita Rd and I-805 500 ft. south of Bonita Rd.

TIME: 11:30 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 X 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a [illegible] mming, wading, or walking through the area. Trash an[illegible] chemicals that may bioaccumulate, transmit dangerou[illegible] bers, human waste), or has the potential for physical [illegible] etc...). Comments should be added for clarificatio[illegible] 63,64
☐ **Threat to Aquatic Health**	Site pose[illegible] r other wildlife (via contact, ingestion, entanglem[illegible] present. Trash and debris such as small floatable m[illegible] transported long distances may resemble food and n[illegible] ing line, and other material that has the potential for [illegible] and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	RCC-02		Latitude	32.63881	Watershed	Hydrologic Unit	909
Location	Northwest corner of E. H Street and Del Ray Blvd.		Longitude	-117.0855		Hydrologic Area	909.1
			TB Page	1310-G6		Hydrologic Subarea (Optional)	909.12
Date	7/7/08	Time 12:50p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	~~☒ None~~	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 32,33

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.3	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	5.8	Ortho-PO_4 (mg/L)	0.1
pH (pH units)	8.0	TURB (NTU)	0.34	NO_3-N (mg/L)	1.31	Ortho-PO_4-P (mg/L)	0.03
COND (mS/cm)	7.55	MBAS (mg/L)	0.75	Glycol (mg/L)	0.3		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	17	in
Depth	0.75	in
Velocity	16/8	ft/sec
Flow	~80	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: RCC-02 DATE: 7/7/08

LOCATION: Northwest corner of E. H Street and Del Ray Blvd. TIME: 12:50 p

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 X 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	RCC-03		Latitude	32.64418	Watershed	Hydrologic Unit	909
Location	Downstream of Discovery Park, West of Rancho Del Rey Pkwy in Rice Canyon open space hiking trail		Longitude	-117.01191		Hydrologic Area	909.1
			TB Page	1311-A5		Hydrologic Subarea (Optional)	909.12
Date	7/7/08	Time 11:45	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other snake in water

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 29, 30, 31

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	76	Ortho-PO_4 (mg/L)	0.5
pH (pH units)	7.4	TURB (NTU)	3.85	NO_3-N (mg/L)	17.18	Ortho-PO_4-P (mg/L)	~~0.2~~
COND (mS/cm)	5.00	MBAS (mg/L)	0.5	Glycol (mg/L)	0.6		0.16

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~20	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: RCC - 03 DATE: 7/7/08

LOCATION: Downstream of Discovery Park West of Rancho Del Rey PKWY in Rice Canyon open space hiking trail TIME: 11:45

OBSERVER: JP / MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	RCC - 03			Latitude	32.64418	Watershed: Hydrologic Unit	909.
Location	Downstream of Discovery Park West of Rancho Del Rey Pkwy in Rice Canyon open space hiking trail			Longitude	-117.01191	Watershed: Hydrologic Area	909.1
				TB Page	1311-A5	Watershed: Hydrologic Subarea (Optional)	909.12
Date	7/8/08	Time	3:00p	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.2	NH_3-N (mg/L)	NA	NO_3 (mg/L)	59	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.2	TURB (NTU)	NA	NO_3-N (mg/L)	13.33	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	4.64	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~20	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	RCC-03		Latitude	32.64418	Watershed	Hydrologic Unit	909
Location	Downstream of Discovery Park, West of Rancho Del Rey Pkwy in Rice Canyon open space hiking trail		Longitude	-117.01191		Hydrologic Area	909.1
			TB Page	1311-A5		Hydrologic Subarea (Optional)	909.12
Date	7/15/08	Time	15:30	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.2	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	4.65	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	15 gpm	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	RCC-03-[redacted]1		Latitude	32.64550	Watershed	Hydrologic Unit	909
Location	Intersection of Cima Del Rey and Rancho Del Rey Pkwy		Longitude	-117.01085		Hydrologic Area	909.1
			TB Page	1311-A5		Hydrologic Subarea (Optional)	909.12
Date	7/15/08	Time 1550	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	RCC-03-[redacted] 2		Latitude	32.64436	Watershed	Hydrologic Unit	909
Location	East H. St. and Otay Lakes Road Intersection, west side of shopping center, in canyon		Longitude	-117.00253		Hydrologic Area	909.1
			TB Page	1311-B5		Hydrologic Subarea (Optional)	909.12
Date	7/15/08	Time 16:10	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☒ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☒ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	**Tide Height:** ____ ft.
Last Rain	☒ > 72 hours	☐ < 72 hours				
Rainfall	☒ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ~~☒ N/A~~

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Nitrate RCC-03

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	RCC-03-3		Latitude	32.64369	Watershed	Hydrologic Unit	909.
Location	manhole at intersection of Rancho Del Rey Pkwy and Buena Vista Way		Longitude	-117.01073		Hydrologic Area	909.1
			TB Page	1311 A5		Hydrologic Subarea (Optional)	909.12
Date	7/8/08	Time 3:30p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.7	NH_3-N (mg/L)	NA	NO_3 (mg/L)	107	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.8	TURB (NTU)	NA	NO_3-N (mg/L)	24.18	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.2	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~20	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	RCC-04			Latitude	32.64436	Watershed: Hydrologic Unit	909
Location	East H. St. and Otay Lakes Road Intersection, west of shopping center in Canyon			Longitude	-117.00253	Hydrologic Area	909.1
				TB Page	1311-B5	Hydrologic Subarea (Optional)	909.12
Date	7/10/08	Time	2:40p	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 73-78

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.5	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	172	Ortho-PO_4 (mg/L)	0.3
pH (pH units)	7.8	TURB (NTU)	0.01	NO_3-N (mg/L)	38.87	Ortho-PO_4-P (mg/L)	0.10
COND (mS/cm)	6.19	MBAS (mg/L)	0.75	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: RCC-04 DATE: 7/10/08

LOCATION: E. H St. and Otay Lakes Rd. intersection, west of shopping center, in canyon TIME: 2:40 pm

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☒ RECEIVING WATER ☒ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☒ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging	1		X		X					X		X
Food Waste												
Household												
Shopping Carts	2	X			X					X		X
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NO_3-N ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	RCC-04			Latitude	32.64436	Watershed: Hydrologic Unit	909
Location	East H. St. and Otay Lakes Rd. Intersection West of Shopping Center in Canyon			Longitude	-117.00253	Hydrologic Area	909.1
				TB Page	1311-B5	Hydrologic Subarea (Optional)	909.12
Date	7/11/08	Time	9:45 am	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? (☒ Yes) ~~☒ No~~ ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.9	NH_3-N (mg/L)	NA	NO_3 (mg/L)	175	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.7	TURB (NTU)	NA	NO_3-N (mg/L)	~~40~~ 39.5	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.70	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	RCC-04-01		Latitude	32.64412	Watershed	Hydrologic Unit	909.
Location	Otay Lakes Rd South East of E H St intersection in front of South Western College		Longitude	-116.99799		Hydrologic Area	909.1
			TB Page	1311-C5		Hydrologic Subarea (Optional)	909.12
Date	7/10/08	Time 3:40p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☒ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.9	NH_3-N (mg/L)	NA	NO_3 (mg/L)	97	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.0	TURB (NTU)	NA	NO_3-N (mg/L)	22.92	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	3.92	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SCR-01		Latitude	32.64567	Watershed	Hydrologic Unit	910
Location	North of Otay Lakes Rd. and 300 ft. West of Wood Dr. E. of Hunte Parkway		Longitude	-116.94713		Hydrologic Area	910.2
			TB Page	1311-J5		Hydrologic Subarea (Optional)	910.20
Date	7/7/08	Time 9:45	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 25, 26 upstream 27, 28

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.0	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	10.6	Ortho-PO_4 (mg/L)	3.4
pH (pH units)	7.3	TURB (NTU)	3.05	NO_3-N (mg/L)	2.40	Ortho-PO_4-P (mg/L)	1.11
COND (mS/cm)	1.93	MBAS (mg/L)	0.63	Glycol (mg/L)	2:0		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SCR-01 DATE: 7/7/08

LOCATION: North of Otay Lakes Rd and 300 ft. W of Wood Dr. E. of Hunte Pkwy TIME: 9:45

OBSERVER: JP / MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 x 12

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Glycol ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SCR-01		Latitude	32.64567	Watershed	Hydrologic Unit	910
Location	North of Otay Lakes Rd and 300 ft. West of Wood Drive, East of Hunte Parkway		Longitude	-116.94713		Hydrologic Area	910.2
			TB Page	1311-J5		Hydrologic Subarea (Optional)	910.20
Date	7/8/07	Time 2:10p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☐ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.1	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.3	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.46	MBAS (mg/L)	NA	Glycol (mg/L)	0.5		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SCR-01			Latitude	32.64567	Watershed: Hydrologic Unit	910
Location	North of Otay Lakes Rd and 300 ft. West of Wood Drive, East of Hunte Pkwy			Longitude	116.94713	Hydrologic Area	910.2
				TB Page	1311-J5	Hydrologic Subarea (Optional)	910.20
Date	7/15/08	Time	1340	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	~~☒ None~~	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.4	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.97	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SCR-01-1			Latitude	32.64723	Watershed: Hydrologic Unit	910
Location	intersection of La Costa Ave and Torrey Pines Rd			Longitude	-116.95200	Hydrologic Area	910.2
				TB Page	1311-H5	Hydrologic Subarea (Optional)	910.20
Date	7/15/08	Time	1420	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	SCR-02		Latitude	32.64548	Watershed	Hydrologic Unit	910
Location	salt creek as it passes under Otay Lakes Rd. East of Hunte Pkwy North Side of Street		Longitude	-116.94671		Hydrologic Area	910.2
			TB Page	1311-J5		Hydrologic Subarea (Optional)	910.20
Date	7/15/08	Time 1445	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ~~☒ Normal~~ ☒ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 101, 102

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	72	Ortho-PO_4 (mg/L)	0.4
pH (pH units)	8.0	TURB (NTU)	0.01	NO_3-N (mg/L)	16.27	Ortho-PO_4-P (mg/L)	0.13
COND (mS/cm)	6.38	MBAS (mg/L)	0.5	Glycol (mg/L)	ND		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	40	in
Depth	1	in
Velocity	10/10	ft/sec
Flow	125	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SCR - 02 DATE: 7/15/08

LOCATION: Salt creek as it passes under Otay Lakes Rd ~~East of Hunte Pkwy~~, North side of street TIME: 1445

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☒ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	SCR-02			Latitude	32.64548	Watershed: Hydrologic Unit	910
Location	salt creek as it passes under Otay Lakes Rd. East of Hunte Pkwy North side of street			Longitude	-116.94671	Hydrologic Area	910.2
				TB Page	1311-J5	Hydrologic Subarea (Optional)	910.20
Date	7/16/08	Time	16:20	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 111

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	97. ~~NA~~	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.0	TURB (NTU)	NA	NO_3-N (mg/L)	~~22. NA~~ 21.97	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.60	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	45	in
Depth	1	in
Velocity	10 / 10	ft/sec
Flow	140	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Vegetation has been cut back and site scraped and cleaned since yesterday.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	SCR-02-1		Latitude	32.66103	Watershed	Hydrologic Unit	910
Location	southeast of Hunte Pkwy and Proctor Valley Rd.		Longitude	116.95484		Hydrologic Area	910.2
			TB Page	1311-H3		Hydrologic Subarea (Optional)	910.20
Date	7/23/08	Time 1430	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	198	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	44.75	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	9.42	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	SCR-03		Latitude	32.63333	Watershed	Hydrologic Unit	910
Location	Olympic Parkway about 200 ft east of Hunte Pkwy on the salt creek		Longitude	-116.94444		Hydrologic Area	910.2
			TB Page	1311-J7		Hydrologic Subarea (Optional)	910.20
Date	7/2/08	Time 1545	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 12

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.6	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	49.4	Ortho-PO_4 (mg/L)	0.7
pH (pH units)	7.7	TURB (NTU)	0.01	NO_3-N (mg/L)	11.16	Ortho-PO_4-P (mg/L)	0.23
COND (mS/cm)	5.29	MBAS (mg/L)	0.38	Glycol (mg/L)	0.1		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	30	in
Depth	1.6	in
Velocity	12/10	ft/sec
Flow	~~1638~~ 1132	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SCR-03 DATE: 7/2/08

LOCATION: Olympic Pkwy about 200ft. East of Hunte Pkwy on the Salt Creek TIME: 15:45

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☒ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
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☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	SCR-03		Latitude	32.63333	Watershed	Hydrologic Unit	910
Location	Olympic PRKWY about 200 ft. east of Hunte PRKWY on the salt creek		Longitude	-116.94444		Hydrologic Area	910.2
			TB Page	1311-J7		Hydrologic Subarea (Optional)	910.20
Date	7/7/08	Time 2:30p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.1	NH_3-N (mg/L)	NA	NO_3 (mg/L)	87	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.8	TURB (NTU)	NA	NO_3-N (mg/L)	19.66	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	5.41	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	32	in
Depth	1	in
Velocity	12/10	ft/sec
Flow	120	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SCR - 04		Latitude	32.61261	Watershed	Hydrologic Unit	910
Location	southwest of East Lake Parkway and Hunte Parkway in canyon		Longitude	-116.95940		Hydrologic Area	910.2
			TB Page	1331 - 62		Hydrologic Subarea (Optional)	910.20
Date	7/2/08	Time 2:40p	Observer	JP / MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☒ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 9, 10, 11

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	~~29~~ 25.6	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	~~[illegible]~~ 34.7	Ortho-PO_4 (mg/L)	3.1
pH (pH units)	8.9	TURB (NTU)	~~58~~ 41.0	NO_3-N (mg/L)	7.84	Ortho-PO_4 -P (mg/L)	1.01
COND (mS/cm)	2.09	MBAS (mg/L)	0.62	Glycol (mg/L)	0.6		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

✓

Trash Assessment Form

SITE ID: SCR - 04 DATE: 7/2/08

LOCATION: Southwest of Eastlake Parkway and Hunte Parkway in canyon TIME: 2:40

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 35 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SCR - 05		Latitude	32.61857	Watershed	Hydrologic Unit	910
Location	Approx. 200 ft. South of Hunte Parkway, across from exploration falls in canyon		Longitude	-116.95093		Hydrologic Area	910.2
			TB Page	1331 - H1		Hydrologic Subarea (Optional)	910.20
Date	7/2/08	Time 1:30p	Observer	JP / MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☒ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6, 7, 8

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.7	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	54	Ortho-PO_4 (mg/L)	2.4
pH (pH units)	8.2	TURB (NTU)	17.31	NO_3-N (mg/L)	12.20	Ortho-PO_4-P (mg/L)	0.78
COND (mS/cm)	2.45	MBAS (mg/L)	0.5	Glycol (mg/L)	0.7		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SCR-05 DATE: 7/2/08

LOCATION: Approx 200ft. south of Hunter Parkway, across from Exploration Falls, in canyon TIME: 1:30 pm

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SCR-05		Latitude	32.61857	Watershed	Hydrologic Unit	910
Location	Approx. 200ft. south of Hunte Parkway, across from Exploration falls in canyon		Longitude	-116.95093		Hydrologic Area	910.2
			TB Page	1331-H1		Hydrologic Subarea (Optional)	910.20
Date	7/3/08	Time 4:00	Observer	JP/MO		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.6	NH_3-N (mg/L)	NA	NO_3 (mg/L)	75	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.3	TURB (NTU)	NA	NO_3-N (mg/L)	~~17~~ 16.95	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.98	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SCR-05	Latitude	32.37159	Watershed	Hydrologic Unit	910.
Location	Manhole ~~at~~ just west of Trellis St and Exploration Falls Drive intersection	Longitude	-116.57134		Hydrologic Area	910.2
		TB Page	1331-H1		Hydrologic Subarea (Optional)	910.20
Date	7/3/08	Time	430	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ~~☐ No~~ **Photo #** 23, 24 irrigation

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.5	NH_3-N (mg/L)	NA	NO_3 (mg/L)	79	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.7	TURB (NTU)	NA	NO_3-N (mg/L)	~~[illegible]~~ 17.85	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.35	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-02		Latitude	32.65924	Watershed	Hydrologic Unit	909.
Location	North of EH St and 50 ft. West of SR-125 at base of slope, East of SUN-05		Longitude	-116.97750		Hydrologic Area	909.1
			TB Page	1311-E3		Hydrologic Subarea (Optional)	909.11
Date	7/3/08	Time 11:30am	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☒ Other larvae

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 15, 16

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	99	Ortho-PO_4 (mg/L)	0.6
pH (pH units)	8.2	TURB (NTU)	6.91	NO_3-N (mg/L)	22.37	Ortho-PO_4-P (mg/L)	0.20
COND (mS/cm)	5.57	MBAS (mg/L)	0.75	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SUN-02 DATE: 7/3/08

LOCATION: North of EH St and 50 ft West of SR-125 at base of slope, East of SUN-05 TIME: 11:30 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-02			Latitude	32.65924	Watershed: Hydrologic Unit	909
Location	North of E. H St and 50 ft. west of SR-125 at base of slope, East of Sun-05'			Longitude	-116.97750	Hydrologic Area	909.1
				TB Page	1311-E3	Hydrologic Subarea (Optional)	909.11
Date	7/7/08	Time	4:10p	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	71.0	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.0	TURB (NTU)	NA	NO_3-N (mg/L)	17.40	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.56	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-02		Latitude	32.65924	Watershed	Hydrologic Unit	909
Location	North of E. H St. and 50 ft. West of SR-125 at base of slope, East of Sun-05		Longitude	-116.97750		Hydrologic Area	909.1
			TB Page	1311-E3		Hydrologic Subarea (Optional)	909.1R
Date	7/9/08	Time 3:50p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☒ Chemical	☐ Sewage	~~☒ Other~~
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	72	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.0	TURB (NTU)	NA	NO_3-N (mg/L)	16.27	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	7.21	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Second site confirmation for Nitrate.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-02			Latitude	32.65924	Watershed: Hydrologic Unit	909
Location	North of E. H St. and 50 ft. West of SR-125 at base of slope, East of SUN-05			Longitude	-117.97750	Hydrologic Area	909.1
				TB Page	1311-E3	Hydrologic Subarea (Optional)	909.11
Date	7/14/08	Time	1330	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☒ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.8	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.0	TURB (NTU)	0.01	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	8.07	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	SUN-02-1			Latitude	~~32.39668~~ 32.581508	Watershed: Hydrologic Unit	909
Location	center lane of southbound Mt. Miguel Rd, just south of intersection w/E. H St. / Proctor Valley Rd			Longitude	~~-116.58288~~ -116.97148	Hydrologic Area	909.1
				TB Page	1311 - F3	Hydrologic Subarea (Optional)	909.12
Date	7/9/08	Time	3:10p	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.4	NH_3-N (mg/L)	NA	NO_3 (mg/L)	32	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.3	TURB (NTU)	NA	NO_3-N (mg/L)	7.23	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.47	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-02-~~3~~1			Latitude	32.~~39668~~ 66150	Watershed: Hydrologic Unit	909
Location	center lane of southbound Mt. Miguel Rd, just south of intersection w/ E. H'St./Proctor Valley Rd.			Longitude	-116.~~582~~88 97148	Hydrologic Area	909.1
				TB Page	1311-F3	Hydrologic Subarea (Optional)	909.11
Date	7/14/08	Time	1350	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	~~☒ Sediment/Gravel~~	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ~~☒ No~~ **Photo #** 95

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-03		Latitude	32.66685	Watershed	Hydrologic Unit	909.
Location	Chula Vista Municipal Golf Course, southwest of Bonita Rd. and Central Ave		Longitude	1310-J2		Hydrologic Area	909.1
			TB Page	-117.02338		Hydrologic Subarea (Optional)	909.12
Date	7/21/08	Time 15:15	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☒ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 140, 141

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.5	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	2.1	Ortho-PO_4 (mg/L)	0.3
pH (pH units)	8.2	TURB (NTU)	3.66	NO_3-N (mg/L)	0.47	Ortho-PO_4-P (mg/L)	0.10
COND (mS/cm)	3.08	MBAS (mg/L)	0.25	Glycol (mg/L)	0.8		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SUN-03 DATE: 7/21/08

LOCATION: Chula Vista Municipal Golf Course, Southwest of Bonita Rd. and Central Ave. Intersection TIME: 15:15

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-05		Latitude	32.65917	Watershed	Hydrologic Unit	909.
Location	North of E H St and 50 ft West of SR-125 at base of slope, western most outfall		Longitude	-116.97767		Hydrologic Area	909.1
			TB Page	1311-E3		Hydrologic Subarea (Optional)	909.12
Date	7/3/08	Time 12:20p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 17, 18

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.1	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	80	Ortho-PO_4 (mg/L)	0.6
pH (pH units)	8.4	TURB (NTU)	0.80	NO_3-N (mg/L)	18.08	Ortho-PO_4-P (mg/L)	0.20
COND (mS/cm)	3.43	MBAS (mg/L)	0.25	Glycol (mg/L)	0.5		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SUN-05 DATE: 7/3/08

LOCATION: North of E H Street and 50ft. West of SR-125 at base of slope, Western most outfall TIME: 12:20 pm

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-05-01		Latitude	32.65917	Watershed	Hydrologic Unit	909.
Location	North of E. H St. and 50 ft. west of SR-125 at base of slope, western most outfall		Longitude	-116.97767		Hydrologic Area	909.1
			TB Page	1311-E3		Hydrologic Subarea (Optional)	909.12
Date	7/7/08	Time 4:30p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	95.0	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.3	TURB (NTU)	NA	NO_3-N (mg/L)	21.47	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.87	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For SUN - 05 - Nitra

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	SUN-05-02		Latitude	32.65704	Watershed	Hydrologic Unit	909
Location	manhole on stone creek Place in front of 2128 Stone Creek Pl.		Longitude	-116.97778		Hydrologic Area	909.1
			TB Page	1311-E3		Hydrologic Subarea (Optional)	909.12
Date	7/8/08	Time 4:15p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☒ ~~Fine Particul~~ates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	27	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.1	TURB (NTU)	NA	NO_3-N (mg/L)	6.10	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.80	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	.3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-06		Latitude	32.67141	Watershed	Hydrologic Unit	909
Location	south west of the intersection of Proctor Valley Road and San Miguel Ranch Road.		Longitude	-116.99702		Hydrologic Area	909.1
			TB Page	131-C2		Hydrologic Subarea (Optional)	909.12
Date	7/16/08	Time 11:30a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☒ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae ☒ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 107, 108

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.4	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	57	Ortho-PO_4 (mg/L)	0.3
pH (pH units)	7.9	TURB (NTU)	0.52	NO_3-N (mg/L)	12.88	Ortho-PO_4-P (mg/L)	0.10
COND (mS/cm)	5.13	MBAS (mg/L)	0.5	Glycol (mg/L)	0.3		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SUN-06 DATE: 7/16/08

LOCATION: south west of the intersection of Proctor Valley Rd and San Miguel Ranch Rd. TIME: 11:30 am

OBSERVER: JP / MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-06			Latitude	32.67141	Watershed: Hydrologic Unit	909
Location	southwest of the intersection of Proctor Valley Rd & San Miguel Ranch Rd			Longitude	-116.99702	Hydrologic Area	909.1
				TB Page	1311-C2	Hydrologic Subarea (Optional)	909.12
Date	7/17/08	Time	11:00a	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae	☒ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.7	NH_3-N (mg/L)	na	NO_3 (mg/L)	~~na~~ 48	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.6	TURB (NTU)	na	NO_3-N (mg/L)	~~na~~ 10.8	Ortho-PO_4-P (mg/L)	na
~~COND (mS/cm)~~	5.31	MBAS (mg/L)	na	~~Glycol (mg/L)~~	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-06-1		Latitude	32.67194	Watershed	Hydrologic Unit	909
Location	Detention basin East of Proctor Valley Rd Northern outfall		Longitude	-116.99642		Hydrologic Area	909.1
			TB Page	1311-C1		Hydrologic Subarea (Optional)	909.12
Date	7/17/08	Time 11:40a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	51	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	~~12~~ 11.53	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-07		Latitude	32.67688	Watershed	Hydrologic Unit	909
Location	East of the end of Jonel Way, in lot to detention basin at base of slope, West of SR-125		Longitude	-116.98830		Hydrologic Area	909.1
			TB Page	1311-D1		Hydrologic Subarea (Optional)	909.12
Date	7/16/08	Time 12:20p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 109, 110

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.9	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	11.3	Ortho-PO_4 (mg/L)	0.3
pH (pH units)	7.8	TURB (NTU)	3.68	NO_3-N (mg/L)	25.54	Ortho-PO_4-P (mg/L)	0.10
COND (mS/cm)	7.35	MBAS (mg/L)	0.68	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SUN-07 DATE: 7/16/08

LOCATION: East of the end of Jonel Way, inlet to detention basin at base of slope, west of SR-125 TIME: 12:20p

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SUN-07		Latitude	32.67688	Watershed	Hydrologic Unit	909
Location	East of the end of Jonel Way inlet to detention Basin at base of slope West of SR-125		Longitude	116.98830		Hydrologic Area	909.1
			TB Page	1311-D1		Hydrologic Subarea (Optional)	909.12
Date	7/17/08	Time 12:15p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	106	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.5	TURB (NTU)	NA	NO_3-N (mg/L)	23.96	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.86	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SVS-01			Latitude	32.64912	Watershed: Hydrologic Unit	909
Location	Rear of Ramada Inn at intersection of Bonita Rd. and Bonita Glen, north of Bonita Rd.			Longitude	-117.06474	Hydrologic Area	909.1
				TB Page	1310-D5	Hydrologic Subarea (Optional)	909.12
Date	7/9/08	Time	10:30am	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 60,61

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	19.9	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	2.9	Ortho-PO_4 (mg/L)	1.4
pH (pH units)	7.8	TURB (NTU)	5.27	NO_3-N (mg/L)	0.66	Ortho-PO_4-P (mg/L)	0.46
COND (mS/cm)	2.08	MBAS (mg/L)	0.5	Glycol (mg/L)	0.6		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SVS-01 DATE: 7/9/08

LOCATION: Rear of ~~Bonita~~ Ramada Inn at Intersection of Bonita Rd and Bonita Glen North of Bonita Rd. TIME: 10:30 am

OBSERVER: MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 12 X 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
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☐ Field Screening ☒ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SVS-01		Latitude	32.64912	Watershed	Hydrologic Unit	909
Location	Rear of Ramada Inn at intersection of Bonita Rd and Bonita Glen, north of Bonita Road		Longitude	-117.06474		Hydrologic Area	909.1
			TB Page	1310-D5		Hydrologic Subarea (Optional)	909.12
Date	7/17/08	Time 15:00	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.5	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.6	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.63	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SVS-02		Latitude	32.65010	Watershed	Hydrologic Unit	909
Location	East of 65 flower St behind units 297 + 320 West of I-805		Longitude	-117.06696		Hydrologic Area	909.1
			TB Page	1310-C5 ~~1330-D5~~		Hydrologic Subarea (Optional)	909.12
Date	7/17/08	Time 3:30 pm	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other larvae

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 118, 119

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.5	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	2.0	Ortho-PO_4 (mg/L)	5.2
pH (pH units)	7.2	TURB (NTU)	17.84	NO_3-N (mg/L)	0.45	Ortho-PO_4-P (mg/L)	~~1.7~~
COND (mS/cm)	1.58	MBAS (mg/L)	0.5	Glycol (mg/L)	0.7		1.70

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SVS-02 DATE: 7/17/08

LOCATION: East of 65 Flower St. behind units 297 + 320, West of I-805 TIME: 3:30 pm

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SWB-03			Latitude	32.59512	Watershed: Hydrologic Unit	910
Location	west of 2466 Main St. (Tikeforce)			Longitude	-117.08089	Hydrologic Area	910.2
				TB Page	1130-B5	Hydrologic Subarea (Optional)	910.20
Date	7/17/08	Time	8:40a	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 112, 113

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.5	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	12.3	Ortho-PO_4 (mg/L)	2.0
pH (pH units)	8.0	TURB (NTU)	29.77	NO_3-N (mg/L)	2.78	Ortho-PO_4-P (mg/L)	0.65
COND (mS/cm)	1.19	MBAS (mg/L)	0.25	Glycol (mg/L)	0.5		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SWB-03 DATE: 7/17/08

LOCATION: West of 2466 Main St. (Tileforce) TIME: 8:40 am

OBSERVER: MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SWR-03-E		Latitude	32.64999	Watershed	Hydrologic Unit	909
Location	South of Third Ave. and N. Glover Ave in back of CVS Pharmacy		Longitude	-117.08655		Hydrologic Area	909.1
			TB Page	1310-A5		Hydrologic Subarea (Optional)	909.12
Date	7/23/08	Time 9:00a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ~~☒ Flowing~~ ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 165, 166

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.8	NH_3-N (mg/L)	0.9	NO_3 (mg/L)	5.0	Ortho-PO_4 (mg/L)	2.6
pH (pH units)	8.0	TURB (NTU)	4.73	NO_3-N (mg/L)	1.13	Ortho-PO_4-P (mg/L)	0.85
COND (mS/cm)	1.31	MBAS (mg/L)	0.5	Glycol (mg/L)	0.5		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SWR-03-E

DATE: 7/23/08

LOCATION: South of Third Ave and N. Glover Ave Intersection in back of CVS Pharmacy

TIME: 9:00 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 100 x 2

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SWR-04		Latitude	32.65010	Watershed	Hydrologic Unit	909
Location	Northwest of 5th Ave and C. St., South of Wal-Mart parking lot.		Longitude	-117.09266		Hydrologic Area	909.1
			TB Page	1310-A5		Hydrologic Subarea (Optional)	909.12
Date	7/21/08	Time 1615	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☒ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 142-149

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.7	NO_3 (mg/L)	3.2	Ortho-PO_4 (mg/L)	1.2
pH (pH units)	7.1	TURB (NTU)	34.39	NO_3-N (mg/L)	0.72	Ortho-PO_4-P (mg/L)	0.39
COND (mS/cm)	0.94	MBAS (mg/L)	0.13	Glycol (mg/L)	0.4		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: SWR-04 DATE: 7/21/08

LOCATION: Northwest of 5th Ave and C St, South of Wal-Mart parking lot. TIME: 16:15

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☒ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing	1	X									X	X
Food Packaging	3	X									X	X
Food Waste												
Household	2	X									X	X
Shopping Carts	4	X									X	X
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	TCC-01-01		Latitude	32.61457	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Channel, Southwest of J Bay. Blvd, "L" St. Intersection inside Duke Energy Plant		Longitude	-117.09232		Hydrologic Area	909.1
			TB Page	1330-A3		Hydrologic Subarea (Optional)	909.11
Date	7/22/08	Time 9:00a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 150, ~~155~~

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.0	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	33.8	Ortho-PO_4 (mg/L)	0.1
pH (pH units)	8.1	TURB (NTU)	0.01	NO_3-N (mg/L)	7.64	Ortho-PO_4-P (mg/L)	0.03
COND (mS/cm)	6.68	MBAS (mg/L)	0.75	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: TCC-01-01 DATE: 7/22/08

LOCATION: Telegraph Canyon Channel, Southwest of Bay Blvd "L" St. intersection, inside Duke Energy Plant TIME: 9:00 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	TCC-01-02		Latitude	32.61457	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Channel, Southwest of Bay Blvd, "L" St. intersection, inside Duke Energy plant		Longitude	117.09232		Hydrologic Area	909.1
			TB Page	1330-A3		Hydrologic Subarea (Optional)	909.11
Date	7/22/08	Time 9:45am	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☒ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 151

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.4	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	40.0	Ortho-PO_4 (mg/L)	ND
pH (pH units)	7.9	TURB (NTU)	0.35	NO_3-N (mg/L)	9.04	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	6.57	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	20	in
Depth	0.75	in
Velocity	10/10	ft/sec
Flow	47	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: TCC-01-02 DATE: 7/22/08

LOCATION: Telegraph Canyon Channel, South - West of Bay Blvd. "L" St. intersection, inside Duke Energy Plant TIME: 9:45 am

OBSERVER: JP / MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	TCC-01-03		Latitude	32.61457	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Channel South west of Bay Blvd, "L" St. intersection, inside Duke Energy Plant		Longitude	-117.09232		Hydrologic Area	909.1
			TB Page	1330-A3		Hydrologic Subarea (Optional)	909.11
Date	7/22/08	Time 10:50a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 152 ~~154~~

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.5	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	36.7	Ortho-PO_4 (mg/L)	0.1
pH (pH units)	8.0	TURB (NTU)	0.01	NO_3-N (mg/L)	8.29	Ortho-PO_4-P (mg/L)	0.03
COND (mS/cm)	6.55	MBAS (mg/L)	0.5	Glycol (mg/L)	0.3		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: TCC-01-03 DATE: 7/22/08

LOCATION: Telegraph Canyon Channel Southwest of Bay Blvd "L" St. intersection, inside Duke Energy Plant TIME: 10:25 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	TCC-01-04			Latitude	32.61457	Watershed: Hydrologic Unit	909
Location	Telegraph Canyon Channel Southwest of Bay Blvd, "L" St. Intersection, inside Duke Energy Plant			Longitude	-117.09232	Hydrologic Area	909.1
				TB Page	1330-A3	Hydrologic Subarea (Optional)	909.11
Date	7/22/08	Time	10:25am	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ~~☒ Yes~~ ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 153, 154, 155

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.7	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	32.4	Ortho-PO_4 (mg/L)	ND
pH (pH units)	7.9	TURB (NTU)	0.01	NO_3-N (mg/L)	7.32	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	6.53	MBAS (mg/L)	0.5	Glycol (mg/L)	0.1		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	30	in
Depth	1.0	in
Velocity	12/10	ft/sec
Flow	112	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: TCC-01-04 DATE: 7/22/08

LOCATION: Telegraph Canyon Channel South west of Bay Blvd "L" St. intersection, inside Duke Energy Plant TIME: 10:50 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	TCC-02		Latitude	32.62821	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Channel West of Hilltop Drive in Hilltop Park		Longitude	117.06138		Hydrologic Area	909.1
			TB Page	1330-D1		Hydrologic Subarea (Optional)	909.11
Date	7/22/08	Time 16:45	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 163,164

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.0	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	55	Ortho-PO_4 (mg/L)	ND
pH (pH units)	8.6	TURB (NTU)	0.01	NO_3-N (mg/L)	12.43	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	6.56	MBAS (mg/L)	0.5	Glycol (mg/L)	0.1		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	30	in
Depth	1.25	in
Velocity	15/10	ft/sec
Flow	175	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: TCC-02 DATE: 7/22/08

LOCATION: Telegraph Canyon Channel West of Hilltop Dr, in Hilltop Park TIME: 16:45

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 2

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☒ RECEIVING WATER ☒ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
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☐ Field Screening ☒ Confirmation For NO_3 ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	TCC-02		Latitude	32.62821	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Channel West of Hilltop Drive in Hilltop Park		Longitude	-117.06138		Hydrologic Area	909.1
			TB Page	1330-D1		Hydrologic Subarea (Optional)	909.11
Date	7/23/08	Time 15:40	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	30.1	NH_3-N (mg/L)	NA	NO_3 (mg/L)	52	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.5	TURB (NTU)	NA	NO_3-N (mg/L)	11.75	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.10	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	32	in
Depth	1.25	in
Velocity	15/12	ft/sec
Flow	156	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	TCC-03		Latitude	32.64726	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Channel 500 ft. West of Eastlake Pkwy 100 ft. North of Otay Lakes Rd. Across from Mobil Gas Station		Longitude	-116.96885		Hydrologic Area	909.1
			TB Page	1311-F5		Hydrologic Subarea (Optional)	909.11
Date	7/22/08	Time 1400	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ~~☒ N/A~~

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 156-158

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	144	Ortho-PO_4 (mg/L)	0.5
pH (pH units)	8.1	TURB (NTU)	1.87	NO_3-N (mg/L)	32.54	Ortho-PO_4-P (mg/L)	0.16
COND (mS/cm)	7.41	MBAS (mg/L)	0.75	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	17	in
Depth	1.9	in
Velocity	16/10	ft/sec
Flow	85	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: TCC-03 DATE: 7/22/08

LOCATION: Telegraph Canyon Channel, 500 ft. West of Eastlake Pkwy, 100 ft. N. of Otay Lakes Rd, across from Mobil Gas Station TIME: 14:00

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☒ RECEIVING WATER ☒ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ ~~Field Screening~~ ☒ Confirmation For NO_3 ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	TCC-03		**Latitude**	32.64726	**Watershed**	**Hydrologic Unit**	909
Location	Telegraph Canyon Channel 500 ft. West of Eastlake Pkwy, 100 ft. North of Otay Lakes Rd, across from Mobil Gas Station		**Longitude**	-116.96885		**Hydrologic Area**	909.1
			TB Page	1311-F5		**Hydrologic Subarea** (Optional)	909.11
Date	7/23/08	**Time** 10:45a	**Observer**	JP/MD		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.8	NH_3-N (mg/L)	NA	NO_3 (mg/L)	142	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.0	TURB (NTU)	NA	NO_3-N (mg/L)	32.09	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	5.98	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	18	in
Depth	1.0	in
Velocity	16/12	ft/sec
Flow	75	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	TCC-03-1			Latitude	32.64703	Watershed: Hydrologic Unit	909
Location	south side of Otay Lakes Rd between mobil gas station and East Lake Pkwy			Longitude	-116.96796	Hydrologic Area	909.1
				TB Page	1311-F5	Hydrologic Subarea (Optional)	909.11
Date	7/23/08	Time	11:20	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	205	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	46.33	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	5.86	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	15	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	TCC-03-2		Latitude	32.64835	Watershed	Hydrologic Unit	909
Location	North side of intersection of Otay Lakes Rd and East Lake Pkwy		Longitude	-116.96551		Hydrologic Area	909.1
			TB Page	1311-F5		Hydrologic Subarea (Optional)	909.11
Date	7/23/08	Time 11:45	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☒ ~~Commercial~~ ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ ~~Residential~~ ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	117	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	26.44	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	5.89	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	60	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	TCC-03-3		Latitude	32.64586	Watershed	Hydrologic Unit	909
Location	Behind Vons in Eastlake Village Center		Longitude	-116.96587		Hydrologic Area	909.1
			TB Page	1311-F5		Hydrologic Subarea (Optional)	909.11
Date	7/23/08	Time 12:10	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	288	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	65.09	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.53	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO_3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	TCC-03-4		Latitude	32.64405	Watershed	Hydrologic Unit	909
Location	in grass southeast of intersection of Greensgate Drive and N. Greensview Dr.		Longitude	-116.96434		Hydrologic Area	909.1
			TB Page	1311-65		Hydrologic Subarea (Optional)	909.11
Date	7/23/08	Time 12:40	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	231	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	52.21 ~~15.3~~	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	7.	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
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☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For NO3

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	TCC-03-5		Latitude	32.65201	Watershed	Hydrologic Unit	909
Location	on east sidewalk approximately 150 ft. North of Fenton St and East Lake Pkwy intersection		Longitude	-116.96706		Hydrologic Area	909.1
			TB Page	1311-F4		Hydrologic Subarea (Optional)	909.11
Date	7/23/08	Time 13:45	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	154	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	34.80	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	7.12	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~20	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	TCC-04		Latitude	32.62016	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Channel West of 3rd Ave and South of L. St. under Mobil gas station		Longitude	-117.07230		Hydrologic Area	909.1
			TB Page	1330-C2		Hydrologic Subarea (Optional)	909.11
Date	7/10/08	Time 10:45	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 69, 70

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	~~3.7~~ 22.8	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	38.1	Ortho-PO_4 (mg/L)	0.1
pH (pH units)	8.1	TURB (NTU)	3.40	NO_3-N (mg/L)	8.61	Ortho-PO_4-P (mg/L)	0.03
COND (mS/cm)	6.20	MBAS (mg/L)	0.5	Glycol (mg/L)	0.4		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	40	in
Depth	1.5	in
Velocity	10/15	ft/sec
Flow	125	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: TCC-04 **DATE:** 7/10/08

LOCATION: Telegraph canyon channel W. of 3rd Ave and south of L.S. under mobil gas station **TIME:** 10:45 am

OBSERVER: MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): ~~10x~~ 15x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☒ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	TCC-05		Latitude	32.626 05	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Rd and Heritage Rd/Paseo Ranchero Northeast of Intersection		Longitude	117.00806		Hydrologic Area	909.1
			TB Page	1331-B1		Hydrologic Subarea (Optional)	909.11
Date	7/22/08	Time 14:45	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ~~☒ N/A~~

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 159,160

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	73	Ortho-PO_4 (mg/L)	0.6
pH (pH units)	8.2	TURB (NTU)	3.97	NO_3-N (mg/L)	16.50	Ortho-PO_4-P (mg/L)	0.20
COND (mS/cm)	6.40	MBAS (mg/L)	0.68	Glycol (mg/L)	0.1		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	100	in
Depth	0.75	in
Velocity	10 / 10	ft/sec
Flow	234	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: TCC-05 DATE: 7/22/08

LOCATION: Telegraph Canyon Rd and Heritage Rd/Paseo Ranchero, Northeast of intersection. TIME: 14:45

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 40 X 25

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☒ RECEIVING WATER ☒ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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☐ Field Screening ☒ Confirmation For NO_3 ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	TCC-05		Latitude	32.62605	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Rd and Heritage Rd / Paseo Ranchero Northeast of Intersection		Longitude	-117.00806		Hydrologic Area	909.1
			TB Page	1331-B1		Hydrologic Subarea (Optional)	909.11
Date	7/23/08	Time 15:10	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☒ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	103	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.1	TURB (NTU)	NA	NO_3-N (mg/L)	23.3	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	5.79	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	105	in
Depth	0.75	in
Velocity	10/10	ft/sec
Flow	245	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	TCC-06		Latitude	32.62774	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Road and Paseo Del Rey, Northwest of Intersection		Longitude	-117.03429		Hydrologic Area	909.1
			TB Page	1310-J1		Hydrologic Subarea (Optional)	909.11
Date	7/22/08	Time 16:00	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 161,162

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.0	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	28	Ortho-PO_4 (mg/L)	ND
pH (pH units)	8.5	TURB (NTU)	0.14	NO_3-N (mg/L)	6.33	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	6.56	MBAS (mg/L)	0.5	Glycol (mg/L)	0.1		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	120	in
Depth	0.75	in
Velocity	10/10	ft/sec
Flow	281	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: TCC-06 DATE: 7/22/08

LOCATION: Telegraph Canyon Rd and Paseo Del Rey, northwest corner of intersection TIME: 16:00

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 X 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☒ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	TCS		Latitude	32.61283	Watershed	Hydrologic Unit	909
Location	Moss St. and Trolley Tracks Intersection, inside property located West of SD Pallet facility		Longitude	-117.08840		Hydrologic Area	909.1
			LTB Page	1330-A3		Hydrologic Subarea (Optional)	909.12
Date	7/21/08	Time 1400p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☒ Sheen grease or oil	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 136-139

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	31.2	NH_3-N (mg/L)	5.0	NO_3 (mg/L)	1.3	Ortho-PO_4 (mg/L)	1.7
pH (pH units)	8.1	TURB (NTU)	3.99	NO_3-N (mg/L)	0.29	Ortho-PO_4-P (mg/L)	0.55
COND (mS/cm)	1.96	MBAS (mg/L)	0.75	Glycol (mg/L)	0.5		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: TCS DATE: 7/21/08

LOCATION: Moss St. and Trolley Tracks intersection, inside property located west of SD Pallet facility TIME: 14:00

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☒ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☒ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related	2			X								X
Cigarette Butts												
Construction												
Fabric/Clothing												X
Food Packaging	1			X								
Food Waste												
Household	3	X		X		X						X
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Strong sewager like odor from catch basin
Grease film on water surface (food grease) possibly dumped at site.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NH_3-N ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	TCS		Latitude	32.61283	Watershed	Hydrologic Unit	909.
Location	Moss St. and Trolley tracks Intersection, inside property located west of SD Pallet facility		Longitude	-117.08840		Hydrologic Area	909.1
			TB Page	1330-A3		Hydrologic Subarea (Optional)	909.12
Date	7/22/08	Time 11:50 am	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other	N/A
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other	N/A
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☒ Other	N/A
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☒ Other	N/A
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	~~☐ Other~~	
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		~~☐ Other~~	
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	~~☐ Other~~

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	~~NA~~ NS	NH_3-N (mg/L)	~~NA~~ NS	NO_3 (mg/L)	~~NA~~ NS	Ortho-PO_4 (mg/L)	~~NA~~ NS
pH (pH units)	~~NA~~ NS	TURB (NTU)	~~NA~~ NS	NO_3-N (mg/L)	~~NA~~ NS	Ortho-PO_4-P (mg/L)	~~NA~~ NS
COND (mS/cm)	~~NA~~ NS	MBAS (mg/L)	~~NA~~ NS	Glycol (mg/L)	~~NA~~ NS		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	DRY	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	WIL-01			Latitude	32.66082	Watershed: Hydrologic Unit	909
Location	Chula Vista Municipal Golf Course, south of Sweetwater Road, 100 ft. East of Willow Street.			Longitude	-117.04306	Hydrologic Area	909.1
				TB Page	1310-F3	Hydrologic Subarea (Optional)	909.12
Date	7/18/08	Time	12:15p	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☒ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other Toads/Frogs?

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 128, 129

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.6	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	4.1	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	7.6	TURB (NTU)	2.60	NO_3-N (mg/L)	0.93	Ortho-PO_4-P (mg/L)	0.07
COND (mS/cm)	5.89	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: WIL-01 Chula Vista Municipal Golf Course **DATE:** 7/18/08

LOCATION: South of Sweetwater Rd., 100 ft. East of Willow St. **TIME:** 12:15p

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	WOL-02		Latitude	32.61194	Watershed	Hydrologic Unit	910
Location	West of La Media Road, across from detention basin in canyon.		Longitude	-116.98443		Hydrologic Area	910.2
			TB Page	1331 D2		Hydrologic Subarea (Optional)	910.20
Date	7/2/08	Time 10:00a.m	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1, 2

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.7	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	51.0	Ortho-PO_4 (mg/L)	1.1
pH (pH units)	8.5	TURB (NTU)	3.63	NO_3-N (mg/L)	11.53	Ortho-PO_4-P (mg/L)	0.36
COND (mS/cm)	2.8	MBAS (mg/L)	0.38	Glycol (mg/L)	0.9		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: WOL-02

DATE: 7/2/08

LOCATION: West of La Media Rd across from detention basin, in canyon

TIME: 10:00 am

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 25 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For ~~Nitrogen~~ Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	WOL-02		Latitude	32.61194	Watershed	Hydrologic Unit	910.
Location	West of La Media Rd, across from detention basin in canyon		Longitude	-116.98443		Hydrologic Area	910.2
			TB Page	1331-D2		Hydrologic Subarea (Optional)	910.20
Date	7/3/08	Time 9:00am	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☒ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	~~☒ None~~	~~☒ Trash~~	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☒ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae ☒ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☐ No **Photo #** —

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.3	NH_3-N (mg/L)	— N/A	NO_3 (mg/L)	121	Ortho-PO_4 (mg/L)	— N/A
pH (pH units)	8.7	TURB (NTU)	— N/A	NO_3-N (mg/L)	27.35	Ortho-PO_4-P (mg/L)	— N/A
COND (mS/cm)	— 4.49	MBAS (mg/L)	— N/A	Glycol (mg/L)	— N/A		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Seepage at bottom of concrete structure noted

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ ~~Confirmation For Nitrate~~ ☒ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	WOL-02-1		Latitude	32.61225	Watershed	Hydrologic Unit	910
Location	Detention Basin East of La Media, Northern most outlet		Longitude	-116.98367		Hydrologic Area	910.2
			TB Page	1331-D2		Hydrologic Subarea (Optional)	910.20
Date	7/3/08	Time 2:30p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☒ Other dead bird

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 19, 20

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	145	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.0	TURB (NTU)	NA	NO_3-N (mg/L)	32.77	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	5.03	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	WOL-02-2		Latitude	32.36729	Watershed	Hydrologic Unit	910
Location	manhole in center divide between WOL-02 and detention basin		Longitude	-116.59039		Hydrologic Area	910.2
			TB Page	1331-D2		Hydrologic Subarea (Optional)	910.20
Date	7/3/08	Time 3:40p	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 21, 22

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.5	NH_3-N (mg/L)	NA	NO_3 (mg/L)	159	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.3	TURB (NTU)	NA	NO_3-N (mg/L)	35.93	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	5.19	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	NOL-03		Latitude	32.60779	Watershed	Hydrologic Unit	910
Location	South of Santa Luna st approx. 500 ft. west of Magdalena Ave		Longitude	116.97800		Hydrologic Area	910.2
			TB Page	1331 E3		Hydrologic Subarea (Optional)	910.20
Date	7/2/08	Time 11:30a	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ~~☒ None~~ ☐ Trash ☒ Bubbles ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 3, 4, 5

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.6	NH_3-N (mg/L)	~~0.0~~ ND	NO_3 (mg/L)	9.6	Ortho-PO_4 (mg/L)	2.0
pH (pH units)	7.3	TURB (NTU)	1.49	NO_3-N (mg/L)	2.17	Ortho-PO_4-P (mg/L)	0.65
COND (mS/cm)	1.73	MBAS (mg/L)	0.25	Glycol (mg/L)	05		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: WOL-03 DATE: 7/2/08

LOCATION: south of Santa Luna St. approx. 500 ft. West of Magdalena Ave. TIME: 11:30 a.m.

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

Your Community. Your Environment. Your Choice.

Su Comunidad. Su Ambiente. Su Decisión.

www.chulavistaca.gov/clean

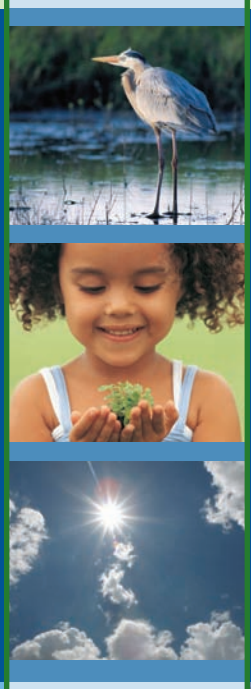

City of Chula Vista

Jurisdictional Urban Runoff Management Program

ANNUAL REPORT

No. 28

July 1, 2007 - June 30, 2008

The bay begins at your front door.
Help keep our bay and waterways clean.

La bahía comienza en la puerta de su casa. Ayude a mantener limpios nuestros canales y nuestra bahía.

CITY OF CHULA VISTA

CITY OF CHULA VISTA

Public Works Department

September 26, 2008
File # 0780-82-KY181

San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Attention: Mr. John H. Robertus, Executive Officer

SUBJECT: JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) ANNUAL REPORT NO 28 AND ATTACHMENTS

Please find enclosed City of Chula Vista's JURMP Annual Report No. 28, for Fiscal-Year 2007-2008.

The JURMP Annual Report has been prepared in accordance with the requirements of the San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (NPDES Permit No. CAS0108758) and is a documentation of the City's activities on the implementation of, and compliance with the requirements of said Permit during the reporting period July 1, 2007 to June 30, 2008.

If you have any questions regarding the submitted report, or need further information, please contact Khosro Aminpour, Senior Civil Engineer, at (619) 397-6111. Please direct any and all correspondence to:

City of Chula Vista, Department of Public Works
1800 Maxwell Road, Chula Vista, CA 91911
Attention: Khosro Aminpour, Senior Civil Engineer

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

Attachments

Cc: Jack Griffin, Director of Public Works
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer

SIGNED CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

9/23/08
DATE

CITY OF
CHULA VISTA

CITY OF CHULA VISTA
JURMP Annual Report No. 28
Fiscal Year 2007-2008
SEPTEMBER 2008

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ACKNOWLEGEMENTS

This Report has been prepared by or under the supervision of:

Matt Little, Assistant Director of Public Works
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer
Don Bergeson, Environmental Health Specialist
Marisa Fontanoz, Environmental Health Specialist
Mike Hice, Storm Water Compliance Inspector
Ramon Quicho, Engineering Technician

Staff from the following City of Chula Vista departments, divisions, or sections has contributed to the implementation of the JURMP in 2007-2008:

Public Works Inspection Services
Public Works Storm Water Management
Public Works Wastewater Management
Public Works Environmental Services
Office of Communications
Chula Vista Nature Center
Geographic Information Systems
Engineering Land Development
Engineering Design
Planning Landscape Architecture
Environmental Planning
City Attorney's Office

The following organizations have contributed to the implementation of the JURMP in 2007-2008:

- D-MAX Engineering, Inc.
- I Love a Clean San Diego, Inc.
- Otay Valley Regional Park (OVRP)
- Members of the CLEAN Stakeholder Group

The City of Chula Vista wishes to thank:

- Volunteers who dedicated their time to improve water quality in Chula Vista
- Environmentally conscious citizens who reported illegal discharges
- Citizens, business owners, contractors, and developers who cooperated with City staff in implementing Best Management Practices

LIST OF TERMS AND ABBREVIATIONS

APN	-	Assessors Parcel Number
BMPs	-	Best Management Practices
CASQA	-	California Storm Water Quality Association
City	-	City of Chula Vista
CIWMB	-	California Integrated Waste Management Board
CSWMP	-	Construction Storm Water Management Plan
CWA	-	Clean Water Act
ESA	-	Environmentally Sensitive Area
FY	-	Fiscal Year
GBA	-	George Butler Associates Management System
GIS	-	Geographic Information System
GPU	-	General Plan Update
HHW	-	Household Hazardous Waste
HMP	-	Hydromodification Management Plan
IHC	-	Interim Hydromodification Criteria
IPM	-	Integrated Pest Management
JURMP	-	Jurisdictional Urban Runoff Monitoring Plan
LID	-	Low Impact Development
LTEA		Long Term Effectiveness Assessment
Manual	-	Development Storm Water Manual
MEP	-	Maximum Extent Practicable
MS4	-	Municipal Separate Storm Sewer System
MWS	-	Modular Wetland System
NAICS	-	North American Industrial Classification System
NOI	-	Notice of Intent
NOT	-	Notice of Termination
NPDES	-	National Pollutant Discharge Elimination System
ROWD		Report of Waste Discharge
RWQCB	-	Regional Water Quality Control Board
SIC	-	Standard Industrial Classification
SSO	-	Sanitary Sewer Overflows
SUSMP	-	Standard Urban Storm Water Mitigation Plan
SWPPP	-	Storm Water Pollution Prevention Plan
SWRCB	-	State Water Resources Control Board
TAC	-	Technical Advisory Committee
TTWQ	-	Threat to Water Quality
WDID	-	Waste Discharge Identification
WQTR	-	Water Quality Technical Report

EXECUTIVE SUMMARY

On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (Regional Board) adopted the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 (Municipal Permit). The implementation phase of the Municipal Permit commenced on January 24, 2008. Prior to that date, NPDES Municipal Permit, Order No. 2001-01 regulated discharges from urbanized areas of San Diego County. This report, therefore, covers two distinct implementation periods, July 1, 2007 to January 23, 2008, and January 24, 2008 to June 30, 2008. Implementation during the first period was under Order No. 2001-0001, while Order No. R9-2007-0001 established compliance standards during the second period. Reporting requirements of this Jurisdictional Urban Runoff Management Program (JURMP) annual report is in accordance with the Municipal Permit, Orders No. R9-2007-0001.

Among other requirements, the Municipal Permit requires that on September 30th of each year, all municipalities of San Diego County (including Chula Vista) as well as the San Diego Unified Port District, the San Diego County Regional Airport Authority and the County of San Diego, collectively referred to as the Copermittees, submit jurisdictional annual reports which provide documentation of the activities conducted by each Copermittee during the reporting period covering the previous fiscal year from July 1 to June 30. JURMP annual reports are to include descriptions of each Copermittees' efforts in the implementation of its JURMP document developed in compliance with Municipal Permit requirements to minimize discharges of pollutants to waters of the United States and other receiving waters.

Meanwhile, during the current reporting period, the Copermittees developed a regional standardized format for JURMP annual reports. This report was prepared in conformance with the regional standardized format for annual reports.

The present report has been prepared in compliance with said requirements and, covers subjects and areas outlined in the Municipal Permit and the Chula Vista JURMP. Although the reporting period is essentially from July 1, 2007 to June 30, 2008, some of the activities could not readily be divided to fall within the above target dates and continuation of the activities may have extended beyond this period to their completion.

This report has been prepared to provide an account of activities conducted by the City of Chula Vista (City) according to the components outlined in Section D of the Municipal Permit including:

- Development Planning
- Construction
- Existing Development (Including Municipal, Industrial and Commercial, Residential)
- Illicit Discharge Detection and Elimination
- Education
- Public Participation
- Fiscal Analysis

- Assessment of JURMP Effectiveness

It is important to note that while the City discharges, directly or indirectly, to water bodies that are listed on the Clean Water Act Section 303(d) as impaired water segments; the City does not discharge to any water bodies with a Total Maximum Daily Load (TMDL) program. Therefore, a discussion of TMDLs is not included in this report.

In previous years, the City submitted copies of its Dry Weather Field Screening and Analytical Monitoring Program report and any follow-up investigation reports for the previous dry weather season as attachments to its JURMP annual reports. Since the annual reports are now due to the Regional Board by September 30th of each year, and Dry Weather Field Screening activities can continue until September 30th, the Regional Board has agreed that Dry Weather Field Screening reports and their analysis can be submitted separately at a later date but no later than December 15th of each year. Section 7.0 of this report, Dry Weather Field Screening reports, and analyses of their findings will be submitted to the Regional Board before December 15, 2008, as mandated by Addendum No. 2 to Order No. R9-2007-0001.

As required under Section III.A.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program, the County of San Diego, as the Principal Copermittee, will submit to the Regional Board the Receiving Waters and Urban Runoff Monitoring Annual Report for the 2007-2008 rainy season on January 31, 2009.

Section 11.0 of this report includes an effectiveness assessment analysis of the development and implementation of the City's Storm Water Management Program. Such analysis provides a synopsis of activities and a critical look at the overall strengths and challenges associated with the components throughout this report.

The following sections cover the City's strides toward continued implementation and improvement of its JURMP and participation in regional and watershed level activities and programs from July 1, 2007 to June 30, 2008. The City is in the continuing process of assessing the effectiveness of individual program components and has made adjustments or revisions in some areas in order to improve the overall effectiveness of the program and to assure full compliance under the Municipal Permit. The City recognizes its role as a good steward of local water bodies, as well as the overall health of the San Diego Bay watershed.

1.0 INTRODUCTION

1.1 BACKGROUND

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollutions such as urban runoff and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issues to local governments and other agencies.

The California Regional Water Quality Control Board, San Diego Region (RWQCB), adopted the first NPDES General Municipal Permit for the San Diego Region in 1990. The NPDES Municipal Permit is re-issued approximately every five years. On January 24, 2007, the Regional Board adopted the latest NPDES General Municipal Permit for the San Diego Region, Order No. R9-2007-0001. The Municipal Permit regulates all new development, significant redevelopment, existing land use and other activities within the jurisdictional boundaries of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority and eighteen municipalities of San Diego County, collectively known as the Copermittees. The Municipal Permit requires all Copermittees to develop and implement programs to reduce the discharge of pollutants into and from their Municipal Separate Storm Sewer Systems (MS4s) and report all their efforts and achievements to the Regional Board on an annual basis.

Report No. 28 spans two NPDES Municipal Permits, i.e., Order No. 2001-01 (Old Permit) and Order No. R9-2007-0001 (New Permit). The implementation phase of the New Permit commenced on January 24, 2008. However, region-wide wildfires of November 2007 impacted the progress on certain regional efforts and the development of some required reports and plans, which made it impossible for the Copermittees to submit such reports and plans to the RWQCB on time. On November 13, 2007, the Copermittees requested an extension of 60 days for the submittals and/or implementation deadlines related to the following Permit components:

1. Submittal and implementation of Jurisdictional Urban Runoff Management Programs (JURMPs).
2. Review and update of grading and other ordinances to comply with the New Permit's Construction Component.
3. Submittal and implementation of Watershed Urban Runoff Management Programs.
4. Submittal and implementation of the Regional Urban Runoff Management Program.

Subsequently, the RWQCB approved the 60-day extension under Addendum No. 1 to Order No. R9-2007-0001. Therefore, Report No. 28 describes programs and activities conducted by the City of Chula Vista for program implementation under the Old Permit until January 23, 2008; partial implementation of the New Permit between January 24, 2008, and March 23, 2008; and finally, full implementation of the New Permit from March 24, 2008 to the end of this reporting period (June 30, 2008).

During this reporting period, and pursuant to the requirements of the Municipal Permit, the City of Chula Vista (City) has:

- Updated its JURMP document. The updated JURMP includes plans and procedures to comply with the Municipal Permit requirements.

- Developed a Development Storm Water Manual (Manual). The Manual provides information to applicants for development and redevelopment projects processed through the City of Chula Vista, as well as public projects on how to comply with permanent and construction storm water requirements. The Manual further guides project applicants through the selection, design, and incorporation of storm water Best Management Practices (BMPs) into the project's design plan. Section 3 of the Manual comprises the City's Standard Urban Storm Water Mitigation Plan (SUSMP), which describes post-construction BMP requirements, including Low Impact Development and Interim Hydromodification Management, for Priority Development Projects.

- Revised its Storm Water Management and Discharge Control and Grading Ordinances. The revised ordinances now incorporate, by reference, the Development Storm Water Manual and make the Manual's requirements enforceable.

- Reviewed its General Plan, Subdivision Manual, and other relevant Municipal Code sections and regulations for conformity and continuity with the Municipal Permit requirements.

- Implemented inspection programs of high priority construction, municipal, industrial, commercial, and residential existing land uses.

- Provided education and training for City staff, developers, residents, and businesses on current storm water regulations and applicable BMPs that can be implemented to reduce discharge of pollutants to the City's storm water conveyance systems.

- Continued Dry Weather Field Screening and Analytical Monitoring, and participated in the region-wide Receiving Water Monitoring Program, both of which are designed to evaluate water quality and identify sources of pollution to and from storm water conveyance systems.

- Inspected and maintained public facilities and activities for compliance with BMPs requirements.

1.2 PURPOSE AND OBJECTIVES

Report No. 28 is a documentation of the City's efforts to minimize discharge of pollutants to and from its storm water conveyance systems and to reduce the impact of urban runoff on adjacent water bodies and sensitive areas. The following account describes the City's activities on the implementation of, and compliance with, the requirements of said Permits during the reporting

period July 1, 2007 to June 30, 2008. The reporting year has been guided by insight through the Report of Waste Discharge and Long Term Effectiveness Assessments undertaken regionally in 2004-2005. These regional reporting and assessment efforts have provided valuable understanding on both local and watershed conditions, and offered the City information to support programmatic development and priority establishment throughout various elements presented within this report.

Sections 2.0 to 6.0 of this report describe the City's compliance activities during the current reporting period and include the following components:

- Development Planning
- Construction
- Municipal
- Industrial and Commercial
- Residential

Section 7.0 includes a description of the City's activities and analysis of the Illicit Discharge Detection and Elimination Component. In previous years, when submittal of JURMP annual reports were due to the Regional Board on or before January 31 of each year, Dry Weather Field Screening and Analytical Monitoring report findings were referenced and analyzed in this Section, and the reports themselves were submitted as attachments to the annual report. Addendum No. 2 to Order No. R9-2007-0001 acknowledges that Dry Weather Field Screening and Analytical Monitoring reports can no longer be completed by the new due date of the JURMP annual report submittal (September 30 of each year) and, therefore, Section 7.0, together with copies of Dry Weather Field Screening and Analytical Monitoring reports will be submitted to the Regional Board on or before December 15, 2008.

Section 8.0 highlights City's efforts and activities conducted during the reporting period to increase general public awareness about environmental issues and water quality protection and train City staff, business owners, developers, contractors, and other targeted groups to implement BMPs during their daily activities.

Section 9.0 is a description of the City's attempts to promote environmental and water quality awareness among the general public and particularly young people through their involvement and participation in environmental group activities.

Section 10.0 outlines an analysis of the City's storm water management costs and budgets. Program costs during FY 2007-2008 and program budgets for FY 2008-2009 are included in two separate tables that show itemized and total figures.

Section 11.0 of this report is dedicated to the effectiveness assessment of the City's implementation of the JURMP. The document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" and Section 13 of the City's JURMP document have been utilized to draw conclusions about the effectiveness of the City's JURMP implementation. It should be noted that effectiveness assessment is an on-going

component of the JURMP program, and various program elements are revised as necessary, based on observations and findings.

Section 12.0 of the Standardized Format for JURMP Annual Report is dedicated to descriptions of any special investigations conducted during the reporting period. As indicated in this Section, the need for special investigations did not arise during the current reporting period.

Section 13.0 of this report includes a description of the City's efforts to reduce pollutant discharges from non-emergency fire fighting flows. Such efforts include training of Fire Department staff to implement BMPs during their daily activities, fire-fighting exercises, and post-incident spill control and cleanup. Incorporation of post-construction BMPs in the design and construction of new fire stations is considered to be another method for minimizing pollutant discharges from washing fire fighting equipment and other non-emergency activities at fire stations and is discussed in this section.

Section 14.0 of the Standardized Format for JURMP Annual Report is dedicated to descriptions of any modifications to the JURMP document that were made during the reporting period, or that are proposed or planned, to maximize the Copermittee's JURMP effectiveness. Since the City's JURMP document was developed recently and submitted to the RWQCB in March 2008, the City has not found it necessary to modify the JURMP document at this time. As necessary, future annual reports will include modifications to the JURMP document during the reporting period.

Section 15.0 includes the report's conclusions and recommendations. It provides an overall view of the City's implementation of its JURMP, assesses its strengths and weaknesses in general terms, and provides recommendations to improve next year's program.

2.0 DEVELOPMENT PLANNING COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a (3)(a) i – A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.

Permit Section J.3.a.(3)(a).ii - Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).iii - A listing of the development projects to which SUSMP requirements were applied.

Permit Section J.3.a.(3)(a).iv - Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).v - At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.

Permit Section J.3.a.(3)(a).vi - A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.

Permit Section J.3.a.(3)(a).vii - An updated treatment control BMP inventory

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Permit Section J.3.a.(3)(a).viii - The number of treatment control BMPs inspected, including a summary of inspection results and findings.

Permit Section J.3.a.(3)(a).ix - A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.

Permit Section J.3.a.(3)(a).x - Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).xi - A listing of any projects which received a SUSMP waiver.

Permit Section J.3.a.(3)(a).xii - A description of implementation of any SUSMP waiver mitigation program.

Permit Section J.3.a.(3)(a).xiii - A description of Hydromodification Management Plan (HMP) development collaboration and participation.

Permit Section J.3.a.(3)(a).xiv - A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.

Permit Section J.3.a.(3)(a).xv - A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.

Permit Section J.3.a.(3)(a).xvi - A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.

Permit Section J.3.a.(3)(a).xvii - The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(a).xviii - A description of notable activities conducted to manage urban runoff from development projects.

2.1 INTRODUCTION

Municipal Permit Section D.1 states "Each Copermittee shall implement a program which meets the requirements of this section and (1) reduces Development Project discharges of pollutants from the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP), (2) prevents Development Project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) manages increases in runoff discharge rates and durations from Development Projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force."

This section describes the actions taken during the defined reporting period by the City to minimize the short- and long-term impacts of new development or redevelopment with land disturbance activities, structural development, including construction or installation of a building or structure, creation of impervious surfaces and capital improvement projects. Through the implementation of the Development Planning Component, the City will minimize and manage increases in runoff from development projects to the MEP to protect receiving waters.

2.2 LAND-USE PLANNING

2.2.1 BACKGROUND

The City's land-use planning is guided by its General Plan and the goals, objectives, and policies included therein. The City's comprehensive General Plan Update (GPU) was completed in December of 2005. The GPU program was nearly a five-year effort, and included the

preparation of a citywide master drainage study and assessment and, a water quality baseline study to identify planning issues and policy implications, including compliance with the Municipal Permit and NPDES regulations.

Throughout the GPU process, the City solicited and received significant public input with respect to vision, goals, and objectives and conducted numerous public workshops to present and solicit input on alternative land use concepts. The GPU was adopted by City Council on December 13, 2005.

According to the Environmental Element of the GPU: "With further growth and redevelopment in Chula Vista, the projection of local and regional water resources must be adequately addressed. The City will continue its efforts to reduce the discharge of pollutants into the municipal storm drain system and natural water bodies in accordance with established NPDES standards and watershed planning efforts involving the City." One of the major objectives of the Environmental Element is to "Protect and improve water quality within surface water bodies and groundwater resources within and downstream of Chula Vista."

Water quality policies have been developed based upon those found within the Municipal Permit, and have been composed as to compliment the flow and content of the entire General Plan Update. The following water quality policies are contained in the Environmental Element:

- Ensure safely swimmable and fishable surface waters through careful management of land uses and activities within Chula Vista.

- Pursue safe alternatives to traditional pest management methods in order to reduce toxics in urban runoff and large open uses of land (e.g., golf courses, parks, agricultural lands.)

- Educate residents, business owners and City departments about feasible methods to minimize the discharge of pollutants into natural drainages and the municipal storm water conveyance system.

- Ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy.

- Encourage and facilitate construction and land development techniques that minimize water quality impacts from urban development.

- Maximize the protection of potable water supply resources from pollutants.

- Collaborate with other applicable jurisdictions in the development and funding of regional watershed management plans.

In view of the above comprehensive water quality protection provisions in the Updated General Plan, the City does not find it necessary to make any amendments to its General Plan.

2.2.2 SOURCE CHARACTERIZATION

Seven categories of land uses are identified in the City's General Plan: residential, commercial, mixed-use, industrial, public, special planning areas, and streets/freeways/right-of-ways. Each category can be associated with its specific combination of activities and pollutants and the potential impact that those activities and pollutants may have on the environment, including urban runoff quality. The City's land-use planning, project review, approval, and verification process includes environmental considerations such as source characterization, proximity to sensitive areas, pollutants and conditions of concern in receiving waters and sensitive areas, and measures necessary to minimize environmental impacts to the MEP.

Additionally, the City's Development Storm Water Manual (Manual), updated in 2008, provides guidelines and directives for development project applicants and City staff to identify pollutants and conditions of concern for each type of land use, both during and after construction, and recommend BMPs to mitigate negative impacts of proposed activities and increased impervious areas. The City's Jurisdictional Urban Runoff Management Plan (JURMP) includes a map (Map 2) showing environmentally sensitive areas within the City. Land use planning attempts to prevent, to the MEP, potentially pollutant-generating land uses from being located near environmentally sensitive areas.

During the reporting period, the City subjected all development project applications to applicable environmental review processes, including the Standard Urban Storm Water Mitigation Plan (SUSMP) process.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

To implement the policies outlined within the City's GPU, the City has developed the Manual. The Manual includes a comprehensive description of construction and post-construction BMPs that are required from each development project. Additionally, the Manual includes guidelines, flow charts, and directives for development applicants and City staff on how to identify applicable requirements for priority and non-priority projects. A section of the Manual has been dedicated to the City's SUSMP. Another section of the Manual outlines BMP requirements on construction sites during both rainy and dry seasons.

During the current reporting period, the City has ensured compliance with BMP requirements through development project reviews, construction and post-construction site inspections, and enforcement actions as necessary.

2.2.4 PROGRAM IMPLEMENTATION

The current reporting period is highlighted by program implementation under two separate NPDES Municipal Permits. During the first half of the period, extending from June 1, 2007 to March 23, 2008, Development Planning program implementation was under the NPDES Municipal Permit, Order No. 2001-01, while during the second half of the period, from March

24, 2008 to June 30, 2008 program implementation was under NPDES Municipal Permit, Order No. R9-2007-0001.

The City successfully completed implementation of the program under both Municipal Permits as described in Section 2.4.4 of this report.

The City's GPU was completed in December 2005 and incorporates several goals, objectives, and policies directed toward protecting the City's environmental resources and improving water quality throughout the City's storm water conveyance systems and receiving waters. City staff has determined that at this time there is no need to make any revisions to the General Plan. However, in compliance with the NPDES Municipal Permit requirements, several of the City's implementation documents were updated, including:

- Jurisdictional Urban Runoff Management Plan
- Storm Water Management and Discharge Control Ordinance
- Grading Ordinance
- Development Storm Water Manual

During the process of updating the above-referenced documents, each of the City's implementation processes were objectively reviewed for any potential deficiencies and, based on extensive experience gained during the previous Municipal Permit implementation, significant improvements were made throughout all aspects of the program. Those improvements are reflected in the above referenced updated documents and are currently being implemented.

2.3 ENVIRONMENTAL REVIEW PROCESS

The Environmental Review Process for development and redevelopment projects occurs in two phases. The Environmental Planning Section of the Planning Division reviews all development and redevelopment projects for compliance with California Environmental Quality Act (CEQA) requirements, which includes water quality considerations. The Permits, Land Development, and the Storm Water Management Sections review development and redevelopment projects for compliance with requirements of the Clean Water Act, the Municipal Permit, and the City's Grading and Storm Water Management Ordinance requirements. Further, the Planning Division and the Storm Water Management Section, as needed, review project Environmental Impact Reports (EIRs) to ensure that water quality issues are adequately addressed at early stages of the Environmental Review Process.

The development review and SUSMP implementation processes within the City take place with close coordination of staff from various departments, divisions, and sections. The following departments, divisions, and sections are responsible for the review of development projects for SUSMP requirements:

- Planning and Building Services Department
- Engineering and General Services Department, Land Development and Permits Sections
- Public Works Department, Storm Water Management Section

The Engineering and General Services Department, which is responsible for issuing grading and improvement permits, is the lead department for coordinating all SUSMP review activities. Development projects initiated in the Planning Department or other departments within the City are required to submit environmental documents showing compliance with all applicable environmental regulations. Initial Studies, Environmental Impact Reports, Public Facilities Finance Plans, etc., are routed to the Engineering and General Services Department for review and final approval.

Engineering staff reviews submitted documents and determines if a project is a Priority Development Project and subject to SUSMP requirements. All applicants are required to complete checklists included in the Manual in order to identify specific SUSMP BMP requirements.

Priority Development Projects are then required to submit Water Quality Technical Reports (WQTR) that include identification of project pollutants; Low Impact Development Site Design, Source Control, and Structural Treatment Control BMPs; calculations for sizing of treatment control BMPs; and a perpetual maintenance plan and funding mechanism. When necessary, the Engineering and General Services Department coordinates with the Storm Water Management Section for the latest developments and requirements in the SUSMP program.

Engineering and General Services Department and Storm Water Management staff reviews WQTRs and ensures that appropriate BMPs are included in the design of projects. Through meetings and phone calls, developers and consultants are educated on the City's SUSMP requirements and are required to revise their WQTRs to include all corrections and amendments required by the City.

As noted above, and within the current reporting period, significant efforts were made by City staff to ensure complete and comprehensive WQTR reviews. This programmatic update was introduced to make certain that each WQTR includes a fully developed assessment of each post-construction BMP considered for the project. BMP analysis is required for Low Impact Development Site Design, Source Control, and Treatment Control BMPs, and effectively holds project designers accountable for demonstrating the effectiveness of the overall design.

The formal review of WQTRs by the Engineering and General Services Department and Storm Water Management staff provides an essential mechanism in emphasizing the use of effective site design features and higher efficiency treatment control BMPs. It is recognized that site design and/or structural BMPs are difficult to add to the completed design of a private development project without causing substantial changes to the project's character or viability. The earlier in the design process that storm water quality facilities are considered, the greater the chance that a successful and efficient design can be achieved. During the reporting period, Engineering and General Services Department and Storm Water Management staff has strongly emphasized the use of site design features and high efficiency structural BMPs to be incorporated into project design.

Sufficient analysis and discourse must be included within submitted WQTRs to answer why or why not effective and efficient site design features and treatment controls have been selected

and/or incorporated into a given project design. Based on the MEP Standards included within the City's SUSMP, staff will make a determination as to whether or not there has been adequate consideration of site design and high-efficiency BMP recommendations. It is noteworthy that projects without approved WQTRs will not move further along in the development review process, providing Engineering and General Services Department and Storm Water Management staff an effective tool in the enforcement of SUSMP requirements.

Public projects are initiated in the Engineering and General Services Department. Public projects undergo the same review process as private developments. Engineering staff has received training on SUSMP requirements, the identification of SUSMP projects, and application of appropriate BMPs in project design. For complex projects, Storm Water Management staff is available for advice and assistance.

In the case of private SUSMP projects, before final approval of the project and issuance of a grading or improvement permit, the applicant is required to demonstrate that among other provisions, a program and funding mechanism for long-term maintenance of designated BMPs are in place. The applicant is required to sign an agreement with the City for the long-term maintenance of post-construction BMPs. The agreement is recorded and runs with the land.

Citywide project tracking is managed through specialized computer software utilized by the City (Permits Plus). The Permits Plus software is shared by all development services departments, divisions, and sections within the City. The Permits Plus software package has been customized with a window for identifying SUSMP projects. All SUSMP projects are, therefore, readily identifiable via the Permits Plus software. Digital copies of final plans, including drainage and BMP plans, are submitted to the City's Geographic Information System (GIS) Section. They are linked to the CVMapper program, the City's internal computer-based mapping tool, for convenient accessibility to the Drainage Layer.

During the current reporting period, the City successfully implemented the environmental review process for all development and redevelopment project submittals.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

The development project approval and verification process is inherently complex due to the fact that many departments, divisions, and sections of the City are involved. As discussed earlier in this Section, and as part of the update of the City's JURMP and the Manual, which culminated in March 2008, specific attention was focused on identifying gaps or inconsistencies within the development project approval and verification process. During a long process of coordination with all departments involved in the development services, adjustments, amendments, and revisions were made to existing processes. As a result, a more elaborate process with new milestones, flags, checks, and notifications were added to warn staff of any shortcomings in the project approval process. A comprehensive flow chart was created to show the SUSMP implementation, approval, and verification process, together with responsible departments,

divisions, and sections of the City. A copy of the referenced flow chart is included in Appendix D of the City's JURMP.

2.4.2 SOURCE CHARACTERIZATION

Development projects have the potential to discharge different types and amounts of pollutants based on the development project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's updated SUSMP describes 10 specific categories for Priority Projects and indicates common pollutants associated with each category. A Priority Project must identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

All development projects, including non-Priority Projects, are required to meet the applicable BMP requirements as outlined in the Manual.

During the current reporting period, all development projects were required to identify their proposed land uses and activities that may potentially generate pollutants. Such pollutants were compared to pollutants of concern within downstream receiving waters. Applicable BMPs were required during the project approval and verification process.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's BMP minimum requirements for all development projects are outlined below and are included in the Manual. All development projects are required to implement the following principles, where applicable:

- Source control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed material and trash storage areas, and use of efficient irrigation systems.
- Low Impact Development (LID) BMPs that maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary.
- Provide buffer zones or other buffers for natural water bodies.
- Grading and construction activities must implement all applicable erosion and sediment control BMPs and minimize the discharge of non-visible pollutants.
- Submittal of proof of a mechanism for ongoing long-term maintenance of all structural post-construction BMPs.

During the project approval and verification process, all project submittals were reviewed for compliance with the BMP minimum requirements described above.

2.4.4 PROGRAM IMPLEMENTATION

The City's SUSMP was developed around the regulatory standards mandated in the Municipal Permit to address post-construction urban runoff pollution from new development and significant redevelopment projects. The goal of the SUSMP is to develop and implement policies to ensure to the MEP that development does not increase pollutant loads from a project site and considers runoff flow rates and volumes. The City's SUSMP is incorporated into a document titled "Development Storm Water Manual", available on the web at:
http://www.chulavistaca.gov/clean/StormWater/DevelopAndConst.asp

In addition to the City's SUSMP, the Manual includes guidelines for developers and other interested parties to understand the City's storm water review process; forms required to establish eligibility under various project requirements; and a section on minimum BMPs requirements during project's construction phase.

On February 19, 2008, the City Council of the City approved updates to the City's SUSMP and Manual. The Updated SUSMP and Manual incorporate standards for construction and post-construction phases of development and redevelopment projects that meet the requirements of the NPDES Municipal Permit, Order No. R9-2007-0001. Concurrently, the City's Storm Water Management and Discharge Control and Grading Ordinances were updated to incorporate the Development Storm Water Manual (which includes the City's SUSMP) by reference.

2.4.4.1 NOTABLE ACTIVITIES

In 2007-2008, notable improvements in processes and protocols supporting SUSMP implementation have been made by Storm Water Management staff in efforts to continually refine this program element. Significant programmatic updates within the defined reporting period include:

- Adoption of more stringent standards for post-construction Low Impact Development Site Design BMPs, Source Control BMPs, Treatment Control BMPs, and Interim Hydromodification Criteria.
- Emphasis on the use of structural BMPs with high pollutant removal efficiency.
- Requirements to fully develop WQTRs discussions to evaluate the use of all post-construction BMPs considered.
- Continued population of post-construction BMP GIS layer, including the addition of project-specific WQTR document links through the Grading Plan Layer.
- Creation of flags and checks in the SUSMP review and implementation process to ensure that all SUSMP projects are properly tracked and documented.

2.4.4.2 CONFIRMATION OF APPROVAL PROCESS

During the reporting period, all private development projects submitted to the City for review and approval of construction or grading permits, and public projects initiated by the City were required to undergo the urban runoff approval process and meet the applicable project

requirements. Private development permit applications are tracked in Permits Plus, which is a project tracking software shared by all departments and divisions involved in development services. Flags and checks have been established in Permits Plus to ensure that all Priority Development projects undergo the appropriate review and documentation process. Copies of approved WQTRs, grading or construction plans, and post-construction BMPs' maintenance agreements are scanned and digitally saved. Links have been provided between the above referenced documents and the CVMapper software, which is a mapping tool based on the GIS system. This system enables City staff to get copies of the above referenced documents by clicking on the project's grading layer and to make prints as necessary.

Public projects are tracked in a database maintained by the City's Engineering and General Services Department. A list of all public projects, showing the status of each project, is distributed to various staff members on a monthly basis. The list, among other information, includes a column showing environmental requirements for each project, including WQTRs and Storm Water Pollution Prevention Plans. The list is discussed in monthly meetings set up specifically for public projects. A Storm Water Management Section representative attends such meetings and provides input as necessary.

2.4.4.3 LISTING OF SUSMP PROJECTS

A listing of development projects in the City, to which SUSMP requirements were applied during the current reporting period, is included in Attachment A. It should be noted that the list includes all projects that were identified as High Priority Development projects during the reporting period by their permit issue date. The projects may be currently in different phases of review and construction. Some are still under review, while others are under construction or have been completed. The list is categorized for various phases of projects, including: 1) Under Construction, 2) Pending, and 3) Completed. Pending refers to projects that have not completed their project review process and are either on hold or being reviewed by City staff. Completed projects have completed their construction and should have permanent BMPs in place.

2.4.4.4 CONFIRMATION OF SUSMP BMP APPLICATION

Based on the MEP standards included within the City's SUSMP, staff makes a determination as to whether or not there has been adequate consideration of site design and high efficiency BMP recommendations. Projects without approved WQTRs do not move further along in the development review process, providing Engineering and Storm Water Management staff an effective tool in the enforcement of SUSMP requirements.

Public Works Inspectors and Storm Water Management staff ensure that development projects are constructed according to approved plans. This includes inspection and approval of installed or constructed Structural Treatment Control BMPs.

For tracking of post-construction BMPs, Storm Water Management staff has coordinated with the Public Works Inspectors and the Building Inspectors to be notified upon Notice of Final Inspection and Certification of Occupancy and the final release of any Bonds. Copies of notices are sent to Storm Water Management staff for final inspections of such development projects to

ensure proper installation of post-construction BMPs before final Certificates of Occupancy are issued and bonds are released.

The City's GIS system has been continuously updated throughout FY 2007-2008 with post-construction BMP information, further supporting project tracking and post-construction BMP inventory management. The GIS database is populated with post-construction BMP information including the type of BMPs and provides links to applicable project plans, copies of WQTRs, and maintenance agreements, where applicable. Most significantly, in FY 2007-2008, WQTR documents are being made available through the Grading Plan layer as they are linked to individual projects (Figure 2-1 - GIS Layer: Grading Plan and WQTR Links). This process facilitates inspections and verifications of post-construction structural BMPs. A GIS layer containing all publicly maintained treatment control BMPs is utilized to verify and maintain such facilities (Figure 2-2 - GIS Layer: Post Construction BMPs). In addition, files containing hard copies of grading plans and other pertinent information are being created and maintained to support and facilitate inspection of post-construction BMPs.

Figure 2-1 GIS Layer: Grading Plan and WQTR Links

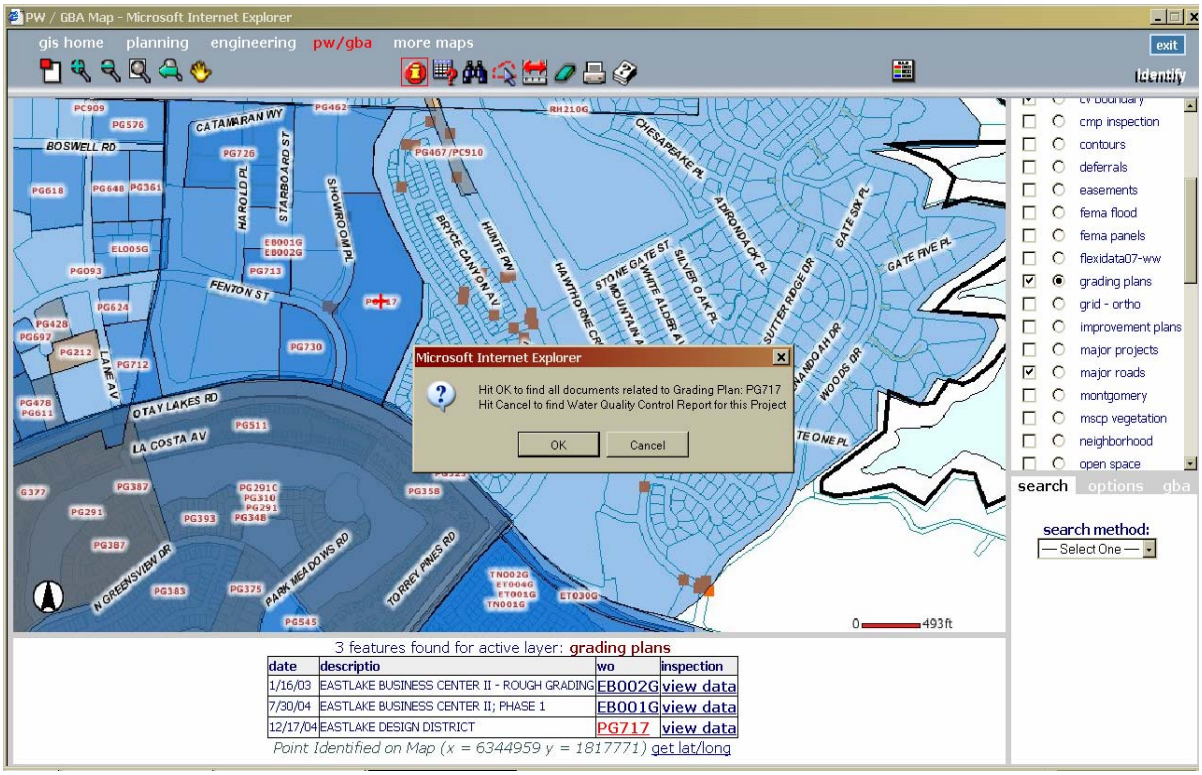

Figure 2-2 GIS Layer: Post Construction BMPs

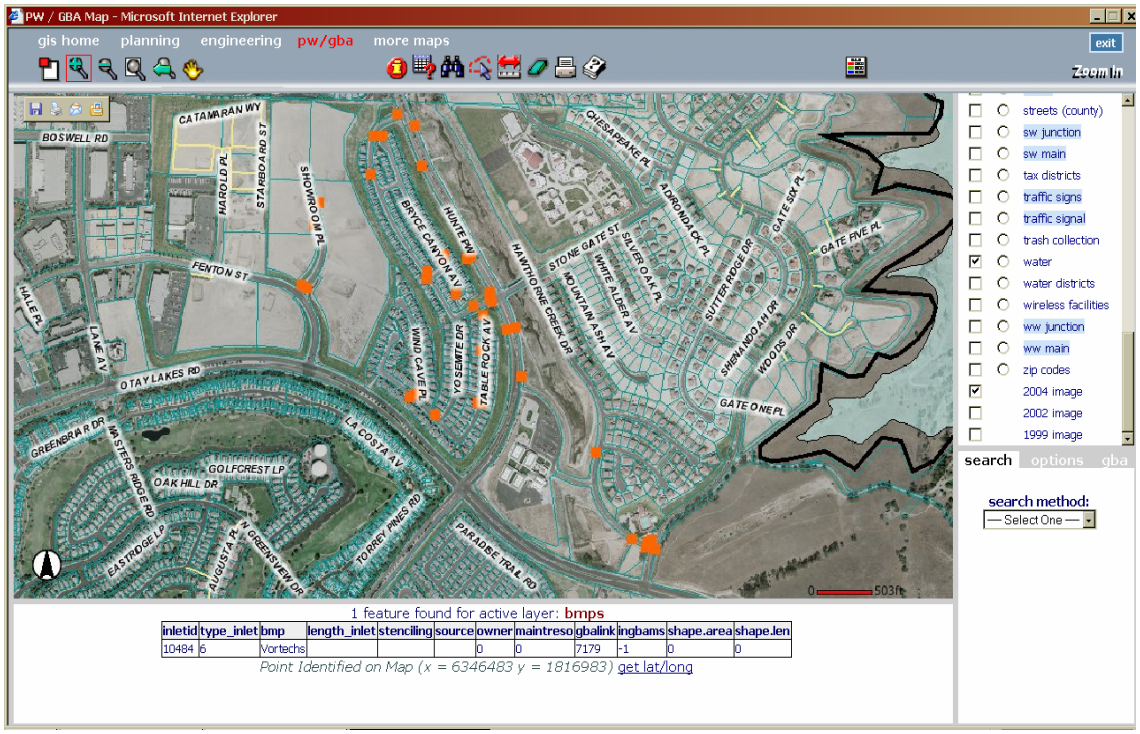

During the current reporting period, Storm Water Management staff conducted extensive inspections of constructed permanent BMPs to verify their proper installation and maintenance. A summary of inspections is listed in Table 2-1 below. Where deficiencies were identified, notices were sent out to the responsible parties, followed by further contacts to ensure that corrective actions were taken within the allowed time period. For a detailed list of projects inspected for post-construction BMPs, please refer to Attachment F.

Table 2-1 Treatment Control BMP Inspection Summary FY2007-2008

PROJECT CATEGORY	NUMBER OF PROJECTS INSPECTED	NUMBER OF INSTALLED TREATMENT CONTROL BMP UNITS
High Priority	20	108
Medium Priority	23	320
Low Priority	58	209

Public Works Department Storm Drain Maintenance Section maintains publicly owned post-construction BMPs. Storm Drain Maintenance Section staff, utilizing GBA Master Series computer software, tracks all publicly owned post-construction BMPs and creates work orders to field staff for conducting inspection and scheduled maintenance of the BMPs. Maintenance records for permanent BMPs are tracked in the GBA Master Series computer software. Please refer to Figure 2-3 Publicly Maintained Treatment Control BMP Inspection and Maintenance Report.

Figure 2-3 Publicly Maintained Treatment Control BMP Inspection and Maintenance Report

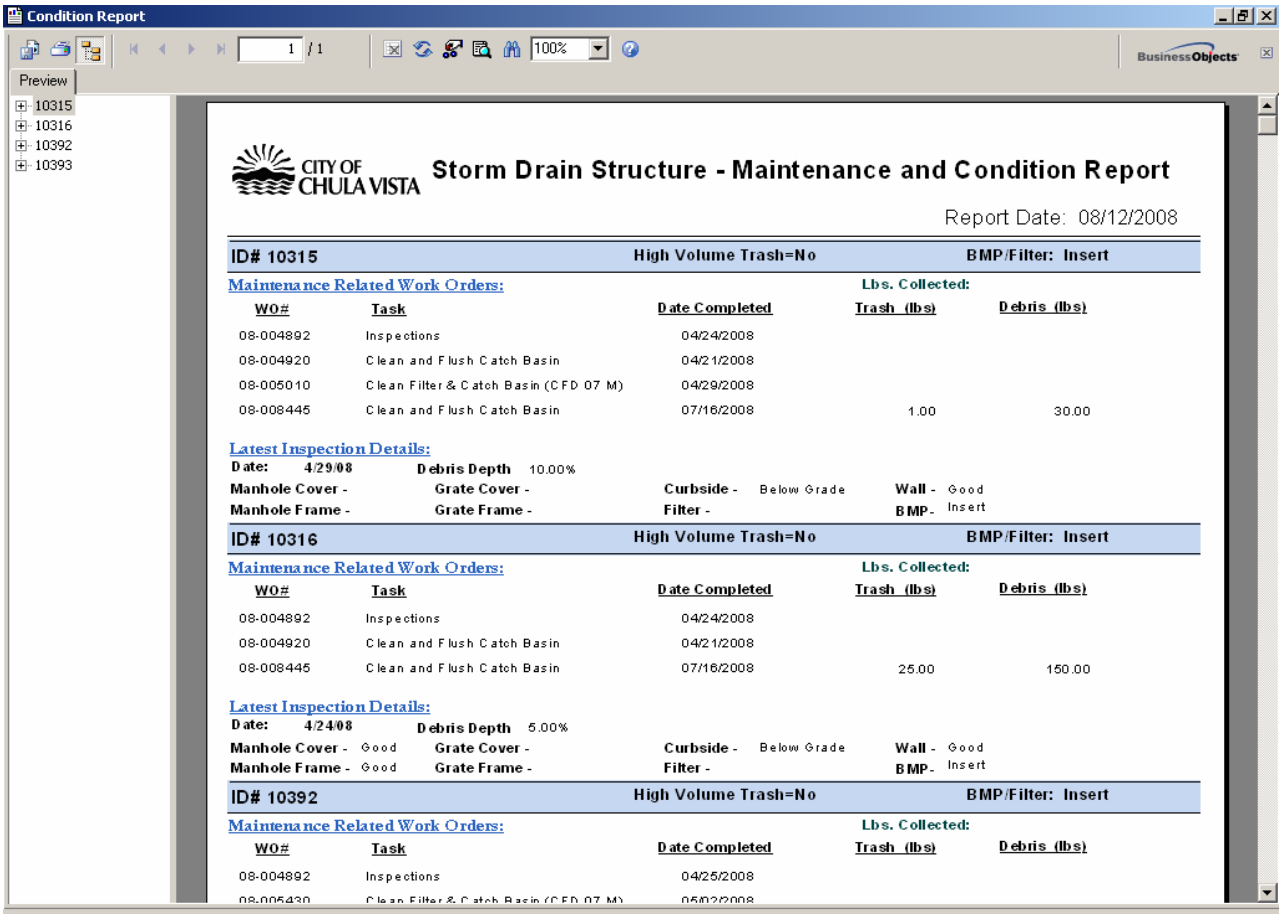

Condition Report

Preview

10315
10316
10392
10393

CITY OF CHULA VISTA **Storm Drain Structure - Maintenance and Condition Report**

Report Date: 08/12/2008

ID# 10315 High Volume Trash=No BMP/Filter: Insert

Maintenance Related Work Orders:

WO#	Task	Date Completed	Lbs. Collected: Trash (lbs)	Debris (lbs)
08-004892	Inspections	04/24/2008		
08-004920	Clean and Flush Catch Basin	04/21/2008		
08-005010	Clean Filter & Catch Basin (CFD 07 M)	04/29/2008		
08-008445	Clean and Flush Catch Basin	07/16/2008	1.00	30.00

Latest Inspection Details:

Date: 4/29/08 Debris Depth 10.00%

Manhole Cover - Grate Cover - Curbside - Below Grade Wall - Good

Manhole Frame - Grate Frame - Filter - BMP- Insert

ID# 10316 High Volume Trash=No BMP/Filter: Insert

Maintenance Related Work Orders:

WO#	Task	Date Completed	Lbs. Collected: Trash (lbs)	Debris (lbs)
08-004892	Inspections	04/24/2008		
08-004920	Clean and Flush Catch Basin	04/21/2008		
08-008445	Clean and Flush Catch Basin	07/16/2008	25.00	150.00

Latest Inspection Details:

Date: 4/24/08 Debris Depth 5.00%

Manhole Cover - Good Grate Cover - Curbside - Below Grade Wall - Good

Manhole Frame - Good Grate Frame - Filter - BMP- Insert

ID# 10392 High Volume Trash=No BMP/Filter: Insert

Maintenance Related Work Orders:

WO#	Task	Date Completed	Lbs. Collected: Trash (lbs)	Debris (lbs)
08-004892	Inspections	04/25/2008		

All pending, under construction, and installed Post-Construction BMPs and Priority Projects are inventoried and tracked by the Storm Water Management staff utilizing the City's GBA Master Series program. The database includes the following information:

- Project name
- WQTR, Plans are scanned and linked into GIS (CVMapper)
- Type of treatment control BMP installed or approved
- Number of Treatment Units installed
- Location of the BMP (Development name, area, neighborhood, etc.)
- Project category (Municipal/CIP, Residential, Commercial, etc.)
- Project status (Pending, under construction, completed)
- Priority
- Public or privately maintained
- Watershed within which the BMP is located
- The party responsible for maintenance of the BMP
- Name of person or company who conducted maintenance
- Maintenance certifications or verifications
- Inspection reports and findings

- Any corrective actions issued

See Attachment A for an updated listing of Priority Projects that were subject to SUSMP requirements. See Figures 2-4, 2-5, and 2-6 – GBA Master Series – SUSMP Verification and Maintenance Tracking for examples of SUSMP tracking forms.

Figure 2-4 GBA Master Series: SUSMP Verification and Maintenance Tracking Database A

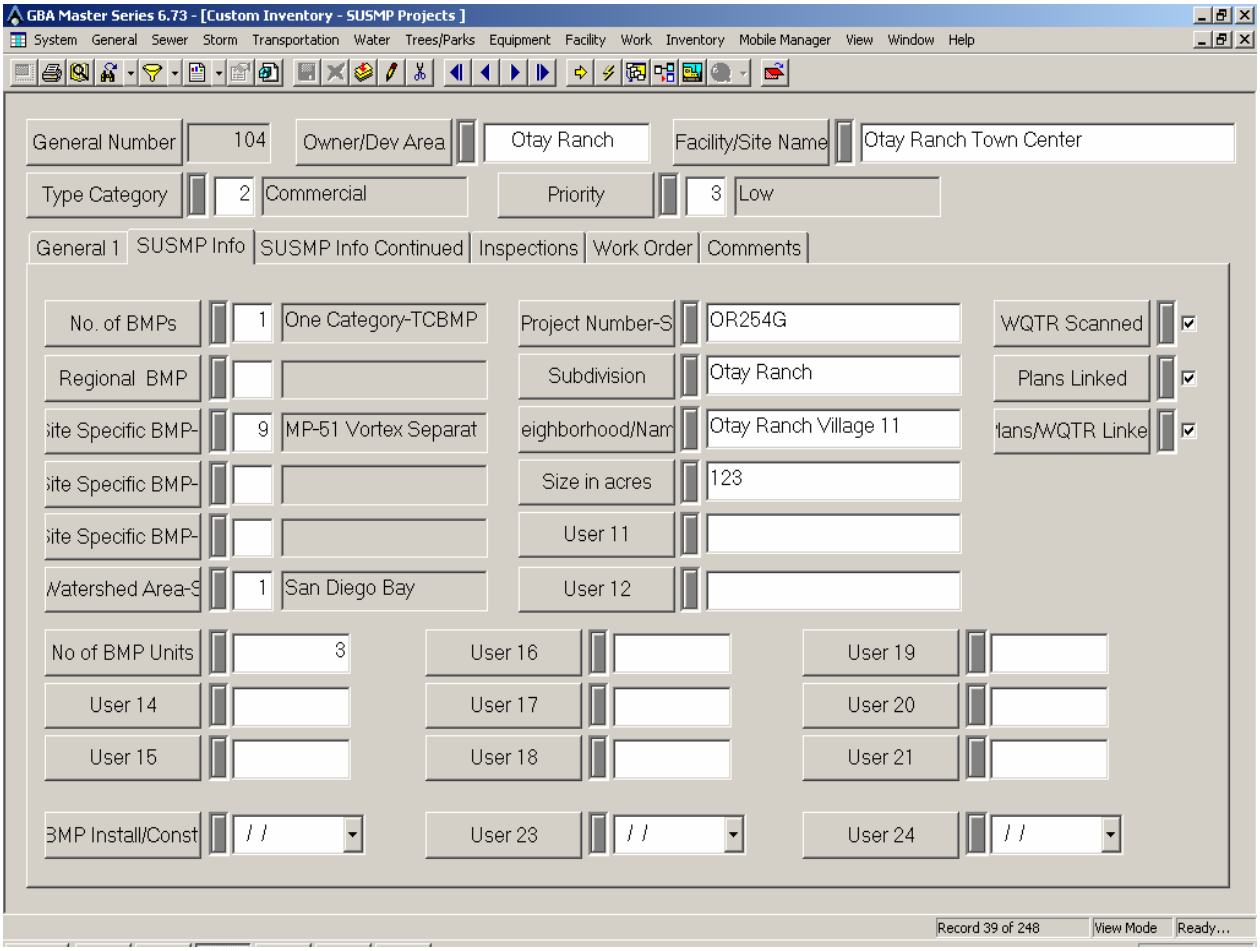

Figure 2-5 GBA Master Series: SUSMP Verification and Maintenance Tracking Database B

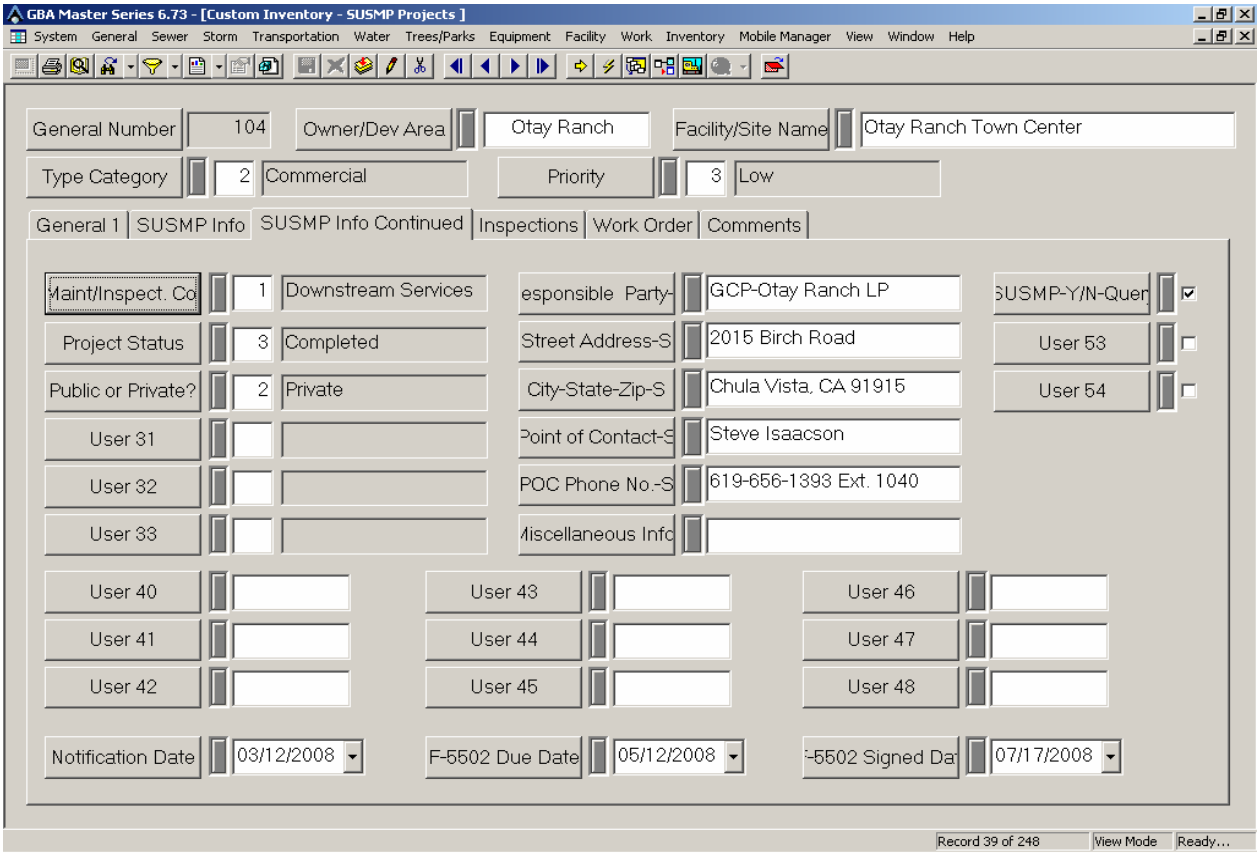

Figure 2-6 GBA Master Series: SUSMP Verification and Maintenance Tracking Database C

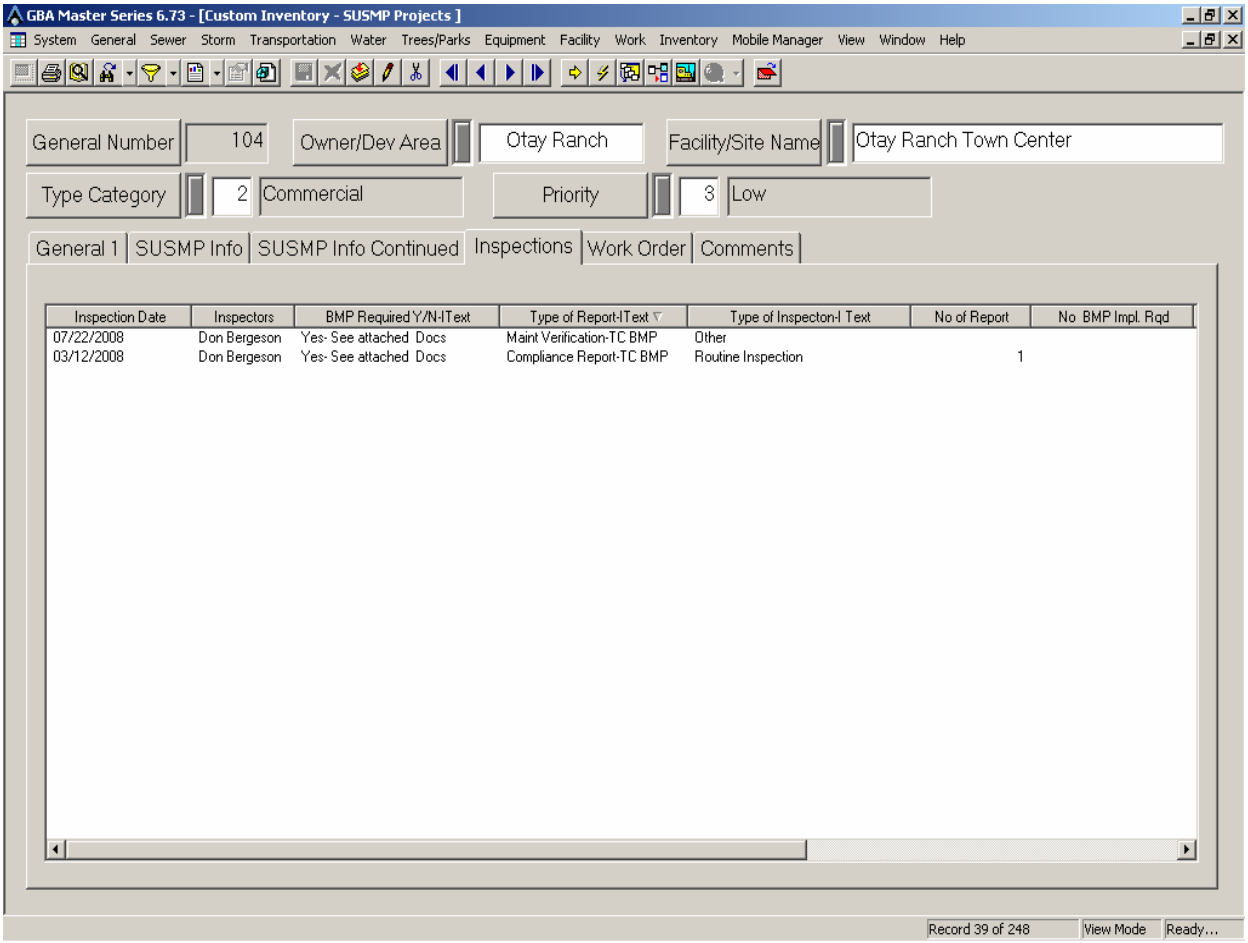

2.4.4.5 EXAMPLE PRIORITY DEVELOPMENT PROJECT

During the current reporting period, the City worked with developers, planners, and consulting engineers to establish standards of Source Control, LID Site Design, and Treatment Control BMPs that met the requirements of the Municipal Permit, Order No. R9-2007-0001. An example of such cooperation was the Windstar Pointe Resort development. The Windstar Pointe Resort project will be located at the southwest corner of Olympic Parkway and Wueste Road, adjacent to the Olympic Training Center. The project is planned for high-density multifamily use. It is a luxury apartment project consisting of 494 units located on a 19.6-acre site.

The Windstar Pointe Resort project is still under review by City staff, pending final approval and issuance of grading and construction permits. The project will incorporate Site Design, Source Control, and Treatment Control BMPs with particular emphasis on LID principles for the post-construction storm water management. The treatment control BMPs that will be used are bioretention/biofiltration areas, Modular Wetlands Systems (MWS) Linear storm Water Filtration, porous material over gravel bed filters, and Filter Inserts. The Filter Inserts will be

used in combination with other treatment BMPs as a trash-removal BMP. In addition to on-site BMPs, an existing CDS unit located off-site will act as the last line of defense in a treatment train for the treatment of site runoff.

The site of the Windstar Pointe Resort project is less than 50 acres in area and, therefore, exempt from the Interim Hydromodification Criteria. If grading and construction permits for this project are issued before the City adopts its final Hydromodification Management Plan, the project will be permanently exempted from Hydromodification requirements. However, if permits are not issued by that time, the project will be required to comply with the City's final Hydromodification Management Plan criteria. Nonetheless, the WQTR for the project includes a discussion of hydrologic conditions of concern, and the consultant has demonstrated that based on analysis of two- and ten-year peak discharge rates, flows will not exceed pre-development peak discharge rates due to existing detention facilities in Salt Creek, where the project discharges to.

2.4.4.6 LIST OF PROJECTS WITH LOW EFFICIENCY BMPS

During the current reporting period, all SUSMP projects that received grading, construction, or building permits proposed medium or high-efficiency treatment control BMPs. No SUSMP projects were permitted to have low-efficiency treatment control BMPs.

2.4.4.7 TREATMENT CONTROL BMP INVENTORY

Requirements for Treatment Control BMPs on Priority development and redevelopment projects were established by the Municipal Permit, Order No. 2001-01. The Copermittees developed a Model SUSMP, which included requirements for Treatment Control BMPs on Priority development and redevelopment projects. On June 12, 2002, the Regional Water Quality Control Board approved the Final Model SUSMP. Municipal Permit, Order No. 2001-01 provided a 180-day period for the Copermittees to incorporate the Model SUSMP in their local SUSMPs and implement its requirements. Accordingly, the Treatment Control BMP requirements went into effect on December 3, 2002. Attachment A of this report includes a list of Priority Development projects in the City that were subjected to SUSMP requirements during the current reporting period. The information provided in the Attachment includes the name of the project, category (residential, commercial, etc.), Inspection priority, status (under construction, pending, completed), type of Treatment Control BMPs, subdivision name, and neighborhood name.

The City maintains individual project files that include more detailed information regarding the type, number, and location of Treatment Control BMPs on each Priority development project.

2.4.4.8 INSPECTION OF TREATMENT CONTROL BMPS

The City started the process of Treatment Control BMPs inspection and verification in February 2008. A total of 117 Priority development projects were inspected before the end of the current reporting period. Attachment F of this report includes a list of projects inspected during that period. The list includes inspection dates, project names, types of BMPs installed, categories

(commercial, residential, etc.), priorities, development names, neighborhood names, and responsible parties for each project. The list includes both private and public projects. Depending on the findings during the course of initial inspections, follow-up inspections were conducted as necessary.

2.4.4.9 VERIFICATION AND MAINTENANCE INSPECTION OF TREATMENT CONTROL BMPS

During the reporting period, a total of 107 notification letters were sent out to parties responsible for the maintenance of completed private Priority Development Projects (see City's JURMP document Appendix D). The City is in the process of sending out more verification letters as projects are completed and such verification will be reported in the future Annual Reports.

It should be noted that City's maintenance crews are responsible for the maintenance of Treatment Control BMPs on public facilities and projects, in accordance with a scheduled maintenance program, which is tracked by the GBA Master Series program. Additionally, Storm Water Management staff conducts inspections of public Treatment Control BMPs to ensure that the level of maintenance is adequate.

Self-inspection and verification of Treatment Control BMPs by the responsible party for maintenance is unlike any current program within the City. Due to this new requirement, responsible party(ies) such as property management companies, Homeowner's Associations, property owners, and developers, are often unaware that Treatment Control BMPs have been installed on their properties and that they are responsible for annual inspection and maintenance of the units. The fact that such inspections and maintenance would create unexpected additional expenses to the responsible party(ies), City staff often encounters some resistance and has to explain the requirements. Because of this, the City has worked closely with the party(ies) to educate and guide them on the procedures to inspect and maintain the BMPs in the future. The City continues to re-evaluate its annual maintenance verification procedures and may modify the program if necessary.

The City requires annual verification of proper maintenance of all treatment control BMPs by the party responsible for maintenance prior to the start of each rainy season. The City issues to the responsible party, either electronically or by certified mail, a Treatment Control BMP Maintenance Package that includes: 1) an annual verification cover letter, 2) a Storm Water Treatment Facilities Inspection/Maintenance Verification Form (Form 5502), and 3) a Compliance Report – Treatment Control BMP Inspection, which includes a summary of the inspection results and findings, pertinent sections of the WQTR, and BMP Location Site Plans. This package informs the responsible parties of the Treatment Control BMPs, for which they are responsible; and requires the responsible parties to sign the verification form that the treatment control BMPs are being properly maintained in accordance with the sites' maintenance requirements. This information is tracked utilizing the City's GBA Master Series program. Each package is scanned and linked into the program, which includes the notification, required completion and receipt of the signed verification form.

2.4.4.10 BMP VERIFICATION

The City's Public Works Inspectors are responsible for ensuring that Treatment Control BMPs, which are components of the project's drainage systems and grading works, are inspected and constructed in accordance with approved grading plans. Public Works Inspectors conduct frequent inspections of projects during their grading activities and verify that Treatment Control BMPs are constructed as per approved plans. During the reporting period, Storm Water Management staff conducted an additional comprehensive inspection of 117 completed private and public projects to evaluate their Treatment Control BMPs installation and maintenance, and opened communication with persons responsible for the maintenance of such BMPs.

In compliance with the Municipal Permit, the City has developed databases for tracking the verification, maintenance, and inspections of Treatment Control BMPs. Additionally, hard copy files, including information about each project's WQTRs, maintenance agreements, locations of Treatment Control BMPs, and correspondence with persons responsible for the maintenance of Treatment Control BMPs have been created and are continuously updated.

Since LID features are considered components of site hardscape and are not inspected by Public Works Inspectors, a new process has been established in which Public Works Inspectors notify Storm Water Management Section immediately after their inspections of grading activities are completed and their inspections are no longer necessary. At such time, Storm Water Management staff takes over the responsibility of inspecting site hardscape construction. They will ensure the LID Site Design features are constructed as shown on approved grading and landscaping plans.

During the comprehensive inspection program for post-construction BMPs described above, it was determined that although major treatment facilities were constructed before occupancy of the project, some projects had not installed filter inserts or constructed vegetated swales prior to occupancy. Those projects were identified and responsible persons were required to install the deficient BMPs. With amendment in the verification process described above, the installation of all BMPs, including LID BMPs will be monitored during site construction on all Priority Projects.

2.4.4.11 SUSMP WAIVERS

The Municipal Permit includes a waiver provision, under which a Copermittee may provide for a Priority Project to be waived from treatment control numeric sizing criteria, if infeasibility can be established. During the reporting period, the City did not grant such waivers to any development projects.

2.4.4.12 SUSMP WAIVER MITIGATION

As mentioned above, during the reporting period, the City did not grant any treatment control numeric sizing criteria waivers to Priority Projects and, therefore, no waiver mitigation programs were implemented during the current reporting period.

2.4.4.13 HYDROMODIFICATION MANAGEMENT PLAN COLLABORATION

During the current reporting period, the Copermittees established a SUSMP and Hydromodification Management Workplan (HMP) workgroup and an HMP Technical Advisory Committee (TAC). The workgroup met frequently and hired a consultant to develop an updated SUSMP, Interim Hydromodification Criteria, and an HMP. The City was an active member of the workgroup and provided extensive comments on each draft document. City representatives attended almost all of the workgroup meetings. Although not members of the HMP TAC, City staff participated in meetings, were closely involved in the issues that were discussed, and obtained extensive information from expert presentations by consultants and others.

2.4.4.14 PROJECTS REQUIRED TO MEET HMP REQUIREMENTS

An HMP is currently under development at the regional level. The Municipal Permit requires the HMP document to be incorporated into local SUSMPs after approval by the Regional Board (Permit Section D.1.g.(5)) and be implemented thereafter. It is anticipated that the implementation of HMP will commence in the first quarter of 2010. In the meantime, an Interim Hydromodification Criteria (IHC) was developed and incorporated into the City's Updated SUSMP. Such IHC requires that all development projects that disturb 50 acres or more of land should implement hydrologic controls to manage post-project runoff flow rates and durations as required by the IHC. The City's Manual sets the issuance of a grading or construction permit as lawful prior approval of a project. Therefore, IHC requirements do not apply to projects that had received their grading or construction permit before March 24, 2008, when the updated SUSMP went into effect.

Although the City underwent significant development during the years 2000 to 2006, due to the slump in the housing market and the current economic situation, the City receives very few development applications. Since March 24, 2008, when the IHC requirements went into effect, the only development that qualifies for IHC is the 300-acre Eastern Urban Center (EUC) project, which is planned for mixed uses including high-density multifamily residential, office, commercial, recreational, civic and cultural land uses. The EUC development project is currently undergoing the project review process and is required to comply with IHC requirements. The developer has proposed a combination of existing detention basins and proposed a new underground detention facility in addition to LID BMPs to comply with IHC requirements.

2.4.4.15 PROJECTS EXEMPTED FROM HMP REQUIREMENTS

Other than the development project listed above, all other development projects reviewed during the current reporting period were less than 50 acres in area and did not meet the criteria for IHC requirements. However, Priority Development Projects were all required to address hydrologic conditions of concern by comparing pre- and post-development peak discharge rates and durations, and demonstrate that the increased peak discharge rates and durations would not cause downstream erosion or habitat impact. Such discussions were required to be included in the submitted WQTRs.

2.4.4.16 PROJECTS DISTURBING 50 ACRES OR MORE

As mentioned in Section 2.4.4.14 of this report, the only project that was under review during the reporting period and met the conditions for IHC was the EUC development project. This project is currently under review by City staff. The developer has submitted preliminary WQTRs that discuss the IHC. However, City staff has determined that calculations are required to demonstrate that the proposed facilities, including existing detention basins, a proposed underground detention facility, and LID features are adequate to meet IHC requirements.

2.4.4.17 ENFORCEMENT ACTION TAKEN FOR DEVELOPMENT PROJECTS

As a result of post-construction treatment BMP verification inspections, the City determined that 21 out of 117 inspected projects were partially or totally deficient in the installation of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, 13 projects were brought into compliance. Work is being continued on the remaining 8 projects and it is anticipated that they will also be in compliance within a short period. The City has the option of initiating enforcement action on responsible persons who do not demonstrate adequate effort to bring their project to compliance in a timely manner. Such enforcement action may include Notices of Violation, Administrative Citations, and/or Civil or Criminal Penalties. At this time, the City has not initiated any enforcement action for development projects with deficient post-construction BMPs and trusts that working with the responsible persons is at this time a more efficient and effective method.

3.0 CONSTRUCTION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(b).ii - Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.

Permit Section J.3.a.(3)(b).iii - A description of modifications made to the construction and grading ordinances and approval processes.

Permit Section J.3.a.(3)(b).iv - Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.

Permit Section J.3.a.(3)(b).i - Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.

Permit Section J.3.a.(3)(b).v - Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.

Permit Section J.3.a.(3)(b).vi - A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.

Permit Section J.3.a.(3)(b).vii - For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.

Permit Section J.3.a.(3)(b).viii - A description of the general results of the inspections.

Permit Section J.3.a.(3)(b).ix - Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(b).x - The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

3.1 INTRODUCTION

Under the Municipal Permit, construction sites are subject to dual regulation insofar as all construction sites that are covered under the NPDES General Construction Permit continue to be inspected and enforced by RWQCB staff. At the same time, the Municipal Permit requires Copermittees to implement a Construction Component to limit the impact of construction and

grading activities on receiving waters, which may result from the presence of disturbed soils and building materials. It is important that construction sites take appropriate measures to prevent potential pollutants from entering storm water conveyance systems.

The following section provides an account of the City's program to meet the requirements outlined in Section D.2 of the Permit to reduce the release of pollutants from construction sites into the storm water conveyance systems to the MEP.

3.2 SOURCE CHARACTERIZATION

The City has compiled and frequently updates a watershed-based inventory of all construction sites within its jurisdiction. The City utilizes a construction site database to maintain its inventory. The inventory includes details on each construction site, including project name, location, project developer and project size. A list of construction projects under the City's jurisdiction, all of which are located within the San Diego Bay Watershed, can be found in Attachment B. The list was current at the time of preparation of this report.

3.2.1 CONFIRMATION OF INVENTORY MANAGEMENT

During the reporting period, the City's construction site inventory was maintained current and up to date and was updated monthly by Storm Water Management staff. As a result of coordination between the Public Works Construction Inspection staff and Storm Water Management staff, mechanisms are in place in the maintenance and tracking of an up-to-date and accurate inventory. As such, all significant construction activities are closely monitored, supporting close collaboration and an effective means of tracking such activities Citywide. Storm Water Management staff are notified of all pre-construction meetings as coordinated by Public Works Construction Inspection staff. This provides an additional level of notification regarding the start of construction activities. In support of maintaining an accurate inventory, the City's Planning and Building Department distributes a monthly Major Project Development Status Report, which apprises City staff of such information as project review status and construction phase. Updates to the inventory include the addition of new construction projects, the removal of completed projects, the assignment of threat to water quality (TTWQ) prioritization, and inspection frequencies of active sites as needed.

3.3 UPDATES TO ORDINANCES AND APPROVAL PROCESS

Compliance requirements for construction activities are provided in the City's Development Storm Water Manual (Manual). The City's Storm Water Management and Discharge Control and Grading Ordinances were updated in 2008 and make the Manual enforceable. Such documents and ordinances have been updated and amended to ensure that compliance with the Municipal Permit requirements is met. The City's updated ordinances can be found in Attachment G.

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City requires that all individual proposed construction and grading projects implement measures to ensure that pollutants from the project site are reduced to the MEP and will not cause or contribute to an exceedance of water quality objectives. The following mechanisms have been identified and utilized to promote the implementation of BMPs during construction activities.

- Development Storm Water Manual (Manual)
- Construction site inspection and enforcement
- Construction and development community education

Designated BMPs for each construction site were required to be implemented through the requirement of a Storm Water Pollution Prevention Plan (SWPPP) or a Construction Storm Water Management Plan (CSWMP). SWPPPs are required for projects disturbing one acre or more of land, while CSWMPs are required for all other projects.

Regular and random inspections of construction sites ensure that BMPs are implemented, and where deficiencies are noted, corrective action is required, which in some cases may lead to the initiation of enforcement action.

3.4.1 DEVELOPMENT STORM WATER MANUAL

Construction activity standards and requirements are fully developed and included within the Manual. The Manual clearly states that it is the responsibility of the property owner and/or contractor to select, install, and maintain appropriate BMPs. The Manual outlines minimum construction BMPs required by the City. Where applicable, current fact sheets obtained from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual and the CASQA Storm Water BMP Handbook are referenced in the Manual. The following topics are also discussed:

- Site management requirements
- BMP performance standards
- Seasonal requirements

3.5 PROGRAM IMPLEMENTATION

The City's Manual is used by City staff to assist in the review and permitting of development and redevelopment projects with respect to construction activities. The Manual clearly outlines the review process for water quality. It includes descriptive text and charts that guide staff in determining if a project needs to be covered under the NPDES General Construction Permit. If the project is subject to the General Construction Permit, it is required to develop a SWPPP. The project is also required to file a Notice of Intent (NOI) with the State Water Resources Control Board. If the project is not subject to the General Construction Permit it is required to develop a CSWMP. Both SWPPPs and CSWMPs must be prepared prior to the start of construction

activities. All projects are required to include applicable measures to prevent pollution discharges to storm water conveyance systems by implementing BMPs during all phases of construction.

When it is determined that Capital Improvement Projects (CIPs) need coverage under the NPDES General Construction Permit, the project engineer submits an NOI to the State Water Resources Control Board and prepares a SWPPP, which is maintained at the construction site office for review by RWQCB and City inspectors.

The City has ensured compliance with construction BMP requirements through development project reviews, construction site inspections, and enforcement actions as necessary.

Within the defined reporting period, the City made notable efforts in promoting pollution prevention and BMP implementation on construction sites. The following mechanisms have been identified by the City as those integral to the promotion of pollution prevention techniques and BMP implementation.

- Construction site inspection and enforcement
- Construction and development community education
- Integration of pollution prevention and BMP implementation requirements into the development review process, including requirements for erosion control plans.
- Development Storm Water Manual
- Construction specific outreach and education activities

Education of the construction and development community is achieved on a local and regional level. Locally, project proponents including contractors, developers, property owners, superintendents, and other responsible parties are exposed to construction related water quality protection requirements throughout the development review and construction process. Storm Water Management staff provides comments and direction through the review of development proposals and plans. As mentioned above, pre-construction meetings provide Storm Water Management staff with an excellent forum to communicate storm water compliance requirements and for project proponents to have their own concerns addressed.

In addition, City Storm Water Management staff frequently meets with developers and contractors and provides on-site training regarding site management for storm water quality. In preparation for the wet season, Storm Water Management staff annually issues wet and dry season reminder letter, normally about one month before the start of each season.

As a result of the slow-down in development, many construction sites are currently inactive. The City has made notable efforts in the management of inactive construction sites. A site is considered inactive if construction activities have ceased for a period of 7 or more consecutive calendar days. Recently, the City issued a formal letter to all developers with inactive construction sites. The purpose of the letter was to bring to the attention of developers the City's storm water and non-storm water discharge requirements on inactive construction sites and to reiterate the developer's responsibility at both active and inactive sites to implement a plan to

address all potential non-storm water discharges. If a site was partially inactive, above requirements applied only to inactive areas of the site.

If the construction project was wholly or partially inactive or expected to remain inactive for a long period, the City required the developer to submit a construction site stabilization plan.

The stabilization plan was required to include the following information:

- Project name and a description of inactive areas or those expected to become inactive.
- A description of the stage of work at which the project became inactive.
- An estimate of time that the project, or areas of the project, would remain inactive, and a description of BMPs that would be used to stabilize inactive areas of the construction site.
- A project plan delineating areas of the project that are inactive or expected to become inactive, as well as all erosion control, sediment control, and non-storm water BMPs that would be implemented to prevent the discharge of sediment or other pollutants from the site.

3.5.1 MAXIMUM DISTURBED AREAS

The City's Manual limits the area that can be cleared or graded and left exposed at one time to 100 acres for an individual grading permit or a combination of grading permits under the associated tentative map. On a case-by-case basis expansion of disturbed area requires approval by the Director of Public Works. Maximum disturbed area requirements are discussed in detailed in the City's Manual.

3.5.2 ADVANCED TREATMENT

During this reporting period, there were no construction sites that met the conditions requiring advanced treatment methods. If it is determined that a site poses a Exceptional TTWQ based on criteria outlined in the Manual, the site shall implement advance treatment controls to minimize the discharges from the construction site.

3.5.3 CONSTRUCTION SITE INSPECTIONS

The City construction site inspection and enforcement program is defined by a consistent and frequent presence of inspectors on construction sites Citywide. It is recognized that construction sites must be regulated through a well-coordinated and highly refined inspection and enforcement program. The City has one full-time Storm Water Compliance Inspector, two full-time Environmental Health Specialists, one Engineering Technician, and eight Public Works Inspectors who manage this effort.

During this reporting period, all construction sites were assigned appropriate dry and wet season inspection frequencies required by the Municipal Permit. Unlike Order No. 2001-01, Order No. R9-2007-0001 does not require TTWQ Prioritization for construction sites. However, the City

has determined that this designation is a useful indicator for inspectors to evaluate the priority and relative importance of each construction site with respect to erosion and sediment controls, and the special attention required to the implementation of BMPs during their inspections of each site. The inventory of construction sites in this report, therefore, includes a column indicating TTWQ Prioritization for each site.

During the current reporting period, the City conducted inspections of construction sites in accordance with the requirements of Order No. 2001-01 and Order No. 2007-07, as applicable. Please see Table 3-1 for the number of construction site inspections under each category. A complete list of inspected construction sites is included in Attachment F. The period of time each construction site was active during the wet or dry seasons, and the number of inspections conducted during the rainy season for each site, are recorded on inspection reports that are available at the City.

Table 3-1 Construction Site Inspection Summary FY 2007-2008

INSPECTION SUMMARY	NO.
Formal Inspection Reports	548
Inspections During Wet Season	415
Inspections During Dry Season	122
Inspections of High Priority Sites	415
Inspections of Medium Priority Sites	123
Inspections of Low Priority Sites	10

During the construction phase, BMP implementation is evaluated by the City in a site-specific and situation-specific manner. It is through this approach that determinations of the effectiveness of a specific BMP are made, based on an accounting of the overall conditions observed at a specific job site. Established construction site inspection protocols also include a documentation review including site specific SWPPP as needed.

City inspectors use construction inspection forms specifically designed as multi-purpose tools. The form provides a checklist of information and potential water quality issues, which serves as a reminder to the inspector of all items requiring attention while on the construction site. The form also provides clear and concise information to the developer or contractor about deficiencies in the implementation of BMPs. It includes information about corrective actions that the developer or contractor needs to take for brining the site into compliance, and the time allowed by the inspector. Inspection forms are designed to enable the inspector and others to assess BMP implementation on each construction site and the effectiveness of BMPs. Inspection reports are often used as supporting documents in enforcement actions against non-compliant construction sites.

Through the above process, the City ensures that the inspections conducted address all the required inspection steps to determine full compliance.

Based on documented information, the trend of inspection issues were related to the following:

- Failure to implement and provide continuous maintenance of existing BMPs to prevent or minimize pollution of the storm water conveyance system in accordance with respective SWPPP.
- Failure to implement good housekeeping practices at the site.

Site inspections of both public and private developments are performed by City staff with inspection and enforcement authority. Sites are evaluated for compliance with the minimum BMP requirements as per the Permit requirements and applicable ordinances and permits.

Inspections include the following:

- Proof of coverage under the General Construction Permit, where applicable.
- Assessment of the implementation of all required BMPs and any additional controls as needed and required by the City.
- Proper maintenance of the BMPs.
- Effectiveness of the BMPs.
- Verification that the party responsible for the implementation of the site SWPPP has received adequate training.
- Observations of any non-storm water discharges, illicit connections, and potential discharges into the storm drain system.

3.5.4 CONSTRUCTION SITE ENFORCEMENT

The City enforces its ordinances and permit conditions at all construction sites, as necessary. The City's ordinances and permit conditions provide adequate legal authority for the City to enforce its ordinances on construction sites through Stop Work Notices, penalties, fines, and other enforcement procedures as necessary. City staff work with developers and contractors to frequently identify non-compliance issues and to set deadlines for bringing sites into compliance; however, if the developer/contractor is found to be non-cooperative in bringing a site into compliance in an expeditious manner, City staff initiates an enforcement action, which, depending upon the severity of the violation, may include one or more of the following:

- Verbal Warning
- Written Warning
- Notice of Violation (Includes Cease and Desist and/or Clean and Abate Orders)
- Enforcement of Contract (for City projects)
- Stop Work Notice
- Denial or Revocation of Permits
- Administrative, Civil, or Criminal Actions

Table 3-2 - Construction Enforcement Summary summarizes enforcement actions taken within the defined reporting period of this report:

Table 3-2 Construction Enforcement Summary FY 2007-2008

ENFORCEMENT ACTION	NO.
Written Notices of Violation (Includes Cease and Desist and/or Clean and Abate Orders)	3
Required Technical Reports	4
Stop Work Notices	4
Administrative Citations (Construction related)	4

As a result of the above enforcement actions, $6,400.00 in fines were issued. Follow-up inspections were conducted as necessary until compliance was met.

Within the defined reporting period of this report and as described in the narrative provided throughout this section, the construction component has demonstrated numerous successes as well as undergone notable programmatic developments and enhancements. Through identified needs and associated management decisions, the City has fortified its jurisdictional construction management component in 2007-2008. Further, as the need for further development emerges for construction activities, the City will seek to maintain the level of performance established from years past, and to continue to meet the regulatory standards mandated in the Municipal Permit.

4.0 MUNICIPAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(c).i - Any updates to the municipal inventory and prioritization.

Permit Section J.3.a.(3)(c).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.

Permit Section J.3.a.(3)(c).iii - A description of inspections and maintenance conducted for municipal treatment controls.

Permit Section J.3.a.(3)(c).iv - Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.

Permit Section J.3.a.(3)(c).v - Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.

Permit Section J.3.a.(3)(c).vi - Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.

Permit Section J.3.a.(3)(c).vii - Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.

Permit Section J.3.a.(3)(c).viii - Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.

Permit Section J.3.a.(3)(c).ix - Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.

Permit Section J.3.a.(3)(c).x - Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xi - Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xii - Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xiii - Identification of the total distance of curb-miles swept.

Permit Section J.3.a.(3)(c).xiv - Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.

Permit Section J.3.a.(3)(c).xv - Amount of material (tons) collected from street and parking lot sweeping.

Permit Section J.3.a.(3)(c).xvi - A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.

Permit Section J.3.a.(3)(c).xvii - Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.

Permit Section J.3.a.(3)(c).xviii - A description of the general results of the inspections.

Permit Section J.3.a.(3)(c).xix - Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(c).xx - The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(c).xxi - A description of notable activities conducted to manage urban runoff from municipal areas and activities.

4.1 INTRODUCTION

The goal of the City's municipal program is to minimize or prevent negative impacts of municipal activities and areas on receiving waters and other environmental resources in the City and where possible, to enhance the quality of these resources. The City maintains the following types of municipal areas and activities:

- Fixed Facilities
- Municipal Separate Storm Sewer System (MS4)
- Sanitary Sewer System
- Roads, Streets, and Parking facilities
- Powerwashing – Graffiti removal

Minimum BMPs for specific municipal facilities and activities have been implemented as applicable and as required by the Municipal Permit. Minimum BMPs for specific facilities and

activities have been described in the City's JURMP. BMP implementation is ensured through various levels of enforcement, inspection, communication, and awareness. BMP information is disseminated to City staff through the following resources:

- California Stormwater Quality Association (CASQA) Municipal Stormwater BMP Handbook. January 2003
- Municipal staff training venues (formal training, staff meetings, etc.)
- Routine inspection activities
- Activity specific training

BMP implementation is regulated by City staff through routine inspection activities as described in the JURMP. High priority municipal facilities are inspected annually, and all other facilities are inspected as needed. Inspections are conducted to verify the implementation of an effective combination of BMPs to meet the minimum water quality protection requirements. Applicable minimum activity-specific BMPs, as outlined in the JURMP, have been reviewed and implemented at facilities throughout the City. As needed, BMP implementation has been re-enforced as conditions of concern are identified, and personnel have been briefed on their roles and responsibilities in maintaining and implementing prescribed BMPs. Inspections are scheduled to support continued implementation and maintenance of BMPs Citywide.

The following paragraphs include summaries of activities undertaken by the City to meet the Municipal Permit requirements for the Municipal Component of the JURMP. It is important to recognize that such recounted activities, practices, and functions are ongoing efforts by the City and not constrained by the defined reporting period of this report.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City operates and maintains the following types of fixed facilities within its jurisdiction:

- Parks and recreation centers
- Libraries
- Administration buildings
- Public Works Center
- Animal care facility
- Fire stations
- Land application site

4.2.2 SOURCE CHARACTERIZATION

Attachment C – Municipal Inventory is a list of all the municipal facilities and activities within the City. Table 6-1 of the City's JURMP details the pollutants potentially generated by the area or activity. General operations include landscape maintenance, material handling and storage, loading/unloading, waste handling, street maintenance, and sewer maintenance. Facilities are classified as high, medium, or low TTWQ based on activities, functions, and various site-specific

factors. For more information on the facilities that have additional operations and activities, please see the City's JURMP. The inventory was updated in March 2008 during the JURMP update process. The same inventory has been used in this report. Future annual reports will include inventories as updated for that report.

4.2.3 BMP REQUIREMENTS

Each fixed municipal facility in the City implements BMPs in accordance with their specific operations and activities. The City uses the CASQA BMP Handbook for Municipal Facilities as a guide for employees as well as a training tool. City staff receives training on storm water BMPs on a regular basis. More information on employee training can be found in Section 8.0. Mobile municipal operations use source control BMPs as pollution prevention measures. During the reporting period, all designated BMPs were implemented for municipal areas and activities as well as special events.

4.2.4 PROGRAM IMPLEMENTATION

4.2.4.1 MAINTENANCE

The City maintains all of its fixed facilities and implements BMPs during operations and activities. Any illegal connections or illegal discharges noticed by City staff are eliminated and BMPs are revised if needed.

4.2.4.2 TRAINING AND EDUCATION

All City employees who work in municipal facilities and activities receive training on general storm water concepts, the City's storm water ordinance, and BMP requirements. More information on employee training can be found in Section 8.0.

4.2.4.3 INSPECTIONS

The City proactively approaches enforcement of its storm water ordinance for all municipal areas and activities. All deficiencies are immediately brought to the attention of the facility manager or the staff member responsible for the facility or activity. The facility managers or the responsible staff members have the authority to implement or require implementation of adequate BMPs for their facility. If the storm water inspector observes a violation of the City's storm water ordinance caused by negligence of City personnel, the inspector immediately informs the appropriate supervisor; works with supervisors to ensure that corrective actions are implemented; and provides training to the personnel. The supervisor will then take action against the violating staff member, as may be necessary, including warnings and other disciplinary measures. Notably, since Public Works staff has been trained for pollution prevention and BMP implementation in their daily activities, most deficiencies are taken care of upon the first notice. With the training provided for the operations staff and implementation of BMPs on municipal facilities, it is expected that discharge of pollutants from municipal areas and activities have been minimized.

City staff inspected all 62 high priority municipal facilities and activities during the fiscal year as required by the Municipal Permit. Medium and low priority facilities are inspected on an as needed basis. No medium or low priority facilities were determined to need inspection this fiscal year. During inspections, storm water staff identified BMPs that were in need of improvement and informed responsible persons to take action to implement additional BMPs. A list of municipal facilities that were inspected during the reporting period is included in Attachment F. Overall, sites were in good condition, however; some facilities needed BMP improvements. For the sites needing BMP improvements, the appropriate supervisor was notified and any corrective actions to bring the facility into compliance were immediately implemented.

The City also maintains a number of treatment control BMPs that have been installed at municipal fixed facilities. Along with the required storm water BMP compliance inspections, City Storm Water Management staff also inspects all municipal treatment control BMPs. The City maintains treatment control BMPs at the John Lippitt Public Works Operations Center; Fire Stations 6, 7, 8; Salt Creek Park; Veteran's Park; Sunset View Park; Harvest Park; Santa Cora Park; Mountain Hawk Park; Montevalle Park; Windingwalk Park; Horizon Neighborhood Park; Harborside Park; and the City of Chula Vista Civic Center. City crews service the structural treatment control BMPs on an as needed basis, and their condition is evaluated for effectiveness. Table 4-1 shows the municipal facilities within the City that have treatment control BMPs and their inspection dates.

Table 4-1 Municipal Facilities with Treatment Control BMPs

FACILITY NAME	NUMBER & TYPE OF TREATMENT CONTROL BMP	DATE INSPECTED
Montevalle Park	10 Filter Inserts	06/27/08
Salt Creek Park	1 CDS Unit	06/26/08
Windingwalk Neighborhood Park	1 Vegetated Swale	06/19/08
Harvest Park	1 Filter Insert	06/19/08
Sunset View Park	3 Filter Inserts	02/21/08
Mountain Hawk Park	20 Filter Inserts	06/27/08
Horizon Neighborhood Park	1 Filter Insert	06/27/08
Veterans Park	1 Vegetated Swale, 5 Filter Inserts	06/19/08
Chula Vista Civic Center	5 Vegetated Swale, 1 CDS Unit, 2 Filter Inserts	06/27/08
Fire Station 6	3 Filter Inserts	06/26/08
Fire Station 7	1 CDS Unit, non-storm water diverter	06/28/08
Fire Station 8	1 CDS Unit, non-storm water diverter	06/26/08
Harborside Park*	3 Filter Inserts	As needed
Santa Cora Park*	23 Filter Inserts	As needed
John Lippitt Public Works Center*	6 Filter Inserts	Annually

* – Not a SUSMP Project, but the City still inspects the inserts and maintains them

4.2.4.4 INTEGRATED PEST MANAGEMENT (IPM)

During the reporting period, the City Parks and Open Space Divisions have implemented the following BMPs in their activities to prevent pollution of storm water conveyance systems:

Fertilizer, Pesticides, and Herbicides

- Minimize fertilizer use.
- All fertilizing is done so that no fertilizer is applied to the walkways or street. Any accidental spill is cleaned up and applied to the plant material. Areas are cleaned using a gas blower.
- All leaf blowing is towards plant material and away from any hardscape.
- Whenever possible, compost and soil amendments are used in place of fertilizers.
- Manual weeding whenever possible along with IPM Practices to minimize chemical application.
- All pesticides, herbicides, and fertilizers are stored in a controlled, locked and properly marked chemical locker.
- Prevent pesticide drift – do no spray on windy days.
- All employees who spray pesticides for weed control are properly trained and possess a valid Qualified Applicator Certificate issued by the state and receive 20 hours of continuing education in order to renew their certifications bi-annually.
- Reporting and record keeping for the use of fertilizers and pesticides includes the location, frequency, amount, type, and date of application.
- Staff is supplied with spill kits in case of an accidental spill.
- All mixing is done in an area that is away from storm drains.
- All employees who handle pesticides are trained and familiar with the most recent material safety data sheet (MSDS) files.
- MSDS sheets for chemical being used must be kept with the applicator while applying pesticides.

Proper Planting Techniques

- Proper plant selection for pest resistance to minimize the use of pesticides and fertilizers.
- Removal or pruning of deceased plants and branches.
- Clearing of weeds, grass, and brush from building perimeters and fence lines.
- Plant native vegetation whenever possible.
- Increase plant vigor and pest resistance through proper cultural practices; proper water application, clearing of weeds to decrease competition, pruning at the right time of year, and accurate diagnosis of plant pests.
- Control pests by removing diseased plants, pruning to increase air circulation and to remove diseased or injured plant parts.

Minimize Runoff

- The City utilizes several weather stations throughout the City to monitor microclimates to set evapotransporation (ET) rates for Maxicom Irrigation Systems.
- Installation of flow sensors and master valves to prevent water loss in the event of mainline break.

4.3 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.3.1 BACKGROUND

Roads, streets, highways, and parking facilities make up a large part of the City. Pollutants associated with roads, streets, highways, and parking facilities include sediment, metals, and trash. The City has implemented various BMPs to reduce the amount of pollutants that come off of these areas.

4.3.2 SOURCE CHARACTERIZATION

Roads, streets, highways, and parking facilities are included as a high TTWQ facility in the Municipal Inventory (Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by the roads, streets, highways, and parking facilities. The City maintains 402 miles of roads, streets, and highways.

There is one standalone parking facility within the City in a commercial area which is swept on a monthly basis; the other 22 parking facilities are associated with City buildings and facilities and are swept as a part of the normal maintenance activities for the fixed facility they are associated with.

Roads, streets, and highways are further classified into high, medium, and low based on the amounts of trash, sediment, and debris that are generated by their use. Commercial and industrial streets are classified as high priority; center islands and medians are classified as medium priority; and centerlines and residential streets are classified as low priority. The City is in the process of collecting data to refine this classification by working with its contractor to keep records of the quantities of trash and debris collected each day from various sections of the City.

4.3.3 BMP REQUIREMENTS

Street sweeping is another ongoing city function that provides for the reduction in pollutants entering the storm drain system and ultimately local receiving waters. It is the main BMP used to maintain roads, streets, highways, and parking areas. It is conducted in a systematic and coordinated manner as to compliment pollution prevention throughout the City.

4.3.4 PROGRAM IMPLEMENTATION

4.3.4.1 MAINTENANCE AND INSPECTION

During the reporting period, the City swept 18,000 curb miles and removed 580 tons of trash, debris, and sediment from Chula Vista streets and parking lots. While regular roadway maintenance is contracted, the City operates a street sweeper to be used by City crews to maintain City facilities, parking lots, bus stops, and special events. Figure 4-1 shows the street sweeping schedule for the reporting year.

- Commercial and industrial streets swept once per week
- Center islands and medians swept twice per month
- Centerlines, residential streets, and non-curbed streets swept once per month

Figure 4-1 Street Sweeping Schedule

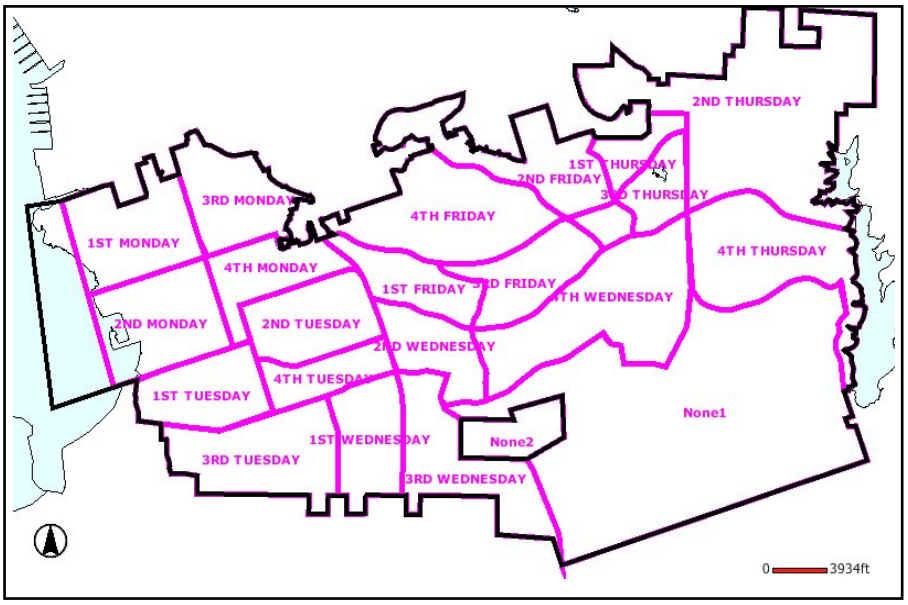

4.4 MS4

4.4.1 BACKGROUND

MS4 maintenance is an ongoing city function that is essential for the removal of pollutants and potential pollutants that may be discharged to receiving waters. MS4 maintenance activities address pollution prevention through three primary activities: 1) catch basin maintenance, 2) channel maintenance, and 3) outfall maintenance.

As part of the City's maintenance protocol, a maintenance supervisor inspects storm drainage facilities before and after cleaning operations. Problem sites within the drainage facilities were inspected and cleaned multiple times during the reporting period. In addition, the City's consultants for dry weather field screening annually inspect over 50 outfall locations throughout the City and conduct upstream investigations based on field screening results. They call and report observed pollution in storm drainage systems to the City, in which case Public Works maintenance crews immediately take action to abate the pollution, cleanup, and inspect the drainage area.

Another method of inspection of storm drainage facilities employed by the City is through investigation of reported violations. When an inspector responds to a reported violation, in addition to normal investigations, he or she inspects the first downstream storm drain inlet to determine if pollution has reached the inlet. In case of presence of any trash, silt, or other visible

pollutants in the storm drain inlet, Public Works crews are immediately notified and they take action to clean the storm drainage system, as necessary.

All channel and outfall maintenance activities have been conducted in a manner as to assure compliance with all regulatory standards. Notably, channel and outfall maintenance activities have been limited to manual removal of trash and debris.

Currently, three vacuum trucks and three crews are allocated full-time to performing the above tasks on the maintenance and inspection of the City's storm drainage systems. In addition, four vacuum trucks, equipment, and wastewater field crews are available on an as-needed basis to help in cleaning and inspecting the storm drainage systems.

The City maintains an extensive record keeping and maintenance tracking system utilizing George Butler Associates Work Management System (GBA), which is an automated system used for collecting and tracking data about the work that the Department of Public Works performs in order to maintain the City's infrastructure. Detailed maintenance logs are available in the City's storm drain maintenance database and can be presented upon request.

During the reporting period, the City installed new thermoplastic storm drain signage to curb inlets in the City. These stencils adhere to the concrete curb/gutter by heat treatment and are more durable than paint stencils or plastic markers using adhesive. Approximately 500 thermoplastic storm drain markers were permanently affixed to storm drain inlets with the prohibitive "No Dumping – Drains to Bay" message in two languages. In addition, citizens participating in Beautify Chula Vista Day in October 2007 stenciled 80 more storm drains. Notably, nearly all storm drain structures in the City are identified with stenciling, plastic markers, or permanent concrete stamping. In addition, the City plans to stencil more drains with the thermoplastic marker in the next reporting year and is maintaining a record of stenciled storm drains through GIS mapping.

4.4.2 SOURCE CHARACTERIZATION

The City maintains its MS4 which includes open channels, catch basins and inlets, and outfalls. The City's MS4 is included in the municipal facility inventory (Attachment C) as a high TTWQ facility. Table 6-1 of the City's JURMP details the pollutants potentially generated by the MS4.

4.4.3 BMP REQUIREMENTS

The City implements various BMPs to maintain its MS4 and uses the CASQA BMPs for municipal facilities and activities as a guide.

4.4.4 PROGRAM IMPLEMENTATION

4.4.4.1 MAINTENANCE AND INSPECTION

A summary of the City's efforts in the maintenance and inspection of its catch basins and inlets, MS4, and open channels during the reporting period of July 1, 2007 to June 30, 2008 is

summarized below. All high trash volume facilities were inspected at least once during May 1 – September 30. Table 4-2 details the amounts of waste cleaned from the City's storm drain system.

Catch Basins and Inlets

- There are 11,332 catch basins and inlets in the City
  - 7,908 catch basins and inlets were inspected
    - Out of these catch basins and inlets inspected, 3,601 catch basins and inlets were cleaned
- Data collection for catch basins with accumulated waste exceeding the cleaning criteria (33% or more full) started January 1, 2008. A total of 299 exceeded the criteria from January 1, 2008 – June 30, 2008.

MS4

- There are 184 miles of MS4 in the City
- The storm drain maintenance crews televised 0.57 miles of MS4 during the reporting year. New storm drain pipes were televised to ensure that there is no infiltration from groundwater or the sanitary sewer, and to inspect MS4 where there was obstructed water flow.
- A total of 1.31 miles of MS4 was cleaned. It should be noted that storm drain pipes are self-cleaning and under normal operation there should be no need for cleaning storm drain pipes.

Open Channels

- There are 298 miles of open channels in the City
- A total of 518,000 square feet of open channels were inspected and cleaned

Table 4-2 Amount of Waste Cleaned from the Storm Drain System FY 2007-2008

CATEGORY	AMOUNT (tons)
Catch Basins	9.92
Inlets	19.69
MS4	11.93
Open Channels	400.78
TOTAL	442.32

The City will continue to inspect its MS4 as required by the Municipal Permit and record inspection data collected during FY 2008-2009. After two fiscal years, the City will review its inspection record and determine which facilities will require inspections less than annually and report these facilities in its FY 2009-2010 annual report.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

The City recognizes the vital pollution prevention role that sanitary sewer system maintenance plays in protection of the MS4 system. If not properly maintained, the sewer system can

potentially discharge numerous pollutants to the storm drain system such as bacteria, viruses, nutrients, and parasites, not to mention chemicals.

The City currently implements a Sewer Overflow Response and Prevention Plan. Pursuant to the Statewide General Waste Discharge Requirements for Sewer Collection Agencies, the City is in the process of updating the plan and developing a Sewer Collection Management Plan and a Fats, Oils, and Grease (FOG) Monitoring Ordinance. As part of the FOG program, the City has conducted a survey in which questionnaires were sent out to all restaurants in the City. Information collected about their FOG practices, and methods of preventing oil and grease from entering sanitary sewer systems will be used to track BMPs, assess their efficiencies, and direct future inspections.

4.5.2 SOURCE CHARACTERIZATION

There are 481 miles of sewer in the City. The sanitary sewer is included in the municipal inventory as a high threat to water quality facility (Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by the sanitary sewer system.

4.5.3 BMP REQUIREMENTS

The City responds to all sanitary sewer overflows and uses the CASQA BMP Handbook for municipal facilities and activities including sanitary sewer system maintenance as a guide. City staff regularly receives training on inspection and maintenance of the sanitary sewer system.

Concurrent with the arrival of maintenance crews at the scene of a sewage spill from private sewer lines to contain and cleanup the spill, a Storm Water Compliance Inspector contacts the responsible person at the residence or facility and makes it a requirement to implement BMPs to prevent the recurrence of similar incidents. Such BMPs frequently include the requirement for regular and frequent inspections and cleaning of private sewer lines, tightly closing the cap on cleanouts, preventing oil and grease from entering sanitary sewer systems, etc.

4.5.4 PROGRAM IMPLEMENTATION

4.5.4.1 MAINTENANCE AND INSPECTION

The City cleaned and maintained a total of 440 miles of sewer main (includes critical maintenance areas) within the defined reporting period of this report. Identified critical maintenance areas were cleaned on a monthly basis by City crews. In addition to comprehensive sanitary sewer maintenance activities, the City utilizes a number of controls to limit infiltration from the sanitary sewer system to the MS4. Most essential of which, the City's standards require concrete pipes for all new storm drains, which ensure a much longer life, watertight joints, and effectively minimizes infiltration of groundwater and sewage to storm drain pipes. In addition, flow metering is conducted throughout the City's sanitary sewer system to monitor flow depths and potential capacity concerns, eliminating potential sewer overflows and infiltration. The City has video cameras that can be moved through storm drain or sanitary sewer pipes for close inspection of pipe conditions. If a problem is suspected, that section of the pipe is video

surveyed. This practice has greatly minimized the potential for infiltration of sewage into storm drain pipes.

The City also implements a rehabilitation program for aged sewer pipes. Rehabilitation consists of lining deteriorated existing Vitrified Clay Pipes (VCP) with a continuous material. This process eliminates the joints of the VCP, thereby eliminating the potential for ex-filtration of sewage. Also, only PVC sewer pipes are used for new construction for all but interceptors with diameters larger than 36 inches. The PVC pipes have proven to be very watertight and minimize sewage infiltration into the ground and storm drain systems.

Another control to limit infiltration from the sanitary sewer system to the MS4 is the City's initiative to replace aged corrugated metal pipe storm drains with concrete pipes. The City no longer allows metal pipes to be used for storm drains due to their inherent corrosion potential and increased risk of infiltration. Corrugated metal pipes are gradually being replaced with concrete pipes, which are more durable and watertight.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City performs activities that are not confined to a fixed area, such as powerwashing. Pollution prevention using source control BMPs are implemented for such activities.

4.6.2 SOURCE CHARACTERIZATION

The City performs a variety of mobile activities such as powerwashing for graffiti removal, landscape maintenance, street repairs, and pool maintenance. Powerwashing for graffiti removal is included in the municipal inventory as a high TTWQ (Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by the area or activity.

4.6.3 BMP REQUIREMENTS

The City implements source control BMPs for mobile activities, including powerwashing, and uses the CASQA BMP Handbook for Municipal Facilities as a guide. City powerwashing crews implement BMPs when powerwashing and receive regular training on storm water pollution prevention.

4.6.4 PROGRAM IMPLEMENTATION – POWERWASHING FOR GRAFFITI REMOVAL

4.6.4.1 MAINTENANCE AND INSPECTION

The City's Graffiti Abatement Program functions under the mission of: *"to deliver in a timely manner, a comprehensive, cost-effective, environmentally sound, and technically reliable graffiti removal, education, and prevention program for the residents of Chula Vista."* The City provides cost-free graffiti removal for the residents of Chula Vista.

The Graffiti Abatement Program utilizes various techniques for effective removal of graffiti Citywide, including power washing and sand blasting. In its commitment to this program and to utilize environmentally sound and cost-effective graffiti removal processes, City Council approved the spending of $63,000 for the purchase of highly specialized equipment to capture and treat residual wash water generated from graffiti abatement activities in early 2006. At the end of 2006, the new equipment was made available to the graffiti crews. The equipment includes the following:

- A Ford F450 Heavy Duty truck powered by a Triton V10 gasoline engine with an 8' x 12' flatbed.
- A Mi-T-M Industrial belt-driven pressure washer rated at 5.6 GPM output at 3,500 P.S.I.
- A diesel-fired burner for hot water rated at 470,000 BTUs per hour with adjustable temperature control up to steam.
- A Mi-T-M 6000 watt Generator powered by a 13 HP Honda gasoline engine provides power for the AquaKleen Vacuum Recovery system and Water Recycling System, which includes a commercial vacuum system that operates on two 120 volt vacuum motors.
- An automatic discharge pump with a check valve recovers the residual wash water through a Vacu-berm, and a 1.5" 25 foot-long pick up hose and pumps wash water into a 22 gallon oil/water separator system. The water then passes thru a series of 3 filters and a filtration bag that is changeable before it is returned to the storage tank for reuse. This high efficiency system is capable of recycling up to 80% of the wash water for reuse. The clean water tank holds 250 gallons.
- Speedflo PowerTwin 6900 gas powered hydraulic airless paint pump with 3000 PSI and two-gun capability with 100 feet of 0.25" paint hose on a spring-loaded retractable hose reel mounted in the rear corner of the truck bed. This pump is rated at 1.8 GPM.
- Side mount under-bed tool and accessory carryall baskets made of expanded metal for carrying five gallon buckets of paint and vacuum attachments are located on both sides of the truck.

As a part of the inspection process, City's Storm Water Management staff usually does a ride-along with the graffiti/powerwashing crews to observe their operations and activities. Storm water staff provides storm water education to the crew and gives any additional BMP recommendations or improvements to their existing pollution prevention measures.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City hosts a variety of special events, which include festivals, fairs, and other events for special causes and occasions. Many times these events involve the participation of outside organizations and community groups. The gathering of event participants and the presence of booths can be a source of trash and debris if BMPs are not implemented.

4.7.2 SOURCE CHARACTERIZATION

Special events are included in the City's municipal inventory as a high TTWQ activity (Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by special events.

4.7.3 BMP REQUIREMENTS

The City implements various BMPs for special events such as having special bins available for recyclables and trash, using street sweeping following major events, and having personnel especially dedicated to waste management during City events. Also, following every event, City staff inspects the grounds for trash and performs other clean-up activities as necessary. Environmental Services Division and Storm Water Management staff works together to ensure that adequate BMPs are implemented during special events.

4.7.4 PROGRAM IMPLEMENTATION

City Storm Water Management and Environmental Services staff are present at the majority of City events. As a part of storm water education outreach, staff working at the events provides information on pollution prevention and watershed protection. City Environmental Services staff notify hired personnel if there are overflowing trash bins or areas where more trash receptacles are needed.

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(d).i -Any updates to the industrial and commercial inventory.

Permit Section J.3.a.(3)(d).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.

Permit Section J.3.a.(3)(d).iii - A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.

Permit Section J.3.a.(3)(d).iv - Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.

Permit Section J.3.a.(3)(d).v - Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.

Permit Section J.3.a.(3)(d).vi - Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(d).vii - Identification of the number of third party inspections conducted.

Permit Section J.3.a.(3)(d).viii - Identification of efforts conducted to verify third party inspection effectiveness.

Permit Section J.3.a.(3)(d).ix - A description of efforts implemented to address mobile businesses.

Permit Section J.3.a.(3)(d).x - The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(d).xi - A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.

Permit Section J.3.a.(3)(d).xii - A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.

5.1 INTRODUCTION

The following section describes the development and implementation of program components related to industrial and commercial activities in the City to minimize the impact of urban runoff on receiving waters. This component is driven by multiple interrelated activities to ensure an effective and complete set of actions. The City recognizes that no program activity is mutually

exclusive, and that each is essential to the overall success of the program. The City has compiled a list of industrial and commercial sources and developed BMP requirements for each source and activity. Implementation of these requirements will be accomplished through education, inspection, and enforcement.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

The City's industrial and commercial inventories include 1,368 facilities. Examples of industrial facilities within the City include manufacturing facilities, auto dismantlers, and transportation businesses. Examples of stationary commercial facilities within the City include auto repair shops, restaurants, and wholesalers of many kinds; this does not include mobile commercial facilities. Mobile commercial facilities are detailed in Section 5.3.

The main objective of the industrial and commercial component of the JURMP is to minimize or eliminate the impacts of industrial and commercial activities on receiving waters and other sensitive environmental resources. Each facility has the potential to discharge pollutants into the MS4 and hence degrade local water quality.

5.2.2 SOURCE CHARACTERIZATION

Through ongoing efforts to maintain a more systematic approach to source inventory management, the City conducts an annual comprehensive inventory validation process of commercial and industrial sources Citywide.

A watershed-based inventory of the industrial and commercial sites within the City has been compiled. Information was obtained from the City's business license database (Permits Plus), the State of California database of industrial sites that have filed NOIs, inspection records, and previous experience. The inventories are updated annually through reviewing business license records for new businesses, performing routine inspections, and responding to reported incidents.

The inventory of industrial and commercial facilities within the City was updated during the development of the City's JURMP in 2008 and the same inventory is included in Attachments D and E.

The inventory for commercial facilities includes such information as:

- Facility name
- Assessor's Parcel Number (APN)
- Facility address
- Municipal Permit category
- Description of services
- Priority
- North American Industrial Classification System (NAICS) code

The inventory for industrial facilities includes such information as:

- Facility name
- Assessor's Parcel Number (APN)
- Type of facility
- Priority
- Facility address
- North American Industrial Classification System (NAICS) code
- Waste Discharge Identification Numbers (WDID) for sites that are covered under the State of California's General Industrial Permit.

The inclusion of the APNs allows the City to track its inventories through the City's GIS program. Table 7.1 – General Pollutant Loading Potentials of Industrial and Commercial Sources in the City's JURMP document identifies the pollutants that may be generated by each business category.

5.2.3 BEST MANAGEMENT PRACTICES REQUIREMENTS

Pollution prevention methods are used as a primary mechanism for reducing industrial and commercial discharges of pollutants into MS4s. Pollution prevention methods are cost-effective BMPs that eliminate or reduce the generation of pollutants at their sources. Industrial and commercial facilities produce a range of pollutants, both indoors and outdoors, that can threaten human and environmental health if washed into the storm drain system by way of urban runoff. Businesses can benefit from pollution prevention methods by reducing labor time associated with excess pollutant waste handling, thereby re-directing labor time more efficiently to production, as well as the accompanying costs of storage, disposal or treatment.

The following pollution prevention methods were required to be implemented to the MEP where applicable and feasible:

- Reduce the quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct employees
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

In addition to the methods listed above, the City's Storm Water Management Ordinance provides the authority to require SWPPP for any industrial or commercial facility that may discharge significant pollutants into receiving water bodies.

In addition to the pollution prevention BMPs, the City has established a set of minimum BMPs based on the California Stormwater BMP Handbook – Industrial & Commercial (CASQA, 2003) for all industrial and commercial sites. Businesses are required to use an effective combination of the applicable BMPs and activity-specific BMPs. The listings of the BMP fact sheets are available online at www.cabmphandbooks.com.

Insurance of proper BMP implementation at industrial and commercial sites is based on a multi-level approach and information on BMPs are disseminated to the local business community through a number of channels, including:

- Inspection & enforcement activities
- Industrial and commercial outreach & education
- Business license application procedure

The City does not exclusively endorse some of the specific recommended BMP options listed in the CASQA fact sheets. Those exceptions are listed in Appendix C of the JURMP. Businesses are informed of the exceptions, where necessary.

It is important to recognize that pollution prevention methods are stressed through all interactions between the City and facility owners, operators or their employees. Further, pollution prevention methods are commonly used in compliance with other regulatory management standards.

5.2.4 PROGRAM IMPLEMENTATION

The City provides education and outreach to industrial and commercial businesses so they are aware of the City's storm water requirements. The City also inspects its inventoried businesses to evaluate compliance with its BMP requirements. Enforcement actions are taken as necessary to bring the business into compliance.

Because the City's BMP requirements as described in the JURMP are not substantially different from the BMP requirements that the City has been enforcing since 2002, most businesses should already be familiar with what they need to do to comply with the City's requirements. While the City continues to provide education and outreach to industrial and commercial businesses, in most cases a lack of awareness is not accepted as an excuse for noncompliance.

The City provides information and training regarding storm water quality to industrial and commercial owners and operators. In turn, owners and operators are required to train their personnel, employees, and/or other parties involved with industrial or commercial activities. Businesses are given educational materials outlining pollution prevention methods and BMPs during inspections, where appropriate. Storm Water Management staff gives recommendations to businesses where necessary. Based on the City's experience, this site-specific, personal education is among the most effective methods of outreach. The educational program for industrial and commercial businesses is described in more detail in Section 10 of the updated JURMP.

After each inspection the City provides a copy of the findings to the responsible party of the inspected business. Generally electronic inspection forms are completed, and a printout is mailed or faxed to the responsible party after the inspection. If immediate notification is deemed necessary, a paper inspection form with carbon copy is completed onsite, with the carbon copy provided to the responsible party at the time of inspection.

In all cases a copy of the Chula Vista Storm Water Management and Discharge Control Ordinance is handed to the facility owner/manager. The City also distributes the regionally developed "Green Wrench Guide" for automotive facilities, and the "What's Cooking" guide for food related businesses. The City continues to utilize the following primary mechanisms to provide ongoing education to the industrial and commercial communities within the City.

- Industrial trade group presentation
- Print / Media distribution
- Industrial & commercial inspection activities

5.2.4.1 INDUSTRIAL/COMMERCIAL SITE INVENTORY AND INSPECTIONS

During this reporting period, 204 industrial facilities and 1,164 commercial facilities including 353 mobile businesses were identified and inventoried. These facilities are identified in Attachments D and E.

Through ongoing efforts to maintain a more systematic approach to source inventory management, industrial and commercial facilities were prioritized as potential contributors of identified watershed Pollutants of Concern including bacteria and heavy metals. Inspections were conducted and, observed Pollutants of Concern were addressed through necessary education and enforcement actions.

During this reporting period, the following number of inspections were conducted to ensure compliance within the Permit requirements:

- 97 high priority commercial facilities
- 27 low priority commercial facilities
- 48 high priority industrial facilities
- 31 low priority industrial facilities

Justification and rationale for why industrial and commercial sites/sources were chosen for inspection is as follows:

- Permit compliance – Categories and numbers of facilities selected for inspection were chosen to meet permit requirements of Section D.3.b(3).
- Threat to Water Quality – Facilities that posed higher TTWQ were given higher priority for inspections.
- Inspection frequency – Facilities that were not inspected during the previous period were given a higher priority for inspection.

- Past history of non-compliance – Facilities that had a history of non-compliance during previous inspections were targeted for re-inspection during the current reporting period.

City inspectors use industrial/commercial inspection forms specifically designed as multi-purpose tools. The form provides a checklist of information and potential water quality issues, which serves as a reminder to the inspector of all items requiring attention while on the industrial/commercial facility. The form also provides clear and concise information to the business owner or manager about deficiencies in the implementation of BMPs. It includes information about corrective actions that the business owner or manager needs to take for bringing the site into compliance, and the time allowed by the inspector. Inspection forms are designed to enable the inspector and others to assess BMP implementation on each industrial/commercial facility and the effectiveness of BMPs. Inspection reports are often used as supporting documents in enforcement actions against non-compliant industrial/commercial facilities.

Through the above process, the City ensures that inspections conducted address all the required inspection steps to determine full compliance.

5.2.4.2 PRIORITIZATION

The new Municipal Permit no longer requires industrial and commercial facilities to be prioritized as high, medium or low TTWQ. However, the City has prioritized both industrial and commercial businesses into either high or low priority, for inspection purposes.

The City evaluated each business by incorporating factors specified by the Municipal Permit and by using past experience. Although not specifically required, the City has also continued to classify industrial businesses that have obtained coverage under the General Industrial Permit as high priority. Other industrial businesses, based on past inspections and institutional knowledge, or those that are known to have poor compliance history, or have a high potential for pollutant discharge were also classified as high priority.

Criteria for identification of low priority industrial facilities include the following:

- Land Use Code
- NAICS Code
- Type of Activity
- Location

Criteria to identify high priority commercial facilities:

- Auto related businesses
  Businesses operating along the following areas were included due to their proximity to receiving water bodies:
  - Main Street corridor (Otay River and MSCP Preserve areas)
  - Bonita Road corridor (Sweetwater River)
  - Bay Boulevard (San Diego Bay)

- Restaurants
  Restaurants operating along the following areas were included due to their proximity to receiving water bodies:
  - Main Street corridor (Otay River and MSCP Preserve areas)
  - Bonita Road (Sweetwater River)
  - Bay Boulevard (San Diego Bay; facilities within the Port jurisdiction are not included)
- Fast food chains
  This is due to frequent management and employee changes, and low awareness about water quality issues. Also, fast food restaurants often have a drive through and more customers who potentially discard food wrap, etc. in the parking lot.
- Private golf courses
- Entertainment facilities
  For example, facilities such as the Cricket Wireless Amphitheatre, Knotts Soak City, etc.
- Towing companies
- Building supplies and materials
- Food Markets
- Violation history
  Commercial facilities that have been issued a citation or Notice of Violation within the past two years are included in the list. Also, any business that receives a citation or Notice of Violation in the future will automatically be added to the list.

5.2.4.3 INSPECTIONS CONDUCTED

An inspection of an industrial and commercial business involves verifying information regarding ownership, management, and contact names and phone numbers of the businesses. If the inventoried business is no longer at the listed location or has moved, the inspector makes a note to update the inventory. If a new business has been determined to be included in the inventory, City Storm Water Management staff notes that information, and the business is usually inspected at that time.

For industrial sites, City Storm Water Management staff reviews the facility's SWPPP, Annual Report, and monitoring results, if applicable. Typically, only sites that are covered under the General Industrial Permit have these documents. Storm Water Management staff checks for coverage under the General Industrial Permit, where applicable.

Monitoring verifications for high priority industrial facilities are conducted through the review of the facility's annual report or by the verification of the facility's participation in the Group Monitoring Program. To ensure that the subject facility is still an active participant of a Group Monitoring Program, the City verifies membership by contacting the Group Leader, and by accessing the State Water Resource Control Board's website:
http://www.waterboards.ca.gov/stormwtr/groupmonitoring.html

During both industrial and commercial business inspections the main focus is reviewing the implementation of pollution prevention methods and other BMPs. A walk-through of the

business is conducted to identify potential pollutants and pollutant generating activities. The business contact typically accompanies City Storm Water Management staff during the walk-through to enable City staff to point out areas where correction are needed, and for the business representative to answer any questions and take note of the requirements.

Based on the results of the inspection, City Storm Water Management staff completes a Storm Water Quality Inspection for Commercial/Industrial Facilities compliance report. The responsible party is provided with a copy of the inspection report after the inspection. The inspection report contains the following information:

- General information to update the inventory
- General site observations and/or conditions of concern noted
- Notations for review of SWPPP or BMP plan and monitoring results
- Assessment of BMP implementation
- Recommended corrective action
- Enforcement action taken
- Inspector name and signature
- Signature of party receiving the form

City Storm Water Management staff does not typically prescribe exact BMP solutions; staff does attempt to work with the facility's contact to provide examples of BMPs that could be implemented. Cost-effective BMPs are sought whenever possible, although, more expensive BMPs may be needed to reduce the pollutant discharges to the MEP. The business is also evaluated for its staff training procedures and the storm water quality awareness of the contact person; educational information is provided as appropriate. The findings of the inspection and corrective actions are discussed with the responsible party while City Storm Water Management staff is at the site.

As discussed above, the business is also provided with a copy of the completed inspection report. Based on observations during the inspection, the City may determine that the business category should be changed from low to high or vice versa. Any such changes are reflected in the inventory update submitted in the JURMP Annual Reports.

A detailed account of all industrial and commercial inspections conducted during this reporting period is included in Attachment F.

5.2.4.4 THIRD PARTY INSPECTIONS

With a dedicated Storm Water Management staff, industrial and commercial facilities are effectively regulated in the City without the use of a third party inspection program. The City's industrial and commercial inspection program is defined by a consistent presence and strong enforcement standard, and the City's Storm Water Management staff continues to excel in maintaining the needs of the industrial and commercial programmatic elements.

5.2.4.5 VIOLATION AND ENFORCEMENT ACTIONS

The City has a number of mechanisms that can be used to bring an industrial or commercial facility into compliance. These mechanisms include:

- Verbal and Written Warnings
- Notices of Code Violation
- Orders to Clean and Abate
- Orders to Cease and Desist
- Orders to prepare a Storm Water Pollution Prevention Plan
- Orders to implement a Monitoring and Testing Program
- Administrative Citations
- Civil Penalties
- Judicial Enforcement

City Storm Water Management staff properly document each observed violation at the facility failing to comply with the storm water requirements, and enforcement action is taken when necessary to bring the facility into compliance.

In some cases compliance is achieved and observed at the time the initial enforcement action is taken, and no follow-up is necessary. In other cases, City Storm Water Management staff conducts follow-up inspections to determine that if required corrective actions are adequately addressed.

Where City Storm Water Management staff observes a significant and/or immediate threat to water quality, immediate enforcement action is taken to require the facility to immediately correct the discrepancies. When necessary, City maintenance crews respond to illegal discharges, contain and capture pollutants before entering storm water conveyance system inlets, and stay at the scene until the illegal discharge is terminated by the responsible person. The affected areas and the storm water conveyance system are cleaned and disinfected as necessary. Costs for such operations are charged to the property owner. In any case in which City Storm Water Management staff determines that a noncompliant site poses a threat to human or environmental health, the City notifies the RWQCB by phone and in writing as required by the Municipal Permit.

The City also investigates all reported incidents of illegal discharges from industrial and commercial businesses; this includes findings during the implementation of the City's Dry Weather Field Screening and Analytical Monitoring Program. The investigations are performed in accordance with Section, 9.5 of the City's JURMP.

See Table 5-1 – Industrial/Commercial enforcement Action Summary. A detailed account of enforcement actions taken during this reporting period is included in Attachment H.

Table 5-1 Industrial/Commercial Enforcement Action Summary FY 2007-2008

VIOLATION TYPE	NO.
Administrative Citations-Warning	6
Administrative Citations	17
Notice of Violation	4
Cease and Desist Orders	3
Clean and Abate Order	4

As a result of the above enforcement actions, $6,000.00 in fines were issued. The above referenced enforcement actions were preceded by initial inspections and were followed up by additional inspections as necessary until such non-compliant facilities were brought to full compliance with the City's storm water regulations.

5.2.4.6 IDENTIFICATION OF NON-FILERS

If City Storm Water Management staff determines that an industrial facility may require coverage under the General Industrial Permit and has not filed a Notice of Intent (NOI), the City requires the responsible party to contact the RWQCB to determine if the facility is required to obtain coverage. At the same time, the RWQCB is notified of the existence of such industrial facility. Additionally, the City coordinates joint site inspections with RWQCB staff to assist in their site inspections. Each Annual Report includes a list of industrial facilities that the City has identified as candidates for coverage that have not filed NOIs. The list includes the name of the facility, address, contact information and NAICS code.

5.3 MOBILE SOURCES ELEMENT

5.3.1 BACKGROUND

Illegal discharges are a concern with mobile businesses working in the City. Due to the nature of their activities, mobile businesses are regulated differently than stationary businesses. Many mobile businesses can be difficult to identify because many do not have business licenses. On a continuous basis, new mobile businesses are started, existing mobile businesses go out of business or some mobile businesses do not renew their business license or operate from their home. Since they are not consistently present at any particular location, regular inspections are difficult and infeasible. For the above reasons, City maintenance crews who normally work on public streets have been trained to report any observed illegal discharges by mobile businesses. Furthermore, City inspectors conduct weekend and night inspections to monitor BMP implementation by mobile businesses.

5.3.2 SOURCE CHARACTERIZATION

Mobile businesses that are known to operate within the City are marked as such on the City's commercial inventory in Section B.5 of the City's updated JURMP. The following business types are addressed by the mobile source element of the City's industrial and commercial program.

- Mobile Auto Detail
- Window Washing/Pressure Washing/ Street Sweeping
- Pool and Spa Cleaning
- Carpet Cleaning
- Plumbing/Handyman/Repairman
- Landscaping
- Dog Grooming
- Boat Cleaning/Hull Maintenance
- Fire Sprinkler Maintenance
- Mobile construction trades; cement, masonry and painting and coatings

In addition to the business types listed above, other mobile businesses that the City identifies as a TTWQ are added to the inventory. Because not all mobile businesses have obtained a business license in the City or the business is based out of the City's jurisdiction, the City continues to refine and update its inventory of mobile businesses.

The City has established a process by which any mobile business applicant within the above categories are required to go through a storm water BMP training and sign a certification verifying that they are aware of the City's BMP requirements and pollution prevention ordinances.

During this reporting period, 71 mobile businesses have applied for a City Business License and have been approved and met the City's requirements and the standard BMPs for the specific type of business. See Table 5-2 – FY 07-08 Approved Mobile Business License Category.

Table 5-2 Approved Mobile Business License Category FY2007-2008

BUSINESS TYPE	NO.
Construction Related	16
Carpet Cleaning	12
Boat Cleaning & Maintenance	6
Auto Detailing	14
Pool & Spa Cleaning	3
Handyman/Repairman	5
Powerwashing/Window Cleaning	5
Plumbing	4
Landscaping	2
Mobile Oil Change	1
Sweeping	2
Dog Washing	1

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 POLLUTION PREVENTION

Pollution prevention comprises procedures and practices that eliminate or reduce the generation of pollutants at their sources. Mobile businesses often deal with a variety of pollutants, both indoors and outdoors, that pose potential environmental threats if transported by way of urban runoff. In mobile business settings, pollution prevention strategies enable the operator to reduce the volume of solid, liquid, and hazardous wastes; and costs. The City emphasizes the use of the following pollution prevention methods, when appropriate:

- Use smaller quantities of toxic materials or substitute less-toxic materials.
- Minimize the volume of cleaning water to decrease wastewater generation.
- Implement a spill response plan.
- Train employees in pollution prevention practices.

It is important to recognize that pollution prevention methods are stressed through all interactions between the City and the owners, operators, and their employees. Further, pollution prevention methods are commonly used in compliance with other regulatory management standards.

5.3.3.2 BMP REQUIREMENTS

All BMPs required for stationary sources listed in Section 7.2.3.1 of the City's updated JURMP, are also required for mobile businesses where applicable. The most important BMPs used for most mobile businesses are typically Non-Storm Water Discharge and Control, Spill Prevention, Control/Cleanup, as described in fact sheets SC-10 and SC-11 of the CASQA Manual.

5.3.4 PROGRAM IMPLEMENTATION

The City continues to implement well-developed procedures for mobile businesses through the City's Storm Water Mobile Business License Program. New mobile business license applicants are made aware of applicable requirements and BMPs related to their business prior to the approval and issuance of a business license. Under this program, business license applications that fall under pollutant generating mobile activity types are routed through the Storm Water Management Section for review and approval. Applicants are required to complete a Storm Water Questionnaire regarding their business practices and required BMPs and sign a certification statement that states they are aware of the City' Storm Water regulations and will implement adequate BMPs in their activities. The approved applications and completed Storm Water Questionnaire and Certification Statement are scanned into the City's Mobile Business Database. This process provides a tracking mechanism for Storm Water Management Staff in managing and maintaining priority mobile sources, and identifying repeat violators. The procedures shown below have demonstrated success in requiring new business owners, particularly mobile businesses, to address water quality concerns through the implementation of BMPs.

- The Finance Department receives application from mobile business owner
- The applicant is issued a commercial or construction packet based on business type/description. Each Storm Water Information Packet for Mobile Business contains a transmittal letter, copy of the City's Storm Water Ordinance and appropriate CASQA BMPs.
- The applicant is instructed that they must complete and return the Storm Water Questionnaire and Certification Statement in order to receive approval and issuance of their business license
- The applicant contacts Storm Water Management staff for either a "face-to-face" or phone conversation to review the application and answer any questions prior to approval and issuance of a license.

5.3.4.1 EDUCATION AND OUTREACH

The City provides information, education materials and outreach regarding storm water quality to mobile business owners and operators during the business license application process. As stated above, businesses are given the education materials outlining pollution prevention measures and other BMP requirements related to their perspective activities prior to the license being issued and also during onsite inspections. The Storm Water Information Packet for Mobile Businesses are included in Appendix D, of the City's updated JURMP and the education program is described in detail in Section 10, of the City's updated JURMP.

5.3.4.2 ENFORCEMENT ACTIONS

Most violations associated with mobiles businesses are related to illegal discharges and lack of BMP implementation. Upon arrival at the scene City inspectors require the discharge to be immediately stopped and cleanup initiated and completed to the extent feasible and practical. If the business does not have materials required for the implementation of the BMPs available, the business will not be allowed to resume operations until such time that the business demonstrates that they have procured the materials and can properly use them. City Storm Water Management staff determines if the business possesses a business license, and has signed a Certification Statement. Mobile businesses that do not have a City business license will be required to obtain one prior to being able to resume business operations. See Table 5-3 – Enforcement Action Summary for Mobile Businesses.

Table 5-3 Enforcement Actions Summary for Mobile Businesses FY 2007-2008

BUSINESS TYPE	VIOLATION TYPE	NO.	TOTAL FINES
Construction Related	Administrative Citation	4	Warning
Construction Related	Administrative Citation	8	$1600
Powerwashing	Administrative Citation	8	$1800
Landscaping	Administrative Citation	1	Warning
Landscaping	Administrative Citation	1	$200
Carpet Care	Administrative Citation	1	$200
Auto Detailing	Administrative Citation	1	Warning
Auto Detailing	Administrative Citation	2	$400
Plumbing	Administrative Citation	1	$200
Pool Spa Maintenance	Administrative Citation	1	$200

6.0 RESIDENTIAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a. (3)(e). i - Identification of the high threat to water quality residential areas and activities that were focused on.

Permit Section J.3.a.(3)(e).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.

Permit Section J.3.a.(3)(e).iii - A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.

Permit Section J.3.a.(3)(e).iv - Types and amounts of household hazardous waste collected, if applicable.

Permit Section J.3.a.(3)(e).v - A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of evaluation.

Permit Section J.3.a.(3)(e).vi - The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(e).vii - A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.

Permit Section J.3.a.(3)(e).viii - A description of notable activities conducted to manage urban runoff from residential areas and activities.

6.1 INTRODUCTION

The City has developed the residential component of the JURMP based upon a multi-faceted approach including pollution prevention; residential complaint response and enforcement; and residential outreach and education. It is the overarching goal of this component to offer cost effective and simple solutions to reducing residential discharge of pollutants into the MS4 and to support the long-term improvements of water quality through awareness and behavior modification.

6.2 SOURCE CHARACTERIZATION

It is also recognized that the nature of residential reporting can effectively characterize those activities and sources that may need to be targeted from year to year. As in previous reporting years, the City has taken a critical look at the complaints received in 2007-2008 as presented in Figure 6-1. Notably, home improvement related discharges continue to be prevalent in this reporting period. Compared to last year, the percentage of home improvement related discharges

decreased by 10%. This may be attributable to the public outreach programs conducted by City staff that provides invaluable information and education on the impacts of waste disposal. This type of critical look is an important tool in making management decisions on how to approach residential BMP implementation and pollution prevention in the City. It should be noted that such analysis is not intended to offer determinate conclusions; rather it is presented to provide a general evaluation tool to guide residential strategies and BMP implementation guidance. Further, it is an effective way of evaluating and characterizing sources over time.

Figure 6-1 Percentage of Reported Residential Non-Storm Water Violations by Activity FY 2007-2008

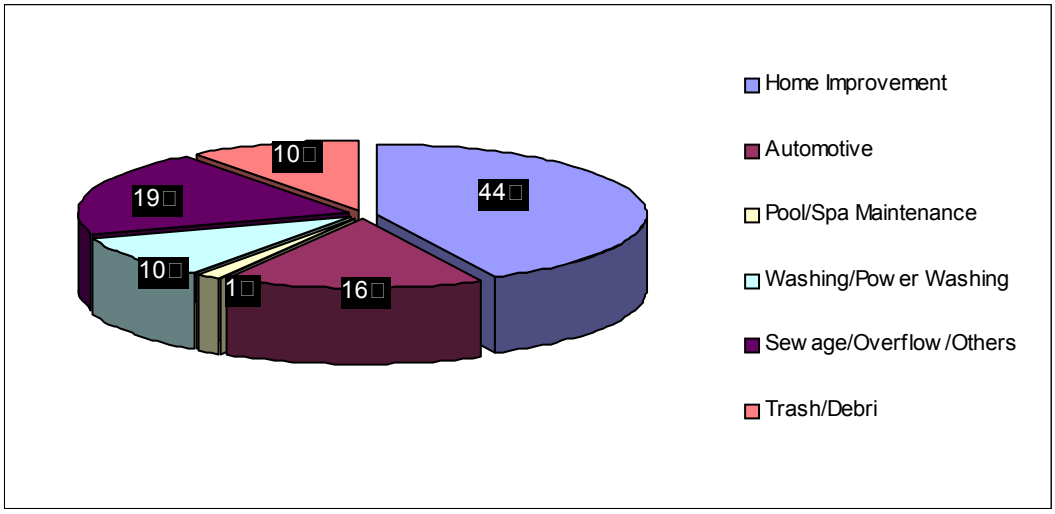

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's JURMP has designated BMPs for a number of high TTWQ residential activities including home improvement and maintenance, automotive maintenance, waste management and disposal, and pet waste management. In addition, residential areas within the City have been designated as areas with a high TTWQ. It is important to recognize that the dynamic behind strict enforcement of requirements regulating residential BMP implementation is quite challenging, however, the City has developed a number of mechanisms through which information on BMPs are disseminated to the public and ultimately enforced through the City's Storm Water Ordinance. Mechanisms such as special community events, school presentations, and community newsletters were utilized within the defined reporting period of this report. Examples of such programs and outlets include:

- Household Hazardous Waste Collection Events
- State-Certified Used-Oil Collection Centers
- Household Collection of Used Cooking Oil
- Christmas Tree Recycling Program
- Residential Complaint Response & Enforcement
- Residential Door Hangers
- City's environmental website at: www.chulavistaca.gov/clean

Notably, all of the mechanisms listed have been detailed throughout other sections in this report. It is confirmed that the designated BMPs were required to be implemented through public education and enforcement action, where necessary.

6.4 PROGRAM IMPLEMENTATION

The residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted, so that pollutants associated with residential activities and areas are minimized to the MEP. The residential program also has an education component, described in the following sections, so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities. The City uses enforcement mechanisms when necessary to address particularly problematic individuals, activities, and areas.

6.4.1 MANAGEMENT AND DISPOSAL OF USED OIL AND HOUSEHOLD HAZARDOUS MATERIAL

The City facilitates the proper management and disposal of used oil, toxic materials, and all other Household Hazardous Waste (HHW). Residents are educated about the disposal of such waste through the City's educational program, which is described in Section 8.0. The City meets and often exceeds requirements set forth by the California Integrated Waste Management Board (CIWMB). The program has the capacity to receive and process the used oil generated by City residents. The amount of used oil collected increased significantly since the last reporting period as presented in Table 4-1. We attribute this increase to public education and the City's active role in coordinating with Certified Centers in rebate claims program and the participation in filter exchange events. The South Bay Used Oil Recycling Program has been evaluated to be one of the most successful programs implemented by the City of Chula Vista, National City, and Imperial Beach in improving environmental quality. Residents of these cities may recycle oil filters and up to 5 gallons of used oil at the curb on their regular trash and recycling collection day at no additional charge. Residents of Chula Vista may also take used oil to the various facilities in the City for disposal.

Additionally, the City provides its residents and neighboring municipalities the means to properly dispose of HHW at the facility located at 1800 Maxwell Road, Chula Vista. The facility is open every Saturday from the hours of 9 AM to 1 PM. Because of the continuous high volume amount of HHW collected and demand from the public, the City decided to also open the facility on Wednesdays from 1 PM to 3 PM. The City also offers "door-to-door" collection of HHW for a small fee. Under this program, HHW is collected by appointment from residents who are unable to physically take the waste to the permanent facility or because of scheduling conflicts.

Table 6-1 Amount of HHW and Used Oil Collected FY2007-2008

Household Hazardous Material	Quantity of waste collected (FY 06-07)	Quantity of waste collected (FY 07-08)
	254,583 lbs	220,008 lbs
Used Oil	Quantity of used oil collected (FY 06-07)	Quantity of used oil collected (FY 07-08)
	57,393.5 gallons	134,314.70 gallons

6.4.2 RESIDENTIAL AREAS AND ACTIVITIES EVALUATION METHOD

A total of 25% of the City's 33,366 acres is designated as either multi- or single-family residential. Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the water quality of receiving waters. The City has developed various mechanisms that aim to reduce pollutant runoff from residential areas and activities to the MEP. The following mechanisms are used by the City to determine areas where enforcement actions may be necessary, where appropriate:

- Public reporting hotline
- Analysis of Dry Weather Monitoring Program results
- Observations from City maintenance personnel

Further information about the City's hotline reporting system and Dry Field Screening and Analytical Monitoring Program are provided in Section 9 of the JURMP. The City evaluates its methods used to encourage improved pollution prevention practices and the implementation of BMPs through the review of the aforementioned mechanisms. The City will continue to develop measures to inspect and investigate areas of the City that are considered high TTWQ. City personnel investigate violations with enforcement authority within a reasonable timeframe. Violations are documented and depending on the nature and severity of the violation, enforcement may consist of any of the following:

- Verbal Warnings
- Written Warnings
- Orders to Clean and Abate
- Monetary Fines

Details of these procedures are included in Section 2 of the JURMP document.

The general public continued to effectively participate in the program by reporting pollutant generating activities or practices observed within their neighborhoods. Based on the number of calls received from the public during this reporting period, it can be construed that the general public's awareness of water quality issues continue to improve and people are more sensitive about the environmental quality of their surroundings. Information collected from the City's database, George Butler Associates Work Management System (GBA) database, can also characterize those activities and sources that have more implications on water quality as presented in Figure 6-1. The expanding residential community that makes up the City defines

the residential component of the City's JURMP. As such, the Storm Water Management staff has sought to achieve success in the reduction of pollutants through a variety of mechanisms geared toward behavior change. This has been approached through the characterization of a variety of activities and pollutant types resulting from such activities. As such, the Storm Water Management staff has identified a specific need to reach out to the residential community to communicate a broad-based message of environmental stewardship and protection of water quality.

6.4.3 VIOLATIONS AND ENFORCEMENT ACTIONS TAKEN

Enforcement of the residential program has been established and addressed in the City's Storm Water Management and Discharge Control Ordinance and in Chula Vista Municipal Code Title 1. During this reporting period, Storm Water Compliance Inspectors responded to over 131 violations, of which 77 were residential. Forty-one of the investigations resulted in citations. The total amount of fines collected during this reporting period from residential violations was $3,900.00. Follow-up inspections were conducted when necessary to ensure that full compliance is achieved. Storm Water Management staff respond to reports of residential and other violations; investigate each case; take appropriate actions regarding containment of pollution; educate the violating party on existing laws and regulations; make follow-up visits, where necessary; and, proceed with enforcement action if voluntary compliance is not achieved.

Data management of past violations helps City staff to identify repeat residential violators. Repeat violators are subject to more severe enforcement action due to the fact that the violation can no longer be considered an act of ignorance of water quality protection laws and regulations, but is a deliberate act. Some of the cases were resolved without resorting to enforcement action. In other cases, enforcement actions were taken regarding residential areas. Details of reported violations are included in Attachment I.

6.4.4 RESIDENTIAL EDUCATION PROGRAM

Education is an important step in working towards improving receiving water quality both locally and regionally. By increasing public awareness and encouraging a change in both the attitude and the behavior of the general public and the regulated community, the City may reduce or eliminate storm water pollution caused by common daily activities.

6.4.4.1 JURISDICTIONAL RESIDENTIAL EDUCATION PROGRAM

The Storm Water Management Section collaborates with the Environmental Services Division and the Energy Conservation Department in the implementation of the Regional Residential Education Program. Storm water information is disseminated by actively participating in community events throughout the year. Informational booths at fairs, flyers, brochures, website postings, advertisements, and other educational materials are the various approaches used by City staff in disseminating storm water information. Such programs raise awareness of the City's storm water programs. Residents recognize that they have the ability to improve local water quality by making a few simple changes to their regular routines. The Storm Water

Management Section continues to provide a comprehensive storm water education program to the residential community, general public, and school children.

Many educational efforts such as direct interaction during reported violation investigations or when taking calls to the City's Storm Water Hotline are conducted on an ongoing basis. Educational materials are also available throughout the year. Targeted mailings, focused training sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of complaints, and other similar factors.

Residential complaint response and enforcement relies heavily upon reporting of illegal activities. As such, an integral component of residential outreach and education is to encourage the reporting of pollutant generating activities or practices observed by citizens within their neighborhoods. To further support the reporting efforts, the City relies heavily upon well-trained municipal staff who effectively operate as the "eyes and ears" of the City.

6.4.4.2 REGIONAL RESIDENTIAL EDUCATION PROGRAM

During this reporting year, the City continued to collaborate with the Education and Residential Sources Workgroup to develop and implement the Regional Residential Education Program (Program). In order to develop this Program, the Copermittees contracted a consultant to develop Recommended Options for the San Diego Regional Storm Water Education Program. This document contains a number of recommended strategies, an extensive literature review, an analysis of existing educational programs, and a comprehensive list of public awareness surveys. The overall education goals of the Program are to increase storm water awareness and knowledge, improve attitudes toward storm water pollution, and provide a foundation for changing behaviors that contribute to storm water pollution. The program aims to develop a consistent storm water education message throughout the region, to leverage resources and utilize economies of scale, and make collaborative approaches.

The City is an active participant in the Education and Residential Education Workgroup and collaborates with other Copermittees on all aspects of joint activities and programs. The workgroup is in the process of developing a workplan to implement the Regional Residential Education Program and a Regional Education Program Five Year Implementation Schedule.

6.4.5 MANAGEMENT OF URBAN RUNOFF FROM RESIDENTIAL AREAS AND ACTIVITIES

As detailed throughout this report, the City institutes a variety of highly effective pollution prevention programs to provide the residential community with venues and outlets for disposal of wastes and to provide invaluable information and education on the impacts of improper waste disposal. A consistent message of stewardship through everyday actions and behaviors and the importance of protecting and maintaining the quality of our natural resources are presented through a variety of outlets. It is because pollution prevention is the most economical and effective way of protecting water quality, that this element is given higher priority, and has proven to be a successful measure for the City over time.

The City uses another notable measure in certain residential areas where BMP implementation is regarded as especially important. The City's GBA database system collects data from residential inspection and violation reports and check for individuals with repeated non-storm water discharges or BMP issues. The City analyzes this data to identify areas where more attention should be focused as presented in Attachment J. The City sends out informational materials to residential areas that are believed to contribute to storm water pollution.

The City has a number of programs in place to promote environmental stewardship and storm water pollution prevention among its residents. Section 8.0 details the education programs that the City has implemented in order to encourage positive behavior changes in residents.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(f).i - Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.

Permit Section J.3.a.(3)(f).ii - Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.

Permit Section J.3.a.(3)(f).iii - Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.

Permit Section J.3.a.(3)(f).iv - A brief description of any other investigations and follow-up activities for illicit discharges and connections.

Permit Section J.3.a.(3)(f).v - The number and brief description of illicit discharges and connections identified.

Permit Section J.3.a.(3)(f).vi - The number of illicit discharges and connections eliminated.

Permit Section J.3.a.(3)(f).vii - Identification and description of all spills to the MS4 and response to the spills.

Permit Section J.3.a.(3)(f).viii - A description of activities implemented to prevent sewage and other spills from entering the MS4.

Permit Section J.3.a.(3)(f).ix - A description of the mechanism whereby notification of sewage spills from private laterals and septic system is received.

Permit Section J.3.a.(3)(f).x - Number of times the hotline was called, as compared to previous reporting period, and a summary of the calls.

Permit Section J.3.a.(3)(f).xi - A description of efforts to publicize and facilitate public reporting of illicit discharges.

Permit Section J.3.a.(3)(f).xii - The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(f).xiii - A description of notable activities conducted to manage illicit discharges and connections.

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2007-2008 Illicit Discharge Detection and Elimination Component; copies of the City's 2008 Dry Weather Field Screening and Analytical Monitoring Program Report and Follow-Up Investigations; and related attachments no later than December 15, 2008.

8.0 EDUCATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(g).i - A description of education efforts conducted for each target community.

Permit Section J.3.a.(3)(g).ii - A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.

Permit Section J.3.a.(3)(g).iii - A description of education efforts conducted for municipal departments and personnel.

Permit Section J.3.a.(3)(g).iv - A description of education efforts conducted for the new development and construction communities.

Permit Section J.3.a.(3)(g).v - A description of jurisdictional education efforts conducted for residents, the general public, and school children.

8.1 INTRODUCTION

The City has identified public education and outreach as powerful and effective tools towards increased awareness and behavioral changes that will ultimately lead to reduced pollutant loading from various land uses. The City considers voluntary pollution prevention to be one of the most effective means of achieving long-term reductions in urban runoff pollution. This objective is achievable only through public education and outreach that makes an impression on the community and invokes changes in behavior. As such, the City has approached the development and implementation of educational components by targeting the following audiences:

- Municipal staff
- Residential community, general public and schools
- Industrial and commercial business owners and operators
- Construction and development community
- Underserved communities

The City's Storm Water Management Program is strongly supported by a variety of environmental programs within the organization that provide an exceptional vehicle for disseminating educational materials to the general public regarding storm water pollution prevention. Specifically, the City's Environmental Services Division, under the South Bay Regional Used Oil Recycling, Household Hazardous Waste Collection and Recycling Programs target issues directly connected to storm water pollution prevention. The Chula Vista Nature Center also provides an invaluable venue for public participation and the promotion of conserving, preserving, and protecting San Diego Bay. Through these programs and facilities, activities such as annual school presentations, waste collection events, and public outreach events are conducted in collaboration with the Storm Water Management Section. During such

events, the general public is exposed to water quality concerns, pollution prevention techniques, and BMPs to prevent storm drain pollution. The following sections provide a summary of various activities and venues utilized within the defined reporting period of this report to achieve public education and outreach goals for municipal staff, business owner, construction, new development, general public, and targeted communities.

8.2 STAFF TRAINING ELEMENT

Staff education and training on water quality issues takes several forms as follows:

- General storm water education for all City employees
- Education targeting staff engaged in the review, approval, and inspection of new development and redevelopment projects
- Training for City staff responsible for the maintenance of the City's infrastructure

General storm water protection and pollution prevention education for City staff is provided and reinforced on an ongoing basis. While a number of communication venues are available and have been relied upon in previous reporting years, the most valuable education comes through the implementation of Citywide pollution prevention and waste reduction programs. Recycling programs are in place throughout City facilities, and serve as a constant reminder to staff of the City's commitment to pollution prevention.

During the reporting period, education for staff engaged in the City's permitting process for new development and redevelopment has been achieved through a number of venues. Targeted training activities have been conducted to reinforce water quality priorities in the field of land development and planning, including Standard Urban Stormwater Mitigation Plans (SUSMP) implementation strategies. In addition, development planning and engineering staff is consistently exposed to water quality priorities on a project-by-project basis through project meetings, workshops, and field visits. City Storm Water Management staff also provides training on the City's Development Storm Water Manual. While specific workshops have been organized in previous reporting years covering such topics as laws and regulations, water quality impacts, and applicable BMPs, a focus on internal SUSMP implementation policy, procedure and guidance training has been emphasized during the defined reporting period of this report. Within this framework, those departments and staff involved in the SUSMP review process have been apprised of the need to utilize site design techniques as well as higher efficiency treatment control BMPs for project design in meeting the City's SUSMP requirements. This approach has proven integral in ensuring ongoing SUSMP implementation refinement and in unifying the focus on site design techniques and the use of higher efficiency treatment control BMPs.

Most notably, and consistent with previous reporting years, Storm Water Management staff provides focused training on storm water BMPs to various City departments and divisions on an as needed basis. Such training may be in the form of formal workshops, or on the job training. The following staff has received storm water training on an as-needed basis:

- Wastewater Maintenance
- Storm Drain Maintenance

- Street Maintenance
- Open Space Maintenance
- Traffic Signing and Striping
- Transit
- Vehicle Maintenance
- Land Development
- Public Works Inspections

In addition, presentations by the manufacturers and vendors of structural BMPs were organized and arranged in the City, such as presentations on modular wetlands and porous pavement technologies.

Table 8-1 details the training, workshops, and seminars that City staff attended and/or gave to other departments during the reporting period. Below is a summary of general concepts that were covered during the trainings.

- Federal, state, and local water quality laws and regulations applicable to municipal areas and activities, development and redevelopment projects, and construction projects;
- Required federal, state, and local permits pertaining to water quality;
- Water quality impacts of urbanization, municipal activities and areas, and construction sites;
- The connection between land use decisions and short-term and long-term water quality impacts;
- Methods for minimizing the impacts on receiving water quality and watershed.

Table 8-1 Municipal Staff Education FY 2007-2008

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
07/26/07	LID Training	City staff received training on LID concepts from UC Davis and County of San Diego	City of Chula Vista
11/08/07	IEA Seminar	City storm water staff attended this seminar on "The Greening of CA Businesses"	IEA
11/19/07	SUSMP and HMP Workshop	City storm water staff attended this workshop about SUSMP and HMP concepts	County of San Diego
01/11/08	CASQA	Annual Federal and State Stormwater and Water Quality Regulatory Programs Update	CASQA
01/11/08	Construction Inspector Training	Storm water inspection training for staff who perform inspections during the building phase of construction projects	City of Chula Vista
02/11/08	Bio Clean Presentation	Treatment control BMP training on Modular Wetlands	City of Chula Vista

Table 8-1 continued on next page

Table 8-1 continued

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
02/25/08	San Diego County LID Requirements	City Engineering, Planning, and Storm Water staff attended training on LID requirements, benefits, and planning	APWA
02/27/08	San Diego County LID Requirements	City Engineering, Planning, and Storm Water staff attended training on LID requirements, benefits, and planning	APWA
03/14/08	New Municipal Permit – SUSMP Updates	Storm water staff provided training to Engineering and Land Development Staff about the updated SUSMP, WQTRs, pollutants of concern, BMP selection, maintenance, Construction Permit, and phased grading.	City of Chula Vista
03/25/08	LID Seminar	City staff received training on LID principles, the SD County LID guidelines, and treatment BMPs	San Diego County Department of Public Works
04/29/08	Segmental Pavers Seminar	Storm water staff received training on advanced pavement technology as a BMP	Filterra
05/13/08	WQTR Training	Storm water staff provided training to Engineering Staff about WQTRs	City of Chula Vista
05/21/08	NPDES General Training	Storm water staff provided training to Code Enforcement Staff on storm water concepts, enforcement, field observations, and reporting	City of Chula Vista
05/30/08	Program Effectiveness Assessment Workshop	Storm water staff attended program effectiveness assessment training given by CASQA	CASQA

8.3 EDUCATIONAL OUTREACH ELEMENT

8.3.1 RESIDENTS, GENERAL PUBLIC, AND SCHOOL CHILDREN

During this reporting year the CLEAN group, made up of the City's environmental departments and various environmentally focused stakeholders, has continued to collaborate on various environmental education programs within the City. The following mission statement established by the CLEAN workgroup has guided these efforts:

"Foster environmental awareness in the City of Chula Vista, through stakeholder and community involvement and participation."

The CLEAN education program was developed around three primary elements: 1) Media 2) Community Interaction and 3) Stakeholder Coordination. It is important to distinguish the focus of this program to promote not only community education, but also community action.

In efforts to maximize the overall effectiveness of this program, and to capitalize on the interrelationship of various Chula Vista environmental programs, the program has been branded under the tag line of "**Your Community. Your Environment. Your Choice."**

The culmination of efforts of the various involved departments has been embodied in the established CLEAN program, and will provide an effective and powerful body to guide the significant efforts envisioned for the program. It also anticipated that these efforts would be further strengthened through support of community stakeholders including non-profit and business entities.

Based on the CLEAN branding, media elements including billing inserts, bus signs, stickers, stationary, t-shirts, and a booth display continued to be implemented within the defined reporting period of this report. In addition, the CLEAN web site has been established with pages dedicated to water quality protection and pollution prevention Citywide. The CLEAN website www.chulavistaca.gov/clean has information about the environmentally focused departments in the City including Storm Water Management, Environmental Services, Conservation, and the Chula Vista Nature Center. The storm water section has information specific to residents, the development community, mobile businesses, and industrial and commercial businesses. Figure 8-1 shows a general snapshot of the CLEAN homepage.

As the CLEAN program continues to be developed, a wide array of media outlets have been explored, and it is anticipated that the established branding will be incorporated into media developed in subsequent reporting years. As indicated above, the larger CLEAN campaign has been designed to promote not only education, but also to encourage and facilitate community actions.

While the City has developed and maintained a variety of new residential education and public outreach opportunities, the City has sustained a number of existing outlets and events. In 2007-2008, the City continued to use seasonal pollution prevention messages on the side of waste management vehicles to encourage the proper disposal of such items as cooking grease and holiday trees. In addition, the City continued to distribute a number of promotional items with pollution prevention messaging for distribution at presentations and community events. Promotional items included CLEAN branding and messaging on such items as chip clips, pens, pencils, calculators, mini flashlights and rulers.

Figure 8-1 CLEAN Homepage

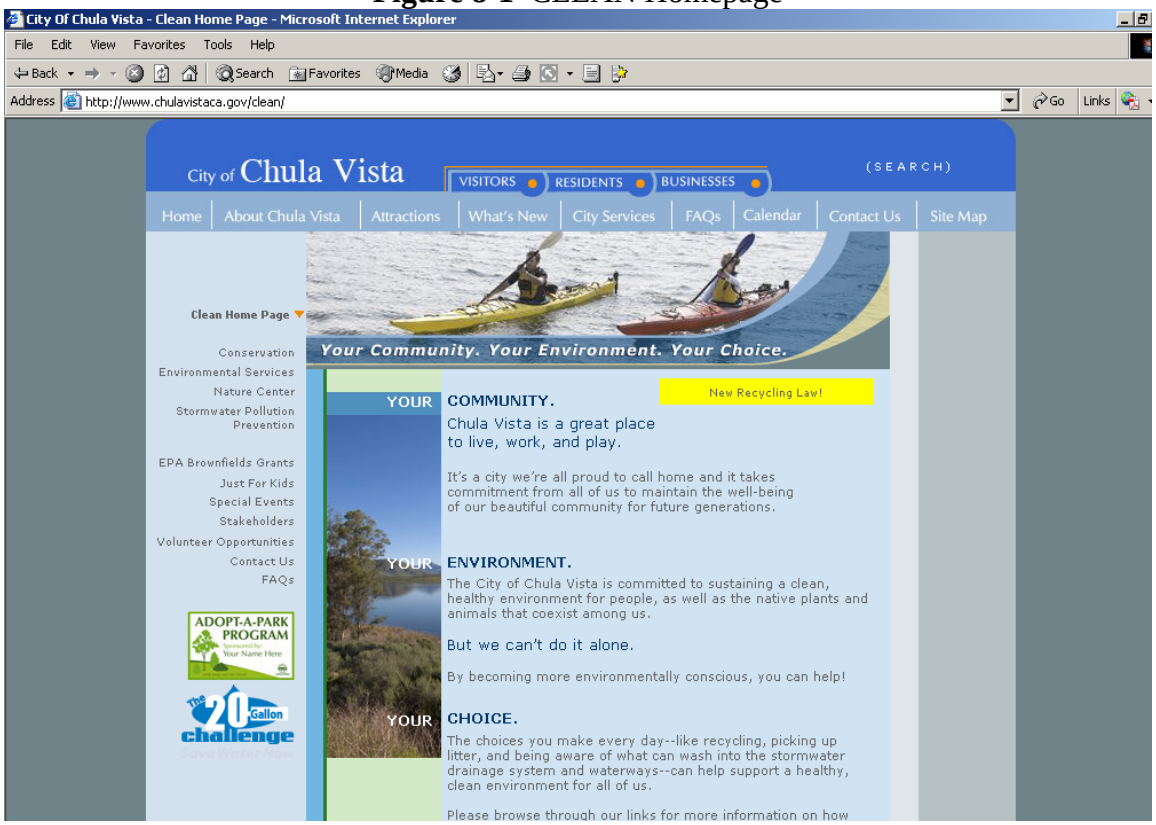

In capturing the array of concepts and ideas that have emerged through the collaborative development process of the City's Storm Water Management Section and CLEAN Stakeholders, a set of six trail displays (Figure 8-2) have been strategically placed through the City during the reporting year. Trail displays have been installed at the following locations:

- Chula Vista Nature Center
- Mountain Hawk Park
- Hilltop Park
- Salt Creek Park
- Rice Canyon
- Corner of Telegraph Canyon Road and La Media

This concept was conceived from the core concept of a broad environmental message that spans the entire City. The trail displays include information on a variety of interrelated environmental issues, and remind the public of the precious resources that exist within the City. The trail display concept provides commercial or industrial entities the opportunity to receive public recognition through the support of such efforts. The City plans to implement more displays from the Bay Front to the eastern territories, which would demonstrate the connectivity of environmental concerns throughout the City.

Figure 8-2 City of Chula Vista CLEAN Trail Display

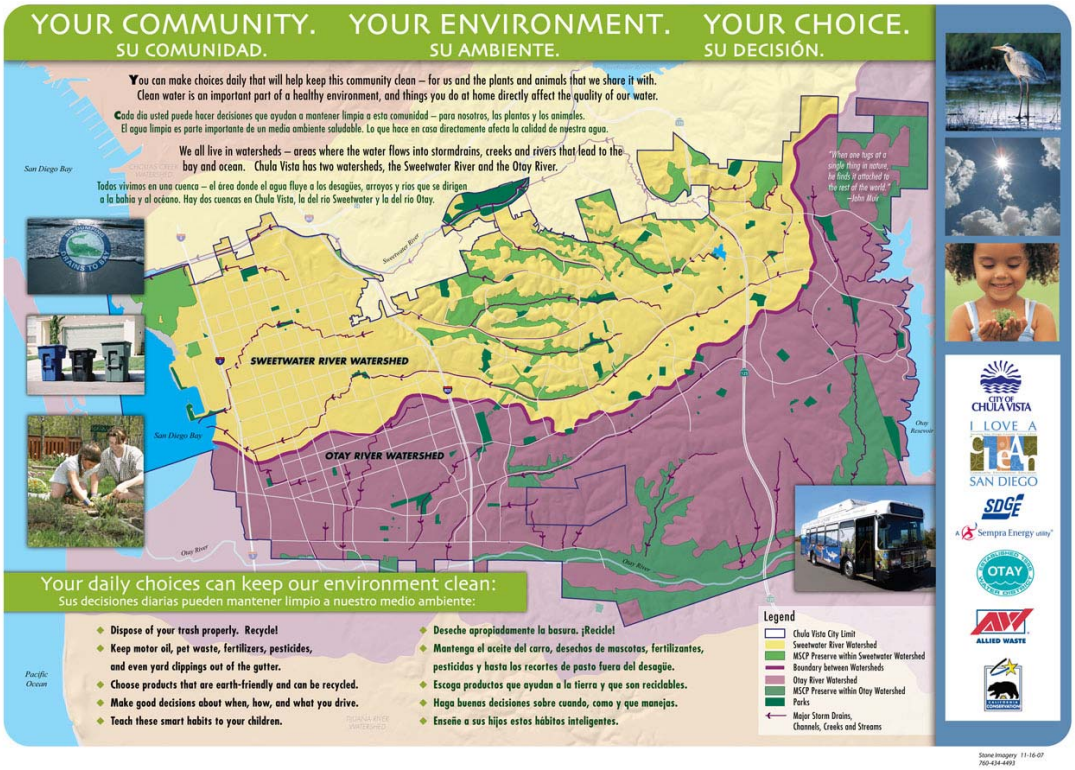

School Education Efforts

Last reporting year, the City implemented the Salt Creek Critters Program, which focused on pollution prevention and watershed protection. The program's target group was elementary school children. Due to the success of the program, the City is in the planning phase for a similar program for implementation in fall 2008, called South Bay Water Warriors.

Community Events

The City of Chula Vista Storm Water Management Section and Environmental Services Division participate in various community events held throughout Chula Vista and San Diego County. Each of these events provides an opportunity to reach citizens throughout the watershed by setting up educational booths and displays.

Community events have been identified as valuable venues providing excellent opportunities to reach large numbers of citizens. The City's Storm Water Management and Environmental Services staff participates in and sets up booths and displays at all major South Bay community events. City staff provides education and outreach materials regarding a variety of interrelated environmental issues facing the City of Chula Vista. Distributed information includes concerns over storm water pollution and the need to protect local waterways. By participating in these community events, City storm water staff has the opportunity to generate hundreds of thousands of impressions each fiscal year.

Chula Vista Nature Center

The City of Chula Vista Nature Center, located within the 316-acre Sweetwater Marsh National Wildlife Refuge of San Diego Bay, is an internationally recognized zoo/aquarium exhibiting plants and animals native to San Diego Bay and marsh/wetland habitats. The Nature Center provides the San Diego Bay watershed with a truly unique and invaluable outreach and education resource.

The Nature Center's mission is to educate the public about the importance of coastal resource conservation and environmental stewardship. Through visits to the Nature Center and its offsite programs, nearly 72,000 people are exposed to these critical environmental messages each year. To help facilitate educational experiences, the Nature Center offers field trips, guided walks, classes, tours, and special projects. Annually, organized school programs (approximately 15,000 K-6 children, 2,000 7-12 graders, and another 2,000 college students) visit the Nature Center to learn about the watersheds of San Diego Bay and what they can do to protect San Diego Bay.

- The Chula Vista Elementary School District (CVESD) funds a full-time Science Resource Teacher who works closely with the Nature Center staff to provide environmental education programs which are integrated in their science and social studies curricula. This teacher works with over 5,000 CVESD students each year.

- Other schools and youth groups schedule field trips to the Chula Vista Nature Center after the leader participates in a 2-hour Field Trip Orientation Workshop (a teacher training program) held at the Center to gain familiarity with the Nature Center and the Sweetwater Marsh National Wildlife Refuge. During these field trips, Nature Center docents guide students around the Center and grounds, where they learn about the importance of watersheds, wetlands, and other coastal resources.

- In partnership with the U.S. Fish and Wildlife Service, Chevron, and the San Diego Zoo, a backpack program called Sweetwater Safari is offered to teachers who have already brought students to the Nature Center. In this hands-on program, students take backpacks containing binoculars, mini-microscopes, and other materials to discover plankton, birds, plants and animal tracks on the trails of the Sweetwater Marsh National Wildlife Refuge.

Students learn to recycle, reuse, and reduce waste. They also learn how to correctly use storm drains and the types of pollutants commonly identified in the storm drain system. The Chula Vista Nature Center and Conservation Department also conduct "Less Toxic Gardening" classes twice a month, dealing specifically with pesticide use, as well as composting classes.

Table 8-2 summarizes the education efforts of the City for residents, school children, and the general public during the reporting year.

Table 8-2 Education Outreach Provided FY2007-2008

DATE	EVENT	EVENT DESCRIPTION	SITE NAME/ LOCATION
08/12/07	Lemon Festival	City staff manned a booth and distributed IPM Pest Tip cards and the CLEAN brochures	Downtown Chula Vista
09/08/07	Kid's Festival	City staff manned a booth and distributed information about pollution prevention and used oil recycling	New Hope Community Church
09/29/07	Bonitafest	City staff manned a booth and distributed CLEAN brochures and IPM Pest Tip Cards	Bonita Road Shopping Center
10/06/07	Chula Vista Fire Department Open House	Storm water staff had a booth at the open house and provided pollution prevention training to citizens	Fire Station 4
10/06/07	Beautify Chula Vista	Storm water staff provided pollution prevention training to citizens	Southwest Chula Vista
10/06/07	Go Green and Clean Day	Staff provided training on pollution prevention and provided CLEAN brochures and IPM Pest Tip cards	Otay Ranch Town Center
10/17/07	Citizen's Academy	City staff provided storm water training to citizens	Chula Vista Public Works Center
04/12/08	Day of the Child/ Put Your Butt in the Right Place	City staff provided storm water education to citizens	Memorial Park
04/19/08	Festival del Sol	City storm water staff had a booth at the event and provided information about storm water pollution prevention	Otay Ranch Town Center
04/30/08	Earth Day Booth	City staff provided education on hazardous waste disposal and pollution prevention	Imperial Beach Pier
05/30/08	AVID Presentation	City staff in collaboration with the airport, provided information about storm water principles to middle school kids.	Ocean View Hills School
06/03/08	Tow Yard Training	City staff provided training to tow yard owners and managers about general storm water concepts and storm water inspections	Chula Vista Police Department

Table 8-2 continued on next page

Table 8-2 continued

DATE	EVENT	EVENT DESCRIPTION	SITE NAME/ LOCATION
Year-round	Watershed, Recycling, Storm Drain Pollution Education	Organized School Group Visitors to the Chula Vista Nature Center	Chula Vista Nature Center

Regional Outreach

During the reporting year, Copermittees collaborated on a number of education outreach activities and events, including further development of the Regional Residential Storm Water Education Plan that was submitted to the RWQCB in March 2008. One of the most notable activities conducted during FY07-08 and into FY08-09 was Copermittee collaboration and sponsorship of the San Diego County Fair from June 14, 2008 – July 6, 2008. The City of San Diego, along with the San Diego Copermittees, used the Think Blue campaign branding during fair media exposure and for the fair displays. The Copermittees focused their efforts on educating the public about Integrated Pest Management (IPM) practices. The IPM pest tip card packets were distributed, along with other giveaways to promote storm drain pollution prevention. During the fair, the Copermittees administered a survey to over 1,200 fair attendees. Results of the survey will be reported in the FY08-09 annual report. The Copermittees are planning similar educational outreach events that are focused on region-wide education.

8.3.2 INDUSTRIAL AND COMMERCIAL FACILITY OWNERS AND OPERATORS EDUCATION

Educational activities targeting industrial and commercial sectors have been produced through local and regional efforts. Regional efforts have included various storm water educational events and workshops targeting businesses and residents. During the reporting period, the City has utilized the following primary mechanisms to provide ongoing education to the industrial and commercial communities within the City:

- Distribution of printed materials
- One-on-one education of business owners and managers during industrial and commercial inspections

As part of the City's industrial and commercial facility inspections, the City's inspectors meet with the facility owners or managers and explain water quality issues relating to the particular type of industrial or commercial facility. BMPs relevant to the activities at each facility are explained and, corrective actions are proposed to bring the facility into compliance. Consequences of non-compliance are also brought to the attention of the facility owner/manager. In all cases, copies of the Chula Vista Storm Water Management and Discharge Control Ordinance are handed to the facility owner/manager. The City also distributes the regionally developed "Green Wrench Guide" for automotive facilities, and the "What's Cooking?" guide for food related businesses.

8.3.3 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITY

Education of the development community is approached by the City through two primary audiences: 1) education and training of City staff and 2) education of project applicants, developers, contractors, design engineers, and property owners. As with multiple elements reviewed throughout this report, the City of Chula Vista Development Storm Water Manual provides development project proponents with a fundamental guidance tool for development activities in the City. City Storm Water Management Staff actively engages the development and construction communities working within the City in a proactive effort to educate and expose these entities to the regulatory standards established within the jurisdiction.

As in previous reporting years, the education and training of the development community within Chula Vista has primarily been addressed on a project-by-project basis. As the larger development community has been exposed to SUSMP requirements throughout the region and through a broader message, Chula Vista accommodates project applicants with project specific direction and analysis. Through the comprehensive review of development and redevelopment projects, and subsequent meetings and discourse, project applicants are apprised of the suitability of proposed project components in compliance with SUSMP requirements and the City's emphasis on the use of site design features and high efficiency treatment control BMPs.

Educational activities within the development community are provided throughout the development process from design and planning through construction. As such, educational outlets have been provided by the City at each phase, and have been discussed in Section 2.0 of this report. The following is a list of highlights from the referenced section.

- Project specific post-construction requirements education and training
- The City Development Storm Water Manual
- Pre-construction meeting participation by storm water inspection staff
- On-site construction BMP training
- Participation in regional education and training activities

8.3.3 TARGETING UNDERSERVED COMMUNITIES

The City targets underserved communities and high-risk behaviors through three programs:

- CLEAN education campaign
- Beautify Chula Vista Day
- Graffiti Abatement Program

The CLEAN education campaign has developed a variety of media elements that promote the City's environmental programs such as brochures, website, and giveaways in both English and Spanish. The CLEAN website provides an easy and cost-effective method for the City to reach out to citizens and promote storm water pollution prevention awareness. The City also distributes a variety of giveaways with the CLEAN message to reach different age groups such as calculators, mini-footballs, pencils, pens, and chip clips.

During the reporting period, the City, in cooperation with I Love a Clean San Diego, supported the annual Beautify Chula Vista Day that focuses on citizen participation in keeping the City clean. Volunteer groups have the opportunity to participate in storm drain stenciling, cleanup of trash, graffiti removal, and plant trees. Efforts are usually focused in areas of the City where more attention is needed due to trash and graffiti problems. Over 800 volunteers participated in the Beautify Chula Vista Day in October 2007.

The graffiti program allows citizens to report graffiti in their neighborhoods by phone or by email. City staff is also encouraged to call and report any graffiti they see while they are out in the field. There were over 1,500 emails and calls to the graffiti hotline (some duplicated) during the reporting period, showing that City staff and residents are taking an active role in promoting a clean City.

9.0 PUBLIC PARTICIPATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(h).i - A description of public participation efforts conducted.

9.1 INTRODUCTION

The City encourages and fosters environmental responsibility by supporting community events, activities, and programs that improve storm water awareness. Changing behaviors of residents and the general public can lead to improved water quality. Cleanup events can promote awareness and can lead to a load reduction of trash to receiving waters. In addition to the educational component presented in Section 8.0, the following sections provide an overview of significant public participation opportunities provided or supported by the City within the defined reporting period.

9.2 PROGRAM IMPLEMENTATION

Beautify Chula Vista Day – October 6, 2007
Beautify Chula Vista Day is an annual event that involves citizen participation in activities that improve the City and provides opportunity for City staff to have direct interaction with the public. Volunteer citizens are able to participate in tree planting, graffiti removal, clean-up projects, and storm drain stenciling. With participation from over 800 volunteers of all ages, the group was able to remove more than one ton of debris including plastic bags, recyclable bottles and cans, mixed paper and cigarettes from various locations in urban areas of Chula Vista. Volunteers also erased over 500 square feet of graffiti, stenciled 80 storm drain inlets, and planted 29 trees throughout the City.

Put Your Butt in the Right Place Day/ Day of the Child Event – April 12, 2008
The Put Your Butt in the Right Place Day was an anti-cigarette litter campaign that the City implemented with the help of the Surfrider Foundation. The event was held in Memorial Park in Downtown Chula Vista. The event coincided with the Day of the Child Event, which provided an opportunity to have contact with Chula Vista citizens. Ten high school and college volunteers provided education about cigarette butt disposal and storm water pollution prevention to attendees at the event as well as shop patrons along Downtown 3rd Avenue. Volunteers distributed the City of Chula Vista cigarette butt informational flyer, personal ashtrays, Hold on to Your Butt Stickers, CLEAN footballs, and CLEAN calculators. Storm Water Management staff manned the Household Hazardous Waste Booth along with Environmental Services staff and handed out pamphlets about using less toxic chemicals in their homes and recycling information. They also distributed personal ashtrays, pens, pencils, calculators, footballs, and shopping bags with environmental and water quality messages.

Otay Valley Regional Park Cleanup
The Otay Valley Regional Park (OVRP) http://www.ovrp.org/ is being developed as a collaborative effort of the cities of Chula Vista and San Diego, City of San Diego Water Works, and the County of San Diego. These jurisdictions have adopted the OVRP Concept Plan, which

identifies recreation areas, trails, overlook points, and staging areas for future park use. The park contains several hundred acres of land in the floodway and floodplain areas and undisturbed land along the steep slopes adjacent to the Otay River. Seven fresh water ponds, created from past gravel and sand mining operations, are within the park. OVRP extends from South San Diego Bay to the Lower Otay Reservoir and from Chula Vista's southern boundary to the communities of Otay Mesa and Nestor, encompassing 11.2 square miles of land. The Otay River Valley Cleanup Project (Cleanup Work Project) currently encompasses the Western Otay Valley Regional Park (Nester Creek east to I-805) and Eastern Otay Valley Regional Park – Proctor Valley (North End Upper Otay Lakes Reservoir).

The Cleanup Work Project encompasses efforts by many organizations including the OVRP Citizens Advisory Committee coordinating the Donovan Prison Community Crew, California Conservation Corp (CCC) coordinated by the City of San Diego WOVRP Rangers, County of San Diego Otay Lakes Park Rangers (provided dump truck and driver), Friends of the Park (coordinates Proctor Valley Cleanup), Allied Waste (delivering and picking up of large waste bins), City of San Diego Environmental Services, City of Chula Vista Public Works, and Hanson Aggregates (provided heavy equipment as needed).

Park cleanup activities include debris removal, encouraging transients to leave the area, improving security by preparing for fencing, trimming foliage, planting trees and other vegetation, and placing signage identifying the OVRP. Table 9-1 details the cleanup and abatement work at the OVRP from July 1, 2007 through June 30, 2008.

Table 9-1 Cleanup and Abatement Work at the OVRP

DONOVAN COMMUNITY CREW AND CAC MEMBERS	
Labor Hours	4,752
Trips to Otay Land Fill	122
Tons of trash removed	169
Tons of concrete and asphalt removed	2
Old homeless camps removed	18
Abandoned drug dens removed	2
Tires removed	28
Shopping carts removed	31
CCC – CONCRETE AND ASPHALT REMOVAL CONTRACT	
Labor Hours (11/01/07– 06/30/08)	500
Trips to Otay Land Fill	30
Tons of concrete and asphalt removed	300
CITY OF SD OVRP RANGERS – DAILY PARK MAINTENANCE	
Labor Hours	405
Tons of trash removed	3

Table 9-1 continued on next page

Table 9-1 continued

Tires removed	15
Shopping carts removed	32
PROCTOR VALLEY – UPPER OTAY RESERVOIR AREA	
Volunteer Labor Hours	186
Trips to Otay Land Fill	8
Tons of trash removed	23
Tons of concrete and asphalt removed	11

I Love a Clean San Diego (ILACSD) 6th Annual Creek To Bay Cleanup

The 6th Annual Creek to Bay Cleanup occurred on Saturday April 26th, 2008. The City co-sponsored this cleanup event, which was coordinated by ILACSD. This year's cleanup was presented by the San Diego County Board of Supervisors through the support of Supervisor Greg Cox and Supervisor Pam Slater-Price. The event was able to bring together over 4,000 San Diegans who spent their Saturday morning cleaning and restoring the health of our coastal and inland waterways and open space areas. Total volunteer count for this event was 4,039 participants. Volunteers accumulated a total of 200,000 pounds of debris from 154 miles of coastline and inland areas. Commonly found items included tires and beverage containers.

The event featured multiple cleanup sites in Chula Vista and surrounding areas including Del Rey Canyon, Rice Canyon, J Street Marina, and Otay Valley Regional Park. At the Chula Vista locations, 167 volunteers removed 1,093 pounds of trash and 277 pounds of recyclables from 5.5 miles of Chula Vista parks and inland waterways.

Hazardous Waste and Used Oil Recycling

The Household Hazardous Waste Facility at the City of Chula Vista Public Works Center started operation in January 2002. The City provides its residents and neighboring municipalities easy access for disposal of HHW. The Chula Vista facility is open every Saturday from the hours of 9am to 1 pm and Wednesdays from 1pm to 3 pm. This facility also offers small businesses the option to dispose of hazardous waste through its Conditionally Exempt Small Quantity Generator (CESQG) program. The City also offers "door-to-door" collection of HHW. Under this program, HHW is collected by appointment from residents that are unable to physically take the waste to the permanent facility or because of scheduling conflicts. During the reporting period approximately 2,255 households participated in the collection program. The facility is under 24-hour camera surveillance to avoid illegal dumping in and around its surrounding areas. Also, during hours of service operations staff places temporary berms in the proximate storm drain to prevent contamination in the event of a spill.

Public IC/ID Reporting and Graffiti Hotline

The City encourages its citizens to participate in keeping the City clean by reporting any illegal discharges to the storm drain, as well as any graffiti in their neighborhoods. When the City receives a graffiti complaint, City crews will remove it using environmentally friendly powerwashing equipment and BMPs. Storm Water Management Section staff investigates illegal discharges and provides education and enforcement, and Public Works crews provide cleanup as needed. As mentioned in Section 7, the City had 131 calls and complaints about

illegal discharges to the storm drain system during the reporting period. There were over 1,500 calls and emails (some for duplicate complaints) to the graffiti program during the reporting year, showing that citizens are participating and taking an active part in keeping the City clean.

10.0 FISCAL ANALYSIS COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(j).i - A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.

Permit Section G: Fiscal Analysis

1. *Each Copermittee shall secure the resources necessary to meet all requirement of this Order.*

2. *As part of the Regional Urban Runoff Management Program, the Copermittees shall collectively develop a standardized method and format for annually conducting and reporting fiscal analyses of their urban runoff management programs in their entirety (including jurisdictional, watershed, and regional activities). This standardized method shall:*

    a. *Identify the various categories of expenditures attributable to the urban runoff management programs, including a description of the specific items to be accounted for in each category of expenditures.*
    b. *Identify expenditures that contribute to multiple programs or were in existence prior to implementation of the urban runoff management program.*
    c. *Identify a metric or metrics to be used to report program component and total program expenditures.*

3. *Each Copermittee shall conduct an annual fiscal analysis. Starting January 31, 2010, the annual fiscal analysis shall be conducted consistent with the standardized fiscal analysis method included in the January 31, 2009 Regional Urban Runoff Management Program Annual Report. The annual fiscal analysis shall be conducted and reported on as part of each Copermittee's Jurisdictional Urban Runoff Management Program Annual Reports. For convenience, the fiscal analysis included in the Jurisdictional Urban Runoff Management Program Annual Reports shall address the Copermittee's urban runoff management programs in their entirety, including jurisdictional, watershed, and regional activities. The fiscal analysis shall provide the Copermittee's urban runoff management program budget for the current reporting period. The fiscal analysis shall include a description of the source(s) of the funds that are proposed to be used to meet the necessary expenditures, including legal restrictions on the use of such funds.*

10.1 INTRODUCTION

The first half of the current reporting period corresponded with compliance under the NPDES Municipal Permit Order No. 2001-01, while during the second half; the Copermittees were regulated by Order No. R9-2007-0001. Pursuant to Order No. R9-2007-0001, the Copermittees are required to develop a standardized method and format for annually conducting and reporting fiscal analyses of their urban runoff management programs. The standardized method and

format is due for submittal to the Regional Board by January 31, 2009. In the meantime, fiscal analysis and reporting will continue as in previous reports. The City has decided to include an analysis of watershed and regional shared expenditures and budgets in the current report in order to bring the fiscal analysis and reporting as close to the requirements of Order No. R9-2007-0001 as possible, while the regional standardized method and format is under development.

10.2 FISCAL-YEAR EXPENDITURES AND BUDGETS

The City's storm water program budget and expenditures consist of the following components:

- Staff
- Operating Budget (non-staff)
- Drainage Capital Improvement Projects

City staff from different departments and divisions contributes to the implementation of the storm water program and their contributions are as follow:

- The Storm Water Management Section is responsible for the development and implementation of storm water programs, participation in regional and watershed activities, oversight of storm water related contracts, data management, and report writing. It is also responsible for inspecting municipal, industrial, commercial, building construction, and residential land uses and responding to reported violations of the City's Storm Water Management and Discharge Control Ordinance. The Storm Water Management Section conducts enforcement action on violators of the City's Storm Water Ordinance.

- The Planning Department reviews development projects for environmental impacts to sensitive areas and requires developers to provide mitigation plans before permits are issued.

- The Engineering Land Development Section is responsible for ensuring that grading and construction permit applications are in compliance with grading and other engineering ordinances, and that temporary and permanent Best Management Practices are incorporated in the grading plans, tentative maps, and final maps. Land Development Section staff reviews and approves Water Quality Technical Reports submitted to the City as part of development application packages for Priority Development Projects.

- The City Attorney's Office reviews all documents (such as manuals, forms, ordinances, etc.) developed by the Storm water Management Section, to ensure that they are in compliance with current laws and regulations. The City Attorney's Office also assists the Storm water Management Section in the enforcement of City's Municipal Code.

- The Environmental Services Division manages the Used Oil Recycling Program, the Household Hazardous Waste Collection Program, the Solid Waste Collection Program, and the Solid Waste Reduction and Recycling Program.

- The Geographic Information Systems (GIS) Section of the Information Technology Services Department is responsible for the GIS systems, and provides support to the Storm Water Management Section by mapping the City's storm water conveyance systems and data management.

- The Public Works Department is responsible for the maintenance of the City's storm drainage systems and the sanitary sewer collection systems; oversight of the street sweeping program, and oversight of the open space maintenance program. The Wastewater Management Division, in addition to its scheduled maintenance activities, is responsible for emergency responses to sanitary sewer overflows (SSO) and pollutant spills on public streets.

- The Inspection Services Division is responsible for the inspection of grading, improvement, and Capital Improvement Projects for compliance with the City's ordinances, including the Storm Water Management and Discharge Control Ordinance.

- Other City departments, divisions, and sections that provide support to the Storm Water Management Section in the fulfillment of the City's JURMP. Although those department, divisions, and sections provide important contributions, a detailed accounting of their roles is beyond the scope of this report.

The City's NPDES jurisdictional expenditures for FY 2007-2008 and budgeted figures for FY 2008-2009 are listed in Tables 10-1 and 10-2:

Table 10-1 Chula Vista NPDES Expenditures for FY 2007-2008

DESCRIPTION	EXPENDITURES (APPROXIMATE)
A. Staff	
1. Public Works Maintenance	$589,843
2. Storm Water Management	$462,071
Sub-Total	**$1,051,914**
B. Operating Expenditures (Non-Staff)	
1. NPDES Permit Fee	$22,368
2. Professional Services	
a) Consultant Fees for Dry Weather Field Screening Program	$52,600
b) Consultant Fees Related to Regional Activities (City Share of County-Wide Cooperative Wet Weather Monitoring Program, HMP, CASQA Fees, Public Education)	$183,471
c) Consultant Fees for JURMP Update	$45,000
3. NPDES Outreach (Jurisdictional)	$21,444
4. Miscellaneous	$4,279
5. Street Sweeping Program	$292,737
6. Storm Drain Maintenance Materials and Equipment	$134,887
Sub-Total	**$756,786**
C. C.I.P. Appropriations	
1. Telegraph Canyon Channel Design DR118	$14,872
2. Drainage Basin east of Second Avenue DR120	$85,354
3. Telegraph Canyon/Poggi Flow Metering DR131	$6,500
4. Emerson Street Drainage Improvements DR133	$2,442,763
5. F Street Drainage Facilities DR160	$13,500
6. CMP Storm Drain Pipe Rehab Program Phase 4 DR169	$483,844
7. Bonita Long Canyon Erosion Study DR172	$391
8. Fifth Ave. Drainage Improvements DR173	$358,464
Sub-Total	**$3,405,688**
Grand Total	**$5,214,388**

Table 10-2 Chula Vista Budget for FY 2008-2009

DESCRIPTION	BUDGET
A. Staff	
1. Public Works Maintenance	$995,962
2. Storm Water Management	$654,192
Sub-Total	**$1,650,154**
B. Operating Budget (Non-Staff)	
1. NPDES Permit Fee	$24,500
2. Professional Services	
a) Consultant Fees for Dry Weather Field Screening Program	$66,000
b) Consultant Fees Related to Storm Sampling (City Share of County-Wide Cooperative Wet Weather Monitoring Program)	$76,000
c) Hydromodification	$44,500
d) Source ID/ABLM Monitoring	$53,000
e) Flow Meter Maintenance	$3,000
3. Watershed Activities	$25,000
4. Watershed Education	$10,000
5. NPDES Outreach	$70,000
6. Miscellaneous	$18,950
7. Street Sweeping Program	$264,709
8. Storm Drain Maintenance Materials and Equipment	$277,301
Sub-Total	**$932,960**
C. C.I.P. Appropriations	
1. Broadway Basin Project D St. to C St. (drainage) STM354	$1,500,000
2. Telegraph Canyon Drainage Study 3/L DR167	$500,000
3. Bonita Long Canyon Erosion Study DR172	$100,000
Sub-Total	**$2,100,000**
Grand Total	**$4,683,114**

10.3 REGIONAL EXPENDITURES AND BUDGETS

The City participates in regional activities with other Copermittees of San Diego County. Each year, the Regional Management Committee approves a budget for the following Fiscal Year and each Copermittee pays their share of the regional costs to the Principal Copermittee. The Principal Copermittee, on behalf of all the Copermittees, manages an account and pays regional expenses from that account. During the current reporting period, the following costs were included in the regional expenditures and budgets:

- Regional Monitoring Program
- Regional Outreach Program
- Hydromodification Management Plan
- CASQA Fees

City's share of the above expenditures was $183,471 for FY 2007-2008, as indicated by Item B.2.b in Table 10-1 above. It should be noted that the above cost does not include staff time that was spent to attend regional management committee or workgroup meetings or participate in the development and implementation of regional programs and reports.

The approved regional budget for FY 2008-2009 is $3,341,472. Considering that $685,281 was carried over from FY 2007-2008, the Copermittees will be invoiced $2,656,191. City's share of the total budget will be $164,198. The regional budget for FY 2008-2009 includes the following costs:

- Working Body Support
- Regional Monitoring Program
- Regional Outreach
- Mobile Business Program
- Recommended Land Use Planning Approaches
- Hydromodification Management Plan
- CASQA Fees

10.4 WATERSHED EXPENDITURES AND BUDGETS

During FY 2007-2008, watershed activities in the San Diego Bay Watershed were developed at the watershed level, while each Copermittee implemented their respective watershed activities individually within their jurisdictions and, therefore, no cost sharing occurred at the watershed level. Based on the Municipal Permit requirements for watershed activities, the City has allocated $25,000 for watershed activities and $10,000 for watershed education in its FY 2008-2009 budget. These budgeted items are included as Items B.3 and B.4 in Table 10-2 above.

10.5 FUNDING

An analysis of the City's storm water program revenues and expenditures indicates that the program captures its revenues from General Funds, Capital Improvement Project funds, and Storm Drain Fees assessed on property owners or tenants of single family homes, multi-family buildings, and commercial/industrial facilities through the Sweetwater Authority, Otay Water District, and Cal-American Water District. Additional revenues are received from Building Permit Fees and from developer deposits; however, it is difficult to quantify the amount of revenue captured from developer deposits for storm water related issues on development projects. Building Permit Fees, which are used to cover staff time for inspections of construction sites during the building phase of the projects has been reduced drastically as a result of the recent slow down of development projects within the City.

11.0 PROGRAM EFFECTIVENESS ASSESSMENT COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

a. *As part of its Jurisdictional Urban Runoff Management Program, each Copermittee shall annually assess the effectiveness of its Jurisdictional Urban Runoff Management Program implementation. At a minimum, the annual effectiveness assessment shall:*

   (1) *Specifically assess the effectiveness of each of the following:*

      (a) *Each significant jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented;*
      (b) *Implementation of each major component of the Jurisdictional Urban Runoff Management Program (Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education); and*
      (c) *Implementation of the Jurisdictional Urban Runoff Management Program as a whole.*

   (2) *Identify and utilize measurable targeted outcomes, assessment measures, and assessment methods for each of the items listed in section I.1.a.(1) above.*

   (3) *Utilize outcome levels 1-6*[9] *to assess the effectiveness of each of the items listed in section I.1.a.(1) above, where applicable and feasible.*

   (4) *Utilize monitoring data and analysis from the Receiving Waters Monitoring Program to assess the effectiveness each of the items listed in section I.1.a.(1) above, where applicable and feasible.*

   (5) *Utilize Implementation Assessment, Water Quality Assessment, and Integrated Assessment, where applicable and feasible* [10].

b. *Based on the results of the effectiveness assessment, each Copermittee shall annually review its jurisdictional activities or BMPs to identify modifications and improvements needed to maximize Jurisdictional Urban Runoff Management Program effectiveness, as necessary to achieve compliance with section A of this Order. The Copermittees shall develop and implement a plan and schedule to address the identified modifications and improvements. Jurisdictional activities/BMPs that are ineffective or less effective than other comparable jurisdictional activities/BMPs shall be replaced or improved upon by implementation of more effective jurisdictional activities/BMPs. Where monitoring data exhibits persistent water quality problems that are caused or contributed to by MS4 discharges, jurisdictional activities or BMPs applicable to the water quality problems shall be modified and improved to correct the water quality problems.*

c. *As part of its Jurisdictional Urban Runoff Management Program Annual Reports, each Copermittee shall report on its Jurisdictional Urban Runoff Management Program*

effectiveness assessment as implemented under each of the requirements of sections I.1.a and I.1.b above.

11.1 INTRODUCTION

It is the culmination of efforts described throughout this report that supports the application of effectiveness assessment protocols introduced through the document entitled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" as submitted by the San Diego Municipal Storm Water Copermittees to the Regional Water Quality Control Board on October 16, 2003. The intent of this section is to offer a more critical analysis of programmatic activities to compliment the accounting of the City's accomplishments as presented in this report.

The 2004-2005 reporting year was highlighted by the San Diego County Storm Water Copermittees development of the Baseline Long-Term Effectiveness Assessment (LTEA) conducted as part of the Report of Waste Discharge (ROWD). This comprehensive assessment incorporated water quality and source data collected by all Copermittees to date, and provided a critical first look at regional water quality presented per watershed.

In 2007-2008, the City continued to build upon knowledge gained through the implementation of long-term effectiveness strategies on a jurisdictional level through annual reporting, as well as the application of strategies on a regional level through the development of the LTEA. As such, the City has endeavored in 2007-2008 to augment programs and to gather applicable data to support a more holistic look at storm water program effectiveness.

Notably, in 2007-2008, the City continued to gather and evaluate data supporting education and outreach efforts. This effort was prompted through the development of the Chula Vista CLEAN program in order to provide a baseline by which to gauge the overall successes of the program. In addition, this effort is highly supportive of the annual appraisal of the larger Chula Vista Storm Water Management Program, and provides a fitting nexus to the annual long-term effectiveness assessments presented in this report.

Further, in 2007-2008 the City continued its source inventory validation process. This effort has been detailed in Section 5.0 of this report, and focused on source types identified in the LTEA as potential contributors to watershed pollutants of concern. These activities have also provided the City with valuable data for incorporation into long-term effectiveness evaluation on a jurisdictional level.

11.2 METHODOLOGY

Based on the understanding that long-term effectiveness assessment is an ongoing and iterative process, the regional framework has been developed around three primary elements, each supported by additional key components.

- **Program Planning**
  - Source Characterization

- BMP Selection
- Targeted Outcomes
- Assessment Measures and Indicators

- **Program Implementation**

- **Effectiveness Assessment**
  - Water Quality Assessment
  - Program Assessment
  - Integrated Assessment

Detailed discussions of each of the above topics is included in the document "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003, and developed by the Copermittees. A brief summary is included below to describe the City's approach to program effectiveness assessment. The following discussion has been organized as to address each of the targeted outcome levels under program planning and evaluates the City's effectiveness toward JURMP implementation in 2007-2008. It is important to recognize that the whole of this document represents an account of program implementation in 2007-2008, and presents a variety of tracked information supporting overall effectiveness assessment. The following discussion will highlight the development and implementation of targeted efforts, and evaluate the overall effectiveness of the City's Storm Water Management Program.

11.2.1 PROGRAM PLANNING

As discussed in the regional framework document, program planning should include the establishment of meaningful implementation targets and the development of clear measures for assessing them. The four key and interrelated components to effective program planning; 1) source characterization, 2) BMP selection, 3) establishment of targeted outcomes, and 4) establishment of assessment measures and indicators, must be completed prior to program implementation. The primary mechanism in support of program planning was achieved through the development of the Chula Vista JURMP in 2001 as updated in 2008. This document has provided the initial framework to program planning as implementation has continued, and it is through the annual reporting process and associated programmatic updates detailed through this process that this concept continues to be perpetuated. The City has sought to integrate these key elements in order to more clearly direct programmatic activities and to support the vital interrelationship of each element.

Source Characterization

Source characterization largely consists of the development and maintenance of site, source, and facility inventories associated with construction, municipal, industrial, commercial, and residential locations. Through the development of the JURMP, and as required by Permit sections F.2.d, F.3.a.(2), F.3.b.(2), F.3.c.(2), and F.3.d.(2), baseline source inventories were initially complied in 2001, and are updated annually. The City employs a number of strategies and mechanisms in tracking source inventories for all of the sectors mentioned above. Such methodologies have been outlined within specific sections of this report, and include GIS

systems and comprehensive business license tracking. In recognizing that source characterization will need to be increasingly matched to identified water quality concerns and program results in the years to come, the City will seek to more fully utilize extensive GIS capabilities to associate sources with pollutants as they are viewed spatially. Construction, municipal, industrial, commercial, and residential source inventory updates have been provided in attachments to this report.

As introduced above, and detailed in Section 5.0 of this report, the City has continued to take further steps to fortify source characterization in 2007-2008. In 2006-2007 and continued in 2007-2008, the City conducted an extensive source verification utilizing the City's Permits Plus program to identify all active industrial and commercial facilities Citywide. While this effort served a number of functions within the larger storm water program, significant value was gained of the data compiled through the resources described above. Ultimately, this data will be utilized in overall program assessments, and to guide programmatic development to support long-term effectiveness.

BMP Selection

In terms of BMP selection, activity based BMP selection was conducted as part of the development of the City's JURMP. As required by Permit Sections D.2.c.(1), D.3.a.(2)(b), D.3.b.(2)(b), and D.3.c.(2)(a), minimum BMPs were established for each of the major program elements. The City actively evaluates activity specific BMPs primarily through its well-developed municipal, industrial/commercial, and construction inspection programs.

Targeted Outcomes

The establishment of measurable targeted outcomes is necessary both for incremental program improvement, and as a basis for the future establishment of relationships between implementation and desired water quality outcomes. It is important to recognize that quantifiable outcomes be established prior to program implementation to accurately provide measurability and accountability. Included within the regional long-term assessment framework, is the concept of a hierarchy of targeted outcomes. Six "levels" have been established, representing a gradation from activity-based to water quality based outcomes.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

The above concept can be shown as a pyramid with the base at Level 1 and the apex at Level 6 as shown in Figure 11-1. Each layer of outcome from the bottom to the top represents a gradation from activity-based to water quality-based outcome.

Figure 11-1 Hierarchy of Targeted Outcomes

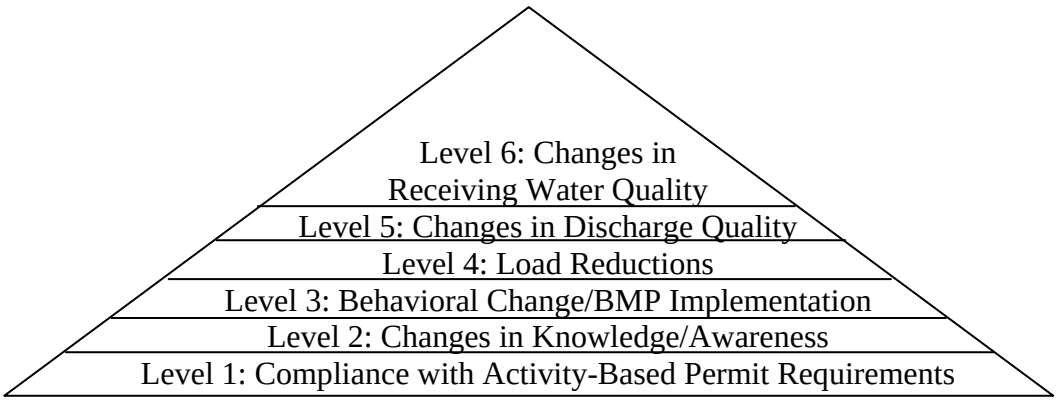

Assessment Measures and Indicators

In order to establish measurability and accountability in the implementation of various water quality program elements, assessment measures for the targeted outcomes need to be developed. Assessment measures may be direct or indirect. Direct measures are those that characterize the quality of water in runoff discharges or within receiving waters. In San Diego County, direct measurements are primarily addressed through regional Receiving Waters Monitoring Program and Dry Weather Field Screening and Analytical Monitoring Program. Indirect measures take into account the degree of activity or program element implementation. Indirect measures are easier and less expensive than direct measures and do not require long-range data.

11.2.2 PROGRAM IMPLEMENTATION

A comprehensive accounting of the City's implementation of its Jurisdictional Urban Runoff Management Program (JURMP) during the current reporting period (2007-2008) has been provided in other sections of this report. In this section, it will suffice to say that sufficient data tracking and data management has complemented the implementation of each component of the JURMP to enable an accurate program effectiveness assessment.

11.2.3 EFFECTIVENESS ASSESSMENT

Program effectiveness assessment comprises of three components, i.e., 1) Water Quality Assessment, 2) Program Assessment, and 3) Integrated Assessment. Integrated Assessment is a long-term process by which Copermittees will attempt to establish causal relationships between program implementation activities and changes to water quality. These relationships may be established either hypothetically or empirically. Integrated Assessment is necessarily the most difficult and uncertain step in the overall assessment process. Over time, quantitative "cause and effect" relationships will increasingly be sought. However, because of the sheer number and variety of BMPs and control programs being concurrently implemented at any given time, establishing such relationships will be a considerable challenge. This report, therefore, focuses on Water Quality Assessment and Program Assessment, and will leave the Integrated Assessment to be addressed at the watershed and regional level.

11.2.3.1 WATER QUALITY ASSESSMENT

Water Quality Assessment may be used to evaluate the water quality of discharges to receiving waters or within the receiving waters themselves. Water Quality Assessment is conducted by taking samples from discharges or the water body within receiving waters and conducting field screening or laboratory analysis. Sampling and testing may be conducted during storm events or from dry weather flows during non-rainy seasons. It is necessary to have benchmarks or other standards such as the Water Quality Control Plan for the San Diego Basin (Basin Plan) to compare the results and make judgment about water quality. It is also beneficial to track the quality of water for long periods of time to enable the Copermittees to assess long-term trends and draw conclusions as to the effectiveness of their storm water programs.

11.2.3.2 PROGRAM ASSESSMENT

As mentioned above, during the planning phase of the program, it is of utmost importance to set measurable goals for each of the program components and track progress through data collection and management. Such data will later be used to evaluate the success of failure of the implementation of the program and derive conclusions regarding each component's effectiveness.

In this report, Program Assessment has been divided into components similar to those established in the Municipal Permit, i.e.:

- Land Use Planning
- Construction
- Municipal
- Industrial and Commercial
- Residential
- Education and Public Participation

11.2.3.3 INTEGRATED ASSESSMENT

Integrated Assessment establishes a relationship between program implementation activities and changes to water quality. This information is critical for agencies to evaluate cost effectiveness of their program elements. However, Integrated Assessment is often the most difficult element of the overall program effectiveness assessment.

11.3 WATER QUALITY ASSESSMENT RESULTS

This section of the report utilizes the methodology described above to arrive at conclusions regarding the effectiveness of the City's storm water management program during the current reporting period. This Section focuses on the three components of the effectiveness assessment described in Section 11.2, i.e.:

- Water Quality Assessment (Levels 5 and 6 of the Hierarchy of Targeted Outcomes in the pyramid of Figure 11-1)

- Program Assessment (Levels 1 to 4 of the pyramid)
- Integrated Assessment

11.3.1 WATER QUALITY ASSESSMENT

Changes in discharge quality and receiving waters quality (Levels 5 and 6 of the Targeted Outcomes) are the ultimate targeted outcomes in describing direct successes of storm water program activities. While such levels have proven challenging in assessing individual JURMP effectiveness, levels 5 and 6 have been thoroughly processed through the ROWD and LTEA development on a regional basis in 2004-2005, and will be addressed for the current permit cycle in the next ROWD. As such, the City relies to a great extent on the regionally prepared annual Receiving Water Monitoring Reports, ROWD, and LTEA for a detailed look at levels 5 and 6 assessments. Additionally, the City uses results of its jurisdictional Dry Weather Field Screening and Analytical Monitoring program to track long-term trends in the quality of discharges at outfall locations throughout the City. This process has been discussed in more detail below.

Although lines between programmatic efforts and water quality improvements will require long-term data gathering and analysis, the City annually conducts an evaluation of data gathered through the Dry Weather Field Screening and Analytical Monitoring Program. It is important to recognize that the Dry Weather Monitoring Program is primarily used to identify illicit discharges and connections to the MS4 and receiving waters, and not as a surface water characterization mechanism. Alternatively, the dry weather data sets have proven useful in characterizing the quality of non-storm water discharges to surface waters during dry seasons. As such, the City utilizes dry weather data sets to evaluate trends and to steer program priorities on a local level. Dry weather data analysis has been reasoned as a means to further target programmatic components, and to establish target pollutants and to identify geographic areas of concern.

The Chart on Page 11-8, Average Percentage of Observations Exceeding Action Levels in Dry Weather Samples, was developed in an effort to track the overall average of samples taken per year in exceedance of numeric action levels as established under the Dry Weather Monitoring Program. This effort is intended to initiate a long-term analysis through tracking detectable improvements or impairments in the quality of non-storm water discharges throughout Chula Vista. This analysis is valuable in evaluating not only the number of exceedances from one year to the next, but also in examining those pollutants that are commonly identified.

In support of the overall average exceedances, the City utilizes constituent specific trends analysis to develop a clear picture of water quality trends in non-storm water discharges. This analysis evaluates the percentage of annual samples, in relation to a specific constituent, in exceedance of established action levels. A summary of this analysis with the latest available data (2007) is presented below:

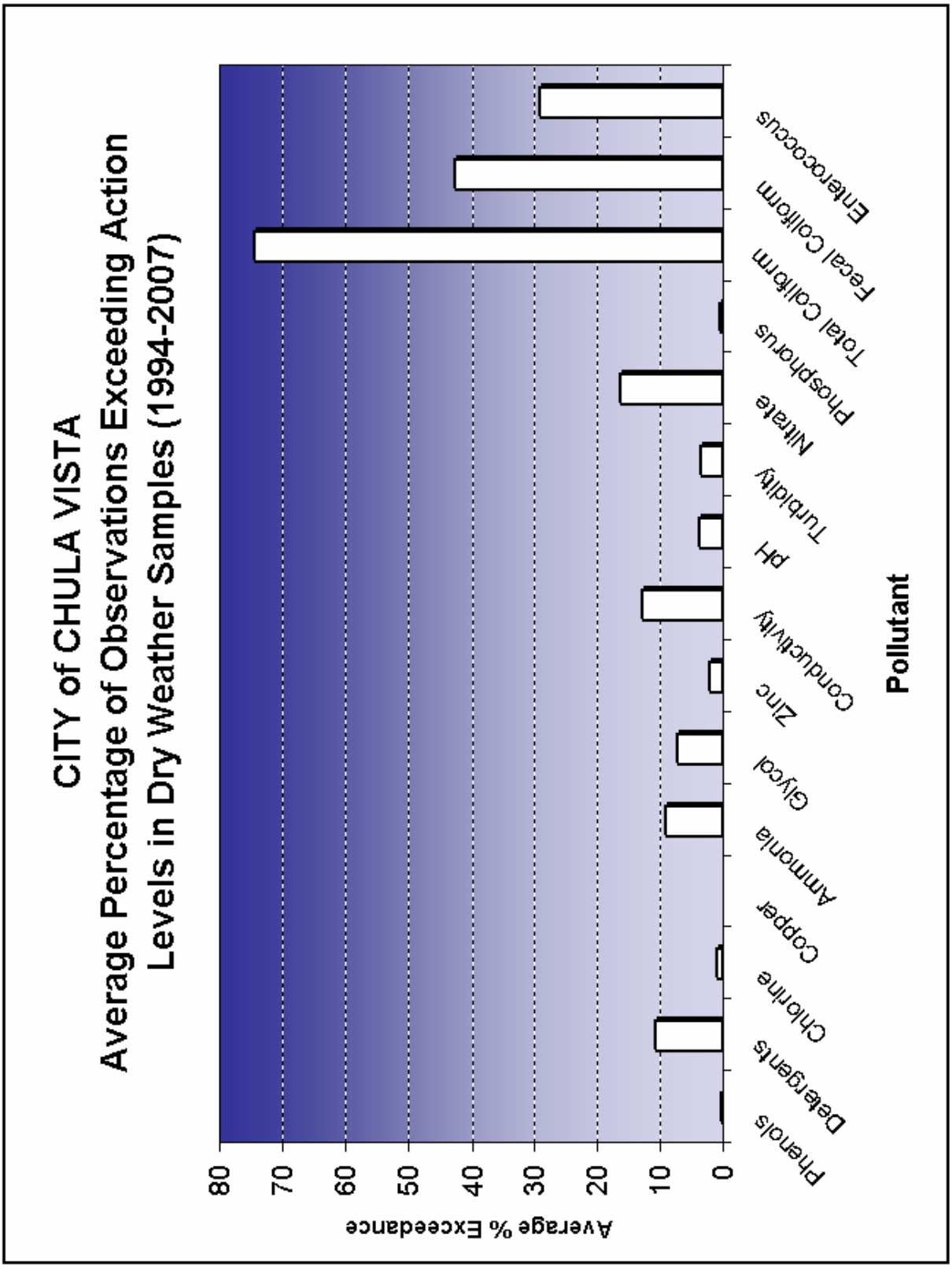
CITY of CHULA VISTA
Average Percentage of Observations Exceeding Action Levels in Dry Weather Samples (1994-2007)
Average % Exceedance
80
70
60
50
40
30
20
10
0
Phenols
Detergents
Chlorine
Copper
Ammonia
Glycol
Zinc
Conductivity
pH
Turbidity
Nitrate
Phosphorus
Total Coliform
Fecal Coliform
Enterococcus
Pollutant

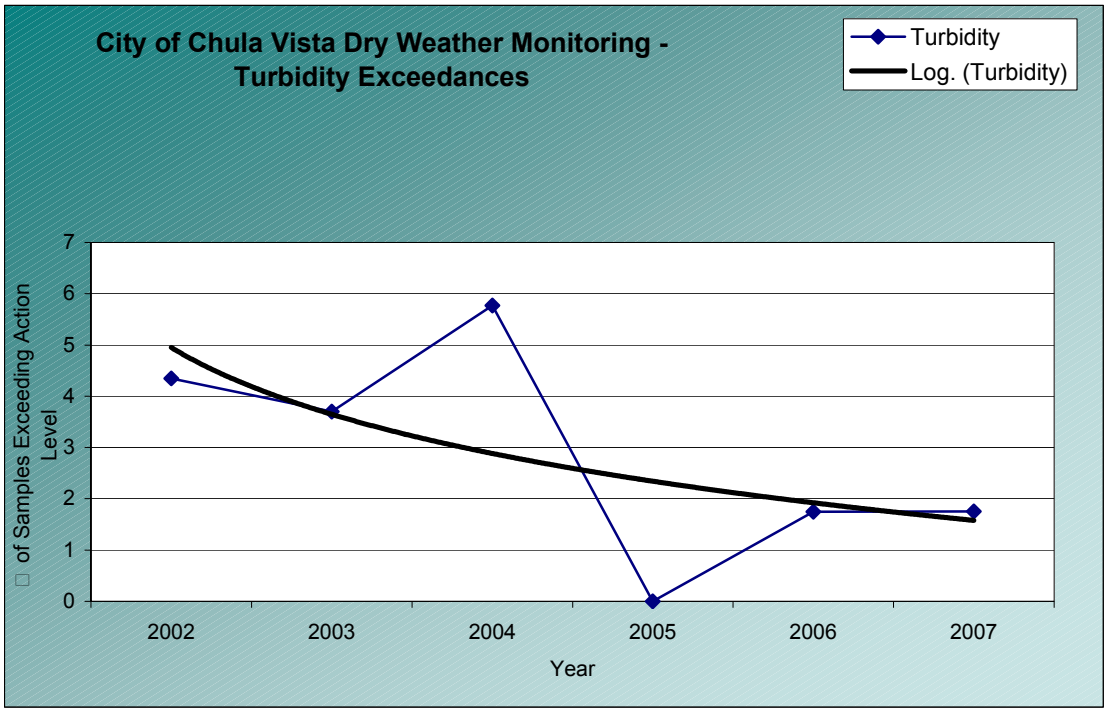
City of Chula Vista Dry Weather Monitoring - Turbidity Exceedances
Turbidity
Log. (Turbidity)
of Samples Exceeding Action Level
0
1
2
3
4
5
6
7
2002
2003
2004
2005
2006
2007
Year

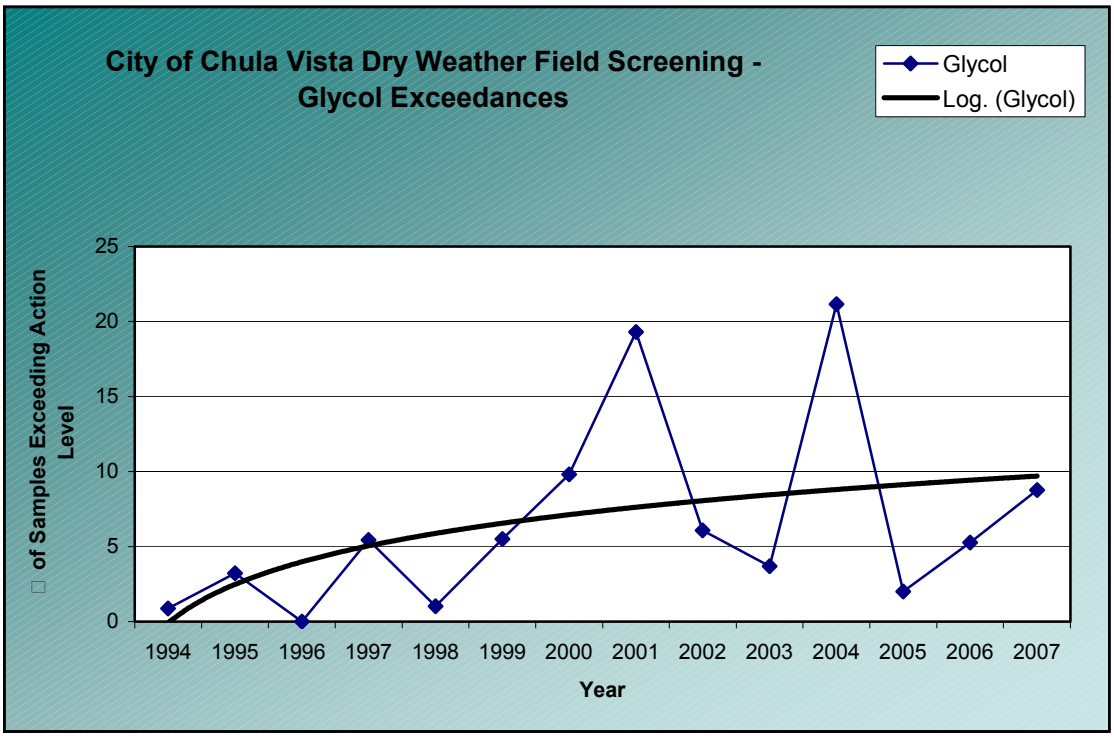
City of Chula Vista Dry Weather Field Screening - Glycol Exceedances
Glycol
Log. (Glycol)
of Samples Exceeding Action Level
0
5
10
15
20
25
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year

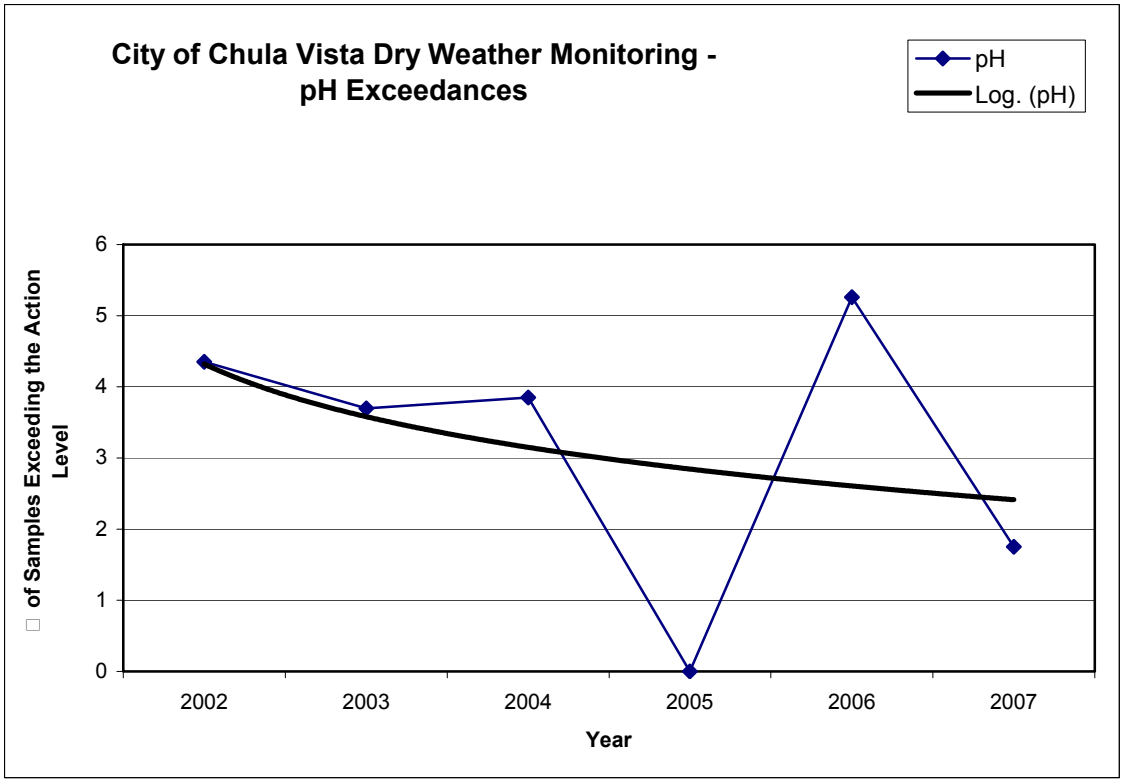
City of Chula Vista Dry Weather Monitoring - pH Exceedances
pH
Log. (pH)
of Samples Exceeding the Action Level
6
5
4
3
2
1
0
2002
2003
2004
2005
2006
2007
Year

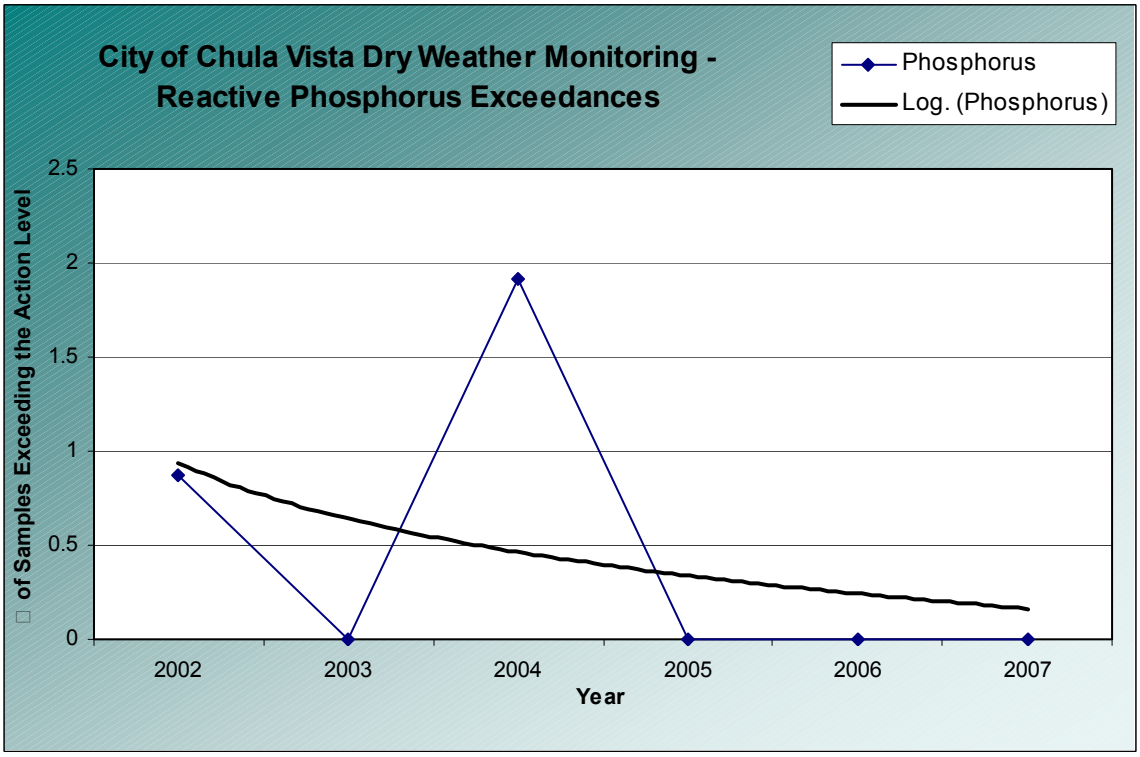
City of Chula Vista Dry Weather Monitoring - Reactive Phosphorus Exceedances
Phosphorus
Log. (Phosphorus)
of Samples Exceeding the Action Level
2.5
2
1.5
1
0.5
0
2002
2003
2004
2005
2006
2007
Year

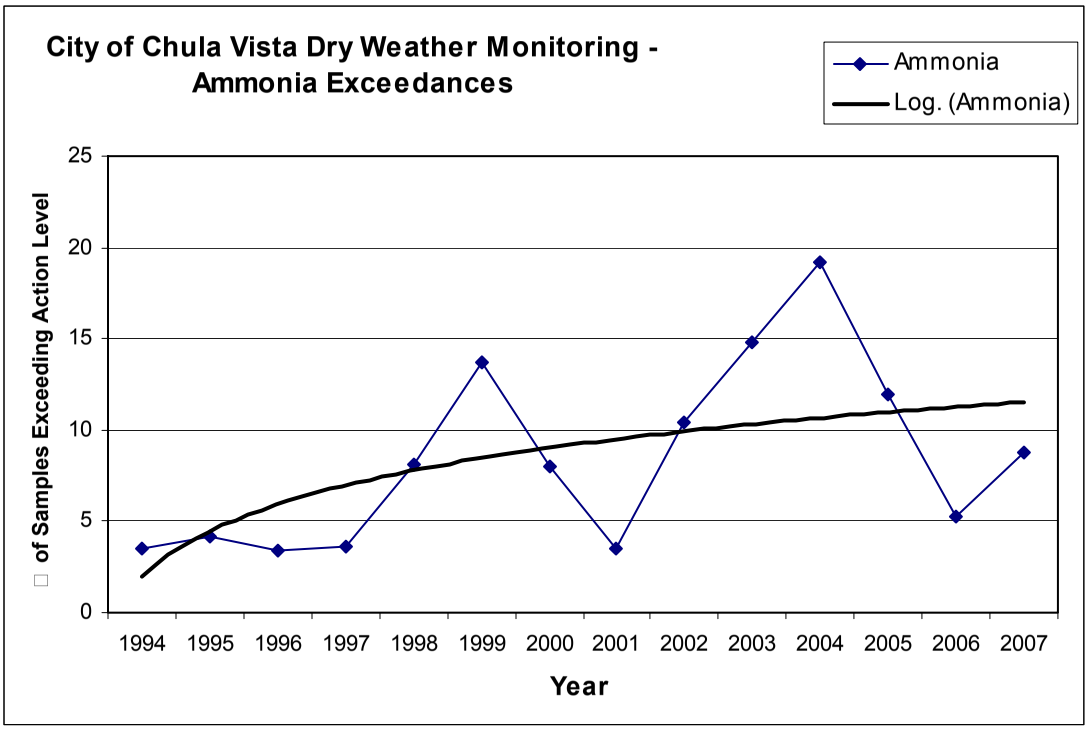
City of Chula Vista Dry Weather Monitoring - Ammonia Exceedances
Ammonia
Log. (Ammonia)
of Samples Exceeding Action Level
25
20
15
10
5
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year

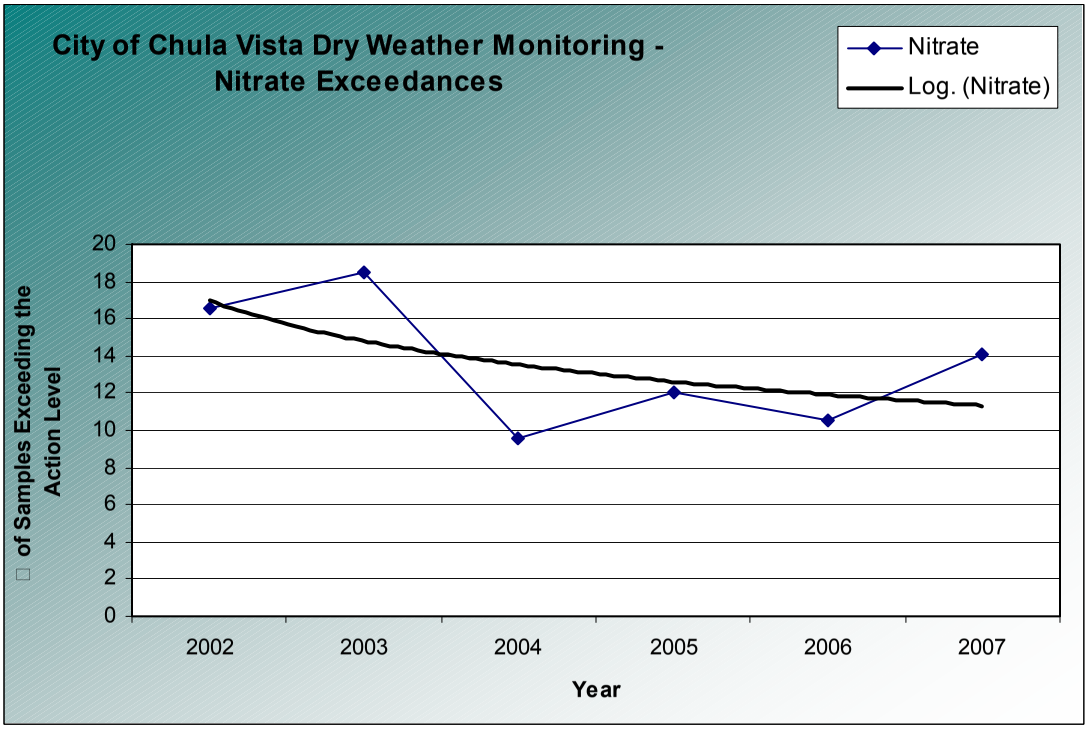
City of Chula Vista Dry Weather Monitoring - Nitrate Exceedances
Nitrate
Log. (Nitrate)
of Samples Exceeding the Action Level
20
18
16
14
12
10
8
6
4
2
0
2002
2003
2004
2005
2006
2007
Year

3612

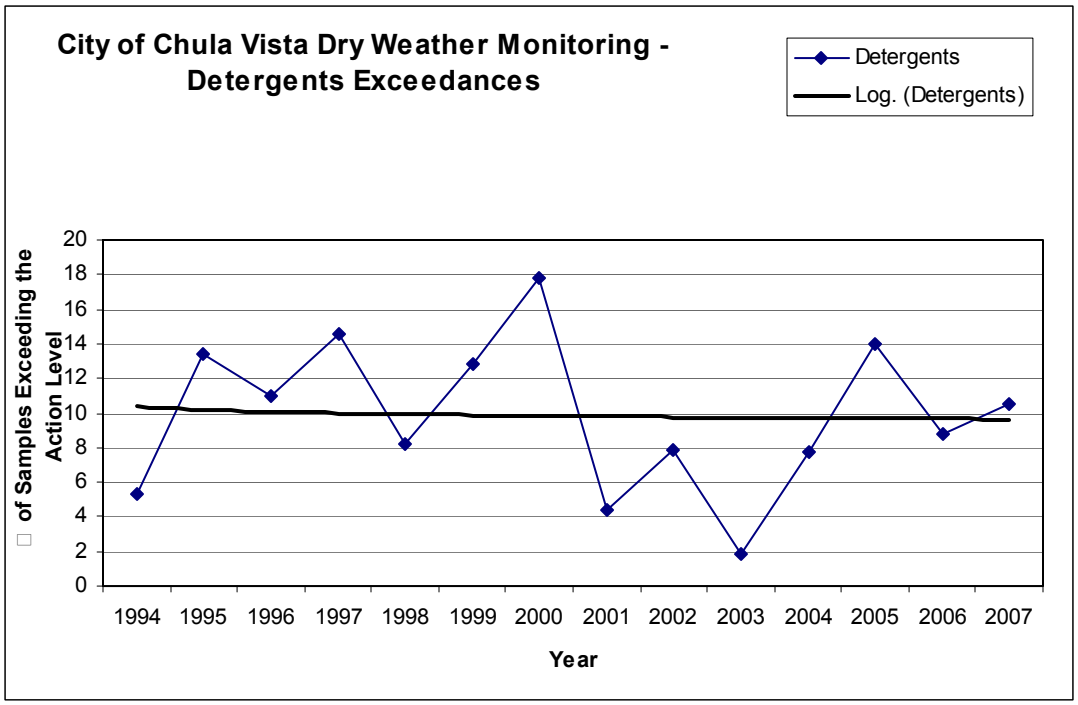
City of Chula Vista Dry Weather Monitoring - Detergents Exceedances
Detergents
Log. (Detergents)
of Samples Exceeding the Action Level
20
18
16
14
12
10
8
6
4
2
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year

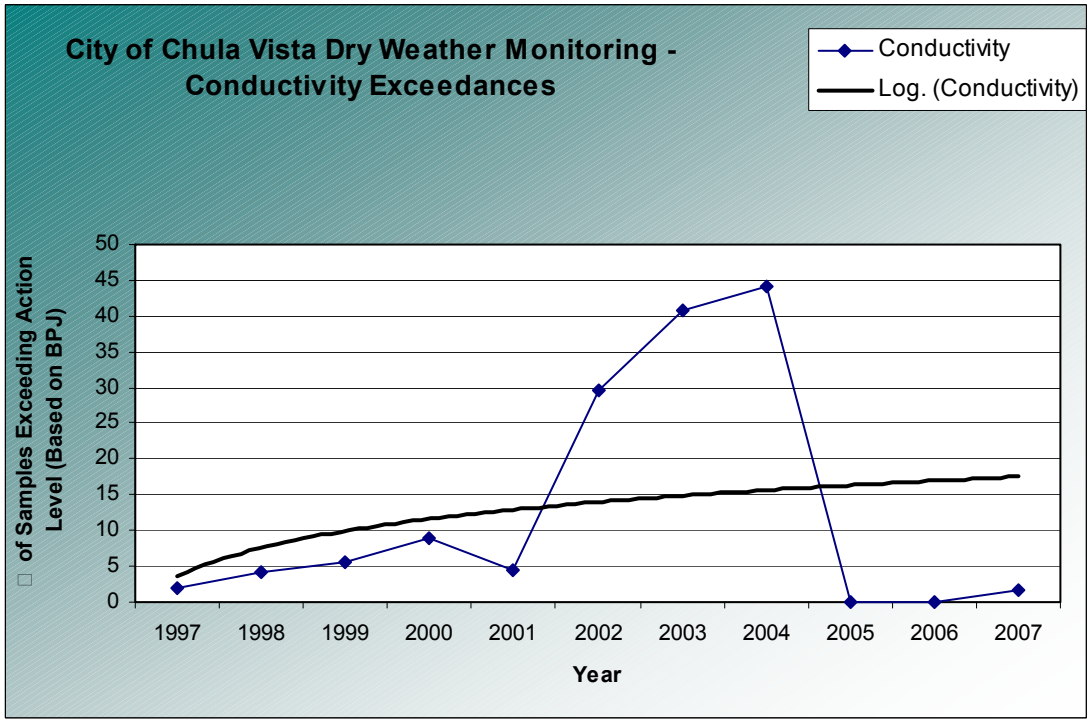
City of Chula Vista Dry Weather Monitoring - Conductivity Exceedances
Conductivity
Log. (Conductivity)
of Samples Exceeding Action Level (Based on BPJ)
50
45
40
35
30
25
20
15
10
5
0
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year

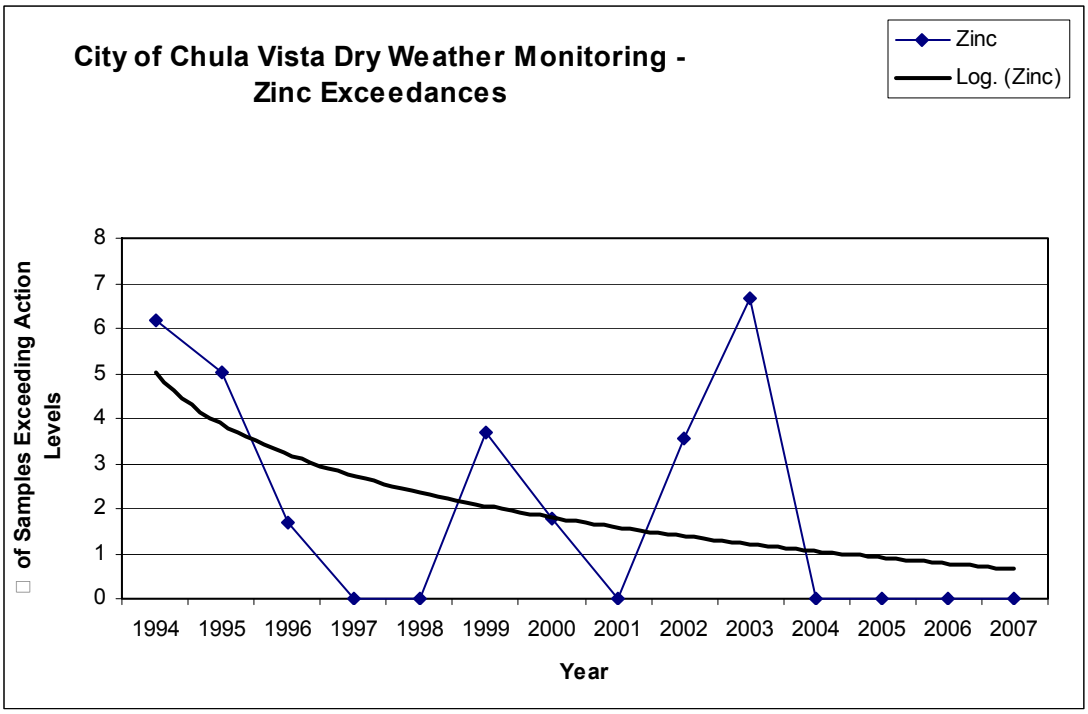
City of Chula Vista Dry Weather Monitoring - Zinc Exceedances
Zinc
Log. (Zinc)
of Samples Exceeding Action Levels
8
7
6
5
4
3
2
1
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year

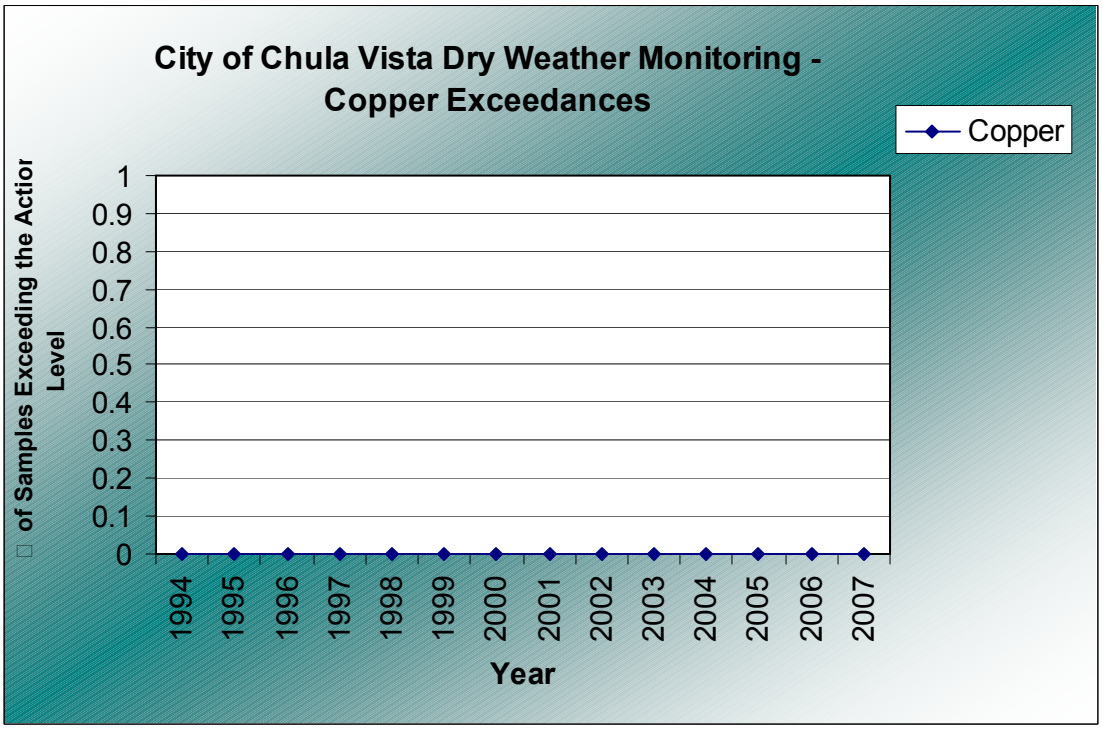
City of Chula Vista Dry Weather Monitoring - Copper Exceedances
Copper
of Samples Exceeding the Actior Level
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year

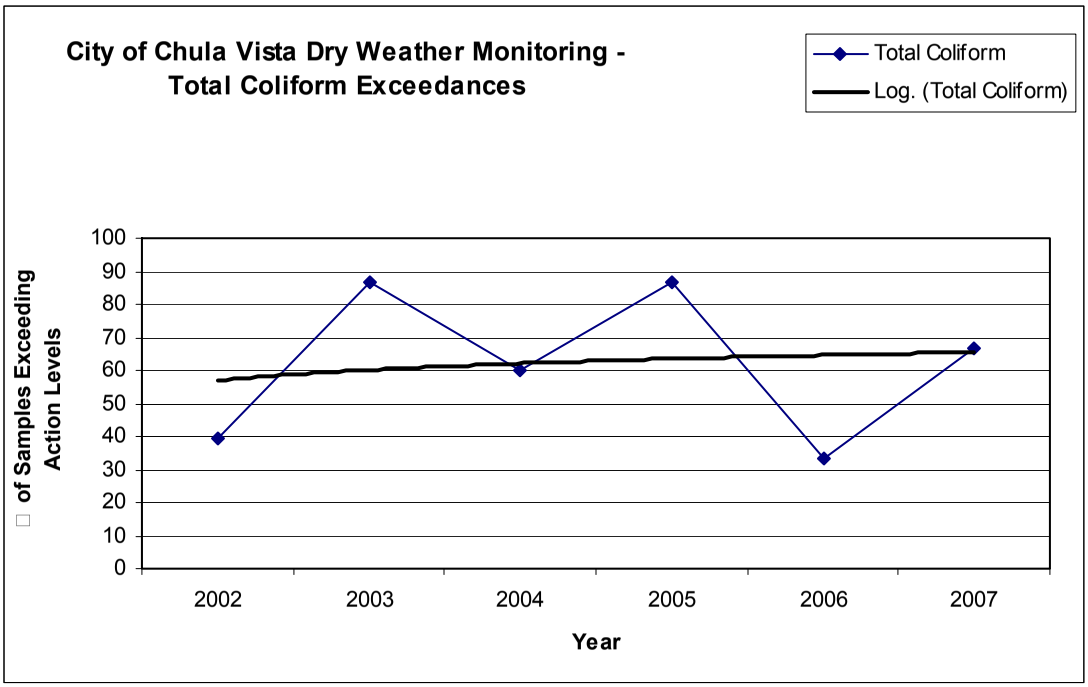
City of Chula Vista Dry Weather Monitoring - Total Coliform Exceedances
Total Coliform
Log. (Total Coliform)
of Samples Exceeding Action Levels
100
90
80
70
60
50
40
30
20
10
0
2002
2003
2004
2005
2006
2007
Year

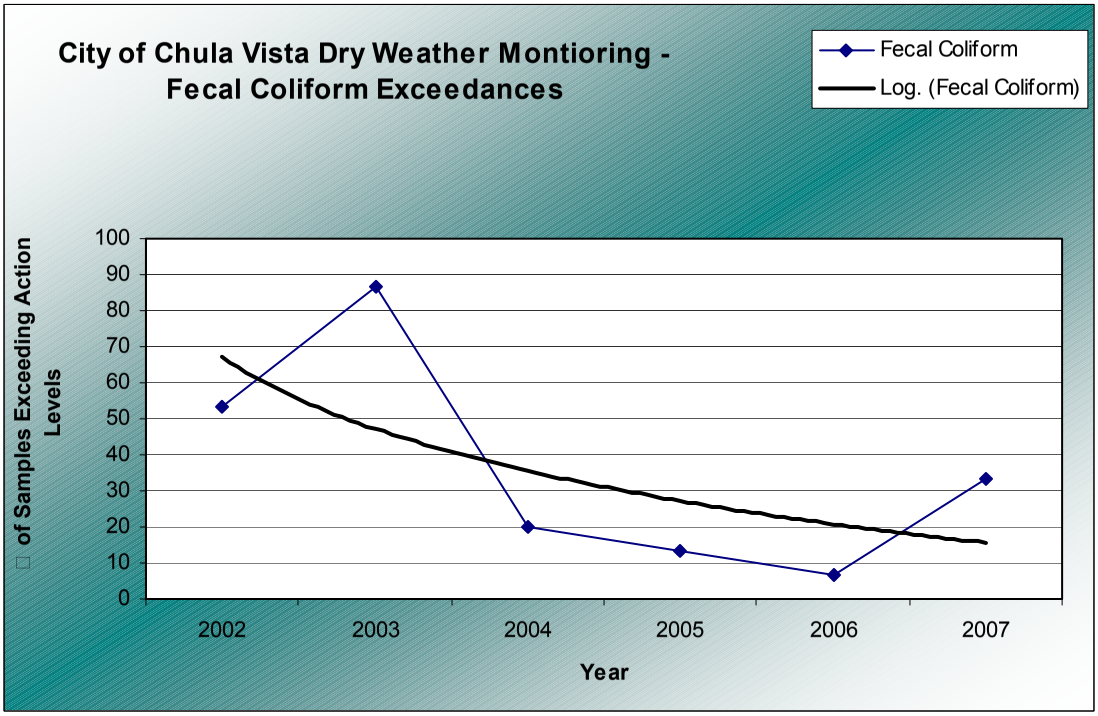
City of Chula Vista Dry Weather Montioring - Fecal Coliform Exceedances
Fecal Coliform
Log. (Fecal Coliform)
of Samples Exceeding Action Levels
100
90
80
70
60
50
40
30
20
10
0
2002
2003
2004
2005
2006
2007
Year

3615

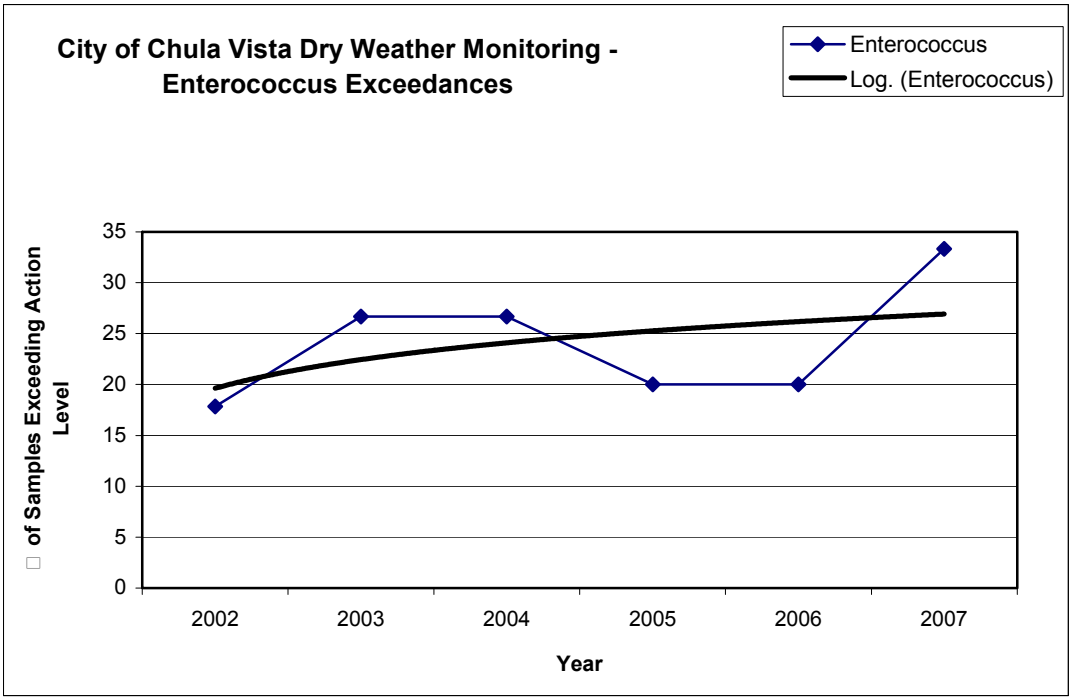

11.3.2 PROGRAM ASSESSMENT

In 2007-2008, the City has sought to evaluate programmatic activities and implementation protocols in support of effectiveness assessment strategies. It is important to note that through the ROWD and LTEA process, the City has developed a sound understanding of the association of programmatic activities as they relate to long-term effectiveness assessment. As such, the City has sought to formalize various programmatic elements and implementation protocols in support of the effectiveness assessment framework as demonstrated in the preceding paragraphs. The targeted outcome levels discussed below are not intended to be rigid in their function, and while programmatic activities in 2007-2008 more wholly support these levels, continued advancements and data gathering efforts by the City in the future will support a more complete jurisdictional effectiveness assessment.

Notably, the discussion under Program Assessment focuses on Levels 1 to 4 of the Targeted Outcomes on a jurisdictional basis as follows:

11.3.2.1 COMPLIANCE WITH ACTIVITY-BASED PERMIT REQUIREMENTS (LEVEL 1)

This level of effectiveness assessment is intended to provide a quantitative assessment that reflects the regional long-term effectiveness assessment framework through targeted outcomes for the City based on various components of the Municipal Permit (Tables 11-1 – 11-6). In the following sections, these tables and their associated analyses are divided into Municipal Permit components of land use planning, construction, municipal, industrial and commercial, residential, education and public participation reflect the various activities prescribed under the Municipal Permit and provide a summary accounting of activities conducted by the City in 2007-2008.

11.3.2.1.1 LAND USE PLANNING

Due to the significant amount of growth that the City has experienced in recent years, the City has sought to continually refine the SUSMP implementation process as deemed necessary to ensure overall effectiveness and compliance with Municipal Permit provisions. Based upon the significant achievements and refinements experienced in 2007-2008, the City has not identified any ineffective BMPs or management measures in terms of compliance with the Land Use Planning for New Development and Redevelopment permit requirements.

Table 11-1 FY 2007-2008 Compliance with Activity-Based Requirements – Land Use Planning

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.1.e Land Use Planning	Development Projects	# Projects Needing SUSMP	# Projects Subjected to SUSMP	Actual/Target	%
		5	5	5/5	100
	High Priority Sites (Total Listed = 20)	# Sites Targeted for Inspection	# Sites inspected	Actual/Target	%
		20	20	20/20	100
	Medium Priority Sites (Total Listed = 45)	23	36	36/23	156
	Low Priority Sites (Total Listed = 194)	As Needed	58	As Shown	100

Jurisdictional Urban Runoff Management Program strengths associated with Land Use Planning for New Development and Redevelopment during the reporting period are described below. The list is not intended to provide comprehensive accounting of programmatic activities; rather it is to highlight those activities that best accentuate the Land Use Planning for New Development and Redevelopment component of the City's JURMP in 2007-2008

The following features distinguish the Land Use Planning for New Development and Redevelopment component of the City's JURMP:

Development Storm Water Manual

The Manual, which was adopted by the City in February of 2008, provides the City with a mechanism to effectively articulate all requirements related to water quality and the development or redevelopment of land within the City. The Manual covers all aspects of development, including the City's SUSMP requirements, applicable checklists, permanent BMP requirements, construction BMP requirements, and implementation and maintenance requirements. The Manual is available on the City's website, and is used extensively as a reference document by

City staff, developers and consultants. The Manual supersedes a similar document titled "Development and Redevelopment Projects Storm Water Management Standards Requirements Manual," which was adopted in November of 2002.

Inter-Departmental Coordination

The City's SUSMP and development review process includes multiple entities throughout the City. As the City has been characterized by significant growth in recent years, the City has taken all necessary steps to maintain compliance with SUSMP requirements through the coordination of multiple departments. Further, as the City continues to grow, albeit at a much slower rate than before, such coordination has continued in 2007-2008 to require refinement and augmentation as necessary to maintain compliance and ultimately improve water quality.

Dedicated Storm Water Management Section

The City Engineering and General Services Department provides the necessary oversight over all management components of SUSMP implementation. The Storm Water Management Section keeps up with the latest requirements and regulations, and provides technical support to staff as well as project proponents. Storm Water Compliance Inspectors and Environmental Health Specialists also perform the function of post-construction BMP verification.

Information System Support

A robust geographic information management system (GIS) supports the City's Storm Water Management Program. The City's GIS currently includes multiple layers used by Storm Water Management staff for various functions. In terms of land development and redevelopment activities, within the reporting period, a BMP layer has been maintained in order to track post-construction BMPs implemented Citywide. In addition to the GIS, Permits Plus, which is a specialized permits tracking software is utilized in tracking a variety of discretionary permits, and specifically is utilized by the Engineering and General Services Department to identify high priority SUSMP projects. Notably in 2007-2008, the GIS layer is being continuously updated to manage and provide easy access to project specific WQTRs and grading plans.

It should be noted that while no ineffective BMPs or management measures have been identified within this reporting period, the City recognizes the importance of an adaptive approach to various programmatic elements. As such, the following program areas have been identified for further development or augmentation in order to support overall program effectiveness:

Data Management

As the City continues to grow, challenges associated with data management emerge such as tracking of post-construction BMPs, maintenance agreements, and associated documents. It is noteworthy that such challenges have been addressed in 2007-2008 through the customization of robust data management systems presented in this report, including GIS, GBA, and Permits Plus. However, as requirements and programmatic elements continue to evolve, it is important to update available tools with up-to-date information, as well as information necessary to evaluate overall program effectiveness. For these reasons, during this reporting period, the Storm Water Management Section added an Engineering Technician to the team. The Engineering Technician is mainly responsible for developing databases and maintaining such databases for information related to the City's JURMP activities.

New Development and Redevelopment Project Design Elements
With a focus on the use of Low Impact Development Integrated Management Practices and higher efficiency structural treatment BMPs in achieving SUSMP compliance, the City is working with the development community to improve the design of proposed projects. While this focus has been stressed by the City in 2007-2008 through requirements of project proponents to provide a detailed level of analysis to justify utilizing design elements in their proposed projects, a more universal change in project design approach is necessary. It is anticipated that the City will continue to work with other Copermittees to evaluate the standardization of various BMP types in the future and through the SUSMP update processes required under the Municipal Permit.

11.3.2.1.2 CONSTRUCTION

Within the reporting period of this report, the construction component has demonstrated numerous successes as well as undergone notable programmatic developments and enhancements. Through identified needs and associated management decisions, the City has fortified its jurisdictional construction management component in 2007-2008. Further, as construction activities continue, the City will seek to maintain the level of performance established from years past, and to continue to meet the regulatory standards mandated in the Municipal Permit.

Table 11-2 FY 2007-2008 Compliance with Activity-Based Requirements – Construction

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.2.d Construction	High Priority Sites (Total Listed = 71)	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		71	71	71/71	100
	Medium Priority Sites (Total Listed = 25)	25	25	25/25	100
	Low Priority Sites (Total Listed = 7)	7	7	7/7	100
	All Sites (Total Listed = 103)	Total sites identified	# in compliance or on a schedule for compliance	Actual/Target	%
		103	103	103/103	100
		# of inspections during dry season	# of inspections during wet season	Total # of inspections	N/A
		122	426	548	N/A

The following features distinguish the construction component of the City's JURMP:

Inspection and Enforcement
As demonstrated above, and in previous reporting years, the City has established a comprehensive construction inspection and enforcement program. The Storm Water and Public Works Inspection staff, with broad knowledge and expertise in construction storm water management, ensure compliance with this JURMP component on construction sites. Within the reporting period, targeted inspections on development, redevelopment, and capital construction projects have been achieved. These goals have been accomplished through an aggressive inspection and follow-up schedule approach that assures compliance in the highly dynamic construction environment.

Education and Training
Storm water inspection staff invites and readily provides education and training to all entities related to construction activities including developers, site superintendents, and trades persons. This education and training capacity is further defined by ongoing storm water inspection staff participation and expertise provided at regional training seminars and outreach events directed at the construction industry. As a function of the experience gained through a broad spectrum of construction activities in the City, the Chula Vista storm water and public works inspection staff offers a strong asset and broad-based expertise in construction storm water management both locally and regionally.

It should be noted that programmatic updates and proposed updates presented above have been driven by management decisions to develop more effective JURMP elements. As such, at this time, no significant management measure deficiencies have been identified and no BMPs determined ineffective in 2007-2008. However, in support of an adaptive management approach to jurisdictional elements, the following program areas have been identified for further attention in order to support overall program effectiveness:

BMP Maintenance
During the reporting period, BMP maintenance at construction sites continued to be an area of concern in construction activities. While inspection staff has noted appreciable efforts in BMP implementation, the maintenance needs associated with implemented BMP must be addressed on a consistent basis.

11.3.2.1.3 MUNICIPAL

As exemplified in the program descriptions included in other section of this report, the City prides itself on outstanding environmental programs, and the interrelated successes that each can account for. The City recognizes the need for far-reaching pollution prevention programs for the general public, but further emphasizes ongoing pollution prevention programs through well-developed City functions such as MS4 maintenance, street sweeping, and Integrated Pest Management techniques. With such a well-rounded approach, the City has not identified any significant management measures with which to augment municipal program activities in 2007-2008. Further, no BMPs have been identified as ineffective within the reporting period of this report.

Table 11-3 FY 2007-2008 Compliance with Activity-Based Requirements - Municipal

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.a Municipal	High Priority Sites (Total Listed = 62)	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		62	62	62/62	100
	Medium Priority Sites (Total Listed = 6)	As needed	As needed	As shown	100
	Low Priority Sites (Total Listed = 12)	As needed	As needed	As shown	100
	MS4	Estimated quantity of material targeted for removal from MS4 (Tons)	Quantity of material removed from MS4 (Tons)	Actual/Target	%
		442	442	442/442	100
	Streets/Parking Lots	Estimated distance of curb miles to be cleaned	Total curb miles cleaned	Actual/Target	%
		18,412	18,412	18,412/18,412	100
	Catch Basins/ Inlets	# of catch basins and inlets targeted to be inspected	# of catch basins and inlets inspected	Actual/Target	%
		7,908	7,908	7,908/7,908	100
		# of catch basins and inlets targeted to be cleaned	# of catch basins and inlets cleaned	Actual/Target	%
		3,601	3,601	3,601/3,601	100

The following features distinguish the Municipal component of the City's JURMP:

Municipal Facility Inspections

The City conducts inspections on numerous municipal facilities on an annual basis. Continued in 2007-2008, and as part of this comprehensive inspection process, storm water inspection staff inspects City owned parks and other facilities for potential maintenance concerns and BMP implementation.

Environmental Programs
As described in other sections of this report, the City manages a number of separate, yet interrelated environmental programs. The City recognizes the tremendous asset that such programs provide to the City's pollution prevention efforts, and will continue to promote the collaborative relationship of these programs in the future. The collaborative successes of each program have capitalized upon in 2007-2008 through the development of a broad-based outreach and educational campaign by the City. The details of this program are discussed further in Section 7 of this report.

Based on exemplary Municipal Pollution Prevention procedures, BMP implementation, and management measures, the City has not identified any significant needs for improvement at this time.

11.3.2.1.4 INDUSTRIAL AND COMMERCIAL

The 2007-2008 reporting year was primarily a maintenance year in terms of industrial and commercial activities within the City, highlighted by a significant source inventory validation and supplemental inspection efforts. As reported in previous reporting cycles, significant numbers of inspections have been conducted Citywide in order to reach out to numerous facilities located within the City limits. With such a significant commercial and industrial community in the City, staff has recognized the need to target those areas and those business activities that remain high on the source priority list and to provide a consistent presence and strong enforcement standard.

The City's inventory of industrial/commercial facilities includes 204 industrial and 1164 commercial facilities (including 353 mobile businesses). In 2007-2008, Storm Water Management Staff has successfully met, and in some cases exceeded, all compliance-based industrial/commercial requirements of the Permit through inspection of all high-priority and some low-priority commercial and industrial sites. As such, the City has not identified any significant management measures, deficiencies or ineffective BMPs within the defined reporting period.

Table 11-4 FY2007-2008 Compliance with Activity-Based Requirements - Industrial/Commercial

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.b Industrial	High Priority Sites (Total Listed = 54)	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		27	48	48/27	177
	Medium Priority Sites (Total Listed = 0)	As needed	As needed	N/A	N/A
	Low Priority Sites (Total Listed = 150)	As needed	31	N/A	N/A

		# Sites targeted for inspection	# Sites inspected	Actual/Target	%
D.3.c Commercial	High Priority Sites (Total Listed = 191)	96	97	97/96	101
	Medium Priority Sites (Total Listed = 0)	As needed	As needed	As shown	100
	Low Priority Sites (Total Listed = 973)	27	27	27/27	100

The following features distinguish the industrial/commercial component of the City's JURMP:

Integrated and Balanced Approach
With a dedicated Storm Water Compliance Inspector on staff, industrial and commercial facilities are effectively regulated in the City. Most notably, the City's industrial and commercial inspection program is defined by a consistent presence and strong enforcement standard, and Chula Vista storm water inspection staff continues to excel in maintaining the needs of the industrial and commercial programmatic elements. Needs such as pollution prevention and BMP implementation assurance, business community education and outreach, ongoing inspection and enforcement, and maintenance of a dynamic source inventory characterize the large role these components have in the larger storm water management scheme in the City.

Marked by exemplary inspection and enforcement processes and procedures, the City has not identified any significant need for improvement of the industrial/commercial program at this time.

11.3.2.1.5 RESIDENTIAL

As demonstrated through the narratives in other sections of this report, the expanding residential community that makes up the City defines the residential component of the City's JURMP. As such, the Storm Water Management staff has sought to achieve success in the reduction of pollutants through a variety of mechanisms geared toward behavior change. This has been approached through the characterization of a variety of activities and pollutant types resulting from such activities. As such, the Storm Water Management staff has identified a specific need to reach out to the residential community to communicate a broad based message of environmental stewardship and protection of water quality in the future.

Table 11-5 FY 2007-2008 Compliance with Activity-Based Requirements – Residential

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.e Residential	Household Hazardous Material	Quantity of waste targeted for collections (lbs)	Quantity of waste collected (lbs)	Increase/Decrease	%
		254,583 (FY 06-07 data)	220,008 (FY 07-08)	34,575 Decrease	13.5% Decrease
	Used Oil	Quantity of used oil collected (Gallons FY 06-07)	Quantity of used oil collected (Gallons FY 07-08)	Increase/Decrease	%
		57,393.5	134,314.7	76,921.2 Increase	134% Increase

Residential Program Strengths:

Pollution Prevention
The City's residential component is strengthened by the various pollution prevention programs offered to residents. Such pollution prevention programs provide the community with highly cost-effective methods of disposal of such items as used motor oil, green waste, recyclables, used cooking oil, household hazardous materials, and electronic waste. While the details of such programs are found throughout this report, it is important to recapture the tremendous asset such programs offer the City's community.

Residential Outreach and Education
The City has focused significant resources on residential outreach and education efforts in 2007-2008. While these activities are more fully described in Section 7.0 of this report, it is necessary to recognize the importance of this attribute to the overall success of the residential sector of the community.

Residential Program Improvement Areas and Challenges:

Based on exemplary residential pollution prevention procedures, BMP implementation, management measures, and a greatly enhanced outreach and education strategy, the City has not identified any significant needs for improvement at this time.

11.3.2.1.6 EDUCATION AND PUBLIC PARTICIPATION

The City prides in its well-established and comprehensive environmental programs. The Storm Water Management Program plays a vital role in communicating water quality information to

local commercial, industrial, residential, and development communities. Further, such messages are supported by cooperative efforts with such City entities as the Chula Vista Nature Center, the Conservation Department, the Regional Used Oil Recycling Program, and Household Hazardous Waste Program. With the City's commitment to environmental services and resources, the City's Storm Water Program has successfully collaborated with City environmental programs and departments in order to effectively reach the community at large with clear and relevant messages of environmental stewardship and protection. The accounting of activities in Sections 8 and 9 of this report has been prepared to demonstrate the broad spectrum of education and public participation opportunities provided to the community of Chula Vista.

Within the reporting period of this report, the City has not identified specific management measures by which to improve education and public participation activities. However, the City is committed to the continued development of such efforts as they are evaluated through the effectiveness assessment process.

Education and Public Participation Program Strengths:

Environmental Program Collaboration

As discussed throughout Sections 8 and 9 of this report and highlighted in previous reporting years, the City's Storm Water Management Program is strongly supported by numerous environmental programs within the City. As such, the Storm Water Management Program has been able to reach a diverse audience as well as participate in a variety of public participation venues. Reporting Year 2007-2008 marks a more fully developed collaboration of programs culminated through the CLEAN program, and has resulted in clear and consistent messaging to the Chula Vista community.

While the goals of the CLEAN program have been articulated elsewhere in this report, it is important to note the unique approach to education and outreach that the City has taken. The connection of such programs including conservation activities, household hazardous waste collection, recycling programs, and storm water management is most effectively approached mutually. It has been recognized that the interrelationship of each of these programs collectively, is integral to the overall success of each of these programs individually. Finally, the City is fortunate to have the Chula Vista Nature Center to showcase the San Diego Bay and to provide tangible access to the resources the community is called to protect.

Internal Staff Training

Through formal or informal training, meetings or individual contact staff training is conducted each year in the City on an as needed basis. With the status and trends in storm water management in such a dynamic state, Storm Water Management staff has recognized the need to consistently provide updated information to City employees. In addition, the messages must be conveyed consistently at all levels, and cover all necessary City functions.

Chula Vista CLEAN Program

Within the reporting period of this report, the City has taken significant steps to further develop an integrated and relevant public education and outreach program aimed at a diverse audience. Utilizing the services of I Love A Clean San Diego (ILACSD) the CLEAN program has been

built upon a holistic approach and increased community participation, aiming to utilize the participating community groups, private businesses and organizations, local water agencies, local schools, developers, community groups, and others to create a shared personal commitment to water quality and watershed protection.

Education and Public Participation Program Improvement Areas and Challenges:

Education of the Development Community

During previous years, the development community had shown the most resistance to changing storm water requirements. However, during this reporting period the development community has shown improvement to change in terms of project design, high efficiency treatment control BMPs, and site design BMP implementation. This is in part due to the City's strong steps to ensure the effective design and utilization of appropriate construction and post-construction BMPs. It is a priority of the City to communicate and reinforce the requirements associated with development and redevelopment projects through a consistent and clear message. This is most effectively approached through project-by-project interaction with developers and consultants.

Table 11-6 Compliance with Activity-Based Requirements – Education and Public Participation

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.g Education	Outreach (External)	# targeted training workshops, outreach events	# training workshops, outreach events conducted	Actual/Target	%
		14	14	14/14	100
		# Material, brochures targeted for distribution	# Materials, brochures distributed	Actual/Target	%
		General public contact	General public contact	N/A	N/A
	Staff Training	# Material, brochures targeted for distribution	# Materials, brochures distributed	Actual/Target	%
		14	14	14/14	100
	Opportunities for participation	Estimated # of opportunity events to be provided	# provided	Actual/Target	%
		6	6	6/6	100

11.3.2.2 CHANGES IN KNOWLEDGE/AWARENESS (LEVEL 2)

It is generally accepted that expanded knowledge and awareness is fundamental to bringing about desired changes in behavior. As such, the wide variety of activities captured in this report, including workshops, training, and public outreach through the Chula Vista CLEAN program all support this critical programmatic element. The City provides a wide cross-section of information through the interrelationship of various environmental programs. In 2007-2008, the City has been able to significantly impact the level of knowledge and awareness within the community by influencing residential, industrial, commercial, and municipal activities. In order to evaluate levels of knowledge and awareness, the City has established the following indicators:

- Complaint Response Tracking (Residential, Industrial, Commercial, Construction)
- Business License Application Screening Procedure (Mobile Businesses)
- Storm Water Web Site (All Community Sectors)
- Development Review Process (Development Community)

It is anticipated that in future reporting years as these indicators become more wholly developed; they will provide strong directional measures toward programmatic updates. It is important to recognize that the elements presented below are only indicators used to evaluate trends in Chula Vista, and are taken collectively to express overall successes and challenges and provide programmatic guidance.

Complaint Response Tracking

A comprehensive complaint response summary is presented in Attachment I – Complaint Response Summary. It is important to note that trends in complaints received by the City have remained strong since the inception of the program. Figure 11-2 shows the number of complaints from FY 1997-1998 to FY 2007-2008. With slight fluctuations in numbers, it is difficult to draw any strong conclusions, however, it may be inferred that overall programmatic influences are strong throughout the community.

Figure 11-2 Chula Vista Storm Water Complaint Summary 1997-2008

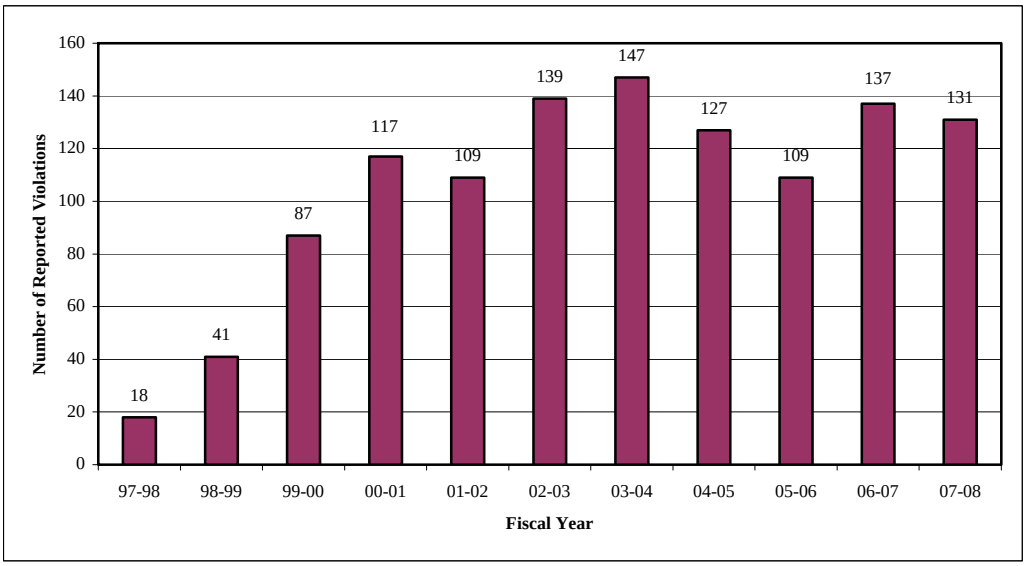

Business License Application Screening Procedure
The Business License Application Procedure, presented in Section 5.3 of this report, has provided the City a unique mechanism in evaluating knowledge and awareness of various mobile business communities. Mobile business owners are required to complete a storm water questionnaire, read the City's Storm Water Ordinance, and review educational BMP information related to their mobile business type. Through direct interaction with business license applicants, Storm Water Management staff is able to subjectively assess the level of awareness that mobile business owners have, based on their answers to the storm water questionnaire.

Storm Water Web Site
The City's CLEAN website development and update continued into 2007-2008. While this site offers valuable information to a number of sectors, it is anticipated that this site will provide invaluable data to support predicted access to the site. Web statistics indicate that the community has visited the site on a regular basis. It is anticipated that through the incorporation of the web site into the larger CLEAN media campaign, the web site will continue to provide valuable resources to the Storm Water Management Program and provide data to support long-term effectiveness assessment.

Development Review Process
Through the required submission of Water Quality Technical Reports (WQTR) and the subsequent review by City staff, there has been a notable increase in knowledge and awareness within the development community in 2007-2008. A level of knowledge and awareness has been evaluated through a review of the comments provided and direction needed from City staff to ensure compliance with Standard Urban Storm Water Management Plan (SUSMP) requirements. Further, it has been noted that WQTR submittals tend to be more fully developed and generally utilize effective sets of post-construction BMPs as required. It should also be noted that while great strides have been observed in the development community, the City has identified the need to consistently convey stronger regulatory standards of construction and post-construction BMPs, and will continue to take this approach in subsequent reporting years.

11.3.2.3 BEHAVIORAL CHANGE/BMP IMPLEMENTATION (LEVEL 3)

In 2007-2008, the City continued to implement BMP tracking measures into various components as reviewed in this report. Further, it has been recognized that through the implementation of well-developed BMP tracking measures, the City will be able to more fully evaluate BMP implementation and associated behavioral change. The City has identified the following program areas as those most conducive to effectively tracking BMP implementation and evaluating behavioral change within the various regulated communities:

- Inspection Activities
- SUSMP Implementation

Inspection Activities
As discussed in applicable sections of this report, the City has developed a comprehensive commercial, industrial, municipal, and construction inspection program. It is through these well-

developed inspection programs, that the City is able to utilize BMP implementation tracking mechanisms.

In support of BMP selection and evaluation throughout various community sectors, in 2005-2006 the City developed new inspection forms to document BMP implementation. These forms were used for inspection during 2007-2008. The inspection forms developed for commercial, industrial, municipal, and construction inspection activities, are intended to provide a more fully developed BMP implementation tracking mechanism. Based upon data gathered from such activities, it is anticipated that the City will be able to take a more critical look at BMP selection and implementation Citywide, and further validate effectiveness trends in years to come.

SUSMP Implementation

Within the development community, implementation of post-construction phase BMPs provides the City with the strongest indicator of BMP implementation and behavioral change. As discussed in Section 2.0 of this report, the City has sought to firmly establish SUSMP requirements within the development community, and has successfully implemented SUSMP procedures for all applicable projects within the defined reporting period of this report. Inherently through this process, significant numbers of post-construction phase BMPs have been implemented throughout the City; including site design, source control, and treatment control level BMPs.

11.3.2.4 LOAD REDUCTIONS (LEVEL 4)

On a regional level, some Level 4 analysis has been conducted within the ROWD and associated LTEA documents. While load reduction targeted outcomes and estimates have proven challenging on a jurisdictional level, the regional ROWD and LTEA provide the most well developed approach toward such assessments. As such, the City has developed the following snapshot of load reduction estimates on a jurisdictional level to support overall JURMP effectiveness assessment. Notably, the load reduction numbers provided below in Table 11-1 are focused on municipal functions and programs:

Table 11-1 Load Reduction

ACTIVITY/FUNCTION	LOAD REDUCTION	POLLUTANT TYPE
Used Oil Recycling	134,314 Gallons	Motor Oil
Household Hazardous Waste Collection	220,008 Pounds	Antifreeze, Oils, Paints
MS4 Maintenance	11.93 Tons	Trash, Debris, Leaves, Grass, Rock, Silt
MS4 Inlets	19.69 Tons	Trash, Debris, Leaves, Grass
MS4 Catch Basins	9.92 Tons	Trash, Debris
Channel Maintenance	400.78 Tons	Trash, Debris
Street Sweeping	584.1 Tons	Trash, Debris, Sediment

11.3.3 INTEGRATED ASSESSMENT

A review of the results from the regional monitoring program and the City's Dry Weather Field Screening and Analytical Monitoring indicates that bacterial indicators are the only persistent constituent of concern in discharges from the City's MS4 and within the receiving waters. Other constituents of concern occasionally exceed established limits, however, they appear to be transient. Sources of bacterial indicators are commonly associated with wildlife; pet waste, improper management of restaurant waste, sewage overflows, and general residential activities and land uses.

The City has implemented a variety of program elements that are described fully in other sections of this report, as summarized below:

- Residential and commercial public education
- Inspection of restaurants and other potential sources of bacteria
- A comprehensive sanitary sewer overflow prevention and cleanup program
- A comprehensive storm water conveyance system maintenance
- Street sweeping
- Requirements for treatment control Best Management Practices on new development and major redevelopment

The Charts included in Section 11.3.1 indicate that while Total Coliform and Enterococci are on an upward trend, Fecal Coliform exceedance has sharply declined during the past five years. These results can be interpreted as follows:

The City has expanded significantly during the past few years. As a result of new development, increased population, and creation of additional impervious areas, it is expected that bacterial contamination should increase. However, the implementation of BMPs as listed above, has resulted in decease in fecal coliform in urban runoff. This indicates that the City's programs are effective in controlling bacterial indicators. It is important to point out that this analysis should not be construed as a scientific assessment of the effectiveness of all the City's programs. As mentioned before, integrated assessment is the most difficult step in the effectiveness assessment and requires the evaluation of many diverse factors throughout a long period of time. It is expected that the next regional ROWD will include a more comprehensive evaluation of integrated assessment within the San Diego Bay Watershed and the City.

12.0 SPECIAL INVESTIGATIONS

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(k).i - A description of any special investigations conducted.

During this reporting period, the City did not encounter a situation where conducting Special Investigations was necessary.

13.0 NON-EMERGENCY FIRE FIGHTING

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(l).i - A description of any efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.

13.1 INTRODUCTION

The City has developed and implemented a program to reduce pollutants from non-emergency fire fighting flows. BMPs have been implemented when conducting the following activities:

- Regular maintenance of fire and emergency vehicles and equipment
- Training exercises
- Facilities maintenance
- Post-Emergency rehabilitation of response equipment

These activities are conducted in a way to either minimize or eliminate the discharge of pollutants to the storm water conveyance system. Detailed descriptions of BMPs are given for each activity below:

13.2 BEST MANAGEMENT PRACTICES

The City has developed and implemented a program to reduce pollutants from non-emergency fire fighting flows. Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. BMPs and educational methods will be used to reduce the discharge of pollutants to the MEP. BMPs will be implemented when conducting the activities described in the following sections:

13.2.1 REGULAR MAINTENANCE OF EQUIPMENT

- Vehicles and equipment are cleaned where runoff will be directed either to the sanitary sewer system or to a drain with an oil/water separator system.
- Vehicles and equipment are cleaned where runoff will pond and evaporate and/or where runoff will filter through landscaped areas.
- Sewer drains in a vehicle cleaning area are outfitted with a hydro screen fabric barrier to collect debris.
- Spill kits are available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents is minimized and disposed of into the sanitary sewer system.

13.2.3 TRAINING EXERCISES

- Water flows are directed to landscaped areas whenever possible.

- When flowing water to an area where landscaping does not prevent runoff, the area selected is surveyed by the Officer-in-Charge prior to training activities to ensure that debris does not enter into the MS4 as a result of the drill.
- Areas with debris that could potentially enter the MS4 as a result of the drill activities are not used for training until the debris has been removed.
- Live fire training activities are pre-planned to allow integration of barriers to off-site runoff that could contribute to storm water discharges.

13.2.4 FACILITIES MAINTENANCE

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways are swept to remove debris. Debris is placed in the trash.
- Landscaped areas are maintained as required to reduce the introduction of leaves and other landscape waste into the MS4.
- Irrigation systems are monitored and maintained as required to reduce irrigation water from going off-site.
- Spills are cleaned up using spill kits provided at the work site, and disposal of spilled material are in accordance with applicable regulations.
- Hazardous materials (Hazmat) spills that require a cleanup beyond the ability of the on-site employees are reported to the County of San Diego Hazardous Materials Division or a Hazmat certified contractor with appropriate resources to properly address the spill.
- Maintenance and repair of structures are conducted using methods that do not contribute pollutants to the MS4.

13.2.5 POST-EMERGENCY REHABILITATION OF RESPONSE EQUIPMENT

Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency are restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. Water is used only if other practical and immediately available methods can not be identified. In such cases, water usage and discharges to MS4s are kept to a minimum.

13.2.6 WASHING AND FUELING ACTIVITIES

The City maintains a number of fire stations, as listed in the municipal inventory. Such facilities are inspected on an as needed basis. See Attachment C. Only one fire station; Fire Station No. 4/Training Tower, has training capabilities. The property is sloped so that all runoff generated by training activities is directed to a pervious infiltration area. Two fire stations within the City, stations No. 2 and No. 7, have fueling stations on site. Trucks from other stations are brought to these locations for fueling. The following fire stations conduct washing activities on site and pursuant to SUSMP regulations have permanent storm water BMPs installed:

- Fire Station No. 6 – 3 filter inserts and a non-storm water diverter

- Fire Station No. 7 – 1 CDS unit and a non-storm water diverter
- Fire Station No. 8 – 1 CDS unit and a non-storm water diverter

Each station is sloped so that all runoff generated by washing activities flows to a drain equipped with a non-storm water diverter mechanism which diverts the wash water to the sanitary sewer system.

All employees that conduct washing are properly trained on using the diverter device and ensuring it is used appropriately. Similar to fueling activities, trucks from other stations that require cleaning are brought to the stations equipped with washing capabilities. In addition to the BMPs for washing activities discharges, which are not allowed to enter the storm water conveyance system, these facilities are equipped with treatment control BMPs for storm water discharges.

14.0 JURMP REVISIONS

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(m).i A description of any proposed revisions to the JURMP.

Pursuant to the Municipal Permit, the City's JURMP was updated in March 2008. A copy of the City's updated JURMP was submitted to the RWQCB. Since the JURMP is a living document, it is continuously updated throughout the year. An account of the proposed updates will be included in the next JURMP Annual report, which is due for submittal to the RWQCB in September 2009.

15.0 CONCLUSIONS AND RECOMMENDATIONS

On January 24, 2007, the San Diego Regional Water Quality Control Board adopted the National Pollutant Discharge Elimination System Municipal Permit, Order No. R9-2007-0001. The new permit includes more prescriptive requirements than Permit Order No. 2001-01. Pursuant to the requirements of the new Municipal Permit, the City of Chula Vista updated its ordinances; permit processes; Standard Urban Storm Water Mitigation Plan (SUSMP), and Jurisdictional Urban Runoff Management Program (JURMP) document. This report, therefore, includes an account of the City's implementation of the old and new permits during fiscal year 2007-2008 (July 1, 2007 to June 30, 2008).

Well-developed program implementation and management in the City have defined the 2007-2008 reporting year. As reflected throughout this report, the City's Storm Water Management Program has matured and successfully met all programmatic goals set out for the defined reporting period, and has experienced overall success as reflected in the effectiveness assessment conducted in this report. It is vital to direct implementation and management strategies down a targeted, effective, and efficient path as to create a set of interrelated actions and to promote long-term effectiveness. The City recognizes the need to be steadfast and pragmatic toward programmatic development in order to foster long-term success achieved through water quality improvements.

The whole of the preceding document presents a comprehensive implementation narrative and accounting of results in 2007-2008. Further, a detailed effectiveness assessment exercise has supported an overall evaluation of programmatic elements. Taken collectively, the City has identified a variety of strengths and perceived some challenges that will impact program development and implementation in the years to come.

As a result of the re-issuance of the Municipal Permit, major programmatic updates and changes were introduced to the City's Storm Water Management Program. Such updates included data collection and management strategies, implementation approaches, and program planning with the goal of effective support of long-term methodologies on jurisdictional, watershed, and regional basis. It is expected that the programmatic updates to the Storm Water Management Program will result in the support of a seasoned approach to program implementation in future reporting years.

The City's Storm Water Management Program is served well through continued evolution and implementation of the CLEAN program introduced and detailed throughout this report. The City's integrated approach to public outreach and education is unique, and an approach that the City feels is well received by its diverse community with diverse environmental resources and interests. While many CLEAN concepts have come to fruition in 2007-2008, this program continues to grow in the coming years through ongoing efforts and commitment from the City of Chula Vista and its partners.

In subsequent reporting years, the City will continue to maintain a high standard of compliance with permit requirements through program planning and implementation and seek to continually evaluate and augment program elements as deemed necessary. Further, the City will seek to

more fully integrate watershed based programmatic planning and development to foster a more well rounded approach to program implementation and to support long-term effectiveness assessment at local, watershed, and regional levels.

ATTACHMENT A
Summary of SUSMP Projects

FY 2007-2008 Permitted SUSMP Projects

Permit Issued Date	Project Name	Inspection Priority	Category	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
21-Dec-07	New Hope Church	Low	Miscelleneous	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake Vistas	New Hope Community
21-Mar-08	High Tech High University Park	Low	Municipal	TC-30 Vegetated Swale TC-11 Infiltration Basin	MP-52 Drain Inlet	Otay Ranch Village 11	High Tech High Univ. Park
28-May-08	Otay Ranch Village 2 - R13a	Low	Condo			Otay Ranch Village 2	Casita De Avila
28-May-08	Otay Ranch Village 2 - R13b	Low	Condo			Otay Ranch Village 2	Villas De Avila (Att. Condos)
26-Jun-08	Bonita Gateway	Low	Commercial	TC-32 Bioretention	Other	Bonita	Bonita Village

Total Projects:: **5**

SUSMP Projects Inventory

Note: This table represents a comprehensive list of projects screened for applicability and or reviewed for compliance with SUSMP requirements.

Project Name	Category	Inspection Priority	Status	Types of BMP: BMP Type- Group I	Types of BMP: BMP Type - Group II	Subdivision	Neighborhood
Completed							
2380 Main Street	Residential	Low	Completed	MP-52 Drain Insert		Main Street	Main Street
805 / Orange Interchange	Municipal/CIP	Medium	Completed	MP-52 Drain Insert		805 & Orange Ave	805 & Orange Ave
Altamira II - Area E2	Residential	Medium	Completed	MP-52 Drain Insert		San Miguel Ranch	Altamira II
Aqua Clean	Commercial	Medium	Completed	MP-52 Drain Insert		Otay Lakes	Otay Lakes
Auto Park North	Commercial	High	Completed	MP-52 Drain Insert		Autopark	Autopark
Bella Sol	Condo	Low	Completed	MP-51 Vortex Separator		Sunbow	Bella Sol
Belleza - Neighborhood B	Residential	Low	Completed	MP-51 Vortex Separator		San Miguel Ranch	Belleza
Bonita Library	Municipal/County	High	Completed	MP-52 Drain Insert MP-51 Vortex Separator	TC-30 Vegetated Swale	Bonita	Bonita
Brisas Del Mar Village	Commercial/Mixed	Medium	Completed	MP-52 Drain Insert		Broadway	Broadway
C.V. Commerce Center	Commercial	Medium	Completed	MP-51 Vortex Separator		Main Street	Main Street
C.V. Corporate Center	Commercial	High	Completed	MP-52 Drain Insert		Main Street	Main Street
Capria	Residential	Medium	Completed	MP-52 Drain Insert		The Summit @ Eastlake	Capria

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Chevron Station-Olympic	Commercial	Medium	Completed	MP-52 Drain Insert		Eastlake	Eastlake Terraces
Chula Vista Crossings	Commercial	Medium	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	The Crossings	The Crossings
Chula Vista Toyota-Main Street	Commercial	High	Completed	MP-52 Drain Insert		Autopark	Autopark
COSTCO at Broadway	Commercial	Low	Completed	MP-51 Vortex Separator		Broadway	Broadway
Desert King	Commercial	Medium	Completed	MP-52 Drain Insert		Main Street	Main Street
Dixon Drive	Municipal/CIP	Medium	Completed	MP-52 Drain Insert		Dixon	Dixon
Doctor's Park	Commercial	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake	Eastlake Business District
Eastlake - Village Walk	Commercial	Low	Completed	MP-52 Drain Inlet	MP-51 Vortex Separator	Eastlake	Eastlake Village Walk
Eastlake Business Center-Hale Place	Commercial	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Business District
Eastlake Commerce-Business Center	Commercial	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Business District
Eastlake Community Church	Commercial	Low	Completed	MP-52 Drain Insert	Other	Eastlake	Eastlake Community
Eastlake Design District	Commercial	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake	Eastlake Business District
Eastlake Little League	Miscellaneous	Low	Completed	TC-30 Vegetated Swale		Eastlake Vistas	Eastlake Vistas
Eastlake Marketplace	Commercial	Low	Completed	MP-51 Vortex Separator		Eastlake	Eastlake Marketplace

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Eastlake Medical Campus	Commercial	High	Completed	MP-52 Drain Insert	TC-30 Vegetated Swale	Eastlake	Eastlake Village Walk
Eastlake Parkway 1-Kestrel Fall to Hunte	Commercial/Mixed	Medium	Completed	MP-52 Drain Insert		Otay Ranch Village 11	Kerstel Falls to Hunte Pkway
Eastlake Parkway Professional	Commercial	High	Completed	MP-52 Drain Insert	TC-30 Vegetated Swale	Eastlake	Eastlake Business District
Eastlake Parkway Trinidad Cove to	Commercial/Mixed	Medium	Completed	MP-52 Drain Insert	MP-51 Vortex Separator	Eastlake	Eastlake Landswap
Eastlake Terrace-Landswap	Commercial	High	Completed	MP-52 Drain Insert		Eastlake Terraces	Eastlake Landswap
Eastlake Terraces North-Ltd Edition	Commercial	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake	Eastlake Terraces North
Eastlake Terrace-Walmart	Commercial	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Terraces
Eastlake Village Center East	Commercial	Medium	Completed	MP-52 Drain Insert		Eastlake	Eastlake Village Center East
Fairhaven II	Residential	Medium	Completed	MP-52 Drain Insert		Rolling Hills Ranch	Fairhaven II
Fenton Business Center	Commercial	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Business District
Fire Station #6	Municipal	Low	Completed	MP-52 Drain Insert		San Miguel Ranch	Fire Station 6
Fire Station #7	Municipal	Low	Completed	MP-51 Vortex Separator	Other	Otay Ranch V6	Otay Ranch V6
Fire Station #8	Municipal	Low	Completed	MP-51 Vortex Separator		Eastlake Woods	Fire Station 8
Firenze	Residential	Medium	Completed	MP-52 Drain Insert		The Summit @ Eastlake	Firenze

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
High Tech Business Center @ Eastlake	Industrial	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake	Eastlake Business Center
Home Depot Eastlake	Commercial	Low	Completed	MP-52 Drain Insert	TC-50 Water Quality Inlet	Eastlake	Eastlake Terraces
Horizon Neighborhood Park	Municipal	Medium	Completed	MP-52 Drain Insert		Sunbow	Horizon Neighborhood
J&W Redwood	Commercial	Medium	Completed	TC-11 Infiltration Basin		Main Street	Main Street
Kohls Store -Eastlake Village East	Commercial	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Village Center East
LA Fitness Eastlake Village Terraces North	Commercial	Low	Completed	MP-51 Vortex Separator	MP-52 Drain Inlet	Eastlake	Eastlake Terraces North
Lady of Guadalupe Church	Miscellaneous	Medium	Completed	TC-30 Vegetated Swale		Fresno Avenue	Fresno Avenue
Mantilla- Lot 5-Neighborhood C	Residential	Medium	Completed	MP-52 Drain Insert		San Miguel Ranch	Mantilla- Neighborhood C
Mar Brisa	Condo	Medium	Completed	MP-52 Drain Insert		Rolling Hills Ranch	Mar Brisas
Mater Dei High School	Miscellaneous	Low	Completed	MP-50 Wet Vault		Otay Ranch Village 6	Mater Dei High School
McCune Chrysler Dodge	Commercial	High	Completed	MP-52 Drain Insert		Autopark	Autopark
Montevalle Park	Municipal	Medium	Completed	MP-52 Drain Insert		Eastlake Woods	Montevalle Park
Mountain Hawk Park	Municipal	Medium	Completed	MP-52 Drain Insert		Eastlake Vistas	Mountain Hawk Park
Otay Lakes Medical Office	Commercial	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Business District

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Otay Ranch Town Center	Commercial	Low	Completed	MP-51 Vortex Separator		Otay Ranch	Otay Ranch Village 11
Otay Ranch V1 West -- R59C & R60	Residential	Medium	Completed	MP-52 Drain Insert		Otay Ranch V1 West	R59C & R60
Otay Ranch Village 6, Windchime R9b	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch Village 6	Windchime
Payless Auto Sales	Commercial	High	Completed	MP-52 Drain Insert		Autopark	Autopark
Pharus Plaza	Commercial	Low	Completed	MP-51 Vortex Separator		Broadway	Broadway
R-1/Mandalay	Residential	Medium	Completed	MP-52 Drain Insert		Otay Ranch V-6 McMillin	R-1/Mandalay
R-1/Wisteria-Otay Ranch V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-1/Wisteria
R-10/Cedar Rose II-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-10/Cedar Rose II
R-2/Twilight I-Otay Ranch V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-2/Twilight I
R-20/Cottage Lane-Otay Ranch,	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-20/Cottage Lane
R-21/Cottage Lane II-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-21/Cottage Lane II
R-22/Cottage Lane III-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-22/Cottage Lane III
R-23 / Azalea-Otay Ranch, V-11	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-11	R-23/Azatea
R-24A/Agave-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-24A/Agave

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
R-25/Aristata-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-25/Aristata
R-2A/Cambria	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-6	R-2A/Cambria
R-2B/Willowbrook	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch-V-6 ORC	R-2B/Willowbrook
R-3/Sienna	Residential	Medium	Completed	MP-52 Drain Insert		Otay Ranch V-6 McMillin	R-3/Sienna
R-3/Twilight II-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-3/Twilight II
R-30A, Goldrush, Otay Ranch, V-5	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch Village 5	R-30A/Goldrush
R-30B, Stetson, Otay Ranch, V-5	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-5	R-30B2/Stetson
R-30B, Winchester, Otay Ranch, V-5	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-5	R-30B/Winchester
R-30B,Siver Sage, Otay Ranch, V-5	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-5	R-30B3/Siver Sage
R-4/Auburn Lane	Residential	Medium	Completed	MP-52 Drain Insert		Otay Ranch V-6 McMillin	R-4/Auburn Lane
R-4/Magnolia I-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-4/Magnolia I
R-5/Magnolia II-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-5/Magnolia II
R-5A/Madera	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch-V-6 ORC	R-5A/Madera
R-6/Jasmine	Residential	Medium	Completed	MP-52 Drain Insert		Otay Ranch V-6 McMillin	R-6/Jasmine

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
R-6/Magnolia III-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-6/Magnolia III
R-7/Belleme Chateau	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-6 ORC	R-7/Belleme Chateau
R-7/Cedar Rose I-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-7/Cedar Rose I
R-7A/Belleme Villas	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch-V-6 ORC	R-7A/Belleme Villas
R-8/Mir Soliel	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-6 ORC	R-8/Mir Soliel
R-8/Picket Fence-Otay Ranch, V-11	Residential	Medium	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-8/Picket Fence
R-9/Lantana-Otay Ranch, V-11	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-9/Lantana
R-9A/Rosewood	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-6 ORC	R-9A/Rosewood
Rancho Rios Condo	Condo Conversion	Medium	Completed	MP-52 Drain Insert		Rancho Drive	Rancho Drive
Rancho Vista Apartments	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake	Eastlake Summit
Road One of San Diego	Commercial	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Maxwell Road	Maxwell Road
Salt Creek Park	Municipal	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	Salt Creek Park
Savon-CVS Pharmacy @ Fourth Av.	Commercial	High	Completed	MP-52 Drain Insert		Fourth Ave	Fourth Ave
Sedona	Condo	Medium	Completed	MP-52 Drain Insert		Rolling Hills Ranch	Sedona

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Seniors at Broadway	Residential	Medium	Completed	MP-52 Drain Insert		Broadway	Broadway
Southbay Motorsports	Commercial	High	Completed	MP-52 Drain Insert		Autopark	Autopark
Telegraph Canyon	Municipal/CIP	Medium	Completed	MP-52 Drain Insert		Telegraph Canyon Rd	Telegraph Canyon Rd
The Collections	Commercial	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Business District
The Shops at San Miguel Ranch	Commercial	Low	Completed	MP-51 Vortex Separator		San Miguel Ranch	The Shops at San Miguel Ranch
Tobias Drive	Municipal/CIP	Medium	Completed	MP-52 Drain Insert		Tobias	Tobias
Ventana I - Planning Area F	Residential	Medium	Completed	MP-52 Drain Insert		San Miguel Ranch	Ventana I
Ventana II - Planning Area G	Residential	Medium	Completed	MP-52 Drain Insert		San Miguel Ranch	Ventana II
Venture Commerce Center	Commercial	Low	Completed	MP-51 Vortex Separator		Eastlake	Eastlake Business District
Veterans Park	Municipal	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Sunbow	Veteran's Park
Villagio - Otay Ranch V5	Commercial/Mixed	Low	Completed	MP-51 Vortex Separator		Otay Ranch Village 5	Villagio
VR-1/Colrich	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-1/Colrich
VR-10/Summerhill	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-10/Summerhill
VR-12/Alder Lane	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-12/Alder Lane

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
VR-3/Aqua	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-3/Aqua
VR-4/Lost Creek	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-4/Lost Creek
VR-5/Bridgepark	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-5/Bridgepark
VR-6/Valencia	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-6/Valencia
VR-7/Abilene	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-7/Abilene
VR-8/Monticello	Residential	Medium	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-8/Monticello
VR-9 & 11/Sonora Ridge	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-9 & 11/Sonora Ridge
Walgreens @ Third Avenue	Commercial	High	Completed	MP-52 Drain Insert		Third Ave	Third Ave
Walmart at 5305 Broadway	Commercial	Low	Completed	MP-51 Vortex Separator	MP-52 Drain Inlet	Broadway	Broadway
Windingwalk Park	Municipal	Low	Completed	TC-30 Vegetated Swale		Otay Ranch Village-11	Windingwalk Neighborhood
WR-2 / Reserves	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Woods	WR-2/Reserves
WR-3 / The Woods	Residential	Low	Completed	MP-51 Vortex Separator	TC-22 Extended Det Basin	Eastlake Woods	WR-3/The Woods
WR-4 / Cornerstone	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Woods	WR-4/Cornerstone
WR-5 / K Hovnanian	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Woods	WR-5/K Hovnanian

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
WR-6 / Meredian	Residential	Medium	Completed	MP-52 Drain Insert		Eastlake Woods	WR-6/Meredian
WR-7 / Sonoma	Residential	Medium	Completed	MP-52 Drain Insert		Eastlake Woods	WR-7/Sonoma
Under Construction							
Ada Terraces	Condo	Medium	Under Construction	MP-52 Drain Insert		Ada Street	Ada Street
ADA Townhomes	Condo	Medium	Under Construction	MP-52 Drain Insert		Ada Street	Ada Street
Ada Villas 1	Condo	Medium	Under Construction	MP-52 Drain Insert		Ada Street	Ada Street
Andora	Residential	Medium	Under Construction	MP-52 Drain Insert		The Summit @ Eastlake	Andora
Bella Lago	Residential	High	Under Construction	TC-40 Media Filter		Rolling Hills Ranch	Bella Lago
Castillian	Residential	Low	Under Construction		TC-22 Extended Det Basin	Rolling Hills Ranch	Castillian
Clearstory	Residential	Low	Under Construction		TC-22 Extended Det Basin	Rolling Hills Ranch	Clearstory
Cortina	Residential	Medium	Under Construction	MP-52 Drain Insert		The Summit @ Eastlake	Cortina
High Tech High University Park	Municipal	Low	Under Construction	TC-30 Vegetated Swale TC-11 Infiltration Basin	MP-52 Drain Inlet	Otay Ranch Village 11	High Tech High Univ. Park
Marquis @ Otay Ranch Village 6	Residential	Low	Under Construction	TC-30 Vegetated Swale	MP-51 Vortex Separator	Otay Ranch Village 6	Marquis
Mike's Recycling Center	Commercial	Low	Under Construction	TC-32 Bioretention		Main Street	Main Street

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
New Hope Church	Miscelleneous	Low	Under Construction	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake Vistas	New Hope Community
Otay Ranch Village 11 Rec Center	Residential	Low	Under Construction	TC-30 Vegetated Swale	TC-22 Extended Det Basin	Otay Ranch Village 11	Otay Ranch Village 11
Otay Ranch Village 7/Indigo R1a	Residential	Medium	Under Construction	MP-52 Drain Insert		Otay Ranch Village 7	Indigo
Otay Ranch Village 7/Jacaranda R1b	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Jacaranda
Otay Ranch Village 7/Monte Sereno R2c	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Monte Sereno
Otay Ranch Village 7/Mosaic R7	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Mosaic
Otay Ranch Village 7/Santa Barbara R2a	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Santa Barbara
Otay Ranch Village 7/Tapestry R6a	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Tapestry
Otay Ranch Village 7/Terracotta R5	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Terracotta
Otay Ranch Village 7/Terraza R2b	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Terraza
Provence	Residential	Low	Under Construction		TC-22 Extended Det Basin	Rolling Hills Ranch	Provence
Quintessa	Residential	Low	Under Construction		TC-22 Extended Det Basin	Rolling Hills Ranch	Quintessa
R-10/Treviana, Otay Ranch, V-6	Residential	Medium	Under Construction	MP-52 Drain Insert		Otay Ranch V-6	R-10/Treviana
R-24B/Saguara-Otay Ranch, V-11	Residential	Low	Under Construction		TC-22 Extended Det Basin	Otay Ranch V-11	R-24B/Saguara

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
R-9B / Monet, Otay Ranch, V-6	Residential	Low	Under Construction	MP-51 Vortex Separator		Otay Ranch V-6 ORC	R-9B/Monet
San Miguel Ranch Bontera Neighborhood	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	San Miguel Ranch	San Miguel Ranch
San Miguel Ranch Estrella Neighborhood	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	San Miguel Ranch	San Miguel Ranch
San Miguel Ranch Montecito	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	San Miguel Ranch	San Miguel Ranch
The Marketplace @ Windingwalk	Commercial	Low	Under Construction	MP-52 Drain Insert	TC-22 Extended Det Basin	Otay Ranch Village 11	The Marketplace
VR-2/Atrium	Residential	Low	Under Construction	MP-51 Vortex Separator		Eastlake Vistas	VR-2/Atrium
Walnut Drive	Miscellaneous	Low	Under Construction	TC-30 Vegetated Swale		Walnut Drive	Walnut Drive
WR-1 / The Gates	Residential	Low	Under Construction	MP-51 Vortex Separator		Eastlake Woods	WR-1/The Gates

Total Projects:: **159**

ATTACHMENT B

Construction Projects Inventory and Prioritization

Subdivision	Project Name	Neighborhood	Work Order No	Developer	Priority
Eastlake Business Center					
Eastlake Business Center	Doctors Park Medical Campus		PC1629	Ledcor Petty	Low
Eastlake Business Center	Eastlake High Tech Research Center			Hamann Construction Co.	Low
Eastlake Summit					
Eastlake Summit	Capria	R9E	EL101I	KB Homes	Medium
Eastlake Summit	Andora	R9B	EL103I	Cornerstone Communities	Medium
Eastlake Summit	Buie Communities- Veranza	R9C	EL106I	Seacall Management	Medium
Eastlake Summit	Cortina	R9D	EL104I	Cornerstone Communities	Medium
Eastlake Vistas					
Eastlake Vistas	Atrium- Davidson	VR2		Davidson Development	Medium
Miscellaneous					
Miscellaneous	Villas at H Street		PG749	James Tellez	Medium
Miscellaneous	Mater Dei High School		OR421G	Sundt Construction	Medium
Miscellaneous	32 Walnut Drive < 1 acre			Private Builders	Low
Miscellaneous	1501 Broadway		PG763	Wermer Corporation	Medium
Miscellaneous	Sycamore Estates		PC1722/PG735	Norton Construction Co.	Medium
Miscellaneous	Fifth Avenue Drainage Improvements		DR173	City of Chula Vista	Low
Miscellaneous	Civic Center -Chula Vista		PC1580 -GG300	Highland Partnership	Medium
Miscellaneous	Lion Circlle Hilltp Estates		PG714	Pacific Homes Int.	Low
Miscellaneous	Village Walk at Eastlake		PG738	Jayness Corp.	Medium
Miscellaneous	Eastlake Village LTD Edition		VC204G	Snyder Langston	Medium
Miscellaneous	High Tech High School - Grading		PG765	High Tech High	High
Miscellaneous	New Hope Community Church @ Telegraph		PG747	Erickson Hall	Medium
Miscellaneous	Auto Park North			Knowlton Realty	Low
Otay Ranch, Village 11					
Otay Ranch, Village 11	Amber II	R12	OR629I	Shea Homes	High

Subdivision	Project Name	Neighborhood	Work Order No	Developer	Priority
Otay Ranch, Village 11	Cordova -Courtyard	R17	OR634I	Brookfield Homes	Medium
Otay Ranch, Village 11	Trellis II	R16	OR627I	Brookfield Homes	High
Otay Ranch, Village 11	Trellis I	R15	OR627I	Brookfield Homes	High
Otay Ranch, Village 11	Sapphire II	R14	OR628I	Shea Homes	High
Otay Ranch, Village 11	Saphhire I	R13	OR628I	Shea Homes	High
Otay Ranch, Village 11	Amber I/Sapphire Village	R11	OR629I	Shea Homes	High
Otay Ranch, Village 11	Clover	R18	OR633I	Shea Homes	Medium
Otay Ranch, Village 11	Windingwalk Shops	MU1	OR635I	Moorefield Construction	Medium
Otay Ranch, Village 11	Agave	R24A	OR624I	Shea Homes	Medium
Otay Ranch, Village 11	Sagurao	R24B	OR624I	Shea Homes	Medium
Otay Ranch, Village 2					
Otay Ranch, Village 2	Future SFD-under grading phase	R18A		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD (Alley)-under grading phase	R5B		Sunrise Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R20	PG656	Otay Ranch Company	High
Otay Ranch, Village 2	La Purisma	R6		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R25A		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R24		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R23		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R21		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R4		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R27		Otay Ranch Company	High
Otay Ranch, Village 2	Anacapa	R9A		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R10		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R11		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R12		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R13	OR815I / G	Otay Ranch Company	High
Otay Ranch, Village 2	North- Future MFD-under grading phase	R16		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R17		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R26		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R19		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R29		Otay Ranch Company	High

Subdivision	Project Name	Neighborhood	Work Order No	Developer	Priority
Otay Ranch, Village 2	Lindera Kane (Alley)	R5A		Kane Development	High
Otay Ranch, Village 2	Future Mixed Used-under grading phase	MU1	OR909I	Otay Ranch Company	High
Otay Ranch, Village 2	Future Mixed Use-under grading phase	MU2		Otay Ranch Company	High
Otay Ranch, Village 2	North- Future Mixed Use-under grading phase	MU3		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R8		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R25B		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R9B		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R15	OR806I	Otay Ranch Company	High
Otay Ranch, Village 2	Sevilla	R30	OR814I	Otay Ranch Company	Low
Otay Ranch, Village 2	Future SFD-under grading phase	R18B		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R28		Otay Ranch Company	High
Otay Ranch, Village 2	Tavera	R14	OR813I	Otay Ranch Company	High
Otay Ranch, Village 2	North- Future Mixed-Under Grading Phase	R12, R13, R	OR805G	Otay Ranch Company	High
Otay Ranch, Village 2	North- Heritage Road		OR807G	Otay Ranch Company	High
Otay Ranch, Village 2	North- Future Mixed-Under Grading Phase	R5, R6, R7,	OR809G	Otay Ranch Company	High
Otay Ranch, Village 2	Presidio	R7		Otay Ranch Company	High
Otay Ranch, Village 6, ORC					
Otay Ranch, Village 6, ORC	Treviana	R10	OR418C	Cornerstone Communities	Medium
Otay Ranch, Village 6, ORC	Marquis	MU1	OR909I	Oakwood Company	Medium
Otay Ranch, Village 6, ORC	Monet	R9B	OR939I/OR939G	Pacific Coast	Medium
Otay Ranch, Village 7, McMillin					
Otay Ranch, Village 7, McMillin	Mosaic II	R7A		Shea Homes	High
Otay Ranch, Village 7, McMillin	Future	R7B		McMillin	High
Otay Ranch, Village 7, McMillin	Indigo	R1A	OR457I	McMillin	High
Otay Ranch, Village 7, McMillin	Mosaic I	R6B		Shea Homes	High
Otay Ranch, Village 7, McMillin	Tapestry	R6A		Shea Homes	High
Otay Ranch, Village 7, McMillin	Terracotta	R2B	OR458I	McMillin	High
Otay Ranch, Village 7, McMillin	Santa Luna Road		OR976C	Otay Ranch Company	High
Otay Ranch, Village 7, McMillin	Jacaranda	R1B	OR459I	McMillin	High
Otay Ranch, Village 7, ORC					

Subdivision	Project Name	Neighborhood	Work Order No	Developer	Priority
Otay Ranch, Village 7, ORC	Terraza	R2B	OR973I	Sunrise Company	High
Otay Ranch, Village 7, ORC	Open Space Designated	R4		Otay Ranch Company	High
Otay Ranch, Village 7, ORC	Santa Barbara	R2A	OR973I	Pacific Coast	High
Otay Ranch, Village 7, ORC	Cypress Lane	R2D	OR973I	Kane Development	High
Otay Ranch, Village 7, ORC	Open Space Designated	R3		Otay Ranch Company	High
Otay Ranch, Village 7, ORC	La Media Road		OR975C	Otay Ranch Company	High
Otay Ranch, Village 7, ORC	Monte Sereno	R2C	OR973I	Oakwood	High
Rolling Hills Ranch					
Rolling Hills Ranch	Bella Lago -Future-SFD	R1	BE002G / I	K Hovnanian	High
Rolling Hills Ranch	FutureMFD	N10B	RH242I	K Hovnanian	High
Rolling Hills Ranch	Future MFD	N11	RH241I	Future-N/A	High
Rolling Hills Ranch	Portola	N10A	RH237I	Lennar Corp.	High
Rolling Hills Ranch	Clearstory	N12B	RH239I	Davidson Homes	High
Rolling Hills Ranch	Quintessa	N9B	RH234I	McMillin	High
Rolling Hills Ranch	Provence		RH229G	Cornerstone Communities	High
Rolling Hills Ranch	Future MFD	N9-N12	RH229G	McMillin	High
Rolling Hills Ranch	Rolling Hills Backbone Improvements	N9-N12	RH231C	McMillin	Medium
San Miguel Ranch					
San Miguel Ranch	Proctor Valley Road		SM020I	Trimark Homes	Medium
San Miguel Ranch	Backbone Improvements-Avenida Loreta		SM014C	Trimark Homes	Medium
San Miguel Ranch	San Miguel Ranch Road		SM013C	Trimark Homes	Medium
San Miguel Ranch	SMR Phase III Grading	K,L,J1,J2, B	SM011G	Trimark Pacific Homes	High
San Miguel Ranch	Montecito Ridge	J1	SM016I	Trimark Pacific	High
San Miguel Ranch	Marvilla	L	SM022I	Shea Homes	High
San Miguel Ranch	Estrella	J2	SM018I	Shea Homes	High
San Miguel Ranch	Bontera	K	SM015I	Buie/Secall Management	High
San Miguel Ranch	Camino	N/A		Shea Homes	High
Total:	**103**				

ATTACHMENT C

Municipal Facility Source Inventory and Prioritization

Facility Name	APN Number	Type of Facility	Address			Priority
Animal Care Facility	6290605400	Animal Facilities	130	BEYER	WY	High
Bay Boulevard Park	5670213202	Parks-Landscape-Rec Areas		BAY	BL	High
Bonita Long Canyon Park	5941100500	Parks-Landscape-Rec Areas	1745	COLTRIDGE	LN	High
Breezewood Park	6425004600	Parks-Landscape-Rec Areas	1091	BREEZEWOOD	DR	High
Chula Vista Community Park	5953200200	Parks-Landscape-Rec Areas	1060	EASTLAKE	PW	High
Chula Vista Municipal Golf Course	5932402400	Parks-Landscape-Rec Areas	4475	BONITA	RD	High
Chula Vista Women's Club	5683004200	Parks-Landscape-Rec Areas	357	G	ST	High
Civic Center and Admin Building	5681103300	Other Fixed Facilities	276	FOURTH	AV	Medium
Civic Center Branch Library	5681530200	Other Fixed Facilities	365	F	ST	Low
Community Youth Center	5723001100	Parks-Landscape-Rec Areas	465	L	ST	High
Conneley Park	6233143300	Parks-Landscape-Rec Areas	1559	CONNOLEY	AV	High
Cottonwood Park	6424210600	Parks-Landscape-Rec Areas	1778	PALOMAR	ST	High
Discovery Park	6423930700	Parks-Landscape-Rec Areas	700	BUENA VISTA	WY	High
Downtown Parking Facility	5682702900	Parks-Landscape-Rec Areas	340	F	ST	High
Eastlake Branch Library	5953201700	Other Fixed Facilities	1120	EASTLAKE	PW	Low
Eucalyptus Park	5651200300	Parks-Landscape-Rec Areas	47	FIFTH	AV	High
Explorer Park	6400301900	Parks-Landscape-Rec Areas		NORELLA	ST	High
Fire Station #1	5681103300	Fire Stations	447	F	ST	Low
Fire Station #2	5743003300	Fire Stations	80	J	ST	Low
Fire Station #3	6411213000	Fire Stations	1410	BRANDYWINE	AV	Low
Fire Station #4/Training Tower	6423910600	Fire Stations	850	PASEO RANCHERO		Medium
Fire Station #5	6192110100	Fire Stations	391	OXFORD	ST	Low
Fire Station #6	5955700100	Fire Stations	605	MOUNT MIGUEL	RD	Low
Fire Station #7	6443101500	Fire Stations	1640	SANTA VENETIA	ST	Low

Facility Name	APN Number	Type of Facility	Address			Priority
Fire Station #8	5950804200	Fire Stations	1180	WOODS	DR	Medium
Friendship Park	5681530100	Parks-Landscape-Rec Areas	365	F	ST	High
Gayle McCandliss Park	6390301300	Parks-Landscape-Rec Areas	415	J	ST	High
Greg Rogers Park	6200600300	Parks-Landscape-Rec Areas	1189	OLEANDER	AV	High
H Street Land Application	5740300800	Parks-Landscape-Rec Areas		H	ST	High
Harborside Park	6182005900	Parks-Landscape-Rec Areas	670	OXFORD	ST	High
Harvest Park	6425814800	Parks-Landscape-Rec Areas	1381	PALOMAR	ST	High
Heritage Park & Community Center	6425601100	Parks-Landscape-Rec Areas	1550	PALOMAR	ST	High
Hilltop Park	5744104600	Parks-Landscape-Rec Areas	780	HILLTOP	DR	High
Holiday Estates I&II	6233413100	Other Fixed Facilities	27	CONNOLEY	CI	Low
Horizon Neighborhood Park	6410721600	Parks-Landscape-Rec Areas	970	PALOMAR	ST	High
Independence Park	6423205600	Parks-Landscape-Rec Areas	1248	CALLE SANTIAGO		High
John Lippit PWC & Admin Building	6442301100	Other Fixed Facilities	1800	MAXWELL	RD	High
Ken Lee Administration Building	5681814400	Other Fixed Facilities	430	F	ST	Low
Lancerlot Park	5711701800	Parks-Landscape-Rec Areas	750	K	ST	High
Landscape Maintenance		Mobile Mun Activities				Medium
Lauderbach Park	6192113700	Parks-Landscape-Rec Areas	333	OXFORD	ST	High
Loma Verde Park & Recreation Center	6240107200	Parks-Landscape-Rec Areas	1420	LOMA	LN	High
Los Ninos Park	6243411200	Parks-Landscape-Rec Areas	150	TEAL	ST	High
Mackenzie Creek Park	5955700200	Parks-Landscape-Rec Areas	2275	MACKENZIE CREEK	RD	High
Marisol Park	5933803600	Parks-Landscape-Rec Areas	916	RANCHO DEL REY	PW	High
Memorial Park	5683004300	Parks-Landscape-Rec Areas	373	PARK	WY	High
Mini Park	5952145100	Parks-Landscape-Rec Areas	753	ASHBROOK	DR	High
Montevalle Park & Community Center	5957360600	Parks-Landscape-Rec Areas	840	DUNCAN RANCH	RD	High
Mountain Hawk Park	6435180200	Parks-Landscape-Rec Areas	1475	LAKE CREST	DR	High
MS4 Throughout the City of CV		Parks-Landscape-Rec Areas				High
Nature Center	5650102900	Parks-Landscape-Rec Areas	1000	GUNPOWDER POINT	DR	High

Facility Name	APN Number	Type of Facility	Address			Priority
Norman Park and Recreation Center	5683331100	Parks-Landscape-Rec Areas	270	F	ST	High
Old Public Works Yard	5670312700	Public Work Facilities	707	F	ST	High
Orange Avenue Fields	6240107200	Parks-Landscape-Rec Areas	160	ORANGE	AV	High
Otay Park & Recreation Center	6232302600	Parks-Landscape-Rec Areas	3554	MAIN	ST	High
Otay Park & Recreation Center	6232302700	Parks-Landscape-Rec Areas	1613	ALBANY	AV	High
Palomar Park	6200504900	Parks-Landscape-Rec Areas	1359	PARK	DR	High
Parkway Community Center	5683004300	Parks-Landscape-Rec Areas	373	PARK	WY	High
Paseo Del Rey Park	6401412500	Parks-Landscape-Rec Areas	750	PASEO DEL REY		High
Police Administration Building	5682703100	Other Fixed Facilities	315	FOURTH	AV	Low
Pool, Fountain, Water Feature Maintenance		Mobile Mun Activities				Medium
Power Washing-Graffiti Removal		Mobile Mun Activities				High
Rancho Del Rey Park	6422800300	Parks-Landscape-Rec Areas	1131	BUENA VISTA	WY	High
Reinstra Ball Fields	6240107300	Parks-Landscape-Rec Areas	1500	MAX	AV	High
Roads, Streets, Highways		Others				High
Rohr Park	5932400500	Parks-Landscape-Rec Areas	4548	SWEETWATER	RD	High
Salt Creek Park & Community Center	6434830200	Parks-Landscape-Rec Areas	2710	OTAY LAKES	RD	High
Santa Cora Park	6420804000	Parks-Landscape-Rec Areas	1365	SANTA CORA	AV	High
Santa Venetia Park	6430512700	Parks-Landscape-Rec Areas	1500	MAGDALENA	AV	High
SDGE Park	6230720700	Parks-Landscape-Rec Areas	1438	HILLTOP	DR	High
Sherwood Park	6233211900	Parks-Landscape-Rec Areas	69	SHERWOOD	ST	High
South Branch Library	6230102900	Other Fixed Facilities	389	ORANGE	AV	Low
Special Events Throughout the City of CV		Others				High
Street, Sidewalk Repair & Maintenance		Mobile Mun Activities				Medium
Sunbow Park	6402725100	Parks-Landscape-Rec Areas	690	NAPLES	ST	High
Sunridge Park	6400502000	Parks-Landscape-Rec Areas	952	BEECHGLEN	DR	High
Sunset View Park	6430330100	Parks-Landscape-Rec Areas	1390	GREENSVIEW	DR	High
Terra Nova Park	5921922700	Parks-Landscape-Rec Areas	450	HIDDEN VISTA	DR	High

Facility Name	APN Number	Type of Facility	Address			Priority
Tiffany Park	6420302900	Parks-Landscape-Rec Areas	1713	ELMHURST	ST	High
Valle Lindo Park	6440102600	Parks-Landscape-Rec Areas	545	SEQUOIA	ST	High
Veteran's Park Recreation Center	6411221000	Parks-Landscape-Rec Areas	785	PALOMAR	ST	High
Voyager Park	6400901900	Parks-Landscape-Rec Areas	1178	J	ST	High
Windingwalk Neighborhood Park	6436101500	Parks-Landscape-Rec Areas	1675	EXPLORATION FALLS	DR	High

Grand Total: 83

ATTACHMENT D

Commercial Source Inventory by Category

Facility Name	APN Number	Address			Category	Priority	NAICS
Cat (iii-xxi)-Boat/Marina							
Chula Vista Marina	7600480101	550	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	441222
Five Star Diesel Service	7600480101	550	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	811
Garcia's Detail and Repair	5713201400	867	COLORADO	AV	Cat (iii-xxi)-Boat/Marina	Low	441222
Kaiulani Boat Service	6435163600	1446	YELLOWSTONE	AV	Cat (iii-xxi)-Boat/Marina	Low	441222
Magana Yacht Repair	6220723500	778	ANITA	ST	Cat (iii-xxi)-Boat/Marina	Low	336612
South Shore Yacht Sales	7600480101	550	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	441222
Sterling Marine	6395203600	829	WILER	DR	Cat (iii-xxi)-Boat/Marina	Low	336611
The Marine Group LLC	7600481700	997	G	ST	Cat (iii-xxi)-Boat/Marina	Low	336612
WCK Marine Wiring	7600481900	640	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	441222
Cat (i-v) Auto Related							
3MC Body & Paint & Auto Center	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	Low	811121
A&A Auto Body & Paint	6181520400	1077	BROADWAY		Cat (i-v) Auto Related	Low	811121
A&C Machine Shop and Auto Repair	622021800	876	ADA	ST	Cat (i-v) Auto Related	Low	811111
A&D Automotive	6181421500	1088	BROADWAY		Cat (i-v) Auto Related	Low	811111
A&V Road Service	6182000100	1100	INDUSTRIAL	BL	Cat (i-v) Auto Related	Low	811111
A-1 Auto Detail & Repair	5711531500	696	BROADWAY		Cat (i-v) Auto Related	Low	811111
AARDVARC Racing	5953711700	1007	OAK HILL	DR	Cat (i-v) Auto Related	Low	441310
ABC Motors Inc./Kirker Customs	5734500500	310	K	ST	Cat (i-v) Auto Related	Low	811121
ABC Rebuilders	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	811121

Facility Name	APN Number	Address			Category	Priority	NAICS
Abel Najera	6291200800	3679	MAIN	ST	Cat (i-v) Auto Related	High	811118
Abel's Auto Body	6231320800	311	TREMONT	ST	Cat (i-v) Auto Related	Low	811111
Abre Towing dba Paxton Towing	6290620300	3487	MAIN	ST	Cat (i-v) Auto Related	High	488410
ABS Collision Center	6191211000	1137	THIRD	AV	Cat (i-v) Auto Related	Low	811111
Absolute Tinting	5955904200	685	EL PORTAL	DR	Cat (i-v) Auto Related	Low	811112
Access II Towing	6232300600	1350	MAX	AV	Cat (i-v) Auto Related	High	48841
Ace Auto	6241803500	1647	MARL	AV	Cat (i-v) Auto Related	Low	811111
ACE Autocare Experts	6182100600	1135	BROADWAY		Cat (i-v) Auto Related	Low	81111
AG Auto Repair	5651703200	107	BROADWAY		Cat (i-v) Auto Related	Low	811111
Agustin Auto Repair	6290402100	1747	BROADWAY		Cat (i-v) Auto Related	Low	811121
Albert Stiehle Parts	6390106700	627	WINDSOR	CI	Cat (i-v) Auto Related	Low	441310
All Around Service	5730620800	268	SHASTA	ST	Cat (i-v) Auto Related	Low	811111
Almacen Automotriz Pacifico	6424100318	1355	CALLEJON PALACIOS		Cat (i-v) Auto Related	Low	441310
American Auto Service	5672003600	430	BROADWAY		Cat (i-v) Auto Related	High	811111
American Towing & American Dismantling I	6291001600	140	REED	CT	Cat (i-v) Auto Related	High	488410
Annex San Diego #1 Inc/Cheelys	5653201100	45	BROADWAY		Cat (i-v) Auto Related	Low	441310
Anthony's Auto Center	5662321200	305	E	ST	Cat (i-v) Auto Related	Low	488410
Apollo Tire	6220412700	1421	BROADWAY		Cat (i-v) Auto Related	Low	441310
Aragon Car Care Center	5933811700	894	LAGASCA	PL	Cat (i-v) Auto Related	Low	441310
Argent Classics	6421500100	1698	HARVARD	ST	Cat (i-v) Auto Related	Low	811121
Arias Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	811111
Auto Painting/Booth Rental	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	811121
Auto Partes Maya	6411220700	825	PALOMAR	ST	Cat (i-v) Auto Related	Low	441310
Auto Servicio La Vuelta	6426704900	1307	MONTERA	ST	Cat (i-v) Auto Related	Low	441310

Facility Name	APN Number	Address			Category	Priority	NAICS
Auto Smog Check Centers	5672001200	416	BROADWAY		Cat (i-v) Auto Related	Low	811191
Autoland Inc.	5922001500	354	H	ST	Cat (i-v) Auto Related	Low	441110
Automaster Automotive Center	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	811111
Automatic Transmission	6180220800	609	ARIZONA	ST	Cat (i-v) Auto Related	Low	811111
Autotech Motorsports	6191212700	286	EMERSON	ST	Cat (i-v) Auto Related	Low	811111
Autozone #2810	6193001600	1315	THIRD	AV	Cat (i-v) Auto Related	Low	441310
Autozone #2817	5670411700	225	BROADWAY		Cat (i-v) Auto Related	Low	441310
Autozone #5643	5722811300	897	BROADWAY		Cat (i-v) Auto Related	Low	441310
Autozone #5644	6402924000	885	H	ST	Cat (i-v) Auto Related	Low	441310
B&J Auto Repair Smog & Sales	5711531500	696	BROADWAY		Cat (i-v) Auto Related	Low	811111
Barajas Auto Tech	5753010200	1017	HILLTOP	DR	Cat (i-v) Auto Related	Low	811111
Barracuda Wheel Alignment	6290603200	1655	BROADWAY		Cat (i-v) Auto Related	Low	811111
Barracuda Wheel Alignment	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	811118
Batteries Unlimited	6221021800	2244	MAIN	ST	Cat (i-v) Auto Related	High	441310
Bay Auto Electric	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	811118
Becka Automotive	5670900400	736	F	ST	Cat (i-v) Auto Related	Low	811111
Beto's Mobile Mechanic	5734401700	396	SIERRA	WY	Cat (i-v) Auto Related	Low	811111
Better Bumper	6435711400	1586	MOUNT TAMALPAIS	AV	Cat (i-v) Auto Related	Low	811198
Beyer Supreme Tires	6190605600	1055	THIRD	AV	Cat (i-v) Auto Related	Low	811111
Beyer Supreme Tires #3	5672002400	647	H	ST	Cat (i-v) Auto Related	Low	811121
Big O Tires	5671402400	399	BROADWAY		Cat (i-v) Auto Related	Low	441320
Bonita Valley Auto Care Inc.	5912402700	3995	BONITA	RD	Cat (i-v) Auto Related	Low	811111
Bowlins Auto Service	5713100800	850	BROADWAY		Cat (i-v) Auto Related	Low	811111
Brake Depot	6182803200	1232	BROADWAY		Cat (i-v) Auto Related	Low	811111

Facility Name	APN Number	Address			Category	Priority	NAICS
Brake Express	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low	811111
Broadway Automotive	6220436700	1415	BROADWAY		Cat (i-v) Auto Related	Low	811111
Budget Tires	6230301200	275	ORANGE	AV	Cat (i-v) Auto Related	Low	441310
Butlers Auto	5684200700	286	G	ST	Cat (i-v) Auto Related	Low	811111
C&V Auto	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	811111
C-1 B Tune Up	5953211449	1055	TORREY PINES	RD	Cat (i-v) Auto Related	Low	8111
Calif Smog Certification Inc.	5660106200	11	THIRD	AV	Cat (i-v) Auto Related	Low	334512
California Smog Certification Inc.	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	48841
California Smog Test Only	5623231300	425	C	ST	Cat (i-v) Auto Related	Low	811198
California Tire and Service Centers	5672311300	471	BROADWAY		Cat (i-v) Auto Related	Low	811111
Camacho Tires	6180103000	650	MOSS	ST	Cat (i-v) Auto Related	Low	811198
Candys Auto Body Shop	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	811121
Castaneda's Auto Repair	5650401500	44	BROADWAY		Cat (i-v) Auto Related	Low	811111
Charlies Auto Electric	5652301700	186	BROADWAY		Cat (i-v) Auto Related	Low	811111
Cherniss Tire World Inc.	5651703200	101	BROADWAY		Cat (i-v) Auto Related	Low	441310
Chichi's Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	
Chula Vista Auto Inc.	5650401400	24	BROADWAY		Cat (i-v) Auto Related	Low	811111
Chula Vista Auto Repair	6221901000	2627	FAIVRE	ST	Cat (i-v) Auto Related	High	811111
Chula Vista Engine Rebuilding	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	811111
Chula Vista Smog	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	811198
Chula Vista Towing	5711531200	625	J	ST	Cat (i-v) Auto Related	High	48841
Collision Parts Warehouse	6232302800	3740	MAIN	ST	Cat (i-v) Auto Related	High	441310
Courtney Tire	5712001200	726	BROADWAY		Cat (i-v) Auto Related	Low	811111
CSK Auto Inc. #1153	5670411900	241	BROADWAY		Cat (i-v) Auto Related	Low	441310

Facility Name	APN Number	Address			Category	Priority	NAICS
CSK Auto Inc. #1486	6192806100	1396	THIRD	AV	Cat (i-v) Auto Related	Low	441310
CV Fast	6230825400	1492	ALBANY	AV	Cat (i-v) Auto Related	Low	441310
Daniels Tire Service	5623500600	575	C	ST	Cat (i-v) Auto Related	Low	441310
Dave's Auto Service	5634313100	359	TROUSDALE	DR	Cat (i-v) Auto Related	Low	811111
Depot of Wheel Corp.	6290200400	2835	MAIN	ST	Cat (i-v) Auto Related	High	441310
Diamond Finish	6402131800	897	MESA	PL	Cat (i-v) Auto Related	Low	811198
Doctor Jay Automobile Service	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	811111
Dons Auto Service Inc.	6390802200	495	TELEGRAPH CANYON	RD	Cat (i-v) Auto Related	Low	811111
Double AA Tire Co Inc.	6231921400	3124	MAIN	ST	Cat (i-v) Auto Related	Low	441320
DR Kar	5953312500	1153	CRYSTAL DOWNS	DR	Cat (i-v) Auto Related	Low	811118
DR Truck & Trailer Repair	5693802100	10	H	ST	Cat (i-v) Auto Related	Low	811111
DR Truck & Trailer Repair	5952211800	756	EASTSHORE	TE	Cat (i-v) Auto Related	Low	811111
Dynamic Results Inc/Eddies Tires & Auto R	6221403600	2677	MAIN	ST	Cat (i-v) Auto Related	High	441310
Earl Scheib of CA Inc 243	6180621200	951	BROADWAY		Cat (i-v) Auto Related	Low	811121
Econo Lube N Tune #56	6180612000	903	BROADWAY		Cat (i-v) Auto Related	Low	811121
Economy Tires	6220412600	1430	BROADWAY		Cat (i-v) Auto Related	Low	441310
Enterprise Rent A Car Sales	61821000200	1129	BROADWAY		Cat (i-v) Auto Related	Low	441110
Euro Specialties	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	811111
Evans Tire & Service Center #49	6180211100	948	BROADWAY		Cat (i-v) Auto Related	Low	441320
Explorer Competition Products	5953000600	2311	BOSWELL	RD	Cat (i-v) Auto Related	Low	441310
Express Tire	5710502100	646	H	ST	Cat (i-v) Auto Related	Low	811118
F&V Auto Repair	6290200100	2801	MAIN	ST	Cat (i-v) Auto Related	High	811111
Fernando's Smog	6180220800	609	ARIZONA	ST	Cat (i-v) Auto Related	Low	811121
Fiber Molds	6221023400	767	ANITA	ST	Cat (i-v) Auto Related	Low	811111

Facility Name	APN Number	Address			Category	Priority	NAICS
Fily's Auto Shop	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	8111
Formiller Motors	6181510100	1001	BROADWAY		Cat (i-v) Auto Related	Low	441110
Formula Auto Repair	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	811118
Freeway Tire Co	6441810100	1861	NIRVANA	AV	Cat (i-v) Auto Related	Low	441310
Fritz Garage	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	811111
Fuller Ford	6440420400	560	AUTOPARK	DR	Cat (i-v) Auto Related	High	441110
Galaz Auto Service	6220430200	545	ORANGE	AV	Cat (i-v) Auto Related	Low	811111
Garage 13 Performance	6436624700	1574	STARGAZE	DR	Cat (i-v) Auto Related	Low	441310
Geos Auto Service	5671030600	355	BROADWAY		Cat (i-v) Auto Related	Low	811111
German Werks	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	811111
GK Smog & Auto Repair	6181421700	1088	BROADWAY		Cat (i-v) Auto Related	Low	811111
Glass Depot	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	811122
GMJ Enterprises LLC/Maximus Auto Center	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	811111
Goodwins Auto Kraft	6396505400	576	MANZANITA	ST	Cat (i-v) Auto Related	Low	811111
Gre-Laz Complete Auto Repair	5651703200	107	BROADWAY		Cat (i-v) Auto Related	Low	811111
Guero's Towing	6242103300	485	SATINWOOD	WY	Cat (i-v) Auto Related	High	488410
H&A Electric Motors	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	811111
Happy Auto Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	811111
Hernandez Tire Sales	6232021800	3236	MAIN	ST	Cat (i-v) Auto Related	High	441310
Hot Spot Window Tinting	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	442291
Huerta Ruben	5651610100	101	JEFFERSON	AV	Cat (i-v) Auto Related	Low	811111
Humberto's Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	811111
Hunter Service & Parts Inc.	5721320500	673	ASH	AV	Cat (i-v) Auto Related	Low	811111
Hypersport Performance	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	441310

Facility Name	APN Number	Address			Category	Priority	NAICS
In and Out Transmissions	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	811113
In-N-Out Auto Glass	6191102400	1120	THIRD	AV	Cat (i-v) Auto Related	Low	811122
International Transmission	6230300900	1580	THIRD	AV	Cat (i-v) Auto Related	Low	811111
Investruck Inc.	6210100100	1470	BAY	BL	Cat (i-v) Auto Related	Low	811118
J&H Auto Repair	5671030100	355	BROADWAY		Cat (i-v) Auto Related	Low	811111
J&J Chrome & Polish	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	811121
J&L Auto Repair Inc.	5670531200	273	BROADWAY		Cat (i-v) Auto Related	High	8111
J&S Leasing	6291302700	187	MACE	ST	Cat (i-v) Auto Related	High	532120
J&V Automotive	6220620500	1550	FRONTAGE	RD	Cat (i-v) Auto Related	Low	8111
JC Towing Inc.	6221901800	2515	FAIVRE	ST	Cat (i-v) Auto Related	High	488410
Jesse Smog	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	811111
Jiffy Lube #897	5652402700	593	E	ST	Cat (i-v) Auto Related	High	48841
Jim's Glass & Screen	6221113200	2540	MAIN	ST	Cat (i-v) Auto Related	High	811122
JJ & Vic Auto Service & Repair	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	811111
JJ Auto Body		2631	FAIVRE	ST	Cat (i-v) Auto Related	Low	811111
John's Towing	6206021700	1298	WAXWING	LN	Cat (i-v) Auto Related	High	488410
JT Associates Inc/DBA Audio Xperts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	811118
Juans Auto Repair Inc.	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	811111
Just Smog (T & TF Inc)	5731700100	605	THIRD	AV	Cat (i-v) Auto Related	Low	811112
Kantruds Garage	5651622100	120	BROADWAY		Cat (i-v) Auto Related	Low	811111
Karillos Truck Tire and Road Service	5954200915	2178	CABO BAHIA		Cat (i-v) Auto Related	Low	811121
Kars Machine Shop	6220121800	876	ADA	ST	Cat (i-v) Auto Related	Low	811121
KDR Enterprises Inc. DBA WABCO Product	5661903100	753	ANITA	ST	Cat (i-v) Auto Related	Low	441310
L Street 76 Service Center	5713101400	898	BROADWAY		Cat (i-v) Auto Related	Low	811111

Facility Name	APN Number	Address			Category	Priority	NAICS
L&E Tire Service	6243662500	226	REGENCY	CT	Cat (i-v) Auto Related	Low	811198
L&E Transmission Inc.	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	811113
Ledezma's Muffler Service	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	811111
Ledezma's Tires	6290603300	231	BEYER	WY	Cat (i-v) Auto Related	High	441320
Leemor Sound Inc	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	441310
Leer Truck Accessory Center	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	441310
Low Price Auto Glass	6441820800	880	ENERGY	WY	Cat (i-v) Auto Related	Low	811122
M&M Mobile Auto Repair	6231710300	437	MONTGOMERY	ST	Cat (i-v) Auto Related	Low	811111
Main Car Care Inc	6231721300	2952	MAIN	ST	Cat (i-v) Auto Related	High	811198
Main Clutch Co	6232301700	3800	MAIN	ST	Cat (i-v) Auto Related	High	441310
Marc Goodwin Trucking	5741030300	72	MANKATO	ST	Cat (i-v) Auto Related	Low	488410
Marcos Radiator	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	Low	811111
Marios Mobile Truck Body Repair & Driver	6240532300	4087	OTAY VALLEY	RD	Cat (i-v) Auto Related	Low	811111
Marquez Auto Body Inc.	5734500500	310	K	ST	Cat (i-v) Auto Related	Low	811111
Martinez Tires	6290606600	3261	MAIN	ST	Cat (i-v) Auto Related	High	441310
Martins Auto Transport	6391040600	1026	NOLAN	LN	Cat (i-v) Auto Related	Low	488410
Max Auto Detail & Auto Elelctric	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	811192
Maximus Auto Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	811111
MBTS Corporation/Econo Lube and Tune #	5633704200	3008	SECOND	AV	Cat (i-v) Auto Related	Low	811111
MCCUNE Chrysler Jeep Dodge	6440414200	1885	AUTO PARK	PL	Cat (i-v) Auto Related	High	441110
Midas Rajmp Inc.	5671030300	363	BROADWAY		Cat (i-v) Auto Related	Low	811112
Miguel Auto Mobile Repair	5956303700	2474	FALCON VALLEY	DR	Cat (i-v) Auto Related	Low	811111
Mike Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	811118
Mikes Auto Repair & Smog Center	5662321500	305	E	ST	Cat (i-v) Auto Related	Low	811118

Facility Name	APN Number	Address			Category	Priority	NAICS
Mikes Auto Repair & Smog Center	5680442300	300	E	ST	Cat (i-v) Auto Related	Low	811118
Mobil Mercedez Specialist	6290402100	1747	BROADWAY		Cat (i-v) Auto Related	Low	811118
Mobile Trenz Autosound	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	811121
Monell Brakes	6291200100	3611	MAIN	ST	Cat (i-v) Auto Related	High	811111
MTM Mobile Truck Repair	6240420446	1640	MAPLE	DR	Cat (i-v) Auto Related	Low	811111
Murrays Automobile	5634410500	320	TROUSDALE	DR	Cat (i-v) Auto Related	Low	811112
NAPA Auto Parts	6180103700	680	L	ST	Cat (i-v) Auto Related	Low	441310
Need Tow Inc.	5670311100	240	WOODLAWN	AV	Cat (i-v) Auto Related	Low	48841
Neill's Suzuki Auto Repair	5712610100	804	COLORADO	AV	Cat (i-v) Auto Related	Low	811111
Nice & Easy Autobody & Paint Inc.	6221116000	2350	MAIN	ST	Cat (i-v) Auto Related	High	811121
Octavio's Garage	5711230800	632	BROADWAY		Cat (i-v) Auto Related	Low	811118
Official Brake & Lights Inspection Center	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	8111
Oldham Ranch Automotive	5722705104				Cat (i-v) Auto Related	Low	811111
One Stop Auto Access Plus	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	441310
One Stop Under Car	5670902100	360	BROADWAY		Cat (i-v) Auto Related	Low	441310
Orion's Mobile Auto Service	6433202200	2554	FERN VALLEY	RD	Cat (i-v) Auto Related	Low	811111
P&R Motors	6191710300	1165	THIRD	AV	Cat (i-v) Auto Related	Low	441110
Pacific Auto Glass	6191710300	1165	THIRD	AV	Cat (i-v) Auto Related	Low	811122
Pacific Auto Glass	6191710800	1193	THIRD	AV	Cat (i-v) Auto Related	Low	811122
Pacific Bay Auto	6222111000	150	JACQUA	ST	Cat (i-v) Auto Related	High	441110
Pacific Supply Co/Parts Plus	6180101500	660	L	ST	Cat (i-v) Auto Related	Low	441310
Parts Plus Auto	5650601200	98	BROADWAY		Cat (i-v) Auto Related	Low	441310
Pasten Auto Body	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	811121
PB Auto Service	6291201600	3645	MAIN	ST	Cat (i-v) Auto Related	High	811111

Facility Name	APN Number	Address			Category	Priority	NAICS
People Chevrolet	6440420500	580	AUTOPARK	DR	Cat (i-v) Auto Related	High	441110
Pep Boys Manny Moe & Jack of CA #651	5672004500	454	BROADWAY		Cat (i-v) Auto Related	Low	441310
Pep Boys Manny Moe & Jack of CA #872	6402932300	1000	TIERRA DEL REY		Cat (i-v) Auto Related	Low	441310
Perfect Star European Auto Repair	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	811111
Performance Auto Repair & Smog	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	811198
Performance Team Warehouse Inc.	5713100600	842	BROADWAY		Cat (i-v) Auto Related	Low	441320
Peters Precision Auto	5634512200	310	TROUSDALE	DR	Cat (i-v) Auto Related	Low	811111
Polos Auto Paint Supply	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	811121
Precision Motors	5712002900	619	K	ST	Cat (i-v) Auto Related	Low	811118
Pro Tires	6206012200	437	THRUSH	ST	Cat (i-v) Auto Related	Low	811198
Prokar Products	6222110200	2471	MAIN	ST	Cat (i-v) Auto Related	Low	441310
Protech Autoglass	5653301100	546	CASSELMAN	ST	Cat (i-v) Auto Related	Low	811122
Quick Tows & Road Service	5680710200	209	THIRD	AV	Cat (i-v) Auto Related	Low	488410
R&G Auto Electric	6180211300	924	BROADWAY		Cat (i-v) Auto Related	Low	811111
R&L Performance Auto Service	6220111900	887	PALOMAR	ST	Cat (i-v) Auto Related	Low	811121
Rafael General Atuo Repair	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	811111
Rags Enterprises Inc./Tip Top Auto	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	811111
Rainbow Striping	6441301100	981	MONSERATE	AV	Cat (i-v) Auto Related	Low	811121
Ramz Mobile Auto Care	6391510500	394	MONTCLAIR	ST	Cat (i-v) Auto Related	Low	811111
Rauls's Body Shop	6170712200	790	PALOMAR	ST	Cat (i-v) Auto Related	Low	811121
Rays Mobile Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	811111
RG Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	811118
Ricardos's Custom Covers	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	441310
Roadone DBA A to Z Metro, A to Z Enterpri	6440406100	1805	MAXWELL	RD	Cat (i-v) Auto Related	High	488410

Facility Name	APN Number	Address			Category	Priority	NAICS
Roman's Truck Body & Paint MJP	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	811121
Ruben's Auto Electronics	6220412700	1420	BROADWAY		Cat (i-v) Auto Related	Low	811111
S&J Auto Repair	6291201600	2530	MAIN	ST	Cat (i-v) Auto Related	High	811111
Safelite Auto Glass #6150	5672001200	416	BROADWAY		Cat (i-v) Auto Related	Low	811122
Sams Muffler Radiators	6290603200	225	BEYER	WY	Cat (i-v) Auto Related	High	811112
San Diego Automotive Inc	5661320100	48	HILLTOP	DR	Cat (i-v) Auto Related	Low	441310
San Diego Diesel Parts	6392901200	252	INKOPAH	ST	Cat (i-v) Auto Related	Low	441310
San Diego Tires and Brakes	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	811111
Sanchez Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	811111
SCJ Auto Repair	6240602700	4501	OTAY VALLEY	RD	Cat (i-v) Auto Related	Low	811121
SCJ Towing	6290606000	3211	MAIN	ST	Cat (i-v) Auto Related	High	488410
Scotts Porsche	5651623000	118	BROADWAY		Cat (i-v) Auto Related	Low	441310
Sir Y Incorporated/DBA Sir Y Auto Group	5722120600	777	BROADWAY		Cat (i-v) Auto Related	Low	441110
Skyline Garage	5650401000	615	CHULA VISTA	ST	Cat (i-v) Auto Related	Low	811111
Smitty's Auto Center	6220913200	1510	BROADWAY		Cat (i-v) Auto Related	Low	811111
Smog Center	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	811112
Smog Check Station	6180221100	960	BROADWAY		Cat (i-v) Auto Related	Low	811191
SO California Discount Tire	5711230200	600	BROADWAY		Cat (i-v) Auto Related	Low	441310
Soundelux	6221112500	2490	MAIN	ST	Cat (i-v) Auto Related	High	441310
South Bay Auto Haus	5634410100	310	TROUSDALE	DR	Cat (i-v) Auto Related	Low	811111
South Bay Auto Parts Inc.	6190104100	908	THIRD	AV	Cat (i-v) Auto Related	Low	441310
South Bay Auto Repair	5713100500	811	BROADWAY		Cat (i-v) Auto Related	Low	811111
South Bay Collision Center	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	811121
South Bay Datsun Auto Repairs	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	811111

Facility Name	APN Number	Address			Category	Priority	NAICS
South Beach Auto Sales/El Valle Auto Sales	5713100700	846	BROADWAY		Cat (i-v) Auto Related	Low	441110
South Coast Alignment	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	811118
Southbay Auto Glass	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	Low	811122
Southbay Motorsports	6440412000	1890	AUTO PARK	PL	Cat (i-v) Auto Related	Low	441110
Southbay Tire & Auto Service	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low	811111
Southbay Transmision	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	811113
Southern California Reconditioning	5661020100	67	DEL MAR	AV	Cat (i-v) Auto Related	Low	811121
Sparks Tune Up of CV	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	811111
Special Smog Test Only	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	811198
Speed Merchant Inc/American Tire Distribut	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	441310
Sunbelt Towing Inc DBA Western Towing	6170601200	1171	FRONTAGE	RD	Cat (i-v) Auto Related	Low	488410
Super Low Price Auto Glass #23	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	441310
Superior Auto Body & Paint	5662311000	347	E	ST	Cat (i-v) Auto Related	Low	811121
Superior Group	5661900600	363	E	ST	Cat (i-v) Auto Related	Low	811111
Superior VW Automotive Repair	6221113400	2578	MAIN	ST	Cat (i-v) Auto Related	High	811111
Tap Acquisition LLC/4 Wheel Parts & Perfor	6220433700	1427	BROADWAY		Cat (i-v) Auto Related	Low	441310
Taps Auto Smog	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	811111
Ted Johnson Garage	6192122600	1270	THIRD	AV	Cat (i-v) Auto Related	Low	811111
The Autobroker	5680722600	203	CHURCH	AV	Cat (i-v) Auto Related	Low	441110
TK Auto Repair	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	811121
TK Smog Check & Auto Repair	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	811111
Tony's Smog Test Only	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	811111
Tony's Tires	6290401700	1771	BROADWAY		Cat (i-v) Auto Related	Low	441310
Torque Performance Auto Center	6220433700	1421	BROADWAY		Cat (i-v) Auto Related	Low	811111

Facility Name	APN Number	Address			Category	Priority	NAICS
Toyo Tire USA Corporation	5952310200	860	KUHN	DR	Cat (i-v) Auto Related	Low	441320
Truebar Machine Shop & Auto Repair	6220433700	1403	BROADWAY		Cat (i-v) Auto Related	Low	811111
Trueline Auto Service	5661903100	377	E	ST	Cat (i-v) Auto Related	Low	811111
Two Bit Tow of San Diego	5670311100	240	WOODLAWN	AV	Cat (i-v) Auto Related	Low	488410
Ulises Roberto Sanchez dba Batt Recycling		2446	MAIN	ST	Cat (i-v) Auto Related	High	423930
UNIC Smog Repair	6180220900	960	BROADWAY		Cat (i-v) Auto Related	High	811111
V&m Auto Mechanic	5684200200	409	THIRD	AV	Cat (i-v) Auto Related	Low	811111
Valencia's Diesel Mobile	6220121800	876	ADA	ST	Cat (i-v) Auto Related	Low	811118
Valvoline Instant Oil Change	6420201700	1556	H	ST	Cat (i-v) Auto Related	Low	811191
Valvoline Instant Oil Change	6402924800	899	H	ST	Cat (i-v) Auto Related	Low	811191
Van's Suspension & Brake Center	6290100500	1741	BROADWAY		Cat (i-v) Auto Related	Low	811111
Victor's Auto Repair	5670510100	255	ASH	AV	Cat (i-v) Auto Related	Low	811111
Victor's Auto Repair	6426406400	1645	RIDGE ROCK	CT	Cat (i-v) Auto Related	Low	811111
Vidrio Towing	6240606000	2471	MAIN	ST	Cat (i-v) Auto Related	Low	488410
Villegas Used Tires	5672001900	466	BROADWAY		Cat (i-v) Auto Related	Low	441310
VIP Towing	6441820100	811	ENERGY	WY	Cat (i-v) Auto Related	High	488410
West Coast Mobile Mechanix	6180610100	935	BROADWAY		Cat (i-v) Auto Related	Low	811111
West Coast Transmission	6221112900	1656	SILVAS	ST	Cat (i-v) Auto Related	Low	811111
Western Towing	6170710200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	488410
Western Towing/Sunbelt Towing Inc	6170600200	1150	WALNUT	AV	Cat (i-v) Auto Related	High	488410
Xpress Motorsports	5623242400	45	BROADWAY		Cat (i-v) Auto Related	Low	441310
Zepeda's Radiator Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	811111
Zeppy Auto Repair	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	811111

Facility Name	APN Number	Address			Category	Priority	NAICS
		Cat iv-Equipment Relaled					
All Drain Rooter	6423111400	1267	CALLE CANDELERO		Cat iv-Equipment Relaled	Low	561790
Allbrands A1 Appliance Service	5954605800	951	SAINT CLAIRE	DR	Cat iv-Equipment Relaled	Low	811412
Antonio Plumbing	7762204003	577	PALOMAR	ST	Cat iv-Equipment Relaled	Low	561790
Any Drain Rooter Service	6231412100	296	TREMONT	ST	Cat iv-Equipment Relaled	Low	561790
Arrow Appliance Service	6400333300	1164	CALLE FLORECITA		Cat iv-Equipment Relaled	Low	811219
B&D Power Services	6230202700	368	ANITA	ST	Cat iv-Equipment Relaled	Low	811219
BJ's Rental Inc.	5733202000	317	K	ST	Cat iv-Equipment Relaled	Low	
Blue Planet Drains & Plumbing	6436312952	1558	CIRCULO BRINDISI		Cat iv-Equipment Relaled	Low	561790
California Plumbing & Heating	6424011200	1434	SOUTHVIEW	CT	Cat iv-Equipment Relaled	Low	236118
Chula Vista Cycle Center	6220913200	1502	BROADWAY		Cat iv-Equipment Relaled	Low	811
Clear-Flow Rooter Service	6202730600	218	ORLANDO	ST	Cat iv-Equipment Relaled	Low	561790
Cogswell Marine & Motorsports Inc.	6220122600	865	STELLA	ST	Cat iv-Equipment Relaled	Low	45111
Daves Quality Plumbing Inc.	5634410500	320	TROUSDALE	DR	Cat iv-Equipment Relaled	Low	561790
Dresser Rand	6180101400	670	L	ST	Cat iv-Equipment Relaled	Low	811310
Elias Plumbing	6402600500	1129	CLOUDWALK CANYON	DR	Cat iv-Equipment Relaled	Low	238220
Gastech	6182600700	453	QUEEN ANNE	DR	Cat iv-Equipment Relaled	Low	561790
Handiworks	5932621100	944	BUCKAROO	LN	Cat iv-Equipment Relaled	Low	811411
J&J Drain & Sewer	5950305513	2355	CALLE SABROSO		Cat iv-Equipment Relaled	Low	561790
Jakes Plumbing	6180718200	430	WESTBY	ST	Cat iv-Equipment Relaled	Low	561790
Jifffy Rooter	6232021800	3236	MAIN	ST	Cat iv-Equipment Relaled	Low	561790
Martin Prep	6424312000	1213	MONTE SERENO	AV	Cat iv-Equipment Relaled	Low	336991
Moys Appliance Repair	6203202900	1458	MAX	AV	Cat iv-Equipment Relaled	Low	811412

Facility Name	APN Number	Address			Category	Priority	NAICS
Randys Rooter Service	5685123100	223	H	ST	Cat iv-Equipment Relaled	Low	561790
Triple M. Marine Welding & Repairn Inc.	6220620500	1550	FRONTAGE	RD	Cat iv-Equipment Relaled	Low	333992
TV Jacks Inc.	5932800100	4230	BONITA	RD	Cat iv-Equipment Relaled	Low	811219
Uncle Joe Drain Cleaning	6441910500	1660	CABRILLO	DR	Cat iv-Equipment Relaled	Low	561790
Valley Industrial Specialties Inc.	5634312800	110	GLOVER	AV	Cat iv-Equipment Relaled	Low	561790
Walashek Industrial & Marine Inc.	5623500100	595	C	ST	Cat iv-Equipment Relaled	Low	811
Cat ix-Pest Control ...							
Adios Pest Control Inc.	5957102017	2576	CATAMARAN	WY	Cat ix-Pest Control ...	Low	561710
Atlas Termite	5661103700	25	SECOND	AV	Cat ix-Pest Control ...	Low	561710
Chula Vista Pest Control	5680441300	244	THIRD	AV	Cat ix-Pest Control ...	Low	561710
Indemand Pest Control	6412504200	982	MERCED RIVER	RD	Cat ix-Pest Control ...	Low	561710
King Termite Control Inc.	5681512200	290	LANDIS	AV	Cat ix-Pest Control ...	Low	561710
Lloyds Pest Control	6290201200	2865	MAIN	ST	Cat ix-Pest Control ...	Low	56172
The Works Temite Co	5733601200	119	KEARNEY	ST	Cat ix-Pest Control ...	Low	561710
Turbo Termite & Repair	6170800600	1021	BAY	BL	Cat ix-Pest Control ...	Low	561710
We Got Ya Pest Control Inc.	5660103100	46	THIRD	AV	Cat ix-Pest Control ...	Low	561710
Cat vi-Auto-Washing							
619 Detail	5957400200	2792	SAVANNAH	CT	Cat vi-Auto-Washing	Low	811192
619 Mobile Detailing	6202510800	55	PALOMAR	ST	Cat vi-Auto-Washing	Low	811192
Absolute Auto Detail	6420736100	1390	SANTA ALICIA	AV	Cat vi-Auto-Washing	Low	811192
Advance Mobile Wash & Detail	5954406600	1093	FOREST LAKE	DR	Cat vi-Auto-Washing	Low	811192
AG Autobody & Detail	6431613800	2466	MYRTLE BEACH	WY	Cat vi-Auto-Washing	Low	811192

Facility Name	APN Number	Address			Category	Priority	NAICS
All American Car Wash C.V.	6182103500	1137	BROADWAY		Cat vi-Auto-Washing	Low	811192
Aqua Clean	5922109000	1435	RIDGEBACK	RD	Cat vi-Auto-Washing	Low	811192
Arreola Auto Detailing	6184200100	1049	FOURTH	AV	Cat vi-Auto-Washing	Low	811192
Auto Detailing By David	5692520900	489	ELM	AV	Cat vi-Auto-Washing	Low	811192
Baja Auto Detail	5650401000	615	CHULA VISTA	ST	Cat vi-Auto-Washing	Low	811192
Bonita Car Wash	5702204600	3048	BONITA	RD	Cat vi-Auto-Washing	Low	811192
Car Shower	6290620300	3487	MAIN	ST	Cat vi-Auto-Washing	Low	811192
Deluxe Mobile Detailing	6435022400	1320	LONG VIEW	DR	Cat vi-Auto-Washing	Low	811192
Eastlake Mobile Detailing	5955100217	1185	LA VIDA	CT	Cat vi-Auto-Washing	Low	811192
Empire Mobile Auto Detailing	6230606300	250	QUINTARD	ST	Cat vi-Auto-Washing	Low	811192
Finest Auto Detailing	6423801614	1336	SERENA	CI	Cat vi-Auto-Washing	Low	811192
Fresh Detailing	6181102800	615	MOSS	ST	Cat vi-Auto-Washing	Low	811192
GBC Auto Detailing	6434302800	1175	BATTLE CREEK	RD	Cat vi-Auto-Washing	Low	811192
Jay Bright Company	6441812700	787	ENERGY	WY	Cat vi-Auto-Washing	Low	811192
JJ's Mobile Auto Detailing	6191620500	1123	TOBIAS	DR	Cat vi-Auto-Washing	Low	811192
JR S Detail/Mobile Carh Wash	6400703900	770	NAPLES	CT	Cat vi-Auto-Washing	Low	811192
JR's Mobile Auto Detail	6242201200	1516	OLEANDER	AV	Cat vi-Auto-Washing	Low	811192
Keen Detail	6423801515	1344	SERENA	CI	Cat vi-Auto-Washing	Low	811192
Klimax Mobile Detail	5733721400	253	K	ST	Cat vi-Auto-Washing	Low	811192
LST Carwash	6180612000	907	BROADWAY		Cat vi-Auto-Washing	Low	811192
Luna's Mobile Detailing	5754321900	1143	VISTA	WY	Cat vi-Auto-Washing	Low	811192
Maranatha Carwash	5670324300	298	BROADWAY		Cat vi-Auto-Washing	Low	811192
Mario's Auto Detailing	6180610500	915	BROADWAY		Cat vi-Auto-Washing	Low	811192
Mario's Auto Detailing	6220433700	1409	BROADWAY		Cat vi-Auto-Washing	Low	811192

Facility Name	APN Number	Address			Category	Priority	NAICS
Max Auto Detail & Auto Electric	6220913200	1502	BROADWAY		Cat vi-Auto-Washing	Low	811192
Max Enterprises	5711331100	691	WOODLAWN	AV	Cat vi-Auto-Washing	Low	811192
Mobile Car Wash	6426002400	1613	WOODVILLE	AV	Cat vi-Auto-Washing	Low	811192
Moreno Auto Detailing	6431313200	1291	BOCA RATON	DR	Cat vi-Auto-Washing	Low	811192
Nice Car Always	6432331400	1468	ASHFORD CASTLE	DR	Cat vi-Auto-Washing	Low	811192
Pearl Carwash/Chula Vista Inc.	5670325000	215	WOODLAWN	AV	Cat vi-Auto-Washing	Low	811192
Premier Mobile Atuo Detail and Tinting	6435162300	1438	MARBLE CANYON	WY	Cat vi-Auto-Washing	Low	811192
Pro Detailing Services	6420736100	1390	SANTA ALICIA	AV	Cat vi-Auto-Washing	Low	811192
Prontowash Southern CA, LLC	6430610100	2015	BIRCH	RD	Cat vi-Auto-Washing	Low	811192
Rancho Mobile Auto Detail	6206200200	227	RIENSTRA	ST	Cat vi-Auto-Washing	Low	811192
Roberto's Custom Detailing	6193202000	1307	TOBIAS	DR	Cat vi-Auto-Washing	Low	811192
Shining Star Auto Detail	5953613600	2431	EASTRIDGE	LP	Cat vi-Auto-Washing	Low	811192
Simply Clean Atuo Detailing	6400325700	589	BAYONA	LP	Cat vi-Auto-Washing	Low	811192
Splash Auto Detail	6396902600	731	LORI	LN	Cat vi-Auto-Washing	Low	811192
Spotless Auto Detailing	6436410800	1618	GOLDEN GATE	AV	Cat vi-Auto-Washing	Low	811192
Stinger Auto Detail	6290500900	3031	MAIN	ST	Cat vi-Auto-Washing	High	811192
Superior Shine Mobile Detailing	6393141800	398	INKOPAH	ST	Cat vi-Auto-Washing	Low	811192
Vista Palms Car Wash	5722120500	795	BROADWAY		Cat vi-Auto-Washing	Low	811192
Wash and Glow Auto Detail	6401104200	886	ENTRADA	PL	Cat vi-Auto-Washing	Low	811192
Xclusive Auto Detail	5672001200	416	BROADWAY		Cat vi-Auto-Washing	Low	811192
Xtreme Enterprises Inc./Xtreme Mobile	6221112500	2446	MAIN	ST	Cat vi-Auto-Washing	Low	811192
Xtreme Mobile Detailing	6390109000	603	MELROSE	AV	Cat vi-Auto-Washing	Low	811192

Cat vii-Auto Lots Storage

Facility Name	APN Number	Address			Category	Priority	NAICS
Broadway Palomar RV Storage	6220431100	1375	BROADWAY		Cat vii-Auto Lots Storage	Low	493110
Convinient Mobile	6221403200	2555	MAIN	ST	Cat vii-Auto Lots Storage	Low	493110
Eastlake RV and Boat Storage	5952312100	2371	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	493110
Eastlake Self Storage	5952312900	2351	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	493110
Economy Upholstery	6291200800	3679	MAIN	ST	Cat vii-Auto Lots Storage	High	493110
Hilltop Main Self Storage	6291302500	3755	MAIN	ST	Cat vii-Auto Lots Storage	Low	493110
Irongate Mini Storage	6232502300	3650	MAIN	ST	Cat vii-Auto Lots Storage	Low	493110
Koa Kampground Storage	5633303600	111	SECOND	AV	Cat vii-Auto Lots Storage	Low	493110
Otay Valley RV Storage	6291300300	163	MACE	ST	Cat vii-Auto Lots Storage	Low	493110
Roman's Auto Electric	6221902000	2555	FAIVRE	ST	Cat vii-Auto Lots Storage	High	
Savon Self Storage	6232300600	3708	MAIN	ST	Cat vii-Auto Lots Storage	Low	493110
SD Storage-CVS	6221121100	2776	MAIN	ST	Cat vii-Auto Lots Storage	Low	493110
SD Storage-MSS	6221902700	2385	MAIN	ST	Cat vii-Auto Lots Storage	Low	493110
SD Storage-VSS	5634421500	325	TROUSDALE	DR	Cat vii-Auto Lots Storage	Low	493110
Security First Commercial Storage, LLC	6290501000	1725	FOURTH	AV	Cat vii-Auto Lots Storage	Low	493110
Security First Self Storage	6290500800	3089	MAIN	ST	Cat vii-Auto Lots Storage	Low	493110
Security Public Storage	5623232900	471	C	ST	Cat vii-Auto Lots Storage	Low	493110
Sentry Storage	6291302900	3885	MAIN	ST	Cat vii-Auto Lots Storage	Low	493110
		Cat viii-Fueling-Rtl/Wsl					
3MC Body & Paint & Auto Center	6231320900	1612	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	811121
Allen Gas Truck Stop	6290606100	3205	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	811111
Arco AM/PM #5208	5652801400	407	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Arco AM/PM #5217	5733203900	798	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	447110

Facility Name	APN Number	Address			Category	Priority	NAICS
Arco AM/PM #5218	6290101300	1725	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	447110
Arco AM/PM #607	6231921500	3190	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Arco AM/PM #633	6170601600	800	PALOMAR	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Arco At H Street	5710300900	720	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Arco By The Bay	5653101600	765	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Arco Sunshine Market	6201301600	1401	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	447110
Birkdale Corp DBA L Street 76	5713101400	898	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	447110
Bobar Market 8	5670903900	600	F	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Bonita Gas & Mini Mart	5932800700	4498	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	447110
Bonita Point Auto Care Inc.	5941311200	149	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Bonita Shell	5701402700	100	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	447110
Bonita Vista Gas & Auto	6421701100	903	OTAY LAKES	RD	Cat viii-Fueling-Rtl/Wsl	Low	447110
Broadway Shell Station	5652402100	199	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	447110
Cali Mart	6291303000	3733	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Chevron #1975	6430206900	2115	OLYMPIC	PW	Cat viii-Fueling-Rtl/Wsl	Low	447110
Chevron Inc #1422	5700203200	95	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	447110
Chevron Station #1946	6411222000	695	PALOMAR	ST	Cat viii-Fueling-Rtl/Wsl	Low	445120
Chevron Station Inc. #1837	6402910400	770	PLAZA	CT	Cat viii-Fueling-Rtl/Wsl	Low	447110
Chevron Station-Eastlake Parkway		950	EASTLAKE	PW	Cat viii-Fueling-Rtl/Wsl	Low	
Chula Vista Mobil	6190104500	902	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	447110
Chula Vista SVC CTR/SECV Inc.	5734902600	899	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	447110
Circle K Store #2964	5650401100	60	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	447110
Circle K Store #5708	5701310500	98	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	447110
Dons Arco	6390802200	495	TELEGRAPH CANYON	RD	Cat viii-Fueling-Rtl/Wsl	Low	447110

Facility Name	APN Number	Address			Category	Priority	NAICS
Fred's Auto Repair	6290606100	3205	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Lamb Fuels Inc.	6441820300	855	ENERGY	WY	Cat viii-Fueling-Rtl/Wsl	Low	447110
Lorena B Ratonel Shell	5922001600	350	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Melrose 76	6240800700	1495	MELROSE	AV	Cat viii-Fueling-Rtl/Wsl	Low	447110
Mobil Oil On The Run #12924	5953221800	2210	OTAY LAKES	RD	Cat viii-Fueling-Rtl/Wsl	Low	447110
Mohsen Oil	6192805900	1328	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	447110
New West Petroleum LLC #1016	6240800900	1498	MELROSE	AV	Cat viii-Fueling-Rtl/Wsl	Low	447110
Optima	5672003900	498	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	447110
Optimart	62303000800	1450	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	447110
Palomar Texaco	6192225500	1295	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	447110
Seven Eleven 13951 B 2131	5662402800	275	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Seven Eleven 24070A 2131	6232716800	1482	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	447110
Seven Eleven 29540B 2131	6191002400	7	NAPLES	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Shell at Main	6240602800	4555	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Supreme Gasoline	5652302600	196	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	447110
Suresh Patel	6240606500	4430	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
Thrifty #9568	6394901500	401	TELEGRAPH CANYON	RD	Cat viii-Fueling-Rtl/Wsl	Low	447110
World Oil Co. #46	5672010300	685	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
			Cat x-Eating/Drinking ...				
Agave Grill	5672004700	625	H	ST	Cat x-Eating/Drinking ...	High	713990
Albertson's #6729	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	445110
Albertson's #6757	5733204500	720	THIRD	AV	Cat x-Eating/Drinking ...	High	445110
Albertson's #6759	5950305800	2310	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	High	445110

Facility Name	APN Number	Address			Category	Priority	NAICS
Alejandro's Mexican Bar & Grill	5953222100	2220	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	
Aning's Homemade Specialties	5922102100	449	KRISTA	CT	Cat x-Eating/Drinking ...	Low	723320
Anthony's Fish Grotto	5670212900	215	BAY	BL	Cat x-Eating/Drinking ...	High	722
Antojito's Lucy's	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	Low	722110
Apple Tree Market	6231312000	1556	THIRD	AV	Cat x-Eating/Drinking ...	High	445120
Aquies Texaco	6181512900	1043	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Arbys #7057/Capitals Group LLC	5953220800	2244	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	722
Aunt Emmas	5670310600	700	E	ST	Cat x-Eating/Drinking ...	Low	722110
Baja Lobster & Club	6181422700	1060	BROADWAY		Cat x-Eating/Drinking ...	Low	713990
Ball 3	5721312000	683	BROADWAY		Cat x-Eating/Drinking ...	Low	722410
Baskin Robbins	5941310200	1463	H	ST	Cat x-Eating/Drinking ...	Low	71111
Best Price	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	Low	452990
Blimpie	6182802100	1208	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Blimpie Subs and Salads	6430206500	1360	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	722211
Bobbies South	5711530600	686	BROADWAY		Cat x-Eating/Drinking ...	Low	71111
Boll Weevil Inc	5933500100	4528	BONITA	RD	Cat x-Eating/Drinking ...	High	722211
Boston Market #863	5941310600	770	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	722211
Brassco International Inc.	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	452990
Bulls Eye Burger	5713101800	860	BROADWAY		Cat x-Eating/Drinking ...	High	722110
Burger King #11435	5700201700	97	BONITA	RD	Cat x-Eating/Drinking ...	High	722211
Burger King #11545	6402924800	899	H	ST	Cat x-Eating/Drinking ...	High	722211
Burger King #2339	5720104700	599	BROADWAY		Cat x-Eating/Drinking ...	High	722211
Burger King #952	6192225200	1265	THIRD	AV	Cat x-Eating/Drinking ...	High	722211
Burrito Corona Group LLC	5932800600	4444	BONITA	RD	Cat x-Eating/Drinking ...	Low	722211

Facility Name	APN Number	Address			Category	Priority	NAICS
Butcher Shop Steak HS	5710500800	556	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
C&S Discount Store	5683340100	294	CENTER	ST	Cat x-Eating/Drinking ...	Low	
Cafe De Cafe	5932800900	4366	BONITA	RD	Cat x-Eating/Drinking ...	Low	31192
Cafe Salotto	5953220300	2240	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722213
Caffe Taza	6390806400	533	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	722213
Caffe Taza 2	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	Low	722213
California Pizza Kitchen	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722110
California Sushi Bar Inc.	5683340300	337	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Canyon Club Cafe	6394901300	421	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	722410
Carls JR #281	6430206800	2097	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	722211
Carls JR #31	5710502400	502	BROADWAY		Cat x-Eating/Drinking ...	High	722211
Carls JR #546	6182005400	1100	BROADWAY		Cat x-Eating/Drinking ...	High	722211
Carls JR #575	5941310400	1487	H	ST	Cat x-Eating/Drinking ...	High	722211
Carls JR #83	6190100800	996	THIRD	AV	Cat x-Eating/Drinking ...	High	722211
Carrow's Restaurant #953	5720104700	598	H	ST	Cat x-Eating/Drinking ...	Low	722
CAT Cheoon Restauranct	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	722110
CDT Catering Services	5634410600	320	TROUSDALE	DR	Cat x-Eating/Drinking ...	Low	72232
Cheesecake Factory	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722110
Chick Fil A at Eastlake Terraces	6430206700	2089	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	722211
Chili's Bar & Grill #1363	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722110
Chili's Bar & Grill #387	6402924700	800	PASEO DEL REY		Cat x-Eating/Drinking ...	Low	722
China China Restaurant	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	71111
China Gourmet Express	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
China King Buffet	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722211

Facility Name	APN Number	Address			Category	Priority	NAICS
China Little Cafe Express	5684503600	492	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Chinese City Restaurant	6230600200	1403	THIRD	AV	Cat x-Eating/Drinking ...	High	
Chriss Chriss Ent Inc./Little Caesar Pizza	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722211
Chriss Chriss Ent Inc./Little Caesar Pizza	5672322300	481	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Chula Vista Nutrition Store	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	Low	445110
Chula Vista RV Park Store	7600480300	460	SANDPIPER	WY	Cat x-Eating/Drinking ...	Low	452990
Chula Vista Submarina	6182106300	1177	BROADWAY		Cat x-Eating/Drinking ...	Low	71111
Church Fried Chicken	6190610200	1005	THIRD	AV	Cat x-Eating/Drinking ...	High	722211
Churreria	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	722213
Ciao Italian Restaurant	6240606000	4360	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	722110
Cilantro Live	5683330500	315	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
Claire's #5016	5720104700	555	BROADWAY		Cat x-Eating/Drinking ...	Low	452990
Coco's #607	5671010400	303	BROADWAY		Cat x-Eating/Drinking ...	Low	722
Coin Toss	5670901500	312	BROADWAY		Cat x-Eating/Drinking ...	Low	72241
Colima's Mexican Food	5912522500	4102	BONITA	RD	Cat x-Eating/Drinking ...	High	722110
Coors Amp/Valentino Espresso	6450214700	2050	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	Low	722213
Corzy Corner Pizza	6441912700	1655	BRANDYWINE	AV	Cat x-Eating/Drinking ...	Low	722211
Costco Wholesale Corp #460	6402925000	895	H	ST	Cat x-Eating/Drinking ...	High	452990
Costco Wholesale Corp #781	6182006100	1136	BROADWAY		Cat x-Eating/Drinking ...	High	452990
Cotijas Mexican Food	5734500700	810	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Cotixan Mexican & Seafood	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722211
Cotixan Taco Shop	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	71111
D & J's Way Inc./Subway	6390806500	559	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	
D Lish	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	722211

Facility Name	APN Number	Address			Category	Priority	NAICS
D Lish Express	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	71111
Dairy Queen Orange Julius	6220310500	664	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722213
Daphnes Grekk Cafe	5950720800	2275	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722211
Del Taco #809	6220310500	670	PALOMAR	ST	Cat x-Eating/Drinking ...	High	722211
Deli Shoppe	6170800700	1075	BAY	BL	Cat x-Eating/Drinking ...	Low	722211
Denny's Restaurant	5670320600	692	E	ST	Cat x-Eating/Drinking ...	High	722
Denny's Restaurant #1719	5701406000	110	BONITA	RD	Cat x-Eating/Drinking ...	High	722110
Diamond Jim	5733710400	771	THIRD	AV	Cat x-Eating/Drinking ...	Low	713990
Dlush LLC	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722211
Docks Cocktail Lounge	5683330600	317	THIRD	AV	Cat x-Eating/Drinking ...	Low	722410
Dominos Pizza	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722211
Dominos Pizza #7724	5683004600	380	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Don Pedro Taco Shop	5680711700	247	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Donnys Cafe Inc.	5912401800	3901	BONITA	RD	Cat x-Eating/Drinking ...	Low	71111
Dragon Express Fast Food	5670320800	678	E	ST	Cat x-Eating/Drinking ...	Low	722110
Edelweiss Restaurant	5680441700	230	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
El Camaron 2	6231911200	301	MONTGOMERY	ST	Cat x-Eating/Drinking ...	Low	722110
El Comal Antojitos Mexicanos	5680711500	239	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
El Comal Antojitos Mexicanos	5710500600	534	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
El Dorado Seafood & Grill	6192806300	0	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722110
El Gordito Feliz Mexican Food	6404400117	1149	CABRILLO	DR	Cat x-Eating/Drinking ...	Low	722320
El Jalapeno Mexican Grill	6192806000	1352	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
El Mexicanos Taco Shop	6390806500	567	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	722211
El Nopal Market LLC	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	445110

Facility Name	APN Number	Address			Category	Priority	NAICS
El Norteno	6192122800	1266	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
El Pollo Loco/Bas Food Services	5710622100	666	H	ST	Cat x-Eating/Drinking ...	High	71111
El Ranchero Factory	6192804300	1324	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
El Ranchero Factory Taco Shop #2	6232121900	3344	MAIN	ST	Cat x-Eating/Drinking ...	High	722211
El Torito #89	5670213700	271	BAY	BL	Cat x-Eating/Drinking ...	High	722
Ernie's 50s Diner	5683330800	323	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
Estela's Bazaar	6181422000	1080	BROADWAY		Cat x-Eating/Drinking ...	Low	452990
Fair Market & Hollywood Pizza	5743003200	72	J	ST	Cat x-Eating/Drinking ...	Low	7222
Figaro's Pizza	5950305900	2326	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low	722211
Filippis Pizza Grotto	5650600900	82	BROADWAY		Cat x-Eating/Drinking ...	Low	722
Flamingo Cafe	5670902500	396	BROADWAY		Cat x-Eating/Drinking ...	Low	722110
Florence Pizza Express	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	722
Food 4 Less #780	6220310500	660	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	445110
Formosa Club	5713100500	840	BROADWAY		Cat x-Eating/Drinking ...	Low	713990
Fuddruckers #3055	5682702300	340	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
Galley At The Marina	7600480101	550	MARINA	PW	Cat x-Eating/Drinking ...	Low	711130
General Los Panchos Taco Shop	5672321400	577	H	ST	Cat x-Eating/Drinking ...	Low	722211
Giant Pizza King $17	6394901300	419	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	722211
Godfather's Pizza	6182101500	1187	BROADWAY		Cat x-Eating/Drinking ...	Low	71111
Godland Inc./Juice It Up	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722211
Godland Inc./Juice It Up	5950720300	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	722211
Golden Star Chinese Food	5734503500	864	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Great Happiness II	6230606700	1445	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
H&J Phan DBA Lollicup Tea Zone	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	722211

Facility Name	APN Number	Address			Category	Priority	NAICS
HDOS ENT	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722211
Henry's Market Place	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	High	445110
Henry's Market Place dba Otay Ranch Mark	6421701000	941	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	445110
Heritage Park Cafe	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722213
Hermano's Taco Shop	6182901700	1295	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Hilltop Market	6232716700	1500	HILLTOP	DR	Cat x-Eating/Drinking ...	High	445110
Home Town Buffet #705	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722
Home Town IGA	5670320800	646	E	ST	Cat x-Eating/Drinking ...	High	445110
Honey Baked Ham Inc.	5922000700	316	H	ST	Cat x-Eating/Drinking ...	High	445110
Hot Dog Expressions	6402911300	725	PLAZA	CT	Cat x-Eating/Drinking ...	Low	722211
Hungry Hanks Deli	5734503500	866	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Hurshi's Cafe	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	722213
Ida's Lompia Palace & China Town	5941310900	732	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722
International House of Pancakes	5953221000	2258	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722110
Isactaz Inc/Quiznos #3179	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	722211
Italy Express	6390806400	527	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	722110
Jack Donuts	6220433200	1355	BROADWAY		Cat x-Eating/Drinking ...	Low	311811
Jack in the Box #15	5734500600	802	THIRD	AV	Cat x-Eating/Drinking ...	High	722211
Jack in the Box #6	5672003900	486	BROADWAY		Cat x-Eating/Drinking ...	High	722211
Jack in the Box #63	6230500200	1408	THIRD	AV	Cat x-Eating/Drinking ...	High	722211
Jack in the Box #64	6230500200	1408	THIRD	AV	Cat x-Eating/Drinking ...	High	722211
Jack in the Box #68	5912511600	4011	BONITA	RD	Cat x-Eating/Drinking ...	High	71111
Jack in the Box #86	5632703400	5	FOURTH	AV	Cat x-Eating/Drinking ...	High	722211
Jack in the Box #93	6220433300	585	PALOMAR	ST	Cat x-Eating/Drinking ...	High	722211

Facility Name	APN Number	Address			Category	Priority	NAICS
Jack in the Box #99	5922001800	370	H	ST	Cat x-Eating/Drinking ...	High	722211
Jalisco Cafe	5912522600	4026	BONITA	RD	Cat x-Eating/Drinking ...	Low	722211
Jamba Juice #515	5950720800	2275	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722211
Jamba Juice #603	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Janies	5670320800	652	E	ST	Cat x-Eating/Drinking ...	Low	722410
Javid Brothers Enterpirse Inc/Quiznos	6182006500	1120	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Jill A Lindstedt	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Jill A Lindstedt	5653102700	725	E	ST	Cat x-Eating/Drinking ...	Low	722211
Jimmy J's Espresso	6420202800	900	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	72241
Jimmy's Family Restaurant	6191105000	1198	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
JNC Pinoy Foodmart Inc.	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	445110
Jochi's Fast Food Inc.	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Joco Management	5720803100	635	BROADWAY		Cat x-Eating/Drinking ...	Low	722
Joe and Ernie's Pizzeria Inc.	5712006208	730	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Jose Mexican Food	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Joshways Restaurant & Bar	5670531400	299	BROADWAY		Cat x-Eating/Drinking ...	Low	71111
Juice Adventure	6421701000	935	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722211
Juice Adventure	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Julian's Mexican Food	6190506700	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Just Java Cafe	5681611200	285	THIRD	AV	Cat x-Eating/Drinking ...	Low	722320
JVS ENT LLC/DBA Quiznos Sub #4365	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722211
Kaga Sushi	6192113500	1216	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Kanpai Restaurant	6192806300	305	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722211
Karina's Mex Seafood	6180101700	986	BROADWAY		Cat x-Eating/Drinking ...	Low	722211

Facility Name	APN Number	Address			Category	Priority	NAICS
Karina's Mexican Style Seafood #2	6192122200	1282	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
KD Inc/Krazy Dollar	6170800800	1161	BAY	BL	Cat x-Eating/Drinking ...	Low	452990
KFC Y305136BL03	6193001500	1305	THIRD	AV	Cat x-Eating/Drinking ...	High	722211
KFC Y450073BL03	5685112000	461	THIRD	AV	Cat x-Eating/Drinking ...	High	722211
KFC-#Y305030	6411221700	1361	MEDICAL CENTER	DR	Cat x-Eating/Drinking ...	High	722211
KFC-Y450114	6220433400	1327	BROADWAY		Cat x-Eating/Drinking ...	High	722211
KIC Import & Export	5733310800	737	THIRD	AV	Cat x-Eating/Drinking ...	Low	452990
King's Fish House	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722110
KMart Corp. #7636	6402923600	875	H	ST	Cat x-Eating/Drinking ...	Low	452990
Koopman Enterprise	6396307800	376	THERESA	WY	Cat x-Eating/Drinking ...	Low	452990
Kotija Taco Shop	6240800800	295	ORANGE	AV	Cat x-Eating/Drinking ...	Low	722211
L Street Shell	6180211800	902	BROADWAY		Cat x-Eating/Drinking ...	High	445110
La Bella Pizza	5683502500	373	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
La Bodega Market	6182101600	1193	BROADWAY		Cat x-Eating/Drinking ...	High	445110
La Escondida	6221114100	2530	MAIN	ST	Cat x-Eating/Drinking ...	Low	722211
La Fresca	6181513000	1037	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
La Fuente Mexican Food	5660106200	34	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
La India Bonita	6240800600	1455	MELROSE	AV	Cat x-Eating/Drinking ...	Low	722211
La Moreliana Bakery	6230602500	275	QUINTARD	ST	Cat x-Eating/Drinking ...	Low	311812
La Nena Restaurant Inc.	6180621300	975	BROADWAY		Cat x-Eating/Drinking ...	Low	71111
La Pulga #2	6182901700	1295	BROADWAY		Cat x-Eating/Drinking ...	Low	452990
La Quinta Grill	5652302300	625	E	ST	Cat x-Eating/Drinking ...	Low	722211
La Tia Mexican Food/Paula Bakery	5720803200	631	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
La Torta	5710301200	730	H	ST	Cat x-Eating/Drinking ...	Low	722211

Facility Name	APN Number	Address			Category	Priority	NAICS
La Tropicana	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
Liberty Giant Pizza	6201301800	1419	HILLTOP	DR	Cat x-Eating/Drinking ...	Low	722211
Little Caesars 7636	6402923600	875	H	ST	Cat x-Eating/Drinking ...	Low	722211
LJ San Miguel Ranch 22 LP/Los Primos Me	5950305300	2322	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low	722211
Lolitas Taco Shop	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	722211
Lolitas Taco Shop	5933500100	4516	BONITA	RD	Cat x-Eating/Drinking ...	High	722211
Lomas Cafe Mexican Food	6232022500	3218	MAIN	ST	Cat x-Eating/Drinking ...	High	722211
Long John Silver	6190611400	1049	THIRD	AV	Cat x-Eating/Drinking ...	High	722211
Lorenzos	5670324500	200	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Los Alazanes Inc.	5941310200	1451	H	ST	Cat x-Eating/Drinking ...	Low	722211
Los Jalapenos Mexican Restaurant	6180620100	943	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Los Panchos Mexican & Seafood	6421701000	933	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722211
Los Panchos Taco Shop	6190610300	1009	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Los Taquitos	6232022700	1665	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Los Taquitos Mexican Grill	6182802100	1208	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Los Tres Pedros	6192215300	1223	THIRD	AV	Cat x-Eating/Drinking ...	Low	722110
Loves Wood Pit Barbeque	5700203400	89	BONITA	RD	Cat x-Eating/Drinking ...	Low	722
Lucys Market	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	High	445110
Lutong Bahay & Oriental Grill	5941310900	732	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722211
Luzitas Taco Shop	5743003200	60	J	ST	Cat x-Eating/Drinking ...	Low	722211
Mandarin Canton Restaurant	6390806400	543	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	722110
Mandarin Chinese	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722110
Mandarin Gourmet	5932800600	4410	BONITA	RD	Cat x-Eating/Drinking ...	High	71111
Manhattan	5672000900	400	BROADWAY		Cat x-Eating/Drinking ...	Low	711130

Facility Name	APN Number	Address			Category	Priority	NAICS
Manila Garden Restaurant	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	722110
Manna Restaurant	5670903900	600	F	ST	Cat x-Eating/Drinking ...	Low	722211
Marie Calendar #103	5682702000	330	F	ST	Cat x-Eating/Drinking ...	High	722
Marios Taco Shop	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722211
Mariscos El Palmar	5670411600	201	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Mariscos Marisol	5652402600	193	BROADWAY		Cat x-Eating/Drinking ...	Low	71111
Mariscos Y Birria Los Tokados	6221114600	2638	MAIN	ST	Cat x-Eating/Drinking ...	High	722110
Marisol Nite Club	6221114600	2638	MAIN	ST	Cat x-Eating/Drinking ...	Low	
Mazal Realty Investment	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	
McDonalds #14228/Sutherland MGMT Co	5953220900	2254	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	722211
McDonalds #14228/Sutherland MGMT Co	6390806700	551	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	722211
McDonalds #25836/TRS Restaurant	6411221900	687	PALOMAR	ST	Cat x-Eating/Drinking ...	High	722211
McDonalds at Broadway	5720803400	619	BROADWAY		Cat x-Eating/Drinking ...	High	722211
McDonalds at E Street	5653102700	725	E	ST	Cat x-Eating/Drinking ...	High	722211
McDonalds at Third	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	High	722211
McDonalds Corp	6182007100	1150	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
McDonalds Corp	6182803700	1288	BROADWAY		Cat x-Eating/Drinking ...	High	722211
McDonalds of Bonita	5932800900	4340	BONITA	RD	Cat x-Eating/Drinking ...	High	722
McDonalds/Tavarua Restaurant Inc	5623242000	75	BROADWAY		Cat x-Eating/Drinking ...	High	722211
Mercado International 2000	6230606100	1415	THIRD	AV	Cat x-Eating/Drinking ...	High	445110
Merkl's Restaurant	5672112200	415	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
MGM Buffet	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722211
Miramar Fish Market	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	
MJ's Bar & Grill	6230606700	1445	THIRD	AV	Cat x-Eating/Drinking ...	Low	722410

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MR Jalapeno	5710502200	520	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
MR VS Giant Pizza	6190507100	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
MRS Rice Oriental Restaurant, LLC	6220433200	1355	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
NAPA Pizza	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	722211
NIC Subway 29881 Inc	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722211
NIC Subway 33339 Inc	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	722211
Ninna Matty's Mexican Food	6192806000	1352	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Noodles & Company	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722211
Oasis Cafe	5912522500	4076	BONITA	RD	Cat x-Eating/Drinking ...	Low	722213
Ocean City Partnership	6181510200	1011	BROADWAY		Cat x-Eating/Drinking ...	Low	71111
Old Bonita Store Restaurant	5912522600	4014	BONITA	RD	Cat x-Eating/Drinking ...	High	722110
Olive Garden Restaurant #1205	5720104500	585	I	ST	Cat x-Eating/Drinking ...	Low	722
Otay Farms Inc.	6290100100	1716	BROADWAY		Cat x-Eating/Drinking ...	High	445110
Outside In	6191210700	1121	THIRD	AV	Cat x-Eating/Drinking ...	Low	713990
Over the Border	6231821400	3008	MAIN	ST	Cat x-Eating/Drinking ...	Low	72241
Palap Charbroiled Chicken	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	722211
Palomar Importer & Wholesale Co. Inc.	6221114100	2550	MAIN	ST	Cat x-Eating/Drinking ...	Low	452990
Panda Chef	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722110
Panda Express #1098	6240606700	1820	MAIN	ST	Cat x-Eating/Drinking ...	High	722211
Panda Express #1316	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	722211
Panda Express #960	6182005400	1120	BROADWAY		Cat x-Eating/Drinking ...	High	722211
Panda Imperial Restaurant	6192113400	1208	THIRD	AV	Cat x-Eating/Drinking ...	Low	722210
Panera Bread	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722210
Papa Johns Pizza #1977	6190601600	1085	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211

Facility Name	APN Number	Address			Category	Priority	NAICS
Papa Johns Pizza #1978	6402932300	1020	TIERRA DEL REY		Cat x-Eating/Drinking ...	Low	722211
Papa Murphy's Take & Bake Pizza	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	722211
Papayas	5932800200	4244	BONITA	RD	Cat x-Eating/Drinking ...	Low	722211
Park & Joo Enterprise Inc/DBA Rice King	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	722211
Pei Wei Asian Dinner	5950711600	884	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	722211
Pescados Mariscos Hectors	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722211
Pescados Y Mariscos Hectors	6182106300	1177	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
PF Changs China Bistro	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722210
Pick Up Stix	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	722211
Pinas Fruit Salads Smoothies	6180103300	970	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Pizza & Pasta Express	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722211
Pizza Hut #315092	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	722211
Pizza Junction	5670324500	226	BROADWAY		Cat x-Eating/Drinking ...	Low	722110
Pizza Mania	5670324500	226	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Pizzeria Uno	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	722
Plazas Mexican Food	6220913700	1550	BROADWAY		Cat x-Eating/Drinking ...	Low	71111
Poe's Catering	5954100222	2156	LAGO MADERO		Cat x-Eating/Drinking ...	Low	722320
Poliza Hollywood Inc	5743003200	72	J	ST	Cat x-Eating/Drinking ...	High	445120
Pozoleria Dona Maria	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Prima Supply Inc.	6221115800	649	ANITA	ST	Cat x-Eating/Drinking ...	Low	452990
Quik Wok	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	452990
Quizno's Classic Subs	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	445
Quizno's Subs	5932800500	4378	BONITA	RD	Cat x-Eating/Drinking ...	High	722211
Rally's Hamburger/Ongs Restaurant Group	6190511300	1004	THIRD	AV	Cat x-Eating/Drinking ...	High	722211

Facility Name	APN Number	Address			Category	Priority	NAICS
Ralphs #235	6411221400	659	PALOMAR	ST	Cat x-Eating/Drinking ...	High	445110
Ralphs #75	5941310100	780	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	445110
Rancho Palomar LP	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	Low	
Red Hot Java	6410101900	765	MEDICAL CENTER	CT	Cat x-Eating/Drinking ...	Low	722213
Red Lobster #521	5682702700	342	F	ST	Cat x-Eating/Drinking ...	High	722
Robledo's Taco Shop Inc.	5672001500	444	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Romano's Macaroni Grill #339	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722110
Rosa Giant Pizza	6221114800	1680	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Royal China Palace II	5652302300	625	E	ST	Cat x-Eating/Drinking ...	Low	71111
Rubios Fresh Mexican Grill	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	High	722211
Rubios Fresh Mexican Grill at Broadway	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	High	722211
Rubios Fresh Mexican Grill at Eastlake	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	722211
San Diego Cash & Carry	6232502500	3630	MAIN	ST	Cat x-Eating/Drinking ...	Low	452990
Santa Fe Meats	6221112000	2514	MAIN	ST	Cat x-Eating/Drinking ...	High	445110
Save A Lot #943	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	High	445110
Seafood City Market	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	High	445220
Senor Pancho Mexican Grill	6231423900	298	MONTGOMERY	ST	Cat x-Eating/Drinking ...	Low	722211
Seven Eleven #13568E-2131	6394901300	415	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	445120
Seven Eleven #13569E-2131	5712002300	796	BROADWAY		Cat x-Eating/Drinking ...	Low	445120
Seven Eleven #13570C-2131	5670531100	285	BROADWAY		Cat x-Eating/Drinking ...	High	445120
Seven Eleven #13576F	5710611000	698	H	ST	Cat x-Eating/Drinking ...	Low	445120
Seven Eleven #13578D-2131	6240800600	1475	MELROSE	AV	Cat x-Eating/Drinking ...	Low	445110
Seven Eleven #13582C-2131	5731700200	290	I	ST	Cat x-Eating/Drinking ...	Low	452990
Seven Eleven #13590D-2131	6181520700	1097	BROADWAY		Cat x-Eating/Drinking ...	High	452990

Facility Name	APN Number	Address			Category	Priority	NAICS
Seven Eleven #18547B-2131	6240605700	4300	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	445120
Seven Eleven #2131	6421700900	913	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	445120
Seven Eleven #21604C-2131	5722811300	899	BROADWAY		Cat x-Eating/Drinking ...	High	445110
Seven Eleven #21792C-2131	5684200100	403	THIRD	AV	Cat x-Eating/Drinking ...	High	445120
Seven Eleven #33715	6182803600	689	PALOMAR	ST	Cat x-Eating/Drinking ...	High	445120
Silver Dollar	5683340400	341	THIRD	AV	Cat x-Eating/Drinking ...	Low	722410
Sitoo's Deli & Catering	5952313500	2300	BOSWELL	RD	Cat x-Eating/Drinking ...	Low	722211
SL Gourmet/Chinese Gourmet Express	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Smart & Final #463 / SFI Corp	6290607500	3141	MAIN	ST	Cat x-Eating/Drinking ...	High	445110
Smoothie Caffe	5950705500	2070	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	722213
Snack Ball	6232301700	3804	MAIN	ST	Cat x-Eating/Drinking ...	Low	722211
Sodexho Management Inc.	5743003400	84	J	ST	Cat x-Eating/Drinking ...	Low	71111
Southbay Fish and Grill	7600480102	570	MARINA	PW	Cat x-Eating/Drinking ...	Low	722110
Star Bakery	6192866000	1372	THIRD	AV	Cat x-Eating/Drinking ...	High	311811
Star Gazer Club	5653201600	33	BROADWAY		Cat x-Eating/Drinking ...	Low	72241
Starbucks Coffee #5253	5941310200	1467	H	ST	Cat x-Eating/Drinking ...	Low	71111
Starbucks Coffee #5665	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	71111
Starbucks Coffee #5885	5672321500	595	H	ST	Cat x-Eating/Drinking ...	Low	722
Starbucks Coffee #6589	6411221800	605	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722
Starbucks Coffee #8750	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	Low	722213
Steak Escape Otay Ranch Town Center	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722211
Stellas Deli & Cafe at Third Avenue	5683504000	365	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Steve's Cabana Bar	5652400600	173	BROADWAY		Cat x-Eating/Drinking ...	Low	72241
Stuart Anderson Black Angus Restaurant	5653101700	707	E	ST	Cat x-Eating/Drinking ...	Low	722

Facility Name	APN Number	Address			Category	Priority	NAICS
Submarina	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	722211
Subway #1055	5720803500	609	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Subway #15681/Serler Inc.	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722211
Subway #16107	6390806500	559	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	722211
Subway #16107-1	6240800900	1498	MELROSE	AV	Cat x-Eating/Drinking ...	Low	71111
Subway #28286	5623242400	45	BROADWAY		Cat x-Eating/Drinking ...	Low	722
Subway #3062	5941310200	1455	H	ST	Cat x-Eating/Drinking ...	Low	722211
Subway #31595	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Subway at H	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	722211
Subway at Main	6291303000	3733	MAIN	ST	Cat x-Eating/Drinking ...	Low	722
Sugar & Spice Delicafe	5720104700	555	BROADWAY		Cat x-Eating/Drinking ...	Low	71111
Sunny's Market	5672122000	449	BROADWAY		Cat x-Eating/Drinking ...	High	445110
Super Express Chinese Food	5720803500	609	BROADWAY		Cat x-Eating/Drinking ...	Low	72211
Sushi Loco	5670324500	224	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Sushiya	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722110
Sutherland Management Co.	5932800900	4394	BONITA	RD	Cat x-Eating/Drinking ...	Low	71111
Taco Bell #15508	6420201700	1548	H	ST	Cat x-Eating/Drinking ...	High	722211
Taco Bell #2971	5922001300	340	H	ST	Cat x-Eating/Drinking ...	High	722211
Taco Bell #3398	5670320100	696	E	ST	Cat x-Eating/Drinking ...	High	722211
Tacos El Gordo	5671902800	689	H	ST	Cat x-Eating/Drinking ...	Low	722211
Tacos El Gordo De Tijuana, BC Jr	6193001100	1351	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Tacos Toby	6240606200	1682	MELROSE	AV	Cat x-Eating/Drinking ...	Low	722320
Taqueria El Farolito	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722
Target Store T-1815	5950720400	910	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	452990

Facility Name	APN Number	Address			Category	Priority	NAICS
Tavarua Restaurant Inc/DBA McDonalds	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	High	722211
The Lighthearted Gourmet	5683003300	385	FOURTH	AV	Cat x-Eating/Drinking ...	Low	722320
The Lion's Den	5721803300	725	BROADWAY		Cat x-Eating/Drinking ...	Low	722410
The Perking Lot	5933500100	4502	BONITA	RD	Cat x-Eating/Drinking ...	Low	722213
The Plascencia Group LLC	5932800500	4346	BONITA	RD	Cat x-Eating/Drinking ...	Low	722211
The Soup Stone	5682702100	310	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Thien's Optimart	5672003900	498	BROADWAY		Cat x-Eating/Drinking ...	Low	722213
Third Avenue Minimart	5733204000	772	THIRD	AV	Cat x-Eating/Drinking ...	High	445120
Tijuana Oyster Bar	5932800200	4246	BONITA	RD	Cat x-Eating/Drinking ...	Low	722211
Tomatoes Plus A California Bistro	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	Low	722
Tortilleria Santa FE, Inc.	6231820400	387	ZENITH	ST	Cat x-Eating/Drinking ...	Low	722
Tropical Fruits	6220412700	1410	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Vanessa Water Store	5670903900	600	F	ST	Cat x-Eating/Drinking ...	Low	722211
VIP Oriental Buffet	5710500600	542	BROADWAY		Cat x-Eating/Drinking ...	Low	722
Vons Food & Drug #2006	6390806200	505	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	445110
Vons Food & Drug #2071	5953220200	2250	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	445110
Vons Food & Drug #2130	5932800600	4404	BONITA	RD	Cat x-Eating/Drinking ...	High	445110
Vons Food & Drug #2336	5922000500	360	H	ST	Cat x-Eating/Drinking ...	High	445110
Vons Food & Drug #3063	5734503400	870	THIRD	AV	Cat x-Eating/Drinking ...	High	445110
Water 24 Inc.	6182911200	1215	BROADWAY		Cat x-Eating/Drinking ...	Low	452990
Wendy's Coastline Food Service Corp	5950720600	960	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	722211
Wendy's Coastline Food Service Corp	5670325100	618	E	ST	Cat x-Eating/Drinking ...	High	722211
Wetzel's Pretzels Otay Ranch	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	722211
Wienerschitzel	6192221400	283	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	722211

Facility Name	APN Number	Address			Category	Priority	NAICS
Wings N Things Restaurant	5672322300	481	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Xana Spree	5957505000	391	PLAZA TOLUCA		Cat x-Eating/Drinking ...	Low	452990
Yo Julian's Mexican Food	6190507100	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	722211
Yokozuna's Shushi Bar & Island Grill	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	722110
Yoshinoya Beef Bowl	6182901500	1299	BROADWAY		Cat x-Eating/Drinking ...	Low	722211
Zorba's Family Restaurant	5651622800	100	BROADWAY		Cat x-Eating/Drinking ...	Low	532292
Cat xii-Cement Mixing/Cut							
Arturo Cervantes Barajas Concrete Co.	6206030400	1264	RAVEN	AV	Cat xii-Cement Mixing/Cut	Low	238110
Buildis and Son Cement	5733322100	720	DEL MAR	AV	Cat xii-Cement Mixing/Cut	Low	2357
California Concrete Designs	6424800400	1631	COOLSPRINGS	CT	Cat xii-Cement Mixing/Cut	Low	23571
Contrera's Concrete Service	5735411300	113	L	ST	Cat xii-Cement Mixing/Cut	Low	238990
Cuen Fred Concrete Service	6200301000	47	OXFORD	ST	Cat xii-Cement Mixing/Cut	Low	23571
John Tessitore	5735220300	812	FAIRWAY	CT	Cat xii-Cement Mixing/Cut	Low	23571
Nora's Concrete	5691330300	110	F	ST	Cat xii-Cement Mixing/Cut	Low	238110
RDS Concrete Construction	5693020600	479	CORTE HELENA	AV	Cat xii-Cement Mixing/Cut	Low	238110
Rubios Concrete Construction	6220722400	725	BELVIA	LN	Cat xii-Cement Mixing/Cut	Low	23571
The Rock Concrete Pumping	6180901900	1031	COLORADO	AV	Cat xii-Cement Mixing/Cut	Low	561790
Cat xiii-Masonry							
A&E Carpet & Tile Distributors	6291002300	170	MACE	ST	Cat xiii-Masonry	Low	238330
Alpha-Omega Hardscape	5952931300	861	SOUTHSHORE	DR	Cat xiii-Masonry	Low	238140
Chula Vista Tile & Stone	6182803500	693	PALOMAR	ST	Cat xiii-Masonry	Low	23543
Emerald Plastering	5752001200	947	HELIX	AV	Cat xiii-Masonry	Low	238990

Facility Name	APN Number	Address			Category	Priority	NAICS
FJL Masonry	5958001500	1002	SUTTER RIDGE	CT	Cat xiii-Masonry	Low	238140
J&J Tile Service	5650801200	54	SMITH	AV	Cat xiii-Masonry	Low	238340
Jasa Concrete	6205101900	1414	MELROSE	AV	Cat xiii-Masonry	Low	238140
JR Drywall	6202621800	121	PALOMAR	ST	Cat xiii-Masonry	Low	23542
Klaser Tile Company Inc.	6222303400	1595	JAYKEN	WY	Cat xiii-Masonry	Low	23543
MAC Plastering Inc.	6424901800	1705	FAWNTAIL	CT	Cat xiii-Masonry	Low	235
Masonry By Michael	6403810800	573	PLAZA DEL CID		Cat xiii-Masonry	Low	238140
Masonry Pros	5741401800	78	KING	ST	Cat xiii-Masonry	Low	238140
Precison Plastering	5730900800	389	I	ST	Cat xiii-Masonry	Low	23542
South Coast Structures	6392320700	801	HALECREST	DR	Cat xiii-Masonry	Low	23541
TRS Tile	6201610600	1221	HELIX	AV	Cat xiii-Masonry	Low	238340
USA Stone Design	6180103300	970	BROADWAY		Cat xiii-Masonry	Low	23541
Valencia Stone and Tile	5662503100	241	E	ST	Cat xiii-Masonry	Low	23543
Vent Pros	6192113200	325	OXFORD	ST	Cat xiii-Masonry	Low	561790
WEMAC Marine Insulation	6221023500	753	ANITA	ST	Cat xiii-Masonry	Low	23542
			Cat xi-Mob. Carpet/Drape				
Active Carpet Cleaning	5693111900	43	ALVARADO	PL	Cat xi-Mob. Carpet/Drape	Low	561740
Bonita Carpet Care	5955205800	2506	SADDLEHORN	DR	Cat xi-Mob. Carpet/Drape	Low	561740
Buena Vista Carpet Care	6243850500	1551	LOMA	LN	Cat xi-Mob. Carpet/Drape	Low	561740
Carlos Sandoval Carpet Center	5731300500	380	I	ST	Cat xi-Mob. Carpet/Drape	Low	561740
Cool Style Carpet Cleaning	5712332000	752	MADISON	AV	Cat xi-Mob. Carpet/Drape	Low	561740
Day & Night Carpet Cleaning Services	5683322200	317	TWIN OAKS	AV	Cat xi-Mob. Carpet/Drape	Low	561740
Del Rey Carpet Service	5933702900	535	PASEO ROSAL		Cat xi-Mob. Carpet/Drape	Low	561740

Facility Name	APN Number	Address			Category	Priority	NAICS
Dollar Carpet Cleaning	6431823800	2287	SUN VALLEY	RD	Cat xi-Mob. Carpet/Drape	Low	561740
Edwards Carpet Cleaning	6410910400	578	NANTUCKET	DR	Cat xi-Mob. Carpet/Drape	Low	561740
Empire Carpet Service Inc.	5957232000	556	SCENIC TRAIL	PL	Cat xi-Mob. Carpet/Drape	Low	561740
Extreme Carpet Care Services LLC	6233151100	1540	CONNOLEY	AV	Cat xi-Mob. Carpet/Drape	Low	561740
First Touch Steam Carpet Cleaning	6182106300	1177	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	561740
Foreign Auto Upholstery	5754000100	55	NAPLES	ST	Cat xi-Mob. Carpet/Drape	Low	561740
Frankys Floor & Carpet Care	6190105200	971	FOURTH	AV	Cat xi-Mob. Carpet/Drape	Low	561740
Golden Care Carpet Cleaning	6243711600	1768	REGENCY	WY	Cat xi-Mob. Carpet/Drape	Low	561740
Hydro Pacific Carpet Cleaning	5680421100	232	GARRETT	AV	Cat xi-Mob. Carpet/Drape	Low	561740
Integrity Carpet Cleaning	5652904100	30	WOODLAWN	AV	Cat xi-Mob. Carpet/Drape	Low	561740
L&V Cleaning Services	6233331300	64	SHERWOOD	ST	Cat xi-Mob. Carpet/Drape	Low	561740
Lavamax Carpet Cleaning	5634410500	320	TROUSDALE	DR	Cat xi-Mob. Carpet/Drape	Low	561740
Ocean's Carpet	6221112500	2488	MAIN	ST	Cat xi-Mob. Carpet/Drape	Low	561740
Preferred Carpet Care	5651623100	110	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	561740
RC Carpet & Furniture Cleaning	5735330600	162	L	ST	Cat xi-Mob. Carpet/Drape	Low	561740
RG Carpet Cleaning	6412710400	1097	MOUNT DANA	DR	Cat xi-Mob. Carpet/Drape	Low	561740
Rosalie's Carpet Cleaning	6181522600	1057	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	561740
Rueda's Carpet Cleaning	6244213600	274	RANCHO	CT	Cat xi-Mob. Carpet/Drape	Low	561740
Select Carpets	6204202000	4501	OTAY VALLEY	RD	Cat xi-Mob. Carpet/Drape	Low	442210
Servpro of Fire & Water Damage	6411431300	1485	LA CHICA	DR	Cat xi-Mob. Carpet/Drape	Low	236118
Siedschlag Carpet Cleaning	5710620800	537	OAKLAWN	AV	Cat xi-Mob. Carpet/Drape	Low	561740
Southbay Carpet Care	6422404000	1883	GOTHAM	ST	Cat xi-Mob. Carpet/Drape	Low	561740
Sunset Carpet Cleaning	5672111000	557	VANCE	ST	Cat xi-Mob. Carpet/Drape	Low	561740
Sunset Carpet Cleaning & Services	6422724300	931	BUENA VISTA	WY	Cat xi-Mob. Carpet/Drape	Low	561740

Facility Name	APN Number	Address			Category	Priority	NAICS
TNT Carpets	5742311800	658	CARLA	AV	Cat xi-Mob. Carpet/Drape	Low	561740
Two Brothers Carpet & Upholstery Cleaning	5651312300	50	MONTE VISTA	AV	Cat xi-Mob. Carpet/Drape	Low	561740
Vegas Carpet Cleaning	5754321700	1108	HILLTOP	DR	Cat xi-Mob. Carpet/Drape	Low	561740
Warrior Carpet	6442214600	1546	POINT HUENEME	CT	Cat xi-Mob. Carpet/Drape	Low	561740
We Buff It Too Biz	5682630600	489	G	ST	Cat xi-Mob. Carpet/Drape	Low	561740
We Care Carpet Cleaning	5951750300	1937	DUKE	ST	Cat xi-Mob. Carpet/Drape	Low	561740
Westcoast Carpet Cleaning	5733712300	297	K	ST	Cat xi-Mob. Carpet/Drape	Low	561740
			Cat xiv-Painting/Coating				
Alfred's Painting	6183600800	544	WELTON	ST	Cat xiv-Painting/Coating	Low	236118
Allstar Painting Services	6433411100	1957	MOSS LANDING	AV	Cat xiv-Painting/Coating	Low	561790
Arrow Professional Painting	6413011600	1170	WIND RIVER	RD	Cat xiv-Painting/Coating	Low	238320
Arroyo Custom Painting Corp	6423800610	1365	SERENA	CI	Cat xiv-Painting/Coating	Low	238320
Barba Painting	6426001000	1537	APPLEGATE	ST	Cat xiv-Painting/Coating	Low	238320
Discount Painting	6423801607	1335	SERENA	CI	Cat xiv-Painting/Coating	Low	238320
DS Construction	5663002200	172	D	ST	Cat xiv-Painting/Coating	Low	235
G&R Painting	6180623900	580	MOSS	ST	Cat xiv-Painting/Coating	Low	238320
Gaskill Painting Company Inc.	6442302100	744	DESIGN	CT	Cat xiv-Painting/Coating	Low	238320
George Painting	6205412200	1420	CAMELLIA	CT	Cat xiv-Painting/Coating	Low	561790
Hawkin's Painting Company	5752620500	976	GUATAY	AV	Cat xiv-Painting/Coating	Low	238990
Icon Painting Solutions	6411305200	1480	VENTERS	DR	Cat xiv-Painting/Coating	Low	561790
Jam Painting Inc.	6230501400	317	QUINTARD	ST	Cat xiv-Painting/Coating	Low	23521
Lazaro's Painting	6244325700	252	RANCHO	DR	Cat xiv-Painting/Coating	Low	238320
Luther Painting	5680142300	215	GUAVA	AV	Cat xiv-Painting/Coating	Low	23521

Facility Name	APN Number	Address			Category	Priority	NAICS
Maintenance	6432903800	1150	HITCHING POST	LN	Cat xiv-Painting/Coating	Low	23521
Marcelo's Distinctive Painting	6181511100	567	MOSS	ST	Cat xiv-Painting/Coating	Low	561790
MCS Painting	5663005600	121	SECOND	AV	Cat xiv-Painting/Coating	Low	561790
My Painer Plus.Com	6203600100	1360	MYRA	CT	Cat xiv-Painting/Coating	Low	238320
NR Painting Inc.	6433914200	2526	KING CREEK	CI	Cat xiv-Painting/Coating	Low	238320
Painters at Work	6182106100	550	OXFORD	ST	Cat xiv-Painting/Coating	Low	236118
Paradise Painting	6403300107	1015	CAMINITO ESTRELLA		Cat xiv-Painting/Coating	Low	561790
Quality Home Painting	5952122100	2019	BRIDGEPORT		Cat xiv-Painting/Coating	Low	236118
Ray Garcia	5700204000	24	FLOWER	ST	Cat xiv-Painting/Coating	Low	238320
Rolling Hills Custom Painting	6192501500	116	PALOMAR	ST	Cat xiv-Painting/Coating	Low	236118
Safari Painting	5681610300	259	THIRD	AV	Cat xiv-Painting/Coating	Low	238320
Sammy's Painting Company	6192221100	225	PALOMAR	ST	Cat xiv-Painting/Coating	Low	561790
Scott Painting Company	6393630200	752	PASEO DEL REY		Cat xiv-Painting/Coating	Low	561790
South Coast Home Painting	6393141300	1015	NORMA	CT	Cat xiv-Painting/Coating	Low	236118
Southbay Painting	5651701100	564	D	ST	Cat xiv-Painting/Coating	Low	561790
Sumaya Painting	5730502200	244	H	ST	Cat xiv-Painting/Coating	Low	561790
Superb Interior Painting	6437335000	1679	PICKET FENCE	DR	Cat xiv-Painting/Coating	Low	561790
Superior Color Painting	6437323200	1604	PICKET FENCE	DR	Cat xiv-Painting/Coating	Low	238320
		Cat xviii-Golf/Parks/Rec					
Alcala Park	6424816200	1620	MONTANA	RD	Cat xviii-Golf/Parks/Rec	Low	712190
Augusta Park	5953706900		GREENSVIEW	DR	Cat xviii-Golf/Parks/Rec	Low	712190
Bonita Haciendas Mini Park	5943114700	1518	VIA HACIENDA		Cat xviii-Golf/Parks/Rec	Low	712190
Boys & Girls Club of Chula Vista	6200601900	1301	OLEANDER	AV	Cat xviii-Golf/Parks/Rec	Low	813410

Facility Name	APN Number	Address			Category	Priority	NAICS
Chula Vista Elks Lodge #2011	6391600300	901	ELKS	LN	Cat xviii-Golf/Parks/Rec	Low	721211
Circle Park	6433902300		KING CREEK	CI	Cat xviii-Golf/Parks/Rec	Low	712190
Cobblestone Park	5952035500		LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	712190
Coors Amphitheatre	6450214700	2050	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	Low	71
Countryside Park	6432611000		PINON HILLS	RD	Cat xviii-Golf/Parks/Rec	Low	712190
Eastlake Beach Club	5952220700	2050	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	712190
Eastlake Country Club	5953203000	2375	CLUBHOUSE	DR	Cat xviii-Golf/Parks/Rec	Low	713910
Fun 4 All	6170103000	950	INDUSTRIAL	BL	Cat xviii-Golf/Parks/Rec	Low	713110
Kensington Road Park	5955502800	2600	SADDLEBACK	ST	Cat xviii-Golf/Parks/Rec	Low	712190
Knotts Soak City USA	6450201700	2052	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	Low	713110
Madison Lane Park	5955201600	640	FALCON VALLEY	DR	Cat xviii-Golf/Parks/Rec	Low	712190
Magnolia Hill Park	5956901900	2640	MONTECITO	RD	Cat xviii-Golf/Parks/Rec	Low	712190
Oak Crest Park	6426222300		SANTA MADERA	AV	Cat xviii-Golf/Parks/Rec	Low	712190
Orchard Park	6420712400		MONTE SERENO	AV	Cat xviii-Golf/Parks/Rec	Low	712190
Palace Garden Park	6230710400	1425	SECOND	AV	Cat xviii-Golf/Parks/Rec	Low	713290
Salt Creek Golf Club	5950400800	525	HUNTE	PW	Cat xviii-Golf/Parks/Rec	Low	713910
San Diego County Club	6190300800	88	L	ST	Cat xviii-Golf/Parks/Rec	Low	713990
Scobee Park	5952310700	2351	KUHN	DR	Cat xviii-Golf/Parks/Rec	Low	712190
Shorebird Park	5952806400	2088	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	712190
Wisteria Park	6420735100		SANTA RITA		Cat xviii-Golf/Parks/Rec	Low	712190
			Cat xvi-Landscaping				
A&G Landscaping	6203502500	226	QUINTARD	ST	Cat xvi-Landscaping	Low	561730
A&G Landscaping	6230720428	56	QUINTARD	ST	Cat xvi-Landscaping	Low	561730

Facility Name	APN Number	Address			Category	Priority	NAICS
AJ Gardening	6411707100	1125	MISTY CREEK	ST	Cat xvi-Landscaping	Low	561730
All Palms Plus	6411307000	1471	VENTERS	DR	Cat xvi-Landscaping	Low	561730
American Veteran Lawn Care	6393530400	431	NAPLES	ST	Cat xvi-Landscaping	Low	561730
Arroyo Landscaping	6424000100	1494	WOODCREST	ST	Cat xvi-Landscaping	Low	561730
AXL Landscaping	6404002000	1136	CALLE DE DAMASCO		Cat xvi-Landscaping	Low	561730
Beltran Landscaping	6433521000	2078	MIRROR LAKE	PL	Cat xvi-Landscaping	Low	561730
Better Greens	6192611800	1230	TOBIAS	DR	Cat xvi-Landscaping	Low	561730
Better Greens 2	6192614800	1232	TOBIAS	DR	Cat xvi-Landscaping	Low	561730
Bufallo Quality Tree Work	5950931100	902	ASPEN GLEN	RD	Cat xvi-Landscaping	Low	561730
C&R Landscaping	6392800300	314	MOSS	ST	Cat xvi-Landscaping	Low	561730
Castro Lawn Care	6233331100	70	SHERWOOD	ST	Cat xvi-Landscaping	Low	561730
Chau Pen Van	5753410400	1037	HELIX	AV	Cat xvi-Landscaping	Low	561730
Chermak Joseph	5751830100	52	FORTUNA	ST	Cat xvi-Landscaping	Low	561730
Clean Cut Lawn Services	5711810100	702	COLORADO	AV	Cat xvi-Landscaping	Low	561730
CMN Lawn Services	5941331800	1208	POSITAS	RD	Cat xvi-Landscaping	Low	561730
Colonial Gardens Inc	5922302100	578	PARKSIDE	DR	Cat xvi-Landscaping	Low	561730
Complete Lawn Maintenance	5652020200	470	D	ST	Cat xvi-Landscaping	Low	561730
Cortez Samuel Landscaping	6403405100	1058	CAMINO ATAJO		Cat xvi-Landscaping	Low	561730
Decasas Garden	6244012100	1539	GRAND TETON	CT	Cat xvi-Landscaping	Low	561730
Desert Garden's & Sons	6423040500	1351	BLUE FALLS	DR	Cat xvi-Landscaping	Low	561730
Dixon Landscaping Solutions	6433801917	1243	CABEZAS COVE		Cat xvi-Landscaping	Low	561730
Dreamview Landscaping	5755401400	226	OXFORD	ST	Cat xvi-Landscaping	Low	561730
E Kim Landscaping	6403514800	1002	CAMINO CALABAZO		Cat xvi-Landscaping	Low	561730
Elite Hauling Services	6191921600	1180	FIRST	AV	Cat xvi-Landscaping	Low	561730

Facility Name	APN Number	Address			Category	Priority	NAICS
Enrique YBarra Landscape Maintenance	5710802300	619	WHITNEY	ST	Cat xvi-Landscaping	Low	561730
Epifanio Morales Gardens Landscape	5721723200	684	FOURTH	AV	Cat xvi-Landscaping	Low	561730
Eriks Lawn Maintenance	6202020300	1195	NAPA	AV	Cat xvi-Landscaping	Low	561730
Ernesto Casillas Landscaping	6182105000	555	NAPLES	ST	Cat xvi-Landscaping	Low	561730
Ernie Salazar Landscaping	6180613100	958	CEDAR	AV	Cat xvi-Landscaping	Low	561730
Evergreen Gardening Service	6435432400	1486	OAKPOINT	AV	Cat xvi-Landscaping	Low	561730
Ezequiel Perez Landscaping	5650900800	44	FIFTH	AV	Cat xvi-Landscaping	Low	561730
Fast and Friendly	6412200800	1352	SANTA OLIVIA	RD	Cat xvi-Landscaping	Low	561730
Federal Land Management Corp	6184200700	440	NICKMAN	ST	Cat xvi-Landscaping	Low	561730
Gaeta's Tree Service	6433700124	2543	GARNET PEAK	RD	Cat xvi-Landscaping	Low	561730
Gotta Go Mow & Landscaping	6434102300	1968	MEEKS BAY	DR	Cat xvi-Landscaping	Low	561730
Green Desert	5954406000	1081	FOREST LAKE	DR	Cat xvi-Landscaping	Low	561730
Green Earth Gardening Service	6396840700	145	CORTE MARIA	AV	Cat xvi-Landscaping	Low	561730
Green Grass Landscape	6243930300	149	RAINIER	CT	Cat xvi-Landscaping	Low	561730
Hale Landscaping	5712222000	752	WOODLAWN	AV	Cat xvi-Landscaping	Low	561730
Handy Lawn Care	6435803000	2016	GEYSERVILLE	ST	Cat xvi-Landscaping	Low	561730
Hector Gardening	5951741100	1946	DUKE	ST	Cat xvi-Landscaping	Low	561730
Heldiz Landscape	6204400500	295	RIENSTRA	ST	Cat xvi-Landscaping	Low	561730
Hernandez Gardening	6181020400	1038	JEFFERSON	AV	Cat xvi-Landscaping	Low	561730
Herrera Antonio Landscape	6203304000	140	RIVERA	CT	Cat xvi-Landscaping	Low	561730
Hinkle Tree Service	5651621100	143	MADISON	AV	Cat xvi-Landscaping	Low	561730
JC Landscaping	5952412800	2157	HAMDEN	DR	Cat xvi-Landscaping	Low	561730
Jeff's Lawn Care	5753630100	995	MONSERATE	AV	Cat xvi-Landscaping	Low	561730
Jessica Lopez Design	6412101300	972	MCCAIN VALLEY	CT	Cat xvi-Landscaping	Low	561730

Facility Name	APN Number	Address			Category	Priority	NAICS
JM Landscaping	6192807715	1303	CALLE TEMPRA		Cat xvi-Landscaping	Low	561730
JM Lawns	6230202700	368	ANITA	ST	Cat xvi-Landscaping	Low	561730
John's Yard Service	5742521800	668	ROBERT	AV	Cat xvi-Landscaping	Low	561730
Johnson Greenery	5735320600	171	L	ST	Cat xvi-Landscaping	Low	561730
Jose's Gardening	5753300800	1013	CUYAMACA	AV	Cat xvi-Landscaping	Low	561730
Jose's Lawn Service	6411444100	1428	LA CHICA	DR	Cat xvi-Landscaping	Low	561730
JR's Landscape	5650310600	689	CHULA VISTA	ST	Cat xvi-Landscaping	Low	561730
Juan J. Hale Landscaping Maint. Service	6181522600	1057	BROADWAY		Cat xvi-Landscaping	Low	561730
Juan Leal Landscape	6310122200	308	PALM	AV	Cat xvi-Landscaping	Low	561730
Kazper's Landscaping	6192113800	1246	THIRD	AV	Cat xvi-Landscaping	Low	561730
Kiki's Paradise Landscaping	6424101606	1360	CALLEJON CERVANTES		Cat xvi-Landscaping	Low	561730
Kutting Edge	6232903400	1617	JADE	AV	Cat xvi-Landscaping	Low	561730
Kyoto Landscape	6220912600	602	ANITA	ST	Cat xvi-Landscaping	Low	561730
Land Art	6403107400	725	GREDOS	PL	Cat xvi-Landscaping	Low	561730
Landscape Enterprise	5661321600	25	D	ST	Cat xvi-Landscaping	Low	561730
Leon's Landscaping Service	6430515004	1453	TROUVILLE	LN	Cat xvi-Landscaping	Low	561730
Leo's Landscape	5922210903	480	BELLE VISTA	DR	Cat xvi-Landscaping	Low	561730
Lua's Landscaping	6182000100	1100	INDUSTRIAL	BL	Cat xvi-Landscaping	Low	561730
Lucero's Landscaping	6190105800	374	MOSS	ST	Cat xvi-Landscaping	Low	561730
Manzano's Landscaping	6395932400	739	NEPTUNE	CT	Cat xvi-Landscaping	Low	561730
Mario's Landscaping	6411134800	576	SIPES	CI	Cat xvi-Landscaping	Low	561730
Mariposa's Landscape	6396821200	666	MARIPOSA	CI	Cat xvi-Landscaping	Low	561730
Martin & Zamora Landscape Maintenance	5721930600	758	ASH	AV	Cat xvi-Landscaping	Low	561730
Maximum & Green Maintenance	6240552500	309	VALLEY	AV	Cat xvi-Landscaping	Low	561730

Facility Name	APN Number	Address			Category	Priority	NAICS
Mel's Gardening Service	6412022800	910	ISRAEL	CT	Cat xvi-Landscaping	Low	561730
MG Gardening	6205904000	357	PEPPERWOOD	CT	Cat xvi-Landscaping	Low	561730
MGM Landscape Inc	5943610200	558	TRAILRIDGE	DR	Cat xvi-Landscaping	Low	561730
Miles Bob Irrigation	6395933600	752	NACION	AV	Cat xvi-Landscaping	Low	561730
Ochi Gardens	6397013300	176	CAMINO ENTRADA		Cat xvi-Landscaping	Low	561730
Olguin's Landscape	5662911500	186	CORTE HELENA	AV	Cat xvi-Landscaping	Low	561730
Orlando's Garden	6290201100	2887	MAIN	ST	Cat xvi-Landscaping	Low	561730
Ortega Landscape	6182901200	1225	BROADWAY		Cat xvi-Landscaping	Low	561730
P Gracia Landscape	6183011600	490	SHY	LN	Cat xvi-Landscaping	Low	561730
P&A Garden Landscaping	5721723200	684	FOURTH	AV	Cat xvi-Landscaping	Low	561730
Pacific Turf Specialists	5742520800	681	CLAIRE	AV	Cat xvi-Landscaping	Low	561730
PCM Maintenance Landscape Service	5922109300	400	KRISTA	CT	Cat xvi-Landscaping	Low	561730
Pedro's Landscaping	5652200200	443	FLOWER	ST	Cat xvi-Landscaping	Low	561730
Pena's Gardening Maintenance Service	6200420100	236	OLYMPIA	ST	Cat xvi-Landscaping	Low	561730
Picket Fences Landscaping Inc.	6434844000	1263	POPLAR SPRING	RD	Cat xvi-Landscaping	Low	561730
PK Shedenhelm's Landscaping	5943831200	1606	COUNTRY VISTAS	LN	Cat xvi-Landscaping	Low	561730
Plays in the Dirt	5942112000	575	OTAY LAKES	RD	Cat xvi-Landscaping	Low	561730
PRG Maintenance Gardening Service	6192807715	1303	CALLE TEMPRA		Cat xvi-Landscaping	Low	561730
Pro Care Landscape & Gard	6401961100	1164	PASEO SARINA		Cat xvi-Landscaping	Low	561730
Rafaelo's Tree Trimmer	6231122300	435	TREMONT	ST	Cat xvi-Landscaping	Low	561730
RG Landscape & Design	6201212300	3	PAISLEY	ST	Cat xvi-Landscaping	Low	561730
Rhinotech Landscape	6242400500	459	RIVERA	CT	Cat xvi-Landscaping	Low	561730
Rich Valens Tree Service	6191212300	1106	DEL MAR	AV	Cat xvi-Landscaping	Low	561730
RM Landscape	5752710100	933	GUATAY	AV	Cat xvi-Landscaping	Low	561730

Facility Name	APN Number	Address			Category	Priority	NAICS
Robert's Gardening Service	5712101600	749	RIVERLAWN	AV	Cat xvi-Landscaping	Low	561730
Romita Landscape	6241802500	20	TOURMALINE	ST	Cat xvi-Landscaping	Low	561730
Rudy Landscaping	6403220400	746	AVENIDA SOLARIA		Cat xvi-Landscaping	Low	561730
Sam's Stump Removal	6191220400	1103	DEL MAR	AV	Cat xvi-Landscaping	Low	561730
Silahua's Landscape and Yard Maintenance	6394110500	1169	OCALA	AV	Cat xvi-Landscaping	Low	561730
Silva's Tree Service	5660200400	75	FOURTH	AV	Cat xvi-Landscaping	Low	561730
Southwing Land Maint Inc.	5693010100	3855	SAN MIGUEL	AV	Cat xvi-Landscaping	Low	561730
SPS/Creative Curb Landscapes	5933802700	839	CALLE LAGASCA		Cat xvi-Landscaping	Low	561730
Steve Ferlito Gardening Service	6244212500	271	RANCHO	CT	Cat xvi-Landscaping	Low	561730
Trim Around Yard Service	6421202400	914	WAYNE	AV	Cat xvi-Landscaping	Low	561730
Trujillo Landscaping	5742522100	656	ROBERT	AV	Cat xvi-Landscaping	Low	561730
Turf Pros	6441703300	598	RIVERA	ST	Cat xvi-Landscaping	Low	561730
Valle Lawn Service	5941216200	1284	MARBELLA	PL	Cat xvi-Landscaping	Low	561730
Vasquez Landscaping & Hauling	5730810102	398	MANKATO	ST	Cat xvi-Landscaping	Low	561730
Vegas Gardening Landscaping Services	6412023000	901	ISRAEL	CT	Cat xvi-Landscaping	Low	561730
VMG Landscaping	6240514300	270	DATE	ST	Cat xvi-Landscaping	Low	561730
Westerm Tree Service	5943411100	1756	RIDGE CREEK	DR	Cat xvi-Landscaping	Low	561730
Yonekura Glenn	5672320400	572	OTIS	ST	Cat xvi-Landscaping	Low	561730
			Cat xxiii-Bldg/Mat Storag				
Builders Surplus Sales	5634312900	130	GLOVER	AV	Cat xxiii-Bldg/Mat Storag	Low	444130
Ferguson Enterprise	5734903000	895	THIRD	AV	Cat xxiii-Bldg/Mat Storag	Low	444130
Home Depot #658/Home Depot USA Inc.	6402911300	725	PLAZA	CT	Cat xxiii-Bldg/Mat Storag	High	444130
J&W Lumber	6291303600	3817	MAIN	ST	Cat xxiii-Bldg/Mat Storag	High	444130

Facility Name	APN Number	Address			Category	Priority	NAICS
Leticia Cano/Nuts and Bolts	6221112500	2446	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	444130
Lowes Home Improvement Warehouse Inc.	5950720100	2225	OTAY LAKES	RD	Cat xxiii-Bldg/Mat Storag	High	444110
Plastics By Roy Inc.	5952313600	825	KUHN	DR	Cat xxiii-Bldg/Mat Storag	Low	444130
RCP Block & Brick Inc.	5632703700	75	FOURTH	AV	Cat xxiii-Bldg/Mat Storag	Low	444110
The Home Depot #1030	6430206600	1320	EASTLAKE	PW	Cat xxiii-Bldg/Mat Storag	High	444130
White Cap Construction Supply	6290620200	3451	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	444130
			Cat xx-Pool/Fountain Clng				
A Environmental Services	5692631100	125	H	ST	Cat xx-Pool/Fountain Clng	Low	561790
ABC Pool Service	5682701746	376	CENTER	ST	Cat xx-Pool/Fountain Clng	Low	561790
Academy Pool Service & Supplies	6221114800	1680	BROADWAY		Cat xx-Pool/Fountain Clng	Low	561790
Acuario Pool & SPA Maintenance	6206334400	1450	MELROSE	AV	Cat xx-Pool/Fountain Clng	Low	561790
All Pro Pool Services	5932800100	4248	BONITA	RD	Cat xx-Pool/Fountain Clng	Low	561790
Ambart Inc.	5710630100	652	H	ST	Cat xx-Pool/Fountain Clng	Low	561790
Aqua Diamond Pool Service & Repair	6395102000	383	NOVA	PL	Cat xx-Pool/Fountain Clng	Low	561790
Aqua Pro Pool & SPA Service	6433700415	1328	PINNACLE PEAK	DR	Cat xx-Pool/Fountain Clng	Low	561790
Aquatech Pool Service	5953700300	1057	PARK MEADOWS	RD	Cat xx-Pool/Fountain Clng	Low	561790
Azul Pool Service	6436716600	1546	HOPSCOTCH	DR	Cat xx-Pool/Fountain Clng	Low	561790
Blue Wave Pools	5752720100	5116	GLEN VERDE	DR	Cat xx-Pool/Fountain Clng	Low	561790
Bob Reed's Step Saver Pool Products	5662321300	326	E	ST	Cat xx-Pool/Fountain Clng	Low	561790
Bonita Vista Pool Service	6422104600	1618	MILLS	ST	Cat xx-Pool/Fountain Clng	Low	561790
C&A Maint Service	6242000800	461	RIENSTRA	CT	Cat xx-Pool/Fountain Clng	Low	561790
Chlor-Nation	5942221800	510	CAMINO ELEVADO		Cat xx-Pool/Fountain Clng	Low	561790
Choice Maintenance and Repair	5933111500	960	SURREY	DR	Cat xx-Pool/Fountain Clng	Low	561790

Facility Name	APN Number	Address			Category	Priority	NAICS
Chula Vista Curbside Agency	6192215100	249	OXFORD	ST	Cat xx-Pool/Fountain Clng	Low	561790
Constable Pool Service	5952312900	2351	BOSWELL	RD	Cat xx-Pool/Fountain Clng	Low	561790
Cornerstone	5922107600	458	KARRA	CT	Cat xx-Pool/Fountain Clng	Low	561790
Crystal Clear Poolz	6191620500	1123	TOBIAS	DR	Cat xx-Pool/Fountain Clng	Low	561790
CTI of San Diego	5954811000	2137	CHATEAU	CT	Cat xx-Pool/Fountain Clng	Low	561790
CV Pool Repair & Supply	6181421900	1082	BROADWAY		Cat xx-Pool/Fountain Clng	Low	561790
E&D Pool and SPA Service	6204100900	1451	NAPA	CT	Cat xx-Pool/Fountain Clng	Low	561790
Fire on Ice of San Diego	6411702900	1080	MOONSTONE	PL	Cat xx-Pool/Fountain Clng	Low	561790
Fix Time	5952221578	2023	LAKERIDGE	CI	Cat xx-Pool/Fountain Clng	Low	561790
Herbur Pool	6426900900	1421	FIELDBROOK	ST	Cat xx-Pool/Fountain Clng	Low	561790
Jim's Pool Clean Up	5942112000	575	OTAY LAKES	RD	Cat xx-Pool/Fountain Clng	Low	561790
Jose's Pool Service	5671030100	355	BROADWAY		Cat xx-Pool/Fountain Clng	Low	561790
JP's Pool Service	6436312974	1571	CIRCULO BRINDISI		Cat xx-Pool/Fountain Clng	Low	561790
Keep It Clean Pool Service	6403924300	1307	VAQUERO	CT	Cat xx-Pool/Fountain Clng	Low	561790
Kelly's Pool and SPA Care	5954902300	1870	MARQUETTE	RD	Cat xx-Pool/Fountain Clng	Low	561790
Kng D C Pool & SPAS	6244021300	14	QUINTARD	ST	Cat xx-Pool/Fountain Clng	Low	561790
Leslie's Swimming Pool Supplies #299	5922000700	316	H	ST	Cat xx-Pool/Fountain Clng	Low	561790
Mack's Maintenance & Repair	5680741800	201	TWIN OAKS	AV	Cat xx-Pool/Fountain Clng	Low	561790
Max Swimming Pool Service	6424602300	1298	MORGAN HILL	DR	Cat xx-Pool/Fountain Clng	Low	561790
Misty Creek Home Improvement	6411705700	1069	MISTY CREEK	ST	Cat xx-Pool/Fountain Clng	Low	561790
New Look Concrete Creations	6422205700	1753	YALE	ST	Cat xx-Pool/Fountain Clng	Low	561790
Patrick's Pool & SPA Service	5670801600	155	NAPLES	ST	Cat xx-Pool/Fountain Clng	Low	561790
Pete & Irma's Pool And SPA	5952034700	2140	STONECREEK	PL	Cat xx-Pool/Fountain Clng	Low	561790
Pressures On	6425401400	1288	SANTA LUCIA	RD	Cat xx-Pool/Fountain Clng	Low	561790

Facility Name	APN Number	Address			Category	Priority	NAICS
Pure Water Pool and SPA	5955505500	2642	FLAGSTAFF	CT	Cat xx-Pool/Fountain Clng	Low	561790
R3 & Sons	6206334400	1450	MELROSE	AV	Cat xx-Pool/Fountain Clng	Low	561790
Robert The Handy Man	6422201800	1803	GOTHAM	ST	Cat xx-Pool/Fountain Clng	Low	561790
San Deigo Stone Technicians	6422404200	1863	GOTHAM	ST	Cat xx-Pool/Fountain Clng	Low	561790
Sanchez Handyman Service	5711810600	730	COLORADO	AV	Cat xx-Pool/Fountain Clng	Low	561790
Sanique Development	5921920300	474	H	ST	Cat xx-Pool/Fountain Clng	Low	561790
Schaeffer's Pool Service	5952222327	2067	LAKERIDGE	CI	Cat xx-Pool/Fountain Clng	Low	561790
SD Pool Service	5652904100	30	WOODLAWN	AV	Cat xx-Pool/Fountain Clng	Low	561790
Sea Breeze Pool Service	6432321700	1408	ASHFORD CASTLE	DR	Cat xx-Pool/Fountain Clng	Low	561790
Sharko Pool Service & Maintenance	6397021400	819	AVENIDA MADERA		Cat xx-Pool/Fountain Clng	Low	561790
Southbay Postcon Services	6205004000	1422	LANTANA	AV	Cat xx-Pool/Fountain Clng	Low	561790
Spic N Span	5956201100	2057	CHATEAU	CT	Cat xx-Pool/Fountain Clng	Low	561790
Superior Home Prep Co.	6423800116	1467	SUMMIT	DR	Cat xx-Pool/Fountain Clng	Low	561790
Three Amigos Pool Service	6200830600	1362	MAX	AV	Cat xx-Pool/Fountain Clng	Low	561790
WES C Gallagher	5952931300	861	SOUTHSHORE	DR	Cat xx-Pool/Fountain Clng	Low	561790
		Cat xxv-Power Washing...					
APM Power Washing	6192215200	228	KENNEDY	ST	Cat xxv-Power Washing...	Low	561790
Fully Restored Surface Cleaning Specialists	5953213006	970	SOMERSET	CT	Cat xxv-Power Washing...	Low	561790
GMR Enterprises	5755001600	91	EMERSON	ST	Cat xxv-Power Washing...	Low	561790
JayBright Company	6441812700	787	ENERGY	WY	Cat xxv-Power Washing...	Low	561790
Jet Clean USA Inc.	6403926200	1255	VAQUERO	CT	Cat xxv-Power Washing...	Low	561790
Superior Wash	6435604300	1556	HUNTERS GLEN	AV	Cat xxv-Power Washing...	Low	561790

Facility Name	APN Number	Address		Category	Priority	NAICS
		Retail Store				
C.V. Wholesale Furniture Store	5721312200	655	BROADWAY	Retail Store	Low	442110
Furniture Mattress Expo	6182911200	1215	BROADWAY	Retail Store	Low	442110

Grand Total: **1,164**

ATTACHMENT E

Industrial Source Inventory and Prioritization

Facility Name	APN Number	Type of Facility	Priority	Address			NAICS	WDID
2 Heavy Equipment/Cons.Recycling	6441820300	Metal Recycling	High	855	ENERGY	WY	336999	
A&A Auto Recycling	6441811900	Auto Dismantlers	High	775	ENERGY	WY	811198	9371020792
A1 Moulding Supplies	6291000600	Warehousing	Low	180	MACE	ST	493110	
AAA Foreign Auto Recycling	6441812200	Auto Dismantlers	High	783	ENERGY	WY	811198	9371016197
ABF Freight System Inc.	6441821700	Transportation	High	875	ENERGY	WY	484220	9371013254
ACE Industries Inc.	6442302200	Manufacturing	Low	738	DESIGN	CT	3133	
Acme Bag Company	6221114100	Retail	Low	2528	MAIN	ST	4445	
Action Auto Dismantlers Inc	6291001400	Auto Dismantlers	High	151	REED	CT	811198	9371004000
ADA Fabrication	6221021800	Fabrications	Low	2260	MAIN	ST	339950	
Advance Auto Wrecking	6441812300	Auto Dismantlers	High	777	ENERGY	WY	811198	9371020612
Advantage Printing & Apparel Inc	6221115300	Printing	Low	681	ANITA	ST	323113	
Airgas West Inc	6291413100	Retail/Sales	Low	3303	MAIN	ST	42	
Aker Leather Products	6221021800	Manufacturing	Low	2248	MAIN	ST	3133	
All Japanese Auto Recycling	6441811900	Auto Dismantlers	High	775	ENERGY	WY	811198	9371015706
All Smash Auto Recycling	6441812100	Auto Dismantlers	High	791	ENERGY	WY	811198	9371011044
All Toyota/Lexus Wrecking	6441811500	Auto Dismantlers	High	805	ENERGY	WY	811198	9371018543
Alliance Hardwood LLC	6221023300	Wholesale	Low	775	ANITA	ST	42	
Allied Waste Services	6441821600	Waste Management	High	881	ENERGY	WY	562111	9371014355
Amerivacs Manufacturing Inc	6232301700	Manufacturing	Low	3800	MAIN	ST	3133	
Apada Industries Inc	6222304400	Manufacturing	Low	632	MARSAT	CT	3133	
Aqualarm	6170800800	Manufacturing	Low	1151	BAY	BL	3133	
Arise/Waco Scafolding	6180103100	Construction Equipment	High	676	MOSS	ST	532490	No WDID
Arroyo Fabrication	6221112500	Fabrications	Low	2488	MAIN	ST	238390	
Artistic Wrought Iron	6221902000	Manufacturing	Low	2555	FAIVRE	ST	3133	
ASI Distr. & Fabr./Abbet Services Inc	6222304900	Distributor	Low	1547	JAYKEN	WY	4445	

Facility Name	APN Number	Type of Facility	Priority	Address			NAICS	WDID
Asian Kars Auto Recycling	6441812300	Auto Dismantlers	High	777	ENERGY	WY	811198	9371017467
BABA Foods	6182803500	Manufacturing	Low	693	PALOMAR	ST	3133	
Bacco Produce	6170800600	Produce	Low	1031	BAY	BL	424480	
Baja California Cycle USA Inc	6290200100	Wholesale	Low	2801	MAIN	ST	423910	
Barbee Valve & Supply	6442302600	Manufacturing	Low	751	DESIGN	CT	326191	
Bastan Corporation	6221021800	Food Preparation	Low	2260	MAIN	ST	424420	
Bellama Custom Metal Fabrication	6290604200	Fabrications	Low	3129	MAIN	ST	238990	
Brentag Pacific Inc	6441810800	Chemical Storage	High	1888	NIRVANA	AV	562211	No WDID
Brunswick Mattress	6170800600	Furnitures	Low	1021	BAY	BL	442110	
C&G Swiss	6291000600	Machine Products	Low	180	MACE	ST	332721	
Cabinet Tronix LLC	5634511900	Furnitures	Low	290	TROUSDALE	DR	442110	
Cabinetry Design Inc	6221115400	Manufacturing	Low	675	ANITA	ST	337110	
Cal Plastics 7 Metals	6221022800	Wholesale	Low	1670	INDUSTRIAL	BL	42	
California Hardcoating Company	6221115400	Manufacturing	Low	675	ANITA	ST	3133	
California Sports Auto Wrecking	6441811800	Auto Dismantlers	High	781	ENERGY	WY	811198	9371018391
Caltrans Yard*	5653200100	Corporation Yard	High	570	C	ST	488999	No WDID
Calumet Auto Wrecking Inc	6441821400	Auto Dismantlers	High	891	ENERGY	WY	811198	9371004393
Canvas Concept Inc.	6221115800	Manufacturing	Low	649	ANITA	ST	3133	
Career Cap Corporation	6221022800	Manufacturing	Low	1680	INDUSTRIAL	BL		
Choes Wholesale	6182803500	Wholesale	Low	693	PALOMAR	ST		
Chula Vista Bolt	6170800800	Wholesale	Low	1161	BAY	BL	423710	
Ciannas Creation	6442302100	Manufacturing	Low	744	DESIGN	CT	3133	
Circle Food LLC	6221110800	Manufacturing	Low	1616	SILVAS	ST	3133	
Circle Food LLC	6221110800	Distributor	Low	1616	SILVAS	ST	424490	
Conway Western Express	5952313200	Trucking	High	2420	BOSWELL	RD	484220	9371015484
Corsair Marine Inc	6291000400	Manufacturing	Low	150	REED	CT	3133	
Custom Door and Window Sales	61701100300	Wholesale	Low	1128	BAY	BL	3133	

Facility Name	APN Number	Type of Facility	Priority	Address			NAICS	WDID
Daves Woodworking	6291302600	Woodworking-Specialty	Low	171	MACE	ST	238390	
David J Food Products	6222303900	Distributor	Low	689	MARSAT	CT	42	
DNP Electronics America LLC	5952313300	Manufacturing	Low	2391	FENTON	ST	3133	
Downtown Copy & Print Inc	5634421600	Printing	Low	101	GLOVER	AV	3133	
Dutchmasters Cabinets	6221900800	Manufacturing	Low	2605	FAIVRE	ST	337110	
Eagle Foods Distributors Inc	6220810602	Distributor	Low	684	ANITA	ST	424410	
Ecology Auto Wrecking	6441821100	Others	High	820	ENERGY	WY	811198	9371003280
Ecology Auto Wrecking	6441820100	Auto Dismantlers	High	825	ENERGY	WY	811198	9371003325
Ecology Auto Wrecking 2	6441821000	Auto Dismantlers	High	850	ENERGY	WY	811198	9371019445
Ecology Auto Wrecking 3	6441821200	Auto Dismantlers	High	800	ENERGY	WY	811198	9371003280
El Sol Industries Inc	6221115400	Manufacturing	Low	679	ANITA	ST	424330	
Ervey Produce	6170800600	Produce	Low	1031	BAY	BL	424480	
Estes Express Lines	5634521200	Trucking	High	120	PRESS	LN	484110	9371007126
Eurotecnics	6291002300	Woodworking	Low	170	MACE	ST	337212	
Explorer Competetion	5952311300	Manufacturing	Low	2360	BOSWELL	RD	441310	
Express Furniture	6192113900	Furnitures	Low	1226	THIRD	AV	442110	
Express Pipe & Supply Co	5634512600	Wholesale	Low	117	PRESS	LN	42	
FFF Distributors Inc	6221112500	Wholesale	Low	2474	MAIN	ST	42	
Finest City Cabinets	5634411200	Specialty	Low	330	TROUSDALE	DR	238990	
First Appearance Copy Printing & More	6231921800	Printing/Copy Service	Low	3156	MAIN	ST	323119	
Five Star Medical Transport Inc	6291302700	Transportation	Low	187	MACE	ST	485999	
FJ Willert Cont Co.	6441810200	Engineering Services	High	1869	NIRVANA	AV	236220	9371016993
Flag Crafters	6170800700	Manufacturing	Low	1095	BAY	BL	3133	
Fleetpride West Inc.	5713301900	Trucking	Low	630	BAY	BL	42	
Formosa Prosonic USA Inc.	5684503900	Manufacturing	Low	303	H	ST	3133	
Frank B Wood	6221112500	Furnitures	Low	2474	MAIN	ST	3133	
Frontera International	6441810400	Warehousing	Low	1879	NIRVANA	AV	493110	

Facility Name	APN Number	Type of Facility	Priority	Address			NAICS	WDID
Fuji Seimen Corp	6291002300	Food Preparation	Low	170	MACE	ST		
G&M Custom Flags and Banners	6221021800	Manufacturing	Low	2240	MAIN	ST	314999	
G&M Manufacturing	6291000600	Manufacturing	Low	180	MACE	ST	3133	
Gary Manafacturing Inc.	61701100300	Manufacturing	Low	1124	BAY	BL	3133	
Granite Gallery Inc	6291000600	Wholesale	Low	180	MACE	ST	42	
H&M Wrought Iron Factory Inc	6221113200	Manufacturing	Low	2560	MAIN	ST	332999	
Hanson Aggregates	6290300500	Concrete Work	High	116	7TH	ST	238110	9371015523
Hitachi Home Electronic Inc.- America	5957110300	Manufacturing	Low	900	HITACHI	WY	335211	
Honda Acura Parts Auto Recycling	6441821500	Auto Dismantlers	High	895	ENERGY	WY	811198	9371011394
House of Leather and Fabrics	5634512000	Leather Works	Low	290	TROUSDALE	DR	316110	
Hydro Scape Products Inc.	5634313000	Wholesale	Low	375	TROUSDALE	DR	42	
Hyspan Precision Prod Inc	6440402800	Manufacturing	Low	1685	BRANDYWINE	AV	3133	
Hyundai Livart Furniture Outlet	6290604200	Import/Export	Low	3121	MAIN	ST	3133	
Imperial Sprinkler	5634511400	Retail/Sales	Low	280	TROUSDALE	DR	3133	
Import Auto Wrecking	6441812900	Auto Dismantlers	High	793	ENERGY	WY	811198	9371016877
Indu Fashions		Manufacturing	Low	680	MARSAT	CT	3133	
International Sign Co	6232022300	Others	Low	3268	MAIN	ST	3133	
Japan Tech Auto Wrecking	6441812300	Auto Dismantlers	High	777	ENERGY	WY	811198	9371020121
Japanese Auto Wrecking	6441811500	Auto Dismantlers	High	811	ENERGY	WY	811198	No WDID
Julio C Battery	6232021800	Battery Recycling-Sales	High	1502	BROADWAY		423610	No WDID
K&T Carpet Services Inc	6170800700	Carpet Services	Low	1085	BAY	BL	3133	
Kama Tech Corporation	6442301300	Manufacturing	Low	739	DESIGN	CT	3133	
Kelco Packaging Prop	6221112500	Warehousing	Low	2474	MAIN	ST	3133	
Kelly Paper Company	5713301900	Wholesale	Low	630	BAY	BL	3133	
KEM LLC	5634421600	Environmental Services	Low	101	GLOVER	AV	3133	
Ken Larcens Cabinet Plus	6291302600	Specialty	Low	171	MACE	ST	3133	
Kleen Blast Industrial Services	6180103100	Blasting Abrasives	High	676	MOSS	ST	333298	No WDID

Facility Name	APN Number	Type of Facility	Priority	Address			NAICS	WDID
L&V Furniture	6221113200	Manufacturing	Low	2560	MAIN	ST	3133	
LA Natural Tortilla Factory	6290101100	Bakery	Low	2765	MAIN	ST	311830	
Lawrence Hughes Cabinets Unlimited	6291000600	Manufacturing	Low	180	MACE	ST	337110	
LC Turbo	6221112500	Equipment Sales	Low	2446	MAIN	ST	811219	
Leticia Cano Nuts and Bolts	6221112500	Retail/Sales	Low	2446	MAIN	ST	444130	
Lopez Iron Works Repairs	6221902000	Welding Services	Low	2555	FAIVRE	ST	811310	
LSP South Bay (Power Plant)**	5711600800	Electric Services	High	990	BAY	BL	221111	9371015022
Lund & Flynn Inc	5634322400	Manufacturing	Low	370	TROUSDALE	DR	3133	
Lyon Technologies Inc	6440403700	Manufacturing	Low	1690	BRANDYWINE	AV	3133	
Main Street Recycling	6290607300	Recycling	Low	1751	FOURTH	AV	3133	
Marscott marine and Industrial Supply	6221112500	Supply	Low	2446	MAIN	ST	3133	
Mask US Inc	6290604200	Fabrications	Low	3121	MAIN	ST	3133	
Mikolajczyk Cabinet Shop	6170102900	Manufacturing	Low	926	INDUSTRIAL	BL	3133	
MMC Energy -Peak Power Plant	6290620400	Power Generations	High	3497	MAIN	ST	221119	9371020087
Monos Custom Metal Fabrications Inc	6222300400	Fabrications	Low	1548	JAYKEN	WY	238390	
Montoya's Auto Wrecking	6441811800	Auto Dismantlers	High	781	ENERGY	WY		
NCR Neon Specialist	6291000600	Sign Services	Low	180	MACE	ST	339950	
Next Day Printed Tees	6170800700	Printing/Copy Service	Low	1075	BAY	BL		
Nirvana Produce Distributions	6441811000	Produce	Low	1872	NIRVANA	AV	445230	
Nypro San Diego	6440402400	Manufacturing	Low	505	MAIN	ST		
Oak Land Furniture	6221112500	Manufacturing	Low	2462	MAIN	ST	3133	
Ochoa's Cabinet	6221112500	Manufacturing	Low	2446	MAIN	ST		
Onager Corporation	6441812800	Auto Dismantlers	High	789	ENERGY	WY	811198	9371010014
Ordior LLC		Manufacturing	Low	2252	MAIN	ST		
OSI Security Devices	6222300200	Fabrications	Low	1580	JAYKEN	WY	3133	
Otay Metal Mart	6291302800	Wholesale	Low	195	MACE	ST	3133	
Pacific Auto Wrecking	6441812000	Auto Dismantlers	High	795	ENERGY	WY	811198	9371015058

Facility Name	APN Number	Type of Facility	Priority	Address			NAICS	WDID
Pacific Manufacturing Inc	6221900800	Manufacturing	Low	2605	FAIVRE	ST	3133	
Pacific Maritime Industries	6221022700	Manufacturing	Low	1664	INDUSTRIAL	BL	313221	
Pallets and Services of SD Corp	6182005800	Wholesale	Low	1020	COLORADO	AV	423830	
Parts Heaven	6111812100	Auto Dismantlers	High	791	ENERGY	WY	81198	
Payless Auto Wrecking	6441811500	Auto Dismantlers	High	811	ENERGY	WY	811198	9371019794
PHV Custom Cabinets	6290604200	Manufacturing	Low	3121	MAIN	ST	337110	
Pick Your Part Auto Wrecking	6441820800	Auto Dismantlers	High	880	ENERGY	WY	811198	9371012114
Plenums Plus, LLC	5632703900	Fabrications	Low	67	BRISBANE	ST	31	
Precision Woodworking of SD	6170800600	Woodworking	Low	1031	BAY	BL	337212	
Premier Copper & Brass Pacific Inc	5634410100	Wholesale	Low	310	TROUSDALE	DR	42	
Profil Institute for Clinical Research	5734606400	Others	Low	855	THIRD	AV	621111	
Prudential Overall Supply	56709000300	Industrial Cleaning	High	740	F	ST	812320	No WDID
Pump Export Distributors	6221403400	Manufacturing	Low	124	27TH	ST	3133	
Quality Lift Trucks	5634421600	Retail/Sales	Low	115	GLOVER	AV	4445	
R E Moore Inc	6221110800	Manufacturing	Low	1624	SILVAS	ST	332710	
R L Stone Fabrications	6221112500	Fabrications	Low	2446	MAIN	ST	238340	
R&R Delta Supplies Inc	6170800800	Wholesale	Low	1161	BAY	BL	42	
RC Import Auto Recycler	6441812300	Auto Dismantlers	High	777	ENERGY	WY	811198	9371010144
Resslers Welding Service	6220620500	Welding Services	Low	1550	FRONTAGE	RD	811310	
Ri-Ber Industrial Inc	6221112500	Wholesale	Low	2488	MAIN	ST	42	
Rimrock Quarry LLC	6440600600	Others	High	2041	HERITAGE	RD	212319	No WDID
ROHR dba B.F. Goodrich**	5670102600	Manufacturing	High	850	LAGOON	DR	336411	9371004297
Rossin Steel Inc.	6441810900	Fabricated Metal	High	1880	NIRVANA	AV	332312	9371020898
Sammy's Kitchen & Bath Inc	6222304200	Warehousing	Low	645	MARSAT	CT	493190	
San Diego Architectural Metals	6220610300	Manufacturing	Low	873	DOROTHY	ST	3133	
San Diego Floor Design	6221113200	Carpet Services	Low	2560	MAIN	ST	442210	
San Diego Frame MFG Co	6220725900	Manufacturing	Low	1567	FRONTAGE	RD	3133	

Facility Name	APN Number	Type of Facility	Priority	Address			NAICS	WDID
San Diego Pallets	6170800600	Distributor	Low	1031	BAY	BL	4445	
San Digoe Screw Products Inc	6290201200	Machine Products	Low	2865	MAIN	ST	333515	
Seagate Produce	6220810602	Wholesale	Low	684	ANITA	ST	424480	
Sealed Air Corporation	59530000600	Manufacturing	Low	2311	BOSWELL	RD	3133	
Serco Inc	6440404500	Manufacturing	Low	1669	BRANDYWINE	AV	3133	
Showtime Creations	5952320600	Manufacturing	Low	925	HALE	PL	3133	
Silent Salvage Search	6441820200	Auto Dismantlers	High	811	ENERGY	WY	811198	9371020921
SMR Bakery Inc/Califorina Baking Co	6221115300	Bakery	Low	681	ANITA	ST	311830	
Snowbird Transportation	6441811000	Distributor	Low	1872	NIRVANA	AV	484220	
SOCAL Ironworks Inc.	6222300400	Storage	Low	1548	JAYKEN	WY	493110	
SOS Metals San Diego LLC	6221115700		High	635	ANITA	ST	423510	9371013260
Source of Health Inc.	61708000700	Others	Low	1055	BAY	BL	3254112	
South Bay Auto Wreckers	6441820200	Auto Dismantlers	High	811	ENERGY	WY	811198	9371004495
South Bay Boat Yard**	7600481700	Boat Building & Repair	High	997	G	ST	336612	No WDID
South Coast Printing	6170800800	Printing/Copy Service	Low	1151	BAY	BL	323119	
South Xpress Inc	6291000600	Wholesale	Low	180	MACE	ST	423390	
Standard Auto Recycling	6291000400	Auto Dismantlers	High	150	REED	CT	811198	9371010775
Stanford Signs	6221403300	Specialty	Low	2556	FAIVRE	ST	238990	
Suncraft Fence Co	6232023800	Distributor	Low	3288	MAIN	ST	23	
Sunrise Jewelry Manufacturing	5952313400	Manufacturing	Low	2371	FENTON	ST	339911	
Surface Fleet Supply Co	6220620500	Wholesale	Low	1550	FRONTAGE	RD	423850	
Surface Technologies Corp	6441811100	Manufacturing	Low	796	ENERGY	WY	3133	
SUV Auto Wrecking Inc.	6441811500	Auto Dismantlers	High	805	ENERGY	WY	811198	9371019236
SWE Jon Flexible Packaging Inc	6221112500	Packaging	Low	2474	MAIN	ST	561499	
Synthetic Marble By Ponce	6222303900	Specialty	Low	675	MARSAT	CT	238910	
Tantus Inc	6170800700	Manufacturing	Low	1045	BAY	BL	3133	
TBA Mexican Trade	6170800700	Wholesale	Low	1045	BAY	BL	445110	

Facility Name	APN Number	Type of Facility	Priority	Address			NAICS	WDID
Tileforce Inc	6221112500	Retail/Sales	Low	2446	MAIN	ST	4445	
Tortilleria Santa Fe Inc.	6290101100	Bakery	Low	2765	MAIN	ST	311830	
Triple M Marine Welding & Repair Inc	6220620500	Welding Services	Low	1550	FRONTAGE	RD	333992	
Truitt Machine & Fabrication	7600481700	Fabrications	Low	997	G	ST	332710	
U S Glass & Mirror Co	6170102900	Others	Low	926	INDUSTRIAL	BL	453998	
Uniforms Express International	6170800800	Warehousing	Low	1111	BAY	BL	493110	
United Cutting	6221115400	Others	Low	677	ANITA	ST	812332	
United Parcel Service	5953000300	Postal Service	High	2300	BOSWELL	CT	484220	9371002086
United Rentals Inc	5623501000	Heavy Equipment Rentals	High	501	C	ST	532490	9371019886
Universal Auto Recycling	6441812200	Auto Dismantlers	High	783	ENERGY	WY	811198	9371011318
Vallarta Iron Works	6221902000	Welding Services	Low	2555	FAIVRE	ST	811310	
Vcella Kilsn Inc	6291302600	Manufacturing	Low	171	MACE	ST	3133	
Veolia Transportation -MTS	6232502100	Transportation	High	3650	MAIN	ST	485999	9371011017
Vesco Metal Craft Inc	5952314200	Manufacturing	Low	2425	FENTON	ST	339112	
Videotel Inc	6221115300	Manufacturing	Low	681	ANITA	ST	335211	
West Auto Wreckers	6221902600	Auto Dismantlers	High	2365	MAIN	ST	811198	9371001046
Woodenvision	6170102900	Woodworking	Low	920	INDUSTRIAL	BL	321213	
Grand Total:	**204**							

ATTACHMENT F

FY 2007-2008 Inspection Action Summary

Treatment Control BMP Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection acitivities.

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
5-Feb-08	Eastlake Parkway Professional Pla	MP-52 Drain Insert TC-30 Vegetated Swale	Commercial	High	Eastlake	Eastlake Professional	IRE Development
	Comments/Findings:	Conducted verification of installation of Post Construction BMPS. Filter inserts are not installed at all inlets as per WQTR. See attached documents.					
5-Feb-08	Eastlake Design District	TC-30 Vegetated Swale MP-52 Drain Inlet	Commercial	Low	Eastlake	Eastlake Design District	IRE Development
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Consruction BMPS. Recommend cleaning of filter inserts. See attached documents.					
5-Feb-08	Otay Lakes Medical Office	MP-52 Drain Insert	Commercial	High	Eastlake	Otay Lakes Medical	Otay Lakes Med. Condo Dev. LLC
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Recommend filter inserts cleaning and boom replacement. See attached documents.					
5-Feb-08	Fenton Business Center	MP-52 Drain Insert	Commercial	High	Eastlake	Fenton Business Center	Seymour/Lewis Development LTD
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMP as per plans, and site WQTR. * Recommend to clean filter inserts.					
5-Feb-08	Kohls Store -Eastlake Village East	MP-52 Drain Insert	Commercial	High	Eastlake	Eastlake Village East -Kohls	Kohls Department Store Inc.
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Eastside filter is growing vegetation.					
5-Feb-08	Eastlake Business Center-Hale Pl	MP-52 Drain Insert	Commercial	High	Eastlake	Business Center @ Harold	Tycoon Management
	Comments/Findings:	Conducted verification of installation of Post Construction BMPs. Filter inserts are not installed at all inlets per WQTR. See attached documents.					
5-Feb-08	Eastlake Village Center East	MP-52 Drain Insert	Commercial	Medium	Eastlake Village	Eastlake Village Center East	Gatlin Development Co.
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs.					
7-Feb-08	The Collections	MP-52 Drain Insert	Commercial	High	Eastlake	The Collections	Mar West Real Estate
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Recommend to clean filter inserts.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
13-Feb-08	Auto Park North	MP-52 Drain Insert	Commercial	High			Knowlton Realty Advisors, LLC
	Comments/Findings:	Conducted verification of installation of Post Construction BMPs. Filter inserts are not installed at all inlets. See attached documents.					
13-Feb-08	ADA Villas 1	MP-52 Drain Insert	Condo	Medium			
	Comments/Findings:	BMP items need to be implemented. **See attached document**					
28-Feb-08	Brisas Del Mar Village	MP-52 Drain Insert	Commercial/Mixed	Medium			McCormack Ragan
	Comments/Findings:	Conducted verification on the cleaning and maintenance of Post Construction BMPs. Recommend filter inserts cleaning and replacement of filter media. Please see attached documents.					
28-Feb-08	Southbay Motorsports	MP-52 Drain Insert	Commercial	High			SB Land, LLC
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the post construction BMP. Recommend to clean filter inserts.					
28-Feb-08	Payless Auto Sales	MP-52 Drain Insert	Commercial	High			L-20 LLC c/o Floit Properties
	Comments/Findings:	Conducted verification on the cleaning and maintenance of Post Construction BMPs. Recommend filter inserts cleaning. See attached documents.					
28-Feb-08	McCune Chrysler Dodge	MP-52 Drain Insert	Commercial	High			McCune Chrysler Jeep Dodge
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Recommend filter inserts cleaning. See attached documents.					
28-Feb-08	J&W Redwood	TC-11 Infiltration Basin	Commercial	Medium			J&W Redwood
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Basin needs minor maintenance. See attached documents.					
28-Feb-08	C.V. Commerce Center		Commercial	Medium			MarWest Real Estate
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. CDS unit needs cleaning. See attached documents.					
3-Mar-08	Chula Vista Crossings	TC-32 Bioretention MP-52 Drain Inlet	Commercial	Medium			NewMark Merrill
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Filter inserts require cleaning and repair. Inlets are covered with vegetation and mulch. See attached documents.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
4-Mar-08	Chula Vista Toyota-Main Street	MP-52 Drain Insert	Commercial	High			Sunroad Enterprises
	Comments/Findings:	Conducted verification on the cleaning and maintenance of Post Construction BMPs. Filter inserts need cleaning. See attached documents.					
4-Mar-08	Eastlake Commerce- Business Ce	MP-52 Drain Insert TC-30 Vegetated Swale	Commercial	High	Eastlake	Eastlake Commerce	IRE Development
	Comments/Findings:	Conducted verification of installation of Post Construction BMPS. Filter inserts are not installed at all inlets per WQTR. See attached documents.					
4-Mar-08	Chevron Station-Olympic Parkway	MP-52 Drain Insert	Commercial	Medium			Chevron Station Inc.
	Comments/Findings:	Conducted verification on installation and maintenance of Post Construction BMPs. Filter inserts are not installed per WQTR.					
4-Mar-08	Sedona	MP-52 Drain Insert	Condo	Medium	Rolling Hills Ranch	Sedona	RH Community Asso. C/O**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Filter inserts need maintenance. See attached documents.					
4-Mar-08	Mar Brisa	MP-52 Drain Insert	Condo	Medium	Rolling Hills Ranch	Mar Bristas	Mar Brisa-C/O Prescott Co.
	Comments/Findings:	Conducted verification of installation and maintenance of Post Construction BMPs. Filter inserts are missing filter baskets and were improperly installed.					
6-Mar-08	The Shops at San Miguel Ranch	MP-51 Vortex Separator	Commercial	Low	San Miguel Ranch	The Shops at San Miguel Ranch	McMillin, San Miguel Ranch LLC
	Comments/Findings:	Conducted verification on the cleaning and maintenance of Post Construction BMPs.Unable to remove the 36" manhole cover of the hydrodynamic separator to verify maintenance.					
7-Mar-08	Venture Commerce Center	MP-51 Vortex Separator MP-52 Drain Inlet	Commercial	Low	Eastlake	Venture Commerce Center	Heritage Real Estate Advisors
	Comments/Findings:	Conducted verification on the installation, cleaning, and maintenance of the Post BMPs. Unable to locate manhole cover of the hydrodynamic separator. See attached documents.					
11-Mar-08	C.V. Corporate Center	MP-52 Drain Insert	Commercial	High			Mar West Real Estate
	Comments/Findings:	Conducted verification on the cleaning and maintenance of Post Control BMPS. Filter inserts need cleaning and maintenance. See attached documents.					
11-Mar-08	Walgreens @ Third Avenue	MP-52 Drain Insert	Commercial	High			Walvista, LLC
	Comments/Findings:	Conducted verificaiton on the cleaning and maintenance of the Post Construction BMPs. Filter inserts need cleaning. See attached documents.					

Inspection Date	Project Name	Type of BMP Installed		Category	Priority	Development	Neighborhood	Responsible Party
11-Mar-08	Bonita Library	MP-52 Drain Insert	TC-32 Bioretention	Municipal/County	High			Bonita-Sunnyside Branch Librar
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construcion BMP. Recommend filter inserts cleaning. See attached documents						
11-Mar-08	Walmart at 5305 Broadway	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	Low			WAL-MART Stores Inc.
	Comments/Findings:	Conducted verificaiton on the installation of Post Construction BMPs. Filter inserts are not installed. See attached documents.						
11-Mar-08	Pharus Plaza	MP-51 Vortex Separator		Commercial	Low			Pharus Development LLC
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. CDS units need cleaning. See attached documents.						
11-Mar-08	Rancho Rios Condo	MP-52 Drain Insert		Condo Conversion	Medium			Rancho Coastal, LLC; C/O**
	Comments/Findings:	Conducted verification of the installation of Post Construction BMPS. There are missing filter inserts per WQTR. See attached documents.						
11-Mar-08	2380 Main Street	MP-52 Drain Insert		Residential	Low			Chula Vista Main, LLC**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Constructin BMPs. Filter inserts need cleaning. See attached documents.						
12-Mar-08	Aqua Clean	MP-52 Drain Insert		Commercial	Medium			Aqua Clean C/O Lou Brito
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Filter inserts need cleaning. See attached documents.						
12-Mar-08	Otay Ranch Town Center	MP-51 Vortex Separator		Commercial	Low	Otay Ranch	Otay Ranch Town Center	GCP-Otay Ranch LP
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Vortech units need cleaning. See attached documents.						
12-Mar-08	COSTCO at Broadway	MP-51 Vortex Separator		Commercial	Low			COSTCO Wholesale Corp.
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Vortech units need cleaning. See attached documents.						
14-Mar-08	Savon-CVS Pharmacy @ Fourth A	MP-52 Drain Insert		Commercial	High			CAM Commercial Properties
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Filter inserts need cleaning and maintenance.						

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
17-Mar-08	LA Fitness Eastlake Village Cente	MP-51 Vortex Separator MP-52 Drain Inlet	Commercial	Low	Eastlake Village Center	Eastlake Village West	EL Vill. Center Comm. Assc.**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Vortex unit needs maintenance and filter inserts need cleaning.					
17-Mar-08	Eastlake Terraces North	TC-30 Vegetated Swale MP-52 Drain Inlet	Commercial	Low	Eastlake	Eastlake Terraces North	Mar West Real Estate
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs.					
25-Mar-08	Home Depot Eastlake	MP-52 Drain Insert TC-50 Water Quality Inlet	Commercial	High	Eastlake	Home Depot	Home Depot USA, Inc.
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Filter inserts need cleaning.See attached documents.					
25-Mar-08	Eastlake Terrace-Walmart	MP-52 Drain Insert	Commercial	High	Eastlake	Walmart Eastlake Terraces	Wal-Mart Stores Inc.
	Comments/Findings:	Conducted verification of the cleaning and maintenance of the Post Construction BMPs. Filter inserts were observed to have trash and debris.					
25-Mar-08	Eastlake Terrace-Landswap	MP-52 Drain Insert	Commercial	High	Eastlake Terraces	Eastlake Landswap	Eastlake Holding, LP
	Comments/Findings:	Conducted verification on the installation, cleaning, and maintenance of the Post Construction BMPs.					
18-Apr-08	Eastlake Parkway 1- Kerstel to Hu	MP-52 Drain Insert	Commercial/Mixed	Medium	Eastlake	Kerstel Falls to Hunte Pkway	Brookefield Shea Otay, LLC
	Comments/Findings:	Conducted verification on the cleaning and maintenance of Post Control BMPs. Filter inserts were observed to have trash and debris. **See attachment**					
18-Apr-08	Eastlake Parkway 2-Trinidad to Cc		Commercial/Mixed	Medium	Eastlake	Trinidad Cove to Olympic Pw	Eastlake Company
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Control BMPs. Filter inserts were observed to have trash and debris. **See attachments**					
18-Apr-08	VR-12/Alder Lane	MP-51 Vortex Separator	Residential	Low	Eastlake Vistas	VR-12/Alder Lane	Eastlake III Community Asso.**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Vortex unit needs cleaning.					
18-Apr-08	Eastlake Little League	TC-32 Bioretention	Miscellaneous	Low	Eastlake Vistas	Eastlake Little League	Eastlake Co.,LLC
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Vegetated swales are not established.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
22-Apr-08	Mar Brisa	MP-52 Drain Insert	Condo	Medium	Rolling Hills Ranch	Mar Bristas	Mar Brisa-C/O Prescott Co.
	Comments/Findings:	Received maintenance verification. **see attachment**					
22-Apr-08	Mater Dei High School	MP-50 Wet Vault	Miscellaneous	Low	Otay Ranch	Mater Dei High School	Mater Dei High School **
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Units had minor trash and sediment accumulation.					
24-Apr-08	R-30A, Goldrush, Otay Ranch, V-5	MP-51 Vortex Separator	Residential	Low	Otay Ranch Village 5	R-30A/Goldrush	Otay Ranch 3, HOA**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Const. BMPs. CDS units were observed to have trash and debris.**See attached documents.					
24-Apr-08	R-30B, Winchester, Otay Ranch, V	MP-51 Vortex Separator	Residential	Low	Otay Ranch V-5	R-30B/Winchester	Otay Ranch 3, HOA**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Const. BMPs. CDS units were observed to have debris and trash. ** See attached documents.					
24-Apr-08	R-30B, Stetson, Otay Ranch, V-5	MP-51 Vortex Separator	Residential	Low	Otay Ranch V-5	R-30B2/Stetson	Otay Ranch 3, HOA **
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Cosnt. BMPs. CDS units were observed to have debris and trash. ** See attached documents.					
24-Apr-08	R-30B,Siver Sage, Otay Ranch, V	MP-51 Vortex Separator	Residential	Low	Otay Ranch V-5	R-30B3/Siver Sage	Otay Ranch 3, HOA**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Const. BMPs. CDS units were observed to have debris and trash. **See attached documents.					
24-Apr-08	Villagio - Otay Ranch V5	MP-51 Vortex Separator	Commercial/Mixed	Low	Otay Ranch	Villagio	Villagio @ Lomas Verdes HOA
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construciton BMPs. CDS units appear to have trash and debris in the containment area.					
24-Apr-08	Doctor's Park	TC-30 Vegetated Swale	Commercial	Low	Eastlake	Doctor's Park	Otay Lakes Partners, LLC
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Control BMPs. All filter inserts were recently installed and were found clean. Vegetated swale was well established.					
24-Apr-08	R-23 / Azalea-Otay Ranch, V-11	MP-51 Vortex Separator	Residential	Low	Otay Ranch V-11	R-23/Azatea	Windingwalk Association
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Control BMPs. CDS units were observed to have trash and debris.**See attachments**					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
24-Apr-08	Rancho Vista Apartments	MP-51 Vortex Separator	Residential	Low	Eastlake Greens	Rancho Vista Apartments	CIC Eastlake, LP
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Const. BMPs. Could not access the CDS units. Cannot open manhole cover. **See attached documents.					
30-Apr-08	R-7/Belleme Chateau	MP-51 Vortex Separator	Residential	Low	Otay Ranch V-6 ORC	R-7/Belleme Chateau	Hillsborough @ Otay HOA**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post BMPs. CDS units need cleaning.**See attached documents.					
30-Apr-08	R-8/Mir Soliel	MP-51 Vortex Separator	Residential	Low	Otay Ranch V-6 ORC	R-8/Mir Soliel	Hillsborough @ Otay HOA**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Control BMPs. CDS units need cleaning.					
30-Apr-08	R-9B / Monet, Otay Ranch, V-6	MP-51 Vortex Separator	Residential	Low	Otay Ranch V-6 ORC	R-9B/Monet	Pacific Coast Communities
	Comments/Findings:	Conducted verification on the cleaning and maintenance of Post Control BMPs. Vortex unit appeared to have been maintained. **See attachment**					
30-Apr-08	Bella Sol	MP-51 Vortex Separator	Condo	Low	Sunbow	Bella Sol	Tyco Property Management Co.
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Control BMPs. CDS units were observed to have debris and trash in the containment areas.**See attached documents**					
5-May-08	R-10/Treviana, Otay Ranch, V-6	MP-52 Drain Insert	Residential	Medium	Otay Ranch V-6	R-10/Treviana	Treviana @ Lomas Verdes
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Control BMPs. Filter inserts are not installed on all inlets as per WQTR.					
8-May-08	Belleza - Neighborhood B	MP-51 Vortex Separator	Residential	Low	San Miguel Ranch	Belleza	Belleza @ SMR c/o**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Control BMPs. CDS units were observed to have debris and trash in the containment areas. **See attachment**					
9-May-08	Mantilla- Lot 5-Neighborhood C	MP-52 Drain Insert	Residential	Medium	San Miguel Ranch	Mantilla-Neighborhood C	San Miguel Ranch HOA
	Comments/Findings:	Conducted verification on the installation of Post Control BMPs. Filter inserts were not installed as per WQTR.**See attachment**					
13-May-08	Ventana I - Planning Area F	MP-52 Drain Insert	Residential	Medium	San Miguel Ranch	Ventana I	Trimark Pacific Homes
	Comments/Findings:	Conducted verification on the cleaning and maintenance of Post Control BMPs. Filter inserts are not installed in all inlets as per plan.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
13-May-08	Ventana II - Planning Area G	MP-52 Drain Insert	Residential	Medium	San Miguel Ranch	Ventana II	Trimark Homes
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post BMPs. Filter inserts were not installed in all inlets as per plan. **see attachment**					
13-May-08	Altamira II - Area E2	MP-52 Drain Insert	Residential	Medium	San Miguel Ranch	Altamira II	Buie Communities
	Comments/Findings:	Conducted verification on the cleaning and maintenance of Post BMPs. Filter inserts were not installed in all inlets as per plan. **see attachment**					
13-May-08	Seniors at Broadway	MP-52 Drain Insert	Residential	Medium			MAAC Project Community Develop
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Control BMPs. Filter inserts were missing at 4 of the 6 locations.**see attachment**					
13-May-08	Eastlake Marketplace	MP-51 Vortex Separator	Commercial	Low	Eastlake	Eastlake Marketplace	Eastlake Marketplace c/o**
	Comments/Findings:	Conducted verificaiton on the cleaning and maintenance of the Post Control BMPs. Units were observed to have trash and debris. **see attachment**					
14-May-08	Eastlake - Village Walk	TC-30 Vegetated Swale MP-51 Vortex Separator	Commercial	Low	Eastlake	Village Walk	Subberry Properties, Inc.
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filters were observed to have trash and debris in containment areas. **see attachment**					
14-May-08	Salt Creek Park	MP-51 Vortex Separator	Municipal	Low	Eastlake		City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. CDS units need maintenance. **see attachment**					
19-May-08	Windingwalk Park	TC-30 Vegetated Swale	Municipal	Low	Otay Ranch Village-11	Windingwalk Neighborhood	City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. All treatment facilities were properly maintained and requires no maintenance at this time. **see attachment**					
19-May-08	Montevalle Park	MP-52 Drain Insert	Municipal	Medium	Eastlake Woods		City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Two filter inserts were are missing and others need cleaning. Bid from Bio-Clean to install missing filters is attached.. **see attachment**					
23-May-08	Otay Ranch V1 West - R59C & R6	MP-52 Drain Insert	Residential	Low	Otay Ranch V1 West	R59C & R60	Otay Ranch Three HOA c/o**
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs.Filter inserts are not installed at all inserts as per site plan. **see attachment**					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
26-May-08	Walmart at 5305 Broadway	MP-51 Vortex Separator MP-52 Drain Inlet	Commercial	Low			WAL-MART Stores Inc.
	Comments/Findings:	Extended installation date					
2-Jun-08	J&W Redwood	TC-11 Infiltration Basin	Commercial	Medium			J&W Redwood
	Comments/Findings:	Received maintenance verification package. **see attachment**					
2-Jun-08	R-9B / Monet, Otay Ranch, V-6	MP-51 Vortex Separator	Residential	Low	Otay Ranch V-6 ORC	R-9B/Monet	Pacific Coast Communities
	Comments/Findings:	Received Maintenance Verification Package 5/30/08 **see attachment**					
3-Jun-08	Eastlake Terrace-Walmart	MP-52 Drain Insert	Commercial	High	Eastlake	Walmart Eastlake Terraces	Wal-Mart Stores Inc.
	Comments/Findings:	Received verification package - Copy and forward next years inspection to Front Range Environmental **see attachment*					
3-Jun-08	Chevron Station-Olympic Parkway	MP-52 Drain Insert	Commercial	Medium			Chevron Station Inc.
	Comments/Findings:	Received verification package - Print quality of document is poor. Added text verification and approved by inspector - see file.					
3-Jun-08	2380 Main Street	MP-52 Drain Insert	Residential	Low			Chula Vista Main, LLC**
	Comments/Findings:	Received Verification Package **see attachment**					
6-Jun-08	Chula Vista Crossings	TC-32 Bioretention MP-52 Drain Inlet	Commercial	Medium			NewMark Merrill
	Comments/Findings:	Received verification package. **see attachment**					
9-Jun-08	Dixon Drive	MP-52 Drain Insert	Municipal/CIP	Medium			City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filters were observed to have trash and debris in containment areas. **see attachment** Forwarded to Storm Water Maintenance section for action.					
9-Jun-08	Tobias Drive	MP-52 Drain Insert	Municipal/CIP	Medium			City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filters were observed to have trash and debris in containment areas. **see attachment** Forwarded to Storm Water Maintenance section for action.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
9-Jun-08	WR-1 / The Gates	MP-51 Vortex Separator	Residential	Low	Eastlake Woods	WR-1/The Gates	City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filters were observed to have trash and debris in containment areas. **see attachment**					
9-Jun-08	WR-2 / Reserves	MP-51 Vortex Separator	Residential	Low	Eastlake Woods	WR-2/Reserves	City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filters were observed to have trash and debris in containment areas. **see attachment**					
9-Jun-08	WR-3 / The Woods	MP-51 Vortex Separator	Residential	Low	Eastlake Woods	WR-3/The Woods	City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filters were observed to have trash and debris in containment areas. **see attachment**					
9-Jun-08	WR-4 / Cornerstone	MP-51 Vortex Separator	Residential	Medium	Eastlake Woods	WR-4/Cornerston e	City Of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filters were observed to have trash and debris in containment areas. **see attachment**					
9-Jun-08	WR-5 / K Hovnanian	MP-51 Vortex Separator	Residential	Low	Eastlake Woods	WR-5/K Hovnanian	City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filters were observed to have trash and debris in containment areas. **see attachment**					
9-Jun-08	WR-6 / Meredian	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	WR-6/Meredian	City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. One insert was observed to have trash and debris in containment areas. **see attachment**					
9-Jun-08	WR-7 / Sonoma	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	WR-7/Sonoma	City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. One filter insert was observed to have trash and debris in containment areas. **see attachment**					
9-Jun-08	VR-2/Atrium	MP-51 Vortex Separator	Residential	Low	Eastlake Vistas	VR-2/Atrium	City of Chula Vista
	Comments/Findings:	Pulled inlet ID# for verification. 6 IDs needs inspection and ID# verified.					
9-Jun-08	VR-3/Aqua	MP-51 Vortex Separator	Residential	Low	Eastlake Vistas	VR-3/Aqua	City of Chula Vista
	Comments/Findings:	Pulled inlet ID# for verification. 6 IDs needs inspection and ID# verified.					

Inspection Date	Project Name	Type of BMP Installed		Category	Priority	Development	Neighborhood	Responsible Party
9-Jun-08	VR-4/Lost Creek	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	VR-4/Lost Creek	City of Chula Vista
	Comments/Findings:	Pulled inlet ID# for verification. 6 IDs needs inspection and ID# verified.						
9-Jun-08	VR-5/Bridgepark	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	VR-5/Bridgepark	City of Chula Vista
	Comments/Findings:	Pulled inlet ID# for verification. 6 IDs needs inspection and ID# verified.						
9-Jun-08	VR-6/Valencia	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	VR-6/Valencia	City Of Chula Vista
	Comments/Findings:	Pulled inlet ID# for verification. 6 IDs needs inspection and ID# verified.						
9-Jun-08	VR-7/Abilene	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	VR-7/Abilene	City of Chula Vista
	Comments/Findings:	Pulled inlet ID# for verification. 6 IDs needs inspection and ID# verified.						
9-Jun-08	VR-8/Monticello	MP-51 Vortex Separator		Residential	Medium	Eastlake Vistas	VR-8/Monticello	City of Chula Vista
	Comments/Findings:	Pulled inlet ID# for verification. 6 IDs needs inspection and ID# verified.						
9-Jun-08	VR-9 & 11/Sonora Ridge	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	VR-9 & 11/Sonora Ridge	City of Chula Vista
	Comments/Findings:	Pulled inlet ID# for verification. 6 IDs needs inspection and ID# verified.						
9-Jun-08	VR-10/Summerhill	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	VR-10/Summerhill	City of Chula Vista
	Comments/Findings:	Pulled inlet ID# for verification. 6 IDs needs inspection and ID# verified.						
13-Jun-08	Eastlake Medical Campus	MP-52 Drain Insert	TC-30 Vegetated Swale	Commercial	High	Eastlake	Eastlake Medical Campus	Heritage Real Estate Advisors
	Comments/Findings:	Received verification package.						
16-Jun-08	Fairhaven II	MP-52 Drain Insert		Residential	Medium	Rolling Hills Ranch	Fairhaven II	
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filters were observed to have trash and debris in containment areas. **see attachment**						

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
16-Jun-08	Road One of San Diego	TC-30 Vegetated Swale MP-52 Drain Inlet	Commercial	Low			Road One of San Diego
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Veg. swales are not established. Please correct all BMP items listed. **see attachment**					
18-Jun-08	High Tech Business Center @ Eas	TC-30 Vegetated Swale MP-52 Drain Inlet	Industrial	Low	Eastlake	High Tech Business Center	HTRCE, LP
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. All treatment facilities were recently installed and cleaned. **see attachment**					
19-Jun-08	VR-1/Colrich	MP-51 Vortex Separator	Residential	Low	Eastlake Vistas	VR-1/Colrich	City of Chula Vista PW
	Comments/Findings:	Pulled inlet ID# for verification. 6 IDs needs inspection and ID# verified.					
19-Jun-08	Veterans Park	TC-30 Vegetated Swale MP-52 Drain Inlet TC-12 Retention/Irrigatio	Municipal	Low			City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. All treatment facilities were installed and cleaned. **see attachment**					
23-Jun-08	Bella Lago	TC-40 Media Filter	Residential	High	Rolling Hills East	Bella Lago	KHovnanian
	Comments/Findings:	Conducted routine inspection of the storm filter units. All units were observed to have sediment loading on the vault floors. Provide proof of the cleaning and maintenance of the filters. **see attachment**					
23-Jun-08	Savon-CVS Pharmacy @ Fourth A	MP-52 Drain Insert	Commercial	High			CAM Commercial Properties
	Comments/Findings:	Received Verification Package on 06/12/2008					
23-Jun-08	Lady of Guadalupe Church	MP-52 Drain Insert	Miscellaneous	Medium			Roman Catholic Bishop of SD
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs.Filter inserts are not installed at all inserts as per site plan. **see attachment**					
25-Jun-08	Eastlake Community Church	MP-52 Drain Insert	Commercial	Low	Eastlake	Eastlake Community	City of Chula Vista
	Comments/Findings:	Conducted routine inspection of the storm filter units. Project was released recently for occupancy. Site BMPs are installed per plans and WQTR. **see attachment**					
26-Jun-08	Fire Station #6	MP-51 Vortex Separator	Municipal	Low			City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Filter inserts are cleaned and free of debris. **see attachment**					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
26-Jun-08	Fire Station #8	MP-51 Vortex Separator	Municipal	Low			City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Filter inserts are cleaned and free of debris. **see attachment**					
26-Jun-08	Mountain Hawk Park	MP-52 Drain Insert	Municipal	Medium			City of Chula Vista
	Comments/Findings:	Conducted verification on the installation and maintenance of the Post Construction BMPs. Filter inserts inside park will be maintained by Park staff and parking lot inserts at the catch basins will be maintained by the storm water section. Inserts at north entrance was damaged and need replacement **see attachment**					
26-Jun-08	Horizon Neighborhood Park	MP-52 Drain Insert	Municipal	Medium			City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. Filter inserts are cleaned and free of debris. **see attachment**					
26-Jun-08	Fire Station #7	MP-51 Vortex Separator Other	Municipal	Low			City of Chula Vista
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. CDS Unit Inspeciton. Could not access manhole **see attachment**					
27-Jun-08	Pharus Plaza	MP-51 Vortex Separator	Commercial	Low			Pharus Development LLC
	Comments/Findings:	Received verification package.					
27-Jun-08	Eastlake - Village Walk	TC-30 Vegetated Swale MP-51 Vortex Separator	Commercial	Low	Eastlake	Village Walk	Subberry Properties, Inc.
	Comments/Findings:	Received verification package from Ocean Protection. Sudbury Properties has not addressed on why the Vegetated Swales were not installed as per grading plans and WQTR.					
27-Jun-08	Auto Park North	MP-52 Drain Insert	Commercial	High			Knowlton Realty Advisors, LLC
	Comments/Findings:	Project completion extended by Kirk Ammerman to Mid-September.					
27-Jun-08	Eastlake Marketplace	MP-51 Vortex Separator	Commercial	Low	Eastlake	Eastlake Marketplace	Eastlake Marketplace c/o**
	Comments/Findings:	Received verification report.					
30-Jun-08	Telegraph Canyon	MP-52 Drain Insert	Municipal/CIP	Low			City of Chula Vista
	Comments/Findings:	Received conditional report.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
30-Jun-08	805 / Orange Interchange	TC-40 Media Filter	Municipal/CIP	Low			City Of Chula Vista

Comments/Findings: Received conditional report.

Total Sites Inspected: **117**

FY 2007-2008 Construction Inspections

Construction Inspection records are included in the inspection reports and are on file for each specific project. ***Inspected construction sites with discrepancies had a verbal or written follow-up notice.*** *During this reporting period, all High Priority construction sites were inspected bi-weekly during the rainy season, and all Medium and Low Priority construction sites were inspected at leasy monthly. Construction projects that were inspected during this reporting period are listed below:*

Subdivision	Project Name	Neighborhood	Work Order No	Developer	Priority
Eastlake Business Center					
Eastlake Business Center	Doctors Park Medical Campus		PC1629	Ledcor Petty	Low
Eastlake Business Center	Eastlake High Tech Research Center			Hamann Construction Co.	Low
Eastlake Summit					
Eastlake Summit	Capria	R9E	EL101I	KB Homes	Medium
Eastlake Summit	Andora	R9B	EL103I	Cornerstone Communities	Medium
Eastlake Summit	Buie Communities- Veranza	R9C	EL106I	Seacall Management	Medium
Eastlake Summit	Cortina	R9D	EL104I	Cornerstone Communities	Medium
Eastlake Vistas					
Eastlake Vistas	Atrium- Davidson	VR2		Davidson Development	Medium
Miscellaneous					
Miscellaneous	Villas at H Street		PG749	James Tellez	Medium
Miscellaneous	Mater Dei High School		OR421G	Sundt Construction	Medium
Miscellaneous	32 Walnut Drive < 1 acre			Private Builders	Low
Miscellaneous	1501 Broadway		PG763	Wermer Corporation	Medium
Miscellaneous	Sycamore Estates		PC1722/PG735	Norton Construction Co.	Medium
Miscellaneous	Fifth Avenue Drainage Improvements		DR173	City of Chula Vista	Low
Miscellaneous	Civic Center -Chula Vista		PC1580 -GG300	Highland Partnership	Medium
Miscellaneous	Lion Circlle Hilltp Estates		PG714	Pacific Homes Int.	Low
Miscellaneous	Village Walk at Eastlake		PG738	Jayness Corp.	Medium
Miscellaneous	Eastlake Village LTD Edition		VC204G	Snyder Langston	Medium
Miscellaneous	High Tech High School - Grading		PG765	High Tech High	High
Miscellaneous	New Hope Community Church @ Telegraph		PG747	Erickson Hall	Medium
Miscellaneous	Auto Park North			Knowlton Realty	Low

Subdivision	Project Name	Neighborhood	Work Order No	Developer	Priority
Otay Ranch, Village 11					
Otay Ranch, Village 11	Amber II	R12	OR629I	Shea Homes	High
Otay Ranch, Village 11	Cordova -Courtyard	R17	OR634I	Brookfield Homes	Medium
Otay Ranch, Village 11	Trellis II	R16	OR627I	Brookfield Homes	High
Otay Ranch, Village 11	Trellis I	R15	OR627I	Brookfield Homes	High
Otay Ranch, Village 11	Sapphire II	R14	OR628I	Shea Homes	High
Otay Ranch, Village 11	Saphhire I	R13	OR628I	Shea Homes	High
Otay Ranch, Village 11	Amber I/Sapphire Village	R11	OR629I	Shea Homes	High
Otay Ranch, Village 11	Clover	R18	OR633I	Shea Homes	Medium
Otay Ranch, Village 11	Windingwalk Shops	MU1	OR635I	Moorefield Construction	Medium
Otay Ranch, Village 11	Agave	R24A	OR624I	Shea Homes	Medium
Otay Ranch, Village 11	Sagurao	R24B	OR624I	Shea Homes	Medium
Otay Ranch, Village 2					
Otay Ranch, Village 2	Future SFD-under grading phase	R18A		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD (Alley)-under grading phase	R5B		Sunrise Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R20	PG656	Otay Ranch Company	High
Otay Ranch, Village 2	La Purisma	R6		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R25A		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R24		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R23		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R21		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R4		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R27		Otay Ranch Company	High
Otay Ranch, Village 2	Anacapa	R9A		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R10		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R11		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R12		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R13	OR815I / G	Otay Ranch Company	High
Otay Ranch, Village 2	North- Future MFD-under grading phase	R16		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R17		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R26		Otay Ranch Company	High

Subdivision	Project Name	Neighborhood	Work Order No	Developer	Priority
Otay Ranch, Village 2	Future SFD-under grading phase	R19		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R29		Otay Ranch Company	High
Otay Ranch, Village 2	Lindera Kane (Alley)	R5A		Kane Development	High
Otay Ranch, Village 2	Future Mixed Used-under grading phase	MU1	OR909I	Otay Ranch Company	High
Otay Ranch, Village 2	Future Mixed Use-under grading phase	MU2		Otay Ranch Company	High
Otay Ranch, Village 2	North- Future Mixed Use-under grading phase	MU3		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R8		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R25B		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R9B		Otay Ranch Company	High
Otay Ranch, Village 2	Future SFD-under grading phase	R15	OR806I	Otay Ranch Company	High
Otay Ranch, Village 2	Sevilla	R30	OR814I	Otay Ranch Company	Low
Otay Ranch, Village 2	Future SFD-under grading phase	R18B		Otay Ranch Company	High
Otay Ranch, Village 2	Future MFD-under grading phase	R28		Otay Ranch Company	High
Otay Ranch, Village 2	Tavera	R14	OR813I	Otay Ranch Company	High
Otay Ranch, Village 2	North- Future Mixed-Under Grading Phase	R12, R13, R	OR805G	Otay Ranch Company	High
Otay Ranch, Village 2	North- Heritage Road		OR807G	Otay Ranch Company	High
Otay Ranch, Village 2	North- Future Mixed-Under Grading Phase	R5, R6, R7,	OR809G	Otay Ranch Company	High
Otay Ranch, Village 2	Presidio	R7		Otay Ranch Company	High
Otay Ranch, Village 6, ORC					
Otay Ranch, Village 6, ORC	Treviana	R10	OR418C	Cornerstone Communities	Medium
Otay Ranch, Village 6, ORC	Marquis	MU1	OR909I	Oakwood Company	Medium
Otay Ranch, Village 6, ORC	Monet	R9B	OR939I/OR939G	Pacific Coast	Medium
Otay Ranch, Village 7, McMillin					
Otay Ranch, Village 7, McMillin	Mosaic II	R7A		Shea Homes	High
Otay Ranch, Village 7, McMillin	Future	R7B		McMillin	High
Otay Ranch, Village 7, McMillin	Indigo	R1A	OR457I	McMillin	High
Otay Ranch, Village 7, McMillin	Mosaic I	R6B		Shea Homes	High
Otay Ranch, Village 7, McMillin	Tapestry	R6A		Shea Homes	High
Otay Ranch, Village 7, McMillin	Terracotta	R2B	OR458I	McMillin	High
Otay Ranch, Village 7, McMillin	Santa Luna Road		OR976C	Otay Ranch Company	High
Otay Ranch, Village 7, McMillin	Jacaranda	R1B	OR459I	McMillin	High

Subdivision	Project Name	Neighborhood	Work Order No	Developer	Priority
Otay Ranch, Village 7, ORC					
Otay Ranch, Village 7, ORC	Terraza	R2B	OR973I	Sunrise Company	High
Otay Ranch, Village 7, ORC	Open Space Designated	R4		Otay Ranch Company	High
Otay Ranch, Village 7, ORC	Santa Barbara	R2A	OR973I	Pacific Coast	High
Otay Ranch, Village 7, ORC	Cypress Lane	R2D	OR973I	Kane Development	High
Otay Ranch, Village 7, ORC	Open Space Designated	R3		Otay Ranch Company	High
Otay Ranch, Village 7, ORC	La Media Road		OR975C	Otay Ranch Company	High
Otay Ranch, Village 7, ORC	Monte Sereno	R2C	OR973I	Oakwood	High
Rolling Hills Ranch					
Rolling Hills Ranch	Bella Lago -Future-SFD	R1	BE002G / I	K Hovnanian	High
Rolling Hills Ranch	FutureMFD	N10B	RH242I	K Hovnanian	High
Rolling Hills Ranch	Future MFD	N11	RH241I	Future-N/A	High
Rolling Hills Ranch	Portola	N10A	RH237I	Lennar Corp.	High
Rolling Hills Ranch	Clearstory	N12B	RH239I	Davidson Homes	High
Rolling Hills Ranch	Quintessa	N9B	RH234I	McMillin	High
Rolling Hills Ranch	Provence		RH229G	Cornerstone Communities	High
Rolling Hills Ranch	Future MFD	N9-N12	RH229G	McMillin	High
Rolling Hills Ranch	Rolling Hills Backbone Improvements	N9-N12	RH231C	McMillin	Medium
San Miguel Ranch					
San Miguel Ranch	Proctor Valley Road		SM020I	Trimark Homes	Medium
San Miguel Ranch	Backbone Improvements-Avenida Loreta		SM014C	Trimark Homes	Medium
San Miguel Ranch	San Miguel Ranch Road		SM013C	Trimark Homes	Medium
San Miguel Ranch	SMR Phase III Grading	K,L,J1,J2, B	SM011G	Trimark Pacific Homes	High
San Miguel Ranch	Montecito Ridge	J1	SM016I	Trimark Pacific	High
San Miguel Ranch	Marvilla	L	SM022I	Shea Homes	High
San Miguel Ranch	Estrella	J2	SM018I	Shea Homes	High
San Miguel Ranch	Bontera	K	SM015I	Buie/Secall Management	High
San Miguel Ranch	Camino	N/A		Shea Homes	High
Total:	**103**				

FY 2007-2008 Municipal Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection acitivities.

Inspection Date	Facility Name	APN Number	Address	Category	Priority
4-Feb-08	Old Public Works Yard	5670312700	707 F ST	Public Work Facilities	High
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**			
14-Feb-08	Reinstra Ball Fields	6240107300	1500 MAX AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**			
14-Feb-08	Salt Creek Park & Community Center	6434830200	2710 OTAY LAKES RD	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**			
14-Feb-08	Sunset View Park	6430330100	1390 GREENSVIEW DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. **see attachment**			
14-Feb-08	Windingwalk Neighborhood Park	6436101500	1675 XPLORATION FALL DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. **see attachment**			
14-Feb-08	Chula Vista Community Park	5953200200	1060 EASTLAKE PW	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Some. No pet waste bag stations observed. Correct BMP items listed on the attachment **see attachment**			
14-Feb-08	Mackenzie Creek Park	5955700200	2275 MACKENZIE CREEK RD	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			
14-Feb-08	Montevalle Park & Community Center	5957360600	840 DUNCAN RANCH RD	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**			
14-Feb-08	Mountain Hawk Park	6435180200	1475 LAKE CREST DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			

Inspection Date	Facility Name	APN Number	Address	Category	Priority
29-Feb-08	Harvest Park	6425814800	1381 PALOMAR ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			
29-Feb-08	Heritage Park & Community Center	6425601100	1550 PALOMAR ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			
29-Feb-08	Horizon Neighborhood Park	6410721600	970 PALOMAR ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Two pet waste bag stations observed. **see attachment**			
29-Feb-08	Breezewood Park	6425004600	1091 BREEZEWOOD DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			
29-Feb-08	Cottonwood Park	6424210600	1778 PALOMAR ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Some. No pet waste bag stations observed. Correct BMP items listed on the attachment **see attachment**			
29-Feb-08	Veteran's Park Recreation Center	6411221000	785 PALOMAR ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**			
29-Feb-08	Santa Venetia Park	6430512700	1500 MAGDALENA AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	One pet waste bag station observed. Cigarette butt accumulation in grassy area near skate park - need to post No Smoking Sign. **see attachment**			
7-Mar-08	Santa Cora Park	6420804000	1365 SANTA CORA AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			
7-Mar-08	Memorial Park	5683004300	373 PARK WY	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			
7-Mar-08	Tiffany Park	6420302900	1713 ELMHURST ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. **see attachment**			

Inspection Date	Facility Name	APN Number	Address	Category	Priority
7-Mar-08	Friendship Park	5681530100	365 F ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Two pet waste bag stations observed. **see attachment**			
7-Mar-08	Bonita Long Canyon Park	5941100500	1745 COLTRIDGE LN	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Some. Correct BMP items listed on the attachment **see attachment**			
7-Mar-08	Parkway Community Center	5683004300	373 PARK WY	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Excessive cigarette butt waste observed around stairs at northwest corner of building.**see attachment**			
7-Mar-08	Mini Park	5952145100	753 ASHBROOK DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**			
18-Mar-08	Independence Park	6423205600	1248CALLE SANTIAGO	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			
18-Mar-08	Voyager Park	6400901900	1178 J ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Curb/gutter areas in parking lots need sweeping. No pet waste bag stations observed. **see attachment**			
18-Mar-08	Rancho Del Rey Park	6422800300	1131 BUENA VISTA WY	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Two pet waste bag stations observed. **see attachment**			
27-Mar-08	Paseo Del Rey Park	6401412500	750 PASEO DEL REY	Parks-Landscape-Rec Areas	High
	Comments/Findings:	BMPs need to be implemented. No pet waste bag station observed. Correct all items listed on the attachment. **see attachment**			
27-Mar-08	Sunbow Park	6402725100	690 NAPLES ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	No pet waste bag stations observed. Correct BMP items listed on the attachment **see attachment**			
27-Mar-08	Sunridge Park	6400502000	952 BEECHGLEN DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			

Inspection Date	Facility Name	APN Number	Address	Category	Priority
27-Mar-08	Greg Rogers Park	6200600300	1189 OLEANDER AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Concrete brow ditch at the east end of the park has trash accumulation at the inlet. Slope at south end of the park is eroding and there is evidence of sediment entering the storm drain due to erosion.**see attachment**			
27-Mar-08	Marisol Park	5933803600	916 RANCHO DEL REY PW	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			
27-Mar-08	Explorer Park	6400301900	NORELLA ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. One pet waste bag stations observed. There was an overflowing trash can. **see attachment**			
27-Mar-08	Discovery Park	6423930700	700 BUENA VISTA WY	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. Correct BMP items listed on the attachment **see attachment**			
28-Mar-08	Terra Nova Park	5921922700	450 HIDDEN VISTA DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	No pet waste bag stations observed. Correct BMP items listed on the attachment **see attachment**			
2-Apr-08	Valle Lindo Park	6440102600	545 SEQUOIA ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. **see attachment**			
2-Apr-08	SDGE Park	6230720700	1438 HILLTOP DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			
2-Apr-08	Sherwood Park	6233211900	69 SHERWOOD ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**			
2-Apr-08	Orange Avenue Fields	6240107200	160 ORANGE AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Site is adjacent to Riensta Ball Field. **see attachment**			
2-Apr-08	Loma Verde Park & Recreation Cente		1420 LOMA LN	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Some. No pet waste bag stations observed. Correct BMP items listed on the attachment **see attachment**			

Inspection Date	Facility Name	APN Number	Address			Category	Priority
2-Apr-08	Los Ninos Park	6243411200	150	TEAL	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings: Site is in good condition. No pet waste bag stations observed. **see attachment**						
2-Apr-08	H Street Land Application	5740300800		H	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings: There is an overflowing trash bin with street sweeping debris. There is a vehicle fluid spill near trash bin. Correct BMP items listed on the attachment. **see attachment**.						
2-Apr-08	Hilltop Park	5744104600	780	HILLTOP	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings: Site is in good condition. Some. Correct BMP items listed on the attachment **see attachment**						
3-Apr-08	John Lippit PWC & Admin Building	6442301100	1800	MAXWELL	RD	Other Fixed Facilities	High
	Comments/Findings: BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
16-Apr-08	Power Washing-Graffiti Removal					Mobile Mun Activities	High
	Comments/Findings: Graffiti removal crew had good housekeeping practices. Need to replace any damaged BMPs. **see attachment**						
13-May-08	Norman Park and Recreation Center	5683331100	270	F	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings: Site is in good condition. No pet waste bag stations observed. **see attachment** Need to update JURMP to include that this is a Park and Rec Center.						
13-May-08	Otay Park & Recreation Center	6232302600	3554	MAIN	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings: Site is in good condition. Pet waste bag stations observed. **see attachment**						
13-May-08		6232302700	1613	ALBANY	AV	Parks-Landscape-Rec Areas	High
	Comments/Findings: Site is in good condition. Pet waste bag stations observed. **see attachment**						
13-May-08	Palomar Park	6200504900	1359	PARK	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings: Site is in good condition. No pet waste bag stations observed. **see attachment**						
13-May-08	Downtown Parking Facility	5682702900	340	F	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings: Overall site was in good condition. Some light leaf accumulation was observed on the third floor of the facility.						

Inspection Date	Facility Name	APN Number	Address			Category	Priority
13-May-08	Eucalyptus Park	5651200300	47	FIFTH	AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Some. No pet waste bag stations observed. Correct BMP items listed on the attachment **see attachment**					
13-May-08	Conneley Park	6233143300	1559	CONNOLEY	AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**					
13-May-08	Gayle McCandliss Park	6390301300	415	J	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. Some. No pet waste bag stations observed. Correct BMP items listed on the attachment **see attachment**					
13-May-08	Chula Vista Women's Club	5683004200	357	G	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. **see attachment**					
29-May-08	Community Youth Center	5723001100	465	L	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Please sweep up all trash and debris in the trash enclosure area. **see attachment**					
29-May-08	Animal Care Facility	6290605400	130	BEYER	WY	Animal Facilities	High
	Comments/Findings:	Employees are washing out the backs of the animal pick-up trucks in the parking area. The resulting runoff contains animal waste. BMP should be implemented to prevent discharge.**see attachment**					
29-May-08	Lancerlot Park	5711701800	750	K	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. **see attachment**					
29-May-08	Lauderbach Park	6192113700	333	OXFORD	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	The site is under construction on this date. The drainage ditch at the west end of the park has accumulated sediment from construction activity.. Fiber roll at the storm drain needs to be replaced. **see attachment**					
29-May-08	Harborside Park	6182005900	670	OXFORD	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. One pet waste bag station observed. **see attachment**					
2-Jun-08	Nature Center	5650102900	1000	GUNPOWDER POINT	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Overall site is in good condition. Chemicals are stored indoors. Aquarium water is cleared by flirtation and is maintained regularly.					

Inspection Date	Facility Name	APN Number	Address	Category	Priority
2-Jun-08	Bay Boulevard Park	5670213202	BAY BL	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Correct BMP items listed on the attachment **see attachment**. There are some leaf and organic accumulation in the curb/gutter of the parking area. There was one overflowing trash at the west end of the park.			
10-Jun-08	Chula Vista Municipal Golf Course	5932402400	4475 BONITA RD	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**			
10-Jun-08	Rohr Park	5932400500	4548 SWEETWATER RD	Parks-Landscape-Rec Areas	High
	Comments/Findings:	Site is in good condition. No pet waste bag stations observed. Correct BMP items listed on the attachment **see attachment**			

Total Inspections: **62**

FY 2007-2008 Commercial Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection acitivities.

Inspection Date	Facility Name	APN Number	Address	Category	Priority	NAICS Number
2-May-08	ABC Rebuilders	6291000600	180 MACE ST	Cat (i-v) Auto Related	High	811121
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
3-Mar-08	Abel Najera	6291200800	3679 MAIN ST	Cat (i-v) Auto Related	High	811118
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
9-Apr-08	Abre Towing dba Paxton Towing	6290620300	3487 MAIN ST	Cat (i-v) Auto Related	High	488410
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
22-May-08	Absolute Tinting	5955904200	685 EL PORTAL DR	Cat (i-v) Auto Related	Low	811112
	Comments/Findings:	Site is generally in good order. Business is within a residential area and may be mobile.				
15-May-08	Access II Towing	6232300600	1350 MAX AV	Cat (i-v) Auto Related	High	48841
	Comments/Findings:	This is a home occupation business. All BMPs are in place. Site is in good order. **see attachment**				
7-Jan-08	ACE Autocare Experts	6182100600	1135 BROADWAY	Cat (i-v) Auto Related	Low	81111
	Comments/Findings:	Facility is generally in good, clean order. Activity is done indoors. See attached documents for concern issues.				
19-Feb-08	Agave Grill	5672004700	625 H ST	Cat x-Eating/Drinking ...	High	713990
	Comments/Findings:	Trash bin lids are not closed. Grease containers on ground not contained. See attached documents.				
20-Feb-08	American Auto Service	5672003600	430 BROADWAY	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	The site is reasonaby clean. A 55 GL. Drum of unknown content with an open lid is in the parking lot. Need to follow up inspection.				
24-Apr-08			BROADWAY	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	Conducted a follow up visit to the site. The 55 GL drum has been removed from outside storage area. The site is generally clean. Business has change the name to Express Tire.				
2-May-08	American Towing & American Dismar	6291001600	140 REED CT	Cat (i-v) Auto Related	High	488410
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
9-Jun-08	Apple Tree Market	6231312000	1556 THIRD AV	Cat x-Eating/Drinking ...	High	445120
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
20-Feb-08	Arco AM/PM #607	6231921500	3190 MAIN ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
	Comments/Findings:	Area is clean. Hazmat containers on site. See attached documents.				

Inspection Date	Facility Name	APN Number	Address			Category	Priority	NAICS Number
25-Apr-08	Arco By The Bay	5653101600	765	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
	Comments/Findings:	Site is generally clean at the time of inspection.						
9-May-08	Arias Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
3-Mar-08	Barracuda Wheel Alignment	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	811118
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
22-Apr-08	Batteries Unlimited	6221021800	2244	MAIN	ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
20-May-08	Big O Tires	5671402400	399	BROADWAY		Cat (i-v) Auto Related	Low	441320
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**						
11-Mar-08	Bonita Shell	5701402700	100	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	447110
	Comments/Findings:	Facility is in good clean order and maintained. Spill control kit is verified.--see attached documents.						
14-Apr-08				BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	447110
	Comments/Findings:	This is a follow up inspection. Carwash discharge baffle boxes need maintenance. No other concern at this time.						
16-Jun-08	Bulls Eye Burger	5713101800	860	BROADWAY		Cat x-Eating/Drinking ...	High	722110
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
9-Jun-08	C&V Auto	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	811111
	Comments/Findings:	Some BMPs need to be implemented. Correct items listed on the attachment . **see attachment**						
21-May-08	Calif Smog Certification Inc.	5660106200	11	THIRD	AV	Cat (i-v) Auto Related	Low	334512
	Comments/Findings:	Site in in good condition. Recommends training for employees. **see attachment**						
9-Jun-08	Candys Auto Body Shop	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	811121
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
3-Apr-08	Chevron #1975	6430206900	2115	OLYMPIC	PW	Cat viii-Fueling-Rtl/Wsl	Low	447110
	Comments/Findings:	Facility was kept in good order. Storm drain inlets on site was verified and was free from debris.						
28-Apr-08				OLYMPIC	PW	Cat viii-Fueling-Rtl/Wsl	Low	447110
	Comments/Findings:	This is a follow up of the 4-03-08 inspection. All concerns on the the previous inspection have been corrected/completed.						

Inspection Date	Facility Name	APN Number	Address	Category	Priority	NAICS Number
5-May-08	Chichi's Auto Repair	6221902000	2555 FAIVRE ST	Cat (i-v) Auto Related	High	
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
25-Apr-08	Chula Vista Auto Repair	6221901000	2627 FAIVRE ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
5-Jun-08	Chula Vista Nutrition Store	6221115000	1655 BROADWAY	Cat x-Eating/Drinking ...	Low	445110
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
5-Mar-08	Chula Vista Smog	6290500900	3031 MAIN ST	Cat (i-v) Auto Related	High	811198
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
19-May-08	Chula Vista Towing	5711531200	625 J ST	Cat (i-v) Auto Related	High	48841
	Comments/Findings:	Some BMPs need to be implemented. Correct items listed on the attachment . **see attachment**				
22-May-08	Cobblestone Park	5952035500	LAKESHORE DR	Cat xviii-Golf/Parks/Rec	Low	712190
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**				
14-Apr-08	Collision Parts Warehouse	6232302800	3740 MAIN ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
23-Apr-08	Depot of Wheel Corp.	6290200400	2835 MAIN ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
24-Mar-08			MAIN ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
10-Mar-08	Dominos Pizza	6421701000	943 OTAY LAKES RD	Cat x-Eating/Drinking ...	Low	722211
	Comments/Findings:	Facility is generally cleaned and maintained. Business is done indoor.				
29-May-08	Dominos Pizza #7724	5683004600	380 THIRD AV	Cat x-Eating/Drinking ...	Low	722211
	Comments/Findings:	Site is in general good condition. Recommends training to employees. **see attachment**				
20-Mar-08	Double AA Tire Co Inc.	6231921400	3124 MAIN ST	Cat (i-v) Auto Related	Low	441320
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
27-Mar-08	Dynamic Results Inc/Eddies Tires & A	6221403600	2677 MAIN ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				

Inspection Date	Facility Name	APN Number	Address	Category	Priority	NAICS Number
13-Mar-08	Economy Upholstery	6291200800	3679 MAIN ST	Cat vii-Auto Lots Storage	High	493110
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
5-Jun-08	El Nopal Market LLC	6221115000	1655 BROADWAY	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
6-Mar-08	Euro Specialties	6221114100	2530 MAIN ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	Some BMPs need to be implemented. Site is in general good condition. **see attachment**				
27-Feb-08			MAIN ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
7-Mar-08	F&V Auto Repair	6290200100	2801 MAIN ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
10-Mar-08	Fred's Auto Repair	6290606100	3205 MAIN ST	Cat viii-Fueling-Rtl/Wsl	Low	447110
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
20-May-08	Freeway Tire Co	6441810100	1861 NIRVANA AV	Cat (i-v) Auto Related	Low	441310
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**				
15-May-08	Guero's Towing	6242103300	485 SATINWOOD WY	Cat (i-v) Auto Related	High	488410
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
2-May-08	H&A Electric Motors	6291000600	180 MACE ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
29-May-08	Henry's Market Place	5732400500	690 THIRD AV	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
29-May-08	Henry's Market Place dba Otay Rancl	6421701000	941 OTAY LAKES RD	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
21-Mar-08	Hernandez Tire Sales	6232021800	3236 MAIN ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
22-May-08	Hilltop Main Self Storage	6291302500	3755 MAIN ST	Cat vii-Auto Lots Storage	Low	493110
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**. Recommend to provide information to tenants.				

Inspection Date	Facility Name	APN Number	Address	Category	Priority	NAICS Number
9-Jun-08	Hilltop Market	6232716700	1500 HILLTOP DR	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
29-May-08	Home Town IGA	5670320800	646 E ST	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
28-May-08	Honey Baked Ham Inc.	5922000700	316 H ST	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
5-May-08	Humberto's Auto Repair	6221902000	2555 FAIVRE ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
11-Mar-08	International House of Pancakes	5953221000	2258 OTAY LAKES RD	Cat x-Eating/Drinking ...	Low	722110
	Comments/Findings:	Facility showed a good clean surrounding.				
9-May-08	J&J Chrome & Polish	6221901000	2631 FAIVRE ST	Cat (i-v) Auto Related	High	811121
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
19-Jun-08			FAIVRE ST	Cat (i-v) Auto Related	High	811121
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
25-Apr-08	J&L Auto Repair Inc.	5670531200	273 BROADWAY	Cat (i-v) Auto Related	High	8111
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
14-Mar-08	J&S Leasing	6291302700	187 MACE ST	Cat (i-v) Auto Related	High	532120
	Comments/Findings:	MPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
12-Jun-08	Jack in the Box #86	5632703400	5 FOURTH AV	Cat x-Eating/Drinking ...	High	722211
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
25-Apr-08	JC Towing Inc.	6221901800	2515 FAIVRE ST	Cat (i-v) Auto Related	High	488410
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
14-Apr-08	Jesse Smog	6221112500	2446 MAIN ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
19-Feb-08	Jiffy Lube #897	5652402700	593 E ST	Cat (i-v) Auto Related	High	48841
	Comments/Findings:	Oil tanks are sealed. Spill kits on site. See attached documents.				

Inspection Date	Facility Name	APN Number	Address			Category	Priority	NAICS Number
27-Feb-08	Jim's Glass & Screen	6221113200	2540	MAIN	ST	Cat (i-v) Auto Related	High	811122
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
5-Jun-08	JNC Pinoy Foodmart Inc.	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
28-May-08	John's Towing	6206021700	1298	WAXWING	LN	Cat (i-v) Auto Related	High	488410
	Comments/Findings:	This is a home occupational business. BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
5-Mar-08	JT Associates Inc/DBA Audio Xperts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	811118
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
3-Mar-08	Juans Auto Repair Inc.	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	Some BMPs need to be implemented. Site is in general good condition. **see attachment**						
19-Jul-07	Knotts Soak City USA	6450201700	2052	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	Low	713110
	Comments/Findings:	Observed grease and used cooking oil spills. Recommend to relocate grease bins and cleanup spills.						
2-May-08	L&E Transmission Inc.	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	811113
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
5-Jun-08	La Bodega Market	6182101600	1193	BROADWAY		Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
24-Apr-08	Ledezma's Tires	6290603300	231	BEYER	WY	Cat (i-v) Auto Related	High	441320
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
20-May-08	Low Price Auto Glass	6441820800	880	ENERGY	WY	Cat (i-v) Auto Related	Low	811122
	Comments/Findings:	Site is generally kept cleaned and maintained. Trash cans are provided at parking lots and shops. No concerns at this time. **see attachment**						
28-May-08	Lucys Market	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
11-Mar-08	Main Car Care Inc	6231721300	2952	MAIN	ST	Cat (i-v) Auto Related	High	811198
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
11-Apr-08	Main Clutch Co	6232301700	3800	MAIN	ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						

Inspection Date	Facility Name	APN Number	Address	Category	Priority	NAICS Number
21-Mar-08	Martinez Tires	6290606600	3261 MAIN ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	Some BMPs need to be implemented. Site is in general good condition. **see attachment**				
29-Feb-08	Mike Auto Repair	6221114100	2530 MAIN ST	Cat (i-v) Auto Related	High	811118
	Comments/Findings:	Some BMPs need to be implemented. Site is in general good condition. **see attachment**				
5-Jun-08	Miramar Fish Market	6221115000	1655 BROADWAY	Cat x-Eating/Drinking ...	High	
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
19-Mar-08	Monell Brakes	6291200100	3611 MAIN ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
19-Feb-08	Need Tow Inc.	5670311100	240 WOODLAWN AV	Cat (i-v) Auto Related	Low	48841
	Comments/Findings:	Office only in a complex. Trash around dumpster and lid not closed. See attached documents.				
25-Mar-08	Nice & Easy Autobody & Paint Inc.	6221116000	2350 MAIN ST	Cat (i-v) Auto Related	High	811121
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
19-May-08	Official Brake & Lights Inspection Cer	6220913200	1502 BROADWAY	Cat (i-v) Auto Related	Low	8111
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**				
20-Feb-08	One Stop Auto Access Plus	6182103500	1137 BROADWAY	Cat (i-v) Auto Related	Low	441310
	Comments/Findings:	Part of larger auto repair complex. Area is clean. See attached documents.				
28-May-08	Otay Farms Inc.	6290100100	1716 BROADWAY	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**				
22-Apr-08	Pacific Bay Auto	6222111000	150 JACQUA ST	Cat (i-v) Auto Related	High	441110
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
9-May-08	Pasten Auto Body	6221902000	2555 FAIVRE ST	Cat (i-v) Auto Related	High	811121
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
5-Mar-08	PB Auto Service	6291201600	3645 MAIN ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				
10-Jun-08	Poliza Hollywood Inc	5743003200	72 J ST	Cat x-Eating/Drinking ...	High	445120
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**				

Inspection Date	Facility Name	APN Number	Address			Category	Priority	NAICS Number
28-Apr-08	Polos Auto Paint Supply	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	811121
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
5-May-08	Rays Mobile Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
5-May-08	RG Auto Repair			FAIVRE	ST	Cat (i-v) Auto Related	High	811118
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
24-Mar-08	Ricardos's Custom Covers	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
12-Jun-08	Roadone DBA A to Z Metro, A to Z Er	6440406100	1805	MAXWELL	RD	Cat (i-v) Auto Related	High	488410
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
5-May-08	Roman's Auto Electric	6221902000	2555	FAIVRE	ST	Cat vii-Auto Lots Storage	High	
	Comments/Findings:	All BMPs in place. Site is in good order.**see attachment**						
18-Mar-08	Roman's Truck Body & Paint MJP	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	811121
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
28-Apr-08				MAIN	ST	Cat (i-v) Auto Related	High	811121
	Comments/Findings:	All BMPs in place. Site is in good order.**see attachment**						
5-Mar-08	S&J Auto Repair	6291201600	2530	MAIN	ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
24-Apr-08	Sams Muffler Radiators	6290603200	225	BEYER	WY	Cat (i-v) Auto Related	High	811112
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
4-Mar-08	San Diego Tires and Brakes	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
3-Mar-08	Sanchez Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	Some BMPs need to be implemented. Site is in general good condition. **see attachment**						
28-May-08	Santa Fe Meats	6221112000	2514	MAIN	ST	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	NAICS Number
9-Jun-08	Save A Lot #943	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
21-Mar-08	SCJ Towing	6290606000	3211	MAIN	ST	Cat (i-v) Auto Related	High	488410
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
9-Jun-08	Seafood City Market	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	High	445220
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
29-May-08	Smart & Final #463 / SFI Corp	6290607500	3141	MAIN	ST	Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
18-Mar-08	Soundelux	6221112500	2490	MAIN	ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
27-Feb-08	Southbay Auto Glass		2446	MAIN	ST	Cat (i-v) Auto Related	Low	811122
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
27-Feb-08	Southbay Transmision	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	811113
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
24-Mar-08	Speed Merchant Inc/American Tire Di	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	441310
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
9-Jun-08	Star Bakery	6192866000	1372	THIRD	AV	Cat x-Eating/Drinking ...	High	311811
	Comments/Findings:	Some BMPs need to be implemented. Correct items listed on the attachment . **see attachment**						
19-May-08	Starbucks Coffee #5665	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	71111
	Comments/Findings:	Site is generally kept cleaned and maintained. No illegal discharge was observed at this time. **see attachment**						
4-Mar-08	Stinger Auto Detail	6290500900	3031	MAIN	ST	Cat vi-Auto-Washing	High	811192
	Comments/Findings:	Some BMPs need to be implemented. Site is in general good condition. **see attachment**						
5-Jun-08	Sunny's Market	5672122000	449	BROADWAY		Cat x-Eating/Drinking ...	High	445110
	Comments/Findings:	BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
12-Jun-08	Superior VW Automotive Repair	6221113400	2578	MAIN	ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	NAICS Number
8-Jun-08	Third Avenue Minimart	5733204000	772	THIRD	AV	Cat x-Eating/Drinking ...	High	445120
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
5-Mar-08	Tony's Smog Test Only	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	Some BMPs need to be implemented. Site is in general good condition. **see attachment**						
4-Apr-08	Ulises Roberto Sanchez dba Batt Rec		2446	MAIN	ST	Cat (i-v) Auto Related	High	423930
	Comments/Findings:	Some BMPs need to be implemented. Site is in general good condition. **see attachment**						
2-May-08	Vidrio Towing	6240606000	2471	MAIN	ST	Cat (i-v) Auto Related	Low	488410
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
12-May-08	VIP Towing	6441820100	811	ENERGY	WY	Cat (i-v) Auto Related	High	488410
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
16-May-08	Western Towing	6170710200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	488410
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
16-Jun-08	Western Towing/Sunbelt Towing Inc	6170600200	1150	WALNUT	AV	Cat (i-v) Auto Related	High	488410
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
5-Mar-08	Zeppy Auto Repair	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	811111
	Comments/Findings:	Some BMPs need to be implemented. Site is in general good condition. **see attachment**						

Total Inspections: **124**

FY 2007-2008 Industrial Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection acitivities.

Inspection Date	Facility Name	APN Number	Address	Category	Priority	WDID Number	NAICS Number
29-Aug-07	Japanese Auto Wrecking	6441811500	811 ENERGY WY	Auto Dismantlers	High	No WDID	811198
	Comments/Findings:	Provide proof of coverage under the General Industrial Permit and SWPPP.					
11-Sep-07	Brentag Pacific Inc	6441810800	1888 NIRVANA AV	Chemical Storage	High	No WDID	562211
	Comments/Findings:	Site is generally in good condition. Recommend to provide tag-outs on all secondary containment areas.					
14-Jan-08	Julio C Battery	6232021800	1502 BROADWAY	Battery Recycling-Sale	High	No WDID	423610
	Comments/Findings:	BMP items need to be corrected. **see attachment**					
15-Jan-08	SOS Metals San Diego LLC	6221115700	635 ANITA ST		High	9371013260	423510
	Comments/Findings:	BMP items need to be implemented. **see attachment**					
15-Jan-08	Veolia Transportation -MTS	6232502100	3650 MAIN ST	Transportation	High	9371011017	485999
	Comments/Findings:	Site is in good order. BMPs are in place.**see attachment**					
16-Jan-08	Prudential Overall Supply	56709000300	740 F ST	Industrial Cleaning	High	No WDID	812320
	Comments/Findings:	Site is in good order. BMPs are in place. **see attachment**					
30-Jan-08	Estes Express Lines	5634521200	120 PRESS LN	Trucking	High	9371007126	484110
	Comments/Findings:	Site is in good order. Need to refocus training of storm water pollution prevention. **see attachment**					
30-Jan-08	Allied Waste Services	6441821600	881 ENERGY WY	Waste Management	High	9371014355	562111
	Comments/Findings:	Site is in general good order. BMPs are in place. Need minor corrections. **see attachment**					
31-Jan-08	West Auto Wreckers	6221902600	2365 MAIN ST	Auto Dismantlers	High	9371001046	811198
	Comments/Findings:	Site is in good order. SWPPP is updated and BMPs are in place. **see attachment**					
1-Feb-08	Onager Corporation	6441812800	789 ENERGY WY	Auto Dismantlers	High	9371010014	811198
	Comments/Findings:	Site is in good order. BMPs are in place. **see attachment**					
8-Feb-08	Pacific Auto Wrecking	6441812000	795 ENERGY WY	Auto Dismantlers	High	9371015058	811198
	Comments/Findings:	All BMPs are in place. Site is in good condition. **See attachment**					

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	NAICS Number
8-Feb-08	Kleen Blast Industrial Services	6180103100	676	MOSS	ST	Blasting Abrasives	High	No WDID	333298
	Comments/Findings: BMP items need to be implemented. **See attached document**								
8-Feb-08	AAA Foreign Auto Recycling	6441812200	783	ENERGY	WY	Auto Dismantlers	High	9371016197	811198
	Comments/Findings: BMP items need to be implemented.**See attached document**								
8-Feb-08	California Sports Auto Wrecking	6441811800	781	ENERGY	WY	Auto Dismantlers	High	9371018391	811198
	Comments/Findings: BMP items need to be implemented. **See attached document**								
11-Feb-08	MMC Energy -Peak Power Plant	6290620400	3497	MAIN	ST	Power Generations	High	9371020087	221119
	Comments/Findings: Facility is in good order. BMPs are in place. **See attachment**								
11-Feb-08	Asian Kars Auto Recycling	6441812300	777	ENERGY	WY	Auto Dismantlers	High	9371017467	811198
	Comments/Findings: BMP items need to be implemented.**See attached documents**								
11-Feb-08	Payless Auto Wrecking	6441811500	811	ENERGY	WY	Auto Dismantlers	High	9371019794	811198
	Comments/Findings: Auto body repair being conducted outdoors. **See comments on attachment**								
11-Feb-08	Universal Auto Recycling	6441812200	783	ENERGY	WY	Auto Dismantlers	High	9371011318	811198
	Comments/Findings: BMP items need to be implemented * See comments on attached document*								
13-Feb-08	Japan Tech Auto Wrecking	6441812300	777	ENERGY	WY	Auto Dismantlers	High	9371020121	811198
	Comments/Findings: Some BMPs need to be corrected. **See attachment**								
13-Feb-08	RC Import Auto Recycler			ENERGY	WY	Auto Dismantlers	High	9371010144	811198
	Comments/Findings: BMP items need to be implemented. **See attachment**								
13-Feb-08	A&A Auto Recycling	6441811900	775	ENERGY	WY	Auto Dismantlers	High	9371020792	811198
	Comments/Findings: BMP items need to be implemented. **See attached documents**								
13-Feb-08	All Japanese Auto Recycling			ENERGY	WY	Auto Dismantlers	High	9371015706	811198
	Comments/Findings: Some BMPs need to be implemented. **See attachment**								
14-Feb-08	All Toyota/Lexus Wrecking	6441811500	805	ENERGY	WY	Auto Dismantlers	High	9371018543	811198
	Comments/Findings: BMP items need to be implemented. **See attachment**								

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	NAICS Number
14-Feb-08	Japanese Auto Wrecking	6441811500	811	ENERGY	WY	Auto Dismantlers	High	No WDID	811198
	Comments/Findings: Auto boy works is being conducted outdoors. BMPs items need to be implemented. **See attached documents**								
14-Feb-08	SUV Auto Wrecking Inc.		805	ENERGY	WY	Auto Dismantlers	High	9371019236	811198
	Comments/Findings: Auotbody works being conducted outdoors. BMPs need to be implemented. ** See attached documents**								
15-Feb-08	Honda Acura Parts Auto Recycling	6441821500	895	ENERGY	WY	Auto Dismantlers	High	9371011394	811198
	Comments/Findings: BMPs are in place. Site is in good order. **See attachment**								
15-Feb-08	Import Auto Wrecking	6441812900	793	ENERGY	WY	Auto Dismantlers	High	9371016877	811198
	Comments/Findings: All BMPs are in place. Site is in good order.**See attachment**								
18-Feb-08	Pick Your Part Auto Wrecking	6441820800	880	ENERGY	WY	Auto Dismantlers	High	9371012114	811198
	Comments/Findings: All BMPs are in place. Site is in good order. **See attachment**								
18-Feb-08	Action Auto Dismantlers Inc	6291001400	151	REED	CT	Auto Dismantlers	High	9371004000	811198
	Comments/Findings: All BMPs are in place. Site is in good order. **See Attachment**								
18-Feb-08	Calumet Auto Wrecking Inc	6441821400	891	ENERGY	WY	Auto Dismantlers	High	9371004393	811198
	Comments/Findings: Site is in good general order. **See attachment**								
18-Feb-08	Standard Auto Recycling	6291000400	150	REED	CT	Auto Dismantlers	High	9371010775	811198
	Comments/Findings: All BMPS are in place. **See Attachment**								
19-Feb-08	United Rentals Inc	5623501000	501	C	ST	Heavy Equipment Rer	High	9371019886	532490
	Comments/Findings: Site in in good order. BMPs are in place. **See attachment**								
19-Feb-08	Baja California Cycle USA Inc	6290200100	2801	MAIN	ST	Wholesale	Low		423910
	Comments/Findings: All bike parts stored in bins. No oil used in operations. Finished bikes are staged outside.. See attached document.								
19-Feb-08	Aker Leather Products	6221021800	2248	MAIN	ST	Manufacturing	Low		3133
	Comments/Findings: Business is a suite in a large complex. Parking lot drains to a concrete open channel. No site filtering system . See attached documents.								
19-Feb-08	Choes Wholesale	6182803500	693	PALOMAR	ST	Wholesale	Low		
	Comments/Findings: None of the grated drains in the parking lot have filters. Not treatment control for surface water. Parking lot is clean. See attached documents.								

Inspection Date	Facility Name	APN Number	Address	Category	Priority	WDID Number	NAICS Number
19-Feb-08	Express Pipe & Supply Co	5634512600	117 PRESS LN	Wholesale	Low		42
	Comments/Findings:	Supply storage is indoor. Some pipes are stored off the ground.. Area is clean and trash bin closed.					
19-Feb-08	K&T Carpet Services Inc	6170800700	1085 BAY BL	Carpet Services	Low		3133
	Comments/Findings:	Suite in large complex concrete swale conveys parking lot run off to street. See attached documents.					
19-Feb-08	Lyon Technologies Inc	6440403700	1690 BRANDYWINE AV	Manufacturing	Low		3133
	Comments/Findings:	Trash bins under covered area. Parking lot and area are clean. Need filter at grated inlet in parking lot.					
19-Feb-08	Next Day Printed Tees	6170800700	1075 BAY BL	Printing/Copy Service	Low		
	Comments/Findings:	Business is conducted inside. Need to clean roof. Roof drain leaving sediment on concrete driveway.					
19-Feb-08	ABF Freight System Inc.	6441821700	875 ENERGY WY	Transportation	High	9371013254	484220
	Comments/Findings:	SWPPP not being maintained. Missing rain event documentation, sampling data, and training documentation.**See attachement**					
19-Feb-08	SMR Bakery Inc/Califorina Baking	6221115300	681 ANITA ST	Bakery	Low		311830
	Comments/Findings:	Business conducted inside. Common areas are swept and clean. Need to clean up dumpster area.					
20-Feb-08	Arise/Waco Scafolding	6180103100	676 MOSS ST	Construction Equipme	High	No WDID	532490
	Comments/Findings:	All BMPs are in place. Site is in good order**					
20-Feb-08	Hanson Aggregates	6290300500	116 7TH ST	Concrete Work	High	9371015523	238110
	Comments/Findings:	All BMPs are in place. Site is in good general order. **See attachment**					
20-Feb-08	Hydro Scape Products Inc.	5634313000	375 TROUSDALE DR	Wholesale	Low		42
	Comments/Findings:	The site is generally clean and orderly. Continue to maintain area around the outside storage of fertilizer.					
21-Feb-08	Rossin Steel Inc.	6441810900	1880 NIRVANA AV	Fabricated Metal	High	9371020898	332312
	Comments/Findings:	BMP items need to be implemented. **see attachment**					
22-Feb-08	FJ Willert Cont Co.	6441810200	1869 NIRVANA AV	Engineering Services	High	9371016993	236220
	Comments/Findings:	Site is in good order and BMPs are in place. **see attachment**					
22-Feb-08	Brentag Pacific Inc	6441810800	1888 NIRVANA AV	Chemical Storage	High	No WDID	562211
	Comments/Findings:	Site in in good order. BMPs are in place. In the process of registering with RWQB.**See attachment**					

Inspection Date	Facility Name	APN Number	Address	Category	Priority	WDID Number	NAICS Number
25-Feb-08	Conway Western Express	5952313200	2420 BOSWELL RD	Trucking	High	9371015484	484220
	Comments/Findings: All BMPs are in place. Site is in good order. **See attachment**						
25-Feb-08	Rimrock Quarry LLC	6440600600	2041 HERITAGE RD	Others	High	No WDID	212319
	Comments/Findings: SWPPP is missing documentation of training, rain events, and sampling data. Site is in general good order.**See attachment**						
26-Feb-08	United Parcel Service	5953000300	2300 BOSWELL CT	Postal Service	High	9371002086	484220
	Comments/Findings: Site is well organized and most BMPS are in place. Dirt lot maintenance must be implemented. **see attachment**						
28-Feb-08	Ecology Auto Wrecking 2	6441821000	850 ENERGY WY	Auto Dismantlers	High	9371019445	811198
	Comments/Findings: Site is in good order. BMPs are in place.**see attachment**						
28-Feb-08	Ecology Auto Wrecking	6441820100	825 ENERGY WY	Auto Dismantlers	High	9371003325	811198
	Comments/Findings: Site is in good order. Majority of BMPs in place. **see attachment**						
28-Feb-08	Ecology Auto Wrecking 3	6441821200	800 ENERGY WY	Auto Dismantlers	High	9371003280	811198
	Comments/Findings: Site is in good order. Major BMPs re in place. Missing SWPPP and sampling data. **see attachment**						
4-Mar-08	H&M Wrought Iron Factory Inc	6221113200	2560 MAIN ST	Manufacturing	Low		332999
	Comments/Findings: Some BMPs need to be implemented. Site is in general good condition. **see attachment**						
6-Mar-08	Custom Door and Window Sales	61701100300	1128 BAY BL	Wholesale	Low		3133
	Comments/Findings: Site is generally clean with no visible concerns at the time of inspection.						
6-Mar-08	Aqualarm	6170800800	1151 BAY BL	Manufacturing	Low		3133
	Comments/Findings: Site is generally clean with no visible concerns at the time of inspection.						
6-Mar-08	R&R Delta Supplies Inc		1161 BAY BL	Wholesale	Low		42
	Comments/Findings: Site is generally clean with no visible concerns at the time of inspection.						
6-Mar-08	Brunswick Mattress	6170800600	1021 BAY BL	Furnitures	Low		442110
	Comments/Findings: The site is clean at the time of inspection. No visible concerns at this time.						
7-Mar-08	2 Heavy Equipment/Cons.Recyclir	6441820300	855 ENERGY WY	Metal Recycling	High		336999
	Comments/Findings: BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	NAICS Number
11-Mar-08	Videotel Inc	6221115300	681	ANITA	ST	Manufacturing	Low		335211
	Comments/Findings: Business is done indoors. There are no concern at inspection time.								
12-Mar-08	Advantage Printing & Apparel Inc			ANITA	ST	Printing	Low		323113
	Comments/Findings: Business is done indoors. Facility showed a good clean and maintain surrounding.								
12-Mar-08	Otay Metal Mart	6291302800	195	MACE	ST	Wholesale	Low		3133
	Comments/Findings: Facility needs BMPs (Fiber Roll, Silt Fence). See attached document.								
12-Mar-08	Granite Gallery Inc	6291000600	180	MACE	ST	Wholesale	Low		42
	Comments/Findings: Business is done indoors. Facility is in good general order.								
14-Mar-08	LC Turbo	6221112500	2446	MAIN	ST	Equipment Sales	Low		811219
	Comments/Findings: Facility showed a clean and maintained frontage and parking lots.								
3-Apr-08	R L Stone Fabrications			MAIN	ST	Fabrications	Low		238340
	Comments/Findings: Parking lot in front of business is kept clean. No pollutant discharge was observed. See concerns on attached documents.								
3-Apr-08	South Xpress Inc	6291000600	180	MACE	ST	Wholesale	Low		423390
	Comments/Findings: Parking area in front of business is kept clean and maintain.								
4-Apr-08	Otay Metal Mart	6291302800	195	MACE	ST	Wholesale	Low		3133
	Comments/Findings: This is a follow up inspection. Business complied. All discrepancies on the site has been corrected.								
7-Apr-08	Montoya's Auto Wrecking	6441811800	781	ENERGY	WY	Auto Dismantlers	High		
	Comments/Findings: BMPs need to be implemented. **See attached documents**								
8-Apr-08	R L Stone Fabrications	6221112500	2446	MAIN	ST	Fabrications	Low		238340
	Comments/Findings: Excessive dust observed on 04/03/08 was completed. Area is clean.								
24-Apr-08	First Appearance Copy Printing &	6231921800	3156	MAIN	ST	Printing/Copy Service	Low		323119
	Comments/Findings: Business appears to be closed and vacant. The front is clean and orderly.								
24-Apr-08	Flag Crafters	6170800700	1095	BAY	BL	Manufacturing	Low		3133
	Comments/Findings: The site is clean and orderly. The outdoor loading area is clean.								

Inspection Date	Facility Name	APN Number	Address	Category	Priority	WDID Number	NAICS Number
25-Apr-08	BABA Foods	6182803500	693 PALOMAR ST	Manufacturing	Low		3133
	Comments/Findings:	Site is generally clean.					
25-Apr-08	Cabinetry Design Inc	6221115400	675 ANITA ST	Manufacturing	Low		337110
	Comments/Findings:	Site is generally clean. Some equipment maintenance and storage control is required.					
25-Apr-08	Canvas Concept Inc.	6221115800	649 ANITA ST	Manufacturing	Low		3133
	Comments/Findings:	Site is in general good order. **See attachment**					
30-Apr-08	South Bay Auto Wreckers	6441820200	811 ENERGY WY	Auto Dismantlers	High	9371004495	811198
	Comments/Findings:	Site is in good order. All BMPs are in place. **See attachment**					
30-Apr-08	Silent Salvage Search		ENERGY WY	Auto Dismantlers	High	9371020921	811198
	Comments/Findings:	Need to established trash service with Allied Waste. BMPs items need to be implemented. **See attachment**					
5-May-08	Lopez Iron Works Repairs	6221902000	2555 FAIVRE ST	Welding Services	Low		811310
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**					
5-May-08	Vallarta Iron Works		FAIVRE ST	Welding Services	Low		811310
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**					
18-Jun-08	High Tech Business Center @ Ea		861 HAROLD PL		Low		
	Comments/Findings:	Conducted verification on the cleaning and maintenance of the Post Construction BMPs. All treatment facilities were recently installed and cleaned. **see attachment**					

Total Inspections: **79**

ATTACHMENT G

Chapter 14.20
STORM WATER MANAGEMENT AND DISCHARGE CONTROL

Sections:

14.20.010 Purpose and intent.
14.20.020 Scope.
14.20.030 Definitions.
14.20.040 Administration.
14.20.100 Discharge of non-storm water prohibited.
14.20.110 Exemptions to discharge prohibition.
14.20.120 Reduction of pollutants contacting or entering storm water required.
14.20.125 Additional Planning, Design, Construction, and Post-Construction Requirements for All Land Development and Redevelopment Projects.
14.20.130 Containment, cleanup, and notification of spills.
14.20.140 Watercourse protection.
14.20.150 Development in or adjacent to watercourse restricted – Land development, building, or watercourse permit required.
14.20.160 Illegal connection prohibited.
14.20.170 Proof of compliance required.
14.20.200 Inspection and sampling – General.
14.20.210 Inspection procedures – Additional requirements.
14.20.220 Authority to sample and establish sampling devices.
14.20.230 Testing, monitoring or mitigation required – When.
14.20.300 Concealment.
14.20.310 Administrative enforcement powers.
14.20.320 Administrative notice, hearing, and appeal procedures.
14.20.330 Judicial enforcement.
14.20.340 Violations deemed a public nuisance.
14.20.350 Remedies not exclusive.
14.20.360 Civil penalties to be deposited in the storm drain revenue fund.

14.20.010 Purpose and intent.

The purpose of this chapter is to promote the health, safety, and general welfare of the citizens of the City of Chula Vista by:

A. Prohibiting non-storm water discharges to the storm water conveyance system.

B. Preventing discharges to the storm water conveyance system from spills, dumping or disposal of materials other than storm water.

C. Reducing pollutants in storm water discharges, including those pollutants taken up by storm water as it flows over urban areas (urban runoff), to the maximum extent practicable.

D. Reducing pollutants in storm water discharges in order to achieve applicable water quality objectives for surface waters in San Diego County.

The intent of this chapter is to protect and enhance the water quality of our watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Clean Water Act (33 USCA Section 1251, et seq.) and its implementing regulations, the Porter-Cologne Water

Quality Control Act (California Water Code section 13020, et seq.) and its implementing regulations, and the San Diego Regional Water Quality Control Board (NPDES Permit No. CAS 0108758) and any subsequent amendments thereto.

14.20.020 Scope.

This chapter shall be interpreted in accordance with the definitions set forth herein and the provisions of this chapter shall apply to the direct or indirect discharge of pollutants into the City's storm water conveyance system.

Further, this chapter shall be interpreted in accordance with the requirements of the federal Clean Water Act and acts amendatory thereof or supplementary thereto; applicable implementing regulations; NPDES Permit No. CAS 0108758 and any amendment, revision, or reissuance thereof; and the purposes and intent of this chapter.

This chapter, among other things, provides for the prohibition of non-storm water discharges to the storm water conveyance system, the prohibition of illegal connections to the storm water conveyance system, the requirement that all persons reduce the volume and character of pollutants related to urban activity entering the storm water conveyance system to the maximum extent practicable, and the establishment of enforcement mechanisms for violation of this chapter, including civil and criminal fines and penalties.

14.20.030 Definitions.

When used in this chapter, the following terms shall have the meanings ascribed to them in this section:

A. "Basin plan" shall mean the "Comprehensive Water Quality Control Plan for the San Diego Basin" adopted by the Regional Water Quality Control Board, San Diego Region (September 1994), and approved by the State Water Resources Control Board, together with subsequent amendments.

B. "Best management practices (BMPs)" shall mean schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce, to the maximum extent practicable, the discharge of pollutants directly or indirectly to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

C. "Building permit" shall mean a permit issued by the building official pursuant to Chapter 15.20 CVMC.

D. "California ocean plan" shall mean the "California Ocean Plan: Water Quality Control Plan for Ocean Waters of California" adopted by the State Water Resources Control Board in July, 2005, and any subsequent amendments.

E. "Clean Water Act" shall mean the federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 95-117 (33 USCA Section 1251, et seq.), and any subsequent amendments.

F. "County health officer" shall mean the health officer of the County of San Diego Department of Public Health or designee.

G. "Development" shall mean:

1. The placement or erection of any solid material or structure on land, in water, or under water;

2. The discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste;

3. The grading, removing, dredging, mining, or extraction of any materials;

4. A change in the density or intensity of the use of land, including, but not limited to, a subdivision pursuant to the Subdivision Map Act (Government Code section 66410, et seq.) and any other division of land, except where the division of land is brought about in connection with the purchase of such land by a public agency for public recreational use;

5. A change in the intensity of the use of water, or of access thereto;

6. The construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal entity; and

7. The removal or harvesting of major vegetation other than for agricultural purposes.

As used in this definition, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line. (Source: Government Code section 65927).

H. "Employee training program" shall mean a documented employee training program for all persons responsible for implementing a storm water pollution prevention plan. The employee training program shall include, but is not limited to, the following topics:

1. Laws, regulations, and local ordinances associated with storm water pollution prevention, and an overview of the potential impacts of polluted storm water on the receiving waters of the San Diego region;

2. Proper handling of all materials and wastes to prevent spillage;

3. Mitigation of spills including spill response, containment and cleanup procedures;

4. Visual monitoring of all effluent streams to ensure that no illegal discharges enter the storm water conveyance system;

5. Discussion of the differences between the storm water conveyance system and the sanitary sewer system;

6. Identification of all on-site connections to the storm water conveyance system;

7. Preventive maintenance and good housekeeping procedures;

8. Material management practices employed by the facility to reduce or eliminate pollutant contact with storm water discharge.

I. "Enclosed bays and estuaries plan" means the "California Enclosed Bays and Estuaries Plan: Water Quality Control Plan for the Enclosed Bays and Estuaries of California," adopted by the State Water Resources Control Board on November 16, 1995, and all subsequent amendments.

J. "Enforcement agency" shall mean the City of Chula Vista or its authorized agents charged with ensuring compliance with this chapter.

K. "Enforcement official" shall mean the Director of Public Works or his or her designee.

L. "Hazardous materials" shall mean any substance or mixture of substances which is toxic, corrosive, flammable, an irritant, a strong sensitizer, or generates pressure through decomposition, heat or other means, if such a substance or mixture of substances may cause substantial injury, serious illness or harm to humans, domestic livestock, or wildlife.

M. "Illegal connection" shall mean any physical connection to the storm water conveyance system which has not been permitted by the City of Chula Vista or the San Diego Regional Water Quality Control Board, or which drains illegal discharges either directly or indirectly into the storm water conveyance system.

N. "Illegal discharge" shall mean any discharge to the storm water conveyance system that is not composed entirely of storm water, or is expressly prohibited by federal, state, or local

regulations, laws, codes, or ordinances, NPDES Permit No. CAS 0108758, or degrades the quality of receiving waters in violation of any plan water quality objective.

O. "Inland surface water plan" means the "California Inland Surface Waters Plan: Water Quality Control Plan for Inland Surface Waters of California" adopted by the State Water Resources Control Board on April 1991, and all amendments thereto.

P. "Land development permit" shall mean a permit issued by the Director of Engineering and General Services pursuant to Chapter 15.04 CVMC.

Q. "Maximum extent practicable (MEP)" shall mean the technology-based standard established by Congress in Clean Water Act Section 402(p)(3)(B)(iii) that municipal dischargers of storm water discharges must meet. MEP generally emphasizes pollution prevention and source control BMPs primarily in combination with treatment methods serving as a backup.

R. "National Pollutant Discharge Elimination System (NPDES) permit" shall mean a permit issued by the Regional Water Quality Control Board or the State Water Resources Control Board, pursuant to Chapter 5.5, Division 7 of the California Water Code, to control discharges from point sources to waters of the United States, including, but not limited to:

1. California Regional Water Quality Control Board, San Diego Region, (NPDES No. CAS 0108758), NPDES municipal permit – Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego Count Regional Airport Authority

2. NPDES general permit for storm water discharges associated with industrial activities;

3. NPDES general permit for storm water discharges associated with construction activity; and

4. California Regional Water Quality Control Board, San Diego Region, general dewatering permits.

S. "NPDES general permit" shall mean a permit issued by the State Water Resources Control Board, including, but not limited to:

1. NPDES general permit for storm water discharges associated with industrial activities; and

2. NPDES general permit for storm water discharges associated with construction activity.

T. "Non-storm water" shall mean any water conveyed to the storm water conveyance system that is not entirely composed of storm water (also see definition of "storm water").

U. "Parking lot" shall mean an open area, other than a street or other public way, used for the parking of motorized vehicles, whether for a fee or free, to accommodate clients or customers, or to accommodate residents of multifamily dwellings (i.e., apartments, condominiums, townhomes, mobilehomes, dormitories, group quarters, etc.).

V. "Person" shall mean any individual, organization, business trust, company, partnership, entity, firm, association, corporation, or public agency, including the state of California and the United States of America.

W. "Plan water quality objective" means any or all applicable requirements of the basin plan, the enclosed bays and estuaries plan, the inland surface water plan, and the California ocean plan.

X. "Pollutant" may include, but is not limited to, solid waste, sewage, garbage, medical waste, wrecked or discarded equipment, radioactive materials, dredged soil, rock, sand, sediment, industrial waste, and any organic or inorganic contaminant whose presence degrades the quality of the receiving waters in violation of basin plan or California ocean plan standards. "Pollutant"

includes, but is not limited to, fecal coliform, fecal streptococcus, enterococcus, volatile organic carbon (VOC), surfactants, oil and grease, petroleum hydrocarbons, total organic carbon (TOC), lead, copper, chromium, cadmium, silver, nickel, zinc, cyanides, phenols, and biocides.

A "pollutant" also includes any substance defined as a pollutant under 40 CFR Section 122.2 and any contaminant which degrades the quality of the receiving waters in violation of basin plan or California ocean plan standards by altering any of the following parameters: pH, total suspended and settleable solids, biochemical oxygen demand (BOD), chemical oxygen demand (COD), nutrients, and temperature.

Y. "Premises" shall mean any building, lot, parcel, real estate, land, or portion of land, whether improved or unimproved.

Z. "Receiving waters" shall mean surface bodies of water, as described in NPDES Permit No. CAS 0108758, which serve as discharge points for the storm water conveyance system, including creeks, rivers, reservoirs, lakes, lagoons, estuaries, harbors, bays, and the Pacific Ocean.

AA. "Significant quantities" shall mean the volume, concentrations, or mass of a pollutant in a discharge that can cause or threaten to cause pollution, contamination, or nuisance; or adversely impact human health or the environment; or cause or contribute to a violation of any water quality standards applicable to the receiving water.

BB. "Storm water" shall mean urban runoff and snow melt runoff consisting of only those discharges which originate from precipitation events. Storm water is that portion of precipitation that flows across a surface to the storm water conveyance system or receiving waters.

For the purposes of this chapter, storm water runoff and drainage from areas that are in a natural state, have not been significantly disturbed or altered, either directly or indirectly, as a result of human activity, and the character and type of pollutants naturally appearing in the runoff that have not been significantly altered, either directly or indirectly, as a result of human activity, shall be considered "unpolluted" and shall satisfy the definition of "storm water" in this chapter.

CC. "Storm water conveyance system" means those municipal, private and/or natural facilities within the City of Chula Vista by which storm water may be conveyed to waters of the United States, including any roads with drainage systems, municipal streets, catch basins, and watercourses.

DD. "Storm water pollution prevention plan" shall mean a document which describes the on-site program activities to utilize BMPs to eliminate or reduce pollutant discharges to the storm water conveyance system to the maximum extent practicable.

A storm water pollution prevention plan prepared and implemented pursuant to any NPDES permit shall meet the definition of a "storm water pollution prevention plan" for the purposes of this chapter.

EE. "Watercourse" shall mean any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, arroyo or wash in which waters flow in a definite direction or course, either continuously or intermittently, and which has a definite channel and a bed or banks. A "channel" is not limited to land covered by minimal or ordinary flow but also includes land covered during times of high water. "Watercourse" does not include any surface drainage prior to its collection in a stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, arroyo or wash.

FF. "Watercourse permit" shall mean a permit issued by the director of Engineering and General Services pursuant to Chapter 14.08 CVMC.

GG. “Wetlands” shall mean areas that are inundated or saturated by surface or ground waters at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. “Wetlands” generally includes swamps, marshes, bogs, and similar areas.

14.20.040 Administration.

The Enforcement Official shall administer, implement, and enforce the provisions of this chapter. Any powers granted to, or duties imposed upon, the Enforcement Official may be delegated by the enforcement official to persons in the employ of the City, or pursuant to contract.

When deemed necessary by the Enforcement Official, the Enforcement Official shall prepare and present to the City Council for approval regulations and programs consistent with the general policies established herein by the City Council. The Enforcement Official shall enforce Council-approved regulations necessary to the administration of this chapter, and may recommend that the Council amend such regulations and programs from time to time, as conditions require.

14.20.100 Discharge of non-storm water prohibited.

A. It is unlawful for any person to discharge non-storm water into the storm water conveyance system, except as provided in CVMC 14.20.110.

B. It is unlawful for any person to cause either individually or jointly any discharge into or from the storm water conveyance system that results in or contributes to a violation of any NPDES permit. Liability for any damage, abatement costs, or fines against the permit holder caused by such discharge shall be the responsibility of the person(s) causing or responsible for the discharge.

14.20.110 Exemptions to discharge prohibition.

The following discharges are exempt from the prohibition set forth in CVMC 14.20.100; provided, that they do not cause or significantly contribute to violations of the water quality standards set forth in any plan water quality objective or convey significant quantities of pollutants to receiving waters, or are a danger to public health and safety:

A. Any discharge or connection regulated under an NPDES permit issued to the discharger and administered by the state of California pursuant to Chapter 5.5, Division 7 of the California Water Code; provided, that the discharger is in compliance with all requirements of the permit and other applicable laws, and regulations, and programs.

B. Discharges from the following activities will not be considered a source of pollutants to waters of the United States:

1. Diverted steam flows;
2. Rising Ground Water;
3. Uncontaminated ground water infiltration [as defined in 40 CFR 35.2005(20)] to MS4s;
4. Uncontaminated pumped ground water;
5. Foundation drains;
6. Springs;
7. Water from crawl space pumps;
8. Footing drains;
9. Air conditioning condensation;
10. Flows from riparian habitats and wetlands;

11. Water line flushing;
12. Landscape irrigation;
13. Discharges from potable water sources not subject to NPDES Permit No. CAG679001, other than water main breaks;
14. Irrigation water;
15. Lawn watering;
16. Individual residential car washing; and
17. Dechlorinated swimming pool discharges.

C. Any discharge which the enforcement agency, the County Health Officer, the Regional Water Quality Control Board and/or the U.S. Environmental Protection Agency determines in writing is necessary for the protection of the public health and safety.

14.20.120 Reduction of pollutants contacting or entering storm water required.

Any person engaged in activities which may result in pollutants entering the storm water conveyance system shall, to the maximum extent practical, undertake all measures to reduce the risk of illegal discharges. The following requirements shall apply:

A. Best Management Practices Implementation. It is unlawful for any person not to comply with BMPs and pollution control requirements established by the City or other responsible agency to eliminate or reduce pollutants entering the City's storm water conveyance system. BMPs shall be complied with throughout the life of the activity.

B. Storm Water Pollution Prevention Plan. When the enforcement official determines that a business or business-related activity causes or may cause an illegal discharge to the storm water conveyance system, then the enforcement official may require the business to develop and implement a storm water pollution prevention plan (SWPPP). Businesses which may be required to prepare and implement a SWPPP include, but are not limited to, those which perform maintenance, storage, manufacturing, assembly, equipment operations, vehicle loading, and/or cleanup activities partially or wholly out of doors.

C. Coordination with Hazardous Materials Response Plans and Inventory. Any activity subject to the hazardous materials inventory and response program, pursuant to Chapter 6.95 of the California Health and Safety Code, shall include provisions for compliance with this chapter in its hazardous materials response plan, including prohibitions of unlawful non-storm water discharges and illegal discharges, and provisions requiring the use of BMPs to reduce the discharge of pollutants in storm water.

D. Impervious Surfaces. Persons owning or operating a parking lot or an impervious surface (including, but not limited to, service station pavements or paved private streets and roads) used for automobile-related or similar purposes shall clean those surfaces as frequently and as thoroughly as is necessary, in accordance with BMPs, to prevent the discharge of pollutants to the City's storm water conveyance system. Sweepings or cleaning residue from parking lots or impervious surfaces shall not be swept or otherwise made or allowed to go into any storm water conveyance, gutter, or roadway, but must be disposed of in accordance with regional solid waste procedures and practices.

E. Compliance with NPDES Permit for Storm Water Discharges. Each discharger subject to any NPDES permit for storm water discharges shall comply with all requirements of such permit.

14.20.125 Additional Planning, Design, Construction, and Post-Construction Requirements for All Land Development and Redevelopment Projects.

The City of Chula Vista Development Storm Water Manual is a part of this Ordinance and is incorporated by reference as though set forth in full in this Ordinance. No land owner or development project proponent in the City of Chula Vista shall receive any City permit or approval for land development activity or significant redevelopment activity unless the project meets or will meet the requirements of this Ordinance and the Development Storm Water Manual.

The Development Storm Water Manual includes, among other requirements, the following requirements:

- Phased grading during construction (limitation of grading to a maximum disturbed area before either temporary or permanent erosion controls are implemented).
- Compliance with Low Impact Development (LID) principals.
- Compliance with Interim Hydromodification criteria and Hydrograph Modification Management Plan (HMP) requirements.
- Compliance with Post-Construction Best Management Practices self inspections, maintenance, record keeping, and maintenance certification.

The City of Chula Vista generally accepts standards established in the most up-to-date editions of the following documents for Best Management Practices, however, the City Engineer will make the final determination to approve or disapprove any proposed BMPs:

- Stormwater Best Management Practices Handbooks developed by the California Stormwater Quality Association
- CALTRANS Treatment BMP Technology Report
- County of San Diego Low Impact Development Handbook

Long-term maintenance obligations of all proposed Best Management Practices must be approved in an agreement that runs with the land in perpetuity prior to the issuance of a grading or other construction permit.

14.20.130 Containment, cleanup, and notification of spills.

It is unlawful for any person owning or occupying any premises who has knowledge of any release of significant quantities of materials, pollutants, or waste which may result in pollutants or non-storm water discharges entering the City's storm water conveyance system to not immediately take all reasonable action to contain, minimize, and clean up such release. Such person shall notify the City of Chula Vista of the occurrence and/or the County of San Diego Department of Health Services/Environmental Health Services Hazardous Materials Management Division, and any other appropriate agency of the occurrence as soon as possible, but no later than 24 hours from the time of the incident's occurrence.

14.20.140 Watercourse protection.

In addition to the prohibitions relating to watercourses and the requirements for watercourse permits set forth in Chapter 14.08 CVMC, it is unlawful for any person owning and/or occupying property through which a watercourse passes to fail or refuse to:

A. Keep and maintain that part of the watercourse within the property free of trash, debris, and other obstacles which would pollute, contaminate, or significantly retard the flow of water through the watercourse.

B. Maintain existing privately owned structures within or adjacent to a watercourse so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

C. Keep and maintain healthy bank vegetation in such a manner as to minimize the vulnerability of the watercourse to erosion.

14.20.150 Development in or adjacent to watercourse restricted – Land development, building, or watercourse permit required.

No person shall carry out development within 30 feet of the centerline of any watercourse or within 20 feet of the edge of any watercourse, whichever is the greater distance from the top of the creek bank, unless a land development, building, or watercourse permit has first been obtained. The City Officer issuing said permit is hereby granted the authority to establish controls on the volume and rate of storm water runoff from such new development as may be reasonable and appropriate to minimize the discharge and transport of pollutants to the maximum extent practicable in the granting or conditioning the granting of such permit.

14.20.160 Illegal connection prohibited.

It is unlawful for any person to establish, use, or maintain any illegal connection to the storm water conveyance system, regardless of whether such connection was made under a permit or other authorization or whether permissible under the law or practices applicable or prevailing at the time of the connection, except as authorized in CVMC 14.20.110(A).

14.20.170 Proof of compliance required.

Proof of compliance with this chapter may be required in a form acceptable to the City prior to or as a condition of a subdivision map, site plan, development improvement plan, building permit, grading permit or any other permit or activity which may affect the storm water conveyance system and/or the waters entering it. Proof of compliance shall be furnished upon request of the enforcement official.

14.20.200 Inspection and sampling – General.

A. After obtaining legal entry to any premises in accordance with CVMC 1.16.010 or by consent, the representative of the enforcement agency shall have the right to:

1. Carry out any inspection and sampling activities on the premises as may be necessary to enforce the provisions and requirements of this chapter. Upon request, split samples shall be given to the owner and/or occupant of the premises.

2. Inspect any vehicle on the premises reasonably suspected of causing, contributing to, or being used to transport an illegal discharge to the storm water conveyance system.

3. Conduct tests, analyses and evaluations to determine if a discharge of storm water is an illegal discharge or to determine if the requirements of this chapter have been met.

4. Photograph any effluent stream, material or waste, material or waste container, container label, vehicle, waste treatment process, waste disposal site, or condition contributing to storm water pollution and constituting a violation of this chapter found during an inspection.

5. Inspect and copy pertinent records relating to the facility's operations, including inventories, chemical usage, materials, sources, hazardous materials manifests and disposal records, treatment and operations log books, and materials invoices.

6. Review and obtain a copy of the storm water pollution prevention plan prepared by the owner and/or occupant or facility operator, if such a plan is required.

7. Require the owner and/or occupant or facility operator to retain evidence, as instructed by the inspector, for a period not to exceed 30 days.

8. Review and obtain copies of all storm water monitoring data compiled by the owner and/or occupant or facility operator, if such monitoring is required.

9. Review and obtain copies of all records related to handling of pollutants and hazardous materials.

B. The Enforcement Official may conduct routine or area inspections, which shall be based upon such reasonable selection processes as may be deemed necessary to carry out the objectives of this chapter, including, but not limited to, random sampling or sampling in areas with evidence of storm water contamination, illegal discharges, discharge of non-storm water to the storm water conveyance system, or similar factors.

C. All enforcement officials shall have adequate identification. Enforcement officials and other authorized personnel shall identify themselves when entering any property for inspection purposes or when inspecting the work of any contractor.

14.20.210 Inspection procedures – Additional requirements.

During the inspection, the Enforcement Official shall comply with all reasonable security, safety, and sanitation measures. In addition, the Enforcement Official shall comply with reasonable precautionary measures specified by the owner and/or occupant or facility operator.

At the conclusion of the inspection, and prior to leaving the site, the Enforcement Official shall make every reasonable effort to review with the owner and/or occupant or the facility operator each of the violations noted by the Enforcement Official and any corrective actions that may be necessary. A report listing any violation found by the Enforcement Official during the inspection shall be kept on file by the enforcement agency. A copy of the report shall be provided to the owner and/or occupant or facility operator, or left at the premises if no person is available. If corrective action is required, then the occupant, facility owner, and/or facility operator shall implement a plan of corrective action based upon a written plan of correction, submitted to the enforcement agency, which states the corrective actions to be taken and the expected dates of completion. Failure to implement a plan of correction constitutes a violation of this chapter.

14.20.220 Authority to sample and establish sampling devices.

With the consent of the property owner or occupant or pursuant to an inspection warrant, the Enforcement Official is authorized to establish on any property that discharges directly or indirectly to the municipal storm water conveyance system such devices as are necessary to conduct sampling or metering operations. During all inspections as provided herein, the Official may take samples of materials, wastes, and/or effluent as deemed necessary to aid in the pursuit of the inquiry or in the recordation of the activities on-site.

14.20.230 Testing, monitoring or mitigation required – When.

A. The Enforcement Official may require that any person engaged in any activity and/or owning or operating any facility which causes or may contribute to storm water pollution or contamination, illegal discharges, and/or discharge of non-storm water to the storm water conveyance system perform monitoring, including physical and chemical monitoring and/or analyses, and furnish reports as the Enforcement Official may specify, if:

1. The person, or facility owner or operator, fails to eliminate illegal discharges within a specified time after receiving a written notice to do so by the Enforcement Official; or

2. The Enforcement Official has documented repeated violations of this chapter by the person or facility owner, or operator, which have caused or contributed to storm water pollution.

It is unlawful for such person or facility owner or operator to fail or refuse to undertake and provide the monitoring, analyses, and/or reports specified. Specific monitoring criteria shall bear a relationship to the types of pollutants which may be generated by the person's activities or the facility's operations. If the enforcement agency has evidence that a pollutant is originating from a specific premises, then the enforcement agency may require monitoring for that pollutant regardless of whether said pollutant may be generated by routine activities or operations. The person or facility owner or operator shall be responsible for all costs of these activities, analyses and reports.

B. Any persons required to monitor, pursuant to subsection (A) of this section, shall implement a storm water monitoring program including, but not limited to, the following:

1. Routine visual monitoring for dry weather flows;

2. Routine visual monitoring for spills which may pollute storm water runoff;

3. A monitoring log including monitoring date, potential pollution sources, as noted in subsections (B)(1) and (2) of this section, and a description of the mitigation measures taken to eliminate any potential pollution sources.

C. If testing, monitoring or mitigation required pursuant to this chapter is deemed no longer necessary by the enforcement official, then any or all of the requirements contained in subsections (A) and (B) of this section may be discontinued.

D. A storm water monitoring program prepared and implemented pursuant to any state-issued NPDES general permit shall be deemed to meet the requirements of a monitoring program for the purposes of this chapter. All monitoring data and analytical evaluation/assessment reports required by such a permit shall be submitted to the City at the same time the data and reports are submitted to the Regional Water Quality Control Board.

14.20.300 Concealment.

Causing, permitting, aiding, abetting or concealing a violation of any provision of this chapter is unlawful and shall constitute a separate violation of this chapter..

14.20.310 Administrative enforcement powers.

The enforcement agency and Enforcement Official can exercise any enforcement powers as provided in CVMC Title 1. In addition to the general enforcement powers provided in CVMC Title 1, the enforcement agency and Enforcement Official have the authority to utilize the following administrative remedies as may be necessary to enforce this chapter:

A. Cease and Desist Orders. When the Enforcement Official finds that an illegal discharge has or is likely to occur or an illegal connection is in place, the Enforcement Official may issue an

order to cease and desist such discharge, practice, or operation likely to cause such discharge and direct that those persons not complying shall:

1. Comply with the applicable provisions and policies of this chapter;

2. Comply with a time schedule for compliance, which may consist of a duty to cease and desist immediately; and

3. Take appropriate remedial or preventive action to prevent the violation from recurring.

B. Notice to Clean and Abate. Whenever the Enforcement Official finds any oil, earth, dirt, grass, weeds, dead trees, tin cans, rubbish, refuse, waste or any other material of any kind in or upon the sidewalk abutting or adjoining any parcel of land, or upon any parcel of land or grounds, which may result in an increase in pollutants entering the City's storm water conveyance system or a non-storm water discharge to the City's storm water conveyance system, the enforcement official may issue orders and give written notice to remove same in any reasonable manner. The recipient of such notice shall undertake the activities as described in the notice.

C. Storm Water Pollution Prevention Plan. The enforcement official shall have the authority to establish elements of a storm water pollution prevention plan, and to require any owner or occupier of any premises to adopt and implement such a plan, pursuant to CVMC 14.20.120(B), as may be reasonably necessary to fulfill the purposes of this chapter.

D. Employee Training Program. The Enforcement Official shall have the authority to establish elements of an employee training program, as may be necessary to fulfill the purposes of this chapter, where such a program has been required as an element of a storm water pollution prevention plan.

E. Best Management Practices. The Enforcement Official may establish the requirements of BMPs for any premises pursuant to CVMC 14.20.040.

F. Civil Penalties. Notwithstanding any other provisions of the Municipal Code, a person who violates any of the provisions of this chapter or who fails to implement a storm water monitoring plan, violates any cease and desist order or notice to clean and abate, or fails to adopt or implement a storm water pollution prevention plan as directed by the enforcement official shall be liable for a civil penalty not to exceed $10,000 for each day such a violation exists. The violator shall also be charged for the full costs of any investigation, inspection, or monitoring survey which led to the detection of any such violation; for abatement costs; and for the reasonable costs of preparing and bringing legal action under this subsection. In addition to any other applicable procedures, the enforcement agency may utilize the lien procedures of Chapter 1.30 CVMC to enforce the violator's liability. The violator may also be liable for compensatory damages for impairment, loss or destruction to water quality, wildlife, fish and aquatic life.

G. Administrative Citations. Notwithstanding any other provision of the Municipal Code, a person who violates any provision of this chapter or disobeys an enforcement order may be issued an administrative citation by the enforcement official requiring immediate corrective action and imposing an administrative fine in an amount as set forth in CVMC 1.41.100(D)(1).

14.20.320 Administrative notice, hearing, and appeal procedures.

A. Service. Unless otherwise provided herein, any order, notice of violation, or other notice required to be given by the Enforcement Official under this chapter shall be in writing and served in accordance with CVMC 1.40.030.

B. Notice Contents. Notwithstanding any other provision of the Municipal Code, when the Enforcement Official determines that a violation of one or more provisions of this chapter exists

or has occurred, any violator(s) may be served with a written notice of violation and order. The notice and order shall state the Municipal Code section violated, describe how violated, the location, date(s) and time(s) of the violation(s), and describe the corrective action required. The notice and order may require immediate corrective action by the violator(s) and explain which method(s) of enforcement the City is utilizing. The notice and order shall explain the consequences of failing to comply. Finally, the notice and order shall identify all hearing/appeal rights and specify the issuing officer.

C. Hearings and Appeals. Notwithstanding any other provision of the Municipal Code, a violator may request a hearing to contest the Enforcement Official's determination that a violation has occurred. Such request must be in writing and received by the City within 10 calendar days of service of the notice of violation (or 30 calendar days for out-of-state residents) in a form approved by the Enforcement Official. If the City does not receive such a written request within 10 calendar days (or 30 calendar days for out-of-state residents), it shall constitute a waiver of the right to a hearing and adjudication of all or any portion of the notice and order. Once a request for hearing is received, the hearing shall be conducted pursuant to CVMC 1.40.020(B) through (I) and 1.40.070. If the violator(s) fails to attend the hearing, it shall constitute a waiver of the right to a hearing and adjudication of all or any portion of the notice and order.

14.20.330 Judicial enforcement.

A. Criminal Penalties. Notwithstanding CVMC 1.20.010, any person who violates any provision of this chapter or who fails to implement a storm water monitoring plan, violates any cease and desist order or notice to clean and abate, or fails to adopt or implement a storm water pollution prevention plan as directed by the enforcement official shall be punished, upon conviction, by a fine not to exceed $10,000 for each day in which such violation occurs, or imprisonment in the San Diego County jail for a period not to exceed one year, or both.

B. Injunction/Abatement of Public Nuisance. Whenever a discharge into the storm water conveyance system is in violation of the provisions of this chapter or otherwise threatens to cause a condition of contamination, pollution, or nuisance, the Enforcement Official may also cause the City to seek a petition to the superior court for the issuance of a preliminary or permanent injunction, or both, or an action to abate a public nuisance, as may be appropriate in restraining the continuance of such discharge.

C. Other Civil Action. Whenever a notice and order or Hearing Officer's decision is not complied with, the City Attorney may, at the request of the Enforcement Official, initiate any appropriate civil action in a court of competent jurisdiction to enforce such notice and order and decision, including the recovery of any unpaid storm drain fees and/or civil penalties provided herein.

14.20.340 Violations deemed a public nuisance.

In addition to the other civil and criminal penalties provided herein, any condition caused or permitted to exist in violation of any of the provisions of this chapter is a threat to the public health, safety, and welfare and is declared and deemed a public nuisance, which may be summarily abated and/or restored as directed by the Enforcement Official in accordance with the procedures identified in this chapter or Chapter 1.30 CVMC. A civil action to abate, enjoin or otherwise compel the cessation of such nuisance may also be taken by the City, if necessary.

The full cost of such abatement and restoration shall be borne by the owner of the property, and the cost thereof shall be a lien upon and against the property in accordance with the procedures set forth in Chapter 1.30 CVMC.

14.20.350 Remedies not exclusive.

Remedies set forth in this chapter are not exclusive but are cumulative to all other civil and criminal penalties provided by law, including, but not limited to, penalty provisions of the federal Clean Water Act and/or the State Porter-Cologne Water Quality Control Act. The seeking of such federal and/or state remedies shall not preclude the simultaneous commencement of proceedings pursuant to this chapter.

14.20.360 Civil penalties to be deposited in the storm drain revenue fund.

Any civil penalties collected by the City as a result of violations of this chapter shall be deposited in the storm drain revenue fund.

ATTACHMENT G

Chapter 15.04
EXCAVATION, GRADING, CLEARING, GRUBBING AND FILLS*

Sections:

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15.04.010 Definitions.
15.04.015 Permit required for all land development work and soil investigations.
15.04.017 Other required permits.
15.04.018 Additional Planning, Design, Construction, and Post-Construction Requirements for All Land Development and Redevelopment Projects.15.04.020 Compliance with conditions and specifications required – Deviations from standards permitted when.
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* For statutory provisions authorizing cities to abate building nuisances, see Health and Safety Code § 17980, et seq.; for statutory requirement for cities to pass a soil testing ordinance, see Health and Safety Code §§ 17953 – 17957.

15.04.005 Purpose and intent of provisions.

The purpose of this chapter is to establish minimum requirements for land development work, to provide for the issuance of permits and for the enforcement of the requirements. These

provisions are supplementary and additional to the subdivision and zoning regulations of this code and shall be read and construed as an integral part of said regulations and the land development patterns and controls established thereby. It is the intent of the City Council to protect life and property and promote the general welfare; enhance and improve the physical environment of the community; and preserve, subject to economic feasibility, the natural scenic character of the City. In administering these provisions, the following goals should be respected:

A. Ensuring that future development of lands, particularly in the hilly areas of the City, occurs in the manner most compatible with surrounding areas and so as to have the least adverse effect upon other persons or lands, or upon the general public;

B. Ensuring that soil will not be stripped and removed from lands in the more scenic parts of the City, leaving the same barren, unsightly, unproductive, and subject to erosion and the hazards of subsidence and faulty drainage;

C. Encouraging the planning, design and development of building sites in such fashion as to provide the maximum in safety and human enjoyment, while adapting development to and taking advantage of the best use of the natural terrain;

D. Encouraging and directing special attention toward retaining, insofar as practical, the natural planting and a maximum number of existing trees;

E. Ensuring any impact to sensitive biological resources, as defined by CVMC 17.35.030, is consistent with the goals and policies of the Chula Vista MSCP subarea plan.

15.04.010 Definitions.

The following words and phrases, when used in this chapter, shall be construed as defined in this section:

"Appurtenant structures" means manmade structures related to and necessitated by the proposed grading and includes paved drainage ditches, inlet structures, lined channels, culverts, outlet structures and retaining walls.

"Building pad" means that portion of an embankment and/or excavation contained within an area bounded by a line five feet outside the foundation footing.

"Building site" means that portion of an embankment and/or excavation containing the building pad(s) and lying within an area bounded by the top of slopes and/or toe of slopes within the lot or parcel.

"Certify" or "certification" means a signed written statement that the specific inspection and tests which were required have been performed and that the works comply with the applicable requirements of this chapter, the plans, and the permit.

"Clearing" means the cutting of natural vegetation by any means, without disturbance to the soil and root system.

"Clearing and grubbing permit" means a permit issued pursuant to this chapter that allows clearing and grubbing that is not in association with other land development work.

"Compaction" means densification of a soil or rock fill by mechanical or other acceptable procedures.

"Contract, private" means an agreement between a property owner and a qualified contractor to do land development work.

"Contractor" means a contractor licensed by the state to do work covered by this chapter. A contractor may be authorized to act for a property owner in doing such work.

“Embankment” or “fill” means any act by which earth, sand, gravel, rock or any other material is deposited, placed, pushed, dumped, pulled, transported or moved to a new location and the conditions resulting therefrom.

“Embankment, uncontrolled” means any embankment constructed as land development on which no soil testing was performed or no compaction reports or other soil reports were prepared or submitted.

“Engineer, private” means a civil engineer registered by the state. A private engineer may be authorized to act for a property owner in doing work covered by this chapter.

“Engineering geologist” means a certified engineering geologist, registered by the state, who is engaged in the practice of applying geological principles and data to engineering problems dealing with naturally occurring rock and soil for the purpose of assuring that geological factors are recognized and adequately interpreted in engineering practice.

“Erosion” means the process by which the ground surface is worn away by the action of water or wind.

“Excavation or cut” means any earth, sand, gravel, rock or any similar material which is cut into, dug, quarried, uncovered, removed, displaced, relocated or bulldozed by man, and the conditions resulting therefrom.

“Grade” means the elevation and cross-sections established for the finished surface. All grades shall be based upon the official datum of the City.

“Grading” means any excavating or filling or combination thereof and shall include the land in its excavated or filled conditions.

“Grubbing” means the removal of natural vegetation by any means including removal of the root system.

“Land development permit” means a permit issued pursuant to this chapter to conduct land development work.

“Land development work” means the making of excavations and embankments on private property and the construction of slopes, drainage structures, fences and other facilities incidental thereto, where it is necessary to safeguard life, limb, health, property and public welfare by regulating and controlling the design, construction and quality of materials. Land development work also includes other associated grading, and clearing and/or grubbing conducted in preparation for such development.

“Landscape architect” means a landscape architect, registered by the state, who performs professional work in physical land planning and integrated land development, including the design of landscape planting programs.

“Landscape manual” means the current “City of Chula Vista Landscape Manual” approved by resolution of the City Council.

“Minor slope” means a slope four feet or less in vertical dimension in either cut or fill, between single-family lots and not parallel to any roadway.

“Natural terrain” means the original contour of a site prior to any grading.

“Permittee” means any person to whom a permit is issued pursuant to this chapter.

“Property owner” means the owner, subdivider or developer of real property which will be benefited by the proposed land development work.

“Property, public” means property owned in fee by the City, or dedicated for public use.

“Public improvement” means publicly owned construction, structures or facilities in the public right-of-way designed for the public use, safety or general welfare.

"Public rights-of-way" means public easements or dedications for streets, alleys and/or other use.

"Rough grading" is the condition where the ground surface approximately conforms to the design grade, generally within 0.5 feet.

"Slope" means the inclined exposed surface of a fill, excavation or natural terrain.

"Slope, natural" means the predominant slope or slopes of land in its original condition prior to any grading.

"Soil engineer" means a civil engineer registered by the state who submits evidence to the satisfaction of the City Engineer that:

1. He is engaged in the practice of civil engineering and spends a majority of his time in the field of applied soil mechanics and foundations engineering;

2. He has at least four years of responsible practical experience in the field of applied soil mechanics;

3. He is qualified to make the investigations and determinations, render the reports and opinions, and perform the duties of a soil engineer as required by this chapter.

All persons meeting the qualifications set forth above shall be recognized by the City Engineer as qualified to perform soil engineering under the provisions of this chapter.

"Soil, expansive" means any soil which swells more than three percent when prepared and tested by a method approved by the City Engineer.

"Subdivider" means a person, firm, corporation, partnership or association who causes land to be divided into one or more subdivisions for himself or others as defined by those sections of the Government Code known as the Subdivision Map Act.

15.04.015 Permit required for all land development work and soil investigations.

No person, either as property owner, contractor, private engineer or otherwise, shall do or shall cause to be done any land development work without first having obtained either a land development permit or clearing and grubbing permit to do such work and having held a pregrading or preclearing meeting if required by the City Engineer, except as provided in CVMC 15.04.150.

Soil investigations by a soil engineer or engineering geologist which involves trenching or scarifying of the natural terrain shall require a permit. A special investigation fee shall be paid prior to issuance of such permit.

15.04.017 Other required permits.

Prior to the City's issuance of a land development permit or clearing and grubbing permit, the applicant shall show compliance with a habitat loss and incidental take (HLIT) permit issued pursuant to Chapter 17.35 CVMC, for areas that contain sensitive biological resources, as defined by CVMC 17.35.030, and are within:

A. Development areas outside of covered projects, as defined by CVMC 17.35.030;

B. Seventy-five (75) to 100 percent conservation areas, as defined by CVMC 17.35.030; or

C. One hundred (100) percent conservation areas, as defined by CVMC 17.35.030.

Prior to the City's issuance of a land development permit or clearing and grubbing permit for areas that contain sensitive biological resources, as defined by CVMC 17.35.030, and are within the development areas of covered projects, as defined by CVMC 17.35.030, the applicant shall show compliance with all applicable provisions of previous project entitlements issued by the

City and with any applicable conditions of coverage listed in the Chula Vista MSCP subarea plan, as determined by the director of planning and building or designee.

Prior to the City's issuance of a land development permit or clearing and grubbing permit for areas that will result in impacts to wetlands or to listed noncovered species, as defined by CVMC 17.35.030, the applicant shall obtain, and show compliance with, all applicable federal and/or state permits.

15.04.018 Additional Planning, Design, Construction, and Post-Construction Requirements for All Land Development and Redevelopment Projects.

The City of Chula Vista Development Storm Water Manual is a part of this Ordinance and is incorporated by reference as though set forth in full in this Ordinance. No land owner or development project proponent in the City of Chula Vista shall receive any City permit or approval for land development activity or significant redevelopment activity unless the project meets or will meet the requirements of this Ordinance and the Development Storm Water Manaul.

The Development Storm Water Manual includes, among other requirements, the following requirements:

- Phased grading during construction (limitation of grading to a maximum disturbed area before either temporary or permanent erosion controls are implemented)
- Compliance with Low Impact Development (LID) principles
- Compliance with Interim Hydromodification Criteria and Hydrograph Modification Management Plan (HMP) requirements
- Compliance with post-construction Best Management Practices self inspections, maintenance, record keeping, and maintenance certification

The City of Chula Vista generally accepts standards established in the most up-to-date editions of the following documents for Best Management Practices, however, the City Engineer will make the final determinatiion to approve or disapprove any proposed BMPs:

- Stormwater Best Management Practice Handbooks developed by the California Stormwater Quality Association
- Caltrans Treatment BMP Technology Report
- County of San Diego Low Impact Development Handbook

Long-term maintenance obligations of all proposed Best Management Practices must be approved in an agreement that runs with the land in perpetuity prior to the issuance of a grading or other construction permit.

15.04.020 Compliance with conditions and specifications required – Deviations from standards permitted when.

Except as herein provided, all land development work done shall be done in accordance with the conditions of the required permit, and shall conform to the approved plans, standard drawings, specifications, landscape manual, subdivision manual, and general conditions as may be determined by the City Engineer to be applicable to the work. Such documents are on file in the office of the City Engineer and shall be kept for public distribution in accordance with fee schedules in said office. In connection with land development work, deviations from the requirements of these standards may be permitted by the City Engineer based upon written reports and recommendations by qualified and recognized authorities subject to review by the City.

15.04.025 Provisions not to affect other code requirements.

This chapter shall not affect the requirements of any other chapter of this code requiring permits, fees or other charges, including those for sewer and services, or affect any provisions concerning the granting of franchises.

15.04.030 Facilities within public rights-of-way – Assignment of costs.

The following provisions of this section shall apply unless provision is made by an agreement pursuant to CVMC 15.04.085 through 15.04.095:

A. The property owner shall pay the City for all the cost of placing, repairing, replacing or maintaining a City-owned facility within a public right-of-way when the City's facility has been damaged or has failed as a result of the construction or existence of the owner's land development work during the process of such work.

B. The costs of placing, replacing or maintaining the City-owned facility shall include the cost of obtaining a necessary alternate easement.

15.04.035 Commencement and completion of work – Extension of time.

All land development work shall be executed in accordance with the provisions of this chapter and the terms of the permit issued by the City Engineer. Once commenced, work shall be carried out diligently until completed. Unless otherwise specified upon the permit, all work shall be completed within 180 days from the date of issuance of the permit. The City Engineer may grant one extension of time for the completion of the work. Such extension shall not exceed the original length of time designated on the permit.

15.04.040 Slopes – Design requirements generally.

The inclination of each cut or fill surface resulting in a slope shall not be steeper than two horizontal to one vertical (2:1) except for minor slopes as herein defined.

All constructed minor slopes shall be designed for proper stability considering both geological and soil properties. A minor slope may be constructed no steeper than one and one-half horizontal to one vertical (1.5:1) contingent upon:

A. Submission of reports by both a soil engineer and a certified engineering geologist containing the results of surface and subsurface exploration and analysis. These results should be sufficient for the soil engineer and engineering geologist to certify that in their professional opinion the underlying bedrock and soil supporting the slope have strength characteristics sufficient to provide a stable slope and will not pose a danger to persons or property; and

B. The installation of an approved special slope planting program and irrigation system.

15.04.045 Building pads – Design requirements.

All building pads and building sites shall drain to an approved drainage facility unless otherwise approved by the City Engineer.

15.04.050 Embankment requirements – Soil engineer may be required.

A. Unless otherwise specified on the permit, all embankments for land development work shall be compacted in conformance with the provisions of the standard specifications. The permit may require that an engineering geologist and/or soil engineer, as appropriate, be responsible for the inspection and testing of the embankment work and inspection of excavations. The soil engineer and engineering geologist, if one or both are required by the permit, shall file with the City Engineer reports as required by CVMC 15.04.140 and 15.04.270(B).

B. Where, in the opinion of the City Engineer, the construction of an uncontrolled embankment would not be contrary to the public interest or welfare, a permit for such land development may be issued in accordance with CVMC 15.04.285. Plans for uncontrolled embankment shall be complete in all respects except for soil analysis and compaction requirements. Uncontrolled embankment slopes shall not be steeper than three horizontal to one vertical (3:1).

15.04.055 Expansive soil grading requirements.

If, during the land development work, expansive soil is found within two feet in cut or three feet in fill of the finished grade of any area intended or designed as the location for a building, the permittee shall cause such expansive soil to be removed from such building area to a minimum depth of two feet in cut or three feet in fill and replaced with nonexpansive soil properly compacted; provided, however, the City Engineer may, upon receipt of a report by a soil engineer certifying that he has investigated the property and recommending a design or footings or floor slab or other procedure that in his opinion will alleviate any problem created by such expansive soil, waive the requirement that such expansive soil be removed and replaced with nonexpansive soil.

15.04.060 Landscaping and irrigation system.

All cut and fill slopes shall be planted and irrigated in accordance with an approved plan. Said plan shall be prepared in accordance with the City landscape manual and shall be approved by the City Landscape Architect, and the Director of Planning and Building or designee, as necessary.

15.04.065 Slopes – Tops and toes to be rounded.

The tops and toes of all major slopes in public view shall be rounded in accordance with the City standard drawings.

15.04.070 Slopes – Blending into existing terrain.

All manmade slopes shall be blended into existing terrain to produce a natural-appearing transition from the face of manmade slopes into natural ground. This blending shall be accomplished in accordance with City of Chula Vista standard drawings. Undulating tops and toes of slopes and variable slope ratios should be used to achieve natural-appearing slopes.

15.04.075 Slopes – Horizontal slope rounding.

Rounding shall be accomplished in accordance with the City of Chula Vista standard drawings.

15.04.080 Preservation of existing monuments.

All existing survey monuments shall be shown on the grading plan. Evidence indicating that arrangements have been made for the preservation and/or relocation of existing monuments shall be submitted to the City Engineer prior to issuance of a land development permit.

15.04.085 Work in conjunction with subdivision of property – Requirements generally.

A subdivider of land required to do land development work as the result or condition of the approval of the tentative map shall perform such work under one of the following procedures, as set forth in CVMC 15.04.090 and 15.04.095.

15.04.090 Work in conjunction with subdivision of property – Standard land development permit – Requirements.

Should the subdivider desire to do certain land development work prior to entering into a contract with the City to install and complete all subdivision and land development work, he may make application to do so under a standard land development permit or clearing and grubbing permit, if the land development work is limited to clearing and grubbing only. This application shall be accompanied by detailed plans and specifications based upon the approved tentative map and in conformity with the provisions of CVMC 15.04.017 and 15.04.040 through 15.04.075. A schedule and estimate based upon such plans and specifications shall accompany the application.

15.04.095 Work in conjunction with subdivision of property – Contract for completion of improvements – Requirements – Bonds.

A. Should the subdivider desire to do certain land development work in conjunction and concurrently with installation and construction of required public improvements, he may enter into a contract with the City to make, install and complete all improvements and land developments in accordance with approved plans and specifications.

B. Prior to any construction of improvements and/or land development work, the subdivider shall have complied with and performed the following requirements:

1. Subdivider shall file with the City Clerk detailed plans and specifications (or a statement that work will be accomplished in accordance with standards and specifications of the City) approved by the City Engineer for all public improvements and land development together with a detailed cost estimate approved by the City Engineer and an estimate of time reasonably necessary to complete the same.

2. Subdivider shall enter into a contract with the City to make, install and complete within the time fixed by the City Engineer, but in no case more than two years from the date of execution of said contract, all improvements and land development in accordance with the approved plans, and shall cause to be filed with the City Clerk a faithful performance bond payable to the City which shall ensure the performance of the contract and the completion of the improvements and land development work. The subdivider shall additionally file with the City Clerk a labor and material bond to inure to the benefit of those persons entitled to the protection of Part III, Title IV, Chapter II of the Code of Civil Procedure. A cash deposit or letter of credit may be submitted in lieu of bonds hereinbefore described. Bonds and other forms of guarantee

shall be in full conformity with the requirements for subdivision guarantees as set forth in the subdivision ordinance codified at CVMC Title 18.

3. The bond or other guarantee shall be based on the City Engineer's estimate of the cost of the work and in accordance with the following schedule:

a. Faithful performance bond:
Public improvements: 50 percent of cost estimate,
Land development: 50 percent of cost estimate;

b. Labor and material bond:
Public improvements: 50 percent of cost estimate,
Land development: 50 percent of cost estimate.

15.04.100 Building construction – Land development permit required – Prerequisite to building permit.

A. An owner of land desiring to do land development work incidental to and in connection with the construction of a building or structure shall present an application and obtain a land development permit or clearing and grubbing permit. The City Engineer may require an on-site field inspection of the rough grading phase of the work between representatives of the City's Engineering, Planning and Building Departments and the permittee; civil engineer; soil engineer; biologist, as defined by CVMC 17.35.030; and engineering geologist, as appropriate, before the issuance of a building permit. The permittee shall request a field inspection of the rough grading phase, if required, five working days prior to the inspection. The rough grading phase of the land development work described on form PW-E-106B shall be completed prior to the issuance of a building permit except as provided below. The City may suspend any building permit where it is found that land development work is being done or has been done without a land development permit or clearing and grubbing permit until a land development permit or clearing and grubbing permit is issued. The City may not certify to the completion of the building where land development work has been done until a land development permit is obtained and certified as complete.

B. Notwithstanding any provisions to the contrary in subsection (A) of this section, walls which are designed and constructed to retain earth and are also integral portions of buildings may be constructed under building permits concurrently with grading work within the project site.

15.04.105 Damaged or disused public improvements – Notification – Corrective action required.

The City Engineer shall notify the property owner of such damage or failure as set forth in CVMC 15.04.030. The City may withhold certification of the completion of a building or other permitted work where a notice has been issued.

15.04.110 Public to be protected from hazards during construction – Fences and barricades required when.

During the land development work, the contractor and owner shall take all necessary measures to eliminate any hazard resulting from the work to the public in its normal use of public property or right-of-way. Any fences or barricades installed shall be substantially constructed and shall be properly maintained as long as the hazard resulting from the work exists.

15.04.115 Safety precautions.

If at any stage of the work the City Engineer determines that further land development work as authorized is likely to endanger any public or private property or result in the deposition of debris on any public way or interfere with any existing drainage course, the City Engineer may require, as a condition to allowing the work to be continued, that such reasonable safety precautions be taken as he considers advisable to avoid such likelihood of danger. The permittee will be responsible for removing any silt and debris deposited upon adjacent and downstream public or private property resulting from his grading operations. Silt and debris shall be removed, and damage to adjacent and downstream property repaired, as directed by the City Engineer. Erosion and siltation control may require temporary or permanent siltation basins, energy dissipaters, or other measures as field conditions warrant, whether or not such measures are a part of approved plans.

15.04.120 Fence specifications – Modification permitted when.

A. Where a slope is created adjacent to a public right-of-way or other publicly used property, and the top of slope is within 10 feet of the property line and the height of the slope is three feet or greater and steeper than four horizontal to one vertical (4:1), a 48-inch-high fence shall be erected between property line and the top of slope. The design of said fence shall be approved by the City Engineer. "Publicly used property" is that property used frequently by persons other than the residents.

B. The City Engineer may modify or delete the above requirements where it is evident that the land development work will present no hazard to the adjacent property or public right-of-way.

15.04.125 Noncompliance.

A. If, in the course of fulfilling his responsibility under this chapter, the private engineer or the soil engineer or biologist, as defined in CVMC 17.35.030, finds that the work is not being done in substantial conformance with this chapter or the plans approved by the City Engineer or in accordance with accepted practices, he shall immediately notify the permittee, the person in charge of the land development work and the City Engineer, in writing, of the nonconformity and of the corrective measures which should be taken.

B. In the event the work does not conform to the permit or the plans or specifications or any instructions of the City Engineer, notice to comply shall be given in writing by the City Engineer to the permittee. As soon as practical after a notice to comply is given, the permittee or his contractor shall begin to make the corrections.

C. If the City Engineer finds any existing conditions not as stated in the application, land development permit, clearing and grubbing permit, or approved plans, he may refuse to approve work until approval is obtained for a revised grading or clearing and grubbing plan which will conform to the existing conditions.

15.04.130 Modification of approved plans.

A. Modifications of the approved grading or clearing and grubbing plan must be in writing and be approved by the City Engineer and/or his designated representative. All necessary soil and geological reports shall be submitted with any substantial proposal to modify the approved grading plan.

B. No land development work in connection with any proposed modifications shall be permitted without the approval of the City Engineer and/or his designated representative.

15.04.135 Responsibility of permittee – Compliance with plans and requirements.

All permits issued hereunder shall be presumed to include the provision that the permittee, his agent, contractors and employees shall carry out the proposed work in accordance with the approved plans and specifications and in compliance with all the requirements of the permit and this chapter. The civil engineer shall file a report as specified in CVMC 15.04.140.

15.04.140 Completion of work – Final reports.

Upon completion of the work the following reports shall be filed with the City Engineer unless waived by him:

A. A written statement by the private engineer that all land development work and/or associated drainage facilities have been completed in conformance with CVMC 15.04.165 and 15.04.225.

B. An as-built plan of the completed work prepared by a civil engineer.

C. A final as-built soil engineer's report which shall include a written statement that inspections and tests were made during the grading, and that in his opinion all embankments and excavations are in accordance with the provisions of this chapter and the permit and are acceptable for their intended use. Soil-bearing capacity (except where the City Engineer determines such is inapplicable), summaries of field and laboratory tests and locations of tests if not previously submitted, and the limits of compacted fill on an as-built plan shall be included in the report. The report shall include reference to the presence of any expansive soil or other soil problems which, if not corrected, would lead to structural defects in buildings constructed on the site. If such report discloses the presence of such expansive soil or such other soil problems, it shall include recommended corrective action designed to prevent structural damage to each building proposed to be constructed upon the site. The final as-built report shall also contain a seepage statement or study as appropriate.

D. A final as-built engineering geology report by an engineering geologist based on the as-built plan, including specific approval of the grading as affected by geological factors. Where required by the City Engineer, the report shall include a revised geologic map and cross-sections and recommendations regarding building restrictions or foundation setbacks.

E. A final biology report, if determined necessary by the Director of Planning and Building or designee, which includes an assessment of the impacts on sensitive biological resources affected by the land development work.

15.04.145 Notification of completion.

The permittee shall notify the City Engineer when the land development work is ready for final inspection. He shall also notify the City Landscape Architect and the Director of Planning and Building, or designee, when planting and irrigation are completed. Final approval shall not be given until all work, including installation of all drainage structures and facilities, sprinkler irrigation systems, planting and all protective devices, has been completed and any required planting established and all as-built plans and reports have been submitted. The City Engineer may accept in writing the completion of all work, or any portion of the work, required by the permit issued in accordance with this chapter and thereupon accept said work or portion thereof.

15.04.150 Exemptions from applicability designated.

No person shall do any land development work without first having obtained a land development permit or clearing and grubbing permit, except for the following:

A. The depositing of materials in any disposal area operated or licensed by the City;

B. The making of excavation on any site or contiguous sites held under one ownership, in which all of the following are characteristic of the work:

1. A cut slope having a maximum steepness of three horizontal to one vertical,

2. A cut having a maximum vertical depth of three feet at any point and a maximum average depth of 18 inches,

3. No adverse effect upon an existing drainage pattern,

4. A top of slope no closer than one foot from an exterior boundary line, and

5. The movement of less than 250 cubic yards of material;

C. The making of an embankment on any site or contiguous sites held under one ownership, in which all of the following are characteristic of the work:

1. None of the embankment exceeds three feet in vertical depth or has an average maximum depth in excess of 18 inches,

2. None of the embankment is placed on existing ground having a slope steeper than five horizontal to one vertical (5:1),

3. Proposed fill slopes are no steeper than three horizontal to one vertical (3:1),

4. The embankment does not change or adversely affect the existing drainage pattern,

5. Adequate provisions are proposed to protect the embankment from erosion,

6. The toe of the embankment is no closer than one and one-half feet to an exterior property line, and

7. The total volume of embankment does not exceed 250 cubic yards of material;

D. Excavation for foundations of buildings, structures, basements, cellars, swimming pools or basins which are authorized by appropriate permits obtained from the Planning and Building Department;

E. Excavation or embankment performed by a governmental agency, franchise holder, or its contractor incidental to the construction of roadways, pipelines, or utility lines within its rights-of-way;

F. "Foundations," as referred to herein, shall not be construed to include foundations for retaining walls, drainage structures, or other structures appurtenant to the land development;

G. Routine maintenance of ornamental landscaping;

H. Agricultural operations, as defined pursuant to CVMC 17.35.030;

I. Maintenance of vegetation in accordance with an approved habitat management plan, or other such similar plan, if consistent with such plan, and prepared pursuant to the Chula Vista MSCP subarea plan;

J. Maintenance of vegetation in a designated fuel modification zone, consistent with the Chula Vista MSCP subarea plan;

K. Clearing and grubbing in an area located entirely within a mapped development area, as defined by CVMC 17.35.030, where it has been demonstrated to the satisfaction of the director of planning and building, or designee, that no sensitive biological resources, as defined by CVMC 17.35.030, exist;

L. Clearing and grubbing entirely located in a development area outside of a covered project, as defined by CVMC 17.35.030, in an area that is one acre or less in size, is not part of a larger contiguous clearing and grubbing project, and does not impact sensitive biological resources, wetlands or listed noncovered species, as defined by CVMC 17.35.030.

15.04.155 Contractor – Qualifications required.

Every person doing land development work shall meet such qualifications as may be determined by the City Engineer and/or director of planning and building to be necessary to protect the public interest. The City Engineer and/or Director of Planning and Building may require an application for qualification which shall contain all information necessary to determine the person's qualifications to do the land development work.

15.04.160 Work to be performed by licensed contractor.

All land development work shall be performed by a contractor licensed by the state.

15.04.165 Inspection of land development work – Responsibility therefor.

A. City Engineer. The City Engineer shall be responsible for all inspections of work not otherwise delegated to some other person. These inspections include, but are not limited to, drainage facilities, fencing, and compliance with state and City regulations in regard to the health and safety of the general public.

B. Private Engineer. The private engineer shall be responsible for all surveying work necessary for proper construction of the grading and drainage facilities. He shall inspect the site to ensure that the embankment and cut slopes are placed at their proper line and grade. He shall, prior to the release of bonds and surety, provide a written statement that, in his professional opinion, all work incorporated in the grading and drainage plans, authorized under the grading permit to include grading, drainage, and construction of appurtenant structures, has been constructed to the lines and grades in substantial conformance with the approved plans, and any approved revisions thereto.

C. Soil Engineer. The soil engineer shall be responsible for the testing of compaction and determination of stability of the various slopes. He shall, prior to release of the bond and surety, provide a written statement that inspections and tests were made by him, or under his supervision, and that, in his professional opinion, all embankments have been compacted to City standards and in accordance with the earthwork specifications for the project.

D. Landscape Architect. All landscaping work shall be designed under the supervision of a landscape architect; however, a registered civil engineer or registered architect may be responsible for the inspection of all landscaping and irrigation required in accordance with the grading permit and plans if it is in conjunction with a project he has been contracted to do. He shall, prior to the release of the bond and surety, provide a written statement that in his professional opinion all work incorporated in the landscape and irrigation plans authorized under the permit has been constructed in accordance with the approved plans and revisions thereto.

E. Biologist. A biologist, as defined by CVMC 17.35.030, shall be required to inspect all land development or clearing and grubbing sites prior to work occurring in areas of sensitive biological resources, as defined by CVMC 17.35.030, to ensure compliance with the permit issued pursuant to this chapter. The biologist shall identify areas to be protected with appropriate staking and fencing, ensure that these sensitive biological resources, as defined by CVMC 17.35.030, are correctly identified on the grading or clearing and grubbing plan, and inspect the staking and fencing after installation to ensure installation according to plan. In addition, the biologist shall conduct an inspection after the work is completed. Prior to the release of the bond and surety, the biologist shall provide a written statement that in his/her professional opinion all work was conducted as authorized under the permit in accordance with approved plans and revisions thereto.

F. Prior to the release of building permits for any given lot or lots, the private engineer shall submit a statement (Form PW-E-106B) as evidence that rough grading for land development has been completed within standard tolerance in accordance with the approved plans, and that all embankments and cut slopes and pad sizing are as shown on the approved plans.

The soil engineer will submit a statement that all embankments, under his direction, have been completed to an indicated 90 percent relative compaction of dry density.

15.04.170 Transfer of responsibility for approval.

If the private engineer, soil engineer, landscape architect, engineering geologist, or biologist, as defined in CVMC 17.35.030, of record is changed during the course of the work, the work shall be stopped until the replacement has agreed to accept the responsibility within the area of their technical competence for approval upon completion of the work.

15.04.175 Plans and reports to be prepared by engineers.

A. Plans for public improvements and land development work authorized under this chapter shall be prepared by a civil engineer. Where soil or geologic reports or soil and geologic investigations are required, the reports and investigations shall be prepared and conducted by an engineering geologist and/or soil engineer as appropriate.

B. A seepage statement or study is required as a part of all soil reports. All soil engineering, geologic, and geologic engineering reports shall consist of a preliminary and a final as-built report. Whenever blasting is to be performed or bedrock is to be exposed, a seepage study must be performed to determine method of handling excess water infiltration.

C. Plans prepared for land development work, which includes clearing and grubbing only, shall be prepared with input from a biologist.

15.04.180 Private contract performance bond – Required when – Issuance conditions generally.

Persons performing private contract work under a permit issued in accordance with this chapter shall furnish a bond/bonds or cash deposit or instrument of credit executed by the owner or his agent, or both, as principal in accordance with the provisions codified in this section through CVMC 15.04.215.

The performance bond/bonds shall be issued by a surety company authorized to do business in the state and shall be approved as to form by the City Attorney. The bond/bonds shall be in favor of the City and shall be conditioned upon the completion, free of liens, of the work authorized by the permit in accordance with the requirements of this chapter and the conditions prescribed by the permit. Slope planting and irrigation bonds will be separate from the performance bond requirements for appurtenant structures and grading. They will be held in the office of the director of planning and building until satisfactory compliance with landscaping and irrigation has been accepted.

15.04.185 Private contract performance bond – Conditions – Notice of default – Contents – Effect.

The bond/bonds shall be conditioned upon the payment to the City of any costs incurred by the City or its agent in completing the required work or performing work necessary to leave the site in a nonhazardous condition and restoring habitat as may be needed. The bond/bonds shall be further conditioned upon the payment to the City or its agents in completing the work required to

protect or repair adjacent public or private properties from damage from work performed under the permit. Whenever the City Engineer finds that a default has occurred in the performance of any term or condition of work authorized by a permit, he shall give written notice of such default to the principal and surety of the bond. Such notice shall state the work remaining to be done, the estimated cost of completion and the time estimated by the City Engineer to be necessary for the completion of the work. After the receipt of such notice, the principal or the surety must, within the time specified, either complete the work satisfactorily or deposit with the City an amount equal to the City Engineer's estimate of the completion cost plus an additional sum equal to 25 percent of such cost.

15.04.190 Private contract performance bond – Principal or surety liable for cost of completing work when.

In the event that the principal or surety fails to complete such work within the time specified in the notice, or fails to deposit the estimated cost plus 25 percent with the City, the City Engineer may cause the required work to be completed. The principal and the surety shall be liable for the cost of completing such work.

15.04.195 Private contract performance bond – Liability of City for performance of certain work.

If the principal or surety deposits the estimated cost plus 25 percent as set forth in the notice, the City Engineer shall cause the required work to be completed. The unexpended money shall be returned to the depositor at the completion of such work, together with an itemized accounting of the cost. The principal and surety shall hold the City blameless from any liability in connection with the work so performed by the City or contractor employed by the City. The City shall not be liable in connection with such work other than for the expenditure of said money.

15.04.200 Private contract performance bond – Cash deposit accepted in lieu when – Default correction procedure.

In lieu of a bond, the permittee may post a cash deposit with the director of finance in an amount equal to the required bond. Notice of default as provided above shall be given to the principal, and if the default is not corrected within the time specified, the City Engineer should proceed without delay and without further notice of proceeding whatever to use the cash deposit or any portion of such deposit to complete the required work. The balance, if any, of such cash deposit shall, upon the completion of the work, be returned to the depositor or to his successors or assigns after deducting the cost of the work.

15.04.205 Private contract performance bond – Not required when.

No performance bond under the provisions of this chapter shall be required from the state, or any of its political subdivisions, or any governmental agency.

15.04.210 Private contract performance bond – Required from certain contractors when – Exception.

A contractor working for the state or any of its political subdivisions or any governmental agency shall present a performance bond unless proof is submitted that the work is covered by a bond inuring to the benefit of the state or agency.

15.04.215 Private contract performance bond – Conditions – Compliance with certain terms and provisions required.

Every bond or other performance guarantee shall include conditions that the permittee shall:

A. Comply with all provisions of this chapter;

B. Comply with all terms and conditions of the land development permit or clearing and grubbing permit;

C. Complete the land development work within the time limit specified in the land development permit or clearing and grubbing permit.

15.04.220 Private contract performance bond – Method of estimating amount – Schedule.

The amount of the bonds or cash deposits covering a specific job shall be based on the amount of the estimate submitted by the person doing the work and approved by the City Engineer and in accordance with the following schedule:

A. Appurtenant structures: 100 percent of the estimated cost of retaining walls, drainage facilities or other grading appurtenances;

B. Grading: 25 percent of the estimated cost. This percentage may be varied by the City Engineer to fit conditions which are unusual in his opinion;

C. Slope planting and irrigation: 100 percent of the estimated cost of required landscaping and irrigation facilities;

D. Maintenance of landscaping: 100 percent of the estimated cost of maintaining landscaping for the period specified upon the permit;

E. Habitat restoration: 100 percent of the estimated cost of repairing or replacing sensitive biological resources, as defined by CVMC 17.35.030, including short-term maintenance and long-term monitoring (typically five years), as specified by a biologist.

15.04.225 Release of bonds/security.

Bonds and other security shall be released 35 days after filing a "notice of completion" with the county recorder (recorded copy to City Engineer) for improvements accepted by this City and upon acceptance of completed Form PW-E-106 ("request for release of bonds") submitted by the permittee. This form is available in the office of the City Engineer. Such form may not be accepted until the end of the maintenance period for the required landscaping, unless a separate bond is or has been submitted to guarantee maintenance of landscaping.

15.04.230 City Engineer – Enforcement responsibility and permit issuance authority.

The City Engineer shall enforce the provisions of this chapter. He shall, upon application by qualified persons, issue permits in connection with land development work when all applicable conditions established by this chapter for such permits have been met.

15.04.235 City Engineer – Powers and duties generally.

The City Engineer shall cause land development work being done without a permit to be stopped until a permit has been obtained. He may require that such work done without a permit be removed or corrected, including habitat restoration, at the expense of the responsible person. Where land development work involves an embankment improperly constructed or constructed without adequate testing, he shall cause such embankment to be reconstructed or, in lieu thereof, shall cause a declaration of improper land development to be recorded in the office of the county recorder. He shall have work done in connection with land development to ensure compliance

with the provisions of this chapter and shall release the bond when such work is properly completed.

15.04.240 City Engineer – Authority to determine applicable fees.

The City Engineer shall determine the fees applicable under the provisions of this chapter.

15.04.245 City Engineer – Duty to consider certain recommendations and deny certain applications.

When the nature of the work requested is such that it comes within the requirements of, or affects the operation of, any other department of the City, the City Engineer shall obtain and consider the recommendations of applicable City departments in determining the disposition of the application. He shall deny applications which are not in the interest of the public health, safety or general welfare, or do not constitute a reasonable use of land as indicated by the existing zoning or an approved land use plan.

15.04.250 City Engineer – Grounds for cancelling permit or amending plans.

The City Engineer may cancel a permit or may require the plans to be amended when it is in the interest of public health, safety and welfare and under any of the following:

A. Upon the request of the permittee;

B. When the facts are not as presented by the permittee in application;

C. When work as constructed or as proposed to be constructed creates a hazard to public health, safety and welfare.

15.04.255 Appeals – Authorized when – Determination authority.

An applicant may appeal the City Engineer's denial of, or the conditions of approval of, an application for a land development or clearing and grubbing permit to the City council.

15.04.260 Appeals – Time limit for filing – Form.

The applicant for a permit issued pursuant to this chapter, or the permittee, may appeal to the City Council from any decision of the City Engineer within ten working days after said decision. Appeals shall be in writing and shall state the specific nature of the appeal. Appeals shall be filed with the City Clerk.

15.04.265 Permits – Application – Procedure generally – Detailed plan required.

Applications for permits authorizing land development work shall be made in accordance with procedures established by the City Engineer. Applications shall be accompanied by such detailed plans, specifications and schedules as listed in the subdivision manual, landscape manual, and as otherwise required by the City Engineer. See CVMC 15.04.290 and 15.04.295 regarding fees.

15.04.270 Permits – Application – Detailed plans and specifications required.

A. Detailed plans and specifications for land development shall include, but not be limited to:

1. Those requirements listed in the subdivision manual;

2. A vicinity sketch or other data adequately indicating the site location;

3. A plot plan showing the location of the land development boundaries, lot lines, and public and private rights-of-way lines;

4. A contour map showing the present contours of the land and the proposed contours or grid elevations. Contours will extend beyond the limits of grading at least 100 feet;

5. The location of any buildings or structures within the land development boundaries, and the location of any building or structure on adjacent property which is within fifteen feet of the land development boundary;

6. Typical sections showing details concerning proposed cut and fill slopes;

7. Adequate plans of all drainage devices, walk or other protective devices to be constructed in connection with, or as a result of, the proposed work, together with a map showing the drainage area of land tributary to the site and the estimated runoff of the area served by any drainage facilities and devices;

8. An estimate of the quantity of excavation and fill involved, quantities relative to construction of appurtenant structures, estimate of cost and estimated starting and completion dates;

9. A landscape and irrigation plan indicating the total landscaped square footage, plant quantity, spacing, type and location and the layout of the irrigation system, and an estimate of cost of the landscaping and irrigation facilities;

10. A map, prepared by a biologist, as defined by CVMC 17.35.030, illustrating the proposed land development work relative to sensitive biological resources in compliance with the applicable habitat loss and incidental take permit issued pursuant to Chapter 17.35 CVMC;

11. An erosion control plan as may be required by the City Engineer or the director of Planning and Building.

B. A soil investigation may be required to correlate surface and subsurface conditions with the proposed land development plan. The results of the investigation shall be presented in a soil report by a soil engineer which shall include, but not be limited to: location of faults; data regarding the nature, distribution, and strength of existing soil and rock on the site; the soil engineer's conclusion; recommendations for grading requirements, including the correction of weak or unstable soil conditions and treatment of any expansive soil that may be present; and his opinion as to the adequacy of building sites to be developed by the proposed land development operations. The soil engineer shall provide an engineering geology report by an engineering geologist when required by the City Engineer. A seepage statement or a study is required as a part of all soil reports. Whenever blasting is to be performed or bedrock is to be exposed, a seepage study must be performed to determine method of handling excess water infiltration.

C. The City Engineer may require other data or information as he deems necessary. He may eliminate or modify any of these requirements where, in his opinion, they will serve no practical purpose.

15.04.275 Permits – Issuance – Prerequisites and contents.

The City Engineer shall issue permits for land development work upon approval of applications and plans, receipt of the prescribed fees and bonds, and receipt of letters from the private engineer, soil engineer, engineering geologist, landscape architect, biologist, and others, as required by the City Engineer, that they have been retained by the permittee to perform the work specified in CVMC 15.04.165. The permits shall include, or refer to, the conditions, plans and specifications which shall govern the work authorized.

15.04.280 Investigations authorized and required when – Fee.

The City Engineer may require the payment of the prescribed fees for special investigations when the proposed work or inquiries necessitate that special work be performed by the City. Special investigations shall include all requests for time extensions or variance requests and shall be accompanied by the special investigation fee.

15.04.285 Agreement required for uncontrolled embankments – Additional specifications.

A. Applications for land development permits involving uncontrolled embankments shall be accompanied by an agreement signed by the property owner. The agreement shall be prepared by the City Engineer and shall contain the following provisions and such other provisions as may in the opinion of the City Engineer afford protection to the property owner and City:

1. The land development work shall be designated as an uncontrolled embankment and shall be constructed in accordance with plans approved by the City Engineer.

2. The owner acknowledges that, as an uncontrolled embankment, the site is not eligible for a building permit unless special soil analysis and foundation design are submitted.

3. The land development work shall be done and maintained in a safe and sanitary manner at the sole cost, risk and responsibility of the owner and his successors in interest, who shall hold the City harmless with respect thereto.

B. The agreement for uncontrolled embankments shall be approved by the City Council and recorded by the City Clerk in the Office of the County Recorder as an obligation upon the land involved. The notice shall remain in effect until release of the agreement is filed by the City Engineer.

15.04.290 Fees – Collection – Method of estimation – Verification – Payment required – Exemptions.

A. Fees required by this chapter shall be collected by the City Engineer and deposited with the director of finance. Such fees shall be as presently designated, or as may in the future be amended, in the master fee schedule.

B. No permit shall be issued, and no land development work shall be permitted until the City Engineer has received the fees applicable under this chapter.

C. The state or any of its political subdivisions or any governmental agency shall file applications for permits and shall be issued permits as required by this chapter. No fees shall be required when the work is done by persons working directly for the state or agency.

D. The City Manager, or his designee, may authorize, without advance appropriation, the refund of fees required by this chapter to be collected, or such portion of the fees deemed appropriate for refund by the City Manager (net of costs incurred by the City in processing the permit application or unless the City has used the fees to construct facilities for a development for which the fees were paid), if the City Manager finds that the permit for which they were collected has been revoked, surrendered or terminated without use by the permittee and the refund is less than $100,000. All other refunds shall be authorized by the City Council.

15.04.295 Fees – Schedule for computation.

Fees shall be as presently designated, or as may in the future be amended, in the master fee schedule

15.04.305 Fees – To be doubled in certain cases – Effect of imposition.

In the event that land development work is commenced without a land development or clearing and grubbing permit, the City Engineer shall cause such work to be stopped until a permit is obtained. The permit fee, in such instance, shall then be the normally required permit fee, plus $500.00. The payment of the increased permit fees shall not relieve any person from fully complying with the requirements of this chapter in the performance of the work. Such fee shall defray the expense of enforcement of the provisions of this chapter in such cases.

When land development work commences without a permit and results in damage to sensitive biological resources, as defined by CVMC 17.35.030, restoration requirements (including maintenance and monitoring) shall be imposed at the sole discretion of the director of planning and building and the full cost of the restoration shall be borne by the property owner.

When land development work is inconsistent with a permit issued pursuant to Chapter 17.35 CVMC and results in damage to sensitive biological resources, as defined by CVMC 17.35.030, restoration requirements (including maintenance and monitoring) shall be imposed at the sole discretion of the director of planning and building and the full cost of the restoration shall be borne by the property owner. The payment of such fees or penalties as described above shall not prevent the imposition of any penalty prescribed or imposed by this chapter, Chapter 1.41 CVMC, or other federal or state law.

15.04.310 Violations – Declared unlawful and public nuisance – Abatement authority.

Any land development work commenced, done, maintained or allowed, contrary to the provisions of this chapter, shall be, and the same is hereby declared to be, unlawful and a public nuisance. Upon order of the City Council, or upon the determination of the City Manager or the City Attorney, necessary proceedings for the abatement, removal and/or enjoinment of any such public nuisance shall be commenced in the manner provided by law. Alternatively, the procedures to abate under Chapter 1.30 CVMC may be used. Any failure, refusal, or neglect by a responsible party to obtain a permit as required by this chapter shall be prima facie evidence of the fact that a public nuisance has been committed in connection with any land development work commenced or done contrary to the provisions of this chapter.

15.04.315 Abatement of dangerous conditions.

Where the City Engineer determines that land development work has created a danger to public or private property or has resulted in the deposition of debris on any public way or interferes with any existing drainage course, the City Engineer shall serve written notice on the property owner, describing the condition and requiring that the property owner abate the dangerous condition within ten days after the notice is received. If the property owner fails to so abate the condition, the City Engineer may do so, in which event the property owner shall be liable for all costs of such abatement, including, but not limited to, reasonable attorney fees. The expenses of abatement shall be a lien against the property on which it is maintained and a personal obligation against the property owner.

15.04.320 Emergency abatement by City – Liability for costs.

If it appears to the City Engineer that an emergency exists because land development work has resulted in a danger to public or private property, then, without following the procedure established by CVMC 15.04.315, the City Engineer may order all work necessary to remove, abate or mitigate the condition creating such emergency. The City Engineer may do the work with his own employees or may contract to have the work done; in either event, the City

Engineer shall keep a record of the costs of the work and charge the cost of the work to the property owner who shall repay the City for the cost thereof.

15.04.325 Costs of abatement – Special assessment procedure – Statutory authority.

The costs of abating a dangerous condition within the meaning of this chapter shall be imposed as a special assessment against the land on which such abatement was done. Costs and assessment procedures will be in accordance with Chapters 1.40 and 1.41 CVMC. The property owner may raise and the City Manager shall consider, as a complete or partial defense to the imposition of the assessment, questions as to the necessity of the abatement and the means in which it was accomplished. Pursuant to Government Code Section 38773.5, abatement costs shall be transmitted to the tax collector for collection. This assessment shall have the same priority as other City taxes.

15.04.330 Conflicts.

Except for exempt projects, if a conflict occurs between this chapter and Chapter 17.35 CVMC, the stricter regulation shall apply.

ATTACHMENT H

FY 2007-2008 Enforcement Action Taken

(Residential, Industrial, Commercial, Construction, and Related Businesses)

Note: During this reporting period, 7/01/2007 to 6/30/2008, investigation of the following cases have resulted in the issuance of Notice of Code of Violation, Orders to Cease and Desist, Notice to Clean and Abate, and Admin Citation.

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
Commercial							
8-Aug-07	Atlas Pressure Washing Service	Power/Pressure Washing	Commercial	407 E ST	Issued citation-Fine $200.00	Atlas Pressure Washing Service	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter storm water conveyance system. 14.20.120--Failure to utilize BMPs Atlas Pressure Company does not have business license in Chula Vista					
13-Aug-07	KFC-Y450114	Sewage Spill/Discharge	Commercial	1327 BROADWAY	Issued notice of violation.		
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from sewer system back-up. 14.20.120--Failure to utilize adequate BMPs. 14.20.130--Failure to contain clean up, and notify the City of spills. See attached documents.					
20-Sep-07	Chevron Station #1946	Others/Unknown Discharge	Commercial	695 PALOMAR ST	Issued warning citation	Chevron Station #1946	
	Nature of Violation:	14.20.120--Failure to implement BMPs from wash water.					
27-Sep-07	Simplex Grinnell	Others/Unknown Discharge	Commercial	690 THIRD AV	Issued citation-Fine $200.00	Simplex Grinnell	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter the storm water conveyance system in the form of broken sprinkler system. 14.20.120--Failure to utilize BMPs					
24-Oct-07	People Chevrolet	Power/Pressure Washing	Commercial	580 AUTOPARK DR	Issued citation-Fine $200.00	People Chevrolet	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the stormm water conveyance system by power washing. 14.20.120--Failure to utilize BMPs.					

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
25-Oct-07	Coastline Communications	Sediment Discharge	Commercial	1027	THIRD	AV	Issued citation-Fine $200.00	Coastline Communications	$200
	Nature of Violation:	14.20.100--Discharge on non-storm water to storm water conveyance system in the form of oil and sediment discharge. 14.20.120--Failure to utilize BMPs City staff responded and performed clean up of the affected site.							
7-Nov-07	Marisol Nite Club	Grease/Food/Drink Disch.	Commercial	2638	MAIN	ST	Issuec 2nd violation-Fine $400	Marison Nite Club	$400
	Nature of Violation:	14.20.100--Discharge of non-storm water to storm water conveyance system in the form of wash water/food discharge. 14.20.120--Failure to utilize BMPs. Previous citation was issued on 5/16/2007.							
8-Nov-07	BJ's Rental Inc.	Power/Pressure Washing	Commercial	317	K	ST	Issued citation-Fine $200.00		$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system. 14.20.120--Failure to utilize BMPs. Commercial power washing by store manage.							
6-Dec-07	Ralphs #75	Grease/Food/Drink Disch.	Commercial	780	OTAY LAKES	RD	Issued violation-Fine $200.00	Ralphs #75	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water to storm water conveyance system 14.20.120--Failure to utilize BMPs. 30 galloon of orange drink discharged to storm drain system.							
23-Jan-08	Mercado International 2000	Grease/Food/Drink Disch.	Commercial	1415	THIRD	AV	Issued citation-Fine $200.00	Mercado Intl. 2000	$200
	Nature of Violation:	14.20.100--Discharged on non-storm water to enter the storm drain system in the form of grease, rinse water, and food waste. 14.20.120--Failure to utilize BMPs; Failure to reduce pollutants of entering the storm drain system.							
23-Jan-08	Rancho Palomar LP	Sediment Discharge	Commercial	1315	THIRD	AV	Issued warning citation	Rancho Palomar LP	
	Nature of Violation:	14.20.100--Discharged of non-storm water to enter the drain system in the form of leaking water from underground pipe. 14.201120--Failure to utilize BMPs.							

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
24-Jan-08	Mazal Realty Investment	Grease/Food/Drink Disch.	Commercial	693 PALOMAR ST	Issued citation-Fine $200.00	Mazal Realty Invesments	$200
	Nature of Violation:	14.20.100--Discharged of non-storm water into the drainage system in the form of grease, oil due to sewage line stoppage. 14.20.120--Failure to utilize BMPs. City staff responded and performed cleanup to the affected site.					
4-Feb-08	C.V. Wholesale Furniture Store	Trash/Debris Discharge	Commercial	655 BROADWAY	Issued warning citation	CV Wholesale Furniture	
	Nature of Violation:	14.20.120--Failure to utilize BMPs.Trash, debris, junk and discarded furnitures were piled in the alley. 12.12.10--Removal of obstructions from streets is required. 8.24.040--Disposal of solid waste in public places is prohibited.					
12-Feb-08	Jack in the Box #68	Sewage Spill/Discharge	Commercial	4011 BONITA RD	Issued citation:Fine $2,000.00	Jack in the Box #68	$2000
	Nature of Violation:	14.20.100--Discharge in non-storm water is prohibited 14.20.120--Reductions of pollutants entering storm water system 14.20.130--Containment cleanup; Notification of sewage spills. $500 per violation is warranted. See attachment.					
10-Mar-08	Main Car Care Inc	Chemical Disharge	Commercial	2952 MAIN ST	Issued citation-Fine 100.00	Main Car Care	$100
	Nature of Violation:	14.20.120--Failure to utilize BMPs. House guest is discharging anti-freeze into storm drain system.					
14-Mar-08	Roman's Truck Body & Paint MJP	Saw Cutting/Sanding Disc.	Commercial	2513 MAIN ST	Issued citation-Fine $200.00	Roman's Truck Body & Paint	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm drain system in the form of sand dust resulted from auto body sanding. 14.20.120--Failure to utilize BMPs.					
23-Apr-08	Furniture Mattress Expo	Trash/Debris Discharge	Commercial	1215 BROADWAY	Issued citation-Fine $400.00	Furniture Mattress Expo	$400
	Nature of Violation:	14.20.100--Discharge on non-storm water to storm drain system in the form of styrofoam packing materials. 14.20.120--Failure to utilize BMPS to reduce pollutants entering storm drain system.					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
1-May-08	Jack in the Box #86	Sewage Spill/Discharge	Commercial	5 FOURTH AV	Issued citation - Fine	Jack in the Box #86	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed sewer discharge from sewer back up system into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
5-May-08	Rays Mobile Car Care	Vehicle oil discharge	Commercial	2555 FAIVRE ST	Issued citation - Fine	Rays Mobil Car Care	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of oil and grease from car into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
30-May-08	El Ranchero Factory Taco Shop #2	Slurry/Concrete Discharge	Commercial	3344 MAIN ST	Issued Citation-Fine	El Ranchero Factory	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of concrete slurry into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
9-Jun-08	Seafood City Market	Leaking Containers/Tanks	Commercial	1340 THIRD AV	Issued citation - Fine	Seafood City	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of grease and oil from leaking trash and grease containers into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
11-Jun-08	Chula Vista Auto Inc.	Painting-Sanding Residue	Commercial	24 BROADWAY	Issued citation- Fine	Chula Vista Auto Body	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wet paint into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
		Incidents: 22					**$5,700.00**
Construction-Citations							
12-Sep-07	San Miguel Ranch-Montecito Ridge	Power/Pressure Washing	Construction-Citations	144 AVENIDA LORETTA	Issued citation-Fine $200.00	Trimark Pacific Homes	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to storm water conveyance system from power washing. 14.20.120--Failure to utilize BMPs See attached documents					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
18-Sep-07	Otay Ranch, Village 7, R2A	Others/Unknown Discharge	Construction-Citations		Issued Cease & Desist Order	Otay Ranch, V-7, LLC	
	Nature of Violation:	14.20--Failure to implement and provide continuous maintenance of existing BMPs on the Santa Barbara project in Otay Ranch Village 7. Failure to camply with previous orders dated Aug 20 and Sep 10 inspection report. See attachments.					
4-Jan-08	Sycamore Estates	Others/Unknown Discharge	Construction-Citations	SYCAMORE DR	Issued Clean & Abate Order	Norton Construction	
	Nature of Violation:	14.20--Failure to implement and provide continuous maintenance of existing BMPs. **See attachment**					
1-Apr-08	San Miguel Ranch-Montecito Ridge	Sediment Discharge	Construction-Citations	144 AVENIDA LORETTA	Issued citation-Fine $2,500.00	Trimark Pacific Homes	$2500
	Nature of Violation:	14.20.100--Discharged on non-storm is prohibited. Observed sediment discharge. 14.20.120-Reduction of pollutants entering/contacting storm water required 14.20.130-Containment, Cleanup, and notification of spills. SEE ATTACHMENTS					
9-Apr-08		Others/Unknown Discharge	Construction-Citations	AVENIDA LORETTA	Issued citaton-Fine $2,000.00	Trimark Pacific Homes	$2000
	Nature of Violation:	14.20.120-Reduction of pollutants contacting or entering storm water required. 14.20.130-Containment, cleanup and notification of spills. 14.20.310-Administrative powers. Failure to comply with previous orders.--See Attachment					
10-Apr-08		Others/Unknown Discharge	Construction-Citations	AVENIDA LORETTA	Issued citation-Fine $1,500.00	Trimark Pacific Homes	$1500
	Nature of Violation:	14.20.120-Reduction of pollutants contacting or entering storm water required. 14.20.310-Administrative enforcement powers. Failure to comply with previous orders.					
14-May-08	Kevin O'Neil Company	Saw Cutting/Sanding Disc.	Construction-Citations	610 THIRD AV	Issued citation- Fine	Kevin O'Neil Company	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of saw cutting residue into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
		Incidents: 7					**$6,400.00**

Industrial

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
7-Aug-07	Profil Institute for Clinical Research	Trash/Debris Discharge	Industrial	855	THIRD	AV	Issued notice of compliance	Profill Institute	
	Nature of Violation:	14.20.100--Allowance of non storm water to enter the storm water conveyance system in the form of trash/debris. 14.20.120--Failure to utilize BMPs. See attached documents.							
4-Dec-07	Bellama Custom Metal Fabrication	Equipment Washing	Industrial	3129	MAIN	ST	Issued violation-Fine $100.00	Bellama Custom Metal	$100
	Nature of Violation:	14.20.120--Failure to utilize BMPs. Washing large metal parts outdoor contaminating storm water conveyance system.							
6-Mar-08	Express Furniture	Equipment Washing	Industrial	1226	THIRD	AV	Issued warning citation	Express Furniture	
	Nature of Violation:	14.20.100- Discharge of non-storm water is prohibited. Staff is washing off parking lot. 14.20.120--Failure to implement BMPs.							
20-Mar-08	Hyundai Livart Furniture Outlet	Equipment Washing	Industrial	3121	MAIN	ST	Issued warning citation	Hyundai Livart Furniture	
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter drain system in the form of styrofoam and packing materials.							
9-Apr-08	Parts Heaven	Chemical Disharge	Industrial	791	ENERGY	WY	Issued Cease and Desist Orders	Parts Heaven	
	Nature of Violation:	14.20--Pollutants entering the storm water conveyance system. Violations are observed on Feb. 07, Mar 06, and Apr 07. On April 16, 2008, a letter to repeal the cease and desist order was sent to Parts Heaven.**See attached documents**							
14-May-08	Kleen Blast Industrial Services	Vehicle oil discharge	Industrial	676	MOSS	ST	Issued citation- Fine	Kleen Blast Abrasive	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of vehicle residue into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
		Incidents: 6							**$300.00**

Others-Citation

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
10-Jul-07	Tech Wash Services	Power/Pressure Washing	Others-Citation	910 EASTLAKE PW	Issued citation-Fine $200.00	Tech Wash Services	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water is prohibited. Wash water from power washing entered the storm drain system. 14.20.120--Failure to utilized BMPs. See attachment.					
11-Jul-07	Lot Management	Chemical Disharge	Others-Citation	1361 MEDICAL CENTER DR	Issued Citation-Fine $1500.00	Lot Management	$1500
	Nature of Violation:	14.20.100--Discharged of wash water cleaning solution into the storm drain system. 14.20.120--Washing crew failed to implement BMPs. 14.20.130--Failure to take all reasonable actions to contain, minimize, and clean up pollutants and did not notify the city of pollutant spill.					
31-Oct-07	GMI Building Services	Power/Pressure Washing	Others-Citation	970 EASTLAKE PW	Issued citation-Fine $200.00	GMI Building Servicies	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water is prohibited 14.20.120--Failure to utilize BMPs. Power washing trash enclosures and walkways. See attachments.					
1-Nov-07	A&D General Contracting Division	Leaking Containers/Tanks	Others-Citation	626 L ST	Issued citation-Fine $200.00	A&D General Contracting	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water to the storm water conveyance system. 14.20.120--Failure to utilize BMPs.Discharging of water from water truck. See attachments.					
20-Nov-07	Volt Telecommunication	Power/Pressure Washing	Others-Citation	173 E ST	Issued violation-Fine $200.00	Volt Communication	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system. 14.20.120--Failure to utilize BMPs. Power washing surrounding the utility vault.					
30-Nov-07	Hilltop Middle School	Sediment Discharge	Others-Citation	TELEGRAPH CANYON RD	Sent notice of notification	Hilltop Middle School	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of sediments from grounds and slopes into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
18-Jan-08	Chosen Mobile Detail	Vehicle Washing/Dismantle	Others-Citation	67 BRISBANE ST	Issued warning citation	Chosen Mobile Detail	
	Nature of Violation:	14.20.100--Allowance of non-storm water into the drainage system in the form of rinse water from commercial auto washing. 14.20.120--Failure to utilize BMPs.					
21-Feb-08	Wilfredo Concrete Construction	Slurry/Concrete Discharge	Others-Citation	303 H ST	Issued citation-Fine $200.00	Wilfredo Concrete Construction	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water is prohibited. Concrete slurry discharge to storm drain. 14.20.120--Failure to utilize BMPs. City staff responded and performed cleanup to the affected site.					
23-Apr-08	USI	Power/Pressure Washing	Others-Citation	555 BROADWAY	Issued Citation-Fine $200.00	USI	$200
	Nature of Violation:	14.20.100--USI staff was observed by a private citizen power washing in the vicinity of JC Penney causing discharge to the storm drain system. 14.20.120A--USI staff fail to utilize BMPs to contain wash water.					
25-Apr-08	Smitty Built-Inns	Saw Cutting/Sanding Disc.	Others-Citation	180 MACE ST	Issued warning citation	Smiity Built-Inns	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of saw dust into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
28-Apr-08	Craft Construction	Slurry/Concrete Discharge	Others-Citation	696 E ST	Issued Citation- Fine $200.00	Craft Construction Co	$200
	Nature of Violation:	14.20.100 Allowance of non-storm water to enter storm water conveyance system in the form of rinse water. **see attachment**. 14.20.120 Failure to utilize BMPs to protect storm drain from contaminants. **see attachment**					
11-May-08	Enviro Steam Cleaning System	Power/Pressure Washing	Others-Citation	330 F ST	Issued Citation - Fine $100.00	Enviro Steam Cleaning System	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
9-Jun-08	Laundry Mat	Resident Cleaning Residue	Others-Citation	1356	THIRD	AV	Issued warning citation	Laundry Mat	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of soap, dirt, and waxes from floor cleaning into the storm water conveyance system. **see attachment**.							
18-Jun-08	Jay Bright Company	Power/Pressure Washing	Others-Citation	684	ANITA	ST	Issued citation - Fine	Jay Bright Company	$100
	Nature of Violation:	14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs allowing non-storm water to enter the drain system form high pressure washing. **see attachment**							
		Incidents: 14							**$3,200.00**
Residential									
3-Jul-07	Brower Carpet Cleaning	Resident Cleaning Residue	Residential	2767	RED ROCK CANYON	RD	Issued Citation-fine $200.00	Brower Carpet Cleaning	$200
	Nature of Violation:	14.20.100--Company employee discharged non-storm water in the form of carpet cleaning wastewater into the drain system. 14.20.120--Failure to utilized BMPs.							
5-Jul-07	Resident-81 Fifth Avenue	Others/Unknown Discharge	Residential	81	FIFTH	AV	Issued warning citation	Henkels & Maccoy Inc	
	Nature of Violation:	14.20.100---Allowance of non-storm water to enter storm water conveyance in the form of sediments from water main rapture.							
7-Jul-07	Resident-79 Provence	Slurry/Concrete Discharge	Residential	79	PROVENCE	CT	Issued Notice of Citation	Francisco Tavia Cons	
	Nature of Violation:	14.20.100 --Allowance of non-storm water to enter the storm water conveyance from concrete work. 14.20.120--Failure to implement BMPs and failure to protect storm water conveyance.							
9-Jul-07	Resident-474 Elm Avenue	Trash/Debris Discharge	Residential	474	ELM	AV	Issued notice of compliance		
	Nature of Violation:	14.20.100--Allowance of non storm water to enter the storm water conveyance system in the form of trash/debris from tree trimming. 14.20.120---Failure to utilize BMPs. (see attached documents)							

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
12-Jul-07	Resident-479 G Street	Trash/Debris Discharge	Residential	479	G	ST	Issued notice of compliance.		
	Nature of Violation:	14.20.100-- Allowance of non storm water to enter water conveyance system in the form to trash and debris. 14.20.120--Failure to utilize BMPs. (see attached documents)							
29-Jul-07	Resident-1462 Hilltop Drive	Slurry/Concrete Discharge	Residential	1462	HILLTOP	DR	Issued warning citation		
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from concrete work. 14.20.120--Failure to utilize BMPs							
10-Aug-07	Resident-Orange Glen Apartments	Trash/Debris Discharge	Residential	307	ORANGE	AV	Issued citation-Fine $200	Orange Glen Apartments	$200
	Nature of Violation:	14.20.100--Allowance of storm water to enter storm water conveyance syste. 14.20.120--Failire to utilize BMPs. City staff cleaned all trash and debris discharge from the site.							
10-Aug-07		Trash/Debris Discharge	Residential		ORANGE	AV	Issued citation-Fine $200.00	Orange Glen Apartments	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter storm water conveyance system. 14.20.120--Failure to utilize BMPs. This is the second letter and was sent to a different address.							
28-Aug-07	Resident-268 Del Mar Avenue	Slurry/Concrete Discharge	Residential	268	DEL MAR	AV	Issued citation- Fine $200.00	De La Valle Construction	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from concrete work. 14.20.120--Failure to utilize BMPs City crews will conduct clean up of the impacted site.							
28-Aug-07	Resident-69 Pala Ct.	Trash/Debris Discharge	Residential	69	PALA	CT	Issued warning citation	Property Owner	
	Nature of Violation:	14.20.100--Allowance of non stom water to enter the storm water conveyance system in the form of trash/debris. 14.20.120--Failure to implement BMPS							

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
5-Sep-07	Resident-Rancho Del Rey -Belmont	Power/Pressure Washing	Residential	1103 MAJESTAD LN	Issued citation-Fine $200.00	Rancho Del Rey-Belmont	$200
	Nature of Violation:	14.20.100--Allowance of storm water to storm water conveyance system from power washing. 14.20.120--Failure to utilize BMPs.					
5-Oct-07	Resident-1225 Frontage Rd-MHP	Sewage Spill/Discharge	Residential	1225 FRONTAGE RD	Issued citation-Fine $200.00	Georgenanna MHP	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from sewer discharge. 14.20.120--Failure to utilize BMPs					
5-Oct-07	1445 Trailwood Avenue	Saw Cutting/Sanding Disc.	Residential	1445 TRAILWOOD AV	Isuued Citation-Fine $200.00	Cornerstone Masonry Const.	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from concrete cutting. 14.20.120--Failure to utilize BMPs. See attachments					
9-Oct-07	Resident-1623 Melrose Avenue	Pool-Spa Residue	Residential	1623 MELROSE AV	Issued citation-Fine $200.00	Property Owner	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter storm water conveyance system in the form of pool filter residue. 14.20.12.--Failure to utilize BMPs. City Staff performed storm drain clean up of the site.					
9-Oct-07	Pro Care Auto Detail	Vehicle Washing/Dismantle	Residential	284 MADRONA ST	Issued citation-Fine $200.00	Pro Care Auto Detail	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter storm water conveyance system from auto washing. 14.20.120--Failure to utilize BMPs					
17-Oct-07	Burtech Pipeline Inc.	Leaking Containers/Tanks	Residential	456 EMERSON ST	2nd Violation-Fine $600.00	Burtech Pipeline Inc.	$600
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from fuel spill. 14.20.120--Failure to utilize BMPs 14.20.130--Failure to contain, cleanup, and notify the City of spills (leaky tank).					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
26-Oct-07	BRE Properties Inc	Sewage Spill/Discharge	Residential	601 TELEGRAPH CANYON RD	Issued citation-Fine $200.00	BRE Properties Inc.	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter the storm water conveyance system from sewage spill. 14.20.120--Failure to utilize BMPs. City Staff performed clean up of the affected site.					
6-Nov-07	TCP Company-Plumbing Specialist	Sewage Spill/Discharge	Residential	465 F ST	Issued violation-Fine $200.00	TCP Company	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water to storm water conveyance system from sewer water discharge. 14.20.120--Failure to utilize BMPs. City Staff responded and performed cleanup of the affected site.					
8-Nov-07	Resident-12 Bonita Road	Grease/Food/Drink Disch.	Residential	12 BONITA RD	Issued warning citation		
	Nature of Violation:	14.20.100--Discharge of non-storm water to storm water conveyance system. 14.20.120--Failure to utilize BMPs. Washing machines waste water not plumbed to sewer system.					
9-Nov-07	Excellence Service Towing	Leaking Containers/Tanks	Residential	921 BUCKAROO LN	Issued citation-Fine $200.00	Excellence Service & Towing	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water to enter storm water conveyance system from leaking oil lines of tow truck. 14.20.120--Failure to utilize BMPs. City staff responded to spill and performed clean up of the affected site.					
27-Nov-07	Resident-118 East Olympia St.	Resident Cleaning Residue	Residential	118 OLYMPIA ST	Issued warning citation		
	Nature of Violation:	14.20.100--Discharge of non-storm water to storm water conveyance system in the form of washing machine water dishcarge. 14.20.120--Failure to utilize BMPs. See attachments.					
1-Dec-07	Hilltop Middle School	Sediment Discharge	Residential	44 HILLTOP DR	Issued Violation Letter	SW High School District	
	Nature of Violation:	14.20--Significant amount of sediments were discharged form Hilltop Middle School's grounds and slope along Hilltop Drive and Telegraph Canyon Road. Previous letters were sent to the school district regarding these incidents. **See attached documents.**					

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
6-Dec-07	Resident-1132 Melrose Avenue	Slurry/Concrete Discharge	Residential	1132	MELROSE	AV	Issued warning citation		
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from concrete work. 14.20.120--Failure to utilize BMPs-							
10-Dec-07	Resident-209 Church Avenue	Trash/Debris Discharge	Residential	209	CHURCH	AV	Issued warning citation		
	Nature of Violation:	14.20.100--Discharge of non-storm water into the drainage system in the form of trash, junk, debris from trash bins. 14.20.120--Failure to utilize BMPs.							
17-Jan-08	Agundez Concrete Co.	Saw Cutting/Sanding Disc.	Residential	1052	HILLTOP	DR	Issued citation-Fine 200.00	Agundezl Mattew	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to the storm drain system in the form of water laden with concrete saw dust. 14.20.120--Failure to utilize BMPs.							
17-Jan-08	Resident-1153 Nolan Avenue	Slurry/Concrete Discharge	Residential	1153	NOLAN	AV	Issued warning citation		
	Nature of Violation:	14.20.100--Discharged of non-storm water into the drain system in the form of concrete slurry. 14.20.120--Failure to utilize BMPs.							
25-Jan-08	Resident-354 Torquoise Court	Painting-Sanding Residue	Residential	354	TURQUOISE	CT	Issued warning citation		
	Nature of Violation:	14.20.100--Discharged on non-storm water into the drainage system in the form of water base paint. 14.20.120--Failure to utilize BMPs. City staff responded and performed a cleanup of the affective site.							
28-Jan-08	Tenant-1143 Potter Valley Dr.	Painting-Sanding Residue	Residential	1143	POTTER VALLEY	DR	Issued warning citation		
	Nature of Violation:	14.20.100--Discharged of non-storm water into the drainage system as a result of accidental paint spill. 14.20.120--Failure to utilize BMPs. City staff responded and performed cleanup to the affected site.							

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
6-Feb-08	Resident-100 Walnut Drive	Trash/Debris Discharge	Residential	100 WALNUT DR	Issued warning citation		
	Nature of Violation:	14.20.100--Discharge of non-storm water is prohibited. 14.20.120--Failure to utilize BMPs					
6-Mar-08	Resident-248 Orange Avenue	Driveway/Trash Washing	Residential	248 ORANGE AV	Issued warning citation		
	Nature of Violation:	14.20.100--Discharge of non-storm water is prohibited. Green waste can washing. 14.20.120--Failure to utilized BMPs					
13-Mar-08	Vistan Apartments	Sewage Spill/Discharge	Residential	418 OAKLAWN AV	Issued citation-Fine $200.00	Vistan Apartments	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to storm water conveyance system due to back up and overflow of sewage. 14.20.120--Failure to utilize BMPs. City Staff responded and performed clean to the affected site.					
8-Apr-08	Bea's Garden of Eden	Slurry/Concrete Discharge	Residential	395 CAMINO ELEVADO	Issued warning citation	Bea's Garden of Eden	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the storm concrete slurry conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
17-Apr-08	Resident - 1288 Cardinal Place	Sediment Discharge	Residential	1288 CARDINAL PL	Issued warning citation	Resident	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the sediment water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
25-Apr-08	Resident - 2488 Faivre Street	Vehicle Washing/Dismantle	Residential	2488 FAIVRE ST	Issued warning citation	Resident	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the storm water conveyance system. Allowance of trash debri from vehicle dismantling **see attachment**.					

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
12-May-08	Cooper's Concrete Pumping	Slurry/Concrete Discharge	Residential	641	GUAVA	AV	Issued warning citation	Cooper's Concrete Pumping	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of slurry concrete into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
12-May-08	Resident - 1188 Nacion Avenue	Pool-Spa Residue	Residential	1188	NACION	AV	Issued warning citation	Resident	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of pool/spa residue into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
12-May-08	Resident - 576 Point San Luis Court	Vehicle oil discharge	Residential	576	POINT SAN LUIS	CT	Issued warning citation	Resident	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of motor oil from leaking vehicle into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
30-May-08	Resident-1097 Fourth Avenue	Driveway/Trash Washing	Residential	1097	FOURTH	AV	Issued admin citation- Fine	Property Owner	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
30-May-08	Resident - 1097 Fourth Avenue	Slurry/Concrete Discharge	Residential		FOURTH	AV	Issued Citation - Fine	Resident	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of concrete wash water into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
10-Jun-08	AIG Concrete Pumping	Equipment Washing	Residential	2874	MORNING CREEK	RD	Issued Warning Citation	AIG Concrete Pumping	$0
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
23-Jun-08	Resident - 168 Shasta	Slurry/Concrete Discharge	Residential	168 SHASTA ST	Issued Citation- Fine	Resident	$100

Nature of Violation: 14.20.100 Discharge of non-strom water prohibited. Observed discharge of concrete wash water into the storm water conveyance system. **see attachment**.

Incidents: 41 **$3,900.00**

Total Incidents: 90 **Total Fine: $19,500.00**

ATTACHMENT I

FY 2007-2008 Complaint Response Summary

Incident Date	Structure Category	Site Category	Address			Type of Violation
Commercial						
8-Aug-07	STORM CHANNEL	Commercial	855	THIRD	AV	Unknown Discharge
Comments Action Taken:	Some plastic trash bags found in the storm channel adjacent to 855 Third Ave. Staff responded immediately and cleaned all trash and debris associated with this incident. An administrative citation warning B87071 was issued. No Further action is necessary at this time.					
8-Aug-07	STREET	Commercial	421	E	ST	Construction Debris & Waste
Comments Action Taken:	8/8/07--- Noted just-washed parking lot at the Arco gas station and evidence of dirt, soot, cigarette butts, and other debris washed from gas station and onto the curb and gutter.Issued admin citation.					
10-Aug-07	STORM DRAIN PIPE	Commercial	1327	BROADWAY		Sewage Spill Going Down Storm Drair
Comments Action Taken:	8/13/07---Sewer back up at the KFC restaurant was caused by lack of proper maintenance. City staff contained and remediated the spill while KFC's contractor cleared the private sewer line. Administrative Citation warning SWB813071 was issued to the responsible party. No further action required at this time.					
30-Aug-07	STREET	Commercial	77	BROADWAY		Possible Dumping into Catch Basin
Comments Action Taken:	8/30/08--- evidence of violation was not found at the time of inspection. No further action necessary at this time.					
14-Sep-07	STREET	Commercial	866	EASTLAKE	PW	Power Washing
Comments Action Taken:	Village Walk (Jaynes Corporation General Contractors) conducting washing of parking area for Grand Opening. Not using BMPs. Issued verbal immediately cease and desist. Issued Admin Citation-Warning and conducted post construction BMP verification inspection. Compliance is being met.					
20-Sep-07	STREET	Commercial	695	PALOMAR	DR	Power Washing

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	9/20/07---Chevron staff washing down front of store with no BMPs. Manager and staff immediately stopped activity and took corrective actions to remediate the situation. Wash water did not enter the SWCS. Administrative citation warning SW1586 was issued. No further action necessary at this time.					
27-Sep-07	STREET	Commercial	690	THIRD	AV	Unknown Discharge
Comments Action Taken:	9/27/08---Contractor SimplexGrinnel discharging non-storm water as part of fire sprinkler system maintenance. Administrative Citation SWB0927071 was issued. No further action necessary at this time.					
26-Oct-07	STREET	Commercial	1027	THIRD	AV	Unknown Discharge
Comments Action Taken:	10/26/07---Coastline Communications of Temecula allowed dirt and sediment from vault work to discharge into the SWCS. Administrative citation SW B1025072 was issued to Mr. John Vernieu of Coastline Communications. No further action necessary at this time.					
8-Nov-07	STREET	Commercial	317	K	ST	Power Washing
Comments Action Taken:	11/8/07---Responded to report of power washing with no BMPs. BJs Rental staff was power washing all cement dust and debris from parking lot and onto K street. Administrative Citation SW B1108071 was issued to Mr. Brad Thomas, President of BJs rentals. No further action necessary at this time.					
20-Nov-07	STREET	Commercial	173	BROADWAY		Power Washing
Comments Action Taken:	11/20/07---Responded to report of Volt Telecommunication Group, Inc. staff discharging non-storm water onto the street and gutter as a result of washing out telecommunications vaults without implementing BMPs. Administrative Citation SW B1206071 was issued to No further action necessary at this time.					
6-Dec-07	STORM DRAIN PIPE	Commercial	680	OTAY LAKES	RD	Other
Comments Action Taken:	12/6/07---Responded to report of non storm water discharge by Ralph's grocery stores. Noted Ralph's staff pouring juices into the storm drain at the rear loading dock. Issued administrative citation SW B1206071. No further action necessary at this time.					
2-Jan-08	STREET	Commercial	556	BROADWAY		Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Did not respond. Sent maintenance staff to confirm. No discharge observed. NFA					
23-Jan-08	STORM CHANNEL	Commercial	1415	THIRD	AV	Unknown Discharge
Comments Action Taken:	1/23/08---Responded to report of unknown discharge from Mercado Int. 2000. Inspection noted that grocery store staff had washed down area surrounding the cardboard bailer and that the grease container was leaking. Discharge flowed into the SWCS. Issued Administrative Citation SW B123081. No further action necessary at this time.					
24-Jan-08	STREET	Commercial	687	OXFORD	ST	Sewage Spill Going Down Storm Drair
Comments Action Taken:	1/24/08---Responded to report of sewer discharge into the SWCS. Inspection noted that Buffet Time Restaurant had a sewer line stoppage that resulted in a sewer overflow into the SWCS. Issued Administrative Citation SW B124081. No further action necessary at this time.					
12-Feb-08	STREET	Commercial	4011	BONITA	RD	Sewage Spill Going Down Storm Drair
Comments Action Taken:	On February 12, 2008 received notification of a sewage spill from PW dispatch. Arrived on scene at Jack in the Box, 4011 Bonita Road and observed the discharge of sewage from the facilities private sewer lateral clean out. City crews conducted cleanup operations. Jack in the Box was informed of the discharge on February 11, 2008 by a concerned citizen at 9:30am. Due to the seriousness of the violations and the threat to public health and the impact to the environment a NOV and Admin Citation for the amount of 2000.00 was issued to the property owner. A full cost recovery invoice will be also issued to the property owner.					
12-Feb-08	STREET	Commercial	4011	BONITA	RD	Sewage Spill Going Down Storm Drair
Comments Action Taken:	On February 12, 2008 received notification of a sewage spill from PW dispatch. Arrived on scene at Jack in the Box, 4011 Bonita Road and observed the discharge of sewage from the facilities private sewer lateral clean out. City crews conducted cleanup operations. Jack in the Box was informed of the discharge on February 11, 2008 by a concerned citizen at 9:30am. Due to the seriousness of the violations and the threat to public health and the impact to the environment a NOV and Admin Citation for the amount of 2000.00 was issued to the property owner. A full cost recovery invoice will be also issued to the property owner.					
6-Mar-08	STREET	Commercial	1236	THIRD	AV	Power Washing
Comments Action Taken:	3/6/08---Responded to report of power washing without BMPs and discharging into the SWCS at 1226 Third Ave. Inspection noted that Express Furniture staff was power washing parking lot with no BMPs and discharging into the SWCS. Issued Administrative Citation Warning SW1590. No further action necessary at this time.					
17-Apr-08	STORM DRAIN PIPE	Commercial	1415	THIRD	AV	Unknown Discharge

Incident Date	Structure Category	Site Category	Address	Type of Violation
Comments Action Taken:	4/17/08---Responded to report of unknown discharge from 1415 Third Ave. Inspection noted a discharge from the store and into the SWCS. Issued administrative citation SW B0417081. No further action necessary at this time.			
22-Apr-08	STREET	Commercial	1037 BROADWAY	Possible Dumping into Catch Basin
Comments Action Taken:	Contacted La Costa Azul staff and issued verbal warning and to conduct proper clean up of grease on wall. Compliance met NFA			
23-Apr-08	STORM CHANNEL	Commercial	1215 BROADWAY	Construction Debris & Waste
Comments Action Taken:	Issued Admin Citation SW042308-01 for 400.00 due to continued discharge of styrofoam into storm channel. On 06/24/08 - Furniture Mattress Expo filed for an appeal of the issuance of the citation and a adminstrative hearing was conducted this date. On 6/27/08 - Received finding from the hearing Examiner in favor of the City and Furniture Mattress Expo was required to pay hearing costs of an additional 500.00. No further action is required.			
28-Apr-08	STREET	Commercial	696 E ST	Power Washing
Comments Action Taken:	4/28/08---Responded to report of power washing without BMPs at 696 E Street. Inspection noted a discharge from the store and into the SWCS as a result of not implementing BMPs. Issued administrative citation SW1597. No further action necessary at this time.			
6-May-08	STREET	Commercial	MADRONA ST	Unknown Discharge
Comments Action Taken:	5/6/08---Responded to report of power washing without BMPs at 373 Third Ave. Inspection noted a discharge from carpet cleaning van and into the SWCS as a result of ruptured hose. Issued verbal warning to fix part and provide proof. Hours later the van was inspected and the repair were verified. No further action necessary at this time.			
14-May-08	STREET	Commercial	610 THIRD AV	Slulry/Concrete Discharge
Comments Action Taken:	5/14/08---Responded to report of concrete slurry discharge at the corner of Third Ave. and I Street. Inspection found M. Kevin O'Neill staff saw cutting concrete and allowing slurry to flow into the SWCS. Issued administrative citation SW1651. No further action necessary at this time.			
15-May-08	STREET	Commercial	ENERGY WY	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address	Type of Violation
Comments Action Taken:	5/15/08---Responded to report of concrete slurry discharge at 825 Energy Way. Inspection found CMC Contracting staff had allowed a concrete washout pit to be situated in the public right of way, and had overfilled it causing the washout pit to overflow into the SWCS. Issued administrative citation SW B0515082. No further action necessary at this time.			
22-May-08	STREET	Commercial	515 TELEGRAPH CANYON RD	Unknown Discharge
Comments Action Taken:	5/21/08---Responded to report of unknown discharge from 515 Telegraph Canyon Rd. Inspection of address in question and surrounding areas found two 55-gallon drums that were clean and leak proof. No violation was found. No further action necessary at this time.			
28-May-08	CATCH BASIN	Commercial	695 PALOMAR ST	Accident/Spill
Comments Action Taken:	5/28/08---Responded to report of gasoline spill from Chevron gas at 695 East Palomar. Inspection of address in question and surrounding areas found no evidence of spill or violation. Chevron staff had taken all appropriate measures for responding to accidental spills per company policy. No violation was found. No further action necessary at this time.			
30-May-08	STREET	Commercial	1665 BROADWAY	Unknown Discharge
Comments Action Taken:	5/30/08---Responded to report of unknown discharge from 1655 Broadway. Inspection found rinse water from tenant cleaning and washing activity flowing into the SWCS. Issued administrative citation SW B0619081. No further action necessary at this time.			
9-Jun-08	STREET	Commercial	1356 THIRD AV	Unknown Discharge
Comments Action Taken:	6/9/08---Encountered reissue from cleaning floor-cleaning activity at laundry mat at 1356 Third Ave. Inspection noted that residue led to the SWCS. Issued administrative citation warning SW1655. No further action necessary at this time.			
10-Jun-08	STREET	Commercial	1177 BROADWAY	Unknown Discharge
Comments Action Taken:	6/10/08---Inspection found no evidence of a violation. No further action necessary at this time.			
10-Jun-08	STREET	Commercial	876 HAROLD PL	Power Washing

Incident Date	Structure Category	Site Category		Address		Type of Violation
Comments Action Taken:	Mobile Detailer washing vehicles at Venture Commerce Center. Business was utilizing necessary BMPs. NFA required.					
10-Jun-08	STREET	Commercial	36	BROADWAY		Unknown Discharge
Comments Action Taken:	6/11/08---Responded to report of unknown discharge from 24 Broadway at Sea Vale St. Inspection noted wet sanding residue traceable from above mentioned address and into the SWCS. Issued administrative citation warning SW1656. No further action necessary at this time.					
	Subtotal: 31					
Construction Sites						
1-Aug-07	CATCH BASIN	Construction Sites		RIDGEBACK	RD	Other
Comments Action Taken:	Aqua Clean employee spilled liquid carwax/wash into onsite drain which discharged into catch basin. Vactor crew conducted cleanout. Recommend full cost recovery for cleanup. Education material issued to manager.					
3-Oct-07	CATCH BASIN	Construction Sites		EXPLORATION FALLS	DR	Construction Debris & Waste
Comments Action Taken:	Contacted TVRI Landscaping to use BMPs when conducting parkway maintenance.					
3-Oct-07	CATCH BASIN	Construction Sites	1674	MORNING STAR	DR	Possible Dumping into Catch Basin
Comments Action Taken:	Contacted Brookfield Shea Otay to investigate. Need access to homeowner's back yard to dye test. Left Door hanger but home is for sale.					
5-Oct-07	STREET	Construction Sites	1429	TRAILWOOD	AV	Construction Debris & Waste
Comments Action Taken:	Assigned work order for maintenance cleaning.					
13-Nov-07	MISC	Construction Sites		MAXWELL	RD	Sewage Spill Going Down Storm Drair

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Work request was cancelled. No further action needed.					
16-Nov-07	STREET	Construction Sites	582	COASTAL HILLS	DR	Slulry/Concrete Discharge
Comments Action Taken:	Robertson's staff conducted cleanup of spill. Concrete did not enter storm drain. Driver accidentally hit control stick when going over speed bump. City staff was relieved of conducting cleanup. NFA required.					
16-Nov-07	STREET	Construction Sites	582	COASTAL HILLS	DR	Slulry/Concrete Discharge
Comments Action Taken:	Robertson's staff conducted cleanup of spill. Concrete did not enter storm drain. Driver accidentally hit control stick when going over speed bump. City staff was relieved of conducting cleanup. NFA required.					
17-Jan-08	STREET	Construction Sites	1052	HILLTOP	DR	Unknown Discharge
Comments Action Taken:	1/17/08---Responded to report of unknown discharge from construction. Inspection noted Agundez Concrete staff saw cutting concrete and allowing lubricating water to flow into the SWCS. Issued Administrative Citation SW B117081. No further action necessary at this time.					
23-Jan-08	STREET	Construction Sites	745	DESIGN	CT	Construction Debris & Waste
Comments Action Taken:	1/23/08---Responded to report of dirt spoils in the public right-of-way. Inspection noted that landscape staff had placed dirt spoils in the sidewalk as par of irrigation replacement work being conducted. Notified Jay of Monroe Property Management (858) 922-5739. All dirt was covered in preparation for impending rain, and removed by 9AM the following morning. No further action necessary at this time.					
28-Jan-08	STREET	Construction Sites	1143	POTTER VALLEY	DR	Paint Discharge
Comments Action Taken:	1/28/08---Responded to report of paint discharge into the SWCS. Inspection noted that tenant at 1143 Potter Valley Dr. was washing paint brushes at the rear of the property and that the paint and rinse water was flowing at the front of the home via the yard drain. Issued Administrative Citation Warning SW C128081. No further action necessary at this time.					
29-Jan-08	STREET	Construction Sites	2879	BLUE RIDGE	CT	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Home is currently not occupied. Bank owned. Home has unfinished built in swimming pool that is fill with runoff water.Otained permission from Agent, to enter premises to secure automated sprinkler system to prevent further over-watering of landscaping. Agent notified County Health to request assistance in vector control. . Emailed Dat Quach, RWQCB, to brief on incident. NFA required.					
1-Feb-08	STREET	Construction Sites	610	HALECREST	DR	Slulry/Concrete Discharge
Comments Action Taken:	1/28/08---Responded to report of concrete discharge into the SWCS. Inspection noted that City contractor was pouring sidewalks and using BMPs to contain any potential spills. No evidence of a violation was found. No further action necessary at this time.					
14-Feb-08	STREET	Construction Sites	12	GATE TWELVE	PL	Dirt Tracking
Comments Action Taken:	Minor tracking NFA					
21-Feb-08	STREET	Construction Sites	1500	CUMBRE VIEW		Slulry/Concrete Discharge
Comments Action Taken:	2/28/08---Responded to report of concrete discharge into the SWCS at 1562 Cumbre View. Inspection noted that Wilfredo Concrete Construction staff was using wheel barrow located near a storm drain as a concrete wash out pit. Wheel barrow fell and discharged into SWCS. Issued Administrative Citation SW B221081. No further action necessary at this time.					
11-Apr-08	STREET	Construction Sites	421	HIDDEN VISTA	DR	Construction Debris & Waste
Comments Action Taken:	4/08/08---Responded to report of dirt/ sediment discharge from 421 Hidden Vista. Inspection noted some dirt and trash on the street in front of address. Issued verbal notice to property owner to clean and install BMPs. 4/14/08---Re-inspection noted all BMPs in place. No further action necessary at this time.					
		Subtotal: 15				
Industrial						
4-Dec-07	STREET	Industrial	3129	MAIN	ST	Unknown Discharge
Comments Action Taken:	12/4/07---Responded to report of business washing oil and grease of parts and equipment at facility adjacent to storm channel. Noted evidence of discharge into the SWCS. Issued Administrative citation SW B1204071 to Ms. Jo Ann Bellama of BMC Metals (Bellama). No further action is necessary at this time.					
30-May-08	STREET	Industrial	3358	MAIN	ST	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address	Type of Violation

Comments Action Taken: 5/30/08---Responded to report of concrete slurry spill at 3344 Main St. Inspection found construction contractor saw cutting concrete and allowing slurry to flow into the SWCS. Issued administrative citation SW1652. No further action necessary at this time.

Subtotal: 2

Municipal

14-Aug-07	STREET	Municipal	421	HIDDEN VISTA	DR	Construction Debris & Waste

Comments Action Taken: Spoke with contractor and instructed them to conduct thorough cleanup of sidewalk and street on a daily basis. Any future complaints could result in enforcement actions.

14-Aug-07	STREET	Municipal	421	HIDDEN VISTA	DR	Construction Debris & Waste

Comments Action Taken: Spoke with contractor and instructed them to conduct thorough cleanup of sidewalk and street on a daily basis. Any future complaints could result in enforcement actions.

25-Jan-08	STREET	Municipal	1351	THIRD	AV	Unknown Discharge

Comments Action Taken: 1/23/08---Responded to report of unknown discharge into the SWCS. Inspection noted that construction workers were ruptured an underground irrigation line. Issued Administrative Citation Warning SW C123084. No further action necessary at this time.

Subtotal: 3

Other

25-Oct-07	STREET	Other		BROADWAY		Dirt Tracking

Comments Action Taken: 10/25/07---American Asphalt allowing dirt to track onto Moss Street. Upon arrival American asphalt staff was finishing cleaning the street and correcting the violation. A verbal warning was issued along with public education materials. No further action necessary at this time.

6-Dec-07	STREET	Other		OLEANDER	AV	Unknown Discharge

Comments Action Taken: From new request to no further action required.

Incident Date	Structure Category	Site Category	Address			Type of Violation
26-Jun-08	STREET	Other	900	OTAY LAKES	RD	Complaint Response Enforcement

Comments Action Taken: On 6/26/08---Anonymous caller reported that Burns & Sons Trucking are hauling materials out of Southwestern College without using tarps. The materials are blowing into the street. Storm Water Staff responded and did not observe caller's concerns and alleged violation. Burns & Sons was not on-scene. Caller did not leave name and number for further information. No Further Action Required.

Subtotal: 3

Residential

3-Jul-07	CATCH BASIN	Residential	2767	RED ROCK CANYON	RD	Complaint Response Enforcement

Comments Action Taken: Arrived on scene and observed remnants of discharge of carpet cleaning effluent onto street and into the storm drain system. Issued Administrative Citation to Brower Carpet Cleaning in the amount of 200.00.

9-Jul-07	STREET	Residential	79	PROVENCE	CT	Slulry/Concrete Discharge

Comments Action Taken: 7/9/07---Issued Citation SW1583 for allowance of non storm water to enter the storm water conveyance system in the form of concrete pigment as a result of concrete work at 79 Provence Ct. See detail comments on customer tab

9-Jul-07	STREET	Residential	1142	LATIGO COVE		Unknown Discharge

Comments Action Taken: No evidence of NPDES violation found at the time of inspection. No further action necessary at this time. Photos on file.

10-Jul-07	STREET	Residential	227	CAMINO VISTA REAL		Other

Comments Action Taken: Complainant stated that neighbor illegally discharges by washing off rear deck of house and that she disguises such discharge by turning on her sprinklers to make it appear as a legal irrigation discharge. An agreement was made that inspector would monitor neighborhood whenever possible. No further action necessary at this time.

17-Jul-07	STREET	Residential	40	TOURMALINE	ST	Construction Debris & Waste

Comments Action Taken: Arrived on scene and observed several pallets, paver sand, concrete (dry), on street in front of residence. Spoke with homeowner who contacted Rhino Paving to have the street cleaned by AM of 7/18. Conducted followup and no further action is required.

17-Jul-07	STREET	Residential	1222	VIA ESCALANTE		Washing Vehicle in Street

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Arrived on scene and observed "red" dirt in front of residence. Spoke with homeowner who stated that sister washed her truck that was full of mud from traveling from New Mexico. Vactor crew conducted cleanup. NFA					
17-Jul-07	STREET	Residential	1361	BLUE SAGE	WY	Construction Debris & Waste
Comments Action Taken:	Arrived on scene and observed soil stockpile in driveway, sidewalk and into the curbline. Spoke with homeowner who stated that it will be removed by the end of the day by her contractor. Followup conducted. NFA					
17-Jul-07	STREET	Residential	1266	BLUE SAGE	WY	Power Washing
Comments Action Taken:	Observed RCA Landscaping employee hosing down street. Instructed him to stop and he complied. Contacted Company to inform employee to remove gravel stockpile from street. NFA					
17-Jul-07	STREET	Residential	1503	HILLTOP	DR	Slulry/Concrete Discharge
Comments Action Taken:	Arrived on scene and observed colored concrete wash in the the conveyance system. Left Pollution Notice at residence. Vactor crew conducted cleanup. Homeowner arrived at PWOPS with contractor. Conducted informal education to utilize vacuum system and not fiber rolls to contain wash water. NFA					
18-Jul-07	STREET	Residential	1078	ACERO	ST	Washing Vehicle in Street
Comments Action Taken:	Left door hanger at resident to ensure that carwashing activities be conducted in driveway or at a local carwash.					
24-Jul-07	STREET	Residential	1472	HILLTOP	DR	Slulry/Concrete Discharge
Comments Action Taken:	Property owner of 1462 Hilltop Dr. stated that property owner of 7038 Delos Dr., San Diego, CA 92139, (619) 370-4589, was responsible for allowing pigmented slurry onto the curb and gutter. Issued administrative citation warning SWB83071 on 8/3/07 noting the requirement to pay full cost recovery invoice for all costs associated with clean up by City staff.					
25-Jul-07	STREET	Residential	61	WHITNEY	ST	Construction Debris & Waste

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Debris removed from street. NFA required.					
31-Jul-07	STREET	Residential	36	SAN MIGUEL	DR	Slulry/Concrete Discharge
Comments Action Taken:	Instructed homeowner to remove all construction debris from the street by the following morning. Follow-up conducted to ensure compliance. NFA required.					
1-Aug-07	CATCH BASIN	Residential		CLAIRE	AV	Unknown Discharge
Comments Action Taken:						
1-Aug-07	CATCH BASIN	Residential		CLAIRE	AV	Sewage Spill Going Down Storm Drair
Comments Action Taken:	No evidence of violation found at the time of inspection. No further action necessary at this time. Photos on file.					
3-Aug-07	STREET	Residential	1012	VIA SINUOSO		Pool Filter Discharge
Comments Action Taken:	Discharge was from 1024 - Homeowner was contacted and issued verbal warning and possible cost recovery. City crew conducted cleanup.					
9-Aug-07	STREET	Residential	1155	VIA MONADA		Construction Debris & Waste
Comments Action Taken:	Observed used oil spill along street and sidewalk. Contacted vac truck to do initial washing. Have graffiti crew conduct powerwashing to remove staining. Responsible party unknown.					
21-Aug-07	STREET	Residential	1564	CONNOLEY	AV	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Left Door Hanger on vehicle. Vehicle was leaking transmission fluid on driveway and running onto sidewalk.					
22-Aug-07	STORM CHANNEL	Residential	62	PROVENCE	CT	Complaint Response Enforcement
Comments Action Taken:	9/14/08---Property owner at 69 Pala Ct. obstructing the brow ditch with dirt, debris, tools and other materials. Issued administrative citation warning B914071. No further action necessary at this time.					
27-Aug-07	STREET	Residential	103	OXFORD	ST	Unknown Discharge
Comments Action Taken:	8/27/08---Some staining found on the sidewalk from landscape drain. No evidence of discharge. Spoke to Manuel Barajas Rodriguez, son of property owner and informed him of the municipal code. Left public education materials. No further action necessary at this time.					
27-Aug-07	STREET	Residential	437	THRUSH	ST	Slulry/Concrete Discharge
Comments Action Taken:	Observed slurry discharge from address from new patio. Vac Truck crew conducted cleanup. Left Pollution Notice on residents door. Possible full cost recovery.					
28-Aug-07	STREET	Residential	270	DEL MAR	AV	Unknown Discharge
Comments Action Taken:	8/28/08---268/270 Del Mar (APN 5681621900) --- Installing a stamped and pigmented concrete driveway. Allowed runoff to enter the storm water conveyance system. Issued administrative citation SW1584 to contractor Miguel Valle Ramirez.					
14-Sep-07	STREET	Residential		EMERSON	ST	Construction Debris & Waste
Comments Action Taken:	9/14/08---Some dirt and debris in the curb as a result of landscaping work being conducted at this address. Advised the contractor of CVMC14.20.100 and issued public education materials. An immediate clean up of all debris in the curb was undertaken by the contractor. No further action required at this time.					
17-Sep-07	STREET	Residential	185	MONTGOMERY	ST	Sewage Spill Going Down Storm Drair

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Sewer spill secured. Sent sewer maintenance person to clean up. No further action required					
9-Oct-07	STREET	Residential	1623	MELROSE	AV	Unknown Discharge
Comments Action Taken:	10/9/07----Responded to complaint call of white residue discharging from 1623 Melrose Ave. White residue was traced to address and homeowner contacted. Homeowner stated that Dean's Pool service had performed maintenance on the pool the day before. Homeowner Sergio Saravia wanted to accept responsibility and was issued administrative citation SW1009072. No further action necessary at this time.					
9-Oct-07	STREET	Residential		MADRONA	ST	Power Washing
Comments Action Taken:	10/9/07----Responded to complaint call of auto detailing in the street without BMPs. Pro Care Auto Detail staff was washing vehicles in the street at 284 Madrona Street. Public education and administrative citation SW B1009071was issued to Ms. Monica Gomez, owner of this business.					
17-Oct-07	STREET	Residential	456	EMERSON	ST	Leaking Vehicle
Comments Action Taken:	10/17/07---Burtech Pipeline truck leaking diesel onto the street. Staff overfilled the saddle tank, and allowed leak to go uncontrolled. Administrative Citation SW B0101707 issued to Bob Bardo of Burtech Pipeline. No further action necessary at this time.					
18-Oct-07	STORM DRAIN PIPE	Residential	250	QUINTARD	ST	Unknown Discharge
Comments Action Taken:	10/18/07---Responded to report of illegal discharge from Mercado Int. Inspection noted water near the storm drain, however it was not traceable to the grocery store. No further action necessary at this time.					
5-Nov-07	CATCH BASIN	Residential	1025	CUYAMACA	AV	Unknown Discharge
Comments Action Taken:	Responded to report of illegal discharge from 1025 Cuyamaca. Noted discharge stains from property leading to the SWCS. Owner agreed to immediately stop using the washer machine and to re-plumb the machine to sewer. Issued public education materials and a verbal warning. No further action necessary at this time.					
6-Nov-07	STREET	Residential	465	F	ST	Sewage Spill Going Down Storm Drair

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	11/6/07---TCP Company Plumbing Specialist staff unclogging back up at apartment complex. Washing sewer residue into street. Issued Administrative Citation SW B1106071 to Mr. Roby Ellis. No further action necessary at this time.					
8-Nov-07	STREET	Residential		F	ST	Power Washing
Comments Action Taken:	11/8/08---Responded to report of power washing with no BMPs. Inspection did not find evidence of violation. No further action necessary at this time.					
8-Nov-07	STREET	Residential	16	BONITA	RD	Unknown Discharge
Comments Action Taken:	Responded to report of illegal discharge from 16 Bonita. Noted discharge from property leading to the SWCS. Contacted property owner that the discharge was from her washer machine. Owner agreed to immediately stop using the washer machine and have a plumber or her husband re-plumb the machine to sewer. Issued public education materials and a verbal warning. No further action necessary at this time.					
15-Nov-07	STREET	Residential	848	COLORADO	AV	Leaking Vehicle
Comments Action Taken:	11/15/07---Responded to report of vehicle leaking oil from a residential driveway and onto the sidewalk, and gutter. Noted a covered vehicle parked in the driveway and leaking oil. Left a business card and door hanger for resident. Had telephone conversation with the owner of the vehicle. Vehicle was moved, spill was cleaned, vehicle was replaced, and an oil pan was set underneath the car to capture any leakage. Verbal warning was issued. No further action necessary at this time.					
19-Nov-07	STREET	Residential	163	QUEEN ANNE	DR	Leaking Vehicle
Comments Action Taken:	11/19/07---responded to report of leaky vehicle onto the street. No evidence of a leaky vehicle or any other storm water violation was found upon inspection and a later re-inspection. No further action necessary at this time.					
21-Nov-07	STREET	Residential	478	SECOND	AV	Leaking Vehicle
Comments Action Taken:	Explorer was not on scene. Mulitple vehicle oil staining located throughout section of site. NFA required.					
4-Dec-07	CATCH BASIN	Residential		MAX	AV	Follow Up Inspection

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Work request was cancelled. Change category from storm water to catch basin. Refer work request to waste water division. No further action required.					
6-Dec-07	STREET	Residential	720	BAYLOR	AV	Slulry/Concrete Discharge
Comments Action Taken:	Did not observe slurry discharge. Some sediment and grass in curbline.					
6-Dec-07	STREET	Residential	1100	MELROSE	AV	Paint Discharge
Comments Action Taken:	12/6/07---Noted some light traces of dry paint from 1132 Melrose Ave. Spoke to property owner regarding the discharge and the dry wall work being conducted at the home. Owner cleaned the discharge. No further action necessary at this time.					
13-Dec-07	CATCH BASIN	Residential	2287	SUN VALLEY	RD	Complaint Response Enforcement
Comments Action Taken:	12/6/07---Responded to report of non storm water discharge by resident who also owns a carpet cleaning business. Inspection found no evidence of an illegal discharge. Public education materials and contact information was left at the door. No further action necessary at this time.					
13-Dec-07	CATCH BASIN	Residential	2287	SUN VALLEY	RD	Complaint Response Enforcement
Comments Action Taken:	12/6/07---Responded to report of non storm water discharge by resident who also owns a carpet cleaning business. Inspection found no evidence of an illegal discharge. Public education materials and contact information was left at the door. No further action necessary at this time.					
3-Jan-08	STREET	Residential	655	OAKLAWN	AV	Other
Comments Action Taken:	1/4/08--- Responded to call regarding trash, junk and debris (TJD) in the storm drain at 655 Oaklawn. Inspection noted violations as described. Notified property owner Francisco Ceja regarding the condition of his rental property. Mr. Ceja immediately began efforts to summon help, go to the site and began cleaning the TJD dumped by his tenants. All TJD was cleaned and verbal notice was issued for Mr. Ceja to take all necessary steps to prevent a reoccurrence of this violation. No further action is necessary at this time.					
4-Jan-08	STREET	Residential	1101	PARADISE TRAIL	RD	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	1/4/08--- Responded to call regarding leaky vehicle ion the street. Located the Grey Saturn wagon CL 4HLD265 in question. No evidence of violation was found. Spoke to vehicle owner and advised to move vehicle from the street in case vehicle were to leak fluids and to comply with parking regulations. No further action is necessary at this time.					
10-Jan-08	STREET	Residential	511	JEFFERSON	AV	Unknown Discharge
Comments Action Taken:	1/9/08--- Responded to call regarding oil spill from tire shop at 646 H Street. Per inspection, I found oil seeping between crack in the wall and staining the exterior of wall abutting to 511 Jefferson Ave. Oil was static. Advised tenant at 511 Jefferson that case was a civil matter. Advised manager of Express Tire at 646 H that he should take immediate action to correct seepage. Did not issue any order or directive on this case.					
10-Jan-08	STREET	Residential		HILLTOP	DR	Accident/Spill
Comments Action Taken:	1/10/08--- Responded to call regarding radiator coolant spilled in the gutter at intersection of Hilltop and Rienstra. Cause of spill was an auto collision. City crews assisted in containment of spill by diking spill with sand / dirt. Remained on site until tow contractor arrived. Reminded tow contractor of his requirement to clean up all auto spills. Asked police officer on scene to ensure tow contractor cleans up. No further action necessary at this time.					
14-Jan-08	STREET	Residential		PARADISE RIDGE	WY	Accident/Spill
Comments Action Taken:	On 01/14/08 received notification of a vehicle leaking oil. Arrived on-scene and observed a small stain in the area but there was no vehicle at this location. Did not require cleanup due to stain appeared to be old and was already saturated into the asphalt. No Further Action Required.					
16-Jan-08	STREET	Residential	943	PALENCIA	PL	Leaking Vehicle
Comments Action Taken:	1/16/08---Responded to report of trash truck leaking hydraulic fluid onto the street. Inspection noted evidence of some hydraulic fluid on street. Notified Manuel Medrano in the City's conservation division to alert Allied Waste of the spill. Allied Waste staff immediately responded and cleaned all stains from the street. No further action necessary at this time.					
17-Jan-08	STREET	Residential	1153	NOLAN	AV	Leaking Vehicle
Comments Action Taken:	1/17/08---Responded to report of unknown discharge from motor home parked at 1153 Nolan Ave. Inspection noted traces of dry concrete residue potentially originating ar rge address in question. Definitive evidence of a violation was not found. Issued Administrative Citation Warning SW C117082. No further action necessary at this time.					
22-Jan-08	STREET	Residential		PERRIN	PL	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	1/22/08---Responded to report of unknown discharge from concrete truck at Perrin Place and Brezar Street. Searched the area and was not able to locate truck or any evidence of a violation. No further action necessary at this time.					
22-Jan-08	STREET	Residential	1218	HELIX	AV	Leaking Vehicle
Comments Action Taken:	1/22/08---Responded to report of leaky vehicle at 1218 Helix Ave. Inspection noted some old oil stains in the street, however no evidence was found linking stains to any of the vehicles parked in the vicinity. No further action necessary at this time.					
25-Jan-08	STREET	Residential		TURQUOISE	CT	Unknown Discharge
Comments Action Taken:	1/23/08---Responded to report of unknown discharge into the SWCS. Inspection noted that tenant at 354 Turquoise Ct. was washing paint brushes into the SWCS. Issued Administrative Citation Warning SW B125081. No further action necessary at this time.					
11-Feb-08	STREET	Residential	24	J	ST	Dirt Tracking
Comments Action Taken:	No evidence of tracking.					
25-Feb-08	STREET	Residential	1392	OLEANDER	AV	Slulry/Concrete Discharge
Comments Action Taken:	2/25/08---Responded to report of concrete discharge into the SWCS at 1392 Oleander Ave. Inspection noted that staff working for Ernesto Rubalcava allowing rinse water to flow into the SWCS and not using BMPs. Issued Administrative Citation SW B225081. No further action necessary at this time.					
27-Feb-08	STREET	Residential	780	FOURTH	AV	Slulry/Concrete Discharge
Comments Action Taken:	2/27/08---Responded to report of concrete discharge into the SWCS at 780 Fourth Ave. Inspection noted homeowner Ana and Arthur Lowery had washed off concrete buggy in the street in preparation for its return to the rental facility. Rinse water flowed into the SWCS. Issued Administrative Citation Warning SW B227081. No further action necessary at this time.					
6-Mar-08	STREET	Residential	246	ORANGE	AV	Unknown Discharge

Incident Date	Structure Category	Site Category	Address		Type of Violation
Comments Action Taken:	3/6/08---Responded to report of unknown discharge at 248 Orange Ave. Inspection noted that green waste can set out for pick-up was leaking onto street. Issued Administrative Citation Warning SW1591. No further action necessary at this time.				
17-Mar-08	STREET	Residential	RIDGEBACK	RD	Power Washing
Comments Action Taken:	3/17/08---Responded to report of power washing at 700 BLK of Marbella Circle. Inspection noted that contractors for the complex were power washing homes in preparation for painting. At the time of inspection all runoff was contained within the vegetated areas of the complex. A verbal warning was issued to Painting staff that if they were to continue power washing they must implement BMPs. All power washing was stopped until appropriate BMPs were implemented. No further action necessary at this time.				
27-Mar-08	STREET	Residential	1136 NOLAN	AV	Unknown Discharge
Comments Action Taken:	3/27/08---Responded to report of unknown discharge 1136 Nolan Ave. Inspection noted slight traces of residue from a pool filter cleaning. Insufficient evidence was present to take enforcement action. A verbal warning was issued. No further action necessary at this time.				
2-Apr-08	STREET	Residential	361 EMERSON	ST	Slulry/Concrete Discharge
Comments Action Taken:	Arrived on scene and observed buildup of slurry in conveyance system. Resident was pouring own driveway and was washing it down to keep it wet. Resident was not aware of regulations and thought that washing it down was OK. Issued educational material and city crews conducted clean up. NFA				
8-Apr-08	STREET	Residential	393 CAMINO ELEVADO		Slulry/Concrete Discharge
Comments Action Taken:	4/08/08---Responded to report of unknown discharge 395 Camino Elevado. Inspection noted a discharge of concrete slurry flowing from this address and into the SWCS. Issued Administrative Citation Warning SW B0408081. No further action necessary at this time.				
17-Apr-08	STREET	Residential	1294 CARDINAL	PL	Slulry/Concrete Discharge
Comments Action Taken:	4/17/08---Responded to report of concrete discharge from 1288 Cardinal Place. Inspection noted slurry from this address flowing into the SWCS. Issued administrative citation warning SW1594. No further action necessary at this time.				
21-Apr-08	STREET	Residential	255 WOODLAWN	AV	Power Washing

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Marisa and Ramon responded. Did not observe discharge. NFA					
24-Apr-08	CATCH BASINS	Residential	427	DEL MAR	CT	Wash Down Basin
Comments Action Taken:	Assigned work order to clean and flush catch basin. Completed by City's Waste Water Division.					
12-May-08	STREET	Residential	600	GUAVA	AV	Unknown Discharge
Comments Action Taken:	5/12/08---Responded to report of unknown discharge at 641 Guava. Inspection noted a discharge from concrete pump and into the SWCS. Issued administrative citation warning SW1650. No further action necessary at this time.					
12-May-08	STREET	Residential	419	PLAZA TOLUCA		Leaking Vehicle
Comments Action Taken:	5/12/08---Responded to report of leaky vehicle at Plaza Toluca. Inspection noted white Jaguar Lic 2JAN931 leaking oil onto SWCS. Issued verbal warning to owner to have the vehicle repaired or removed from the street. A re-inspection found that the car had been removed from the street and parked in a private driveway. No further action necessary at this time.					
12-May-08	STREET	Residential	1188	NACION	AV	Unknown Discharge
Comments Action Taken:	5/12/08---Responded to report of unknown discharge at 1188 Nacion. Inspection noted white residue in SWCS from address in question. Issued administrative citation SW B0512082. No further action necessary at this time.					
12-May-08	STREET	Residential	576	POINT SAN LUIS	CT	Unknown Discharge
Comments Action Taken:	5/12/08---Responded to report of unknown discharge from 576 Point San Luis Ct. and into the SWCS. Issued administrative citation warning SW B0512083. No further action necessary at this time.					
15-May-08	STREET	Residential	225	PALOMAR	ST	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	5/15/08---Responded to report of unknown discharge from 225 Palomar Street. Inspection verified that unknown flow was from irrigation over watering. No further action necessary at this time.					
16-May-08	STREET	Residential	906	BUCKAROO	LN	Unknown Discharge
Comments Action Taken:	5/16/08---Responded to report of unknown discharge from 906 Buckaroo Ln. Inspection found white residue in the SWCS, but could not find definitive evidence to identify the responsible party. City staff was summoned to clean up all white residue. No further action necessary at this time.					
21-May-08	STREET	Residential	955	MONSERATE	AV	Complaint Response Enforcement
Comments Action Taken:	5/21/08---Responded to report of resident deliberately placing pipe in the SWCS. Inspection found white pipe placed in the SWCS. Spoke to resident and informed him of the CVMC. Issued order to remove pipe and verbal notice regarding violation. Resident removed the pipe. No further action necessary at this time.					
22-May-08	STREET	Residential	1179	AGUA TIBIA	AV	Unknown Discharge
Comments Action Taken:	5/21/08---Responded to report of unknown discharge from 1179 Agua Tibia Ave. Inspection found white water based paint in the SWCS. The paint residue was traceable to the above address. Issued administrative citation SW B0521083. No further action necessary at this time.					
23-May-08	STREET	Residential		TIFFANY	CT	Construction Debris & Waste
Comments Action Taken:	On 05/23/08, received notification of City contractor washing down construction debris into the storm drain. Arrived on-scene and observed contractor staff "wetting" fresh concrete from new ADA ramp. Contractor was using BMPs - (Berms and Sand Bags). No Further Action Required.					
23-May-08	STREET	Residential		TIFFANY	CT	Construction Debris & Waste
Comments Action Taken:	On 05/23/08, received notification of City contractor washing down construction debris into the storm drain. Arrived on-scene and observed contractor staff "wetting" fresh concrete from new ADA ramp. Contractor was using BMPs - (Berms and Sand Bags). No Further Action Required.					
29-May-08	STREET	Residential	1195	BOW WILLOW TRAIL	WY	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	5/29/08---Responded to report of leaking vehicle at 1195 Bow Willow Trail Way. Inspection of address in question and surrounding areas found no evidence of spill or violation. The resident at the address in question was washing his car. No violation was found. No further action necessary at this time.					
29-May-08	STREET	Residential		H	ST	Accident/Spill
Comments Action Taken:	5/29/08---Responded to report of diesel spill at eastbound H Street and 805. Inspection found that an accidental fire caused a diesel spill. Spill had been contained and responsible party was taken all appropriate measures to contain, remove and appropriately dispose of all diesel fuel spilled in the street, under the supervision of CVFD and County HAZMAT. Diesel fuel did not enter a storm drain inlet. This spill was completely remediated by the responsible party. This spill was unavoidable. No violation was found. No further action necessary at this time.					
30-May-08	STREET	Residential	1097	FOURTH	AV	Slulry/Concrete Discharge
Comments Action Taken:	5/30/08---Responded to report of concrete slurry spill at 1095 Fourth Ave. Inspection found concrete slurry flowing from said property and into the SWCS. Issued administrative citation SW1653. No further action necessary at this time.					
10-Jun-08	STREET	Residential	2875	MORNING CREEK	RD	Unknown Discharge
Comments Action Taken:	AIG Concrete Pumping washing down equipment into the conveyance system. Issued admin citation SW061008-01 (Warning).					
11-Jun-08	STREET	Residential	987	ROCA	PL	Construction Debris & Waste
Comments Action Taken:	6/11/08---Responded to report of sand/ dirt in the SWCS at 987 Roca Place. Inspection noted approximately one yard of sand dumped in the street. A door hanger was left at the address informing resident of violation, and to call. Spoke to resident who immediately complied with request to remove the sand in lieu of increased enforcement action by the City. No further action necessary at this time.					
23-Jun-08	STREET	Residential	168	SHASTA	ST	Slulry/Concrete Discharge
Comments Action Taken:	6/23/08---Responded to report of concrete slurry in the SWCS from 168 Shasta. Inspection noted evidence of non storm water discharges from address in question. Issued administrative citation SW1660. No further action necessary at this time.					

Subtotal: 77

Total: 131

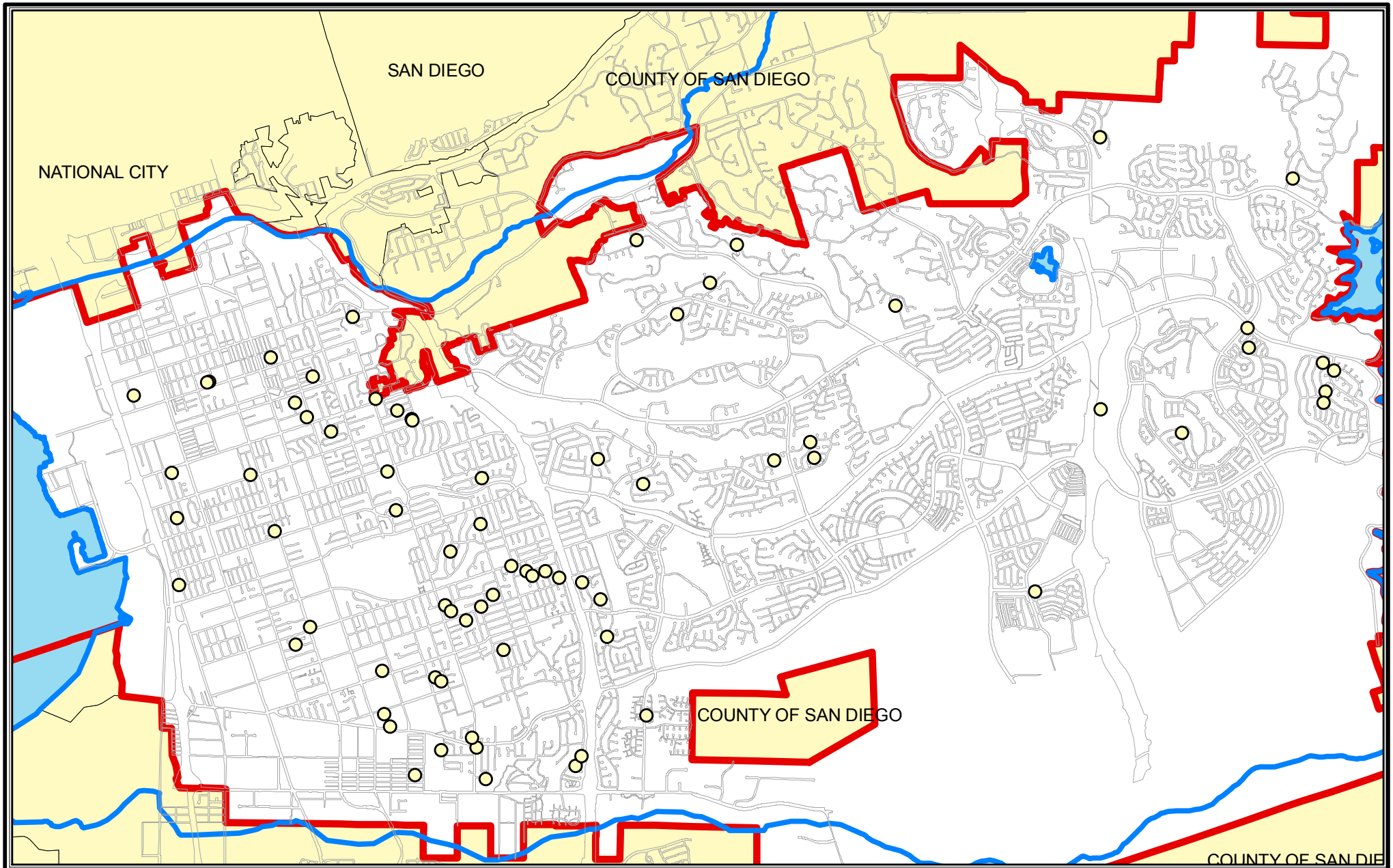

Jurisdictional Urban Runoff Management Program

Violation Locations FY 2007-2008

N W E S

0 0.5 1 2 Miles

Residential

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM
Map Created 8/22/2008
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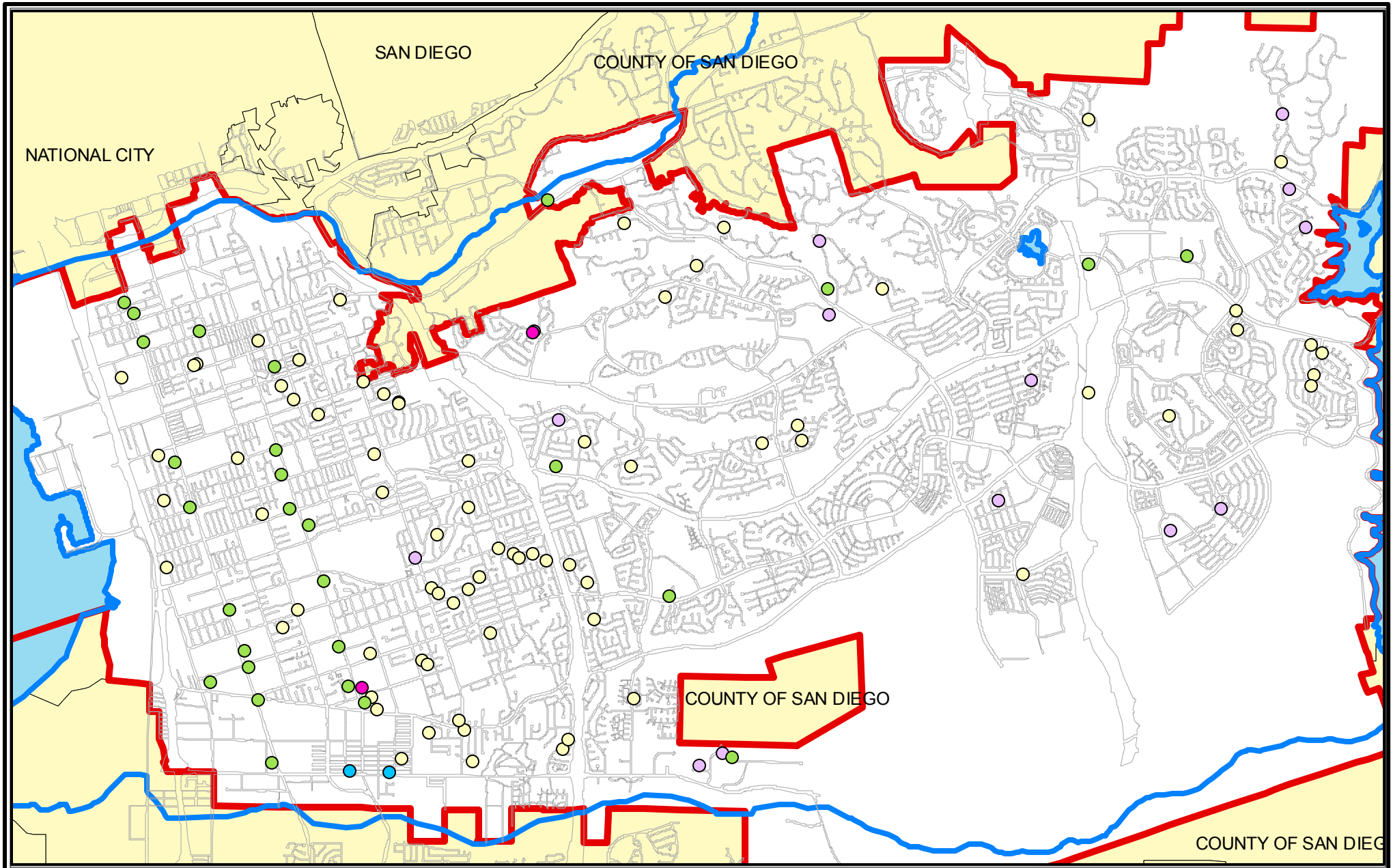

Jurisdictional Urban Runoff Management Program

Violation Locations FY 2007-2008

0 0.5 1 2 Miles

Commercial
Industrial
Residential
Construction
Municipal

CITY OF CHULA VISTA

Map Created 9/16/2008

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CITY OF CHULA VISTA

Public Works Department

December 8, 2008

County of San Diego
Watershed Protection Program
5201 Ruffin Road, Suite P
San Diego, CA 92123

Attention: Mr. Jon Van Rhyn, Watershed Protection Program Manager

SUBJECT: SUBMITTAL OF JURMP ANNUAL REPORT NO. 28 SECTION 7.0 FOR FISCAL YEAR 2007-2008

Enclosed please find one hard copy and three CD-ROMs of the City of Chula Vista's Jurisdictional Urban Runoff Management Program Annual Report No. 28 Section 7.0 – Illicit Discharge Detection and Elimination Component for Fiscal-Year 2007-2008. Pursuant to the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 and Addendum No. 2 to Order No. R9-2007-0001, I request that the County of San Diego, as the Principal Copermittee, submits said report to the Regional Water Quality Control Board.

Should you have any questions please call me at (619) 397-6111. Thank you.

K. Aminpour

KHOSRO AMINPOUR
SENIOR CIVIL ENGINEER

Attachments

CITY OF CHULA VISTA

Public Works Department

December 8, 2008
File # 0780-72-KY181

San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Attention: Mr. John H. Robertus, Executive Officer

SUBJECT: JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) ANNUAL REPORT NO. 28, SECTION 7.0 AND ATTACHMENTS

Please find enclosed City of Chula Vista's JURMP Annual Report No. 28, Section 7.0 – Illicit Discharge Detection and Elimination Component for Fiscal-Year 2007-2008.

Section 7.0 of the JURMP Annual Report has been prepared in accordance with the requirements of the San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (NPDES Permit No. CAS0108758) and Addendum No. 2 to Order No. R9-2007-0001.

If you have any questions regarding the submitted report, or need further information, please contact Khosro Aminpour, Senior Civil Engineer, at (619) 397-6111. Please direct any and all correspondence to:

City of Chula Vista, Department of Public Works
1800 Maxwell Road, Chula Vista, CA 91911
Attention: Khosro Aminpour, Senior Civil Engineer

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

Attachments

C: Jack Griffin, Director of Public Works
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer

SIGNED CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

12/8/08
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City of Chula Vista

Jurisdictional Urban Runoff Management Program

ANNUAL REPORT

No. 28

July 1, 2007 - June 30, 2008

Section 7

Illicit Discharge Detection & Elimination Component

CITY OF CHULA VISTA

CITY OF CHULA VISTA
JURMP Annual Report No. 28
Fiscal Year 2007-2008
SEPTEMBER 2008

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7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(f).i - Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.

Permit Section J.3.a.(3)(f).ii - Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.

Permit Section J.3.a.(3)(f).iii - Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.

Permit Section J.3.a.(3)(f).iv - A brief description of any other investigations and follow-up activities for illicit discharges and connections.

Permit Section J.3.a.(3)(f).v - The number and brief description of illicit discharges and connections identified.

Permit Section J.3.a.(3)(f).vi - The number of illicit discharges and connections eliminated.

Permit Section J.3.a.(3)(f).vii - Identification and description of all spills to the MS4 and response to the spills.

Permit Section J.3.a.(3)(f).viii - A description of activities implemented to prevent sewage and other spills from entering the MS4.

Permit Section J.3.a.(3)(f).ix - A description of the mechanism whereby notification of sewage spills from private laterals and septic system is received.

Permit Section J.3.a.(3)(f).x - Number of times the hotline was called, as compared to previous reporting period, and a summary of the calls.

Permit Section J.3.a.(3)(f).xi - A description of efforts to publicize and facilitate public reporting of illicit discharges.

Permit Section J.3.a.(3)(f).xii - The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(f).xiii - A description of notable activities conducted to manage illicit discharges and connections.

7.1 INTRODUCTION

Illicit connections and illicit discharges (IC/ID) to the MS4 can potentially impact water quality if they are not eliminated. Examples of illicit discharges include wash-water, sediment, spilled chemicals, sewage releases, and pollutants from various sources. An illicit connection is a connection that conveys an illicit discharge to the MS4 via a pipe, drain, channel, etc. The City utilizes the following mechanisms to actively seek and eliminate illicit discharges and connections to the MS4:

1. Public complaint response and investigation
2. Inspection of local businesses and municipal facilities
3. Dry weather field screening and analytical monitoring
4. Municipal MS4 and sewer maintenance activities
5. Providing educational outreach to the community and business owners

This section provides a summary of public complaint responses and investigation; and spill response and reporting during FY 2007-2008. Also in this section is a summary of Dry Weather Field Screening and Analytical Monitoring activities conducted within the 2008 Dry Weather Monitoring Season (May 1 – September 30) and a summary of follow-up investigations conducted to determine the potential source(s) of pollutants that exceeded their respective action levels. Effectiveness assessment of the Illicit Discharge Detection and Elimination Component is included in Section 11.0 of this annual report.

Inspection of municipal facilities and industrial/commercial businesses are addressed in Sections 2.0 and 5.0 of this report. Municipal MS4 and sewer maintenance activities are described below and in Section 2.0 of this report. Educational outreach is described in Section 8.0.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

The City operates a hotline (619)397-6000 for residents, employees, and the general public to report any illicit discharges to storm water conveyance systems. The hotline is publicized through several venues such as the City's website, City bus signs, and various storm water educational materials and brochures. The hotline is answered by Public Works dispatch staff, who routes the concern(s) to the appropriate section(s) within the City's Public Works Department. All calls are entered into a database, and all potential IC/IDs are investigated by Storm Water Management Section staff. Storm Water Management Section Staff takes immediate action to respond, investigate, and provide education and enforcement as necessary. Staff also ensures that City crews or the responsible party contains and cleans any spills. Public

Works crews are equipped with vactor trucks to contain and clean large spills. All appropriate departments are notified as needed such as the Fire Department or the County of San Diego for hazardous materials response.

During the reporting year, there were 131 calls to the hotline, compared to 137 calls in FY 2006-2007. Figure 7-1 details the number of complaints from FY 1997-1998 through FY 2007-2008. As part of its education component, the City advertises the hotline on its website and trains employees to report any illegal discharges to the storm water conveyance system. Attachment I summarizes all calls to the hotline and describes the outcomes of each. Attachment H is a summary of all illegal discharges to the MS4 or other violations of the City's Storm Water Ordinance that resulted in enforcement actions for FY 2007-2008.

Figure 7-1 City of Chula Vista Storm Water Complaint Summary 1997-2008

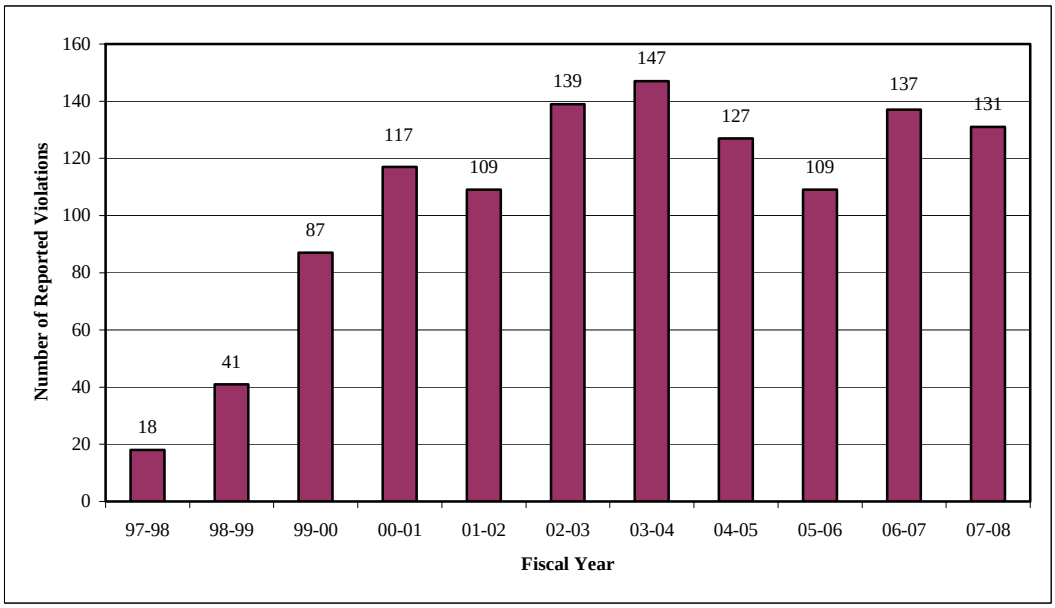

7.3 SPILL REPORTING, RESPONSE, AND PREVENTION

Section 9.0 of the City's JURMP document outlines the procedures for preventing discharges of sewage to the MS4 and the mechanism whereby notification of sewage spills from private laterals, septic systems, and others spills are received. City staff is trained to report all spills to the dispatch hotline and crews are prepared to respond, contain, and cleanup spills where necessary. In addition, Section 9.0 of the City's JURMP details the City's Sanitary Sewer Overflow Response Plan (SSORP) as required by RWQCB Order No. 96-04 and a Capacity, Management, Operations, and Maintenance (CMOM) program. The City is also in the process of developing a Fats, Oil, and Grease (FOG) Program to reduce the amount of FOG introduced into the sanitary sewer system by businesses.

Table 7-1 provides a summary of these discharges and spills and the number of each. All discharges and spills were immediately responded to, contained, cleaned, and eliminated.

Table 7-1 Types of Spills/Discharges and Number of Each During FY 2007-2008

TYPE OF SPILL/DISCHARGE	NUMBER
Chemical Discharge	3
Driveway-Trash Washing	2
Equipment Washing	4
Grease/Food/Drink Discharge	5
Leaking Containers/Tanks	4
Others/Unknown Discharge	7
Painting-Sanding Residue	3
Pool-Spa Residue	2
Power/Pressure Washing	11
Resident Cleaning Residue	3
Saw Cutting/Sanding Discharge	5
Sediment Discharge	5
Sewage Spill/Discharge	7
Slurry/Concrete Discharge	12
Trash/Debris Discharge	10
Vehicle Oil Discharge	3
Vehicle Washing/Dismantling	3
TOTAL	89

City inspectors are constantly on the lookout for illegal connections during their routine response to reported violations or industrial/commercial inspections. When a floor drain within a structure is suspected of being connected to the storm water conveyance system or discharging to the street gutter, such connection is verified by dye testing. If the indoor drain is connected to storm drains, it is considered illegal and ordered to be disconnected immediately. This reporting year, the City had some incidents of illegal connections dealing with washing machine and hand washing sink outlets. All illegal connections were immediately brought to the attention of the homeowner or business owner and were eliminated. In addition, the City's maintenance crews have been trained to look for illicit discharges and connections during their daily activities in the field. This process has resulted in the identification of several illicit discharges and connections each year.

7.4 URBAN RUNOFF MONITORING

The 2008 Dry Weather Field Screening and Analytical Monitoring Program Report has been submitted as Attachment K, along with an updated Dry Weather Field Screening and Analytical Stations Map. During the reporting period, the MS4 map and the dry weather monitoring maps were reviewed for inaccuracies, and no amendments were necessary. Fifty-eight primary monitoring sites were visited during the 2008 Dry Weather Monitoring Program, and samples were collected and analyzed for 57 of these sites. Site BAY-01 was found to be dry so an alternate location, SWR-03-E, was chosen to replace the site. Forty-two sites had measurable flow and 15 sites were ponded. Fifteen sites received laboratory analysis in addition to normal field screening. Table 7-2 provides a summary of exceedances for both field and laboratory analysis.

In previous years, the main round of monitoring was followed by a follow-up monitoring round within one or two months of each other. In this year's monitoring, the main round and follow-up monitoring were combined as required by NPDES Municipal Permit, Order No. R9-2007-0001.

Table 7-2 Summary of Action Level Exceedances for the 2008 Dry Weather Monitoring and Field Screening Analysis

FIELD SCREENING ANALYSIS (57 Samples)			
Analyte	**Number of Exceedances**	**% of Sites with Exceedances**	**Site(s) Exceeding Action Level**
pH	0	0	None
Conductivity	0	0	None
Turbidity	0	0	None
Surfactants (MBAS)	2	4	CEN-01, CEN-08
Ammonia-N	4	7	CEN-01, TCC-04, TCC-05, TCS
Nitrate-N	16	28	BAY-03, LAK-01, OVR-07, RCC-03, RCC-04, SCR-02, SCR-03, SCR-05, SUN-02, SUN-05, SUN-06, SUN-07, TCC-02, TCC-03, TCC-05, WOL-02
Orthophosphate-P	0	0	None
Glycol	5	9	BAY-02, CEN-01, POG-02, PRD-02, SCR-01

MBAS = Methylene Blue Active Substances

LABORATORY ANALYSIS (15 Samples)			
Analyte	**Number of Exceedances**	**% of Sites with Exceedances**	**Site(s) Exceeding Action Level**
Oil and Grease	0	0	None
Cadmium (Dissolved)	0	0	None
Copper (Dissolved)	0	0	None
Lead (Dissolved)	0	0	None
Zinc (Dissolved)	0	0	None
Diazinon	0	0	None
Chlorpyrifos	0	0	None
Total Coliforms	7	47	CEN-01, JUD-01, JUD-02, POG-02, RCC-03, SCR-01, SUN-02
Fecal Coliforms	2	13	JUD-02, POG-02
Enterococcus	4	27	CEN-01, POG-02, SCR-01, SVS-01

Note: Table data is based on routine visits only. Confirmation, follow-up and dry site visits are not included.

Since 2002, no exceedances have been measured for temperature, turbidity, cadmium, copper, lead, or chlorpyrifos.

The historical data for the results of field analysis presented in Figure 7-2 indicates a decreasing trend in ammonia concentrations. Orthophosphate exceedances have been very rare in all years since 2002. No discernable trend is apparent for glycol, nitrate, or surfactants results, which have fluctuated from year to year.

Figure 7-2 Percent of Sites with Field Constituents Exceedances by Year

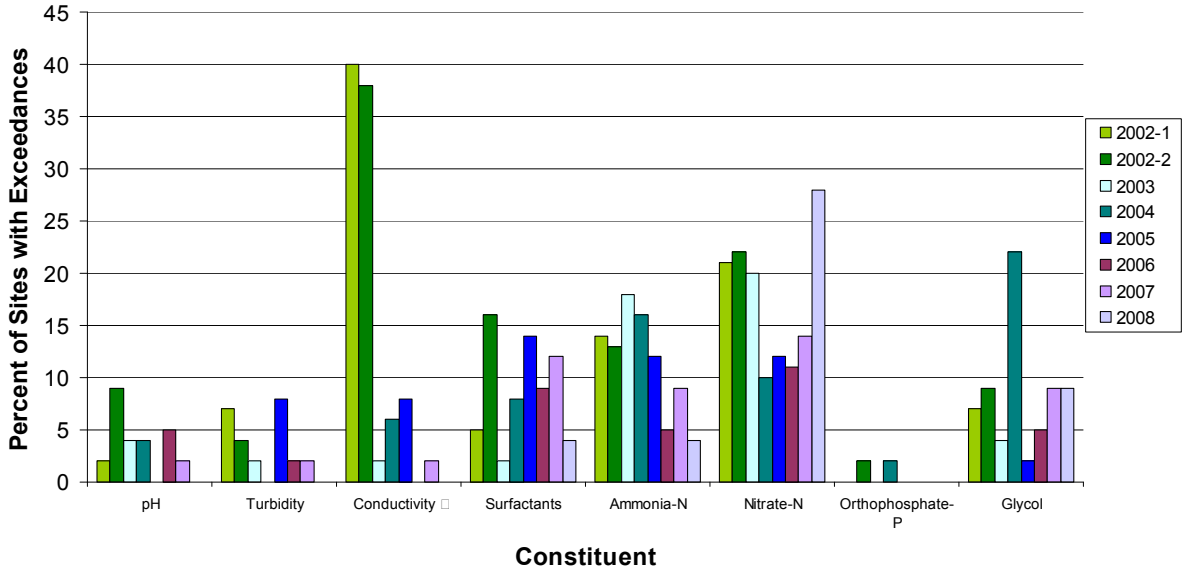

* The action level for conductivity was numeric in the past but was later changed to best professional judgment.

This year, nitrate-nitrogen was the constituent with the greatest number of exceedances, testing above the action level at 16 sites. Also, bacteria were elevated at eight sites. All five of the glycol action level exceedances were within normal range at the confirmation visit. In addition, ammonia and surfactants tested above the action level at two sites. Upon the confirmation visit to the sites, both ammonia and surfactant levels had decreased to below the action level.

Historical data for laboratory analyses presented in Figure 7-3 indicates relatively high bacteria exceedance rates, although the fecal coliform exceedance rate has decreased somewhat over the years. Zinc and diazinon have not been detected above their action levels since 2003. Prior to 2003 the rates of exceedances were approximately 10% per year. Surfactants and oil and grease have generally had no exceedances or only a minimal number of exceedances over the years.

Additionally, a trash monitoring element was added to the dry weather monitoring program beginning this dry season, as required by the Municipal Permit. Of the 57 sites, 41% were found to be Optimal, 33% were Suboptimal, 17% were Marginal, 3% were Submarginal, and 5% were Poor. The main sources of trash came from transient, household, and school activities. As a part of trash assessment, sites were evaluated for potential threat to human or aquatic health. Two sites were found to have potential threats to human or aquatic health and were immediately cleaned by City crews. The three Submarginal and Poor sites were also cleaned by City crews and were noted as sites needing more routine maintenance and trash pick-up.

Figure 7-3 Percent of Sites with Laboratory Exceedances by Year

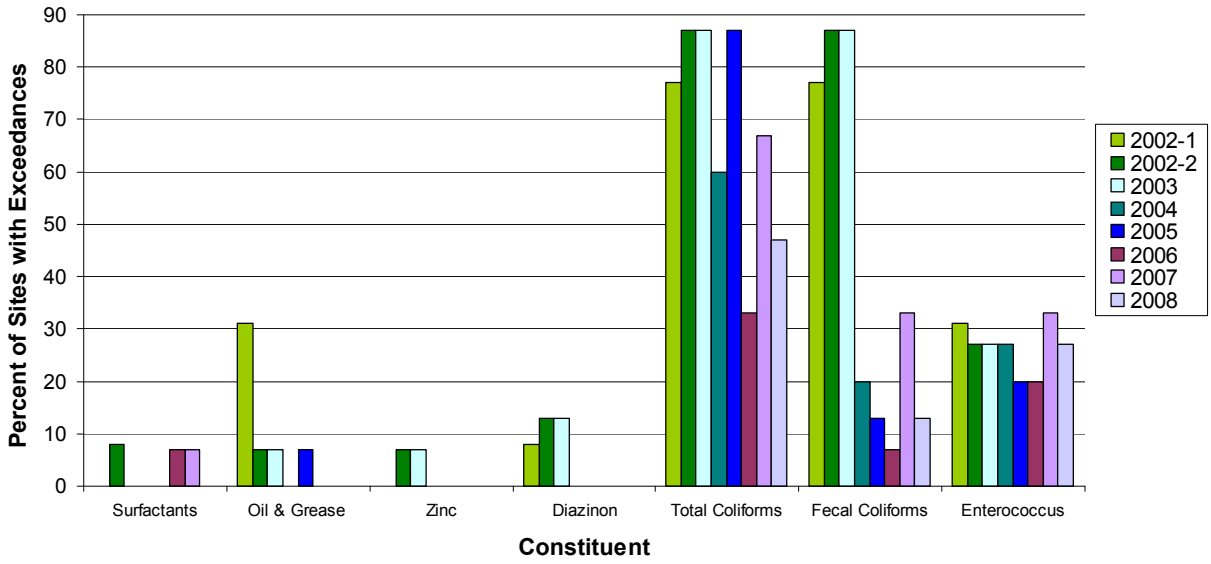

7.5 FOLLOW-UP AND ENFORCEMENT

Twenty-six sites had constituents above their respective action levels. Table 7-3 shows the sites with elevated constituent level and their probable sources based on upstream investigations.

Table 7-3 Summary of Upstream Investigations

SITE	UPSTREAM INVESTIGATION TARGET CONSTITUENT(S)		RESULTS/ PROBABLE SOURCE
	Field	Laboratory	
BAY-02	Glycol	-	Discarded container of anti-freeze
BAY-03	Nitrate-N	-	Unknown
CEN-01	Surfactants, Ammonia-N, Glycol	Total Coliforms, *Enterococcus*	Surfactants, ammonia-N, glycol – transient flow; Bacteria – catch basin with food grease on Jefferson Avenue
CEN-08	Surfactants	-	Car wash area in Cabrillo Mobile Lodge residential community
JUD-01	-	Total Coliforms	Significant trash at the site and from water discharging to the site from the west. City crews removed the trash from the channel.
JUD-02	-	Total Coliforms, Fecal Coliforms	Decaying vegetation and litter in a storm drain inlet on Connelly Circle, washed down by irrigation runoff. Bacteria are likely amplified in the site's slow-moving water and excessive vegetation.

Table 7-3 continued

LAK-01	Nitrate-N	-	Nitrate-enriched flow from landscaping activities
OVR-07	Nitrate-N	-	Nitrate-enriched groundwater seepage, possibly secondary to landscaping
POG-02	Glycol	Total Coliforms, Fecal Coliforms, *Enterococcus*	Glycol – transient flow; Bacteria – significant amounts of water fowl waste transported by irrigation runoff
PRD-02	Glycol	-	Recent automotive fluid spills in the residential complex immediately upstream, carried by irrigation runoff
RCC-03	Nitrate-N	Total Coliforms	Nitrate-N – nitrate-enriched groundwater seepage; Total Coliforms – thick layer of aquatic plant material at site, trash, and wildlife waste upstream
RCC-04	Nitrate-N	-	Nitrate-enriched groundwater seepage
SCR-01	Glycol	Total Coliforms, *Enterococcus*	Glycol – automotive fluid spills on nearby streets; Bacteria–combination of lawn clippings, excess irrigation, and possibly pet waste
SCR-02	Nitrate-N	-	Landscaping fertilization in new residential developments
SCR-03	Nitrate-N	-	Landscaping fertilization in new residential developments
SCR-05	Nitrate-N	-	Landscaping fertilization in new residential developments and over-irrigation
SUN-02	Nitrate-N	Total Coliforms	Nitrate-N – Groundwater seepage along landscaped hillside on the south side of East H Street/ Proctor Valley Road
SUN-05	Nitrate-N	-	Nitrate-enriched groundwater seepage
SUN-06	Nitrate-N	-	Landscaping fertilization in new residential developments and over-irrigation
SUN-07	Nitrate-N	-	Landscaping fertilization in nearby developments
SVS-01	-	*Enterococcus*	Transient flow
TCC-02	Nitrate-N	-	Nitrate-enriched groundwater seepage; landscaping fertilization of park
TCC-03	Nitrate-N	-	Nitrate-enriched groundwater seepage
TCC-05	Nitrate-N	-	Nitrate-enriched groundwater seepage
TCS	Ammonia-N	-	Storm drain clogged with trash allowing water to pond; shallow ponded water likely evaporates during the day, concentrating ammonia levels
WOL-02	Nitrate-N	-	Nitrate-enriched due to landscape seepage

Based on the results of the 2008 Dry Weather Field Screening and Analytical Monitoring Program as well as the Follow-Up Investigation Program, the City was provided with recommendations for dry weather monitoring sites and surrounding areas in need of cleaning and neighborhoods where storm water pollution prevention education is needed. The City is in the process of completing these recommended cleaning and education activities and is working to minimize illicit discharges. During the reporting period, there were no instances that require additional investigations or follow-up activities above and beyond those conducted during the 2008 Dry Weather Monitoring Program. More information about the recommendations from City's Dry Weather Monitoring and Field Screening Program and Follow-up Investigations can be found in Attachment K.

ATTACHMENT H

FY 2007-2008 Enforcement Action Taken

(Residential, Industrial, Commercial, Construction, and Related Businesses)

Note: During this reporting period, 7/01/2007 to 6/30/2008, investigation of the following cases have resulted in the issuance of Notice of Code of Violation, Orders to Cease and Desist, Notice to Clean and Abate, and Admin Citation.

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
Commercial							
8-Aug-07	Atlas Pressure Washing Service	Power/Pressure Washing	Commercial	407 E ST	Issued citation-Fine $200.00	Atlas Pressure Washing Service	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter storm water conveyance system. 14.20.120--Failure to utilize BMPs Atlas Pressure Company does not have business license in Chula Vista					
13-Aug-07	KFC-Y450114	Sewage Spill/Discharge	Commercial	1327 BROADWAY	Issued notice of violation.		
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from sewer system back-up. 14.20.120--Failure to utilize adequate BMPs. 14.20.130--Failure to contain clean up, and notify the City of spills. See attached documents.					
20-Sep-07	Chevron Station #1946	Others/Unknown Discharge	Commercial	695 PALOMAR ST	Issued warning citation	Chevron Station #1946	
	Nature of Violation:	14.20.120--Failure to implement BMPs from wash water.					
27-Sep-07	Simplex Grinnell	Others/Unknown Discharge	Commercial	690 THIRD AV	Issued citation-Fine $200.00	Simplex Grinnell	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter the storm water conveyance system in the form of broken sprinkler system. 14.20.120--Failure to utilize BMPs					
24-Oct-07	People Chevrolet	Power/Pressure Washing	Commercial	580 AUTOPARK DR	Issued citation-Fine $200.00	People Chevrolet	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the stormm water conveyance system by power washing. 14.20.120--Failure to utilize BMPs.					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
25-Oct-07	Coastline Communications	Sediment Discharge	Commercial	1027 THIRD AV	Issued citation-Fine $200.00	Coastline Communications	$200
	Nature of Violation:	14.20.100--Discharge on non-storm water to storm water conveyance system in the form of oil and sediment discharge. 14.20.120--Failure to utilize BMPs City staff responded and performed clean up of the affected site.					
7-Nov-07	Marisol Nite Club	Grease/Food/Drink Disch.	Commercial	2638 MAIN ST	Issuec 2nd violation-Fine $400	Marison Nite Club	$400
	Nature of Violation:	14.20.100--Discharge of non-storm water to storm water conveyance system in the form of wash water/food discharge. 14.20.120--Failure to utilize BMPs. Previous citation was issued on 5/16/2007.					
8-Nov-07	BJ's Rental Inc.	Power/Pressure Washing	Commercial	317 K ST	Issued citation-Fine $200.00		$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system. 14.20.120--Failure to utilize BMPs. Commercial power washing by store manage.					
6-Dec-07	Ralphs #75	Grease/Food/Drink Disch.	Commercial	780 OTAY LAKES RD	Issued violation-Fine $200.00	Ralphs #75	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water to storm water conveyance system 14.20.120--Failure to utilize BMPs. 30 galloon of orange drink discharged to storm drain system.					
23-Jan-08	Mercado International 2000	Grease/Food/Drink Disch.	Commercial	1415 THIRD AV	Issued citation-Fine $200.00	Mercado Intl. 2000	$200
	Nature of Violation:	14.20.100--Discharged on non-storm water to enter the storm drain system in the form of grease, rinse water, and food waste. 14.20.120--Failure to utilize BMPs; Failure to reduce pollutants of entering the storm drain system.					
23-Jan-08	Rancho Palomar LP	Sediment Discharge	Commercial	1315 THIRD AV	Issued warning citation	Rancho Palomar LP	
	Nature of Violation:	14.20.100--Discharged of non-storm water to enter the drain system in the form of leaking water from underground pipe. 14.201120--Failure to utilize BMPs.					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
24-Jan-08	Mazal Realty Investment	Grease/Food/Drink Disch.	Commercial	693 PALOMAR ST	Issued citation-Fine $200.00	Mazal Realty Invesments	$200
	Nature of Violation:	14.20.100--Discharged of non-storm water into the drainage system in the form of grease, oil due to sewage line stoppage. 14.20.120--Failure to utilize BMPs. City staff responded and performed cleanup to the affected site.					
4-Feb-08	C.V. Wholesale Furniture Store	Trash/Debris Discharge	Commercial	655 BROADWAY	Issued warning citation	CV Wholesale Furniture	
	Nature of Violation:	14.20.120--Failure to utilize BMPs.Trash, debris, junk and discarded furnitures were piled in the alley. 12.12.10--Removal of obstructions from streets is required. 8.24.040--Disposal of solid waste in public places is prohibited.					
12-Feb-08	Jack in the Box #68	Sewage Spill/Discharge	Commercial	4011 BONITA RD	Issued citation:Fine $2,000.00	Jack in the Box #68	$2000
	Nature of Violation:	14.20.100--Discharge in non-storm water is prohibited 14.20.120--Reductions of pollutants entering storm water system 14.20.130--Containment cleanup; Notification of sewage spills. $500 per violation is warranted. See attachment.					
10-Mar-08	Main Car Care Inc	Chemical Disharge	Commercial	2952 MAIN ST	Issued citation-Fine 100.00	Main Car Care	$100
	Nature of Violation:	14.20.120--Failure to utilize BMPs. House guest is discharging anti-freeze into storm drain system.					
14-Mar-08	Roman's Truck Body & Paint MJP	Saw Cutting/Sanding Disc.	Commercial	2513 MAIN ST	Issued citation-Fine $200.00	Roman's Truck Body & Paint	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm drain system in the form of sand dust resulted from auto body sanding. 14.20.120--Failure to utilize BMPs.					
23-Apr-08	Furniture Mattress Expo	Trash/Debris Discharge	Commercial	1215 BROADWAY	Issued citation-Fine $400.00	Furniture Mattress Expo	$400
	Nature of Violation:	14.20.100--Discharge on non-storm water to storm drain system in the form of styrofoam packing materials. 14.20.120--Failure to utilize BMPS to reduce pollutants entering storm drain system.					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
1-May-08	Jack in the Box #86	Sewage Spill/Discharge	Commercial	5 FOURTH AV	Issued citation - Fine	Jack in the Box #86	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed sewer discharge from sewer back up system into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
5-May-08	Rays Mobile Car Care	Vehicle oil discharge	Commercial	2555 FAIVRE ST	Issued citation - Fine	Rays Mobil Car Care	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of oil and grease from car into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
30-May-08	El Ranchero Factory Taco Shop #2	Slurry/Concrete Discharge	Commercial	3344 MAIN ST	Issued Citation-Fine	El Ranchero Factory	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of concrete slurry into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
9-Jun-08	Seafood City Market	Leaking Containers/Tanks	Commercial	1340 THIRD AV	Issued citation - Fine	Seafood City	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of grease and oil from leaking trash and grease containers into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
11-Jun-08	Chula Vista Auto Inc.	Painting-Sanding Residue	Commercial	24 BROADWAY	Issued citation- Fine	Chula Vista Auto Body	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wet paint into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
		Incidents: 22					**$5,700.00**
Construction-Citations							
12-Sep-07	San Miguel Ranch-Montecito Ridge	Power/Pressure Washing	Construction-Citations	144 AVENIDA LORETTA	Issued citation-Fine $200.00	Trimark Pacific Homes	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to storm water conveyance system from power washing. 14.20.120--Failure to utilize BMPs See attached documents					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
18-Sep-07	Otay Ranch, Village 7, R2A	Others/Unknown Discharge	Construction-Citations		Issued Cease & Desist Order	Otay Ranch, V-7, LLC	
	Nature of Violation:	14.20--Failure to implement and provide continuous maintenance of existing BMPs on the Santa Barbara project in Otay Ranch Village 7. Failure to camply with previous orders dated Aug 20 and Sep 10 inspection report. See attachments.					
4-Jan-08	Sycamore Estates	Others/Unknown Discharge	Construction-Citations	SYCAMORE DR	Issued Clean & Abate Order	Norton Construction	
	Nature of Violation:	14.20--Failure to implement and provide continuous maintenance of existing BMPs. **See attachment**					
1-Apr-08	San Miguel Ranch-Montecito Ridge	Sediment Discharge	Construction-Citations	144 AVENIDA LORETTA	Issued citation-Fine $2,500.00	Trimark Pacific Homes	$2500
	Nature of Violation:	14.20.100--Discharged on non-storm is prohibited. Observed sediment discharge. 14.20.120-Reduction of pollutants entering/contacting storm water required 14.20.130-Containment, Cleanup, and notification of spills. SEE ATTACHMENTS					
9-Apr-08		Others/Unknown Discharge	Construction-Citations	AVENIDA LORETTA	Issued citaton-Fine $2,000.00	Trimark Pacific Homes	$2000
	Nature of Violation:	14.20.120-Reduction of pollutants contacting or entering storm water required. 14.20.130-Containment, cleanup and notification of spills. 14.20.310-Administrative powers. Failure to comply with previous orders.--See Attachment					
10-Apr-08		Others/Unknown Discharge	Construction-Citations	AVENIDA LORETTA	Issued citation-Fine $1,500.00	Trimark Pacific Homes	$1500
	Nature of Violation:	14.20.120-Reduction of pollutants contacting or entering storm water required. 14.20.310-Administrative enforcement powers. Failure to comply with previous orders.					
14-May-08	Kevin O'Neil Company	Saw Cutting/Sanding Disc.	Construction-Citations	610 THIRD AV	Issued citation- Fine	Kevin O'Neil Company	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of saw cutting residue into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
		Incidents: 7					**$6,400.00**

Industrial

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
7-Aug-07	Profil Institute for Clinical Research	Trash/Debris Discharge	Industrial	855	THIRD	AV	Issued notice of compliance	Profill Institute	
	Nature of Violation:	14.20.100--Allowance of non storm water to enter the storm water conveyance system in the form of trash/debris. 14.20.120--Failure to utilize BMPs. See attached documents.							
4-Dec-07	Bellama Custom Metal Fabrication	Equipment Washing	Industrial	3129	MAIN	ST	Issued violation-Fine $100.00	Bellama Custom Metal	$100
	Nature of Violation:	14.20.120--Failure to utilize BMPs. Washing large metal parts outdoor contaminating storm water conveyance system.							
6-Mar-08	Express Furniture	Equipment Washing	Industrial	1226	THIRD	AV	Issued warning citation	Express Furniture	
	Nature of Violation:	14.20.100- Discharge of non-storm water is prohibited. Staff is washing off parking lot. 14.20.120--Failure to implement BMPs.							
20-Mar-08	Hyundai Livart Furniture Outlet	Equipment Washing	Industrial	3121	MAIN	ST	Issued warning citation	Hyundai Livart Furniture	
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter drain system in the form of styrofoam and packing materials.							
9-Apr-08	Parts Heaven	Chemical Disharge	Industrial	791	ENERGY	WY	Issued Cease and Desist Orders	Parts Heaven	
	Nature of Violation:	14.20--Pollutants entering the storm water conveyance system. Violations are observed on Feb. 07, Mar 06, and Apr 07. On April 16, 2008, a letter to repeal the cease and desist order was sent to Parts Heaven.**See attached documents**							
14-May-08	Kleen Blast Industrial Services	Vehicle oil discharge	Industrial	676	MOSS	ST	Issued citation- Fine	Kleen Blast Abrasive	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of vehicle residue into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
		Incidents: 6							**$300.00**

Others-Citation

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
10-Jul-07	Tech Wash Services	Power/Pressure Washing	Others-Citation	910 EASTLAKE PW	Issued citation-Fine $200.00	Tech Wash Services	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water is prohibited. Wash water from power washing entered the storm drain system. 14.20.120--Failure to utilized BMPs. See attachment.					
11-Jul-07	Lot Management	Chemical Disharge	Others-Citation	1361 MEDICAL CENTER DR	Issued Citation-Fine $1500.00	Lot Management	$1500
	Nature of Violation:	14.20.100--Discharged of wash water cleaning solution into the storm drain system. 14.20.120--Washing crew failed to implement BMPs. 14.20.130--Failure to take all reasonable actions to contain, minimize, and clean up pollutants and did not notify the city of pollutant spill.					
31-Oct-07	GMI Building Services	Power/Pressure Washing	Others-Citation	970 EASTLAKE PW	Issued citation-Fine $200.00	GMI Building Servicies	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water is prohibited 14.20.120--Failure to utilize BMPs. Power washing trash enclosures and walkways. See attachments.					
1-Nov-07	A&D General Contracting Division	Leaking Containers/Tanks	Others-Citation	626 L ST	Issued citation-Fine $200.00	A&D General Contracting	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water to the storm water conveyance system. 14.20.120--Failure to utilize BMPs.Discharging of water from water truck. See attachments.					
20-Nov-07	Volt Telecommunication	Power/Pressure Washing	Others-Citation	173 E ST	Issued violation-Fine $200.00	Volt Communication	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system. 14.20.120--Failure to utilize BMPs. Power washing surrounding the utility vault.					
30-Nov-07	Hilltop Middle School	Sediment Discharge	Others-Citation	TELEGRAPH CANYON RD	Sent notice of notification	Hilltop Middle School	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of sediments from grounds and slopes into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
18-Jan-08	Chosen Mobile Detail	Vehicle Washing/Dismantle	Others-Citation	67 BRISBANE ST	Issued warning citation	Chosen Mobile Detail	
	Nature of Violation:	14.20.100--Allowance of non-storm water into the drainage system in the form of rinse water from commercial auto washing. 14.20.120--Failure to utilize BMPs.					
21-Feb-08	Wilfredo Concrete Construction	Slurry/Concrete Discharge	Others-Citation	303 H ST	Issued citation-Fine $200.00	Wilfredo Concrete Construction	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water is prohibited. Concrete slurry discharge to storm drain. 14.20.120--Failure to utilize BMPs. City staff responded and performed cleanup to the affected site.					
23-Apr-08	USI	Power/Pressure Washing	Others-Citation	555 BROADWAY	Issued Citation-Fine $200.00	USI	$200
	Nature of Violation:	14.20.100--USI staff was observed by a private citizen power washing in the vicinity of JC Penney causing discharge to the storm drain system. 14.20.120A--USI staff fail to utilize BMPs to contain wash water.					
25-Apr-08	Smitty Built-Inns	Saw Cutting/Sanding Disc.	Others-Citation	180 MACE ST	Issued warning citation	Smiity Built-Inns	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of saw dust into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
28-Apr-08	Craft Construction	Slurry/Concrete Discharge	Others-Citation	696 E ST	Issued Citation- Fine $200.00	Craft Construction Co	$200
	Nature of Violation:	14.20.100 Allowance of non-storm water to enter storm water conveyance system in the form of rinse water. **see attachment**. 14.20.120 Failure to utilize BMPs to protect storm drain from contaminants. **see attachment**					
11-May-08	Enviro Steam Cleaning System	Power/Pressure Washing	Others-Citation	330 F ST	Issued Citation - Fine $100.00	Enviro Steam Cleaning System	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
9-Jun-08	Laundry Mat	Resident Cleaning Residue	Others-Citation	1356	THIRD	AV	Issued warning citation	Laundry Mat	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of soap, dirt, and waxes from floor cleaning into the storm water conveyance system. **see attachment**.							
18-Jun-08	Jay Bright Company	Power/Pressure Washing	Others-Citation	684	ANITA	ST	Issued citation - Fine	Jay Bright Company	$100
	Nature of Violation:	14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs allowing non-storm water to enter the drain system form high pressure washing. **see attachment**							
		Incidents: 14							**$3,200.00**
Residential									
3-Jul-07	Brower Carpet Cleaning	Resident Cleaning Residue	Residential	2767	RED ROCK CANYON	RD	Issued Citation-fine $200.00	Brower Carpet Cleaning	$200
	Nature of Violation:	14.20.100--Company employee discharged non-storm water in the form of carpet cleaning wastewater into the drain system. 14.20.120--Failure to utilized BMPs.							
5-Jul-07	Resident-81 Fifth Avenue	Others/Unknown Discharge	Residential	81	FIFTH	AV	Issued warning citation	Henkels & Maccoy Inc	
	Nature of Violation:	14.20.100---Allowance of non-storm water to enter storm water conveyance in the form of sediments from water main rapture.							
7-Jul-07	Resident-79 Provence	Slurry/Concrete Discharge	Residential	79	PROVENCE	CT	Issued Notice of Citation	Francisco Tavia Cons	
	Nature of Violation:	14.20.100 --Allowance of non-storm water to enter the storm water conveyance from concrete work. 14.20.120--Failure to implement BMPs and failure to protect storm water conveyance.							
9-Jul-07	Resident-474 Elm Avenue	Trash/Debris Discharge	Residential	474	ELM	AV	Issued notice of compliance		
	Nature of Violation:	14.20.100--Allowance of non storm water to enter the storm water conveyance system in the form of trash/debris from tree trimming. 14.20.120---Failure to utilize BMPs. (see attached documents)							

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
12-Jul-07	Resident-479 G Street	Trash/Debris Discharge	Residential	479	G	ST	Issued notice of compliance.		
	Nature of Violation:	14.20.100-- Allowance of non storm water to enter water conveyance system in the form to trash and debris. 14.20.120--Failure to utilize BMPs. (see attached documents)							
29-Jul-07	Resident-1462 Hilltop Drive	Slurry/Concrete Discharge	Residential	1462	HILLTOP	DR	Issued warning citation		
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from concrete work. 14.20.120--Failure to utilize BMPs							
10-Aug-07	Resident-Orange Glen Apartments	Trash/Debris Discharge	Residential	307	ORANGE	AV	Issued citation-Fine $200	Orange Glen Apartments	$200
	Nature of Violation:	14.20.100--Allowance of storm water to enter storm water conveyance syste. 14.20.120--Failire to utilize BMPs. City staff cleaned all trash and debris discharge from the site.							
10-Aug-07		Trash/Debris Discharge	Residential		ORANGE	AV	Issued citation-Fine $200.00	Orange Glen Apartments	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter storm water conveyance system. 14.20.120--Failure to utilize BMPs. This is the second letter and was sent to a different address.							
28-Aug-07	Resident-268 Del Mar Avenue	Slurry/Concrete Discharge	Residential	268	DEL MAR	AV	Issued citation- Fine $200.00	De La Valle Construction	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from concrete work. 14.20.120--Failure to utilize BMPs City crews will conduct clean up of the impacted site.							
28-Aug-07	Resident-69 Pala Ct.	Trash/Debris Discharge	Residential	69	PALA	CT	Issued warning citation	Property Owner	
	Nature of Violation:	14.20.100--Allowance of non stom water to enter the storm water conveyance system in the form of trash/debris. 14.20.120--Failure to implement BMPS							

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
5-Sep-07	Resident-Rancho Del Rey -Belmont	Power/Pressure Washing	Residential	1103 MAJESTAD LN	Issued citation-Fine $200.00	Rancho Del Rey-Belmont	$200
	Nature of Violation:	14.20.100--Allowance of storm water to storm water conveyance system from power washing. 14.20.120--Failure to utilize BMPs.					
5-Oct-07	Resident-1225 Frontage Rd-MHP	Sewage Spill/Discharge	Residential	1225 FRONTAGE RD	Issued citation-Fine $200.00	Georgenanna MHP	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from sewer discharge. 14.20.120--Failure to utilize BMPs					
5-Oct-07	1445 Trailwood Avenue	Saw Cutting/Sanding Disc.	Residential	1445 TRAILWOOD AV	Isuued Citation-Fine $200.00	Cornerstone Masonry Const.	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from concrete cutting. 14.20.120--Failure to utilize BMPs. See attachments					
9-Oct-07	Resident-1623 Melrose Avenue	Pool-Spa Residue	Residential	1623 MELROSE AV	Issued citation-Fine $200.00	Property Owner	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter storm water conveyance system in the form of pool filter residue. 14.20.12.--Failure to utilize BMPs. City Staff performed storm drain clean up of the site.					
9-Oct-07	Pro Care Auto Detail	Vehicle Washing/Dismantle	Residential	284 MADRONA ST	Issued citation-Fine $200.00	Pro Care Auto Detail	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter storm water conveyance system from auto washing. 14.20.120--Failure to utilize BMPs					
17-Oct-07	Burtech Pipeline Inc.	Leaking Containers/Tanks	Residential	456 EMERSON ST	2nd Violation-Fine $600.00	Burtech Pipeline Inc.	$600
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from fuel spill. 14.20.120--Failure to utilize BMPs 14.20.130--Failure to contain, cleanup, and notify the City of spills (leaky tank).					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
26-Oct-07	BRE Properties Inc	Sewage Spill/Discharge	Residential	601 TELEGRAPH CANYON RD	Issued citation-Fine $200.00	BRE Properties Inc.	$200
	Nature of Violation:	14.20.100--Allowance of non storm water to enter the storm water conveyance system from sewage spill. 14.20.120--Failure to utilize BMPs. City Staff performed clean up of the affected site.					
6-Nov-07	TCP Company-Plumbing Specialist	Sewage Spill/Discharge	Residential	465 F ST	Issued violation-Fine $200.00	TCP Company	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water to storm water conveyance system from sewer water discharge. 14.20.120--Failure to utilize BMPs. City Staff responded and performed cleanup of the affected site.					
8-Nov-07	Resident-12 Bonita Road	Grease/Food/Drink Disch.	Residential	12 BONITA RD	Issued warning citation		
	Nature of Violation:	14.20.100--Discharge of non-storm water to storm water conveyance system. 14.20.120--Failure to utilize BMPs. Washing machines waste water not plumbed to sewer system.					
9-Nov-07	Excellence Service Towing	Leaking Containers/Tanks	Residential	921 BUCKAROO LN	Issued citation-Fine $200.00	Excellence Service & Towing	$200
	Nature of Violation:	14.20.100--Discharge of non-storm water to enter storm water conveyance system from leaking oil lines of tow truck. 14.20.120--Failure to utilize BMPs. City staff responded to spill and performed clean up of the affected site.					
27-Nov-07	Resident-118 East Olympia St.	Resident Cleaning Residue	Residential	118 OLYMPIA ST	Issued warning citation		
	Nature of Violation:	14.20.100--Discharge of non-storm water to storm water conveyance system in the form of washing machine water dishcarge. 14.20.120--Failure to utilize BMPs. See attachments.					
1-Dec-07	Hilltop Middle School	Sediment Discharge	Residential	44 HILLTOP DR	Issued Violation Letter	SW High School District	
	Nature of Violation:	14.20--Significant amount of sediments were discharged form Hilltop Middle School's grounds and slope along Hilltop Drive and Telegraph Canyon Road. Previous letters were sent to the school district regarding these incidents. **See attached documents.**					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
6-Dec-07	Resident-1132 Melrose Avenue	Slurry/Concrete Discharge	Residential	1132 MELROSE AV	Issued warning citation		
	Nature of Violation:	14.20.100--Allowance of non-storm water to enter the storm water conveyance system from concrete work. 14.20.120--Failure to utilize BMPs-					
10-Dec-07	Resident-209 Church Avenue	Trash/Debris Discharge	Residential	209 CHURCH AV	Issued warning citation		
	Nature of Violation:	14.20.100--Discharge of non-storm water into the drainage system in the form of trash, junk, debris from trash bins. 14.20.120--Failure to utilize BMPs.					
17-Jan-08	Agundez Concrete Co.	Saw Cutting/Sanding Disc.	Residential	1052 HILLTOP DR	Issued citation-Fine 200.00	Agundezl Mattew	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to the storm drain system in the form of water laden with concrete saw dust. 14.20.120--Failure to utilize BMPs.					
17-Jan-08	Resident-1153 Nolan Avenue	Slurry/Concrete Discharge	Residential	1153 NOLAN AV	Issued warning citation		
	Nature of Violation:	14.20.100--Discharged of non-storm water into the drain system in the form of concrete slurry. 14.20.120--Failure to utilize BMPs.					
25-Jan-08	Resident-354 Torquoise Court	Painting-Sanding Residue	Residential	354 TURQUOISE CT	Issued warning citation		
	Nature of Violation:	14.20.100--Discharged on non-storm water into the drainage system in the form of water base paint. 14.20.120--Failure to utilize BMPs. City staff responded and performed a cleanup of the affective site.					
28-Jan-08	Tenant-1143 Potter Valley Dr.	Painting-Sanding Residue	Residential	1143 POTTER VALLEY DR	Issued warning citation		
	Nature of Violation:	14.20.100--Discharged of non-storm water into the drainage system as a result of accidental paint spill. 14.20.120--Failure to utilize BMPs. City staff responded and performed cleanup to the affected site.					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
6-Feb-08	Resident-100 Walnut Drive	Trash/Debris Discharge	Residential	100 WALNUT DR	Issued warning citation		
	Nature of Violation:	14.20.100--Discharge of non-storm water is prohibited. 14.20.120--Failure to utilize BMPs					
6-Mar-08	Resident-248 Orange Avenue	Driveway/Trash Washing	Residential	248 ORANGE AV	Issued warning citation		
	Nature of Violation:	14.20.100--Discharge of non-storm water is prohibited. Green waste can washing. 14.20.120--Failure to utilized BMPs					
13-Mar-08	Vistan Apartments	Sewage Spill/Discharge	Residential	418 OAKLAWN AV	Issued citation-Fine $200.00	Vistan Apartments	$200
	Nature of Violation:	14.20.100--Allowance of non-storm water to storm water conveyance system due to back up and overflow of sewage. 14.20.120--Failure to utilize BMPs. City Staff responded and performed clean to the affected site.					
8-Apr-08	Bea's Garden of Eden	Slurry/Concrete Discharge	Residential	395 CAMINO ELEVADO	Issued warning citation	Bea's Garden of Eden	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the storm concrete slurry conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
17-Apr-08	Resident - 1288 Cardinal Place	Sediment Discharge	Residential	1288 CARDINAL PL	Issued warning citation	Resident	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the sediment water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					
25-Apr-08	Resident - 2488 Faivre Street	Vehicle Washing/Dismantle	Residential	2488 FAIVRE ST	Issued warning citation	Resident	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the storm water conveyance system. Allowance of trash debri from vehicle dismantling **see attachment**.					

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
12-May-08	Cooper's Concrete Pumping	Slurry/Concrete Discharge	Residential	641	GUAVA	AV	Issued warning citation	Cooper's Concrete Pumping	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of slurry concrete into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
12-May-08	Resident - 1188 Nacion Avenue	Pool-Spa Residue	Residential	1188	NACION	AV	Issued warning citation	Resident	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of pool/spa residue into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
12-May-08	Resident - 576 Point San Luis Court	Vehicle oil discharge	Residential	576	POINT SAN LUIS	CT	Issued warning citation	Resident	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of motor oil from leaking vehicle into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
30-May-08	Resident-1097 Fourth Avenue	Driveway/Trash Washing	Residential	1097	FOURTH	AV	Issued admin citation- Fine	Property Owner	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
30-May-08	Resident - 1097 Fourth Avenue	Slurry/Concrete Discharge	Residential		FOURTH	AV	Issued Citation - Fine	Resident	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of concrete wash water into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							
10-Jun-08	AIG Concrete Pumping	Equipment Washing	Residential	2874	MORNING CREEK	RD	Issued Warning Citation	AIG Concrete Pumping	$0
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water into the storm water conveyance system. **see attachment**. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
23-Jun-08	Resident - 168 Shasta	Slurry/Concrete Discharge	Residential	168 SHASTA ST	Issued Citation- Fine	Resident	$100

Nature of Violation: 14.20.100 Discharge of non-strom water prohibited. Observed discharge of concrete wash water into the storm water conveyance system. **see attachment**.

Incidents: 41 **$3,900.00**

Total Incidents: 90 **Total Fine: $19,500.00**

ATTACHMENT I

FY 2007-2008 Complaint Response Summary

Incident Date	Structure Category	Site Category	Address			Type of Violation
Commercial						
8-Aug-07	STORM CHANNEL	Commercial	855	THIRD	AV	Unknown Discharge
Comments Action Taken:	Some plastic trash bags found in the storm channel adjacent to 855 Third Ave. Staff responded immediately and cleaned all trash and debris associated with this incident. An administrative citation warning B87071 was issued. No Further action is necessary at this time.					
8-Aug-07	STREET	Commercial	421	E	ST	Construction Debris & Waste
Comments Action Taken:	8/8/07--- Noted just-washed parking lot at the Arco gas station and evidence of dirt, soot, cigarette butts, and other debris washed from gas station and onto the curb and gutter.Issued admin citation.					
10-Aug-07	STORM DRAIN PIPE	Commercial	1327	BROADWAY		Sewage Spill Going Down Storm Drair
Comments Action Taken:	8/13/07---Sewer back up at the KFC restaurant was caused by lack of proper maintenance. City staff contained and remediated the spill while KFC's contractor cleared the private sewer line. Administrative Citation warning SWB813071 was issued to the responsible party. No further action required at this time.					
30-Aug-07	STREET	Commercial	77	BROADWAY		Possible Dumping into Catch Basin
Comments Action Taken:	8/30/08--- evidence of violation was not found at the time of inspection. No further action necessary at this time.					
14-Sep-07	STREET	Commercial	866	EASTLAKE	PW	Power Washing
Comments Action Taken:	Village Walk (Jaynes Corporation General Contractors) conducting washing of parking area for Grand Opening. Not using BMPs. Issued verbal immediately cease and desist. Issued Admin Citation-Warning and conducted post construction BMP verification inspection. Compliance is being met.					
20-Sep-07	STREET	Commercial	695	PALOMAR	DR	Power Washing

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	9/20/07---Chevron staff washing down front of store with no BMPs. Manager and staff immediately stopped activity and took corrective actions to remediate the situation. Wash water did not enter the SWCS. Administrative citation warning SW1586 was issued. No further action necessary at this time.					
27-Sep-07	STREET	Commercial	690	THIRD	AV	Unknown Discharge
Comments Action Taken:	9/27/08---Contractor SimplexGrinnel discharging non-storm water as part of fire sprinkler system maintenance. Administrative Citation SWB0927071 was issued. No further action necessary at this time.					
26-Oct-07	STREET	Commercial	1027	THIRD	AV	Unknown Discharge
Comments Action Taken:	10/26/07---Coastline Communications of Temecula allowed dirt and sediment from vault work to discharge into the SWCS. Administrative citation SW B1025072 was issued to Mr. John Vernieu of Coastline Communications. No further action necessary at this time.					
8-Nov-07	STREET	Commercial	317	K	ST	Power Washing
Comments Action Taken:	11/8/07---Responded to report of power washing with no BMPs. BJs Rental staff was power washing all cement dust and debris from parking lot and onto K street. Administrative Citation SW B1108071 was issued to Mr. Brad Thomas, President of BJs rentals. No further action necessary at this time.					
20-Nov-07	STREET	Commercial	173	BROADWAY		Power Washing
Comments Action Taken:	11/20/07---Responded to report of Volt Telecommunication Group, Inc. staff discharging non-storm water onto the street and gutter as a result of washing out telecommunications vaults without implementing BMPs. Administrative Citation SW B1206071 was issued to No further action necessary at this time.					
6-Dec-07	STORM DRAIN PIPE	Commercial	680	OTAY LAKES	RD	Other
Comments Action Taken:	12/6/07---Responded to report of non storm water discharge by Ralph's grocery stores. Noted Ralph's staff pouring juices into the storm drain at the rear loading dock. Issued administrative citation SW B1206071. No further action necessary at this time.					
2-Jan-08	STREET	Commercial	556	BROADWAY		Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Did not respond. Sent maintenance staff to confirm. No discharge observed. NFA					
23-Jan-08	STORM CHANNEL	Commercial	1415	THIRD	AV	Unknown Discharge
Comments Action Taken:	1/23/08---Responded to report of unknown discharge from Mercado Int. 2000. Inspection noted that grocery store staff had washed down area surrounding the cardboard bailer and that the grease container was leaking. Discharge flowed into the SWCS. Issued Administrative Citation SW B123081. No further action necessary at this time.					
24-Jan-08	STREET	Commercial	687	OXFORD	ST	Sewage Spill Going Down Storm Drair
Comments Action Taken:	1/24/08---Responded to report of sewer discharge into the SWCS. Inspection noted that Buffet Time Restaurant had a sewer line stoppage that resulted in a sewer overflow into the SWCS. Issued Administrative Citation SW B124081. No further action necessary at this time.					
12-Feb-08	STREET	Commercial	4011	BONITA	RD	Sewage Spill Going Down Storm Drair
Comments Action Taken:	On February 12, 2008 received notification of a sewage spill from PW dispatch. Arrived on scene at Jack in the Box, 4011 Bonita Road and observed the discharge of sewage from the facilities private sewer lateral clean out. City crews conducted cleanup operations. Jack in the Box was informed of the discharge on February 11, 2008 by a concerned citizen at 9:30am. Due to the seriousness of the violations and the threat to public health and the impact to the environment a NOV and Admin Citation for the amount of 2000.00 was issued to the property owner. A full cost recovery invoice will be also issued to the property owner.					
12-Feb-08	STREET	Commercial	4011	BONITA	RD	Sewage Spill Going Down Storm Drair
Comments Action Taken:	On February 12, 2008 received notification of a sewage spill from PW dispatch. Arrived on scene at Jack in the Box, 4011 Bonita Road and observed the discharge of sewage from the facilities private sewer lateral clean out. City crews conducted cleanup operations. Jack in the Box was informed of the discharge on February 11, 2008 by a concerned citizen at 9:30am. Due to the seriousness of the violations and the threat to public health and the impact to the environment a NOV and Admin Citation for the amount of 2000.00 was issued to the property owner. A full cost recovery invoice will be also issued to the property owner.					
6-Mar-08	STREET	Commercial	1236	THIRD	AV	Power Washing
Comments Action Taken:	3/6/08---Responded to report of power washing without BMPs and discharging into the SWCS at 1226 Third Ave. Inspection noted that Express Furniture staff was power washing parking lot with no BMPs and discharging into the SWCS. Issued Administrative Citation Warning SW1590. No further action necessary at this time.					
17-Apr-08	STORM DRAIN PIPE	Commercial	1415	THIRD	AV	Unknown Discharge

Incident Date	Structure Category	Site Category	Address	Type of Violation
Comments Action Taken:	4/17/08---Responded to report of unknown discharge from 1415 Third Ave. Inspection noted a discharge from the store and into the SWCS. Issued administrative citation SW B0417081. No further action necessary at this time.			
22-Apr-08	STREET	Commercial	1037 BROADWAY	Possible Dumping into Catch Basin
Comments Action Taken:	Contacted La Costa Azul staff and issued verbal warning and to conduct proper clean up of grease on wall. Compliance met NFA			
23-Apr-08	STORM CHANNEL	Commercial	1215 BROADWAY	Construction Debris & Waste
Comments Action Taken:	Issued Admin Citation SW042308-01 for 400.00 due to continued discharge of styrofoam into storm channel. On 06/24/08 - Furniture Mattress Expo filed for an appeal of the issuance of the citation and a adminstrative hearing was conducted this date. On 6/27/08 - Received finding from the hearing Examiner in favor of the City and Furniture Mattress Expo was required to pay hearing costs of an additional 500.00. No further action is required.			
28-Apr-08	STREET	Commercial	696 E ST	Power Washing
Comments Action Taken:	4/28/08---Responded to report of power washing without BMPs at 696 E Street. Inspection noted a discharge from the store and into the SWCS as a result of not implementing BMPs. Issued administrative citation SW1597. No further action necessary at this time.			
6-May-08	STREET	Commercial	MADRONA ST	Unknown Discharge
Comments Action Taken:	5/6/08---Responded to report of power washing without BMPs at 373 Third Ave. Inspection noted a discharge from carpet cleaning van and into the SWCS as a result of ruptured hose. Issued verbal warning to fix part and provide proof. Hours later the van was inspected and the repair were verified. No further action necessary at this time.			
14-May-08	STREET	Commercial	610 THIRD AV	Slulry/Concrete Discharge
Comments Action Taken:	5/14/08---Responded to report of concrete slurry discharge at the corner of Third Ave. and I Street. Inspection found M. Kevin O'Neill staff saw cutting concrete and allowing slurry to flow into the SWCS. Issued administrative citation SW1651. No further action necessary at this time.			
15-May-08	STREET	Commercial	ENERGY WY	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address	Type of Violation
Comments Action Taken:	5/15/08---Responded to report of concrete slurry discharge at 825 Energy Way. Inspection found CMC Contracting staff had allowed a concrete washout pit to be situated in the public right of way, and had overfilled it causing the washout pit to overflow into the SWCS. Issued administrative citation SW B0515082. No further action necessary at this time.			
22-May-08	STREET	Commercial	515 TELEGRAPH CANYON RD	Unknown Discharge
Comments Action Taken:	5/21/08---Responded to report of unknown discharge from 515 Telegraph Canyon Rd. Inspection of address in question and surrounding areas found two 55-gallon drums that were clean and leak proof. No violation was found. No further action necessary at this time.			
28-May-08	CATCH BASIN	Commercial	695 PALOMAR ST	Accident/Spill
Comments Action Taken:	5/28/08---Responded to report of gasoline spill from Chevron gas at 695 East Palomar. Inspection of address in question and surrounding areas found no evidence of spill or violation. Chevron staff had taken all appropriate measures for responding to accidental spills per company policy. No violation was found. No further action necessary at this time.			
30-May-08	STREET	Commercial	1665 BROADWAY	Unknown Discharge
Comments Action Taken:	5/30/08---Responded to report of unknown discharge from 1655 Broadway. Inspection found rinse water from tenant cleaning and washing activity flowing into the SWCS. Issued administrative citation SW B0619081. No further action necessary at this time.			
9-Jun-08	STREET	Commercial	1356 THIRD AV	Unknown Discharge
Comments Action Taken:	6/9/08---Encountered reissue from cleaning floor-cleaning activity at laundry mat at 1356 Third Ave. Inspection noted that residue led to the SWCS. Issued administrative citation warning SW1655. No further action necessary at this time.			
10-Jun-08	STREET	Commercial	1177 BROADWAY	Unknown Discharge
Comments Action Taken:	6/10/08---Inspection found no evidence of a violation. No further action necessary at this time.			
10-Jun-08	STREET	Commercial	876 HAROLD PL	Power Washing

Incident Date	Structure Category	Site Category		Address		Type of Violation
Comments Action Taken:	Mobile Detailer washing vehicles at Venture Commerce Center. Business was utilizing necessary BMPs. NFA required.					
10-Jun-08	STREET	Commercial	36	BROADWAY		Unknown Discharge
Comments Action Taken:	6/11/08---Responded to report of unknown discharge from 24 Broadway at Sea Vale St. Inspection noted wet sanding residue traceable from above mentioned address and into the SWCS. Issued administrative citation warning SW1656. No further action necessary at this time.					
	Subtotal: 31					
Construction Sites						
1-Aug-07	CATCH BASIN	Construction Sites		RIDGEBACK	RD	Other
Comments Action Taken:	Aqua Clean employee spilled liquid carwax/wash into onsite drain which discharged into catch basin. Vactor crew conducted cleanout. Recommend full cost recovery for cleanup. Education material issued to manager.					
3-Oct-07	CATCH BASIN	Construction Sites		EXPLORATION FALLS	DR	Construction Debris & Waste
Comments Action Taken:	Contacted TVRI Landscaping to use BMPs when conducting parkway maintenance.					
3-Oct-07	CATCH BASIN	Construction Sites	1674	MORNING STAR	DR	Possible Dumping into Catch Basin
Comments Action Taken:	Contacted Brookfield Shea Otay to investigate. Need access to homeowner's back yard to dye test. Left Door hanger but home is for sale.					
5-Oct-07	STREET	Construction Sites	1429	TRAILWOOD	AV	Construction Debris & Waste
Comments Action Taken:	Assigned work order for maintenance cleaning.					
13-Nov-07	MISC	Construction Sites		MAXWELL	RD	Sewage Spill Going Down Storm Drair

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Work request was cancelled. No further action needed.					
16-Nov-07	STREET	Construction Sites	582	COASTAL HILLS	DR	Slulry/Concrete Discharge
Comments Action Taken:	Robertson's staff conducted cleanup of spill. Concrete did not enter storm drain. Driver accidentally hit control stick when going over speed bump. City staff was relieved of conducting cleanup. NFA required.					
16-Nov-07	STREET	Construction Sites	582	COASTAL HILLS	DR	Slulry/Concrete Discharge
Comments Action Taken:	Robertson's staff conducted cleanup of spill. Concrete did not enter storm drain. Driver accidentally hit control stick when going over speed bump. City staff was relieved of conducting cleanup. NFA required.					
17-Jan-08	STREET	Construction Sites	1052	HILLTOP	DR	Unknown Discharge
Comments Action Taken:	1/17/08---Responded to report of unknown discharge from construction. Inspection noted Agundez Concrete staff saw cutting concrete and allowing lubricating water to flow into the SWCS. Issued Administrative Citation SW B117081. No further action necessary at this time.					
23-Jan-08	STREET	Construction Sites	745	DESIGN	CT	Construction Debris & Waste
Comments Action Taken:	1/23/08---Responded to report of dirt spoils in the public right-of-way. Inspection noted that landscape staff had placed dirt spoils in the sidewalk as par of irrigation replacement work being conducted. Notified Jay of Monroe Property Management (858) 922-5739. All dirt was covered in preparation for impending rain, and removed by 9AM the following morning. No further action necessary at this time.					
28-Jan-08	STREET	Construction Sites	1143	POTTER VALLEY	DR	Paint Discharge
Comments Action Taken:	1/28/08---Responded to report of paint discharge into the SWCS. Inspection noted that tenant at 1143 Potter Valley Dr. was washing paint brushes at the rear of the property and that the paint and rinse water was flowing at the front of the home via the yard drain. Issued Administrative Citation Warning SW C128081. No further action necessary at this time.					
29-Jan-08	STREET	Construction Sites	2879	BLUE RIDGE	CT	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Home is currently not occupied. Bank owned. Home has unfinished built in swimming pool that is fill with runoff water.Otained permission from Agent, to enter premises to secure automated sprinkler system to prevent further over-watering of landscaping. Agent notified County Health to request assistance in vector control. . Emailed Dat Quach, RWQCB, to brief on incident. NFA required.					
1-Feb-08	STREET	Construction Sites	610	HALECREST	DR	Slulry/Concrete Discharge
Comments Action Taken:	1/28/08---Responded to report of concrete discharge into the SWCS. Inspection noted that City contractor was pouring sidewalks and using BMPs to contain any potential spills. No evidence of a violation was found. No further action necessary at this time.					
14-Feb-08	STREET	Construction Sites	12	GATE TWELVE	PL	Dirt Tracking
Comments Action Taken:	Minor tracking NFA					
21-Feb-08	STREET	Construction Sites	1500	CUMBRE VIEW		Slulry/Concrete Discharge
Comments Action Taken:	2/28/08---Responded to report of concrete discharge into the SWCS at 1562 Cumbre View. Inspection noted that Wilfredo Concrete Construction staff was using wheel barrow located near a storm drain as a concrete wash out pit. Wheel barrow fell and discharged into SWCS. Issued Administrative Citation SW B221081. No further action necessary at this time.					
11-Apr-08	STREET	Construction Sites	421	HIDDEN VISTA	DR	Construction Debris & Waste
Comments Action Taken:	4/08/08---Responded to report of dirt/ sediment discharge from 421 Hidden Vista. Inspection noted some dirt and trash on the street in front of address. Issued verbal notice to property owner to clean and install BMPs. 4/14/08---Re-inspection noted all BMPs in place. No further action necessary at this time.					
		Subtotal: 15				
Industrial						
4-Dec-07	STREET	Industrial	3129	MAIN	ST	Unknown Discharge
Comments Action Taken:	12/4/07---Responded to report of business washing oil and grease of parts and equipment at facility adjacent to storm channel. Noted evidence of discharge into the SWCS. Issued Administrative citation SW B1204071 to Ms. Jo Ann Bellama of BMC Metals (Bellama). No further action is necessary at this time.					
30-May-08	STREET	Industrial	3358	MAIN	ST	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	5/30/08---Responded to report of concrete slurry spill at 3344 Main St. Inspection found construction contractor saw cutting concrete and allowing slurry to flow into the SWCS. Issued administrative citation SW1652. No further action necessary at this time.					

Subtotal: 2

Municipal

14-Aug-07	STREET	Municipal	421	HIDDEN VISTA	DR	Construction Debris & Waste
Comments Action Taken:	Spoke with contractor and instructed them to conduct thorough cleanup of sidewalk and street on a daily basis. Any future complaints could result in enforcement actions.					
14-Aug-07	STREET	Municipal	421	HIDDEN VISTA	DR	Construction Debris & Waste
Comments Action Taken:	Spoke with contractor and instructed them to conduct thorough cleanup of sidewalk and street on a daily basis. Any future complaints could result in enforcement actions.					
25-Jan-08	STREET	Municipal	1351	THIRD	AV	Unknown Discharge
Comments Action Taken:	1/23/08---Responded to report of unknown discharge into the SWCS. Inspection noted that construction workers were ruptured an underground irrigation line. Issued Administrative Citation Warning SW C123084. No further action necessary at this time.					

Subtotal: 3

Other

25-Oct-07	STREET	Other		BROADWAY		Dirt Tracking
Comments Action Taken:	10/25/07---American Asphalt allowing dirt to track onto Moss Street. Upon arrival American asphalt staff was finishing cleaning the street and correcting the violation. A verbal warning was issued along with public education materials. No further action necessary at this time.					
6-Dec-07	STREET	Other		OLEANDER	AV	Unknown Discharge
Comments Action Taken:	From new request to no further action required.					

Incident Date	Structure Category	Site Category	Address			Type of Violation
26-Jun-08	STREET	Other	900	OTAY LAKES	RD	Complaint Response Enforcement

Comments Action Taken: On 6/26/08---Anonymous caller reported that Burns & Sons Trucking are hauling materials out of Southwestern College without using tarps. The materials are blowing into the street. Storm Water Staff responded and did not observe caller's concerns and alleged violation. Burns & Sons was not on-scene. Caller did not leave name and number for further information. No Further Action Required.

Subtotal: 3

Residential

3-Jul-07	CATCH BASIN	Residential	2767	RED ROCK CANYON	RD	Complaint Response Enforcement

Comments Action Taken: Arrived on scene and observed remnants of discharge of carpet cleaning effluent onto street and into the storm drain system. Issued Administrative Citation to Brower Carpet Cleaning in the amount of 200.00.

9-Jul-07	STREET	Residential	79	PROVENCE	CT	Slulry/Concrete Discharge

Comments Action Taken: 7/9/07---Issued Citation SW1583 for allowance of non storm water to enter the storm water conveyance system in the form of concrete pigment as a result of concrete work at 79 Provence Ct. See detail comments on customer tab

9-Jul-07	STREET	Residential	1142	LATIGO COVE		Unknown Discharge

Comments Action Taken: No evidence of NPDES violation found at the time of inspection. No further action necessary at this time. Photos on file.

10-Jul-07	STREET	Residential	227	CAMINO VISTA REAL		Other

Comments Action Taken: Complainant stated that neighbor illegally discharges by washing off rear deck of house and that she disguises such discharge by turning on her sprinklers to make it appear as a legal irrigation discharge. An agreement was made that inspector would monitor neighborhood whenever possible. No further action necessary at this time.

17-Jul-07	STREET	Residential	40	TOURMALINE	ST	Construction Debris & Waste

Comments Action Taken: Arrived on scene and observed several pallets, paver sand, concrete (dry), on street in front of residence. Spoke with homeowner who contacted Rhino Paving to have the street cleaned by AM of 7/18. Conducted followup and no further action is required.

17-Jul-07	STREET	Residential	1222	VIA ESCALANTE		Washing Vehicle in Street

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Arrived on scene and observed "red" dirt in front of residence. Spoke with homeowner who stated that sister washed her truck that was full of mud from traveling from New Mexico. Vactor crew conducted cleanup. NFA					
17-Jul-07	STREET	Residential	1361	BLUE SAGE	WY	Construction Debris & Waste
Comments Action Taken:	Arrived on scene and observed soil stockpile in driveway, sidewalk and into the curbline. Spoke with homeowner who stated that it will be removed by the end of the day by her contractor. Followup conducted. NFA					
17-Jul-07	STREET	Residential	1266	BLUE SAGE	WY	Power Washing
Comments Action Taken:	Observed RCA Landscaping employee hosing down street. Instructed him to stop and he complied. Contacted Company to inform employee to remove gravel stockpile from street. NFA					
17-Jul-07	STREET	Residential	1503	HILLTOP	DR	Slulry/Concrete Discharge
Comments Action Taken:	Arrived on scene and observed colored concrete wash in the the conveyance system. Left Pollution Notice at residence. Vactor crew conducted cleanup. Homeowner arrived at PWOPS with contractor. Conducted informal education to utilize vacuum system and not fiber rolls to contain wash water. NFA					
18-Jul-07	STREET	Residential	1078	ACERO	ST	Washing Vehicle in Street
Comments Action Taken:	Left door hanger at resident to ensure that carwashing activities be conducted in driveway or at a local carwash.					
24-Jul-07	STREET	Residential	1472	HILLTOP	DR	Slulry/Concrete Discharge
Comments Action Taken:	Property owner of 1462 Hilltop Dr. stated that property owner of 7038 Delos Dr., San Diego, CA 92139, (619) 370-4589, was responsible for allowing pigmented slurry onto the curb and gutter. Issued administrative citation warning SWB83071 on 8/3/07 noting the requirement to pay full cost recovery invoice for all costs associated with clean up by City staff.					
25-Jul-07	STREET	Residential	61	WHITNEY	ST	Construction Debris & Waste

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Debris removed from street. NFA required.					
31-Jul-07	STREET	Residential	36	SAN MIGUEL	DR	Slulry/Concrete Discharge
Comments Action Taken:	Instructed homeowner to remove all construction debris from the street by the following morning. Follow-up conducted to ensure compliance. NFA required.					
1-Aug-07	CATCH BASIN	Residential		CLAIRE	AV	Unknown Discharge
Comments Action Taken:						
1-Aug-07	CATCH BASIN	Residential		CLAIRE	AV	Sewage Spill Going Down Storm Drair
Comments Action Taken:	No evidence of violation found at the time of inspection. No further action necessary at this time. Photos on file.					
3-Aug-07	STREET	Residential	1012	VIA SINUOSO		Pool Filter Discharge
Comments Action Taken:	Discharge was from 1024 - Homeowner was contacted and issued verbal warning and possible cost recovery. City crew conducted cleanup.					
9-Aug-07	STREET	Residential	1155	VIA MONADA		Construction Debris & Waste
Comments Action Taken:	Observed used oil spill along street and sidewalk. Contacted vac truck to do initial washing. Have graffiti crew conduct powerwashing to remove staining. Responsible party unknown.					
21-Aug-07	STREET	Residential	1564	CONNOLEY	AV	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Left Door Hanger on vehicle. Vehicle was leaking transmission fluid on driveway and running onto sidewalk.					
22-Aug-07	STORM CHANNEL	Residential	62	PROVENCE	CT	Complaint Response Enforcement
Comments Action Taken:	9/14/08---Property owner at 69 Pala Ct. obstructing the brow ditch with dirt, debris, tools and other materials. Issued administrative citation warning B914071. No further action necessary at this time.					
27-Aug-07	STREET	Residential	103	OXFORD	ST	Unknown Discharge
Comments Action Taken:	8/27/08---Some staining found on the sidewalk from landscape drain. No evidence of discharge. Spoke to Manuel Barajas Rodriguez, son of property owner and informed him of the municipal code. Left public education materials. No further action necessary at this time.					
27-Aug-07	STREET	Residential	437	THRUSH	ST	Slulry/Concrete Discharge
Comments Action Taken:	Observed slurry discharge from address from new patio. Vac Truck crew conducted cleanup. Left Pollution Notice on residents door. Possible full cost recovery.					
28-Aug-07	STREET	Residential	270	DEL MAR	AV	Unknown Discharge
Comments Action Taken:	8/28/08---268/270 Del Mar (APN 5681621900) --- Installing a stamped and pigmented concrete driveway. Allowed runoff to enter the storm water conveyance system. Issued administrative citation SW1584 to contractor Miguel Valle Ramirez.					
14-Sep-07	STREET	Residential		EMERSON	ST	Construction Debris & Waste
Comments Action Taken:	9/14/08---Some dirt and debris in the curb as a result of landscaping work being conducted at this address. Advised the contractor of CVMC14.20.100 and issued public education materials. An immediate clean up of all debris in the curb was undertaken by the contractor. No further action required at this time.					
17-Sep-07	STREET	Residential	185	MONTGOMERY	ST	Sewage Spill Going Down Storm Drair

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Sewer spill secured. Sent sewer maintenance person to clean up. No further action required					
9-Oct-07	STREET	Residential	1623	MELROSE	AV	Unknown Discharge
Comments Action Taken:	10/9/07----Responded to complaint call of white residue discharging from 1623 Melrose Ave. White residue was traced to address and homeowner contacted. Homeowner stated that Dean's Pool service had performed maintenance on the pool the day before. Homeowner Sergio Saravia wanted to accept responsibility and was issued administrative citation SW1009072. No further action necessary at this time.					
9-Oct-07	STREET	Residential		MADRONA	ST	Power Washing
Comments Action Taken:	10/9/07----Responded to complaint call of auto detailing in the street without BMPs. Pro Care Auto Detail staff was washing vehicles in the street at 284 Madrona Street. Public education and administrative citation SW B1009071was issued to Ms. Monica Gomez, owner of this business.					
17-Oct-07	STREET	Residential	456	EMERSON	ST	Leaking Vehicle
Comments Action Taken:	10/17/07---Burtech Pipeline truck leaking diesel onto the street. Staff overfilled the saddle tank, and allowed leak to go uncontrolled. Administrative Citation SW B0101707 issued to Bob Bardo of Burtech Pipeline. No further action necessary at this time.					
18-Oct-07	STORM DRAIN PIPE	Residential	250	QUINTARD	ST	Unknown Discharge
Comments Action Taken:	10/18/07---Responded to report of illegal discharge from Mercado Int. Inspection noted water near the storm drain, however it was not traceable to the grocery store. No further action necessary at this time.					
5-Nov-07	CATCH BASIN	Residential	1025	CUYAMACA	AV	Unknown Discharge
Comments Action Taken:	Responded to report of illegal discharge from 1025 Cuyamaca. Noted discharge stains from property leading to the SWCS. Owner agreed to immediately stop using the washer machine and to re-plumb the machine to sewer. Issued public education materials and a verbal warning. No further action necessary at this time.					
6-Nov-07	STREET	Residential	465	F	ST	Sewage Spill Going Down Storm Drair

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	11/6/07---TCP Company Plumbing Specialist staff unclogging back up at apartment complex. Washing sewer residue into street. Issued Administrative Citation SW B1106071 to Mr. Roby Ellis. No further action necessary at this time.					
8-Nov-07	STREET	Residential		F	ST	Power Washing
Comments Action Taken:	11/8/08---Responded to report of power washing with no BMPs. Inspection did not find evidence of violation. No further action necessary at this time.					
8-Nov-07	STREET	Residential	16	BONITA	RD	Unknown Discharge
Comments Action Taken:	Responded to report of illegal discharge from 16 Bonita. Noted discharge from property leading to the SWCS. Contacted property owner that the discharge was from her washer machine. Owner agreed to immediately stop using the washer machine and have a plumber or her husband re-plumb the machine to sewer. Issued public education materials and a verbal warning. No further action necessary at this time.					
15-Nov-07	STREET	Residential	848	COLORADO	AV	Leaking Vehicle
Comments Action Taken:	11/15/07---Responded to report of vehicle leaking oil from a residential driveway and onto the sidewalk, and gutter. Noted a covered vehicle parked in the driveway and leaking oil. Left a business card and door hanger for resident. Had telephone conversation with the owner of the vehicle. Vehicle was moved, spill was cleaned, vehicle was replaced, and an oil pan was set underneath the car to capture any leakage. Verbal warning was issued. No further action necessary at this time.					
19-Nov-07	STREET	Residential	163	QUEEN ANNE	DR	Leaking Vehicle
Comments Action Taken:	11/19/07---responded to report of leaky vehicle onto the street. No evidence of a leaky vehicle or any other storm water violation was found upon inspection and a later re-inspection. No further action necessary at this time.					
21-Nov-07	STREET	Residential	478	SECOND	AV	Leaking Vehicle
Comments Action Taken:	Explorer was not on scene. Mulitple vehicle oil staining located throughout section of site. NFA required.					
4-Dec-07	CATCH BASIN	Residential		MAX	AV	Follow Up Inspection

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Work request was cancelled. Change category from storm water to catch basin. Refer work request to waste water division. No further action required.					
6-Dec-07	STREET	Residential	720	BAYLOR	AV	Slulry/Concrete Discharge
Comments Action Taken:	Did not observe slurry discharge. Some sediment and grass in curbline.					
6-Dec-07	STREET	Residential	1100	MELROSE	AV	Paint Discharge
Comments Action Taken:	12/6/07---Noted some light traces of dry paint from 1132 Melrose Ave. Spoke to property owner regarding the discharge and the dry wall work being conducted at the home. Owner cleaned the discharge. No further action necessary at this time.					
13-Dec-07	CATCH BASIN	Residential	2287	SUN VALLEY	RD	Complaint Response Enforcement
Comments Action Taken:	12/6/07---Responded to report of non storm water discharge by resident who also owns a carpet cleaning business. Inspection found no evidence of an illegal discharge. Public education materials and contact information was left at the door. No further action necessary at this time.					
13-Dec-07	CATCH BASIN	Residential	2287	SUN VALLEY	RD	Complaint Response Enforcement
Comments Action Taken:	12/6/07---Responded to report of non storm water discharge by resident who also owns a carpet cleaning business. Inspection found no evidence of an illegal discharge. Public education materials and contact information was left at the door. No further action necessary at this time.					
3-Jan-08	STREET	Residential	655	OAKLAWN	AV	Other
Comments Action Taken:	1/4/08--- Responded to call regarding trash, junk and debris (TJD) in the storm drain at 655 Oaklawn. Inspection noted violations as described. Notified property owner Francisco Ceja regarding the condition of his rental property. Mr. Ceja immediately began efforts to summon help, go to the site and began cleaning the TJD dumped by his tenants. All TJD was cleaned and verbal notice was issued for Mr. Ceja to take all necessary steps to prevent a reoccurrence of this violation. No further action is necessary at this time.					
4-Jan-08	STREET	Residential	1101	PARADISE TRAIL	RD	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	1/4/08--- Responded to call regarding leaky vehicle ion the street. Located the Grey Saturn wagon CL 4HLD265 in question. No evidence of violation was found. Spoke to vehicle owner and advised to move vehicle from the street in case vehicle were to leak fluids and to comply with parking regulations. No further action is necessary at this time.					
10-Jan-08	STREET	Residential	511	JEFFERSON	AV	Unknown Discharge
Comments Action Taken:	1/9/08--- Responded to call regarding oil spill from tire shop at 646 H Street. Per inspection, I found oil seeping between crack in the wall and staining the exterior of wall abutting to 511 Jefferson Ave. Oil was static. Advised tenant at 511 Jefferson that case was a civil matter. Advised manager of Express Tire at 646 H that he should take immediate action to correct seepage. Did not issue any order or directive on this case.					
10-Jan-08	STREET	Residential		HILLTOP	DR	Accident/Spill
Comments Action Taken:	1/10/08--- Responded to call regarding radiator coolant spilled in the gutter at intersection of Hilltop and Rienstra. Cause of spill was an auto collision. City crews assisted in containment of spill by diking spill with sand / dirt. Remained on site until tow contractor arrived. Reminded tow contractor of his requirement to clean up all auto spills. Asked police officer on scene to ensure tow contractor cleans up. No further action necessary at this time.					
14-Jan-08	STREET	Residential		PARADISE RIDGE	WY	Accident/Spill
Comments Action Taken:	On 01/14/08 received notification of a vehicle leaking oil. Arrived on-scene and observed a small stain in the area but there was no vehicle at this location. Did not require cleanup due to stain appeared to be old and was already saturated into the asphalt. No Further Action Required.					
16-Jan-08	STREET	Residential	943	PALENCIA	PL	Leaking Vehicle
Comments Action Taken:	1/16/08---Responded to report of trash truck leaking hydraulic fluid onto the street. Inspection noted evidence of some hydraulic fluid on street. Notified Manuel Medrano in the City's conservation division to alert Allied Waste of the spill. Allied Waste staff immediately responded and cleaned all stains from the street. No further action necessary at this time.					
17-Jan-08	STREET	Residential	1153	NOLAN	AV	Leaking Vehicle
Comments Action Taken:	1/17/08---Responded to report of unknown discharge from motor home parked at 1153 Nolan Ave. Inspection noted traces of dry concrete residue potentially originating ar rge address in question. Definitive evidence of a violation was not found. Issued Administrative Citation Warning SW C117082. No further action necessary at this time.					
22-Jan-08	STREET	Residential		PERRIN	PL	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	1/22/08---Responded to report of unknown discharge from concrete truck at Perrin Place and Brezar Street. Searched the area and was not able to locate truck or any evidence of a violation. No further action necessary at this time.					
22-Jan-08	STREET	Residential	1218	HELIX	AV	Leaking Vehicle
Comments Action Taken:	1/22/08---Responded to report of leaky vehicle at 1218 Helix Ave. Inspection noted some old oil stains in the street, however no evidence was found linking stains to any of the vehicles parked in the vicinity. No further action necessary at this time.					
25-Jan-08	STREET	Residential		TURQUOISE	CT	Unknown Discharge
Comments Action Taken:	1/23/08---Responded to report of unknown discharge into the SWCS. Inspection noted that tenant at 354 Turquoise Ct. was washing paint brushes into the SWCS. Issued Administrative Citation Warning SW B125081. No further action necessary at this time.					
11-Feb-08	STREET	Residential	24	J	ST	Dirt Tracking
Comments Action Taken:	No evidence of tracking.					
25-Feb-08	STREET	Residential	1392	OLEANDER	AV	Slulry/Concrete Discharge
Comments Action Taken:	2/25/08---Responded to report of concrete discharge into the SWCS at 1392 Oleander Ave. Inspection noted that staff working for Ernesto Rubalcava allowing rinse water to flow into the SWCS and not using BMPs. Issued Administrative Citation SW B225081. No further action necessary at this time.					
27-Feb-08	STREET	Residential	780	FOURTH	AV	Slulry/Concrete Discharge
Comments Action Taken:	2/27/08---Responded to report of concrete discharge into the SWCS at 780 Fourth Ave. Inspection noted homeowner Ana and Arthur Lowery had washed off concrete buggy in the street in preparation for its return to the rental facility. Rinse water flowed into the SWCS. Issued Administrative Citation Warning SW B227081. No further action necessary at this time.					
6-Mar-08	STREET	Residential	246	ORANGE	AV	Unknown Discharge

Incident Date	Structure Category	Site Category	Address		Type of Violation
Comments Action Taken:	3/6/08---Responded to report of unknown discharge at 248 Orange Ave. Inspection noted that green waste can set out for pick-up was leaking onto street. Issued Administrative Citation Warning SW1591. No further action necessary at this time.				
17-Mar-08	STREET	Residential	RIDGEBACK	RD	Power Washing
Comments Action Taken:	3/17/08---Responded to report of power washing at 700 BLK of Marbella Circle. Inspection noted that contractors for the complex were power washing homes in preparation for painting. At the time of inspection all runoff was contained within the vegetated areas of the complex. A verbal warning was issued to Painting staff that if they were to continue power washing they must implement BMPs. All power washing was stopped until appropriate BMPs were implemented. No further action necessary at this time.				
27-Mar-08	STREET	Residential	1136 NOLAN	AV	Unknown Discharge
Comments Action Taken:	3/27/08---Responded to report of unknown discharge 1136 Nolan Ave. Inspection noted slight traces of residue from a pool filter cleaning. Insufficient evidence was present to take enforcement action. A verbal warning was issued. No further action necessary at this time.				
2-Apr-08	STREET	Residential	361 EMERSON	ST	Slulry/Concrete Discharge
Comments Action Taken:	Arrived on scene and observed buildup of slurry in conveyance system. Resident was pouring own driveway and was washing it down to keep it wet. Resident was not aware of regulations and thought that washing it down was OK. Issued educational material and city crews conducted clean up. NFA				
8-Apr-08	STREET	Residential	393 CAMINO ELEVADO		Slulry/Concrete Discharge
Comments Action Taken:	4/08/08---Responded to report of unknown discharge 395 Camino Elevado. Inspection noted a discharge of concrete slurry flowing from this address and into the SWCS. Issued Administrative Citation Warning SW B0408081. No further action necessary at this time.				
17-Apr-08	STREET	Residential	1294 CARDINAL	PL	Slulry/Concrete Discharge
Comments Action Taken:	4/17/08---Responded to report of concrete discharge from 1288 Cardinal Place. Inspection noted slurry from this address flowing into the SWCS. Issued administrative citation warning SW1594. No further action necessary at this time.				
21-Apr-08	STREET	Residential	255 WOODLAWN	AV	Power Washing

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	Marisa and Ramon responded. Did not observe discharge. NFA					
24-Apr-08	CATCH BASINS	Residential	427	DEL MAR	CT	Wash Down Basin
Comments Action Taken:	Assigned work order to clean and flush catch basin. Completed by City's Waste Water Division.					
12-May-08	STREET	Residential	600	GUAVA	AV	Unknown Discharge
Comments Action Taken:	5/12/08---Responded to report of unknown discharge at 641 Guava. Inspection noted a discharge from concrete pump and into the SWCS. Issued administrative citation warning SW1650. No further action necessary at this time.					
12-May-08	STREET	Residential	419	PLAZA TOLUCA		Leaking Vehicle
Comments Action Taken:	5/12/08---Responded to report of leaky vehicle at Plaza Toluca. Inspection noted white Jaguar Lic 2JAN931 leaking oil onto SWCS. Issued verbal warning to owner to have the vehicle repaired or removed from the street. A re-inspection found that the car had been removed from the street and parked in a private driveway. No further action necessary at this time.					
12-May-08	STREET	Residential	1188	NACION	AV	Unknown Discharge
Comments Action Taken:	5/12/08---Responded to report of unknown discharge at 1188 Nacion. Inspection noted white residue in SWCS from address in question. Issued administrative citation SW B0512082. No further action necessary at this time.					
12-May-08	STREET	Residential	576	POINT SAN LUIS	CT	Unknown Discharge
Comments Action Taken:	5/12/08---Responded to report of unknown discharge from 576 Point San Luis Ct. and into the SWCS. Issued administrative citation warning SW B0512083. No further action necessary at this time.					
15-May-08	STREET	Residential	225	PALOMAR	ST	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	5/15/08---Responded to report of unknown discharge from 225 Palomar Street. Inspection verified that unknown flow was from irrigation over watering. No further action necessary at this time.					
16-May-08	STREET	Residential	906	BUCKAROO	LN	Unknown Discharge
Comments Action Taken:	5/16/08---Responded to report of unknown discharge from 906 Buckaroo Ln. Inspection found white residue in the SWCS, but could not find definitive evidence to identify the responsible party. City staff was summoned to clean up all white residue. No further action necessary at this time.					
21-May-08	STREET	Residential	955	MONSERATE	AV	Complaint Response Enforcement
Comments Action Taken:	5/21/08---Responded to report of resident deliberately placing pipe in the SWCS. Inspection found white pipe placed in the SWCS. Spoke to resident and informed him of the CVMC. Issued order to remove pipe and verbal notice regarding violation. Resident removed the pipe. No further action necessary at this time.					
22-May-08	STREET	Residential	1179	AGUA TIBIA	AV	Unknown Discharge
Comments Action Taken:	5/21/08---Responded to report of unknown discharge from 1179 Agua Tibia Ave. Inspection found white water based paint in the SWCS. The paint residue was traceable to the above address. Issued administrative citation SW B0521083. No further action necessary at this time.					
23-May-08	STREET	Residential		TIFFANY	CT	Construction Debris & Waste
Comments Action Taken:	On 05/23/08, received notification of City contractor washing down construction debris into the storm drain. Arrived on-scene and observed contractor staff "wetting" fresh concrete from new ADA ramp. Contractor was using BMPs - (Berms and Sand Bags). No Further Action Required.					
23-May-08	STREET	Residential		TIFFANY	CT	Construction Debris & Waste
Comments Action Taken:	On 05/23/08, received notification of City contractor washing down construction debris into the storm drain. Arrived on-scene and observed contractor staff "wetting" fresh concrete from new ADA ramp. Contractor was using BMPs - (Berms and Sand Bags). No Further Action Required.					
29-May-08	STREET	Residential	1195	BOW WILLOW TRAIL	WY	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	5/29/08---Responded to report of leaking vehicle at 1195 Bow Willow Trail Way. Inspection of address in question and surrounding areas found no evidence of spill or violation. The resident at the address in question was washing his car. No violation was found. No further action necessary at this time.					
29-May-08	STREET	Residential		H	ST	Accident/Spill
Comments Action Taken:	5/29/08---Responded to report of diesel spill at eastbound H Street and 805. Inspection found that an accidental fire caused a diesel spill. Spill had been contained and responsible party was taken all appropriate measures to contain, remove and appropriately dispose of all diesel fuel spilled in the street, under the supervision of CVFD and County HAZMAT. Diesel fuel did not enter a storm drain inlet. This spill was completely remediated by the responsible party. This spill was unavoidable. No violation was found. No further action necessary at this time.					
30-May-08	STREET	Residential	1097	FOURTH	AV	Slulry/Concrete Discharge
Comments Action Taken:	5/30/08---Responded to report of concrete slurry spill at 1095 Fourth Ave. Inspection found concrete slurry flowing from said property and into the SWCS. Issued administrative citation SW1653. No further action necessary at this time.					
10-Jun-08	STREET	Residential	2875	MORNING CREEK	RD	Unknown Discharge
Comments Action Taken:	AIG Concrete Pumping washing down equipment into the conveyance system. Issued admin citation SW061008-01 (Warning).					
11-Jun-08	STREET	Residential	987	ROCA	PL	Construction Debris & Waste
Comments Action Taken:	6/11/08---Responded to report of sand/ dirt in the SWCS at 987 Roca Place. Inspection noted approximately one yard of sand dumped in the street. A door hanger was left at the address informing resident of violation, and to call. Spoke to resident who immediately complied with request to remove the sand in lieu of increased enforcement action by the City. No further action necessary at this time.					
23-Jun-08	STREET	Residential	168	SHASTA	ST	Slulry/Concrete Discharge
Comments Action Taken:	6/23/08---Responded to report of concrete slurry in the SWCS from 168 Shasta. Inspection noted evidence of non storm water discharges from address in question. Issued administrative citation SW1660. No further action necessary at this time.					

Subtotal: 77

Total: 131

CITY OF CHULA VISTA **Public Works Department**

September 28, 2009

County of San Diego
Watershed Protection Program
5201 Ruffin Road, Suite P
San Diego, CA 92123

Attention: Mr. Jon Van Rhyn, Watershed Protection Program Manager

SUBJECT: SUBMITTAL OF JURMP ANNUAL REPORT NO. 29 FOR FISCAL YEAR 2008-2009

Enclosed please find one hard copy and three CD-ROMs of the City of Chula Vista's Jurisdictional Urban Runoff Management Plan Annual Report No. 29 for Fiscal-Year 2008-2009. Pursuant to the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001, I request that the County of San Diego, as the Principal Copermittee, submits said report to the Regional Water Quality Control Board.

Should you have any questions please call me at (619) 397-6111. Thank you.

K. Aminpour

KHOSRO AMINPOUR
SENIOR CIVIL ENGINEER

Attachments

1800 Maxwell Road, Chula Vista, CA 91911 | www.chulavistaca.gov | (619) 397-6000 | fax (619) 397-6259

CITY OF CHULA VISTA

Public Works Department

September 28, 2009
File # 0780-85-KY181

San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Attention: Mr. John H. Robertus, Executive Officer

SUBJECT: JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) ANNUAL REPORT NO. 29 AND ATTACHMENTS

Please find enclosed City of Chula Vista's JURMP Annual Report No. 29, for Fiscal Year 2008-2009.

The JURMP Annual Report has been prepared in accordance with the requirements of the San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (NPDES Permit No. CAS0108758) and is a documentation of the City's activities on the implementation of, and compliance with the requirements of said Permit during the reporting period July 1, 2008 to June 30, 2009.

If you have any questions regarding the submitted report, or need further information, please contact Khosro Aminpour, Senior Civil Engineer, at (619) 397-6111. Please direct any and all correspondence to:

City of Chula Vista, Department of Public Works
1800 Maxwell Road, Chula Vista, CA 91911
Attention: Khosro Aminpour, Senior Civil Engineer

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

Attachments

C: Rick Hopkins, Director of Public Works
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer

SIGNED CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

9/16/09

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

DATE

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City of Chula Vista

Jurisdictional Urban Runoff Management Program

ANNUAL REPORT

No. 29

July 1, 2008 - June 30, 2009

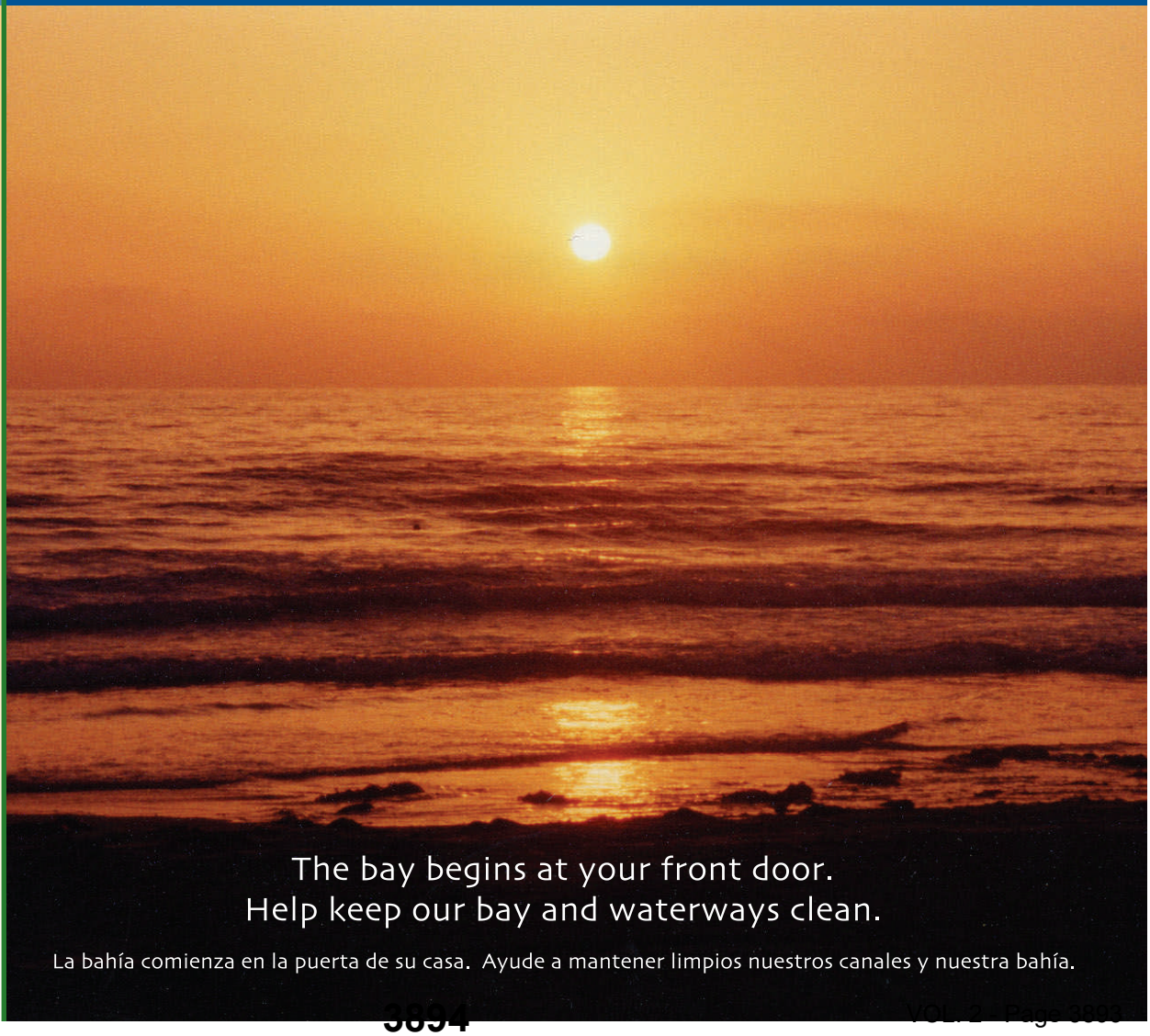

The bay begins at your front door.
Help keep our bay and waterways clean.

La bahía comienza en la puerta de su casa. Ayude a mantener limpios nuestros canales y nuestra bahía.

CITY OF CHULA VISTA

ACKNOWLEGEMENTS

This Report has been prepared by or under the supervision of:

Matt Little, Assistant Director of Public Works
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer
Don Bergeson, Environmental Health Specialist
Marisa Fontanoz, Environmental Health Specialist
Mike Hice, Storm Water Compliance Inspector
Ramon Quicho, Engineering Technician

Staff from the following City of Chula Vista departments, divisions, or sections has contributed to the implementation of the JURMP in 2008-2009:

Public Works Inspection Services
Public Works Storm Water Management
Public Works Wastewater Management
Public Works Environmental Services
Office of Communications
Chula Vista Nature Center
Geographic Information Systems
Development Services – Land Development
Engineering Design
Planning Landscape Architecture
Environmental Planning
City Attorney's Office

The following organizations have contributed to the implementation of the JURMP in 2008-2009:

- D-MAX Engineering, Inc.
- I Love a Clean San Diego, Inc.
- Otay Valley Regional Park (OVRP)
- Members of the CLEAN Stakeholder Group

The City of Chula Vista wishes to thank:

- Volunteers who dedicated their time to improve water quality in Chula Vista
- Environmentally conscious citizens who reported illegal discharges
- Citizens, business owners, contractors, and developers who cooperated with City staff in implementing Best Management Practices

CITY OF CHULA VISTA
JURMP Annual Report No. 29
Fiscal Year 2008-2009
SEPTEMBER 2009

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H. Municipal Inspections
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LIST OF TERMS AND ABBREVIATIONS

APN	-	Assessors Parcel Number
BMPs	-	Best Management Practices
CASQA	-	California Storm Water Quality Association
City	-	City of Chula Vista
CIWMB	-	California Integrated Waste Management Board
CSWMP	-	Construction Storm Water Management Plan
CWA	-	Clean Water Act
ESA	-	Environmentally Sensitive Area
FY	-	Fiscal Year
GBA	-	George Butler Associates Management System
GIS	-	Geographic Information System
GPU	-	General Plan Update
HHW	-	Household Hazardous Waste
HMP	-	Hydromodification Management Plan
IHC	-	Interim Hydromodification Criteria
IPM	-	Integrated Pest Management
JURMP	-	Jurisdictional Urban Runoff Monitoring Plan
LID	-	Low Impact Development
LTEA		Long Term Effectiveness Assessment
Manual	-	Development Storm Water Manual
MEP	-	Maximum Extent Practicable
MS4	-	Municipal Separate Storm Sewer System
MWS	-	Modular Wetland System
NAICS	-	North American Industrial Classification System
NOI	-	Notice of Intent
NOT	-	Notice of Termination
NPDES	-	National Pollutant Discharge Elimination System
ROWD		Report of Waste Discharge
RWQCB	-	Regional Water Quality Control Board
SIC	-	Standard Industrial Classification
SSO	-	Sanitary Sewer Overflows
SUSMP	-	Standard Urban Storm Water Mitigation Plan
SWPPP	-	Storm Water Pollution Prevention Plan
SWRCB	-	State Water Resources Control Board
TAC	-	Technical Advisory Committee
TTWQ	-	Threat to Water Quality
WDID	-	Waste Discharge Identification
WQTR	-	Water Quality Technical Report

EXECUTIVE SUMMARY

On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (Regional Board) adopted the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 (Municipal Permit). The implementation phase of the Municipal Permit commenced on January 24, 2008. Prior to that date, NPDES Municipal Permit, Order No. 2001-01 regulated discharges from urbanized areas of San Diego County. This report covers the implementation period of July 1, 2008 to June 30, 2009. Reporting requirements of this Jurisdictional Urban Runoff Management Program (JURMP) annual report is in accordance with the Municipal Permit, Order No. R9-2007-0001.

Among other requirements, the Municipal Permit requires that on September 30th of each year, all municipalities of San Diego County (including Chula Vista) as well as the San Diego Unified Port District, the San Diego County Regional Airport Authority and the County of San Diego, collectively referred to as the Copermittees, submit jurisdictional annual reports which provide documentation of the activities conducted by each Copermittee during the reporting period covering the previous fiscal year from July 1 to June 30. JURMP annual reports are to include descriptions of each Copermittees' efforts in the implementation of its JURMP document developed in compliance with Municipal Permit requirements to minimize discharges of pollutants to waters of the United States and other receiving waters.

As required under Section M.6 of the Municipal Permit, the Copermittees have developed a regional standardized format for JURMP annual reports. This report has therefore been prepared in conformance with the regional standardized format.

The present report covers subjects and areas outlined in Section J.3.a of the Municipal Permit and the Chula Vista JURMP. Although the reporting period is essentially from July 1, 2008 to June 30, 2009, some of the activities could not readily be divided to fall within the above target dates and continuation of the activities may have extended beyond this period to their completion.

This report has been prepared to provide an account of activities conducted by the City of Chula Vista (City) according to the components outlined in Section D of the Municipal Permit including:

- Development Planning
- Construction
- Existing Development (Including Municipal, Industrial and Commercial, Residential)
- Illicit Discharge Detection and Elimination (to be submitted under separate cover on or before December 15, 2009, in accordance with Addendum 2 to Order No. R9-2007-0001)
- Education
- Public Participation
- Fiscal Analysis
- Assessment of JURMP Effectiveness

It is important to note that while the City discharges, directly or indirectly, to water bodies that are listed on the Clean Water Act Section 303(d) as impaired water segments; the City does not discharge to any water bodies with a Total Maximum Daily Load (TMDL) program. Therefore, a discussion of TMDLs is not included in this report.

In previous years, the City submitted copies of its Dry Weather Field Screening and Analytical Monitoring Program report and any follow-up investigation reports for the previous dry weather season as attachments to its JURMP annual reports. Since the annual reports are now due to the Regional Board by September 30th of each year, and Dry Weather Field Screening activities can continue until September 30th, the Regional Board has agreed that Dry Weather Field Screening reports and their analysis can be submitted separately at a later date but no later than December 15th of each year. Section 7.0 of this report, the 2009 Dry Weather Field Screening report, and an analysis of its findings will be submitted to the Regional Board before December 15, 2009, as mandated by Addendum No. 2 to Order No. R9-2007-0001.

During the current reporting period, the City of Chula Vista participated in the regional Receiving Water and Urban Runoff Monitoring and Reporting Program as mandated in the Municipal Permit. The County of San Diego, as the Principal Copermittee, will submit to the Regional Board the Receiving Waters and Urban Runoff Monitoring Annual Report for the 2008-2009 rainy season on January 31, 2010.

Section 11.0 of this report includes an effectiveness assessment analysis of the development and implementation of the City's Storm Water Management Program. Such analysis provides a synopsis of activities and a critical look at the overall strengths and challenges associated with the components throughout this report.

The following sections cover City of Chula Vista's strides toward continued implementation and improvement of its JURMP and, participation in regional and watershed level activities and programs from July 1, 2008 to June 30, 2009. The City is in the continuing process of assessing the effectiveness of individual program components and has made adjustments or revisions in some areas in order to improve the overall effectiveness of the program and to assure full compliance under the Municipal Permit. The City recognizes its role as a good steward of local and regional water resources, as well as the overall health of the San Diego Bay watershed.

1.0 INTRODUCTION

1.1 BACKGROUND

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollutions such as urban runoff and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issues to local governments and other agencies.

The California Regional Water Quality Control Board, San Diego Region (Regional Board), adopted the first NPDES General Municipal Permit for the San Diego Region in 1990. The NPDES Municipal Permit is re-issued approximately every five years. On January 24, 2007, the Regional Board adopted the latest NPDES General Municipal Permit for the San Diego Region, Order No. R9-2007-0001 (Municipal Permit). The Municipal Permit regulates all new development, significant redevelopment, existing land use and other activities within the jurisdictional boundaries of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority and eighteen municipalities of San Diego County, collectively known as the Copermittees. The Municipal Permit requires all Copermittees to develop and implement programs to reduce the discharge of pollutants into and from their Municipal Separate Storm Sewer Systems (MS4s) and report all their efforts and achievements to the Regional Board on an annual basis.

Report No. 29 is an account of City of Chula Vista's activities and Jurisdictional Urban Runoff Management Program (JURMP) implementation efforts during the reporting period of July 1, 2008 to June 30, 2009.

During this reporting period, and pursuant to the requirements of the Municipal Permit, the City of Chula Vista (City) has:

- Implemented inspection programs of high priority construction, municipal, industrial, commercial, and residential existing land uses.

- Provided education and training for City staff, developers, residents, and businesses on current storm water regulations and applicable Best Management Practices (BMPs) that can be implemented to reduce discharge of pollutants to the City's storm water conveyance systems.

- Continued Dry Weather Field Screening and Analytical Monitoring, and participated in the region-wide Receiving Water Monitoring Program, both of which are designed to evaluate water quality and identify sources of pollution to and from storm water conveyance systems.

- Inspected and maintained public facilities and activities for compliance with BMPs requirements.

- Participated in watershed and regional meetings and activities.

1.2 PURPOSE AND OBJECTIVES

Report No. 29 is a documentation of the City's efforts to minimize discharge of pollutants to and from its storm water conveyance systems and to reduce the impact of urban runoff on adjacent water bodies and sensitive areas. The following account describes the City's activities on the implementation of, and compliance with, the requirements of the Municipal Permit during the reporting period July 1, 2008 to June 30, 2009. The reporting year has been guided by insight through the Report of Waste Discharge and Long Term Effectiveness Assessments undertaken regionally in 2004-2005. These regional reporting and assessment efforts have provided valuable understanding on both local and watershed conditions, and offered the City information to support programmatic development and priority establishment throughout various elements presented within this report.

Sections 2.0 to 6.0 of this report describe the City's compliance activities during the current reporting period and include the following components:

- Development Planning
- Construction Program
- Municipal Program
- Industrial and Commercial Program
- Residential Program

Section 7.0 includes a description of the City's activities and analysis of the Illicit Discharge Detection and Elimination Component. In previous years, when submittal of JURMP annual reports were due to the Regional Board on or before January 31 of each year, Dry Weather Field Screening and Analytical Monitoring report findings were referenced and analyzed in this Section, and the reports themselves were submitted as attachments to the annual report. Addendum No. 2 to Order No. R9-2007-0001 acknowledges that Dry Weather Field Screening and Analytical Monitoring reports can no longer be completed by the new due date of the JURMP annual report submittal (September 30 of each year) and, therefore, Section 7.0 together with copies of Dry Weather Field Screening and Analytical Monitoring reports will be submitted to the Regional Board on or before December 15, 2008.

Section 8.0 highlights City's efforts and activities conducted during the reporting period to increase general public awareness about environmental issues and water quality protection and train City staff, business owners, developers, contractors, and other targeted groups to implement BMPs during their daily activities.

Section 9.0 is a description of the City's attempts to promote environmental and water quality awareness among the general public and particularly young people through their involvement and participation in environmental group activities.

Section 10.0 outlines an analysis of the City's storm water management costs and budgets. Program costs during FY 2008-2009 and program budgets for FY 2009-2010 are included in two separate tables that show itemized and total figures. On January 29, 2009, the Copermittees developed a Standardized Fiscal Analysis Method and Format, which will be used to report fiscal analysis in the next Annual Report as required under Section G.3 of the Municipal Permit.

Section 11.0 of this report is dedicated to the effectiveness assessment of the City's implementation of the JURMP. The document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" and Section 13 of the City's JURMP document have been utilized to draw conclusions about the effectiveness of the City's JURMP implementation. It should be noted that effectiveness assessment is an on-going component of the JURMP program, and various program elements are revised as necessary, based on observations and findings.

Section 12.0 of the Standardized Format for JURMP Annual Report is dedicated to descriptions of any special investigations conducted during the reporting period. As indicated in this Section, the need for special investigations did not arise during the current reporting period.

Section 13.0 of this report includes a description of the City's efforts to reduce pollutant discharges from non-emergency fire fighting flows. Such efforts include training of Fire Department staff to implement BMPs during their daily activities, fire-fighting exercises, and post-incident spill control and cleanup. Incorporation of post-construction BMPs in the design and construction of new fire stations is considered to be another method for minimizing pollutant discharges from washing fire fighting equipment and other non-emergency activities at fire stations and is discussed in this section.

Section 14.0 of this report is dedicated to descriptions of modifications to the JURMP document that were made during the reporting period, or that are proposed or planned, to maximize the Copermittee's JURMP effectiveness. These updates include changes to Appendix B of the JURMP, establishment of minimum mobile business Best Management Practices (BMPs), updates to the Dry Weather Monitoring Action Levels for Bacteria, and the establishment of the regional standardized fiscal analysis method.

- Since the City's JURMP document was developed recently and submitted to the RWQCB in March 2008, Appendix B of the JURMP has been updated during the current reporting period, which includes inventories of construction sites; municipal, commercial, and industrial facilities and activities; and treatment control BMPs.
- The Regional Industrial and Commercial Workgroup established minimum BMP requirements for mobile businesses. These minimum BMPs were incorporated into the City's Storm Water Information Packets that are provided to mobile businesses who apply for a business license application in the City.

- During the current reporting period, a study was conducted at the regional level to evaluate the accuracy of Dry Weather Monitoring Action Levels for Bacteria. The study resulted in some adjustments in Action Levels for Total and Fecal Coliform, and Enterococcus. Appendix E and Table E-3 of the JURMP document will be updated in the next Annual Report to reflect these adjustments. The new Action Levels will be implemented during the next Dry Weather Monitoring, which will occur during the summer of 2010.
- Lastly, pursuant to Order No. R9-2007-0001, the Copermittees developed a standardized method and format for annually conducting and reporting fiscal analysis of their urban runoff management programs. The City plans conduct it annual fiscal analysis consistent with this standard method starting January 31, 2010.

Section 15.0 includes the report's conclusions and recommendations. It provides an overall view of the City's implementation of its JURMP, assesses its strengths and weaknesses in general terms, and provides recommendations to improve next year's program.

2.0 DEVELOPMENT PLANNING COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a (3)(a) i – A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.

Permit Section J.3.a.(3)(a).ii - Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).iii - A listing of the development projects to which SUSMP requirements were applied.

Permit Section J.3.a.(3)(a).iv - Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).v - At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.

Permit Section J.3.a.(3)(a).vi - A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.

Permit Section J.3.a.(3)(a).vii - An updated treatment control BMP inventory

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Permit Section J.3.a.(3)(a).viii - The number of treatment control BMPs inspected, including a summary of inspection results and findings.

Permit Section J.3.a.(3)(a).ix - A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.

Permit Section J.3.a.(3)(a).x - Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).xi - A listing of any projects which received a SUSMP waiver.

Permit Section J.3.a.(3)(a).xii - A description of implementation of any SUSMP waiver mitigation program.

Permit Section J.3.a.(3)(a).xiii - A description of Hydromodification Management Plan (HMP) development collaboration and participation.

Permit Section J.3.a.(3)(a).xiv - A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.

Permit Section J.3.a.(3)(a).xv - A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.

Permit Section J.3.a.(3)(a).xvi - A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.

Permit Section J.3.a.(3)(a).xvii - The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(a).xviii - A description of notable activities conducted to manage urban runoff from development projects.

2.1 INTRODUCTION

Municipal Permit Section D.1 states "Each Copermittee shall implement a program which meets the requirements of this section and (1) reduces Development Project discharges of pollutants from the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP), (2) prevents Development Project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) manages increases in runoff discharge rates and durations from Development Projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force."

This section describes actions taken during the defined reporting period by the City to minimize short- and long-term impacts of new development or redevelopment with land disturbance activities, structural development (including construction or installation of a building or structure), creation of impervious surfaces, and capital improvement projects. Through the implementation of the Development Planning Component, the City minimizes and manages increases in runoff from development projects to the MEP to protect receiving waters.

2.2 LAND-USE PLANNING

2.2.1 BACKGROUND

The City's land-use planning is guided by its General Plan and the goals, objectives, and policies included therein. The City's comprehensive General Plan Update (GPU) was completed in December of 2005. The GPU program was nearly a five-year effort, and included the

preparation of a citywide master drainage study and assessment and, a water quality baseline study to identify planning issues and policy implications, including compliance with the Municipal Permit and NPDES regulations.

Throughout the GPU process, the City solicited and received significant public input with respect to visions, goals, and objectives and conducted numerous public workshops to present and solicit input on alternative land use concepts. The GPU was adopted by City Council on December 13, 2005.

According to the Environmental Element of the GPU: "With further growth and redevelopment in Chula Vista, the projection of local and regional water resources must be adequately addressed. The City will continue its efforts to reduce the discharge of pollutants into the municipal storm drain system and natural water bodies in accordance with established NPDES standards and watershed planning efforts involving the City." One of the major objectives of the Environmental Element is to "Protect and improve water quality within surface water bodies and groundwater resources within and downstream of Chula Vista."

Water quality policies have been developed based upon those found within the Municipal Permit, and have been composed as to compliment the flow and content of the entire General Plan Update. The following water quality policies are contained in the Environmental Element:

- Ensure safely swimmable and fishable surface waters through careful management of land uses and activities within Chula Vista.
- Pursue safe alternatives to traditional pest management methods in order to reduce toxics in urban runoff and large open uses of land (e.g., golf courses, parks, agricultural lands.)
- Educate residents, business owners and City departments about feasible methods to minimize the discharge of pollutants into natural drainages and the municipal storm water conveyance system.
- Ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy.
- Encourage and facilitate construction and land development techniques that minimize water quality impacts from urban development.
- Maximize the protection of potable water supply resources from pollutants.
- Collaborate with other applicable jurisdictions in the development and funding of regional watershed management plans.

In view of the above comprehensive water quality protection provisions in the Updated General Plan, the City does not find it necessary to make any amendments to its General Plan.

2.2.2 SOURCE CHARACTERIZATION

Seven categories of land uses are identified in the City's General Plan: residential, commercial, mixed-use, industrial, public, special planning areas, and streets/freeways/right-of-ways. Each category can be associated with its specific combination of activities and pollutants and the potential impact that those activities and pollutants may have on the environment, including urban runoff quality. The City's land-use planning, project review, approval, and verification process includes environmental considerations such as source characterization, proximity to sensitive areas, pollutants and conditions of concern in receiving waters and sensitive areas, and measures necessary to minimize environmental impacts to the MEP.

Additionally, the City's Development Storm Water Manual (Storm Water Manual), updated in 2008, provides guidelines and directives for development project applicants and City staff to identify pollutants and conditions of concern for each type of land use, both during and after construction, and recommend BMPs to mitigate negative impacts of proposed activities and increased impervious areas. The City's Jurisdictional Urban Runoff Management Plan (JURMP) includes a map (Map 2) showing environmentally sensitive areas within the City. Land use planning attempts to prevent, to the MEP, potentially pollutant-generating land uses from being located near environmentally sensitive areas.

During the reporting period, the City subjected all development project applications to applicable environmental review processes, including the Standard Urban Storm Water Mitigation Plan (SUSMP) process.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

To implement the policies outlined within the City's GPU, the City has developed the Storm Water Manual. The Storm Water Manual includes a comprehensive description of construction and post-construction BMPs that are required from each development project. Additionally, the Storm Water Manual includes guidelines, flow charts, and directives for development applicants and City staff on how to identify applicable requirements for priority and non-priority projects. A section of the Storm Water Manual has been dedicated to the City's SUSMP. Another section of the Storm Water Manual outlines BMP requirements on construction sites during both rainy and dry seasons.

During the current reporting period, the City has ensured compliance with BMP requirements through development project reviews, construction and post-construction site inspections, and enforcement actions as necessary.

2.2.4 PROGRAM IMPLEMENTATION

During the reporting period, the City successfully completed implementation of the program under the Municipal Permit as described in Section 2.4.4 of this report.

During Fiscal Year 2007-08, in compliance with the NPDES Municipal Permit requirements, several of the City's implementation documents were updated, including:

- Jurisdictional Urban Runoff Management Plan
- Storm Water Management and Discharge Control Ordinance
- Grading Ordinance
- Development Storm Water Manual

During the process of updating the above-referenced documents, each of the City's implementation processes were objectively reviewed for any potential deficiencies and, based on extensive experience gained during the previous Municipal Permit implementation, significant improvements were made throughout all aspects of the program. Those improvements are reflected in the above referenced updated documents and are currently being implemented.

2.3 ENVIRONMENTAL REVIEW PROCESS

The Environmental Review Process for development and redevelopment projects occurs in two phases. The Environmental Planning Division of the Development Services Department reviews all development and redevelopment projects for compliance with California Environmental Quality Act (CEQA) requirements, which includes water quality considerations. The Permits and Land Development Divisions of the Development Services Department, and the Storm Water Management Section of the Public Works Department review development and redevelopment projects for compliance with requirements of the Clean Water Act, the Municipal Permit, and the City's Grading and Storm Water Management Ordinance requirements. Further, the Environmental Planning Division and the Storm Water Management Section, as needed, review project Environmental Impact Reports (EIRs) to ensure that water quality issues are adequately addressed at early stages of the Environmental Review Process.

The development review and SUSMP implementation processes within the City take place with close coordination of staff from various departments, divisions, and sections. The following departments, divisions, and sections are responsible for the review of development projects for SUSMP requirements:

- Development Services Department
- Public Works Department, Engineering
- Public Works Department, Operations - Storm Water Management Section

The Development Services Department, which is responsible for issuing grading and improvement permits, is the lead department for coordinating all SUSMP review activities. Development projects initiated in the Planning Division of the Department Services Department or other departments within the City are required to submit environmental documents showing compliance with all applicable environmental regulations. Initial Studies, Environmental Impact Reports, Public Facilities Finance Plans, etc., are routed to the Land Development Division for review and final approval.

Land Development Division staff reviews submitted documents and determines if a project is a Priority Development Project and subject to SUSMP requirements. All applicants are required to complete checklists included in the Storm Water Manual in order to identify specific SUSMP BMP requirements.

Priority Development Projects are then required to submit Water Quality Technical Reports (WQTR) that include identification of project pollutants; Low Impact Development Site Design, Source Control, and Structural Treatment Control BMPs; calculations for sizing of treatment control BMPs; and a perpetual maintenance plan and funding mechanism. The applicants are required to sign an agreement with the City for the maintenance of post-construction BMPs. When necessary, the Land Development Division coordinates with the Storm Water Management Section for the latest developments and requirements in the SUSMP program.

The Land Development Division and Storm Water Management staff reviews WQTRs and ensures that appropriate BMPs are included in the design of projects. Through meetings and phone calls, developers and consultants are educated on the City's SUSMP requirements and are required to revise their WQTRs to include all corrections and amendments required by the City.

As noted above, and within the current reporting period, significant efforts were made by City staff to ensure complete and comprehensive WQTR reviews. This programmatic update was introduced to make certain that each WQTR includes a fully developed assessment of each post-construction BMP considered for the project. BMP analysis is required for Low Impact Development Site Design, Source Control, and Treatment Control BMPs, and effectively holds project designers accountable for demonstrating the effectiveness of the overall design.

The formal review of WQTRs by the Land Development Division and Storm Water Management staff provides an essential mechanism in emphasizing the use of effective site design features and higher efficiency treatment control BMPs. It is recognized that site design and/or structural BMPs are difficult to add to the completed design of a private development project without causing substantial changes to the project's character or viability. The earlier in the design process that storm water quality facilities are considered, the greater the chance that a successful and efficient design can be achieved. During the reporting period, Land Development Division and Storm Water Management staff has strongly emphasized the use of site design features and high efficiency structural BMPs to be incorporated into project design.

Sufficient analysis and discourse must be included within submitted WQTRs to answer why or why not effective and efficient site design features and treatment controls have been selected and/or incorporated into a given project design. Based on the MEP Standards included within the City's SUSMP, staff will make a determination as to whether or not there has been adequate consideration of site design and high-efficiency BMP recommendations. It is noteworthy that projects without approved WQTRs will not move further along in the development review process, providing Land Development Division and Storm Water Management staff an effective tool in the enforcement of SUSMP requirements.

Public projects are initiated in the Public Works Department, Engineering. Public projects undergo the same review process as private developments. Engineering staff has received

training on SUSMP requirements, identification of SUSMP projects, and application of appropriate BMPs in project design. For complex projects, Storm Water Management staff is available for advice and assistance.

In the case of private SUSMP projects, before final approval of the project and issuance of a grading or improvement permit, the applicant is required to demonstrate that among other provisions, a program and funding mechanism for long-term maintenance of designated BMPs are in place. The applicant is required to sign an agreement with the City for the long-term maintenance of post-construction BMPs. The agreement is recorded and runs with the land.

Citywide project tracking is managed through specialized computer software utilized by the City (Permits Plus). The Permits Plus software is shared by all development services departments, divisions, and sections within the City. The Permits Plus software package has been customized with a window for identifying SUSMP projects. All SUSMP projects are therefore readily identifiable via the Permits Plus software. Digital copies of final plans, including drainage and BMP plans, are submitted to the City's Geographic Information System (GIS) Section. They are linked to the CVMapper program, the City's internal computer-based mapping tool, for convenient accessibility to the Drainage Layer.

During the current reporting period, the City successfully implemented the environmental review process for all development and redevelopment project submittals.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

The development project approval and verification process is inherently complex due to the fact that many departments, divisions, and sections of the City are involved. As discussed earlier in this Section, and as part of the update of the City's JURMP and the Storm Water Manual, which culminated in March 2008, specific attention was focused on identifying gaps or inconsistencies within the development project approval and verification process. During a long process of coordination with all departments involved in the development services, adjustments, amendments, and revisions were made to existing processes. As a result, a more elaborate process with new milestones, flags, checks, and notifications were added to warn staff of any shortcomings in the project approval process. A comprehensive flow chart was created to show the SUSMP implementation, approval, and verification process, together with responsible departments, divisions, and sections of the City. A copy of the referenced flow chart is included in Appendix D of the City's JURMP.

2.4.2 SOURCE CHARACTERIZATION

Development projects have the potential to discharge different types and amounts of pollutants based on the development project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to

discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's updated SUSMP describes 10 specific categories for Priority Projects and indicates common pollutants associated with each category. A Priority Project must identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

All development projects, including non-Priority Projects, are required to meet the applicable BMP requirements as outlined in the City's Storm Water Manual.

During the current reporting period, all development projects were required to identify their proposed land uses and activities that may potentially generate pollutants. Such pollutants were compared to pollutants of concern within downstream receiving waters. Applicable BMPs were required during the project approval and verification process.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are outlined below and are included in the Storm Water Manual. All development projects are required to implement the following principles, where applicable:

- Source control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed material and trash storage areas, and use of efficient irrigation systems.
- Low Impact Development (LID) BMPs that maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary.
- Provide buffer zones or other buffers for natural water bodies.
- Grading and construction activities must implement all applicable erosion and sediment control BMPs and minimize the discharge of non-visible pollutants.
- Submittal of proof of a mechanism for ongoing long-term maintenance of all structural post-construction BMPs.

During the project approval and verification process, all project submittals were reviewed for compliance with the minimum BMP requirements described above.

2.4.4 PROGRAM IMPLEMENTATION

The City's SUSMP document was developed around the regulatory standards mandated in the Municipal Permit to address post-construction urban runoff pollution from new development and significant redevelopment projects. The goal of the SUSMP is to develop and implement policies to ensure that to the maximum extent practicable, development does not increase pollutant loads from a project site and considers runoff flow rates and volumes. The City's SUSMP is incorporated into a document titled "Development Storm Water Manual," available on the web at:

http://www.chulavistaca.gov/clean/StormWater/DevelopAndConst.asp

In addition to the City's SUSMP, the Storm Water Manual includes guidelines for developers and other interested parties to understand the City's storm water review process; forms required to establish eligibility under various project requirements; and a section on minimum BMPs requirements during project's construction phase.

On February 19, 2008, City Council approved the updates to the City's SUSMP and Storm Water Manual. The Updated SUSMP and Storm Water Manual incorporate standards for construction and post-construction phases of development and redevelopment projects that meet the requirements of the Municipal Permit. Concurrently, the City's Storm Water Management and Discharge Control and Grading Ordinances were updated to incorporate the Storm Water Manual (which includes the City's SUSMP) by reference.

2.4.4.1 NOTABLE ACTIVITIES

In 2008-2009, notable improvements in processes and protocols supporting SUSMP implementation have been made by Storm Water Management staff in efforts to continually refine this program element. Significant programmatic updates within the defined reporting period include:

- Adoption of more stringent standards for post-construction Low Impact Development Site Design BMPs, Source Control BMPs, Treatment Control BMPs, and Interim Hydromodification Criteria.
- Emphasis on the use of structural BMPs with high pollutant removal efficiency.
- Requirements to fully develop WQTRs discussions to evaluate the use of all post-construction BMPs considered.
- Continued population of post-construction BMP GIS layer, including the addition of project-specific WQTR document and Maintenance Agreement links through the Grading Plan Layer.
- Creation of flags and checks in the SUSMP review and implementation process to ensure that all SUSMP projects are properly tracked and documented.
- Site inspections of all development projects to ensure proper installation of construction and post-construction BMPs.

2.4.4.2 CONFIRMATION OF APPROVAL PROCESS

During the reporting period, all private development projects submitted to the City for review and approval of construction or grading permits, and public projects initiated by the City were required to undergo the urban runoff approval process and meet the applicable project requirements. Private development permit applications are tracked in Permits Plus, which is a project tracking software shared by all departments and divisions involved in development services. Flags and checks have been established in Permits Plus to ensure that all Priority Development projects undergo the appropriate review and documentation process. Copies of approved WQTRs, grading or construction plans, and post-construction BMPs' maintenance agreements are scanned and digitally saved. Links have been provided between the above

referenced documents and the CVMapper software, which is a mapping tool based on the GIS system. This system enables City staff to get copies of the above referenced documents by clicking on the project's grading layer and to make prints as necessary.

Public projects are tracked in a database maintained by the City's Public Works Department, Engineering. A list of all public projects, showing the status of each project, is distributed to various staff members on a monthly basis. The list, among other information, includes a column showing environmental requirements for each project, including WQTRs and Storm Water Pollution Prevention Plans. The list is discussed in monthly meetings set up specifically for public projects. A Storm Water Management Section representative attends such meetings and provides input as necessary.

2.4.4.3 LISTING OF SUSMP PROJECTS

A listing of development projects subject to SUSMP requirements is included in Attachment A. This list includes the names of all Priority Development or Redevelopment projects from the inception of the SUSMP program on December 9, 2002 to the end of the current reporting period. The list is updated annually to include Priority Development Projects for which development applications have been received and SUSMP eligibility identified during that reporting period. The listed projects may be currently in different phases of review, construction, or occupancy. Some are still under review, while others are under construction or have been completed. The list is categorized for various phases of projects, including: 1) Pending, 2) Under Construction, 2), or 3) Completed. Pending refers to projects that have not completed their project review process and are either on hold or being reviewed by City staff. Completed projects have completed their construction and should have permanent BMPs in place.

2.4.4.4 CONFIRMATION OF SUSMP BMP APPLICATION

The Municipal Permit establishes requirements for post-construction BMPs on Priority Development and Redevelopment Projects. In order to develop regional standards and criteria for compliance with Municipal Permit requirements, the Copermittees have developed Model and local SUSMPs. All project applicants are required to complete forms that are included in the City's Development Storm Water Manual to determine post-construction BMP requirements for their projects. City staff verifies proper completion of such forms and informs applicants of their required study reports and project submittals. Project submittals are then reviewed based upon this initial determination.

As required by the Municipal Permit, the City updated its local SUSMP on January 2008 to include Low Impact Development and Hydromodification Management requirements, as well as other construction and post-construction criteria and standards. Currently, the City's local SUSMP is the basis for approval of Priority Development Projects. However, the Municipal Permit requires an update of the Model SUSMP and the incorporation of its requirements into local SUSMPs. During 2008 and 2009, the Copermittees updated the Model SUSMP, which was later approved by the Regional Board on March 25, 2009. The Copermittees have to update their local SUSMPs for the second time and within 180 days from Regional Board's approval.

The Municipal Permit also requires the Copermittees to develop a Hydromodification Management Plan and require Priority Development Projects to comply with its requirements. The City's current local SUSMP includes Interim Hydromodification Criteria, which are being enforced by the City. A Final Hydromodification Management Plan is being developed by the Copermittees, which will replace the Interim Hydromodification Criteria after Regional Board's approval.

Based on the MEP standards included within the City's SUSMP, staff makes a determination as to whether or not there has been adequate consideration of site design and high efficiency BMP recommendations. Priority Development Projects without approved WQTRs do not move further along in the development review process, providing Land Development and Storm Water Management staff an effective tool in the enforcement of SUSMP requirements.

Project grading or construction plans are required to show all approved structural BMPs. Non-structural BMPs are described in the project's Water Quality Technical Report. Public Works Inspectors and Storm Water Management staff ensure that development projects are constructed according to approved plans. This includes verification inspection and approval of installed or constructed structural treatment control BMPs.

For tracking of post-construction BMPs, Storm Water Management staff has coordinated with the Public Works Inspectors and the Building Inspectors to be notified upon Notice of Final Inspection and Certification of Occupancy and the final release of any Bonds. Copies of notices are sent to Storm Water Management staff for final inspections and confirmation of SUSMP BMP applications of such Priority Development projects to ensure proper installation of post-construction BMPs before final Certificates of Occupancy are issued and bonds are released.

In order to track confirmation of post-construction BMPs, and as an on-going activity, the City's GIS system was continuously updated throughout FY 2008-2009 with post-construction BMP information; further supporting project tracking and post-construction BMP inventory management. The GIS database is populated with post-construction BMP information including the types of BMPs, and provides links to applicable project plans, copies of WQTRs, and maintenance agreements, where applicable. Most significantly, in FY 2008-2009, WQTR documents were made available through the GIS Grading Plan layer as they are linked to individual projects (Figure 2-1 – CVMapper GIS Layer). This process facilitates inspections and verifications of post-construction structural BMPs. A GIS layer containing all publicly or privately maintained treatment control BMPs is utilized to verify and maintain such facilities (Figure 2-2 – GIS Layer: Grading Plans & WQTR Links). In addition, all privately or publicly maintained treatment control BMPs are being added to the BMP layer to facilitate their tracking and mapping. Also, files containing hard copies of grading plans, Water Quality Technical Reports, maintenance agreements, and other pertinent information are being created and maintained to support and facilitate construction verification and maintenance inspections of post-construction BMPs. (Figure 2-3 – GIS Layer: Post Construction BMPs).

Figure 2-1 CVMapper GIS Layer

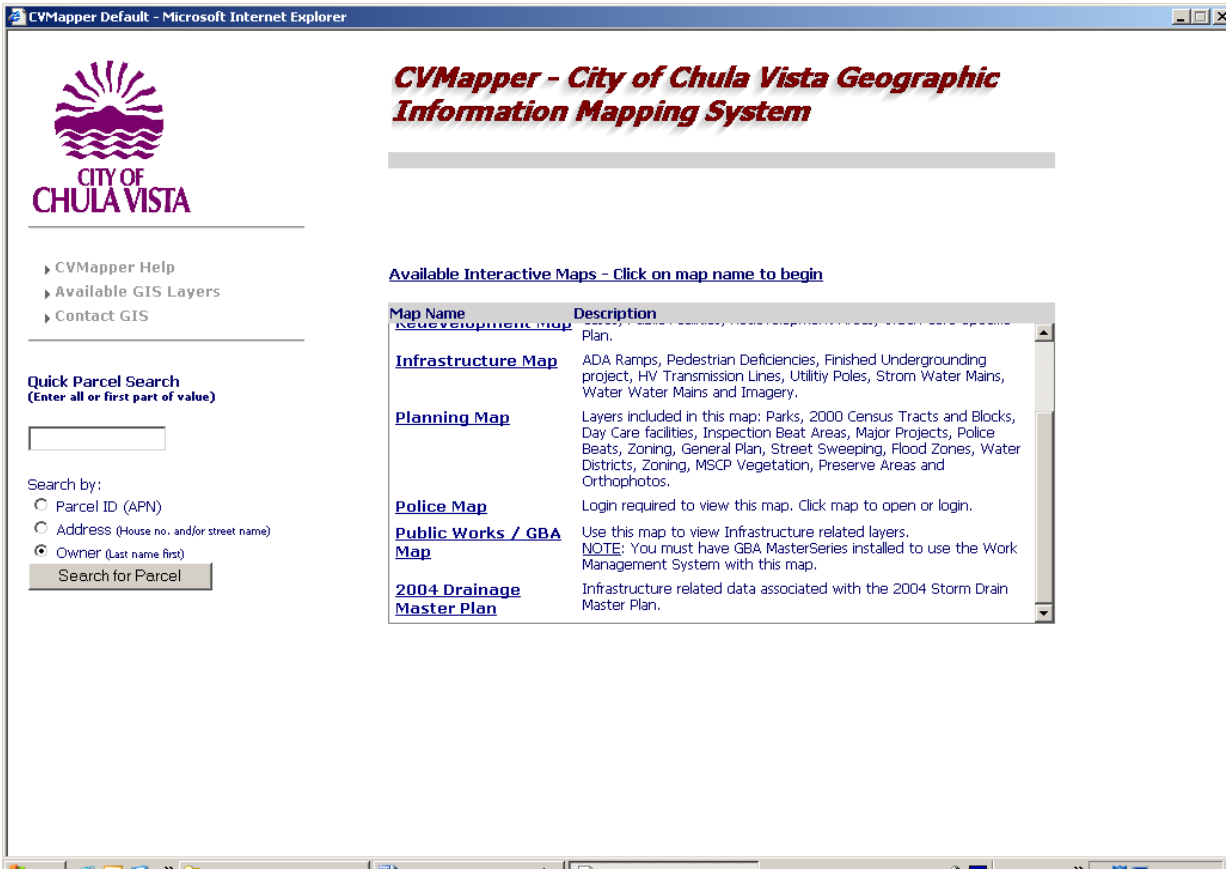

Figure 2-2 GIS Layer: Grading Plans & WQTR

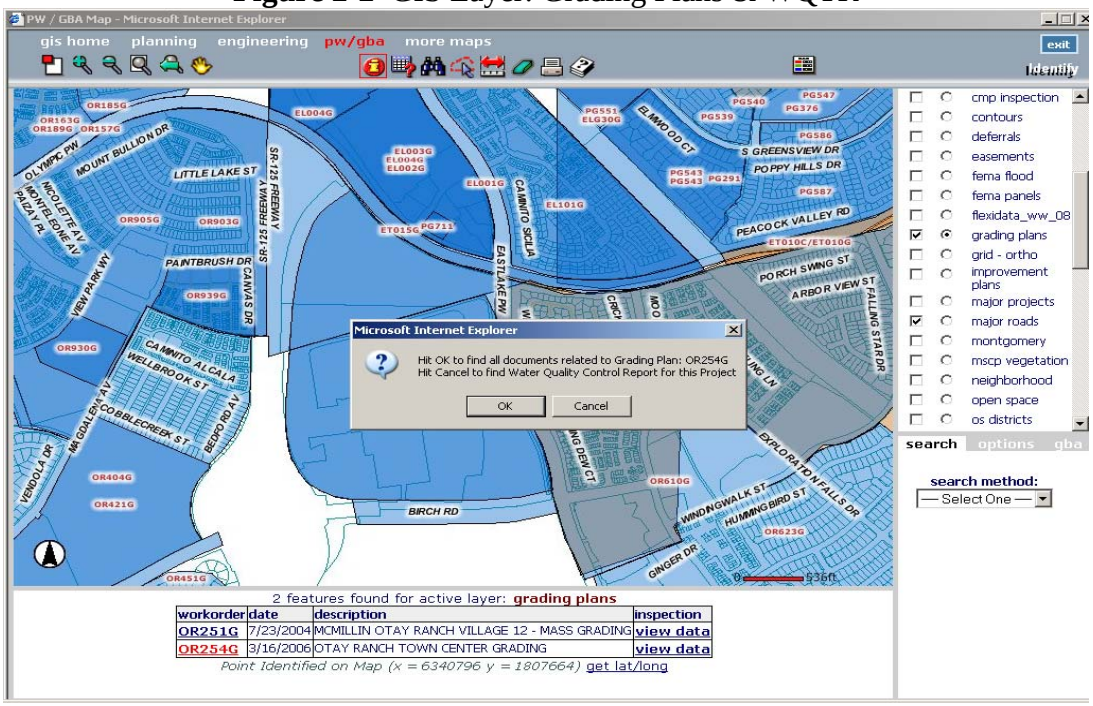

Figure 2-3: GIS Layer: Post Construction BMPs

All pending, under construction, or installed Post-Construction BMPs and Priority Projects are inventoried and tracked by Storm Water Management staff utilizing the City's GBA Master Series program. The database includes the following information:

- Project name
- WQTR, Plans are scanned and linked into GIS (CVMapper)
- Type of treatment control BMP installed or approved
- Number of Treatment Units installed
- Location of the BMP (Development name, area, neighborhood, etc.)
- Project category (Municipal/Capital Improvement Plan, Residential, Commercial, etc.)
- Project status (Pending, under construction, completed)
- Priority
- Public or privately maintained
- Watershed within which the BMP is located
- The party responsible for maintenance of the BMP
- Name of person or company who conducted maintenance
- Maintenance certifications or verifications
- Inspection reports and findings
- Any corrective actions issued

See Attachment A for an updated listing of Priority Projects that were subject to SUSMP requirements. See Figures 2-4, 2-5, and 2-6 – GBA Master Series – SUSMP Verification and Maintenance Tracking, for examples of SUSMP tracking forms.

Figure 2-4 GBA Master Series: SUSMP Verification and Maintenance Tracking Database A

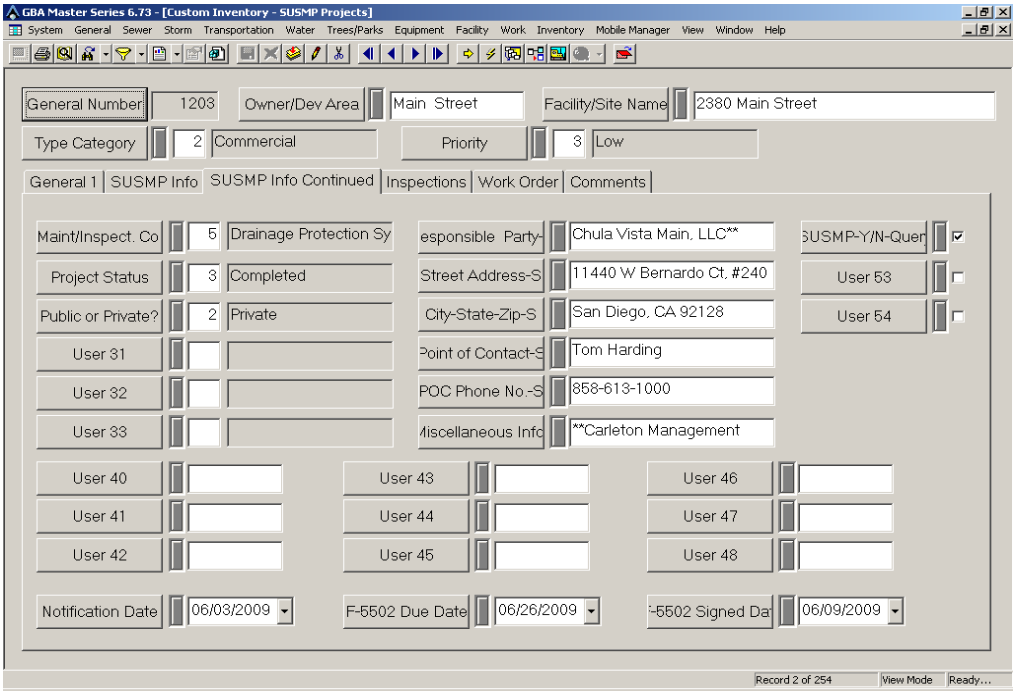

Figure 2-5 GBA Master Series: SUSMP Verification and Maintenance Tracking Database B

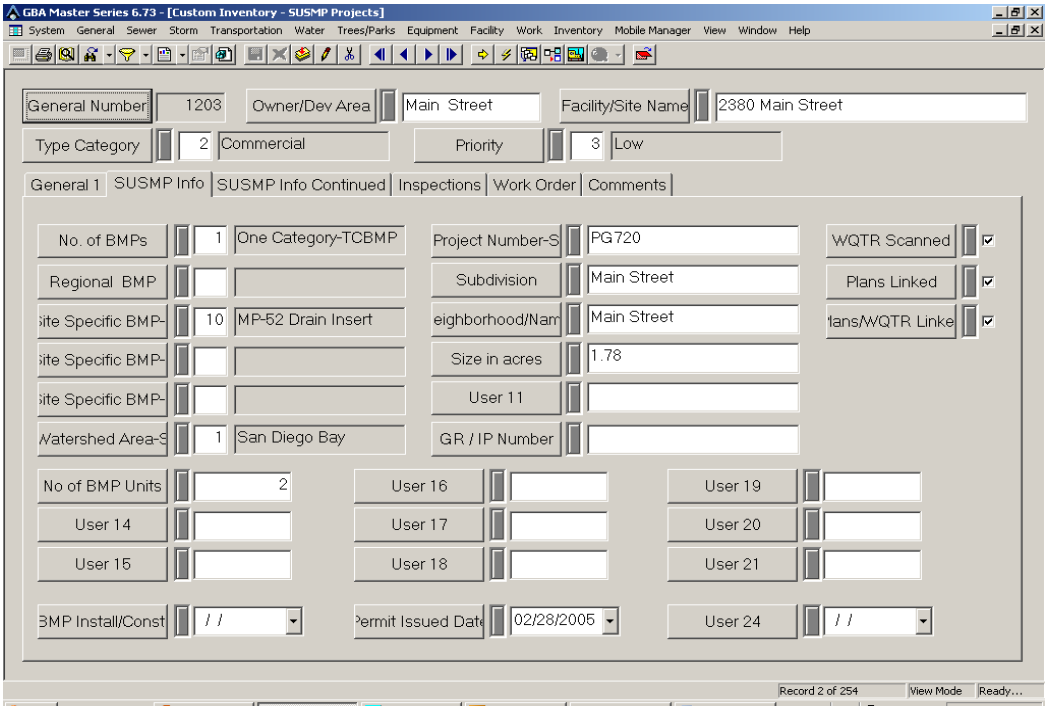

Figure 2-6 GBA Master Series: SUSMP Verification and Maintenance Tracking Database C

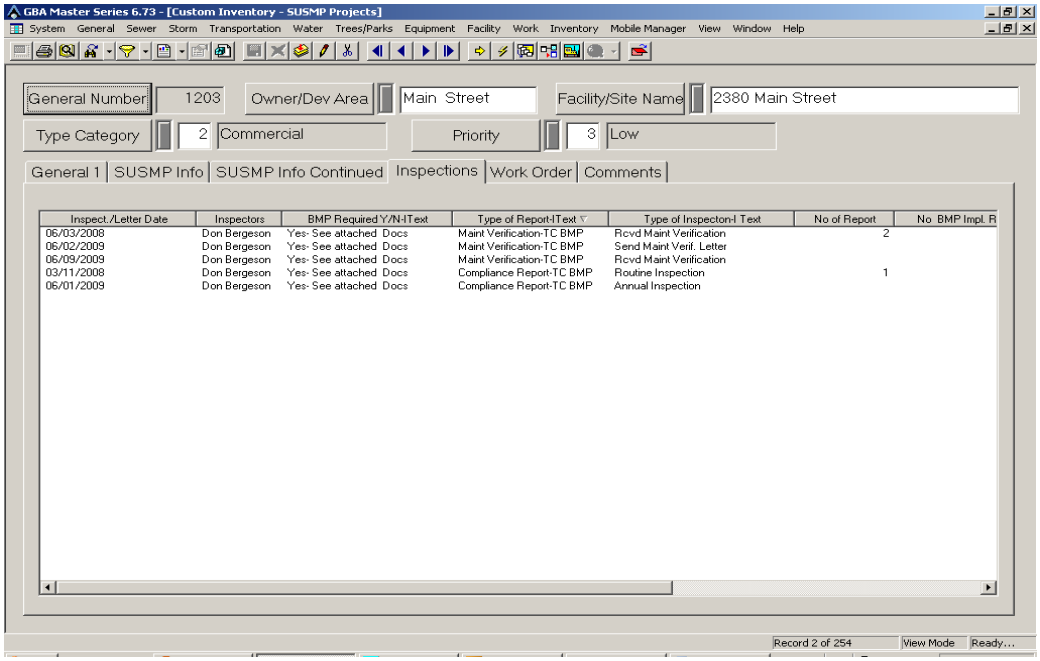

2.4.4.5 EXAMPLE PRIORITY DEVELOPMENT PROJECT

The City works with developers, planners, and consulting engineers to establish standards of Source Control, LID Site Design, and Treatment Control BMPs that meet the requirements of the Storm Water Manual and the Municipal Permit. An example of such cooperation was the High Tech High development. The High Tech High project is located in Otay Ranch Village 11, at the intersection of Discovery Falls Drive and Hunte Parkway. The project site is situated along a ridgeline between two drainage basins of Salt Creek and minor tributaries of the Otay River. The project is planned for a charter high school in Phase 1 and K-8 school in Phase 2.

The High Tech High project's Phase 1, the charter high school, is completed and is opening for the 2009-2010 school year. The project incorporates Site Design, Source Control, and Treatment Control BMPs, with particular emphasis on Low Impact Development principles for the post-construction storm water management. Low Impact Development features such as Bioretention/Biofiltration areas, grassy swales, decomposed granite for fire lanes and future pad areas of the Environmental Research Center are incorporated in the project. In addition to on-site BMPs, an existing regional water quality basin located off-site will act as the last line of defense in a treatment train for the treatment of site runoff.

The site of the High Tech High project is less than 50 acres in area and, therefore, exempt from the Interim Hydromodification Criteria requirements.

2.4.4.6 LIST OF PROJECTS WITH LOW EFFICIENCY BMPS

During the current reporting period, all Priority Development Projects that received grading, construction, or building permits from the City proposed medium or high-efficiency treatment control BMPs. No SUSMP projects were permitted to have low-efficiency treatment control BMPs.

2.4.4.7 TREATMENT CONTROL BMP INVENTORY

Attachment A of this report includes an inventory of all Priority Development projects in the City that were subjected to SUSMP requirements from the inception of this program on December 9, 2002. The information provided in the Attachment includes the name of the project, category (residential, commercial, etc.), inspection priority, status (under construction, pending, completed), type of Treatment Control BMPs, subdivision name, and neighborhood name.

The City maintains individual project files that include more detailed information regarding the type, number, and location of Treatment Control BMPs on each Priority development project as well as post-construction BMPs inspection records.

2.4.4.8 INSPECTION OF TREATMENT CONTROL BMPS

Storm Water Management Section staff is responsible for annual inspections of private and public constructed permanent BMPs as required by the Municipal Permit. Additionally,

responsible parties for the maintenance of permanent BMPs are required to conduct routine inspections of their treatment facilities. For public permanent BMPs, the City's Public Works Storm Drain Maintenance staff is responsible for conducting routine inspections and maintenance. This duplicate inspections program ensures that all permanent BMPs are maintained to high operational standards.

During the current reporting period, Storm Water Management staff conducted inspections of constructed permanent BMPs to verify their proper installation and maintenance. A summary of inspections is listed in Table 2-1 below, which includes both private and public permanent BMPs inspections. Where deficiencies were identified, notices were sent out to responsible parties, followed by further contacts to ensure that corrective actions were taken within the specified time period. For a detailed list of projects inspected for post-construction BMPs, please refer to Attachment F.

Table 2-1 Treatment Control BMP Inspection Summary FY 2008-2009

PROJECT PRIORITY	TOTAL NUMBER OF PROJECTS	INSTALLED TREATMENT CONTROL BMP UNITS	NUMBER OF PROJECTS INSPECTED
High	26	108	26
Medium	50	359	43
Low	107	196	28
Total	183	663	97

Note: The total number of projects listed above includes some projects that are still under construction and permanent BMPs have yet to be installed. Also, some medium and low priority projects are partially occupied which have operational treatment control BMPs.

As can be seen from Table 2-1, a total of 97 Priority Development Projects were inspected during the current reporting period, which meets and exceeds Municipal Permit requirements. Attachment F to this report includes more detailed information about each project, such as, inspection dates, project names, types of BMPs installed, categories (commercial, residential, etc.), priorities, development names, neighborhood names, and responsible parties for each project. The list includes both private and public projects. Depending on the findings during the course of initial inspections, follow-up inspections were conducted as necessary.

Public Works Department Storm Drain Maintenance Section conducts routine inspections and maintenance of publicly owned permanent BMPs. Storm Drain Maintenance Section staff, utilizing GBA Master Series computer software, tracks all publicly owned post-construction BMPs and creates work orders conducting inspection and scheduled maintenance of the BMPs. Maintenance records for permanent BMPs are tracked in the GBA Master Series computer software. Please refer to Figure 2-3 for a sample of Publicly Maintained Treatment Control BMP Inspection and Maintenance Report.

Figure 2-7 Sample Publicly Maintained Treatment Control BMP Inspection and Maintenance Report

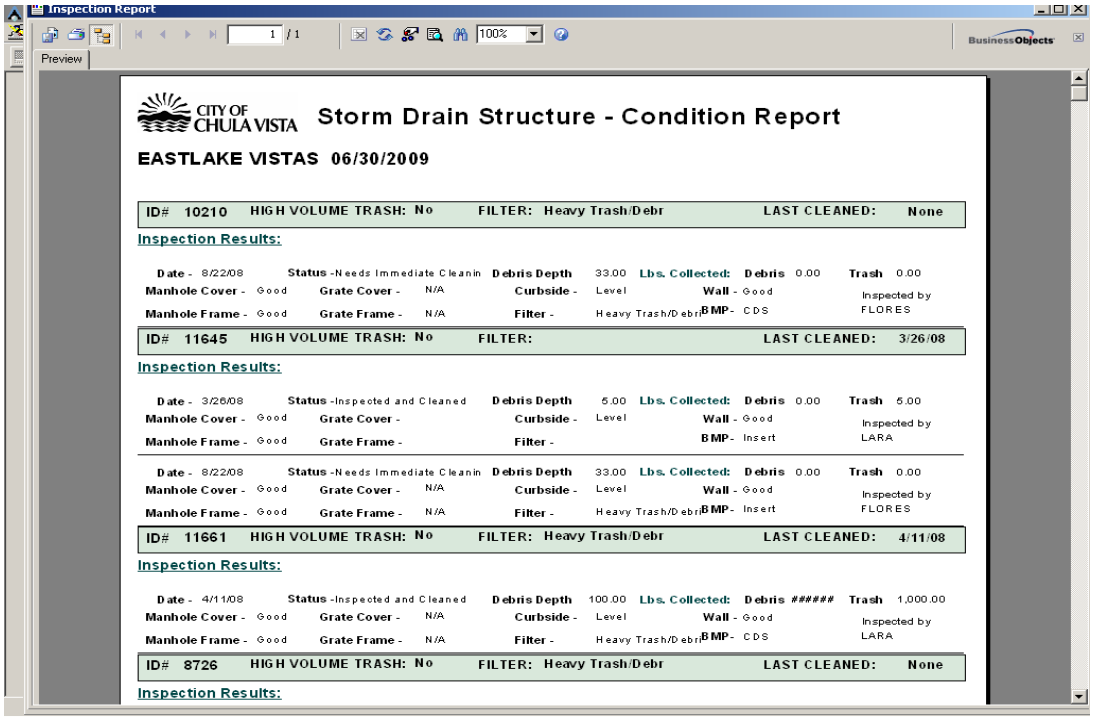

Inspection Report

Preview

CITY OF CHULA VISTA **Storm Drain Structure - Condition Report**

EASTLAKE VISTAS 06/30/2009

ID# 10210 HIGH VOLUME TRASH: No FILTER: Heavy Trash/Debr LAST CLEANED: None

Inspection Results:

Date - 8/22/08 Status - Needs Immediate Cleanin Debris Depth 33.00 Lbs. Collected: Debris 0.00 Trash 0.00
Manhole Cover - Good Grate Cover - N/A Curbside - Level Wall - Good
Manhole Frame - Good Grate Frame - N/A Filter - Heavy Trash/Debri BMP - CDS
Inspected by FLORES

ID# 11645 HIGH VOLUME TRASH: No FILTER: LAST CLEANED: 3/26/08

Inspection Results:

Date - 3/26/08 Status - Inspected and Cleaned Debris Depth 5.00 Lbs. Collected: Debris 0.00 Trash 5.00
Manhole Cover - Good Grate Cover - Curbside - Level Wall - Good
Manhole Frame - Good Grate Frame - Filter - BMP - Insert
Inspected by LARA

Date - 8/22/08 Status - Needs Immediate Cleanin Debris Depth 33.00 Lbs. Collected: Debris 0.00 Trash 0.00
Manhole Cover - Good Grate Cover - N/A Curbside - Level Wall - Good
Manhole Frame - Good Grate Frame - N/A Filter - Heavy Trash/Debri BMP - Insert
Inspected by FLORES

ID# 11661 HIGH VOLUME TRASH: No FILTER: Heavy Trash/Debr LAST CLEANED: 4/11/08

Inspection Results:

Date - 4/11/08 Status - Inspected and Cleaned Debris Depth 100.00 Lbs. Collected: Debris ###### Trash 1,000.00
Manhole Cover - Good Grate Cover - N/A Curbside - Level Wall - Good
Manhole Frame - Good Grate Frame - N/A Filter - Heavy Trash/Debri BMP - CDS
Inspected by LARA

ID# 8726 HIGH VOLUME TRASH: No FILTER: Heavy Trash/Debr LAST CLEANED: None

Inspection Results:

2.4.4.9 VERIFICATION AND MAINTENANCE INSPECTION OF TREATMENT CONTROL BMPS

During the reporting period, a total of 165 notification and inspection letters were sent out to parties responsible for the maintenance of completed private Priority Development Projects as shown in Table 2-2 (see City's JURMP document Appendix D).

Table 2-2 Summary of Project Maintenance Verification FY2008-2009

PROJECT PRIORITY	TOTAL NUMBER OF PROJECTS	INSTALLED TREATMENT CONTROL BMP UNITS	NUMBER OF PROJECTS VERIFIED
High	26	108	26
Medium	50	359	50
Low	107	196	89
Total	183	663	165

Note: The total number of projects listed above includes some projects that are still under construction and permanent BMPs have yet to be installed. Also, some medium and low priority projects are partially occupied which have operational treatment control BMPs.

It should be noted that City's Storm Drain Maintenance Section is responsible for the routine inspections and maintenance of Treatment Control BMPs on public right-of-way, facilities, and

projects, in accordance with a scheduled maintenance program, which is tracked by the GBA Master Series program. It is not therefore necessary to send out verification letters for publicly maintained permanent BMPs. By conducting random inspections of public Treatment Control BMPs, Storm Water Management Section ensures that the level of maintenance on such facilities is adequate.

During the previous reporting period, self-inspection and maintenance verification of Treatment Control BMPs by the responsible parties, such as property management companies, Homeowner's Associations, property owners, and developers was a new program and, therefore, City staff found that many property management companies or homeowner associations were unaware of the existence of storm water treatment facilities within their properties and were not familiar with their maintenance procedures. City staff expended significant time to conduct joint visits to the facilities and explain the function of the units and the reasons why such facilities had to be routinely maintained. Staff also brought to the attention of responsible parties their responsibilities and obligations under maintenance agreements.

During this reporting period, while responsible parties were generally more aware of their maintenance obligations, City staff encountered some resistance, which was mainly believed to be attributable to the current downturn in economy as well as factors such as the transfer of property ownership, a change in property management companies, and a change in the board membership of Homeowners' Association. For this reason, the City worked closely with the responsible parties to ensure that the BMPs were inspected and maintained. The City continues to re-evaluate its annual maintenance verification procedures and may modify the program if necessary to increase compliance.

Prior to the start of each rainy season, the City requires verification of proper inspection and maintenance of all treatment control BMPs by the responsible parties. Each year, the City issues to the responsible party, either electronically, by fax, or by certified mail, a Treatment Control BMP Maintenance Package that includes: 1) an annual verification cover letter, 2) a Storm Water Treatment Facilities Inspection/Maintenance Verification Form (Form 5502), and 3) if necessary, a Compliance Report – Treatment Control BMP Inspection, which includes a summary of the inspection results and findings, pertinent sections of the WQTR, and BMP Location Site Plans.

This package informs the responsible parties of the Treatment Control BMPs, for which they are responsible; and requires the responsible parties to sign the verification form and certify that the treatment control BMPs have been properly maintained in accordance with the site's maintenance requirements. This information is tracked utilizing the City's GBA Master Series program. Each package is scanned and linked into the program, which includes the notification, required completion and receipt of the signed verification form. If signed and certified verification forms are not received by the due date, City staff contacts the responsible parties and follows up until Treatment Control BMPs are maintained and verification form properly completed and returned to the City. Enforcement action may be initiated if a responsible party does not comply with the verification requirement after follow-up actions and proper service of a notice.

2.4.4.10 BMP CONSTRUCTION VERIFICATION

The City's Public Works Inspectors and Storm Water Management staff is responsible for ensuring that permanent BMPs, which are components of the project's drainage systems and grading works, are constructed in accordance with approved specifications and grading plans. Public Works Inspectors and Storm Water Management staff conducts frequent inspections of projects during their grading and construction activities and verify that permanent BMPs are constructed as per approved plans.

In compliance with the Municipal Permit, the City has developed databases for tracking Priority Development Projects that are under construction. Additionally, hard copy files, including information about each project's WQTRs and grading or construction site plans that show locations of permanent BMPs have been created and are continuously updated.

Since LID features are considered components of site hardscape and are not inspected by Public Works Inspectors, a new process has been established in which Public Works Inspectors notify Storm Water Management Section staff immediately after their inspections of grading activities are completed and their presence on the project is no longer necessary. At such time, Storm Water Management staff takes over the responsibility of inspecting permanent BMPs while being constructed. They ensure that LID Site Design features are constructed as shown on approved grading, construction, or landscape plans and per approved specifications.

As a result of the comprehensive construction verification program for permanent BMPs as described above, it was determined that while major treatment facilities were constructed before occupancy of the project, some minor deficiencies still existed even after partial occupancy. Those projects were identified in each case and responsible persons were required to install the deficient BMPs. As a result of this finding, the City made adjustments and improvements in its construction verification process, which will ensure that all treatment control and other post-construction BMPs are fully operational and without any deficiencies even before the first occupancy of the project.

2.4.4.11 SUSMP WAIVERS

Section D.1.d.(11) of the Municipal Permit includes a waiver provision, under which a Copermittee may provide for a Priority Development Project to receive a waiver from the requirement of meeting numeric sizing criteria for Treatment Control BMPs, if infeasibility can be established. During the reporting period, the City did not grant waivers to any Priority Development Projects.

2.4.4.12 SUSMP WAIVER MITIGATION

During the reporting period, all Priority Development Projects were required to comply with the provisions of the City's local SUSMP. Therefore, the City did not grant waivers to any Priority Development Project during this period.

2.4.4.13 HYDROMODIFICATION MANAGEMENT PLAN COLLABORATION

Soon after Regional Board's adoption of the Municipal Permit on January 24, 2007, the Copermittees formed a Land Development Workgroup to develop Copermittees' Hydromodification Management Plan (HMP) and Model SUSMP, among other regional development related tasks. The Land Development Workgroup planned regular meetings, in which various topics, mainly the development of the HMP and Model SUSMP were discussed. The Copermittees decided to hire a consultant with expertise in those fields to work on the studies needed for this purpose. The consulting team of Brown and Caldwell was selected as the main consultant, with several sub-consultants providing expert services.

A Technical Advisory Committee (TAC), consisting of high-ranking and renowned experts in the fields of hydrology, hydromodification, and SUSMP issues were formed to oversee the Consultant's work, and to provide expert advice. During the reporting period, the TAC met on a regular basis, and while Copermittees were not on the TAC, they were encouraged to participate in their meetings. Brown and Caldwell developed submittals for the Interim Hydromodification Criteria and Model SUSMP, which were approved by the Regional Board and the Interim Hydromodification Criteria was incorporated in the first update of local SUSMPs.

During the reporting period, a draft of the Final HMP was submitted to the Regional Board and comments were received. Currently, Brown and Caldwell is working to address Regional Board's comments and submit the Final HMP within the schedule defined in the Municipal Permit. The Model SUSMP has been finalized and approved by the Regional Board, and Copermittees are required to incorporate its standards and criteria into their updated local SUSMPs by March 25, 2010.

City of Chula Vista representatives are active participants in all Land Development Workgroup and TAC meetings and activities, are closely involved in the issues that are discussed, review work products, and provide comments on all related draft documents.

City staff has attended all regional workshops and trainings related to HMP and SUSMP issues, including a 3-day training on Hydrologic Simulation Program Fortran (HSPF), which was organized by the County of San Diego and the American Public Works Association in June 2009. Details of these workshops and trainings are included in Section 8 of this report.

2.4.4.14 PROJECTS REQUIRED TO MEET HMP REQUIREMENTS

Section D.1.g.(5) of the Municipal Permit requires the development of an HMP document at the regional level and incorporation of such HMP into individual local SUSMPs. The HMP is to include limitations on increases of runoff discharge rates and durations from all Priority Development Projects in order to prevent increased downstream channel erosion, sediment pollutant generation, or other impacts to beneficial uses and stream habitat.

Development of a draft HMP was a two-year effort by the Copermittees and their consultants. The Copermittees submitted the first draft HMP to the Regional Board in January 2009, with the final HMP implementation expected to commence in July 2010. In the meantime, the Municipal

Permit requires the implementation of an Interim Hydromodification Criteria (IHC) for development projects that are 50 acres or more. The IHC requirement was incorporated into updated local SUSMPs, which came into effect in January 2008.

Adoption of IHC requirements in January 2008 coincided with the collapse in the housing market, and almost all major development projects in Chula Vista came to an abrupt halt. Occasional major projects submitted for review by City staff have had extended project submittal, review, and permitting schedules and are still in the review phase. The following development projects in Chula Vista, which cover 50 or more acres each quality for IHC or HMP requirements and are currently under review by City staff:

1. Eastern Urban Center
2. Otay Ranch Village 8
3. Otay Ranch Village 9

During the reporting period, no Priority Development Projects that qualified for IHC received a grading permit or construction permit from the City of Chula Vista.

2.4.4.15 PROJECTS EXEMPTED FROM HMP REQUIREMENTS

Other than the development projects listed above, all other development projects reviewed during the current reporting period were less than 50 acres in area and did not meet the criteria for IHC requirements. However, Priority Development Projects were all required to address hydrologic conditions of concern by comparing pre- and post-development peak discharge rates and durations, and demonstrate that the increased peak discharge rates and durations would not cause downstream erosion or habitat impact. Such discussions were required to be included in the submitted WQTRs.

2.4.4.16 ROJECTS DISTURBING 50 ACRES OR MORE

As mentioned in Section 2.4.4.14 above, during the reporting period, there were only three project submittals that proposed to disturb 50 acres or more and met the conditions for IHC requirements. These projects are listed in Section 2.4.4.14.

2.4.4.17 ENFORCEMENT ACTION TAKEN FOR DEVELOPMENT PROJECTS

As a result of post-construction treatment BMP verification inspections, the City determined that 7 out of 97 inspected projects were partially or totally deficient in the installation of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, 3 projects were brought into compliance. Work is being continued on the remaining 4 projects and it is anticipated that they will also be in compliance within a short period. Deficiencies were also observed in the maintenance of some treatment control BMPs, which were satisfactorily addressed by the responsible persons after verbal notices. The City has the option of initiating enforcement action on responsible persons who do not demonstrate adequate effort to bring their project to compliance in a timely manner. Such enforcement action may include verbal and written warnings, Notices of Violation, Administrative Citations, and/or

Civil or Criminal Penalties. At this time, the City initiated enforcement actions, which included a Notice of Violation for one development project with deficient post-construction BMPs.

3.0 CONSTRUCTION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(b).i – Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.

Permit Section J.3.a.(3)(b).ii – Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.

Permit Section J.3.a.(3)(b).iii – A description of modifications made to the construction and grading ordinances and approval processes.

Permit Section J.3.a.(3)(b).iv – Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.

Permit Section J.3.a.(3)(b).v – Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.

Permit Section J.3.a.(3)(b).vi – A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.

Permit Section J.3.a.(3)(b).vii – For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.

Permit Section J.3.a.(3)(b).viii – A description of the general results of the inspections.

Permit Section J.3.a.(3)(b).ix – Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(b).x – The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(b).xi – A description of the notable activities conducted to manage urban runoff from construction sites.

3.1 INTRODUCTION

Pursuant to the Municipal Permit, construction sites are subject to dual regulation insofar as all construction sites that are covered under the NPDES General Construction Permit continue to be inspected and enforced by Regional Board staff. At the same time, the Municipal Permit requires Copermittees to implement a Construction Component to limit the impact of construction and grading activities on receiving waters, which may result from the presence of disturbed soils and building materials. It is important that construction sites take appropriate measures to prevent potential pollutants from entering storm water conveyance systems.

The following section provides an account of the City's program to meet the requirements outlined in Section D.2 of the Permit to reduce the release of pollutants from construction sites into the storm water conveyance systems to the Maximum Extent Practicable (MEP).

3.2 SOURCE CHARACTERIZATION

The City has compiled and monthly updates a watershed-based inventory of all construction sites within its jurisdiction as required by Municipal Permit Section D.2.b. The City utilizes a construction site database to maintain its inventory. The inventory includes details on each construction site, including project name, location, project developer and project size. A list of construction projects under the City's jurisdiction, all of which are located within the San Diego Bay Watershed, can be found in Attachment B. The list was current at the time of preparation of this report.

3.2.1 CONFIRMATION OF INVENTORY MANAGEMENT

During the reporting period, Storm Water Management staff maintained and monthly updated a construction site inventory. As a result of coordination between the Public Works Construction Inspection staff, Engineering Design staff, Development Services staff, and Storm Water Management staff, mechanisms have been established in the maintenance and tracking of an up-to-date and accurate inventory. As such, all significant construction activities are closely monitored, supporting close collaboration and an effective means of tracking such activities Citywide. Storm Water Management staff are notified of all pre-construction meetings as coordinated by Public Works Construction Inspection staff. This provides an additional level of notification regarding the start of construction activities. In support of maintaining an accurate inventory, the City's Development Services Department distributes a monthly Major Project Development Status Report, which apprises City staff of such information as project review status and construction phase. Updates to the inventory include the addition of new construction projects, the removal of completed projects, the assignment of Threat To Water Quality (TTWQ) prioritization, and inspection frequencies of active and inactive sites as needed.

3.3 UPDATES TO ORDINANCES AND APPROVAL PROCESS

Storm water compliance requirements for construction activities are provided in the City's Development Storm Water Manual (Manual). The City's Storm Water Management and

Discharge Control and Grading Ordinances were updated in 2008 and make the Manual enforceable. Such documents and ordinances have been updated and amended to ensure that compliance with the Municipal Permit requirements is met.

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City requires that all proposed construction and grading projects implement measures to ensure that pollutants from the project site are reduced to the MEP and will not cause or contribute to an exceedance of water quality objectives. The following mechanisms have been identified and utilized to promote the implementation of Best Management Practices (BMPs) during construction activities.

- Development Storm Water Manual (Manual)
- Construction site inspection and enforcement
- Construction and development community education

Designated BMPs for each construction site were required to be implemented through the requirement of a Storm Water Pollution Prevention Plan (SWPPP) or a Construction Storm Water Management Plan (CSWMP). SWPPPs are required for projects disturbing one acre or more of land, while CSWMPs are required for all other projects.

Regular and random inspections of construction sites ensure that BMPs are implemented, and where deficiencies are noted, corrective action is required, which in some cases may lead to the initiation of enforcement action.

3.4.1 DEVELOPMENT STORM WATER MANUAL

Construction activity standards and requirements are fully developed and included within the Development Storm Water Manual. The Manual clearly states that it is the responsibility of the property owner and/or contractor to select, install, and maintain appropriate BMPs. The Manual outlines minimum construction BMPs required by the City. Where applicable, current fact sheets obtained from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual and the CASQA Storm Water BMP Handbook are referenced in the Manual. The following topics are also discussed:

- Site management requirements
- BMP performance standards
- Seasonal requirements
- Limitation of Grading
- Advanced Treatment
- Example Construction Best Management Practices

3.5 PROGRAM IMPLEMENTATION

The Development Storm Water Manual is used by City staff to assist in the review and permitting of development and redevelopment projects with respect to construction activities. The Manual clearly outlines the review process for water quality. It includes descriptive text and charts that guide staff in determining if a project needs to be covered under the NPDES General Construction Permit. If the project is subject to the General Construction Permit, it is required to develop a SWPPP. The project is also required to file a Notice of Intent (NOI) with the State Water Resources Control Board. If the project is not subject to the General Construction Permit, it is required to develop a CSWMP. Both SWPPPs and CSWMPs must be prepared prior to the start of construction activities. All projects are required to include applicable measures to prevent pollution discharges to storm water conveyance systems by implementing BMPs during all phases of construction.

When it is determined that Capital Improvement Projects (CIPs) need coverage under the NPDES General Construction Permit, the project engineer submits an NOI to the State Water Resources Control Board and prepares a SWPPP, which is maintained at the construction site office for review by Regional Board and City inspectors.

The City has ensured compliance with construction BMP requirements through development project reviews, construction site inspections, and enforcement actions as necessary.

Within the defined reporting period, the City made notable efforts in promoting pollution prevention and BMP implementation on construction sites. The following mechanisms have been identified by the City as those integral to the promotion of pollution prevention techniques and BMP implementation.

- Construction site inspection and enforcement
- Construction and development community education
- Integration of pollution prevention and BMP implementation requirements into the development review process, including requirements for erosion control plans.
- Development Storm Water Manual
- Construction specific outreach and education activities

Education of the construction and development community is achieved on a local and regional level. Locally, project proponents including contractors, developers, property owners, superintendents, and other responsible parties are exposed to construction related water quality protection requirements throughout the development review and construction process. Storm Water Management staff provides comments and direction through the review of development proposals and plans. As mentioned above, pre-construction meetings provide Storm Water Management staff with an excellent forum to communicate storm water compliance requirements and for project proponents to have their own concerns addressed.

In addition, City Storm Water Management staff frequently meets with developers and contractors and provides on-site training regarding site management for storm water quality. In preparation for the wet season, Storm Water Management staff annually issues wet and dry season reminder letter, normally about one month before the start of each season.

As a result of the slow-down in development, many construction sites are currently inactive or in distress. The City has made notable efforts in the management of inactive construction sites. A site is considered inactive if construction activities have ceased for a period of 7 or more consecutive calendar days. The City inspects inactive construction sites and issues formal letters to developers if their sites do not meet City standards for BMP requirements as a result of failure to maintain adequate BMPs. The purpose of such letter is to notify developers of the City's storm water and non-storm water discharge requirements on inactive construction sites and to reiterate the developer's or property owner's responsibility at both active and inactive sites to implement a plan to address all potential discharges from construction sites. If a site is partially inactive, above requirements apply only to inactive areas of the site.

If a construction project is wholly or partially inactive or expected to remain inactive for some time, the City requires the developer to submit a Construction Site Stabilization Plan.

The Stabilization Plan is required to include the following information:

- Project name and a description of inactive areas or those expected to become inactive.
- A description of the stage of work at which the project became inactive.
- An estimate of time that the project, or areas of the project, would remain inactive, and a description of BMPs that would be used to stabilize inactive areas of the construction site.
- A project plan delineating areas of the project that are inactive or expected to become inactive, as well as all erosion control, sediment control, and non-storm water BMPs that would be implemented to prevent the discharge of sediment or other pollutants from the site.

3.5.1 MAXIMUM DISTURBED AREAS

The Development Storm Water Manual limits the area that can be cleared or graded and left exposed at one time to 100 acres for an individual grading permit or a combination of grading permits under the associated tentative map. Maximum disturbed area requirements are discussed in detailed in the Development Storm Water Manual. During the reporting period, most major development activities came to a halt as a result of the downturn in the housing industry, and developers in Chula Vista did not undertake major new grading projects. The focus of City inspectors were to ensure that existing graded sites that intended to close down the site or slow down construction activities stabilized inactive areas and implemented adequate BMPs to minimize the discharge of sediment and other pollutants from their sites.

3.5.2 ADVANCED TREATMENT

During this reporting period, there were no construction sites that met the conditions requiring advanced treatment methods. These conditions are explained in Section 7.V of the Development Storm Water Manual. If it is determined that a site poses a Exceptional TTWQ based on criteria outlined in the Manual, the site shall implement advance treatment controls to minimize the discharges from the construction site.

3.5.3 CONSTRUCTION SITE INSPECTIONS

The City's construction site inspection and enforcement program is defined by a consistent and frequent presence of inspectors on construction sites Citywide. It is recognized that construction sites must be regulated through a well-coordinated and highly refined inspection and enforcement program. The City has one full-time Storm Water Compliance Inspector, two full-time Environmental Health Specialists, one Engineering Technician, and eight Public Works Inspectors who manage this effort on private and public construction projects.

During this reporting period, all construction sites were assigned appropriate dry and wet season inspection frequencies required by the Municipal Permit. The Municipal Permit does not require TTWQ Prioritization for construction sites. However, the City has determined that this designation is a useful indicator for inspectors to evaluate the priority and relative importance of each construction site with respect to erosion and sediment controls, and the special attention required to the implementation of BMPs during their inspections of each site. The inventory of construction sites in this report, therefore, includes a column indicating TTWQ Prioritization for each site.

During the current reporting period, the City conducted inspections of construction sites in accordance with the requirements of the Municipal Permit, as applicable. Please see Table 3-1 for the number of construction site inspections under each category. A complete list of inspected construction sites is included in Attachment G. The period of time each construction site was active during the wet or dry seasons, and the number of inspections conducted during the rainy season for each site, are recorded on inspection reports that are available at the City.

Table 3-1 Construction Site Inspection Summary FY 2008-2009

INSPECTION SUMMARY	NO.
Formal Inspection Reports	469
Inspections During Wet Season	322
Inspections During Dry Season	147
Inspections of High Priority Sites	87
Inspections of Medium Priority Sites	289
Inspections of Low Priority Sites	93

City inspectors evaluate BMP implementation on construction sites in a site-specific and situation-specific manner. It is through this approach that determinations of the effectiveness of a specific BMP are made, based on an accounting of the overall conditions observed at a specific job site. Established construction site inspection protocols also include a documentation review including site specific SWPPP, monitoring results, training records, etc. for construction sites subject to the General Construction Permit.

City inspectors use construction inspection forms specifically designed as multi-purpose tools. The form provides a checklist of information and potential water quality issues, which serves as a reminder to the inspector of all items requiring attention while on the construction site. The form also provides clear and concise information to the developer or contractor about deficiencies in the implementation of BMPs. It includes information about corrective actions that the developer or contractor needs to take for brining the site into compliance, and the time allowed by the inspector. Inspection forms are designed to enable the inspector and others to assess BMP implementation on each construction site and the effectiveness of BMPs. Inspection reports are often used as supporting documents in enforcement actions against non-compliant construction sites.

Through the above process, the City ensures that the inspections conducted address all the required inspection steps to determine full compliance.

Based on documented information, the trend of inspection issues were related to the following:

- Failure to implement and provide continuous maintenance of existing BMPs to prevent or minimize pollution of the storm water conveyance system in accordance with respective SWPPP or CSWMP.
- Failure to implement good housekeeping practices at the site.
- Failure to comply with previous orders.

City inspectors who conduct site inspections of both public and private development projects have full inspection and enforcement authority. Sites are evaluated for compliance with the minimum BMP requirements of the Municipal Permit, the Development Storm Water Manual, the erosion control plans, and any other development permit conditions imposed by the City prior to the issuance of a grading or construction permit.

Construction site inspections include the following:

- Verification of coverage under the General Construction Permit, where applicable.
- Assessment of the implementation of all required BMPs and any additional controls as needed and required by the City.
- Verification of proper maintenance of the BMPs.
- Evaluation of the effectiveness of the BMPs.
- Verification that the party responsible for the implementation of the site SWPPP has received adequate training.

- Observations of any non-storm water discharges, illicit connections, and potential discharges into the storm drain system.

3.5.4 CONSTRUCTION SITE ENFORCEMENT

The City enforces its storm water ordinances and development permit conditions at all private and public construction sites, as necessary. The City's ordinances and development permit conditions provide adequate legal authority for the City to enforce its ordinances on construction sites through Stop Work Notices, penalties, fines, and other enforcement procedures as necessary. City's inspectors work with developers and contractors to identify non-compliance issues and to set deadlines for bringing sites into compliance; however, if the developer/contractor is found to be non-cooperative in bringing a site into compliance in an expeditious manner, City's inspectors initiate enforcement action which, depending upon the severity of the violation, may include one or more of the following:

- Verbal Warning
- Written Warning
- Notice of Violation (Includes Cease and Desist and/or Clean and Abate Orders)
- Enforcement of Contract (for City projects)
- Stop Work Notice
- Denial or Revocation of Permits
- Administrative, Civil, or Criminal Actions

Table 3-2 summarizes enforcement actions taken within the defined reporting period of this report.

Table 3-2 Construction Enforcement Summary FY 2008-2009

ENFORCEMENT ACTION	NO.
Written Notices of Violation (Includes Cease and Desist and/or Clean and Abate Orders)	7
Civil Penalty Order	1

As a result of the above enforcement actions, Chula Vista developers were fined a total of $7,500 in the current reporting period. Follow-up inspections were conducted as necessary until compliance was met.

Within the defined reporting period of this report and as described in the narrative provided throughout this section, the construction component has demonstrated numerous successes as well as undergone notable programmatic developments and enhancements. Through identified needs and associated management decisions, the City has fortified its jurisdictional construction management component in 2008-2009. Further, as the need for further development emerges for construction activities, the City will seek to maintain the level of performance established from years past, and to continue to meet the regulatory standards mandated in the Municipal Permit.

4.0 MUNICIPAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(c).i – Any updates to the municipal inventory and prioritization.

Permit Section J.3.a.(3)(c).ii – Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.

Permit Section J.3.a.(3)(c).iii – A description of inspections and maintenance conducted for municipal treatment controls.

Permit Section J.3.a.(3)(c).iv – Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.

Permit Section J.3.a.(3)(c).v – Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.

Permit Section J.3.a.(3)(c).vi - Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.

Permit Section J.3.a.(3)(c).vii – Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.

Permit Section J.3.a.(3)(c).viii – Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.

Permit Section J.3.a.(3)(c).ix - Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.

Permit Section J.3.a.(3)(c).x – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xi – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xii – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xiii – Identification of the total distance of curb-miles swept.

Permit Section J.3.a.(3)(c).xiv – Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.

Permit Section J.3.a.(3)(c).xv – Amount of material (tons) collected from street and parking lot sweeping.

Permit Section J.3.a.(3)(c).xvi – A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.

Permit Section J.3.a.(3)(c).xvii – Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.

Permit Section J.3.a.(3)(c).xviii – A description of the general results of the inspections.

Permit Section J.3.a.(3)(c).xix – Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(c).xx – The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(c).xxi – A description of notable activities conducted to manage urban runoff from municipal areas and activities.

4.1 INTRODUCTION

The goal of the City's municipal program is to minimize or prevent negative impacts of municipal activities and areas on receiving waters and other environmental resources in the City and where possible, to enhance the quality of these resources. The City maintains the following types of municipal areas and activities:

- Fixed Facilities
- Municipal Separate Storm Sewer System (MS4)
- Sanitary Sewer System
- Roads, Streets, and Parking facilities
- Powerwashing – Graffiti removal

Minimum BMPs for specific municipal facilities and activities have been implemented as applicable and as required by the Municipal Permit. Minimum BMPs for specific facilities and

activities have been described in the City's JURMP. BMP implementation is ensured through various levels of enforcement, inspection, communication, and awareness. BMP information is disseminated to City staff through the following resources:

- California Stormwater Quality Association (CASQA) Municipal Stormwater BMP Handbook. January 2003
- Municipal staff training venues (formal training, staff meetings, etc.)
- Routine inspection activities
- Activity specific training

BMP implementation is regulated by City staff through routine inspection activities as described in the JURMP. High priority municipal facilities are inspected annually, and all other facilities are inspected as needed. Inspections are conducted to verify the implementation of an effective combination of BMPs to meet the minimum water quality protection requirements. Applicable minimum activity-specific BMPs, as outlined in the JURMP, have been reviewed and implemented at facilities throughout the City. As needed, BMP implementation has been re-enforced as conditions of concern are identified, and personnel have been briefed on their roles and responsibilities in maintaining and implementing prescribed BMPs.

The following paragraphs include summaries of activities undertaken by the City to meet the Municipal Permit requirements for the Municipal Component of the JURMP. It is important to recognize that such recounted activities, practices, and functions are ongoing efforts by the City and not constrained by the defined reporting period of this report.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City operates and maintains the following types of fixed facilities within its jurisdiction:

- Parks and recreation centers
- Libraries
- Administration buildings
- Public Works Center
- Animal care facility
- Fire stations
- Land application site

4.2.2 SOURCE CHARACTERIZATION

Attachment C – Municipal Inventory is a list of all the municipal facilities and activities within the City. Table 6-1 of the City's JURMP details the pollutants potentially generated by the area or activity. General operations include landscape maintenance, material handling and storage, loading/unloading, waste handling, street maintenance, and sewer maintenance. Facilities are classified as high, medium, or low TTWQ based on activities, functions, and various site-specific factors. For more information on the facilities that have additional operations and activities,

please see the City's JURMP. The inventory was updated in March 2008 during the JURMP update process. During the reporting period, no additional municipal facilities were constructed and, therefore, the same inventory has been used in this report. Currently, there are some public parks in the design or construction phase that will be added to the municipal inventory after they are completed.

4.2.3 BMP REQUIREMENTS

Each fixed municipal facility in the City implements BMPs in accordance with their specific operations and activities. The City uses the CASQA BMP Handbook for Municipal Facilities as a guide for employees as well as a training tool. City staff receives training on storm water BMPs on a regular basis. More information on employee training can be found in Section 8.0. Mobile municipal operations use source control BMPs as pollution prevention measures. During the reporting period, all designated BMPs were implemented for municipal areas and activities as well as special events.

4.2.4 PROGRAM IMPLEMENTATION

4.2.4.1 MAINTENANCE

The City maintains all of its fixed facilities and implements BMPs during operations and activities. Any illegal connections or illegal discharges noticed by City staff are eliminated and BMPs are revised if needed.

4.2.4.2 TRAINING AND EDUCATION

All City employees who work in municipal facilities and activities receive training on general storm water concepts, the City's storm water ordinance, and BMP requirements. More information on employee training can be found in Section 8.0.

4.2.4.3 INSPECTIONS

The City proactively approaches enforcement of its storm water ordinance for all municipal areas and activities. All deficiencies are immediately brought to the attention of the facility manager or the staff member responsible for the facility or activity. The facility managers or the responsible staff members have the authority to implement or require implementation of adequate BMPs for their facility. With the training provided for the operations staff and implementation of BMPs on municipal facilities, it is expected that discharge of pollutants from municipal areas and activities have been minimized.

City storm water staff inspected all 62 high priority municipal facilities and activities during the fiscal year as required by the Municipal Permit. Medium and low priority facilities are inspected on an as needed basis. No medium or low priority facilities were determined to need inspection this fiscal year. During inspections, storm water staff identified BMPs that were in need of improvement and informed responsible persons to take action to implement additional BMPs. A list of municipal facilities that were inspected during the reporting period is included in

Attachment H. Overall, sites were in good condition, however; some facilities needed BMP improvements. For the sites needing BMP improvements, the appropriate supervisor was notified and any corrective actions to bring the facility into compliance were immediately implemented. Enforcement on municipal facilities is in the form of disciplinary process against the responsible staff member when compliance is not met in a timely manner. If a violation of the City's Storm Water Ordinance or the Municipal Permit is observed, which is caused by negligence of City personnel, inspectors work with supervisors to ensure that corrective actions are implemented; provide training to the personnel; and immediately inform the appropriate supervisor. The supervisor will then take action against the violating staff member as necessary, including warnings and other disciplinary measures. City storm water staff is in regular contact with Public Works Maintenance staff and provides training on pollution prevention and BMP implementation, therefore, most deficiencies are taken care of upon first notice.

The City also maintains a number of treatment control BMPs that have been installed at municipal fixed facilities. Public Works Maintenance staff inspects all municipal treatment control BMPs to ensure their proper operation. Additionally, Storm Water Management staff conducts random inspections of such facilities to provide a second layer of confidence and ensure that maintenance standards are met. The City maintains treatment control BMPs at the John Lippitt Public Works Operations Center; Fire Stations 6, 7, 8; Salt Creek Park; Veteran's Park; Sunset View Park; Harvest Park; Santa Cora Park; Mountain Hawk Park; Montevalle Park; Windingwalk Park; Horizon Neighborhood Park; Harborside Park; and the City of Chula Vista Civic Center. City crews clean the structural treatment control BMPs on an as needed basis, and their condition is evaluated for effectiveness. Any repairs are noted and carried out on a timely manner. Table 4-1 shows the municipal facilities within the City that have treatment control BMPs and their inspection dates.

Table 4-1 Municipal Facilities with Treatment Control BMPs

FACILITY NAME	NUMBER & TYPE OF TREATMENT CONTROL BMP	DATE INSPECTED
Montevalle Park	10 Filter Inserts	06/04/09
Salt Creek Park	1 CDS Unit	06/04/09
Windingwalk Neighborhood Park	1 Vegetated Swale	06/09/09
Harvest Park	1 Filter Insert	06/18/09
Sunset View Park	3 Filter Inserts	06/04/09
Mountain Hawk Park	20 Filter Inserts	06/04/09
Horizon Neighborhood Park	1 Filter Insert	06/05/09
Veterans Park	1 Vegetated Swale, 5 Filter Inserts	05/27/09
Chula Vista Civic Center	5 Vegetated Swale, 1 CDS Unit, 2 Filter Inserts	05/27/09
Fire Station 6	3 Filter Inserts	06/01/09
Fire Station 7	1 CDS Unit, non-storm water diverter	06/01/09
Fire Station 8	1 CDS Unit, non-storm water diverter	06/01/09
Harborside Park*	3 Filter Inserts	06/29/09
Santa Cora Park*	23 Filter Inserts	09/29/08
John Lippitt Public Works Center*	6 Filter Inserts	06/01/09

* – Not a SUSMP Project, but the City still inspects the inserts and maintains them

4.2.4.4 INTEGRATED PEST MANAGEMENT (IPM)

During the reporting period, the City Parks and Open Space Divisions have implemented the following BMPs in their activities to prevent pollution of storm water conveyance systems:

Fertilizer, Pesticides, and Herbicides

- Minimize fertilizer use.
- All fertilizing is done so that no fertilizer is applied to the walkways or street. Any accidental spill is cleaned up and applied to the plant material. Areas are cleaned using a gas blower.
- All leaf blowing is towards plant material and away from any hardscape.
- Whenever possible, compost and soil amendments are used in place of fertilizers.
- Manual weeding whenever possible along with IPM Practices to minimize chemical application.
- All pesticides, herbicides, and fertilizers are stored in a controlled, locked and properly marked chemical locker.
- Prevent pesticide drift – do not spray on windy days.
- All employees who spray pesticides for weed control are properly trained and possess a valid Qualified Applicator Certificate issued by the state and receive 20 hours of continuing education in order to renew their certifications bi-annually.
- Reporting and record keeping for the use of fertilizers and pesticides includes the location, frequency, amount, type, and date of application.
- Staff is supplied with spill kits in case of an accidental spill.
- All mixing is done in an area that is away from storm drains.
- All employees who handle pesticides are trained and familiar with the most recent material safety data sheet (MSDS) files.
- MSDS sheets for chemical being used must be kept with the applicator while applying pesticides.

Proper Planting Techniques

- Proper plant selection for pest resistance to minimize the use of pesticides and fertilizers.
- Removal or pruning of deceased plants and branches.
- Clearing of weeds, grass, and brush from building perimeters and fence lines.
- Plant native vegetation whenever possible.
- Increase plant vigor and pest resistance through proper cultural practices; proper water application, clearing of weeds to decrease competition, pruning at the right time of year, and accurate diagnosis of plant pests.
- Control pests by removing diseased plants, pruning to increase air circulation and to remove diseased or injured plant parts.

Minimize Runoff

- The City utilizes several weather stations throughout the City to monitor microclimates to set evapotransporation (ET) rates for Maxicom Irrigation Systems.
- Installation of flow sensors and master valves to prevent water loss in the event of mainline break.

4.3 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.3.1 BACKGROUND

Roads, streets, highways, and parking facilities make up a large part of the City. Pollutants associated with roads, streets, highways, and parking facilities include sediment, metals, and trash. The City has implemented various BMPs to reduce the amount of pollutants that come off of these areas.

4.3.2 SOURCE CHARACTERIZATION

Municipal Permit Section D.3.a.(7) designates roads, streets, highways, and parking facilities as high priority municipal areas for inspection purposes. Therefore, the Municipal Inventory (Attachment C) categorizes these facilities as such. Table 6-1 of the City's JURMP details the pollutants potentially generated by the roads, streets, highways, and parking facilities. The City maintains 406 miles of roads, streets, and highways.

The City has one stand-alone covered parking facility in downtown Chula Vista that generates a moderate volume of trash and debris that is swept twice per month and is inspected annually as a part of the City's Municipal Inspection Program. The other 22 parking facilities are associated with other municipal facilities (such as parks) and generate low volumes of trash and/or debris. These are swept on a monthly basis and are inspected annually.

For the purpose of street sweeping, roads, streets, and highways are further classified into high, medium, and low priority based on the amounts of trash, sediment, and debris that are generated by their use. Commercial and industrial streets are classified as high priority; center islands and medians are classified as medium priority; and centerlines and residential streets are classified as low priority. Table 4-2 below provides more information about these classifications, the number of curb miles in each, the type of areas these classes cover, and their respective sweeping frequencies. The City is in the process of collecting data to refine this classification by working with its contractor to keep records of the quantities of trash and debris collected each day from various sections of the City.

Table 4-2 Street Sweeping Information Based on Class

CLASS	NUMBER OF CURB MILES	TYPE	SWEEPING FREQUENCY
High	127.75	Industrial and Commercial – 10.5 miles	Twice per week
		Commercial and Business – 117.25 miles	Once per week
Medium	71.6	Center Islands and Medians	Twice per month
Low	702.26	Residential – 656.36 miles	Once per month
		Center Lines – 45.9 miles	Twice per month

4.3.3 BMP REQUIREMENTS

Street sweeping is one of the ongoing city functions that provides for the reduction in pollutants entering the storm drain system and ultimately local receiving waters. It is the main BMP used to maintain roads, streets, highways, and parking areas. It is conducted in a systematic and coordinated manner as to compliment pollution prevention throughout the City.

The City has identified some streets as high Threat to Water Quality (HTTWQ) areas. The main pollutant in these areas is trash. Trash in these areas is mainly attributable to customers of recycling businesses located in the industrial areas of Energy Way and Nirvana Avenue. Also, trash trucks shedding some of their load while traveling to and from the Otay Landfill on Maxwell Road and Main Street east of I-805 are sources of trash on these two streets. As a proactive measure to minimize trash entering the storm drain system in these areas, the City has retrofitted existing curb inlets in these areas with filter inserts. The City's storm drain crew conducts regular inspections and cleaning of these filter inserts and replaces parts as necessary.

4.3.4 PROGRAM IMPLEMENTATION

4.3.4.1 MAINTENANCE AND INSPECTION

During the reporting period, the City swept approximately 18,000 curb miles and removed 590 tons of trash, debris, and sediment from Chula Vista streets and parking lots. While regular roadway maintenance is contracted, the City operates a street sweeper to be used by City crews to maintain City facilities, parking lots, bus stops, and special events. Figure 4-1 shows the street sweeping schedule for the reporting year.

- Commercial and industrial streets swept once per week
- Center islands and medians swept twice per month
- Centerlines and residential streets swept once per month

Figure 4-1 Street Sweeping Schedule

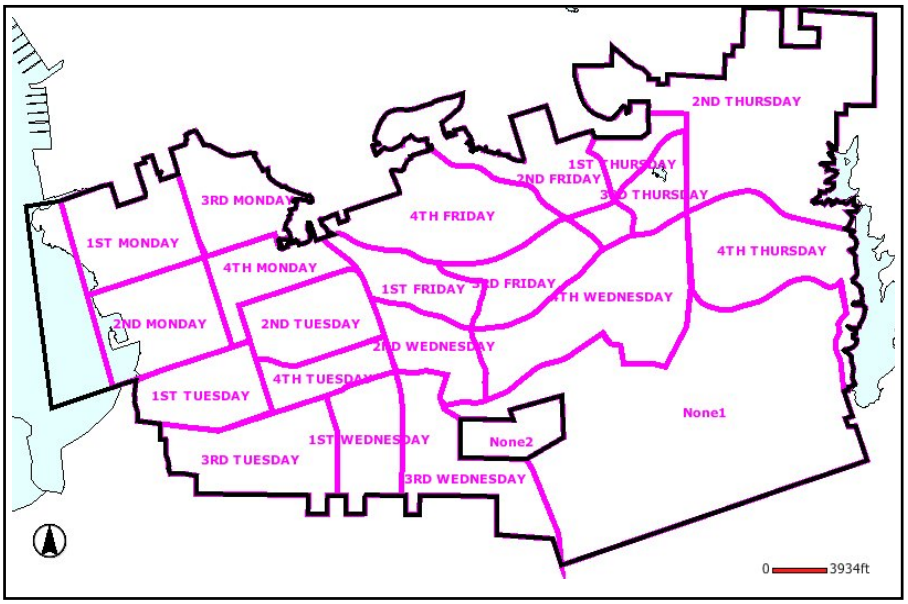

4.4 MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

4.4.1 BACKGROUND

MS4 maintenance is an ongoing city function that is essential for the removal of pollutants and potential pollutants that may be discharged to receiving waters. MS4 maintenance activities address pollution prevention through three primary activities: 1) catch basin maintenance, 2) channel maintenance, and 3) outfall maintenance.

As part of the City's maintenance protocol, a maintenance supervisor inspects storm drain facilities before and after cleaning operations. Problem sites within the drainage facilities were inspected and cleaned multiple times during the reporting period. In addition, the City's consultant for dry weather field screening annually inspects over 57 outfall locations throughout the City and conducts upstream investigations based on field screening results. They call and report observed pollution in storm drainage systems to the City, in which case Public Works maintenance crews immediately take action to abate the pollution, cleanup, and inspect the drainage area.

Another method of inspection of storm drainage facilities employed by the City is through investigation of reported violations. When an inspector responds to a reported violation, in addition to normal investigations, he or she inspects the first downstream storm drain inlet to determine if pollution has reached the inlet. In case of presence of any trash, silt, or other visible pollutants in the storm drain inlet, Public Works crews are immediately notified and they take action to clean the storm drainage system, as necessary. This multi-layer inspection program ensures that almost all MS4 facilities are inspected and maintained regularly.

All channel and outfall maintenance activities have been conducted in a manner as to assure compliance with all environmental regulatory standards. Notably, channel and outfall maintenance activities have been limited to manual removal of trash and debris from areas that trash accumulation may cause flooding and damage to life or property. The City is in the process of obtaining environmental permits for maintaining areas that require the use of equipment.

Currently, three vacuum trucks and three crews are allocated full-time to performing the above tasks on the maintenance and inspection of the City's storm drain systems. In addition, four vacuum trucks, equipment, and wastewater field crews are available on an as-needed basis to help in cleaning and inspecting the storm drain systems in emergencies and other similar situations.

The City maintains an extensive record keeping and maintenance tracking system utilizing George Butler Associates Work Management System (GBA), which is an automated system universally used by the Public Works Department for collecting and tracking data about all its activities. Detailed maintenance logs are available in the City's storm drain maintenance database and can be presented upon request.

During the reporting period, the City purchased an additional 200 thermoplastic storm drain stencils, and plans to install them in the next fiscal year. These stencils adhere to the concrete curb/gutter by heat treatment and are more durable than paint stencils or plastic markers using adhesive. Last Fiscal Year, 500 thermoplastic storm drain markers were permanently affixed to storm drain inlets with the prohibitive "No Dumping – Drains to Bay" message in two languages. In addition, citizens participating in Beautify Chula Vista Day in October 2008 stenciled 88 more storm drains. Notably, nearly all storm drain structures in the City are identified with stenciling, plastic markers, or permanent concrete stamping.

4.4.2 SOURCE CHARACTERIZATION

The City maintains its MS4, which includes open channels, catch basins and inlets, and outfalls. As required by the Municipal Permit Section D.3.a.(7), the City's MS4 is included in the municipal facility inventory (Attachment C) as a high priority facility for inspection purposes. Table 6-1 of the City's JURMP details the pollutants potentially generated by the MS4.

4.4.3 BMP REQUIREMENTS

The City implements various BMPs to maintain its MS4 and uses the CASQA BMPs for municipal facilities and activities as a guide.

4.4.4 PROGRAM IMPLEMENTATION

4.4.4.1 MAINTENANCE AND INSPECTION

A summary of the City's efforts in the maintenance and inspection of its catch basins and inlets, MS4, and open channels during the reporting period of July 1, 2008 to June 30, 2009 is summarized below. A total of 248 inlets were identified as accumulating a high volume of trash.

All high trash volume facilities were inspected at least once during May 1 – September 30. Table 4-3 details the amounts of waste collected from the City's storm drain system based on various facility and waste categories. Recently, the City has added green waste as a category of waste collected from the MS4 and will include this new data in the annual report for next fiscal year.

Catch Basins and Inlets

- There are 8,412 catch basins and inlets in the City
  - 7,343 catch basins and inlets were inspected
    - Out of these catch basins and inlets inspected, 5,183 catch basins and inlets were cleaned
- Data collection for catch basins with accumulated waste exceeding the cleaning criteria (33% or more full) started January 1, 2008. A total of 147 exceeded the criteria from July 1, 2008 – June 30, 2009.

MS4

- There are 181 miles of MS4 in the City
- The storm drain maintenance crews televised 0.63 miles of MS4 during the reporting year. New storm drain pipes were televised to ensure that there was no infiltration from groundwater or the sanitary sewer, and to inspect MS4 where there was obstructed water flow.
- A total of 0.62 miles of MS4 was cleaned. It should be noted that if storm drain pipes are self-cleaning and under normal operation, there should be no need for cleaning storm drain pipes.

Open Channels

- There are 31 miles of open channels in the City
- A total of 738,000 square feet of open channels were inspected and cleaned

Table 4-3 Amount of Waste Cleaned from the Storm Drain System FY 2008-2009

CATEGORY	AMOUNT (tons)
Catch Basins	**56.86**
Inlets	**39.46**
MS4	
Trash	2.23
Sediment	0.76
Landscaping Debris	8.75
Sub-Total	**11.74**
Open Channels	**367.08**
TOTAL	**475.14**

The City will continue to inspect its MS4 as required by the Municipal Permit and record collected inspection data. In addition, the City will review its inspection record and determine which facilities will require inspections less than annually and report these facilities in its FY 2009-2010 annual report.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

The City recognizes the vital pollution prevention role that sanitary sewer system maintenance plays in the protection of the MS4 system. If not properly maintained, the sewer system can potentially discharge numerous pollutants to the storm drain system such as bacteria, viruses, nutrients, parasites, and chemicals.

The City currently implements a Sewer Overflow Response and Prevention Plan. Pursuant to the Statewide General Waste Discharge Requirements for Sewer Collection Agencies, the City is in the final stages of updating the plan and developing a Sewer Collection Management Plan and a Fats, Oils, and Grease (FOG) Monitoring Ordinance. As part of the FOG program, the City has conducted a survey in which questionnaires were sent out to all restaurants in the City. Information collected about their FOG practices, and methods of preventing oil and grease from entering sanitary sewer systems will be used to track BMPs, assess their efficiencies, and direct future inspections.

4.5.2 SOURCE CHARACTERIZATION

There are 485 miles of sewer pipes in the City. The Municipal Permit Section D.3.a.(7) requires sanitary sewer collection systems to be identified as high priority facilities for the purpose of inspections. The sanitary sewer system is included in the municipal inventory as such (please see Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by the sanitary sewer system. The City of Chula Vista does not operate a Publicly Owned Treatment Works. Sewage generated in Chula Vista is collected and conveyed to the City of San Diego treatment works at Point Loma.

4.5.3 BMP REQUIREMENTS

The City responds to all sanitary sewer overflows and uses the CASQA BMP Handbook for municipal facilities and activities including sanitary sewer system maintenance as a guide. City staff regularly receive training on inspection and maintenance of the sanitary sewer system.

Concurrent with the arrival of maintenance and cleanup crews at the scene of a sewage spill from private sewer lines to contain and cleanup the spill, a Storm Water Compliance Inspector contacts the responsible person at the residence or facility and makes it a requirement to implement BMPs to prevent the recurrence of similar incidents. Such BMPs frequently include the requirement for regular and frequent inspections and cleaning of private sewer lines, tightly closing the cap on cleanouts, preventing oil and grease from entering sanitary sewer systems, etc.

4.5.4 PROGRAM IMPLEMENTATION

4.5.4.1 MAINTENANCE AND INSPECTION

The City cleaned and maintained a total of 443 miles of sewer main (includes critical maintenance areas) within the defined reporting period of this report. Identified critical maintenance areas were cleaned on a monthly basis by City crews. In addition to comprehensive sanitary sewer maintenance activities, the City utilizes a number of controls to limit infiltration from the sanitary sewer system to the MS4. Most essential of which, the City's standards require concrete pipes for all new storm drains, which ensure a much longer life, watertight joints, and effectively minimizes infiltration of groundwater and sewage to storm drain pipes. In addition, flow metering is also conducted throughout the City's sanitary sewer system to monitor flow depths and potential capacity concerns, minimizing potential sewer overflows and infiltration. The City has video cameras that can be moved through storm drain or sanitary sewer pipes for close inspection of pipe conditions. If a problem is suspected, that section of the pipe is video surveyed. This practice has greatly minimized the potential for infiltration of sewage into storm drain pipes.

The City also implements a rehabilitation program for aged sewer pipes. Rehabilitation consists of lining deteriorated existing Vitrified Clay Pipes (VCP) with a continuous material. This process eliminates the joints of the VCP, thereby eliminating the potential for ex-filtration of sewage. Also, only PVC sewer pipes are used for new construction for all but interceptors with diameters larger than 36 inches. PVC pipes have proven to be very watertight and minimize sewage infiltration into the ground and storm drain systems.

Another control to limit infiltration from the sanitary sewer system to the MS4 is the City's initiative to replace aged corrugated metal pipe storm drains with concrete pipes. The City no longer allows metal pipes to be used for storm drains due to their inherent corrosion potential and increased risk of infiltration. Corrugated metal pipes are gradually being replaced with concrete pipes, which are more durable and watertight.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City performs activities that are not confined to a fixed area, such as powerwashing. Pollution prevention using source control BMPs are implemented for such activities.

4.6.2 SOURCE CHARACTERIZATION

The City performs a variety of mobile activities such as power washing for graffiti removal, landscape maintenance, street repairs, and pool maintenance. The Municipal Permit Section D.3.a.(7) requires that power washing be identified as a high priority municipal activity for inspection purposes. Therefore, Attachment C has categorized power washing as such. Table 6-1 of the City's JURMP details the pollutants potentially generated by the area or activity.

4.6.3 BMP REQUIREMENTS

The City implements source control BMPs for mobile activities, including power washing, and uses the CASQA BMP Handbook for Municipal Facilities as a guide. City power washing crews implement BMPs during their activities and receive regular training on storm water pollution prevention.

4.6.4 PROGRAM IMPLEMENTATION – POWER WASHING FOR GRAFFITI REMOVAL

4.6.4.1 MAINTENANCE AND INSPECTION

The City's Graffiti Abatement Program functions under the mission of: *"To deliver in a timely manner, a comprehensive, cost-effective, environmentally sound, and technically reliable graffiti removal, education, and prevention program for the residents of Chula Vista."* The City provides cost-free graffiti removal for the residents of Chula Vista.

The Graffiti Abatement Program utilizes various techniques for effective removal of graffiti Citywide, including power washing and sand blasting. In its commitment to this program and to utilize environmentally sound and cost-effective graffiti removal processes, City Council approved the spending of $63,000 for the purchase of highly specialized equipment to capture and treat residual wash water generated from graffiti abatement activities in early 2006. At the end of 2006, the new equipment was made available to the graffiti crews and has been in use ever since. The equipment includes the following:

- A Ford F450 Heavy Duty truck powered by a Triton V10 gasoline engine with an 8' x 12' flatbed.
- A Mi-T-M Industrial belt-driven pressure washer rated at 5.6 GPM output at 3,500 P.S.I.
- A diesel-fired burner for hot water rated at 470,000 BTUs per hour with adjustable temperature control up to steam.
- A Mi-T-M 6000 watt Generator powered by a 13 HP Honda gasoline engine provides power for the AquaKleen Vacuum Recovery system and Water Recycling System, which includes a commercial vacuum system that operates on two 120 volt vacuum motors.
- An automatic discharge pump with a check valve recovers the residual wash water through a Vacu-berm, and a 1.5" 25 foot-long pick up hose and pumps wash water into a 22 gallon oil/water separator system. The water then passes thru a series of 3 filters and a filtration bag that is changeable before it is returned to the storage tank for reuse. This high efficiency system is capable of recycling up to 80% of the wash water for reuse. The clean water tank holds 250 gallons.
- Speedflo PowerTwin 6900 gas powered hydraulic airless paint pump with 3000 PSI and two-gun capability with 100 feet of 0.25" paint hose on a spring-loaded retractable hose reel mounted in the rear corner of the truck bed. This pump is rated at 1.8 GPM.

As a part of the inspection process, City's Storm Water Management staff annually conducts a ride-along with the graffiti/power washing crews to observe their operations and activities. Storm water staff provides storm water education to the crew and gives any additional BMP recommendations or improvements to their existing pollution prevention measures. During this reporting year, City Storm Water Management staff observed the removal of graffiti from a sidewalk area, close to the curb/gutter. The graffiti crew implemented all BMPs and prevented any wash water from entering the storm drain system. All BMPs were in place and working properly.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City hosts a variety of special local events, which include festivals, fairs, and other events for special causes and occasions. Usually, these events involve the participation of outside organizations, community groups, and the general public. The gathering of event participants and crowds is generally a source of trash and debris if BMPs are not implemented.

4.7.2 SOURCE CHARACTERIZATION

Municipal Permit Section D.3.a.(7) requires that special events be designated as high priority for inspection purposes. Therefore, special events are included in the City's municipal inventory as high priority activities (Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by special events.

4.7.3 BMP REQUIREMENTS

The City implements various BMPs for special events such as having special bins available for recyclables and trash, using street sweeping immediately following major events taking place on a street, and having personnel dedicated to litter abatement throughout City events. Also, following every event, City staff inspects the grounds for trash and performs other clean-up activities as necessary. Environmental Services Division and Storm Water Management staff works in conjunction with other City departments and event organizers to ensure that adequate BMPs are implemented during special events.

4.7.4 PROGRAM IMPLEMENTATION

Storm Water Management and Environmental Services staff has active presence at the majority of City events. They set up booths, provide public education on environmental issues, and distribute informational materials. As necessary, they conduct surveys at the same time to evaluate general public's awareness and practice of BMPs. As a part of storm water education outreach, staff working at the events provides information on pollution prevention and watershed protection. City Environmental Services staff notifies hired personnel if there are overflowing trash bins or areas where more trash receptacles are needed.

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(d).i – Any updates to the industrial and commercial inventory.

Permit Section J.3.a.(3)(d).ii – Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.

Permit Section J.3.a.(3)(d).iii - A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.

Permit Section J.3.a.(3)(d).iv - Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.

Permit Section J.3.a.(3)(d).v - Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.

Permit Section J.3.a.(3)(d).vi - Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(d).vii - Identification of the number of third party inspections conducted.

Permit Section J.3.a.(3)(d).viii - Identification of efforts conducted to verify third party inspection effectiveness.

Permit Section J.3.a.(3)(d).ix – A description of efforts implemented to address mobile businesses.

Permit Section J.3.a.(3)(d).x - The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(d).xi - A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.

Permit Section J.3.a.(3)(d).xii - A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.

5.1 INTRODUCTION

The following section describes the development and implementation of program components related to industrial and commercial activities in the City of Chula Vista to minimize the impact of urban runoff on receiving waters. This component is driven by multiple interrelated activities to ensure an effective and complete set of actions. The City recognizes that no program activity

is mutually exclusive, and that each is essential to the overall success of the program. The City has compiled an inventory of industrial and commercial sources and developed BMP requirements for each source and activity. Implementation of these requirements will be accomplished through education, inspection, and enforcement.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

The City's industrial and commercial inventories include 1,383 facilities. Examples of industrial facilities within the City include manufacturing facilities, auto dismantlers, and transportation businesses. Examples of stationary commercial facilities within the City include auto repair shops, restaurants, and wholesalers of many kinds; this does not include mobile commercial facilities. Mobile commercial facilities are detailed in Section 5.3.

The main objective of the industrial and commercial component of the JURMP is to minimize or eliminate the impacts of industrial and commercial activities on receiving waters and other sensitive environmental resources. Each facility has the potential to discharge pollutants into the MS4 and hence degrade local water quality.

5.2.2 SOURCE CHARACTERIZATION

Through ongoing efforts to maintain a more systematic approach to source inventory management, annually, the City conducts updates of its industrial and commercial facilities inventories by searching through its business license database and conducting visual observations of new or closed businesses during annual inspections. Additionally, every five years, the City conducts a comprehensive field validation of its industrial and commercial inventories Citywide. The industrial and commercial inventories are also updated on a continuous basis by adding businesses that cause incidents of pollutant discharge or are found to require regular inspections due to the type and amount of pollutants that they generate.

Watershed-based inventories of industrial and commercial sites within the City have been compiled. Information was obtained from the City's business license database (Permits Plus), the State of California database of industrial sites that have filed NOIs, inspection records, and previous experience.

Inventories of industrial and commercial facilities within the City were compiled during the development of the City's JURMP in 2008, which were later updated for the current reporting period and are included in Attachments D and E.

The inventory for commercial facilities includes such information as:

- Facility name
- Assessor's Parcel Number (APN)
- Facility address
- Municipal Permit category
- Description of services

- Priority
- North American Industrial Classification System (NAICS) code

The inventory for industrial facilities includes such information as:

- Facility name
- Assessor's Parcel Number (APN)
- Type of facility
- Priority
- Facility address
- Standard Industrial Classification (SIC) code
- Waste Discharge Identification Numbers (WDID) for sites that are covered under the State of California's General Industrial Permit.

The inclusion of the APNs allows the City to track its inventories through the City's GIS program. Table 7.1 – General Pollutant Loading Potentials of Industrial and Commercial Sources in the City's JURMP document identifies the pollutants that may be generated by each business category.

5.2.3 BEST MANAGEMENT PRACTICES REQUIREMENTS

Pollution prevention methods are used as a primary mechanism for reducing industrial and commercial discharges of pollutants into MS4s. Pollution prevention methods are cost-effective BMPs that eliminate or reduce the generation of pollutants at their sources. Industrial and commercial facilities produce a range of pollutants, both indoors and outdoors, that can threaten human and environmental health if washed into the storm drain system by way of urban runoff. Businesses can benefit from pollution prevention methods by reducing labor time associated with excess pollutant waste handling, thereby re-directing labor time more efficiently to production, as well as the accompanying costs of storage, disposal or treatment.

The following pollution prevention methods were required to be implemented to the MEP where applicable and feasible:

- Reduce the quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct employees
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

In addition to the methods listed above, the City's Storm Water Management Ordinance provides the authority to require SWPPP for any industrial or commercial facility that may discharge significant pollutants into receiving water bodies.

In addition to the pollution prevention BMPs, the City has established a set of minimum BMPs based on the California Stormwater BMP Handbook – Industrial & Commercial (CASQA, 2003) for all industrial and commercial sites. Businesses are required to use an effective combination of the applicable BMPs and activity-specific BMPs. The listings of the BMP fact sheets are available online at www.cabmphandbooks.com.

Insurance of proper BMP implementation at industrial and commercial sites is based on a multi-level approach and information on BMPs are disseminated to the local business community through a number of channels, including:

- Inspection & enforcement activities
- Industrial and commercial outreach & education
- Business license application procedure

The City does not exclusively endorse some of the specific recommended BMP options listed in the CASQA fact sheets because they conflict with Municipal Permit requirements or City's ordinances. Those exceptions are listed in Appendix C of the JURMP. Businesses are informed of the exceptions, where necessary.

It is important to recognize that pollution prevention methods are stressed through all interactions between the City and facility owners, operators or their employees. Further, pollution prevention methods are commonly used in compliance with other regulatory management standards. It has been determined that one-on-one interaction between City inspectors and business owners are more effective in knowledge and behavior change than conducting workshops or distributing informational materials, although latter methods are also effective to a lesser degree and are practiced by the City.

5.2.4 PROGRAM IMPLEMENTATION

The City provides education and outreach to industrial and commercial businesses so they are aware of the City's storm water requirements. The City also inspects its inventoried businesses to evaluate compliance with its BMP requirements. Enforcement actions are taken as necessary to bring the business into compliance.

Because the City's BMP requirements, as described in the JURMP, are not substantially different from the BMP requirements that the City has been enforcing since 2002, most businesses should already be familiar with what they need to do to comply with the City's requirements. While the City continues to provide education and outreach to industrial and commercial businesses, in most cases a lack of awareness is not accepted as an excuse for noncompliance.

The City provides information and training regarding storm water quality to industrial and commercial owners and operators. In turn, owners and operators are required to train their personnel, employees, and/or other parties involved with industrial or commercial activities.

Businesses are given educational materials outlining pollution prevention methods and BMPs during inspections, where appropriate. Storm Water Management staff gives recommendations to businesses where necessary. Based on the City's experience, this site-specific, personal education is among the most effective methods of outreach. The educational program for industrial and commercial businesses is described in more detail in Section 10 of the updated JURMP.

After each inspection, the City provides a copy of the inspection report to the responsible party of the inspected business. Generally electronic inspection forms are completed, and a printout is mailed or faxed to the responsible party after the inspection. If immediate notification is deemed necessary, a paper inspection form with carbon copy is completed onsite, with the carbon copy provided to the responsible party at the time of inspection.

In all cases a copy of the Chula Vista Storm Water Management and Discharge Control Ordinance is handed to the facility owner/manager. The City continues to utilize the following primary mechanisms to provide ongoing education to the industrial and commercial communities within the City.

- Providing one-on-one training and help to business owners to develop their activity and site specific BMPs
- Distributing informational printed materials
- Conducting industrial and commercial inspection and setting standards for compliance

5.2.4.1 INDUSTRIAL/COMMERCIAL SITE INVENTORY AND INSPECTIONS

During this reporting period, 209 industrial facilities and 1,174 commercial facilities including 516 mobile businesses were identified and inventoried. These facilities are identified in Attachments D and E.

Through ongoing efforts to maintain a more systematic approach to source inventory management, industrial and commercial facilities were prioritized as potential contributors of identified watershed Pollutants of Concern including bacteria and heavy metals. Inspections were conducted and, observed Pollutants of Concern were addressed through necessary education and enforcement actions.

During this reporting period, the following number of inspections was conducted to ensure compliance within the Permit requirements (see Attachments I and J):

- 192 high priority commercial facilities
- 41 low priority commercial facilities
- 48 high priority industrial facilities
- 2 low priority industrial facilities

Justification and rationale for why industrial and commercial sites/sources were chosen for inspection is as follows:

- Permit compliance – Categories and numbers of facilities selected for inspection were chosen to meet permit requirements of Section D.3.b.(3).
- Threat to Water Quality – Facilities that posed a higher TTWQ were given higher priority for inspections.
- Inspection frequency – Facilities that were not inspected during the previous period were given a higher priority for inspection.
- Past history of non-compliance – Facilities that had a history of non-compliance during previous inspections were targeted for re-inspection during the current reporting period.

City inspectors use industrial and commercial inspection forms specifically designed as multi-purpose tools. The form provides a checklist of information and potential water quality issues, which serves as a reminder to the inspector of all items requiring attention while on the industrial/commercial facility. The form also provides clear and concise information to the business owner or manager about deficiencies in the implementation of BMPs. It includes information about corrective actions that the business owner or manager needs to take for bringing the site into compliance, and the time allowed for bringing the facility into compliance. Inspection forms are designed to enable the inspector and others to assess BMP implementation on each industrial/commercial facility and the effectiveness of BMPs. Inspection reports are often used as supporting documents in enforcement actions against non-compliant industrial/commercial facilities and during administrative hearings.

Through the above process, the City ensures that inspections conducted address all the required inspection steps to determine full compliance.

The Copermittees are in the process of standardizing industrial/commercial inspections. An Inspection Standards Workgroup was formed with the task of finding a way to standardize industrial-commercial inspections so that the results from each Copermittee's inspections are consistent. The goal of the workgroup is to create minimum regional standards while maintaining flexibility for each Copermittee to identify and apply their individual requirements that have been developed to match each Copermittee's respective storm water program.

5.2.4.2 PRIORITIZATION

The Municipal Permit no longer requires industrial and commercial inventories to be categorized into high or low priority for TTWQ, although Section D.3.b.(3) of the Municipal Permit requires inspections of sites determined to pose a high threat to water quality. Based on the City's past experience, prioritization of industrial and commercial facilities into high or low priority provides a powerful tool to identify facilities that require focused attention and more frequent inspections. Therefore, the inventories of industrial and commercial facilities have been prioritized in this report.

The City evaluated each business by incorporating factors specified by the Municipal Permit and by using past experience. Although not specifically required, the City has also continued to classify industrial businesses that have obtained coverage under the General Industrial Permit as

high priority. Other industrial businesses, based on past inspections and institutional knowledge, or those that are known to have poor compliance history, or have a high potential for pollutant discharge are also classified as high priority.

Criteria for identification of low priority industrial facilities include the following:

- Land Use Code
- SIC Code
- Type of Activity
- Location

Criteria to identify high priority commercial facilities:

- Auto related businesses
  Businesses operating along the following areas were included due to their proximity to receiving water bodies:
  - Main Street corridor (Otay River and MSCP Preserve areas)
  - Bonita Road corridor (Sweetwater River)
  - Bay Boulevard (San Diego Bay)
- Restaurants
  Restaurants operating along the following areas were included due to their proximity to receiving water bodies:
  - Main Street corridor (Otay River and MSCP Preserve areas)
  - Bonita Road (Sweetwater River)
  - Bay Boulevard (San Diego Bay; facilities within the Port jurisdiction are not included)
- Fast food chains
  This is due to frequent rotation of management and employees, and low awareness about water quality issues. Also, fast food restaurants often have a drive through and more customers who potentially discard food wrappers, etc. in the parking lot.
- Private golf courses
- Entertainment facilities
  For example, facilities such as the Cricket Wireless Amphitheatre, Knotts Soak City, etc.
- Towing companies
- Building supplies and materials
- Food Markets
- Violation history
  Commercial facilities that have been issued a citation or Notice of Violation within the past two years are included in the list. Also, any business that receives a citation or Notice of Violation in the future will automatically be added to the list.

5.2.4.3 INSPECTIONS CONDUCTED

An inspection of an industrial and commercial business involves verifying information regarding ownership, management, and contact names and phone numbers of the businesses. If the inventoried business is no longer at the listed location or has moved, the inspector makes a note

to update the inventory. If a new business has been determined to be included in the inventory, Storm Water Management staff notes that information, and the business is usually inspected at that time.

For industrial sites, Storm Water Management staff reviews the facility's SWPPP, Annual Report, and monitoring results, if applicable. Typically, only sites that are covered under the General Industrial Permit have these documents. Storm Water Management staff checks for coverage under the General Industrial Permit, where applicable.

Monitoring verifications for high priority industrial facilities are conducted through the review of the facility's annual report or by the verification of the facility's participation in the Group Monitoring Program. To ensure that the subject facility is still an active participant of a Group Monitoring Program, the City verifies membership by contacting the Group Leader, and by accessing the State Water Resource Control Board's website:
http://www.waterboards.ca.gov/stormwtr/groupmonitoring.html

During both industrial and commercial business inspections the main focus is reviewing the implementation of pollution prevention methods and other BMPs. A walk-through of the business is conducted to identify potential pollutants and pollutant generating activities. The business contact typically accompanies the Storm Water Compliance Inspector during the walk-through to enable City staff to point out areas where corrections are needed, and for the business representative to answer any questions and take note of the requirements.

Based on the results of the inspection, the Storm Water Compliance Inspector completes a Storm Water Quality Inspection Report for Commercial/Industrial Facilities. The responsible party is provided with a copy of the inspection report after the inspection. The inspection report contains the following information:

- General information to update the inventory
- General site observations and/or conditions of concern noted
- Results of the SWPPP review, BMP plan, and monitoring results
- Assessment of BMP implementation
- Recommended corrective actions
- Enforcement action taken
- Inspector name and signature
- Signature of party receiving the report

The Storm Water Compliance Inspector does not typically prescribe exact BMP solutions; staff does attempt to work with the facility's contact to provide examples of BMPs that could be implemented. Cost-effective BMPs are sought whenever possible, although, more expensive BMPs may be needed to reduce the pollutant discharges to the MEP. The business is also evaluated for its staff training procedures and the storm water quality awareness of the contact person. Educational information is provided as appropriate. The findings of the inspection and corrective actions are discussed with the responsible party while the Storm Water Compliance Inspector is at the site.

As discussed above, the business is provided with a copy of the completed inspection report. Based on observations during the inspection, the City may determine that the business category should be changed from low to high priority or vice versa. Any such changes are reflected in the inventory update submitted in the following JURMP Annual Report.

A detailed account of all industrial and commercial inspections conducted during this reporting period is included in Attachments I and J.

5.2.4.4 THIRD PARTY INSPECTIONS

With a dedicated Storm Water Management staff, industrial and commercial facilities are effectively regulated in the City without the use of a third party inspection program. The City's industrial and commercial inspection program is defined by a consistent presence and strong enforcement standard, and the City's Storm Water Management staff continues to excel in maintaining the needs of the industrial and commercial programmatic elements.

5.2.4.5 VIOLATIONS AND ENFORCEMENT ACTIONS

The City has a number of mechanisms that can be used to bring an industrial or commercial facility into compliance. These mechanisms include:

- Verbal and Written Warnings
- Notices of Code Violation
- Orders to Clean and Abate
- Orders to Cease and Desist
- Orders to prepare a Storm Water Pollution Prevention Plan
- Orders to implement a Monitoring and Testing Program
- Administrative Citations
- Civil Penalties
- Judicial Enforcement

Storm Water Compliance Inspectors properly document each observed violation at the facility failing to comply with the storm water requirements, and enforcement action is taken when necessary to bring the facility into compliance.

In some cases compliance is achieved and observed at the time the initial enforcement action is taken, and no follow-up is necessary. In other cases, Storm Water Compliance Inspector conducts follow-up inspections to ensure that required corrective actions are adequately addressed.

Where the Storm Water Compliance Inspector observes a significant and/or immediate threat to water quality, immediate enforcement action is taken to require the facility to immediately correct the situation. When necessary, City's maintenance crews respond to illegal discharges, contain and capture pollutants before entering storm water conveyance system inlets, and stay at the scene until the illegal discharge is terminated by the responsible person. The affected areas

and the storm water conveyance system are cleaned and disinfected as necessary. Costs for such operations are charged to the business owner of the property owner. In any case in which Storm Water Compliance Inspectors determine that a noncompliant site poses a threat to human or environmental health, the City notifies the RWQCB by phone and in writing as required by the Municipal Permit.

The City also investigates all reported incidents of illicit discharges or illegal connections from industrial and commercial businesses. This includes findings during the implementation of the City's Dry Weather Field Screening and Analytical Monitoring Program. The investigations are performed in accordance with Section 9.5 of the City's JURMP.

See Table 5-1 details the types of violations and the numbers of each during the fiscal year. A detailed account of enforcement actions taken during this reporting period is included in Attachment K.

Table 5-1 Industrial/Commercial Enforcement Action Summary FY 2008-2009

VIOLATION TYPE	NO.
Administrative Citations-Warning	5
Administrative Citations	12
Notice of Violation	1
Cease and Desist Orders	1
Clean and Abate Order	1

The above referenced enforcement actions were preceded by initial inspections and were followed up by additional inspections as necessary until such non-compliant facilities were brought to full compliance with the City's storm water regulations.

5.2.4.6 IDENTIFICATION OF NON-FILERS

If Storm Water Compliance Inspectors determine that an industrial facility may require coverage under the General Industrial Permit and has not filed a Notice of Intent (NOI), the City requires the responsible party to contact the Regional Board to determine if the facility is required to obtain coverage. At the same time, the Regional Board is notified of the existence of such industrial facility. Additionally, the City coordinates joint site inspections with Regional Board staff to assist in their site inspections. Each Annual Report includes a list of industrial facilities that the City has identified during that reporting period as candidates for coverage that have not filed NOIs. The list includes the name of the facility, address, the respective SIC code, and the type of business.

During the current reporting period, the City identified facilities that may be eligible for coverage under the General Industrial Permit. These facilities are listed below in Table 5-2. The Regional Board makes the ultimate decision as to the applicability of the Industrial Permit to the listed facilities.

Table 5-2 Facilities Potentially Eligible for Coverage Under the General Industrial Permit

BUSINESS NAME	ADDRESS	SIC	BUSINESS TYPE
Gonzales Northgate Market	1058 Third Avenue Chula Vista, CA 91911	2099	Tortilla Manufacturing
Mercado Internacional 2000	1415 Third Avenue Chula Vista, CA 91911	2099	Tortilla Manufacturing
Selecta Mexican Foods	1340 3rd Ave. Chula Vista, CA 91911	2099	Tortilla Manufacturing
Tortillas de Harina Elice	1660 Broadway Chula Vista, CA 91911	2099	Tortilla Manufacturing
Tortilleria Santa Fe	2765Main Street Chula Vista, CA 91911	2099	Tortilla Manufacturing

5.3 MOBILE SOURCES ELEMENT

5.3.1 BACKGROUND

Illegal discharges are a concern with mobile businesses working in the City. Due to the nature of their activities, mobile businesses are regulated differently than stationary businesses. Many mobile businesses can be difficult to identify because many do not have business licenses. On a continuous basis, new mobile businesses are started, existing mobile businesses go out of business or some mobile businesses do not renew their business license or operate from their home. Since they are not consistently present at any particular location, regular inspections are difficult and infeasible. For the above reasons, City maintenance crews who normally work on public streets have been trained to report any observed illegal discharges by mobile businesses. Furthermore, City inspectors conduct weekend and night inspections to monitor BMP implementation by mobile businesses.

5.3.2 SOURCE CHARACTERIZATION

Mobile businesses that are known to operate within the City are marked as such on the City's commercial inventory in Section B.5 of the City's updated JURMP. The following business types are addressed by the mobile source element of the City's industrial and commercial program.

- Mobile Auto Detail
- Window Washing/Pressure Washing/ Street Sweeping
- Pool and Spa Cleaning
- Carpet Cleaning
- Plumbing/Handyman/Repairman
- Landscaping
- Dog Grooming
- Boat Cleaning/Hull Maintenance
- Fire Sprinkler Maintenance

- Painting and coating
- Mobile construction trades, which include cement work and masonry

In addition to the business types listed above, other mobile businesses that the City identifies as a TTWQ are added to the inventory. Because not all mobile businesses have obtained a business license in the City or the business is based out of the City's jurisdiction, the City continues to refine and update its inventory of mobile businesses.

The City has established a process by which any mobile business applicant within the above categories are required to go through a storm water BMP training and sign a certification verifying that they are aware of the City's BMP requirements and pollution prevention ordinances.

During this reporting period, 208 mobile businesses from the categories listed above applied for a City business license, were trained on BMPs related to their business, signed the certification statement, and received their business license. Table 5-2 details the types and numbers of mobile businesses approved during the reporting year.

Table 5-3 Approved Mobile Business Licenses by Category FY2008-2009

BUSINESS TYPE	NO.
Construction Related	16
Carpet Cleaning	12
Boat Cleaning & Maintenance	5
Auto Detailing	21
Pool & Spa Cleaning	12
Handyman/Repairman	40
Powerwashing/Window Cleaning	2
Plumbing	28
Landscaping	35
Fire Protection Systems	10
Painting and Coatings	19
Portable Sanitary Services	1
Pest Control	1
Miscellaneous/Others	6

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 POLLUTION PREVENTION

Pollution prevention comprises procedures and practices that eliminate or reduce the generation of pollutants at their sources. Mobile businesses often deal with a variety of pollutants, both indoors and outdoors, that pose potential environmental threats if transported by way of urban runoff. In mobile business settings, pollution prevention strategies enable the operator to reduce the volume of solid, liquid, and hazardous wastes as well as costs. The City emphasizes the use of the following pollution prevention methods, when appropriate:

- Use smaller quantities of toxic materials or substitute less-toxic materials.
- Minimize the volume of cleaning water to decrease wastewater generation.
- Implement a spill response plan.
- Train employees in pollution prevention practices.

It is important to recognize that pollution prevention methods are stressed through all interactions between the City and the owners, operators, and their employees. Further, pollution prevention methods are commonly used in compliance with other regulatory management standards.

5.3.3.2 BMP REQUIREMENTS

All BMPs required for stationary sources listed in Section 7.2.3.1 of the City's updated JURMP, are also required for mobile businesses where applicable. The most important BMPs used for most mobile businesses are typically Non-Storm Water Discharge Control and Spill Prevention, Control, and Cleanup, as described in fact sheets SC-10 and SC-11 of the CASQA Manual.

In addition, as per the Municipal Permit, the Copermittees developed and implemented a set of minimum core BMPs for the various types of mobile businesses. The following BMPs specifically address the unique characteristics of mobile businesses.

- Storm water training
- Spill containment and cleanup (Spill Kits)
- Proper handling of all wastes (Solid, liquid and hazardous)
- Protecting storm water conveyance systems
- Providing proper handling and containment of materials
- Providing equipment washout areas

These practices represent only the minimum required BMPs. Mobile businesses are instructed to contact local jurisdictions where mobile business activities are to take place to find out about any additional or more stringent requirements.

The Copermittees are in the process of posting information about mobile business minimum BMPs as a resource in the Project Clean Water Toolbox website. Please see Figure 5-1 – Clean Water Toolbox for the home page of the website.

Figure 5-1 Clean Water Toolbox

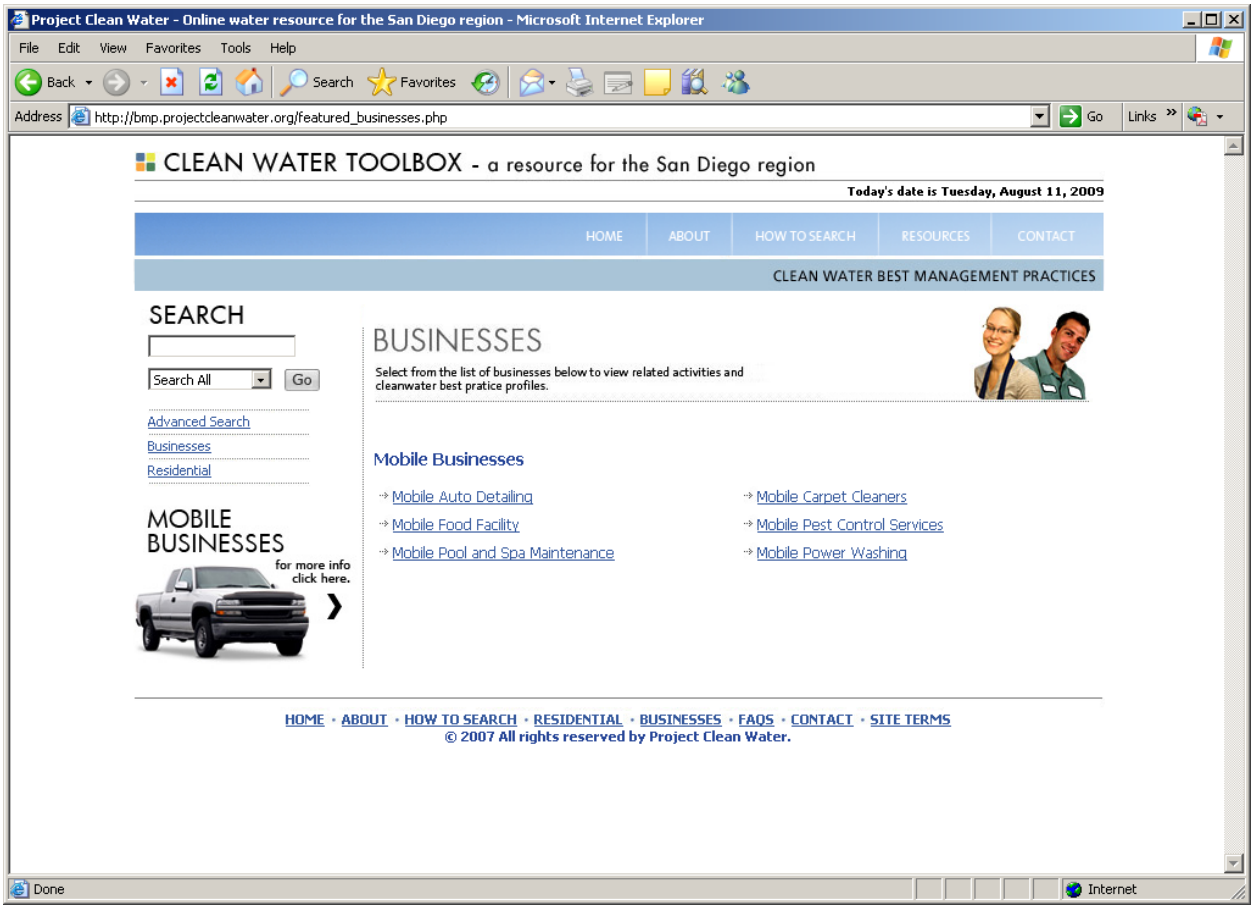

5.3.4 PROGRAM IMPLEMENTATION

The City continues to implement well-developed procedures for mobile businesses through the City's Storm Water Mobile Business License Program. New mobile business license applicants are made aware of applicable requirements and BMPs related to their business prior to the approval and issuance of a business license. Under this program, business license applications that fall under pollutant generating mobile activity types are routed to the Storm Water Management Section for review and approval. Applicants are required to complete a Storm Water Questionnaire regarding their business practices and required BMPs and sign a certification statement that states they are aware of the City' Storm Water regulations and will implement adequate BMPs in their activities. Approved applications and completed Storm Water Questionnaires and Certification Statements are scanned into the City's Mobile Business Database. This process provides a tracking mechanism for Storm Water Management Staff in managing and maintaining priority mobile sources, and identifying repeat violators. The procedures shown below have demonstrated success in requiring new business owners, particularly mobile businesses, to address water quality concerns through the implementation of BMPs.

- The Finance Department receives application from mobile business owner

- The applicant is issued a commercial or construction packet based on business type/description. Each Storm Water Information Packet for Mobile Business contains a transmittal letter, copy of the City's Storm Water Ordinance, and appropriate CASQA BMPs relevant to the type of business activities.
- The applicant is instructed to complete and return the Storm Water Questionnaire and Certification Statement in order to receive approval from the Storm Water Management Section before a business license can be issued.
- The applicant contacts Storm Water Management staff for either a "face-to-face" or phone conversation to review the application and answer any questions prior to approval and issuance of a license.
- In addition to the City's Mobile Business Database, the Copermittees have established a Regional Copermittee Mobile Business Database. The web-based database can make queries on locating a mobile business, finding and viewing violations, and watershed-based reporting. Jurisdictions are able to edit a mobile business that is located or does business in their jurisdiction. See Figure 5-2 – Regional Copermittee Mobile Business Database for a sample web page.

Figure 5-2 Regional Copermittee Mobile Business Database

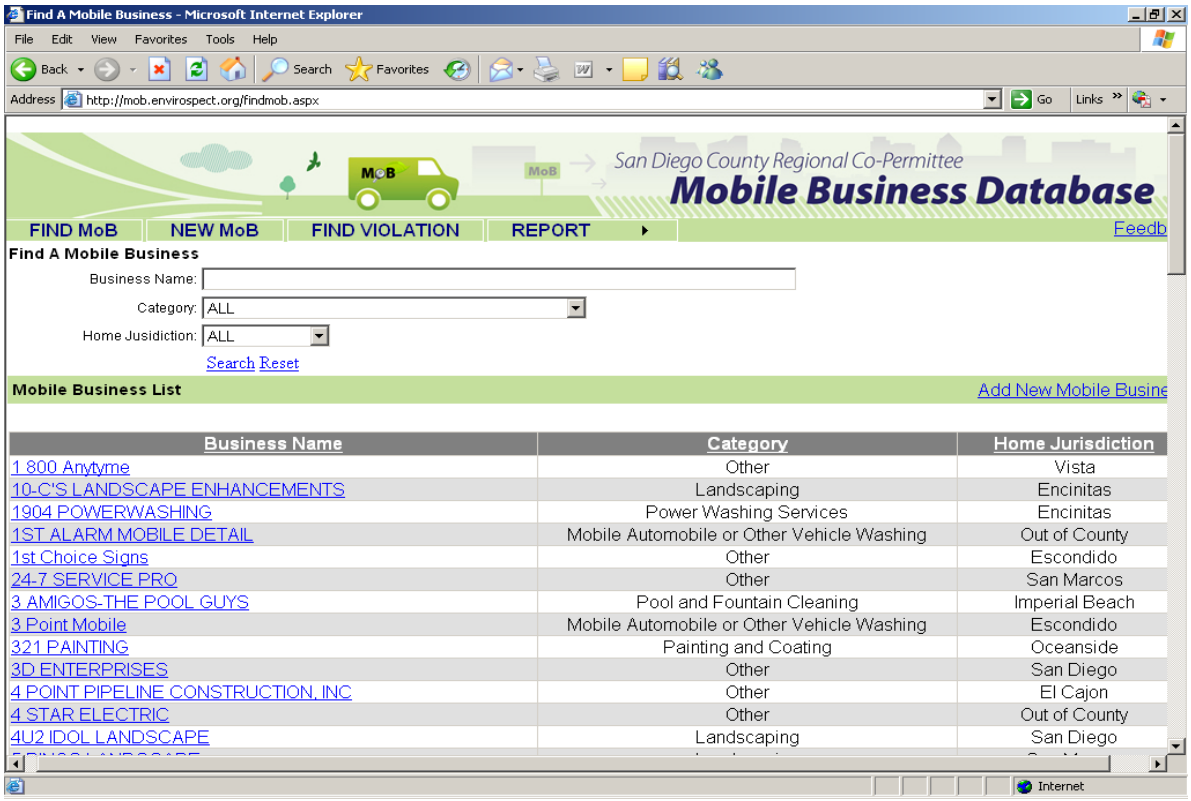

Three types of reports can be generated from this database:

- All mobile businesses home based within a jurisdiction
- All mobile businesses operating within a jurisdiction

- All violations that have occurred within a jurisdiction

5.3.4.1 EDUCATION AND OUTREACH

During the business license application process, the City provides mobile business owners or operators necessary information, educational materials, and outreach related to storm water quality issues specific to their type of business. As stated above, businesses are given the educational materials outlining pollution prevention measures and other BMP requirements related to their perspective activities prior to the license being issued. A sample of the Storm Water Information Packets for Mobile Businesses is included in Appendix D of the City's updated JURMP. The education program is described in detail in Section 10, of the City's updated JURMP.

5.3.4.2 ENFORCEMENT ACTIONS

Most violations associated with mobile businesses are related to illegal discharges and lack of BMP implementation. Upon arrival at the scene, City inspectors require an immediate stop to any illegal discharge and instruct the responsible person to initiate containment and cleanup of the affected areas. If the business lacks materials and equipment required for the deployment of adequate BMPs, the responsible person is informed that they will not be able to resume activities until such time that they procure all necessary materials and equipment. Storm Water Compliance Inspectors find out if the business possesses a business license, and has signed a Certification Statement. Mobile businesses that do not have a City business license will be required to obtain one prior to being allowed to resume business operations. Enforcement action, including warnings, citations, civil penalties, or other enforcement measures are initiated where justified. During the current reporting period, a total of 4 administrative citations were issued to mobile businesses operating in Chula Vista.

5.3.4.2.1 NOTABLE ACTIVITIES

Because of both the City's and Regional education efforts focused on mobile businesses, there has been a significant decrease in enforcement. During the reporting period, the City continued its business license application processing combined with public education, which is considered a notable and very effective method of minimizing pollutant discharges from mobile business activities.

6.0 RESIDENTIAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a. (3)(e). i - Identification of the high threat to water quality residential areas and activities that were focused on.

Permit Section J.3.a.(3)(e).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.

Permit Section J.3.a.(3)(e).iii - A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.

Permit Section J.3.a.(3)(e).iv - Types and amounts of household hazardous waste collected, if applicable.

Permit Section J.3.a.(3)(e).v - A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of evaluation.

Permit Section J.3.a.(3)(e).vi - The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(e).vii - A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.

Permit Section J.3.a.(3)(e).viii - A description of notable activities conducted to manage urban runoff from residential areas and activities.

6.1 INTRODUCTION

The City has developed the residential component of the Jurisdictional Urban Runoff Management Plan (JURMP) based upon a multi-faceted approach including pollution prevention; complaint response and enforcement; and outreach and education. It is the overarching goal of this component to offer cost effective and simple solutions to reducing residential discharges of pollutants into the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP) and to support the long-term improvements of water quality through awareness and behavior modification.

6.2 SOURCE CHARACTERIZATION

It is recognized that the information collected from reported illegal discharges and results of subsequent investigations can be analyzed to provide useful tools in effectively characterizing activities, sources, and areas within the City that contribute more to water quality impairment and that need to be targeted. These criteria may stay constant from year to year, or change each

year. However, knowledge of the pattern that they follow will provide the storm water manager an insight that is necessary to develop or modify an effective program. As in previous reporting years, the City has taken a critical look at the complaints received in 2008-2009 as presented in Figure 6-1. Notably, home improvement related discharges continue to be prevalent in this reporting period. Compared to last year, the percentage of home improvement related discharges decreased by 18%. Within two consecutive years, home improvement related illegal discharges have decreased by 28%. There may be several reasons for this declining pattern, one of which may be attributable to the public outreach programs conducted by City staff that provide invaluable information and education on the impacts of waste disposal to the general public and, therefore, is effective in changing habits. Further, characterizing the sources of pollutants can provide a resource in tailoring public education and outreach programs to the specific needs of the community and improving their effectiveness, while maintaining economic viability. This type of critical look is an important tool in making management decisions on how to approach residential Best Management Practices (BMPs) implementation and pollution prevention in the City. It should be noted that such analysis is not intended to offer determinate conclusions; rather it is presented to provide a general evaluation tool to guide residential strategies and BMP implementation guidance. Further, it is an effective way of evaluating and characterizing sources over time.

Figure 6-1 Percentage of Reported Residential Non-Storm Water Violations by Activity FY 2008-2009

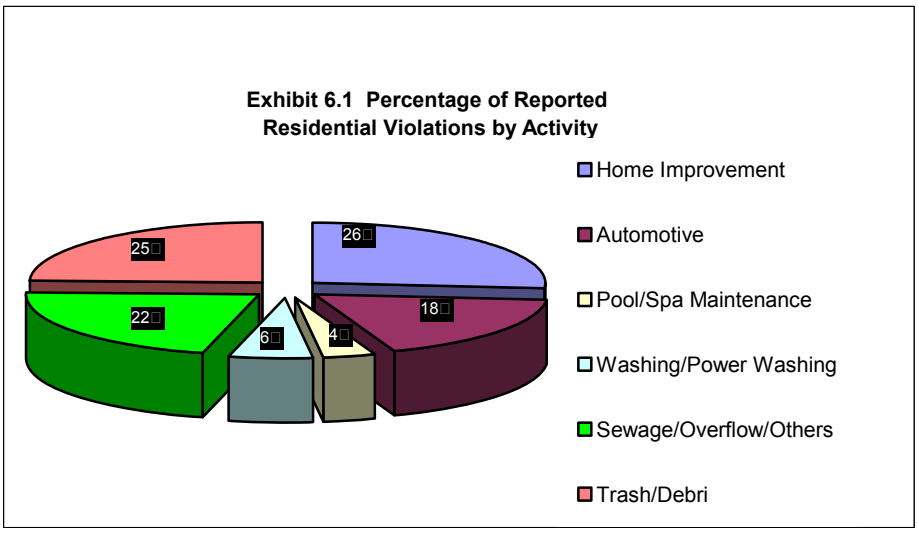

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's JURMP has designated BMPs for a number of high Threat To Water Quality (TTWQ) residential activities including home improvement and maintenance, automotive maintenance, waste management and disposal, and pet waste management. In addition, every year certain residential areas of the City are designated as areas with a high TTWQ. It is important to recognize that the dynamic behind strict enforcement of requirements regulating residential BMP implementation is quite challenging, however, the City has developed a number of mechanisms through which information on BMPs are disseminated to the public and

ultimately enforced through the City's Storm Water Ordinance. Mechanisms such as special community events, school presentations, door hangers, City's environmental website, and community newsletters were utilized within the defined reporting period of this report. Examples of such programs and outlets include:

- Household Hazardous Waste Collection Events
- State-Certified Used-Oil Collection Centers
- Household Collection of Used Cooking Oil
- Christmas Tree Recycling Program
- Residential Complaint Response & Enforcement
- Residential Door Hangers
- City's environmental website at: www.chulavistaca.gov/clean

Notably, all of the mechanisms listed above have been discussed in more detail throughout other sections in this report. It is confirmed that the designated BMPs were required to be implemented primarily through public education, and where necessary by enforcement action.

6.4 PROGRAM IMPLEMENTATION

The residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted, so that pollutants associated with residential activities and areas are minimized to the MEP. The residential program also has an education component, described in the following sections, so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities. The City uses public education and outreach together with enforcement mechanisms, when necessary, to ensure program implementation by residents and compliance with all federal, state, and local laws and regulations.

The City keeps accurate records of all reported residential illegal discharges and non-compliance with BMP requirements. This information can be used in many ways such as identification of pollutants of concern, areas of HTTWQ, increasing/decreasing trends in illegal discharges, and repeat violators. Such analysis is then used to develop new programs or modify existing programs to focus attention on program elements that result in higher effectiveness and quicker results. Map 1 – Violation Location Map was prepared to depict all areas of the City with concentrated illegal discharge reports. The City then targets such areas for more focused public education and surveillance. The one municipal violation shown on Map 1 was not due to municipal activities, but was caused by an illegal discharge by a transient in a City park.

6.4.1 MANAGEMENT AND DISPOSAL OF USED OIL AND HOUSEHOLD HAZARDOUS MATERIAL

The City facilitates the proper management and disposal of used oil, toxic materials, and all other Household Hazardous Waste (HHW). Information pertaining to the household hazardous waste and the used oil and filter programs are distributed to residents annually during special events, presentations, point of purchase locations, mobile displays throughout the city offices and community centers, local realtors/associations, and property management offices. Residents are

educated about the disposal of such waste through the City's educational program, which is described in Section 8.0. The City meets and often exceeds requirements set forth by the California Integrated Waste Management Board (CIWMB). The program has the capacity to receive and process used oil generated by City residents. The amount of used oil collected from certified oil centers increased since the last reporting period as presented in Table 6-1. This increase can be attributed to public education and the City's active role in coordinating with Certified Centers in rebate claims program and participation in filter exchange events. Also, the oil collection increase can be credited to the City's certified centers and to a strong promotion program. The City encouraged residents to take a proactive approach to changing their oil by draining it first and uninstalling their filters and to take them along prior to visiting their local auto supply store. In this way, residents recycle used oil as they purchase their new oil and avoid an extra trip, one that would produce additional green house gases into the atmosphere. This method also prevents storm drain pollution, as unattended oil could intentionally or unintentionally spill and enter storm drain systems. The recent economic downturn can also be another reason for more people performing their own oil changes in an attempt to save money.

The South Bay Used Oil Recycling Program has been evaluated to be one of the most successful programs implemented by the City of Chula Vista, National City, Coronado, and Imperial Beach in improving environmental quality. Residents of these cities can leave oil filters and up to 5 gallons of used oil at the curb on their regular trash and recycling collection day at no additional charge. This used oil will be collected and recycled through the South Bay Used Oil Recycling Program. Residents of Chula Vista also have the option of taking their used oil to various used oil collection facilities in the City for recycling or disposal.

Additionally, the City provides its residents and neighboring municipalities the means to properly dispose of HHW at the facility located at 1800 Maxwell Road, Chula Vista. This facility accepts clean as well as used oil. Residents are limited to 15 gallons or 125 pounds per vehicle. The facility is open every Saturday from the hours of 9 AM to 1 PM. Because of the continuous high volume amount of HHW collected and demand from the public, the City decided to continue to keep the facility open on Wednesdays from 1 PM to 3 PM. The City also offers "door-to-door" collection of HHW for a small fee. Under this program, HHW is collected by appointment from residents who are unable to physically take the waste to the permanent facility or because of scheduling conflicts. Every used oil and HHW application has focused on pollution prevention, watershed protection, source reduction and making it easy for residents to do the right thing when it comes to proper disposal.

Table 6-1 Amount of HHW and Used Oil Collected FY 2008-2009

Household Hazardous Waste	Quantity of waste collected (FY 07-08)	Quantity of waste collected (FY 08-09)
	220,008 lbs	252,494 lbs
Used Oil	Quantity of used oil collected from certified centers (FY 07-08)	Quantity of used oil collected from certified centers (FY 08-09)
	30,779 gallons	49,287 gallons

6.4.2 RESIDENTIAL AREAS AND ACTIVITIES EVALUATION METHOD

A total of 25% of the City's 33,366 acres is designated as either multi- or single-family residential. Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the quality of receiving waters. The City has developed various mechanisms that aim to reduce pollutant runoff from residential areas and activities to the MEP. The following mechanisms are used by the City to determine areas where enforcement actions may be necessary, where appropriate:

- Public reporting hotline
- Analysis of Dry Weather Monitoring Program results
- Observations from City maintenance personnel
- City's environmental website at: www.chulavistaca.gov/clean
- Analysis of data collected and managed in the Department of Public Works data management system GBA (George Butler Associates Management System)

Further information about the City's hotline reporting system and Dry Weather Field Screening and Analytical Monitoring Program are provided in Section 9 of the JURMP. The City evaluates its methods used to encourage improved pollution prevention practices and the implementation of BMPs through the review of the aforementioned mechanisms. By using a Geographic Information System program and the data collected from these mechanisms, every year residential areas of the City that have had higher numbers of violations, and outfall locations that exceeded pollutant standard limits are mapped (see Map 2– HTTWQ Residential Area Map and Map 3 – Violations Locations - Residential). City staff then develops programs to inspect and investigate areas of the City that are considered high TTWQ. City staff investigates violations with enforcement authority within a reasonable timeframe. Violations are documented and depending on the nature and severity of the violation, enforcement may consist of any of the following:

- Verbal Warnings
- Written Warnings
- Orders to Clean and Abate
- Monetary Fines

Details of these procedures are included in Section 2 of the JURMP document.

The general public continues to effectively participate in the program by reporting pollutant generating activities or practices observed within their neighborhoods. Based on the number of calls received from the public during this reporting period, it can be construed that the general public's awareness of water quality issues continue to improve and people are more sensitive about the environmental quality of their surroundings. Information collected from the City's illegal discharge reports database can also characterize those activities and sources that have more implications on water quality as presented in Figure 6-1.

The residential areas and activities evaluation method described above indicates that: 1) residents are becoming more environmentally conscious, 2) residents take an active role in environmental protection by calling the City and reporting illegal discharges, 3) positive trends in urban runoff discharge quality is emerging. These results are encouraging and provide incentive to City staff to maintain their level of efforts and find innovative methods to accelerate the positive trend.

6.4.3 VIOLATIONS AND ENFORCEMENT ACTIONS TAKEN

Enforcement of the residential program has been established and addressed in Chula Vista Municipal Code Chapter 14.20, Storm Water Management and Discharge Control; and Chula Vista Municipal Code Title 1, General Provisions. During this reporting period, Storm Water Compliance Inspectors responded to over 144 complaint calls of which 106 were residential. Twenty-four of the complaint calls resulted in citations. The total amount of fines collected during this reporting period from residential violations was $10,000.00. Compared to last year, the number of residential complaint calls increased by 28%. Conversely, despite this increase, the number of actual violations/citations is down by 47%. This can be attributed to the ongoing public outreach programs conducted by City staff to increase public awareness of City's storm water programs and pollution prevention laws. Follow-up inspections were conducted when necessary to ensure that full compliance is achieved.

During the reporting period, Storm Water Compliance Inspectors responded to each report of residential and other violations; investigated each case; took appropriate actions regarding containment of pollution; educated the violating party on existing laws and regulations; made follow-up visits, where necessary; and, proceeded with enforcement action if voluntary compliance was not achieved.

Data management of past violations helps City staff to identify repeat residential violators. Repeat violators are subject to more severe enforcement action due to the fact that the violation can no longer be considered an act of ignorance of water quality protection laws and regulations, but is a deliberate illegal act. Some of the cases were resolved without resorting to enforcement action. In other cases, enforcement actions were taken regarding residential areas. Details of reported violations are included in Attachment K.

6.4.4 RESIDENTIAL EDUCATION PROGRAM

Education is an important step towards improving receiving water quality, both locally and regionally. Increasing public awareness and encouraging a change in both attitude and behavior of the general public and the regulated community, can directly lead to a reduction or elimination of storm water pollution caused by common daily residential activities. Due to the importance of public education and outreach in storm water programs, the Municipal Permit requires public education at jurisdictional, watershed, and regional levels. The following are brief accounts of the implementation of jurisdictional and regional education programs during the reporting period. Additionally, during the reporting period, the City collaborated with the Copermittees of the San Diego Bay Watershed to implement the Watershed Urban Runoff Management Program

(WURMP) residential education component. Details of such efforts are fully discussed in this year's WURMP Annual Report, which will be submitted to the Regional Board under a different cover.

6.4.4.1 JURISDICTIONAL RESIDENTIAL EDUCATION PROGRAM

The Storm Water Management Section collaborates with the City's Environmental Services Division and the Conservation Department in the implementation of the Jurisdictional Residential Education Program. Pollution prevention and water quality regulation information is disseminated by actively participating in community events throughout the year. Informational booths at fairs, flyers, brochures, website postings, advertisements, and other educational materials are the various approaches used by City staff in disseminating storm water information. Such programs raise pubic awareness about the City's storm water regulations and requirements as well as Best Management Practices methods. Residents become aware of the importance of protecting their watersheds and water resources, and recognize that they have the ability to improve local water quality by making a few simple changes to their regular routines. The Storm Water Management Section continues to provide a comprehensive storm water education program to the residential community, general public, and school children.

Many educational efforts such as direct interaction during reported violation investigations or when taking calls to the City's Storm Water Hotline are conducted on an ongoing basis. Educational materials are also distributed throughout the year. Targeted mailings, focused training sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of complaints, and other similar factors.

The decision to select the types of educational materials to be disseminated throughout selected residential areas was based on an analysis of current and past residential violation reports, as well as results from the Dry Weather Field Screening and Analytical Monitoring program. During this reporting period, City Staff distributed 1,420 educational door hangers with educational pamphlets to various residential locations of the City (see table 6-2).

Table 6-2 Educational Materials Distributed Based on Dry Weather Monitoring Results

RESIDENTIAL AREA	EDUCATIONAL INFORMATION	NUMBER DISTRIBUTED
Jefferson Street	Household Grease Disposal	38
Cabrillo Mobile Lodge	Auto Maintenance and Washing	100
Palomar to Orange 3rd to 4th Avenue	Proper Trash Disposal	75
Connely Circle	Home and Garden Maintenance	107
Rolling Hills Ranch by Agua Vista and Coastal Hills Drive	Home and Garden Maintenance	179
Ridgeback Road and Lima del Rey	Auto Maintenance and Garden Maintenance	130
Torrey Pines Road and La Costa Avenue	Auto Maintenance	114
Stone Gate and Hawthorne Creek Drive	Home and Garden Maintenance	120
La Media Road south of Olympic Parkway	Home and Garden Maintenance	557
	Total:	**1420**

Residential complaint response and enforcement relies heavily upon reporting of illegal activities. As such, an integral component of residential outreach and education is to encourage the reporting of pollutant generating activities or practices observed by citizens within their neighborhoods. To further support the reporting efforts, the City relies heavily upon well-trained municipal staff who effectively operate as the "eyes and ears" of the City.

6.4.4.2 REGIONAL RESIDENTIAL EDUCATION PROGRAM

During this reporting period, the City continued to participate in the Education and Residential Sources (ERS) Workgroup with the San Diego Copermittees. Due to the many tasks that the ERS Workgroup had to undertake, they separated the workgroup into various sub-workgroups to complete their tasks. These sub-workgroups address media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment. A few of the activities that the group completed during the reporting year include: 1) Development of a regional brand that all Copermittees can use to represent their efforts in storm water education; 2) Development of a county-wide telephone survey to assess citizen storm water knowledge; 3) Development of a regional website that all Copermittees can link to, through their own jurisdictional websites; 4) Participation in regional community events such as the Envirofair at the San Diego County Fair, the Independence Jam, and Movies in the Park.

Comprehensive discussions of each of the above program elements will be included in the Regional Urban Runoff Management Program Annual Report, which will be submitted to the Regional Board under separate cover.

6.4.5 MANAGEMENT OF URBAN RUNOFF FROM RESIDENTIAL AREAS AND ACTIVITIES

As detailed throughout this report, the City institutes a variety of highly effective pollution prevention programs to provide the residential community with venues and outlets for disposal of wastes and to provide invaluable information and education on the impacts of improper waste disposal. A consistent message of stewardship through everyday actions and behaviors and the importance of protecting and maintaining the quality of our natural resources are presented through a variety of outlets. It is because pollution prevention is the most economical and effective way of protecting water quality, that this element is given higher priority, and has proven to be a successful measure for the City over time.

During fiscal year 2008-2009, the City identified several High Threat to Water Quality (HTTWQ) residential neighborhoods that required focused educational outreach (see Map 2). These areas have been targeted based on storm water inspection observations, complaint calls to the City's hotline and the dry weather monitoring upstream investigation program. Each of the homes in these neighborhoods received a general storm water pollution prevention brochure or door hanger in addition to a brochure targeting specific residential activities and their associated pollutants. The activities and pollutants that were focused on included: 1) vehicle washing and repair (detergents and vehicle fluids), 2) gardening (green waste, fertilizer, and over-irrigation discharge), 3) household activities (grease, paint, pet waste, and trash and debris). These areas and their corresponding activities and pollutants have been identified in Attachment K. In addition, the City plans to work with Homeowner's Associations to include storm water pollution prevention articles and messages into their community newsletters.

The City also targets HTTWQ residential areas by having cleanup events that provide residents the opportunity to volunteer to help cleanup their neighborhoods. The annual Beautify Chula Vista event focuses on a different neighborhood each year, frequently in underprivileged areas of the City, and provides graffiti cleanup, tree planting, trash pick-up, and storm drain stenciling. By participating in the event, residents are able to make a connection to their community and environment while learning about storm water pollution prevention.

Other than HTTWQ areas, the City has a number of programs in place for throughout the City to promote environmental stewardship and storm water pollution prevention among its residents. Section 8.0 details the education programs that the City has implemented in order to encourage positive behavior changes in residents.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(f).i - Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.

Permit Section J.3.a.(3)(f).ii - Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.

Permit Section J.3.a.(3)(f).iii - Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.

Permit Section J.3.a.(3)(f).iv - A brief description of any other investigations and follow-up activities for illicit discharges and connections.

Permit Section J.3.a.(3)(f).v - The number and brief description of illicit discharges and connections identified.

Permit Section J.3.a.(3)(f).vi - The number of illicit discharges and connections eliminated.

Permit Section J.3.a.(3)(f).vii - Identification and description of all spills to the MS4 and response to the spills.

Permit Section J.3.a.(3)(f).viii - A description of activities implemented to prevent sewage and other spills from entering the MS4.

Permit Section J.3.a.(3)(f).ix - A description of the mechanism whereby notification of sewage spills from private laterals and septic system is received.

Permit Section J.3.a.(3)(f).x - Number of times the hotline was called, as compared to previous reporting period, and a summary of the calls.

Permit Section J.3.a.(3)(f).xi - A description of efforts to publicize and facilitate public reporting of illicit discharges.

Permit Section J.3.a.(3)(f).xii - The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(f).xiii - A description of notable activities conducted to manage illicit discharges and connections.

On September 10, 2008, the Regional Board adopted Addendum No. 2 to the Municipal Permit. The addendum recognized that Dry Weather Field Screening and Analytical Monitoring activities may continue until the end of September each year, and the results would not be available to be included in JURMP Annual Reports, which are also due for submittal on September 30 of each year. Therefore, submittal of Section 7.0 of the JURMP Annual Report (Illicit Discharge Detection and Elimination Component) was allowed to be postponed until December 15 of each year. Pursuant to this new requirement, the City of Chula Vista will submit the entire FY 2008-2009 Illicit Discharge Detection and Elimination Component; copies of the City's 2009 Dry Weather Field Screening and Analytical Monitoring Program Report and Follow-Up Investigations; and related attachments no later than December 15, 2009.

8.0 EDUCATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(g).i - A description of education efforts conducted for each target community.

Permit Section J.3.a.(3)(g).ii - A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.

Permit Section J.3.a.(3)(g).iii - A description of education efforts conducted for municipal departments and personnel.

Permit Section J.3.a.(3)(g).iv - A description of education efforts conducted for the new development and construction communities.

Permit Section J.3.a.(3)(g).v - A description of jurisdictional education efforts conducted for residents, the general public, and school children.

8.1 INTRODUCTION

The City has identified public education and outreach as powerful and effective tools towards increased awareness and behavioral changes that will ultimately lead to reduced pollutant loading from various land uses. The City considers voluntary pollution prevention to be one of the most effective means of achieving long-term reductions in urban runoff pollution. This objective is achievable only through public education and outreach that makes an impression on the community and invokes changes in behavior. As such, the City has approached the development and implementation of educational components by targeting the following audiences:

- Municipal staff
- Residential community, general public and schools
- Industrial and commercial business owners and operators
- Construction and development community
- Underserved communities

The City's Storm Water Management Program is strongly supported by a variety of environmental programs within the organization that provide an exceptional vehicle for disseminating educational materials to the general public regarding storm water pollution prevention. Specifically, the City's Environmental Services Division, under the South Bay Regional Used Oil Recycling, Household Hazardous Waste Collection and Recycling Programs target issues directly connected to storm water pollution prevention. The Chula Vista Nature Center also provides an invaluable venue for public participation and the promotion of conserving, preserving, and protecting San Diego Bay. Through these programs and facilities, activities such as annual school presentations, waste collection events, and public outreach events are conducted in collaboration with the Storm Water Management Section. During such

events, the general public is exposed to water quality concerns, pollution prevention techniques, and Best Management Practices (BMPs) to prevent storm drain pollution. The following sections provide a summary of various activities and venues utilized within the defined reporting period of this report to achieve public education and outreach goals for municipal staff, business owner, construction, new development, general public, and targeted communities.

8.2 STAFF TRAINING ELEMENT

Staff education and training on water quality issues takes several forms as follows:

- General storm water education for all City employees
- Education targeting staff engaged in the review, approval, and inspection of new development and redevelopment projects
- Training for City staff responsible for the maintenance of the City's infrastructure

General storm water protection and pollution prevention education for City staff is provided and reinforced on an ongoing basis. While a number of communication venues are available and have been relied upon in previous reporting years, the most valuable education comes through the implementation of Citywide pollution prevention and waste reduction programs. Recycling programs are in place throughout City facilities, and serve as a constant reminder to staff of the City's commitment to pollution prevention.

During the reporting period, education for staff engaged in the City's permitting process for new development and redevelopment has been achieved through a number of venues. Targeted training activities have been conducted to reinforce water quality priorities in the field of land development and planning, including Standard Urban Stormwater Mitigation Plans (SUSMP) implementation strategies. In addition, development planning and engineering staff is consistently exposed to water quality priorities on a project-by-project basis through project meetings, workshops, and field visits. City Storm Water Management staff also provides training on the City's Development Storm Water Manual. While specific workshops have been organized in previous reporting years covering such topics as laws and regulations, water quality impacts, and applicable BMPs, a focus on internal SUSMP implementation policy, procedure and guidance training has been emphasized during the defined reporting period of this report. Within this framework, those departments and staff involved in the SUSMP review process have been apprised of the need to utilize site design techniques as well as higher efficiency treatment control BMPs for project design in meeting the City's SUSMP requirements. This approach has proven integral in ensuring ongoing SUSMP implementation refinement and in unifying the focus on site design techniques and the use of higher efficiency treatment control BMPs.

Most notably, and consistent with previous reporting years, Storm Water Management staff provides focused training on storm water BMPs to various City departments and divisions on an as needed basis. Such training may be in the form of formal workshops, or on the job training. The following staff has received storm water training on an as-needed basis:

- Wastewater Maintenance
- Storm Drain Maintenance

- Street Maintenance
- Open Space Maintenance
- Traffic Signing and Striping
- Transit
- Vehicle Maintenance
- Land Development
- Public Works Inspections

In addition, presentations by the manufacturers and vendors of structural BMPs were organized and arranged in the City, such as presentations on porous pavement and bioretention technologies.

Table 8-1 details the training, workshops, and seminars that City staff attended and/or gave to other departments during the reporting period. Below is a summary of general concepts that were covered during the trainings.

- Federal, state, and local water quality laws and regulations applicable to municipal areas and activities, development and redevelopment projects, and construction projects;
- Required federal, state, and local permits pertaining to water quality;
- Water quality impacts of urbanization, municipal activities and areas, and construction sites;
- The connection between land use decisions and short-term and long-term water quality impacts;
- Methods for minimizing the impacts on receiving water quality and watershed.

Table 8-1 Municipal Staff Education FY 2008-2009

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
07/29/08	Permeable Pavements	City staff received training on permeable pavements and projects that have used permeable pavements	City of Chula Vista
10/15/08 10/16/08	Storm Water Awareness and BMP Implementation Training	City storm water staff provided Public Works staff with training on job-specific BMPs, watershed protection, and showed the "After the Storm" movie.	City of Chula Vista Storm Water Section
10/16/08 10/17/08	Storm Water Detention Basin Design Training	City engineering staff attended this training on the design of storm water detention basins and implementation techniques	The University of Wisconsin Madison
10/22/08 10/23/08	Industrial Environmental Association Seminar	City storm water staff attended this seminar; in addition the City of Chula Vista received an Environmental Stewardship Award for its CLEAN program	Industrial Environmental Association

Table 8-1 continued on next page

Table 8-1 continued

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
11/14/08	CASQA Quarterly Meeting	City storm water staff attended this one day seminar about Low Impact Development and Hydromodification Management	CA Storm Water Quality Association
12/05/08	Storm Water Management Seminar	City storm water staff attended this training on treatment control BMPs, current regulations, and the new Construction Storm Water Permit	Rain for Rent and Hall & Foreman
02/10/09	Filterra®	City storm water, engineering, development, open space, and public works staff attended this presentation on updates to Filterra® systems	Filterra®
05/21/09	Storm Water Treatment and Detention/ Retention Systems	City public works engineering and operations divisions attended this training on storm water treatment and detention/retention systems	Bay Saver Technologies
05/28/09	Sizing Tool Training	City storm water, public works, and engineering staff attended this training about the HMP process, sizing calculator, and design examples	San Diego Storm Water Copermittees
06/01/09	Model SUSMP Training for Municipal Staff and Plan Checkers	City staff attended this training on the Model SUSMP and it application to development projects	San Diego Storm Water Copermittees
06/8/09 06/09/09 06/10/09	Hydrologic Simulation Program Fortran (HSPF) Training	City staff attended this training on geomorphology and HSPF computer program developed by the USEPA to develop watershed models	American Public Works Association (APWA)

8.3 EDUCATIONAL OUTREACH ELEMENT

8.3.1 RESIDENTS, GENERAL PUBLIC, AND SCHOOL CHILDREN

During this reporting year the CLEAN group, made up of the City's environmental divisions and sections, and various environmentally focused stakeholders, has continued to collaborate on various environmental education programs within the City. The following mission statement established by the CLEAN workgroup has guided these efforts:

"Foster environmental awareness in the City of Chula Vista, through stakeholder and community involvement and participation."

The CLEAN education program was developed around three primary elements: 1) Media 2) Community Interaction and 3) Stakeholder Coordination. It is important to distinguish the focus of this program to promote not only community education, but also community action.

In efforts to maximize the overall effectiveness of this program, and to capitalize on the interrelationship of various Chula Vista environmental programs, the program has been branded under the tag line of "**Your Community. Your Environment. Your Choice."**

The culmination of efforts of various involved City divisions has been embodied in the established CLEAN program, which provides an effective and powerful body to guide the significant efforts envisioned for the program. It is also anticipated that these efforts would be further strengthened through support of community stakeholders including non-profit and business entities.

Based on the CLEAN branding, media elements including pollution notification residential door hangers, stickers, stationery, t-shirts, and a booth display were distributed to the general public within the defined reporting period of this report. In addition, the CLEAN web site has been established with pages dedicated to water quality protection and pollution prevention Citywide. The CLEAN website www.chulavistaca.gov/clean has information about the environmentally focused divisions in the City including Storm Water Management, Environmental Services, Conservation, and the Chula Vista Nature Center. The storm water section has information specific to residents, the development community, mobile businesses, and industrial and commercial businesses. Figure 8-1 shows a general snapshot of the CLEAN homepage.

As the CLEAN program continues to be developed, a wide array of media outlets have been explored, and established branding has been incorporated in them. As indicated above, the larger CLEAN campaign has been designed to promote not only education, but also to encourage and facilitate community actions.

While the City has developed and maintained a variety of new residential education and public outreach opportunities, the City has sustained a number of existing outlets and events. In 2008-2009, the City continued to use seasonal pollution prevention messages on the side of waste management vehicles to encourage the proper disposal of such items as cooking grease and holiday trees. In addition, the City continued to distribute a number of promotional items with pollution prevention messaging for distribution at presentations and community events. Promotional items included CLEAN branding and messaging on such items as pet waste bag containers, calculators, notebooks, and rulers.

Figure 8-1 CLEAN Homepage

The City has continued to maintain six trail displays (Figure 8-2) throughout the City, near walking trails and parks. The trail displays include information on a variety of interrelated environmental issues, and remind the public of the precious resources that exist within the City. The trail display concept provides commercial or industrial entities the opportunity to receive public recognition through the support of such efforts. They demonstrate the connectivity of environmental concerns throughout the City. Trail displays have been installed at the following locations:

- Chula Vista Nature Center
- Mountain Hawk Park
- Hilltop Park
- Salt Creek Park
- Rice Canyon
- Corner of Telegraph Canyon Road and La Media

In addition, the same design has been used in a poster form, one of which is displayed in the John Lippitt Public Works center entryway. Chula Vista staff and customers pass this display on a daily basis. Passing this display reminds staff and citizens that they live in a watershed and of the simple actions they can take to protect their local waterways. Another poster is exhibited at the Chula Vista Public Library in downtown Chula Vista, which is intended to help increase the

number of residents and employees who are exposed to this message on a daily basis. A third poster is used in community events to explain the watershed concept to Chula Vista residents.

Figure 8-2 City of Chula Vista CLEAN Trail Display

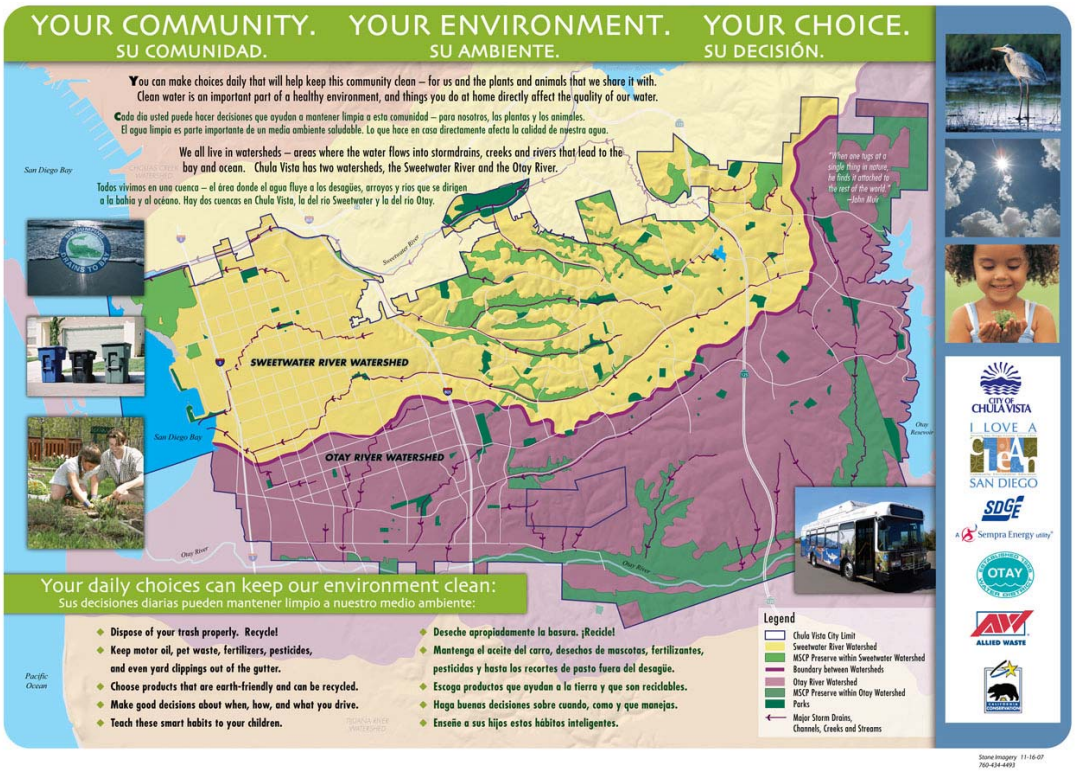

Media Articles

During the reporting period, Storm Water Management Section staff contributed several articles about storm water pollution prevention to various publications aimed at residents living in the City. These included The Star News, My Hometown Otay Ranch/ Eastlake, and Your Guide to CLEAN and Your Guide to Green (which are included in residential trash bills). Altogether, these publications reach more than 100,000 households. The City will continue to contribute articles to, and place pollution prevention advertisements in these publications and explore more venues for reaching citizens through print media.

School Education Efforts

Due to the success of the Salt Creek Critters after-school program in east Chula Vista, the City implemented the South Bay Water Warriors Program in the west side of Chula Vista during October 2008. The after-school program, aimed at 3rd and 4th graders, focused on pollution prevention and watershed protection. Students were involved in a number of interactive and creative activities such as arts and crafts, games, and working with the EnviroScape Model. In order to assess the change in knowledge and awareness as a result of the program, pre- and post-tests were administered to the students. It was found that there was a significant increase in knowledge and awareness in students, showing that the program was effective at educating students about storm water and pollution prevention. The City will continue with school

programs such as this and consider branching out to different age groups, such as high school students.

Community Events

The City of Chula Vista Storm Water Management Section and Environmental Services Division participate in various community events held throughout Chula Vista and San Diego County. Each of these events provides an opportunity to reach citizens throughout the watershed by setting up educational booths and displays.

Community events have been identified as valuable venues providing excellent opportunities to reach large numbers of citizens. During the reporting period, the Storm Water Management and Environmental Services staff participated in and set up booths and displays at all major South Bay community events. City staff provided education and outreach materials regarding a variety of interrelated environmental issues. Distributed information included the effects of storm water pollution on the environment and the need to protect local waterways. By participating in these community events, City storm water staff has the opportunity to generate large numbers of impressions each fiscal year.

Chula Vista Nature Center

The City of Chula Vista Nature Center, located within the 316-acre Sweetwater Marsh National Wildlife Refuge of San Diego Bay, is an internationally recognized zoo/aquarium exhibiting plants and animals native to San Diego Bay and marsh/wetland habitats. The Nature Center provides the San Diego Bay watershed with a truly unique and invaluable outreach and education resource.

The Nature Center's mission is to educate the public about the importance of coastal resource conservation and environmental stewardship. Through visits to the Nature Center and its offsite programs, nearly 72,000 people are exposed to these critical environmental messages each year. To help facilitate educational experiences, the Nature Center offers field trips, guided walks, classes, tours, and special projects. Annually, organized school programs (approximately 15,000 K-6 children, 2,000 7-12 graders, and another 2,000 college students) visit the Nature Center to learn about the watersheds of San Diego Bay and what they can do to protect San Diego Bay.

- The Chula Vista Elementary School District (CVESD) funds a full-time Science Resource Teacher who works closely with the Nature Center staff to provide environmental education programs which are integrated in their science and social studies curricula. This teacher works with over 5,000 CVESD students each year.

- Other schools and youth groups schedule field trips to the Chula Vista Nature Center after the leader participates in a 2-hour Field Trip Orientation Workshop (a teacher training program) held at the Center to gain familiarity with the Nature Center and the Sweetwater Marsh National Wildlife Refuge. During these field trips, Nature Center docents guide students around the Center and grounds, where they learn about the importance of watersheds, wetlands, and other coastal resources.

- In partnership with the U.S. Fish and Wildlife Service, Chevron, and the San Diego Zoo, a backpack program called Sweetwater Safari is offered to teachers who have already brought students to the Nature Center. In this hands-on program, participants take backpacks containing binoculars, mini-microscopes, and other materials to discover plankton, birds, plants and animal tracks on the trails of the Sweetwater Marsh National Wildlife Refuge.

- Students learn to recycle, reuse, and reduce waste. They also learn how to correctly use storm drains and the types of pollutants commonly identified in the storm drain system. The Chula Vista Nature Center and Conservation Department also conduct "Less Toxic Gardening" classes twice a month, dealing specifically with pesticide use, as well as composting classes.

Table 8-2 summarizes the education efforts of the City for residents, school children, and the general public during the reporting year.

Table 8-2 Education Outreach Provided FY 2008-2009

DATE	EVENT	EVENT DESCRIPTION	SITE NAME/ LOCATION
07/05/08	San Diego County Fair	City staff manned a booth and distributed IPM Pest Tip cards and reusable grocery bags as a part of the collaboration with the Regional Storm Water Copermittees	Del Mar Fairgrounds
08/10/08	Lemon Festival	City staff manned a booth and distributed information about pollution prevention	Downtown Chula Vista
08/17/08	Go Green and Clean Family Day	City staff manned a booth and distributed CLEAN brochures and IPM Pest Tip Cards	Otay Ranch Town Center
09/20/08	Children's Festival	Storm water staff had a booth at the festival and provided pollution prevention training to citizens	New Hope Church
09/27/08	BonitaFest	Storm water staff provided pollution prevention training to citizens	Bonita Road Shopping Center
10/04/08	Beautify Chula Vista	Storm water staff provided pollution prevention training to citizens	Southwest Chula Vista
04/18/09	Go Green and Clean Day	Staff provided training on pollution prevention and provided CLEAN brochures and IPM Pest Tip cards	Friendship Park
04/23/06	Earth Day	Storm water staff provided pollution prevention training to students	Eastlake Middle School
04/25/09	Day of the Child	Storm water staff provided pollution prevention training to citizens	Memorial Park

Table 8-2 continued on next page

Table 8-2 continued

05/05/09	Cinco de Mayo	Storm water staff implemented a storm water awareness survey and provided pollution prevention education to citizens	Downtown Chula Vista, 3rd Avenue
06/20/09	Pet Fest and Doggy Dash	Storm water staff implemented a storm water awareness survey and provided pollution prevention education to citizens	Memorial Park
Year-round	Watershed, Recycling, Storm Drain Pollution Education	Organized School Group Visitors to the Chula Vista Nature Center	Chula Vista Nature Center

Regional Outreach

During the reporting year, Copermittees collaborated on a number of education outreach activities and events, including further development of the Regional Residential Storm Water Education Plan that was submitted to the Regional Board in March 2008. One of the most notable activities conducted during FY07-08 and into FY08-09 was Copermittee collaboration and sponsorship of the San Diego County Fair from June 14, 2008 – July 6, 2008. The City of San Diego, along with the San Diego Copermittees, used the Think Blue campaign branding during fair media exposure and for the fair displays. The Copermittees focused their efforts on educating the public about Integrated Pest Management (IPM) practices. The IPM pest tip card packets were distributed, along with other giveaways to promote storm drain pollution prevention. During the fair, the Copermittees administered a survey to over 1,200 fair attendees. Results of the survey will be reported in the next annual report. In addition, the Copermittees manned a booth at the EnviroFair of the San Diego County Fair on June 20, 2009. The Copermittees are planning similar educational outreach events that are focused on region-wide education.

8.3.2 INDUSTRIAL AND COMMERCIAL FACILITY OWNERS AND OPERATORS EDUCATION

Educational activities targeting industrial and commercial sectors have been produced through local and regional efforts. Regional efforts have included dissemination of information via the County's Clean Water Project website targeting businesses and residents. During the reporting period, the City has utilized the following primary mechanisms to provide ongoing education to the industrial and commercial communities within the City:

- Distribution of printed materials
- One-on-one education of business owners and managers during industrial and commercial inspections

As part of the City's industrial and commercial facility inspections, Storm Water Compliance Inspectors meet with facility owners or managers and explain water quality issues relating to the particular type of industrial or commercial facility. BMPs relevant to the activities at each

facility are explained and, corrective actions are proposed to bring the facility into compliance with the City's ordinances and BMP requirements. Consequences of non-compliance are also brought to the attention of the facility owner/manager. In all cases, copies of the Chula Vista Storm Water Management and Discharge Control Ordinance are handed to the facility owner/manager. The City also distributes the regionally developed "Green Wrench Guide" for automotive facilities, and the "What's Cooking?" guide for food related businesses.

8.3.3 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITY

Education of the development community is approached by the City through two primary audiences: 1) education and training of City staff and 2) education of project applicants, developers, contractors, design engineers, and property owners. As with multiple elements reviewed throughout this report, the City of Chula Vista Development Storm Water Manual provides development project proponents with a fundamental guidance tool for development activities in the City. City Storm Water Management Staff actively engages the development and construction communities working within the City in a proactive effort to educate and expose these entities to the regulatory standards established within the jurisdiction.

As in previous reporting years, education and training of the development community within Chula Vista has primarily been addressed on a project-by-project basis. As the larger development community has been exposed to SUSMP requirements throughout the region and through a broader message, Chula Vista accommodates project applicants with project specific direction and analysis. Through the comprehensive review of development and redevelopment projects, and subsequent meetings and discourse, project applicants are apprised of the suitability of proposed project components in compliance with SUSMP requirements and the City's emphasis on the use of Low Impact Development site design features and high efficiency treatment control BMPs.

Educational activities within the development community are provided throughout the development process from design and planning through construction. As such, educational outlets have been provided by the City at each phase, and have been discussed in Section 2.0 of this report. The following is a list of highlights from the referenced section.

- Project specific post-construction requirements education and training
- The City Development Storm Water Manual
- Pre-construction meeting participation by storm water inspection staff
- On-site construction BMP training
- Participation in regional education and training activities

8.3.4 TARGETING UNDERSERVED COMMUNITIES

The City targets underserved communities through three programs:

- CLEAN education campaign
- Beautify Chula Vista Day
- Graffiti Abatement Program

The CLEAN education campaign has developed a variety of media elements that promote the City's environmental programs such as brochures, website, and giveaways in both English and Spanish. The CLEAN website provides an easy and cost-effective method for the City to reach out to citizens and promote storm water pollution prevention awareness. The City also distributes a variety of giveaways with the CLEAN message to reach different age groups such as notebooks, dustpans, pencils, pens, and pet waste bag holders.

During the reporting period, the City, in cooperation with I Love a Clean San Diego, supported the annual Beautify Chula Vista Day that focuses on citizen participation in keeping the City clean. Volunteer groups have the opportunity to participate in storm drain stenciling, cleanup of trash, graffiti removal, and plant trees. Efforts are usually focused in areas of the City where more attention is needed due to trash and graffiti problems. Over 500 volunteers participated in the Beautify Chula Vista Day in October 2008.

The graffiti program allows citizens to report graffiti in their neighborhoods by phone or by email. City staff is also encouraged to call and report any graffiti they see while they are out in the field. There were over 1,900 web requests, emails, and calls to the graffiti hotline (some duplicated) during the reporting period, showing that City staff and residents are taking an active role in promoting a clean City.

9.0 PUBLIC PARTICIPATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(h).i - A description of public participation efforts conducted.

9.1 INTRODUCTION

The City encourages and fosters environmental responsibility by supporting community events, activities, and programs that improve storm water awareness. Changing behaviors of residents and the general public can lead to improved water quality. Cleanup events can promote awareness and can lead to a load reduction of trash to receiving waters. In addition to the educational component presented in Section 8.0, the following sections provide an overview of significant public participation opportunities provided or supported by the City within the defined reporting period.

9.2 PROGRAM IMPLEMENTATION

Beautify Chula Vista Day – October 4, 2008

Beautify Chula Vista Day is an annual event that involves citizen participation and involvement in activities that enhance the environmental setting of the City. Every year, this event attracts several hundred volunteers and provides an opportunity for City staff to have direct interaction with the public to discuss environmental issues and the role that citizens can play in protecting their community's health and living standards. Volunteer citizens are able to participate in activities such as tree planting, graffiti removal, clean-up projects, and storm drain stenciling. During the 2008 event, with participation from over 500 volunteers of all ages, the group was able to remove more than 1,200 pounds of trash from City streets. Volunteers also erased over 1,500 square feet of graffiti, stenciled 88 storm drain inlets, and planted 32 trees.

Otay Valley Regional Park Cleanup

The Otay Valley Regional Park (OVRP) is being developed as a collaborative effort of the cities of Chula Vista and San Diego, City of San Diego Water Works, and the County of San Diego. These jurisdictions have adopted the OVRP Concept Plan, which identifies recreation areas, trails, overlook points, and staging areas for future park use. The park contains several hundred acres of land in the floodway and floodplain areas and undisturbed land along the steep slopes adjacent to the Otay River. Seven fresh water ponds, created from past gravel and sand mining operations, are within the park. OVRP extends from South San Diego Bay to the Lower Otay Reservoir and from Chula Vista's southern boundary to the communities of Otay Mesa and Nestor, encompassing 11.2 square miles of land. The Otay River Valley Cleanup Project (Cleanup Work Project) currently encompasses the Western Otay Valley Regional Park (Nester Creek east to I-805) and Eastern Otay Valley Regional Park – Proctor Valley (North End Upper Otay Lakes Reservoir).

The Cleanup Work Project encompasses efforts by many organizations including the OVRP Citizens Advisory Committee (CAC) coordinating the Donovan Prison Community Crew, California Conservation Corp (CCC) coordinated by the City of San Diego WOVRP Rangers,

County of San Diego Otay Lakes Park Rangers (provided dump truck and driver), Friends of the Park (coordinates Proctor Valley Cleanup), Allied Waste (delivering and picking up of large waste bins), City of San Diego Environmental Services, City of Chula Vista Public Works, and Hanson Aggregates (provided heavy equipment as needed).

Park cleanup activities include debris removal, encouraging transients to leave the area, improving security by preparing for fencing, trimming foliage, planting trees and other vegetation, and placing signage identifying the OVRP. Table 9-1 details the cleanup and abatement work at the OVRP from July 1, 2008 through June 30, 2009.

More information about the Otay Valley Regional Park can be found on their website http://www.ovrp.org/

Table 9-1 Cleanup and Abatement Work at the OVRP FY 2008-2009

DONOVAN COMMUNITY CREW AND CAC MEMBERS	
Labor Hours	4,620
Trips to Otay Land Fill	48
Tons of trash removed	240
Tons of concrete and asphalt removed	2.3
Old homeless camps removed	38
Abandoned drug dens removed	3
Tires removed	62
Shopping carts removed	96
CCC – CONCRETE AND ASPHALT REMOVAL CONTRACT	
Labor Hours	576
Trips to Otay Land Fill	8
Tons of concrete and asphalt removed	178
CITY OF SD OVRP RANGERS – DAILY PARK MAINTENANCE	
Labor Hours	960
Tons of trash removed	3
Tires removed	144
Shopping carts removed	192
PROCTOR VALLEY – UPPER OTAY RESERVOIR AREA	
Volunteer Labor Hours	116
Trips to Otay Land Fill	5
Tons of trash removed	8
Tons of concrete and asphalt removed	10

I Love a Clean San Diego (ILACSD) 7th Annual Creek To Bay Cleanup

The Seventh Annual Creek to Bay Cleanup event occurred on Saturday, April 25, 2009. The City co-sponsored this cleanup event, which was coordinated by ILACSD. The San Diego County Board of Supervisors presented this year's cleanup event through the support of Supervisor Greg Cox and Supervisor Pam Slater-Price. The event was able to bring together over 4,000 volunteers who spent their Saturday morning cleaning and restoring the health of our coastal and inland waterways and open space areas. Total volunteer count for this event was 4,463 participants. Volunteers accumulated over 100,000 pounds of trash and recyclables from 150 miles of coastline and inland areas. Commonly found items included plastic items and cigarette butts.

Cleanup sites within or adjacent to Chula Vista were Del Rey Canyon, in Chula Vista, J Street Marina, and two sites in the Otay Valley Regional Park. At the Chula Vista location, 36 volunteers removed 275 pounds of trash and 25 pounds of recyclables from 5 miles of Chula Vista inland waterways.

Household Hazardous Waste and Used Oil Recycling

The Household Hazardous Waste (HHW) Facility at the City of Chula Vista Public Works Center started operation in January 2002. It serves the Cities of Chula Vista, Imperial Beach, National City, and the County of San Diego. The facility is open every Wednesday and Saturday from 9am to 1pm. This facility also offers small businesses the option to dispose of hazardous waste through its Conditionally Exempt Small Quantity Generator (CESQG) program. The City also offers "door-to-door" collection of HHW. Under this program, HHW is collected by appointment from residents who are unable to physically take the waste to the permanent facility or because of scheduling conflicts. During the reporting period approximately 2,539 households participated in the collection program. The facility is under 24-hour camera surveillance to prevent illegal dumping in and around its surrounding areas. Also, during hours of service operations staff places temporary berms in the proximate storm drain to prevent contamination in the event of a spill. Public participation in this program is expected to minimize the amount of hazardous materials that may otherwise enter storm drain systems.

Public IC/ID Reporting and Graffiti Hotline

The City encourages its citizens to partner with the City in keeping Chula Vista clean. Citizens can do so by reporting any illegal discharges to storm drains, as well as reporting any graffiti in their neighborhoods. The City provides free graffiti removal services on public or private property by using environmentally friendly power washing equipment and BMPs. Storm Water Management Section staff investigates illegal discharges to storm drain systems and provides education and enforcement. In cases of spills or pollutants entering storm drain systems, Public Works maintenance crews provide cleanup as needed. As mentioned in Section 7, during the reporting period the City received 148 calls and reports about illegal discharges to storm drain systems. There were over 1,900 calls, emails, and web requests (some duplicates) to the graffiti program during the reporting year, showing that citizens are participating and taking an active part in keeping the City clean.

CLEAN Business Program

As part of its efforts to involve local businesses in keeping the City clean, the CLEAN Team started the CLEAN Business Program in February 2008. The CLEAN Team is made up of the Storm Water Management Section, Environmental Services Division, and the Department of Conservation. The CLEAN Business Program was designed to help small businesses exercise environmentally safe practices and become sustainable. This goal could only be achieved by learning basic environmentally responsible and sound methods related to their specific daily activities. The program verifies and promotes businesses that demonstrate environmentally friendly practices and conserve resources. As part of the verification process, the business must complete a packet of checklists with minimum BMPs and request an inspection by the CLEAN Team to verify that the selected BMPs are adequate and have been correctly implemented. The CLEAN Team verifies that the BMPs are in place and functioning. Once a business becomes a CLEAN Business, they receive recognition on the City's website and receive a decal sticker to put on their front window to show consumers that they are shopping at a CLEAN Business. Six businesses in the City were verified in the 4 months that the program was in place during the reporting year. Businesses must receive verification on an annual basis in order to maintain their CLEAN Business status.

10.0 FISCAL ANALYSIS COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(j).i - A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.

Permit Section G: Fiscal Analysis

1. *Each Copermittee shall secure the resources necessary to meet all requirement of this Order.*

2. *As part of the Regional Urban Runoff Management Program, the Copermittees shall collectively develop a standardized method and format for annually conducting and reporting fiscal analyses of their urban runoff management programs in their entirety (including jurisdictional, watershed, and regional activities). This standardized method shall:*

    a. *Identify the various categories of expenditures attributable to the urban runoff management programs, including a description of the specific items to be accounted for in each category of expenditures.*
    b. *Identify expenditures that contribute to multiple programs or were in existence prior to implementation of the urban runoff management program.*
    c. *Identify a metric or metrics to be used to report program component and total program expenditures.*

3. *Each Copermittee shall conduct an annual fiscal analysis. Starting January 31, 2010, the annual fiscal analysis shall be conducted consistent with the standardized fiscal analysis method included in the January 31, 2009 Regional Urban Runoff Management Program Annual Report. The annual fiscal analysis shall be conducted and reported on as part of each Copermittee's Jurisdictional Urban Runoff Management Program Annual Reports. For convenience, the fiscal analysis included in the Jurisdictional Urban Runoff Management Program Annual Reports shall address the Copermittee's urban runoff management programs in their entirety, including jurisdictional, watershed, and regional activities. The fiscal analysis shall provide the Copermittee's urban runoff management program budget for the current reporting period. The fiscal analysis shall include a description of the source(s) of the funds that are proposed to be used to meet the necessary expenditures, including legal restrictions on the use of such funds.*

10.1 INTRODUCTION

Pursuant to Order No. R9-2007-0001, the Copermittees are required to develop a standardized method and format for annually conducting and reporting fiscal analysis of their urban runoff management programs. On January 31, 2009, the Copermittees submitted their standardized method and format report to the Regional Board as part of their Regional Urban Runoff Management Program Annual Report submittal. The Municipal Permit further requires the

Copermittees to conduct their annual fiscal analysis consistent with the standardized method starting January 31, 2010. In the meantime, fiscal analysis and reporting will continue as in previous reports. The City has decided to include an analysis of watershed and regional shared expenditures and budgets in the current report in order to bring the fiscal analysis and reporting as close to the requirements of Order No. R9-2007-0001 as possible and in anticipation of the new method and format in a few months.

10.2 FISCAL-YEAR EXPENDITURES AND BUDGETS

The City's storm water program budget and expenditures consist of the following components:

- Staff
- Operating Budget (non-staff)
- Drainage Capital Improvement Projects

City staff from different departments and divisions contributes to the implementation of the storm water program and their contributions are as follow:

- The Storm Water Management Section is responsible for the development and implementation of storm water programs, participation in regional and watershed activities, oversight of storm water related contracts, data management, and report writing. It is also responsible for inspecting municipal, industrial, commercial, building construction, and residential land uses and responding to reported violations of the City's Storm Water Management and Discharge Control Ordinance. The Storm Water Management Section conducts enforcement action on violators of the City's Storm Water Ordinance.

- The Environmental Planning Division of the Development Services Department reviews development projects for environmental impacts to sensitive areas and requires developers to provide mitigation plans before permits are issued.

- The Land Development Division of the Development Services Department is responsible for ensuring that grading and construction permit applications are in compliance with grading and other engineering ordinances, and that temporary and permanent Best Management Practices are incorporated in the grading plans, tentative maps, and final maps. Land Development Division staff reviews and approves Water Quality Technical Reports submitted to the City as part of development application packages for Priority Development Projects.

- The City Attorney's Office reviews all documents (such as manuals, forms, ordinances, etc.) developed by the Storm water Management Section, to ensure that they are in compliance with current laws and regulations. The City Attorney's Office also assists the Storm water Management Section in the enforcement of City's Municipal Code.

- The Environmental Services Section of the Public Works Department manages the Used Oil Recycling Program, the Household Hazardous Waste Collection Program, the Solid Waste Collection Program, and the Solid Waste Reduction and Recycling Program.

- The Geographic Information Systems (GIS) Section of the Information Technology Services Department is responsible for the GIS systems, and provides support to the Storm Water Management Section by mapping the City's storm water conveyance systems and data management.

- The Operations Division of the Public Works Department is responsible for the maintenance of the City's storm drainage systems and the sanitary sewer collection systems; oversight of the street sweeping program, and oversight of the open space maintenance program. The Wastewater Management Section, in addition to its scheduled maintenance activities, is responsible for emergency responses to sanitary sewer overflows (SSO) and pollutant spills on public streets.

- The Inspection Services Section of the Public Works Department is responsible for the inspection of grading, improvement, and Capital Improvement Projects for compliance with the City's ordinances, including the Storm Water Management and Discharge Control Ordinance.

- Other City departments, divisions, and sections provide support to the Storm Water Management Section in the fulfillment of the City's JURMP and are instrumental in the implementation of that program. Although those departments, divisions, and sections provide important contributions, a detailed accounting of their roles is beyond the scope of this report.

The City's NPDES jurisdictional expenditures for FY 2008-2009 and budgeted figures for FY 2009-2010 for drainage related Capital Improvement Projects that are intended to minimize infiltration from sanitary sewer systems, discharge of pollutants into storm drainage systems, and improve water quality are listed in Tables 10-1 and 10-2:

Table 10-1 Chula Vista NPDES Expenditures for FY 2008-2009

DESCRIPTION	EXPENDITURES (APPROXIMATE)
A. Staff	
1. Public Works Maintenance	$672,443
2. Storm Water Management	$538,582
Sub-Total	**$1,211,025**
B. Operating Expenditures (Non-Staff)	
1. NPDES Permit Fee	$27,178
2. Consultant Fees for Dry Weather Field Screening Program	$53,474
3. Regional Shared Costs (Wet Weather Monitoring, Regional Public Education, CASQA Membership Fees, Etc.)	$160,283
4. City's Share of the Sweetwater River Maintenance Costs	$3,731
5. Stream Flow Metering	$6,084
6. Jurisdictional Public Education	$3,972
7. Street Sweeping Program	$244,824
8. Maintenance Materials and Equipment	$158,055
Sub-Total	**$657,601**
C. C.I.P. Appropriations	
1. Telegraph Canyon Channel Design DR118	$48,559
2. Emerson Street Drainage Improvements DR133	$69,598
3. CMP Storm Drain Pipe Rehab Program Phase 4 DR169	$15,567
4. Fifth Ave. Drainage Improvements DR173	$174
5. Telegraph Canyon Drainage Study 3/L, DR167	$12,320
6. North Broadway Reconstruction STM354	$140,330
Sub-Total	**$286,548**
Grand Total	**$2,155,174**

Table 10-2 Chula Vista Budget for FY 2009-2010

DESCRIPTION	BUDGET
A. Staff	
1. Public Works Maintenance	$668,177
2. Storm Water Management	$563,072
Sub-Total	**$1,231,249**
B. Operating Budget (Non-Staff)	
1. NPDES Permit Fee	$24,500
2. Consultant Fees for Dry Weather Field Screening Program	$66,000
3. Regional Shared Costs (Wet Weather Monitoring, Regional Public Education, CASQA Membership, Etc.)	$173,500
4. Watershed Shared Costs	$35,000
5. Stream Flow Metering	$3,000
6. Jurisdictional Public Education	$70,000
7. Street Sweeping Program	$264,709
8. Maintenance Materials and Equipment	$300,031
9. Miscellaneous	$18,755
Sub-Total	**$955,495**
C. C.I.P. Appropriations	
1. Telegraph Canyon Channel Improvements DR182	$950,000*
2. Telegraph Canyon Drainage Study DR183	$300,000*
3. Emergency Storm Drain Replacement DR180	$1,200,000
4. North Broadway Reconstruction STM354	$2,368,000
Sub-Total	**$4,818,000**
Grand Total	**$7,004,744**

* Items marked thus are proposed projects and their schedule may change.

10.3 REGIONAL EXPENDITURES AND BUDGETS

The City participates in regional activities with other Copermittees of San Diego County. Each year, the Regional Management Committee approves a budget for the following Fiscal Year and each Copermittee pays their share of the regional costs to the Principal Copermittee. The Principal Copermittee, on behalf of all the Copermittees, manages an account and pays regional expenses from that account. During the current reporting period, the following costs were included in the regional expenditures and budgets:

- Regional Program Planning Subcommittee and Workgroups costs
- Regional Monitoring Program
- Regional Outreach Program
- Hydromodification Management Plan
- CASQA Fees

City's share of the above expenditures was $160,283 for FY 2007-2008, as indicated by Item B.2.b in Table 10-1 above. It should be noted that the above cost does not include staff time that was spent to attend regional management committee or workgroup meetings or participate in the development and implementation of regional programs and reports.

The approved regional budget for FY 2009-2010 is $3,075,832. City of Chula Vista's share of the total budget is estimated to be $169,170. The regional budget for FY 2009-2010 includes the following costs:

- Working Body Support
- Regional Monitoring Program
- Regional Outreach
- Mobile Business Program
- Recommended Land Use Planning Approaches
- CASQA Fees

10.4 WATERSHED EXPENDITURES AND BUDGETS

During FY 2008-2009, watershed activities in the San Diego Bay Watershed were developed at the watershed level, while each Copermittee implemented their respective watershed activities individually within their jurisdictions and, therefore, no cost sharing occurred at the watershed level. Based on the Municipal Permit requirements for watershed activities, the City has allocated $25,000 for watershed activities and $10,000 for watershed education in its FY 2009-2010 budget. These budgeted items are included as Item B.4 in Table 10-2 above.

10.5 FUNDING

An analysis of the City's storm water program revenues and expenditures indicates that the program captures its revenues from General Funds, Capital Improvement Project funds, and Storm Drain Fees assessed on property owners or tenants of single family homes, multi-family buildings, and commercial/industrial facilities through the Sweetwater Authority, Otay Water District, and Cal-American Water District. Additional revenues are received from Building Permit Fees and from developer deposits; however, these vary significantly from year to year, depending on the level of development activities within the City. Building Permit Fees, which are used to cover staff time for inspections of construction sites during the building phase of the projects has been reduced drastically as a result of the recent slow down of development projects within the City.

11.0 PROGRAM EFFECTIVENESS ASSESSMENT COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

a. *As part of its Jurisdictional Urban Runoff Management Program, each Copermittee shall annually assess the effectiveness of its Jurisdictional Urban Runoff Management Program implementation. At a minimum, the annual effectiveness assessment shall:*

   (1) *Specifically assess the effectiveness of each of the following:*

      (a) *Each significant jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented;*
      (b) *Implementation of each major component of the Jurisdictional Urban Runoff Management Program (Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education); and*
      (c) *Implementation of the Jurisdictional Urban Runoff Management Program as a whole.*

   (2) *Identify and utilize measurable targeted outcomes, assessment measures, and assessment methods for each of the items listed in section I.1.a.(1) above.*

   (3) *Utilize outcome levels 1-6*[9] *to assess the effectiveness of each of the items listed in section I.1.a.(1) above, where applicable and feasible.*

   (4) *Utilize monitoring data and analysis from the Receiving Waters Monitoring Program to assess the effectiveness each of the items listed in section I.1.a.(1) above, where applicable and feasible.*

   (5) *Utilize Implementation Assessment, Water Quality Assessment, and Integrated Assessment, where applicable and feasible* [10].

b. *Based on the results of the effectiveness assessment, each Copermittee shall annually review its jurisdictional activities or BMPs to identify modifications and improvements needed to maximize Jurisdictional Urban Runoff Management Program effectiveness, as necessary to achieve compliance with section A of this Order. The Copermittees shall develop and implement a plan and schedule to address the identified modifications and improvements. Jurisdictional activities/BMPs that are ineffective or less effective than other comparable jurisdictional activities/BMPs shall be replaced or improved upon by implementation of more effective jurisdictional activities/BMPs. Where monitoring data exhibits persistent water quality problems that are caused or contributed to by MS4 discharges, jurisdictional activities or BMPs applicable to the water quality problems shall be modified and improved to correct the water quality problems.*

c. *As part of its Jurisdictional Urban Runoff Management Program Annual Reports, each Copermittee shall report on its Jurisdictional Urban Runoff Management Program*

effectiveness assessment as implemented under each of the requirements of sections I.1.a and I.1.b above.

11.1 INTRODUCTION

It is the culmination of efforts described throughout this report that supports the application of effectiveness assessment protocols introduced through the document entitled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" as submitted by the Copermittees to the Regional Board on October 16, 2003. The intent of this section is to offer a more critical analysis of programmatic activities to compliment the accounting of the City's accomplishments as presented in other sections of this report.

The 2004-2005 reporting year was highlighted by the Copermittees' regional development of the Baseline Long-Term Effectiveness Assessment (LTEA) conducted as part of the Report of Waste Discharge (ROWD). This comprehensive assessment incorporated water quality and source data collected by all Copermittees and provided a critical first look at regional water quality presented per watershed.

In 2008-2009, the City continued to build upon knowledge gained through the implementation of long-term effectiveness strategies on a jurisdictional level through annual reporting, as well as the application of strategies on a regional level through the development of the LTEA. As such, the City has endeavored in 2008-2009 to augment programs and to gather applicable data to support a more holistic look at storm water program effectiveness.

Notably, in 2008-2009, the City continued to gather and evaluate data supporting education and outreach efforts. This effort was prompted through the continued implementation of the Chula Vista CLEAN program in order to provide a baseline by which to gauge the overall successes of the program. In addition, this effort is highly supportive of the annual appraisal of the larger Chula Vista Storm Water Management Program, and provides a fitting nexus to the annual long-term effectiveness assessments presented in this report.

Further, in 2008-2009 the City continued its source inventory validation process. This effort has been detailed in Sections 2.0 through 6.0 of this report, and focused on source types identified in the LTEA as potential contributors to watershed pollutants of concern. These activities have also provided the City with valuable data for incorporation into long-term effectiveness evaluation on a jurisdictional level.

11.2 METHODOLOGY

Based on the understanding that long-term effectiveness assessment is an ongoing and iterative process, the regional framework has been developed around three primary elements, each supported by additional key components.

- **Program Planning**
  - Source Characterization
  - BMP Selection

- Targeted Outcomes
- Assessment Measures and Indicators

- **Program Implementation**

- **Effectiveness Assessment**
  - Water Quality Assessment
  - Program Assessment
  - Integrated Assessment

Detailed discussions of each of the above topics is included in the document "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003, and developed by the Copermittees. A brief summary is included below to describe the City's approach to program effectiveness assessment. The following discussion has been organized as to address each of the targeted outcome levels under program planning and evaluates the City's effectiveness toward JURMP implementation in 2008-2009. It is important to recognize that the whole of this document represents an account of program implementation in 2008-2009, and presents a variety of tracked information supporting overall effectiveness assessment. The following discussion will highlight the development and implementation of targeted efforts, and evaluates the overall effectiveness of the City's Storm Water Management Program.

11.2.1 PROGRAM PLANNING

As discussed in the regional framework document, program planning should include the establishment of meaningful implementation targets and the development of clear measures for assessing them. The four key and interrelated components to effective program planning; 1) source characterization, 2) BMP selection, 3) establishment of targeted outcomes, and 4) establishment of assessment measures and indicators, must be completed prior to program implementation. The primary mechanism in support of program planning was achieved through the development of the Chula Vista JURMP in 2001 as updated in 2008. This document has provided the initial framework to program planning as implementation has continued, and it is through the annual reporting process and associated programmatic updates detailed through this process that this concept continues to be perpetuated. The City has sought to integrate these key elements in order to more clearly direct programmatic activities and to support the vital interrelationship of each element.

Source Characterization

Source characterization largely consists of the development and maintenance of site, source, and facility inventories associated with construction, municipal, industrial, commercial, and residential locations. Through the development of the JURMP, and as required by the previous Municipal Permit sections F.2.d, F.3.a.(2), F.3.b.(2), F.3.c.(2), and F.3.d.(2), baseline source inventories were initially complied in 2001, and have been updated annually ever since. The City employs a number of strategies and mechanisms in tracking source inventories for all of the sectors mentioned above. Such methodologies have been outlined within specific sections of this report, and include GIS systems and comprehensive business license tracking. In recognizing

that source characterization needs to be increasingly matched to identified water quality concerns and program results, the City seeks to more fully utilize extensive GIS capabilities to associate sources with pollutants as they are viewed spatially. Construction, municipal, industrial, commercial, and residential source inventory updates have been provided in attachments to this report.

As introduced above, and detailed in Sections 2.0 through 6.0 of this report, the City has continued to take further steps to fortify source characterization in 2008-2009. Comprehensive field verification of source inventories is conducted once every five years with the renewal of the Municipal Permit, while inventory updates based on existing information in the City's databases and observations during regular inspections are conducted annually. In 2006-2007 and continued in 2007-2008, the City conducted an extensive source verification utilizing the City's Permits Plus program combined with field verification to identify all active industrial and commercial facilities Citywide. The Municipal inventory is updated continuously as new facilities are constructed or acquired. While this effort served a number of functions within the larger storm water program, significant value was gained of the data compiled through the resources described above. Ultimately, this data is utilized in overall program assessments, and to guide programmatic development to support long-term effectiveness.

BMP Selection

In terms of BMP selection, activity based BMP selection was conducted as part of the development of the City's JURMP. As required by the previous Municipal Permit's Sections D.2.c.(1), D.3.a.(2)(b), D.3.b.(2)(b), and D.3.c.(2)(a), minimum BMPs were established for each of the major program elements. These minimum BMPs were visited during the City's JURMP Update in 2008 and changes were made as needed. The City actively evaluates activity specific BMPs primarily through its well-developed municipal, industrial/commercial, and construction inspection programs.

Targeted Outcomes

The establishment of measurable targeted outcomes is necessary both for incremental program improvement, and as a basis for the future establishment of relationships between implementation and desired water quality outcomes. It is important to recognize that quantifiable outcomes be established prior to program implementation to accurately provide measurability and accountability. Included within the regional long-term assessment framework, is the concept of a hierarchy of targeted outcomes. Six "levels" have been established, representing a gradation from activity-based to water quality based outcomes.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

The above concept can be shown as a pyramid with the base at Level 1 and the apex at Level 6 as shown in Figure 11-1. Each layer of outcome from the bottom to the top represents a gradation from activity-based to water quality-based outcome.

Figure 11-1 Hierarchy of Targeted Outcomes

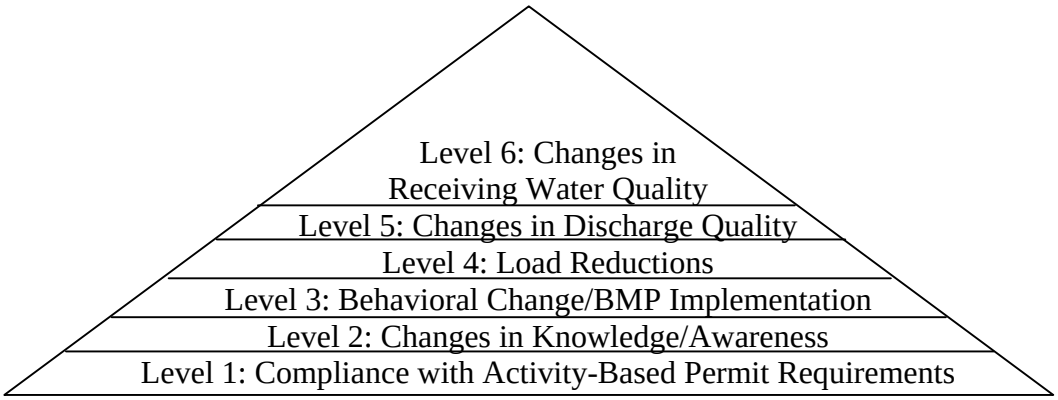

Assessment Measures and Indicators

In order to establish measurability and accountability in the implementation of various water quality program elements, assessment measures for the targeted outcomes need to be developed. Assessment measures may be direct or indirect. Direct measures are those that characterize the quality of water in runoff discharges or within receiving waters. In San Diego County, direct measurements are primarily addressed through regional Receiving Waters Monitoring Program and Dry Weather Field Screening and Analytical Monitoring Program. Indirect measures take into account the degree of activity or program element implementation. Indirect measures are easier and less expensive than direct measures and do not require long-range data.

11.2.2 PROGRAM IMPLEMENTATION

A comprehensive accounting of the City's implementation of its Jurisdictional Urban Runoff Management Program (JURMP) during the current reporting period (2008-2009) has been provided in other sections of this report. In this section, it will suffice to say that sufficient data tracking and data management has complemented the implementation of each component of the JURMP to enable an accurate program effectiveness assessment.

11.2.3 EFFECTIVENESS ASSESSMENT

Program effectiveness assessment comprises of three components, i.e., 1) Water Quality Assessment, 2) Program Assessment, and 3) Integrated Assessment. Integrated Assessment is a long-term process by which Copermittees will attempt to establish causal relationships between program implementation activities and changes in water quality. These relationships may be established either hypothetically or empirically. Integrated Assessment is necessarily the most difficult and uncertain step in the overall assessment process. Over time, quantitative "cause and effect" relationships will increasingly be sought. However, because of the sheer number and variety of BMPs and control programs being concurrently implemented at any given time, establishing such relationships will be a considerable challenge. This report, therefore, focuses

on Water Quality Assessment and Program Assessment, and will leave the Integrated Assessment to be addressed at the watershed and regional level.

11.2.3.1 WATER QUALITY ASSESSMENT

Water Quality Assessment may be used to evaluate the water quality of discharges to receiving waters or within the receiving waters themselves. Water Quality Assessment is conducted by taking samples from discharges or the water body within receiving waters and conducting field screening or laboratory analysis. Sampling and testing may be conducted during storm events or from dry weather flows during non-rainy seasons. It is necessary to have benchmarks or other standards such as the Water Quality Control Plan for the San Diego Basin (Basin Plan) to compare the results and make judgment about water quality. It is also beneficial to track the quality of water for long periods of time to enable the Copermittees to assess long-term trends and draw conclusions as to the effectiveness of their storm water programs.

11.2.3.2 PROGRAM ASSESSMENT

As mentioned above, during the planning phase of the program, it is of utmost importance to set measurable goals for each of the program components and track progress through data collection and management. Such data will later be used to evaluate the success of failure of the implementation of the program and derive conclusions regarding each component's effectiveness.

In this report, Program Assessment has been divided into components similar to those established in the Municipal Permit, i.e.:

- Land Use Planning
- Construction
- Municipal
- Industrial and Commercial
- Residential
- Education and Public Participation

11.2.3.3 INTEGRATED ASSESSMENT

Integrated Assessment establishes a relationship between program implementation activities and changes to water quality. This information is critical for the Copermittees to evaluate cost effectiveness of their program elements. However, Integrated Assessment is often the most difficult element of the overall program effectiveness assessment.

11.3 WATER QUALITY ASSESSMENT RESULTS

This section of the report utilizes the methodology described above to arrive at conclusions regarding the effectiveness of the City's storm water management program during the current reporting period. This Section focuses on the three components of the effectiveness assessment described in Section 11.2, i.e.:

- Water Quality Assessment (Levels 5 and 6 of the Hierarchy of Targeted Outcomes in the pyramid of Figure 11-1)
- Program Assessment (Levels 1 to 4 of the pyramid)
- Integrated Assessment

11.3.1 WATER QUALITY ASSESSMENT

Changes in discharge quality and receiving waters quality (Levels 5 and 6 of the Targeted Outcomes) are the ultimate targeted outcomes in describing direct successes of storm water program activities. While such levels have proven challenging in assessing individual JURMP effectiveness, levels 5 and 6 have been thoroughly processed through the ROWD and LTEA development on a regional basis in 2004-2005, and will be addressed for the current Municipal Permit cycle in the next ROWD. As such, the City relies to a great extent on the regionally prepared annual Receiving Water Monitoring Reports, ROWD, and LTEA for a detailed look at levels 5 and 6 assessments. Additionally, the City uses results of its jurisdictional Dry Weather Field Screening and Analytical Monitoring program to track long-term trends in the quality of discharges at outfall locations throughout the City. This process has been discussed in more detail below.

Although lines between programmatic efforts and water quality improvements will require long-term data gathering and analysis, the City annually conducts an evaluation of data gathered through the Dry Weather Field Screening and Analytical Monitoring Program. It is important to recognize that the Dry Weather Monitoring Program is primarily used to identify illicit discharges and connections to the MS4 and receiving waters, and not as a surface water characterization mechanism. Alternatively, the dry weather data sets have proven useful in characterizing the quality of non-storm water discharges to surface waters during dry seasons. As such, the City utilizes dry weather data sets to evaluate trends and to steer program priorities on a local level. Dry weather data analysis has been reasoned as a means to further target programmatic components, and to establish target pollutants and to identify geographic areas of concern.

The Chart on Page 11-8, Average Percentage of Observations Exceeding Action Levels in Dry Weather Samples, was developed in an effort to track the overall average of samples taken per year in exceedance of numeric action levels as established under the Dry Weather Monitoring Program. This effort is intended to initiate a long-term analysis through tracking detectable improvements or impairments in the quality of non-storm water discharges throughout Chula Vista. This analysis is valuable in evaluating not only the number of exceedances from one year to the next, but also in examining those pollutants that are commonly identified.

In support of the overall average exceedances, the City utilizes constituent-specific trends analysis to develop a clear picture of water quality trends in non-storm water discharges. This analysis evaluates the percentage of annual samples, in relation to a specific constituent, in exceedance of established action levels. A summary of this analysis with the latest available data (2008) is presented below:

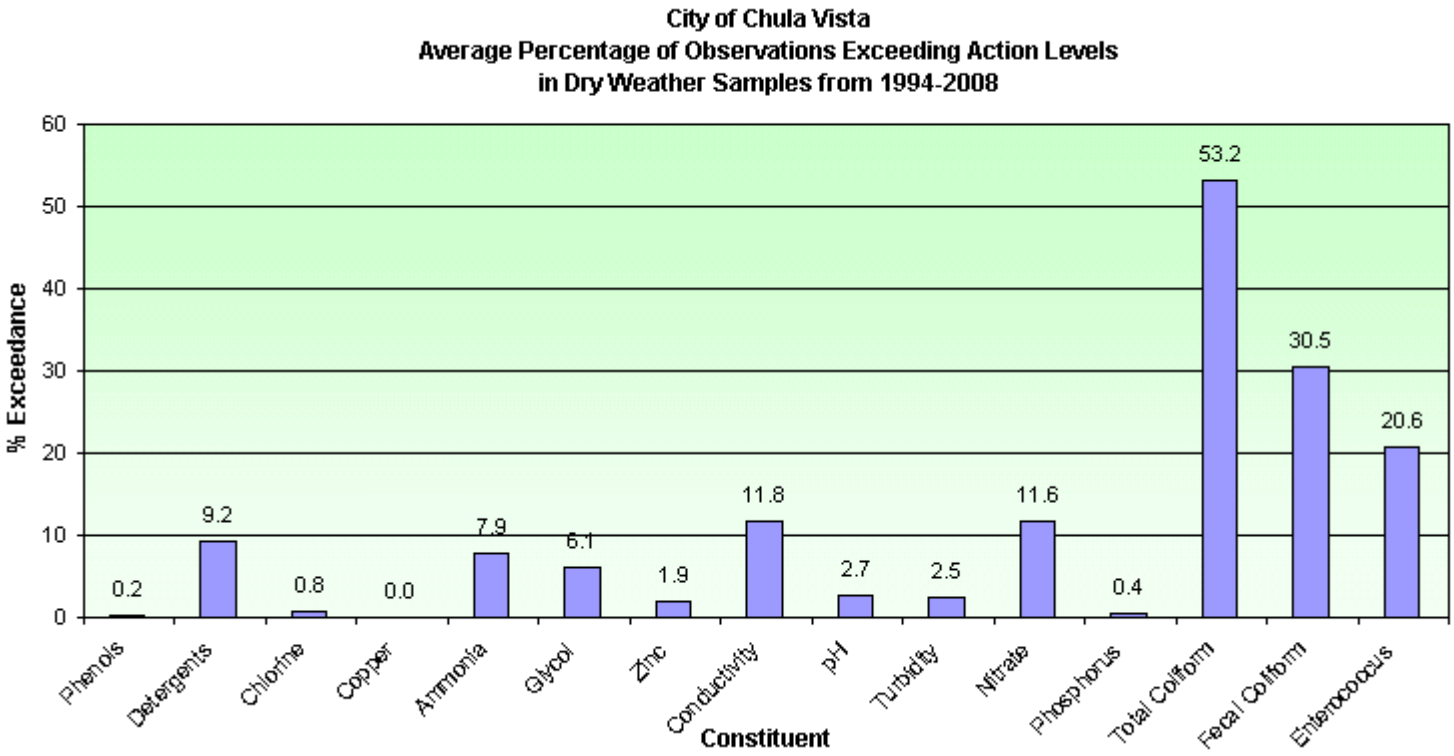
City of Chula Vista
Average Percentage of Observations Exceeding Action Levels
in Dry Weather Samples from 1994-2008
% Exceedance
60
50
40
30
20
10
0
0.2
9.2
0.8
0.0
7.9
6.1
1.9
11.8
2.7
2.5
11.6
0.4
53.2
30.5
20.6
Phenols
Detergents
Chlorine
Copper
Ammonia
Glycol
Zinc
Conductivity
pH
Turbidity
Nitrate
Phosphorus
Total Coliform
Fecal Coliform
Enterococcus
Constituent

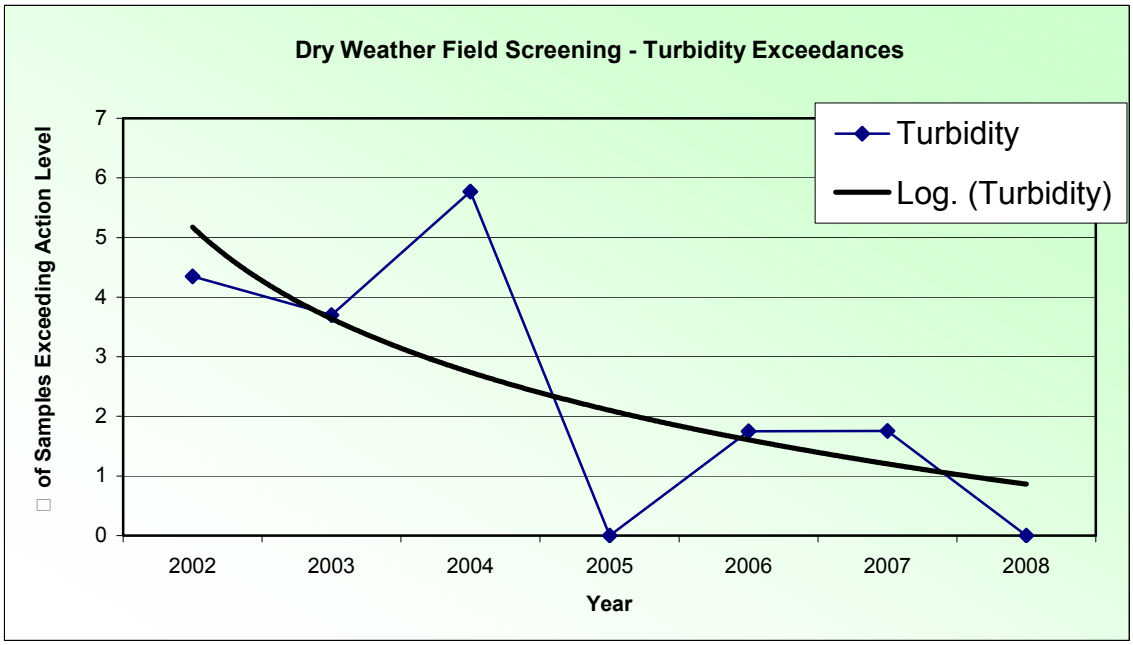
Dry Weather Field Screening - Turbidity Exceedances
of Samples Exceeding Action Level
7
6
5
4
3
2
1
0
2002
2003
2004
2005
2006
2007
2008
Year
Turbidity
Log. (Turbidity)

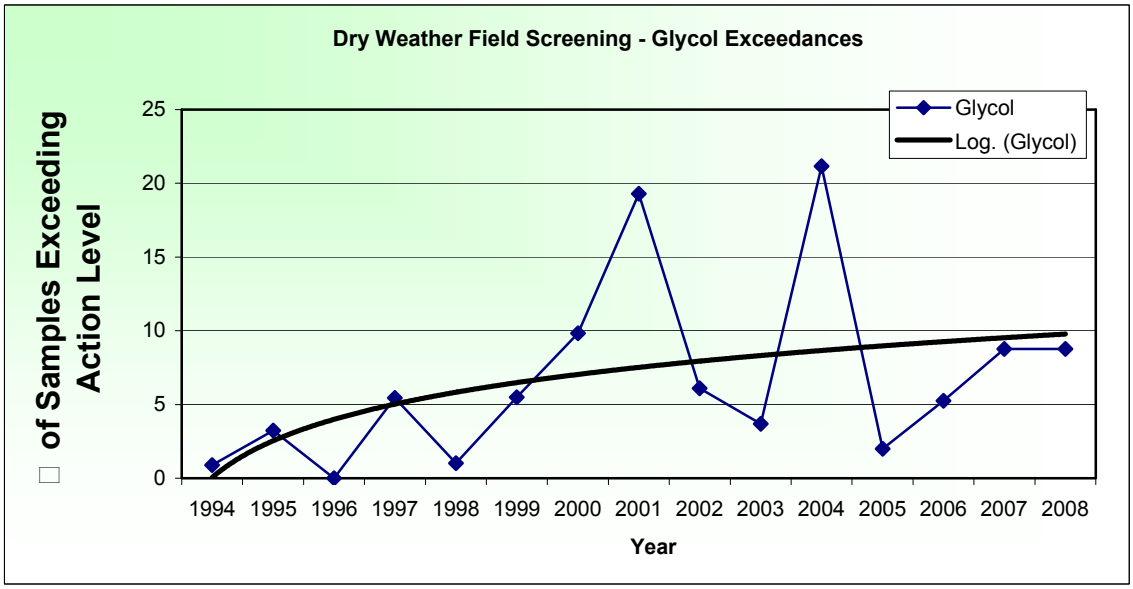
Dry Weather Field Screening - Glycol Exceedances
of Samples Exceeding Action Level
25
20
15
10
5
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
Year
Glycol
Log. (Glycol)

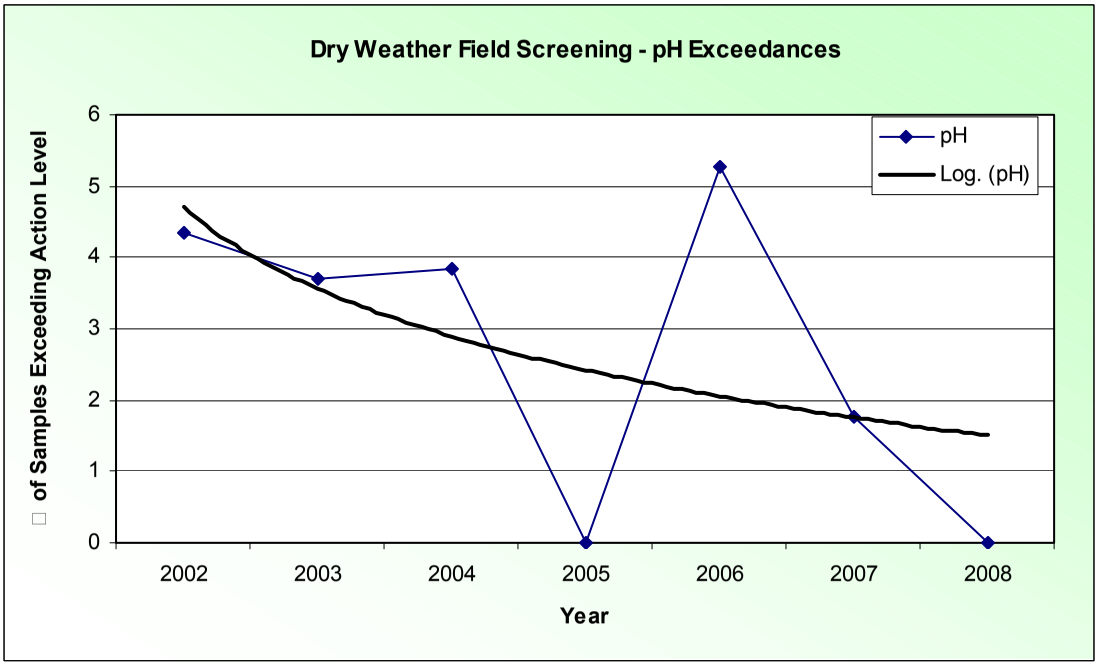
Dry Weather Field Screening - pH Exceedances
of Samples Exceeding Action Level
6
5
4
3
2
1
0
2002
2003
2004
2005
2006
2007
2008
Year
pH
Log. (pH)

4012

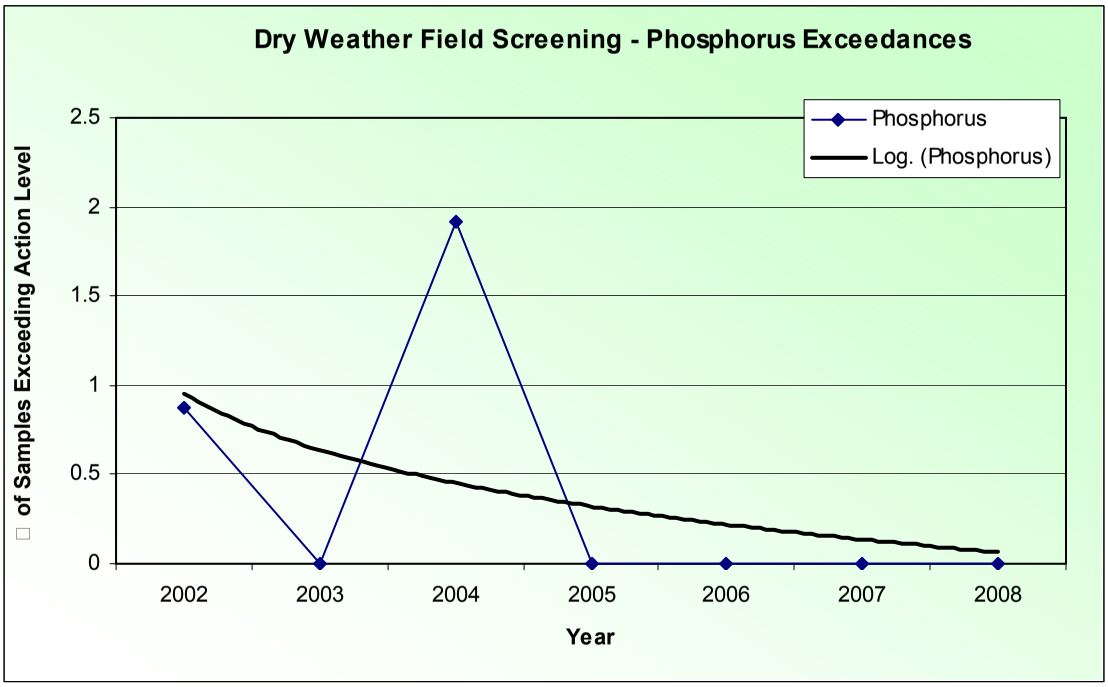
Dry Weather Field Screening - Phosphorus Exceedances
of Samples Exceeding Action Level
2.5
2
1.5
1
0.5
0
2002
2003
2004
2005
2006
2007
2008
Year
Phosphorus
Log. (Phosphorus)

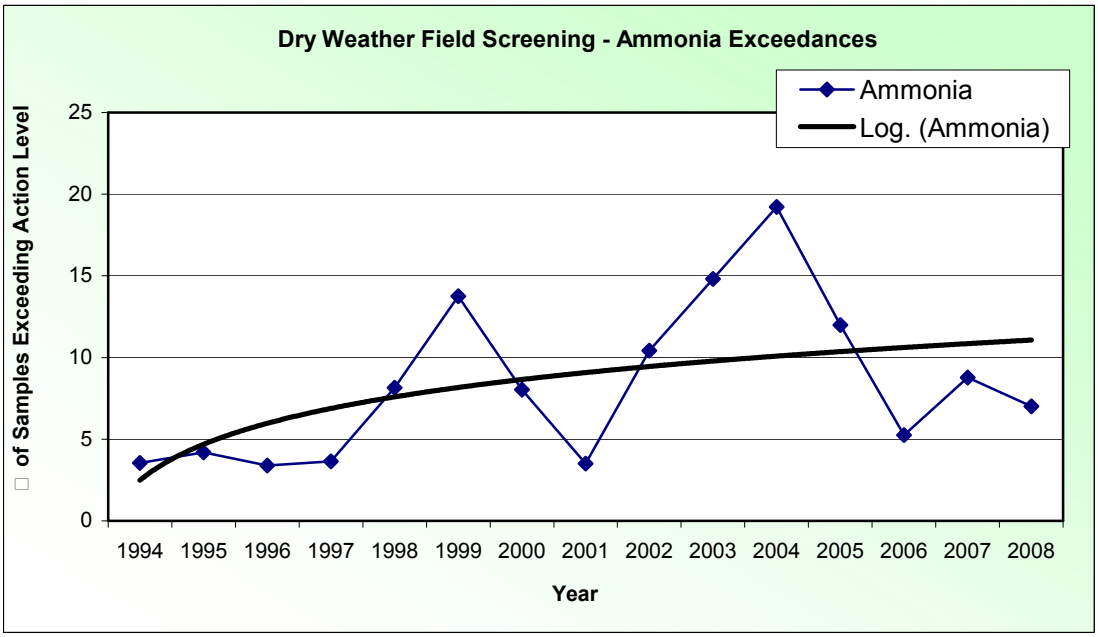
Dry Weather Field Screening - Ammonia Exceedances
Ammonia
Log. (Ammonia)
of Samples Exceeding Action Level
25
20
15
10
5
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
Year

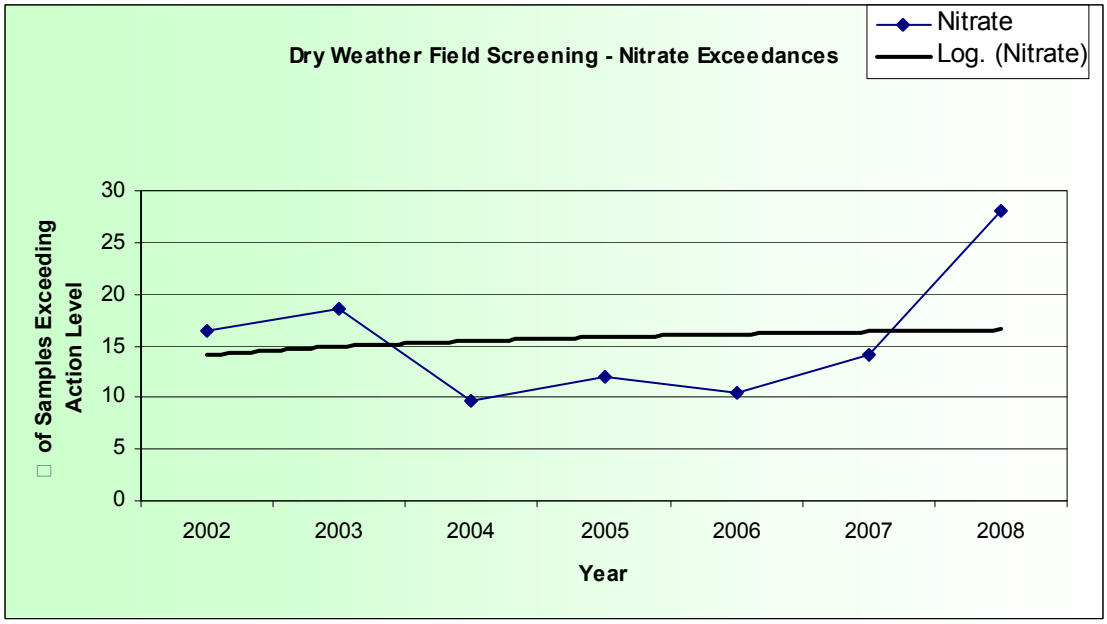
Dry Weather Field Screening - Nitrate Exceedances
Nitrate
Log. (Nitrate)
of Samples Exceeding Action Level
30
25
20
15
10
5
0
2002
2003
2004
2005
2006
2007
2008
Year

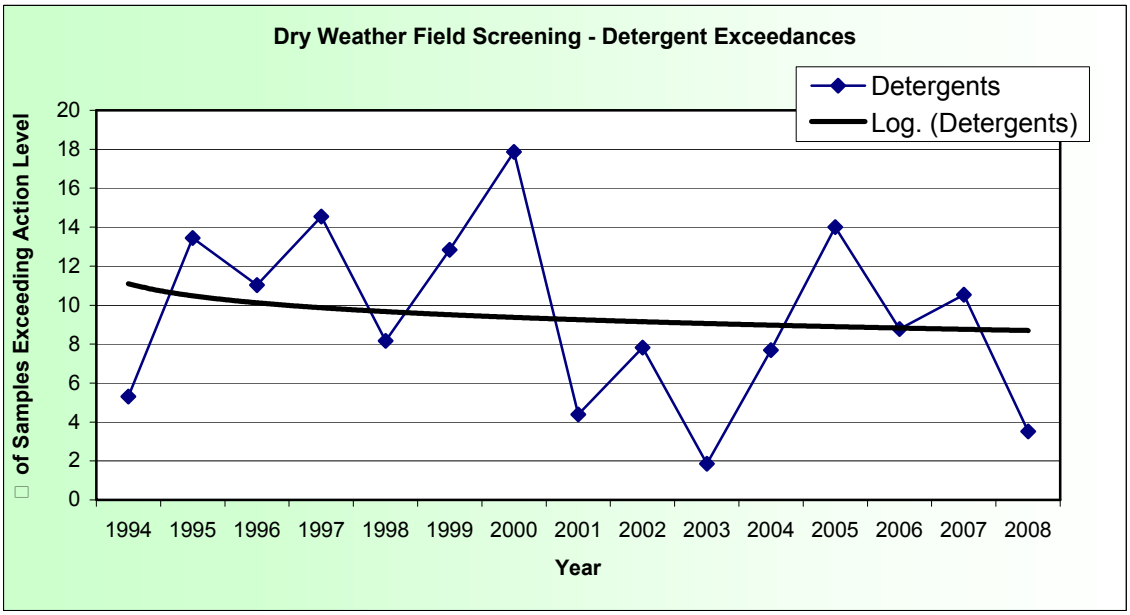
Dry Weather Field Screening - Detergent Exceedances
Detergents
Log. (Detergents)
of Samples Exceeding Action Level
0
2
4
6
8
10
12
14
16
18
20
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
Year

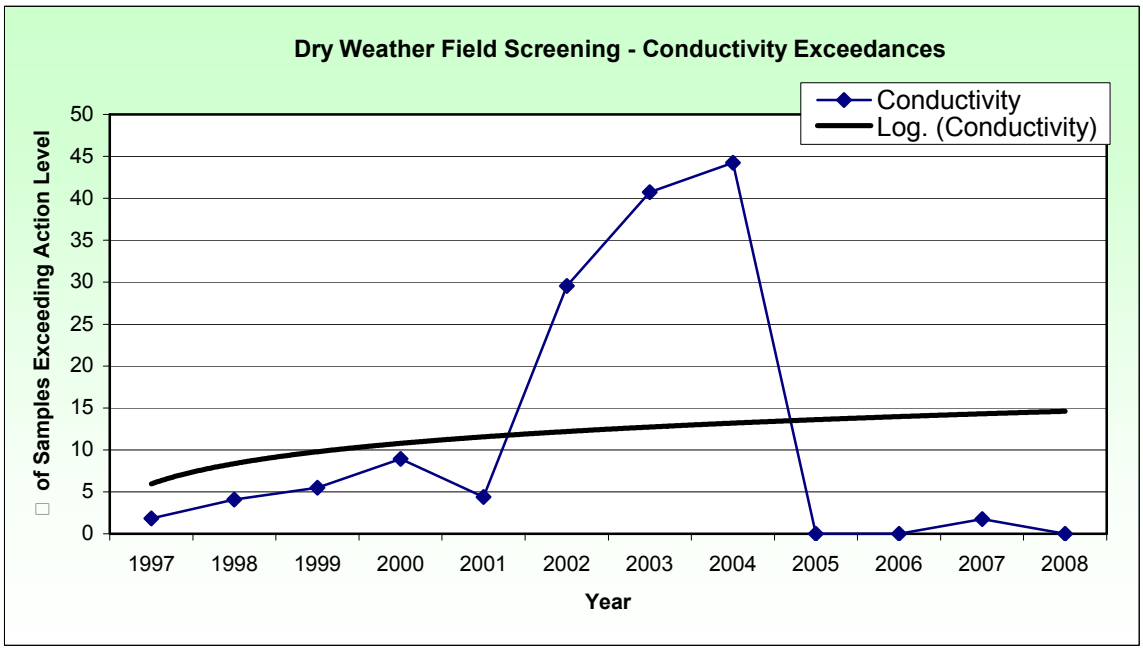
Dry Weather Field Screening - Conductivity Exceedances
Conductivity
Log. (Conductivity)
of Samples Exceeding Action Level
0
5
10
15
20
25
30
35
40
45
50
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
Year

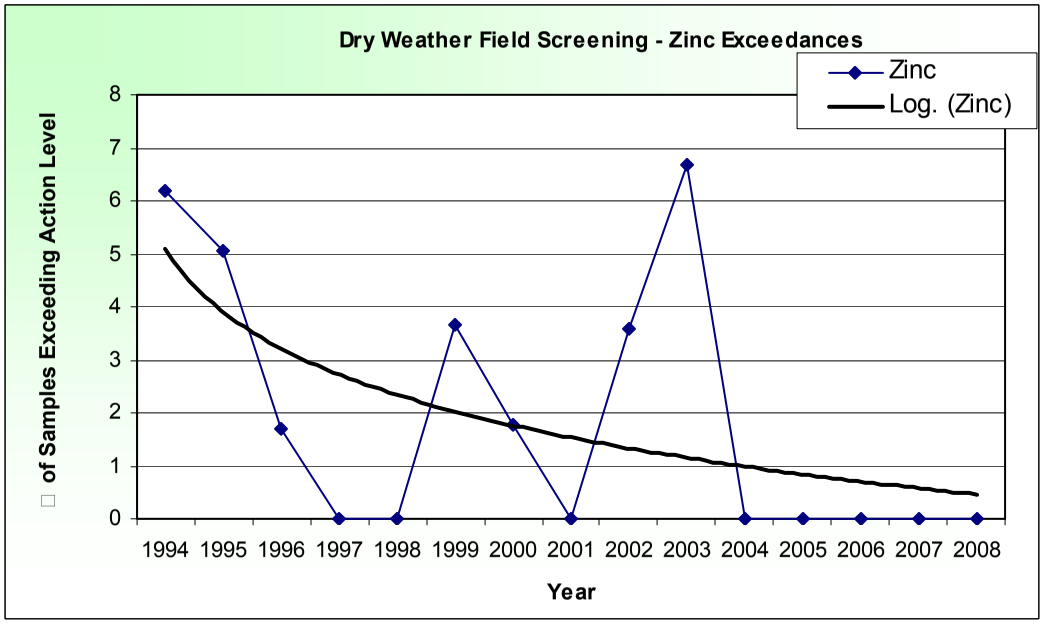
Dry Weather Field Screening - Zinc Exceedances
Zinc
Log. (Zinc)
of Samples Exceeding Action Level
0
1
2
3
4
5
6
7
8
1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008
Year

4015

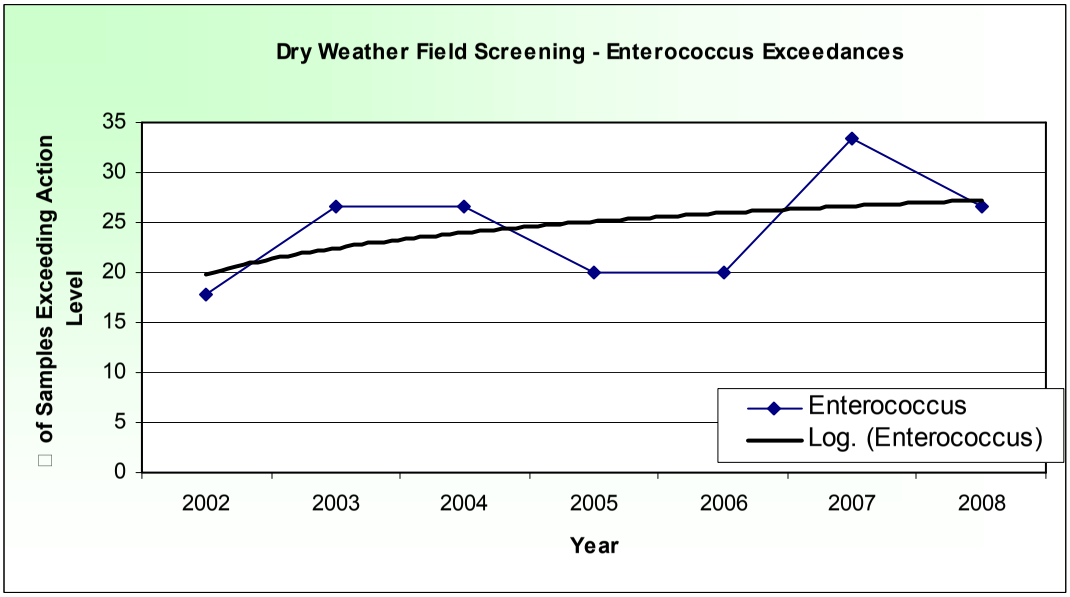
Dry Weather Field Screening - Enterococcus Exceedances
Enterococcus
Log. (Enterococcus)
of Samples Exceeding Action Level
0
5
10
15
20
25
30
35
2002 2003 2004 2005 2006 2007 2008
Year

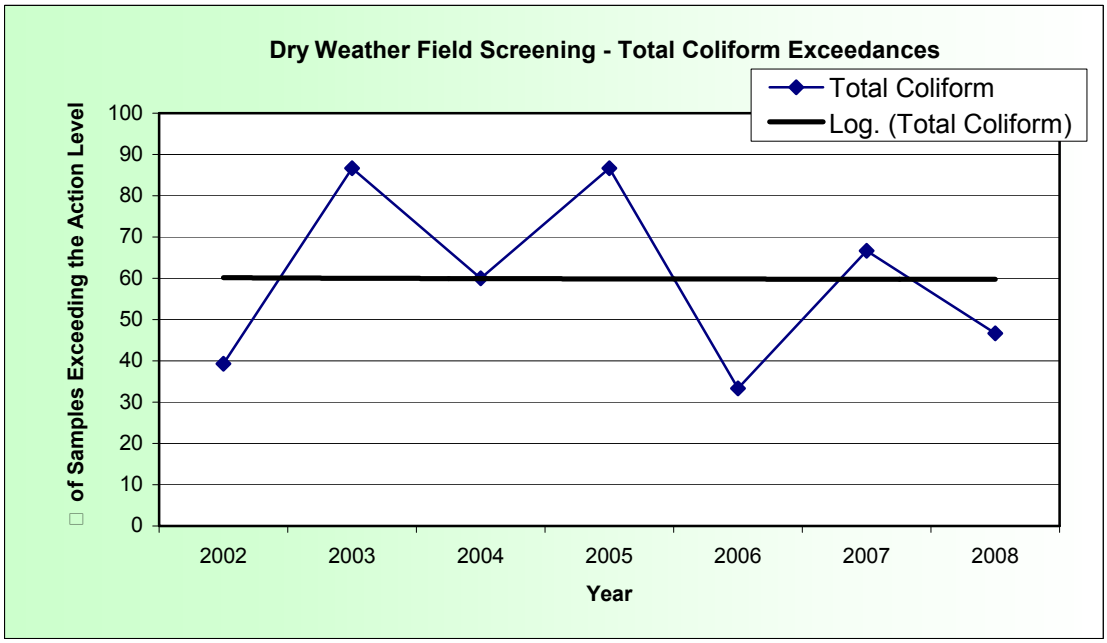
Dry Weather Field Screening - Total Coliform Exceedances
Total Coliform
Log. (Total Coliform)
of Samples Exceeding the Action Level
100
90
80
70
60
50
40
30
20
10
0
2002
2003
2004
2005
2006
2007
2008
Year

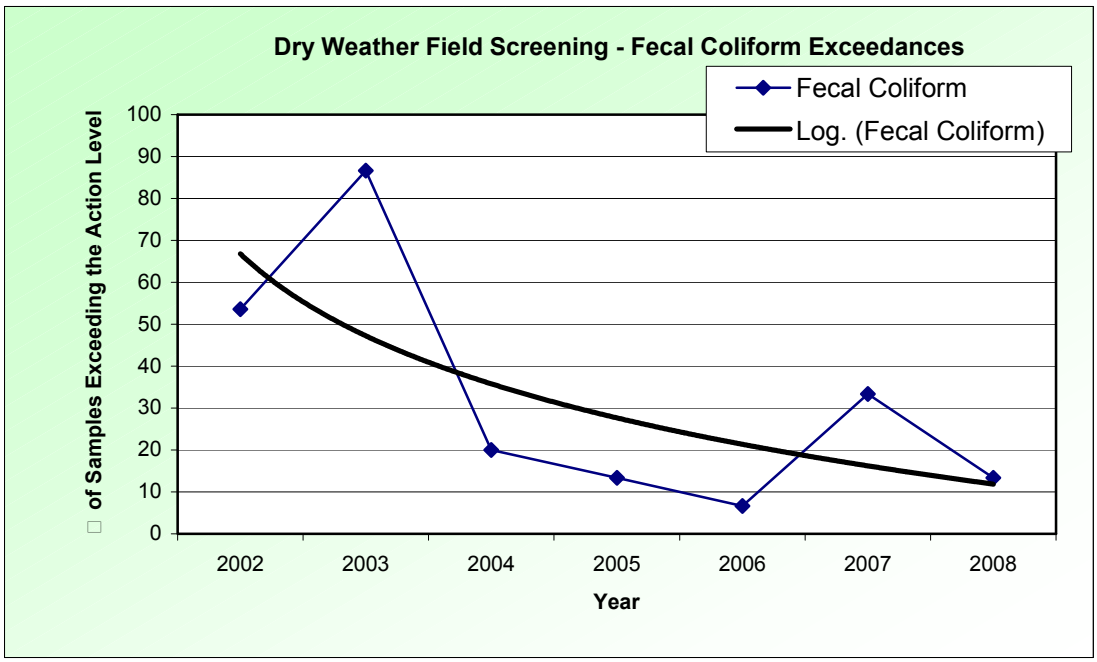
Dry Weather Field Screening - Fecal Coliform Exceedances
Fecal Coliform
Log. (Fecal Coliform)
of Samples Exceeding the Action Level
100
90
80
70
60
50
40
30
20
10
0
2002
2003
2004
2005
2006
2007
2008
Year

11.3.2 PROGRAM ASSESSMENT

In 2008-2009, the City continued to evaluate programmatic activities and implementation protocols in support of effectiveness assessment strategies. It is important to note that through the ROWD and LTEA process, the City has developed a sound understanding of the association of programmatic activities as they relate to long-term effectiveness assessment. As such, the City has sought to formalize various programmatic elements and implementation protocols in support of the effectiveness assessment framework as demonstrated in the preceding paragraphs. The targeted outcome levels discussed below are not intended to be rigid in their function, and while programmatic activities in 2008-2009 more wholly support these levels, continued advancements and data gathering efforts by the City in the future will support a more complete jurisdictional effectiveness assessment.

Additionally, during this reporting period the City started a survey to measure public awareness and behavior on various storm water quality related issues. Based on the City's population of about 220,000, 95% confidence level, and 4 confidence intervals, it was determined that at least 599 people had to be surveyed to obtain results that were statistically significant. In this reporting period, Storm Management Section staff used the opportunity provided by various public events to establish contact with citizens and conduct the survey. To date, 500 surveys have been gathered and the remaining 99 will be completed within the next few community events. Final analysis of the survey will be reported in FY 2009-2010 annual report. Further, a comparison will also be made with the results of a similar survey that was administered in FY 2005-2006 as a baseline survey. This comparison will provide the City with a clear understanding of the effectiveness of the general JURMP implementation effectiveness.

The discussion under Program Assessment focuses on Levels 1 to 4 of the Targeted Outcomes on a jurisdictional basis as follows:

11.3.2.1 COMPLIANCE WITH ACTIVITY-BASED PERMIT REQUIREMENTS (LEVEL 1)

This level of effectiveness assessment is intended to provide a quantitative assessment that reflects the regional long-term effectiveness assessment framework through targeted outcomes for the City, based on various components of the Municipal Permit (Tables 11-1 – 11-8). In the following sections, these tables and their associated analysis are divided into Municipal Permit components of land use planning, construction, municipal, industrial and commercial, residential, education and public participation, reflecting various elements of the Municipal Permit, and provide a summary accounting of activities conducted by the City in 2008-2009.

11.3.2.1.1 LAND USE PLANNING

In view of the recent update to the City's local Standard Urban Storm Water Mitigation Plan (SUSMP), and inclusion of Low Impact Development (LID) and Interim Hydromodification Criteria (IHC), the City has sought to continually refine the SUSMP implementation process as deemed necessary to ensure overall effectiveness and compliance with Municipal Permit provisions. During the current reporting period, as a result of the slowdown in development activities, the number of projects submitted to the City for approval and permit issuance were

drastically reduced. As can be seen from Table 11-1, only 10 SUSMP projects received approval. However, the number of total cumulative projects that have implemented post-construction BMPs and, therefore, the number of projects inspected for post-construction BMPs remained high.

During this reporting period, BMP maintenance verification letters were sent to responsible parties reminding them of their responsibility to clean, inspect, and maintain storm water treatment facilities (see Table 11-2). Responsible parties were required to provide the City with proof of maintenance of the treatment facilities within a set time frame. This process provided yet another mechanism to ensure proper maintenance and effectiveness of all treatment facilities and compliance with Municipal permit provisions.

The following tables summarize City of Chula Vista's activities during the reporting period towards ensuring compliance with SUSMP implementation and the review, inspection, and maintenance verification of SUSMP projects.

Table 11-1 FY 2008-2009 Compliance with Activity-Based Requirements – Land Use Planning

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.1 Land Use Planning	Development Projects	# SUSMP Projects Submitted	# SUSMP Projects Approved	Actual/Target	%
		10	10	10/10	100
	High Priority Sites (Total Listed = 26)	# Sites Targeted for Inspection	# Sites inspected	Actual/Target	%
		26	26	26/26	100
	Medium Priority Sites (Total Listed = 50)	25	42	42/25	168
	Low Priority Sites (Total Listed = 104)	As Needed	28	As Shown	100

Table 11-2 FY 2008-2009 Post Construction BMP Maintenance Verification

Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
High Priority Sites (Total Listed = 26)	# Projects sent BMP maintenance notification letter	# Projects returned BMP maintenance verification letter	Actual/Target	%
	26	26	26/26	100
Medium Priority Sites (Total Listed = 50*)	43	43	43/43	100
Low Priority Sites (Total Listed = 104*)	90	90	90/90	100

* It should be noted that City's Storm Drain Maintenance Section is responsible for the routine inspections and maintenance of Treatment Control BMPs on public right-of-way, facilities, and projects, in accordance with a scheduled maintenance program, which is tracked by the GBA Master Series program. It is not therefore necessary to send out verification letters for publicly maintained permanent BMPs.

Based upon the significant achievements and refinements experienced in 2008-2009, the City has not identified any ineffective BMPs or management measures in terms of compliance with the Land Use Planning for New Development and Redevelopment permit requirements.

JURMP strengths associated with Land Use Planning for New Development and Redevelopment during the reporting period are described below. The list is not intended to provide comprehensive accounting of programmatic activities; rather it is to highlight those activities that best accentuate the Land Use Planning for New Development and Redevelopment component of the City's JURMP in 2008-2009

The following features distinguish the Land Use Planning for New Development and Redevelopment component of the City's JURMP:

Development Storm Water Manual

The Manual, which was adopted by the City in February of 2008, provides the City with a mechanism to effectively articulate all requirements related to water quality and the development or redevelopment of land within the City. The Manual covers all aspects of development, including the City's SUSMP requirements, applicable checklists, permanent BMP requirements, construction BMP requirements, and implementation and maintenance requirements. The Manual is available on the City's website, and is used extensively as a reference document by City staff, developers, and consultants. The Manual supersedes a similar document titled "Development and Redevelopment Projects Storm Water Management Standards Requirements Manual," which was adopted in November of 2002, and will be updated again in March 2010 to incorporate the updated Model SUSMP and Hydromodification Management Plan requirements.

During this reporting period City staff continued to actively participate in the Regional Land Development Workgroup meetings and activities and collaborated with other participants to

update the Model SUSMP and develop a Hydromodification Management Plan (HMP). On March 25, 2009, the Regional Board approved the updated Model SUSMP and the Copermittees have 365 days to incorporate Model SUSMP's requirements into their local SUSMPs. The Copermittees have submitted a draft HMP to the Regional Board and are in the process of addressing Regional Board's comments. The HMP requirements are expected to come into effect in the second quarter of 2010.

Inter-Departmental Coordination

The City's SUSMP and development review process includes multiple entities throughout the City. As the City continue to grow, it has taken all necessary steps to maintain compliance with SUSMP requirements through the coordination of multiple departments. Although the City's growth during the past two years has occurred at a much slower rate than before, such coordination has continued in 2008-2009 to require refinement and augmentation as necessary to maintain compliance and ultimately improve water quality.

Dedicated Storm Water Management Section

The Development Services Department provides the necessary oversight over all management components of SUSMP implementation. The Storm Water Management Section keeps up with the latest requirements and regulations, and provides technical support to City staff and assist project proponents and consultants. Storm Water Compliance Inspectors and Environmental Health Specialists also perform the function of post-construction BMP construction verification, inspection, and maintenance verification.

Information System Support

A robust geographic information management system (GIS) supports the City's Storm Water Management Program. The City's GIS currently includes multiple layers used by Storm Water Management staff for various functions. In terms of land development and redevelopment activities, within the reporting period, a BMP layer has been maintained in order to track post-construction BMPs implemented Citywide. Additionally, Permits Plus, which is a specialized permits tracking software, is utilized in tracking a variety of discretionary permits, and specifically is used by the Development Services Department to identify and track Priority Development Projects. Further, Permits Plus is utilized in annual inventory updates. Notably, in 2008-2009, the GIS layer was continuously updated to manage and provide easy access to project specific WQTRs and grading plans.

Data Management

As the City continues to grow, challenges associated with data management emerge such as tracking of post-construction BMPs, maintenance agreements, and associated documents. It is noteworthy that such challenges have been addressed in 2008-2009 through the customization of robust data management systems presented in this report, including GIS, GBA, and Permits Plus. However, as requirements and programmatic elements continue to evolve, it is important to update available tools with up-to-date information, as well as information necessary to evaluate overall program effectiveness. Since the addition of an Engineering Technician from last reporting period, the City continues to maintain up-to-date data and effectively track all information related to JURMP activities such as inventories, inspections, violations, and post-construction BMPs.

New Development and Redevelopment Project Design Elements

With a focus on the use of Low Impact Development Integrated Management Practices and higher efficiency structural treatment BMPs in achieving SUSMP compliance, the City continued to work with the development community to improve the design of storm water design features of proposed projects. While this focus was stressed by the City in 2008-2009 through requirements of project proponents to provide a detailed level of analysis to justify utilizing design elements in their proposed projects, a more universal change in project design approach will occur when the updated Model SUSMP requirements are incorporated into local SUSMPs and become effective. Through the regional Land Development Workgroup, the City of Chula Vista will continue to work with other Copermittees to develop regional standards and methods that will streamline the process of project design and review for water quality.

11.3.2.1.2 CONSTRUCTION

Within the reporting period of this report, the construction component demonstrated successes and underwent programmatic developments and enhancements. Through identified needs and associated management decisions, the City fortified its jurisdictional construction management component in 2008-2009. As a result of the slowdown in development, many construction sites remained inactive or faced sever reductions in construction activities. Within the reporting period, the City worked closely with developers to stabilize inactive construction sites; promote pollution prevention and BMP implementation; and ensure proper maintenance of BMPs to prevent polluted discharges from construction sites. This was a challenge as many developers claimed that they had limited financial resources and were unable to provide the necessary resources. City staff worked with developers to identify cost-effective BMPs and in some instances initiated enforcement action until full compliance was achieved. Mechanisms were identified to promote pollution prevention techniques as described in section 3 of this report. The City continues to maintain the regulatory standards mandated by the Municipal Permit and as developed and improved through previous years by the City irrespective of prevailing conditions.

Table 11-3 FY 2008-2009 Compliance with Activity-Based Requirements – Construction

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.2.d Construction	High Priority Sites (Total Listed = 7)	# Sites targeted for inspection	# Sites inspected	Actual/ Target	%
		7	7	7/7	100
	Medium Priority Sites (Total Listed = 27)	27	27	27/27	100
	Low Priority Sites (Total Listed = 75)	75	75	75/75	100
	All Sites (Total Listed = 109*)	Total sites identified	# in compliance or on a schedule for compliance	Actual/ Target	%
		109	109	109/109	100
		# of inspections during dry season	# of inspections during wet season	Total # of inspection s	N/A
		147	322	469	N/A

* Note: Of the total number of construction sites listed above, it is estimated that about 70% to 80% were inactive during the reporting period. Therefore, active sites were inspected according to the Municipal Permit requirements and inactive sites were inspected on an as needed basis.

The following features distinguish the construction component of the City's JURMP:

Inspection and Enforcement

As demonstrated above, and in previous reporting years, the City has established a comprehensive construction inspection and enforcement program. The Storm Water and Public Works Inspection staff, with broad knowledge and expertise in construction storm water management, ensure compliance with this JURMP component on construction sites. Within the reporting period, targeted inspections on development, redevelopment, and capital construction projects have been fully achieved. These goals have been accomplished through an aggressive inspection and follow-up schedule approach that assures compliance in the highly dynamic construction environment.

Education and Training

Storm Water Management staff provides education and training to all entities related to construction activities including developers, site superintendents, sub-contractors, and trades persons. During the previous years, this education and training capacity was further defined by storm water inspection staff participation and expertise provided at regional training seminars and outreach events directed at the construction industry. As a function of the experience gained through a broad spectrum of construction activities in the City, Chula Vista Storm Water

Management staff offered a strong asset and broad-based expertise in construction storm water management both locally and regionally. During the reporting period, due to the slowdown in development, regional seminars were not held as in previous years and City staff did not have the opportunity to speak at regional seminars for the construction industry. However, the City is willing and prepared to contribute to such events once development gains momentum. During the reporting period, City staff continued their efforts in educating members of the construction industry at the local level during meetings and site inspections.

It should be noted that programmatic updates and proposed updates presented above have been driven by management decisions to develop more effective JURMP elements. As such, at this time, no significant management measure deficiencies have been identified and no BMPs determined ineffective in 2008-2009. However, in support of an adaptive management approach to jurisdictional elements, the following program areas have been identified for further attention in order to support overall program effectiveness:

BMP Maintenance

During the reporting period, due to an increase in the number of inactive construction sites, BMP maintenance on construction sites continued to be an area of concern. While inspection staff noted significant efforts in BMP implementation, the maintenance needs associated with implemented BMPs did not match implementation efforts on a consistent basis. As a reminder, the City issued a formal letter to all developers with inactive construction sites reiterating their responsibility for BMP implementation as discussed in details in section 3 of this report.

11.3.2.1.3 MUNICIPAL

As exemplified in program descriptions included in other sections of this report, the City prides itself for outstanding environmental programs, and the interrelated successes that each can account for. The City recognizes the need for far-reaching pollution prevention programs for the general public, but further emphasizes ongoing pollution prevention programs through well-developed City functions such as MS4 maintenance, street sweeping, and Integrated Pest Management techniques. The following table summarizes

Table 11-4 FY 2008-2009 Compliance with Activity-Based Requirement – Municipal

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.a Municipal	High Priority Sites (Total Listed = 65[1])	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		62	62	62/62	100
	Medium Priority Sites (Total Listed = 6)	As needed	1	As shown	100
	Low Priority Sites (Total Listed = 13)	As needed	0	As shown	100
	MS4	Estimated quantity of material targeted for removal from MS4 (Tons)	Quantity of material removed from MS4 (Tons)	Actual/Target	%
		475	475	475/475	100
	Streets/Parking Lots	Estimated distance of curb miles to be cleaned	Total curb miles cleaned	Actual/Target	%
		17,889	17,889	17,889/17,889	100
	Catch Basins/ Inlets	# of catch basins and inlets targeted to be inspected	# of catch basins and inlets inspected	Actual/Target	%
		7,393	7,393	7,393/7,393	100
		# of catch basins and inlets targeted to be cleaned	# of catch basins and inlets cleaned	Actual/Target	%
		5,183	5,183	5,183/5,183	100

[1] Three categories listed in the Municipal Inventory as follows are inspected on a regular and as needed basis and are not included in the total number of sites targeted for annual inspections:

- MS4
- Roads, Streets, and Highways
- Special Events

With such a well-rounded approach, the City has not identified any significant management measures with which to augment municipal program activities in 2008-2009. Further, no BMPs have been identified as ineffective within the reporting period of this report.

The following features distinguish the Municipal component of the City's JURMP:

Municipal Facility Inspections
The City conducts inspections on numerous municipal facilities on an annual basis. Continued in 2008-2009, and as part of this comprehensive inspection process, Storm Water Management staff inspects City owned parks and other facilities for potential maintenance concerns and BMP implementation.

Environmental Programs
As described in other sections of this report, the City manages a number of separate, yet interrelated environmental programs. The City recognizes the tremendous asset that such programs provide to the City's pollution prevention efforts, and will continue to promote the collaborative relationship of these programs in the future. The collaborative successes of each program have continued to capitalize upon in 2008-2009 through the development of a broad-based outreach and educational campaign by the City. In this reporting period the City adopted the Clean Business program, which builds partnerships between the City and local businesses that operate in a socially responsible manner and protect the environment. Details of these programs are discussed further in Section 7 of this report.

Based on exemplary Municipal Pollution Prevention procedures, BMP implementation, and management measures, the City has not identified any significant needs for program improvement or modification at this time.

11.3.2.1.4 INDUSTRIAL AND COMMERCIAL

The 2008-2009 reporting year was a continued maintenance year in terms of industrial and commercial activities within the City. Inventory validation and supplemental inspection efforts remain the highlights of this year's activities. As reported in previous reporting cycles, significant numbers of inspections have been conducted Citywide in order to reach out to numerous industrial and commercial facilities operating within the City. With such a significant variety of commercial and industrial activities in Chula Vista, staff has recognized the need to target those areas and business activities that remain high on the source priority list, and to provide a consistent presence and strong enforcement standard.

The City's FY 2008-2009 inventory of industrial/commercial facilities includes 209 industrial and 1174 commercial facilities (including 353 mobile businesses). In 2008-2009, Storm Water Management staff has successfully met, and in some cases exceeded, all compliance-based industrial/commercial requirements of the Municipal Permit through inspection of all high-priority and some low-priority commercial and industrial sites. As such, the City has not identified any significant management measures, deficiencies or ineffective BMPs within the defined reporting period.

Table 11-5 FY 2008-2009 Compliance with Activity-Based Requirements – Industrial/Commercial

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.b Industrial	High Priority Sites (Total Listed = 53[1])	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		48	48	48/48	100
	Low Priority Sites (Total Listed = 149)	As needed	2	As shown	100
D.3.c Commercial	High Priority Sites (Total Listed = 192)	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		192	192	192/192	100
	Low Priority Sites (Total Listed = 984[2])	As needed	41	As shown	100

[1] Five high priority industrial facilities included in the industrial inventory are owned by the San Diego Unified Port District and are inspected by that agency

[2] 348 commercial facilities included in the commercial inventory are mobile businesses that are regulated differently from other businesses. The Municipal Permit does not require their annual inspection.

The following features distinguish the industrial/commercial component of the City's JURMP:

Integrated and Balanced Approach

With a dedicated Storm Water Compliance Inspection staff, industrial and commercial facilities are effectively regulated. Most notably, the City's industrial and commercial inspection program is defined by a consistent presence and strong enforcement standard, and Chula Vista storm water inspection staff continues to excel in maintaining the needs of the industrial and commercial programmatic elements. Needs such as pollution prevention and BMP implementation assurance, business community education and outreach, ongoing inspection and enforcement, and maintenance of a dynamic source inventory characterize the large role these components have in the larger storm water management scheme. Further, Public Works maintenance and landscape crews, whose working environment is in the field, have been trained and educated in storm water pollution prevention and report any observed illegal activities or discharges. As such, they are considered the "eyes and ears" of the Storm Water Management Section.

Marked by exemplary inspection and enforcement processes and procedures, the City has not identified any significant need for improvement of the industrial/commercial program at this time.

11.3.2.1.5 RESIDENTIAL

As demonstrated through the narratives in other sections of this report, the expanding residential community that makes up the City of Chula Vista defines the residential component of the City's

JURMP. Any small changes in behavior of residents are magnified due to the effect of numbers. As such, the Storm Water Management staff has sought to achieve continued success in the reduction of pollutants from residential areas through a variety of mechanisms geared toward behavior change. This has been approached through the characterization of a variety of activities and pollutant types associated with such activities. The Storm Water Management staff has identified a specific need to reach out to the residential community to communicate a broad based message of environmental stewardship and protection of water quality.

Table 11-6 FY 2008-2009 Compliance with Activity-Based Requirements – Residential

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.e Residential	Household Hazardous Material	Quantity of HHW[1] targeted for collection	Quantity of HHW collected	Actual/Target	%
		220,008 lbs (FY 07-08)	252,494 lbs (FY 08-09)	252,494/ 220,008	114
	Used Oil	Quantity of used oil collected from certified collection centers (FY 06-07)	Quantity of used oil collected from certified collection centers (Gallons FY 06		%
		30,779 gallons	49,287 gallons	49,287/ 30,779	160

[1] HHW= Household Hazardous Waste

Residential Program Strengths:

Pollution Prevention

The City's residential component is strengthened by the various pollution prevention programs offered to residents. Such pollution prevention programs provide the community with highly cost-effective methods of disposal of such items as used motor oil, green waste, recyclables, used cooking oil, household hazardous waste, and electronic waste. While the details of such programs are found throughout this report, it is important to recapture the tremendous asset such programs offer the City's community.

Residential Outreach and Education

The City continued to focus significant resources on residential outreach and education efforts in 2008-2009 and constantly endeavored to devise different avenues in reaching the public. While these activities are more fully described in Section 7.0 of this report, it is necessary to recognize the importance of this attribute to the overall success of the residential sector of the community.

Residential Program Improvement Areas and Challenges:
Based on exemplary residential pollution prevention procedures, BMP implementation, management measures, and a greatly enhanced outreach and education strategy, the City has not identified any significant needs for improvement at this time.

11.3.2.1.6 EDUCATION AND PUBLIC PARTICIPATION

The City prides in its well-established and comprehensive environmental programs. The Storm Water Management Program plays a vital role in communicating water quality information to local commercial, industrial, residential, and development communities. Further, such messages are supported by cooperative efforts with such City entities as the Chula Vista Nature Center, the Conservation Department, the Regional Used Oil Recycling Program, and Household Hazardous Waste Program. With the City's commitment to environmental services and resources, the City's Storm Water Management Program has successfully collaborated with City environmental programs and departments in order to effectively reach the community at large with clear and relevant messages of environmental stewardship and protection. The accounting of activities in Sections 8 and 9 of this report has been prepared to demonstrate the broad spectrum of education and public participation opportunities provided to the community of Chula Vista.

While the City continuously strives to improve its JURMP implementation program, it has not identified specific management measures by which to improve education and public participation activities. Notably, the City has added the Clean Business program in one of its participation activities. The City is committed to the continued development of such efforts as they are evaluated through the effectiveness assessment process.

Education and Public Participation Program Strengths:

Environmental Program Collaboration
As discussed throughout Sections 8 and 9 of this report and highlighted in previous reporting years, the City's Storm Water Management Program is strongly supported by numerous environmental programs within the City. As such, the Storm Water Management Program has been able to reach more diverse audiences and participate in a greater variety of public participation venues. This collaboration of programs that culminated in the creation of the CLEAN program has resulted in clear and consistent messaging to Chula Vista residents and has reinforced City's resources toward more effective and holistic environmental programs.

While the goals of the CLEAN program have been articulated elsewhere in this report, it is important to note the unique approach to education and outreach that the City has taken. Through the collaboration of environmental programs such as conservation, household hazardous waste collection, recycling, and storm water management citizens receive consistent and interrelated messages, and participate in activities that demonstrate various facets of environmental protection. Such coordinated public education and participation programs have far reaching and lasting effects that ultimately result in general acceptance of environmental concepts and changes in behavior. It has been recognized that the interrelationship of each of these programs collectively, is integral to the overall success of each of these programs

individually. Finally, the City is fortunate to have the Chula Vista Nature Center to showcase the San Diego Bay and to provide tangible access to the resources the community is called to protect.

Internal Staff Training

Through formal or informal training, meetings or individual contact staff training is conducted each year in the City on an as needed basis. With the status and trends in storm water management in such a dynamic state, Storm Water Management staff has recognized the need to consistently provide updated information to City employees. In addition, the messages must be conveyed consistently at all levels, and cover all necessary City functions.

Chula Vista CLEAN Program

Within the reporting period of this report, the City continued to take significant steps to further implement an integrated and relevant public education and outreach program aimed at a diverse audience. Utilizing the services of I Love A Clean San Diego (ILACSD) the CLEAN program has been built upon a holistic approach and increased community participation, aiming to utilize the participating community groups, private businesses and organizations, local water agencies, local schools, developers, community groups, and others to create a shared personal commitment and a sense of ownership to the community's environment, water resources and waterhseid.

Education and Public Participation Program Improvement Areas and Challenges:

Education of the Development Community

During the previous reporting periods, one of the challenges facing the City was the development community's resistance to changing regulations and requirements of the Municipal Permit and the City's SUSMP. Due to increased cost to development projects, developers were hesitant to implement high-efficiency treatment control BMPs and site design features. Consultants were also unfamiliar with available methods and technologies for pollution prevention on development projects. During this reporting period the development community has shown acceptance of changes in terms of project design, high efficiency treatment control BMPs, and site design BMP implementation. This can be attributed in part to the City's strong steps to ensure the effective design and utilization of appropriate construction and post-construction BMPs. After the issuance of the current Municipal Permit, the Storm Water Management staff expanded its inspections and enforcement of post-construction BMPs to ensure BMP implementation and maintenance on development projects. It is a priority of the City to communicate and reinforce the requirements associated with development and redevelopment projects through a consistent and clear message. This is most effectively approached through project-by-project interaction with developers and consultants.

Table 11-7 Compliance with Activity-Based Requirements – Education and Public Participation

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.g Education	Outreach (External)	# targeted training workshops, outreach events	# training workshops, outreach events conducted	Actual/Target	%
		12	12	12/12	100
		# Material, brochures targeted for distribution	# Materials, brochures distributed	Actual/Target	%
		General public contact	General public contact	N/A	N/A
	Staff Training	# Training sessions	# Training sessions	Actual/Target	%
		11	11	11/11	100
	Opportunities for participation	Estimated # of opportunity events to be provided	# Provided	Actual/Target	%
		3	3	3/3	100

11.3.2.2 CHANGES IN KNOWLEDGE/AWARENESS (LEVEL 2)

It is generally accepted that expanded knowledge and awareness is fundamental to bringing about desired changes in behavior. As such, the wide variety of activities captured in this report, including workshops, training, and public outreach through the Chula Vista CLEAN program all support this critical programmatic element. During the reporting period, the City provided a wide cross-section of information through the interrelationship of various environmental programs. The City was able to significantly impact the level of knowledge and awareness within the community through its continued effort in influencing residential, industrial, commercial, and municipal activities. In order to evaluate levels of knowledge and awareness, the City has established the following indicators:

- Complaint Response Tracking (Residential, Industrial, Commercial, Construction)
- Business License Application Screening Procedure (Mobile Businesses)
- Storm Water Web Site (All Community Sectors)
- Development Review Process (Development Community)

It is anticipated that in future reporting years as these indicators become more wholly developed; they will provide strong directional measures toward programmatic updates. It is important to recognize that the elements presented below are only indicators used to evaluate trends in Chula Vista, and are taken collectively to express overall successes and challenges and provide programmatic guidance.

Complaint Response Tracking

A comprehensive complaint response summary is presented in Attachment L – Complaint Response Summary. It is important to note that trends in complaints received by the City have remained strong since the inception of the program. Figure 11-2 shows the number of complaints from FY 1997-1998 to FY 2008-2009. With slight fluctuations in numbers, it is difficult to draw any strong conclusions, however, it may be inferred that overall programmatic influences are strong throughout the community.

Figure 11-2 Chula Vista Storm Water Complaint Summary 1997-2009

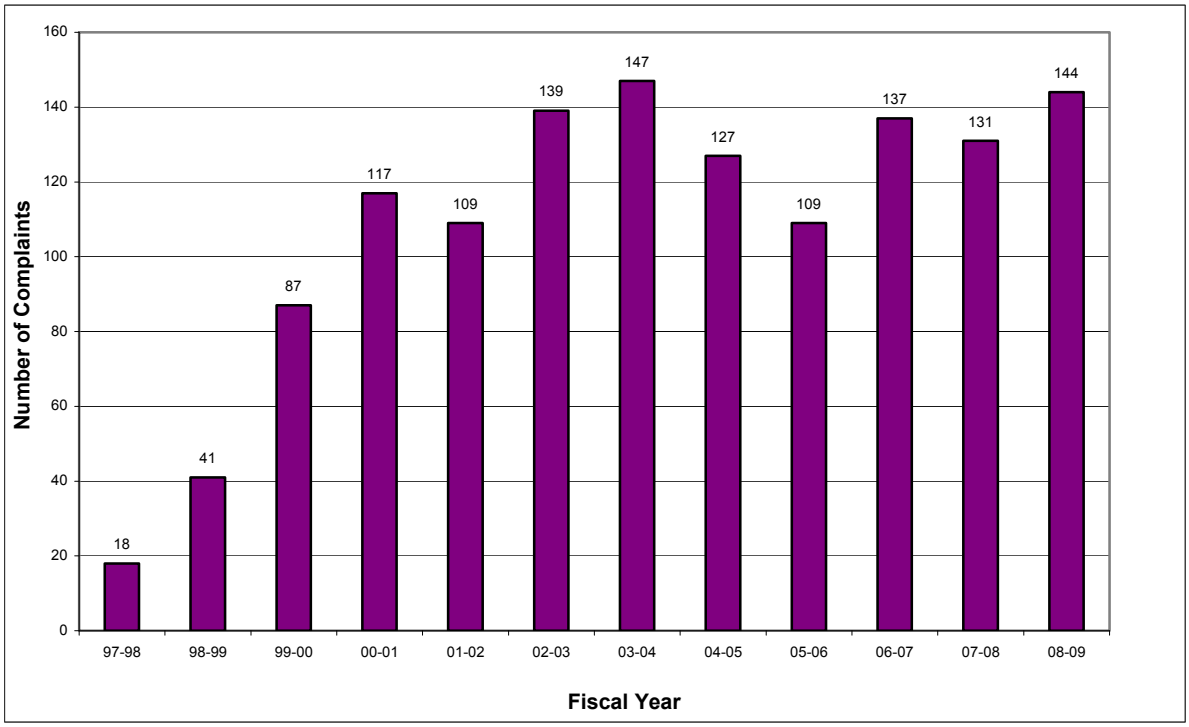

Business License Application Screening Procedure

The Business License Application Procedure, presented in Section 5.3 of this report, has provided the City a unique mechanism in evaluating knowledge and awareness of various mobile business communities. Mobile business owners are required to complete a storm water questionnaire, read the City's Storm Water Ordinance, and review educational BMP information related to their mobile business type. Through direct interaction with business license applicants, Storm Water Management staff is able to subjectively assess the level of awareness that mobile business owners have, based on their answers to the storm water questionnaire.

During this reporting period, through the collaboration efforts of the Copermittees, a regional mobile business website was created. The website includes a compilation of all approved mobile business applications in the region, which is categorized by jurisdiction. The creation of regional source inventory is a significant improvement in mobile business database management, which can provide essential information in monitoring and tracking mobile business activities in the entire region.

Storm Water Web Site

The City's CLEAN website development and update continued into 2008-2009. This site offers valuable information to Chula Vista residents and businesses and is intended to facilitate public education on environmental issues, including storm water. The website also provides a means for residents to report illegal discharges to storm drain systems. Due to technical constraints, it is not possible at this time to count the number of people accessing the website. It is hoped that this technical difficulty will be overcome in the future in order to provide a method to assess the usefulness of the website. In the meantime, Storm Water Management Section staff plans to resort to other means of assessment such as surveys.

Development Review Process

During the current reporting period, the City successfully implemented the environmental review process for all development and redevelopment project submittals. The City's JURMP includes a comprehensive flow chart to show the SUSMP implementation, approval, and verification process, together with responsible departments, divisions, and sections of the City. Through the required submission of Water Quality Technical Reports (WQTR) for Priority Development Projects; subsequent review by City staff; and project meetings, in 2008-2009 a notable increase in knowledge and awareness within the development community was observed. The level of knowledge and awareness has been evaluated through a review of the comments provided and direction needed from City staff to ensure compliance with SUSMP requirements. Further, it has been noted that WQTR submittals tend to be more fully developed and generally utilize effective sets of post-construction BMPs as required. A detailed description of the review process has been discussed in section 2 of this report. It should also be noted that while great strides have been observed in the development community, the City has identified the need to consistently convey stronger regulatory standards of construction and post-construction BMPs, including Low Impact Development features, and will continue to take this approach in subsequent reporting years.

11.3.2.3 BEHAVIORAL CHANGE/BMP IMPLEMENTATION (LEVEL 3)

During this reporting period, the City continued to implement BMP tracking measures into various components as reviewed in this report. It has been recognized that through the implementation of well-developed BMP tracking measures, the City is able to more fully evaluate BMP implementation and associated behavioral change. As discussed earlier in this section, in this reporting period, the City initiated its second survey to measure public awareness and behavior on various storm water quality related issues. The City has identified the following program areas as those most conducive to effectively tracking BMP implementation and evaluating behavioral change within the various regulated communities:

- Inspection Activities
- SUSMP Implementation

Inspection Activities
As discussed in applicable sections of this report, the City has developed comprehensive commercial, industrial, municipal, and construction inspection programs. It is through these well-developed inspection programs, that the City is able to utilize BMP implementation tracking and assessment mechanisms.

In the reporting year 2007-2008, the Storm Water Management Section started using the GBA database management system to track source inventories, inspection activities, and other data relevant to the assessment of storm water management programs. In the current reporting period, the use of the GBA was expanded and refined to better serve the purposes of the new Municipal Permit. Through this database program, Storm Water Management staff is able to view the historical activities such as inspections and violations of commercial, industrial, municipal, and construction sites. Further, in support of BMP selection and evaluation throughout various community sectors, staff uses the inspection forms that were developed in FY 2005-2006. The inspection forms developed for commercial, industrial, municipal, and construction inspection activities are intended to provide fully developed BMP implementation tracking mechanisms.

Based on data gathered from such activities, the City is able to take a critical look at BMP selection and implementation Citywide, and be able to evaluate behavioral change within business communities and further validate effectiveness trends in years to come.

SUSMP Implementation
Within the development community, implementation of post-construction BMPs provides the City with the strongest indicator of BMP implementation and behavioral change. As discussed in Section 2.0 of this report, the City has sought to firmly establish SUSMP requirements within the development community, and has successfully implemented SUSMP procedures for all applicable projects within the defined reporting period of this report. Inherently through this process, significant numbers of post-construction BMPs have been implemented throughout the City; including site design, source control, and treatment control level BMPs.

11.3.2.4 LOAD REDUCTIONS (LEVEL 4)

On a regional level, some Level 4 analysis has been conducted within the ROWD and associated LTEA documents. While load reduction targeted outcomes and estimates have proven challenging on a jurisdictional level, the regional ROWD and LTEA provide the most well developed approach toward such assessments. As such, the City has developed the following snapshot of load reduction estimates on a jurisdictional level to support overall JURMP effectiveness assessment. Notably, the load reduction numbers provided below in Table 11-8 are focused on municipal functions and programs:

Table 11-8 FY 2008-2009 Load Reduction

ACTIVITY/FUNCTION	LOAD REDUCTION	POLLUTANT TYPE
Used Oil Recycling	49,287 gallons	Motor Oil
Household Hazardous Waste Collection	252,494 Pounds	Antifreeze, Oils, Paints
MS4 Maintenance	11.74 Tons	Trash, Debris, Leaves, Grass, Rock, Silt
MS4 Inlets	39.46 Tons	Trash, Debris, Leaves, Grass
MS4 Catch Basins	56.86 Tons	Trash, Debris
Channel Maintenance	367.08 Tons	Trash, Debris
Street Sweeping	596.76 Tons	Trash, Debris, Sediment

11.3.3 INTEGRATED ASSESSMENT

A review of the results from the regional monitoring program and the City's Dry Weather Field Screening and Analytical Monitoring indicates that bacterial indicators are the only persistent constituent of concern in discharges from the City's MS4 and within the receiving waters. Other constituents of concern occasionally exceed established limits, however, they appear to be transient. Sources of bacterial indicators are commonly associated with wildlife; pet waste, improper management of restaurant waste, sewage overflows, and general residential activities and land uses.

The City has implemented a variety of program elements that are described fully in other sections of this report, as summarized below:

- Residential and commercial public education
- Inspection of restaurants and other potential sources of bacteria
- A comprehensive sanitary sewer overflow prevention and cleanup program
- A comprehensive storm water conveyance system maintenance
- Street sweeping
- Requirements for treatment control Best Management Practices on new development and major redevelopment

The Charts included in Section 11.3.1 indicate that the majority of pollutants are on a declining trend in this reporting period. Particularly, significant decreases in Total Coliform and Fecal Coliform are encouraging. These results can be interpreted as follows:

The City expanded its public education and outreach in this reporting period. This effort was aimed at increased awareness and changes in public behavior. Based on current and past results from the dry-weather monitoring program, and past violation reports, specific residential areas that were identified as High Threat To Water Quality (HTTWQ) were targeted for disseminating educational materials specific to the type of pollutants and violation activities. Moreover, the implementation of BMPs as described above, is considered effective in important deceases in fecal coliform and total coliform in urban runoff. This indicates that the City's programs are effective in controlling bacterial indicators. Further, due to the slowdown in construction

activities, creation of urban impervious areas slowed down during the reporting period, which may also contribute to decreased instances of observed pollutant discharges. Low rainfall levels may also be another factor. It is important to point out that this analysis should not be construed as a scientific assessment of the effectiveness of all the City's programs. As mentioned before, integrated assessment is the most difficult step in the effectiveness assessment and requires the evaluation of many diverse factors throughout a long period of time. It is expected that the next regional ROWD will include a more comprehensive evaluation of integrated assessment within the San Diego Bay Watershed and the City.

12.0 SPECIAL INVESTIGATIONS

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(k).i - A description of any special investigations conducted.

During this reporting period, the City did not encounter a situation where conducting Special Investigations was necessary. However, if the need arises at any time in the future, the City will not hesitate to embark on special studies. Currently, the City plans to study the effects of groundwater seepage or discharge on the quality of surface water bodies. This will be a long-term study, in which City staff will identify the locations of groundwater discharge points on a map and attempt to find a correlation with observed pollutants that are thought to originate from ground contamination or natural pollutants within the soil.

13.0 NON-EMERGENCY FIRE FIGHTING

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(l).i - A description of any efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.

13.1 INTRODUCTION

The City has developed and implemented a program to reduce pollutants from non-emergency fire fighting flows. BMPs have been implemented when conducting the following activities:

- Regular maintenance of fire and emergency vehicles and equipment
- Training exercises
- Facilities maintenance
- Post-Emergency rehabilitation of response equipment

These activities are conducted in a way to either minimize or eliminate the discharge of pollutants to the storm water conveyance system. Detailed descriptions of BMPs are given for each activity below:

13.2 BEST MANAGEMENT PRACTICES

The City has developed and implemented a program to reduce pollutants from non-emergency fire fighting flows. Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. BMPs and educational methods will be used to reduce the discharge of pollutants to the MEP. BMPs will be implemented when conducting the activities described in the following sections:

13.2.1 REGULAR MAINTENANCE OF EQUIPMENT

- Vehicles and equipment are cleaned where runoff will be directed either to the sanitary sewer system or to a drain with an oil/water separator system.
- Vehicles and equipment are cleaned where runoff will pond and evaporate and/or where runoff will filter through landscaped areas.
- Sewer drains in a vehicle cleaning area are outfitted with a hydro screen fabric barrier to collect debris.
- Spill kits are available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents is minimized and disposed of into the sanitary sewer system.

13.2.2 TRAINING EXERCISES

- Water flows are directed to landscaped areas whenever possible.

- When water flows to an area where landscaping does not prevent runoff, the Officer-in-Charge surveys the area prior to training activities to ensure that drill activities do not wash debris or sediment to storm drain systems.
- Prior to drill activities, debris is removed from downstream areas that could potentially discharge to storm drain systems.
- Live fire training activities are pre-planned to allow integration of barriers to off-site runoff that could contribute to storm water discharges.

13.2.3 FACILITIES MAINTENANCE

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways are swept regularly to remove debris. Debris is placed in the trash.
- Landscaped areas are maintained as required to reduce the introduction of leaves and other landscape waste into the MS4.
- Irrigation systems are monitored and maintained as required to reduce irrigation water from going off-site.
- Spills are cleaned up using spill kits provided at the work site, and the disposal of spilled materials is in accordance with applicable regulations.
- Hazardous materials (Hazmat) spills that require a cleanup beyond the ability of the on-site personnel are reported to the County of San Diego Hazardous Materials Division or a Hazmat certified contractor with appropriate resources to properly address the spill.
- Maintenance and repair of structures are conducted using methods that do not contribute pollutants to the MS4.

13.2.4 POST-EMERGENCY REHABILITATION OF RESPONSE EQUIPMENT

Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency are restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. Water is used only if other practical and immediately available methods cannot be identified. In such cases, water usage and discharges to MS4s are kept to a minimum and BMPs are implemented.

13.2.5 WASHING AND FUELING ACTIVITIES

The City maintains a number of fire stations, as listed in the municipal inventory. Such facilities are inspected on an as needed basis (See Attachment C). Only one fire station (Fire Station No. 4/Training Tower) has training capabilities. This facility is sloped so that all runoff generated by training activities is directed to a pervious infiltration area. Two fire stations within the City, stations No. 2 and No. 7, have fueling stations on site. Trucks from other stations are brought to these locations for fueling. The following fire stations conduct washing activities on site and pursuant to SUSMP regulations have permanent storm water BMPs installed:

- Fire Station No. 6 – 3 filter inserts and a non-storm water diverter

- Fire Station No. 7 – 1 CDS unit and a non-storm water diverter
- Fire Station No. 8 – 1 CDS unit and a non-storm water diverter

Each station is sloped so that all runoff generated by washing activities flows to a drain equipped with a non-storm water diverter mechanism, which diverts the wash water to the sanitary sewer system and rainwater to storm drain systems.

All personnel who conduct washing activities are properly trained on using the diverter device and ensuring it is used appropriately. Trucks that require cleaning from other stations are brought to the stations equipped with washing capabilities.

14.0 JURMP REVISIONS

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(m)i – A description of any proposed revisions to the JURMP.

The following paragraphs detail proposed updates to the City's JURMP. Each JURMP component is shown as a heading, followed by the specific description of the proposed update.

APPENDIX B

Since the City's JURMP document was developed and submitted to the Regional Board in March 2008, Appendix B of the JURMP has been updated during the current reporting period, which includes inventories of construction sites; municipal, commercial, and industrial facilities and activities; and Priority Development Projects with treatment control BMPs. Updated inventories are included in Attachments A to E of this report.

INDUSTRIAL AND COMMERCIAL COMPONENT

Mobile Business Best Management Practice Updates

The regional Industrial and Commercial Workgroup established minimum BMPs that all mobile businesses with the potential to pollute must implement in order to be in compliance. These BMPs include: 1) Storm water training, 2) Contain and clean up spills, 3) Properly handle all waste, 4) Protect the storm water conveyance system, 5) Provide proper handling and containment of materials, and 6) Provide equipment washout areas. In addition to the BMPs, the workgroup also developed a Regional Mobile Business Database with the help of a consultant. As a part of it's mobile business application approval process, the City plans to add all mobile businesses that receive approval to this regional database.

ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

Dry Weather Field Screening and Analytical Monitoring Update

During the reporting year, the regional Dry Weather Monitoring Sub-workgroup (Dry Weather Workgroup) conducted a study to evaluate and update the dry weather monitoring Action Levels for Total Coliform, Fecal Coliform, and Enterococcus. Action Levels are pollutant concentrations beyond which upstream investigations are initiated to identify and eliminate the source of pollution. The current Action Levels were based on data from one year of monitoring in 2002.

The recent study conducted by the Dry Weather Monitoring Sub-Workgroup was based on available monitoring data from 2002 to 2007. Data were analyzed using three different methods: ranked percentile analysis, statistically based population parameters, and confidence interval. Based on the analysis, the Copermittees determined that the 80th percentile approach would be the best fit to meet the needs of the Dry Weather Monitoring Program. Details of their evaluation are posted on the Project Clean Water Website at:

http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf

Table 14-1 details the updated Action Levels for Total Coliform, Fecal Coliform, and Enterococcus. The Copermittees will use these Action Levels in their Dry Weather Monitoring Program for 2010.

Table 14-1 Updated Bacteria Action Levels for Dry Weather Monitoring

CONSTITUENT	NEW ACTION LEVEL	PREVIOUS ACTION LEVEL
Total Coliform	130,000 MPN/100mL	50,000 MPN/100mL
Fecal Coliform	13,000 MPN/100mL	20,000 MPN/100mL
Enterococcus	7,000 MPN/100mL	10,000 MPN/100mL

Action levels for all other constituents of the Dry Weather Monitoring Program were deemed to be appropriate and were not included in the above study.

FISCAL ANALYSIS COMPONENT

Fiscal Analysis Update

As required by sections G, J.1.a(3)(k), and J.1.c.(1)(d) of NPDES Order No. R9-2007-0001, the Copermittees developed a new Standardized Fiscal Analysis Method to analyze and report their urban runoff management program (jurisdictional, watershed, and regional) expenditures, and outline the funding sources for their programs in a uniform format. As required by Section G.3 of the Municipal Permit, the City will use the new Standardized Fiscal Analysis Method starting January 31, 2010 to conduct its fiscal analysis for the reporting period. This annual report is based on the previously developed method for fiscal analysis.

15.0 CONCLUSIONS AND RECOMMENDATIONS

On January 24, 2007, the San Diego Regional Water Quality Control Board adopted the National Pollutant Discharge Elimination System Municipal Permit, Order No. R9-2007-0001. The new permit includes more prescriptive requirements than Permit Order No. 2001-01, which it superseded. In March 2008, and pursuant to the requirements of the new Municipal Permit, the City of Chula Vista updated its ordinances; permit processes; Standard Urban Storm Water Mitigation Plan (SUSMP), and Jurisdictional Urban Runoff Management Program (JURMP) Document. Implementation of the City's Storm Water Management Program during the reporting period of July 1, 2008 to June 30, 2009 was therefore based on the requirements of the new Municipal Permit and the current report is an account of the City's implementation of the new Municipal Permit during Fiscal Year 2008-2009.

Well-developed program management and implementation defined the City's 2008-2009 reporting year. As reflected throughout this report, the City's Storm Water Management Program has matured and successfully met all programmatic goals set out for the defined reporting period, and has experienced overall success as reflected in the effectiveness assessment conducted in this report. It is vital to direct implementation and management strategies down a targeted, effective, and efficient path as to create a set of interrelated actions and to promote long-term effectiveness. The City recognizes the need to be steadfast and pragmatic toward programmatic development in order to foster long-term success achieved through water quality improvements.

The whole of the preceding document presents a comprehensive implementation narrative and accounting of results in 2008-2009. Further, a detailed effectiveness assessment exercise has supported an overall evaluation of programmatic elements. Taken collectively, the City has identified a variety of strengths and perceived some challenges that will impact program development and implementation in the years to come.

As a result of the re-issuance of the Municipal Permit, major programmatic updates and changes were introduced to the City's Storm Water Management Program. Such updates included new data collection and management strategies, implementation approaches, and program planning with the goal of effective support of long-term methodologies on jurisdictional, watershed, and regional basis. It is expected that the programmatic updates to the Storm Water Management Program will result in the support of a seasoned approach to program implementation and ultimately improvement in the quality of receiving waters regionally.

The City's Storm Water Management Program is served well through continued evolution and implementation of the CLEAN program introduced and detailed throughout this report. The City's integrated approach to public outreach and education is unique, and an approach that the City feels is well received by its diverse community with diverse environmental resources and interests. While many CLEAN concepts have come to fruition in 2008-2009, this program continues to grow in the coming years through ongoing efforts and commitment from the City of Chula Vista and its partners.

In subsequent reporting years, the City will continue to maintain a high standard of compliance with permit requirements through program planning and implementation and seek to continually evaluate and augment program elements as deemed necessary. Further, the City will seek to more fully integrate watershed based programmatic planning and development to foster a more well rounded approach to program implementation and to support long-term effectiveness assessment at local, watershed, and regional levels.

Low Impact Development (LID) and Hydromodification Management Plan (HMP) were the two major additional requirements to the new Municipal Permit. They required substantial resources from the Copermittees. The first update to local SUSMPs were submitted to the Regional Board in March 2008, and included interim conditions until the final Model SUSMP and HMP documents were developed. During the current reporting period, the updated Model SUSMP was completed and approved by the Regional Board. The HMP document is currently being finalized. The Copermittees' next major task would be the incorporation of these documents in their local SUSMP.

Additionally, both these concepts are relatively new to the development community of Southern California. Therefore, the City of Chula Vista expects challenges in enforcing these two requirements in its development review and approval process as the development community passes through the learning curve.

During the reporting period, the City of Chula Vista faced challenges created by additional requirements of the updated Municipal Permit and, financial problems due to the current economic downturn. Despite these challenges, the City placed highest priority on the protection of the region's water resources and the implementation of its JURMP. Dedicating significant sums from its General Fund to the Storm Water Management Program, the City was able to maintain the high standards of performance that were established in previous years.

Attachment I

FY 2008-2009 Commercial Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection acitivities.

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
25-Jul-08	Jiffy Lube #897	5652402700	593	E	ST	Cat (i-v) Auto Related	High	7549
	Comments/Findings:	Some BMPs need to be implemented. Area inside trash enclosure is dirty and drain is not protected. Correct items listed on the attachment. Manager was notified to correct discrepancies within specified time **see attachment** On 3/19/2009 conducted follow up inspection to the site. All discrepancies have been made.						
25-Jul-08	El Camaron	5652402600	193	BROADWAY		Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Found stack of roof shingles. Rear side of building full of trash and scrap. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 7/29/2008 conducted follow up inspections to the site on and found all discrepancies were corrected.						
20-Oct-08	McDonalds at Third #1557	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Some BMPs need to be implemented. Open lids, roof drains discharging rusty water. Correct items listed on the attachment. Manager was notified to correct discrepancies within specified time **see attachment** On 3/17/2009 conducted follow up inspection to the site. All discrepancies have been corrected.						
23-Oct-08	Church Fried Chicken	6190610200	1005	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
23-Oct-08	Burger King #952	6192225200	1265	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
23-Oct-08	KFC Y305136BL03	6193001500	1305	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
23-Oct-08	Chinese City Restaurant	6230600200	1403	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
23-Oct-08	Jack in the Box #63	6230500200	1408	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Some BMPs need to be implemented. Correct items listed on the attachment. Manager was notified to correct discrepancies within specified time **see attachment**						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
24-Oct-08	Carls JR #83	6190100800	996	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
24-Oct-08	KFC Y450073BL03	5685112000	461	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Some BMPs need to be implemented. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/16/2009 conducted follow up inspection to the site. All discrepancies have been corrected.						
27-Oct-08	Albertson's #6757	5733204500	720	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
27-Oct-08	Star Bakery	6192866000	1372	THIRD	AV	Cat x-Eating/Drinking ...	High	5461
	Comments/Findings:	Some BMPs need to be implemented. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**						
27-Oct-08	Seafood City Market	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment** Continue cleaning and maintenance program.						
28-Oct-08	Third Avenue Minimart	5733204000	772	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site in in good order. All BMPS are in place.						
28-Oct-08	Vons Food & Drug #3063	5734503400	870	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good clean order. BMPs are in place.						
28-Oct-08	Rally's Hamburger/Ongs Restaurant (	6190511300	1004	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Site is in good clean order. BMPs are in place.						
28-Oct-08	Long John Silver	6190611400	1049	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Site is in good order. BMPS are in place.						

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
28-Oct-08	Save A Lot #943	6193001600	1315 THIRD AV	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
29-Oct-08	Mercado International 2000	6230606100	1415 THIRD AV	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Some BMPs need to be implemented. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**				
29-Oct-08	Bulls Eye Burger	5713101800	860 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Site is in general good condition. Some BMPs need to be implemented. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**				
30-Oct-08	Burger King #2339	5720104700	599 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Some BMPs need to be implemented. Correct items listed on the attachment. **see attachment** Manager was notified to correct discrepancies within specified time. On 3/16/2009 conducted follow up inspection to the site. All discrepancies have been corrected.				
7-Nov-08	Seven Eleven #21792C-2131	5684200100	403 THIRD AV	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Trash found around surrounding area. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/17/2009 conducted follow up inspection to the site. All discrepancies have been corrected.				
7-Nov-08	Jack in the Box #6	5672003900	486 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Site is in good order. All BMPS are in place.				
10-Nov-08	Wings N Things Restaurant	5672322300	481 BROADWAY	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Found outdoor washing at back of restaurant. Grease/oil containers lids are open and have traces of stains at surrounding area. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/19/2009 conducted follow up inspections to the site and found all discrepancies were corrected.				
10-Nov-08	McDonalds at Broadway	5720803400	619 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Outdoor liquid storage needs to be cleaned. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/17/2009 conducted follow up inspection to the site. All discrepancies have been corrected.				
10-Nov-08	Carls JR #31	5710502400	502 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Site is in good order. All BMPs are in place. **see attachment**				

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
10-Nov-08	Birkdale Corp DBA L Street 76	5713101400	898 BROADWAY	Cat viii-Fueling-Rtl/Wsl	Low	5541
	Comments/Findings:	Site is in good order. All BMPs for gas station are in place.				
12-Nov-08	Pho Vien Dong	5953220100	2260 OTAY LAKES RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Found oil/grease stains at rear door. Trash and recyclables piled at back of site. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/20/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
12-Nov-08	Lisa's Filipino Cuisine		OTAY LAKES RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Site is in good order. All BMPs are in place.				
12-Nov-08	Panda Chef		OTAY LAKES RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Evidence of grease/stains at rear door. Cases of salad oil stored outdoors without containment. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/20/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
12-Nov-08	L & L Barbecue		OTAY LAKES RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Found oil/grease stains at back of site. Trash enclosure areas have grease stains on floor. Correct all items listed on the attachment. Owner was notified to correct the discrepancies within specified time. **see attachment** On 3/20/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
13-Nov-08	Carls JR #546	6182005400	1100 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Found evidence of poor housekeeping. Trash/grease/stains found along trash enclosures. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/17/2009 conducted follow up inspection to the site. All discrepancies have been corrected.				
13-Nov-08	COSTCO at Broadway	6182006100	1130 BROADWAY	Cat x-Eating/Drinking ...	Low	5399
	Comments/Findings:	Site is in good order. All BMPs are in place.				
14-Nov-08	McDonalds Corp	6182803700	1288 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Evidence of grease/stains from washing trash enclosures leading to drainage system. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/18/2009 conducted follow up inspection to the site. All discrepancies have been corrected.				
17-Nov-08	KFC-Y450114	6220433400	1327 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Found grease/stains from trash enclosures leading to drainage at Broadway. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/20/2009 conducted follow up inspections and found all discrepancies were corrected.				

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
18-Nov-08	Yoshinoya Beef Bowl	6182901500	1299 BROADWAY	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Found grease/stains around trash enclosures. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/23/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
18-Nov-08	C&V Auto	6182100300	1131 BROADWAY	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	Site is in good order. All BMPs are in place.				
18-Nov-08	Candys Auto Body Shop		BROADWAY	Cat (i-v) Auto Related	High	7532
	Comments/Findings:	Evidence of discharge found outdoors. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/20/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
19-Nov-08	Rubios Fresh Mexican Grill at Broadw	5720103100	555 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Found oil/stains surrounding trash enclosures. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/20/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
19-Nov-08	Seven Eleven #13570C-2131	5670531100	285 BROADWAY	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
20-Nov-08	Seven Eleven #13569E-2131	5712002300	796 BROADWAY	Cat x-Eating/Drinking ...	Low	5411
	Comments/Findings:	Trash and recyclables not controlled and overflowing. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/18/2009 conducted follow up inspection to the site. All discrepancies have been corrected.				
21-Nov-08	U-Do-It / Auto Painting	6180220900	960 BROADWAY	Cat (i-v) Auto Related	Low	7532
	Comments/Findings:	Evidence of spills and wet sanding found outdoors. Repairs of vehicles must be conducted inside service boots. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 03/18/2009 conducted follow up inspection to the site and noted discrepancies were corrected.				
21-Nov-08	Autozone #5643	5722811300	897 BROADWAY	Cat (i-v) Auto Related	Low	5531
	Comments/Findings:	Trash and recyclables overflowing and lids are open. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/19/2006 conducted follow up inspections and found all discrepancies were corrected.				
21-Nov-08	Seven Eleven #21604C-2131		899 BROADWAY	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Trash and recyclables overflowing and trash lids are open. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/19/2009 conducted follow up inspection and found all discrepancies were corrected.				

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
24-Nov-08	A&A Auto Body & Paint	6181520400	1077 BROADWAY	Cat (i-v) Auto Related	Low	7532
	Comments/Findings:	Some BMPs need to be implemented. Found exposed paints, chemicals and solvents. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 12/16/2008 conducted follow up inspections and found discrepancies were corrected.				
2-Dec-08	A&D Automotive	6181421500	1088 BROADWAY	Cat (i-v) Auto Related	Low	7538
	Comments/Findings:	Some BMPs need to be implemented. Found fuel containers outside, trash and debris around the area. Site needs to improve housekeeping. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/19/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
2-Dec-08	Seven Eleven #13590D-2131	6181520700	1097 BROADWAY	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good order. All BMPs are in place. See attachment.				
3-Dec-08	Javid Brothers Enterpirse Inc/Quiznos	6182006500	1120 BROADWAY	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Some BMPs need to be implemented. Grease/oil stains found in the surrounding trash enclosures. Correct items listed on the attachment. Manager was notified to correct discrepancies within specified time **see attachment* On 3/19/2009 conducted follow up inspections and found all discrepancies were corrected.				
3-Dec-08	Panda Express #960	6182005400	BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Some BMPs need to be implemented. Traces of trash and debris washed out. Grease and oil stains in the trash area. Correct items listed on the attachment. Manager was notified to correct discrepancies within specified time **see attachment** On 3/19/2009 conducted follow up inspections and found all discrepancies were corrected.				
4-Dec-08	Lolitas Taco Shop	5933500100	4516 BONITA RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Liquid containers are not covered and contained. Curb and gutters behind stores have trash accumulation. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/26/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
11-Dec-08	El Pollo Loco/Bas Food Services	5710622100	666 H ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Found sewer clean out cap cracked open. Evidence of sewer discharge present. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/24/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
16-Dec-08	Mandarin Gourmet	5932800600	4410 BONITA RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Grease container lids are open. Trash bags found on floors of trash bin area. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/24/2009 conducted follow up inspection to the site. All discrepancies were corrected.				
5-Jan-09	Romesco Baja Bistro	5932800900	4346 BONITA RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Site is in good order. All BMPs are in place.				

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
5-Jan-09	Quizno's Subs	5932800500	4378	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Trash enclosures littered with overflow trash. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/24/2009 conducted follow up inspection to the site and found all discrepancies were corrected.						
6-Jan-09	California Tire and Service Centers	5672311300	471	BROADWAY		Cat (i-v) Auto Related	Low	7538
	Comments/Findings:	Found oil stains at surrounding area. 55 gallon drum not contained. Dirt and trash in trash enclosure area. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**						
6-Jan-09	Papayas Juice Bar	5932800200	4244	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Site is in good order. All BMPs are in place.						
6-Jan-09	Tijuana Oyster Bar		4246	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Site is in good order.BMPS are in place.						
6-Jan-09	Jalisco Cafe	5912522600	4026	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Eliminate all outdoor discharges and empty mop buckets indoors. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/24/2009 conducted follow up inspection to the site and found all discrepancies were corrected.						
6-Jan-09	Colima's Mexican Food	5912522500	4102	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Need to clean and replace grease drum. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/24/2009 conducted follow up inspections to the site and found all discrepancies were corrected.						
6-Jan-09	McDonalds of Bonita	5932800900	4340	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Site is in good order. All BMPs are in place.						
9-Jan-09	Home Depot Eastlake	6430206600	1320	EASTLAKE	PW	Cat xxiii-Bldg/Mat Storag	Low	5211
	Comments/Findings:	On 01/09/09 conducted inspection on the above facility. Site is in general good condition with the following exeptions: Trash and debris accumulation at the drop inlet, grease interceptor needs cleaning and maintenance. One sewer cap missing. Manager was notified to correct discrepancies within specified time. On 1/20/09 manager called to inform that discrepancies have been corrected. On 3/27/2009 conducted follow up inspection to the site. Agreed to increase sweeping to daily at the north side of the store. All discrepancies corrected.						
9-Jan-09	Carls JR #281	6430206800	2097	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Conducted routine inspection of the above facility. Observed traces of grease/stain along parking. Some BMPs need to be implemented. Correct items listed on the attachment. **see attachment**. Manager was notified to correct discrepancies within specified time. On 3/26/2009 conducted follow up inspection to the site. All discrepancies were corrected.						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
9-Jan-09	Denny's Restaurant #1719	5701406000	110	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Site is in good order. All BMPs are in place.						
9-Jan-09	Donnys Cafe Inc.	5912401800	3901	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Found trash/debris behind storage vans. Evidence of grease stains at trash enclosures. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/26/2009 conducted follow up inspection to the site and found all discrepancies were corrected.						
9-Jan-09	Bonita Valley Auto Care Inc.	5912402700	3995	BONITA	RD	Cat (i-v) Auto Related	Low	7538
	Comments/Findings:	Water hose at air station has leak. Evidence of seeping fluids at floor walls. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 1/29/2009 conducted follow up inspection to the site. All discrepancies were corrected.						
9-Jan-09	Jack in the Box #68	5912511600	4011	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Evidence of oil stains in trash enclosure area. Trash lids left open. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**						
12-Jan-09	Chevron Inc #1422	5700203200	95	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
	Comments/Findings:	Site is in good order. All BMPs are in place.						
12-Jan-09	Burger King #11435	5700201700	99	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	All Bmps are in place. Site is in good order.						
12-Jan-09	Los Arcos Restaurant	5700203400	89	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Found open oil containers on site. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/26/2009 conducted follow up inspections to the site and found all discrepancies were corrected.						
13-Jan-09	Circle K Store #5708	5701310500	98	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
	Comments/Findings:	Site is in good order. All BMPs are in place.						
14-Jan-09	Mikes Auto Repair & Smog Center	5680442300	300	E	ST	Cat (i-v) Auto Related	Low	7538
	Comments/Findings:	Liquid container enclosures are flooded with oil/grease mixture. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/27/2009 conducted follow up inspection to the site. All discrepancies were corrected.						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
14-Jan-09	Seven Eleven 13951 B 2131	5662402800	275	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411
	Comments/Findings:	Site is in good order. All BMPs are in place.						
14-Jan-09	Fuddruckers #3055	5682702300	340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Evidence of grease/oil spills around trash enclosures.. Trash and debris littered around trash bins. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 4/1/2009 conducted follow up inspection to the site. All discrepancies were corrected.						
14-Jan-09	Bonita Shell	5701402700	100	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
	Comments/Findings:	Site is in good order. All BMPs are in place.						
15-Jan-09	Anthony's Auto Center	5662321200	305	E	ST	Cat (i-v) Auto Related	Low	7549
	Comments/Findings:	Dirt/sediments has clogged drain outlet at SW corner of the site. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/26/2009 conducted follow up inspection to the site and found all discrepancies were corrected.						
21-Jan-09	Trueline Auto Service	5661903100	377	E	ST	Cat (i-v) Auto Related	Low	7538
	Comments/Findings:	Trash and debris littered around the trash bins. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/26/2009 conducted follow up inspection to the site and found all discrepancies were corrected.						
21-Jan-09	Superior Auot Body Group	5661900600	363	E	ST	Cat (i-v) Auto Related	Low	7538
	Comments/Findings:	Site is in good order. All BMPs are in place.						
26-Jan-09	Arco AM/PM #5208	5652801400	407	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
	Comments/Findings:	Site is in good order. All BMPs are in place.						
26-Jan-09	Gas Depot	5652402100	199	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
	Comments/Findings:	Site is in good order. All BMPs are in place.						
27-Jan-09	Supreme Gasoline	5652302600	196	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
	Comments/Findings:	Site is in good order. All BMPs are in place.						

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
27-Jan-09	Sushi Loco	5670324500	224 BROADWAY	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Found grease/oil drums without covers. Trash recycling bins are left open. Trash littered around enclosures. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 4/1/2009 conducted follow up inspection to the site. All discrepancies were corrected.				
27-Jan-09	Gigante Pizza		226 BROADWAY	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Found grease/oil drums without covers. Trash littered around enclosures. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**				
29-Jan-09	Texcoco Restaurant	6181512900	1043 BROADWAY	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Found trash bins leaking fluids onto drain gutters. Rear area needs to be swept clean. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 2/4/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
29-Jan-09	Wendy's Coastline Food Service Corp	5670325100	618 E ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
3-Feb-09	Stuart Anderson Black Angus Restau	5653101700	707 E ST	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	Found oil/grease spil in trash enclosures. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/27/2009 conducted follow up inspection to the site. All discrepancies were corrected.				
3-Feb-09	Taco Bell #3398	5670320100	696 E ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Staff was observed washing down contaminants into the storm conveyance system. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/26/2009 conducted follow up inspections to the site and found all discrepancies were corrected.				
3-Feb-09	Aunt Emmas	5670310600	700 E ST	Cat x-Eating/Drinking ...	Low	5812
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**				
3-Feb-09	McDonalds at E Street	5653102700	725 E ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Found grease/oil spill inside trash enclosures. Trash not properly disposed. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/27/2009 conducted follow up inspection to the site. All discrepancies were corrected.				
3-Feb-09	Arco By The Bay	5653101600	765 E ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
	Comments/Findings:	Need to increase maintenance to trash enclosures. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 4/2/2009 conducted follow up inspection to the site. All discrepancies were corrected.				

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
4-Feb-09	Sunny's Market	5672122000	449 BROADWAY	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Grease/oil container laden with grease. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**				
4-Feb-09	Denny's Restaurant #6962	5670320600	692 E ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Trash bin is leaking. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/26/2009 conducted follow up inspection to the site and found all discrepancies were corrected.				
5-Feb-09	El Nopal Market LLC	6221115000	1655 BROADWAY	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good order. BMPs are in place.				
5-Feb-09	Battery & Auto Center	6220913200	1510 BROADWAY	Cat (i-v) Auto Related	Low	7538
	Comments/Findings:	Provide cover and containers for all automotive fluid containers. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**				
5-Feb-09	Miramar Fish Market	6221115000	1655 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Water and ice from fish boxes spilled at rear area of the store. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**				
11-Feb-09	McDonalds/Tavarua Restaurant Inc	5623242000	75 BROADWAY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Site is in good order. All BMPs are in place. **see attachment**				
13-Feb-09	L Street Shell	6180211800	902 BROADWAY	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good condition. All BMPs are in place. **see attachment**				
13-Feb-09	La Bodega Market	6182101600	1193 BROADWAY	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good order. All BMPs are in place. **see attachment**				
13-Feb-09	Otay Farms Inc.	6290100100	1716 BROADWAY	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Trash and debris scattered around rear area and trash bins. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 4/2/2009 conducted follow up inspection to the site. All discrepancies were corrected.				

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
17-Feb-09	Red Lobster #521	5682702700	342	F	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Trash are not being properly placed inside the trash bins. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**						
17-Feb-09	Home Town IGA	5670320800	646	E	ST	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good order. All BMPs are in place. **see attachment**						
18-Feb-09	Anthony's Fish Grotto	5670212900	215	BAY	BL	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Need to stop outdoor discharges. All equipment wash out must me done indoor sinks. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment**						
19-Feb-09	Henry's Market Place	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good order. All BMPs are in place.**see attachment**						
20-Feb-09	Seven Eleven #13576F	5710611000	698	H	ST	Cat x-Eating/Drinking ...	Low	5411
	Comments/Findings:	Site is in good order. All BMPs are in place. **see attachment**						
20-Feb-09	Honey Baked Ham Inc.	5922000700	316	H	ST	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good order. All BMps are in place. ** See attachment**						
20-Feb-09	Vons Food & Drug #2336	5922000500	360	H	ST	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good order. All BMPs are in place. **see attachment**						
20-Feb-09	Taco Bell #2971	5922001300	340	H	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Found leaky water valve at southwest corner of building. Site is in general good condition. Correct item listed on the attachment. **see attachment**						
23-Feb-09	Costco Wholesale Corp #460	6402925000	895	H	ST	Cat x-Eating/Drinking ...	High	5399
	Comments/Findings:	Oil/grease drums need covers and secondary containment. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 3/18/2009 conducted follow up inspection to the site and found discrepancies were corrected.						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
23-Feb-09	Carls JR #575	5941310400	1487	H	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Trash enclosures stained with oil/grease. Trash and debris around enclosure area. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 4/3/2009 conducted follow up inspection to the site. All discrepancies were corrected.						
23-Feb-09	Burger King #11545	6402924800	899	H	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Grease/oily boxes are not disposed appropriately. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 4/3/2009 conducted follow up inspection to the site. All discrepancies were corrected.						
23-Feb-09	Jack in the Box #99	5922001800	370	H	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
24-Feb-09	Taco Bell #15508	6420201700	1548	H	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	Grease/oil containers around oil containers must be cleaned. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 4/3/2009 conducted follow up inspection to the site. All discrepancies were corrected.						
25-Feb-09	Apple Tree Market	6231312000	1556	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good order. All BMPs are in place. **see attachment**						
25-Feb-09	Poliza Hollywood Inc	5743003200	72	J	ST	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good order. All BMPs are in place. **see attachment**						
26-Feb-09	Vons Food & Drug #2071	5953220200	2250	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	Site is in good order. All BMPs are in place. **see attachment**						
26-Feb-09	McDonalds #14228/Sutherland MGM	5953220900	2254	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						
26-Feb-09	Arbys #7057/Capitals Group LLC	5953220800	2244	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	All BMPs are in place. Site is in good order. **see attachment**						

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
26-Feb-09	Lowes Home Improvement Warehous	5950720100	2225 OTAY LAKES RD	Cat xxiii-Bldg/Mat Storag	High	5211
	Comments/Findings: Site is in good order. All BMPs are in place. **see attachment**					
26-Feb-09	Chick Fil A at Eastlake Terraces	6430206700	2089 OLYMPIC PW	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings: Found grease/oil stains, trash and debris on floor of trash enclosures. Correct items listed on the attachment. Owner was notified to correct discrepancies within specified time **see attachment** On 4/7/2009 conducted follow up inspection to the site. All discrepancies were corrected.					
27-Feb-09	Ralphs #75	5941310100	780 OTAY LAKES RD	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings: On 2/27/2009 conducted annual inspection to the site. Site is in good clean order. BMPs are in place. No further action required.					
27-Feb-09	Pick Up Stix	6430207400	2127 OLYMPIC PW	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings: On 2/27/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
2-Mar-09	Boston Market #863	5941310600	770 OTAY LAKES RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings: On 3/2/2009 conducted annual inspection to the site. Found grease and oil stains in trash enclosures. **see attachment** Follow up inspections to be conducted within 10 days.					
2-Mar-09	Seven Eleven #2131	6421700900	913 OTAY LAKES RD	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings: On 3/2/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
2-Mar-09	JNC Pinoy Foodmart Inc.	6421701000	943 OTAY LAKES RD	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings: On 3/2/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
2-Mar-09	Yokozuna's Shushi Bar & Island Grill		945 OTAY LAKES RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings: On 3/2/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
5-Mar-09	Ciao Italian Restaurant	6240606000	4360 OTAY VALLEY RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings: On 3/5/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
5-Mar-09	Seven Eleven #18547B-2131	6240605700	4300OTAY VALLEY RD	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	On 3/5/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
6-Mar-09	El Ranchero Factory Taco Shop #2	6232121900	3344 MAIN ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 3/6/2009 conducted annual inspection to the site. Found grease oil containers with no covers. Sewer clean out cap not properly tighten. Need to correct listed items within 10 days of the inspection. . **see attachment**				
6-Mar-09	SCJ Towing	6290606000	3211 MAIN ST	Cat (i-v) Auto Related	High	7549
	Comments/Findings:	On 3/6/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
6-Mar-09	Allen Gas Truck Stop	6290606100	3205 MAIN ST	Cat viii-Fueling-Rtl/Wsl	Low	7538
	Comments/Findings:	On 3/6/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
9-Mar-09	Double AA Tire Co Inc.	6231921400	3124 MAIN ST	Cat (i-v) Auto Related	Low	5531
	Comments/Findings:	On 3/9/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
9-Mar-09	Depot of Wheel Corp.	6290200400	2835 MAIN ST	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 3/9/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
9-Mar-09	Dynamic Results Inc/Eddies Tires & A	6221403600	2677 MAIN ST	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 3/9/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
9-Mar-09	Abre Towing dba Paxton Towing	6290620300	3487 MAIN ST	Cat (i-v) Auto Related	High	7549
	Comments/Findings:	On 3/9/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
11-Mar-09	Barracuda Wheel Alignment	6221114100	2520 MAIN ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 3/11/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
11-Mar-09	Euro Specialties	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 3/11/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
11-Mar-09	F &V Auto Repair	6290200100	2801	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 3/11/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
11-Mar-09	Batteries Unlimited	6221021800	2244	MAIN	ST	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 3/11/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
12-Mar-09	Abel Najera	6291200800	3679	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 3/12/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
12-Mar-09	Chula Vista Smog	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 3/12/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
13-Mar-09	Collision Parts Warehouse	6232302800	3740	MAIN	ST	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 3/13/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
8-Apr-09	Juans Auto Repair Inc.	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/8/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
8-Apr-09	Jim's Glass & Screen	6221113200	2540	MAIN	ST	Cat (i-v) Auto Related	High	7536
	Comments/Findings:	On 4/8/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
9-Apr-09	JT Associates Inc/DBA Audio Xperts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/9/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
9-Apr-09	Jesse Smog	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/9/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
9-Apr-09	Lomas Cafe Mexican Food	6232022500	3218	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 4/9/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
10-Apr-09	Hernandez Tire Sales	6232021800	3236	MAIN	ST	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 4/10/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
13-Apr-09	Mike Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/13/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
13-Apr-09	Nice & Easy Autobody & Paint Inc.	6221116000	2350	MAIN	ST	Cat (i-v) Auto Related	High	7532
	Comments/Findings:	On 4/13/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
13-Apr-09	Mariscos Y Birria Los Tokados	6221114600	2638	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 4/13/2009 conducted annual inspection of the site. BMPs are in place. Site is in general good order. Missing oil/grease container**see attachment** Correct listed item within 10 days.						
13-Apr-09	Superior Auto Repair	6291200100	3611	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/13/2009 conducted annual inspection of the facility. BMPs are in place. Site is in good order. Facility was formerly called Monell Brakes.**see attachment** No further action required.						
14-Apr-09	Roman's Truck Body & Paint MJP	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532
	Comments/Findings:	On 4/14/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
14-Apr-09	Main Clutch Co	6232301700	3800	MAIN	ST	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 4/14/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
14-Apr-09	Ricardos's Custom Covers	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 4/14/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
14-Apr-09	Polos Auto Paint Supply	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532
	Comments/Findings:	On 4/14/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
14-Apr-09	Martinez Tires	6290606600	3261	MAIN	ST	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 4/14/2009 conducted annual inspection of the site. Site is in good order. **see attachment** Business is closed. Will be removed from inventory for FY 09-10						
15-Apr-09	Panda Express #1098	6240606700	1820	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 4/15/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
15-Apr-09	Smart & Final #463 / SFI Corp	6290607500	3141	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	On 4/15/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
15-Apr-09	San Diego Tires and Brakes	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/15/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
15-Apr-09	Santa Fe Meats	6221112000	2514	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	On 4/15/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
15-Apr-09	Sanchez Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/15/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
15-Apr-09	PO Auto Repair	6291201600		MAIN	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/15/2009 conducted annual inspection of the facility. BMPs are in place. Site is in good order. Facility was formerly called PO Auto Repair **see attachment** No further action required.						

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
21-Apr-09	J&L Auto Repair Inc.	5670531200	273 BROADWAY	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/21/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
21-Apr-09	Marie Calendar #103	5682702000	330 F ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 4/21/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
21-Apr-09	PB Auto Service	6291201600	3645 MAIN ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/21/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
27-Apr-09	America's Finest Carpet	644-230-2300	730 DESIGN CT	Cat xi-Mob. Carpet/Drape	High	5713
	Comments/Findings:	On 4/23/2009 received complaint report from Sand Diego County Hazmat Division of discharging cleaning effluent into drain system. On 4/27/2009 conducted inspection and observed vehicles discharging effluent into an on-site clean out sewer and piles of carpet fibers along curb line and into landscaping. Staff was also observed hosing down vehicles causing discharge of non-storm water into the conveyance system. See attachment for details of items to be corrected. Owner was directed to act upon discrepancies within 2 working days.				
30-Apr-09	Tune Plus	6221114100	2530 MAIN ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/30/2009 conducted annual inspection of the facility. BMPs are in place. Site is in good order. Facility was formerly called Southbay Transmission **see attachment** No further action required.				
30-Apr-09	Ulises Roberto Sanchez dba Batt Rec	6221112500	2446 MAIN ST	Cat (i-v) Auto Related	High	4953
	Comments/Findings:	On 4/30/2009 conducted annual inspection of the site. Need to clean oils stains in front of store. Correct recommendation within 10 days of the inspection. **see attachment**				
30-Apr-09	Zeppy Auto Repair	6221114100	2520 MAIN ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/30/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
30-Apr-09	Tony's Smog Test Only		MAIN ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 4/30/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
30-Apr-09	Soundelux	6221112500	2490 MAIN ST	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 4/30/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
30-Apr-09	Speed Merchant Inc/American Tire Di	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 4/30/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
4-May-09	Arias Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 5/4/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
4-May-09	Roman's Auto Electric			FAIVRE	ST	Cat vii-Auto Lots Storage	High	7538
	Comments/Findings:	On 5/4/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
5-May-09	Express Tire dba American Auto Serv	5672003600	430	BROADWAY		Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 5/05/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
5-May-09	Chichi's Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 5/5/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
5-May-09	Chula Vista Auto Repair	6221901000	2627	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 5/05/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
5-May-09	JC Towing Inc.	6221901800	2515	FAIVRE	ST	Cat (i-v) Auto Related	High	7549
	Comments/Findings:	On 5/05/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
5-May-09	J&J Chrome & Polish	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
	Comments/Findings:	On 5/05/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
5-May-09	Rays Mobile Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 5/5/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
5-May-09	RG Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 5/5/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
5-May-09	Azteca Auto Repair			FAIVRE	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 5/05/2009 conducted annual inspection of the facility. BMPs are in place. Site is in good order. Facility was formerly called Humberto's Auto Repair. No further action required.						
5-May-09	Capuchino Autobody			FAIVRE	ST	Cat (i-v) Auto Related	High	7532
	Comments/Findings:	On 5/05/2009 conducted annual inspection of the facility. BMPs are in place. Site is in good order. Facility was formerly called Pasten Auto Repair. No further action required.						
5-May-09	South 1 Atuor Detail	6290500900	3031	MAIN	ST	Cat vi-Auto-Washing	High	7542
	Comments/Findings:	On 5/05/2009 conducted annual inspection of the facility. BMPs are in place. Site is in good order. **see attachment** No further action required.						
5-May-09	Ledezma's Tires	6290603300	231	BEYER	WY	Cat (i-v) Auto Related	High	5531
	Comments/Findings:	On 5/5/2009 conducted annual inspection of the site. Facility is out of business. To be deleted for FY 09-10 inventory. **see attachment** No further action required.						
7-May-09	Sams Muffler Radiators	6290603200	225	BEYER	WY	Cat (i-v) Auto Related	High	7533
	Comments/Findings:	On 5/14/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
7-May-09	Lucys Market	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	On 5/7/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
7-May-09	Western Towing	6170710200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549
	Comments/Findings:	On 5/7/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
7-May-09	Pacific Bay Auto	6222111000	150	JACQUA	ST	Cat (i-v) Auto Related	High	5511
	Comments/Findings:	On 5/7/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
7-May-09	American Towing & American Dismar	6291001600	140	REED	CT	Cat (i-v) Auto Related	High	7549
	Comments/Findings:	On 5/7/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
7-May-09	L&E Transmission Inc.	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 5/07/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
7-May-09	H&A Electric Motors			MACE	ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings:	On 5/7/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
7-May-09	ABC Rebuilders			MACE	ST	Cat (i-v) Auto Related	High	7532
	Comments/Findings:	On 5/07/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
8-May-09	Pressures On	6425401400	1288	SANTA LUCIA	RD	Cat xx-Pool/Fountain Clng	Low	7389
	Comments/Findings:	On 5/8/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
8-May-09	D III Industrial	6291302700	187	MACE	ST	Cat (i-v) Auto Related	High	7513
	Comments/Findings:	On 5/08/2009 conducted annual inspection of the facility. BMPs are in place. Site is in good order. No further action required. Facility was formerly J & S Leasing.						
11-May-09	Access II Towing	6232300600	1350	MAX	AV	Cat (i-v) Auto Related	High	7549
	Comments/Findings:	On 5/11/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
12-May-09	Fuller Ford	6440420400	560	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
	Comments/Findings:	On 5/12/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
12-May-09	El Torito #89	5670213700	271	BAY	BL	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/12/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
12-May-09	Economy Upholstery	6291200800	3679	MAIN	ST	Cat vii-Auto Lots Storage	High	4225
	Comments/Findings:	On 5/12/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
14-May-09	Home Depot #658/Home Depot USA	6402911300	725	PLAZA	CT	Cat xxiii-Bldg/Mat Storag	High	5211
	Comments/Findings:	On 5/14/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
20-May-09	John's Towing	6206021700	1298	WAXWING	LN	Cat (i-v) Auto Related	High	7549
	Comments/Findings:	On 5/20/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
20-May-09	Hilltop Market	6232716700	1500	HILLTOP	DR	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	On 5/20/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
20-May-09	Jack in the Box #86	5632703400	5	FOURTH	AV	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/20/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
21-May-09	Jack in the Box #93	6220433300	585	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/21/2009 conducted annual inspection of the site. Found oil/grease stains at front of trash enclosures. Trash lids are open. Need to properly store or remove oil bottles and paint cans **see attachment** Notified manager to correct discrepancies within 10 days of inspection.						
21-May-09	Panda Chef	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/21/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
21-May-09	L & L Barbecue			OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/21/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
21-May-09	Agave Grill	5672004700	625	H	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/21/2009 conducted annual inspection of the site. Found grease/oil on exterior of liquid container storage. Missing covers on oil container storage.. **see attachment** Recommendations to correct discrepancies must be acted upon within 10 days of the inspection.						

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
21-May-09	Chula Vista Towing	5711531200	625	J	ST	Cat (i-v) Auto Related	High	7549
	Comments/Findings:	On 5/21/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
21-May-09	Del Taco #809	6220310500	670	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/21/2009 conducted annual inspection of the site. Food are scattered near rear door. Oill/grease covers missing covers. Trash/Debris scattered in ground surrounding bin. **see attachment** Recommendations to correct discrepancies must be acted upon within 10 days of inspection.						
21-May-09	Seven Eleven #33715	6182803600	689	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	On 5/21/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
22-May-09	Chula Vista Toyota-Main Street	6440407900	650	MAIN	ST	Cat vii-Auto Lots Storage	High	5511
	Comments/Findings:	On 5/22/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
22-May-09	Southbay Motorsports	6440412000	1890	AUTO PARK	PL	Cat (i-v) Auto Related	High	5941
	Comments/Findings:	On 5/22/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
22-May-09	Fuller Honda former People Chevrole	6440420500	580	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
	Comments/Findings:	On 5/22/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
26-May-09	Lolitas Taco Shop	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/26/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						
26-May-09	McDonalds #25836/TRS Restaurant	6411221900	687	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/26/2009 conducted annual inspection of the site. Found stains/grease/oil throughout trash enclosure. Need to train staff on proper maintenance of Trash enclosures. Recommendations to correct discrepancies need to be acted upon within 10 days of the inspection. **see attachment**						
26-May-09	McDonalds #6840/Sutherland MGMT	6390806700	554	EGRAPH CANYO	RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/26/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.						

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
26-May-09	Western Towing/Road One Towing In	6170600200	1150 WALNUT AV	Cat (i-v) Auto Related	High	7549
	Comments/Findings:	On 5/26/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
27-May-09	Panda Express #1316	6430610100	2015 BIRCH RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
27-May-09	Albertson's #6759	5950305800	2370 PROCTOR VALLEY RD	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
27-May-09	Rubios Fresh Mexican Grill	6402932300	1010 TIERRA DEL REY	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
27-May-09	Ralphs #235	6411221400	659 PALOMAR ST	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
27-May-09	KFC-#Y305030	6411221700	1361 MEDICAL CENTER DR	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
27-May-09	McCune Chrysler Dodge	6440414200	1885 AUTO PARK PL	Cat (i-v) Auto Related	High	5511
	Comments/Findings:	On 5/28/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
28-May-09	Vons Food & Drug #2130	5932800600	4404 BONITA RD	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	On 5/28/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.				
28-May-09	Vons Food & Drug #2006	6390806200	505 TELEGRAPH CANYON RD	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings:	On 5/28/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.				

Inspection Date	Facility Name	APN Number	Address	Category	Priority	SIC Number
28-May-09	Seven Eleven #13568E-2131	6394901300	415 TELEGRAPH CANYON RD	Cat x-Eating/Drinking ...	High	5411
	Comments/Findings: On 5/28/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
28-May-09	Roadone DBA A to Z Metro, A to Z Er	6440406100	1805 MAXWELL RD	Cat (i-v) Auto Related	High	7549
	Comments/Findings: On 5/28/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
28-May-09	Rubios Fresh Mexican Grill at Eastlak	6430207300	1480 EASTLAKE PW	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings: On 5/28/2009 conducted annual inspection of the facility. Found multiple stains and leaks in trash enclosures. Need to train employees on proper BMP maintenance. Recommendations be corrected within 10 days of the inspection. **see attachment**					
28-May-09	Pizza Hut #315092		EASTLAKE PW	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings: On 5/28/2009 conducted annual inspection of the facility. Fond leaks and multiple stains in trash enclosures. Train employees on proper BMP maintenance. Recommendations be corrected within 10 days of inspection. **see attachment**					
29-May-09	Wendy's Coastline Food Service Corp	5950720600	960 EASTLAKE PW	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings: On 5/29/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
29-May-09	Boll Weevil Inc	5933500100	4528 BONITA RD	Cat x-Eating/Drinking ...	High	5812
	Comments/Findings: On 5/29/2009 conducted annual inspection of the site. Business is no longer in operation at this location and will be taken out of the inventory. **see attachment** No further action required.					
1-Jun-09	Superior VW Automotive Repair	6221113400	2578 MAIN ST	Cat (i-v) Auto Related	High	7538
	Comments/Findings: On 6/1/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
2-Jun-09	VIP Towing	6441820100	811 ENERGY WY	Cat (i-v) Auto Related	High	7549
	Comments/Findings: On 6/2/2009 conducted annual inspection of the site. Business is no longer located at this address. To be deleted for FY 09-10. **see attachment** No further action required.					

Total Inspections: **232**

Facility Name	APN Number	Address			Category	Priority	SIC Number
		Cat (i-v) Auto Related					
3MC Body & Paint & Auto Center	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	Low	7532
A&A Auto Body & Paint	6181520400	1077	BROADWAY		Cat (i-v) Auto Related	Low	7532
A&C Machine Shop and Auto Repair	622021800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538
A&D Automotive	6181421500	1088	BROADWAY		Cat (i-v) Auto Related	Low	7538
A&V Road Service	6182000100	1100	INDUSTRIAL	BL	Cat (i-v) Auto Related	Low	7538
A-1 Auto Detail & Repair	5711531500	696	BROADWAY		Cat (i-v) Auto Related	Low	7538
AARDVARC Racing	5953711700	1007	OAK HILL	DR	Cat (i-v) Auto Related	Low	5531
ABC Motors Inc./Kirker Customs	5734500500	310	K	ST	Cat (i-v) Auto Related	Low	7532
ABC Rebuilders	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7532
Abel Najera	6291200800	3679	MAIN	ST	Cat (i-v) Auto Related	High	7538
Abel's Auto Body	6231320800	311	TREMONT	ST	Cat (i-v) Auto Related	Low	7532
Abre Towing dba Paxton Towing	6290620300	3487	MAIN	ST	Cat (i-v) Auto Related	High	7549
ABS Collision Center	6191211000	1137	THIRD	AV	Cat (i-v) Auto Related	Low	7532
Absolute Tinting	5955904200	685	EL PORTAL	DR	Cat (i-v) Auto Related	Low	7549
Access II Towing	6232300600	1350	MAX	AV	Cat (i-v) Auto Related	High	7549
Ace Auto	6241803500	1647	MARL	AV	Cat (i-v) Auto Related	Low	7538
ACE Autocare Experts	6182100600	1135	BROADWAY		Cat (i-v) Auto Related	Low	7538
AG Auto Repair	5651703200	107	BROADWAY		Cat (i-v) Auto Related	Low	7538
Agustin Auto Repair	6290402100	1747	BROADWAY		Cat (i-v) Auto Related	Low	7532
Albert Stiehle Parts	6390106700	627	WINDSOR	CI	Cat (i-v) Auto Related	Low	5531

Facility Name	APN Number	Address			Category	Priority	SIC Number
All Around Service	5730620800	268	SHASTA	ST	Cat (i-v) Auto Related	Low	7538
Almacen Automotriz Pacifico	6424100318	1355	CALLEJON PALACIOS		Cat (i-v) Auto Related	Low	5531
American Towing & American Dismantling I	6291001600	140	REED	CT	Cat (i-v) Auto Related	High	7549
Annex San Diego #1 Inc/Cheelys	5653201100	45	BROADWAY		Cat (i-v) Auto Related	Low	5531
Anthony's Auto Center	5662321200	305	E	ST	Cat (i-v) Auto Related	Low	7549
Apollo Tire	6220412700	1421	BROADWAY		Cat (i-v) Auto Related	Low	5531
Aragon Car Care Center	5933811700	894	LAGASCA	PL	Cat (i-v) Auto Related	Low	5531
Argent Classics	6421500100	1698	HARVARD	ST	Cat (i-v) Auto Related	Low	7532
Arias Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
Auto Partes Maya	6411220700	825	PALOMAR	ST	Cat (i-v) Auto Related	Low	5531
Auto Servicio La Vuelta	6426704900	1307	MONTERA	ST	Cat (i-v) Auto Related	Low	5531
Auto Smog Check Centers	5672001200	416	BROADWAY		Cat (i-v) Auto Related	Low	7538
Autoland Inc.	5922001500	354	H	ST	Cat (i-v) Auto Related	Low	5511
Automaster Automotive Center	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7533
Automatic Transmission	6180220800	609	ARIZONA	ST	Cat (i-v) Auto Related	Low	7537
Autotech Motorsports	6191212700	286	EMERSON	ST	Cat (i-v) Auto Related	Low	7538
Autozone #2810	6193001600	1315	THIRD	AV	Cat (i-v) Auto Related	Low	5531
Autozone #2817	5670411700	225	BROADWAY		Cat (i-v) Auto Related	Low	5531
Autozone #5643	5722811300	897	BROADWAY		Cat (i-v) Auto Related	Low	5531
Autozone #5644	6402924000	885	H	ST	Cat (i-v) Auto Related	Low	5531
B&J Auto Repair Smog & Sales	5711531500	696	BROADWAY		Cat (i-v) Auto Related	Low	7538
Barajas Auto Tech	5753010200	1017	HILLTOP	DR	Cat (i-v) Auto Related	Low	7538
Barracuda Wheel Alignment	6290603200	1655	BROADWAY		Cat (i-v) Auto Related	Low	7538
Barracuda Wheel Alignment	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
Batteries Unlimited	6221021800	2244	MAIN	ST	Cat (i-v) Auto Related	High	5531
Battery & Auto Center	6220913200	1510	BROADWAY		Cat (i-v) Auto Related	Low	7538
Bay Auto Electric	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538
Becka Automotive	5670900400	736	F	ST	Cat (i-v) Auto Related	Low	7538
Beto's Mobile Mechanic	5734401700	396	SIERRA	WY	Cat (i-v) Auto Related	Low	7538
Better Bumper	6435711400	1586	MOUNT TAMALPAIS	AV	Cat (i-v) Auto Related	Low	7538
Beyer Supreme Tires	6190605600	1055	THIRD	AV	Cat (i-v) Auto Related	Low	7534
Beyer Supreme Tires #3	5672002400	647	H	ST	Cat (i-v) Auto Related	Low	7534
Big O Tires	5671402400	399	BROADWAY		Cat (i-v) Auto Related	Low	5531
Bonita Valley Auto Care Inc.	5912402700	3995	BONITA	RD	Cat (i-v) Auto Related	Low	7538
Bowlins Auto Service	5713100800	850	BROADWAY		Cat (i-v) Auto Related	Low	7538
Brake Depot	6182803200	1232	BROADWAY		Cat (i-v) Auto Related	Low	7538
Brake Express	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low	7538
Broadway Automotive	6220436700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7538
Budget Tires	6230301200	275	ORANGE	AV	Cat (i-v) Auto Related	Low	5531
Butlers Auto	5684200700	286	G	ST	Cat (i-v) Auto Related	Low	7538
C&V Auto	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7538
C-1 B Tune Up	5953211449	1055	TORREY PINES	RD	Cat (i-v) Auto Related	Low	7538
Calif Smog Certification Inc.	5660106200	11	THIRD	AV	Cat (i-v) Auto Related	Low	7549
California Smog Certification Inc.	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7549
California Smog Test Only	5623231300	425	C	ST	Cat (i-v) Auto Related	Low	7538
California Tire and Service Centers	5672311300	471	BROADWAY		Cat (i-v) Auto Related	Low	7538
Camacho Tires	6180103000	650	MOSS	ST	Cat (i-v) Auto Related	Low	7534
Candys Auto Body Shop	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7532

Facility Name	APN Number	Address			Category	Priority	SIC Number
Castaneda's Auto Repair	5650401500	44	BROADWAY		Cat (i-v) Auto Related	Low	7538
Charlies Auto Electric	5652301700	186	BROADWAY		Cat (i-v) Auto Related	Low	7538
Cherniss Tire World Inc.	5651703200	101	BROADWAY		Cat (i-v) Auto Related	Low	5531
Chichi's Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
Chula Vista Auto Inc.	5650401400	24	BROADWAY		Cat (i-v) Auto Related	Low	7538
Chula Vista Auto Repair	6221901000	2627	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
Chula Vista Engine Rebuilding	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Chula Vista Smog	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
Chula Vista Towing	5711531200	625	J	ST	Cat (i-v) Auto Related	High	7549
Collision Parts Warehouse	6232302800	3740	MAIN	ST	Cat (i-v) Auto Related	High	5531
Courtney Tire	5712001200	726	BROADWAY		Cat (i-v) Auto Related	Low	7534
CSK Auto Inc. #1153	5670411900	241	BROADWAY		Cat (i-v) Auto Related	Low	5531
CSK Auto Inc. #1486	6192806100	1396	THIRD	AV	Cat (i-v) Auto Related	Low	5531
CV Fast	6230825400	1492	ALBANY	AV	Cat (i-v) Auto Related	Low	5531
Daniels Tire Service	5623500600	575	C	ST	Cat (i-v) Auto Related	Low	5531
Dave's Auto Service	5634313100	359	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538
Depot of Wheel Corp.	6290200400	2835	MAIN	ST	Cat (i-v) Auto Related	High	5531
Diamond Finish	6402131800	897	MESA	PL	Cat (i-v) Auto Related	Low	7542
Doctor Jay Automobile Service	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Dons Auto Service Inc.	6390802200	495	TELEGRAPH CANYON	RD	Cat (i-v) Auto Related	Low	7538
Double AA Tire Co Inc.	6231921400	3124	MAIN	ST	Cat (i-v) Auto Related	Low	5531
DR Kar	5953312500	1153	CRYSTAL DOWNS	DR	Cat (i-v) Auto Related	Low	7538
DR Truck & Trailer Repair	5693802100	10	H	ST	Cat (i-v) Auto Related	Low	7538
DR Truck & Trailer Repair	5952211800	756	EASTSHORE	TE	Cat (i-v) Auto Related	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
Dynamic Results Inc/Eddies Tires & Auto R	6221403600	2677	MAIN	ST	Cat (i-v) Auto Related	High	5531
Earl Scheib of CA Inc 243	6180621200	951	BROADWAY		Cat (i-v) Auto Related	Low	7532
Econo Lube N Tune #56	6180612000	903	BROADWAY		Cat (i-v) Auto Related	Low	7538
Economy Tires	6220412600	1430	BROADWAY		Cat (i-v) Auto Related	Low	5531
Enterprise Rent A Car Sales	61821000200	1129	BROADWAY		Cat (i-v) Auto Related	Low	5511
Euro Specialties	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
Evans Tire & Service Center #49	6180211100	948	BROADWAY		Cat (i-v) Auto Related	Low	5531
Explorer Competition Products	5953000600	2311	BOSWELL	RD	Cat (i-v) Auto Related	Low	5531
Express Tire	5710502100	646	H	ST	Cat (i-v) Auto Related	Low	7534
Express Tire dba American Auto Service	5672003600	430	BROADWAY		Cat (i-v) Auto Related	High	7538
F &V Auto Repair	6290200100	2801	MAIN	ST	Cat (i-v) Auto Related	High	7538
Fernando's Smog	6180220800	609	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538
Fiber Molds	6221023400	767	ANITA	ST	Cat (i-v) Auto Related	Low	7532
Fily's Auto Shop	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538
Formiller Motors	6181510100	1001	BROADWAY		Cat (i-v) Auto Related	Low	5511
Formula Auto Repair	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538
Freeway Tire Co	6441810100	1861	NIRVANA	AV	Cat (i-v) Auto Related	Low	5531
Fritz Garage	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538
Fuller Ford	6440420400	560	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
Fuller Honda former People Chevrolet	6440420500	580	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
Galaz Auto Service	6220430200	545	ORANGE	AV	Cat (i-v) Auto Related	Low	7538
Garage 13 Performance	6436624700	1574	STARGAZE	DR	Cat (i-v) Auto Related	Low	5531
Geos Auto Service	5671030600	355	BROADWAY		Cat (i-v) Auto Related	Low	7538
German Werks	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
GK Smog & Auto Repair	6181421700	1088	BROADWAY		Cat (i-v) Auto Related	Low	7538
Glass Depot	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7536
GMJ Enterprises LLC/Maximus Auto Center	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Goodwins Auto Kraft	6396505400	576	MANZANITA	ST	Cat (i-v) Auto Related	Low	7538
Gre-Laz Complete Auto Repair	5651703200	107	BROADWAY		Cat (i-v) Auto Related	Low	7538
Guero's Towing	6242103300	485	SATINWOOD	WY	Cat (i-v) Auto Related	High	7549
H&A Electric Motors	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7538
Happy Auto Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Hernandez Tire Sales	6232021800	3236	MAIN	ST	Cat (i-v) Auto Related	High	5531
Hot Spot Window Tinting	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	7549
Huerta Ruben	5651610100	101	JEFFERSON	AV	Cat (i-v) Auto Related	Low	7538
Humberto's Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
Hunter Service & Parts Inc.	5721320500	673	ASH	AV	Cat (i-v) Auto Related	Low	7538
Hypersport Performance	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	5531
In and Out Transmissions	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538
In-N-Out Auto Glass	6191102400	1120	THIRD	AV	Cat (i-v) Auto Related	Low	7536
International Transmission	6230300900	1580	THIRD	AV	Cat (i-v) Auto Related	Low	7537
Investruck Inc.	6210100100	1470	BAY	BL	Cat (i-v) Auto Related	Low	7538
J&H Auto Repair	5671030100	355	BROADWAY		Cat (i-v) Auto Related	Low	7538
J&J Chrome & Polish	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
J&L Auto Repair Inc.	5670531200	273	BROADWAY		Cat (i-v) Auto Related	High	7538
J&S Leasing	6291302700	187	MACE	ST	Cat (i-v) Auto Related	High	7513
J&V Automotive	6220620500	1550	FRONTAGE	RD	Cat (i-v) Auto Related	Low	7538
JC Towing Inc.	6221901800	2515	FAIVRE	ST	Cat (i-v) Auto Related	High	7549

Facility Name	APN Number	Address			Category	Priority	SIC Number
Jesse Smog	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	7538
Jiffy Lube #897	5652402700	593	E	ST	Cat (i-v) Auto Related	High	7549
Jim's Glass & Screen	6221113200	2540	MAIN	ST	Cat (i-v) Auto Related	High	7536
JJ & Vic Auto Service & Repair	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538
JJ Auto Body	?	2631	FAIVRE	ST	Cat (i-v) Auto Related	Low	7532
John's Towing	6206021700	1298	WAXWING	LN	Cat (i-v) Auto Related	High	7549
JT Associates Inc/DBA Audio Xperts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
Juans Auto Repair Inc.	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
Just Smog (T & TF Inc)	5731700100	605	THIRD	AV	Cat (i-v) Auto Related	Low	7538
Kantruds Garage	5651622100	120	BROADWAY		Cat (i-v) Auto Related	Low	7538
Karillos Truck Tire and Road Service	5954200915	2178	CABO BAHIA		Cat (i-v) Auto Related	Low	7538
Kars Machine Shop	6220121800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538
KDR Enterprises Inc. DBA WABCO Product	5661903100	753	ANITA	ST	Cat (i-v) Auto Related	Low	5531
L&E Tire Service	6243662500	226	REGENCY	CT	Cat (i-v) Auto Related	Low	7534
L&E Transmission Inc.	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7538
Ledezma Tire and Muffler 2	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	Low	5014
Ledezma's Muffler Service	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7538
Ledezma's Tires	6290603300	231	BEYER	WY	Cat (i-v) Auto Related	High	5531
Leemor Sound Inc	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	5531
Leer Truck Accessory Center	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	5531
Low Price Auto Glass	6441820800	880	ENERGY	WY	Cat (i-v) Auto Related	Low	7536
M&M Mobile Auto Repair	6231710300	437	MONTGOMERY	ST	Cat (i-v) Auto Related	Low	7538
Main Car Care Inc	6231721300	2952	MAIN	ST	Cat (i-v) Auto Related	High	7538
Main Clutch Co	6232301700	3800	MAIN	ST	Cat (i-v) Auto Related	High	5531

Facility Name	APN Number	Address			Category	Priority	SIC Number
Marc Goodwin Trucking	5741030300	72	MANKATO	ST	Cat (i-v) Auto Related	Low	7549
Marcos Radiator	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	Low	7538
Marios Mobile Truck Body Repair & Driver	6240532300	4087	OTAY VALLEY	RD	Cat (i-v) Auto Related	Low	7532
Marquez Auto Body Inc.	5734500500	310	K	ST	Cat (i-v) Auto Related	Low	7532
Martinez Tires	6290606600	3261	MAIN	ST	Cat (i-v) Auto Related	High	5531
Martins Auto Transport	6391040600	1026	NOLAN	LN	Cat (i-v) Auto Related	Low	7549
Max Auto Detail & Auto Elelctric	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7542
Maximus Auto Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
MBTS Corporation/Econo Lube and Tune #	5633704200	3008	SECOND	AV	Cat (i-v) Auto Related	Low	7538
McCune Chrysler Dodge	6440414200	1885	AUTO PARK	PL	Cat (i-v) Auto Related	High	5511
Midas Rajmp Inc.	5671030300	363	BROADWAY		Cat (i-v) Auto Related	Low	7538
Miguel Auto Mobile Repair	5956303700	2474	FALCON VALLEY	DR	Cat (i-v) Auto Related	Low	7538
Mike Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
Mikes Auto Repair & Smog Center	5662321500	305	E	ST	Cat (i-v) Auto Related	Low	7538
Mikes Auto Repair & Smog Center	5680442300	300	E	ST	Cat (i-v) Auto Related	Low	7538
Mobil Mercedez Specialist	6290402100	1747	BROADWAY		Cat (i-v) Auto Related	Low	7538
Mobile Trenz Autosound	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	7538
Monell Brakes	6291200100	3611	MAIN	ST	Cat (i-v) Auto Related	High	7538
Mossy Nissan	6440414300	1875	AUTO PARK	AV	Cat (i-v) Auto Related	Medium	5511
MTM Mobile Truck Repair	6240420446	1640	MAPLE	DR	Cat (i-v) Auto Related	Low	7538
Murrays Automobile	5634410500	320	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538
NAPA Auto Parts	6180103700	680	L	ST	Cat (i-v) Auto Related	Low	5531
Need Tow Inc.	5670311100	240	WOODLAWN	AV	Cat (i-v) Auto Related	Low	7549
Neill's Suzuki Auto Repair	5712610100	804	COLORADO	AV	Cat (i-v) Auto Related	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
Nice & Easy Autobody & Paint Inc.	6221116000	2350	MAIN	ST	Cat (i-v) Auto Related	High	7532
Octavio's Garage	5711230800	632	BROADWAY		Cat (i-v) Auto Related	Low	7538
Official Brake & Lights Inspection Center	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7538
Oldham Ranch Automotive	5722705104				Cat (i-v) Auto Related	Low	7538
One Stop Auto Access Plus	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	5531
One Stop Under Car	5670902100	360	BROADWAY		Cat (i-v) Auto Related	Low	5531
Orion's Mobile Auto Service	6433202200	2554	FERN VALLEY	RD	Cat (i-v) Auto Related	Low	7538
P&R Motors	6191710300	1165	THIRD	AV	Cat (i-v) Auto Related	Low	5511
Pacific Auto Glass	6191710300	1165	THIRD	AV	Cat (i-v) Auto Related	Low	7536
Pacific Auto Glass	6191710800	1193	THIRD	AV	Cat (i-v) Auto Related	Low	7536
Pacific Bay Auto	6222111000	150	JACQUA	ST	Cat (i-v) Auto Related	High	5511
Pacific Supply Co/Parts Plus	6180101500	660	L	ST	Cat (i-v) Auto Related	Low	5531
Parts Plus Auto	5650601200	98	BROADWAY		Cat (i-v) Auto Related	Low	5531
Pasten Auto Body	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
PB Auto Service	6291201600	3645	MAIN	ST	Cat (i-v) Auto Related	High	7538
Pep Boys Manny Moe & Jack of CA #651	5672004500	454	BROADWAY		Cat (i-v) Auto Related	Low	5531
Pep Boys Manny Moe & Jack of CA #872	6402932300	1000	TIERRA DEL REY		Cat (i-v) Auto Related	Low	5531
Perfect Star European Auto Repair	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538
Performance Auto Repair & Smog	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538
Performance Team Warehouse Inc.	5713100600	842	BROADWAY		Cat (i-v) Auto Related	Low	5531
Peters Precision Auto	5634512200	310	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538
Polos Auto Paint Supply	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532
Precision Motors	5712002900	619	K	ST	Cat (i-v) Auto Related	Low	7538
Pro Tires	6206012200	437	THRUSH	ST	Cat (i-v) Auto Related	Low	7534

Facility Name	APN Number	Address			Category	Priority	SIC Number
Prokar Products	6222110200	2471	MAIN	ST	Cat (i-v) Auto Related	Low	5531
Protech Autoglass	5653301100	546	CASSELMAN	ST	Cat (i-v) Auto Related	Low	7536
Quick Tows & Road Service	5680710200	209	THIRD	AV	Cat (i-v) Auto Related	Low	7549
R&G Auto Electric	6180211300	924	BROADWAY		Cat (i-v) Auto Related	Low	7538
R&L Performance Auto Service	6220111900	887	PALOMAR	ST	Cat (i-v) Auto Related	Low	7538
Rafael General Atuo Repair	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538
Rags Enterprises Inc./Tip Top Auto	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Rainbow Striping	6441301100	981	MONSERATE	AV	Cat (i-v) Auto Related	Low	7532
Ramz Mobile Auto Care	6391510500	394	MONTCLAIR	ST	Cat (i-v) Auto Related	Low	7538
Rauls's Body Shop	6170712200	790	PALOMAR	ST	Cat (i-v) Auto Related	Low	7532
Rays Mobile Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
RG Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
Ricardos's Custom Covers	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	5531
Roadone DBA A to Z Metro, A to Z Enterpri	6440406100	1805	MAXWELL	RD	Cat (i-v) Auto Related	High	7549
Roman's Truck Body & Paint MJP	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532
Ruben's Auto Electronics	6220412700	1420	BROADWAY		Cat (i-v) Auto Related	Low	7538
S&J Auto Repair	6291201600	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
Safelite Auto Glass #6150	5672001200	416	BROADWAY		Cat (i-v) Auto Related	Low	7536
Sams Muffler Radiators	6290603200	225	BEYER	WY	Cat (i-v) Auto Related	High	7533
San Diego Automotive Inc	5661320100	48	HILLTOP	DR	Cat (i-v) Auto Related	Low	5531
San Diego Diesel Parts	6392901200	252	INKOPAH	ST	Cat (i-v) Auto Related	Low	5531
San Diego Tires and Brakes	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
Sanchez Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
SCJ Auto Repair	6240602700	4501	OTAY VALLEY	RD	Cat (i-v) Auto Related	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
SCJ Towing	6290606000	3211	MAIN	ST	Cat (i-v) Auto Related	High	7549
Scotts Porsche	5651623000	118	BROADWAY		Cat (i-v) Auto Related	Low	5531
Sir Y Incorporated/DBA Sir Y Auto Group	5722120600	777	BROADWAY		Cat (i-v) Auto Related	Low	5511
Skyline Garage	5650401000	615	CHULA VISTA	ST	Cat (i-v) Auto Related	Low	7538
Smog Center	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538
Smog Check Station	6180221100	960	BROADWAY		Cat (i-v) Auto Related	Low	7538
SO California Discount Tire	5711230200	600	BROADWAY		Cat (i-v) Auto Related	Low	5531
Soundelux	6221112500	2490	MAIN	ST	Cat (i-v) Auto Related	High	5531
South Bay Auto Haus	5634410100	310	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538
South Bay Auto Parts Inc.	6190104100	908	THIRD	AV	Cat (i-v) Auto Related	Low	5531
South Bay Auto Repair	5713100500	811	BROADWAY		Cat (i-v) Auto Related	Low	7538
South Bay Collision Center	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7532
South Bay Datsun Auto Repairs	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538
South Beach Auto Sales/El Valle Auto Sales	5713100700	846	BROADWAY		Cat (i-v) Auto Related	Low	5511
South Coast Alignment	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Southbay Auto Glass	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	Low	7536
Southbay Motorsports	6440412000	1890	AUTO PARK	PL	Cat (i-v) Auto Related	High	5941
Southbay Tire & Auto Service	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low	7538
Southbay Transmision	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
Southern California Reconditioning	5661020100	67	DEL MAR	AV	Cat (i-v) Auto Related	Low	7532
Sparks Tune Up of CV	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7538
Special Smog Test Only	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Speed Merchant Inc/American Tire Distribut	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	5531
Sunbelt Towing Inc DBA Western Towing	6170601200	1171	FRONTAGE	RD	Cat (i-v) Auto Related	Low	7549

Facility Name	APN Number	Address			Category	Priority	SIC Number
Super Low Price Auto Glass #23	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	5531
Superior Auot Body Group	5661900600	363	E	ST	Cat (i-v) Auto Related	Low	7538
Superior Auto Body & Paint	5662311000	347	E	ST	Cat (i-v) Auto Related	Low	7532
Superior VW Automotive Repair	6221113400	2578	MAIN	ST	Cat (i-v) Auto Related	High	7538
Tap Acquisition LLC/4 Wheel Parts & Perfor	6220433700	1427	BROADWAY		Cat (i-v) Auto Related	Low	5531
Taps Auto Smog	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	7538
Ted Johnson Garage	6192122600	1270	THIRD	AV	Cat (i-v) Auto Related	Low	7538
The Autobroker	5680722600	203	CHURCH	AV	Cat (i-v) Auto Related	Low	5511
TK Auto Repair	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538
TK Smog Check & Auto Repair	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538
Tony's Smog Test Only	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
Tony's Tires	6290401700	1771	BROADWAY		Cat (i-v) Auto Related	Low	5531
Torque Performance Auto Center	6220433700	1421	BROADWAY		Cat (i-v) Auto Related	Low	7538
Toyo Tire USA Corporation	5952310200	860	KUHN	DR	Cat (i-v) Auto Related	Low	5531
Truebar Machine Shop & Auto Repair	6220433700	1403	BROADWAY		Cat (i-v) Auto Related	Low	7538
Trueline Auto Service	5661903100	377	E	ST	Cat (i-v) Auto Related	Low	7538
Two Bit Tow of San Diego	5670311100	240	WOODLAWN	AV	Cat (i-v) Auto Related	Low	7549
U-Do-It / Auto Painting	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7532
Ulises Roberto Sanchez dba Batt Recycling	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	4953
UNIC Smog Repair	6180220900	960	BROADWAY		Cat (i-v) Auto Related	High	7538
V&m Auto Mechanic	5684200200	409	THIRD	AV	Cat (i-v) Auto Related	Low	7538
Valencia's Diesel Mobile	6220121800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538
Valvoline Instant Oil Change	6420201700	1556	H	ST	Cat (i-v) Auto Related	Low	7538
Valvoline Instant Oil Change	6402924800	899	H	ST	Cat (i-v) Auto Related	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
Van's Suspension & Brake Center	6290100500	1741	BROADWAY		Cat (i-v) Auto Related	Low	7538
Victor's Auto Repair	5670510100	255	ASH	AV	Cat (i-v) Auto Related	Low	7538
Victor's Auto Repair	6426406400	1645	RIDGE ROCK	CT	Cat (i-v) Auto Related	Low	7538
Vidrio Towing	6240606000	2471	MAIN	ST	Cat (i-v) Auto Related	Low	7549
Villegas Used Tires	5672001900	466	BROADWAY		Cat (i-v) Auto Related	Low	5531
VIP Towing	6441820100	811	ENERGY	WY	Cat (i-v) Auto Related	High	7549
West Coast Mobile Mechanix	6180610100	935	BROADWAY		Cat (i-v) Auto Related	Low	7538
West Coast Transmission	6221112900	1656	SILVAS	ST	Cat (i-v) Auto Related	Low	7537
Western Towing	6170710200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549
Western Towing/Road One Towing Inc	6170600200	1150	WALNUT	AV	Cat (i-v) Auto Related	High	7549
Xpress Motorsports	5623242400	45	BROADWAY		Cat (i-v) Auto Related	Low	5531
Zepeda's Radiator Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Zeppy Auto Repair	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
		Cat (iii-xxi)-Boat/Marina					
Chula Vista Marina	7600480101	550	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	Port of SD
Five Star Diesel Service	7600480101	550	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	7538
Garcia's Detail and Repair	5713201400	867	COLORADO	AV	Cat (iii-xxi)-Boat/Marina	Low	3732
Kaiulani Boat Service	6435163600	1446	YELLOWSTONE	AV	Cat (iii-xxi)-Boat/Marina	Low	3732
Magana Yacht Repair	6220723500	778	ANITA	ST	Cat (iii-xxi)-Boat/Marina	Low	3732
South Shore Yacht Sales	7600480101	550	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	5551
Sterling Marine	6395203600	829	WILER	DR	Cat (iii-xxi)-Boat/Marina	Low	3732
The Marine Group LLC	7600481700	997	G	ST	Cat (iii-xxi)-Boat/Marina	Low	3732
WCK Marine Wiring	7600481900	640	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	3732

Facility Name	APN Number	Address			Category	Priority	SIC Number
		Cat iv-Equipment Relaled					
All Drain Rooter	6423111400	1267	CALLE CANDELERO		Cat iv-Equipment Relaled	Low	1711
Allbrands A1 Appliance Service	5954605800	951	SAINT CLAIRE	DR	Cat iv-Equipment Relaled	Low	7623
Antonio Plumbing	7762204003	577	PALOMAR	ST	Cat iv-Equipment Relaled	Low	1711
Any Drain Rooter Service	6231412100	296	TREMONT	ST	Cat iv-Equipment Relaled	Low	1711
Arrow Appliance Service	6400333300	1164	CALLE FLORECITA		Cat iv-Equipment Relaled	Low	7629
B&D Power Services	6230202700	368	ANITA	ST	Cat iv-Equipment Relaled	Low	7629
BJ's Rental Inc.	5733202000	317	K	ST	Cat iv-Equipment Relaled	Low	7359
Blue Planet Drains & Plumbing	6436312952	1558	CIRCULO BRINDISI		Cat iv-Equipment Relaled	Low	1711
California Plumbing & Heating	6424011200	1434	SOUTHVIEW	CT	Cat iv-Equipment Relaled	Low	1711
Chula Vista Cycle Center	6220913200	1502	BROADWAY		Cat iv-Equipment Relaled	Low	5941
Clear-Flow Rooter Service	6202730600	218	ORLANDO	ST	Cat iv-Equipment Relaled	Low	1711
Cogswell Marine & Motorsports Inc.	6220122600	865	STELLA	ST	Cat iv-Equipment Relaled	Low	5941
Daves Quality Plumbing Inc.	5634410500	320	TROUSDALE	DR	Cat iv-Equipment Relaled	Low	1711
Dresser Rand	6180101400	670	L	ST	Cat iv-Equipment Relaled	Low	7699
Elias Plumbing	6402600500	1129	CLOUDWALK CANYON	DR	Cat iv-Equipment Relaled	Low	1711
Gastech	6182600700	453	QUEEN ANNE	DR	Cat iv-Equipment Relaled	Low	7699
Handiworks	5932621100	944	BUCKAROO	LN	Cat iv-Equipment Relaled	Low	7699
J&J Drain & Sewer	5950305513	2355	CALLE SABROSO		Cat iv-Equipment Relaled	Low	1711
Jakes Plumbing	6180718200	430	WESTBY	ST	Cat iv-Equipment Relaled	Low	1711
Jifffy Rooter	6232021800	3236	MAIN	ST	Cat iv-Equipment Relaled	Low	1711
Martin Prep	6424312000	1213	MONTE SERENO	AV	Cat iv-Equipment Relaled	Low	3751
Moys Appliance Repair	6203202900	1458	MAX	AV	Cat iv-Equipment Relaled	Low	7623
Randys Rooter Service	5685123100	223	H	ST	Cat iv-Equipment Relaled	Low	1711

Facility Name	APN Number	Address			Category	Priority	SIC Number
Triple M. Marine Welding & Repairn Inc.	6220620500	1550	FRONTAGE	RD	Cat iv-Equipment Relaled	Low	3732
TV Jacks Inc.	5932800100	4230	BONITA	RD	Cat iv-Equipment Relaled	Low	7629
Uncle Joe Drain Cleaning	6441910500	1660	CABRILLO	DR	Cat iv-Equipment Relaled	Low	1711
Valley Industrial Specialties Inc.	5634312800	110	GLOVER	AV	Cat iv-Equipment Relaled	Low	7699
Walashek Industrial & Marine Inc.	5623500100	595	C	ST	Cat iv-Equipment Relaled	Low	7538
Cat ix-Pest Control ...							
Adios Pest Control Inc.	5957102017	2576	CATAMARAN	WY	Cat ix-Pest Control ...	Low	7342
Atlas Termite	5661103700	25	SECOND	AV	Cat ix-Pest Control ...	Low	7342
Chula Vista Pest Control	5680441300	244	THIRD	AV	Cat ix-Pest Control ...	Low	7342
Indemand Pest Control	6412504200	982	MERCED RIVER	RD	Cat ix-Pest Control ...	Low	7342
King Termite Control Inc.	5681512200	290	LANDIS	AV	Cat ix-Pest Control ...	Low	7342
Lloyds Pest Control	6290201200	2865	MAIN	ST	Cat ix-Pest Control ...	Low	7342
The Works Temite Co	5733601200	119	KEARNEY	ST	Cat ix-Pest Control ...	Low	7342
Turbo Termite & Repair	6170800600	1021	BAY	BL	Cat ix-Pest Control ...	Low	7342
We Got Ya Pest Control Inc.	5660103100	46	THIRD	AV	Cat ix-Pest Control ...	Low	7342
Cat vi-Auto-Washing							
619 Detail	5957400200	2792	SAVANNAH	CT	Cat vi-Auto-Washing	Low	7542
619 Mobile Detailing	6202510800	55	PALOMAR	ST	Cat vi-Auto-Washing	Low	7542
Absolute Auto Detail	6420736100	1390	SANTA ALICIA	AV	Cat vi-Auto-Washing	Low	7542
Advance Mobile Wash & Detail	5954406600	1093	FOREST LAKE	DR	Cat vi-Auto-Washing	Low	7542
AG Autobody & Detail	6431613800	2466	MYRTLE BEACH	WY	Cat vi-Auto-Washing	Low	7542
All American Car Wash C.V.	6182103500	1137	BROADWAY		Cat vi-Auto-Washing	Low	7542

Facility Name	APN Number	Address			Category	Priority	SIC Number
Aqua Clean	5922109000	1435	RIDGEBACK	RD	Cat vi-Auto-Washing	Medium	7542
Arreola Auto Detailing	6184200100	1049	FOURTH	AV	Cat vi-Auto-Washing	Low	7542
Auto Detailing By David	5692520900	489	ELM	AV	Cat vi-Auto-Washing	Low	7542
Baja Auto Detail	5650401000	615	CHULA VISTA	ST	Cat vi-Auto-Washing	Low	7542
Bonita Car Wash	5702204600	3048	BONITA	RD	Cat vi-Auto-Washing	Low	7542
Car Shower	6290620300	3487	MAIN	ST	Cat vi-Auto-Washing	Low	7542
Deluxe Mobile Detailing	6435022400	1320	LONG VIEW	DR	Cat vi-Auto-Washing	Low	7542
Eastlake Mobile Detailing	5955100217	1185	LA VIDA	CT	Cat vi-Auto-Washing	Low	7542
Empire Mobile Auto Detailing	6230606300	250	QUINTARD	ST	Cat vi-Auto-Washing	Low	7542
Finest Auto Detailing	6423801614	1336	SERENA	CI	Cat vi-Auto-Washing	Low	7542
Fresh Detailing	6181102800	615	MOSS	ST	Cat vi-Auto-Washing	Low	7542
GBC Auto Detailing	6434302800	1175	BATTLE CREEK	RD	Cat vi-Auto-Washing	Low	7542
Jay Bright Company	6441812700	787	ENERGY	WY	Cat vi-Auto-Washing	Low	7542
JJ's Mobile Auto Detailing	6191620500	1123	TOBIAS	DR	Cat vi-Auto-Washing	Low	7542
JR S Detail/Mobile Carh Wash	6400703900	770	NAPLES	CT	Cat vi-Auto-Washing	Low	7542
JR's Mobile Auto Detail	6242201200	1516	OLEANDER	AV	Cat vi-Auto-Washing	Low	7542
Keen Detail	6423801515	1344	SERENA	CI	Cat vi-Auto-Washing	Low	7542
Klimax Mobile Detail	5733721400	253	K	ST	Cat vi-Auto-Washing	Low	7542
LST Carwash	6180612000	907	BROADWAY		Cat vi-Auto-Washing	Low	7542
Luna's Mobile Detailing	5754321900	1143	VISTA	WY	Cat vi-Auto-Washing	Low	7542
Maranatha Carwash	5670324300	298	BROADWAY		Cat vi-Auto-Washing	Low	7542
Mario's Auto Detailing	6180610500	915	BROADWAY		Cat vi-Auto-Washing	Low	7542
Mario's Auto Detailing	6220433700	1409	BROADWAY		Cat vi-Auto-Washing	Low	7542
Max Auto Detail & Auto Electric	6220913200	1502	BROADWAY		Cat vi-Auto-Washing	Low	7542

Facility Name	APN Number	Address			Category	Priority	SIC Number
Max Enterprises	5711331100	691	WOODLAWN	AV	Cat vi-Auto-Washing	Low	7542
Mobile Car Wash	6426002400	1613	WOODVILLE	AV	Cat vi-Auto-Washing	Low	7542
Moreno Auto Detailing	6431313200	1291	BOCA RATON	DR	Cat vi-Auto-Washing	Low	7542
Nice Car Always	6432331400	1468	ASHFORD CASTLE	DR	Cat vi-Auto-Washing	Low	7542
Palomar Gas & Carwash	6220112700	878	STELLA	ST	Cat vi-Auto-Washing	High	5541
Pearl Carwash/Chula Vista Inc.	5670325000	215	WOODLAWN	AV	Cat vi-Auto-Washing	Low	7542
Premier Mobile Atuo Detail and Tinting	6435162300	1438	MARBLE CANYON	WY	Cat vi-Auto-Washing	Low	7542
Pro Detailing Services	6420736100	1390	SANTA ALICIA	AV	Cat vi-Auto-Washing	Low	7542
Prontowash Southern CA, LLC	6430610100	2015	BIRCH	RD	Cat vi-Auto-Washing	Low	7542
Rancho Mobile Auto Detail	6206200200	227	RIENSTRA	ST	Cat vi-Auto-Washing	Low	7542
Roberto's Custom Detailing	6193202000	1307	TOBIAS	DR	Cat vi-Auto-Washing	Low	7542
Shining Star Auto Detail	5953613600	2431	EASTRIDGE	LP	Cat vi-Auto-Washing	Low	7542
Simply Clean Atuo Detailing	6400325700	589	BAYONA	LP	Cat vi-Auto-Washing	Low	7542
Splash Auto Detail	6396902600	731	LORI	LN	Cat vi-Auto-Washing	Low	7542
Spotless Auto Detailing	6436410800	1618	GOLDEN GATE	AV	Cat vi-Auto-Washing	Low	7542
Stinger Auto Detail	6290500900	3031	MAIN	ST	Cat vi-Auto-Washing	High	7542
Superior Shine Mobile Detailing	6393141800	398	INKOPAH	ST	Cat vi-Auto-Washing	Low	7542
Vista Palms Car Wash	5722120500	795	BROADWAY		Cat vi-Auto-Washing	Low	7542
Wash and Glow Auto Detail	6401104200	886	ENTRADA	PL	Cat vi-Auto-Washing	Low	7542
Xclusive Auto Detail	5672001200	416	BROADWAY		Cat vi-Auto-Washing	Low	7542
Xtreme Enterprises Inc./Xtreme Mobile	6221112500	2446	MAIN	ST	Cat vi-Auto-Washing	Low	7542
Xtreme Mobile Detailing	6390109000	603	MELROSE	AV	Cat vi-Auto-Washing	Low	7542

Cat vii-Auto Lots Storage

Facility Name	APN Number	Address			Category	Priority	SIC Number
Broadway Palomar RV Storage	6220431100	1375	BROADWAY		Cat vii-Auto Lots Storage	Low	4225
Chula Vista Toyota-Main Street	6440407900	650	MAIN	ST	Cat vii-Auto Lots Storage	High	5511
Convinient Mobile	6221403200	2555	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
Eastlake RV and Boat Storage	5952312100	2371	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	4225
Eastlake Self Storage	5952312900	2351	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	4225
Economy Upholstery	6291200800	3679	MAIN	ST	Cat vii-Auto Lots Storage	High	4225
Hilltop Main Self Storage	6291302500	3755	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
Irongate Mini Storage	6232502300	3650	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
Koa Kampground Storage	5633303600	111	SECOND	AV	Cat vii-Auto Lots Storage	Low	4225
Otay Valley RV Storage	6291300300	163	MACE	ST	Cat vii-Auto Lots Storage	Low	4225
Roman's Auto Electric	6221902000	2555	FAIVRE	ST	Cat vii-Auto Lots Storage	High	7538
Savon Self Storage	6232300600	3708	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
SD Storage-CVS	6221121100	2776	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
SD Storage-MSS	6221902700	2385	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
SD Storage-VSS	5634421500	325	TROUSDALE	DR	Cat vii-Auto Lots Storage	Low	4225
Security First Commercial Storage, LLC	6290501000	1725	FOURTH	AV	Cat vii-Auto Lots Storage	Low	4225
Security First Self Storage	6290500800	3089	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
Security Public Storage	5623232900	471	C	ST	Cat vii-Auto Lots Storage	Low	4225
Sentry Storage	6291302900	3885	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
Sharp Hospital Parking Lot	6410201700	765	MEDICAL CENTER	CT	Cat vii-Auto Lots Storage	Low	
The Collections @ Eastlake	5952314100	2421	FENTON	ST	Cat vii-Auto Lots Storage	Low	
		Cat viii-Fueling-Rtl/Wsl					
3MC Body & Paint & Auto Center	6231320900	1612	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	7532

Facility Name	APN Number	Address			Category	Priority	SIC Number
Allen Gas Truck Stop	6290606100	3205	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	7538
Arco AM/PM #5208	5652801400	407	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco AM/PM #5217	5733203900	798	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco AM/PM #5218	6290101300	1725	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco AM/PM #607	6231921500	3190	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco AM/PM #633	6170601600	800	PALOMAR	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco At H Street	5710300900	720	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco By The Bay	5653101600	765	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco Sunshine Market	6201301600	1401	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	5541
Birkdale Corp DBA L Street 76	5713101400	898	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Bobar Market 8	5670903900	600	F	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Bonita Gas & Mini Mart	5932800700	4498	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Bonita Point Auto Care Inc.	5941311200	149	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Bonita Shell	5701402700	100	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Bonita Vista Gas & Auto	6421701100	903	OTAY LAKES	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Cali Mart	6291303000	3733	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Chevron Inc #1422	5700203200	95	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Chevron Station #1946	6411222000	695	PALOMAR	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411
Chevron Station Inc. #1837	6402910400	770	PLAZA	CT	Cat viii-Fueling-Rtl/Wsl	Low	5541
Chevron Station-Eastlake Parkway	5950720500	950	EASTLAKE	PW	Cat viii-Fueling-Rtl/Wsl	Low	5541
Chevron Station-Olympic Parkway #1975	6430206900	2115	OLYMPIC	PW	Cat viii-Fueling-Rtl/Wsl	Medium	5541
Chula Vista Mobil	6190104500	902	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Chula Vista SVC CTR/SECV Inc.	5734902600	899	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Circle K Store #2964	5650401100	60	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541

Facility Name	APN Number	Address			Category	Priority	SIC Number
Circle K Store #5708	5701310500	98	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Dons Arco	6390802200	495	TELEGRAPH CANYON	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Fred's Auto Repair	6290606100	3205	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Gas Depot	5652402100	199	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Lamb Fuels Inc.	6441820300	855	ENERGY	WY	Cat viii-Fueling-Rtl/Wsl	Low	5541
Lorena B Ratonel Shell	5922001600	350	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Melrose 76	6240800700	1495	MELROSE	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Mobil Oil On The Run #12924	5953221800	2210	OTAY LAKES	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Mohsen Oil	6192805900	1328	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
New West Petroleum LLC #1016	6240800900	1498	MELROSE	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Optima	5672003900	498	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Optimart	62303000800	1450	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Palomar Shell	6192225500	1295	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Seven Eleven 13951 B 2131	5662402800	275	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411
Seven Eleven 24070A 2131	6232716800	1482	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	5411
Seven Eleven 29540B 2131	6191002400	7	NAPLES	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411
Shell at Main	6240602800	4555	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Supreme Gasoline	5652302600	196	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Suresh Patel	6240606500	4430	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Thrifty #9568	6394901500	401	TELEGRAPH CANYON	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
World Oil Co. #46	5672010300	685	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
		Cat x-Eating/Drinking ...					
Agave Grill	5672004700	625	H	ST	Cat x-Eating/Drinking ...	High	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Albertson's #6729	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5411
Albertson's #6757	5733204500	720	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Albertson's #6759	5950305800	2310	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	High	5411
Alejandro's Mexican Bar & Grill	5953222100	2220	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Aning's Homemade Specialties	5922102100	449	KRISTA	CT	Cat x-Eating/Drinking ...	Low	5812
Anthony's Fish Grotto	5670212900	215	BAY	BL	Cat x-Eating/Drinking ...	High	5812
Antojito's Lucy's	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	Low	5812
Apple Tree Market	6231312000	1556	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Arbys #7057/Capitals Group LLC	5953220800	2244	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Aunt Emmas	5670310600	700	E	ST	Cat x-Eating/Drinking ...	Low	5812
Baja Lobster & Club	6181422700	1060	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Ball 3	5721312000	683	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Baskin Robbins	5941310200	1463	H	ST	Cat x-Eating/Drinking ...	Low	5812
Best Price	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Blimpie	6182802100	1208	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Blimpie Subs and Salads	6430206500	1360	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812
Bobbies South	5711530600	686	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Boll Weevil Inc	5933500100	4528	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Boston Market #863	5941310600	770	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Brassco International Inc.	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Bulls Eye Burger	5713101800	860	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Burger King #11435	5700201700	99	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Burger King #11545	6402924800	899	H	ST	Cat x-Eating/Drinking ...	High	5812
Burger King #2339	5720104700	599	BROADWAY		Cat x-Eating/Drinking ...	High	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Burger King #952	6192225200	1265	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Burrito Corona Group LLC	5932800600	4444	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Butcher Shop Steak HS	5710500800	556	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
C&S Discount Store	5683340100	294	CENTER	ST	Cat x-Eating/Drinking ...	Low	5099
Cafe De Cafe	5932800900	4366	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Cafe Salotto	5953220300	2240	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Caffe Taza	6390806400	533	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Caffe Taza 2	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	Low	5812
California Pizza Kitchen	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
California Sushi Bar Inc.	5683340300	337	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Canyon Club Cafe	6394901300	421	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Carls JR #281	6430206800	2097	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
Carls JR #31	5710502400	502	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Carls JR #546	6182005400	1100	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Carls JR #575	5941310400	1487	H	ST	Cat x-Eating/Drinking ...	High	5812
Carls JR #83	6190100800	996	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Carrow's Restaurant #953	5720104700	598	H	ST	Cat x-Eating/Drinking ...	Low	5812
CAT Cheoon Restauranct	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
CDT Catering Services	5634410600	320	TROUSDALE	DR	Cat x-Eating/Drinking ...	Low	
Cheesecake Factory	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Chick Fil A at Eastlake Terraces	6430206700	2089	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
Chili's Bar & Grill #1363	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Chili's Bar & Grill #387	6402924700	800	PASEO DEL REY		Cat x-Eating/Drinking ...	Low	5812
China China Restaurant	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
China Gourmet Express	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
China King Buffet	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
China Little Cafe Express	5684503600	492	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Chinese City Restaurant	6230600200	1403	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Chinese Restaurant	6240605600	4290	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
Chriss Chriss Ent Inc./Little Caesar Pizza	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Chriss Chriss Ent Inc./Little Caesar Pizza	5672322300	481	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Chula Vista Nutrition Store	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	Low	5411
Chula Vista RV Park Store	7600480300	460	SANDPIPER	WY	Cat x-Eating/Drinking ...	Low	5399
Chula Vista Submarina	6182106300	1177	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Church Fried Chicken	6190610200	1005	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Churreria	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Ciao Italian Restaurant	6240606000	4360	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5812
Cilantro Live	5683330500	315	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Claire's #5016	5720104700	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Coco's #607	5671010400	303	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Coin Toss	5670901500	312	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Colima's Mexican Food	5912522500	4102	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Coors Amp/Valentino Espresso	6450214700	2050	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812
Corzy Corner Pizza	6441912700	1655	BRANDYWINE	AV	Cat x-Eating/Drinking ...	Low	5812
COSTCO at Broadway	6182006100	1130	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Costco Wholesale Corp #460	6402925000	895	H	ST	Cat x-Eating/Drinking ...	High	5399
Cotijas Mexican Food	5734500700	810	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Cotixan Mexican & Seafood	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Cotixan Taco Shop	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5812
D & J's Way Inc./Subway	6390806500	559	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
D Lish	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	5812
Dairy Queen Orange Julius	6220310500	664	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Daphnes Grekk Cafe	5950720800	2275	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Del Taco #809	6220310500	670	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
Deli Shoppe	6170800700	1075	BAY	BL	Cat x-Eating/Drinking ...	Low	5812
Denny's Restaurant #1719	5701406000	110	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Denny's Restaurant #6962	5670320600	692	E	ST	Cat x-Eating/Drinking ...	High	5812
Diamond Jim	5733710400	771	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Dlush LLC	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Docks Cocktail Lounge	5683330600	317	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Dominos Pizza	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Dominos Pizza #7724	5683004600	380	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Don Pedro Taco Shop	5680711700	247	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Donnys Cafe Inc.	5912401800	3901	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Dragon Express Fast Food	5670320800	678	E	ST	Cat x-Eating/Drinking ...	Low	5812
Edelweiss Restaurant	5680441700	230	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
El Camaron	5652402600	193	BROADWAY		Cat x-Eating/Drinking ...	High	5812
El Camaron 2	6231911200	301	MONTGOMERY	ST	Cat x-Eating/Drinking ...	Low	5812
El Comal Antojitos Mexicanos	5680711500	239	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
El Comal Antojitos Mexicanos	5710500600	534	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
El Dorado Seafood & Grill	6192806300	0	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
El Gordito Feliz Mexican Food	6404400117	1149	CABRILLO	DR	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
El Jalapeno Mexican Grill	6192806000	1352	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
El Mexicanos Taco Shop	6390806500	567	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
El Nopal Market LLC	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5411
El Norteno	6192122800	1266	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
El Pollo Loco/Bas Food Services	5710622100	666	H	ST	Cat x-Eating/Drinking ...	High	5812
El Ranchero Factory	6192804300	1324	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
El Ranchero Factory Taco Shop #2	6232121900	3344	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
El Torito #89	5670213700	271	BAY	BL	Cat x-Eating/Drinking ...	High	5812
Ernie's 50s Diner	5683330800	323	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Estela's Bazaar	6181422000	1080	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Fair Market & Hollywood Pizza	5743003200	72	J	ST	Cat x-Eating/Drinking ...	Low	5812
Figaro's Pizza	5950305900	2326	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812
Filippis Pizza Grotto	5650600900	82	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Flamingo Cafe	5670902500	396	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Florence Pizza Express	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812
Food 4 Less #780	6220310500	660	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5411
Formosa Club	5713100500	840	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Fuddruckers #3055	5682702300	340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Galley At The Marina	7600480101	550	MARINA	PW	Cat x-Eating/Drinking ...	Low	5812
General Los Panchos Taco Shop	5672321400	577	H	ST	Cat x-Eating/Drinking ...	Low	5812
Giant Pizza King $17	6394901300	419	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Gigante Pizza	5670324500	226	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Godfather's Pizza	6182101500	1187	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Godland Inc./Juice It Up	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Godland Inc./Juice It Up	5950720300	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812
Golden Star Chinese Food	5734503500	864	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Great Happiness II	6230606700	1445	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
H&J Phan DBA Lollicup Tea Zone	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812
HDOS ENT	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Henry's Market Place	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Henry's Market Place dba Otay Ranch Mark	6421701000	941	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
Heritage Park Cafe	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Hermano's Taco Shop	6182901700	1295	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Hilltop Market	6232716700	1500	HILLTOP	DR	Cat x-Eating/Drinking ...	High	5411
Home Town Buffet #705	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Home Town IGA	5670320800	646	E	ST	Cat x-Eating/Drinking ...	High	5411
Honey Baked Ham Inc.	5922000700	316	H	ST	Cat x-Eating/Drinking ...	High	5411
Hot Dog Expressions	6402911300	725	PLAZA	CT	Cat x-Eating/Drinking ...	Low	5812
Hungry Hanks Deli	5734503500	866	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Hurshi's Cafe	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Ida's Lompia Palace & China Town	5941310900	732	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
International House of Pancakes	5953221000	2258	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Isactaz Inc/Quiznos #3179	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	5812
Italy Express	6390806400	527	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Jack Donuts	6220433200	1355	BROADWAY		Cat x-Eating/Drinking ...	Low	5461
Jack in the Box #15	5734500600	802	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Jack in the Box #6	5672003900	486	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Jack in the Box #63	6230500200	1408	THIRD	AV	Cat x-Eating/Drinking ...	High	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Jack in the Box #68	5912511600	4011	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Jack in the Box #86	5632703400	5	FOURTH	AV	Cat x-Eating/Drinking ...	High	5812
Jack in the Box #93	6220433300	585	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
Jack in the Box #99	5922001800	370	H	ST	Cat x-Eating/Drinking ...	High	5812
Jalisco Cafe	5912522600	4026	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Jamba Juice #515	5950720800	2275	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Jamba Juice #603	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Janies	5670320800	652	E	ST	Cat x-Eating/Drinking ...	Low	5812
Javid Brothers Enterpirse Inc/Quiznos	6182006500	1120	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Jill A Lindstedt	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Jill A Lindstedt	5653102700	725	E	ST	Cat x-Eating/Drinking ...	Low	5812
Jimmy J's Espresso	6420202800	900	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Jimmy's Family Restaurant	6191105000	1198	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
JNC Pinoy Foodmart Inc.	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
Jochi's Fast Food Inc.	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Joco Management	5720803100	635	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Joe and Ernie's Pizzeria Inc.	5712006208	730	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Jose Mexican Food	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Joshways Restaurant & Bar	5670531400	299	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Juice Adventure	6421701000	935	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Juice Adventure	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Julian's Mexican Food	6190506700	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Just Java Cafe	5681611200	285	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
JVS ENT LLC/DBA Quiznos Sub #4365	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Kaga Sushi	6192113500	1216	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Kanpai Restaurant	6192806300	305	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Karina's Mex Seafood	6180101700	986	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Karina's Mexican Style Seafood #2	6192122200	1282	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
KD Inc/Krazy Dollar	6170800800	1161	BAY	BL	Cat x-Eating/Drinking ...	Low	5331
KFC Y305136BL03	6193001500	1305	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
KFC Y450073BL03	5685112000	461	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
KFC-#Y305030	6411221700	1361	MEDICAL CENTER	DR	Cat x-Eating/Drinking ...	High	5812
KFC-Y450114	6220433400	1327	BROADWAY		Cat x-Eating/Drinking ...	High	5812
KIC Import & Export	5733310800	737	THIRD	AV	Cat x-Eating/Drinking ...	Low	5399
King's Fish House	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
KMart Corp. #7636	6402923600	875	H	ST	Cat x-Eating/Drinking ...	Low	5399
Koopman Enterprise	6396307800	376	THERESA	WY	Cat x-Eating/Drinking ...	Low	5399
Kotija Taco Shop	6240800800	295	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812
L & L Barbecue	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
L Street Shell	6180211800	902	BROADWAY		Cat x-Eating/Drinking ...	High	5411
La Bella Pizza	5683502500	373	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
La Bodega Market	6182101600	1193	BROADWAY		Cat x-Eating/Drinking ...	High	5411
La Escondida	6221114100	2530	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812
La Fresca	6181513000	1037	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
La Fuente Mexican Food	5660106200	34	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
La India Bonita	6240800600	1455	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812
La Moreliana Bakery	6230602500	275	QUINTARD	ST	Cat x-Eating/Drinking ...	Low	5461
La Nena Restaurant Inc.	6180621300	975	BROADWAY		Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
La Pulga #2	6182901700	1295	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
La Quinta Grill	5652302300	625	E	ST	Cat x-Eating/Drinking ...	Low	5812
La Tia Mexican Food/Paula Bakery	5720803200	631	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
La Torta	5710301200	730	H	ST	Cat x-Eating/Drinking ...	Low	5812
La Tropicana	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Liberty Giant Pizza	6201301800	1419	HILLTOP	DR	Cat x-Eating/Drinking ...	Low	5812
Lisa's Filipino Cuisine	5953220100	2206	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Little Caesars 7636	6402923600	875	H	ST	Cat x-Eating/Drinking ...	Low	5812
LJ San Miguel Ranch 22 LP/Los Primos Me	5950305300	2322	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812
Lolitas Taco Shop	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
Lolitas Taco Shop	5933500100	4516	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Lomas Cafe Mexican Food	6232022500	3218	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
Long John Silver	6190611400	1049	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Lorenzos	5670324500	200	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Los Alazanes Inc.	5941310200	1451	H	ST	Cat x-Eating/Drinking ...	Low	5812
Los Arcos Restaurant	5700203400	89	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Los Jalapenos Mexican Restaurant	6180620100	943	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Los Panchos Mexican & Seafood	6421701000	933	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Los Panchos Taco Shop	6190610300	1009	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Los Taquitos	6232022700	1665	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Los Taquitos Mexican Grill	6182802100	1208	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Los Tres Pedros	6192215300	1223	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Lucys Market	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	High	5411
Lutong Bahay & Oriental Grill	5941310900	732	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Luzitas Taco Shop	5743003200	60	J	ST	Cat x-Eating/Drinking ...	Low	5812
Mandarin Canton Restaurant	6390806400	543	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Mandarin Chinese	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Mandarin Gourmet	5932800600	4410	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Manhattan	5672000900	400	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Manila Garden Restaurant	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Manna Restaurant	5670903900	600	F	ST	Cat x-Eating/Drinking ...	Low	5812
Marie Calendar #103	5682702000	330	F	ST	Cat x-Eating/Drinking ...	High	5812
Marios Taco Shop	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Mariscos El Palmar	5670411600	201	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Mariscos Y Birria Los Tokados	6221114600	2638	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
Marisol Nite Club	6221114600	2638	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812
Mazal Realty Investment	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	
McDonalds #14228/Sutherland MGMT Co	5953220900	2254	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
McDonalds #25836/TRS Restaurant	6411221900	687	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
McDonalds #6840/Sutherland MGMT Co	6390806700	551	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812
McDonalds at Broadway	5720803400	619	BROADWAY		Cat x-Eating/Drinking ...	High	5812
McDonalds at E Street	5653102700	725	E	ST	Cat x-Eating/Drinking ...	High	5812
McDonalds at Third #1557	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
McDonalds Corp	6182007100	1150	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
McDonalds Corp	6182803700	1288	BROADWAY		Cat x-Eating/Drinking ...	High	5812
McDonalds of Bonita	5932800900	4340	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
McDonalds/Tavarua Restaurant Inc	5623242000	75	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Mercado International 2000	6230606100	1415	THIRD	AV	Cat x-Eating/Drinking ...	High	5411

Facility Name	APN Number	Address			Category	Priority	SIC Number
Merkl's Restaurant	5672112200	415	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
MGM Buffet	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Miramar Fish Market	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5812
MJ's Bar & Grill	6230606700	1445	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
MR Jalapeno	5710502200	520	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
MR VS Giant Pizza	6190507100	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
MRS Rice Oriental Restaurant, LLC	6220433200	1355	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
NAPA Pizza	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812
NIC Subway 29881 Inc	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
NIC Subway 33339 Inc	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812
Ninna Matty's Mexican Food	6192806000	1352	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Noodles & Company	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Oasis Cafe	5912522500	4076	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Ocean City Partnership	6181510200	1011	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Old Bonita Store Restaurant	5912522600	4014	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Olive Garden Restaurant #1205	5720104500	585	I	ST	Cat x-Eating/Drinking ...	Low	5812
Otay Farms Inc.	6290100100	1716	BROADWAY		Cat x-Eating/Drinking ...	High	5411
Outside In	6191210700	1121	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Over the Border	6231821400	3008	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812
Palap Charbroiled Chicken	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812
Palomar Importer & Wholesale Co. Inc.	6221114100	2550	MAIN	ST	Cat x-Eating/Drinking ...	Low	5399
Panda Chef	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Panda Express #1098	6240606700	1820	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
Panda Express #1316	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Panda Express #960	6182005400	1120	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Panda Imperial Restaurant	6192113400	1208	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Panera Bread	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Papa Johns Pizza #1977	6190601600	1085	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Papa Johns Pizza #1978	6402932300	1020	TIERRA DEL REY		Cat x-Eating/Drinking ...	Low	5812
Papa Murphy's Take & Bake Pizza	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812
Papayas Juice Bar	5932800200	4244	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Park & Joo Enterprise Inc/DBA Rice King	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812
Pei Wei Asian Dinner	5950711600	884	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812
Pescados Mariscos Hectors	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Pescados Y Mariscos Hectors	6182106300	1177	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
PF Changs China Bistro	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Pho Vien Dong	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Pick Up Stix	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
Pinas Fruit Salads Smoothies	6180103300	970	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Pizza & Pasta Express	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Pizza Hut #315092	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
Pizza Junction	5670324500	226	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Pizzeria Uno	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Plazas Mexican Food	6220913700	1550	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Poe's Catering	5954100222	2156	LAGO MADERO		Cat x-Eating/Drinking ...	Low	5812
Poliza Hollywood Inc	5743003200	72	J	ST	Cat x-Eating/Drinking ...	High	5411
Pozoleria Dona Maria	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Prima Supply Inc.	6221115800	649	ANITA	ST	Cat x-Eating/Drinking ...	Low	5399

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Quik Wok	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5399
Quizno's Classic Subs	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	5812
Quizno's Subs	5932800500	4378	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Rally's Hamburger/Ongs Restaurant Group	6190511300	1004	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Ralphs #235	6411221400	659	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411
Ralphs #75	5941310100	780	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
Rancho Palomar LP	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	Low	
Red Hot Java	6410101900	765	MEDICAL CENTER	CT	Cat x-Eating/Drinking ...	Low	5812
Red Lobster #521	5682702700	342	F	ST	Cat x-Eating/Drinking ...	High	5812
Robledo's Taco Shop Inc.	5672001500	444	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Romano's Macaroni Grill #339	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Romesco Baja Bistro	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Rosa Giant Pizza	6221114800	1680	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Royal China Palace II	5652302300	625	E	ST	Cat x-Eating/Drinking ...	Low	5812
Rubios Fresh Mexican Grill	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	High	5812
Rubios Fresh Mexican Grill at Broadway	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Rubios Fresh Mexican Grill at Eastlake	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
San Diego Cash & Carry	6232502500	3630	MAIN	ST	Cat x-Eating/Drinking ...	Low	5399
Santa Fe Meats	6221112000	2514	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
Save A Lot #943	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Seafood City Market	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Senor Pancho Mexican Grill	6231423900	298	MONTGOMERY	ST	Cat x-Eating/Drinking ...	Low	5812
Seven Eleven #13568E-2131	6394901300	415	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411
Seven Eleven #13569E-2131	5712002300	796	BROADWAY		Cat x-Eating/Drinking ...	Low	5411

Facility Name	APN Number	Address			Category	Priority	SIC Number
Seven Eleven #13570C-2131	5670531100	285	BROADWAY		Cat x-Eating/Drinking ...	High	5411
Seven Eleven #13576F	5710611000	698	H	ST	Cat x-Eating/Drinking ...	Low	5411
Seven Eleven #13578D-2131	6240800600	1475	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5411
Seven Eleven #13582C-2131	5731700200	290	I	ST	Cat x-Eating/Drinking ...	Low	5411
Seven Eleven #13590D-2131	6181520700	1097	BROADWAY		Cat x-Eating/Drinking ...	High	5411
Seven Eleven #18547B-2131	6240605700	4300	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5411
Seven Eleven #2131	6421700900	913	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
Seven Eleven #21604C-2131	5722811300	899	BROADWAY		Cat x-Eating/Drinking ...	High	5411
Seven Eleven #21792C-2131	5684200100	403	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Seven Eleven #33715	6182803600	689	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411
Silver Dollar	5683340400	341	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Sitoo's Deli & Catering	5952313500	2300	BOSWELL	RD	Cat x-Eating/Drinking ...	Low	5812
SL Gourmet/Chinese Gourmet Express	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Smart & Final #463 / SFI Corp	6290607500	3141	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
Smoothie Caffe	5950705500	2070	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Snack Ball	6232301700	3804	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812
Sodexho Management Inc.	5743003400	84	J	ST	Cat x-Eating/Drinking ...	Low	5812
Southbay Fish and Grill	7600480102	570	MARINA	PW	Cat x-Eating/Drinking ...	Low	5812
Star Bakery	6192866000	1372	THIRD	AV	Cat x-Eating/Drinking ...	High	5461
Star Gazer Club	5653201600	33	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Starbucks Coffee #5253	5941310200	1467	H	ST	Cat x-Eating/Drinking ...	Low	5812
Starbucks Coffee #5665	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	5812
Starbucks Coffee #5885	5672321500	595	H	ST	Cat x-Eating/Drinking ...	Low	5812
Starbucks Coffee #6589	6411221800	605	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Starbucks Coffee #8750	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	Low	5812
Steak Escape Otay Ranch Town Center	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Stellas Deli & Cafe at Third Avenue	5683504000	365	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Steve's Cabana Bar	5652400600	173	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Stuart Anderson Black Angus Restaurant	5653101700	707	E	ST	Cat x-Eating/Drinking ...	Low	5812
Submarina	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812
Subway #1055	5720803500	609	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Subway #15681/Serler Inc.	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Subway #16107	6390806500	559	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Subway #16107-1	6240800900	1498	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812
Subway #28286	5623242400	45	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Subway #3062	5941310200	1455	H	ST	Cat x-Eating/Drinking ...	Low	5812
Subway #31595	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Subway at H	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5812
Subway at Main	6291303000	3733	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812
Sugar & Spice Delicafe	5720104700	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Sunny's Market	5672122000	449	BROADWAY		Cat x-Eating/Drinking ...	High	5411
Super Express Chinese Food	5720803500	609	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Sushi Loco	5670324500	224	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Sushiya	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Sutherland Management Co.	5932800900	4394	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Taco Bell #15508	6420201700	1548	H	ST	Cat x-Eating/Drinking ...	High	5812
Taco Bell #2971	5922001300	340	H	ST	Cat x-Eating/Drinking ...	High	5812
Taco Bell #3398	5670320100	696	E	ST	Cat x-Eating/Drinking ...	High	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Tacos El Gordo	5671902800	689	H	ST	Cat x-Eating/Drinking ...	Low	5812
Tacos El Gordo De Tijuana, BC Jr	6193001100	1351	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Tacos Toby	6240606200	1682	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812
Taqueria El Farolito	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Target Store T-1815	5950720400	910	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5399
Texcoco Restaurant	6181512900	1043	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
The Lighthearted Gourmet	5683003300	385	FOURTH	AV	Cat x-Eating/Drinking ...	Low	5812
The Lion's Den	5721803300	725	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
The Perking Lot	5933500100	4502	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
The Plascencia Group LLC	5932800500	4346	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
The Soup Stone	5682702100	310	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Thien's Optimart	5672003900	498	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Third Avenue Minimart	5733204000	772	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Tijuana Oyster Bar	5932800200	4246	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Tortilleria Santa FE, Inc.	6231820400	387	ZENITH	ST	Cat x-Eating/Drinking ...	Low	5812
Tropical Fruits	6220412700	1410	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Vanessa Water Store	5670903900	600	F	ST	Cat x-Eating/Drinking ...	Low	5812
VIP Oriental Buffet	5710500600	542	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Vons Food & Drug #2006	6390806200	505	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411
Vons Food & Drug #2071	5953220200	2250	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
Vons Food & Drug #2130	5932800600	4404	BONITA	RD	Cat x-Eating/Drinking ...	High	5411
Vons Food & Drug #2336	5922000500	360	H	ST	Cat x-Eating/Drinking ...	High	5411
Vons Food & Drug #3063	5734503400	870	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Walmart Expansion	5623242000	75	BROADWAY		Cat x-Eating/Drinking ...	High	5399

Facility Name	APN Number	Address			Category	Priority	SIC Number
Water 24 Inc.	6182911200	1215	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Wendy's Coastline Food Service Corp	5950720600	960	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
Wendy's Coastline Food Service Corp	5670325100	618	E	ST	Cat x-Eating/Drinking ...	High	5812
Wetzel's Pretzels Otay Ranch	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Wienerschitzel	6192221400	283	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Wings N Things Restaurant	5672322300	481	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Xana Spree	5957505000	391	PLAZA TOLUCA		Cat x-Eating/Drinking ...	Low	5399
Yo Julian's Mexican Food	6190507100	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Yokozuna's Shushi Bar & Island Grill	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Yoshinoya Beef Bowl	6182901500	1299	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Zorba's Family Restaurant	5651622800	100	BROADWAY		Cat x-Eating/Drinking ...	Low	5812

Cat xi-Mob. Carpet/Drape

Active Carpet Cleaning	5693111900	43	ALVARADO	PL	Cat xi-Mob. Carpet/Drape	Low	7217
America's Finest Carpet	644-230-2300	730	DESIGN	CT	Cat xi-Mob. Carpet/Drape	High	5713
Bonita Carpet Care	5955205800	2506	SADDLEHORN	DR	Cat xi-Mob. Carpet/Drape	Low	7217
Buena Vista Carpet Care	6243850500	1551	LOMA	LN	Cat xi-Mob. Carpet/Drape	Low	7217
Carlos Sandoval Carpet Center	5731300500	380	I	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Cool Style Carpet Cleaning	5712332000	752	MADISON	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Day & Night Carpet Cleaning Services	5683322200	317	TWIN OAKS	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Del Rey Carpet Service	5933702900	535	PASEO ROSAL		Cat xi-Mob. Carpet/Drape	Low	7217
Dollar Carpet Cleaning	6431823800	2287	SUN VALLEY	RD	Cat xi-Mob. Carpet/Drape	Low	7217
Edwards Carpet Cleaning	6410910400	578	NANTUCKET	DR	Cat xi-Mob. Carpet/Drape	Low	7217
Empire Carpet Service Inc.	5957232000	556	SCENIC TRAIL	PL	Cat xi-Mob. Carpet/Drape	Low	7217

Facility Name	APN Number	Address			Category	Priority	SIC Number
Extreme Carpet Care Services LLC	6233151100	1540	CONNOLEY	AV	Cat xi-Mob. Carpet/Drape	Low	7217
First Touch Steam Carpet Cleaning	6182106300	1177	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217
Foreign Auto Upholstery	5754000100	55	NAPLES	ST	Cat xi-Mob. Carpet/Drape	Low	7532
Frankys Floor & Carpet Care	6190105200	971	FOURTH	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Golden Care Carpet Cleaning	6243711600	1768	REGENCY	WY	Cat xi-Mob. Carpet/Drape	Low	7217
Hydro Pacific Carpet Cleaning	5680421100	232	GARRETT	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Integrity Carpet Cleaning	5652904100	30	WOODLAWN	AV	Cat xi-Mob. Carpet/Drape	Low	7217
L&V Cleaning Services	6233331300	64	SHERWOOD	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Lavamax Carpet Cleaning	5634410500	320	TROUSDALE	DR	Cat xi-Mob. Carpet/Drape	Low	7217
Ocean's Carpet	6221112500	2488	MAIN	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Preferred Carpet Care	5651623100	110	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217
RC Carpet & Furniture Cleaning	5735330600	162	L	ST	Cat xi-Mob. Carpet/Drape	Low	7217
RG Carpet Cleaning	6412710400	1097	MOUNT DANA	DR	Cat xi-Mob. Carpet/Drape	Low	7217
Rosalie's Carpet Cleaning	6181522600	1057	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217
Rueda's Carpet Cleaning	6244213600	274	RANCHO	CT	Cat xi-Mob. Carpet/Drape	Low	7217
Select Carpets	6204202000	4501	OTAY VALLEY	RD	Cat xi-Mob. Carpet/Drape	Low	5713
Servpro of Fire & Water Damage	6411431300	1485	LA CHICA	DR	Cat xi-Mob. Carpet/Drape	Low	7217
Siedschlag Carpet Cleaning	5710620800	537	OAKLAWN	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Southbay Carpet Care	6422404000	1883	GOTHAM	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Sunset Carpet Cleaning	5672111000	557	VANCE	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Sunset Carpet Cleaning & Services	6422724300	931	BUENA VISTA	WY	Cat xi-Mob. Carpet/Drape	Low	7217
TNT Carpets	5742311800	658	CARLA	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Two Brothers Carpet & Upholstery Cleaning	5651312300	50	MONTE VISTA	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Vegas Carpet Cleaning	5754321700	1108	HILLTOP	DR	Cat xi-Mob. Carpet/Drape	Low	7217

Facility Name	APN Number	Address			Category	Priority	SIC Number
Warrior Carpet	6442214600	1546	POINT HUENEME	CT	Cat xi-Mob. Carpet/Drape	Low	7217
We Buff It Too Biz	5682630600	489	G	ST	Cat xi-Mob. Carpet/Drape	Low	7217
We Care Carpet Cleaning	5951750300	1937	DUKE	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Westcoast Carpet Cleaning	5733712300	297	K	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Cat xii-Cement Mixing/Cut							
Arturo Cervantes Barajas Concrete Co.	6206030400	1264	RAVEN	AV	Cat xii-Cement Mixing/Cut	Low	1771
Buildis and Son Cement	5733322100	720	DEL MAR	AV	Cat xii-Cement Mixing/Cut	Low	1771
California Concrete Designs	6424800400	1631	COOLSPRINGS	CT	Cat xii-Cement Mixing/Cut	Low	1771
Contrera's Concrete Service	5735411300	113	L	ST	Cat xii-Cement Mixing/Cut	Low	1771
Cuen Fred Concrete Service	6200301000	47	OXFORD	ST	Cat xii-Cement Mixing/Cut	Low	1771
John Tessitore	5735220300	812	FAIRWAY	CT	Cat xii-Cement Mixing/Cut	Low	1771
Nora's Concrete	5691330300	110	F	ST	Cat xii-Cement Mixing/Cut	Low	1771
RDS Concrete Construction	5693020600	479	CORTE HELENA	AV	Cat xii-Cement Mixing/Cut	Low	1771
Rubios Concrete Construction	6220722400	725	BELVIA	LN	Cat xii-Cement Mixing/Cut	Low	1771
The Rock Concrete Pumping	6180901900	1031	COLORADO	AV	Cat xii-Cement Mixing/Cut	Low	1771
Cat xiii-Masonry							
A&E Carpet & Tile Distributors	6291002300	170	MACE	ST	Cat xiii-Masonry	Low	1743
Alpha-Omega Hardscape	5952931300	861	SOUTHSHORE	DR	Cat xiii-Masonry	Low	1741
Chula Vista Tile & Stone	6182803500	693	PALOMAR	ST	Cat xiii-Masonry	Low	1743
Emerald Plastering	5752001200	947	HELIX	AV	Cat xiii-Masonry	Low	1742
FJL Masonry	5958001500	1002	SUTTER RIDGE	CT	Cat xiii-Masonry	Low	1741
J&J Tile Service	5650801200	54	SMITH	AV	Cat xiii-Masonry	Low	1743

Facility Name	APN Number	Address			Category	Priority	SIC Number
Jasa Concrete	6205101900	1414	MELROSE	AV	Cat xiii-Masonry	Low	1741
JR Drywall	6202621800	121	PALOMAR	ST	Cat xiii-Masonry	Low	1742
Klaser Tile Company Inc.	6222303400	1595	JAYKEN	WY	Cat xiii-Masonry	Low	1743
MAC Plastering Inc.	6424901800	1705	FAWNTAIL	CT	Cat xiii-Masonry	Low	1742
Masonry By Michael	6403810800	573	PLAZA DEL CID		Cat xiii-Masonry	Low	1741
Masonry Pros	5741401800	78	KING	ST	Cat xiii-Masonry	Low	1741
Precison Plastering	5730900800	389	I	ST	Cat xiii-Masonry	Low	1742
South Coast Structures	6392320700	801	HALECREST	DR	Cat xiii-Masonry	Low	1741
TRS Tile	6201610600	1221	HELIX	AV	Cat xiii-Masonry	Low	1743
USA Stone Design	6180103300	970	BROADWAY		Cat xiii-Masonry	Low	1741
Valencia Stone and Tile	5662503100	241	E	ST	Cat xiii-Masonry	Low	1743
Vent Pros	6192113200	325	OXFORD	ST	Cat xiii-Masonry	Low	1743
WEMAC Marine Insulation	6221023500	753	ANITA	ST	Cat xiii-Masonry	Low	1742
		Cat xiv-Painting/Coating					
Alfred's Painting	6183600800	544	WELTON	ST	Cat xiv-Painting/Coating	Low	17721
Allstar Painting Services	6433411100	1957	MOSS LANDING	AV	Cat xiv-Painting/Coating	Low	7349
Arrow Professional Painting	6413011600	1170	WIND RIVER	RD	Cat xiv-Painting/Coating	Low	1721
Arroyo Custom Painting Corp	6423800610	1365	SERENA	CI	Cat xiv-Painting/Coating	Low	1721
Barba Painting	6426001000	1537	APPLEGATE	ST	Cat xiv-Painting/Coating	Low	1721
Discount Painting	6423801607	1335	SERENA	CI	Cat xiv-Painting/Coating	Low	1721
DS Construction	5663002200	172	D	ST	Cat xiv-Painting/Coating	Low	1742
G&R Painting	6180623900	580	MOSS	ST	Cat xiv-Painting/Coating	Low	1721
Gaskill Painting Company Inc.	6442302100	744	DESIGN	CT	Cat xiv-Painting/Coating	Low	1721

Facility Name	APN Number	Address			Category	Priority	SIC Number
George Painting	6205412200	1420	CAMELLIA	CT	Cat xiv-Painting/Coating	Low	1721
Hawkin's Painting Company	5752620500	976	GUATAY	AV	Cat xiv-Painting/Coating	Low	1721
Icon Painting Solutions	6411305200	1480	VENTERS	DR	Cat xiv-Painting/Coating	Low	1721
Jam Painting Inc.	6230501400	317	QUINTARD	ST	Cat xiv-Painting/Coating	Low	1721
Lazaro's Painting	6244325700	252	RANCHO	DR	Cat xiv-Painting/Coating	Low	1721
Luther Painting	5680142300	215	GUAVA	AV	Cat xiv-Painting/Coating	Low	1721
Maintenance	6432903800	1150	HITCHING POST	LN	Cat xiv-Painting/Coating	Low	1721
Marcelo's Distinctive Painting	6181511100	567	MOSS	ST	Cat xiv-Painting/Coating	Low	1721
MCS Painting	5663005600	121	SECOND	AV	Cat xiv-Painting/Coating	Low	1721
My Painer Plus.Com	6203600100	1360	MYRA	CT	Cat xiv-Painting/Coating	Low	1721
NR Painting Inc.	6433914200	2526	KING CREEK	CI	Cat xiv-Painting/Coating	Low	1721
Painters at Work	6182106100	550	OXFORD	ST	Cat xiv-Painting/Coating	Low	1721
Paradise Painting	6403300107	1015	CAMINITO ESTRELLA		Cat xiv-Painting/Coating	Low	1721
Quality Home Painting	5952122100	2019	BRIDGEPORT		Cat xiv-Painting/Coating	Low	1721
Ray Garcia	5700204000	24	FLOWER	ST	Cat xiv-Painting/Coating	Low	1721
Rolling Hills Custom Painting	6192501500	116	PALOMAR	ST	Cat xiv-Painting/Coating	Low	1721
Safari Painting	5681610300	259	THIRD	AV	Cat xiv-Painting/Coating	Low	1721
Sammy's Painting Company	6192221100	225	PALOMAR	ST	Cat xiv-Painting/Coating	Low	1721
Scott Painting Company	6393630200	752	PASEO DEL REY		Cat xiv-Painting/Coating	Low	1721
South Coast Home Painting	6393141300	1015	NORMA	CT	Cat xiv-Painting/Coating	Low	1721
Southbay Painting	5651701100	564	D	ST	Cat xiv-Painting/Coating	Low	1721
Sumaya Painting	5730502200	244	H	ST	Cat xiv-Painting/Coating	Low	1721
Superb Interior Painting	6437335000	1679	PICKET FENCE	DR	Cat xiv-Painting/Coating	Low	1721
Superior Color Painting	6437323200	1604	PICKET FENCE	DR	Cat xiv-Painting/Coating	Low	1721

Facility Name	APN Number	Address			Category	Priority	SIC Number
		Cat xvi-Landscaping					
A&G Landscaping	6203502500	226	QUINTARD	ST	Cat xvi-Landscaping	Low	0782
A&G Landscaping	6230720428	56	QUINTARD	ST	Cat xvi-Landscaping	Low	0782
AJ Gardening	6411707100	1125	MISTY CREEK	ST	Cat xvi-Landscaping	Low	0782
All Palms Plus	6411307000	1471	VENTERS	DR	Cat xvi-Landscaping	Low	0782
American Veteran Lawn Care	6393530400	431	NAPLES	ST	Cat xvi-Landscaping	Low	0782
Arroyo Landscaping	6424000100	1494	WOODCREST	ST	Cat xvi-Landscaping	Low	0782
AXL Landscaping	6404002000	1136	CALLE DE DAMASCO		Cat xvi-Landscaping	Low	0782
Beltran Landscaping	6433521000	2078	MIRROR LAKE	PL	Cat xvi-Landscaping	Low	0782
Better Greens	6192611800	1230	TOBIAS	DR	Cat xvi-Landscaping	Low	0782
Better Greens 2	6192614800	1232	TOBIAS	DR	Cat xvi-Landscaping	Low	0782
Bufallo Quality Tree Work	5950931100	902	ASPEN GLEN	RD	Cat xvi-Landscaping	Low	0782
C&R Landscaping	6392800300	314	MOSS	ST	Cat xvi-Landscaping	Low	0782
Castro Lawn Care	6233331100	70	SHERWOOD	ST	Cat xvi-Landscaping	Low	0782
Chau Pen Van	5753410400	1037	HELIX	AV	Cat xvi-Landscaping	Low	0782
Chermak Joseph	5751830100	52	FORTUNA	ST	Cat xvi-Landscaping	Low	0782
Clean Cut Lawn Services	5711810100	702	COLORADO	AV	Cat xvi-Landscaping	Low	0782
CMN Lawn Services	5941331800	1208	POSITAS	RD	Cat xvi-Landscaping	Low	0782
Colonial Gardens Inc	5922302100	578	PARKSIDE	DR	Cat xvi-Landscaping	Low	0782
Complete Lawn Maintenance	5652020200	470	D	ST	Cat xvi-Landscaping	Low	0782
Cortez Samuel Landscaping	6403405100	1058	CAMINO ATAJO		Cat xvi-Landscaping	Low	0782
Decasas Garden	6244012100	1539	GRAND TETON	CT	Cat xvi-Landscaping	Low	0782
Desert Garden's & Sons	6423040500	1351	BLUE FALLS	DR	Cat xvi-Landscaping	Low	0782
Dixon Landscaping Solutions	6433801917	1243	CABEZAS COVE		Cat xvi-Landscaping	Low	0782

Facility Name	APN Number	Address			Category	Priority	SIC Number
Dreamview Landscaping	5755401400	226	OXFORD	ST	Cat xvi-Landscaping	Low	0782
E Kim Landscaping	6403514800	1002	CAMINO CALABAZO		Cat xvi-Landscaping	Low	0782
Elite Hauling Services	6191921600	1180	FIRST	AV	Cat xvi-Landscaping	Low	0782
Enrique YBarra Landscape Maintenance	5710802300	619	WHITNEY	ST	Cat xvi-Landscaping	Low	0782
Epifanio Morales Gardens Landscape	5721723200	684	FOURTH	AV	Cat xvi-Landscaping	Low	0782
Eriks Lawn Maintenance	6202020300	1195	NAPA	AV	Cat xvi-Landscaping	Low	0782
Ernesto Casillas Landscaping	6182105000	555	NAPLES	ST	Cat xvi-Landscaping	Low	0782
Ernie Salazar Landscaping	6180613100	958	CEDAR	AV	Cat xvi-Landscaping	Low	0782
Evergreen Gardening Service	6435432400	1486	OAKPOINT	AV	Cat xvi-Landscaping	Low	0782
Ezequiel Perez Landscaping	5650900800	44	FIFTH	AV	Cat xvi-Landscaping	Low	0782
Fast and Friendly	6412200800	1352	SANTA OLIVIA	RD	Cat xvi-Landscaping	Low	0782
Federal Land Management Corp	6184200700	440	NICKMAN	ST	Cat xvi-Landscaping	Low	0782
Gaeta's Tree Service	6433700124	2543	GARNET PEAK	RD	Cat xvi-Landscaping	Low	0782
Gotta Go Mow & Landscaping	6434102300	1968	MEEKS BAY	DR	Cat xvi-Landscaping	Low	0782
Green Desert	5954406000	1081	FOREST LAKE	DR	Cat xvi-Landscaping	Low	0782
Green Earth Gardening Service	6396840700	145	CORTE MARIA	AV	Cat xvi-Landscaping	Low	0782
Green Grass Landscape	6243930300	149	RAINIER	CT	Cat xvi-Landscaping	Low	0782
Hale Landscaping	5712222000	752	WOODLAWN	AV	Cat xvi-Landscaping	Low	0782
Handy Lawn Care	6435803000	2016	GEYSERVILLE	ST	Cat xvi-Landscaping	Low	0782
Hector Gardening	5951741100	1946	DUKE	ST	Cat xvi-Landscaping	Low	0782
Heldiz Landscape	6204400500	295	RIENSTRA	ST	Cat xvi-Landscaping	Low	0782
Hernandez Gardening	6181020400	1038	JEFFERSON	AV	Cat xvi-Landscaping	Low	0782
Herrera Antonio Landscape	6203304000	140	RIVERA	CT	Cat xvi-Landscaping	Low	0782
Hinkle Tree Service	5651621100	143	MADISON	AV	Cat xvi-Landscaping	Low	0782

Facility Name	APN Number	Address			Category	Priority	SIC Number
JC Landscaping	5952412800	2157	HAMDEN	DR	Cat xvi-Landscaping	Low	0782
Jeff's Lawn Care	5753630100	995	MONSERATE	AV	Cat xvi-Landscaping	Low	0782
Jessica Lopez Design	6412101300	972	MCCAIN VALLEY	CT	Cat xvi-Landscaping	Low	0782
JM Landscaping	6192807715	1303	CALLE TEMPRA		Cat xvi-Landscaping	Low	0782
JM Lawns	6230202700	368	ANITA	ST	Cat xvi-Landscaping	Low	0782
John's Yard Service	5742521800	668	ROBERT	AV	Cat xvi-Landscaping	Low	0782
Johnson Greenery	5735320600	171	L	ST	Cat xvi-Landscaping	Low	0782
Jose's Gardening	5753300800	1013	CUYAMACA	AV	Cat xvi-Landscaping	Low	0782
Jose's Lawn Service	6411444100	1428	LA CHICA	DR	Cat xvi-Landscaping	Low	0782
JR's Landscape	5650310600	689	CHULA VISTA	ST	Cat xvi-Landscaping	Low	0782
Juan J. Hale Landscaping Maint. Service	6181522600	1057	BROADWAY		Cat xvi-Landscaping	Low	0782
Juan Leal Landscape	6310122200	308	PALM	AV	Cat xvi-Landscaping	Low	0782
Kazper's Landscaping	6192113800	1246	THIRD	AV	Cat xvi-Landscaping	Low	0782
Kiki's Paradise Landscaping	6424101606	1360	CALLEJON CERVANTES		Cat xvi-Landscaping	Low	0782
Kutting Edge	6232903400	1617	JADE	AV	Cat xvi-Landscaping	Low	0782
Kyoto Landscape	6220912600	602	ANITA	ST	Cat xvi-Landscaping	Low	0782
Land Art	6403107400	725	GREDOS	PL	Cat xvi-Landscaping	Low	0782
Landscape Enterprise	5661321600	25	D	ST	Cat xvi-Landscaping	Low	0782
Leo's Landscape	5922210903	480	BELLE VISTA	DR	Cat xvi-Landscaping	Low	0782
Leon's Landscaping Service	6430515004	1453	TROUVILLE	LN	Cat xvi-Landscaping	Low	0782
Lua's Landscaping	6182000100	1100	INDUSTRIAL	BL	Cat xvi-Landscaping	Low	0782
Lucero's Landscaping	6190105800	374	MOSS	ST	Cat xvi-Landscaping	Low	0782
Manzano's Landscaping	6395932400	739	NEPTUNE	CT	Cat xvi-Landscaping	Low	0782
Mario's Landscaping	6411134800	576	SIPES	CI	Cat xvi-Landscaping	Low	0782

Facility Name	APN Number	Address			Category	Priority	SIC Number
Mariposa's Landscape	6396821200	666	MARIPOSA	CI	Cat xvi-Landscaping	Low	0782
Martin & Zamora Landscape Maintenance	5721930600	758	ASH	AV	Cat xvi-Landscaping	Low	0782
Maximum & Green Maintenance	6240552500	309	VALLEY	AV	Cat xvi-Landscaping	Low	0782
Mel's Gardening Service	6412022800	910	ISRAEL	CT	Cat xvi-Landscaping	Low	0782
MG Gardening	6205904000	357	PEPPERWOOD	CT	Cat xvi-Landscaping	Low	0782
MGM Landscape Inc	5943610200	558	TRAILRIDGE	DR	Cat xvi-Landscaping	Low	0782
Miles Bob Irrigation	6395933600	752	NACION	AV	Cat xvi-Landscaping	Low	0782
Ochi Gardens	6397013300	176	CAMINO ENTRADA		Cat xvi-Landscaping	Low	0782
Olguin's Landscape	5662911500	186	CORTE HELENA	AV	Cat xvi-Landscaping	Low	0782
Orlando's Garden	6290201100	2887	MAIN	ST	Cat xvi-Landscaping	Low	0782
Ortega Landscape	6182901200	1225	BROADWAY		Cat xvi-Landscaping	Low	0782
P Gracia Landscape	6183011600	490	SHY	LN	Cat xvi-Landscaping	Low	0782
P&A Garden Landscaping	5721723200	684	FOURTH	AV	Cat xvi-Landscaping	Low	0782
Pacific Turf Specialists	5742520800	681	CLAIRE	AV	Cat xvi-Landscaping	Low	0782
PCM Maintenance Landscape Service	5922109300	400	KRISTA	CT	Cat xvi-Landscaping	Low	0782
Pedro's Landscaping	5652200200	443	FLOWER	ST	Cat xvi-Landscaping	Low	0782
Pena's Gardening Maintenance Service	6200420100	236	OLYMPIA	ST	Cat xvi-Landscaping	Low	0782
Picket Fences Landscaping Inc.	6434844000	1263	POPLAR SPRING	RD	Cat xvi-Landscaping	Low	0782
PK Shedenhelm's Landscaping	5943831200	1606	COUNTRY VISTAS	LN	Cat xvi-Landscaping	Low	0782
Plays in the Dirt	5942112000	575	OTAY LAKES	RD	Cat xvi-Landscaping	Low	0782
PRG Maintenance Gardening Service	6192807715	1303	CALLE TEMPRA		Cat xvi-Landscaping	Low	0782
Pro Care Landscape & Gard	6401961100	1164	PASEO SARINA		Cat xvi-Landscaping	Low	0782
Rafaelo's Tree Trimmer	6231122300	435	TREMONT	ST	Cat xvi-Landscaping	Low	0782
RG Landscape & Design	6201212300	3	PAISLEY	ST	Cat xvi-Landscaping	Low	0782

Facility Name	APN Number	Address			Category	Priority	SIC Number
Rhinotech Landscape	6242400500	459	RIVERA	CT	Cat xvi-Landscaping	Low	0782
Rich Valens Tree Service	6191212300	1106	DEL MAR	AV	Cat xvi-Landscaping	Low	0782
RM Landscape	5752710100	933	GUATAY	AV	Cat xvi-Landscaping	Low	0782
Robert's Gardening Service	5712101600	749	RIVERLAWN	AV	Cat xvi-Landscaping	Low	0782
Romita Landscape	6241802500	20	TOURMALINE	ST	Cat xvi-Landscaping	Low	0782
Rudy Landscaping	6403220400	746	AVENIDA SOLARIA		Cat xvi-Landscaping	Low	0782
Sam's Stump Removal	6191220400	1103	DEL MAR	AV	Cat xvi-Landscaping	Low	0782
Silahua's Landscape and Yard Maintenance	6394110500	1169	OCALA	AV	Cat xvi-Landscaping	Low	0782
Silva's Tree Service	5660200400	75	FOURTH	AV	Cat xvi-Landscaping	Low	0782
Southwing Land Maint Inc.	5693010100	3855	SAN MIGUEL	AV	Cat xvi-Landscaping	Low	0782
SPS/Creative Curb Landscapes	5933802700	839	CALLE LAGASCA		Cat xvi-Landscaping	Low	0782
Steve Ferlito Gardening Service	6244212500	271	RANCHO	CT	Cat xvi-Landscaping	Low	0782
Trim Around Yard Service	6421202400	914	WAYNE	AV	Cat xvi-Landscaping	Low	0782
Trujillo Landscaping	5742522100	656	ROBERT	AV	Cat xvi-Landscaping	Low	0782
Turf Pros	6441703300	598	RIVERA	ST	Cat xvi-Landscaping	Low	0782
Valle Lawn Service	5941216200	1284	MARBELLA	PL	Cat xvi-Landscaping	Low	0782
Vasquez Landscaping & Hauling	5730810102	398	MANKATO	ST	Cat xvi-Landscaping	Low	0782
Vegas Gardening Landscaping Services	6412023000	901	ISRAEL	CT	Cat xvi-Landscaping	Low	0782
VMG Landscaping	6240514300	270	DATE	ST	Cat xvi-Landscaping	Low	0782
Westerm Tree Service	5943411100	1756	RIDGE CREEK	DR	Cat xvi-Landscaping	Low	0782
Yonekura Glenn	5672320400	572	OTIS	ST	Cat xvi-Landscaping	Low	0782
		Cat xviii-Golf/Parks/Rec					
Alcala Park	6424816200	1620	MONTANA	RD	Cat xviii-Golf/Parks/Rec	Low	7929

Facility Name	APN Number	Address			Category	Priority	SIC Number
Augusta Park	5953706900		GREENSVIEW	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Bonita Haciendas Mini Park	5943114700	1518	VIA HACIENDA		Cat xviii-Golf/Parks/Rec	Low	7929
Boys & Girls Club of Chula Vista	6200601900	1301	OLEANDER	AV	Cat xviii-Golf/Parks/Rec	Low	8641
Chula Vista Elks Lodge #2011	6391600300	901	ELKS	LN	Cat xviii-Golf/Parks/Rec	Low	7929
Circle Park	6433902300		KING CREEK	CI	Cat xviii-Golf/Parks/Rec	Low	7929
Cobblestone Park	5952035500		LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Coors Amphitheatre	6450214700	2050	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	Low	7929
Countryside Park	6432611000		PINON HILLS	RD	Cat xviii-Golf/Parks/Rec	Low	7929
Eastlake Beach Club	5952220700	2050	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Eastlake Country Club	5953203000	2375	CLUBHOUSE	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Fun 4 All	6170103000	950	INDUSTRIAL	BL	Cat xviii-Golf/Parks/Rec	Low	7929
Kensington Road Park	5955502800	2600	SADDLEBACK	ST	Cat xviii-Golf/Parks/Rec	Low	7929
Knotts Soak City USA	6450201700	2052	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	Low	7929
Madison Lane Park	5955201600	640	FALCON VALLEY	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Magnolia Hill Park	5956901900	2640	MONTECITO	RD	Cat xviii-Golf/Parks/Rec	Low	7929
Oak Crest Park	6426222300		SANTA MADERA	AV	Cat xviii-Golf/Parks/Rec	Low	7929
Orchard Park	6420712400		MONTE SERENO	AV	Cat xviii-Golf/Parks/Rec	Low	7929
Palace Garden Park	6230710400	1425	SECOND	AV	Cat xviii-Golf/Parks/Rec	Low	7929
Salt Creek Golf Club	5950400800	525	HUNTE	PW	Cat xviii-Golf/Parks/Rec	Low	7929
San Diego County Club	6190300800	88	L	ST	Cat xviii-Golf/Parks/Rec	Low	7929
Scobee Park	5952310700	2351	KUHN	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Shorebird Park	5952806400	2088	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Wisteria Park	6420735100		SANTA RITA		Cat xviii-Golf/Parks/Rec	Low	7929

Cat xx-Pool/Fountain Clng

Facility Name	APN Number	Address			Category	Priority	SIC Number
A Environmental Services	5692631100	125	H	ST	Cat xx-Pool/Fountain Clng	Low	7349
ABC Pool Service	5682701746	376	CENTER	ST	Cat xx-Pool/Fountain Clng	Low	7389
Academy Pool Service & Supplies	6221114800	1680	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389
Acuario Pool & SPA Maintenance	6206334400	1450	MELROSE	AV	Cat xx-Pool/Fountain Clng	Low	7389
All Pro Pool Services	5932800100	4248	BONITA	RD	Cat xx-Pool/Fountain Clng	Low	7389
Ambart Inc.	5710630100	652	H	ST	Cat xx-Pool/Fountain Clng	Low	7389
Aqua Diamond Pool Service & Repair	6395102000	383	NOVA	PL	Cat xx-Pool/Fountain Clng	Low	7389
Aqua Pro Pool & SPA Service	6433700415	1328	PINNACLE PEAK	DR	Cat xx-Pool/Fountain Clng	Low	7389
Aquatech Pool Service	5953700300	1057	PARK MEADOWS	RD	Cat xx-Pool/Fountain Clng	Low	7389
Azul Pool Service	6436716600	1546	HOPSCOTCH	DR	Cat xx-Pool/Fountain Clng	Low	7389
Blue Wave Pools	5752720100	5116	GLEN VERDE	DR	Cat xx-Pool/Fountain Clng	Low	7389
Bob Reed's Step Saver Pool Products	5662321300	326	E	ST	Cat xx-Pool/Fountain Clng	Low	7389
Bonita Vista Pool Service	6422104600	1618	MILLS	ST	Cat xx-Pool/Fountain Clng	Low	7389
C&A Maint Service	6242000800	461	RIENSTRA	CT	Cat xx-Pool/Fountain Clng	Low	7389
Chlor-Nation	5942221800	510	CAMINO ELEVADO		Cat xx-Pool/Fountain Clng	Low	7389
Choice Maintenance and Repair	5933111500	960	SURREY	DR	Cat xx-Pool/Fountain Clng	Low	7389
Chula Vista Curbside Agency	6192215100	249	OXFORD	ST	Cat xx-Pool/Fountain Clng	Low	7389
Constable Pool Service	5952312900	2351	BOSWELL	RD	Cat xx-Pool/Fountain Clng	Low	7389
Cornerstone	5922107600	458	KARRA	CT	Cat xx-Pool/Fountain Clng	Low	7389
Crystal Clear Poolz	6191620500	1123	TOBIAS	DR	Cat xx-Pool/Fountain Clng	Low	7389
CTI of San Diego	5954811000	2137	CHATEAU	CT	Cat xx-Pool/Fountain Clng	Low	7389
CV Pool Repair & Supply	6181421900	1082	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389
E&D Pool and SPA Service	6204100900	1451	NAPA	CT	Cat xx-Pool/Fountain Clng	Low	7389
Fire on Ice of San Diego	6411702900	1080	MOONSTONE	PL	Cat xx-Pool/Fountain Clng	Low	7389

Facility Name	APN Number	Address			Category	Priority	SIC Number
Fix Time	5952221578	2023	LAKERIDGE	CI	Cat xx-Pool/Fountain Clng	Low	7389
Herbur Pool	6426900900	1421	FIELDBROOK	ST	Cat xx-Pool/Fountain Clng	Low	7389
Jim's Pool Clean Up	5942112000	575	OTAY LAKES	RD	Cat xx-Pool/Fountain Clng	Low	7389
Jose's Pool Service	5671030100	355	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389
JP's Pool Service	6436312974	1571	CIRCULO BRINDISI		Cat xx-Pool/Fountain Clng	Low	7389
Keep It Clean Pool Service	6403924300	1307	VAQUERO	CT	Cat xx-Pool/Fountain Clng	Low	7389
Kelly's Pool and SPA Care	5954902300	1870	MARQUETTE	RD	Cat xx-Pool/Fountain Clng	Low	7389
Kng D C Pool & SPAS	6244021300	14	QUINTARD	ST	Cat xx-Pool/Fountain Clng	Low	7389
Leslie's Swimming Pool Supplies #299	5922000700	316	H	ST	Cat xx-Pool/Fountain Clng	Low	7389
Mack's Maintenance & Repair	5680741800	201	TWIN OAKS	AV	Cat xx-Pool/Fountain Clng	Low	7389
Max Swimming Pool Service	6424602300	1298	MORGAN HILL	DR	Cat xx-Pool/Fountain Clng	Low	7389
Misty Creek Home Improvement	6411705700	1069	MISTY CREEK	ST	Cat xx-Pool/Fountain Clng	Low	7389
New Look Concrete Creations	6422205700	1753	YALE	ST	Cat xx-Pool/Fountain Clng	Low	1711
Patrick's Pool & SPA Service	5670801600	155	NAPLES	ST	Cat xx-Pool/Fountain Clng	Low	7389
Pete & Irma's Pool And SPA	5952034700	2140	STONECREEK	PL	Cat xx-Pool/Fountain Clng	Low	7389
Pressures On	6425401400	1288	SANTA LUCIA	RD	Cat xx-Pool/Fountain Clng	Low	7389
Pure Water Pool and SPA	5955505500	2642	FLAGSTAFF	CT	Cat xx-Pool/Fountain Clng	Low	7389
R3 & Sons	6206334400	1450	MELROSE	AV	Cat xx-Pool/Fountain Clng	Low	7389
Robert The Handy Man	6422201800	1803	GOTHAM	ST	Cat xx-Pool/Fountain Clng	Low	7699
San Deigo Stone Technicians	6422404200	1863	GOTHAM	ST	Cat xx-Pool/Fountain Clng	Low	1743
Sanchez Handyman Service	5711810600	730	COLORADO	AV	Cat xx-Pool/Fountain Clng	Low	7699
Sanique Development	5921920300	474	H	ST	Cat xx-Pool/Fountain Clng	Low	7699
Schaeffer's Pool Service	5952222327	2067	LAKERIDGE	CI	Cat xx-Pool/Fountain Clng	Low	7389
SD Pool Service	5652904100	30	WOODLAWN	AV	Cat xx-Pool/Fountain Clng	Low	7389

Facility Name	APN Number	Address			Category	Priority	SIC Number
Sea Breeze Pool Service	6432321700	1408	ASHFORD CASTLE	DR	Cat xx-Pool/Fountain Clng	Low	7389
Sharko Pool Service & Maintenance	6397021400	819	AVENIDA MADERA		Cat xx-Pool/Fountain Clng	Low	7389
Southbay Postcon Services	6205004000	1422	LANTANA	AV	Cat xx-Pool/Fountain Clng	Low	7389
Spic N Span	5956201100	2057	CHATEAU	CT	Cat xx-Pool/Fountain Clng	Low	7389
Superior Home Prep Co.	6423800116	1467	SUMMIT	DR	Cat xx-Pool/Fountain Clng	Low	1721
Three Amigos Pool Service	6200830600	1362	MAX	AV	Cat xx-Pool/Fountain Clng	Low	7389
WES C Gallagher	5952931300	861	SOUTHSHORE	DR	Cat xx-Pool/Fountain Clng	Low	7389
Cat xxiii-Bldg/Mat Storag							
Builders Surplus Sales	5634312900	130	GLOVER	AV	Cat xxiii-Bldg/Mat Storag	Low	5211
Ferguson Enterprise	5734903000	895	THIRD	AV	Cat xxiii-Bldg/Mat Storag	Low	5211
Home Depot #658/Home Depot USA Inc.	6402911300	725	PLAZA	CT	Cat xxiii-Bldg/Mat Storag	High	5211
Home Depot Eastlake	6430206600	1320	EASTLAKE	PW	Cat xxiii-Bldg/Mat Storag	Low	5211
J&W Redwood	6291303600	3817	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Medium	5211
Leticia Cano/Nuts and Bolts	6221112500	2446	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	5211
Lowes Home Improvement Warehouse Inc.	5950720100	2225	OTAY LAKES	RD	Cat xxiii-Bldg/Mat Storag	High	5211
Plastics By Roy Inc.	5952313600	825	KUHN	DR	Cat xxiii-Bldg/Mat Storag	Low	5211
RCP Block & Brick Inc.	5632703700	75	FOURTH	AV	Cat xxiii-Bldg/Mat Storag	Low	5211
Road One of San Diego	64404061	1805	MAXWELL	RD	Cat xxiii-Bldg/Mat Storag	Low	
White Cap Construction Supply	6290620200	3451	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	5211
Cat xxv-Power Washing...							
APM Power Washing	6192215200	228	KENNEDY	ST	Cat xxv-Power Washing...	Low	4959
Fully Restored Surface Cleaning Specialists	5953213006	970	SOMERSET	CT	Cat xxv-Power Washing...	Low	4959

Facility Name	APN Number	Address			Category	Priority	SIC Number
GMR Enterprises	5755001600	91	EMERSON	ST	Cat xxv-Power Washing...	Low	4959
JayBright Company	6441812700	787	ENERGY	WY	Cat xxv-Power Washing...	Low	4959
Jet Clean USA Inc.	6403926200	1255	VAQUERO	CT	Cat xxv-Power Washing...	Low	4959
Superior Wash	6435604300	1556	HUNTERS GLEN	AV	Cat xxv-Power Washing...	Low	1721
		Retail Store					
C.V. Wholesale Furniture Store	5721312200	655	BROADWAY		Retail Store	Low	5712
Furniture Mattress Expo	6182911200	1215	BROADWAY		Retail Store	Low	5712
Target	MULTIPLE	40	FOURTH	AV	Retail Store	Medium	

Grand Total: **1,174**

Attachment G
FY 2008-2009 Construction Inspections

Construction Inspection records are included in the inspection reports and are on file for each specific project. Detailed inspection logs are maintained in the City's database system and are availabe upon request. ***Inspected construction sites with discrepancies had a verbal or written follow-up notice.*** *During this reporting period, all High Priority construction sites were inspected bi-weekly during the rainy season, and all Medium and Low Priority construction sites were inspected at least monthly. Construction projects that were inspected during this reporting period are listed below:*

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
San Miguel Ranch					
San Miguel Ranch	Backbone Improvements-Avenida L		Inactive-Not Complete	SM014C	Medium
San Miguel Ranch	SMR Phase III Grading	K,L,J1,J2,	Inactive-Not Complete	SM011G	Medium
San Miguel Ranch	San Miguel Ranch Road		Inactive-Not Complete	SM013C	Medium
San Miguel Ranch	Proctor Valley Road		Inactive-Not Complete	SM020I	Medium
San Miguel Ranch	Camino	N/A	Inactive-Not Complete		Low
San Miguel Ranch	Bontera	K	Inactive-Not Complete	SM015I	Medium
San Miguel Ranch	Estrella	J2	Inactive-Not Complete	SM018I	Medium
San Miguel Ranch	Marvilla	L	Active	SM022I	High
San Miguel Ranch	Montecito Ridge	J1	Inactive-Not Complete	SM016I	Medium
Rolling Hills Ranch					
Rolling Hills Ranch	Future MFD	N9-N12	Inactive-Not Complete	RH229G	Medium
Rolling Hills Ranch	Rolling Hills-Backbone Improvemen	N9-N12	Inactive-Not Complete	RH231C	Medium
Rolling Hills Ranch	Future MFD	N11	Inactive-Not Complete	RH241I	Low
Rolling Hills Ranch	Bella Lago -Future-SFD	R1	Active	BE002G / I	High
Rolling Hills Ranch	Quintessa	N9B	Inactive-Not Complete	RH234I	Low
Rolling Hills Ranch	Clearstory-Davidsoh Homes	N12B	Active	RH239I	High
Rolling Hills Ranch	Portola	N10A	Inactive-Not Complete	RH237I	Low
Rolling Hills Ranch	Provence	N9-N12	Inactive-Not Complete	RH229G	Medium
Otay Ranch, Village 7, ORC					
Otay Ranch, Village 7, ORC	Monte Sereno	R2C	Inactive-Not Complete	OR973I	Medium
Otay Ranch, Village 7, ORC	La Media Road Improvements		Inactive-Not Complete	OR975C	Low
Otay Ranch, Village 7, ORC	Open Space Designated	R4	Inactive-Not Complete		Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 7, ORC	Open Space Designated	R3	Inactive-Not Complete		Low
Otay Ranch, Village 7, ORC	Cypress Lane	R2D	Inactive-Not Complete	OR973I	Medium
Otay Ranch, Village 7, ORC	Terraza	R2B	Active	OR973I	Medium
Otay Ranch, Village 7, ORC	Santa Barbara	R2A	Active	OR973I	High
Otay Ranch, Village 7, McMillin					
Otay Ranch, Village 7, McMillin	Tapestry	R6A	Inactive-Not Complete	OR461G	Low
Otay Ranch, Village 7, McMillin	Future	R7B	Inactive-Not Complete		Low
Otay Ranch, Village 7, McMillin	Jacaranda	R1B	Inactive-Not Complete	OR459I /OR4	Low
Otay Ranch, Village 7, McMillin	Mosaic I	R6B	Inactive-Not Complete	OR461G	Low
Otay Ranch, Village 7, McMillin	Mosaic II	R7A	Inactive-Not Complete	OR461G	Low
Otay Ranch, Village 7, McMillin	Indigo	R1A	Inactive-Not Complete	OR457I /OR4	Low
Otay Ranch, Village 7, McMillin	Terracotta	R5	Inactive-Not Complete	OR458I /OR4	Low
Otay Ranch, Village 6, ORC					
Otay Ranch, Village 6, ORC	Monet	R9B	Inactive-Not Complete	OR939I/OR9:	Low
Otay Ranch, Village 6, ORC	Treviana	R10	Inactive-Not Complete	OR418C	Low
Otay Ranch, Village 2 South					
Otay Ranch, Village 2 South	Mass Grading		Inactive-Not Complete	OR830G	Low
Otay Ranch, Village 2 North					
Otay Ranch, Village 2 North	OR Village2 North Improvement 1	Unit 1	Inactive-Not Complete	OR811I	Low
Otay Ranch, Village 2 North	OR Village2 North Improvement 2	Unit 2	Inactive-Not Complete	OR812I	Low
Otay Ranch, Village 2					
Otay Ranch, Village 2	Future SFD-under grading phase	R20	Inactive-Not Complete	PG656	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R11	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R18B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R12	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R10	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R21	Inactive-Not Complete		Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 2	Anacapa	R9A	Inactive-Not Complete	OR805I	Low
Otay Ranch, Village 2	Future SFD-under grading phase	R23	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R24	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R25A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R4	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD (Alley)-under grading pl	R5B	Inactive-Not Complete		Low
Otay Ranch, Village 2	La Purisma	R6	Inactive-Not Complete		Low
Otay Ranch, Village 2	Lindera Kane (Alley)	R5A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R19	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future Mixed Used-under grading p	MU1	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R15	Inactive-Not Complete	OR806I	Low
Otay Ranch, Village 2	Future SFD-under grading phase	R9B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R25B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R8	Inactive-Not Complete		Low
Otay Ranch, Village 2	Presidio	R7	Inactive-Not Complete		Low
Otay Ranch, Village 2	North- Future MFD-under grading p	R16	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future Mixed Use-under grading ph	MU2	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R13 (Villa	Inactive-Not Complete	OR815I / G	Medium
Otay Ranch, Village 2	Future MFD-under grading phase	R27	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R29	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R28	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R26	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R18A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R17	Inactive-Not Complete		Low
Otay Ranch, Village 2	North- Future Mixed Use-under grac	MU3	Inactive-Not Complete		Low
Otay Ranch, Village 2	North- Heritage Road		Inactive-Not Complete	OR807G	Medium
Otay Ranch, Village 2	Sevilla	R30	Inactive-Not Complete	OR814I	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R14 (Villa	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R30 (Villa	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase -M	MU3	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Tavera	R14	Inactive-Not Complete	OR813I	Low
Otay Ranch, Village 2	North- Future Mixed-Under Grading	R5, R6, R	Inactive-Not Complete	OR809G	Medium

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 2	North- Future Mixed-Under Grading	R12, R13,	Inactive-Not Complete	OR805G	Medium
Otay Ranch, Village 11					
Otay Ranch, Village 11	Cordova -Courtyard	R17	Active	OR634I	Medium
Otay Ranch, Village 11	Trellis II	R16	Inactive-Not Complete	OR627I	Medium
Otay Ranch, Village 11	Sapphire II	R14	Inactive-Not Complete	OR628I	Low
Otay Ranch, Village 11	Clover	R18	Active	OR633I	Medium
Otay Ranch, Village 11	Amber II	R12	Inactive-Not Complete	OR629I	Low
Otay Ranch, Village 11	Trellis I	R15	Active	OR627I	High
Otay Ranch, Village 11	The Landings	R19	Inactive-Not Complete	OR630I	Low
Otay Ranch, Village 11	Concordia Lutheran Church-1695 D		Active	PG776	Low
Otay Ranch, Village 11	Amber I/Sapphire Village	R11	Active	OR629I	High
Otay Ranch, Village 11	Phase II	Rough Gr	Inactive-Not Complete	OR610G	Low
Otay Ranch, Village 11	Agave	R24A	Active	OR624I	Medium
Otay Ranch, Village 11	Marquis	MU1 Lanc	Inactive-Not Complete	OR635I	Medium
Otay Ranch, Village 11	Saphhire I	R13	Inactive-Not Complete	OR628I	Low
Otay Ranch, Village 11	Sagurao	R24B	Inactive-Not Complete	OR624I	Low
Miscellaneous					
Miscellaneous	Mount San Miguel Community Park		Active	PR260	Low
Miscellaneous	1232 Broadway-Wells Fargo Bank		Active	PG779	Low
Miscellaneous	144 27th Street-Buidling		Inactive-Not Complete	PG770	Low
Miscellaneous	Walmart Expansion at Eastlake Par		Active	BLDG Permit	Low
Miscellaneous	1855 Maxwell Road- CV Elem Scho		Active	PG778	Low
Miscellaneous	60 Lion Circle		Inactive-Not Complete	PG773	Low
Miscellaneous	860 Duncan Road - New Kingdom H		Active	PG759	Low
Miscellaneous	1310 Third Avenue		Active	PG769 / PC1	Low
Miscellaneous	High Tech High School - Grading		Active	PG765	High
Miscellaneous	La Roca Comunidad Cristiana		Inactive-Not Complete	OR196G	Low
Miscellaneous	Sycamore Estates		Inactive-Not Complete	PG735 / PC1	Low
Miscellaneous	Lion Circlle Hilltp Estates		Inactive-Not Complete	PG714	Low
Miscellaneous	Villas at H Street		Active	PG749/PC18	Medium

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Miscellaneous	Saint Rose of Lima Parish-Phase 1,		Active	PG780 / PC1	Low
Miscellaneous	Westmon Senior Homes -509 Moun		Inactive-Not Complete	SM026G	Low
Miscellaneous	215 Camino Elevado & 1011 Calle E		Active	PG767	Low
Eastlake Vistas					
Eastlake Vistas	Atrium- Davidson	VR2	Active	EV004I	Medium
Eastlake Summit					
Eastlake Summit	Cortina	R9D	Active	EL104I	Medium
Eastlake Summit	Buie Communities- Veranza	R9C	Inactive-Not Complete	EL106I	Medium
Eastlake Summit	Andora	R9B	Active	EL103I	Medium

Total: 109

Attachment B
FY 2008-2009 Construction Inventory

Construction Inspection records are included in the inspection reports and are on file for each specific project. ***Inspected construction sites with discrepancies had a verbal or written follow-up notice.*** *During this reporting period, all High Priority construction sites were inspected bi-weekly during the rainy season, and all Medium and Low Priority construction sites were inspected at least monthly. Construction projects that were inspected during this reporting period are listed below:*

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
San Miguel Ranch					
San Miguel Ranch	Backbone Improvements-Avenida L		Inactive-Not Complete	SM014C	Medium
San Miguel Ranch	SMR Phase III Grading	K,L,J1,J2,	Inactive-Not Complete	SM011G	Medium
San Miguel Ranch	San Miguel Ranch Road		Inactive-Not Complete	SM013C	Medium
San Miguel Ranch	Proctor Valley Road		Inactive-Not Complete	SM020I	Medium
San Miguel Ranch	Camino	N/A	Inactive-Not Complete		Low
San Miguel Ranch	Bontera	K	Inactive-Not Complete	SM015I	Medium
San Miguel Ranch	Estrella	J2	Inactive-Not Complete	SM018I	Medium
San Miguel Ranch	Marvilla	L	Active	SM022I	High
San Miguel Ranch	Montecito Ridge	J1	Inactive-Not Complete	SM016I	Medium
Rolling Hills Ranch					
Rolling Hills Ranch	Future MFD	N9-N12	Inactive-Not Complete	RH229G	Medium
Rolling Hills Ranch	Rolling Hills-Backbone Improvemen	N9-N12	Inactive-Not Complete	RH231C	Medium
Rolling Hills Ranch	Future MFD	N11	Inactive-Not Complete	RH241I	Low
Rolling Hills Ranch	Bella Lago -Future-SFD	R1	Active	BE002G / I	High
Rolling Hills Ranch	Quintessa	N9B	Inactive-Not Complete	RH234I	Low
Rolling Hills Ranch	Clearstory-Davidsoh Homes	N12B	Active	RH239I	High
Rolling Hills Ranch	Portola	N10A	Inactive-Not Complete	RH237I	Low
Rolling Hills Ranch	Provence	N9-N12	Inactive-Not Complete	RH229G	Medium
Otay Ranch, Village 7, ORC					
Otay Ranch, Village 7, ORC	Monte Sereno	R2C	Inactive-Not Complete	OR973I	Medium
Otay Ranch, Village 7, ORC	La Media Road Improvements		Inactive-Not Complete	OR975C	Low
Otay Ranch, Village 7, ORC	Open Space Designated	R4	Inactive-Not Complete		Low
Otay Ranch, Village 7, ORC	Open Space Designated	R3	Inactive-Not Complete		Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 7, ORC	Cypress Lane	R2D	Inactive-Not Complete	OR973I	Medium
Otay Ranch, Village 7, ORC	Terraza	R2B	Active	OR973I	Medium
Otay Ranch, Village 7, ORC	Santa Barbara	R2A	Active	OR973I	High
Otay Ranch, Village 7, McMillin					
Otay Ranch, Village 7, McMillin	Tapestry	R6A	Inactive-Not Complete	OR461G	Low
Otay Ranch, Village 7, McMillin	Future	R7B	Inactive-Not Complete		Low
Otay Ranch, Village 7, McMillin	Jacaranda	R1B	Inactive-Not Complete	OR459I /OR4	Low
Otay Ranch, Village 7, McMillin	Mosaic I	R6B	Inactive-Not Complete	OR461G	Low
Otay Ranch, Village 7, McMillin	Mosaic II	R7A	Inactive-Not Complete	OR461G	Low
Otay Ranch, Village 7, McMillin	Indigo	R1A	Inactive-Not Complete	OR457I /OR4	Low
Otay Ranch, Village 7, McMillin	Terracotta	R5	Inactive-Not Complete	OR458I /OR4	Low
Otay Ranch, Village 6, ORC					
Otay Ranch, Village 6, ORC	Monet	R9B	Inactive-Not Complete	OR939I/OR9:	Low
Otay Ranch, Village 6, ORC	Treviana	R10	Inactive-Not Complete	OR418C	Low
Otay Ranch, Village 2 South					
Otay Ranch, Village 2 South	Mass Grading		Inactive-Not Complete	OR830G	Low
Otay Ranch, Village 2 North					
Otay Ranch, Village 2 North	OR Village2 North Improvement 1	Unit 1	Inactive-Not Complete	OR811I	Low
Otay Ranch, Village 2 North	OR Village2 North Improvement 2	Unit 2	Inactive-Not Complete	OR812I	Low
Otay Ranch, Village 2					
Otay Ranch, Village 2	Future SFD-under grading phase	R20	Inactive-Not Complete	PG656	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R11	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R18B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R12	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R10	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R21	Inactive-Not Complete		Low
Otay Ranch, Village 2	Anacapa	R9A	Inactive-Not Complete	OR805I	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 2	Future SFD-under grading phase	R23	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R24	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R25A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R4	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD (Alley)-under grading pl	R5B	Inactive-Not Complete		Low
Otay Ranch, Village 2	La Purisma	R6	Inactive-Not Complete		Low
Otay Ranch, Village 2	Lindera Kane (Alley)	R5A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R19	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future Mixed Used-under grading p	MU1	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R15	Inactive-Not Complete	OR806I	Low
Otay Ranch, Village 2	Future SFD-under grading phase	R9B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R25B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R8	Inactive-Not Complete		Low
Otay Ranch, Village 2	Presidio	R7	Inactive-Not Complete		Low
Otay Ranch, Village 2	North- Future MFD-under grading p	R16	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future Mixed Use-under grading ph	MU2	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R13 (Villa	Inactive-Not Complete	OR815I / G	Medium
Otay Ranch, Village 2	Future MFD-under grading phase	R27	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R29	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R28	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R26	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R18A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R17	Inactive-Not Complete		Low
Otay Ranch, Village 2	North- Future Mixed Use-under grac	MU3	Inactive-Not Complete		Low
Otay Ranch, Village 2	North- Heritage Road		Inactive-Not Complete	OR807G	Medium
Otay Ranch, Village 2	Sevilla	R30	Inactive-Not Complete	OR814I	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R14 (Villa	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R30 (Villa	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase -M	MU3	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Tavera	R14	Inactive-Not Complete	OR813I	Low
Otay Ranch, Village 2	North- Future Mixed-Under Grading	R5, R6, R	Inactive-Not Complete	OR809G	Medium
Otay Ranch, Village 2	North- Future Mixed-Under Grading	R12, R13,	Inactive-Not Complete	OR805G	Medium

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 11					
Otay Ranch, Village 11	Cordova -Courtyard	R17	Active	OR634I	Medium
Otay Ranch, Village 11	Trellis II	R16	Inactive-Not Complete	OR627I	Medium
Otay Ranch, Village 11	Sapphire II	R14	Inactive-Not Complete	OR628I	Low
Otay Ranch, Village 11	Clover	R18	Active	OR633I	Medium
Otay Ranch, Village 11	Amber II	R12	Inactive-Not Complete	OR629I	Low
Otay Ranch, Village 11	Trellis I	R15	Active	OR627I	High
Otay Ranch, Village 11	The Landings	R19	Inactive-Not Complete	OR630I	Low
Otay Ranch, Village 11	Concordia Lutheran Church-1695 D		Active	PG776	Low
Otay Ranch, Village 11	Amber I/Sapphire Village	R11	Active	OR629I	High
Otay Ranch, Village 11	Phase II	Rough Gr	Inactive-Not Complete	OR610G	Low
Otay Ranch, Village 11	Agave	R24A	Active	OR624I	Medium
Otay Ranch, Village 11	Marquis	MU1 Lanc	Inactive-Not Complete	OR635I	Medium
Otay Ranch, Village 11	Saphhire I	R13	Inactive-Not Complete	OR628I	Low
Otay Ranch, Village 11	Sagurao	R24B	Inactive-Not Complete	OR624I	Low
Miscellaneous					
Miscellaneous	Mount San Miguel Community Park		Active	PR260	Low
Miscellaneous	1232 Broadway-Wells Fargo Bank		Active	PG779	Low
Miscellaneous	144 27th Street-Buidling		Inactive-Not Complete	PG770	Low
Miscellaneous	Walmart Expansion at Eastlake Par		Active	BLDG Permit	Low
Miscellaneous	1855 Maxwell Road- CV Elem Scho		Active	PG778	Low
Miscellaneous	60 Lion Circle		Inactive-Not Complete	PG773	Low
Miscellaneous	860 Duncan Road - New Kingdom H		Active	PG759	Low
Miscellaneous	1310 Third Avenue		Active	PG769 / PC1	Low
Miscellaneous	High Tech High School - Grading		Active	PG765	High
Miscellaneous	La Roca Comunidad Cristiana		Inactive-Not Complete	OR196G	Low
Miscellaneous	Sycamore Estates		Inactive-Not Complete	PG735 / PC1	Low
Miscellaneous	Lion Circlle Hilltp Estates		Inactive-Not Complete	PG714	Low
Miscellaneous	Villas at H Street		Active	PG749/PC18	Medium
Miscellaneous	Saint Rose of Lima Parish-Phase 1,		Active	PG780 / PC1	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Miscellaneous	Westmon Senior Homes -509 Moun		Inactive-Not Complete	SM026G	Low
Miscellaneous	215 Camino Elevado & 1011 Calle E		Active	PG767	Low
Eastlake Vistas					
Eastlake Vistas	Atrium- Davidson	VR2	Active	EV004I	Medium
Eastlake Summit					
Eastlake Summit	Cortina	R9D	Active	EL104I	Medium
Eastlake Summit	Buie Communities- Veranza	R9C	Inactive-Not Complete	EL106I	Medium
Eastlake Summit	Andora	R9B	Active	EL103I	Medium

Total: 109

Attachment K

FY 2008-2009 Enforcement Action Taken

(Residential, Industrial, Commercial, Construction, and Related Businesses)

Note: During this reporting period, 7/01/2008 to 6/30/2009, investigation of the following cases have resulted in the issuance of Notice of Code of Violation, Orders to Cease and Desist, Notice to Clean and Abate, and Admin Citation.

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
			Commercial				
1-Jul-08	A-1 Auto Detail & Repair	Vehicle oil discharge	Commercial	696 BROADWAY	Issued admin- Fine $400	A-1 Auto Detail & Repair	$400
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of used oil and sludge storm water conveyance system. **see attachment**. 14.20.120A Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** 14.20.130 Failure to contain and clean up released used oil from entering the City's storm drain system. 14.20.160 Illegal connection prohibited. Maintenance bay sump overflow was connected to an under sidewalk drain.					
8-Jul-08	Home Town Buffet #705	Grease/Food/Drink Disch.	Commercial	651 PALOMAR ST	Issued Admin. Fine - $200	Hometown Buffet #705	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of grease from container spillage into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** City crews clean up the spillage and full cost recovery will be issued to Mr. Barrios.					
11-Jul-08	Ledezma Tire and Muffler 2	Lack of Housekeeping	Commercial	3031 MAIN ST	Issued Warning Citation	Ledezma Tire and Muffler	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge water marks from sites from lack of housekeeping into the storm water conveyance system. **see attachments**. Ledezma staff immediately cleaned water marks conduct housekeeping.					
13-Aug-08	Jack in the Box #63	Sewage Spill/Discharge	Commercial	1408 THIRD AV	Issued Admin Fine -$1500	Jack in the Box #63	$1500
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of sewer spills from sewer bakc up system entering the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. 14.20.130 Failure to contain clean up and notify City of spills. **see attachment** City staff clean up sewer spills discharge on areas impacted by this violation. Full recovery cost will be issued to Jack in the Box.					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
13-Aug-08	Seafood City Market	Leaking Containers/Tanks	Commercial	1340 THIRD AV	Issued Admin. Fine- $400	Seafood City	$400
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of leaky garbage bins entering the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** Ordered to correct items indicated in the storm compliance report by 9/30/2008.					
19-Aug-08	C&V Auto	Failure to Maintain BMPS	Commercial	1131 BROADWAY	Issued Admin. Fine- $100	C & V Automotive	$100
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Failure to implement BMPs as directed during the last compliance inspection report dated 6/11/08. Directed to implement all BMPS listed in the compliance inspection report. **see attachment**					
19-Aug-08	Candys Auto Body Shop	Vehicle oil discharge	Commercial	BROADWAY	Issued Admin Citation- Fine	Candy's Auto Body	$100
	Nature of Violation:	14.20.120----Facility failed to utilized BMPs to protect Storm Water Conveyance System. There are vehicle oil leaks on the ground. Site was fined and directed to clean the site.					
10-Sep-08	Palomar Shell	Vehicle Washing/Dismantle	Commercial	1295 THIRD AV	Issued Admin Citation	Palomar Shell	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water from pre-washing cars entering the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**. City staff visited the site and offer recommendations on proper discharge of wash water.					
3-Oct-08	We Care Carpet Cleaning	Carpet Clean Wash Water	Commercial	1937 DUKE ST	Issued Warning Citation	We Care Carpet Cleaning	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water from carpet cleaning van entering into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**. City staff cleaned conveyance system affected by this violation. Full recovery cost will be issued to Mr. Vargas					
16-Oct-08	Marisol Nite Club	Grease/Food/Drink Disch.	Commercial	2638 MAIN ST	Issued Citation-Fine $1000	Marisol Nite Club	$1000
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water, food waste,and bottle caps into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** Issued $1000 fine. Previous citations issued on 5/16/07 and 11/7/07.					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
3-Nov-08	Vista Palms Car Wash	Saw Cutting/Sanding Disc.	Commercial	795 BROADWAY	Issued $200 admin. fine	Vista Pams Car Wash Inc.	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of contaminated lubrication form asphalt cutting machine into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** Ordered to correct violation immediately and fine paid by 11/05/2008.					
11-Dec-08	Westwood Financial Corporation - Citation	Grease/Food/Drink Disch.	Commercial	2260 OTAY LAKES RD	Issued Citation - Fine $200	Westwood Financial	$200
	Nature of Violation:	14.20.100 Discharge of non-storm water prohibited. Observed discharge of grease and trash into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** Directed to correct violation immediately. Fined $200.					
12-Dec-08	El Pollo Loco/Bas Food Services	Sewage Spill/Discharge	Commercial	666 H ST	Issued Citation - Fine $200	El Pollo Loco	$200
	Nature of Violation:	14.20.100 Discharge of non-storm water prohibited. Observed discharge of sewer form open sewer clean out into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**Directed owner to correct all items in inspection report and provide City with sewer maintenance documentation.					
9-Jan-09	Carls JR #281	Trash/Debris Discharge	Commercial	2097 OLYMPIC PW	Issued Warning Citation	Carl's Jr. # 281	
	Nature of Violation:	14.20.100 Discharge of non-storm water prohibited. Observed discharge of wash water and grease stains into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. Grease interceptor has no evidence of cleaning/maintenance. **see attachment** Manager was notified to correct discrepancies within specified time.					
Incidents:	**14**						**$4,300.00**

Commercial/Mixed

30-Sep-08	Auto Park North	Failure To Install TCBMP	Commercial/Mixed	1185 AUTO PARK PL	Issued Notice of Violation	Knowlton Realty	
	Nature of Violation:	On 09/30/08, issued NOV to Knowlton Realty Advisors for failure to install required storm water treatment control facilities.					
Incidents:	**1**						

Condo Conversion

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
30-Oct-08	Rancho Rios Condo	Failure To Install TCBMP	Condo Conversion	321 RANCHO DR	Issued Notice of Violation	Rancho Coastal, LLC	
	Nature of Violation:	Issued Notice of Violation for failure to install storm water treatment facilities. Developer is given until October 30, 2008 to comply and provide proof of installation.					
10-Nov-08		Failure To Install TCBMP	Condo Conversion	RANCHO DR	Issued Civil Penalty Notice	Rancho Coastal, LLC	$100
	Nature of Violation:	Issued Civil Penalty Notice and Order for failure to to install Treatment Control BMPs.					
Incidents:	**2**						**$100.00**
			Construction				
4-Nov-08	High Tech High Chula Vista Campus	Sediment Discharge	Construction	HUNTE PW	Issued Order to Cease & Desist	High Tech High	
	Nature of Violation:	On 11/4/2008 site was observed to have discharge sediment laden into the City's storm water conveyance system. Issued order to cease and desist all activities resulting in storm water pollution and clean and abate any construction site violations.					
10-Feb-09	La Roca Comunidad Christiana Church	Const. BMPS Violation	Construction		Issued Notice of Violation	La Roca Christian Church	
	Nature of Violation:	14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. Owner has been notified to correct discrepancies within specified time. **see attachment**					
Incidents:	**2**						
			Construction-Citations				
30-Aug-08	Otay Ranch - V11 - Cordova & Trellis	Const. BMPS Violation	Construction-Citations		Order to Cease & Desist/Clean	Brookfield Homes	
	Nature of Violation:	14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
16-Oct-08	Eastlake Summit -Veranza	Failure to Maintain BMPS	Construction-Citations	EASTLAKE		PW	Issued Notice of Violation	Buie Communities	
	Nature of Violation:	Issued Notice of Violation for failure to implement and provide continuous maintenance fo existing BMPs. Ordered to clean and abate construction site by 10/27/2008 otherwise a Civil Penalty Order of $500 per day per violation will be assessed.							
Incidents:	**2**								
			Industrial						
25-Jul-08	United Rentals Inc	Slurry/Concrete Discharge	Industrial	501	C	ST	Issued Admin. Fine -$200	United Rentals	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of concrete aggregate from over filled concrete mix trailer into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** City Crews clean up discharge on affected areas. Full cost recovery invoice will be issued to United Rentals.							
19-Aug-08	Montoya's Auto Wrecking	Lack of Housekeeping	Industrial	781	ENERGY	WY	Issued $100 Admin. fine	Montoya's Auto Wrecking	$100
	Nature of Violation:	14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. Fine $100 and order to correct all violation items by 9/30/2008 **see attachment**							
26-Aug-08	Japanese Auto Wrecking	Lack of Housekeeping	Industrial	811	ENERGY	WY	Issued $100 admin. fine	Japanese Auto Wrecking	$100
	Nature of Violation:	14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. Fine $100 and ordered to correct violations by 9/30/08. **see attachment**							
Incidents:	**3**								**$400.00**
			Others-Citation						
1-Jul-08	Western Pump Co.-Citation	Saw Cutting/Sanding Disc.	Others-Citation	720	H	ST	Issued Warning Admin Citation	Western Pump	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Concrete saw cutting operations causing the discharge of slurry into the City's storm drain system.14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**							

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
29-Aug-08	JR Power Sweeping Co.- - Citation	Power/Pressure Washing	Others-Citation	760 BROADWAY	Issued warning citation	JR Power Sweeping	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water from power washing sidewalks into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** Ordered to obtain business license with the City of Chula Vista.					
9-Sep-08	Wayne Perry Consulting	Slurry/Concrete Discharge	Others-Citation		Issied Warning Citation.	Wayne Perry Consulting	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of concrete slurry from over filled concrete mix buggy into the storm water conveyance system. **see attachment** Mr. Cardenas staff immediately cleaned the discharged. City crews cleaned up the remaining areas impacted by this violation. Full cost recovery will be issued to Mr. Cardenas.					

Incidents: 3

Residential

10-Jul-08	Resident - Richard Ogden	Driveway/Trash Washing	Residential	819 CORNELL AV	Issued warning citation	Resident-819 Cornell Av.	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water from driveway washing into the storm water conveyance system. Cityt crew will clean up affected areas and full cost recovery will be issued to MR. Ogden. **see attachment**.					
14-Jul-08	Resident - 673 F St.	Leaking Containers/Tanks	Residential	673 F ST	Issued warning citation	Resident - 673 F St.	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of gray water from leaking tank into the storm water conveyance system. . 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** Directed to repair leaky tank cap on RV and provide City with repair evidence by 7/24/08.					
21-Jul-08	Resident- 1096 Forest Lake Dr.	Painting-Sanding Residue	Residential	1096 FOREST LAKE DR	Issued Warning Citation	Resident- 1096 Forest Lake Dr.	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge wash water base paint from washing off paint brushes entering the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**. City staff cleaned up the site affected by this violation. Full recovery cost will be issued to Ms. Delgado.					
4-Aug-08	Resident -1364 El Lugar	Sediment Discharge	Residential	1364 EL LUGAR ST	Issued Warning Citation	Resident- 1364 El Lugar St.	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of dirt/sediment from construction activity entering the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** City crew cleaned up discharge sediments in areas affected by this violation. Full recovery cost will be issued to Mr. Renteria.					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
4-Aug-08	Resident -1364 El Lugar St.	Sediment Discharge	Residential	1364 EL LUGAR ST	Issued Warning Citation	Resident- 1364 El Lugar St.	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge dirt/sediments from construction activity entering the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** City staff cleaned up sediment discharged in areas affected by this violation. Full recovery cost will be issued to Mr. Renteria.					
6-Aug-08	Resident - South of Khols	Sediment Discharge	Residential		Issued warning admin citation	Resident	$0
	Nature of Violation:	140.2.120 --Failure to utilize BMPs to protect storm conveyance system form pollutants. Issued warning citation and directed to established BMPs.					
8-Aug-08	Resident-1225 Frontage Rd-MHP	Sewage Spill/Discharge	Residential	1225 FRONTAGE RD	Issued Admin. Fine- $1000	Resident-1225 Frontage Rd.	$1000
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of sewer spill as a result of sewer back up system entering the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**. City crew cleaned up the sewer spill in the affected areas. Full recovery cost will be issued to Mr. Kleege					
18-Aug-08	Resident - 176 F Street	Vehicle oil discharge	Residential	176 F ST	Issued Admin. Fine- $200	Resident- 176 F Street	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of oily water from auto radiator while doing auto repair in driveway entering the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** City crew clean up oily discharge and full recovery cost will be issued to Mr. Spencer.					
13-Sep-08	General Growth Properties Inc. - Citation	Others/Unknown Discharge	Residential	555 BROADWAY	Issued Admin Fine -$400	General Growth Properties	$400
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of rust laden water from sprinkler system into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** City staff cleaned sections of storm conveyance system impacted by this violation. Full cost recovery will be issued to Mr. Jensen.					
23-Sep-08	Resident- 1297 Wheatland Street	Sediment Discharge	Residential	1297 WHEATLAND ST	Issued Admin. Fine- $200	Resident- 1297 Wheatland St.	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of sediment water and mud from construction activity entering the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**. City staff cleaned up dirt and sediment in the areas affected by this violation. Full recovery cost will be issued to Ms. Silva.					

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
30-Sep-08	Resident- 1001 Passeo Del Paso	Resident Cleaning Residue	Residential	1001 PASEO DEL PASO	Issued Admin. Fine- $200	Resident- 1001 Paseo Del Paso	$200
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of sediment water from roof washing entering the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**. City crew cleaned up the wash sediment wash in areas affected by this violation. Full recovery cost will be issued to Mr. Cardenas.					
6-Oct-08	Resident - 1745 Gotham Street	Painting-Sanding Residue	Residential	1745 GOTHAM ST	Issued Warning Citation	Residetn- 1745 Gotham St.	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of white wash water from paint brush cleaning entering into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** City staff cleaned illegal discharges and full recovery cost will be issued to Ms. Gonzales.					
9-Oct-08	Resident - Fresno & Anita	Vehicle oil discharge	Residential	FRESNO AV	Issued Admin Citation & Fine	Resident	$100
	Nature of Violation:	Resident was issued admin citation and fine $100 for discharging oil into the storm drain system. Immediately clean up of the spilled oil using absorbent materials and removed the vehicle from city street.					
27-Oct-08	Otay Ranch V-6 R-7B Chateau Belleme	Failure to Maintain BMPS	Residential		Issued Notice of Violation	Hillsborough ,Otay Ranch, HOA	
	Nature of Violation:	Issued Notice of Violation for failure to maintain the required storm water treatment facilities. Developer was given until November 14, 2008 to comply. Failure to comply will result in fines and/or civil penalties.					
27-Oct-08	Seniors at Broadway	Failure To Install TCBMP	Residential	845 BROADWAY	Issued Notice of Violation	MAAC Project Comm.	
	Nature of Violation:	Issued Notice of Violation for failure to install and maintain the required storm water treatment facilities. Developer was given until November 14, 2008 to comply, otherwise enforcement actions will be taken that may include fines and/or civil penalties.					
14-Nov-08	Spoon House -Citation	Painting-Sanding Residue	Residential	45	Issued Warning Citation	Spoon House	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of wash water form paint brush cleaning into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** Spoon House staff cleaned all areas affected by this violation.					

Date of Incident	Facility Name	Violation Category	Site Category	Address			Action Taken	Violator Business Name	Fine Amount
19-Nov-08	Contractor- Furmnansky - Citation	Sediment Discharge	Residential	1120	THIRD	AV	Issued Citation - Fine $200	Contractor -Furmansky	$200
	Nature of Violation:	14.20.100 Discharge of non-storm water prohibited. Observed discharge of dirt/sediment into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** City crews cleaned up areas affected by this violation. A full recovery cost will be issued to Mr. Furmansky.							
26-Nov-08	Hilltop Middle School	Sediment Discharge	Residential	44	HILLTOP	DR	Issued NOV Letter	Hilltop Middle School	
	Nature of Violation:	On 11/26-27, 2008, significant amount of sediments were discharge from Hilltop School's ground and slope along Telegraph Canyon Road and Hilltop Drive to the City's street and drainage system. Ordered to cease and desist and clean and abate any violations caused by the defective drain line.							
9-Dec-08	Eastlake 1 - Community Association	Sediment Discharge	Residential	1941	CLEARBROOK	DR	Issued Warning Citation	Eastlake 1 Comm. Association	
	Nature of Violation:	14.20.100 Discharge of non-strom water prohibited. Observed discharge of dirt/sediment into the storm water conveyance system. Upon notification, Tom Iniguez of Walters Management took immediate action to clean and restore streets, curb, and gutter.							
9-Dec-08	Players Choice - Citation	Sediment Discharge	Residential	224	ALPINE	AV	Issued Citation: Fine $200	Players Choice	$200
	Nature of Violation:	14.20.100 Discharge of non-storm water prohibited. Observed discharge of dirt into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**City crew clean up all areas affected by this violation. Full recovery cost will be issued to Mr. Mark Hyatt.							
10-Dec-08	Resident - 1165 Crystal Downs Dr.	Painting-Sanding Residue	Residential	1165	CRYSTAL DOWNS	DR	Issued Warning Citation	Resident- 1165 Crystal Down Dr	
	Nature of Violation:	14.20.100 Discharge of non-storm water prohibited. Observed discharge of water based paint residue into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment** Mr. Witt's staff immediately cleaned up areas affected by this violation. Provide educational brochures to owner.							
22-Jan-09	San Miguel Ranch-Montecito Ridge J1	Const. BMPS Violation	Residential	144	AVENIDA LORETTA		Issued NOV	Trimark Montecito, LLC	
	Nature of Violation:	14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to implement and provide maintenance of existing BMPs. 14.20.100 Discharge of non-storm water prohibited. Observed discharge of wash water into the storm water conveyance system. Owner was notified to correct discrepancies within specified period of time. **see attachment**							

Date of Incident	Facility Name	Violation Category	Site Category	Address	Action Taken	Violator Business Name	Fine Amount
22-Jan-09	San Miguel Ranch-Montecito Ridge J1	Const. BMPS Violation	Residential	144 AVENIDA LORETTA	Civil Penalty Notice and Order	Trimark Pacific Homes	$7500
	Nature of Violation:	14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to comply with previous orders to implement and provide continuous maintenance of existing BMPs. **see attachment** On 3829/2009 received fine payment from Trimark in the amount of $7,500.00					
11-Feb-09	Vo Dien Landscape Contractor	Slurry/Concrete Discharge	Residential	2418 FALCON VALLEY DR	Issued Admin Citation	Vo Dien Landscape	$200
	Nature of Violation:	14.20.100 Discharge of non-storm water prohibited. Observed discharge of color concrete hardener into the storm water conveyance system. 14.20.120 Reduction of pollutants contacting or entering storm water required. Failure to utilize BMPs. **see attachment**					

Incidents: 24 **$10,200.00**

Total Incidents: 51 **Total Fine: $15,000.00**

Attachment L

FY 2008-2009 Complaint Response Summary

Incident Date	Structure Category	Site Category	Address			Type of Violation
1-Jul-08	STREET	Commercial	720	H	ST	Slulry/Concrete Discharge

Comments Action Taken: On 07/01/08 - Arrived on-scene and observed Western Pump staff conducted preliminary concrete cuts to replace concrete section around UST access. Observed discharge of slurry buildup in the parking lot and minor buildup on 3 feet of curbline. Discharge did not enter catch basin. Spoke with superintendent and he instructed his staff to immediately conduct cleanup using brooms and shovels. He contacted local crew to deliver shop-vac and gravel bags to contain during cutting operations. City vactor crew assisted the cleanup of the area affected on the property. Issued Administrative Citation SW070108-01 (Warning) to Western Pump. No Further Action Required.

1-Jul-08	STREET	Commercial	696	BROADWAY		Leaking Vehicle

Comments Action Taken: On 07/01/08 - Received phone call from CVFD Engine 52 - Battalion Chief of a sump sludge/used oil spill at A-1 Auto Detail & Repair. Arrived on-scene and observed approx. 1500 ft of curbline contaminated with sump sludge & used oil. CVFD and County HIRT Team on-scene to investigate and contain. CVFD personnel contained spill utilizing earthen berms to prevent the spill from entering open storm channel downstream. Property owner contracted North -State environmental services to conduct clean up of the site. City staff to conduct follow up on August 1, 2008. See continuation on Customer Tab

On 07/29/08 conducted follow-up to ensure that Sump and illegal connection was plugged or capped. Permanent caps were placed over PVC and glued to prevent removal. SE corner box was filled with concrete. Deep sink in maintenance bay was disconnected. No further action required.

8-Jul-08	STREET	Residential	587	FOURTH	AV	Leaking Vehicle

Comments Action Taken: 7/8/08---Responded to report of leaky vehicle. Inspection oil stains on street in front of reported address, but no vehicle. Unable to trace origins of this leak.

7/9/08--- Returned in AM to try and find responsible vehicle. No leaky vehicles were found

7/11/08--- Returned in AM to try and find responsible vehicle. No leaky vehicles were found

7/14/08--- Returned in AM to try and find responsible vehicle. No leaky vehicles were found. Spoke to complainant and explained that enforcement action could not be taken since evidence could not be found linking leak to responsible party. Left public education materials at homes in the area.

7/14/08---City crews spread absorbent, scrubbed area and swept area clean to eliminate the stain. No further action necessary at this time.

10-Jul-08	STREET	Residential	819	CORNELL	AV	Dirt Tracking

Comments Action Taken: 7/10/08---Responded to report of unknown discharge from residence at 819 Cornell. Inspection found evidence of water discharged from address in question. Also found sediment and sand that appeared to be washed away. Spoke to homeowner who stated that he had washed off his driveway. He also stated that he was not using any sand or dirt. Administrative citation warning SW 1662 was issued. City crews cleaned all areas of the storm drain system impacted by this spill. No further action necessary at this time.

10-Jul-08	STREET	Residential	819	CORNELL	AV	Dirt Tracking

Comments Action Taken: 7/10/08---Responded to report of unknown discharge from residence at 819 Cornell. Inspection found evidence of water discharged from address in question. Also found sediment and sand that appeared to be washed away. Spoke to homeowner who stated that he had washed off his driveway. He also stated that he was not using any sand or dirt. Administrative citation warning SW 1662 was issued. City crews cleaned all areas of the storm drain system impacted by this spill. No further action necessary at this time.

14-Jul-08	STREET	Residential		F	ST	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	7/14/08---Responded to report of unknown discharge from motor home at 673 F Street. Inspection found evidence of small discharge from gray water tank of motor home in question. Spoke to vehicle owner who stated that she knew about the leak and that she was planning on getting it fixed. Issued administrative citation warning SW1663 with the requirement to repair the tanks and provide city with copies of receipts. Also issued order to immediately drive the motor home to the local RV dump station. 7/22/08--- Received call from vehicle owner stating that all repairs had been made and asking if copies were ok by mail. Waiting for mailed copies before case can be closed. 7/25/08---Received documents. No further action necessary at this time.					
14-Jul-08	STREET	Residential	687	FOURTH	AV	Accident/Spill
Comments Action Taken:	7/14/08----Called in request for street crews to clean up oil spill in front of 687 Fourth Ave. 7/14/08---Conducted follow-up inspection and crews had cleaned up spill to the MEP.					
16-Jul-08	STREET	Residential	1369	MARTIN	PL	Accident/Spill
Comments Action Taken:	On 7/16/08---Otay Water District reported a fuel spill at 1369 Martin Place. Storm Water staff responded and observed small diesel fuel spill from residents driveway and minor contamination of approx. 30 feet of curbline. Spill was old and already dried. Small amount of accumulation located 2 houses down. Residents son arrived home and stated that his employer's bobcat leaked the fuel and was supposed to clean up before he left. Instructed resident to conduct proper cleanup and remain at location and contact City staff for follow-up that the spill was properly cleaned. City staff conducted follow-up approximately 1.5 hours later and observed that the resident purchased oil absorbent materials from Pep Boys and properly cleaned the spill. Issued resident City Storm Water education Package for Mobile Construction Related Businesses. Instructed resident to inform employer to relocate bobcat from his resident and to conduct refueling at construction site and utilize BMPs such as plastic sheeting, containment pans and to refuel away from impervious areas. NFA Required.					
16-Jul-08	STREET	Residential	1369	MARTIN	PL	Accident/Spill
Comments Action Taken:	On 7/16/08---Otay Water District reported a fuel spill at 1369 Martin Place. Storm Water staff responded and observed small diesel fuel spill from residents driveway and minor contamination of approx. 30 feet of curbline. Spill was old and already dried. Small amount of accumulation located 2 houses down. Residents son arrived home and stated that his employer's bobcat leaked the fuel and was supposed to clean up before he left. Instructed resident to conduct proper cleanup and remain at location and contact City staff for follow-up that the spill was properly cleaned. City staff conducted follow-up approximately 1.5 hours later and observed that the resident purchased oil absorbent materials from Pep Boys and properly cleaned the spill. Issued resident City Storm Water education Package for Mobile Construction Related Businesses. Instructed resident to inform employer to relocate bobcat from his resident and to conduct refueling at construction site and utilize BMPs such as plastic sheeting, containment pans and to refuel away from impervious areas. NFA Required.					
16-Jul-08	STREET	Residential	1369	MARTIN	PL	Accident/Spill
Comments Action Taken:	On 7/16/08---Otay Water District reported a fuel spill at 1369 Martin Place. Storm Water staff responded and observed small diesel fuel spill from residents driveway and minor contamination of approx. 30 feet of curbline. Spill was old and already dried. Small amount of accumulation located 2 houses down. Residents son arrived home and stated that his employer's bobcat leaked the fuel and was supposed to clean up before he left. Instructed resident to conduct proper cleanup and remain at location and contact City staff for follow-up that the spill was properly cleaned. City staff conducted follow-up approximately 1.5 hours later and observed that the resident purchased oil absorbent materials from Pep Boys and properly cleaned the spill. Issued resident City Storm Water education Package for Mobile Construction Related Businesses. Instructed resident to inform employer to relocate bobcat from his resident and to conduct refueling at construction site and utilize BMPs such as plastic sheeting, containment pans and to refuel away from impervious areas. NFA Required.					
21-Jul-08	STREET	Residential	1096	FOREST LAKE	DR	Paint Discharge
Comments Action Taken:	7/21/08---Responded to report of paint in the SWCS from 1096 Forest Lake Dr. Inspection noted evidence of water based paint discharges from address in question. Issued administrative citation warning SW B0721081. No further action necessary at this time.					
23-Jul-08	STREET	Industrial	811	ENERGY	WY	Dirt Tracking

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	7/1/08--- Responded to report of over irrigation, storm drains full of trash and debris, and damaged "No Dumping" signs at inlet. Inspection found inlets clean and free of trash and debris, no evidence of over irrigation, some sections of the curb and gutter had pine needles, and small amounts of trash, and all "No Dumping" plaques were in good condition. Notified street sweeping regarding pine needles. No violations were observed. No further action is necessary at this time.					
23-Jul-08	STREET	Industrial	855	ENERGY	WY	Construction Debris & Waste
Comments Action Taken:	7/1/08--- Responded to report of storm drains full of trash and debris, and damaged "No Dumping" signs at inlet. Inspection found inlets clean and free of trash and debris, and all "No Dumping" plaques were in good condition. No violations were observed. No further action is necessary at this time.					
23-Jul-08	STREET	Industrial	850	ENERGY	WY	Leaking Vehicle
Comments Action Taken:	7/2/08--- Responded to report of oil spills onto the ground from vehicles waiting to be dismantled, open top trash containers, and damaged "No Dumping" signs on inlets. Inspection found all areas clean and free of oil spills, and all "No Dumping" plaques were in good condition. No violations were observed. No further action is necessary at this time.					
23-Jul-08	STREET	Commercial	1751	FOURTH	AV	Street Sweeping Needed
Comments Action Taken:	7/2/08---Responded to report of uncovered dumpsters, trash and bottle caps littered on the ground, and lack of sweeping. Inspection found several open top containers used for handling and containment of recyclable commodities, facility and public right-of-way in front of this business were in good clean order. No violations were observed. No further action necessary at this time.					
23-Jul-08	STREET	Residential	640	ASH	AV	Sewage Spill Going Down Storm Drair
Comments Action Taken:	7/23/08---Responded to call of illegal dumping by driver of a motor home (Lic. 3MDD932). Inspection noted sewage spilled in the alley at the 600 blk of East Park Lane. Issued administrative citation warning SW B0723081. No further action necessary at this time.					
25-Jul-08	STREET	Commercial		THIRD	AV	Slulry/Concrete Discharge
Comments Action Taken:	7/25/08---Responded to report of concrete from a rental concrete trailer spilled into the SWCS at the intersection of Third and D Street. Inspection noted evidence of concrete in the SWCS. Called for City Crews to clean up spill. No further action necessary at this time.					
25-Jul-08	STREET	Commercial	501	FIFTH	AV	Slulry/Concrete Discharge
Comments Action Taken:	7/25/08---Responded to report of concrete from a rental concrete trailer spilled into the SWCS at the intersection of Third and D Street. Inspection noted evidence of concrete in the SWCS. This report also included identical spills at the intersection of North Glover Ave. & Third Ave, the intersection of Fifth Ave. & C Street, and in front of 501 C Street. Issued administrative citation SW1665. No further action necessary at this time.					
25-Jul-08	STREET	Commercial		GLOVER	AV	Slulry/Concrete Discharge
Comments Action Taken:	7/25/08---Responded to report of concrete from a rental concrete trailer spilled into the SWCS at the intersection of Third and D Street. Inspection noted evidence of concrete in the SWCS. Called for City crews to clean up spill. No further action necessary at this time.					
28-Jul-08	STREET	Commercial		HALSEY	ST	Sewage Spill Going Down Storm Drair
Comments Action Taken:						
28-Jul-08	MISC	Residential		PARK	LN	Accident/Spill
Comments Action Taken:						
29-Jul-08	MISC	Residential		HALSEY	ST	Accident/Spill

Incident Date	Structure Category	Site Category		Address		Type of Violation
Comments Action Taken:						
29-Jul-08	STREET	Commercial		AUTO PARK	AV	Accident/Spill
Comments Action Taken:	On 07/28/08 received notification via email of City of San Diego's Waste Water Division on the storage of some drum of used oil, antifreeze drums at Peoples Chevrolet. Arrived on-scene and observed that the City of San Diego's concerns were met. No compliance issues were observed. No further action required.					
29-Jul-08	STREET	Residential		PARK	LN	Sewage Spill Going Down Storm Drair
Comments Action Taken:	7/29/08---Responded to report of illegal dumping by driver of motor home at 600 blk of East Park Lane. Inspection found that the same motor home involved in an illegal dumping incident on 7/23/08 was reportedly also involved in this incident. Please refer 08_003351. No further action necessary at this time.					
30-Jul-08	STREET	Construction		CORRAL CANYON	RD	Power Washing
Comments Action Taken:	7/30/08---Responded to report of power washing without BMPs. Inspection noted construction workers at Long Canyon Park power washing. Rinse water was flowing into grassy areas. Evidence of a violation was not found, however, the construction crew Forman was advised to stop power washing. No further action necessary at this time.					
4-Aug-08	STREET	Residential	1364	EL LUGAR	ST	Dirt Tracking
Comments Action Taken:	8/4/08---Responded to report of dirt/ sediment tracking into the SWCS. Inspection noted severe tracking and discharge of sediment into the SWCS. Issued administrative citation warning SW1666. No further action necessary at this time.					
8-Aug-08	STREET	Residential	1225	FRONTAGE	RD	Sewage Spill Going Down Storm Drair
Comments Action Taken:	SEWER SPILL IN THE GUTTER,SENT 336 FOR CONTAINMENT,WE HAVE BEEN THERE BEFORE.MIKE HICE WAS SENT THERE ALSO.					
	8/8/08---Responded to call of sewage discharge into the SWCS from 1225 Frontage Rd. Inspection noted sewage discharged from two uncapped sewage cleanouts discharging into the SWCS. Property manager Yvonne Cerda stated that a plumber had inspected the sewer system at the mobile home park on 8/4/08 and recommended that the sewer lines be cleaned. The property owner refused the sewer line cleaning service. Issued administrative citation SW B0808081. No further action necessary at this time.					
12-Aug-08	STREET	Residential	375	JASON	PL	Other
Comments Action Taken:	THE RESIDENT AT 375 JASON PL IS SPRAYING GUTTER WITH WEED KILLER.					
	8/19/08---Responded to report of illegal discharge of pesticides at 375 Jason Place. Inspection did not find any evidence indicating that pesticides were discharge into the SWCS. Some watermarks were found in the gutter in front of the home. Left a door hanger with note for homeowner to call me. I received call from homeowner, Robert Boyd (619) 254-8956. Mr. Boyd stated that he sprayed Round-Up on the weeds in front of his home, but that he used the product in minimal amounts in accordance to the directions on the bottle.					
	8/20/08---As part of a second call I left a message explaining to Mr. Boyd that Round-Up weed killer can be used within his property; but that when it came to the sidewalk, curb, and gutter he should notify the City for weed removal at (619) 397-6100. No violation was found. No further action necessary at this time.					
13-Aug-08	STREET	Commercial	1408	THIRD	AV	Sewage Spill Going Down Storm Drair
Comments Action Taken:	SEWER SPILL FROM JACK IN THE BOX,SENT MARTINEZ AND PALMER TO DO CONTAINMENT.					
	8/13/08---Responded to report of sewage discharge into the SWCS from 1408 Third Ave. Inspection noted sewage discharged from improperly capped sewage cleanout discharging into the SWCS. Issued administrative citation SW B0813081. No further action necessary at this time.					

Incident Date	Structure Category	Site Category	Address			Type of Violation
13-Aug-08	STREET	Commercial	1408	THIRD	AV	Sewage Spill Going Down Storm Drair

Comments Action Taken:

SEWER SPILL FROM JACK IN THE BOX,SENT MARTINEZ AND PALMER TO DO CONTAINMENT.

8/13/08---Responded to report of sewage discharge into the SWCS from 1408 Third Ave. Inspection noted sewage discharged from improperly capped sewage cleanout discharging into the SWCS. Issued administrative citation SW B0813081. No further action necessary at this time.

14-Aug-08	STORM DRAIN PIPE	Residential	279	D	ST	Sewage Spill Going Down Storm Drair

Comments Action Taken:

GRAY WATER BEING DUMPED IN THE BACKYARD.

On 08/14/08 responded to a reported discharge of sewage/gray water into the storm drain system. Arrived onscene and did not observe or smell of any evidence of the discharge coming form the property. No further action is required.

On 8/22/08 received pictures via email from complainant of the alleged discharge. Photos showed a drain on the inside of the house and it appeared to be coming from the laundry room of the home. Photos did not show a private sewer cleanout at this location. The discharge appeared to be washwater from either a deep sink of washing machine. Small discharged was flowing into homes side yard and was not discharging onto the storm drain system. Referred complainant to DEH and Community Relations Officer for other concerns. No further action is required.

14-Aug-08	STREET	Residential	575	PARKSIDE	DR	Power Washing

Comments Action Taken:

On 08/14/08, received notification of resident powerwashing front walkway and patio. Arrived on-scene and observed a small stream of water coming from the residents curb drain. Heard resident powerwashing in the back but could not make contact due to the noise level. Issued Pollution Notice door hanger for resident to contact Storm Water Section.

On 08/15/08 received phone call from a Mr. Romero of the subject address. Mr. Romero explained that he was using measures to minimize the discharge to the gutter. He stated that he blocks off his area drain on the patio concrete and washes the water into his landscaping and does not use any chemicals. He has invited Storm Water staff to observe on the practices he uses next time that he intends to clean the area again. Explained to him to that his wash water is a violation of the CVMC and that he should utilize additional measures to prevent the discharge into the gutter. It was also explained that future complaints could result in increased enforcement actions.

18-Aug-08	STREET	Residential	176	F	ST	Leaking Vehicle

Comments Action Taken:

RESIDENT WAS CITED FOR RELEASING RADIATOR ANTI-FREEZE FROM AUTO,SENT 2907 MARTINEZ & PALMER TO DO CONTAINMENT

8/18/08---Resident at 176 F Street was discharging non storm water into the SWCS as a result of radiator repair work. Issued administrative citation SW1667. No further action necessary at this time.

19-Aug-08	STREET	Residential	1123	OCALA	AV	Construction Debris & Waste

Comments Action Taken:

THEY ARE WASHING DOWN MATERIALS IN GUTTER.

8/19/08---Responded to report of TJD in the public right-of-way/ SWCS. Inspection found construction discards had been staged at the curb for pick up. Issued verbal notice to tenant Mr. Salvador Armas to have TJD removed by 10AM the following day.

8/20/08---Re-inspection confirmed that all debris was removed from public right-of-way. No further action necessary at this time.

2-Sep-08	STREET	Commercial	730	BROADWAY		Power Washing

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	THEY WERE POWER WASHING THE SIDEWALKS,THEY DID NOT HAVE ANY(BMPS)TO CONTAIN FROM GOING INTO STORM DRAIN . 8/29/08---Responded to report of power washing sidewalks without BMPs. Inspection noted JR Power Sweeping staff power washing sidewalks and discharging wash waster into SWCS. Issued Administrative Citation warning SW1668. No further action necessary at this time.					
10-Sep-08	STREET	Residential	318	NOCTURNE	CT	Leaking Vehicle
Comments Action Taken:	9/9/08---Responded to report of vehicle leaking oil onto the street. Inspection noted white Chevy van LIC 14523(DP) leaking oil onto SWCS. Issued verbal warning to park van in driveway, repair leaks on van, or place drip pan underneath the van daily. Additionally, the vehicle owner was asked to clean the oil from the street. A re-inspection will be conducted on 9/12/08. 9/17/08-A reinspection found that the vehicle owner had cleaned all oil stains from the street and placed a drip pan underneath the vehicle to catch any oil potentially leaking from the vehicle. No further action necessary at this time.					
10-Sep-08	STREET	Residential		THIRD	AV	Slulry/Concrete Discharge
Comments Action Taken:	9/9/08---Responded to report of concrete slurry spill at the intersection of Third Ave. and D Street. Inspection noted some concrete slurry spilled into the SWCS. Violator remained on site and cleaned a significant portion of this spill before city crews arrived. Administrative citation warning SW1670 was issued. No further action is necessary at this time.					
10-Sep-08	STREET	Municipal	333	OXFORD	ST	Complaint Response Enforcement
Comments Action Taken:	HOMELESS ARE USING SDGE BOX TO GO TO LATRINE. 9/10/08---inspection did not find evidence of any discharge or potential for a discharge. No further action necessary at this time.					
11-Sep-08	STREET	Residential	1295	THIRD	AV	Washing Vehicle in Street
Comments Action Taken:	LIQUID LEAKING THRU A PIPE OPENING AT THE CURB,AND THRU A WALL ADJOINING HER PROPERTY AT 286 PALOMAR ST. 9/10/08-Responded to complaint call of water being discharged from curb drain onto Palomar St. Inspection noted that the root cause of this discharge is from customers pre-washing their cars in front of the on-site car wash, and wash water entering the adjacent drain and ultimately discharging at Palomar St. Spoke with business owner Sameer Shrouki and pointed out the violation. Mr. Shrouki stated that he wanted some time to try different solutions to the problem. 9/25/08---Administrative citation warning SW B0910082 was issued. This warning included a deadline of 10/1/08 for the implementation of solutions. A reinspection will be conducted to ensure that a permanent solution has been implemented for this case. 10/21/08--- A re-inspection of 1295 Third Ave. noted that the curb drain at Palomar Ave. was sealed off and no longer discharging. Manager Sameer Shrouki stated that he has implemented an internal policy among gas station staff that requires residual water from the car wash be mopped up as much as possible. No further action necessary at this time.					
16-Sep-08	STREET	Residential	1010	JEFFERSON	AV	Complaint Response Enforcement
Comments Action Taken:	9/16/08---Responded to complaint call regarding illegal discharge of wastewater. Inspection found no evidence of any discharge into the public right-of-way. Case was referred to Code Enforcement for sewer discharges between properties and unpermitted dwellings. No further action is necessary at this time.					
16-Sep-08	STREET	Residential	1009	PLAZA SINUOSO		Over-Irrigation/Pesticide

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	A SEDIMENT DISCHARGE ON SIDEWALK FROM RESIDENT HOME.					
	9/12/08---Responded to complaint call regarding illegal discharge of sediment. Inspection noted that dirt and sediment is flowing from unlandscaped section of side yard near mailbox, and onto the sidewalk, curb and gutter. Left a door hanger and asked to contact city regarding the discharge. 3/12/09--- after leaving several monthly door hangers with notes to call me, I finally made contact with homeowner Juana Reyes (619) 410-8101. The nature of the violation was explained to Ms. Reyes, who responded by agreeing to correct the problem. A follow up inspection will be made on 3/20/09. 4/3/09---Follow up inspection noted that the violation had been corrected. Ms. Reyes and staff had fixed the irrigation system and cleaned all sediment and debris. Photos on file. No further action necessary at this time.					
16-Sep-08	STORM CHANNEL	Residential	1391	SOUTH HILLS	DR	Other
Comments Action Taken:	RESIDENT IS PUTTING PLANT CONTAINERS IN DRAIN.					
	9/12/08---Responded to complaint call regarding resident placing plant containers in the drain. Inspection found no evidence of any discharge into the public right-of-way. . No further action is necessary at this time.					
17-Sep-08	STREET	Residential	2403	EASTRIDGE	LP	Fuel/Oil/Gas Spill
Comments Action Taken:	COMPLAINTANT BELIEVES THAT IT IS OIL AND TRANSMISSION FLUID INTO THE GUTTER.					
	9/17/08---Responded to complaint call regarding oil being washed into the street by resident at 2403 East Ridge Loop. Inspection noted a large puddle of oil in the street in front of the address in question. Streets division staff was summoned to contain the oil with dirt/ absorbent. Left door hanger asking resident to contact the city regarding violation. Spoke to property owner, Mr Rigoberto Cardenas who stated that he drove away early in the morning to find that his car had leaked out all oil and subsequently broke down. He was unaware of the oil in front of his home. He was asked to clean all oil and absorbent and repeat the process until spill is cleaned. 9/18/08---A re-inspection on noted that all oil and absorbent had been cleaned. No further action is necessary at this time.					
22-Sep-08	STREET	Residential	658	GUAVA	AV	Dirt/Sediments
Comments Action Taken:	HOSING DOWN YARD WASTE INT GUTTERS EVERY NIGHT,GOING INTO CATCH BASINS.,VERY UNCOOPERATIVE NEIGHBOR.					
	On 9/22/08 did not observe any unusual buildup into storm drain. Left Door Hanger. Work Request Cancelled.					
22-Sep-08	STREET	Residential	2616	MOONLIGHT TRAIL	LN	Paint Discharge
Comments Action Taken:	On 9/22/08 responded to a reported paint spill. Arrived on-scene and observed partially dried white latex paint that was spilled into the street. Gravel was placed on spill to prevent tracking. Left door hangers at residences located near the spill. City vactor crews conducted cleanup. No further action required.					
23-Sep-08	STREET	Residential	1297	WHEATLAND	ST	Construction Debris & Waste
Comments Action Taken:	WASH DOWN DEBRIS INTO GUTTER,IT IS ALL OVER THE NEIGHBORHOOD.					
	9/23/08---Responded to complaint call regarding illegal discharge of dirt/ sediment into the SWCS. Inspection noted that dirt and sedimented water was discharged from concrete wall footings at the rear section of the property. Tenant, Rosemary Staub stated that the property owner had contracted workers to build a retaining wall at the rear of the property. Workers were discharging dirt/ sediment as part of dewatering the wall footings. Administrative citation SW B0923082 was issued to property owner Lourdes N. Silva. No further action necessary at this time.					

Incident Date	Structure Category	Site Category	Address			Type of Violation
24-Sep-08	STREET	Residential		NAPLES	ST	Carpet Cleaning

Comments Action Taken: CARPET CLEANING MATERIALS DOWN THE GUTTER.

10/3/08---Responded to complaint call of carpet cleaner discharging wash water into the SCWS at 1117 Hilltop Dr. Inspection noted that We Care Carpet cleaners had discharged wash water into the SWCS. Administrative citation warning SW 1672 was issued with the requirement to pay a full cost recovery invoice for all costs associated with the clean up of the spill and to register as a mobile business with the Storm Water Management section. No further action is necessary at this time.

26-Sep-08	STREET	Residential	915	RIGLEY	ST	Slulry/Concrete Discharge

Comments Action Taken: CEMENT SLURRY RUNNING DOWN STREET.

Arrived at the site on 09-26-08. Resident had hired a concrete contractor to do concrete work at his house. Contractor was rinsing out a wheel barrel into the landscaping. Observed potable water entering the storm drain immediately downstream of the home. Water was clear and free of concrete. Vactor crews arrived onsite and flushed the curb and gutter and collected water at the storm drain. Provided education to the homeowner and contractor about concrete BMPs. No further action required. A verbal warning was issued to the homeowner.

30-Sep-08	STREET	Residential	1001	PASEO DEL PASO		Power Washing

Comments Action Taken: RESIDENT IS WASHING HIS ROOF.

9/30/08---Responded to report of red colored water flowing from 1001Paseo Del Paso. Inspection noted red sediment laden water flowing from said property as a result of workers washing off red clay roof and not implementing BMPs. Administrative citation SW B0930081 was issued to the property owner. No further action is necessary at this time.

1-Oct-08	STREET	Residential	153	INKOPAH	ST	Sewage Spill Going Down Storm Drair

Comments Action Taken: MOTORHOME LEAKING UNKNOWN SUBSTANCE.MOTORHOME BUTTOMED OUT ON SWAIL.

10/1/08---Responded to report of sewer spill from a motor home into the street at 157 Inkopah. Inspection noted a sewer spill beginning at the cross gutter of the intersection of Inkopah Street and Helix Ave. and ending at the intersection of Jamul Ave. and Melrose Ave. Scrape marks at the beginning of the spill indicate an accidental motor home sewer system break. Responsible party could not be determined. City staff conducted a thorough cleaning of all public areas impacted by this accidental spill. No further action is necessary at this time.

2-Oct-08	STREET	Residential	2616	MOONLIGHT TRAIL	LN	Paint Discharge

Comments Action Taken: PAINT SPILL FROM TRASH TRUCK.

On 10/02/08 received notification from dispatch of a paint spill from a Allied Waste vehicle. Arrived on scene and observed "absorbent" material (pea gravel) ands paint at the location. Allied did not respond to calls. City vactor crew conducted final cleanup of site.

2-Oct-08	STREET	Residential	1044	GUATAY	AV	Automotive Work

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	WASHING THEIR CAR ENGINE INTO THE GUTTER. 10/2/08---Responded to report of resident at 1042 Guatay Ave. washing vehicle engines and allowing wash water to flow into the SWCS. Inspection did not find any evidence of a violation. Called complainant Laura Badgett (619) 420-1448 for additional information. Ms. Badgett acknowledged the illegal discharges had occurred hours prior to the report and that evidence was no longer present. Ms. Badgett agreed to call dispatch as soon as illegal discharges are witnessed. 2/13/09---After various windshield inspections no evidence was found. Home at 1042 Guatay has been vacated. Suspected tenants are no longer living at this home. No further action necessary at this time.					
3-Oct-08	CATCH BASIN	Residential	290	SECOND	AV	Sewage Spill Going Down Storm Drair
Comments Action Taken:	On 10/03/08 received notification of sewage spill at the above location. Arrived on-scene and observed small coming from private sewer cleanout and discharging onto private storm drain sump. Spoke with Mr. Montoya, rep for property owner, who will dispatch crew to clean out backup. Mr. Montoya will clean private sumps at the site. City staff to look into lateral separation located from lateral to city main. NFA required.					
3-Oct-08	STREET	Commercial		SECOND	AV	Possible Dumping into Catch Basin
Comments Action Taken:	WE CARE CARPET CLEANING IS DUMPING INTO STREET. 10/6/08---Responded to report of We care carpet cleaning discharging wastewater into the SWCS at 1117 Hilltop. An inspection confirmed the report. Administrative citation warning SW1672 was issued with the requirement for the business to register with the Storm Water Management division as a Mobil business.					
6-Oct-08	STREET	Residential	1745	VASSAR	AV	Paint Discharge
Comments Action Taken:	WHITE MILKY STUFF RUNNING IN THE GUTTER. 10/6/08---Responded to call at 1745 Gotham St. Noted white reside from curb drain. Spoke to homeowner Janet Gonzales. Ms. Gonzales stated that they were painting and washing brushes in back yard. Issued Administrative Citation warning SW B0106081. No further action necessary at this time.					
8-Oct-08	STREET	Residential	88	FOURTH	AV	Over-Irrigation/Pesticide
Comments Action Taken:	SPILL IS COMING FROM A CURB DRAIN IN THE RESIDENCE. 10/8/08---Responded to report of illegal discharge at 88 Fourth Ave. Inspection noted a clear discharge from curb drain due to irrigation. No violation found. No further action necessary.					
8-Oct-08	STREET	Residential	1444	CREEKSIDE	DR	Paint Discharge
Comments Action Taken:	RESIDENT WOULD NOT GIVE HIS NAME,NOTICED PAINT SINCE YESTERDAY. (10-07-08) 10/6/08---Responded to call at 1745 Gotham St. Noted white reside from curb drain. Spoke to homeowner Janet Gonzales. Ms Gonzales stated that they were painting and washing brushes in back yard. Issued Administrative Citation warning SW B0106081. No further action necessary at this time.					
13-Oct-08	STREET	Commercial		H	ST	Unknown Discharge
Comments Action Taken:	RUSTY WATER FROM FIRE SPRINKLERS. 10/13/08---Responded to report of illegal discharge at the Chula Vista Mall. Inspection noted rust colored water being discharged from the mall building and into the SWCS. Issued Administrative Citation SW B0913081. No further action is necessary at this time.					

Incident Date	Structure Category	Site Category	Address			Type of Violation
14-Oct-08	STREET	Residential	1580	MARL	AV	Construction Debris & Waste
Comments Action Taken:	GROUT RESIDUE ON THE GUTTER,SENT A VACTOR TO CONTAIN.					
	10/6/08---Responded to report of white paint in the curb and gutter at the 1745 Gotham. Inspection noted paint from curb drain into the SWCS. Issued administrative citation warning SW B0106081. No further action necessary at this time.					
16-Oct-08	STREET	Residential		SILVAS	ST	Dirt/Sediments
Comments Action Taken:	THEY ARE WASHING THEIR TRASH CANS INTO THE GUTTER.					
	10/16/08---Responded to report of non-storm water discharge at 2638 Main St. Inspection noted that bar staff had washed out trash and other debris from inside the bar and into the SWCS. Issued Administrative Citation SW B1016081. No further action necessary at this time.					
16-Oct-08	STREET	Residential	966	CHARDONNAY	TE	Unknown Discharge
Comments Action Taken:	LACK OF INFO.					
20-Oct-08	STREET	Residential	2771	SUTTER RIDGE	DR	Fuel/Oil/Gas Spill
Comments Action Taken:	UNKNOWN SPILL ,ABSORBENT ON THE ROAD.					
	10/20/08---Responded to report of oil stain and absorbent in the street in front of 2775 Sutter Ridge Rd. Inspection noted that absorbent had been removed and oil stain had been cleaned as much as possible. No threat to water quality is present. Left public education materials. No further action necessary at this time.					
20-Oct-08	STREET	Commercial	298	OXFORD	ST	Possible Dumping into Catch Basin
Comments Action Taken:	RESTAURANT HAS A LARGE BUCKET OF USED OIL IN PARKING LOT.					
	10/20/08---Responded to report of oil container at Casa Don Diego situated in the parking lot without cover and containment. Issued inspection report with recommended salutations and a time line for completion. Left public education materials. A re-inspection will be conducted to ensure compliance.					
	3/12/09---A follow up inspection found that the restaurant's oil and grease container had been moved to a location with cover and containment. Photos on file. No further action is necessary at this time.					
24-Oct-08	STREET	Residential	594	TRAILRIDGE	DR	Slulry/Concrete Discharge
Comments Action Taken:	10/24/08---Responded to report of concrete slurry being discharged at 594 Trailridge Rd. Inspection noted that a small amount of dirt had been spilled in the street and that the contractor was cleaning. BMPs were in place. No threat to water quality present. No further action necessary at this time.					
28-Oct-08	STREET	Residential	984	ARROYO	DR	Construction Debris & Waste
Comments Action Taken:	TILE GROUT RESIDUE RUNNING IN THE GUTTER.					
	10/28/08---Responded to report of non-storm water discharge at 984 Arroyo Rd. Inspection found no evidence of a violation. . No threat to water quality present. No further action necessary at this time.					
3-Nov-08	STREET	Commercial	2290	OTAY LAKES	RD	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	PHO VIETNAMESE NOODLES,DUMPING OF GREASE INTO STORM DRAIN. 10/20/08---Responded to report of grease or oil being dumped into storm drain system. Notified Luke Arrington of Westwood Financial Corporation regarding cooking oil spill. Mr. Arrington and staff took immediate action to correct the problem. Issued verbal warning to Luke Arrington. Prepared inspection reports for Smoking Sam's Barbeque, Pho Vien Dong, L&L Barbeque, Panda Chef, and Lisa's Filipino Cuisine documenting the conditions and establishing a 20day correction deadline. 12/11/08---At the time of re-inspection the condition had not been restored to an acceptable level. Administrative Citation SW B1211081 was issued to Westwood Financial Corporation.					
6-Nov-08	STREET	Residential		SANTA CORA	AV	Construction Debris & Waste
Comments Action Taken:	WASHING SOME TYPE OF MATERIAL INTO STORM DRAIN. 11/6/08---Inspection found dirt and sediment discharged into street/ gutter. Landscape maintenance contractor was immediately called to clean up and fix irrigation problem. A verbal warning was issued. No further action necessary at this time.					
14-Nov-08	STREET	Residential	104	D	ST	Complaint Response Enforcement
Comments Action Taken:	11/14/08---inspection found furniture and other household items in driveway and on sidewalk at 102 D street. Not a storm water violation. Referred to Code Enforcement. No further action necessary at this time.					
17-Nov-08	STREET	Residential	1349	HIDDEN SPRINGS	PL	Leaking Vehicle
Comments Action Taken:	11/18/08---inspection noted grey Ford, CAL plate 3CDX361 leaking oil on to street. Left card and note to call me. 11/19/08--- Spoke to home owner regarding leaky Ford. Issued verbal warning with requirement to move fix or move the vehicle into their private driveway and to clean up all oil spilled. 11/20/08---Inspection noted vehicle was moved and oil spot was cleaned. No further action necessary at this time.					
19-Nov-08	STREET	Residential	1120	THIRD	AV	Other
Comments Action Taken:	11/19/08---Inspection found dirt and sediment discharged into street/ gutter from construction project at 1120 Third Ave. Summoned city staff to clean all areas impacted by this illegal discharge. Issued Administrative Citation SW1674. No further action necessary at this time.					
21-Nov-08	STREET	Residential	88	FOURTH	AV	Unknown Discharge
Comments Action Taken:	Please see request 08_002748					
2-Dec-08	STREET	Residential	426	J	ST	Sewage Spill Going Down Storm Drair
Comments Action Taken:	12/2/08---Inspection found no evidence of a discharge or any other storm water violation. No further action is necessary at this time.					
9-Dec-08	STREET	Construction Sites	1948	CLEARBROOK	DR	Construction Debris & Waste
Comments Action Taken:	12/9/08---Inspection noted a discharge of dirt/ sediment from unimproved parcel. Walters Management staff was called to clean up all dirt and debris resulting from this discharge and to also implement BMPs. An administrative Citation warning SW B0129081 was issued to Walters Management. All items noted on the written warning were corrected. No further action necessary at this time.					

Incident Date	Structure Category	Site Category	Address			Type of Violation
9-Dec-08	STREET	Residential	224	ALPINE	AV	Construction Debris & Waste
Comments Action Taken:	12/9/08---Inspection noted a discharge of dirt/ sediment from 224 Alpine Ave. and onto the SWCS as a result of landscape contractor staging dirt on the street and using water to and using a water hose for compaction and dust control. City crews were summoned to clean all sections of the public storm drain system impacted by this discharge. An administrative Citation SW B01209081 was issued to Walters Management. No further action necessary at this time.					
10-Dec-08	STREET	Residential	700	EDGEWATER	DR	Slulry/Concrete Discharge
Comments Action Taken:						
11-Dec-08	STREET	Residential	1165	CRYSTAL DOWNS	DR	Paint Discharge
Comments Action Taken:	12/10/08---Inspection noted a discharge of white paint residue from 1165 Crystal Downs Dr. and onto the SWCS as a result of homeowner painting activity at residence. An administrative Citation Warning SW 1701 was issued to property owner. Property owner was took immediate action to clean up all sections of the public storm drain system impacted by this discharge. No further action necessary at this time.					
11-Dec-08	STREET	Residential	1165	CRYSTAL DOWNS	DR	Paint Discharge
Comments Action Taken:	12/10/08---Inspection noted a discharge of white paint residue from 1165 Crystal Downs Dr. and onto the SWCS as a result of homeowner painting activity at residence. An administrative Citation Warning SW 1701 was issued to property owner. Property owner was took immediate action to clean up all sections of the public storm drain system impacted by this discharge. No further action necessary at this time.					
12-Dec-08	CATCH BASIN	Residential	2260	OTAY LAKES	RD	Sewage Spill Going Down Storm Drair
Comments Action Taken:	GREASE & OIL GOING INTO STORM DRAIN. 12/12/08---Inspection noted a discharge of grease and other food waste from poorly maintained trash equipment. The property manager has been warned on previous occasions. Administrative citation SW B1211081 was issued with the reiteration to clean and abate all areas of the private storm drain system and to have the trash equipment repaired or replaced.					
22-Dec-08	STREET	Residential	368	SURREY	DR	Dirt Tracking
Comments Action Taken:	MUD TRACKING IN THE STREET,SENT 2 VACTORS TO MAINTAIN. 12/22/08---Inspection noted a discharge of dirt sediment from construction project at 368 Surrey DR. City crews were summoned to clean all sections of the storm water conveyance system impacted by this discharge. Administrative citation SW B1222081 was issued to property owner. No further action is necessary at this time.					
23-Dec-08	STREET	Construction Sites	860	DUNCAN RANCH	RD	Dirt Tracking
Comments Action Taken:	RCP TRUCK GOT STUCK IN MUD,TOW TRUCK PULLED HIM OUT AND THEY LEFT A MESS IN THE STREET.TRUCK 299 (RCP),CONTRACTOR NAME IS ALLEN MASS PHONE IS937-8580. On 12/23/08, received notification that RCP Block and Brick Truck got stuck on the Kingdom Hall construction site. RCP contacted tow truck and thus tracked significant amounts of dirt and mud onto Duncan Ranch Road to the intersection of Proctor Valley and Hunte Parkway. Arrived on-scene and observed street sweeping contractor hired by RCP conducting extensive cleanup of the dirt and mud. Informed RCP to instruct delivery drivers to not enter construction site after a rain event. On 12/23/08 at 4:45PM received phone call from Street Sweeper that the dirt and mud has been removed from streets. Due to the fast response by RCP, issued verbal warning that any future violations will result with the issuance of a notice of violation and possible fines.					
24-Dec-08	STREET	Residential	196	GUAVA	AV	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	RESIDENT CHANGING OIL IN THE STREET.					
	12/24/08---Inspection noted a resident conducting auto repairs in the street and a small oil stains on the ground. Issued verbal warning. Resident took immediate action to move work onto private property and wipes up oil spill. No further action is necessary at this time.					
5-Jan-09	STREET	Residential	242	DEL MAR	AV	Paint Discharge
Comments Action Taken:	PAINT RUNNING IN THE GUTTER.					
	1/5/09---Inspection noted a resident disposed small amount of baking soda in the gutter. Issued verbal warning to clean up small amount of baking soda from the gutter. Resident took immediate action to clean up spill. No further action is necessary at this time.					
6-Jan-09	STREET	Commercial	471	BROADWAY		Complaint Response Enforcement
Comments Action Taken:	POSSIBLE STORM DRAIN COMPLAINT.REAL MESSY					
	1/6/09---Inspection noted a business did not have trash or recycling bins, and had accumulated trash and debris in the trash enclosure. Some trash and debris was flowing into the SWCS due to lack of containers. Issued inspection report with required corrections and a 10-day timeline to business owner.					
	2/4/09--- A reinspection of this business noted that all items listed in the original inspection report have been corrected. No further action is necessary at this time.					
7-Jan-09	STORM WATER	Residential	84	FOURTH	AV	Other
Comments Action Taken:	1/7/009---Please refer to case 08_002748					
7-Jan-09	CATCH BASIN	Residential	84	FOURTH	AV	Unknown Discharge
Comments Action Taken:						
12-Jan-09	STREET	Residential	76	GEORGINA	ST	Leaking Vehicle
Comments Action Taken:	CAR LEAKING OIL IN FRONT OF HOME,LIC 5UIZ090.					
	1/12/09--- Inspection noted a leaky Chevrolet Sedan CA 5UIZ090. Owner was notified of the leak, asked to move his vehicle and clean up the oil spill. Vehicle owner took immediate action to comply. A verbal warning was issued. . No further action is necessary at this time.					
15-Jan-09	CATCH BASIN	Construction Sites	548	PALOMAR	ST	Slulry/Concrete Discharge
Comments Action Taken:	SAW CUTTING.					
	1/15/09--- Inspection noted concrete slurry flowing from apartment complex at 548 Palomar as a result of concrete activity. City crews were summoned to clean all areas of the public storm drain system impacted by this spill. Administrative citation SW1706 was issued. No further action is necessary at this time.					
16-Jan-09	STREET	Residential	2418	FALCON VALLEY	DR	Unknown Discharge
Comments Action Taken:	Case entered twice.					

Incident Date	Structure Category	Site Category	Address			Type of Violation
16-Jan-09	MISC	Residential	2418	FALCON VALLEY	DR	Accident/Spill

Comments Action Taken: On 1/16/09, received notification of landscaper washing down concrete coloring hardener into the storm drain system. Spoke with staff who stated that they knew that it was wrong but did not want to lose job and did what they were told by their supervisor. Contacted homeowner and landscaping company that a Administrative Citation will be issued to landscaper and that they would possibly be responsible for the cleanup that was conducted by City Crews. No further action is required. Compliance was met.

16-Jan-09	STREET	Residential	1333	J	ST	Other

Comments Action Taken: 1/16/09--- Inspection noted some waster being discharged as a result of insufficient BMPs. Stanley Steemer staff was discharging into the lawn as a form of BMP. Discharge exceeded the capacity of the lawn to hold water and resulted in a portion of the discharge to flow away. Educated staff on directing the flow into the sanitary sewer. Issued verbal warning. No further action is necessary at this time.

16-Jan-09	STREET	Residential	1333	J	ST	Accident/Spill

Comments Action Taken: 1/16/09--- Inspection noted some waster being discharged as a result of insufficient BMPs. Stanley Steemer staff was discharging into the lawn as a form of BMP. Discharge exceeded the capacity of the lawn to hold water and resulted in a portion of the discharge to flow away. Educated staff on directing the flow into the sanitary sewer. Issued verbal warning. No further action is necessary at this time.

27-Jan-09	STREET	Residential		THIRD	AV	Leaking Vehicle

Comments Action Taken: FLUIDS LEAKING FROM A BUS INTO THE STREET SENT MIKE HICE TO LOCATION.

1/27/09--- Inspection noted emergency repairs being conducted on a bus CA 6FQS605 by Avila Mobile Truck Repair CA 5V96007. Some diesel fuel had leaked from the bus. Issued verbal warning to the owner and mechanic to ensure that all spills were cleaned.

1/29/09---A re-inspection found that the bus was moved and all leaks were completely cleaned up. No further action is necessary at this time.

29-Jan-09	STREET	Commercial	1045	BROADWAY		Dirt/Sediments

Comments Action Taken: THE DUMPSTER LEAKS A SUBSTANCE NOT KNOWN THEN THEY WASH IT DOWN INTO THE STORM DRAINS.

1/29/09--- Inspection noted trash bin not within it's trash enclosure, and leaking onto the a private driveway. Issued commercial inspection report requiring clean up of all spills, repair or replacement of the leaky trash bin, and placement of the trash bin within the trash enclosure.

2/4/09---A re-inspection found all items noted on the commercial inspection report corrected. No further action is necessary at this time.

5-Feb-09	STREET	Commercial	481	BROADWAY		Fuel/Oil/Gas Spill

Comments Action Taken: OIL SPILL ON THE PARKING LOT.

2/2/09---Received report and pictures of oil spill onto the rear parking lot at Wings and Things Chula Vista. Verified spill, and prior notices to Wings and Things in the form of an inspection report. Issued Administrative Citation (Warning) SW B0131091 on 3/3/09 to property owner. Follow up inspection noted that parking lot was free of oil. No further action necessary at this time.

5-Feb-09	STREET	Residential		PASEO LADERA		Unknown Discharge

Comments Action Taken: SUSPICIOUS RESIDENTS DUMPING INTO CATCH BASIN.

Incident Date	Structure Category	Site Category	Address			Type of Violation
9-Feb-09	STREET	Construction Sites		MOUNT MIGUEL	RD	Dirt Tracking
Comments Action Taken:	On 02/09/09, received notification of dirt tracking coming from Seniors Hill (SM026G) construction project at 503 Mount Miguel Road. Arrives on scene and observed small amount of sediment accumulating at access road onto project. Due to significant rain, silt fencing was being slightly overwhelmed. Adjusted silt fence and notified Westmont Construction to monitor site. No further actions required.					
11-Feb-09	STREET	Commercial	4360	BONITA	RD	Unknown Discharge
Comments Action Taken:	UNKNOWN DISCHARGE COMING FROM SHOPPING MALL ENTRANCE TO RITE AID.					
11-Feb-09	CATCH BASIN	Construction Sites	517	LAS ESTANCIAS	DR	Dirt Tracking
Comments Action Taken:	MUD IS GOING INTO CATCH BASIN.					
	2/11/09--- Inspection found no evidence of a discharge. However some construction BMPs were not being implemented. Issued a construction inspection report detailing items that needed implementation of correction. A re-inspection will be conducted to ensure all items are addressed.					
11-Feb-09	STREET	Residential	182	SIERRA	WY	Construction Debris & Waste
Comments Action Taken:	2/11/09---Noted approximately 8 yards of dirt staged in the street in front of 182 Sierra Way as part of a pool filling project. Spoke to homeowner and issued verbal warning to remove dirt from the street and to stage all future loads of dirt on private property. Homeowner took immediate action and began clean up.					
	2/12/09---A re-inspection noted that all dirt had been cleaned from the street. No further action is necessary at this time.					
13-Feb-09	STREET	Residential	670	BROADWAY		Leaking Vehicle
Comments Action Taken:						
19-Feb-09	STREET	Residential		COLUMBIA	ST	Construction Debris & Waste
Comments Action Taken:	2/19/09---Received report of construction debris and sediment on the street in front of 1627 Columbia Street. Inspection noted large amount of sand in the driveway and in the street. Spoke to project foreman. Issued directive to remove all sand and other debris from the public right of way. A follow up inspection noted the public right of way had been cleared away. No further action necessary at this time.					
20-Feb-09	STREET	Residential	871	FIRST	AV	Construction Debris & Waste
Comments Action Taken:	2/25/09---Responded to report of mulch and other debris in the alley behind 874 Country Club. Inspection noted mulch, concrete and other materials in the public right of way. Met with homeowner Kathy Estrasa and informed her of the violation and need to correct. Ms Estrasa agreed to correct the violations.					
	3/13/09---A follow up inspection noted that all items were corrected. Photos on file. No further action is necessary at this time.					
24-Feb-09	STREET	Construction Sites	11	WALNUT	DR	Slulry/Concrete Discharge
Comments Action Taken:	2/24/09---Responded to report of saw cutting without BMPs. Inspection noted Loya construction staff saw cutting sidewalk without using BMPs. Notified business owner Pablo Loya of violation and of requirement to implement BMPs. Loya construction staff stopped cutting activity and began to clean all slurry. Mr. Loya stated that he would wait until later when a professional saw cutting company that uses BMPs could come out and perform the saw cutting instead. No further action necessary at this time.					
26-Feb-09	STREET	Residential	908	WAYNE	AV	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	2/26/09---Responded to report of vehicle leaking oil onto the street in front of 926 Wayne Ave. Inspection noted that a white Ford pickup License plate 6J76670 belonging to San Diego Sweeping Services was leaking oil onto the street. Notified Steve J. Reid of said co. and asked that he clean up the spill. Mr. Reid stated that he or his staff would take care of the matter immediately. A follow up inspection noted that the vehicle had been removed and the oil spill cleaned. No further action necessary at this time.					
2-Mar-09	CATCH BASIN	Residential	729	ANZA	WY	Over-Irrigation/Pesticide
Comments Action Taken:	WATER RUNNING FROM YARD INTO STORM DRAIN PIPE IN FRON OF THIS ADDRESS. 3/4/09---Inspection noted trickle of water coming from sai address. Left bus. card with not for homeowner to call me. 3/9/09---Met with homeowner Cesar Murillo. Noted that the yard drains were possibly clogged, retaining irrigation water, and releasing the water at a trickle slow enough to allow algae to form. Mr. Murillo explained how he is working to unclog the drain pipe and that if he was not successful he would call a plumber. I issued Mr. Murillo more time to fix the problem. A follow up call or visit will occur on 3/16/09. 3/16/09---A follow up inspection noted that the violation had been corrected. Homeowner Cesar Murillo stated that the problem was a secondary valve in his irrigation system. No further action necessary at this time.					
2-Mar-09	CATCH BASIN	Residential		BLUE FALLS	DR	Slulry/Concrete Discharge
Comments Action Taken:	SAW CUTTING SLURRY WENT INTO CATCH BASIN.ALREADY DRY.					
4-Mar-09	STREET	Residential		FIRST	AV	Construction Debris & Waste
Comments Action Taken:	WHEN IT RAINS CONSTRUCTION DEBRIS (ASPHALT & CONCRETE)DEPOSITS INTO DRAIN. AT INTERSECTION. 3/12/09---inspection found no evidence of a storm water violation. Photos on file. No further action necessary at this time.					
4-Mar-09	STREET	Commercial	1266	THIRD	AV	Complaint Response Enforcement
Comments Action Taken:	GREASE OVERFLOWING FROM CONTAINER. 3/3/09--- responded to complaint regarding an overflowing restaurant oil grease container. Inspection noted that the oil grease container at El Norteno Taco shop was overflowing and did not have the lids in place. Notice was given to business owner Daniel Amador of the need to provide proper containment for oil and grease. A follow up inspection was agreed upon. 3/12/09---A follow up inspection of El Norteno noted that all spills had been cleaned and a new container was in place. No further action is necessary at this time.					
4-Mar-09	STREET	Residential	1337	TIERRA BONITA	PL	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	OIL SPILL/MR .FRANK YORK 204-7585 ALSO CALLED ON THIS. ON (3/06/09) 3/2/09---Responded to report of vehicle leaking oil onto the street in front of 1337 Tierra Bonita. Inspection noted large oil stains on driveway of said address and out into street. Left business card with message to call me. 3/4/09---Left second door hanger with message to call me 3/5/09---Met with homeowner Christine Pelayo (619) 421-5314. Notified Ms. Pelayo of the violation and of the need to clean all oil from the public right of way and her driveway to avoid potential discharges or tracking. Ms. Pelayo stated that she would have the oil cleaned. We agreed that on 3/10/09 a follow up inspection would occur. 3/11/09---A follow up inspection noted that all oil had been cleaned as agreed. No further action necessary at this time.					
9-Mar-09	STREET	Residential	4	PAISLEY	ST	Fuel/Oil/Gas Spill
Comments Action Taken:	CLEANING GRAFFITI WITH UNKNOWN SUBSTANCE. 3/9/09---Responded to report of gasoline spill at 4 Paisley Street. Inspection did not find any evidence of a spill at the said address or the surrounding areas. Photos on file. No further action is necessary at this time.					
16-Mar-09	STORM CHANNEL	Residential	1400	OLEANDER	AV	Possible Dumping into Catch Basin
Comments Action Taken:	NO ACTION TAKEN.					
16-Mar-09	STREET	Residential	1400	OLEANDER	AV	Possible Dumping into Catch Basin
Comments Action Taken:	3/16/09---Inspection did not find any evidence of a storm water violation. No further action necessary at this time.					
17-Mar-09	STREET	Commercial	690	E	ST	Fuel/Oil/Gas Spill
Comments Action Taken:	HOT WATER FROM WASHING PARKING LOT. 3/17/09---Responded to report of an illegal discharge at the Denny's restaurant at 690 E Street. Complainant George Donavan (619) 581-5060 stated that he noticed the discharge coming from the restaurant and onto E Street. Inspection did not find any evidence of a violation. A verbal notice was issued to restaurant manager Cindy Gegenworth that non-storm water discharges into the storm water conveyance system are a violation of the City's municipal code. No further action necessary at this time.					
18-Mar-09	STREET	Residential	734	COLORADO	AV	Washing Vehicle in Street
Comments Action Taken:	A NEIGHBOR WASHED A CAR ENGINE IN FRONT OF HIS HOME AND LET WATER AND OIL RUN INTO STORM DRAIN CHANNEL. 3/18/09---Responded to report of engine washing in the street. Inspection noted a trail of oil from 753 Woodlawn Ave. to 734 Colorado Ave. via Kearny Street. At the time of inspection no evidence was found leading to the responsible party. City crews spread absorbent and cleaned up the spill.					
20-Mar-09	STREET	Commercial		FOURTH	AV	Accident/Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	3/20/09---Responded to report of oil spill in the street and potentially leading into the SWCS. Inspection noted a trail of oil from the private parking lot and into the private street in front of Dixiline Lumber (Brisbane St.) Origin of oil spill was from a semi truck owned by Glesby Building Materials. Spoke to Rick Gotterman of Glesby (800) 339-3729. Mr. Gotternan stated that he had hired a private clean up and response company to respond. I provided traffic control assistance until National City Fire and Police department responded to the spill. National City Fire Captain Sergio Mora asked for assistance from Chula Vista Public Works crews. Street Division Supervisor Nelson Rivera approved the assistance and dispatched crews to the scene to assist National City Fire department. No further action necessary at this time.					
24-Mar-09	STREET	Residential	128	ELDER	AV	Possible Dumping into Catch Basin
Comments Action Taken:	NEIGHBOR DUMPING GREY WATER INTO BACKYARD.FROM WASHER. 3/24/09---Responded to report of resident discharging gray water from a washer machine and potentially leading into the SWCS. Resident Marco Diaz stated that they had already fixed the plumbing leading from the washer machine. Inspection noted all gray water was plumbed into the sewer system. No further action necessary at this time.					
25-Mar-09	STREET	Residential	783	AVENIDA SOLARIA		Leaking Vehicle
Comments Action Taken:	RED FORD P/U LEAKING OIL INTO STORM DRAIN. 3/25/09---Responded to report of oil spill in front of 783 Avenida Solaria. Inspection noted that absorbent had been spread to contain and clean up the spill. Inspection did not find evidence necessary to identify the responsible party. A follow up inspection will be conducted to ensure that the absorbent is swept up. Please see request 09_001696					
27-Mar-09	STREET	Residential	1225	CIMA DEL REY		Complaint Response Enforcement
Comments Action Taken:	RUNNING WATER FROM SIDEWALK DRAIN (ALGAE BUILD UP) BEEN RUNNING FOR SEVERAL MONTHS. 3/27/09---Responded to report of constant water flow coming from curb drain at 1225 Cima Del Rey. Inspection noted a constant trickle of water from the curb drain. Spoke to homeowner Cheryl Flora (619) 656-4662 who stated that Otay water had investigated and found that the discharge was attributed to ground water. Explained to Ms. Flora that I would be contacting Otay Water and that I would contact her regarding my findings and the status of this case. 4/13/09---Received call back from David Charles with Otay Water who states that there is no record of an investigation or report at 1225 Cima Del Rey. Will investigate further.					
1-Apr-09	STREET	Residential	765	THIRD	AV	Slulry/Concrete Discharge
Comments Action Taken:	RESIDENTS ARE SAW CUTTING WITHOUT CONTAINMENT. 4/1/09---Responded to report of contractors saw cutting contract without BMPs. Inspection noted HCI staff working for AT&T allowing a small amount of cement slurry trickle onto the sidewalk. Informed Forman, Alejandro Campos (760) 644-0840 of the need to clean up and only continue working if implementing BMPs. He and his staff immediately complied. Verbal warning was issued. No further action necessary at this time.					
1-Apr-09	STREET	Residential		BRANDYWINE	AV	Possible Dumping into Catch Basin
Comments Action Taken:	4/1/09---Responded to report of oil spill on the street at the bus stop located on the southwest corner of the intersection of Olympic Parkway and Brandywine Ave. A spill of approximately one gallon was found. No evidence was found leading to the responsible party. Established a perimeter around the spill and called for city crews to clean up. City staff cleaned up spill. No further action necessary at this time.					
8-Apr-09	STREET	Commercial	556	BROADWAY		Power Washing

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	POWER R WASHING STRUCTURE WITHOUT CONTAINMENT. 4/8/09---Responded to report of power washing in the rain at 556 Broadway. Inspection found no evidence of a violation. No further action necessary at this time.					
9-Apr-09	STREET	Residential	783	AVENIDA SOLARIA		Leaking Vehicle
Comments Action Taken:	3/26/09---Received report of oil stain at 783 Avenida Solaria. Inspection verified complaint and left door hanger instructing homeowner to contact the inspector. 4/2/09---Made contact with homeowner who said that he would spread absorbent on the spill to clean it up. 4/7/09---Noted that absorbent had been spread on the stain. 4/9/09---Re-inspection noted that the stain was cleaned to the maximum extent practical.					
9-Apr-09	STREET	Residential	1142	VISTA	WY	Slulry/Concrete Discharge
Comments Action Taken:	CONCRETE SLURRY COMING OUT OF THIS ADDRESS INTO CATCH BASIN. 4/9/09---Received report of pool filter residue discharged into the street. At 1142 Vista Way. Inspection noted some residue from the above address in the gutter. Discharge did not enter the storm drain inlet. Spoke to Juan DeLaVega regarding spill. Mr. DeLaVega stated that he would be cleaning up the discharge residue. 4/9/09---Re-inspection noted that the spill had been cleaned.					
16-Apr-09	STREET	Construction Sites	1834	CORTE GALEANA		Sewage Spill Going Down Storm Drair
Comments Action Taken:	SEWER MAIN SPILL USED (2) FLUSHERS FOR CONTAINMENT. On 04/16/09 received call from Ken Lightbody, Public Works Inspector, of a sewer overflow located at San Miguel Ranch. City crews were dispatched using 2 vactor crews. Crews contained and clean blockage caused by plug and construction debris. Discharge did not reach water quality basin. Overflow location is new inactive development and not the responsibility of the City. Full cost recovery to be the responsibility of Resmark Development, Owner. No further action required.					
16-Apr-09	STREET	Construction Sites	1834	CORTE GALEANA		Sewage Spill Going Down Storm Drair
Comments Action Taken:	SEWER MAIN SPILL USED (2) FLUSHERS FOR CONTAINMENT. On 04/16/09 received call from Ken Lightbody, Public Works Inspector, of a sewer overflow located at San Miguel Ranch. City crews were dispatched using 2 vactor crews. Crews contained and clean blockage caused by plug and construction debris. Discharge did not reach water quality basin. Overflow location is new inactive development and not the responsibility of the City. Full cost recovery to be the responsibility of Resmark Development, Owner. No further action required.					
22-Apr-09	STREET	Residential	891	DATE	AV	Other
Comments Action Taken:	Received email from Doug Roberts from Sweetwater Authority with a voicemail message attached. The voicemail was from a resident who was complaining about a neighbor (891 Date Ave) who was discharging pool water for 1.5 hours on 04/21/09 and again 04/22/09. The resident did not leave any contact information, nor did he provide a description of the water being discharged. Drove by residence on 04/22/09 around 5pm. There was some water in the curb gutter area on the street on the same side as the address, but there was no evidence of water marks or staining coming from the address. On 04/23/09, called Doug Roberts and informed him that I drove by the residence and did not see evidence of pool discharge from this address. I explained to him that pool water, as long as it is clear and free of debris, is exempt from regulation. I told him to have the resident call me if he has any further questions.					

Incident Date	Structure Category	Site Category	Address	Type of Violation
30-Apr-09	CATCH BASIN	Residential	EXPLORATION FALLSDR	Power Washing

Comments Action Taken: On 4/24/09 received report of mobile Detailer conducting washing of vehicles in the street discharging soapy water into the storm drain system. Observed Xtreme Mobile Cleaning Vehicle at the location with wash water in the curbline from the clean of a red SUV. Contacted owner who stated that he sold the box van to his brother-in-law and previously instructed him to remove all advertising from the sides of the vehicle and that he informed him that he was in violation of the storm water regulations. Verbal Warning issued. Business does have inactive business license. Owner will renew within 7 days. No further action required.

6-May-09	STREET	Residential	1205 CRYSTAL SPRINGS	DR	Leaking Vehicle

Comments Action Taken: SILVER MERCEDES LIC 4GKS959.

5/4/09---After several inspections at various times of the day inspector noted that no action had been taken by the vehicle owner. Will try early mornings before normal work hours.

5/5/09---Re-inspection noted vehicle had not been removed. No calls received from vehicle owner.

5/12/09---Re-inspection noted that the spill had been cleaned.

6-May-09	STREET	Residential	418 QUEEN ANNE	DR	Leaking Vehicle

Comments Action Taken: BLUE DATSUN OIL CHANGE BEING DONE WITHOUT CONTAINMENT.

5/6/09---Received call regarding a blue vehicle changing oil in the street at 418 Queen Anne Street. Inspection noted a blue Mazda with Tennessee license plate 452-NVB parked in the street with an oil pan underneath. Left a tag with notice of City code and instructions to call inspector.

5/7/09---Re-inspection noted vehicle had been removed and the oil stain had been cleaned.

7-May-09	STREET	Residential	1164 CHIMNEY FLATS	LN	Accident/Spill

Comments Action Taken: ALLIED WASTE TRUCK SPILLED HYDRAULIC FLUID.

On 05/07/09 received phone complaint that Allied Waste vehicle blew hydraulic hose at subject location and did a poor job on cleanup. Contacted Allied Waste staff of complaint. Allied dispatched additional crew to re-clean area using dry methods. Spill was properly cleaned per the satisfaction of the citizen. No further action required.

11-May-09	STREET	Commercial	J	ST	Complaint Response Enforcement

Comments Action Taken: 5/11/09---Received report of roadside fruit stand operator throwing cherries into the storm drain. Inspection noted a handful of cherries had rolled into the storm drain catch basin. Issued verbal warning to vendor to take precautions so that nothing could fall into the storm drain. During the inquiry the vendor stated that he did not have a business license, permit, or permission from the property owner to operate on the property he was selling from. The vendor stated that he did not want to get a fine from the city and on his own accord, broke down stand and left.

18-May-09	STREET	Residential	1109 DEL MAR	AV	Possible Dumping into Catch Basin

Comments Action Taken: GREY WATER FROM WASHER RUNNING INTO THE GUTTER.

05/18/2009 Responded to the illegal discharge report. Resident was discharging washing machine waste to the street via a black plastic hose. Wastewater did not enter storm inlets as the sidewalk was unpaved. The resident was instructed to discontinue illegal discharge and connect to a toilet or sink inside the building. The resident complied and removed the hose. Follow-up inspection is required to ensure that the incident is not repeated.

Incident Date	Structure Category	Site Category	Address			Type of Violation
22-May-09	STREET	Residential	469	HIDDEN VISTA	DR	Washing Vehicle in Street

Comments Action Taken: HE IS WASHING HIS BOAT IN THE STREET.MIKE HICE SAID IT WAS OK.

5/22/09---Notice issued to inspector from dispatcher indicated residential washing of a vehicle and water running into street. Public information regarding the use of BMPs has been left at this address.

22-May-09	STREET	Commercial	1128	BAY	BL	Possible Dumping into Catch Basin

Comments Action Taken: HE DUMPED HIS LOAD OF WATER INTO THE STORM DRAIN

5/22/09---Received report of carpet cleaning van discharging into the private storm drain inlet at 1128 Bay. Evidence of the discharge was not found. After speaking to the business owner it was clear that he was fully aware of all the NPDES requirements. However, his business did not have a license to operate in Chula Vista and therefore had not been registered with the City's Mobile Business Stormwater Education Program. This business was issued verbal notice to obtain a City of Chula Vista business license and complete the Mobile Business Stormwater Education Program and has complied.

29-May-09	STREET	Residential	32	ORLANDO	CT	Slulry/Concrete Discharge

Comments Action Taken: 5/26/09---Received report of concrete pump discharge at 32 Orlando Ct. Inspection did not find any evidence of a discharge. Spoke to property owner Francisco Delgado who stated that he and his family had poured concrete a few days prior, but that they were very careful to use BMPs. A courtesy notice was issued to Mr. Delgado to continue ensuring that all the all his contractors use BMPs.

1-Jun-09	STREET	Residential		OTAY LAKES	RD	Pool Filter Discharge

Comments Action Taken: 5/26/09---Received report of pool filter discharge at Rutgers and Otay Lakes Rd. Inspection did not find any evidence of a pool discharges. Some areas of the gutter were stained with dry concrete that appeared white in color. The concrete stains were years old and cannot be cleaned.

2-Jun-09	STREET	Construction Sites	397	INKOPAH	ST	Construction Debris & Waste

Comments Action Taken: CONSTRUCTION BEING DONE AND WATER IS RUNNING DOWN FROM THIS ADDRESS.

6/2/09---Received report of concrete pump operator washing into the street at 395 Inkopah St.. Inspection found evidence of discharges. Concrete pump operator said he was in the process of cleaning it and finished the clean up while the inspector was still there. Discharge was contained due to over growing vegetation in the gutter. Issued verbal warning to concrete pump operator to always clean up spills immediately.

3-Jun-09	STREET	Residential	2627	FAIVRE	ST	Fuel/Oil/Gas Spill

Comments Action Taken: 6/4/09---Received report of motor home discharging sewer at 2627 Faivre St. Initial inspection did not find evidence of a discharge. Will re-inspect on a different day and time to try and make contact with motor home owner and to ensure the motor home is not leaking.

7/13/09---Periodic visits failed to find the suspect motor home. Spoke the business owner Cristobal Campos of Chula Vista Auto Repair (619) 429-6994. Issued verbal warning regarding municipal code and reminder that he and ultimately the property owner are responsible for preventing and controlling any spills from vehicles on the property including motor homes he or his staff is repairing. Mr Campos agreed and said that he would immediately report any motor homes discharging on the street. No further action is necessary at this time.

15-Jun-09	STREET	Residential	514	OCEAN VIEW	LN	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	6/16/09---Responded to report of oil in the street at the 514 Ocean View Ln. Did not find oil stain. Mistakenly visited Ocean Breeze Ln. 6/17/09---Visited 514 Ocean View Ln. Found oil stain and spread absorbent over the stain. 6/18/09---E-mailed the complainant as requested and called dispatch to establish a work request for street crews to sweep up the absorbent.					
16-Jun-09	STREET	Residential	161	VANCE	ST	Leaking Vehicle
Comments Action Taken:	OIL SPILL IN THE GUTTER. 6/10/09---Received report resident at 161 Vance St. changing oil in the street and allowing discharges flow in to the gutter. Inspection notes some oil stains on the street that we're not traceable to the address. Left note on door for resident to contact the inspector. 6/15/09---Made contact with resident who stated that they had washed the street and utilized proper BMPs to capture, contain and appropriately dispose of all wash water. A re-inspection confirmed that all had been cleaned.					
17-Jun-09	CATCH BASIN	Residential	2347	FOREST OAKS	DR	Possible Dumping into Catch Basin
Comments Action Taken:	6/17/09---Responded to call of carpet cleaner discharging into the storm drain. inspection noted that the van-mounted carpet cleaning equipment was leaking clean water into the street, and that the carpet cleaning staff was inside the house. Issued verbal notice to stop work until the machine could be fixed. Carpet cleaning staff stated that they did not know the machine was leaking and would immediately stop work and have a replacement van dispatched out. Issued verbal warning to carpet cleaning staff informing them of CVMC14.20., and that replacement equipment would also be held to the municipal codes requirements. Carpet cleaning staff packed up equipment and left to get another van. No further action necessary at this time.					
18-Jun-09	STREET	Residential	514	OCEAN VIEW	LN	Accident/Spill
Comments Action Taken:	6/18/09---Please see request 09_002810					
19-Jun-09	STREET	Residential	115	GLOVER	AV	Possible Dumping into Catch Basin
Comments Action Taken:	6/19/09-Received report of motor home dumping sewage into the street adjacent to the storm drain inlet at 115 N. Glover Ave. Inspection noted approximately 20 gallons of raw sewage dumped into the street, curb and gutter. Some of the sewage flowed near the inlet, but did not enter. Summoned city crews to contain, clean and appropriately dispose of sewage. Quality Lift Trucks staff shared surveillance video showing a motor home potentially discharging sewage into the street at the same location on 6/18/09 at 10pm. Further review of the evidence and investigation is will be conducted to determine the exact cause of the discharge and the party responsible.					
22-Jun-09	STREET	Residential	62	MINOT	AV	Sewage Spill Going Down Storm Drair
Comments Action Taken:	On 06/22/09 received notification of a private sewer lateral leaking into the street. Reporting party anonymous and there is no such address. Could not find any evidence of a sewer discharge. No further action required.					
25-Jun-09	STREET	Residential	1541	MELROSE	AV	Leaking Vehicle
Comments Action Taken:	On 06/25/09 responded to the subject location on leaking vehicles. Spoke with homeowner who stated that he will park any leaking vehicles in driveway and put down drip pans. Owner stated that the vehicles are his family members. No further action required.					
25-Jun-09	STREET	Residential	533	PLAZA DEL CID		Leaking Vehicle

Incident Date	Structure Category	Site Category	Address	Type of Violation
Comments Action Taken:	On 6/26/09 responded to the complaint at the above address. Observed significant oil staining from a leaking vehicle. Vehicle was not located at this time. City staff left a Pollution notice at the location. Received phone call from owner of vehicle who stated that she did not have the means to repair the leak at this time. City staff instructed her park the vehicle in the driveway and place a drip pan under the vehicle. Resident complied. No further action required at this time.			
29-Jun-09	STREET	Residential	1368 OLEANDER AV	Construction Debris & Waste
Comments Action Taken:	CONTRACTOR IS THROWING ALL KINDS OF MATERIALS BEHIND 1368 OLEANDER AVE INTO CITY PROPERTY. On 06/29/09, responded to complaint and observed slurry spills, concrete and yard waste along open space slope. Contact owner of the property who stated that he will ensure that the contractors promptly conduct the cleanup of all the waste. No further action is required at this time.			
30-Jun-09	STREET	Residential	421 HIDDEN VISTA DR	Slulry/Concrete Discharge
Comments Action Taken:	CONCRETE RESIDUE IN THE GUTTER.IT IS A CONTINUING THING 6/30/09---Responded to report of concrete slurry in the street from 421 Hidden Vista Dr. Inspection noted dry grout mix in the gutter from this address and to the corner of the block. Spoke to Jorge Elizande, (619) 481-9807 at the home who said that he would sweep and mop up all the dry grout mix. A re-inspection a few hours later noted that all grout mix had been cleaned. No further action necessary at this time.			

Total: **148**

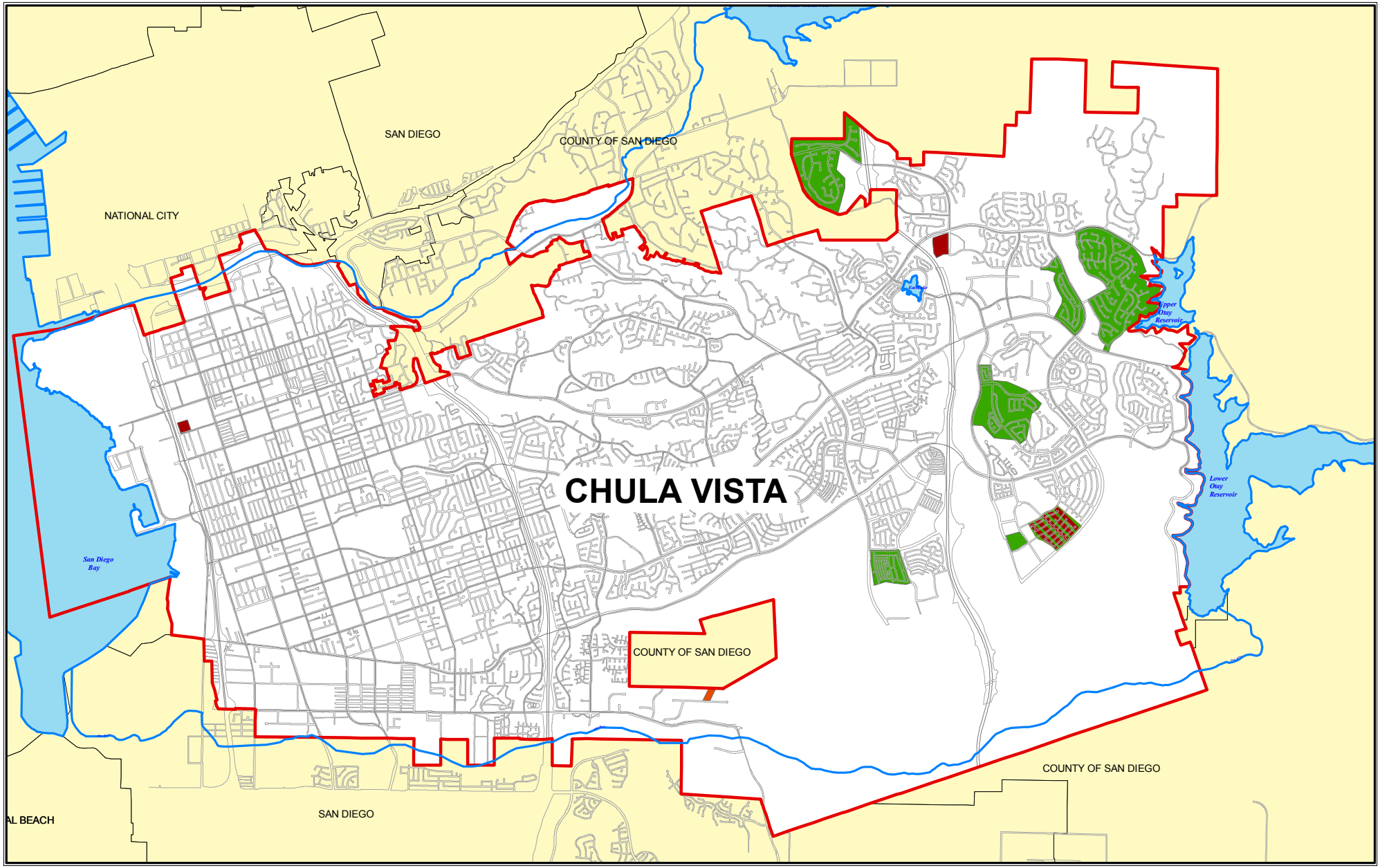

HTTWQ Residential Areas for FY 08-09

N W E S

0 0.5 1 2 3 Miles

0 2,000 4,000 8,000 12,000 Feet

Equipment Washing

Vehicle Washing

Landscaping Activities and Over Fertilization

Landscaping Activities and Vehicle Washing

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created 9/1//2009

//citywide2000/gis/projects/NPDES/HTTWQ/HTTWQ08_09Res.mxd

Attachment J

FY 2008-2009 Industrial Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection acitivities.

Inspection Date	Facility Name	APN Number	Address	Category	Priority	WDID Number	SIC Number
19-Jun-09	Arise/Waco Scafolding	6180103100	676 MOSS ST	Wholesale	High	No WDID	5082
	Comments/Findings:	On 6/19/2009 conducted annual inspection of the facility. Found food trash around work areas, sediment discharge from parking lot, trash not contained. Need to replace filters at east drain section. Discrepancies must be corrected/acted upon within 10 days of inspection. **see attachment**					
19-Jun-09	Action Auto Dismantlers Inc	6291001400	151 REED CT	Auto Dismantlers	High	937I004000	5015
	Comments/Findings:	On 6/19/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
19-Jun-09	Profil Institute for Clinical Researcl	5734606400	855 THIRD AV	Others	Low	No WDID	8011
	Comments/Findings:	On 6/19/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. SWPP is not signed, missing WDID, rain observation documents, and sampling data. Obtain required data within specified time allotted. **see attachment**					
19-Jun-09	Hanson Aggregates	6290300500	116 7TH ST	Concrete Work	High	937I015523	3271
	Comments/Findings:	On 6/19/2009 conducted annual inspection of the facility. Found trash and debris at the northeast corner of the property. **see attachment** Correct the the item listed within 10 days of the inspection.					
11-Jun-09	United Rentals Inc	5623501000	501 C ST	Heavy Equipment Rer	High	9371019886	7359
	Comments/Findings:	On 6/11/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
10-Jun-09	Kleen Blast Industrial Services	6180103100	676 MOSS ST	Retail/Sales	High	No WDID	5084
	Comments/Findings:	On 6/10/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
10-Jun-09	Standard Auto Recycling	6291000400	150 REED CT	Auto Dismantlers	High	9371010775	5015
	Comments/Findings:	On 6/10/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
10-Jun-09	West Auto Wreckers	6221902600	2365 MAIN ST	Auto Dismantlers	High	9371001046	5015
	Comments/Findings:	On 6/10/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. Sample results showed elevated values. Take necessary actions to bring values within parameters.**see attachment** No further action required.					

Inspection Date	Facility Name	APN Number	Address	Category	Priority	WDID Number	SIC Number
9-Jun-09	SOS Metals San Diego LLC	6221115700	635 ANITA ST	Recycling	High	9371013260	5093
	Comments/Findings:	On 6/9/2009 conducted annual inspection of the facility. BMPs are in place. Site is in good order. Sampling test results shows elevated levels of specific conductance. Staff is in the process of increasing BMPs. **see attachment** No further action required.					
9-Jun-09	United Parcel Service	5953000300	2300 BOSWELL CT	Postal Service	High	9371002086	4215
	Comments/Findings:	On 6/9/2009 conducted annual inspection of the facility. Small section of erosion control fence needs repair. Found large amount of debris at west wall and SW drain. Correct items listed within 10 days of inspection. **see attachment**					
5-Jun-09	Prudential Overall Supply	56709000300	740 F ST	Service	High	No WDID	7213
	Comments/Findings:	On 6/5/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
5-Jun-09	Estes Express Lines	5634521200	120 PRESS LN	Trucking	High	937I007126	4231
	Comments/Findings:	On 6/5/2009/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
4-Jun-09	Veolia Transportation -MTS	6232502100	3650 MAIN ST	Transportation	High	9371011017	4111
	Comments/Findings:	On 6/4/2009 conducted annual inspection of the facility. All BMPs are in place. Site is in good order. Sample data results are above limits. Implement necessary BMPs to bring levels within parameters.**see attachment** No further action required.					
4-Jun-09	MMC Energy -Peak Power Plant	6290620400	3497 MAIN ST	Power Generations	High	9371020087	4911
	Comments/Findings:	On 6/4//2009 conducted annual inspection of the facility. BMPs are in place. Site is in good order. Sampling data from rain events on 11/4/08 and 12/22/08 showed UMHOS/cm results at 842 and 561. Regulatory contractor will address the findings within 30 days. **see attachment** On 6/17/2009 MMC conducted SWPPP training to employees. Further, brush and excess growth were removed at the sample area.					
13-May-09	Otay Valley Rock- Rimrock Quarry	6440600600	2041 HERITAGE RD	Others	High	No WDID	1429
	Comments/Findings:	On 5/13/2009 conducted annual inspection of the facility. Sediment basin near office needs maintenance. Inlets along entrance road not protected. Discrepancies must be corrected/acted upon within 10 days of inspection. **see attachment**					
6-May-09	Import Auto Wrecking	6441812900	793 ENERGY WY	Auto Dismantlers	High	937I016877	5015
	Comments/Findings:	On 5/6-2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
6-May-09	California Sports Auto Wrecking	6441811800	781 ENERGY WY	Auto Dismantlers	High	937I021145	5015
	Comments/Findings:	On 5/6/2009 conducted annual inspection of the site. SWPPP is current. Facility is a member of GMP Brash. Sampled on 2/26/2008. Added new gravel for better flirtation.. Site is in good order. **see attachment** No further action required.					

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	SIC Number
6-May-09	Montoya's Auto Wrecking	6441811800	781	ENERGY	WY	Auto Dismantlers	High	937I021427	5015
	Comments/Findings:	On 5/6/2009 conducted annual inspection of the site. SWPPP is current and up to date. Member of GMP Brash. . Site is in good order. **see attachment** No follow up action required.							
6-May-09	All Japanese Auto Recycling	6441811900	775	ENERGY	WY	Auto Dismantlers	High	937I015706	5015
	Comments/Findings:	On 5/6-2009 conducted annual inspection of the site. SWPPP is current. Facility is a member of GMP Brash. Sampled on 12/17/2009 (High TSS). Added additional gravel along drainage channel. Site is in good order. **see attachment** No further action required.							
1-May-09	Advance Auto Wrecking	6441812300	777	ENERGY	WY	Auto Dismantlers	High	937i020612	5015
	Comments/Findings:	On 5/01/2009 conducted annual inspection of the site. Facility is currently member of group monitoring program with Brash Industries. Samples were taken on 12/15/08. Results are good. SWPPP is current and up to date. Overall site is in good clean condition. No follow up is required.							
1-May-09	Pacific Auto Wrecking	6441812000	795	ENERGY	WY	Auto Dismantlers	High	9371015058	5015
	Comments/Findings:	On 5/01/2009 conducted annual inspection of the site. Facility is currently member of group monitoring program with Brash Industries. Samples were taken on 12/15/08. Results are good. SWPPP is current and up to date. Overall site is in good clean condition. No follow up is required.							
1-May-09	Freeway Auto Wrecking	6441812200	783	ENERGY	WY	Auto Dismantlers	High	937I021643	5015
	Comments/Findings:	On 5/01/2009 conducted annual inspection of the site. Facility is a member of group monitoring group, Brash Industries. SWPPP is current. Overall site is in good, clean condition.This is a new facility. No follow up is required.							
1-May-09	RC Import Auto Recycler	6441812300	777	ENERGY	WY	Auto Dismantlers	High	9371010144	5015
	Comments/Findings:	On 5/01/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. Member of GMP Brash program. All paperwork is current and up to date **see attachment** No further action required.							
1-May-09	Onager Corporation	6441812800	789	ENERGY	WY	Auto Dismantlers	High	9371010014	5015
	Comments/Findings:	On 5/01/2009 conducted annual inspection to the site. All BMPs are in place. Site is in good order. Facility is a member of group monitoring group Brash Industries. SWPPP is current. **see attachment** No further action required.							
21-Apr-09	FJ Willert Cont Co.	6441810200	1869	NIRVANA	AV	Storage	High	937I016993	4953
	Comments/Findings:	On 4/21/2009 conducted annual inspection to the site. Site need to conduct cleaning of drainage ditch. Manager was informed to correct the discrepancy within 10 days of the inspection.							
21-Apr-09	Rossin Steel Inc.	6441810900	1880	NIRVANA	AV	Fabrications	High	9371020898	3441
	Comments/Findings:	On 4/21/2009 conducted annual inspection to the site. Site is in good clean condition. No further action is required.							

Inspection Date	Facility Name	APN Number	Address	Category	Priority	WDID Number	SIC Number
21-Apr-09	Brenntag Pacific Inc	6441810800	1888 NIRVANA AV	Chemical Storage	High	No WDID	5169
	Comments/Findings:	On 4/21/2009 conducted annual inspection to the site. Site needs to obtain Industrial General Permit as per notice of non compliance issued by Ca. Regional Board dated 10/03/2007 and 2/18/2008. Site need to provide copy of notice of intend and SWPPP within 45 days of the report. Correct items listed on the attachment. **see attachment**					
9-Apr-09	Ecology Auto Wrecking 3	6441821200	800 ENERGY WY	Auto Dismantlers	High	937I003280	5015
	Comments/Findings:	On 4/09/2009 conducted annual inspection to the following site: 800 Energy Way; 825 Energy Way; 850 Energy Way. Sites were observed to be in good conditions. 825 Energy Way is converting the facility to capture all run-off to be sued for the Shredder operations. Ecology anticipates all three facilities to be converted to capture all run-off. Need to maintain housekeeping measures. 850 Energy Way was notified of the eroded slope along the access road coming from Pick Your Parts Recycling site. Erosion causes discharge of sediment to storm drain system. SWPPP is current and samples were taken. City to conduct further investigation. No follow up is required at Ecology.					
9-Apr-09	Ecology Auto Wrecking	6441820100	825 ENERGY WY	Auto Dismantlers	High	937I003325	5015
	Comments/Findings:	On 4/09/2009 conducted annual inspection to the following site: 800 Energy Way; 825 Energy Way; 850 Energy Way. Sites were observed to be in good conditions. 825 Energy Way is converting the facility to capture all run-off to be sued for the Shredder operations. Ecology anticipates all three facilities to be converted to capture all run-off. Need to maintain housekeeping measures. 850 Energy Way was notified of the eroded slope along the access road coming from Pick Your Parts Recycling site. Erosion causes discharge of sediment to storm drain system. SWPPP is current and samples were taken. City to conduct further investigation. No follow up is required at Ecology.					
9-Apr-09	Ecology Auto Wrecking 2	6441821000	850 ENERGY WY	Auto Dismantlers	High	937I019445	5015
	Comments/Findings:	On 4/09/2009 conducted annual inspection to the following site: 800 Energy Way; 825 Energy Way; 850 Energy Way. Sites were observed to be in good conditions. 825 Energy Way is converting the facility to capture all run-off to be sued for the Shredder operations. Ecology anticipates all three facilities to be converted to capture all run-off. Need to maintain housekeeping measures. 850 Energy Way was notified of the eroded slope along the access road coming from Pick Your Parts Recycling site. Erosion causes discharge of sediment to storm drain system. SWPPP is current and samples were taken. City to conduct further investigation. No follow up is required at Ecology.					
26-Mar-09	Asian Kars Auto Recycling	6441812300	777 ENERGY WY	Auto Dismantlers	High	937I017467	5015
	Comments/Findings:	On 3/26/2009 conducted annual inspection to the site. Need to remove buildup of weeds, sediment, and trash from the drainage channel. Ensure stockpile of engine parts is removed. Store used oil under cover and place secondary containment. Clean up residual used oil. SWPPP is current. Follow up inspection to be conducted within 7 days.					
26-Mar-09	Japan Tech Auto Wrecking		ENERGY WY	Auto Dismantlers	High	937I020121	5015
	Comments/Findings:	On 3/26/2009 conducted annual inspection to the site. Remove or cover stockpile of parts. Engines on the ground located throughout the facility must be stored properly. Conduct proper housekeeping and removed oil stains in the graveled area. SWPPP is current. Follow up inspections to be conducted within 30 days.					
25-Mar-09	Japanese Auto Wrecking	6441811500	811 ENERGY WY	Auto Dismantlers	High	No WDID	5015
	Comments/Findings:	On 3/25/2009 conducted annual site inspection. Site is in general good condition. Did not have a representative on site. SWPPPP was unavailable for review. Follow up to be conducted at Japan Tech Auto- same owner the inspected site.					
25-Mar-09	Texano Auto Recycling		805 ENERGY WY	Recycling	High	937I1021577	5015
	Comments/Findings:	On 3/25/2009 conducted annual inspection to the site. Site is in general good condition. SWPPP is current. Samples were taken February 2009. This is a new business at this address. No follow up required.					

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	SIC Number
25-Mar-09	Pick Your Part Auto Wrecking	6441820800	880	ENERGY	WY	Auto Dismantlers	High	937I012114	5015
	Comments/Findings:	On 3/25/2009 conducted annual inspection. The site is in general good condition. SWPPP is current. Facility has sampled on 12/22/2008 and 02/16/2009. Need to cover drums in used oil storage area. Conduct general housekeeping specifically at crushing dismantling area. Follow up to be conducted within the next 5 days.							
25-Mar-09	All Toyota/Lexus Wrecking	6441811500	805	ENERGY	WY	Auto Dismantlers	High	937I018543	5015
	Comments/Findings:	On 3/25/2009 conducted annual inspection to the site. Site is general good condition except for the following: Parts storage area in the back of the facility needs cover. Need to remove stockpile of parts at the dismantling area. SWPPP is current. Samples taken with results pending. Follow-up to be conducted on 04/03/2009.							
25-Mar-09	South Bay Auto Wreckers	6441820200	811	ENERGY	WY	Auto Dismantlers	High	9371004495	5015
	Comments/Findings:	On 3/25/2009 conducted annual inspection to the site. Site is in general good condition. SWPPP is current and samples were taken Feb 2009. Results are pending. No follow-up is required.							
23-Mar-09	Calumet Auto Wrecking Inc	6441821400	891	ENERGY	WY	Auto Dismantlers	High	937I004393	5015
	Comments/Findings:	On 3/23/209 conducted annual inspection. Site is in general good condition with the following exceptions: a) Observed dumpster leaking fluids and batteries leaking fluids in the concrete containment area b) Recommend engines and parts on the pallets located behind main building be covered. SWPPP is current, site is member of group monitoring program. Items observed have been corrected and no follow up inspection is required.							
23-Mar-09	Allied Waste Services	6441821600	881	ENERGY	WY	Waste Management	High	937I014355	4953
	Comments/Findings:	On 3/23/2009 conducted annual inspection. Site is in general good condition with the following exceptions: a) Observed several oil stains in the service parking area b) Absorbent boom located at the southwest inlet needs replacement c) Recommend e-waste and hot water heaters be covered. During inspection discrepancies have been addressed. SWPPP is current, samples were taken for two rain events. No follow-up inspection is required.							
23-Mar-09	Honda Acura Parts Auto Recycling	6441821500	895	ENERGY	WY	Auto Dismantlers	High	937i011394	5015
	Comments/Findings:	Site is in general good condition. Recommend to cover parts stockpiled until recycled. Put hoods down at the end of business day. Site has liner installed to prevent seepage into soil. Member of Nest Environmental Group program. SWPPP is current. Sample date 11/07. No follow up inspection is required.							
23-Mar-09	ABF Freight System Inc.	6441821700	875	ENERGY	WY	Transportation	High	937I013254	4213
	Comments/Findings:	Site is in general good condition at the time of inspection. Need minor housekeeping of blown trash and debris. Sweep absorbents around storage area. Sampling data and SWPPP were not available at the time of inspection. Follow up to be conducted for SWPPP inspection in 14 days.							
17-Mar-09	GCE Industries Inc.	6441813300	1891	NIRVANA	AV	Manufacturing	High	No WDID	3443
	Comments/Findings:	Conducted follow-up inspection as a requested by City of San Diego IWCP. Observed non-storm water discharges from jet cleaning system. Found illegal connection of parts washing water. There is 55 gallon drum of alkaline near storm drain inlet. Recommend to contain and capture wash water and dispose of properly. Removed illegal connections divert to landscaping or sewer system. Deploy sandbags to protect drain inlets and relocate the 55 gallon alkaline drum either indoors or place secondary containment. Company was given 14 days to correct the discrepancies.							

Inspection Date	Facility Name	APN Number	Address	Category	Priority	WDID Number	SIC Number
7-Mar-09	2 Heavy Equipment/Cons.Recyclir	6441820300	855 ENERGY WY	Metal Recycling	High	No WDID	5093
	Comments/Findings: BMPs need to be implemented. Correct all items listed on the attachment. **see attachment**						
4-Mar-09	H&M Wrought Iron Factory Inc	6221113200	2560 MAIN ST	Manufacturing	High	No WDID	3315
	Comments/Findings: Some BMPs need to be implemented. Site is in general good condition. **see attachment**						
20-Feb-09	Hydro Scape Products Inc.	5634313000	375 TROUSDALE DR	Retail/Sales	High	No WDID	5039
	Comments/Findings: The site is generally clean and orderly. Continue to maintain area around the outside storage of fertilizer.						
4-Dec-08	Parts Heaven	6111812100	791 ENERGY WY	Auto Dismantlers	High	No WDID	5015
	Comments/Findings: On 12/4/09 conducted routine and annual inspection of the above facility. Overall site was in good condition. Facility is not a member of Group Monitoring Program and thus requires wet weather sampling. Owner was notified to correct the discrepancies within specified time.**see attachment**						
24-Jul-08	Flag Crafters	6170800700	1095 BAY BL	Manufacturing	High	No WDID	2399
	Comments/Findings: Conducted annual inspection. The site is clean and orderly. The outdoor loading area is clean. No further action required.						
24-Jul-08	First Appearance Copy Printing &	6231921800	3156 MAIN ST	Printing/Copy Service	High	No WDID	7334
	Comments/Findings: Conducted annual inspection. Business appears to be closed and vacant. The front is clean and orderly. Will follow up if business is still in operation. No further action required.						
5-Jul-08	Vallarta Iron Works	6221902000	2555 FAIVRE ST	Welding Services	Low	No WDID	7692
	Comments/Findings: Conducted annual inspection. All BMPs are in place. Site is in good order. **see attachment**. No further action required.						
5-Jul-08	Lopez Iron Works Repairs		FAIVRE ST	Welding Services	High	No WDID	7692
	Comments/Findings: All BMPs are in place. Site is in good order. **see attachment**						

Total Inspections: **50**

Attachment E

FY 2008-2009 Industrial Source Inventory and Prioritization

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
2 Heavy Equipment/Cons.Recycling	6441820300	Metal Recycling	High	855	ENERGY	WY	5093	
A&A Auto Recycling	6441811900	Auto Dismantlers	High	775	ENERGY	WY	5015	937I020792
A1 Moulding Supplies	6291000600	Warehousing	Low	180	MACE	ST	4225	
AAA Foreign Auto Recycling	6441812200	Auto Dismantlers	High	783	ENERGY	WY	5015	937I016197
ABF Freight System Inc.	6441821700	Transportation	High	875	ENERGY	WY	4213	937i013254
ACE Industries Inc.	6442302200	Manufacturing	Low	738	DESIGN	CT	3599	
Acme Bag Company	6221114100	Retail	Low	2528	MAIN	ST	5999	
Action Auto Dismantlers Inc	6291001400	Auto Dismantlers	High	151	REED	CT	5015	937i004000
ADA Fabrication	6221021800	Fabrications	Low	2260	MAIN	ST	3993	
Advance Auto Wrecking	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937i020612
Advantage Printing & Apparel Inc	6221115300	Printing	Low	681	ANITA	ST	2262	
Airgas West Inc	6291413100	Retail/Sales	Low	3303	MAIN	ST	3563	
Aker Leather Products	6221021800	Manufacturing	Low	2248	MAIN	ST	2386	
All Japanese Auto Recycling	6441811900	Auto Dismantlers	High	775	ENERGY	WY	5015	937I015706
All Smash Auto Recycling	6441812100	Auto Dismantlers	High	791	ENERGY	WY	5015	937i011044
All Toyota/Lexus Wrecking	6441811500	Auto Dismantlers	High	805	ENERGY	WY	5015	937I018543
Alliance Hardwood LLC	6221023300	Wholesale	Low	775	ANITA	ST	5031	
Allied Waste Services	6441821600	Waste Management	High	881	ENERGY	WY	4953	937i014355
Amerivacs Manufacturing Inc	6232301700	Manufacturing	Low	3800	MAIN	ST	3635	
Apada Industries Inc	6222304400	Manufacturing	Low	632	MARSAT	CT	2299	
Aqualarm	6170800800	Manufacturing	Low	1151	BAY	BL	3635	
Arise/Waco Scafolding	6180103100	Wholesale	High	676	MOSS	ST	5082	No WDID

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Arroyo Fabrication	6221112500	Fabrications	Low	2488	MAIN	ST	3399	
Artistic Wrought Iron	6221902000	Manufacturing	Low	2555	FAIVRE	ST	3312	
ASI Distr. & Fabr./Abbet Services Inc	6222304900	Distributor	Low	1547	JAYKEN	WY	5085	
Asian Kars Auto Recycling	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937I017467
BABA Foods	6182803500	Manufacturing	Low	693	PALOMAR	ST	2099	
Bacco Produce	6170800600	Produce	Low	1031	BAY	BL	5148	
Baja California Cycle USA Inc	6290200100	Wholesale	Low	2801	MAIN	ST	5091	
Barbee Valve & Supply	6442302600	Manufacturing	Low	751	DESIGN	CT	3432	
Bastan Corporation	6221021800	Wholesale	Low	2260	MAIN	ST	5142	
Bellama Custom Metal Fabrication	6290604200	Fabrications	Low	3129	MAIN	ST	3499	
Brenntag Pacific Inc	6441810800	Chemical Storage	High	1888	NIRVANA	AV	5169	No WDID
Brunswick Mattress	6170800600	Furnitures	Low	1021	BAY	BL	5712	
C&G Swiss	6291000600	Fabrications	Low	180	MACE	ST	3451	
Cabinet Tronix LLC	5634511900	Furnitures	Low	290	TROUSDALE	DR	2517	
Cabinetry Design Inc	6221115400	Manufacturing	Low	675	ANITA	ST	2434	
Cal Plastics 7 Metals	6221022800	Wholesale	Low	1670	INDUSTRIAL	BL	5162	
California Hardcoating Company	6221115400	Manufacturing	Low	675	ANITA	ST	3479	
California Sports Auto Wrecking	6441811800	Auto Dismantlers	High	781	ENERGY	WY	5015	937I021145
Caltrans Yard*	5653200100	Corporation Yard	High	570	C	ST	4789	No WDID
Calumet Auto Wrecking Inc	6441821400	Auto Dismantlers	High	891	ENERGY	WY	5015	937i004393
Canvas Concept Inc.	6221115800	Manufacturing	Low	649	ANITA	ST	2394	
Career Cap Corporation	6221022800	Manufacturing	Low	1680	INDUSTRIAL	BL	2353	
Choes Wholesale	6182803500	Wholesale	Low	693	PALOMAR	ST	5092	
Chula Vista Bolt	6170800800	Wholesale	Low	1161	BAY	BL	5072	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Ciannas Creation	6442302100	Manufacturing	Low	744	DESIGN	CT		
Circle Food LLC	6221110800	Distributor	Low	1616	SILVAS	ST	5149	
Conway Western Express	5952313200	Trucking	High	2420	BOSWELL	RD	4214	937i015484
Corsair Marine Inc	6291000400	Boat Building & Repair	Low	150	REED	CT	3732	
Custom Door and Window Sales	61701100300	Wholesale	Low	1128	BAY	BL	5211	
Daves Woodworking	6291302600	Retail/Sales	Low	171	MACE	ST	5712	
David J Food Products	6222303900	Wholesale	Low	689	MARSAT	CT	5149	
DNP Electronics America LLC	5952313300	Manufacturing	Low	2391	FENTON	ST	3571	
Downtown Copy & Print Inc	5634421600	Printing	Low	101	GLOVER	AV	7334	
Dutchmasters Cabinets	6221900800	Manufacturing	Low	2605	FAIVRE	ST	2434	
Eagle Foods Distributors Inc	6220810602	Distributor	Low	684	ANITA	ST	5141	
Ecology Auto Wrecking	6441821100	Auto Dismantlers	High	820	ENERGY	WY	5015	937i003280
Ecology Auto Wrecking	6441820100	Auto Dismantlers	High	825	ENERGY	WY	5015	937I003325
Ecology Auto Wrecking 2	6441821000	Auto Dismantlers	High	850	ENERGY	WY	5015	937I019445
Ecology Auto Wrecking 3	6441821200	Auto Dismantlers	High	800	ENERGY	WY	5015	937I003280
El Sol Industries Inc	6221115400	Manufacturing	Low	679	ANITA	ST	2389	
Ervey Produce	6170800600	Produce	Low	1031	BAY	BL	5148	
Estes Express Lines	5634521200	Trucking	High	120	PRESS	LN	4231	937i007126
Eurotecnics	6291002300	Manufacturing	Low	170	MACE	ST	2434	
Explorer Competetion	5952311300	Retail/Sales	Low	2360	BOSWELL	RD	5531	
Express Furniture	6192113900	Furnitures	Low	1226	THIRD	AV	5712	
Express Pipe & Supply Co	5634512600	Wholesale	Low	117	PRESS	LN	5074	
FFF Distributors Inc	6221112500	Wholesale	Low	2474	MAIN	ST		
Finest City Cabinets	5634411200	Manufacturing	Low	330	TROUSDALE	DR	5712	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
First Appearance Copy Printing & More	6231921800	Printing/Copy Service	Low	3156	MAIN	ST	7334	
Five Star Medical Transport Inc	6291302700	Transportation	Low	187	MACE	ST	4119	
FJ Willert Cont Co.	6441810200	Storage	High	1869	NIRVANA	AV	4953	937I016993
Flag Crafters	6170800700	Manufacturing	Low	1095	BAY	BL	2399	
Fleetpride West Inc.	5713301900	Trucking	Low	630	BAY	BL	4214	
Formosa Prosonic USA Inc.	5684503900	Manufacturing	Low	303	H	ST	3679	
Frank B Wood	6221112500	Furnitures	Low	2474	MAIN	ST	5712	
Freeway Auto Wrecking	6441812200	Auto Dismantlers	High	783	ENERGY	WY	5015	937I021643
Frontera International	6441810400	Warehousing	Low	1879	NIRVANA	AV	4225	
Fuji Seimen Corp	6291002300	Manufacturing	Low	170	MACE	ST	2098	
G&M Custom Flags and Banners	6221021800	Manufacturing	Low	2240	MAIN	ST	2399	
G&M Manufacturing	6291000600	Management Service	Low	180	MACE	ST	8741	
Gary Manafacturing Inc.	61701100300	Manufacturing	Low	1124	BAY	BL	2299	
GCE Industries Inc.	6441813300	Manufacturing	High	1891	NIRVANA	AV	3443	N/A--not indust
Granite Gallery Inc	6291000600	Wholesale	Low	180	MACE	ST	5032	
H&M Wrought Iron Factory Inc	6221113200	Manufacturing	Low	2560	MAIN	ST	3315	
Hanson Aggregates	6290300500	Concrete Work	High	116	7TH	ST	3271	937i015523
High Tech Business Center @ Eastlake	5957100800		Low	861	HAROLD	PL		
Hitachi Home Electronic Inc.- America	5957110300	Manufacturing	Low	900	HITACHI	WY	3639	
Honda Acura Parts Auto Recycling	6441821500	Auto Dismantlers	High	895	ENERGY	WY	5015	937i011394
House of Leather and Fabrics	5634512000	Manufacturing	Low	290	TROUSDALE	DR	3111	
Hydro Scape Products Inc.	5634313000	Retail/Sales	Low	375	TROUSDALE	DR	5039	
Hyspan Precision Prod Inc	6440402800	Manufacturing	Low	1685	BRANDYWINE	AV	3441	
Hyundai Livart Furniture Outlet	6290604200	Furnitures	Low	3121	MAIN	ST	5712	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Imperial Sprinkler Supply Inc.	5634511400	Retail/Sales	Low	280	TROUSDALE	DR	5087	
Import Auto Wrecking	6441812900	Auto Dismantlers	High	793	ENERGY	WY	5015	937I016877
Indu Fashions	6222303800	Manufacturing	Low	680	MARSAT	CT	2329	
International Sign Co	6232022300	Manufacturing	Low	3268	MAIN	ST	3993	
Japan Tech Auto Wrecking	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937I020121
Japanese Auto Wrecking	6441811500	Auto Dismantlers	High	811	ENERGY	WY	5015	No WDID
Julio C Battery	6232021800	Retail/Sales	High	1502	BROADWAY		5531	No WDID
K&T Carpet Services Inc	6170800700	Service	Low	1085	BAY	BL	7217	
Kama Tech Corporation	6442301300	Manufacturing	Low	739	DESIGN	CT		
Kelco Packaging Prop	6221112500	Warehousing	Low	2474	MAIN	ST	4222	
Kelly Paper Company	5713301900	Wholesale	Low	630	BAY	BL	5111	
KEM LLC	5634421600	Environmental Services	Low	101	GLOVER	AV	8999	
Ken Larcens Cabinet Plus	6291302600	Manufacturing	Low	171	MACE	ST	2434	
Kleen Blast Industrial Services	6180103100	Retail/Sales	High	676	MOSS	ST	5084	No WDID
L&V Furniture	6221113200	Manufacturing	Low	2560	MAIN	ST	2434	
LA Natural Tortilla Factory	6290101100	Manufacturing	Low	2765	MAIN	ST	2099	
Lawrence Hughes Cabinets Unlimited	6291000600	Manufacturing	Low	180	MACE	ST	2434	
LC Turbo	6221112500	Service	Low	2446	MAIN	ST	7699	
Leticia Cano Nuts and Bolts	6221112500	Retail/Sales	Low	2446	MAIN	ST	5072	
Lopez Iron Works Repairs	6221902000	Welding Services	Low	2555	FAIVRE	ST	7692	
LSP South Bay (Power Plant)**	5711600800	Electric Services	High	990	BAY	BL	4911	9371015022
Lund & Flynn Inc	5634322400	Manufacturing	Low	370	TROUSDALE	DR	3694	
Lyon Technologies Inc	6440403700	Manufacturing	Low	1690	BRANDYWINE	AV	3499	
Main Street Recycling	6290607300	Recycling	Low	1751	FOURTH	AV	5093	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Marscott marine and Industrial Supply	6221112500	Wholesale	Low	2446	MAIN	ST	5085	
Mask US Inc	6290604200	Fabrications	Low	3121	MAIN	ST	2389	
Mikolajczyk Cabinet Shop	6170102900	Cabinet Installation	Low	926	INDUSTRIAL	BL	1751	
MMC Energy -Peak Power Plant	6290620400	Power Generations	High	3497	MAIN	ST	4911	9371020087
Monos Custom Metal Fabrications Inc	6222300400	Fabrications	Low	1548	JAYKEN	WY	3499	
Montoya's Auto Wrecking	6441811800	Auto Dismantlers	High	781	ENERGY	WY	5015	937I021427
NCR Neon Specialist	6291000600	Manufacturing	Low	180	MACE	ST	3993	
Next Day Printed Tees	6170800700	Retail/Sales	Low	1075	BAY	BL	5699	
Nirvana Produce Distributions	6441811000	Produce	Low	1872	NIRVANA	AV	5431	
Nypro San Diego	6440402400	Manufacturing	Low	505	MAIN	ST	3061	
Oak Land Furniture	6221112500	Cabinet Installation	Low	2462	MAIN	ST	1751	
Ochoa's Cabinet	6221112500	Manufacturing	Low	2446	MAIN	ST	2434	
Onager Corporation	6441812800	Auto Dismantlers	High	789	ENERGY	WY	5015	9371010014
Ordior LLC	6221021800	Manufacturing	Low	2252	MAIN	ST		
OSI Security Devices	6222300200	Fabrications	Low	1580	JAYKEN	WY	3499	
Otay Metal Mart	6291302800	Wholesale	Low	195	MACE	ST	5051	
Otay Valley Rock- Rimrock Quarry LLC	6440600600	Others	High	2041	HERITAGE	RD	1429	No WDID
Pacific Auto Wrecking	6441812000	Auto Dismantlers	High	795	ENERGY	WY	5015	9371015058
Pacific Manufacturing Inc	6221900800	Manufacturing	Low	2605	FAIVRE	ST	3452	
Pacific Maritime Industries	6221022700	Manufacturing	Low	1664	INDUSTRIAL	BL	3441	
Pallets and Services of SD Corp	6182005800	Wholesale	Low	1020	COLORADO	AV	5031	
Parts Heaven	6111812100	Auto Dismantlers	High	791	ENERGY	WY	5015	
Payless Auto Wrecking	6441811500	Auto Dismantlers	High	811	ENERGY	WY	5015	9371019794
PHV Custom Cabinets	6290604200	Manufacturing	Low	3121	MAIN	ST	2434	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Pick Your Part Auto Wrecking	6441820800	Auto Dismantlers	High	880	ENERGY	WY	5015	937I012114
Plenums Plus, LLC	5632703900	Fabrications	Low	67	BRISBANE	ST	3441	
Precision Woodworking of SD	6170800600	Woodworking	Low	1031	BAY	BL	2541	
Premier Copper & Brass Pacific Inc	5634410100	Wholesale	Low	310	TROUSDALE	DR	5051	
Profil Institute for Clinical Research	5734606400	Others	Low	855	THIRD	AV	8011	
Prudential Overall Supply	56709000300	Service	High	740	F	ST	7213	No WDID
Pump Export Distributors	6221403400	Manufacturing	Low	124	27TH	ST	3561	
Quality Lift Trucks	5634421600	Retail/Sales	Low	115	GLOVER	AV	5084	
R E Moore Inc	6221110800	Manufacturing	Low	1624	SILVAS	ST	3451	
R L Stone Fabrications	6221112500	Fabrications	Low	2446	MAIN	ST	3281	
R&R Delta Supplies Inc	6170800800	Wholesale	Low	1161	BAY	BL	5013	
RC Import Auto Recycler	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	9371010144
Resslers Welding Service	6220620500	Welding Services	Low	1550	FRONTAGE	RD	7692	
Ri-Ber Industrial Inc	6221112500	Wholesale	Low	2488	MAIN	ST	5084	
ROHR dba B.F. Goodrich**	5670102600	Manufacturing	High	850	LAGOON	DR	3724	9371004297
Rossin Steel Inc.	6441810900	Fabrications	High	1880	NIRVANA	AV	3441	9371020898
Sammy's Kitchen & Bath Inc	6222304200	Warehousing	Low	645	MARSAT	CT	4226	
San Diego Architectural Metals	6220610300	Manufacturing	Low	873	DOROTHY	ST	3499	
San Diego Dry Mix - Paragon Products	6290402300	Manufacturing	High	1865	BROADWAY		3271	
San Diego Floor Design	6221113200	Wholesale	Low	2560	MAIN	ST	5713	
San Diego Frame MFG Co	6220725900	Manufacturing	Low	1567	FRONTAGE	RD	2499	
San Diego Pallets	6170800600	Distributor	Low	1031	BAY	BL	7389	
San Digoe Screw Products Inc	6290201200	Manufacturing	Low	2865	MAIN	ST	3545	
Seagate Produce	6220810602	Produce	Low	684	ANITA	ST	5148	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Sealed Air Corporation	59530000600	Manufacturing	Low	2311	BOSWELL	RD	3565	
Serco Inc	6440404500	Service	Low	1669	BRANDYWINE	AV	8741	
Showtime Creations	5952320600	Manufacturing	Low	925	HALE	PL	2389	
Silent Salvage Search	6441820200	Auto Dismantlers	High	811	ENERGY	WY	5015	937I020921
SMR Bakery Inc/Califorina Baking Co	6221115300	Bakery	Low	681	ANITA	ST	2099	
Snowbird Transportation	6441811000	Distributor	Low	1872	NIRVANA	AV	4212	
SOCAL Ironworks Inc.	6222300400	Storage	Low	1548	JAYKEN	WY	4225	
SOS Metals San Diego LLC	6221115700	Recycling	High	635	ANITA	ST	5093	9371013260
Source of Health Inc.	61708000700	Manufacturing	Low	1055	BAY	BL	2833	
South Bay Auto Wreckers	6441820200	Auto Dismantlers	High	811	ENERGY	WY	5015	9371004495
South Bay Boat Yard**	7600481700	Boat Building & Repair	High	997	G	ST	3732	No WDID
South Coast Printing	6170800800	Printing/Copy Service	Low	1151	BAY	BL	2759	
South Xpress Inc	6291000600	Wholesale	Low	180	MACE	ST	5074	
Standard Auto Recycling	6291000400	Auto Dismantlers	High	150	REED	CT	5015	9371010775
Stanford Signs	6221403300	Specialty	Low	2556	FAIVRE	ST	3993	
Suncraft Fence Co	6232023800	Distributor	Low	3288	MAIN	ST	5039	
Sunrise Jewelry Manufacturing	5952313400	Manufacturing	Low	2371	FENTON	ST	3911	
Surface Fleet Supply Co	6220620500	Wholesale	Low	1550	FRONTAGE	RD	5074	
Surface Technologies Corp	6441811100	Service	Low	796	ENERGY	WY	7699	
SUV Auto Wrecking Inc.	6441811500	Auto Dismantlers	High	805	ENERGY	WY	5015	9371019236
SWE Jon Flexible Packaging Inc	6221112500	Wholesale	Low	2474	MAIN	ST	5113	
Synthetic Marble By Ponce	6222303900	Fabrications	Low	675	MARSAT	CT	3281	
Tantus Inc	6170800700	Manufacturing	Low	1045	BAY	BL	3645	
TBA Mexican Trade	6170800700	Wholesale	Low	1045	BAY	BL	5411	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Texano Auto Recycling	6441811500	Recycling	High	805	ENERGY	WY	5015	937I1021577
Tileforce Inc	6221112500	Retail/Sales	Low	2446	MAIN	ST	5713	
Tortilleria Santa Fe Inc.	6290101100	Retail/Sales	Low	2765	MAIN	ST	5411	
Triple M Marine Welding & Repair Inc	6220620500	Welding Services	Low	1550	FRONTAGE	RD	7692	
Truitt Machine & Fabrication	7600481700	Fabrications	Low	997	G	ST	3599	
U S Glass & Mirror Co	6170102900	Manufacturing	Low	926	INDUSTRIAL	BL	3231	
Uniforms Express International	6170800800	Supply	Low	1111	BAY	BL	5699	
United Cutting	6221115400	Industrial Launderes	Low	677	ANITA	ST	7218	
United Parcel Service	5953000300	Postal Service	High	2300	BOSWELL	CT	4215	9371002086
United Rentals Inc	5623501000	Heavy Equipment Rentals	High	501	C	ST	7359	9371019886
Universal Auto Recycling	6441812200	Auto Dismantlers	High	783	ENERGY	WY	5015	9371011318
Vallarta Iron Works	6221902000	Welding Services	Low	2555	FAIVRE	ST	7692	
Vcella Kilsn Inc	6291302600	Manufacturing	Low	171	MACE	ST	3631	
Veolia Transportation -MTS	6232502100	Transportation	High	3650	MAIN	ST	4111	9371011017
Vesco Metal Craft Inc	5952314200	Manufacturing	Low	2425	FENTON	ST	3312	
Videotel Inc	6221115300	Manufacturing	Low	681	ANITA	ST	3651	
West Air Gas	6220620700	Wholesale	Low	1590	FRONTAGE	RD		
West Auto Wreckers	6221902600	Auto Dismantlers	High	2365	MAIN	ST	5015	9371001046
Woodenvision	6170102900	Woodworking	Low	920	INDUSTRIAL	BL	2511	
Grand Total:	**209**							

Attachment H

FY 2008-2009 Municipal Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection acitivities.

Inspection Date	Facility Name	APN Number	Address	Category	Priority
20-Feb-09	Paseo Del Rey Park	6401412500	750 PASEO DEL REY	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 2/20/2009 conducted annual inspection of the site. Site is in good order. Need to replace fiber rolls at the south end of the channel.**see attachment** No further action required.			
20-Feb-09	Valle Lindo Park	6440102600	545 SEQUOIA ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 2/20/2009 conducted annual inspection of the site. BMPs are in place. Site is in good order. **see attachment** No further action required.			
20-Feb-09	Marisol Park	5933803600	916 RANCHO DEL REY PW	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 2/20/2009 conducted annual inspection of the site. BMPs are in place. Site is in good order. There is a dog waste station at the entrance of the trails on the east side of the park.**see attachment** No further action required.			
20-Feb-09	Santa Venetia Park	6430512700	1500 MAGDALENA AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 2/20/2009 conducted annual inspection of the site. Overall, site is in good condition. Two pet waste bag stations observed. **see attachment** No further action required.			
20-Feb-09	Voyager Park	6400901900	1178 J ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 2/20/2009 conducted annual inspection of the site. Overall, site is in good condition. No pet waste bag stations observed. **see attachment** No further action is required.			
25-Feb-09	Rohr Park	5932400500	4548 SWEETWATER RD	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 2/25/2009 conducted annual inspection of the site. BMPs are in place. Site is in good order. Pet waste bag stations were observed at the walking trails around the park. **see attachment** No further action required.			
25-Feb-09	Old Public Works Yard	5670312700	707 F ST	Public Work Facilities	High
	Comments/Findings:	On 2/25/2009 conducted annual inspection of the site. Need to reduce amount of storage outdoors. Perform a thorough cleaning of the yard to remove accumulated trash and debris. Properly dispose any hazardous wastes. Sewer storm drain underneath concrete bridge need to be cleaned to remove sediment accumulation. City Parks Manager was notified on 3/4/2009 to correct discrepancies.			

Inspection Date	Facility Name	APN Number	Address			Category	Priority
25-Feb-09	H Street Land Application	5740300800		H	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 2/25/2009 conducted annual inspection of the site. Need to clean oil stain in the yard. Notified Parks Manager on 3/4/2009. Item was corrected.					
6-Mar-09	Parkway CommunityCenter	5683004300	373	PARK	WY	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 3/6/2009 conducted annual inspection of the site. BMPs are in place. Site is in good order. Consider installing a cigarette butt waste container near the stairs at the NW corner of the building **see attachment** No further action required.					
6-Mar-09	Otay Park & Recreation Center	6232302600	3554	MAIN	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 3/6/2009 conducted annual inspection of the site. Storm drain at end to channel (SE end of Park) needs cleaning. One pet waste station found. Overall, site is in good order. **see attachment** Notified City Parks Manager to clean storm drain on 3/10/2009.					
6-Mar-09	Los Ninos Park	6243411200	150	TEAL	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 3/06/2009 conducted annual inspection of the site.BMPs are in place. Site is in good order. **see attachment** No further action required.					
6-Mar-09	Norman Park and Recreation Center	5683331100	270	F	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 3/6/2009 conducted annual inspection of the site. BMPs are in place. Site is in good order. **see attachment** No further action required.					
6-Mar-09	Memorial Park	5683004300	373	PARK	WY	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 3/06/2009 conducted annual inspection of the site. Need to remove trash and shopping cart in the channel. Lock storm drain grates to prevent trespassing. **see attachment** Notified City Parks Manager to correct the discrepancy on 3/10/2009.					
6-Mar-09	Otay Park & Recreation Center	6232302700	1613	ALBANY	AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 3/06/2009 conducted annual inspection of the site. Overall, site is in good condition. One pet waste bag stations observed. Storm drain at end of channel needs cleaning.**see attachment**					
26-Mar-09	Nature Center	5650102900	1000	UNPOWDER POIN	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 3/26/2009 conducted annual inspection of the site.The facility was designed to drain storm water and waste aquarium water into a vegetated swale that leads into a settling pond. If the pond is filled, it would spill over into San Diego Bay. At the time of inspection, the settling pond was approx. 3/4 full. The swale appeared to be in good condition and working properly. Plese provide employee training that includes spill response and prevention, dry methods of clean up, and general pollution prevention measures. **see attachment** No further action required.					

Inspection Date	Facility Name	APN Number	Address			Category	Priority
27-Apr-09	Horizon Neighborhood Park	6410721600	970	PALOMAR	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 4/27/2009 conducted annual inspection of the site. No pet waste bag station observed. Found trash/debris, car engine block on trash bin floor area located at the entrance of the park. Site is in good order. **see attachment** Notify City Park Manager to correct the discrepancy. On 5/7/2009 city crew corrected the discrepancy. No further action required.					
27-Apr-09	Harvest Park	6425814800	1381	PALOMAR	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 4/27/2009 conducted annual inspection of the site. No pet waste bag observed. Site is in good order. **see attachment** No further action required.					
27-Apr-09	Cottonwood Park	6424210600	1778	PALOMAR	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 4/28/2009 conducted annual inspection of the site. No pet waste bag observed. Site is in good order. **see attachment** No further action required.					
27-Apr-09	Heritage Park & Community Center	6425601100	1550	PALOMAR	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 4/27/2009 conducted annual inspection of the site. No pet waste bag station observed. Trash bin floor area at the SE corner of the park full of trash/debris.. Site is in overall good order. Notified Parks Manager on 5/4/2009 **see attachment** On 5/7/2009 discrepancy was corrected.					
1-May-09	Explorer Park	6400301900		NORELLA	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/01/2009 conducted annual inspection of the site. No pet waste bag station observed. Found broken sprinkler heads at the SE of the park next to basketball court. There are traces of sediments on the walkways. Drain inlet located at NW end of park is covered with sediments. Recommend to put gravel bags around inlet opening.. **see attachment** Notified City Park Manager to correct discrepancies. On 5/19/2009 all discrepancies were corrected by City staff.					
1-May-09	Discovery Park	6423930700	700	BUENA VISTA	WY	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/01/2009 conducted annual inspection of the site.Need to replace broken fiber rolls on the SE and SW end to the park. Need to clean trash/debris on concrete brow ditch at the NE and NW end of the park. Site is in general good order. **see attachment** City Park Manager was notified to correct the discrepancies. On 5/15/2009 all discrepancies were corrected by park division.					
7-May-09	Loma Verde Park & Recreation Cente	6240107200	1420	LOMA	LN	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/7/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
7-May-09	Conneley Park	6233143300	1559	CONNOLEY	AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/7/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					

Inspection Date	Facility Name	APN Number	Address			Category	Priority
7-May-09	Hilltop Park	5744104600	780	HILLTOP	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/7/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
8-May-09	Tiffany Park	6420302900	1713	ELMHURST	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/08/2009 conducted annual inspection of the site. Found trash and green waste on the concrete V-ditch at the north end of the park (see photo). Overall, site is in good order. **see attachment** Notified City Park Manager on 5/14/2009. On 5/18/2009 trash and green waste were removed from the v-ditch.					
8-May-09	Veteran's Park Recreation Center	6411221000	785	PALOMAR	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/08/2009 conducted annual inspection of the site. Overall, site is in good condition. There are pet waste stations in the dog park area. Need to dispose of all trash and debris from the gated storage area near rec. center. Sweep inside trash dumpster. **see attachment**					
8-May-09	Sunridge Park	6400502000	952	BEECHGLEN	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 6/02/2009 conducted annual inspection of the site. Overall, site is in good condition. **see attachment** No further action is required.					
8-May-09	Terra Nova Park	5921922700	450	HIDDEN VISTA	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/08/2009 conducted annual inspection of the site. Overall, site is in good condition. Need to replace damaged gravel bags around storm drain at the north end of the park near tennis court. **see attachment** On 5/19/2009 City staff replace damaged gravel bags.					
8-May-09	Rancho Del Rey Park	6422800300	1131	BUENA VISTA	WY	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/08/2009 conducted annual inspection of the site. Overall, site is in good condition. Found 1 pet bag waste station. Leaking irrigation control should be inspected and fixed.**see attachment** On 5/12/2009 City staff repair leaking irrigation control.					
13-May-09	Eucalyptus Park	5651200300	47	FIFTH	AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/13/2009 conducted annual inspection of the site. Found trash/debris/plastic bags in the channel located at NW end of the park (see photo). Site is in general good order. **see attachment** Notified City Park Manager on 5/18/2009. On 5/22/2009 City staff cleaned and vacuum trash and vegetation.					
13-May-09	Friendship Park	5681530100	365	F	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/13/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					

Inspection Date	Facility Name	APN Number	Address			Category	Priority
13-May-09	Bay Boulevard Park	5670213202		BAY	BL	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/13/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
13-May-09	Chula Vista Women's Club	5683004200	357	G	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/13/2009 conducted annual inspection of the site. All BMPs are in place. Site is in good order. **see attachment** No further action required.					
15-May-09	Mini Park	5952145100	753	ASHBROOK	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/15/2009 conducted annual inspection of the site. Overall, site is in good condition. No pet waste bag stations observed. **see attachment** No further action is required.					
15-May-09	Mackenzie Creek Park	5955700200	2275	MACKENZIE CREEK	RD	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/15/2009 conducted annual inspection of the site. Overall, site is in good condition. **see attachment** No further action is required.					
15-May-09	Salt Creek Park & Community Center	6434830200	2710	OTAY LAKES	RD	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/15/2009 conducted annual inspection of the site. Overall, site is in good condition. **see attachment** No further action is required.					
15-May-09	Mountain Hawk Park	6435180200	1475	LAKE CREST	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/15/2009 conducted annual inspection of the site. Overall, site is in good condition. No pet waste bag stations observed. **see attachment** No further action is required.					
15-May-09	Windingwalk Neighborhood Park	6436101500	1675	XPLORATION FALL	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/15/2009 conducted annual inspection of the site. Overall, site is in good condition. Recommend to adjust irrigation system to prevent erosion on small slope at winding sidewalk. Post "No Smoking" sign and install trash container at the skate park area. **see attachment** City staff repaired irrigation system. Trash container will not be added and sign will not be posted due to vandalism.					
18-May-09	Downtown Parking Facility	5682702900	340	F	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/18/2009 conducted annual inspection of the site. Facility is maintained by Smiser Family Management. Observed sporadic oil stains on ground level parking lot. Overall, facility is n good order.Parking lot is power sweep twice a month, power blow/hand sweep as needed and power wash at least once a year. *see attachment** Notified property management to correct discrepancy within 20 days of the notification.					

Inspection Date	Facility Name	APN Number	Address			Category	Priority
18-May-09	Gayle McCandliss Park	6390301300	415	J	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/18/2009 conducted annual inspection of the site. BMPs are in place. Site is in good order. **see attachment** No further action required.					
20-May-09	Greg Rogers Park	6200600300	1189	OLEANDER	AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/7/2009 conducted annual inspection of the site. Found drain inlet located at the SE end of the park (bottom of hill) is covered with sediments (see photo). Site is clean and in general good order. **see attachment** Notify City Park Manager to correct discrepancy. On 5/20/2009 conducted follow up inspection. Sediments at drain inlet have been cleared.					
20-May-09	Lancerlot Park	5711701800	750	K	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/20/2009 conducted annual inspection of the site. Site is in good condition. **see attachment** No further action required.					
20-May-09	Lauderbach Park	6192113700	333	OXFORD	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/20/2009 conducted annual inspection of the site. Site is in good condition. **see attachment** No further action required.					
20-May-09	Harborside Park	6182005900	670	OXFORD	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/20/2009 conducted annual inspection of the site. Site is in good condition. **see attachment** No further action required.					
27-May-09	Sunset View Park	6430330100	1390	GREENSVIEW	DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the site. Site is in general good order. There is pet station near trail. Need to sweep curb gutter areas in parking lot to remove accumulated leaves **see attachment** On 6/3/2009 accumulated leaves on curb gutter were removed by City Parks staff.					
27-May-09	Sherwood Park	6233211900	69	SHERWOOD	ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the park. Site is in general good order. Need to replace gravel bags along the dirt slope to stabilize it. **see attachment** On 6/17/2009 gravel bags were replace by City Staff.					
27-May-09	Santa Cora Park	6420804000	1365	SANTA CORA	AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the site. Overall, site is in good condition. Need to remove vegetation and trash from storm drain filter inserts. **see attachment** On 6/11/2009 filter insert was cleaned by City staf.					

Inspection Date	Facility Name	APN Number	Address	Category	Priority
27-May-09	Orange Avenue Fields	6240107200	160 ORANGE AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the site. Overall, site is in good condition. Need to empty trash bins to prevent overflowing. **see attachment** City staff empty trash bin. Recommend to have Little League to provide additional trash can to the site.			
27-May-09	Reinstra Ball Fields	6240107300	1500 MAX AV	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the site. Overall, site is in good condition. There were some trash bags thrown outside the waste dumpster.Consider posting "No Dumping" sign near the dumpster area. **see attachment** City staff contacted Little League who owns the trash bins.			
27-May-09	Palomar Park	6200504900	1359 PARK DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 6/02/2009 conducted annual inspection of the site. Overall, site is in good condition. No pet waste bag stations observed. **see attachment** No further action is required.			
27-May-09	SDGE Park	6230720700	1438 HILLTOP DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 6/02/2009 conducted annual inspection of the site. Overall, site is in good condition. No pet waste bag stations observed. **see attachment** No further action is required.			
27-May-09	Montevalle Park & Community Center	5957360600	840 DUNCAN RANCHRD	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the site. Overall, site is in good condition. Pet waste station installed in the dog park. **see attachment** No further action is required.			
27-May-09	Sunbow Park	6402725100	690 NAPLES ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/27/2009 conducted annual inspection of the site. Overall, site is in good condition. **see attachment** No further action is required.			
29-May-09	Chula Vista Community Park	5953200200	1060 EASTLAKE PW	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/29/2009 conducted annual inspection of the site. Overall, site is in good condition. No pet waste bag stations observed. **see attachment**			
29-May-09	Independence Park	6423205600	1248CALLE SANTIAGO	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/29/2009 conducted annual inspection of the site. Overall, site is in good condition. No pet waste bag stations observed. **see attachment** No further action is required.			

Inspection Date	Facility Name	APN Number	Address	Category	Priority
29-May-09	Breezewood Park	6425004600	1091 BREEZEWOOD DR	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 5/29/2009 conducted annual inspection of the site. Overall, site is in good condition. No pet waste bag stations observed. **see attachment** No further action is required.			
1-Jun-09	John Lippit PWC & Admin Building	6442301100	1800 MAXWELL RD	Other Fixed Facilities	High
	Comments/Findings:	On 6/01/2009 conducted annual inspection of the facility. Recommend 1) to reduce outdoor storage and dispose of/recycle equipment that is no longer needed. 2) Broom sweep around all outdoor areas to reduce trash, dirt, and debris build-up. 3) Remove and replace damaged fiber roll and install erosion control BMPs along slopes to prevent sediment from entering the storm drain during rain events. **see attachment**			
2-Jun-09	Power Washing-Graffiti Removal			Mobile Mun Activities	High
	Comments/Findings:	On 6/02/2009 conducted annual inspection of the graffiti removal operation. Crew showed an example site at the corner of 3rd and Ash St. All necessary BMPs are implemented including geo-logs, vacuum equipment, and brooms for directing water flow. The crew used as little water as possible. . **see attachment**			
2-Jun-09	Animal Care Facility	6290605400	130 BEYER WY	Animal Facilities	High
	Comments/Findings:	On 6/02/2009 conducted annual inspection of the site. Overall, site is in good condition. BMPs are in place **see attachment** No further action is required.			
2-Jun-09	Bonita Long Canyon Park	5941100500	1745 COLTRIDGE LN	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 6/2/2009 conducted annual inspection of the facility. Site is in good condition. No pet waste stations observed. **see attachment** No further action required.			
2-Jun-09	Community Youth Center	5723001100	465 L ST	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 6024/2009 conducted annual inspection of the site. Overall site is in good condition. Need to sweep the curb/gutter areas and clean out storm drains in the parking lot **see attachment** On 6/9/2009 city staff clean curb/gutter and vacuum storm drains.			
19-Jun-09	Chula Vista Municipal Golf Course	5932402400	4475 BONITA RD	Parks-Landscape-Rec Areas	High
	Comments/Findings:	On 6/19/2009 conducted annual inspection of the site. Need to close dumpster lids and sweep around dumpster in the restaurant area. Keep spill kits on-hand and used oil storage area. Pick up oil stains in the equipment parking area and move metal plate that was covering ground water well. **see attachment**			

Total Inspections: **62**

Attachment C

Municipal Facility Source Inventory and Prioritization

Facility Name	APN Number	Type of Facility	Address			Priority
All Seasons Park		Parks-Landscape-Rec Areas		MAGDALENA	AV	Low
Animal Care Facility	6290605400	Animal Facilities	130	BEYER	WY	High
Bay Boulevard Park	5670213202	Parks-Landscape-Rec Areas		BAY	BL	High
Bonita Library	5930313100	Library	4375	BONITA	RD	Medium
Bonita Long Canyon Park	5941100500	Parks-Landscape-Rec Areas	1745	COLTRIDGE	LN	High
Breezewood Park	6425004600	Parks-Landscape-Rec Areas	1091	BREEZEWOOD	DR	High
Chula Vista Civic Center	5684505700	Parks-Landscape-Rec Areas	476	FOURTH	AV	Low
Chula Vista Community Park	5953200200	Parks-Landscape-Rec Areas	1060	EASTLAKE	PW	High
Chula Vista Municipal Golf Course	5932402400	Parks-Landscape-Rec Areas	4475	BONITA	RD	High
Chula Vista Women's Club	5683004200	Parks-Landscape-Rec Areas	357	G	ST	High
Civic Center and Admin Building	5681103300	Other Fixed Facilities	276	FOURTH	AV	Medium
Civic Center Branch Library	5681530200	Other Fixed Facilities	365	F	ST	Low
Community Youth Center	5723001100	Parks-Landscape-Rec Areas	465	L	ST	High
Conneley Park	6233143300	Parks-Landscape-Rec Areas	1559	CONNOLEY	AV	High
Cottonwood Park	6424210600	Parks-Landscape-Rec Areas	1778	PALOMAR	ST	High
Discovery Park	6423930700	Parks-Landscape-Rec Areas	700	BUENA VISTA	WY	High
Downtown Parking Facility	5682702900	Other Fixed Facilities	340	F	ST	High
Eastlake Branch Library	5953201700	Library	1120	EASTLAKE	PW	Low
Eucalyptus Park	5651200300	Parks-Landscape-Rec Areas	47	FIFTH	AV	High
Explorer Park	6400301900	Parks-Landscape-Rec Areas		NORELLA	ST	High
Fire Station #1	5681103300	Fire Stations	447	F	ST	Low
Fire Station #2	5743003300	Fire Stations	80	J	ST	Low
Fire Station #3	6411213000	Fire Stations	1410	BRANDYWINE	AV	Low
Fire Station #4/Training Tower	6423910600	Fire Stations	850	PASEO RANCHERO		Medium

Facility Name	APN Number	Type of Facility	Address			Priority
Fire Station #5	6192110100	Fire Stations	391	OXFORD	ST	Low
Fire Station #6	5955700100	Fire Stations	605	MOUNT MIGUEL	RD	Low
Fire Station #7	5950805400	Fire Stations	1640	SANTA VENETIA	ST	Low
Fire Station #8	5950805400	Fire Stations	1180	WOODS	DR	Low
Friendship Park	5681530100	Parks-Landscape-Rec Areas	365	F	ST	High
Gayle McCandliss Park	6390301300	Parks-Landscape-Rec Areas	415	J	ST	High
Greg Rogers Park	6200600300	Parks-Landscape-Rec Areas	1189	OLEANDER	AV	High
H Street Land Application	5740300800	Other Fixed Facilities		H	ST	High
Harborside Park	6182005900	Parks-Landscape-Rec Areas	670	OXFORD	ST	High
Harvest Park	6425814800	Parks-Landscape-Rec Areas	1381	PALOMAR	ST	High
Heritage Park & Community Center	6425601100	Parks-Landscape-Rec Areas	1550	PALOMAR	ST	High
Hilltop Park	5744104600	Parks-Landscape-Rec Areas	780	HILLTOP	DR	High
Holiday Estates I&II	6233413100	Other Fixed Facilities	27	CONNOLEY	CI	Low
Horizon Neighborhood Park	6410721600	Parks-Landscape-Rec Areas	970	PALOMAR	ST	Medium
Independence Park	6423205600	Parks-Landscape-Rec Areas	1248	CALLE SANTIAGO		High
John Lippit PWC & Admin Building	6442301100	Other Fixed Facilities	1800	MAXWELL	RD	High
Ken Lee Administration Building	5681814400	Other Fixed Facilities	430	F	ST	Low
Lancerlot Park	5711701800	Parks-Landscape-Rec Areas	750	K	ST	High
Landscape Maintenance		Mobile Mun Activities				Medium
Lauderbach Park	6192113700	Parks-Landscape-Rec Areas	333	OXFORD	ST	High
Loma Verde Park & Recreation Center	6240107200	Parks-Landscape-Rec Areas	1420	LOMA	LN	High
Los Ninos Park	6243411200	Parks-Landscape-Rec Areas	150	TEAL	ST	High
Mackenzie Creek Park	5955700200	Parks-Landscape-Rec Areas	2275	MACKENZIE CREEK	RD	High
Marisol Park	5933803600	Parks-Landscape-Rec Areas	916	RANCHO DEL REY	PW	High
Memorial Park	5683004300	Parks-Landscape-Rec Areas	373	PARK	WY	High
Mini Park	5952145100	Parks-Landscape-Rec Areas	753	ASHBROOK	DR	High
Montevalle Park	5957360600	Parks-Landscape-Rec Areas	840	DUNCAN RANCH	RD	Medium

Facility Name	APN Number	Type of Facility	Address			Priority
Montevalle Park & Community Center	5957360600	Parks-Landscape-Rec Areas	840	DUNCAN RANCH	RD	High
Mountain Hawk Park	6435180200	Parks-Landscape-Rec Areas	1475	LAKE CREST	DR	High
MS4 Throughout the City of CV		Others				High
Nature Center	5650102900	Parks-Landscape-Rec Areas	1000	GUNPOWDER POINT	DR	High
Norman Park and Recreation Center	5683331100	Parks-Landscape-Rec Areas	270	F	ST	High
Old Public Works Yard	5670312700	Public Work Facilities	707	F	ST	High
Orange Avenue Fields	6240107200	Parks-Landscape-Rec Areas	160	ORANGE	AV	High
Otay Park & Recreation Center	6232302600	Parks-Landscape-Rec Areas	3554	MAIN	ST	High
Otay Park & Recreation Center	6232302700	Parks-Landscape-Rec Areas	1613	ALBANY	AV	High
Palomar Park	6200504900	Parks-Landscape-Rec Areas	1359	PARK	DR	High
Parkway CommunityCenter	5683004300	Parks-Landscape-Rec Areas	373	PARK	WY	High
Paseo Del Rey Park	6401412500	Parks-Landscape-Rec Areas	750	PASEO DEL REY		High
Police Administration Building	5682703100	Other Fixed Facilities	315	FOURTH	AV	Low
Pool, Fountain, Water Feature Maintenance		Mobile Mun Activities				Medium
Power Washing-Graffiti Removal		Mobile Mun Activities				High
Rancho Del Rey Library		Library		PASEO RANCHERO		
Rancho Del Rey Park	6422800300	Parks-Landscape-Rec Areas	1131	BUENA VISTA	WY	High
Reinstra Ball Fields	6240107300	Parks-Landscape-Rec Areas	1500	MAX	AV	High
Roads, Streets, Highways		Others				High
Rohr Park	5932400500	Parks-Landscape-Rec Areas	4548	SWEETWATER	RD	High
Salt Creek Park	6434830200	Parks-Landscape-Rec Areas	2710	OTAY LAKES	RD	Low
Salt Creek Park & Community Center	6434830200	Parks-Landscape-Rec Areas	2710	OTAY LAKES	RD	High
San Miguel Ranch Community Park		Parks-Landscape-Rec Areas				Low
Santa Cora Park	6420804000	Parks-Landscape-Rec Areas	1365	SANTA CORA	AV	High
Santa Venetia Park	6430512700	Parks-Landscape-Rec Areas	1500	MAGDALENA	AV	High
SDGE Park	6230720700	Parks-Landscape-Rec Areas	1438	HILLTOP	DR	High
Sherwood Park	6233211900	Parks-Landscape-Rec Areas	69	SHERWOOD	ST	High

Facility Name	APN Number	Type of Facility	Address			Priority
South Branch Library	6230102900	Library	389	ORANGE	AV	Low
Special Events Throughout the City of CV		Others				High
Street, Sidewalk Repair & Maintenance		Mobile Mun Activities				Medium
Sunbow Park	6402725100	Parks-Landscape-Rec Areas	690	NAPLES	ST	High
Sunridge Park	6400502000	Parks-Landscape-Rec Areas	952	BEECHGLEN	DR	High
Sunset View Park	6430330100	Parks-Landscape-Rec Areas	1390	GREENSVIEW	DR	High
Terra Nova Park	5921922700	Parks-Landscape-Rec Areas	450	HIDDEN VISTA	DR	High
Tiffany Park	6420302900	Parks-Landscape-Rec Areas	1713	ELMHURST	ST	High
Valle Lindo Park	6440102600	Parks-Landscape-Rec Areas	545	SEQUOIA	ST	High
Veteran's Park Recreation Center	6411221000	Parks-Landscape-Rec Areas	785	PALOMAR	ST	High
Veterans Park	6411221000	Parks-Landscape-Rec Areas	785	PALOMAR	ST	Low
Voyager Park	6400901900	Parks-Landscape-Rec Areas	1178	J	ST	High
Windingwalk Neighborhood Park	6436101500	Parks-Landscape-Rec Areas	1675	EXPLORATION FALLS	DR	High
Windingwalk Park Otay Ranch V-11	5436101500	Parks-Landscape-Rec Areas	1675	EXPLORATION FALLS	DR	Low

Total: 92

Attachment A
FY 2008-2009 SUSMP Projects Inventory

Note: This table represents a comprehensive list of projects screened for applicability and or reviewed for compliance with SUSMP requirements.

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Completed							
2380 Main Street	Commercial	Low	Completed	MP-52 Drain Insert		Main Street	Main Street
420 Naples Street	Residential	Low	Completed	TC-30 Vegetated Swale		Naples	Naples
725 Main Street	Miscelleneous	Medium	Completed	MP-52 Drain Insert		Main Street	Main Street
805 / Orange Interchange	Municipal/CIP	Medium	Completed	MP-52 Drain Insert		805 & Orange Ave	805 & Orange Ave
Ada Terraces	Condo	Medium	Completed	MP-52 Drain Insert		Ada Street	Ada Street
ADA Townhomes	Condo	Medium	Completed	TC-30 Vegetated Swale		Ada Street	Ada Street
Ada Villas 1	Condo	Medium	Completed	MP-52 Drain Insert		Ada Street	Ada Street
Aqua Clean	Commercial	Medium	Completed	MP-52 Drain Insert		Otay Lakes	Otay Lakes
Auto Park North	Commercial/Mixed	High	Completed	MP-52 Drain Insert		Autopark	Autopark
Bella Sol -Sunbow Plannig Area 11	Condo	Low	Completed	MP-51 Vortex Separator		Sunbow	Bella Sol
Bonita Library	Municipal	High	Completed	MP-52 Drain Insert MP-51 Vortex Separator	TC-30 Vegetated Swale	Bonita	Bonita

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Brisas Del Mar Village	Commercial/Mixed	Medium	Completed	MP-52 Drain Insert		Broadway	Broadway
C.V. Commerce Center	Miscelleneous	Medium	Completed	MP-51 Vortex Separator		Main Street	Main Street
C.V. Corporate Center	Miscelleneous	High	Completed	MP-52 Drain Insert		Main Street	Main Street
Chevron Station-Olympic	Commercial	Medium	Completed	MP-52 Drain Insert		Eastlake	Eastlake Terraces
Chula Vista Civic Center	Municipal	Low	Completed	MP-51 Vortex Separator TC-30 Vegetated Swale	MP-52 Drain Inlet		
Chula Vista Crossings	Miscelleneous	Medium	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	The Crossings	The Crossings
Chula Vista Toyota-Main Street	Commercial	High	Completed	MP-52 Drain Insert		Autopark	Autopark
COSTCO at Broadway	Commercial	Low	Completed	MP-51 Vortex Separator		Broadway	Broadway
Dixon Drive CIP	Municipal/CIP	Medium	Completed	MP-52 Drain Insert		Dixon	Dixon
Doctor's Park	Miscelleneous	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake	Eastlake Business District
Eastlake - Village Walk	Miscelleneous	Low	Completed	MP-52 Drain Inlet	MP-51 Vortex Separator	Eastlake	Eastlake Village Walk
Eastlake Business Center-Hale Place	Miscelleneous	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Business District
Eastlake Commerce-Business Center	Miscelleneous	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Business District
Eastlake Community Church	Miscelleneous	Low	Completed	MP-52 Drain Insert	Other	Eastlake	Eastlake Community

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Eastlake Design District	Miscelleneous	Medium	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake	Eastlake Business District
Eastlake Little League Field	Miscellaneous	Low	Completed	TC-30 Vegetated Swale		Eastlake Vistas	Eastlake Vistas
Eastlake Marketplace	Miscelleneous	Low	Completed	MP-51 Vortex Separator		Eastlake	Eastlake Marketplace
Eastlake Parkway Professional	Miscelleneous	High	Completed	MP-52 Drain Insert	TC-30 Vegetated Swale	Eastlake	Eastlake Business District
Eastlake Parkway Trinidad Cove to	Commercial/Mixed	Medium	Completed	MP-52 Drain Insert	MP-51 Vortex Separator	Eastlake	Eastlake Landswap
Eastlake Terrace-Landswap	Miscelleneous	High	Completed	MP-52 Drain Insert		Eastlake Terraces	Eastlake Landswap
Eastlake Terraces North-Ltd Edition	Miscelleneous	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake	Eastlake Terraces North
Eastlake Terrace-Walmart	Miscelleneous	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Terraces
Eastlake Village Center East	Miscelleneous	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Village Center East
Eastlake Village East - Kohls	Miscelleneous	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Village Center East
Eastlake Vistas VR-1/Colrich	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-1/Colrich
Eastlake Vistas VR-10/Summerhill	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-10/Summerhill
Eastlake Vistas VR-12/Alder Lane	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-12/Alder Lane
Eastlake Vistas VR-2/Atrium	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-2/Atrium

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Eastlake Vistas VR-3/Aqua	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-3/Aqua
Eastlake Vistas VR-4/Lost Creek	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-4/Lost Creek
Eastlake Vistas VR-5/Bridgepark	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-5/Bridgepark
Eastlake Vistas VR-6/Valencia	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-6/Valencia
Eastlake Vistas VR-7/Abilene	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-7/Abilene
Eastlake Vistas VR-8/Monticello	Residential	Medium	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-8/Monticello
Eastlake Vistas VR-9 & 11/Sonora Ridge	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	VR-9 & 11/Sonora Ridge
Eastlake Woods WR-2 / Reserves	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Woods	WR-2/Reserves
Eastlake Woods WR-3 / The Woods	Residential	Low	Completed	MP-51 Vortex Separator	TC-22 Extended Det Basin	Eastlake Woods	WR-3/The Woods
Eastlake Woods WR-4 / Cornerstone	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Woods	WR-4/Cornerstone
Eastlake Woods WR-5 / K Hovnanian	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake Woods	WR-5/K Hovnanian
Eastlake Woods WR-6 / Meredian	Residential	Medium	Completed	MP-52 Drain Insert		Eastlake Woods	WR-6/Meredian
Eastlake Woods WR-7 / Sonoma	Residential	Medium	Completed	MP-52 Drain Insert		Eastlake Woods	WR-7/Sonoma
Enterprise Administration Bldg.	Miscelleneous	High	Completed	MP-52 Drain Insert		Autopark	Autopark

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Fenton Business Center	Miscelleneous	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Business District
Fire Station #6	Municipal	Low	Completed	MP-52 Drain Insert		San Miguel Ranch	Fire Station 6
Fire Station #7	Municipal	Low	Completed	MP-51 Vortex Separator	Other	Otay Ranch V6	Otay Ranch V6
Fire Station #8	Municipal	Low	Completed	MP-51 Vortex Separator		Eastlake Woods	Fire Station 8
First Avenue-Naples to Palomar CIP	Municipal	Medium	Completed	MP-52 Drain Insert			
High Tech Business Center @ Eastlake	Industrial	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake	Eastlake Business Center
High Tech High Chula Vista Campus	Miscelleneous	Medium	Completed	TC-30 Vegetated Swale TC-11 Infiltration Basin	MP-52 Drain Inlet	Otay Ranch Village 11	High Tech High Univ. Park
Home Depot Eastlake	Commercial	Low	Completed	MP-52 Drain Insert	TC-50 Water Quality Inlet	Eastlake	Eastlake Terraces
Horizon Neighborhood Park	Municipal	Medium	Completed	MP-52 Drain Insert		Sunbow	Horizon Neighborhood
J&W Redwood	Commercial	Medium	Completed	TC-11 Infiltration Basin		Main Street	Main Street
LA Fitness Eastlake Village Center	Miscelleneous	Low	Completed	MP-51 Vortex Separator	MP-52 Drain Inlet	Eastlake	Eastlake Terraces North
Lady of Guadalupe Church	Miscellaneous	Medium	Completed	TC-30 Vegetated Swale		Fresno Avenue	Fresno Avenue
Los Vecinos Apartments	Residential	Low	Completed	MP-50 Wet Vault Other	Other		
Mater Dei High School	Miscellaneous	Low	Completed	MP-50 Wet Vault		Otay Ranch Village 6	Mater Dei High School

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
McCune Chrysler Dodge	Commercial	High	Completed	MP-52 Drain Insert		Autopark	Autopark
Montevalle Park	Municipal	Medium	Completed	MP-52 Drain Insert		Eastlake Woods	Montevalle Park
Mountain Hawk Park	Municipal	Medium	Completed	MP-52 Drain Insert		Eastlake Vistas	Mountain Hawk Park
New Hope Church	Miscelleneous	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Eastlake Vistas	New Hope Community
Otay Lakes Medical Office	Miscelleneous	High	Completed	MP-52 Drain Insert		Eastlake	Eastlake Business District
Otay Ranch Town Center	Miscelleneous	Low	Completed	MP-51 Vortex Separator		Otay Ranch	Otay Ranch Village 11
Otay Ranch V1 West -- R59C & R60	Residential	Medium	Completed	MP-52 Drain Insert		Otay Ranch V1 West	R59C & R60
Otay Ranch V-11 R-1/Wisteria	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-1/Wisteria
Otay Ranch V-11 R-10/Cedar Rose II	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-10/Cedar Rose II
Otay Ranch V-11 R-2/Twilight I	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-2/Twilight I
Otay Ranch V-11 R-20/Cottage Lane	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-20/Cottage Lane
Otay Ranch V-11 R-21/Cottage Lane II	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-21/Cottage Lane II
Otay Ranch V-11 R-22/Cottage Lane III	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-22/Cottage Lane III
Otay Ranch V-11 R-23 / Azalea	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-11	R-23/Azatea

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Otay Ranch V-11 R-24A/Agave	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-24A/Agave
Otay Ranch V-11 R-25/Aristata	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-25/Aristata
Otay Ranch V-11 R-3/Twilight II	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-3/Twilight II
Otay Ranch V-11 R-4/Magnolia I	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-4/Magnolia I
Otay Ranch V-11 R-5/Magnolia II	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-5/Magnolia II
Otay Ranch V-11 R-6/Magnolia III	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-6/Magnolia III
Otay Ranch V-11 R-7/Cedar Rose I	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-7/Cedar Rose I
Otay Ranch V-11 R-8/Picket Fence	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-8/Picket Fence
Otay Ranch V-11 R-9/Lantana	Residential	Low	Completed		TC-22 Extended Det Basin	Otay Ranch V-11	R-9/Lantana
Otay Ranch V-5 R-30A, Goldrush	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch Village 5	R-30A/Goldrush
Otay Ranch V-5 R-30B, Stetson	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-5	R-30B2/Stetson
Otay Ranch V-5 R-30B, Winchester	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-5	R-30B/Winchester
Otay Ranch V-5 R-30B,Silver Sage	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-5	R-30B3/Silver Sage
Otay Ranch V-5 Villagio	Commercial/Mixed	Low	Completed	MP-51 Vortex Separator		Otay Ranch Village 5	Villagio

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Otay Ranch V-6 R-1 Mandalay	Residential	Medium	Completed	MP-52 Drain Insert		Otay Ranch V-6 McMillin	R-1/Mandalay
Otay Ranch V-6 R-2A Cambria	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-6	R-2A/Cambria
Otay Ranch V-6 R-2B Willowbrook	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch-V-6 ORC	R-2B/Willowbrook
Otay Ranch V-6 R-3 Sienna	Residential	Medium	Completed	MP-52 Drain Insert		Otay Ranch V-6 McMillin	R-3/Sienna
Otay Ranch V-6 R-4 Auburn Lane	Residential	Medium	Completed	MP-52 Drain Insert		Otay Ranch V-6 McMillin	R-4/Auburn Lane
Otay Ranch V-6 R-5A Madera	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch-V-6 ORC	R-5A/Madera
Otay Ranch V-6 R-6 Jasmine	Residential	Medium	Completed	MP-52 Drain Insert		Otay Ranch V-6 McMillin	R-6/Jasmine
Otay Ranch V-6 R-7 Villas Belleme	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-6 ORC	R-7/Belleme Chateau
Otay Ranch V-6 R-7B Chateau Belleme	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch-V-6 ORC	R-7A/Belleme Villas
Otay Ranch V-6 R-8/Mir Soliel	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-6 ORC	R-8/Mir Soliel
Otay Ranch V-6 R-9A Rosewood	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch V-6 ORC	R-9A/Rosewood
Otay Ranch V-6, Windchime R9b	Residential	Low	Completed	MP-51 Vortex Separator		Otay Ranch Village 6	Windchime
Otay Ranch Village 11 Rec Center	Residential	Low	Completed	TC-30 Vegetated Swale		Otay Ranch Village 11	Otay Ranch Village 11
Palomar Street Improvements Trenton	Municipal	Low	Completed	MP-51 Vortex Separator		Trenton Avenue	

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Pharus Plaza	Miscelleneous	Low	Completed	MP-51 Vortex Separator		Broadway	Broadway
Rancho Rios Condo	Condo Conversion	Medium	Completed	MP-52 Drain Insert		Rancho Drive	Rancho Drive
Rancho Vista Apartments	Residential	Low	Completed	MP-51 Vortex Separator		Eastlake	Eastlake Summit
Retail Center	Miscelleneous	Low	Completed	TC-50 Water Qaulity Inlet		Third Ave	Third Ave
Road One of San Diego	Commercial	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Maxwell Road	Maxwell Road
Rolling Hills Ranch Clearstory	Residential	Low	Completed		TC-22 Extended Det Basin	Rolling Hills Ranch	Clearstory
Rolling Hills Ranch Fairhaven II	Residential	Medium	Completed	MP-52 Drain Insert		Rolling Hills Ranch	Fairhaven II
Rolling Hills Ranch Mar Brisa	Condo	Medium	Completed	MP-52 Drain Insert		Rolling Hills Ranch	Mar Brisas
Rolling Hills Ranch Sedona	Condo	Medium	Completed	MP-52 Drain Insert		Rolling Hills Ranch	Sedona
Salt Creek Park	Municipal	Low	Completed	MP-51 Vortex Separator		Eastlake Vistas	Salt Creek Park
San Miguel Ranch Belleza - Neighborhood	Residential	Low	Completed	MP-51 Vortex Separator		San Miguel Ranch	Belleza
San Miguel Ranch Mantilla- Lot	Residential	Medium	Completed	MP-52 Drain Insert		San Miguel Ranch	Mantilla- Neighborhood C
San Miguel Ranch Ventana I - Planning	Residential	Medium	Completed	MP-52 Drain Insert		San Miguel Ranch	Ventana I
San Miguel Ranch Ventana II - Planning	Residential	Medium	Completed	MP-52 Drain Insert		San Miguel Ranch	Ventana II

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Savon-CVS Pharmacy @ Fourth Av.	Miscelleneous	High	Completed	MP-52 Drain Insert		Fourth Ave	Fourth Ave
Seniors at Broadway	Residential	Medium	Completed	MP-52 Drain Insert		Broadway	Broadway
Sharp Hospital Parking Lot	Commercial	Low	Completed	TC-32 Bioretention		Sunbow	Sunbow
Southbay Motorsports	Commercial	High	Completed	MP-52 Drain Insert		Autopark	Autopark
Sunset View Park	Municipal	High	Completed		MP-52 Drain Inlet		Sunset View Park
Telegraph Canyon CIP	Municipal/CIP	Medium	Completed	MP-52 Drain Insert		Telegraph Canyon Rd	Telegraph Canyon Rd
Terra Nova Service Plaza	Commercial	Medium	Completed	TC-40 Media Filter		Terra Nova	Terra Nova Service Plaza
The Collections @ Eastlake	Commercial	Low	Completed	MP-52 Drain Insert		Eastlake	Eastlake Business District
The Marketplace @ Windingwalk-V11	Commercial	Medium	Completed	MP-52 Drain Insert	TC-22 Extended Det Basin	Otay Ranch Village 11	The Marketplace
The Shops at San Miguel Ranch	Miscelleneous	Low	Completed	MP-51 Vortex Separator		San Miguel Ranch	The Shops at San Miguel Ranch
The Summit Andora	Residential	Medium	Completed	MP-52 Drain Insert		The Summit @ Eastlake	Andora
The Summit Capria	Residential	Medium	Completed	MP-52 Drain Insert		The Summit @ Eastlake	Capria
The Summit Cortina	Residential	Medium	Completed	MP-52 Drain Insert		The Summit @ Eastlake	Cortina
The Summit Firenze	Residential	Medium	Completed	MP-52 Drain Insert		The Summit @ Eastlake	Firenze

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Tobias Drive	Municipal/CIP	Medium	Completed	MP-52 Drain Insert		Tobias	Tobias
Venture Commerce Center	Miscelleneous	Low	Completed	MP-51 Vortex Separator		Eastlake	Eastlake Business District
Veterans Park	Municipal	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Sunbow	Veteran's Park
Village Walk - Medical Arts Center	Miscelleneous	Medium	Completed	MP-52 Drain Insert	TC-30 Vegetated Swale	Eastlake	Eastlake Village Walk
Walgreens @ Third Avenue	Miscelleneous	High	Completed	MP-52 Drain Insert		Third Ave	Third Ave
Walmart at 5305 Broadway	Commercial	Low	Completed	MP-51 Vortex Separator	MP-52 Drain Inlet	Broadway	Broadway
Wells Fargo Bank	Commercial	Low	Completed			Broadway	Broadway
West Air Gas	Industrial	Low	Completed	TC-30 Vegetated Swale	MP-52 Drain Inlet	Frontage	Frontage
Windingwalk Park Otay Ranch V-11	Municipal	Low	Completed	TC-30 Vegetated Swale		Otay Ranch Village-11	Windingwalk Neighborhood
Sub Total: 146							
			Under Construction				
Bella Lago	Residential	High	Under Construction	TC-40 Media Filter	TC-22 Extended Det Basin	Rolling Hills Ranch	Bella Lago
Bonita Arco	Commercial	High	Under Construction			Bonita Rd	Bonita Rd
Chula Vista Elementary School	Miscelleneous	Low	Under Construction			Maxwell Road	
Concordia Church and School	Miscelleneous	Low	Under Construction			Otay Ranch	Village 11

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Eastlake Woods WR-1 / The Gates	Residential	Low	Under Construction	MP-51 Vortex Separator		Eastlake Woods	WR-1/The Gates
Glenhaven Way CIP		Low	Under Construction	TC-32 Bioretention			
Glenhaven Way Improvements CIP	Municipal	High	Under Construction	TC-32 Bioretention			Glenhaven Way
Kingdom Hall - Rolling Hills Ranch	Miscelleneous	Low	Under Construction			Eastlake Woods	Eastlake Woods
La Roca Comunidad Christiana Church	Miscelleneous	Low	Under Construction	TC-32 Bioretention	Other	Rancho Del Rey	Rancho Del Rey
Otay Ranch V-11 R-24B/Saguara	Residential	Low	Under Construction		TC-22 Extended Det Basin	Otay Ranch V-11	R-24B/Saguara
Otay Ranch V-11 The Landing Apartments	Residential	Low	Under Construction			Otay Ranch Village 11	The Landing Apartments
Otay Ranch V-6 MU1 Marquis	Residential	Low	Under Construction	TC-30 Vegetated Swale	MP-51 Vortex Separator	Otay Ranch Village 6	MU1 -Marquis
Otay Ranch V-6 R-10 Treviana	Residential	Medium	Under Construction	MP-52 Drain Insert		Otay Ranch V-6	R-10/Treviana
Otay Ranch V-6 R-9B Monet	Residential	Low	Under Construction	MP-51 Vortex Separator		Otay Ranch V-6 ORC	R-9B/Monet
Otay Ranch Village 7/Cypress Lane R2d	Residential		Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Cypress Lane
Otay Ranch Village 7/Indigo R1a	Residential	Medium	Under Construction	MP-52 Drain Insert		Otay Ranch Village 7	Indigo
Otay Ranch Village 7/Jacaranda R1b	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Jacaranda
Otay Ranch Village 7/Monte Sereno R2c	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Monte Sereno

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Otay Ranch Village 7/Mosaic R7	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Mosaic
Otay Ranch Village 7/Santa Barbara R2a	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Santa Barbara
Otay Ranch Village 7/Tapestry R6a	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Tapestry
Otay Ranch Village 7/Terracotta R5	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Terracotta
Otay Ranch Village 7/Terraza R2b	Residential	Low	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	Otay Ranch Village 7	Terraza
Rolling Hills Ranch Castillian	Residential	Low	Under Construction		TC-22 Extended Det Basin	Rolling Hills Ranch	Castillian
Rolling Hills Ranch Provence	Residential	Low	Under Construction		TC-22 Extended Det Basin	Rolling Hills Ranch	Provence
Rolling Hills Ranch Quintessa	Residential	Low	Under Construction		TC-22 Extended Det Basin	Rolling Hills Ranch	Quintessa
Saint Rose of Lima Catholic Church	Miscelleneous	Low	Under Construction				
San Miguel Ranch Bontera Neighborhood	Residential	High	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	San Miguel Ranch	San Miguel Ranch
San Miguel Ranch Community Park	Municipal	Low	Under Construction	TC-32 Bioretention	TC-30 Vegetated Swale	San Miguel Ranch	San Miguel Ranch
San Miguel Ranch Estrella Neighborhood	Residential	High	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	San Miguel Ranch	San Miguel Ranch
San Miguel Ranch-Montecito Ridge	Residential	High	Under Construction	MP-51 Vortex Separator	TC-22 Extended Det Basin	San Miguel Ranch	Montecito Ridge
Spring Hills Senior Care	Residential	Low	Under Construction			San Miguel Ranch	San Miguel Ranch

Project Name	Category	Inspection Priority	Status	Types of BMP		Subdivision	Neighborhood
				BMP Type- Group I	BMP Type - Group II		
Villas at H Street	Residential	Medium	Under Construction	MP-52 Drain Insert			
Walnut Drive	Miscellaneous	Low	Under Construction	TC-30 Vegetated Swale		Walnut Drive	Walnut Drive

Sub Total: **34**

Total Projects:: **180**

Attachment F
FY 2008-2009 Inspection Action Summary

Treatment Control BMP Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection acitivities.

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
22-Sep-08	Ada Terraces	MP-52 Drain Insert	Condo	Medium	Ada Street	Ada Street	Paul Miller Company
	Comments/Findings: On 9/22/2008, send notification letter regarding inspection and maintenance of storm water treatment facilities.						
29-Oct-08	New Hope Church	TC-30 Vegetated Swale MP-52 Drain Inlet	Miscelleneous	Low	Eastlake Vistas	New Hope Community	New Hope Community Church
	Comments/Findings: Conducted inspection on the installation of the required vegetated swales. Swale guard pre-filters are installed per plan.						
13-May-09	C.V. Commerce Center	MP-51 Vortex Separator	Miscelleneous	Medium	Main Street	Main Street	MarWest Real Estate
	Comments/Findings: On 5/13/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .The hydrodynamics separator unit (CDS) were observed to have trash & debris in the containment area.. Provide proof of the cleaning and maintenance of the unit by 6/12/2009. **see attachment**						
25-May-09	Eastlake Terrace-Landswap	MP-52 Drain Insert	Miscelleneous	High	Eastlake Terraces	Eastlake Landswap	Gatlin Development
	Comments/Findings: On 05/25/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/12/2009. **see attachment**						
26-May-09	The Collections @ Eastlake	MP-52 Drain Insert	Commercial	Low	Eastlake	Eastlake Business District	Mar West Real Estate
	Comments/Findings: On 5/26/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. Drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**						

Inspection Date	Project Name	Type of BMP Installed		Category	Priority	Development	Neighborhood	Responsible Party
26-May-09	Eastlake Business Center-Hale Pl	MP-52 Drain Insert		Miscelleneous	High	Eastlake	Eastlake Business District	Tycoon Management
	Comments/Findings: On 5/26/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/12/2009. **see attachment**							
26-May-09	Eastlake Village East - Kohls	MP-52 Drain Insert		Miscelleneous	High	Eastlake	Eastlake Village Center East	DENTCO Exterior Services Mgmt
	Comments/Findings: On 5/26/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .Drain filter inserts were observed to have accumulation of trash and debris in the containment area. The loading dock area have significant amount of trash and debris.Provide proof of the cleaning and maintenance of the filters and loading area by 6/12/2009. **see attachment**							
26-May-09	Otay Lakes Medical Office	MP-52 Drain Insert		Miscelleneous	High	Eastlake	Eastlake Business District	Otay Lakes Med. Condo Assoc.
	Comments/Findings: On 5/26/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. . Storm drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/12/2009. **see attachment**							
26-May-09	Fenton Business Center	MP-52 Drain Insert		Miscelleneous	High	Eastlake	Eastlake Business District	Jason Chases
	Comments/Findings: On 5/26/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All storm drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/12/2009 **see attachment**							
27-May-09	Eastlake Commerce- Business Ce	MP-52 Drain Insert		Miscelleneous	High	Eastlake	Eastlake Business District	IRE Development
	Comments/Findings: On 5/26/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All units were observed to have minor accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**							
27-May-09	Eastlake Parkway Professional Pl	MP-52 Drain Insert	TC-30 Vegetated Swale	Miscelleneous	High	Eastlake	Eastlake Business District	IRE Development
	Comments/Findings: On 5/26/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All units were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**							

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
27-May-09	Eastlake Village Center East	MP-52 Drain Insert	Miscelleneous	High	Eastlake	Eastlake Village Center East	Gatlin Development Co.
	Comments/Findings: On 5/26/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All units were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**						
27-May-09	C.V. Corporate Center	MP-52 Drain Insert	Miscelleneous	High	Main Street	Main Street	Mar West Real Estate
	Comments/Findings: On 5/27/2009 conducted verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filter inserts were observed to have trash and debris in containment areas. **see attachment** Please provide proof of cleaning and maintenance records by 6/12/2009.						
28-May-09	Chevron Station-Olympic Parkway	MP-52 Drain Insert	Commercial	Low	Eastlake	Eastlake Terraces	Chevron Station Inc.
	Comments/Findings: On 5/26/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All units were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**						
29-May-09	Enterprise Administration Bldg.	MP-52 Drain Insert	Miscelleneous	High	Autopark	Autopark	Floit Properties
	Comments/Findings: On 5/28/2009 conducted annual inspection and verification on the cleaning and maintenance of the Post Construction BMPs. Storm drain filter inserts were observed to have minor accumulation of trash and debris. Please correct all BMP items listed. Send notification letter to Floit properties.**see attachment**						
29-May-09	Southbay Motorsports	MP-52 Drain Insert	Commercial	High	Autopark	Autopark	SB Land, LLC
	Comments/Findings: On 5/28/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All units were observed to have trash, sediment, and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**						
29-May-09	McCune Chrysler Dodge	MP-52 Drain Insert	Commercial	High	Autopark	Autopark	McCune Chrysler Jeep Dodge
	Comments/Findings: On 5/28/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All units were observed to have minor trash & debris in the containment area. Evidence of power washing was observed. Cease all power washing until necessary BMPs are in place. Provide proof of the cleaning and maintenance of the filters. **see attachment**						

Inspection Date	Project Name	Type of BMP Installed		Category	Priority	Development	Neighborhood	Responsible Party
29-May-09	Chula Vista Toyota-Main Street	MP-52 Drain Insert		Commercial	High	Autopark	Autopark	Chula Vista Toyota
	Comments/Findings: On 5/28/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All units were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/12/2009. **see attachment**							
29-May-09	Auto Park North	MP-52 Drain Insert		Commercial/Mixed	High	Autopark	Autopark	Chula Vista Auto Park Assoc.
	Comments/Findings: On 5/28/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All units were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/19/09. **see attachment**							
1-Jun-09	2380 Main Street	MP-52 Drain Insert		Commercial	Low	Main Street	Main Street	Chula Vista Main, LLC**
	Comments/Findings: On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All storm drain filters were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/26/2009. **see attachment**							
1-Jun-09	Seniors at Broadway	MP-52 Drain Insert		Residential	Medium	Broadway	Broadway	MAAC Project Community Develop
	Comments/Findings: On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .Filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/26/2009. **see attachment**							
1-Jun-09	805 / Orange Interchange	MP-52 Drain Insert		Municipal/CIP	Medium	805 & Orange Ave	805 & Orange Ave	City Of Chula Vista
	Comments/Findings: Inspections and maintenance is conducted by Public Works - Storm Drain Section.							
1-Jun-09	Eastlake Parkway Trinidad Cove t	MP-52 Drain Insert	MP-51 Vortex Separator	Commercial/Mixed	Medium	Eastlake	Eastlake Landswap	City of Chula Vista
	Comments/Findings: Work Order created for action.							
1-Jun-09	Lady of Guadalupe Church	TC-30 Vegetated Swale		Miscellaneous	Medium	Fresno Avenue	Fresno Avenue	Our Lady of Guadalupe
	Comments/Findings: Conducted visual inspection of vegetated swale and observed BMPs to be properly maintained.							

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
2-Jun-09	Chula Vista Crossings	TC-30 Vegetated Swale MP-52 Drain Inlet	Miscelleneous	Medium	The Crossings	The Crossings	NewMark Merrill
	Comments/Findings: On 6/02/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All storm drain filters were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/26/2009. **see attachment**						
2-Jun-09	Savon-CVS Pharmacy @ Fourth A	MP-52 Drain Insert	Miscelleneous	High	Fourth Ave	Fourth Ave	CAM Commercial Properties
	Comments/Findings: On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All strom drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**						
2-Jun-09	Walgreens @ Third Avenue	MP-52 Drain Insert	Miscelleneous	High	Third Ave	Third Ave	Walgreeens 02623
	Comments/Findings: On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All storm drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/26/2009. **see attachment**						
2-Jun-09	Aqua Clean	MP-52 Drain Insert	Commercial	High	Otay Lakes	Otay Lakes	Aqua Clean C/O Lou Brito
	Comments/Findings: On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All storm drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters 6/26/2009. **see attachment**						
2-Jun-09	Eastlake Design District	TC-30 Vegetated Swale MP-52 Drain Inlet	Miscelleneous	Medium	Eastlake	Eastlake Business District	IRE Development
	Comments/Findings: On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All storm drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. By 6/26/2009. **see attachment**						
2-Jun-09	Rolling Hills Ranch Mar Brisa	MP-52 Drain Insert	Condo	Medium	Rolling Hills Ranch	Mar Brisas	Mar Brisa-C/O Prescott Co.
	Comments/Findings: On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/26/2009. **see attachment**						

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
2-Jun-09	Rolling Hills Ranch Sedona	MP-52 Drain Insert	Condo	Medium	Rolling Hills Ranch	Sedona	Prescott Companies
	Comments/Findings:	On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All storm drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 6/26/2009. **see attachment**					
2-Jun-09	San Miguel Ranch Mantilla- Lot 5-	MP-52 Drain Insert	Residential	Medium	San Miguel Ranch	Mantilla-Neighborhood C	San Miguel Ranch HOA
	Comments/Findings:	On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .Filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**					
2-Jun-09	The Summit Andora	MP-52 Drain Insert	Residential	Medium	The Summit @ Eastlake	Andora	NN Jaeske
	Comments/Findings:	On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters by 7/30/2009. **see attachment**					
2-Jun-09	The Summit Firenze	MP-52 Drain Insert	Residential	Medium	The Summit @ Eastlake	Firenze	NN Jaeske
	Comments/Findings:	On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**					
2-Jun-09	The Summit Cortina	MP-52 Drain Insert	Residential	Medium	The Summit @ Eastlake	Cortina	NN Jaeske
	Comments/Findings:	On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**					
2-Jun-09	The Summit Capria	MP-52 Drain Insert	Residential	Medium	The Summit @ Eastlake	Capria	NN Jaeske
	Comments/Findings:	On 6/2/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All drain filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
3-Jun-09	San Miguel Ranch-Montecito Ridg	MP-51 Vortex Separator TC-22 Extended Det Basin	Residential	High	San Miguel Ranch	Montecito Ridge	Trimark Pacific Homes
	Comments/Findings:	City staff conducted follow up/annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .There were broken gravel bags, filter fabric, and vegetation from eight inlets along Proctor Valley Road.. Provide proof of the cleaning and maintenance of the filters by 6/5/2009. **see attachment for details**					
3-Jun-09	San Miguel Ranch Bontera Neight	MP-51 Vortex Separator TC-22 Extended Det Basin	Residential	High	San Miguel Ranch	San Miguel Ranch	Trimark Pacific
	Comments/Findings:	City staff conducted follow up/annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .There were broken gravel bags, filter fabric, and vegetation from eight inlets along Proctor Valley Road.. Provide proof of the cleaning and maintenance of the filters by 6/5/2009. **see attachment for details**					
3-Jun-09	San Miguel Ranch Estrella Neighb	MP-51 Vortex Separator TC-22 Extended Det Basin	Residential	High	San Miguel Ranch	San Miguel Ranch	Trimark Pacific
	Comments/Findings:	City staff conducted follow up/annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .There were broken gravel bags, filter fabric, and vegetation from eight inlets along Proctor Valley Road.. Provide proof of the cleaning and maintenance of the filters by 6/5/2009. **see attachment for details**					
3-Jun-09	Bella Lago	TC-40 Media Filter TC-22 Extended Det Basin	Residential	High	Rolling Hills Ranch	Bella Lago	KHovnanian
	Comments/Findings:	On 6/4/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. .All units were observed to have minor sediment loading in the vault floors. Provide proof of the cleaning and maintenance of filters box # 3,4, 5, 6, & 7 by 6/26/2009. **see attachment**					
8-Jun-09	Village Walk - Medical Arts Center	MP-52 Drain Insert TC-30 Vegetated Swale	Miscelleneous	Medium	Eastlake	Eastlake Village Walk	Heritage Real Estate Advisors
	Comments/Findings:	Conducted joint on-site inspection with Downstream Services.					
10-Jun-09	Eastlake Terrace-Walmart	MP-52 Drain Insert	Commercial	High	Eastlake	Eastlake Terraces	WalMart
	Comments/Findings:	Conducted visual inspection with Front Range Environmental.					
12-Jun-09	Windingwalk Park Otay Ranch V-1	TC-30 Vegetated Swale	Municipal	Low	Otay Ranch Village-11	Windingwalk Neighborhood	City of Chula Vista
	Comments/Findings:	On 6/12/2009 conducted annual inspection of the site. BMP(vegetates swale) is in properly maintained. . **see attachment** No further action required.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
12-Jun-09	Veterans Park	TC-30 Vegetated Swale MP-52 Drain Inlet	Municipal	Low	Sunbow	Veteran's Park	City of Chula Vista
	Comments/Findings:	On 6/12/2009 conducted annual inspection of the site. BMPs are properly maintained (vegetated swale and filter inserts). **see attachment** No further action required.					
12-Jun-09	The Marketplace @ Windingwalk-'	MP-52 Drain Insert TC-22 Extended Det Basin	Commercial	Medium	Otay Ranch Village 11	The Marketplace	Shea Properties
	Comments/Findings:	On 6/12/2009 conducted annual inspection and verification on the cleaning and maintenance of the post construction BMPs. Filter inserts were observed to have accumulation of trash and debris in the containment area. Provide proof of the cleaning and maintenance of the filters. **see attachment**					
12-Jun-09	Bonita Library	MP-52 Drain Insert TC-30 Vegetated Swale	Municipal	Medium	Bonita	Bonita	Bonita-Sunnyside Branch Librar
	Comments/Findings:	Conducted visual inspection. Emailed John Cole SD County to conduct maintenance. Pending - Budget approval.					
29-Jun-09	Ada Terraces	MP-52 Drain Insert	Condo	Medium	Ada Street	Ada Street	Paul Miller Company
	Comments/Findings:	Met with Paul Miller Company on-site. HOA contracted Bio Clean Services to conduct all maintenance. Verification received.					
29-Jun-09	Eastlake Woods WR-7 / Sonoma	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	WR-7/Sonoma	City of Chula Vista
	Comments/Findings:	Inspection conducted by Public Works - Storm Drain Section.					
30-Jun-09	First Avenue-Naples to Palomar C	MP-52 Drain Insert	Residential	Medium			City of Chula Vista
	Comments/Findings:	Project recently was completed and inserts were inspected by Public Works - Storm Drain Section.					
30-Jun-09	Horizon Neighborhood Park	MP-52 Drain Insert	Municipal	High	Sunbow	Horizon Neighborhood	City of Chula Vista
	Comments/Findings:	Filter insert is inspected by Public Works -Storm Drain Section.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
30-Jun-09	Montevalle Park	MP-52 Drain Insert	Municipal	Medium	Eastlake Woods	Montevalle Park	City of Chula Vista
	Comments/Findings:	Inspection conducted by Public Works - Storm Drain Section.					
30-Jun-09	Mountain Hawk Park	MP-52 Drain Insert	Construction	Medium	Eastlake Vistas	Mountain Hawk Park	City of Chula Vista
	Comments/Findings:	Inspection and maintenance is conducted by Parks and Public Works - Storm Drain Section.					
30-Jun-09	Otay Ranch V-6 R-1 Mandalay	MP-52 Drain Insert	Residential	Medium	Otay Ranch V-6 McMillin	R-1/Mandalay	City of Chula Vista
	Comments/Findings:	Inspections conducted by Public Works Storm Drain Section.					
30-Jun-09	Otay Ranch V-6 R-3 Sienna	MP-52 Drain Insert	Residential	Medium	Otay Ranch V-6 McMillin	R-3/Sienna	City of Chula Vista
	Comments/Findings:	Inspection conducted by Public Works Storm Drain Section.					
30-Jun-09	Otay Ranch V-6 R-4 Auburn Lane	MP-52 Drain Insert	Residential	Medium	Otay Ranch V-6 McMillin	R-4/Auburn Lane	City of Chula Vista
	Comments/Findings:	Inspection conducted by Public Works Storm Drain Section.					
30-Jun-09	Otay Ranch V-6 R-6 Jasmine	MP-52 Drain Insert	Residential	Medium	Otay Ranch V-6 McMillin	R-6/Jasmine	City of Chula Vista
	Comments/Findings:	Inspection conducted by Public Works Storm Drain Section.					
30-Jun-09	Otay Ranch Village 7/Indigo R1a	MP-52 Drain Insert	Residential	Medium	Otay Ranch Village 7	Indigo	McMillin
	Comments/Findings:	Conducted joint inspection with McMillin staff. Site is partially homeowner occupied and requires inspection and maintenance.					
30-Jun-09	Rolling Hills Ranch Fairhaven II	MP-52 Drain Insert	Residential	Medium	Rolling Hills Ranch	Fairhaven II	City of Chula Vista
	Comments/Findings:	Inspection conducted by Public Works Storm Drain Section.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
30-Jun-09	Telegraph Canyon CIP	MP-52 Drain Insert	Municipal/CIP	Medium	Telegraph Canyon Rd	Telegraph Canyon Rd	City of Chula Vista
	Comments/Findings: Inspection conducted by Public Works Storm Drain Section.						
30-Jun-09	Tobias Drive	MP-52 Drain Insert	Municipal/CIP	Medium	Tobias	Tobias	City of Chula Vista
	Comments/Findings: Inspection conducted by Public Works Storm Drain Section.						
30-Jun-09	Eastlake Vistas VR-8/Monticello	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	VR-8/Monticello	City of Chula Vista
	Comments/Findings: Inspections conducted by Public Works - Storm Drain Section.						
30-Jun-09	Dixon Drive CIP	MP-52 Drain Insert	Municipal/CIP	Medium	Dixon	Dixon	City of Chula Vista
	Comments/Findings: Inspection conducted by Public Works - Storm Drain Section.						
30-Jun-09	Eastlake Woods WR-6 / Meredian	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	WR-6/Meredian	City of Chula Vista
	Comments/Findings: Inspection conducted by Public Works - Storm Drain Section.						
30-Jun-09	Eastlake Woods WR-7 / Sonoma	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	WR-7/Sonoma	City of Chula Vista
	Comments/Findings: Inspection conducted by Public Works - Storm Drain Section.						
30-Jun-09	Rancho Rios Condo	MP-52 Drain Insert	Condo Conversion	Medium	Rancho Drive	Rancho Drive	Rancho Coastal, LLC; C/O**
	Comments/Findings: Conducted joint inspection with HOA president and management company staff. Inserts were cleaned and maintained.						
30-Jun-09	ADA Townhomes	TC-30 Vegetated Swale	Condo	Medium	Ada Street	Ada Street	Paul Miller Company
	Comments/Findings: Conducted on-site inspection with Paul Miller Company. Bio-Clean contracted to conduct maintenance.						

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
30-Jun-09	Ada Villas 1	MP-52 Drain Insert	Condo	Medium	Ada Street	Ada Street	Paul Miller Company
	Comments/Findings:	Conducted on-site inspection with Paul Miller Company. Bio-Clean contracted to conduct maintenance.					
30-Jun-09	Los Vecinos Apartments	MP-50 Wet Vault Other	Residential	Low			Los Vecinos, LP
	Comments/Findings:	Conducted final installation inspection for approval to release grading bonds. Project to begin routine inspection program for FY09-10.					
30-Jun-09	Otay Ranch V-11 R-1/Wisteria		Residential	Low	Otay Ranch V-11	R-1/Wisteria	Brookfield Homes
	Comments/Findings:	TC-22 Extended Det Basin See file for work plan of water quality basins.					
30-Jun-09	Otay Ranch V-11 R-10/Cedar Ros		Residential	Low	Otay Ranch V-11	R-10/Cedar Rose II	Brookfield Homes
	Comments/Findings:	TC-22 Extended Det Basin See file for work plan on the maintenance of the water quality basins.					
30-Jun-09	Otay Ranch V-11 R-2/Twilight I		Residential	Low	Otay Ranch V-11	R-2/Twilight I	Brookfield Homes
	Comments/Findings:	TC-22 Extended Det Basin See file for work plan for maintenance of water quality basins.					
30-Jun-09	Otay Ranch V-11 R-20/Cottage La		Residential	Low	Otay Ranch V-11	R-20/Cottage Lane	Brookfield Homes
	Comments/Findings:	TC-22 Extended Det Basin See file for work plan of maintenance of water quality basin.					
30-Jun-09	Otay Ranch V-11 R-22/Cottage La		Residential	Low	Otay Ranch V-11	R-22/Cottage Lane III	Brookfield Homes
	Comments/Findings:	TC-22 Extended Det Basin See file work plan on maintenance of water quality basins.					
30-Jun-09	Otay Ranch V-11 R-24A/Agave		Residential	Low	Otay Ranch V-11	R-24A/Agave	Brookfield Homes
	Comments/Findings:	TC-22 Extended Det Basin See file work plan on maintenance of water quality basins.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
30-Jun-09	Otay Ranch V-11 R-24B/Saguara	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	R-24B/Saguara	Brookfield Homes
	Comments/Findings:	See file work plan on maintenance of water quality basins.					
30-Jun-09	Otay Ranch V-11 R-25/Aristata	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	R-25/Aristata	Brookfield Homes
	Comments/Findings:	See file work plan on maintenance of water quality basins.					
30-Jun-09	Otay Ranch V-11 R-3/Twilight II	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	R-3/Twilight II	Brookfield Homes
	Comments/Findings:	See file work plan on maintenance of water quality basins.					
30-Jun-09	Otay Ranch V-11 R-4/Magnolia I	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	R-4/Magnolia I	Brookfield Homes
	Comments/Findings:	See file work plan on maintenance of water quality basins.					
30-Jun-09	Otay Ranch V-11 R-5/Magnolia II	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	R-5/Magnolia II	Brookfield Homes
	Comments/Findings:	See file work plan on maintenance of water quality basins.					
30-Jun-09	Otay Ranch V-11 R-6/Magnolia III	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	R-6/Magnolia III	Brookfield Homes
	Comments/Findings:	See file work plan on maintenance of water quality basins.					
30-Jun-09	Otay Ranch V-11 R-7/Cedar Rose	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	R-7/Cedar Rose I	Brookfield Homes
	Comments/Findings:	See file work plan on maintenance of water quality basins.					
30-Jun-09	Otay Ranch V-11 R-8/Picket Fenc	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	R-8/Picket Fence	Brookfield Homes
	Comments/Findings:	See file work plan on maintenance of water quality basins.					

Inspection Date	Project Name	Type of BMP Installed	Category	Priority	Development	Neighborhood	Responsible Party
30-Jun-09	Otay Ranch V-11 R-9/Lantana	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	R-9/Lantana	Brookfield Homes
	Comments/Findings:	See file work plan on maintenance of water quality basins.					
30-Jun-09	Otay Ranch V-11 The Landing Ap	TC-22 Extended Det Basin	Residential	Low	Otay Ranch Village 11	The Landing Apartments	Shea Homes
	Comments/Findings:	See file work plan on maintenance of water quality basins. Site is partially occupied.					
30-Jun-09	Otay Ranch Village 11 Rec Center	TC-30 Vegetated Swale	Residential	Low	Otay Ranch Village 11	Otay Ranch Village 11	Prescott Companies
	Comments/Findings:	Verified install of vegetated swales. Project to be included in annual verification for FY09-10.					
30-Jun-09	Brisas Del Mar Village	MP-52 Drain Insert	Commercial/Mixed	Medium	Broadway	Broadway	Brisas Del Mar Apartments
	Comments/Findings:	Conducted visual inspection. Maintenance required. Contacted new Property Mgt Company to provide maintenance records.					
30-Jun-09	Venture Commerce Center	MP-51 Vortex Separator	Miscelleneous	Low	Eastlake	Eastlake Business District	Heritage Real Estate Advisors
	Comments/Findings:	During FY07-08 Inspection, one of the CDS Units was buried within the landscaping area with no internal components were installed along with the other CDS Unit. KTA General Contractors was responsible for the installation conducted the repairs to make the units operational. Project was completed October 08. Units were observed to be clean and free of debris. No action is required for FY08-09.					
30-Jun-09	725 Main Street	MP-52 Drain Insert	Miscelleneous	Medium	Main Street	Main Street	CBRE Family Trust
	Comments/Findings:	Facility is currently vacant and possibly under foreclosure. Inserts observed to be in good condition. City staff attempting to locate new responsible party.					

Total Sites Inspected: **88**

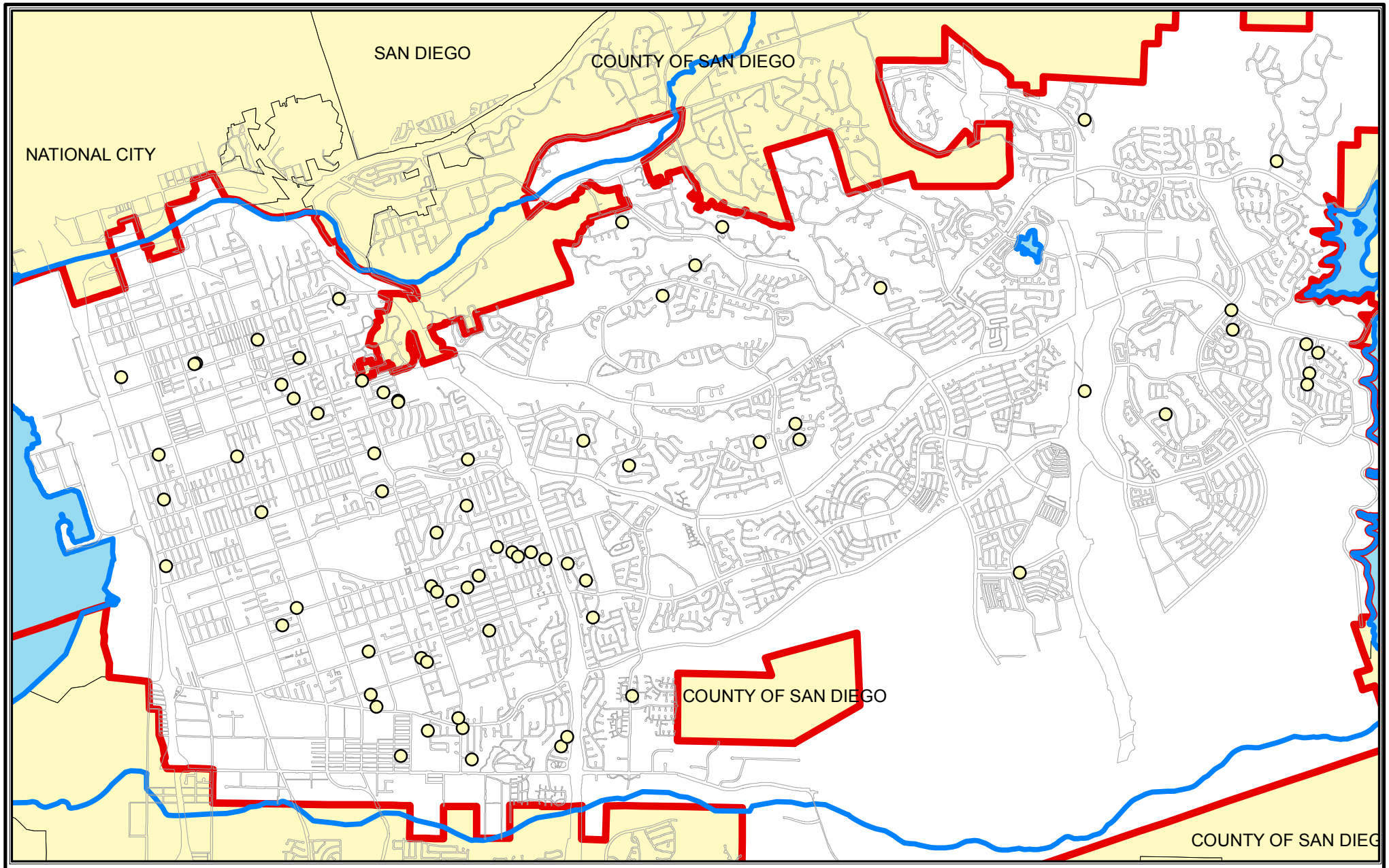

Jurisdictional Urban Runoff Management Program

Violation Locations FY 2007-2008

0 0.5 1 2 Miles

Residential

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created 9/16/2008

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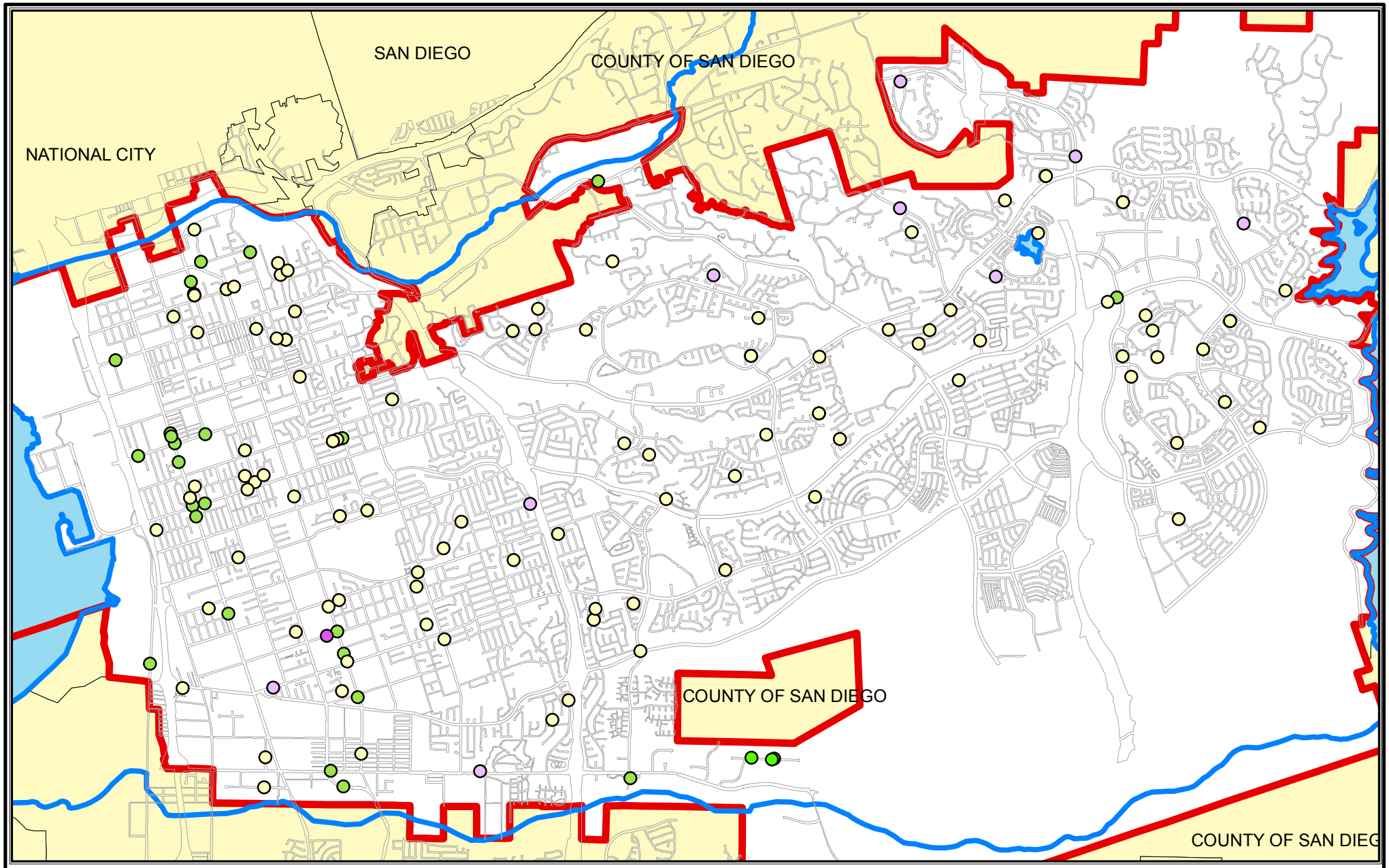

Jurisdictional Urban Runoff Management Program

Violation Locations FY 2008-2009

0 0.5 1 2 Miles

Commercial
Industrial
Residential
Construction
Municipal

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created 8/18/2009

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CITY OF
CHULA VISTA

DEPARTMENT OF PUBLIC WORKS OPERATIONS

December 10, 2009
File #0780-72-KY181

County of San Diego
Watershed Protection Program
5201 Ruffin Road, Suite P
San Diego, CA 92123

Attention: Ms. Sheri McPherson

SUBJECT: SUBMITTAL OF JURMP ANNUAL REPORT NO. 29 SECTION 7.0 FOR FISCAL YEAR 2008-2009

Enclosed please find one hard copy and three CD-ROMs of the City of Chula Vista's Jurisdictional Urban Runoff Management Program Annual Report No. 29 Section 7.0 – Illicit Discharge Detection and Elimination Component for Fiscal-Year 2008-2009 and the City of Chula Vista Dry Weather Field Screening and Analytical Monitoring Program 2009. The main report was submitted on September 28, 2009 under separate cover. Pursuant to the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 and Addendum No. 2 to Order No. R9-2007-0001, I request that the County of San Diego, as the Principal Copermittee, submits said report to the Regional Water Quality Control Board.

Should you have any questions please call me at (619) 397-6111. Thank you.

K. Aminpour

KHOSRO AMINPOUR
SENIOR CIVIL ENGINEER

Attachments

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1800 Maxwell Rd.
Chula Vista, CA 91911
Phone (619) 397-6000

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CITY OF
CHULA VISTA

DEPARTMENT OF PUBLIC WORKS OPERATIONS

December 10, 2009
File # 0780-85-KY181

San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Attention: Ms. Christina Arias, Water Resource Control Engineer

SUBJECT: JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) ANNUAL REPORT NO. 29, SECTION 7.0 AND RELATED ATTACHMENTS

Please find enclosed City of Chula Vista's JURMP Annual Report No. 29, Section 7.0 – Illicit Discharge Detection and Elimination Component and the City of Chula Vista Dry Weather Field Screening and Analytical Monitoring Report 2009 for Fiscal-Year 2008-2009. The main report was submitted to the County of San Diego for transmittal to the Regional Board on September 28, 2009 under a separate cover.

Section 7.0 of the JURMP Annual Report has been prepared in accordance with the requirements of the San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (NPDES Permit No. CAS0108758) and Addendum No. 2 to Order No. R9-2007-0001. Please replace the Table of Contents and Executive Summary of the main report with updated versions as attached to this letter.

If you have any questions regarding the submitted report, or need further information, please contact Khosro Aminpour, Senior Civil Engineer, at (619) 397-6111. Please direct any and all correspondence to:

City of Chula Vista, Department of Public Works
1800 Maxwell Road, Chula Vista, CA 91911
Attention: Khosro Aminpour, Senior Civil Engineer

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

Attachments

C: Rick Hopkins, Director of Public Works
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer

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1800 Maxwell Rd.
Chula Vista, CA 91911
Phone (619) 397-6000

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SIGNED CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

12/9/09
DATE

CITY OF CHULA VISTA
JURMP Annual Report No. 29
Fiscal Year 2008-2009
SEPTEMBER 2009

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EXECUTIVE SUMMARY

On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (Regional Board) adopted the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 (Municipal Permit). The implementation phase of the Municipal Permit commenced on January 24, 2008. Prior to that date, NPDES Municipal Permit, Order No. 2001-01 regulated discharges from urbanized areas of San Diego County. This report covers the implementation period of July 1, 2008 to June 30, 2009. Reporting requirements of this Jurisdictional Urban Runoff Management Program (JURMP) annual report is in accordance with the Municipal Permit, Order No. R9-2007-0001.

Among other requirements, the Municipal Permit requires that on September 30th of each year, all municipalities of San Diego County (including Chula Vista) as well as the San Diego Unified Port District, the San Diego County Regional Airport Authority and the County of San Diego, collectively referred to as the Copermittees, submit jurisdictional annual reports which provide documentation of the activities conducted by each Copermittee during the reporting period covering the previous fiscal year from July 1 to June 30. JURMP annual reports are to include descriptions of each Copermittees' efforts in the implementation of its JURMP document developed in compliance with Municipal Permit requirements to minimize discharges of pollutants to waters of the United States and other receiving waters.

As required under Section M.6 of the Municipal Permit, the Copermittees have developed a regional standardized format for JURMP annual reports. This report has therefore been prepared in conformance with the regional standardized format.

The present report covers subjects and areas outlined in Section J.3.a of the Municipal Permit and the Chula Vista JURMP. Although the reporting period is essentially from July 1, 2008 to June 30, 2009, some of the activities could not readily be divided to fall within the above target dates and continuation of the activities may have extended beyond this period to their completion.

This report has been prepared to provide an account of activities conducted by the City of Chula Vista (City) according to the components outlined in Section D of the Municipal Permit including:

- Development Planning
- Construction
- Existing Development (Including Municipal, Industrial and Commercial, Residential)
- Illicit Discharge Detection and Elimination (to be submitted under separate cover on or before December 15, 2009, in accordance with Addendum 2 to Order No. R9-2007-0001)
- Education
- Public Participation
- Fiscal Analysis
- Assessment of JURMP Effectiveness

It is important to note that while the City discharges, directly or indirectly, to water bodies that are listed on the Clean Water Act Section 303(d) as impaired water segments; the City does not discharge to any water bodies with a Total Maximum Daily Load (TMDL) program. Therefore, a discussion of TMDLs is not included in this report.

Section 7.0 of this report includes a summary of the City's 2009 Dry Weather Field Screening and Analytical Monitoring Program report, follow-up investigations, as well as a summary of the Illicit Discharges and Connections program for FY 2008-2009. As mandated by Addendum No. 2 to Order No. R9-2007-0001, the County of San Diego, as Principal Copermittee, will submit this section as a part of the unified JURMP to the Regional Board by December 15, 2009. As required under Section III.A.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program, the Principal Copermittee will submit to the Regional Board the Receiving Waters and Urban Runoff Monitoring Annual Report for the 2008-2009 monitoring season on January 31, 2010.

During the current reporting period, the City of Chula Vista participated in the regional Receiving Water and Urban Runoff Monitoring and Reporting Program as mandated in the Municipal Permit. The County of San Diego, as the Principal Copermittee, will submit to the Regional Board the Receiving Waters and Urban Runoff Monitoring Annual Report for the 2008-2009 rainy season on January 31, 2010.

Section 11.0 of this report includes an effectiveness assessment analysis of the development and implementation of the City's Storm Water Management Program. Such analysis provides a synopsis of activities and a critical look at the overall strengths and challenges associated with the components throughout this report.

The following sections cover City of Chula Vista's strides toward continued implementation and improvement of its JURMP and, participation in regional and watershed level activities and programs from July 1, 2008 to June 30, 2009. The City is in the continuing process of assessing the effectiveness of individual program components and has made adjustments or revisions in some areas in order to improve the overall effectiveness of the program and to assure full compliance under the Municipal Permit. The City recognizes its role as a good steward of local and regional water resources, as well as the overall health of the San Diego Bay watershed.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(f).i - Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.

Permit Section J.3.a.(3)(f).ii - Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.

Permit Section J.3.a.(3)(f).iii - Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.

Permit Section J.3.a.(3)(f).iv - A brief description of any other investigations and follow-up activities for illicit discharges and connections.

Permit Section J.3.a.(3)(f).v - The number and brief description of illicit discharges and connections identified.

Permit Section J.3.a.(3)(f).vi - The number of illicit discharges and connections eliminated.

Permit Section J.3.a.(3)(f).vii - Identification and description of all spills to the MS4 and response to the spills.

Permit Section J.3.a.(3)(f).viii - A description of activities implemented to prevent sewage and other spills from entering the MS4.

Permit Section J.3.a.(3)(f).ix - A description of the mechanism whereby notification of sewage spills from private laterals and septic system is received.

Permit Section J.3.a.(3)(f).x - Number of times the hotline was called, as compared to previous reporting period, and a summary of the calls.

Permit Section J.3.a.(3)(f).xi - A description of efforts to publicize and facilitate public reporting of illicit discharges.

Permit Section J.3.a.(3)(f).xii - The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(f).xiii - A description of notable activities conducted to manage illicit discharges and connections.

7.1 INTRODUCTION

Illicit connections and illicit discharges (IC/ID) to the MS4 can potentially impact water quality if they are not eliminated. Examples of illicit discharges include wash-water, sediment, spilled chemicals, sewage releases, and pollutants from various sources. An illicit connection is a connection that conveys an illicit discharge to the MS4 via a pipe, drain, channel, etc. The City utilizes the following mechanisms to actively seek and eliminate illicit discharges and connections to the MS4:

1. Public complaint response and investigation
2. Inspection of local businesses and municipal facilities
3. Dry weather field screening and analytical monitoring
4. Municipal MS4 and sewer inspection and maintenance activities
5. Providing educational outreach to the community and business owners

This section provides a summary of:

- Reported illegal discharges and investigation by City staff
- Spill response and reporting
- Dry Weather Field Screening and Analytical Monitoring activities conducted within the 2009 Dry Weather Monitoring Season (May 1 – September 30)
- Follow-up investigations conducted to determine the potential source(s) of pollutants that exceeded their respective action levels.

Effectiveness assessment of the Illicit Discharge Detection and Elimination Component is included in Section 11.0 of this annual report.

Inspection of municipal facilities and industrial/commercial businesses are addressed in Sections 2.0 and 5.0 of this report. Municipal MS4 and sewer maintenance activities are described below and in Section 2.0 of this report. Educational outreach is described in Section 8.0.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

The City operates a hotline (619)397-6000 for residents, employees, and the general public to report any illicit discharges to storm water conveyance systems. The hotline is publicized through several venues such as the City's website, City bus signs, and various storm water educational materials and brochures. The hotline is answered by Public Works dispatch staff, who routes the concern(s) to the appropriate section(s) within the City's Public Works Department. All calls are entered into a database, and all potential IC/IDs are investigated by Storm Water Management Section staff. Storm Water Management Section staff takes

immediate action to respond, investigate, provide education, and take enforcement actions as necessary. Staff also ensures that City crews or the responsible party contains and cleans any spills. Public Works crews are equipped with vactor trucks to contain and clean large spills. When hazardous materials are involved, all appropriate City departments or other agencies such as the Fire Department or the County of San Diego are notified as necessary.

During the reporting year, there were 144 calls to the hotline, compared to 131 calls in FY 2007-2008. Figure 7-1 compares the number of complaints from FY 1997-1998 through FY 2008-2009. As part of its education component, the City advertises the hotline on its website and trains City employees to report any illegal discharges. Attachment L summarizes all calls to the hotline and describes the outcomes of each. Attachment K is a summary of all illegal discharges to the MS4 or other violations of the City's Storm Water Ordinance that resulted in enforcement actions for FY 2008-2009.

Figure 7-1 City of Chula Vista Storm Water Complaint Summary 1997-2009

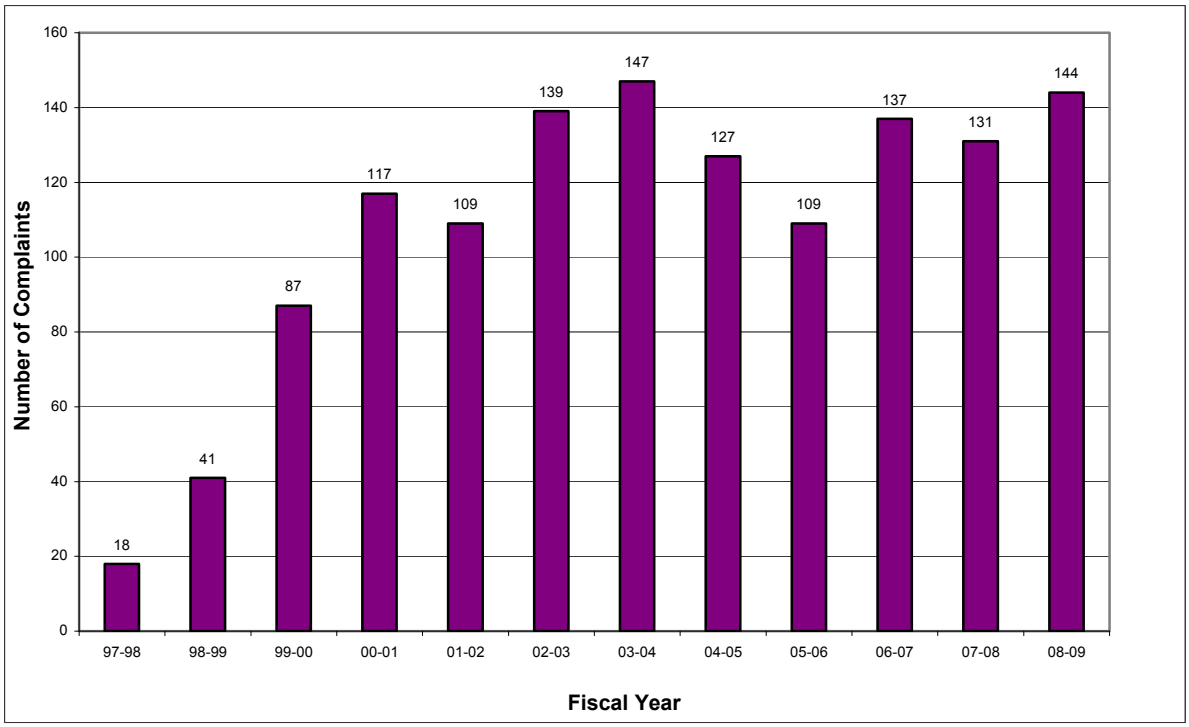

7.3 SPILL REPORTING, RESPONSE, AND PREVENTION

Section 9.0 of the City's JURMP document outlines the procedures for preventing discharges of sewage to the MS4 and the mechanism whereby notification of sewage spills from private laterals, septic systems, and others spills are received. City staff is trained to report all spills to the dispatch hotline and crews are prepared to respond, contain, and cleanup spills where necessary. In addition, Section 9.0 of the City's JURMP details the City's Sanitary Sewer Overflow Response Plan (SSORP) as required by RWQCB Order No. 96-04 and a Capacity, Management, Operations, and Maintenance (CMOM) program. The City has also developed a

Fats, Oil, and Grease (FOG) Monitoring Program to reduce the amount of FOG introduced into the sanitary sewer system by businesses.

Table 7-1 provides a summary of illegal discharges and spills and the number of each. All discharges and spills were immediately responded to, contained, cleaned, and eliminated.

Table 7-1 Types of Spills/Discharges and Number of Each During FY 2008-2009

TYPE OF SPILL/DISCHARGE	NUMBER
Construction BMPs Violation	4
Driveway-Trash Washing	1
Grease/Food/Drink Discharge	3
Leaking Containers/Tanks	2
Others/Unknown Discharge	1
Painting-Sanding Residue	4
Power or Carpet Wash Water	2
Resident Cleaning Residue	1
Saw Cutting/Sanding Discharge	2
Sediment Discharge	9
Sewage Spill/Discharge	3
Slurry/Concrete Discharge	3
Trash/Debris Discharge	1
Vehicle Oil Discharge	4
Vehicle Washing/Dismantling	1
TOTAL	41

City inspectors are constantly on the lookout for illegal connections during their routine response to reported violations or industrial/commercial inspections. When a floor drain within a structure is suspected of being connected to the storm water conveyance system or discharging to the street gutter, such connection is verified by dye testing. If the indoor drain is connected to storm drains, it is considered illegal and ordered to be disconnected immediately. In addition, the City's maintenance crews have been trained to look for illicit discharges and connections during their daily activities in the field. This process has resulted in the identification of several illicit discharges and connections each year.

7.4 URBAN RUNOFF MONITORING

The 2009 Dry Weather Field Screening and Analytical Monitoring Program Report has been submitted as Attachment M, along with an updated Dry Weather Field Screening and Analytical Stations Map. During the reporting period, the MS4 map and the dry weather monitoring maps were reviewed for inaccuracies, and no amendments were necessary. Fifty-seven primary monitoring sites were visited during the 2009 Dry Weather Monitoring Program, and samples were collected and analyzed at 55 of these sites. Sites CEN-08 and TCS were dry, so two alternate locations, SWR-03-E and SCR-06, were chosen to replace these sites. Thirty-six sites had measurable flow and 21 sites were ponded. Fifteen sites received laboratory analysis in

addition to normal field screening. Table 7-2 provides a summary of exceedances for both field and laboratory analysis.

Under the previous Municipal Permit, the main round of monitoring was followed by a follow-up monitoring round within one or two months of each other. Under the current Municipal Permit, the main round and follow-up monitoring are combined.

Table 7-2 Summary of Action Level Exceedances for the 2009 Dry Weather Monitoring and Field Screening Analysis

FIELD SCREENING ANALYSIS (57 Samples)			
Analyte	**Number of Exceedances**	**% of Sites with Exceedances**	**Site(s) Exceeding Action Level**
pH	2	4	BAY-01, CEN-04
Conductivity	0	0	None
Turbidity	0	0	None
Surfactants (MBAS)	4	7	CEN-08, OVR-09, SCR-05, SUN-02
Ammonia-N	4	7	OVR-14, SCR-04, SUN-03, SWB-03
Nitrate-N	11	19	OVR-07, RCC-03, RCC-04, SCR-02, SCR-05, SUN-02, SUN-06, SWB-03, TCC-03, TCC-05, WOL-02
Orthophosphate-P	2	4	BAY-02, SCR-04
Glycol	1	2	SVS-02

MBAS = Methylene Blue Active Substances

LABORATORY ANALYSIS (15 Samples)			
Analyte	**Number of Exceedances**	**% of Sites with Exceedances**	**Site(s) Exceeding Action Level**
Oil and Grease	0	0	None
Cadmium (Dissolved)	0	0	None
Copper (Dissolved)	0	0	None
Lead (Dissolved)	0	0	None
Zinc (Dissolved)	0	0	None
Diazinon	0	0	None
Chlorpyrifos	0	0	None
Total Coliforms	4	27	RCC-01, SCR-01, SUN-05, SWR-03-E
Fecal Coliforms	2	13	SCR-01, SWR-03-E
Enterococcus	4	27	JUD-01, SCR-01, SUN-05, SWR-03-E

Note: Table data is based on routine visits only. Confirmation, follow-up and dry site visits are not included.

Since 2002, no exceedances have been measured for temperature, cadmium, copper, lead, or chlorpyrifos.

The historical data for the results of field analysis presented in Figure 7-2 indicates a decreasing trend in ammonia concentrations. Orthophosphate exceedances have been very rare in all years, with two exceedances this year. No discernable trend is apparent for glycol or surfactants results, which have fluctuated from year to year.

Figure 7-2 Percent of Sites with Field Constituents Exceedances by Year

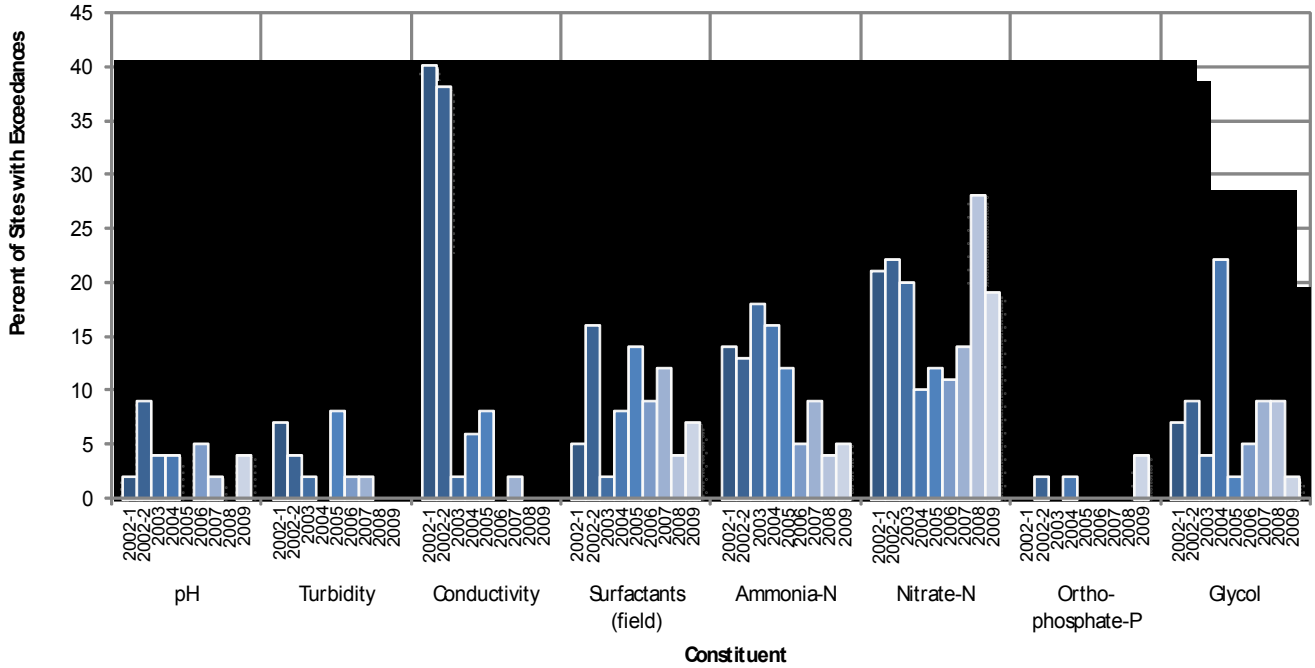

* The action level for conductivity was numeric in the past but was later changed to best professional judgment.

This year, nitrate-nitrogen was the constituent with the greatest number of exceedances, testing above the action level at 11 sites, an improvement from 16 exceedances in the previous year. The possible sources of nitrate-nitrogen exceedances include fertilizer runoff from overwatering and possible groundwater seepage into the storm drain system. Bacteria was elevated at 10 sites. The one glycol action level exceedance was tested within normal range at the confirmation visit. Ammonia tested above the action level at four sites. Upon the confirmation visits, three sites were dry and one still had an elevated ammonia level, which was due to decaying organic material in ponded water. Surfactants tested above the action level at four sites. Upon confirmation visits, two sites were found to be below in the action level, indicating a transient source; the other two sites had evidence of equipment and vehicle washing in the areas upstream. Orthophosphate-P was above the action level at two sites. Upon their confirmation visits, it was determined that both action level exceedances were caused by transient sources.

Historical data for laboratory analyses presented in Figure 7-3 indicates relatively high bacteria exceedance rates, although the fecal coliform exceedance rate has decreased somewhat over the years. Zinc and diazinon have not been detected above their action levels since 2003. Prior to

2003 the rates of exceedances were approximately 10% per year. Surfactants and oil and grease have generally had no exceedances or only a minimal number of exceedances over the years.

Figure 7-3 Percent of Sites with Laboratory Exceedances by Year

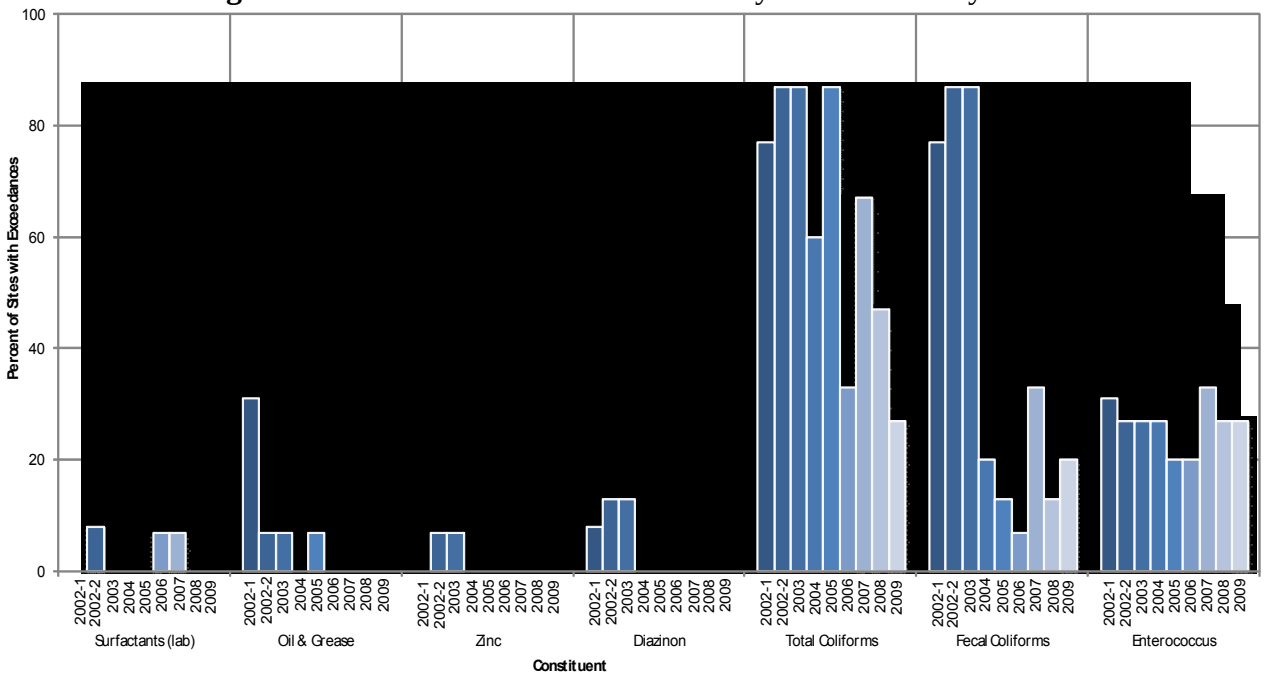

The City continued to implement the trash monitoring program, as required by the Municipal Permit. Of the 57 sites, 44% were found to be Optimal, 37% were Suboptimal, 14% were Marginal, 5% were Submarginal, and 0% were Poor. The main sources of trash came from household, commercial, and transient sources. As a part of trash assessment, sites were evaluated for potential threat to human or aquatic health. One site was found to have potential threat to aquatic health and was immediately cleaned by City crews. The 11 Marginal and Submarginal sites were noted to City crews as sites needing more routine maintenance and trash pick-up.

In addition, the City began implementation of the MS4 Outfall Monitoring Program – Dry Targeted Portion during this dry season, in accordance with the Final Copermittee MS4 Outfall Monitoring Workplan, and as required by the Municipal Permit. Ten dry weather monitoring sites were laboratory analyzed for constituents as detailed in Table 7-3 below. These results were reported in regional spreadsheet database as a part of the Regional Monitoring Program. As there are no established water quality standards for MS4 results, these data will be compared relative to each other beginning in dry season 2010.

Table 7-3 MS4 Outfall Monitoring Locations and Constituents Analyzed

OUTFALL NAME	CONSTITUENTS ANALYZED
BAY-01	Bacteria and Dissolved metals
CEN-01	Bacteria, Dissolved metals, and TDS
JUD-01	Bacteria and Dissolved metals
PRD-02	Bacteria and Dissolved metals
RCC-02	Bacteria, Dissolved metals, and TDS
SCR-01	Bacteria and Dissolved metals
SUN-06	Bacteria, Dissolved metals, and TDS
SVS-01	Bacteria, Dissolved metals, and TDS
TCC-03	Bacteria, Dissolved metals, and TDS
TCC-04	Bacteria, Dissolved metals, and TDS

7.5 FOLLOW-UP AND ENFORCEMENT

Twenty-five sites had constituents above their respective action levels. Table 7-3 shows the sites with elevated constituent level and their probable sources based on upstream investigations.

Table 7-4 Summary of Upstream Investigations

SITE	UPSTREAM INVESTIGATION TARGET CONSTITUENT(S)		RESULTS/ PROBABLE SOURCE
	Field	Laboratory	
BAY-01	pH	-	Decreased CO2 due to photosynthesis and reduced CO2 solubility due to high water temperature.
BAY-02	Orthophosphate-P	-	Transient flow
CEN-04	pH	-	Decreased CO2 due to photosynthesis and reduced CO2 solubility due to high water temperature
CEN-08	Surfactants	-	Car wash area in Cabrillo Mobile Lodge residential community
JUD-01	-	Enterococcus	Trash in the channel immediately upstream of the site
OVR-07	Nitrate-N	-	Nitrate-enriched groundwater seepage, possibly secondary to landscaping
OVR-09	Surfactants	-	Equipment washing by upstream business
OVR-14	Ammonia-N	-	Ammonia-N levels likely concentrated by evaporation of ponded water
RCC-01	-	Total Coliform	Dish washing behind China China restaurant; dirty grease bin a possible source
RCC-03	Nitrate-N	-	Nitrate-enriched groundwater seepage
RCC-04	Nitrate-N	-	Nitrate-enriched groundwater seepage

Table 7-4 continued on next page

Table 7-4 continued

SCR-01	-	Total Coliform, Fecal Coliform, Enterococcus	Combination of plant debris, excess irrigation, and possibly pet waste; stagnant water in MS4 may promote bacterial growth
SCR-02	Nitrate-N	-	Nitrate-enriched groundwater seepage, possibly secondary to landscaping
SCR-04	Orthophosphate-P, Ammonia-N	-	Landscaping fertilization in new residential community, possibly concentrated by evaporating water
SCR-05	Nitrate-N, Surfactants	-	Nitrate-N: Landscaping fertilization and over-irrigation in new residential developments Surfactants: Transient flow
SUN-02	Nitrate-N, Surfactants	-	Nitrate-N: Groundwater seepage along landscaped hillside on the south side of East H Street/ Proctor Valley Road Surfactants: Transient flow
SUN-03	Ammonia-N	-	Decomposing aquatic fauna and evaporating ponded water
SUN-05	-	Total Coliform, Enterococcus	Decomposing plant debris
SUN-06	Nitrate-N	-	Landscaping fertilization in new residential developments and possible seepage of nitrate-containing groundwater
SVS-02	Glycol	-	Transient flow
SWB-03	Ammonia-N, Nitrate-N	-	Landscaping fertilization, possibly concentrated by evaporating water
SWR-03-E	-	Total Coliform, Fecal Coliform, Enterococcus	Transient flow
TCC-03	Nitrate-N	-	Nitrate-enriched groundwater seepage
TCC-05	Nitrate-N	-	Nitrate-enriched groundwater seepage
WOL-02	Nitrate-N	-	Landscaping fertilization in new residential developments

Based on the results of the 2009 Dry Weather Field Screening and Analytical Monitoring Program as well as the Follow-Up Investigation Program, the City was provided with recommendations for dry weather monitoring sites and surrounding areas in need of cleaning and neighborhoods where storm water pollution prevention education is needed. The City is in the process of completing these recommended cleaning and education activities and is working to minimize illicit discharges. During the reporting period, there were no instances that required additional investigations or follow-up activities above and beyond those conducted during the 2009 Dry Weather Monitoring Program. More information about the recommendations from City's Dry Weather Monitoring and Field Screening Program and Follow-up Investigations can be found in Attachment M.

Attachment L

FY 2008-2009 Complaint Response Summary

Incident Date	Structure Category	Site Category	Address			Type of Violation
1-Jul-08	STREET	Commercial	720	H	ST	Slulry/Concrete Discharge

Comments Action Taken: On 07/01/08 - Arrived on-scene and observed Western Pump staff conducted preliminary concrete cuts to replace concrete section around UST access. Observed discharge of slurry buildup in the parking lot and minor buildup on 3 feet of curbline. Discharge did not enter catch basin. Spoke with superintendent and he instructed his staff to immediately conduct cleanup using brooms and shovels. He contacted local crew to deliver shop-vac and gravel bags to contain during cutting operations. City vactor crew assisted the cleanup of the area affected on the property. Issued Administrative Citation SW070108-01 (Warning) to Western Pump. No Further Action Required.

Incident Date	Structure Category	Site Category	Address			Type of Violation
1-Jul-08	STREET	Commercial	696	BROADWAY		Leaking Vehicle

Comments Action Taken: On 07/01/08 - Received phone call from CVFD Engine 52 - Battalion Chief of a sump sludge/used oil spill at A-1 Auto Detail & Repair. Arrived on-scene and observed approx. 1500 ft of curbline contaminated with sump sludge & used oil. CVFD and County HIRT Team on-scene to investigate and contain. CVFD personnel contained spill utilizing earthen berms to prevent the spill from entering open storm channel downstream. Property owner contracted North -State environmental services to conduct clean up of the site. City staff to conduct follow up on August 1, 2008. See continuation on Customer Tab

On 07/29/08 conducted follow-up to ensure that Sump and illegal connection was plugged or capped. Permanent caps were placed over PVC and glued to prevent removal. SE corner box was filled with concrete. Deep sink in maintenance bay was disconnected. No further action required.

Incident Date	Structure Category	Site Category	Address			Type of Violation
8-Jul-08	STREET	Residential	587	FOURTH	AV	Leaking Vehicle

Comments Action Taken: 7/8/08---Responded to report of leaky vehicle. Inspection oil stains on street in front of reported address, but no vehicle. Unable to trace origins of this leak.

7/9/08--- Returned in AM to try and find responsible vehicle. No leaky vehicles were found

7/11/08--- Returned in AM to try and find responsible vehicle. No leaky vehicles were found

7/14/08--- Returned in AM to try and find responsible vehicle. No leaky vehicles were found. Spoke to complainant and explained that enforcement action could not be taken since evidence could not be found linking leak to responsible party. Left public education materials at homes in the area.

7/14/08---City crews spread absorbent, scrubbed area and swept area clean to eliminate the stain. No further action necessary at this time.

Incident Date	Structure Category	Site Category	Address			Type of Violation
10-Jul-08	STREET	Residential	819	CORNELL	AV	Dirt Tracking

Comments Action Taken: 7/10/08---Responded to report of unknown discharge from residence at 819 Cornell. Inspection found evidence of water discharged from address in question. Also found sediment and sand that appeared to be washed away. Spoke to homeowner who stated that he had washed off his driveway. He also stated that he was not using any sand or dirt. Administrative citation warning SW 1662 was issued. City crews cleaned all areas of the storm drain system impacted by this spill. No further action necessary at this time.

Incident Date	Structure Category	Site Category	Address			Type of Violation
14-Jul-08	STREET	Residential		F	ST	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	7/14/08---Responded to report of unknown discharge from motor home at 673 F Street. Inspection found evidence of small discharge from gray water tank of motor home in question. Spoke to vehicle owner who stated that she knew about the leak and that she was planning on getting it fixed. Issued administrative citation warning SW1663 with the requirement to repair the tanks and provide city with copies of receipts. Also issued order to immediately drive the motor home to the local RV dump station. 7/22/08--- Received call from vehicle owner stating that all repairs had been made and asking if copies were ok by mail. Waiting for mailed copies before case can be closed. 7/25/08---Received documents. No further action necessary at this time.					
14-Jul-08	STREET	Residential	687	FOURTH	AV	Accident/Spill
Comments Action Taken:	7/14/08----Called in request for street crews to clean up oil spill in front of 687 Fourth Ave. 7/14/08---Conducted follow-up inspection and crews had cleaned up spill to the MEP.					
16-Jul-08	STREET	Residential	1369	MARTIN	PL	Accident/Spill
Comments Action Taken:	On 7/16/08---Otay Water District reported a fuel spill at 1369 Martin Place. Storm Water staff responded and observed small diesel fuel spill from residents driveway and minor contamination of approx. 30 feet of curbline. Spill was old and already dried. Small amount of accumulation located 2 houses down. Residents son arrived home and stated that his employer's bobcat leaked the fuel and was supposed to clean up before he left. Instructed resident to conduct proper cleanup and remain at location and contact City staff for follow-up that the spill was properly cleaned. City staff conducted follow-up approximately 1.5 hours later and observed that the resident purchased oil absorbent materials from Pep Boys and properly cleaned the spill. Issued resident City Storm Water education Package for Mobile Construction Related Businesses. Instructed resident to inform employer to relocate bobcat from his resident and to conduct refueling at construction site and utilize BMPs such as plastic sheeting, containment pans and to refuel away from impervious areas. NFA Required.					
21-Jul-08	STREET	Residential	1096	FOREST LAKE	DR	Paint Discharge
Comments Action Taken:	7/21/08---Responded to report of paint in the SWCS from 1096 Forest Lake Dr. Inspection noted evidence of water based paint discharges from address in question. Issued administrative citation warning SW B0721081. No further action necessary at this time.					
23-Jul-08	STREET	Industrial	811	ENERGY	WY	Dirt Tracking
Comments Action Taken:	7/1/08--- Responded to report of over irrigation, storm drains full of trash and debris, and damaged "No Dumping" signs at inlet. Inspection found inlets clean and free of trash and debris, no evidence of over irrigation, some sections of the curb and gutter had pine needles, and small amounts of trash, and all "No Dumping" plaques were in good condition. Notified street sweeping regarding pine needles. No violations were observed. No further action is necessary at this time.					
23-Jul-08	STREET	Industrial	855	ENERGY	WY	Construction Debris & Waste
Comments Action Taken:	7/1/08--- Responded to report of storm drains full of trash and debris, and damaged "No Dumping" signs at inlet. Inspection found inlets clean and free of trash and debris, and all "No Dumping" plaques were in good condition. No violations were observed. No further action is necessary at this time.					
23-Jul-08	STREET	Industrial	850	ENERGY	WY	Leaking Vehicle
Comments Action Taken:	7/2/08--- Responded to report of oil spills onto the ground from vehicles waiting to be dismantled, open top trash containers, and damaged "No Dumping" signs on inlets. Inspection found all areas clean and free of oil spills, and all "No Dumping" plaques were in good condition. No violations were observed. No further action is necessary at this time.					
23-Jul-08	STREET	Commercial	1751	FOURTH	AV	Street Sweeping Needed
Comments Action Taken:	7/2/08---Responded to report of uncovered dumpsters, trash and bottle caps littered on the ground, and lack of sweeping. Inspection found several open top containers used for handling and containment of recyclable commodities, facility and public right-of-way in front of this business were in good clean order. No violations were observed. No further action necessary at this time.					

Incident Date	Structure Category	Site Category	Address			Type of Violation
23-Jul-08	STREET	Residential	640	ASH	AV	Sewage Spill Going Down Storm Drair
Comments Action Taken:	7/23/08---Responded to call of illegal dumping by driver of a motor home (Lic. 3MDD932). Inspection noted sewage spilled in the alley at the 600 blk of East Park Lane. Issued administrative citation warning SW B0723081. No further action necessary at this time.					
25-Jul-08	STREET	Commercial		THIRD	AV	Slulry/Concrete Discharge
Comments Action Taken:	7/25/08---Responded to report of concrete from a rental concrete trailer spilled into the SWCS at the intersection of Third and D Street. Inspection noted evidence of concrete in the SWCS. Called for City Crews to clean up spill. No further action necessary at this time.					
25-Jul-08	STREET	Commercial	501	FIFTH	AV	Slulry/Concrete Discharge
Comments Action Taken:	7/25/08---Responded to report of concrete from a rental concrete trailer spilled into the SWCS at the intersection of Third and D Street. Inspection noted evidence of concrete in the SWCS. This report also included identical spills at the intersection of North Glover Ave. & Third Ave, the intersection of Fifth Ave. & C Street, and in front of 501 C Street. Issued administrative citation SW1665. No further action necessary at this time.					
25-Jul-08	STREET	Commercial		GLOVER	AV	Slulry/Concrete Discharge
Comments Action Taken:	7/25/08---Responded to report of concrete from a rental concrete trailer spilled into the SWCS at the intersection of Third and D Street. Inspection noted evidence of concrete in the SWCS. Called for City crews to clean up spill. No further action necessary at this time.					
28-Jul-08	STREET	Commercial		HALSEY	ST	Sewage Spill Going Down Storm Drair
Comments Action Taken:	GOT CALLED ABOUT A MOTORHOME THAT DUMPS INTO THE STREET.SEE REQ 08_003437					
28-Jul-08	MISC	Residential		PARK	LN	Accident/Spill
Comments Action Taken:	motorhome dumped into the gutter.SEE REQ. 08_003437.					
29-Jul-08	MISC	Residential		HALSEY	ST	Accident/Spill
Comments Action Taken:	MOTORHOME DUMPED INTO THE STREET,BY THE TIME WE GOT THERE IT WAS GONE SEE REQ. 08_003437					
29-Jul-08	STREET	Commercial		AUTO PARK	AV	Accident/Spill
Comments Action Taken:	On 07/28/08 received notification via email of City of San Diego's Waste Water Division on the storage of some drum of used oil, antifreeze drums at Peoples Chevrolet. Arrived on-scene and observed that the City of San Diego's concerns were met. No compliance issues were observed. No further action required.					
29-Jul-08	STREET	Residential		PARK	LN	Sewage Spill Going Down Storm Drair
Comments Action Taken:	7/29/08---Responded to report of illegal dumping by driver of motor home at 600 blk of East Park Lane. Inspection found that the same motor home involved in an illegal dumping incident on 7/23/08 was reportedly also involved in this incident. Please refer 08_003351. No further action necessary at this time.					
30-Jul-08	STREET	Construction		CORRAL CANYON	RD	Power Washing
Comments Action Taken:	7/30/08---Responded to report of power washing without BMPs. Inspection noted construction workers at Long Canyon Park power washing. Rinse water was flowing into grassy areas. Evidence of a violation was not found, however, the construction crew Forman was advised to stop power washing. No further action necessary at this time.					
4-Aug-08	STREET	Residential	1364	EL LUGAR	ST	Dirt Tracking

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	8/4/08---Responded to report of dirt/ sediment tracking into the SWCS. Inspection noted severe tracking and discharge of sediment into the SWCS. Issued administrative citation warning SW1666. No further action necessary at this time.					
8-Aug-08	STREET	Residential	1225	FRONTAGE	RD	Sewage Spill Going Down Storm Drair
Comments Action Taken:	SEWER SPILL IN THE GUTTER,SENT 336 FOR CONTAINMENT,WE HAVE BEEN THERE BEFORE.MIKE HICE WAS SENT THERE ALSO.					
	8/8/08---Responded to call of sewage discharge into the SWCS from 1225 Frontage Rd. Inspection noted sewage discharged from two uncapped sewage cleanouts discharging into the SWCS. Property manager Yvonne Cerda stated that a plumber had inspected the sewer system at the mobile home park on 8/4/08 and recommended that the sewer lines be cleaned. The property owner refused the sewer line cleaning service. Issued administrative citation SW B0808081. No further action necessary at this time.					
12-Aug-08	STREET	Residential	375	JASON	PL	Other
Comments Action Taken:	THE RESIDENT AT 375 JASON PL IS SPRAYING GUTTER WITH WEED KILLER.					
	8/19/08---Responded to report of illegal discharge of pesticides at 375 Jason Place. Inspection did not find any evidence indicating that pesticides were discharge into the SWCS. Some watermarks were found in the gutter in front of the home. Left a door hanger with note for homeowner to call me. I received call from homeowner, Robert Boyd (619) 254-8956. Mr. Boyd stated that he sprayed Round-Up on the weeds in front of his home, but that he used the product in minimal amounts in accordance to the directions on the bottle.					
	8/20/08---As part of a second call I left a message explaining to Mr. Boyd that Round-Up weed killer can be used within his property; but that when it came to the sidewalk, curb, and gutter he should notify the City for weed removal at (619) 397-6100. No violation was found. No further action necessary at this time.					
13-Aug-08	STREET	Commercial	1408	THIRD	AV	Sewage Spill Going Down Storm Drair
Comments Action Taken:	SEWER SPILL FROM JACK IN THE BOX,SENT MARTINEZ AND PALMER TO DO CONTAINMENT.					
	8/13/08---Responded to report of sewage discharge into the SWCS from 1408 Third Ave. Inspection noted sewage discharged from improperly capped sewage cleanout discharging into the SWCS. Issued administrative citation SW B0813081. No further action necessary at this time.					
14-Aug-08	STORM DRAIN PIPE	Residential	279	D	ST	Sewage Spill Going Down Storm Drair
Comments Action Taken:	GRAY WATER BEING DUMPED IN THE BACKYARD.					
	On 08/14/08 responded to a reported discharge of sewage/gray water into the storm drain system. Arrived onscene and did not observe or smell of any evidence of the discharge coming form the property. No further action is required.					
	On 8/22/08 received pictures via email from complainant of the alleged discharge. Photos showed a drain on the inside of the house and it appeared to be coming from the laundry room of the home. Photos did not show a private sewer cleanout at this location. The discharge appeared to be washwater from either a deep sink of washing machine. Small discharged was flowing into homes side yard and was not discharging onto the storm drain system. Referred complainant to DEH and Community Relations Officer for other concerns. No further action is required.					
14-Aug-08	STREET	Residential	575	PARKSIDE	DR	Power Washing

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	On 08/14/08, received notification of resident powerwashing front walkway and patio. Arrived on-scene and observed a small stream of water coming from the residents curb drain. Heard resident powerwashing in the back but could not make contact due to the noise level. Issued Pollution Notice door hanger for resident to contact Storm Water Section. On 08/15/08 received phone call from a Mr. Romero of the subject address. Mr. Romero explained that he was using measures to minimize the discharge to the gutter. He stated that he blocks off his area drain on the patio concrete and washes the water into his landscaping and does not use any chemicals. He has invited Storm Water staff to observe on the practices he uses next time that he intends to clean the area again. Explained to him to that his wash water is a violation of the CVMC and that he should utilize additional measures to prevent the discharge into the gutter. It was also explained that future complaints could result in increased enforcement actions.					
18-Aug-08	STREET	Residential	176	F	ST	Leaking Vehicle
Comments Action Taken:	RESIDENT WAS CITED FOR RELEASING RADIATOR ANTI-FREEZE FROM AUTO,SENT 2907 MARTINEZ & PALMER TO DO CONTAINMENT 8/18/08---Resident at 176 F Street was discharging non storm water into the SWCS as a result of radiator repair work. Issued administrative citation SW1667. No further action necessary at this time.					
19-Aug-08	STREET	Residential	1123	OCALA	AV	Construction Debris & Waste
Comments Action Taken:	THEY ARE WASHING DOWN MATERIALS IN GUTTER. 8/19/08---Responded to report of TJD in the public right-of-way/ SWCS. Inspection found construction discards had been staged at the curb for pick up. Issued verbal notice to tenant Mr. Salvador Armas to have TJD removed by 10AM the following day. 8/20/08---Re-inspection confirmed that all debris was removed from public right-of-way. No further action necessary at this time.					
2-Sep-08	STREET	Commercial	730	BROADWAY		Power Washing
Comments Action Taken:	THEY WERE POWER WASHING THE SIDEWALKS,THEY DID NOT HAVE ANY(BMPS)TO CONTAIN FROM GOING INTO STORM DRAIN . 8/29/08---Responded to report of power washing sidewalks without BMPs. Inspection noted JR Power Sweeping staff power washing sidewalks and discharging wash waster into SWCS. Issued Administrative Citation warning SW1668. No further action necessary at this time.					
10-Sep-08	STREET	Residential	318	NOCTURNE	CT	Leaking Vehicle
Comments Action Taken:	9/9/08---Responded to report of vehicle leaking oil onto the street. Inspection noted white Chevy van LIC 14523(DP) leaking oil onto SWCS. Issued verbal warning to park van in driveway, repair leaks on van, or place drip pan underneath the van daily. Additionally, the vehicle owner was asked to clean the oil from the street. A re-inspection will be conducted on 9/12/08. 9/17/08-A reinspection found that the vehicle owner had cleaned all oil stains from the street and placed a drip pan underneath the vehicle to catch any oil potentially leaking from the vehicle. No further action necessary at this time.					
10-Sep-08	STREET	Residential		THIRD	AV	Slulry/Concrete Discharge
Comments Action Taken:	9/9/08---Responded to report of concrete slurry spill at the intersection of Third Ave. and D Street. Inspection noted some concrete slurry spilled into the SWCS. Violator remained on site and cleaned a significant portion of this spill before city crews arrived. Administrative citation warning SW1670 was issued. No further action is necessary at this time.					
10-Sep-08	STREET	Municipal	333	OXFORD	ST	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	HOMELESS ARE USING SDGE BOX TO GO TO LATRINE.					
	9/10/08---inspection did not find evidence of any discharge or potential for a discharge. No further action necessary at this time.					
11-Sep-08	STREET	Residential	1295	THIRD	AV	Washing Vehicle in Street
Comments Action Taken:	LIQUID LEAKING THRU A PIPE OPENING AT THE CURB,AND THRU A WALL ADJOINING HER PROPERTY AT 286 PALOMAR ST.					
	9/10/08-Responded to complaint call of water being discharged from curb drain onto Palomar St. Inspection noted that the root cause of this discharge is from customers pre-washing their cars in front of the on-site car wash, and wash water entering the adjacent drain and ultimately discharging at Palomar St. Spoke with business owner Sameer Shrouki and pointed out the violation. Mr. Shrouki stated that he wanted some time to try different solutions to the problem. 9/25/08---Administrative citation warning SW B0910082 was issued. This warning included a deadline of 10/1/08 for the implementation of solutions. A reinspection will be conducted to ensure that a permanent solution has been implemented for this case. 10/21/08--- A re-inspection of 1295 Third Ave. noted that the curb drain at Palomar Ave. was sealed off and no longer discharging. Manager Sameer Shrouki stated that he has implemented an internal policy among gas station staff that requires residual water from the car wash be mopped up as much as possible. No further action necessary at this time.					
16-Sep-08	STREET	Residential	1010	JEFFERSON	AV	Unknown Discharge
Comments Action Taken:	9/16/08---Responded to complaint call regarding illegal discharge of wastewater. Inspection found no evidence of any discharge into the public right-of-way. Case was referred to Code Enforcement for sewer discharges between properties and unpermitted dwellings. No further action is necessary at this time.					
16-Sep-08	STREET	Residential	1009	PLAZA SINUOSO		Over-Irrigation/Pesticide
Comments Action Taken:	A SEDIMENT DISCHARGE ON SIDEWALK FROM RESIDENT HOME.					
	9/12/08---Responded to complaint call regarding illegal discharge of sediment. Inspection noted that dirt and sediment is flowing from unlandscaped section of side yard near mailbox, and onto the sidewalk, curb and gutter. Left a door hanger and asked to contact city regarding the discharge. 3/12/09--- after leaving several monthly door hangers with notes to call me, I finally made contact with homeowner Juana Reyes (619) 410-8101. The nature of the violation was explained to Ms. Reyes, who responded by agreeing to correct the problem. A follow up inspection will be made on 3/20/09. 4/3/09---Follow up inspection noted that the violation had been corrected. Ms. Reyes and staff had fixed the irrigation system and cleaned all sediment and debris. Photos on file. No further action necessary at this time.					
16-Sep-08	STORM CHANNEL	Residential	1391	SOUTH HILLS	DR	Other
Comments Action Taken:	RESIDENT IS PUTTING PLANT CONTAINERS IN DRAIN.					
	9/12/08---Responded to complaint call regarding resident placing plant containers in the drain. Inspection found no evidence of any discharge into the public right-of-way. . No further action is necessary at this time.					
17-Sep-08	STREET	Residential	2403	EASTRIDGE	LP	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	COMPLAINTANT BELIEVES THAT IT IS OIL AND TRANSMISSION FLUID INTO THE GUTTER.					
	9/17/08---Responded to complaint call regarding oil being washed into the street by resident at 2403 East Ridge Loop. Inspection noted a large puddle of oil in the street in front of the address in question. Streets division staff was summoned to contain the oil with dirt/ absorbent. Left door hanger asking resident to contact the city regarding violation. Spoke to property owner, Mr Rigoberto Cardenas who stated that he drove away early in the morning to find that his car had leaked out all oil and subsequently broke down. He was unaware of the oil in front of his home. He was asked to clean all oil and absorbent and repeat the process until spill is cleaned. 9/18/08---A re-inspection on noted that all oil and absorbent had been cleaned. No further action is necessary at this time.					
22-Sep-08	STREET	Residential	658	GUAVA	AV	Dirt/Sediments
Comments Action Taken:	HOSING DOWN YARD WASTE INT GUTTERS EVERY NIGHT,GOING INTO CATCH BASINS.,VERY UNCOOPERATIVE NEIGHBOR.					
	On 9/22/08 did not observe any unusual buildup into storm drain. Left Door Hanger. Work Request Cancelled.					
22-Sep-08	STREET	Residential	2616	MOONLIGHT TRAIL	LN	Paint Discharge
Comments Action Taken:	On 9/22/08 responded to a reported paint spill. Arrived on-scene and observed partially dried white latex paint that was spilled into the street. Gravel was placed on spill to prevent tracking. Left door hangers at residences located near the spill. City vactor crews conducted cleanup. No further action required.					
23-Sep-08	STREET	Residential	1297	WHEATLAND	ST	Construction Debris & Waste
Comments Action Taken:	WASH DOWN DEBRIS INTO GUTTER,IT IS ALL OVER THE NEIGHBORHOOD.					
	9/23/08---Responded to complaint call regarding illegal discharge of dirt/ sediment into the SWCS. Inspection noted that dirt and sedimented water was discharged from concrete wall footings at the rear section of the property. Tenant, Rosemary Staub stated that the property owner had contracted workers to build a retaining wall at the rear of the property. Workers were discharging dirt/ sediment as part of dewatering the wall footings. Administrative citation SW B0923082 was issued to property owner Lourdes N. Silva. No further action necessary at this time.					
24-Sep-08	STREET	Residential		NAPLES	ST	Carpet Cleaning
Comments Action Taken:	CARPET CLEANING MATERIALS DOWN THE GUTTER.					
	10/3/08---Responded to complaint call of carpet cleaner discharging wash water into the SCWS at 1117 Hilltop Dr. Inspection noted that We Care Carpet cleaners had discharged wash water into the SWCS. Administrative citation warning SW 1672 was issued with the requirement to pay a full cost recovery invoice for all costs associated with the clean up of the spill and to register as a mobile business with the Storm Water Management section. No further action is necessary at this time.					
26-Sep-08	STREET	Residential	915	RIGLEY	ST	Slulry/Concrete Discharge
Comments Action Taken:	CEMENT SLURRY RUNNING DOWN STREET.					
	Arrived at the site on 09-26-08. Resident had hired a concrete contractor to do concrete work at his house. Contractor was rinsing out a wheel barrel into the landscaping. Observed potable water entering the storm drain immediately downstream of the home. Water was clear and free of concrete. Vactor crews arrived onsite and flushed the curb and gutter and collected water at the storm drain. Provided education to the homeowner and contractor about concrete BMPs. No further action required. A verbal warning was issued to the homeowner.					
30-Sep-08	STREET	Residential	1001	PASEO DEL PASO		Power Washing

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	RESIDENT IS WASHING HIS ROOF.					
	9/30/08---Responded to report of red colored water flowing from 1001Paseo Del Paso. Inspection noted red sediment laden water flowing from said property as a result of workers washing off red clay roof and not implementing BMPs. Administrative citation SW B0930081 was issued to the property owner. No further action is necessary at this time.					
1-Oct-08	STREET	Residential	153	INKOPAH	ST	Sewage Spill Going Down Storm Drair
Comments Action Taken:	MOTORHOME LEAKING UNKNOWN SUBSTANCE.MOTORHOME BUTTOMED OUT ON SWAIL.					
	10/1/08---Responded to report of sewer spill from a motor home into the street at 157 Inkopah. Inspection noted a sewer spill beginning at the cross gutter of the intersection of Inkopah Street and Helix Ave. and ending at the intersection of Jamul Ave. and Melrose Ave. Scrape marks at the beginning of the spill indicate an accidental motor home sewer system break. Responsible party could not be determined. City staff conducted a thorough cleaning of all public areas impacted by this accidental spill. No further action is necessary at this time.					
2-Oct-08	STREET	Residential	2616	MOONLIGHT TRAIL	LN	Paint Discharge
Comments Action Taken:	PAINT SPILL FROM TRASH TRUCK.					
	On 10/02/08 received notification from dispatch of a paint spill from a Allied Waste vehicle. Arrived on scene and observed "absorbent" material (pea gravel) ands paint at the location. Allied did not respond to calls. City vactor crew conducted final cleanup of site.					
2-Oct-08	STREET	Residential	1044	GUATAY	AV	Automotive Work
Comments Action Taken:	WASHING THEIR CAR ENGINE INTO THE GUTTER.					
	10/2/08---Responded to report of resident at 1042 Guatay Ave. washing vehicle engines and allowing wash water to flow into the SWCS. Inspection did not find any evidence of a violation. Called complainant Laura Badgett (619) 420-1448 for additional information. Ms. Badgett acknowledged the illegal discharges had occurred hours prior to the report and that evidence was no longer present. Ms. Badgett agreed to call dispatch as soon as illegal discharges are witnessed. 2/13/09---After various windshield inspections no evidence was found. Home at 1042 Guatay has been vacated. Suspected tenants are no longer living at this home. No further action necessary at this time.					
3-Oct-08	CATCH BASIN	Residential	290	SECOND	AV	Sewage Spill Going Down Storm Drair
Comments Action Taken:	On 10/03/08 received notification of sewage spill at the above location. Arrived on-scene and observed small coming from private sewer cleanout and discharging onto private storm drain sump. Spoke with Mr. Montoya, rep for property owner, who will dispatch crew to clean out backup. Mr. Montoya will clean private sumps at the site. City staff to look into lateral separation located from lateral to city main. NFA required.					
3-Oct-08	STREET	Commercial		SECOND	AV	Unknown Discharge
Comments Action Taken:	WE CARE CARPET CLEANING IS DUMPING INTO STREET.					
	10/6/08---Responded to report of We care carpet cleaning discharging wastewater into the SWCS at 1117 Hilltop. An inspection confirmed the report. Administrative citation warning SW1672 was issued with the requirement for the business to register with the Storm Water Management division as a Mobil business.					
6-Oct-08	STREET	Residential	1745	VASSAR	AV	Paint Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	WHITE MILKY STUFF RUNNING IN THE GUTTER. 10/6/08---Responded to call at 1745 Gotham St. Noted white reside from curb drain. Spoke to homeowner Janet Gonzales. Ms. Gonzales stated that they were painting and washing brushes in back yard. Issued Administrative Citation warning SW B0106081. No further action necessary at this time.					
8-Oct-08	STREET	Residential	88	FOURTH	AV	Over-Irrigation/Pesticide
Comments Action Taken:	SPILL IS COMING FROM A CURB DRAIN IN THE RESIDENCE. 10/8/08---Responded to report of illegal discharge at 88 Fourth Ave. Inspection noted a clear discharge from curb drain due to irrigation. No violation found. No further action necessary.					
8-Oct-08	STREET	Residential	1444	CREEKSIDE	DR	Paint Discharge
Comments Action Taken:	RESIDENT WOULD NOT GIVE HIS NAME,NOTICED PAINT SINCE YESTERDAY. (10-07-08) 10/6/08---Responded to call at 1745 Gotham St. Noted white reside from curb drain. Spoke to homeowner Janet Gonzales. Ms Gonzales stated that they were painting and washing brushes in back yard. Issued Administrative Citation warning SW B0106081. No further action necessary at this time.					
13-Oct-08	STREET	Commercial		H	ST	Unknown Discharge
Comments Action Taken:	RUSTY WATER FROM FIRE SPRINKLERS. 10/13/08---Responded to report of illegal discharge at the Chula Vista Mall. Inspection noted rust colored water being discharged from the mall building and into the SWCS. Issued Administrative Citation SW B0913081. No further action is necessary at this time.					
14-Oct-08	STREET	Residential	1580	MARL	AV	Construction Debris & Waste
Comments Action Taken:	GROUT RESIDUE ON THE GUTTER,SENT A VACTOR TO CONTAIN. 10/6/08---Responded to report of white paint in the curb and gutter at the 1745 Gotham. Inspection noted paint from curb drain into the SWCS. Issued administrative citation warning SW B0106081. No further action necessary at this time.					
16-Oct-08	STREET	Residential		SILVAS	ST	Dirt/Sediments
Comments Action Taken:	THEY ARE WASHING THEIR TRASH CANS INTO THE GUTTER. 10/16/08---Responded to report of non-storm water discharge at 2638 Main St. Inspection noted that bar staff had washed out trash and other debris from inside the bar and into the SWCS. Issued Administrative Citation SW B1016081. No further action necessary at this time.					
16-Oct-08	STREET	Residential	966	CHARDONNAY	TE	Unknown Discharge
Comments Action Taken:	LACK OF INFO.					
20-Oct-08	STREET	Residential	2771	SUTTER RIDGE	DR	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	UNKNOWN SPILL ,ABSORBENT ON THE ROAD.					
	10/20/08---Responded to report of oil stain and absorbent in the street in front of 2775 Sutter Ridge Rd. Inspection noted that absorbent had been removed and oil stain had been cleaned as much as possible. No threat to water quality is present. Left public education materials. No further action necessary at this time.					
20-Oct-08	STREET	Commercial	298	OXFORD	ST	Unknown Discharge
Comments Action Taken:	RESTAURANT HAS A LARGE BUCKET OF USED OIL IN PARKING LOT.					
	10/20/08---Responded to report of oil container at Casa Don Diego situated in the parking lot without cover and containment. Issued inspection report with recommended salutations and a time line for completion. Left public education materials. A re-inspection will be conducted to ensure compliance. 3/12/09---A follow up inspection found that the restaurant's oil and grease container had been moved to a location with cover and containment. Photos on file. No further action is necessary at this time.					
24-Oct-08	STREET	Residential	594	TRAILRIDGE	DR	Slulry/Concrete Discharge
Comments Action Taken:	10/24/08---Responded to report of concrete slurry being discharged at 594 Trailridge Rd. Inspection noted that a small amount of dirt had been spilled in the street and that the contractor was cleaning. BMPs were in place. No threat to water quality present. No further action necessary at this time.					
28-Oct-08	STREET	Residential	984	ARROYO	DR	Construction Debris & Waste
Comments Action Taken:	TILE GROUT RESIDUE RUNNING IN THE GUTTER.					
	10/28/08---Responded to report of non-storm water discharge at 984 Arroyo Rd. Inspection found no evidence of a violation. . No threat to water quality present. No further action necessary at this time.					
3-Nov-08	STREET	Commercial	2290	OTAY LAKES	RD	Fuel/Oil/Gas Spill
Comments Action Taken:	PHO VIETNAMESE NOODLES,DUMPING OF GREASE INTO STORM DRAIN.					
	10/20/08---Responded to report of grease or oil being dumped into storm drain system. Notified Luke Arrington of Westwood Financial Corporation regarding cooking oil spill. Mr. Arrington and staff took immediate action to correct the problem. Issued verbal warning to Luke Arrington. Prepared inspection reports for Smoking Sam's Barbeque, Pho Vien Dong, L&L Barbeque, Panda Chef, and Lisa's Filipino Cuisine documenting the conditions and establishing a 20day correction deadline. 12/11/08---At the time of re-inspection the condition had not been restored to an acceptable level. Administrative Citation SW B1211081 was issued to Westwood Financial Corporation.					
6-Nov-08	STREET	Residential		SANTA CORA	AV	Construction Debris & Waste
Comments Action Taken:	WASHING SOME TYPE OF MATERIAL INTO STORM DRAIN.					
	11/6/08---Inspection found dirt and sediment discharged into street/ gutter. Landscape maintenance contractor was immediately called to clean up and fix irrigation problem. A verbal warning was issued. No further action necessary at this time.					
14-Nov-08	STREET	Residential	104	D	ST	Complaint Response Enforcement
Comments Action Taken:	11/14/08---inspection found furniture and other household items in driveway and on sidewalk at 102 D street. Not a storm water violation. Referred to Code Enforcement. No further action necessary at this time.					
17-Nov-08	STREET	Residential	1349	HIDDEN SPRINGS	PL	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	11/18/08---inspection noted grey Ford, CAL plate 3CDX361 leaking oil on to street. Left card and note to call me. 11/19/08--- Spoke to home owner regarding leaky Ford. Issued verbal warning with requirement to move fix or move the vehicle into their private driveway and to clean up all oil spilled. 11/20/08---Inspection noted vehicle was moved and oil spot was cleaned. No further action necessary at this time.					
19-Nov-08	STREET	Residential	1120	THIRD	AV	Other
Comments Action Taken:	11/19/08---Inspection found dirt and sediment discharged into street/ gutter from construction project at 1120 Third Ave. Summoned city staff to clean all areas impacted by this illegal discharge. Issued Administrative Citation SW1674. No further action necessary at this time.					
21-Nov-08	STREET	Residential	88	FOURTH	AV	Unknown Discharge
Comments Action Taken:	Please see request 08_002748					
2-Dec-08	STREET	Residential	426	J	ST	Sewage Spill Going Down Storm Drair
Comments Action Taken:	12/2/08---Inspection found no evidence of a discharge or any other storm water violation. No further action is necessary at this time.					
9-Dec-08	STREET	Construction Sites	1948	CLEARBROOK	DR	Construction Debris & Waste
Comments Action Taken:	12/9/08---Inspection noted a discharge of dirt/ sediment from unimproved parcel. Walters Management staff was called to clean up all dirt and debris resulting from this discharge and to also implement BMPs. An administrative Citation warning SW B0129081 was issued to Walters Management. All items noted on the written warning were corrected. No further action necessary at this time.					
9-Dec-08	STREET	Residential	224	ALPINE	AV	Construction Debris & Waste
Comments Action Taken:	12/9/08---Inspection noted a discharge of dirt/ sediment from 224 Alpine Ave. and onto the SWCS as a result of landscape contractor staging dirt on the street and using water to and using a water hose for compaction and dust control. City crews were summoned to clean all sections of the public storm drain system impacted by this discharge. An administrative Citation SW B01209081 was issued to Walters Management. No further action necessary at this time.					
11-Dec-08	STREET	Residential	1165	CRYSTAL DOWNS	DR	Paint Discharge
Comments Action Taken:	12/10/08---Inspection noted a discharge of white paint residue from 1165 Crystal Downs Dr. and onto the SWCS as a result of homeowner painting activity at residence. An administrative Citation Warning SW 1701 was issued to property owner. Property owner was took immediate action to clean up all sections of the public storm drain system impacted by this discharge. No further action necessary at this time.					
12-Dec-08	CATCH BASIN	Residential	2260	OTAY LAKES	RD	Sewage Spill Going Down Storm Drair
Comments Action Taken:	GREASE & OIL GOING INTO STORM DRAIN. 12/12/08---Inspection noted a discharge of grease and other food waste from poorly maintained trash equipment. The property manager has been warned on previous occasions. Administrative citation SW B1211081 was issued with the reiteration to clean and abate all areas of the private storm drain system and to have the trash equipment repaired or replaced.					
22-Dec-08	STREET	Residential	368	SURREY	DR	Dirt Tracking

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	MUD TRACKING IN THE STREET,SENT 2 VACTORS TO MAINTAIN.					
	12/22/08---Inspection noted a discharge of dirt sediment from construction project at 368 Surrey DR. City crews were summoned to clean all sections of the storm water conveyance system impacted by this discharge. Administrative citation SW B1222081 was issued to property owner. No further action is necessary at this time.					
23-Dec-08	STREET	Construction Sites	860	DUNCAN RANCH	RD	Dirt Tracking
Comments Action Taken:	RCP TRUCK GOT STUCK IN MUD,TOW TRUCK PULLED HIM OUT AND THEY LEFT A MESS IN THE STREET.TRUCK 299 (RCP),CONTRACTOR NAME IS ALLEN MASS PHONE IS937-8580.					
	On 12/23/08, received notification that RCP Block and Brick Truck got stuck on the Kingdom Hall construction site. RCP contacted tow truck and thus tracked significant amounts of dirt and mud onto Duncan Ranch Road to the intersection of Proctor Valley and Hunte Parkway. Arrived on-scene and observed street sweeping contractor hired by RCP conducting extensive cleanup of the dirt and mud. Informed RCP to instruct delivery drivers to not enter construction site after a rain event. On 12/23/08 at 4:45PM received phone call from Street Sweeper that the dirt and mud has been removed from streets. Due to the fast response by RCP, issued verbal warning that any future violations will result with the issuance of a notice of violation and possible fines.					
24-Dec-08	STREET	Residential	196	GUAVA	AV	Leaking Vehicle
Comments Action Taken:	RESIDENT CHANGING OIL IN THE STREET.					
	12/24/08---Inspection noted a resident conducting auto repairs in the street and a small oil stains on the ground. Issued verbal warning. Resident took immediate action to move work onto private property and wipes up oil spill. No further action is necessary at this time.					
5-Jan-09	STREET	Residential	242	DEL MAR	AV	Paint Discharge
Comments Action Taken:	PAINT RUNNING IN THE GUTTER.					
	1/5/09---Inspection noted a resident disposed small amount of baking soda in the gutter. Issued verbal warning to clean up small amount of baking soda from the gutter. Resident took immediate action to clean up spill. No further action is necessary at this time.					
6-Jan-09	STREET	Commercial	471	BROADWAY		Unknown Discharge
Comments Action Taken:	POSSIBLE STORM DRAIN COMPLAINT.REAL MESSY					
	1/6/09---Inspection noted a business did not have trash or recycling bins, and had accumulated trash and debris in the trash enclosure. Some trash and debris was flowing into the SWCS due to lack of containers. Issued inspection report with required corrections and a 10-day timeline to business owner.					
	2/4/09--- A reinspection of this business noted that all items listed in the original inspection report have been corrected. No further action is necessary at this time.					
7-Jan-09	STORM WATER	Residential	84	FOURTH	AV	Other
Comments Action Taken:	1/7/009---Please refer to case 08_002748					
12-Jan-09	STREET	Residential	76	GEORGINA	ST	Leaking Vehicle
Comments Action Taken:	CAR LEAKING OIL IN FRONT OF HOME,LIC 5UIZ090.					
	1/12/09--- Inspection noted a leaky Chevrolet Sedan CA 5UIZ090. Owner was notified of the leak, asked to move his vehicle and clean up the oil spill. Vehicle owner took immediate action to comply. A verbal warning was issued. . No further action is necessary at this time.					

Incident Date	Structure Category	Site Category	Address			Type of Violation
15-Jan-09	CATCH BASIN	Construction Sites	548	PALOMAR	ST	Slulry/Concrete Discharge

Comments Action Taken: SAW CUTTING.

1/15/09--- Inspection noted concrete slurry flowing from apartment complex at 548 Palomar as a result of concrete activity. City crews were summoned to clean all areas of the public storm drain system impacted by this spill. Administrative citation SW1706 was issued. No further action is necessary at this time.

16-Jan-09	STREET	Residential	2418	FALCON VALLEY	DR	Unknown Discharge

Comments Action Taken: Case entered twice.

16-Jan-09	MISC	Residential	2418	FALCON VALLEY	DR	Accident/Spill

Comments Action Taken: On 1/16/09, received notification of landscaper washing down concrete coloring hardener into the storm drain system. Spoke with staff who stated that they knew that it was wrong but did not want to lose job and did what they were told by their supervisor. Contacted homeowner and landscaping company that a Administrative Citation will be issued to landscaper and that they would possibly be responsible for the cleanup that was conducted by City Crews. No further action is required. Compliance was met.

16-Jan-09	STREET	Residential	1333	J	ST	Accident/Spill

Comments Action Taken: 1/16/09--- Inspection noted some waster being discharged as a result of insufficient BMPs. Stanley Steemer staff was discharging into the lawn as a form of BMP. Discharge exceeded the capacity of the lawn to hold water and resulted in a portion of the discharge to flow away. Educated staff on directing the flow into the sanitary sewer. Issued verbal warning. No further action is necessary at this time.

27-Jan-09	STREET	Residential		THIRD	AV	Leaking Vehicle

Comments Action Taken: FLUIDS LEAKING FROM A BUS INTO THE STREET SENT MIKE HICE TO LOCATION.

1/27/09--- Inspection noted emergency repairs being conducted on a bus CA 6FQS605 by Avila Mobile Truck Repair CA 5V96007. Some diesel fuel had leaked from the bus. Issued verbal warning to the owner and mechanic to ensure that all spills were cleaned.

1/29/09---A re-inspection found that the bus was moved and all leaks were completely cleaned up. No further action is necessary at this time.

29-Jan-09	STREET	Commercial	1045	BROADWAY		Dirt/Sediments

Comments Action Taken: THE DUMPSTER LEAKS A SUBSTANCE NOT KNOWN THEN THEY WASH IT DOWN INTO THE STORM DRAINS.

1/29/09--- Inspection noted trash bin not within it's trash enclosure, and leaking onto the a private driveway. Issued commercial inspection report requiring clean up of all spills, repair or replacement of the leaky trash bin, and placement of the trash bin within the trash enclosure.

2/4/09---A re-inspection found all items noted on the commercial inspection report corrected. No further action is necessary at this time.

5-Feb-09	STREET	Commercial	481	BROADWAY		Fuel/Oil/Gas Spill

Comments Action Taken: OIL SPILL ON THE PARKING LOT.

2/2/09---Received report and pictures of oil spill onto the rear parking lot at Wings and Things Chula Vista. Verified spill, and prior notices to Wings and Things in the form of an inspection report. Issued Administrative Citation (Warning) SW B0131091 on 3/3/09 to property owner. Follow up inspection noted that parking lot was free of oil. No further action necessary at this time.

Incident Date	Structure Category	Site Category	Address		Type of Violation
5-Feb-09	STREET	Residential	PASEO LADERA		Unknown Discharge
Comments Action Taken:	SUSPICIOUS RESIDENTS DUMPING INTO CATCH BASIN.				
9-Feb-09	STREET	Construction Sites	MOUNT MIGUEL	RD	Dirt Tracking
Comments Action Taken:	On 02/09/09, received notification of dirt tracking coming from Seniors Hill (SM026G) construction project at 503 Mount Miguel Road. Arrives on scene and observed small amount of sediment accumulating at access road onto project. Due to significant rain, silt fencing was being slightly overwhelmed. Adjusted silt fence and notified Westmont Construction to monitor site. No further actions required.				
11-Feb-09	STREET	Commercial	4360 BONITA	RD	Unknown Discharge
Comments Action Taken:	UNKNOWN DISCHARGE COMING FROM SHOPPING MALL ENTRANCE TO RITE AID.				
11-Feb-09	CATCH BASIN	Construction Sites	517 LAS ESTANCIAS	DR	Dirt Tracking
Comments Action Taken:	MUD IS GOING INTO CATCH BASIN. 2/11/09--- Inspection found no evidence of a discharge. However some construction BMPs were not being implemented. Issued a construction inspection report detailing items that needed implementation of correction. A re-inspection will be conducted to ensure all items are addressed.				
11-Feb-09	STREET	Residential	182 SIERRA	WY	Construction Debris & Waste
Comments Action Taken:	2/11/09---Noted approximately 8 yards of dirt staged in the street in front of 182 Sierra Way as part of a pool filling project. Spoke to homeowner and issued verbal warning to remove dirt from the street and to stage all future loads of dirt on private property. Homeowner took immediate action and began clean up. 2/12/09---A re-inspection noted that all dirt had been cleaned from the street. No further action is necessary at this time.				
13-Feb-09	STREET	Residential	670 BROADWAY		Leaking Vehicle
Comments Action Taken:					
19-Feb-09	STREET	Residential	COLUMBIA	ST	Construction Debris & Waste
Comments Action Taken:	2/19/09---Received report of construction debris and sediment on the street in front of 1627 Columbia Street. Inspection noted large amount of sand in the driveway and in the street. Spoke to project foreman. Issued directive to remove all sand and other debris from the public right of way. A follow up inspection noted the public right of way had been cleared away. No further action necessary at this time.				
20-Feb-09	STREET	Residential	871 FIRST	AV	Construction Debris & Waste
Comments Action Taken:	2/25/09---Responded to report of mulch and other debris in the alley behind 874 Country Club. Inspection noted mulch, concrete and other materials in the public right of way. Met with homeowner Kathy Estrasa and informed her of the violation and need to correct. Ms Estrasa agreed to correct the violations. 3/13/09---A follow up inspection noted that all items were corrected. Photos on file. No further action is necessary at this time.				
24-Feb-09	STREET	Construction Sites	11 WALNUT	DR	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	2/24/09---Responded to report of saw cutting without BMPs. Inspection noted Loya construction staff saw cutting sidewalk without using BMPs. Notified business owner Pablo Loya of violation and of requirement to implement BMPs. Loya construction staff stopped cutting activity and began to clean all slurry. Mr. Loya stated that he would wait until later when a professional saw cutting company that uses BMPs could come out and perform the saw cutting instead. No further action necessary at this time.					
26-Feb-09	STREET	Residential	908	WAYNE	AV	Leaking Vehicle
Comments Action Taken:	2/26/09---Responded to report of vehicle leaking oil onto the street in front of 926 Wayne Ave. Inspection noted that a white Ford pickup License plate 6J76670 belonging to San Diego Sweeping Services was leaking oil onto the street. Notified Steve J. Reid of said co. and asked that he clean up the spill. Mr. Reid stated that he or his staff would take care of the matter immediately. A follow up inspection noted that the vehicle had been removed and the oil spill cleaned. No further action necessary at this time.					
2-Mar-09	CATCH BASIN	Residential	729	ANZA	WY	Over-Irrigation/Pesticide
Comments Action Taken:	WATER RUNNING FROM YARD INTO STORM DRAIN PIPE IN FRON OF THIS ADDRESS. 3/4/09---Inspection noted trickle of water coming from sai address. Left bus. card with not for homeowner to call me. 3/9/09---Met with homeowner Cesar Murillo. Noted that the yard drains were possibly clogged, retaining irrigation water, and releasing the water at a trickle slow enough to allow algae to form. Mr. Murillo explained how he is working to unclog the drain pipe and that if he was not successful he would call a plumber. I issued Mr. Murillo more time to fix the problem. A follow up call or visit will occur on 3/16/09. 3/16/09---A follow up inspection noted that the violation had been corrected. Homeowner Cesar Murillo stated that the problem was a secondary valve in his irrigation system. No further action necessary at this time.					
2-Mar-09	CATCH BASIN	Residential		BLUE FALLS	DR	Slulry/Concrete Discharge
Comments Action Taken:	SAW CUTTING SLURRY WENT INTO CATCH BASIN.ALREADY DRY.					
4-Mar-09	STREET	Residential		FIRST	AV	Construction Debris & Waste
Comments Action Taken:	WHEN IT RAINS CONSTRUCTION DEBRIS (ASPHALT & CONCRETE)DEPOSITS INTO DRAIN. AT INTERSECTION. 3/12/09---inspection found no evidence of a storm water violation. Photos on file. No further action necessary at this time.					
4-Mar-09	STREET	Commercial	1266	THIRD	AV	Unknown Discharge
Comments Action Taken:	GREASE OVERFLOWING FROM CONTAINER. 3/3/09--- responded to complaint regarding an overflowing restaurant oil grease container. Inspection noted that the oil grease container at El Norteno Taco shop was overflowing and did not have the lids in place. Notice was given to business owner Daniel Amador of the need to provide proper containment for oil and grease. A follow up inspection was agreed upon. 3/12/09---A follow up inspection of El Norteno noted that all spills had been cleaned and a new container was in place. No further action is necessary at this time.					
4-Mar-09	STREET	Residential	1337	TIERRA BONITA	PL	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	OIL SPILL/MR .FRANK YORK 204-7585 ALSO CALLED ON THIS. ON (3/06/09) 3/2/09---Responded to report of vehicle leaking oil onto the street in front of 1337 Tierra Bonita. Inspection noted large oil stains on driveway of said address and out into street. Left business card with message to call me. 3/4/09---Left second door hanger with message to call me 3/5/09---Met with homeowner Christine Pelayo (619) 421-5314. Notified Ms. Pelayo of the violation and of the need to clean all oil from the public right of way and her driveway to avoid potential discharges or tracking. Ms. Pelayo stated that she would have the oil cleaned. We agreed that on 3/10/09 a follow up inspection would occur. 3/11/09---A follow up inspection noted that all oil had been cleaned as agreed. No further action necessary at this time.					
9-Mar-09	STREET	Residential	4	PAISLEY	ST	Fuel/Oil/Gas Spill
Comments Action Taken:	CLEANING GRAFFITI WITH UNKNOWN SUBSTANCE. 3/9/09---Responded to report of gasoline spill at 4 Paisley Street. Inspection did not find any evidence of a spill at the said address or the surrounding areas. Photos on file. No further action is necessary at this time.					
16-Mar-09	STREET	Residential	1400	OLEANDER	AV	Possible Dumping into Catch Basin
Comments Action Taken:	3/16/09---Inspection did not find any evidence of a storm water violation. No further action necessary at this time.					
17-Mar-09	STREET	Commercial	690	E	ST	Fuel/Oil/Gas Spill
Comments Action Taken:	HOT WATER FROM WASHING PARKING LOT. 3/17/09---Responded to report of an illegal discharge at the Denny's restaurant at 690 E Street. Complainant George Donavan (619) 581-5060 stated that he noticed the discharge coming from the restaurant and onto E Street. Inspection did not find any evidence of a violation. A verbal notice was issued to restaurant manager Cindy Gegenworth that non-storm water discharges into the storm water conveyance system are a violation of the City's municipal code. No further action necessary at this time.					
18-Mar-09	STREET	Residential	734	COLORADO	AV	Washing Vehicle in Street
Comments Action Taken:	A NEIGHBOR WASHED A CAR ENGINE IN FRONT OF HIS HOME AND LET WATER AND OIL RUN INTO STORM DRAIN CHANNEL. 3/18/09---Responded to report of engine washing in the street. Inspection noted a trail of oil from 753 Woodlawn Ave. to 734 Colorado Ave. via Kearny Street. At the time of inspection no evidence was found leading to the responsible party. City crews spread absorbent and cleaned up the spill.					
20-Mar-09	STREET	Commercial		FOURTH	AV	Accident/Spill
Comments Action Taken:	3/20/09---Responded to report of oil spill in the street and potentially leading into the SWCS. Inspection noted a trail of oil from the private parking lot and into the private street in front of Dixiline Lumber (Brisbane St.) Origin of oil spill was from a semi truck owned by Glesby Building Materials. Spoke to Rick Gotterman of Glesby (800) 339-3729. Mr. Gotternan stated that he had hired a private clean up and response company to respond. I provided traffic control assistance until National City Fire and Police department responded to the spill. National City Fire Captain Sergio Mora asked for assistance from Chula Vista Public Works crews. Street Division Supervisor Nelson Rivera approved the assistance and dispatched crews to the scene to assist National City Fire department. No further action necessary at this time.					
24-Mar-09	STREET	Residential	128	ELDER	AV	Possible Dumping into Catch Basin

Incident Date	Structure Category	Site Category	Address		Type of Violation
Comments Action Taken:	NEIGHBOR DUMPING GREY WATER INTO BACKYARD.FROM WASHER.				
	3/24/09---Responded to report of resident discharging gray water from a washer machine and potentially leading into the SWCS. Resident Marco Diaz stated that they had already fixed the plumbing leading from the washer machine. Inspection noted all gray water was plumbed into the sewer system. No further action necessary at this time.				
25-Mar-09	STREET	Residential	783 AVENIDA SOLARIA		Leaking Vehicle
Comments Action Taken:	RED FORD P/U LEAKING OIL INTO STORM DRAIN.				
	3/25/09---Responded to report of oil spill in front of 783 Avenida Solaria. Inspection noted that absorbent had been spread to contain and clean up the spill. Inspection did not find evidence necessary to identify the responsible party. A follow up inspection will be conducted to ensure that the absorbent is swept up. Please see request 09_001696				
27-Mar-09	STREET	Residential	1225 CIMA DEL REY		Complaint Response Enforcement
Comments Action Taken:	RUNNING WATER FROM SIDEWALK DRAIN (ALGAE BUILD UP) BEEN RUNNING FOR SEVERAL MONTHS.				
	3/27/09---Responded to report of constant water flow coming from curb drain at 1225 Cima Del Rey. Inspection noted a constant trickle of water from the curb drain. Spoke to homeowner Cheryl Flora (619) 656-4662 who stated that Otay water had investigated and found that the discharge was attributed to ground water. Explained to Ms. Flora that I would be contacting Otay Water and that I would contact her regarding my findings and the status of this case. 4/13/09---Received call back from David Charles with Otay Water who states that there is no record of an investigation or report at 1225 Cima Del Rey. Will investigate further.				
1-Apr-09	STREET	Residential	765 THIRD	AV	Slulry/Concrete Discharge
Comments Action Taken:	RESIDENTS ARE SAW CUTTING WITHOUT CONTAINMENT.				
	4/1/09---Responded to report of contractors saw cutting contract without BMPs. Inspection noted HCI staff working for AT&T allowing a small amount of cement slurry trickle onto the sidewalk. Informed Forman, Alejandro Campos (760) 644-0840 of the need to clean up and only continue working if implementing BMPs. He and his staff immediately complied. Verbal warning was issued. No further action necessary at this time.				
1-Apr-09	STREET	Residential	BRANDYWINE	AV	Possible Dumping into Catch Basin
Comments Action Taken:	4/1/09---Responded to report of oil spill on the street at the bus stop located on the southwest corner of the intersection of Olympic Parkway and Brandywine Ave. A spill of approximately one gallon was found. No evidence was found leading to the responsible party. Established a perimeter around the spill and called for city crews to clean up. City staff cleaned up spill. No further action necessary at this time.				
8-Apr-09	STREET	Commercial	556 BROADWAY		Power Washing
Comments Action Taken:	POWER R WASHING STRUCTURE WITHOUT CONTAINMENT.				
	4/8/09---Responded to report of power washing in the rain at 556 Broadway. Inspection found no evidence of a violation. No further action necessary at this time.				
9-Apr-09	STREET	Residential	783 AVENIDA SOLARIA		Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	3/26/09---Received report of oil stain at 783 Avenida Solaria. Inspection verified complaint and left door hanger instructing homeowner to contact the inspector. 4/2/09---Made contact with homeowner who said that he would spread absorbent on the spill to clean it up. 4/7/09---Noted that absorbent had been spread on the stain. 4/9/09---Re-inspection noted that the stain was cleaned to the maximum extent practical.					
9-Apr-09	STREET	Residential	1142	VISTA	WY	Slulry/Concrete Discharge
Comments Action Taken:	CONCRETE SLURRY COMING OUT OF THIS ADDRESS INTO CATCH BASIN. 4/9/09---Received report of pool filter residue discharged into the street. At 1142 Vista Way. Inspection noted some residue from the above address in the gutter. Discharge did not enter the storm drain inlet. Spoke to Juan DeLaVega regarding spill. Mr. DeLaVega stated that he would be cleaning up the discharge residue. 4/9/09---Re-inspection noted that the spill had been cleaned.					
16-Apr-09	STREET	Construction Sites	1834	CORTE GALEANA		Sewage Spill Going Down Storm Drair
Comments Action Taken:	SEWER MAIN SPILL USED (2) FLUSHERS FOR CONTAINMENT. On 04/16/09 received call from Ken Lightbody, Public Works Inspector, of a sewer overflow located at San Miguel Ranch. City crews were dispatched using 2 vactor crews. Crews contained and clean blockage caused by plug and construction debris. Discharge did not reach water quality basin. Overflow location is new inactive development and not the responsibility of the City. Full cost recovery to be the responsibility of Resmark Development, Owner. No further action required.					
22-Apr-09	STREET	Residential	891	DATE	AV	Other
Comments Action Taken:	Received email from Doug Roberts from Sweetwater Authority with a voicemail message attached. The voicemail was from a resident who was complaining about a neighbor (891 Date Ave) who was discharging pool water for 1.5 hours on 04/21/09 and again 04/22/09. The resident did not leave any contact information, nor did he provide a description of the water being discharged. Drove by residence on 04/22/09 around 5pm. There was some water in the curb gutter area on the street on the same side as the address, but there was no evidence of water marks or staining coming from the address. On 04/23/09, called Doug Roberts and informed him that I drove by the residence and did not see evidence of pool discharge from this address. I explained to him that pool water, as long as it is clear and free of debris, is exempt from regulation. I told him to have the resident call me if he has any further questions.					
30-Apr-09	CATCH BASIN	Residential		EXPLORATION FALLS	DR	Power Washing
Comments Action Taken:	On 4/24/09 received report of mobile Detailer conducting washing of vehicles in the street discharging soapy water into the storm drain system. Observed Xtreme Mobile Cleaning Vehicle at the location with wash water in the curbline from the clean of a red SUV. Contacted owner who stated that he sold the box van to his brother-in-law and previously instructed him to remove all advertising from the sides of the vehicle and that he informed him that he was in violation of the storm water regulations. Verbal Warning issued. Business does have inactive business license. Owner will renew within 7 days. No further action required.					
6-May-09	STREET	Residential	1205	CRYSTAL SPRINGS	DR	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	SILVER MERCEDES LIC 4GKS959.					
	5/4/09---After several inspections at various times of the day inspector noted that no action had been taken by the vehicle owner. Will try early mornings before normal work hours.					
	5/5/09---Re-inspection noted vehicle had not been removed. No calls received from vehicle owner.					
	5/12/09---Re-inspection noted that the spill had been cleaned.					
6-May-09	STREET	Residential	418	QUEEN ANNE	DR	Leaking Vehicle
Comments Action Taken:	BLUE DATSUN OIL CHANGE BEING DONE WITHOUT CONTAINMENT.					
	5/6/09---Received call regarding a blue vehicle changing oil in the street at 418 Queen Anne Street. Inspection noted a blue Mazda with Tennessee license plate 452-NVB parked in the street with an oil pan underneath. Left a tag with notice of City code and instructions to call inspector.					
	5/7/09---Re-inspection noted vehicle had been removed and the oil stain had been cleaned.					
7-May-09	STREET	Residential	1164	CHIMNEY FLATS	LN	Accident/Spill
Comments Action Taken:	ALLIED WASTE TRUCK SPILLED HYDRAULIC FLUID.					
	On 05/07/09 received phone complaint that Allied Waste vehicle blew hydraulic hose at subject location and did a poor job on cleanup. Contacted Allied Waste staff of complaint. Allied dispatched additional crew to re-clean area using dry methods. Spill was properly cleaned per the satisfaction of the citizen. No further action required.					
11-May-09	STREET	Commercial		J	ST	Unknown Discharge
Comments Action Taken:	5/11/09---Received report of roadside fruit stand operator throwing cherries into the storm drain. Inspection noted a handful of cherries had rolled into the storm drain catch basin. Issued verbal warning to vendor to take precautions so that nothing could fall into the storm drain. During the inquiry the vendor stated that he did not have a business license, permit, or permission from the property owner to operate on the property he was selling from. The vendor stated that he did not want to get a fine from the city and on his own accord, broke down stand and left.					
18-May-09	STREET	Residential	1109	DEL MAR	AV	Unknown Discharge
Comments Action Taken:	GREY WATER FROM WASHER RUNNING INTO THE GUTTER.					
	05/18/2009 Responded to the illegal discharge report. Resident was discharging washing machine waste to the street via a black plastic hose. Wastewater did not enter storm inlets as the sidewalk was unpaved. The resident was instructed to discontinue illegal discharge and connect to a toilet or sink inside the building. The resident complied and removed the hose. Follow-up inspection is required to ensure that the incident is not repeated.					
22-May-09	STREET	Residential	469	HIDDEN VISTA	DR	Washing Vehicle in Street
Comments Action Taken:	HE IS WASHING HIS BOAT IN THE STREET.MIKE HICE SAID IT WAS OK.					
	5/22/09---Notice issued to inspector from dispatcher indicated residential washing of a vehicle and water running into street. Public information regarding the use of BMPs has been left at this address.					
22-May-09	STREET	Commercial	1128	BAY	BL	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	HE DUMPED HIS LOAD OF WATER INTO THE STORM DRAIN					
	5/22/09---Received report of carpet cleaning van discharging into the private storm drain inlet at 1128 Bay. Evidence of the discharge was not found. After speaking to the business owner it was clear that he was fully aware of all the NPDES requirements. However, his business did not have a license to operate in Chula Vista and therefore had not been registered with the City's Mobile Business Stormwater Education Program. This business was issued verbal notice to obtain a City of Chula Vista business license and complete the Mobile Business Stormwater Education Program and has complied.					
29-May-09	STREET	Residential	32	ORLANDO	CT	Slulry/Concrete Discharge
Comments Action Taken:	5/26/09---Received report of concrete pump discharge at 32 Orlando Ct. Inspection did not find any evidence of a discharge. Spoke to property owner Francisco Delgado who stated that he and his family had poured concrete a few days prior, but that they were very careful to use BMPs. A courtesy notice was issued to Mr. Delgado to continue ensuring that all the all his contractors use BMPs.					
1-Jun-09	STREET	Residential		OTAY LAKES	RD	Pool Filter Discharge
Comments Action Taken:	5/26/09---Received report of pool filter discharge at Rutgers and Otay Lakes Rd. Inspection did not find any evidence of a pool discharges. Some areas of the gutter were stained with dry concrete that appeared white in color. The concrete stains were years old and cannot be cleaned.					
2-Jun-09	STREET	Construction Sites	397	INKOPAH	ST	Construction Debris & Waste
Comments Action Taken:	CONSTRUCTION BEING DONE AND WATER IS RUNNING DOWN FROM THIS ADDRESS.					
	6/2/09---Received report of concrete pump operator washing into the street at 395 Inkopah St.. Inspection found evidence of discharges. Concrete pump operator said he was in the process of cleaning it and finished the clean up while the inspector was still there. Discharge was contained due to over growing vegetation in the gutter. Issued verbal warning to concrete pump operator to always clean up spills immediately.					
3-Jun-09	STREET	Residential	2627	FAIVRE	ST	Fuel/Oil/Gas Spill
Comments Action Taken:	6/4/09---Received report of motor home discharging sewer at 2627 Faivre St. Initial inspection did not find evidence of a discharge. Will re-inspect on a different day and time to try and make contact with motor home owner and to ensure the motor home is not leaking.					
	7/13/09---Periodic visits failed to find the suspect motor home. Spoke the business owner Cristobal Campos of Chula Vista Auto Repair (619) 429-6994. Issued verbal warning regarding municipal code and reminder that he and ultimately the property owner are responsible for preventing and controlling any spills from vehicles on the property including motor homes he or his staff is repairing. Mr Campos agreed and said that he would immediately report any motor homes discharging on the street. No further action is necessary at this time.					
15-Jun-09	STREET	Residential	514	OCEAN VIEW	LN	Fuel/Oil/Gas Spill
Comments Action Taken:	6/16/09---Responded to report of oil in the street at the 514 Ocean View Ln. Did not find oil stain. Mistakenly visited Ocean Breeze Ln.					
	6/17/09---Visited 514 Ocean View Ln. Found oil stain and spread absorbent over the stain.					
	6/18/09---E-mailed the complainant as requested and called dispatch to establish a work request for street crews to sweep up the absorbent.					
16-Jun-09	STREET	Residential	161	VANCE	ST	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
Comments Action Taken:	OIL SPILL IN THE GUTTER. 6/10/09---Received report resident at 161 Vance St. changing oil in the street and allowing discharges flow in to the gutter. Inspection notes some oil stains on the street that we're not traceable to the address. Left note on door for resident to contact the inspector. 6/15/09---Made contact with resident who stated that they had washed the street and utilized proper BMPs to capture, contain and appropriately dispose of all wash water. A re-inspection confirmed that all had been cleaned.					
17-Jun-09	CATCH BASIN	Residential	2347	FOREST OAKS	DR	Unknown Discharge
Comments Action Taken:	6/17/09---Responded to call of carpet cleaner discharging into the storm drain. inspection noted that the van-mounted carpet cleaning equipment was leaking clean water into the street, and that the carpet cleaning staff was inside the house. Issued verbal notice to stop work until the machine could be fixed. Carpet cleaning staff stated that they did not know the machine was leaking and would immediately stop work and have a replacement van dispatched out. Issued verbal warning to carpet cleaning staff informing them of CVMC14.20., and that replacement equipment would also be held to the municipal codes requirements. Carpet cleaning staff packed up equipment and left to get another van. No further action necessary at this time.					
18-Jun-09	STREET	Residential	514	OCEAN VIEW	LN	Accident/Spill
Comments Action Taken:	6/18/09---Please see request 09_002810					
19-Jun-09	STREET	Residential	115	GLOVER	AV	Unknown Discharge
Comments Action Taken:	6/19/09-Received report of motor home dumping sewage into the street adjacent to the storm drain inlet at 115 N. Glover Ave. Inspection noted approximately 20 gallons of raw sewage dumped into the street, curb and gutter. Some of the sewage flowed near the inlet, but did not enter. Summoned city crews to contain, clean and appropriately dispose of sewage. Quality Lift Trucks staff shared surveillance video showing a motor home potentially discharging sewage into the street at the same location on 6/18/09 at 10pm. Further review of the evidence and investigation is will be conducted to determine the exact cause of the discharge and the party responsible.					
22-Jun-09	STREET	Residential	62	MINOT	AV	Sewage Spill Going Down Storm Drair
Comments Action Taken:	On 06/22/09 received notification of a private sewer lateral leaking into the street. Reporting party anonymous and there is no such address. Could not find any evidence of a sewer discharge. No further action required.					
25-Jun-09	STREET	Residential	1541	MELROSE	AV	Leaking Vehicle
Comments Action Taken:	On 06/25/09 responded to the subject location on leaking vehicles. Spoke with homeowner who stated that he will park any leaking vehicles in driveway and put down drip pans. Owner stated that the vehicles are his family members. No further action required.					
25-Jun-09	STREET	Residential	533	PLAZA DEL CID		Leaking Vehicle
Comments Action Taken:	On 6/26/09 responded to the complaint at the above address. Observed significant oil staining from a leaking vehicle. Vehicle was not located at this time. City staff left a Pollution notice at the location. Received phone call from owner of vehicle who stated that she did not have the means to repair the leak at this time. City staff instructed her park the vehicle in the driveway and place a drip pan under the vehicle. Resident complied. No further action required at this time.					
29-Jun-09	STREET	Residential	1368	OLEANDER	AV	Construction Debris & Waste
Comments Action Taken:	CONTRACTOR IS THROWING ALL KINDS OF MATERIALS BEHIND 1368 OLEANDER AVE INTO CITY PROPERTY. On 06/29/09, responded to complaint and observed slurry spills, concrete and yard waste along open space slope. Contact owner of the property who stated that he will ensure that the contractors promptly conduct the cleanup of all the waste. No further action is required at this time.					

Incident Date	Structure Category	Site Category	Address			Type of Violation
30-Jun-09	STREET	Residential	421	HIDDEN VISTA	DR	Slulry/Concrete Discharge

Comments Action Taken:

CONCRETE RESIDUE IN THE GUTTER.IT IS A CONTINUING THING

6/30/09---Responded to report of concrete slurry in the street from 421 Hidden Vista Dr. Inspection noted dry grout mix in the gutter from this address and to the corner of the block. Spoke to Jorge Elizande, (619) 481-9807 at the home who said that he would sweep and mop up all the dry grout mix. A re-inspection a few hours later noted that all grout mix had been cleaned. No further action necessary at this time.

Total: **138**

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City of Chula Vista

Jurisdictional Urban Runoff Management Program

ANNUAL REPORT

No. 30

July 1, 2009 - June 30, 2010

The bay begins at your front door. Help keep our bay and waterways clean.

La bahía comienza en la puerta de su casa. Ayude a mantener limpios nuestros canales y nuestra bahía.

CITY OF CHULA VISTA

CITY OF CHULA VISTA

Public Works Department

September 27, 2010
File # 0780-85-KY181

San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Attention: Mr. David Gibson, Executive Officer

SUBJECT: JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) ANNUAL REPORT NO. 30

Please find enclosed City of Chula Vista's JURMP Annual Report No. 30, for Fiscal Year 2009-2010.

The JURMP Annual Report has been prepared in accordance with the requirements of the San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (NPDES Permit No. CAS0108758) and is a documentation of the City's activities on the implementation of, and compliance with the requirements of said Permit during the reporting period July 1, 2009 to June 30, 2010.

If you have any questions regarding the submitted report, or need further information, please contact Khosro Aminpour, Senior Civil Engineer, at (619) 397-6111. Please direct any and all correspondence to:

City of Chula Vista, Department of Public Works
1800 Maxwell Road, Chula Vista, CA 91911
Attention: Khosro Aminpour, Senior Civil Engineer

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

Attachments

C: Rick Hopkins, Director of Public Works
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer

SIGNED CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

DATE

CITY OF CHULA VISTA
JURMP Annual Report No. 30
Fiscal Year 2009-2010
SEPTEMBER 2010

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ACKNOWLEDGEMENTS

This Report has been prepared by or under the supervision of:

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Staff from the following City of Chula Vista departments, divisions, or sections has contributed to the implementation of the JURMP in 2009-2010:

Public Works Storm Water Management
Public Works Inspection Services
Public Works Wastewater Management
Public Works Environmental Services
Department of Conservation and Environmental Services
Office of Communications
Chula Vista Nature Center
Geographic Information Systems
Development Services – Land Development
Engineering Design
Planning Landscape Architecture
Environmental Planning
City Attorney's Office

The following organizations have contributed to the implementation of the JURMP in 2009-2010:

- D-MAX Engineering, Inc.
- I Love a Clean San Diego, Inc.
- Otay Valley Regional Park (OVRP)
- The CLEAN Stakeholder Group

The City of Chula Vista wishes to thank:

- Volunteers who dedicated their time to improve water quality in Chula Vista
- Environmentally conscious citizens who reported illegal discharges
- Citizens, business owners, contractors, and developers who cooperated with City staff in implementing Best Management Practices

EXECUTIVE SUMMARY

On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (Regional Board) adopted the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 (Municipal Permit). The implementation phase of the Municipal Permit commenced on January 24, 2008. This is the third annual report submitted under the current permit and covers the implementation period of July 1, 2009 to June 30, 2010. Reporting requirements of this Jurisdictional Urban Runoff Management Program (JURMP) annual report is in accordance with the stipulations of Section J.3.a of the Municipal Permit.

Among other requirements, the Municipal Permit requires that on September 30th of each year, all municipalities of San Diego County (including Chula Vista) as well as the San Diego Unified Port District, the San Diego County Regional Airport Authority and the County of San Diego, collectively referred to as the Copermittees, submit jurisdictional annual reports, which provide documentation of the activities conducted by each Copermittee during the reporting period covering the previous fiscal year from July 1 to June 30. JURMP annual reports are to include descriptions of each Copermittees' efforts in the implementation of its JURMP document developed in compliance with Municipal Permit requirements to minimize discharges of pollutants to waters of the United States and other receiving waters.

As required under Section M.6 of the Municipal Permit, the Copermittees have developed a regional standardized format for JURMP annual reports. This report has, therefore, been prepared in conformance with the regional standardized format.

The present report covers subjects and areas outlined in Section J.3.a of the Municipal Permit and the Chula Vista JURMP. Although the reporting period is essentially from July 1, 2009 to June 30, 2010, some of the activities could not readily be divided to fall within the above target dates and continuation of the activities may have extended beyond this period to their completion.

This report has been prepared to provide an account of activities conducted by the City of Chula Vista (City) according to the components outlined in Section D of the Municipal Permit including:

- Development Planning
- Construction
- Existing Development (Including Municipal, Industrial and Commercial, Residential)
- Illicit Discharge Detection and Elimination (this section will be submitted under a separate cover on or before December 15, 2010, in accordance with Addendum 2 to Order No. R9-2007-0001)
- Education
- Public Participation
- Fiscal Analysis
- Assessment of JURMP Effectiveness

It is important to note that while the City discharges, directly or indirectly, to water bodies that are listed on the Clean Water Act Section 303(d) as impaired water segments; the City does not discharge to any water bodies with a Total Maximum Daily Load (TMDL) program. Therefore, a discussion of TMDLs is not included in this report.

Prior to the 2007-2008 report, the City submitted copies of its Dry Weather Field Screening and Analytical Monitoring Program report and any follow-up investigation reports for the previous dry weather season as attachments to its JURMP annual reports. Since the annual reports are now due to the Regional Board by September 30th of each year, and Dry Weather Field Screening activities can continue until September 30th, the Regional Board has agreed that Dry Weather Field Screening reports and their analysis can be submitted separately at a later date but no later than December 15th of each year. Section 7.0 of this report, the 2010 Dry Weather Field Screening report, and an analysis of its findings will be submitted to the Regional Board before December 15, 2010, as mandated by Addendum No. 2 to Order No. R9-2007-0001.

During this reporting period, the City of Chula Vista participated in the regional Receiving Water and Urban Runoff Monitoring and Reporting Program as mandated in the Municipal Permit. The County of San Diego, as the Principal Copermittee, will submit to the Regional Board the Receiving Waters and Urban Runoff Monitoring Annual Report for the 2009-2010 rainy season on January 31, 2011.

Section 11.0 of this report includes an effectiveness assessment analysis of the development and implementation of the City's Storm Water Management Program. Such analysis provides a synopsis of activities and a critical look at the overall strengths and challenges associated with the components throughout this report.

The following sections cover City of Chula Vista's strides toward continued implementation and improvement of its JURMP and, participation in regional and watershed level activities and programs from July 1, 2009 to June 30, 2010. The City is in the continuing process of assessing the effectiveness of individual program components and has made adjustments or revisions in some areas in order to improve the overall effectiveness of the program and to assure full compliance under the Municipal Permit. The City recognizes its role as a good steward of local and regional water resources, as well as the overall health of the San Diego Bay watershed.

LIST OF TERMS AND ABBREVIATIONS

APN	-	Assessors Parcel Number
BMPs	-	Best Management Practices
CASQA	-	California Storm Water Quality Association
City	-	City of Chula Vista
CIWMB	-	California Integrated Waste Management Board
CSWMP	-	Construction Storm Water Management Plan
CWA	-	Clean Water Act
ESA	-	Environmentally Sensitive Area
FY	-	Fiscal Year
GBA	-	George Butler Associates Management System
GIS	-	Geographic Information System
GPU	-	General Plan Update
HHW	-	Household Hazardous Waste
HMP	-	Hydromodification Management Plan
IHC	-	Interim Hydromodification Criteria
IPM	-	Integrated Pest Management
JURMP	-	Jurisdictional Urban Runoff Monitoring Plan
LID	-	Low Impact Development
LTEA		Long Term Effectiveness Assessment
Manual	-	Chula Vista Development Storm Water Manual
MEP	-	Maximum Extent Practicable
MS4	-	Municipal Separate Storm Sewer System
MWS	-	Modular Wetland System
NAICS	-	North American Industrial Classification System
NOI	-	Notice of Intent
NOT	-	Notice of Termination
NPDES	-	National Pollutant Discharge Elimination System
ROWD		Report of Waste Discharge
RWQCB	-	Regional Water Quality Control Board
SIC	-	Standard Industrial Classification
SSO	-	Sanitary Sewer Overflows
SUSMP	-	Standard Urban Storm Water Mitigation Plan
SWPPP	-	Storm Water Pollution Prevention Plan
SWRCB	-	State Water Resources Control Board
TAC	-	Technical Advisory Committee
TTWQ	-	Threat to Water Quality
WDID	-	Waste Discharge Identification
WQTR	-	Water Quality Technical Report

1.0 INTRODUCTION

1.1 BACKGROUND

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollutions such as urban runoff and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issues to local governments and other agencies.

The California Regional Water Quality Control Board, San Diego Region (Regional Board), adopted the first NPDES General Municipal Permit for the San Diego Region in 1990. The NPDES Municipal Permit is re-issued approximately every five years. On January 24, 2007, the Regional Board adopted the latest NPDES General Municipal Permit for the San Diego Region, Order No. R9-2007-0001 (Municipal Permit). The Municipal Permit regulates all new development, significant redevelopment, existing land use and other activities within the jurisdictional boundaries of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and eighteen municipalities of San Diego County, collectively known as the Copermittees. The Municipal Permit requires all Copermittees to develop and implement programs to reduce the discharge of pollutants into and from their Municipal Separate Storm Sewer Systems (MS4s) and report all their efforts and achievements to the Regional Board on an annual basis.

Report No. 30 is an account of City of Chula Vista's activities and Jurisdictional Urban Runoff Management Program (JURMP) implementation efforts during the reporting period of July 1, 2009 to June 30, 2010.

During this reporting period, and pursuant to the requirements of the Municipal Permit, the City of Chula Vista (City) has:

- Implemented inspection programs of high priority construction, municipal, industrial, commercial, and residential existing land uses.

- Provided education and training for City staff, developers, residents, and businesses on current storm water regulations and applicable Best Management Practices (BMPs) that can be implemented to reduce discharge of pollutants to the City's storm water conveyance systems.

- Continued Dry Weather Field Screening and Analytical Monitoring, and participated in the region-wide Receiving Water Monitoring Program, both of which are designed to evaluate water quality and identify sources of pollution to and from storm water conveyance systems.

- Inspected and maintained public facilities and activities for compliance with BMPs requirements.

- Participated in watershed and regional meetings and activities.

1.2 PURPOSE AND OBJECTIVES

Report No. 30 is a documentation of the City's efforts to minimize discharge of pollutants to and from its storm water conveyance systems and to reduce the impact of urban runoff on adjacent water bodies and sensitive areas. The following account describes the City's activities on the implementation of, and compliance with, the requirements of the Municipal Permit during the reporting period July 1, 2009 to June 30, 2010. The reporting year has been guided by insight through the Report of Waste Discharge and Long Term Effectiveness Assessments undertaken regionally in 2004-2005. These regional reporting and assessment efforts have provided valuable understanding on both local and watershed conditions, and offered the City information to support programmatic development and priority establishment throughout various elements presented within this report.

Sections 2.0 to 6.0 of this report describe the City's compliance activities during the current reporting period and include the following components:

- Development Planning
- Construction Program
- Municipal Program
- Industrial and Commercial Program
- Residential Program

Section 7.0 includes a description of the City's activities and analysis of the Illicit Discharge Detection and Elimination Component. In previous years, when submittal of JURMP annual reports were due to the Regional Board on or before January 31 of each year, Dry Weather Field Screening and Analytical Monitoring report findings were referenced and analyzed in this Section, and the reports themselves were submitted as attachments to the annual report. Addendum No. 2 to Order No. R9-2007-0001 acknowledges that Dry Weather Field Screening and Analytical Monitoring reports can no longer be completed by the new due date of the JURMP annual report submittal (September 30 of each year) and, therefore, Section 7.0 together with copies of Dry Weather Field Screening and Analytical Monitoring reports will be submitted to the Regional Board on or before December 15, 2010.

Section 8.0 highlights City's efforts and activities conducted during the reporting period to increase general public awareness about environmental issues and water quality protection and train City staff, business owners, developers, contractors, and other targeted groups to implement BMPs during their daily activities.

Section 9.0 is a description of the City's attempts to promote environmental and water quality awareness among the general public and particularly young people through their involvement and participation in environmental group activities.

Section 10.0 outlines an analysis of the City's storm water management fiscal resources as required by Section G of the Municipal Permit. The Copermittees developed a Standardized Fiscal Analysis Method and Format, dated January 29, 2009, which has been used in this report as a basis for the City's fiscal analysis in this section.

Section 11.0 of this report is dedicated to the effectiveness assessment of the City's implementation of the JURMP. The document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" and Section 13 of the City's JURMP document have been utilized to draw conclusions about the effectiveness of the City's JURMP implementation. It should be noted that effectiveness assessment is an on-going component of the JURMP program, and various program elements are revised as necessary, based on observations and findings.

Section 12.0 of the Standardized Format for JURMP Annual Report is dedicated to descriptions of any special investigations conducted during the reporting period. As indicated in this section, the City has determined that groundwater intrusion to surface receiving waters may have notable impacts on surface water quality and, therefore, during the current reporting period initiated a study to identify locations where groundwater is discharged to surface waters and, to characterize potential pollutants being discharged. This is an on-going study, which is expected to provide valuable insight in identifying sources of surface water contamination.

Section 13.0 of this report includes a description of the City's efforts to reduce pollutant discharges from non-emergency fire fighting flows. Such efforts include training of Fire Department staff to implement BMPs during their daily activities, fire-fighting exercises, and post-incident spill control and cleanup. Incorporation of post-construction BMPs in the design and construction of new fire stations is considered to be another method for minimizing pollutant discharges from washing fire fighting equipment and other non-emergency activities at fire stations and is discussed in this section.

Section 14.0 of this report is dedicated to descriptions of modifications to the JURMP document that were made during the reporting period, or that are proposed or planned, to maximize the City's JURMP effectiveness.

Section 15.0 includes the report's conclusions and recommendations. It provides an overall view of the City's implementation of its JURMP, assesses its strengths and weaknesses in general terms, and provides recommendations to improve next year's program.

2.0 DEVELOPMENT PLANNING COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a (3)(a) i – A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.

Permit Section J.3.a.(3)(a).ii - Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).iii - A listing of the development projects to which SUSMP requirements were applied.

Permit Section J.3.a.(3)(a).iv - Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).v - At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.

Permit Section J.3.a.(3)(a).vi - A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.

Permit Section J.3.a.(3)(a).vii - An updated treatment control BMP inventory

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Permit Section J.3.a.(3)(a).viii - The number of treatment control BMPs inspected, including a summary of inspection results and findings.

Permit Section J.3.a.(3)(a).ix - A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.

Permit Section J.3.a.(3)(a).x - Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).xi - A listing of any projects which received a SUSMP waiver.

Permit Section J.3.a.(3)(a).xii - A description of implementation of any SUSMP waiver mitigation program.

Permit Section J.3.a.(3)(a).xiii - A description of Hydromodification Management Plan (HMP) development collaboration and participation.

Permit Section J.3.a.(3)(a).xiv - A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.

Permit Section J.3.a.(3)(a).xv - A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.

Permit Section J.3.a.(3)(a).xvi - A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.

Permit Section J.3.a.(3)(a).xvii - The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(a).xviii - A description of notable activities conducted to manage urban runoff from development projects.

2.1 INTRODUCTION

Municipal Permit Section D.1 states "Each Copermittee shall implement a program which meets the requirements of this section and (1) reduces Development Project discharges of pollutants from the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP), (2) prevents Development Project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) manages increases in runoff discharge rates and durations from Development Projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force."

This section describes actions taken during the defined reporting period by the City to minimize short- and long-term impacts of new development or redevelopment with land disturbance activities, structural development (including construction or installation of a building or structure), creation of impervious surfaces, and capital improvement projects. Through the implementation of the Development Planning Component, the City minimizes and manages increases in runoff from development projects to the MEP to protect receiving waters.

2.2 LAND-USE PLANNING

2.2.1 BACKGROUND

The City's land-use planning is guided by its General Plan and the goals, objectives, and policies included therein. The City's comprehensive General Plan Update (GPU) was completed in December of 2005. The GPU program was nearly a five-year effort, and included the

preparation of a citywide master drainage study and assessment and, a water quality baseline study to identify planning issues and policy implications, including compliance with the Municipal Permit and NPDES regulations.

Throughout the GPU process, the City solicited and received significant public input with respect to visions, goals, and objectives and conducted numerous public workshops to present and solicit input on alternative land use concepts. The GPU was adopted by City Council on December 13, 2005.

According to the Environmental Element of the GPU: "With further growth and redevelopment in Chula Vista, the projection of local and regional water resources must be adequately addressed. The City will continue its efforts to reduce the discharge of pollutants into the municipal storm drain system and natural water bodies in accordance with established NPDES standards and watershed planning efforts involving the City." One of the major objectives of the Environmental Element is to "Protect and improve water quality within surface water bodies and groundwater resources within and downstream of Chula Vista."

Water quality policies have been developed based upon those found within the Municipal Permit, and have been composed as to compliment the flow and content of the entire General Plan Update. The following water quality policies are contained in the Environmental Element:

- Ensure safely swimmable and fishable surface waters through careful management of land uses and activities within Chula Vista.
- Pursue safe alternatives to traditional pest management methods in order to reduce toxics in urban runoff and large open uses of land (e.g., golf courses, parks, agricultural lands.)
- Educate residents, business owners and City departments about feasible methods to minimize the discharge of pollutants into natural drainages and the municipal storm water conveyance system.
- Ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy.
- Encourage and facilitate construction and land development techniques that minimize water quality impacts from urban development.
- Maximize the protection of potable water supply resources from pollutants.
- Collaborate with other applicable jurisdictions in the development and funding of regional watershed management plans.

In view of the above comprehensive water quality protection provisions in the Updated General Plan, the City does not find it necessary to make any amendments to its General Plan.

2.2.2 SOURCE CHARACTERIZATION

Seven categories of land uses are identified in the City's General Plan: residential, commercial, mixed-use, industrial, public, special planning areas, and streets/freeways/right-of-ways. Each category can be associated with its specific combination of activities and pollutants and the potential impact that those activities and pollutants may have on the environment, including

urban runoff quality. The City's land-use planning, project review, approval, and verification process includes environmental considerations such as source characterization, proximity to sensitive areas, pollutants and conditions of concern in receiving waters and sensitive areas, and measures necessary to minimize environmental impacts to the MEP.

Additionally, the Chula Vista Development Storm Water Manual (Manual), updated in 2010, provides guidelines and directives for development project applicants and City staff to identify pollutants and conditions of concern for each type of land use, both during and after construction, and recommend BMPs to mitigate negative impacts of proposed activities and increased impervious areas. The City's Jurisdictional Urban Runoff Management Plan (JURMP) includes a map (Map 2) showing environmentally sensitive areas within the City. Land use planning attempts to prevent, to the MEP, potentially pollutant-generating land uses from being located near environmentally sensitive areas.

During the reporting period, the City subjected all development project applications to applicable environmental review processes, including the Standard Urban Storm Water Mitigation Plan (SUSMP) process.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

To implement the policies outlined within the City's GPU, the City has developed the Manual. The Manual includes a comprehensive description of construction and post-construction BMPs that are required from each development project. Additionally, the Manual includes guidelines, flow charts, and directives for development applicants and City staff on how to identify applicable requirements for priority and non-priority projects. A section of the Manual has been dedicated to the City's SUSMP. Another section of the Manual outlines BMP requirements on construction sites during both rainy and dry seasons.

During the current reporting period, the City has ensured compliance with BMP requirements through development project reviews, construction and post-construction site inspections, and enforcement actions as necessary.

2.2.4 PROGRAM IMPLEMENTATION

During the reporting period, the City successfully completed implementation of the Land Development Component of the JURMP as described in Section 2.4.4 of this report.

During Fiscal Year 2009-2010, in compliance with NPDES Municipal Permit requirements, the following document was updated:

- Chula Vista Development Storm Water Manual (including the City's SUSMP)

During the process of updating the above-referenced document, each of the City's implementation processes were objectively reviewed for any potential deficiencies and, based on extensive experience gained during the previous Municipal Permit implementation, significant

improvements were made throughout all aspects of the program. Those improvements are reflected in the above referenced updated document dated March 2010.

2.3 ENVIRONMENTAL REVIEW PROCESS

The Environmental Review Process for development and redevelopment projects occurs in two phases. The Environmental Planning Division of the Development Services Department reviews all development and redevelopment projects for compliance with California Environmental Quality Act (CEQA) requirements, which includes water quality considerations. The Permits and Land Development Divisions of the Development Services Department, and the Storm Water Management Section of the Public Works Department review development and redevelopment projects for compliance with requirements of the Clean Water Act, the Municipal Permit, and the City's Grading and Storm Water Management Ordinance requirements. Further, the Environmental Planning Division and the Storm Water Management Section, as needed, review project Environmental Impact Reports (EIRs) to ensure that water quality issues are adequately addressed at early stages of the Environmental Review Process.

The development review and SUSMP implementation processes within the City take place with close coordination of staff from various departments, divisions, and sections. The following departments, divisions, and sections are responsible for the review of development projects for SUSMP requirements:

- Development Services Department
- Public Works Department, Engineering
- Public Works Department, Operations - Storm Water Management Section

The Development Services Department, which is responsible for issuing grading and improvement permits, is the lead department for coordinating all SUSMP review activities. Development projects initiated in the Planning Division of the Development Services Department or other departments within the City are required to submit environmental documents showing compliance with all applicable environmental regulations. Initial Studies, Environmental Impact Reports, Public Facilities Finance Plans, etc., are routed to the Land Development Division for review and final approval.

Land Development Division staff reviews submitted documents and determines if a project is a Priority Development Project and subject to SUSMP requirements. All applicants are required to complete checklists included in the Manual in order to identify specific SUSMP BMP requirements.

Priority Development Projects are then required to submit Water Quality Technical Reports (WQTR) that include identification of project pollutants; Low Impact Development Site Design, Source Control, and Structural Treatment Control BMPs; calculations for sizing of treatment control BMPs; and a perpetual maintenance plan and funding mechanism. The applicants are required to sign an agreement with the City for the maintenance of post-construction BMPs. When necessary, the Land Development Division coordinates with the Storm Water Management Section for the latest developments and requirements in the SUSMP program.

The Land Development Division and Storm Water Management staff reviews WQTRs and ensures that appropriate BMPs are included in the design of projects. Through meetings and phone calls, developers and consultants are educated on the City's SUSMP requirements and are required to revise their WQTRs to include all corrections and amendments required by the City.

As noted above, and within the current reporting period, significant efforts were made by City staff to ensure complete and comprehensive WQTR reviews. This programmatic update was introduced to make certain that each WQTR includes a fully developed assessment of each post-construction BMP considered for the project. BMP analysis is required for Low Impact Development Site Design, Source Control, and Treatment Control BMPs, and effectively holds project designers accountable for demonstrating the effectiveness of the overall design.

The formal review of WQTRs by the Land Development Division and Storm Water Management staff provides an essential mechanism in emphasizing the use of effective site design features and higher efficiency treatment control BMPs. It is recognized that site design and/or structural BMPs are difficult to add to the completed design of a private development project without causing substantial changes to the project's character or viability. The earlier in the planning and design process that storm water quality facilities are considered, the greater the chance that a successful and efficient design can be achieved. During the reporting period, Land Development Division and Storm Water Management staff has strongly emphasized the use of site design features and high efficiency structural BMPs to be incorporated into project design.

Sufficient analysis and discourse must be included within submitted WQTRs to answer why or why not effective and efficient site design features and treatment controls have been selected and/or incorporated into a given project design. Based on the MEP Standards included within the City's SUSMP, staff will make a determination as to whether or not there has been adequate consideration of site design and high-efficiency BMP recommendations. It is noteworthy that projects without approved WQTRs will not move further along in the development review process, providing Land Development Division and Storm Water Management staff an effective tool in the enforcement of SUSMP requirements.

Public projects are initiated in the Public Works Department, Engineering, Design Section. Public projects undergo the same review process as private developments. Engineering staff has received training on SUSMP requirements, identification of SUSMP projects, and application of appropriate BMPs in project design. For complex projects, Storm Water Management staff is available for advice and assistance.

In the case of private SUSMP projects, before final approval of the project and issuance of a grading or improvement permit, the applicant is required to demonstrate that among other provisions, a program and funding mechanism for long-term maintenance of designated BMPs are in place. The applicant is required to sign an agreement with the City for the long-term maintenance of post-construction BMPs. The agreement is recorded and runs with the land.

Citywide project tracking is managed through specialized computer software utilized by the City (Permits Plus). The Permits Plus software is shared by all development services departments,

divisions, and sections within the City. The Permits Plus software package has been customized with a window for identifying SUSMP projects. All SUSMP projects are therefore readily identifiable via the Permits Plus software. Digital copies of final plans, including drainage and BMP plans, are submitted to the City's Geographic Information System (GIS) Section. They are linked to the CVMapper program, the City's internal computer-based mapping tool, for convenient accessibility to the Drainage Layer.

During the current reporting period, the City successfully implemented the environmental review process for all development and redevelopment project submittals. City staff reviewed fifteen projects that were required to implement SUSMP requirements as per the Manual.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

The development project approval and verification process is inherently complex due to the fact that many departments, divisions, and sections of the City are involved. As discussed earlier in this Section, and as part of the update of the City's JURMP and the Manual, which culminated in March 2008 and March 2010 respectively, specific attention was focused on identifying gaps or inconsistencies within the development project approval and verification process. During a long process of coordination with all departments involved in the development services, adjustments, amendments, and revisions were made to existing processes. As a result, a more elaborate process with new milestones, flags, checks, and notifications were added to warn staff of any shortcomings in the project approval process. A comprehensive flow chart was created to show the SUSMP implementation, approval, and verification process, together with responsible departments, divisions, and sections of the City. A copy of the referenced flow chart is included in Appendix D of the City's JURMP.

2.4.2 SOURCE CHARACTERIZATION

Development projects have the potential to discharge different types and amounts of pollutants based on the development project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's updated SUSMP describes 12 specific categories for Priority Projects and indicates common pollutants associated with each category. A Priority Project must identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

All development projects, including non-Priority Projects, are required to meet the applicable BMP requirements as outlined in the Manual.

During the current reporting period, all development projects were required to identify their proposed land uses and activities that may potentially generate pollutants. Such pollutants were compared to pollutants of concern within downstream receiving waters. Applicable BMPs were required during the project approval and verification process.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are outlined below and are included in the Manual. All development projects are required to implement the following principles, where applicable:

- Source control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed material and trash storage areas, and use of efficient irrigation systems.

- Low Impact Development (LID) BMPs that maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary.

- Provide buffer zones or other buffers for natural water bodies.

- Grading and construction activities must implement all applicable erosion and sediment control BMPs and minimize the discharge of non-visible pollutants.

- Submittal of proof of a mechanism for ongoing long-term maintenance of all structural post-construction BMPs.

During the project approval and verification process, all project submittals were reviewed for compliance with the minimum BMP requirements described above.

2.4.4 PROGRAM IMPLEMENTATION

The City's SUSMP document was developed around the regulatory standards mandated in the Municipal Permit to address post-construction urban runoff pollution from new development and significant redevelopment projects. The goal of the SUSMP is to develop and implement policies to ensure that to the maximum extent practicable, development does not increase pollutant loads from a project site and considers runoff flow rates and volumes. The City's SUSMP is incorporated into a document titled "Development Storm Water Manual," available on the web at:

http://www.chulavistaca.gov/clean/StormWater/DevelopAndConst.asp

In addition to the City's SUSMP, the Manual includes guidelines for developers and other interested parties to understand the City's storm water review process; forms required to establish eligibility under various project requirements; and a section on minimum BMPs requirements during project's construction phase.

In March, 2010, City Council approved the updates to the City's SUSMP and Manual. The Updated SUSMP and Manual incorporate standards for construction and post-construction phases of development and redevelopment projects that meet the requirements of the Municipal Permit. Concurrently, the City's Storm Water Management and Discharge Control and Grading Ordinances were updated to incorporate the Manual (which includes the City's SUSMP) by reference.

2.4.4.1 NOTABLE ACTIVITIES

In 2009-2010, notable improvements in processes and protocols supporting SUSMP implementation have been made by Storm Water Management staff in efforts to continually refine this program element. Significant programmatic updates within the defined reporting period include:

- Adoption of more stringent standards for post-construction Low Impact Development Site Design BMPs, Source Control BMPs, Treatment Control BMPs, and Interim Hydromodification Criteria.
- Emphasis on the use of structural BMPs with high pollutant removal efficiency.
- Requirements to fully develop WQTRs discussions to evaluate the use of all post-construction BMPs considered.
- Continued population of post-construction BMP GIS layer, including the addition of project-specific WQTR document and Maintenance Agreement links through the Grading Plan Layer.
- Creation of flags and checks in the SUSMP review and implementation process to ensure that all SUSMP projects are properly tracked and documented.
- Site inspections of all development projects to ensure proper installation of construction and post-construction BMPs.

2.4.4.2 CONFIRMATION OF APPROVAL PROCESS

During the reporting period, all private development projects submitted to the City for review and approval of construction or grading permits, and public projects initiated by the City were required to undergo the urban runoff approval process and meet the applicable project requirements. Private development permit applications are tracked in Permits Plus, which is a project tracking software shared by all departments and divisions involved in development services. Flags and checks have been established in Permits Plus to ensure that all Priority Development projects undergo the appropriate review and documentation process. Copies of approved WQTRs, grading or construction plans, and post-construction BMPs' maintenance agreements are scanned and digitally saved. The City maintained the database necessary to link the above referenced documents and the CVMapper software, which is a mapping tool based on the GIS system. This system enables City staff to get copies of the above referenced documents by clicking on the project's grading layer and to make prints as necessary.

Public projects are tracked in a database maintained by the City's Public Works Department, Engineering. A list of all public projects, showing the status of each project, is distributed to various staff members on a monthly basis. The list, among other information, includes a column

showing environmental requirements for each project, including WQTRs and Storm Water Pollution Prevention Plans. The list is discussed in monthly meetings set up specifically for public projects. A Storm Water Management Section representative attends such meetings and provides input as necessary.

2.4.4.3 LISTING OF SUSMP PROJECTS

A listing of development projects subject to SUSMP requirements is included in Attachment A. This list includes the names of all Priority Development or Redevelopment projects from the inception of the SUSMP program on December 9, 2002 to the end of the current reporting period. The list is updated annually to include Priority Development Projects for which development applications have been received and SUSMP eligibility identified during that reporting period. The listed projects may be currently in different phases of review, construction, or occupancy. Some are still under review, while others are under construction or have been completed. The list is categorized for various phases of projects, including: 1) Pending, 2) Inactive, 3) Under Construction, or 4) Completed. Pending refers to projects that have not completed their project review process and are either on hold or being reviewed by City staff. Completed projects have completed their construction and should have permanent BMPs in place.

2.4.4.4 CONFIRMATION OF SUSMP BMP APPLICATION

The Municipal Permit establishes requirements for post-construction BMPs on Priority Development and Redevelopment Projects. In order to develop regional standards and criteria for compliance with Municipal Permit requirements, the Copermittees have developed Model and local SUSMPs. All project applicants are required to complete forms that are included in the Manual to determine post-construction BMP requirements for their projects. City staff verifies proper completion of such forms and informs applicants of their required study reports and project submittals. Project submittals are then reviewed based upon this initial determination.

As required by the Municipal Permit, the City updated its local SUSMP in January 2008 to include Low Impact Development and Interim Hydromodification Management requirements, as well as other construction and post-construction criteria and standards. Subsequently, the Copermittees updated their Model SUSMP and submitted it for the Regional Boards approval in July 2008. The Regional Board approved the Model SUSMP on March 25, 2009. In March 2010, the City again updated its local SUSMP to incorporate the provisions of the Model SUSMP. In July 2009 and December 2009, the Copermittees submitted their draft and final Hydromodification Management Plans to the Regional Board. The Regional Board considered and approved the final Hydromodification Management Plan for approval on July 14, 2010. The Copermittees have 180 days after approval of the Regional Board to incorporate the HMP into their local SUSMP and implement the HMP for all applicable Priority Development Projects. The City's local SUSMP is the basis for approval of Priority Development Projects.

Based on the MEP standards included within the City's SUSMP, staff makes a determination as to whether or not there has been adequate consideration of site design and high efficiency BMP recommendations. Priority Development Projects without approved WQTRs do not move

further along in the development review process, providing Land Development and Storm Water Management staff an effective tool in the enforcement of SUSMP requirements.

Project grading or construction plans are required to show all approved structural BMPs. Non-structural BMPs are described in the project's WQTR. Public Works Inspectors and Storm Water Management staff ensure that development projects are constructed according to approved plans. This includes verification inspection and approval of installed or constructed structural treatment control BMPs.

For tracking of post-construction BMPs, Storm Water Management staff has coordinated with the Public Works Inspectors and the Building Inspectors to be notified upon Notice of Final Inspection and Certification of Occupancy and the final release of any Bonds. Copies of notices are sent to Storm Water Management staff for final inspections and confirmation of SUSMP BMP applications of such Priority Development projects to ensure proper installation of post-construction BMPs before final Certificates of Occupancy are issued and bonds are released.

In order to track confirmation of post-construction BMPs, and as an on-going activity, the City's GIS system was continuously updated throughout FY 2009-2010 with post-construction BMP information; further supporting project tracking and post-construction BMP inventory management. The GIS database is populated with post-construction BMP information including the types of BMPs, and provides links to applicable project plans, copies of WQTRs, and maintenance agreements, where applicable. Most significantly, in FY 2009-2010, WQTR documents were made available through the GIS Grading Plan layer as they are linked to individual projects (Figure 2-1 – CVMapper GIS Layer). This process facilitates inspections and verifications of post-construction structural BMPs. A GIS layer containing all publicly or privately maintained treatment control BMPs is utilized to verify and maintain such facilities (Figure 2-2 – GIS Layer: Grading Plans & WQTR Links). In addition, all privately or publicly maintained treatment control BMPs are being added to the BMP layer to facilitate their tracking and mapping. Also, files containing hard copies of grading plans, WQTRs, maintenance agreements, and other pertinent information are being created and maintained to support and facilitate construction verification and maintenance inspections of post-construction BMPs. (Figure 2-3 – GIS Layer: Post Construction BMPs).

Figure 2-1 CVMapper GIS Layer

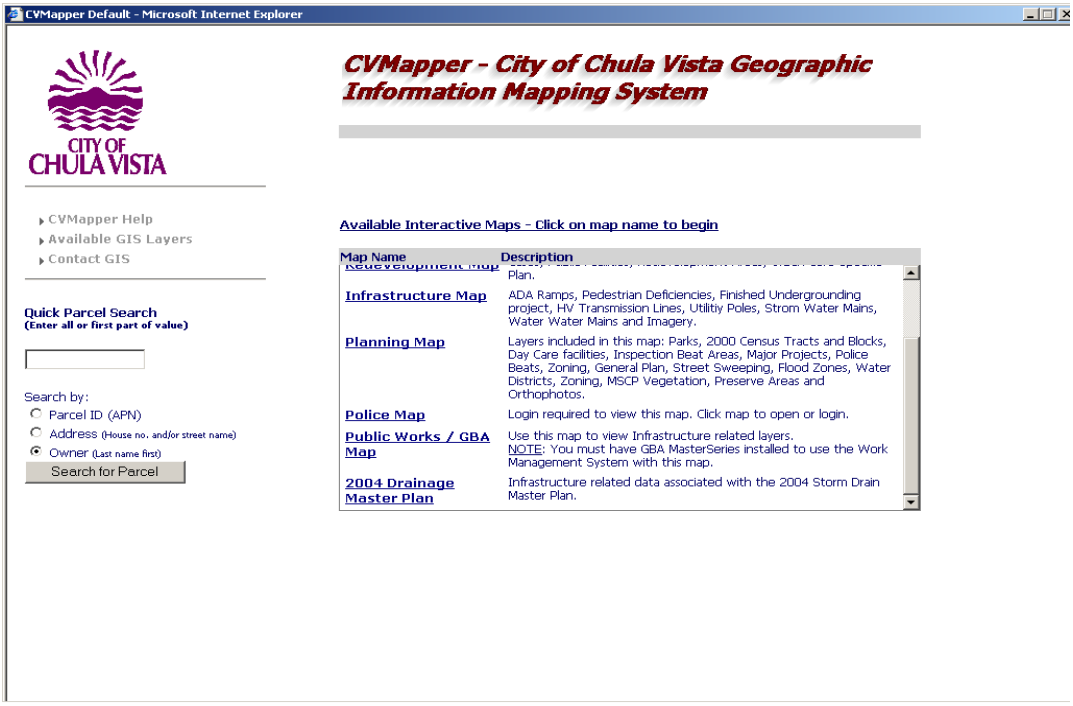

Figure 2-2 GIS Layer: Grading Plans and WQTR

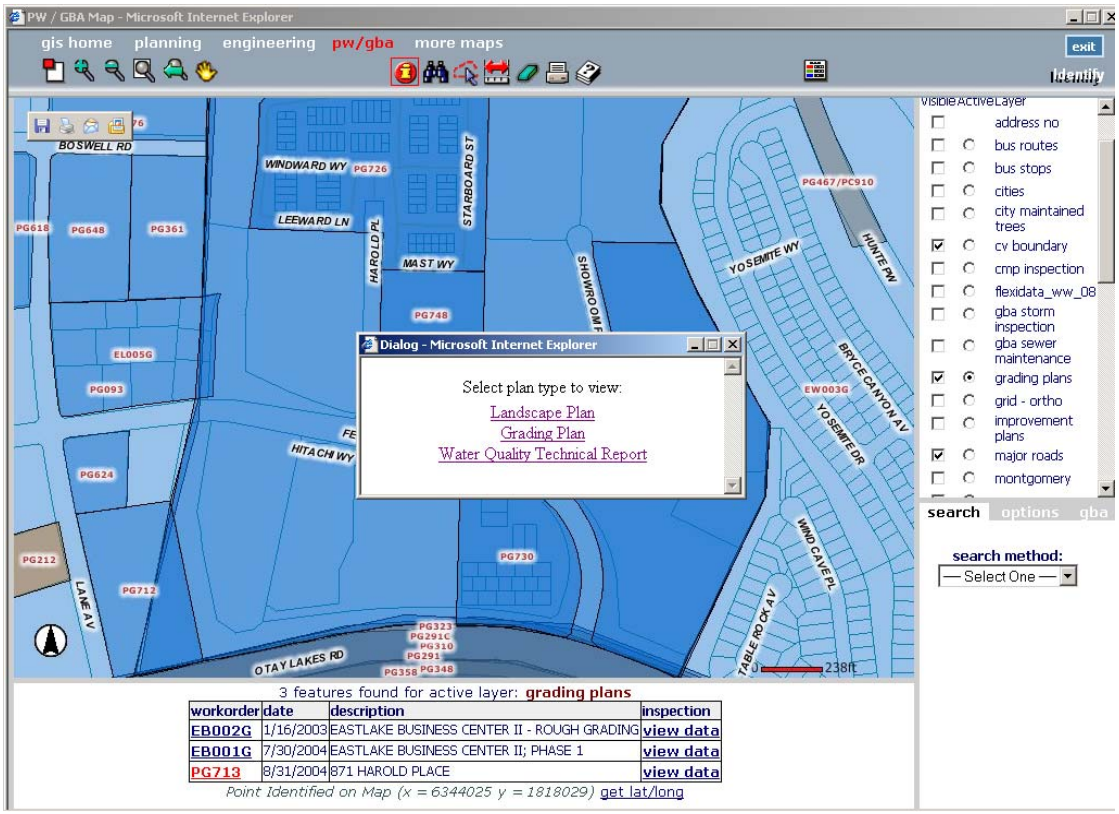

Figure 2-3: GIS Layer: Post Construction BMPs

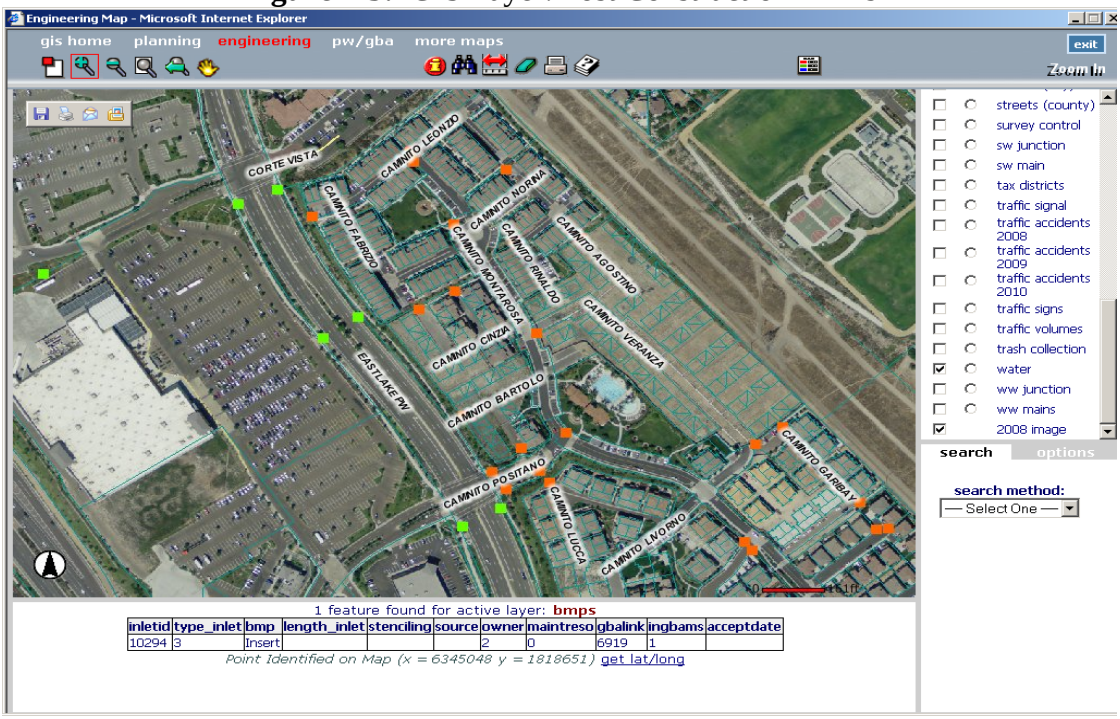

All pending, inactive, under construction, or installed Post-Construction BMPs and Priority Projects are inventoried and tracked by Storm Water Management staff utilizing the City's GBA Master Series program. The database includes the following information:

- Project name
- WQTR, Plans are scanned and linked into GIS (CVMapper)
- Type of treatment control BMP installed or approved
- Number of Treatment Units installed
- Location of the BMP (Development name, area, neighborhood, etc.)
- Project category (Municipal/Capital Improvement Plan, Residential, Commercial, etc.)
- Project status (Pending, inactive, under construction, completed)
- Priority
- Public or privately maintained
- Watershed within which the BMP is located
- The party responsible for maintenance of the BMP
- Name of person or company who conducted maintenance
- Maintenance certifications or verifications
- Inspection reports and findings
- Any corrective actions issued

See Attachment A for an updated listing of Priority Projects that were subject to SUSMP requirements. See Figures 2-4, 2-5, and 2-6 – GBA Master Series – SUSMP Verification and Maintenance Tracking, for examples of SUSMP tracking forms.

Figure 2-4 GBA Master Series: SUSMP Verification and Maintenance Tracking Database A

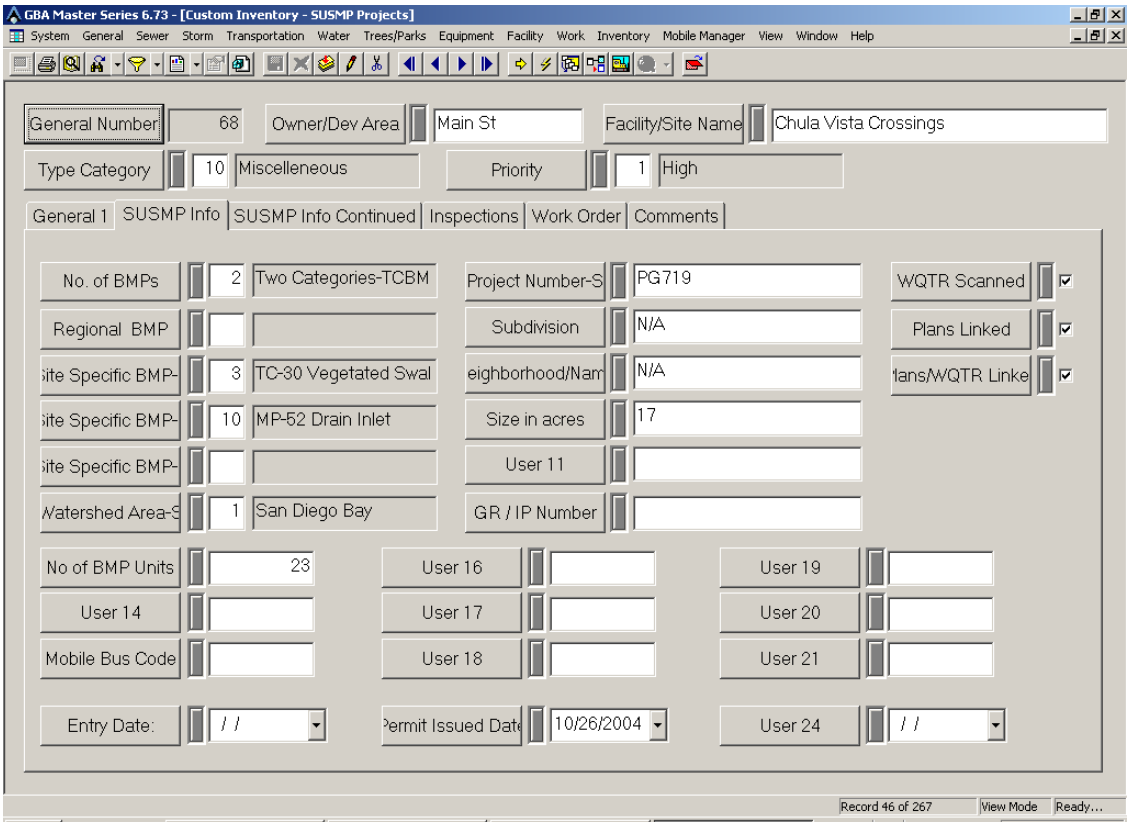

Figure 2-5 GBA Master Series: SUSMP Verification and Maintenance Tracking Database B

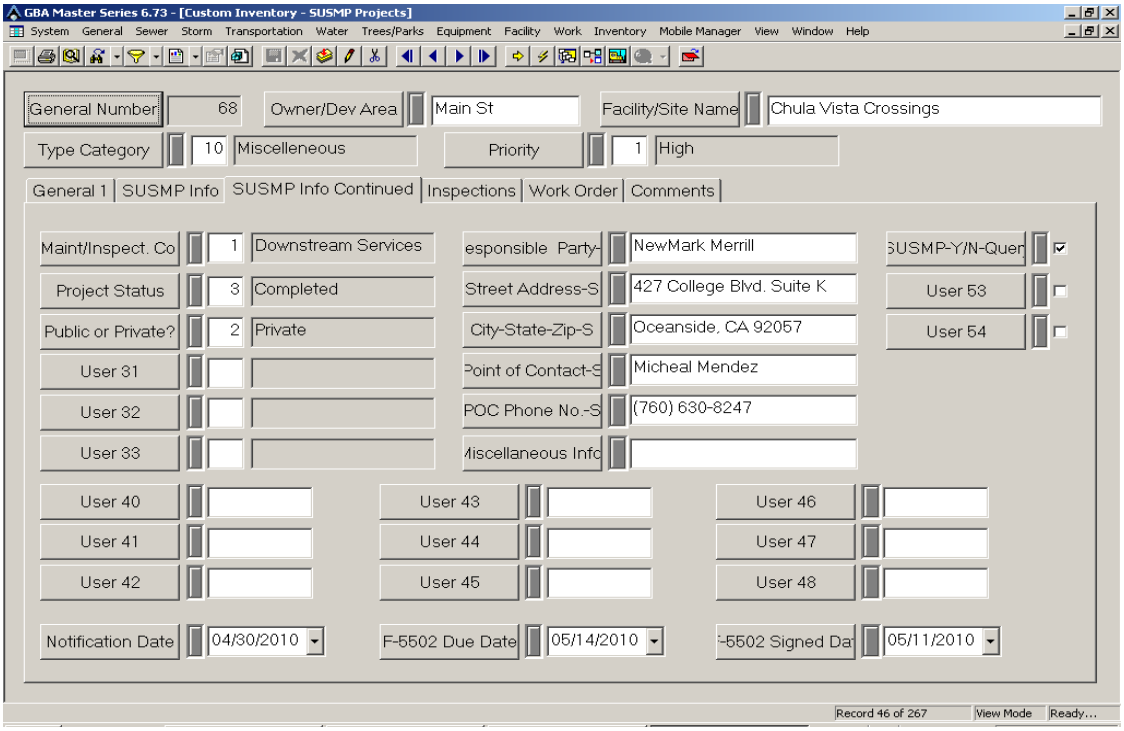

Figure 2-6 GBA Master Series: SUSMP Verification and Maintenance Tracking Database C

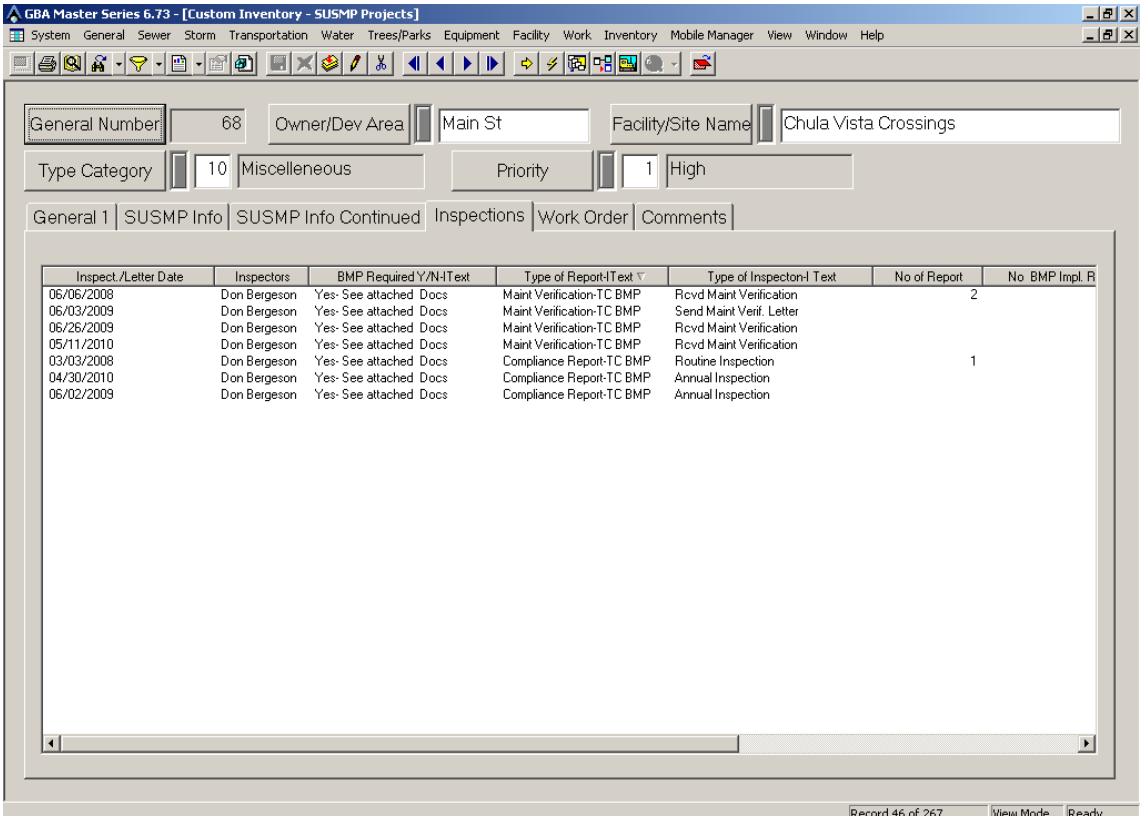

Inspect./Letter Date	Inspectors	BMP Required Y/N-I Text	Type of Report-I Text	Type of Inspecton-I Text	No of Report	No BMP Impl. R
06/06/2008	Don Bergeson	Yes- See attached Docs	Maint Verification-TC BMP	Rcvd Maint Verification	2	
06/03/2009	Don Bergeson	Yes- See attached Docs	Maint Verification-TC BMP	Send Maint Verif. Letter		
06/26/2009	Don Bergeson	Yes- See attached Docs	Maint Verification-TC BMP	Rcvd Maint Verification		
05/11/2010	Don Bergeson	Yes- See attached Docs	Maint Verification-TC BMP	Rcvd Maint Verification		
03/03/2008	Don Bergeson	Yes- See attached Docs	Compliance Report-TC BMP	Routine Inspection	1	
04/30/2010	Don Bergeson	Yes- See attached Docs	Compliance Report-TC BMP	Annual Inspection		
06/02/2009	Don Bergeson	Yes- See attached Docs	Compliance Report-TC BMP	Annual Inspection		

2.4.4.5 EXAMPLE PRIORITY DEVELOPMENT PROJECT

The City works with developers, planners, and consulting engineers to establish standards of Source Control, LID Site Design, and Treatment Control BMPs that meet the requirements of the Manual and the Municipal Permit. An example of such cooperation was with the Chula Vista Elementary School District Bus Corp Yard. The District Bus Corp Yard project is located on 10 acres of land on Maxwell Road. The project site is bounded on the south by an existing industrial facility; on the east by steep slopes and the Otay Industrial Park; on the north by a temporary auto storage facility; and, on the west by Maxwell Road. The project is planned for a bus parking facility and temporary office buildings in Phase 1 and a bus maintenance building in Phase 2.

The Chula Vista Elementary School District Bus Corp Yard Phase 1 is completed and operational. The project incorporates Site Design, Source Control, and Treatment Control BMPs, with particular emphasis on Low Impact Development principles for post-construction storm water management. Low Impact Development features include vegetated swales and an underground detention system. Storm water runoff from approximately 6.5 acres of the project is captured and conveyed to the underground detention system through a system of vegetated swales. Then storm water runoff from the facility travels in a southerly direction and eventually discharges into the Otay River.

The site of the Chula Vista Elementary School District Bus Corp Yard project is less than 50 acres in area and, therefore, was exempt from the Interim Hydromodification Criteria requirements.

2.4.4.6 LIST OF PROJECTS WITH LOW EFFICIENCY BMPS

During the current reporting period, all Priority Development Projects that received grading, construction, or building permits from the City proposed medium or high-efficiency treatment control BMPs. No SUSMP projects were permitted to have low-efficiency treatment control BMPs.

2.4.4.7 TREATMENT CONTROL BMP INVENTORY

In Chula Vista there are 247 priority development projects inventoried from the inception of the SUSMP requirements to date. Projects that are still in the review stage are not included in the inspections list and are not prioritized until the final WQTR is approved. Attachment A of this report includes an inventory of all Priority Development projects in the City that were subjected to SUSMP requirements from the inception of this program on December 9, 2002. The information provided in Attachment A includes the name of the project, category (residential, commercial, etc.), inspection priority, status (under construction, pending, inactive, and completed), and type of Treatment Control BMPs. The City maintains individual project files that include more detailed information regarding the type, number, and location of Treatment Control BMPs on each Priority development project as well as post-construction BMPs inspection records.

2.4.4.8 INSPECTION OF TREATMENT CONTROL BMPS

Storm Water Management Section staff is responsible for annual inspections of private and public constructed permanent BMPs as required by the Municipal Permit. Additionally, responsible parties for the maintenance of permanent BMPs are required to conduct routine inspections of their treatment facilities. For public permanent BMPs, the City's Public Works Storm Drain Maintenance staff is responsible for conducting routine inspections and maintenance. This duplicate inspections program ensures that all permanent BMPs are maintained to high operational standards.

During the current reporting period, Storm Water Management staff conducted inspections of all constructed permanent BMPs to verify their proper installation and maintenance, which exceeds Permit requirements. A summary of inspections is listed in Table 2-1 below, which includes both private and public permanent BMPs inspections. Where deficiencies were identified, notices were sent out to responsible parties, followed by further contacts to ensure that corrective actions were taken within the specified time period. For a detailed list of projects inspected for post-construction BMPs, please refer to Attachment F.

Table 2-1 Treatment Control BMP Inspection Summary FY 2009-2010

PROJECT PRIORITY	TOTAL NUMBER OF PROJECTS	NUMBER OF PROJECTS INSPECTED
High	44	44
Medium	48	48
Low	82	82
Total	174	174

Note: In addition to the total number listed above, 73 projects are under review, inactive, or still under construction and the permanent BMPs have yet to be installed. Also, some of the projects are partially occupied which have operational treatment BMPs.

As can be seen from Table 2-1, a total of 174 Priority Development Projects were inspected during the current reporting period, which meets and exceeds Municipal Permit requirements. Attachment F to this report includes more detailed information about each project, such as, inspection dates, project names, types of BMPs installed, categories (commercial, residential, etc.), priorities, development names, and neighborhood names. The list includes both private and public projects. Depending on the findings during the course of initial inspections, follow-up inspections were conducted as necessary.

Public Works Department Storm Drain Maintenance Section conducts routine inspections and maintenance of publicly owned permanent BMPs. Storm Drain Maintenance Section staff, utilizing GBA Master Series computer software, tracks all publicly owned post-construction BMPs and creates work orders for conducting inspection and scheduling maintenance of the BMPs. Maintenance records for permanent BMPs are tracked in the GBA Master Series computer software. Please refer to Figure 2-7 for a sample of Publicly Maintained Treatment Control BMP Inspection and Maintenance Report.

Figure 2-7 Sample Publicly Maintained Treatment Control BMP Inspection and Maintenance Report

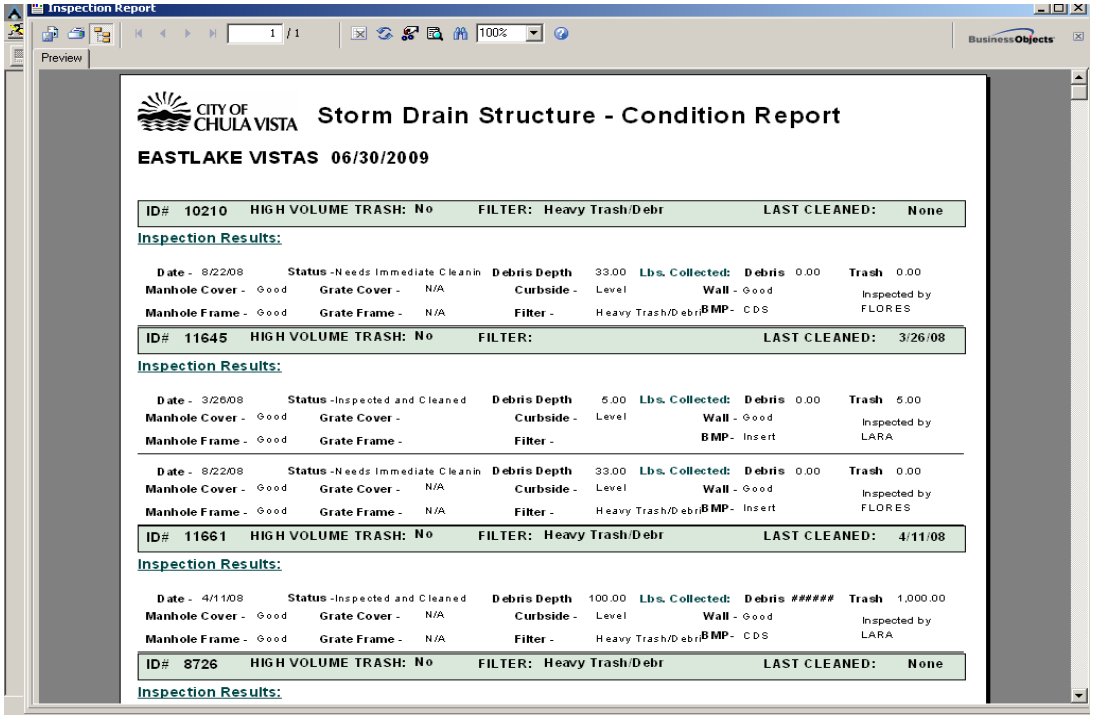

Inspection Report

Preview

CITY OF CHULA VISTA **Storm Drain Structure - Condition Report**

EASTLAKE VISTAS 06/30/2009

ID# 10210 HIGH VOLUME TRASH: No FILTER: Heavy Trash/Debr LAST CLEANED: None

Inspection Results:

Date - 8/22/08 Status -Needs Immediate Cleanin Debris Depth 33.00 Lbs. Collected: Debris 0.00 Trash 0.00
Manhole Cover - Good Grate Cover - N/A Curbside - Level Wall - Good Inspected by
Manhole Frame - Good Grate Frame - N/A Filter - Heavy Trash/Debr BMP- CDS FLORES

ID# 11645 HIGH VOLUME TRASH: No FILTER: LAST CLEANED: 3/26/08

Inspection Results:

Date - 3/26/08 Status -Inspected and Cleaned Debris Depth 5.00 Lbs. Collected: Debris 0.00 Trash 5.00
Manhole Cover - Good Grate Cover - Curbside - Level Wall - Good Inspected by
Manhole Frame - Good Grate Frame - Filter - BMP- Insert LARA

Date - 8/22/08 Status -Needs Immediate Cleanin Debris Depth 33.00 Lbs. Collected: Debris 0.00 Trash 0.00
Manhole Cover - Good Grate Cover - N/A Curbside - Level Wall - Good Inspected by
Manhole Frame - Good Grate Frame - N/A Filter - Heavy Trash/Debr BMP- Insert FLORES

ID# 11661 HIGH VOLUME TRASH: No FILTER: Heavy Trash/Debr LAST CLEANED: 4/11/08

Inspection Results:

Date - 4/11/08 Status -Inspected and Cleaned Debris Depth 100.00 Lbs. Collected: Debris ###### Trash 1,000.00
Manhole Cover - Good Grate Cover - N/A Curbside - Level Wall - Good Inspected by
Manhole Frame - Good Grate Frame - N/A Filter - Heavy Trash/Debr BMP- CDS LARA

ID# 8726 HIGH VOLUME TRASH: No FILTER: Heavy Trash/Debr LAST CLEANED: None

Inspection Results:

2.4.4.9 VERIFICATION AND MAINTENANCE INSPECTION OF TREATMENT CONTROL BMPS

During the reporting period, a total of 137 notification and inspection letters were sent out to parties responsible for the maintenance of completed private Priority Development Projects. (see City's JURMP document Appendix D).

It should be noted that City's Storm Drain Maintenance Section is responsible for the routine inspections and maintenance of Treatment Control BMPs on public right-of-way, facilities, and projects, in accordance with a scheduled maintenance program, which is tracked by the GBA Master Series program. It is not therefore necessary to send out verification letters for publicly maintained permanent BMPs. By conducting random inspections of public Treatment Control BMPs, Storm Water Management Section ensures that the level of maintenance on such facilities is adequate.

During this reporting period, responsible parties were aware of their BMP cleaning and maintenance obligations. City staff encountered some resistance, which was mainly believed to be attributable to the current downturn in economy as well as factors such as the transfer of property ownership, changes in property management companies, and a change in the board membership of Homeowners' Associations. For this reason, the City worked closely with the responsible parties to ensure that the BMPs were inspected and maintained. The City continues

to re-evaluate its annual maintenance verification procedures and may modify the program if necessary.

Prior to the beginning of the rainy season, the City requires annual verification of proper inspection and maintenance of all treatment control BMPs by the responsible parties. Each year, the City issues to the responsible party, either electronically, by fax, or by certified mail, a Treatment Control BMP Maintenance Package that includes: 1) an annual verification cover letter, 2) a Storm Water Treatment Facilities Inspection/Maintenance Verification Form (Form 5502), and 3) if necessary, a Compliance Report – Treatment Control BMP Inspection, which includes a summary of the inspection results and findings, pertinent sections of the WQTR, and BMP Location Site Plans.

This package informs the responsible parties of the Treatment Control BMPs, for which they are responsible; and requires the responsible parties to sign the verification form and certify that the treatment control BMPs have been properly maintained in accordance with the site's maintenance requirements. This information is tracked utilizing the City's GBA Master Series program. Each package is scanned and linked into the program, which includes the notification, required completion and receipt of the signed verification form. If signed and certified verification forms are not received by the due date, City staff contacts the responsible parties and follows up until Treatment Control BMPs are maintained and verification forms properly completed and returned to the City. Enforcement action may be initiated if a responsible party does not comply with the verification requirement after follow-up actions and proper service of a notice.

2.4.4.10 BMP CONSTRUCTION VERIFICATION

The City's Public Works Inspectors and Storm Water Management staff is responsible for ensuring that permanent BMPs, which are components of the project's drainage systems and grading works, are constructed in accordance with approved specifications and grading plans. Public Works Inspectors and Storm Water Management staff conducts frequent inspections of projects during their grading and construction activities and verify that permanent BMPs are constructed as per approved plans.

In compliance with the Municipal Permit, the City has developed databases for tracking Priority Development Projects that are under construction. Additionally, hard copy files, including information about each project's WQTRs and grading or construction site plans that show locations of permanent BMPs have been created and are continuously updated.

Since LID features are considered components of site hardscape and are not inspected by Public Works Inspectors, a new process has been established in which Public Works Inspectors notify Storm Water Management Section staff immediately after their inspections of grading activities are completed and their presence on the project is no longer necessary. At such time, Storm Water Management staff takes over the responsibility of inspecting permanent BMPs while being constructed. They ensure that LID Site Design features are constructed as shown on approved grading, construction, or landscape plans and per approved specifications.

As a result of the comprehensive construction verification program for permanent BMPs as described above, it was determined that while major treatment facilities were constructed before occupancy of the project, some minor deficiencies still existed even after partial occupancy. Those projects were identified in each case and responsible persons were required to install the deficient BMPs. As a result of this finding, the City made adjustments and improvements in its construction verification process, which will ensure that all treatment control and other post-construction BMPs are fully operational and without any deficiencies even before the first occupancy of the project.

2.4.4.11 SUSMP WAIVERS

Section D.1.d.(11) of the Municipal Permit includes a waiver provision, under which a Copermittee may provide for a Priority Development Project to receive a waiver from the requirement of meeting numeric sizing criteria for Treatment Control BMPs, if infeasibility can be established. During the reporting period, the City did not grant waivers to any Priority Development Projects.

2.4.4.12 SUSMP WAIVER MITIGATION

During the reporting period, all Priority Development Projects were required to comply with the provisions of the City's local SUSMP. Therefore, the City did not grant waivers to any Priority Development Project during this period.

2.4.4.13 HYDROMODIFICATION MANAGEMENT PLAN COLLABORATION

Soon after Regional Board's adoption of the Municipal Permit on January 24, 2007, the Copermittees formed a Land Development Workgroup to develop Copermittees' Hydromodification Management Plan (HMP) and Model SUSMP, among other regional development related tasks. The Land Development Workgroup planned regular meetings in which various topics, mainly the development of the HMP and Model SUSMP, were discussed. The Copermittees decided to hire a consultant with expertise in those fields to work on the studies needed for this purpose. The consulting team of Brown and Caldwell was selected as the main consultant, with several sub-consultants providing expert services.

A Technical Advisory Committee (TAC), consisting of high-ranking and renowned experts in the fields of hydrology, hydromodification, and SUSMP issues were formed to oversee the Consultant's work, and to provide expert advice. During the reporting period, the TAC continued to meet on a regular basis, and while Copermittees were not on the TAC, they were encouraged to participate in their meetings. Brown and Caldwell developed submittals for the Interim Hydromodification Criteria, Final Hydromodification Management Plan, and Model SUSMP, which were subsequently approved by the Regional Board. The Interim Hydromodification Criteria and the Model SUSMP have been incorporated in the updates of the City's SUSMP and the Final Hydromodification Plan will be incorporated before January 2011.

During the reporting period, notable milestones included the submittal of the final HMP to the Regional Board in December 2009 and the second update of the City of Chula Vista's local SUSMP in March 2010.

City of Chula Vista representatives are active participants in all Land Development Workgroup and TAC meetings and activities. They are closely involved in the issues that are discussed, review work products, and provide comments on all related draft documents.

City staff has attended all regional workshops and trainings related to HMP and SUSMP issues, including a 3-day training seminar on Hydrologic Simulation Program Fortran (HSPF).

2.4.4.14 PROJECTS REQUIRED TO MEET HMP REQUIREMENTS

Section D.1.g.(5) of the Municipal Permit requires the development of an HMP document at the regional level and incorporation of such HMP into individual local SUSMPs. The HMP is to include limitations on increases of runoff discharge rates and durations from all Priority Development Projects in order to prevent increased downstream channel erosion, sediment pollutant generation, or other impacts to beneficial uses and stream habitat.

Development of a draft HMP was a two-year effort by the Copermittees and their consultants. The Copermittees submitted the first draft HMP to the Regional Board in January 2009. In the meantime, the Municipal Permit required the implementation of an Interim Hydromodification Criteria (IHC) for development projects that were 50 acres or more. The IHC requirement was incorporated into updated local SUSMPs, which came into effect in January 2008.

Adoption of IHC requirements in January 2008 coincided with the collapse in the housing market, and almost all major development projects in Chula Vista came to an abrupt halt. Occasional major projects submitted for review by City staff have had extended project submittal, review, and permitting schedules.

During the reporting period, 3 major projects were under review as follows:

1. Eastern Urban Center
2. Otay Ranch Village 8
3. Otay Ranch Village 9

These projects qualified for IHC requirements but have not yet received their grading or construction permits. Such projects are expected to meet the requirements of the final HMP, which will come into effect on January 2011.

2.4.4.15 PROJECTS EXEMPTED FROM HMP REQUIREMENTS

Development projects for which grading or construction permits were issued during the current reporting period were less than 50 acres in area and did not meet the criteria for IHC requirements. However, Priority Development Projects were all required to address hydrologic conditions of concern by comparing pre- and post-development peak discharge rates and durations, and demonstrate that the increased peak discharge rates and durations would not cause

downstream erosion or habitat impact. Such discussions were required to be included in the submitted WQTRs.

2.4.4.16 PROJECTS DISTURBING 50 ACRES OR MORE

During the reporting period, three projects were under review that proposed to disturb 50 acres or more and met the conditions for IHC requirements. These projects are listed in Section 2.4.4.14.

2.4.4.17 ENFORCEMENT ACTION TAKEN FOR DEVELOPMENT PROJECTS

As a result of post-construction treatment BMP verification inspections, the City determined that nine out of 174 inspected projects were partially or totally deficient in the inspection and maintenance of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, eight projects were brought into compliance. Work is being continued on the remaining one project. Deficiencies were observed in the cleaning and maintenance of some treatment control BMPs, which were satisfactorily addressed by the responsible persons after written notices. The City has the option of initiating enforcement action on responsible persons who do not demonstrate adequate effort to bring their project to compliance in a timely manner. Such enforcement action may include verbal and written warnings, Notices of Violation, Administrative Citations, and/or Civil or Criminal Penalties. At this time, the City initiated enforcement actions, which included a Notice of Violation for one development project with deficient post-construction BMPs.

3.0 CONSTRUCTION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(b).i – Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.

Permit Section J.3.a.(3)(b).ii – Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.

Permit Section J.3.a.(3)(b).iii – A description of modifications made to the construction and grading ordinances and approval processes.

Permit Section J.3.a.(3)(b).iv – Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.

Permit Section J.3.a.(3)(b).v – Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.

Permit Section J.3.a.(3)(b).vi – A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.

Permit Section J.3.a.(3)(b).vii – For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.

Permit Section J.3.a.(3)(b).viii – A description of the general results of the inspections.

Permit Section J.3.a.(3)(b).ix – Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(b).x – The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(b).xi – A description of the notable activities conducted to manage urban runoff from construction sites.

3.1 INTRODUCTION

Pursuant to the Municipal Permit, construction sites are subject to dual regulation insofar as all construction sites that are covered under the NPDES General Construction Permit continue to be inspected and enforced by Regional Board staff. At the same time, the Municipal Permit requires Copermittees to implement a Construction Component to limit the impact of construction and grading activities on receiving waters, which may result from the presence of disturbed soils and building materials. It is important that construction sites take appropriate measures to prevent potential pollutants from entering storm water conveyance systems.

The following section provides an account of the City's program to meet the requirements outlined in Section D.2 of the Permit to reduce the release of pollutants from construction sites into the storm water conveyance systems to the Maximum Extent Practicable (MEP).

3.2 SOURCE CHARACTERIZATION

The City has compiled and monthly updates a watershed-based inventory of all construction sites within its jurisdiction as required by Municipal Permit Section D.2.b. The City utilizes a construction site database to maintain its inventory. The inventory includes details on each construction site, including project name, location, project developer and project size. A list of construction projects under the City's jurisdiction, all of which are located within the San Diego Bay Watershed, can be found in Attachment B. The list was current at the time of preparation of this report and includes all completed projects.

3.2.1 CONFIRMATION OF INVENTORY MANAGEMENT

During the reporting period, Storm Water Management staff maintained and monthly updated a construction site inventory. As a result of coordination between the Public Works Construction Inspection staff, Engineering Design staff, Development Services staff, and Storm Water Management staff, mechanisms have been established in the maintenance and tracking of an up-to-date and accurate inventory. As such, all significant construction activities are closely monitored, supporting close collaboration and an effective means of tracking such activities Citywide. Storm Water Management staff are notified of all pre-construction meetings as coordinated by Public Works Construction Inspection staff. This provides an additional level of notification regarding the start of construction activities. In support of maintaining an accurate inventory, the City's Development Services Department distributes a monthly Major Project Development Status Report, which apprises City staff of such information as project review status and construction phase. Updates to the inventory include the addition of new construction projects, the removal of completed projects, the assignment of Threat to Water Quality (TTWQ) prioritization, and inspection frequencies of active and inactive sites as needed.

3.3 UPDATES TO ORDINANCES AND APPROVAL PROCESS

Storm water compliance requirements for construction activities are provided in the City's Development Storm Water Manual (Manual). The City's Storm Water Management and

Discharge Control and Grading Ordinances incorporate, by reference, the Development Storm Water Manual, hence providing legal authority for the enforcement of the Manual's requirements. Such documents and ordinances have been updated and amended to ensure that compliance with the Municipal Permit requirements is met.

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City requires that all proposed construction and grading projects implement measures to ensure that pollutants from the project site are reduced to the MEP and do not cause or contribute to an exceedance of water quality objectives. The following mechanisms have been identified and utilized to promote the implementation of Best Management Practices (BMPs) during construction activities.

- Development Storm Water Manual (Manual)
- Construction site inspection and enforcement
- Construction and development community education

Designated BMPs for each construction site were required to be implemented through the requirement of a Storm Water Pollution Prevention Plan (SWPPP) or a Construction Storm Water Management Plan (CSWMP). SWPPPs are required for projects disturbing one acre or more of land, while CSWMPs are required for all other projects.

Regular and random inspections of construction sites ensure that BMPs are implemented, and where deficiencies are noted, corrective action is required, which in some cases may lead to the initiation of enforcement action.

3.4.1 DEVELOPMENT STORM WATER MANUAL

Construction activity standards and requirements are fully developed and included within the Development Storm Water Manual. The Manual clearly states that it is the responsibility of the property owner and/or contractor to select, install, and maintain appropriate BMPs. The Manual outlines minimum construction BMPs required by the City. Where applicable, current fact sheets obtained from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual and the CASQA Storm Water BMP Handbook are referenced in the Manual. The following topics are also discussed:

- Site management requirements
- BMP performance standards
- Seasonal requirements
- Limitation of Grading
- Advanced Treatment
- Example Construction Best Management Practices

3.5 PROGRAM IMPLEMENTATION

The Development Storm Water Manual is used by City staff to assist in the review and permitting of development and redevelopment projects with respect to construction activities. The Manual clearly outlines the review process for water quality. It includes descriptive text and charts that guide staff in determining if a project needs to be covered under the NPDES General Construction Permit. If the project is subject to the General Construction Permit, it is required to develop a SWPPP. The project is also required to file a Notice of Intent (NOI) with the State Water Resources Control Board. If the project is not subject to the General Construction Permit, it is required to develop a CSWMP. Both SWPPPs and CSWMPs must be prepared prior to the start of construction activities. All projects are required to include applicable measures to prevent pollution discharges to storm water conveyance systems by implementing BMPs during all phases of construction.

When it is determined that Capital Improvement Projects (CIPs) need coverage under the NPDES General Construction Permit, the project engineer electronically submits a Notice of Intent and a SWPPP through the State Water Resources Control Board Storm Water Multiple Application and Report Tracking System (SMARTS). The SWPPP is maintained with the proper personnel for review by request of the Regional Board.

The City has ensured compliance with construction BMP requirements through development project reviews, construction site inspections, and enforcement actions as necessary.

Within the defined reporting period, the City made notable efforts in promoting pollution prevention and BMP implementation on construction sites. The following mechanisms have been identified by the City as those integral to the promotion of pollution prevention techniques and BMP implementation.

- Construction site inspection and enforcement
- Construction and development community education
- Integration of pollution prevention and BMP implementation requirements into the development review process, including requirements for erosion control plans.
- Development Storm Water Manual
- Construction specific outreach and education activities

Education of the construction and development community is achieved on a local and regional level. Locally, project proponents including contractors, developers, property owners, superintendents, and other responsible parties are exposed to construction related water quality protection requirements throughout the development review and construction process. Storm Water Management staff provides comments and direction through the review of development proposals and plans. As mentioned above, pre-construction meetings provide Storm Water Management staff with an excellent forum to communicate storm water compliance requirements and for project proponents to have their own concerns addressed.

In addition, City Storm Water Management staff frequently meets with developers and contractors and provides on-site training regarding site management for storm water quality. In preparation for the wet and dry seasons, Storm Water Management staff annually issues wet and dry season reminder letter, normally about one month before the start of each season.

As a result of the slow-down in development, many construction sites are currently inactive or in distress. The City has made notable efforts in the management of inactive construction sites. A site is considered inactive if construction activities have ceased for a period of seven or more consecutive calendar days. The City inspects inactive construction sites and issues formal letters to developers if their sites do not meet City standards for BMP requirements as a result of failure to maintain adequate BMPs. The purpose of such letter is to notify developers of the City's storm water and non-storm water discharge requirements on inactive construction sites and to reiterate the developer's or property owner's responsibility at both active and inactive sites to implement a plan to address all potential discharges from construction sites. If a site is partially inactive, above requirements apply only to inactive areas of the site.

If a construction project is wholly or partially inactive or expected to remain inactive for some time, the City requires the developer to submit a Construction Site Stabilization Plan.

The Stabilization Plan is required to include the following information:

- Project name and a description of inactive areas or those expected to become inactive.
- A description of the stage of work at which the project became inactive.
- An estimate of time that the project, or areas of the project, would remain inactive, and a description of BMPs that would be used to stabilize inactive areas of the construction site.
- A project plan delineating areas of the project that are inactive or expected to become inactive, as well as all erosion control, sediment control, and non-storm water BMPs that would be implemented to prevent the discharge of sediment or other pollutants from the site.

3.5.1 MAXIMUM DISTURBED AREAS

The Development Storm Water Manual limits the area that can be cleared or graded and left exposed at one time to 100 acres for an individual grading permit or a combination of grading permits under the associated tentative map. Maximum disturbed area requirements are discussed in detailed in the Development Storm Water Manual. During the reporting period, most major development activities remained inactive as a result of the downturn in the housing industry, and developers in Chula Vista did not undertake major new grading projects. The focus of City inspectors were to ensure that existing graded sites that intended to close down the site or slow down construction activities stabilized inactive areas and implemented adequate BMPs to minimize the discharge of sediment and other pollutants from their sites.

3.5.2 ADVANCED TREATMENT

During this reporting period, there were no construction sites that met the conditions requiring advanced treatment methods. These conditions are explained in Section 7.V of the Development Storm Water Manual. If it is determined that a site poses an Exceptional TTWQ based on criteria outlined in the Manual, the site will be required to implement advanced treatment controls to minimize the discharges from the construction site.

3.5.3 CONSTRUCTION SITE INSPECTIONS

The City's construction site inspection and enforcement program is defined by a consistent and frequent presence of inspectors on construction sites Citywide. It is recognized that construction sites must be regulated through a well-coordinated and highly refined inspection and enforcement program. The City has one full-time Storm Water Compliance Inspector, two full-time Environmental Health Specialists, one Engineering Technician, and eight Public Works Inspectors who manage this effort on private and public construction projects.

During this reporting period, all construction sites were assigned appropriate dry and wet season inspection frequencies required by the Municipal Permit. The Municipal Permit does not require TTWQ Prioritization for construction sites. However, the City has determined that this designation is a useful indicator for inspectors to evaluate the priority and relative importance of each construction site with respect to erosion and sediment controls, and the special attention required to the implementation of BMPs during their inspections of each site. The inventory of construction sites, therefore, includes a column indicating TTWQ Prioritization for each site.

During the current reporting period, the City conducted inspections of construction sites in accordance with the requirements of the Municipal Permit, as applicable. Please see Table 3-1 for the number of construction site inspections under each category. A complete list of inspected construction sites is included in Attachment G. The period of time each construction site was active during the wet or dry seasons, and the number of inspections conducted during the rainy season for each site, are recorded on inspection reports that are available at the City.

Table 3-1 Construction Site Inspection Summary FY 2009-2010

INSPECTION SUMMARY	NO.
Formal Inspection Reports	303
Inspections During Wet Season	286
Inspections During Dry Season	17
Inspections of High Priority Sites	39
Inspections of Medium Priority Sites	182
Inspections of Low Priority Sites	82

City inspectors evaluate BMP implementation on construction sites in a site-specific and situation-specific manner. It is through this approach that determinations of the effectiveness of

a specific BMP are made, based on an accounting of the overall conditions observed at a specific job site. Established construction site inspection protocols also include a documentation review including site specific SWPPP, monitoring results, training records, etc. for construction sites subject to the General Construction Permit.

City inspectors use construction inspection forms specifically designed as multi-purpose tools. The form provides a checklist of information and potential water quality issues, which serves as a reminder to the inspector of all items requiring attention while on the construction site. The form also provides clear and concise information to the developer or contractor about deficiencies in the implementation of BMPs. It includes information about corrective actions that the developer or contractor needs to take for brining the site into compliance, and the time allowed by the inspector. Inspection forms are designed to enable the inspector and others to assess BMP implementation on each construction site and the effectiveness of BMPs. Inspection reports are often used as supporting documents in enforcement actions against non-compliant construction sites.

Through the above process, the City ensures that the inspections conducted address all the required inspection steps to determine full compliance.

Based on documented information, the trend of inspection issues were related to the following:

- Failure to implement and provide continuous maintenance of existing BMPs to prevent or minimize pollution of the storm water conveyance system in accordance with respective SWPPP or CSWMP.
- Failure to implement good housekeeping practices at the site.
- Failure to comply with previous orders.

City inspectors who conduct site inspections of both public and private development projects have full inspection and enforcement authority. Sites are evaluated for compliance with the minimum BMP requirements of the Municipal Permit, the Development Storm Water Manual, the erosion control plans, and any other development permit conditions imposed by the City prior to the issuance of a grading or construction permit.

Construction site inspections include the following:

- Verification of coverage under the General Construction Permit, where applicable.
- Assessment of the implementation of all required BMPs and any additional controls as needed and required by the City.
- Verification of proper maintenance of the BMPs.
- Evaluation of the effectiveness of the BMPs.
- Verification that the party responsible for the implementation of the site SWPPP has received adequate training.
- Observations of any non-storm water discharges, illicit connections, and potential discharges into the storm drain system.

3.5.4 CONSTRUCTION SITE ENFORCEMENT

The City enforces its storm water ordinances and development permit conditions at all private and public construction sites, as necessary. The City's ordinances and development permit conditions provide adequate legal authority for the City to enforce its ordinances on construction sites through Stop Work Notices, penalties, fines, and other enforcement procedures as necessary. City's inspectors work with developers and contractors to identify non-compliance issues and to set deadlines for bringing sites into compliance; however, if the developer/contractor is found to be non-cooperative in bringing a site into compliance in an expeditious manner, City's inspectors initiate enforcement action which, depending upon the severity of the violation, may include one or more of the following:

- Verbal Warning
- Written Warning
- Notice of Violation (Includes Cease and Desist and/or Clean and Abate Orders)
- Enforcement of Contract (for City projects)
- Stop Work Notice
- Denial or Revocation of Permits
- Administrative, Civil, or Criminal Actions

Table 3-2 summarizes enforcement actions taken within the defined reporting period of this report.

Table 3-2 Construction Enforcement Summary FY 2009-2010

ENFORCEMENT ACTION	NO.
Written Notices of Violation (Includes Cease and Desist and/or Clean and Abate Orders)	5
Civil Penalty Order	2

As a result of the above enforcement actions, Chula Vista developers were fined a total of $9,000.00 in the current reporting period. Follow-up inspections were conducted as necessary until compliance was met.

Within the defined reporting period of this report and as described in the narrative provided throughout this section, the construction component has demonstrated numerous successes as well as undergone notable programmatic developments and enhancements. Through identified needs and associated management decisions, the City has fortified its jurisdictional construction management component in 2009-2010. Further, as the need for further development emerges for construction activities, the City will seek to maintain the level of performance established from years past, and to continue to meet the regulatory standards mandated in the Municipal Permit.

4.0 MUNICIPAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(c).i – Any updates to the municipal inventory and prioritization.

Permit Section J.3.a.(3)(c).ii – Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.

Permit Section J.3.a.(3)(c).iii – A description of inspections and maintenance conducted for municipal treatment controls.

Permit Section J.3.a.(3)(c).iv – Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.

Permit Section J.3.a.(3)(c).v – Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.

Permit Section J.3.a.(3)(c).vi - Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.

Permit Section J.3.a.(3)(c).vii – Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.

Permit Section J.3.a.(3)(c).viii – Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.

Permit Section J.3.a.(3)(c).ix - Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.

Permit Section J.3.a.(3)(c).x – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xi – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xii – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xiii – Identification of the total distance of curb-miles swept.

Permit Section J.3.a.(3)(c).xiv – Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.

Permit Section J.3.a.(3)(c).xv – Amount of material (tons) collected from street and parking lot sweeping.

Permit Section J.3.a.(3)(c).xvi – A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.

Permit Section J.3.a.(3)(c).xvii – Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.

Permit Section J.3.a.(3)(c).xviii – A description of the general results of the inspections.

Permit Section J.3.a.(3)(c).xix – Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(c).xx – The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(c).xxi – A description of notable activities conducted to manage urban runoff from municipal areas and activities.

4.1 INTRODUCTION

The goal of the City's municipal program is to minimize or prevent negative impacts of municipal activities and areas on receiving waters and other environmental resources in the City and where possible, to enhance the quality of these resources. The City maintains the following types of municipal areas and activities:

- Fixed Facilities
- Open Space
- Municipal Separate Storm Sewer System (MS4)
- Sanitary Sewer System
- Roads, Streets, and Parking facilities
- Powerwashing – Graffiti removal

Minimum BMPs for specific municipal facilities and activities have been implemented as applicable and as required by the Municipal Permit. Minimum BMPs for specific facilities and activities have been described in the City's JURMP. BMP implementation is ensured through various levels of enforcement, inspection, communication, and awareness. BMP information is disseminated to City staff through the following resources:

- California Stormwater Quality Association (CASQA) Municipal Stormwater BMP Handbook. January 2003
- Municipal staff training venues (formal training, staff meetings, etc.)
- Routine inspection activities
- Activity specific training

BMP implementation is regulated by City staff through routine inspection activities as described in the JURMP. High priority municipal facilities are inspected annually, and all other facilities are inspected as needed. Inspections are conducted to verify the implementation of an effective combination of BMPs to meet the minimum water quality protection requirements. Applicable minimum activity-specific BMPs, as outlined in the JURMP, have been reviewed and implemented at facilities throughout the City. As needed, BMP implementation has been re-enforced as conditions of concern are identified, and personnel have been briefed on their roles and responsibilities in maintaining and implementing prescribed BMPs.

The following paragraphs include summaries of activities undertaken by the City to meet the Municipal Permit requirements for the Municipal Component of the JURMP. It is important to recognize that such recounted activities, practices, and functions are ongoing efforts by the City and not constrained by the defined reporting period of this report.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City operates and maintains the following types of fixed facilities within its jurisdiction:

- Parks and recreation centers
- Nature Center
- Libraries
- Administration buildings
- Public Works Center
- Animal care facility
- Fire stations
- Land application site

4.2.2 SOURCE CHARACTERIZATION

Attachment C – Municipal Inventory is a list of all the municipal facilities and activities within the City. Table 6-1 of the City's JURMP details the pollutants potentially generated by the area or activity. General operations include landscape maintenance, material handling and storage,

loading/unloading, waste handling, street maintenance, and sewer maintenance. Facilities are classified as high, medium, or low TTWQ based on activities, functions, and various site-specific factors. For more information on the facilities that have additional operations and activities, please see the City's JURMP. The inventory was updated in March 2008 during the JURMP update process. During the reporting period, no additional municipal facilities were constructed and, therefore, the same inventory has been used in this report. Currently, there are some public parks in the design or construction phase that will be added to the municipal inventory after they are completed.

4.2.3 BMP REQUIREMENTS

Each fixed municipal facility in the City implements BMPs in accordance with their specific operations and activities. The City uses the CASQA BMP Handbook for Municipal Facilities as a guide for employees as well as a training tool. City staff receives training on storm water BMPs on a regular basis. More information on employee training can be found in Section 8.0. Mobile municipal operations use source control BMPs as pollution prevention measures. During the reporting period, all designated BMPs were implemented for municipal areas and activities as well as special events.

4.2.4 PROGRAM IMPLEMENTATION

4.2.4.1 MAINTENANCE

The City maintains all of its fixed facilities and implements BMPs during operations and activities. Any illegal connections or illegal discharges noticed by City staff are eliminated and BMPs are revised if needed.

4.2.4.2 TRAINING AND EDUCATION

All City employees who work in municipal facilities and activities receive training on general storm water concepts, the City's storm water ordinance, and BMP requirements. More information on employee training can be found in Section 8.0.

4.2.4.3 INSPECTIONS

The City proactively approaches enforcement of its storm water ordinance for all municipal areas and activities. All deficiencies are immediately brought to the attention of the facility manager or the staff member responsible for the facility or activity. The facility managers or the responsible staff members have the authority to implement or require implementation of adequate BMPs for their facility. With the training provided for the operations staff and implementation of BMPs on municipal facilities, it is expected that discharge of pollutants from municipal areas and activities have been minimized.

City storm water staff inspected all 61 high priority municipal facilities and activities during the fiscal year as required by the Municipal Permit. Medium and low priority facilities are inspected on an as needed basis. No medium or low priority facilities were determined to need inspection

this fiscal year. During inspections, storm water staff identified BMPs that were in need of improvement and informed responsible persons to take action to implement additional BMPs. A list of municipal facilities that were inspected during the reporting period is included in Attachment H. Overall, sites were in good condition, however; some facilities needed BMP improvements. For the sites needing BMP improvements, the appropriate supervisor was notified and any corrective actions to bring the facility into compliance were immediately implemented. Enforcement on municipal facilities is in the form of disciplinary process against the responsible staff member when compliance is not met in a timely manner. If a violation of the City's Storm Water Ordinance or the Municipal Permit is observed, which is caused by negligence of City personnel, inspectors work with supervisors to ensure that corrective actions are implemented; provide training to the personnel; and immediately inform the appropriate supervisor. The supervisor will then take action against the violating staff member as necessary, including warnings and other disciplinary measures. City storm water staff is in regular contact with Public Works Maintenance staff and provides training on pollution prevention and BMP implementation, therefore, most deficiencies are taken care of upon first notice.

The City also maintains a number of treatment control BMPs that have been installed at municipal fixed facilities. Public Works Maintenance staff inspects all municipal treatment control BMPs to ensure their proper operation. Additionally, Storm Water Management staff conducts random inspections of such facilities to provide a second layer of confidence and ensure that maintenance standards are met. The City maintains treatment control BMPs at several of its facilities. City crews clean the structural treatment control BMPs on an as needed basis, and their condition is evaluated for effectiveness. Any repairs are noted and carried out on a timely manner. Table 4-1 shows the municipal facilities within the City that have treatment control BMPs and their inspection dates.

Table 4-1 Municipal Facilities with Treatment Control BMPs

FACILITY NAME	NUMBER & TYPE OF TREATMENT CONTROL BMP	DATE INSPECTED
Montevalle Park	10 Filter Inserts	06/29/10
Salt Creek Park	1 CDS Unit	06/11/10
Windingwalk Neighborhood Park	1 Vegetated Swale	05/17/10
Harvest Park	1 Filter Insert	05/17/10
Sunset View Park	3 Filter Inserts	05/07/10
Mountain Hawk Park	20 Filter Inserts	06/01/10
Horizon Neighborhood Park	1 Filter Insert	05/07/10
Veterans Park	1 Vegetated Swale, 5 Filter Inserts	05/17/10
Chula Vista Civic Center	5 Vegetated Swale, 1 CDS Unit, 2 Filter Inserts	06/21/10
Fire Station 6	3 Filter Inserts	05/11/10
Fire Station 7	1 CDS Unit, non-storm water diverter	06/21/10
Fire Station 8	1 CDS Unit, non-storm water diverter	06/04/10
Harborside Park*	3 Filter Inserts	06/01/10
Santa Cora Park*	23 Filter Inserts	07/12/09
John Lippitt Public Works Center*	6 Filter Inserts	09/01/09

* – Not a SUSMP Project, but the City still inspects the inserts and maintains them

4.2.4.4 INTEGRATED PEST MANAGEMENT (IPM)

During the reporting period, the City Parks and Open Space Divisions have implemented the following BMPs in their activities to prevent pollution of storm water conveyance systems:

Fertilizer, Pesticides, and Herbicides

- Minimize fertilizer use.
- All fertilizing is done so that no fertilizer is applied to the walkways or street. Any accidental spill is cleaned up and applied to the plant material. Areas are cleaned using a gas blower.
- All leaf blowing is towards plant material and away from any hardscape.
- Whenever possible, compost and soil amendments are used in place of fertilizers.
- Manual weeding whenever possible along with IPM Practices to minimize chemical application.
- All pesticides, herbicides, and fertilizers are stored in a controlled, locked and properly marked chemical locker.
- Prevent pesticide drift – do not spray on windy days.
- All employees who spray pesticides for weed control are properly trained and possess a valid Qualified Applicator Certificate issued by the state and receive 20 hours of continuing education in order to renew their certifications bi-annually.
- Reporting and record keeping for the use of fertilizers and pesticides includes the location, frequency, amount, type, and date of application.
- Staff is supplied with spill kits in case of an accidental spill.
- All mixing is done in an area that is away from storm drains.
- All employees who handle pesticides are trained and familiar with the most recent material safety data sheet (MSDS) files.
- MSDS sheets for chemical being used must be kept with the applicator while applying pesticides.

Proper Planting Techniques

- Proper plant selection for pest resistance to minimize the use of pesticides and fertilizers.
- Removal or pruning of deceased plants and branches.
- Clearing of weeds, grass, and brush from building perimeters and fence lines.
- Plant native vegetation and convert existing turf areas to drought tolerant, sustainable landscaping when possible.
- Increase plant vigor and pest resistance through proper cultural practices; proper water application, clearing of weeds to decrease competition, pruning at the right time of year, and accurate diagnosis of plant pests.
- Control pests by removing diseased plants, pruning to increase air circulation and to remove diseased or injured plant parts.

Minimize Runoff

- The City utilizes several weather stations throughout the City to monitor microclimates to set evapotransporation (ET) rates for Maxicom Irrigation Systems.

- Installation of flow sensors and master valves to prevent water loss in the event of mainline break.

4.3 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.3.1 BACKGROUND

Roads, streets, highways, and parking facilities make up a large part of the City. Pollutants associated with roads, streets, highways, and parking facilities include sediment, metals, and trash. The City has implemented various BMPs to reduce the amount of pollutants that come off of these areas.

4.3.2 SOURCE CHARACTERIZATION

Municipal Permit Section D.3.a.(7) designates roads, streets, highways, and parking facilities as high priority municipal areas for inspection purposes. Therefore, the Municipal Inventory (Attachment C) categorizes these facilities as such. Table 6-1 of the City's JURMP details the pollutants potentially generated by roads, streets, highways, and parking facilities. The City maintains 414 miles of roads, streets, and highways.

The City has one stand-alone covered parking facility in downtown Chula Vista that generates a moderate volume of trash and debris that is swept twice per month and is inspected annually as a part of the City's Municipal Inspection Program. The other 22 parking facilities are associated with other municipal facilities (such as parks) and generate low volumes of trash and/or debris. These are swept on a monthly basis and are inspected annually.

For the purpose of street sweeping, roads, streets, and highways are further classified into high, medium, and low priority based on the amounts of trash, sediment, and debris that are generated by their use. Commercial and industrial streets are classified as high priority; center islands and medians are classified as medium priority; and centerlines and residential streets are classified as low priority. Table 4-2 below provides more information about these classifications, the number of curb miles in each, the type of areas these classes cover, and their respective sweeping frequencies. The City is in the process of collecting data to refine this classification by working with its contractor to keep records of the quantities of trash and debris collected each day from various sections of the City.

Table 4-2 Street Sweeping Information Based on Class

CLASS	NUMBER OF CURB MILES	TYPE	SWEEPING FREQUENCY
High	131.61	Industrial and Commercial – 10.5 miles	Twice per week
		Commercial and Business – 121.11 miles	Once per week
Medium	75.47	Center Islands and Medians	Twice per month
Low	702.26	Residential – 656.36 miles	Once per month
		Center Lines – 45.9 miles	Twice per month

4.3.3 BMP REQUIREMENTS

Street sweeping is one of the ongoing city functions that provides for the reduction in pollutants entering the storm drain system and ultimately local receiving waters. It is the main BMP used to maintain roads, streets, highways, and parking areas. It is conducted in a systematic and coordinated manner as to compliment pollution prevention throughout the City.

The City has identified some streets as high Threat to Water Quality (HTTWQ) areas. The main pollutant in these areas is trash. Trash in these areas is mainly attributable to customers of recycling businesses located in the industrial areas of Energy Way and Nirvana Avenue. Also, trash trucks shedding some of their load while traveling to and from the Otay Landfill on Maxwell Road and Main Street east of I-805 are sources of trash on these two streets. As a proactive measure to minimize trash entering the storm drain system, the City has retrofitted existing curb inlets in these areas with filter inserts. The City's storm drain crews conduct regular inspections and cleaning of these filter inserts and replace parts as necessary.

4.3.4 PROGRAM IMPLEMENTATION

4.3.4.1 MAINTENANCE AND INSPECTION

During the reporting period, the City swept approximately 18,000 curb miles and removed approximately 940 tons of trash, debris, and sediment from Chula Vista streets and parking lots. While regular street sweeping is contracted, the City operates a street sweeper to be used by City crews to maintain City facilities, parking lots, bus stops, and special events. Figure 4-1 shows the street sweeping schedule for the reporting year.

Figure 4-1 Street Sweeping Schedule

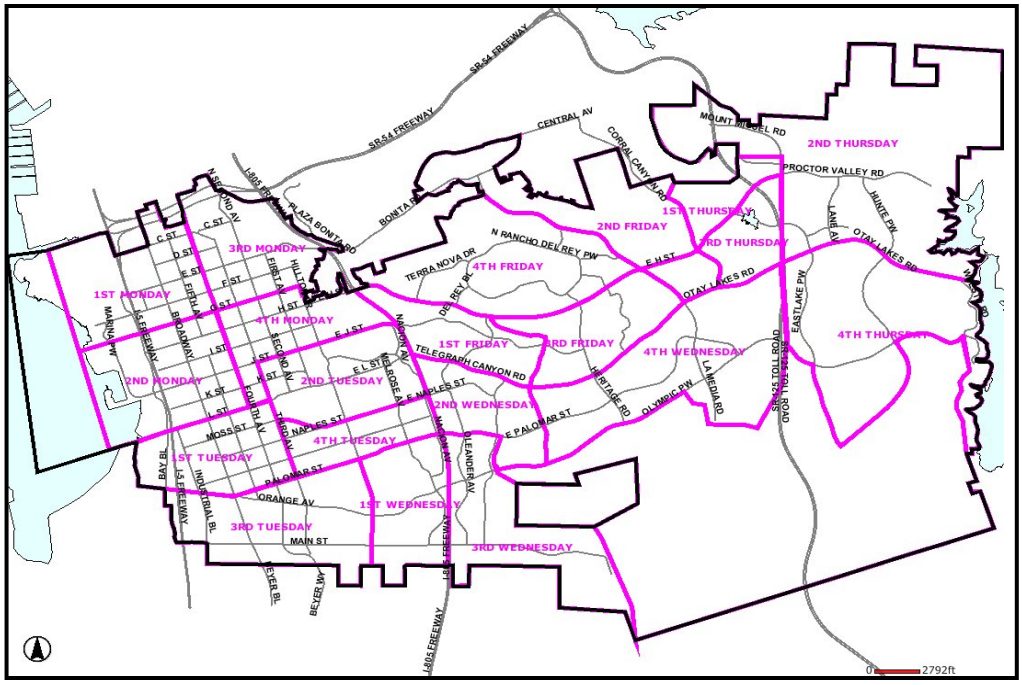

4.4 MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

4.4.1 BACKGROUND

MS4 maintenance is an ongoing city function that is essential for the removal of pollutants that may be discharged to receiving waters. MS4 maintenance activities address pollution prevention through four primary activities: 1) Inspections, 2) catch basin maintenance, 3) channel maintenance, and 4) outfall maintenance.

As part of the City's maintenance protocol, a maintenance supervisor inspects storm drain facilities before and after cleaning operations. Problem sites within the drainage facilities were inspected and cleaned multiple times during the reporting period. In addition, the City's consultant for dry weather field screening annually inspects over 57 outfall locations throughout the City and conducts upstream investigations based on field screening results. They report observed pollution in storm drainage systems to the City, in which case Public Works maintenance crews immediately take action to inspect the drainage area, abate the pollution, and conduct cleanup.

Another method of inspection of storm drainage facilities employed by the City is through investigation of reported violations. When an inspector responds to a reported violation, in addition to normal investigations, he or she inspects the first downstream storm drain inlet to determine if pollution has reached the inlet. In case of presence of any trash, silt, or other visible pollutants in the storm drain inlet, Public Works crews are immediately notified and they take action to clean the storm drainage system, as necessary. This multi-layer inspection program ensures that almost all MS4 facilities are inspected and maintained regularly.

All channel and outfall maintenance activities have been conducted in a manner as to assure compliance with all environmental regulatory standards. Notably, channel and outfall maintenance activities have been limited to manual removal of trash and debris from areas that trash accumulation may cause flooding and damage to life or property.

Currently, three vacuum trucks and three crews are allocated full-time to performing the above tasks on the maintenance and inspection of the City's storm drain systems. In addition, four vacuum trucks, equipment, and wastewater field crews are available on an as-needed basis to help in cleaning and inspecting the storm drain systems in emergencies and other similar situations.

The City maintains an extensive record keeping and maintenance tracking system utilizing George Butler Associates Work Management System (GBA), which is an automated system universally used by the Public Works Department for collecting and tracking data about all its activities. Detailed maintenance logs are available in the City's storm drain maintenance database and can be presented upon request.

During this reporting period, the City installed 150 thermoplastic storm drain stencils in addition to the 500 that had already been installed in previous fiscal years. These stencils adhere to the

concrete curb/gutter by heat treatment and are more durable than paint stencils or plastic markers using adhesive. These thermoplastic storm drain markers permanently affix to storm drain inlets with the prohibitive "No Dumping – I Live Downstream" message in two languages. Notably, nearly all storm drain structures in the City are identified with stenciling, plastic markers, or permanent concrete stamping.

Figure 4-2 Thermoplastic Storm Drain Stencil

4.4.2 SOURCE CHARACTERIZATION

The City maintains its MS4, which includes open channels, catch basins and inlets, and outfalls. As required by the Municipal Permit Section D.3.a.(7), the City's MS4 is included in the municipal facility inventory (Attachment C) as a high priority facility for inspection purposes. Table 6-1 of the City's JURMP details the pollutants potentially generated by the MS4.

4.4.3 BMP REQUIREMENTS

The City implements various BMPs to maintain its MS4 and uses the CASQA BMPs for municipal facilities and activities as a guide.

4.4.4 PROGRAM IMPLEMENTATION

4.4.4.1 MAINTENANCE AND INSPECTION

A summary of the City's efforts in the maintenance and inspection of its catch basins and inlets, MS4, and open channels during the reporting period of July 1, 2009 to June 30, 2010 is summarized below. A total of 273 inlets were identified as accumulating a high volume of trash. All high trash volume facilities were inspected at least once during the dry season (May 1 – September 30). Table 4-3 details the amounts of waste collected from the City's storm drain system based on various facility and waste categories.

Catch Basins and Inlets

- There are 8,801 catch basins and inlets in the City
  - 8,480 catch basins and inlets were inspected
    - Out of these catch basins and inlets inspected, 4,444 catch basins and inlets were cleaned
- Data collection for catch basins with accumulated waste exceeding the cleaning criteria (33% or more full) started January 1, 2008. A total of 351 exceeded the criteria from July 1, 2009 – June 30, 2010.

MS4

- There are 184 miles of MS4 in the City
- The storm drain maintenance crews televised 4.31 miles of MS4 during the reporting year. New storm drain pipes were televised to ensure that there was no infiltration from groundwater or the sanitary sewer, and to inspect MS4 where there was obstructed water flow.
- A total of 0.16 miles of MS4 was cleaned. It should be noted that the City's storm drain pipes are designed to be self-cleaning under normal operation.

Open Channels

- There are 31 miles of open channels in the City
- A total of 286,714 square feet of open channels were inspected and cleaned

Table 4-3 Amount of Waste Cleaned from the Storm Drain System FY 2009-2010

CATEGORY	AMOUNT (tons)
Catch Basins	**28.18**
Inlets	**48.94**
MS4	
Trash	6.71
Landscaping Debris	8.30
Sediment	20.10
Sub-Total	**35.11**
Open Channels	**280.47**
TOTAL	**427.81**

The City will continue to inspect its MS4 as required by the Municipal Permit and record collected inspection data. During this reporting year, the City reviewed its inspection record and determined that there were no facilities that required inspections less than annually.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

The City recognizes the vital pollution prevention role that sanitary sewer system maintenance plays in the protection of the MS4 system. If not properly maintained, the sewer system can potentially discharge numerous pollutants to the storm drain system such as bacteria, viruses, nutrients, parasites, and chemicals.

The City currently implements a Sewer System Management Plan. Pursuant to the Statewide General Waste Discharge Requirements for Sewer Collection Agencies, in April 2009 the City developed a Sewer System Management Plan. The City is currently working on developing a Fats, Oils, and Grease (FOG) Monitoring Ordinance. As part of the FOG program, the City has conducted a survey in which questionnaires were sent out to all restaurants in the City. Information collected about their FOG practices, and methods of preventing oil and grease from entering sanitary sewer systems will be used to track BMPs, assess their efficiencies, and direct future inspections.

4.5.2 SOURCE CHARACTERIZATION

There are 487 miles of sewer pipes in the City. The Municipal Permit Section D.3.a.(7) requires sanitary sewer collection systems to be identified as high priority facilities for the purpose of inspections. The sanitary sewer system is included in the municipal inventory as such (please see Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by the sanitary sewer system. The City of Chula Vista does not operate a Publicly Owned Treatment Works. Sewage generated in Chula Vista is collected and conveyed to the City of San Diego treatment works at Point Loma.

4.5.3 BMP REQUIREMENTS

The City responds to all sanitary sewer overflows and uses the CASQA BMP Handbook for municipal facilities and activities including sanitary sewer system maintenance as a guide. City staff regularly receive training on inspection and maintenance of the sanitary sewer system.

Concurrent with the arrival of maintenance and cleanup crews at the scene of a sewage spill from private sewer lines to contain and cleanup the spill, a Storm Water Compliance Inspector contacts the responsible person at the residence or facility and makes it a requirement to implement BMPs to prevent the recurrence of similar incidents. Such BMPs frequently include the requirement for regular and frequent inspections and cleaning of private sewer lines, tightly closing the cap on cleanouts, preventing oil and grease from entering sanitary sewer systems, etc.

4.5.4 PROGRAM IMPLEMENTATION

4.5.4.1 MAINTENANCE AND INSPECTION

The City cleaned and maintained a total of 586 miles of sewer main (includes critical maintenance areas, which were cleaned multiple times) within the defined reporting period of this report. Identified critical maintenance areas were cleaned on a monthly basis by City crews. In addition to comprehensive sanitary sewer maintenance activities, the City utilizes a number of controls to limit infiltration from the sanitary sewer system to the MS4. Most essential of which, the City's standards require concrete pipes for all new storm drains, which ensure a much longer life, watertight joints, and effectively minimizes infiltration of groundwater and sewage to storm drain pipes. In addition, flow metering is also conducted throughout the City's sanitary sewer system to monitor flow depths and potential capacity concerns, minimizing potential sewer overflows and infiltration. The City has video cameras that can be moved through storm drain or sanitary sewer pipes for close inspection of pipe conditions. If a problem is suspected, that section of the pipe is video surveyed. This practice has greatly minimized the potential for infiltration of sewage into storm drain pipes.

The City also implements a rehabilitation program for aged sewer pipes. Rehabilitation consists of lining deteriorated existing Vitrified Clay Pipes (VCP) with a continuous material. This process eliminates the joints of the VCP, thereby eliminating the potential for ex-filtration of sewage. Also, only PVC sewer pipes are used for new construction for all but interceptors with

diameters larger than 36 inches. PVC pipes have proven to be very watertight and minimize sewage infiltration into the ground and storm drain systems.

Another control to limit infiltration from the sanitary sewer system to the MS4 is the City's initiative to replace aged corrugated metal pipe storm drains with concrete pipes. The City no longer allows metal pipes to be used for storm drains due to their inherent corrosion potential and increased risk of infiltration. Corrugated metal pipes are gradually being replaced with concrete pipes, which are more durable and watertight.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City performs activities that are not confined to a fixed area, such as powerwashing. Pollution prevention using source control BMPs are implemented for such activities.

4.6.2 SOURCE CHARACTERIZATION

The City performs a variety of mobile activities such as power washing for graffiti removal, landscape maintenance, street repairs, and pool maintenance. The Municipal Permit Section D.3.a.(7) requires that power washing be identified as a high priority municipal activity for inspection purposes. Therefore, Attachment C has categorized power washing as such. Table 6-1 of the City's JURMP details the pollutants potentially generated by the area or activity.

4.6.3 BMP REQUIREMENTS

The City implements source control BMPs for mobile activities, including power washing, and uses the CASQA BMP Handbook for Municipal Facilities as a guide. City power washing crews implement BMPs during their activities and receive regular training on storm water pollution prevention.

4.6.4 PROGRAM IMPLEMENTATION – POWER WASHING FOR GRAFFITI REMOVAL

4.6.4.1 MAINTENANCE AND INSPECTION

The City's Graffiti Abatement Program functions under the mission of: *"To deliver in a timely manner, a comprehensive, cost-effective, environmentally sound, and technically reliable graffiti removal, education, and prevention program for the residents of Chula Vista."* The City provides cost-free graffiti removal for the residents of Chula Vista.

The Graffiti Abatement Program utilizes various techniques for effective removal of graffiti Citywide, including power washing and sand blasting. In its commitment to this program and to utilize environmentally sound and cost-effective graffiti removal processes, City Council approved the spending

of $63,000 for the purchase of highly specialized equipment to capture and treat residual wash water generated from graffiti abatement activities in early 2006. At the end of 2006, the new equipment was made available to the graffiti crews and has been in use ever since.

As a part of the inspection process, City's Storm Water Management staff annually conducts a ride-along with the graffiti/power washing crews to observe their operations and activities. Storm water staff provides storm water education to the crew and gives any additional BMP recommendations or improvements to their existing pollution prevention measures. During this reporting year, City Storm Water Management staff observed the removal of graffiti from a sidewalk area, close to the curb/gutter. The graffiti crew implemented all BMPs and prevented any wash water from entering the storm drain system. In addition, the crew made used the least amount of water necessary to complete the job. All BMPs were in place and working properly.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City hosts a variety of special local events, which include festivals, fairs, and other events for special causes and occasions. Usually, these events involve the participation of outside organizations, community groups, and the general public. The gathering of event participants and crowds is generally a source of trash and debris if BMPs are not implemented.

4.7.2 SOURCE CHARACTERIZATION

Municipal Permit Section D.3.a.(7) requires that special events be designated as high priority for inspection purposes. Therefore, special events are included in the City's municipal inventory as high priority activities (Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by special events.

4.7.3 BMP REQUIREMENTS

The City implements various BMPs for special events such as having special bins available for recyclables and trash, using street sweeping immediately following major events taking place on a street, and having personnel dedicated to litter abatement throughout City events. Also, following every event, City staff inspects the grounds for trash and performs other clean-up activities as necessary. Environmental Services Division and Storm Water Management staff works in conjunction with other City departments and event organizers to ensure that adequate BMPs are implemented during special events.

4.7.4 PROGRAM IMPLEMENTATION

Storm Water Management and Environmental Services staff has active presence at the majority of City events. They set up booths, provide public education on environmental issues, and distribute informational materials. As necessary, they conduct surveys at the same time to evaluate general public's awareness and practice of BMPs. As a part of storm water education outreach, staff working at the events provides information on pollution prevention and watershed

protection. City Environmental Services staff notifies hired personnel if there are overflowing trash bins or areas where more trash receptacles are needed.

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(d).i – Any updates to the industrial and commercial inventory.

Permit Section J.3.a.(3)(d).ii – Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.

Permit Section J.3.a.(3)(d).iii - A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.

Permit Section J.3.a.(3)(d).iv - Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.

Permit Section J.3.a.(3)(d).v - Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.

Permit Section J.3.a.(3)(d).vi - Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(d).vii - Identification of the number of third party inspections conducted.

Permit Section J.3.a.(3)(d).viii - Identification of efforts conducted to verify third party inspection effectiveness.

Permit Section J.3.a.(3)(d).ix – A description of efforts implemented to address mobile businesses.

Permit Section J.3.a.(3)(d).x - The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(d).xi - A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.

Permit Section J.3.a.(3)(d).xii - A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.

5.1 INTRODUCTION

The following section describes the development and implementation of program components related to industrial and commercial activities in the City of Chula Vista to minimize the impact of urban runoff on receiving waters. This component is driven by multiple interrelated activities to ensure an effective and complete set of actions. The City recognizes that no program activity is mutually exclusive, and that each is essential to the overall success of the program. The City has compiled an inventory of industrial and commercial sources and developed BMP requirements for each source and activity. Implementation of these requirements will be accomplished through education, inspection, and enforcement.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

The City's industrial and commercial inventories include 1,426 facilities. Examples of industrial facilities within the City include manufacturing facilities, auto dismantlers, and transportation businesses. Examples of stationary commercial facilities within the City include auto repair shops, restaurants, and wholesalers of many kinds; this does not include mobile commercial facilities. Mobile commercial facilities are detailed in Section 5.3.

The main objective of the industrial and commercial component of the JURMP is to minimize or eliminate the impacts of industrial and commercial activities on receiving waters and other sensitive environmental resources. Each facility has the potential to discharge pollutants into the MS4 and hence degrade local water quality.

5.2.2 SOURCE CHARACTERIZATION

Through ongoing efforts to maintain a more systematic approach to source inventory management, annually, the City conducts updates of its industrial and commercial facilities inventories by searching through its business license database and conducting visual observations of new or closed businesses during annual inspections. Additionally, every five years, the City conducts a comprehensive field validation of its industrial and commercial inventories Citywide. The industrial and commercial inventories are also updated on a continuous basis by adding businesses that cause incidents of pollutant discharge or are found to require regular inspections due to the type and amount of pollutants that they generate.

Watershed-based inventories of industrial and commercial sites within the City have been compiled. Information was obtained from the City's business license database (Permits Plus), the State Water Resources Control Board database of industrial sites that have filed NOIs, inspection records, and previous experience.

Inventories of industrial and commercial facilities within the City were compiled during the development of the City's JURMP in 2008, which were later updated for the current reporting period and are included in Attachments D.1 and E.

The inventory for commercial facilities includes such information as:

- Facility name
- Assessor's Parcel Number (APN)
- Facility address
- Municipal Permit category
- Description of services
- Priority

The inventory for industrial facilities includes such information as:

- Facility name
- Assessor's Parcel Number (APN)
- Type of facility
- Priority
- Facility address
- Standard Industrial Classification (SIC) code
- Waste Discharge Identification Numbers (WDID) for sites that are covered under the State of California's General Industrial Permit.

The inclusion of the APNs allows the City to track its inventories through the City's GIS program. Table 7.1 – General Pollutant Loading Potentials of Industrial and Commercial Sources in the City's JURMP document identifies the pollutants that may be generated by each business category.

5.2.3 BEST MANAGEMENT PRACTICES REQUIREMENTS

Pollution prevention methods are used as a primary mechanism for reducing discharges of pollutants into MS4s from existing industrial and commercial facilities. Pollution prevention methods are cost-effective BMPs that eliminate or reduce the generation of pollutants at their sources. Industrial and commercial facilities produce a range of pollutants, both indoors and outdoors, that can threaten human and environmental health if washed into the storm drain system by way of urban runoff. Businesses can benefit from pollution prevention methods by reducing labor time associated with excess pollutant waste handling, thereby re-directing labor time more efficiently to production, as well as the accompanying costs of storage, disposal or treatment.

The following pollution prevention methods were required to be implemented to the MEP where applicable and feasible:

- Reduce the quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct employees
- Implement a spill response plan
- Segregate and recycle wastes

- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

In addition to the methods listed above, the City's Storm Water Management Ordinance provides legal authority for the City to require a SWPPP for any industrial or commercial facility that may potentially discharge significant pollutants into receiving water bodies.

In addition to the pollution prevention BMPs, the City has established a set of minimum BMPs based on the California Stormwater BMP Handbook – Industrial & Commercial (CASQA, 2003) for all industrial and commercial sites. Businesses are required to use an effective combination of the applicable BMPs and activity-specific BMPs. The listings of the BMP fact sheets are available online at www.cabmphandbooks.com.

Insurance of proper BMP implementation at industrial and commercial sites is based on a multi-level approach and information on BMPs are disseminated to the local business community through a number of channels, including:

- Inspection & enforcement activities
- Industrial and commercial outreach & education
- Business license application procedure

The City does not exclusively endorse some of the specific recommended BMP options listed in the CASQA fact sheets because they are less stringent than, and conflict with Municipal Permit requirements or City's ordinances. Those exceptions are listed in Appendix C of the JURMP. Businesses are informed of the exceptions, where necessary.

It is important to recognize that pollution prevention methods are stressed through all interactions between the City and facility owners, operators or their employees. Further, pollution prevention methods are commonly used in compliance with other regulatory management standards. It has been determined that one-on-one interaction between City inspectors and business owners are more effective in knowledge and behavior change than conducting workshops or distributing informational materials, although latter methods are also effective to a lesser degree and are practiced by the City.

5.2.4 PROGRAM IMPLEMENTATION

The City provides education and outreach to industrial and commercial businesses so they are aware of the City's storm water requirements. As per the permit, during the reporting period, the City mailed approximately 1,200 BMP notification letters to stationary commercial and industrial business owners/managers. The notification letters provided information on the BMPs that businesses must implement in order to be in compliance with storm water regulations. A Storm Water BMP Fact Sheet was provided that outlines what the business need to know about

the City's storm water ordinance as well as the general pollution prevention BMPs. The remaining industrial and commercial businesses were notified of BMP requirements during inspections. The City inspects its inventoried businesses to evaluate compliance with its BMP requirements. Enforcement actions are taken as necessary to bring the business into compliance.

Because the City's BMP requirements, as described in the JURMP, are not substantially different from the BMP requirements that the City has been enforcing since 2002, most businesses should already be familiar with what they need to do to comply with the City's requirements. While the City continues to provide education and outreach to industrial and commercial businesses, in most cases a lack of awareness is not accepted as an excuse for noncompliance.

The City provides information and training regarding storm water quality to industrial and commercial owners and operators. In turn, owners and operators are required to train their personnel, employees, and/or other parties involved with industrial or commercial activities. Businesses are given educational materials outlining pollution prevention methods and BMPs during inspections, where appropriate. Storm Water Management staff gives recommendations to businesses where necessary. Based on the City's experience, this site-specific, personal education is among the most effective methods of outreach. The educational program for industrial and commercial businesses is described in more detail in Section 10 of the updated JURMP.

After each inspection, the City provides a copy of the inspection report to the responsible party of the inspected business. Generally electronic inspection forms are completed, and a printout is mailed or faxed to the responsible party after the inspection. If immediate notification is deemed necessary, a paper inspection form with carbon copy is completed onsite, with the carbon copy provided to the responsible party at the time of inspection.

In all cases a copy of the Chula Vista Storm Water Management and Discharge Control Ordinance is handed to the facility owner/manager. The City continues to utilize the following primary mechanisms to provide ongoing education to the industrial and commercial communities within the City:

- Providing one-on-one training and helping business owners to develop their activity and site specific BMPs
- Distributing informational printed materials
- Conducting industrial and commercial inspections and setting standards for compliance

5.2.4.1 INDUSTRIAL/COMMERCIAL SITE INVENTORY AND INSPECTIONS

During this reporting period, 198 industrial facilities and 1,228 commercial facilities including 333 mobile businesses were identified and inventoried. These facilities are identified in Attachments D.1 and E.

Through ongoing efforts to maintain a more systematic approach to source inventory management, industrial and commercial facilities were prioritized as potential contributors of identified watershed Pollutants of Concern including bacteria and heavy metals. Inspections

were conducted and, observed Pollutants of Concern were addressed through necessary education and enforcement actions.

During this reporting period, the following number of inspections was conducted to ensure compliance with Permit requirements (see Attachments I and J):

- 201 high priority commercial facilities
- 28 low priority commercial facilities
- 48 high priority industrial facilities
- 2 low priority industrial facilities

Justification and rationale for why industrial and commercial sites/sources were chosen for inspection is as follows:

- Permit compliance – Categories and numbers of facilities selected for inspection were chosen to meet permit requirements of Section D.3.b.(3).
- Threat to Water Quality – Facilities that posed a higher TTWQ was given higher priority for inspections.
- Inspection frequency – Facilities that were not inspected during the previous period were given a higher priority for inspection.
- Past history of non-compliance – Facilities that had a history of non-compliance during previous inspections were targeted for re-inspection during the current reporting period.

City inspectors use industrial and commercial inspection forms specifically designed as multi-purpose tools. The form provides a checklist of information and potential water quality issues, which serves as a reminder to the inspector of all items requiring attention while on the industrial/commercial facility. The form also provides clear and concise information to the business owner or manager about deficiencies in the implementation of BMPs. It includes information about corrective actions that the business owner or manager needs to take for bringing the site into compliance, and the time allowed for bringing the facility into compliance. Inspection forms are designed to enable the inspector and others to assess BMP implementation on each industrial/commercial facility and the effectiveness of BMPs. Inspection reports are often used as supporting documents in enforcement actions against non-compliant industrial/commercial facilities and during administrative hearings.

Through the above process, the City ensures that inspections conducted address all the required inspection steps to determine full compliance.

The Copermittees have standardized industrial/commercial inspections. An Inspection Standards Workgroup was formed with the task of finding a way to standardize industrial-commercial inspections so that the results from each Copermittee's inspections are consistent. The goal of the workgroup was to create minimum regional standards while maintaining flexibility for each Copermittee to identify and apply their individual requirements that have been developed to match each Copermittee's respective storm water program.

5.2.4.2 PRIORITIZATION

The Municipal Permit no longer requires industrial and commercial inventories to be categorized into high or low priority for TTWQ, although Section D.3.b.(3) of the Municipal Permit requires inspections of sites determined to pose a high threat to water quality. Based on the City's past experience, prioritization of industrial and commercial facilities into high or low priority provides a powerful tool to identify facilities that require focused attention and more frequent inspections. Therefore, the inventories of industrial and commercial facilities have been prioritized in this report.

The City evaluated each business by incorporating factors specified by the Municipal Permit and by using past experience. Although not specifically required, the City has also continued to classify industrial businesses that have obtained coverage under the General Industrial Permit as high priority. Other industrial businesses, based on past inspections and institutional knowledge, or those that are known to have poor compliance history, or have a high potential for pollutant discharge are also classified as high priority.

Criteria for identification of low priority industrial facilities include the following:

- Land Use Code
- SIC Code
- Type of Activity
- Location

Criteria to identify high priority commercial facilities:

- Auto related businesses
  Businesses operating along the following areas were included due to their proximity to receiving water bodies:
  - Main Street corridor (Otay River and MSCP Preserve areas)
  - Bonita Road corridor (Sweetwater River)
  - Bay Boulevard (San Diego Bay)
- Restaurants
  Restaurants operating along the following areas were included due to their proximity to receiving water bodies:
  - Main Street corridor (Otay River and MSCP Preserve areas)
  - Bonita Road (Sweetwater River)
  - Bay Boulevard (San Diego Bay; facilities within the Port jurisdiction are not included)
- Fast food chains
  This is due to frequent rotation of management and employees, and low awareness about water quality issues. Also, fast food restaurants often have a drive through and more customers who potentially discard food wrappers, etc. in the parking lot.
- Private golf courses
- Entertainment facilities
  Cricket Wireless Amphitheater and Knotts Soak City

- Towing companies
- Building supplies and materials
- Food Markets
- Violation history
  Commercial facilities that have been issued a citation or Notice of Violation within the past two years are included in the list. Also, any business that receives a citation or Notice of Violation in the future will automatically be added to the list.

5.2.4.3 INSPECTIONS CONDUCTED

An inspection of an industrial and commercial business involves verifying information regarding ownership, management, and contact names and phone numbers of the businesses. If the inventoried business is no longer at the listed location or has moved, the inspector makes a note to update the inventory. If a new business has been determined to be included in the inventory, Storm Water Management staff notes that information, and the business is usually inspected at that time.

For industrial sites, Storm Water Management staff reviews the facility's SWPPP, Annual Report, and monitoring results, if applicable. Typically, only sites that are covered under the General Industrial Permit have these documents. Where applicable, Storm Water Management staff checks for coverage under the General Industrial Permit

Monitoring verifications for high priority industrial facilities are conducted through the review of the facility's annual report or by the verification of the facility's participation in the Group Monitoring Program. To ensure that the subject facility is still an active participant of a Group Monitoring Program, the City verifies membership by contacting the Group Leader, and by accessing the State Water Resource Control Board's website:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/groupmonitoring.shtml

During both industrial and commercial business inspections the main focus is reviewing the implementation of pollution prevention methods and other BMPs. A walk-through of the business is conducted to identify potential pollutants and pollutant generating activities. The business contact typically accompanies the Storm Water Compliance Inspector during the walk-through to enable City staff to point out areas where corrections are needed, and for the business representative to answer any questions and take note of the requirements.

Based on the results of the inspection, the Storm Water Compliance Inspector completes a Storm Water Quality Inspection Report for Commercial/Industrial Facilities. The responsible party is provided with a copy of the inspection report after the inspection. The inspection report contains the following information:

- General information to update the inventory
- General site observations and/or conditions of concern noted
- Results of the SWPPP review, BMP plan, and monitoring results, where applicable
- Assessment of BMP implementation

- Recommended corrective actions
- Enforcement action taken
- Inspector name and signature
- Signature of party receiving the report

The Storm Water Compliance Inspector does not typically prescribe exact BMP solutions; staff does attempt to work with the facility's contact to provide examples of BMPs that could be implemented. Cost-effective BMPs are sought whenever possible, although, more expensive BMPs may be needed to reduce the pollutant discharges to the MEP. The business is also evaluated for its staff training procedures and the storm water quality awareness of the contact person. Educational information is provided as appropriate. The findings of the inspection and corrective actions are discussed with the responsible party while the Storm Water Compliance Inspector is at the site.

As discussed above, the business is provided with a copy of the completed inspection report. Based on observations during the inspection, the City may determine that the business category should be changed from low to high priority or vice versa. Any such changes are reflected in the inventory update submitted in the following JURMP Annual Report.

A detailed account of all industrial and commercial inspections conducted during this reporting period is included in Attachments I and J.

5.2.4.4 THIRD PARTY INSPECTIONS

With a dedicated Storm Water Management staff, industrial and commercial facilities are effectively regulated in the City without the use of a third party inspection program. The City's industrial and commercial inspection program is defined by a consistent presence and strong enforcement standard, and the City's Storm Water Management staff continues to excel in maintaining the needs of the industrial and commercial programmatic elements.

5.2.4.5 VIOLATIONS AND ENFORCEMENT ACTIONS

The City has a number of mechanisms that can be used to bring an industrial or commercial facility into compliance. These mechanisms include:

- Verbal and Written Warnings
- Notices of Code Violation
- Orders to Clean and Abate
- Orders to Cease and Desist
- Orders to prepare a Storm Water Pollution Prevention Plan
- Orders to implement a Monitoring and Testing Program
- Administrative Citations
- Civil Penalties
- Judicial Enforcement

Storm Water Compliance Inspectors properly document each observed violation at the facility failing to comply with the storm water requirements, and enforcement action is taken when necessary to bring the facility into compliance.

In some cases compliance is achieved and observed at the time the initial enforcement action is taken, and no follow-up is necessary. In other cases, Storm Water Compliance Inspector conducts follow-up inspections to ensure that required corrective actions are adequately addressed.

Where the Storm Water Compliance Inspector observes a significant and/or immediate threat to water quality, immediate enforcement action is taken to require the facility to immediately correct the situation. When necessary, City's maintenance crews respond to illegal discharges, contain and capture pollutants before entering storm water conveyance system inlets, and stay at the scene until the illegal discharge is terminated by the responsible person. The affected areas and the storm water conveyance system are cleaned and disinfected as necessary. Costs for such operations are charged to the business owner of the property owner. In any case in which Storm Water Compliance Inspectors determine that a noncompliant site poses a threat to human or environmental health, the City notifies the RWQCB by phone and in writing as required by the Municipal Permit.

The City also investigates all reported incidents of illicit discharges or illegal connections from industrial and commercial businesses. This includes findings during the implementation of the City's Dry Weather Field Screening and Analytical Monitoring Program. The investigations are performed in accordance with Section 9.5 of the City's JURMP.

Table 5-1 details the types of violations and the numbers of each during the reporting period. A detailed account of enforcement actions taken during this reporting period is included in Attachment K.

Table 5-1 Industrial/Commercial Enforcement Action Summary FY 2009-2010

VIOLATION TYPE	NO.
Administrative Citations-Warning	6
Administrative Citations	31
Notice of Violation	5
Civil Penalties	1
VIOLATION CATEGORY	**NO.**
Commercial	38
Industrial	5

Total penalties of $16,400 were issued to the enforcement actions above.

The above referenced enforcement actions were preceded by initial inspections and were followed up by additional inspections as necessary until such non-compliant facilities were brought to full compliance with the City's storm water regulations.

5.2.4.6 IDENTIFICATION OF NON-FILERS

If Storm Water Compliance Inspectors determine that an industrial facility may require coverage under the General Industrial Permit and has not filed a Notice of Intent (NOI), the City requires the responsible party to contact the Regional Board to determine if the facility is required to obtain coverage. At the same time, the Regional Board is notified of the existence of such industrial facility. Additionally, the City coordinates joint site inspections with Regional Board staff to assist in their site inspections. Each Annual Report includes a list of industrial facilities that the City has identified during that reporting period as candidates for coverage that have not filed NOIs. The list includes the name of the facility, address, applicable SIC code(s), and the type of business.

During the current reporting period, the City did not identify any non-filer facilities that may be eligible for coverage under the General Industrial Permit.

5.3 MOBILE SOURCES ELEMENT

5.3.1 BACKGROUND

Illegal discharges are a concern with mobile businesses working in the City. Due to the nature of their activities, mobile businesses are regulated differently than stationary businesses. Mobile businesses can be difficult to regulate because many do not have permanent locations in the City or may not have a business license. On a continual basis, new mobile businesses are started, existing mobile businesses go out of business, some mobile businesses do not renew their business license, or some operate from their home. Since they are not consistently present at any particular location, regular inspections are difficult and infeasible. For the above reasons, City maintenance crews who normally work on public streets have been trained to report any observed illegal discharges by mobile businesses. Furthermore, City inspectors conduct weekend and night inspections to monitor BMP implementation by mobile businesses.

5.3.2 SOURCE CHARACTERIZATION

Mobile businesses that are known to operate within the City are marked as such on the City's commercial inventory in Section B.5 of the City's updated JURMP. The following business types are addressed by the mobile source element of the City's industrial and commercial program.

- Mobile auto detail/ maintenance
- Window washing/pressure washing/ street sweeping
- Pool and spa cleaning
- Carpet cleaning
- Plumbing/ handyman/ repairman
- Landscaping
- Dog grooming
- Boat cleaning/ hull maintenance

- Fire sprinkler maintenance
- Painting and coating
- Mobile construction trades, which include cement work and masonry

In addition to the business types listed above, other mobile businesses that the City identifies as a TTWQ are added to the inventory. Because not all mobile businesses have obtained a business license in the City or the business is based out of the City's jurisdiction, the City continues to refine and update its inventory of mobile businesses.

The City has established a process by which any mobile business license applicant within the above categories are required to go through a storm water BMP training, and sign a certification verifying that they are aware of the City's BMP requirements and pollution prevention ordinances.

During this reporting period, 164 mobile businesses from the categories listed above applied for a City business license, were trained on BMPs related to their business, completed the City of Chula Vista Storm Water Questionnaire and Certification Statement, and received their business license. Attachment D.2 is a list of the businesses that went through this process during the reporting period. Table 5-2 details the types and numbers of mobile businesses approved during the reporting year.

Table 5-2 Approved Mobile Business Licenses by Category FY2009-2010

BUSINESS TYPE	NO.
Construction Related	10
Carpet Cleaning	8
Boat Cleaning and Maintenance	2
Auto Detailing	13
Pool and Spa Cleaning	8
Handyman/ Repairman	27
Powerwashing/ Window Cleaning	2
Plumbing	26
Landscaping	29
Fire Protection Systems	14
Painting and Coatings	15
Portable Sanitary Services	1
Pest Control	1
Miscellaneous/ Others	8
TOTAL	**164**

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 POLLUTION PREVENTION

Pollution prevention comprises procedures and practices that eliminate or reduce the generation of pollutants at their sources. Mobile businesses often deal with a variety of pollutants, both

indoors and outdoors, that pose potential environmental threats if transported by way of urban runoff. In mobile business settings, pollution prevention strategies enable the operator to reduce the volume of solid, liquid, and hazardous wastes as well as costs. The City emphasizes the use of the following pollution prevention methods, when appropriate:

- Use smaller quantities of toxic materials or substitute less-toxic materials.
- Minimize the volume of cleaning water to decrease wastewater generation.
- Implement a spill response plan.
- Train employees in pollution prevention practices.

It is important to recognize that pollution prevention methods are stressed through all interactions between the City and the owners, operators, and their employees. Further, pollution prevention methods are commonly used in compliance with other regulatory management standards.

5.3.3.2 BMP REQUIREMENTS

All BMPs required for stationary sources listed in Section 7.2.3.1 of the City's updated JURMP, are also required for mobile businesses where applicable. The most important BMPs used for most mobile businesses are typically Non-Storm Water Discharge Control and Spill Prevention, Control, and Cleanup, as described in fact sheets SC-10 and SC-11 of the CASQA Manual.

In addition, as per the Municipal Permit, the Copermittees developed a set of minimum core BMPs for the various types of mobile businesses. The following BMPs specifically address the unique characteristics of mobile businesses.

- Storm water training
- Spill containment and cleanup (Spill Kits)
- Proper handling of all wastes (Solid, liquid and hazardous)
- Protecting storm water conveyance systems
- Providing proper handling and containment of materials
- Providing equipment washout areas

These practices represent only the minimum required BMPs. Mobile businesses are instructed to contact local jurisdictions where mobile business activities are to take place to find out about any additional or more stringent requirements.

The Copermittees are in the process of posting information about mobile business minimum BMPs as a resource in the Project Clean Water Toolbox website. Please see Figure 5-1 – Clean Water Toolbox for the home page of the website.

Figure 5-1 Clean Water Toolbox

5.3.4 PROGRAM IMPLEMENTATION

The City continues to implement well-developed procedures for mobile businesses through the City's Storm Water Mobile Business License Program. New mobile business license applicants are made aware of applicable requirements and BMPs related to their business prior to the approval and issuance of a business license. Under this program, business license applications that fall under pollutant generating mobile activity types are routed to the Storm Water Management Section for review and approval. Applicants are required to complete a Storm Water Questionnaire regarding their business practices and required BMPs and sign a certification statement that states they are aware of the City' Storm Water regulations and will implement adequate BMPs in their activities. Approved applications and completed Storm Water Questionnaires and Certification Statements are scanned into the City's Mobile Business Database. This process provides a tracking mechanism for Storm Water Management Staff in managing and maintaining priority mobile sources, and identifying repeat violators. The procedures shown below have demonstrated success in requiring new business owners, particularly mobile businesses, to address water quality concerns through the implementation of BMPs.

- The Finance Department receives application from mobile business owner

- The applicant is issued a commercial or construction packet based on business type/description. Each Storm Water Information Packet for Mobile Business contains a transmittal letter, copy of the City's Storm Water Ordinance, and appropriate CASQA BMPs relevant to the type of business activities.
- The applicant is instructed to complete and return the Storm Water Questionnaire and Certification Statement in order to receive approval from the Storm Water Management Section before a business license can be issued.
- The applicant contacts Storm Water Management staff for either a "face-to-face" or phone conversation to review the application and answer any questions prior to approval and issuance of a license.
- In addition to the City's Mobile Business Database, the Copermittees have established a Regional Copermittee Mobile Business Database. The web-based database can make queries on locating a mobile business, finding and viewing violations, and watershed-based reporting. Jurisdictions are able to edit a mobile business that is located or does business in their jurisdiction. See Figure 5-2 – Regional Copermittee Mobile Business Database for a sample web page.

Figure 5-2 Regional Copermittee Mobile Business Database

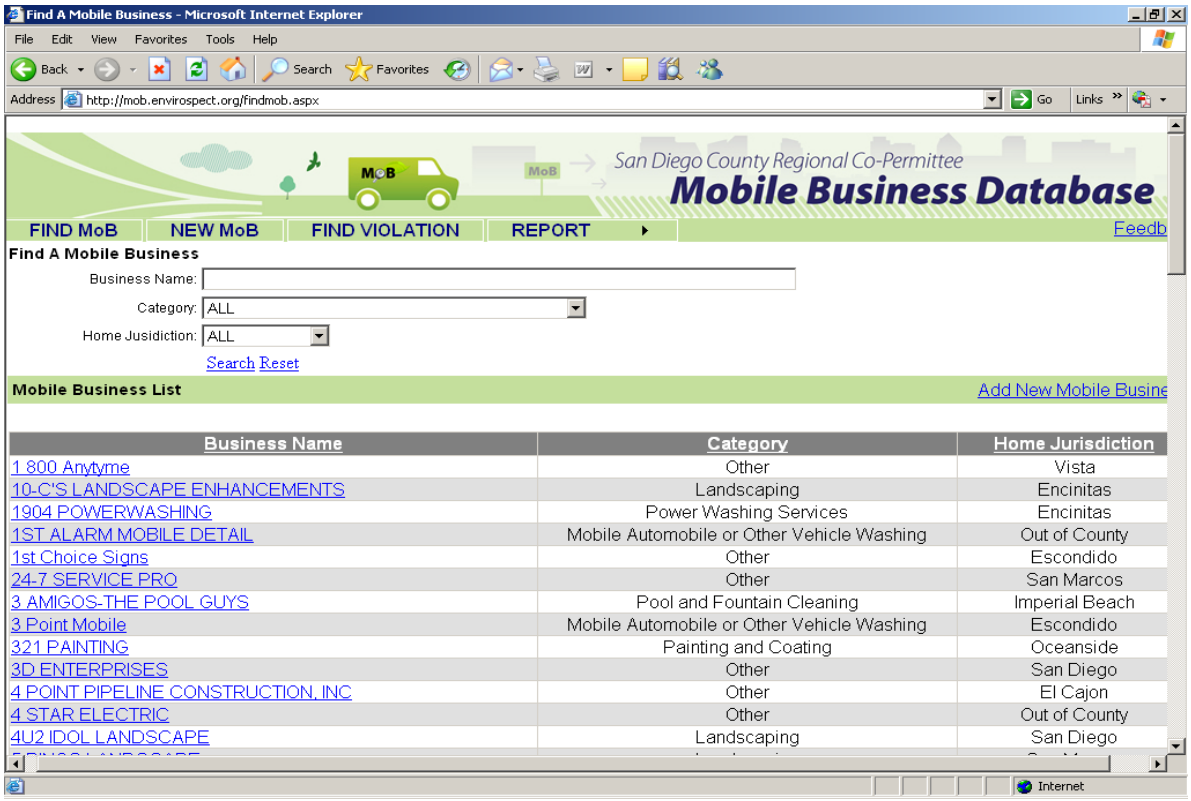

Three types of reports can be generated from this database:

- All mobile businesses home-based within a jurisdiction
- All mobile businesses operating within a jurisdiction

- All violations that have occurred within a jurisdiction

5.3.4.1 EDUCATION AND OUTREACH

During the business license application process, the City provides mobile business owners or operators the necessary information, educational materials, and outreach related to storm water quality issues specific to their type of business. As stated above, businesses are given the educational materials outlining pollution prevention measures and other BMP requirements related to their respective activities prior to the license being issued. A sample of the Storm Water Information Packets for Mobile Businesses is included in Appendix D of the City's updated JURMP. The education program is described in detail in Section 10, of the City's updated JURMP.

5.3.4.2 ENFORCEMENT ACTIONS

Most violations associated with mobile businesses are related to illegal discharges and lack of BMP implementation. Upon arrival at the scene, City inspectors require an immediate stop to any illegal discharge and instruct the responsible person to initiate containment and cleanup of the affected areas. If the business lacks materials and equipment required for the deployment of adequate BMPs, the responsible person is informed that they will not be able to resume activities until such time that they procure all necessary materials and equipment. Storm Water Compliance Inspectors find out if the business possesses a business license, and has signed a Certification Statement. Mobile businesses that do not have a City business license will be required to obtain one prior to being allowed to resume business operations. Enforcement action, including warnings, citations, civil penalties, or other enforcement measures are initiated where justified. During the current reporting period, a total of 17 administrative citations totaling $3,100 in fines were issued to mobile businesses operating in Chula Vista.

5.3.4.2.1 NOTABLE ACTIVITIES

During the reporting period, the City continued its mobile business license application processing combined with public education, which is considered a notable and very effective method of minimizing pollutant discharges from mobile business activities.

6.0 RESIDENTIAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a. (3)(e). i - Identification of the high threat to water quality residential areas and activities that were focused on.

Permit Section J.3.a.(3)(e).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.

Permit Section J.3.a.(3)(e).iii - A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.

Permit Section J.3.a.(3)(e).iv - Types and amounts of household hazardous waste collected, if applicable.

Permit Section J.3.a.(3)(e).v - A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of evaluation.

Permit Section J.3.a.(3)(e).vi - The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(e).vii - A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.

Permit Section J.3.a.(3)(e).viii - A description of notable activities conducted to manage urban runoff from residential areas and activities.

6.1 INTRODUCTION

The City has developed the residential component of the Jurisdictional Urban Runoff Management Program (JURMP) based upon a multi-faceted approach including pollution prevention; complaint response and enforcement; and outreach and education. It is the overarching goal of this component to offer cost effective and simple solutions to reducing residential discharges of pollutants into the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP) and to support the long-term improvements of water quality through awareness and behavior modification.

6.2 SOURCE CHARACTERIZATION

The information collected from reported illegal discharges and results of subsequent investigations can be analyzed to provide useful tools in effectively characterizing activities, sources, and areas within the City that contribute more to water quality impacts and that need to be targeted. These criteria may stay constant from year to year, or change each year. However,

knowledge of the pattern that they follow will provide the storm water manager an insight that is necessary to develop or modify an effective program. As in previous reporting years, the City has taken a critical look at the complaints received in 2009-2010 as presented in Figure 6-1. Home improvement related discharges continue to be prevalent in this reporting period. Compared to last year, the percentage of home improvement related discharges decreased by 14%. There may be several reasons for this declining pattern, one of which may be attributable to the public outreach programs conducted by City staff that provide invaluable information and education on the impacts of waste disposal to the general public and, therefore, is effective in changing habits. Further, characterizing the sources of pollutants can provide a resource in tailoring public education and outreach programs to the specific needs of the community and improving their effectiveness, while maintaining economic viability. This type of critical look is an important tool in making management decisions on how to approach residential Best Management Practices (BMPs) implementation and pollution prevention in the City. It should be noted that such analysis is not intended to offer determinate conclusions; rather it is presented to provide a general evaluation tool to guide residential strategies and BMP implementation guidance. Further, it is an effective way of evaluating and characterizing sources over time.

Figure 6-1 Percentage of Reported Residential Non-Storm Water Violations by Activity FY 2009-2010

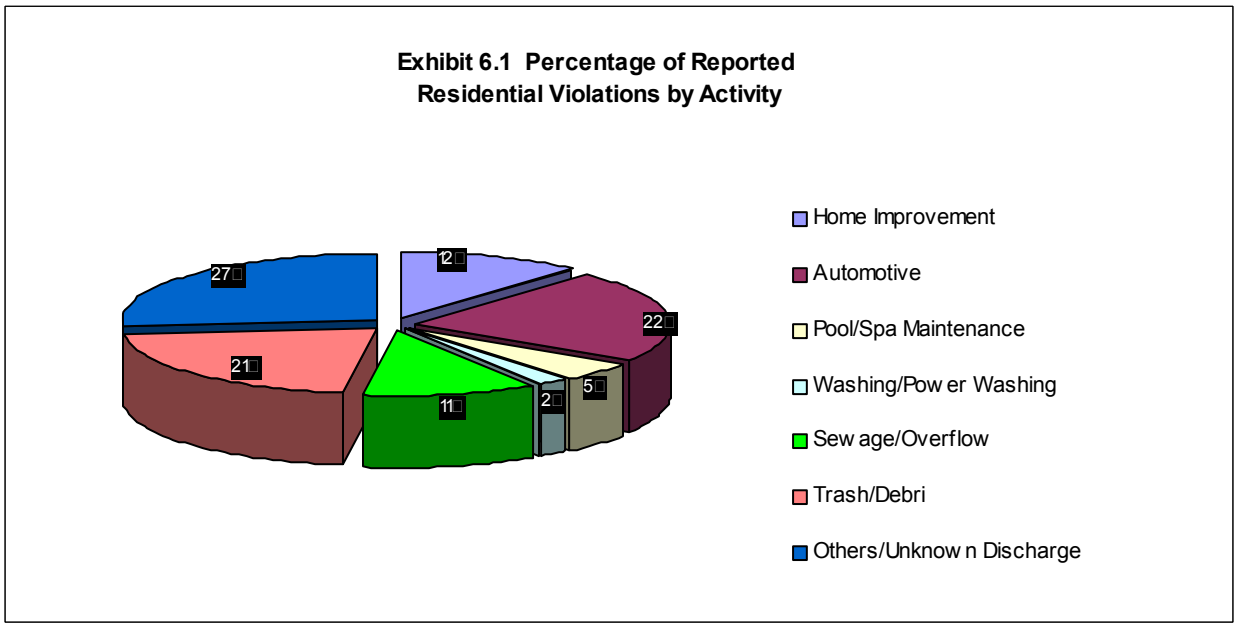

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's JURMP has designated BMPs for a number of high Threat To Water Quality (TTWQ) residential activities including home improvement and maintenance, automotive maintenance, waste management and disposal, and pet waste management. In addition, every year certain residential areas of the City are designated as areas with a high TTWQ. It is important to recognize that the dynamic behind strict enforcement of requirements regulating residential BMP implementation is quite challenging, however, the City has developed a number

of mechanisms through which information on BMPs are disseminated to the public and ultimately enforced through the City's Storm Water Ordinance. Mechanisms such as special community events, school presentations, door hangers, City's environmental website, and community newsletters were utilized within the defined reporting period of this report. Examples of such programs and outlets include:

- Household Hazardous Waste Collection Events
- State-Certified Used-Oil Collection Centers
- Household Collection of Used Cooking Oil
- Christmas Tree Recycling Program
- Residential Complaint Response & Enforcement
- Residential Door Hangers
- City's environmental website at: www.chulavistaca.gov/clean

Notably, all of the mechanisms listed above have been discussed in more detail throughout other sections in this report. It is confirmed that the designated BMPs were required to be implemented primarily through public education, and where necessary by enforcement action.

6.4 PROGRAM IMPLEMENTATION

The residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted, so that pollutants associated with residential activities and areas are minimized to the MEP. The residential program also has an education component, described in the following sections, so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities. The City uses public education and outreach together with enforcement mechanisms, when necessary, to ensure program implementation by residents and compliance with all federal, state, and local laws and regulations.

The City keeps accurate records of all reported residential illegal discharges and non-compliance with BMP requirements. This information can be used in many ways such as identification of pollutants of concern, areas of HTTWQ, increasing/decreasing trends in illegal discharges, and repeat violators. Such analysis is then used to develop new programs or modify existing programs to focus attention on program elements that result in higher effectiveness and quicker results. Map 1 – Violation Location Map was prepared to depict all areas of the City with a visual demonstration of reported illegal discharge distributions. The City then targets higher density areas for more focused public education and surveillance.

6.4.1 MANAGEMENT AND DISPOSAL OF USED OIL AND HOUSEHOLD HAZARDOUS MATERIAL

The City facilitates the proper management and disposal of used oil, toxic materials, and all other Household Hazardous Waste (HHW). Information pertaining to the household hazardous waste and the used oil and filter programs are distributed to residents annually during special events, presentations, point of purchase locations, mobile displays throughout the city offices and community centers, local realtors/associations, and property management offices. Residents are

educated about the disposal of such waste through the City's public education program, which is described in Section 8.0. The City meets and often exceeds requirements set forth by the Cal Recycle (formerly the California Integrated Waste Management Board). The program has the capacity to receive and process used oil and filters generated by City residents. The amount of used oil collected from certified oil centers decreased since the last reporting period as presented in Table 6-1. This decrease can be attributed to a change in the data tracking requirements as set forth by the CalRecycle. The City continues encouraging residents to take a proactive approach to changing their oil by draining it, uninstalling their oil filters and taking filters along prior to visiting their local auto supply store. In this way, residents recycle used oil as they purchase their new oil and avoid an extra trip, one that could have added green house gases into the atmosphere. This method also prevents storm drain pollution, as unattended oil could intentionally or unintentionally spill and enter storm drain systems.

The South Bay Used Oil Recycling Program has been evaluated by CalRecycle as a successful program implemented by the City of Chula Vista, National City, and Imperial Beach in terms of improving environmental quality. Residents of Chula Vista can leave oil filters and up to 5 gallons of used oil at the curb on their regular trash and recycling collection day at no additional charge. This used oil will be collected and recycled through the South Bay Used Oil Recycling Program. Residents of Chula Vista also have the option of taking their used oil to various used oil collection facilities in the City for recycling or disposal.

Additionally, the City provides its residents and neighboring municipalities the means to properly dispose of HHW at the facility located at 1800 Maxwell Road, Chula Vista. This facility accepts oil, both clean and contaminated as well as residential hazardous waste. Residents are limited to 15 gallons or 125 pounds of used oil or hazardous waste per vehicle. The facility is open every Saturday and Wednesday from the hours of 9 AM to 1 PM. The City also offers "door-to-door" collection of HHW for a small donation. Under this program, HHW is collected by appointment from residents who are unable to physically take the waste to the permanent facility or because of scheduling conflicts. Every used oil and HHW application has focused on pollution prevention, watershed protection, source reduction and making it easy for residents to do the right thing when it comes to proper disposal.

Table 6-1 Amount of HHW and Used Oil Collected FY 2009-2010

Household Hazardous Waste	Quantity of waste collected (FY 08-09)	Quantity of waste collected (FY 09-10)
	252,494 lbs	294,217 lbs
Used Oil	Quantity of used oil collected from certified centers (FY 08-09)	Quantity of used oil collected from certified centers (FY 09-10)
	49,287 gallons	22,399 gallons

6.4.2 RESIDENTIAL AREAS AND ACTIVITIES EVALUATION METHOD

A total of 25% of the City's 33,366 acres is designated as either multi- or single-family residential. Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the quality of receiving waters. The City has developed various mechanisms that aim to reduce pollutant runoff from residential areas and activities to the MEP. The following mechanisms are used by the City to determine areas where enforcement actions may be necessary, where appropriate:

- Public reporting hotline
- Analysis of Dry Weather Monitoring Program results
- Observations from City maintenance personnel
- City's environmental website at: www.chulavistaca.gov/clean
- Analysis of data collected and managed in the Department of Public Works data management system GBA (George Butler Associates Management System)

Further information about the City's hotline reporting system and Dry Weather Field Screening and Analytical Monitoring Program are provided in Section 9 of the JURMP. The City evaluates its methods used to encourage improved pollution prevention practices and the implementation of BMPs through the review of the aforementioned mechanisms. By using a Geographic Information System program and the data collected from these mechanisms, every year residential areas of the City that have had higher numbers of violations, and outfall locations that exceeded pollutant standard limits are mapped (see Map 2– HTTWQ Residential Area Map and Map 3 – Violations Locations - Residential). City staff then develops programs to inspect and investigate areas of the City that are considered high TTWQ. City staff investigates violations with enforcement authority within a reasonable timeframe. Violations are documented and depending on the nature and severity of the violation, enforcement may consist of any of the following:

- Verbal Warnings
- Written Warnings
- Orders to Clean and Abate
- Monetary Fines

Details of these procedures are included in Section 2 of the JURMP document.

The general public continues to effectively participate in the program by reporting pollutant generating activities or practices observed within their neighborhoods. Based on the number of calls received from the public during this reporting period, it can be construed that the general public's awareness of water quality issues continue to improve and people are more sensitive about the environmental quality of their surroundings. Information collected from the City's illegal discharge reports database can also characterize those activities and sources that have more implications on water quality as presented in Figure 6-1.

The residential areas and activities evaluation method described above indicate that: 1) residents are becoming more environmentally conscious, 2) residents take an active role in environmental

protection by calling the City and reporting illegal discharges, 3) a positive trend in urban runoff discharge quality is emerging. These results are encouraging and provide incentive to City staff to maintain their level of efforts and find innovative methods to accelerate the positive trend.

6.4.3 VIOLATIONS AND ENFORCEMENT ACTIONS TAKEN

Enforcement of the residential program has been established and addressed in Chula Vista Municipal Code Chapter 14.20, Storm Water Management and Discharge Control; and Chula Vista Municipal Code Title 1, General Provisions. During this reporting period, Storm Water Compliance Inspectors responded to over 256 reported violations of which 102 were residential. Fifty-eight of the reported violations resulted in citations. The total amount of fines collected during this reporting period from residential violations was $11,800.00. Compared to last year, the number of residential reported violations increased by 44% and the number of actual violations/citations increased by 59%. This unexpected increase in the number of reported violations needs further investigation. Future data will be used to determine the root cause of this increase and if any actions or adjustments in this City's procedures and programs are necessary.

During the reporting period, Storm Water Compliance Inspectors responded to each report of residential and other violations; investigated each case; took appropriate actions regarding containment of pollution; educated the violating party on existing laws and regulations; made follow-up visits, where necessary; and, proceeded with enforcement action if voluntary compliance was not achieved.

Data management of past violations helps City staff to identify repeat residential violators. Repeat violators are subject to more severe enforcement action due to the fact that the violation can no longer be considered an act of ignorance of water quality protection laws and regulations, but is a deliberate illegal act. Some of the cases were resolved without resorting to enforcement action. In other cases, enforcement actions were taken regarding residential areas. Details of reported violations are included in Attachment K.

6.4.4 RESIDENTIAL EDUCATION PROGRAM

Education is an important step towards improving receiving water quality, both locally and regionally. Increasing public awareness and encouraging a change in both attitude and behavior of the general public and the regulated community, can directly lead to a reduction or elimination of storm water pollution caused by common daily residential activities. Due to the importance of public education and outreach in storm water programs, the Municipal Permit requires public education at jurisdictional, watershed, and regional levels. The following are brief accounts of the implementation of jurisdictional and regional education programs during the reporting period. Additionally, during the reporting period, the City collaborated with the Copermittees of the San Diego Bay Watershed to implement the Watershed Urban Runoff Management Program (WURMP) residential education component. Details of such efforts are fully discussed in this year's WURMP Annual Report, which will be submitted to the Regional Board under a different cover.

6.4.4.1 JURISDICTIONAL RESIDENTIAL EDUCATION PROGRAM

The Storm Water Management Section collaborates with the City's Environmental Services Division and the Conservation Department in the implementation of the Jurisdictional Residential Education Program. Pollution prevention and water quality regulation information is disseminated by actively participating in community events throughout the year. Informational booths at fairs, flyers, brochures, website postings, advertisements, and other educational materials are the various approaches used by City staff in disseminating storm water information. Such programs raise pubic awareness about the City's storm water regulations and requirements as well as Best Management Practices methods. Residents become aware of the importance of protecting their watersheds and water resources, and recognize that they have the ability to improve local water quality by making a few simple changes to their regular routines. The Storm Water Management Section continues to provide a comprehensive storm water education program to the residential community, general public, and school children.

Many educational efforts such as direct interaction during reported violation investigations or when taking calls to the City's Storm Water Hotline are conducted on an ongoing basis. Educational materials are also distributed throughout the year. Targeted mailings, focused training sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of reported violations, and other similar factors.

The decision to select the types of educational materials to be disseminated throughout selected residential areas was based on an analysis of current and past residential violation reports, as well as results from the Dry Weather Field Screening and Analytical Monitoring program. During this reporting period, City Staff distributed 3,030 educational door hangers with educational pamphlets to various residential locations of the City (see Table 6-2).

Table 6-2 Educational Materials Distributed Based on Dry Weather Monitoring Results and Storm Water Hotline

RESIDENTIAL AREA	EDUCATIONAL INFORMATION	NUMBER DISTRIBUTED
Cabrillo Mobile Homes	Vehicle Washing	130
Otay Ranch area along La Media Drive, south of Olympic Parkway, north of Fleishbein Street	Landscaping Activities	350
Otay Ranch along Exploration Falls Drive	Landscaping Activities	320
Eastlake around Eastlake Greens neighborhood	Landscaping Activities	300
Rolling Hills Ranch and Eastlake Woods	Landscaping Activities	850
San Miguel Ranch in Cabo Bahia and Lago Madero areas	Vehicle Washing	350
San Miguel Ranch by San Miguel Ranch Road and Proctor Valley Road	Landscaping Activities	250
North end of East J Street by Plaza Ultima	Automobile Maintenance	20
Otay Ranch near the corner of La Media and Otay Lakes Road, on Santa Cora Avenue	Landscaping Activities	350
Foxboro neighborhood by Nantucket Drive and Hampshire Lane	Vehicle Washing	110
		TOTAL: 3,030

Residential hotline calls, response, and enforcement rely heavily upon citizen participation and awareness. As such, an integral component of residential outreach and education is to encourage the reporting of pollutant generating activities or practices observed by citizens within their neighborhoods. To further support the reporting efforts, the City relies heavily upon well-trained municipal staff who effectively operate as the "eyes and ears" of the City.

6.4.4.2 REGIONAL RESIDENTIAL EDUCATION PROGRAM

During this reporting period, the City continued to participate in the Education and Residential Sources (ERS) Workgroup with the San Diego Copermittees. The workgroup is broken down into sub-workgroups that focus on one, or more of the various components undertaken by the ERS. These sub-workgroups address media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment. A few of the activities that the group completed during the reporting year include: 1) Development and implementation of comprehensive media program including ads on TV, radio, movie theaters, and bus shelters; 2) Development and implementation of a county-wide telephone survey to assess citizen storm

water knowledge; 3) Development and distribution of the regional 2010 Storm Water Calendar; 4) Completed the development of a regional website that all Copermittees can link to, through their own jurisdictional websites; 5) Continued participation in regional community events such as the Envirofair at the San Diego County Fair, High Tech High Science Fair, and 6) Continued development through the quarterly Edu TAC meetings.

Comprehensive discussions of each of the above program elements will be included in the Regional Urban Runoff Management Program Annual Report, which will be submitted to the Regional Board under a separate cover.

6.4.5 MANAGEMENT OF URBAN RUNOFF FROM RESIDENTIAL AREAS AND ACTIVITIES

As detailed throughout this report, the City institutes a variety of highly effective pollution prevention programs to provide the residential community with venues and outlets for disposal of wastes and to provide invaluable information and education on the negative impacts of improper waste disposal. A consistent message of stewardship through everyday actions and behaviors and the importance of protecting and maintaining the quality of our natural resources are presented through a variety of outlets. It is because pollution prevention is the most economical and effective way of protecting water quality, that this element is given higher priority, and has proven to be a successful measure for the City over time.

During fiscal year 2009-2010, the City identified several High Threat to Water Quality (HTTWQ) residential neighborhoods that required focused educational outreach (see Map 2). These areas have been targeted based on storm water inspection observations, reported violations to the City's hotline and the dry weather monitoring upstream investigation program. Each of the homes in these neighborhoods received a general storm water pollution prevention brochure or door hanger in addition to a brochure targeting specific residential activities and their associated pollutants. The activities and pollutants that were focused on included: 1) vehicle washing and repair (detergents and vehicle fluids), 2) gardening (green waste, fertilizer, and over-irrigation discharge), 3) household activities (grease, paint, pet waste, and trash and debris). These areas and their corresponding activities and pollutants have been identified in Attachment K. In addition, the City plans to work with Homeowner's Associations to include storm water pollution prevention articles and messages into their community newsletters.

The City also targets HTTWQ residential areas by having cleanup events that provide residents the opportunity to volunteer to help cleanup their neighborhoods. The annual Beautify Chula Vista event focuses on a different neighborhood each year, frequently in under-privileged areas of the City, and provides graffiti cleanup, tree planting, trash pick-up, and storm drain stenciling. By participating in the event, residents are able to make a connection to their community and environment while learning about storm water pollution prevention.

Other than HTTWQ areas, the City has a number of programs in place throughout the City to promote environmental stewardship and storm water pollution prevention among its residents. Section 8.0 details the education programs that the City has implemented in order to encourage positive behavior changes in residents.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(f).i - Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.

Permit Section J.3.a.(3)(f).ii - Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.

Permit Section J.3.a.(3)(f).iii - Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.

Permit Section J.3.a.(3)(f).iv - A brief description of any other investigations and follow-up activities for illicit discharges and connections.

Permit Section J.3.a.(3)(f).v - The number and brief description of illicit discharges and connections identified.

Permit Section J.3.a.(3)(f).vi - The number of illicit discharges and connections eliminated.

Permit Section J.3.a.(3)(f).vii - Identification and description of all spills to the MS4 and response to the spills.

Permit Section J.3.a.(3)(f).viii - A description of activities implemented to prevent sewage and other spills from entering the MS4.

Permit Section J.3.a.(3)(f).ix - A description of the mechanism whereby notification of sewage spills from private laterals and septic system is received.

Permit Section J.3.a.(3)(f).x - Number of times the hotline was called, as compared to previous reporting period, and a summary of the calls.

Permit Section J.3.a.(3)(f).xi - A description of efforts to publicize and facilitate public reporting of illicit discharges.

Permit Section J.3.a.(3)(f).xii - The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(f).xiii - A description of notable activities conducted to manage illicit discharges and connections.

On September 10, 2008, the Regional Board adopted Addendum No. 2 to the Municipal Permit. The addendum recognized that Dry Weather Field Screening and Analytical Monitoring activities may continue until the end of September each year, and the results would not be available to be included in JURMP Annual Reports, which are also due for submittal on September 30 of each year. Therefore, submittal of Section 7.0 of the JURMP Annual Report (Illicit Discharge Detection and Elimination Component) was allowed to be postponed until December 15 of each year. Pursuant to this requirement, the City of Chula Vista will submit the entire FY 2009-2010 Illicit Discharge Detection and Elimination Component; copies of the City's 2010 Dry Weather Field Screening and Analytical Monitoring Program Report and Follow-Up Investigations; and related attachments no later than December 15, 2010.

8.0 EDUCATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(g).i - A description of education efforts conducted for each target community.

Permit Section J.3.a.(3)(g).ii - A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.

Permit Section J.3.a.(3)(g).iii - A description of education efforts conducted for municipal departments and personnel.

Permit Section J.3.a.(3)(g).iv - A description of education efforts conducted for the new development and construction communities.

Permit Section J.3.a.(3)(g).v - A description of jurisdictional education efforts conducted for residents, the general public, and school children.

8.1 INTRODUCTION

The City has identified public education and outreach as powerful and effective tools towards increased awareness and behavioral changes that will ultimately lead to reduced pollutant loading from various land uses. The City considers voluntary pollution prevention to be one of the most effective means of achieving long-term reductions in urban runoff pollution. This objective is achievable only through public education and outreach that makes an impression on the community and invokes changes in behavior. As such, the City has approached the development and implementation of educational components by targeting the following audiences:

- Municipal staff
- Residential community, general public, and schools
- Industrial and commercial business owners and operators
- Construction and development community
- Underserved communities

The City's Storm Water Management Program is strongly supported by a variety of environmental programs within the organization that provide an exceptional vehicle for disseminating educational materials to the general public regarding storm water pollution prevention. Specifically, the City's Environmental Services Division, under the South Bay/ East County Regional Used Oil Recycling, Household Hazardous Waste Collection and Recycling Program targets issues directly connected to storm water pollution prevention. The Chula Vista Nature Center also provides an invaluable venue for public participation and the promotion of conserving, preserving, and protecting San Diego Bay. Through these programs and facilities, activities such as annual school presentations, waste collection events, and public outreach events are conducted in collaboration with the Storm Water Management Section. During such

events, the general public is exposed to water quality concerns, pollution prevention techniques, and Best Management Practices (BMPs) to prevent storm drain pollution. The following sections provide a summary of various activities and venues utilized within the defined reporting period of this report to achieve public education and outreach goals for municipal staff, business owner, construction, new development, general public, and targeted communities.

8.2 STAFF TRAINING ELEMENT

Staff education and training on water quality issues takes several forms as follows:

- General storm water education for all City employees
- Education targeting staff engaged in the review, approval, and inspection of new development and redevelopment projects
- Training for City staff responsible for the maintenance of the City's infrastructure

General storm water protection and pollution prevention education for City staff is provided and reinforced on an ongoing basis. While a number of communication venues are available and have been relied upon in previous reporting years, the most valuable education comes through the implementation of Citywide pollution prevention and waste reduction programs. Recycling programs are in place throughout City facilities, and serve as a constant reminder to staff of the City's commitment to pollution prevention.

During the reporting year, Storm Water Management staff received training as well as provided training to municipal staff (including Public Works Engineering and Development Services Departments) about the new General Construction Permit. Training included general permit overview, risk levels, sampling and monitoring, inspections, reporting, and certification requirements. Notably, two City Storm Water Management Section staff became Qualified SWPPP Practitioners (QSP) by obtaining their Certified Erosion, Sediment, and Storm Water Inspector (CESSWI) certification. As construction projects begin to implement the General Construction Permit, the Storm Water Management Section staff will continue its efforts to educate itself as well as municipal staff.

Education for staff engaged in the City's permitting process for new development and redevelopment has been achieved through a number of venues. Targeted training activities have been conducted to reinforce water quality priorities in the field of land development and planning, including Standard Urban Stormwater Mitigation Plans (SUSMP) implementation strategies. In addition, development planning and engineering staff is consistently exposed to water quality priorities on a project-by-project basis through project meetings, workshops, and field visits. City Storm Water Management staff also provides training on the City's Development Storm Water Manual. A continuing focus on internal SUSMP implementation policy, procedure and guidance training has been emphasized during the defined reporting period of this report. Within this framework, those departments and staff involved in the SUSMP review process have been apprised of the need to utilize Low Impact Development (LID) techniques as well as higher efficiency treatment control BMPs for project design in meeting the City's SUSMP requirements. This approach has proven integral in ensuring ongoing SUSMP implementation refinement and in unifying the focus on site design techniques and the use of

higher efficiency treatment control BMPs. In addition, presentations by the manufacturers and vendors of structural BMPs have been organized and hosted by the City.

As in previous reporting year, Storm Water Management staff provides focused training on storm water BMPs to various City departments and divisions on an as needed basis. Such training may be in the form of formal workshops, or on the job training. The following staff has received storm water training on an as-needed basis:

- Wastewater Maintenance
- Storm Drain Maintenance
- Street Maintenance
- Open Space Maintenance
- Traffic Signing and Striping
- Transit
- Vehicle Maintenance
- Land Development
- Public Works Inspections

Table 8-1 details the training, workshops, and seminars that City staff attended and/or gave to other departments during the reporting period. Below is a summary of general concepts that were covered during the trainings.

- Federal, state, and local water quality laws and regulations applicable to municipal areas and activities, development and redevelopment projects, and construction projects;
- Required federal, state, and local permits pertaining to water quality;
- Water quality impacts of urbanization, municipal activities and areas, and construction sites;
- The connection between land use decisions and short-term and long-term water quality impacts;
- Methods for minimizing the impacts on receiving water quality and watershed.

Table 8-1 Municipal Staff Education FY 2009-2010

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
07/16/09	Filtrexx Presentation	Training on construction site sediment control, post-construction storm water management, stream bank restoration, and slope stabilization.	City of Chula Vista
10/13, 15, 19, 22/09	Storm Water Pollution Prevention Refresher Training for Firefighters	Topics included a general overview of the storm water permit, BMPs, and the review of the City's program for non-emergency fire fighting flows.	City of Chula Vista

Table 8-1 continued on next page

Table 8-1 continued

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
10/14/09 through 11/12/09	Storm Water Refresher Training for Public Works Staff	City of Chula Vista Storm Water staff provided training to all public works departments about storm water BMPs related to their job activities.	City of Chula Vista
10/30/09	Storm Water Compliance and New Construction Permit Training Seminar	Seminar covered risk levels, general permit overview, monitoring, certifications, advance treatment BMPs, and the online reporting system.	Rick Engineering
11/02/09	General Construction Permit: Tools for Implementation Workshop	Introduction to the General Construction Permit requirements, risk levels, monitoring, certifications, and online reporting system.	CASQA
11/06/09	CEQA Basics	Introduction to CEQA and exemptions from CEQA, negative declarations, EIRs, legal challenges and defense, coordination with NEPA, and case studies.	Association of Environmental Professionals
11/11/09	4-Hour Storm Water Pollution Prevention Forum	Training on obtaining Construction Permit coverage, sampling requirements and reporting, legal implications of permit requirements, and municipality response to requirements.	Associated General Contractors of America (ACG)
12/03/09	New General Construction Permit Seminar	Construction risk level assessments, grandfathering, LUPs, monitoring guidelines, inspector/SWPPP certifications.	Shea with City of Chula Vista Storm Water Staff as a panelist
01/02/10	New General Construction Permit Training	City storm water staff provided training to civil engineers and land developers about the General Construction Permit, NOIs, SWPPPs, annual reporting, and risk levels.	City of Chula Vista Storm Water Section Staff
02/12/10	SUSMP Training for Engineers	Updates on Model SUSMP, HMP, LID, new General Construction Permit, WQTR preparation, BMPs, and inspection and maintenance requirements.	City of Chula Vista Storm Water Section Staff

Table 8-1 continued on next page

Table 8-1 continued

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
03/23/10	Environmental Enforcement Training	Conducting effective inspection interviews, access and entry, violations, reporting writing, environmental crimes, and enforcement options	Cal EPA
04/08/10	New General Construction Permit Workshop	Construction permit overview, differences between old and new permits, SMARTS program, and Q&A session.	SDRWQCB
04/15/10	BioClean	Properties and effectiveness of modular wetlands and various configurations of installed units throughout CA.	Bio Clean Environmental Services
04/21/10	Storm Water Workshop	Numeric limits, LID, storm water regulation and policy topics, water board issues, and urban runoff.	Law Seminars International
05/21/10	Construction Permit SWPPP Training Workshop	Training covered what is needed in a SWPPP, how to obtain coverage, sampling requirements, BMP implementation, qualifications and training requirements.	Rick Engineering
06/22/10	Storm Water Multiple Application and Report Tracking System (SMARTS)	City Storm Water Staff conducted training on the SMARTS website and covered data entry, re-certifying NOIs, Annual Reports, NOTs, and SWPPPs.	City of Chula Vista Storm Water Staff
07/16/10	SUSMP and LID Training	City Storm Water Staff provided training on development and redevelopment requirements of the Permit, SUSMP, treatment control BMPs, HMP, and site design.	City of Chula Vista Storm Water Staff

8.3 EDUCATIONAL OUTREACH ELEMENT

8.3.1 RESIDENTS, GENERAL PUBLIC, AND SCHOOL CHILDREN

The CLEAN group, made up of the City's environmental departments and various environmentally focused stakeholders, has continued to collaborate on various environmental education programs within the City. The following mission statement established by the CLEAN workgroup has guided these efforts:

"Foster environmental awareness in the City of Chula Vista, through stakeholder and community involvement and participation."

The CLEAN education program was developed around three primary elements: 1) Media 2) Community Interaction and 3) Stakeholder Coordination. It is important to distinguish the focus of this program to promote not only community education, but also community action.

In efforts to maximize the overall effectiveness of this program, and to capitalize on the interrelationship of various Chula Vista environmental programs, the program has been branded under the tag line of "**Your Community. Your Environment. *Your Choice*."**

The culmination of efforts of various involved City divisions has been embodied in the established CLEAN program, which provides an effective and powerful body to guide the significant efforts envisioned for the program. It is also anticipated that these efforts would be further strengthened through support of community stakeholders including non-profit and business entities.

Based on the CLEAN branding, media elements including pollution notification residential door hangers, stickers, stationery, and various brochures were distributed to the general public within the defined reporting period of this report. In addition, the CLEAN web site has been established with pages dedicated to water quality protection and pollution prevention Citywide. The CLEAN website www.chulavistaca.gov/clean has information about the environmentally focused divisions in the City including Storm Water Management, Environmental Services, Conservation, and the Chula Vista Nature Center. The storm water section has information specific to residents, the development community, mobile businesses, and industrial and commercial businesses. Figure 8-1 shows a general snapshot of the CLEAN homepage.

As the CLEAN program continues to evolve, a wide array of media outlets have been explored, and established branding has been incorporated in them. As indicated above, the larger CLEAN campaign has been designed to promote not only education, but also to encourage and facilitate community actions.

While the City has developed and maintained a variety of new residential education and public outreach opportunities, the City has sustained a number of existing outlets and events. In 2009-2010, the City continued to use pollution prevention messages on the side of waste management vehicles to encourage the proper disposal of items such as recyclables, cooking grease, and holiday trees. In addition, the City continued to distribute a number of promotional items with pollution prevention messaging for distribution at presentations and community events. Promotional items included CLEAN branding and messaging on such items as pet waste bag containers, towels, pens, pencils, and rulers. During this reporting year, the CLEAN group and stakeholders collaborated to produce a comprehensive environmental guide that covers various topics such as storm water pollution prevention, recycling, alternative transportation, green gardening, and conservation. This guide is distributed by all CLEAN stakeholders at community events.

Figure 8-1 CLEAN Homepage

The City has continued to maintain six trail displays (Figure 8-2) throughout the City, near walking trails and parks. The trail displays include information on a variety of interrelated environmental issues, and remind the public of the precious resources that exist within the City. The trail display concept provides commercial or industrial entities the opportunity to receive public recognition through the support of such efforts. They demonstrate the connectivity of environmental concerns throughout the City. Trail displays have been installed at the following locations:

- Chula Vista Nature Center
- Mountain Hawk Park
- Hilltop Park
- Salt Creek Park
- Rice Canyon
- Corner of Telegraph Canyon Road and La Media

A poster form of the trail display is also displayed in the City's John Lippit Public Works Center and the Chula Vista Public Library. Chula Vista staff and residents pass this display on a daily basis, reminding them that the City is within the Sweetwater and Otay Watersheds and of the simple actions they can take to protect their local waterways. Another poster is used for community events to explain watershed concepts and pollution prevention to Chula Vista residents.

Figure 8-2 City of Chula Vista CLEAN Trail Display

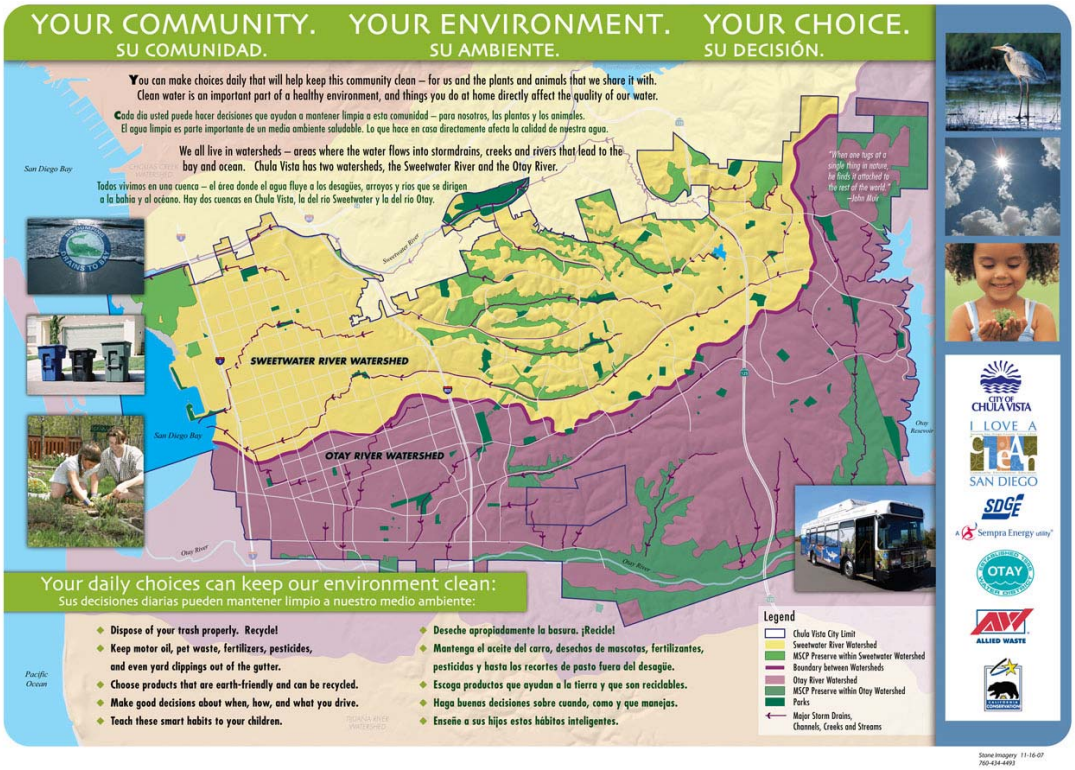

Media Articles

During the reporting period, Storm Water Management Section staff contributed several articles about storm water pollution prevention to various publications aimed at residents living in the City. These included The Star News, My Hometown Otay Ranch/ Eastlake, and Your Guide to CLEAN, which are included in residential trash bills. Altogether, these publications reach more than 70,000 households. The City will continue to contribute and place pollution prevention advertisements and articles in these publications as well as continue to explore more venues for reaching citizens through print media.

School Education Efforts

Due to the previous success of the Salt Creek Critters and the Southbay Water Warriors after-school programs in east and west Chula Vista, respectively, the City decided to implement a storm water education program for high school students in west Chula Vista during the reporting year. With the help of I Love a Clean San Diego, the City provided storm water education presentations to students at Castle Park and Chula Vista High Schools. The presentation focused on pollutant types and their sources, pollution prevention, watershed protection, and volunteer opportunities. A pre- and post-test were administered to the students receiving the presentations. In addition, an interactive activity was done with each class to enforce the concepts taught in the presentations. Overall, both students and teachers felt that the presentations were beneficial and increased knowledge and interest in environmental issues in their community. The City will continue with school programs such as these into the coming fiscal year, as funding permits.

Community Events
The City of Chula Vista Storm Water Management Section and Environmental Services Division participate in various community events held throughout Chula Vista and San Diego County. Each of these events provides an opportunity to reach citizens throughout the watershed by setting up educational booths and displays.

Community events have been identified as valuable venues providing excellent opportunities to reach large numbers of citizens. During the reporting period, the Storm Water Management and Environmental Services staff participated in and set up booths and displays at all major South Bay community events. City staff provided education and outreach materials regarding a variety of interrelated environmental issues. A variety of brochures and pamphlets were distributed to the general public about the effects of storm water pollution on the environment and ways that residents can prevent pollution of their waterways. By participating in these community events, City storm water staff has the opportunity to generate large numbers of impressions each fiscal year. In addition, City staff displayed the EnviroScape model at several community events in order to teach residents about watershed concepts and to reinforce the connection between everyday actions and water quality.

Chula Vista Nature Center
The City of Chula Vista Nature Center, located within the 316-acre Sweetwater Marsh National Wildlife Refuge of San Diego Bay, is an internationally recognized zoo/aquarium exhibiting plants and animals native to San Diego Bay and marsh/wetland habitats. The Nature Center provides the San Diego Bay watershed with a truly unique and invaluable outreach and education resource.

The Nature Center's mission is to educate the public about the importance of coastal resource conservation and environmental stewardship. Through visits to the Nature Center and its offsite programs thousands of people are exposed to these critical environmental messages each year. To help facilitate educational experiences, the Nature Center offers field trips, guided walks, classes, tours, and special projects. During the reporting year, there were over 430 scheduled tours to the Nature Center, resulting in over 10,500 children and over 1,800 adults learning about San Diego Bay watersheds and watershed protection.

- The Chula Vista Elementary School District (CVESD) funds a full-time Science Resource Teacher who works closely with the Nature Center staff to provide environmental education programs which are integrated in their science and social studies curricula. This teacher works with over 5,000 CVESD students each year.

- Other schools and youth groups schedule field trips to the Chula Vista Nature Center after the leader participates in a 2-hour Field Trip Orientation Workshop (a teacher training program) held at the Center to gain familiarity with the Nature Center and the Sweetwater Marsh National Wildlife Refuge. During these field trips, Nature Center docents guide students around the Center and grounds, where they learn about the importance of watersheds, wetlands, and other coastal resources.

- Students learn to recycle, reuse, and reduce waste. They also learn how to correctly use storm drains and the types of pollutants commonly identified in the storm drain system. The Chula Vista Nature Center and Conservation Department also conduct "Less Toxic Gardening", dealing specifically with pesticide use, as well as weekly composting classes.

Table 8-2 summarizes the education efforts of the City for residents, school children, and the general public during the reporting year.

Table 8-2 Education Outreach Provided FY 2009-2010

DATE	EVENT	EVENT DESCRIPTION	SITE NAME/ LOCATION
08/09/09	Lemon Festival	City storm water staff manned a booth and distributed information about pollution prevention	Downtown Chula Vista
09/19/09	Children's Festival	City storm water staff had a booth at the festival and provided pollution prevention training to citizens	New Hope Community Church
09/26/09	BonitaFest	City storm water staff provided pollution prevention training to citizens	Bonita Shopping Center
10/03/09	Fire Station Open House	City storm water staff manned a booth and provided education about pollution prevention to citizens	City of Chula Vista Fire Station #4
10/14/09	Citizen's Leadership Academy	City storm water staff provided storm water education and explained the purpose of the Storm Water Management Section to citizens who were a part of this special group.	John Lippitt Public Works Center
10/17/09	Beautify Chula Vista	City storm water staff provided pollution prevention training to citizens	Memorial Park
02/26/10	Storm Water Training for Tortilleria Santa Fe	City staff provided training on storm water pollution prevention and the General Industrial Permit to Santa Fe Tortilla staff	Tortilleria Santa Fe Shop
04/17/10	Go Green and Clean Family Day	City staff provided training on pollution prevention and provided CLEAN brochures, IPM Pest Tip cards, and displayed the EnviroScape watershed model	Otay Ranch Town Center

Table 8-2 continued on next page

Table 8-2 continued

DATE	EVENT	EVENT DESCRIPTION	SITE NAME/ LOCATION
04/24/10	Day of the Child	Storm water staff manned a booth and provided storm water pollution prevention brochures, IPM tip cards, storm water calendars, and environmental giveaways	Memorial Park
06/19/10	Pet Fest and Doggy Dash	Storm water staff implemented a pet waste survey, provided pollution prevention education, and environmental giveaways to citizens	Memorial Park
06/26/10	Southbay Homeowners Resources Fair	City staff provided pollution prevention education to homeowners.	Chula Vista City Hall Courtyard
Year-round	Watershed, Recycling, Storm Drain Pollution Education	Organized School Group Visitors to the Chula Vista Nature Center	Chula Vista Nature Center

Regional Outreach

During the reporting year, Copermittees collaborated on a number of education outreach activities and events, including further development of the Regional Residential Storm Water Education Plan that was submitted to the Regional Board in March 2008. This reporting year, the Copermittees collaborated on a regional storm water website (www.thinkbluesdregion.com), developed and distributed a regional storm water education calendar, had a booth at the High Tech High fair in March 2010, and had a booth at the EnviroFair at the San Diego County Fair in June 2010.

8.3.2 INDUSTRIAL AND COMMERCIAL FACILITY OWNERS AND OPERATORS EDUCATION

Educational activities targeting industrial and commercial sectors have been produced through local and regional efforts. Regional efforts have included dissemination of information via the County's Clean Water Project website targeting businesses and residents. During the reporting period, the City has utilized the following primary mechanisms to provide ongoing education to the industrial and commercial communities within the City:

- Distribution of printed materials
- One-on-one education of business owners and managers during industrial and commercial inspections

As part of the City's industrial and commercial facility inspections, Storm Water Compliance Inspectors meet with facility owners or managers and explain water quality issues relating to the particular type of industrial or commercial facility. BMPs relevant to the activities at each facility are explained and, corrective actions are proposed to bring the facility into compliance with the City's ordinances and BMP requirements. Consequences of non-compliance are also

brought to the attention of the facility owner/manager. In all cases, copies of the Chula Vista Storm Water Management and Discharge Control Ordinance are handed to the facility owner/manager. The City also distributes the regionally developed "Green Wrench Guide" for automotive facilities, and the "What's Cooking?" guide for food related businesses.

During this reporting year, City Storm Water Management Section Staff provided storm water training to a tortilla manufacturing business in the City. During a storm water inspection of the business, the City found that hazardous wastes were not stored properly. As a result, the City issued the business a Notice of Violation. At the request of the business, the City provided a one-hour storm water pollution prevention training in both English and Spanish to workers at the factory. The training, given to both managers and key staff at the factory, focused on BMPs directly applicable to their business operations and gave an overall review of the General Industrial Permit.

8.3.3 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITY

Education of the development community is approached by the City through two primary audiences: 1) education and training of City staff and 2) education of project applicants, developers, contractors, design engineers, and property owners. As with multiple elements reviewed throughout this report, the City of Chula Vista Development Storm Water Manual provides development project proponents with a fundamental guidance tool for development activities in the City. City Storm Water Management Staff actively engages the development and construction communities working within the City in a proactive effort to educate and expose these entities to the regulatory standards established within the jurisdiction.

As in previous reporting years, education and training of the development community within Chula Vista has primarily been addressed on a project-by-project basis. As the larger development community has been exposed to SUSMP requirements throughout the region and through a broader message, Chula Vista accommodates project applicants with project specific direction and analysis. Through the comprehensive review of development and redevelopment projects, and subsequent meetings and discourse, project applicants are apprised of the suitability of proposed project components in compliance with SUSMP requirements and the City's emphasis on the use of Low Impact Development site design features and high efficiency treatment control BMPs.

Educational activities within the development community are provided throughout the development process from design and planning through construction. As such, educational outlets have been provided by the City at each phase, and have been discussed in Section 2.0 of this report. The following is a list of highlights from the referenced section.

- Project specific post-construction requirements education and training
- The City Development Storm Water Manual
- Pre-construction meeting participation by storm water inspection staff
- On-site construction BMP training
- Participation in regional education and training activities

8.3.4 TARGETING UNDERSERVED COMMUNITIES

The City targets underserved communities through three programs:

- CLEAN education campaign
- Beautify Chula Vista Day
- Graffiti Abatement Program

The CLEAN education campaign has developed a variety of media elements that promote the City's environmental programs such as brochures, website, and giveaways in both English and Spanish. The CLEAN website provides an easy and cost-effective method for the City to reach out to citizens and promote storm water pollution prevention awareness. The City also distributes a variety of giveaways with the CLEAN message to reach different age groups such as notebooks, dustpans, pencils, pens, and pet waste bag holders. This reporting year, the CLEAN Team and Stakeholders collaborated to produce an all-inclusive environmental brochure called CLEAN – Your Environmental Guide for Green Living. The brochure covers a wide range of environmental topics such as storm water pollution prevention, water conservation, energy, green living, transportation, recycling, and green gardening.

During the reporting period, the City, with the help of I Love a Clean San Diego, supported the annual Beautify Chula Vista Day that focuses on citizen participation in keeping the City clean. Volunteers have participated in a number of activities during this event, including storm drain stenciling, cleaning of trash, graffiti removal, and planting trees. Efforts are usually focused in areas of the City where more attention is needed due to trash and graffiti problems. Over 500 volunteers participated in the Beautify Chula Vista Day in October 2009.

The Graffiti Abatement Program allows citizens to report graffiti in their neighborhoods by phone or by email. City staff is also encouraged to call and report any graffiti they see while they are out in the field. There were over 2,850 web requests, emails, and calls to the graffiti hotline during the reporting period (some duplicated), showing that City staff and residents are taking an active role in promoting a clean City.

9.0 PUBLIC PARTICIPATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(h).i - A description of public participation efforts conducted.

9.1 INTRODUCTION

The City encourages and fosters environmental responsibility by supporting community events, activities, and programs that improve storm water awareness. Changing behaviors of residents and the general public can lead to improved water quality. Cleanup events can promote awareness and can lead to a load reduction of trash to receiving waters. In addition to the educational component presented in Section 8.0, the following sections provide an overview of significant public participation opportunities provided or supported by the City within the defined reporting period.

9.2 PROGRAM IMPLEMENTATION

Beautify Chula Vista Day – October 17, 2009

Beautify Chula Vista Day is an annual event that involves citizen participation and involvement in activities that enhance the environmental setting of the City. Every year, this event attracts several hundred volunteers and provides an opportunity for City staff to have direct interaction with the public to discuss environmental issues and the role that citizens can play in protecting their community's health and living standards. Volunteer citizens are able to participate in activities such as tree planting, graffiti removal, clean-up projects, and storm drain stenciling. During the 2009 event, with participation from over 500 volunteers of all ages, the group was able to remove more than 2,000 pounds of trash from City streets.

Otay Valley Regional Park Cleanup

The Otay Valley Regional Park (OVRP) is being developed as a collaborative effort of the cities of Chula Vista and San Diego and the County of San Diego. These jurisdictions have adopted the OVRP Concept Plan, which identifies recreation areas, trails, overlook points, and staging areas for future park use. The park contains several hundred acres of land in the floodway and floodplain areas and undisturbed land along the steep slopes adjacent to the Otay River. Seven fresh water ponds, created from past gravel and sand mining operations, are within the park. OVRP extends from South San Diego Bay to the Lower Otay Reservoir and from Chula Vista's southern boundary to the communities of Otay Mesa and Nestor, encompassing 11.2 square miles of land. The Otay River Valley Cleanup Project (Cleanup Work Project) currently encompasses the Western Otay Valley Regional Park (Nester Creek east to I-805) and Eastern Otay Valley Regional Park – Proctor Valley (North End Upper Otay Lakes Reservoir).

The Cleanup Work Project encompasses efforts by many organizations including the OVRP Citizens Advisory Committee (CAC) coordinating the Donovan Prison Community Crew,

California Conservation Corp (CCC) coordinated by the City of San Diego WOVRP Rangers, County of San Diego Otay Lakes Park Rangers (provided dump truck and driver), Friends of the Park (coordinates Proctor Valley Cleanup), Allied Waste (delivering and picking up of large waste bins), City of San Diego Environmental Services, City of Chula Vista Public Works, and Hanson Aggregates (provided heavy equipment as needed).

Park cleanup activities include debris removal, encouraging transients to leave the area, improving security by preparing for fencing, trimming foliage, planting trees and other vegetation, and placing signage identifying the OVRP. More information about the Otay Valley Regional Park can be found on their website http://www.ovrp.org/

I Love a Clean San Diego (ILACSD) 7th Annual Creek To Bay Cleanup

The Seventh Annual Creek to Bay Cleanup event occurred on Saturday, April 24, 2010. The City co-sponsored this cleanup event, which was coordinated by ILACSD. The San Diego County Board of Supervisors presented this year's cleanup event through the support of Supervisor Greg Cox and Supervisor Pam Slater-Price. The event was able to bring together over 4,500 volunteers who spent their Saturday morning cleaning and restoring the health of our coastal and inland waterways and open space areas. Volunteers accumulated over 150,000 pounds of trash and recyclables from 185 miles of coastline and inland areas. Commonly found items included plastic items and cigarette butts.

Cleanup sites within or adjacent to Chula Vista included the Sweetwater Regional Park, J Street Marina, and the western side of Otay Valley Regional Park. At these locations, over 440 volunteers removed over 2,100 pounds of trash and over 390 pounds of recyclables from almost 10 miles of Chula Vista inland waterways.

Household Hazardous Waste and Used Oil Recycling

The Household Hazardous Waste (HHW) Facility at the City of Chula Vista Public Works Center started operation in January 2002. It serves the Cities of Chula Vista, Imperial Beach, National City, and the County of San Diego. The facility is open every Wednesday and Saturday from 9am to 1pm. This facility also offers small businesses the option to dispose of hazardous waste through its Conditionally Exempt Small Quantity Generator (CESQG) program. The City also offers "door-to-door" collection of HHW. Under the door-to-door program, HHW is collected by appointment from residents who are unable to take the waste to the permanent facility or because of scheduling conflicts. The facility is under 24-hour camera surveillance to prevent illegal dumping in and around its surrounding areas. Also, during hours of service operations staff places temporary berms in the proximate storm drain to prevent contamination in the event of a spill. Public participation in this program is expected to minimize the amount of hazardous materials that may otherwise enter storm drain systems. During the reporting period approximately 2,800 households participated in the collection program.

Public IC/ID Reporting and Graffiti Hotline

The City encourages its citizens to partner with the City in keeping Chula Vista clean. Citizens can do so by reporting any illegal discharges to storm drains, as well as reporting any graffiti in their neighborhoods. The City provides free graffiti removal services on public or private property by using environmentally friendly power washing equipment and BMPs. Storm Water

Management Section staff investigates illegal discharges to storm drain systems and provides education and enforcement. In cases of spills or pollutants entering storm drain systems, Public Works maintenance crews provide cleanup as needed. During the reporting period the City received over 240 calls and reports about illegal discharges to storm drain systems. There were over 2,850 calls, emails, and web requests from citizens to the graffiti program during the reporting year (some duplicated), showing that citizens are participating and taking an active part in keeping the City clean.

CLEAN Business Program

As part of its efforts to involve local businesses in keeping the City clean, the CLEAN Team started the CLEAN Business Program in February 2008. The CLEAN Team is made up of the City's Storm Water Management Section, Environmental Services Division, and the Department of Conservation. The CLEAN Business Program was designed to help small businesses exercise environmentally safe practices and become sustainable. This goal could only be achieved by learning basic environmentally responsible and sound methods related to their specific daily activities. The program verifies and promotes businesses that demonstrate environmentally friendly practices and conserve resources. As part of the verification process, the business must complete a packet of checklists with minimum BMPs and request an inspection by the CLEAN Team to verify that the selected BMPs are adequate and have been correctly implemented. The CLEAN Team verifies that the BMPs are in place and functioning. Once a business becomes a CLEAN Business, they receive recognition on the City's website and receive a decal sticker to put on their front window to show consumers that they are shopping at a CLEAN Business. Five businesses in the City were verified during the reporting year. Businesses must receive verification on an annual basis in order to maintain their CLEAN Business status.

10.0 FISCAL ANALYSIS COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(j).i - A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.

Permit Section G: Fiscal Analysis

1. *Each Copermittee shall secure the resources necessary to meet all requirement of this Order.*

2. *As part of the Regional Urban Runoff Management Program, the Copermittees shall collectively develop a standardized method and format for annually conducting and reporting fiscal analyses of their urban runoff management programs in their entirety (including jurisdictional, watershed, and regional activities). This standardized method shall:*

    a. *Identify the various categories of expenditures attributable to the urban runoff management programs, including a description of the specific items to be accounted for in each category of expenditures.*
    b. *Identify expenditures that contribute to multiple programs or were in existence prior to implementation of the urban runoff management program.*
    c. *Identify a metric or metrics to be used to report program component and total program expenditures.*

3. *Each Copermittee shall conduct an annual fiscal analysis. Starting January 31, 2010, the annual fiscal analysis shall be conducted consistent with the standardized fiscal analysis method included in the January 31, 2009 Regional Urban Runoff Management Program Annual Report. The annual fiscal analysis shall be conducted and reported on as part of each Copermittee's Jurisdictional Urban Runoff Management Program Annual Reports. For convenience, the fiscal analysis included in the Jurisdictional Urban Runoff Management Program Annual Reports shall address the Copermittee's urban runoff management programs in their entirety, including jurisdictional, watershed, and regional activities. The fiscal analysis shall provide the Copermittee's urban runoff management program budget for the current reporting period. The fiscal analysis shall include a description of the source(s) of the funds that are proposed to be used to meet the necessary expenditures, including legal restrictions on the use of such funds.*

10.1 INTRODUCTION

The Municipal Permit requires the Copermittees to develop a standardized method and format for annually conducting and reporting fiscal analysis of their urban runoff management programs. The Standardized Fiscal Analysis Method and Format (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis

Method document was submitted to the San Diego Regional Water Quality Control Board by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009. The Municipal Permit further requires the Copermittees to conduct their annual fiscal analysis consistent with the standardized method starting January 31, 2010. The fiscal analysis incorporated in this section is based on the standardized method. This is the first year that the standardized method is being used.

10.2 GENERAL BUDGET INFORMATION

The Standardized Fiscal Analysis Method includes a Standardized Fiscal Analysis Reporting Form, which consists of three tables separating jurisdictional, watershed, and regional expenditures. Jurisdictional expenditures are divided into components that mirror those included in the Municipal Permit as follows:

- Administration
- Development Planning
- Construction
- Municipal
- Industrial and Commercial
- Residential
- Illegal Discharge Detection and Elimination (IDDE)
- Education
- Public Participation
- Special Investigations
- Non-Emergency Firefighting

Further, each of the above categories may be broken down into sub-categories. Potential Sub-categories may include:

- Land Use Planning
- Environmental Review
- Development Project Approval and verification
- Public Construction Projects
- Private Construction Projects
- Public Reporting of Illicit Connection or Illegal Discharges (ICIDs)
- Jurisdictional Urban Runoff Monitoring Programs
- Other

Expenditure items to be considered for each category or sub-category may include:

- Administration
- Permitting and Licensing
- Project Planning and Engineering
- Maintenance Inspections
- Compliance Inspection and Enforcement

- BMP Implementation
- Educational Outreach
- Waste Collection and Recycling
- Jurisdictional Urban Runoff and Receiving Water Monitoring
- Other Expenditures

For reporting purposes, only the table incorporating major jurisdictional components will be used. Sub-categories and expenditure items are intended to provide standardization of expenditures and need not be shown in the final report.

City of Chula Vista staff from different departments and divisions contributes to the implementation of the storm water program and their contributions are as follow:

- The Storm Water Management Section is responsible for the development and implementation of storm water programs, participation in regional and watershed activities, oversight of storm water related contracts, data management, and report writing. It is also responsible for inspecting municipal, industrial, commercial, building construction, and residential land uses and responding to reported violations of the City's Storm Water Management and Discharge Control Ordinance. The Storm Water Management Section conducts enforcement action on violators of the City's Storm Water Ordinance.

- The Environmental Planning Division of the Development Services Department reviews development projects for compliance with the California Environmental Quality Act, assesses potential environmental impacts to sensitive areas and requires developers to provide mitigation plans before permits are issued.

- The Land Development Division of the Development Services Department is responsible for ensuring that grading and construction permit applications are in compliance with grading and other engineering ordinances, and that temporary and permanent Best Management Practices are incorporated in the grading plans, tentative maps, and final maps. Land Development Division staff reviews and approves Water Quality Technical Reports submitted to the City as part of development application packages for Priority Development Projects.

- The City Attorney's Office reviews all documents (such as manuals, forms, ordinances, etc.) developed by the Storm water Management Section, to ensure that they are in compliance with current laws and regulations. The City Attorney's Office also assists the Storm water Management Section in the enforcement of City's Municipal Code.

- The Environmental Services Section of the Public Works Department manages the Used Oil Recycling Program, the Household Hazardous Waste Collection Program, the Solid Waste Collection Program, and the Solid Waste Reduction and Recycling Program.

- The Geographic Information Systems (GIS) Section of the Information Technology Services Department is responsible for the City's GIS systems, and provides support to

the Storm Water Management Section by mapping the City's storm water conveyance systems and data management.

- The Operations Division of the Public Works Department is responsible for the maintenance of the City's storm drainage systems and the sanitary sewer collection systems; oversight of the street sweeping program, and oversight of the open space maintenance program. The Wastewater Management Section, in addition to its scheduled maintenance activities, is responsible for emergency responses to sanitary sewer overflows (SSO) and pollutant spills on public streets.

- The Inspection Services Section of the Public Works Department is responsible for the inspection of grading, improvement, and Capital Improvement Projects for compliance with the City's ordinances, including the Storm Water Management and Discharge Control Ordinance.

- Other City departments, divisions, and sections provide support to the Storm Water Management Section in the fulfillment of the City's JURMP and are instrumental in the implementation of that program. Although those departments, divisions, and sections provide important contributions, a detailed accounting of their roles is beyond the scope of this report.

10.3 FISCAL ANALYSIS METHODS

The fiscal analysis method used in this report is based on the standardized fiscal analysis method and format dated January 29, 2009, developed by the Copermittees of the San Diego County NPDES Municipal Permit, Order No. R9-2007-0001.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

10.4.1.1 JURISDICTIONAL

The City's jurisdictional expenditures for FY 2009-2010 related to compliance with the Municipal Permit are listed in Table 10-1 to 10-3.

Table 10-1 NPDES Jurisdictional Expenditures for FY 2009-2010

JURISDICTIONAL COMPONENT		MULTIPLE PROGRAMS	PRIOR PROGRAM
Administration	$301,523		
Development Planning	$136,759		
Construction	$237,552		
Municipal	$1,200,865		
Industrial and Commercial	$138,963		
Residential	$71,180		
IDDE	$349773		
Education	$54,180		
Public Participation	$1,000		
Special Investigations	$1,780		
Non-Emergency Firefighting	$8,149		
Jurisdictional Total	**$2,501,724**		

Table 10-2 NPDES Jurisdictional Shared Program Expenditures for FY 2009-2010

JURISDICTIONAL COMPONENT SHARED PROGRAMS		MULTIPLE PROGRAMS	PRIOR PROGRAM
Used Oil Recycling	$11,840	x	x
Household hazardous Waste Management	$264,438		
Wastewater Collection Systems Maintenance	$4,266,158	x	x
Flood Management Projects and Flood Control Devices	$169,537	x	x
Jurisdictional Shared Programs Total	**$4,711,973**		

Table 10-3 Jurisdictional Shared Programs For Which Expenditures are Not Readily Available

JURISDICTIONAL COMPONENT SHARED PROGRAMS FOR WHICH COSTS ARE NOT READILY AVAILABLE	MULTIPLE PROGRAMS	PRIOR PROGRAM
Land Use Planning	x	x
Environmental Review	x	x
Development Project Approval and Verification	x	x
Management of Pesticides, Herbicides, and Fertilizers	x	x
Roads, Streets, Highways, and Parking Facilities	x	x
Parks and Recreational Facilities	x	x

10.4.1.2 WATERSHED

The standardized Fiscal Analysis method and format provides a form for total watershed expenditures which is divided into various watersheds draining each Copermittee's jurisdictional boundaries. The City of Chula Vista is wholly located within the San Diego Bay watershed and, therefore, the sum total of all expenditures associated with watershed activities is shown as one number under Watershed Total.

Table 10-4 NPDES Watershed Expenditures for FY 2009-2010

WATERSHED COMPONENT		MULTIPLE PROGRAMS	PRIOR PROGRAMS
Chula Vista's Share of the Watershed Total	**$32,594**		

During FY 2008-2009, watershed activities in the San Diego Bay Watershed were developed at the watershed level, while each Copermittee implemented their respective watershed activities individually within their jurisdictions and, therefore, no cost sharing occurred at the watershed level. Based on the Municipal Permit requirements for watershed activities, the City allocated $25,000 for watershed activities and $10,000 for watershed education in its FY 2009-2010 budget.

10.4.1.2 REGIONAL

Table 10-5 for total regional expenditures shows the City's share of total regional costs that are determined by using cost share formulae included in the Memorandum of Understanding dated November 16, 2007, and signed by all Copermittees.

The City participates in regional meetings and activities with other Copermittees of San Diego County. Each year, the Regional Management Committee approves a budget for the following Fiscal Year and each Copermittee pays their share of the regional costs to the Principal Copermittee. The Principal Copermittee, on behalf of all the Copermittees, manages an account and pays regional expenses from that account. During the current reporting period, costs associated with activities of the following workgroups were included in the regional expenditures and budgets:

- Program Planning Subcommittee
- Fiscal, Reporting, and Assessment Workgroup
- Education and Residential Sources Workgroup
- Monitoring Workgroup
- Land Development Workgroup
- Municipal Workgroup
- Industrial and Commercial Sources Workgroup
- Regional WURMP Workgroup

Additionally, City staff time for attending regional workgroup meetings has been included in regional expenditures for Fiscal Year 2009-2010. Finally, annual fees for membership in the California Storm Water Quality Association is paid as a regional expenditures and the

appropriate share of the City of Chula Vista has been included in the following regional expenditure analysis.

Table 10-5 NPDES Regional Expenditures for FY 2009-2010

REGIONAL COMPONENT		MULTIPLE PROGRAMS	PRIOR PROGRAMS
Chula Vista's Share of the Regional Total	**$244,655**		

As shown in Table 10-5, City's share of the above expenditures was $244,655 for FY 2009-2010.

10.4.2 FUNDING SOURCES

An analysis of the City's storm water program revenues and expenditures indicates that the program captures its revenues from General Funds, Capital Improvement Project funds, and Storm Drain Fees assessed on property owners or tenants of single family homes, multi-family buildings, and commercial/industrial facilities through the Sweetwater Authority, Otay Water District, and Cal-American Water District. Additional revenues are received from Building Permit Fees and from developer deposits; however, these vary significantly from year to year, depending on the level of development activities within the City. Building Permit Fees, which are used to cover staff time for inspections of construction sites during the building phase of the projects has been reduced drastically as a result of the recent slow down of development projects within the City.

Table 10-6 Funding Sources for FY 2009-2010

No.	FUNDING SOURCE	PROGRAM ELEMENT
1	General Fund	Storm Water Management Program
		Storm Drain Maintenance
2	Storm Drain Fee	Storm Water Management Program
3	Sewer Fee	Wastewater Collection System Maintenance
4	Special Assessment District Fees	Storm Drain Maintenance
		Wastewater Collection System Maintenance
5	Grant Funds	Used Oil Recycling
		Drainage Capital Improvement Projects
6	Solid Waste Fee	Household Hazardous Waste Management Waste Management Recycling
7	Developer Deposits and Fees	Environmental Reviews
8	Loans	Drainage Capital Improvement Projects
9	Transnet	Drainage Capital Improvement Projects

11.0 PROGRAM EFFECTIVENESS ASSESSMENT COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

a. *As part of its Jurisdictional Urban Runoff Management Program, each Copermittee shall annually assess the effectiveness of its Jurisdictional Urban Runoff Management Program implementation. At a minimum, the annual effectiveness assessment shall:*

   (1) *Specifically assess the effectiveness of each of the following:*

      (a) *Each significant jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented;*
      (b) *Implementation of each major component of the Jurisdictional Urban Runoff Management Program (Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education); and*
      (c) *Implementation of the Jurisdictional Urban Runoff Management Program as a whole.*

   (2) *Identify and utilize measurable targeted outcomes, assessment measures, and assessment methods for each of the items listed in section I.1.a.(1) above.*

   (3) *Utilize outcome levels 1-6*[9] *to assess the effectiveness of each of the items listed in section I.1.a.(1) above, where applicable and feasible.*

   (4) *Utilize monitoring data and analysis from the Receiving Waters Monitoring Program to assess the effectiveness each of the items listed in section I.1.a.(1) above, where applicable and feasible.*

   (5) *Utilize Implementation Assessment, Water Quality Assessment, and Integrated Assessment, where applicable and feasible* [10].

b. *Based on the results of the effectiveness assessment, each Copermittee shall annually review its jurisdictional activities or BMPs to identify modifications and improvements needed to maximize Jurisdictional Urban Runoff Management Program effectiveness, as necessary to achieve compliance with section A of this Order. The Copermittees shall develop and implement a plan and schedule to address the identified modifications and improvements. Jurisdictional activities/BMPs that are ineffective or less effective than other comparable jurisdictional activities/BMPs shall be replaced or improved upon by implementation of more effective jurisdictional activities/BMPs. Where monitoring data exhibits persistent water quality problems that are caused or contributed to by MS4 discharges, jurisdictional activities or BMPs applicable to the water quality problems shall be modified and improved to correct the water quality problems.*

c. *As part of its Jurisdictional Urban Runoff Management Program Annual Reports, each Copermittee shall report on its Jurisdictional Urban Runoff Management Program*

effectiveness assessment as implemented under each of the requirements of sections I.1.a and I.1.b above.

11.1 INTRODUCTION

It is the culmination of efforts described throughout this report that supports the application of effectiveness assessment protocols introduced through the document entitled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" as submitted by the Copermittees to the Regional Board on October 16, 2003. The intent of this section is to offer a more critical analysis of programmatic activities to compliment the accounting of the City's accomplishments as presented in other sections of this report.

The 2004-2005 reporting year was highlighted by the Copermittees' regional development of the Baseline Long-Term Effectiveness Assessment (LTEA) conducted as part of the Report of Waste Discharge (ROWD). This comprehensive assessment incorporated water quality and source data collected by all Copermittees and provided a critical first look at regional water quality presented per watershed.

The City continued to build upon knowledge gained through the implementation of long-term effectiveness strategies on a jurisdictional level through annual reporting, as well as the application of strategies on a regional level through the development of the LTEA. As such, the City continued to augment programs and to gather applicable data to support a more holistic look at storm water program effectiveness.

During the reporting period, the City continued to gather and evaluate data supporting education and outreach efforts. This effort was prompted through the continued implementation of the Chula Vista CLEAN program in order to provide a baseline by which to gauge the overall successes of the program. In addition, this effort is highly supportive of the annual appraisal of the larger Chula Vista Storm Water Management Program, and provides a fitting nexus to the annual long-term effectiveness assessments presented in this report.

Notably, in FY 2008-2009 and into the current reporting period, the City of Chula Vista administered a survey instrument designed to measure public awareness of various storm water quality related issues. Analysis of the survey has been detailed in Attachment M. In addition, the City continued its source inventory validation process. This effort has been detailed in Sections 2.0 through 6.0 of this report, and focused on source types identified in the LTEA as potential contributors to watershed pollutants of concern. These activities have also provided the City with valuable data for incorporation into long-term effectiveness evaluation on a jurisdictional level.

11.2 METHODOLOGY

Based on the understanding that long-term effectiveness assessment is an ongoing and iterative process, the regional framework has been developed around three primary elements, each supported by additional key components.

- **Program Planning**
  - Source Characterization
  - BMP Selection
  - Targeted Outcomes
  - Assessment Measures and Indicators

- **Program Implementation**

- **Effectiveness Assessment**
  - Water Quality Assessment
  - Program Assessment
  - Integrated Assessment

Detailed discussions of each of the above topics are included in the document "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003, and developed by the Copermittees. A brief summary is included below to describe the City's approach to program effectiveness assessment. The following discussion has been organized as to address each of the targeted outcome levels under program planning and evaluates the City's effectiveness toward JURMP implementation during the reporting period. It is important to recognize that the whole of this document represents an account of program implementation in 2009-2010, and presents a variety of tracked information supporting overall effectiveness assessment. The following discussion will highlight the development and implementation of targeted efforts, and evaluates the overall effectiveness of the City's Storm Water Management Program.

11.2.1 PROGRAM PLANNING

As discussed in the regional framework document, program planning should include the establishment of meaningful implementation targets and the development of clear measures for assessing them. The four key and interrelated components to effective program planning; 1) source characterization, 2) BMP selection, 3) establishment of targeted outcomes, and 4) establishment of assessment measures and indicators, must be completed prior to program implementation. The primary mechanism in support of program planning was achieved through the development of the Chula Vista JURMP in 2001 as updated in 2008. This document has provided the initial framework to program planning as implementation has continued, and it is through the annual reporting process and associated programmatic updates detailed through this process that this concept continues to be perpetuated. The City has sought to integrate these key elements in order to more clearly direct programmatic activities and to support the vital interrelationship of each element.

Source Characterization
Source characterization largely consists of the development and maintenance of site, source, and facility inventories associated with construction, municipal, industrial, commercial, and residential locations. Through the development of the JURMP, and as required by the previous Municipal Permit sections F.2.d, F.3.a.(2), F.3.b.(2), F.3.c.(2), and F.3.d.(2), baseline source inventories were initially compiled in 2001, and have been updated annually ever since. The City employs a number of strategies and mechanisms in tracking source inventories for all of the sectors mentioned above. Such methodologies have been outlined within specific sections of this report, and include GIS systems, GBA database, and comprehensive business license tracking. In recognizing that source characterization needs to be increasingly matched to identified water quality concerns and program results, the City seeks to more fully utilize extensive GIS capabilities to associate sources with pollutants as they are viewed spatially. Construction, municipal, industrial, commercial, and residential source inventory updates have been provided in attachments to this report.

As introduced above, and detailed in Sections 2.0 through 6.0 of this report, the City has continued to fortify source characterization in 2009-2010. Comprehensive field verification of source inventories is conducted once every five years with the renewal of the Municipal Permit, while inventory updates based on existing information in the City's databases and observations during regular inspections are conducted annually. In this reporting period, the City continued its extensive source verification utilizing the City's Permits Plus program combined with field verification to identify all active industrial and commercial facilities Citywide. Notably in FY 2009-2010, the City mailed BMP education letters and notifications as required by Permit section D.3.b.(2)(c) to all commercial and industrial businesses that are not required to be inspected by the Municipal Permit. Source inventories were updated based on returned letters. The Municipal inventory is updated continuously as new facilities are constructed or acquired. While this effort served a number of functions within the larger storm water program, significant value was gained of the data compiled through the resources described above. Ultimately, this data is utilized in overall program assessments, and to guide programmatic development to support long-term effectiveness.

BMP Selection
In terms of BMP selection, activity based BMP selection was conducted as part of the development of the City's JURMP. As required by the previous Municipal Permit's Sections D.2.c.(1), D.3.a.(2)(b), D.3.b.(2)(b), and D.3.c.(2)(a), minimum BMPs were established for each of the major program elements. These minimum BMPs were visited during the City's JURMP update in 2008 and changes were made as needed. The City actively evaluates activity specific BMPs primarily through its well-developed municipal, industrial/commercial, and construction inspection programs. As previously mentioned, letters detailing the City's BMP requirements were sent to all commercial and industrial businesses within the City.

Targeted Outcomes
The establishment of measurable targeted outcomes is necessary both for incremental program improvement, and as a basis for the future establishment of relationships between implementation and desired water quality outcomes. It is important to recognize that quantifiable outcomes be established prior to program implementation to accurately provide

measurability and accountability. Included within the regional long-term assessment framework, is the concept of a hierarchy of targeted outcomes. Six "levels" have been established, representing a gradation from activity-based to water quality based outcomes.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

The above concept can be shown as a pyramid with the base at Level 1 and the apex at Level 6 as shown in Figure 11-1. Each layer of outcome from the bottom to the top represents a gradation from activity-based to water quality-based outcome.

Figure 11-1 Hierarchy of Targeted Outcomes

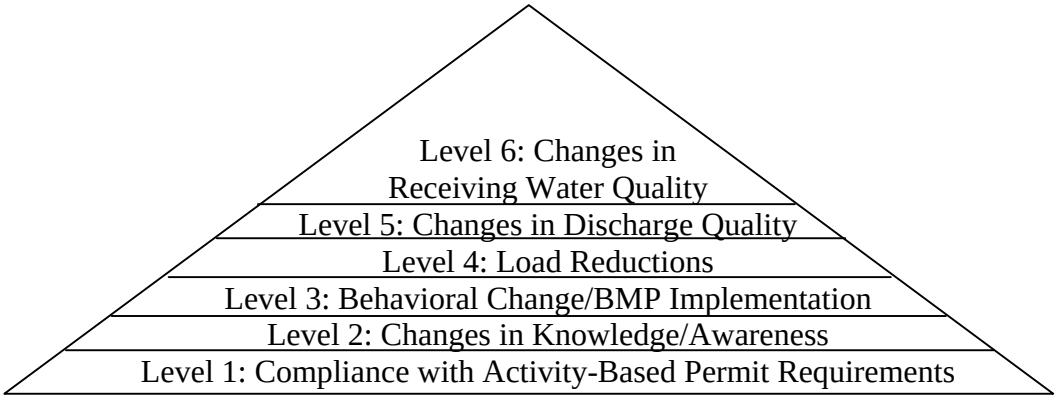

Assessment Measures and Indicators

In order to establish measurability and accountability in the implementation of various water quality program elements, assessment measures for the targeted outcomes need to be developed. Assessment measures may be direct or indirect. Direct measures are those that characterize the quality of water in runoff discharges or within receiving waters. In San Diego County, direct measurements are primarily addressed through regional Receiving Waters Monitoring Program and Dry Weather Field Screening and Analytical Monitoring Program. Indirect measures take into account the degree of activity or program element implementation. Indirect measures are easier and less expensive than direct measures and do not require long-range data.

11.2.2 PROGRAM IMPLEMENTATION

A comprehensive accounting of the City's implementation of its Jurisdictional Urban Runoff Management Program (JURMP) during the current reporting period has been provided in other sections of this report. In this section, it will suffice to say that sufficient data tracking and data management has complemented the implementation of each component of the JURMP to enable an accurate program effectiveness assessment.

11.2.3 EFFECTIVENESS ASSESSMENT

Program effectiveness assessment comprises of three components, i.e., 1) Water Quality Assessment, 2) Program Assessment, and 3) Integrated Assessment. Integrated Assessment is a long-term process by which Copermittees will attempt to establish causal relationships between program implementation activities and changes in water quality. These relationships may be established either hypothetically or empirically. Integrated Assessment is necessarily the most difficult and uncertain step in the overall assessment process. Over time, quantitative "cause and effect" relationships will increasingly be sought. However, because of the sheer number and variety of BMPs and control programs being concurrently implemented at any given time, establishing such relationships will be a considerable challenge. This report, therefore, focuses on Water Quality Assessment and Program Assessment, and will leave the Integrated Assessment to be addressed at the watershed and regional level.

11.2.3.1 WATER QUALITY ASSESSMENT

Water Quality Assessment may be used to evaluate the water quality of discharges to receiving waters or within the receiving waters themselves. Water Quality Assessment is conducted by taking samples from discharges or the water body within receiving waters and conducting field screening or laboratory analysis. Sampling and testing may be conducted during storm events or from dry weather flows during non-rainy seasons. It is necessary to have benchmarks or other standards such as the Water Quality Control Plan for the San Diego Basin (Basin Plan) to compare the results and make judgment about water quality. It is also beneficial to track the quality of water for long periods of time to enable the Copermittees to assess long-term trends and draw conclusions as to the effectiveness of their storm water programs.

11.2.3.2 PROGRAM ASSESSMENT

As mentioned above, during the planning phase of the program, it is of utmost importance to set measurable goals for each of the program components and track progress through data collection and management. Such data will later be used to evaluate the success or failure of the implementation of the program and derive conclusions regarding each component's effectiveness.

In this report, Program Assessment has been divided into components similar to those established in the Municipal Permit, i.e.:

- Land Use Planning
- Construction
- Municipal
- Industrial and Commercial
- Residential
- Education and Public Participation

11.2.3.3 INTEGRATED ASSESSMENT

Integrated Assessment establishes a relationship between program implementation activities and changes to water quality. This information is critical for the Copermittees to evaluate cost effectiveness of their program elements. However, Integrated Assessment is often the most difficult element of the overall program effectiveness assessment.

11.3 WATER QUALITY ASSESSMENT RESULTS

This section of the report utilizes the methodology described above to arrive at conclusions regarding the effectiveness of the City's storm water management program during the current reporting period. This Section focuses on the three components of the effectiveness assessment described in Section 11.2, i.e.:

- Water Quality Assessment (Levels 5 and 6 of the Hierarchy of Targeted Outcomes in the pyramid of Figure 11-1)
- Program Assessment (Levels 1 to 4 of the pyramid)
- Integrated Assessment

11.3.1 WATER QUALITY ASSESSMENT

Changes in discharge quality and receiving waters quality (Levels 5 and 6 of the Targeted Outcomes) are the ultimate targeted outcomes in describing direct successes of storm water program activities. While such levels have proven challenging in assessing individual JURMP effectiveness, levels 5 and 6 have been thoroughly processed through the ROWD and LTEA development on a regional basis in 2004-2005, and will be addressed for the current Municipal Permit cycle in the next ROWD. As such, the City relies to a great extent on the regionally prepared annual Receiving Water Monitoring Reports, ROWD, and LTEA for a detailed look at levels 5 and 6 assessments. Additionally, the City uses results of its jurisdictional Dry Weather Field Screening and Analytical Monitoring program to track long-term trends in the quality of discharges at outfall locations throughout the City. This process has been discussed in more detail below.

Although lines between programmatic efforts and water quality improvements will require long-term data gathering and analysis, the City annually conducts an evaluation of data gathered through the Dry Weather Field Screening and Analytical Monitoring Program. It is important to recognize that the Dry Weather Monitoring Program is primarily used to identify illicit discharges and connections to the MS4 and receiving waters, and not as a surface water characterization mechanism. Alternatively, the dry weather data sets have proven useful in characterizing the quality of non-storm water discharges to surface waters during dry seasons. As such, the City utilizes dry weather data sets to evaluate trends and to steer program priorities on a local level. Dry weather data analysis has been reasoned as a means to further target programmatic components, and to establish target pollutants and to identify geographic areas of concern.

The graph on the following page, Average Percentage of Observations Exceeding Action Levels in Dry Weather Samples, was developed in an effort to track the overall average of samples taken per year in exceedance of numeric action levels as established under the Dry Weather Monitoring Program. This effort is intended to initiate a long-term analysis through tracking detectable improvements or impairments in the quality of non-storm water discharges throughout Chula Vista. This analysis is valuable in evaluating not only the number of exceedances from one year to the next, but also in examining those pollutants that are commonly identified.

In support of the overall average exceedances, the City utilizes constituent-specific trends analysis to develop a clear picture of water quality trends in non-storm water discharges. This analysis evaluates the percentage of annual samples, in relation to a specific constituent, in exceedance of established action levels. Graphs detailing the action level exceedences for each pollutant are on the following pages.

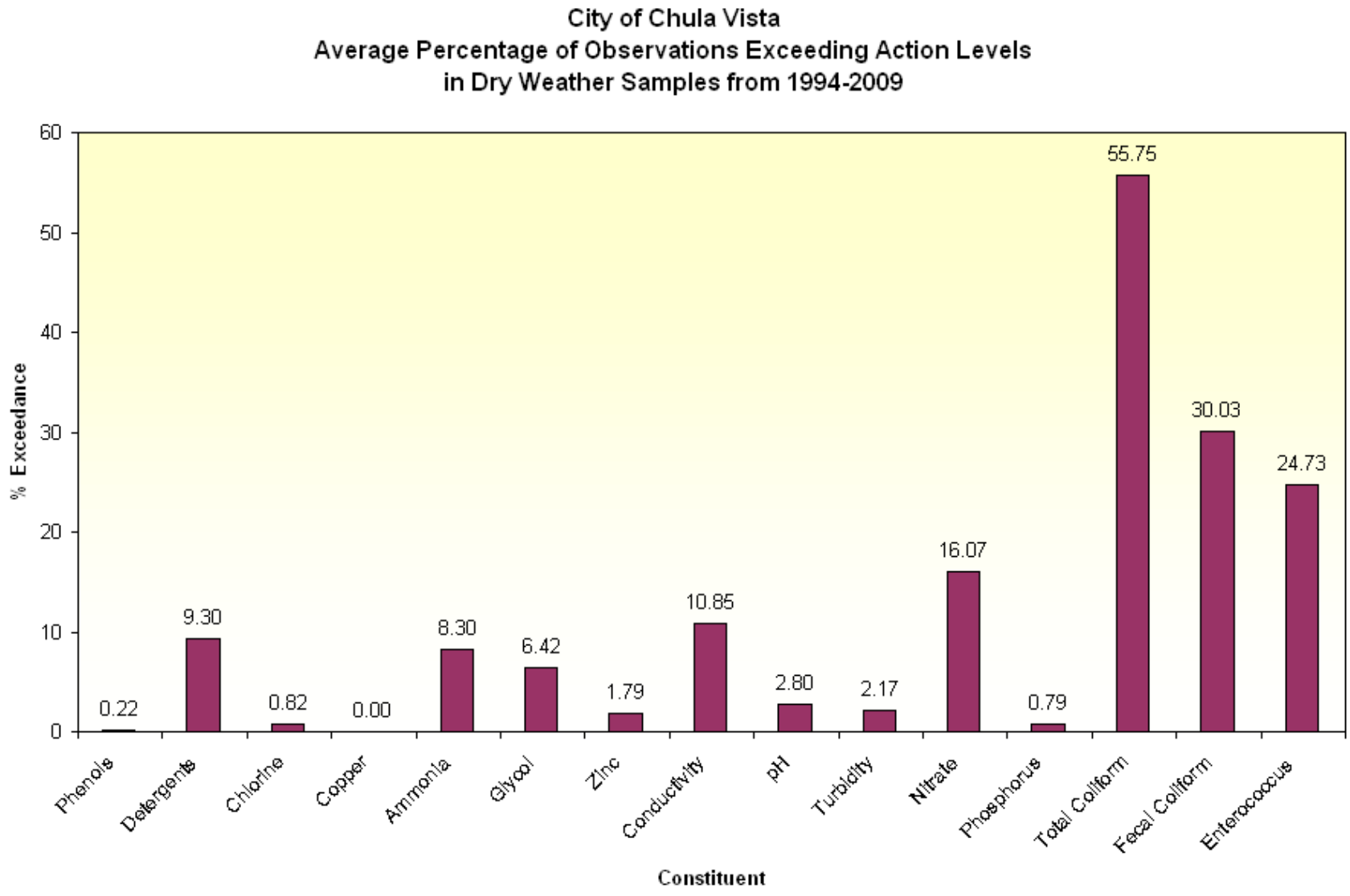
City of Chula Vista
Average Percentage of Observations Exceeding Action Levels
in Dry Weather Samples from 1994-2009
% Exceedance
60
50
40
30
20
10
0
0.22
9.30
0.82
0.00
8.30
6.42
1.79
10.85
2.80
2.17
16.07
0.79
55.75
30.03
24.73
Phenols
Detergents
Chlorine
Copper
Ammonia
Glycol
Zinc
Conductivity
pH
Turbidity
Nitrate
Phosphorus
Total Coliform
Fecal Coliform
Enterococcus
Constituent

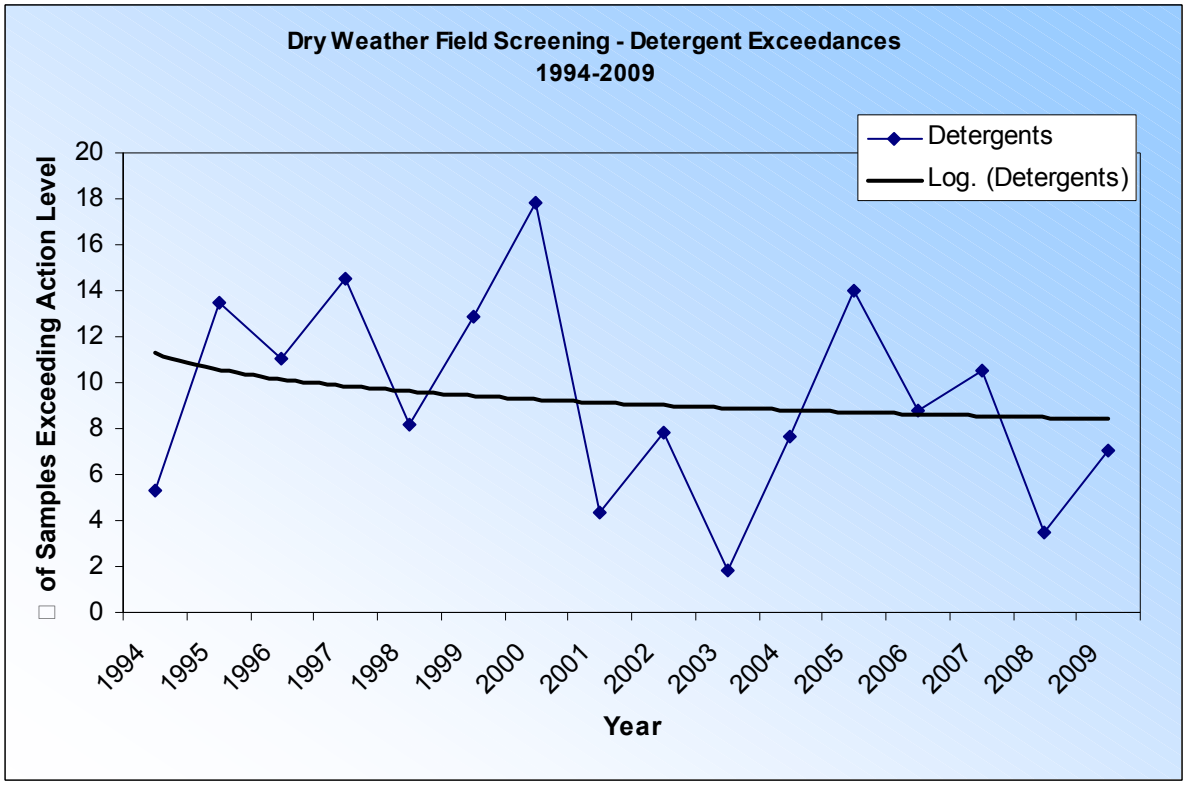
Dry Weather Field Screening - Detergent Exceedances
1994-2009
Detergents
Log. (Detergents)
of Samples Exceeding Action Level
0
2
4
6
8
10
12
14
16
18
20
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year

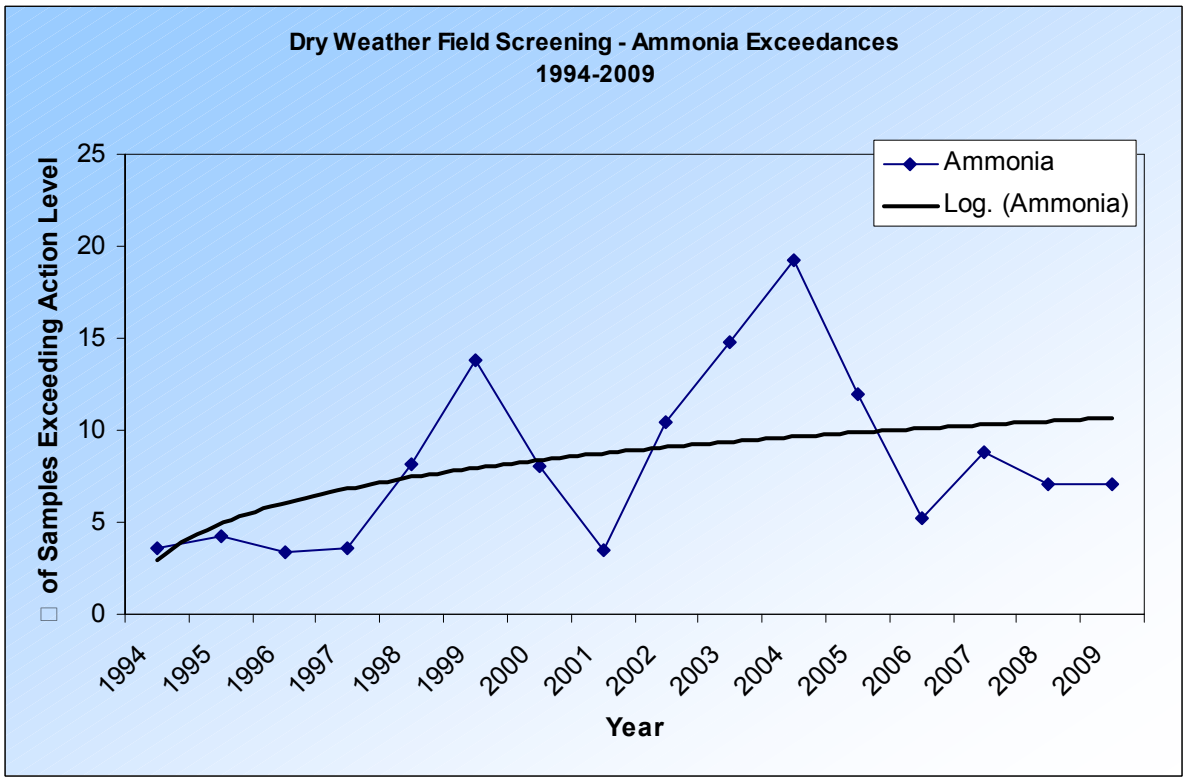
Dry Weather Field Screening - Ammonia Exceedances
1994-2009
Ammonia
Log. (Ammonia)
of Samples Exceeding Action Level
0
5
10
15
20
25
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year

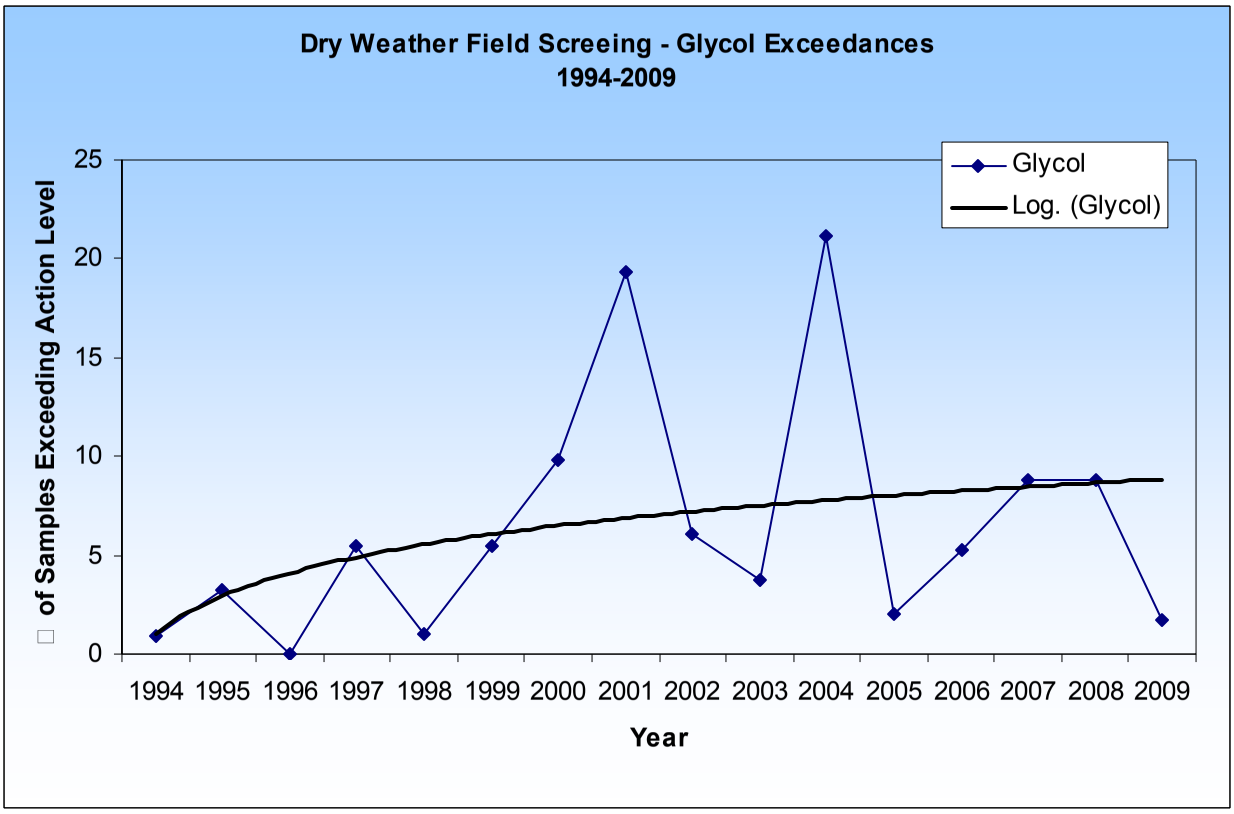
Dry Weather Field Screeing - Glycol Exceedances
1994-2009
Glycol
Log. (Glycol)
of Samples Exceeding Action Level
0
5
10
15
20
25
1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Year

4380

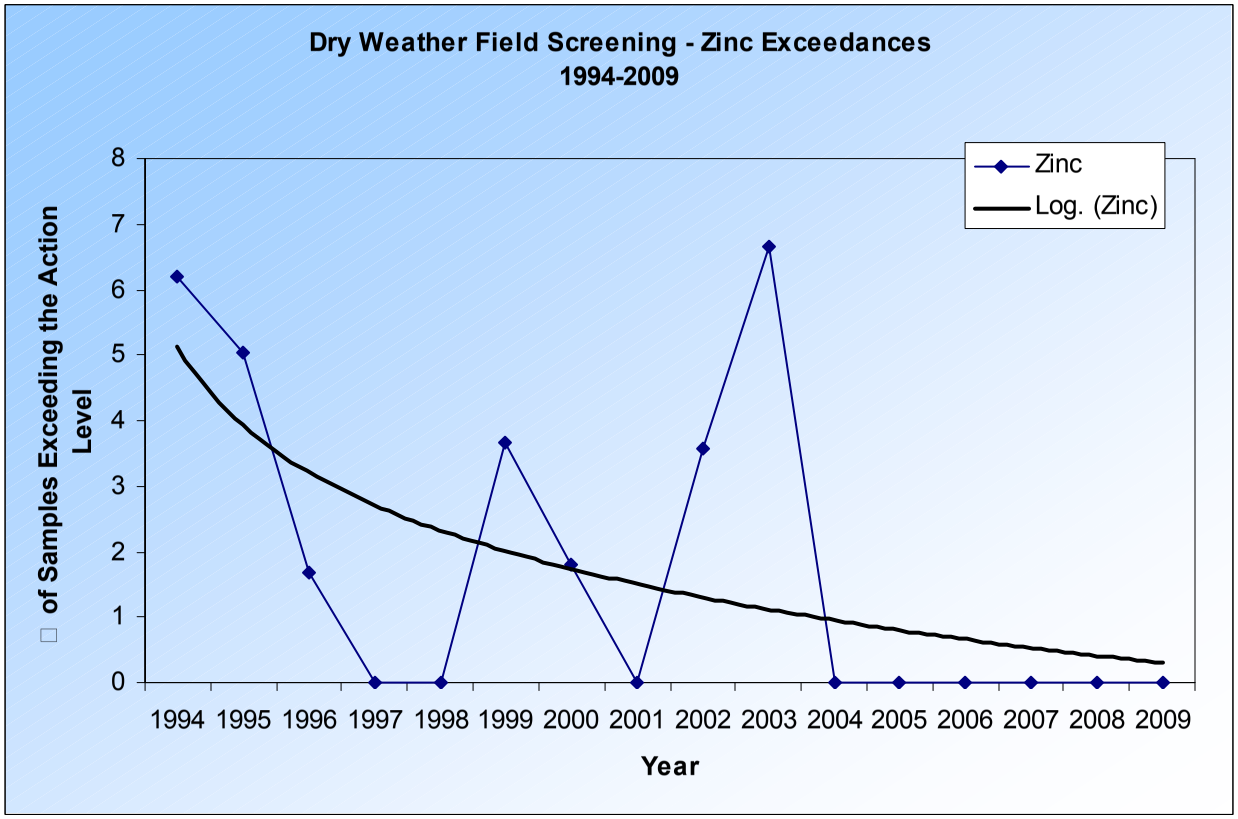
Dry Weather Field Screening - Zinc Exceedances
1994-2009
Zinc
Log. (Zinc)
of Samples Exceeding the Action Level
0
1
2
3
4
5
6
7
8
1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Year

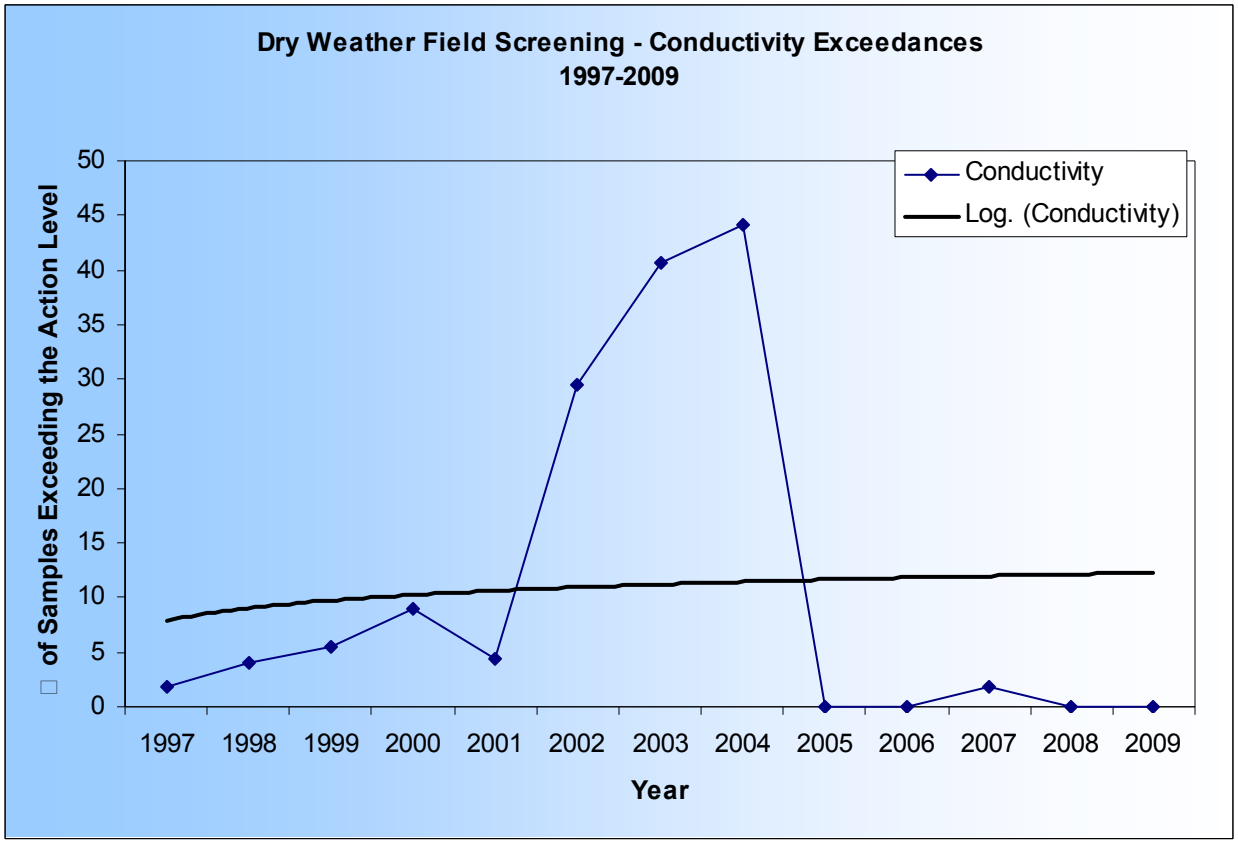
Dry Weather Field Screening - Conductivity Exceedances
1997-2009
Conductivity
Log. (Conductivity)
of Samples Exceeding the Action Level
0
5
10
15
20
25
30
35
40
45
50
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year

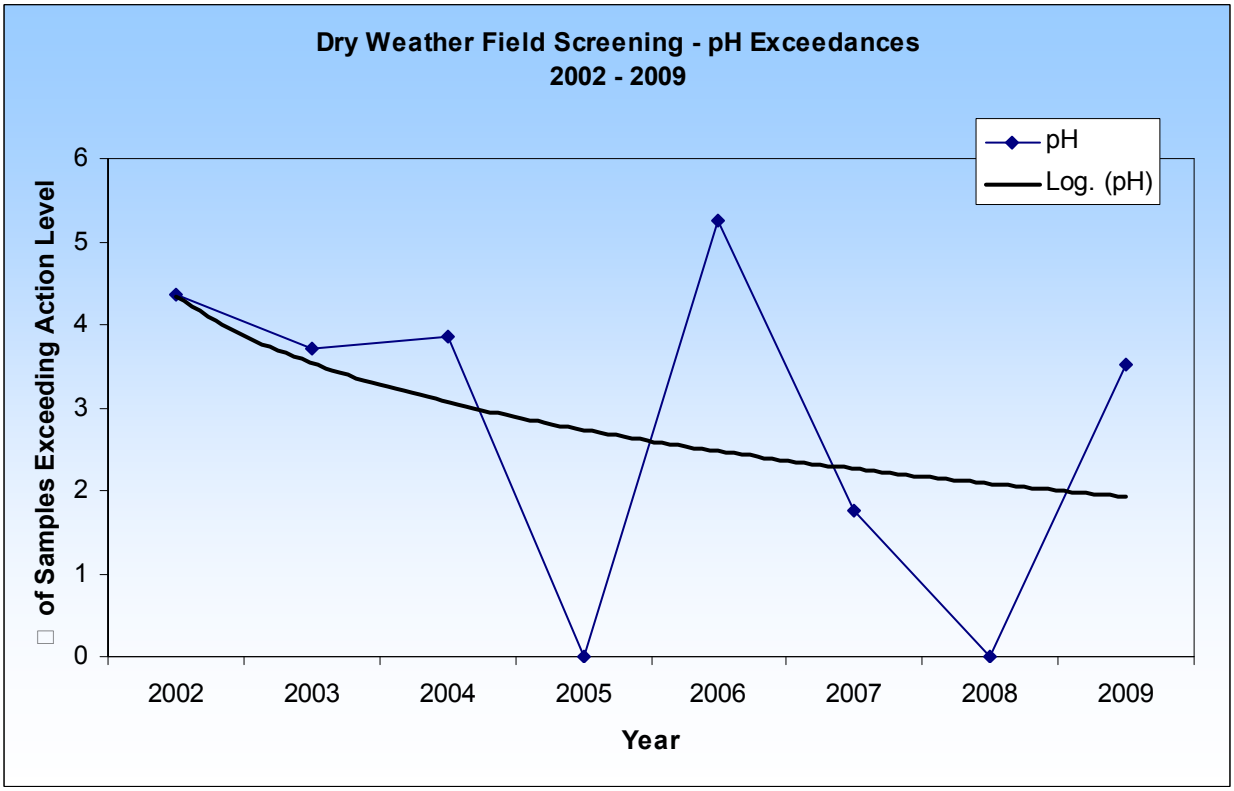
Dry Weather Field Screening - pH Exceedances
2002 - 2009
pH
Log. (pH)
of Samples Exceeding Action Level
0
1
2
3
4
5
6
2002
2003
2004
2005
2006
2007
2008
2009
Year

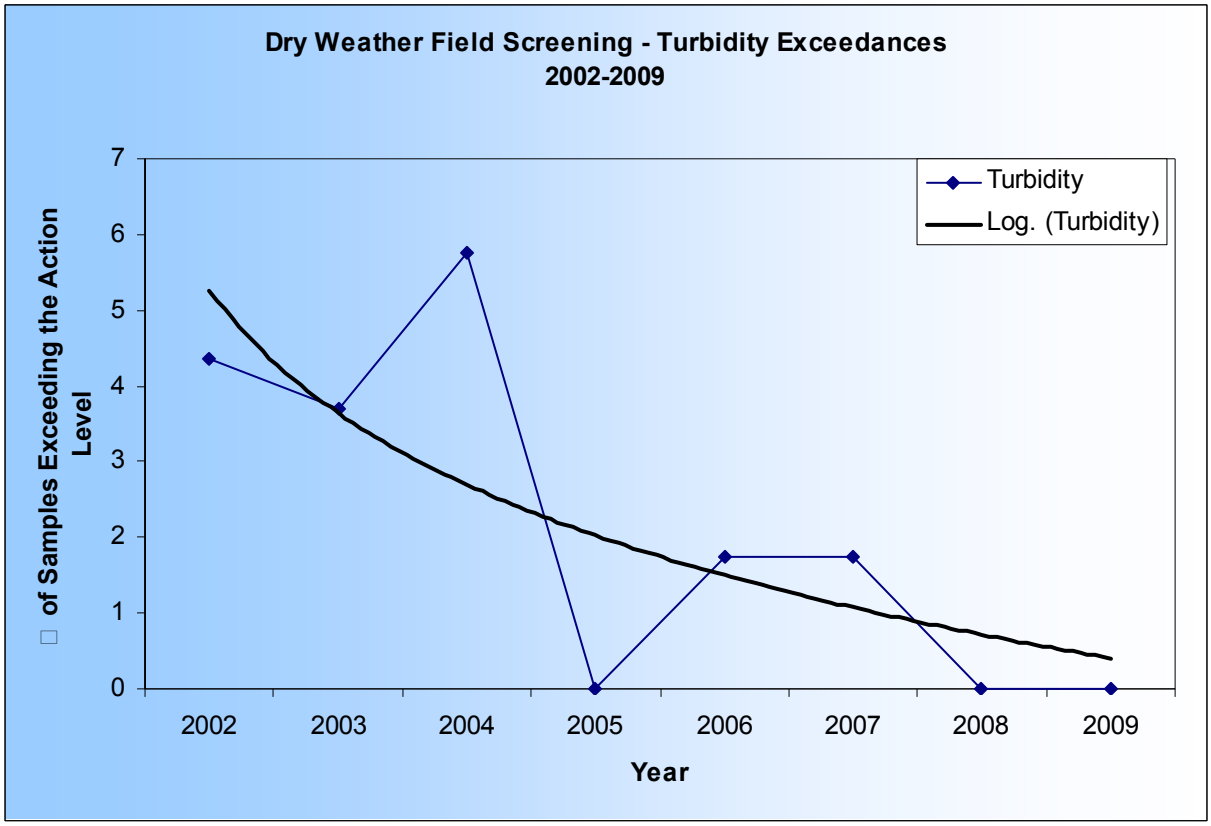
Dry Weather Field Screening - Turbidity Exceedances
2002-2009
of Samples Exceeding the Action Level
0
1
2
3
4
5
6
7
2002
2003
2004
2005
2006
2007
2008
2009
Year
Turbidity
Log. (Turbidity)

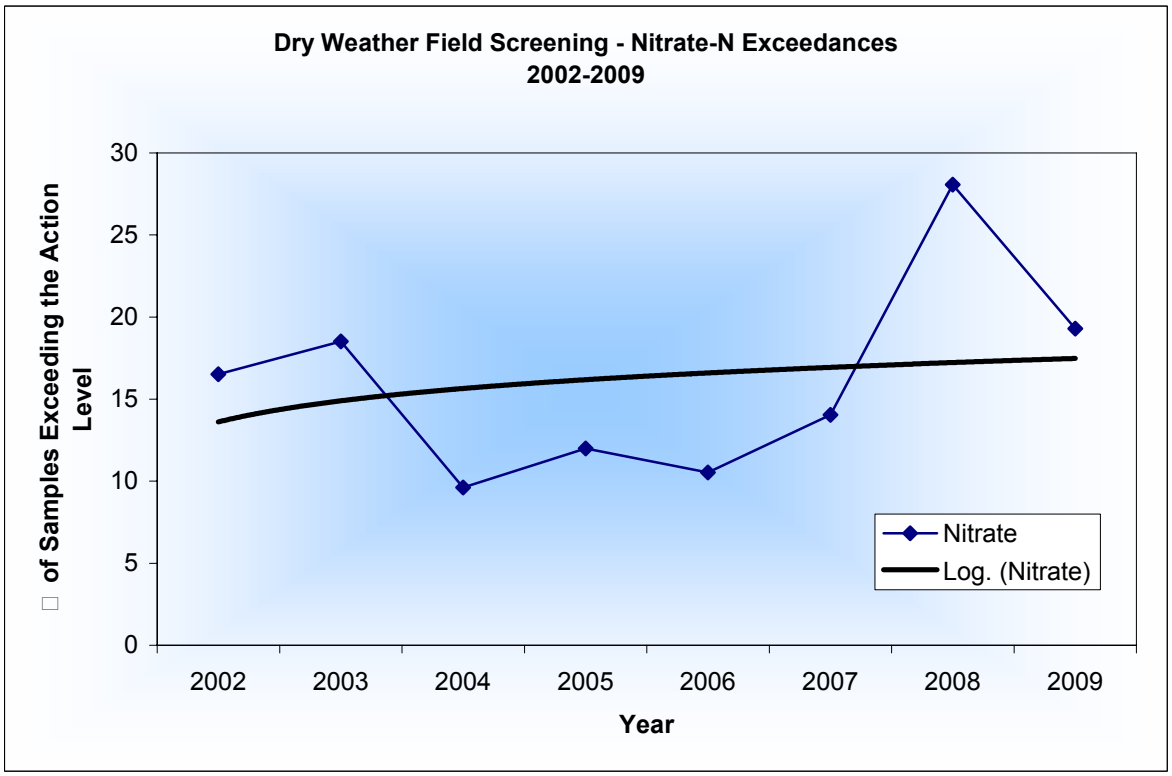
Dry Weather Field Screening - Nitrate-N Exceedances
2002-2009
of Samples Exceeding the Action Level
0
5
10
15
20
25
30
2002
2003
2004
2005
2006
2007
2008
2009
Year
Nitrate
Log. (Nitrate)

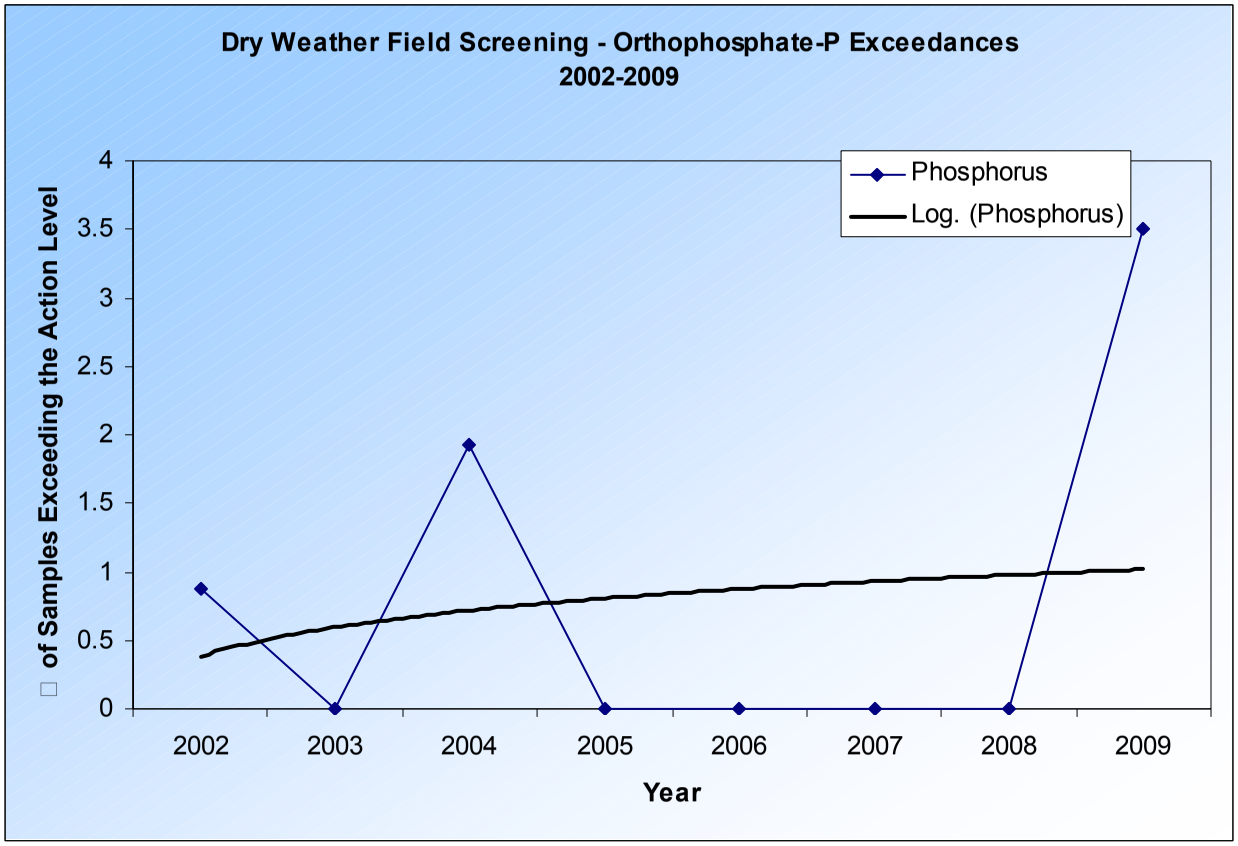
Dry Weather Field Screening - Orthophosphate-P Exceedances
2002-2009
Phosphorus
Log. (Phosphorus)
of Samples Exceeding the Action Level
4
3.5
3
2.5
2
1.5
1
0.5
0
2002
2003
2004
2005
2006
2007
2008
2009
Year

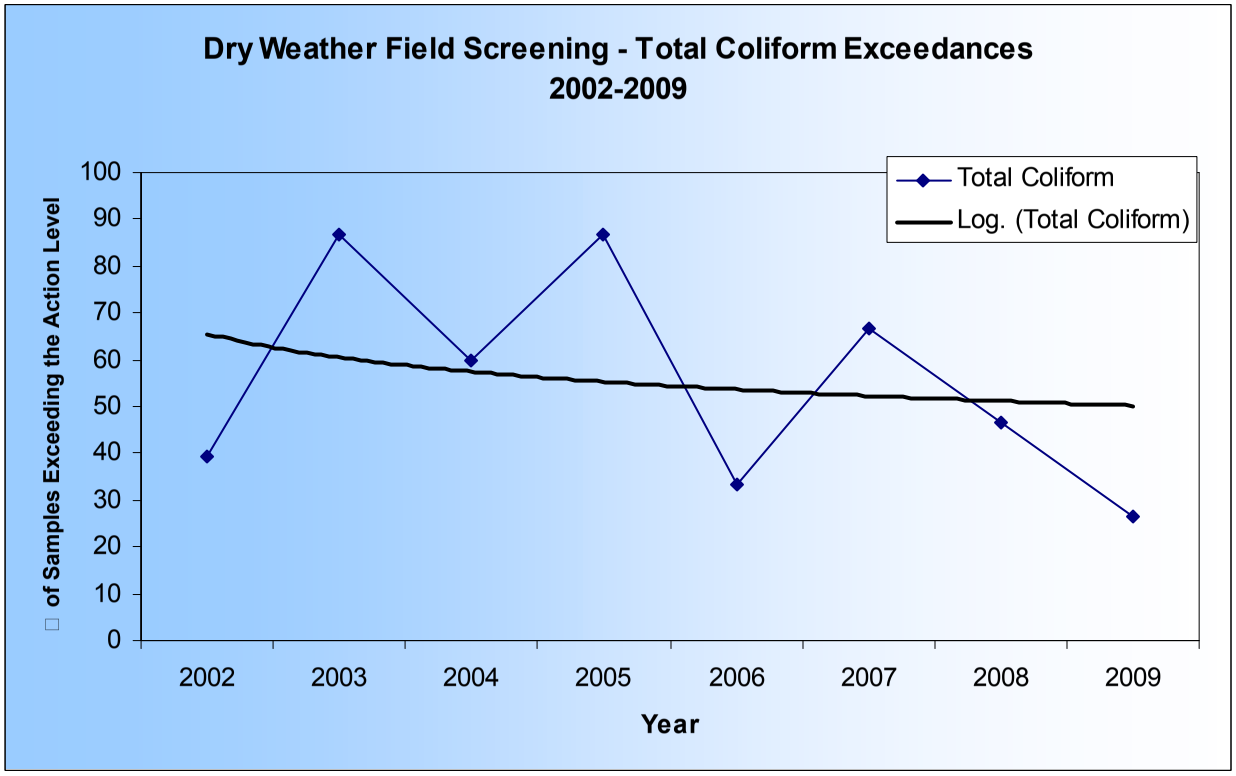
Dry Weather Field Screening - Total Coliform Exceedances
2002-2009
Total Coliform
Log. (Total Coliform)
of Samples Exceeding the Action Level
100
90
80
70
60
50
40
30
20
10
0
2002
2003
2004
2005
2006
2007
2008
2009
Year

4383

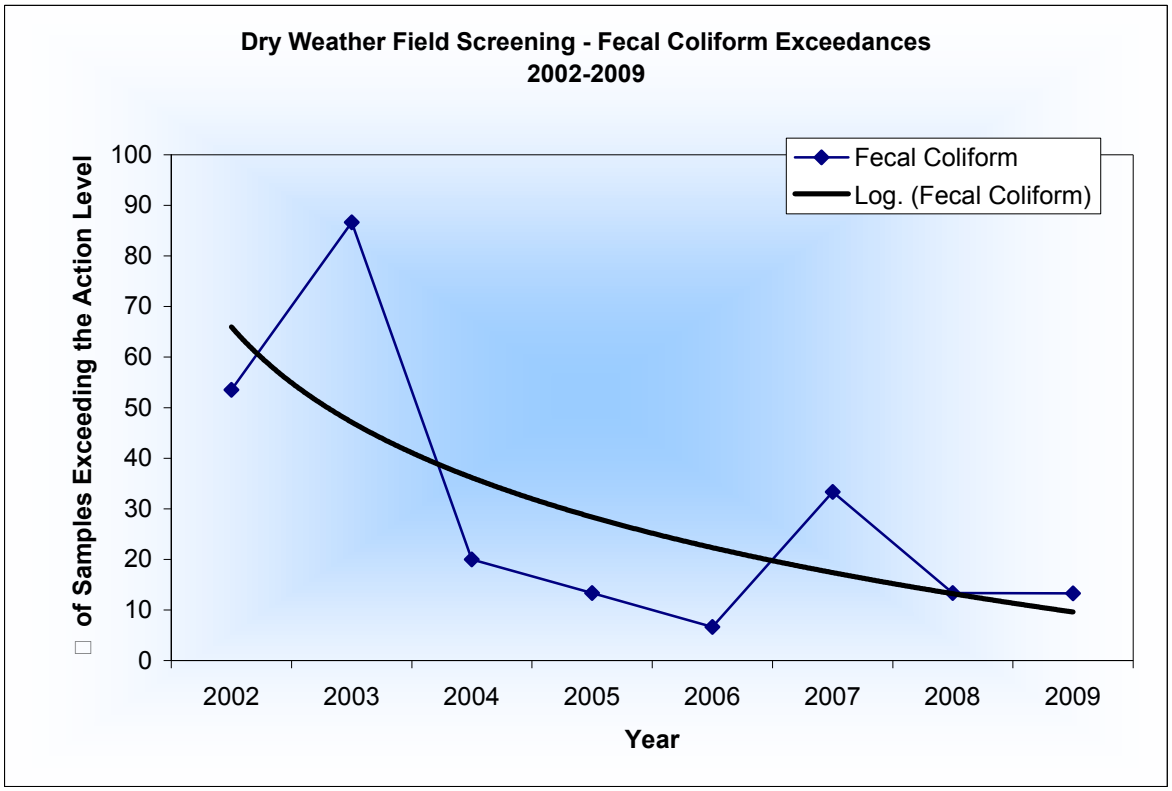
Dry Weather Field Screening - Fecal Coliform Exceedances
2002-2009
Fecal Coliform
Log. (Fecal Coliform)
of Samples Exceeding the Action Level
100
90
80
70
60
50
40
30
20
10
0
2002
2003
2004
2005
2006
2007
2008
2009
Year

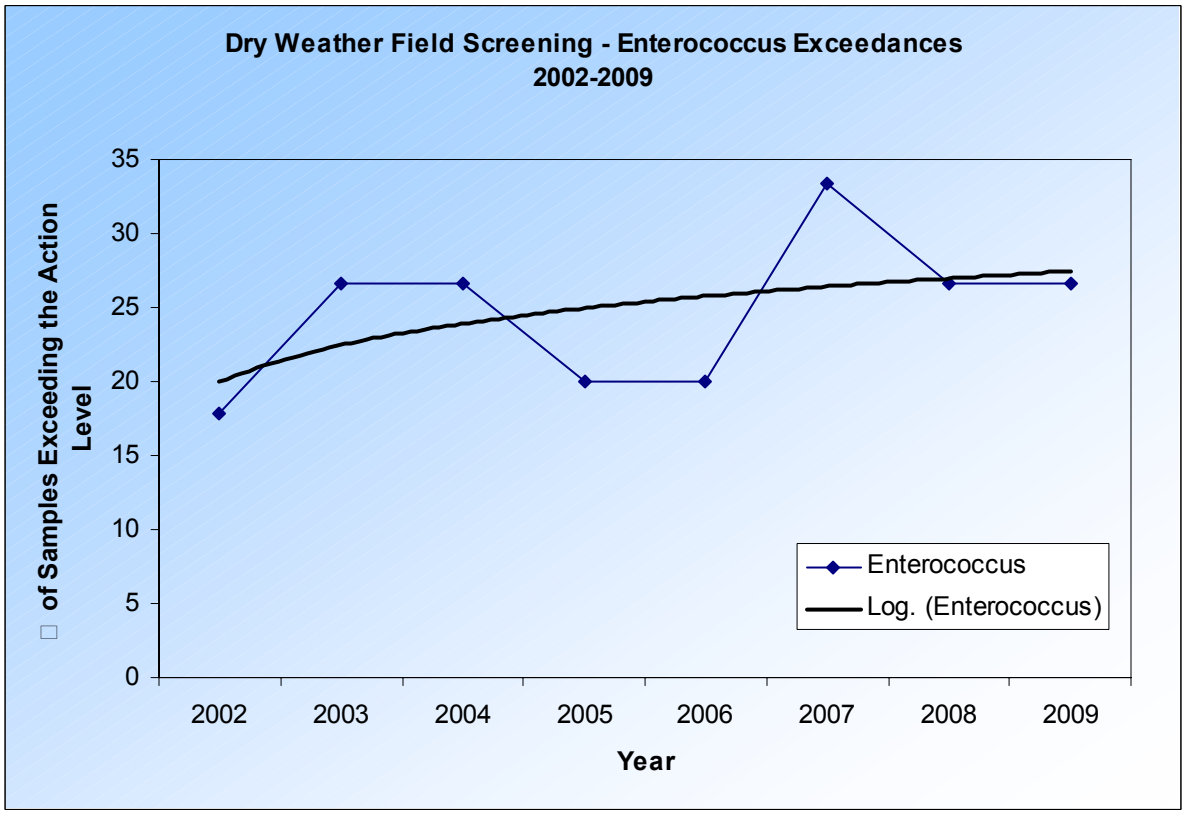
Dry Weather Field Screening - Enterococcus Exceedances
2002-2009
Enterococcus
Log. (Enterococcus)
of Samples Exceeding the Action Level
35
30
25
20
15
10
5
0
2002
2003
2004
2005
2006
2007
2008
2009
Year

11.3.2 PROGRAM ASSESSMENT

In 2009-2010, the City continued to evaluate programmatic activities and implementation protocols in support of effectiveness assessment strategies. It is important to note that through the ROWD and LTEA process, the City has developed a sound understanding of the association of programmatic activities as they relate to long-term effectiveness assessment. As such, the City has sought to formalize various programmatic elements and implementation protocols in support of the effectiveness assessment framework as demonstrated in the preceding paragraphs. The targeted outcome levels discussed below are not intended to be rigid in their function, and while programmatic activities in 2009-2010 more wholly support these levels, continued advancements and data gathering efforts by the City in the future will support a more complete jurisdictional effectiveness assessment. As mentioned in the preceding paragraphs, Copermittees continued to collaborate in an effort to establish a comprehensive assessment in developing a standardize framework for assessing the effectiveness of Jurisdictional Urban Runoff Management Program.

Additionally, during this reporting period the City administered a survey to measure public awareness and behavior on various storm water quality related issues. Based on the City's population of about 220,000, a 95% confidence level, and 4 confidence intervals, it was determined that at least 599 people had to be surveyed to obtain results that were statistically significant. In this reporting period, Storm Management Section staff used the opportunity provided by various public events to establish contact with citizens and conduct the survey. A total of 662 surveys were collected. This number exceeds the minimum requirement thus increasing the general level of survey accuracy. Survey data and analysis is detailed in Attachment M. The report presents the analysis approach, a summary of data, and a comparison with the results of a similar survey that was administered in the City's FY 2005-2006 baseline survey. Analysis results provide the City with more understanding of general JURMP implementation effectiveness as well as potential areas where the City's storm water program can be improved or enhanced. The City will use this data to better focus its storm water education efforts.

The discussion under Program Assessment focuses on Levels 1 to 4 of the Targeted Outcomes on a jurisdictional basis as follows:

11.3.2.1 COMPLIANCE WITH ACTIVITY-BASED PERMIT REQUIREMENTS (LEVEL 1)

This level of effectiveness assessment is intended to provide a quantitative assessment that reflects the regional long-term effectiveness assessment framework through targeted outcomes for the City, based on various components of the Municipal Permit (Tables 11-1 – 11-8). In the following sections, these tables and their associated analysis are divided into Municipal Permit components of land use planning, construction, municipal, industrial and commercial, residential, education and public participation, reflecting various elements of the Municipal Permit, and provide a summary accounting of activities conducted by the City in 2009-2010.

11.3.2.1.1 LAND USE PLANNING

In view of the recent update to the City's local Standard Urban Storm Water Mitigation Plan (SUSMP), and inclusion of Low Impact Development (LID) and Interim Hydromodification Criteria (IHC), the City has sought to continually refine the SUSMP implementation process as deemed necessary to ensure overall effectiveness and compliance with Municipal Permit provisions. During the current reporting period, development activities remains slow and the number of projects submitted to the City for approval and permit issuance was low. As can be seen from Table 11-1, ten SUSMP projects were submitted and one SUSMP project received approval. However, the number of total cumulative projects that have implemented post-construction BMPs and the number of projects inspected for post-construction BMPs remains high.

During this reporting period, BMP maintenance verification letters were sent to responsible parties reminding them of their responsibility to clean, inspect, and maintain storm water treatment facilities (see Table 11-2). Responsible parties were required to provide the City with certification of maintenance of the treatment facilities within a set time frame. Additionally, the City has added another GIS layer in our GBA tracking system identifying all public and private treatment category BMPs. These processes provided yet another mechanism to ensure proper maintenance and effectiveness of all treatment facilities and compliance with Municipal permit provisions.

The following tables summarize City of Chula Vista's activities during the reporting period towards ensuring compliance with SUSMP implementation and the review, inspection, and maintenance verification of SUSMP projects.

Table 11-1 FY 2009-2010 Compliance with Activity-Based Requirements – Land Use Planning

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.1 Land Use Planning	Development Projects	# SUSMP Projects Submitted	# SUSMP Projects Approved	Actual/Target	%
		11	1	N/A	N/A
	High Priority Sites (Total Listed = 42)	# Sites Targeted for Inspection	# Sites inspected	Actual/Target	%
		42	42	42/42	100
	Medium Priority Sites (Total Listed = 50)	25	36	36/25	144
	Low Priority Sites (Total Listed = 89)	As Needed	58	As Shown	100

Table 11-2 FY 2009-2010 Post Construction BMP Maintenance Verification

Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
High Priority Sites (Total Listed = 42)	# Projects sent BMP maintenance notification letter	# Projects returned BMP maintenance verification letter	Actual/Target	%
	42	42	42/42	100
Medium Priority Sites (Total Listed = 50*)	41	34	34/41	83
Low Priority Sites (Total Listed = 89*)	76	68	68/76	89

* It should be noted that City's Storm Drain Maintenance Section is responsible for the routine inspections and maintenance of Treatment Control BMPs on public right-of-way, facilities, and projects, in accordance with a scheduled maintenance program, which is tracked by the GBA Master Series program. At the end of the reporting period, there were 22 municipal treatment control facilities that did not require a BMP notification letter. These facilities can be found in Attachment A.

Based upon the significant achievements and continued refinements experienced in 2009-2010, the City has not identified any ineffective BMPs or management measures in terms of compliance with the Land Use Planning for New Development and Redevelopment permit requirements.

JURMP strengths associated with Land Use Planning for New Development and Redevelopment during the reporting period are described below. The list is not intended to provide comprehensive accounting of programmatic activities; rather it is to highlight those activities that best accentuate the Land Use Planning for New Development and Redevelopment component of the City's JURMP in 2009-2010

The following features distinguish the Land Use Planning for New Development and Redevelopment component of the City's JURMP:

Development Storm Water Manual

The Manual, updated in March 2010, provides the City with a mechanism to effectively articulate all requirements related to water quality and the development or redevelopment of land within the City. The Manual covers all aspects of development, the City's SUSMP requirements, applicable checklists, permanent BMP requirements, construction BMP requirements, and implementation and maintenance requirements. The Manual is available on the City's website, and is used extensively as a reference document by City staff, developers, and consultants. The Manual supersedes a similar document titled "Development and Redevelopment Projects Storm Water Management Standards Requirements Manual," which was adopted in November of 2002.

During this reporting period City staff actively participated in the Regional Land Development Workgroup meetings and activities and collaborated with other participants to update the Model SUSMP and develop a Hydromodification Management Plan (HMP). As mentioned earlier, in

March 2009, the Regional Board approved the updated Model SUSMP. Copermittees were given 365 days to incorporate the Model SUSMP requirements into their local SUSMPs. Likewise, Copermittees submitted a draft HMP to the Regional Board, which was approved in July 2010. HMP requirements are expected be in effect six months after its approval (January 2011). The City of Chula Vista has met all the deadlines for updating its local SUSMP. The Final HMP will be incorporated in the City's SUSMP before January 14, 2011.

Inter-Departmental Coordination

The City's SUSMP and development review process includes multiple entities throughout the City. As the City continues to grow, it has taken all necessary steps to maintain compliance with SUSMP requirements through the coordination of multiple departments. Although the current economic situation has slowed down the City's growth during the past three years, such coordination has continued in 2009-2010 to require refinement and augmentation, as necessary, to maintain compliance and ultimately improve water quality.

Dedicated Storm Water Management Section

The Development Services Department provides the necessary oversight over all management components of SUSMP implementation. The Storm Water Management Section keeps up with the latest requirements and regulations, and provides technical support to City staff and assist project proponents and consultants. Storm Water Compliance Inspectors and Environmental Health Specialists also perform the functions of post-construction BMP construction verification, inspection, and maintenance verification.

Information System Support

A robust geographic information management system (GIS) supports the City's Storm Water Management Program. The City's GIS currently includes multiple layers used by Storm Water Management staff for various functions. In terms of land development and redevelopment activities, within the reporting period, a BMP layer has been maintained in order to track post-construction BMPs implemented Citywide. Additionally, Permits Plus, which is a specialized permits tracking software, is utilized in tracking a variety of discretionary permits, and specifically is used by the Development Services Department to identify and track Priority Development Projects. Further, Permits Plus is utilized in annual inventory updates. Notably, in 2009-2010, the GIS layer was continuously updated to manage and provide easy access and tracking of post-construction BMP Treatment facilities. A recent update was an addition of a layer identifying public and private categories of post-construction BMP Treatment facilities.

Data Management

As the City continues to grow, challenges associated with data management emerge such as tracking of post-construction BMPs, maintenance agreements, and associated documents. The City continues to address these challenges through the customization of robust data management systems presented in this report, including GIS, GBA, and Permits Plus. However, as requirements and programmatic elements continue to evolve, it is important to update available tools with up-to-date information, as well as information necessary to evaluate overall program effectiveness. The City continues to maintain up-to-date data and effectively track all information related to JURMP activities such as inventories, inspections, violations, notifications, and post-construction BMPs.

New Development and Redevelopment Project Design Elements

With a focus on the use of Low Impact Development Integrated Management Practices and higher efficiency structural treatment BMPs in achieving SUSMP compliance, the City continued to work with the development community to improve the design of storm water design features of proposed projects. The City continuously stressed this focus in 2009-2010 through requirements of project proponents to provide a detailed level of analysis to justify utilizing design elements in their proposed projects. The recently approved Model SUSMP, which was incorporated in the City SUSMP requirements, will provide a new approach in the level of analysis and project design elements for the development community.

11.3.2.1.2 CONSTRUCTION

Within the reporting period of this report, the construction component continued to demonstrate success by consistent programmatic developments and enhancements. Through identified needs and associated management decisions, the City fortified its jurisdictional construction management component in 2009-2010. As the slowdown in development continued, many construction sites remained inactive or faced sever reductions in construction activities. Within the reporting period, the City worked closely with developers to stabilize inactive construction sites; promote pollution prevention and BMP implementation; and ensure proper maintenance of BMPs to prevent polluted discharges from construction sites. Because of sagging economy, this was a challenge as many developers claimed that they had limited financial resources and were unable to provide the necessary resources. City staff worked with developers to identify cost-effective BMPs and in some instances initiated enforcement action until full compliance was achieved. Mechanisms were identified to promote pollution prevention techniques as described in Section 3 of this report. The City continues to maintain the regulatory standards mandated by the Municipal Permit and as developed and improved through previous years by the City irrespective of prevailing conditions.

Table 11-3 FY 2009-2010 Compliance with Activity-Based Requirements – Construction

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.2.d Construction	High Priority Sites (Total Listed = 7)	# Sites targeted for inspection	# Sites inspected	Actual/ Target	%
		7	7	7/7	100
	Medium Priority Sites (Total Listed = 27)	27	27	27/27	100
	Low Priority Sites (Total Listed = 70)	70	70	70/70	100
	All Sites (Total Listed = 104*)	Total sites identified	# in compliance or on a schedule for compliance	Actual/ Target	%
		104	104	104/104	100
		# of inspections during dry season	# of inspections during wet season	Total # of inspection s	N/A
		17	286	303	N/A

*Note: Of the total number of construction sites listed above, it is estimated that about 70% to 80% were inactive during the reporting period. Therefore, active sites were inspected according to the Municipal Permit requirements and inactive sites were inspected on an as needed basis.

The following features distinguish the construction component of the City's JURMP:

Inspection and Enforcement

As demonstrated above, and in previous reporting years, the City has established a comprehensive construction inspection and enforcement program. The Storm Water and Public Works Inspection staff, with broad knowledge and expertise in construction storm water management, ensure compliance with this JURMP component on construction sites. Within the reporting period, targeted inspections on development, redevelopment, and capital construction projects have been fully achieved. These goals have been accomplished through an aggressive inspection and follow-up schedule approach that assures compliance in the highly dynamic construction environment.

Education and Training

Storm Water Management staff provides education and training to all entities related to construction activities including developers, site superintendents, sub-contractors, and trades persons. During the previous years, this education and training capacity was further defined by storm water inspection staff participation and expertise provided at regional training seminars and outreach events directed at the construction industry. As a function of the experience gained through a broad spectrum of construction activities in the City, Chula Vista Storm Water Management staff continues to offer a strong asset and broad-based expertise in construction storm water management both locally and regionally. The adoption of the new General

Construction Permit necessitates further education and trainings to all entities related to construction activities. During this reporting period, City staff was given the opportunity to speak at a regional seminar for the construction industry. City staff continued their efforts in educating members of the construction industry at the local level during meetings and site inspections.

It should be noted that programmatic updates and proposed updates presented above have been driven by management decisions to develop more effective JURMP elements. As such, at this time, no significant management measure deficiencies have been identified and no BMPs determined ineffective in 2009-2010. However, in support of an adaptive management approach to jurisdictional elements, the following program areas have been identified for further attention in order to support overall program effectiveness:

BMP Maintenance

During the reporting period, due to an increase in the number of inactive construction sites, BMP maintenance on construction sites continued to be an area of concern. While inspection staff noted significant efforts in BMP implementation, the maintenance needs associated with implemented BMPs did not match implementation efforts on a consistent basis. As a reminder, the City issued a formal letter to all developers with inactive construction sites reiterating their responsibility for BMP implementation as discussed in details in section 3 of this report.

11.3.2.1.3 MUNICIPAL

As exemplified in program descriptions included in other sections of this report, the City prides itself for outstanding environmental programs, and the interrelated successes that each can account for. The City recognizes the need for far-reaching pollution prevention programs for the general public, but further emphasizes ongoing pollution prevention programs through well-developed City functions such as MS4 maintenance, street sweeping, and Integrated Pest Management techniques. The following table summarizes functions' data.

Table 11-4 FY 2009-2010 Compliance with Activity-Based Requirement – Municipal

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.a Municipal	High Priority Sites (Total Listed = 64[1])	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		61	61	61/61	100
	Medium Priority Sites (Total Listed = 5)	As needed	0	N/A	N/A
	Low Priority Sites (Total Listed = 19)	As needed	0	N/A	N/A
	Catch Basins, Inlets, MS4, Open Channels	Estimated quantity of waste targeted for removal (Tons)	Quantity of waste removed (Tons)	Actual/Target	%
		427	427	427/427	100
	Streets/Parking Lots	Estimated distance of curb/park miles to be cleaned	Total curb/park miles cleaned	Actual/Target	%
		18,000	18,000	18,000/18,000	100
	Catch Basins/ Inlets	# of catch basins and inlets in the City	# of catch basins and inlets inspected	Actual/Target	%
		8,801	8,480[2]	8,480/8,801	96
		# of catch basins and inlets targeted to be cleaned	# of catch basins and inlets cleaned	Actual/Target	%
		4,444	4,444	4,444/4,444	100

[1] Three categories listed in the Municipal Inventory as follows are inspected on a regular and as needed basis and are not included in the total number of sites targeted for annual inspections:

- MS4
- Roads, Streets, and Highways
- Special Events

[2] Out of 8,801 catch basins and inlets, 8,480 were inspected in this reporting period. The remaining 321 catch basins and inlets are scheduled for inspection in FY 2010-2011.

With such a well-rounded approach, the City has a significant number of management measures to accurately assess the effectiveness of municipal program component. Further, no BMPs have been identified as ineffective within the reporting period of this report.

The following features distinguish the Municipal component of the City's JURMP:

Municipal Facility Inspections
The City conducts inspections on numerous municipal facilities on an annual basis. Continued in 2009-2010, and as part of this comprehensive inspection process, Storm Water Management staff inspects City owned parks and other facilities for potential maintenance concerns and BMP implementation.

Environmental Programs
As described in other sections of this report, the City manages a number of separate, yet interrelated environmental programs. The City recognizes the tremendous asset that such programs provide to the City's pollution prevention efforts, and will continue to promote the collaborative relationship of these programs in the future. The collaborative successes of each program have continued to capitalize upon in 2009-2010 through the development of a broad-based outreach and educational campaign by the City. The City's CLEAN Business program adopted in 2008 continued to promote partnerships between the City and local businesses that operate in a socially responsible manner and protect the environment. The program was well received by local businesses and has increased in membership since its adoption.

Based on exemplary municipal pollution prevention procedures, BMP implementation, and management measures, the City has not identified any significant needs for program improvement or modification at this time.

11.3.2.1.4 INDUSTRIAL AND COMMERCIAL

The 2009-2010 reporting year was a continued maintenance year in terms of industrial and commercial activities within the City. Inventory validation and supplemental inspection efforts remain the highlights of this year's activities. As reported in previous reporting cycles, significant numbers of inspections have been conducted Citywide in order to reach out to numerous industrial and commercial facilities operating within the City. With such a significant variety of commercial and industrial activities in Chula Vista, staff has recognized the need to target those areas and business activities that remain high on the source priority list, and to provide a consistent presence and strong enforcement standard. Notably in this reporting period, Storm Water Section staff initiated an educational training program on storm water pollution prevention and BMP implementation to specific industrial facilities that have a track record of violations and were identified as High Threat To Water Quality.

The City's FY 2009-2010 inventory of industrial/commercial facilities includes 198 industrial and 1,228 commercial facilities (which includes 333 mobile businesses). In 2009-2010, Storm Water Management staff has successfully met, and in some cases exceeded, all compliance-based industrial/commercial requirements of the Municipal Permit through inspection of all high-priority and some low-priority commercial and industrial sites. As such, the City has not

identified any significant management measures, deficiencies or ineffective BMPs within the defined reporting period.

Table 11-5 FY 2009-2010 Compliance with Activity Based Requirements – Industrial/Commercial

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.b Industrial	High Priority Sites (Total Listed = 48[1])	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		48	48	48/48	100
	Low Priority Sites (Total Listed = 150)	As needed	2	As shown	100
D.3.c Commercial	High Priority Sites (Total Listed = 201)	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		201	201	201/201	100
	Low Priority Sites (Total Listed = 1,022[2])	As needed	28	As shown	100

[1] Four high priority industrial facilities included in the industrial inventory are owned by the San Diego Unified Port District and are inspected by that agency

[2] 333 commercial facilities included in the commercial inventory are mobile businesses that are regulated differently from other businesses. The Municipal Permit does not require their annual inspection.

The following features distinguish the industrial/commercial component of the City's JURMP:

Integrated and Balanced Approach

With a dedicated Storm Water Compliance Inspection staff, industrial and commercial facilities are effectively regulated. Most notably, the City's industrial and commercial inspection program is defined by a consistent presence and strong enforcement standard, and Chula Vista storm water inspection staff continues to excel in maintaining the needs of the industrial and commercial programmatic elements. Needs such as pollution prevention and BMP implementation assurance, business community education and outreach, ongoing inspection and enforcement, and maintenance of a dynamic source inventory characterize the large role these components have in the larger storm water management scheme. Further, Public Works maintenance and landscape crews, whose working environment is in the field, have been trained and educated in storm water pollution prevention and report any observed illegal activities or discharges. As such, they are considered the "eyes and ears" of the Storm Water Management Section.

Marked by exemplary inspection and enforcement processes and procedures, the City has not identified any significant need for improvement of the industrial/commercial program at this time.

11.3.2.1.5 RESIDENTIAL

As demonstrated through the narratives in other sections of this report, the expanding residential community that makes up the City of Chula Vista defines the residential component of the City's JURMP. Any small changes in behavior of residents are magnified due to the effect of numbers. As such, the Storm Water Management staff has sought to achieve continued success in the reduction of pollutants from residential areas through a variety of mechanisms geared toward behavior change. This has been approached through the characterization of a variety of activities and pollutant types associated with such activities. The Storm Water Management staff has identified a specific need to reach out to the residential community to communicate a broad based message of environmental stewardship and protection of water quality. Table 11-6 shows the quantity of Household Hazardous Waste and used oil collected from residents in the City of Chula Vista for FY 2009-2010. The significant increase in quantity collected in HHW can be attributed to an aggressive effort by the City on residential outreach and educational efforts. Conversely, the quantity of used oil collected came down dramatically in this reporting period. In previous years, the California Integrated Waste Management Board (now CalRecyle) allowed estimates given by center operators. Numbers given in the previous years are overestimated. In 2010, the State now only accepts numbers from claims submitted to the Board. Collection centers get reimbursed for the number of gallons they accept from the public. This number represents a more accurate quantity of used oil collected and will be the baseline data for tracking in the forthcoming years.

Table 11-6 FY 2009-2010 Compliance with Activity-Based Requirements – Residential

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.e Residential	Household Hazardous Material	Quantity of HHW[1] targeted for collection	Quantity of HHW collected	Actual/Target	%
		252,494 lbs (FY 08-09)	294,217 lbs (FY 09-10)	294,217/ 252,494	116
	Used Oil	Quantity of used oil collected from certified collection centers (FY 08-09)	Quantity of used oil collected from certified collection centers (FY 09-10)		%
		48,287[2] gallons	23,560[3] gallons	N/A	N/A

[1] HHW= Household Hazardous Waste

[2] In previous years the California Integrated Waste Management Board (now CalRecyle) allowed estimates given by center operators. Numbers given in the previous years are overestimated.

[3] In 2010 the State only accepts numbers from claims submitted to the Board. Collection centers get reimbursed for the number of gallons they accept from the public.

Residential Program Strengths:

Pollution Prevention
The City's residential component is strengthened by various pollution prevention programs offered to residents. Such pollution prevention programs provide the community with highly cost-effective methods of disposal of such items as used motor oil, oil filters, green waste, recyclables, used cooking oil, household hazardous waste, and electronic waste. While the details of such programs are found throughout this report, it is important to recapture the tremendous asset such programs offer the City's community.

Residential Outreach and Education
The City continued to focus significant resources on residential outreach and education efforts in 2009-2010 and constantly endeavored to devise different avenues in reaching the public. While these activities are more fully described in Section 7.0 of this report, it is necessary to recognize the importance of this attribute to the overall success of the residential sector of the community.

Residential Program Improvement Areas and Challenges:
Based on exemplary residential pollution prevention procedures, BMP implementation, management measures, and a greatly enhanced outreach and education strategy, the City has not identified any significant needs for improvement at this time.

11.3.2.1.6 EDUCATION AND PUBLIC PARTICIPATION

The City prides in its well-established and comprehensive environmental programs. The Storm Water Management Program plays a vital role in communicating water quality information to local commercial, industrial, residential, and development communities. Further, such messages are supported by cooperative efforts with such City entities as the Chula Vista Nature Center, the Conservation Department, the Regional Used Oil Recycling Program, and Household Hazardous Waste Program. With the City's commitment to environmental services and resources, the City's Storm Water Management Program has successfully collaborated with City environmental programs and departments in order to effectively reach the community at large with clear and relevant messages of environmental stewardship and protection. The accounting of activities in Sections 8 and 9 of this report has been prepared to demonstrate the broad spectrum of education and public participation opportunities provided to the community of Chula Vista.

While the City continuously strives to improve its JURMP implementation program, it has not identified specific management measures by which to improve education and public participation activities. The added Clean Business program was the latest measure added in our public participation activities. The City is committed to the continued development of such efforts as they are evaluated through the effectiveness assessment process.

Education and Public Participation Program Strengths:

Environmental Program Collaboration
As discussed throughout Sections 8 and 9 of this report and highlighted in previous reporting years, the City's Storm Water Management Program is strongly supported by numerous

environmental programs within the City. As such, the Storm Water Management Program has been able to reach more diverse audiences and participate in a greater variety of public participation venues. This collaboration of programs that culminated in the creation of the CLEAN program has resulted in clear and consistent messaging to Chula Vista residents and has reinforced City's resources toward more effective and holistic environmental programs.

While the goals of the CLEAN program have been articulated elsewhere in this report, it is important to note the unique approach to education and outreach that the City has taken. Through the collaboration of environmental programs such as conservation, household hazardous waste collection, recycling, and storm water management citizens receive consistent and interrelated messages, and participate in activities that demonstrate various facets of environmental protection. Such coordinated public education and participation programs have far reaching and lasting effects that ultimately result in general acceptance of environmental concepts and changes in behavior. It has been recognized that the interrelationship of each of these programs collectively, is integral to the overall success of each of these programs individually. Finally, the City is fortunate to have the Chula Vista Nature Center to showcase the San Diego Bay and to provide tangible access to the resources the community is called to protect.

Internal Staff Training

Through formal or informal training, meetings or individual contact staff training is conducted each year in the City on an as needed basis. With the status and trends in storm water management in such a dynamic state, Storm Water Management staff has recognized the need to consistently provide updated information to City employees. In addition, the messages must be conveyed consistently at all levels, and cover all necessary City functions.

Chula Vista CLEAN Program

The City continued to take significant steps to further implement an integrated and relevant public education and outreach program aimed at a diverse audience. Utilizing the services of I Love A Clean San Diego (ILACSD) the CLEAN program has been built upon a holistic approach and increased community participation, aiming to utilize the participating community groups, private businesses and organizations, local water agencies, local schools, developers, community groups, and others to create a shared personal commitment and a sense of ownership to the community's environment, water resources and watershed.

Education and Public Participation Program Improvement Areas and Challenges:

Education of the Development Community

The recently adopted Model SUSMP, which was incorporated in the City's local SUSMP required extra efforts by City staff, Developers, and consultants. The development community, which was used to meeting water quality requirements of their projects by mainly incorporating mechanical treatment BMPs in their drainage systems, was now faced with LID requirements. LID principles are based on site planning for the minimization of impervious areas, utilizing landscaped areas for the benefit of water quality, water conservation, and other natural site design BMPs that mimic the pre-development hydrologic conditions of the site.

The new LID concepts require site planning at the earliest stages of the project conception. A change in perspective and a closer cooperation between architects, planners, and engineers, as well as cross training among these groups are needed. Because of these reasons, and the inevitable fact that normally there is reluctance to change of acquired habits and established procedures, City staff faced the challenge of returning project submittals and meeting with project applicants, on occasions several times, before acceptable site plans were achieved. Through regional and jurisdictional efforts, developers and consultants are becoming familiar with the new requirements and are making the necessary adjustments to incorporate LID principles into their project plans. After the issuance of the current Municipal Permit, the Storm Water Management staff expanded its inspections and enforcement of post-construction BMPs to ensure BMP implementation and maintenance on development projects, often exceeding minimum requirements of the Permit. It is a priority of the City to communicate and reinforce the requirements associated with development and redevelopment projects through a consistent and clear message. This is most effectively approached through project-by-project interaction with developers and consultants.

Table 11-7 Compliance with Activity-Based Requirements – Education and Public Participation

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measure of Success	
D.3.g Education	Outreach (External)	# targeted training workshops, outreach events	# training workshops, outreach events conducted	Actual/Target	%
		12	12	12/12	100
		# Material, brochures targeted for distribution	# Materials, brochures distributed	Actual/Target	%
		General public contact	General public contact	N/A	N/A
	Staff Training	# Training sessions FY 08-09	# Training sessions FY 09-10	Actual/Target	%
		11	17	17/11	155
	Opportunities for participation	Estimated # of opportunity events to be provided	# Provided	Actual/Target	%
		3	3	3/3	100

11.3.2.2 CHANGES IN KNOWLEDGE/AWARENESS (LEVEL 2)

It is generally accepted that expanded knowledge and awareness is fundamental to bringing about desired changes in behavior. As such, the wide variety of activities captured in this report, including workshops, training, and public outreach through the Chula Vista CLEAN program all support this critical programmatic element. Notably, in 2009-2010, the City of Chula Vista completed the survey instrument designed to measure public awareness of various storm water quality related issues. The survey intends to measure the level of knowledge and associated behavioral change. Analysis of the survey has been detailed in Attachment M. During the reporting period, the City provided a wide cross-section of information through the interrelationship of various environmental programs. The City was able to significantly impact the level of knowledge and awareness within the community through its continued effort in influencing residential, industrial, commercial, and municipal activities. In order to evaluate levels of knowledge and awareness, the City has established the following indicators:

- Hotline Call Response Tracking (Residential, Industrial, Commercial, Construction)
- Business License Application Screening Procedure (Mobile Businesses)
- Storm Water Web Site (All Community Sectors)
- Development Review Process (Development Community)

It is anticipated that in future reporting years as these indicators become more wholly developed; they will provide strong directional measures toward programmatic updates. It is important to recognize that the elements presented below are only indicators used to evaluate trends in Chula Vista, and are taken collectively to express overall successes and challenges and provide programmatic guidance.

Hotline Call Response Tracking

A comprehensive hotline call response summary is presented in Attachment L – Hotline Call Response Summary. It is important to note that trends in hotline calls received by the City have remained strong since the inception of the program. Figure 11-2 shows the number of hotline calls from FY 1998-1999 to FY 2009-2010. There is a dramatic increase in hotline calls in this reporting period. This significant increase can be attributed to the expanded effort by the City in its public education and outreach that gained substantial increase in public awareness of various storm water quality issues. It may be inferred that overall programmatic influences are strong throughout the community.

Figure 11-2 Chula Vista Storm Water Hotline Call Summary 1998-2010

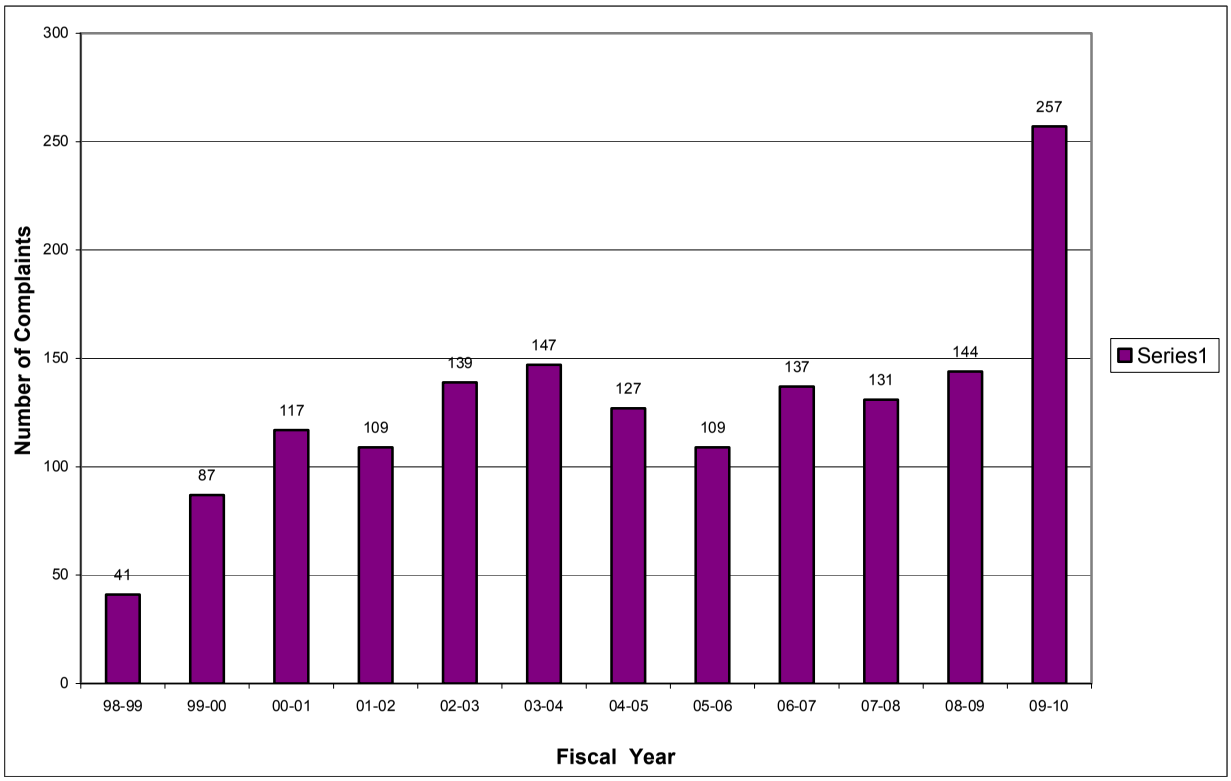

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Business License Application Screening Procedure

The Business License Application Procedure, presented in Section 5.3 of this report, has provided the City a unique mechanism in evaluating knowledge and awareness of various mobile business communities. Mobile business owners are required to complete a storm water questionnaire, read the City's Storm Water Ordinance, and review educational BMP information related to their mobile business type. Through direct interaction with business license applicants, Storm Water Management staff is able to subjectively assess the level of awareness that mobile business owners have, based on their answers to the storm water questionnaire.

The City continued to utilize the regional mobile business database website. The website includes a compilation of all approved mobile business applications in the region, which is categorized by jurisdiction. The creation of regional source inventory is a significant improvement in mobile business database management, which can provide essential information in monitoring and tracking mobile business activities in the entire region.

Storm Water Web Site

The City's CLEAN website development and update continued into 2009-2010. This site offers valuable information to Chula Vista residents and businesses and is intended to facilitate public education on environmental issues, including storm water. The website also provides a means for residents to report illegal discharges to storm drain systems. Due to technical constraints, it is not possible at this time to count the number of people accessing the website. It is hoped that this technical difficulty will be overcome in the future in order to provide a method to assess the

usefulness of the website. In the meantime, Storm Water Management Section will continue to resort to other means of assessment such as surveys.

Development Review Process

During the current reporting period, the City continued implementing the environmental review process for all development and redevelopment project submittals. The City's JURMP includes a comprehensive flow chart to show the SUSMP implementation, approval, and verification process, together with responsible departments, divisions, and sections of the City. Through the required submission of Water Quality Technical Reports (WQTR) for Priority Development Projects; subsequent review by City staff; and project pre-con meetings, in 2009-2010 a notable increase in knowledge and awareness within the development community was observed. The level of knowledge and awareness has been evaluated through a review of the comments provided and direction needed from City staff to ensure compliance with SUSMP requirements. Further, it has been noted that WQTR submittals tend to be more fully developed and generally utilize effective sets of post-construction BMPs as required. A detailed description of the review process has been discussed in section 2 of this report. It should also be noted that while great strides have been observed in the development community, the City has identified the need to consistently convey stronger regulatory standards of construction and post-construction BMPs, including Low Impact Development features, and will continue to take this approach in subsequent reporting years.

11.3.2.3 BEHAVIORAL CHANGE/BMP IMPLEMENTATION (LEVEL 3)

During this reporting period, the City continued to implement BMP tracking measures into various components as reviewed in this report. It has been recognized that through the implementation of well-developed BMP tracking measures, the City is able to more fully evaluate BMP implementation and associated behavioral change. As discussed earlier in this section, in this reporting period, the City completed its second survey to measure public awareness and behavior on various storm water quality related issues. The City has identified the following program areas as those most conducive to effectively tracking BMP implementation and evaluating behavioral change within the various regulated communities:

- Inspection Activities
- SUSMP Implementation
- Survey

Inspection Activities

As discussed in applicable sections of this report, the City has developed comprehensive commercial, industrial, municipal, and construction inspection programs. It is through these well-developed inspection programs, that the City is able to utilize BMP implementation tracking and assessment mechanisms.

In the reporting year 2009-2010, the Storm Water Management Section continued using the GBA database management system to track source inventories, inspection activities, and other data relevant to the assessment of storm water management programs. The use of the GBA was

expanded and refined to better serve the purposes of the new Municipal Permit. Through this database program, Storm Water Management staff is able to view the historical activities such as inspections and violations of commercial, industrial, municipal, and construction sites. Further, in support of BMP selection and evaluation throughout various community sectors, staff uses the inspection forms that were developed in FY 2005-2006. The inspection forms developed for commercial, industrial, municipal, and construction inspection activities are intended to provide fully developed BMP implementation tracking mechanisms.

Based on data gathered from such activities, the City is able to take a critical look at BMP selection and implementation Citywide, and be able to evaluate behavioral change within business communities and further validate effectiveness trends in years to come.

SUSMP Implementation

Within the development community, implementation of post-construction BMPs provides the City with the strongest indicator of BMP implementation and behavioral change. As discussed in Section 2.0 of this report, the City has sought to firmly establish SUSMP requirements within the development community, and has successfully implemented SUSMP procedures for all applicable projects within the defined reporting period of this report. Inherently through this process, significant numbers of post-construction BMPs have been implemented throughout the City; including site design, source control, and treatment control level BMPs.

Survey

During the reporting period, the City implemented an 11-question survey designed to measure public awareness of various storm water quality related issues and their relationship to behavioral change. A similar survey was administered in 2005 and serves as a general baseline for comparison. Although the survey in general is an assessment of public awareness, a few questions were designed to measure behavioral change. The focus of the survey was residential behaviors related to auto maintenance, landscaping, pet care, and swimming pool maintenance. Overall, results show that residents are aware of pollution prevention methods to protect waterways. Results show that some improvement can be made regarding educating residents watershed knowledge, the difference between the storm drain and the sewer system, and on BMPs for vehicle washing. Results suggest that although residents know in general how to prevent pollution, they still may not know the fundamentals of why they should prevent pollution. The City will take this knowledge and use it to better focus its education program. Attachment M provides a more detailed analysis of the survey.

11.3.2.4 LOAD REDUCTIONS (LEVEL 4)

On a regional level, some Level 4 analysis has been conducted within the ROWD and associated LTEA documents. While load reduction targeted outcomes and estimates have proven challenging on a jurisdictional level, the regional ROWD and LTEA provide the most well developed approach toward such assessments. As such, the City has developed the following snapshot of load reduction estimates on a jurisdictional level to support overall JURMP effectiveness assessment. Notably, the load reduction numbers provided below in Table 11-8 are focused on municipal functions and programs.

Table 11-8 FY 2009-2010 Load Reduction

ACTIVITY/FUNCTION	LOAD REDUCTION	POLLUTANT TYPE
Used Oil Recycling	23,560 gallons	Motor Oil
Household Hazardous Waste Collection	294,217 pounds	Antifreeze, Oils, Paints, Aerosols, etc
MS4 Maintenance	35.11 tons	Trash, Debris, Leaves, Grass, Rock, Silt
MS4 Inlets	48.94 tons	Trash, Debris, Leaves, Grass
MS4 Catch Basins	28.18 tons	Trash, Debris
Channel Maintenance	280.47 tons	Trash, Debris
Street Sweeping	940 tons	Trash, Debris, Sediment

11.3.3 INTEGRATED ASSESSMENT

A review of the results from the regional monitoring program and the City's Dry Weather Field Screening and Analytical Monitoring indicates that bacterial indicators and nitrate are the persistent constituents of concern in discharges from the City's MS4 and within the receiving waters. Other constituents of concern occasionally exceed established limits, however, they appear to be transient. Sources of bacterial indicators are commonly associated with wildlife; pet waste, improper management of restaurant waste, sewage overflows, and general residential activities and land uses. Nitrate is commonly associated with landscaping activities and groundwater intrusion. Notably, the City began a special investigation this reporting year to learn more about the sources of nitrate within the City, particularly those areas that show a consistent flow of groundwater into the storm drain system. The City will continue this special study in order to characterize these areas and to better focus its efforts in the improvement of water quality.

The City has implemented a variety of program elements that are described fully in other sections of this report, as summarized below:

- Residential and commercial public education
- Inspection of restaurants and other potential sources of bacteria
- A comprehensive sanitary sewer overflow prevention and cleanup program
- A comprehensive storm water conveyance system maintenance
- Street sweeping
- Requirements for treatment control Best Management Practices on new development and major redevelopment

The Charts included in Section 11.3.1 indicate that the majority of pollutants are on a declining trend in this reporting period. Particularly, significant decreases in Total Coliform and Fecal Coliform are encouraging. These results can be interpreted as follows:

The City expanded its public education and outreach in this reporting period. This effort was aimed at increased awareness and changes in public behavior. Based on current and past results from the dry-weather monitoring program, and past violation reports, specific residential areas

that were identified as High Threat To Water Quality (HTTWQ) were targeted for disseminating educational materials specific to the type of pollutants and violation activities. Moreover, the implementation of BMPs as described above, is considered effective in important deceases in fecal coliform and total coliform in urban runoff. This indicates that the City's programs are effective in controlling bacterial indicators. Further, due to the slowdown in construction activities, creation of urban impervious areas slowed down during the reporting period, which may also contribute to decreased instances of observed pollutant discharges. It is important to point out that this analysis should not be construed as a scientific assessment of the effectiveness of all the City's programs. As mentioned before, integrated assessment is the most difficult step in the effectiveness assessment and requires the evaluation of many diverse factors throughout a long period of time. It is expected that the next regional ROWD will include a more comprehensive evaluation of integrated assessment within the San Diego Bay Watershed and the City.

12.0 SPECIAL INVESTIGATIONS

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(k).i - A description of any special investigations conducted.

12.1 GROUNDWATER SPECIAL STUDY

The City has identified several locations where there is a consistent flow of groundwater into the City's storm drainage system. Previous dry weather monitoring reports have identified areas where there is seepage into storm drain pipes or where groundwater is freely flowing from the ground. In order to better characterize groundwater discharges within the City, a special investigation was undertaken to identify these areas. With the help of a consultant, the City identified five areas where groundwater is consistently seeping into the storm drain system. Water samples were taken from these areas and field observations were recorded. Samples were analyzed for physiochemical parameters (pH, conductivity, total dissolved solids (TDS), and turbidity) and constituents commonly associated with groundwater (nitrate, nitrite, total kjeldahl nitrogen, and total nitrogen). In addition, analysis for residual chlorine was done to determine if samples were potable water discharges. Based on preliminary review of the data, it was determined that these samples were not potable water discharges. Nitrate-nitrogen levels above the dry weather action level in addition to high TDS levels suggest that these samples are consistent with groundwater discharge characteristics. Historically, Chula Vista was largely an agricultural area in the eastern portion. Agricultural activities especially those related to fertilization could have contributed to the high nitrate levels in the soil. Recent development in Chula Vista has caused increased grading, which has mobilized soil and re-suspended nitrogen through the nitrogen cycle. Nitrate-rich groundwater in addition to fertilizers in soil may be contributing to elevated nitrogen levels observed in this special study.

The City will continue this long-term special study to identify and characterize the areas where groundwater is discharging to the storm drain system. Potential future directions involve identifying and sampling these areas, in addition to creating a map to mark and track these areas over time.

13.0 NON-EMERGENCY FIRE FIGHTING

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(l).i - A description of any efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.

13.1 INTRODUCTION

The City has developed and implemented a program to reduce pollutants from non-emergency fire fighting flows. BMPs have been implemented when conducting the following activities:

- Regular maintenance of fire and emergency vehicles and equipment
- Training exercises
- Facilities maintenance
- Post-Emergency rehabilitation of response equipment

These activities are conducted in a way to either minimize or eliminate the discharge of pollutants to the storm water conveyance system. Detailed descriptions of BMPs are given for each activity below:

13.2 BEST MANAGEMENT PRACTICES

The City has developed and implemented a program to reduce pollutants from non-emergency fire fighting flows. Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. BMPs and educational methods will be used to reduce the discharge of pollutants to the MEP. BMPs will be implemented when conducting the activities described in the following sections:

13.2.1 REGULAR MAINTENANCE OF EQUIPMENT

- Vehicles and equipment are cleaned where runoff will be directed to the sanitary sewer system.
- Vehicles and equipment are cleaned where runoff will pond and evaporate and/or where runoff will filter through landscaped areas.
- Sewer drains in a vehicle cleaning area are outfitted with a hydro screen fabric barrier to collect debris.
- Spill kits are available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents is minimized and disposed of into the sanitary sewer system.

13.2.2 TRAINING EXERCISES

- Water flows are directed to landscaped areas whenever possible.

- When water flows to an area where landscaping does not prevent runoff, the Officer-in-Charge surveys the area prior to training activities to ensure that drill activities do not wash debris or sediment to storm drain systems.
- Prior to drill activities, debris is removed from downstream areas that could potentially discharge to storm drain systems.
- Live fire training activities are pre-planned to allow integration of barriers to off-site runoff that could contribute to storm water discharges.
- On October 13, 15, 19 and 22, 2009, Storm Water Management Staff provided Storm Water Pollution Prevention Refresher Training to approximately 110 Fire Department personnel. Topics included a general overview of the storm water permit, BMPs, and the review of the City's program for non-emergency fire fighting flows.

13.2.3 FACILITIES MAINTENANCE

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways are swept regularly to remove debris. Debris is placed in the trash.
- Landscaped areas are maintained as required to reduce the introduction of leaves and other landscape waste into the MS4.
- Irrigation systems are monitored and maintained as required to reduce irrigation water from going off-site.
- Spills are cleaned up using spill kits provided at the work site, and the disposal of spilled materials is in accordance with applicable regulations.
- Hazardous materials (Hazmat) spills that require a cleanup beyond the ability of the on-site personnel are reported to the County of San Diego Hazardous Materials Division or a Hazmat certified contractor with appropriate resources to properly address the spill.
- Maintenance and repair of structures are conducted using methods that do not contribute pollutants to the MS4.

13.2.4 POST-EMERGENCY REHABILITATION OF RESPONSE EQUIPMENT

Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency are restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. Water is used only if other practical and immediately available methods cannot be identified. In such cases, water usage and discharges to MS4s are kept to a minimum and BMPs are implemented.

13.2.5 WASHING AND FUELING ACTIVITIES

The City maintains a number of fire stations, as listed in the municipal inventory. Such facilities are inspected on an as needed basis (See Attachment C). Only one fire station (Fire Station No. 4/Training Tower) has training capabilities. This facility is sloped so that all runoff generated by training activities is directed to a pervious infiltration area. Two fire stations within the City, stations No. 2 and No. 7, have fueling stations on site. Trucks from other stations are brought to these locations for fueling. The following fire stations conduct washing activities on site and pursuant to SUSMP regulations have permanent storm water BMPs installed:

- Fire Station No. 6 – 3 filter inserts and a non-storm water diverter
- Fire Station No. 7 – 1 CDS unit and a non-storm water diverter
- Fire Station No. 8 – 1 CDS unit and a non-storm water diverter

Each station is sloped so that all runoff generated by washing activities flows to a drain equipped with a non-storm water diverter mechanism, which diverts the wash water to the sanitary sewer system and rainwater to storm drain systems.

All personnel who conduct washing activities are properly trained on using the diverter device and ensuring it is used appropriately. Trucks that require cleaning from other stations are brought to the stations equipped with washing capabilities.

14.0 JURMP REVISIONS

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(m)i – A description of any proposed revisions to the JURMP.

The following paragraph details proposed updates to the City's JURMP.

APPENDIX B

Since the City's JURMP document was developed and submitted to the Regional Board in March 2008, Appendix B of the JURMP has been updated during the current reporting period, which includes inventories of construction sites; municipal, commercial, and industrial facilities and activities; and Priority Development Projects with treatment control BMPs. Updated inventories are included in Attachments A to E of this report.

15.0 CONCLUSIONS

The present report is an accounting of City of Chula Vista's activities and Jurisdictional Urban Runoff Management Program (JURMP) implementation efforts during the reporting period of July 1, 2009 to June 30, 2010. It has been prepared in compliance with the requirements of the San Diego Regional Water Quality Control Board's Order No. R9-2007-0001, National Pollutant Discharge Elimination System Municipal Permit No. CAS0108758. The report format follows the regional standardized reporting format developed by the Copermittees as required under Section M.6 of the Municipal Permit.

Section 10 "Fiscal Analysis" of this report follows the guidelines provided in the Standardized Fiscal Analysis Method and Format dated January 29, 2009, which was developed by all Copermittees pursuant to the requirements of Section G.3 of the Municipal Permit.

Submittal of Section 7 "Illicit Discharge Detection and Elimination Component" has been deferred to December 15, 2010 as permitted by Addendum No. 2 to Order No. R9-2007-0001. The Regional Board issued Addendum No. 2 in recognition of the fact that field screening and analytical monitoring work could continue to the end of September of each year, and time was required to complete, finalize, and submit the required reports.

As can be construed from the contents of this report, during the reporting period of July 1, 2009 to June 30, 2010, the City of Chula Vista met, and in some cases exceeded, implementation requirements of the Municipal Permit and the City's JURMP.

DEVELOPMENT PLANNING

A notable activity during the current reporting period was the update of the City of Chula Vista Development Storm Water Manual in March 2010. The Manual includes the City's local SUSMP. The updated Manual incorporates the requirements established under the regional Model SUSMP, including Low Impact Development and Interim Hydromodification Control requirements. The next update of the Manual is planned to take place before January 2011, and will include the final Hydromodification Management requirements.

During the reporting period, the City successfully completed implementation of the Land Development Component of the JURMP. The 2009-2010 Fiscal Year marked one of the lowest number of private development applications. Although there were a few major development projects under review by the City, only a handful of small projects received construction permits.

The City mailed out post-construction treatment control Best Management Practices (BMPs) maintenance verification letters and forms to all responsible parties and followed up to ensure that they were duly certified and returned. Inspections of post-construction treatment control BMPs were conducted on 100% of privately maintained facilities. In total, 174 projects were inspected, which exceeds Permit requirements.

Further emphasis was placed on the practice of Low Impact Development site design BMPs. Developers and consulting engineers were encouraged and required to incorporate such BMPs in

their site design as much as site conditions permitted. Three development projects were under review during the reporting period that proposed to disturb more than 50 acres and qualified for the Interim Hydromodification Criteria, however, they did not receive grading permits and are still in the design process.

CONSTRUCTION

The Construction Component of the City's JURMP primarily included inspections of construction sites for BMP implementation. The City successfully conducted all inspections on private and public construction sites and resorted to enforcement action where necessary to bring violating sites into compliance with the requirements of the City's storm water management and grading ordinances. A total of five Notices of Violation and two Civil Penalties were issued. During the reporting period, the majority of graded construction sites remained inactive. Responsible persons for such sites were contacted and they were required to repair and maintain their erosion and sediment control BMPs. A total of 303 construction inspections were conducted during the reporting period, which meets and exceeds Permit requirements.

MUNICIPAL

The Municipal Component of the City's JURMP primarily includes implementation of BMPs on all City owned facilities and activities. During the reporting period, the City ensured BMP implementation through staff training and inspections. Sixty-one high priority municipal facilities were inspected during the reporting period. The City also conducted street sweeping (18,000 curb miles), storm sewer system maintenance (removed 427 tons of waste), and sanitary sewer system maintenance (cleaned and maintained 586 miles) as source control preventive measures. Wastewater capture was implemented during graffiti removal, Integrated Pest Management practices were implemented during landscaping and parks maintenance, and waste management activities were conducted after each special community event. In Fiscal Year 2009-2010, the City achieved all its inspections, training, and BMP implementation goals under its JURMP Municipal Component.

INDUSTRIAL AND COMMERCIAL

The Industrial and Commercial Component of the City's JURMP constitutes a major section of its storm water management program. An experienced full time Storm Water Compliance Inspector is dedicated to conducting industrial and commercial inspections and providing one-on-one training to business owners and managers throughout the City. The City's industrial and commercial inventory includes 1,426 businesses, of which 249 have been categorized as high priority and the remaining are classified as low priority. All high priority industrial and commercial businesses were inspected during the current reporting period. Thirty low priority businesses were also inspected to bring the total inspections to 25% of the total inventory as required by the Municipal Permit.

Mobile businesses applying for business licenses were directed to the Storm Water Management Section for training and signing of a certification statement to the effect that they are familiar with the City's storm water regulations and would implement BMPs appropriate to their line of

business at all times. During the reporting period, 164 mobile businesses went through this process.

RESIDENTIAL

The City has developed the residential component of the JURMP based upon a multi-faceted approach, including pollution prevention; hotline response and enforcement; and outreach and education. The City collects and analyzes information about various aspects of observed and reported violations from multiple sources to identify high-priority residential areas and activities. Such areas and activities are then targeted for public education and outreach. The current reporting period marks a significant jump in the number of hotline calls, which can be indicative of the public awareness of storm water regulations and the relative ease of reporting.

During the reporting period, various programs under the City's residential component continued, including 1) Household hazardous waste collection center, 2) State-certified used-oil collection center, 3) Household collection of used oil, 4) Christmas tree recycling program, 5) Residential complaint response and enforcement, 6) Residential door hangers, and 7) City's environmental website.

PUBLIC EDUCATION AND OUTREACH

The City of Chula Vista has identified public education and outreach as powerful and effective tools towards increased awareness and behavioral changes that will ultimately lead to reduced pollutant loading from various land uses and activities. As such, the City places great importance on its education and outreach programs. During the reporting period, City staff organized or participated in 17 training and educational events.

The CLEAN group continued its activities toward its mission: "Foster environmental awareness in the City of Chula Vista, through stakeholder and community involvement and participation." CLEAN group activities included media articles, school education efforts, community events, and Chula Vista Nature Center presentations and field trips. In total, City staff organized or participated in 12 educational events and provided public education on storm water regulations and BMP implementation during everyday residential activities.

City staff provided public education to industrial, commercial, and construction communities by one-on-one contact and on-site training. Business owners and managers, and construction site personnel were trained based on their specific site conditions and pollutant generating activities.
The City's storm water management program is based on the concept of continuous improvement through iterative goal setting, implementation, and assessment cycles. This process requires identifying measurable goals the beginning of the process, followed by implementation of tasks, and then assessment and comparison of results with identified goals. This illustrates the importance of assessment in any storm water management program.

PROGRAM EFFECTIVENESS ASSESSMENT

During the reporting period, the City of Chula Vista continued using the methodology developed in the regional document "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs." Assessment tools such as assessment of activity based results, surveys, and dry weather monitoring results were used to arrive at acceptable conclusions. Higher levels of assessment such as changes in discharge quality and receiving water quality were deemed to be beyond the scope of jurisdictional programs and, therefore, delegated to regional research and analysis such as the Regional Monitoring Program, Long-Term Effectiveness Assessment, and the Report of Waste Discharge.

Assessment results indicate that during the Fiscal Year 2009-2010, the City of Chula Vista met all its measurable goals for program element implementation. Dry Weather monitoring indicates that the majority of pollutants of concern show decreasing trends, while some still pose a challenge. In particular, nitrate and bacterial indicators appear to pose persistent problems, which the program should focus on in future years.

FISCAL ANALYSIS

A successful storm water program would require adequate funding. During the current reporting period, the City of Chula Vista made such funds available through various sources including the general fund, storm drain fee, sewer fee, special assessment district fees, etc. The total jurisdictional storm water program costs amounted to about $2.5 million. There were other City programs designed to serve multiple objectives, including storm water pollution prevention, such as wastewater collection system maintenance, household hazardous waste management, etc. The total cost for such programs amounted to about $4.7 million.

Additionally, the City contributed its share to watershed and regional activities. The total for such programs amounted to about $277,000 during the reporting period.

As the City of Chula Vista continues its efforts toward environmental protection in general and water quality improvements in particular, its storm water management program becomes more refined and a part of a more holistic sustainability program.

Attachment A
SUSMP Projects Inventory
FY 2009-2010

Note: This table represents a comprehensive list of SUSMP projects completed or under construction since the inception of SUSMP requirements.

Project Name	Subdivision	Neighborhood	Types of BMP: BMP Type- Group I	Types of BMP: BMP Type - Group II	Category	Inspection Priority
Bella Lago						
Bella Lago	Bella Lago	R-1	TC-40 Media Filter	TC-22 Extended Det Basin	Residential	High
Eastlake Vistas						
Abilene	Eastlake Vistas	VR-7	MP-51 Vortex Separator		Residential	Low
Alder Lane	Eastlake Vistas	VR-12	MP-51 Vortex Separator		Residential	High
Aqua	Eastlake Vistas	VR-3	MP-51 Vortex Separator		Residential	Low
Atrium	Eastlake Vistas	VR-2	MP-51 Vortex Separator		Residential	Low
Bridgepark	Eastlake Vistas	VR-5	MP-51 Vortex Separator		Residential	Low
Colrich	Eastlake Vistas	VR-1	MP-51 Vortex Separator		Residential	Low
Lost Creek	Eastlake Vistas	VR-4	MP-51 Vortex Separator		Residential	Low
Monticello	Eastlake Vistas	VR-8	MP-51 Vortex Separator		Residential	Medium
Sonora Ridge	Eastlake Vistas	VR-9 & 11	MP-51 Vortex Separator		Residential	Low

Project Name	Subdivision	Neighborhood	Types of BMP: BMP Type- Group I	Types of BMP: BMP Type - Group II	Category	Inspection Priority
Summerhill	Eastlake Vistas	VR-10	MP-51 Vortex Separator		Residential	Low
Valencia	Eastlake Vistas	VR-6	MP-51 Vortex Separator		Residential	Low
Eastlake Woods						
Cornerstone	Eastlake Woods	WR-4	MP-51 Vortex Separator		Residential	Low
K Hovnanian	Eastlake Woods	WR-5	MP-51 Vortex Separator		Residential	Low
Meredian	Eastlake Woods	WR-6	MP-52 Drain Insert		Residential	Medium
Reserves	Eastlake Woods	WR-2	MP-51 Vortex Separator	MP-52 Drain Inlet	Residential	Low
Sonoma	Eastlake Woods	WR-7	MP-52 Drain Insert		Residential	Medium
The Woods	Eastlake Woods	WR-3	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Miscellaneous						
2380 Main Street	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
725 Main Street	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	Medium
805 / Orange Interchange	Miscellaneous	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium
Ada Terraces	Miscellaneous	N/A	MP-52 Drain Insert		Residential	Medium

Project Name	Subdivision	Neighborhood	Types of BMP BMP Type- Group I	BMP Type - Group II	Category	Inspection Priority
Ada Townhomes	Miscellaneous	N/A	TC-30 Vegetated Swale		Residential	Medium
Ada Villas 1	Miscellaneous	N/A	MP-52 Drain Insert		Residential	Medium
Aqua Clean	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High
Auto Park North	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
Bonita Arco	Miscellaneous	N/A	TC-30 Vegetated Swale		Commercial	Low
Bonita Library	Miscellaneous	N/A	MP-52 Drain Insert MP-51 Vortex Separator	TC-30 Vegetated Swale	Miscelleneous	Low
Brisas Del Mar Village	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	Medium
C.V. Commerce Center	Miscellaneous	N/A	MP-51 Vortex Separator		Miscelleneous	High
C.V. Corporate Center	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
Chevron Station-Olympic Parkway #1975	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High
Chula Vista Civic Center	Miscellaneous	N/A	MP-51 Vortex Separator TC-30 Vegetated Swale	MP-52 Drain Inlet	Municipal	Low
Chula Vista Crossings	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Miscelleneous	High
Chula Vista Elementary School District Bus Yard	Miscellaneous	N/A	MP-50 Wet Vault MP-52 Drain Inlet	TC-30 Vegetated Swale	Miscelleneous	High
Chula Vista Toyota	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Concordia Church and School	Miscellaneous	N/A	TC-30 Vegetated Swale	TC-32 Bioretention	Miscelleneous	Low
COSTCO at Broadway	Miscellaneous	N/A	MP-51 Vortex Separator		Commercial	High
Dixon Drive CIP	Miscellaneous	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium
Doctor's Park	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Miscelleneous	High
Eastlake - Village Walk	Miscellaneous	N/A	MP-52 Drain Inlet	MP-51 Vortex Separator	Miscelleneous	High
Eastlake Business Center-Hale Place	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
Eastlake Commerce-Business Center	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
Eastlake Community Church	Miscellaneous	N/A	MP-52 Drain Insert	Other	Miscelleneous	Low
Eastlake Design District	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Miscelleneous	High
Eastlake Little League Field	Miscellaneous	N/A	TC-30 Vegetated Swale		Miscellaneous	Low
Eastlake Marketplace	Miscellaneous	N/A	MP-51 Vortex Separator		Miscelleneous	High
Eastlake Parkway Professional Plaza	Miscellaneous	N/A	MP-52 Drain Insert	TC-30 Vegetated Swale	Miscelleneous	High
Eastlake Terrace-Landswap	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
Eastlake Terraces North-Ltd Edition	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Miscelleneous	Low

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Eastlake Village Center East	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
Enterprise Administration Bldg.	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
Fenton Business Center	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
Fire Station #6	Miscellaneous	N/A	MP-52 Drain Insert		Municipal	Low
Fire Station #7	Miscellaneous	N/A	MP-51 Vortex Separator	Other	Municipal	Low
Fire Station #8	Miscellaneous	N/A	MP-51 Vortex Separator		Municipal	Low
First Avenue-Naples to Palomar CIP	Miscellaneous	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium
Glenhaven Way Improvements CIP	Miscellaneous	N/A	TC-32 Bioretention		CIP With SUSMP	Low
High Tech Business Center @ Eastlake	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Industrial	Low
High Tech High Chula Vista Campus	Miscellaneous	N/A	TC-30 Vegetated Swale TC-11 Infiltration Basin	MP-52 Drain Inlet	Residential	Low
Home Depot Eastlake	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High
Horizon Neighborhood Park	Miscellaneous	N/A	MP-52 Drain Insert		Municipal	High
J&W Redwood	Miscellaneous	N/A	TC-11 Infiltration Basin		Commercial	Low
Kingdom Hall - Rolling Hills Ranch	Miscellaneous	N/A	TC-32 Bioretention	TC-11 Infiltration Basin	Miscelleneous	Low

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Kohls @ Eastlake	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High
LA Fitness Eastlake Village Center	Miscellaneous	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Miscelleneous	Medium
Lady of Guadalupe Church	Miscellaneous	N/A	TC-30 Vegetated Swale		Miscellaneous	Medium
Los Vecinos Apartments	Miscellaneous	N/A	MP-50 Wet Vault Other	Other	Residential	Low
Mater Dei High School	Miscellaneous	N/A	MP-50 Wet Vault		Miscellaneous	Low
McCune Chrysler Dodge	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High
Montevalle Park	Miscellaneous	N/A	MP-52 Drain Insert		Municipal	High
Mountain Hawk Park	Miscellaneous	N/A	MP-52 Drain Insert		Municipal	High
New Hope Church	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Miscelleneous	Low
North Broadway Basin Reconstruction - CIP	Miscellaneous	N/A		TC-40 Medial Filter	CIP With SUSMP	Medium
Olympic Parkway to Hunte Pkwy	Miscellaneous	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Residential	Low
Otay Lakes Medical Office	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
Otay Ranch Town Center	Miscellaneous	N/A	MP-51 Vortex Separator		Miscelleneous	High
Otay Ranch Village 11 Rec Center	Miscellaneous	N/A	TC-30 Vegetated Swale		Residential	Low

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Palomar Street Improvements Trenton	Miscellaneous	N/A	MP-51 Vortex Separator		Residential	Low
Pharus Plaza	Miscellaneous	N/A	MP-51 Vortex Separator		Miscelleneous	Low
Rancho Rios Condo	Miscellaneous	N/A	MP-52 Drain Insert		Residential	Medium
Rancho Vista Apartments	Miscellaneous	N/A	MP-51 Vortex Separator		Residential	Medium
Retail Center	Miscellaneous	N/A	TC-50 Water Qaulity Inlet		Miscelleneous	Low
Road One of San Diego	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low
Salt Creek Park	Miscellaneous	N/A	MP-51 Vortex Separator		Municipal	High
Savon-CVS Pharmacy @ Fourth Av.	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	High
Seniors at Broadway	Miscellaneous	N/A	MP-52 Drain Insert		Residential	Medium
Sharp Hospital Parking Lot	Miscellaneous	N/A	TC-32 Bioretention		Miscelleneous	Low
Southbay Motorsports	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High
Sunset View Park	Miscellaneous	N/A		MP-52 Drain Inlet	Municipal	High
Telegraph Canyon CIP	Miscellaneous	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium
Terra Nova Service Plaza	Miscellaneous	N/A	TC-40 Media Filter		Commercial	Medium

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
The Collections @ Eastlake	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High
The Marketplace	Miscellaneous	N/A	MP-52 Drain Insert	TC-22 Extended Det Basin	Miscelleneous	High
The Shops at San Miguel Ranch	Miscellaneous	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Miscelleneous	High
Tobias Drive CIP	Miscellaneous	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium
Venture Commerce Center	Miscellaneous	N/A	MP-51 Vortex Separator		Miscelleneous	High
Veterans Park	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Municipal	Low
Village Walk - Medical Arts Center	Miscellaneous	N/A	MP-52 Drain Insert	TC-30 Vegetated Swale	Miscelleneous	High
Walgreens @ Third Avenue	Miscellaneous	N/A	MP-52 Drain Insert		Miscelleneous	Medium
Walmart @ Eastlake	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High
Walmart at 5305 Broadway	Miscellaneous	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	High
Wells Fargo Bank	Miscellaneous	N/A	TC-30 Vegetated Swale		Miscelleneous	Low
West Air Gas & Equip Inc.	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Industrial	Low
Windingwalk Park	Miscellaneous	N/A	TC-30 Vegetated Swale		Municipal	Low
All Seasons Park	Miscellaneous	N/A	TC-30 Vegetated Swale	TC-22 Extended Det Basin	Municipal	Low

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Corpus Christi Catholic Church	Miscellaneous	N/A	Other	TC-32 Bioretention	Miscelleneous	Low
Eastlake RV & Boat Storage	Miscellaneous	N/A	TC-40 Media Filter		Commercial	Low
Mace Street Equestrian & 27th Street Staging Areas	Miscellaneous	N/A	TC-30 Vegetated Swale		CIP With SUSMP	Low
Saint Rose of Lima Catholic Church	Miscellaneous	N/A	TC-30 Vegetated Swale		Miscelleneous	Low
San Miguel Ranch Community Park	Miscellaneous	N/A	TC-32 Bioretention	TC-30 Vegetated Swale	Municipal	Low
Southbound 805 Off-Ramp Bonita Road	Miscellaneous	N/A			CIP With SUSMP	Medium
St Pius X Catholic Church	Miscellaneous	N/A			Miscelleneous	Low
Sunbow Villas	Miscellaneous	N/A			Residential	Medium
Villas at H Street	Miscellaneous	N/A	MP-52 Drain Insert		Residential	Low
Otay Ranch V-1 West						
Canyon View	Otay Ranch V-1 West	R59C & R60	MP-52 Drain Insert		Residential	Medium
Otay Ranch V-11						
Agave	Otay Ranch V-11	R-24A		TC-22 Extended Det Basin	Residential	Low
Aristata	Otay Ranch V-11	R-25		TC-22 Extended Det Basin	Residential	Low

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Azalea	Otay Ranch V-11	R-23	MP-51 Vortex Separator		Residential	Low
Cedar Rose I	Otay Ranch V-11	R-7		TC-22 Extended Det Basin	Residential	Low
Cedar Rose II	Otay Ranch V-11	R-10		TC-22 Extended Det Basin	Residential	Low
Cottage Lane	Otay Ranch V-11	R-20		TC-22 Extended Det Basin	Residential	Low
Cottage Lane II	Otay Ranch V-11	R-21		TC-22 Extended Det Basin	Residential	Low
Cottage Lane III	Otay Ranch V-11	R-22		TC-22 Extended Det Basin	Residential	Low
Lantana	Otay Ranch V-11	R-9		TC-22 Extended Det Basin	Residential	Low
Magnolia I	Otay Ranch V-11	R-4		TC-22 Extended Det Basin	Residential	Low
Magnolia II	Otay Ranch V-11	R-5		TC-22 Extended Det Basin	Residential	Low
Magnolia III	Otay Ranch V-11	R-6		TC-22 Extended Det Basin	Residential	Low
Picket Fence	Otay Ranch V-11	R-8		TC-22 Extended Det Basin	Residential	Low
The Lofts/Landing Apartments	Otay Ranch V-11	R-26		TC-22 Extended Det Basin	Residential	Low
Twilight I	Otay Ranch V-11	R-2		TC-22 Extended Det Basin	Residential	Low
Twilight II	Otay Ranch V-11	R-3		TC-22 Extended Det Basin	Residential	Low

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Wisteria	Otay Ranch V-11	R-1		TC-22 Extended Det Basin	Residential	Low
Saguara	Otay Ranch V-11	R-24B		TC-22 Extended Det Basin	Residential	Low
Otay Ranch V-5						
Goldrush	Otay Ranch V-5	R-30A	MP-51 Vortex Separator		Residential	Low
Silver Sage	Otay Ranch V-5	R-30B3	MP-51 Vortex Separator		Residential	Low
Stetson	Otay Ranch V-5	R-30B2	MP-51 Vortex Separator		Residential	Low
Villagio	Otay Ranch V-5	R45	MP-51 Vortex Separator		Miscelleneous	Low
Winchester	Otay Ranch V-5	R-30B	MP-51 Vortex Separator		Residential	Low
Otay Ranch V-6						
Auburn Lane	Otay Ranch V-6	R-4	MP-52 Drain Insert		Residential	Medium
Cambria	Otay Ranch V-6	R-2A	MP-51 Vortex Separator		Residential	Low
Chateau Belleme	Otay Ranch V-6	R-7A	MP-51 Vortex Separator		Residential	Low
Jasmine	Otay Ranch V-6	R-6	MP-52 Drain Insert		Residential	Medium
Madera	Otay Ranch V-6	R-5A	MP-51 Vortex Separator		Residential	Low

Project Name	Subdivision	Neighborhood	Types of BMP: BMP Type- Group I	Types of BMP: BMP Type - Group II	Category	Inspection Priority
Mandalay	Otay Ranch V-6	R-1	MP-52 Drain Insert		Residential	Medium
Mir Soliel	Otay Ranch V-6	R-8	MP-51 Vortex Separator		Residential	Low
Rosewood	Otay Ranch V-6	R-9A	MP-51 Vortex Separator		Residential	Low
Sienna	Otay Ranch V-6	R-3	MP-52 Drain Insert		Residential	Medium
Villas Belleme	Otay Ranch V-6	R-7	MP-51 Vortex Separator		Residential	Low
Willowbrook	Otay Ranch V-6	R-2B	MP-51 Vortex Separator		Residential	Low
Windchime	Otay Ranch V-6	R-9B	MP-51 Vortex Separator		Residential	Low
Marquis	Otay Ranch V-6	MU1	TC-30 Vegetated Swale	MP-51 Vortex Separator	Residential	Low
Monet	Otay Ranch V-6	R-9B	MP-51 Vortex Separator		Residential	Low
Treviana	Otay Ranch V-6	R-10	MP-52 Drain Insert		Residential	Medium
Otay Ranch V-7						
Cypress Lane	Otay Ranch V-7	R-2D	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Indigo	Otay Ranch V-7	R-1A	MP-52 Drain Insert		Residential	Medium
Jacaranda	Otay Ranch V-7	R-1B	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Monte Sereno	Otay Ranch V-7	R-2C	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Mosaic	Otay Ranch V-7	R-7	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Santa Barbara	Otay Ranch V-7	R-2A	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Tapestry	Otay Ranch V-7	R-6A	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Terracotta	Otay Ranch V-7	R-5	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Terraza	Otay Ranch V-7	R-2B	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Rolling Hills Ranch						
Castillian	Rolling Hills Ranch	N9B		TC-22 Extended Det Basin	Residential	Low
Clearstory	Rolling Hills Ranch	N12B		TC-22 Extended Det Basin	Residential	Low
Fairhaven II	Rolling Hills Ranch	N7C	MP-52 Drain Insert		Residential	Medium
Provence	Rolling Hills Ranch	N12A		TC-22 Extended Det Basin	Residential	Low
Quintessa	Rolling Hills Ranch	N9A		TC-22 Extended Det Basin	Residential	Low
Sedona	Rolling Hills Ranch	N4A2	MP-52 Drain Insert		Residential	Medium
San Miguel Ranch						

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Belleza	San Miguel Ranch	Neighborhood B	MP-51 Vortex Separator		Residential	Low
Mantilla	San Miguel Ranch	Neighborhood C	MP-52 Drain Insert		Residential	Medium
Mar Brisa	San Miguel Ranch	N4A1	MP-52 Drain Insert		Residential	Medium
Ventana I	San Miguel Ranch	Planning Area F	MP-52 Drain Insert		Residential	Medium
Ventana II	San Miguel Ranch	Planning Area G	MP-52 Drain Insert		Residential	Medium
Estrella	San Miguel Ranch	J2	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Sunbow						
Bella Sol	Sunbow	Planning Area 11	MP-51 Vortex Separator		Residential	Low
The Summit						
Andora	The Summit	R-9B	MP-52 Drain Insert		Residential	Medium
Capria	The Summit	R9E	MP-52 Drain Insert		Residential	Medium
Cortina	The Summit	R9D	MP-52 Drain Insert		Residential	Medium
Firenze	The Summit	R9A	MP-52 Drain Insert		Residential	Medium
Veranza	The Summit	R9C	MP-52 Drain Insert		Residential	Medium

Total Projects:: **181**

Attachment B
FY 2009-2010 Construction Sites Inventory

The construction site inventory is updated monthly. This attachment lists construction sites for the last month of the reporting period. Previous months' inventories are available in the City's database.

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Eastlake Summit					
Eastlake Summit	Buie Communities- Veranza	R9C	Inactive-Not Complete	EL106I	Medium
Eastlake Summit	Cortina	R9D	Active	EL104I	Medium
Eastlake Summit	Andora	R9B	Active	EL103I	Medium
Miscellaneous					
Miscellaneous	Robinhood Pump Station		Active	SW256	Low
Miscellaneous	North Broadway Basin Project		Active	STM354	Low
Miscellaneous	Villas at H Street		Active	PG749/PC1817	Medium
Miscellaneous	La Roca Comunidad Cristiana		Inactive-Not Complete	OR196G	Low
Miscellaneous	Saint Rose of Lima Parish-Phase 1, 293 H Street		Active	PG780 / PC1955	Low
Miscellaneous	Curb and Pedramps FY 09-10		Active	STL348	Low
Miscellaneous	1590 West Frontage Road		Inactive-Not Complete	PG754 / PC1821	Low
Miscellaneous	G Street Sewer Improvements from Fourth to Second Avenue		Active	SW251	Low
Miscellaneous	Corpus Christi Catholic Church - 450 Corral Canyon		Active	PG785 / PC1988	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Miscellaneous	144 27th Street-Buidling		Inactive-Not Complete	PG770	Low
Miscellaneous	Mount San Miguel Community Park		Active	PR260	Low
Miscellaneous	Grading for storage @ 2371 Boswell Court		Active	PG784	Low
Miscellaneous	Fourth Avenue Improvements		Active	STL291	High
Miscellaneous	Otay Valley Regional park, Phase 2 Trails		Active	AC360	Medium
Miscellaneous	Westmon Senior Homes -509 Mount Miguel Road		Inactive-Not Complete	SM026G	Low
Otay Ranch, Village 11					
Otay Ranch, Village 11	Saguard		Active	OR624I	Low
Otay Ranch, Village 11	Agave	R24A	Active	OR624I	Medium
Otay Ranch, Village 11	Clover	R18	Active	OR633I	Medium
Otay Ranch, Village 11	Cordova -Courtyard	R17	Active	OR634I	Medium
Otay Ranch, Village 11	Trellis I	R15	Active	OR627I	Low
Otay Ranch, Village 11	The Lofts		Inactive-Not Complete	OR635I	Low
Otay Ranch, Village 2					
Otay Ranch, Village 2	Future SFD-under grading phase	R24	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R18A	Inactive-Not Complete		Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 2	Future MFD-under grading phase	R29	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R4	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R23	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R21	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R20	Inactive-Not Complete	PG656	Low
Otay Ranch, Village 2	Future SFD-under grading phase	R19	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R18B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R25A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R28	Inactive-Not Complete		Low
Otay Ranch, Village 2	Anacapa	R9A	Inactive-Not Complete	OR805I	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R10	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R11	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R12	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R13 (Village 2 East)	Active	OR815I / G	Medium
Otay Ranch, Village 2	North- Future MFD-under grading phase	R16	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future Mixed Used-under grading phase	MU1	Inactive-Not Complete		Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 2	Future MFD-under grading phase	R26	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R15	Inactive-Not Complete	OR806I	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R27	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD (Alley)-under grading phase	R5B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future Mixed Use-under grading phase	MU2	Inactive-Not Complete		Low
Otay Ranch, Village 2	North- Future Mixed Use-under grading phase	MU3	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R8	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R25B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R9B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R17	Inactive-Not Complete		Low
Otay Ranch, Village 2	Lindera Kane (Alley)	R5A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Presidio	R7	Inactive-Not Complete		Low
Otay Ranch, Village 2	Sevilla	R30	Inactive-Not Complete	OR814I	Low
Otay Ranch, Village 2	Future Mixed-Under Grading Phase	R12, R13, R14, R15, R29, R30,	Inactive-Not Complete	OR805G	Medium
Otay Ranch, Village 2	North- Heritage Road		Inactive-Not Complete	OR807G	Medium
Otay Ranch, Village 2	North- Future Mixed-Under Grading Phase	R5, R6, R7, R8, R9, R10	Inactive-Not Complete	OR809G	Medium

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 2	Future MFD-under grading phase	R14 (Village 2 East)	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R30 (Village 2 East)	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase -MU3	MU3	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	La Purisma	R6	Inactive-Not Complete		Low
Otay Ranch, Village 2	Tavera	R14	Inactive-Not Complete	OR813I	Low
Otay Ranch, Village 2 North					
Otay Ranch, Village 2 North	OR Village2 North Improvement 1	Unit 1	Inactive-Not Complete	OR811I	Low
Otay Ranch, Village 2 North	OR Village2 North Improvement 2	Unit 2	Inactive-Not Complete	OR812I	Low
Otay Ranch, Village 2 South					
Otay Ranch, Village 2 South	Mass Grading		Inactive-Not Complete	OR830G	Low
Otay Ranch, Village 6, ORC					
Otay Ranch, Village 6, ORC	Treviana	R10	Inactive-Not Complete	OR418C	Low
Otay Ranch, Village 6, ORC	Marquis		Inactive-Not Complete		Low
Otay Ranch, Village 7, McMillin					
Otay Ranch, Village 7, McMillin	Terracotta	R5	Active	OR458I /OR451G	Low
Otay Ranch, Village 7, McMillin	Tapestry	R6A	Active	OR461G	Low
Otay Ranch, Village 7, McMillin	Mosaic I & II	R6B & R7A	Active	OR461G	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 7, McMillin	Jacaranda	R1B	Active	OR459I /OR451G	Low
Otay Ranch, Village 7, McMillin	Future	R7B	Inactive-Not Complete		Low
Otay Ranch, Village 7, McMillin	All Seasons Park		Active	PR279	High
Otay Ranch, Village 7, McMillin	Indigo	R1A	Active	OR457I /OR451G	Low
Otay Ranch, Village 7, ORC					
Otay Ranch, Village 7, ORC	Open Space Designated	R3	Inactive-Not Complete		Low
Otay Ranch, Village 7, ORC	Santa Barbara	R2A	Active	OR973I	High
Otay Ranch, Village 7, ORC	Terraza	R2B	Active	OR973I	Medium
Otay Ranch, Village 7, ORC	Monte Sereno	R2C	Active	OR973I	Medium
Otay Ranch, Village 7, ORC	Cypress Lane	R2D	Active	OR973I	Medium
Otay Ranch, Village 7, ORC	Open Space Designated	R4	Inactive-Not Complete		Low
Rolling Hills Ranch					
Rolling Hills Ranch	Bella Lago -Future-SFD	R1	Active	BE002G /BE002I	High
Rolling Hills Ranch	Portola	N10A	Active	RH237I	Low
Rolling Hills Ranch	Future MFD	N11	Inactive-Not Complete	RH241I	Low
Rolling Hills Ranch	Future MFD	N9-N12 Backbone	Inactive-Not Complete	RH229G	Medium

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Rolling Hills Ranch	Rolling Hills-Backbone Improvements	N9-N12	Inactive-Not Complete	RH231C	Medium
San Miguel Ranch					
San Miguel Ranch	Montecito Ridge	J1	Inactive-Not Complete	SM016I	Medium
San Miguel Ranch	Proctor Valley Road		Inactive-Not Complete	SM020I	Medium
San Miguel Ranch	Backbone Improvements-Avenida Loreta		Inactive-Not Complete	SM014C	Medium
San Miguel Ranch	Spring Hills Senior Care		Inactive-Not Complete		Low
San Miguel Ranch	San Miguel Ranch Road		Inactive-Not Complete	SM013C	Medium
San Miguel Ranch	Bontera	K	Active	SM015I	Medium
San Miguel Ranch	Marvilla	L	Active	SM022I	High
San Miguel Ranch	Estrella	J2	Active	SM018I	Medium

Total: **94**

Attachment C

Municipal Facility Source Inventory and Prioritization
FY 2009-2010

Facility Name	APN Number	Type of Facility	Address			Priority
All Seasons Park		Parks-Landscape-Rec Areas		MAGDALENA	AV	Low
Animal Care Facility	6290605400	Animal Facilities	130	BEYER	WY	High
Bay Boulevard Park	5670213202	Parks-Landscape-Rec Areas		BAY	BL	High
Bonita Long Canyon Park	5941100500	Parks-Landscape-Rec Areas	1745	COLTRIDGE	LN	High
Breezewood Park	6425004600	Parks-Landscape-Rec Areas	1091	BREEZEWOOD	DR	High
Chula Vista Civic Center	5684505700	Parks-Landscape-Rec Areas	476	FOURTH	AV	Low
Chula Vista Community Park	5953200200	Parks-Landscape-Rec Areas	1060	EASTLAKE	PW	High
Chula Vista Municipal Golf Course	5932402400	Parks-Landscape-Rec Areas	4475	BONITA	RD	High
Chula Vista Women's Club	5683004200	Parks-Landscape-Rec Areas	357	G	ST	High
Civic Center and Admin Building	5681103300	Other Fixed Facilities	276	FOURTH	AV	Medium
Civic Center Branch Library	5681530200	Other Fixed Facilities	365	F	ST	Low
Community Youth Center	5723001100	Parks-Landscape-Rec Areas	465	L	ST	High
Conneley Park	6233143300	Parks-Landscape-Rec Areas	1559	CONNOLEY	AV	High
Cottonwood Park	6424210600	Parks-Landscape-Rec Areas	1778	PALOMAR	ST	High
Discovery Park	6423930700	Parks-Landscape-Rec Areas	700	BUENA VISTA	WY	High
Downtown Parking Facility	5682702900	Other Fixed Facilities	340	F	ST	High
Eastlake Branch Library	5953201700	Library	1120	EASTLAKE	PW	Low
Eucalyptus Park	5651200300	Parks-Landscape-Rec Areas	47	FIFTH	AV	High
Explorer Park	6400301900	Parks-Landscape-Rec Areas		NORELLA	ST	High
Fire Station #1	5681103300	Fire Stations	447	F	ST	Low
Fire Station #2	5743003300	Fire Stations	80	J	ST	Low
Fire Station #3	6411213000	Fire Stations	1410	BRANDYWINE	AV	Low
Fire Station #4/Training Tower	6423910600	Fire Stations	850	PASEO RANCHERO		Medium
Fire Station #5	6192110100	Fire Stations	391	OXFORD	ST	Low

Facility Name	APN Number	Type of Facility	Address			Priority
Fire Station #6	5955700100	Fire Stations	605	MOUNT MIGUEL	RD	Low
Fire Station #7	5950805400	Fire Stations	1640	SANTA VENETIA	ST	Low
Fire Station #8	5950805400	Fire Stations	1180	WOODS	DR	Low
Fire Station 9	6202401700	Fire Stations	266	ONEIDA	ST	Low
Friendship Park	5681530100	Parks-Landscape-Rec Areas	365	F	ST	High
Gayle McCandliss Park	6390301300	Parks-Landscape-Rec Areas	415	J	ST	High
Greg Rogers Park	6200600300	Parks-Landscape-Rec Areas	1189	OLEANDER	AV	High
H Street Land Application	5740300800	Other Fixed Facilities		H	ST	High
Harborside Park	6182005900	Parks-Landscape-Rec Areas	670	OXFORD	ST	High
Harvest Park	6425814800	Parks-Landscape-Rec Areas	1381	PALOMAR	ST	High
Heritage Park & Community Center	6425601100	Parks-Landscape-Rec Areas	1550	PALOMAR	ST	High
Hilltop Park	5744104600	Parks-Landscape-Rec Areas	780	HILLTOP	DR	High
Holiday Estates I&II	6233413100	Other Fixed Facilities	27	CONNOLEY	CI	Low
Horizon Neighborhood Park	6410721600	Parks-Landscape-Rec Areas	970	PALOMAR	ST	High
Independence Park	6423205600	Parks-Landscape-Rec Areas	1248	CALLE SANTIAGO		High
John Lippit PWC & Admin Building	6442301100	Other Fixed Facilities	1800	MAXWELL	RD	High
Ken Lee Administration Building	5681814400	Other Fixed Facilities	430	F	ST	Low
Lancerlot Park	5711701800	Parks-Landscape-Rec Areas	750	K	ST	High
Landscape Maintenance		Mobile Mun Activities				Medium
Lauderbach Park	6192113700	Parks-Landscape-Rec Areas	333	OXFORD	ST	High
Loma Verde Park & Recreation Center	6240107200	Parks-Landscape-Rec Areas	1420	LOMA	LN	High
Los Ninos Park	6243411200	Parks-Landscape-Rec Areas	150	TEAL	ST	High
Mackenzie Creek Park	5955700200	Parks-Landscape-Rec Areas	2275	MACKENZIE CREEK	RD	High
Marisol Park	5933803600	Parks-Landscape-Rec Areas	916	RANCHO DEL REY	PW	High
Memorial Park	5683004300	Parks-Landscape-Rec Areas	373	PARK	WY	High
Mini Park	5952145100	Parks-Landscape-Rec Areas	753	ASHBROOK	DR	High
Montevalle Park & Community Center	5957360600	Parks-Landscape-Rec Areas	840	DUNCAN RANCH	RD	High

Facility Name	APN Number	Type of Facility	Address			Priority
Mountain Hawk Park	6435180200	Parks-Landscape-Rec Areas	1475	LAKE CREST	DR	High
MS4 Throughout the City of CV		Others				High
Nature Center	5650102900	Parks-Landscape-Rec Areas	1000	GUNPOWDER POINT	DR	High
Norman Park and Recreation Center	5683331100	Parks-Landscape-Rec Areas	270	F	ST	High
Old Public Works Yard	5670312700	Public Work Facilities	707	F	ST	High
Orange Avenue Fields	6240107200	Parks-Landscape-Rec Areas	160	ORANGE	AV	High
Otay Park & Recreation Center	6232302600	Parks-Landscape-Rec Areas	3554	MAIN	ST	High
Palomar Park	6200504900	Parks-Landscape-Rec Areas	1359	PARK	DR	High
Parkway CommunityCenter	5683004300	Parks-Landscape-Rec Areas	373	PARK	WY	High
Paseo Del Rey Park	6401412500	Parks-Landscape-Rec Areas	750	PASEO DEL REY		High
Police Administration Building	5682703100	Other Fixed Facilities	315	FOURTH	AV	Low
Pool, Fountain, Water Feature Maintenance		Mobile Mun Activities				Medium
Power Washing-Graffiti Removal		Mobile Mun Activities				High
Rancho Del Rey Park	6422800300	Parks-Landscape-Rec Areas	1131	BUENA VISTA	WY	High
Reinstra Ball Fields	6240107300	Parks-Landscape-Rec Areas	1500	MAX	AV	High
Roads, Streets, Highways		Others				High
Rohr Park	5932400500	Parks-Landscape-Rec Areas	4548	SWEETWATER	RD	High
Salt Creek Park & Community Center	6434830200	Parks-Landscape-Rec Areas	2710	OTAY LAKES	RD	High
San Miguel Ranch Community Park		Parks-Landscape-Rec Areas				Low
Santa Cora Park	6420804000	Parks-Landscape-Rec Areas	1365	SANTA CORA	AV	High
Santa Venetia Park	6430512700	Parks-Landscape-Rec Areas	1500	MAGDALENA	AV	High
SDGE Park	6230720700	Parks-Landscape-Rec Areas	1438	HILLTOP	DR	High
Sherwood Park	6233211900	Parks-Landscape-Rec Areas	69	SHERWOOD	ST	High
South Branch Library	6230102900	Library	389	ORANGE	AV	Low
Special Events Throughout the City of CV		Others				High
Street, Sidewalk Repair & Maintenance		Mobile Mun Activities				Medium
Sunbow Park	6402725100	Parks-Landscape-Rec Areas	690	NAPLES	ST	High

Facility Name	APN Number	Type of Facility	Address			Priority
Sunridge Park	6400502000	Parks-Landscape-Rec Areas	952	BEECHGLEN	DR	High
Sunset View Park	6430330100	Parks-Landscape-Rec Areas	1390	GREENSVIEW	DR	High
Terra Nova Park	5921922700	Parks-Landscape-Rec Areas	450	HIDDEN VISTA	DR	High
Tiffany Park	6420302900	Parks-Landscape-Rec Areas	1713	ELMHURST	ST	High
Valle Lindo Park	6440102600	Parks-Landscape-Rec Areas	545	SEQUOIA	ST	High
Veteran's Park Recreation Center	6411221000	Parks-Landscape-Rec Areas	785	PALOMAR	ST	High
Veterans Park	6411221000	Parks-Landscape-Rec Areas	785	PALOMAR	ST	Low
Voyager Park	6400901900	Parks-Landscape-Rec Areas	1178	J	ST	High
Windingwalk Neighborhood Park	6436101500	Parks-Landscape-Rec Areas	1675	EXPLORATION FALLS	DR	High
Windingwalk Park	5436101500	Parks-Landscape-Rec Areas	1675	EXPLORATION FALLS	DR	Low

Total: **88**

Attachment D1

Commercial Source Inventory and Prioritization
Mobile and Stationary
FY 2009-2010

Facility Name	APN Number	Address			Category	Priority	SIC Number
Cat (i-v) Auto Related							
3M Brakes & Lube	6220620500	1550	FRONTAGE	RD	Cat (i-v) Auto Related	Low	7542
3MC Body & Paint & Auto Center	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	Low	7532
A Spec Autocare	5957404500	688	CHAPEL HILL	DR	Cat (i-v) Auto Related	Low	7538
A&A Auto Body & Paint	6181520400	1077	BROADWAY		Cat (i-v) Auto Related	Low	7532
A&C Machine Shop and Auto Repair	622021800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538
A&D Automotive	6181421500	1088	BROADWAY		Cat (i-v) Auto Related	Low	7538
A&E Smog Test Only		231	BEYER	BL	Cat (i-v) Auto Related	Low	
A&V Road Service	6182000100	1100	INDUSTRIAL	BL	Cat (i-v) Auto Related	Low	7538
A-1 Auto Detail & Repair	5711531500	696	BROADWAY		Cat (i-v) Auto Related	Low	7538
A-1 Autobody DBA Calico - Mobile Business	5672010200	402	OAKLAWN	AV	Cat (i-v) Auto Related	Low	7532
AARDVARC Racing	5953711700	1007	OAK HILL	DR	Cat (i-v) Auto Related	Low	5531
ABC Electromechanic Projects	6242500800	1550	OCALA	AV	Cat (i-v) Auto Related	Low	7538
ABC Motors Inc./Kirker Customs	5734500500	310	K	ST	Cat (i-v) Auto Related	Low	7532
ABC Rebuilders	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7532
Abel Najera	6291200800	3679	MAIN	ST	Cat (i-v) Auto Related	High	7538
Abel's Auto Body	6231320800	311	TREMONT	ST	Cat (i-v) Auto Related	Low	7532
Abre Towing dba Paxton Towing	6290620300	3487	MAIN	ST	Cat (i-v) Auto Related	High	7549
ABS Collision Center	6191211000	1137	THIRD	AV	Cat (i-v) Auto Related	Low	7532
Absolute Tinting	5955904200	685	EL PORTAL	DR	Cat (i-v) Auto Related	Low	7549
Access II Towing	6232300600	1350	MAX	AV	Cat (i-v) Auto Related	High	7549

Facility Name	APN Number	Address			Category	Priority	SIC Number
Ace Auto	6241803500	1647	MARL	AV	Cat (i-v) Auto Related	Low	7538
ACE Autocare Experts	6182100600	1135	BROADWAY		Cat (i-v) Auto Related	Low	7538
AG Auto Repair	5651703200	107	BROADWAY		Cat (i-v) Auto Related	Low	7538
Agustin Auto Repair	6290402100	1747	BROADWAY		Cat (i-v) Auto Related	Low	7532
Al Smith	6232023100	275	ZENITH	ST	Cat (i-v) Auto Related	Low	7542
Albert Stiehle Parts	6390106700	627	WINDSOR	CI	Cat (i-v) Auto Related	Low	5531
All Around Service	5730620800	268	SHASTA	ST	Cat (i-v) Auto Related	Low	7538
Almacen Automotriz Pacifico	6424100318	1355	CALLEJON PALACIOS		Cat (i-v) Auto Related	Low	5531
America Test Only & Regular Smog	6290603300	231	BEYER	WY	Cat (i-v) Auto Related	Low	7533
American Towing & American Dismantling I	6291001600	140	REED	CT	Cat (i-v) Auto Related	High	7549
Andrade Auto Glass	5671011500	572	MADRONA	ST	Cat (i-v) Auto Related	Low	7532
Andrade Auto Glass	5711920500	721	OAKLAWN	AV	Cat (i-v) Auto Related	Low	7532
Annex San Diego #1 Inc/Cheelys	5653201100	45	BROADWAY		Cat (i-v) Auto Related	Low	5531
Anthony's Auto Center	5662321200	305	E	ST	Cat (i-v) Auto Related	Low	7549
Apollo Tire	6220412700	1421	BROADWAY		Cat (i-v) Auto Related	Low	5531
Apollo Tire Co	6220433700	1421	BROADWAY		Cat (i-v) Auto Related	Low	7549
Aragon Car Care Center	5933811700	894	LAGASCA	PL	Cat (i-v) Auto Related	Low	5531
Argent Classics	6421500100	1698	HARVARD	ST	Cat (i-v) Auto Related	Low	7532
Arias Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
Auto Express Services	5722705100	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Auto Partes Maya	6411220700	825	PALOMAR	ST	Cat (i-v) Auto Related	Low	5531
Auto Servicio La Vuelta	6426704900	1307	MONTERA	ST	Cat (i-v) Auto Related	Low	5531
Auto Smog Check Centers	5672001200	416	BROADWAY		Cat (i-v) Auto Related	Low	7538
Autoland Inc.	5922001500	354	H	ST	Cat (i-v) Auto Related	Low	5511

Facility Name	APN Number	Address			Category	Priority	SIC Number
Automaster Automotive Center	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7533
Automatic Transmission	6180220800	609	ARIZONA	ST	Cat (i-v) Auto Related	Low	7537
Autotech Motorsports	6191212700	286	EMERSON	ST	Cat (i-v) Auto Related	Low	7538
Autozone #2810	6193001600	1315	THIRD	AV	Cat (i-v) Auto Related	Low	5531
Autozone #2817	5670411700	225	BROADWAY		Cat (i-v) Auto Related	Low	5531
Autozone #5643	5722811300	897	BROADWAY		Cat (i-v) Auto Related	Low	5531
Autozone #5644	6402924000	885	H	ST	Cat (i-v) Auto Related	Low	5531
Azteca Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
B&J Auto Repair Smog & Sales	5711531500	696	BROADWAY		Cat (i-v) Auto Related	Low	7538
Barajas Auto Tech	5753010200	1017	HILLTOP	DR	Cat (i-v) Auto Related	Low	7538
Barracuda Wheel Alignment	6290603200	1655	BROADWAY		Cat (i-v) Auto Related	Low	7538
Batteries Unlimited	6221021800	2244	MAIN	ST	Cat (i-v) Auto Related	High	5531
Battery & Auto Center	6220913200	1510	BROADWAY		Cat (i-v) Auto Related	Low	7538
Bay Auto Electric	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538
Becka Automotive	5670900400	736	F	ST	Cat (i-v) Auto Related	Low	7538
Beto's Mobile Mechanic	5734401700	396	SIERRA	WY	Cat (i-v) Auto Related	Low	7538
Better Bumper	6435711400	1586	MOUNT TAMALPAIS	AV	Cat (i-v) Auto Related	Low	7538
Beyer Supreme Tires	6190605600	1055	THIRD	AV	Cat (i-v) Auto Related	Low	7534
Beyer Supreme Tires #3	5672002400	647	H	ST	Cat (i-v) Auto Related	Low	7534
Big O Tires	5671402400	399	BROADWAY		Cat (i-v) Auto Related	Low	5531
Bolanos Windshield	6231413400	276	MONTGOMERY	ST	Cat (i-v) Auto Related	Low	7532
Bonita Valley Auto Care Inc.	5912402700	3995	BONITA	RD	Cat (i-v) Auto Related	Low	7538
Bowlins Auto Service	5713100800	850	BROADWAY		Cat (i-v) Auto Related	Low	7538
Brake Depot	6182803200	1232	BROADWAY		Cat (i-v) Auto Related	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
Brake Express	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low	7538
Brakes and Tunes	6220433700	1403	BROADWAY		Cat (i-v) Auto Related	Low	7542
Broadway Auto Glass Inc.	5650601200	98	BROADWAY		Cat (i-v) Auto Related	Low	7532
Broadway Automotive	6220436700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7538
Broadway Recycling Center	6290402600	1778	BROADWAY		Cat (i-v) Auto Related	Low	4953
Budget Tires	6230301200	275	ORANGE	AV	Cat (i-v) Auto Related	Low	5531
Butlers Auto	5684200700	286	G	ST	Cat (i-v) Auto Related	Low	7538
C&V Auto	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7538
C-1 B Tune Up	5953211449	1055	TORREY PINES	RD	Cat (i-v) Auto Related	Low	7538
Calif Smog Certification Inc.	5660106200	11	THIRD	AV	Cat (i-v) Auto Related	Low	7549
California Smog Certification Inc.	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7549
California Smog Test Only	5623231300	425	C	ST	Cat (i-v) Auto Related	Low	7538
California Tire and Service Centers	5672311300	471	BROADWAY		Cat (i-v) Auto Related	Low	7538
Camacho Tires	6180103000	650	MOSS	ST	Cat (i-v) Auto Related	Low	7534
Candys Auto Body Shop	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7532
Capuchino Autobody	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
Castaneda's Auto Repair	5650401500	44	BROADWAY		Cat (i-v) Auto Related	Low	7538
Charlies Auto Electric	5652301700	186	BROADWAY		Cat (i-v) Auto Related	Low	7538
Cherniss Tire World Inc.	5651703200	101	BROADWAY		Cat (i-v) Auto Related	Low	5531
Chichi's Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
Chula Vista Auto Inc.	5650401400	24	BROADWAY		Cat (i-v) Auto Related	Low	7538
Chula Vista Auto Repair	6221901000	2627	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
Chula Vista Engine Rebuilding	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Chula Vista Smog	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
Chula Vista Towing	5711531200	625	J	ST	Cat (i-v) Auto Related	High	7549
Classic Auto Body	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	High	7532
Collision Parts Warehouse	6232302800	3740	MAIN	ST	Cat (i-v) Auto Related	High	5531
Courtney Tire	5712001200	726	BROADWAY		Cat (i-v) Auto Related	Low	7534
CSK Auto Inc. #1153	5670411900	241	BROADWAY		Cat (i-v) Auto Related	Low	5531
CSK Auto Inc. #1486	6192806100	1396	THIRD	AV	Cat (i-v) Auto Related	Low	5531
CV Fast	6230825400	1492	ALBANY	AV	Cat (i-v) Auto Related	Low	5531
D & D Smog Test	6291303100	145	MACE	ST	Cat (i-v) Auto Related	Low	7533
D and D Smog Station		145	MACE	ST	Cat (i-v) Auto Related	Low	7532
D III Industrial	6291302700	187	MACE	ST	Cat (i-v) Auto Related	High	7513
Daniels Tire Service	5623500600	575	C	ST	Cat (i-v) Auto Related	Low	5531
Dave's Auto Service	5634313100	359	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538
Depot of Wheel Corp.	6290200400	2835	MAIN	ST	Cat (i-v) Auto Related	High	5531
Diamond Finish	6402131800	897	MESA	PL	Cat (i-v) Auto Related	Low	7542
Doctor Jay Automobile Service	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Dons Auto Service Inc.	6390802200	495	TELEGRAPH CANYON	RD	Cat (i-v) Auto Related	Low	7538
Double AA Tire Co Inc.	6231921400	3124	MAIN	ST	Cat (i-v) Auto Related	Low	5531
DR Kar	5953312500	1153	CRYSTAL DOWNS	DR	Cat (i-v) Auto Related	Low	7538
DR Truck & Trailer Repair	5693802100	10	H	ST	Cat (i-v) Auto Related	Low	7538
DR Truck & Trailer Repair	5952211800	756	EASTSHORE	TE	Cat (i-v) Auto Related	Low	7538
DR Truck & Trailer Repair - Mobile Busines		1136	MAGELLAN	WY	Cat (i-v) Auto Related	Low	7538
Dynamic Results Inc/Eddies Tires & Auto R	6221403600	2677	MAIN	ST	Cat (i-v) Auto Related	High	5531
Earl Scheib of CA Inc 243	6180621200	951	BROADWAY		Cat (i-v) Auto Related	Low	7532
Econo Lube N Tune #56	6180612000	903	BROADWAY		Cat (i-v) Auto Related	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
Economy Tires	6220412600	1430	BROADWAY		Cat (i-v) Auto Related	Low	5531
Eddie's Tires and Auto Repair	6290101200	1743	BROADWAY		Cat (i-v) Auto Related	Low	7549
Enterprise Rent A Car Sales	61821000200	1129	BROADWAY		Cat (i-v) Auto Related	Low	5511
Euro Specialties	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
Evans Tire & Service Center #49	6180211100	948	BROADWAY		Cat (i-v) Auto Related	Low	5531
Explorer Competition Products	5953000600	2311	BOSWELL	RD	Cat (i-v) Auto Related	Low	5531
Express Tire	5710502100	646	H	ST	Cat (i-v) Auto Related	Low	7534
Express Tire dba American Auto Service	5672003600	430	BROADWAY		Cat (i-v) Auto Related	High	7538
F &V Auto Repair	6290200100	2801	MAIN	ST	Cat (i-v) Auto Related	High	7538
Fernando's Smog	6180220800	609	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538
Fiber Molds	6221023400	767	ANITA	ST	Cat (i-v) Auto Related	Low	7532
Fily's Auto Shop	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538
Formiller Motors	6181510100	1001	BROADWAY		Cat (i-v) Auto Related	Low	5511
Formula Auto Repair	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538
Freeway Tire Co	6441810100	1861	NIRVANA	AV	Cat (i-v) Auto Related	Low	5531
Fritz Garage	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538
Fuller Ford	6440420400	560	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
Fuller Honda former People Chevrolet	6440420500	580	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
Galaz Auto Service	6220430200	545	ORANGE	AV	Cat (i-v) Auto Related	Low	7538
Garage 13 Performance	6436624700	1574	STARGAZE	DR	Cat (i-v) Auto Related	Low	5531
Geos Auto Service	5671030600	355	BROADWAY		Cat (i-v) Auto Related	Low	7538
German Werks	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538
GK Smog & Auto Repair	6181421700	1088	BROADWAY		Cat (i-v) Auto Related	Low	7538
Glass Depot	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7536

Facility Name	APN Number	Address			Category	Priority	SIC Number
GMJ Enterprises LLC/Maximus Auto Center	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Goodwins Auto Kraft	6396505400	576	MANZANITA	ST	Cat (i-v) Auto Related	Low	7538
Gre-Laz Complete Auto Repair	5651703200	107	BROADWAY		Cat (i-v) Auto Related	Low	7538
Guero's Towing	6242103300	485	SATINWOOD	WY	Cat (i-v) Auto Related	Low	7549
H&A Electric Motors	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7538
Happy Auto Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Henry Auto Glass - Mobile Business		1255	BROADWAY		Cat (i-v) Auto Related	Low	7532
Hernandez Tire Sales	6232021800	3236	MAIN	ST	Cat (i-v) Auto Related	High	5531
Hi Voltage Industries - Mobile Business	5742111700	649	GRETCHEN	RD	Cat (i-v) Auto Related	Low	7538
Hot Spot Window Tinting	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	7549
Huerta Ruben	5651610100	101	JEFFERSON	AV	Cat (i-v) Auto Related	Low	7538
Hunter Service & Parts Inc.	5721320500	673	ASH	AV	Cat (i-v) Auto Related	Low	7538
Hypersport Performance	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	5531
In and Out Transmissions	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538
In-N-Out Auto Glass	6191102400	1120	THIRD	AV	Cat (i-v) Auto Related	Low	7536
International Transmission	6230300900	1580	THIRD	AV	Cat (i-v) Auto Related	Low	7537
Investruck Inc.	6210100100	1470	BAY	BL	Cat (i-v) Auto Related	Low	7538
J&H Auto Repair	5671030100	355	BROADWAY		Cat (i-v) Auto Related	Low	7538
J&J Chrome & Polish	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
J&L Auto Repair Inc.	5670531200	273	BROADWAY		Cat (i-v) Auto Related	High	7538
J&V Automotive	6220620500	1550	FRONTAGE	RD	Cat (i-v) Auto Related	Low	7538
JC Towing Inc.	6221901800	2515	FAIVRE	ST	Cat (i-v) Auto Related	High	7549
Jesse Smog	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	7538
Jiffy Lube #897	5652402700	593	E	ST	Cat (i-v) Auto Related	High	7549

Facility Name	APN Number	Address			Category	Priority	SIC Number
Jim's Glass & Screen	6221113200	2540	MAIN	ST	Cat (i-v) Auto Related	High	7536
JJ & Vic Auto Service & Repair	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538
JJ Auto Body	?	2631	FAIVRE	ST	Cat (i-v) Auto Related	Low	7532
John's Towing	6206021700	1298	WAXWING	LN	Cat (i-v) Auto Related	High	7549
JP Truck and Trailer Repair - Mobile Busine	5651510200	105	WOODLAWN	AV	Cat (i-v) Auto Related	Low	7538
JT Associates Inc/DBA Audio Xperts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
Juans Auto Repair Inc.	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
Julio C Battery	6232021800	1502	BROADWAY		Cat (i-v) Auto Related	Low	5531
Just Smog (T & TF Inc)	5731700100	605	THIRD	AV	Cat (i-v) Auto Related	Low	7538
Kantruds Garage	5651622100	120	BROADWAY		Cat (i-v) Auto Related	Low	7538
Karillos Truck Tire and Road Service	5954200915	2178	CABO BAHIA		Cat (i-v) Auto Related	Low	7538
Kars Machine Shop	6220121800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538
KDR Enterprises Inc. DBA WABCO Product	5661903100	753	ANITA	ST	Cat (i-v) Auto Related	Low	5531
Kpucinos Auto Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538
Kustom Nation Auto	6221115900	2524	MAIN	ST	Cat (i-v) Auto Related	High	7538
L&E Tire Service	6243662500	226	REGENCY	CT	Cat (i-v) Auto Related	Low	7534
L&E Transmission Inc.	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7538
Ledezma Tire and Muffler 2	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	Low	5014
Ledezma's Muffler Service	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7538
Leemor Sound Inc	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	5531
Leer Truck Accessory Center	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	5531
Low Price Auto Glass	6441820800	880	ENERGY	WY	Cat (i-v) Auto Related	Low	7536
M&M Mobile Auto Repair	6231710300	437	MONTGOMERY	ST	Cat (i-v) Auto Related	Low	7538
Madrig Glass - Mobile Business	6190506200	1067	FOURTH	AV	Cat (i-v) Auto Related	Low	7532

Facility Name	APN Number	Address			Category	Priority	SIC Number
Main Car Care Inc	6231721300	2952	MAIN	ST	Cat (i-v) Auto Related	Low	7538
Main Clutch Co	6232301700	3800	MAIN	ST	Cat (i-v) Auto Related	High	5531
Marc Goodwin Trucking	5741030300	72	MANKATO	ST	Cat (i-v) Auto Related	Low	7549
Marcos Radiator	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	Low	7538
Marcos Raiator	6221113200	2530	MAIN	ST	Cat (i-v) Auto Related	High	7539
Marios Mobile Truck Body Repair & Driver	6240532300	4087	OTAY VALLEY	RD	Cat (i-v) Auto Related	Low	7532
Marquez Auto Body Inc.	5734500500	310	K	ST	Cat (i-v) Auto Related	Low	7532
Martinez Smog Check	6231721300	2952	MAIN	ST	Cat (i-v) Auto Related	High	7533
Martins Auto Transport	6391040600	1026	NOLAN	LN	Cat (i-v) Auto Related	Low	7549
Max Auto Detail & Auto Elelctric	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7542
Maximus Auto Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
MBTS Corporation/Econo Lube and Tune #	5633704200	3008	SECOND	AV	Cat (i-v) Auto Related	Low	7538
McCune Chrysler Dodge	6440414200	1885	AUTO PARK	PL	Cat (i-v) Auto Related	High	5511
Midas Rajmp Inc.	5671030300	363	BROADWAY		Cat (i-v) Auto Related	Low	7538
Miguel Auto Mobile Repair	5956303700	2474	FALCON VALLEY	DR	Cat (i-v) Auto Related	Low	7538
Miguel Garnica	6230605800	1420	SECOND	AV	Cat (i-v) Auto Related	Low	7538
Mike Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
Mike's Recycling	6290607200	3151	MAIN	ST	Cat (i-v) Auto Related	High	7389
Mikes Auto Repair & Smog Center	5662321500	305	E	ST	Cat (i-v) Auto Related	Low	7538
Mikes Auto Repair & Smog Center	5680442300	300	E	ST	Cat (i-v) Auto Related	Low	7538
Mobil Mercedez Specialist	6290402100	1747	BROADWAY		Cat (i-v) Auto Related	Low	7538
Mobile Trenz Autosound	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	7538
Monell Brake Service	5722705100	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Monos Brake and Alignment		231	BEYER	BL	Cat (i-v) Auto Related	Other	

Facility Name	APN Number	Address			Category	Priority	SIC Number
Mossy Nissan	6440414300	1875	AUTO PARK	AV	Cat (i-v) Auto Related	Low	5511
MTM Mobile Truck Repair	6240420446	1640	MAPLE	DR	Cat (i-v) Auto Related	Low	7538
MTM Mobile Truck Repair - Mobile Busines:	6240420446	1640	MAPLE	DR	Cat (i-v) Auto Related	Low	7538
MTS Maintenance Facility		3630	MAIN	ST	Cat (i-v) Auto Related	High	
Murrays Automobile	5634410500	320	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538
NAPA Auto Parts	6180103700	680	L	ST	Cat (i-v) Auto Related	Low	5531
Need Tow Inc.	5670311100	240	WOODLAWN	AV	Cat (i-v) Auto Related	Low	7549
Neill's Suzuki Auto Repair	5712610100	804	COLORADO	AV	Cat (i-v) Auto Related	Low	7538
Nice & Easy Autobody & Paint Inc.	6221116000	2350	MAIN	ST	Cat (i-v) Auto Related	High	7532
Octavio's Garage	5711230800	632	BROADWAY		Cat (i-v) Auto Related	Low	7538
Official Brake & Lights Inspection Center	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7538
Oldham Ranch Automotive	5722705104				Cat (i-v) Auto Related	Low	7538
One Stop Auto Access Plus	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	5531
One Stop Under Car	5670902100	360	BROADWAY		Cat (i-v) Auto Related	Low	5531
Orion's Mobile Auto Service	6433202200	2554	FERN VALLEY	RD	Cat (i-v) Auto Related	Low	7538
P&R Motors	6191710300	1165	THIRD	AV	Cat (i-v) Auto Related	Low	5511
Pacific Auto Glass	6191710300	1165	THIRD	AV	Cat (i-v) Auto Related	Low	7536
Pacific Auto Glass	6191710800	1193	THIRD	AV	Cat (i-v) Auto Related	Low	7536
Pacific Bay Auto	6222111000	150	JACQUA	ST	Cat (i-v) Auto Related	High	5511
Pacific Supply Co/Parts Plus	6180101500	660	L	ST	Cat (i-v) Auto Related	Low	5531
Parts Plus Auto	5650601200	98	BROADWAY		Cat (i-v) Auto Related	Low	5531
PB Auto Service	6291201600	3645	MAIN	ST	Cat (i-v) Auto Related	High	7538
Pep Boys Manny Moe & Jack of CA #651	5672004500	454	BROADWAY		Cat (i-v) Auto Related	Low	5531
Pep Boys Manny Moe & Jack of CA #872	6402932300	1000	TIERRA DEL REY		Cat (i-v) Auto Related	Low	5531

Facility Name	APN Number	Address			Category	Priority	SIC Number
Perfect Star European Auto Repair	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538
Performance Auto Repair & Smog	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538
Performance Team Warehouse Inc.	5713100600	842	BROADWAY		Cat (i-v) Auto Related	Low	5531
Peters Precision Auto	5634512200	310	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538
PO Auto Repair	6291201600	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
Polos Auto Paint Supply	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532
Precision Automotive		2446	MAIN	ST	Cat (i-v) Auto Related	High	7537
Precision Motors	5712002900	619	K	ST	Cat (i-v) Auto Related	Low	7538
Pro Tires	6206012200	437	THRUSH	ST	Cat (i-v) Auto Related	Low	7534
Prokar Products	6222110200	2471	MAIN	ST	Cat (i-v) Auto Related	Low	5531
Protech Autoglass	5653301100	546	CASSELMAN	ST	Cat (i-v) Auto Related	Low	7536
Quick Tows & Road Service	5680710200	209	THIRD	AV	Cat (i-v) Auto Related	Low	7549
R&G Auto Electric	6180211300	924	BROADWAY		Cat (i-v) Auto Related	Low	7538
R&L Performance Auto Service	6220111900	887	PALOMAR	ST	Cat (i-v) Auto Related	Low	7538
R&R General Auto Repair	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538
Rafael General Atuo Repair	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538
Rags Enterprises Inc./Tip Top Auto	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Rainbow Striping	6441301100	981	MONSERATE	AV	Cat (i-v) Auto Related	Low	7532
Ramz Mobile Auto Care	6391510500	394	MONTCLAIR	ST	Cat (i-v) Auto Related	Low	7538
Rauls's Body Shop	6170712200	790	PALOMAR	ST	Cat (i-v) Auto Related	Low	7532
Rays Mobile Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
RG Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
Ricardos's Custom Covers	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	5531
RNA Motor Works	5956503500	737	SAN GABRIEL	PL	Cat (i-v) Auto Related	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
Roadone DBA A to Z Metro, A to Z Enterpri	6440406100	1805	MAXWELL	RD	Cat (i-v) Auto Related	High	7549
Roman's Truck Body & Paint MJP	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532
Ruben's Auto Electronics	6220412700	1420	BROADWAY		Cat (i-v) Auto Related	Low	7538
S & H Motors	6191213000	292	EMERSON	ST	Cat (i-v) Auto Related	Low	7538
Safelite Auto Glass #6150	5672001200	416	BROADWAY		Cat (i-v) Auto Related	Low	7536
Sams Muffler Radiators	6290603200	225	BEYER	WY	Cat (i-v) Auto Related	High	7533
San Diego Automotive Inc	5661320100	48	HILLTOP	DR	Cat (i-v) Auto Related	Low	5531
San Diego Diesel Parts	6392901200	252	INKOPAH	ST	Cat (i-v) Auto Related	Low	5531
San Diego Tires and Brakes	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
Sanchez Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
SCJ Auto Repair	6240602700	4501	OTAY VALLEY	RD	Cat (i-v) Auto Related	Low	7538
SCJ Towing	6290606000	3211	MAIN	ST	Cat (i-v) Auto Related	High	7549
Scotts Porsche	5651623000	118	BROADWAY		Cat (i-v) Auto Related	Low	5531
Sir Y Incorporated/DBA Sir Y Auto Group	5722120600	777	BROADWAY		Cat (i-v) Auto Related	Low	5511
Skyline Garage	5650401000	615	CHULA VISTA	ST	Cat (i-v) Auto Related	Low	7538
Smog Center	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538
Smog Check Station	6180221100	960	BROADWAY		Cat (i-v) Auto Related	Low	7538
SO California Discount Tire	5711230200	600	BROADWAY		Cat (i-v) Auto Related	Low	5531
Soundelux	6221112500	2490	MAIN	ST	Cat (i-v) Auto Related	High	5531
South Bay Auto Haus	5634410100	310	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538
South Bay Auto Parts Inc.	6190104100	908	THIRD	AV	Cat (i-v) Auto Related	Low	5531
South Bay Auto Repair	5713100500	811	BROADWAY		Cat (i-v) Auto Related	Low	7538
South Bay Collision Center	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7532
South Bay Datsun Auto Repairs	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
South Beach Auto Sales/El Valle Auto Sales	5713100700	846	BROADWAY		Cat (i-v) Auto Related	Low	5511
South Coast Alignment	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Southbay Auto Glass	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	Low	7536
Southbay Motorsports	6440412000	1890	AUTO PARK	PL	Cat (i-v) Auto Related	High	5941
Southbay Tire & Auto Service	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low	7538
Southern California Reconditioning	5661020100	67	DEL MAR	AV	Cat (i-v) Auto Related	Low	7532
Sparks Tune Up of CV	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7538
Special Smog Test Only	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Speed Merchant Inc/American Tire Distribut	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	5531
Subway Sandwiches	5932800500	4378	BONITA	RD	Cat (i-v) Auto Related	High	5812
Sunbelt Towing Inc DBA Western Towing	6170601200	1171	FRONTAGE	RD	Cat (i-v) Auto Related	Low	7549
Super Low Price Auto Glass #23	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	5531
Superior Auot Body Group	5661900600	363	E	ST	Cat (i-v) Auto Related	Low	7538
Superior Auto Body & Paint	5662311000	347	E	ST	Cat (i-v) Auto Related	Low	7532
Superior Auto Repair	6291200100	3611	MAIN	ST	Cat (i-v) Auto Related	High	7538
Superior VW Automotive Repair	6221113400	2578	MAIN	ST	Cat (i-v) Auto Related	High	7538
Tap Acquisition LLC/4 Wheel Parts & Perfor	6220433700	1427	BROADWAY		Cat (i-v) Auto Related	Low	5531
Taps Auto Smog	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	7538
Ted Johnson Garage	6192122600	1270	THIRD	AV	Cat (i-v) Auto Related	Low	7538
The Autobroker	5680722600	203	CHURCH	AV	Cat (i-v) Auto Related	Low	5511
TK Auto Repair	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538
TK Smog Check & Auto Repair	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538
Tony Discount Tires Brakes & More	6290603300	231	BEYER	WY	Cat (i-v) Auto Related	Low	7542
Tony's Smog Test Only	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
Tony's Tires	6290401700	1771	BROADWAY		Cat (i-v) Auto Related	Low	5531
Torque Performance Auto Center	6220433700	1421	BROADWAY		Cat (i-v) Auto Related	Low	7538
Toyo Tire USA Corporation	5952310200	860	KUHN	DR	Cat (i-v) Auto Related	Low	5531
Truebar Machine Shop & Auto Repair	6220433700	1403	BROADWAY		Cat (i-v) Auto Related	Low	7538
Trueline Auto Service	5661903100	377	E	ST	Cat (i-v) Auto Related	Low	7538
Tune Plus	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
Two Bit Tow of San Diego	5670311100	240	WOODLAWN	AV	Cat (i-v) Auto Related	Low	7549
U-Do-It / Auto Painting	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7532
Ulises Roberto Sanchez dba Batt Recycling	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	4953
UNIC Smog Repair	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538
Union Auto Repair	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538
V&M Auto Mechanic	6191211000	1135	THIRD	AV	Cat (i-v) Auto Related	Low	7538
V&m Auto Mechanic	5684200200	409	THIRD	AV	Cat (i-v) Auto Related	Low	7538
Valencia's Diesel Mobile	6220121800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538
Valvoline Instant Oil Change	6420201700	1556	H	ST	Cat (i-v) Auto Related	Low	7538
Valvoline Instant Oil Change	6402924800	899	H	ST	Cat (i-v) Auto Related	Low	7538
Van's Suspension & Brake Center	6290100500	1741	BROADWAY		Cat (i-v) Auto Related	Low	7538
Victor's Auto Repair	5670510100	255	ASH	AV	Cat (i-v) Auto Related	Low	7538
Victor's Auto Repair	6426406400	1645	RIDGE ROCK	CT	Cat (i-v) Auto Related	Low	7538
Vidrio Towing	6240606000	2471	MAIN	ST	Cat (i-v) Auto Related	Low	7549
Villegas Used Tires	5672001900	466	BROADWAY		Cat (i-v) Auto Related	Low	5531
West Coast Mobile Mechanix	6180610100	935	BROADWAY		Cat (i-v) Auto Related	Low	7538
West Coast Transmission	6221112900	1656	SILVAS	ST	Cat (i-v) Auto Related	Low	7537
Western Towing	6170710200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549

Facility Name	APN Number	Address			Category	Priority	SIC Number
Western Towing/Road One Towing Inc	6170600200	1150	WALNUT	AV	Cat (i-v) Auto Related	High	7549
Xpress Motorsports	5623242400	45	BROADWAY		Cat (i-v) Auto Related	Low	5531
Zepeda's Radiator Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538
Zeppy Auto Repair	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
ZX Team	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	7538
Cat (iii-xxi)-Boat/Marina							
Chula Vista Marina	7600480101	550	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	Port of SD
Five Star Diesel Service	7600480101	550	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	7538
Garcia's Detail and Repair	5713201400	867	COLORADO	AV	Cat (iii-xxi)-Boat/Marina	Low	3732
Kaiulani Boat Service	6435163600	1446	YELLOWSTONE	AV	Cat (iii-xxi)-Boat/Marina	Low	3732
Magana Yacht Repair	6220723500	778	ANITA	ST	Cat (iii-xxi)-Boat/Marina	Low	3732
Sergion Hernandez Yacht Maintenance	6180611800	934	FIFTH	AV	Cat (iii-xxi)-Boat/Marina	High	3732
South Shore Yacht Sales	7600480101	550	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	5551
Sterling Marine	6395203600	829	WILER	DR	Cat (iii-xxi)-Boat/Marina	Low	3732
The Marine Group LLC	7600481700	997	G	ST	Cat (iii-xxi)-Boat/Marina	Low	3732
WCK Marine Wiring	7600481900	640	MARINA	PW	Cat (iii-xxi)-Boat/Marina	Low	3732
Cat iv-Equipment Relaled							
ABLE Heating and Air Conditioning	6182005800	1020	COLORADO	AV	Cat iv-Equipment Relaled	Other	
All Drain Rooter	6423111400	1267	CALLE CANDELERO		Cat iv-Equipment Relaled	Low	1711
Allbrands A1 Appliance Service	5954605800	951	SAINT CLAIRE	DR	Cat iv-Equipment Relaled	Low	7623
Antonio Plumbing	7762204003	577	PALOMAR	ST	Cat iv-Equipment Relaled	Low	1711
Any Drain Rooter Service	6231412100	296	TREMONT	ST	Cat iv-Equipment Relaled	Low	1711

Facility Name	APN Number	Address			Category	Priority	SIC Number
Arrow Appliance Service	6400333300	1164	CALLE FLORECITA		Cat iv-Equipment Relaled	Low	7629
B&D Power Services	6230202700	368	ANITA	ST	Cat iv-Equipment Relaled	Low	7629
BJ's Rental Inc.	5733202000	317	K	ST	Cat iv-Equipment Relaled	Low	7359
California Plumbing & Heating	6424011200	1434	SOUTHVIEW	CT	Cat iv-Equipment Relaled	Low	1711
Chula Vista Cycle Center	6220913200	1502	BROADWAY		Cat iv-Equipment Relaled	Low	5941
Clear-Flow Rooter Service	6202730600	218	ORLANDO	ST	Cat iv-Equipment Relaled	Low	1711
Cogswell Marine & Motorsports Inc.	6220122600	865	STELLA	ST	Cat iv-Equipment Relaled	Low	5941
Daves Quality Plumbing Inc.	5634410500	320	TROUSDALE	DR	Cat iv-Equipment Relaled	Low	1711
DaVinchi Metal Signs-Citation	6291002128	3521	MAIN	ST	Cat iv-Equipment Relaled	Other	
Dresser Rand	6180101400	670	L	ST	Cat iv-Equipment Relaled	Low	7699
Elias Plumbing	6402600500	1129	CLOUDWALK CANYON	DR	Cat iv-Equipment Relaled	Low	1711
Handiworks	5932621100	944	BUCKAROO	LN	Cat iv-Equipment Relaled	Low	7699
J&J Drain & Sewer	5950305513	2355	CALLE SABROSO		Cat iv-Equipment Relaled	Low	1711
Jakes Plumbing	6180718200	430	WESTBY	ST	Cat iv-Equipment Relaled	Low	1711
Jifffy Rooter	6232021800	3236	MAIN	ST	Cat iv-Equipment Relaled	Low	1711
Martin Prep	6424312000	1213	MONTE SERENO	AV	Cat iv-Equipment Relaled	Low	3751
Moys Appliance Repair	6203202900	1458	MAX	AV	Cat iv-Equipment Relaled	Low	7623
Randys Rooter Service	5685123100	223	H	ST	Cat iv-Equipment Relaled	Low	1711
Triple M. Marine Welding & Repairn Inc.	6220620500	1550	FRONTAGE	RD	Cat iv-Equipment Relaled	Low	3732
TV Jacks Inc.	5932800100	4230	BONITA	RD	Cat iv-Equipment Relaled	Low	7629
Uncle Joe Drain Cleaning	6441910500	1660	CABRILLO	DR	Cat iv-Equipment Relaled	Low	1711
Valley Industrial Specialties Inc.	5634312800	110	GLOVER	AV	Cat iv-Equipment Relaled	Low	7699
Walashek Industrial & Marine Inc.	5623500100	595	C	ST	Cat iv-Equipment Relaled	Low	7538

Cat ix-Pest Control ...

Facility Name	APN Number	Address			Category	Priority	SIC Number
Adios Pest Control Inc.	5957102017	2576	CATAMARAN	WY	Cat ix-Pest Control ...	Low	7342
Atlas Termite	5661103700	25	SECOND	AV	Cat ix-Pest Control ...	Low	7342
Chula Vista Pest Control	5680441300	244	THIRD	AV	Cat ix-Pest Control ...	Low	7342
Indemand Pest Control	6412504200	982	MERCED RIVER	RD	Cat ix-Pest Control ...	Low	7342
King Termite Control Inc.	5681512200	290	LANDIS	AV	Cat ix-Pest Control ...	Low	7342
Lloyds Pest Control	6290201200	2865	MAIN	ST	Cat ix-Pest Control ...	Low	7342
The Works Temite Co	5733601200	119	KEARNEY	ST	Cat ix-Pest Control ...	Low	7342
Turbo Termite & Repair	6170800600	1021	BAY	BL	Cat ix-Pest Control ...	Low	7342
We Got Ya Pest Control Inc.	5660103100	46	THIRD	AV	Cat ix-Pest Control ...	Low	7342
Cat vi-Auto-Washing							
619 Detail	5957400200	2792	SAVANNAH	CT	Cat vi-Auto-Washing	Low	7542
619 Mobile Detailing	6202510800	55	PALOMAR	ST	Cat vi-Auto-Washing	Low	7542
Absolute Auto Detail	6420736100	1390	SANTA ALICIA	AV	Cat vi-Auto-Washing	Low	7542
Advance Mobile Wash & Detail	5954406600	1093	FOREST LAKE	DR	Cat vi-Auto-Washing	Low	7542
AG Autobody & Detail	6431613800	2466	MYRTLE BEACH	WY	Cat vi-Auto-Washing	Low	7542
All American Car Wash C.V.	6182103500	1137	BROADWAY		Cat vi-Auto-Washing	Low	7542
Amplified Detailing & Restoration - Mobile B	5672600901	423	COLORADO	AV	Cat vi-Auto-Washing	Low	7542
Aqua Clean	5922109000	1435	RIDGEBACK	RD	Cat vi-Auto-Washing	High	7542
Aqua-Man Mobile Auto Carwash Detailing	6403223600	1184	CAMINO BISCAY		Cat vi-Auto-Washing	Low	7542
Arreola Auto Detailing	6190513000	1047	FOURTH	AV	Cat vi-Auto-Washing	Low	7542
Arreola Auto Detailing	6184200100	1049	FOURTH	AV	Cat vi-Auto-Washing	Low	7542
Auto Detailing By David	5692520900	489	ELM	AV	Cat vi-Auto-Washing	Low	7542
Baja Auto Detail	5650401000	615	CHULA VISTA	ST	Cat vi-Auto-Washing	Low	7542

Facility Name	APN Number	Address			Category	Priority	SIC Number
Bebo's Auto Detail	5713101900	804	BROADWAY		Cat vi-Auto-Washing	Low	7542
Bonita Car Wash	5702204600	3048	BONITA	RD	Cat vi-Auto-Washing	Low	7542
Brabus Pro Auto Detailing	6437701700	1743	FENNEL	WY	Cat vi-Auto-Washing	Low	7542
California Sunshine Detail	5957701100	2385	PLAZA EVA		Cat vi-Auto-Washing	Low	7542
Car Shower	6290620300	3487	MAIN	ST	Cat vi-Auto-Washing	Low	7542
Del Rey Detailers	6402402600	1030	CORDOVA	DR	Cat vi-Auto-Washing	Low	7542
Deluxe Mobile Detailing	6435022400	1320	LONG VIEW	DR	Cat vi-Auto-Washing	Low	7542
Deluxe Mobile Detailing - Mobile Business	6432320700	2401	VALLEY GARDENS	DR	Cat vi-Auto-Washing	Low	7542
Diablos Auto Detail - Mobile Business	6191100900	1151	FOURTH	AV	Cat vi-Auto-Washing	Low	7542
Eastlake Mobile Detailing	5955100217	1185	LA VIDA	CT	Cat vi-Auto-Washing	Low	7542
Empire Mobile Auto Detailing	6230606300	250	QUINTARD	ST	Cat vi-Auto-Washing	Low	7542
Ernie's Detail	6221902000	2555	FAIVRE	ST	Cat vi-Auto-Washing	Low	7542
Finest Auto Detailing	6423801614	1336	SERENA	CI	Cat vi-Auto-Washing	Low	7542
Fresh Detailing	6181102800	615	MOSS	ST	Cat vi-Auto-Washing	Low	7542
GBC Auto Detailing	6434302800	1175	BATTLE CREEK	RD	Cat vi-Auto-Washing	Low	7542
Jay Bright Company	6441812700	787	ENERGY	WY	Cat vi-Auto-Washing	Low	7542
JDA Detailing and Services - Mobile Busine	6411220700	825	PALOMAR	ST	Cat vi-Auto-Washing	Low	7542
JJ's Mobile Auto Detailing	6191620500	1123	TOBIAS	DR	Cat vi-Auto-Washing	Low	7542
Jose Gallardo -Auto Detail Mobile	5651701400	561	FLOWER	ST	Cat vi-Auto-Washing	Low	7542
JR S Detail/Mobile Carh Wash	6400703900	770	NAPLES	CT	Cat vi-Auto-Washing	Low	7542
JR's Mobile Auto Detail	6242201200	1516	OLEANDER	AV	Cat vi-Auto-Washing	Low	7542
Keen Detail	6423801515	1344	SERENA	CI	Cat vi-Auto-Washing	Low	7542
Klimax Mobile Detail	5733721400	253	K	ST	Cat vi-Auto-Washing	Low	7542
Lad Mobile Vehicle Service - Mobile Busine	6182910500	557	OXFORD	ST	Cat vi-Auto-Washing	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
LST Carwash	6180612000	907	BROADWAY		Cat vi-Auto-Washing	Low	7542
Luna's Mobile Detailing	5754321900	1143	VISTA	WY	Cat vi-Auto-Washing	Low	7542
Maranatha Carwash	5670324300	298	BROADWAY		Cat vi-Auto-Washing	Low	7542
Mario's Auto Detailing	6180610500	915	BROADWAY		Cat vi-Auto-Washing	Low	7542
Mario's Auto Detailing	6220433700	1409	BROADWAY		Cat vi-Auto-Washing	Low	7542
Max Auto Detail & Auto Electric	6220913200	1502	BROADWAY		Cat vi-Auto-Washing	Low	7542
Max Enterprises	5711331100	691	WOODLAWN	AV	Cat vi-Auto-Washing	Low	7542
Mobile Car Wash	6426002400	1613	WOODVILLE	AV	Cat vi-Auto-Washing	Low	7542
Moreno Auto Detailing	6431313200	1291	BOCA RATON	DR	Cat vi-Auto-Washing	Low	7542
Nice Car Always	6432331400	1468	ASHFORD CASTLE	DR	Cat vi-Auto-Washing	Low	7542
Oscar Velazquez Auto Detail- Mobile	6183010600	465	OXFORD	ST	Cat vi-Auto-Washing	Low	7542
Palomar Gas & Carwash	6220112700	878	STELLA	ST	Cat vi-Auto-Washing	Low	5541
Pearl Carwash/Chula Vista Inc.	5670325000	215	WOODLAWN	AV	Cat vi-Auto-Washing	Low	7542
Premier Mobile Atuo Detail and Tinting	6435162300	1438	MARBLE CANYON	WY	Cat vi-Auto-Washing	Low	7542
Pro Detailing Services	6420736100	1390	SANTA ALICIA	AV	Cat vi-Auto-Washing	Low	7542
Prontowash Southern CA, LLC	6430610100	2015	BIRCH	RD	Cat vi-Auto-Washing	Low	7542
Rancho Mobile Auto Detail	6206200200	227	RIENSTRA	ST	Cat vi-Auto-Washing	Low	7542
Rancho Mobile Detail - Mobile Business	6391300400	1087	MELROSE	AV	Cat vi-Auto-Washing	Low	7542
Roberto's Custom Detailing	6193202000	1307	TOBIAS	DR	Cat vi-Auto-Washing	Low	7542
Shine Mobile Detailing	6411602100	1282	WILD IRIS	PL	Cat vi-Auto-Washing	Low	7542
Shining Star Auto Detail	5953613600	2431	EASTRIDGE	LP	Cat vi-Auto-Washing	Low	7542
Simply Clean Atuo Detailing	6400325700	589	BAYONA	LP	Cat vi-Auto-Washing	Low	7542
Sky Auto Detail - Mobile Business	6196500900	1340	ELM	AV	Cat vi-Auto-Washing	Low	7542
SOS Auto Mobile - Mobile Business	5671011200	336	ASH	AV	Cat vi-Auto-Washing	Low	7538

Facility Name	APN Number	Address			Category	Priority	SIC Number
South 1 Atuor Detail	6290500900	3031	MAIN	ST	Cat vi-Auto-Washing	High	7542
Speed Auto Detailing	6180900700	1018	WOODLAWN	AV	Cat vi-Auto-Washing	Low	5812
Splash Auto Detail	6396902600	731	LORI	LN	Cat vi-Auto-Washing	Low	7542
Splash Mobile Detail - Mobile Business	6233122400	1579	CITRUS	WY	Cat vi-Auto-Washing	Low	7542
Spotless Auto Detailing	6436410800	1618	GOLDEN GATE	AV	Cat vi-Auto-Washing	Low	7542
Superior Shine Mobile Detailing	6393141800	398	INKOPAH	ST	Cat vi-Auto-Washing	Low	7542
Terra Nova Car Wash/Fiesta Express	5922001600	350	H	ST	Cat vi-Auto-Washing	High	7542
Valencia Headlights Restoration	5957223300	2520	TRAIL MARKER	PL	Cat vi-Auto-Washing	Low	7542
Vista Palms Car Wash	5722120500	795	BROADWAY		Cat vi-Auto-Washing	Low	7542
Wash and Glow Auto Detail	6401104200	886	ENTRADA	PL	Cat vi-Auto-Washing	Low	7542
Wash and Glow Detail - Mobile Business	6441412900	1539	SONORA	DR	Cat vi-Auto-Washing	Low	7542
Xclusive Auto Detail	5672001200	416	BROADWAY		Cat vi-Auto-Washing	Low	7542
Xtreme Enterprises Inc./Xtreme Mobile	6221112500	2446	MAIN	ST	Cat vi-Auto-Washing	Low	7542
Xtreme Mobile Detailing	6390109000	603	MELROSE	AV	Cat vi-Auto-Washing	Low	7542
		Cat vii-Auto Lots Storage					
Bajas #3 Auto Wrecking		811	ENERGY	WY	Cat vii-Auto Lots Storage	High	7549
Broadway Palomar RV Storage	6220431100	1375	BROADWAY		Cat vii-Auto Lots Storage	Low	4225
Chula Vista Toyota	6440407900	650	MAIN	ST	Cat vii-Auto Lots Storage	High	5511
Convinient Mobile	6221403200	2555	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
Eastlake RV and Boat Storage	5952312100	2371	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	4225
Eastlake Self Storage	5952312900	2351	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	4225
Economy Upholstery	6291200800	3679	MAIN	ST	Cat vii-Auto Lots Storage	High	4225
Hilltop Main Self Storage	6291302500	3755	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225

Facility Name	APN Number	Address			Category	Priority	SIC Number
Hofer Corporation	6450300900	5662	OTAY VALLEY	RD	Cat vii-Auto Lots Storage	High	4226
Irongate Mini Storage	6232502300	3650	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
Koa Kampground Storage	5633303600	111	SECOND	AV	Cat vii-Auto Lots Storage	Low	4225
Otay Valley RV Storage	6291300300	163	MACE	ST	Cat vii-Auto Lots Storage	Low	4225
Roman's Auto Electric	6221902000	2555	FAIVRE	ST	Cat vii-Auto Lots Storage	High	7538
Savon Self Storage	6232300600	3708	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
SD Storage-CVS	6221121100	2776	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
SD Storage-MSS	6221902700	2385	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
SD Storage-VSS	5634421500	325	TROUSDALE	DR	Cat vii-Auto Lots Storage	Low	4225
Security First Commercial Storage, LLC	6290501000	1725	FOURTH	AV	Cat vii-Auto Lots Storage	Low	4225
Security First Self Storage	6290500800	3089	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
Security Public Storage	5623232900	471	C	ST	Cat vii-Auto Lots Storage	Low	4225
Sentry Storage	6291302900	3885	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
The Collections @ Eastlake	5952314100	2421	FENTON	ST	Cat vii-Auto Lots Storage	High	
		Cat viii-Fueling-Rtl/Wsl					
Allen Gas Truck Stop	6290606100	3205	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	7538
Arco AM/PM #5208	5652801400	407	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco AM/PM #5217	5733203900	798	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco AM/PM #5218	6290101300	1725	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco AM/PM #607	6231921500	3190	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco AM/PM #633	6170601600	800	PALOMAR	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco At H Street	5710300900	720	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Arco By The Bay	5653101600	765	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541

Facility Name	APN Number	Address			Category	Priority	SIC Number
Arco Sunshine Market	6201301600	1401	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	5541
Birkdale Corp DBA L Street 76	5713101400	898	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Bobar Market 8	5670903900	600	F	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Bonita Arco	5932800700	4498	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Bonita Gas & Mini Mart	5932800700	4498	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Bonita Point Auto Care Inc.	5941311200	149	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Bonita Shell	5701402700	100	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Bonita Vista Gas & Auto	6421701100	903	OTAY LAKES	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Cali Mart	6291303000	3733	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Chevron Inc #1422	5700203200	95	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Chevron Station #1946	6411222000	695	PALOMAR	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411
Chevron Station Inc. #1837	6402910400	770	PLAZA	CT	Cat viii-Fueling-Rtl/Wsl	Low	5541
Chevron Station-Eastlake Parkway	5950720500	950	EASTLAKE	PW	Cat viii-Fueling-Rtl/Wsl	Low	5541
Chevron Station-Olympic Parkway #1975	6430206900	2115	OLYMPIC	PW	Cat viii-Fueling-Rtl/Wsl	High	5541
Chula Vista Mobil	6190104500	902	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Chula Vista SVC CTR/SECV Inc.	5734902600	899	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Circle K Store #2964	5650401100	60	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Circle K Store #5708	5701310500	98	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Dons Arco	6390802200	495	TELEGRAPH CANYON	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Fred's Auto Repair	6290606100	3205	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Gas Depot	5652402100	199	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Lamb Fuels Inc.	6441820300	855	ENERGY	WY	Cat viii-Fueling-Rtl/Wsl	Low	5541
Lorena B Ratonel Shell	5922001600	350	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Melrose 76	6240800700	1495	MELROSE	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541

Facility Name	APN Number	Address			Category	Priority	SIC Number
Mobil Oil On The Run #12924	5953221800	2210	OTAY LAKES	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
Mohsen Oil	6192805900	1328	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
New West Petroleum LLC #1016	6240800900	1498	MELROSE	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Optima	5672003900	498	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Optimart	62303000800	1450	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Palomar Shell	6192225500	1295	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
Seven Eleven 13951 B 2131	5662402800	275	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411
Seven Eleven 24070A 2131	6232716800	1482	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	5411
Seven Eleven 29540B 2131	6191002400	7	NAPLES	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411
Shell at Main	6240602800	4555	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Supreme Gasoline	5652302600	196	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
Suresh Patel	6240606500	4430	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
Terra Nova Service Plaza	5922001600	350	H	ST	Cat viii-Fueling-Rtl/Wsl	Medium	
Thrifty #9568	6394901500	401	TELEGRAPH CANYON	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
World Oil Co. #46	5672010300	685	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
		Cat x-Eating/Drinking ...					
Agave Grill	5672004700	625	H	ST	Cat x-Eating/Drinking ...	High	5812
Albertson's #6729	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5411
Albertson's #6757	5733204500	720	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Albertson's #6759	5950305800	2310	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	High	5411
Alejandro's Mexican Bar & Grill	5953222100	2220	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Ancira Tamales		2260	MAIN	ST	Cat x-Eating/Drinking ...	Low	
Aning's Homemade Specialties	5922102100	449	KRISTA	CT	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Anthony's Fish Grotto	5670212900	215	BAY	BL	Cat x-Eating/Drinking ...	High	5812
Antojito's Lucy's	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	Low	5812
Apple Tree Market	6231312000	1556	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Arbys #7057/Capitals Group LLC	5953220800	2244	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Asada Express Inc.	6181520200	1067	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Aunt Emmas	5670310600	700	E	ST	Cat x-Eating/Drinking ...	Low	5812
Auto Express Services	5722705100	801	BROADWAY		Cat x-Eating/Drinking ...	Low	7538
Baja Lobster & Club	6181422700	1060	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Baja Taco	6181422700	1052	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Ball 3	5721312000	683	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Baskin Robbins	5941310200	1463	H	ST	Cat x-Eating/Drinking ...	Low	5812
Bert's Grill		525	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Best Price	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Birrieria Don Rafa	5720803200	621	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Blimpie	6182802100	1208	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Blimpie Subs and Salads	6430206500	1360	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812
Bobbies South	5711530600	686	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Boston Market #863	5941310600	770	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Brassco International Inc.	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Bulls Eye Burger	5713101800	860	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Burger King #11435	5700201700	99	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Burger King #11545	6402924800	899	H	ST	Cat x-Eating/Drinking ...	High	5812
Burger King #2339	5720104700	599	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Burger King #952	6192225200	1265	THIRD	AV	Cat x-Eating/Drinking ...	High	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Burrito Corona Group LLC	5932800600	4444	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Butcher Shop Steak HS	5710500800	556	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
C&S Discount Store	5683340100	294	CENTER	ST	Cat x-Eating/Drinking ...	Low	5099
Cafe De Cafe	5932800900	4366	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Cafe Salotto	5953220300	2240	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Caffe Taza	6390806400	533	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Caffe Taza	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5451
Caffe Taza 2	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	Low	5812
Caffe Tazza	5950711500	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812
California Pizza Kitchen	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
California Sushi Bar Inc.	5683340300	337	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Canyon Club Cafe	6394901300	421	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Carls JR #281	6430206800	2097	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
Carls JR #31	5710502400	502	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Carls JR #546	6182005400	1100	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Carls JR #575	5941310400	1487	H	ST	Cat x-Eating/Drinking ...	High	5812
Carls JR #83	6190100800	996	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Carrow's Restaurant #953	5720104700	598	H	ST	Cat x-Eating/Drinking ...	Low	5812
CAT Cheoon Restauranct	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
CDT Catering Services	5634410600	320	TROUSDALE	DR	Cat x-Eating/Drinking ...	Low	5812
Cheesecake Factory	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Chick Fil A at Eastlake Terraces	6430206700	2089	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
Chili's Bar & Grill #1363	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Chili's Bar & Grill #387	6402924700	800	PASEO DEL REY		Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
China China Restaurant	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	5812
China Gourmet Express	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
China King Buffet	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
China Little Cafe Express	5684503600	492	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Chinese City Restaurant	6230600200	1403	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Chriss Chriss Ent Inc./Little Caesar Pizza	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Chriss Chriss Ent Inc./Little Caesar Pizza	5672322300	481	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Chula Vista Nutrition Store	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	Low	5411
Chula Vista RV Park Store	7600480300	460	SANDPIPER	WY	Cat x-Eating/Drinking ...	Low	5399
Chula Vista Submarina	6182106300	1177	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Church Fried Chicken	6190610200	1005	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Churreria	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Ciao Italian Restaurant	6240606000	4360	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5812
Cilantro Live	5683330500	315	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Claire's #5016	5720104700	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Coco's #607	5671010400	303	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Coin Toss	5670901500	312	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Colima's Mexican Food	5912522500	4102	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Coors Amp/Valentino Espresso	6450214700	2050	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812
Corzy Corner Pizza	6441912700	1655	BRANDYWINE	AV	Cat x-Eating/Drinking ...	Low	5812
COSTCO at Broadway	6182006100	1130	BROADWAY		Cat x-Eating/Drinking ...	High	5399
Costco Wholesale Corp #460	6402925000	895	H	ST	Cat x-Eating/Drinking ...	High	5399
Cotija Taco Shop		4444	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Cotijas Mexican Food	5734500700	810	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Cotixan Mexican & Seafood	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Cotixan Taco Shop	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5812
D & J's Way Inc./Subway	6390806500	559	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
D Lish	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	5812
Dairy Queen Orange Julius	6220310500	664	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Daphnes Grekk Cafe	5950720800	2275	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Del Taco #809	6220310500	670	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
Deli Shoppe	6170800700	1075	BAY	BL	Cat x-Eating/Drinking ...	Low	5812
Denny's Restaurant #1719	5701406000	110	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Denny's Restaurant #6962	5670320600	692	E	ST	Cat x-Eating/Drinking ...	High	5812
Diamond Jim	5733710400	771	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Dlush LLC	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Docks Cocktail Lounge	5683330600	317	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Dolci Mango	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5451
Dominos Pizza	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Dominos Pizza #7724	5683004600	380	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Don Pedro Taco Shop	5680711700	247	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Donnys Cafe Inc.	5912401800	3901	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Dragon Express Fast Food	5670320800	678	E	ST	Cat x-Eating/Drinking ...	Low	5812
Edelweiss Restaurant	5680441700	230	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
El Camaron	5652402600	193	BROADWAY		Cat x-Eating/Drinking ...	High	5812
El Camaron 2	6231911200	301	MONTGOMERY	ST	Cat x-Eating/Drinking ...	Low	5812
El Comal Antojitos Mexicanos	5680711500	239	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
El Comal Antojitos Mexicanos	5710500600	534	BROADWAY		Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
El Comal Antojitos-Citation	5681521900	262	THIRD	AV	Cat x-Eating/Drinking ...	Other	
El Dorado Seafood & Grill	6192806300	0	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
El Gordito Feliz Mexican Food	6404400117	1149	CABRILLO	DR	Cat x-Eating/Drinking ...	Low	5812
El Jalapeno Mexican Grill	6192806000	1352	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
El Mexicanos Taco Shop	6390806500	567	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
El Nopal Market LLC	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5411
El Norteno	6192122800	1266	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
El Pollo Loco/Bas Food Services	5710622100	666	H	ST	Cat x-Eating/Drinking ...	High	5812
El Ranchero Factory	6192804300	1324	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
El Ranchero Factory Taco Shop #2	6232121900	3344	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
El Torito #89	5670213700	271	BAY	BL	Cat x-Eating/Drinking ...	High	5812
Ernie's 50s Diner	5683330800	323	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Estela's Bazaar	6181422000	1080	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Fair Market & Hollywood Pizza	5743003200	72	J	ST	Cat x-Eating/Drinking ...	Low	5812
Figaro's Pizza	5950305900	2326	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812
Filippis Pizza Grotto	5650600900	82	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Flamingo Cafe	5670902500	396	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Florence Pizza Express	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812
Food 4 Less #780	6220310500	660	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5411
Formosa Club	5713100500	840	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Frutas Inc.	6192805800	1329	THIRD	AV	Cat x-Eating/Drinking ...	Low	5451
Fuddruckers #3055	5682702300	340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Galley At The Marina	7600480101	550	MARINA	PW	Cat x-Eating/Drinking ...	Low	5812
General Los Panchos Taco Shop	5672321400	577	H	ST	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Giant Pizza King $17	6394901300	419	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Gigante Pizza	5670324500	226	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Global Coffee Sidewalk Cafe	5932800500	4366	BONITA	RD	Cat x-Eating/Drinking ...	Low	5451
Godfather's Pizza	6182101500	1187	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Godland Inc./Juice It Up	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Godland Inc./Juice It Up	5950720300	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812
Golden Star Chinese Food	5734503500	864	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Great Happiness II	6230606700	1445	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
H&J Phan DBA Lollicup Tea Zone	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812
HDOS ENT	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Henry's Market Place	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Henry's Market Place dba Otay Ranch Mark	6421701000	941	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5411
Heritage Park Cafe	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Hermano's Taco Shop	6182901700	1295	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Hilltop Market	6232716700	1500	HILLTOP	DR	Cat x-Eating/Drinking ...	High	5411
Home Town Buffet #705	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Home Town IGA	5670320800	646	E	ST	Cat x-Eating/Drinking ...	High	5411
Honey Baked Ham Inc.	5922000700	316	H	ST	Cat x-Eating/Drinking ...	High	5411
Hot Dog Expressions	6402911300	725	PLAZA	CT	Cat x-Eating/Drinking ...	Low	5812
Hungry Hanks Deli	5734503500	866	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Hurshi's Cafe	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Ida's Lompia Palace & China Town	5941310900	732	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
In-N-Out Burger	6437700900	1725	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
International House of Pancakes	5953221000	2258	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Isactaz Inc/Quiznos #3179	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	5812
Italy Express	6390806400	527	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Jack Donuts	6220433200	1355	BROADWAY		Cat x-Eating/Drinking ...	Low	5461
Jack in the Box #15	5734500600	802	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Jack in the Box #6	5672003900	486	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Jack in the Box #63	6230500200	1408	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Jack in the Box #68	5912511600	4011	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Jack in the Box #86	5632703400	5	FOURTH	AV	Cat x-Eating/Drinking ...	High	5812
Jack in the Box #93	6220433300	585	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
Jack in the Box #99	5922001800	370	H	ST	Cat x-Eating/Drinking ...	High	5812
Jack-N-The Box		919	OTAY LAKES	RD	Cat x-Eating/Drinking ...		
Jalisco Cafe	5912522600	4026	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Jamba Juice #515	5950720800	2275	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Jamba Juice #603	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Janies	5670320800	652	E	ST	Cat x-Eating/Drinking ...	Low	5812
Javid Brothers Enterpirse Inc/Quiznos	6182006500	1120	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Jill A Lindstedt	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Jill A Lindstedt	5653102700	725	E	ST	Cat x-Eating/Drinking ...	Low	5812
Jimmy J's Espresso	6420202800	900	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Jimmy's Family Restaurant	6191105000	1198	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
JNC Pinoy Foodmart Inc.	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
Jochi's Fast Food Inc.	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Joco Management	5720803100	635	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Joe and Ernie's Pizzeria Inc.	5712006208	730	BROADWAY		Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Jose Mexican Food	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Jose's Mexican Food	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Joshways Restaurant & Bar	5670531400	299	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Juice Adventure	6421701000	935	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Juice Adventure	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Julian's Mexican Food	6190506700	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Just Java Cafe	5681611200	285	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
JVS ENT LLC/DBA Quiznos Sub #4365	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
K Kiala Inc DBA SD Philly Cheese	5950711500	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812
Kaga Sushi	6192113500	1216	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Kanpai Restaurant	6192806300	305	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Karina's Mex Seafood	6180101700	986	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Karina's Mexican Style Seafood #2	6192122200	1282	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
KD Inc/Krazy Dollar	6170800800	1161	BAY	BL	Cat x-Eating/Drinking ...	Low	5331
KFC Y450073BL03	5685112000	461	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
KFC-#Y305030	6411221700	1361	MEDICAL CENTER	DR	Cat x-Eating/Drinking ...	High	5812
KFC-Y450114	6220433400	1327	BROADWAY		Cat x-Eating/Drinking ...	High	5812
KIC Import & Export	5733310800	737	THIRD	AV	Cat x-Eating/Drinking ...	Low	5399
King's Fish House	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
KMart Corp. #7636	6402923600	875	H	ST	Cat x-Eating/Drinking ...	Low	5399
Koopman Enterprise	6396307800	376	THERESA	WY	Cat x-Eating/Drinking ...	Low	5399
Kotija Taco Shop	6240800800	295	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812
L & L Barbecue	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
L Street Shell	6180211800	902	BROADWAY		Cat x-Eating/Drinking ...	High	5411

Facility Name	APN Number	Address			Category	Priority	SIC Number
La Bella Pizza	5683502500	373	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
La Bodega Market	6182101600	1193	BROADWAY		Cat x-Eating/Drinking ...	High	5411
La Escondida	6221114100	2530	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812
La Fresca	6181513000	1037	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
La Fuente Mexican Food	5660106200	34	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
La India Bonita	6240800600	1455	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812
La Moreliana Bakery	6230602500	275	QUINTARD	ST	Cat x-Eating/Drinking ...	Low	5461
La Nena Restaurant Inc.	6180621300	975	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
La Parroquia Cafe & Music Lounge	6430610500	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
La Plamita		1231	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
La Pulga #2	6182901700	1295	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
La Quinta Grill	5652302300	625	E	ST	Cat x-Eating/Drinking ...	Low	5812
La Taquiza Mexican Restaurant	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	Low	5812
La Tia Mexican Food/Paula Bakery	5720803200	631	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
La Torta	5710301200	730	H	ST	Cat x-Eating/Drinking ...	Low	5812
La Tropicana	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Las Golondrinas Taco Shop	5711530600	686	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Liberty Giant Pizza	6201301800	1419	HILLTOP	DR	Cat x-Eating/Drinking ...	Low	5812
Lisa's Filipino Cuisine	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Little Caesars 7636	6402923600	875	H	ST	Cat x-Eating/Drinking ...	Low	5812
LJ San Miguel Ranch 22 LP/Los Primos Me	5950305300	2322	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812
Lolitas Restaurant	63949001300	413	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Lolitas Taco Shop	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
Lolitas Taco Shop	5933500100	4516	BONITA	RD	Cat x-Eating/Drinking ...	High	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Lomas Cafe Mexican Food	6232022500	3218	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
Long John Silver	6190611400	1049	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Lorenzos	5670324500	200	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Los Alazanes Inc.	5941310200	1451	H	ST	Cat x-Eating/Drinking ...	Low	5812
Los Jalapenos Mexican Restaurant	6180620100	943	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Los Panchos Mexican & Seafood	6421701000	933	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Los Panchos Taco Shop	6190610300	1009	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Los Taquitos	6232022700	1665	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Los Taquitos Mexican Grill	6182802100	1208	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Los Tres Pedros	6192215300	1223	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Lucys Market	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	High	5411
Lutong Bahay & Oriental Grill	5941310900	732	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Luzitas Taco Shop	5743003200	60	J	ST	Cat x-Eating/Drinking ...	Low	5812
Mandarin Canton Restaurant	6390806400	543	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Mandarin Chinese	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Mandarin Gourmet	5932800600	4410	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Mango Exotic Mexican Ice Cream	5710502200	510	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Manhattan	5672000900	400	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Manila Garden Restaurant	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Manna Restaurant	5670903900	600	F	ST	Cat x-Eating/Drinking ...	Low	5812
Marie Calendar #103	5682702000	330	F	ST	Cat x-Eating/Drinking ...	High	5812
Marios Taco Shop	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Mariscos El Palmar	5670411600	201	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Mariscos Los Arcos Restaurant	5700203400	89	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Marisol Nite Club	6221114600	2638	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812
Maye's Desserts	5932800200	4240	BONITA	RD	Cat x-Eating/Drinking ...	Low	5499
McDonalds #14228/Sutherland MGMT Co	5953220900	2254	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
McDonalds #25836/TRS Restaurant	6411221900	687	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
McDonalds #6840/Sutherland MGMT Co	6390806700	551	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812
McDonalds at Broadway	5720803400	619	BROADWAY		Cat x-Eating/Drinking ...	High	5812
McDonalds at E Street	5653102700	725	E	ST	Cat x-Eating/Drinking ...	High	5812
McDonalds at Third #1557	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
McDonalds Corp	6182007100	1150	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
McDonalds Corp #7554	6182803700	1288	BROADWAY		Cat x-Eating/Drinking ...	High	5812
McDonalds of Bonita	5932800900	4340	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
McDonalds/Tavarua Restaurant Inc	5623242000	75	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Mercado International 2000	6230606100	1415	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Merkl's Restaurant	5672112200	415	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
MGM Buffet	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Miramar Fish Market	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5812
MJ's Bar & Grill	6230606700	1445	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
MR Jalapeno	5710502200	520	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
MR VS Giant Pizza	6190507100	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
MRS Rice Oriental Restaurant, LLC	6220433200	1355	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
NAPA Pizza	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812
Ninna Matty's Mexican Food	6192806000	1352	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Noodles & Company	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Ocean City Partnership	6181510200	1011	BROADWAY		Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Olive Garden Restaurant #1205	5720104500	585	I	ST	Cat x-Eating/Drinking ...	Low	5812
Otay Farms Inc.	6290100100	1716	BROADWAY		Cat x-Eating/Drinking ...	High	5411
Outside In	6191210700	1121	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Over the Border	6231821400	3008	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812
Palap Charbroiled Chicken	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812
Palomar Importer & Wholesale Co. Inc.	6221114100	2550	MAIN	ST	Cat x-Eating/Drinking ...	Low	5399
Panda Chef	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Panda Express #1098	6240606700	1820	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
Panda Express #1316	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
Panda Express #960	6182005400	1120	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Panda Imperial Restaurant	6192113400	1208	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Panera Bread	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Papa Johns Pizza #1977	6190601600	1085	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Papa Johns Pizza #1978	6402932300	1020	TIERRA DEL REY		Cat x-Eating/Drinking ...	Low	5812
Papa Murphy's Take & Bake Pizza	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812
Papayas Juice Bar	5932800200	4244	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Park & Joo Enterprise Inc/DBA Rice King	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812
Pei Wei Asian Dinner	5950711600	884	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812
Pescados Mariscos Hectors	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Pescados Y Mariscos Hectors	6182106300	1177	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
PF Changs China Bistro	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Pho Vien Dong	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Pick Up Stix	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
Pinas Fruit Salads Smoothies	6180103300	970	BROADWAY		Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Pizza & Pasta Express	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Pizza Hut #315092	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
Pizza Junction	5670324500	226	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Pizzeria Uno	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Plazas Mexican Food	6220913700	1550	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Poe's Catering	5954100222	2156	LAGO MADERO		Cat x-Eating/Drinking ...	Low	5812
Poliza Hollywood Inc	5743003200	72	J	ST	Cat x-Eating/Drinking ...	High	5411
Pozoleria Dona Maria	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Prima Supply Inc.	6221115800	649	ANITA	ST	Cat x-Eating/Drinking ...	Low	5399
Quik Wok	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5399
Quizno's Classic Subs	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	5812
Rally's Hamburger/Ongs Restaurant Group	6190511300	1004	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
Ralphs #235	6411221400	659	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411
Ralphs #75	5941310100	780	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
Rancho Palomar LP	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	Low	
Red Hot Java	6410101900	765	MEDICAL CENTER	CT	Cat x-Eating/Drinking ...	Low	5812
Red Lobster #521	5682702700	342	F	ST	Cat x-Eating/Drinking ...	High	5812
Robledo's Taco Shop Inc.	5672001500	444	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Romano's Macaroni Grill #339	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Romesco Baja Bistro	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
Rosa Giant Pizza	6221114800	1680	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Royal China Palace II	5652302300	625	E	ST	Cat x-Eating/Drinking ...	Low	5812
RS Restaurant LLC DBA Subway #2253	5922001700	374	H	ST	Cat x-Eating/Drinking ...	High	5812
Rubios Fresh Mexican Grill	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	High	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Rubios Fresh Mexican Grill at Broadway	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Rubios Fresh Mexican Grill at Eastlake	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
San Diego Cash & Carry	6232502500	3630	MAIN	ST	Cat x-Eating/Drinking ...	Low	5399
Santa Fe Meats	6221112000	2514	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
Saphire Lounge	5912522500	4076	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Sareta Food Corporation	6430610500	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Save A Lot #943	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Seafood City Market	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Selecta Mexican Foods		1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	
Senor Pancho Mexican Grill	6231423900	298	MONTGOMERY	ST	Cat x-Eating/Drinking ...	Low	5812
Seven Eleven #13568E-2131	6394901300	415	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411
Seven Eleven #13569E-2131	5712002300	796	BROADWAY		Cat x-Eating/Drinking ...	Low	5411
Seven Eleven #13570C-2131	5670531100	285	BROADWAY		Cat x-Eating/Drinking ...	High	5411
Seven Eleven #13576F	5710611000	698	H	ST	Cat x-Eating/Drinking ...	Low	5411
Seven Eleven #13578D-2131	6240800600	1475	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5411
Seven Eleven #13582C-2131	5731700200	290	I	ST	Cat x-Eating/Drinking ...	Low	5411
Seven Eleven #13590D-2131	6181520700	1097	BROADWAY		Cat x-Eating/Drinking ...	High	5411
Seven Eleven #18547B-2131	6240605700	4300	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5411
Seven Eleven #2131	6421700900	913	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
Seven Eleven #21604C-2131	5722811300	899	BROADWAY		Cat x-Eating/Drinking ...	High	5411
Seven Eleven #21792C-2131	5684200100	403	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Seven Eleven #33715	6182803600	689	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411
Silver Cup Bakery	6426402800	1352	SANTA CORA	AV	Cat x-Eating/Drinking ...	Low	5461
Silver Dollar	5683340400	341	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Sitoo's Deli & Catering	5952313500	2300	BOSWELL	RD	Cat x-Eating/Drinking ...	Low	5812
SL Gourmet/Chinese Gourmet Express	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Smart & Final #463 / SFI Corp	6290607500	3141	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
Smoothie Caffe	5950705500	2070	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
Snack Ball	6232301700	3804	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812
Sodexho Management Inc.	5743003400	84	J	ST	Cat x-Eating/Drinking ...	Low	5812
Southbay Fish and Grill	7600480102	570	MARINA	PW	Cat x-Eating/Drinking ...	Low	5812
Star Bakery	6192866000	1372	THIRD	AV	Cat x-Eating/Drinking ...	High	5461
Star Gazer Club	5653201600	33	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Starbucks Coffee #5253	5941310200	1467	H	ST	Cat x-Eating/Drinking ...	Low	5812
Starbucks Coffee #5665	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	5812
Starbucks Coffee #5885	5672321500	595	H	ST	Cat x-Eating/Drinking ...	Low	5812
Starbucks Coffee #6589	6411221800	605	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Starbucks Coffee #8750	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	Low	5812
Steak Escape Otay Ranch Town Center	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Stellas Deli & Cafe at Third Avenue	5683504000	365	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Steve's Cabana Bar	5652400600	173	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Stuart Anderson Black Angus Restaurant	5653101700	707	E	ST	Cat x-Eating/Drinking ...	Low	5812
Submarina	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812
Subway #1055	5720803500	609	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Subway #15681/Serler Inc.	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Subway #16107	6390806500	559	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812
Subway #16107-1	6240800900	1498	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812
Subway #28286	5623242400	45	BROADWAY		Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
Subway #29881	6411224800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
Subway #3062	5941310200	1455	H	ST	Cat x-Eating/Drinking ...	Low	5812
Subway #31595	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Subway #33339		263	ORANGE	AV	Cat x-Eating/Drinking ...	High	5812
Subway at H	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5812
Subway at Main	6291303000	3733	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812
Sugar & Spice Delicafe	5720104700	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Sunny's Market	5672122000	449	BROADWAY		Cat x-Eating/Drinking ...	High	5411
Super Express Chinese Food	5720803500	609	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Sushi Corner	6430610500	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Sushi Loco	5670324500	224	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Sushiya	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Sutherland Management Co.	5932800900	4394	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Taco Bell #15508	6420201700	1548	H	ST	Cat x-Eating/Drinking ...	High	5812
Taco Bell #2971	5922001300	340	H	ST	Cat x-Eating/Drinking ...	High	5812
Taco Bell #3398	5670320100	696	E	ST	Cat x-Eating/Drinking ...	High	5812
Tacos El Gordo	5671902800	689	H	ST	Cat x-Eating/Drinking ...	Low	5812
Tacos El Gordo De Tijuana, BC Jr	6193001100	1351	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Tacos Toby	6240606200	1682	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812
Taqueria El Farolito	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Target Store T-1815	5950720400	910	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5399
Tasita D Cafe	6220913300	1550	BROADWAY		Cat x-Eating/Drinking ...	Low	5451
Texcoco Restaurant	6181512900	1043	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
The Flafel Shoppe	5651703500	115	BROADWAY		Cat x-Eating/Drinking ...	Low	5812

Facility Name	APN Number	Address			Category	Priority	SIC Number
The Lighthearted Gourmet	5683003300	385	FOURTH	AV	Cat x-Eating/Drinking ...	Low	5812
The Lion's Den	5721803300	725	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
The Perking Lot	5933500100	4502	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
The Plascencia Group LLC	5932800500	4346	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
The Soup Stone	5682702100	310	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
TheMarshmallow Studio	6435154500	1422	MARBLE CANYON	WY	Cat x-Eating/Drinking ...	Low	5441
Thien's Optimart	5672003900	498	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Third Avenue Minimart	5733204000	772	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Tijuana Oyster Bar	5932800200	4246	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
TJ Oyster Bar	59332800200	4246	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
Tortillas De Harina Elice		1660	BROADWAY		Cat x-Eating/Drinking ...	Low	
Tortilleria Santa FE, Inc.	6231820400	387	ZENITH	ST	Cat x-Eating/Drinking ...	Low	5812
Tropical Fruits	6220412700	1410	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Vanessa Water Store	5670903900	600	F	ST	Cat x-Eating/Drinking ...	Low	5812
VIP Oriental Buffet	5710500600	542	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Vons Food & Drug #2006	6390806200	505	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411
Vons Food & Drug #2071	5953220200	2250	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
Vons Food & Drug #2130	5932800600	4404	BONITA	RD	Cat x-Eating/Drinking ...	High	5411
Vons Food & Drug #2336	5922000500	360	H	ST	Cat x-Eating/Drinking ...	High	5411
Vons Food & Drug #3063	5734503400	870	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
Walmart @ Eastlake	6430208400	1360	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5399
Walmart Expansion	5623242000	75	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Water 24 Inc.	6182911200	1215	BROADWAY		Cat x-Eating/Drinking ...	Low	5399
Weinerhsnitzel		282	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	

Facility Name	APN Number	Address			Category	Priority	SIC Number
Wendy's Coastline Food Service Corp	5950720600	960	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
Wendy's Coastline Food Service Corp	5670325100	618	E	ST	Cat x-Eating/Drinking ...	High	5812
Wetzel's Pretzels Otay Ranch	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
Wienerschitzel	6192221400	283	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
Wienerschnitzel #116	5672321800	493	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Wienerschnitzel #16	5672321800	493	BROADWAY		Cat x-Eating/Drinking ...	High	5812
Wings N Things Restaurant	5672322300	481	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Xana Spree	5957505000	391	PLAZA TOLUCA		Cat x-Eating/Drinking ...	Low	5399
Yo Julian's Mexican Food	6190507100	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
Yokozuna's Shushi Bar & Island Grill	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
Yoshinoya Beef Bowl	6182901500	1299	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Zorba's Family Restaurant	5651622800	100	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
Cat xi-Mob. Carpet/Drape							
Active Carpet Cleaning	5693111900	43	ALVARADO	PL	Cat xi-Mob. Carpet/Drape	Low	7217
Bonita Carpet Care	5955205800	2506	SADDLEHORN	DR	Cat xi-Mob. Carpet/Drape	Low	7217
Buena Vista Carpet Care	6243850500	1551	LOMA	LN	Cat xi-Mob. Carpet/Drape	Low	7217
Carlos Sandoval Carpet Center	5731300500	380	I	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Cool Style Carpet Cleaning	5712332000	752	MADISON	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Day & Night Carpet Cleaning Services	5683322200	317	TWIN OAKS	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Del Rey Carpet Service	5933702900	535	PASEO ROSAL		Cat xi-Mob. Carpet/Drape	Low	7217
Dollar Carpet Cleaning	6431823800	2287	SUN VALLEY	RD	Cat xi-Mob. Carpet/Drape	Low	7217
Edwards Carpet Cleaning	6410910400	578	NANTUCKET	DR	Cat xi-Mob. Carpet/Drape	Low	7217
Empire Carpet Service Inc.	5957232000	556	SCENIC TRAIL	PL	Cat xi-Mob. Carpet/Drape	Low	7217

Facility Name	APN Number	Address			Category	Priority	SIC Number
Extreme Carpet Care Services LLC	6233151100	1540	CONNOLEY	AV	Cat xi-Mob. Carpet/Drape	Low	7217
First Touch Steam Carpet Cleaning	6182106300	1177	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217
Foreign Auto Upholstery	5754000100	55	NAPLES	ST	Cat xi-Mob. Carpet/Drape	Low	7532
Frankys Floor & Carpet Care	6190105200	971	FOURTH	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Golden Care Carpet Cleaning	6243711600	1768	REGENCY	WY	Cat xi-Mob. Carpet/Drape	Low	7217
Hydro Pacific Carpet Cleaning	5680421100	232	GARRETT	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Integrity Carpet Cleaning	5652904100	30	WOODLAWN	AV	Cat xi-Mob. Carpet/Drape	Low	7217
L&V Cleaning Services	6233331300	64	SHERWOOD	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Lavamax Carpet Cleaning	5634410500	320	TROUSDALE	DR	Cat xi-Mob. Carpet/Drape	Low	7217
Ocean's Carpet	6221112500	2488	MAIN	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Preferred Carpet Care	5651623100	110	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217
RC Carpet & Furniture Cleaning	5735330600	162	L	ST	Cat xi-Mob. Carpet/Drape	Low	7217
RG Carpet Cleaning	6412710400	1097	MOUNT DANA	DR	Cat xi-Mob. Carpet/Drape	Low	7217
Rosalie's Carpet Cleaning	6181522600	1057	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217
Rueda's Carpet Cleaning	6244213600	274	RANCHO	CT	Cat xi-Mob. Carpet/Drape	Low	7217
Select Carpets	6204202000	4501	OTAY VALLEY	RD	Cat xi-Mob. Carpet/Drape	Low	5713
Servpro of Fire & Water Damage	6411431300	1485	LA CHICA	DR	Cat xi-Mob. Carpet/Drape	Low	7217
Siedschlag Carpet Cleaning	5710620800	537	OAKLAWN	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Southbay Carpet Care	6422404000	1883	GOTHAM	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Sunset Carpet Cleaning	5672111000	557	VANCE	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Sunset Carpet Cleaning & Services	6422724300	931	BUENA VISTA	WY	Cat xi-Mob. Carpet/Drape	Low	7217
TNT Carpets	5742311800	658	CARLA	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Two Brothers Carpet & Upholstery Cleaning	5651312300	50	MONTE VISTA	AV	Cat xi-Mob. Carpet/Drape	Low	7217
Vegas Carpet Cleaning	5754321700	1108	HILLTOP	DR	Cat xi-Mob. Carpet/Drape	Low	7217

Facility Name	APN Number	Address			Category	Priority	SIC Number
Warrior Carpet	6442214600	1546	POINT HUENEME	CT	Cat xi-Mob. Carpet/Drape	Low	7217
We Buff It Too Biz	5682630600	489	G	ST	Cat xi-Mob. Carpet/Drape	Low	7217
We Care Carpet Cleaning	5951750300	1937	DUKE	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Westcoast Carpet Cleaning	5733712300	297	K	ST	Cat xi-Mob. Carpet/Drape	Low	7217
Cat xii-Cement Mixing/Cut							
Arturo Cervantes Barajas Concrete Co.	6206030400	1264	RAVEN	AV	Cat xii-Cement Mixing/Cut	Low	1771
Buildis and Son Cement	5733322100	720	DEL MAR	AV	Cat xii-Cement Mixing/Cut	Low	1771
California Concrete Designs	6424800400	1631	COOLSPRINGS	CT	Cat xii-Cement Mixing/Cut	Low	1771
Contrera's Concrete Service	5735411300	113	L	ST	Cat xii-Cement Mixing/Cut	Low	1771
Cuen Fred Concrete Service	6200301000	47	OXFORD	ST	Cat xii-Cement Mixing/Cut	Low	1771
John Tessitore	5735220300	812	FAIRWAY	CT	Cat xii-Cement Mixing/Cut	Low	1771
Nora's Concrete	5691330300	110	F	ST	Cat xii-Cement Mixing/Cut	Low	1771
RDS Concrete Construction	5693020600	479	CORTE HELENA	AV	Cat xii-Cement Mixing/Cut	Low	1771
Rubios Concrete Construction	6220722400	725	BELVIA	LN	Cat xii-Cement Mixing/Cut	Low	1771
The Rock Concrete Pumping	6180901900	1031	COLORADO	AV	Cat xii-Cement Mixing/Cut	Low	1771
Cat xiii-Masonry							
A&E Carpet & Tile Distributors	6291002300	170	MACE	ST	Cat xiii-Masonry	Low	1743
Alpha-Omega Hardscape	5952931300	861	SOUTHSHORE	DR	Cat xiii-Masonry	Low	1741
Chula Vista Tile & Stone	6182803500	693	PALOMAR	ST	Cat xiii-Masonry	Low	1743
Emerald Plastering	5752001200	947	HELIX	AV	Cat xiii-Masonry	Low	1742
FJL Masonry	5958001500	1002	SUTTER RIDGE	CT	Cat xiii-Masonry	Low	1741
J&J Tile Service	5650801200	54	SMITH	AV	Cat xiii-Masonry	Low	1743

Facility Name	APN Number	Address			Category	Priority	SIC Number
Jasa Concrete	6205101900	1414	MELROSE	AV	Cat xiii-Masonry	Low	1741
JR Drywall	6202621800	121	PALOMAR	ST	Cat xiii-Masonry	Low	1742
Klaser Tile Company Inc.	6222303400	1595	JAYKEN	WY	Cat xiii-Masonry	Low	1743
MAC Plastering Inc.	6424901800	1705	FAWNTAIL	CT	Cat xiii-Masonry	Low	1742
Masonry By Michael	6403810800	573	PLAZA DEL CID		Cat xiii-Masonry	Low	1741
Masonry Pros	5741401800	78	KING	ST	Cat xiii-Masonry	Low	1741
Precison Plastering	5730900800	389	I	ST	Cat xiii-Masonry	Low	1742
South Coast Structures	6392320700	801	HALECREST	DR	Cat xiii-Masonry	Low	1741
TRS Tile	6201610600	1221	HELIX	AV	Cat xiii-Masonry	Low	1743
USA Stone Design	6180103300	970	BROADWAY		Cat xiii-Masonry	Low	1741
Valencia Stone and Tile	5662503100	241	E	ST	Cat xiii-Masonry	Low	1743
Vent Pros	6192113200	325	OXFORD	ST	Cat xiii-Masonry	Low	1743
WEMAC Marine Insulation	6221023500	753	ANITA	ST	Cat xiii-Masonry	Low	1742

Cat xiv-Painting/Coating

Alfred's Painting	6183600800	544	WELTON	ST	Cat xiv-Painting/Coating	Low	17721
Allstar Painting Services	6433411100	1957	MOSS LANDING	AV	Cat xiv-Painting/Coating	Low	7349
Arrow Professional Painting	6413011600	1170	WIND RIVER	RD	Cat xiv-Painting/Coating	Low	1721
Arroyo Custom Painting Corp	6423800610	1365	SERENA	CI	Cat xiv-Painting/Coating	Low	1721
Barba Painting	6426001000	1537	APPLEGATE	ST	Cat xiv-Painting/Coating	Low	1721
Discount Painting	6423801607	1335	SERENA	CI	Cat xiv-Painting/Coating	Low	1721
DS Construction	5663002200	172	D	ST	Cat xiv-Painting/Coating	Low	1742
G&R Painting	6180623900	580	MOSS	ST	Cat xiv-Painting/Coating	Low	1721
Gaskill Painting Company Inc.	6442302100	744	DESIGN	CT	Cat xiv-Painting/Coating	Low	1721

Facility Name	APN Number	Address			Category	Priority	SIC Number
George Painting	6205412200	1420	CAMELLIA	CT	Cat xiv-Painting/Coating	Low	1721
Hawkin's Painting Company	5752620500	976	GUATAY	AV	Cat xiv-Painting/Coating	Low	1721
Icon Painting Solutions	6411305200	1480	VENTERS	DR	Cat xiv-Painting/Coating	Low	1721
Jam Painting Inc.	6230501400	317	QUINTARD	ST	Cat xiv-Painting/Coating	Low	1721
Lazaro's Painting	6244325700	252	RANCHO	DR	Cat xiv-Painting/Coating	Low	1721
Luther Painting	5680142300	215	GUAVA	AV	Cat xiv-Painting/Coating	Low	1721
Maintenance	6432903800	1150	HITCHING POST	LN	Cat xiv-Painting/Coating	Low	1721
Marcelo's Distinctive Painting	6181511100	567	MOSS	ST	Cat xiv-Painting/Coating	Low	1721
MCS Painting	5663005600	121	SECOND	AV	Cat xiv-Painting/Coating	Low	1721
My Painer Plus.Com	6203600100	1360	MYRA	CT	Cat xiv-Painting/Coating	Low	1721
NR Painting Inc.	6433914200	2526	KING CREEK	CI	Cat xiv-Painting/Coating	Low	1721
Painters at Work	6182106100	550	OXFORD	ST	Cat xiv-Painting/Coating	Low	1721
Paradise Painting	6403300107	1015	CAMINITO ESTRELLA		Cat xiv-Painting/Coating	Low	1721
Quality Home Painting	5952122100	2019	BRIDGEPORT		Cat xiv-Painting/Coating	Low	1721
Ray Garcia	5700204000	24	FLOWER	ST	Cat xiv-Painting/Coating	Low	1721
Rolling Hills Custom Painting	6192501500	116	PALOMAR	ST	Cat xiv-Painting/Coating	Low	1721
Safari Painting	5681610300	259	THIRD	AV	Cat xiv-Painting/Coating	Low	1721
Sammy's Painting Company	6192221100	225	PALOMAR	ST	Cat xiv-Painting/Coating	Low	1721
Scott Painting Company	6393630200	752	PASEO DEL REY		Cat xiv-Painting/Coating	Low	1721
South Coast Home Painting	6393141300	1015	NORMA	CT	Cat xiv-Painting/Coating	Low	1721
Southbay Painting	5651701100	564	D	ST	Cat xiv-Painting/Coating	Low	1721
Sumaya Painting	5730502200	244	H	ST	Cat xiv-Painting/Coating	Low	1721
Superb Interior Painting	6437335000	1679	PICKET FENCE	DR	Cat xiv-Painting/Coating	Low	1721
Superior Color Painting	6437323200	1604	PICKET FENCE	DR	Cat xiv-Painting/Coating	Low	1721

Facility Name	APN Number	Address			Category	Priority	SIC Number
		Cat xvi-Landscaping					
A&G Landscaping	6230720428	56	QUINTARD	ST	Cat xvi-Landscaping	Low	0782
A&G Landscaping	6203502500	226	QUINTARD	ST	Cat xvi-Landscaping	Low	0782
AJ Gardening	6411707100	1125	MISTY CREEK	ST	Cat xvi-Landscaping	Low	0782
All Palms Plus	6411307000	1471	VENTERS	DR	Cat xvi-Landscaping	Low	0782
American Veteran Lawn Care	6393530400	431	NAPLES	ST	Cat xvi-Landscaping	Low	0782
Arroyo Landscaping	6424000100	1494	WOODCREST	ST	Cat xvi-Landscaping	Low	0782
AXL Landscaping	6404002000	1136	CALLE DE DAMASCO		Cat xvi-Landscaping	Low	0782
Beltran Landscaping	6433521000	2078	MIRROR LAKE	PL	Cat xvi-Landscaping	Low	0782
Better Greens	6192611800	1230	TOBIAS	DR	Cat xvi-Landscaping	Low	0782
Bufallo Quality Tree Work	5950931100	902	ASPEN GLEN	RD	Cat xvi-Landscaping	Low	0782
C&R Landscaping	6392800300	314	MOSS	ST	Cat xvi-Landscaping	Low	0782
Castro Lawn Care	6233331100	70	SHERWOOD	ST	Cat xvi-Landscaping	Low	0782
Chau Pen Van	5753410400	1037	HELIX	AV	Cat xvi-Landscaping	Low	0782
Chermak Joseph	5751830100	52	FORTUNA	ST	Cat xvi-Landscaping	Low	0782
Clean Cut Lawn Services	5711810100	702	COLORADO	AV	Cat xvi-Landscaping	Low	0782
CMN Lawn Services	5941331800	1208	POSITAS	RD	Cat xvi-Landscaping	Low	0782
Colonial Gardens Inc	5922302100	578	PARKSIDE	DR	Cat xvi-Landscaping	Low	0782
Complete Lawn Maintenance	5652020200	470	D	ST	Cat xvi-Landscaping	Low	0782
Cortez Samuel Landscaping	6403405100	1058	CAMINO ATAJO		Cat xvi-Landscaping	Low	0782
Decasas Garden	6244012100	1539	GRAND TETON	CT	Cat xvi-Landscaping	Low	0782
Desert Garden's & Sons	6423040500	1351	BLUE FALLS	DR	Cat xvi-Landscaping	Low	0782
Dixon Landscaping Solutions	6433801917	1243	CABEZAS COVE		Cat xvi-Landscaping	Low	0782
Dreamview Landscaping	5755401400	226	OXFORD	ST	Cat xvi-Landscaping	Low	0782

Facility Name	APN Number	Address			Category	Priority	SIC Number
E Kim Landscaping	6403514800	1002	CAMINO CALABAZO		Cat xvi-Landscaping	Low	0782
Elite Hauling Services	6191921600	1180	FIRST	AV	Cat xvi-Landscaping	Low	0782
Enrique YBarra Landscape Maintenance	5710802300	619	WHITNEY	ST	Cat xvi-Landscaping	Low	0782
Epifanio Morales Gardens Landscape	5721723200	684	FOURTH	AV	Cat xvi-Landscaping	Low	0782
Eriks Lawn Maintenance	6202020300	1195	NAPA	AV	Cat xvi-Landscaping	Low	0782
Ernesto Casillas Landscaping	6182105000	555	NAPLES	ST	Cat xvi-Landscaping	Low	0782
Ernie Salazar Landscaping	6180613100	958	CEDAR	AV	Cat xvi-Landscaping	Low	0782
Evergreen Gardening Service	6435432400	1486	OAKPOINT	AV	Cat xvi-Landscaping	Low	0782
Ezequiel Perez Landscaping	5650900800	44	FIFTH	AV	Cat xvi-Landscaping	Low	0782
Fast and Friendly	6412200800	1352	SANTA OLIVIA	RD	Cat xvi-Landscaping	Low	0782
Federal Land Management Corp	6184200700	440	NICKMAN	ST	Cat xvi-Landscaping	Low	0782
Gaeta's Tree Service	6433700124	2543	GARNET PEAK	RD	Cat xvi-Landscaping	Low	0782
Gotta Go Mow & Landscaping	6434102300	1968	MEEKS BAY	DR	Cat xvi-Landscaping	Low	0782
Green Desert	5954406000	1081	FOREST LAKE	DR	Cat xvi-Landscaping	Low	0782
Green Earth Gardening Service	6396840700	145	CORTE MARIA	AV	Cat xvi-Landscaping	Low	0782
Green Grass Landscape	6243930300	149	RAINIER	CT	Cat xvi-Landscaping	Low	0782
Hale Landscaping	5712222000	752	WOODLAWN	AV	Cat xvi-Landscaping	Low	0782
Handy Lawn Care	6435803000	2016	GEYSERVILLE	ST	Cat xvi-Landscaping	Low	0782
Hector Gardening	5951741100	1946	DUKE	ST	Cat xvi-Landscaping	Low	0782
Heldiz Landscape	6204400500	295	RIENSTRA	ST	Cat xvi-Landscaping	Low	0782
Hernandez Gardening	6181020400	1038	JEFFERSON	AV	Cat xvi-Landscaping	Low	0782
Herrera Antonio Landscape	6203304000	140	RIVERA	CT	Cat xvi-Landscaping	Low	0782
Hinkle Tree Service	5651621100	143	MADISON	AV	Cat xvi-Landscaping	Low	0782
JC Landscaping	5952412800	2157	HAMDEN	DR	Cat xvi-Landscaping	Low	0782

Facility Name	APN Number	Address			Category	Priority	SIC Number
Jeff's Lawn Care	5753630100	995	MONSERATE	AV	Cat xvi-Landscaping	Low	0782
Jessica Lopez Design	6412101300	972	MCCAIN VALLEY	CT	Cat xvi-Landscaping	Low	0782
JM Landscaping	6192807715	1303	CALLE TEMPRA		Cat xvi-Landscaping	Low	0782
JM Lawns	6230202700	368	ANITA	ST	Cat xvi-Landscaping	Low	0782
John's Yard Service	5742521800	668	ROBERT	AV	Cat xvi-Landscaping	Low	0782
Johnson Greenery	5735320600	171	L	ST	Cat xvi-Landscaping	Low	0782
Jose's Gardening	5753300800	1013	CUYAMACA	AV	Cat xvi-Landscaping	Low	0782
Jose's Lawn Service	6411444100	1428	LA CHICA	DR	Cat xvi-Landscaping	Low	0782
JR's Landscape	5650310600	689	CHULA VISTA	ST	Cat xvi-Landscaping	Low	0782
Juan J. Hale Landscaping Maint. Service	6181522600	1057	BROADWAY		Cat xvi-Landscaping	Low	0782
Juan Leal Landscape	6310122200	308	PALM	AV	Cat xvi-Landscaping	Low	0782
Kazper's Landscaping	6192113800	1246	THIRD	AV	Cat xvi-Landscaping	Low	0782
Kiki's Paradise Landscaping	6424101606	1360	CALLEJON CERVANTES		Cat xvi-Landscaping	Low	0782
Kutting Edge	6232903400	1617	JADE	AV	Cat xvi-Landscaping	Low	0782
Kyoto Landscape	6220912600	602	ANITA	ST	Cat xvi-Landscaping	Low	0782
Land Art	6403107400	725	GREDOS	PL	Cat xvi-Landscaping	Low	0782
Landscape Enterprise	5661321600	25	D	ST	Cat xvi-Landscaping	Low	0782
Leo's Landscape	5922210903	480	BELLE VISTA	DR	Cat xvi-Landscaping	Low	0782
Leon's Landscaping Service	6430515004	1453	TROUVILLE	LN	Cat xvi-Landscaping	Low	0782
Lua's Landscaping	6182000100	1100	INDUSTRIAL	BL	Cat xvi-Landscaping	Low	0782
Lucero's Landscaping	6190105800	374	MOSS	ST	Cat xvi-Landscaping	Low	0782
Manzano's Landscaping	6395932400	739	NEPTUNE	CT	Cat xvi-Landscaping	Low	0782
Mario's Landscaping	6411134800	576	SIPES	CI	Cat xvi-Landscaping	Low	0782
Mariposa's Landscape	6396821200	666	MARIPOSA	CI	Cat xvi-Landscaping	Low	0782

Facility Name	APN Number	Address			Category	Priority	SIC Number
Martin & Zamora Landscape Maintenance	5721930600	758	ASH	AV	Cat xvi-Landscaping	Low	0782
Maximum & Green Maintenance	6240552500	309	VALLEY	AV	Cat xvi-Landscaping	Low	0782
Mel's Gardening Service	6412022800	910	ISRAEL	CT	Cat xvi-Landscaping	Low	0782
MG Gardening	6205904000	357	PEPPERWOOD	CT	Cat xvi-Landscaping	Low	0782
MGM Landscape Inc	5943610200	558	TRAILRIDGE	DR	Cat xvi-Landscaping	Low	0782
Miles Bob Irrigation	6395933600	752	NACION	AV	Cat xvi-Landscaping	Low	0782
Ochi Gardens	6397013300	176	CAMINO ENTRADA		Cat xvi-Landscaping	Low	0782
Olguin's Landscape	5662911500	186	CORTE HELENA	AV	Cat xvi-Landscaping	Low	0782
Orlando's Garden	6290201100	2887	MAIN	ST	Cat xvi-Landscaping	Low	0782
Ortega Landscape	6182901200	1225	BROADWAY		Cat xvi-Landscaping	Low	0782
P Gracia Landscape	6183011600	490	SHY	LN	Cat xvi-Landscaping	Low	0782
P&A Garden Landscaping	5721723200	684	FOURTH	AV	Cat xvi-Landscaping	Low	0782
Pacific Turf Specialists	5742520800	681	CLAIRE	AV	Cat xvi-Landscaping	Low	0782
PCM Maintenance Landscape Service	5922109300	400	KRISTA	CT	Cat xvi-Landscaping	Low	0782
Pedro's Landscaping	5652200200	443	FLOWER	ST	Cat xvi-Landscaping	Low	0782
Pena's Gardening Maintenance Service	6200420100	236	OLYMPIA	ST	Cat xvi-Landscaping	Low	0782
Picket Fences Landscaping Inc.	6434844000	1263	POPLAR SPRING	RD	Cat xvi-Landscaping	Low	0782
PK Shedenhelm's Landscaping	5943831200	1606	COUNTRY VISTAS	LN	Cat xvi-Landscaping	Low	0782
Plays in the Dirt	5942112000	575	OTAY LAKES	RD	Cat xvi-Landscaping	Low	0782
PRG Maintenance Gardening Service	6192807715	1303	CALLE TEMPRA		Cat xvi-Landscaping	Low	0782
Pro Care Landscape & Gard	6401961100	1164	PASEO SARINA		Cat xvi-Landscaping	Low	0782
Rafaelo's Tree Trimmer	6231122300	435	TREMONT	ST	Cat xvi-Landscaping	Low	0782
RG Landscape & Design	6201212300	3	PAISLEY	ST	Cat xvi-Landscaping	Low	0782
Rhinotech Landscape	6242400500	459	RIVERA	CT	Cat xvi-Landscaping	Low	0782

Facility Name	APN Number	Address			Category	Priority	SIC Number
Rich Valens Tree Service	6191212300	1106	DEL MAR	AV	Cat xvi-Landscaping	Low	0782
RM Landscape	5752710100	933	GUATAY	AV	Cat xvi-Landscaping	Low	0782
Robert's Gardening Service	5712101600	749	RIVERLAWN	AV	Cat xvi-Landscaping	Low	0782
Romita Landscape	6241802500	20	TOURMALINE	ST	Cat xvi-Landscaping	Low	0782
Rudy Landscaping	6403220400	746	AVENIDA SOLARIA		Cat xvi-Landscaping	Low	0782
Sam's Stump Removal	6191220400	1103	DEL MAR	AV	Cat xvi-Landscaping	Low	0782
Silahua's Landscape and Yard Maintenance	6394110500	1169	OCALA	AV	Cat xvi-Landscaping	Low	0782
Silva's Tree Service	5660200400	75	FOURTH	AV	Cat xvi-Landscaping	Low	0782
Southwing Land Maint Inc.	5693010100	3855	SAN MIGUEL	AV	Cat xvi-Landscaping	Low	0782
SPS/Creative Curb Landscapes	5933802700	839	CALLE LAGASCA		Cat xvi-Landscaping	Low	0782
Steve Ferlito Gardening Service	6244212500	271	RANCHO	CT	Cat xvi-Landscaping	Low	0782
Trim Around Yard Service	6421202400	914	WAYNE	AV	Cat xvi-Landscaping	Low	0782
Trujillo Landscaping	5742522100	656	ROBERT	AV	Cat xvi-Landscaping	Low	0782
Turf Pros	6441703300	598	RIVERA	ST	Cat xvi-Landscaping	Low	0782
Valle Lawn Service	5941216200	1284	MARBELLA	PL	Cat xvi-Landscaping	Low	0782
Vasquez Landscaping & Hauling	5730810102	398	MANKATO	ST	Cat xvi-Landscaping	Low	0782
Vegas Gardening Landscaping Services	6412023000	901	ISRAEL	CT	Cat xvi-Landscaping	Low	0782
VMG Landscaping	6240514300	270	DATE	ST	Cat xvi-Landscaping	Low	0782
Westerm Tree Service	5943411100	1756	RIDGE CREEK	DR	Cat xvi-Landscaping	Low	0782
Yonekura Glenn	5672320400	572	OTIS	ST	Cat xvi-Landscaping	Low	0782
		Cat xviii-Golf/Parks/Rec					
Alcala Park	6424816200	1620	MONTANA	RD	Cat xviii-Golf/Parks/Rec	Low	7929
Augusta Park	5953706900		GREENSVIEW	DR	Cat xviii-Golf/Parks/Rec	Low	7929

Facility Name	APN Number	Address			Category	Priority	SIC Number
Bonita Haciendas Mini Park	5943114700	1518	VIA HACIENDA		Cat xviii-Golf/Parks/Rec	Low	7929
Boys & Girls Club of Chula Vista	6200601900	1301	OLEANDER	AV	Cat xviii-Golf/Parks/Rec	Low	8641
Chula Vista Elks Lodge #2011	6391600300	901	ELKS	LN	Cat xviii-Golf/Parks/Rec	Low	7929
Circle Park	6433902300		KING CREEK	CI	Cat xviii-Golf/Parks/Rec	Low	7929
Cobblestone Park	5952035500		LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Coors Amphitheatre	6450214700	2050	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	Low	7929
Countryside Park	6432611000		PINON HILLS	RD	Cat xviii-Golf/Parks/Rec	Low	7929
Eastlake Beach Club	5952220700	2050	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Eastlake Country Club	5953203000	2375	CLUBHOUSE	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Fun 4 All	6170103000	950	INDUSTRIAL	BL	Cat xviii-Golf/Parks/Rec	Low	7929
Kensington Road Park	5955502800	2600	SADDLEBACK	ST	Cat xviii-Golf/Parks/Rec	Low	7929
Knotts Soak City USA	6450201700	2052	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	High	7929
Madison Lane Park	5955201600	640	FALCON VALLEY	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Magnolia Hill Park	5956901900	2640	MONTECITO	RD	Cat xviii-Golf/Parks/Rec	Low	7929
Oak Crest Park	6426222300		SANTA MADERA	AV	Cat xviii-Golf/Parks/Rec	Low	7929
Orchard Park	6420712400		MONTE SERENO	AV	Cat xviii-Golf/Parks/Rec	Low	7929
Palace Garden Park	6230710400	1425	SECOND	AV	Cat xviii-Golf/Parks/Rec	Low	7929
Salt Creek Golf Club	5950400800	525	HUNTE	PW	Cat xviii-Golf/Parks/Rec	Low	7929
San Diego County Club	6190300800	88	L	ST	Cat xviii-Golf/Parks/Rec	Low	7929
Scobee Park	5952310700	2351	KUHN	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Shorebird Park	5952806400	2088	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7929
Wisteria Park	6420735100		SANTA RITA		Cat xviii-Golf/Parks/Rec	Low	7929

Cat xx-Pool/Fountain Clng

Facility Name	APN Number	Address			Category	Priority	SIC Number
A Environmental Services	5692631100	125	H	ST	Cat xx-Pool/Fountain Clng	Low	7349
ABC Pool Service	5682701746	376	CENTER	ST	Cat xx-Pool/Fountain Clng	Low	7389
Academy Pool Service & Supplies	6221114800	1680	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389
Acuario Pool & SPA Maintenance	6206334400	1450	MELROSE	AV	Cat xx-Pool/Fountain Clng	Low	7389
All Pro Pool Services	5932800100	4248	BONITA	RD	Cat xx-Pool/Fountain Clng	Low	7389
Ambart Inc.	5710630100	652	H	ST	Cat xx-Pool/Fountain Clng	Low	7389
Aqua Diamond Pool Service & Repair	6395102000	383	NOVA	PL	Cat xx-Pool/Fountain Clng	Low	7389
Aqua Pro Pool & SPA Service	6433700415	1328	PINNACLE PEAK	DR	Cat xx-Pool/Fountain Clng	Low	7389
Aquatech Pool Service	5953700300	1057	PARK MEADOWS	RD	Cat xx-Pool/Fountain Clng	Low	7389
Azul Pool Service	6436716600	1546	HOPSCOTCH	DR	Cat xx-Pool/Fountain Clng	Low	7389
Blue Wave Pools	5752720100	5116	GLEN VERDE	DR	Cat xx-Pool/Fountain Clng	Low	7389
Bob Reed's Step Saver Pool Products	5662321300	326	E	ST	Cat xx-Pool/Fountain Clng	Low	7389
Bonita Vista Pool Service	6422104600	1618	MILLS	ST	Cat xx-Pool/Fountain Clng	Low	7389
C&A Maint Service	6242000800	461	RIENSTRA	CT	Cat xx-Pool/Fountain Clng	Low	7389
Chlor-Nation	5942221800	510	CAMINO ELEVADO		Cat xx-Pool/Fountain Clng	Low	7389
Choice Maintenance and Repair	5933111500	960	SURREY	DR	Cat xx-Pool/Fountain Clng	Low	7389
Chula Vista Curbside Agency	6192215100	249	OXFORD	ST	Cat xx-Pool/Fountain Clng	Low	7389
Constable Pool Service	5952312900	2351	BOSWELL	RD	Cat xx-Pool/Fountain Clng	Low	7389
Cornerstone	5922107600	458	KARRA	CT	Cat xx-Pool/Fountain Clng	Low	7389
Crystal Clear Poolz	6191620500	1123	TOBIAS	DR	Cat xx-Pool/Fountain Clng	Low	7389
CTI of San Diego	5954811000	2137	CHATEAU	CT	Cat xx-Pool/Fountain Clng	Low	7389
CV Pool Repair & Supply	6181421900	1082	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389
E&D Pool and SPA Service	6204100900	1451	NAPA	CT	Cat xx-Pool/Fountain Clng	Low	7389
Fire on Ice of San Diego	6411702900	1080	MOONSTONE	PL	Cat xx-Pool/Fountain Clng	Low	7389

Facility Name	APN Number	Address			Category	Priority	SIC Number
Fix Time	5952221578	2023	LAKERIDGE	CI	Cat xx-Pool/Fountain Clng	Low	7389
Herbur Pool	6426900900	1421	FIELDBROOK	ST	Cat xx-Pool/Fountain Clng	Low	7389
Jim's Pool Clean Up	5942112000	575	OTAY LAKES	RD	Cat xx-Pool/Fountain Clng	Low	7389
Jose's Pool Service	5671030100	355	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389
JP's Pool Service	6436312974	1571	CIRCULO BRINDISI		Cat xx-Pool/Fountain Clng	Low	7389
Keep It Clean Pool Service	6403924300	1307	VAQUERO	CT	Cat xx-Pool/Fountain Clng	Low	7389
Kelly's Pool and SPA Care	5954902300	1870	MARQUETTE	RD	Cat xx-Pool/Fountain Clng	Low	7389
Kng D C Pool & SPAS	6244021300	14	QUINTARD	ST	Cat xx-Pool/Fountain Clng	Low	7389
Leslie's Swimming Pool Supplies #299	5922000700	316	H	ST	Cat xx-Pool/Fountain Clng	Low	7389
Mack's Maintenance & Repair	5680741800	201	TWIN OAKS	AV	Cat xx-Pool/Fountain Clng	Low	7389
Max Swimming Pool Service	6424602300	1298	MORGAN HILL	DR	Cat xx-Pool/Fountain Clng	Low	7389
Misty Creek Home Improvement	6411705700	1069	MISTY CREEK	ST	Cat xx-Pool/Fountain Clng	Low	7389
New Look Concrete Creations	6422205700	1753	YALE	ST	Cat xx-Pool/Fountain Clng	Low	1711
Patrick's Pool & SPA Service	5670801600	155	NAPLES	ST	Cat xx-Pool/Fountain Clng	Low	7389
Pete & Irma's Pool And SPA	5952034700	2140	STONECREEK	PL	Cat xx-Pool/Fountain Clng	Low	7389
Pressures On	6425401400	1288	SANTA LUCIA	RD	Cat xx-Pool/Fountain Clng	Low	7389
Pure Water Pool and SPA	5955505500	2642	FLAGSTAFF	CT	Cat xx-Pool/Fountain Clng	Low	7389
R3 & Sons	6206334400	1450	MELROSE	AV	Cat xx-Pool/Fountain Clng	Low	7389
Robert The Handy Man	6422201800	1803	GOTHAM	ST	Cat xx-Pool/Fountain Clng	Low	7699
San Deigo Stone Technicians	6422404200	1863	GOTHAM	ST	Cat xx-Pool/Fountain Clng	Low	1743
Sanchez Handyman Service	5711810600	730	COLORADO	AV	Cat xx-Pool/Fountain Clng	Low	7699
Sanique Development	5921920300	474	H	ST	Cat xx-Pool/Fountain Clng	Low	7699
Schaeffer's Pool Service	5952222327	2067	LAKERIDGE	CI	Cat xx-Pool/Fountain Clng	Low	7389
SD Pool Service	5652904100	30	WOODLAWN	AV	Cat xx-Pool/Fountain Clng	Low	7389

Facility Name	APN Number	Address			Category	Priority	SIC Number
Sea Breeze Pool Service	6432321700	1408	ASHFORD CASTLE	DR	Cat xx-Pool/Fountain Clng	Low	7389
Sharko Pool Service & Maintenance	6397021400	819	AVENIDA MADERA		Cat xx-Pool/Fountain Clng	Low	7389
Southbay Postcon Services	6205004000	1422	LANTANA	AV	Cat xx-Pool/Fountain Clng	Low	7389
Spic N Span	5956201100	2057	CHATEAU	CT	Cat xx-Pool/Fountain Clng	Low	7389
Superior Home Prep Co.	6423800116	1467	SUMMIT	DR	Cat xx-Pool/Fountain Clng	Low	1721
Three Amigos Pool Service	6200830600	1362	MAX	AV	Cat xx-Pool/Fountain Clng	Low	7389
WES C Gallagher	5952931300	861	SOUTHSHORE	DR	Cat xx-Pool/Fountain Clng	Low	7389
		Cat xxiii-Bldg/Mat Storag					
Builders Surplus Sales	5634312900	130	GLOVER	AV	Cat xxiii-Bldg/Mat Storag	Low	5211
Chase Equestrian	5943622400	575	TRAILRIDGE	DR	Cat xxiii-Bldg/Mat Storag	Low	0752
Eastlake Parkway Trinidad Cove to Olympic	N/A				Cat xxiii-Bldg/Mat Storag	Low	5211
Eastlake RV & Boat Storage	5952312100	2371	BOSWELL	RD	Cat xxiii-Bldg/Mat Storag	Low	
Ferguson Enterprise	5734903000	895	THIRD	AV	Cat xxiii-Bldg/Mat Storag	Low	5211
Gonzalez Mortgage Market		1058	THIRD	AV	Cat xxiii-Bldg/Mat Storag	Low	
Home Depot #658/Home Depot USA Inc.	6402911300	725	PLAZA	CT	Cat xxiii-Bldg/Mat Storag	High	5211
Home Depot Eastlake	6430206600	1320	EASTLAKE	PW	Cat xxiii-Bldg/Mat Storag	High	5211
J&W Redwood	6291303600	3817	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	5211
Leticia Cano/Nuts and Bolts	6221112500	2446	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	5211
Lowes Home Improvement Warehouse Inc.	5950720100	2225	OTAY LAKES	RD	Cat xxiii-Bldg/Mat Storag	High	5211
Mazal Realty Investment	6182803500	693	PALOMAR	ST	Cat xxiii-Bldg/Mat Storag	Low	8741
Plastics By Roy Inc.	5952313600	825	KUHN	DR	Cat xxiii-Bldg/Mat Storag	Low	5211
RCP Block & Brick Inc.	5632703700	75	FOURTH	AV	Cat xxiii-Bldg/Mat Storag	Low	5211
Road One of San Diego	64404061	1805	MAXWELL	RD	Cat xxiii-Bldg/Mat Storag	Low	7549

Facility Name	APN Number	Address			Category	Priority	SIC Number
Walmart at 5305 Broadway	6182007100	1150	BROADWAY		Cat xxiii-Bldg/Mat Storag	High	5399
White Cap Construction Supply	6290620200	3451	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	5211
Cat xxiv-Animal Facility							
A Girl and Her Dog	6436102846	2278	SWEET PEA	LN	Cat xxiv-Animal Facility	Low	0752
J & R Pet Services	6402524700	664	RAINBOW	DR	Cat xxiv-Animal Facility	Low	0752
Kim's Paws Claws * Hoover Pet Care	5702800100	39	SANDALWOOD	DR	Cat xxiv-Animal Facility	Low	0752
Pawz R US	5670530100	251	BROADWAY		Cat xxiv-Animal Facility	Low	0752
Preen-2-Pristine Pet Parlor & Snack Shack	5950306000	2318	PROCTOR VALLEY	RD	Cat xxiv-Animal Facility	Low	0752
SD Doggy Runs	6244010700	1539	MAX	AV	Cat xxiv-Animal Facility	Low	0752
Unleashed by Petco #1192	5922000900	304	H	ST	Cat xxiv-Animal Facility	Low	0752
Waggin N Walkin	5741030400	78	MANKATO	ST	Cat xxiv-Animal Facility	Low	0752
Cat xxv-Power Washing...							
APM Power Washing	6192215200	228	KENNEDY	ST	Cat xxv-Power Washing...	Low	4959
Fully Restored Surface Cleaning Specialists	5953213006	970	SOMERSET	CT	Cat xxv-Power Washing...	Low	4959
GMR Enterprises	5755001600	91	EMERSON	ST	Cat xxv-Power Washing...	Low	4959
JayBright Company	6441812700	787	ENERGY	WY	Cat xxv-Power Washing...	Low	4959
Jet Clean USA Inc.	6403926200	1255	VAQUERO	CT	Cat xxv-Power Washing...	Low	4959
Superior Wash	6435604300	1556	HUNTERS GLEN	AV	Cat xxv-Power Washing...	Low	1721
Retail Store							
C.V. Wholesale Furniture Store	5721312200	655	BROADWAY		Retail Store	Low	5712
Furniture Mattress Expo	6182911200	1215	BROADWAY		Retail Store	Low	5712

Facility Name	APN Number	Address			Category	Priority	SIC Number
Kohls @ Eastlake	5952322900	2325	OTAY LAKES	RD	Retail Store	High	
Target	MULTIPLE	40	FOURTH	AV	Retail Store	Low	5399

Grand Total: **1,284**

Attachment D.2

Mobile Commercial Businesses Certified During FY 2009-2010

	Business Name	Business Type	SIC	NAICS
1	Andy Anderson Plumbing Inc.	Plumbing	1711	238220
2	Remac	Landscaping	0782	561730
3	Derry Bayner Plumbing	Plumbing	1711	238220
4	Haynes Fire Systems	Fire sprinkler maintenance or installation	1711	238220
5	Aqua Tech Pool Service	Pool and fountain cleaning	7349	561790
6	Jose Melendrez Painting	Handyman	17721	236118
7	MJM Handyman Services	Handyman	17722	236119
8	Pearson Plumbing and Heating	Plumbing	1711	238220
9	The Water's Edge Pool and Spa	Pool and fountain cleaning	7349	561790
10	Salazar Construction Co. Inc.	Cement mixing or cutting	1771	238990
11	1-800 Anytyme	Plumbing	1711	238220
12	Gro Bluegrass Landscaping and Maintenance	Landscaping	0782	561730
13	Eco Asset Preservation (Lewis Jones)	Plumbing	1711	238220
14	Avila Brothers Maintenance	Painting and coating	1721	238320
15	Guillermo Lopez Landscaping	Landscaping	0782	561730
16	Eastlake Pool Service	Pool and fountain cleaning	7349	561790
17	Fleming Painting Inc.	Painting and coating	1721	238320
18	JC Landworks	Landscaping	0782	561730
19	Carlos Becerra Painting	Painting and coating	1721	238320
20	N and C Services/ Splash Spas and Pools	Pool and fountain cleaning	7349	561730
21	Bucio Landscaping	Landscaping	0782	561730
22	Arthur G Ortiz Concrete Inc.	Cement mixing or cutting	1771	238110
23	Erbi Arcasi	Handyman	1721	238320
24	Blue Planet Drains and Plumbing Inc.	Plumbing	1711	238220
25	Al Smith's Deluxe Auto Detailing Services	Mobile automobile or other vehicle washing	7542	811192
26	D.E. Smith	Painting and coating	1721	238320
27	Will Handy Man	Handyman	1721	238320
28	Rafael Carpet Cleaning	Mobile carpet, drape, or furniture cleaning	7217	561740
29	Mid City Fire	Fire sprinkler maintenance or installation	1711	238220
30	Perfection Painting	Painting and coating	1721	238320
31	Del Sol Fence Repair	Landscaping	0782	561730
32	Ecowash Mobile	Mobile automobile or other vehicle washing	7532	811192
33	Ape Construction	Cement mixing or cutting	1771	238110
34	Wipe-Out Window Washing	Other - window cleaning	7349	561790
35	S.J.B.	Plumbing	1711	238220
36	Brown Leaf	Landscaping	0782	561730
37	A1 Fire Protection Inc.	Fire sprinkler maintenance or installation	1711	238220
38	Act First Fire Protection, Inc.	Fire sprinkler maintenance or installation	1711	238220
39	Ernest Carpet Cleaning	Mobile carpet, drape, or furniture cleaning	7217	561740
40	Ricardo Aaron Suberanis	Handyman	1721	238320
41	United Fire Services, Inc.	Fire sprinkler maintenance or installation	1711	238220
42	Frankie Sandoval Lawn Maintenance	Landscaping	0782	561730
43	Edward Pina Services	Handyman	1721	238320
44	Leal Cleaning	Mobile carpet, drape, or furniture cleaning	7217	561740
45	Pepe La Poo's Pump Out	Portable sanitary services	7699	562998
46	Sol Manifest Landscape Maintenance	Landscaping	0782	561730
47	Ferrellgas Inc.	Plumbing	1711	238220
48	G & J Sons House & Window Cleaning	House cleaning	8811	814110
49	Valencia Headlights Restoration	Mobile automobile or other vehicle washing	7542	811192
50	Elite Cleaning Systems	Mobile carpet, drape, or furniture cleaning	7217	561740
51	MC Carpet Cleaning	Mobile carpet, drape, or furniture cleaning	7217	561740
52	Envirosteam Cleaning Systems	Power washing services	4959	561790
53	All Pro Fire Protection Inc.	Fire sprinkler maintenance or installation	1711	238220
54	M&M Construction	Painting and coating	1721	23820

Attachment D.2

Mobile Commercial Businesses Certified During FY 2009-2010

	Business Name	Business Type	SIC	NAICS
55	Lindley Fire Protection	Fire sprinkler maintenance or installation	1711	238220
56	Rodolfo Celis Gardening Service	Landscaping	0782	561730
57	Alberto Verduzco Madrigal	Painting and coating	1721	238320
58	Professional Concepts Cleaning and Landscaping Services	Landscaping	0782	561730
59	Horacio Vicente Comercial and Residential Services	Handyman	1721	238320
60	Fire Sprinkler Systems Inc.	Fire sprinkler maintenance or installation	1711	238220
61	Seascape Pools	Cement mixing or cutting	1771	238110
62	J and R Pet Services	Pet grooming	0752	812910
63	Grace Landscaping	Landscaping	0782	561730
64	Clean and Green	Landscaping	0782	561730
65	Vincent Tapia	Handyman	1721	238320
66	Enrico's Handyman Service	Handyman	1721	238320
67	Sven Dargatz Consulting Inc.	Pool and fountain cleaning	7349	561790
68	US Remodelers Inc. DBA US Homes Services	Plumbing	1711	238220
69	Quality Home Plumbing	Plumbing	1711	238220
70	Pacific Fire Protection	Fire sprinkler maintenance or installation	1711	238220
71	Just Water Heaters Inc.	Plumbing	1711	238220
72	Steele Plumbing Inc.	Plumbing	1711	238220
73	Kings Plumbing and Drains	Plumbing	1711	238220
74	Salvador Arroyo	Handyman	1721	238320
75	Santiago	Handyman	1721	238320
76	Howell Plumbing	Plumbing	1711	238220
77	City-Tile Flooring	Handyman	1721	238320
78	Building Concepts	Handyman	1721	238320
79	McDermott's Handyman Services	Handyman	1721	238320
80	Cardonas Landscaping	Landscaping	0782	561730
81	Dynamic Plumbing SFH Inc.	Plumbing	1711	238220
82	Stoebe Enterprises Inc.	Cement mixing or cutting	1771	238110
83	Plaza Services	Painting and coating	1721	238320
84	Alvarez Construction	Cement mixing or cutting	1771	238110
85	Delgado Plumbing	Plumbing	1711	238220
86	Scape Fx Landscape	Landscaping	0782	561730
87	Painters Unlimited CA, Inc.	Painting and coating	1721	238320
88	Full Effect Mobile Detail	Mobile automobile or other vehicle washing	7542	811192
89	Gary Cornell Painting Inc.	Painting and coating	1721	238320
90	Michael T Smith Painting	Painting and coating	1721	238320
91	Victor Zamarripa	Handyman	1721	238320
92	DEK Builders	Handyman	1721	238320
93	Cal Tex Fire	Fire sprinkler maintenance or installation	1711	238220
94	Balance Pool and Spa	Pool and fountain cleaning	7349	561790
95	AB&B Plumbing	Plumbing	1711	238220
96	Magdita's Landscaping Services and Maintenance	Landscaping	0782	561730
97	J Ginger Masonry LP	Masonry	1771	238110
98	MDC Landscaping	Landscaping	0782	561730
99	RGC	Handyman	1721	238320
100	Rafael Lemus Gardening	Landscaping	0782	561730
101	CMN Lawn Services	Landscaping	0782	561730
102	Handyman Marcos	Handyman	1721	238320
103	Plumbing Concepts Inc.	Plumbing	1711	238220
104	Sunset Carpet Cleaning and Services	Mobile carpet, drape, or furniture cleaning	7217	561740
105	Shellscapes	Landscaping	0782	561730
106	Laws Maintenance LLC	Handyman	1721	238320
107	Vertex Coatings Inc.	Painting and coating	1721	238320

Attachment D.2

Mobile Commercial Businesses Certified During FY 2009-2010

	Business Name	Business Type	SIC	NAICS
108	Yard Pros of America	Handyman	1721	238320
109	GJA Pools	Pool and fountain cleaning	7349	561790
110	Francisco Garcia	Handyman	1721	238320
111	Edward Z. Acosta Painting	Handyman	1721	238320
112	Beauty Look Mobile Auto Detail	Mobile automobile or other vehicle washing	7532	811192
113	Jose Hector Sanz Painting	Painting and coating	1721	238320
114	Daniel Tinoco's Mobile Auto Repair	Mobile Mechanic	7537	811113
115	C&S Construction Company	Construction	1771	238110
116	Tailored Masonry of California	Masonry	1771	238110
117	Cool Style Carpet Cleaning	Mobile carpet, drape, or furniture cleaning	7217	561740
118	Julio's Hydraulic Lift	Fork lift repair	7699	561790
119	Lance Taylor Plumbing Inc.	Plumbing	1711	238220
120	Arturo Davila's Pool Service	Pool and fountain cleaning	7349	561790
121	Pedro Morales Landscape	Landscaping	782	561730
122	Clauddagh Paving Corp.	Masonry	1771	238110
123	Pacific Rim Fire Protection	Fire sprinkler maintenance or installation	1711	238220
124	Prestigeous Auto Care	Mobile automobile or other vehicle washing	7542	811192
125	Ismael Delgado's Landscape	Landscaping	0782	561730
126	Sprekelmeyer Construction	Plumbing	1711	238220
127	J.C. Lawn Services	Landscaping	0782	561730
128	Miguel A. Garnica	Mobile Mechanic	7537	811113
129	Anytime Carpet Cleaning	Mobile carpet, drape, or furniture cleaning	7217	561740
130	Odilon Castro	Plumbing	1711	238220
131	KAP Handyman Services	Handyman	1721	238320
132	KACK Plumbing	Plumbing	1711	238220
133	Del Rey Detailers	Mobile automobile or other vehicle washing	7542	811192
134	Leo's Marine Services	Boat repair	5551	441222
135	Mo's Handywork	Handyman	1721	238320
136	Home Solutions 2 U Inc.	Landscaping/ Pool	0782	561730
137	RBM Fire Protection Inc.	Fire sprinkler maintenance or installation	1711	238220
138	Capuchino Boat Care	Boat maintenance	5551	441222
139	Glen Waymire General Services	Handyman	1721	238320
140	Luis Macias	Landscaping	0782	561730
141	Tate Fire Protection	Fire sprinkler maintenance or installation	1711	238220
142	Speedy's Auto Detailing	Mobile automobile or other vehicle washing	7542	811192
143	G&A Fire Protection Corp.	Fire sprinkler maintenance or installation	1711	238220
144	Shine Mobile Detail LLC	Mobile automobile or other vehicle washing	7542	811192
145	JD Paving Inc.	Asphalt paving	1771	238990
146	PT Striping	Parking lot striping	1771	238110
147	Virgilio Rodriguez Landscape	Landscaping	0782	561730
148	Movils Car Wash	Mobile automobile or other vehicle washing	7542	811192
149	Sam Rammaha Painting Co Inc.	Painting and coating	1721	238320
150	Aqua-Man Mobile Auto Carwash and Detailing	Mobile automobile or other vehicle washing	7542	811192
151	Brabus Pro Auto Detailing	Mobile automobile or other vehicle washing	7542	811192
152	Dust Buster Mobile Car Wash	Mobile automobile or other vehicle washing	7542	811192
153	Stauffer's Landscape	Landscaping installation	782	561730
154	All Star Water Heaters	Plumbing	1711	238220
155	Plumbing Master Servicer	Plumbing	1711	238220
156	Absolute Plumbing	Plumbing	1711	238220
157	Mariner Mechanical Inc.	Plumbing	1711	238220
158	SoCAL Turf and Design	Landscaping	0782	561730
159	Xtermite Inc.	Pest control	7342	561710
160	Montijo's Handyman	Handyman	1751	23835
161	Liberty Maintenance Services	Handyman	1751	23835

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Mobile Commercial Businesses Certified During FY 2009-2010

	Business Name	Business Type	SIC	NAICS
162	SC Services Inc.	Concrete	1771	238110
163	Discount Bathtub and Kitchen	Painting and coating	1721	238320
164	Corralez Landscaping	Landscaping	0782	561730

Attachment E

Industrial Source Inventory and Prioritization
FY 2009-2010

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
2 Heavy Equipment/PavementRecycling	6441820300	Metal Recycling	High	855	ENERGY	WY	5093	
A1 Moulding Supplies	6291000600	Warehousing	Low	180	MACE	ST	4225	
ABF Freight System Inc.	6441821700	Transportation	High	875	ENERGY	WY	4213	937I013254
ACE Industries Inc.	6442302200	Manufacturing	Low	738	DESIGN	CT	3599	
Acme Bag Company	6221114100	Retail	Low	2528	MAIN	ST	5999	
Action Auto Dismantlers Inc	6291001400	Auto Dismantlers	High	151	REED	CT	5015	937I004000
ADA Fabrication	6221021800	Fabrications	Low	2260	MAIN	ST	3993	
Advance Auto Wrecking	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937i020612
Advantage Printing & Apparel Inc	6221115300	Printing	Low	681	ANITA	ST	2262	
Airgas West Inc	6291413100	Retail/Sales	Low	3303	MAIN	ST	3563	
Aker Leather Products	6221021800	Manufacturing	Low	2248	MAIN	ST	2386	
All Japanese Auto Recycling	6441811900	Auto Dismantlers	High	775	ENERGY	WY	5015	937I015706
All Toyota/Lexus Wrecking	6441811500	Auto Dismantlers	High	805	ENERGY	WY	5015	937I018543
Alliance Hardwood LLC	6221023300	Wholesale	Low	775	ANITA	ST	5031	
Allied Waste Services	6441821600	Waste Management	High	881	ENERGY	WY	4953	937I014355
America's Finest Carpet	644-230-2300	Carpet Services	High	730	DESIGN	CT	5713	
Amerivacs Manufacturing Inc	6232301700	Manufacturing	Low	3800	MAIN	ST	3635	
Apada Industries Inc	6222304400	Manufacturing	Low	632	MARSAT	CT	2299	
Aqualarm	6170800800	Manufacturing	Low	1151	BAY	BL	3635	
Arise/Waco Scafolding	6180103100	Wholesale	High	676	MOSS	ST	5082	
Arroyo Fabrication	6221112500	Fabrications	Low	2488	MAIN	ST	3399	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
ASI Distr. & Fabr./Abbet Services Inc	6222304900	Distributor	Low	1547	JAYKEN	WY	5085	
Asian Kars Auto Recycling	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937I017467
BABA Foods	6182803500	Manufacturing	Low	693	PALOMAR	ST	2099	
Bacco Produce	6170800600	Produce	Low	1031	BAY	BL	5148	
Baja California Cycle USA Inc	6290200100	Wholesale	Low	2801	MAIN	ST	5091	
Barbee Valve & Supply	6442302600	Manufacturing	Low	751	DESIGN	CT	3432	
Bastan Corporation	6221021800	Wholesale	Low	2260	MAIN	ST	5142	
Bellama Custom Metal Fabrication	6290604200	Fabrications	Low	3129	MAIN	ST	3499	
Brenntag Pacific Inc	6441810800	Chemical Storage	Low	1888	NIRVANA	AV	5169	
Brunswick Mattress	6170800600	Furnitures	Low	1021	BAY	BL	5712	
C&G Swiss	6291000600	Fabrications	Low	180	MACE	ST	3451	
Cabinet Tronix LLC	5634511900	Furnitures	Low	290	TROUSDALE	DR	2517	
Cabinetry Design Inc	6221115400	Manufacturing	Low	675	ANITA	ST	2434	
Cal Plastics 7 Metals	6221022800	Wholesale	Low	1670	INDUSTRIAL	BL	5162	
California Hardcoating Company	6221115400	Manufacturing	Low	675	ANITA	ST	3479	
California Scrap Logistic Corp	6444841500	Auto Dismantlers	High	811	ENERGY	WY	5015	
California Sports Auto Wrecking	6441811800	Auto Dismantlers	High	781	ENERGY	WY	5015	937I021145
Caltrans Yard*	5653200100	Corporation Yard	High	570	C	ST	4789	
Calumet Auto Wrecking Inc	6441821400	Auto Dismantlers	High	891	ENERGY	WY	5015	937I004393
Canvas Concept Inc.	6221115800	Manufacturing	Low	649	ANITA	ST	2394	
Career Cap Corporation	6221022800	Manufacturing	Low	1680	INDUSTRIAL	BL	2353	
Choes Wholesale	6182803500	Wholesale	Low	693	PALOMAR	ST	5092	
Chula Vista Bolt	6170800800	Wholesale	Low	1161	BAY	BL	5072	
Ciannas Creation	6442302100	Manufacturing	Low	744	DESIGN	CT	2299	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Circle Food LLC	6221110800	Distributor	Low	1616	SILVAS	ST	5149	
Corsair Marine Inc	6291000400	Boat Building & Repair	Low	150	REED	CT	3732	
Custom Door and Window Sales	61701100300	Wholesale	Low	1128	BAY	BL	5211	
Daves Woodworking	6291302600	Retail/Sales	Low	171	MACE	ST	5712	
David J Food Products	6222303900	Wholesale	Low	689	MARSAT	CT	5149	
DNP Electronics America LLC	5952313300	Manufacturing	Low	2391	FENTON	ST	3571	
Downtown Copy & Print Inc	5634421600	Printing	Low	101	GLOVER	AV	7334	
Dutchmasters Cabinets	6221900800	Manufacturing	Low	2605	FAIVRE	ST	2434	
Eagle Foods Distributors Inc	6220810602	Distributor	Low	684	ANITA	ST	5141	
Ecology Auto Wrecking	6441820100	Auto Dismantlers	High	825	ENERGY	WY	5015	937I003325
Ecology Auto Wrecking 2	6441821000	Auto Dismantlers	High	850	ENERGY	WY	5015	937I019445
Ecology Auto Wrecking 3	6441821200	Auto Dismantlers	High	800	ENERGY	WY	5015	937I003280
El Sol Industries Inc	6221115400	Manufacturing	Low	679	ANITA	ST	2389	
Ervey Produce	6170800600	Produce	Low	1031	BAY	BL	5148	
Estes Express Lines	5634521200	Trucking	High	120	PRESS	LN	4231	937I007126
Eurotecnics	6291002300	Manufacturing	Low	170	MACE	ST	2434	
Explorer Competetion	5952311300	Retail/Sales	Low	2360	BOSWELL	RD	5531	
Express Furniture	6192113900	Furnitures	Low	1226	THIRD	AV	5712	
Express Pipe & Supply Co	5634512600	Wholesale	Low	117	PRESS	LN	5074	
FFF Distributors Inc	6221112500	Wholesale	Low	2474	MAIN	ST	5063	
Finest City Cabinets	5634411200	Manufacturing	Low	330	TROUSDALE	DR	5712	
First Appearance Copy Printing & More	6231921800	Printing/Copy Service	Low	3156	MAIN	ST	7334	
Five Star Medical Transport Inc	6291302700	Transportation	Low	187	MACE	ST	4119	
FJ Willert Cont Co.	6441810200	Storage	High	1869	NIRVANA	AV	4953	937I016993

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Flag Crafters	6170800700	Manufacturing	Low	1095	BAY	BL	2399	
Fleetpride West Inc.	5713301900	Trucking	Low	630	BAY	BL	4214	
Formosa Prosonic USA Inc.	5684503900	Manufacturing	Low	303	H	ST	3679	
Frank B Wood	6221112500	Furnitures	Low	2474	MAIN	ST	5712	
Freeway Auto Wrecking	6441812200	Auto Dismantlers	High	783	ENERGY	WY	5015	937I021643
Frontera International	6441810400	Warehousing	Low	1879	NIRVANA	AV	4225	
Fuji Seimen Corp	6291002300	Manufacturing	Low	170	MACE	ST	2098	
G&M Custom Flags and Banners	6221021800	Manufacturing	Low	2240	MAIN	ST	2399	
G&M Manufacturing	6291000600	Management Service	Low	180	MACE	ST	8741	
Gary Manafacturing Inc.	61701100300	Manufacturing	Low	1124	BAY	BL	2299	
GCE Industries Inc.	6441813300	Manufacturing	Low	1891	NIRVANA	AV	3443	
Granite Gallery Inc	6291000600	Wholesale	Low	180	MACE	ST	5032	
H&M Wrought Iron Factory Inc	6221113200	Manufacturing	Low	2560	MAIN	ST	3315	
Hanson Aggregates	6290300500	Concrete Work	High	116	7TH	ST	3271	937I015523
High Tech Business Center @ Eastlake	5957100800	Other Fixed Facilities	Low	861	HAROLD	PL	7389	
Hitachi Home Electronic Inc.- America	5957110300	Manufacturing	Low	900	HITACHI	WY	3639	
Honda Acura Parts Auto Recycling	6441821500	Auto Dismantlers	High	895	ENERGY	WY	5015	937i011394
House of Leather and Fabrics	5634512000	Manufacturing	Low	290	TROUSDALE	DR	3111	
Hydro Scape Products Inc.	5634313000	Retail/Sales	Low	375	TROUSDALE	DR	5039	
Hyspan Precision Prod Inc	6440402800	Manufacturing	Low	1685	BRANDYWINE	AV	3441	
Hyundai Livart Furniture Outlet	6290604200	Furnitures	Low	3121	MAIN	ST	5712	
Imperial Sprinkler Supply Inc.	5634511400	Retail/Sales	Low	280	TROUSDALE	DR	5087	
Import Auto Wrecking	6441812900	Auto Dismantlers	High	793	ENERGY	WY	5015	937I016877
Indu Fashions	6222303800	Manufacturing	Low	680	MARSAT	CT	2329	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
International Sign Co	6232022300	Manufacturing	Low	3268	MAIN	ST	3993	
Japan Tech Auto Wrecking	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937I020121
Japanese Auto Wrecking	6441811500	Auto Dismantlers	High	811	ENERGY	WY	5015	
K&T Carpet Services Inc	6170800700	Service	Low	1085	BAY	BL	7217	
Kama Tech Corporation	6442301300	Manufacturing	Low	739	DESIGN	CT	5131	
Kelco Packaging Prop	6221112500	Warehousing	Low	2474	MAIN	ST	4222	
Kelly Paper Company	5713301900	Wholesale	Low	630	BAY	BL	5111	
KEM LLC	5634421600	Environmental Services	Low	101	GLOVER	AV	8999	
Ken Larcens Cabinet Plus	6291302600	Manufacturing	Low	171	MACE	ST	2434	
Kleen Blast Industrial Services	6180103100	Retail/Sales	High	676	MOSS	ST	5084	
L&V Furniture	6221113200	Manufacturing	Low	2560	MAIN	ST	2434	
LA Natural Tortilla Factory	6290101100	Manufacturing	Low	2765	MAIN	ST	2099	
Lawrence Hughes Cabinets Unlimited	6291000600	Manufacturing	Low	180	MACE	ST	2434	
LC Turbo	6221112500	Service	Low	2446	MAIN	ST	7699	
Leticia Cano Nuts and Bolts	6221112500	Retail/Sales	Low	2446	MAIN	ST	5072	
Lopez Iron Works Repairs	6221902000	Welding Services	Low	2555	FAIVRE	ST	7692	
LSP South Bay (Power Plant)**	5711600800	Electric Services	High	990	BAY	BL	4911	9371015022
Lund & Flynn Inc	5634322400	Manufacturing	Low	370	TROUSDALE	DR	3694	
Lyon Technologies Inc	6440403700	Manufacturing	Low	1690	BRANDYWINE	AV	3499	
Main Street Recycling	6290607300	Recycling	Low	1751	FOURTH	AV	5093	
Marscott marine and Industrial Supply	6221112500	Wholesale	Low	2446	MAIN	ST	5085	
Mask US Inc	6290604200	Fabrications	Low	3121	MAIN	ST	2389	
Mikolajczyk Cabinet Shop	6170102900	Cabinet Installation	Low	926	INDUSTRIAL	BL	1751	
MMC Energy -Peak Power Plant	6290620400	Power Generations	High	3497	MAIN	ST	4911	9371020087

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Monos Custom Metal Fabrications Inc	6222300400	Fabrications	Low	1548	JAYKEN	WY	3499	
Montoya's Auto Wrecking	6441811800	Auto Dismantlers	High	781	ENERGY	WY	5015	937I021427
NCR Neon Specialist	6291000600	Manufacturing	Low	180	MACE	ST	3993	
Next Day Printed Tees	6170800700	Retail/Sales	Low	1075	BAY	BL	5699	
Nirvana Produce Distributions	6441811000	Produce	Low	1872	NIRVANA	AV	5431	
Nypro San Diego	6440402400	Manufacturing	Low	505	MAIN	ST	3061	
Oak Land Furniture	6221112500	Cabinet Installation	Low	2462	MAIN	ST	1751	
Ochoa's Cabinet	6221112500	Manufacturing	Low	2446	MAIN	ST	2434	
Onager Corporation	6441812800	Auto Dismantlers	High	789	ENERGY	WY	5015	9371010014
OSI Security Devices	6222300200	Fabrications	Low	1580	JAYKEN	WY	3499	
Otay Metal Mart	6291302800	Wholesale	Low	195	MACE	ST	5051	
Otay Valley Rock- Rimrock Quarry LLC	6440600600	Others	High	2041	HERITAGE	RD	1429	
Pacific Auto Wrecking	6441812000	Auto Dismantlers	High	795	ENERGY	WY	5015	9371015058
Pacific Manufacturing Inc	6221900800	Manufacturing	Low	2605	FAIVRE	ST	3452	
Pacific Maritime Industries	6221022700	Manufacturing	Low	1664	INDUSTRIAL	BL	3441	
Pallets and Services of SD Corp	6182005800	Wholesale	Low	1020	COLORADO	AV	5031	
Parts Heaven	6111812100	Auto Dismantlers	High	791	ENERGY	WY	5015	
PHV Custom Cabinets	6290604200	Manufacturing	Low	3121	MAIN	ST	2434	
Pick Your Part Auto Wrecking	6441820800	Auto Dismantlers	High	880	ENERGY	WY	5015	937I012114
Plenums Plus, LLC	5632703900	Fabrications	Low	67	BRISBANE	ST	3441	
Precision Woodworking of SD	6170800600	Woodworking	Low	1031	BAY	BL	2541	
Premier Copper & Brass Pacific Inc	5634410100	Wholesale	Low	310	TROUSDALE	DR	5051	
Profil Institute for Clinical Research	5734606400	Others	Low	855	THIRD	AV	8011	
Prudential Overall Supply	56709000300	Service	High	740	F	ST	7213	

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Pump Export Distributors	6221403400	Manufacturing	Low	124	27TH	ST	3561	
Quality Lift Trucks	5634421600	Retail/Sales	Low	115	GLOVER	AV	5084	
R E Moore Inc	6221110800	Manufacturing	Low	1624	SILVAS	ST	3451	
R L Stone Fabrications	6221112500	Fabrications	Low	2446	MAIN	ST	3281	
R&R Delta Supplies Inc	6170800800	Wholesale	Low	1161	BAY	BL	5013	
RC Import Auto Recycler	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	9371010144
Resslers Welding Service	6220620500	Welding Services	Low	1550	FRONTAGE	RD	7692	
Ri-Ber Industrial Inc	6221112500	Wholesale	Low	2488	MAIN	ST	5084	
ROHR dba B.F. Goodrich**	5670102600	Manufacturing	High	850	LAGOON	DR	3724	9371004297
Rossin Steel Inc.	6441810900	Fabrications	High	1880	NIRVANA	AV	3441	9371020898
Sammy's Kitchen & Bath Inc	6222304200	Warehousing	Low	645	MARSAT	CT	4226	
San Diego Architectural Metals	6220610300	Manufacturing	Low	873	DOROTHY	ST	3499	
San Diego Floor Design	6221113200	Wholesale	Low	2560	MAIN	ST	5713	
San Diego Frame MFG Co	6220725900	Manufacturing	Low	1567	FRONTAGE	RD	2499	
San Diego Pallets	6170800600	Distributor	Low	1031	BAY	BL	7389	
San Digoe Screw Products Inc	6290201200	Manufacturing	Low	2865	MAIN	ST	3545	
Seagate Produce	6220810602	Produce	Low	684	ANITA	ST	5148	
Sealed Air Corporation	59530000600	Manufacturing	Low	2311	BOSWELL	RD	3565	
Serco Inc	6440404500	Service	Low	1669	BRANDYWINE	AV	8741	
Showtime Creations	5952320600	Manufacturing	Low	925	HALE	PL	2389	
SMR Bakery Inc/Califorina Baking Co	6221115300	Bakery	Low	681	ANITA	ST	2099	
Snowbird Transportation	6441811000	Distributor	Low	1872	NIRVANA	AV	4212	
SOCAL Ironworks Inc.	6222300400	Storage	Low	1548	JAYKEN	WY	4225	
SOS Metals San Diego LLC	6221115700	Recycling	High	635	ANITA	ST	5093	9371013260

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
Source of Health Inc.	61708000700	Manufacturing	Low	1055	BAY	BL	2833	
South Bay Auto Wreckers	6441820200	Auto Dismantlers	High	811	ENERGY	WY	5015	9371004495
South Bay Boat Yard**	7600481700	Boat Building & Repair	High	997	G	ST	3732	
South Coast Printing	6170800800	Printing/Copy Service	Low	1151	BAY	BL	2759	
South Xpress Inc	6291000600	Wholesale	Low	180	MACE	ST	5074	
Standard Auto Recycling	6291000400	Auto Dismantlers	High	150	REED	CT	5015	9371010775
Stanford Signs	6221403300	Specialty	Low	2556	FAIVRE	ST	3993	
Suncraft Fence Co	6232023800	Distributor	Low	3288	MAIN	ST	5039	
Sunrise Jewelry Manufacturing	5952313400	Manufacturing	Low	2371	FENTON	ST	3911	
Surface Fleet Supply Co	6220620500	Wholesale	Low	1550	FRONTAGE	RD	5074	
Surface Technologies Corp	6441811100	Service	Low	796	ENERGY	WY	7699	
SWE Jon Flexible Packaging Inc	6221112500	Wholesale	Low	2474	MAIN	ST	5113	
Synthetic Marble By Ponce	6222303900	Fabrications	Low	675	MARSAT	CT	3281	
Tantus Inc	6170800700	Manufacturing	Low	1045	BAY	BL	3645	
TBA Mexican Trade	6170800700	Wholesale	Low	1045	BAY	BL	5411	
Texano Auto Recycling	6441811500	Recycling	High	805	ENERGY	WY	5015	937I1021577
Tileforce Inc	6221112500	Retail/Sales	Low	2446	MAIN	ST	5713	
Tortilleria Santa Fe Inc.	6290101100	Manufacturing	High	2765	MAIN	ST	2099	
Triple M Marine Welding & Repair Inc	6220620500	Welding Services	Low	1550	FRONTAGE	RD	7692	
Truitt Machine & Fabrication	7600481700	Fabrications	Low	997	G	ST	3599	
U S Glass & Mirror Co	6170102900	Manufacturing	Low	926	INDUSTRIAL	BL	3231	
Uniforms Express International	6170800800	Supply	Low	1111	BAY	BL	5699	
United Cutting	6221115400	Industrial Launderes	Low	677	ANITA	ST	7218	
United Parcel Service	5953000300	Postal Service	High	2300	BOSWELL	CT	4215	9371002086

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number
United Rentals Inc	5623501000	Heavy Equipment Rentals	High	501	C	ST	7359	9371019886
Vallarta Iron Works	6221902000	Welding Services	Low	2555	FAIVRE	ST	7692	
Vcella Kilsn Inc	6291302600	Manufacturing	Low	171	MACE	ST	3631	
Veolia Transportation -MTS	6232502100	Transportation	High	3650	MAIN	ST	4111	9371011017
Vesco Metal Craft Inc	5952314200	Manufacturing	Low	2425	FENTON	ST	3312	
Videotel Inc	6221115300	Manufacturing	Low	681	ANITA	ST	3651	
West Air Gas & Equip Inc.	6220620700	Wholesale	Low	1590	FRONTAGE	RD	5084	
West Auto Wreckers	6221902600	Auto Dismantlers	High	2365	MAIN	ST	5015	9371001046
Woodenvision	6170102900	Woodworking	Low	920	INDUSTRIAL	BL	2511	
Grand Total:	**198**							

Attachment F

FY 2009-2010 Treatment Control BMP Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection acitivities.

Inspection Date	Project Name	Neighborhood	Type of BMP Installed	Category	Priority	Development	Responsible Party
30-Jul-09	Cottage Lane II	R-21	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	Brookfield Homes
26-Oct-09	Sunset View Park	N/A	MP-52 Drain Inlet	Municipal	High	N/A	City of Chula Vista-Park Div.
28-Oct-09	K Hovnanian	WR-5	MP-51 Vortex Separator	Residential	Low	Eastlake Woods	City of Chula Vista
2-Nov-09	Horizon Neighborhood Park	N/A	MP-52 Drain Insert	Municipal	High	N/A	City of Chula Vista
18-Feb-10	Fire Station #6	N/A	MP-52 Drain Insert	Municipal	Low	N/A	City of Chula Vista
1-Mar-10	Provence	N12A	TC-22 Extended Det Basin	Residential	Low	Rolling Hills Ranch	Cornerstone
1-Mar-10	Quintessa	N9A	TC-22 Extended Det Basin	Residential	Low	Rolling Hills Ranch	McMillin
1-Mar-10	Clearstory	N12B	TC-22 Extended Det Basin	Residential	Low	Rolling Hills Ranch	Standard Pacific

Inspection Date	Project Name	Neighborhood	Type of BMP Installed	Category	Priority	Development	Responsible Party
1-Mar-10	Castillian	N9B	TC-22 Extended Det Basin	Residential	Low	Rolling Hills Ranch	McMillin
16-Mar-10	Tobias Drive CIP	N/A	MP-52 Drain Insert	CIP With SUSMP	Medium	N/A	City of Chula Vista
22-Mar-10	First Avenue-Naples to Palomar C	N/A	MP-52 Drain Insert	CIP With SUSMP	Medium	N/A	City of Chula Vista
13-Apr-10	Dixon Drive CIP	N/A	MP-52 Drain Insert	CIP With SUSMP	Medium	N/A	City of Chula Vista
19-Apr-10	Rancho Vista Apartments	N/A	MP-51 Vortex Separator	Residential	Medium	N/A	Chelsea Investment Corp.
19-Apr-10	Eastlake Marketplace	N/A	MP-51 Vortex Separator	Miscelleneous	High	N/A	Eastlake Marketplace c/o**
19-Apr-10	Villagio	R45	MP-51 Vortex Separator	Commercial	Low	Otay Ranch V-5	Villagio @ Lomas Verdes HOA
19-Apr-10	The Marketplace	N/A	MP-52 Drain Insert TC-22 Extended Det Basin	Miscelleneous	High	N/A	Shea Properties
19-Apr-10	Otay Ranch Town Center	N/A	MP-51 Vortex Separator	Miscelleneous	High	N/A	GCP-Otay Ranch LP
19-Apr-10	Treviana	R-10	MP-52 Drain Insert	Residential	Medium	Otay Ranch V-6	NN Jaeske

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
19-Apr-10	Andora	R-9B	MP-52 Drain Insert		Residential	Medium	The Summit	NN Jaeske
19-Apr-10	Firenze	R9A	MP-52 Drain Insert		Residential	Medium	The Summit	NN Jaeske
19-Apr-10	Cortina	R9D	MP-52 Drain Insert		Residential	Medium	The Summit	NN Jaeske
19-Apr-10	Capria	R9E	MP-52 Drain Insert		Residential	Medium	The Summit	NN Jaeske
19-Apr-10	Veranza	R9C	MP-52 Drain Insert		Residential	Medium	The Summit	
21-Apr-10	Palomar Street Improvements Tre	N/A	MP-51 Vortex Separator		Residential	Low	N/A	City of Chula Vista
26-Apr-10	Chula Vista Toyota	N/A	MP-52 Drain Insert		Commercial	High	N/A	Chula Vista Toyota
26-Apr-10	Southbay Motorsports	N/A	MP-52 Drain Insert		Commercial	High	N/A	SB Land, LLC
27-Apr-10	Chula Vista Elementary School Di	N/A	MP-50 Wet Vault	TC-30 Vegetated Swale	Miscelleneous	High	N/A	Chula Vista Elementary SD
27-Apr-10	Auto Park North	N/A	MP-52 Drain Insert		Miscelleneous	High	N/A	Chula Vista Auto Park Assoc.

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
27-Apr-10	Enterprise Administration Bldg.	N/A	MP-52 Drain Insert		Miscelleneous	High	N/A	Floit Properties
27-Apr-10	McCune Chrysler Dodge	N/A	MP-52 Drain Insert		Commercial	High	N/A	McCune Chrysler Jeep Dodge
30-Apr-10	C.V. Corporate Center	N/A	MP-52 Drain Insert		Miscelleneous	High	N/A	Mar West Real Estate
30-Apr-10	Chula Vista Crossings	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Miscelleneous	High	N/A	NewMark Merrill
30-Apr-10	C.V. Commerce Center	N/A	MP-51 Vortex Separator		Miscelleneous	High	N/A	MarWest Real Estate
30-Apr-10	Brisas Del Mar Village	N/A	MP-52 Drain Insert		Commercial	Medium	N/A	Brisas Del Mar Apartments
1-May-10	Rosewood	R-9A	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-6	The Merit Companies
4-May-10	Eastlake Design District	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Miscelleneous	High	N/A	IRE Development
4-May-10	Indigo	R-1A	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-7	McMillin
4-May-10	Jacaranda	R-1B	MP-51 Vortex Separator TC-22 Extended Det Basin		Residential	Medium	Otay Ranch V-7	McMillin

Inspection Date	Project Name	Neighborhood	Type of BMP Installed	Category	Priority	Development	Responsible Party
4-May-10	Terracotta	R-5	MP-51 Vortex Separator TC-22 Extended Det Basin	Residential	Medium	Otay Ranch V-7	McMillin
4-May-10	Eastlake Commerce- Business Ce	N/A	MP-52 Drain Insert	Miscelleneous	High	N/A	IRE Development
4-May-10	Kohls @ Eastlake	N/A	MP-52 Drain Insert	Commercial	High	N/A	DENTCO Exterior Services Mgmt
4-May-10	Venture Commerce Center	N/A	MP-51 Vortex Separator	Miscelleneous	High	N/A	Heritage Real Estate Advisors
4-May-10	Fenton Business Center	N/A	MP-52 Drain Insert	Miscelleneous	High	N/A	Jason Chases
4-May-10	Chevron Station-Olympic Parkway	N/A	MP-52 Drain Insert	Commercial	High	N/A	Chevron Station Inc.
4-May-10	The Collections @ Eastlake	N/A	MP-52 Drain Insert	Commercial	High	N/A	Mar West Real Estate
4-May-10	Walmart @ Eastlake	N/A	MP-52 Drain Insert	Commercial	High	N/A	WalMart
4-May-10	Home Depot Eastlake	N/A	MP-52 Drain Insert	Commercial	High	N/A	Home Depot USA, Inc.
4-May-10	Eastlake Business Center-Hale Pl	N/A	MP-52 Drain Insert	Miscelleneous	High	N/A	Tycoon Management

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
4-May-10	Eastlake Terrace-Landswap	N/A	MP-52 Drain Insert		Miscelleneous	High	N/A	Gatlin Development
4-May-10	Eastlake Village Center East	N/A	MP-52 Drain Insert		Miscelleneous	High	N/A	Gatlin Development Co.
4-May-10	Otay Lakes Medical Office	N/A	MP-52 Drain Insert		Miscelleneous	High	N/A	Otay Lakes Med. Condo Assoc.
5-May-10	Eastlake - Village Walk	N/A		MP-51 Vortex Separator	Miscelleneous	High	N/A	Sudberry Properties, Inc.
6-May-10	Fairhaven II	N7C	MP-52 Drain Insert		Residential	Medium	Rolling Hills Ranch	City of Chula Vista
6-May-10	Stetson	R-30B2	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-5	Otay Ranch 5 HOA **
6-May-10	Goldrush	R-30A	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-5	Otay Ranch 5, HOA**
6-May-10	Winchester	R-30B	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-5	Otay Ranch 5, HOA**
6-May-10	Silver Sage	R-30B3	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-5	Otay Ranch 5, HOA**
6-May-10	Eastlake Parkway Professional Pla	N/A	MP-52 Drain Insert	TC-30 Vegetated Swale	Miscelleneous	High	N/A	IRE Development

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
6-May-10	Windchime	R-9B	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-6	The Merit Companies
7-May-10	Villas Belleme	R-7	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-6	Hillsborough @ Otay HOA**
7-May-10	Madera	R-5A	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-6	The Merit Companies
7-May-10	Mir Soliel	R-8	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-6	Hillsborough @ Otay HOA**
7-May-10	Chateau Belleme	R-7A	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-6	The Merit Companies
7-May-10	Sedona	N4A2	MP-52 Drain Insert		Residential	Medium	Rolling Hills Ranch	Prescott Companies
7-May-10	Monet	R-9B	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-6	Pacific Coast Communities
7-May-10	LA Fitness Eastlake Village Cente	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Miscelleneous	Medium	N/A	EL Vill. Center Comm. Assc.**
7-May-10	The Shops at San Miguel Ranch	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Miscelleneous	High	N/A	Cushman & Wakefield
7-May-10	Mater Dei High School	N/A	MP-50 Wet Vault		Miscellaneous	Low	N/A	Mater Dei High School **

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
7-May-10	Alder Lane	VR-12	MP-51 Vortex Separator		Residential	High	Eastlake Vistas	Summit Property Management
7-May-10	2380 Main Street	N/A	MP-52 Drain Insert		Miscelleneous	High	N/A	Chula Vista Main, LLC**
9-May-10	Doctor's Park	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Miscelleneous	High	N/A	Otay Lakes Partners, LLC
10-May-10	Village Walk - Medical Arts Center	N/A	MP-52 Drain Insert	TC-30 Vegetated Swale	Miscelleneous	High	N/A	Heritage Real Estate Advisors
10-May-10	Eastlake Community Church	N/A	MP-52 Drain Insert	Other	Miscelleneous	Low	N/A	Eastlake Community Church
10-May-10	Aqua Clean	N/A	MP-52 Drain Insert		Commercial	High	N/A	Aqua Clean C/O Lou Brito
10-May-10	Rancho Rios Condo	N/A	MP-52 Drain Insert		Residential	Medium	N/A	HOA President
10-May-10	Belleza	Neighborhood B	MP-51 Vortex Separator		Residential	Low	San Miguel Ranch	Belleza @ SMR c/o**
10-May-10	New Hope Church	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Miscelleneous	Low	N/A	New Hope Community Church
10-May-10	Mar Brisa	N4A1	MP-52 Drain Insert		Residential	Medium	San Miguel Ranch	Mar Brisa-C/O Prescott Co.

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
10-May-10	Canyon View	R59C & R60	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-1 West	Otay Ranch Three HOA c/o**
10-May-10	Eastlake Little League Field	N/A	TC-30 Vegetated Swale		Miscellaneous	Low	N/A	Eastlake Little League
10-May-10	Bella Sol	Planning Area 11	MP-51 Vortex Separator		Residential	Low	Sunbow	Tyco Property Management Co.
10-May-10	Bella Lago	R-1	TC-40 Media Filter TC-22 Extended Det Basin		Residential	High	Bella Lago	KHovnanian
11-May-10	Cambria	R-2A	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-6	City of Chula Vista
11-May-10	Willowbrook	R-2B	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-6	City of Chula Vista
12-May-10	Jasmine	R-6	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-6	City of Chula Vista
12-May-10	Walgreens @ Third Avenue	N/A	MP-52 Drain Insert		Miscelleneous	Medium	N/A	Walgreeens 02623
12-May-10	Walmart at 5305 Broadway	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	High	N/A	WAL-MART Stores Inc.
12-May-10	Pharus Plaza	N/A	MP-51 Vortex Separator		Miscelleneous	Low	N/A	Pharus Development Group

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
12-May-10	COSTCO at Broadway	N/A	MP-51 Vortex Separator		Commercial	High	N/A	AAA Property Services
12-May-10	Savon-CVS Pharmacy @ Fourth A	N/A	MP-52 Drain Insert		Miscelleneous	High	N/A	CAM Commercial Properties
12-May-10	Los Vecinos Apartments	N/A	MP-50 Wet Vault	Other	Residential	Low	N/A	Los Vecinos, LP
12-May-10	Seniors at Broadway	N/A	MP-52 Drain Insert		Residential	Medium	N/A	MAAC Project Community Develop
13-May-10	Ada Terraces	N/A	MP-52 Drain Insert		Residential	Medium	N/A	Paul Miller Company
13-May-10	Windingwalk Park	N/A	TC-30 Vegetated Swale		Municipal	Low	N/A	City of Chula Vista
13-May-10	Veterans Park	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Municipal	Low	N/A	City of Chula Vista
13-May-10	Ada Villas 1	N/A	MP-52 Drain Insert		Residential	Medium	N/A	Paul Miller Company
13-May-10	Ada Townhomes	N/A	TC-30 Vegetated Swale		Residential	Medium	N/A	Paul Miller Company
14-May-10	Lady of Guadalupe Church	N/A	TC-30 Vegetated Swale		Miscellaneous	Medium	N/A	Our Lady of Guadalupe

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
14-May-10	Reserves	WR-2	MP-51 Vortex Separator	MP-52 Drain Inlet	Residential	Low	Eastlake Woods	City of Chula Vista
17-May-10	Bonita Library	N/A	MP-52 Drain Insert	TC-30 Vegetated Swale	Miscelleneous	Low	N/A	Bonita-Sunnyside Branch Librar
17-May-10	High Tech Business Center @ Eas	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Industrial	Low	N/A	HTRCE, LP
17-May-10	West Air Gas & Equip Inc.	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Industrial	Low	N/A	West Air Gases & Equipment
17-May-10	Retail Center	N/A	TC-50 Water Qaulity Inlet		Miscelleneous	Low	N/A	Mohammad Zamir
17-May-10	High Tech High Chula Vista Camp	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Residential	Low	N/A	High Tech High
17-May-10	Mantilla	Neighborhood C	MP-52 Drain Insert		Residential	Medium	San Miguel Ranch	San Miguel Ranch HOA
17-May-10	J&W Redwood	N/A	TC-11 Infiltration Basin		Commercial	Low	N/A	J&W Redwood
17-May-10	Wells Fargo Bank	N/A	TC-30 Vegetated Swale		Miscelleneous	Low	N/A	
18-May-10	Cornerstone	WR-4	MP-51 Vortex Separator		Residential	Low	Eastlake Woods	City Of Chula Vista

Inspection Date	Project Name	Neighborhood	Type of BMP Installed	Category	Priority	Development	Responsible Party
19-May-10	Montevalle Park	N/A	MP-52 Drain Insert	Municipal	High	N/A	City of Chula Vista
19-May-10	Meredian	WR-6	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	City of Chula Vista
19-May-10	Sonoma	WR-7	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	City of Chula Vista
21-May-10	Eastlake Woods WR-1 / The Gate	WR-1/The Gates	MP-51 Vortex Separator	Residential	Low	Eastlake Woods	City of Chula Vista
24-May-10	Colrich	VR-1	MP-51 Vortex Separator	Residential	Low	Eastlake Vistas	City of Chula Vista PW
24-May-10	Salt Creek Park	N/A	MP-51 Vortex Separator	Municipal	High	N/A	City of Chula Vista
24-May-10	Mountain Hawk Park	N/A	MP-52 Drain Insert	Municipal	High	N/A	City of Chula Vista
24-May-10	Aqua	VR-3	MP-51 Vortex Separator	Residential	Low	Eastlake Vistas	City of Chula Vista
24-May-10	Bridgepark	VR-5	MP-51 Vortex Separator	Residential	Low	Eastlake Vistas	City of Chula Vista
24-May-10	Abilene	VR-7	MP-51 Vortex Separator	Residential	Low	Eastlake Vistas	City of Chula Vista

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
24-May-10	Sonora Ridge	VR-9 & 11	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	City of Chula Vista
24-May-10	Summerhill	VR-10	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	City of Chula Vista
25-May-10	Monticello	VR-8	MP-51 Vortex Separator		Residential	Medium	Eastlake Vistas	City of Chula Vista
25-May-10	Lost Creek	VR-4	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	City of Chula Vista
25-May-10	Atrium	VR-2	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	City of Chula Vista
27-May-10	The Woods	WR-3	MP-51 Vortex Separator TC-22 Extended Det Basin		Residential	Low	Eastlake Woods	City of Chula Vista
3-Jun-10	Chula Vista Civic Center	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Municipal	Low	N/A	City of Chula Vista
4-Jun-10	Telegraph Canyon CIP	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium	N/A	City of Chula Vista
4-Jun-10	805 / Orange Interchange	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium	N/A	City Of Chula Vista
4-Jun-10	Glenhaven Way Improvements CI	N/A	TC-32 Bioretention		CIP With SUSMP	Low	N/A	City of Chula Vista

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
10-Jun-10	Mandalay	R-1	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-6	City of Chula Vista
10-Jun-10	Road One of San Diego	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low	N/A	Road One of San Diego
10-Jun-10	Fire Station #7	N/A	MP-51 Vortex Separator	Other	Municipal	Low	N/A	City of Chula Vista
11-Jun-10	Sienna	R-3	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-6	City of Chula Vista
21-Jun-10	Auburn Lane	R-4	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-6	City of Chula Vista
21-Jun-10	Azalea	R-23	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-11	City of Chula Vista
21-Jun-10	Fire Station #8	N/A	MP-51 Vortex Separator		Municipal	Low	N/A	City of Chula Vista
25-Jun-10	Valencia	VR-6	MP-51 Vortex Separator		Residential	Low	Eastlake Vistas	City Of Chula Vista

Total Sites Inspected: 136

Attachment G
FY 2009-2010 Construction Inspections

Construction Inspection records are included in the inspection reports and are on file for each specific project. During this reporting period, all High Priority construction sites were inspected at least bi-weekly during the rainy season, and all Medium and Low Priority construction sites were inspected at least monthly. Construction projects that were inspected during this reporting period are listed below:

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Eastlake Summit					
Eastlake Summit	Buie Communities- Veranza	R9C	Inactive-Not Complete	EL106I	Medium
Eastlake Summit	Cortina	R9D	Active	EL104I	Medium
Eastlake Summit	Andora	R9B	Active	EL103I	Medium
Miscellaneous					
Miscellaneous	Robinhood Pump Station		Active	SW256	Low
Miscellaneous	North Broadway Basin Project		Active	STM354	Low
Miscellaneous	Villas at H Street		Active	PG749/PC1817	Medium
Miscellaneous	La Roca Comunidad Cristiana		Inactive-Not Complete	OR196G	Low
Miscellaneous	Saint Rose of Lima Parish-Phase 1, 293 H Street		Active	PG780 / PC1955	Low
Miscellaneous	Curb and Pedramps FY 09-10		Active	STL348	Low
Miscellaneous	1590 West Frontage Road		Inactive-Not Complete	PG754 / PC1821	Low
Miscellaneous	G Street Sewer Improvements from Fourth to Second Avenue		Active	SW251	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Miscellaneous	Corpus Christi Catholic Church - 450 Corral Canyon		Active	PG785 / PC1988	Low
Miscellaneous	144 27th Street-Buidling		Inactive-Not Complete	PG770	Low
Miscellaneous	Mount San Miguel Community Park		Active	PR260	Low
Miscellaneous	Grading for storage @ 2371 Boswell Court		Active	PG784	Low
Miscellaneous	Fourth Avenue Improvements		Active	STL291	High
Miscellaneous	Otay Valley Regional park, Phase 2 Trails		Active	AC360	Medium
Miscellaneous	Westmon Senior Homes -509 Mount Miguel Road		Inactive-Not Complete	SM026G	Low
Otay Ranch, Village 11					
Otay Ranch, Village 11	Saguard		Active	OR624I	Low
Otay Ranch, Village 11	Agave	R24A	Active	OR624I	Medium
Otay Ranch, Village 11	Clover	R18	Active	OR633I	Medium
Otay Ranch, Village 11	Cordova -Courtyard	R17	Active	OR634I	Medium
Otay Ranch, Village 11	Trellis I	R15	Active	OR627I	Low
Otay Ranch, Village 11	The Lofts		Inactive-Not Complete	OR635I	Low
Otay Ranch, Village 2					
Otay Ranch, Village 2	Future SFD-under grading phase	R24	Inactive-Not Complete		Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 2	Future SFD-under grading phase	R18A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R29	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R4	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R23	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R21	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R20	Inactive-Not Complete	PG656	Low
Otay Ranch, Village 2	Future SFD-under grading phase	R19	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R18B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R25A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R28	Inactive-Not Complete		Low
Otay Ranch, Village 2	Anacapa	R9A	Inactive-Not Complete	OR805I	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R10	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R11	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R12	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R13 (Village 2 East)	Active	OR815I / G	Medium
Otay Ranch, Village 2	North- Future MFD-under grading phase	R16	Inactive-Not Complete		Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 2	Future Mixed Used-under grading phase	MU1	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R26	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R15	Inactive-Not Complete	OR806I	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R27	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD (Alley)-under grading phase	R5B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future Mixed Use-under grading phase	MU2	Inactive-Not Complete		Low
Otay Ranch, Village 2	North- Future Mixed Use-under grading phase	MU3	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R8	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R25B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future SFD-under grading phase	R9B	Inactive-Not Complete		Low
Otay Ranch, Village 2	Future MFD-under grading phase	R17	Inactive-Not Complete		Low
Otay Ranch, Village 2	Lindera Kane (Alley)	R5A	Inactive-Not Complete		Low
Otay Ranch, Village 2	Presidio	R7	Inactive-Not Complete		Low
Otay Ranch, Village 2	Sevilla	R30	Inactive-Not Complete	OR814I	Low
Otay Ranch, Village 2	Future Mixed-Under Grading Phase	R12, R13, R14, R15, R29, R30,	Inactive-Not Complete	OR805G	Medium
Otay Ranch, Village 2	North- Heritage Road		Inactive-Not Complete	OR807G	Medium

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 2	North- Future Mixed-Under Grading Phase	R5, R6, R7, R8, R9, R10	Inactive-Not Complete	OR809G	Medium
Otay Ranch, Village 2	Future MFD-under grading phase	R14 (Village 2 East)	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase	R30 (Village 2 East)	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	Future MFD-under grading phase -MU3	MU3	Inactive-Not Complete	OR805G	Low
Otay Ranch, Village 2	La Purisma	R6	Inactive-Not Complete		Low
Otay Ranch, Village 2	Tavera	R14	Inactive-Not Complete	OR813I	Low
Otay Ranch, Village 2 North					
Otay Ranch, Village 2 North	OR Village2 North Improvement 1	Unit 1	Inactive-Not Complete	OR811I	Low
Otay Ranch, Village 2 North	OR Village2 North Improvement 2	Unit 2	Inactive-Not Complete	OR812I	Low
Otay Ranch, Village 2 South					
Otay Ranch, Village 2 South	Mass Grading		Inactive-Not Complete	OR830G	Low
Otay Ranch, Village 6, ORC					
Otay Ranch, Village 6, ORC	Treviana	R10	Inactive-Not Complete	OR418C	Low
Otay Ranch, Village 6, ORC	Marquis		Inactive-Not Complete		Low
Otay Ranch, Village 7, McMillin					
Otay Ranch, Village 7, McMillin	Terracotta	R5	Active	OR458I /OR451G	Low
Otay Ranch, Village 7, McMillin	Tapestry	R6A	Active	OR461G	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch, Village 7, McMillin	Mosaic I & II	R6B & R7A	Active	OR461G	Low
Otay Ranch, Village 7, McMillin	Jacaranda	R1B	Active	OR459I /OR451G	Low
Otay Ranch, Village 7, McMillin	Future	R7B	Inactive-Not Complete		Low
Otay Ranch, Village 7, McMillin	All Seasons Park		Active	PR279	High
Otay Ranch, Village 7, McMillin	Indigo	R1A	Active	OR457I /OR451G	Low
Otay Ranch, Village 7, ORC					
Otay Ranch, Village 7, ORC	Open Space Designated	R3	Inactive-Not Complete		Low
Otay Ranch, Village 7, ORC	Santa Barbara	R2A	Active	OR973I	High
Otay Ranch, Village 7, ORC	Terraza	R2B	Active	OR973I	Medium
Otay Ranch, Village 7, ORC	Monte Sereno	R2C	Active	OR973I	Medium
Otay Ranch, Village 7, ORC	Cypress Lane	R2D	Active	OR973I	Medium
Otay Ranch, Village 7, ORC	Open Space Designated	R4	Inactive-Not Complete		Low
Rolling Hills Ranch					
Rolling Hills Ranch	Bella Lago -Future-SFD	R1	Active	BE002G /BE002I	High
Rolling Hills Ranch	Portola	N10A	Active	RH237I	Low
Rolling Hills Ranch	Future MFD	N11	Inactive-Not Complete	RH241I	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Rolling Hills Ranch	Future MFD	N9-N12 Backbone	Inactive-Not Complete	RH229G	Medium
Rolling Hills Ranch	Rolling Hills-Backbone Improvements	N9-N12	Inactive-Not Complete	RH231C	Medium
San Miguel Ranch					
San Miguel Ranch	Montecito Ridge	J1	Inactive-Not Complete	SM016I	Medium
San Miguel Ranch	Proctor Valley Road		Inactive-Not Complete	SM020I	Medium
San Miguel Ranch	Backbone Improvements-Avenida Loreta		Inactive-Not Complete	SM014C	Medium
San Miguel Ranch	Spring Hills Senior Care		Inactive-Not Complete		Low
San Miguel Ranch	San Miguel Ranch Road		Inactive-Not Complete	SM013C	Medium
San Miguel Ranch	Bontera	K	Active	SM015I	Medium
San Miguel Ranch	Marvilla	L	Active	SM022I	High
San Miguel Ranch	Estrella	J2	Active	SM018I	Medium

Total: **94**

Attachment H

FY 2009-2010 Municipal Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection acitivities.

Inspection Date	Facility Name	APN Number	Address			Category	Priority
22-Jan-10	Nature Center	5650102900	1000	GUNPOWDER POINT	DR	Parks-Landscape-Rec Areas	High
27-Jan-10	Old Public Works Yard	5670312700	707	F	ST	Public Work Facilities	High
9-Apr-10	Valle Lindo Park	6440102600	545	SEQUOIA	ST	Parks-Landscape-Rec Areas	High
13-Apr-10	Windingwalk Neighborhood Park	6436101500	1675	EXPLORATION FALLS	DR	Parks-Landscape-Rec Areas	High
13-Apr-10	Mountain Hawk Park	6435180200	1475	LAKE CREST	DR	Parks-Landscape-Rec Areas	High
23-Apr-10	Montevalle Park & Community Center	5957360600	840	DUNCAN RANCH	RD	Parks-Landscape-Rec Areas	High
23-Apr-10	Mackenzie Creek Park	5955700200	2275	MACKENZIE CREEK	RD	Parks-Landscape-Rec Areas	High
26-Apr-10	Discovery Park	6423930700	700	BUENA VISTA	WY	Parks-Landscape-Rec Areas	High
26-Apr-10	Salt Creek Park & Community Center	6434830200	2710	OTAY LAKES	RD	Parks-Landscape-Rec Areas	High
27-Apr-10	Chula Vista Community Park	5953200200	1060	EASTLAKE	PW	Parks-Landscape-Rec Areas	High
27-Apr-10	Sunset View Park	6430330100	1390	GREENSVIEW	DR	Parks-Landscape-Rec Areas	High
27-Apr-10	Santa Venetia Park	6430512700	1500	MAGDALENA	AV	Parks-Landscape-Rec Areas	High
28-Apr-10	Cottonwood Park	6424210600	1778	PALOMAR	ST	Parks-Landscape-Rec Areas	High

Inspection Date	Facility Name	APN Number	Address			Category	Priority
30-Apr-10	Bonita Long Canyon Park	5941100500	1745	COLTRIDGE	LN	Parks-Landscape-Rec Areas	High
30-Apr-10	Tiffany Park	6420302900	1713	ELMHURST	ST	Parks-Landscape-Rec Areas	High
30-Apr-10	Greg Rogers Park	6200600300	1189	OLEANDER	AV	Parks-Landscape-Rec Areas	High
3-May-10	Santa Cora Park	6420804000	1365	SANTA CORA	AV	Parks-Landscape-Rec Areas	High
3-May-10	Harvest Park	6425814800	1381	PALOMAR	ST	Parks-Landscape-Rec Areas	High
4-May-10	Voyager Park	6400901900	1178	J	ST	Parks-Landscape-Rec Areas	High
4-May-10	Sunridge Park	6400502000	952	BEECHGLEN	DR	Parks-Landscape-Rec Areas	High
4-May-10	Breezewood Park	6425004600	1091	BREEZEWOOD	DR	Parks-Landscape-Rec Areas	High
4-May-10	Horizon Neighborhood Park	6410721600	970	PALOMAR	ST	Parks-Landscape-Rec Areas	High
4-May-10	Heritage Park & Community Center	6425601100	1550	PALOMAR	ST	Parks-Landscape-Rec Areas	High
4-May-10	Rancho Del Rey Park	6422800300	1131	BUENA VISTA	WY	Parks-Landscape-Rec Areas	High
5-May-10	Explorer Park	6400301900		NORELLA	ST	Parks-Landscape-Rec Areas	High
5-May-10	Marisol Park	5933803600	916	RANCHO DEL REY	PW	Parks-Landscape-Rec Areas	High
5-May-10	Veteran's Park Recreation Center	6411221000	785	PALOMAR	ST	Parks-Landscape-Rec Areas	High
5-May-10	Sunbow Park	6402725100	690	NAPLES	ST	Parks-Landscape-Rec Areas	High

Inspection Date	Facility Name	APN Number	Address			Category	Priority
5-May-10	Independence Park	6423205600	1248	CALLE SANTIAGO		Parks-Landscape-Rec Areas	High
6-May-10	Terra Nova Park	5921922700	450	HIDDEN VISTA	DR	Parks-Landscape-Rec Areas	High
6-May-10	Palomar Park	6200504900	1359	PARK	DR	Parks-Landscape-Rec Areas	High
6-May-10	Paseo Del Rey Park	6401412500	750	PASEO DEL REY		Parks-Landscape-Rec Areas	High
7-May-10	Gayle McCandliss Park	6390301300	415	J	ST	Parks-Landscape-Rec Areas	High
7-May-10	Rohr Park	5932400500	4548	SWEETWATER	RD	Parks-Landscape-Rec Areas	High
7-May-10	Hilltop Park	5744104600	780	HILLTOP	DR	Parks-Landscape-Rec Areas	High
10-May-10	Otay Park & Recreation Center	6232302600	3554	MAIN	ST	Parks-Landscape-Rec Areas	High
10-May-10	SDGE Park	6230720700	1438	HILLTOP	DR	Parks-Landscape-Rec Areas	High
11-May-10	Los Ninos Park	6243411200	150	TEAL	ST	Parks-Landscape-Rec Areas	High
11-May-10	Reinstra Ball Fields	6240107300	1500	MAX	AV	Parks-Landscape-Rec Areas	High
11-May-10	Sherwood Park	6233211900	69	SHERWOOD	ST	Parks-Landscape-Rec Areas	High
11-May-10	Orange Avenue Fields	6240107200	160	ORANGE	AV	Parks-Landscape-Rec Areas	High
11-May-10	Loma Verde Park & Recreation Center		1420	LOMA	LN	Parks-Landscape-Rec Areas	High
12-May-10	Harborside Park	6182005900	670	OXFORD	ST	Parks-Landscape-Rec Areas	High

Inspection Date	Facility Name	APN Number	Address			Category	Priority
12-May-10	Lancerlot Park	5711701800	750	K	ST	Parks-Landscape-Rec Areas	High
13-May-10	Lauderbach Park	6192113700	333	OXFORD	ST	Parks-Landscape-Rec Areas	High
17-May-10	Eucalyptus Park	5651200300	47	FIFTH	AV	Parks-Landscape-Rec Areas	High
17-May-10	Conneley Park	6233143300	1559	CONNOLEY	AV	Parks-Landscape-Rec Areas	High
17-May-10	Friendship Park	5681530100	365	F	ST	Parks-Landscape-Rec Areas	High
17-May-10	Norman Park and Recreation Center	5683331100	270	F	ST	Parks-Landscape-Rec Areas	High
19-May-10	Chula Vista Women's Club	5683004200	357	G	ST	Parks-Landscape-Rec Areas	High
19-May-10	Memorial Park	5683004300	373	PARK	WY	Parks-Landscape-Rec Areas	High
19-May-10	Bay Boulevard Park	5670213202		BAY	BL	Parks-Landscape-Rec Areas	High
24-May-10	Downtown Parking Facility	5682702900	340	F	ST	Other Fixed Facilities	High
24-May-10	Mini Park	5952145100	753	ASHBROOK	DR	Parks-Landscape-Rec Areas	High
25-May-10	H Street Land Application	5740300800		H	ST	Other Fixed Facilities	High
2-Jun-10	Parkway CommunityCenter	5683004300	373	PARK	WY	Parks-Landscape-Rec Areas	High
2-Jun-10	Community Youth Center	5723001100	465	L	ST	Parks-Landscape-Rec Areas	High
3-Jun-10	Chula Vista Municipal Golf Course	5932402400	4475	BONITA	RD	Parks-Landscape-Rec Areas	High

Inspection Date	Facility Name	APN Number	Address			Category	Priority
3-Jun-10	John Lippit PWC & Admin Building	6442301100	1800	MAXWELL	RD	Other Fixed Facilities	High
4-Jun-10	Animal Care Facility	6290605400	130	BEYER	WY	Animal Facilities	High
10-Jun-10	Power Washing-Graffiti Removal					Mobile Mun Activities	High

Total Inspections: 61

Attachment I

FY 2009-2010 Commercial Inspections

Note: Inspections listed are based on FY 08-09 Commercial Inventory

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
17-Aug-09	Hofer Corporation	6450300900	5662	OTAY VALLEY	RD	Cat vii-Auto Lots Storage	High	4226
10-Sep-09	Karina's Mexican Style Seafood #2	6192122200	1282	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
14-Sep-09	Otay Farms Inc.	6290100100	1716	BROADWAY		Cat x-Eating/Drinking ...	High	5411
14-Sep-09	La Bodega Market	6182101600	1193	BROADWAY		Cat x-Eating/Drinking ...	High	5411
16-Sep-09	Mercado International 2000	6230606100	1415	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
23-Sep-09	Jim's Glass & Screen	6221113200	2540	MAIN	ST	Cat (i-v) Auto Related	High	7536
29-Sep-09	Southbay Motorsports	6440412000	1890	AUTO PARK	PL	Cat (i-v) Auto Related	High	5941
29-Sep-09	McCune Chrysler Dodge	6440414200	1885	AUTO PARK	PL	Cat (i-v) Auto Related	High	5511
29-Sep-09	Fuller Ford	6440420400	560	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
29-Sep-09	Fuller Honda former People Chevrolet	6440420500	580	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
29-Sep-09	El Torito #89	5670213700	271	BAY	BL	Cat x-Eating/Drinking ...	High	5812
29-Sep-09	Anthony's Fish Grotto	5670212900	215	BAY	BL	Cat x-Eating/Drinking ...	High	5812
30-Sep-09	Denny's Restaurant #1719	5701406000	110	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
30-Sep-09	Jack in the Box #68	5912511600	4011	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
30-Sep-09	Burger King #11435	5700201700	99	BONITA	RD	Cat x-Eating/Drinking ...	High	5812

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
30-Sep-09	Colima's Mexican Food	5912522500	4102	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
30-Sep-09	Panda Express #1316	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
1-Oct-09	Classic Auto Body	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	High	7532
2-Oct-09	Sams Muffler Radiators	6290603200	225	BEYER	WY	Cat (i-v) Auto Related	High	7533
5-Oct-09	McDonalds of Bonita	5932800900	4340	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5-Oct-09	Quizno's Subs	5932800500	4378	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5-Oct-09	Vons Food & Drug #2130	5932800600	4404	BONITA	RD	Cat x-Eating/Drinking ...	High	5411
5-Oct-09	Lolitas Taco Shop	5933500100	4516	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5-Oct-09	Mandarin Gourmet	5932800600	4410	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5-Oct-09	Romesco Baja Bistro	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
7-Oct-09	Baja Taco	6181422700	1052	BROADWAY		Cat x-Eating/Drinking ...	High	5812
7-Oct-09	Bulls Eye Burger	5713101800	860	BROADWAY		Cat x-Eating/Drinking ...	High	5812
8-Oct-09	Carls JR #546	6182005400	1100	BROADWAY		Cat x-Eating/Drinking ...	High	5812
8-Oct-09	Burger King #2339	5720104700	599	BROADWAY		Cat x-Eating/Drinking ...	High	5812
8-Oct-09	Carls JR #31	5710502400	502	BROADWAY		Cat x-Eating/Drinking ...	High	5812
8-Oct-09	Candys Auto Body Shop	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7532
9-Oct-09	C&V Auto			BROADWAY		Cat (i-v) Auto Related	High	7538

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
12-Oct-09	El Camaron	5652402600	193	BROADWAY		Cat x-Eating/Drinking ...	High	5812
12-Oct-09	J&L Auto Repair Inc.	5670531200	273	BROADWAY		Cat (i-v) Auto Related	High	7538
12-Oct-09	Jack in the Box #6	5672003900	486	BROADWAY		Cat x-Eating/Drinking ...	High	5812
13-Oct-09	KFC-Y450114	6220433400	1327	BROADWAY		Cat x-Eating/Drinking ...	High	5812
13-Oct-09	L Street Shell	6180211800	902	BROADWAY		Cat x-Eating/Drinking ...	High	5411
13-Oct-09	McDonalds at Broadway	5720803400	619	BROADWAY		Cat x-Eating/Drinking ...	High	5812
13-Oct-09	Express Tire dba American Auto Service	5672003600	430	BROADWAY		Cat (i-v) Auto Related	High	7538
15-Oct-09	Miramar Fish Market	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5812
16-Oct-09	El Nopal Market LLC			BROADWAY		Cat x-Eating/Drinking ...	High	5411
16-Oct-09	McDonalds Corp #7554	6182803700	1288	BROADWAY		Cat x-Eating/Drinking ...	High	5812
16-Oct-09	McDonalds/Tavarua Restaurant Inc	5623242000	75	BROADWAY		Cat x-Eating/Drinking ...	High	5812
16-Oct-09	Panda Express #960	6182005400	1120	BROADWAY		Cat x-Eating/Drinking ...	High	5812
16-Oct-09	San Diego County Club	6190300800	88	L	ST	Cat xviii-Golf/Parks/Rec	Low	7929
20-Oct-09	Rubios Fresh Mexican Grill at Broadway	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	High	5812
20-Oct-09	Seven Eleven #13570C-2131	5670531100	285	BROADWAY		Cat x-Eating/Drinking ...	High	5411
20-Oct-09	Seven Eleven #21604C-2131	5722811300	899	BROADWAY		Cat x-Eating/Drinking ...	High	5411
20-Oct-09	Sunny's Market	5672122000	449	BROADWAY		Cat x-Eating/Drinking ...	High	5411

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
20-Oct-09	Wienerschnitzel #116	5672321800	493	BROADWAY		Cat x-Eating/Drinking ...	High	5812
21-Oct-09	Seven Eleven #13590D-2131	6181520700	1097	BROADWAY		Cat x-Eating/Drinking ...	High	5411
21-Oct-09	Wendy's Coastline Food Service Corp	5950720600	960	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
21-Oct-09	Arbys #7057/Capitals Group LLC	5953220800	2244	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
21-Oct-09	Lisa's Filipino Cuisine	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
21-Oct-09	Panda Chef			OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
21-Oct-09	Pho Vien Dong			OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
21-Oct-09	L & L Barbecue			OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
22-Oct-09	Boston Market #863	5941310600	770	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
22-Oct-09	Yokozuna's Shushi Bar & Island Grill	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
22-Oct-09	Ralphs #75	5941310100	780	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
22-Oct-09	JNC Pinoy Foodmart Inc.	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
22-Oct-09	Seven Eleven #2131	6421700900	913	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
23-Oct-09	Walmart @ Eastlake	6430208400	1360	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5399
23-Oct-09	In-N-Out Burger	6437700900	1725	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
23-Oct-09	Rubios Fresh Mexican Grill at Eastlake	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
23-Oct-09	Pizza Hut #315092			EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
26-Oct-09	Vons Food & Drug #2071	5953220200	2250	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
26-Oct-09	Lowes Home Improvement Warehouse Inc.	5950720100	2225	OTAY LAKES	RD	Cat xxiii-Bldg/Mat Storag	High	5211
26-Oct-09	McDonalds #14228/Sutherland MGMT Co	5953220900	2254	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
26-Oct-09	Carls JR #281	6430206800	2097	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
29-Oct-09	Chick Fil A at Eastlake Terraces	6430206700	2089	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
29-Oct-09	KFC-#Y305030	6411221700	1361	MEDICAL CENTER	DR	Cat x-Eating/Drinking ...	High	5812
29-Oct-09	Pick Up Stix	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
30-Oct-09	Jiffy Lube #897	5652402700	593	E	ST	Cat (i-v) Auto Related	High	7549
30-Oct-09	Home Town IGA	5670320800	646	E	ST	Cat x-Eating/Drinking ...	High	5411
30-Oct-09	Denny's Restaurant #6962	5670320600	692	E	ST	Cat x-Eating/Drinking ...	High	5812
30-Oct-09	Jack in the Box #86	5632703400	5	FOURTH	AV	Cat x-Eating/Drinking ...	High	5812
3-Nov-09	Red Lobster #521	5682702700	342	F	ST	Cat x-Eating/Drinking ...	High	5812
3-Nov-09	Marie Calendar #103	5682702000	330	F	ST	Cat x-Eating/Drinking ...	High	5812
3-Nov-09	Wendy's Coastline Food Service Corp	5670325100	618	E	ST	Cat x-Eating/Drinking ...	High	5812
3-Nov-09	Taco Bell #3398	5670320100	696	E	ST	Cat x-Eating/Drinking ...	High	5812
3-Nov-09	McDonalds at E Street	5653102700	725	E	ST	Cat x-Eating/Drinking ...	High	5812
6-Nov-09	Azteca Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
6-Nov-09	Rays Mobile Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
6-Nov-09	RG Auto Repair			FAIVRE	ST	Cat (i-v) Auto Related	High	7538
6-Nov-09	Chichi's Auto Repair			FAIVRE	ST	Cat (i-v) Auto Related	High	7538
6-Nov-09	Roman's Auto Electric			FAIVRE	ST	Cat vii-Auto Lots Storage	High	7538
9-Nov-09	Arias Auto Repair			FAIVRE	ST	Cat (i-v) Auto Related	High	7538
9-Nov-09	Capuchino Autobody			FAIVRE	ST	Cat (i-v) Auto Related	High	7532
9-Nov-09	J&J Chrome & Polish	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
9-Nov-09	Chula Vista Auto Repair		2627	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
9-Nov-09	JC Towing Inc.	6221901800	2515	FAIVRE	ST	Cat (i-v) Auto Related	High	7549
10-Nov-09	Home Town Buffet #705	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
10-Nov-09	La Bella Pizza	5683502500	373	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812
16-Nov-09	Agave Grill	5672004700	625	H	ST	Cat x-Eating/Drinking ...	High	5812
16-Nov-09	El Pollo Loco/Bas Food Services	5710622100	666	H	ST	Cat x-Eating/Drinking ...	High	5812
16-Nov-09	Costco Wholesale Corp #460	6402925000	895	H	ST	Cat x-Eating/Drinking ...	High	5399
16-Nov-09	Burger King #11545	6402924800	899	H	ST	Cat x-Eating/Drinking ...	High	5812
16-Nov-09	Carls JR #575	5941310400	1487	H	ST	Cat x-Eating/Drinking ...	High	5812
16-Nov-09	Honey Baked Ham Inc.	5922000700	316	H	ST	Cat x-Eating/Drinking ...	High	5411

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
17-Nov-09	Taco Bell #15508	6420201700	1548	H	ST	Cat x-Eating/Drinking ...	High	5812
17-Nov-09	Jack in the Box #99	5922001800	370	H	ST	Cat x-Eating/Drinking ...	High	5812
17-Nov-09	Vons Food & Drug #2336	5922000500	360	H	ST	Cat x-Eating/Drinking ...	High	5411
17-Nov-09	Taco Bell #2971	5922001300	340	H	ST	Cat x-Eating/Drinking ...	High	5812
17-Nov-09	Terra Nova Car Wash/Fiesta Express	5922001600	350	H	ST	Cat vi-Auto-Washing	High	7542
18-Nov-09	Hilltop Market	6232716700	1500	HILLTOP	DR	Cat x-Eating/Drinking ...	High	5411
18-Nov-09	Lucys Market	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	High	5411
19-Nov-09	Pacific Bay Auto	6222111000	150	JACQUA	ST	Cat (i-v) Auto Related	High	5511
19-Nov-09	Poliza Hollywood Inc	5743003200	72	J	ST	Cat x-Eating/Drinking ...	High	5411
19-Nov-09	Chula Vista Towing	5711531200	625	J	ST	Cat (i-v) Auto Related	High	7549
20-Nov-09	ABC Rebuilders	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7532
20-Nov-09	Batteries Unlimited	6221021800	2244	MAIN	ST	Cat (i-v) Auto Related	High	5531
20-Nov-09	L&E Transmission Inc.	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7538
20-Nov-09	H&A Electric Motors			MACE	ST	Cat (i-v) Auto Related	High	7538
20-Nov-09	Economy Upholstery	6291200800	3679	MAIN	ST	Cat vii-Auto Lots Storage	High	4225
20-Nov-09	D III Industrial	6291302700	187	MACE	ST	Cat (i-v) Auto Related	High	7513
23-Nov-09	Abel Najera	6291200800	3679	MAIN	ST	Cat (i-v) Auto Related	High	7538

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
23-Nov-09	Abre Towing dba Paxton Towing	6290620300	3487	MAIN	ST	Cat (i-v) Auto Related	High	7549
23-Nov-09	Chula Vista Smog	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
23-Nov-09	Barracuda Wheel Alignment	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
23-Nov-09	Chula Vista Toyota	6440407900	650	MAIN	ST	Cat vii-Auto Lots Storage	High	5511
24-Nov-09	Dynamic Results Inc/Eddies Tires & Auto Repair	6221403600	2677	MAIN	ST	Cat (i-v) Auto Related	High	5531
24-Nov-09	Depot of Wheel Corp.	6290200400	2835	MAIN	ST	Cat (i-v) Auto Related	High	5531
24-Nov-09	Euro Specialties	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
24-Nov-09	El Ranchero Factory Taco Shop #2	6232121900	3344	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
24-Nov-09	Collision Parts Warehouse	6232302800	3740	MAIN	ST	Cat (i-v) Auto Related	High	5531
24-Nov-09	Pescados Y Mariscos Hectors	6182106300	1177	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
1-Dec-09	F &V Auto Repair	6290200100	2801	MAIN	ST	Cat (i-v) Auto Related	High	7538
1-Dec-09	Jesse Smog	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	7538
1-Dec-09	Hernandez Tire Sales	6232021800	3236	MAIN	ST	Cat (i-v) Auto Related	High	5531
2-Dec-09	Ricardos's Custom Covers	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	5531
2-Dec-09	Ulises Roberto Sanchez dba Batt Recycling			MAIN	ST	Cat (i-v) Auto Related	High	4953
2-Dec-09	Speed Merchant Inc/American Tire Distributor	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	5531
2-Dec-09	Nice & Easy Autobody & Paint Inc.	6221116000	2350	MAIN	ST	Cat (i-v) Auto Related	High	7532

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
2-Dec-09	Santa Fe Meats	6221112000	2514	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
3-Dec-09	Polos Auto Paint Supply	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532
3-Dec-09	Roman's Truck Body & Paint MJP			MAIN	ST	Cat (i-v) Auto Related	High	7532
4-Dec-09	Tony's Smog Test Only	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
4-Dec-09	Sanchez Auto Repair		2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
9-Dec-09	Zeppy Auto Repair		2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
9-Dec-09	Juans Auto Repair Inc.			MAIN	ST	Cat (i-v) Auto Related	High	7538
9-Dec-09	Mike Auto Repair		2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
9-Dec-09	Marcos Raiator	6221113200		MAIN	ST	Cat (i-v) Auto Related	High	7539
9-Dec-09	PO Auto Repair	6291201600		MAIN	ST	Cat (i-v) Auto Related	High	7538
10-Dec-09	Mariscos Y Birria Los Tokados	6221114600	2638	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
10-Dec-09	Precision Automotive		2446	MAIN	ST	Cat (i-v) Auto Related	High	7537
10-Dec-09	Main Clutch Co	6232301700	3800	MAIN	ST	Cat (i-v) Auto Related	High	5531
10-Dec-09	Lomas Cafe Mexican Food	6232022500	3218	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
10-Dec-09	Tune Plus	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
10-Dec-09	Soundelux	6221112500	2490	MAIN	ST	Cat (i-v) Auto Related	High	5531
11-Dec-09	San Diego Tires and Brakes	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
11-Dec-09	JT Associates Inc/DBA Audio Xperts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
11-Dec-09	PB Auto Service	6291201600	3645	MAIN	ST	Cat (i-v) Auto Related	High	7538
14-Dec-09	Smart & Final #463 / SFI Corp	6290607500	3141	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
14-Dec-09	Panda Express #1098	6240606700	1820	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
14-Dec-09	SCJ Towing	6290606000	3211	MAIN	ST	Cat (i-v) Auto Related	High	7549
14-Dec-09	South 1 Atuor Detail	6290500900	3031	MAIN	ST	Cat vi-Auto-Washing	High	7542
15-Dec-09	Seven Eleven #18547B-2131	6240605700	4300	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5411
15-Dec-09	Ciao Italian Restaurant	6240606000	4360	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5812
15-Dec-09	Jack in the Box #93	6220433300	585	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
15-Dec-09	Subway #33339		263	ORANGE	AV	Cat x-Eating/Drinking ...	High	5812
15-Dec-09	Superior Auto Repair	6291200100	3611	MAIN	ST	Cat (i-v) Auto Related	High	7538
15-Dec-09	Superior VW Automotive Repair	6221113400	2578	MAIN	ST	Cat (i-v) Auto Related	High	7538
15-Dec-09	Roadone DBA A to Z Metro, A to Z Enterprises Inc	6440406100	1805	MAXWELL	RD	Cat (i-v) Auto Related	High	7549
15-Dec-09	Access II Towing	6232300600	1350	MAX	AV	Cat (i-v) Auto Related	High	7549
17-Dec-09	Ralphs #235	6411221400	659	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411
17-Dec-09	Subway #29881	6411224800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
17-Dec-09	Lolitas Taco Shop	6411221800		PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
17-Dec-09	McDonalds #25836/TRS Restaurant	6411221900	687	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
17-Dec-09	Del Taco #809	6220310500	670	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
18-Dec-09	McDonalds #6840/Sutherland MGMT Co	6390806700	551	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812
18-Dec-09	Seven Eleven #13568E-2131	6394901300	415	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411
21-Dec-09	Home Depot #658/Home Depot USA Inc.	6402911300	725	PLAZA	CT	Cat xxiii-Bldg/Mat Storag	High	5211
21-Dec-09	American Towing & American Dismantling Inc.	6291001600	140	REED	CT	Cat (i-v) Auto Related	High	7549
22-Dec-09	Vons Food & Drug #2006	6390806200	505	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411
22-Dec-09	Seven Eleven #33715	6182803600	689	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411
22-Dec-09	Albertson's #6759	5950305800	2310	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	High	5411
22-Dec-09	Aqua Clean	5922109000	1435	RIDGEBACK	RD	Cat vi-Auto-Washing	High	7542
23-Dec-09	Star Bakery	6192866000	1372	THIRD	AV	Cat x-Eating/Drinking ...	High	5461
23-Dec-09	John's Towing	6206021700	1298	WAXWING	LN	Cat (i-v) Auto Related	High	7549
23-Dec-09	Seafood City Market	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
23-Dec-09	Save A Lot #943	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
23-Dec-09	KFC Y305136BL03	6193001500	1305	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
4-Jan-10	Albertson's #6757	5733204500	720	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
4-Jan-10	Vons Food & Drug #3063	5734503400	870	THIRD	AV	Cat x-Eating/Drinking ...	High	5411

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
4-Jan-10	Third Avenue Minimart	5733204000	772	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
5-Jan-10	Chinese City Restaurant	6230600200	1403	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
5-Jan-10	Apple Tree Market	6231312000	1556	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
6-Jan-10	Jack in the Box #63	6230500200	1408	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
6-Jan-10	Burger King #952	6192225200	1265	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
7-Jan-10	Rally's Hamburger/Ongs Restaurant Group	6190511300	1004	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
7-Jan-10	Church Fried Chicken	6190610200	1005	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
7-Jan-10	Long John Silver	6190611400	1049	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
7-Jan-10	McDonalds at Third #1557	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
7-Jan-10	Carls JR #83	6190100800	996	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
8-Jan-10	Henry's Market Place	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
8-Jan-10	KFC Y450073BL03	5685112000	461	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
8-Jan-10	Seven Eleven #21792C-2131	5684200100	403	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
11-Jan-10	Western Towing	6170710200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549
11-Jan-10	Western Towing/Road One Towing Inc	6170600200	1150	WALNUT	AV	Cat (i-v) Auto Related	High	7549
11-Jan-10	Rubios Fresh Mexican Grill	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	High	5812
14-Jan-10	Sergion Hernandez Yacht Maintenance	6180611800	934	FIFTH	AV	Cat (iii-xxi)-Boat/Marina	High	3732

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
26-Jan-10	Bajas #3 Auto Wrecking		811	ENERGY	WY	Cat vii-Auto Lots Storage	High	7549
8-Apr-10	Dominos Pizza	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
21-Apr-10	Gas Depot	5652402100	199	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541
6-May-10	Home Depot Eastlake	6430206600	1320	EASTLAKE	PW	Cat xxiii-Bldg/Mat Storag	High	5211
6-May-10	Chevron Station-Olympic Parkway #1975	6430206900	2115	OLYMPIC	PW	Cat viii-Fueling-Rtl/Wsl	High	5541
13-May-10	COSTCO at Broadway	6182006100	1130	BROADWAY		Cat x-Eating/Drinking ...	High	5399
1-Jun-10	Arco Sunshine Market	6201301600	1401	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	5541
24-Jun-10	China China Restaurant	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	5812
28-Jun-10	All American Car Wash C.V.	6182103500	1137	BROADWAY		Cat vi-Auto-Washing	Low	7542
29-Jun-10	Arco AM/PM #5208	5652801400	407	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
29-Jun-10	Arco AM/PM #5217	5733203900	798	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541
29-Jun-10	Atlas Termite	5661103700	25	SECOND	AV	Cat ix-Pest Control ...	Low	7342
29-Jun-10	Aunt Emmas	5670310600	700	E	ST	Cat x-Eating/Drinking ...	Low	5812
29-Jun-10	Big O Tires	5671402400	399	BROADWAY		Cat (i-v) Auto Related	Low	5531
29-Jun-10	Bobar Market 8	5670903900	600	F	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541
29-Jun-10	The Perking Lot	5933500100	4502	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
29-Jun-10	Bonita Arco	5932800700	4498	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
29-Jun-10	Global Coffee Sidewalk Cafe	5932800500	4366	BONITA	RD	Cat x-Eating/Drinking ...	Low	5451
29-Jun-10	Burrito Corona Group LLC	5932800600	4444	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
29-Jun-10	Tijuana Oyster Bar	5932800200	4246	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
29-Jun-10	Jalisco Cafe	5912522600	4026	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
29-Jun-10	Saphire Lounge	5912522500	4076	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
29-Jun-10	Donnys Cafe Inc.	5912401800	3901	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
29-Jun-10	Bonita Shell	5701402700	100	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
29-Jun-10	Circle K Store #5708	5701310500	98	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
29-Jun-10	Chevron Inc #1422	5700203200	95	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
29-Jun-10	Mariscos Los Arcos Restaurant	5700203400	89	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812

Total Inspections: **229**

Attachment J

FY 2009-2010 Industrial Inspections

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	SIC Number
3-Sep-09	Tortilleria Santa Fe Inc.	6290101100	2765	MAIN	ST	Manufacturing	High		2099
3-Nov-09	America's Finest Carpet	644-230-2300	730	DESIGN	CT	Carpet Services	High		5713
14-Jan-10	Montoya's Auto Wrecking	6441811800	781	ENERGY	WY	Auto Dismantlers	High	937I021427	5015
14-Jan-10	All Japanese Auto Recycling	6441811900	775	ENERGY	WY	Auto Dismantlers	High	937I015706	5015
14-Jan-10	Asian Kars Auto Recycling	6441812300	777	ENERGY	WY	Auto Dismantlers	High	937I017467	5015
15-Jan-10	Parts Heaven	6111812100	791	ENERGY	WY	Auto Dismantlers	High		5015
15-Jan-10	All Toyota/Lexus Wrecking	6441811500	805	ENERGY	WY	Auto Dismantlers	High	937I018543	5015
15-Jan-10	California Sports Auto Wrecking	6441811800	781	ENERGY	WY	Auto Dismantlers	High	937I021145	5015
19-Jan-10	Advance Auto Wrecking	6441812300	777	ENERGY	WY	Auto Dismantlers	High	937i020612	5015
20-Jan-10	Freeway Auto Wrecking	6441812200	783	ENERGY	WY	Auto Dismantlers	High	937I021643	5015
20-Jan-10	RC Import Auto Recycler	6441812300	777	ENERGY	WY	Auto Dismantlers	High	9371010144	5015

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	SIC Number
20-Jan-10	Honda Acura Parts Auto Recycling	6441821500	895	ENERGY	WY	Auto Dismantlers	High	937i011394	5015
21-Jan-10	Import Auto Wrecking	6441812900	793	ENERGY	WY	Auto Dismantlers	High	937I016877	5015
21-Jan-10	Pacific Auto Wrecking	6441812000	795	ENERGY	WY	Auto Dismantlers	High	9371015058	5015
21-Jan-10	Texano Auto Recycling	6441811500	805	ENERGY	WY	Recycling	High	937I1021577	5015
25-Jan-10	Japan Tech Auto Wrecking	6441812300	777	ENERGY	WY	Auto Dismantlers	High	937I020121	5015
25-Jan-10	Onager Corporation	6441812800	789	ENERGY	WY	Auto Dismantlers	High	9371010014	5015
25-Jan-10	South Bay Auto Wreckers	6441820200	811	ENERGY	WY	Auto Dismantlers	High	9371004495	5015
26-Jan-10	Japanese Auto Wrecking	6441811500		ENERGY	WY	Auto Dismantlers	High		5015
26-Jan-10	Calumet Auto Wrecking Inc	6441821400	891	ENERGY	WY	Auto Dismantlers	High	937I004393	5015
26-Jan-10	2 Heavy Equipment/PavementRecycling	6441820300	855	ENERGY	WY	Metal Recycling	High		5093
27-Jan-10	Rossin Steel Inc.	6441810900	1880	NIRVANA	AV	Fabrications	High	9371020898	3441
29-Jan-10	Ecology Auto Wrecking	6441820100	825	ENERGY	WY	Auto Dismantlers	High	937I003325	5015
29-Jan-10	Ecology Auto Wrecking 3	6441821200	800	ENERGY	WY	Auto Dismantlers	High	937I003280	5015

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	SIC Number
29-Jan-10	Pick Your Part Auto Wrecking	6441820800	880	ENERGY	WY	Auto Dismantlers	High	937I012114	5015
2-Feb-10	Kleen Blast Industrial Services	6180103100	676	MOSS	ST	Retail/Sales	High		5084
2-Feb-10	Ecology Auto Wrecking 2	6441821000	850	ENERGY	WY	Auto Dismantlers	High	937I019445	5015
3-Feb-10	FJ Willert Construction Co.	6441810200	1869	NIRVANA	AV	Storage	High	937I016993	4953
3-Feb-10	ABF Freight System Inc.	6441821700	875	ENERGY	WY	Transportation	High	937I013254	4213
4-Feb-10	Allied Waste Services	6441821600	881	ENERGY	WY	Waste Management	High	937I014355	4953
4-Feb-10	Estes Express Lines	5634521200	120	PRESS	LN	Trucking	High	937I007126	4231
5-Feb-10	United Parcel Service	5953000300	2300	BOSWELL	CT	Postal Service	High	9371002086	4215
8-Feb-10	Arise/Waco Scafolding	6180103100	676	MOSS	ST	Wholesale	High		5082
8-Feb-10	Standard Auto Recycling	6291000400	150	REED	CT	Auto Dismantlers	High	9371010775	5015
10-Feb-10	Action Auto Dismantlers Inc	6291001400	151	REED	CT	Auto Dismantlers	High	937I004000	5015
15-Feb-10	West Auto Wreckers	6221902600	2365	MAIN	ST	Auto Dismantlers	High	9371001046	5015
16-Feb-10	Prudential Overall Supply	56709000300	740	F	ST	Service	High		7213

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	SIC Number
16-Feb-10	Veolia Transportation -MTS	6232502100	3650	MAIN	ST	Transportation	High	9371011017	4111
17-Feb-10	United Rentals Inc	5623501000	501	C	ST	Heavy Equipment Rer	High	9371019886	7359
18-Feb-10	SOS Metals San Diego LLC	6221115700	635	ANITA	ST	Recycling	High	9371013260	5093
18-Feb-10	Hanson Aggregates	6290300500	116	7TH	ST	Concrete Work	High	937I015523	3271
23-Feb-10	Otay Valley Rock- Rimrock Quarry LLC	6440600600	2041	HERITAGE	RD	Others	High		1429
24-Feb-10	MMC Energy -Peak Power Plant	6290620400	3497	MAIN	ST	Power Generations	High	9371020087	4911
25-Jun-10	Brenntag Pacific Inc	6441810800	1888	NIRVANA	AV	Chemical Storage	Low		5169

Total Inspections: 44

Attachment K

FY 2009-2010 Enforcement Action Taken

(Residential, Industrial, Commercial, and Related Businesses)

Note: During this reporting period, 7/01/2009 to 6/30/2010, investigation of the following cases have resulted in the issuance of Notice Code of Violation, Orders to Cease and Desist, Notice to Clean and Abate, and Admin Citation.

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
			Commercial					
17-Jul-09	Budget Tires	Leaking Containers/Tanks	Commercial	275	ORANGE	AV	Issued Admin Citation-Warning	
17-Jul-09	China China Restaurant	Grease/Food/Drink Disch.	Commercial	386	H	ST	Issued Admin Citation-Warning	
22-Jul-09	Reliable Carpet & Upholstery Cleaning	Carpet Clean Wash Water	Commercial	847	HALECREST	DR	Issued Admin Citation and Fine	$100
25-Jul-09	GMI Building Services	Power/Pressure Washing	Commercial	1451	H	ST	Issued Admin Citation	$200
7-Aug-09	El Latino Newspaper	Slurry/Concrete Discharge	Commercial	725	MAIN	ST	Issued Admin Citation-Warning	
20-Aug-09	Tortilleria Santa Fe Inc.	Chemical Disharge	Commercial	2765	MAIN	ST	Issued Notice of Violation	
31-Aug-09	Karina's Mexican Style Seafood #2	Driveway/Trash Washing	Commercial	1282	THIRD	AV	Issued Admin Citation-Warning	
29-Sep-09	Car Wash - Mobile Business	Vehicle Washing/Dismantle	Commercial	1714	BROADWAY		Issued Admin Citation- Fine	$200
15-Oct-09	San Diego County Club	Grease/Food/Drink Disch.	Commercial	88	L	ST	Issued Admin Citation - Fine	$200
29-Oct-09	Pool Maintenance - Mobile Business	Pool-Spa Residue	Commercial	200	SURREY	DR	Issued Admin Citation- Fine	$200
31-Oct-09	All American Car Wash C.V.	Vehicle Washing/Dismantle	Commercial	1137	BROADWAY		Issued Admin Citation and Fine	$200

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
3-Nov-09	Home Town Buffet #705	Grease/Food/Drink Disch.	Commercial	651	PALOMAR	ST	Issued Admin Citation & Fine	$200
3-Nov-09	Party Production Rentals-Mobile	Grease/Food/Drink Disch.	Commercial	657	PALOMAR	ST	Issued Admin Citation and Fine	$200
6-Nov-09	Islandia 29 LP Kelton Title	Grease/Food/Drink Disch.	Commercial	945	OTAY LAKES	RD	Issued Admin Citation and Fine	$200
9-Nov-09	La Bella Pizza	Power/Pressure Washing	Commercial	373	THIRD	AV	Issued Admin Citation-Warning	
16-Nov-09	El Pollo Loco/Bas Food Services	Grease/Food/Drink Disch.	Commercial	666	H	ST	Issued 2nd Admin Citation	$200
23-Nov-09	Pescados Y Mariscos Hectors	Grease/Food/Drink Disch.	Commercial	1177	BROADWAY		Issued Admin Citation and Fine	$200
3-Dec-09	Chula Vista SVC CTR/SECV Inc.	Failure to Maintain BMPS	Commercial	899	THIRD	AV	Issued Admin Citation & Fine	$100
4-Dec-09	Tony's Smog Test Only	Res/Comm Cleaning Residue	Commercial	2520	MAIN	ST	Issued Admin Citation & Fine	$100
11-Dec-09	PB Auto Service	Vehicle oil discharge	Commercial	3645	MAIN	ST	Issued Admin Citation & Fine	$200
15-Dec-09	Jack in the Box #93	Trash/Debris Discharge	Commercial	585	PALOMAR	ST	Issued Admin Citation & Fine	$200
5-Jan-10	Lunch Truck - Mobile Business	Sewage Spill/Discharge	Commercial	77	BROADWAY		Admin Citation and Fine	$200
17-Feb-10	McDonalds Corp #7554	Sewage Spill/Discharge	Commercial	1288	BROADWAY		Admin Citation and Fine	$200
19-Feb-10	El Comal Antojitos	Grease/Food/Drink Disch.	Commercial	262	THIRD	AV	Issued Admin Citation and Fine	$200
2-Mar-10	DaVinchi Metal Signs	Others/Unknown Discharge	Commercial	3521	MAIN	ST	Issued Admin Citation and Fine	$200

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
3-Mar-10	ABLE Heating and Air Conditioning	Trash/Debris Discharge	Commercial	1020	COLORADO	AV	Issued Admin Citation and Fine	$200
3-Mar-10	Rivas Manufacturing	Chemical Disharge	Commercial	1060	COLORADO	AV	Admin Citation and Fine	$100
10-Mar-10	Karina's Mexican Seafood	Sediment Discharge	Commercial	986	BROADWAY		Issued Admin Citation and Fine	
10-Mar-10	Heartland Meats Company	Vehicle oil discharge	Commercial	3461	MAIN	ST	Issued Admin Citation and Fine	$200
2-Apr-10	SSFT Holdings	Painting-Sanding Residue	Commercial	735	SAN JUAN	PL	Admin Citation and Fine	$200
6-Apr-10	JNC Pinoy Foodmart Inc.	Sewage Spill/Discharge	Commercial	943	OTAY LAKES	RD	Admin Citation and Fine	$100
6-Apr-10	Dominos Pizza	Sewage Spill/Discharge	Commercial		OTAY LAKES	RD	Issued Admin Citation and Fine	$200
4-May-10	Walgreens @ Third Avenue	Failure to Maintain BMPS	Commercial	1111	THIRD	AV	Issued Notice of Violation	
4-May-10	Kohls @ Eastlake	Failure to Maintain BMPS	Commercial	2325	OTAY LAKES	RD	Issued Notice of Violation	
4-May-10	Eastlake Commerce-Business Center	Failure to Maintain BMPS	Commercial	821	KUHN	DR	Issued Notice of Violation	
4-May-10	Eastlake Parkway Professional Plaza	Failure to Maintain BMPS	Commercial	860	KUHN	DR	Isssued Notice of Violation	
14-May-10	Shmidt Fire Protection-Citation - Mobile	Slurry/Concrete Discharge	Commercial	2400	MAIN	ST	Issued Admin Citation and Fine	$100
27-May-10	Knotts Soak City USA	Pool-Spa Residue	Commercial	2052	ENTERTAINMENT	CI	Issued Admin Citation-Warning	
11-Jun-10	Westwood Financial Corporation	Lack of Housekeeping	Commercial	2260	OTAY LAKES	RD	Issued Admin Citation and Fine	$400

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
15-Jun-10	Lolitas Restaurant	Res/Comm Cleaning Residue	Commercial	413	TELEGRAPH CANYON	RD	Issued Admin Citation	
			Industrial					
1-Jul-09	Hyundai Livart Furniture Outlet	Lack of Housekeeping	Industrial	3121	MAIN	ST	Issued Admin Citation and Fine	$100
20-Aug-09	Tortilleria Santa Fe Inc.	Chemical Disharge	Industrial	2765	MAIN	ST	Issued Admin Citation and Fine	$200
3-Nov-09	America's Finest Carpet	Carpet Clean Wash Water	Industrial	730	DESIGN	CT	Issued Admin Citation and Fine	$200
9-Mar-10	Kleen Blast Industrial Services	Others/Unknown Discharge	Industrial	676	MOSS	ST	Issued Admin Citatin and Fine	$200
21-Apr-10	Quality Lift Trucks	Sediment Discharge	Industrial	115	GLOVER	AV	Admin Citation and Fine	$200
			Residential					
15-Jul-09	San Miguel Ranch III-Residential Area	Failure to Maintain BMPS	Residential				Issued NOV	
4-Aug-09	Woodlawn Garden Apartments	Sewage Spill/Discharge	Residential	502	WOODLAWN	AV	Issued Admin Citation and Fine	$300
7-Aug-09	Blue Planet Drains & Plumbing	Res/Comm Cleaning Residue	Residential	1558	CIRCULO BRINDISI		Issued Admin Citatin-Warning	
20-Aug-09	Ape Cosntruction	Driveway/Trash Washing	Residential	1613	MELROSE	AV	Issued Admin Citation and Fine	$200
10-Sep-09	Camelot at Eastlake	Res/Comm Cleaning Residue	Residential	734	BROOKSTONE	RD	Issued Notice of Violation	
11-Sep-09	Motor Home RV	Sewage Spill/Discharge	Residential	3211	MAIN	ST	Issued Admin Citation - Fine	$200
31-Oct-09	Resident	Sewage Spill/Discharge	Residential	577	OXFORD	ST	Issued Admin Citation and Fine	$200

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
1-Nov-09	South Bay Community Villas LP	Sewage Spill/Discharge	Residential	1325	SANTA RITA		Issued Admin Citation and Fine	$200
6-Nov-09	KDC Construction - Mobile Business	Const. BMPS Violation	Residential	320	H	ST	Issued Admin Citation	$200
12-Nov-09	Resident	Trash/Debris Discharge	Residential	555	TRAILRIDGE	DR	Issued Admin Citation & Fine	$200
1-Dec-09	Rex Holdings LP	Sewage Spill/Discharge	Residential	488	DAVIDSON	ST	Issued Admin Citation and Fine	$200
4-Dec-09	Paul Miller Company	Slurry/Concrete Discharge	Residential	1216	THIRD	AV	Issued Admin Citation & Fine	$200
15-Dec-09	Villas San Miguel HOA	Sewage Spill/Discharge	Residential	93	LION	CI	Issued Admin Citation-Warning	
5-Jan-10	Resident	Slurry/Concrete Discharge	Residential	238	L	ST	Issued Admin Citation-Warning	
13-Jan-10	4D + N ----Mobile Business	Vehicle oil discharge	Residential	794	ADA	ST	Admin Citation and Fine	$200
13-Jan-10	Resident	Res/Comm Cleaning Residue	Residential	1566	CUMBRE VIEW		Issued Admin Citation-Warning	
1-Feb-10	Eastlake 1 - Community Association	Sediment Discharge	Residential	1941	CLEARBROOK	DR	Issued Admin Citation and Fine	$200
1-Feb-10	Paving Stone of SD - Mobile	Slurry/Concrete Discharge	Residential	1008	CORTE MARIA	AV	Admin Citation and Fine	$200
2-Feb-10	TCP Company-Plumbing Specialist-Mobile	Res/Comm Cleaning Residue	Residential	465	F	ST	Warning Citation	
8-Feb-10	Southeren CA Soil Testing-Mobile	Sediment Discharge	Residential	751	OTAY LAKES	RD	Admin Citation and Fine	$200
8-Feb-10	San Miguel Ranch Master Ass.-Citation	Sediment Discharge	Residential		PROCTOR VALLEY	RD	Issued Admin Citation-Warning	

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
10-Feb-10	We Care Carpet Clean - Mobile	Carpet Clean Wash Water	Residential	1485	ROBLES	DR	Admin Citation and Fine	$200
11-Feb-10	Davis & Adam Construction-Mobile	Sediment Discharge	Residential	440	FOURTH	AV	Issued Admin Citation and Fine	$200
12-Feb-10	Resident- Citation	Sediment Discharge	Residential	603	MELROSE	AV	Issued Admin Citation-Warning	
15-Feb-10	Luis & Sons Construction-Mobile	Slurry/Concrete Discharge	Residential	1133	VISTA	WY	Admin Citation and Fine	$200
15-Feb-10	Phair Company - Mobile Business-Citation	Power/Pressure Washing	Residential	200	SURREY	DR	Admin Citation and Fine	$200
17-Feb-10	Xtreme Enterpriese -Mobile	Vehicle Washing/Dismantle	Residential	2539	TABLE ROCK	AV	Issued Admin Citation and Fine	$200
23-Feb-10	Myers Construction- Mobile Business	Slurry/Concrete Discharge	Residential	1375	MELROSE	AV	Admin Citation and Fine	$200
26-Feb-10	Home Owner- Citation	Vehicle oil discharge	Residential	1253	SECOND	AV	Issued Citation - Fined $200	$200
26-Feb-10	Total Landscaping Design -Mobile	Sediment Discharge	Residential	2799	SHADOW CREST	TE	Issued Admin Citation and Fine	$200
2-Mar-10	Resident	Sewage Spill/Discharge	Residential	786	THIRD	AV	Issued Admin Citation and Fine	$200
17-Mar-10	K Hovnanaian Homes	Sewage Spill/Discharge	Residential	614	VIA MAGGIORE		Issued Admin Citation and Fine	$200
12-Apr-10	Villas at H Street	Failure to Maintain BMPS	Residential		H	ST	Issued Notice Of Violation	
14-Apr-10	K Hovnanaian Homes	Sewage Spill/Discharge	Residential	614	VIA MAGGIORE		Issued Admin Citation and Fine	$400
10-May-10	Resident	Vehicle Washing/Dismantle	Residential	103	NAPLES	ST	Issued Admin Citation and Fine	$200

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
13-May-10	Otay Ranch V-7, N6 and N7	Sewage Spill/Discharge	Residential				Issued Notice of Violation	
8-Jun-10	Winchester	Failure to Maintain BMPS	Residential		GEYSERVILLE	ST	Issued Notice of Violation	
10-Jun-10	Stetson	Failure to Maintain BMPS	Residential		GEYSERVILLE	ST	Issued Notice of Violations	
10-Jun-10	Resident - Citation - Open Parcel lots	Trash/Debris Discharge	Residential	912	THIRD	AV	Issued Notice of Violation	
23-Jun-10	Resident	Const. BMPS Violation	Residential	713	J	ST	Issued Admin Citation-Warning	
			Schools/ Church/Offices					
11-Sep-09	La Roca Comunidad Christiana Church	Failure to Maintain BMPS	Schools/ Church/Office	1420	PALOMAR	ST	Issued NOV and Civil Penalty	$5000
8-Feb-10	Bonita Vista High School - Citation	Vehicle Washing/Dismantle	Schools/ Church/Office	751	OTAY LAKES	RD	Issued Admin Citation	
19-Feb-10	International Travel & Tours- Citation	Painting-Sanding Residue	Schools/ Church/Office	294	THIRD	AV	Issued Admin Citation and Fine	$200

Total Incidents: **88** **Total Fine:** **$16,400.00**

FY 2009-2010 Hotline Call Response Summary

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/01/2009	STORM CHANNEL	Commercial	3121	MAIN	ST	Construction Debris & Waste
	Comments/ Action Taken:	7/1/09---Received a report of illegal dumping of trash, junk and debris by Hyundai Livart Furniture at 3121 Main St. into the adjacent channel. Inspection noted several large pieces of cardboard and other packing materials dumped into the storm channel. Admin Citation Issued. Cleanup conducted. No further action required.				
07/02/2009	STREET	Commercial	1478	MELROSE	AV	Unknown Discharge
	Comments/ Action Taken:	Received a complaint from Sunny Fresh Cleaners regarding landscape maintenance crews blowing grass clippings into the street. All American Landscape was responsible party. Issued verbal warning regarding the blowing of debris into the street. No further action necessary at this time.				
07/06/2009	STREET	Residential	142	SAN MARCOS	PL	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Received a report of illegal connection at 142 San Marcos Pl. Inspection noted a sewer discharge hose leading from under garage door and into open top sewer clean out in the front drive way. Spoke with resident who stated that she would remove the hose, replace the sewer clean out cap and discontinue washing clothes at home. A re-inspection verified that corrections were made.				
07/06/2009	CATCH BASIN	Residential	160	LAS FLORES	DR	Complaint Response Enforcement
	Comments/ Action Taken:	Received a call reporting mud running into the street from 160 Las Flores and into the storm drain inlet. Inspection did not find any evidence of mud flowing from said property. No further action is necessary at this time.				
07/07/2009	STREET	Residential	501	C	ST	Unknown Discharge
	Comments/ Action Taken:	Received report of water flowing into gutter with oil, slurry and rocks at 501 C Street. Inspection found small water puddle in the gutter in front of said address resulting from irrigation overflows. No further action is necessary at this time.				
07/07/2009	STREET	Commercial	5	FOURTH	AV	Unknown Discharge
	Comments/ Action Taken:	Received report of non-storm water flowing from jack in the box at 5 Fourth Ave. Inspection noted that a sprinkler was leaking water into the gutter. Irrigation system was repaired. No further action is necessary at this time.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/08/2009	CATCH BASIN	Residential	740	F	ST	Other
	Comments/ Action Taken:	Received notification of open trash container and running water at the subject location. Inspection did not observe running water from the facility at the time of the response. Open trash container was not overfilled and is not a storm water violation. No further action required.				
07/08/2009	CATCH BASIN	Residential	120	PRESS	LN	Other
	Comments/ Action Taken:	Received notification of an open trash container at subject location. Inspection did not observe trash bin to be overflowing or an accumulation of trash at the bins location. No further action required.				
07/08/2009	CATCH BASIN	Residential	793	ENERGY	WY	Other
	Comments/ Action Taken:	Received notification of uncovered equipment and open trash container at the subject location. Inspection observed facility in good, clean condition and using proper BMPs in accordance with their Industrial Permit. Did not observe overflowing or spilled trash. No further action required.				
07/08/2009	STREET	Commercial	1855	MAXWELL	RD	Construction Debris & Waste
	Comments/ Action Taken:	Received notification of dirt tracking at subject location. Barnhardt, Inc. conducted the cleanup of the tracking using staff and a street sweeper. No further action required.				
07/08/2009	CATCH BASIN	Residential	15	J	ST	Pool Filter Discharge
	Comments/ Action Taken:	Observed discharge into the storm drain system but did not reach the catch basin. Homeowner was not aware that this is an illegal discharge. Issued verbal warning to the residence. Education material was issued. City staff conducted the cleanup utilizing a vactor crew. No further action required.				
07/09/2009	CATCH BASIN	Industrial	1888	NIRVANA	AV	Other
	Comments/ Action Taken:	Received notification of a possible storm water issue at Brenntag Pacific of uncovered pipe, equipment, large drums and possible hazardous materials. Responded to the the facility and observed the facility to be in good, clean condition. Facility is a chemical distribution facility. No storm water violations were observed. No further action is required.				
07/09/2009	CATCH BASIN	Residential	1867	CAMINO MOJAVE		Leaking Vehicle

Incident Date	Structure Category	Site Category	Address	Type of Violation
07/09/2009	CATCH BASIN	Residential	1867 CAMINO MOJAVE	Leaking Vehicle
	Comments/ Action Taken:	Received notification of an oil stain at the subject location. Inspection observed trail of oil stain or other petroleum product along a small section of Camino Mojave. Stain was already adsorbed into asphalt and did not pose a threat to water quality. Source unknown. No further action required.		
07/09/2009	CATCH BASIN	Residential	503 PROCTOR VALLEY RD	Other
	Comments/ Action Taken:	Received notification of uncovered stockpiles at the Senior Living Construction site. Inspection observed inactive large stockpiles that were properly protected with visqueen and gravel bags. Small uncovered stockpiles do not pose a threat to water quality. No further actions required.		
07/09/2009	CATCH BASIN	Municipal	1178 J ST	Other
	Comments/ Action Taken:	Received notification of water running from sprinkler system into storm drain and poor soil containment from slope located at upper parking lot of the subject location. Inspection did not observe landscape water in the curbline. Observed the slope to have old and damaged fiber roll at the toe and a buildup of leaves and sediment in the brow ditch. Parks Department replaced fiber rolls and conducted cleanup of brow ditch. No further actions required.		
07/09/2009	CATCH BASIN	Municipal	4548 SWEETWATER RD	Other
	Comments/ Action Taken:	Received notification of sprinkler water runoff at Rohr Park. Responded to subject location and did not observe irrigation runoff. No further action is required.		
07/09/2009	CATCH BASIN	Municipal	519 CARVALOS DR	Other
	Comments/ Action Taken:	Received notification of a large oil slick at the City's H Street Land Application Site. Observed hydraulic oil staining located behind K-Rail in the dirt. Inform Public Works supervisor. Public Works crew conducted the proper cleanup and disposal of the spill. No further action required.		
07/09/2009	CATCH BASIN	Municipal	707 F ST	Other
	Comments/ Action Taken:	Received notification of trash and poor soil containment at the City's Old Corp Yard. City staff responded and observed facility to be in good,clean condition with minor remnant blown trash. All stockpiles were properly contained. City staff conduct regularly schedule cleaning of the facility. No further action required.		
07/09/2009	CATCH BASIN	Residential	339 CORTE GOLETA	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/09/2009	CATCH BASIN	Residential	339	CORTE GOLETA		Other
	Comments/ Action Taken:	Received notification of residential sprinkler water in the gutter and storm drain. City staff responded to subject location and did not observe discharge due to system was not energized at the time of the response. City staff provided educational door hanger at the residence. No further action required.				
07/09/2009	CATCH BASIN	Industrial	811	ENERGY	WY	Other
	Comments/ Action Taken:	Received notification of oil stains and uncovered equipment at the subject location. City staff responded and observed minor oil staining in the gravel at the entrance to the facility. Observed engine blocks not properly stored. Spoke with owner of the facility and instructed him conduct the proper cleanup of the staining and remove the engine blocks off the ground. Owner complied and completed as instructed. No further action required.				
07/10/2009	CATCH BASIN	Residential	1907	CAMINO MOJAVE		Construction Debris & Waste
	Comments/ Action Taken:	Received notification of dirt, concrete improperly covered. Dirt on the sidewalks and in the street and no silt fencing in place during grading. Responded to subject location and observed private landscaping company conducting work at the private residence. Did not observe an immediate threat to water quality and no potential of a discharge. All BMPs were in place and properly installed and maintained. No further action required.				
07/10/2009	CATCH BASIN	Residential	100	WALNUT	AV	Other
	Comments/ Action Taken:	Received notification of trash, tar, paint at abandoned lot at 100 Walnut. City staff responded to subject location and observed inactive construction of 2 SFD with stockpiles of trash, construction debris, old vehicles, appliances, slurry spills throughout the site. Owner conducted proper cleanup of the property. No further action required.				
07/10/2009	CATCH BASIN	Commercial	1320	EASTLAKE	PW	Other
	Comments/ Action Taken:	Received notification of oil staining in customer parking lot and sprinkler runoff at subject location. City staff responded and observed several small oil stain within the parking stalls from customer vehicles. All stains were adsorbed into the asphalt and does not pose an immediate threat to water quality. Sprinkler runoff did not enter inlet and is properly managed. No further action required.				
07/10/2009	STREET	Residential	167	PROSPECT	ST	Pool Filter Discharge
	Comments/ Action Taken:	Received report of illegal discharge at 167 East Prospect Street. Inspection noted pool filter discharge residue in the gutter leading from 167 East Prospect Street to 117 East Prospect Street. Issued homeowner verbal notice to clean and abate. Proper cleanup was conducted. No further action required.				
07/10/2009	STREET	Residential	350	G	ST	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/10/2009	STREET	Residential	350	G	ST	Unknown Discharge
	Comments/ Action Taken:	Received report of illegal discharge at 350 G Street. Inspection noted irrigation water flowing from lawn and into the street. Notified HOA president as a courtesy regarding the discharge. HOA president immediately took action to stop the sprinkler system. No further action necessary at this time,				
07/10/2009	CATCH BASIN	Residential	1458	MAX	AV	Other
	Comments/ Action Taken:	Received notification of uncovered buckets and appliances at subject location. City staff responded and did not observe any of the issues reported. Residence had only personal vehicle in driveway. No further actions required.				
07/10/2009	CATCH BASIN	Industrial	676	MOSS	ST	Other
	Comments/ Action Taken:	Received notification of overflowing trash, uncovered concrete wash buckets and litter into storm drain across the street from subject location. City staff responded and observed trash bins to be full. Trash was properly bagged. Observed buckets to be stacked and empty. No further action required.				
07/10/2009	CATCH BASIN	Commercial	676	MOSS	ST	Other
	Comments/ Action Taken:	Received notification of uncovered wood, pipes and rebar at subject location. Observed uncovered wood, pipes (scaffolding) and rebar at facility and does not pose a immediate threat to water quality. In addition site provides inlet protection utilizing fiber rolls to prevent any discharges. No further actions required.				
07/10/2009	CATCH BASIN	Industrial	997	G	ST	Other
	Comments/ Action Taken:	Received notification of trash, metal litter, spout draining without secondary containment, uncovered trash, and workers getting water from fire hydrant. City staff responded and did not observe trash, metal litter, uncovered trash from outside the facility. Fire hydrant hookup is not a storm water violation. Site is in Port District's jurisdiction. City to forward for information. No further action is required.				
07/10/2009	CATCH BASIN	Commercial	1550	FRONTAGE	RD	Other
	Comments/ Action Taken:	Received notification of uncovered trash bins, dumped trash, litter, waste at the subject location. City staff responded and did not observe reporting party's concerns. All trash cans were closed and did not locate any dumped trash, litter and dumped waste throughout the facility. No further action required.				
07/10/2009	CATCH BASIN	Industrial	1510	BROADWAY		Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/10/2009	CATCH BASIN	Industrial	1510	BROADWAY		Other
	Comments/ Action Taken:	Received notification of hazardous waste/materials, batteries and overflowing trash, uncovered trash, tires and runoff from equipment at location. City staff responded and did not observe any of the reported violations. No further action required.				
07/10/2009	CATCH BASIN	Commercial	550	MARINA	PW	Other
	Comments/ Action Taken:	Received notification of uncovered overflowing trash and uncovered pipe at location. A City staff responded and did not observe uncovered trash bins and overflowing trash. Uncovered pipe is not a storm water violation. Site is the Port District's jurisdiction. Forwarded for information. No further action is required.				
07/13/2009	STREET	Residential	602	ANITA	ST	Complaint Response Enforcement
	Comments/ Action Taken:	Received report of water puddle in front of 602 Anita St. Inspection noted the water accumulated was a result of irrigation. No further action necessary.				
07/13/2009	STREET	Residential	200	ZENITH	ST	Construction Debris & Waste
	Comments/ Action Taken:	Received report of illegally discharged oil and plaster in the alley behind 220 Zenith. Inspection could not find any evidence of oil or plaster discharge. No further action is necessary at this time.				
07/14/2009	STREET	Commercial	646	E	ST	Other
	Comments/ Action Taken:	Received notification of Southwest Recycling behind IGA of customers dumping out the bottles and cans onto the parking lot. City staff responded and observed significant staining and some pooling of liquid at the recycling site location. Spoke with owner that they have a mop and bucket on site to prevent any additional dumping. Owner complied. Issued verbal warning. No further action required at this time.				
07/16/2009	STREET	Residential	540	OTIS	ST	Construction Debris & Waste
	Comments/ Action Taken:	Received a report of illegal dumping at 545 and 539 H street. Inspection noted that the trash bins at 545 & 539 H Street had trash and other debris scattered around the outside of the trash can. Referred to Environmental Services. No further action required.				
07/17/2009	STREET	Commercial	3358	MAIN	ST	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/17/2009	STREET	Commercial	3358	MAIN	ST	Unknown Discharge
	Comments/ Action Taken:	Received a report of tire shop at 3358 Main St. discharging water into the street. Inspection noted evidence of a discharge from the tire shop to the street. Business owner stated that shop staff released the water from a leak detection tub. Administrative citation warning SW1711 was issued along with public education materials. No further action is necessary at this time.				
07/20/2009	STREET	Commercial	100	L	ST	Unknown Discharge
	Comments/ Action Taken:	Received report of oil running down the street from 162 L Street. Oil stain on the street and in the gutter we're caused by a car accident in front of the house. Anthony Towing was contacted to cleanup remainder of the spill. Spill was cleaned. Issued verbal warning. No further action required.				
07/22/2009	STREET	Residential	847	HALECREST	DR	Complaint Response Enforcement
	Comments/ Action Taken:	Responded to report of illegal dumping by carpet cleaning. Inspection noted a discharge of water from 847 Halecrest and into the SWCS. Issued Administrative Citation SWB0722091 to Reliable Carpet & Upholstery Cleaning. No further action required.				
07/22/2009	STORM DRAIN PIPES	Residential	287	INKOPAH	ST	Pool Filter Discharge
	Comments/ Action Taken:	Responded to report of a pool discharge into a City easement at subject address. Inspection observed evidence of discharge of pool filter. Spoke to homeowner and issued a verbal warning regarding the discharge along with public education materials. No further action is necessary at this time.				
07/23/2009	STREET	Commercial	655	BROADWAY		Complaint Response Enforcement
	Comments/ Action Taken:	Received report of illegally dumped furniture behind Chula Vista Carpet Cleaning at 655 Broadway. Inspection noted furniture, trash and debris scattered at rear alley next to trash bins. Administrative citation #SW B0619091 was issued and withdrawn due to agreement with the business owner who will conduct cleanup. No further action required.				
07/24/2009	STREET	Residential	1984	PINON HILLS	RD	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of illegal dumping of tile cutting slurry at 1984 Pinon Hills. Inspection noted a red discharge from the home into SWCS. Due to no contact with resident city crews conducted cleanup with full cost recovery. No further action required.				
07/28/2009	STREET	Residential	139	MINOT	AV	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/28/2009	STREET	Residential	139	MINOT	AV	Other
	Comments/ Action Taken:	Received notification of trash, debris, paints and refrigerators behind the subject location property. City staff responded and observed back of property with multiple piles of trash, debris, paints, camper and inoperable vehicles. No storm water violations were observed. Case to be referred to Code Enforcement. No further action required.				
07/28/2009	STREET	Commercial	1725	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	Received notification of black water being discharged from subject location. City staff responded and observed that sites sump clogged and overflowed into street. Did not enter SWCS. Business conducted proper cleanup. Issued verbal warning. No further action required.				
07/29/2009	STREET	Residential	15	J	ST	Leaking Vehicle
	Comments/ Action Taken:	Received notification from City staff of a vehicles transmission failure at the subject location. City staff responded to subject location and observed box truck with blown transmission and fluid leak on east J and Carla Ave. Responsible party immediately contained and cleaned up spill utilizing vehicle's spill kit. No further actions are required at this time.				
08/03/2009	CATCH BASIN	Commercial	1322	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of illegally dumped oil into the storm drain at 1328 Third Ave. Inspection noted an oil filter drained over the grate and some oil inside the catch basin. Source unknown. Cleanup conducted. No further action required.				
08/04/2009	STREET	Commercial	1451	H	ST	Power Washing
	Comments/ Action Taken:	Received notification of illegal power washing at Bonita Point Plaza. City Staff confirmed that GMI was responsible party. Issued Admin Citation and educational materials. No further action required.				
08/04/2009	STREET	Residential	502	WOODLAWN	AV	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Received a report of illegal discharge at 502 Woodlawn Ave. Inspection found wash water and sewage leading from an unsecured sewage clean out cap and into the SWCS. City Crews cleaned all public sections of the SWCS. A full cost recovery invoice will be issued. Administrative Citation #SW B0804091 was issued. No further action necessary at this time.				
08/05/2009	STREET	Commercial	800	PASEO DEL REY		Unknown Discharge

Incident Date	Structure Category	Site Category	Address	Type of Violation
08/05/2009	STREET	Commercial	800 PASEO DEL REY	Unknown Discharge
	Comments/ Action Taken:	Received e-mail report from the Mayor's assistant of a potential kerosene discharge in the vicinity of the intersection of East H Street and Paseo Del Rey. Inspection of all areas in the vicinity did not find evidence of kerosene or any violation. No further action is necessary at this time.		
08/05/2009	STREET	Residential	1400 NACION AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Received report of a white substance discharged from 1410 Nacion and into the SWCS. Inspection found white substance leading from subject address in the gutter ending at 1420 Nacion. Resident cleaned his pool's filter into the SWCS. Issued verbal warning, Cleanup conducted by resident. No further action required.		
08/06/2009	STREET	Commercial	1295 THIRD AV	Other
	Comments/ Action Taken:	Received notification of Turf Pros Landscaping blowing debris into the street at the subject location. Conducted phone investigation with Turf Pros in reference to the complaint. Issued verbal warning to ensure that BMPs are being followed. No further action required.		
08/07/2009	STREET	Commercial	725 MAIN ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to complaint of concrete saw cutting with no BMPs and allowing discharge into the SWCS. Inspection noted that property owner's staff saw cutting and not using BMPs causing discharge. Property management staff cleaned up the spill. Administrative citation #SW B0807092 was issued. No further action is necessary at this time.		
08/07/2009	STREET	Residential	77 L ST	Sewage Spill
	Comments/ Action Taken:	Responded to complaint of an illegal discharge at 77 East L Street. Inspection found plumber repaired sewer line and had discharged water into the SWCS. Administrative citation warning #SW B0807091 was issued. No further action necessary at this time.		
08/10/2009	STREET	Residential	1548 APACHE DR	Washing Vehicle in Street
	Comments/ Action Taken:	Received e-mail report of excessive car washing by neighbors in the vicinity of 1548-B Apache Dr. No violation was observed at time of inspection. Issued educational materials to residences. No further action required.		
08/12/2009	STREET	Residential	1095 OSAGE AV	Sewage Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/12/2009	STREET	Residential	1095	OSAGE	AV	Sewage Spill
	Comments/ Action Taken:	Received compliant call regarding a potential sewage discharge at 1095 Osage Ave. Inspection found evidence of a spill in the street in front of said address. Spill caused by Allied Waste. Cleanup conducted. No further action is necessary at this time.				
08/14/2009	STREET	Residential	178	FOURTH	AV	Unknown Discharge
	Comments/ Action Taken:	Received compliant call regarding an unknown discharge at 178 Fourth Ave. Inspection found irrigation discharge at the curb outlet caused by a leaky irrigation valve at the rear section of the complex. Repairs made. No further action is necessary at this time.				
08/14/2009	STREET	Commercial	4498	BONITA	RD	Complaint Response Enforcement
	Comments/ Action Taken:	Received complaint call regarding saw cutting without using BMPs at 4498 Bonita Rd.. Inspection found evidence of small slurry discharge in the gutter. Concrete saw operator immediately began mopping slurry. Issued verbal warning. No further action necessary at this time.				
08/17/2009	STREET	Residential	1195	CORTE DE CERA		Paint Discharge
	Comments/ Action Taken:	Received report of paint in the gutter in front of 1195 Corte de Cera. Observed paint was flowing out from the curb outlet. Resident washing paint brushes in the rear yard drain. Issued verbal warning regarding violation. Cleanup conducted. No further action required.				
08/19/2009	STREET	Residential	967	VIA LUNA		Paint Discharge
	Comments/ Action Taken:	Received report of a paint discharge from 967 Via Luna. Inspection noted red paint from curb outlet leading to the gutter and then near the storm drain inlet at Paseo Ranchero. Resident conducted cleanup. Issued verbal warning. No further action required.				
08/19/2009	STREET	Commercial	1481	BRANDYWINE	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of concrete slurry in the gutter at 1481 Brandywine Ave. Inspection did not find evidence of a violation. No further action is necessary at this time.				
08/20/2009	STREET	Commercial	1613	MELROSE	AV	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/20/2009	STREET	Commercial	1613	MELROSE	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of concrete slurry flowing in the gutter from 1613 Melrose Ave. Inspection noted that wash water from a concrete job was being allowed to discharge into the SWCS. Administrative Citation #SW B0820091 was issued to Ape construction. No further action is necessary at this time.				
08/20/2009	STREET	Commercial	4011	BONITA	RD	Unknown Discharge
	Comments/ Action Taken:	Received notification of an unknown discharge coming from the Jack In the Box leading onto the walking trail behind the facility. City staff responded and observed a storm water drop inlet that discharges into the landscaped area. No violation was observed. No further action required.				
08/21/2009	STREET	Commercial	2765	MAIN	ST	Unknown Discharge
	Comments/ Action Taken:	Received notification from County HAZMAT of Hydrochloric Acid spill at subject address. Business owner claimed the discharge was food additives waste water. Discharge did not reach MS4 inlets.				
08/24/2009	STREET	Residential	1427	LAUREL	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of green substance in the gutter from 1407 Laurel Ave. Investigation noted that resident discharged contaminated pool water. Issued verbal warning. Resident cleaned algae buildup in SWCS. No further action required.				
08/24/2009	STREET	Residential	263	DEL MAR	AV	Unknown Discharge
	Comments/ Action Taken:	Received report of potential discharge into the SWCS from subject address. Inspection found no evidence of spill. No further action is necessary at this time.				
08/25/2009	STREET	Commercial	337	THIRD	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report from business owner that someone had left some cooking grease in the trash area behind his business (California Sushi). Observed grease spill. Cleanup conducted by business owner. Issued verbal warning. No further action required.				
08/26/2009	STREET	Residential	795	HILLTOP	DR	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/26/2009	STREET	Residential	795	HILLTOP	DR	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Received a report of oil or grease spilled on the street and the sidewalk at the south east corner of the intersection of Hilltop Drive and Telegraph Canyon Rd. Inspection found that tar had been spilled on the sidewalk and in the street at above mentioned location. Referred to street crews for clean-up. No further action necessary at this time.				
08/27/2009	STREET	Commercial	317	QUINTARD	ST	Unknown Discharge
	Comments/ Action Taken:	Received report of mud and paint thinner running into street and gutter from 317 Quintard Street. Inspection found no evidence of thinner in the SWCS. Mud caused by Jack in the Box Issued verbal notice to Jack in the Box . Cleanup conducted. No further action required.				
08/31/2009	STREET	Residential	696	PORT CHELSEA		Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from 696 Port Chelsea. Inspection found white residue and water flowing from the curb drain at the subject address. Discharge due to pool cleaning. Issued verbal warning. Cleanup conducted. No further action required.				
08/31/2009	STREET	Residential	1343	LONG VIEW	DR	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of a neighbor at 1339 Long View Drive working on vehicles in the street, allowing oil to spill in the street and parking leaky vehicles in the street. Violation verified. Resident conducting oil changes in street. Resident conducted cleanup. Verbal warning issued. No further action required.				
08/31/2009	STREET	Commercial	1282	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a discharge at Karina's restaurant at 1282 Third Ave. Inspection found some run off from washing activity at front patio. Issued administrative citation warning #SW1712. Compliance met. No further action required.				
09/01/2009	STREET	Commercial	348	NOVA	WY	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of concrete slurry flowing from 346 Nova Way. Inspection noted some flow that had undermined the existing BMPs implemented by the concrete pump operator. Issued verbal notice. Cleanup conducted. No further action required.				
09/02/2009	STREET	Commercial	200	J	ST	Construction Debris & Waste

Incident Date	Structure Category	Site Category	Address			Type of Violation
09/02/2009	STREET	Commercial	200	J	ST	Construction Debris & Waste
	Comments/ Action Taken:	Responded to report of sand dumped in front of 202 East J street. 9/2/09---Responded to report of sand dumped in front of 202 East J street. Inspection found approximately 3 yards of sand in the SWCS. Sand removed. No further action is necessary at this time.				
09/04/2009	STREET	Residential	501	ANITA	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to a call of power washing without BMPs at 501 Anita Street space 140. Inspection found small traces of water in the SWCS not traceable to any address. No evidence of violation was present.				
09/09/2009	STREET	Residential	1046	PLAZA CAPOTE		Leaking Vehicle
	Comments/ Action Taken:	Responded to complaint regarding a leaky vehicle at subject address. Inspection found a fresh oil stain but no van. Left door hanger with note to call inspector. No further action required.				
09/09/2009	STORM CHANNEL	Municipal	780	HILLTOP	DR	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to call of illegal dumping of paint into the storm channel at Hilltop Park. Inspection did not find any evidence of a discharge or any other violation. No further action is necessary at this time.				
09/11/2009	STREET	Residential	734	BROOKSTONE	RD	Unknown Discharge
	Comments/ Action Taken:	Responded to report of water coming from 734 Brookstone Rd. After investigating it was found to be a fountain overflow discharge. Fountain discharges are not exempt by CVMC 14.20. Fountain repaired. Issued admin citation. No further action required.				
09/11/2009	STREET	Residential	3211	MAIN	ST	Leaking Vehicle
	Comments/ Action Taken:	Received report of an illegal discharge from a motor home into the SWCS at 3211 Main Street. Inspection found that the motor home had been leaking sewage into the SWCS. Notified the motor home owner of the spill and issued administrative citation #SW1725. Cleanup conducted. No further action is necessary at this time.				
09/11/2009	STREET	Residential	144	ORANGE	DR	Construction Debris & Waste

Incident Date	Structure Category	Site Category	Address			Type of Violation
09/11/2009	STREET	Residential	144	ORANGE	DR	Construction Debris & Waste
	Comments/ Action Taken:	Received notification of construction debris at residence. Inspection of this site did not find any storm water violations.				
09/14/2009	STREET	Residential	41	I	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at Church at 41 I Street. Inspection noted that an irrigation valve had broken and was discharging into the SWCS. Valve repaired. No further action required.				
09/15/2009	STREET	Residential	68	BONITA	RD	Complaint Response Enforcement
	Comments/ Action Taken:	Received notification of trash at subject location overflowing on trash days. City staff responded to subject location and observed trash and debris in curbline and on sidewalk. Could not determine that the trash is from residents trash bins. No further action is required at this time.				
09/15/2009	STREET	Residential	1255	TRINIDAD COVE		Leaking Vehicle
	Comments/ Action Taken:	Received notification of a oil spill at the corner of Trinidad Cove and Eastlake Parkway. City staff responded and observed approx one gallon of transmission fluid on the sidewalk and in the curbline. Street crew responded and conducted the cleanup of the spill. No further action is required.				
09/16/2009	CATCH BASIN	Commercial	1206	BROADWAY		Possible Dumping into Catch Basin
	Comments/ Action Taken:	Received notification of landscaper blowing trash/debris into the street. City staff responded and did not observe any grass or debris into the curbline. No further action is required.				
09/16/2009	CATCH BASIN	Residential	336	C	ST	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Received notification of Landscaper blowing debris into catch basin. Issued verbal notice to clean, abate and train staff to sweep up grass clippings. No further action is necessary at this time.				
09/18/2009	CATCH BASIN	Residential	557	VISTA MIRANDA		Possible Dumping into Catch Basin

Incident Date	Structure Category	Site Category	Address	Type of Violation
09/18/2009	CATCH BASIN	Residential	557 VISTA MIRANDA	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to a report of oil spilled into the SWCS. Inspection found no evidence of an oil spill or discharge. No further action necessary at this time.		
09/18/2009	STREET	Residential	227 CAMINO VISTA REAL	Pool Filter Discharge
	Comments/ Action Taken:	Responded to an e-mail report of a pool discharge eroding a dirt slope and resulting in mud into the SWCS. Inspection found that a sprinkler line had broken and was discharging water onto a dirt slope resulting in a sediment discharge into the SWCS. All corrections have been completed. No further action is necessary at this time.		
09/23/2009	STREET	Residential	1459 HILLTOP DR	Unknown Discharge
	Comments/ Action Taken:	Responded to report of unknown discharge from 1459 Hilltop Dr. Inspection found a legal discharge of clear pool water onto the SWCS at a moderate rate. No further action is necessary at this time.		
09/25/2009	STREET	Residential	1347 SILVER SPRINGS DR	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a resident sweeping up white powder into the SWCS at 1347 Silver Springs Dr. Inspection noted resident sweeping up white filter residue from the street left over as a result of cleaning a pool filter in the street. Compliance met. No further action required.		
09/28/2009	CATCH BASIN	Residential	972 SAINT GERMAIN RD	Unknown Discharge
	Comments/ Action Taken:	Received report of a constant water discharge from 972 St. Germain Rd. Water source is from fountain. Resident conducted repairs. No further action required.		
10/01/2009	STREET	Commercial	865 THIRD AV	Unknown Discharge
	Comments/ Action Taken:	Responded to call regarding illegal discharge by contractor. Inspection noted a non-storm water discharge from an accidental waterline break as a result of dig outs made by Cox cable contractor. Sweetwater Authority was on the scene and immediately took control of the incident. Repairs made. No further action required.		
10/05/2009	STORM WATER	Residential	862 FIFTH AV	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
10/05/2009	STORM WATER	Residential	862	FIFTH	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Received report of neighbor at 862 Fifth Ave. leaving an unattended oil container to discharge oil onto the driveway. Inspection noted that an oil change pan near the garage door had leaked some oil onto the driveway. Resident conducted cleanup. No further action required.				
10/12/2009	STREET	Commercial	1004	THIRD	AV	Power Washing
	Comments/ Action Taken:	Observed Rally's Hamburger personnel conducting washing operations of trash enclosure eating areas and drive-thru without using BMPs. Instructed staff to ensure that no wash water is discharged into storm drain system. Staff will use mop and buckets to wash down trash enclosure. No further action is required.				
10/13/2009	STREET	Commercial	649	MELROSE	AV	Construction Debris & Waste
	Comments/ Action Taken:	Received e-mail from Tom Adler (Development Services) about erosion potential at 649 Melrose. BMPs were implemented. No further action required.				
10/13/2009	STREET	Residential	34	L	ST	Accident/Spill
	Comments/ Action Taken:	Received call of a hydraulic oil spill. Observed ponded hydraulic oil in the gutter on E L Street west of Agua Tibia. Called maintenance crews who arrived at the location and cleaned up the oil spill. No further action required.				
10/15/2009	STREET	Residential	126	L	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of an illegal discharge at 126 L Street. Inspection noted that there was a discharge mix of oil/grease/ water from a storm drain outlet at 88 L Street down to 899 Second Ave. Responsible party conducted cleanup. Issued Admin Citation. No further action required.				
10/19/2009	STREET	Residential	200	JAMUL	AV	Leaking Vehicle
	Comments/ Action Taken:	Received notification via email of leaking construction equipment at subject address. City staff responded and observed SRM Contracting Paving equipment located and staged at the 200 block of Jamul Av. Leaks to be cleaned and equipment removed. No further action required.				
10/23/2009	STREET	Residential	813	HUMPHREY	PL	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
10/23/2009	STREET	Residential	813	HUMPHREY	PL	Leaking Vehicle
	Comments/ Action Taken:	Responded to call regarding leaky vehicle at 813 Humphrey Place. Spill was cleaned. No further action required.				
10/27/2009	STORM CHANNEL	Residential	62	PEPPER TREE	RD	Sewage Spill
	Comments/ Action Taken:	Received notification from Dispatch of a private sewer pump station failing and causing sewage to overflow into the storm drain system. City staff arrived on-scene and placed a dirt berm around small containment area to prevent further discharge. Repairs made to failed pump and City Vac Truck crews conducted the cleanup. No further action is required.				
10/29/2009	STREET	Residential	431	NAPLES	ST	Construction Debris & Waste
	Comments/ Action Taken:	Responded to report of contractor stockpiling concrete and gravel on the street at the northwest corner of the intersection of Naples and Osage. Issued a written order for the contractor to remove all stockpiles from the street and that the contractor has corrected violation. No further action is necessary at this time.				
10/29/2009	STREET	Residential	200	SURREY	DR	Construction Debris & Waste
	Comments/ Action Taken:	Responded to report of pool contractor discharging gunite residue into the SWCS. Inspection found that the pool contractor was using inadequate BMPs and had allowed gunite residue to enter the storm drain inlet. City crews conducted cleanup. Administrative citation #SW1715 was issued. No further action is necessary at this time.				
11/02/2009	STREET	Commercial	3131	MAIN	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of lunch truck parked inside the property at 3031 Main Street was discharging sewer water into the SWCS. Inspection found no evidence of a discharge or violation. No further action required.				
11/02/2009	STORM CHANNEL	Commercial	1137	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	Received photo evidence of a non-storm water discharge from All American Car wash at 1137 Broadway and into the adjacent channel and into the SWCS. Issued administrative citation #SW B1031092. No further action required.				
11/02/2009	STREET	Residential	577	OXFORD	ST	Sewage Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
11/02/2009	STREET	Residential	577	OXFORD	ST	Sewage Spill
	Comments/ Action Taken:	Received photo evidence of a sewer discharge from 577 Oxford Street and into the SWCS. City responded and cleaned up spill. Issued administrative citation #SW B1031091. No further action is necessary at this time				
11/04/2009	CATCH BASIN	Residential	4300	ALLEN SCHOOL	LN	Unknown Discharge
	Comments/ Action Taken:	Responded to report of unprotected slope at 4300 Allen School Lane. Inspection found a slope at the west side of the school adjacent tot the parking lot with signs of erosion. Issued a compliance report in lieu of an administrative citation. Repairs made. No further action required.				
11/04/2009	STORM CHANNEL	Commercial	600	PALOMAR	ST	Follow Up Inspection
	Comments/ Action Taken:	Inspection confirmed trash and debris in the catch basin. Insufficient evidence. No further action is necessary at this time. Responded to a report of trash and debris being dumped into a storm drain catch basin by unknown party.				
11/04/2009	STREET	Residential	1325	SANTA RITA	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to complaint of an illegal discharge. City crews had contained and remediated the spill. Issued Admin citation to responsible party. No further action required.				
11/05/2009	CATCH BASIN	Residential	981	PASEO DEL PASO		Unknown Discharge
	Comments/ Action Taken:	Responded to report of white substance in the gutter at subject address, Inspection found dry traces of white powder from home, in the gutter and two houses down. Cleanup conducted. Issued verbal warning. Compliance met.				
11/06/2009	STORM CHANNEL	Commercial	945	OTAY LAKES	RD	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of a possible non-storm water discharge at 945 Otay Lakes Rd. Inspection found that evidence of oil/grease and toilet paper in and around the private catch basin at the property. Issued administrative citation. No further action required.				
11/09/2009	STORM DRAIN PIPES	Commercial	304	H	ST	Possible Dumping into Catch Basin

Incident Date	Structure Category	Site Category	Address			Type of Violation
11/09/2009	STORM DRAIN PIPES	Commercial	304	H	ST	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of contractor discharging into the SWCS. Inspection found evidence of wash water on sidewalk and parking lot. Issued administrative citation #SW1716. No further action necessary.				
11/09/2009	STREET	Commercial	1800	MAXWELL	RD	Unknown Discharge
	Comments/ Action Taken:	Responded to report of construction contractor discharging into SWCS. Inspection noted that contractor was saw cutting concrete and was using BMPs. Issued verbal warning to ensure continued compliance. No further action required at this time.				
11/10/2009	STORM CHANNEL	Residential	555	TRAILRIDGE	DR	Construction Debris & Waste
	Comments/ Action Taken:	Received report of illegally dumped dirt by resident into canyon. Dirt cleaned up by resident. Issued admin citation. No further action required.				
11/10/2009	STREET	Commercial	393	THIRD	AV	Power Washing
	Comments/ Action Taken:	Responded to report of illegal discharge by contractor working for La Bella's Pizza Garden. Evidence of discharge confirmed by La Bellas. Compliance met. Issued admin citation. No further action required.				
11/10/2009	STREET	Residential	735	FIFTH	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of soapy water from 730 fifth Ave, and into the SWCS. Inspection could not find any evidence of a discharge. No further action required.				
11/13/2009	STREET	Residential	1395	MELROSE	AV	Dirt/Sediments
	Comments/ Action Taken:	Received report of lack of construction BMPs at subject address. All BMPs were installed. Issued verbal warning. No further action required.				
11/13/2009	STORM CHANNEL	Commercial	88	L	ST	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
11/13/2009	STORM CHANNEL	Commercial	88	L	ST	Other
	Comments/ Action Taken:	Received notification of lack of maintenance of private storm channel. Storm channel was cleaned and is being maintained. BMPs installed along slope. No further action required.				
11/18/2009	STREET	Commercial	1650	INDUSTRIAL	BL	Leaking Vehicle
	Comments/ Action Taken:	Received notification of a leaky vehicle at subject company. Vehicle was repaired and oil was properly cleaned up. No further action is required.				
11/18/2009	STREET	Residential	45	FOURTH	AV	Accident/Spill
	Comments/ Action Taken:	Received notification from PD Dispatch of an oil spill on Fourth Ave at C from vehicle that blew oil pan. Street Department conducted the cleanup utilizing absorbent and sand. No further action is required.				
11/19/2009	STREET	Residential	330	G	ST	Sewage Spill
	Comments/ Action Taken:	Responded to report of violation at 330 G Street. Inspection noted that a discharge into the SWCS. Issued administrative citation. After discussion with staff citation was removed. No further action is necessary.				
11/19/2009	CATCH BASIN	Residential	1048	STRAWBERRY VALLEY	DR	Unknown Discharge
	Comments/ Action Taken:	Received notification of a continuous flow of water discharging into brow ditch at the intersection of La Media and Telegraph Canyon. Upon further investigation it was determined to be ground water. No further action required.				
11/24/2009	STREET	Commercial	1177	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	Received notification of a discharge at subject location. Inspection noted a non storm water discharge was found at 1177 Broadway Suite 14 and 15 at Pescasos y Mariscos Hectors Inc. Informed of proper BMPs. Administrative Citation #SW B1123091 was issued. No further action is necessary.				
11/30/2009	CATCH BASIN	Residential	1998	MOSS LANDING	AV	Carpet Cleaning

Incident Date	Structure Category	Site Category	Address			Type of Violation
11/30/2009	CATCH BASIN	Residential	1998	MOSS LANDING	AV	Carpet Cleaning
	Comments/ Action Taken:	Received notification from dispatch of a carpet cleaning company discharging wash water into the storm drain. Observed soapy water on the driveway. City vactor was on scene doing regular maintenance and prevented the discharge from entering the storm drain. Broken solution bucket inside the vehicle. No further action is required.				
11/30/2009	STREET	Residential	1532	CONNOLEY	AV	Leaking Vehicle
	Comments/ Action Taken:	Received notification of a vehicle leaking transmission fluid onto subject address driveway. City staff responded and observed a pickup truck leaking transmission fluid onto the driveway and a portion of the spill was at the curbline. Homeowner will use dry methods to cleanup remainder of spill. No further action is required at this time.				
12/01/2009	STREET	Residential	488	DAVIDSON	ST	Sewage Spill
	Comments/ Action Taken:	Responded to report of sewage spill at 488 Davidson. Inspection noted sewage had flowed from an uncapped clean out and into the SWCS. City staff cleared the obstruction (tree roots) and restored flow. An administrative citation #SW B121091 was issued to responsible party. No further action is necessary.				
12/01/2009	STORM CHANNEL	Residential	21	FOURTH	AV	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Received phone call from City Staff that resident cut branches that fell into storm channel. Not a storm water issue. Referred to appropriate section.				
12/02/2009	STREET	Residential	2191	HONEYBEE	ST	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of leaking vehicle at subject address. Oil stain had been rubbed with oil absorbent and removed. The vehicles was removed from the street and parked in his driveway with an oil pan underneath. No further action required at this time.				
12/03/2009	STREET	Commercial	2710	OTAY LAKES	RD	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of broken down vehicle leaking gear oil in parking lot of Salt Creek Park. Inspection found that a white pick up truck had broken axle, lost a wheel and was stuck in the parking lot. Oil absorbent was spread on the spill, rubbed in and swept up. No further action is necessary at this time.				
12/03/2009	STREET	Commercial	902	THIRD	AV	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
12/03/2009	STREET	Commercial	902	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Inspection found that oil/grease had accumulated underneath a blue metal dwelling and was seeping into the dirt area adjacent. Administrative citation #SW1721 was issued. Compliance met. No further action required. Responded to a report of oil seeping from subject address into SWCS.				
12/04/2009	STORM DRAIN PIPES	Commercial	1216	THIRD	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of illegal discharge by construction contractor at 1216 Third Ave, Inspection found that concrete slurry had been washed into the SWCS at Oxford Street. City crews conducted cleanup. Administrative citation #SW1723 was issued to responsible party. No further action required.				
12/15/2009	CATCH BASIN	Residential	93	LION	CI	Sewage Spill
	Comments/ Action Taken:	12/15/09---Responded to report of sewer discharge from sewer line within the common area at the Lion Circle community and into the SWCS. Observed sewage overflow at manhole. City crew conducted cleanup. Admin citation issued to HOA. No further action required.				
12/16/2009	STORM CHANNEL	Residential	309	PINE	CT	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of tree limbs dumped behind 309 Pine Ct. Inspection noted large amount of tree limbs dumped into the storm channel behind subject address. Homeowner issued verbal warning to have the tree limbs removed. Compliance met. No further action required.				
12/22/2009	STORM DRAIN PIPES	Industrial	2631	FAIVRE	ST	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to complaint regarding illegal dumping at 2631 Faivre Street. Inspection found no evidence of violation present. No further action required.				
01/05/2010	STREET	Commercial	77	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	Responded to report of illegal dumping of sewage by lunch truck into the SWCS. Inspection noted a grey sewage water had been dumped in a grassy area near the sidewalk. Issued administrative citation #SW1728. No further action is necessary at this time.				
01/05/2010	CATCH BASIN	Residential	238	L	ST	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
01/05/2010	CATCH BASIN	Residential	238	L	ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of illegal discharge into the SWCS. Inspection noted concrete slurry in the SWCS. Administrative Citation warning #SW1729 was issued. Compliance met. No further action is necessary at this time.				
01/05/2010	STREET	Residential	1128	CALLE DE DAMASCO		Unknown Discharge
	Comments/ Action Taken:	Responded to report of grease spilled into the SWCS. Inspection found grease had flowed out of the curb outlet at 1152 Calle De Demasco. Resident conducted proper cleanup. No further action required.				
01/06/2010	STREET	Industrial	4555	OTAY VALLEY	RD	Accident/Spill
	Comments/ Action Taken:	Responded to report of sludge in the street at the intersection of 805 and Main Street. Inspection noted a strip of sludge approximately 60 feet long and 2 to 3 feet wide in the middle of the intersection. City crew conducted cleanup. No further action required.				
01/07/2010	STREET	Residential	2879	BLUE RIDGE	CT	Other
	Comments/ Action Taken:	Received notification via email from the RWQCB to investigate of a compliant of water running continuously in the gutter, City staff responded and observed that the resident is overwatering. Posted educational letter and door hanger at the residence. No further action are required at this time.				
01/11/2010	STREET	Residential	160	JAMUL	AV	Pool Filter Discharge
	Comments/ Action Taken:	Responded to report of a discharge from curb drain at 160 Jamul. Inspection noted that there had been a discharge from the back yard and out into the street/gutter at the curb drain. Broken pool pump. Repairs made. No further action required.				
01/12/2010	STORM CHANNEL	Residential	840	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a discharge from an apartment complex. Inspection noted that there was a discharge of irrigation water flowing from the Wells Fargo bank at 826 Third Ave. Repairs made. No further action required.				
01/12/2010	STREET	Residential	779	ADA	ST	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
01/12/2010	STREET	Residential	779	ADA	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of vehicle leaking oil in the street at 794 Ada Street. Inspection noted a dump truck and trailer parked in the street in front of the subject address. Evidence that the truck had leaked oil was present. Cleanup conducted. Administrative Citation #SW1730 was issued. No further action is necessary.				
01/13/2010	STREET	Residential	1566	CUMBRE VIEW		Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from 1566 Cumbre View. Observed dry blue staining. Homeowners stated that the blue substance is a dye that accident spilled in their back yard and drained out to the front curb drain. Conducted cleanup. Issued admin citation. No further action required.				
01/20/2010	STREET	Residential	1155	VIA MONADA		Leaking Vehicle
	Comments/ Action Taken:	Received voice mail of an oil spill in front of subject address. No violation observed. No further action required.				
01/29/2010	STREET	Residential	1948	CLEARBROOK	DR	Dirt/Sediments
	Comments/ Action Taken:	Received notification of mud, sediment discharge from subject address. Inspection noted that large amounts of sediment/ dirt had flowed into the curb gutter and street from the property adjacent to 1941 Clearbrook Dr. Responsible party conducted cleanup. Issued admin citation. No further action required.				
02/01/2010	STREET	Residential	1000	CORTE MARIA	AV	Construction Debris & Waste
	Comments/ Action Taken:	Responded to report of an illegal discharge at 1008 Corte Maria. Inspection noted that the contractor Paving Stone of San Diego had allowed mud and sand to flow into the street and gutter Contractor conducted cleanup. Administrative citation was issued. No further action is necessary at this time.				
02/02/2010	STREET	Residential	1393	LONG VIEW	DR	Dirt/Sediments
	Comments/ Action Taken:	Responded to complaint regarding mud running from subject address. Inspection noted small amounts of gravel that had eroded from the walking trail adjacent to the subject address. Cleanup conducted and BMPs are in place. No further action required.				
02/02/2010	STREET	Residential	223	H	ST	Possible Dumping into Catch Basin

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/02/2010	STREET	Residential	223	H	ST	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of an illegal discharge by a plumber at 223 H Street. Inspection noted clear water flowing from a hose and into the SWCS. Water was the result of rain water accumulation being pumped. Administrative citation warning issued. No further action is necessary at this time.				
02/03/2010	CATCH BASIN	Residential	599	PORTSMOUTH	DR	Washing Vehicle in Street
	Comments/ Action Taken:	Responded to report of resident washing engine parts at subject address. No evidence of any discharge. No further action is necessary at this time.				
02/05/2010	STREET	Residential	1458	LANTANA	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a discharge from 1458 Lantana. Inspection noted a dried trail of rust laden anti-freeze from subject address down stream to 585 Rivera. Homeowner conducted cleanup. No further action is necessary at this time.				
02/05/2010	STREET	Residential	737	COOPER	RD	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of vehicle leaking oil onto the street at 735 Cooper St.. Inspection noted a brown Ford station wagon with small oil spots underneath it. Owner implemented BMPs. No further action is necessary at this time.				
02/08/2010	STREET	Residential	467	CORTE CALYPSO		Dirt/Sediments
	Comments/ Action Taken:	Responded to report of mud slide at Proctor Valley Rd. and Valley Ridge St. Observed erosion on walking trail with discharge into SWCS. HOA implemented proper BMPs. Issued admin citation. No further action required.				
02/08/2010	STREET	Residential	1337	TIERRA BONITA	PL	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of oil flowing from the subject property and into the SWCS. Inspection found no evidence of any oil spills or stains. No further action required.				
02/08/2010	STREET	Commercial	4555	OTAY VALLEY	RD	Dirt/Sediments

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/08/2010	STREET	Commercial	4555	OTAY VALLEY	RD	Dirt/Sediments
	Comments/ Action Taken:	Responded to complaint of mud flowing into the SWCS at the underpass at I805 and Main St. Observed discharge from CALTRANS right of way. CALTRANS conducted cleanup. No further action required.				
02/08/2010	STREET	Commercial	751	OTAY LAKES	RD	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to contractor saw cutting and creating a large dust cloud. Inspection found contractor drilling core samples and not using BMPs. Allowing mud and water to enter the SWCS. BMPs in place. Issued Administrative Citation. No further action is necessary at this time.				
02/10/2010	STORM CHANNEL	Municipal	4548	SWEETWATER	RD	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of silt being discharged from a county property into ROHR park near gate B. Inspection noted that the drainage for the area had been altered and that as a result large amounts of sediment were being discharged into the park. Determined to be Parks responsibility. No further action required.				
02/10/2010	STREET	Residential	751	OTAY LAKES	RD	Washing Vehicle in Street
	Comments/ Action Taken:	City Staff observed illegal carwash at Bonita Vista High School. Instructed to use proper BMPs and prevent discharge for entering storm drain. Issued admin citation. No further action required.				
02/10/2010	STREET	Residential	192	EL CAPITAN	DR	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of resident stockpiling rubble in the SWCS. Inspection noted concrete rubble stockpiled in the street. Issued verbal warning to homeowner to remove and sweep the SWCS. All rubble removed and area swept clean. No further action is necessary at this time.				
02/10/2010	CATCH BASIN	Residential	1485	ROBLES	DR	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of an illegal discharge by a carpet cleaner. Inspection found We Care Carpet cleaning discharging into the SWCS. Issued administrative citation #SW1734. No further action is necessary at this time.				
02/11/2010	STREET	Residential	1361	THERESA	WY	Dirt/Sediments

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/11/2010	STREET	Residential	1361	THERESA	WY	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of mud, concrete and pipe in the gutter in front of the subject property. Issued verbal warning to homeowner remove and sweep the obstruction from the SWCS. Compliance met. No further action required.				
02/12/2010	STORM CHANNEL	Residential	603	MELROSE	AV	Unknown Discharge
	Comments/ Action Taken:	Received notification of several yards of soil in the brow ditch at the subject location. Resident conducted cleanup. Admin citation issued. No further action required.				
02/12/2010	STREET	Commercial	440	FOURTH	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at 440 Fourth Ave. Inspection found that the contractor was de-watering construction site directly into the storm drain inlet and not using adequate BMPs. BMPs were implemented. Admin citation issued. No further action required.				
02/15/2010	STREET	Residential	1133	VISTA	WY	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of a contractor discharging into the SWCS. Inspection found Luis and Sons Construction discharging concrete slurry into the SWCS. Contractor immediately began clean up. Issued administrative citation. No further action required.				
02/15/2010	STREET	Residential	200	SURREY	DR	Power Washing
	Comments/ Action Taken:	Responded to report of homeowner power washing sediment into the street at 200 Surrey Dr. Inspection found property owner and staff powerwash the back yard and allowing water and sediment to flow into the street, curb and gutter at the front of the home. Conducted cleanup. Issued administrative citation. No further action is necessary at this time.				
02/17/2010	STREET	Commercial	1288	BROADWAY		Sewage Spill
	Comments/ Action Taken:	Responded to report of a sewer discharge at 1288 Broadway (McDonald's.) Inspection noted evidence of a discharge along with a sewer clean out missing it's cap. The restaurant had a sewer back up and maintenance person unclogged it. Issued administrative citation. No further action is necessary at this time.				
02/19/2010	STORM DRAIN PIPES	Residential	257	THIRD	AV	Paint Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/19/2010	STORM DRAIN PIPES	Residential	257	THIRD	AV	Paint Discharge
	Comments/ Action Taken:	Responded to report of illegal dumping from 294 Third Ave. Inspection noted traces of paint from subject address into the SWCS and leading to the north east corner of F Sreet and Garret Ave. Clean up conducted. Issued Administrative Citation No further action is necessary at this time.				
02/19/2010	STREET	Commercial	262	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of grease discharged from a restaurant at 262 Third Ave. Restaurant owner conducted cleanup. Issued administrative citation. No further action required.				
02/19/2010	STREET	Residential	741	ADA	ST	Construction Debris & Waste
	Comments/ Action Taken:	Area is a CIP project. All BMPs were in place. No further action required. Received notification of stockpiles, mud, dirt on sidewalk and street at ADA and Palomar. Area is a CIP project. All BMPs were in place. No further action required.				
02/22/2010	STREET	Residential	407	WINDROSE	WY	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of mud and sediment in the street and gutter in front to subject address. Inspection noted that the open space areas maintained by City contractors had eroded and deposited dirt and sediment in the street. Contractor conducted cleanup. No further action required.				
02/23/2010	STREET	Residential	1375	MELROSE	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from subject address. Inspection found a trail of saw cutting slurry leading from subject address to open channel down stream. Administrative citation was issued. City crews and owner conducted cleanup. No further action required.				
02/24/2010	STREET	Residential	671	CANYON	DR	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a constant water discharge from 663 Canyon Dr. Inspection noted a constant flow of water from curb drain flowing downstream and across the nearby intersection. Water determined to be groundwater. No further action required.				
02/24/2010	STREET	Residential	695	HILLTOP	DR	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/24/2010	STREET	Residential	695	HILLTOP	DR	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	City staff observed oil at the intersection. CVESD conducted cleanup for city. No further action required.				
02/24/2010	STREET	Commercial	1315	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a discharge at 1315 Third Ave. Inspection noted that a private irrigation line was leaking. No evidence of a violation was present. No further action required at this time.				
02/25/2010	STREET	Residential	2786	SUTTER RIDGE	DR	Power Washing
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection found small amount of water in the gutter and a wet driveway, but no evidence of power washing. Issued verbal warning to homeowner proper BMPs. No further action is necessary at this time.				
02/26/2010	STREET	Residential	1253	SECOND	AV	Leaking Vehicle
	Comments/ Action Taken:	Received notification from City staff of a used motor oil spill behind 1253 Second Av at Amy St. Responded to subject address and observed a significant amount of oil from a vehicle in the storm drain system. Issued Admin citation. City crews conducted cleanup with full cost recovery. No further action required.				
02/26/2010	STREET	Residential	933	GUATAY	AV	Accident/Spill
	Comments/ Action Taken:	Received notification from City staff of an unknown discharge at the corner of Inkopah and Guatay Streets. Responded to the call. Small flow was observed in the gutter at the intersection of Guatay and Inkopah. Water was clear. SDGE hit water line. Repairs made. No further action required.				
03/01/2010	STREET	Residential	528	PALOMAR	ST	Sewage Spill
	Comments/ Action Taken:	Responded to report of a sewage spill into the street from an overflowing septic tank. Inspection found septic tank was over flowing but had not entered the street. Property owner conducted repairs. No sewage entered SWCS. Issued verbal warning. No further action required.				
03/01/2010	STREET	Residential	489	MIGUEL TRAIL	PL	Dirt/Sediments

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/01/2010	STREET	Residential	489	MIGUEL TRAIL	PL	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of a resident washing mud from vehicles into the street. Inspection found resident washing vehicles on his lawn. Minimal traces of sediment had made their way onto the sidewalk. Issued a verbal notice to clean the small amount of sediment. No further action required.				
03/01/2010	STREET	Commercial	786	THIRD	AV	Sewage Spill
	Comments/ Action Taken:	Responded to report of a sewer discharge from subject address. Inspection noted sewage flowing from an uncapped sewer clean out and into the SWCS. Issued property owner Admin citation. City crews conducted cleanup and repairs. No further actions required.				
03/03/2010	CATCH BASIN	Industrial	3521	MAIN	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection noted evidence of paint and rusty metal shavings scattered at the back door of De Vichi Metal Works and leading into the gutter. Issued Admin citation. Cleanup conducted. No further action required.				
03/03/2010	STREET	Commercial	1020	COLORADO	AV	Power Washing
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Investigation found that ABLE heating and air staff are washing off materials outdoors and allowing the wash water to enter the SWCS at the parking lot drain. Issued Administrative citation to Property owner. No further action is necessary at this time.				
03/03/2010	STREET	Commercial	1060	COLORADO	AV	Sewage Spill
	Comments/ Action Taken:	Responded to report of a battery acid discharge at subject address. Inspection found that a forklift battery had burst and discharged battery acid into the rear parking lot of the business. Cleanup conducted. Issued administrative citation. No further action required.				
03/03/2010	CATCH BASIN	Residential	1526	GRAND TETON	CT	Construction Debris & Waste
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection found three aluminum beer cans in the catch basin and no evidence of responsible party. Contacted city staff to conduct cleaning of catch basin.				
03/05/2010	STREET	Residential	1925	MAGDALENA	AV	Dirt/Sediments

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/05/2010	STREET	Residential	1925	MAGDALENA	AV	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of mud in the street at the corner of Peabody and Wolf Canyon. Inspection found that mud/sediment had eroded from a a slope belonging to Sweetwater Union High School District at Olympian High School. The mud cleaned and temporary BMPs implemented. No further action required.				
03/08/2010	STORM DRAIN PIPES	Commercial	3461	MAIN	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of potential non-storm water discharges into the SWCS at 3461 Main Street. Inspection found automotive fluid drums, engines in the trash enclosure without cover and containment. Vehicle repairs being conducted in the parking lot of Heartland Meats. Business to conduct cleanup and cease vehicle repairs. Admin citation issued. No further action required.				
03/09/2010	CATCH BASIN	Commercial	676	MOSS	ST	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of illegal discharge into the SWCS at 676-B Moss Street. Inspection noted abrasive being tracked from the subject address and into the tracking into the street curb and gutter. Cleanup conducted. An administrative citation was issued. No further action required.				
03/10/2010	CATCH BASIN	Commercial	986	BROADWAY		Dirt/Sediments
	Comments/ Action Taken:	Received notification of sediment discharge from subject property. City crews conducted cleanup with cost recovery. Issued admin citation. No further action required.				
03/12/2010	STORM DRAIN PIPES	Residential	449	MILAGROSA	CI	Sewage Spill
	Comments/ Action Taken:	Responded to report of an illegal discharge from 449 Milagrosa Circle into the storm drain. Illegal connection of the property sewer lateral to the SWCS was found. City crews conducted all repairs. Investigation completed. No further action required.				
03/16/2010	CATCH BASIN	Commercial	440	FOURTH	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of unknown discharge from 440 Fourth Ave. Inspection found that the contractor was de-watering construction site using BMPs. Instructed to add additional BMPs. No further action required.				
03/17/2010	STREET	Residential	614	VIA MAGGIORE		Sewage Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/17/2010	STREET	Residential	614	VIA MAGGIORE		Sewage Spill
	Comments/ Action Taken:	Responded to report of a sewer discharge into the SWCS. Inspection found sewage had flowed from an uncapped sewer clean out and into the planter area and partly onto the sidewalk. City staff conducted cleanup and repairs with full cost recovery. Admin citation issued. No further action required.				
03/19/2010	STREET	Commercial	29	BROADWAY		Washing Vehicle in Street
	Comments/ Action Taken:	Responded to report of illegal discharge by Enterprise car rentals. Inspection found no evidence of a violation. Business washing cars in proper carwash bay. No further action required.				
03/22/2010	CATCH BASIN	Residential	931	BUENA VISTA	WY	Carpet Cleaning
	Comments/ Action Taken:	Rcvd notification from Dispatch of Sunset Carpet Cleaning discharging wash water into the storm drain system. City staff responded and did not observe evidence of possible discharge. No further action required.				
03/22/2010	CATCH BASIN	Commercial	555	CLAIRE	AV	Unknown Discharge
	Comments/ Action Taken:	Rcvd notification of a unknown discharge at Hilltop High School. Observed a cloudy water coming form curb outlet. Observed maintenance worker conducting cleanup of diluted floor wax from a mop bucket that spilled into a small catch basin on site. Site staff ensured that the cleanup was conducted using mops and bucket. No further action required.				
03/24/2010	STREET	Commercial	285	BROADWAY		Sewage Spill
	Comments/ Action Taken:	Received notification of sewage spill at subject location. Arrived on scene and observed approx. 5-8 gallons of sewage being contained by city staff. Property's clean out cap was missing. City crews contained spill until repairs made. Full cost recovery. No further action required.				
03/25/2010	STREET	Residential	749	NEPTUNE	CT	Unknown Discharge
	Comments/ Action Taken:	Received notification from Dispatch of a unknown spill from Allied Waste at subject location. Arrived on-scene and observed discharge of liquid from Allied Waste Green Waste vehicle. Did not enter storm drain. Spill absorbed in asphalt. No further action required.				
03/29/2010	STREET	Residential	1087	MELROSE	AV	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/29/2010	STREET	Residential	1087	MELROSE	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Rcvd notification of a concrete slurry spill at subject address. Arrived on-scene and observed Bulldog Concrete Pumping conducting operations at the address. Bulldog had all BMPs in place and did not observe spill. No further action required.				
03/30/2010	STREET	Residential	122	QUINTARD	ST	Pool Filter Discharge
	Comments/ Action Taken:	Rcvd. Report of pool discharge into adjacent property and subject location. Determined to be a waterline leak. City staff provided info to resident to repair. No further action required.				
04/02/2010	STREET	Residential	739	SAN JUAN	PL	Paint Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at 735 San Juan Place. Inspection noted traces of dry paint from a previous discharge from the subject property, into the gutter and nearing the storm drain inlet. Administrative citation was issued. Cleanup conducted. No further action required.				
04/06/2010	STREET	Residential	1450	THIRD	AV	Washing Vehicle in Street
	Comments/ Action Taken:	Responded to report of water flowing from a curb drain and into the SWCS. Observed water discharging, Determined to be a water leak on property. Repairs conducted. No further action required.				
04/06/2010	STREET	Commercial	943	OTAY LAKES	RD	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of a sewage spill from Domino's Pizza at subject address. Inspection found that sewage had been overflowing from grease trap at the west side of the building and discharging into the street, curb, and gutter at Otay Lakes Rd. Dominos contractor conducted cleanup. Admin citation issued. No further action required.				
04/07/2010	STREET	Municipal	503	PROCTOR VALLEY	RD	Unknown Discharge
	Comments/ Action Taken:	Received report of stagnant water in detention basin. Observed that orifice was clogged. City staff conducted maintenance of basin. No further action required.				
04/07/2010	STREET	Commercial	943	OTAY LAKES	RD	Sewage Spill

Incident Date	Structure Category	Site Category	Address	Type of Violation
04/07/2010	STREET	Commercial	943 OTAY LAKES RD	Sewage Spill
	Comments/ Action Taken:	Responded to report of a sewer discharge from JNC Pinoy Food Mart at 943-D Otay Lakes Rd. Inspection found two sewer clean out caps removed from clean outs, and sewage flowing into the adjacent grease trap. Sewage did not reach the SWCS. Repairs made. Admin Citation issued. No further action required.		
04/08/2010	STREET	Residential	755 MISSION AV	Leaking Vehicle
	Comments/ Action Taken:	Responded to e-mail report of a leaky vehicle and oil pan stored on the street. Observed oil stain. Homeowner cleaned and repaired vehicle. No further action required.		
04/14/2010	STREET	Residential	809 FLOYD AV	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of resident at 805 Floyd allowing oil and grease to spill in the street in front of home. Inspection noted oils stains that had been thoroughly cleaned. No further action required.		
04/14/2010	STREET	Residential	614 VIA MAGGIORE	Sewage Spill
	Comments/ Action Taken:	Report of sewer spill at subject address. Home had previous spill in the past. Observed community carwash without using BMPs. Corrections made. Issued verbal warning. No further action required.		
04/19/2010	STREET	Residential	199 BROADWAY	Washing Vehicle in Street
	Comments/ Action Taken:	Responded to report of an illegal discharge into the SWCS at Gas Depot 199 Broadway. Observed community carwash without using BMPs. Corrections made. Issued verbal warning. No further action required.		
04/20/2010	STREET	Residential	245 ORANGE AV	Paint Discharge
	Comments/ Action Taken:	Responded to report of resident discharging contaminants into the SWCS as a result of automotive body work at subject address. Inspection found no evidence of an illegal discharge nor any Body work being conducted.		
04/22/2010	STREET	Residential	2155 CORTE VISTA	Dirt/Sediments

Incident Date	Structure Category	Site Category	Address			Type of Violation
04/22/2010	STREET	Residential	2155	CORTE VISTA		Dirt/Sediments
	Comments/ Action Taken:	Responded to report of an illegal discharge from 2155 Corte Vista. Inspection found dirt/sediment was eroding from the slope at the south east section of the intersection of Eastlake Parkway and Trinidad Cove. Implemented BMPs. Compliance met. No further action required.				
04/22/2010	STREET	Residential	2015	BIRCH	RD	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of SUV leaking oil into the SWCS at 1610 Phoenix Ct. Inspection noted that the vehicle was parked on private property. Oil cleaned up. No further action required.				
04/22/2010	STREET	Residential	115	GLOVER	AV	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection noted dirt/ sediment on the street, stock piles in the public right-of-way not covered and contained, and that the construction project did not have any BMPs in place. Implemented BMPs. Issued Admin Citation. No further action required.				
04/29/2010	STREET	Residential	2574	VIEW TRAIL	CT	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection found irrigation water was being discharged from the curb drain. No further action is necessary at this time.				
04/30/2010	CATCH BASIN	Residential	569	E	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Discharge was determined to be a water line leak at property. Repairs made. No further action required.				
05/05/2010	STREET	Residential	416	L	ST	Other
	Comments/ Action Taken:	Responded to discharge of gray water from subject property. Observed illegal discharge. Code enforcement took care of enforcement. No further action required.				
05/10/2010	STREET	Residential	103	JAMUL	AV	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
05/10/2010	STREET	Residential	103	JAMUL	AV	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of an illegal discharge of radiator fluid into the SWCS from subject address. Inspection noted that homeowner was allowing the discharge of radiator fluid into the SWCS as a result of automotive work. Cleanup conducted. Issued admin citation. No further action required.				
05/12/2010	STREET	Residential	4368	ACACIA	AV	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of illegally dumped tires at subject address. Inspection noted four tires placed approximately 10 feet from storm drain channel. No evidence linking the tires to the property owner could be found. City staff removed the tires. No further action required.				
05/13/2010	STREET	Residential	764	LAKE HILL	PL	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection notes that a broken irrigation line had saturated the dirt lot and water was flowing into the street, curb and gutter. BMPs were in place and prevented any dirt/ sediment from entering the SWCS. Leak repaired. No further action required.				
05/13/2010	STORM CHANNEL	Residential	1193	CARLOS CANYON	DR	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of gasoline dumped into the storm channel near the intersection of Otay Lakes Rd. And Avenida Del Rey. nspection found no gasoline containers, nor buckets of gasoline, only political signs that had been dumped into the storm drain. City staff removed all political signs and trash and debris from this section of the storm drain system. No further action is necessary at this time.				
05/14/2010	STREET	Commercial	1321	THIRD	AV	Accident/Spill
	Comments/ Action Taken:	Rcvd notification from Dispatch of a soy bean oil container leaking at subject location. City staff arrived on-scene and observed cooking oil leaching out from a dumpster. Contacted Hunong Chinese Buffet staff to conduct the cleanup using mop and bucket and to call Allied Waste to change out dumpster. Rcvd call from owner who contacted Allied which they will replace dumpster week of 05/16/10. Owner to monitor dumpster and conduct any cleanup as necessary. Owner to ensure that Offal is used. No further action is required.				
05/18/2010	STREET	Residential	496	FLOWER	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at 496 Flower Street. Inspection found that trash cans had been turned over and a leachate was discharging from the cans. Property owner conducted cleanup. No further action required.				
05/18/2010	STREET	Commercial	670	OXFORD	ST	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
05/18/2010	STREET	Commercial	670	OXFORD	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from a lunch truck at Harborside Park. Inspection noted ice water leaking from the truck's ice box. Containment placed inside truck to prevent leak. A verbal warning was issued. No further action is necessary at this time.				
05/19/2010	STREET	Commercial	283	PALOMAR	ST	Power Washing
	Comments/ Action Taken:	Inspection found no evidence to support enforcement. No further action required. Responded to report of power washing without the use of BMPs.				
05/21/2010	STREET	Commercial	2400	MAIN	ST	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of an illegal discharge into the SWCS at subject address. Inspection found evidence of a discharge related to fire sprinkler system water. Some BMPs have been implemented, however they were not sufficient. Implemented additional BMPs. Issued Admin Citation. No further action required.				
05/25/2010	STREET	Residential	2338	PEACOCK VALLEY	RD	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of oil spilled in the street in front of subject address. Inspection noted only small piles of oil absorbent left from a clean-up. Small piles of oil absorbent need to be removed. City staff conducted cleanup. No further action required.				
05/26/2010	STREET	Commercial	2397	PORCH SWING	ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of vehicle discharging concrete from the back of a concrete trailer on Olympic Parkway. Found small marks of what may be concrete. Source cannot be located. No further action is necessary at this time.				
05/27/2010	CATCH BASIN	Residential	1401	HILLTOP	DR	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of an illegal discharge in the vicinity of East Rienstra and Hilltop Drive. Inspection found an irrigation system leak at the Arco gas station at 1401 Hilltop Drive. Leak repaired. No further action required.				
05/27/2010	CATCH BASIN	Residential	1579	APACHE	DR	Possible Dumping into Catch Basin

Incident Date	Structure Category	Site Category	Address			Type of Violation
05/27/2010	CATCH BASIN	Residential	1579	APACHE	DR	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of an illegal pet waste discharge at subject address. Inspection found no evidence of a pet waste discharge. No further action required.				
05/27/2010	CATCH BASIN	Commercial	2052	ENTERTAINMENT	CI	Unknown Discharge
	Comments/ Action Taken:	Responded to a report of illegally dumped water and trash into the adjacent field at the subject address. Inspection found no evidence of an illegal discharge, but did find evidence of a need for BMP implementation. BMPs implemented. Issued Admin Citation. No further action required.				
05/28/2010	STREET	Residential	1453	MELROSE	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of an abandoned open top used oil container. Inspection found an abandoned used oil container in the trash enclosure at 1450 Melrose Ave #16. Oil removed. No further action required.				
05/28/2010	STREET	Residential	79	SUZANNE	LN	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from 79 Suzanne Lane. Inspection found minimal traces of a discharge. Spoke to tenant regarding discharge. Tenant stated that they were watering the plants in the backyard and that they would try and limit watering. No further action is necessary at this time.				
06/02/2010	STREET	Residential	1419	MELROSE	AV	Unknown Discharge
	Comments/ Action Taken:	White residue flowing from curb drain outlet at Spruce street from 1419 Melrose Ave. Homeowner stated that had spackle spill. Cleanup conducted. No further action required.				
06/03/2010	STREET	Commercial	1328	J	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of an oil spill in the street in the vicinity of the subject address. Inspection noted that Allied waste staff was already on scene finishing up the clean up. No further action required.				
06/03/2010	STORM WATER	Residential	214	RICHMOND PARK	CT	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
06/03/2010	STORM WATER	Residential	214	RICHMOND PARK	CT	Other
	Comments/ Action Taken:	Follow up visit to to investigate the report of an unknown discharge. No evidence of a violation was found. No further action is necessary at this time.				
06/10/2010	STORM CHANNEL	Residential	916	L	ST	Complaint Response Enforcement
	Comments/ Action Taken:	City staff responded to the report of a foul odor from the channel. I Inspection noted trash junk, debris, and human waste along the banks of the channel. Admin citation issued. Cleanup conducted. No further action required.				
06/11/2010	STORM DRAIN PIPES	Commercial	2260	OTAY LAKES	RD	Other
	Comments/ Action Taken:	Responded to complaint of trash, junk, debris and grease/ oil scattered outside the common trash enclosure at the subject address. Inspection verified the existence of above mentioned conditions. Cleanup conducted. No further action required.				
06/11/2010	CATCH BASIN	Commercial	1550	SOLANO	DR	Complaint Response Enforcement
	Comments/ Action Taken:	Responded to report of landscape staff blowing trash into the storm drain system. Inspection found that landscape staff were applying fertilizer with back pack mounted blowers on a trash pick up day for the same neighborhood. Spoke to the landscaping staff and explained the importance of applying fertilizer accurately and being careful not to further blow existing trash generated by other sources. No further action is necessary at this time.				
06/14/2010	STREET	Residential	443	WOODLAWN	AV	Sewage Spill
	Comments/ Action Taken:	Responded to e-mailed report of a possible illegal sewer discharge at subject address. Inspection found no evidence of a violation. Prior discharge cleanup was conducted by city staff. No further action is necessary at this time.				
06/14/2010	STREET	Residential	130	FORTUNA	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to a Code Enforcement's report of a potential sewer discharge from subject address. Inspection found evidence of an irrigation discharge. No evidence of a sewer discharge was present. No further action is necessary at this time.				
06/15/2010	STREET	Commercial	700	NAPLES	CT	Sewage Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
06/15/2010	STREET	Commercial	700	NAPLES	CT	Sewage Spill
	Comments/ Action Taken:	Responded to report of a broken sewer line within the Chula Vista Veterans Home. An inspection was conducted to ensure there was no potential threat to the City's SWCS. The inspection found no evidence of any discharge. No further action is necessary at this time.				
06/15/2010	STREET	Commercial	413	TELEGRAPH CANYON	RD	Unknown Discharge
	Comments/ Action Taken:	Responded to report of restaurant staff discharging Lysol and water into the parking lot after mopping. Inspection found some traces of a discharge. Spoke to Restaurant owner she was unaware of the requirement to use BMPs. Issued Admin citation. Staff informed of requirements. No further action required.				
06/17/2010	STREET	Residential	2532	TABLE ROCK	WY	Washing Vehicle in Street
	Comments/ Action Taken:	Responded to report of an illegal discharge at the subject address. Inspection found auto detailer Xrtreme Enterprises Inc. allowing a discharge and not implementing BMPs. Administrative citation was issued. No further action is necessary at this time.				
06/21/2010	STREET	Residential	795	FOURTH	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of an unknown discharge from a five gallon container. Inspection at 786 Fourth Avenue found an unmarked five gallon container slowly leaking fluid into the gutter. Liquid was unknown. Spread dirt at the spill to prevent further flow. Remained on scene until Fire Department took command. No further action is necessary at this time.				
06/21/2010	STREET	Residential	735	ASH	AV	Pool Filter Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from a pool at subject address. Inspection found that green pool water was being discharged from a pool contaminated with algae. Algae cleaned. Issued admin citation. No further action required.				
06/23/2010	STREET	Residential	2972	WINDING FENCE	WY	Unknown Discharge
	Comments/ Action Taken:	Received notification of a slurry spill at subject address. City staff responded to subject address and observed Green Leaf pumping concrete for pool. Green leaf was using proper BMPs. No further action required.				
06/24/2010	STREET	Residential	445	HILLTOP	DR	Pool Filter Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
06/24/2010	STREET	Residential	445	HILLTOP	DR	Pool Filter Discharge
	Comments/ Action Taken:	Responded to report of pool discharge with strong smell of chlorine. At the time of my visit the flow of water had been stopped. Spoke to homeowner on the proper procedure of discharging pool. No further action required.				
06/24/2010	STREET	Commercial	1016	GUATAY	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from subject address. Inspection found a small trace of gray slurry from 1016 Guatay to 1038 Guatay. Flow did not reach the storm drain inlet. Cleanup conducted. No further action required.				
06/28/2010	STREET	Residential	143	J	ST	Complaint Response Enforcement
	Comments/ Action Taken:	Received notification of a resident washing trash from driveway to street. City staff arrived on-scene and did not observed evidence of discharge. Street was dry and did not observe trash. Left door hanger at resident. No further action required at this time.				

Total: 243

ATTACHMENT M

City of Chula Vista
Storm Water Quality Public Awareness Survey Analysis

BACKGROUND

During the period April through September 2009, the City of Chula Vista Storm Water Management Section administered an 11-question, multiple-choice survey designed to assess public awareness of pollution prevention measures related to storm water. A copy of the survey is at the end of this document. The focus of the survey was residential behaviors related to gardening, pet care, automobile maintenance, pool maintenance, and reporting of illegal discharges. A baseline survey was administered in 2005. In this latest survey, some questions were improved to increase respondent understanding; some answers were expanded to gain more insight into behavioral change. Data was collected at a variety of locations throughout the City during public outreach events. Survey respondents were encouraged to take any of the various educational storm water brochures offered at the booth when they were finished with the survey.

DATA ANALYSIS APPROACH

Based on the City's population of about 220,000, a 95% confidence level, and 4 confidence intervals, it was determined that at least 599 people had to be surveyed to obtain results that were statistically significant. A total of 662 surveys were collected, thus increasing the level of survey accuracy. This report presents a summary of the survey data and a general comparison with the results of the 2005 baseline survey. Analysis results provide the City with a better understanding of JURMP public outreach and education program implementation and effectiveness, as well as potential areas where the City's storm water program can be improved or enhanced. The City plans to conduct its next survey in FY 2012-2013.

ZIP CODE

Respondents were asked to write in their residence zip code on the survey. This provides information on whether or not the individual is a Chula Vista resident and provides info on the region of Chula Vista in which he/she lives. Overall, more than half of the respondents live in zip codes 91910 and 91911, the two westernmost zip codes in Chula Vista. About 70% of respondents live in zip codes 91910 through 91915, which are in the City of Chula Vista. Table 1 and Figure 1 below summarize the results.

Table A: Zip Codes of Survey Respondents

Zip Codes	Count	FY 09-10
91902	21	3.17%
91910	228	34.44%
91911	143	21.60%
91913	52	7.85%
91914	9	1.36%
91915	36	5.44%
91950	29	4.38%
Other Zip Codes	139	21.00%
No Answer	5	0.76%
Total	662	

Figure A

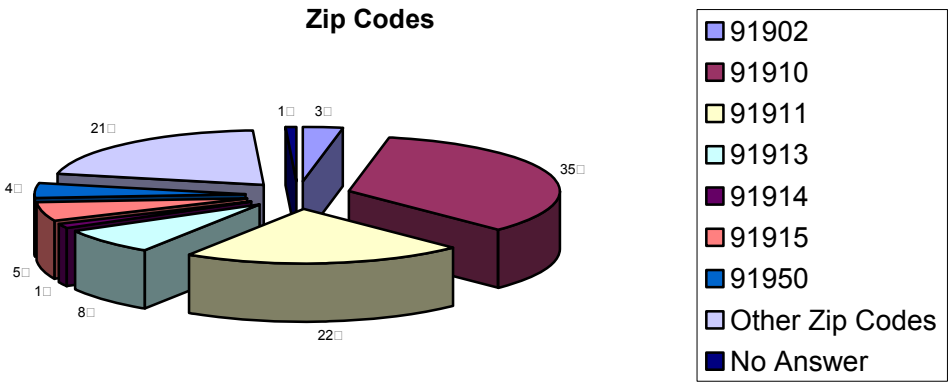

QUESTION 1 : A WATERSHED IS DEFINED AS:

This question was designed to determine what percent of the Chula Vista respondents knew the correct definition of a watershed. The question was improved from the baselines survey's "Yes or No" answer that did not accurately monitor the respondent's knowledge of watersheds. By measuring the understanding of watersheds, the City can better focus its education efforts.

Overall, about 37% of respondents knew the correct definition of a watershed. This was the most favored answer, but was closely followed by respondents that "Do Not Know," at 35%. About 60% of the respondents either did not know what a watershed was or answered incorrectly. Over half of the surveyed population did not know what a watershed is, as shown in the Table 1 and Figure 1 below.

Table 1: Response to Question 1

Answer	Chula Vista	Total
The measure of velocity from urban runoff discharge	10.81%	11.48%
Methods implemented to prevent evaporation of bodies of water	15.06%	15.26%
The land area that drains into particular lake, river, or oceans	37.45%	36.86%
Do not know	34.94%	34.89%
No answer	1.74%	1.51%

Figure 1

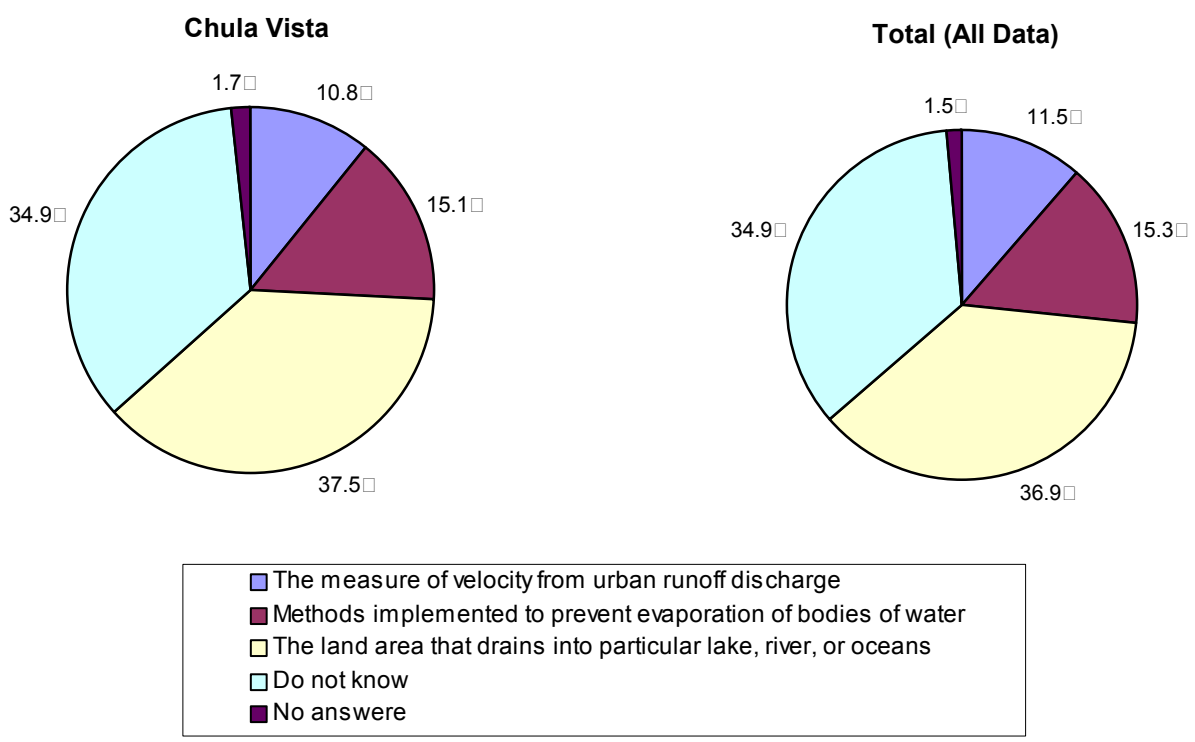

QUESTION 2: WHAT IS THE DIFFERENCE BETWEEN STORM DRAIN SYSTEM AND SANITARY SEWER SYSTEM?

This is a very basic and fundamental concept in storm water pollution prevention. This question was modified from the baseline survey that asked respondents to choose an answer for: "Water that flows down the street goes to..."

Over half (57%) of the respondents answered correctly, saying that "Water that flows in Sanitary Sewer System is treated and water that flows in Storm Drain System goes directly to creek, bay, or ocean." Others (30%) responded that water in the storm water drain system gets treated before it is released, and about 12% did not know the difference between the two. This implies that most respondents are aware that runoff could potentially pollute nearby waterbodies. Due to the fact that this is such a fundamental concept in storm water pollution prevention, it is evident that more effort is needed to educate the public on this concept. Data from Question 2 is summarized in Table 2 and Figure 2 below.

Table 2: Response to Question 2

Answer	Chula Vista	Total
Water that flows in Storm Drain System is treated and water that flows in Sewer System is not	16.02%	16.47%
Water that flows in Sanitary Sewer System is treated and water that flows in Storm Drain System is not	57.34%	57.25%
Water that flows in both systems is treated before releasing to bay or ocean	13.90%	13.90%
Do not know	11.97%	11.63%
No answer	0.77%	0.76%

Figure 2

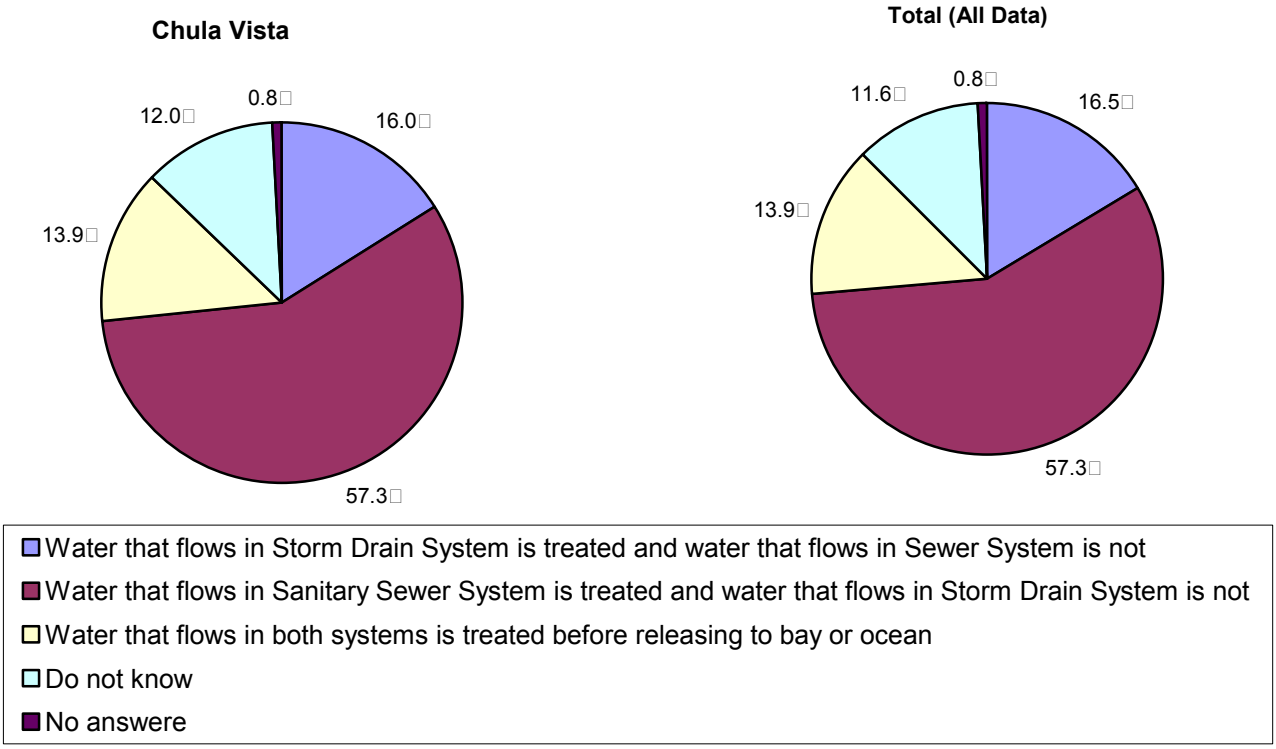

QUESTION 3: IN WHAT WAYS HAVE YOU RECEIVED EDUCATIONAL MATERIALS (BROCHURES, PAMPHLETS, POSTERS) WITH REGARDS TO STORM WATER POLLUTION PREVENTION? (PLEASE MARK ALL THAT APPLY)

It is important for the City to find effective ways to disseminate educational information to residents. Many respondents chose more than one answer, so the sum of the percents is greater than 100%. While most respondents (38%) said they obtained material from public events, many respondents also received information through websites (26%) and the mail (25%). About 10% of respondents found material on their front door at home. It is important to note that no respondents answered: "I have not received any educational materials regarding Storm Water Pollution Prevention." This indicates that the City is able to effectively reach the public through its storm water education program, especially through public events and the website. Data from Question 3 is summarized in Table 3 and Figure 3 below.

Table 3: Response to Question 3

Answer	Chula Vista	Total
Attended public events	58.49%	60.12%
Found it at my door	16.02%	15.26%
Visited Chula Vista websites	40.15%	40.03%
Received through mail	38.61%	36.86%
Others	0.58%	0.91%
No Answer	0.77%	0.91%
I have not received any educational materials	0.00%	0.00%

Figure 3

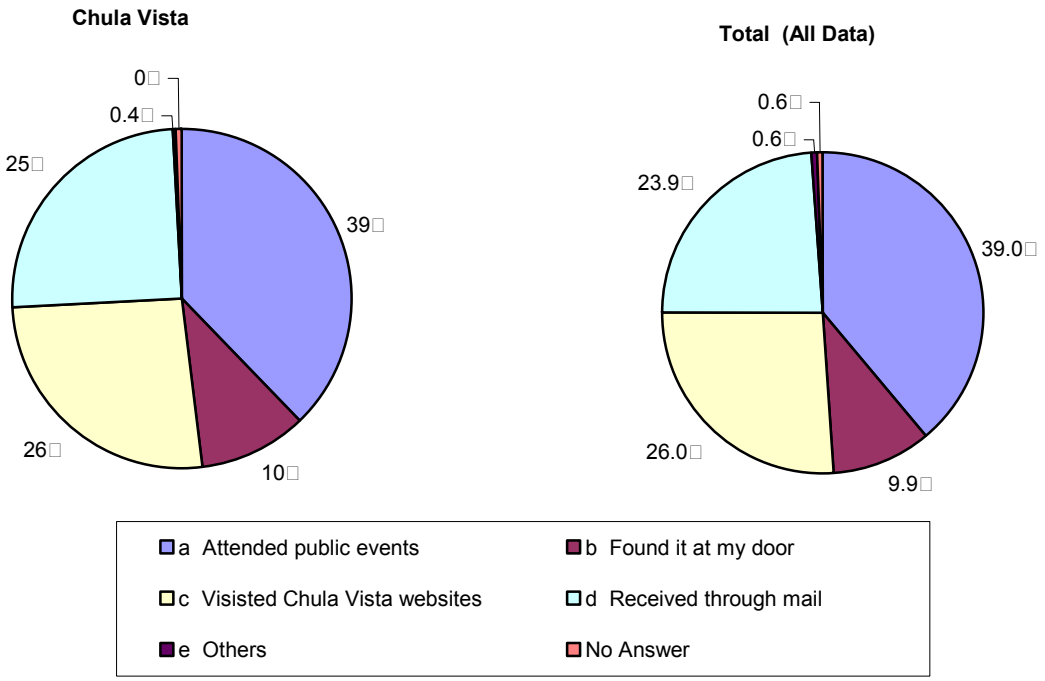

QUESTION 4: WHICH OF THE FOLLOWING PRACTICES MOST APPLY TO YOU REGARDING AUTO REPAIR MAINTENANCE/ACTIVITIES?

There are many pollutants involved in automobile maintenance and it is important to know where most residents prefer to service their vehicles. The majority of respondents (72%) take their automobiles to a commercial repair shop, while others (24%) perform maintenance at home. The results suggest that in terms of education, it is better to focus efforts on commercial automobile shops. However, it is still important to remind residents about proper auto fluid disposal and to encourage the use of the City' Household Hazardous Waste program. Data from Question 4 is summarized in Table 4 and Figure 4 below.

Table 4: Response to Question 4

Answer	Chula Vista	Total
Take it to commercial repair shop	71.59%	71.66%
Do it myself in the garage	14.77%	13.35%
Do it myself in the backyard	5.30%	6.23%
I don't own a car	7.95%	8.16%
No answer	0.38%	0.59%

Figure 4

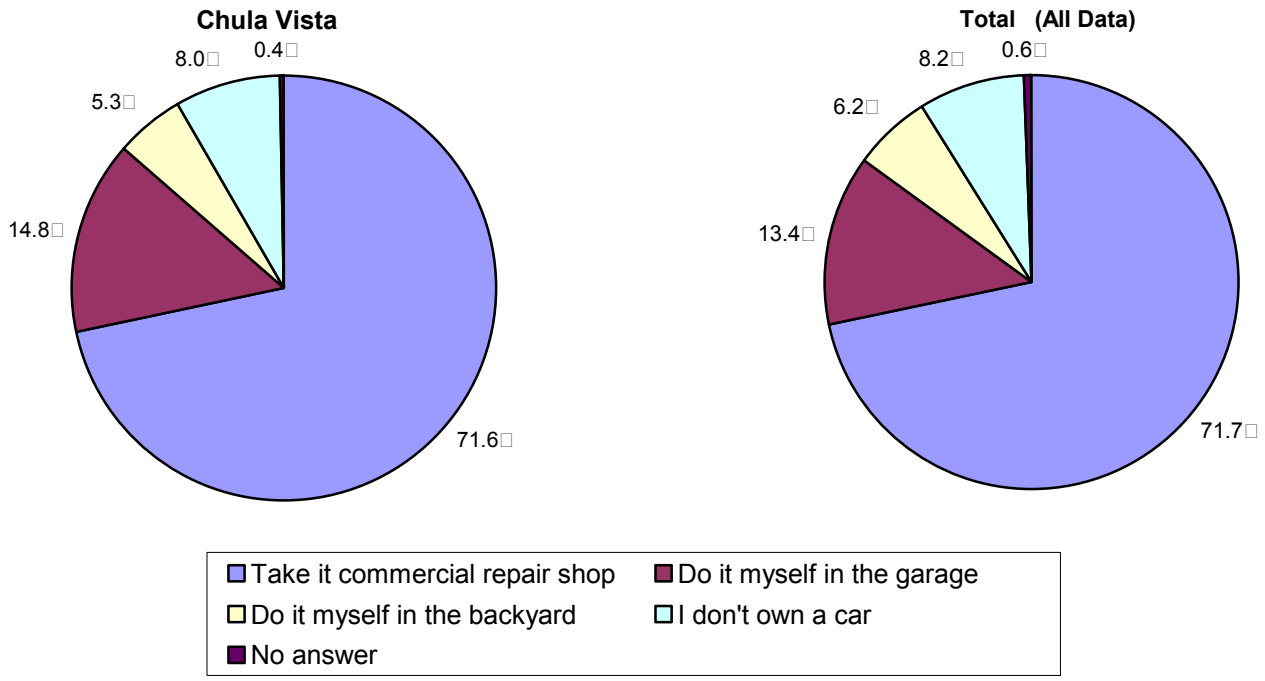

QUESTION 5: HOW MANY TIMES IN THE PAST YEAR HAVE YOU REPORTED AN ILLEGAL DUMPING IN STORM DRAIN SYSTEM?

This question is followed by a series of related questions regarding illegal dumping. Compared to the baseline survey question, "Do you know where to report illegal dumping into storm drains?" this series of questions in the 2009 survey help to provide a more in-depth look at how respondents report illegal dumping.

Though most respondents (84%) have never reported an illegal dumping, some have taken the initiative to do so at least once or twice (11%). Of those that have reported illegal dumping, most respondents called the City of Chula Vista Hotline (60.8%), and a few visited the Chula Vista Storm Water Management website (14.5 %) or visited Chula Vista City Hall (7.25%). Among the illegal dumping incidents that were reported, most were pollutants that had been dumped into the streets (43%) or leaking oil from cars (32%). Table 5 and Figure 5 below summarize the results for Question 5.

Table 5: Response to Question 5

Answer	Chula Vista	Total
1 to 2 times	11.39%	10.88%
3 to 4 times	2.32%	2.27%
5 or more	1.35%	1.96%
I have not reported any illegal dumping	83.78%	83.69%
No Answer	1.16%	1.21%

Figure 5

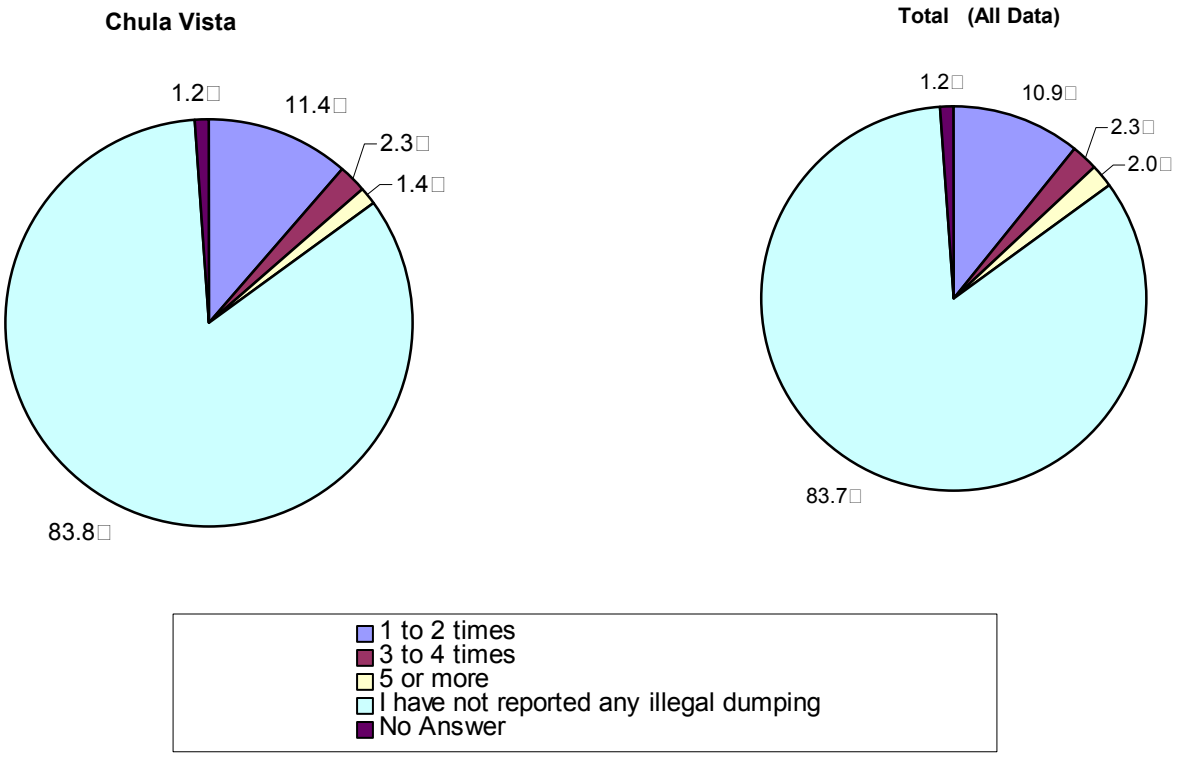

QUESTION 6: HOW DID YOU REPORT THE ILLEGAL DUMPING?

This is a follow up of question number 5. This is an important question because it indicates whether or not respondents know where to report illegal dumping into storm drain. Over half of the respondents who reported illegal dumping called the City's hotline and few visited the City's website or reported it at City Hall. It is important to note that the City's website was the least utilized access tool in reporting illegal dumping. This indicates that majority of respondents still prefer the personal contact approach way of communicating with the City, or they may not know about the City's website. In addition, it may be beneficial to promote the website as a means for reporting illegal dumping. Table 6 and Figure 6 below summarize the data for Question 6.

Table 6: Response to Question 6

Question 6 - Follow up answer from Question 5	Chula Vista	Total
Called City of Chula Vista hotline number (619-397-6000)	60.87%	53.33%
Visited CV Storm Water Management website (www.chulavista.gov/clean) to find contact information	14.49%	16.67%
Called the County of San Diego or other city's hotline number	17.39%	23.33%
Visited Chula Vista City Hall to report the violation	7.25%	6.67%

Figure 6

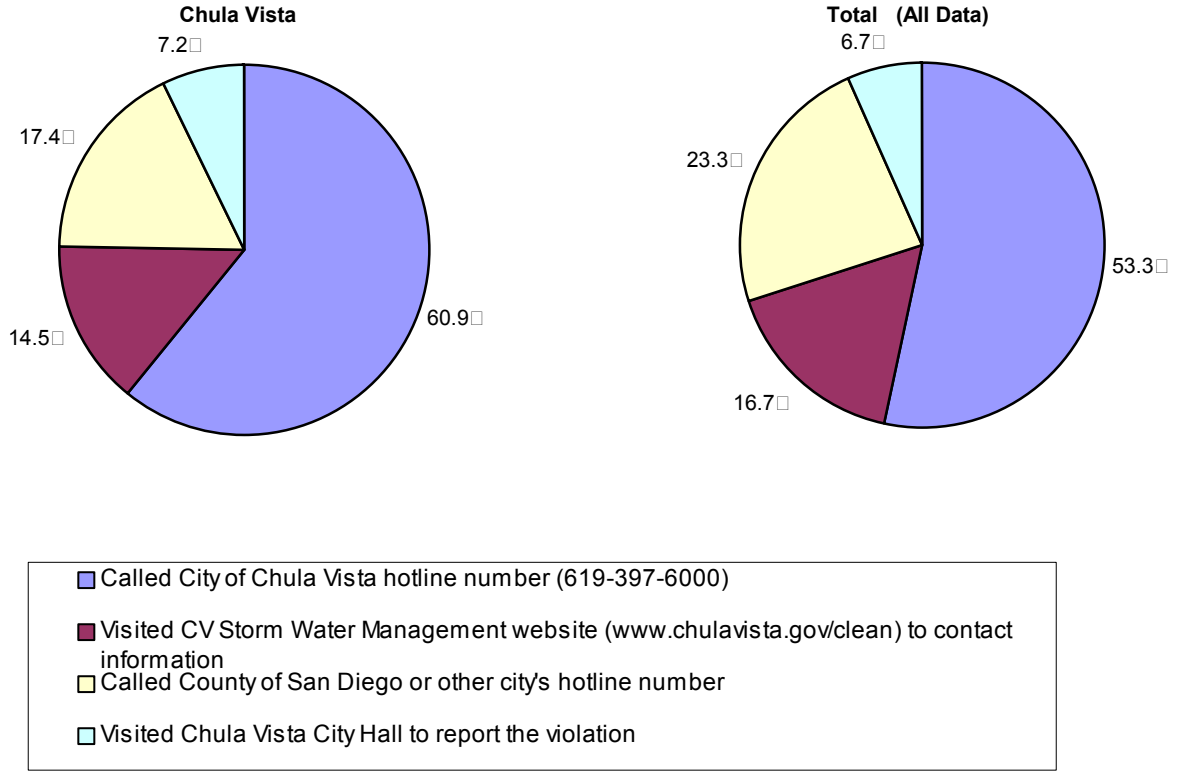

QUESTION 7: WHAT ILLEGAL DUMPING DID YOU REPORT?

This is a follow up to question number 6. Most reported cases were regarding pollutants that were directly dumped into the streets and gutter (43.84%), followed by leaking oil from cars (32.88%). The data collected provide valuable information in identifying the prevalent pollutants of concern. This data gives insight as to the level of education the of citizens of Chula Vista regarding pollution prevention and preventing illegal discharges. Table 7 and Figure 7 below summarize the results for Question 7.

Table 7: Response to Question 7

Answer	Chula Vista	Total
Illegal dumping into streets/gutter (paints, oil, grease)	43.84%	41.49%
Construction waste dumping (slurry, concrete, etc)	19.18%	20.21%
Leaking oil from cars	32.88%	35.11%
Others	4.11%	3.19%

Figure 7

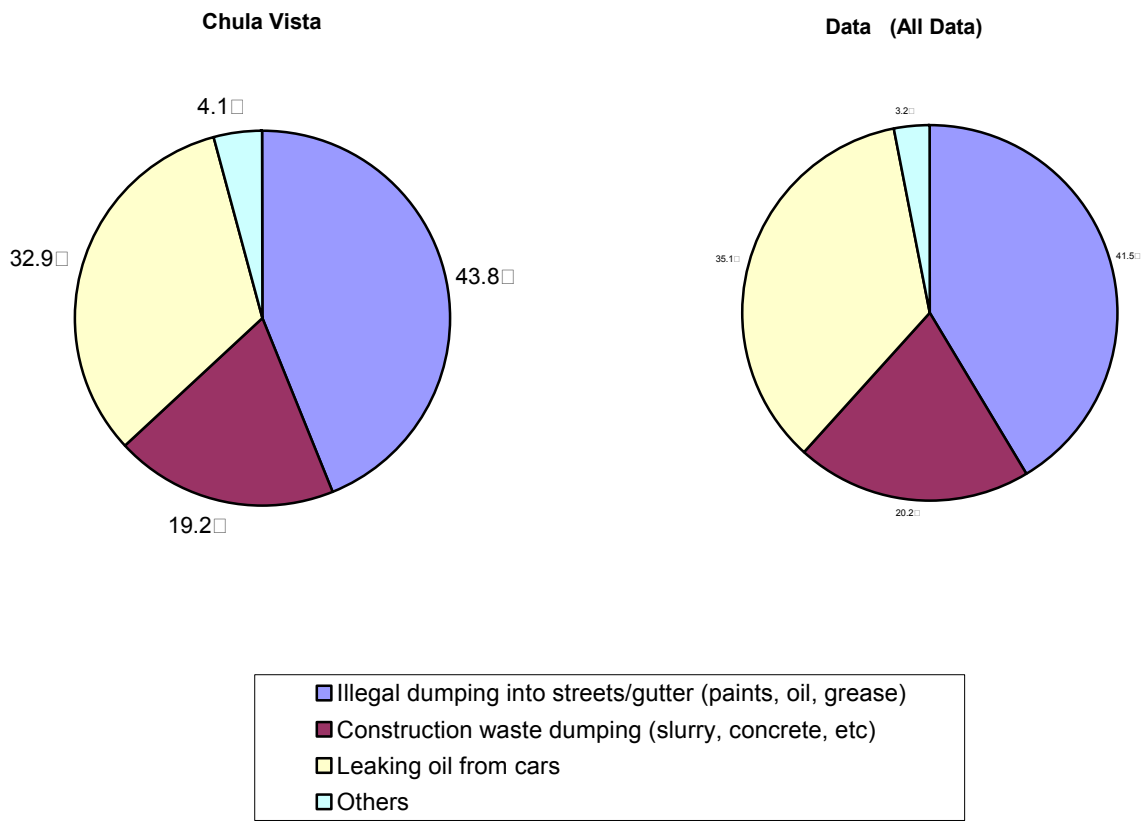

QUESTION 8: IN THE PAST YEAR, WHERE HAVE YOU REGULARLY WASHED YOUR CAR?

More than half of the respondents (51.96%) said that they take their car to a fixed car wash. Another 24% said that they wash their cars on the driveway and 12% wash their cars on the lawn. In comparing the baseline survey with the current survey, a few differences are evident. Car washing on the driveway increased from 3.7% in 2005 to 24.21% in 2009, while washing at a fixed carwash facility decreased from 75.9% in 2005 to 51.96% in 2009. A possible explanation for the decreased use of car washing facilities and increased washing on the driveway could be due to the downturn in the economy. Residents may prefer to wash their cars at home in order to save money. Based on this data, the City will continue to provide education to residents about BMPs for vehicle washing. Table 8 and Figure 8 below summarize results for Question 8.

Table 8: Response to Question 8

Answer	FY 05-06 Survey Chula Vista	FY 09-10 Survey Chula Vista	FY 09-10 Survey Total
On the driveway	3.7%	24.21%	23.90%
On the lawn	11.7%	12.29%	11.73%
At a fixed carwash station	75.9%	51.96%	52.05%
I called a mobile detail service	N/A	2.61%	2.64%
I don't have a car	N/A	5.77%	5.87%
No Answer	2.5%	3.17%	3.81%

Figure 8

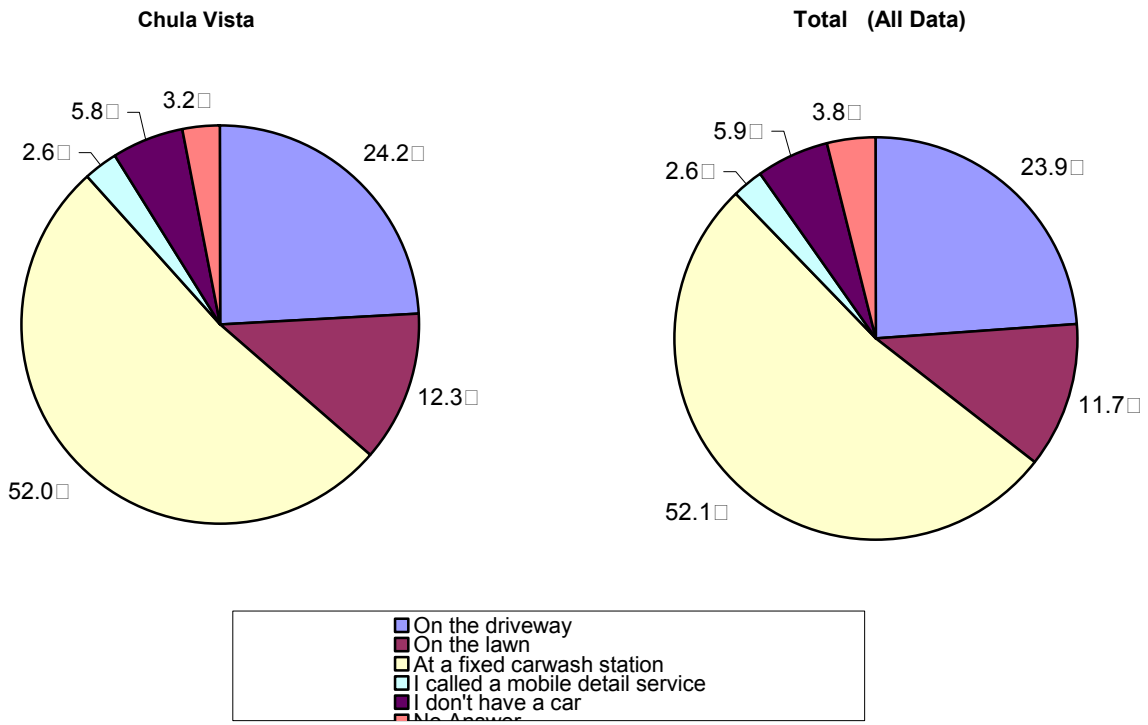

QUESTION 9: HOW DO YOU DISPOSE OF YOUR PET'S WASTE?

This question determines if individuals are familiar with methods of properly disposing pet waste, which can be a source of bacteria. Two extra choices were added to this survey in order to get more accurate data, one of them being that the respondent does not own a pet. The correct response to this question was to either flush the waste down the toilet or to pick it up with a plastic bag and place it in the trash. Some respondents picked more than one answer, so the total number of percentages sums up to more than 100%. There was no significant change in the trends from the 2005 baseline survey to the current survey. Most respondents answered that they use a plastic bag and place it in the trash (59%), which also received the most response in the baseline survey. The results show that the majority of respondents knew the best way to dispose of pet waste. It can be assumed that residents were knowledgeable about pet waste disposal methods regardless of pet ownership. Table 9 and Figure 9 below summarize results for Question 9.

Table 9: Response to Question 9

Answer	FY 05-06 Survey Chula Vista	FY 09-10 Survey Chula Vista	FY 09-10 Survey Total
Rinse off yard/sidewalk into gutter	1.0%	1.16%	1.66%
Flush down the toilet	8.0%	5.02%	5.29%
Bury in the yard/garden	N/A	5.41%	5.74%
Use plastic bag and place in trash	77.1%	59.65%	60.27%
I left it where it was	1.5%	0.58%	0.91%
Don't know	10.7%	0.97%	1.21%
I don't have a pet	N/A	25.68%	23.87%
No Answer	3.0%	3.09%	3.02%

Figure 9

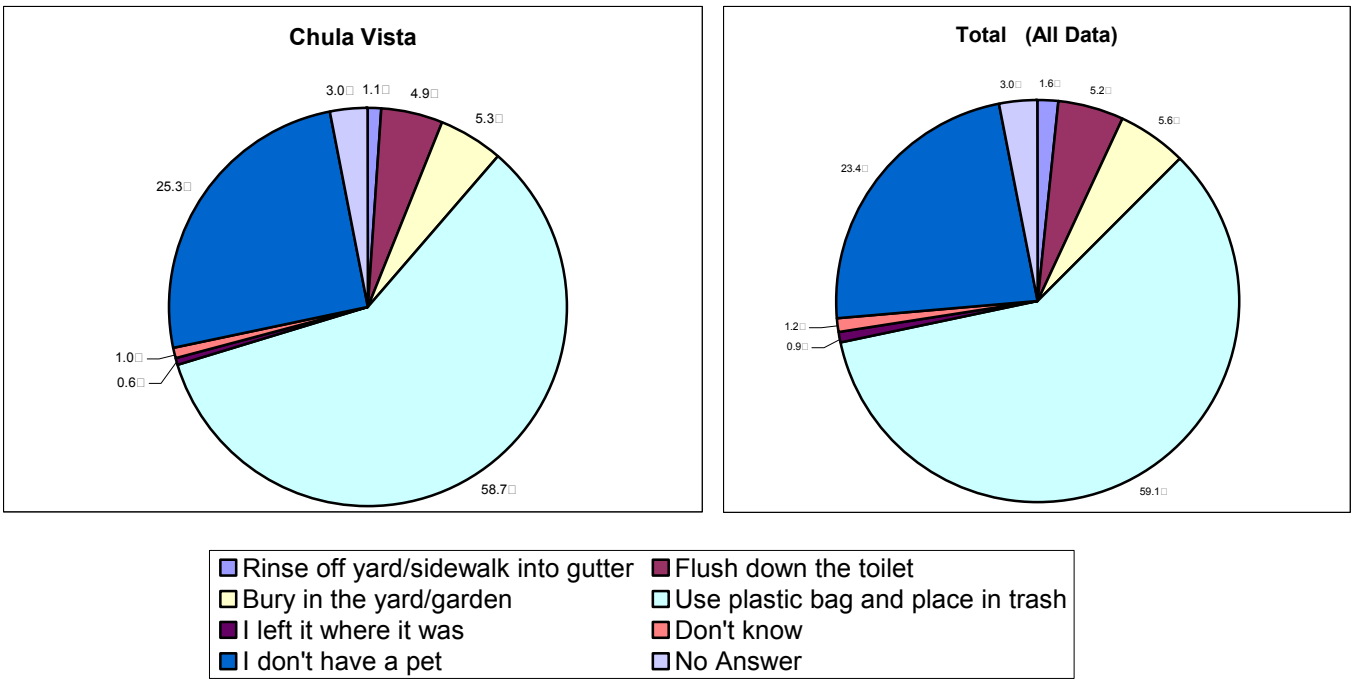

QUESTION 10: WHAT METHOD HAVE YOU USED TO DRAIN YOUR POOL, SPA, OR JACUZZI?

This question was designed to measure awareness of the correct method to drain water from pools, spas, or Jacuzzis. Most respondents did not own a pool, spa, or Jacuzzi (76.8%). Pool owners responded that they discharge to lawn/landscaping, collect filter material and dispose to trash (5.5%) or hire a pool maintenance company (4.6%). About 4% of respondents did not know how to drain their pool. Although dechlorinating and discharging to the storm drain system was also a correct answer, only about 2% of respondents chose this answer.

This differs from the 2005 baseline survey where 39% of respondents did not know the correct method to drain a pool. This may have improved because this year's survey allowed residents to choose "Don't own a pool, spa, or Jacuzzi," which was the most prevalent answer. In the baseline survey, those who did not own pools, spas, or Jacuzzis would not know how to properly drain a pool, therefore forcing them to choose "I do not know." It could possibly explain the high numbers in the baseline survey (39%) and the lower numbers in the current one (3.4%).

The data suggests that majority of respondents who own a pool, spas, or Jacuzzi have significant educational level of awareness on the best ways of draining pools, spas, or Jacuzzis. Table 10 and Figure 10 summarize the results for Question 10.

Table 10: Response to Question 10

Answer	FY 05-06 Survey Chula Vista	FY 09-10 Survey Chula Vista	FY 09-10 Survey Total
Discharge to lawn/landscaping, collect filter material and dispose to trash	14.2%	5.41%	5.59%
I hire a pool maintenance company	N/A	4.63%	4.53%
Discharge to sanitary sewer	20.9%	2.90%	3.17%
De-chlorinate and discharge to street gutter	20.4%	1.74%	1.81%
Others –specify	N/A	0.00%	0.15%
Don't know	39.3%	3.47%	4.23%
I don't have a Pool, spa, or Jacuzzi	N/A	76.83%	75.38%
No answer	4.0%	5.02%	5.14%

Figure 10

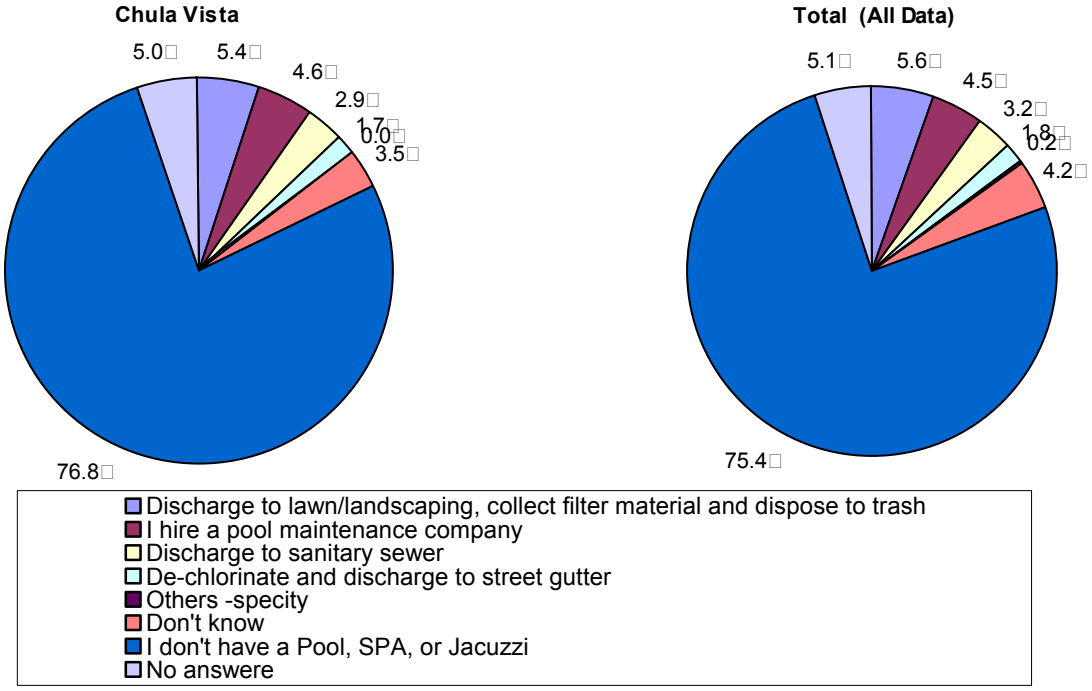

QUESTION 11: WHICH OF THE FOLLOWING PRACTICES HAVE YOU USED IN MAINTAINING YOUR LANDSCAPE OR GARDEN? (PLEASE MARK ALL THAT APPLY)

This question has no wrong answers. With the exception of "Do not Know," all answers are correct. Many respondents chose more than one answer, so the sum of the percents is greater than 100%.

There was a significant decrease in those that responded with "Do not know" in comparing the 2005 baseline survey to the current one. This may be explained by the wider array of answer options in this survey, especially with the option to choose "I don't have landscaping or a garden." In 2005, those that do not own landscaping or a garden would automatically choose "Do not know," falsifying the results which show that a significant number of respondents do not know how to properly care for their landscape or garden. It can be assumed that the high tally of "Do not know" respondents took advantage of the opportunity to answer, "I don't have landscaping or a garden" instead, decreasing the "Do not know" response significantly from 27% to 3.2% in 2009.

The 2009 survey numbers show that respondents use all practices in maintaining their garden. However, most hire landscape contractors (20%), collect and recycle yard waste (27%), and use a hose to water to avoid over-watering (20%). Notably, only 3.28% of the total respondents picked the "Don't Know" answer, which is the lowest percentage of all the answers. This indicates that citizens of Chula Vista have a high level of awareness on proper landscape maintenance. Table 11 and Figure 11 summarize the data for Question 11, the final question in the survey.

Table 11: Response to Question 11

Answer	FY 05-06 Survey Chula Vista	FY 09-10 Survey Chula Vista	FY 09-10 Survey Total
Use less toxic pesticides	61.4%	N/A	N/A
I hire a landscape contractor	N/A	20.46%	19.94%
Collect lawn clippings and yard waste for recycling	40%	27.03%	26.28%
Use fertilizers sparingly according to label procedures	33.1%	13.13%	13.60%
Use hose to water landscape to avoid over irrigation	40.5%	20.46%	20.54%
Use drip irrigation and soakers hoses	N/A	10.23%	10.12%
Use regular sprinkler system	N/A	20.66%	19.94%
Don't know	27.1%	3.28%	4.08%

Figure 11

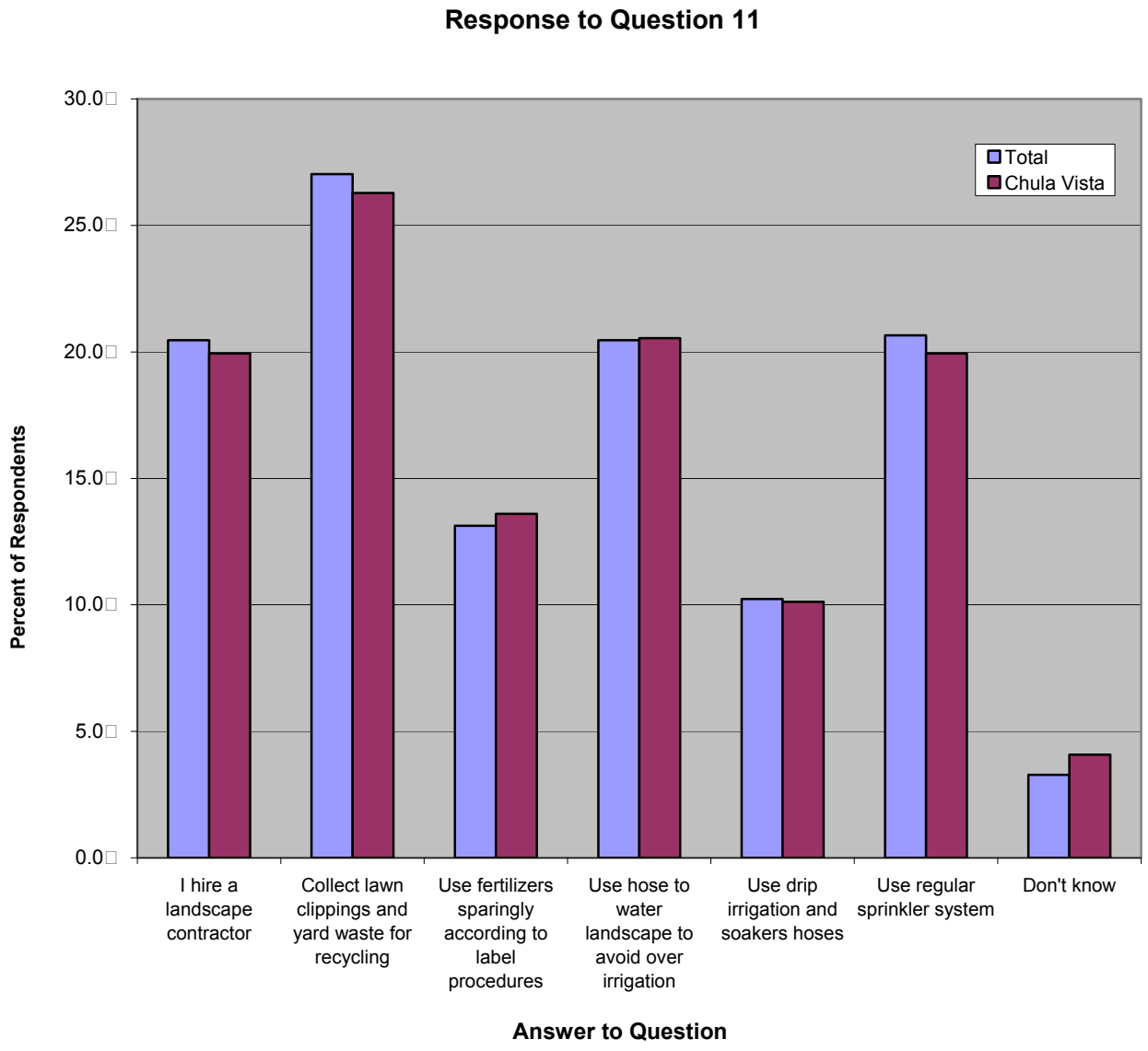
Response to Question 11
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Percent of Respondents
Total
Chula Vista
I hire a landscape contractor
Collect lawn clippings and yard waste for recycling
Use fertilizers sparingly according to label procedures
Use hose to water landscape to avoid over irrigation
Use drip irrigation and soakers hoses
Use regular sprinkler system
Don't know
Answer to Question

Public Works Department
Storm Water Management Section

STORM WATER QUALITY PUBLIC AWARENESS SURVEY
Home Zip Code: _____ Date: _____

This survey is to evaluate citizen awareness of storm drain pollution prevention and watershed protection issues. Results will be used to improve the City's Urban Runoff Management Program. Please mark the answer that best fits your response.

1) A watershed is defined as:
   a. The measure of velocity from urban runoff discharge before reaching the bay.
   b. Methods implemented to prevent evaporation of bodies of water (lakes, rivers, creeks)
   c. The land area that drains into particular lake, river, or ocean.
   d. Do not know

2) What is the difference between Storm Water Drain System and Sanitary Sewer System?
   a. Water that flows in Storm Drain System is treated and water that flows in Sewer System is not.
   b. Water that flows in Sanitary Sewer System is treated and water that flows in Storm Drain system goes directly to creek, bay or ocean.
   c. Water that flows in both systems is treated before releasing to bay or ocean.
   d. Do not know.

3) In what ways have you received educational materials (brochures, pamphlets, posters) with regards to storm water pollution prevention? (Please mark all that apply)
   a. Attended public events
   b. Found it at my door
   c. Visited Chula Vista websites
   d. Received through mail
   e. I have not received any educational materials regarding Storm Water Pollution Prevention

4) Which of the following practices most apply to you regarding auto repair maintenance/activities?
   a. Take it to commercial repair shop
   b. Do it myself in the garage
   c. Do it myself in the backyard
   d. I don't own a car

5) How many times in the past year have you reported an illegal dumping into storm drain system?
   a. 1 to 2 times
   b. 3 to 4 times
   c. 5 or more
   d. I have not reported any illegal dumping into the storm drain system (Please proceed to Question 8)

6) How did you report the illegal dumping?
   a. Called City of Chula Vista Hotline number (619-397-6000)
   b. Visited Chula Vista Storm Water Management Website (www.chulavista.gov/clean) to find contact information.
   c. Called the County of San Diego or other city's Hotline number
   d. Visited Chula Vista City Hall to report the violation

7) What illegal dumping did you report?
   a. Illegal dumping into streets/gutter (paints, oil, grease)
   b. Construction waste dumping (slurry, concrete, etc)
   c. Leaking oil from cars
   d. Other - please specify: _____

8) In the past year, where have you regularly washed your car?
   a. On the driveway
   b. On the lawn
   c. At a fixed carwash station
   d. I called a mobile detail service
   e. I don't have a car

9) How do you dispose of your pet's (dog, cat, turtle, etc) waste?
   a. Rinse off yard/sidewalk into gutter
   b. Flush down the toilet
   c. Bury in the yard/garden
   d. Use plastic bag and place in trash
   e. I left it where it was
   f. Don't know
   g. I don't have a pet

10) What method have you used to drain your pool, spa, or Jacuzzi?
   a. Discharge to lawn/landscaping, collect filter material and dispose to trash
   b. I hire pool maintenance company
   c. Discharge to sanitary sewer
   d. De-chlorinate and discharge to street gutter
   e. Other – Please specify _____
   f. Don't know
   g. I don't have a Pool, Spa, or Jacuzzi

11) Which of the following practices have you used in maintaining your landscape or garden? (Please mark all that apply)
   a. I hire a landscape contractor
   b. Collect lawn clippings and yard waste for recycling
   c. Use fertilizers sparingly and according to the procedures indicated on the label
   d. Use hose to water landscape to avoid over irrigation
   e. Use drip irrigation and soaker hoses
   f. Use regular sprinkler system
   g. Don't know
   h. I don't have landscaping or a garden.

Thank you for participating in this survey. If you have any questions, please contact Khosro Aminpour, Civil Engineer, at (619) 397-6111.

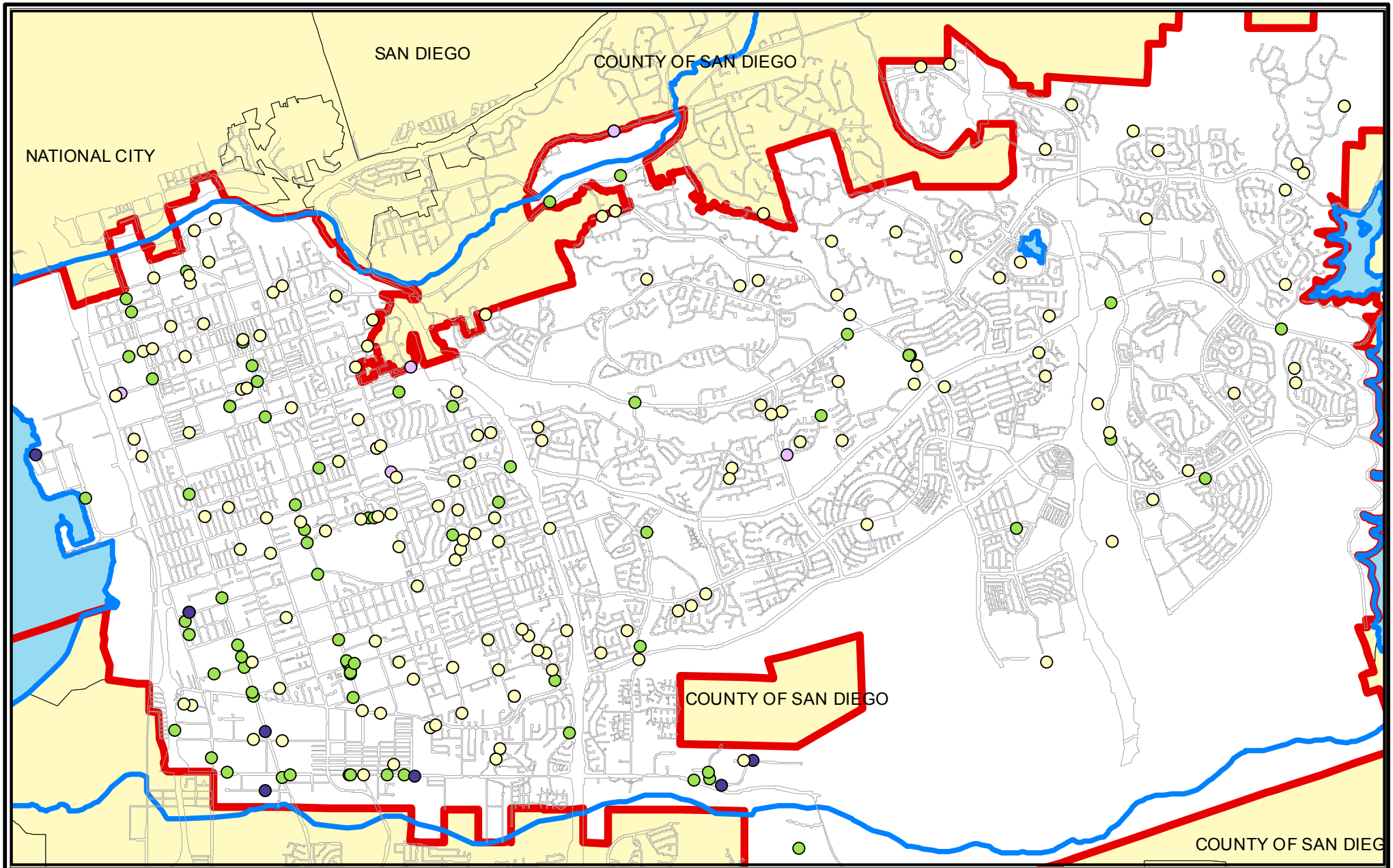

Jurisdictional Urban Runoff Management Program

Violation Locations FY 2009-2010

0 0.5 1 2 Miles

Commercial
Municipal
Industrial
Residential

CITY OF CHULA VISTA

Map Created 9/15/2010

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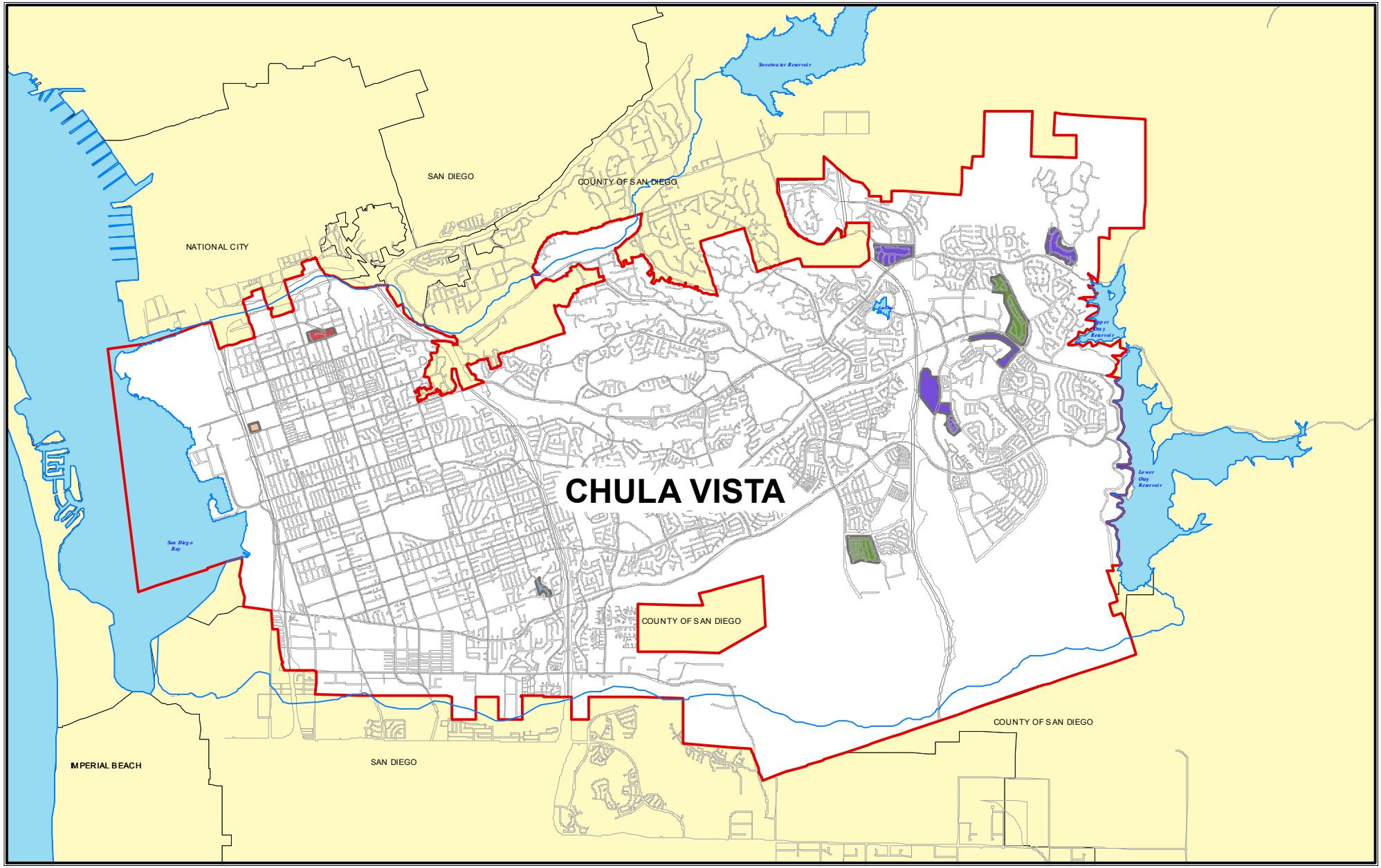

HTTWQ Residential Areas for FY 09-10

0 0.5 1 2 3 Miles

0 2,000 4,000 8,000 12,000 Feet

- Landscaping Activities - Fertilizer and Over Irrigation
- Landscaping Activities - Over Irrigation
- Landscaping Activities - Over Irrigation Pet Waste
- Trash
- Vehicle Washing

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

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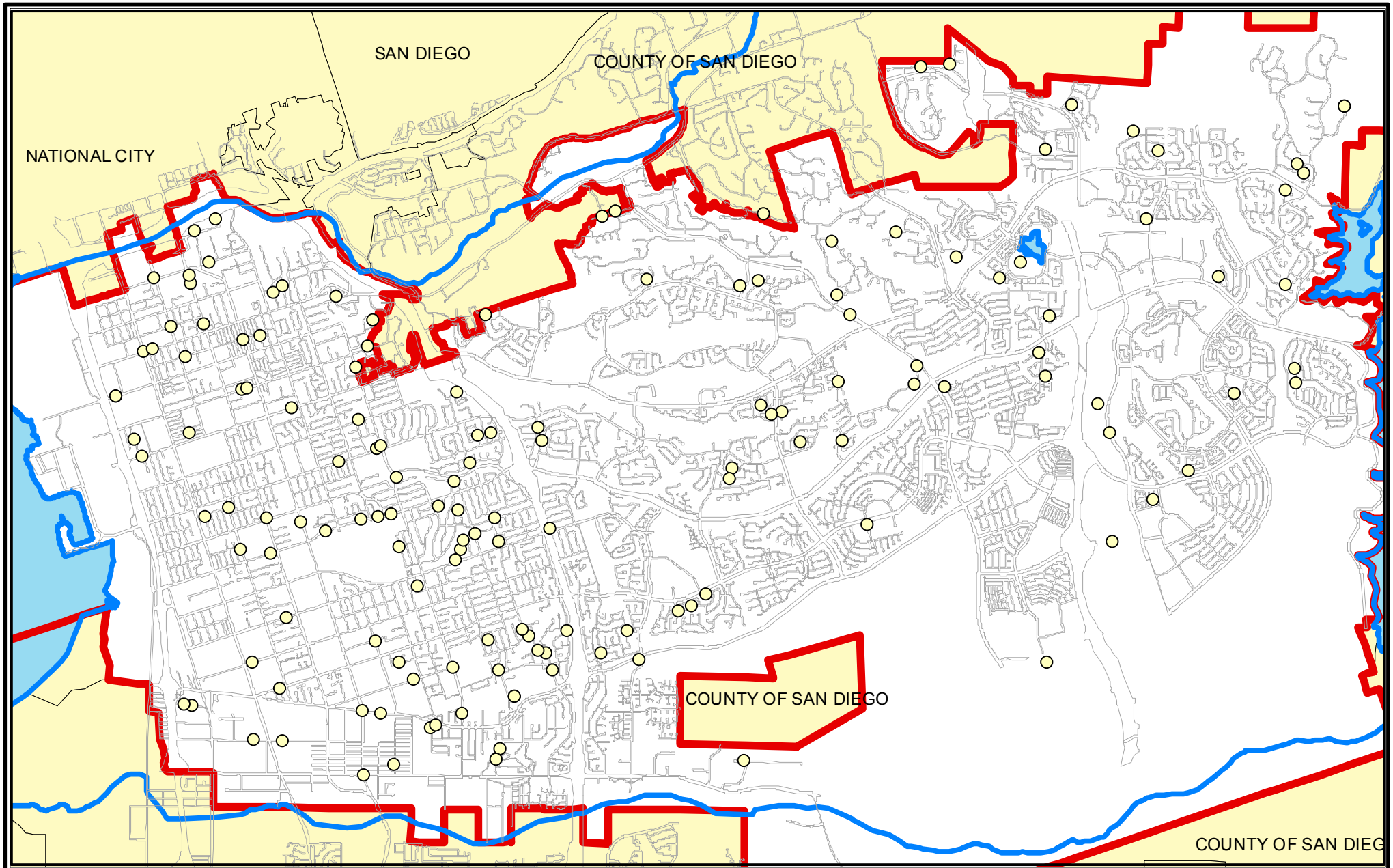

Jurisdictional Urban Runoff Management Program

Violation Locations FY 2009-2010

0 0.5 1 2 Miles

Residential

CITY OF CHULA VISTA

Map Created 9/15/2010

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CITY OF CHULA VISTA

Public Works Department

December 2, 2010
File #0780-85-KY181

County of San Diego
Watershed Protection Program
5201 Ruffin Road, Suite P
San Diego, CA 92123

Attention: Mr. Jon Van Rhyn, Watershed Protection Program Manager

SUBJECT: SUBMITTAL OF JURMP ANNUAL REPORT NO. 30 SECTION 7.0 FOR FISCAL YEAR 2009-2010

Enclosed please find one hard copy and three CD-ROMs of the City of Chula Vista's Jurisdictional Urban Runoff Management Program Annual Report No. 30 Section 7.0 – Illicit Discharge Detection and Elimination Component for Fiscal-Year 2009-2010 and one hard copy of the City of Chula Vista Dry Weather Field Screening and Analytical Monitoring Program 2010. The main report was submitted on September 28, 2010 under separate cover. Pursuant to the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 and Addendum No. 2 to Order No. R9-2007-0001, I request that the County of San Diego, as the Principal Copermittee, submits said report to the Regional Water Quality Control Board.

Should you have any questions please call me at (619) 397-6111. Thank you.

K. Aminpour

KHOSRO AMINPOUR
SENIOR CIVIL ENGINEER

Attachments

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CITY OF CHULA VISTA

Public Works Department

December 2, 2010
File # 0780-85-KY181

San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Attention: Mr. David Gibson, Executive Officer

SUBJECT: JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) ANNUAL REPORT NO. 30, SECTION 7.0 AND RELATED ATTACHMENTS

Please find enclosed City of Chula Vista's JURMP Annual Report No. 30, Section 7.0 – Illicit Discharge Detection and Elimination Component and the City of Chula Vista Dry Weather Field Screening and Analytical Monitoring Program 2010 for Fiscal-Year 2009-2010. The main report was submitted to the county of San Diego for transmittal to the Regional Board on September 28, 2010 under a separate cover.

Section 7.0 of the JURMP Annual Report has been prepared in accordance with the requirements of the San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (NPDES Permit No. CAS0108758) and Addendum No. 2 to Order No. R9-2007-0001. Please replace the Table of Contents and Executive Summary of the main report with updated versions as attached to this letter.

If you have any questions regarding the submitted report, or need further information, please contact Khosro Aminpour, Senior Civil Engineer, at (619) 397-6111. Please direct any and all correspondence to:

City of Chula Vista, Department of Public Works
1800 Maxwell Road, Chula Vista, CA 91911
Attention: Khosro Aminpour, Senior Civil Engineer

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

Attachments

C: Rick Hopkins, Director of Public Works
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer

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City of Chula Vista

Jurisdictional Urban Runoff Management Program
Annual Report No 30
Section 7 – Illicit Discharge Detection and Elimination

SIGNED CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

12/1/10
DATE

CITY OF CHULA VISTA
JURMP Annual Report No. 30
Fiscal Year 2009-2010
SEPTEMBER 2010

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EXECUTIVE SUMMARY

On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (Regional Board) adopted the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 (Municipal Permit). The implementation phase of the Municipal Permit commenced on January 24, 2008. This is the third annual report submitted under the current permit and covers the implementation period of July 1, 2009 to June 30, 2010. Reporting requirements of this Jurisdictional Urban Runoff Management Program (JURMP) annual report is in accordance with the stipulations of Section J.3.a of the Municipal Permit.

Among other requirements, the Municipal Permit requires that on September 30th of each year, all municipalities of San Diego County (including Chula Vista) as well as the San Diego Unified Port District, the San Diego County Regional Airport Authority and the County of San Diego, collectively referred to as the Copermittees, submit jurisdictional annual reports, which provide documentation of the activities conducted by each Copermittee during the reporting period covering the previous fiscal year from July 1 to June 30. JURMP annual reports are to include descriptions of each Copermittees' efforts in the implementation of its JURMP document developed in compliance with Municipal Permit requirements to minimize discharges of pollutants to waters of the United States and other receiving waters.

As required under Section M.6 of the Municipal Permit, the Copermittees have developed a regional standardized format for JURMP annual reports. This report has, therefore, been prepared in conformance with the regional standardized format.

The present report covers subjects and areas outlined in Section J.3.a of the Municipal Permit and the Chula Vista JURMP. Although the reporting period is essentially from July 1, 2009 to June 30, 2010, some of the activities could not readily be divided to fall within the above target dates and continuation of the activities may have extended beyond this period to their completion.

This report has been prepared to provide an account of activities conducted by the City of Chula Vista (City) according to the components outlined in Section D of the Municipal Permit including:

- Development Planning
- Construction
- Existing Development (Including Municipal, Industrial and Commercial, Residential)
- Illicit Discharge Detection and Elimination (this section will be submitted under a separate cover on or before December 15, 2010, in accordance with Addendum 2 to Order No. R9-2007-0001)
- Education
- Public Participation
- Fiscal Analysis
- Assessment of JURMP Effectiveness

It is important to note that while the City discharges, directly or indirectly, to water bodies that are listed on the Clean Water Act Section 303(d) as impaired water segments; the City does not discharge to any water bodies with a Total Maximum Daily Load (TMDL) program. Therefore, a discussion of TMDLs is not included in this report.

Section 7.0 of this report includes a summary of the City's 2010 Dry Weather Field Screening and Analytical Monitoring Program report, follow-up investigations, as well as a summary of the Illicit Discharges and Connections program for FY 2009-2010. As mandated by Addendum No. 2 to Order No. R9-2007-0001, the County of San Diego, as Principal Copermittee, will submit this section as a part of the unified JURMP Annual Report to the Regional Board by December 15, 2010. During the current reporting period, the City of Chula Vista participated in the regional Receiving Water and Urban Runoff Monitoring and Reporting Program as mandated in the Municipal Permit. As required under Section III.A.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program, the Principal Copermittee will submit to the Regional Board the Receiving Waters and Urban Runoff Monitoring Annual Report for the 2009-2010 monitoring season on January 31, 2011.

Section 11.0 of this report includes an effectiveness assessment analysis of the development and implementation of the City's Storm Water Management Program. Such analysis provides a synopsis of activities and a critical look at the overall strengths and challenges associated with the components throughout this report.

The following sections cover City of Chula Vista's strides toward continued implementation and improvement of its JURMP and, participation in regional and watershed level activities and programs from July 1, 2009 to June 30, 2010. The City is in the continuing process of assessing the effectiveness of individual program components and has made adjustments or revisions in some areas in order to improve the overall effectiveness of the program and to assure full compliance under the Municipal Permit. The City recognizes its role as a good steward of local and regional water resources, as well as the overall health of the San Diego Bay watershed.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(f).i - Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.

Permit Section J.3.a.(3)(f).ii - Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.

Permit Section J.3.a.(3)(f).iii - Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.

Permit Section J.3.a.(3)(f).iv - A brief description of any other investigations and follow-up activities for illicit discharges and connections.

Permit Section J.3.a.(3)(f).v - The number and brief description of illicit discharges and connections identified.

Permit Section J.3.a.(3)(f).vi - The number of illicit discharges and connections eliminated.

Permit Section J.3.a.(3)(f).vii - Identification and description of all spills to the MS4 and response to the spills.

Permit Section J.3.a.(3)(f).viii - A description of activities implemented to prevent sewage and other spills from entering the MS4.

Permit Section J.3.a.(3)(f).ix - A description of the mechanism whereby notification of sewage spills from private laterals and septic system is received.

Permit Section J.3.a.(3)(f).x - Number of times the hotline was called, as compared to previous reporting period, and a summary of the calls.

Permit Section J.3.a.(3)(f).xi - A description of efforts to publicize and facilitate public reporting of illicit discharges.

Permit Section J.3.a.(3)(f).xii - The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(f).xiii - A description of notable activities conducted to manage illicit discharges and connections.

7.1 INTRODUCTION

Illicit connections and illicit discharges (IC/ID) to the MS4 can potentially impact water quality if they are not eliminated. Examples of illicit discharges include wash-water, sediment, spilled chemicals, sewage releases, and pollutants from various sources. An illicit connection is a connection that conveys an illicit discharge to the MS4 via a pipe, drain, channel, etc. The City utilizes the following mechanisms to actively seek and eliminate illicit discharges and connections to the MS4:

1. Public complaint response and investigation
2. Inspection of local businesses and municipal facilities
3. Dry weather field screening and analytical monitoring
4. Municipal MS4 and sewer inspection and maintenance activities
5. Providing educational outreach to the community and business owners

This section provides a summary of:

- Reported illegal discharges and investigation by City staff
- Spill reporting and response
- Dry Weather Field Screening and Analytical Monitoring activities conducted within the 2010 Dry Weather Monitoring Season (May 1 – September 30)
- Follow-up investigations conducted to determine the potential source(s) of pollutants that exceeded their respective action levels.

Effectiveness assessment of the Illicit Discharge Detection and Elimination Component is included in Section 11.0 of this annual report.

Inspection of municipal facilities and industrial/commercial businesses are addressed in Sections 2.0 and 5.0 of this report. Municipal MS4 and sewer maintenance activities are described below and in Section 2.0 of this report. Educational outreach is described in Section 8.0.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

The City operates a hotline (619) 397-6000 for residents, employees, and the general public to report any illicit discharges to storm water conveyance systems. The hotline is publicized through several venues such as the City's website, City bus signs, and various storm water educational materials and brochures. The hotline is answered by Public Works dispatch staff, who routes the concern(s) to the appropriate section(s) within the City's Public Works

Department. All calls are entered into a database, and Storm Water Management Section staff takes immediate action to respond, investigate, provide education, and initiate enforcement actions as necessary. Staff also ensures that City crews or the responsible party contains and cleans any spills. Public Works crews are equipped with vactor trucks to contain and clean large spills. When hazardous materials are involved, all appropriate City departments or other agencies such as the Fire Department or the County of San Diego are notified as necessary.

During the reporting year, there were 257 calls to the hotline, compared to 144 calls in FY 2008-2009. Figure 7-1 compares the number of complaints from FY 1997-1998 through FY 2009-2010. As part of its education component, the City advertises the hotline on its website and trains City employees to report any illegal discharges. Attachment L summarizes all calls to the hotline and describes the outcomes of each. Attachment K is a summary of all illegal discharges to the MS4 or other violations of the City's Storm Water Ordinance that resulted in enforcement actions for FY 2009-2010.

Figure 7-1 City of Chula Vista Storm Water Hotline Call Summary 1998-2010

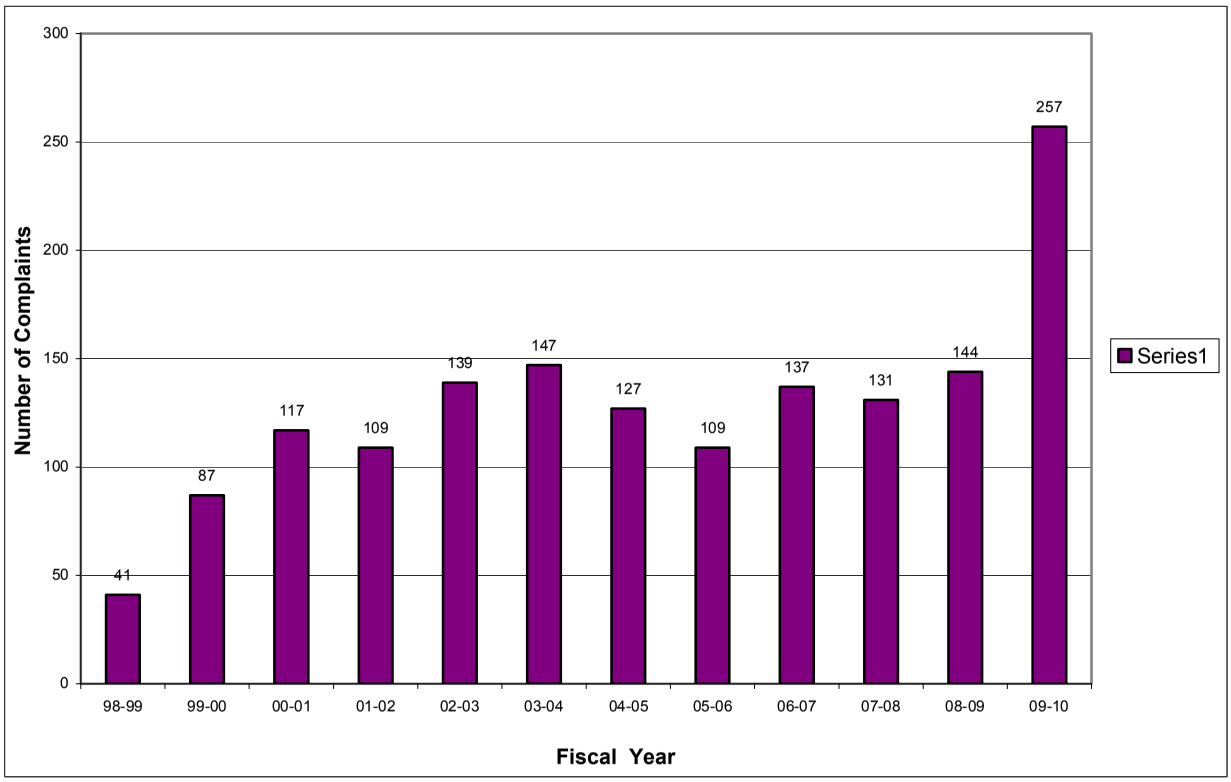

7.3 SPILL REPORTING, RESPONSE, AND PREVENTION

Section 9.0 of the City's JURMP document outlines the procedures for preventing discharges of sewage to the MS4 and the mechanism whereby notification of sewage spills from private laterals, septic systems, and others spills are received. City staff is trained to report all spills to the dispatch hotline and crews are prepared to respond, contain, and cleanup spills where necessary. In addition, Section 9.0 of the City's JURMP details the City's Sanitary Sewer Overflow Response Plan (SSORP) as required by RWQCB Order No. 96-04 and a Capacity,

Management, Operations, and Maintenance (CMOM) program. The City has also developed a Fats, Oil, and Grease (FOG) Monitoring Program to reduce the amount of FOG introduced into the sanitary sewer system by businesses.

Table 7-1 provides a summary of illegal discharges and spills and the number of each. All discharges and spills were immediately responded to, contained, cleaned, and eliminated.

Table 7-1 Types of Spills/Discharges and Number of Each During FY 2009-2010

TYPE OF SPILL/DISCHARGE	NUMBER
Construction BMPs Violation	2
Chemical Discharge	3
Driveway-Trash Washing	2
Grease/Food/Drink Discharge	8
Leaking Containers/Tanks	1
Others/Unknown Discharge	2
Painting-Sanding Residue	2
Pool/SPA Residue	2
Power or Carpet Wash Water	6
Resident Cleaning Residue	6
Sediment Discharge	8
Sewage Spill/Discharge	14
Slurry/Concrete Discharge	7
Trash/Debris Discharge	4
Vehicle Oil Discharge	4
Vehicle Washing/Dismantling	5
TOTAL	76

City inspectors are constantly on the lookout for illegal connections during their routine response to reported violations or industrial/commercial inspections. When a floor drain within a structure is suspected of being connected to the storm water conveyance system or discharging to the street gutter, such connection is verified by dye testing. If the indoor drain is connected to storm drains, it is considered illegal and ordered to be disconnected immediately. In addition, the City's maintenance crews have been trained to look for illicit discharges and connections during their daily activities in the field. This process has resulted in the identification of several illicit discharges and connections each year.

7.4 URBAN RUNOFF MONITORING

The 2010 Dry Weather Field Screening and Analytical Monitoring Program Report has been submitted as Attachment N, along with an updated Dry Weather Field Screening and Analytical Stations Map. During the reporting period, the MS4 map and the dry weather monitoring maps were reviewed for inaccuracies, and no amendments were necessary. Sixty monitoring stations were visited during the 2010 Dry Weather Monitoring Program, and field screening was conducted at the 57 sites where ponded or flowing water was observed. Sites CEN-03, SCR-04,

and SWB-03 were dry, so three alternate locations; SWR-03-E, SCR-07, and SUN-08 were chosen to replace these sites. Forty sites had measurable flow and 17 sites were ponded. Fifteen sites received laboratory analysis in addition to normal field screening. Table 7-2 provides a summary of exceedances for both field and laboratory analysis.

Under the previous Municipal Permit, the main round of monitoring was followed by a follow-up monitoring round within one or two months of each other. Under the current Municipal Permit, the main and follow-up monitoring rounds are combined.

Table 7-2 Summary of Action Level Exceedances for the 2010 Dry Weather Monitoring and Field Screening Analysis

FIELD SCREENING ANALYSIS (57 Samples)			
Analyte	**Number of Exceedances**	**% of Sites with Exceedances**	**Site(s) Exceeding Action Level**
pH	0	0	None
Conductivity	0	0	None
Turbidity	1	2	SVS-01
Surfactants (MBAS)	1	2	CEN-08
Ammonia-N	3	5	JUD-02, SCR-01, SWR-04
Nitrate-N	17	30	LAK-01, OVR-07, RCC-03, RCC-04, SCR-02, SCR-03, SCR-05, SCR-06, SCR-07, SUN-02, SUN-07, TCC-02, TCC-03, TCC-05, TCC-06, WOL-02, WOL-03
Orthophosphate-P	0	0	None
Glycol	3	5	BAY-01, JUD-03, TCS

MBAS = Methylene Blue Active Substances

LABORATORY ANALYSIS (15 Samples)			
Analyte	**Number of Exceedances**	**% of Sites with Exceedances**	**Site(s) Exceeding Action Level**
Oil and Grease	0	0	None
Cadmium (Dissolved)	0	0	None
Copper (Dissolved)	0	0	None
Lead (Dissolved)	0	0	None
Zinc (Dissolved)	0	0	None
Diazinon	0	0	None
Chlorpyrifos	0	0	None
Total Coliforms	3	20	POG-02, SCR-01, SVS-01
Fecal Coliforms	5	33	CEN-01, JUD-01, PRD-02, SCR-01, SWR-03-E
Enterococcus	5	33	CEN-01, JUD-01, JUD-02, SCR-01, SWR-03-E

Note: Table data is based on routine visits only. Confirmation, follow-up, and dry site visits are not included.

During the 2010 Dry Weather Monitoring Program, one exceedance of turbidity was reported. However, prior to 2010, no exceedances have been measured for temperature, turbidity, cadmium, copper, lead, or chlorpyrifos.

The historical data for the results of field analysis presented in Figure 7-2 indicates a decreasing trend in conductivity and ammonia-N exceedances. Orthophosphate-P exceedances have been infrequent, and there is no apparent trend for glycol, surfactants, or pH results. Nitrate-N exceedances generally appear to be increasing each year since 2004.

Figure 7-2 Percent of Sites with Field Constituents Exceedances by Year

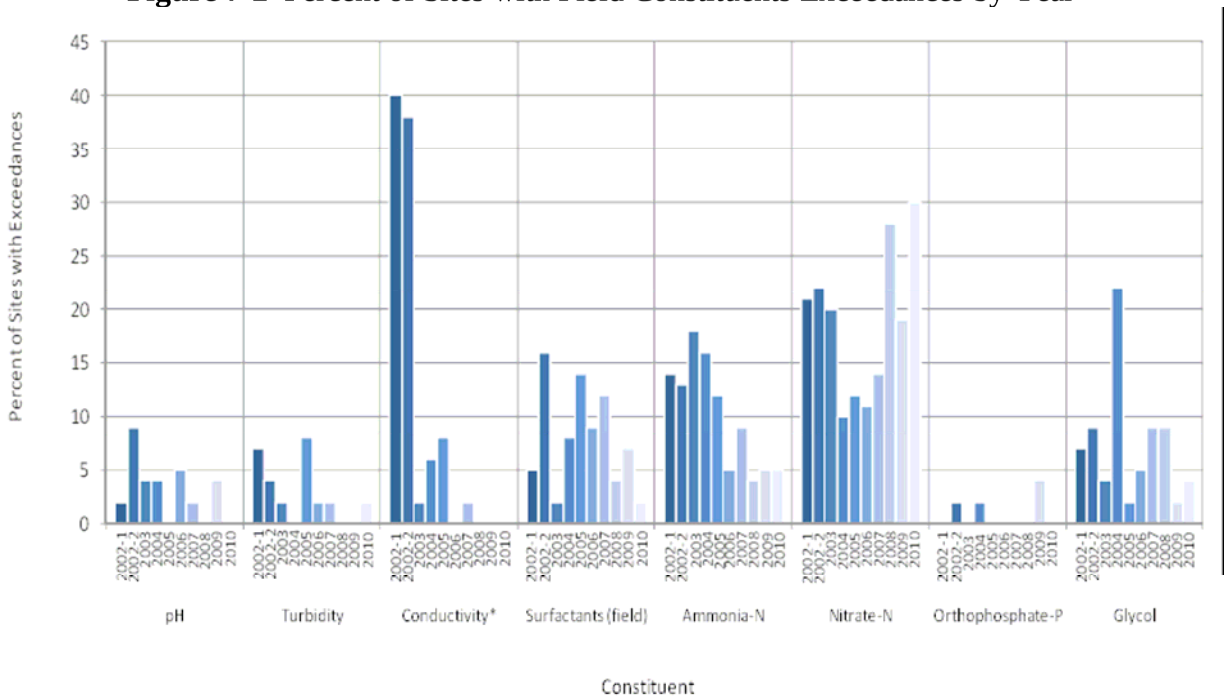

* The action level for conductivity was numeric in the past but was later changed to best professional judgment.

This year, nitrate-nitrogen was the constituent with the greatest number of exceedances, testing above the action level at 17 sites, compared to 11 exceedances in the previous year. The possible sources of nitrate-nitrogen exceedances include fertilizer runoff from over-watering and possible groundwater seepage into the storm drain system. Bacteria were elevated at 13 out of 15 sites. The three glycol action level exceedances were tested within normal range at the confirmation visits. Ammonia tested above the action level at three ponded sites. Upon the confirmation visits, two still had an elevated ammonia level, which was due to decaying organic material in ponded water. Surfactants tested above the action level at one ponded site. Upon confirmation visit, the exceedance persisted. Orthophosphate-P was not above action level at any of the tested sites.

Historical data for laboratory analyses presented in Figure 7-3 indicate regular bacteria exceedance rates, although the percent of total and fecal coliform exceedances appear to have decreased somewhat over the years. During this dry weather season, updated action levels for total coliform, fecal coliform, and Enterococcus were implemented. Zinc and diazinon have not

been detected over their action levels since 2003. Prior to 2003 the rates of exceedances were approximately 10% per year. Oil and grease has not been measured above the action level since 2005. From 2002 to 2007, both field screening and laboratory analysis were performed for surfactants. Starting in 2008, routine laboratory analysis of surfactant levels was discontinued.

Figure 7-3 Percent of Sites with Laboratory Exceedances by Year

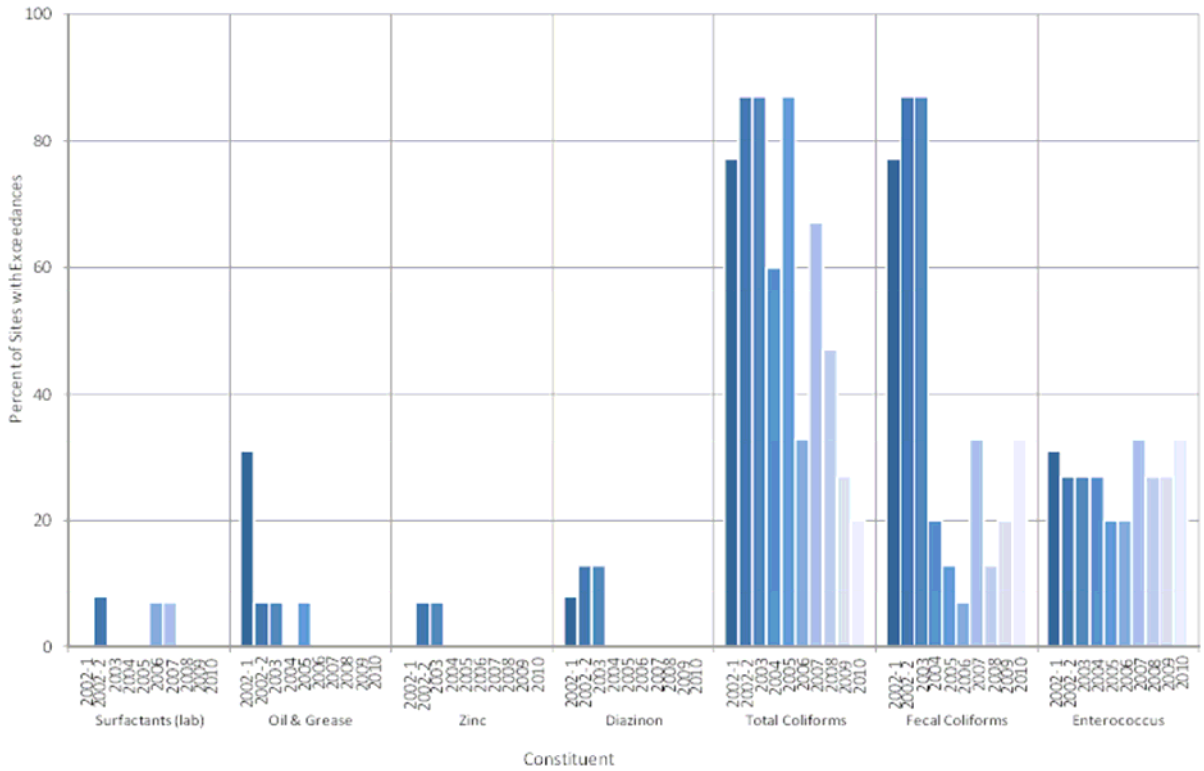

The City continued to implement the trash monitoring program, as required by the Municipal Permit. Of the 60 sites inspected, 72% were found to be Optimal, 18% Suboptimal, 8% Marginal, 2% Submarginal, and 0% Poor. At the only Submarginal site, trash included Styrofoam cups, beer bottles, aluminum cans, food packaging, plastic bags, shopping carts, and cardboard, suggesting transient activity in the immediate area. As a part of trash assessment, sites were evaluated for potential threat to human or aquatic health. The only Submarginal site described above was found to have potential threat to aquatic health and was immediately cleaned by City crews. The 6 Marginal and Submarginal sites were noted to City crews as sites needing more routine maintenance and trash pick-up.

In addition, the City continued implementation of the Dry Targeted portion of the MS4 Outfall Monitoring Program during this dry season, in accordance with the Final Copermittee MS4 Outfall Monitoring Workplan, and as required by the Municipal Permit. Ten dry weather monitoring sites were laboratory analyzed for constituents as detailed in Table 7-3 below. These results were reported in regional spreadsheet database as a part of the Regional Monitoring Program. The MS4 Outfall monitoring Program is primarily a regional effort and results will be analyzed within the Regional Monitoring Program. A list of outfalls monitored under the MS4 Outfall Monitoring Program together with the constituents analyzed at each outfall is presented in Table 7-3 below.

Table 7-3 MS4 Outfall Monitoring Locations and Constituents Analyzed

OUTFALL NAME	CONSTITUENTS ANALYZED
BAY-01	Bacteria and Dissolved metals
CEN-01	Bacteria, Dissolved metals, and TDS
JUD-01	Bacteria and Dissolved metals
PRD-02	Bacteria and Dissolved metals
RCC-02	Bacteria, Dissolved metals, and TDS
SCR-01	Bacteria and Dissolved metals
SUN-06	Bacteria, Dissolved metals, and TDS
SVS-01	Bacteria, Dissolved metals, and TDS
TCC-03	Bacteria, Dissolved metals, and TDS
TCC-04	Bacteria, Dissolved metals, and TDS

7.5 FOLLOW-UP AND ENFORCEMENT

Twenty nine sites had constituents above their respective action levels. Table 7-4 shows the sites with elevated constituent level and their probable sources based on upstream investigations.

Table 7-4 Summary of Upstream Investigations

SITE	UPSTREAM INVESTIGATION TARGET CONSTITUENT(S)		RESULTS/ PROBABLE SOURCE
	Field	Laboratory	
BAY-01	Glycol	-	Coolant from leaking cars in parking lot
CEN-01	-	Fecal Coliform, *Enterococcus*	Transient flow
CEN-08	Surfactants	-	Car wash area in Cabrillo Mobile Lodge residential community
JUD-01	-	Fecal Coliform, *Enterococcus*	Transient flow
JUD-02	Ammonia-N	*Enterococcus*	Ammonia-N: trash and decomposing organic material upstream; *Enterococcus*: transient flow
JUD-03	Glycol	-	Transient flow
LAK-01	Nitrate-N	-	Over-irrigation and groundwater seepage
OVR-07	Nitrate-N	-	Groundwater or interflow seepage
POG-02	-	Total Coliform	Decomposing leaves and grass clippings in gutters in combination with consistent irrigation runoff from residential areas
PRD-02	-	Fecal Coliform	Insufficient trash control BMPs upstream which can attract wildlife from the adjacent open area
RCC-03	Nitrate-N	-	Groundwater or interflow seepage
RCC-04	Nitrate-N	-	Groundwater or interflow seepage
SCR-01	Ammonia-N	Total Coliform,	Decomposing organic material in a shaded

SITE	UPSTREAM INVESTIGATION TARGET CONSTITUENT(S)		RESULTS/ PROBABLE SOURCE
	Field	Laboratory	
		Fecal Coliform, *Enterococcus*	and ponded area at the site and in a manhole upstream; excess irrigation from residential areas upstream transports bacteria to site; stagnant water upstream may promote bacterial growth; ammonia-N levels likely concentrated by evaporation of ponded water
SCR-02	Nitrate-N	-	Over-irrigation and groundwater seepage
SCR-05	Nitrate-N	-	Over-irrigation and groundwater seepage
SCR-06	Nitrate-N	-	Over-irrigation and groundwater seepage
SCR-07	Nitrate-N	-	Over-irrigation and groundwater seepage
SUN-02	Nitrate-N	-	Over-irrigation and groundwater seepage
SUN-07	Nitrate-N	-	Over-irrigation and groundwater seepage
SVS-01	Turbidity	Total Coliform	Turbidity exceedance due to construction activity; total Coliform exceedance related to transient flow
SWR-03-E	-	Fecal Coliform, *Enterococcus*	Wildlife activity, animal feces, and decomposing leaves present in upstream areas
SWR-04	Ammonia-N	-	Ammonia-N levels likely concentrated by evaporation of ponded water with decomposing leaves, transient activity and trash upstream
TCC-02	Nitrate-N	-	Groundwater or interflow seepage
TCC-03	Nitrate-N	-	Groundwater or interflow seepage
TCC-05	Nitrate-N	-	Groundwater or interflow seepage
TCC-06	Nitrate-N	-	Groundwater or interflow seepage
TCS	Glycol	-	Coolant from leaking cars in parking lot
WOL-02	Nitrate-N	-	Over-irrigation and groundwater seepage
WOL-03	Nitrate-N	-	Over-irrigation and groundwater seepage

Based on the results of the 2010 Dry Weather Field Screening and Analytical Monitoring Program as well as the Follow-Up Investigation Program, the City was provided with recommendations for dry weather monitoring sites and surrounding areas in need of cleaning and neighborhoods where storm water pollution prevention education is needed. The City is in the process of completing these recommended cleaning and education activities and is working to minimize illicit discharges. During the reporting period, there were no instances that required additional investigations or follow-up activities above and beyond those conducted during the 2010 Dry Weather Monitoring Program. More information about the recommendations from City's Dry Weather Monitoring and Field Screening Program and Follow-up Investigations can be found in Attachment N.

Attachment K

FY 2009-2010 Enforcement Action Taken

(Residential, Industrial, Commercial, and Related Businesses)

Note: During this reporting period, 7/01/2009 to 6/30/2010, investigation of the following cases have resulted in the issuance of Notice Code of Violation, Orders to Cease and Desist, Notice to Clean and Abate, and Admin Citation.

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
			Commercial					
17-Jul-09	Budget Tires	Leaking Containers/Tanks	Commercial	275	ORANGE	AV	Issued Admin Citation-Warning	
17-Jul-09	China China Restaurant	Grease/Food/Drink Disch.	Commercial	386	H	ST	Issued Admin Citation-Warning	
22-Jul-09	Reliable Carpet & Upholstery Cleaning	Carpet Clean Wash Water	Commercial	847	HALECREST	DR	Issued Admin Citation and Fine	$100
25-Jul-09	GMI Building Services	Power/Pressure Washing	Commercial	1451	H	ST	Issued Admin Citation	$200
7-Aug-09	El Latino Newspaper	Slurry/Concrete Discharge	Commercial	725	MAIN	ST	Issued Admin Citation-Warning	
20-Aug-09	Tortilleria Santa Fe Inc.	Chemical Disharge	Commercial	2765	MAIN	ST	Issued Notice of Violation	
31-Aug-09	Karina's Mexican Style Seafood #2	Driveway/Trash Washing	Commercial	1282	THIRD	AV	Issued Admin Citation-Warning	
29-Sep-09	Car Wash - Mobile Business	Vehicle Washing/Dismantle	Commercial	1714	BROADWAY		Issued Admin Citation- Fine	$200
15-Oct-09	San Diego County Club	Grease/Food/Drink Disch.	Commercial	88	L	ST	Issued Admin Citation - Fine	$200
29-Oct-09	Pool Maintenance - Mobile Business	Pool-Spa Residue	Commercial	200	SURREY	DR	Issued Admin Citation- Fine	$200
31-Oct-09	All American Car Wash C.V.	Vehicle Washing/Dismantle	Commercial	1137	BROADWAY		Issued Admin Citation and Fine	$200

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
3-Nov-09	Home Town Buffet #705	Grease/Food/Drink Disch.	Commercial	651	PALOMAR	ST	Issued Admin Citation & Fine	$200
3-Nov-09	Party Production Rentals-Mobile	Grease/Food/Drink Disch.	Commercial	657	PALOMAR	ST	Issued Admin Citation and Fine	$200
6-Nov-09	Islandia 29 LP Kelton Title	Grease/Food/Drink Disch.	Commercial	945	OTAY LAKES	RD	Issued Admin Citation and Fine	$200
9-Nov-09	La Bella Pizza	Power/Pressure Washing	Commercial	373	THIRD	AV	Issued Admin Citation-Warning	
16-Nov-09	El Pollo Loco/Bas Food Services	Grease/Food/Drink Disch.	Commercial	666	H	ST	Issued 2nd Admin Citation	$200
23-Nov-09	Pescados Y Mariscos Hectors	Grease/Food/Drink Disch.	Commercial	1177	BROADWAY		Issued Admin Citation and Fine	$200
3-Dec-09	Chula Vista SVC CTR/SECV Inc.	Failure to Maintain BMPS	Commercial	899	THIRD	AV	Issued Admin Citation & Fine	$100
4-Dec-09	Tony's Smog Test Only	Res/Comm Cleaning Residue	Commercial	2520	MAIN	ST	Issued Admin Citation & Fine	$100
11-Dec-09	PB Auto Service	Vehicle oil discharge	Commercial	3645	MAIN	ST	Issued Admin Citation & Fine	$200
15-Dec-09	Jack in the Box #93	Trash/Debris Discharge	Commercial	585	PALOMAR	ST	Issued Admin Citation & Fine	$200
5-Jan-10	Lunch Truck - Mobile Business	Sewage Spill/Discharge	Commercial	77	BROADWAY		Admin Citation and Fine	$200
17-Feb-10	McDonalds Corp #7554	Sewage Spill/Discharge	Commercial	1288	BROADWAY		Admin Citation and Fine	$200
19-Feb-10	El Comal Antojitos	Grease/Food/Drink Disch.	Commercial	262	THIRD	AV	Issued Admin Citation and Fine	$200
2-Mar-10	DaVinchi Metal Signs	Others/Unknown Discharge	Commercial	3521	MAIN	ST	Issued Admin Citation and Fine	$200

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
3-Mar-10	ABLE Heating and Air Conditioning	Trash/Debris Discharge	Commercial	1020	COLORADO	AV	Issued Admin Citation and Fine	$200
3-Mar-10	Rivas Manufacturing	Chemical Disharge	Commercial	1060	COLORADO	AV	Admin Citation and Fine	$100
10-Mar-10	Karina's Mexican Seafood	Sediment Discharge	Commercial	986	BROADWAY		Issued Admin Citation and Fine	
10-Mar-10	Heartland Meats Company	Vehicle oil discharge	Commercial	3461	MAIN	ST	Issued Admin Citation and Fine	$200
2-Apr-10	SSFT Holdings	Painting-Sanding Residue	Commercial	735	SAN JUAN	PL	Admin Citation and Fine	$200
6-Apr-10	JNC Pinoy Foodmart Inc.	Sewage Spill/Discharge	Commercial	943	OTAY LAKES	RD	Admin Citation and Fine	$100
6-Apr-10	Dominos Pizza	Sewage Spill/Discharge	Commercial		OTAY LAKES	RD	Issued Admin Citation and Fine	$200
4-May-10	Walgreens @ Third Avenue	Failure to Maintain BMPS	Commercial	1111	THIRD	AV	Issued Notice of Violation	
4-May-10	Kohls @ Eastlake	Failure to Maintain BMPS	Commercial	2325	OTAY LAKES	RD	Issued Notice of Violation	
4-May-10	Eastlake Commerce-Business Center	Failure to Maintain BMPS	Commercial	821	KUHN	DR	Issued Notice of Violation	
4-May-10	Eastlake Parkway Professional Plaza	Failure to Maintain BMPS	Commercial	860	KUHN	DR	Isssued Notice of Violation	
14-May-10	Shmidt Fire Protection-Citation - Mobile	Slurry/Concrete Discharge	Commercial	2400	MAIN	ST	Issued Admin Citation and Fine	$100
27-May-10	Knotts Soak City USA	Pool-Spa Residue	Commercial	2052	ENTERTAINMENT	CI	Issued Admin Citation-Warning	
11-Jun-10	Westwood Financial Corporation	Lack of Housekeeping	Commercial	2260	OTAY LAKES	RD	Issued Admin Citation and Fine	$400

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
15-Jun-10	Lolitas Restaurant	Res/Comm Cleaning Residue	Commercial	413	TELEGRAPH CANYON	RD	Issued Admin Citation	
			Industrial					
1-Jul-09	Hyundai Livart Furniture Outlet	Lack of Housekeeping	Industrial	3121	MAIN	ST	Issued Admin Citation and Fine	$100
20-Aug-09	Tortilleria Santa Fe Inc.	Chemical Disharge	Industrial	2765	MAIN	ST	Issued Admin Citation and Fine	$200
3-Nov-09	America's Finest Carpet	Carpet Clean Wash Water	Industrial	730	DESIGN	CT	Issued Admin Citation and Fine	$200
9-Mar-10	Kleen Blast Industrial Services	Others/Unknown Discharge	Industrial	676	MOSS	ST	Issued Admin Citatin and Fine	$200
21-Apr-10	Quality Lift Trucks	Sediment Discharge	Industrial	115	GLOVER	AV	Admin Citation and Fine	$200
			Residential					
15-Jul-09	San Miguel Ranch III-Residential Area	Failure to Maintain BMPS	Residential				Issued NOV	
4-Aug-09	Woodlawn Garden Apartments	Sewage Spill/Discharge	Residential	502	WOODLAWN	AV	Issued Admin Citation and Fine	$300
7-Aug-09	Blue Planet Drains & Plumbing	Res/Comm Cleaning Residue	Residential	1558	CIRCULO BRINDISI		Issued Admin Citatin-Warning	
20-Aug-09	Ape Cosntruction	Driveway/Trash Washing	Residential	1613	MELROSE	AV	Issued Admin Citation and Fine	$200
10-Sep-09	Camelot at Eastlake	Res/Comm Cleaning Residue	Residential	734	BROOKSTONE	RD	Issued Notice of Violation	
11-Sep-09	Motor Home RV	Sewage Spill/Discharge	Residential	3211	MAIN	ST	Issued Admin Citation - Fine	$200
31-Oct-09	Resident	Sewage Spill/Discharge	Residential	577	OXFORD	ST	Issued Admin Citation and Fine	$200

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
1-Nov-09	South Bay Community Villas LP	Sewage Spill/Discharge	Residential	1325	SANTA RITA		Issued Admin Citation and Fine	$200
6-Nov-09	KDC Construction - Mobile Business	Const. BMPS Violation	Residential	320	H	ST	Issued Admin Citation	$200
12-Nov-09	Resident	Trash/Debris Discharge	Residential	555	TRAILRIDGE	DR	Issued Admin Citation & Fine	$200
1-Dec-09	Rex Holdings LP	Sewage Spill/Discharge	Residential	488	DAVIDSON	ST	Issued Admin Citation and Fine	$200
4-Dec-09	Paul Miller Company	Slurry/Concrete Discharge	Residential	1216	THIRD	AV	Issued Admin Citation & Fine	$200
15-Dec-09	Villas San Miguel HOA	Sewage Spill/Discharge	Residential	93	LION	CI	Issued Admin Citation-Warning	
5-Jan-10	Resident	Slurry/Concrete Discharge	Residential	238	L	ST	Issued Admin Citation-Warning	
13-Jan-10	4D + N ----Mobile Business	Vehicle oil discharge	Residential	794	ADA	ST	Admin Citation and Fine	$200
13-Jan-10	Resident	Res/Comm Cleaning Residue	Residential	1566	CUMBRE VIEW		Issued Admin Citation-Warning	
1-Feb-10	Eastlake 1 - Community Association	Sediment Discharge	Residential	1941	CLEARBROOK	DR	Issued Admin Citation and Fine	$200
1-Feb-10	Paving Stone of SD - Mobile	Slurry/Concrete Discharge	Residential	1008	CORTE MARIA	AV	Admin Citation and Fine	$200
2-Feb-10	TCP Company-Plumbing Specialist-Mobile	Res/Comm Cleaning Residue	Residential	465	F	ST	Warning Citation	
8-Feb-10	Southeren CA Soil Testing-Mobile	Sediment Discharge	Residential	751	OTAY LAKES	RD	Admin Citation and Fine	$200
8-Feb-10	San Miguel Ranch Master Ass.-Citation	Sediment Discharge	Residential		PROCTOR VALLEY	RD	Issued Admin Citation-Warning	

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
10-Feb-10	We Care Carpet Clean - Mobile	Carpet Clean Wash Water	Residential	1485	ROBLES	DR	Admin Citation and Fine	$200
11-Feb-10	Davis & Adam Construction-Mobile	Sediment Discharge	Residential	440	FOURTH	AV	Issued Admin Citation and Fine	$200
12-Feb-10	Resident- Citation	Sediment Discharge	Residential	603	MELROSE	AV	Issued Admin Citation-Warning	
15-Feb-10	Luis & Sons Construction-Mobile	Slurry/Concrete Discharge	Residential	1133	VISTA	WY	Admin Citation and Fine	$200
15-Feb-10	Phair Company - Mobile Business-Citation	Power/Pressure Washing	Residential	200	SURREY	DR	Admin Citation and Fine	$200
17-Feb-10	Xtreme Enterpriese -Mobile	Vehicle Washing/Dismantle	Residential	2539	TABLE ROCK	AV	Issued Admin Citation and Fine	$200
23-Feb-10	Myers Construction- Mobile Business	Slurry/Concrete Discharge	Residential	1375	MELROSE	AV	Admin Citation and Fine	$200
26-Feb-10	Home Owner- Citation	Vehicle oil discharge	Residential	1253	SECOND	AV	Issued Citation - Fined $200	$200
26-Feb-10	Total Landscaping Design -Mobile	Sediment Discharge	Residential	2799	SHADOW CREST	TE	Issued Admin Citation and Fine	$200
2-Mar-10	Resident	Sewage Spill/Discharge	Residential	786	THIRD	AV	Issued Admin Citation and Fine	$200
17-Mar-10	K Hovnanaian Homes	Sewage Spill/Discharge	Residential	614	VIA MAGGIORE		Issued Admin Citation and Fine	$200
12-Apr-10	Villas at H Street	Failure to Maintain BMPS	Residential		H	ST	Issued Notice Of Violation	
14-Apr-10	K Hovnanaian Homes	Sewage Spill/Discharge	Residential	614	VIA MAGGIORE		Issued Admin Citation and Fine	$400
10-May-10	Resident	Vehicle Washing/Dismantle	Residential	103	NAPLES	ST	Issued Admin Citation and Fine	$200

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
13-May-10	Otay Ranch V-7, N6 and N7	Sewage Spill/Discharge	Residential				Issued Notice of Violation	
8-Jun-10	Winchester	Failure to Maintain BMPS	Residential		GEYSERVILLE	ST	Issued Notice of Violation	
10-Jun-10	Stetson	Failure to Maintain BMPS	Residential		GEYSERVILLE	ST	Issued Notice of Violations	
10-Jun-10	Resident - Citation - Open Parcel lots	Trash/Debris Discharge	Residential	912	THIRD	AV	Issued Notice of Violation	
23-Jun-10	Resident	Const. BMPS Violation	Residential	713	J	ST	Issued Admin Citation-Warning	
			Schools/ Church/Offices					
11-Sep-09	La Roca Comunidad Christiana Church	Failure to Maintain BMPS	Schools/ Church/Office	1420	PALOMAR	ST	Issued NOV and Civil Penalty	$5000
8-Feb-10	Bonita Vista High School - Citation	Vehicle Washing/Dismantle	Schools/ Church/Office	751	OTAY LAKES	RD	Issued Admin Citation	
19-Feb-10	International Travel & Tours- Citation	Painting-Sanding Residue	Schools/ Church/Office	294	THIRD	AV	Issued Admin Citation and Fine	$200

Total Incidents: **88** **Total Fine:** **$16,400.00**

Attachment L

FY 2009-2010 Hotline Call Response Summary

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/01/2009	STORM CHANNEL	Commercial	3121	MAIN	ST	Construction Debris & Waste
	Comments/ Action Taken:	7/1/09---Received a report of illegal dumping of trash, junk and debris by Hyundai Livart Furniture at 3121 Main St. into the adjacent channel. Inspection noted several large pieces of cardboard and other packing materials dumped into the storm channel. Admin Citation Issued. Cleanup conducted. No further action required.				
07/02/2009	STREET	Commercial	1478	MELROSE	AV	Unknown Discharge
	Comments/ Action Taken:	Received a complaint from Sunny Fresh Cleaners regarding landscape maintenance crews blowing grass clippings into the street. All American Landscape was responsible party. Issued verbal warning regarding the blowing of debris into the street. No further action necessary at this time.				
07/06/2009	STREET	Residential	142	SAN MARCOS	PL	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Received a report of illegal connection at 142 San Marcos Pl. Inspection noted a sewer discharge hose leading from under garage door and into open top sewer clean out in the front drive way. Spoke with resident who stated that she would remove the hose, replace the sewer clean out cap and discontinue washing clothes at home. A re-inspection verified that corrections were made.				
07/06/2009	CATCH BASIN	Residential	160	LAS FLORES	DR	Complaint Response Enforcement
	Comments/ Action Taken:	Received a call reporting mud running into the street from 160 Las Flores and into the storm drain inlet. Inspection did not find any evidence of mud flowing from said property. No further action is necessary at this time.				
07/07/2009	STREET	Residential	501	C	ST	Unknown Discharge
	Comments/ Action Taken:	Received report of water flowing into gutter with oil, slurry and rocks at 501 C Street. Inspection found small water puddle in the gutter in front of said address resulting from irrigation overflows. No further action is necessary at this time.				
07/07/2009	STREET	Commercial	5	FOURTH	AV	Unknown Discharge
	Comments/ Action Taken:	Received report of non-storm water flowing from jack in the box at 5 Fourth Ave. Inspection noted that a sprinkler was leaking water into the gutter. Irrigation system was repaired. No further action is necessary at this time.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/08/2009	CATCH BASIN	Residential	740	F	ST	Other
	Comments/ Action Taken:	Received notification of open trash container and running water at the subject location. Inspection did not observe running water from the facility at the time of the response. Open trash container was not overfilled and is not a storm water violation. No further action required.				
07/08/2009	CATCH BASIN	Residential	120	PRESS	LN	Other
	Comments/ Action Taken:	Received notification of an open trash container at subject location. Inspection did not observe trash bin to be overflowing or an accumulation of trash at the bins location. No further action required.				
07/08/2009	CATCH BASIN	Residential	793	ENERGY	WY	Other
	Comments/ Action Taken:	Received notification of uncovered equipment and open trash container at the subject location. Inspection observed facility in good, clean condition and using proper BMPs in accordance with their Industrial Permit. Did not observe overflowing or spilled trash. No further action required.				
07/08/2009	STREET	Commercial	1855	MAXWELL	RD	Construction Debris & Waste
	Comments/ Action Taken:	Received notification of dirt tracking at subject location. Barnhardt, Inc. conducted the cleanup of the tracking using staff and a street sweeper. No further action required.				
07/08/2009	CATCH BASIN	Residential	15	J	ST	Pool Filter Discharge
	Comments/ Action Taken:	Observed discharge into the storm drain system but did not reach the catch basin. Homeowner was not aware that this is an illegal discharge. Issued verbal warning to the residence. Education material was issued. City staff conducted the cleanup utilizing a vactor crew. No further action required.				
07/09/2009	CATCH BASIN	Industrial	1888	NIRVANA	AV	Other
	Comments/ Action Taken:	Received notification of a possible storm water issue at Brenntag Pacific of uncovered pipe, equipment, large drums and possible hazardous materials. Responded to the the facility and observed the facility to be in good, clean condition. Facility is a chemical distribution facility. No storm water violations were observed. No further action is required.				
07/09/2009	CATCH BASIN	Residential	1867	CAMINO MOJAVE		Leaking Vehicle

Incident Date	Structure Category	Site Category	Address	Type of Violation
07/09/2009	CATCH BASIN	Residential	1867 CAMINO MOJAVE	Leaking Vehicle
	Comments/ Action Taken:	Received notification of an oil stain at the subject location. Inspection observed trail of oil stain or other petroleum product along a small section of Camino Mojave. Stain was already adsorbed into asphalt and did not pose a threat to water quality. Source unknown. No further action required.		
07/09/2009	CATCH BASIN	Residential	503 PROCTOR VALLEY RD	Other
	Comments/ Action Taken:	Received notification of uncovered stockpiles at the Senior Living Construction site. Inspection observed inactive large stockpiles that were properly protected with visqueen and gravel bags. Small uncovered stockpiles do not pose a threat to water quality. No further actions required.		
07/09/2009	CATCH BASIN	Municipal	1178 J ST	Other
	Comments/ Action Taken:	Received notification of water running from sprinkler system into storm drain and poor soil containment from slope located at upper parking lot of the subject location. Inspection did not observe landscape water in the curbline. Observed the slope to have old and damaged fiber roll at the toe and a buildup of leaves and sediment in the brow ditch. Parks Department replaced fiber rolls and conducted cleanup of brow ditch. No further actions required.		
07/09/2009	CATCH BASIN	Municipal	4548 SWEETWATER RD	Other
	Comments/ Action Taken:	Received notification of sprinkler water runoff at Rohr Park. Responded to subject location and did not observe irrigation runoff. No further action is required.		
07/09/2009	CATCH BASIN	Municipal	519 CARVALOS DR	Other
	Comments/ Action Taken:	Received notification of a large oil slick at the City's H Street Land Application Site. Observed hydraulic oil staining located behind K-Rail in the dirt. Inform Public Works supervisor. Public Works crew conducted the proper cleanup and disposal of the spill. No further action required.		
07/09/2009	CATCH BASIN	Municipal	707 F ST	Other
	Comments/ Action Taken:	Received notification of trash and poor soil containment at the City's Old Corp Yard. City staff responded and observed facility to be in good,clean condition with minor remnant blown trash. All stockpiles were properly contained. City staff conduct regularly schedule cleaning of the facility. No further action required.		
07/09/2009	CATCH BASIN	Residential	339 CORTE GOLETA	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/09/2009	CATCH BASIN	Residential	339	CORTE GOLETA		Other
	Comments/ Action Taken:	Received notification of residential sprinkler water in the gutter and storm drain. City staff responded to subject location and did not observe discharge due to system was not energized at the time of the response. City staff provided educational door hanger at the residence. No further action required.				
07/09/2009	CATCH BASIN	Industrial	811	ENERGY	WY	Other
	Comments/ Action Taken:	Received notification of oil stains and uncovered equipment at the subject location. City staff responded and observed minor oil staining in the gravel at the entrance to the facility. Observed engine blocks not properly stored. Spoke with owner of the facility and instructed him conduct the proper cleanup of the staining and remove the engine blocks off the ground. Owner complied and completed as instructed. No further action required.				
07/10/2009	CATCH BASIN	Residential	1907	CAMINO MOJAVE		Construction Debris & Waste
	Comments/ Action Taken:	Received notification of dirt, concrete improperly covered. Dirt on the sidewalks and in the street and no silt fencing in place during grading. Responded to subject location and observed private landscaping company conducting work at the private residence. Did not observe an immediate threat to water quality and no potential of a discharge. All BMPs were in place and properly installed and maintained. No further action required.				
07/10/2009	CATCH BASIN	Residential	100	WALNUT	AV	Other
	Comments/ Action Taken:	Received notification of trash, tar, paint at abandoned lot at 100 Walnut. City staff responded to subject location and observed inactive construction of 2 SFD with stockpiles of trash, construction debris, old vehicles, appliances, slurry spills throughout the site. Owner conducted proper cleanup of the property. No further action required.				
07/10/2009	CATCH BASIN	Commercial	1320	EASTLAKE	PW	Other
	Comments/ Action Taken:	Received notification of oil staining in customer parking lot and sprinkler runoff at subject location. City staff responded and observed several small oil stain within the parking stalls from customer vehicles. All stains were adsorbed into the asphalt and does not pose an immediate threat to water quality. Sprinkler runoff did not enter inlet and is properly managed. No further action required.				
07/10/2009	STREET	Residential	167	PROSPECT	ST	Pool Filter Discharge
	Comments/ Action Taken:	Received report of illegal discharge at 167 East Prospect Street. Inspection noted pool filter discharge residue in the gutter leading from 167 East Prospect Street to 117 East Prospect Street. Issued homeowner verbal notice to clean and abate. Proper cleanup was conducted. No further action required.				
07/10/2009	STREET	Residential	350	G	ST	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/10/2009	STREET	Residential	350	G	ST	Unknown Discharge
	Comments/ Action Taken:	Received report of illegal discharge at 350 G Street. Inspection noted irrigation water flowing from lawn and into the street. Notified HOA president as a courtesy regarding the discharge. HOA president immediately took action to stop the sprinkler system. No further action necessary at this time,				
07/10/2009	CATCH BASIN	Residential	1458	MAX	AV	Other
	Comments/ Action Taken:	Received notification of uncovered buckets and appliances at subject location. City staff responded and did not observe any of the issues reported. Residence had only personal vehicle in driveway. No further actions required.				
07/10/2009	CATCH BASIN	Industrial	676	MOSS	ST	Other
	Comments/ Action Taken:	Received notification of overflowing trash, uncovered concrete wash buckets and litter into storm drain across the street from subject location. City staff responded and observed trash bins to be full. Trash was properly bagged. Observed buckets to be stacked and empty. No further action required.				
07/10/2009	CATCH BASIN	Commercial	676	MOSS	ST	Other
	Comments/ Action Taken:	Received notification of uncovered wood, pipes and rebar at subject location. Observed uncovered wood, pipes (scaffolding) and rebar at facility and does not pose a immediate threat to water quality. In addition site provides inlet protection utilizing fiber rolls to prevent any discharges. No further actions required.				
07/10/2009	CATCH BASIN	Industrial	997	G	ST	Other
	Comments/ Action Taken:	Received notification of trash, metal litter, spout draining without secondary containment, uncovered trash, and workers getting water from fire hydrant. City staff responded and did not observe trash, metal litter, uncovered trash from outside the facility. Fire hydrant hookup is not a storm water violation. Site is in Port District's jurisdiction. City to forward for information. No further action is required.				
07/10/2009	CATCH BASIN	Commercial	1550	FRONTAGE	RD	Other
	Comments/ Action Taken:	Received notification of uncovered trash bins, dumped trash, litter, waste at the subject location. City staff responded and did not observe reporting party's concerns. All trash cans were closed and did not locate any dumped trash, litter and dumped waste throughout the facility. No further action required.				
07/10/2009	CATCH BASIN	Industrial	1510	BROADWAY		Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/10/2009	CATCH BASIN	Industrial	1510	BROADWAY		Other
	Comments/ Action Taken:	Received notification of hazardous waste/materials, batteries and overflowing trash, uncovered trash, tires and runoff from equipment at location. City staff responded and did not observe any of the reported violations. No further action required.				
07/10/2009	CATCH BASIN	Commercial	550	MARINA	PW	Other
	Comments/ Action Taken:	Received notification of uncovered overflowing trash and uncovered pipe at location. A City staff responded and did not observe uncovered trash bins and overflowing trash. Uncovered pipe is not a storm water violation. Site is the Port District's jurisdiction. Forwarded for information. No further action is required.				
07/13/2009	STREET	Residential	602	ANITA	ST	Complaint Response Enforcement
	Comments/ Action Taken:	Received report of water puddle in front of 602 Anita St. Inspection noted the water accumulated was a result of irrigation. No further action necessary.				
07/13/2009	STREET	Residential	200	ZENITH	ST	Construction Debris & Waste
	Comments/ Action Taken:	Received report of illegally discharged oil and plaster in the alley behind 220 Zenith. Inspection could not find any evidence of oil or plaster discharge. No further action is necessary at this time.				
07/14/2009	STREET	Commercial	646	E	ST	Other
	Comments/ Action Taken:	Received notification of Southwest Recycling behind IGA of customers dumping out the bottles and cans onto the parking lot. City staff responded and observed significant staining and some pooling of liquid at the recycling site location. Spoke with owner that they have a mop and bucket on site to prevent any additional dumping. Owner complied. Issued verbal warning. No further action required at this time.				
07/16/2009	STREET	Residential	540	OTIS	ST	Construction Debris & Waste
	Comments/ Action Taken:	Received a report of illegal dumping at 545 and 539 H street. Inspection noted that the trash bins at 545 & 539 H Street had trash and other debris scattered around the outside of the trash can. Referred to Environmental Services. No further action required.				
07/17/2009	STREET	Commercial	3358	MAIN	ST	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/17/2009	STREET	Commercial	3358	MAIN	ST	Unknown Discharge
	Comments/ Action Taken:	Received a report of tire shop at 3358 Main St. discharging water into the street. Inspection noted evidence of a discharge from the tire shop to the street. Business owner stated that shop staff released the water from a leak detection tub. Administrative citation warning SW1711 was issued along with public education materials. No further action is necessary at this time.				
07/20/2009	STREET	Commercial	100	L	ST	Unknown Discharge
	Comments/ Action Taken:	Received report of oil running down the street from 162 L Street. Oil stain on the street and in the gutter we're caused by a car accident in front of the house. Anthony Towing was contacted to cleanup remainder of the spill. Spill was cleaned. Issued verbal warning. No further action required.				
07/22/2009	STREET	Residential	847	HALECREST	DR	Complaint Response Enforcement
	Comments/ Action Taken:	Responded to report of illegal dumping by carpet cleaning. Inspection noted a discharge of water from 847 Halecrest and into the SWCS. Issued Administrative Citation SWB0722091 to Reliable Carpet & Upholstery Cleaning. No further action required.				
07/22/2009	STORM DRAIN PIPES	Residential	287	INKOPAH	ST	Pool Filter Discharge
	Comments/ Action Taken:	Responded to report of a pool discharge into a City easement at subject address. Inspection observed evidence of discharge of pool filter. Spoke to homeowner and issued a verbal warning regarding the discharge along with public education materials. No further action is necessary at this time.				
07/23/2009	STREET	Commercial	655	BROADWAY		Complaint Response Enforcement
	Comments/ Action Taken:	Received report of illegally dumped furniture behind Chula Vista Carpet Cleaning at 655 Broadway. Inspection noted furniture, trash and debris scattered at rear alley next to trash bins. Administrative citation #SW B0619091 was issued and withdrawn due to agreement with the business owner who will conduct cleanup. No further action required.				
07/24/2009	STREET	Residential	1984	PINON HILLS	RD	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of illegal dumping of tile cutting slurry at 1984 Pinon Hills. Inspection noted a red discharge from the home into SWCS. Due to no contact with resident city crews conducted cleanup with full cost recovery. No further action required.				
07/28/2009	STREET	Residential	139	MINOT	AV	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/28/2009	STREET	Residential	139	MINOT	AV	Other
	Comments/ Action Taken:	Received notification of trash, debris, paints and refrigerators behind the subject location property. City staff responded and observed back of property with multiple piles of trash, debris, paints, camper and inoperable vehicles. No storm water violations were observed. Case to be referred to Code Enforcement. No further action required.				
07/28/2009	STREET	Commercial	1725	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	Received notification of black water being discharged from subject location. City staff responded and observed that sites sump clogged and overflowed into street. Did not enter SWCS. Business conducted proper cleanup. Issued verbal warning. No further action required.				
07/29/2009	STREET	Residential	15	J	ST	Leaking Vehicle
	Comments/ Action Taken:	Received notification from City staff of a vehicles transmission failure at the subject location. City staff responded to subject location and observed box truck with blown transmission and fluid leak on east J and Carla Ave. Responsible party immediately contained and cleaned up spill utilizing vehicle's spill kit. No further actions are required at this time.				
08/03/2009	CATCH BASIN	Commercial	1322	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of illegally dumped oil into the storm drain at 1328 Third Ave. Inspection noted an oil filter drained over the grate and some oil inside the catch basin. Source unknown. Cleanup conducted. No further action required.				
08/04/2009	STREET	Commercial	1451	H	ST	Power Washing
	Comments/ Action Taken:	Received notification of illegal power washing at Bonita Point Plaza. City Staff confirmed that GMI was responsible party. Issued Admin Citation and educational materials. No further action required.				
08/04/2009	STREET	Residential	502	WOODLAWN	AV	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Received a report of illegal discharge at 502 Woodlawn Ave. Inspection found wash water and sewage leading from an unsecured sewage clean out cap and into the SWCS. City Crews cleaned all public sections of the SWCS. A full cost recovery invoice will be issued. Administrative Citation #SW B0804091 was issued. No further action necessary at this time.				
08/05/2009	STREET	Commercial	800	PASEO DEL REY		Unknown Discharge

Incident Date	Structure Category	Site Category	Address	Type of Violation
08/05/2009	STREET	Commercial	800 PASEO DEL REY	Unknown Discharge
	Comments/ Action Taken:	Received e-mail report from the Mayor's assistant of a potential kerosene discharge in the vicinity of the intersection of East H Street and Paseo Del Rey. Inspection of all areas in the vicinity did not find evidence of kerosene or any violation. No further action is necessary at this time.		
08/05/2009	STREET	Residential	1400 NACION AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Received report of a white substance discharged from 1410 Nacion and into the SWCS. Inspection found white substance leading from subject address in the gutter ending at 1420 Nacion. Resident cleaned his pool's filter into the SWCS. Issued verbal warning, Cleanup conducted by resident. No further action required.		
08/06/2009	STREET	Commercial	1295 THIRD AV	Other
	Comments/ Action Taken:	Received notification of Turf Pros Landscaping blowing debris into the street at the subject location. Conducted phone investigation with Turf Pros in reference to the complaint. Issued verbal warning to ensure that BMPs are being followed. No further action required.		
08/07/2009	STREET	Commercial	725 MAIN ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to complaint of concrete saw cutting with no BMPs and allowing discharge into the SWCS. Inspection noted that property owner's staff saw cutting and not using BMPs causing discharge. Property management staff cleaned up the spill. Administrative citation #SW B0807092 was issued. No further action is necessary at this time.		
08/07/2009	STREET	Residential	77 L ST	Sewage Spill
	Comments/ Action Taken:	Responded to complaint of an illegal discharge at 77 East L Street. Inspection found plumber repaired sewer line and had discharged water into the SWCS. Administrative citation warning #SW B0807091 was issued. No further action necessary at this time.		
08/10/2009	STREET	Residential	1548 APACHE DR	Washing Vehicle in Street
	Comments/ Action Taken:	Received e-mail report of excessive car washing by neighbors in the vicinity of 1548-B Apache Dr. No violation was observed at time of inspection. Issued educational materials to residences. No further action required.		
08/12/2009	STREET	Residential	1095 OSAGE AV	Sewage Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/12/2009	STREET	Residential	1095	OSAGE	AV	Sewage Spill
	Comments/ Action Taken:	Received compliant call regarding a potential sewage discharge at 1095 Osage Ave. Inspection found evidence of a spill in the street in front of said address. Spill caused by Allied Waste. Cleanup conducted. No further action is necessary at this time.				
08/14/2009	STREET	Residential	178	FOURTH	AV	Unknown Discharge
	Comments/ Action Taken:	Received compliant call regarding an unknown discharge at 178 Fourth Ave. Inspection found irrigation discharge at the curb outlet caused by a leaky irrigation valve at the rear section of the complex. Repairs made. No further action is necessary at this time.				
08/14/2009	STREET	Commercial	4498	BONITA	RD	Complaint Response Enforcement
	Comments/ Action Taken:	Received complaint call regarding saw cutting without using BMPs at 4498 Bonita Rd.. Inspection found evidence of small slurry discharge in the gutter. Concrete saw operator immediately began mopping slurry. Issued verbal warning. No further action necessary at this time.				
08/17/2009	STREET	Residential	1195	CORTE DE CERA		Paint Discharge
	Comments/ Action Taken:	Received report of paint in the gutter in front of 1195 Corte de Cera. Observed paint was flowing out from the curb outlet. Resident washing paint brushes in the rear yard drain. Issued verbal warning regarding violation. Cleanup conducted. No further action required.				
08/19/2009	STREET	Residential	967	VIA LUNA		Paint Discharge
	Comments/ Action Taken:	Received report of a paint discharge from 967 Via Luna. Inspection noted red paint from curb outlet leading to the gutter and then near the storm drain inlet at Paseo Ranchero. Resident conducted cleanup. Issued verbal warning. No further action required.				
08/19/2009	STREET	Commercial	1481	BRANDYWINE	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of concrete slurry in the gutter at 1481 Brandywine Ave. Inspection did not find evidence of a violation. No further action is necessary at this time.				
08/20/2009	STREET	Commercial	1613	MELROSE	AV	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/20/2009	STREET	Commercial	1613	MELROSE	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of concrete slurry flowing in the gutter from 1613 Melrose Ave. Inspection noted that wash water from a concrete job was being allowed to discharge into the SWCS. Administrative Citation #SW B0820091 was issued to Ape construction. No further action is necessary at this time.				
08/20/2009	STREET	Commercial	4011	BONITA	RD	Unknown Discharge
	Comments/ Action Taken:	Received notification of an unknown discharge coming from the Jack In the Box leading onto the walking trail behind the facility. City staff responded and observed a storm water drop inlet that discharges into the landscaped area. No violation was observed. No further action required.				
08/21/2009	STREET	Commercial	2765	MAIN	ST	Unknown Discharge
	Comments/ Action Taken:	Received notification from County HAZMAT of Hydrochloric Acid spill at subject address. Business owner claimed the discharge was food additives waste water. Discharge did not reach MS4 inlets.				
08/24/2009	STREET	Residential	1427	LAUREL	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of green substance in the gutter from 1407 Laurel Ave. Investigation noted that resident discharged contaminated pool water. Issued verbal warning. Resident cleaned algae buildup in SWCS. No further action required.				
08/24/2009	STREET	Residential	263	DEL MAR	AV	Unknown Discharge
	Comments/ Action Taken:	Received report of potential discharge into the SWCS from subject address. Inspection found no evidence of spill. No further action is necessary at this time.				
08/25/2009	STREET	Commercial	337	THIRD	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report from business owner that someone had left some cooking grease in the trash area behind his business (California Sushi). Observed grease spill. Cleanup conducted by business owner. Issued verbal warning. No further action required.				
08/26/2009	STREET	Residential	795	HILLTOP	DR	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/26/2009	STREET	Residential	795	HILLTOP	DR	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Received a report of oil or grease spilled on the street and the sidewalk at the south east corner of the intersection of Hilltop Drive and Telegraph Canyon Rd. Inspection found that tar had been spilled on the sidewalk and in the street at above mentioned location. Referred to street crews for clean-up. No further action necessary at this time.				
08/27/2009	STREET	Commercial	317	QUINTARD	ST	Unknown Discharge
	Comments/ Action Taken:	Received report of mud and paint thinner running into street and gutter from 317 Quintard Street. Inspection found no evidence of thinner in the SWCS. Mud caused by Jack in the Box Issued verbal notice to Jack in the Box . Cleanup conducted. No further action required.				
08/31/2009	STREET	Residential	696	PORT CHELSEA		Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from 696 Port Chelsea. Inspection found white residue and water flowing from the curb drain at the subject address. Discharge due to pool cleaning. Issued verbal warning. Cleanup conducted. No further action required.				
08/31/2009	STREET	Residential	1343	LONG VIEW	DR	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of a neighbor at 1339 Long View Drive working on vehicles in the street, allowing oil to spill in the street and parking leaky vehicles in the street. Violation verified. Resident conducting oil changes in street. Resident conducted cleanup. Verbal warning issued. No further action required.				
08/31/2009	STREET	Commercial	1282	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a discharge at Karina's restaurant at 1282 Third Ave. Inspection found some run off from washing activity at front patio. Issued administrative citation warning #SW1712. Compliance met. No further action required.				
09/01/2009	STREET	Commercial	348	NOVA	WY	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of concrete slurry flowing from 346 Nova Way. Inspection noted some flow that had undermined the existing BMPs implemented by the concrete pump operator. Issued verbal notice. Cleanup conducted. No further action required.				
09/02/2009	STREET	Commercial	200	J	ST	Construction Debris & Waste

Incident Date	Structure Category	Site Category	Address			Type of Violation
09/02/2009	STREET	Commercial	200	J	ST	Construction Debris & Waste
	Comments/ Action Taken:	Responded to report of sand dumped in front of 202 East J street. 9/2/09---Responded to report of sand dumped in front of 202 East J street. Inspection found approximately 3 yards of sand in the SWCS. Sand removed. No further action is necessary at this time.				
09/04/2009	STREET	Residential	501	ANITA	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to a call of power washing without BMPs at 501 Anita Street space 140. Inspection found small traces of water in the SWCS not traceable to any address. No evidence of violation was present.				
09/09/2009	STREET	Residential	1046	PLAZA CAPOTE		Leaking Vehicle
	Comments/ Action Taken:	Responded to complaint regarding a leaky vehicle at subject address. Inspection found a fresh oil stain but no van. Left door hanger with note to call inspector. No further action required.				
09/09/2009	STORM CHANNEL	Municipal	780	HILLTOP	DR	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to call of illegal dumping of paint into the storm channel at Hilltop Park. Inspection did not find any evidence of a discharge or any other violation. No further action is necessary at this time.				
09/11/2009	STREET	Residential	734	BROOKSTONE	RD	Unknown Discharge
	Comments/ Action Taken:	Responded to report of water coming from 734 Brookstone Rd. After investigating it was found to be a fountain overflow discharge. Fountain discharges are not exempt by CVMC 14.20. Fountain repaired. Issued admin citation. No further action required.				
09/11/2009	STREET	Residential	3211	MAIN	ST	Leaking Vehicle
	Comments/ Action Taken:	Received report of an illegal discharge from a motor home into the SWCS at 3211 Main Street. Inspection found that the motor home had been leaking sewage into the SWCS. Notified the motor home owner of the spill and issued administrative citation #SW1725. Cleanup conducted. No further action is necessary at this time.				
09/11/2009	STREET	Residential	144	ORANGE	DR	Construction Debris & Waste

Incident Date	Structure Category	Site Category	Address			Type of Violation
09/11/2009	STREET	Residential	144	ORANGE	DR	Construction Debris & Waste
	Comments/ Action Taken:	Received notification of construction debris at residence. Inspection of this site did not find any storm water violations.				
09/14/2009	STREET	Residential	41	I	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at Church at 41 I Street. Inspection noted that an irrigation valve had broken and was discharging into the SWCS. Valve repaired. No further action required.				
09/15/2009	STREET	Residential	68	BONITA	RD	Complaint Response Enforcement
	Comments/ Action Taken:	Received notification of trash at subject location overflowing on trash days. City staff responded to subject location and observed trash and debris in curbline and on sidewalk. Could not determine that the trash is from residents trash bins. No further action is required at this time.				
09/15/2009	STREET	Residential	1255	TRINIDAD COVE		Leaking Vehicle
	Comments/ Action Taken:	Received notification of a oil spill at the corner of Trinidad Cove and Eastlake Parkway. City staff responded and observed approx one gallon of transmission fluid on the sidewalk and in the curbline. Street crew responded and conducted the cleanup of the spill. No further action is required.				
09/16/2009	CATCH BASIN	Commercial	1206	BROADWAY		Possible Dumping into Catch Basin
	Comments/ Action Taken:	Received notification of landscaper blowing trash/debris into the street. City staff responded and did not observe any grass or debris into the curbline. No further action is required.				
09/16/2009	CATCH BASIN	Residential	336	C	ST	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Received notification of Landscaper blowing debris into catch basin. Issued verbal notice to clean, abate and train staff to sweep up grass clippings. No further action is necessary at this time.				
09/18/2009	CATCH BASIN	Residential	557	VISTA MIRANDA		Possible Dumping into Catch Basin

Incident Date	Structure Category	Site Category	Address	Type of Violation
09/18/2009	CATCH BASIN	Residential	557 VISTA MIRANDA	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to a report of oil spilled into the SWCS. Inspection found no evidence of an oil spill or discharge. No further action necessary at this time.		
09/18/2009	STREET	Residential	227 CAMINO VISTA REAL	Pool Filter Discharge
	Comments/ Action Taken:	Responded to an e-mail report of a pool discharge eroding a dirt slope and resulting in mud into the SWCS. Inspection found that a sprinkler line had broken and was discharging water onto a dirt slope resulting in a sediment discharge into the SWCS. All corrections have been completed. No further action is necessary at this time.		
09/23/2009	STREET	Residential	1459 HILLTOP DR	Unknown Discharge
	Comments/ Action Taken:	Responded to report of unknown discharge from 1459 Hilltop Dr. Inspection found a legal discharge of clear pool water onto the SWCS at a moderate rate. No further action is necessary at this time.		
09/25/2009	STREET	Residential	1347 SILVER SPRINGS DR	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a resident sweeping up white powder into the SWCS at 1347 Silver Springs Dr. Inspection noted resident sweeping up white filter residue from the street left over as a result of cleaning a pool filter in the street. Compliance met. No further action required.		
09/28/2009	CATCH BASIN	Residential	972 SAINT GERMAIN RD	Unknown Discharge
	Comments/ Action Taken:	Received report of a constant water discharge from 972 St. Germain Rd. Water source is from fountain. Resident conducted repairs. No further action required.		
10/01/2009	STREET	Commercial	865 THIRD AV	Unknown Discharge
	Comments/ Action Taken:	Responded to call regarding illegal discharge by contractor. Inspection noted a non-storm water discharge from an accidental waterline break as a result of dig outs made by Cox cable contractor. Sweetwater Authority was on the scene and immediately took control of the incident. Repairs made. No further action required.		
10/05/2009	STORM WATER	Residential	862 FIFTH AV	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
10/05/2009	STORM WATER	Residential	862	FIFTH	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Received report of neighbor at 862 Fifth Ave. leaving an unattended oil container to discharge oil onto the driveway. Inspection noted that an oil change pan near the garage door had leaked some oil onto the driveway. Resident conducted cleanup. No further action required.				
10/12/2009	STREET	Commercial	1004	THIRD	AV	Power Washing
	Comments/ Action Taken:	Observed Rally's Hamburger personnel conducting washing operations of trash enclosure eating areas and drive-thru without using BMPs. Instructed staff to ensure that no wash water is discharged into storm drain system. Staff will use mop and buckets to wash down trash enclosure. No further action is required.				
10/13/2009	STREET	Commercial	649	MELROSE	AV	Construction Debris & Waste
	Comments/ Action Taken:	Received e-mail from Tom Adler (Development Services) about erosion potential at 649 Melrose. BMPs were implemented. No further action required.				
10/13/2009	STREET	Residential	34	L	ST	Accident/Spill
	Comments/ Action Taken:	Received call of a hydraulic oil spill. Observed ponded hydraulic oil in the gutter on E L Street west of Agua Tibia. Called maintenance crews who arrived at the location and cleaned up the oil spill. No further action required.				
10/15/2009	STREET	Residential	126	L	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of an illegal discharge at 126 L Street. Inspection noted that there was a discharge mix of oil/grease/ water from a storm drain outlet at 88 L Street down to 899 Second Ave. Responsible party conducted cleanup. Issued Admin Citation. No further action required.				
10/19/2009	STREET	Residential	200	JAMUL	AV	Leaking Vehicle
	Comments/ Action Taken:	Received notification via email of leaking construction equipment at subject address. City staff responded and observed SRM Contracting Paving equipment located and staged at the 200 block of Jamul Av. Leaks to be cleaned and equipment removed. No further action required.				
10/23/2009	STREET	Residential	813	HUMPHREY	PL	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
10/23/2009	STREET	Residential	813	HUMPHREY	PL	Leaking Vehicle
	Comments/ Action Taken:	Responded to call regarding leaky vehicle at 813 Humphrey Place. Spill was cleaned. No further action required.				
10/27/2009	STORM CHANNEL	Residential	62	PEPPER TREE	RD	Sewage Spill
	Comments/ Action Taken:	Received notification from Dispatch of a private sewer pump station failing and causing sewage to overflow into the storm drain system. City staff arrived on-scene and placed a dirt berm around small containment area to prevent further discharge. Repairs made to failed pump and City Vac Truck crews conducted the cleanup. No further action is required.				
10/29/2009	STREET	Residential	431	NAPLES	ST	Construction Debris & Waste
	Comments/ Action Taken:	Responded to report of contractor stockpiling concrete and gravel on the street at the northwest corner of the intersection of Naples and Osage. Issued a written order for the contractor to remove all stockpiles from the street and that the contractor has corrected violation. No further action is necessary at this time.				
10/29/2009	STREET	Residential	200	SURREY	DR	Construction Debris & Waste
	Comments/ Action Taken:	Responded to report of pool contractor discharging gunite residue into the SWCS. Inspection found that the pool contractor was using inadequate BMPs and had allowed gunite residue to enter the storm drain inlet. City crews conducted cleanup. Administrative citation #SW1715 was issued. No further action is necessary at this time.				
11/02/2009	STREET	Commercial	3131	MAIN	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of lunch truck parked inside the property at 3031 Main Street was discharging sewer water into the SWCS. Inspection found no evidence of a discharge or violation. No further action required.				
11/02/2009	STORM CHANNEL	Commercial	1137	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	Received photo evidence of a non-storm water discharge from All American Car wash at 1137 Broadway and into the adjacent channel and into the SWCS. Issued administrative citation #SW B1031092. No further action required.				
11/02/2009	STREET	Residential	577	OXFORD	ST	Sewage Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
11/02/2009	STREET	Residential	577	OXFORD	ST	Sewage Spill
	Comments/ Action Taken:	Received photo evidence of a sewer discharge from 577 Oxford Street and into the SWCS. City responded and cleaned up spill. Issued administrative citation #SW B1031091. No further action is necessary at this time				
11/04/2009	CATCH BASIN	Residential	4300	ALLEN SCHOOL	LN	Unknown Discharge
	Comments/ Action Taken:	Responded to report of unprotected slope at 4300 Allen School Lane. Inspection found a slope at the west side of the school adjacent tot the parking lot with signs of erosion. Issued a compliance report in lieu of an administrative citation. Repairs made. No further action required.				
11/04/2009	STORM CHANNEL	Commercial	600	PALOMAR	ST	Follow Up Inspection
	Comments/ Action Taken:	Inspection confirmed trash and debris in the catch basin. Insufficient evidence. No further action is necessary at this time. Responded to a report of trash and debris being dumped into a storm drain catch basin by unknown party.				
11/04/2009	STREET	Residential	1325	SANTA RITA	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to complaint of an illegal discharge. City crews had contained and remediated the spill. Issued Admin citation to responsible party. No further action required.				
11/05/2009	CATCH BASIN	Residential	981	PASEO DEL PASO		Unknown Discharge
	Comments/ Action Taken:	Responded to report of white substance in the gutter at subject address, Inspection found dry traces of white powder from home, in the gutter and two houses down. Cleanup conducted. Issued verbal warning. Compliance met.				
11/06/2009	STORM CHANNEL	Commercial	945	OTAY LAKES	RD	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of a possible non-storm water discharge at 945 Otay Lakes Rd. Inspection found that evidence of oil/grease and toilet paper in and around the private catch basin at the property. Issued administrative citation. No further action required.				
11/09/2009	STORM DRAIN PIPES	Commercial	304	H	ST	Possible Dumping into Catch Basin

Incident Date	Structure Category	Site Category	Address			Type of Violation
11/09/2009	STORM DRAIN PIPES	Commercial	304	H	ST	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of contractor discharging into the SWCS. Inspection found evidence of wash water on sidewalk and parking lot. Issued administrative citation #SW1716. No further action necessary.				
11/09/2009	STREET	Commercial	1800	MAXWELL	RD	Unknown Discharge
	Comments/ Action Taken:	Responded to report of construction contractor discharging into SWCS. Inspection noted that contractor was saw cutting concrete and was using BMPs. Issued verbal warning to ensure continued compliance. No further action required at this time.				
11/10/2009	STORM CHANNEL	Residential	555	TRAILRIDGE	DR	Construction Debris & Waste
	Comments/ Action Taken:	Received report of illegally dumped dirt by resident into canyon. Dirt cleaned up by resident. Issued admin citation. No further action required.				
11/10/2009	STREET	Commercial	393	THIRD	AV	Power Washing
	Comments/ Action Taken:	Responded to report of illegal discharge by contractor working for La Bella's Pizza Garden. Evidence of discharge confirmed by La Bellas. Compliance met. Issued admin citation. No further action required.				
11/10/2009	STREET	Residential	735	FIFTH	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of soapy water from 730 fifth Ave, and into the SWCS. Inspection could not find any evidence of a discharge. No further action required.				
11/13/2009	STREET	Residential	1395	MELROSE	AV	Dirt/Sediments
	Comments/ Action Taken:	Received report of lack of construction BMPs at subject address. All BMPs were installed. Issued verbal warning. No further action required.				
11/13/2009	STORM CHANNEL	Commercial	88	L	ST	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
11/13/2009	STORM CHANNEL	Commercial	88	L	ST	Other
	Comments/ Action Taken:	Received notification of lack of maintenance of private storm channel. Storm channel was cleaned and is being maintained. BMPs installed along slope. No further action required.				
11/18/2009	STREET	Commercial	1650	INDUSTRIAL	BL	Leaking Vehicle
	Comments/ Action Taken:	Received notification of a leaky vehicle at subject company. Vehicle was repaired and oil was properly cleaned up. No further action is required.				
11/18/2009	STREET	Residential	45	FOURTH	AV	Accident/Spill
	Comments/ Action Taken:	Received notification from PD Dispatch of an oil spill on Fourth Ave at C from vehicle that blew oil pan. Street Department conducted the cleanup utilizing absorbent and sand. No further action is required.				
11/19/2009	STREET	Residential	330	G	ST	Sewage Spill
	Comments/ Action Taken:	Responded to report of violation at 330 G Street. Inspection noted that a discharge into the SWCS. Issued administrative citation. After discussion with staff citation was removed. No further action is necessary.				
11/19/2009	CATCH BASIN	Residential	1048	STRAWBERRY VALLEY	DR	Unknown Discharge
	Comments/ Action Taken:	Received notification of a continuous flow of water discharging into brow ditch at the intersection of La Media and Telegraph Canyon. Upon further investigation it was determined to be ground water. No further action required.				
11/24/2009	STREET	Commercial	1177	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	Received notification of a discharge at subject location. Inspection noted a non storm water discharge was found at 1177 Broadway Suite 14 and 15 at Pescasos y Mariscos Hectors Inc. Informed of proper BMPs. Administrative Citation #SW B1123091 was issued. No further action is necessary.				
11/30/2009	CATCH BASIN	Residential	1998	MOSS LANDING	AV	Carpet Cleaning

Incident Date	Structure Category	Site Category	Address			Type of Violation
11/30/2009	CATCH BASIN	Residential	1998	MOSS LANDING	AV	Carpet Cleaning
	Comments/ Action Taken:	Received notification from dispatch of a carpet cleaning company discharging wash water into the storm drain. Observed soapy water on the driveway. City vactor was on scene doing regular maintenance and prevented the discharge from entering the storm drain. Broken solution bucket inside the vehicle. No further action is required.				
11/30/2009	STREET	Residential	1532	CONNOLEY	AV	Leaking Vehicle
	Comments/ Action Taken:	Received notification of a vehicle leaking transmission fluid onto subject address driveway. City staff responded and observed a pickup truck leaking transmission fluid onto the driveway and a portion of the spill was at the curbline. Homeowner will use dry methods to cleanup remainder of spill. No further action is required at this time.				
12/01/2009	STREET	Residential	488	DAVIDSON	ST	Sewage Spill
	Comments/ Action Taken:	Responded to report of sewage spill at 488 Davidson. Inspection noted sewage had flowed from an uncapped clean out and into the SWCS. City staff cleared the obstruction (tree roots) and restored flow. An administrative citation #SW B121091 was issued to responsible party. No further action is necessary.				
12/01/2009	STORM CHANNEL	Residential	21	FOURTH	AV	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Received phone call from City Staff that resident cut branches that fell into storm channel. Not a storm water issue. Referred to appropriate section.				
12/02/2009	STREET	Residential	2191	HONEYBEE	ST	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of leaking vehicle at subject address. Oil stain had been rubbed with oil absorbent and removed. The vehicles was removed from the street and parked in his driveway with an oil pan underneath. No further action required at this time.				
12/03/2009	STREET	Commercial	2710	OTAY LAKES	RD	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of broken down vehicle leaking gear oil in parking lot of Salt Creek Park. Inspection found that a white pick up truck had broken axle, lost a wheel and was stuck in the parking lot. Oil absorbent was spread on the spill, rubbed in and swept up. No further action is necessary at this time.				
12/03/2009	STREET	Commercial	902	THIRD	AV	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
12/03/2009	STREET	Commercial	902	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Inspection found that oil/grease had accumulated underneath a blue metal dwelling and was seeping into the dirt area adjacent. Administrative citation #SW1721 was issued. Compliance met. No further action required. Responded to a report of oil seeping from subject address into SWCS.				
12/04/2009	STORM DRAIN PIPES	Commercial	1216	THIRD	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of illegal discharge by construction contractor at 1216 Third Ave, Inspection found that concrete slurry had been washed into the SWCS at Oxford Street. City crews conducted cleanup. Administrative citation #SW1723 was issued to responsible party. No further action required.				
12/15/2009	CATCH BASIN	Residential	93	LION	CI	Sewage Spill
	Comments/ Action Taken:	12/15/09---Responded to report of sewer discharge from sewer line within the common area at the Lion Circle community and into the SWCS. Observed sewage overflow at manhole. City crew conducted cleanup. Admin citation issued to HOA. No further action required.				
12/16/2009	STORM CHANNEL	Residential	309	PINE	CT	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of tree limbs dumped behind 309 Pine Ct. Inspection noted large amount of tree limbs dumped into the storm channel behind subject address. Homeowner issued verbal warning to have the tree limbs removed. Compliance met. No further action required.				
12/22/2009	STORM DRAIN PIPES	Industrial	2631	FAIVRE	ST	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to complaint regarding illegal dumping at 2631 Faivre Street. Inspection found no evidence of violation present. No further action required.				
01/05/2010	STREET	Commercial	77	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	Responded to report of illegal dumping of sewage by lunch truck into the SWCS. Inspection noted a grey sewage water had been dumped in a grassy area near the sidewalk. Issued administrative citation #SW1728. No further action is necessary at this time.				
01/05/2010	CATCH BASIN	Residential	238	L	ST	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
01/05/2010	CATCH BASIN	Residential	238	L	ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of illegal discharge into the SWCS. Inspection noted concrete slurry in the SWCS. Administrative Citation warning #SW1729 was issued. Compliance met. No further action is necessary at this time.				
01/05/2010	STREET	Residential	1128	CALLE DE DAMASCO		Unknown Discharge
	Comments/ Action Taken:	Responded to report of grease spilled into the SWCS. Inspection found grease had flowed out of the curb outlet at 1152 Calle De Demasco. Resident conducted proper cleanup. No further action required.				
01/06/2010	STREET	Industrial	4555	OTAY VALLEY	RD	Accident/Spill
	Comments/ Action Taken:	Responded to report of sludge in the street at the intersection of 805 and Main Street. Inspection noted a strip of sludge approximately 60 feet long and 2 to 3 feet wide in the middle of the intersection. City crew conducted cleanup. No further action required.				
01/07/2010	STREET	Residential	2879	BLUE RIDGE	CT	Other
	Comments/ Action Taken:	Received notification via email from the RWQCB to investigate of a compliant of water running continuously in the gutter, City staff responded and observed that the resident is overwatering. Posted educational letter and door hanger at the residence. No further action are required at this time.				
01/11/2010	STREET	Residential	160	JAMUL	AV	Pool Filter Discharge
	Comments/ Action Taken:	Responded to report of a discharge from curb drain at 160 Jamul. Inspection noted that there had been a discharge from the back yard and out into the street/gutter at the curb drain. Broken pool pump. Repairs made. No further action required.				
01/12/2010	STORM CHANNEL	Residential	840	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a discharge from an apartment complex. Inspection noted that there was a discharge of irrigation water flowing from the Wells Fargo bank at 826 Third Ave. Repairs made. No further action required.				
01/12/2010	STREET	Residential	779	ADA	ST	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
01/12/2010	STREET	Residential	779	ADA	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of vehicle leaking oil in the street at 794 Ada Street. Inspection noted a dump truck and trailer parked in the street in front of the subject address. Evidence that the truck had leaked oil was present. Cleanup conducted. Administrative Citation #SW1730 was issued. No further action is necessary.				
01/13/2010	STREET	Residential	1566	CUMBRE VIEW		Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from 1566 Cumbre View. Observed dry blue staining. Homeowners stated that the blue substance is a dye that accident spilled in their back yard and drained out to the front curb drain. Conducted cleanup. Issued admin citation. No further action required.				
01/20/2010	STREET	Residential	1155	VIA MONADA		Leaking Vehicle
	Comments/ Action Taken:	Received voice mail of an oil spill in front of subject address. No violation observed. No further action required.				
01/29/2010	STREET	Residential	1948	CLEARBROOK	DR	Dirt/Sediments
	Comments/ Action Taken:	Received notification of mud, sediment discharge from subject address. Inspection noted that large amounts of sediment/ dirt had flowed into the curb gutter and street from the property adjacent to 1941 Clearbrook Dr. Responsible party conducted cleanup. Issued admin citation. No further action required.				
02/01/2010	STREET	Residential	1000	CORTE MARIA	AV	Construction Debris & Waste
	Comments/ Action Taken:	Responded to report of an illegal discharge at 1008 Corte Maria. Inspection noted that the contractor Paving Stone of San Diego had allowed mud and sand to flow into the street and gutter Contractor conducted cleanup. Administrative citation was issued. No further action is necessary at this time.				
02/02/2010	STREET	Residential	1393	LONG VIEW	DR	Dirt/Sediments
	Comments/ Action Taken:	Responded to complaint regarding mud running from subject address. Inspection noted small amounts of gravel that had eroded from the walking trail adjacent to the subject address. Cleanup conducted and BMPs are in place. No further action required.				
02/02/2010	STREET	Residential	223	H	ST	Possible Dumping into Catch Basin

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/02/2010	STREET	Residential	223	H	ST	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of an illegal discharge by a plumber at 223 H Street. Inspection noted clear water flowing from a hose and into the SWCS. Water was the result of rain water accumulation being pumped. Administrative citation warning issued. No further action is necessary at this time.				
02/03/2010	CATCH BASIN	Residential	599	PORTSMOUTH	DR	Washing Vehicle in Street
	Comments/ Action Taken:	Responded to report of resident washing engine parts at subject address. No evidence of any discharge. No further action is necessary at this time.				
02/05/2010	STREET	Residential	1458	LANTANA	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a discharge from 1458 Lantana. Inspection noted a dried trail of rust laden anti-freeze from subject address down stream to 585 Rivera. Homeowner conducted cleanup. No further action is necessary at this time.				
02/05/2010	STREET	Residential	737	COOPER	RD	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of vehicle leaking oil onto the street at 735 Cooper St.. Inspection noted a brown Ford station wagon with small oil spots underneath it. Owner implemented BMPs. No further action is necessary at this time.				
02/08/2010	STREET	Residential	467	CORTE CALYPSO		Dirt/Sediments
	Comments/ Action Taken:	Responded to report of mud slide at Proctor Valley Rd. and Valley Ridge St. Observed erosion on walking trail with discharge into SWCS. HOA implemented proper BMPs. Issued admin citation. No further action required.				
02/08/2010	STREET	Residential	1337	TIERRA BONITA	PL	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of oil flowing from the subject property and into the SWCS. Inspection found no evidence of any oil spills or stains. No further action required.				
02/08/2010	STREET	Commercial	4555	OTAY VALLEY	RD	Dirt/Sediments

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/08/2010	STREET	Commercial	4555	OTAY VALLEY	RD	Dirt/Sediments
	Comments/ Action Taken:	Responded to complaint of mud flowing into the SWCS at the underpass at I805 and Main St. Observed discharge from CALTRANS right of way. CALTRANS conducted cleanup. No further action required.				
02/08/2010	STREET	Commercial	751	OTAY LAKES	RD	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to contractor saw cutting and creating a large dust cloud. Inspection found contractor drilling core samples and not using BMPs. Allowing mud and water to enter the SWCS. BMPs in place. Issued Administrative Citation. No further action is necessary at this time.				
02/10/2010	STORM CHANNEL	Municipal	4548	SWEETWATER	RD	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of silt being discharged from a county property into ROHR park near gate B. Inspection noted that the drainage for the area had been altered and that as a result large amounts of sediment were being discharged into the park. Determined to be Parks responsibility. No further action required.				
02/10/2010	STREET	Residential	751	OTAY LAKES	RD	Washing Vehicle in Street
	Comments/ Action Taken:	City Staff observed illegal carwash at Bonita Vista High School. Instructed to use proper BMPs and prevent discharge for entering storm drain. Issued admin citation. No further action required.				
02/10/2010	STREET	Residential	192	EL CAPITAN	DR	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of resident stockpiling rubble in the SWCS. Inspection noted concrete rubble stockpiled in the street. Issued verbal warning to homeowner to remove and sweep the SWCS. All rubble removed and area swept clean. No further action is necessary at this time.				
02/10/2010	CATCH BASIN	Residential	1485	ROBLES	DR	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of an illegal discharge by a carpet cleaner. Inspection found We Care Carpet cleaning discharging into the SWCS. Issued administrative citation #SW1734. No further action is necessary at this time.				
02/11/2010	STREET	Residential	1361	THERESA	WY	Dirt/Sediments

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/11/2010	STREET	Residential	1361	THERESA	WY	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of mud, concrete and pipe in the gutter in front of the subject property. Issued verbal warning to homeowner remove and sweep the obstruction from the SWCS. Compliance met. No further action required.				
02/12/2010	STORM CHANNEL	Residential	603	MELROSE	AV	Unknown Discharge
	Comments/ Action Taken:	Received notification of several yards of soil in the brow ditch at the subject location. Resident conducted cleanup. Admin citation issued. No further action required.				
02/12/2010	STREET	Commercial	440	FOURTH	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at 440 Fourth Ave. Inspection found that the contractor was de-watering construction site directly into the storm drain inlet and not using adequate BMPs. BMPs were implemented. Admin citation issued. No further action required.				
02/15/2010	STREET	Residential	1133	VISTA	WY	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of a contractor discharging into the SWCS. Inspection found Luis and Sons Construction discharging concrete slurry into the SWCS. Contractor immediately began clean up. Issued administrative citation. No further action required.				
02/15/2010	STREET	Residential	200	SURREY	DR	Power Washing
	Comments/ Action Taken:	Responded to report of homeowner power washing sediment into the street at 200 Surrey Dr. Inspection found property owner and staff powerwash the back yard and allowing water and sediment to flow into the street, curb and gutter at the front of the home. Conducted cleanup. Issued administrative citation. No further action is necessary at this time.				
02/17/2010	STREET	Commercial	1288	BROADWAY		Sewage Spill
	Comments/ Action Taken:	Responded to report of a sewer discharge at 1288 Broadway (McDonald's.) Inspection noted evidence of a discharge along with a sewer clean out missing it's cap. The restaurant had a sewer back up and maintenance person unclogged it. Issued administrative citation. No further action is necessary at this time.				
02/19/2010	STORM DRAIN PIPES	Residential	257	THIRD	AV	Paint Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/19/2010	STORM DRAIN PIPES	Residential	257	THIRD	AV	Paint Discharge
	Comments/ Action Taken:	Responded to report of illegal dumping from 294 Third Ave. Inspection noted traces of paint from subject address into the SWCS and leading to the north east corner of F Sreet and Garret Ave. Clean up conducted. Issued Administrative Citation No further action is necessary at this time.				
02/19/2010	STREET	Commercial	262	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of grease discharged from a restaurant at 262 Third Ave. Restaurant owner conducted cleanup. Issued administrative citation. No further action required.				
02/19/2010	STREET	Residential	741	ADA	ST	Construction Debris & Waste
	Comments/ Action Taken:	Area is a CIP project. All BMPs were in place. No further action required. Received notification of stockpiles, mud, dirt on sidewalk and street at ADA and Palomar. Area is a CIP project. All BMPs were in place. No further action required.				
02/22/2010	STREET	Residential	407	WINDROSE	WY	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of mud and sediment in the street and gutter in front to subject address. Inspection noted that the open space areas maintained by City contractors had eroded and deposited dirt and sediment in the street. Contractor conducted cleanup. No further action required.				
02/23/2010	STREET	Residential	1375	MELROSE	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from subject address. Inspection found a trail of saw cutting slurry leading from subject address to open channel down stream. Administrative citation was issued. City crews and owner conducted cleanup. No further action required.				
02/24/2010	STREET	Residential	671	CANYON	DR	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a constant water discharge from 663 Canyon Dr. Inspection noted a constant flow of water from curb drain flowing downstream and across the nearby intersection. Water determined to be groundwater. No further action required.				
02/24/2010	STREET	Residential	695	HILLTOP	DR	Fuel/Oil/Gas Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/24/2010	STREET	Residential	695	HILLTOP	DR	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	City staff observed oil at the intersection. CVESD conducted cleanup for city. No further action required.				
02/24/2010	STREET	Commercial	1315	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of a discharge at 1315 Third Ave. Inspection noted that a private irrigation line was leaking. No evidence of a violation was present. No further action required at this time.				
02/25/2010	STREET	Residential	2786	SUTTER RIDGE	DR	Power Washing
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection found small amount of water in the gutter and a wet driveway, but no evidence of power washing. Issued verbal warning to homeowner proper BMPs. No further action is necessary at this time.				
02/26/2010	STREET	Residential	1253	SECOND	AV	Leaking Vehicle
	Comments/ Action Taken:	Received notification from City staff of a used motor oil spill behind 1253 Second Av at Amy St. Responded to subject address and observed a significant amount of oil from a vehicle in the storm drain system. Issued Admin citation. City crews conducted cleanup with full cost recovery. No further action required.				
02/26/2010	STREET	Residential	933	GUATAY	AV	Accident/Spill
	Comments/ Action Taken:	Received notification from City staff of an unknown discharge at the corner of Inkopah and Guatay Streets. Responded to the call. Small flow was observed in the gutter at the intersection of Guatay and Inkopah. Water was clear. SDGE hit water line. Repairs made. No further action required.				
03/01/2010	STREET	Residential	528	PALOMAR	ST	Sewage Spill
	Comments/ Action Taken:	Responded to report of a sewage spill into the street from an overflowing septic tank. Inspection found septic tank was over flowing but had not entered the street. Property owner conducted repairs. No sewage entered SWCS. Issued verbal warning. No further action required.				
03/01/2010	STREET	Residential	489	MIGUEL TRAIL	PL	Dirt/Sediments

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/01/2010	STREET	Residential	489	MIGUEL TRAIL	PL	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of a resident washing mud from vehicles into the street. Inspection found resident washing vehicles on his lawn. Minimal traces of sediment had made their way onto the sidewalk. Issued a verbal notice to clean the small amount of sediment. No further action required.				
03/01/2010	STREET	Commercial	786	THIRD	AV	Sewage Spill
	Comments/ Action Taken:	Responded to report of a sewer discharge from subject address. Inspection noted sewage flowing from an uncapped sewer clean out and into the SWCS. Issued property owner Admin citation. City crews conducted cleanup and repairs. No further actions required.				
03/03/2010	CATCH BASIN	Industrial	3521	MAIN	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection noted evidence of paint and rusty metal shavings scattered at the back door of De Vichi Metal Works and leading into the gutter. Issued Admin citation. Cleanup conducted. No further action required.				
03/03/2010	STREET	Commercial	1020	COLORADO	AV	Power Washing
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Investigation found that ABLE heating and air staff are washing off materials outdoors and allowing the wash water to enter the SWCS at the parking lot drain. Issued Administrative citation to Property owner. No further action is necessary at this time.				
03/03/2010	STREET	Commercial	1060	COLORADO	AV	Sewage Spill
	Comments/ Action Taken:	Responded to report of a battery acid discharge at subject address. Inspection found that a forklift battery had burst and discharged battery acid into the rear parking lot of the business. Cleanup conducted. Issued administrative citation. No further action required.				
03/03/2010	CATCH BASIN	Residential	1526	GRAND TETON	CT	Construction Debris & Waste
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection found three aluminum beer cans in the catch basin and no evidence of responsible party. Contacted city staff to conduct cleaning of catch basin.				
03/05/2010	STREET	Residential	1925	MAGDALENA	AV	Dirt/Sediments

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/05/2010	STREET	Residential	1925	MAGDALENA	AV	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of mud in the street at the corner of Peabody and Wolf Canyon. Inspection found that mud/sediment had eroded from a a slope belonging to Sweetwater Union High School District at Olympian High School. The mud cleaned and temporary BMPs implemented. No further action required.				
03/08/2010	STORM DRAIN PIPES	Commercial	3461	MAIN	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of potential non-storm water discharges into the SWCS at 3461 Main Street. Inspection found automotive fluid drums, engines in the trash enclosure without cover and containment. Vehicle repairs being conducted in the parking lot of Heartland Meats. Business to conduct cleanup and cease vehicle repairs. Admin citation issued. No further action required.				
03/09/2010	CATCH BASIN	Commercial	676	MOSS	ST	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of illegal discharge into the SWCS at 676-B Moss Street. Inspection noted abrasive being tracked from the subject address and into the tracking into the street curb and gutter. Cleanup conducted. An administrative citation was issued. No further action required.				
03/10/2010	CATCH BASIN	Commercial	986	BROADWAY		Dirt/Sediments
	Comments/ Action Taken:	Received notification of sediment discharge from subject property. City crews conducted cleanup with cost recovery. Issued admin citation. No further action required.				
03/12/2010	STORM DRAIN PIPES	Residential	449	MILAGROSA	CI	Sewage Spill
	Comments/ Action Taken:	Responded to report of an illegal discharge from 449 Milagrosa Circle into the storm drain. Illegal connection of the property sewer lateral to the SWCS was found. City crews conducted all repairs. Investigation completed. No further action required.				
03/16/2010	CATCH BASIN	Commercial	440	FOURTH	AV	Unknown Discharge
	Comments/ Action Taken:	Responded to report of unknown discharge from 440 Fourth Ave. Inspection found that the contractor was de-watering construction site using BMPs. Instructed to add additional BMPs. No further action required.				
03/17/2010	STREET	Residential	614	VIA MAGGIORE		Sewage Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/17/2010	STREET	Residential	614	VIA MAGGIORE		Sewage Spill
	Comments/ Action Taken:	Responded to report of a sewer discharge into the SWCS. Inspection found sewage had flowed from an uncapped sewer clean out and into the planter area and partly onto the sidewalk. City staff conducted cleanup and repairs with full cost recovery. Admin citation issued. No further action required.				
03/19/2010	STREET	Commercial	29	BROADWAY		Washing Vehicle in Street
	Comments/ Action Taken:	Responded to report of illegal discharge by Enterprise car rentals. Inspection found no evidence of a violation. Business washing cars in proper carwash bay. No further action required.				
03/22/2010	CATCH BASIN	Residential	931	BUENA VISTA	WY	Carpet Cleaning
	Comments/ Action Taken:	Rcvd notification from Dispatch of Sunset Carpet Cleaning discharging wash water into the storm drain system. City staff responded and did not observe evidence of possible discharge. No further action required.				
03/22/2010	CATCH BASIN	Commercial	555	CLAIRE	AV	Unknown Discharge
	Comments/ Action Taken:	Rcvd notification of a unknown discharge at Hilltop High School. Observed a cloudy water coming form curb outlet. Observed maintenance worker conducting cleanup of diluted floor wax from a mop bucket that spilled into a small catch basin on site. Site staff ensured that the cleanup was conducted using mops and bucket. No further action required.				
03/24/2010	STREET	Commercial	285	BROADWAY		Sewage Spill
	Comments/ Action Taken:	Received notification of sewage spill at subject location. Arrived on scene and observed approx. 5-8 gallons of sewage being contained by city staff. Property's clean out cap was missing. City crews contained spill until repairs made. Full cost recovery. No further action required.				
03/25/2010	STREET	Residential	749	NEPTUNE	CT	Unknown Discharge
	Comments/ Action Taken:	Received notification from Dispatch of a unknown spill from Allied Waste at subject location. Arrived on-scene and observed discharge of liquid from Allied Waste Green Waste vehicle. Did not enter storm drain. Spill absorbed in asphalt. No further action required.				
03/29/2010	STREET	Residential	1087	MELROSE	AV	Slulry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/29/2010	STREET	Residential	1087	MELROSE	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Rcvd notification of a concrete slurry spill at subject address. Arrived on-scene and observed Bulldog Concrete Pumping conducting operations at the address. Bulldog had all BMPs in place and did not observe spill. No further action required.				
03/30/2010	STREET	Residential	122	QUINTARD	ST	Pool Filter Discharge
	Comments/ Action Taken:	Rcvd. Report of pool discharge into adjacent property and subject location. Determined to be a waterline leak. City staff provided info to resident to repair. No further action required.				
04/02/2010	STREET	Residential	739	SAN JUAN	PL	Paint Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at 735 San Juan Place. Inspection noted traces of dry paint from a previous discharge from the subject property, into the gutter and nearing the storm drain inlet. Administrative citation was issued. Cleanup conducted. No further action required.				
04/06/2010	STREET	Residential	1450	THIRD	AV	Washing Vehicle in Street
	Comments/ Action Taken:	Responded to report of water flowing from a curb drain and into the SWCS. Observed water discharging, Determined to be a water leak on property. Repairs conducted. No further action required.				
04/06/2010	STREET	Commercial	943	OTAY LAKES	RD	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of a sewage spill from Domino's Pizza at subject address. Inspection found that sewage had been overflowing from grease trap at the west side of the building and discharging into the street, curb, and gutter at Otay Lakes Rd. Dominos contractor conducted cleanup. Admin citation issued. No further action required.				
04/07/2010	STREET	Municipal	503	PROCTOR VALLEY	RD	Unknown Discharge
	Comments/ Action Taken:	Received report of stagnant water in detention basin. Observed that orifice was clogged. City staff conducted maintenance of basin. No further action required.				
04/07/2010	STREET	Commercial	943	OTAY LAKES	RD	Sewage Spill

Incident Date	Structure Category	Site Category	Address	Type of Violation
04/07/2010	STREET	Commercial	943 OTAY LAKES RD	Sewage Spill
	Comments/ Action Taken:	Responded to report of a sewer discharge from JNC Pinoy Food Mart at 943-D Otay Lakes Rd. Inspection found two sewer clean out caps removed from clean outs, and sewage flowing into the adjacent grease trap. Sewage did not reach the SWCS. Repairs made. Admin Citation issued. No further action required.		
04/08/2010	STREET	Residential	755 MISSION AV	Leaking Vehicle
	Comments/ Action Taken:	Responded to e-mail report of a leaky vehicle and oil pan stored on the street. Observed oil stain. Homeowner cleaned and repaired vehicle. No further action required.		
04/14/2010	STREET	Residential	809 FLOYD AV	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of resident at 805 Floyd allowing oil and grease to spill in the street in front of home. Inspection noted oils stains that had been thoroughly cleaned. No further action required.		
04/14/2010	STREET	Residential	614 VIA MAGGIORE	Sewage Spill
	Comments/ Action Taken:	Report of sewer spill at subject address. Home had previous spill in the past. Observed community carwash without using BMPs. Corrections made. Issued verbal warning. No further action required.		
04/19/2010	STREET	Residential	199 BROADWAY	Washing Vehicle in Street
	Comments/ Action Taken:	Responded to report of an illegal discharge into the SWCS at Gas Depot 199 Broadway. Observed community carwash without using BMPs. Corrections made. Issued verbal warning. No further action required.		
04/20/2010	STREET	Residential	245 ORANGE AV	Paint Discharge
	Comments/ Action Taken:	Responded to report of resident discharging contaminants into the SWCS as a result of automotive body work at subject address. Inspection found no evidence of an illegal discharge nor any Body work being conducted.		
04/22/2010	STREET	Residential	2155 CORTE VISTA	Dirt/Sediments

Incident Date	Structure Category	Site Category	Address			Type of Violation
04/22/2010	STREET	Residential	2155	CORTE VISTA		Dirt/Sediments
	Comments/ Action Taken:	Responded to report of an illegal discharge from 2155 Corte Vista. Inspection found dirt/sediment was eroding from the slope at the south east section of the intersection of Eastlake Parkway and Trinidad Cove. Implemented BMPs. Compliance met. No further action required.				
04/22/2010	STREET	Residential	2015	BIRCH	RD	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of SUV leaking oil into the SWCS at 1610 Phoenix Ct. Inspection noted that the vehicle was parked on private property. Oil cleaned up. No further action required.				
04/22/2010	STREET	Residential	115	GLOVER	AV	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection noted dirt/ sediment on the street, stock piles in the public right-of-way not covered and contained, and that the construction project did not have any BMPs in place. Implemented BMPs. Issued Admin Citation. No further action required.				
04/29/2010	STREET	Residential	2574	VIEW TRAIL	CT	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection found irrigation water was being discharged from the curb drain. No further action is necessary at this time.				
04/30/2010	CATCH BASIN	Residential	569	E	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Discharge was determined to be a water line leak at property. Repairs made. No further action required.				
05/05/2010	STREET	Residential	416	L	ST	Other
	Comments/ Action Taken:	Responded to discharge of gray water from subject property. Observed illegal discharge. Code enforcement took care of enforcement. No further action required.				
05/10/2010	STREET	Residential	103	JAMUL	AV	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
05/10/2010	STREET	Residential	103	JAMUL	AV	Leaking Vehicle
	Comments/ Action Taken:	Responded to report of an illegal discharge of radiator fluid into the SWCS from subject address. Inspection noted that homeowner was allowing the discharge of radiator fluid into the SWCS as a result of automotive work. Cleanup conducted. Issued admin citation. No further action required.				
05/12/2010	STREET	Residential	4368	ACACIA	AV	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of illegally dumped tires at subject address. Inspection noted four tires placed approximately 10 feet from storm drain channel. No evidence linking the tires to the property owner could be found. City staff removed the tires. No further action required.				
05/13/2010	STREET	Residential	764	LAKE HILL	PL	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at subject address. Inspection notes that a broken irrigation line had saturated the dirt lot and water was flowing into the street, curb and gutter. BMPs were in place and prevented any dirt/ sediment from entering the SWCS. Leak repaired. No further action required.				
05/13/2010	STORM CHANNEL	Residential	1193	CARLOS CANYON	DR	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of gasoline dumped into the storm channel near the intersection of Otay Lakes Rd. And Avenida Del Rey. nspection found no gasoline containers, nor buckets of gasoline, only political signs that had been dumped into the storm drain. City staff removed all political signs and trash and debris from this section of the storm drain system. No further action is necessary at this time.				
05/14/2010	STREET	Commercial	1321	THIRD	AV	Accident/Spill
	Comments/ Action Taken:	Rcvd notification from Dispatch of a soy bean oil container leaking at subject location. City staff arrived on-scene and observed cooking oil leaching out from a dumpster. Contacted Hunong Chinese Buffet staff to conduct the cleanup using mop and bucket and to call Allied Waste to change out dumpster. Rcvd call from owner who contacted Allied which they will replace dumpster week of 05/16/10. Owner to monitor dumpster and conduct any cleanup as necessary. Owner to ensure that Offal is used. No further action is required.				
05/18/2010	STREET	Residential	496	FLOWER	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge at 496 Flower Street. Inspection found that trash cans had been turned over and a leachate was discharging from the cans. Property owner conducted cleanup. No further action required.				
05/18/2010	STREET	Commercial	670	OXFORD	ST	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
05/18/2010	STREET	Commercial	670	OXFORD	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from a lunch truck at Harborside Park. Inspection noted ice water leaking from the truck's ice box. Containment placed inside truck to prevent leak. A verbal warning was issued. No further action is necessary at this time.				
05/19/2010	STREET	Commercial	283	PALOMAR	ST	Power Washing
	Comments/ Action Taken:	Inspection found no evidence to support enforcement. No further action required. Responded to report of power washing without the use of BMPs.				
05/21/2010	STREET	Commercial	2400	MAIN	ST	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of an illegal discharge into the SWCS at subject address. Inspection found evidence of a discharge related to fire sprinkler system water. Some BMPs have been implemented, however they were not sufficient. Implemented additional BMPs. Issued Admin Citation. No further action required.				
05/25/2010	STREET	Residential	2338	PEACOCK VALLEY	RD	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of oil spilled in the street in front of subject address. Inspection noted only small piles of oil absorbent left from a clean-up. Small piles of oil absorbent need to be removed. City staff conducted cleanup. No further action required.				
05/26/2010	STREET	Commercial	2397	PORCH SWING	ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of vehicle discharging concrete from the back of a concrete trailer on Olympic Parkway. Found small marks of what may be concrete. Source cannot be located. No further action is necessary at this time.				
05/27/2010	CATCH BASIN	Residential	1401	HILLTOP	DR	Dirt/Sediments
	Comments/ Action Taken:	Responded to report of an illegal discharge in the vicinity of East Rienstra and Hilltop Drive. Inspection found an irrigation system leak at the Arco gas station at 1401 Hilltop Drive. Leak repaired. No further action required.				
05/27/2010	CATCH BASIN	Residential	1579	APACHE	DR	Possible Dumping into Catch Basin

Incident Date	Structure Category	Site Category	Address			Type of Violation
05/27/2010	CATCH BASIN	Residential	1579	APACHE	DR	Possible Dumping into Catch Basin
	Comments/ Action Taken:	Responded to report of an illegal pet waste discharge at subject address. Inspection found no evidence of a pet waste discharge. No further action required.				
05/27/2010	CATCH BASIN	Commercial	2052	ENTERTAINMENT	CI	Unknown Discharge
	Comments/ Action Taken:	Responded to a report of illegally dumped water and trash into the adjacent field at the subject address. Inspection found no evidence of an illegal discharge, but did find evidence of a need for BMP implementation. BMPs implemented. Issued Admin Citation. No further action required.				
05/28/2010	STREET	Residential	1453	MELROSE	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of an abandoned open top used oil container. Inspection found an abandoned used oil container in the trash enclosure at 1450 Melrose Ave #16. Oil removed. No further action required.				
05/28/2010	STREET	Residential	79	SUZANNE	LN	Unknown Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from 79 Suzanne Lane. Inspection found minimal traces of a discharge. Spoke to tenant regarding discharge. Tenant stated that they were watering the plants in the backyard and that they would try and limit watering. No further action is necessary at this time.				
06/02/2010	STREET	Residential	1419	MELROSE	AV	Unknown Discharge
	Comments/ Action Taken:	White residue flowing from curb drain outlet at Spruce street from 1419 Melrose Ave. Homeowner stated that had spackle spill. Cleanup conducted. No further action required.				
06/03/2010	STREET	Commercial	1328	J	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of an oil spill in the street in the vicinity of the subject address. Inspection noted that Allied waste staff was already on scene finishing up the clean up. No further action required.				
06/03/2010	STORM WATER	Residential	214	RICHMOND PARK	CT	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
06/03/2010	STORM WATER	Residential	214	RICHMOND PARK	CT	Other
	Comments/ Action Taken:	Follow up visit to to investigate the report of an unknown discharge. No evidence of a violation was found. No further action is necessary at this time.				
06/10/2010	STORM CHANNEL	Residential	916	L	ST	Complaint Response Enforcement
	Comments/ Action Taken:	City staff responded to the report of a foul odor from the channel. I Inspection noted trash junk, debris, and human waste along the banks of the channel. Admin citation issued. Cleanup conducted. No further action required.				
06/11/2010	STORM DRAIN PIPES	Commercial	2260	OTAY LAKES	RD	Other
	Comments/ Action Taken:	Responded to complaint of trash, junk, debris and grease/ oil scattered outside the common trash enclosure at the subject address. Inspection verified the existence of above mentioned conditions. Cleanup conducted. No further action required.				
06/11/2010	CATCH BASIN	Commercial	1550	SOLANO	DR	Complaint Response Enforcement
	Comments/ Action Taken:	Responded to report of landscape staff blowing trash into the storm drain system. Inspection found that landscape staff were applying fertilizer with back pack mounted blowers on a trash pick up day for the same neighborhood. Spoke to the landscaping staff and explained the importance of applying fertilizer accurately and being careful not to further blow existing trash generated by other sources. No further action is necessary at this time.				
06/14/2010	STREET	Residential	443	WOODLAWN	AV	Sewage Spill
	Comments/ Action Taken:	Responded to e-mailed report of a possible illegal sewer discharge at subject address. Inspection found no evidence of a violation. Prior discharge cleanup was conducted by city staff. No further action is necessary at this time.				
06/14/2010	STREET	Residential	130	FORTUNA	ST	Unknown Discharge
	Comments/ Action Taken:	Responded to a Code Enforcement's report of a potential sewer discharge from subject address. Inspection found evidence of an irrigation discharge. No evidence of a sewer discharge was present. No further action is necessary at this time.				
06/15/2010	STREET	Commercial	700	NAPLES	CT	Sewage Spill

Incident Date	Structure Category	Site Category	Address			Type of Violation
06/15/2010	STREET	Commercial	700	NAPLES	CT	Sewage Spill
	Comments/ Action Taken:	Responded to report of a broken sewer line within the Chula Vista Veterans Home. An inspection was conducted to ensure there was no potential threat to the City's SWCS. The inspection found no evidence of any discharge. No further action is necessary at this time.				
06/15/2010	STREET	Commercial	413	TELEGRAPH CANYON	RD	Unknown Discharge
	Comments/ Action Taken:	Responded to report of restaurant staff discharging Lysol and water into the parking lot after mopping. Inspection found some traces of a discharge. Spoke to Restaurant owner she was unaware of the requirement to use BMPs. Issued Admin citation. Staff informed of requirements. No further action required.				
06/17/2010	STREET	Residential	2532	TABLE ROCK	WY	Washing Vehicle in Street
	Comments/ Action Taken:	Responded to report of an illegal discharge at the subject address. Inspection found auto detailer Xrtreme Enterprises Inc. allowing a discharge and not implementing BMPs. Administrative citation was issued. No further action is necessary at this time.				
06/21/2010	STREET	Residential	795	FOURTH	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Responded to report of an unknown discharge from a five gallon container. Inspection at 786 Fourth Avenue found an unmarked five gallon container slowly leaking fluid into the gutter. Liquid was unknown. Spread dirt at the spill to prevent further flow. Remained on scene until Fire Department took command. No further action is necessary at this time.				
06/21/2010	STREET	Residential	735	ASH	AV	Pool Filter Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from a pool at subject address. Inspection found that green pool water was being discharged from a pool contaminated with algae. Algae cleaned. Issued admin citation. No further action required.				
06/23/2010	STREET	Residential	2972	WINDING FENCE	WY	Unknown Discharge
	Comments/ Action Taken:	Received notification of a slurry spill at subject address. City staff responded to subject address and observed Green Leaf pumping concrete for pool. Green leaf was using proper BMPs. No further action required.				
06/24/2010	STREET	Residential	445	HILLTOP	DR	Pool Filter Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
06/24/2010	STREET	Residential	445	HILLTOP	DR	Pool Filter Discharge
	Comments/ Action Taken:	Responded to report of pool discharge with strong smell of chlorine. At the time of my visit the flow of water had been stopped. Spoke to homeowner on the proper procedure of discharging pool. No further action required.				
06/24/2010	STREET	Commercial	1016	GUATAY	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Responded to report of an illegal discharge from subject address. Inspection found a small trace of gray slurry from 1016 Guatay to 1038 Guatay. Flow did not reach the storm drain inlet. Cleanup conducted. No further action required.				
06/28/2010	STREET	Residential	143	J	ST	Complaint Response Enforcement
	Comments/ Action Taken:	Received notification of a resident washing trash from driveway to street. City staff arrived on-scene and did not observed evidence of discharge. Street was dry and did not observe trash. Left door hanger at resident. No further action required at this time.				

Total: 243

CITY OF CHULA VISTA
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2010

Submitted to:

City of Chula Vista
Storm Water Management Section
1800 Maxwell Road
Chula Vista, CA 91911

Prepared by:

D-MAX Engineering, Inc.
7220 Trade Street, Suite 119
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D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

October 18, 2010
Project No. 201009W

Mr. Khosro Aminpour, P.E.
City of Chula Vista
Department of Public Works Operations
1800 Maxwell Road
Chula Vista, CA 91911

Re: 2010 Dry Weather Field Screening and Analytical Monitoring Program
City of Chula Vista, California

Dear Mr. Aminpour:

Enclosed please find the final report of the City of Chula Vista 2010 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of Chula Vista during the 2010 dry weather season. The contents include field screening results, trash assessment data, analytical laboratory test results, and analyses of the collected data. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the monitoring program and our recommendations for additional actions. Also, the results and a summary of the 2010 Municipal Separate Storm Sewer System Outfall Monitoring Program are included as a section of this report.

Review comments from the draft report submitted to the City have been included in the final report. It has been our pleasure working with the City of Chula Vista on this project. If you have any questions, please call me at (858) 586-6600.

Sincerely,
D-MAX Engineering, Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

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ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
µg/L	Micrograms per Liter
Basin Plan	Water Quality Control Plan for the San Diego Basin
bgs	Below Ground Surface
CFR	Code of Federal Regulations
City	City of Chula Vista
CMC	Criterion Maximum Concentration
COC	Constituent of Concern
Copermittees	The 18 cities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CTR	California Toxics Rule
CV	Coefficient of Variance
D-MAX	D-MAX Engineering, Inc.
E. coli	*Escherichia coli*
EC	Electrical Conductivity
EMA	EnviroMatrix Analytical, Inc.
FS	Functional Sensitivity
ft/ft	Feet per Foot
gpm	Gallons per Minute
GPS	Global Positioning System
HA	Hydrologic Area
HSA	Hydrologic Subarea
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illegal Discharge
JURMP	Jurisdictional Urban Runoff Management Program
LED	Light-Emitting Diode
MBAS	Methylene Blue Active Substances
mg/L	Milligrams per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) per 100 Milliliters
mS/cm	Millisiemens per Centimeter
MS4	Municipal Separate Storm Sewer System
MS4 Workplan	Final Copermittee MS4 Outfall Monitoring Workplan
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
na	Not Analyzed
nd	Not Detected
ns	Not Sampled (dry site)
NTU	Nephelometric Turbidity Unit
PDL	Practical Detection Limit
ppb	Parts per Billion
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board
TDS	Total Dissolved Solids
EPA	Environmental Protection Agency
WQO	Water Quality Objective
WURMP	Watershed Urban Runoff Management Program

1 INTRODUCTION

1.1 Program Overview

The purpose of the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) is to identify and eliminate illicit connections and illegal discharges (IC/IDs) to the storm water conveyance system, minimizing negative impacts of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following components:

- Field screening observations
- Field analytical testing
- Laboratory analytical testing
- Trash assessments

The data collected from dry weather monitoring is used to characterize discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up investigations are conducted as necessary to detect and eliminate the source(s) of these pollutants. Similarly, the goal of the Municipal Separate Storm Sewer System (MS4) Outfall Monitoring Program is to identify pollutant discharges from MS4 outfalls, and to assess these discharges contributing to the receiving water quality. The results from the 2010 Dry Weather Monitoring Program and MS4 Monitoring Program conducted by D-MAX Engineering, Inc. (D-MAX) are presented herein.

1.2 Regulatory Requirements

In accordance with the San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (Municipal Permit), Copermittees are required to annually perform dry weather field screening of discharges into its storm drain conveyance system. During the dry weather season, May 1 through September 30, selected locations along the storm drain conveyance system are evaluated. This procedure includes recording field observations, estimating observed flow rates, and conducting field testing. The Municipal Permit also necessitates that Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station is selected. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days.

Concurrently with the Dry Weather Monitoring Program, the City conducted the targeted dry weather component of the 2010 MS4 Outfall Monitoring Program. The work was performed in accordance with the Final Copermittee MS4 Outfall Monitoring Workplan (MS4 Workplan) developed in June 2009 and with the requirements of Receiving Waters and Urban Runoff Monitoring and Reporting Program dictated in the Municipal Permit. This report presents the results of the City's 2010 Dry Weather Monitoring Program and MS4 Monitoring Program.

1.3 Hydrologic Setting

The City of Chula Vista (City) is located in the southern portion of the County of San Diego and is bordered by the cities of National City, San Diego, and unincorporated areas of the County of San Diego. The City covers an area of approximately 52 square miles and has a population of approximately 223,738. The majority of the land use in the City is residential.

Other land uses include commercial, industrial, municipal facilities, streets, highways, and open spaces.

The City lies within the Sweetwater River Hydrologic Unit (HU) and the Otay River HU. These two Hydrologic Units, along with the Pueblo San Diego HU, form the San Diego Bay Watershed and ultimately drain into the San Diego Bay. The City is located in the Lower Sweetwater Hydrologic Area (HA 909.1) and the Otay Valley Hydrologic Area (HA 910.2). A complete map of the City's Hydrologic Subareas is included as Figure A.

The City is naturally divided by topography into multiple smaller basins from which runoff flows into the City's major receiving water bodies, including San Diego Bay, Sweetwater River, Otay River, and the Lower Otay Reservoir. A complete drainage map for the City is included as Figure B. Drainage basins and the abbreviations used to identify field sampling stations are listed in Table 1-1.

TABLE 1-1
OUTFALL DESIGNATIONS AND DRAINAGE BASINS

Site Abbreviation	Basin
BAY	Bay Boulevard Outfalls
BLC	Long Canyon Basin
CEN	Central Basin
JUD	Judson Basin
LAK	Upper Otay Reservoir
MGC	Chula Vista Municipal Golf Course
OLR	Otay Lakes Basin
OVR	Otay Valley Road Outfalls
POG	Poggi Canyon Basin
PRD	Palm Road Basin
RCC	Rice Canyon Basin
SCR	Salt Creek Basin
SUN	Sunnyside Basin
SVS	Sunny Vista Basin
SWB	Southwest Basin
SWR	Sweetwater River
TCC	Telegraph Canyon Basin
TCS	Telegraph Canyon Basin, South Branch
WIL	Upstream of the Willow Street Bridge
WOL	Wolf Canyon Basin

Based primarily on wet weather data from mass loading stations (MLS), ambient bay and lagoon monitoring, bioassessments, the Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) List), and/or Total Maximum Daily Load (TMDL) programs for the San Diego Bay Watershed, the high priority constituents of concern (COC) for the San Diego Bay Watershed were identified in the 2009 Watershed Urban Runoff Management Plan (WURMP). COCs for the Sweetwater River Hydrologic Unit (HU 909) are bacteria and pesticides, and for the Otay River Hydrologic Unit (HU 910) they are bacteria and gross pollutants. Receiving water bodies that are located within the jurisdiction of the City of Chula Vista and are 303(d) listed include: Poggi Canyon Creek for DDT, and the

Lower Otay Reservoir for color, iron, manganese, nitrogen ammonia (total ammonia), and high pH. Both Poggi Canyon Creek and Lower Otay Reservoir are in the Otay River HU. The San Diego Bay Shoreline at Chula Vista Marina is 303(d) listed for copper, and the shoreline along Bayside Park for bacteria; both of which are within the jurisdiction of the Port of San Diego.

1.4 Previous Work

The City has conducted dry weather monitoring programs since 1994. The results of the previous programs (1994 through 2009) are summarized in Table 1-2.

TABLE 1-2
SUMMARY OF HISTORICAL DRY WEATHER MONITORING

Year	Number of Field Screening Sites [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1994-R1	14	Data not available [3]		40	0
1994-R2	17			42	0
1995-R1	23			36	0
1995-R2	27			33	0
1996-R1	18			40	0
1996-R2	22			38	0
1997-R1	33			22	0
1997-R2	31			23	0
1998-R1	39			15	0
1998-R2	32			12	0
1999-R1	39			13	0
1999-R2	40			16	0
2000-R1	40	26	14	0	0
2000-R2	45	28	17	0	0
2001-R1	43	28	15	0	0
2001-R2	43	32	11	0	0
2002-R1	42	26	16	16	15
2002-R2	45	30	15	12	13
2003	50	34	16	4	15
2004	50	34	16	2	15
2005	50	38	12	3	15
2006	57	37	20	4	15
2007	57	41	16	0	15
2008	57	42	15	1	15
2009	57	36	21	2	15

Notes: The City conducted two separate rounds of dry weather monitoring in years 1994-2002.
R1 = Round one; R2 = Round two
[1] Number of Field Screening Sites = Number of Flowing Sites + Number of Ponded Sites. Field screening cannot be conducted at dry sites. Dry sites are replaced by either an alternate flowing or ponded site.
[2] Laboratory testing commenced in 2002 as required by San Diego Regional Water Quality Control Board Order 2001-001.
[3] Available information does not distinguish between flowing and ponded sites during this period.

1.5 Report Outline

Section 1, Introduction, includes a program overview, regulatory background, a discussion of the City's hydrologic setting, and constituents of concern, a summary of historical field screening data, and the report outline.

Section 2, Sampling Locations, describes the field screening sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and results of the field screening analyses.

Section 5, Trash Assessment discusses the procedure and results of the trash assessment.

Section 6, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 7, Data Analysis, provides an analysis of field and laboratory data collected in 2009, as well as a comparison of past results.

Section 8, Upstream Investigations, details the results of follow-up investigations undertaken to isolate the sources of water contamination detected during routine field and laboratory screenings.

Section 9, Nitrate-Nitrogen Upstream Investigations, details the results of follow-up investigation conducted to identify the sources of elevated nitrate-nitrogen concentrations detected during routine field screenings.

Section 10, MS4 Outfall Monitoring Program, includes an overview of the new program, descriptions of sampling locations, sampling and analysis test methods, and a discussion of the results.

Section 11, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Figure A is a watershed map of the area, broken into hydrologic subareas.

Figure B is a drainage map for the City.

Figure C is a map showing the 2010 Dry Weather sample locations.

Appendix A contains historical dry weather monitoring data.

Appendix B contains photographs of each of the investigated sites.

Appendix C contains laboratory analytical reports.

Appendix D contains field data sheets.

2 SAMPLING LOCATIONS

The City's 2010 Dry Weather Monitoring Program included 57 primary sampling sites, all of which are located in San Diego Hydrologic Units 909 and 910. This year, sites CEN-03, SCR-04, and SWB-03 were dry. Instead, alternate site SWR-03-E was sampled, as well as two new alternate sites, SCR-07 and SUN-08.

Table 2-1 provides the site, location, conveyance configuration, primary and secondary land uses, hydrological subunit, and GPS coordinates of the sampling locations that were visited. Photographs of sampling locations are included as Appendix B. A map of the watersheds in and around the City, broken down into HSAs, is included as Figure A, and a map of the drainage basins within the City is included as Figure B. A City map with dry weather sampling locations is included as Figure C.

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
BAY-01	West side of Bay Boulevard across from the 1075 complex	Outlet	Commercial	None	910.20	32.60820	-117.09235
BAY-02	West of intersection of Palomar Street and Bay Boulevard	Earthen Channel	Commercial	Industrial	910.20	32.60479	-117.09248
BAY-03	West of intersection of Ada Street and Bay Boulevard	Earthen Channel	Industrial	Residential	910.20	32.60267	-117.09251
BLC-01	Chula Vista Municipal Golf Course, west of Bonita/Acacia intersection	Concrete Channel	Residential	None	909.12	32.66562	-117.02414
BLC-02	Long Canyon Channel south of Bonita Road and west of southern end of Acacia Avenue	Earthen Channel	Residential	Open	909.12	32.65556	-117.00859
CEN-01	South of H Street and east of I-5 and trolley tracks	Concrete Channel	Commercial	Residential	909.12	32.62922	-117.09507
CEN-03*	South of J Street, behind 726 and 728 Colorado Avenue	Concrete Channel	Residential	None	909.11	32.62153	-117.09212
CEN-04	East side of Memorial Park, west of 3rd Avenue, north of Park Way	Outlet	Commercial	Residential	909.12	32.63869	-117.07956
CEN-07	West of 5th Avenue, between Center Street and Park Way	Concrete Channel	Residential	Commercial	909.12	32.63713	-117.08782
CEN-08	100 feet West of Mariana Parkway, North of G Street	Catch Basin	Industrial	Residential	909.12	32.63144	-117.1033
CEN-10	Northwest of the intersection of Hilltop Drive and Whitney Street	Catch Basin	Residential	Commercial	909.12	32.63643	-117.06439
JUD-01	South of intersection of Fresno Avenue and Main Street	Concrete Channel	Commercial	Residential	910.20	32.59465	-117.06675

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
JUD-02	Southwest of Reed Court and Main Street intersection	Outlet	Industrial	Commercial	910.20	32.5945	-117.05599
JUD-03	Southwest of Main Street and Mace Street intersection	Manhole	Industrial	Commercial	910.20	32.59466	-117.0538
LAK-01	Northeast of the intersection of Proctor Valley Road and Agua Vista Drive, in the canyon	Outlet	Residential	Open	910.32	32.66023	-116.94138
OLR-01	South of Chula Vista Municipal Golf Course, north of the Otay Lakes Road and Bonita intersection; smaller, farther east of two outlets	Outlet	Commercial	Residential	909.12	32.66144	-117.03146
OLR-02	South of Chula Vista Municipal Golf Course, north of the Otay Lakes Road and Bonita intersection; larger, farther west of the two outlets	Outlet	Commercial	Residential	909.12	32.66145	-117.03152
OVR-04	South of Main Street, 50 feet east of Nirvana Avenue	Outlet	Industrial	Commercial	910.20	32.59273	-117.0173
OVR-07	East of property at 1879 Nirvana Avenue	Outlet	Industrial	Commercial	910.20	32.59479	-117.01437
OVR-09	South of property at 850 Energy Way, in City easement at base of the slope	Outlet	Industrial	Commercial	910.20	32.59452	-117.01199
OVR-10	South end of Brandywine Avenue, south of Auto Park Drive, at base of slope	Outlet	Commercial	None	910.20	32.59285	-117.02994
POG-01	South of Main Street, 100 feet west of Melrose Avenue	Earthen Channel	Residential	Commercial	910.20	32.59455	-117.04153
POG-02	Intersection of Eastlake Parkway and Trinidad Cove, near entrance to Antigua housing tract	Manhole	Residential	Open	910.20	32.6361	-116.96748

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
POG-03	Olympic Parkway, across from Heritage Road	Natural Creek	Open	Residential	909.20	32.61643	-117.0022
PRD-02	West of Melrose Avenue and 200 feet south of Rienstra Street in SDG&E easement	Outlet	Residential	Commercial	910.20	32.60622	-117.04353
RCC-01	500 feet south of Bonita Road, southeast of the Bonita Road and I-805 crossing	Outlet	Open	Residential	909.12	32.64677	-117.05845
RCC-02	Northwest corner of east H Street and Del Rey Boulevard intersection	Outlet	Commercial	Open	909.12	32.63881	-117.03551
RCC-03	Downstream of Discovery Park, west Rancho Del Rey Parkway in Rice Canyon open space hiking trail	Outlet	Residential	Open	910.12	32.64418	-117.01191
RCC-04	East H Street and Otay Lakes Road intersection, west side of shopping center, in canyon	Outlet	Commercial	Residential	909.12	32.64436	-117.00253
SCR-01	North of Otay Lakes Road and 300 feet west of private Otay Ranch Road, east of Hunte Parkway	Outlet	Residential	Open	910.20	32.64567	-116.94713
SCR-02	Salt Creek, as it passes under Otay Lakes Road, east of Hunte Parkway (north side of street)	Natural Creek	Residential	Open	910.20	32.64548	-116.94671
SCR-03	Olympic Parkway, about 200 feet east of Hunte Parkway, on the Salt Creek	Natural Creek	Open	Residential	910.20	32.63333	-116.94444
SCR-04*	Southwest of the Eastlake Parkway and Hunte Parkway in Canyon	Outlet	Residential	Open	910.20	32.61261	-116.9594
SCR-05	Approximately 200 feet south of Hunte Parkway, across from Exploration Falls, in canyon	Outlet	Open	Residential	910.20	32.61857	-116.95093

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
SCR-06	Northeast of cul-de-sac at North end of Hunte Parkway; just west of gate to Otay Water District property	Earthen Channel	Parks	Open	910.20	32.6678	-116.95562
SCR-07*	South of SCR-05 detention basin at outlet	Outlet	Open	Residential	910.20	32.61662	-116.94391
SUN-02	North of East H Street and 50 feet west of SR-125, at base of slope, east of SUN-05	Outlet	Residential	Open	909.12	32.65924	-116.9775
SUN-03	Chula Vista Municipal Golf Course, southwest of Bonita and Central Avenue intersection	Earthen Channel	Residential	None	909.12	32.66685	-117.02338
SUN-05	North of east H Street and 50 feet west of SR-125, at base of slope, western most outfall	Outlet	Residential	Open	909.12	32.65917	-116.97767
SUN-06	Southwest of the intersection of Proctor Valley Road and San Miguel Ranch Road	Outlet	Residential	Open	909.12	32.67141	-116.99702
SUN-07	East of the end of Jonel Way, inlet to detention basin at base of slope, west of SR-125	Outlet	Residential	Open	909.12	32.67688	-116.9883
SUN-08*	East of the end of Jonel Way; west of detention basin at outlet, south of SUN-07	Outlet	Residential	Open	909.12	32.67693	-116.9886
SVS-01	Rear of Ramada Inn at intersection of Bonita Road and Bonita Glen north of Bonita Road	Outlet	Commercial	Residential	909.12	32.64912	-117.06474
SVS-02	East of 65 Flower Street, behind units 297 & 320, west of I-805	Catch Basin	Residential	None	909.12	32.6501	-117.06696
SWB-03*	Landscaped area along west side of 2446 Main Street	Manhole	Industrial	Commercial	910.20	32.59512	-117.08089
SWR-03-E*	South of Third Avenue and North Glover Avenue in back of CVS Pharmacy	Outlet	Commercial	Residential	910.12	32.64988	-117.08656

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
SWR-04	Northwest of 5th Avenue and C Street, south of Wal-Mart parking lot	Outlet	Commercial	Parks	909.12	32.6501	-117.09266
TCC-01-1	Telegraph Canyon Channel, southwest of Bay Boulevard/ L Street intersection inside Duke Energy Plant, easternmost outlet	Outlet	Commercial	Residential	909.11	32.61457	-117.09232
TCC-01-2	Telegraph Canyon Channel, southwest of Bay Boulevard/ L Street intersection inside Duke Energy Plant, to the right of TCC-01-01	Outlet	Commercial	Residential	909.11	32.61457	-117.09232
TCC-01-3	Telegraph Canyon Channel, southwest of Bay Boulevard/ L Street intersection inside Duke Energy Plant, to the right of TCC-01-02	Outlet	Commercial	Residential	909.11	32.61457	-117.09232
TCC-01-4	Telegraph Canyon Channel, southwest of Bay Boulevard/ L Street intersection inside Duke Energy Plant, to the right of TCC-01-03	Outlet	Commercial	Residential	909.11	32.61457	-117.09232
TCC-02	Telegraph Canyon Channel west of Hilltop Drive in Hilltop Park	Concrete Channel	Residential	Commercial	909.11	32.62821	-117.06138
TCC-03	Telegraph Canyon Channel 500 feet west of East Lake Parkway, 100 feet north of Otay Lakes Road across from Mobil Gas Station	Outlet	Commercial	Residential	909.11	32.64726	-116.96885
TCC-04	Telegraph Canyon Channel west of 3rd Avenue and south of L Street under Mobil gas station	Natural Creek	Commercial	Residential	909.11	32.62016	-117.0723
TCC-05	Telegraph Canyon Road and Heritage/ Paseo Ranchero northeast of intersection	Natural Creek	Open	Residential	909.11	32.62605	-117.00806
TCC-06	Telegraph Canyon Road and Paseo Del Rey intersection northwest corner	Concrete Channel	Open	Residential	909.11	32.62774	-117.03429

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
TCS	Moss Street and Trolley tracks intersection inside property located west of SD Pallet facility	Catch Basin	Commercial	Residential	909.11	32.61283	-117.0884
WIL-01	Chula Vista Municipal Golf Course south of Sweet Water Road 100 feet east of Willow Street	Natural Creek	Residential	Open	909.12	32.66082	-117.04306
WOL-02	West of La Media Road, across from detention basin in canyon; South of intersection of La Media Road and Birch Road	Outlet	Residential	Open	910.20	32.611901	-116.98447
WOL-03	South of Santa Luna Street, approximately 500 feet west Magdalena Avenue	Outlet	Residential	None	910.20	32.60779	-116.97800

Notes:
*Alternate sites SWR-03-E, SCR-07, and SUN-08 were substituted for dry sites CEN-03, SCR-04, and SWB-03.
Denotes a dry weather location sampled for both field screening and laboratory analysis.

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of flow measurements, qualitative field observations, and quantitative field analyses of selected water quality parameters. Weather conditions, time since last rainfall, and the type of storm water conveyance are recorded as well. Specific observations and results of the field water quality analyses are documented on field datasheets, which also serve as a record of the field visit. Datasheets are completed for every site visit regardless of whether or not samples were collected. Check boxes on the datasheets indicate if the visit is for routine field screening, confirmation of an exceedance, or an IC/ID follow-up visit. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation. Datasheets from the 2010 Dry Weather Monitoring Program are included as Appendix D.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Qualitative field observations are made during each site visit. These observations include a general site assessment and description of water odor, clarity, the presence of floatable materials, visible deposits or stains, and organisms. Evidence of past or present illicit connections and illegal discharges (IC/ID) to the storm drain system can also be discovered through careful field observations. Each field screening location is photographed to document site conditions. Photographs of each site visited are included in Appendix B.

Flow Measurement

Flow measurements can help estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative of an illegal discharge. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth, and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)
- Orthophosphate-Phosphorus (Orthophosphate-P)
- Surfactants, measured as methylene blue active substances (MBAS)
- Glycol

The methods used to perform the above field analyses, along with the reporting limit, range, and accuracy of each method, are listed in Table 3-1.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Method Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.01 mS/cm	0 – 20 mS/cm	± 2% of FS[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.1℃	0.0℃ – 60.0℃	± 0.5℃
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703 Portable Turbidity Meter*	0.00 NTU	0.00 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate*	0.20 mg/L**	0.20 mg/L – 3.00 mg/L**	Varies with measured concentration[2,3]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[4]*	1.13 mg/L**	1.13 mg/L – 113 mg/L**	± 30%of PDL[2]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[4]*	0.098 mg/L**	0.098 mg/L – 2.608 mg/L**	Varies with measured concentration[2,3]
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.00 mg/L – 3.00 mg/L***	± 0.13 & ± 0.5 mg/L[5]
Glycol	CHEMetrics V-2000 Multi-Analyte LED Photometer – Glycol Vacu-vials® (K-4403) Purpald/periodate*	0.60 mg/L**	0.60 mg/L – 10.00 mg/L	Varies with measured concentration[4,5]

Notes:

EC = electrical conductivity
mS/cm = millisiemens per centimeter
℃ = degrees Celsius
NTU = nephelometric turbidity unit
mg/L = milligrams per liter
LED = light-emitting diode

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] The Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-N, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The PDL for nitrate is 5.0 mg/L; however, the PDL for nitrate-N is lower due to the conversion.

[4] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The practical detection limit for orthophosphate is 0.3 mg/L; however, the practical detection limit for orthophosphate-P is lower due to the conversion.

[5] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

*Test method information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

3.2 Laboratory Analytical Methods

In accordance with the Municipal Permit, laboratory samples were collected at 15 sites, representing over 25 percent of the sites where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc, (EMA) a laboratory certified by the California Department of Health Services, for analysis of the following dry weather monitoring constituents:

- Total hardness
- Oil and grease
- Diazinon
- Chlorpyrifos
- Dissolved Cadmium
- Dissolved Copper
- Dissolved Lead
- Dissolved Zinc
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria

In addition to the constituents listed above, the following constituents were analyzed in the laboratory as part of the MS4 Outfall Monitoring Program and as part of an upstream investigation:

- Total dissolved solids (TDS)
- Total Nitrogen
    - Total Kjeldahl Nitrogen
    - Nitrite as Nitrogen
    - Nitrate/Nitrite as Nitrogen
    - Nitrate as Nitrogen
- Specific Conductance
- Surfactants, measured as MBAS

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

3.3 Quality Assurance and Quality Control

The Quality Assurance and Quality Control Plan (QA/QC) utilized for this project includes the United States Environmental Protection Agency (EPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters, turbidity meter, and conductivity meter are tested daily before field screening begins. The pH meters are calibrated as needed with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter and conductivity meter are calibrated as needed using standard solutions.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Method Detection Limit	Maximum Holding Time [1]
Oil and Grease	EPA 1664	5 mg/L	5 mg/L	28 days
Total Hardness	EPA 200.7	10 mg/L	10 mg/L	14 days
Dissolved Cadmium	EPA 200.8	1 µg/L	0.2 µg/L	24 hours
Dissolved Copper	EPA 200.8	10 µg/L	1 µg/L	24 hours
Dissolved Lead	EPA 200.8	5 µg/L	1 µg/L	24 hours
Dissolved Zinc	EPA 200.8	20 µg/L	0.3 µg/L	24 hours
Diazinon	EPA 8141A	0.05 µg/L	0.04 µg/L	7 days
Chlorpyrifos	EPA 8141A	0.05 µg/L	0.04 µg/L	7 days
Total Coliforms[2]	SM 9221 B, E	20 – 1,600,000 MPN/100 mL	20 MPN/100 mL	6 hours
Fecal Coliforms[2]	SM 9221 B, E	20 – 160,000 MPN/100 mL	20 MPN/100 mL	6 hours
Enterococci[2]	SM 9230 A, B	20 – 160,000 MPN/100 mL	20 MPN/100 mL	6 hours
Total Coliforms	SM 9223 (IDEXX Colilert)[3]	10 – 2,419,600 MPN/100 mL	10 MPN/100 mL	6 hours
Escherichia coli (E. coli)[4]	SM 9223 (IDEXX Colilert)[3]	10 – 2,419,600 MPN/100 mL	10 MPN/100 mL	6 hours
Enterococci	IDEXX Enterolert[4]	10 – 241,960 MPN/100 mL	10 MPN/100 mL	6 hours
Total Dissolved Solids	SM2540C	20 mg/L	1 mg/L	7 days
Total Nitrogen[5]	Calculation	0.5 mg/L	0.5 mg/L	48 hours
Total Kjeldahl Nitrogen	SM4500 N C	0.5 mg/L	0.3 mg/L	28 days
Nitrite as Nitrogen	SM4500 NO2 B	0.05 mg/L	0.007 mg/L	48 hours
Nitrate/Nitrite as Nitrogen	SM4500 NO3 E	12.5 mg/L	2.25 mg/L	48 hours
Nitrate as Nitrogen	SM4500 NO3 E	12.5 mg/L	2.25 mg/L	48 hours
Specific Conductance	SM2510B	1 umhos/cm	1 umhos/cm	28 days
MBAS	SM5540C	0.5 mg/L	0.1 mg/L	48 hours

Notes:
µg/L = micrograms per liter
MPN/100 mL = most probable number (of colony-forming units) per 100 milliliters
[1] Maximum Holding Time values listed apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.
[2] For D-MAX's Dry Weather Monitoring Program, EMA performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100 mL). For fecal coliforms and Enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.
[4] Number of fecal coliforms is derived from number of *E. coli* through the following formula:
Fecal Coliforms = *E. coli* / 0.85. The converted fecal coliform count, not the number of *E. coli*, is reported in this report's data tables.
[5] Total Nitrogen is the sum of nitrate, nitrite, ammonia and organic nitrogen.

Field sample collection containers are rinsed first with distilled water and then with the sample water prior to sample collection. Upon completion of sampling and testing at each site, sample collection containers, test vials, and ion-sensitive electrodes are rinsed twice with distilled water and dried.

Field test kit accuracy is assessed prior to commencing sampling. Each lot, or batch, of Chemetrics ampoules is analyzed against standard solutions of known concentrations for ammonia-nitrogen, nitrate, orthophosphate, and surfactant ampoules. The results of these tests are shown in Table 3-3.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Analyte	Known Concentration (mg/L)	Acceptable Range* (mg/L)	Lot Number	Date	Field Test Kit Results (mg/L)
Ammonia-N	0.85	0.68 - 1.02	73707/2	5/17/2010	0.811
			74559/8	5/27/2010	0.821
			75425/13	6/30/2010	0.811
Nitrate**	44.3	31.0 - 57.6	75362/2	5/17/2010	42.77
			73960/4	5/17/2010	41.02
			75655/6	6/30/2010	38.56
			75655/8	6/30/2010	36.49
Orthophosphate**	6.13	4.29 - 7.97	75263/4	5/17/2010	6.023
			73677/4	5/17/2010	5.265
			75756/4	6/30/2010	5.015
Surfactants	1.0	0.75 - 1.25	75440/75293/12	5/17/2010	1.0
			74268/74253/2	5/17/2010	1.0
			75638/75460/12	6/30/2010	1.0
			75638/75631/2	6/30/2010	1.0
Glycol	1	0.70 - 1.30	75398/4	6/8/2010	0.943
			75786/12	6/24/2010	0.994

Notes:
* Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1.
** Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by multiplying the results by 0.226 for nitrate and 0.326 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis are collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed and samples are delivered and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain of custody forms are included with laboratory reports in Appendix C.

3. 4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation is necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a confirmation visit is conducted within two business days. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by the laboratory analyses, a comprehensive follow-up pollutant source investigation is initiated within two business days of receiving the laboratory results. A discussion of follow-up investigations is included in Section 8.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. The three approaches are described below and presented with associated constituents in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results. Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels based on county-wide sampling data. These action levels have been used by all San Diego County Copermittees since the 2003 dry weather season. For implementation in 2010, D-MAX performed statistical analysis on county-wide data to update action levels for bacterial indicators.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is a short term concentration limit in which aquatic life can be sustained. The CMC is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in EPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew. Best professional judgment may indicate that results which either exceed certain action levels or are statistical outliers may be the result of natural or background factors.

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TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/Notes
Conductivity (mS/cm)	Best Professional Judgment	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values <0.75 may indicate excessive potable water discharge or flushing.
Temperature (°C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
pH	<6.5 or >9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Orthophosphate-P (mg/L)	2.0	EPA Multi-sector General Permit
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Glycol (mg/L)	1.0	No regional action level has been established; action level is based on City experience.
Laboratory Analytes	**Action Levels**	**Source/Notes**
Oil and Grease (mg/L)	15	EPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	California Toxics Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)		
Dissolved Lead (µg/L)		
Dissolved Zinc (µg/L)		
Total Coliforms (MPN/100 mL)	130,000	Bacteria action levels were updated for implementation in 2010 by the Dry Weather Monitoring Sub-workgroup. Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	13,000	
Enterococci (MPN/100 mL)	7,000	
Total Dissolved Solids (mg/L)	Best Professional Judgment	No regional action level has been established; evaluated based on best professional judgment.

Notes:
[1] The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information, including within-site and between-site sample variability.
[2] Basin Plan = Water Quality Control Plan for the San Diego Basin
WQO = Water Quality Objective
ppb = parts per billion

4 FIELD SCREENING RESULTS

The 2010 Dry Weather Monitoring Program fieldwork began June 9, 2010, and was completed by July 14, 2010. Sixty monitoring stations were visited, and field screening was conducted at the 57 sites where ponded or flowing water was observed. Forty sites had measurable flow, 17 sites were ponded, and three sites were dry. Forty-one confirmation visits were conducted, and 17 upstream investigation locations were visited. A total of 118 site visits were performed.

4.1 Qualitative Observations

Qualitative observations are summarized below and presented in Table 4-1. These observations are based on routine and confirmation site visits only. Upstream investigation data is not included.

Light Conditions
The majority of the program was conducted under sunny light conditions. Several days were partly cloudy or overcast.

Odor
The majority of samples had no discernable odor, five samples had a musty odor, and a few samples had sewage-like odors. Water at one site had a chemical smell.

Color
Water samples were predominantly colorless, and 16 samples were yellow.

Clarity
Almost all water samples were clear with negligible suspended particles. Only a few samples were observed having slightly cloudy water.

Floatable Materials
The majority of the sites did not have any notable materials floating in the water. Trash and algae were most commonly noted, and bubbles, foam, and sheens were also observed at some sites.

Vegetation
Depending upon the type of conveyance and access to sunlight and soil, vegetative growth varied naturally from no growth to normal, with a few sites having excessive vegetation.

Biology
Insects and algae were the most common organisms observed at the sites. Many sites had snails, and at a few sites fish and crawfish were noted. Other organisms seen at the sites include tadpoles, larvae, worms, and birds. The presence of biological organisms typically indicates healthy water conditions. The presence of algae implies a persistent water flow at the site. However, excessive algae may be a result of nutrient enrichment and may diminish the dissolved oxygen available to other organisms.

Deposits
Sediment, gravel, and/or fine particulates were observed at almost all sites. There were no sites having stains or oily deposits.

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
BAY-01	6/9/2010	10:30	Overcast	None	Yellow	Clear	Trash	Sediment, Fine Particulates	Normal	Insects
BAY-01	6/10/2010	9:40	Overcast	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects
BAY-02	6/24/2010	11:50	Sunny	None	None	Clear	Trash	Fine Particulates	Excessive	Insects, Algae, Tadpoles
BAY-03	6/24/2010	11:05	Sunny	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Crawfish
BLC-01	6/16/2010	11:00	Sunny	None	None	Clear	None	Fine Particulates	Normal	Algae
BLC-02	6/16/2010	10:10	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects
CEN-01	6/15/2010	9:30	Overcast	None	Yellow	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Algae
CEN-01	6/30/2010	10:40	Partly Cloudy	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Algae
CEN-03	6/14/2010	9:20	Sunny	ns	ns	ns	None	Fine Particulates	None	None
CEN-04	6/17/2010	9:40	Sunny	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	Limited	Insects, Algae, Snails
CEN-07	6/17/2010	10:25	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae
CEN-08	6/22/2010	14:50	Sunny	None	None	Clear	None	Fine Particulates	None	None
CEN-08	6/23/2010	13:50	Sunny	None	None	Clear	None	Fine Particulates	None	None
CEN-10	6/23/2010	9:45	Sunny	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	None	None

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
JUD-01	6/10/2010	11:20	Overcast	None	None	Clear	Trash	None	Normal	Algae, Snails
JUD-01	6/30/2010	14:50	Sunny	None	None	Clear	Trash, Algae	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
JUD-02	6/14/2010	9:50	Sunny	None	Yellow	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
JUD-02	6/15/2010	10:50	Sunny	Rotten Eggs	None	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
JUD-02	6/30/2010	15:15	Sunny	None	Yellow	Clear	None	Sediment, Gravel, Fine Particulates	Excessive	Insects, Algae, Snails
JUD-03	6/16/2010	15:10	Sunny	Musty	Brown	Slightly Cloudy	None	Sediment, Gravel, Fine Particulates	None	None
JUD-03	6/17/2010	14:40	Sunny	Musty	None	Slightly Cloudy	None	Sediment, Gravel, Fine Particulates	None	None
LAK-01	6/21/2010	10:35	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
LAK-01	6/22/2010	11:20	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
OLR-01	6/22/2010	10:05	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae
OLR-02	6/22/2010	9:20	Sunny	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	None	Insects, Algae
OVR-04	6/23/2010	11:40	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects
OVR-07	6/23/2010	10:45	Sunny	None	None	Clear	dust sheen	Sediment, Gravel, Fine Particulates	Normal	Algae
OVR-07	6/24/2010	10:15	Sunny	None	None	Clear	Dust Sheen	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
OVR-07	7/6/2010	14:15	Overcast	None	None	Clear	Trash, Algae	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
OVR-09	6/14/2010	11:00	Sunny	None	None	Clear	None	None	Normal	Insects, Algae, Snails
OVR-10	6/24/2010	14:15	Sunny	None	Yellow	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
POG-01	6/17/2010	15:20	Sunny	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Snails
POG-02	6/11/2010	11:30	Partly Cloudy	None	None	Clear	None	Sediment, Gravel	None	None
POG-02	6/30/2010	13:10	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
POG-02	7/2/2010	12:55	Sunny	None	Yellow	Clear	None	Sediment, Gravel, Fine Particulates	None	None
POG-03	6/21/2010	15:40	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
PRD-02	6/10/2010	15:15	Overcast	None	None	Clear	Trash	None	Normal	Insects, Snails
PRD-02	6/30/2010	15:40	Sunny	Musty	Yellow	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Snails
PRD-02	7/2/2010	14:40	Sunny	Sewage	Yellow	Clear	Trash	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Worms
RCC-01	6/11/2010	12:30	Partly Cloudy	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects
RCC-02	6/10/2010	15:45	Overcast	None	None	Clear	None	None	Normal	Insects, Algae, Snails
RCC-03	6/14/2010	12:10	Sunny	None	None	Clear	Trash	None	Normal	Insects, Algae, Snails

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
RCC-03	6/15/2010	15:45	Sunny	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Snails
RCC-04	6/24/2010	15:50	Sunny	None	None	Clear	Algae	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
RCC-04	6/25/2010	15:50	Sunny	None	None	Clear	Algae	Sediment, Fine Particulates	Normal	Insects, Algae
SCR-01	6/10/2010	14:40	Partly Cloudy	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
SCR-01	6/11/2010	14:40	Overcast	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
SCR-01	6/30/2010	12:35	Sunny	Rotten Eggs	None	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Larvae
SCR-01	7/2/2010	11:45	Sunny	Sewage	None	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Snails, Larvae
SCR-02	6/18/2010	14:40	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Snails
SCR-02	6/21/2010	14:10	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Snails
SCR-02	7/14/2010	14:00	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
SCR-03	6/18/2010	13:50	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
SCR-03	6/21/2010	13:35	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
SCR-04	6/18/2010	9:30	Sunny	ns	ns	ns	ns	Sediment, Gravel	Normal	None
SCR-05	6/18/2010	10:05	Sunny	None	None	Clear	None	Sediment, Gravel	Normal	Insects

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
SCR-05	6/21/2010	11:35	Sunny	None	None	Clear	None	Sediment, Gravel	Normal	Insects
SCR-05	6/23/2010	15:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
SCR-06	6/21/2010	14:35	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects
SCR-06	6/22/2010	11:50	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects
SCR-06	7/14/2010	11:50	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects
SCR-07	6/28/2010	14:50	Partly Cloudy	None	None	Clear	Algae	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
SCR-07	6/29/2010	15:20	Partly Cloudy	None	None	Clear	Algae	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Crawfish
SUN-02	6/15/2010	11:35	Sunny	None	None	Clear	Bubbles, Trash, Foam	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Snails
SUN-02	6/16/2010	13:45	Sunny	None	None	Clear	Bubbles, Foam	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Snails
SUN-03	6/14/2010	15:40	Sunny	None	None	Clear	None	Fine Particulates	Normal	Insects, Algae, Snails
SUN-05	6/15/2010	12:15	Sunny	None	None	Clear	Trash	Sediment, Gravel	Normal	Algae
SUN-06	6/9/2010	12:00	Partly Cloudy	None	None	Clear	None	None	None	Insects
SUN-07	6/21/2010	9:30	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae
SUN-07	6/22/2010	10:40	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
SUN-08	6/29/2010	10:50	Overcast	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	None
SVS-01	6/9/2010	15:15	Partly Cloudy	None	Gray	Slightly Cloudy	None	Sediment, Gravel	None	Insects
SVS-01	6/14/2010	14:20	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects
SVS-01	6/30/2010	11:55	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
SVS-02	6/14/2010	14:45	Sunny	None	None	Clear	None	Fine Particulates	None	None
SWB-03	6/22/2010	13:20	Sunny	ns	ns	ns	ns	Sediment, Gravel	None	None
SWR-03-E	6/15/2010	14:45	Partly Cloudy	None	None	Clear	Bubbles, Trash, Foam	Sediment, Gravel, Fine Particulates	None	Insects, Algae
SWR-03-E	6/30/2010	16:15	Partly Cloudy	Musty	Yellow	Clear	Leaves	Sediment, Gravel, Fine Particulates	Limited	Insects, Algae
SWR-03-E	7/6/2010	10:00	Overcast	None	Yellow	Clear	Trash	Sediment, Gravel, Fine Particulates	Limited	Insects, Algae
SWR-04	6/20/2010	9:40	Overcast	Chemical	Yellow	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects
SWR-04	6/29/2010	9:20	Overcast	Chemical	Yellow	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects
TCC-01-01	6/25/2010	10:10	Partly Cloudy	None	None	Clear	Algae	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
TCC-01-02	6/25/2010	10:45	Partly Cloudy	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
TCC-01-03	6/25/2010	11:20	Partly Cloudy	Musty	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Larvae
TCC-01-04	6/25/2010	11:55	Partly Cloudy	None	None	Clear	Bubbles, Foam	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
TCC-02	6/28/2010	10:50	Overcast	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Limited	Algae
TCC-02	6/29/2010	11:55	Overcast	None	None	Clear	Trash, Algae	Sediment, Gravel, Fine Particulates	Limited	Algae
TCC-03	6/9/2010	13:40	Sunny	None	None	Clear	Trash	None	Normal	Insects, Algae, Snails
TCC-03	6/10/2010	13:55	Partly Cloudy	None	None	Clear	Trash	None	Normal	Insects, Algae
TCC-04	6/11/2010	10:20	Overcast	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects
TCC-05	6/28/2010	11:50	Overcast	None	None	Clear	Trash, Algae	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
TCC-05	6/29/2010	13:45	Partly Cloudy	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
TCC-06	6/28/2010	13:40	Overcast	None	None	Clear	Algae	Sediment, Gravel, Fine Particulates	Limited	Insects, Algae
TCC-06	6/29/2010	14:20	Partly Cloudy	None	None	Clear	Algae	Sediment, Gravel, Fine Particulates	Limited	Algae, Birds
TCS	6/22/2010	13:50	Sunny	None	Yellow	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects
TCS	6/23/2010	13:25	Sunny	ns	ns	ns	ns	Sediment, Gravel, Fine Particulates	None	None

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
WIL-01	6/16/2010	11:50	Sunny	None	None	Clear	Sheen, Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Fish
WOL-02	6/17/2010	11:25	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Snails
WOL-02	6/18/2010	11:15	Sunny	None	None	Clear	None	Sediment, Gravel	Normal	Algae, Snails
WOL-03	6/17/2010	13:40	Sunny	None	None	Clear	None	Fine Particulates	Normal	Insects, Algae, Snails
WOL-03	6/18/2010	12:15	Sunny	None	None	Clear	None	Fine Particulates	Normal	Insects, Algae, Snails

Notes:

Denotes a confirmation visit.

ns = not sampled (dry site)

4.2 Field Analytical Results

Field analyses were conducted at all sites with ponded or flowing water. Definitions of constituents measured are as follows.

Flow rates are the measurements of the volume of fluid passing through a given surface per unit time. Flow rate measurements are particularly important when calculating the load or particular amount of a pollutant discharged.

The **pH** is an expression of the acidity or alkalinity of a water sample. The pH of an aquatic system will affect a multitude of chemical reactions, including the availability of nutrients and the solubility of chemical substances, especially heavy metals.

Water temperature is needed to assess the significance of other parameters such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. Water temperature was measured in the field immediately upon sample collection at each site.

Conductivity values indicate the total concentration of ions in an aquatic system and the ability of water to conduct electricity. This parameter can be used to assess the mineral content of water or to help determine the presence of dissolved pollutants. Salinity also increases conductivity. Therefore, sites that receive water from the San Diego Bay during high tide often have conductivity greater than the maximum detection limit of 20 mS/cm.

Turbidity indicates the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation (thus reducing photosynthetic capacity), but excessive suspended particles can also absorb heat and elevate water temperatures.

Ammonia-nitrogen is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment, however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-nitrogen is a common indicator of nutrient pollution from agricultural or household fertilizer use. Nitrate pollution can cause excessive algal growth, which can later cause the suffocation of fish and other aquatic organisms by depleting oxygen from the water during decomposition. During field analysis, nitrate is measured in mg/L NO_3 and converted into mg/L nitrate-nitrogen using a conversion factor of 0.226. This process is explained in Note 3 of Table 3-1.

Orthophosphate-phosphorus, known as reactive phosphorus, is also a common indicator of nutrient pollution from agricultural or household fertilizer use and irrigation runoff. Similar to nitrate, phosphate pollution can cause eutrophication, which stimulates algal growth and eventually lowers aquatic dissolved oxygen to levels that are dangerous for aquatic life. Because it is commonly a limiting nutrient required for plant growth, relatively low levels of phosphate can cause significant algal growth. During the field analysis, orthophosphate was measured in mg/L PO_4 and converted into mg/L orthophosphate-P using a conversion factor of 0.326. This process is explained in Note 6 of Table 3-1.

Surfactants in water samples often indicate illegal discharges from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish and other aquatic organisms.

Glycol is most commonly associated with radiator coolant discharges. Glycol is not naturally found in water, and its presence in the storm drain system is indicative of IC/IDs.

A statistical summary of the field analytical results is presented in Table 4-2. The data used in statistical calculations in this table are from routine visits only; data for confirmation visits and upstream investigations have not been incorporated. Table 4-3 presents the results of routine field analyses conducted at the routine sampling sites. Graphs of each analyzed parameter are included at the end of this section.

TABLE 4-2
INITIAL FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceedances	Graph Number
Flow Rate (gpm)	136	0 (Ponded)	14.2	0.8	44.6	0	4-1
Temperature (ºC)	26.8	16.7	20.5	19.9	2.0	0	4-2
pH	8.9	6.9	7.8	7.9	0.5	0	4-3
Conductivity (mS/cm)	16.26	0.96	5.13	5.91	3.27	0	4-4
Turbidity (NTU)	48	0.00	4.99	1.97	8.78	1	4-5
Ammonia-N (mg/L)	3.00	0.11 J	0.47	0.39	0.47	3	4-6
Nitrate-N (mg/L)	100.8	nd	9.07	1.36	17.55	17	4-7
Orthophosphate-P (mg/L)	1.16	0.10	0.20	0.07	0.27	0	4-8
Surfactants (mg/L MBAS)	1.00	0.13	0.50	0.50	0.19	1	4-9
Glycol (mg/L)	1.62	0.00 J	0.37	0.20	0.37	3	4-10

Notes:
The data used in statistical calculations in this table are from routine visits only; data for confirmation visits and upstream investigations have not been incorporated.
nd = not detected; considered to be half of detection limit in statistical calculations.
J = Value reported is below the reporting limit; measurements have an increased percent error

TABLE 4-3
FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow (gpm)	Temp (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Glycol (mg/L)
BAY-01	6/9/2010	10:30	Ponded	19.2	7.2	7.09	1.04	0.25	0.17 J	0.27 J	0.28	**1.55**
BAY-01	6/10/2010	9:40	Ponded	18.3	7.3	na	0.94	na	na	na	na	0.89
BAY-02	6/24/2010	11:50	Ponded	22.3	7.5	1.15	1.19	0.25	0.13 J	0.20 J	0.03 J	0.22 J
BAY-03	6/24/2010	11:05	Ponded	21.4	7.5	5.55	5.87	0.50	0.50	7.84	0.01 J	0.20 J
BLC-01	6/16/2010	11:00	6.5	19.8	8.1	0.56	6.48	0.50	0.36	0.13 J	0.00 J	0.40 J
BLC-02	6/16/2010	10:10	7	17.6	7.9	0.88	6.39	0.50	0.27	4.64	nd	0.20 J
CEN-01	6/15/2010	9:30	<1	19.1	7.8	7.91	1.26	0.25	0.28	1.00 J	0.42	0.24 J
CEN-01	6/30/2010	10:40	1	21.3	7.8	na	3.18	na	na	na	na	na
CEN-03	6/14/2010	9:20	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
CEN-04	6/17/2010	9:40	<1	18.1	7.1	6.98	0.96	0.13	0.74	0.46 J	0.07 J	0.37 J
CEN-07	6/17/2010	10:25	Ponded	19.7	7.9	9.88	1.09	0.50	0.25	0.27 J	0.24	0.59 J
CEN-08	6/22/2010	14:50	Ponded	23.5	8.0	0.49	16.26	**1.00**	0.53	1.03 J	0.19	0.20 J
CEN-08	6/23/2010	13:50	Ponded	24.4	7.8	na	17.60	**1.00**	na	na	na	na

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Glycol (mg/L)
CEN-10	6/23/2010	9:45	<1	26.8	8.0	1.56	1.05	0.25	0.13 J	0.34 J	0.45	0.81
JUD-01	6/10/2010	11:20	<1	19.3	7.6	6.12	1.15	0.50	0.24	0.04 J	0.10	0.76
JUD-01	6/30/2010	14:50	Ponded	21.7	7.9	na	0.06	na	na	na	na	na
JUD-02	6/14/2010	9:50	Ponded	20.2	7.3	6.05	1.33	0.50	**2.53**	0.01 J	0.75	0.53 J
JUD-02	6/15/2010	10:50	Ponded	20.8	7.4	na	1.32	na	**2.82**	na	na	na
JUD-02	6/30/2010	15:15	Ponded	22	7.6	na	1.35	na	na	na	na	na
JUD-03	6/16/2010	15:10	Ponded	23.4	7.8	45.21	1.28	0.50	0.40	0.21 J	0.84	**1.62**
JUD-03	6/17/2010	14:40	Ponded	na	na	22.57	na	na	na	na	na	0.77
LAK-01	6/21/2010	10:35	6	19.1	7.1	1.06	6.53	0.50	0.56	**14.87**	0.01 J	nd
LAK-01	6/22/2010	11:20	7	18.4	7.5	na	6.40	na	na	**12.37**	na	na
OLR-01	6/22/2010	10:05	Ponded	18.4	8.3	0.69	5.66	0.63	0.25	0.19 J	0.05 J	0.50 J
OLR-02	6/22/2010	9:20	1	21.2	8.4	1.77	5.86	0.50	0.23	nd	nd	0.40 J
OVR-04	6/23/2010	11:40	Ponded	19.5	7.6	7.53	1.02	0.13	0.33	0.18 J	0.09 J	0.79

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Glycol (mg/L)
OVR-07	6/23/2010	10:45	<1	19.4	8.1	2.55	12.73	0.75	0.42	**20.63**	nd	0.20 J
OVR-07	6/24/2010	10:15	<1	19.5	8.1	na	12.74	na	na	**22.92**	na	na
OVR-07	7/6/2010	14:15	<1	20.1	8.2	na	12.61	na	na	**20.40**	na	na
OVR-09	6/14/2010	11:00	<1	20	8.2	5.19	7.67	0.75	0.42	1.03 J	0.20	0.50 J
OVR-10	6/24/2010	14:15	Ponded	19.8	7.8	5.07	1.95	0.25	0.43	0.80 J	0.33	0.59 J
POG-01	6/17/2010	15:20	58	24.8	8.1	0.64	8.34	0.50	0.60	1.36	nd	0.20 J
POG-02	6/11/2010	11:30	5	19.8	8.3	3.99	1.62	0.25	0.40	4.76	0.07 J	0.47 J
POG-02	6/30/2010	13:10	4	22.8	7.9	na	1.64	na	na	na	na	na
POG-02	7/2/2010	12:55	2	22.3	7.9	na	1.86	na	na	na	na	na
POG-03	6/21/2010	15:40	62	19.9	7.8	0.34	6.72	0.50	0.48	4.37	0.03 J	0.20 J
PRD-02	6/10/2010	15:15	1	18	8.2	1.97	2.53	0.50	0.49	1.14	0.52	0.61
PRD-02	6/30/2010	15:40	<1	21.2	8.3	na	2.36	na	na	na	na	na
PRD-02	7/2/2010	14:40	<1	21	7.8	na	2.59	na	na	na	na	na

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Glycol (mg/L)
RCC-01	6/11/2010	12:30	55	19	8.2	0.66	6.65	0.50	0.18 J	0.72 J	0.04 J	0.20 J
RCC-02	6/10/2010	15:45	44	19.4	7.8	0.26	7.60	0.50	0.57	0.24 J	nd	0.15 J
RCC-03	6/14/2010	12:10	10	22.4	7.2	2.8	5.24	0.50	0.30	**13.77**	0.09 J	0.20 J
RCC-03	6/15/2010	15:45	10	23.8	7.3	na	6.22	na	na	8.63	na	na
RCC-04	6/24/2010	15:50	7	22.9	8.1	0.91	6.17	0.63	0.34	**33.92**	0.05 J	0.20 J
RCC-04	6/25/2010	15:50	7	22.8	7.9	0 J	6.25	na	na	**30.60**	na	na
SCR-01	6/10/2010	14:40	Ponded	19	7.2	6.19	1.50	0.50	**1.03**	3.13	1.16	0.45 J
SCR-01	6/11/2010	14:40	Ponded	19.3	7.7	2.31	1.57	na	0.97	na	na	na
SCR-01	6/30/2010	12:35	Ponded	20.7	7.3	na	1.64	na	na	na	na	na
SCR-01	7/2/2010	11:45	<1	20.6	7.1	na	1.30	na	na	na	na	na
SCR-02	6/18/2010	14:40	89	19.4	7.8	1.69	7.08	0.38	0.42	**19.62**	0.07 J	nd
SCR-02	6/21/2010	14:10	85	18.6	7.9	0.55	6.90	na	na	**12.79**	na	na
SCR-02	7/14/2010	14:00	82	26	7.8	na	7.27	na	na	**14.01**	na	na

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Glycol (mg/L)
SCR-03	6/18/2010	13:50	71	19.6	7.9	0.00 J	6.60	0.25	0.38	9.96	0.07 J	nd
SCR-03	6/21/2010	13:35	78	18.6	7.8	0.07	6.28	na	na	9.22	na	na
SCR-04	6/18/2010	9:30	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
SCR-05	6/18/2010	10:05	12	20.9	6.9	11.77	8.78	1.00*	0.64	**100.80**	0.16	na
SCR-05	6/21/2010	11:35	12	23	7.0	7.03	11.94	1.25*	na	**119.85**	na	na
SCR-05	6/23/2010	15:00	6	24	7.2	ns	8.49	1.00*	na	**98.45**	na	na
SCR-06	6/21/2010	14:35	5	19.4	7.9	0.37	7.24	0.63	0.40	**12.21**	0.51	nd
SCR-06	6/22/2010	11:50	6	18.3	7.9	na	7.20	na	na	8.50	na	na
SCR-06	7/14/2010	11:50	<1	21.6	7.9	na	7.66	na	na	8.50	na	na
SCR-07	6/28/2010	14:50	26	23.1	7.9	1.83	8.66	0.75	0.40	**77.63**	0.02 J	0.20 J
SCR-07	6/29/2010	15:20	16	25.6	8.1	na	8.65	na	na	**85.50**	na	na
SUN-02	6/15/2010	11:35	3	21.3	8.0	2.09	5.91	0.75	0.31	**12.06**	0.28	0.20J
SUN-02	6/16/2010	13:45	3	23.2	8.0	12.87	6.31	na	na	**12.08**	na	na

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Glycol (mg/L)
SUN-03	6/14/2010	15:40	4	25.6	7.9	3.11	4.91	0.50	0.52	0.40 J	0.00 J	0.36 J
SUN-05	6/15/2010	12:15	4.5	21	8.4	2.61	2.00	0.13	0.30	3.44	0.12	0.49 J
SUN-06	6/9/2010	12:00	5	21.8	7.8	0.61	5.76	0.50	0.14 J	8.16	0.03 J	0.10 J
SUN-07	6/21/2010	9:30	<1	18.4	7.0	3.43	7.60	0.50	0.25	**14.09**	0.00 J	0.20 J
SUN-07	6/22/2010	10:40	<1	19	7.5	na	6.47	na	na	**10.87**	na	na
SUN-08	6/29/2010	10:50	1	20.7	8.0	1.39	8.32	0.50	0.34	6.19	0.00 J	na
SVS-01	6/9/2010	15:15	Ponded	20	8.2	**48.05**	1.06	0.25	0.25	0.31 J	0.37	0.37 J
SVS-01	6/14/2010	14:20	<1	22.4	7.8	3.35	0.92	na	na	na	na	na
SVS-01	6/30/2010	11:55	Ponded	22.5	7.8	na	1.17	na	na	na	na	na
SVS-02	6/14/2010	14:45	<1	20.5	7.6	7.89	1.39	0.50	0.46	0.58 J	0.62	0.77
SWB-03	6/22/2010	13:20	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
SWR-03-E	6/15/2010	14:45	Ponded	20.8	8.6	1.51	1.19	0.25	0.11 J	1.28	0.83	0.41 J
SWR-03-E	6/30/2010	16:15	<1	21.4	8.1	na	1.06	na	na	na	na	na

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Glycol (mg/L)
SWR-03-E	7/6/2010	10:00	<1	19.1	7.9	na	1.20	na	na	na	na	na
SWR-04	6/20/2010	9:40	Ponded	18.5	6.9	4.02	1.13	0.50	**3.00**	0.20 J	0.82	0.87
SWR-04	6/29/2010	9:20	Ponded	18.6	7.2	6.05	1.15	na	**3.00**	na	na	na
TCC-01-01	6/25/2010	10:10	Ponded	19.2	7.0	0.74	7.55	0.50	0.48	0.71 J	0.02 J	0.10 J
TCC-01-02	6/25/2010	10:45	19	19.9	8.1	0.36	6.67	0.50	0.31	7.12	0.02 J	nd
TCC-01-03	6/25/2010	11:20	Ponded	19.5	7.2	11.72	8.70	0.63	0.53	0.33 J	0.21	0.20 J
TCC-01-04	6/25/2010	11:55	58	20.8	8.1	0.54	6.64	0.50	0.39	6.43	0.02 J	nd
TCC-02	6/28/2010	10:50	136	19.1	8.0	0.71	6.83	0.50	0.41	**10.08**	0.00 J	0.10 J
TCC-02	6/29/2010	11:55	136	20.9	8.3	na	6.78	na	na	7.77	na	na
TCC-03	6/9/2010	13:40	78	21.5	8.2	0.09	7.52	0.75	0.46	**25.74**	0.12	0.10 J
TCC-03	6/10/2010	13:55	82	20.4	8.1	0.36	7.28	na	na	**31.50**	na	na
TCC-04	6/11/2010	10:20	104	16.7	8.2	1.05	6.63	0.50	0.24	9.03	0.00 J	na
TCC-05	6/28/2010	11:50	136	18.8	8.1	1.10	6.75	0.63	0.36	**16.29**	0.08 J	nd

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Glycol (mg/L)
TCC-05	6/29/2010	13:45	136	20.8	8.1	na	6.62	na	na	**17.34**	na	na
TCC-06	6/28/2010	13:40	127	21.5	8.3	3.06	6.77	0.50	0.40	**11.49**	0.03 J	nd
TCC-06	6/29/2010	14:20	130	23.7	8.3	na	6.68	na	na	**12.33**	na	na
TCS	6/22/2010	13:50	Ponded	24.5	8.7	9.62	2.18	0.75	0.55	0.14 J	0.49	**1.43**
TCS	6/23/2010	13:25	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
WIL-01	6/16/2010	11:50	<1	22.2	7.6	15.75	6.58	0.50	0.58	0.25 J	0.04 J	0.20 J
WOL-02	6/17/2010	11:25	4	22.9	8.9	8.46	3.32	0.38	0.35	**12.73**	0.14	0.16 J
WOL-02	6/18/2010	11:15	4	20.5	8.6	na	3.22	na	na	**15.29**	na	na
WOL-03	6/17/2010	13:40	<1	20.6	7.2	0.00 J	5.30	0.75	0.32	**31.96**	0.26	0.20 J
WOL-03	6/18/2010	12:15	<1	19.1	7.3	na	5.04	na	na	**33.20**	na	na

Notes: na = not analyzed; nd = not detected; ns = not sampled (dry site)
J = Value reported is below the reporting limit; measurements have an increased percent error.
Red values exceed action level.
* Value not considered an exceedance due to inference in field test method.
Denotes a confirmation visit.
Denotes a location sampled for laboratory analysis.

GRAPH 4-1: FLOW

Action Level is Best Professional Judgment

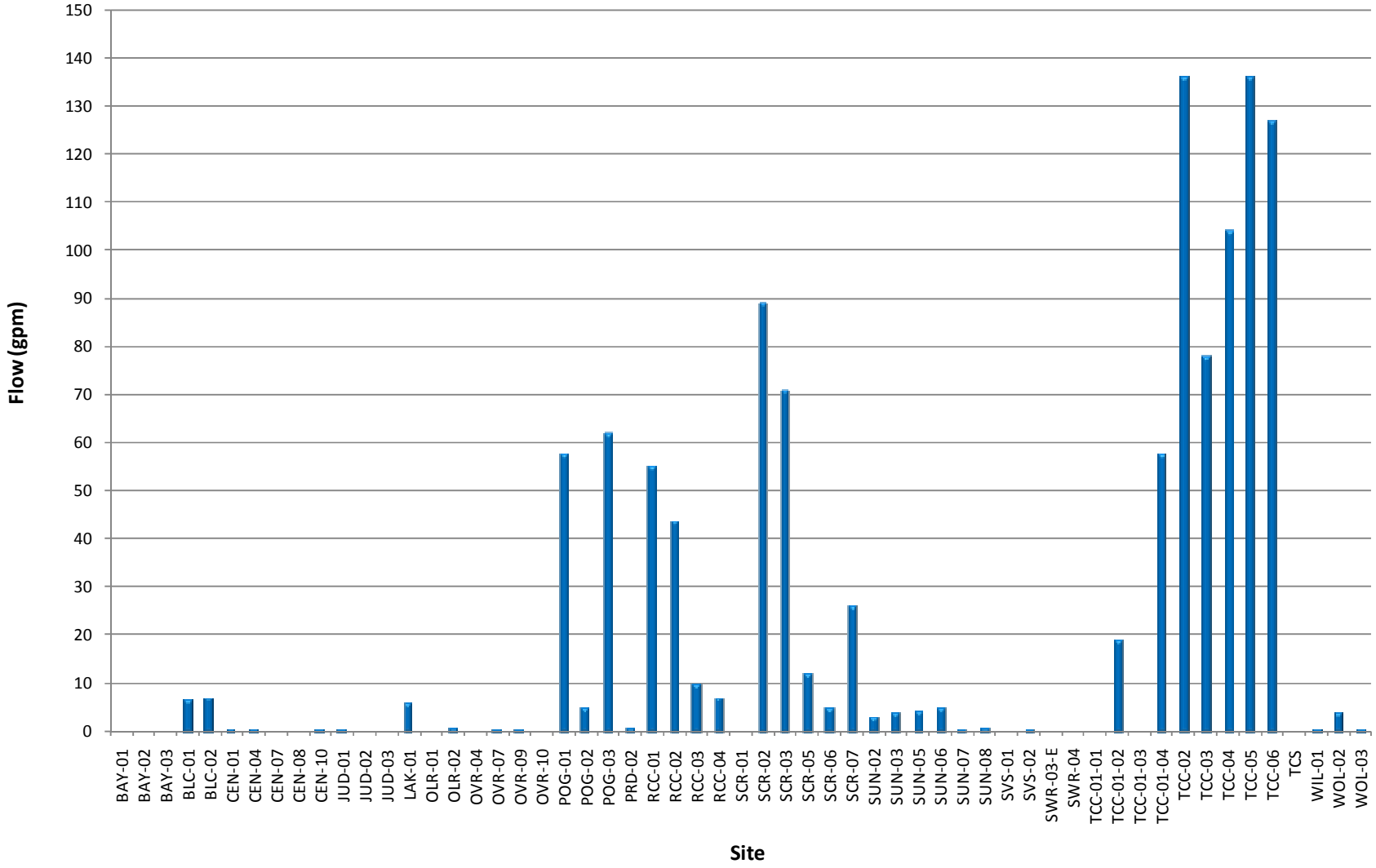

GRAPH 4-2: TEMPERATURE

Action Level is Best Professional Judgment

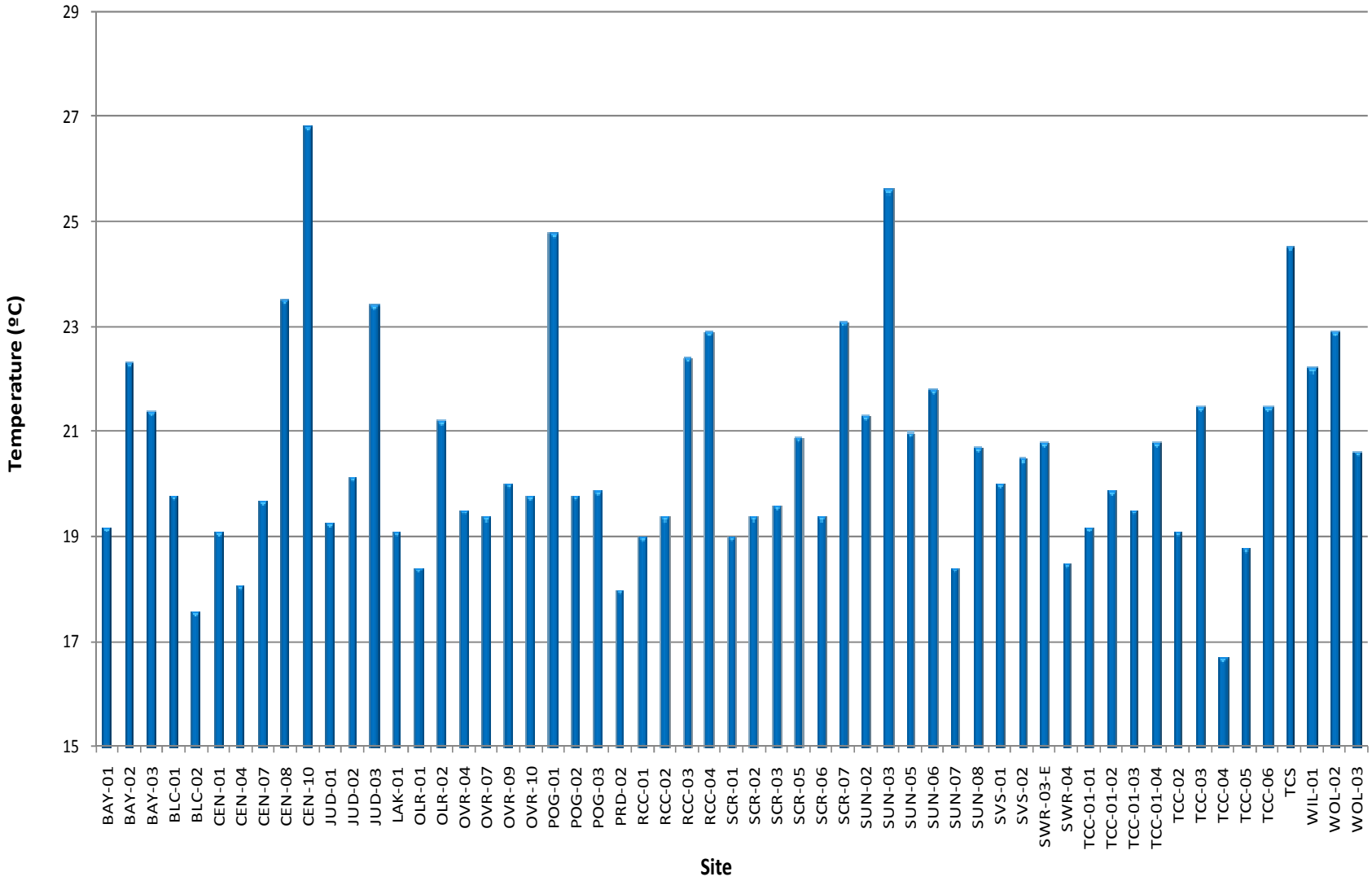

GRAPH 4-3: pH

Action Level is < 6.5 or > 9.0

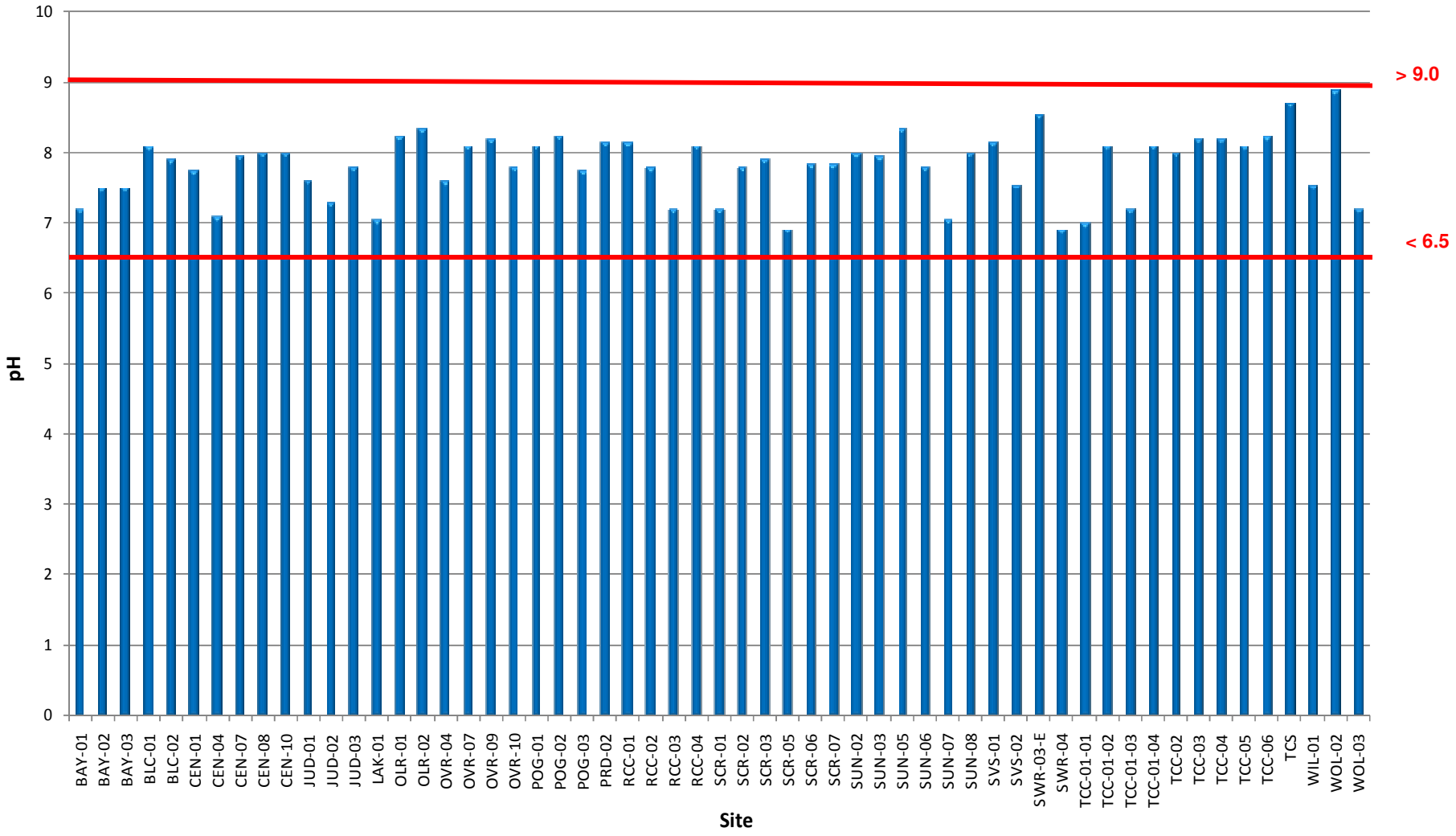

GRAPH 4-4: CONDUCTIVITY

Action Level is Best Professional Judgment

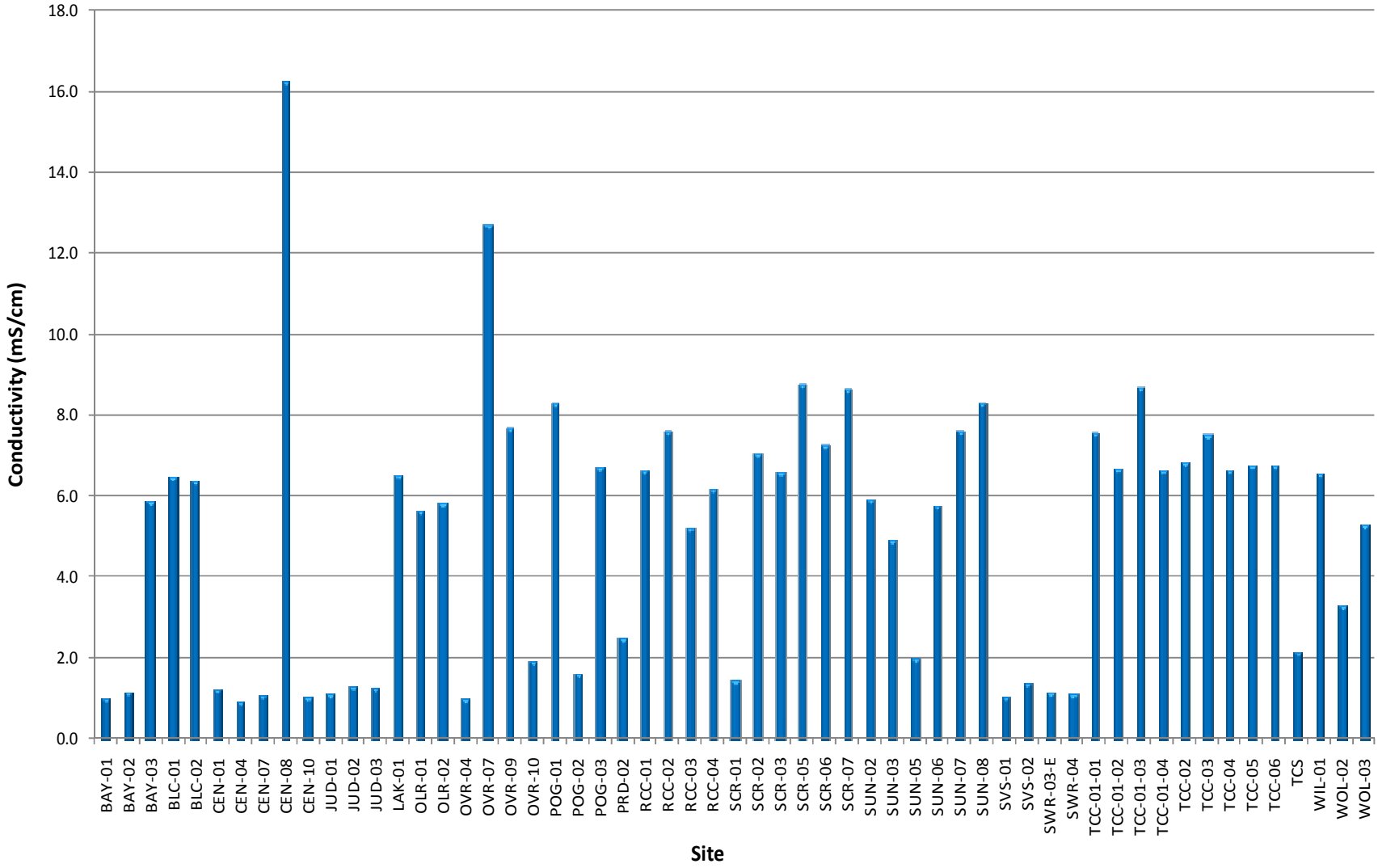

GRAPH 4-5: TURBIDITY

Action Level is Best Professional Judgment

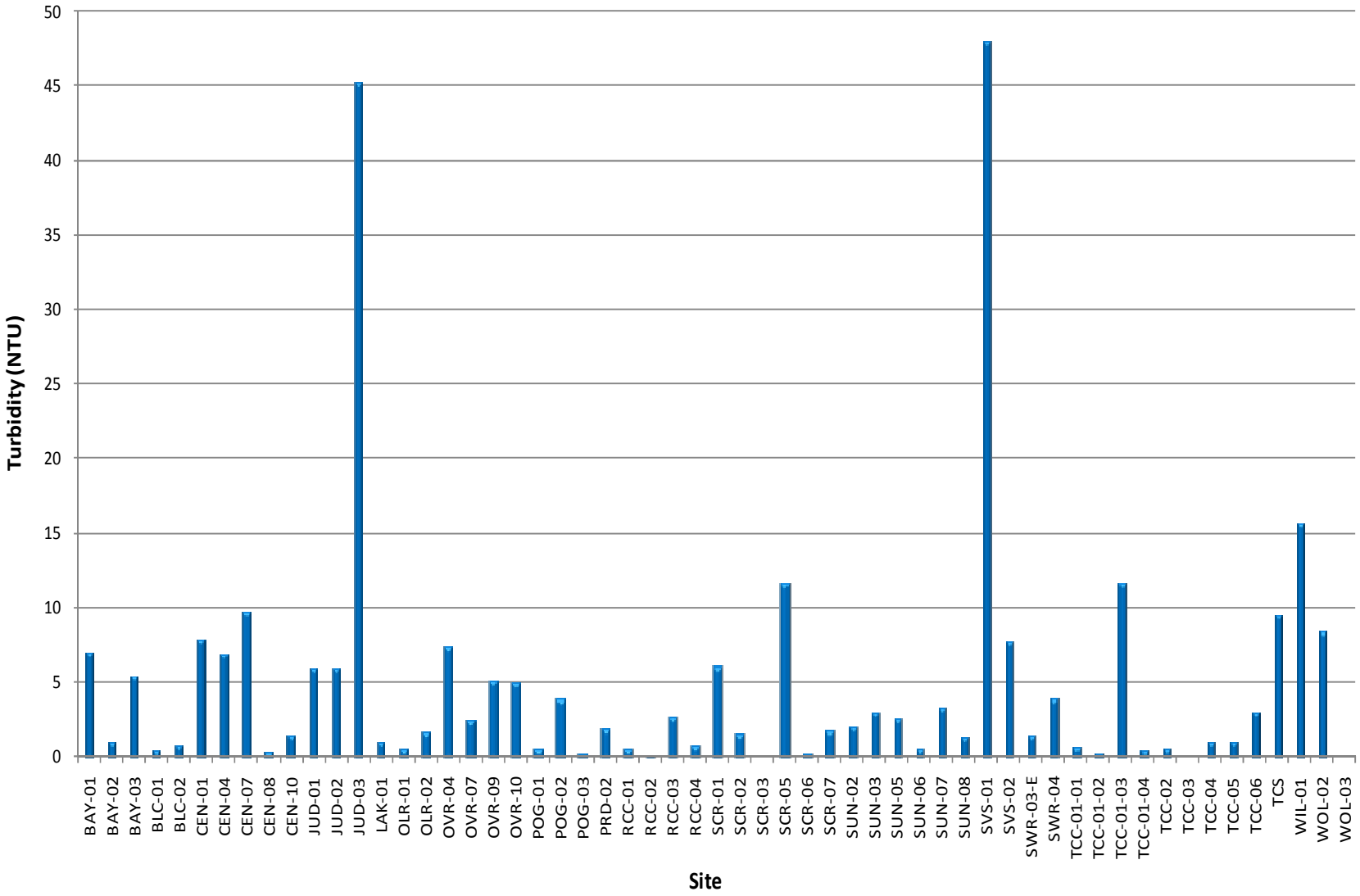

GRAPH 4-6: AMMONIA-N

Action Level = 1.0 mg/L

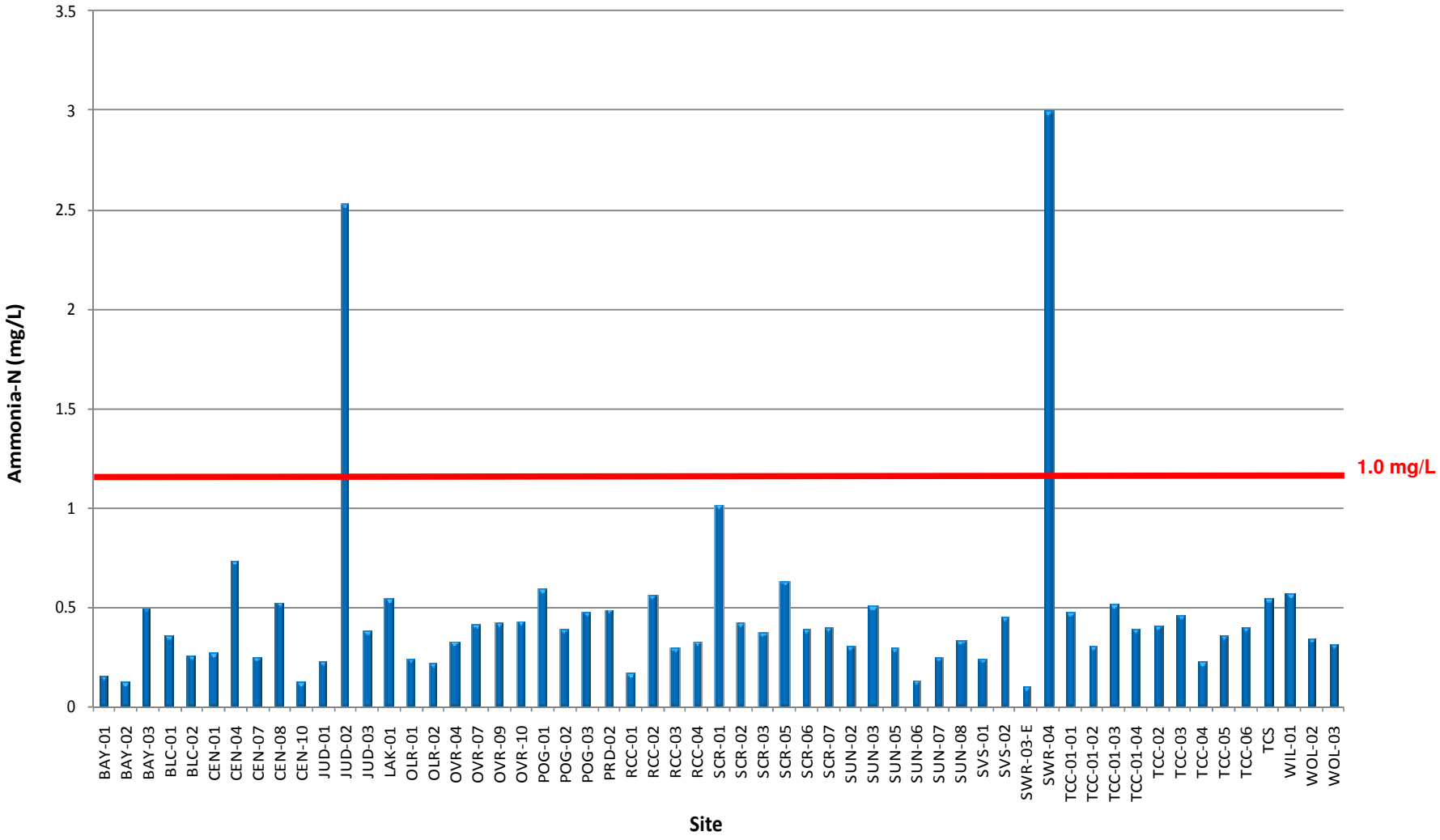

GRAPH 4-7: NITRATE-N

Action Level = 10.0 mg/L

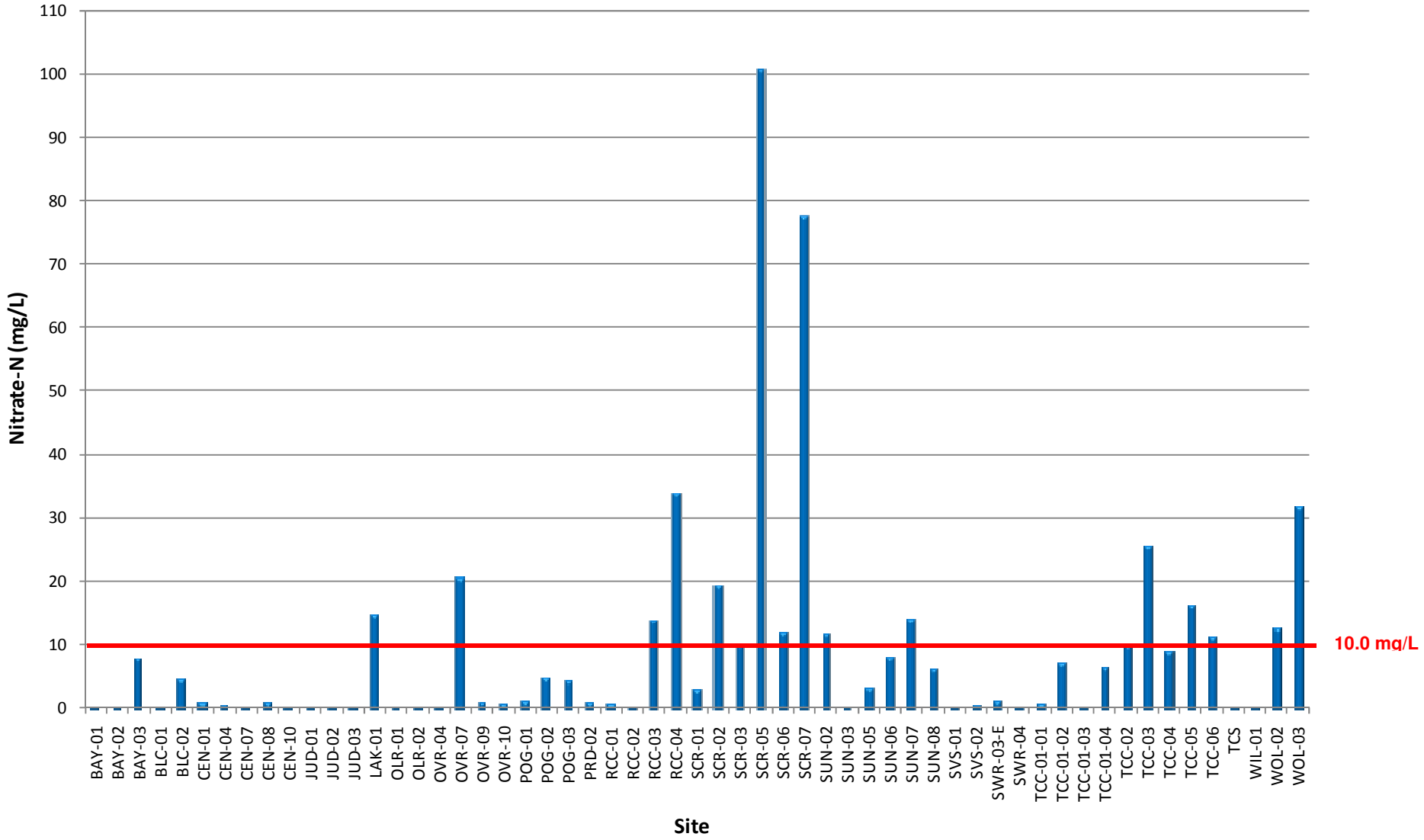

GRAPH 4-8: ORTHOPHOSPHATE-P

Action Level = 2.0 mg/L

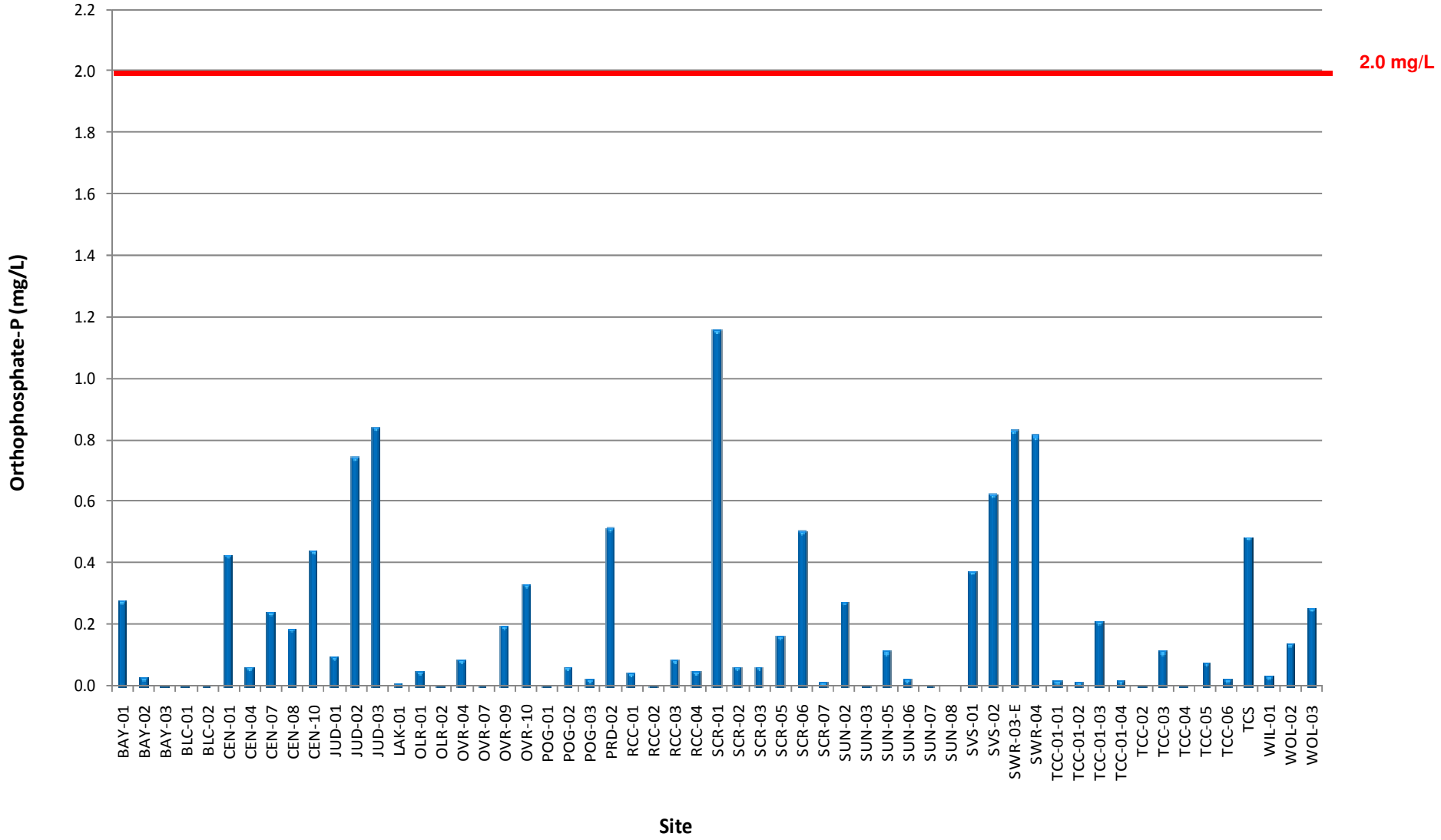

GRAPH 4-9: SURFACTANTS (MBAS)

Action Level = 1.0 mg/L

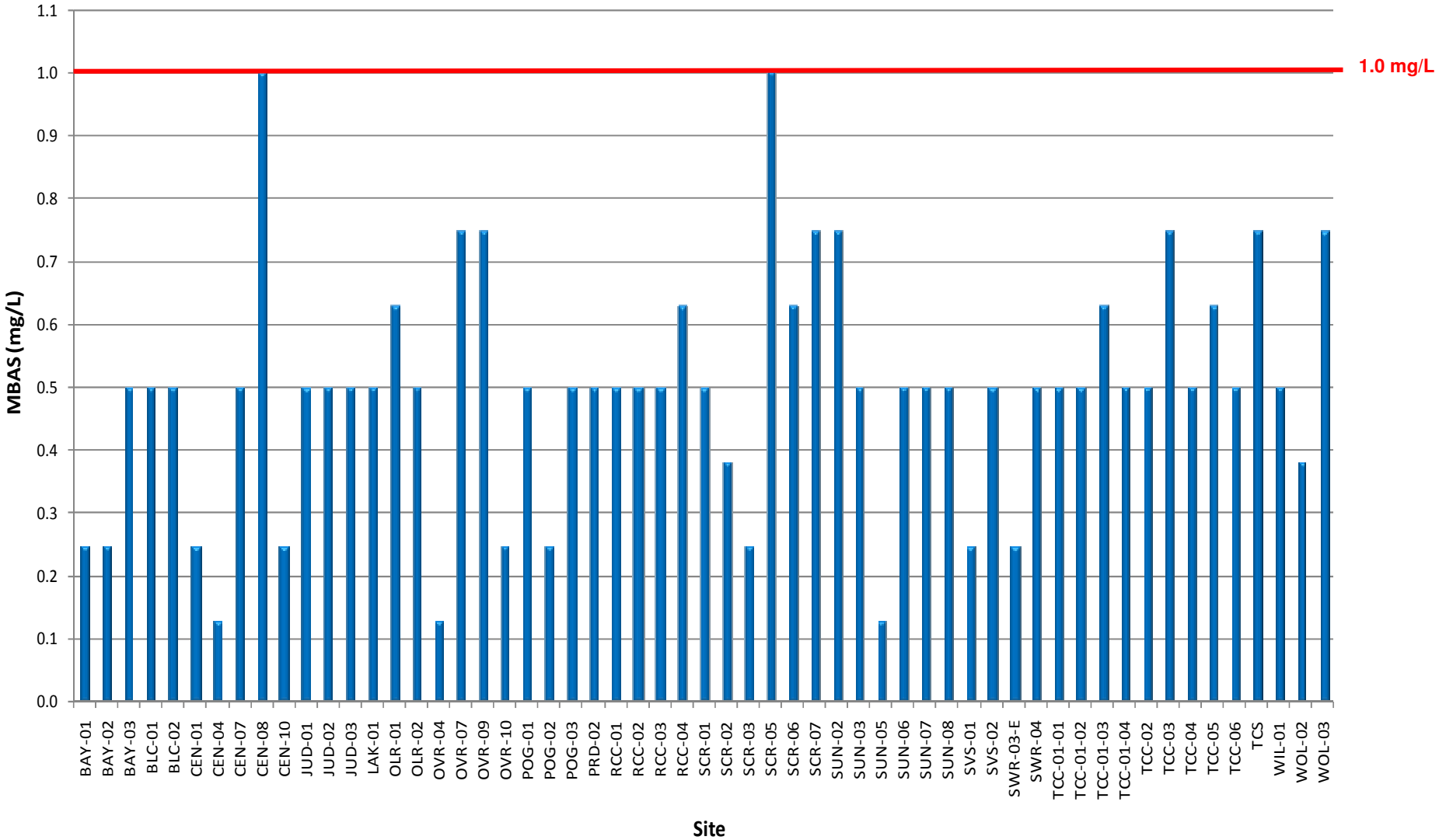

GRAPH 4-10: GLYCOL

Action Level = 1.0 mg/L

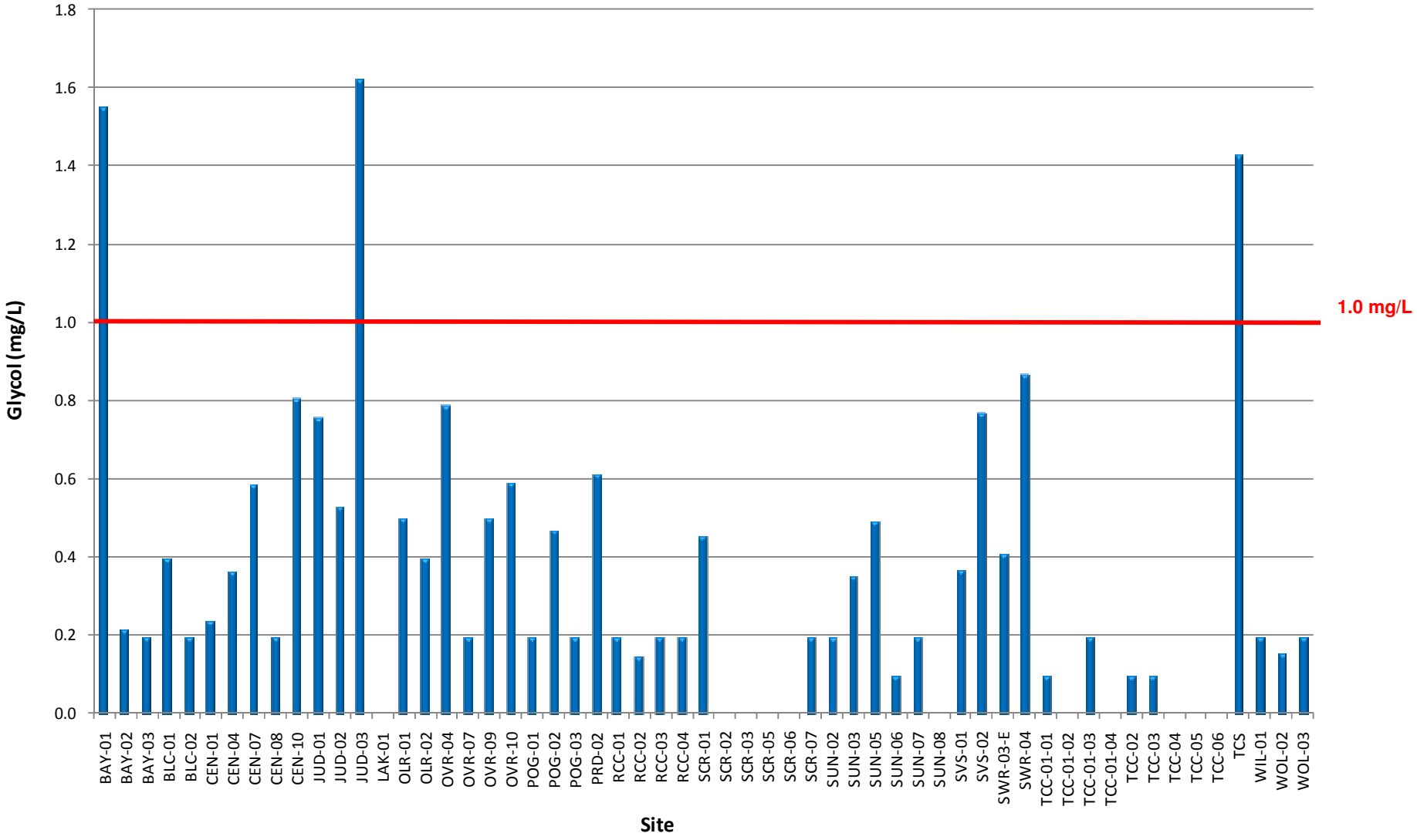

5 TRASH ASSESSMENT

5.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather monitoring site. This trash assessment program is designed to provide information on the spatial extent and relative abundance of trash present, as well at the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form to document the amount and extent of trash at each evaluated site. The first page defines the level of trash as falling within one of five categories ranging from optimal to poor. It also lists any potential threat the wastes may pose to human or aquatic health. The second page, which includes information about the types, prevalence, potential routes, and sources of trash, is also completed at sites where a submarginal or poor trash level is assigned.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although the number of trash pieces is also included in each category as a rough guideline. The five categories are listed below.

- Optimal: On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
- Suboptimal: On first glance, little or no trash visible. After close inspection small levels of trash (~10 - 50 pieces) evident in evaluated area.
- Marginal: Trash is evident in low to medium levels (~51 - 100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
- Submarginal: Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (~100 - 400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
- Poor: Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* – Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment.

- *Threat to Aquatic Health* – Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amounts of settleable, degradable, and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. **Large amount is defined as 50 pieces or more.*

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Form.

If a site is labeled as submarginal or poor, it is assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on their prevalence and the potential threat to water quality they pose. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

The majority of sites evaluated in the City were rated optimal or suboptimal. Of the remaining sites, five fell under the marginal category, and one fell under the submarginal category. No sites were rated as poor. Graph 5-1 and Table 5-1 summarize the trash assessment results. Figure 5-1 provides a map of sampling sites and their corresponding trash assessment.

GRAPH 5-1
TRASH ASSESSMENT SUMMARY

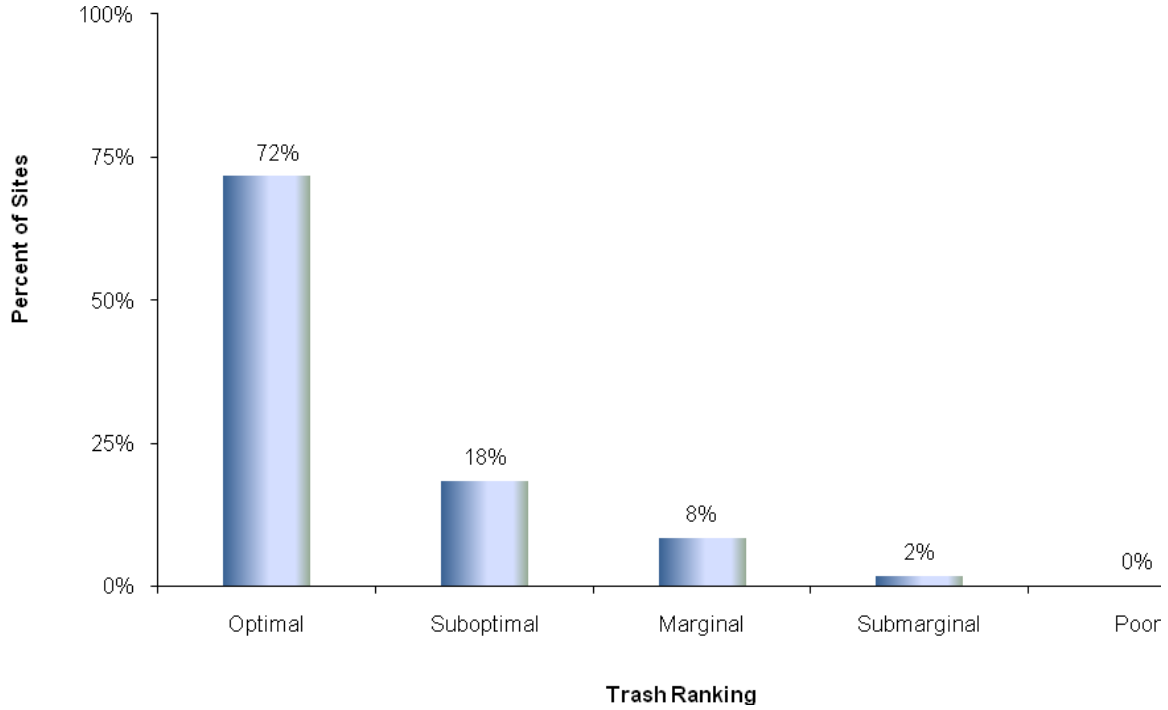

5.3.1 Submarginal Sites

The site that was rated as submarginal is discussed below. A breakdown of the types, prevalence ranking, potential routes, and potential sources of trash to these sites is presented in Table 5-1.

Site SWR-04 is located at an outlet northwest of the intersection of C Street and 5th Avenue. Large quantities of beverage containers were found at the site, including Styrofoam cups, beer bottles, and aluminum cans. There were also significant amounts of food packaging and plastic bags. Much of the trash appeared to have come from transient activity. There were multiple shopping carts and cardboard near the banks of the water, also suggesting human activity in the immediate area. The site was assessed as a potential threat to human health, due to human feces and urine in the immediate area, and mosquito larvae directly observed in ponded water. The presence of larvae in the water was most likely due to trash.

TABLE 5-1
BREAKDOWN OF SUBMARGINAL SITES

Site	Types of Trash	Ranking	Potential Route 1	Potential Route 2	Potential Source 1	Potential Source 2
SWR-04	Food Packaging	1	Dumping	Littering	Transient	--
	Shopping Carts	2	Dumping	Littering	Transient	--
	Fabric/Clothing	3	Dumping	Littering	Transient	--

TABLE 5-2
TRASH ASSESSMENT RESULTS

Optimal (43 sites)			Suboptimal (11 sites)	Marginal (5 sites)	Submarginal (1 site)
BAY-01	POG-03	SVS-02	CEN-03	POG-01	SWR-04
BAY-02	RCC-01	SWB-03	CEN-04	RCC-03	
BAY-03	RCC-02	TCC-01-01	CEN-07	SCR-04	
BLC-01	RCC-04	TCC-01-02	JUD-01	SCR-05	
BLC-02	SCR-01	TCC-01-03	JUD-02	SWR-03-E	
CEN-01	SCR-02	TCC-01-04	OLR-01		
CEN-08	SCR-03	TCC-02	OLR-02		
CEN-10	SCR-06	TCC-04	PRD-02		
JUD-03	SCR-07	TCC-05	SUN-02		
LAK-01	SUN-03	TCC-06	TCC-03		
OVR-04	SUN-05	TCS	WIL-01		
OVR-07	SUN-06	WOL-02			
OVR-09	SUN-07	WOL-03			
OVR-10	SUN-08				
POG-02	SVS-01				

FIGURE 5-1
TRASH ASSESSMENT MAP

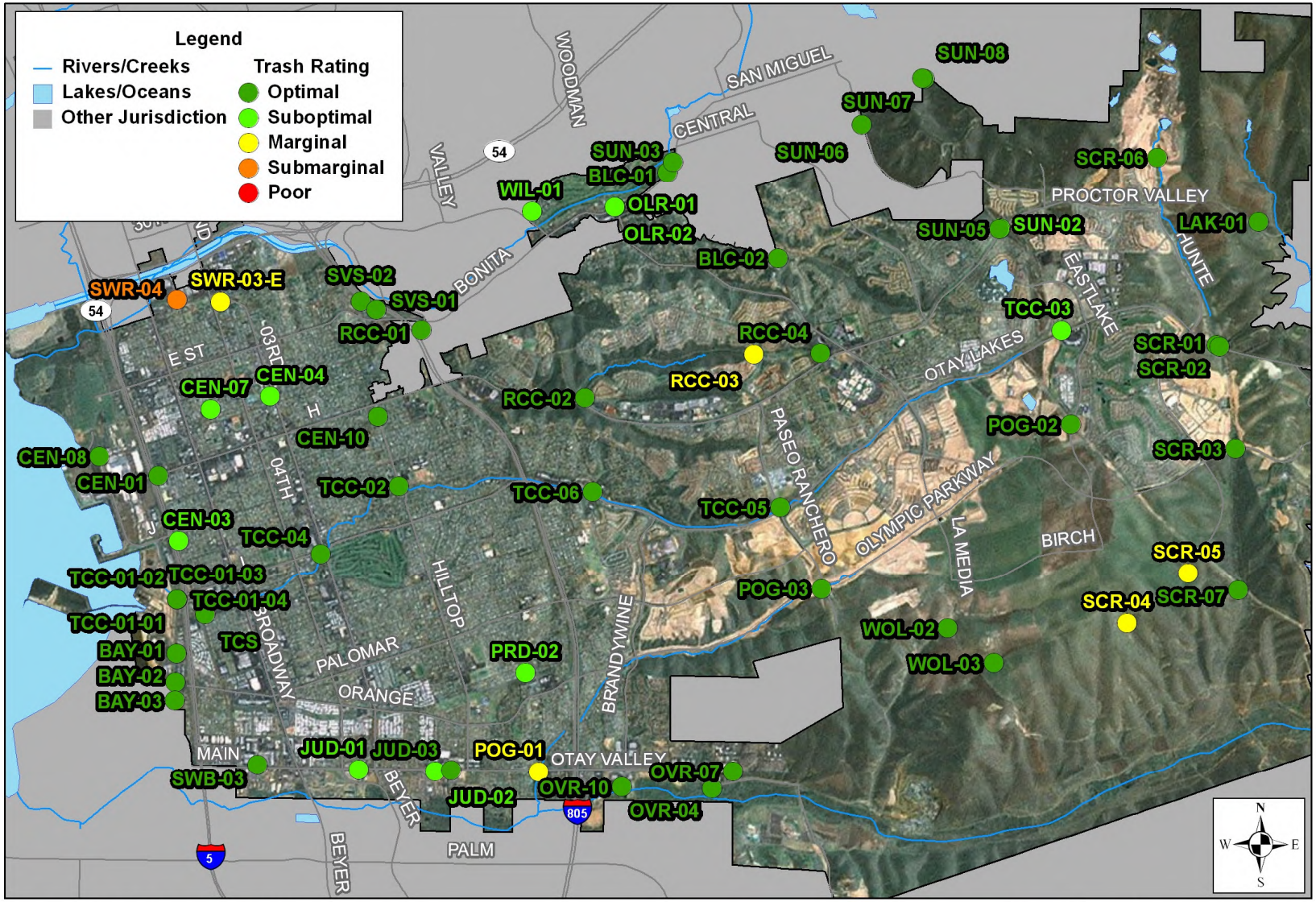

Base Data Sources: USGS, SanGIS, SANDAG

0 0.5 1 2 Miles

6 LABORATORY ANALYTICAL RESULTS

Laboratory analyses were conducted at 15 sites, representing over 25 percent of all sites with ponded or flowing water. The laboratory constituents measured are defined below.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Although it is not itself considered a pollutant, total hardness is measured in order to calculate CTR (California Toxics Rule) limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Diazinon and **chlorpyrifos** are organophosphate pesticides that are highly toxic to insects, birds, and mammals, freshwater fish, and invertebrates. In 2005, the Environmental Protection Agency banned the sale of diazinon in the United States and tightened restrictions on chlorpyrifos use.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the development and survival of aquatic organisms.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness. As hardness increases, so does the Criterion Maximum Concentration (CMC), a concentration limit in which aquatic life can be sustained. CMC values differ for various metals. Dry weather monitoring laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 6-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

TABLE 6-1
CTR – CMC FOR DISSOLVED METALS

Dissolved Copper			
Site	**Total Hardness (mg/L)**	**Concentration (µg/L)**	**CMC (mg/L)**
BAY-01	260	10	0.0331
CEN-01	335	21	0.0420
JUD-01	313	6 J	0.0394
JUD-02	372	2 J	0.0463
OVR-09	926	7 J	0.0496
POG-02	360	4 J	0.0449
PRD-02	570	9 J	0.0496
RCC-01	1,410	2 J	0.0496
RCC-03	1,170	3 J	0.0496
SCR-01	346	3 J	0.0433
SUN-02	1,140	3 J	0.0496
SUN-05	352	3 J	0.0440
SUN-06	904	3 J	0.0496

SVS-01	313	5 J	0.0344
SWR-03-E	302	4 J	0.0341
TCC-03	1,390	2 J	0.0476
TCC-04	1,710	2 J	0.0476
Dissolved Zinc			
Site	**Total Hardness (mg/L)**	**Concentration (µg/L)**	**CMC (mg/L)**
BAY-01	260	59	0.263307
CEN-01	335	68	0.326382
JUD-01	313	16 J	0.308127
JUD-02	372	16 J	0.356678
OVR-09	926	15 J	0.379298
POG-02	360	12 J	0.346905
PRD-02	570	31	0.379298
RCC-01	1,410	3 J	0.379298
RCC-02	1,930	3 J	0.379298
RCC-03	1,170	12 J	0.379298
SCR-01	346	18 J	0.33544
SUN-02	1,140	8 J	0.379298
SUN-05	352	7 J	0.340362
SUN-06	904	2 J	0.379298
SVS-01	313	14 J	0.308127
SWR-03-E	302	16 J	0.298927
TCC-03	1,390	2 J	0.379298
TCC-04	1,710	3 J	0.379298
Dissolved Cadmium			
Site	**Total Hardness (mg/L)**	**Concentration (µg/L)**	**CMC (mg/L)**
BAY-01	260	0.3 J	0.012
CEN-01	335	0.5 J	0.016
JUD-02	372	0.4 J	0.018
PRD-02	570	0.2 J	0.019
RCC-02	1,930	0.5 J	0.019
RCC-03	1,170	0.2 J	0.019
SUN-02	1,140	0.4 J	0.019
SUN-05	352	0.4 J	0.017
TCC-03	1,390	0.2 J	0.019

Notes: Only those sites where a particular dissolved metal was detected are listed. Lead was not detected in any of the samples. For equations and constants used in California Toxics Rule calculations, see http://www.epa.gov/ost/standards/ctr/toxic.pdf.
CMC = Criterion Maximum Concentration, short term concentration limit in which aquatic life can be sustained.
J = Value reported is below the reporting limit; measurements have an increased percent error.

Coliform bacteria are relatively harmless to humans and are typically present at high levels in mammalian digestive tracts, as well as naturally found in most surface waters and soils. Testing water samples for total coliform bacteria is a standard practice in public health. Total coliform is tested as a surrogate for more harmful pathogens that are generally present in much smaller quantities and are therefore difficult to test for directly.

Fecal coliform, a subset of coliform bacteria, and ***Enterococcus*** are found primarily in the gastrointestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material is human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

A summary of the laboratory analytical results is presented in Table 6-2. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included as Appendix C.

TABLE 6-2
LABORATORY ANALYSIS STATISTICAL SUMMARY*

Parameter (units)	Maximum	Minimum	Number of Exceedances
Oil and Grease (mg/L)	nd	nd	0
Total Hardness (mg/L CaCO3)	1,930	302	**
Cadmium (dissolved, µg/L)	0.5	nd	0
Copper (dissolved, µg/L)	21	nd	0
Lead (dissolved, µg/L)	0.5	nd	0
Zinc (dissolved, µg/L)	68	3 J	0
Diazinon (µg/L)	0.07	nd	0
Chlorpyrifos (µg/L)	nd	nd	0
Total Coliform (MPN/100 mL)	170,000	40	3
Fecal Coliform (MPN/100 mL)	24,000	nd	5
Enterococcus (MPN/100 mL)	90,000	20	5

Notes:
* Calculations include complete routine visit data only; confirmation and follow-up visits are not included.
**Total hardness is not considered a pollutant and thus has no exceedances.
nd = not detected
J = Value reported is below the reporting limit; measurements have an increased percent error.

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L $CaCO_3$)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)*	*Enterococcus* (MPN/100 mL)
CEN-01	6/15/2010	9:30	nd	335	0.5 J	21	nd	68	nd	nd	50,000	**17,000**	**24,000**
CEN-01	6/30/2010	10:40	na	na	na	na	na	na	na	na	54,800	2,823	6,488
JUD-01	6/10/2010	11:20	nd	313	nd	6 J	nd	16 J	nd	nd	30,000	**13,000**	**8,000**
JUD-01	6/30/2010	14:50	na	na	na	na	na	na	na	na	7,700	2,423	2,098
JUD-02	6/14/2010	9:50	nd	372	0.4 J	2 J	nd	16 J	nd	nd	80,000	110	**11,000**
JUD-02	6/30/2010	15:15	na	na	na	na	na	na	na	na	na	na	683
OVR-09	6/14/2010	11:00	nd	926	nd	7 J	nd	15 J	nd	nd	40	nd	20
POG-02	6/11/2010	11:30	nd	360	nd	4 J	nd	12 J	nd	nd	**170,000**	8,000	5,000
POG-02	6/30/2010	13:10	na	na	na	na	na	na	na	na	**173,000**	na	na
POG-02	7/2/2010	12:55	na	na	na	na	na	na	na	na	**242,000**	na	na
PRD-02	6/10/2010	15:15	nd	570	0.2 J	9 J	nd	31	nd	nd	80,000	**22,000**	3,000
PRD-02	6/30/2010	15:40	na	na	na	na	na	na	na	na	**173,000**	855	na

TABLE 6-3
LABORATORY ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L $CaCO_3$)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)*	*Enterococcus* (MPN/100 mL)
PRD-02	7/2/2010	14:40	na	na	na	na	na	na	na	na	64,900	503	na
RCC-01	6/11/2010	12:30	nd	1410	nd	2 J	nd	3 J	nd	nd	13,000	800	130
RCC-02	6/10/2010	15:45	nd	1930	0.5 J	nd	nd	3 J	nd	nd	3,000	500	800
RCC-03	6/14/2010	12:10	nd	1,170	0.2 J	3 J	nd	12 J	nd	nd	14,000	1,300	1,100
SCR-01	6/10/2010	14:40	nd	346	nd	3 J	nd	18 J	0.07	nd	**130,000**	**24,000**	**22,000**
SCR-01	6/30/2010	12:35	na	na	na	na	na	na	na	na	**130,000**	7,211	**10,462**
SCR-01	7/2/2010	11:45	na	na	na	na	na	na	na	na	na	na	**24,890**
SUN-02	6/15/2010	11:35	nd	1,140	0.4 J	3 J	nd	8 J	nd	nd	50,000	8,000	360
SUN-05	6/15/2010	12:15	nd	352	0.4 J	3 J	nd	7 J	nd	nd	17,000	110	1,700
SVS-01	6/9/2010	15:15	nd	313	nd	5 J	nd	14 J	nd	nd	**170,000**	300	800
SVS-01	6/30/2010	11:55	na	na	na	na	na	na	na	na	37,800	na	na
SWR-03-E	6/15/2010	14:45	nd	302	nd	4 J	nd	16 J	nd	nd	23,000	**13,000**	**90,000**

TABLE 6-3
LABORATORY ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L $CaCO_3$)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)*	*Enterococcus* (MPN/100 mL)
SWR-03-E	6/30/2010	16:15	na	na	na	na	na	na	na	na	**308,000**	**101,882**	**92,080**
SWR-03-E	7/6/2010	10:00	na	na	na	na	na	na	na	na	46,100	2,800	6,488
TCC-04	6/11/2010	10:20	nd	1,710	nd	2 J	nd	3 J	nd	nd	5,000	700	140
Reporting Limits			**5**	**10**	**1**	**10**	**5**	**20**	**0.05**	**0.05**	**20****	**20****	**20****
Action Levels			**15.0**	*******	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**130,000**	**13,000**	**7,000**

Notes:
Red values are at or exceed action level.
J = Value reported is below the reporting limit; measurements have an increased percent error.
nd = not detected; na = not analyzed.
CTR = California Toxics Rule; CTR action levels for metals are calculated based upon on the total hardness value of the water sample.
* Number of fecal coliforms is derived from *E. coli* count. Number of fecal coliforms = (Number of *E. coli*) / 0.85.
** Reporting limit is 10 MPN/100 mL for IDEXX tests used during confirmation and upstream testing.
*** Total hardness is not considered a pollutant (see section 3.4), and thus has no established action level for the purposes of dry weather monitoring.
Denotes a confirmation visit.

7 DATA ANALYSIS

This section provides an overall evaluation of the results of the 2010 Dry Weather Monitoring Program, as well as a discussion of historical trends for various constituent exceedances.

7.1 2010 Results

Table 7-1 presents the sites at which one or more parameter tested above the respective action level. Below is a summary of notable constituent exceedances reported during the 2010 Dry Weather Monitoring Program.

- Nitrate-N was the constituent with the greatest number of exceedances, testing above the action level at 17 sites.
- Bacteria levels were elevated at eight sites. Note that dry weather action levels for bacterial indicators were revised in 2010. Constituents have been compared to action levels in effect at the time of sampling to identify exceedances.
- All three sites with ammonia-N exceedances were small amounts of ponded water.

7.2 Previous Results

Historical results regarding exceedances are presented in Table 7-2, Graph 7-1, and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances by year for field constituents, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

During the 2010 Dry Weather Monitoring Program, one exceedance of turbidity was reported. However, prior to 2010, no exceedances have been measured for temperature, turbidity, cadmium, copper, lead, or chlorpyrifos. Therefore, these constituents are not included in the following table and graphs.

The historical data for the results of field analyses presented in Graph 7-1 indicates a decreasing trend in conductivity and ammonia-N exceedances. Orthophosphate-P exceedances have been infrequent, and there is no apparent trend for glycol, surfactants, or pH results. Nitrate-N exceedances generally appear to be increasing each year since 2004.

Historical data for laboratory analyses presented in Graph 7-2 indicate regular bacteria exceedance rates, although the percent of total and fecal coliform exceedances appears to have decreased somewhat over the years. Zinc and diazinon have not been detected over their action levels since 2003. Prior to 2003 the rates of exceedances were approximately 10 percent per year. Oil and grease has not been measured above the action level since 2005. From 2002-2007 both field screening and laboratory analysis were performed for surfactants. Starting in 2008, routine laboratory analysis of surfactant levels was discontinued.

TABLE 7-1
2010 EXCEEDANCES SUMMARY

Site	Turbidity	Ammonia-N	Nitrate-N	Surfactants	Glycol	Total Coliform	Fecal Coliform	*Enterococcus*
BAY-01					✓			
CEN-01							✓	✓
CEN-08				✓				
JUD-01							✓	✓
JUD-02		✓						✓
JUD-03					✓			
LAK-01			✓					
OVR-07			✓					
POG-02						✓		
PRD-02							✓	
RCC-03			✓					
RCC-04			✓					
SCR-01		✓				✓	✓	✓
SCR-02			✓					
SCR-03			✓					
SCR-05			✓					
SCR-06			✓					
SCR-07			✓					
SUN-02			✓					
SUN-07			✓					
SVS-01	✓					✓		
SWR-03-E							✓	✓
SWR-04		✓						
TCC-02			✓					
TCC-03			✓					
TCC-05			✓					
TCC-06			✓					
TCS					✓			
WOL-02			✓					
WOL-03			✓					

Note: Table reflects exceedances occurring during routine visits only, not confirmation or follow-up visits.

TABLE 7-2
PERCENT OF SITES WITH EXCEEDANCES BY YEAR

	Field Screening									Laboratory Analyses							
Year	**Number of Sites**	pH	Turbidity	Conductivity *	Surfactants (field)	Ammonia-N	Nitrate-N	Orthophosphate-P	Glycol	**Number of Sites**	Surfactants (lab)**	Oil & Grease	Zinc	Diazinon	Total Coliforms	Fecal Coliforms	*Enterococcus*
2002- ***Round 1***	42	2	7	40	5	14	21	0	7	13	0	31	0	8	77	77	31
2002- ***Round 2***	45	9	4	38	16	13	22	2	9	15	8	7	7	13	87	87	27
2003	50	4	2	2	2	18	20	0	4	15	0	7	7	13	87	87	27
2004	50	4	0	6	8	16	10	2	22	15	0	0	0	0	60	20	27
2005	50	0	8	8	14	12	12	0	2	15	0	7	0	0	87	13	20
2006	57	5	2	0	9	5	11	0	5	15	7	0	0	0	33	7	20
2007	57	2	2	2	12	9	14	0	9	15	7	0	0	0	67	33	33
2008	57	0	0	0	4	4	28	0	9	15	na	0	0	0	47	13	27
2009	57	4	0	0	7	5	19	4	2	15	na	0	0	0	27	20	27
2010	57	0	2	0	2	5	30	0	4	15	na	0	0	0	20	33	33

Notes: Results based on complete routine visits only. Confirmation visits, follow-up visits and dry sites not included.

* By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

** From 2002-2007 both field screening and laboratory analysis were performed for surfactants. Starting in 2008, surfactants were only measured in the field.

na = not analyzed

GRAPH 7-1
PERCENT OF SITES WITH FIELD CONSTITUENTS EXCEEDANCES BY YEAR

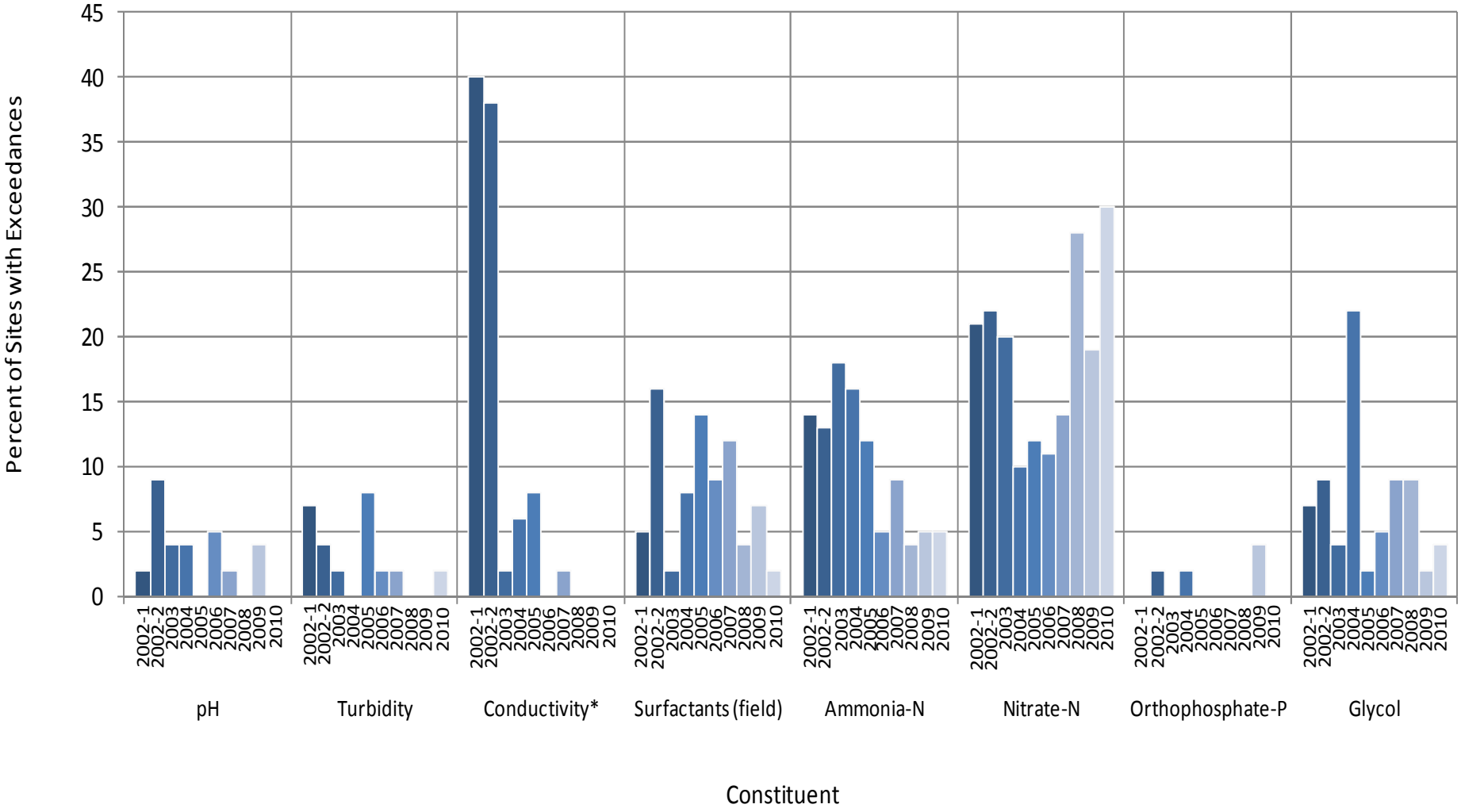

* The action level for conductivity was numeric in the past but was later changed to best professional judgment. See footnote in Table 7-2.

GRAPH 7-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

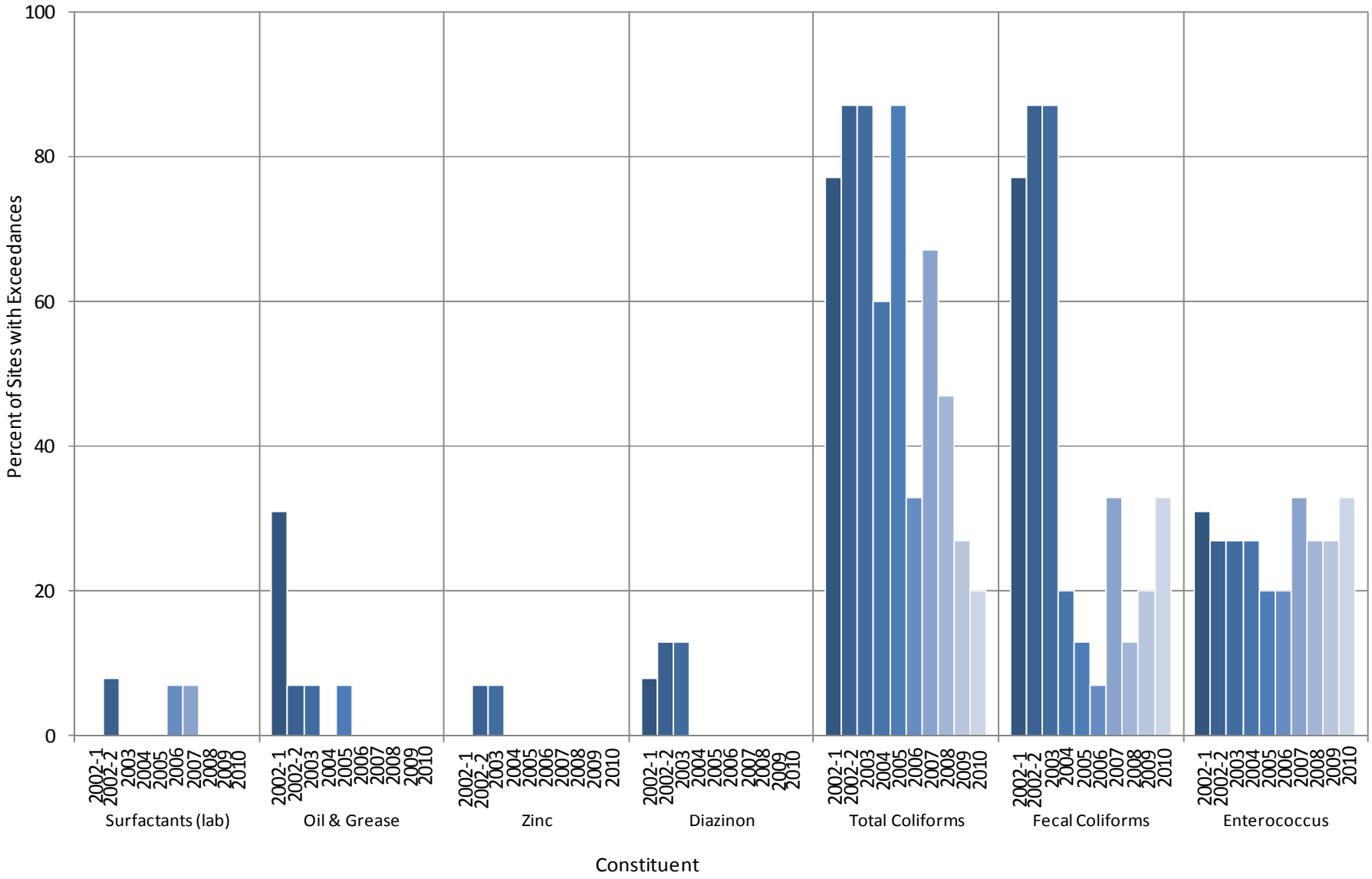

8 UPSTREAM INVESTIGATIONS

The purpose of follow-up investigations is to identify source(s) of pollutants that have caused action level exceedances during routine field screening and laboratory analysis.
Photographs of all primary sampling sites are provided in Appendix B.

8.1 Investigation Procedure

In the event that a constituent measurement is above the associated action level during the routine visit, a confirmation visit is typically conducted within two business days of receiving the result. The purpose of the confirmation visit is to verify whether the initial exceedance is persistent. The visit includes returning to the routine site to retest the water for the parameters initially in exceedance.

In circumstances where an exceedance has been sufficiently investigated through previous studies and a confirmation visit was not likely to provide new information, a confirmation visit was not conducted. Efforts were instead focused upon acquiring new information whenever possible.

If the constituent measures below specified action levels during the confirmation visit, the initial exceedance may have been due to a transient flow. If, however, the constituent concentration is found to exceed the specified action level during the confirmation visit, an upstream investigation is performed. In this case, the field crew progresses upstream to isolate and identify potential pollutant sources.

Follow-up investigations entail making visual observations of areas upstream of the routine site and collecting samples for field or lab analysis. Flow rates of each branch contributing to the site are measured, potential sources of the COC are identified, and sample data is used to assist in source identification. At each location sampled, visual observations are recorded on field data sheets and include water color, clarity, odor, floatable materials, vegetation, and biology present. Field data sheets are included in Appendix D.

The laboratory test for investigating upstream bacteria sources differs from routine bacteria testing by using the IDEXX Colilert and IDEXX Enterolert tests. Information about these methods is provided in Table 3-2. Results for the Colilert and Enterolert tests are typically available within 24 hours, as opposed to the five business days needed for routine testing. The quicker turnaround time allows for additional upstream investigations as needed.

8.2 Investigated Sites

During the 2010 Dry Weather Monitoring Program, some sites required follow-up investigations for constituent exceedances. This section includes a description of the investigated sites, analytical results, photographs of selected upstream locations, and the results of upstream investigations. Table 10-2 in Section 10 of this report provides a summary of the investigation results.

Site BAY-01 is located at an outlet across from 1075 Bay Boulevard, on the west side of the street. The water was ponded during the initial visit, and the glycol measurement was 1.55 mg/L. At the confirmation visit, the glycol level had decreased to 0.89 mg/L. It was concluded that transient exceedance was likely due to irrigation runoff that had come into contact with coolant leaks in an upstream parking lot (Photo 8-1).

Photo 8-1: Irrigation runoff in parking lot near Site BAY-01

Site CEN-01 is located at a concrete channel south of H Street, east of I-5 and the trolley tracks. The site was partially shaded and had yellow-colored water. A fecal coliform bacteria count of 17,000 MPN/100 mL and an *Enterococcus* bacteria count of 24,000 MPN/100 mL were noted at the site. Bacteria levels decreased below action levels at the confirmation visit, and areas upstream of the site did not appear to be contributing significant sources of bacteria. An increase in flow from the routine visit to the confirmation visit may have transported bacteria away from the site. Thus, it was concluded that the initial exceedance was likely the result of a transient flow.

Site CEN-08 is located at a catch basin 100 feet west of Marina Parkway, north of G Street. The initial field screening and confirmation visit samples collected had a surfactants measurement of 1.00 mg/L. Ponded water at upstream location CEN-08-1, at the Cabrillo Mobile Lodge, had a surfactants level of 3.00 mg/L (Photo 8-2). CEN-08-1 is a designated car washing area and drains directly to a concrete channel leading to the MS4. It was concluded that washing activities at this location contribute surfactants to the MS4 flowing to Site CEN-08. Table 8-1 presents the flow and surfactants concentrations measured during this investigation and Figure 8-1 provides an MS4 map of the immediate area.

Photo 8-2: Ponded water at car washing area of upstream location CEN-08-1

TABLE 8-1
SITE CEN-08 SURFACTANTS UPSTREAM INVESTIGATION RESULTS

Site	Location	Flow (gpm)	Surfactants (mg/L)
CEN-08 *(Routine Visit)*	100 feet west of Marina Parkway, north of G Street	Ponded	**1.00**
CEN-08 *(Confirmation)*	*(Same as above)*	Ponded	**1.00**
CEN-08-1	Cabrillo Mobile Lodge at 731 G Street	Ponded	**3.00**

Note: **Red** values were at or above the measured constituent's action level.

FIGURE 8-1
SITE CEN-08 SURFACTANTS UPSTREAM INVESTIGATION

Site JUD-01 is located at a concrete channel south of the intersection of Fresno Avenue and Main Street where trash was observed floating in the water. A fecal coliform bacteria level of 13,000 MPN/100 mL and an *Enterococcus* bacteria level of 8,000 MPN/100 mL were noted at the site. Because bacteria levels decreased below action levels at the confirmation visit, and since areas upstream of the site did not appear to be contributing significant sources of bacteria, it was concluded that the initial exceedance was the result of a transient flow.

Site JUD-02 is located at an outlet southwest of the Reed Court and Main Street intersection. At the routine visit, the site was partially shaded, ponded, and had yellow-colored sample water. An *Enterococcus* bacteria exceedance was noted at the site. The *Enterococcus* count was below the action level at the confirmation visit, and it was concluded that the initial exceedance was the result of a transient flow.

In addition, ammonia-N levels were above the action level at the initial field screening and at the confirmation visit. It was concluded that the exceedance was likely related to trash and decomposing leaves at the site based on the following:

- Trash and decomposing leaves were observed at the site in the ponded water. As organic material decomposes, ammonia-N is created as a byproduct.

- Due to the stagnant water at the site, ammonia-N levels were likely to rise without being washed downstream. Evaporation of the ponded water throughout the day could also cause ammonia-N to become more concentrated.
- At upstream location, JUD-02-1, the flows from two lines were sampled. Both lines had ammonia-N levels below the action level. Therefore, it is likely that conditions at the site itself, not at upstream locations, are the source of elevated ammonia-N.

Table 8-2 presents the results of the *Enterococcus* and ammonia-N investigations.

TABLE 8-2
SITE JUD-02 ENTEROCOCCI & AMMONIA-NITROGEN UPSTREAM INVESTIGATION RESULTS

Site	Location	Flow (gpm)	*Enterococcus* (MPN/100 mL)	Ammonia-N (mg/L)
JUD-02 *(Routine Visit)*	Southwest of the Reed Court and Main Street intersection.	Ponded	**11,000**	**2.531**
JUD-02 *(Confirmation)*	*(Same as above)*	Ponded	683	**2.819**
JUD-02-1	South side of Main Street in front of 3939 Main Street (north line).	Ponded	na	0.793

Notes: **Red** values exceed action level.
na = not analyzed

FIGURE 8-2
SITE JUD-02 ENTEROCOCCI & AMMONIA-NITROGEN UPSTREAM INVESTIGATION

Site JUD-03 is located at a manhole southwest of the Main Street and Mace Street intersection. At the routine field visit, the water had a musty smell and was brown in color. The glycol measurement was 1.623 mg/L, above the action level of 1.0 mg/L. At the confirmation visit, the glycol level decreased below the action level, and the water continued to have a musty odor. Due to the location of this manhole, sediment from the street entered the MS4 when the manhole was opened. This resulted in relatively high values of turbidity at both visits. However, the field crew did not consider the high turbidity measurements to be exceedances since the sediment had entered the storm drain during sampling. Because glycol levels decreased below the action level at the confirmation visit, it was concluded that the initial exceedance was a result of transient flow.

Site POG-02 is located at a manhole at the intersection of Eastlake Parkway and Trinidad Cove, near the entrance to the housing tract "Antigua". Total coliforms at the site measured 173,000 MPN/100 mL, above the action level. The exceedance was likely the result of decomposing leaves and other material in curb gutters, transported by irrigation runoff from residential areas upstream due to the following:

- Trash and decomposing leaves and grass were observed in the manhole at the site. The presence of trash is likely to encourage the growth of bacteria.
- The source of flow observed was irrigation runoff, primarily in the upstream commercial areas to the north, where decomposing organic material was not observed in the streets or gutters.
- Decomposing leaves, grass clippings, and algae were observed along curb gutters in several upstream locations in the residential areas to the east (Photo 8-3).

Photo 8-3: Upstream from POG-02-1 where leaf litter and debris were observed in gutters with flowing irrigation runoff.

- Decomposing organic material and a damp environment are conducive to bacterial regrowth in the MS4.
- The presence of algae in curb gutters indicates a consistent flow in the area.

Table 8-3 presents total coliform counts measured during this investigation.

TABLE 8-3
SITE POG-02 TOTAL COLIFORMS UPSTREAM INVESTIGATION RESULTS

Site	Location	Flow (gpm)	Total Coliform (MPN/100 mL)
POG-02 *(Routine Visit)*	Intersection of Eastlake Parkway and Trinidad Cove, near the entrance to the housing tract "Antigua"	5	**173,000**
POG-02 *(Confirmation)*	*(Same as above)*	4	**242,000**
POG-02-1	Manhole on eastside of Eastlake Parkway 300 feet north of POG-02 (east line)	< 1	**548,000**
POG-02-2	Manhole on eastside of Eastlake Parkway 300 feet north of POG-02 (north line)	2	72,700

Note: **Red** values exceed action level.

FIGURE 8-3
SITE POG-02 TOTAL COLIFORMS UPSTREAM INVESTIGATION

Site PRD-02 is located at an outlet west of Aries Court and 200 feet south of Rienstra Street, in the SDG&E easement. The sample was yellow-colored with a slight sewage odor, and the site had a low flow rate of 1 gpm. At the routine visit, there was a fecal coliform count of 22,000 MPN/100 mL, which decreased to 855 MPN/100 mL at the confirmation visit. However, at the confirmation visit, total coliforms were above the action level with a count of 173,000 MPN/100 mL. A second confirmation visit was conducted and total coliforms measured below the action level at 64,900 MPN/100 mL. These exceedances are most likely attributable to the abundance of trash in the water, and in the immediate and upstream areas of the site. Decomposing trash can induce bacterial growth, particularly total coliform bacteria. Additionally, trash containing food may attract wild animals, which may then deposit feces in the vicinity.

Site SCR-01 is located at an outlet north of Otay Lakes Road and 300 feet west Otay Ranch Road, east of Hunte Parkway. At the routine sample visit, the ammonia-N measurement was 1.026 mg/L. At the confirmation visit, the ammonia-N concentration had decreased to 0.973 mg/L. Although ammonia-N levels decreased below the action level, the concentration remained relatively high.

During the upstream investigation, a manhole was opened at the corner of La Costa Avenue and Torrey Pines Road within a residential area. The manhole also contained decomposing leaves and grass clippings.

Therefore, it was concluded that the ammonia-N exceedance was likely the result of stagnant, shaded, and ponded water with decomposing leaves and trash in the water at the site based on the following:

- Trash and decomposing leaves were observed at the site in the ponded water. As organic material decomposes, ammonia-N is created as a byproduct.
- At upstream location, SCR-01-1, decomposing leaves and grass clippings were observed.
- Due to the stagnant water at the site, ammonia-N levels were likely to rise without being washed downstream. Evaporation of the ponded water throughout the day could also cause ammonia-N to become more concentrated.

In addition, at the routine visit, bacteria counts were above their respective action levels. However, only total coliform and *Enterococcus* bacteria were confirmed exceedances. At upstream location SCR-01-1, the *Enterococcus* bacteria exceedance was most likely the result of decomposing leaves and grass clippings in the manhole, and in the gutters of residential areas upstream. Irrigation runoff from upstream residential areas is most likely the source of flow observed at the site. Runoff has the potential to transport bacteria to the site as the flow comes into contact with decomposing leaves and other material. It was concluded that the confirmed bacteria exceedances were related to decomposing leaves and grass clippings in shaded and ponded areas upstream and at the site, which is conducive to bacterial growth. Table 8-4 presents the bacteria counts measured during this investigation, and Figure 8-4 displays the locations of sampling sites.

TABLE 8-4
SITE SCR-01 BACTERIA UPSTREAM INVESTIGATION RESULTS

Site	Location	Flow (gpm)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
SCR-01 *(Routine Visit)*	North of Otay Lakes Road and 300 feet, west Otay Ranch Road, east of Hunte Parkway.	Ponded	**130,000**	**24,000**	**22,000**
SCR-01 *(Confirmation 1)*	*(Same as above)*	Ponded	**130,000**	7,211*	**10,462**
SCR-01 *(Confirmation 2)*	*(Same as above)*	Ponded	na	na	**24,890**
SCR-01-1	Corner of La Costa Avenue and Torrey Pines Road.	< 1	na	na	**57,940**

Notes: **Red** values were at or above the measured constituent's action level; na = not analyzed.
*Fecal coliform counts for confirmation and follow-up visits derived from *E. coli* counts. See Table 3-2 for more information.

FIGURE 8-4
SITE SCR-01 BACTERIA UPSTREAM INVESTIGATION

Site SVS-01 is located at an outlet located behind the Ramada Inn, north of the intersection of Bonita Road and Bonita Glen. The initial sample was collected from a partially shaded and ponded area. At the initial site visit, the turbidity was very high and construction activity was observed. The sample water was gray and slightly cloudy. At the confirmation visit, the turbidity had significantly decreased. It was concluded that erosion of the steep slope with loose sediment and other materials adjacent to the site was the result of high turbidity measurements. In addition, at the routine site visit, the total coliform bacteria count was above the action level. The bacteria count had decreased below the action level at the confirmation visit, thus indicating that the initial exceedance was the result of a transient flow. Table 8-5 presents the bacteria counts and turbidity measurements recorded during the investigation.

TABLE 8-5
SITE SVS-01 TOTAL COLIFORMS & TURBIDITY UPSTREAM INVESTIGATION RESULTS

Site	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Turbidity (NTU)
SVS-01 *(Routine Visit)*	Behind the Ramada Inn at the intersection of Bonita Road and Bonita Glen, north of Bonita Road	Ponded	**170,000**	**48.05**
SVS-01 *(Confirmation)*	*(Same as above)*	< 1	37,800	3.35

Note: **Red** values were at or above the measured constituent's action level.

Site SWR-03-E is located at an outlet south of 3rd Avenue and North Glover Avenue in back of CVS Pharmacy. A fecal coliform and an *Enterococcus* bacteria exceedance was noted at the routine site visit. At the confirmation visit, total coliform, fecal coliform, and *Enterococcus* bacteria were above their respective action levels. These levels decreased below their action levels at the second confirmation visit.

During the upstream investigation, an *Enterococcus* exceedance was noted. The initial exceedances were likely due to wildlife activity and decomposing leaf litter transported by irrigation runoff from upstream residential areas based on the following:

- Upstream irrigation runoff came into contact with decomposing leaf litter in the manhole.
- Decomposing leaf litter in a ponded area is conducive to bacterial growth, and is most likely the cause of the total coliform bacteria exceedance.
- The open space at the site promotes wildlife activity which is likely related to increased levels of fecal coliforms and *Enterococcous* bacteria.
- A manhole upstream from the site on 3rd Avenue had a flow of less than 1 gpm with an abundance of small animal feces and decomposing leaf litter.
- Two shopping carts, trash, blankets, and clothing were observed next to the manhole on 3rd Avenue and evidence of current transient activity was noted.
- Discharged water from a construction site at the Fredrika Manor Community with a flow of less than one gpm flowed towards a catch basin on D Street near 3rd Avenue which likely transported bacteria to a second manhole at location SWR-03-E-1.

Table 8-6 presents the bacteria counts measured during this investigation, and Figure 8-5 displays the locations of sampling sites.

TABLE 8-6
SITE SWR-03-E BACTERIA UPSTREAM INVESTIGATION RESULTS

Site	Location	Flow (gpm)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
SWR-03-E *(Routine Visit)*	South of 3rd Avenue & North Clover Avenue in back of CVS Pharmacy.	Ponded	23,000	**13,000**	**90,000**
SWR-03-E *(Confirmation 1)*	*(Same as above)*	< 1	**308,000**	**101,882**	**92,080**
SWR-03-E *(Confirmation 2)*	*(Same as above)*	Ponded	46,100	2,800*	6,488
SWR-03-E-1	Inside Gentry Glen residential complex at entrance at 75 3rd Avenue.	< 1	112,000	1,588*	**10,462**

Notes: **Red** values were at or above the measured constituent's action level.
*Fecal coliform counts for confirmation and follow-up visits derived from *E. coli* counts. See Table 3-2 for more information.

FIGURE 8-5
SITE SWR-03-E BACTERIA UPSTREAM INVESTIGATION

Site SWR-04 is an outlet located northwest of the intersection of 5th Avenue and C Street, south of the Wal-Mart parking lot. The initial field screening and confirmation visit samples were taken from ponded water with ammonia-N levels above the action level. The water had a chemical smell, contained mosquito larvae, and was yellow in color. An upstream investigation was conducted at Eucalyptus Park at a concrete channel, and did not contribute to the ammonia-N exceedance. It was concluded that the exceedance was likely due to the abundance of trash, human waste, and transient activity in the immediate vicinity of the site. Table 8-7 presents the ammonia-N measurements recorded during this investigation, and Figure 8-6 displays the locations of sampling sites.

TABLE 8-7
SITE SWR-04 AMMONIA-NITROGEN UPSTREAM INVESTIGATION RESULTS

Site	Location	Flow (gpm)	Ammonia-N (mg/L)
SWR-04 *(Routine Visit)*	Northwest of the intersection of 5th Avenue and C Street, south of Wal-Mart parking lot.	15	**3.0**
SWR-04 *(Confirmation)*	*(Same as above)*	Ponded	**3.0**
SWR-04-1	Concrete channel at entrance to Eucalyptus Park.	< 1	0.255

Note: **Red** values exceed action level.

FIGURE 8-6
SITE SWR-04 AMMONIA-NITROGEN UPSTREAM INVESTIGATION

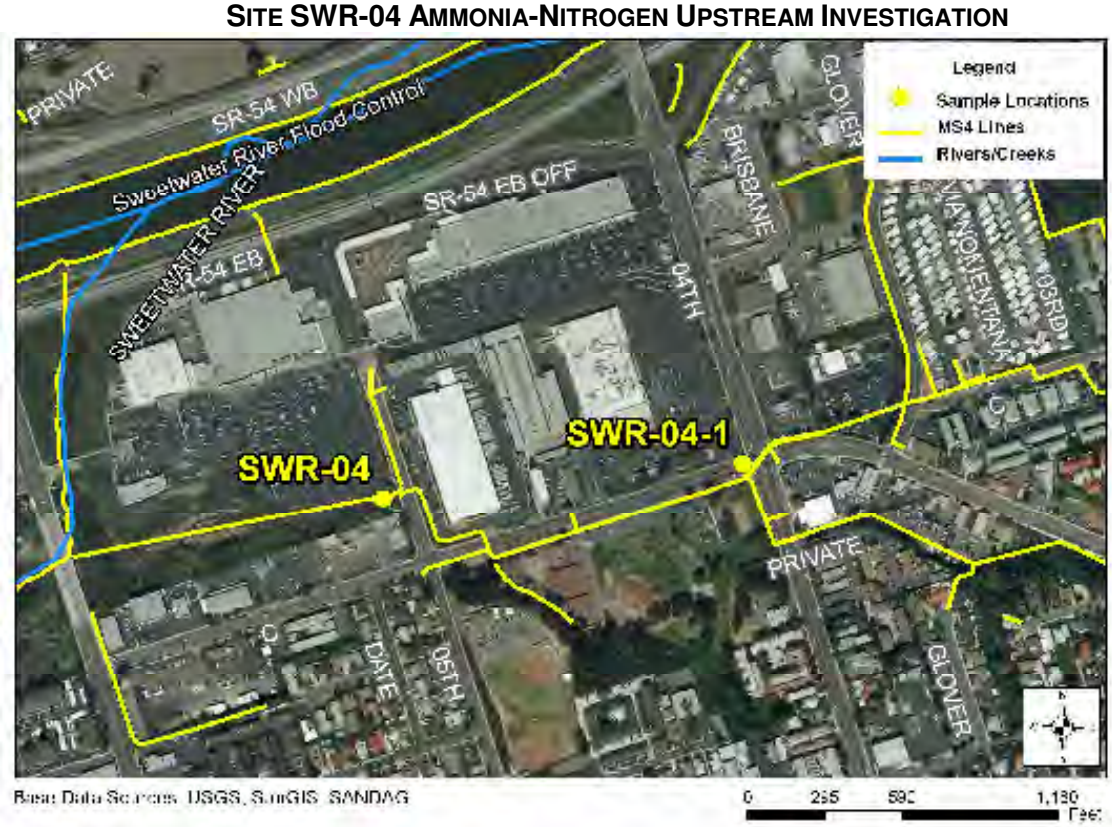

Site TCS is located at a catch basin at the intersection of Moss Street and the trolley tracks inside the property located west of the San Diego Pallet facility. At the routine site visit, a glycol measurement of 1.431 mg/L was reported. The water was ponded, yellow in color, and contained larvae. However, at the confirmation visit, the site was dry. Although, no surface flow was observed at the routine visit, the exceedance was likely the result of irrigation runoff coming into contact with fluids from leaking cars in the parking lot at the site.

9 NITRATE-NITROGEN UPSTREAM INVESTIGATIONS

9.1 Introduction

During the 2010 Dry Weather Monitoring Program, many sites required follow-up investigations for nitrate-N exceedances. Upstream investigations conducted in the past indicated that potential sources of nitrate-N were not specific to the site, but rather common to all sites within their respective drainage basin. Therefore, in 2010, the City took a comprehensive approach to investigating and identifying potential nitrate-N sources on a basin-wide basis. This section includes a description of the investigated sites, analytical results, photographs of selected upstream locations, and the results of upstream investigations.

9.2 Investigated Basins

9.2.1 Otay River Basin

Four sites were sampled within the Otay River Basin during the 2010 Dry Weather Monitoring Program. Of these sites, only OVR-07 had confirmed elevated nitrate-N concentrations. An upstream investigation was conducted to locate and identify the source(s) of nitrate-N and flow. The results of the upstream investigation are presented in Table 9-1. Routine and upstream sampling locations within the Otay River Basin are displayed in Figure 9-1.

Site OVR-07 has had relatively high conductivity measurements and nitrate-N concentrations each year of the Dry Weather Monitoring Program since 2002, with the exception of 2008. In addition, nitrate-N has been reported by State Water Resources Control Board (SWRCB) as a potential contaminant of concern at the land disposal site on Otay Valley Road, north of Energy Way and Site OVR-07[1].

Photo 9-1: Upstream location, OVR-07-1, at entrance of FJ Willert Construction Company on Nirvana Avenue.

In a previous study conducted by D-MAX in April 2010, laboratory analyses of a sample collected at OVR-07 indicated a nitrate-N concentration of 19.80 mg/L and a conductivity value of 11.14 mS/cm.

In 2010, at the upstream location, OVR-07-1, the nitrate-N concentration and conductivity measurement were also relatively high, and were greater than at the site (Photo 9-1). During the upstream investigation a manhole in the South Bay Auto Wrecking property was dry, and further upstream, a manhole along the fence of the landfill was also dry. In addition, no surface flow was observed during the investigation. Therefore, it was concluded that water enters the MS4 conveyance south of the landfill upstream from location OVR-07-1.

[1]Information obtained via http://geotracker.swrcb.ca.gov/.

Due to the current and historical measurements of nitrate-N and high conductivity at the sampling locations within the Otay River Basin, it was concluded that infiltration of water from interflow and groundwater into the MS4 conveyance upstream of location OVR-07-1 and Site OVR-07 is most likely the cause of the consistent elevated nitrate-N levels.

TABLE 9-1
OTAY RIVER BASIN NITRATE-NITROGEN UPSTREAM INVESTIGATION RESULTS

Site	Date	Location	Flow (gpm)	Conductivity (mS/cm)	Nitrate-N (mg/L)
OVR-07 *(Routine Visit)*	6/23/10	East of Property at 1879 Nirvana Avenue.	< 1	12.73	**20.63**
OVR-07 *(Confirmation 1)*	6/24/10	*(Same as above)*	< 1	12.74	**22.92**
OVR-07 *(Confirmation 2)*	7/6/10	*(Same as above)*	< 1	12.61	**20.40**
OVR-07-1	7/6/10	Manhole at the entrance of FJ Willert Construction Company on Nirvana Avenue.	< 1	12.90	**21.06**

Note: **Red** values exceed action level.

FIGURE 9-1
OTAY RIVER BASIN ROUTINE AND UPSTREAM SAMPLING LOCATIONS

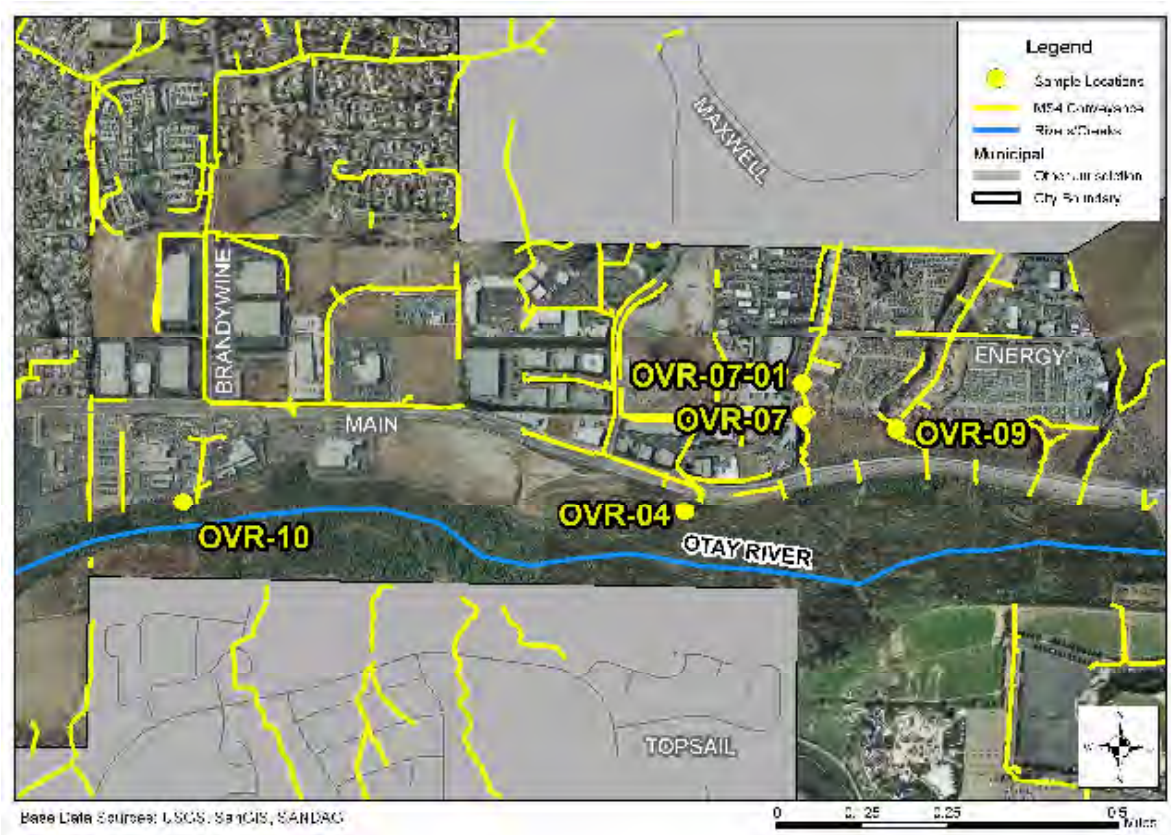

9.2.2 Rice Canyon Basin

Four sites were sampled within the Rice Canyon Basin during the 2010 Dry Weather Monitoring Program. Of these sites, RCC-03 and RCC-04 had observed elevated nitrate-N concentrations and conductivity measurements. An upstream investigation was conducted to locate and identify the source(s) of the nitrate-N and flow. The results of the upstream investigation are presented in Table 9-2, and upstream sampling locations are displayed in Figure 9-2.

Sites within the Rice Canyon Basin have had relatively high conductivity and nitrate-N concentrations each year of the Dry Weather Monitoring Program since 2002. Additionally, upstream from the sampling locations, there are seven wells monitored by SWRCB. The topography in the vicinity of the monitoring wells is generally flat and slopes southwest towards the canyon where Site RCC-04 is located approximately 7 miles west of the wells. The reported depth to groundwater ranges from approximately 8.95 to 14.55 feet below ground surface (bgs) and the groundwater flow direction is toward the southwest at a gradient of 0.02 ft/ft.

The nitrate-N concentration and conductivity measurement were relatively high at the upstream location, RCC-04-1, but were less than the measurements at Site RCC-04 (Photo 9-2). This is consistent with the direction of groundwater flow and topography of the basin. Additionally, no surface flow was observed during the upstream investigation.

In addition, during a past study conducted by D-MAX in April 2010, laboratory analysis of samples collected at location RCC-04-1 indicated nitrate-N concentrations of 18.10 mg/L. Another sample was collected downstream of Site RCC-04 at a 6” pipe next to the outfall at Site RCC-03. Laboratory results indicated nitrate-N levels of 13.50 mg/L. The addition of flow between Site RCC-03 and Site RCC-04 is the likely cause of decreasing nitrate-N levels. Based on the results of the 2010 Dry Weather Monitoring Program, it was concluded that the infiltration of groundwater and lateral flow into the MS4 conveyance upstream from Site RCC-04 and downstream of RCC-04-1 is the most probable source of elevated nitrate-N concentrations and high conductivity values within the Rice Canyon Basin.

Photo 9-2: Upstream location, RCC-04-1, at Otay Lakes Road east of East H Street in front of Southwestern College.

TABLE 9-2
RICE CANYON BASIN NITRATE-NITROGEN UPSTREAM INVESTIGATION RESULTS

Site	Date	Location	Flow (gpm)	Conductivity (mS/cm)	Nitrate-N (mg/L)
RCC-03 *(Routine Visit)*	6/14/10	Downstream of Discovery Park, west of Rancho Del Rey Parkway in Rice Canyon open space hiking trail.	10	5.24	**13.70**
RCC-03 *(Confirmation)*	6/15/10	*(Same as above)*	10	6.22	8.63
RCC-04 *(Routine Visit)*	6/24/10	Intersection of East H Street and Otay Lakes Road, on west side of shopping center, in canyon.	7	6.17	**33.92**
RCC-04 *(Confirmation)*	6/25/10	*(Same as above)*	7	6.25	**30.56**
RCC-04-1	7/1/10	Manhole on Otay Lakes Road east of East H Street in front of Southwestern College.	2.5	4.0	**12.75**

Note: **Red** values exceed action level.

FIGURE 9-2
RICE CANYON BASIN ROUTINE AND UPSTREAM SAMPLING LOCATIONS

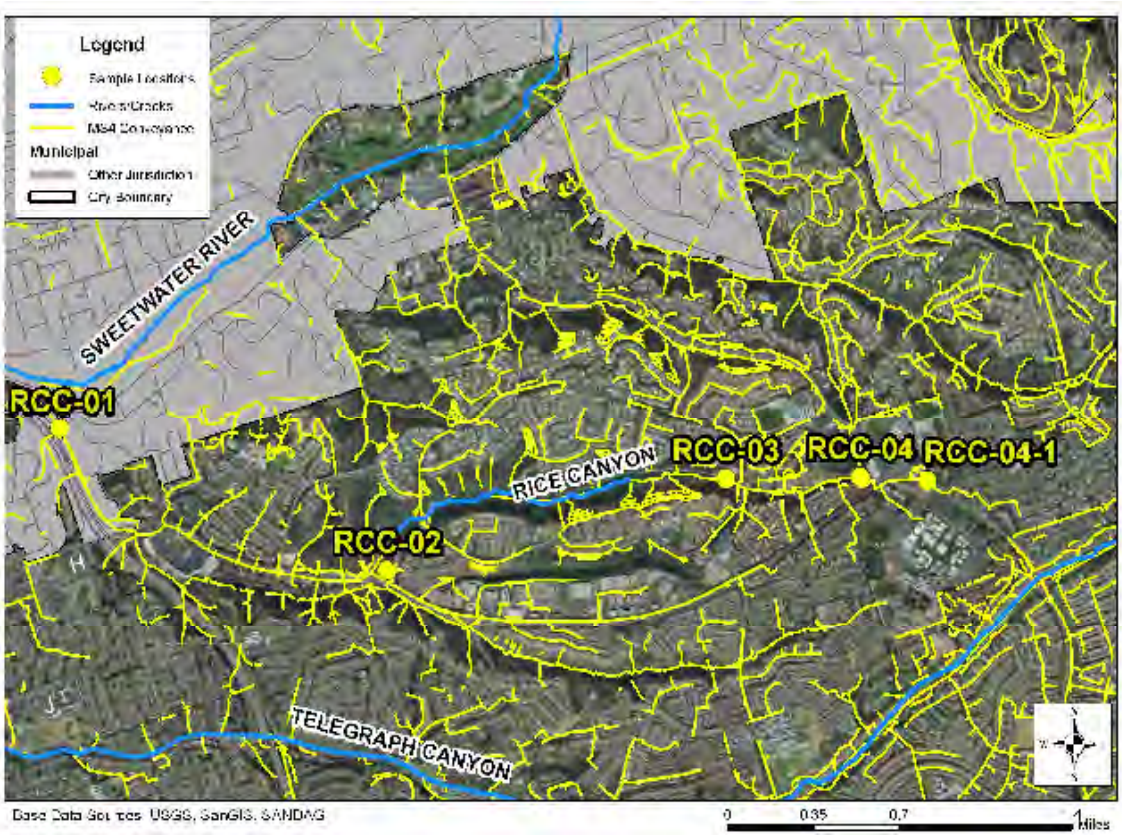

9.2.3 Salt Creek Basin

Seven sites were sampled within the Salt Creek Basin during the 2010 Dry Weather Monitoring Program. Of these sites, SCR-02, SCR-05, SCR-06, and SCR-07 had observed elevated nitrate-N concentrations and conductivity values. Therefore, upstream investigations were conducted to locate and identify the source(s) of the nitrate-N and flow. The routine and upstream sampling locations are displayed in Figure 9-3.

Throughout the history of the program, there was only one nitrate-N exceedance prior to 2007. Since 2007, sites SCR-02, SCR-03, and SCR-05 have had persistent elevated nitrate-N concentrations. In addition, these sites have had relatively high conductivity measurements, with the exception of Site SCR-05 in 2008. The historical data does not include information for Site SCR-06 until 2009, and Site SCR-07, which was added to the list of sampling locations during the 2010 Dry Weather Monitoring Program.

During the upstream investigation of Site SCR-02, water was observed seeping from a vegetated bank located on the east side of Salt Creek and west of Montevalle Community Park at upstream location, SCR-02-2 (Photo 9-3). The spring had a low flow and elevated nitrate-N levels, and location SCR-02-1 had similar results (Table 9-3). Surface flow was not observed during the upstream investigation of the site. Although seepage was observed in only one location upstream from Site SCR-02, it is probable that there are other locations where seepage occurs along the banks of Salt Creek, but are unable to locate due to heavy vegetation.

Photo 9-3: Seepage at upstream location, SCR-02-2, along the bank of Salt Creek.

Samples were taken from the two pipes, SCR-05-1 and SCR-05-2, contributing flow to Site SCR-05 (Photo 9-4). All samples had elevated nitrate-N levels and relatively high conductivity measurements. The results of the routine and upstream field screenings for Sites SCR-05 and SCR-07 are presented in Table 9-4. Further laboratory analysis of SCR-05-1 reported a level of total nitrogen of 195 mg/L with a conductivity measurement of 10.2 mS/cm (Table 9-5).

Site SCR-07, downstream of Site SCR-05, had a nitrate-N concentration of 77.63 mg/L at the routine visit, which is less than at Site SCR-05. This decrease in nitrate-N concentration is most likely the result of water passing through the detention basin before reaching the outlet at Site SCR-07.

Lastly, an upstream investigation was conducted for Site SCR-06. The results of this upstream location are presented in Table 9-6. Three samples were collected within the Salt Creek Golf Course and nitrate-N levels were below the action level. Flow observed within the golf course was

Photo 9-4: Upstream locations, SCR-05-1 (left) and SCR-05-2 (right) contributing to Site SCR-05.

relatively low. Therefore, it could not be concluded that landscaping practices at the Salt Creek Golf Course contributes to the nitrate-N exceedances within the Salt Creek Basin.

Based on the observations of the upstream area of Site SCR-02, it was concluded that the seepage of interflow along Salt Creek is a major source of nitrate-N. Water most likely percolates from irrigation at Montevalle Community Park, Eastlake Middle School, and upstream residential areas and contributes to interflow which is probably the main source of flow at the upstream sample locations. It is probable that the fertilization of the community park and the middle school contributes to elevated nitrate-N concentrations observed in the Salt Creek Basin. In conclusion, the elevated nitrate-N levels and conductivity measurements recorded for the routine and upstream sample locations within the Salt Creek Basin are most likely due to the infiltration of water from interflow and groundwater into the MS4.

TABLE 9-3
SITE SCR-02 NITRATE-NITROGEN UPSTREAM INVESTIGATION FIELD RESULTS

Site	Date	Location	Flow (gpm)	Conductivity (mS/cm)	Nitrate-N (mg/L)
SCR-02 *(Routine Visit)*	6/18/10	Salt Creek, as it passes under Otay Lakes Road, east of Hunte Parkway (north side of street).	89	7.08	**19.62**
SCR-02 *(Confirmation 1)*	6/21/10	*(Same as above)*	85	6.90	**12.79**
SCR-02 *(Confirmation 2)*	7/14/10	*(Same as above)*	82	7.27	**14.01**
SCR-02-1	7/14/10	Outfall east of Hunte Parkway at bottom of slope west of Montevalle Community Park.	< 1	9.35	**59.82**
SCR-02-2	7/14/10	Spring east of Hunte Parkway where water seeping from east bank at bottom of slope west of Montevalle Community Park.	< 1	9.40	**63.66**

Note: **Red** values exceed action level.

TABLE 9-4
SITE SCR-05 & SCR-07 NITRATE-NITROGEN UPSTREAM INVESTIGATION FIELD RESULTS

Site	Date	Location	Flow (gpm)	Conductivity (mS/cm)	Nitrate-N (mg/L)
SCR-05 *(Routine Visit)*	6/18/10	Approximately 200 feet south of Hunte Parkway, across from Exploration Falls, in canyon.	12	8.78	**100.80**
SCR-05 *(Confirmation 1)*	6/21/10	*(Same as above)*	12	11.94	**119.85**
SCR-05 *(Confirmation 2)*	6/23/10	*(Same as above)*	6	8.49	**98.45**
SCR-05-1	6/23/10	Approximately 200 feet south of Hunte Parkway, across from Exploration Falls, in canyon (small pipe at outlet).	9	12.39	**146.67**
SCR-05-1 *(Confirmation)*	6/25/10	*(Same as above)*	5.5	12.48	**188.03**
SCR-05-2	6/23/10	Approximately 200 feet south of Hunte Parkway, across from Exploration Falls, in canyon (large pipe at outlet).	6.5	2.02	8.88
SCR-07 *(Routine)*	6/28/10	South of SCR-05 detention basin at outlet.	26	8.66	**77.63**
SCR-07 *(Confirmation)*	6/29/10	*(Same as above)*	16	8.65	**85.50**

Note: **Red** values exceed action level.

TABLE 9-5
LOCATION SCR-05-1 LABORATORY RESULTS

Date	Total Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrite as Nitrogen (mg/L)	Nitrate/Nitrite as Nitrogen (mg/L)	Nitrate as Nitrogen (mg/L)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)
6/25/10	195	1.0	nd	194	194	10.20	0.3

TABLE 9-6
SITE SCR-06 NITRATE-NITROGEN UPSTREAM INVESTIGATION FIELD RESULTS

Site	Date	Location	Flow (gpm)	Conductivity (mS/cm)	Nitrate-N (mg/L)
SCR-06 *(Routine Visit)*	6/21/10	Northeast of cul-de-sac at north end of Hunte Parkway west of gate to Otay Water District property.	5	7.24	**12.21**
SCR-06 *(Confirmation1)*	6/22/10	*(Same as above)*	6	7.20	8.50
SCR-06 *(Confirmation 2)*	7/14/10	*(Same as above)*	< 1	7.66	8.50
SCR-06-1	7/14/10	Upstream of pond inside Salt Creek Golf Course.	< 1	5.84	6.52
SCR-06-2	7/14/10	East side of Salt Creek Golf Course along border of Otay Water District property.	1	3.06	3.31
SCR-06-3	7/14/10	Center of Salt Creek Golf Course downstream of pond in canyon.	< 1	5.63	0.73
SCR-06-4	7/14/10	Outlet in canyon northeast of intersection of Hunte Parkway and Proctor Valley Road.	< 1	4.25	**10.00**

Note: **Red** values exceed action level.

FIGURE 9-3
SALT CREEK BASIN ROUTINE AND UPSTREAM SAMPLING LOCATIONS

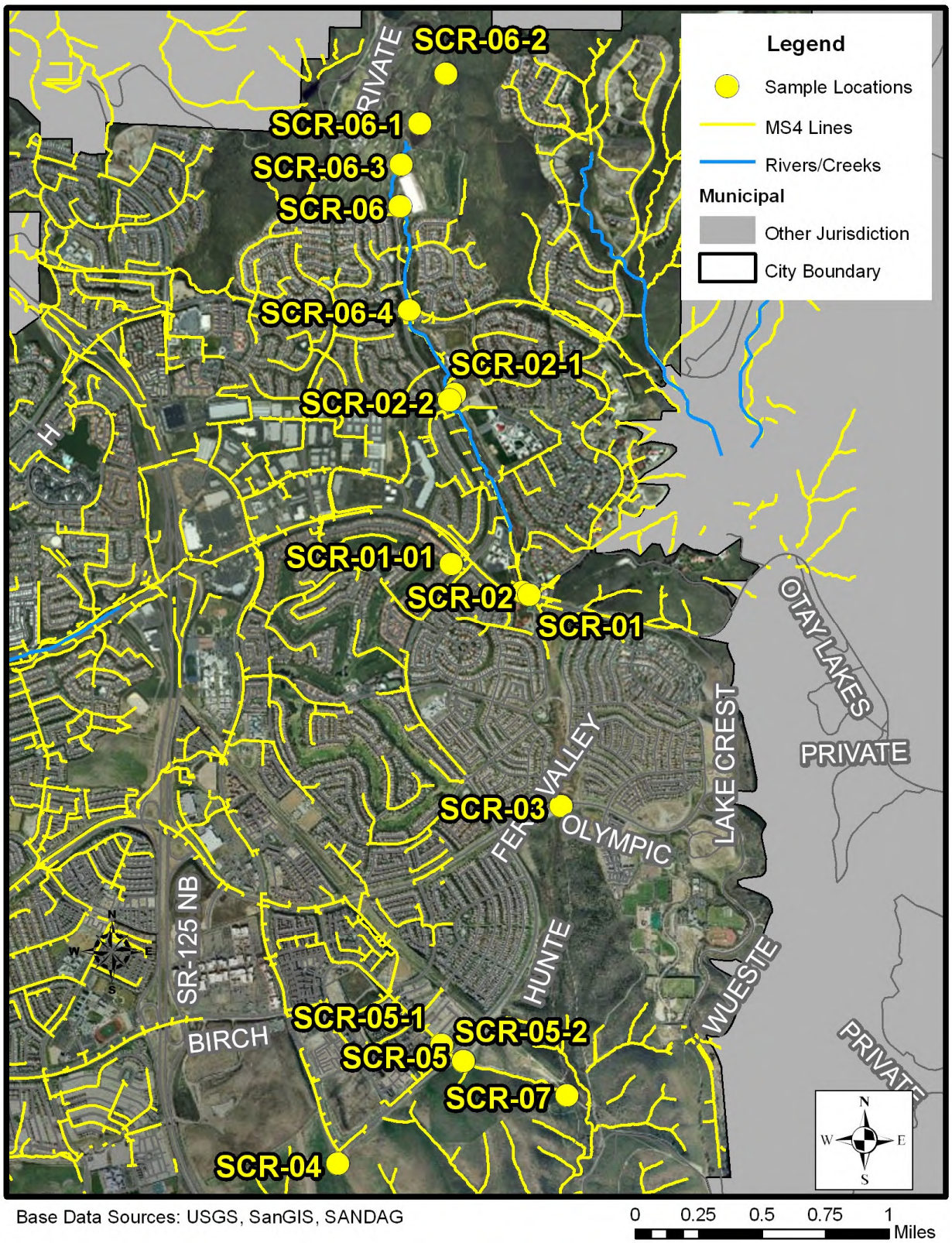

9.2.4 Sunnyside Basin

Six sites were sampled within the Sunnyside Basin during the 2010 Dry Weather Monitoring Program. Of these sites, SUN-02 and SUN-07 had confirmed elevated nitrate-N concentrations and relatively high conductivity measurements. An upstream investigation was conducted to locate and identify the source(s) of the nitrate-N and flow. The results of the upstream investigations are presented in Table 9-7. Routine and upstream sample locations are displayed in Figure 9-4.Site SUN-02 has been a routine sampling site since 1999 and has had elevated nitrate-N concentrations and relatively high conductivity measurements in 2008 and 2009. Site SUN-07 has been a routine sampling site since 2006 and had nitrate-N exceedances in 2007 and 2008.

Photo 9-5: Upstream location SUN-02-2.

Both sites are located at the base of steep, landscaped slopes where irrigation occurs. This area is currently under construction and there are many new housing developments surrounding the sites. At Site SUN-07, water was observed seeping through a crack in the pipe. Although there is flow coming from both sides of the crack in the pipe, the majority of flow at the site comes from the side adjacent to the steep slope.

Samples taken at upstream locations, SUN-02-1 and SUN-02-2, did not have nitrate-N concentrations above the action level and surface flow was not observed (Photo 9-5). Because of the steepness of the slopes surrounding the sites, water from irrigation most likely contributes to interflow observed seeping into the pipe at the sites.

Based on the current and previous results of the Dry Weather Monitoring Program for sites within the Sunnyside Basin, it was concluded that infiltration of irrigation into the MS4, at and upstream from the sites, is most likely the cause of the elevated nitrate-N levels.

TABLE 9-7
SUNNYSIDE BASIN NITRATE-NITROGEN UPSTREAM INVESTIGATION RESULTS

Site	Date	Location	Flow (gpm)	Conductivity (mS/cm)	Nitrate-N (mg/L)
SUN-02 *(Routine Visit)*	6/15/10	North of East H Street and 50 feet west of SR-125, at base of slope east of SUN-05.	3	5.91	**12.06**
SUN-02 *(Confirmation)*	6/16/10	*(Same as above)*	3	6.31	**12.08**
SUN-02-1	6/16/10	Manhole south of the intersection of Mount Miguel Road and Procter Valley Road.	< 1	na	6.29
SUN-02-2	7/13/10	Outlet south of East H Street and east of SR-125 in vegetated area.	< 1	8.92	7.06
SUN-07 *(Routine Visit)*	6/21/10	East of the end of Jonel Way, inlet to detention basin at base of slope west of SR-125.	< 1	7.60	**14.09**
SUN-07 *(Confirmation)*	6/22/10	*(Same as above)*	< 1	6.47	**10.87**

Note: **Red** values exceed action level.

FIGURE 9-4
SUNNYSIDE BASIN ROUTINE AND UPSTREAM SAMPLING LOCATIONS

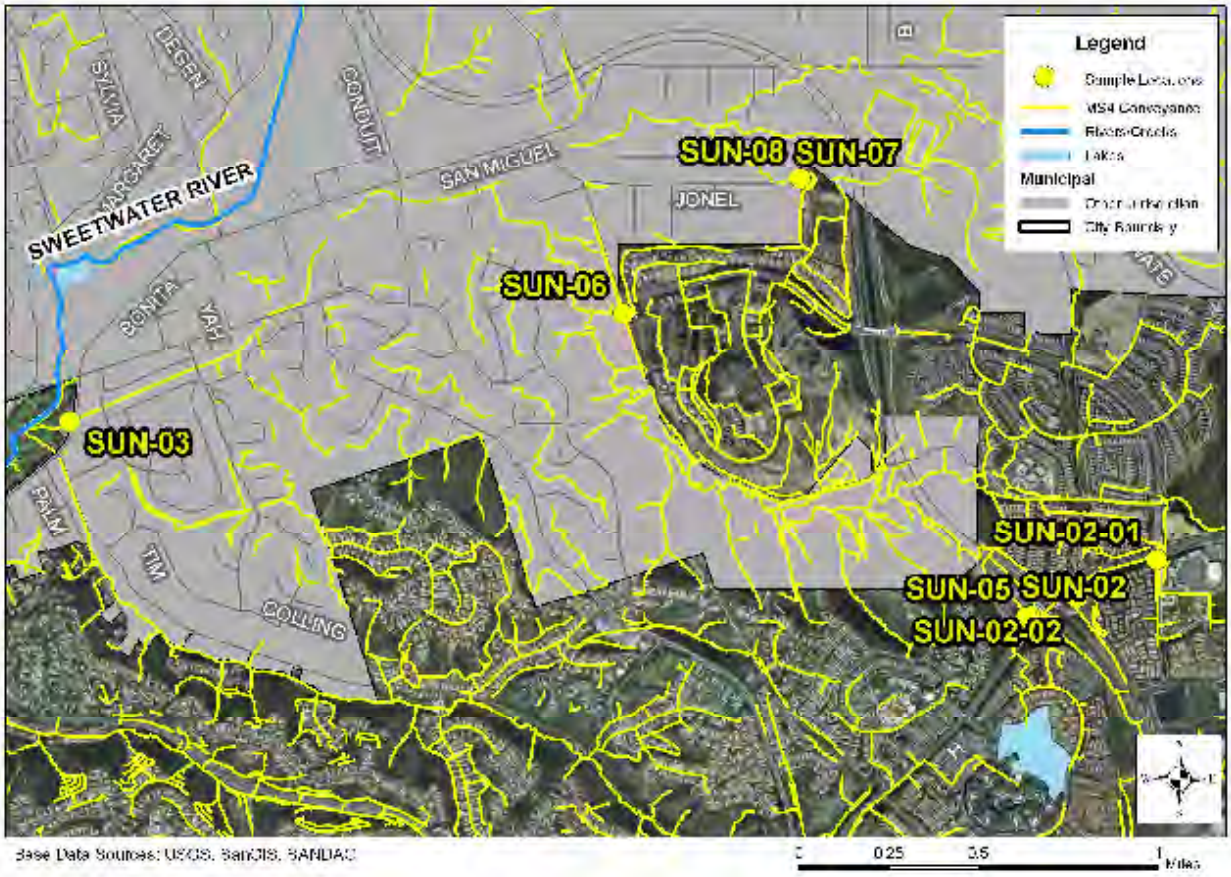

9.2.5 Telegraph Canyon Basin

Nine sites were sampled within the Telegraph Canyon Basin during the 2010 Dry Weather Monitoring Program. Of these sites, TCC-03, TCC-05, TCC-06 had confirmed elevated nitrate-N concentrations and relatively high conductivity values, and an upstream investigation was conducted to locate and identify the source(s) of the nitrate-N and flow. Routine and upstream sampling locations within the Telegraph Canyon Basin are displayed in Figure 9-5, and the results of the upstream investigations are presented herein and summarized in Table 9-8.

Sites within the Telegraph Canyon Basin have had relatively high conductivity and nitrate-N concentrations since 2002, but nitrate-N levels have decreased over the years. During the 2010 program, a sample was collected from a crack in the joint of the concrete pipe at Site TCC-03. Additionally, samples were taken from the east and south line contributing to the flow at the site. All samples had elevated nitrate-N concentrations.

During the upstream investigation, flow contributing to the south line at the upstream location, TCC-03-4, had the greatest concentration of nitrate-N and relatively high conductivity, but had the lowest flow of the sample locations. At this location, water was observed seeping out of the slope behind Vons in the shopping center (Photo 9-6). At the base of the slope, a small concrete channel was dry, and there was no evidence of irrigation runoff. Upstream locations contributing flow to the east line were sampled at three manholes along Otay Lakes Road and Eastlake Parkway. All three samples collected had greater nitrate-N concentrations than at the site, and had similar measurements of conductivity.

Site TCC-03 is located downstream of the Eastlake Greens Golf Course and housing development. It is possible that irrigation water from these areas percolates the soil and contributes to interflow. Therefore, water likely infiltrates the MS4 conveyance and other locations in the area, such as the steep, vegetated slope at TCC-03-2.

Photo 9-6: Seepage along steep slope at upstream location TCC-03-2 contributing to the east flow at Site TCC-03.

Sites TCC-05 and TCC-06, located downstream of Site TCC-03, also had elevated nitrate-N levels. As flow travels from Site TCC-03, the eastern most sample location within the Telegraph Canyon Basin, it gradually dilutes the concentration of nitrate-N. The results of the field tests for nitrate-N at Sites TCC-05 and TCC-06 are presented in Table 9-8 and the direction of flow from Site TCC-03 to Site TCC-02 is displayed in Figure 9-5.

Based on these results, it was concluded that the relatively high concentrations of nitrate-N at the sampling locations within the Telegraph Canyon Basin, is most likely the result of irrigation water infiltrating the MS4 conveyance from interflow upstream of Site TCC-03.

TABLE 9-8
TELEGRAPH CANYON BASIN NITRATE-NITROGEN UPSTREAM INVESTIGATION RESULTS

Site	Date	Location	Flow (gpm)	Conductivity (mS/cm)	Nitrate-N (mg/L)
TCC-02 *(Routine Visit)*	6/28/10	Telegraph Canyon channel west of Hilltop Drive in Hilltop Park.	136	6.83	**10.08**
TCC-02 *(Confirmation)*	6/29/10	*(Same as above)*	136	6.78	7.77
TCC-03 *(Routine Visit)*	6/9/10	Telegraph Canyon channel 500 feet west of Eastlake Parkway, 100 feet north of Otay Lakes Road across from Mobil Gas Station.	78	7.52	**25.74**
TCC-03 *(Confirmation)*	6/10/10	*(Same as above)*	82	7.28	**31.50**
TCC-03-crack	7/1/10	Crack in pipe at Site TCC-03.	na	6.67	**30.58**
TCC-03-east	7/1/10	East line contributing to flow at TCC-03.	na	6.77	**21.49**
TCC-03-3	7/1/10	Manhole on Eastlake Parkway south of Otay Lakes Road.	3.5	4.49	**30.17**
TCC-03-1	7/1/10	Manhole on Eastlake Parkway north of Otay Lakes Road.	10	8.18	**32.16**
TCC-03-4	7/1/10	Manhole on East Otay Lakes Road.	6.5	6.90	**29.79**
TCC-03-south	7/1/10	South line contributing flow to TCC-03.	5	6.23	**36.14**
TCC-03-2	7/1/10	Catch basin behind Vons in shopping center contributing flow to TCC-03 south line.	< 1	6.51	**39.46**
TCC-05 *(Routine Visit)*	6/28/10	Telegraph Canyon Road and Heritage/ Paseo Ranchero northeast of intersection.	136	6.75	**16.29**
TCC-05 *(Confirmation)*	6/29/10	*(Same as above)*	136	6.62	**17.34**
TCC-06 *(Routine Visit)*	6/28/10	Telegraph Canyon Road and Paseo Del Rey intersection at northwest corner.	127	6.77	**11.50**
TCC-06 *(Confirmation)*	6/29/10	*(Same as above)*	130	6.68	**12.33**

Note: **Red** values exceed action level.

FIGURE 9-5
TELEGRAPH CANYON BASIN ROUTINE AND UPSTREAM SAMPLING LOCATIONS

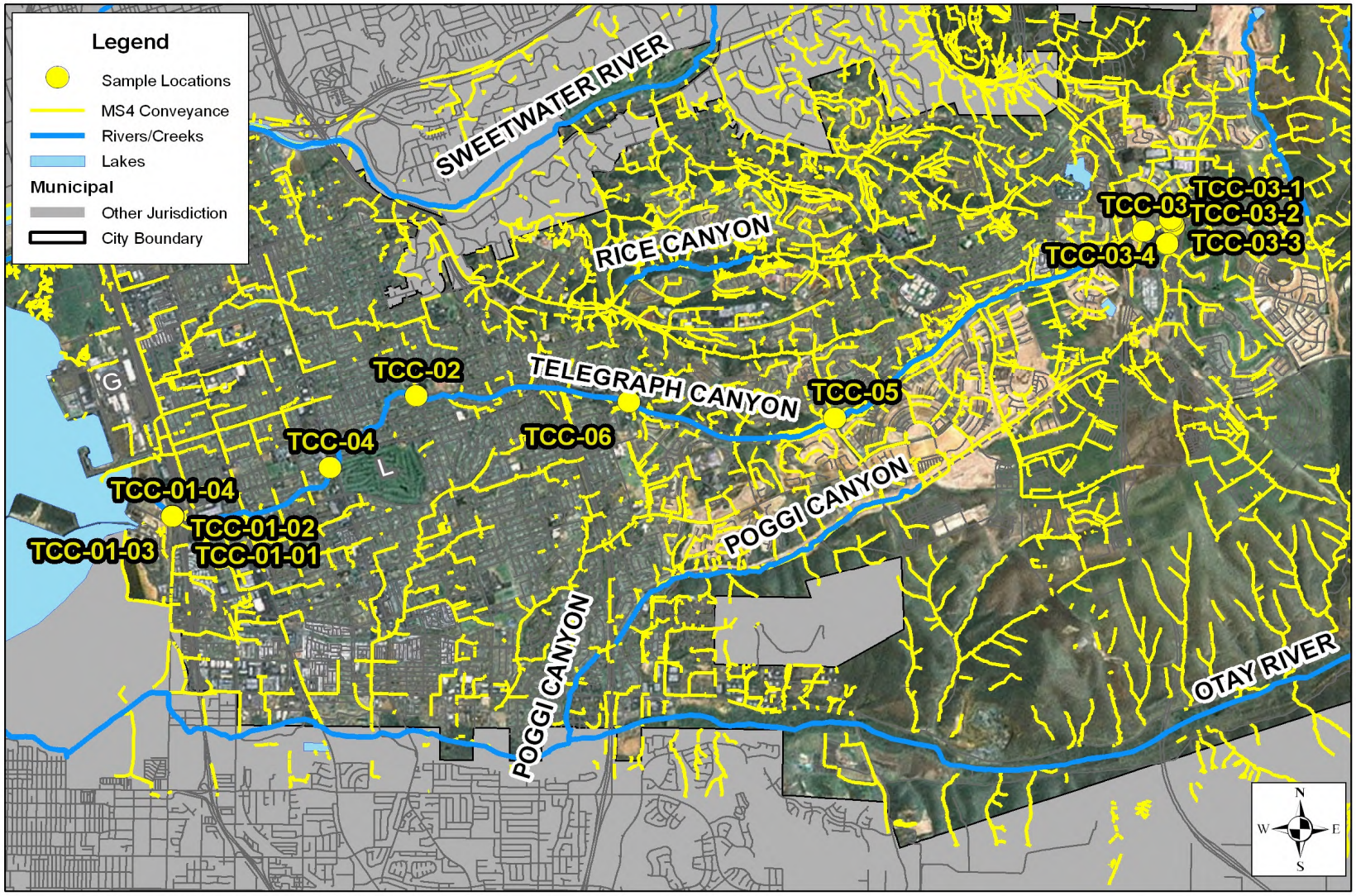

Base Data Sources: USGS, SanGIS, SANDAG

0 0.5 1 2 Miles

9.2.6 Upper Otay Reservoir Basin

One site was sampled within the Upper Otay Reservoir Basin during the 2010 Dry Weather Monitoring Program. Site LAK-01 had confirmed elevated nitrate-N concentrations, and an upstream investigation was conducted to locate and identify the source of the nitrate-N and flow. Table 9-9 presents the results of the upstream investigation and Figure 9-6 displays the routine and upstream sampling locations within the Upper Otay Reservoir Basin.

Site LAK-01 has been a routine sampling site since 2006 and has had relatively high conductivity measurements and nitrate-N concentrations since 2007. Areas surrounding LAK-01 have undergone substantial residential development in recent years. During the upstream investigation in 2010, irrigation runoff was observed flowing to a catch basin at the corner of Agua Vista Drive and Morning Creek Drive. Downstream of the residential area are landscaped slopes with evidence of irrigation runoff. Nonetheless, the upstream location, LAK-01-1, had nitrate-N levels below the action level.

Based on these observations, water most likely percolates the soil and travels down slope, which contributes to interflow. Seepage of interflow likely occurs under the detention basin upstream from the site, and infiltrates the pipe at Site LAK-01. Nitrate-N concentrations are most likely greater at the site than at upstream locations because of the accumulation of surface flow and interflow.

In conclusion, the infiltration of irrigation from interflow into the MS4 conveyance upstream from Site LAK-01 is most likely the cause of elevated nitrate-N concentrations within the Upper Otay Reservoir Basin.

TABLE 9-9
UPPER OTAY RESERVOIR BASIN NITRATE-NITROGEN UPSTREAM INVESTIGATION RESULTS

Site	Date	Location	Flow (gpm)	Conductivity (mS/cm)	Nitrate-N (mg/L)
LAK-01 *(Routine Visit)*	6/21/10	Northeast of the intersection of Proctor Valley Road and Agua Vista Drive, in the canyon.	6	6.53	**14.87**
LAK-01 *(Confirmation)*	6/22/10	*(Same as above)*	7	6.40	**12.37**
LAK-01-1	7/13/10	Northwest of intersection of Proctor Valley Road and Agua Vista Drive in canyon across from LAK-01.	< 1	4.54	6.21

Note: **Red** values exceed action level.

FIGURE 9-6
UPPER OTAY RESERVOIR BASIN ROUTINE AND UPSTREAM SAMPLING LOCATIONS

9.2.7 Wolf Canyon Basin

Two sites were sampled within the Wolf Canyon Basin during the 2010 Dry Weather Monitoring Program. Both sites, WOL-02 and WOL-03 had confirmed elevated nitrate-N concentrations and relatively high conductivity measurements. An upstream investigation was conducted to locate and identify the source of the nitrate-N and flow. The results of the upstream investigation are presented in Table 9-10 and the routine and upstream sampling locations within the Wolf Canyon Basin are displayed in Figure 9-7.

Sites within the Wolf Canyon Basin have been sampled since 2006. Site WOL-02 has had consistent nitrate-N concentrations above the action level and relatively high conductivity measurements. On the other hand, Site WOL-03 has not had nitrate-N exceedances until 2010.

Site WOL-02 and WOL-03 are located at the bottom of steep, vegetated slope with new housing developments located adjacent to and upstream from their locations. During the 2010 program, water was observed leaking from a crack in the concrete pipe at both sites. At Site WOL-02, water was observed seeping from the soil next to the site.

During the upstream investigations, locations upstream from Site WOL-02 were sampled, and measurements of nitrate-N and conductivity were relatively high (Photo 9-7). At these locations, flow most likely comes from irrigation runoff in residential areas upstream, although no surface

flow was observed at the time of the investigation. Due to the steepness of the vegetated slopes surrounding the sites, water from irrigation most likely percolates and contributes to interflow and thus to the flow at the sites. Additionally, two manholes on Santa Luna Street upstream from Site WOL-03 were dry. Because Site WOL-02 is upstream from Site WOL-03, additional upstream locations were not necessary.

Photo 9-7: Upstream location WOL-02-2 north of La Media Road and south of the detention basin.

Based on the results of the 2010 Dry Weather Monitoring Program, and past measurements of nitrate-N and conductivity at Site WOL-02, it was concluded that infiltration of irrigation from interflow into the MS4 conveyance upstream from this site is most likely the cause of nitrate-N exceedances. On the other hand, because of the recent increase in the nitrate-N concentration at Site WOL-03, it was concluded that the likely source of flow and elevated nitrate-N levels include the infiltration of irrigation from interflow into the concrete pipe and surface flow from landscaping practices at new housing developments upstream from the site.

TABLE 9-10
WOLF CANYON BASIN NITRATE-NITROGEN UPSTREAM INVESTIGATION RESULTS

Site	Date	Location	Flow (gpm)	Conductivity (mS/cm)	Nitrate-N (mg/L)
WOL-02 *(Routine Visit)*	6/17/10	West of La Media Road, across from detention basin in canyon; south of the intersection of La Media Road and Birch Road.	4	3.32	**12.73**
WOL-02 *(Confirmation)*	6/18/10	*(Same as above)*	4	3.22	**15.29**
WOL-02-1	6/18/10	East of La Media Rd in NW corner of detention basin across the street from WOL-02.	3	na	**15.63**
WOL-02-2	7/13/2010	North of La Media Road, south of detention basin.	< 1	3.63	**11.22**
WOL-02-3	7/13/2010	North side of La Media Road, east of Birch Road.	< 1	2.60	9.26
WOL-03 *(Routine Visit)*	6/17/10	South of Santa Luna Street, approximately 500 feet west Magdalena Avenue.	< 1	5.30	**31.96**
WOL-03 *(Confirmation)*	6/18/10	*(Same as above)*	< 1	5.04	**33.20**

Note: **Red** values exceed action level.

FIGURE 9-7
WOLF CANYON BASIN ROUTINE AND UPSTREAM SAMPLING LOCATIONS

10 MS4 OUTFALL MONITORING PROGRAM

10.1 Introduction

The targeted dry weather component of the 2010 MS4 Outfall Monitoring Program was performed concurrently with sampling for the 2010 Dry Weather Monitoring Program. The purpose of this program is to identify pollutant discharges from MS4 outfalls and to assess whether these discharges contribute to receiving water quality.

The work was performed in accordance with the Final Copermittee MS4 Outfall Monitoring Workplan (MS4 Workplan) developed in June 2008 and with the requirements of the Receiving Waters and Urban Runoff Monitoring and Reporting Program required in the Municipal Permit. The results of the City of Chula Vista's 2010 MS4 Outfall Monitoring are summarized below.

10.2 Sampling Locations

The MS4 Workplan identifies sites BAY-01, CEN-01, JUD-01, PRD-02, RCC-02, SCR-01, SUN-06, SVS-01, TCC-03, and TCC-04 in the City of Chula Vista as MS4 outfall monitoring sites. Table 10-1 lists MS4 outfall sampling locations and descriptions. Photographs of sampling locations are included as Appendix B, and locations are displayed in Figure 10-1.

10.3 Analytical Methods

All 10 sampling sites were also part of the 2010 Dry Weather Monitoring Program, thus samples for the MS4 Program and Dry Weather Program were taken concurrently. The MS4 Workplan does not require testing of any field screening parameters at the City's MS4 outfall monitoring sites. Seven of the sites were designated as analytical monitoring sites for the Dry Weather Monitoring Program, and laboratory test results for most constituents were used for the MS4 Monitoring Program as well. Samples were collected and submitted to EnviroMatrix Analytical, Inc. for laboratory analysis of the following constituents:

- Total Coliform
- Fecal Coliform
- *Enterococcus*
- Total Hardness
- Dissolved Cadmium
- Dissolved Copper
- Dissolved Lead
- Dissolved Zinc

An additional sample was collected at six of these sites and analyzed for total dissolved solids (TDS), which is not a Dry Weather Monitoring Program analyte. These sites were CEN-01, RCC-02, SVS-01, SUN-06, TCC-03, and TCC-04.

The test methods used are described in Section 3 of this report and are compatible with those set forth in the MS4 Workplan.

10.4 Analytical Results

Laboratory results from the 2010 MS4 Monitoring Program are presented in Table 10-2. Laboratory reports are included as Appendix C. A spreadsheet of the results in the regionally standardized format required for countywide data sharing has been provided to the City.

There are no established water quality standards for MS4 results. Within the MS4 outfall monitoring dataset, the following observations were noted:

- Dissolved copper and zinc concentrations at Sites BAY-01 and CEN-01 were relatively higher than at other sites.
- Measurements of TDS were generally the same among the sites.
- Total coliform counts were the highest at Sites PRD-02 and SVS-01.
- Fecal coliform counts were the highest at Sites PRD-02 and SCR-01.
- Enterococci counts were the highest at Sites CEN-01 and SCR-01.

10.5 Previous Results

Since 2009 was the first year of the MS4 Outfall Monitoring Program, there is not substantial historical data to which the results can be compared. However, the following comparisons can be made of this year's MS4 monitoring results to last year's results:

- Measurements of total hardness and TDS were similar to last year's results.
- In 2010, there were more sites with detected measurements of dissolved cadmium.
- Site BAY-01 had lower levels of dissolved copper in 2010 than in 2009, and CEN-01 has greater levels of dissolved copper.
- Overall, there are greater levels of dissolved zinc than in 2009.
- Total coliform and *Enterococcous* bacteria have generally increased in 2010 from last year.

FIGURE 10-1
MS4 MONITORING SITES

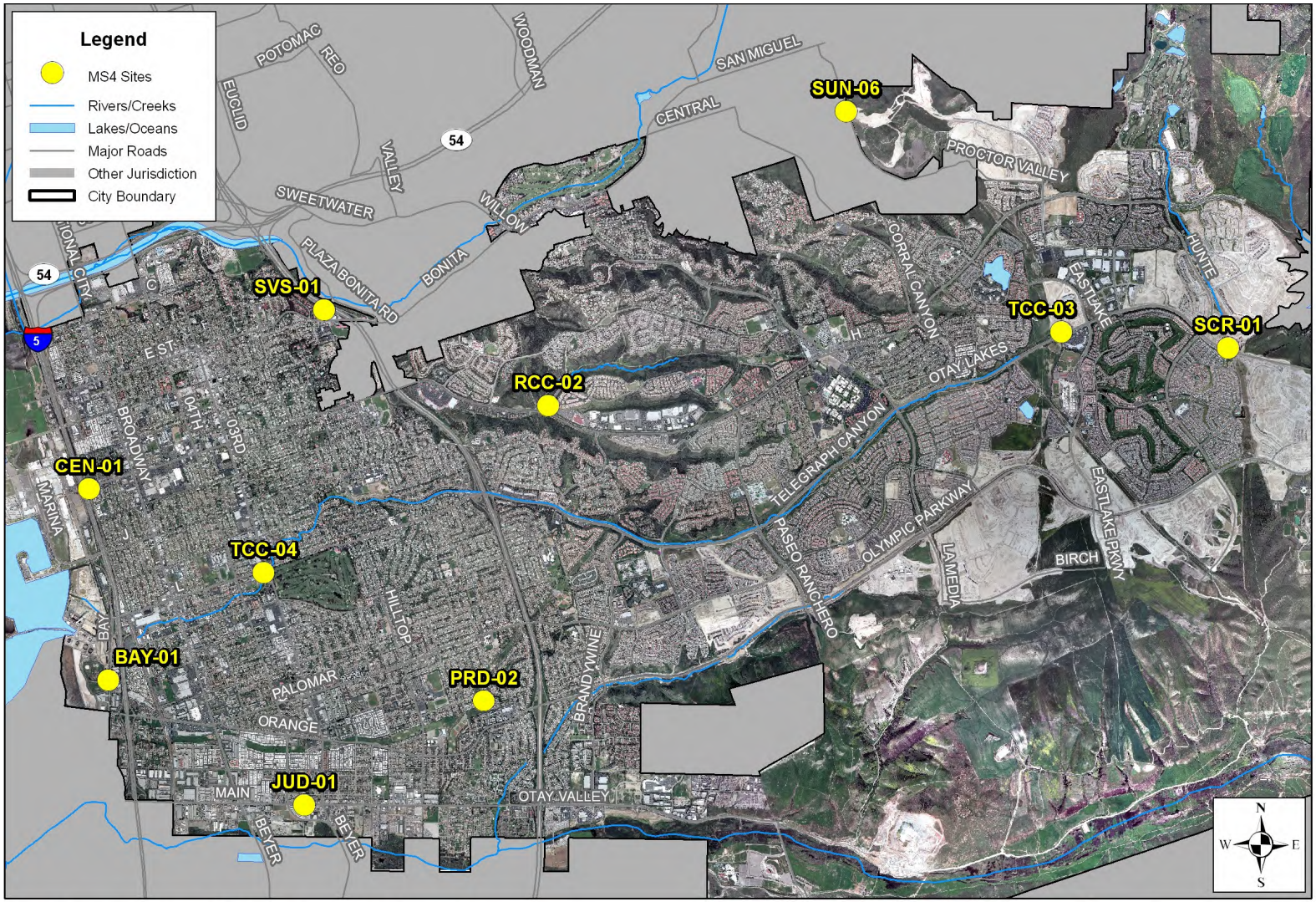

Base Data Sources: USGS, SanGIS, SANDAG

TABLE 10-1
2010 MS4 MONITORING LOCATIONS

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
BAY-01	West side of Bay Boulevard across from 1075 complex	Outlet	Commercial	None	910.20	32.60820	-117.09235
CEN-01	South of H Street and east of I-5 and trolley tracks	Concrete Channel	Commercial	Residential	909.12	32.62922	-117.09507
JUD - 01	South of intersection of Fresno Avenue and Main Street	Concrete Channel	Commercial	Residential	910.20	32.59465	-117.06675
PRD-02	West of Melrose Avenue and 200 feet south of Rienstra Street in SDG&E easement	Outlet	Residential	Commercial	909.12	32.60622	-117.04353
RCC-02	Northwest corner of east H Street and Del Rey Boulevard intersection	Outlet	Commercial	Open	910.20	32.63881	-117.03551
SCR-01	North of Otay Lakes Road and 300 feet west of private Otay Ranch Road, east of Hunte Parkway	Outlet	Residential	Open	910.20	32.64567	-116.94713
SUN-06	Southwest of the intersection of Proctor Valley Road and San Miguel Ranch Road	Outlet	Residential	Open	909.12	32.67141	-116.99702
SVS-01	Rear of Ramada Inn at intersection of Bonita Road and Bonita Glen north of Bonita Road	Outlet	Commercial	Residential	910.20	32.64912	-117.06474
TCC-03	Telegraph Canyon channel 500 feet west of East Lake Parkway, 100 feet north of Otay Lakes Road, across from Mobil Gas Station	Outlet	Commercial	Residential	909.11	32.64726	-116.96885
TCC-04	Telegraph Canyon channel west of 3rd Avenue and south of L Street under Mobil gas station	Natural Creek	Commercial	Residential	909.12	32.62016	-117.07230

TABLE 10-2
MS4 LABORATORY ANALYTICAL RESULTS

Site	Date	Time	Total Hardness (mg/L $CaCO_3$)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	Enterococcus (MPN/100 mL)	TDS (mg/L)
BAY-01	6/9/2010	10:30	260	0.3 J	10	nd	59	130,000	1,700	3,500	na
CEN-01	6/15/2010	9:30	335	0.5 J	21	nd	68	50,000	17,000	24,000	802
CEN-01	6/30/2010	10:40	na	na	na	na	na	54,800	na	6,488	na
JUD-01	6/10/2010	11:20	313	nd	6 J	nd	16 J	30,000	13,000	8,000	na
JUD-01	6/30/2010	14:50	na	na	na	na	na	7,700	na	2,098	na
PRD-02	6/10/2010	15:15	570	0.2 J	9 J	nd	31	80,000	22,000	3,000	na
PRD-02	6/30/2010	15:40	na	na	na	na	na	173,000	na	na	na
PRD-02	7/2/2010	14:40	na	na	na	na	na	64,900	na	na	na
RCC-02	6/10/2010	15:45	1,930	0.5 J	nd	nd	3 J	3,000	500	800	4,300
SCR-01	6/10/2010	14:40	346	nd	3 J	nd	18 J	130,000	24,000	22,000	na
SCR-01	6/30/2010	12:35	na	na	na	na	na	130,000	na	10,462	na
SCR-01	7/2/2010	11:45	na	na	na	na	na	na	na	24,890	na
SUN-06	6/9/2010	12:00	904	nd	3 J	nd	2 J	3,000	170	170	3,390
SVS-01	6/9/2010	15:15	313	nd	5 J	nd	14 J	170,000	300	800	642
SVS-01	6/30/2010	11:55	na	na	na	na	na	37,800	na	na	na
TCC-03	6/9/2010	13:40	1,390	0.2 J	2 J	nd	2 J	3,000	500	170	4,390
TCC-04	6/11/2010	10:20	1,710	nd	2 J	nd	3 J	5,000	700	140	3,770

Notes: na = not analyzed, not required by MS4 Workplan
nd = not detected

11 SUMMARY AND RECOMMENDATIONS

11.1 Field Screening and Laboratory Analyses Summary

Fifty-seven primary monitoring sites were visited during the 2010 Dry Weather Monitoring Program. Thirty-six sites had measurable flow and 21 sites were ponded. A total of 15 sites were sampled for laboratory analyses. A summary of action level exceedances is presented in Table 11-1.

TABLE 11-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (57 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedances**	**Sites Exceeding Action Level**
pH	0	0	---
Conductivity	0	0	---
Turbidity	1	2	SVS-01
Surfactants	1	2	CEN-08
Ammonia-N	3	5	JUD-02, SCR-01, SWR-04
Nitrate-N	17	30	LAK-01, OVR-07, RCC-03, RCC-04, SCR-02, SCR-03, SCR-05, SCR-06, SCR-07, SUN-02, SUN-07, TCC-02, TCC-03, TCC-05, TCC-06, WOL-02, WOL-03
Orthophosphate-P	0	0	---
Glycol	3	5	BAY-01, JUD-03, TCS
Laboratory Analyses (15 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedances**	**Sites Exceeding Action Level**
Oil & Grease	0	0	---
Cadmium	0	0	---
Copper	0	0	---
Lead	0	0	---
Zinc	0	0	---
Diazinon	0	0	---
Chlorpyrifos	0	0	---
Total Coliforms	3	20	POG-02, SCR-01, SVS-01
Fecal Coliforms	5	33	CEN-01, JUD-01, PRD-02, SCR-01, SWR-03-E
Enterococcus	5	33	CEN-01, JUD-01, JUD-02, SCR-01, SWR-03-E

Note: Data is based on routine visits only. Confirmation, follow-up, and dry site visits not included.

11.2 Upstream Investigation Summary

Twenty-nine sites had parameters testing at or above dry weather action levels. Table 11-2 presents conclusions of follow-up investigation, excluding nitrate-N exceedances.

TABLE 11-2
SUMMARY OF UPSTREAM INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results/Probable Source(s)
	Field	Laboratory	
BAY-01	Glycol	----	Coolant from leaking cars in parking lot
CEN-01	----	Fecal Coliforms, *Enterococcus*	Transient flow
CEN-08	Surfactants	----	Car wash area in Cabrillo Mobile Lodge residential community
JUD-01	----	Fecal Coliforms, *Enterococcus*	Transient flow
JUD-02	Ammonia-N	*Enterococcus*	Ammonia-N: trash and decomposing organic material upstream; *Enterococcus:* transient flow
JUD-03	Glycol	----	Transient flow
POG-02	----	Total Coliforms	Decomposing leaves and grass clippings in gutters in combination with consistent irrigation runoff from residential areas
PRD-02	----	Fecal Coliforms	Insufficient trash control BMPs upstream which can attract wildlife from the adjacent open area
SCR-01	Ammonia-N	Total Coliforms, Fecal Coliforms, *Enterococcus*	Decomposing organic material in a shaded and ponded area at the site and in a manhole upstream; excess irrigation from residential areas upstream transports bacteria to site; stagnant water upstream may promote bacterial growth; ammonia-N levels likely concentrated by evaporation of ponded water
SVS-01	Turbidity	Total Coliforms	Turbidity exceedance due to construction activity; total coliforms exceedance related to transient flow
SWR-03-E	----	Fecal Coliforms, *Enterococcus*	Wildlife activity, animal feces, and decomposing leaves present in upstream areas
SWR-04	Ammonia-N	----	Ammonia-N levels likely concentrated by evaporation of ponded water with decomposing leaves, transient activity and trash upstream
TCS	Glycol	----	Coolant from leaking cars in parking lot

11.2.1 Nitrate-N Exceedance Investigations

The 2010 nitrate-N exceedance investigation findings can be grouped into the two primary categories. With the exception of one transient exceedance observed at Site SCR-03, each site with a nitrate-N exceedance is listed under the associated category as follows:

- Groundwater or interflow seeping into stormwater conveyances for the following sites:
  - OVR-07
  - RCC-03
  - RCC-04
  - TCC-02
  - TCC-03
  - TCC-05
  - TCC-06
- Combination of landscaping practices and groundwater/interflow seepage into MS4 conveyance for the following sites:
  - LAK-01
  - SCR-02
  - SCR-05
  - SCR-06
  - SCR-07
  - SUN-02
  - SUN-07
  - WOL-02
  - WOL-03

11.3 Trash Assessments

Trash assessments were performed at all routine sampling sites, including three dry sites. Forty-three sites received optimal ratings, 11 suboptimal, five marginal, and one submarginal. No sites received a poor trash rating. The marginal and submarginal sites are:

- Marginal
  - POG-01
  - RCC-03
  - SCR-04
  - SCR-05
  - SWR-03-E
- Submarginal
  - SWR-04

11.4 Recommendations

Based on the results of the City of Chula Vista's 2010 Dry Weather Monitoring Program, the following actions are recommended.

11.4.1 Inspection and Maintenance

Establish and maintain a regular schedule for the removal of trash at the following sites. Ensure that trash at these sites is regularly assessed, and implement preventative measures where possible to decrease the introduction of debris to the storm water conveyance system.

- POG-01
- RCC-03
- SCR-04
- SCR-05
- SWR-03-E
- SWR-04

Site POG-02

- Clean out manhole upstream from the site at location POG-02-1 on Eastlake Parkway to prevent the growth of bacteria.

Site SCR-01

- Clean out MS4 conveyance at the corner of La Costa Avenue and Torrey Pines Road upstream from the site to prevent bacterial growth.

Site SVS-01

- Contact the construction company working on the I-805 freeway construction at the Bonita Road exit to improve BMPs placed near the site in order to prevent excess sediment from entering the storm drain system.

Site SWR-03-E

- Consider identifying areas in the vicinity of the site where barriers can be placed to prevent wildlife from entering the storm drain system.

Site SWR-04

- Consider improving barriers to MS4 conveyance at the site under the bridge to deter transient activity and littering.

11.3.2 Education

Site BAY-01

- Provide educational material regarding proper management of automobile oil leaks (or general spills and leak management) to the office building at 1075 Bay Boulevard. Consider providing similar information to the surrounding office buildings on the east side of Bay Boulevard located across the street from the site.

Site CEN-08

- Provide educational material regarding vehicle washing BMPs to the property management at the Cabrillo Mobile Lodge on 731 G Street located upstream from the site.

Site JUD-02

- Provide educational material regarding minimizing over-irrigation to the property managers of Otay Park, the elementary school at 1636 Albany Avenue, and commercial businesses along Reed Court and Britton Avenue that contribute runoff to the site.

Site LAK-01

- Provide educational material regarding minimizing over-irrigation to the residents, home owners associations, and property managers of residential areas along Morning Creek Road, Coastal Hills Drive, and Winding Fence Way within the Rolling Hills Ranch community which contribute runoff to the site.

Site POG-02

- Provide educational material regarding landscape fertilization and minimizing over-irrigation to the property managers of Eastlake High School and Olympic View Elementary School on 1220 South Greensview Drive, and the home owners associations and residents of Boca Raton Drive, Turtle Cay Way, Waterwood Court, and Tall Pines Drive contributing runoff to the site.

Site PRD-02

- Provide educational materials regarding trash BMPs to the residents, home owners associations, and property managers at the condominium complex on the 1400 block of Melrose Avenue to prevent bacteria and trash from entering the storm drain system.

Site SCR-01

- Provide educational materials regarding minimizing over-irrigation to residents, the home owners association, and property managers of the

residences along Torrey Pines Road and La Costa Avenue within the Eastlake Greens community to prevent bacteria from entering the storm drain system.

- Consider providing education material to the parties listed above regarding proper pet waste disposal, since dog walking was observed in areas upstream of the site and exceedances of fecal coliform and *Enterococcous* bacteria were reported at the site and at upstream location SCR-01-1.

Site SCR-02

- In order to minimize nitrate sources and flow to the site, consider providing educational material regarding landscape fertilization and minimizing over-irrigation to the property managers of Eastlake Middle School, Montevalle Community Park, and major home owners associations located within Rolling Hills Ranch and Eastlake Woods West communities.

Site SUN-02

- Provide educational material regarding minimizing over-irrigation to the residents, home owners associations, and property managers of areas along Mountain Ridge Road, Rolling Ridge Road, Windy Way, and Ocean View Lane to prevent runoff from potentially entering the storm drain system.

Site SWR-03-E

- Provide educational materials regarding proper pet waste disposal and minimizing over-irrigation to residents of areas surrounding the site, areas upstream from the site, and at the Gentry Glen community on 3rd Avenue.

Site TCS

- Provide educational material regarding proper management of automobile oil leaks (or general spills and leak management) to the facility at 694 Moss Street and to Harbor Freight at 680 East L Street.

Site WOL-02

- Provide educational material regarding landscape fertilization and minimizing over-irrigation to the residents, home owners associations, and property managers of the Montecito Ridge and Otay Ranch communities upstream of the site, particularly residences along Irwin Street, May Street, Jones Street, Pember Street, and Barbour Street south of Birch Road and north of Fleishbein Street.

Site WOL-03

- Provide educational material regarding landscape fertilization and minimizing over-irrigation to the property managers of Olympian High School at 1925 Magdalena Avenue and Wolf Canyon Elementary School on Peabody Way.

11.3.3 Further Investigation

Site SCR-05

- Consider further investigating the source of flow to the small pipe contributing flow and elevated nitrate levels to Site SCR-05.

FIGURE A
WATERSHED MAP OF THE CHULA VISTA AREA, BROKEN INTO HYDROLOGIC SUBAREAS

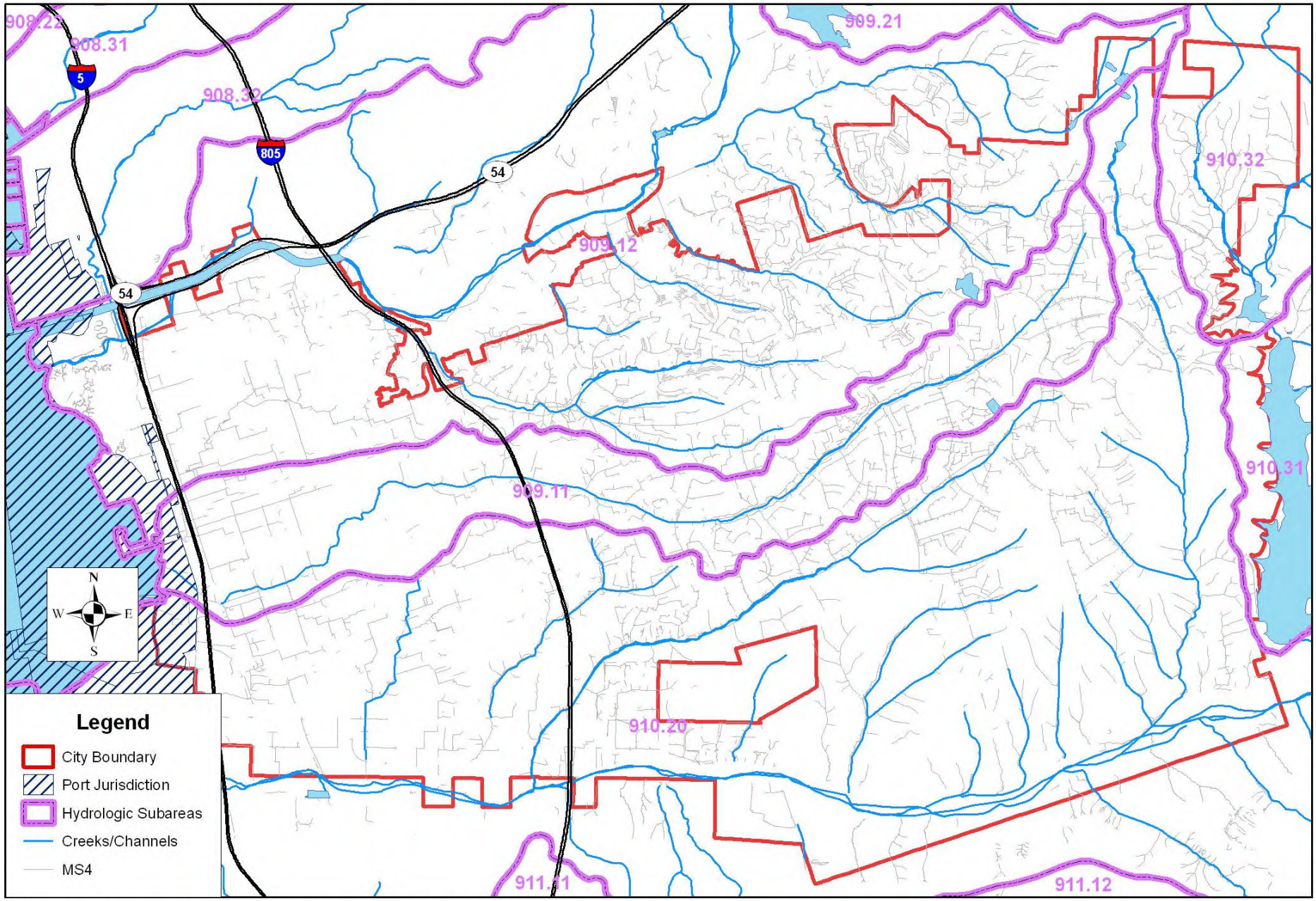

Base Data Sources: City of Chula Vista, SanGIS, SANDAG

0 1 2 4 Miles

FIGURE B
2010 CITY OF CHULA VISTA DRAINAGE MAP

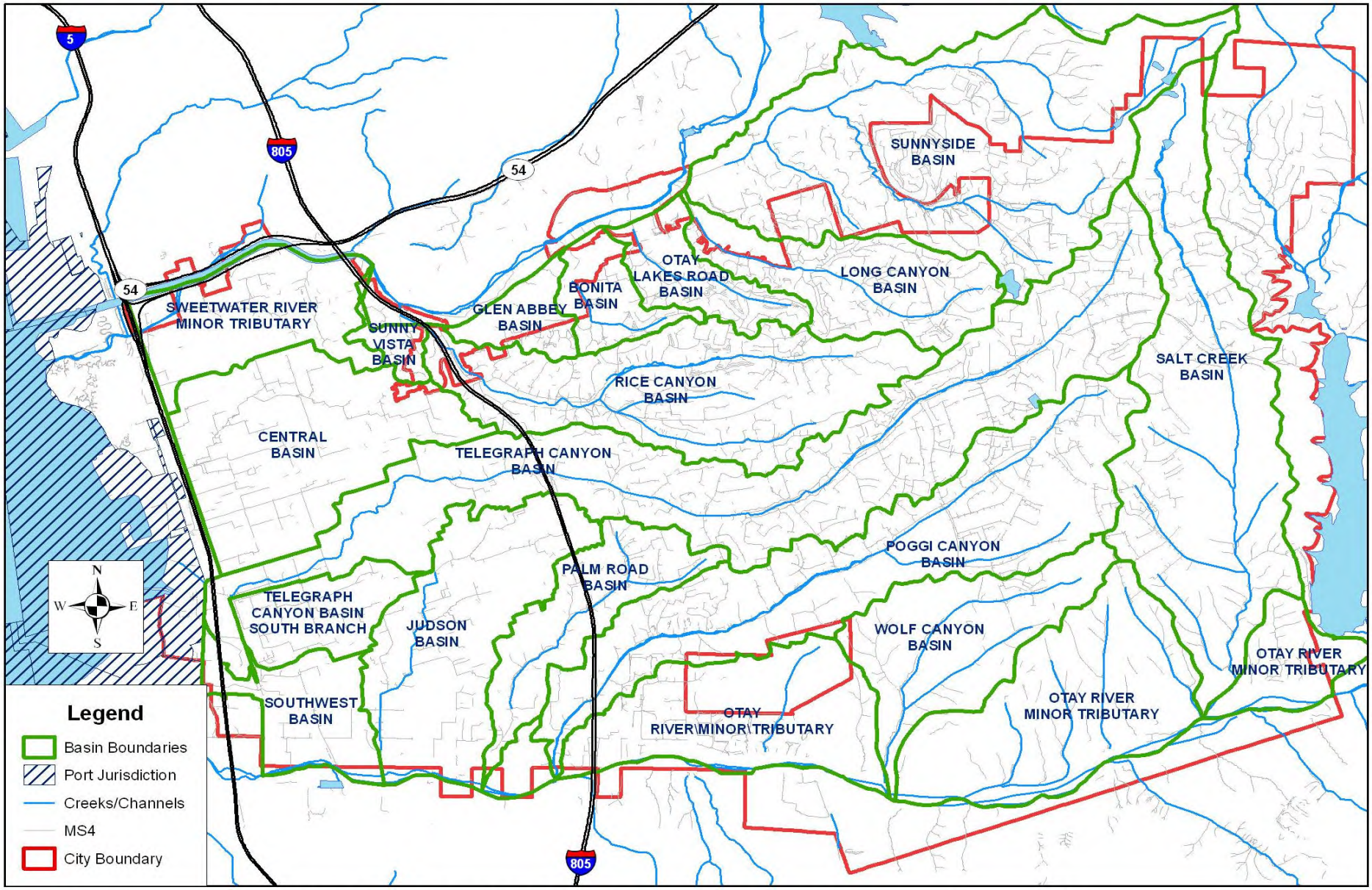

Base Data Sources: City of Chula Vista, SanGIS, SANDAG

0 1 2 4 Miles

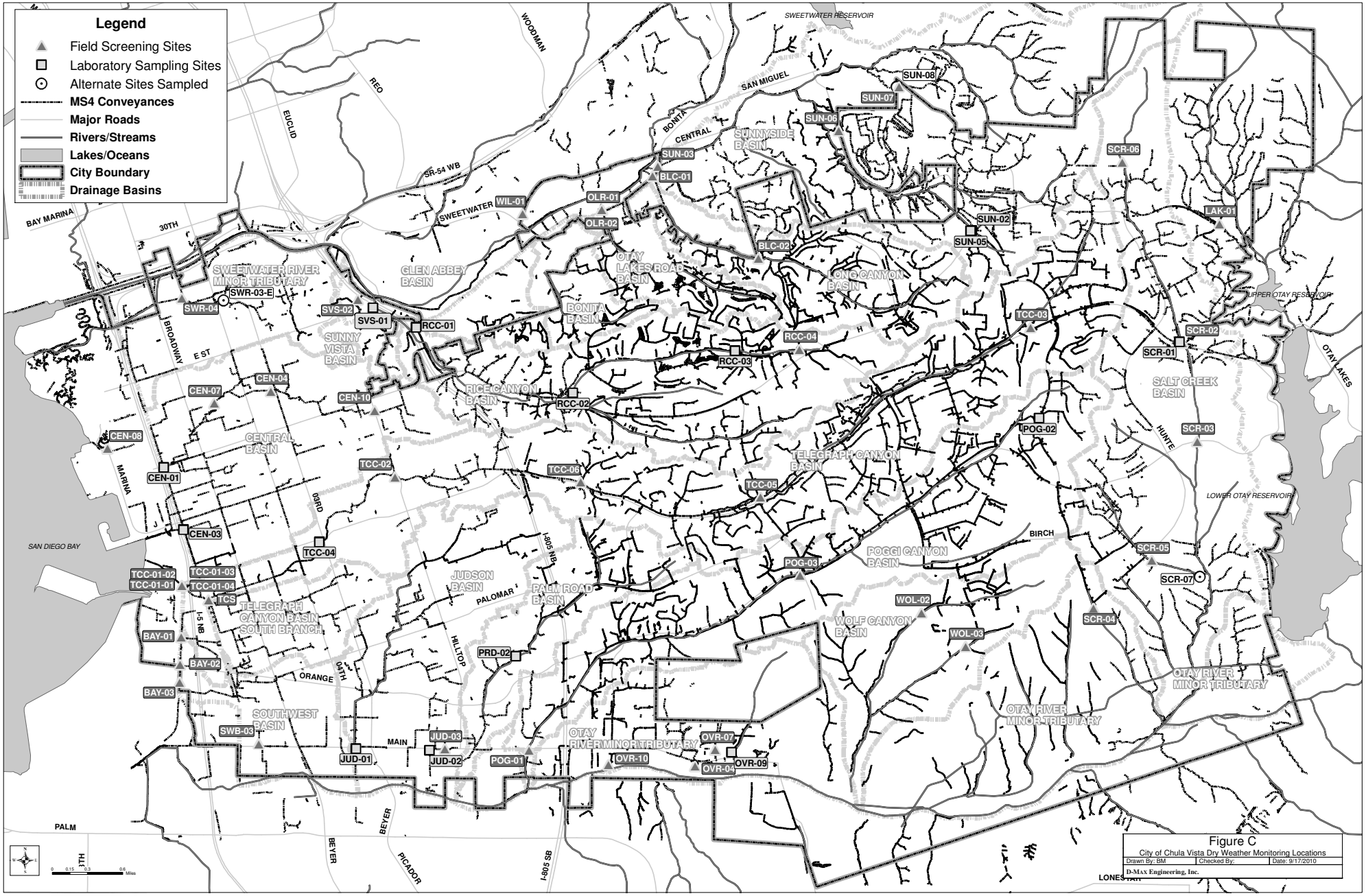

Base Data Sources: USGS, SanGIS, SANDAG, City of Chula Vista

Appendix A

Historical Dry Weather Monitoring Data

APPENDIX A: SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (1994-2009)

Site No.	BAY-01	BAY-02	BAY-02-1	BAY-02-2	BAY-03	BLC-01	BLC-02	CEN-01	CEN-02	CEN-03	CEN-04	CEN-05	CEN-07	CEN-08	CEN-09	CEN-10	GLA-01	GLA-02	JUD-01	JUD-02	JUD-02a	JUD-03	JUD-04	MGC-01	MGC-02	OLR-01	OLR-02	OLR-03	OVR-01	OVR-02	OVR-03	OVR-04	OVR-05	OVR-06	OVR-07	OVR-08	OVR-09	OVR-10	OVR-11	OVR-12	OVR-13
1994 Round One																																									
Phenols(mg/L)	Dry		Dry	Dry	Dry	ND	Dry	ND	Dry	ND	Dry						Dry	Dry	Dry	Dry							ND	Dry	0.4	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Detergents(mg/L)	Dry		Dry	Dry	Dry	0.5	Dry	0.75	Dry	2	Dry						Dry	Dry	Dry	Dry							0.25	Dry	3	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Chlorine (mg/L)	Dry		Dry	Dry	Dry	0.7	Dry	ND	Dry	0.1	Dry						Dry	Dry	Dry	Dry							0.1	Dry	1	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Copper(mg/L)	Dry		Dry	Dry	Dry	ND	Dry	ND	Dry	ND	Dry						Dry	Dry	Dry	Dry							ND	Dry	ND	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Ammonia(mg/L)	Dry		Dry	Dry	Dry	ND	Dry	ND	Dry	0.1	Dry						Dry	Dry	Dry	Dry							ND	Dry	0.2	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Glycol(mg/L)	Dry		Dry	Dry	Dry	0-30	Dry	0-30	Dry	0-30	Dry						Dry	Dry	Dry	Dry							0-30	Dry	0-30	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
Zinc(mg/L)	Dry		Dry	Dry	Dry	1.8	Dry	0.15	Dry	0.15	Dry						Dry	Dry	Dry	Dry							0.1	Dry	0.4	Dry	Dry	Dry	Dry		Dry	Dry	Dry	Dry	Dry		
1994 Round Two																																									
Phenols(mg/L)	Dry		Dry	Dry	Dry	ND	Dry	ND	Dry	Dry	Dry	Dry					Dry	Dry	Dry	Dry				Dry	Dry		ND	ND	ND	Dry	Dry	Dry	Dry		Dry	Dry	ND	ND	Dry		
Detergents(mg/L)	Dry		Dry	Dry	Dry	0.5	Dry	0.75	Dry	Dry	Dry	Dry					Dry	Dry	Dry	Dry				Dry	Dry		0.25	0.25	>3.0	Dry	Dry	Dry	Dry		Dry	Dry	>3.0	0.4	Dry		
Chlorine (mg/L)	Dry		Dry	Dry	Dry	0.3	Dry	0.1	Dry	Dry	Dry	Dry					Dry	Dry	Dry	Dry				Dry	Dry		0.2	0.5	ND	Dry	Dry	Dry	Dry		Dry	Dry	0.2	ND	Dry		
Copper(mg/L)	Dry		Dry	Dry	Dry	ND	Dry	ND	Dry	Dry	Dry	Dry					Dry	Dry	Dry	Dry				Dry	Dry		ND	ND	ND	Dry	Dry	Dry	Dry		Dry	Dry	ND	ND	Dry		
Ammonia(mg/L)	Dry		Dry	Dry	Dry	0.1	Dry	0.6	Dry	Dry	Dry	Dry					Dry	Dry	Dry	Dry				Dry	Dry		ND	ND	3	Dry	Dry	Dry	Dry		Dry	Dry	0.8	0.2	Dry		
Glycol(mg/L)	Dry		Dry	Dry	Dry	0-30	Dry	0-30	Dry	Dry	Dry	Dry					Dry	Dry	Dry	Dry				Dry	Dry		0-30	0-30	0-30	Dry	Dry	Dry	Dry		Dry	Dry	30-100	0-30	Dry		
Zinc(mg/L)	Dry		Dry	Dry	Dry	1.5	Dry	0.2	Dry	Dry	Dry	Dry					Dry	Dry	Dry	Dry				Dry	Dry		0.4	0.4	1.25	Dry	Dry	Dry	Dry		Dry	Dry	1.3	0.12	Dry		
1995 Round One																																									
Phenols(mg/L)	Dry		Dry	1	0.2	ND	ND	0.2	Dry	Dry	Dry	Dry					Dry	Dry	Dry	ND				Dry	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry		ND	Dry	ND	Dry	Dry		
Detergents(mg/L)	Dry		Dry	>3.0	>3.0	0.75	0.75	>3.0	Dry	Dry	Dry	Dry					Dry	Dry	Dry	0.25				Dry	0.25		0.25	Dry	Dry	Dry	Dry	Dry	Dry		1.5	Dry	1.5	Dry	Dry		
Chlorine (mg/L)	Dry		Dry	ND	ND	ND	ND	ND	Dry	Dry	Dry	Dry					Dry	Dry	Dry	ND				Dry	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry		ND	Dry	ND	Dry	Dry		
Copper(mg/L)	Dry		Dry	ND	ND	ND	ND	ND	Dry	Dry	Dry	Dry					Dry	Dry	Dry	ND				Dry	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry		ND	Dry	ND	Dry	Dry		
Ammonia(mg/L)	Dry		Dry	1.4	ND	ND	ND	0.1	Dry	Dry	Dry	Dry					Dry	Dry	Dry	0.2				Dry	ND		0.1	Dry	Dry	Dry	Dry	Dry	Dry		ND	Dry	ND	Dry	Dry		
Glycol(mg/L)	Dry		Dry	0-30	100-150	NT	NT	>150	Dry	Dry	Dry	Dry					Dry	Dry	Dry	0-30				Dry	NT		0-30	Dry	Dry	Dry	Dry	Dry	Dry		0-30	Dry	0-30	Dry	Dry		
Zinc(mg/L)	Dry		Dry	4	2	0.3	1.5	0.25	Dry	Dry	Dry	Dry					Dry	Dry	Dry	0.25				Dry	0.1		0.25	Dry	Dry	Dry	Dry	Dry	Dry		1	Dry	0.5	Dry	Dry		
1995 Round Two																																									
Phenols(mg/L)	Dry		ND	Dry	ND	ND	ND	ND	Dry	ND	Dry	ND					Dry	Dry	Dry	ND				ND	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	Dry	Dry		
Detergents(mg/L)	Dry		0.75	Dry	>3.0	2	0.75	>3.0	Dry	0.5	Dry	0.75					Dry	Dry	Dry	0.75				0.5	0.35		0.3	Dry	Dry	Dry	Dry	Dry	Dry	Dry	2	Dry	2.5	Dry	Dry		
Chlorine (mg/L)	Dry		ND	Dry	ND	ND	ND	ND	Dry	ND	Dry	ND					Dry	Dry	Dry	ND				ND	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	Dry	Dry		
Copper(mg/L)	Dry		ND	Dry	ND	ND	ND	ND	Dry	ND	Dry	ND					Dry	Dry	Dry	ND				ND	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	Dry	Dry		
Ammonia(mg/L)	Dry		0.1	Dry	ND	ND	ND	0.4	Dry	0.4	Dry	0.6					Dry	Dry	Dry	0.6				ND	ND		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	Dry	Dry		
Glycol(mg/L)	Dry		NT	Dry	100-150	0-30	NT	0-30	Dry	NT	Dry	NT					Dry	Dry	Dry	0-30				NT	NT		NT	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0-30	Dry	0-30	Dry	Dry		
Zinc(mg/L)	Dry		0.1	Dry	3	0.15	0.2	0.2	Dry	0.05	Dry	0.05					Dry	Dry	Dry	0.2				0.3	0.1		0.1	Dry	Dry	Dry	Dry	Dry	Dry	Dry	1.3	Dry	0.2	Dry	Dry		
1996 Round One																																									
Phenols(mg/L)	Dry		Dry	Dry	Dry	ND	ND	0.1	Dry	Dry	Dry	Dry					Dry	Dry	Dry	ND				Dry	Dry		0	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND				
Detergents(mg/L)	Dry		Dry	Dry	Dry	0.5	>3.0	1.5	Dry	Dry	Dry	Dry					Dry	Dry	Dry	2				Dry	Dry		0.5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	3	Dry	Lab only				
Chlorine (mg/L)	Dry		Dry	Dry	Dry	0.6	0.1	0	Dry	Dry	Dry	Dry					Dry	Dry	Dry	ND				Dry	Dry		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	0.5				
Copper(mg/L)	Dry		Dry	Dry	Dry	ND	ND	ND	Dry	Dry	Dry	Dry					Dry	Dry	Dry	ND				Dry	Dry		ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND				
Ammonia(mg/L)	Dry		Dry	Dry	Dry	ND	ND	ND	Dry	Dry	Dry	Dry					Dry	Dry	Dry	0.1				Dry	Dry		0.3	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry	ND				
Glycol(mg/L)	Dry		Dry	Dry	Dry	0-30	0-30	0-30	Dry	Dry	Dry	Dry					Dry	Dry	Dry	0-30				Dry	Dry		0-30	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0-30	Dry	0-30				
Zinc(mg/L)	Dry		Dry	Dry	Dry	0.2	0.3	0.1	Dry	Dry	Dry	Dry					Dry	Dry	Dry	0.2				Dry	Dry		0.1	Dry	Dry	Dry	Dry	Dry	Dry	Dry	1	Dry	0.2				
1996 Round Two																																									
Phenols(mg/L)	Dry		Dry	Dry	Dry	ND	ND	ND	Dry	ND	Dry	ND					Dry	Dry	Dry	Dry				Dry	ND		Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	0.1	0.1		
Detergents(mg/L)	Dry		Dry	Dry	Dry	1	0.8	1.5	Dry	0.8	Dry	0.8					Dry	Dry	Dry	Dry				Dry	3		Dry	Dry	>3.0	Dry	Dry	Dry	Dry	Dry	Dry	Dry	1	>3.0	0.5		
Chlorine (mg/L)	Dry		Dry	Dry	Dry	ND	ND	0.1	Dry	ND	Dry	ND					Dry	Dry	Dry	Dry				Dry	ND		Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND		
Copper(mg/L)	Dry		Dry	Dry	Dry	ND	ND	ND	Dry	ND	Dry	ND					Dry	Dry	Dry	Dry				Dry	ND		Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ND	ND	ND		
Ammonia(mg/L)	Dry		Dry	Dry	Dry	ND	0.1	0.7	Dry	ND	Dry	0.8					Dry	Dry	Dry	Dry				Dry	ND		Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0.3	0.4	ND		
Glycol(mg/L)	Dry		Dry	Dry	Dry	0-30	0-30	0-30	Dry	0-30	Dry	0-30					Dry	Dry	Dry	Dry				Dry	0-30		Dry	Dry	0-30	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0-30	0-30	0-30		
Zinc(mg/L)	Dry		Dry	Dry	Dry	0.1	0.3	0.2	Dry	0.1	Dry	ND					Dry	Dry	Dry	Dry				Dry	ND		Dry	Dry	0.3	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0.1	1.4	0.1		
1997 Round One																																									
Phenols(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	ND					Dry		ND	Dry	ND	ND	ND	ND	ND	Dry	ND	Dry	ND	Dry	Dry		
Detergents(mg/L)	Dry	Dry			Dry	0.25	0.25	0.75	Dry	Dry	1								Dry	3.0/2.0					Dry		0.25	Dry	0.25	0.25	0.25	0.75	0.5	Dry	1.5	Dry	2	Dry	Dry		
Chlorine (mg/L)	Dry	Dry			Dry	0.4	0.2	ND	Dry	Dry	ND								Dry	0.1					Dry		0.4	Dry	ND	ND	ND	ND	ND	Dry	0.1	Dry	0.2	Dry	Dry		
Copper(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	ND					Dry		ND	Dry	ND	ND	ND	ND	ND	Dry	ND	Dry	ND	Dry	Dry		
Ammonia(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	0.2					Dry		0.3	Dry	0.1	0.1	0.1	ND	ND	Dry	ND	Dry	ND	Dry	Dry		
Glycol(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	ND					Dry		ND	Dry	ND	ND	ND	ND	ND	Dry	ND	Dry	ND	Dry	Dry		
Zinc(mg/L)	Dry	Dry			Dry	0.01	0.03	ND	Dry	Dry	ND								Dry	0.01					Dry		0.01	Dry	ND	ND	ND	ND	0.03	Dry	0.23	Dry	0.06	Dry	Dry		
Conductivity (mS/cm)	Dry	Dry			Dry	7.95	7.48	1.4	Dry	Dry	1.17								Dry	1.4					Dry		1.43	Dry	1.33	1.33	1.33	0.98	1.11	Dry	15.77	Dry	6.33	Dry	Dry		
1997 Round Two																																									
Phenols(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	<0.1								Dry	ND					Dry		ND	Dry	ND	Dry	Dry	ND	Dry	Dry	ND	Dry	ND	Dry	ND		
Detergents(mg/L)	Dry	Dry			Dry	0.75	0.5	0.5	Dry	Dry	0.5								Dry	3					Dry		0.5	Dry	1	Dry	Dry	1	Dry	Dry	1	Dry	10	Dry	20		
Chlorine (mg/L)	Dry	Dry			Dry	0.8	0.1	ND	Dry	Dry	ND								Dry	10					Dry		0.3	Dry	ND	Dry	Dry	ND	Dry	Dry	0.1	Dry	0.1	Dry	ND		
Copper(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	ND					Dry		ND	Dry	ND	Dry	Dry	ND	Dry	Dry	ND	Dry	ND	Dry	ND		
Ammonia(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	1.4					Dry		ND	Dry	ND	Dry	Dry	0.6	Dry	Dry	ND	Dry	ND	Dry	0.5		
Glycol(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	ND					Dry		ND	Dry	ND	Dry	Dry	ND	Dry	Dry	ND	Dry	ND	Dry	5.0-6.0		
Zinc(mg/L)	Dry	Dry			Dry	ND	ND	ND	Dry	Dry	ND								Dry	0.14					Dry		ND	Dry	0.14	Dry	Dry	0.01	Dry	Dry	0.21	Dry	0.01	Dry	0.41		
Conductivity (mS/cm)	Dry	Dry			Dry	7.1	7.24	1.34	Dry	Dry	1.39								Dry	1.55					Dry		1.4	Dry	1.1	Dry	Dry	1.39	Dry	Dry	16.11	Dry	5.09	Dry	0.88		
1998 Round One																																									
Phenols(mg/L)	ND	ND			ND	ND	ND	ND	Dry	Dry	ND	ND							Dry	ND	ND	ND			ND		ND			Dry	Dry	Dry	Dry	Dry	ND	Dry	0.1	ND	ND		
Detergents(mg/L)	0.25	0.5			ND	0.25	0.5	0.25	Dry	Dry	0.25	0.25							Dry	3	>3	2			0.25		0.5			Dry	Dry	Dry	Dry	Dry	1	Dry	1	<0.25	1.5		
Chlorine (mg/L)	0.2	0.1			ND	0.4	0.4	0.1	Dry	Dry	ND	ND							Dry	0.3	ND	0.1			0.1		ND			Dry	Dry	Dry	Dry	Dry	0.9	Dry	0.2	0.3	1		
Copper(mg/L)	ND	ND			ND	ND	ND	ND	Dry	Dry	ND	ND							Dry	0.1	ND	ND			ND		ND			Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	ND	ND		
Ammonia(mg/L	ND	ND			ND	ND	ND	ND	Dry	Dry	ND	1.3							Dry	ND	ND	2.3			ND		ND			Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	0.2	ND		
Glycol(mg/L)	ND	ND			ND	ND	ND	ND	Dry	Dry	ND	ND							Dry	1	1	<1			ND		ND			Dry	Dry	Dry	Dry	Dry	ND	Dry	ND	ND	ND		
Zinc(mg/L)	ND	0.03			ND	0.01	ND	ND	Dry	Dry	ND	0.09							Dry	0.05	ND	ND			0.18		ND			Dry	Dry	Dry	Dry	Dry	0.26	Dry	0.01	ND	ND		
Conductivity (mS/cm)	1.24	20.1			151.4	6.56	6.99	1.11	Dry	Dry	0.94	5.93							Dry	1.45	ND	1.28			3.82		3.71			Dry	Dry	Dry	Dry	Dry	16.29	Dry	9.64	1.22	0.99		
1998 Round Two																																									
Phenols(mg/L)	ND	ND			ND	0.1	ND	ND	Dry	ND	ND	ND							ND	ND		ND			0.1		0.1		Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry					
Detergents(mg/L)	0.5	0.5			1	0.25	0.25	0.5	Dry	0.25	0.5	1							1	>3		0.5			0.25		0.5		Dry	Dry	Dry	Dry	Dry	Dry	1	Dry					
Chlorine (mg/L)	0.2	0.3			0.2	2	ND	0.3	Dry	0.4	ND	ND							0.2	0.2		0.8			0.1		ND		Dry	Dry	Dry	Dry	Dry	Dry	0.3	Dry					
Copper(mg/L)	ND	ND			ND	ND	ND	ND	Dry	ND	ND	ND							ND	ND		ND			ND		ND		Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry					
Ammonia(mg/L)	ND	0.1			ND	ND	ND	0.6	Dry	ND	ND	0.1							ND	0.7		1.6			ND		ND		Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry					
Glycol(mg/L)	ND	ND			ND	ND	ND	ND	Dry	ND	ND	ND							ND	ND		ND			ND		ND		Dry	Dry	Dry	Dry	Dry	Dry	ND	Dry					
Zinc(mg/L)	ND	ND			ND	ND	ND	ND	Dry	ND	ND	ND							ND	ND		ND			ND		0.01		Dry	Dry	Dry	Dry	Dry	Dry	0.01	Dry					
Conductivity (mS/cm)	1.05	1.91			7.41	6.67	6.96	1.31	Dry	0.94	0.92	0.93							1.53	1.31		1.09			3.74		3.51		Dry	Dry	Dry	Dry	Dry	Dry	15.58	Dry					
1999 Round One																																									
Phenols(mg/L)	0.1	Dry	Dry		2	ND	ND	ND		ND	ND	Dry	0.011	0.2	0.004	Dry			0.1	0.1		0.2	Dry		0.1		ND					Dry			ND		0.008	ND	ND	Dry	Dry
Detergents(mg/L)	0.5	Dry	Dry		10	0.5	0.5	0.5		0.5	0.25	Dry	1.25	1.5	20	Dry			0.75	1.5		3.75	Dry		0.25		0.25					Dry			1		0.5	0.25	0.25	Dry	Dry
Chlorine (mg/L)	0.8	Dry	Dry		2.5	0.6	ND	ND		0.4	0.1	Dry	0.5	ND	0.5	Dry			0.5	0.6		0.6	Dry		0.2		0.2					Dry			0.6		1.5	0.1	0.1	Dry	Dry
Copper(mg/L)	ND	Dry	Dry		ND	ND	ND	ND		ND	ND	Dry	0.03	ND	0.06	Dry			ND	ND		ND	Dry		ND		ND					Dry			ND		ND	ND	ND	Dry	Dry
Ammonia(mg/L)	0.4	Dry	Dry		INT	ND	ND	0.2		0.3	0.1	Dry	ND	0.3	0.1	Dry			1	2		10	Dry		0.4		0.4					Dry			ND		5	1.5	1.5	Dry	Dry
Glycol(mg/L)	ND	Dry	Dry		INT	ND	ND	ND		ND	ND	Dry	ND	ND	2	Dry			ND	ND		2	Dry		ND		ND					Dry			ND		ND	ND	ND	Dry	Dry
Zinc(mg/L)	0.09	Dry	Dry		0.88	ND	0.05	0.01		ND	ND	Dry	0.41	0.7	0.31	Dry			0.28	0.09		0.28	Dry		0.01		0.16					Dry			0.28		0.43	0.11	0.12	Dry	Dry
Conductivity (mS/cm)	1.08	Dry	Dry		135.9	6.99	6.91	1.43		1.12	1.14	Dry	1.74	50.7	1.99	Dry			1.93	1.6		1.5	Dry		4.06		1.61					Dry			16.99		9.99	1.11	0.95	Dry	Dry

APPENDIX A: SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (1994-2009)

Site No.	OVR-14	OVR-15	POG-01	POG-02	POG-03	PRD-01	PRD-02	PRD-03	RCC-01	RCC-02	RCC-03	RCC-04	SCR-01	SCR-02	SCR-03	SUN-01	SUN-02	SUN-03	SUN-04	SUN-05	SVS-01	SVS-02	SWB-01	SWB-02	SWB-03	SWR-01	SWR-02	SWR-03	SWR-04	TCC-01-1	TCC-01-2	TCC-01-3	TCC-01-4	TCC-02	TCC-03	TCC-04	TCC-05	TCC-06	TCS	WIL-01	WIL-02
1994 Round One																																									
Phenols(mg/L)			Dry	ND		Dry	Dry	Dry	0.1	0.1			ND	Dry		Dry	0.1	Dry	Dry		ND		Dry	Dry		Dry	Dry	Dry		Dry	0.1	0.1	Dry	Dry	ND	Dry				Dry	Dry
Detergents(mg/L)			Dry	0.6		Dry	Dry	Dry	1	1.5			3	Dry		Dry	0.25	Dry	Dry		0.5		Dry	Dry		Dry	Dry	Dry		Dry	0.5	0.75	Dry	Dry	0.5	Dry				Dry	Dry
Chlorine (mg/L)			Dry	0.5		Dry	Dry	Dry	0.4	0.1			0.3	Dry		Dry	0.3	Dry	Dry		0.1		Dry	Dry		Dry	Dry	Dry		Dry	ND	0.1	Dry	Dry	0.4	Dry				Dry	Dry
Copper(mg/L)			Dry	ND		Dry	Dry	Dry	ND	ND			ND	Dry		Dry	ND	Dry	Dry		ND		Dry	Dry		Dry	Dry	Dry		Dry	ND	ND	Dry	Dry	ND	Dry				Dry	Dry
Ammonia(mg/L)			Dry	ND		Dry	Dry	Dry	0.1	0.6			2.5	Dry		Dry	1.5	Dry	Dry		ND		Dry	Dry		Dry	Dry	Dry		Dry	ND	ND	Dry	Dry	0.2	Dry				Dry	Dry
Glycol(mg/L)			Dry	0-30		Dry	Dry	Dry	0-30	0-30			0-30	Dry		Dry	0-30	Dry	Dry		0-30		Dry	Dry		Dry	Dry	Dry		Dry	0-30	0-30	Dry	Dry	0-30	Dry				Dry	Dry
Zinc(mg/L)			Dry	0.1		Dry	Dry	Dry	0.15	2.5			4	Dry		Dry	0.2	Dry	Dry		0.15		Dry	Dry		Dry	Dry	Dry		Dry	0.2	0.25	Dry	Dry	0.25	Dry				Dry	Dry
1994 Round Two																																									
Phenols(mg/L)			ND	Dry		ND	ND	Dry	ND	0.2			ND	Dry		Dry	ND	Dry	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	0.1	Dry	Dry	Dry	Dry	Dry				Dry	ND
Detergents(mg/L)			0.5	Dry		0.5	0.75	Dry	0.4	0.75			0.25	Dry		Dry	0.5	Dry	Dry	0.5	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	1	Dry	Dry	Dry	Dry	Dry				Dry	1
Chlorine (mg/L)			ND	Dry		ND	ND	Dry	0.2	0.1			ND	Dry		Dry	0.1	Dry	Dry	0.1	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	0.2	Dry	Dry	Dry	Dry	Dry				Dry	ND
Copper(mg/L)			ND	Dry		ND	0.1	Dry	0.1	ND			ND	Dry		Dry	ND	Dry	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry				Dry	ND
Ammonia(mg/L)			ND	Dry		ND	2.5	Dry	ND	0.1			ND	Dry		Dry	0.4	Dry	Dry	0.3	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	ND	Dry	Dry	Dry	Dry	Dry				Dry	ND
Glycol(mg/L)			0-30	Dry		0-30	0-30	Dry	0-30	0-30			0-30	Dry		Dry	0-30	Dry	Dry	0-30	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	0-30	Dry	Dry	Dry	Dry	Dry				Dry	0-30
Zinc(mg/L)			0.22	Dry		0.05	0.4	Dry	0.3	0.2			1.5	Dry		Dry	0.2	Dry	Dry	0.4	Dry		Dry	Dry		Dry	Dry	Dry	Dry	Dry	0.2	Dry	Dry	Dry	Dry	Dry				Dry	0.05
1995 Round One																																									
Phenols(mg/L)			Dry	ND		Dry	0.2	Dry	ND	Dry			Dry	Dry		Dry	0.2	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Detergents(mg/L)			Dry	ND		Dry	1	Dry	0.75	Dry			Dry	Dry		Dry	3	0.75	Dry	>3.0	Dry		Dry	Dry		Dry	Dry	Dry	0.75	Dry	0.25	0.5	Dry	1.75	1	>3.0				Dry	0.25
Chlorine (mg/L)			Dry	ND		Dry	ND	Dry	ND	Dry			Dry	Dry		Dry	ND	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Copper(mg/L)			Dry	ND		Dry	ND	Dry	ND	Dry			Dry	Dry		Dry	ND	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Ammonia(mg/L)			Dry	ND		Dry	0.8	Dry	ND	Dry			Dry	Dry		Dry	0.1	1.5	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	2.5	ND				Dry	ND
Glycol(mg/L)			Dry	0-30		Dry	NT	Dry	NT	Dry			Dry	Dry		Dry	NT	NT	Dry	NT	Dry		Dry	Dry		Dry	Dry	Dry	0-30	Dry	NT	0-30	Dry	0-30	NT	0-30				Dry	0-30
Zinc(mg/L)			Dry	0.2		Dry	0.1	Dry	0.05	Dry			Dry	Dry		Dry	0.1	0.15	Dry	0.1	Dry		Dry	Dry		Dry	Dry	Dry	0.1	Dry	0	0.2	Dry	ND	0.1	0.1				Dry	0.25
1995 Round Two																																									
Phenols(mg/L)			Dry	ND		Dry	ND	Dry	ND	Dry			0.1	Dry		Dry	0.1	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Detergents(mg/L)			Dry	>3.0		Dry	1	Dry	0.5	Dry			1.5	Dry		Dry	1	0.5	Dry	0.5	Dry		Dry	Dry		Dry	Dry	Dry	0.5	Dry	0.75	0.75	Dry	1.5	1	0.4				Dry	0.3
Chlorine (mg/L)			Dry	3		Dry	ND	Dry	ND	Dry			>3.0	Dry		Dry	0.05	ND	Dry	0.1	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	0.2	ND				Dry	ND
Copper(mg/L)			Dry	ND		Dry	ND	Dry	ND	Dry			ND	Dry		Dry	ND	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Ammonia(mg/L)			Dry	>2.5		Dry	1.8	Dry	ND	Dry			0.6	Dry		Dry	ND	nd.5	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				Dry	ND
Glycol(mg/L)			Dry	0-30		Dry	NT	Dry	NT	Dry			0-30	Dry		Dry	NT	NT	Dry	NT	Dry		Dry	Dry		Dry	Dry	Dry	0-30	Dry	NT	0-30	Dry	NT	NT	0-30				Dry	NT
Zinc(mg/L)			Dry	0.2		Dry	0.2	Dry	0.1	Dry			0.2	Dry		Dry	1.4	0.1	Dry	0.2	Dry		Dry	Dry		Dry	Dry	Dry	0.1	Dry	0.2	0.1	Dry	0.2	0.1	0.1				Dry	0.2
1996 Round One																																									
Phenols(mg/L)			Dry	0.2		Dry	Dry	Dry	0.1	Dry			ND	Dry		Dry	ND	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	ND	Dry	0.1	Dry	ND	ND	Dry				Dry	Dry
Detergents(mg/L)			Dry	0.8		Dry	Dry	Dry	0.3	Dry			0.8	Dry		Dry	0.8	0.5	Dry	1	Dry		Dry	Dry		Dry	Dry	Dry	1	1	Dry	2	Dry	3	2	Dry				Dry	Dry
Chlorine (mg/L)			Dry	0.2		Dry	Dry	Dry	ND	Dry			ND	Dry		Dry	0.1	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	0.3	Dry	0.1	Dry	ND	ND	Dry				Dry	Dry
Copper(mg/L)			Dry	ND		Dry	Dry	Dry	ND	Dry			ND	Dry		Dry	ND	ND	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	ND	Dry	ND	Dry	ND	ND	Dry				Dry	Dry
Ammonia(mg/L)			Dry	0.3		Dry	Dry	Dry	0	Dry			0.02	Dry		Dry	ND	ND	Dry	1.3	Dry		Dry	Dry		Dry	Dry	Dry	1	1.6	Dry	2.3	Dry	ND	0.25	Dry				Dry	Dry
Glycol(mg/L)			Dry	NT		Dry	Dry	Dry	NT	Dry			NT	Dry		Dry	NT	0-30	Dry	NT	Dry		Dry	Dry		Dry	Dry	Dry	NT	0-30	Dry	0-30	Dry	ND	0-30	Dry				Dry	Dry
Zinc(mg/L)			Dry	0.01		Dry	Dry	Dry	0.1	Dry			0.01	Dry		Dry	0.2	0.1	Dry	ND	Dry		Dry	Dry		Dry	Dry	Dry	ND	0.75	Dry	0.1	Dry	0.1	0.4	Dry				Dry	Dry
1996 Round Two																																									
Phenols(mg/L)			Dry	ND		Dry	Dry	Dry	ND	Dry			Dry	ND		Dry	ND	ND	Dry	ND	ND		Dry	Dry		Dry	Dry	Dry	Dry	0.1	ND	ND	Dry	ND	ND	Dry				Dry	Dry
Detergents(mg/L)			Dry	0.3		Dry	Dry	Dry	0.8	Dry			Dry	1		Dry	0.8	0.5	Dry	1	ND		Dry	Dry		Dry	Dry	Dry	Dry	0.5	0.5	0.5	Dry	>3.0	1.5	Dry				Dry	Dry
Chlorine (mg/L)			Dry	ND		Dry	Dry	Dry	ND	Dry			Dry	0.3		Dry	ND	ND	Dry	0.1	ND		Dry	Dry		Dry	Dry	Dry	Dry	ND	ND	ND	Dry	ND	ND	Dry				Dry	Dry
Copper(mg/L)			Dry	ND		Dry	Dry	Dry	ND	Dry			Dry	ND		Dry	ND	ND	Dry	ND	ND		Dry	Dry		Dry	Dry	Dry	Dry	ND	ND	ND	Dry	ND	ND	Dry				Dry	Dry
Ammonia(mg/L)			Dry	2		Dry	Dry	Dry	0.3	Dry			Dry	0.3		Dry	0	0.3	Dry	ND	ND		Dry	Dry		Dry	Dry	Dry	Dry	0.5	ND	ND	Dry	ND	ND	Dry				Dry	Dry
Glycol(mg/L)			Dry	0-30		Dry	Dry	Dry	0-30	Dry			Dry	0-30		Dry	NT	0-30	Dry	0-30	0-30		Dry	Dry		Dry	Dry	Dry	Dry	0-30	0-30	0-30	Dry	NT	0-30	Dry				Dry	Dry
Zinc(mg/L)			Dry	0.1		Dry	Dry	Dry	0.1	Dry			Dry	0.1		Dry	0.1	0.3	Dry	0.2	0.1		Dry	Dry		Dry	Dry	Dry	Dry	0.2	0.1	0.2	Dry	0.2	0.2	Dry				Dry	Dry
1997 Round One																																									
Phenols(mg/L)			Dry	ND		ND	ND	ND	ND	ND			ND	0.2		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				ND	Dry
Detergents(mg/L)			Dry	0.25		0.75	0.75	0.75	0.25	0.25	0.5		0.25	0.25		Dry	1.5	0.25		1.5	0.25		Dry	Dry		Dry	Dry	Dry	0.25	Dry	1.5	1	Dry	0.75	0.25	0.75				ND	Dry
Chlorine (mg/L)			Dry	0.2		ND	ND	ND	0.3	ND	2.0/1.5		0.4	0.6		Dry	0.6	0.2		0.6	1		Dry	Dry		Dry	Dry	Dry	0.1	Dry	ND	ND	Dry	ND	0.4	ND				0.3	Dry
Copper(mg/L)			Dry	ND		ND	ND	ND	ND	ND	ND		ND	ND		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				ND	Dry
Ammonia(mg/L)			Dry	2.1		ND	0.2	ND	ND	0.3	ND		ND	ND		Dry	0.4	ND		ND	0.5		Dry	Dry		Dry	Dry	Dry	0.4	Dry	0.5	ND	Dry	ND	ND	ND				ND	Dry
Glycol(mg/L)			Dry	ND		ND	ND	ND	5	10	ND		ND	ND		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	ND	Dry	ND	ND	ND				ND	Dry
Zinc(mg/L)			Dry	0.03		ND	0.01	ND	0.03	0.23	0.23		0.07	ND		Dry	0.09	0.05		0.18	0.03		Dry	Dry		Dry	Dry	Dry	ND	Dry	ND	0.05	Dry	0.03	0.07	ND				ND	Dry
Conductivity (mS/cm)			Dry	1.22		1.95	1.8	1.95	4.05	1	7.2		1.34	1.42		Dry	2.75	2.57		4.11	1		Dry	Dry		Dry	Dry	Dry	1.54	Dry	2.71	2.86	Dry	4.46	8.22	4.36				1.04	Dry
1997 Round Two																																									
Phenols(mg/L)			Dry	ND		ND	ND	Dry	ND	0.2	ND		ND	ND		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	ND	ND	ND	ND	ND	Dry	ND	ND	ND				ND	Dry
Detergents(mg/L)			Dry	0.5		1	0.5	Dry	0.25	1.5	0.25		0.25	0.25		Dry	0.25	0.5		0.25	0.25		Dry	Dry		Dry	Dry	1.5	0.25	2	1.5	1.5	Dry	1.5	0.25	2				ND	Dry
Chlorine (mg/L)			Dry	0.3		ND	ND	Dry	0.2	0.3	0.2		0.1	0.2		Dry	ND	0.3		0.2	0.8		Dry	Dry		Dry	Dry	ND	ND	ND	ND	ND	Dry	ND	0.2	ND				0.1	Dry
Copper(mg/L)			Dry	ND		ND	ND	Dry	ND	ND	ND		ND	ND		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	ND	ND	ND	ND	ND	Dry	ND	ND	ND				ND	Dry
Ammonia(mg/L)			Dry	2.4		ND	0.1	Dry	ND	0.2	ND		ND	ND		Dry	ND	ND		ND	0.2		Dry	Dry		Dry	Dry	ND	ND	0.4	1	0.2	Dry	ND	1.8	0.2				ND	Dry
Glycol(mg/L)			Dry	ND		ND	ND	Dry	ND	3	ND		ND	ND		Dry	ND	ND		ND	0.4		Dry	Dry		Dry	Dry	ND	ND	ND	1.25	15	Dry	ND	ND	ND				ND	Dry
Zinc(mg/L)			Dry	0.09		ND	ND	Dry	ND	ND	0.09		ND	ND		Dry	ND	ND		ND	ND		Dry	Dry		Dry	Dry	ND	ND	0.36	ND	ND	Dry	ND	0.05	0.05				ND	Dry
Conductivity (mS/cm)			Dry	1.61		1.6	1.08	Dry	4.5	1.48	7.02		1.58	1.74		Dry	5.73	2.2		4.21	1		Dry	Dry		Dry	Dry	1.8	1.5	3.03	2.9	2.6	Dry	6.74	6.69	9.01				1	Dry
1998 Round One																																									
Phenols(mg/L)			ND	ND		Dry	ND	ND	ND	ND	ND		ND	ND			ND	ND		ND	ND		Dry	Dry		Dry		Dry	ND	ND	ND	ND	Dry	ND	ND	ND				ND	ND
Detergents(mg/L)			<0.25	0.25		Dry	0.75	0.25	0.5	0.5	0.25		0.25	0.25			2	0.25		0.25	0.5		Dry	Dry		Dry		Dry	0.25	0.25	0.25	0.25	Dry	0.25	0.5	0.25				<0.25	0.25
Chlorine (mg/L)			0.1	0.6		Dry	0.2	ND	0.4	0.8	0.4		0.8	0.2			0.6	0.2		0.3	ND		Dry	Dry		Dry		Dry	0.6	0.1	0.1	0.2	Dry	0.1	0.8	0.1				0.8	0.4
Copper(mg/L)			ND	ND		Dry	ND	ND	ND	ND	ND		ND	ND			ND	ND		ND	ND		Dry	Dry		Dry		Dry	ND	ND	ND	ND	Dry	0.1	ND	ND				ND	ND
Ammonia(mg/L)			ND	2.5		Dry	0.1	ND	ND	0.1	ND		2.5	ND			ND	ND		ND	ND		Dry	Dry		Dry		Dry	0.5	ND	ND	ND	Dry	ND	ND	ND				ND	ND
Glycol(mg/L)			ND	ND		Dry	<1	ND	ND	ND	ND		ND	ND			ND	5.6		ND	ND		Dry	Dry		Dry		Dry	ND	ND	ND	ND	Dry	ND	ND	ND				ND	ND
Zinc(mg/L)			ND	ND		Dry	ND	ND	ND	0.07	0.01		ND	ND			0.05	ND		ND	0.16		Dry	Dry		Dry		Dry	0.12	0.01	0.05	ND	Dry	0.06	ND	ND				0.12	ND
Conductivity (mS/cm)			1.24	1.78		Dry	1.19	2.06	5	7.64	3.69		2.5	4.74			9.77	2.31		3.79	1.07		Dry	Dry		Dry		Dry	1.93	3.48	3.44	3.4	Dry	3.62	10.27	3.7				4.46	1.1
1998 Round Two																																									
Phenols(mg/L)													0.1	0.1			ND	0.1		ND	0.1		ND	ND		Dry	Dry	0.1	ND	ND	ND	ND	Dry	ND	0.1	ND				0.1	Dry
Detergents(mg/L)													0.25	0.25			0.75	0.25		0.25	0.5		1	2		Dry	Dry	0.5	2	0.5	0.5	0.75	Dry	0.5	0.5	0.5				ND	Dry
Chlorine (mg/L)													ND	ND			0.1	0.1		0.1	ND		ND	1.5		Dry	Dry	ND	ND	0.3	0.2	0.4	Dry	0.3	0.2	0.8				1	Dry
Copper(mg/L)													ND	ND			ND	ND		ND	ND		ND	ND		Dry	Dry	ND	ND	ND	ND	ND	Dry	ND	ND	ND				ND	Dry
Ammonia(mg/L)													1.6	0.1			ND	ND		ND	1.4		0.6	0.8		Dry	Dry	ND	1.5	0.1	0.2	0.1	Dry	ND	ND	0.2				ND	Dry
Glycol(mg/L)													ND	ND			ND	ND		ND	ND		ND	ND		Dry	Dry	ND	ND	ND	ND	ND	Dry	ND	ND	ND				ND	Dry
Zinc(mg/L)													ND	0.05			0.03	ND		ND	ND		0.15	0.03		Dry	Dry	0.15	0.05	ND	ND	ND	Dry	ND	ND	ND				ND	Dry
Conductivity (mS/cm)													2.38	3.45			9.52	2.45		3.33	1.44		0.41	0.73		Dry	Dry	0.96	0.85	6.86	6.68	6.45	Dry	7.31	8.22	6.19				4.42	Dry
1999 Round One																																									
Phenols(mg/L)	0.1	Dry	ND	ND		ND	ND	Dry	ND	ND	0.1		ND					ND		ND	ND	ND	Dry	Dry	Dry			Dry		ND	0.1	0.1		0.1	ND	0.1				ND	
Detergents(mg/L)	0.5	Dry	0.25	0.25		0.25	0.25	Dry	0.25	0.5	0.75		0.25					1		0.5	0.25	0.25	Dry	Dry	Dry			Dry		1	0.5	1		0.25	1	0.5				0.25	
Chlorine (mg/L)	0.6	Dry	0.8	0.5		ND	0.4	Dry	0.1	0.4	0.2		0.2					0.5		0.6	ND	0.1	Dry	Dry	Dry			Dry		0.8	0.4	0.4		0.3	1	0.6				ND	
Copper(mg/L)	ND	Dry	ND	ND		ND	ND	Dry	ND	ND	ND		ND					ND		ND	ND	ND	Dry	Dry	Dry			Dry		ND	ND	ND		ND	ND	ND				ND	
Ammonia(mg/L)	0.8	Dry	0.2	3		1.5	0.7	Dry	ND	0.3	ND		1					0.4		0.3	0.3	0.8	Dry	Dry	Dry			Dry		0.6	0.4	0.6		0.3	ND	0.5				0.3	
Glycol(mg/L)	ND	Dry	ND	3		1100	ND	Dry	ND	6	ND		ND					ND		ND	ND	1	Dry	Dry	Dry			Dry		ND	ND	ND		ND	ND	ND				ND	
Zinc(mg/L)	0.21	Dry	0.3	0.09		0.05	0.07	Dry	0.03	0.01	ND		ND					ND		ND	0.01	ND	Dry	Dry	Dry			Dry		0.05	0.16	ND		ND	0.14	0.01				0.23	
Conductivity (mS/cm)	3.79	Dry	1.29	2.03		1.4	1.16	Dry	5.54	1.32	5.88		2.5					2.25		3.45	1.22	1.24	Dry	Dry	Dry			Dry		6.52	5.45	5.63		4.61	8.15	6.33				5.63	

APPENDIX A: SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (1994-2009)

Site No.	BAY-01	BAY-02	BAY-02-1	BAY-02-2	BAY-03	BLC-01	BLC-02	CEN-01	CEN-02	CEN-03	CEN-04	CEN-05	CEN-07	CEN-08	CEN-09	CEN-10	GLA-01	GLA-02	JUD-01	JUD-02	JUD-02a	JUD-03	JUD-04	MGC-01	MGC-02	OLR-01	OLR-02	OLR-03	OVR-01	OVR-02	OVR-03	OVR-04	OVR-05	OVR-06	OVR-07	OVR-08	OVR-09	OVR-10	OVR-11	OVR-12	OVR-13
1999 Round Two																																									
Phenols(mg/L)	Dry	Dry	Dry		0.049	0.1	ND	ND		Dry	ND	Dry	ND	0.1	ND	Dry			Dry	ND		ND	Dry		ND		ND					Dry			ND		0.2	ND	ND	Dry	Dry
Detergents(mg/L)	Dry	Dry	Dry		1.78	0.5	0.5	0.25		Dry	0.25	Dry	1.25	1.5	3	Dry			Dry	1		1.5	Dry		0.5		0.25					Dry			0.75		0.75	0.25	0.5	Dry	Dry
Chlorine (mg/L)	Dry	Dry	Dry		INT	0.1	0.1	ND		Dry	ND	Dry	ND	ND	ND	Dry			Dry	ND		ND	Dry		0.1		ND					Dry			0.3		0.2	0.1	ND	Dry	Dry
Copper(mg/L)	Dry	Dry	Dry		0.04	ND	ND	ND		Dry	ND	Dry	ND	ND	ND	Dry			Dry	ND		ND	Dry		ND		ND					Dry			ND		ND	ND	ND	Dry	Dry
Ammonia(mg/L)	Dry	Dry	Dry		<0.2	ND	0.2	0.2		Dry	1	Dry	3	0.3	0.4	Dry			Dry	ND		4	Dry		0.1		ND					Dry			ND		0.3	0.2	3	Dry	Dry
Glycol(mg/L)	Dry	Dry	Dry		<10	0.2	ND	ND		Dry	ND	Dry	ND	ND	ND	Dry			Dry	ND		ND	Dry		ND		ND					Dry			ND		ND	ND	ND	Dry	Dry
Zinc(mg/L)	Dry	Dry	Dry		0.07	ND	ND	ND		Dry	ND	Dry	0.43	0.01	0.23	Dry			Dry	0.09		0.07	Dry		0.23		ND					Dry			0.23		0.28	ND	0.12	Dry	Dry
Conductivity (mS/cm)	Dry	Dry	Dry		145.1	6.94	6.91	1.07		Dry	1.25	Dry	2.17	50.9	1.67	Dry			Dry	1.59		1.42	Dry		4.26		3.27					Dry			13.78		9.56	1.17	0.98	Dry	Dry
2000 Round One																																									
Phenols(mg/L)	Dry	0.1			ND	ND	ND	0.1		Dry	ND	Dry	Dry	ND	Dry	0.4			ND	ND		0.1	Dry		0.1	Dry	0.1					Dry			ND		0.1	ND	ND	Dry	Dry
Detergents(mg/L)	Dry	2			3	0.25	0.25	0.5		Dry	0.25	Dry	Dry	2	Dry	1.5			1.5	3		3	Dry		0.25	Dry	0.25					Dry			0.5		0.5	3.0	30	Dry	Dry
Chlorine (mg/L)	Dry	ND			0.4	ND	0.1	ND		Dry	ND	Dry	Dry	ND	Dry	ND			ND	0.1		ND	Dry		ND	Dry	ND					Dry			0.1		0.6	ND	ND	Dry	Dry
Copper(mg/L)	Dry	ND			ND	ND	ND	0.1		Dry	ND	Dry	Dry	ND	Dry	ND			ND	ND		ND	Dry		ND	Dry	ND					Dry			ND		0.1	ND	ND	Dry	Dry
Ammonia(mg/L)	Dry	1			ND	0.4	0.8	5		Dry	0.9	Dry	Dry	0.8	Dry	2			0.3	0.5		4	Dry		0.3	Dry	0.4					Dry			0.8		1.0	0.8	1.0	Dry	Dry
Glycol(mg/L)	Dry	ND			ND	ND	ND	0.1		Dry	ND	Dry	Dry	ND	Dry	4.5			1	ND		1	Dry		ND	Dry	ND					Dry			ND		ND	1.0	2.0	Dry	Dry
Zinc(mg/L)	Dry	0.27			0.23	0.07	0.11	0.12		Dry	0.13	Dry	Dry	0.16	Dry	0.2			0.09	0.39		0.31	Dry		0.27	Dry	0.03					Dry			0.3		0.51	0.21	0.5	Dry	Dry
Conductivity (mS/cm)	Dry	14.17			20	5.48	5.83	1.37		Dry	1.15	Dry	Dry	20	Dry	1.27			16	1.6		2.33	Dry		4.07	Dry	3.69					Dry			13.99		3.8	2.3	1.15	Dry	Dry
2000 Round Two																																									
Phenols(mg/L)	Dry	ND			ND	ND	ND	0.1		ND	Dry	Dry	ND	ND	Dry	ND			ND	ND		ND	Dry		ND	ND	ND					ND			ND		0.1	ND	0.1	Dry	ND
Detergents(mg/L)	Dry	0.25			3	0.25	0.25	0.5		0.5	Dry	Dry	0.25	1.5	Dry	0.25			0.75	0.75		3	Dry		0.25	0.5	0.25					0.5			2.0		2.0	0.25	3.0	Dry	0.75
Chlorine (mg/L)	Dry	ND			0.8	ND	0.1	ND		ND	Dry	Dry	ND	ND	Dry	0.1			ND	0.1		ND	Dry		ND	ND	ND					0.8			0.2		0.1	0.1	ND	Dry	ND
Copper(mg/L)	Dry	0.1			0.1	ND	ND	0.1		ND	Dry	Dry	ND	ND	Dry	ND			ND	ND		ND	Dry		ND	ND	ND					ND			ND		0.1	ND	ND	Dry	ND
Ammonia(mg/L)	Dry	0.7			0.2	0.3	0.1	0.2		0.2	Dry	Dry	0.4	ND	Dry	0.4			0.4	1		1	Dry		0.3	0.5	0.3					1.0			0.3		0.8	0.4	2.0	Dry	0.7
Glycol(mg/L)	Dry	1			ND	ND	ND	1		ND	Dry	Dry	ND	ND	Dry	ND			1	ND		1	Dry		ND	ND	ND					ND			ND		ND	3.0	2.0	Dry	ND
Zinc(mg/L)	Dry	0.14			0.5	0.06	0.06	0.18		0.18	Dry	Dry	0.27	0.21	Dry	0.38			0.14	0.11		0.13	Dry		0.18	0.12	0.13					0.3			0.48		0.49	0.13	0.33	Dry	0.19
Conductivity (mS/cm)	Dry	3.58			20	5.6	5.88	1.48		1.45	Dry	Dry	0.96	20.0	Dry	1.29			1.83	1.31		1.08	Dry		4.36	1.84	2.98					1.04			12.46		5.65	2.46	0.82	Dry	12.44
2001 Round One																																									
Phenols(mg/L)	Dry	ND			ND	ND	0.1	ND		ND	ND	Dry	ND	0.1	Dry	Dry			0.1	0.1		ND	Dry		Dry	ND	ND					0.1			0.1		0.1	ND	ND	Dry	Dry
Detergents(mg/L)	Dry	0.25			2.5	0.25	0.25	0.5		0.5	0.25	Dry	0.75	1.0	Dry	Dry			0.5	0.75		0.5	Dry		Dry	0.5	0.25					0.75			0.78		0.75	0.25	2	Dry	Dry
Chlorine (mg/L)	Dry	ND			ND	ND	0.1	ND		ND	ND	Dry	ND	ND	Dry	Dry			0.3	ND		0.3	Dry		Dry	ND	ND					ND			0.1		0.1	ND	ND	Dry	Dry
Copper(mg/L)	NA	ND			ND	ND	ND	ND		ND	ND	Dry	ND	ND	Dry	Dry			ND	ND		ND	Dry		Dry	ND	ND					ND			ND		0.1	ND	ND	Dry	Dry
Ammonia(mg/L)	NA	0.2			0.1	0.3	0.2	0.2		0.5	0.4	Dry	0.2	0.8	Dry	Dry			0.6	0.5		0.7	Dry		Dry	0.3	0.2					2.0			0.3		0.5	0.2	0.6	Dry	Dry
Glycol(mg/L)	NA	1.0			ND	1.0	ND	1.0		15	1.0	Dry	ND	ND	Dry	Dry			1.0	1.0		1.0	Dry		Dry	1.0	1.0					1.0			ND		1.0	1.0	3.0	Dry	Dry
Zinc(mg/L)	NA	0.2			0.26	0.16	0.16	0.1		0.12	0.14	Dry	0.26	0.12	Dry	Dry			0.09	0.19		0.16	Dry		Dry	0.13	0.12					0.28			0.31		0.39	0.14	0.17	Dry	Dry
Conductivity (mS/cm)	NA	1.36			>20	7.25	7.26	1.40		1.23	1.17	Dry	1.34	>20	Dry	Dry			1.83	1.37		1.47	Dry		Dry	0.92	4.46					0.93			13.33		6.72	3.42	1.14	Dry	Dry
2001 Round Two																																									
Phenols(mg/L)	0.1	ND			Dry	ND	ND	ND		ND	Dry	Dry	ND	ND	Dry	ND			ND	ND		ND	ND		Dry	ND	ND					ND			ND		ND	ND	ND	Dry	Dry
Detergents(mg/L)	0.25	0.5			Dry	0.25	0.25	0.25		0.75	Dry	Dry	0.75	1.5	Dry	0.25			0.75	0.5		0.5	0.5		Dry	1.5	0.25					0.25			0.75		0.5	0.75	0.25	Dry	Dry
Chlorine (mg/L)	NA	0.6			Dry	0.1	0.2	ND		ND	Dry	Dry	ND	ND	Dry	ND			0.1	0.8		0.2	0.3		Dry	ND	0.2					0.6			0.6		1	ND	ND	Dry	Dry
Copper(mg/L)	ND	ND			Dry	ND	ND	ND		ND	Dry	Dry	ND	ND	Dry	ND			ND	ND		ND	ND		Dry	ND	ND					ND			ND		ND	ND	ND	Dry	Dry
Ammonia(mg/L)	0.5	0.4			Dry	0.3	0.6	1.0		0.8	Dry	Dry	0.8	2.0	Dry	0.6			0.8	0.8		1.0	0.7		Dry	0.5	0.5					1.0			0.6		0.4	0.5	0.8	Dry	Dry
Glycol(mg/L)	15.0	1.0			Dry	1.0	1.0	1.0		>15	Dry	Dry	1.0	ND	Dry	8.0			5.0	4.0		6.0	7.0		Dry	15.0	1.0					ND			ND		ND	5.0	3.0	Dry	Dry
Zinc(mg/L)	0.43	0.2			Dry	0.02	0.09	0.17		0.1	Dry	Dry	0.16	0.19	Dry	0.42			0.21	0.36		0.25	0.33		Dry	0.44	0.02					0.46			0.23		0.12	0.25	0.15	Dry	Dry
Conductivity (mS/cm)	1.34	20.00			Dry	6.53	6.48	1.75		1.26	Dry	Dry	1.39	19.00	Dry	1.74			2.45	1.52		1.53	1.44		Dry	1.77	5.65					1.64			9.42		7.31	2.36	0.97	Dry	Dry
2002 Round One																																									
Temperature (°C)	Dry	30			Dry	24	19	23		Dry	25	Dry	31	24	Dry	24.5			20	25		26	Dry		Dry	21	24					20			19		18	22	Dry	Dry	Dry
pH	Dry	7.9			Dry	7.9	7.7	7.9		Dry	8.1	Dry	9.4	8.0	Dry	7.7			7.9	7.7		7.7	Dry		Dry	7.5	8.0					7.2			7.7		7.8	7.2	Dry	Dry	Dry
Conductivity (µmhos/cm)	Dry	>20000			Dry	5710	6270	1407		Dry	1162	Dry	1128	6750	Dry	1364			1677	1302		1143	Dry		Dry	1095	6150					1096			14960		6680	1810	Dry	Dry	Dry
Turbidity (NTU)	Dry	50			Dry	1.77	6.5	6.51		Dry	16.56	Dry	19.95	1.05	Dry	9.23			11.02	96		17.51	Dry		Dry	12.98	9.12					100			1.07		3.32	4.64	Dry	Dry	Dry
Ammonia (mg/L)	Dry	1.0			Dry	0.6	0.7	0.6		Dry	3	Dry	0.8	0.4	Dry	2			1.0	1.5		0.8	Dry		Dry	1.0	0.4					4.5			0.3		0.8	0.6	Dry	Dry	Dry
Nitrate (mg/L)	Dry	< 0.05			Dry	0.5	5.0	< 0.05		Dry	2.8	Dry	< 0.05	0.4	Dry	2.5			< 0.05	< 0.05		1.0	Dry		Dry	< 0.05	0.2					< 0.05			>40		0.1	0.5	Dry	Dry	Dry
Phosphorus (mg/L)	Dry	0.16			Dry	0.03	0.13	2.0		Dry	2	Dry	0.33	0.16	Dry	1.1			1.3	1.3		0.98	Dry		Dry	0.65	0.07					1.1			0.03		0.07	0.65	Dry	Dry	Dry
Detergents (mg/L)	Dry	2.0			Dry	0.5	0.5	0.5		Dry	0.75	Dry	1.0	0.5	Dry	0.37			0.75	1.5		0.5	Dry		Dry	1.0	0.5					0.25			0.75		0.5	0.25	Dry	Dry	Dry
Glycol (mg/L)	Dry	< 0.5			Dry	< 0.5	< 0.5	< 0.5		Dry	3	Dry	1.0	1.0	Dry	1.0			< 0.5	3		< 0.5	Dry		Dry	2.0	< 0.5					1.0			< 0.5		< 0.5	< 0.5	Dry	Dry	Dry
Surfactants (mg/L)						0.06		< 0.50												0.9							0.14										< 0.50				
Oil and grease (mg/L)						22		52												59							123										21				
Total hardness (mg/L)						1030		418												361							1350										852				
Cadmium (mg/L)						< 0.10		< 0.10												< 0.10							< 0.10										< 0.10				
Copper (mg/L)						< 0.10		< 0.10												< 0.10							< 0.10										< 0.10				
Lead (mg/L)						< 0.10		< 0.10												< 0.10							0.12										< 0.10				
Zinc (mg/L)						< 0.10		0.19												0.79							< 0.10										< 0.10				
Diazinon (µg/L)						< 0.50		< 0.50												< 0.50							< 0.50										< 0.50				
Chlorpyrifos (µg/L)						< 0.50		< 0.50												< 0.50							< 0.50										< 0.50				
Total Coliform (MPN/100ml)						24000		8000												> 160000							2300										50000				
Fecal Coliform (MPN/100ml)						13000		5000												90000							2300										24000				
Enterococcus (MPN/100ml)						2300		50000												3000							130										3000				
2002 Round Two																																									
Temperature (°C)	Dry	21			26	25	20	28		19.5	25	Dry	29	22	Dry	21.5			21	21		Dry	Dry		Dry	22	22					20.5			20		19	23	22	Dry	Dry
pH	Dry	7.7			8.3	9	8.8	9.6		8.2	8.2	Dry	9.8	7.4	Dry	8.2			8.2	7.4		Dry	Dry		Dry	7.7	8.1					7.4			8		8.1	7.8	7.8	Dry	Dry
Conductivity (µmhos/cm)	Dry	14180			>20000	5010	5690	1259		1414	1343	Dry	1184	303	Dry	1112			3990	1176		Dry	Dry		Dry	2130	5080					1116			14450		6060	1743	968	Dry	Dry
Turbidity (NTU)	Dry	3.65			7.6	2.11	11.6	20.68		3.73	15.62	Dry	4.89	7.62	Dry	16.76			5.69	26.42		Dry	Dry		Dry	2.94	2.34					58			5.59		2.42	4.84	9.88	Dry	Dry
Ammonia (mg/L)	Dry	0.2			0.5	0.3	0.3	1.0		0.8	1.5	Dry	0.4	1.0	Dry	0.4			3.5	1.0		Dry	Dry		Dry	0.2	0.3					1.5			0.2		0.7	0.8	0.6	Dry	Dry
Nitrate (mg/L)	Dry	0.1			< 0.05	< 0.05	5.0	< 0.05		< 0.05	1.5	Dry	< 0.05	0.1	Dry	1.5			2.5	< 0.05		Dry	Dry		Dry	< 0.05	0.2					1.0			> 40		14	1.0	2.0	Dry	Dry
Phosphorus (mg/L)	Dry	0.49			< 0.02	0.03	0.2	0.49		1.6	1.3	Dry	0.98	0.2	Dry	0.98			0.65	2.0		Dry	Dry		Dry	0.33	0.08					0.65			0.07		0.07	0.49	0.33	Dry	Dry
Detergents (mg/L)	Dry	0.5			2.0	0.25	0.25	0.25		0.75	0.5	Dry	0.25	0.5	Dry	0.5			2.0	0.5		Dry	Dry		Dry	0.5	0.5					3.0			1.0		1.5	0.25	0.37	Dry	Dry
Glycol (mg/L)	Dry	< 0.5			< 0.5	1.0	< 0.5	< 0.5		< 0.5	4.0	Dry	< 0.5	< 0.5	Dry	< 0.5			15	< 0.5		Dry	Dry		Dry	< 0.5	< 0.5					< 0.5			< 0.5		< 0.5	1.0	< 0.5	Dry	Dry
Surfactants (mg/L)							< 0.50			0.55									0.97																0.59						
Oil and grease (mg/L)							23			7									3																5						
Total hardness (mg/L)							978			366									662																2170						
Cadmium (mg/L)							< 0.10			< 0.10									< 0.10																< 0.10						
Copper (mg/L)							< 0.10			< 0.10									< 0.10																< 0.10						
Lead (mg/L)							< 0.10			< 0.10									< 0.10																0.1						
Zinc (mg/L)							< 0.10			< 0.10									0.35																< 0.10						
Diazinon (µg/L)							< 0.50			< 0.50									0.71																< 0.50						
Chlorpyrifos (µg/L)							< 0.50			< 0.50									< 0.50																< 0.50						
Total Coliform (MPN/100ml)							11000			90000									> 160000																17000						
Fecal Coliform (MPN/100ml)							8000			90000									90000																8000						
Enterococcus (MPN/100ml)							3000			11000									35000																1300						

APPENDIX A: SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (1994-2009)

Site No.	OVR-14	OVR-15	POG-01	POG-02	POG-03	PRD-01	PRD-02	PRD-03	RCC-01	RCC-02	RCC-03	RCC-04	SCR-01	SCR-02	SCR-03	SUN-01	SUN-02	SUN-03	SUN-04	SUN-05	SVS-01	SVS-02	SWB-01	SWB-02	SWB-03	SWR-01	SWR-02	SWR-03	SWR-04	TCC-01-1	TCC-01-2	TCC-01-3	TCC-01-4	TCC-02	TCC-03	TCC-04	TCC-05	TCC-06	TCS	WIL-01	WIL-02
1999 Round Two																																									
Phenols(mg/L)	Dry	Dry	ND	ND		0.1	ND	Dry	0.1	ND	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	Dry			ND	ND	ND	ND	0.1		ND	ND	0.1				ND	
Detergents(mg/L)	Dry	Dry	0.5	0.25		0.25	0.5	Dry	0.5	0.5	0.5		0.75	0.5			0.75	0.25		0.25	0.25	0.5	Dry	Dry	*4.44			1.25	0.25	0.5	0.5	0.75		0.5	0.25	0.5				1.25	
Chlorine (mg/L)	Dry	Dry	ND	0.2		ND	ND	Dry	0.1	0.2	0.1		ND	0.1			0.4	ND		0.3	ND	0.1	Dry	Dry	Dry			ND	ND	ND	ND	0.1		0.4	0.4	0.1				0.2	
Copper(mg/L)	Dry	Dry	ND	ND		ND	ND	Dry	ND	ND	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	*0.06			ND	ND	ND	ND	ND		ND	ND	ND				ND	
Ammonia(mg/L)	Dry	Dry	2	5		ND	0.1	Dry	0.1	1	0.2		0.6	0.1			0.1	2		0.1	0.2	0.8	Dry	Dry	*2.4			2	0.6	ND	0.1	ND		0.1	0.1	ND				0.2	
Glycol(mg/L)	Dry	Dry	ND	ND		ND	ND	Dry	ND	800	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	*<10			ND	ND	ND	ND	ND		ND	ND	ND				ND	
Zinc(mg/L)	Dry	Dry	0.01	ND		0.12	0.23	Dry	ND	0.03	0.9		ND	ND			ND	ND		ND	0.07	ND	Dry	Dry	*0.22			0.92	0.01	0.05	0.01	0.07		ND	ND	0.05				0.12	
Conductivity (mS/cm)	Dry	Dry	1.18	1.8		1.79	1.07	Dry	5.93	4.11	6.84		1.23	9.04			7.53	4.04		3.28	1.23	1.17	Dry	Dry	Dry			1.23	1.29	7.38	6.24	6.13		6.91	7.56	6.55				5.46	
2000 Round One																																									
Phenols(mg/L)	0.1	Dry	Dry	ND		Dry	ND	Dry	ND	ND	ND		0.1	ND			0.1	0.1		ND	ND	0.1	Dry	Dry	0.2			0.2	0.1	ND	ND	ND		ND	0.1	ND				ND	
Detergents(mg/L)	0.25	Dry	Dry	0.50		Dry	3.00	Dry	0.50	0.50	0.50		0.25	0.50			1.50	0.25		0.50	0.50	0.25	Dry	Dry	0.25			3.00	3.0	0.50	0.75	1.0		2.0	0.50	0.75				0.50	
Chlorine (mg/L)	0.1	Dry	Dry	ND		Dry	0.1	Dry	ND	0.1	ND		ND	ND			0.1	ND		0.1	ND	ND	Dry	Dry	ND			0.1	ND	ND	ND	ND		0.2	ND	0.1				ND	
Copper(mg/L)	ND	Dry	Dry	ND		Dry	0.1	Dry	ND	ND	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	ND			ND	ND	ND	ND	ND		0.1	ND	ND				ND	
Ammonia(mg/L)	0.2	Dry	Dry	0.5		Dry	0.8	Dry	0.3	0.7	0.3		0.1	0.8			0.5	3		0.2	0.8	6	Dry	Dry	0.6			2	0.9	0.8	0.8	0.8		0.8	0.3	0.8				0.8	
Glycol(mg/L)	1.00	Dry	Dry	3.00		Dry	ND	Dry	ND	ND	ND		ND	ND			ND	ND		ND	3.00	1.00	Dry	Dry	1.50			10.00	ND	2.0	ND	ND		5.0	ND	ND				ND	
Zinc(mg/L)	0.25	Dry	Dry	0.11		Dry	0.27	Dry	0.03	0.1	0.19		0.07	0.46			0.16	0.07		0.29	0.1	0.11	Dry	Dry	0.1			0.33	0.33	0.17	0.07	0.12		0.12	0.09	0.26				0.36	
Conductivity (mS/cm)	3.15	Dry	Dry	3.38		Dry	1.43	Dry	6.76	6.33	6.86		1.25	11.24			5.28	3.32		3.46	1.35	1.48	Dry	Dry	9.49			2.81	1.15	5.39	5.46	5.42		5.34	7.3	5.5				7.79	
2000 Round Two																																									
Phenols(mg/L)	ND	Dry	ND	ND		ND	ND	Dry	ND	ND	0.1		0.1	ND			ND	ND		ND	ND	0.1	Dry	Dry	ND			ND	ND	ND	ND	ND		ND	ND	ND				Dry	
Detergents(mg/L)	0.25	Dry	1	0.75		0.75	0.75	Dry	0.25	0.25	0.25		0.5	0.5			0.5	0.25		0.75	0.25	0.75	Dry	Dry	0.25			0.25	0.25	0.25	0.5	0.25		0.25	0.5	0.25				Dry	
Chlorine (mg/L)	0.1	Dry	0.1	ND		0.5	ND	Dry	ND	0.1	0.1		ND	ND			0.1	ND		ND	ND	ND	Dry	Dry	ND			ND	ND	ND	ND	ND		0.1	ND	0.1				Dry	
Copper(mg/L)	ND	Dry	ND	ND		ND	ND	Dry	ND	ND	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	0.1			ND	ND	ND	ND	ND		ND	ND	ND				Dry	
Ammonia(mg/L)	0.2	Dry	0.6	0.3		0.5	2	Dry	0.2	1.00	ND		0.8	0.2			0.2	0.2		0.3	1	2	Dry	Dry	0.5			0.3	0.6	0.3	1.0	0.4		0.4	0.3	0.7				Dry	
Glycol(mg/L)	ND	Dry	1	ND		1.5	ND	Dry	ND	ND	ND		ND	ND			2.5	ND		ND	1	1	Dry	Dry	ND			3	1	ND	ND	1.0		ND	ND	ND				Dry	
Zinc(mg/L)	0.12	Dry	0.52	0.08		0.21	0.41	Dry	0.09	0.13	0.23		0.16	0.35			0.2	0.09		0.2	0.16	0.19	Dry	Dry	0.1			0.13	0.16	0.04	0.13	0.07		0.08	0.15	0.2				Dry	
Conductivity (mS/cm)	2.8	Dry	2.86	2.88		1.17	1.07	Dry	6.98	4.52	5.08		1.15	12.02			7.84	1.89		3.85	1.27	1.89	Dry	Dry	1.1			1.05	1.15	4.97	4.82	4.85		4.74	7.39	4.95				Dry	
2001 Round One																																									
Phenols(mg/L)	Dry	Dry	0.1	ND		Dry	ND	Dry	ND	ND	ND		ND	0.1			0.1	ND		ND	ND	0.2	Dry	Dry	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND				ND	
Detergents(mg/L)	Dry	Dry	0.25	0.25		Dry	0.5	Dry	0.5	0.25	0.25		0.25	0.25			0.75	0.25		0.25	0.25	ND	Dry	Dry	0.25			0.75	0.25	0.5	0.5	0.25	0.5	0.5	0.5	0.25				0.5	
Chlorine (mg/L)	Dry	Dry	ND	ND		Dry	ND	Dry	ND	ND	ND		0.1	0.2			ND	ND		ND	ND	ND	Dry	Dry	0.2			ND	ND	ND	ND	ND	ND	0.1	0.1	0.1				ND	
Copper(mg/L)	Dry	Dry	ND	ND		Dry	ND	Dry	ND	ND	ND		ND	ND			ND	0.1		ND	ND	ND	Dry	Dry	ND			ND	0.1	ND	ND	ND	ND	ND	ND	ND				ND	
Ammonia(mg/L)	Dry	Dry	0.2	0.3		Dry	0.8	Dry	0.4	0.8	0.5		0.5	0.6			0.4	0.2		2.0	0.4	3.0	Dry	Dry	0.8			0.2	0.2	0.3	0.2	0.2	0.3	0.8	0.3	0.3				0.3	
Glycol(mg/L)	Dry	Dry	ND	1.0		Dry	4.0	Dry	ND	1.0	1.0		1.0	1.0			1.0	1.0		1.0	>15	1.0	Dry	Dry	1.0			1.0	1.0	ND	ND	ND	ND	ND	15.0	ND				1.0	
Zinc(mg/L)	Dry	Dry	0.15	0.17		Dry	0.15	Dry	0.14	0.12	0.3		0.19	0.14			0.18	0.19		0.1	0.29	0.24	Dry	Dry	0.15			0.4	0.21	0.02	0.05	0.09	0.5	0.09	0.19	0.1				0.08	
Conductivity (mS/cm)	Dry	Dry	1.24	3.56		Dry	1.27	Dry	6.82	7.48	6.35		1.10	7.04			4.21	2.49		3.64	1.42	1.64	Dry	Dry	1.37			1.02	1.25	6.44	6.64	6.38	6.41	6.38	8.16	6.31				0.20	
2001 Round Two																																									
Phenols(mg/L)	ND	Dry	ND	ND		ND	0.1	Dry	ND	ND	0.2		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	Dry			Dry	ND	ND	ND	ND	ND	ND	ND	ND				Dry	
Detergents(mg/L)	>3	Dry	0.25	0.025		0.5	0.25	Dry	0.25	0.25	0.5		0.75	0.25			0.5	0.25		0.25	0.25	0.5	Dry	Dry	Dry			Dry	0.5	0.25	0.25	0.25	0.25	0.25	0.5	0.25				Dry	
Chlorine (mg/L)	ND	Dry	ND	0.4		0.1	0.4	Dry	0.2	0.6	0.6		0.1	ND			0.1	ND		0.1	ND	0.4	Dry	Dry	Dry			Dry	0.8	0.3	0.3	0.4	ND	0.4	0.6	0.1				Dry	
Copper(mg/L)	ND	Dry	ND	ND		ND	ND	Dry	ND	ND	ND		ND	ND			ND	ND		ND	ND	ND	Dry	Dry	Dry			Dry	ND	ND	ND	ND	ND	ND	ND	ND				Dry	
Ammonia(mg/L)	1.0	Dry	0.2	0.8		0.2	0.5	Dry	0.6	0.2	0.2		0.8	0.3			0.5	0.8		0.1	0.4	0.8	Dry	Dry	Dry			Dry	0.8	0.5	0.8	0.2	0.8	0.2	0.3	0.3				Dry	
Glycol(mg/L)	ND	Dry	ND	1.0		6.0	ND	Dry	ND	ND	ND		1.0	ND			6.0	1.0		1.0	8.0	1.0	Dry	Dry	Dry			Dry	1.0	1.0	1.0	8.0	5.0	10.0	1.0	8.0				Dry	
Zinc(mg/L)	0.44	Dry	0.09	0.02		0.11	0.13	Dry	0.04	0.08	0.21		0.04	0.05			0.03	0.08		0.1	0.1	0.1	Dry	Dry	Dry			Dry	0.16	0.04	0.12	0.02	0.09	0.08	0.12	0.13				Dry	
Conductivity (mS/cm)	8.98	Dry	1.18	2.25		1.71	1.52	Dry	6.92	7.48	6.96		1.37	8.19			6.62	2.25		3.67	1.32	1.50	Dry	Dry	Dry			Dry	1.40	4.79	4.54	4.69	4.73	4.41	9.30	5.04				Dry	
2002 Round One																																									
Temperature (℃)	Dry	Dry	21	21	18	21	18	Dry	20	21	22		18.5	24			22.5	30		22	21	21	Dry	Dry	21			23	24	21	21	21	Dry	29.5	22	29				27	
pH	Dry	Dry	8.2	7.9	7.8	7	7.9	Dry	7.9	7.6	7.1		7.2	7.5			8.2	8.1		7.9	7.3	7.5	Dry	Dry	7.2			7.6	7.9	7.9	7.8	7.9	Dry	9.3	7.8	8.7				7.9	
Conductivity (µmhos/cm)	Dry	Dry	2850	2510	3890	1351	1405	Dry	5950	8140	6990		1133	10140			3610	2420		3670	1250	1431	Dry	Dry	984			945	1478	6300	6320	6360	Dry	6210	11080	6260				5000	
Turbidity (NTU)	Dry	Dry	3.88	2.45	6.48	36.34	3.16	Dry	3.72	0.47	3.21		2.19	10.61			7.92	17.12		5.04	7.2	2.98	Dry	Dry	8.81			8.75	14.47	12.63	4.28	4.22	Dry	3.78	3.37	3.79				6.95	
Ammonia (mg/L)	Dry	Dry	0.4	0.6	0.4	0.5	0.4	Dry	0.3	0.5	1.0		0.2	0.6			0.6	0.6		0.4	0.5	2	Dry	Dry	0.8			0.7	4.0	1.0	0.6	0.8	Dry	0.7	0.4	0.6				0.7	
Nitrate (mg/L)	Dry	Dry	< 0.05	28	5	< 0.05	< 0.05	Dry	0.6	0.1	28		1.5	0.4			8	< 0.05		10	0.3	0.2	Dry	Dry	0.1			0.2	< 0.05	14	14	14	Dry	24	> 40	20				< 0.05	
Phosphorus (mg/L)	Dry	Dry	0.13	1.1	0.03	0.82	0.2	Dry	0.1	0.23	0.23		0.82	0.03			0.98	0.13		0.49	0.82	1.3	Dry	Dry	0.23			0.33	0.65	0.03	0.03	0.03	Dry	0.03	0.16	0.07				0.2	
Detergents (mg/L)	Dry	Dry	0.5	0.5	0.25	0.5	0.37	Dry	0.5	0.75	0.75		0.5	0.75			0.75	0.25		0.5	0.25	0.75	Dry	Dry	0.5			0.25	0.5	0.5	0.5	0.5	Dry	0.5	0.75	0.75				0.5	
Glycol (mg/L)	Dry	Dry	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	Dry	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5			1.0	< 0.5		1.0	1.0	1.0	Dry	Dry	1.0			< 0.5	1.0	< 0.5	< 0.5	< 0.5	Dry	< 0.5	< 0.5	< 0.5				1.0	
Surfactants (mg/L)			< 0.50		< 0.50	< 0.50			0.12					0.06				0.08			< 0.05								0.36	< 0.50				< 0.50							
Oil and grease (mg/L)			24		25	33			371					60				415			116								24	24				82							
Total hardness (mg/L)			548		827	398			1340					2330				462			317								313	1060				1280							
Cadmium (mg/L)			< 0.10		< 0.10	< 0.10			< 0.10					< 0.10				< 0.10			< 0.10								< 0.10	< 0.10				< 0.10							
Copper (mg/L)			< 0.10		< 0.10	< 0.10			< 0.10					< 0.10				< 0.10			< 0.10								< 0.10	< 0.10				< 0.10							
Lead (mg/L)			< 0.10		< 0.10	< 0.10			< 0.10					0.19				< 0.10			< 0.10								< 0.10	< 0.10				< 0.10							
Zinc (mg/L)			< 0.10		< 0.10	< 0.10			< 0.10					< 0.10				< 0.10			< 0.10								< 0.10	< 0.10				< 0.10							
Diazinon (µg/L)			< 0.50		< 0.50	< 0.50			< 0.50					< 0.50				< 0.50			< 0.50								< 0.50	< 0.50				< 0.50							
Chlorpyrifos (µg/L)			< 0.50		< 0.50	< 0.50			< 0.50					< 0.50				< 0.50			< 0.50								< 0.50	< 0.50				< 0.50							
Total Coliform (MPN/100ml)			13000		30000	8000			50000					300				2200			> 160000								30000	17000				7000							
Fecal Coliform (MPN/100ml)			8000		24000	5000			30000					230				1300			90000								17000	8000				7000							
Enterococcus (MPN/100ml)			500		2300	2300			1300					230				500			17000								1700	1700				2300							
2002 Round Two																																									
Temperature (℃)	24	Dry	22	20.5		22	19.5	Dry	21	18	22		21.5	27			25	30		21	22	21.5	20	Dry	21			23.5	24.5	21	21	21	Dry	29	23	28				24.5	
pH	8.0	Dry	8.5	7.8		7.5	8.5	Dry	8.5	7.7	7.8		8.6	9			8.9	8.4		8.9	8	7.1	7.6	Dry	8.3			8.0	6.3	8.1	8.7	8.8	Dry	9.5	8.9	8.9				7.9	
Conductivity (µmhos/cm)	1558	Dry	4290	1666		1240	2580	Dry	6890	8430	6870		1580	8750			4790	2390		3510	1023	1211	420	Dry	1025			723	596	6490	6660	6670	Dry	6260	9900	6190				4150	
Turbidity (NTU)	478	Dry	3.48	6.83		18.1	7.48	Dry	2.58	2.49	7.75		20.62	1.87			2.57	2.36		3.92	6.17	30.99	4.52	Dry	8.17			34.08	20.23	0.7	1.46	2.1	Dry	3.33	1.23	3.08				4.2	
Ammonia (mg/L)	0.8	Dry	1.0	0.2		1.5	0.3	Dry	0.3	0.2	0.4		0.6	0.2			0.2	0.2		0.3	0.5	2.0	2.0	Dry	0.4			0.6	0.8	0.3	0.3	0.4	Dry	0.3	0.4	0.4				0.3	
Nitrate (mg/L)	5.0	Dry	ND	5.0		< 0.05	0.2	Dry	1.5	< 0.05	28		1.5	2.0			14	< 0.05		7.0	1.5	< 0.05	< 0.05	Dry	1.5			< 0.05	< 0.05	28	28	28	Dry	28	> 40	28				3.5	
Phosphorus (mg/L)	1.3	Dry	0.1	0.49		2.6	0.26	Dry	0.07	0.05	0.23		1.1	0.03			0.13	0.26		0.65	0.65	2.0	1.1	Dry	0.26			0.65	0.03	0.03	0.03	0.03	Dry	0.03	0.2	0.05				0.23	
Detergents (mg/L)	>24	Dry	0.25	0.5		1.5	0.5	Dry	0.37	0.5	0.5		2.0	0.5			0.25	0.25		0.25	0.25	0.5	0.5	Dry	0.25			0.25	0.25	0.5	0.5	0.5	Dry	0.5	0.75	0.5				0.25	
Glycol (mg/L)	2.5	Dry	< 0.5	< 0.5		< 0.5	< 0.5	Dry	< 0.5	< 0.5	< 0.5		< 0.5	< 0.5			< 0.5	< 0.5		< 0.5	< 0.5	< 0.5	< 0.5	Dry	< 0.5			2.0	< 0.5	< 0.5	< 0.5	< 0.5	Dry	< 0.5	< 0.5	< 0.5				< 0.5	
Surfactants (mg/L)				0.67			< 0.50			< 0.50	< 0.50		1.86				< 0.50			< 0.50															< 0.50	< 0.50					
Oil and grease (mg/L)				< 1			4			15	< 1		12				172			1															102	306					
Total hardness (mg/L)				368			485			2290	1200		316				870			430															2090	1190					
Cadmium (mg/L)				< 0.10			< 0.10			< 0.10	< 0.10		< 0.10				< 0.10			< 0.10															< 0.10	< 0.10					
Copper (mg/L)				< 0.10			< 0.10			< 0.10	< 0.10		< 0.10				< 0.10			< 0.10															< 0.10	< 0.10					
Lead (mg/L)				< 0.10			< 0.10			< 0.10	< 0.10		< 0.10				< 0.10			< 0.10															< 0.10	< 0.10					
Zinc (mg/L)				< 0.10			< 0.10			< 0.10	< 0.10		< 0.10				< 0.10			< 0.10															< 0.10	< 0.10					
Diazinon (µg/L)				< 0.50			< 0.50			< 0.50	< 0.50		< 0.50				< 0.50			< 0.50															< 0.50	< 0.50					
Chlorpyrifos (µg/L)				< 0.50			< 0.50			< 0.50	< 0.50		< 0.50				< 0.50			< 0.50															< 0.50	< 0.50					
Total Coliform (MPN/100ml)				160000			160000			160000	50000		160000				160000			90000															17000	160000					
Fecal Coliform (MPN/100ml)				160000			90000			90000	30000		90000				90000			50000															8000	160000					
Enterococcus (MPN/100ml)				13000			5000			5000	2300		8000				3000			5000															2300	3000					

APPENDIX A: SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (1994-2009)

Site No.	BAY-01	BAY-02	BAY-03	BLC-01	BLC-02	CEN-01	CEN-03	CEN-04	CEN-07	CEN-08	CEN-10	JUD-01	JUD-02	JUD-03	LAK-01	OLR-01	OLR-02	OVR-04	OVR-07	OVR-09	OVR-10	OVR-11	OVR-12	OVR-13	OVR-14	POG-01	POG-02	POG-03	PRD-01	PRD-02	PRD-03	RCC-01	RCC-02	RCC-03	RCC-04	SCR-01	SCR-02	SCR-03	SCR-04	SCR-05	SCR-06
2003																																									
Temperature (°C)		22	NA	27	25	23.5	27.5	30	29	24	24	22	24	27		24.5	23.5	24.5	23.5	22	23	22		NA	26.5	27	22.5	25.5	NA	21.7	NA	21.5	21.5	24.5	24	23	29.5	24.5			
pH		7.5	NA	8.8	8.3	8.1	8.6	9.8	7.6	7.3	8.1	8.4	7.7	7.9		7.9	8.4	7.7	8.1	8.3	7.7	7.6		NA	7.9	8.7	8.3	8.5	NA	8.3	NA	8.3	8.1	7.3	7.8	7.5	8.9	7.8			
Conductivity (µmhos/cm)		2,600	NA	5970	6670	1680	2310	1630	1630	7520	2090	2430	1680	1500		1650	4370	1530	14090	8200	2270	1310		NA	1160	4660	1560	5990	NA	1290	NA	7490	9300	6440	7790	1240	6750	7980			
Turbidity (NTU)		12.9	NA	3.2	4.5	19.2	13.4	7.9	17.7	7.3	84.0	16.8	12.2	39.8		4.8	7.0	22.9	2.9	2.5	7.9	49.4		NA	235.0	1.6	4.4	10.1	NA	5.2	NA	3.1	1.3	4.7	1.8	5.3	3.9	5.9			
Ammonia (mg/L)		0.4	NA	0.6	0.6	1.0	1.0	0.4	1.0	0.6	2.0	2.0	3.0	8.0		1.0	0.4	6.0	0.6	0.3	0.6	1.5		NA	2.0	0.5	0.2	0.3	NA	0.4	NA	0.4	0.4	0.4	0.4	0.3	0.4	0.4			
Nitrate (mg/L)		0.2	NA	0.6	6.4	0.4	0.1	0.1	0.1	0.1	1.0	0.3	0.6	0.3		0.6	0.3	ND	32.0	3.2	0.4	ND		NA	2.4	0.2	6.4	10.0	NA	1.3	NA	1.0	0.2	12.0	40.0	2.5	4.8	16.0			
Phosphorus (mg/L)		0.33	NA	ND	0.03	0.65	1.30	0.10	0.98	0.07	1.30	0.65	0.65	1.63		0.65	0.10	1.30	0.07	0.07	0.07	1.63		NA	0.49	0.07	0.65	ND	NA	0.65	NA	0.07	0.03	0.10	0.26	0.65	0.07	0.07			
Detergents (mg/L)		0.25	NA	0.25	0.25	0.75	0.50	0.50	0.75	0.50	3.00	0.75	1.0	1.0		0.75	0.25	0.50	0.75	0.75	0.50	0.50		NA	1.0	0.38	0.25	0.25	NA	0.25	NA	0.50	0.50	0.50	0.50	0.13	0.25	0.50			
Glycol (mg/L)		<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.0	2.5	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		NA	<1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Surfactants (mg/L)						ND	ND					0.5	0.6							ND							ND			ND		ND	ND	ND		ND					
Oil and grease (mg/L)						ND	ND					1	3							ND							ND			ND		ND	ND	ND		2					
Total hardness (mg/L)						467	594					582	298							991							360			286		1,450	1,820	1,260		299					
Cadmium (mg/L)						ND	ND					ND	ND							ND							ND			ND		ND	ND	ND		ND					
Copper (mg/L)						0.012	0.005					0.038	0.015							ND							0.005			0.005		ND	ND	ND		0.005					
Lead (mg/L)						ND	ND					0.018	ND							ND							ND			ND		ND	ND	ND		ND					
Zinc (mg/L)						0.049	0.044					0.785	0.215							ND							ND			0.040		ND	ND	ND		ND					
Diazinon (µg/L)						1.11	ND					ND	ND							ND							0.39			0.06		0.06	ND	ND		0.08					
Chlorpyrifos (µg/L)						ND	ND					ND	0.27							ND							ND			ND		ND	ND	ND		ND					
Total Coliform (MPN/100ml)						160,000	160,000					160,000	160,000							8,000							160,000			160,000		90,000	160,000	90,000		160,000					
Fecal Coliform (MPN/100ml)						90,000	90,000					90,000	90,000							2,300							160,000			90,000		30,000	90,000	30,000		50,000					
Enterococcus (MPN/100ml)						800	5,000					50,000	50,000							300							13,000			2,200		1,300	13,000	8,000		1,300					
2004																																									
Temperature (°C)		23.4	27.3	22	20	29.6	28.2	26.1	29.8	24.6	21.8	26.1	26	27.1			23	25.4	23	21	25	23.4		NA	25	22.7	22	25	21.5	21.5	NA	21	20	22	23	22	27	22			
pH		7.3	8.2	8.2	8.1	9.5	7.9	7.5	9.3	7.4	8.0	8.2	7.1	7.9			8.4	7.8	8.0	8.4	7.8	7.7		NA	8.1	8.2	7.8	7.8	8.5	8.0	NA	7.7	7.7	8.6	7.8	7.3	8.1	8.8			
Conductivity (µmhos/cm)		4,010	18370	5290	5340	1210	1417	1271	1433	20000	1920	2220	1867	1294			5180	995	12900	6100	1710	1273		NA	1783	4550	1260	3630	1909	1338	NA	6100	7730	3120	6340	1460	5530	5680			
Turbidity (NTU)		8.2	16.8	4.4	2.9	9.2	13.9	12.6	7.6	33.7	23.9	10.1	32.7	72.0			4.7	3.4	0.8	6.2	13.8	18.5		NA	71.0	5.4	6.7	0.6	12.3	5.7	NA	0.7	2.3	10.1	4.5	4.6	2.1	8.5			
Ammonia (mg/L)		0.6	0.3	0.2	0.3	0.3	0.4	0.8	0.4	0.7	2.0	0.8	2.0	2.0			0.3	4.0	0.2	0.7	0.5	1.5		NA	2.0	0.3	0.4	0.3	0.8	0.8	NA	0.4	0.1	0.2	0.3	0.8	0.2	0.2			
Nitrate (mg/L)		1.25	2.50	1.25	3.80	2.50	2.50	2.50	1.25	1.25	1.25	2.50	3.75	2.50			1.25	3.75	37.50	3.75	3.75	3.75		NA	1.25	1.25	5.00	5.00	1.25	3.75	NA	1.25	1.25	7.50	31.25	2.50	5.00	8.38			
Phosphorus (mg/L)		0.2	0.07	0.03	0.03	0.65	0.33	1.96	0.82	0.49	1.3	0.49	0.82	0.82			0.03	1.14	0.03	1.63	1.47	2.61		NA	0.98	0.03	0.96	0.03	0.26	1.3	NA	0.06	0.03	0.19	0.33	0.70	0.03	0.13			
Detergents (mg/L)		0.50	0.75	0.75	0.75	0.38	0.25	0.50	0.50	0.75	2.00	0.75	1.5	0.3			0.75	0.25	0.75	1.25	0.25	0.25		NA	1.3	0.75	0.25	0.50	0.63	0.38	NA	0.50	0.50	0.50	0.75	0.25	0.38	0.50			
Glycol (mg/L)		<1.0	<1.0	<1.0	<1.0	>15.0	<1.0	1.5	<1.0	<1.0	3.0	<1.0	>15.0	2.0			<1.0	<1.0	<1.0	3.5	2.0	<1.0		NA	1.5	<1.0	<1.0	<1.0	<1.0	2.5	NA	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0			
Surfactants (mg/L)						ND	ND					ND	0.80							ND							ND			ND		ND	ND	ND		ND					
Oil and grease (mg/L)						1	4					2	2							ND							ND			3		ND	1	3		ND					
Total hardness (mg/L)						366	367					581	421							996							346			381		1,430	2,130	735		360					
Cadmium (mg/L)						ND	ND					ND	ND							ND							ND			ND		ND	ND	ND		ND					
Copper (mg/L)						0.008	ND					0.007	ND							ND							ND			ND		ND	ND	ND		ND					
Lead (mg/L)						ND	ND					ND	ND							ND							ND			ND		ND	ND	ND		ND					
Zinc (mg/L)						0.03	ND					0.033	ND							ND							ND			ND		ND	ND	ND		ND					
Diazinon (µg/L)						0.08	ND					ND	ND							ND							ND			ND		ND	ND	ND		ND					
Chlorpyrifos (µg/L)						ND	ND					ND	ND							ND							ND			ND		ND	ND	ND		ND					
Total Coliform (MPN/100ml)						8,000	13,000					17,000	160,000							4,000							240,000			130,000		70,000	23,000	80,000		80,000					
Fecal Coliform (MPN/100ml)						1,300	400					5,000	160,000							200							30,000			13,000		2,300	700	1,100		13,000					
Enterococcus (MPN/100ml)						2300	3,000					5,000	30,000							3000							22,000			160,000		1,300	5,000	5,000		17,000					
2005																																									
Temp.		26.6	27.8	28.1	25.3	22.2	24.2	20.9	27.2	24.4	20.8	22.8	25.8	26.7		22.8	21.7	22.9	22.4	20.7	24.7	22.8		na	21.7	29	24.4	23.4	na	22.6	na	21.1	23.3	23.2	25.1	23.9	25.3	22			
pH		7.4	8.2	8.4	8.2	8.5	8.3	7.6	8.5	8.1	8.1	8.6	7.8	8.3		8.2	8.2	7.6	8.1	8.2	7.7	7.9		na	8.5	8.4	8.3	8.1	na	8.1	na	8.3	8.0	7.2	7.9	7.5	8.2	7.9			
Conductivity		4,490	12,600	5,770	6,030	1,410	1,390	1,260	1,370	11,560	1,660	2,230	1,510	1,400		2,390	4,840	1,470	13,890	7,320	1,390	1,700		na	12,330	5,590	1,810	5,160	na	1,140	na	5,960	6,660	4,360	5,910	1,800	6,240	5,490			
Turbidity		12.85	3.89	1	1.71	4.73	0.64	5.97	4.86	0.66	20.92	4.49	21.43	41.52		1.88	1.96	6.06	8.07	8.15	10.58	75		na	28.32	1.4	8.54	1.93	na	3.85	na	5.12	4.73	4.77	138	7.62	0.29	2.16			
Ammonia		0.8	0.3	0.6	0.40	0.4	0.3	0.8	0.4	0.2	1	0.6	1.5	1		0.3	0.4	0.3	0.4	0.6	0.6	6		na	0.3	0.6	0.5	0.3	na	0.4	na	0.4	0.3	0.4	0.3	0.4	0.4	0.3			
Nitrate		1.25	2.5	5	5.00	2.5	1.25	1.25	1.25	7.5	1.25	1.5	1.25	1.25		1.25	2.5	2.5	62.5	1.25	1.25	1.25		na	1.25	2.5	7.5	7.5	na	1.25	na	1.25	1.25	7.5	50	7.5	8.75	7.5			
Reactive Phosphorus		0.26	nd	0.03	0.10	0.49	0.20	0.49	0.49	0.10	0.65	0.07	0.82	0.20		0.26	0.10	0.20	0.10	0.82	0.49	1.30		na	0.10	0.03	0.49	0.10	na	0.33	na	0.10	0.06	0.20	0.03	0.41	0.07	0.10			
Detergents		0.75	0.87	0.67	0.67	0.67	0.25	0.37	0.5	0.75	0.75	1	0.75	0.5		0.5	0.5	0.5	1.5	0.75	1.5	3.00		na	1	0.67	0.67	0.75	na	0.25	na	0.75	0.75	0.5	0.75	0.25	0.75	0.75			
Glycol		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8		na	<1.0	<1.0	<1.0	<1.0	na	<1.0	na	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Surfactants (MBAS)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Oil and Grease						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Total Hardness						415	400					510	430							1390							412			485		1,690	2,170	1180		482					
Cadmium (diss)						nd	nd					nd	nd							nd							nd			0.005		nd	nd	nd		nd					
Copper (diss)						0.013	0.005					0.008	nd							0.005							0.008			nd		nd	nd	nd		0.007					
Lead (diss)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Zinc (diss)						0.067	0.026					0.026	0.029							0.097							0.024			nd		nd	nd	0.028		0.034					
Diazinon						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		0.11					
Chlorpyrifos						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Total Coliform						1,600,000	30,000					140,000	170,000							130,000							>1600000			900,000		>1600000	500,000	1,600,000		900,000					
Fecal Coliform						5,000	5000					5,000	3,000							1100							80,000			300		2,300	2300	8,000		2,300					
Enterococcus						1,300	800					5,000	2,200							30,000							24,000			2,300		500	13,000	1,300		1,300					
2006																																									
Temp.	25.3	25.8	27.2	20.5	24.0	29.9	24.7	32.0	33.6	26.8	22.8	22.9	24.4	27.0	26.2	24	23.1	25	24.3	22.2	25.5	ns		ns	25	25.5	24.5	24.7	ns	23.8	ns	22.4	21.4	23.9	24.1	25	24.8	23	27	22	
pH	7.3	7.0	7.9	8.4	8.3	10.1	9.3	10.1	8.8	8.4	8.5	8.3	8.0	8.3	8.8	8.5	8.4	7.6	8.3	8.3	7.9	ns		ns	8.6	8.5	8.4	8.4	ns	8.3	ns	8.3	8.1	7.8	8.1	8.0	8.4	8.1	8.4	8.4	
Conductivity	1.38	1.17	6.50	5.22	5.60	1.44	2.64	1.53	1.04	12.50	1.37	1.34	1.40	1.15	4.28	1.40	4.90	0.88	13.76	6.97	1.44	ns		ns	1.33	5.10	1.34	4.53	ns	1.48	ns	6.22	7.07	2.94	6.01	1.29	5.72	5.33	0.81	1.16	
Turbidity	3.43	3.57	1.8	1.72	1.52	9.05	5.52	14.43	4.02	1.44	45.84	8.71	9.5	53	8.43	3.62	2.21	4.9	2.17	21.17	4.69	ns		ns	20.5	1.84	4.1	1.44	ns	5.63	ns	1.62	2.37	74	1.8	0.56	1.32	2.24	19.47	4.28	
Ammonia	0.6	0.4	0.2	0.1	0.30	0.6	0.8	0.8	0.4	0.1	0.8	0.4	0.8	1.5	0.4	0.2	0.6	0.3	0.2	0.6	0.2	ns		ns	0.8	0.3	0.8	0.15	ns	1.5	ns	0.1	0.1	0.4	0.2	0.1	0.2	0.4	0.2	0.3	
Nitrate	1.25	1.25	5	3.75	3.75	2.5	2.5	1.25	1.25	8.75	1.25	1.25	1.25	1.25	7.5	1.25	1.25	1.25	40	3.75	1.25	ns		ns	1.25	1.25	5	8.75	ns	2.5	ns	2.5	2.5	6.75	30	2.5	6.75	7.5	1.3	3.8	
Reactive Phosphorus	0.49	0.10	<0.016	0.03	0.13	0.26	0.13	1.30	0.65	0.13	0.82	0.33	0.65	0.98	0.03	0.26	0.07	0.26	0.03	0.33	0.65	ns		ns	1.47	0.03	0.20	0.08	ns	0.82	ns	0.49	0.10	0.26	0.13	0.10	0.03	0.10	0.03	0.26	
Detergents	0.50	0.25	0.62	0.5	0.50	0.75	2	1	0.5	0.75	0.75	0.5	0.5	0.5	0.25	0.5	0.5	0.75	0.875	0.75	0.25	ns		ns	1.5	0.75	0.25	0.5	ns	2.5	ns	0.5	0.63	0.25	0.75	0.5	0.5	0.50	0.13	0.25	
Glycol	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ns		ns	<1.0	<1.0	<1.0	<1.0	ns	1	ns	<1.0	<1.0	2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Surfactants (MBAS)						nd	nd					nd	nd							nd							nd			2		nd	nd	nd		nd					
Oil and Grease						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Total Hardness						335	536					426	433							1050							342			305		1,060	2,010	730		367					
Cadmium (diss)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Copper (diss)						0.027	0.01					0.009	0.005							0.013							0.009			0.007		nd	nd	0.007		nd					
Lead (diss)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Zinc (diss)						0.029	0.035					0.041	0.05							0.093							nd			0.056		0.034	0.046	0.043		nd					
Diazinon						nd	nd					nd	nd							nd							0.16			0.33		nd	nd	nd		nd					
Chlorpyrifos						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Total Coliform						1,300	30,000					500,000	23,000							800							30,000			900,000		80,000	22,000	50,000		11,000					
Fecal Coliform						800	13,000					5,000	500							40							24,000			11,000		1,700	1100	13,000		3,000					
Enterococcus						1,300	8,000					8,000	1,300							230							30,000			28,000		17,000	1,100	2,300		330					

APPENDIX A: SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (1994-2009)

Site No.	SUN-02	SUN-03	SUN-05	SUN-06	SUN-07	SVS-01	SVS-02	SWB-03	SWR-03	SWR-04	TCC-01-1	TCC-01-2	TCC-01-3	TCC-01-4	TCC-02	TCC-03	TCC-04	TCC-05	TCC-06	TCS	WIL-01	WOL-02	WOL-03
2003																							
Temperature (°C)	24.5	24	25			22.6	23.5	24	24.5	26	23	23	22.5	22	29.5	23.5	28	23.5	26	24.5	24		
pH	8.4	7.4	8.3			7.9	7.4	7.8	7.5	6.9	8.2	8.3	8.3	8.3	9.1	8.2	8.9	8.3	8.6	7.7	8.3		
Conductivity (µmhos/cm)	4470	1640	3380			1560	1660	1330	1390	1370	6740	6780	6800	6800	6780	8230	6110	7370	6990	1810	5490		
Turbidity (NTU)	7.3	0.8	14.3			10.8	6.6	42.4	21.0	11.5	12.6	9.5	9.0	14.5	4.3	11.5	8.1	18.3	10.0	41.6	9.0		
Ammonia (mg/L)	0.4	0.2	0.3			0.5	1.0	2.5	0.8	0.5	0.2	0.3	0.4	0.5	0.4	0.6	0.4	0.5	0.6	4.0	0.8		
Nitrate (mg/L)	4.8	0.1	6.4			0.6	0.2	0.2	0.6	0.1	12.0	12.0	10.0	10.0	12.0	40.0	8.0	28.0	24.0	nd	0.2		
Phosphorus (mg/L)	0.16	0.03	0.33			0.65	0.98	0.65	1.30	0.03	0.03	ND	ND	ND	ND	0.13	0.03	0.20	0.07	1.63	0.26		
Detergents (mg/L)	0.25	0.13	0.25			0.25	0.25	0.38	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.50	0.25	0.50	0.50	0.25	0.25		
Glycol (mg/L)	<1.0	<1.0	<1.0			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Surfactants (mg/L)	ND		ND			ND											ND						
Oil and grease (mg/L)	ND		18			ND											ND						
Total hardness (mg/L)	643		404			383											1,100						
Cadmium (mg/L)	ND		ND			ND											ND						
Copper (mg/L)	ND		ND			ND											ND						
Lead (mg/L)	ND		ND			ND											ND						
Zinc (mg/L)	ND		ND			0.020											ND						
Diazinon (µg/L)	ND		ND			0.76											ND						
Chlorpyrifos (µg/L)	ND		ND			ND											ND						
Total Coliform (MPN/100ml)	90,000		17,000			90,000											160,000						
Fecal Coliform (MPN/100ml)	30,000		5,000			30,000											90,000						
Enterococcus (MPN/100ml)	1,300		1,700			5,000											300						
2004																							
Temperature (°C)	25	22	24			20	22	21.3		23.7	22.2	22.3	22.2	21.4	29	23	25	23	28	22.7	24		
pH	7.9	7.8	7.8			7.4	7.3	8.1		6.6	8.0	8.1	8.1	8.8	8.2	7.8	8.2	8.0	8.3	8.1	7.9		
Conductivity (µmhos/cm)	6000	2470	2960			1350	1480	1262		910	5900	5430	5500	5520	6110	8470	5630	6380	6090	1680	6030		
Turbidity (NTU)	4.0	4.0	1.9			5.6	3.3	69.0		16.8	0.9	2.3	2.8	14.3	5.0	2.2	2.7	20.7	9.4	2.9	82.0		
Ammonia (mg/L)	0.6	0.4	0.8			0.4	2.0	0.4		0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.2	0.1	8.0	0.5		
Nitrate (mg/L)	7.50	2.50	3.80			1.25	2.50	1.25		2.50	7.50	7.50	7.50	7.50	8.80	50.00	8.80	25.00	25.00	2.50	1.25		
Phosphorus (mg/L)	0.13	0.03	0.82			0.64	1.28	0.65		0.03	0.03	0.03	0.03	0.03	0.03	0.10	0.03	0.26	0.03	0.98	0.06		
Detergents (mg/L)	0.75	0.38	0.50			0.25	0.50	0.50		0.25	0.50	0.50	0.50	0.50	0.50	0.75	0.50	0.75	0.75	0.38	0.50		
Glycol (mg/L)	<1.0	<1.0	<1.0			<1.0	<1.0	1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Surfactants (mg/L)	ND		ND			ND											ND						
Oil and grease (mg/L)	2		1			2											ND						
Total hardness (mg/L)	1250		528			405											1,230						
Cadmium (mg/L)	ND		ND			ND											ND						
Copper (mg/L)	ND		ND			ND											ND						
Lead (mg/L)	ND		ND			ND											ND						
Zinc (mg/L)	ND		ND			ND											ND						
Diazinon (µg/L)	ND		ND			ND											ND						
Chlorpyrifos (µg/L)	ND		ND			ND											ND						
Total Coliform (MPN/100ml)	130,000		300,000			80,000											30,000						
Fecal Coliform (MPN/100ml)	22,000		17,000			270											1,100						
Enterococcus (MPN/100ml)	7,000		2,600			900											1300						
2005																							
Temp.	24.1	26.9	25.8			23.5	23.5	22.4		24.3	21.3	20.9	20.3	21.3	27.8	24.3	20.5	21.5	25.9	28.1	25.7		
pH	8.3	8.1	8.2			8.1	7.6	7.4		7.8	7.5	8.1	8.1	8.1	8.7	8.1	8.1	8.0	8.3	8.3	7.8		
Conductivity	2,940	4,040	3,400			1,370	1,460	1,420		1,300	6,710	6,480	6,350	6,060	5,750	8,780	6,870	6,790	6,980	1,220	6,080		
Turbidity	0.49	2.94	16			9.47	6.32	8.27		7.88	4.77	3.03	10.17	5.96	4.18	1.26	2	7.5	6.87	61	15.02		
Ammonia	0.2	0.4	0.4			0.5	2	0.2		0.8	0.4	0.3	0.4	0.3	0.2	0.4	0.4	0.3	0.4	1	0.4		
Nitrate	2.5	1.25	7.5			1.25	1.25	1.25		2.5	6.25	7.5	8.75	8.75	8.75	65	15	37.5	37.5	1.25	1.25		
Reactive Phosphorus	0.10	0.03	0.26			0.65	0.98	0.13		0.81	0.03	nd	nd	nd	nd	0.10	0.03	0.13	0.07	0.07	0.03		
Detergents	0.25	0.5	0.5			0.5	0.67	0.5		0.5	0.75	0.75	0.75	0.75	0.75	1	1	0.75	0.75	0.75	0.5		
Glycol	<1.0	<1.0	<1.0			<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Surfactants (MBAS)	nd		nd			nd											nd						
Oil and Grease	nd		nd			nd											16						
Total Hardness	564		566			411											1690						
Cadmium (diss)	nd		nd			nd											nd						
Copper (diss)	nd		nd			nd											nd						
Lead (diss)	nd		nd			nd											nd						
Zinc (diss)	0.122		0.022			0.024											nd						
Diazinon	nd		nd			nd											nd						
Chlorpyrifos	nd		nd			nd											nd						
Total Coliform	500,000		500,000			900,000											30,000						
Fecal Coliform	5,000		5,000			140,000											500						
Enterococcus	1,700		5,000			3,000											300						
2006																							
Temp.	24.4	27.2	24.2	26	32.2	23.9	24.5	24.2		24	20.7	22.3	21.6	21.9	29.6	24.1	22.85	21.5	27	25.3	22.6	26	29.1
pH	7.9	8.8	8.5	8.0	8.5	8.2	8.0	8.4		7.4	8.1	8.2	8.2	8.2	8.9	8.3	8.5	8.3	8.6	8.4	7.9	8.5	8.1
Conductivity	7.31	3.31	2.89	3.01	3.12	1.25	1.13	1.19		1.13	6.69	6.24	6.22	6.18	6.72	8.45	6.14	5.73	6.77	1.18	5.52	3.10	0.76
Turbidity	1.3	3.78	3.59	25.85	1.55	25.78	4.21	14.04		4.83	12.86	1.49	3.05	1.89	2.63	4.33	2.52	4.56	2.37	12.54	5.93	98	11.64
Ammonia	0.3	0.3	0.1	0.5	0.1	0.4	0.4	0.3		2.5	0.8	0.3	0.2	0.2	0.4	0.1	0.2	0.4	0.2	0.8	0.6	0.3	0.8
Nitrate	6.75	1.25	3.75	1.25	1.25	1.25	0.4	2.5		1.25	7.5	6.75	6.75	6.75	7.5	40	12.5	25	15	1.25	1.25	1.25	1.25
Reactive Phosphorus	0.07	0.03	0.13	0.03	0.03	0.70	0.82	0.98		0.98	0.03	0.03	<0.016	<0.016	0.03	0.16	0.07	0.26	0.07	0.20	0.03	0.07	0.03
Detergents	0.5	0.37	0.25	0.25	0.25	0.25	0.25	0.5		0.5	0.75	0.75	0.75	0.75	0.5	0.75	0.75	0.75	0.75	0.75	0.5	0.13	**1.5**
Glycol	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Surfactants (MBAS)	nd		nd			nd											nd						
Oil and Grease	nd		nd			nd											nd						
Total Hardness	1,370		496			403											1140						
Cadmium (diss)	nd		nd			nd											nd						
Copper (diss)	nd		0.005			0.008											nd						
Lead (diss)	nd		nd			nd											nd						
Zinc (diss)	0.024		0.02			0.066											0.095						
Diazinon	nd		nd			nd											nd						
Chlorpyrifos	nd		nd			nd											nd						
Total Coliform	23,000		30,000			80,000											30,000						
Fecal Coliform	800		3,000			1,100											1,300						
Enterococcus	300		3,000			5,000											800						

APPENDIX A: SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (1994-2009)

Site No.	BAY-01	BAY-02	BAY-03	BLC-01	BLC-02	CEN-01	CEN-03	CEN-04	CEN-07	CEN-08	CEN-10	JUD-01	JUD-02	JUD-03	LAK-01	OLR-01	OLR-02	OVR-04	OVR-07	OVR-09	OVR-10	OVR-11	OVR-12	OVR-13	OVR-14	POG-01	POG-02	POG-03	PRD-01	PRD-02	PRD-03	RCC-01	RCC-02	RCC-03	RCC-04	SCR-01	SCR-02	SCR-03	SCR-04	SCR-05	SCR-06
2007																																									
Temp.	24	26.6	25.4	26.5	23.4	22.9	24.9	30.7	30	27.2	26.3	21.7	24.7	29.3	22.8	25.2	24.4	23.2	24.2	20.1	26.2				26	22.8	23.2	22.1		21.1		22.2	20.1	22.7	25.1	21.6	21.3	20.1	23.7	21.8	
pH	7.9	7.4	7	8.6	8	8	9.2	8.8	8.3	8	7.8	7.9	7.3	7.5	7.1	8.2	8.4	7.2	8.3	7.7	7.6				8.1	8.1	8	7.7		7.9		8	7.9	7.3	7.7	7.3	7.8	7.7	8.2	8.3	
Conductivity	1.22	1	5.26	4.47	4.88	1.44	1.48	1.03	1.1	20	4.75	1.41	1.23	1.17	5.35	1.63	3.59	0.89	7.61	6.27	1.33				1.22	6.24	1.06	3.91		1.54		5.48	6.74	4.19	1.73	14.3	5.58	4.24	1.01	1.8	
Turbidity	7.82	3.04	2.92	4.89	0.33	1.23	3.1	3.62	1.15	1.5	2.13	19.63	6.66	7.79	0.75	0.1	1.73	1.84	5.53	10.83	1.75				17.66	0.39	1.77	0.1		2.25		1.19	0.1	2.57	104	0.83	0.48	0.35	12.57	1.65	
Ammonia	1.5	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.5	0.6	0.4	0.2	0.3	0.2	0.3	0.2	0.1	0.2	0.2	0.1				2.6	0.2	0.1	0.1		0.2		0.2	0.2	0.1	1.2	nd	0.2	0.1	0.3	nd	
Nitrate	0.27	3.84	6.78	0.36	2.64	0.32	nd	0.34	0.11	6.94	6.55	3.54	0.25	0.32	16.1	1.54	0.2	0.25	8.36	nd	0.29				0.88	0.2	1.79	4.76		3.21		0.36	0.226	16.95	4.75	4.25	16.5	8.59	0.45	11.03	
Reactive Phosphorus	1.08	0.75	0.03	0.07	0.13	1.01	0.326	0.39	0.46	0.2	0.42	1.53	0.52	0.75	0.13	0.52	0.16	0.23	0.39	0.95	0.36				0.57	0.03	0.29	0.03		1.3		0.07	nd	0.16	0.42	0.98	0.07	0.2	0.2	0.26	
Detergents	0.5	0.25	0.5	0.5	0.5	0.63	1	3	0.75	2	0.75	3	1	0.5	0.75	0.38	0.5	0.25	1.25	0.75	0.25				2	0.63	0.5	0.5		0.75		0.63	0.68	0.75	0.13	0.5	0.75	0.75	0.5	0.63	
Glycol	0.9	0.70	0.3	0.5	0.2	0.5	0.8	4.3	0.8	0.5	0.2	1.9	0.8	0.8	0.5	0.3	0.2	0.5	0.7	0.3	0.4				2.2	0.2	0.9	0.5		0.5		0.3	0.5	0.5	0.6	0.8	0.2	0.3	0.9	0.3	
Surfactants (MBAS)						nd	0.5					8	nd							nd							nd			nd		nd	nd	nd		nd					
Oil and Grease						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Total Hardness						419	391					340	367							1070							284			353		1540	1990	1130		411					
Cadmium (diss)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Copper (diss)						0.028	0.025					0.021	0.005							0.006							0.005			0.007		nd	nd	nd		0.007					
Lead (diss)						nd	nd					0.005	nd							nd							nd			nd		nd	nd	nd		nd					
Zinc (diss)						0.029	nd					0.128	0.046							0.069							nd			0.036		nd	nd	nd		0.02					
Diazinon						nd	nd					nd	nd							nd							nd			nd			nd	nd		nd					
Chlorpyrifos						nd	nd					nd	nd							nn							nd			nd			nd	nd		nd					
Total Coliform						50000	240000					90000	130000							nd							170000			50000		80000	8000	17000		80000					
Fecal Coliform						17000	160000					>160000	24000							nd							24000			13000		130	500	2800		13000					
Enterococcus						24000	13000					24000	2300							20							22000			24000		2800	500	2800		3500					
2008																																									
Temperature (℃)	ns	24.2	24.9	23.3	22.3	32.7	22.2	29.0	23.7	25.5	25.7	23.7	25.6	26.7	22.6	22.0	22.0	20.4	21.1	20.1	22.2				22.0	25.5	25.4	21.1		20.9		21.2	21.3	27.0	24.5	22.9	23.3	22.6	25.6	24.7	
pH	ns	7.9	7.2	8.2	7.9	8.7	8.6	8.9	8.7	7.8	8.2	8.5	7.8	7.8	7.4	7.8	8.3	7.5	8.3	8.3	7.7				8.1	8.1	8.4	8.0		8.1		8.0	8.0	7.4	7.8	7.4	8.0	7.8	8.9	8.3	
Conductivity (mS/cm)	ns	14.47	5.60	4.22	5.16	1.93	1.40	1.27	1.36	>20	1.87	1.85	1.49	1.38	5.01	1.53	5.29	1.09	13.53	6.32	1.35				1.10	7.90	1.94	5.34		4.09		6.05	7.55	5.00	6.19	2.46	6.60	5.29	2.09	2.98	
Turbidity (NTU)	ns	4.88	2.37	0.18	0.01	5.36	1.17	9.04	8.77	0.01	11.56	2.12	7.29	31.87	9.5	3.97	2.74	1.23	1.52	6.48	6.39				26.34	0.01	9.81	0.36		3.76		0.48	0.34	3.85	0.01	3.05	0.01	0.01	41	17.31	
Ammonia-Nitrogen (mg/L)	ns	0.9	0.3	0.3	0.2	5	0.1	0.2	0.1	0.3	0.4	nd	0.2	0.3	0.3	0.1	0.1	0.2	0.2	0.5	0.2				0.3	0.2	nd	0.2		0.3		0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	
Nitrate-Nitrogen (mg/L)	ns	8.14	23.504	0.75	3.23	0.77	0.47	0.75	0.75	3.32	1.22	0.47	0.45	0.81	18.31	0.79	0.41	0.95	25.99	1.06	1.72				1.08	0.57	6.53	4.9		0.72		1.18	1.31	17.18	39.55	2.4	21.92	19.66	7.84	16.95	
Orthophosphate Phosphorus (mg/L)	ns	1.56	0.03	nd	0.13	1.04	0.36	0.26	0.62	0.09	1.17	0.06	0.39	0.59	0.19	0.72	0.03	0.36	0.07	0.59	0.36				0.46	nd	1.07	0.1		0.65		0.1	0.03	0.16		1.11	0.13	0.23	1.01	0.78	
Surfactants (field)	ns	0.5	0.5	0.38	0.5	1	0.25	0.38	0.25	1.25	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.13	0.75	0.75	0.25				0.38	0.75	0.5	0.5		0.75		0.5	0.75	0.5	0.75	0.63	0.5	0.38	0.62	0.5	
Glycol (mg/L)	ns	1.3	0.2	0.3	0.2	1.8	0.6	0.7	0.7	0.2	0.8	0.6	0.7	0.7	0.6	0.7	0.2	0.5	0.2	0.6	0.5				0.6	0.2	1.2	0.2		10		0.4	0.3	0.6		2	nd	0.1	0.6	0.7	
Oil and grease (mg/L)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Total Hardness (mg/L)						536	375					422	378							973							297			382		1480	2180	1370		487					
Cadmium (mg/L)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Copper (mg/L)						0.023	0.011					0.013	nd							0.008							0.008			0.007		nd	nd	nd		nd					
Lead (mg/L)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Zinc (mg/L)						nd	nd					nd	nd							0.037							0.062			0.021		nd	nd	nd		nd					
Diazinon (µg/L)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Chlorpyrifos (µg/L)						nd	nd					nd	nd							nd							nd			nd		nd	nd	nd		nd					
Total Coliform (MPN/100mL)						98000	13000					80000	500000							170							170000			30000		23000	7000	112000		579000					
Fecal Coliform (MPN/100mL)						45529	230					2300	24000							nd							90000			1700		800	170	3624		12353					
Enterococcus (MPN/100mL)						13000	500					2300	3000							20							50000			1300		2200	2200	9200		30000					
2009																																									
Temperature (℃)	29.5	25.3	23.4	22.1	21.2	23.0	NS	27.1	23.9	28.8	23.9	21.6	23.1	26.5	22.4	22.2	24.2	22.8	24.1	21.6	22.3				24.6	26.0	22.3	22.5		21.2		22.3	22.5	23.4	24.8	22.9	23.0	22.4	23.4	24.8	22.9
pH	9.1	7.9	7.4	8.0	8.1	8.9	NS	9.5	8.6	7.9	7.8	7.9	7.6	7.7	7.5	7.8	8.4	7.5	8.3	8.3	7.6				8.0	8.0	8.4	7.9		8.0		8.1	7.9	7.3	7.8	7.5	8.1	7.9	8.0	7.1	7.9
Conductivity (mS/cm)	1.29	13.72	6.20	7.33	5.17	1.32	NS	0.94	1.18	>20	1.18	1.11	1.13	1.22	6.31	1.33	4.59	0.99	13.05	6.97	1.31				1.27	9.27	1.71	7.04		2.13		7.18	7.51	6.24	6.60	1.79	7.93	6.37	2.85	6.81	6.99
Turbidity (NTU)	13.06	7.99	13.83	2.95	0.32	6.61	NS	5.59	5.91	4.14	12.08	5.49	4.91	37.16	2.77	11.86	1.26	11.3	19.21	28.04	12.31				33.55	0.01	0.52	5.10		4.93		0.35	0.45	5.02	0.53	26.75	0.48	0.41	16.4	8.07	4.81
Ammonia-Nitrogen (mg/L)	0.103	0.871	0.223	0.194	0.110	0.082	NS	0.131	0.178	0.395	0.111	0.304	0.132	0.898	0.177	0.385	0.133	0.399	0.359	0.479	0.349				1.303	0.177	0.023	0.237		0.090		0.188	0.162	0.197	0.133	0.104	0.175	0.155	1.036	0.211	0.167
Nitrate-Nitrogen (mg/L)	0.560	0.547	6.579	0.054	3.347	0.254	NS	0.070	0.133	0.495	0.330	0.130	0.160	0.400	9.820	0.657	0.123	0.555	24.180	0.290	0.340				3.372	0.082	4.210	2.570		0.660		0.714	1.200	21.430	31.390	0.520	16.66	5.84	5.90	75.55	9.63
Orthophosphate Phosphorus (mg/L)	0.211	2.132	0.022	0.018	0.082	0.606	NS	0.249	0.742	1.163	0.943	0.182	0.345	1.868	0.067	1.161	0.031	0.430	0.139	0.455	0.438				0.473	0.003	0.215	0.065		0.563		0.040	0.019	0.075	0.085	1.893	0.037	0.070	2.277	0.228	0.070
Surfactants (field)	0.75	0.88	0.50	0.75	0.50	0.25	NS	0.25	0.50	2.00	0.50	0.25	0.38	0.50	0.63	0.75	0.50	0.38	0.75	1.50	0.25				0.38	0.50	0.50	0.63		0.50		0.75	0.50	0.88	0.75	0.50	0.75	0.50	0.75	1.50	0.75
Glycol (mg/L)	0.85	0.2	0.20	0.3	0.3	0.5	NS	0.493	0.69	0.2	0.904	0.333	0.452	0.715	0.2	0.8	0.6	0.8	0.2	0.5	0.593				0.889	0.3	0.545	0.2		0.521		0.33	0.2	0.405	0.2	0.583	0.1	ND	0.8	ND	0.2
Oil and grease (mg/L)						ND						ND	ND							ND							ND			ND		ND	ND	ND		ND					
Total Hardness (mg/L)						366						235	334							998							340			500		1800	2,080	1440		449					
Cadmium (mg/L)						0.001						ND	ND							ND							ND			ND		ND	ND	ND		ND					
Copper (mg/L)						0.019						0.002	0.002							0.011							0.003			0.005		0.003	0.001	0.005		0.001					
Lead (mg/L)						ND						ND	ND							ND							ND			ND		ND	ND	ND		ND					
Zinc (mg/L)						ND						ND	ND							0.031							ND			0.02		ND	ND	ND		ND					
Diazinon (µg/L)						ND						ND	ND							ND							ND			ND		ND	ND	ND		ND					
Chlorpyrifos (µg/L)						ND						ND	ND							ND							ND			ND		ND	ND	ND		ND					
Total Coliform (MPN/100mL)						23,000						22000	7000							3000							23,000			17,000		50,000	11,000	28000		1600000					
Fecal Coliform (MPN/100mL)						500						11000	130							500							3,000			500		1,700	500	300		160000					
Enterococcus (MPN/100mL)						5,000						17000	40							70							2,300			2,300		2,200	210	340		90000					

APPENDIX A: SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (1994-2009)

Site No.	SUN-02	SUN-03	SUN-05	SUN-06	SUN-07	SVS-01	SVS-02	SWB-03	SWR-03-E	SWR-04	TCC-01-1	TCC-01-2	TCC-01-3	TCC-01-4	TCC-02	TCC-03	TCC-04	TCC-05	TCC-06	TCS	WIL-01	WOL-02	WOL-03
2007																							
Temp.	22.3	26.6	23	27.7	25.6	22.5	23.8	23.7		25.3	25.6	24	24.9	25	31	23.7	25	25.2	27.1	25.1	26.7	22.8	23.6
pH	7.9	8.1	8.2	8.2	8.1	7.9	7.4	8		7.3	8.2	8.1	8.1	8.1	8.9	8	7.9	8	8.3	7.8	7.4	8.3	7.6
Conductivity	5.72	4.52	2.93	6.69	8.74	1.21	1.46	1.1		1.47	5.25	5.19	5.17	5.09	5.31	6.35	4.88	5.05	5.67	1.32	5.2	6.2	1.14
Turbidity	0.1	1.2	2.07	2.52	2.15	6.33	9.31	1.49		3.57	7.75	0.84	2.57	1.54	1.84	1.14	10.21	4.85	1.12	3.14	2.53	2.39	6.02
Ammonia	0.1	0.2	0.1	0.2	0.2	0.1	0.3	0.1		2.2	0.3	0.1	0.2	0.2	0.1	0.2	1	0.2	0.2	0.2	0.7	0.2	nd
Nitrate	6.1	2.03	5.81	21.47	24.6	0.23	0.14	0.63		0.2	3.84	5.65	6.01	7.01	7.62	27.71	8.36	16.27	8.81	0.45	0.02	3.03	0.76
Reactive Phosphorus	0.29	0.03	0.2	0.07	0.07	0.65	1.24	0.59		1.11	0.16	0.07	0.07	0.03	0.03	0.33	0.16	0.39	0.2	0.46	0.1	0.07	0.49
Detergents	0.75	0.25	0.38	0.63	0.75	0.5	0.75	0.38		0.5	0.5	0.75	0.63	0.75	0.63	0.75	0.75	0.5	0.25	0.63	0.5	0.75	0.25
Glycol	0.5	0.3	2.2	0.2	0.3	0.8	0.7	0.7		1.6	0.2	0.2	0.2	0.2	0.1	0.4	0.2	0.2	0.2	0.7	0.3	0.8	0.6
Surfactants (MBAS)	nd		nd			nd											0.5						
Oil and Grease	nd		nd			nd											nd						
Total Hardness	406		1340			335											1570						
Cadmium (diss)	nd		nd			nd											nd						
Copper (diss)	0.011		nd			0.008											nd						
Lead (diss)	nd		nd			nd											nd						
Zinc (diss)	0.032		nd			nd											nd						
Diazinon	nd		nd			nd											nd						
Chlorpyrifos	nd		nd			nd											nd						
Total Coliform	3000		13000			50000											240000						
Fecal Coliform	800		3500			30000											5000						
Enterococcus	500		1700			1400											2800						
2008																							
Temperature (℃)	23.8	23.5	24.0	25.4	26.9	22.5	22.5	22.5	20.8	23.0	21.0	21.4	21.5	21.7	30.1	22.8	22.8	23.0	26.0	31.2	23.6	23.7	21.6
pH	8.2	8.2	8.4	7.9	7.8	7.8	7.2	8.0	8.0	7.1	8.1	7.9	8.0	7.9	8.6	8.1	8.1	8.2	8.5	8.1	7.6	8.7	7.3
Conductivity (mS/cm)	8.07	3.08	3.43	5.31	7.35	2.08	1.58	1.19	1.31	0.94	6.68	6.57	6.55	6.53	6.56	7.41	6.20	6.40	6.56	1.96	5.89	4.49	1.73
Turbidity (NTU)	6.91	3.66	0.8	0.52	3.68	5.27	17.84	29.77	4.73	34.39	0.01	0.35	0.01	0.01	0.01	1.87	3.4	3.97	0.14	3.99	2.6	3.63	1.49
Ammonia-Nitrogen (mg/L)	0.2	0.3	0.1	0.3	0.3	0.1	0.1	0.2	0.9	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	5	0.3	0.2	nd
Nitrate-Nitrogen (mg/L)	22.37	0.47	21.47	12.88	25.54	0.66	0.45	2.78	1.13	0.72	7.64	9.04	8.29	7.32	12.43	32.54	8.61	23.28	6.33	0.29	0.93	27.35	2.17
Orthophosphate Phosphorus (mg/L)	0.2	0.1	0.2	0.1	0.1	0.46	1.7	0.65	0.85	0.39	0.03	nd	0.03	nd	nd	0.16	0.03	0.2	nd	0.55	0.07	0.36	0.65
Surfactants (field)	0.75	0.25	0.25	0.5	0.68	0.5	0.5	0.25	0.5	0.13	0.75	0.5	0.5	0.5	0.5	0.75	0.5	0.68	0.5	0.75	0.5	0.38	0.25
Glycol (mg/L)	0.2	0.8	0.5	0.3	0.2	0.6	0.7	0.5	0.5	0.4	0.2	0.2	0.3	0.1	0.1	0.2	0.4	0.1	0.1	0.5	0.2	0.9	0.5
Oil and grease (mg/L)	nd		nd			nd											nd						
Total Hardness (mg/L)	1340		412			707											1350						
Cadmium (mg/L)	nd		nd			nd											nd						
Copper (mg/L)	nd		nd			0.008											nd						
Lead (mg/L)	nd		nd			nd											nd						
Zinc (mg/L)	nd		nd			0.069											nd						
Diazinon (µg/L)	nd		nd			nd											nd						
Chlorpyrifos (µg/L)	nd		nd			nd											nd						
Total Coliform (MPN/100mL)	50000		30000			17000											8000						
Fecal Coliform (MPN/100mL)	5000		5000			5000											700						
Enterococcus (MPN/100mL)	500		1700			17000											300						
2009																							
Temperature (℃)	23.9	26.5	23.8	23.5	20.7	22.1	22.2	23.8	20.5	24.8	25.3	25.2	25.8	25.5	30.6	21.4	21.1	23.8	28.8	ns	24.5	26.3	22.8
pH	8.0	7.9	8.4	7.8	7.3	7.9	7.6	8.2	8.1	7.3	7.2	8.1	8.1	8.1	8.5	8.2	8.1	8.1	8.1	ns	7.8	8.1	7.2
Conductivity (mS/cm)	8.16	4.11	3.24	7.78	5.83	1.20	1.81	4.50	1.16	0.85	7.50	5.80	5.90	6.01	6.95	7.58	8.24	6.61	6.87	ns	5.90	5.80	2.98
Turbidity (NTU)	14.26	5.05	1.86	2.08	5.28	0.83	7.54	134	1.59	1.93	5.49	3.77	6.71	6.00	2.87	0.31	2.21	4.36	2.35	ns	12.45	0.68	0.01
Ammonia-Nitrogen (mg/L)	0.242	8.460	0.111	0.155	0.272	0.040	0.174	1.419	0.032	0.101	0.172	0.168	0.170	0.209	0.180	0.167	0.218	0.196	0.143	ns	0.472	0.266	0.245
Nitrate-Nitrogen (mg/L)	20.15	0.11	7.73	15.72	4.97	0.58	0.25	24.43	0.35	ND	0.65	5.44	4.08	5.17	7.95	35.55	8.61	13.20	8.16	ns	0.09	16.34	9.69
Orthophosphate Phosphorus (mg/L)	0.119	0.041	0.168	0.036	0.153	0.408	1.209	1.818	0.365	0.195	0.010	ND	0.150	0.024	ND	0.082	0.031	0.100	0.007	ns	0.054	0.109	0.686
Surfactants (field)	1.50	0.38	0.38	0.75	0.50	0.25	0.50	0.75	0.25	0.25	0.50	0.50	0.50	0.50	0.63	0.75	0.50	0.63	0.50	ns	0.50	0.75	0.50
Glycol (mg/L)	0.2	0.479	0.269	0.3	0.2	0.785	5.476	NA	0.466	0.545	0.2	ND	0.436	0.10	0.2	0.2	0.3	0.1	0.1	ns	0.25	0.5	0.497
Oil and grease (mg/L)	ND		ND			ND			ND								ND						
Total Hardness (mg/L)	1,870		513			331			322								1770						
Cadmium (mg/L)	ND		ND			ND			ND								ND						
Copper (mg/L)	0.004		0.004			0.006			0.004								0.004						
Lead (mg/L)	ND		ND			ND			ND								ND						
Zinc (mg/L)	ND		ND			0.03			ND								ND						
Diazinon (µg/L)	ND		ND			ND			ND								ND						
Chlorpyrifos (µg/L)	ND		ND			ND			ND								ND						
Total Coliform (MPN/100mL)	22,000		90000			14,000			70000								23,000						
Fecal Coliform (MPN/100mL)	1,400		1100			9,000			50000								900						
Enterococcus (MPN/100mL)	500		30000			1100			22000								300						

Appendix B

Photographs of Sampling Locations

Site BAY-01	
Site BAY-02	
Site BAY-03	

Site BLC-01	
Site BLC-02	
Site CEN-01	

Site CEN-03	
Site CEN-04	
Site CEN-07	

Site CEN-08	
Site CEN-10	
Site JUD-01	

Site JUD-02	
Site JUD-03	
Site LAK-01	

Site OLR-01	
Site OLR-02	
Site OVR-04	

Site OVR-07	
Site OVR-09	
Site OVR-10	

Site POG-01	
Site POG-02	
Site POG-03	

Site PRD-02	
Site RCC-01	
Site RCC-02	

Site RCC-03	
Site RCC-04	
Site SCR-01	

Site SCR-02	
Site SCR-03	
Site SCR-04	

Site SCR-05	
Site SCR-06	
Site SCR-07	

Site SUN-02	
Site SUN-03	
Site SUN-05	

Site SUN-06	
Site SUN-07	
Site SUN-08	

Site SVS-01	
Site SVS-02	
Site SWB-03	

Site SWR-03-E	
Site SWR-04	
Site TCC-01-01	

Site TCC-01-02	
Site TCC-01-03	
Site TCC-01-04	

Site TCC-02	
Site TCC-03	
Site TCC-04	

Site TCC-05	
Site TCC-06	
Site TCS	

Site WIL-01	
Site WOL-02	
Site WOL-03	

City of Chula Vista
Dry Weather Field Screening and Analytical Monitoring Program
2010

Appendix C: Laboratory Analytical Reports

Appendix D: Field Data Sheets & Trash Assessment Forms

Appendix C

Laboratory Analytical Reports

Dry Weather Reports

28 June 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0326

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/09/10 16:30. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0326

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SVS-01	10F0326-01	Stormwater	06/09/10 15:15	06/09/10 16:30

4831

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0326

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVS-01 (10F0326-01) Stormwater Sampled: 06/09/10 15:15 Received: 06/09/10 16:30										
Zinc	**0.014**	0.0003	0.020	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.005**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	

4832

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0326

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVS-01 (10F0326-01) Stormwater Sampled: 06/09/10 15:15 Received: 06/09/10 16:30										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/14/10	06/24/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*96 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*76 %*	*60-130*			"	"	"	"	

4833

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0326

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVS-01 (10F0326-01) Stormwater Sampled: 06/09/10 15:15 Received: 06/09/10 16:30										
Hardness (Total)	**313**	100	100	mg CaCO3/L	10	0061107	06/10/10	06/15/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062323	06/23/10	06/23/10	EPA 1664A	

4834

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0326

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVS-01 (10F0326-01) Stormwater Sampled: 06/09/10 15:15 Received: 06/09/10 16:30										
Total Coliforms	**170000**	2000	2000	MPN/100 ml	1000	0061027	06/09/10	06/13/10	SM 9221 B, E	
Fecal Coliforms	**300**	20	20	"	10	"	"	06/12/10	"	
Enterococcus	**800**	20	20	"	"	0061028	"	06/13/10	SM 9230 A, B	

4835

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0326

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Blank (0061435-BLK1)					Prepared & Analyzed: 06/14/10						
Cadmium	ND	0.0002	0.001	mg/l							
Copper	ND	0.001	0.010	"							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
LCS (0061435-BS1)					Prepared & Analyzed: 06/14/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500		92	75-125			
Copper	0.047	0.001	0.010	"	0.0500		94	75-125			
Lead	0.048	0.001	0.005	"	0.0500		97	75-125			
Zinc	0.046	0.0003	0.020	"	0.0500		92	75-125			
LCS Dup (0061435-BSD1)					Prepared & Analyzed: 06/14/10						
Lead	0.049	0.001	0.005	mg/l	0.0500		97	75-125	0.3	20	
Zinc	0.050	0.0003	0.020	"	0.0500		99	75-125	8	20	
Copper	0.047	0.001	0.010	"	0.0500		94	75-125	0.3	20	
Cadmium	0.046	0.0002	0.001	"	0.0500		93	75-125	0.1	20	
Duplicate (0061435-DUP1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Copper	0.001	0.001	0.010	mg/l		0.001			11	20	J
Lead	ND	0.001	0.005	"		ND				20	
Zinc	0.002	0.0003	0.020	"		0.003			2	20	J
Cadmium	0.0002	0.0002	0.001	"		ND				20	J
Matrix Spike (0061435-MS1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.040	0.0002	0.001	mg/l	0.0500	ND	80	75-125			
Copper	0.041	0.001	0.010	"	0.0500	0.001	79	75-125			
Lead	0.048	0.001	0.005	"	0.0500	ND	97	75-125			
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125			

4836

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0326

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Matrix Spike Dup (0061435-MSD1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Zinc	0.040	0.0003	0.020	mg/l	0.0500	0.003	75	75-125	0.6	20	
Cadmium	0.041	0.0002	0.001	"	0.0500	ND	81	75-125	2	20	
Copper	0.042	0.001	0.010	"	0.0500	0.001	82	75-125	3	20	
Lead	0.047	0.001	0.005	"	0.0500	ND	94	75-125	3	20	

4837

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0326

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062120											
Blank (0062120-BLK1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Surrogate: Triphenyl phosphate	*0.230*			*"*	*0.250*		*92*	*60-130*			
Surrogate: Tribuytlphosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
LCS (0062120-BS1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Bolstar	0.40	0.09	0.10	ug/l	0.500		80	60-130			
Diazinon	0.41	0.04	0.05	"	0.500		82	60-130			
Ethoprop	0.50	0.05	0.05	"	0.500		100	60-130			
Mevinphos	0.39	0.21	0.25	"	0.500		78	60-130			
Methyl parathion	0.47	0.07	0.10	"	0.500		94	60-130			
Phorate	0.49	0.03	0.05	"	0.500		98	60-130			
Ronnel	0.39	0.16	0.25	"	0.500		78	60-130			
Trichlorinate	0.39	0.05	0.05	"	0.500		78	60-130			
Surrogate: Triphenyl phosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS Dup (0062120-BSD1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Bolstar	0.41	0.09	0.10	ug/l	0.500		82	60-130	2	30	
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130	2	30	
Ethoprop	0.45	0.05	0.05	"	0.500		90	60-130	11	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	3	30	
Methyl parathion	0.45	0.07	0.10	"	0.500		90	60-130	4	30	
Phorate	0.44	0.03	0.05	"	0.500		88	60-130	11	30	
Ronnel	0.41	0.16	0.25	"	0.500		82	60-130	5	30	
Trichlorinate	0.40	0.05	0.05	"	0.500		80	60-130	3	30	
Surrogate: Triphenyl phosphate	*0.170*			*"*	*0.250*		*68*	*60-130*			
Surrogate: Tribuytlphosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			

4838

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0326

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061107											
Blank (0061107-BLK1)					Prepared: 06/10/10	Analyzed: 06/15/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061107-DUP1)			**Source: 10F0326-01**		Prepared: 06/10/10	Analyzed: 06/15/10					
Hardness (Total)	311	100	100	mg CaCO3/L		313			0.6	20	
Batch 0062323											
Blank (0062323-BLK1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0062323-BS1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	37	5	5	mg/l	40.0		92	78-114			
LCS Dup (0062323-BSD1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	38	5	5	mg/l	40.0		94	78-114	1	20	

4839

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

4840

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0326

Client: D-Max Engineering
Attn: Arsalan Dadkhah
Samplers(s): MD / JB
Address: 7220 Trade street suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: Same

Project ID: Chula Vista MS4 Monitoring
Project #: 201009W-3 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness				
1	SVS-01	6/9/10	15:15	SW	2/5 G/P	X						X		X				X	X		X			X				
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

JUN 9'10 16:50

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manoncheher Dadkhah	6/9/10 16:30	Signature: Kelly Leydler
Print: Manoncheher Dadkhah		Print: Kelly Leydler
Company:		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=7 °C on ice

28 June 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0339

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/10/10 13:29. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0339

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JUD-01	10F0339-01	Stormwater	06/10/10 11:20	06/10/10 13:29
PRD-02	10F0339-02	Stormwater	06/10/10 12:15	06/10/10 13:29

4843

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0339

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-01 (10F0339-01) Stormwater Sampled: 06/10/10 11:20 Received: 06/10/10 13:29										
Zinc	**0.016**	0.0003	0.020	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
Copper	**0.006**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
PRD-02 (10F0339-02) Stormwater Sampled: 06/10/10 12:15 Received: 06/10/10 13:29										
Copper	**0.009**	0.001	0.010	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Cadmium	**0.0002**	0.0002	0.001	"	"	"	"	"	"	J
Zinc	**0.031**	0.0003	0.020	"	"	"	"	"	"	
Lead	ND	0.001	0.005	"	"	"	"	"	"	

4844

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0339

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-01 (10F0339-01) Stormwater Sampled: 06/10/10 11:20 Received: 06/10/10 13:29										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/14/10	06/25/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*88 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*76 %*	*60-130*			"	"	"	"	
PRD-02 (10F0339-02) Stormwater Sampled: 06/10/10 12:15 Received: 06/10/10 13:29										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/14/10	06/25/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*96 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*100 %*	*60-130*			"	"	"	"	

4845

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0339

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-01 (10F0339-01) Stormwater Sampled: 06/10/10 11:20 Received: 06/10/10 13:29										
Hardness (Total)	**313**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062323	06/23/10	06/23/10	EPA 1664A	
PRD-02 (10F0339-02) Stormwater Sampled: 06/10/10 12:15 Received: 06/10/10 13:29										
Hardness (Total)	**570**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062323	06/23/10	06/23/10	EPA 1664A	

4846

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0339

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-01 (10F0339-01) Stormwater Sampled: 06/10/10 11:20 Received: 06/10/10 13:29										
Total Coliforms	**30000**	2000	2000	MPN/100 ml	1000	0061112	06/10/10	06/14/10	SM 9221 B, E	
Fecal Coliforms	**13000**	200	200	"	100	"	"	06/13/10	"	
Enterococcus	**8000**	200	200	"	"	0061113	"	06/14/10	SM 9230 A, B	
PRD-02 (10F0339-02) Stormwater Sampled: 06/10/10 12:15 Received: 06/10/10 13:29										
Total Coliforms	**80000**	2000	2000	MPN/100 ml	1000	0061112	06/10/10	06/14/10	SM 9221 B, E	
Fecal Coliforms	**22000**	200	200	"	100	"	"	06/13/10	"	
Enterococcus	**3000**	200	200	"	"	0061113	"	06/14/10	SM 9230 A, B	

4847

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0339

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Blank (0061435-BLK1)					Prepared & Analyzed: 06/14/10						
Copper	ND	0.001	0.010	mg/l							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
Cadmium	ND	0.0002	0.001	"							
LCS (0061435-BS1)					Prepared & Analyzed: 06/14/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500		92	75-125			
Copper	0.047	0.001	0.010	"	0.0500		94	75-125			
Lead	0.048	0.001	0.005	"	0.0500		97	75-125			
Zinc	0.046	0.0003	0.020	"	0.0500		92	75-125			
LCS Dup (0061435-BSD1)					Prepared & Analyzed: 06/14/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500		93	75-125	0.1	20	
Copper	0.047	0.001	0.010	"	0.0500		94	75-125	0.3	20	
Lead	0.049	0.001	0.005	"	0.0500		97	75-125	0.3	20	
Zinc	0.050	0.0003	0.020	"	0.0500		99	75-125	8	20	
Duplicate (0061435-DUP1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.0002	0.0002	0.001	mg/l		ND				20	J
Zinc	0.002	0.0003	0.020	"		0.003			2	20	J
Copper	0.001	0.001	0.010	"		0.001			11	20	J
Lead	ND	0.001	0.005	"		ND				20	
Matrix Spike (0061435-MS1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.040	0.0002	0.001	mg/l	0.0500	ND	80	75-125			
Copper	0.041	0.001	0.010	"	0.0500	0.001	79	75-125			
Lead	0.048	0.001	0.005	"	0.0500	ND	97	75-125			
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0339

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Matrix Spike Dup (0061435-MSD1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.041	0.0002	0.001	mg/l	0.0500	ND	81	75-125	2	20	
Copper	0.042	0.001	0.010	"	0.0500	0.001	82	75-125	3	20	
Lead	0.047	0.001	0.005	"	0.0500	ND	94	75-125	3	20	
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125	0.6	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0339

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062120											
Blank (0062120-BLK1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Surrogate: Triphenyl phosphate	*0.230*			*"*	*0.250*		*92*	*60-130*			
Surrogate: Tribuytlphosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
LCS (0062120-BS1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Bolstar	0.40	0.09	0.10	ug/l	0.500		80	60-130			
Diazinon	0.41	0.04	0.05	"	0.500		82	60-130			
Ethoprop	0.50	0.05	0.05	"	0.500		100	60-130			
Mevinphos	0.39	0.21	0.25	"	0.500		78	60-130			
Methyl parathion	0.47	0.07	0.10	"	0.500		94	60-130			
Phorate	0.49	0.03	0.05	"	0.500		98	60-130			
Ronnel	0.39	0.16	0.25	"	0.500		78	60-130			
Trichlorinate	0.39	0.05	0.05	"	0.500		78	60-130			
Surrogate: Triphenyl phosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS Dup (0062120-BSD1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Bolstar	0.41	0.09	0.10	ug/l	0.500		82	60-130	2	30	
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130	2	30	
Ethoprop	0.45	0.05	0.05	"	0.500		90	60-130	11	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	3	30	
Methyl parathion	0.45	0.07	0.10	"	0.500		90	60-130	4	30	
Phorate	0.44	0.03	0.05	"	0.500		88	60-130	11	30	
Ronnel	0.41	0.16	0.25	"	0.500		82	60-130	5	30	
Trichlorinate	0.40	0.05	0.05	"	0.500		80	60-130	3	30	
Surrogate: Triphenyl phosphate	*0.170*			*"*	*0.250*		*68*	*60-130*			
Surrogate: Tribuytlphosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0339

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061605											
Blank (0061605-BLK1)					Prepared: 06/15/10	Analyzed: 06/17/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061605-DUP1)			**Source: 10F0353-01**		Prepared: 06/15/10	Analyzed: 06/17/10					
Hardness (Total)	257	100	100	mg CaCO3/L		271			5	20	
Batch 0062323											
Blank (0062323-BLK1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0062323-BS1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	37	5	5	mg/l	40.0		92	78-114			
LCS Dup (0062323-BSD1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	38	5	5	mg/l	40.0		94	78-114	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0339

Client: D-Max Engineering
Attn: Arsalan Daddkhah
Samplers(s): MD/JB
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 856-586-6644
Email:
Billing Address: Same

Project ID: Chula Vista DW monitoring
Project #: 9201009W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease ☐ 413.1 ☐ 413.2 ☒ 1664	8015B (TPH) ☐ Gas ☐ Diesel ☐ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐ pH ☐ EC ☐ TSS ☐ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ NH3	CAC Title 22/CAM17 Metals ☐ TTLC ☐ STLC	TCLP (RCRA) ☐ Metals ☐ Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Collilert, T+E.Coli ☐ P/A ☐ Enumeration	Enterococcus, ☒ MTF ☐ Enterolert	Heterotrophic Plate Count (HPC)	☐ BOD ☐ COD ☐ Cyanide	Total Hardness				
1	JUD-01	6/10/10	11:20	SW	2/4/4 G	X						X						X	X		X			X				
2	PRD-02	"	12:15	"	"	X						X						X	X		X			X				
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

JUN 10 10 13:50

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: ☐ Courier ☐ UPS ☐ FedEx ☐ USPS ☐ Client Drop Off ☐ Other
[1]**Turn-Around-Time:** ☐ Same Day ☐ 24 hr ☐ 48 hr ☐ 3 day ☐ 4 day ☒ 5 day ☐ STD (7 day)
[1]**Reporting Requirements:** ☐ Fax ☐ PDF ☐ Excel ☐ Geotracker/EDF ☐ Hard Copy ☐ EDT
[1]**Sample Disposal:** ☐ By Laboratory ☐ [2]Return to Client: P/U or Delivery ☐ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Daddkhah	6/10/10 13:10	Signature: Kelly Leyden
Print: Manouchehr Daddkhah		Print: Kelly Leyden
Company: D-Max Engi		Company: EMA
Signature: Kelly Leyden	6/10/10 13:29	Signature:
Print: Kelly Leyden		Print: Matt Leyden
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T-5°C on Ice

EnviroMatrix Analytical, Inc.

29 June 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0355

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/10/10 16:46. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SCR-01	10F0355-01	Stormwater	06/10/10 14:40	06/10/10 16:46
RCC-02	10F0355-02	Stormwater	06/10/10 15:45	06/10/10 16:46

4855

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (10F0355-01) Stormwater Sampled: 06/10/10 14:40 Received: 06/10/10 16:46										
Zinc	**0.018**	0.0003	0.020	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
Copper	**0.003**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
RCC-02 (10F0355-02) Stormwater Sampled: 06/10/10 15:45 Received: 06/10/10 16:46										
Copper	ND	0.001	0.010	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	
Cadmium	**0.0005**	0.0002	0.001	"	"	"	"	"	"	J
Zinc	**0.003**	0.0003	0.020	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	06/15/10	"	

4856

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (10F0355-01) Stormwater Sampled: 06/10/10 14:40 Received: 06/10/10 16:46										**GC-05**
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/17/10	06/28/10	EPA 8141A	
Diazinon	**0.07**	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*64 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*92 %*	*60-130*			"	"	"	"	
RCC-02 (10F0355-02) Stormwater Sampled: 06/10/10 15:45 Received: 06/10/10 16:46										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/17/10	06/28/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*64 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*64 %*	*60-130*			"	"	"	"	

4857

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (10F0355-01) Stormwater Sampled: 06/10/10 14:40 Received: 06/10/10 16:46										
Hardness (Total)	**346**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062323	06/23/10	06/23/10	EPA 1664A	
RCC-02 (10F0355-02) Stormwater Sampled: 06/10/10 15:45 Received: 06/10/10 16:46										
Hardness (Total)	**1930**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062323	06/23/10	06/23/10	EPA 1664A	

4858

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (10F0355-01) Stormwater Sampled: 06/10/10 14:40 Received: 06/10/10 16:46										
Total Coliforms	**130000**	2000	2000	MPN/100 ml	1000	0061120	06/10/10	06/14/10	SM 9221 B, E	
Fecal Coliforms	**24000**	200	200	"	100	"	"	06/13/10	"	
Enterococcus	**22000**	200	200	"	"	0061121	"	06/14/10	SM 9230 A, B	
RCC-02 (10F0355-02) Stormwater Sampled: 06/10/10 15:45 Received: 06/10/10 16:46										
Total Coliforms	**3000**	200	200	MPN/100 ml	100	0061120	06/10/10	06/14/10	SM 9221 B, E	
Fecal Coliforms	**500**	20	20	"	10	"	"	06/13/10	"	
Enterococcus	**800**	20	20	"	"	0061121	"	06/14/10	SM 9230 A, B	

4859

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Blank (0061435-BLK1)					Prepared & Analyzed: 06/14/10						
Copper	ND	0.001	0.010	mg/l							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
Cadmium	ND	0.0002	0.001	"							
LCS (0061435-BS1)					Prepared & Analyzed: 06/14/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500		92	75-125			
Copper	0.047	0.001	0.010	"	0.0500		94	75-125			
Lead	0.048	0.001	0.005	"	0.0500		97	75-125			
Zinc	0.046	0.0003	0.020	"	0.0500		92	75-125			
LCS Dup (0061435-BSD1)					Prepared & Analyzed: 06/14/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500		93	75-125	0.1	20	
Copper	0.047	0.001	0.010	"	0.0500		94	75-125	0.3	20	
Lead	0.049	0.001	0.005	"	0.0500		97	75-125	0.3	20	
Zinc	0.050	0.0003	0.020	"	0.0500		99	75-125	8	20	
Duplicate (0061435-DUP1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.0002	0.0002	0.001	mg/l		ND				20	J
Zinc	0.002	0.0003	0.020	"		0.003			2	20	J
Copper	0.001	0.001	0.010	"		0.001			11	20	J
Lead	ND	0.001	0.005	"		ND				20	
Matrix Spike (0061435-MS1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.040	0.0002	0.001	mg/l	0.0500	ND	80	75-125			
Copper	0.041	0.001	0.010	"	0.0500	0.001	79	75-125			
Lead	0.048	0.001	0.005	"	0.0500	ND	97	75-125			
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Matrix Spike Dup (0061435-MSD1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.041	0.0002	0.001	mg/l	0.0500	ND	81	75-125	2	20	
Copper	0.042	0.001	0.010	"	0.0500	0.001	82	75-125	3	20	
Lead	0.047	0.001	0.005	"	0.0500	ND	94	75-125	3	20	
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125	0.6	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062120											
Blank (0062120-BLK1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Surrogate: Triphenyl phosphate	*0.230*			*"*	*0.250*		*92*	*60-130*			
Surrogate: Tribuytlphosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
LCS (0062120-BS1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Bolstar	0.40	0.09	0.10	ug/l	0.500		80	60-130			
Diazinon	0.41	0.04	0.05	"	0.500		82	60-130			
Ethoprop	0.50	0.05	0.05	"	0.500		100	60-130			
Mevinphos	0.39	0.21	0.25	"	0.500		78	60-130			
Methyl parathion	0.47	0.07	0.10	"	0.500		94	60-130			
Phorate	0.49	0.03	0.05	"	0.500		98	60-130			
Ronnel	0.39	0.16	0.25	"	0.500		78	60-130			
Trichlorinate	0.39	0.05	0.05	"	0.500		78	60-130			
Surrogate: Triphenyl phosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS Dup (0062120-BSD1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Bolstar	0.41	0.09	0.10	ug/l	0.500		82	60-130	2	30	
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130	2	30	
Ethoprop	0.45	0.05	0.05	"	0.500		90	60-130	11	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	3	30	
Methyl parathion	0.45	0.07	0.10	"	0.500		90	60-130	4	30	
Phorate	0.44	0.03	0.05	"	0.500		88	60-130	11	30	
Ronnel	0.41	0.16	0.25	"	0.500		82	60-130	5	30	
Trichlorinate	0.40	0.05	0.05	"	0.500		80	60-130	3	30	
Surrogate: Triphenyl phosphate	*0.170*			*"*	*0.250*		*68*	*60-130*			
Surrogate: Tribuytlphosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061605											
Blank (0061605-BLK1)					Prepared: 06/15/10	Analyzed: 06/17/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061605-DUP1)			**Source: 10F0353-01**		Prepared: 06/15/10	Analyzed: 06/17/10					
Hardness (Total)	257	100	100	mg CaCO3/L		271			5	20	
Batch 0062323											
Blank (0062323-BLK1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0062323-BS1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	37	5	5	mg/l	40.0		92	78-114			
LCS Dup (0062323-BSD1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	38	5	5	mg/l	40.0		94	78-114	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.

4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0355

Client: D-Max Engineering

Attn: Arsalan Dadkhah

Samplers(s): MD/SB

Address: 7220 Trade street, Suite 119

Phone: 858-586-6600 Fax: 858-586-6644

Email:

Billing Address: Same

Project ID: Chula Vista MS4 Monitoring

Project #: 201009W-3 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease ☐ 413.1 ☐ 413.2 ☒ 1664	8015B (TPH) ☐ Gas ☐ Diesel ☐ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐ pH ☐ EC ☐ TSS ☒ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ NH3	CAC Title 22/CAM17 Metals ☐ TTLC ☐ STLC	TCLP (RCRA) ☐ Metals ☐ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli ☐ P/A ☐ Enumeration	Enterococcus, ☒ MTF ☐ Enterolert	Heterotrophic Plate Count (HPC)	☐ BOD ☐ COD ☐ Cyanide	Total Hardness				
1	SCR-01	6/10/10	14:40	SW	2/G	X						X						X	X		X			X				
2	RCC-02	"	15:45	SW	2/G, 1/P	X						X		X				X	X		X			X				
3					2/5 G/P																							
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: ☐ Courier ☐ UPS ☐ FedEx ☐ USPS ☐ Client Drop Off ☐ Other

[1]**Turn-Around-Time:** ☐ Same Day ☐ 24 hr ☐ 48 hr ☐ 3 day ☐ 4 day ☒ 5 day ☐ STD (7 day)

[1]**Reporting Requirements:** ☐ Fax ☐ PDF ☐ Excel ☐ Geotracker/EDF ☐ Hard Copy ☐ EDT

[1]**Sample Disposal:** ☐ By Laboratory ☐ [2]Return to Client: P/U or Delivery ☐ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	6/10/10 16:46	Signature: [illegible]
Print: Manouchehr Dadkhah		Print: Kelly [illegible]
Company: D-Max Eng.		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=6°C on ice

29 June 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0375

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/11/10 13:48. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0375

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TCC-04	10F0375-01	Stormwater	06/11/10 10:20	06/11/10 13:48
POG-02	10F0375-02	Stormwater	06/11/10 11:30	06/11/10 13:48
RCC-01	10F0375-03	Stormwater	06/11/10 12:30	06/11/10 13:48

4867

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0375

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TCC-04 (10F0375-01) Stormwater Sampled: 06/11/10 10:20 Received: 06/11/10 13:48										
Cadmium	ND	0.0002	0.001	mg/l	1	0061531	06/15/10	06/15/10	EPA 200.8	
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.003**	0.0003	0.020	"	"	"	"	"	"	J
POG-02 (10F0375-02) Stormwater Sampled: 06/11/10 11:30 Received: 06/11/10 13:48										
Lead	ND	0.001	0.005	mg/l	1	0061531	06/15/10	06/15/10	EPA 200.8	
Copper	**0.004**	0.001	0.010	"	"	"	"	"	"	J
Zinc	**0.012**	0.0003	0.020	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
RCC-01 (10F0375-03) Stormwater Sampled: 06/11/10 12:30 Received: 06/11/10 13:48										
Zinc	**0.003**	0.0003	0.020	mg/l	1	0061531	06/15/10	06/15/10	EPA 200.8	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J

4868

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0375

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TCC-04 (10F0375-01) Stormwater Sampled: 06/11/10 10:20 Received: 06/11/10 13:48										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/17/10	06/28/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*60 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*68 %*	*60-130*			"	"	"	"	
POG-02 (10F0375-02) Stormwater Sampled: 06/11/10 11:30 Received: 06/11/10 13:48										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/17/10	06/28/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*68 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*68 %*	*60-130*			"	"	"	"	
RCC-01 (10F0375-03) Stormwater Sampled: 06/11/10 12:30 Received: 06/11/10 13:48										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/17/10	06/28/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*88 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*64 %*	*60-130*			"	"	"	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0375

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TCC-04 (10F0375-01) Stormwater Sampled: 06/11/10 10:20 Received: 06/11/10 13:48										
Hardness (Total)	**1710**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062323	06/23/10	06/23/10	EPA 1664A	
POG-02 (10F0375-02) Stormwater Sampled: 06/11/10 11:30 Received: 06/11/10 13:48										
Hardness (Total)	**360**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062323	06/23/10	06/23/10	EPA 1664A	
RCC-01 (10F0375-03) Stormwater Sampled: 06/11/10 12:30 Received: 06/11/10 13:48										
Hardness (Total)	**1410**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062526	06/24/10	06/24/10	EPA 1664A	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0375

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TCC-04 (10F0375-01) Stormwater Sampled: 06/11/10 10:20 Received: 06/11/10 13:48										
Total Coliforms	**5000**	200	200	MPN/100 ml	100	0061412	06/11/10	06/15/10	SM 9221 B, E	
Fecal Coliforms	**700**	20	20	"	10	"	"	06/14/10	"	
Enterococcus	**140**	20	20	"	"	0061413	"	06/15/10	SM 9230 A, B	
POG-02 (10F0375-02) Stormwater Sampled: 06/11/10 11:30 Received: 06/11/10 13:48										
Total Coliforms	**170000**	2000	2000	MPN/100 ml	1000	0061412	06/11/10	06/15/10	SM 9221 B, E	
Fecal Coliforms	**8000**	200	200	"	100	"	"	06/14/10	"	
Enterococcus	**5000**	200	200	"	"	0061413	"	06/15/10	SM 9230 A, B	
RCC-01 (10F0375-03) Stormwater Sampled: 06/11/10 12:30 Received: 06/11/10 13:48										
Total Coliforms	**13000**	200	200	MPN/100 ml	100	0061412	06/11/10	06/15/10	SM 9221 B, E	
Fecal Coliforms	**800**	20	20	"	10	"	"	06/14/10	"	
Enterococcus	**130**	20	20	"	"	0061413	"	06/15/10	SM 9230 A, B	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0375

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061531											
Blank (0061531-BLK1)					Prepared & Analyzed: 06/15/10						
Copper	ND	0.001	0.010	mg/l							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
Cadmium	ND	0.0002	0.001	"							
LCS (0061531-BS1)					Prepared & Analyzed: 06/15/10						
Cadmium	0.047	0.0002	0.001	mg/l	0.0500		95	75-125			
Copper	0.049	0.001	0.010	"	0.0500		98	75-125			
Lead	0.048	0.001	0.005	"	0.0500		95	75-125			
Zinc	0.047	0.0003	0.020	"	0.0500		94	75-125			
LCS Dup (0061531-BSD1)					Prepared & Analyzed: 06/15/10						
Cadmium	0.052	0.0002	0.001	mg/l	0.0500		104	75-125	10	20	
Copper	0.052	0.001	0.010	"	0.0500		105	75-125	6	20	
Lead	0.051	0.001	0.005	"	0.0500		102	75-125	7	20	
Zinc	0.052	0.0003	0.020	"	0.0500		105	75-125	11	20	
Duplicate (0061531-DUP1)		**Source: 10F0318-01**			Prepared & Analyzed: 06/15/10						
Cadmium	ND	0.0002	0.001	mg/l		ND				20	
Zinc	ND	0.0003	0.020	"		ND				20	
Copper	ND	0.001	0.010	"		ND				20	
Lead	ND	0.001	0.005	"		ND				20	
Matrix Spike (0061531-MS1)		**Source: 10F0318-01**			Prepared & Analyzed: 06/15/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500	ND	92	75-125			
Copper	0.045	0.001	0.010	"	0.0500	ND	90	75-125			
Lead	0.049	0.001	0.005	"	0.0500	ND	97	75-125			
Zinc	0.045	0.0003	0.020	"	0.0500	ND	90	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0375

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061531											
Matrix Spike Dup (0061531-MSD1)			**Source: 10F0318-01**		Prepared & Analyzed: 06/15/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500	ND	91	75-125	1	20	
Copper	0.044	0.001	0.010	"	0.0500	ND	89	75-125	1	20	
Lead	0.054	0.001	0.005	"	0.0500	ND	108	75-125	11	20	
Zinc	0.044	0.0003	0.020	"	0.0500	ND	89	75-125	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0375

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062120											
Blank (0062120-BLK1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Surrogate: Triphenyl phosphate	*0.230*			*"*	*0.250*		*92*	*60-130*			
Surrogate: Tribuytlphosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
LCS (0062120-BS1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Bolstar	0.40	0.09	0.10	ug/l	0.500		80	60-130			
Diazinon	0.41	0.04	0.05	"	0.500		82	60-130			
Ethoprop	0.50	0.05	0.05	"	0.500		100	60-130			
Mevinphos	0.39	0.21	0.25	"	0.500		78	60-130			
Methyl parathion	0.47	0.07	0.10	"	0.500		94	60-130			
Phorate	0.49	0.03	0.05	"	0.500		98	60-130			
Ronnel	0.39	0.16	0.25	"	0.500		78	60-130			
Trichlorinate	0.39	0.05	0.05	"	0.500		78	60-130			
Surrogate: Triphenyl phosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS Dup (0062120-BSD1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Bolstar	0.41	0.09	0.10	ug/l	0.500		82	60-130	2	30	
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130	2	30	
Ethoprop	0.45	0.05	0.05	"	0.500		90	60-130	11	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	3	30	
Methyl parathion	0.45	0.07	0.10	"	0.500		90	60-130	4	30	
Phorate	0.44	0.03	0.05	"	0.500		88	60-130	11	30	
Ronnel	0.41	0.16	0.25	"	0.500		82	60-130	5	30	
Trichlorinate	0.40	0.05	0.05	"	0.500		80	60-130	3	30	
Surrogate: Triphenyl phosphate	*0.170*			*"*	*0.250*		*68*	*60-130*			
Surrogate: Tribuytlphosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0375

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061605											
Blank (0061605-BLK1)					Prepared: 06/15/10	Analyzed: 06/17/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061605-DUP1)			**Source: 10F0353-01**		Prepared: 06/15/10	Analyzed: 06/17/10					
Hardness (Total)	257	100	100	mg CaCO3/L		271			5	20	
Batch 0062323											
Blank (0062323-BLK1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0062323-BS1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	37	5	5	mg/l	40.0		92	78-114			
LCS Dup (0062323-BSD1)					Prepared & Analyzed: 06/23/10						
Oil & Grease	38	5	5	mg/l	40.0		94	78-114	1	20	
Batch 0062526											
Blank (0062526-BLK1)					Prepared & Analyzed: 06/25/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0062526-BS1)					Prepared & Analyzed: 06/25/10						
Oil & Grease	38	5	5	mg/l	40.0		96	78-114			
LCS Dup (0062526-BSD1)					Prepared & Analyzed: 06/25/10						
Oil & Grease	37	5	5	mg/l	40.0		92	78-114	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0375

Client: D-MAX Engineering
Attn: Arsalan Dadkhah
Samplers(s): MD / JB
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: same

Project ID: Chula Vista DW Monitoring
Project #: 201009W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness				
1	TCC-04	6/11/10	10:20	SW	G/p 2/5	X						X		X				X	X		X			X				
2	POG-02	~	11:30	~	G/p 2/4	X						X						X	X		X			X				
3	RCC-01	~	12:30	~	G/p 2/4	X						X						X	X		X			X				
4																												
5																												
6																												
7																												
8																												
9																												
10																												

JUN 11 '10 13:00

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	6/11/10 1:25	Signature:
Print: Manouchehr Dadkhah		Print: Ross Pipper
Company: D-Max Eng.		Company: EMA
Signature:	6/11/10 1348	Signature:
Print: Ross Pipper		Print: Matt Taylor
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

5°C on ICE

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

29 June 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0425

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/14/10 14:34. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0425

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JUD-02	10F0425-01	Stormwater	06/14/10 09:50	06/14/10 14:34
OVR-09	10F0425-02	Stormwater	06/14/10 11:00	06/14/10 14:34
RCC-03	10F0425-03	Stormwater	06/14/10 12:10	06/14/10 14:34

4879

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0425

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-02 (10F0425-01) Stormwater Sampled: 06/14/10 09:50 Received: 06/14/10 14:34										
Cadmium	**0.0004**	0.0002	0.001	mg/l	1	0061531	06/15/10	06/15/10	EPA 200.8	J
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.016**	0.0003	0.020	"	"	"	"	"	"	J
OVR-09 (10F0425-02) Stormwater Sampled: 06/14/10 11:00 Received: 06/14/10 14:34										
Lead	ND	0.001	0.005	mg/l	1	0061531	06/15/10	06/15/10	EPA 200.8	
Copper	**0.007**	0.001	0.010	"	"	"	"	"	"	J
Zinc	**0.015**	0.0003	0.020	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
RCC-03 (10F0425-03) Stormwater Sampled: 06/14/10 12:10 Received: 06/14/10 14:34										
Cadmium	**0.0002**	0.0002	0.001	mg/l	1	0061531	06/15/10	06/15/10	EPA 200.8	J
Zinc	**0.012**	0.0003	0.020	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.003**	0.001	0.010	"	"	"	"	"	"	J

4880

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0425

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-02 (10F0425-01) Stormwater Sampled: 06/14/10 09:50 Received: 06/14/10 14:34										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/20/10	06/28/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*108 %*	*60-130*			"	"	"	"	
OVR-09 (10F0425-02) Stormwater Sampled: 06/14/10 11:00 Received: 06/14/10 14:34										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/20/10	06/28/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*112 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*88 %*	*60-130*			"	"	"	"	
RCC-03 (10F0425-03) Stormwater Sampled: 06/14/10 12:10 Received: 06/14/10 14:34										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062120	06/20/10	06/29/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*60 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*88 %*	*60-130*			"	"	"	"	

4881

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0425

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-02 (10F0425-01) Stormwater Sampled: 06/14/10 09:50 Received: 06/14/10 14:34										
Hardness (Total)	**372**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062526	06/24/10	06/24/10	EPA 1664A	
OVR-09 (10F0425-02) Stormwater Sampled: 06/14/10 11:00 Received: 06/14/10 14:34										
Hardness (Total)	**926**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062526	06/24/10	06/24/10	EPA 1664A	
RCC-03 (10F0425-03) Stormwater Sampled: 06/14/10 12:10 Received: 06/14/10 14:34										
Hardness (Total)	**1170**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/21/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062526	06/24/10	06/24/10	EPA 1664A	

4882

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0425

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-02 (10F0425-01) Stormwater Sampled: 06/14/10 09:50 Received: 06/14/10 14:34										
Total Coliforms	**80000**	2000	2000	MPN/100 ml	1000	0061521	06/14/10	06/18/10	SM 9221 B, E	
Fecal Coliforms	**110**	20	20	"	10	"	"	06/17/10	"	
Enterococcus	**11000**	200	200	"	100	0061522	"	06/18/10	SM 9230 A, B	
OVR-09 (10F0425-02) Stormwater Sampled: 06/14/10 11:00 Received: 06/14/10 14:34										
Total Coliforms	**40**	20	20	MPN/100 ml	10	0061521	06/14/10	06/18/10	SM 9221 B, E	
Fecal Coliforms	ND	20	20	"	"	"	"	06/17/10	"	
Enterococcus	**20**	20	20	"	"	0061522	"	06/18/10	SM 9230 A, B	
RCC-03 (10F0425-03) Stormwater Sampled: 06/14/10 12:10 Received: 06/14/10 14:34										
Total Coliforms	**14000**	200	200	MPN/100 ml	100	0061521	06/14/10	06/18/10	SM 9221 B, E	
Fecal Coliforms	**1300**	20	20	"	10	"	"	06/17/10	"	
Enterococcus	**1100**	20	20	"	"	0061522	"	06/18/10	SM 9230 A, B	

4883

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0425

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061531											
Blank (0061531-BLK1)					Prepared & Analyzed: 06/15/10						
Copper	ND	0.001	0.010	mg/l							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
Cadmium	ND	0.0002	0.001	"							
LCS (0061531-BS1)					Prepared & Analyzed: 06/15/10						
Cadmium	0.047	0.0002	0.001	mg/l	0.0500		95	75-125			
Copper	0.049	0.001	0.010	"	0.0500		98	75-125			
Lead	0.048	0.001	0.005	"	0.0500		95	75-125			
Zinc	0.047	0.0003	0.020	"	0.0500		94	75-125			
LCS Dup (0061531-BSD1)					Prepared & Analyzed: 06/15/10						
Cadmium	0.052	0.0002	0.001	mg/l	0.0500		104	75-125	10	20	
Copper	0.052	0.001	0.010	"	0.0500		105	75-125	6	20	
Lead	0.051	0.001	0.005	"	0.0500		102	75-125	7	20	
Zinc	0.052	0.0003	0.020	"	0.0500		105	75-125	11	20	
Duplicate (0061531-DUP1)			**Source: 10F0318-01**		Prepared & Analyzed: 06/15/10						
Cadmium	ND	0.0002	0.001	mg/l		ND				20	
Zinc	ND	0.0003	0.020	"		ND				20	
Copper	ND	0.001	0.010	"		ND				20	
Lead	ND	0.001	0.005	"		ND				20	
Matrix Spike (0061531-MS1)			**Source: 10F0318-01**		Prepared & Analyzed: 06/15/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500	ND	92	75-125			
Copper	0.045	0.001	0.010	"	0.0500	ND	90	75-125			
Lead	0.049	0.001	0.005	"	0.0500	ND	97	75-125			
Zinc	0.045	0.0003	0.020	"	0.0500	ND	90	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0425

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061531											
Matrix Spike Dup (0061531-MSD1)			**Source: 10F0318-01**		Prepared & Analyzed: 06/15/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500	ND	91	75-125	1	20	
Copper	0.044	0.001	0.010	"	0.0500	ND	89	75-125	1	20	
Lead	0.054	0.001	0.005	"	0.0500	ND	108	75-125	11	20	
Zinc	0.044	0.0003	0.020	"	0.0500	ND	89	75-125	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0425

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062120											
Blank (0062120-BLK1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Surrogate: Triphenyl phosphate	*0.230*			*"*	*0.250*		*92*	*60-130*			
Surrogate: Tribuytlphosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
LCS (0062120-BS1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Bolstar	0.40	0.09	0.10	ug/l	0.500		80	60-130			
Diazinon	0.41	0.04	0.05	"	0.500		82	60-130			
Ethoprop	0.50	0.05	0.05	"	0.500		100	60-130			
Mevinphos	0.39	0.21	0.25	"	0.500		78	60-130			
Methyl parathion	0.47	0.07	0.10	"	0.500		94	60-130			
Phorate	0.49	0.03	0.05	"	0.500		98	60-130			
Ronnel	0.39	0.16	0.25	"	0.500		78	60-130			
Trichlorinate	0.39	0.05	0.05	"	0.500		78	60-130			
Surrogate: Triphenyl phosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS Dup (0062120-BSD1)					Prepared: 06/20/10	Analyzed: 06/24/10					
Bolstar	0.41	0.09	0.10	ug/l	0.500		82	60-130	2	30	
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130	2	30	
Ethoprop	0.45	0.05	0.05	"	0.500		90	60-130	11	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	3	30	
Methyl parathion	0.45	0.07	0.10	"	0.500		90	60-130	4	30	
Phorate	0.44	0.03	0.05	"	0.500		88	60-130	11	30	
Ronnel	0.41	0.16	0.25	"	0.500		82	60-130	5	30	
Trichlorinate	0.40	0.05	0.05	"	0.500		80	60-130	3	30	
Surrogate: Triphenyl phosphate	*0.170*			*"*	*0.250*		*68*	*60-130*			
Surrogate: Tribuytlphosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0425

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061605											
Blank (0061605-BLK1)					Prepared: 06/15/10	Analyzed: 06/17/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061605-DUP1)			**Source: 10F0353-01**		Prepared: 06/15/10	Analyzed: 06/17/10					
Hardness (Total)	257	100	100	mg CaCO3/L		271			5	20	
Batch 0062526											
Blank (0062526-BLK1)					Prepared & Analyzed: 06/25/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0062526-BS1)					Prepared & Analyzed: 06/25/10						
Oil & Grease	38	5	5	mg/l	40.0		96	78-114			
LCS Dup (0062526-BSD1)					Prepared & Analyzed: 06/25/10						
Oil & Grease	37	5	5	mg/l	40.0		92	78-114	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.

4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0425

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Samplers(s): MD / JB
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: Same

Project ID: Chula Vista Dry Weather Monitoring
Project #: 201009W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 X 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn X Dissolved	Coliform. X Total (MTF) X Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, X MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness				
1	TJJD-02	6/14/10	9:50	SW	S/P 2/4	X						X						X	X		X			X				
2	OVR-09	"	11:00	"	" "	X						X						X	X		X			X				
3	RCC-03	"	12:10	"	" "	X						X						X	X		X			X				
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

	RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature	Manouchehr Dadkhah	6/14/10 110	Signature JUN 14 '10 1457
Print	Manouchehr Dadkhah		Print Room Porter
Company	D-Max Eng.		Company: EMA
Signature		6/14/10 1434	Signature
Print	Ross Porter		Print Matt Grayson
Company	EMA		Company: EMA
Signature			Signature
Print			Print
Company:			Company:

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

1°C on DCR

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

02 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0463

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/15/10 13:50. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0463

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CEN-01	10F0463-01	Stormwater	06/15/10 09:30	06/15/10 13:50
SUN-02	10F0463-02	Stormwater	06/15/10 11:35	06/15/10 13:50
SUN-05	10F0463-03	Stormwater	06/15/10 12:15	06/15/10 13:50

4891

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0463

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-01 (10F0463-01) Stormwater Sampled: 06/15/10 09:30 Received: 06/15/10 13:50										
Cadmium	**0.0005**	0.0002	0.001	mg/l	1	0062237	06/22/10	06/22/10	EPA 200.8	J
Copper	**0.021**	0.001	0.010	"	"	"	"	"	"	
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.068**	0.0003	0.020	"	"	"	"	"	"	
SUN-02 (10F0463-02) Stormwater Sampled: 06/15/10 11:35 Received: 06/15/10 13:50										
Lead	ND	0.001	0.005	mg/l	1	0062237	06/22/10	06/22/10	EPA 200.8	
Copper	**0.003**	0.001	0.010	"	"	"	"	"	"	J
Zinc	**0.008**	0.0003	0.020	"	"	"	"	"	"	J
Cadmium	**0.0004**	0.0002	0.001	"	"	"	"	"	"	J
SUN-05 (10F0463-03) Stormwater Sampled: 06/15/10 12:15 Received: 06/15/10 13:50										
Cadmium	**0.0004**	0.0002	0.001	mg/l	1	0062237	06/22/10	06/22/10	EPA 200.8	J
Zinc	**0.007**	0.0003	0.020	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.003**	0.001	0.010	"	"	"	"	"	"	J

4892

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0463

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-01 (10F0463-01) Stormwater Sampled: 06/15/10 09:30 Received: 06/15/10 13:50										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062427	06/21/10	06/29/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*88 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*60 %*	*60-130*			"	"	"	"	
SUN-02 (10F0463-02) Stormwater Sampled: 06/15/10 11:35 Received: 06/15/10 13:50										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062940	06/22/10	07/01/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*112 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*			"	"	"	"	
SUN-05 (10F0463-03) Stormwater Sampled: 06/15/10 12:15 Received: 06/15/10 13:50										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062940	06/22/10	07/01/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*112 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*108 %*	*60-130*			"	"	"	"	

4893

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0463

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-01 (10F0463-01) Stormwater Sampled: 06/15/10 09:30 Received: 06/15/10 13:50										
Hardness (Total)	**335**	100	100	mg CaCO3/L	10	0061820	06/17/10	06/21/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062526	06/25/10	06/25/10	EPA 1664A	
SUN-02 (10F0463-02) Stormwater Sampled: 06/15/10 11:35 Received: 06/15/10 13:50										
Hardness (Total)	**1140**	100	100	mg CaCO3/L	10	0061820	06/17/10	06/21/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062526	06/25/10	06/25/10	EPA 1664A	
SUN-05 (10F0463-03) Stormwater Sampled: 06/15/10 12:15 Received: 06/15/10 13:50										
Hardness (Total)	**352**	100	100	mg CaCO3/L	10	0061820	06/17/10	06/21/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062828	06/29/10	06/29/10	EPA 1664A	

4894

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0463

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-01 (10F0463-01) Stormwater Sampled: 06/15/10 09:30 Received: 06/15/10 13:50										
Total Coliforms	**50000**	2000	2000	MPN/100 ml	1000	0061615	06/15/10	06/19/10	SM 9221 B, E	
Fecal Coliforms	**17000**	200	200	"	100	"	"	06/18/10	"	
Enterococcus	**24000**	200	200	"	"	0061616	"	06/19/10	SM 9230 A, B	
SUN-02 (10F0463-02) Stormwater Sampled: 06/15/10 11:35 Received: 06/15/10 13:50										
Total Coliforms	**50000**	2000	2000	MPN/100 ml	1000	0061615	06/15/10	06/19/10	SM 9221 B, E	
Fecal Coliforms	**8000**	200	200	"	100	"	"	06/18/10	"	
Enterococcus	**360**	20	20	"	10	0061616	"	06/19/10	SM 9230 A, B	
SUN-05 (10F0463-03) Stormwater Sampled: 06/15/10 12:15 Received: 06/15/10 13:50										
Total Coliforms	**17000**	200	200	MPN/100 ml	100	0061615	06/15/10	06/19/10	SM 9221 B, E	
Fecal Coliforms	**110**	20	20	"	10	"	"	06/18/10	"	
Enterococcus	**1700**	20	20	"	"	0061616	"	06/19/10	SM 9230 A, B	

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Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0463

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062237											
Blank (0062237-BLK1)					Prepared & Analyzed: 06/22/10						
Cadmium	ND	0.0002	0.001	mg/l							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
Copper	ND	0.001	0.010	"							
LCS (0062237-BS1)					Prepared & Analyzed: 06/22/10						
Cadmium	0.048	0.0002	0.001	mg/l	0.0500		97	75-125			
Copper	0.049	0.001	0.010	"	0.0500		98	75-125			
Lead	0.049	0.001	0.005	"	0.0500		97	75-125			
Zinc	0.048	0.0003	0.020	"	0.0500		96	75-125			
LCS Dup (0062237-BSD1)					Prepared & Analyzed: 06/22/10						
Cadmium	0.049	0.0002	0.001	mg/l	0.0500		98	75-125	0.6	20	
Copper	0.048	0.001	0.010	"	0.0500		97	75-125	1	20	
Zinc	0.048	0.0003	0.020	"	0.0500		96	75-125	0.6	20	
Lead	0.048	0.001	0.005	"	0.0500		96	75-125	1	20	
Duplicate (0062237-DUP1)			**Source: 10F0464-02**		Prepared & Analyzed: 06/22/10						
Lead	ND	0.001	0.005	mg/l		ND				20	
Copper	ND	0.001	0.010	"		ND				20	
Zinc	0.0007	0.0003	0.020	"		0.0006			5	20	J
Cadmium	ND	0.0002	0.001	"		ND				20	
Matrix Spike (0062237-MS1)			**Source: 10F0464-02**		Prepared & Analyzed: 06/22/10						
Copper	0.045	0.001	0.010	mg/l	0.0500	ND	90	75-125			
Lead	0.047	0.001	0.005	"	0.0500	ND	95	75-125			
Cadmium	0.047	0.0002	0.001	"	0.0500	ND	94	75-125			
Zinc	0.047	0.0003	0.020	"	0.0500	0.0006	94	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0463

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062237											
Matrix Spike Dup (0062237-MSD1)			**Source: 10F0464-02**		Prepared & Analyzed: 06/22/10						
Zinc	0.048	0.0003	0.020	mg/l	0.0500	0.0006	94	75-125	0.2	20	
Cadmium	0.047	0.0002	0.001	"	0.0500	ND	94	75-125	0.2	20	
Lead	0.045	0.001	0.005	"	0.0500	ND	90	75-125	5	20	
Copper	0.045	0.001	0.010	"	0.0500	ND	90	75-125	0.1	20	

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Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0463

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062427											
Blank (0062427-BLK1)					Prepared: 06/21/10	Analyzed: 06/29/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Surrogate: Triphenyl phosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			
Surrogate: Tribuytlphosphate	*0.170*			*"*	*0.250*		*68*	*60-130*			
LCS (0062427-BS1)					Prepared: 06/21/10	Analyzed: 06/29/10					
Bolstar	0.45	0.09	0.10	ug/l	0.500		90	60-130			
Diazinon	0.45	0.04	0.05	"	0.500		90	60-130			
Ethoprop	0.44	0.05	0.05	"	0.500		88	60-130			
Mevinphos	0.47	0.21	0.25	"	0.500		94	60-130			
Methyl parathion	0.43	0.07	0.10	"	0.500		86	60-130			
Phorate	0.47	0.03	0.05	"	0.500		94	60-130			
Ronnel	0.43	0.16	0.25	"	0.500		86	60-130			
Trichlorinate	0.42	0.05	0.05	"	0.500		84	60-130			
Surrogate: Triphenyl phosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			
Surrogate: Tribuytlphosphate	*0.180*			*"*	*0.250*		*72*	*60-130*			
LCS Dup (0062427-BSD1)					Prepared: 06/21/10	Analyzed: 06/29/10					
Bolstar	0.41	0.09	0.10	ug/l	0.500		82	60-130	9	30	
Diazinon	0.44	0.04	0.05	"	0.500		88	60-130	2	30	
Ethoprop	0.44	0.05	0.05	"	0.500		88	60-130	0	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	16	30	
Methyl parathion	0.42	0.07	0.10	"	0.500		84	60-130	2	30	
Phorate	0.41	0.03	0.05	"	0.500		82	60-130	14	30	
Ronnel	0.43	0.16	0.25	"	0.500		86	60-130	0	30	
Trichlorinate	0.41	0.05	0.05	"	0.500		82	60-130	2	30	
Surrogate: Triphenyl phosphate	*0.170*			*"*	*0.250*		*68*	*60-130*			
Surrogate: Tribuytlphosphate	*0.170*			*"*	*0.250*		*68*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0463

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062940											
Blank (0062940-BLK1)					Prepared: 06/22/10	Analyzed: 07/01/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Surrogate: Triphenyl phosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS (0062940-BS1)					Prepared: 06/22/10	Analyzed: 07/01/10					
Bolstar	0.47	0.09	0.10	ug/l	0.500		94	60-130			
Diazinon	0.41	0.04	0.05	"	0.500		82	60-130			
Ethoprop	0.41	0.05	0.05	"	0.500		82	60-130			
Mevinphos	0.41	0.21	0.25	"	0.500		82	60-130			
Methyl parathion	0.52	0.07	0.10	"	0.500		104	60-130			
Phorate	0.45	0.03	0.05	"	0.500		90	60-130			
Ronnel	0.40	0.16	0.25	"	0.500		80	60-130			
Trichlorinate	0.40	0.05	0.05	"	0.500		80	60-130			
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.260*			*"*	*0.250*		*104*	*60-130*			
LCS Dup (0062940-BSD1)					Prepared: 06/22/10	Analyzed: 07/01/10					
Bolstar	0.48	0.09	0.10	ug/l	0.500		96	60-130	2	30	
Diazinon	0.44	0.04	0.05	"	0.500		88	60-130	7	30	
Ethoprop	0.44	0.05	0.05	"	0.500		88	60-130	7	30	
Mevinphos	0.41	0.21	0.25	"	0.500		82	60-130	0	30	
Methyl parathion	0.51	0.07	0.10	"	0.500		102	60-130	2	30	
Phorate	0.43	0.03	0.05	"	0.500		86	60-130	5	30	
Ronnel	0.41	0.16	0.25	"	0.500		82	60-130	2	30	
Trichlorinate	0.41	0.05	0.05	"	0.500		82	60-130	2	30	
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.260*			*"*	*0.250*		*104*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0463

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061820											
Blank (0061820-BLK1)					Prepared: 06/17/10	Analyzed: 06/21/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061820-DUP1)			**Source: 10F0418-01**		Prepared: 06/17/10	Analyzed: 06/21/10					
Hardness (Total)	537	100	100	mg CaCO3/L		503			7	20	
Batch 0062526											
Blank (0062526-BLK1)					Prepared & Analyzed: 06/25/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0062526-BS1)					Prepared & Analyzed: 06/25/10						
Oil & Grease	38	5	5	mg/l	40.0		96	78-114			
LCS Dup (0062526-BSD1)					Prepared & Analyzed: 06/25/10						
Oil & Grease	37	5	5	mg/l	40.0		92	78-114	3	20	
Batch 0062828											
Blank (0062828-BLK1)					Prepared & Analyzed: 06/28/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0062828-BS1)					Prepared & Analyzed: 06/28/10						
Oil & Grease	37	5	5	mg/l	40.0		92	78-114			
LCS Dup (0062828-BSD1)					Prepared & Analyzed: 06/28/10						
Oil & Grease	35	5	5	mg/l	40.0		88	78-114	4	20	

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Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD 10F0463

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: ~~10F0164~~

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Samplers(s): MD/IT
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax (858) 586-6644
Email:
Billing Address: Same

Project ID: Chula Vista DW Monitoring
Project #: 201009W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	(Cd) (Cu) (Pb) Ni Ag (Zn) ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus. ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness				
1	CEN-01	6/15/10	9:30	SW	G/p 2/5	X						X		X				X	X		X			X				
2	SWN-02	"	11:35	"	G/p 2/4	X						X						X	X		X			X				
3	SWN-05	"	12:15	"	G/p 2/4	X						X						X	X		X			X				
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	6-15-10 1325	Signature: [illegible]
Print: Manouchehr Dadkhah		Print: Louis Luna
Company: D-Max Eng.		Company: EMA
Signature: [illegible]	6-15-10 1350	Signature: [illegible]
Print: Louis Luna		Print: Matt Ayden
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments: 6°C on ice

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

02 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0475

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/15/10 16:27. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0475

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SWR-03-E	10F0475-01	Stormwater	06/15/10 14:45	06/15/10 16:27

4904

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0475

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SWR-03-E (10F0475-01) Stormwater Sampled: 06/15/10 14:45 Received: 06/15/10 16:27										
Zinc	**0.016**	0.0003	0.020	mg/l	1	0062237	06/22/10	06/22/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.004**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	

4905

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0475

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SWR-03-E (10F0475-01) Stormwater Sampled: 06/15/10 14:45 Received: 06/15/10 16:27										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0062940	06/22/10	07/01/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*116 %*	*60-130*			"	"	"	"	

4906

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0475

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SWR-03-E (10F0475-01) Stormwater Sampled: 06/15/10 14:45 Received: 06/15/10 16:27										
Hardness (Total)	**302**	100	100	mg CaCO3/L	10	0061820	06/17/10	06/21/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0062828	06/29/10	06/29/10	EPA 1664A	

4907

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0475

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SWR-03-E (10F0475-01) Stormwater Sampled: 06/15/10 14:45 Received: 06/15/10 16:27										
Total Coliforms	**23000**	2000	2000	MPN/100 ml	1000	0061624	06/15/10	06/19/10	SM 9221 B, E	
Fecal Coliforms	**13000**	200	200	"	100	"	"	06/18/10	"	
Enterococcus	**90000**	200	200	"	"	0061626	"	06/19/10	SM 9230 A, B	

4908

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0475

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062237											
Blank (0062237-BLK1)					Prepared & Analyzed: 06/22/10						
Lead	ND	0.001	0.005	mg/l							
Zinc	ND	0.0003	0.020	"							
Copper	ND	0.001	0.010	"							
Cadmium	ND	0.0002	0.001	"							
LCS (0062237-BS1)					Prepared & Analyzed: 06/22/10						
Cadmium	0.048	0.0002	0.001	mg/l	0.0500		97	75-125			
Copper	0.049	0.001	0.010	"	0.0500		98	75-125			
Lead	0.049	0.001	0.005	"	0.0500		97	75-125			
Zinc	0.048	0.0003	0.020	"	0.0500		96	75-125			
LCS Dup (0062237-BSD1)					Prepared & Analyzed: 06/22/10						
Copper	0.048	0.001	0.010	mg/l	0.0500		97	75-125	1	20	
Zinc	0.048	0.0003	0.020	"	0.0500		96	75-125	0.6	20	
Lead	0.048	0.001	0.005	"	0.0500		96	75-125	1	20	
Cadmium	0.049	0.0002	0.001	"	0.0500		98	75-125	0.6	20	
Duplicate (0062237-DUP1)			**Source: 10F0464-02**		Prepared & Analyzed: 06/22/10						
Copper	ND	0.001	0.010	mg/l		ND				20	
Cadmium	ND	0.0002	0.001	"		ND				20	
Lead	ND	0.001	0.005	"		ND				20	
Zinc	0.0007	0.0003	0.020	"		0.0006			5	20	J
Matrix Spike (0062237-MS1)			**Source: 10F0464-02**		Prepared & Analyzed: 06/22/10						
Copper	0.045	0.001	0.010	mg/l	0.0500	ND	90	75-125			
Zinc	0.047	0.0003	0.020	"	0.0500	0.0006	94	75-125			
Cadmium	0.047	0.0002	0.001	"	0.0500	ND	94	75-125			
Lead	0.047	0.001	0.005	"	0.0500	ND	95	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0475

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062237											
Matrix Spike Dup (0062237-MSD1)			**Source: 10F0464-02**		Prepared & Analyzed: 06/22/10						
Zinc	0.048	0.0003	0.020	mg/l	0.0500	0.0006	94	75-125	0.2	20	
Copper	0.045	0.001	0.010	"	0.0500	ND	90	75-125	0.1	20	
Cadmium	0.047	0.0002	0.001	"	0.0500	ND	94	75-125	0.2	20	
Lead	0.045	0.001	0.005	"	0.0500	ND	90	75-125	5	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0475

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062940											
Blank (0062940-BLK1)					Prepared: 06/22/10	Analyzed: 07/01/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Surrogate: Triphenyl phosphate	*0.160*			*"*	*0.250*		*64*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS (0062940-BS1)					Prepared: 06/22/10	Analyzed: 07/01/10					
Bolstar	0.47	0.09	0.10	ug/l	0.500		94	60-130			
Diazinon	0.41	0.04	0.05	"	0.500		82	60-130			
Ethoprop	0.41	0.05	0.05	"	0.500		82	60-130			
Mevinphos	0.41	0.21	0.25	"	0.500		82	60-130			
Methyl parathion	0.52	0.07	0.10	"	0.500		104	60-130			
Phorate	0.45	0.03	0.05	"	0.500		90	60-130			
Ronnel	0.40	0.16	0.25	"	0.500		80	60-130			
Trichlorinate	0.40	0.05	0.05	"	0.500		80	60-130			
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.260*			*"*	*0.250*		*104*	*60-130*			
LCS Dup (0062940-BSD1)					Prepared: 06/22/10	Analyzed: 07/01/10					
Bolstar	0.48	0.09	0.10	ug/l	0.500		96	60-130	2	30	
Diazinon	0.44	0.04	0.05	"	0.500		88	60-130	7	30	
Ethoprop	0.44	0.05	0.05	"	0.500		88	60-130	7	30	
Mevinphos	0.41	0.21	0.25	"	0.500		82	60-130	0	30	
Methyl parathion	0.51	0.07	0.10	"	0.500		102	60-130	2	30	
Phorate	0.43	0.03	0.05	"	0.500		86	60-130	5	30	
Ronnel	0.41	0.16	0.25	"	0.500		82	60-130	2	30	
Trichlorinate	0.41	0.05	0.05	"	0.500		82	60-130	2	30	
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.260*			*"*	*0.250*		*104*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0475

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061820											
Blank (0061820-BLK1)					Prepared: 06/17/10	Analyzed: 06/21/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061820-DUP1)			**Source: 10F0418-01**		Prepared: 06/17/10	Analyzed: 06/21/10					
Hardness (Total)	537	100	100	mg CaCO3/L		503			7	20	
Batch 0062828											
Blank (0062828-BLK1)					Prepared & Analyzed: 06/28/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0062828-BS1)					Prepared & Analyzed: 06/28/10						
Oil & Grease	37	5	5	mg/l	40.0		92	78-114			
LCS Dup (0062828-BSD1)					Prepared & Analyzed: 06/28/10						
Oil & Grease	35	5	5	mg/l	40.0		88	78-114	4	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0475

Client: D-Max Engineering
Attn: Arsalan Dadkah
Samplers(s): MD/IT
Address: 7220 Trade Street #113
SD, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: same

Project ID: Chula Vista DW Monitoring
Project #: 20100W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 X 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn X Dissolved	Coliform. X Total (MTF) X Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness			
1	SWR-03-E	6/15/10	14:45	SW	4/1 2/4	X						X						X	X		X			X			
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day X STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A
Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temp @ Receipt: 5°C
COC/Labels Agree: Yes No N/A
Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature	6/15/10 16:27	Signature
Print: Ian Todd		Print: Joe Leonard
Company: D-Max Engineering		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

02 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0749

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/25/10 16:29. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0749

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SCR-05-1	10F0749-01	Stormwater	06/25/10 15:10	06/25/10 16:29

4916

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0749

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-05-1 (10F0749-01) Stormwater	**Sampled: 06/25/10 15:10**			**Received: 06/25/10 16:29**						
Specific Conductance (EC)	**10200**	1	1	umhos/cm	1	0070227	07/02/10	07/02/10	SM2510 B	
Methylene Blue Active Substances	**0.3**	0.1	0.5	mg/l	"	0062601	06/26/10	06/26/10	SM5540 C	J
Nitrate as N	**194**	2.25	12.5	"	250	0062901	06/29/10	06/29/10	SM4500 NO3 E	W-02
Nitrate/Nitrite as N	**194**	2.25	12.5	"	"	"	"	"	"	
Nitrite as N	ND	0.007	0.05	"	1	0062501	06/26/10	06/26/10	SM4500 NO2 B	
Total Kjeldahl Nitrogen	**1.0**	0.3	0.5	"	"	0063003	06/30/10	06/30/10	SM4500 N C	
Total Nitrogen	**195**	0.5	0.5	"	"	0070133	06/30/10	"	Calculation	

4917

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0749

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062501											
Blank (0062501-BLK1)					Prepared & Analyzed: 06/25/10						
Nitrite as N	ND	0.007	0.05	mg/l							
LCS (0062501-BS1)					Prepared & Analyzed: 06/25/10						
Nitrite as N	0.10	0.007	0.05	mg/l	0.100		105	80-120			
LCS Dup (0062501-BSD1)					Prepared & Analyzed: 06/25/10						
Nitrite as N	0.11	0.007	0.05	mg/l	0.100		107	80-120	2	20	
Duplicate (0062501-DUP1)			**Source: 10F0715-01**		Prepared & Analyzed: 06/25/10						
Nitrite as N	ND	0.007	0.05	mg/l		ND				20	
Matrix Spike (0062501-MS1)			**Source: 10F0715-01**		Prepared & Analyzed: 06/25/10						
Nitrite as N	0.08	0.007	0.05	mg/l	0.100	ND	85	80-120			
Matrix Spike Dup (0062501-MSD1)			**Source: 10F0715-01**		Prepared & Analyzed: 06/25/10						
Nitrite as N	0.09	0.007	0.05	mg/l	0.100	ND	89	80-120	5	20	
Batch 0062601											
Blank (0062601-BLK1)					Prepared & Analyzed: 06/26/10						
Methylene Blue Active Substances	ND	0.1	0.5	mg/l							
LCS (0062601-BS1)					Prepared & Analyzed: 06/26/10						
Methylene Blue Active Substances	1.0	0.1	0.5	mg/l	1.00		104	80-120			
LCS Dup (0062601-BSD1)					Prepared & Analyzed: 06/26/10						
Methylene Blue Active Substances	1.0	0.1	0.5	mg/l	1.00		99	80-120	5	20	

4918

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0749

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062601											
Duplicate (0062601-DUP1)			**Source: 10F0749-01**		Prepared & Analyzed: 06/26/10						
Methylene Blue Active Substances	0.3	0.1	0.5	mg/l		0.3			2	20	J
Matrix Spike (0062601-MS1)			**Source: 10F0749-01**		Prepared & Analyzed: 06/26/10						
Methylene Blue Active Substances	1.3	0.1	0.5	mg/l	1.00	0.3	103	80-120			
Matrix Spike Dup (0062601-MSD1)			**Source: 10F0749-01**		Prepared & Analyzed: 06/26/10						
Methylene Blue Active Substances	1.3	0.1	0.5	mg/l	1.00	0.3	100	80-120	3	20	
Batch 0062901											
Blank (0062901-BLK1)					Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l							
Nitrate as N	ND	0.009	0.05	"							
LCS (0062901-BS1)					Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	0.50	0.009	0.05	mg/l	0.500		99	80-120			
Nitrate as N	0.50	0.009	0.05	"	0.500		99	80-120			
LCS Dup (0062901-BSD1)					Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	0.48	0.009	0.05	mg/l	0.500		96	80-120	3	20	
Nitrate as N	0.48	0.009	0.05	"	0.500		96	80-120	3	20	
Duplicate (0062901-DUP1)			**Source: 10F0766-02**		Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l		ND				20	
Nitrate as N	ND	0.009	0.05	"		ND				20	
Matrix Spike (0062901-MS1)			**Source: 10F0766-02**		Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	0.57	0.009	0.05	mg/l	0.500	ND	114	80-120			
Nitrate as N	0.57	0.009	0.05	"	0.500	ND	114	80-120			

4919

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0749

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062901											
Matrix Spike Dup (0062901-MSD1)			**Source: 10F0766-02**		Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	0.52	0.009	0.05	mg/l	0.500	ND	104	80-120	8	20	
Nitrate as N	0.52	0.009	0.05	"	0.500	ND	104	80-120	8	20	
Reference (0062901-SRM1)					Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	0.46	0.009	0.05	mg/l	0.442		105	4.16-115.1			
Nitrate as N	0.46	0.009	0.05	"	0.442		105	0.05-108.3			
Batch 0063003											
Blank (0063003-BLK1)					Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	ND	0.3	0.5	mg/l							
LCS (0063003-BS1)					Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	3.4	0.3	0.5	mg/l	4.10		83	80-120			
LCS Dup (0063003-BSD1)					Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	3.8	0.3	0.5	mg/l	4.10		93	80-120	11	20	
Duplicate (0063003-DUP1)			**Source: 10F0533-03**		Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	0.4	0.3	0.5	mg/l		0.6			34	20	QR-06, J
Matrix Spike (0063003-MS1)			**Source: 10F0533-03**		Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	4.0	0.3	0.5	mg/l	4.10	0.6	85	80-120			
Matrix Spike Dup (0063003-MSD1)			**Source: 10F0533-03**		Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	4.1	0.3	0.5	mg/l	4.10	0.6	88	80-120	2	20	

4920

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0749

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0070227											
Duplicate (0070227-DUP1)			**Source: 10G0040-01**		Prepared & Analyzed: 07/02/10						
Specific Conductance (EC)	2290	1	1	umhos/cm		2290			0	20	
Reference (0070227-SRM1)					Prepared & Analyzed: 07/02/10						
Specific Conductance (EC)	366	1	1	umhos/cm	379		97	95.8-104.2			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

W-02	The sample for nitrate analysis was preserved with H2SO4 after the nitrite portion of the analysis was completed to extend the holding time for the sample. Nitrate results are corrected for the nitrite contribution per the method.
QR-06	The RPD value was exceeded due to the sample concentration being less than 10 times the reporting limit. The QC batch was accepted based on the LCS or QCS results.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0749

Client: D-Max Engineering Inc.
Attn: Arsalan Dadkhah
Samplers(s): MD / BM
Address: 7220 Trade St. Suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: same

Project ID: Chula Vista Dry Weather Monitoring
Project #: 201009 W-1 PO #:

JUN 25 '10 16:49

Requested Analysis

JD #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH ☒ EC □ TSS □ TDS	☒ Nitrate ☒ Nitrite ☒ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform. □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Nitrogen	MBAS			
1	SCR-05-1	6/25/10	1510	SW	2P/1G									X	X								X	X			
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	6/25/10 1629	Signature:
Print: Manouchehr Dadkhah		Print: Matt Guyen
Company: D-Max Eng.		Company: EMA
Signature:		Signature:
Print:		Print:
Company:		Company:
Signature:		Signature:
Print:		Print:
Company:		Company:

Project/Sample Comments:

3° on ice

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

06 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0872

Project Name: Chula Vista Dry Weather
Project Desc./#: 2010009W-2

Enclosed are the results of analyses for samples received by the laboratory on 06/30/10 16:47. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0872

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JUD-01	10F0872-01	Stormwater	06/30/10 14:50	06/30/10 16:47
JUD-02	10F0872-02	Stormwater	06/30/10 15:15	06/30/10 16:47
PRD-02	10F0872-03	Stormwater	06/30/10 15:40	06/30/10 16:47
SWR-03-F	10F0872-04	Stormwater	06/30/10 16:15	06/30/10 16:47

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0872

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-01 (10F0872-01) Stormwater Sampled: 06/30/10 14:50 Received: 06/30/10 16:47										
Total Coliforms	**7700**	10	10	MPN/100 ml	10	0070125	06/30/10	07/01/10	SM9223	
E. Coli	**2060**	10	10	"	"	"	"	"	"	
Enterococcus	**2098**	10	10	"	"	0070126	06/30/10	07/01/10	Idexx	
JUD-02 (10F0872-02) Stormwater Sampled: 06/30/10 15:15 Received: 06/30/10 16:47										
Enterococcus	**683**	10	10	MPN/100 ml	10	0070126	06/30/10	07/01/10	Idexx	
PRD-02 (10F0872-03) Stormwater Sampled: 06/30/10 15:40 Received: 06/30/10 16:47										
Total Coliforms	**173000**	100	100	MPN/100 ml	100	0070125	06/30/10	07/01/10	SM9223	
E. Coli	**727**	10	10	"	10	"	"	"	"	
SWR-03-F (10F0872-04) Stormwater Sampled: 06/30/10 16:15 Received: 06/30/10 16:47										
Total Coliforms	**308000**	1000	1000	MPN/100 ml	1000	0070125	06/30/10	07/01/10	SM9223	
E. Coli	**86600**	100	100	"	100	"	"	"	"	
Enterococcus	**92080**	100	100	"	"	0070126	06/30/10	07/01/10	Idexx	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0872

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0872

Client: D-Max Engineering
Attn: Arsalan Nadkhah
Samplers(s): MD/BM
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: Same

Project ID: Chula Vista Dry Weather Follow up
Project #: 201009W-2 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform. □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A ☒ Enumeration	Enterococcus, □ MTF ☒ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide					
1	JUD-01	6/30/10	14:50	SW	2P															X	X							
2	JUD-02	~	15:15	~	1P																X							
3	PRD-02	~	15:40	~	1P															X								
4	SWR-03-F	~	16:15	~	2P															X	X							
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A
Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temp @ Receipt: 5°C
COC Labels Agree: Yes No N/A
Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	6/30/10 16:47	Signature
Print: Manouchehr Dadkhah		Print: Joe Lenard
Company: D-Max Eng.		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

09 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0059

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-2

Enclosed are the results of analyses for samples received by the laboratory on 07/02/10 14:50. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10G0059

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SCR-01	10G0059-01	Stormwater	07/02/10 11:45	07/02/10 14:50
SCR-01-1	10G0059-02	Stormwater	07/02/10 12:30	07/02/10 14:50
POG-02	10G0059-03	Stormwater	07/02/10 12:55	07/02/10 14:50
POG-02-1	10G0059-04	Stormwater	07/02/10 13:10	07/02/10 14:50
POG-02-2	10G0059-05	Stormwater	07/02/10 13:15	07/02/10 14:50

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10G0059

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (10G0059-01) Stormwater Sampled: 07/02/10 11:45 Received: 07/02/10 14:50										
Enterococcus	**24890**	100	100	MPN/100 ml	100	0070319	07/02/10	07/03/10	Idexx	
SCR-01-1 (10G0059-02) Stormwater Sampled: 07/02/10 12:30 Received: 07/02/10 14:50										
Enterococcus	**57940**	100	100	MPN/100 ml	100	0070319	07/02/10	07/03/10	Idexx	
POG-02 (10G0059-03) Stormwater Sampled: 07/02/10 12:55 Received: 07/02/10 14:50										
Total Coliforms	**242000**	100	100	MPN/100 ml	100	0070320	07/02/10	07/03/10	SM9223	
E. Coli	**958**	10	10	"	10	"	"	"	"	
POG-02-1 (10G0059-04) Stormwater Sampled: 07/02/10 13:10 Received: 07/02/10 14:50										
Total Coliforms	**548000**	1000	1000	MPN/100 ml	1000	0070320	07/02/10	07/03/10	SM9223	
E. Coli	**2380**	10	10	"	10	"	"	"	"	
POG-02-2 (10G0059-05) Stormwater Sampled: 07/02/10 13:15 Received: 07/02/10 14:50										
Total Coliforms	**72700**	100	100	MPN/100 ml	100	0070320	07/02/10	07/03/10	SM9223	
E. Coli	**146**	10	10	"	10	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10G0059

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10G0059

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Samplers(s): MD/BM
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: Same

Project ID: Chula Vista Dry Weather Follow up
Project #: 20100 9W-2 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform. □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A ~~#~~ Enumeration	Enterococcus, □ MTF ~~#~~ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide				
1	SCR-01	7/2/10	11:45	SW	1 P																X						
2	SCR-01-1	~	12:30	~	1 P																X						
3	POG-02	~	12:55	~	1 P															X							
4	POG-02-1	~	13:10	~	1 P															X							
5	POG-02-2		13:15	~	1 P															X							
6																											
7																											
8																											
9																											
10																											

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	7/2/10	Signature: [illegible]
Print: Manouchehr Dadkhah	1450	Print: Tim Tiffs
Company: D-Max Engineering		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

3°C on ice

EnviroMatrix Analytical, Inc.

06 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0867

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-2

Enclosed are the results of analyses for samples received by the laboratory on 06/30/10 14:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0867

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CEN-01	10F0867-01	Stormwater	06/30/10 10:40	06/30/10 14:00
SVS-01	10F0867-02	Stormwater	06/30/10 11:55	06/30/10 14:00
SCR-01	10F0867-03	Stormwater	06/30/10 12:35	06/30/10 14:00
POG-02	10F0867-04	Stormwater	06/30/10 13:10	06/30/10 14:00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0867

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-01 (10F0867-01) Stormwater Sampled: 06/30/10 10:40 Received: 06/30/10 14:00										
Total Coliforms	**54800**	100	100	MPN/100 ml	100	0070130	06/30/10	07/01/10	SM9223	
E. Coli	**2400**	10	10	"	10	"	"	"	"	
Enterococcus	**6488**	10	10	"	"	0070145	"	"	Idexx	
SVS-01 (10F0867-02) Stormwater Sampled: 06/30/10 11:55 Received: 06/30/10 14:00										
Total Coliforms	**37800**	100	100	MPN/100 ml	100	0070130	06/30/10	07/01/10	SM9223	
E. Coli	**323**	10	10	"	10	"	"	"	"	
SCR-01 (10F0867-03) Stormwater Sampled: 06/30/10 12:35 Received: 06/30/10 14:00										
Total Coliforms	**130000**	100	100	MPN/100 ml	100	0070130	06/30/10	07/01/10	SM9223	
E. Coli	**6130**	10	10	"	10	"	"	"	"	
Enterococcus	**10462**	10	10	"	"	0070145	"	"	Idexx	
POG-02 (10F0867-04) Stormwater Sampled: 06/30/10 13:10 Received: 06/30/10 14:00										
Total Coliforms	**173000**	100	100	MPN/100 ml	100	0070130	06/30/10	07/01/10	SM9223	
E. Coli	**2850**	10	10	"	10	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10F0867

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0567

Client: D-Max Engineering Inc
Attn: Arslan Dadkhah
Samplers(s): MD/BM
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: 858-588-6600 Fax: 858-586-6644
Email:
Billing Address: same

Project ID: Chula Vista Dry Weather Follow-up
Project #: 201009W-2 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform. □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A ☒ Enumeration	Enterococcus, □ MTF ☒ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide					
1	CEM-01	6/30/10	10:40	SW	2P															X	X							
2	SVS-01	"	11:55	SW	1P															X								
3	SCR-01	"	12:35	SW	2P															X	X							
4	POG-02	"	13:10	SW	1P															X								
5																												
6																												
7																												
8																												
9																												
10																												

JUL 30 '10 14:13

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	6/30/10 13:45	Signature: Kelly Lynch
Print: Manouchehr Dadkhah		Print: Kelly Lynch
Company: D-Max Eng		Company: EMA
Signature: Kelly Lynch	6/30/10 14:00	Signature:
Print: Kelly Lynch		Print: Matt Leyden
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=5°C

09 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0060

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-2

Enclosed are the results of analyses for samples received by the laboratory on 07/02/10 16:15. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10G0060

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PRD-02	10G0060-01	Stormwater	07/02/10 14:40	07/02/10 16:15

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10G0060

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PRD-02 (10G0060-01) Stormwater	**Sampled: 07/02/10 14:40**	**Received: 07/02/10 16:15**								
Total Coliforms	**64900**	100	100	MPN/100 ml	100	0070320	07/02/10	07/03/10	SM9223	
E. Coli	**428**	10	10	"	10	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10G0060

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10G0060
Client: D-Max Engineering
Attn: Arsalan Dadkhah
Samplers(s): MD/BM
Address: 7220 Trade St. Ste. 119
San Diego, CA 92121
Phone: (858) 586-1600 Fax: (858) 586-1044
Email:
Billing Address: Same
Project ID: Chula Vista Dry Weather Follow Up
Project #: 201009W-2 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform. □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A ☒ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide					
1	PRD-02	7/2/10	14:40	SW	1P															X								
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: BCM	7/2/10 1615	Signature:
Print: Brianna Martin		Print: Matt Curcen
Company: D-Max Engineering		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

6 c on ice

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

12 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0113

Project Name: Chula Vista Dry Weather
Project Desc./#: 201009W-2

Enclosed are the results of analyses for samples received by the laboratory on 07/06/10 13:14. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10G0113

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SWR-03-E	10G0113-01	Stormwater	07/06/10 10:00	07/06/10 13:14
SWR-03-E-1	10G0113-02	Stormwater	07/06/10 11:15	07/06/10 13:14

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10G0113

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SWR-03-E (10G0113-01) Stormwater Sampled: 07/06/10 10:00 Received: 07/06/10 13:14										
Total Coliforms	**46100**	100	100	MPN/100 ml	100	0070719	07/06/10	07/07/10	SM9223	
E. Coli	**2380**	10	10	"	10	"	"	"	"	
Enterococcus	**6488**	10	10	"	"	0070720	"	"	Idexx	
SWR-03-E-1 (10G0113-02) Stormwater Sampled: 07/06/10 11:15 Received: 07/06/10 13:14										
Total Coliforms	**112000**	100	100	MPN/100 ml	100	0070719	07/06/10	07/07/10	SM9223	
E. Coli	**1350**	10	10	"	10	"	"	"	"	
Enterococcus	**10462**	10	10	"	"	0070720	"	"	Idexx	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista Dry Weather

EMA Log #: 10G0113

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 1060113

Client: D-Max Engineering
Attn: Arsalan Darkhan
Samplers(s): MD/BM
Address: 7220 Trade St Ste. 119
San Diego, CA 92121
Phone: (858) 586-16600 Fax: (858) 586-16644
Email:
Billing Address: same

Project ID: Chula Vista Dry Weather Follow Up
Project #: 20100W-2 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform. □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A ☒ Enumeration	Enterococcus, □ MTF ☒ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide					
1	SWR-03-E	7/6/10	10:00	SW	2P															X	X							
2	SWR-03-E-1	7/6/10	11:15	SW	2P															X	X							
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: BM	7/6/10 12:45	Signature: Kelly Leyden
Print: Brianna Martin		Print: Kelly Leyden
Company: D-Max Engineering		Company: EMA
Signature: Kelly Leyden	7/6/10 13:14	Signature: [illegible]
Print: Kelly Leyden		Print: Matt Leyden
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=4°C on ice

MS4 Reports

EnviroMatrix Analytical, Inc.

21 June 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0320

Project Name: Chula Vista MS4 Monitoring

Enclosed are the results of analyses for samples received by the laboratory on 06/09/10 14:55. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0320

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BAY-01	10F0320-01	Stormwater	06/09/10 10:30	06/09/10 14:55
SUN-06	10F0320-02	Stormwater	06/09/10 12:00	06/09/10 14:55
TCC-03	10F0320-03	Stormwater	06/09/10 13:40	06/09/10 14:55

4951

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0320

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BAY-01 (10F0320-01) Stormwater Sampled: 06/09/10 10:30 Received: 06/09/10 14:55										
Cadmium	**0.0003**	0.0002	0.001	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Copper	**0.010**	0.001	0.010	"	"	"	"	"	"	
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.059**	0.0003	0.020	"	"	"	"	"	"	
SUN-06 (10F0320-02) Stormwater Sampled: 06/09/10 12:00 Received: 06/09/10 14:55										
Copper	**0.003**	0.001	0.010	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.002**	0.0003	0.020	"	"	"	"	"	"	J
TCC-03 (10F0320-03) Stormwater Sampled: 06/09/10 13:40 Received: 06/09/10 14:55										
Cadmium	**0.0002**	0.0002	0.001	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Zinc	**0.002**	0.0003	0.020	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	06/15/10	"	
Copper	**0.002**	0.001	0.010	"	"	"	"	06/14/10	"	J

4952

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0320

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BAY-01 (10F0320-01) Stormwater Sampled: 06/09/10 10:30 Received: 06/09/10 14:55										
Hardness (Total)	**260**	100	100	mg CaCO3/L	10	0061107	06/10/10	06/15/10	EPA 200.7	
SUN-06 (10F0320-02) Stormwater Sampled: 06/09/10 12:00 Received: 06/09/10 14:55										
Hardness (Total)	**904**	100	100	mg CaCO3/L	10	0061107	06/10/10	06/15/10	EPA 200.7	
Total Dissolved Solids	**3390**	1.0	20.0	mg/l	1	0061425	06/14/10	06/15/10	SM2540 C	
TCC-03 (10F0320-03) Stormwater Sampled: 06/09/10 13:40 Received: 06/09/10 14:55										
Hardness (Total)	**1390**	100	100	mg CaCO3/L	10	0061107	06/10/10	06/15/10	EPA 200.7	
Total Dissolved Solids	**4390**	1.0	20.0	mg/l	1	0061425	06/14/10	06/15/10	SM2540 C	

4953

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0320

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BAY-01 (10F0320-01) Stormwater Sampled: 06/09/10 10:30 Received: 06/09/10 14:55										
Total Coliforms	**130000**	2000	2000	MPN/100 ml	1000	0061027	06/09/10	06/13/10	SM 9221 B, E	
Fecal Coliforms	**1700**	20	20	"	10	"	"	06/12/10	"	
Enterococcus	**3500**	20	20	"	"	0061028	"	06/13/10	SM 9230 A, B	
SUN-06 (10F0320-02) Stormwater Sampled: 06/09/10 12:00 Received: 06/09/10 14:55										
Total Coliforms	**3000**	200	200	MPN/100 ml	100	0061027	06/09/10	06/13/10	SM 9221 B, E	
Fecal Coliforms	**170**	20	20	"	10	"	"	06/12/10	"	
Enterococcus	**170**	20	20	"	"	0061028	"	06/13/10	SM 9230 A, B	
TCC-03 (10F0320-03) Stormwater Sampled: 06/09/10 13:40 Received: 06/09/10 14:55										
Total Coliforms	**3000**	200	200	MPN/100 ml	100	0061027	06/09/10	06/13/10	SM 9221 B, E	
Fecal Coliforms	**500**	20	20	"	10	"	"	06/12/10	"	
Enterococcus	**170**	20	20	"	"	0061028	"	06/13/10	SM 9230 A, B	

4954

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0320

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Blank (0061435-BLK1)					Prepared & Analyzed: 06/14/10						
Cadmium	ND	0.0002	0.001	mg/l							
Copper	ND	0.001	0.010	"							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
LCS (0061435-BS1)					Prepared & Analyzed: 06/14/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500		92	75-125			
Copper	0.047	0.001	0.010	"	0.0500		94	75-125			
Lead	0.048	0.001	0.005	"	0.0500		97	75-125			
Zinc	0.046	0.0003	0.020	"	0.0500		92	75-125			
LCS Dup (0061435-BSD1)					Prepared & Analyzed: 06/14/10						
Lead	0.049	0.001	0.005	mg/l	0.0500		97	75-125	0.3	20	
Copper	0.047	0.001	0.010	"	0.0500		94	75-125	0.3	20	
Zinc	0.050	0.0003	0.020	"	0.0500		99	75-125	8	20	
Cadmium	0.046	0.0002	0.001	"	0.0500		93	75-125	0.1	20	
Duplicate (0061435-DUP1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Copper	0.001	0.001	0.010	mg/l		0.001			11	20	J
Lead	ND	0.001	0.005	"		ND				20	
Zinc	0.002	0.0003	0.020	"		0.003			2	20	J
Cadmium	0.0002	0.0002	0.001	"		ND				20	J
Matrix Spike (0061435-MS1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Lead	0.048	0.001	0.005	mg/l	0.0500	ND	97	75-125			
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125			
Copper	0.041	0.001	0.010	"	0.0500	0.001	79	75-125			
Cadmium	0.040	0.0002	0.001	"	0.0500	ND	80	75-125			

4955

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0320

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Matrix Spike Dup (0061435-MSD1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Zinc	0.040	0.0003	0.020	mg/l	0.0500	0.003	75	75-125	0.6	20	
Copper	0.042	0.001	0.010	"	0.0500	0.001	82	75-125	3	20	
Lead	0.047	0.001	0.005	"	0.0500	ND	94	75-125	3	20	
Cadmium	0.041	0.0002	0.001	"	0.0500	ND	81	75-125	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0320

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061107											
Blank (0061107-BLK1)					Prepared: 06/10/10		Analyzed: 06/15/10				
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061107-DUP1)			**Source: 10F0326-01**		Prepared: 06/10/10		Analyzed: 06/15/10				
Hardness (Total)	311	100	100	mg CaCO3/L		313			0.6	20	
Batch 0061425											
Blank (0061425-BLK1)					Prepared: 06/14/10		Analyzed: 06/15/10				
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0061425-DUP1)			**Source: 10F0300-01**		Prepared: 06/14/10		Analyzed: 06/15/10				
Total Dissolved Solids	1040	1.0	20.0	mg/l		1050			1	20	
Reference (0061425-SRM1)					Prepared: 06/14/10		Analyzed: 06/15/10				
Total Dissolved Solids	290	1.0	20.0	mg/l	269		108	87-113			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0320

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0320

Client: D-Max Engineering Inc
Attn: Arsalan Dadkhah
Samplers(s): MD / JB
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: Same

Project ID: Chula Vista MS4 Monitoring
Project #: 201009W-3 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn Dissolved	Coliform. Total (MTF) Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness				
1	BAY-01	6/9/10	10:30	SW	4P													X	X		X			X				
2	SUN-06	"	12:00	SW	5P									X				X	X		X			X				
3	TCC-03	"	13:40	"	5P									X				X	X		X			X				
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	6/9/10 14:35	Signature: Kelly Reyes
Print: Manouchehr Dadkhah		Print: Kelly Reyes
Company: D-Max Eng.		Company: EMA
Signature: Kelly Reyes	6/9/10 14:55	Signature:
Print: Kelly Reyes		Print: Matt Cayen
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 3°C on ice

EnviroMatrix Analytical, Inc.

28 June 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0339

Project Name: Chula Vista MS4 Monitoring
Project Desc./#: 201009W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/10/10 13:29. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A • San Diego, California 92123 • (858) 560-7717 • Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0339

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
JUD-01	10F0339-01	Stormwater	06/10/10 11:20	06/10/10 13:29
PRD-02	10F0339-02	Stormwater	06/10/10 12:15	06/10/10 13:29

4961

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0339

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-01 (10F0339-01) Stormwater Sampled: 06/10/10 11:20 Received: 06/10/10 13:29										
Zinc	**0.016**	0.0003	0.020	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
Copper	**0.006**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
PRD-02 (10F0339-02) Stormwater Sampled: 06/10/10 12:15 Received: 06/10/10 13:29										
Zinc	**0.031**	0.0003	0.020	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Cadmium	**0.0002**	0.0002	0.001	"	"	"	"	"	"	J
Copper	**0.009**	0.001	0.010	"	"	"	"	"	"	J

4962

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0339

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-01 (10F0339-01) Stormwater Sampled: 06/10/10 11:20 Received: 06/10/10 13:29										
Hardness (Total)	**313**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
PRD-02 (10F0339-02) Stormwater Sampled: 06/10/10 12:15 Received: 06/10/10 13:29										
Hardness (Total)	**570**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	

4963

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0339

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
JUD-01 (10F0339-01) Stormwater Sampled: 06/10/10 11:20 Received: 06/10/10 13:29										
Total Coliforms	**30000**	2000	2000	MPN/100 ml	1000	0061112	06/10/10	06/14/10	SM 9221 B, E	
Fecal Coliforms	**13000**	200	200	"	100	"	"	06/13/10	"	
Enterococcus	**8000**	200	200	"	"	0061113	"	06/14/10	SM 9230 A, B	
PRD-02 (10F0339-02) Stormwater Sampled: 06/10/10 12:15 Received: 06/10/10 13:29										
Total Coliforms	**80000**	2000	2000	MPN/100 ml	1000	0061112	06/10/10	06/14/10	SM 9221 B, E	
Fecal Coliforms	**22000**	200	200	"	100	"	"	06/13/10	"	
Enterococcus	**3000**	200	200	"	"	0061113	"	06/14/10	SM 9230 A, B	

4964

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0339

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Blank (0061435-BLK1)					Prepared & Analyzed: 06/14/10						
Copper	ND	0.001	0.010	mg/l							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
Cadmium	ND	0.0002	0.001	"							
LCS (0061435-BS1)					Prepared & Analyzed: 06/14/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500		92	75-125			
Copper	0.047	0.001	0.010	"	0.0500		94	75-125			
Lead	0.048	0.001	0.005	"	0.0500		97	75-125			
Zinc	0.046	0.0003	0.020	"	0.0500		92	75-125			
LCS Dup (0061435-BSD1)					Prepared & Analyzed: 06/14/10						
Zinc	0.050	0.0003	0.020	mg/l	0.0500		99	75-125	8	20	
Cadmium	0.046	0.0002	0.001	"	0.0500		93	75-125	0.1	20	
Copper	0.047	0.001	0.010	"	0.0500		94	75-125	0.3	20	
Lead	0.049	0.001	0.005	"	0.0500		97	75-125	0.3	20	
Duplicate (0061435-DUP1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Copper	0.001	0.001	0.010	mg/l		0.001			11	20	J
Lead	ND	0.001	0.005	"		ND				20	
Zinc	0.002	0.0003	0.020	"		0.003			2	20	J
Cadmium	0.0002	0.0002	0.001	"		ND				20	J
Matrix Spike (0061435-MS1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.040	0.0002	0.001	mg/l	0.0500	ND	80	75-125			
Copper	0.041	0.001	0.010	"	0.0500	0.001	79	75-125			
Lead	0.048	0.001	0.005	"	0.0500	ND	97	75-125			
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125			

4965

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0339

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Matrix Spike Dup (0061435-MSD1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.041	0.0002	0.001	mg/l	0.0500	ND	81	75-125	2	20	
Copper	0.042	0.001	0.010	"	0.0500	0.001	82	75-125	3	20	
Lead	0.047	0.001	0.005	"	0.0500	ND	94	75-125	3	20	
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125	0.6	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0339

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061605											
Blank (0061605-BLK1)					Prepared: 06/15/10	Analyzed: 06/17/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061605-DUP1)			**Source: 10F0353-01**		Prepared: 06/15/10	Analyzed: 06/17/10					
Hardness (Total)	257	100	100	mg CaCO3/L		271			5	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0339

Client: D-Max Engineering
Attn: Arsalan Daddkhah
Samplers(s): MD/JB
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 856-586-6644
Email:
Billing Address: Same

Project ID: Chula Vista DW monitoring
Project #: 920100 9W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness				
1	JUD-01	6/10/10	11:20	SW	2/4/4 G	X						X						X	X		X			X				
2	PRD-02	"	12:15	"	"	X						X						X	X		X			X				
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

JUN 10 10 13:50

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Daddkhah	6/10/10 13:10	Signature: Kelly Leyden
Print: Manouchehr Daddkhah		Print: Kelly Leyden
Company: D-Max Engi		Company: EMA
Signature: Kelly Leyden	6/10/10 13:29	Signature:
Print: Kelly Leyden		Print: Matt Leyden
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T-5°C on Ice

EnviroMatrix Analytical, Inc.

29 June 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0375

Project Name: Chula Vista MS4 Monitoring
Project Desc./#: 201009W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/11/10 13:48. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A • San Diego, California 92123 • (858) 560-7717 • Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0375

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TCC-04	10F0375-01	Stormwater	06/11/10 10:20	06/11/10 13:48

4971

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0375

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TCC-04 (10F0375-01) Stormwater Sampled: 06/11/10 10:20 Received: 06/11/10 13:48										
Zinc	**0.003**	0.0003	0.020	mg/l	1	0061531	06/15/10	06/15/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	

4972

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0375

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TCC-04 (10F0375-01) Stormwater Sampled: 06/11/10 10:20 Received: 06/11/10 13:48										
Hardness (Total)	**1710**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Total Dissolved Solids	**3770**	1.0	20.0	mg/l	1	0061425	06/14/10	06/15/10	SM2540 C	

4973

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0375

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TCC-04 (10F0375-01) Stormwater Sampled: 06/11/10 10:20 Received: 06/11/10 13:48										
Total Coliforms	**5000**	200	200	MPN/100 ml	100	0061412	06/11/10	06/15/10	SM 9221 B, E	
Fecal Coliforms	**700**	20	20	"	10	"	"	06/14/10	"	
Enterococcus	**140**	20	20	"	"	0061413	"	06/15/10	SM 9230 A, B	

4974

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0375

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061531											
Blank (0061531-BLK1)					Prepared & Analyzed: 06/15/10						
Cadmium	ND	0.0002	0.001	mg/l							
Copper	ND	0.001	0.010	"							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
LCS (0061531-BS1)					Prepared & Analyzed: 06/15/10						
Cadmium	0.047	0.0002	0.001	mg/l	0.0500		95	75-125			
Copper	0.049	0.001	0.010	"	0.0500		98	75-125			
Lead	0.048	0.001	0.005	"	0.0500		95	75-125			
Zinc	0.047	0.0003	0.020	"	0.0500		94	75-125			
LCS Dup (0061531-BSD1)					Prepared & Analyzed: 06/15/10						
Zinc	0.052	0.0003	0.020	mg/l	0.0500		105	75-125	11	20	
Cadmium	0.052	0.0002	0.001	"	0.0500		104	75-125	10	20	
Copper	0.052	0.001	0.010	"	0.0500		105	75-125	6	20	
Lead	0.051	0.001	0.005	"	0.0500		102	75-125	7	20	
Duplicate (0061531-DUP1)			**Source: 10F0318-01**		Prepared & Analyzed: 06/15/10						
Cadmium	ND	0.0002	0.001	mg/l		ND				20	
Lead	ND	0.001	0.005	"		ND				20	
Zinc	ND	0.0003	0.020	"		ND				20	
Copper	ND	0.001	0.010	"		ND				20	
Matrix Spike (0061531-MS1)			**Source: 10F0318-01**		Prepared & Analyzed: 06/15/10						
Lead	0.049	0.001	0.005	mg/l	0.0500	ND	97	75-125			
Zinc	0.045	0.0003	0.020	"	0.0500	ND	90	75-125			
Copper	0.045	0.001	0.010	"	0.0500	ND	90	75-125			
Cadmium	0.046	0.0002	0.001	"	0.0500	ND	92	75-125			

4975

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0375

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061531											
Matrix Spike Dup (0061531-MSD1)			**Source: 10F0318-01**		Prepared & Analyzed: 06/15/10						
Copper	0.044	0.001	0.010	mg/l	0.0500	ND	89	75-125	1	20	
Lead	0.054	0.001	0.005	"	0.0500	ND	108	75-125	11	20	
Zinc	0.044	0.0003	0.020	"	0.0500	ND	89	75-125	1	20	
Cadmium	0.046	0.0002	0.001	"	0.0500	ND	91	75-125	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0375

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061425											
Blank (0061425-BLK1)					Prepared: 06/14/10		Analyzed: 06/15/10				
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0061425-DUP1)			**Source: 10F0300-01**		Prepared: 06/14/10		Analyzed: 06/15/10				
Total Dissolved Solids	1040	1.0	20.0	mg/l		1050			1	20	
Reference (0061425-SRM1)					Prepared: 06/14/10		Analyzed: 06/15/10				
Total Dissolved Solids	290	1.0	20.0	mg/l	269		108	87-113			
Batch 0061605											
Blank (0061605-BLK1)					Prepared: 06/15/10		Analyzed: 06/17/10				
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061605-DUP1)			**Source: 10F0353-01**		Prepared: 06/15/10		Analyzed: 06/17/10				
Hardness (Total)	257	100	100	mg CaCO3/L		271			5	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0375

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0375

Client: D-MAX Engineering
Attn: Arsalan Dadkhah
Samplers(s): MD / JB
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: same

Project ID: Chula Vista DW Monitoring
Project #: 201009W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness				
1	TCC-04	6/11/10	10:20	SW	G/p 2/5	X						X		X				X	X		X			X				
2	POG-02	~	11:30	~	G/p 2/4	X						X						X	X		X			X				
3	RCC-01	~	12:30	~	G/p 2/4	X						X						X	X		X			X				
4																												
5																												
6																												
7																												
8																												
9																												
10																												

JUN 11 '10 13:00

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	6/11/10 1:25	Signature:
Print: Manouchehr Dadkhah		Print: Ross Pipper
Company: D-Max Eng.		Company: EMA
Signature:	6/11/10 1348	Signature:
Print: Ross Pipper		Print: Matt Ceylan
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

5°C on ICE

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

02 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0463

Project Name: Chula Vista MS4 Monitoring
Project Desc./#: 201009W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/15/10 13:50. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0463

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CEN-01	10F0463-01	Stormwater	06/15/10 09:30	06/15/10 13:50

4981

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0463

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-01 (10F0463-01) Stormwater Sampled: 06/15/10 09:30 Received: 06/15/10 13:50										
Zinc	**0.068**	0.0003	0.020	mg/l	1	0062237	06/22/10	06/22/10	EPA 200.8	
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.021**	0.001	0.010	"	"	"	"	"	"	
Cadmium	**0.0005**	0.0002	0.001	"	"	"	"	"	"	J

4982

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0463

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-01 (10F0463-01) Stormwater Sampled: 06/15/10 09:30 Received: 06/15/10 13:50										
Hardness (Total)	**335**	100	100	mg CaCO3/L	10	0061820	06/17/10	06/21/10	EPA 200.7	
Total Dissolved Solids	**802**	1.0	20.0	mg/l	1	0061629	06/16/10	06/17/10	SM2540 C	

4983

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0463

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CEN-01 (10F0463-01) Stormwater Sampled: 06/15/10 09:30 Received: 06/15/10 13:50										
Total Coliforms	**50000**	2000	2000	MPN/100 ml	1000	0061615	06/15/10	06/19/10	SM 9221 B, E	
Fecal Coliforms	**17000**	200	200	"	100	"	"	06/18/10	"	
Enterococcus	**24000**	200	200	"	"	0061616	"	06/19/10	SM 9230 A, B	

4984

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0463

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062237											
Blank (0062237-BLK1)					Prepared & Analyzed: 06/22/10						
Cadmium	ND	0.0002	0.001	mg/l							
Copper	ND	0.001	0.010	"							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
LCS (0062237-BS1)					Prepared & Analyzed: 06/22/10						
Cadmium	0.048	0.0002	0.001	mg/l	0.0500		97	75-125			
Copper	0.049	0.001	0.010	"	0.0500		98	75-125			
Lead	0.049	0.001	0.005	"	0.0500		97	75-125			
Zinc	0.048	0.0003	0.020	"	0.0500		96	75-125			
LCS Dup (0062237-BSD1)					Prepared & Analyzed: 06/22/10						
Lead	0.048	0.001	0.005	mg/l	0.0500		96	75-125	1	20	
Copper	0.048	0.001	0.010	"	0.0500		97	75-125	1	20	
Zinc	0.048	0.0003	0.020	"	0.0500		96	75-125	0.6	20	
Cadmium	0.049	0.0002	0.001	"	0.0500		98	75-125	0.6	20	
Duplicate (0062237-DUP1)			**Source: 10F0464-02**		Prepared & Analyzed: 06/22/10						
Copper	ND	0.001	0.010	mg/l		ND				20	
Lead	ND	0.001	0.005	"		ND				20	
Zinc	0.0007	0.0003	0.020	"		0.0006			5	20	J
Cadmium	ND	0.0002	0.001	"		ND				20	
Matrix Spike (0062237-MS1)			**Source: 10F0464-02**		Prepared & Analyzed: 06/22/10						
Lead	0.047	0.001	0.005	mg/l	0.0500	ND	95	75-125			
Zinc	0.047	0.0003	0.020	"	0.0500	0.0006	94	75-125			
Copper	0.045	0.001	0.010	"	0.0500	ND	90	75-125			
Cadmium	0.047	0.0002	0.001	"	0.0500	ND	94	75-125			

4985

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0463

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062237											
Matrix Spike Dup (0062237-MSD1)			**Source: 10F0464-02**		Prepared & Analyzed: 06/22/10						
Zinc	0.048	0.0003	0.020	mg/l	0.0500	0.0006	94	75-125	0.2	20	
Copper	0.045	0.001	0.010	"	0.0500	ND	90	75-125	0.1	20	
Lead	0.045	0.001	0.005	"	0.0500	ND	90	75-125	5	20	
Cadmium	0.047	0.0002	0.001	"	0.0500	ND	94	75-125	0.2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0463

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061629											
Blank (0061629-BLK1)					Prepared: 06/16/10		Analyzed: 06/17/10				
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0061629-DUP1)			**Source: 10F0405-01**		Prepared: 06/16/10		Analyzed: 06/17/10				
Total Dissolved Solids	805	1.0	20.0	mg/l		803			0.2	20	
Reference (0061629-SRM1)					Prepared: 06/16/10		Analyzed: 06/17/10				
Total Dissolved Solids	240	1.0	20.0	mg/l	269		89	87-113			
Batch 0061820											
Blank (0061820-BLK1)					Prepared: 06/17/10		Analyzed: 06/21/10				
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061820-DUP1)			**Source: 10F0418-01**		Prepared: 06/17/10		Analyzed: 06/21/10				
Hardness (Total)	537	100	100	mg CaCO3/L		503			7	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0463

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD 10F0463

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: ~~10F0164~~

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Samplers(s): MD/IT
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax (858) 586-6644
Email:
Billing Address: Same

Project ID: Chula Vista DW Monitoring
Project #: 201009W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cu Pb Ni Ag Zn ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus. ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness				
1	CEN-01	6/15/10	9:30	SW	G/p 2/5	X						X		X				X	X		X			X				
2	SWN-02	"	11:35	"	G/p 2/4	X						X						X	X		X			X				
3	SWN-05	"	12:15	"	G/p 2/4	X						X						X	X		X			X				
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	6-15-10 1325	Signature: [illegible]
Print: Manouchehr Dadkhah		Print: Louis Luna
Company: D-Max Eng.		Company: EMA
Signature: [illegible]	6-15-10 1350	Signature: [illegible]
Print: Louis Luna		Print: Matt Ayden
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments: 6°C on ice

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

28 June 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0326

Project Name: Chula Vista MS4 Monitoring
Project Desc./#: 201009W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/09/10 16:30. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0326

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SVS-01	10F0326-01	Stormwater	06/09/10 15:15	06/09/10 16:30

4991

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0326

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVS-01 (10F0326-01) Stormwater Sampled: 06/09/10 15:15 Received: 06/09/10 16:30										
Zinc	**0.014**	0.0003	0.020	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.005**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	

4992

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0326

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVS-01 (10F0326-01) Stormwater Sampled: 06/09/10 15:15 Received: 06/09/10 16:30										
Hardness (Total)	**313**	100	100	mg CaCO3/L	10	0061107	06/10/10	06/15/10	EPA 200.7	
Total Dissolved Solids	**642**	1.0	20.0	mg/l	1	0061425	06/14/10	06/15/10	SM2540 C	

4993

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0326

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SVS-01 (10F0326-01) Stormwater Sampled: 06/09/10 15:15 Received: 06/09/10 16:30										
Total Coliforms	**170000**	2000	2000	MPN/100 ml	1000	0061027	06/09/10	06/13/10	SM 9221 B, E	
Fecal Coliforms	**300**	20	20	"	10	"	"	06/12/10	"	
Enterococcus	**800**	20	20	"	"	0061028	"	06/13/10	SM 9230 A, B	

4994

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0326

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Blank (0061435-BLK1)					Prepared & Analyzed: 06/14/10						
Cadmium	ND	0.0002	0.001	mg/l							
Copper	ND	0.001	0.010	"							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
LCS (0061435-BS1)					Prepared & Analyzed: 06/14/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500		92	75-125			
Copper	0.047	0.001	0.010	"	0.0500		94	75-125			
Lead	0.048	0.001	0.005	"	0.0500		97	75-125			
Zinc	0.046	0.0003	0.020	"	0.0500		92	75-125			
LCS Dup (0061435-BSD1)					Prepared & Analyzed: 06/14/10						
Lead	0.049	0.001	0.005	mg/l	0.0500		97	75-125	0.3	20	
Copper	0.047	0.001	0.010	"	0.0500		94	75-125	0.3	20	
Zinc	0.050	0.0003	0.020	"	0.0500		99	75-125	8	20	
Cadmium	0.046	0.0002	0.001	"	0.0500		93	75-125	0.1	20	
Duplicate (0061435-DUP1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Copper	0.001	0.001	0.010	mg/l		0.001			11	20	J
Lead	ND	0.001	0.005	"		ND				20	
Zinc	0.002	0.0003	0.020	"		0.003			2	20	J
Cadmium	0.0002	0.0002	0.001	"		ND				20	J
Matrix Spike (0061435-MS1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Lead	0.048	0.001	0.005	mg/l	0.0500	ND	97	75-125			
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125			
Copper	0.041	0.001	0.010	"	0.0500	0.001	79	75-125			
Cadmium	0.040	0.0002	0.001	"	0.0500	ND	80	75-125			

4995

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0326

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Matrix Spike Dup (0061435-MSD1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Zinc	0.040	0.0003	0.020	mg/l	0.0500	0.003	75	75-125	0.6	20	
Copper	0.042	0.001	0.010	"	0.0500	0.001	82	75-125	3	20	
Lead	0.047	0.001	0.005	"	0.0500	ND	94	75-125	3	20	
Cadmium	0.041	0.0002	0.001	"	0.0500	ND	81	75-125	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0326

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061107											
Blank (0061107-BLK1)					Prepared: 06/10/10		Analyzed: 06/15/10				
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061107-DUP1)			**Source: 10F0326-01**		Prepared: 06/10/10		Analyzed: 06/15/10				
Hardness (Total)	311	100	100	mg CaCO3/L		313			0.6	20	
Batch 0061425											
Blank (0061425-BLK1)					Prepared: 06/14/10		Analyzed: 06/15/10				
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0061425-DUP1)			**Source: 10F0300-01**		Prepared: 06/14/10		Analyzed: 06/15/10				
Total Dissolved Solids	1040	1.0	20.0	mg/l		1050			1	20	
Reference (0061425-SRM1)					Prepared: 06/14/10		Analyzed: 06/15/10				
Total Dissolved Solids	290	1.0	20.0	mg/l	269		108	87-113			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0326

Client: D-Max Engineering
Attn: Arsalan Dadkhah
Samplers(s): MD / JB
Address: 7220 Trade street suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: Same

Project ID: Chula Vista MS4 Monitoring
Project #: 201009W-3 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness				
1	SVS-01	6/9/10	15:15	SW	2/5 G/P	X						X		X				X	X		X			X				
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

JUN 9'10 16:50

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manoncheher Dadkhah	6/9/10 16:30	Signature: Kelly Leydler
Print: Manoncheher Dadkhah		Print: Kelly Leydler
Company:		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T = 7 °C on ice

EnviroMatrix Analytical, Inc.

29 June 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0355

Project Name: Chula Vista MS4 Monitoring
Project Desc./#: 201009W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/10/10 16:46. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SCR-01	10F0355-01	Stormwater	06/10/10 14:40	06/10/10 16:46
RCC-02	10F0355-02	Stormwater	06/10/10 15:45	06/10/10 16:46

5001

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (10F0355-01) Stormwater Sampled: 06/10/10 14:40 Received: 06/10/10 16:46										
Zinc	**0.018**	0.0003	0.020	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.003**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
RCC-02 (10F0355-02) Stormwater Sampled: 06/10/10 15:45 Received: 06/10/10 16:46										
Zinc	**0.003**	0.0003	0.020	mg/l	1	0061435	06/14/10	06/14/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	06/15/10	"	
Copper	ND	0.001	0.010	"	"	"	"	06/14/10	"	
Cadmium	**0.0005**	0.0002	0.001	"	"	"	"	"	"	J

5002

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (10F0355-01) Stormwater Sampled: 06/10/10 14:40 Received: 06/10/10 16:46										
Hardness (Total)	**346**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
RCC-02 (10F0355-02) Stormwater Sampled: 06/10/10 15:45 Received: 06/10/10 16:46										
Hardness (Total)	**1930**	100	100	mg CaCO3/L	10	0061605	06/15/10	06/17/10	EPA 200.7	
Total Dissolved Solids	**4300**	1.0	20.0	mg/l	1	0061629	06/16/10	06/17/10	SM2540 C	

5003

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SCR-01 (10F0355-01) Stormwater Sampled: 06/10/10 14:40 Received: 06/10/10 16:46										
Total Coliforms	**130000**	2000	2000	MPN/100 ml	1000	0061120	06/10/10	06/14/10	SM 9221 B, E	
Fecal Coliforms	**24000**	200	200	"	100	"	"	06/13/10	"	
Enterococcus	**22000**	200	200	"	"	0061121	"	06/14/10	SM 9230 A, B	
RCC-02 (10F0355-02) Stormwater Sampled: 06/10/10 15:45 Received: 06/10/10 16:46										
Total Coliforms	**3000**	200	200	MPN/100 ml	100	0061120	06/10/10	06/14/10	SM 9221 B, E	
Fecal Coliforms	**500**	20	20	"	10	"	"	06/13/10	"	
Enterococcus	**800**	20	20	"	"	0061121	"	06/14/10	SM 9230 A, B	

5004

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Blank (0061435-BLK1)					Prepared & Analyzed: 06/14/10						
Copper	ND	0.001	0.010	mg/l							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
Cadmium	ND	0.0002	0.001	"							
LCS (0061435-BS1)					Prepared & Analyzed: 06/14/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500		92	75-125			
Copper	0.047	0.001	0.010	"	0.0500		94	75-125			
Lead	0.048	0.001	0.005	"	0.0500		97	75-125			
Zinc	0.046	0.0003	0.020	"	0.0500		92	75-125			
LCS Dup (0061435-BSD1)					Prepared & Analyzed: 06/14/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500		93	75-125	0.1	20	
Copper	0.047	0.001	0.010	"	0.0500		94	75-125	0.3	20	
Lead	0.049	0.001	0.005	"	0.0500		97	75-125	0.3	20	
Zinc	0.050	0.0003	0.020	"	0.0500		99	75-125	8	20	
Duplicate (0061435-DUP1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Zinc	0.002	0.0003	0.020	mg/l		0.003			2	20	J
Cadmium	0.0002	0.0002	0.001	"		ND				20	J
Lead	ND	0.001	0.005	"		ND				20	
Copper	0.001	0.001	0.010	"		0.001			11	20	J
Matrix Spike (0061435-MS1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.040	0.0002	0.001	mg/l	0.0500	ND	80	75-125			
Copper	0.041	0.001	0.010	"	0.0500	0.001	79	75-125			
Lead	0.048	0.001	0.005	"	0.0500	ND	97	75-125			
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125			

5005

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061435											
Matrix Spike Dup (0061435-MSD1)			**Source: 10F0280-01**		Prepared & Analyzed: 06/14/10						
Cadmium	0.041	0.0002	0.001	mg/l	0.0500	ND	81	75-125	2	20	
Copper	0.042	0.001	0.010	"	0.0500	0.001	82	75-125	3	20	
Lead	0.047	0.001	0.005	"	0.0500	ND	94	75-125	3	20	
Zinc	0.040	0.0003	0.020	"	0.0500	0.003	75	75-125	0.6	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Chula Vista MS4 Monitoring

EMA Log #: 10F0355

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0061605											
Blank (0061605-BLK1)					Prepared: 06/15/10		Analyzed: 06/17/10				
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0061605-DUP1)			**Source: 10F0353-01**		Prepared: 06/15/10		Analyzed: 06/17/10				
Hardness (Total)	257	100	100	mg CaCO3/L		271			5	20	
Batch 0061629											
Blank (0061629-BLK1)					Prepared: 06/16/10		Analyzed: 06/17/10				
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0061629-DUP1)			**Source: 10F0405-01**		Prepared: 06/16/10		Analyzed: 06/17/10				
Total Dissolved Solids	805	1.0	20.0	mg/l		803			0.2	20	
Reference (0061629-SRM1)					Prepared: 06/16/10		Analyzed: 06/17/10				
Total Dissolved Solids	240	1.0	20.0	mg/l	269		89	87-113			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Page___ of ___

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.

4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10F0355

Client: D-Max Engineering

Attn: Arsalan Dadkhah

Samplers(s): MD/SB

Address: 7220 Trade street, Suite 119

Phone: 858-586-6600 Fax: 858-586-6644

Email:

Billing Address: Same

Project ID: Chula Vista MS4 Monitoring

Project #: 201009W-3 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease ☐ 413.1 ☐ 413.2 ☒ 1664	8015B (TPH) ☐ Gas ☐ Diesel ☐ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐ pH ☐ EC ☐ TSS ☒ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ NH3	CAC Title 22/CAM17 Metals ☐ TTLC ☐ STLC	TCLP (RCRA) ☐ Metals ☐ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli ☐ P/A ☐ Enumeration	Enterococcus, ☒ MTF ☐ Enterolert	Heterotrophic Plate Count (HPC)	☐ BOD ☐ COD ☐ Cyanide	Total Hardness				
1	SCR-01	6/10/10	14:40	SW	2/G	X						X						X	X		X			X				
2	RCC-02	"	15:45	SW	2/G, 1/P	X						X		X				X	X		X			X				
3					2/5 G/P																							
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: ☐ Courier ☐ UPS ☐ FedEx ☐ USPS ☐ Client Drop Off ☐ Other

[1]**Turn-Around-Time:** ☐ Same Day ☐ 24 hr ☐ 48 hr ☐ 3 day ☐ 4 day ☒ 5 day ☐ STD (7 day)

[1]**Reporting Requirements:** ☐ Fax ☐ PDF ☐ Excel ☐ Geotracker/EDF ☐ Hard Copy ☐ EDT

[1]**Sample Disposal:** ☐ By Laboratory ☐ [2]Return to Client: P/U or Delivery ☐ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	6/10/10 16:46	Signature: [illegible]
Print: Manouchehr Dadkhah		Print: Kelly [illegible]
Company: D-Max Eng.		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=6°C on ice

Appendix D

Field Data Sheets and Trash Assessment Forms

LN

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

Field Screening Confirmation For Glycol IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) MS4 Receiving Water

Site ID	Bay-01		Latitude	32.60820	Watershed	Hydrologic Unit	910
Location	West side of Bay Blvd across from 1075 complex		Longitude	-117.09235		Hydrologic Area	910.2
			TB Page	1330-A3		Hydrologic Subarea (Optional)	910.20
Date	6/9/10	Time 10:30	Observer	MD/JB		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential (Commercial) Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial Industrial Agricultural Parks Open (None)

Conveyance (Check one only): Manhole Catch Basin (Outlet) Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	(Overcast)	Fog		
Tide	(N/A)	Low	Incoming	High	Outgoing	**Tide Height:** ____ ft.
Last Rain	(> 72 hours)	< 72 hours				
Rainfall	(None)	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	(None)	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	None	(Yellow)	Brown	White	Gray	Other
Clarity	(Clear)		Slightly Cloudy	Opaque		Other
Floatables	None	(Trash)	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	(Sediment/Gravel)	(Fine Particulates)	Stains	Oily Deposits	Other
Vegetation	None	Limited	(Normal)	Excessive		Other
Biology	None	(Insects)	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow: Flowing (Ponded) Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No (N/A)

Evidence of Overland Flow? Yes (No) Irrigation Runoff Other: _____

Photo Taken (Yes) No **Photo #** 1, 2

Field Screening Samples Collected? (Yes) No

Water Temp (°C)	19.2°C	NH_3-N (mg/L)	0.167	NO_3 (mg/L)	1.206	Ortho-PO_4 (mg/L)	0.863
pH (pH units)	7.2	TURB (NTU)	7.09 NTU	NO_3-N (mg/L)	0.273	Ortho-PO_4-P (mg/L)	0.281
COND (mS/cm)	1.04	MBAS (mg/L)	0.25	Glycol (mg/L)	1.55		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Bay-01 DATE: 6/9/10

OBSERVER: SB/MD TIME: 10:30

LOCATION: West side of Bay Blvd across from 1075 complex

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15' x 10'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Glycol ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Bay-01		Latitude	32.60820	Watershed	Hydrologic Unit	910
Location	west side of Bay Blvd across from 1075 Complex		Longitude	-117.09235		Hydrologic Area	910.2
			TB Page	1330-A3		Hydrologic Subarea (Optional)	910.20
Date	6/10/10	Time 9:40	Observer	MD/SB		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 12, 13, 14, 15

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.3	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.3	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	0.94	MBAS (mg/L)	na	Glycol (mg/L)	0.891		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Concentration of Glycol ~~dropped to~~ Fell to 0.891 mg/L due to dilution from irrigation water over night

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	BAY-02		Latitude	32.60479	Watershed	Hydrologic Unit	910
Location	west of intersection of Palomar St. and Bay Blvd.		Longitude	-117.09248		Hydrologic Area	910.2
			TB Page	1330 A4		Hydrologic Subarea (Optional)	910.20
Date	6/24/10	Time 11:50	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☑ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** 3 ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other Algae
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other Tadpoles

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 158-160

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)	0.130	NO_3 (mg/L)	0.878	Ortho-PO_4 (mg/L)	0.105
pH (pH units)	7.5	TURB (NTU)	1.15	NO_3-N (mg/L)	0.198	Ortho-PO_4-P (mg/L)	0.034
COND (mS/cm)	1.19	MBAS (mg/L)	0.25	Glycol (mg/L)	~~0.321~~ 0.219		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS:

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: BAY-02 DATE: 6/24/10

OBSERVER: MD/BM TIME: 11:50

LOCATION: West of intersection of Palomar St. & Bay Blvd.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	BAY-03		Latitude	32.602667	Watershed	Hydrologic Unit	910
Location	west of intersection of Ada street and Bay Blvd.		Longitude	-117.09251		Hydrologic Area	910.2
			TB Page	1330, A4		Hydrologic Subarea (Optional)	910.20
Date	6/24/10	Time 11:05	Observer	MD / BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other crawfish

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 155-157

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.4	NH_3-N (mg/L)	0.498	NO_3 (mg/L)	~~44.86~~ 34.69	Ortho-PO_4 (mg/L)	0.019
pH (pH units)	7.5	TURB (NTU)	5.55	NO_3-N (mg/L)	7.8839	Ortho-PO_4-P (mg/L)	0.006
COND (mS/cm)	5.87	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: BAY-03 DATE: 6/24/10

OBSERVER: MD/BM TIME: 11:05

LOCATION: west of intersection of Ada St. & Bay Blvd.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Sub optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	BLC-01			Latitude	32.66562	Watershed: Hydrologic Unit	909
Location	Chula Vista Municipal Golf Course, W of Bonita Rd & Acacia Ave. intersection			Longitude	-117.02414	Hydrologic Area	909.1
				TB Page	1310-J2	Hydrologic Subarea (Optional)	909.12
Date	6/16/10	Time	11:00	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 73-74

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.8	NH_3-N (mg/L)	0.361	NO_3 (mg/L)	0.591	Ortho-PO_4 (mg/L)	0.010
pH (pH units)	8.1	TURB (NTU)	0.56	NO_3-N (mg/L)	0.134	Ortho-PO_4-P (mg/L)	0.003
COND (mS/cm)	6.18	MBAS (mg/L)	0.5	Glycol (mg/L)	0.4		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	.25	in
Velocity	10/12	ft/sec
Flow	6.5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: BLC-01 DATE: 6/16/10

OBSERVER: MD/IT TIME: 11:00

LOCATION: Chula Vista Municipal Golf Course, W of the Bonita Rd & Acacia Ave intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LW

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	BLC-02		Latitude	32.65556	Watershed	Hydrologic Unit	909
Location	Long Canyon channel S of Bonita Rd & W of southern end of Acacia Ave.		Longitude	-117.00859		Hydrologic Area	909.1
			TB Page	1311-A4		Hydrologic Subarea (Optional)	909.12
Date	6/16/10	Time 10:10	Observer	MD/KT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 70-72

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	17.6	NH_3-N (mg/L)	0.265	NO_3 (mg/L)	20.51	Ortho-PO_4 (mg/L)	ND
pH (pH units)	7.9	TURB (NTU)	0.88	NO_3-N (mg/L)	4.635	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	6.39	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	14	in
Depth	.25	in
Velocity	10/15	ft/sec
Flow	7	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: BLC-02 DATE: 6/16/10

OBSERVER: MD/IT TIME: 10:10

LOCATION: Long Canyon channel S of Benita Rd & W of southern end of Acacia Ave.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 25X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	CEN-01			Latitude	32.62922	Watershed: Hydrologic Unit	909
Location	S of H St. & E of I-5 & trolley tracks			Longitude	-117.09507	Hydrologic Area	909.1
				TB Page	1329-J1	Hydrologic Subarea (Optional)	909.12
Date	6/15/10	Time	9:30	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 54-55

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.1	NH_3-N (mg/L)	0.277	NO_3 (mg/L)	4.420	Ortho-PO_4 (mg/L)	1.313
pH (pH units)	7.75	TURB (NTU)	7.91	NO_3-N (mg/L)	0.999	Ortho-PO_4-P (mg/L)	0.428
COND (mS/cm)	1.26	MBAS (mg/L)	0.25	Glycol (mg/L)	0.241		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Larvae in water

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: CEN-01 DATE: 6/15/10

OBSERVER: MD/JT TIME: 9:30

LOCATION: S of H St. & E of I-5 & trolley tracks

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

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City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Bacteria ~~☑ IC/ID Follow-Up For Bacteria~~

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	CEN-01			Latitude	32.62922	Watershed: Hydrologic Unit	909
Location	S. of H St. and E. of I-5 & trolley tracks			Longitude	-117.09507	Hydrologic Area	909.1
				TB Page	1329, J1	Hydrologic Subarea (Optional)	909.12
Date	6/30/10	Time	10:40	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☐ Sunny	☑ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	Tide Height: ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: ____

Photo Taken ☐ Yes ☑ No **Photo #** ____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.8	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	3.18	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	~1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: ____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Ln

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	~~CA~~ CEN-09		**Latitude**	32.62153	**Watershed**	**Hydrologic Unit**	909
Location	South of J street, Behind 726 and 728 Colorado Ave		**Longitude**	-117.09212		**Hydrologic Area**	909.1
			TB Page	1329-A1		**Hydrologic Subarea** (Optional)	909.11
Date	6/14/10	**Time** 9:20	**Observer**	MD/SB	**Discharge Area** (Optional)		

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other	N/A
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	N/A
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other	N/A
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	N/A
Deposits	☑ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	N/A
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	N/A

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 35, 36

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Dry

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Cen-03 DATE: 6/14/10

OBSERVER: MD/SB TIME: 9:20

LOCATION: South of J street, behind 726 and 728 Colorado Avenue

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20' x 4'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

* Site was Dry

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	CEN-04		Latitude	32.63869	Watershed	Hydrologic Unit	909
Location	E side of Memorial Park, W of 3rd Ave, N of Park Way		Longitude	-117.07956		Hydrologic Area	909.1
			TB Page	1310-B6		Hydrologic Subarea (Optional)	909.12
Date	6/17/10	Time 9:40	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☑ Algae	☐ Fish ☑ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 81-83

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.1	NH_3-N (mg/L)	0.740	NO_3 (mg/L)	2.018	Ortho-PO_4 (mg/L)	0.203
pH (pH units)	7.1	TURB (NTU)	6.98	NO_3-N (mg/L)	0.456	Ortho-PO_4-P (mg/L)	0.066
COND (mS/cm)	0.96	MBAS (mg/L)	0.13	Glycol (mg/L)	0.366		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: CEN-04 DATE: 6/17/10

OBSERVER: MD/IT TIME: 9:40

LOCATION: E side of Memorial Park, W of 3rd Ave., N of Park Way

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Submarginal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	CEN-07			Latitude	32.63713	Watershed: Hydrologic Unit	909
Location	W of 5th Ave., between Center St & Park Way			Longitude	-117.08782	Hydrologic Area	909.1
				TB Page	1310-A6	Hydrologic Subarea (Optional)	909.12
Date	6/17/10	Time	10:25	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 84-85

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.7	NH_3-N (mg/L)	0.253	NO_3 (mg/L)	1.187	Ortho-PO_4 (mg/L)	0.738
pH (pH units)	7.95	TURB (NTU)	9.88	NO_3-N (mg/L)	0.268	Ortho-PO_4-P (mg/L)	0.241
COND (mS/cm)	1.09	MBAS (mg/L)	0.5	Glycol (mg/L)	0.587		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: CEN-07 DATE: 6/17/10

OBSERVER: MD/IT TIME: 10:25

LOCATION: W of 5th Ave., between Center St. & Park Way

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	CEN-08			Latitude	32.63144	Watershed: Hydrologic Unit	909
Location	100 ft W of Marina Pkwy, N of G St.			Longitude	-117.10330	Hydrologic Area	909.1
				TB Page	1309-H7	Hydrologic Subarea (Optional)	909.12
Date	6/22/10	Time	14:50	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 140-141

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.5	NH_3-N (mg/L)	0.532	NO_3 (mg/L)	4.548	Ortho-PO_4 (mg/L)	0.575
pH (pH units)	8.0	TURB (NTU)	0.49	NO_3-N (mg/L)	1.027	Ortho-PO_4-P (mg/L)	0.187
COND (mS/cm)	16.26	MBAS (mg/L)	1.0	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: CEN-08 DATE: 6/22/10

OBSERVER: MD/IT TIME: 14:50

LOCATION: 100 feet W of Mariana Pkwy, N of G St.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	CEN-08		Latitude	32.63144	Watershed	Hydrologic Unit	909
Location	100 feet west of Marina Parkway North of G St.		Longitude	-117.10330		Hydrologic Area	909.1
			TB Page	1309, H7		Hydrologic Subarea (Optional)	909.12
Date	6/23/10	Time 1350	Observer	MD, BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.4	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	7.80	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	17.60	MBAS (mg/L)	1.0	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For MBAS

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	CEN-08-1		Latitude	32.63294	Watershed	Hydrologic Unit	909
Location	Cabrillo Mobile Lodge, LLC at 731 G Street; end of G st.		Longitude	-117.09667		Hydrologic Area	909.1
			TB Page	1309, J7		Hydrologic Subarea (Optional)	909.12
Date	6/23/10	Time 14:10	Observer	MD, BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☑ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** 2.2 ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other leaves
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 140 – 143

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	3.0	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

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San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	CEN-10			Latitude	32.63643	Watershed: Hydrologic Unit	909
Location	NW of intersection of Hilltop Dr. and Whitney St.			Longitude	-117.06439	Hydrologic Area	909.1
				TB Page	1310, D6	Hydrologic Subarea (Optional)	909.12
Date	6/23/10	Time	9:45	Observer	MD / BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 144-145

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.8	NH_3-N (mg/L)	0.130	NO_3 (mg/L)	1.502	Ortho-PO_4 (mg/L)	1.364
pH (pH units)	8.0	TURB (NTU)	~~1.00~~ 1.56	NO_3-N (mg/L)	0.339	Ortho-PO_4-P (mg/L)	0.445
COND (mS/cm)	1.05	MBAS (mg/L)	0.25	Glycol (mg/L)	0.811		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: CEN-10 DATE: 6-23-10

OBSERVER: MD, BM TIME: 9:45

LOCATION: Northwest of intersection of Hilltop Dr. & Whitney St.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SUD-01			Latitude	32.59465	Watershed: Hydrologic Unit	910
Location	South of Intersection of Fresno Ave and Main Street			Longitude	-117.06675	Hydrologic Area	910.2
				TB Page	1330-D5	Hydrologic Subarea (Optional)	910.20
Date	6/10/10	Time	11:20	Observer	MD/SB	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 16,17

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.3	NH_3-N (mg/L)	0.235	NO_3 (mg/L)	~~0.235~~ 0.158	Ortho-PO_4 (mg/L)	0.316
pH (pH units)	7.60	TURB (NTU)	6.12	NO_3-N (mg/L)	0.040	Ortho-PO_4-P (mg/L)	0.108
COND (mS/cm)	1.15	MBAS (mg/L)	0.50	Glycol (mg/L)	0.759		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SUD-01 DATE: 6/10/10

OBSERVER: MD/SB TIME: 11:20

LOCATION: South of intersection of Fresno Ave and Main Street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10' x 1'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	JUD - 01			Latitude	32.594665	Watershed: Hydrologic Unit	910
Location	S. of intersection of Fresno Ave. & Main St.			Longitude	-117.066675	Hydrologic Area	910.2
				TB Page	1330, D5	Hydrologic Subarea (Optional)	910.20
Date	6/30/10	Time	14:50	Observer	MD / BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algal
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.7	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.85	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.06	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MARM

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	JUD-02			Latitude	32.59450	Watershed	Hydrologic Unit: 910.
Location	Southwest of Reed Court and Main Street intersection			Longitude	-117.05599		Hydrologic Area: 910.2
				TB Page	1330-E5		Hydrologic Subarea (Optional): 910.20
Date	6/14/10	Time	9:50	Observer	MD/JB	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 37, 38, 39

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.15	NH_3-N (mg/L)	2.531	NO_3 (mg/L)	0.044	Ortho-PO_4 (mg/L)	2.094
pH (pH units)	7.30	TURB (NTU)	6.05	NO_3-N (mg/L)	0.01	Ortho-PO_4-P (mg/L)	0.745
COND (mS/cm)	1.33	MBAS (mg/L)	0.5	Glycol (mg/L)	0.532		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: JUD-02 DATE: 6/14/10

OBSERVER: MD/SB TIME: 9:50

LOCATION: Southwest of Reed Court and Main Street intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Submarginal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 4' x 3'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	JUD – 02			Latitude	32.59450	Watershed	Hydrologic Unit 910
Location	SW of Reed St. and Main St. intersection			Longitude	-117.05599		Hydrologic Area 910.2
				TB Page	1330, E5		Hydrologic Subarea (Optional) 910.20
Date	6/30/10	Time	15:15	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.6	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.35	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Ammonia ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	JUD-02			Latitude	32.59450	Watershed: Hydrologic Unit	910
Location	SW of Reed St. & Main St. intersection			Longitude	-117.05599	Hydrologic Area	910.2
				TB Page	1330-E5	Hydrologic Subarea (Optional)	910.20
Date	6/15/10	Time	10:50	Observer	MD/KT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.8	NH_3-N (mg/L)	2.819	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.4	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.32	MBAS (mg/L)	NA	Glycol (mg/L)			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Ammonia

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	JUD-02-M1			Latitude	32.59463	Watershed	Hydrologic Unit	910
Location	S side of Main St. in front of 3639			Longitude	-117.05511		Hydrologic Area	910.2
				TB Page	1330-E5		Hydrologic Subarea (Optional)	910.20
Date	6/16/10	Time	15:45	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	0.793	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LW

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	JUD-03			Latitude	32.59466	Watershed: Hydrologic Unit	910
Location	SW of Main St. & Mace St. intersection			Longitude	-117.05380	Hydrologic Area	910.2
				TB Page	1330-E5	Hydrologic Subarea (Optional)	910.20
Date	6/16/10	Time	15:10	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☑ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 79-80

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	0.389	NO_3 (mg/L)	0.945	Ortho-PO_4 (mg/L)	2.570
pH (pH units)	7.8	TURB (NTU)	45.21	NO_3-N (mg/L)	0.214	Ortho-PO_4-P (mg/L)	0.838
COND (mS/cm)	1.28	MBAS (mg/L)	0.5	Glycol (mg/L)	1.623		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Area around site is not paved with lots of sediment around. When manhole is opened sediment goes in. Can't be avoided.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: JUD-03 DATE: 6/16/10

OBSERVER: MD/IT TIME: 15:10

LOCATION: SW of Main St. & Mace St. intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Glycol/Turbidity ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	JUO-03		Latitude	32.59466	Watershed	Hydrologic Unit	910
Location	SW of Main St & Mace St. intersection		Longitude	-117.05380		Hydrologic Area	910.2
			TB Page	1330-E5		Hydrologic Subarea (Optional)	910.20
Date	6/17/10	Time 14:40	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	22.57	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	0.770		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

LC

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	LAK-01		Latitude	32.66023	Watershed	Hydrologic Unit	910
Location	NE of the intersection of Proctor Valley Rd & Agua Vista Dr, in the canyon		Longitude	-116.94138		Hydrologic Area	910.3
			TB Page	1311-J3		Hydrologic Subarea (Optional)	910.32
Date	6/21/10	Time 10:35	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 122-124

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.1	NH_3-N (mg/L)	0.559	NO_3 (mg/L)	65.80	Ortho-PO_4 (mg/L)	~~ND~~ 0.03
pH (pH units)	7.05	TURB (NTU)	1.06	NO_3-N (mg/L)	14.871	Ortho-PO_4-P (mg/L)	~~ND~~ 0.01
COND (mS/cm)	6.53	MBAS (mg/L)	0.5	Glycol (mg/L)	ND		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	.25	in
Velocity	5.7	ft/sec
Flow	6	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: LAK-01 DATE: 6/21/10

OBSERVER: MD/IT TIME: 10:35

LOCATION: NE of the intersection of Proctor Valley Rd & Agua Vista Dr. in the canyon

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20x20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	LAK-01			Latitude	32.66023	Watershed: Hydrologic Unit	910
Location	NE of the intersection of Proctor Valley Rd & Agua Vista Dr., in the canyon			Longitude	-116.94138	Hydrologic Area	910.3
				TB Page	1311-J3	Hydrologic Subarea (Optional)	910.32
Date	6/22/10	Time	11:20	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.4	NH_3-N (mg/L)	NA	NO_3 (mg/L)	54.74	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.45	TURB (NTU)	NA	NO_3-N (mg/L)	12.371	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.40	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	12	in
Depth	.25	in
Velocity	5/7	ft/sec
Flow	7	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	LAK-01-1			Latitude	32.393722 ~~32.660023~~	Watershed: Hydrologic Unit	910
Location	NW of intersection of Proctor Valley Rd. & Agua Vista Dr. in canyon across from LAK-01			Longitude	-116.563027 ~~-116.911138~~	Hydrologic Area	910.B
				TB Page	1311, J3	Hydrologic Subarea (Optional)	910.32
Date	7/13/10	Time	15:10	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.5	NH_3-N (mg/L)	NA	NO_3 (mg/L)	27.46	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.2	TURB (NTU)	NA	NO_3-N (mg/L)	6.205	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	4.54	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	OLB-01			Latitude	32.66144	Watershed: Hydrologic Unit	909
Location	S of Chula Vista Municipal Golf Course, N of Otay Lakes Rd & Benita intersection, smaller, farther E of two outlets			Longitude	-117.03146	Hydrologic Area	909.1
				TB Page	1310-H3	Hydrologic Subarea (Optional)	909.12
Date	6/22/10	Time	10:05	Observer	MO/TT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 134-135

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.4	NH_3-N (mg/L)	0.249	NO_3 (mg/L)	~~0.050~~	Ortho-PO_4 (mg/L)	~~0.15~~
pH (pH units)	8.25	TURB (NTU)	0.69	NO_3-N (mg/L)	~~0.19~~	Ortho-PO_4 -P (mg/L)	~~0.05~~
COND (mS/cm)	5.66	MBAS (mg/L)	0.63	Glycol (mg/L)	0.5		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: OLR-01 DATE: 6/22/10

OBSERVER: MO/IT TIME: 10:05

LOCATION: S of Chula Vista Municipal Golf Course, N of Otay Lakes Rd & Bonita

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x10

intersection; smaller/farther E of two outlets

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LW

San Diego Stormwater Copermittees

City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	OLR-02		Latitude	32.66145	Watershed	Hydrologic Unit	909
Location	South of Chula Vista Municipal Golf Course N of Otay Lakes Rd & Bonita intersection, larger, farther W of two outlets		Longitude	-117.63152		Hydrologic Area	909.1
			TB Page	1310-H3		Hydrologic Subarea (Optional)	909.12
Date	6/22/10	Time 9:20	Observer	MO/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray			☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive				☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 132-133

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.2	NH_3-N (mg/L)	0.225	NO_3 (mg/L)	ND	Ortho-PO_4 (mg/L)	ND
pH (pH units)	8.35	TURB (NTU)	1.77	NO_3-N (mg/L)	ND	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	5.86	MBAS (mg/L)	0.5	Glycol (mg/L)	0.4		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: OLR-02 DATE: 6/22/10

OBSERVER: MD/IT TIME: 9:20

LOCATION: South of Chula Vista Municipal Golf Course, N of the Otay Lakes Rd & Bonita intersection, larger, farther W of two outlets

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 25 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	OVR-04		Latitude	32.59273	Watershed	Hydrologic Unit	910
Location	South of Main St., 50 feet east of Nirvana Ave.		Longitude	-117.01730 ~~-117.01719~~		Hydrologic Area	910.20
			TB Page	1331, A5		Hydrologic Subarea (Optional)	910.20
Date	6-23-10	Time 11:40	Observer	MD, BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 148-149

Field Screening Samples Collected? ☑ Yes ~~☐ No~~

Water Temp (°C)	19.5	NH_3-N (mg/L)	0.334	NO_3 (mg/L)	0.812	Ortho-PO_4 (mg/L)	0.277
pH (pH units)	7.6	TURB (NTU)	7.53	NO_3-N (mg/L)	0.180	Ortho-PO_4-P (mg/L)	0.09
COND (mS/cm)	1.02	MBAS (mg/L)	0.13	Glycol (mg/L)	0.792		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: OVR-04 DATE: 6-23-10

OBSERVER: MD, BM TIME: 11:40

LOCATION: south of Main st., 50 feet east of Nirvana Ave.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	OVR-07			Latitude	32.59479	Watershed: Hydrologic Unit	910
Location	East of property at 1879 Nirvana Ave.			Longitude	-117.01437	Hydrologic Area	910.20
				TB Page	1331, A5	Hydrologic Subarea (Optional)	910.20
Date	6-23-10	Time	10:45	Observer	MD, BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other dust sheen
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 146-147

Field Screening Samples Collected? ☑ Yes ~~☐ No~~

Water Temp (°C)	19.4	NH_3-N (mg/L)	0.420	NO_3 (mg/L)	91.27	Ortho-PO_4 (mg/L)	ND
pH (pH units)	8.1	TURB (NTU)	2.55	NO_3-N (mg/L)	20.603	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	12.73	MBAS (mg/L)	0.75	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: OVR-07 DATE: 6-23-10

OBSERVER: MD, BM TIME: 10:45

LOCATION: East of property at 1879 Nirvana Ave.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 6 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate, EC ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	OVR-07			Latitude	32.59479	Watershed: Hydrologic Unit	910
Location	East of property at 1879 Nirvana Ave.			Longitude	-117.01437	Hydrologic Area	910.2
				TB Page	1331, A5	Hydrologic Subarea (Optional)	910.20
Date	6/24/10	Time	10:15	Observer	MD / BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other dust sheen
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.5	NH_3-N (mg/L)	NA	NO_3 (mg/L)	101.4	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.1	TURB (NTU)	NA	NO_3-N (mg/L)	22.919	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	12.74	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	OVR-07			Latitude	32.59479	Watershed	Hydrologic Unit 910
Location	E. of property at 1879 Nirvana Ave.			Longitude	-117.01437		Hydrologic Area 910.2
				TB Page	1331, A5		Hydrologic Subarea (Optional) 910.20
Date	7/6/10	Time	14:15	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.1	NH_3-N (mg/L)	NA	NO_3 (mg/L)	90.26	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.2	TURB (NTU)	NA	NO_3-N (mg/L)	20.399	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	12.61	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	OVR-07-1			Latitude	32.59548	Watershed	Hydrologic Unit 910
Location	FJ Willert Construction Co., Inc. entrance on Nirvana Ave.			Longitude	-117.01437		Hydrologic Area 910.2
				TB Page	1331, A5		Hydrologic Subarea (Optional) 910.20
Date	7/6/10	Time	14:50	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 275-277

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	93.22	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	21.059	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	12.90	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LN

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	OVR-09		Latitude	32.59452	Watershed	Hydrologic Unit	910
Location	South of property at 850 Energy Way, in City easement at base of the slope		Longitude	-117.01199		Hydrologic Area	910.2
			TB Page	1331-A5		Hydrologic Subarea (Optional)	910.20
Date	6/14/10	Time 11:00	Observer	MD/SB		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 40, 41, 42

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.00	NH_3-N (mg/L)	0.423	NO_3 (mg/L)	4.554	Ortho-PO_4 (mg/L)	0.545
pH (pH units)	8.20	TURB (NTU)	5.19	NO_3-N (mg/L)	1.029	Ortho-PO_4-P (mg/L)	0.20
COND (mS/cm)	7.67	MBAS (mg/L)	0.75	Glycol (mg/L)	0.50		

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: OVR-09 DATE: 6/14/10

OBSERVER: MD/SB TIME: 11:00

LOCATION: South of property at 850 Energy Way, in the City easement at base of the slope

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10' x 15'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LN

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	UVR-10		Latitude	32.59285	Watershed	Hydrologic Unit	910
Location	S. end of Brandywine Ave., S. of Auto Park Dr. at base of slope		Longitude	-117.02994		Hydrologic Area	910.2
			TB Page	1330, H5		Hydrologic Subarea (Optional)	910.20
Date	6/24/10	Time ~~15:15~~ 14:45	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 101-103

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.8	NH_3-N (mg/L)	0.431	NO_3 (mg/L)	3.518	Ortho-PO_4 (mg/L)	1.024
pH (pH units)	7.80	TURB (NTU)	5.07	NO_3-N (mg/L)	0.795	Ortho-PO_4-P (mg/L)	0.334
COND (mS/cm)	1.95	MBAS (mg/L)	0.25	Glycol (mg/L)	0.592		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: OVR-10 DATE: 6/24/10

OBSERVER: MD/BM TIME: 14:15

LOCATION: S. end of Brandywine Ave., S. of Auto Park Dr. at base of slope

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	POG-01			Latitude	32.59455	Watershed: Hydrologic Unit	910
Location	S of Main St., 100 feet W of Melrose Ave.			Longitude	-117.04153	Hydrologic Area	910.2
				TB Page	1330-65	Hydrologic Subarea (Optional)	910.20
Date	6/17/10	Time	15:20	Observer	MD/TT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 94-96

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.8	NH_3-N (mg/L)	0.600	NO_3 (mg/L)	6.027	Ortho-PO_4 (mg/L)	ND
pH (pH units)	8.1	TURB (NTU)	0.64	NO_3-N (mg/L)	1.362	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	8.34	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	45	in
Depth	.5	in
Velocity	10/12	ft/sec
Flow	58	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: POG-01 DATE: 6/17/10

OBSERVER: MO/TT TIME: 15:20

LOCATION: S of Main St., 100 ft W of Melrose Ave.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	P06-02		Latitude	32.63610	Watershed	Hydrologic Unit	910
Location	Intersection of Eastlake Parkway and Trinidad Cove, near entrance to housing tract "Antigua"		Longitude	-116.96748		Hydrologic Area	910.2
			TB Page	11311.F6		Hydrologic Subarea (Optional)	910.20
Date	6/11/10	Time 11:30	Observer	MD/SB		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 31, 32

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.80	NH_3-N (mg/L)	0.306	NO_3 (mg/L)	21.07	Ortho-PO_4 (mg/L)	2.010
pH (pH units)	8.25	TURB (NTU)	3.99	NO_3-N (mg/L)	4.76	Ortho-PO_4-P (mg/L)	6.66
COND (mS/cm)	1.62	MBAS (mg/L)	0.25	Glycol (mg/L)	0.472		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	0.25	in
Velocity	5.18	ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: POG-02 DATE: 6/11/10

OBSERVER: MD/SB TIME: 11:30

LOCATION: Intersection of Eastlake Parkway and Trinidad Cove, near entrance to housing tract "Antigua"

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6' x 10'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	P06-02		Latitude	32.63610	Watershed	Hydrologic Unit	910
Location	Intersection of Eastlake Pkwy and Trinidad cove near entrance to housing tract "Antiguay"		Longitude	-116.96748		Hydrologic Area	910.2
			TB Page	1131, F6		Hydrologic Subarea (Optional)	910.20
Date	6/30/10	Time 13:10	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray			☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive				☐ Other
Biology	☑ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.9	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.64	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	8	in
Depth	0.25	in
Velocity	5/7	ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Bacteria ☑ ~~IC/ID Follow-Up For Bacteria~~

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	POG-02			Latitude	32.63610	Watershed: Hydrologic Unit	910
Location	Intersection of Eastlake Pkwy & Trinidad Cove near entrance to housing tract "Antigua"			Longitude	-116.96748	Hydrologic Area	910.2
				TB Page	1131, F6	Hydrologic Subarea (Optional)	910.20
Date	7/2/10	Time	12:55	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☑ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	Tide Height: ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other
Water Flow	☑ Flowing	☐ Ponded	☐ Dry	☐ Tidal		

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No Photo # _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.9	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.810	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: trash in manhole not in flow, width, depth, velocity could not be determined due to inaccessibility.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	FOG-02-1			Latitude	32.63739	Watershed: Hydrologic Unit	910
Location	Manhole on eastside of Eastlake Pkwy 300ft. N. of Trinidad Cove and Eastlake Pkwy intersection (eastline)			Longitude	-116.916690	Hydrologic Area	910.2
				TB Page	1131, F6	Hydrologic Subarea (Optional)	910.20
Date	7/2/10	Time	13:10	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☑ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	Tide Height: ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other		
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other		
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other		
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other		
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other		
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other		
Biology	☑ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	P06-02-2			Latitude	32.03739	Watershed	Hydrologic Unit	910
Location	Manhole on eastside of Eastlake Pkwy 300ft N. of Trinidad Cove and Eastlake Pkwy intersection (Burtline)			Longitude	-116.96690		Hydrologic Area	910-2
				TB Page	1131, F6		Hydrologic Subarea (Optional)	910-20
Date	7/2/10	Time	13:15	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☑ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	**Tide Height:** ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other
Water Flow	☑ Flowing	☐ Ponded	☐ Dry	☐ Tidal		

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, velocity & depth could not be determined due to inaccessibility.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☑ Receiving Water

Site ID	P06-03			Latitude	32.61643	Watershed: Hydrologic Unit	909
Location	Olympic Pkwy, across from Heritage Rd			Longitude	-117.00220	Hydrologic Area	909.1
				TB Page	1331-B2	Hydrologic Subarea (Optional)	909.12
Date	6/21/10	Time	15:40	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 128-131

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.9	NH_3-N (mg/L)	0.481	NO_3 (mg/L)	19.33	Ortho-PO_4 (mg/L)	0.078
pH (pH units)	7.75	TURB (NTU)	0.34	NO_3-N (mg/L)	4.369	Ortho-PO_4-P (mg/L)	0.025
COND (mS/cm)	6.72	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	30	in
Depth	1	in
Velocity	10/15	ft/sec
Flow	62	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: POG-03 DATE: 6/21/10

OBSERVER: MD/IT TIME: 15:40

LOCATION: Olympic Pkwy, across from Heritage Rd.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☑ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

MRM

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	PRD-02			Latitude	32.60622	Watershed: Hydrologic Unit	910.
Location	West of Aries Court and 200 feet South of Rieustra Street, in SDGE easement			Longitude	-117.04353	Hydrologic Area	910.2
				TB Page	1330-63	Hydrologic Subarea (Optional)	910.20
Date	6/10/10	Time	12:15	Observer	MD/SB	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☒ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☒ Yes ☐ No **Photo #** 18, 19

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.0	NH_3-N (mg/L)	0.490	NO_3 (mg/L)	5.043	Ortho-PO_4 (mg/L)	1.584
pH (pH units)	8.15	TURB (NTU)	1.97	NO_3-N (mg/L)	1.139	Ortho-PO_4-P (mg/L)	0.516
COND (mS/cm)	2.53	MBAS (mg/L)	0.50	Glycol (mg/L)	0.613		

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: PRD-02 DATE: 6/10/10

OBSERVER: MD/SB TIME: 12:15

LOCATION: West of Aries Court and 200 Feet South of Rieustra Street in SDG&E easement

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4' x 20'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MPM

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☑ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	PRD-02			Latitude	32.60622	Watershed: Hydrologic Unit	910
Location	W. of Aries Ct. & 200ft S. of R. Elvira St. in SDGE easement			Longitude	-117.04353	Hydrologic Area	910.2
				TB Page	1330, G3	Hydrologic Subarea (Optional)	910.20
Date	6/30/10	Time	15:40	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☑ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	Tide Height: ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray			☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive				☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.2	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.30	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.36	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	<1	gpm				Flow		gpm

COMMENTS: abundance of trash

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MPM

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	PRD-02			Latitude	32.60622	Watershed	Hydrologic Unit: 910
Location	W. of Aries Ct. & 200ft S. of Rienstra St. in SDGE easement			Longitude	-117.04353		Hydrologic Area: 910.2
				TB Page	1330, G-3		Hydrologic Subarea (Optional): 910.20
Date	7/2/10	Time	14:40	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☑ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other worms

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.9	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.59	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LN

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	RCC-01			Latitude	32.64677	Watershed	Hydrologic Unit: 909
Location	500 Feet South of Bonita Road Southeast of Bonita Road and I-805 Crossing			Longitude	-117.05845		Hydrologic Area: 909.1
				TB Page	1310-D5		Hydrologic Subarea (Optional): 909.12
Date	6/11/10	Time	12:30	Observer	MD/SB	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 33, 34

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.00	NH_3-N (mg/L)	0.179	NO_3 (mg/L)	3.203	Ortho-PO_4 (mg/L)	0.134
pH (pH units)	8.15	TURB (NTU)	0.66	NO_3-N (mg/L)	0.724	Ortho-PO_4-P (mg/L)	0.044
COND (mS/cm)	6.65	MBAS (mg/L)	0.50	Glycol (mg/L)	.20		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	70	in
Depth	0.50	in
Velocity	10/20	ft/sec
Flow	55	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: RCC-01 DATE: _____

OBSERVER: MD/SB TIME: _____

LOCATION: 500 feet South of Benita Road, Southeast of Benita Road and I-805 Crossing

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10' x 15'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LN

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	RCC-02		Latitude	32.63881	Watershed	Hydrologic Unit	910
Location	Northwest Corner of EAST H Street and Del Rey Boulevard intersection		Longitude	-117.03551		Hydrologic Area	910.2
			TB Page	1310-G6		Hydrologic Subarea (Optional)	910.20
Date	6/10/10	Time 15:45	Observer	MD/SB		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☑ Algae	☐ Fish ☑ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 23, 24, 25, 26, 27

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.40	NH_3-N (mg/L)	0.569	NO_3 (mg/L)	1.042	Ortho-PO_4 (mg/L)	N/D
pH (pH units)	7.80	TURB (NTU)	0.26	NO_3-N (mg/L)	~~#~~ 0.240	Ortho-PO_4-P (mg/L)	N/D
COND (mS/cm)	7.60	MBAS (mg/L)	0.5	Glycol (mg/L)	~~#~~ 0.156		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	20	in
Depth	0.5	in
Velocity	10/7	ft/sec
Flow	~~[illegible]~~ 245	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: RCC-02 DATE: 6/10/10

OBSERVER: MD/SB TIME: 15:45

LOCATION: Northwest corner of East H Street and Del Rey boulevard intersecti

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 6' x 20'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	RCC-03		Latitude	32.64418	Watershed	Hydrologic Unit	910
Location	Downstream of Discovery Park, West Rancho Del Rey Parkway, in Rice Canyon open space hiking trail		Longitude	-117.01191		Hydrologic Area	910.2
			TB Page	1311-A5		Hydrologic Subarea (Optional)	910.20
Date	6/14/10	Time 12:10	Observer	MD/SB		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☒ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 43,44,45

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.40	NH_3-N (mg/L)	0.300	NO_3 (mg/L)	60.93	Ortho-PO_4 (mg/L)	0.280
pH (pH units)	7.20	TURB (NTU)	2.80	NO_3-N (mg/L)	13.770	Ortho-PO_4 -P (mg/L)	0.091
COND (mS/cm)	5.24	MBAS (mg/L)	0.50	Glycol (mg/L)	0.20		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: RCS-03 DATE: 6/14/10

OBSERVER: MD/SB TIME: 12:10

LOCATION: Downstream of Discovery Park, West Rancho Del Rey Parkway in Rice Canyon open sp hiking trai

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20' x 20'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	RCC-03			Latitude	32.64418	Watershed: Hydrologic Unit	910
Location	Downstream of Discovery Park, in Rancho Del Rey Pkwy in Rice Canyon Open Space Hiking Trail			Longitude	-117.01191	Hydrologic Area	910.2
				TB Page	1311-A5	Hydrologic Subarea (Optional)	910.20
Date	6/15/10	Time	15:45	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.8	NH_3-N (mg/L)	NA	NO_3 (mg/L)	~~NA~~ 38.19	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.25	TURB (NTU)	NA	NO_3-N (mg/L)	~~NA 8.33~~	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	6.22	MBAS (mg/L)	NA	Glycol (mg/L)	NA 8.631		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	RCC-04			Latitude	32.64436	Watershed: Hydrologic Unit	909
Location	E. of H St. and otay Lakes Rd intersection; W. side of shopping center, in canyon			Longitude	-117.00253	Hydrologic Area	909.1
				TB Page	1311, B5	Hydrologic Subarea (Optional)	909.12
Date	6/24/10	Time	15:50	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 1104-1107

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)	0.335	NO_3 (mg/L)	150.1	Ortho-PO_4 (mg/L)	0.153
pH (pH units)	8.1	TURB (NTU)	0.91	NO_3-N (mg/L)	33.9	Ortho-PO_4-P (mg/L)	0.049
COND (mS/cm)	1.17	MBAS (mg/L)	0.63	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	11	in
Depth	0.25	in
Velocity	10/12	ft/sec
Flow	7.80	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: RCC-04 DATE: 6/24/10

OBSERVER: MD/BM TIME: 15:50

LOCATION: E. ~~side~~ of H St. and Otay Lakes Rd. intersection; W of shopping center, in canyon

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 7 x 15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	ROC-04			Latitude	32.64436	Watershed: Hydrologic Unit	909
Location	E. of H St. & Otay Lakes Rd. intersection, inside of shopping center in canyon.			Longitude	-117.00253	Hydrologic Area	909.1
				TB Page	1311, B5	Hydrologic Subarea (Optional)	909.12
Date	6/25/10	Time	15:50	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 164-165

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	NA	NO_3 (mg/L)	135.2	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.90	TURB (NTU)	0.00	NO_3-N (mg/L)	30.56	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.25	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	12	in
Depth	0.25	in
Velocity	10/12	ft/sec
Flow	7.80	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRM

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-01			Latitude	32.64567	Watershed: Hydrologic Unit	910.
Location	North of Otay Lakes Road, about 300 feet west of private Otay Ranch Road, east of Hunte Parkway			Longitude	-116.94713	Hydrologic Area	910.2
				TB Page	1311-J5	Hydrologic Subarea (Optional)	910.20
Date	6/10/10	Time	14:40	Observer	MD/SB	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 20, 21, 22

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.0	NH_3-N (mg/L)	1.026	NO_3 (mg/L)	13.87	Ortho-PO_4 (mg/L)	3.558
pH (pH units)	7.2	TURB (NTU)	6.19	NO_3-N (mg/L)	3.134	Ortho-PO_4-P (mg/L)	1.159
COND (mS/cm)	1.50	MBAS (mg/L)	0.50	Glycol (mg/L)	0.454		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SCR-01 DATE: 6/10/10

OBSERVER: MD/SB TIME: 14:40

LOCATION: North of Otay Lakes Road, about 300 Feet west of private Otay Ranch Road east of Hunt Pkwy

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20' x 10'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

NRM

☑ Field Screening ☑ Confirmation For NH_3-N ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-01		Latitude	32.64567	Watershed	Hydrologic Unit	910
Location	North of Otay Lakes Road, about 300 feet west of Private Otay Ranch Road, East of Hunte Parkway		Longitude	-116.94713		Hydrologic Area	910.2
			TB Page	1311-J5		Hydrologic Subarea (Optional)	910.20
Date	6/11/10	Time 14:40	Observer	MD/JB		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☑ No

Water Temp (°C)	19.3	NH_3-N (mg/L)	0.973	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.65	TURB (NTU)	2.31	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.57	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-01			Latitude	32.64567	Watershed: Hydrologic Unit	910
Location	N. of Otay Lakes Rd. about 300 feet W. of Private Otay Ranch Rd. east of Hiline Parkway			Longitude	-116.94713	Hydrologic Area	910.2
				TB Page	1311, J5	Hydrologic Subarea (Optional)	910.20
Date	6/30/10	Time	12:35	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☑ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	Tide Height: ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other		
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other		
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other		
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other		
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other		
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other		
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☑ Other larvae

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.7	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.3	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.64	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: purple color on bottom from discharge upstream most likely; one piece of clothing found;

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

MRM

☐ Field Screening ☑ Confirmation For Bacteria ☑ IC/ID Follow-Up For B

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SWR-05-E SCR-01		Latitude	32.645667	Watershed	Hydrologic Unit	910
Location	N. of Otay Lakes Rd. about 300 ft. W. of private Otay Ranch Rd. east of Hunte Pkway		Longitude	-116.94713		Hydrologic Area	910.2
			TB Page	1311, J5		Hydrologic Subarea (Optional)	910.20
Date	7/2/10	Time 11:45	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☑ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	Tide Height: ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☑ Sewage	☐ Other		
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other		
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other		
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other		
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other		
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other		
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☑ Other larvae

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 249 - 250

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.05	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.30	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: larvae/worms, dead snails & live snails

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

MBM

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-01-1			Latitude	32.64717	Watershed	Hydrologic Unit 910
Location	corner of La Costa & Torrey Pines Rd			Longitude	-116.95198		Hydrologic Area 910.2
				TB Page	1311, J5		Hydrologic Subarea (Optional) 910.20
Date	7/2/10	Time	12:30	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☑ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 251 - 252

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	21	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-02			Latitude	32.64548	Watershed: Hydrologic Unit	910
Location	South Creek, as it passes under Otay Lakes Rd, E of Hunte Pkwy (N side of street)			Longitude	-116.94071	Hydrologic Area	910.2
				TB Page	1311-J5	Hydrologic Subarea (Optional)	910.20
Date	6/18/10	Time	14:40	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☑ Algae	☐ Fish ☑ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 115-119

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.4	NH_3-N (mg/L)	0.423	NO_3 (mg/L)	36.81	Ortho-PO_4 (mg/L)	0.209
pH (pH units)	7.95	TURB (NTU)	1.69	NO_3-N (mg/L)	17.619	Ortho-PO_4-P (mg/L)	0.068
COND (mS/cm)	7.08	MBAS (mg/L)	0.38	Glycol (mg/L)	ND		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	38	in
Depth	.75	in
Velocity	0/10	ft/sec
Flow	89	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SCR-02 DATE: 6/18/10

OBSERVER: MD/IT TIME: 14:40

LOCATION: Salt Creek, as it passes under Otay Lakes Rd, E of Hunte Pkwy (N side of street)

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 40x20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☒ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☐ MS4 ☑ Receiving Water

Site ID	SCR-02			Latitude	32.64548	Watershed: Hydrologic Unit	910
Location	Salt Creek, as it passes under otay Lakes Rd, E of Hunte Pkwy (N side of street)			Longitude	-116.94671	Hydrologic Area	910.2
				TB Page	1311-J5	Hydrologic Subarea (Optional)	910.20
Date	6/21/10	Time	14:10	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.6	NH_3-N (mg/L)	NA	NO_3 (mg/L)	56.58	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.9	TURB (NTU)	0.55	NO_3-N (mg/L)	12.787	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.90	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	40	in
Depth	.75	in
Velocity	10/11	ft/sec
Flow	85	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-02			Latitude	32.64548	Watershed: Hydrologic Unit	910
Location	Salt Creek as it passes under Otay Lakes Rd. E of Hunte Pkwy (N. side of street)			Longitude	-116.94671	Hydrologic Area	910.2
				TB Page	1311, J5	Hydrologic Subarea (Optional)	910.20
Date	7/14/10	Time	14:00	Observer	MD/BN	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray			☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive				☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	62.00	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.8	TURB (NTU)	NA	NO_3-N (mg/L)	14.012	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	7.27	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	35	in
Depth	0.75	in
Velocity	10/10	ft/sec
Flow	82	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☑ Receiving Water

Site ID	SCR-03			Latitude	32.63333	Watershed: Hydrologic Unit	910
Location	Olympic Parkway, about 200 feet E of Hunte Pkwy, on Salt Creek			Longitude	-116.94444	Hydrologic Area	910.2
				TB Page	1311-J7	Hydrologic Subarea (Optional)	910.20
Date	6/18/16	Time	13:50	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 110-114

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.6	NH_3-N (mg/L)	0.378	NO_3 (mg/L)	44.05	Ortho-PO_4 (mg/L)	0.209
pH (pH units)	7.9	TURB (NTU)	0.00	NO_3-N (mg/L)	9.955	Ortho-PO_4-P (mg/L)	0.068
COND (mS/cm)	6.60	MBAS (mg/L)	0.25	Glycol (mg/L)	ND		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	55	in
Depth	.5	in
Velocity	10/12	ft/sec
Flow	71	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SCR-03 DATE: 6/18/10

OBSERVER: MD/IT TIME: 13:50

LOCATION: Olympic Pkwy, about 200 ft E of Hunte Pkwy, on the Salt Creek

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 25x20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☒ RECEIVING WATER ☒ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☐ MS4 ☒ Receiving Water

Site ID	SCR-03			Latitude	32.63333	Watershed	Hydrologic Unit: 910
Location	Olympic Pkwy, about 200ft E of Hunte Pkwy on Salt Creek			Longitude	-116.94444		Hydrologic Area: 910.2
				TB Page	1311-37		Hydrologic Subarea (Optional): 910.20
Date	6/21/10	Time	13:35	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray			☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive				☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	18.6	NH_3-N (mg/L)	NA	NO_3 (mg/L)	40.80	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.8	TURB (NTU)	0.07	NO_3-N (mg/L)	9.221	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.28	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	50	in
Depth	5	in
Velocity	10/10	ft/sec
Flow	78	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LN

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-04		Latitude	32.61261	Watershed	Hydrologic Unit	910
Location	SW of Eastlake Pkwy & Hunte Pkwy in canyon		Longitude	-116.95940		Hydrologic Area	910.2
			TB Page	1331-62		Hydrologic Subarea (Optional)	910.20
Date	6/18/10	Time 9:30	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other NS
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other NS
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other NS
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other NS
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 97-99

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SCR-04 DATE: 6/18/10

OBSERVER: MD/IT TIME: 9:30

LOCATION: SW of Eastlake Pkwy & Hunte Pkwy, in canyon

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20x20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-05		Latitude	32.61857	Watershed	Hydrologic Unit	910
Location	Approximately 200 feet S of Hunte Pkwy, across from Exploration Falls, in canyon		Longitude	-116.95093		Hydrologic Area	910.2
			TB Page	1331-H2		Hydrologic Subarea (Optional)	910.20
Date	6/18/10	Time 10:05	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 100-102

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.9	NH_3-N (mg/L)	0.640	NO_3 (mg/L)	446.0	Ortho-PO_4 (mg/L)	0.503
pH (pH units)	6.9	TURB (NTU)	11.77	NO_3-N (mg/L)	100.796	Ortho-PO_4-P (mg/L)	0.164
COND (mS/cm)	8.78	MBAS (mg/L)	1.0	Glycol (mg/L)			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	8.15	in
Depth	.25	in
Velocity	5/5	ft/sec
Flow	96	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SCR-05 DATE: 6/18/10

OBSERVER: MD/IT TIME: 10:05

LOCATION: Approximately 200 ft S of Hunte Pkwy, across from Exploration Falls in canyon

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 25x25

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

MEM

☐ Field Screening ☑ Confirmation For Nitrate, MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-05			Latitude	32.61857	Watershed: Hydrologic Unit	910
Location	Approximately 200ft S of Hunte Pkwy, across from Exploration Falls, in canyon			Longitude	-116.95093	Hydrologic Area	910.2
				TB Page	1331-H2	Hydrologic Subarea (Optional)	910.20
Date	6/21/10	Time	11:35	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	NS	NO_3 (mg/L)	530.3	Ortho-PO_4 (mg/L)	NS
pH (pH units)	7.0	TURB (NTU)	7.03	NO_3-N (mg/L)	119.848	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	11.94	MBAS (mg/L)	1.25	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	18	in
Depth	.25	in
Velocity	5/5	ft/sec
Flow	114	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MAM

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For MBAS, Nitrate, EC ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-05			Latitude	32.61857	Watershed: Hydrologic Unit	910
Location	About 200 feet south of Hunte Pkway across from Exploration Falls in canyon			Longitude	-116.95093	Hydrologic Area	910.2
				TB Page	1331, H2	Hydrologic Subarea (Optional)	910.20
Date	6/23/10	Time	15:00	Observer	MD / BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	NS	NO_3 (mg/L)	~~98.435~~ 10	Ortho-PO_4 (mg/L)	NS
pH (pH units)	7.2	TURB (NTU)	NS	NO_3-N (mg/L)	98.45	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	8.49	MBAS (mg/L)	1.0	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	~~15.0~~	in
Depth	~~0.25~~	in
Velocity		ft/sec
Flow	6.0	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRM

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For MBAS, Nitrate, EC

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	SCR-05-1		Latitude	32.61857	Watershed	Hydrologic Unit	910
Location	About 200ft south of Hunte Pkwy, across from Exploration Falls, in canyon		Longitude	-116.95093		Hydrologic Area	910.2
			TB Page	1331, H2		Hydrologic Subarea (Optional)	910.20
Date	6/23/10	Time 15:00	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other		
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other		
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other		
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other		
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other		
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other		
Biology	☑ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 151 & 153

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.8	NH_3-N (mg/L)	NS	NO_3 (mg/L)	649.0	Ortho-PO_4 (mg/L)	NS
pH (pH units)	6.9	TURB (NTU)	NS	NO_3-N (mg/L)	146.67	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	12.39	MBAS (mg/L)	2.0	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	~~8~~	in
Depth	~~0.25~~	in
Velocity		ft/sec
Flow	~~8-10~~	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter	0.68	ft
Depth	0.25	ft
Velocity		ft/sec
Flow	8-10	gpm

COMMENTS: small pipe

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

MPM

☐ Field Screening ☑ Confirmation For ~~Nitrate, MBAS, EC~~ ☑ IC/ID Follow-Up For Nitrate, MBAS, EC

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-05-01		Latitude	32.61857	Watershed	Hydrologic Unit	910
Location	About 200 ft. south of Hunte Pkwy across from Exploration Falls in canyon		Longitude	-116.95093		Hydrologic Area	910.2
			TB Page	1331, H2		Hydrologic Subarea (Optional)	910.20
Date	6/25/10	Time 15:10	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** ____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.9	NH_3-N (mg/L)	NA	NO_3 (mg/L)	832.00	Ortho-PO_4 (mg/L)	NA
pH (pH units)	6.71	TURB (NTU)	0.00	NO_3-N (mg/L)	188.03	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.48	MBAS (mg/L)	2.0	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

Lab ID
10F0749-01
for 6/25
NISH

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5-6	gpm

Filling a Bottle or Known Volum

Volume		mL
Time to Fill		sec
Flow		gpm

Pipe

	ft
	ft
	ft/sec
	gpm

COMMENTS: some decomposed leaf litter and bottom covered in brown/green scum; trash and shopping cart in concrete box downstream of small pipe

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

MEM

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For MBAS, Nitrate, EC

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-05-2			Latitude	32.61857	Watershed: Hydrologic Unit	~~90~~ 910
Location	About 200 feet south of Hunte Pkwy, across from Exploration Falls in canyon			Longitude	-116.95093	Hydrologic Area	910.2
				TB Page	1331, H2	Hydrologic Subarea (Optional)	910.20
Date	6/23/10	Time	15:00	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 150 & 152

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.5	NH_3-N (mg/L)	NS	NO_3 (mg/L)	39.30	Ortho-PO_4 (mg/L)	NS
pH (pH units)	8.3	TURB (NTU)	NS	NO_3-N (mg/L)	8.88	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	2.02	MBAS (mg/L)	0.13	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth	0.25	ft
Velocity		ft/sec
Flow	6.5	gpm

COMMENTS: Large pipe

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-06			Latitude	32.66780	Watershed: Hydrologic Unit	910
Location	NE of cul-de-sac at N end of Hunte Pkwy, just W of gate to Otay Water District property			Longitude	-116.95562	Hydrologic Area	910.2
				TB Page	1311-H2	Hydrologic Subarea (Optional)	910.20
Date	6/21/10	Time	14:35	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 125-127

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.4	NH_3-N (mg/L)	0.395	NO_3 (mg/L)	54.02	Ortho-PO_4 (mg/L)	0.152
pH (pH units)	7.85	TURB (NTU)	0.37	NO_3-N (mg/L)	12.209	Ortho-PO_4-P (mg/L)	0.050
COND (mS/cm)	7.24	MBAS (mg/L)	0.63	Glycol (mg/L)	ND		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	.25	in
Velocity	5/8	ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SCR-06 DATE: 6/21/10

OBSERVER: MD/IT TIME: 14:35

LOCATION: NE of cul-de-sac at N end of Hunte Pkwy, just W of gate to Otay Water District property

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-06			Latitude	32.66780	Watershed: Hydrologic Unit	910
Location	NE of cul-de-sac at N end of Hunte Pkwy, just W of gate to Otay Water District property			Longitude	-116.95562	Hydrologic Area	910.2
				TB Page	1511-112	Hydrologic Subarea (Optional)	910.20
Date	6/22/10	Time	11:50	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	33.66	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.9	TURB (NTU)	NA	NO_3-N (mg/L)	7.607	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	7.20	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	.25	in
Velocity	5/6	ft/sec
Flow	6	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate (2) ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SQR-01			Latitude	32.66780	Watershed: Hydrologic Unit	910
Location	NE of rd-de-SQC at N. end of Monte Pkwy just N. of gate to otay water District property			Longitude	-116.95562	Hydrologic Area	910.2
				TB Page	1311, H2	Hydrologic Subarea (Optional)	910.20
Date	7/14/10	Time	11:50	Observer	MD/RM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.6	NH_3-N (mg/L)	NA	NO_3 (mg/L)	37.59	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.85	TURB (NTU)	NA	NO_3-N (mg/L)	8.485	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	7.66	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRM

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-07			Latitude	32.61662	Watershed: Hydrologic Unit	910
Location	S. of SCR-05 detention basin at outlet			Longitude	-116.94391	Hydrologic Area	910.2
				TB Page	1331, H2	Hydrologic Subarea (Optional)	910.20
Date	6/28/10	Time	14:50	Observer	MD / BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 191 - 197

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.1	NH_3-N (mg/L)	0.4	NO_3 (mg/L)	343.5	Ortho-PO_4 (mg/L)	0.055
pH (pH units)	7.85	TURB (NTU)	1.83	NO_3-N (mg/L)	77.63	Ortho-PO_4-P (mg/L)	0.018
COND (mS/cm)	8.16	MBAS (mg/L)	0.75	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	12	in
Depth	0.5	in
Velocity	10.7	ft/sec
Flow	26	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: new site request per city; used as alternate site

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SCR-07 DATE: 6/28/10

OBSERVER: MD/BM TIME: 14:50

LOCATION: S. of SCR-05 detention basin at outlet

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SCR-07			Latitude	32.66662	Watershed: Hydrologic Unit	910
Location	S. of SCR-05 detention basin at outlet			Longitude	-116.94391	Hydrologic Area	910.2
				TB Page	1331, H2	Hydrologic Subarea (Optional)	910.20
Date	6/29/10	Time	15:20	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/Barnacles ☐ Insect/Algae ☐ Insect/Snail ☑ Other crawfish

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.6	NH_3-N (mg/L)	NA	NO_3 (mg/L)	378.3	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.05	TURB (NTU)	NA	NO_3-N (mg/L)	85.496	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	8.65	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	8	in
Depth	0.5	in
Velocity	10/8	ft/sec
Flow	15	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LC

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SUN-02			Latitude	32.65924	Watershed: Hydrologic Unit	909
Location	N of East H St. & 50 ft. W of SR-125, at base of slope, E of Sun-05			Longitude	-116.97750	Hydrologic Area	909.1
				TB Page	13H-E3	Hydrologic Subarea (Optional)	909.12
Date	6/15/16	Time	11:35	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 56-62, 67

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.3	NH3-N (mg/L)	0.309	NO3 (mg/L)	53.36	Ortho-PO4 (mg/L)	0.853
pH (pH units)	8.0	TURB (NTU)	2.09	NO3-N (mg/L)	12.059	Ortho-PO4-P (mg/L)	0.278
COND (mS/cm)	5.91	MBAS (mg/L)	0.75	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	≈ 3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, velocity could not be obtained because of outlet is not able to be reached. ~~Estimate~~ Had to estimate flow from distance.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SUN-02 DATE: 6/15/10

OBSERVER: MD/IT TIME: 11:35

LOCATION: N of East H St. & 50 ft. W of SR-125, at base of slope, E of Site Sun-05

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LU

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SUN-02			Latitude	32.659224	Watershed: Hydrologic Unit	909
Location	N of East H St. ≈ 50 ft. W of SR-125, at base of slope, E of Site SUN-05			Longitude	-116.97750	Hydrologic Area	909.1
				TB Page	1311-E3	Hydrologic Subarea (Optional)	909.12
Date	6/16/10	Time	13:45	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☑ Algae	☐ Fish ☑ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.2	NH_3-N (mg/L)	NA	NO_3 (mg/L)	~~NA~~ 53.43	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.0	TURB (NTU)	12.87	NO_3-N (mg/L)	12.075	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.31	MBAS (mg/L)	NA	Glycol (mg/L)			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Width, depth, velocity could not be obtained due to outlet not being able to be cleared. We had to estimate flow from distance.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LC

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SUN-02-01		Latitude	32.66450	Watershed	Hydrologic Unit	909
Location	Manhole S of Mount Miguel Rd & Proctor Valley Rd intersection		Longitude	-116.97148		Hydrologic Area	909.1
			TB Page	1311, F3		Hydrologic Subarea (Optional)	909.11
Date	6/16/10	Time 14:10	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 77-78

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	27.83	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	6.290	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

LU

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SUN-02-02			Latitude	32.659997	Watershed: Hydrologic Unit	909
Location	S. of G.H St. and E. of SR-125			Longitude	-116.97527	Hydrologic Area	909.1
				TB Page	1311, E3	Hydrologic Subarea (Optional)	909.12
Date	7/13/10	Time	11:00	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** ~~280 - 283~~ 348 - 351

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	27.5	NH_3-N (mg/L)	NA	NO_3 (mg/L)	31.25	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.7	TURB (NTU)	NA	NO_3-N (mg/L)	7.0163	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	8.92	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LN

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SUN-03		Latitude	32.66685	Watershed	Hydrologic Unit	909
Location	~~East of the end of Sonal~~ Chula Vista Municipal Golf Course, Southwest of Benita ~~Road~~ and Central Avenue intersection		Longitude	-117.02338		Hydrologic Area	909.1
			TB Page	1310-52		Hydrologic Subarea (Optional)	909.12
Date	6/14/10	Time 15:40	Observer	MD/JB		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☑ Algae	☑ Fish ☑ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 52, 53

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.60	NH_3-N (mg/L)	0.517	NO_3 (mg/L)	1.830	Ortho-PO_4 (mg/L)	0.010
pH (pH units)	7.95	TURB (NTU)	3.11	NO_3-N (mg/L)	0.488	Ortho-PO_4-P (mg/L)	0.003
COND (mS/cm)	4.91	MBAS (mg/L)	0.50	Glycol (mg/L)	0.355		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	0.25	in
Velocity	10/20	ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Sun-03 DATE: 6/14/10

OBSERVER: MD/SB TIME: 15:40

LOCATION: Chula Vista Municipal Golf Course, Southwest of Bonita and Central Ave intersec

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 4' x 10'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☑ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LA

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SUN-05			Latitude	32.65917	Watershed: Hydrologic Unit	909
Location	N of East H St. ~50 ft W of SR-125, at base of slope, westernmost outfall			Longitude	-116.97767	Hydrologic Area	909.1
				TB Page	1311-E3	Hydrologic Subarea (Optional)	909.12
Date	6/15/10	Time	12:15	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 63-66

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.8	NH_3-N (mg/L)	0.300	NO_3 (mg/L)	15.24	Ortho-PO_4 (mg/L)	0.360
pH (pH units)	8.35	TURB (NTU)	2.61	NO_3-N (mg/L)	3.444	Ortho-PO_4-P (mg/L)	0.117
COND (mS/cm)	2.66	MBAS (mg/L)	0.13	Glycol (mg/L)	0.494		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	0.2	in
Velocity	5/7	ft/sec
Flow	4.5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SUN-05 DATE: 6/15/10

OBSERVER: MD/IT TIME: 12:15

LOCATION: N of East H St. & 50 ft. W of SR-125, at base of slope, westernmost outfall

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

L-1

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) MS4 Receiving Water

Site ID	Sun-06		Latitude	32.67688	Watershed	Hydrologic Unit	909
Location	Southwest of the intersection of Proctor Valley Road and San Miguel Ranch Road		Longitude	-116.98830		Hydrologic Area	909.1
			TB Page	1311-C2		Hydrologic Subarea (Optional)	909.12
Date	6/9/10	Time 12:00	Observer	MO/SB		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	Overcast	Fog		
Tide	N/A	Low	Incoming	High	Outgoing	**Tide Height:** _____ ft.
Last Rain	> 72 hours	< 72 hours				
Rainfall	None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	None	Yellow	Brown	White	Gray	Other
Clarity	Clear		Slightly Cloudy	Opaque		Other
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	Sediment/Gravel	Fine Particulates	Stains	Oily Deposits	Other
Vegetation	None	Limited	Normal	Excessive		Other
Biology	None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No N/A

Evidence of Overland Flow? Yes No Irrigation Runoff Other: _____

Photo Taken Yes No **Photo #** 3, 4

Field Screening Samples Collected? Yes No

Water Temp (°C)	21.8	NH_3-N (mg/L)	0.142	NO_3 (mg/L)	36.11	Ortho-PO_4 (mg/L)	0.077
pH (pH units)	7.80	TURB (NTU)	0.61	NO_3-N (mg/L)	8.161	Ortho-PO_4-P (mg/L)	~~0.03~~ 0.025
COND (mS/cm)	5.76	MBAS (mg/L)	0.50	Glycol (mg/L)	~~45.99~~ 0.10		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	.25	in
Velocity	5/8	ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Sun-06 DATE: 6/9/10

OBSERVER: MO/JB. TIME: 12:00pm

LOCATION: Southwest of the intersection of Proctor Valley rd and San Miguel Ranch Rd

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10' x 20'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SUN-07			Latitude	32.67688	Watershed: Hydrologic Unit	909
Location	E of the end of Jonel Way; inlet to detention basin at base of slope, W of SR-125			Longitude	-116.98830	Hydrologic Area	909.1
				TB Page	1311-D1	Hydrologic Subarea (Optional)	909.12
Date	6/21/10	Time	9:30	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 120-121

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.4	NH_3-N (mg/L)	0.252	NO_3 (mg/L)	62.35	Ortho-PO_4 (mg/L)	0.006
pH (pH units)	7.05	TURB (NTU)	3.43	NO_3-N (mg/L)	14.091	Ortho-PO_4-P (mg/L)	0.002
COND (mS/cm)	7.60	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	< 1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SUN-07			Latitude	32.67688	Watershed: Hydrologic Unit	909
Location	E of the end of Jenel way inlet to detention basin at base of slope, W of SR-125			Longitude	-116.98830	Hydrologic Area	909.1
				TB Page	1311-D1	Hydrologic Subarea (Optional)	909.12
Date	6/22/10	Time	10:40	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	48.08	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.50	TURB (NTU)	NA	NO_3-N (mg/L)	10.866	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.47	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Sun-07 DATE: 6/21/10

OBSERVER: MD/IT TIME: 9:30

LOCATION: E of the end of Jeapl Way, inlet to detention basin at base of slope, W of SR-125

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LN

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SUN-08		Latitude	32.67693	Watershed	Hydrologic Unit	909
Location	E. of the end of Sunset Way; W of detention basin at outlet; S. of SUN-07		Longitude	-116.98860		Hydrologic Area	909.1
			TB Page	1311, D1		Hydrologic Subarea (Optional)	909.12
Date	6/29/10	Time 10:50	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ✓	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 204 - 206

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.7	NH_3-N (mg/L)	0.338	NO_3 (mg/L)	27.40	Ortho-PO_4 (mg/L)	0.000
pH (pH units)	~~7.85~~ 8.0	TURB (NTU)	1.39	NO_3-N (mg/L)	6.192	Ortho-PO_4-P (mg/L)	0.000
COND (mS/cm)	8.32	MBAS (mg/L)	0.5	Glycol (mg/L)	0.1		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, velocity couldn't be determined due to inaccessibility.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SUN-08 DATE: 6/28/10

OBSERVER: MD / BM TIME: 10:50

LOCATION: E. of mend of Jnel Way W of detention basin at outlet; S. of SUN-07

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) MS4 Receiving Water

Site ID	SVS-01		Latitude	32.64912	Watershed	Hydrologic Unit	910
Location	Rear of Ramada Inn, at inter-section of Bonita Road and Bonita Glen, north of Bonita Road		Longitude	-117.06474		Hydrologic Area	910.2
			TB Page	1310-05		Hydrologic Subarea (Optional)	910.20
Date	6/9/10	Time 3:15:15	Observer	MD/SB		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	Overcast	Fog			
Tide	N/A	Low	Incoming	High	Outgoing	**Tide Height:** _____ ft.	
Last Rain	> 72 hours	< 72 hours					
Rainfall	None	< 0.1"	> 0.1"				

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage			Other
Color	None	Yellow	Brown	White	Gray			Other
Clarity	Clear		Slightly Cloudy	Opaque				Other
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter			Other
Deposits	None	Sediment/Gravel	Fine Particulates	Stains	Oily Deposits			Other
Vegetation	None	Limited	Normal	Excessive				Other
Biology	None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow: Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No N/A

Evidence of Overland Flow? Yes No Irrigation Runoff Other: _____

Photo Taken Yes No **Photo #** 10, 11

Field Screening Samples Collected? Yes No

Water Temp (°C)	20.00	NH_3-N (mg/L)	0.243	NO_3 (mg/L)	1.366	Ortho-PO_4 (mg/L)	1.144
pH (pH units)	8.15	TURB (NTU)	48.05	NO_3-N (mg/L)	0.308	Ortho-PO_4-P (mg/L)	0.372
COND (mS/cm)	1.06	MBAS (mg/L)	0.25	Glycol (mg/L)	0.367		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Construction from I 805 Freeway possible explanation for "Gray" color sample, possible sediment contamination

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MPM

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For ~~Fab~~ Turb ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	JVS-01			Latitude	32.64912	Watershed: Hydrologic Unit	910
Location	Rear of Ramada Inn at intersection of Bonita Road and Bonita Glen, north of Bonita road			Longitude	-117.06474	Hydrologic Area	910.2
				TB Page	1310-05	Hydrologic Subarea (Optional)	910.20
Date	6/14/10	Time	2:20	Observer	MD/SB	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits		☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive			☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 46, 47, 48, 49

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.40	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.80	TURB (NTU)	3.35	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	0.92	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MPM

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SVS-01			Latitude	32.64912	Watershed: Hydrologic Unit	910
Location	Rear of Ramada Inn at intersection of Bonita Rd. and Bonita Glen N. of Bonita Rd.			Longitude	-117.06474	Hydrologic Area	910.2
				TB Page	1310, 05	Hydrologic Subarea (Optional)	910.20
Date	6/30/10	Time	11:55	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 212-213

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.5	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.75	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.17	MBAS (mg/L)	NA	Glycol (mg/L)	NA		NA

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: one can found in outlet; animal waste found along perimeter of sample site;

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SVS-01 DATE: 6/9/10

OBSERVER: MD/SB TIME: 15:15

LOCATION: Rear of Ramada Inn at intersection of Bonita rd and Bonita Glen, North of Bonita

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 12' x 60'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LN

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	SVS-02		Latitude	32.65010	Watershed	Hydrologic Unit	909
Location	East of 65 Flower Street, behind units 297 and 320, west of I-805		Longitude	-117.06696		Hydrologic Area	909.1
			TB Page	1310-C5		Hydrologic Subarea (Optional)	909.12
Date	6/14/10	Time 14:45	Observer	MD/SB		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 50, 51

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.50	NH_3-N (mg/L)	0.457	NO_3 (mg/L)	2.599	Ortho-PO_4 (mg/L)	1.914
pH (pH units)	7.55	TURB (NTU)	7.89	NO_3-N (mg/L)	.576	Ortho-PO_4-P (mg/L)	0.623
COND (mS/cm)	1.39	MBAS (mg/L)	0.5	Glycol (mg/L)	.773		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SVS-02 DATE: 6/14/10

OBSERVER: MD/SB TIME: ~~2:45~~ 14:45

LOCATION: East of 65 Flower Street, behind units 297 and 320 west of I-805

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 4' x 4'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LN

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SWB-03			Latitude	32.59512	Watershed	Hydrologic Unit: 910
Location	Landscaped area along W side of 2446 Main St.			Longitude	-117.08089		Hydrologic Area: 910.2
				TB Page	1130-B5		Hydrologic Subarea (Optional): 910.20
Date	6/22/16	Time	13:30	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other NS
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other NS
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other NS
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other NS
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 136-137

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SWB-03 DATE: 6/22/10

OBSERVER: MD/IT TIME: 13:30

LOCATION: Landscaped area along W side of 2446 Main St.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SWR-03-E			Latitude	32.64988	Watershed: Hydrologic Unit	910
Location	S of 3rd Ave. & N. Glover Ave. in back of CVS Pharmacy			Longitude	-117.08656	Hydrologic Area	910.2
				TB Page	1310-A5	Hydrologic Subarea (Optional)	910.20
Date	6/15/10	Time	14:45	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 68-69

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.8	NH_3-N (mg/L)	0.112	NO_3 (mg/L)	5.654	Ortho-PO_4 (mg/L)	2.542
pH (pH units)	8.55	TURB (NTU)	1.51	NO_3-N (mg/L)	1.278	Ortho-PO_4-P (mg/L)	0.829
COND (mS/cm)	1.19	MBAS (mg/L)	0.25	Glycol (mg/L)	0.411		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SWR - 03 - E DATE: 6/15/10

OBSERVER: MD/IT TIME: 14:45

LOCATION: S of 3rd Ave. & North Glover Ave in back of CVS Pharmacy

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SWR-03-E			Latitude	32.64988	Watershed: Hydrologic Unit	910
Location	S. of 3rd Ave. and N. Clover Ave. behind CVS Pharmacy			Longitude	-117.08656	Hydrologic Area	910.2
				TB Page	1310, A5	Hydrologic Subarea (Optional)	910.20
Date	7/6/10	Time	10:00	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☐ Sunny	☐ Partly Cloudy	☑ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	Tide Height: ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other leaves
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.7	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.89	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.20	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRM

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SWR-03-E		Latitude	32.69988	Watershed	Hydrologic Unit	910
Location	S. of 3rd Ave. & N. Clover Ave. in back of CVS Pharmacy		Longitude	-117.08656		Hydrologic Area	910.2
			TB Page	1310, A5		Hydrologic Subarea (Optional)	910.20
Date	6/30/10	Time 16:15	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other leaves
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.4	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.1	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.06	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For _____ ☑ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SWR-03-E-1			Latitude	32.64921	Watershed	Hydrologic Unit: 910
Location	Gentry Glen residential complex entrance; 75 3rd Ave.			Longitude	-117.08249		Hydrologic Area: 910.2
				TB Page	1310, A5		Hydrologic Subarea (Optional): 910.20
Date	7/6/10	Time	11:15	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other leaves
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~205-260~~ 204-270

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Glycol (mg/L)	NS		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LN

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SWR-04			Latitude	32.65010	Watershed: Hydrologic Unit	909
Location	NW of 5th Ave. and C St; South of Wal-Mart parking lot			Longitude	-117.09266	Hydrologic Area	909.1
				TB Page	1209, A5	Hydrologic Subarea (Optional)	909.12
Date	6/28/10	Time	9:40	Observer	MD / BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☑ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 179 - 184

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.5	NH_3-N (mg/L)	~~2.6~~ 3.0	NO_3 (mg/L)	0.890	Ortho-PO_4 (mg/L)	2.499
pH (pH units)	6.9	TURB (NTU)	4.02	NO_3-N (mg/L)	0.201	Ortho-PO_4-P (mg/L)	0.815
COND (mS/cm)	1.13	MBAS (mg/L)	0.5	Glycol (mg/L)	0.870		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: most likely mosquito/fly larvae in ponded water; saw mosquitos and flies around ponded area.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: SWR-04 DATE: 6/28/10

OBSERVER: MD / BM TIME: 9:40

LOCATION: NW of 5th Ave. and C St.; south of Wal-Mart parking lot

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Submarginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☑ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☑ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

SITE ID: SWR-04

*** Complete the following section for Submarginal, and Poor Evaluations ONLY ***

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing	3	✓	✓								✓	
Food Packaging	1	✓	✓								✓	
Food Waste												
Household												
Shopping Carts	2	✓	✓								✓	
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: see back of page 1

LA

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Ammonia ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SWR-04			Latitude	32.65010	Watershed	Hydrologic Unit: 909
Location	NW of 5th Ave. and C St. S of Wal-Mart parking lot			Longitude	-117.09266		Hydrologic Area: 909.1
				TB Page	1309, A5		Hydrologic Subarea (Optional): 909.12
Date	6/29/10	Time	9:20	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☑ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other larvae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae ☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.6	NH_3-N (mg/L)	3.0	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.2	TURB (NTU)	6.05	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.15	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: larvae in sample, mosquito larvae most likely

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For ammonia

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	SWR-04-1			Latitude	32.65050	Watershed: Hydrologic Unit	909
Location	Eucalyptus park upstream from SWR-04 in concrete channel			Longitude	-117.08821	Hydrologic Area	909.1
				TB Page	1309, A5	Hydrologic Subarea (Optional)	909.12
Date	6/29/10	Time	10:00	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other leaves
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	~~☐ Limited~~	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 198 – 203

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	0.255	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCC-01-01			Latitude	32.64457	Watershed: Hydrologic Unit	909
Location	Telegraph Canyon Channel, SW of Bay Blvd. & L St. intersection inside Duke Energy Plant, easternmost outlet			Longitude	-117.09232	Hydrologic Area	909.1
				TB Page	1330, A3	Hydrologic Subarea (Optional)	909.11
Date	6/25/10	Time	10:10	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☐ Sunny	☑ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	**Tide Height:** ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 166-167

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.2	NH_3-N (mg/L)	0.477	NO_3 (mg/L)	3.127	Ortho-PO_4 (mg/L)	0.071
pH (pH units)	7.02	TURB (NTU)	0.74	NO_3-N (mg/L)	0.707	Ortho-PO_4-P (mg/L)	0.022
COND (mS/cm)	7.55	MBAS (mg/L)	0.5	Glycol (mg/L)	0.1		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity	ponded	ft/sec
Flow	~~0.1~~	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: TCC-01-01 DATE: 6/25/10

OBSERVER: MD/BM TIME: 10:10

LOCATION: Telegraph canyon channel SW of Bay Blvd. & L St. inside Duke Energy Plant; easternmost outlet

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LW

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCC-01-02			Latitude	32.61457	Watershed: Hydrologic Unit	909
Location	Telegraph Canyon channel SW Bay Blvd's L St. inter-section / inside Duke Energy Plant, right of TCC-01-01			Longitude	-117.09232	Hydrologic Area	909.1
				TB Page	1330, A3	Hydrologic Subarea (Optional)	909.11
Date	6/25/10	Time	10:45	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 168-169

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.9	NH_3-N (mg/L)	0.307	NO_3 (mg/L)	31.49	Ortho-PO_4 (mg/L)	0.047
pH (pH units)	8.1	TURB (NTU)	0.36	NO_3-N (mg/L)	7.119	Ortho-PO_4-P (mg/L)	0.015
COND (mS/cm)	6.67	MBAS (mg/L)	0.5	Glycol (mg/L)	ND		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	0.5	in
Velocity	10/8	ft/sec
Flow	19	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: TCC-01-02 DATE: 6/25/10

OBSERVER: MD/BM TIME: 10:45

LOCATION: Telegraph Canyon channel SW of Bay Blvd. & L St. intersection inside Duke Energy Plant; Right of TCC-01-01

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCC-01-03			Latitude	32.61457	Watershed	Hydrologic Unit: 909
Location	Telegraph canyon channel SW of Bay Blvd. & L St. intersection inside Duke Energy Plant, right of TCC-01-02			Longitude	-117.09232		Hydrologic Area: 909.1
				TB Page	1330-A3		Hydrologic Subarea (Optional): 909.11
Date	6/25/10	Time	11:20	Observer	MD / BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☑ Other slight odor
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other larvae

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 170

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.5	NH_3-N (mg/L)	0.527	NO_3 (mg/L)	1.470	Ortho-PO_4 (mg/L)	0.648
pH (pH units)	7.2	TURB (NTU)	11.72	NO_3-N (mg/L)	0.334	Ortho-PO_4-P (mg/L)	0.211
COND (mS/cm)	8.70	MBAS (mg/L)	0.63	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: TCC-01-03 DATE: 6/25/10

OBSERVER: MD / BM TIME: 11:20

LOCATION: Telegraph Canyon channel SW of Bay Blvd. & L St. intersection inside Duke Energy Plant; to right of TCC-01-02

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LM

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCC-01-04			Latitude	32.61457	Watershed: Hydrologic Unit	909
Location	Telegraph Canyon channel SW of Bay Blvd. & L St. intersection inside Duke Energy Plant; right of TCC-01-03			Longitude	-117.09232	Hydrologic Area	909.1
				TB Page	1330: A3	Hydrologic Subarea (Optional)	909.11
Date	4/25/10	Time	11:55	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/Barnacles ☐ Insect/Algae ☐ Insect/Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 171-173

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.8	NH_3-N (mg/L)	0.394	NO_3 (mg/L)	28.416	Ortho-PO_4 (mg/L)	0.069
pH (pH units)	8.1	TURB (NTU)	0.54	NO_3-N (mg/L)	6.429	Ortho-PO_4-P (mg/L)	0.022
COND (mS/cm)	6.64	MBAS (mg/L)	0.5	Glycol (mg/L)	ND		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	30	in
Depth	0.75	in
Velocity	10/12	ft/sec
Flow	58	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: yellowish foam

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: TCC-01-04 DATE: 6/25/10

OBSERVER: MD/BM TIME: 11:55

LOCATION: Telegraph Canyon Channel SW of Bay Blvd. & L St. intersection inside Duke Energy Plant, to the right of TCC-01-03

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCC-02			Latitude	32.62821	Watershed: Hydrologic Unit	909
Location	Telegraph canyon channel, W of Hilltop Dr. in Hilltop Park			Longitude	-117.06138	Hydrologic Area	909.1
				TB Page	1330/D1	Hydrologic Subarea (Optional)	909.11
Date	4/28/10	Time	10:50	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other	
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other	
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae	
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 185-186

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.1	NH_3-N (mg/L)	0.409	NO_3 (mg/L)	44.62	Ortho-PO_4 (mg/L)	0.008
pH (pH units)	8.0	TURB (NTU)	0.71	NO_3-N (mg/L)	10.08	Ortho-PO_4-P (mg/L)	0.003
COND (mS/cm)	6.83	MBAS (mg/L)	0.5	Glycol (mg/L)	0.1		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	35	in
Depth	1.5	in
Velocity	10/12	ft/sec
Flow	1360	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Large amounts of floating algae and bottom algae

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: TCC-02 DATE: 6/28/10

OBSERVER: MD/BM TIME: 10:50

LOCATION: Telegraph canyon channel, W of Hilltop Dr. in Hilltop Park

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20 X 2

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MBM

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCC - OEP			Latitude	32.62821	Watershed: Hydrologic Unit	909
Location	Telegraph Canyon channel W. of Hilltop Dr. in Hilltop Park			Longitude	-117.06138	Hydrologic Area	909.1
				TB Page	1330, D1	Hydrologic Subarea (Optional)	909.11
Date	6/29/10	Time	11:55	Observer	MD / BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other		
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other		
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other		
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other	algae	
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other		
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other		
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ~~☑ Yes~~ ☑ No **Photo #** ~~785786~~

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.9	NH_3-N (mg/L)	NA	NO_3 (mg/L)	34.40	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.3	TURB (NTU)	NA	NO_3-N (mg/L)	7.774	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.78	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	36	in
Depth	1.5	in
Velocity	10/12	ft/sec
Flow	140	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

Field Screening Confirmation For ~~NO, N~~ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	TCC-03		Latitude	32.64726	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Channel, ~~West of H.H~~ West of East Lake Parkway, 100 Feet North of Otay Lakes Road, Across From Mon. gas		Longitude	-116.96885		Hydrologic Area	909.1
			TB Page	1311-F5		Hydrologic Subarea (Optional)	909.11
Date	6/9/10	Time 13:40	Observer	MD/SB		Discharge Area (Optional)	

MS4 Receiving Water

Land Use (Primary) (Check one only): Residential, Commercial, Industrial, Agricultural, Parks, Open

Land Use (Secondary) (Optional, greater than 10%): Residential, Commercial, Industrial, Agricultural, Parks, Open, None

Conveyance (Check one only): Manhole, Catch Basin, Outlet, Concrete Channel, Natural Creek, Earthen Channel, Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	Overcast	Fog		
Tide	N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.
Last Rain	> 72 hours	< 72 hours				
Rainfall	None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	None	Yellow	Brown	White	Gray	Other
Clarity	Clear		Slightly Cloudy	Opaque		Other
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	Sediment/Gravel	Fine Particulates	Stains	Oily Deposits	Other
Vegetation	None	Limited	Normal	Excessive		Other
Biology	None	Insects, Algae	Fish, Snails	Mussels/ Barnacles	Insect/ Algae, Insect/ Snail	Other

Water Flow: Flowing, Ponded, Dry, Tidal

Does the storm drain flow reach the Receiving Water? Yes No N/A

Evidence of Overland Flow? Yes No Irrigation Runoff Other: ____

Photo Taken Yes No Photo # 5,6,7,8,9

Field Screening Samples Collected? Yes No

Water Temp (°C)	21.5	NH_3-N (mg/L)	0.464	NO_3 (mg/L)	113.80	Ortho-PO_4 (mg/L)	0.353
pH (pH units)	8.2	TURB (NTU)	0.09	NO_3-N (mg/L)	25.70	Ortho-PO_4 -P (mg/L)	~~0.10~~ 0.115
COND (mS/cm)	7.52	MBAS (mg/L)	0.75	Glycol (mg/L)	0.10		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	400	in
Depth	0.5	in
Velocity	1.8	ft/sec
Flow	78	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: ~~[illegible]~~ Water leaking from seams in drainage pipe observed

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NO_3-N ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	TCC-03			Latitude	32.64726	Watershed: Hydrologic Unit	909
Location	Telegraph Canyon Channel west of East Lake parkway, 100 feet north of otay lakes Road, across from mobil gas			Longitude	-116.96885	Hydrologic Area	909.1
				TB Page	1311-F5	Hydrologic Subarea (Optional)	909.11
Date	6/10/10	Time	13:55	Observer	MD/JB	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☒ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.40	NH_3-N (mg/L)	NA	NO_3 (mg/L)	139.40	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.10	TURB (NTU)	0.36	NO_3-N (mg/L)	31.50	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	7.28	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	42	in
Depth	.5	in
Velocity	10/8	ft/sec
Flow	82	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: TCC-03 DATE: 6/9/10

OBSERVER: MD/SB TIME: 1:40 pm

LOCATION: Telegraph canyon channel, west of Eastlake parkway, 100 feet north of otay lakes Road, across from Mobil gas station

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10'x15'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☑ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRN

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCC-04			Latitude	32.62016	Watershed: Hydrologic Unit	909
Location	Telegraph Canyon Channel West of 3rd Avenue and South of L Street, under Mobil gas station			Longitude	-117.07230	Hydrologic Area	909.1
				TB Page	1330-C2	Hydrologic Subarea (Optional)	909.11
Date	6/11/10	Time	10:20	Observer	MD/SB	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☐ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 28, 29, 30

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	16.70	NH_3-N (mg/L)	0.235	NO_3 (mg/L)	39.94	Ortho-PO_4 (mg/L)	0.006
pH (pH units)	8.20	TURB (NTU)	1.05	NO_3-N (mg/L)	9.026	Ortho-PO_4-P (mg/L)	0.002
COND (mS/cm)	6.63	MBAS (mg/L)	0.50	Glycol (mg/L)	0.20		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	50	in
Depth	1.0	in
Velocity	10/15	ft/sec
Flow	104	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: TCC-04 DATE: 6/11/10

OBSERVER: MO/SB TIME: 10:20

LOCATION: Telegraph Canyon Channel west of 3rd Avenue and South of L Street, under Mobil gas sta

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10'x20'

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☐ MS4 ☑ Receiving Water

Site ID	TCC-05		Latitude	32.02605	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Rd. and Heritage Rd./ Paseo Ranchero NE of intersection		Longitude	-117.00806		Hydrologic Area	909.1
			TB Page	1331, B1		Hydrologic Subarea (Optional)	909.11
Date	6/28/10	Time 11:50	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 187-188

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.8	NH_3-N (mg/L)	0.361	NO_3 (mg/L)	7.207	Ortho-PO_4 (mg/L)	0.249
pH (pH units)	8.1	TURB (NTU)	1.10	NO_3-N (mg/L)	16.287	Ortho-PO_4-P (mg/L)	0.081
COND (mS/cm)	6.75	MBAS (mg/L)	0.63	Glycol (mg/L)	ND		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	100	in
Depth	0.5	in
Velocity	10/12	ft/sec
Flow	130	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: TCC-05 DATE: 6/28/10

OBSERVER: MD/BM TIME: 11:50

LOCATION: Telegraph Canyon Rd. & Heritage Rd. / Paseo Ramahero NE of intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCC-05		Latitude	32.62605	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Rd. and Heritage Rd. / Paseo Ranchero NE of Intersection		Longitude	-117.00806		Hydrologic Area	909.1
			TB Page	1331, B1		Hydrologic Subarea (Optional)	909.11
Date	6/29/10	Time 13:45	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.8	NH_3-N (mg/L)	NA	NO_3 (mg/L)	76.73	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.1	TURB (NTU)	NA	NO_3-N (mg/L)	17.341	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.62	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	105	in
Depth	0.5	in
Velocity	10/12	ft/sec
Flow	136	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCC - Ole			Latitude	32.62774	Watershed: Hydrologic Unit	909
Location	Telegraph canyon Rd. and Paseo del Rey intersection, NW corner			Longitude	-117.03429	Hydrologic Area	909.1
				TB Page	1330, H7	Hydrologic Subarea (Optional)	909.11
Date	4/28/10	Time	1340	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ ≥ 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 189 - 190

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.5	NH_3-N (mg/L)	0.404	NO_3 (mg/L)	50.82	Ortho-PO_4 (mg/L)	0.078
pH (pH units)	8.25	TURB (NTU)	3.06	NO_3-N (mg/L)	11.49	Ortho-PO_4-P (mg/L)	0.025
COND (mS/cm)	6.77	MBAS (mg/L)	0.5	Glycol (mg/L)	ND		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	65	in
Depth	0.5	in
Velocity	10/8	ft/sec
Flow	127	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: TCC - 06 DATE: 6/28/10

OBSERVER: MD/BM TIME: 13:40

LOCATION: Telegraph Canyon Rd. & ~~Hentag~~ Paseo del Rey intersection, NW corner

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Sub optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCC - 06		Latitude	32.62774	Watershed	Hydrologic Unit	909
Location	Telegraph Canyon Rd. and Paseo del Rey intersection at NW corner		Longitude	-117.03429		Hydrologic Area	909.1
			TB Page	1330, H1		Hydrologic Subarea (Optional)	909.11
Date	6/29/10	Time 14:20	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other Birds

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.7	NH_3-N (mg/L)	NA	NO_3 (mg/L)	~~41.97~~ 54.53	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.30	TURB (NTU)	NA	NO_3-N (mg/L)	12.328	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.68	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6 ft	in
Depth	0.5	in
Velocity	10/8	ft/sec
Flow	130	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCS			Latitude	32.61283	Watershed: Hydrologic Unit	909
Location	Moss St. & trolley tracks intersection inside property located W of Arrive Waco			Longitude	-117.08840	Hydrologic Area	909.1
				TB Page	1330-A3	Hydrologic Subarea (Optional)	909.12
Date	6/22/10	Time	13:50	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 138-139

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.5	NH_3-N (mg/L)	0.553	NO_3 (mg/L)	0.630	Ortho-PO_4 (mg/L)	1.799
pH (pH units)	8.7	TURB (NTU)	9.62	NO_3-N (mg/L)	0.142	Ortho-PO_4-P (mg/L)	0.489
COND (mS/cm)	2.18	MBAS (mg/L)	0.75	Glycol (mg/L)	1.431		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: larvae

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: TCS DATE: 6/22/10

OBSERVER: MD/IT TIME: 13:50

LOCATION: Mass St. & trolley tracks intersection, inside property located W of Arrie Waco

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Glycol ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	TCS		Latitude	32.61283	Watershed	Hydrologic Unit	909
Location	Moss St. & Trolley tracks intersecting inside property west of Anise Wadda		Longitude	-117.08840		Hydrologic Area	909.1
			TB Page	1330, A3		Hydrologic Subarea (Optional)	909.12
Date	6-23-10	Time 13:25	Observer	MD, BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☑ Other NA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☑ Other NA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☑ Other NA
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other NA
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other NA
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☑ Other NA

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other NA

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4-P (mg/L)	
COND (mS/cm)		MBAS (mg/L)		Glycol (mg/L)			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	DRY	gpm				Flow		gpm

COMMENTS: photos taken upstream on 6-22-10 # 138-139

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

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San Diego Stormwater Copermittees

City of Chula Vista
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	WIL-01			Latitude	32.66082	Watershed: Hydrologic Unit	909
Location	Chula Vista Municipal Golf Course, S of Sweetwater Rd, 100 ft E of Willow St.			Longitude	-117.04306	Hydrologic Area	909.1
				TB Page	1310-F3	Hydrologic Subarea (Optional)	909.12
Date	6/16/10	Time	11:50	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☑ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 75-76

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.582	NO_3 (mg/L)	1.083	Ortho-PO_4 (mg/L)	0.106
pH (pH units)	7.55	TURB (NTU)	15.75	NO_3-N (mg/L)	0.245	Ortho-PO_4-P (mg/L)	0.035
COND (mS/cm)	6.58	MBAS (mg/L)	0.5	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: WIL-01 DATE: 6/16/10

OBSERVER: MD/IT TIME: 11:50

LOCATION: Chula Vista Municipal Golf Course, S of Sweetwater Rd, 100 ft E of Willow Rd

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

LC

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	WOL-02			Latitude	32.61194	Watershed: Hydrologic Unit	910
Location	W of La Media Rd, across from detention basin in canyon, S of intersection of La Media Rd & Birch Rd			Longitude	-116.98443	Hydrologic Area	910.2
				TB Page	1331-D2	Hydrologic Subarea (Optional)	910.20
Date	6/17/10	Time	11:25	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 86-89

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)	0.346	NO_3 (mg/L)	56.31	Ortho-PO_4 (mg/L)	0.427
pH (pH units)	8.9	TURB (NTU)	8.46	NO_3-N (mg/L)	12.726	Ortho-PO_4-P (mg/L)	0.139
COND (mS/cm)	3.32	MBAS (mg/L)	0.38	Glycol (mg/L)	0.156		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	8	in
Depth	0.25	in
Velocity	5/8	ft/sec
Flow	4.	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Site WOL-02
32.611908
-116.984478
WOL-02-1
32.612253
-116.983631

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: WOL-02 DATE: 6/17/10

OBSERVER: MD/CT TIME: 11:25

LOCATION: W of La Media Rd, across from detention basin in canyon, S of intersection of La Media Rd & Birch Rd

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	WOB-02			Latitude	32.61194	Watershed: Hydrologic Unit	910
Location	W of La Media Rd, across from detention basin in canyon, S of intersection of La Media Rd & Birch Rd			Longitude	-116.98443	Hydrologic Area	910.2
				TB Page	1331-D2	Hydrologic Subarea (Optional)	910.20
Date	6/18/10	Time	11:15	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 103-109

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.5	NH_3-N (mg/L)	NA	NO_3 (mg/L)	67.66	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.6	TURB (NTU)	NA	NO_3-N (mg/L)	15.291	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	3.22	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	7	in
Depth	.25	in
Velocity	5/7	ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	WOL-02-#1		Latitude	32.61213	Watershed	Hydrologic Unit	910
Location	E of la Media Rd. in NW corner of detention basin across the street from WOL-02		Longitude	-116.98360		Hydrologic Area	910.2
			TB Page	133, -D2		Hydrologic Subarea (Optional)	910.20
Date	6/18/10	Time 11:30	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 105-106

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	69.17	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	15.632	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	8	in
Depth	.25	in
Velocity	5/9	ft/sec
Flow	[illegible]	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Receives runoff from large landscaped area bordering residential development

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	WOL-02			Latitude	32.61223	Watershed: Hydrologic Unit	910
Location	N. of La Media Rd. S. of detention basin			Longitude	-116.90392	Hydrologic Area	910.2
				TB Page	1331, D2	Hydrologic Subarea (Optional)	910.20
Date	7/13/10	Time	12:45	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	49.64	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.0	TURB (NTU)	NA	NO_3-N (mg/L)	11.219	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	3.03	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	VOL-02-B3			Latitude	32.611615	Watershed: Hydrologic Unit	910
Location	N. side of La Media Rd. E. of Birch Rd.			Longitude	-116.98397	Hydrologic Area	910.2
				TB Page	1331, D2	Hydrologic Subarea (Optional)	910.20
Date	7/13/10	Time	13:20	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ >72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	10.960	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.06	TURB (NTU)	NA	NO_3-N (mg/L)	9.256	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.68	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees

City of Chula Vista

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	WOL-03		Latitude	32.60779	Watershed	Hydrologic Unit	910
Location	S of Santa Luna St, approximately 500 ft W of Magdalena Ave.		Longitude	-116.97800		Hydrologic Area	910.2
			TB Page	1331-E3		Hydrologic Subarea (Optional)	910.20
Date	6/17/10	Time 13:40	Observer	MO/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 91-93

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.6	NH_3-N (mg/L)	0.320	NO_3 (mg/L)	141.4	Ortho-PO_4 (mg/L)	0.781
pH (pH units)	7.2	TURB (NTU)	0.00	NO_3-N (mg/L)	31.956	Ortho-PO_4-P (mg/L)	0.255
COND (mS/cm)	5.30	MBAS (mg/L)	0.25	Glycol (mg/L)	0.2		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: WOL-03 DATE: 6/17/10

OBSERVER: MP/IT TIME: 13:40

LOCATION: S of Santa Luna St, approximately 500 feet W of Magdalena St.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees

City of Chula Vista
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	WOL-03			Latitude	32.60779	Watershed	Hydrologic Unit: 910
Location	S of Santa Luna St, approximately 500 ft W of Magdalena Ave.			Longitude	-116.97800		Hydrologic Area: 910.2
				TB Page	1331-E3		Hydrologic Subarea (Optional): 910.20
Date	6/18/16	Time	12:15	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 107-109

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.1	NH_3-N (mg/L)	NA	NO_3 (mg/L)	146.9	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.25	TURB (NTU)	NA	NO_3-N (mg/L)	33.199	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	5.04	MBAS (mg/L)	NA	Glycol (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	21	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Your Community. Your Environment. Your Choice.

Su Comunidad. Su Ambiente. Su Decisión.

www.chulavistaca.gov/clean

City of Chula Vista

Jurisdictional Urban Runoff Management Program

ANNUAL REPORT

No. 31

July 1, 2010 - June 30, 2011

The bay begins at your front door. Help keep our bay and waterways clean.

La bahía comienza en la puerta de su casa. Ayude a mantener limpios nuestros canales y nuestra bahía.

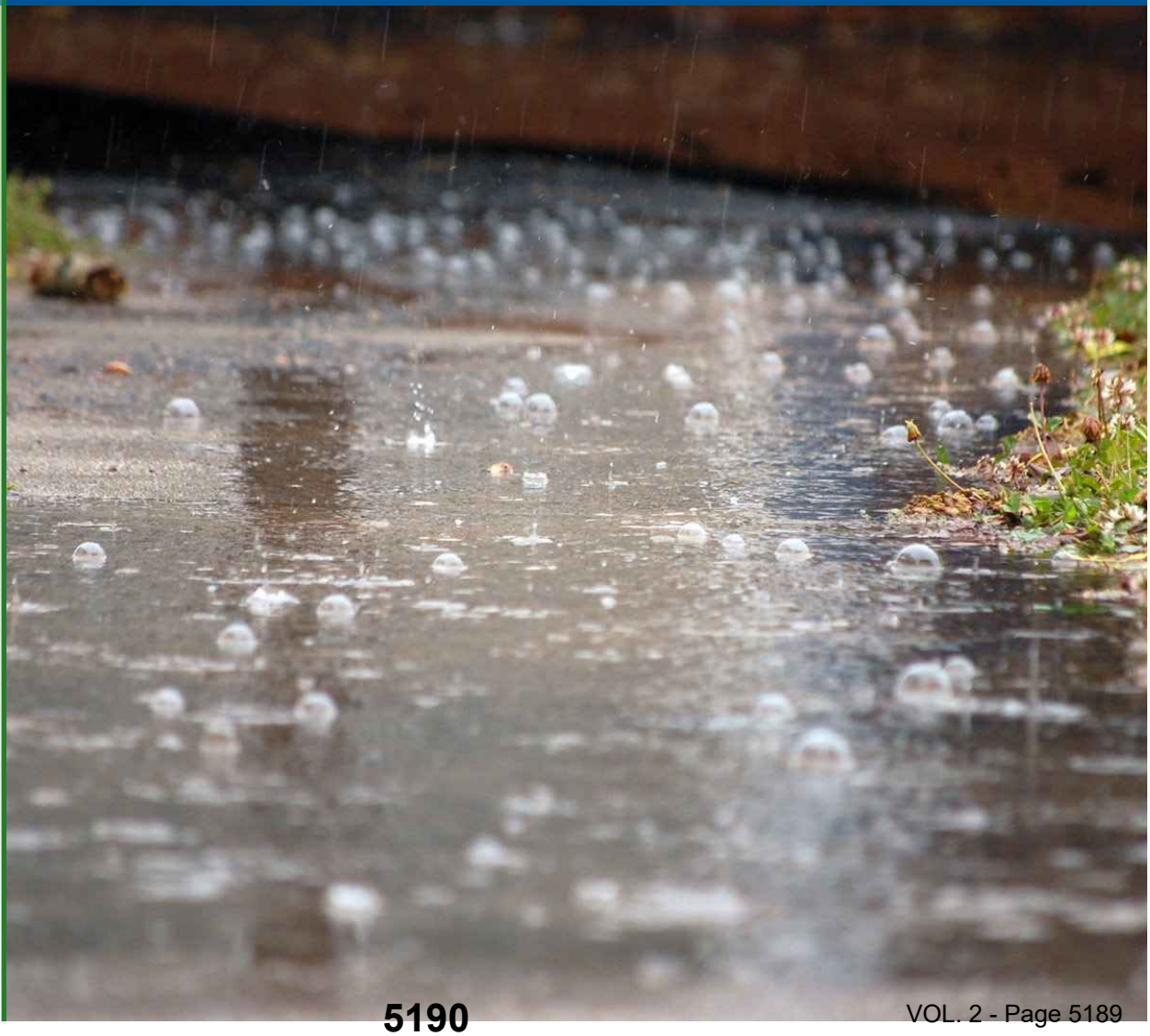

CITY OF CHULA VISTA

CITY OF CHULA VISTA

Public Works Department

September 28, 2011
File # 0780-85-KY181

San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Attention: Mr. David Gibson, Executive Officer

SUBJECT: JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) ANNUAL REPORT NO. 31

Please find enclosed City of Chula Vista's JURMP Annual Report No. 31 for Fiscal Year 2010-2011.

The JURMP Annual Report has been prepared in accordance with the requirements of the San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (NPDES Permit No. CAS0108758) and is a documentation of the City's implementation of and compliance with the requirements of said Permit during the reporting period July 1, 2010 to June 30, 2011.

If you have any questions regarding the submitted report, or need further information, please contact Khosro Aminpour, Senior Civil Engineer, at (619) 397-6111. Please direct any and all correspondence to:

City of Chula Vista, Department of Public Works
1800 Maxwell Road, Chula Vista, CA 91911
Attention: Khosro Aminpour, Senior Civil Engineer

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

Attachments

C: Richard A. Hopkins, Director of Public Works/City Engineer
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer

SIGNED CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

MATT LITTLE
ASSISTANT DIRECTOR OF PUBLIC WORKS

9/29/11
DATE

CITY OF CHULA VISTA
JURMP Annual Report No. 31
Fiscal Year 2010-2011
SEPTEMBER 2011

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ACKNOWLEDGEMENTS

This Report has been prepared by or under the supervision of:

Matt Little, Assistant Director of Public Works
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer
Don Bergeson, Environmental Health Specialist
Marisa Soriano, Environmental Health Specialist

Staff from the following City of Chula Vista departments, divisions, or sections has contributed to the implementation of the JURMP in 2010-2011:

Public Works Storm Water Management
Public Works Inspection Services
Public Works Wastewater Management
Public Works Environmental Services
Office of Communications
Chula Vista Nature Center
Geographic Information Systems
Development Services – Land Development
Engineering Design
Planning Landscape Architecture
Environmental Planning
City Attorney's Office

The following organizations have contributed to the implementation of the JURMP in 2010-2011:

- D-MAX Engineering, Inc.
- I Love a Clean San Diego, Inc.
- Otay Valley Regional Park (OVRP)
- The CLEAN Stakeholder Group

The City of Chula Vista wishes to thank:

- Volunteers who dedicated their time to improve water quality in Chula Vista
- Environmentally conscious citizens who reported illegal discharges
- Citizens, business owners, contractors, and developers who cooperated with City staff in implementing Best Management Practices

LIST OF TERMS AND ABBREVIATIONS

APN	-	Assessors Parcel Number
BMPs	-	Best Management Practices
CASQA	-	California Storm Water Quality Association
City	-	City of Chula Vista
CIWMB	-	California Integrated Waste Management Board
CSWMP	-	Construction Storm Water Management Plan
CWA	-	Clean Water Act
ESA	-	Environmentally Sensitive Area
FY	-	Fiscal Year
GBA	-	George Butler Associates Management System
GIS	-	Geographic Information System
GPU	-	General Plan Update
HHW	-	Household Hazardous Waste
HMP	-	Hydromodification Management Plan
IHC	-	Interim Hydromodification Criteria
IPM	-	Integrated Pest Management
JURMP	-	Jurisdictional Urban Runoff Monitoring Plan
LID	-	Low Impact Development
LTEA		Long Term Effectiveness Assessment
Manual	-	Chula Vista Development Storm Water Manual
MEP	-	Maximum Extent Practicable
MS4	-	Municipal Separate Storm Sewer System
MWS	-	Modular Wetland System
NAICS	-	North American Industrial Classification System
NOI	-	Notice of Intent
NOT	-	Notice of Termination
NPDES	-	National Pollutant Discharge Elimination System
ROWD		Report of Waste Discharge
RWQCB	-	Regional Water Quality Control Board
SIC	-	Standard Industrial Classification
SSO	-	Sanitary Sewer Overflows
SUSMP	-	Standard Urban Storm Water Mitigation Plan
SWPPP	-	Storm Water Pollution Prevention Plan
SWRCB	-	State Water Resources Control Board
TAC	-	Technical Advisory Committee
TTWQ	-	Threat to Water Quality
WDID	-	Waste Discharge Identification
WQTR	-	Water Quality Technical Report

• Executive Summary

EXECUTIVE SUMMARY

On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (Regional Board) adopted the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 (Municipal Permit). The implementation phase of the Municipal Permit commenced on January 24, 2008. This is the fourth annual report submitted under the current permit and covers the implementation period of July 1, 2010 to June 30, 2011. Reporting requirements of this Jurisdictional Urban Runoff Management Program (JURMP) annual report is in accordance with the stipulations of Section J.3.a of the Municipal Permit.

Among other requirements, the Municipal Permit requires that on September 30th of each year, all municipalities of San Diego County (including Chula Vista) as well as the San Diego Unified Port District, the San Diego County Regional Airport Authority and the County of San Diego, collectively referred to as the Copermittees, submit jurisdictional annual reports, which provide documentation of the activities conducted by each Copermittee during the reporting period covering the previous fiscal year from July 1 to June 30. JURMP annual reports are to include descriptions of each Copermittees' efforts in the implementation of its JURMP document developed in compliance with Municipal Permit requirements to minimize discharges of pollutants to waters of the United States and other receiving waters.

As required under Section M.6 of the Municipal Permit, the Copermittees have developed a regional standardized format for JURMP annual reports. This report has, therefore, been prepared in conformance with the regional standardized format.

The present report covers subjects and areas outlined in Section J.3.a of the Municipal Permit and the Chula Vista JURMP. Although the reporting period is essentially from July 1, 2010 to June 30, 2011, some of the activities could not readily be divided to fall within the above target dates and continuation of the activities may have extended beyond this period to their completion.

This report has been prepared to provide an account of activities conducted by the City of Chula Vista (City) according to the components outlined in Section D of the Municipal Permit including:

- Development Planning
- Construction
- Existing Development (Including Municipal, Industrial and Commercial, Residential)
- Illicit Discharge Detection and Elimination (this section will be submitted under a separate cover on or before December 15, 2011, in accordance with Addendum 2 to Order No. R9-2007-0001)
- Education
- Public Participation
- Fiscal Analysis
- Assessment of JURMP Effectiveness

It is important to note that while the City discharges, directly or indirectly, to water bodies that are listed on the Clean Water Act Section 303(d) as impaired water segments; the City does not discharge to any water bodies with a Total Maximum Daily Load (TMDL) program. Therefore, a discussion of TMDLs is not included in this report.

Prior to the 2007-2008 report, the City submitted copies of its Dry Weather Field Screening and Analytical Monitoring Program report and any follow-up investigation reports for the previous dry weather season as attachments to its JURMP annual reports. Since the annual reports are now due to the Regional Board by September 30th of each year, and Dry Weather Field Screening activities can continue until September 30th, the Regional Board has agreed that Dry Weather Field Screening reports and their analysis can be submitted separately at a later date but no later than December 15th of each year. Section 7.0 of this report, the 2011 Dry Weather Field Screening report, and an analysis of its findings will be submitted to the Regional Board before December 15, 2011, as mandated by Addendum No. 2 to Order No. R9-2007-0001.

During this reporting period, the City of Chula Vista participated in the regional Receiving Water and Urban Runoff Monitoring and Reporting Program as mandated in the Municipal Permit. The County of San Diego, as the Principal Copermittee, will submit to the Regional Board the Receiving Waters and Urban Runoff Monitoring Annual Report for the 2010-2011 rainy season on January 31, 2012.

Section 11.0 of this report includes an effectiveness assessment analysis of the development and implementation of the City's Storm Water Management Program. Such analysis provides a synopsis of activities and a critical look at the overall strengths and challenges associated with the components throughout this report.

The following sections cover City of Chula Vista's strides toward continued implementation and improvement of its JURMP and, participation in regional and watershed level activities and programs from July 1, 2010 to June 30, 2011. The City is in the continuing process of assessing the effectiveness of individual program components and has made adjustments or revisions in some areas in order to improve the overall effectiveness of the program and to assure full compliance under the Municipal Permit. The City recognizes its role as a good steward of local and regional water resources, as well as the overall health of the San Diego Bay watershed.

• Introduction

1.0 INTRODUCTION

1.1 BACKGROUND

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollutions such as urban runoff and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issues to local governments and other agencies.

The California Regional Water Quality Control Board, San Diego Region (Regional Board), adopted the first NPDES General Municipal Permit for the San Diego Region in 1990. The NPDES Municipal Permit is re-issued approximately every five years. On January 24, 2007, the Regional Board adopted the latest NPDES General Municipal Permit for the San Diego Region, Order No. R9-2007-0001 (Municipal Permit). The Municipal Permit regulates all new development, significant redevelopment, existing land use and other activities within the jurisdictional boundaries of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and eighteen municipalities of San Diego County, collectively known as the Copermittees. The Municipal Permit requires all Copermittees to develop and implement programs to reduce the discharge of pollutants into and from their Municipal Separate Storm Sewer Systems (MS4s) and report all their efforts and achievements to the Regional Board on an annual basis.

Report No. 31 is an account of City of Chula Vista's activities and Jurisdictional Urban Runoff Management Program (JURMP) implementation efforts during the reporting period of July 1, 2010 to June 30, 2011.

During this reporting period, and pursuant to the requirements of the Municipal Permit, the City of Chula Vista (City) has:

- Implemented inspection programs of construction, municipal, industrial, commercial, and residential existing land uses.

- Provided education and training for City staff, developers, residents, and businesses on current storm water regulations and applicable Best Management Practices (BMPs) that can be implemented to reduce the discharge of pollutants to the City's storm water conveyance systems.

- Continued Dry Weather Field Screening and Analytical Monitoring, and participated in the region-wide Receiving Water Monitoring Program, both of which are designed to evaluate water quality and identify sources of pollution to and from storm water conveyance systems.

- Inspected and maintained public facilities and activities for compliance with BMPs requirements.

- Participated in watershed and regional meetings and activities.

1.2 PURPOSE AND OBJECTIVES

Report No. 31 is a documentation of the City's efforts to minimize discharge of pollutants to and from its storm water conveyance systems and to reduce the impact of urban runoff on adjacent water bodies and sensitive areas. The following account describes the City's activities on the implementation of, and compliance with, the requirements of the Municipal Permit during the reporting period July 1, 2010 to June 30, 2011. The reporting year has been guided by insight through the Report of Waste Discharge and Long Term Effectiveness Assessments undertaken regionally in 2004-2005. These regional reporting and assessment efforts have provided valuable understanding on both local and watershed conditions, and offered the City information to support programmatic development and priority establishment throughout various elements presented within this report.

Sections 2.0 to 6.0 of this report describe the City's compliance activities during the current reporting period and include the following components:

- Development Planning
- Construction Program
- Municipal Program
- Industrial and Commercial Program
- Residential Program

Section 7.0 includes a description of the City's activities and analysis of the Illicit Discharge Detection and Elimination Component. In previous years, when submittal of JURMP annual reports were due to the Regional Board on or before January 31 of each year, Dry Weather Field Screening and Analytical Monitoring report findings were referenced and analyzed in this Section, and the reports themselves were submitted as attachments to the annual report. Addendum No. 2 to Order No. R9-2007-0001 acknowledges that Dry Weather Field Screening and Analytical Monitoring reports can no longer be completed by the new due date of the JURMP annual report submittal (September 30 of each year) and, therefore, Section 7.0 of this report, together with copies of Dry Weather Field Screening and Analytical Monitoring reports will be submitted to the Regional Board on or before December 15, 2011.

Section 8.0 highlights City's efforts and activities conducted during the reporting period to increase general public awareness about environmental issues and water quality protection and train City staff, business owners, developers, contractors, and other targeted groups to implement BMPs during their daily activities.

Section 9.0 is a description of the City's attempts to promote environmental and water quality awareness among the general public and particularly young people through their involvement and participation in environmental group activities.

Section 10.0 outlines an analysis of the City's storm water management fiscal resources as required by Section G of the Municipal Permit. The Copermittees developed a Standardized Fiscal Analysis Method and Format, dated January 29, 2009, which has been used in this report as a basis for the City's fiscal analysis in this section.

Section 11.0 of this report is dedicated to the effectiveness assessment of the City's implementation of the JURMP. The document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" and Section 13 of the City's JURMP document have been utilized to draw conclusions about the effectiveness of the City's JURMP implementation. It should be noted that effectiveness assessment is an on-going component of the JURMP program, and various program elements are revised as necessary, based on observations and findings.

Section 12.0 of the Standardized Format for JURMP Annual Report is dedicated to descriptions of any special investigations conducted during the reporting period. As indicated in this section, the Telegraph Canyon Channel has been placed on the 2008-2010 303(d) list for Selenium. The listing was based on the results of four samples taken from the Telegraph Canyon Channel within the Hilltop Park, as part of the SWAMP program. During the reporting period, the City initiated a Selenium Study to collect additional samples and obtain further data. Four sites were selected along the Telegraph Canyon Channel and samples were collected and tested in May 2011. This study will be continued in the future until adequate data is available to provide statistically significant results.

Section 13.0 of this report includes a description of the City's efforts to reduce pollutant discharges from non-emergency fire fighting flows. Such efforts include training of Fire Department staff to implement BMPs during their daily activities, fire-fighting exercises, and post-incident spill control and cleanup. Incorporation of post-construction BMPs in the design and construction of new fire stations is considered to be another method for minimizing pollutant discharges from washing fire fighting equipment and other non-emergency activities at fire stations and is discussed in this section.

Section 14.0 of this report is dedicated to descriptions of modifications to the JURMP document that were made during the reporting period, or that are proposed or planned, to maximize the City's JURMP effectiveness.

Section 15.0 includes the report's conclusions and recommendations. It provides an overall view of the City's implementation of its JURMP, assesses its strengths and weaknesses in general terms, and provides recommendations to improve next year's program.

• Development Planning

2.0 DEVELOPMENT PLANNING COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a (3)(a) i – A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.

Permit Section J.3.a.(3)(a).ii - Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).iii - A listing of the development projects to which SUSMP requirements were applied.

Permit Section J.3.a.(3)(a).iv - Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).v - At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.

Permit Section J.3.a.(3)(a).vi - A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.

Permit Section J.3.a.(3)(a).vii - An updated treatment control BMP inventory

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Permit Section J.3.a.(3)(a).viii - The number of treatment control BMPs inspected, including a summary of inspection results and findings.

Permit Section J.3.a.(3)(a).ix - A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.

Permit Section J.3.a.(3)(a).x - Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).xi - A listing of any projects which received a SUSMP waiver.

Permit Section J.3.a.(3)(a).xii - A description of implementation of any SUSMP waiver mitigation program.

Permit Section J.3.a.(3)(a).xiii - A description of Hydromodification Management Plan (HMP) development collaboration and participation.

Permit Section J.3.a.(3)(a).xiv - A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.

Permit Section J.3.a.(3)(a).xv - A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.

Permit Section J.3.a.(3)(a).xvi - A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.

Permit Section J.3.a.(3)(a).xvii - The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(a).xviii - A description of notable activities conducted to manage urban runoff from development projects.

2.1 INTRODUCTION

Municipal Permit Section D.1 states "Each Copermittee shall implement a program which meets the requirements of this section and (1) reduces Development Project discharges of pollutants from the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP), (2) prevents Development Project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) manages increases in runoff discharge rates and durations from Development Projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force."

This section describes actions taken during the defined reporting period by the City to minimize short- and long-term impacts of new development or redevelopment with land disturbance activities, structural development (including construction or installation of a building or structure), creation of impervious surfaces, and capital improvement projects. Through the implementation of the Development Planning Component, the City minimizes and manages increases in runoff from development projects to the MEP to protect receiving waters.

2.2 LAND-USE PLANNING

2.2.1 BACKGROUND

The City's land-use planning is guided by its General Plan and the goals, objectives, and policies included therein. The City's comprehensive General Plan Update (GPU) was completed in December of 2005. The GPU program was nearly a five-year effort, and included the

preparation of a citywide master drainage study and assessment and, a water quality baseline study to identify planning issues and policy implications, including compliance with the Municipal Permit and NPDES regulations.

Throughout the GPU process, the City solicited and received significant public input with respect to visions, goals, and objectives and conducted numerous public workshops to present and solicit input on alternative land use concepts. The GPU was adopted by City Council on December 13, 2005.

According to the Environmental Element of the GPU: "With further growth and redevelopment in Chula Vista, the projection of local and regional water resources must be adequately addressed. The City will continue its efforts to reduce the discharge of pollutants into the municipal storm drain system and natural water bodies in accordance with established NPDES standards and watershed planning efforts involving the City." One of the major objectives of the Environmental Element is to "Protect and improve water quality within surface water bodies and groundwater resources within and downstream of Chula Vista."

Water quality policies have been developed based upon those found within the Municipal Permit, and have been composed as to compliment the flow and content of the entire General Plan Update. The following water quality policies are contained in the Environmental Element:

- Ensure safely swimmable and fishable surface waters through careful management of land uses and activities within Chula Vista.
- Pursue safe alternatives to traditional pest management methods in order to reduce toxics in urban runoff and large open uses of land (e.g., golf courses, parks, agricultural lands.)
- Educate residents, business owners and City departments about feasible methods to minimize the discharge of pollutants into natural drainages and the municipal storm water conveyance system.
- Ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy.
- Encourage and facilitate construction and land development techniques that minimize water quality impacts from urban development.
- Maximize the protection of potable water supply resources from pollutants.
- Collaborate with other applicable jurisdictions in the development and funding of regional watershed management plans.

In view of the above comprehensive water quality protection provisions in the Updated General Plan, the City does not find it necessary to make any amendments to its General Plan.

2.2.2 SOURCE CHARACTERIZATION

Seven categories of land uses are identified in the City's General Plan: residential, commercial, mixed-use, industrial, public, special planning areas, and streets/freeways/right-of-ways. Each category can be associated with its specific combination of activities and pollutants and the potential impact that those activities and pollutants may have on the environment, including

urban runoff quality. The City's land-use planning, project review, approval, and verification process includes environmental considerations such as source characterization, proximity to sensitive areas, pollutants and conditions of concern in receiving waters and sensitive areas, and measures necessary to minimize environmental impacts to the MEP.

Additionally, the Chula Vista Development Storm Water Manual (Manual), updated in January 2011, provides guidelines and directives for development project applicants and City staff to identify pollutants and conditions of concern for each type of land use, both during and after construction, and recommend BMPs to mitigate negative impacts of proposed activities and increased impervious areas. The City's Jurisdictional Urban Runoff Management Plan (JURMP) includes a map (Map 2 of the JURMP) showing environmentally sensitive areas within the City. Land use planning attempts to prevent, to the MEP, potentially pollutant-generating land uses from being located near environmentally sensitive areas.

During the reporting period, the City subjected all development project applications to applicable environmental review processes, including the Standard Urban Storm Water Mitigation Plan (SUSMP) process.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

To implement the policies outlined within the City's GPU, the City has developed the Manual. The Manual includes a comprehensive description of construction and post-construction BMPs that are required from each development project. Additionally, the Manual includes guidelines, flow charts, and directives for development applicants and City staff on how to identify applicable requirements for priority and non-priority projects. A section of the Manual has been dedicated to the City's SUSMP. Another section of the Manual outlines BMP requirements on construction sites during both dry and rainy seasons.

During the current reporting period, amid continued slump in development activities, the City has ensured compliance with BMP requirements through development project reviews, construction and post-construction site inspections, and enforcement actions as necessary.

2.2.4 PROGRAM IMPLEMENTATION

During the reporting period, the City successfully completed implementation of the Land Development Component of the JURMP as described in Section 2.4.4 of this report.

In January 2011, in compliance with NPDES Municipal Permit requirements, the following document was updated:

- Chula Vista Development Storm Water Manual (including the City's SUSMP)

The main objective of this update was to incorporate Hydromodification Control requirements in the City's local SUSMP. During the update process, each of the City's implementation processes were objectively reviewed and, based on extensive experience gained during several years of Municipal Permit implementation, significant improvements were made throughout all

aspects of the program. Those improvements are reflected in the above referenced updated document. A copy of the updated Development Storm Water Manual is available on the City's website at http://www.chulavistaca.gov/clean/StormWater/DevelopAndConst.asp .

2.3 ENVIRONMENTAL REVIEW PROCESS

The Environmental Review Process for development and redevelopment projects occurs in two phases. The Environmental Planning Division of the Development Services Department reviews all development and redevelopment projects for compliance with California Environmental Quality Act (CEQA) requirements, which includes water quality considerations. The Permits and Land Development Divisions of the Development Services Department, and the Storm Water Management Section of the Public Works Department review development and redevelopment projects for compliance with requirements of the Clean Water Act, the Municipal Permit, and the City's Grading and Storm Water Management Ordinance requirements. Further, the Environmental Planning Division and the Storm Water Management Section, as needed, review project Environmental Impact Reports (EIRs) to ensure that water quality issues are adequately addressed at early stages of the Environmental Review Process.

The development review and SUSMP implementation processes within the City take place with close coordination of staff from various departments, divisions, and sections. The following departments, divisions, and sections are responsible for the review of development projects for SUSMP requirements:

- Development Services Department
- Public Works Department, Engineering
- Public Works Department, Operations - Storm Water Management Section

The Development Services Department, which is responsible for issuing grading and improvement permits, is the lead department for coordinating all SUSMP review activities. Development projects initiated in the Planning Division of the Development Services Department or other departments within the City are required to submit environmental documents showing compliance with all applicable environmental regulations. Initial Studies, Environmental Impact Reports, Public Facilities Finance Plans, etc., are routed to the Land Development Division for review and final approval.

Land Development Division staff reviews submitted documents and determines if a project is a Priority Development Project and subject to SUSMP requirements. All applicants are required to complete checklists included in the Manual in order to identify specific SUSMP BMP requirements.

Priority Development Projects are then required to submit Water Quality Technical Reports (WQTR) that include identification of project pollutants; low impact development site design, source control, structural treatment control, and hydromodification control BMPs; calculations for sizing of treatment control and hydromodification control BMPs; and a perpetual maintenance plan and funding mechanism. The applicants are required to sign an agreement with the City for the maintenance of post-construction BMPs. When necessary, the Land

Development Division coordinates with the Storm Water Management Section for the latest developments and requirements in the SUSMP program.

The Land Development Division and Storm Water Management staff reviews WQTRs and ensures that appropriate BMPs are included in the design of projects. Through meetings and phone calls, developers and consultants are educated on the City's SUSMP requirements and are required to revise their WQTRs to include all corrections and amendments required by the City.

As noted above, and within the current reporting period, significant efforts were made by City staff to ensure complete and comprehensive WQTR reviews. This programmatic update was introduced to make certain that each WQTR includes a fully developed assessment of each post-construction BMP considered for the project. BMP analysis is required for low impact development site design, source control, treatment control, and hydromodification control BMPs, and effectively holds project designers accountable for demonstrating the effectiveness of the overall design.

The formal review of WQTRs by the Land Development Division and Storm Water Management staff provides an essential mechanism in emphasizing the use of effective site design features and higher efficiency treatment control BMPs. It is recognized that site design and/or structural BMPs are difficult to add to the completed design of a private development project without causing substantial changes to the project's character or viability. The earlier in the planning and design process that storm water quality facilities are considered, the greater the chance that a successful and efficient design can be achieved. During the reporting period, Land Development Division and Storm Water Management staff has strongly emphasized the use of site design features and high efficiency structural BMPs to be incorporated into project design.

Sufficient analysis and discourse must be included within submitted WQTRs to answer why or why not effective and efficient site design features and treatment controls have been selected and/or incorporated into a given project design. Based on the MEP Standards included within the City's SUSMP, staff will make a determination as to whether or not there has been adequate consideration of site design and high-efficiency BMP recommendations. It is noteworthy that projects without approved WQTRs will not move further along in the development review process, providing Land Development Division and Storm Water Management staff an effective tool in the enforcement of SUSMP requirements.

Public projects are initiated in the Public Works Department, Engineering Design Section. Public projects undergo the same review process as private developments. Engineering staff has received training on SUSMP requirements, identification of SUSMP projects, and application of appropriate BMPs in project design. For complex projects, Storm Water Management staff is available for advice and assistance.

In the case of private SUSMP projects, before final approval of the project and issuance of a grading or improvement permit, the applicant is required to demonstrate that among other provisions, a program and funding mechanism for long-term maintenance of designated BMPs are in place. The applicant is required to sign an agreement with the City for the long-term maintenance of post-construction BMPs. The agreement is recorded and runs with the land.

Citywide project tracking is managed through specialized computer software utilized by the City (Permits Plus). The Permits Plus software is shared by all development services departments, divisions, and sections within the City. The Permits Plus software package has been customized with a window for identifying SUSMP projects. All SUSMP projects are therefore readily identifiable via the Permits Plus software. Digital copies of final plans, including drainage and BMP plans, are submitted to the City's Geographic Information System (GIS) Section. They are linked to the CVMapper program, the City's internal computer-based mapping tool, for convenient accessibility to the Drainage Layer.

During the current reporting period, the City successfully implemented the environmental review process for all development and redevelopment project submittals.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

The development project approval and verification process is inherently complex due to the fact that many departments, divisions, and sections of the City are involved. As discussed earlier in this Section, and as part of the update of the City's JURMP which culminated in December 2007, specific attention was focused on identifying gaps or inconsistencies within the development project approval and verification process. During a long process of coordination with all departments involved in the development services, adjustments, amendments, and revisions were made to existing processes. As a result, a more elaborate process with new milestones, flags, checks, and notifications were added to warn staff of any shortcomings in the project approval process. A comprehensive flow chart was created to show the SUSMP implementation, approval, and verification process, together with responsible departments, divisions, and sections of the City. A copy of the referenced flow chart is included in Appendix D of the City's JURMP. During the current reporting period, City staff followed all such guidelines and procedures, and it can be asserted that a sound process is now in place. City staff involved with project review and approval is now familiar with their roles and responsibilities regarding water quality aspects of project approvals. They receive adequate training when necessary to stay abreast of the latest developments, including BMPs, Low Impact Development, and Hydromodification.

2.4.2 SOURCE CHARACTERIZATION

Development projects have the potential to discharge different types and amounts of pollutants based on the development project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's updated SUSMP describes 10 specific categories for Priority Projects and indicates common pollutants associated with each category. A Priority Project must identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

All development projects, including non-Priority Projects, are required to meet the applicable BMP requirements as outlined in the Manual.

During the current reporting period, all development projects were required to identify their proposed land uses and activities that may potentially generate pollutants. Such pollutants were compared to pollutants of concern within downstream receiving waters. Applicable BMPs were required during the project approval and verification process.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are outlined below and are included in the Manual (Forms 5501 and 5504A or 5504B of the Manual). All development projects are required to implement the following principles, where applicable:

- Source control BMPs that reduce storm water pollutants in urban runoff, including storm drain stenciling and signage, properly designed material and trash storage areas, and use of efficient irrigation systems.

- Low Impact Development (LID) BMPs that maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary.

- BMPs applicable to individual project categories

- Provide buffer zones or other buffers for natural water bodies.

- Grading and construction activities must implement all applicable erosion and sediment control BMPs and minimize the discharge of non-visible pollutants.

- Submittal of proof of a mechanism for ongoing long-term maintenance of all structural post-construction BMPs.

Priority Development Projects are additionally required to meet the City's SUSMP requirements included in Section 3 of the Manual. Also, projects disturbing one or more acre of land are required to comply with the Construction General Permit requirements of the State Water Resources Control Board.

During the project approval and verification process, all project submittals were reviewed for compliance with the minimum BMP requirements described above.

2.4.4 PROGRAM IMPLEMENTATION

The City's SUSMP document was developed around the regulatory standards mandated in the Municipal Permit to address post-construction urban runoff pollution from new development and significant redevelopment projects. The goal of the SUSMP is to develop and implement policies to ensure that to the maximum extent practicable, development does not increase pollutant loads from a project site and considers runoff flow rates and volumes. The City's SUSMP is incorporated into a document titled "Development Storm Water Manual," available on the web at:

http://www.chulavistaca.gov/clean/StormWater/DevelopAndConst.asp

In addition to the City's SUSMP, the Manual includes guidelines for developers and other interested parties to understand the City's storm water review process; forms required to establish eligibility under various project requirements; and a section on minimum BMPs requirements during project's construction phase.

In January 2011, City Council approved the updates to the City's SUSMP and Manual. The Updated SUSMP and Manual incorporate standards for construction and post-construction phases of development and redevelopment projects that meet the requirements of the Municipal Permit. The City's Storm Water Management and Discharge Control and Grading Ordinances incorporate the Manual (which includes the City's SUSMP) by reference, therefore, making its contents legally enforceable.

2.4.4.1 NOTABLE ACTIVITIES

In 2010-2011, notable improvements in processes and protocols supporting SUSMP implementation were made by Storm Water Management staff in efforts to continually refine this program element. Significant programmatic updates included:

- Adoption of more stringent standards for post-construction Low Impact Development Site Design BMPs, Source Control BMPs, Treatment Control BMPs, and Hydromodification BMPs.
- Emphasis on the use of structural BMPs with high pollutant removal efficiency.
- Requirements to fully develop WQTRs discussions to evaluate the use of all post-construction BMPs considered.
- Continued population of post-construction BMP GIS layer, including the addition of project-specific WQTR document and Maintenance Agreement links through the Grading Plan Layer.
- Creation of flags and checks in the SUSMP review and implementation process to ensure that all SUSMP projects are properly tracked and documented.
- Site inspections of all development projects to ensure proper installation of construction and post-construction BMPs.

On July 14, 2010, the Regional Water Quality Control Board approved the Final Hydromodification Management Plan submitted by the Copermittees. Subsequent to this

approval and throughout the current reporting period, City staff continued active participation in regional meetings and activities, which focused on issues concerning the implementation phase of this program component. Subjects addressed during regional meetings involved monitoring activities, improvements in the numeric sizing calculator, and the review of other available hydromodification computer software. Further, City staff participated in several regional workshops, seminars, and other training courses on HMP processes and techniques.

2.4.4.2 CONFIRMATION OF APPROVAL PROCESS

During the reporting period, all private development projects submitted to the City for review and approval of construction or grading permits, and public projects initiated by the City were required to undergo the urban runoff approval process and meet the applicable project requirements. Private development permit applications are tracked in Permits Plus, which is a project tracking software shared by all departments and divisions involved in development services. Flags and checks have been established in Permits Plus to ensure that all Priority Development Projects undergo the appropriate review and documentation process. Copies of approved WQTRs, grading or construction plans, and post-construction BMPs' maintenance agreements are scanned and digitally saved. The City maintained the database necessary to link the above referenced documents and the CVMapper software, which is a mapping tool based on the GIS system. This system enables City staff to get copies of the above referenced documents by clicking on the project's grading layer and to make prints as necessary.

Public projects are tracked in a database maintained by the City's Public Works Department, Engineering. A list of all public projects, showing the status of each project, is distributed to various staff members on a monthly basis. The list, among other information, includes a column showing environmental requirements for each project, including WQTRs and Storm Water Pollution Prevention Plans. The list is discussed in monthly meetings set up specifically for public projects. A Storm Water Management Section representative attends such meetings and provides input as necessary.

2.4.4.3 LISTING OF SUSMP PROJECTS

A listing of development projects subject to SUSMP requirements is included in Attachment A. This list includes the names of all Priority Development or Redevelopment Projects from the inception of the SUSMP program on December 9, 2002 to the end of the current reporting period. The list is updated annually to include Priority Development Projects for which development applications have been received and SUSMP eligibility identified during that reporting period. The listed projects may be currently in different phases of review, construction, or occupancy. Some are still under review, while others are under construction or have been completed. The list is categorized for various phases of projects, including: 1) Pending, 2) Inactive, 3) Under Construction, or 4) Completed. Pending refers to projects that have not completed their project review process and are either on hold or being reviewed by City staff. Completed projects have completed their construction and should have permanent BMPs in place.

2.4.4.4 CONFIRMATION OF SUSMP BMP APPLICATION

The Municipal Permit establishes requirements for post-construction BMPs on Priority Development and Redevelopment Projects. In order to develop regional standards and criteria for compliance with Municipal Permit requirements, the Copermittees have developed Model and local SUSMPs. All project applicants are required to complete forms that are included in the Manual to determine post-construction BMP requirements for their projects. City staff verifies proper completion of such forms and informs applicants of their required study reports and project submittals. Project submittals are then reviewed based upon this initial determination.

As required by the Municipal Permit, the City updated its local SUSMP for the first time in January 2008 to include Low Impact Development and Interim Hydromodification Management requirements, as well as other construction and post-construction criteria and standards. Subsequently, the Copermittees updated their Model SUSMP and submitted it for the Regional Boards approval in July 2008. The Regional Board approved the Model SUSMP on March 25, 2009. In March 2010, the City again updated its local SUSMP to incorporate the provisions of the Model SUSMP. In July 2009 and December 2009, the Copermittees submitted their draft and final Hydromodification Management Plans to the Regional Board. The Regional Board considered and approved the final Hydromodification Management Plan for approval on July 14, 2010. The Copermittees had 180 days after approval of the Regional Board to incorporate the HMP into their local SUSMP and implement the HMP for all applicable Priority Development Projects. The City's current Manual, which came into effect on January 10, 2011, includes requirements for Final Hydromodification Control BMPs.

Based on the MEP standards included within the City's SUSMP, staff makes a determination as to whether or not there has been adequate consideration of site design and high efficiency BMP recommendations. Priority Development Projects without approved WQTRs do not move further along in the development review process, providing Land Development and Storm Water Management staff an effective tool in the enforcement of SUSMP requirements.

Project grading or construction plans are required to show all approved structural BMPs. Non-structural BMPs are described in the project's WQTR. Public Works Inspectors and Storm Water Management staff ensure that development projects are constructed according to approved plans. This includes verification inspection and approval of installed or constructed structural treatment control BMPs.

For tracking of post-construction BMPs, Storm Water Management staff has coordinated with the Public Works Inspectors and the Building Inspectors to be notified upon Notice of Final Inspection and Certification of Occupancy and the final release of any Bonds. Copies of notices are sent to Storm Water Management staff for final inspections and confirmation of SUSMP BMP applications of such Priority Development projects to ensure proper installation of post-construction BMPs before final Certificates of Occupancy are issued and bonds are released.

In order to track confirmation of post-construction BMPs, and as an on-going activity, the City's GIS system was continuously updated throughout FY 2010-2011 with post-construction BMP

information; further supporting project tracking and post-construction BMP inventory management. The GIS database is populated with post-construction BMP information including the types of BMPs, and provides links to applicable project plans, copies of WQTRs, and maintenance agreements, where applicable. Most significantly, in FY 2010-2011, WQTR documents were made available through the GIS Grading Plan layer as they are linked to individual projects (Figure 2-1 – CVMapper GIS Layer). This process facilitates inspections and verifications of post-construction structural BMPs. A GIS layer containing all publicly or privately maintained treatment control BMPs is utilized to verify and maintain such facilities (Figure 2-2 – GIS Layer: Grading Plans & WQTR Links). In addition, all privately or publicly maintained treatment control BMPs are being added to the BMP layer to facilitate their tracking and mapping. Also, files containing hard copies of grading plans, WQTRs, maintenance agreements, and other pertinent information are being created and maintained to support and facilitate construction verification and maintenance inspections of post-construction BMPs. (Figure 2-3 – GIS Layer: Post Construction BMPs).

Figure 2-1 CVMapper GIS Layer

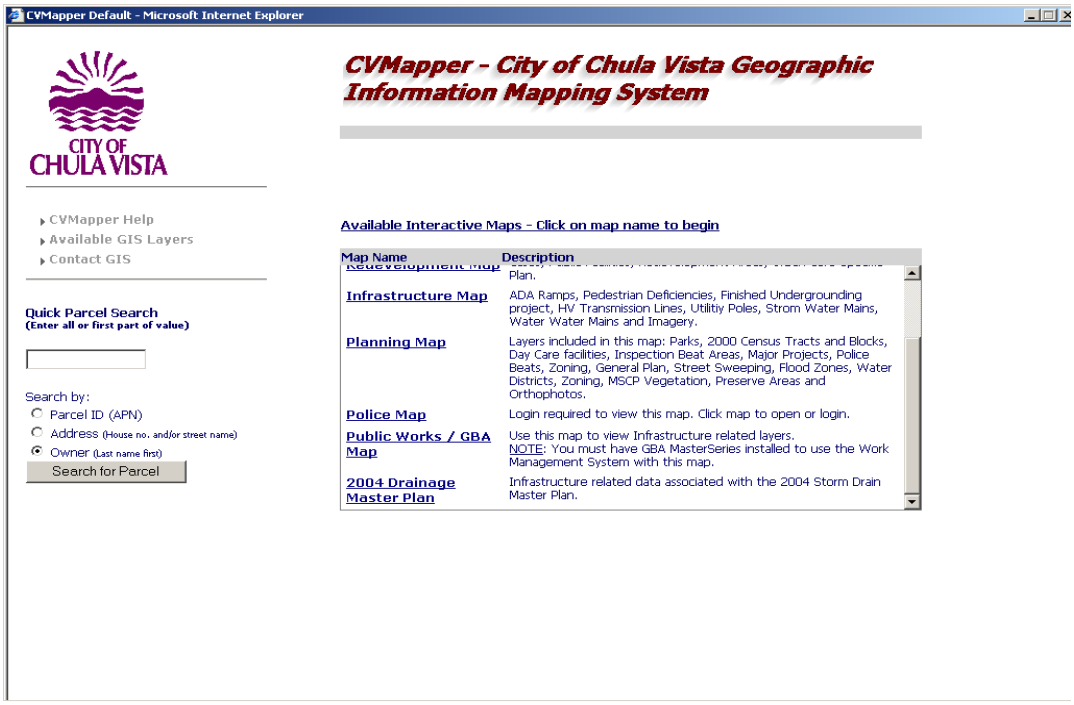

Figure 2-2 GIS Layer: Grading Plans and WQTR

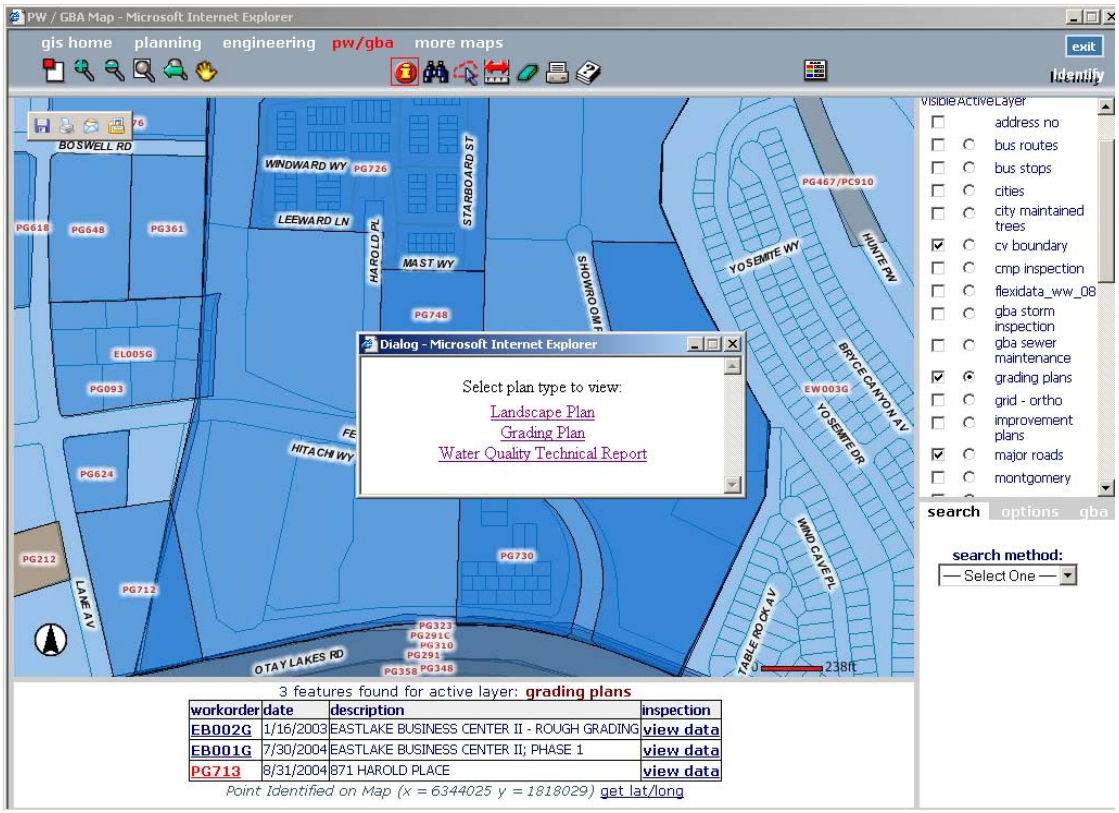

Figure 2-3: GIS Layer: Post Construction BMPs

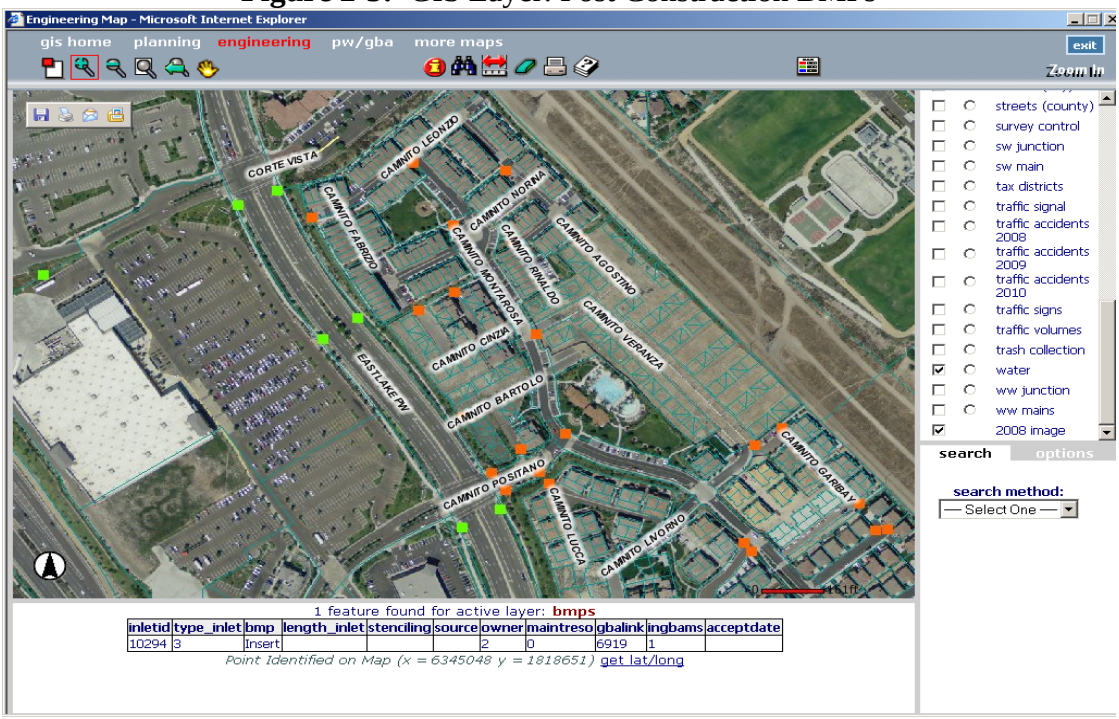

All pending, inactive, under construction, or installed Post-Construction BMPs and Priority Projects are inventoried and tracked by Storm Water Management staff utilizing the City's GBA Master Series program. The database includes the following information:

- Project name
- WQTR, Plans are scanned and linked into GIS (CVMapper)
- Type of treatment control BMP installed or approved
- Number of Treatment Units installed
- Location of the BMP (Development name, area, neighborhood, etc.)
- Project category (Municipal/Capital Improvement Plan, Residential, Commercial, etc.)
- Project status (Pending, inactive, under construction, completed)
- Priority
- Public or privately maintained
- Watershed within which the BMP is located
- The party responsible for maintenance of the BMP
- Name of person or company who conducted maintenance
- Maintenance certifications or verifications
- Inspection reports and findings
- Any corrective actions issued

See Attachment A for an updated listing of Priority Projects that were subject to SUSMP requirements. See Figures 2-4, 2-5, and 2-6 – GBA Master Series – SUSMP Verification and Maintenance Tracking, for examples of SUSMP tracking forms.

Figure 2-4 GBA Master Series: SUSMP Verification and Maintenance Tracking Database A

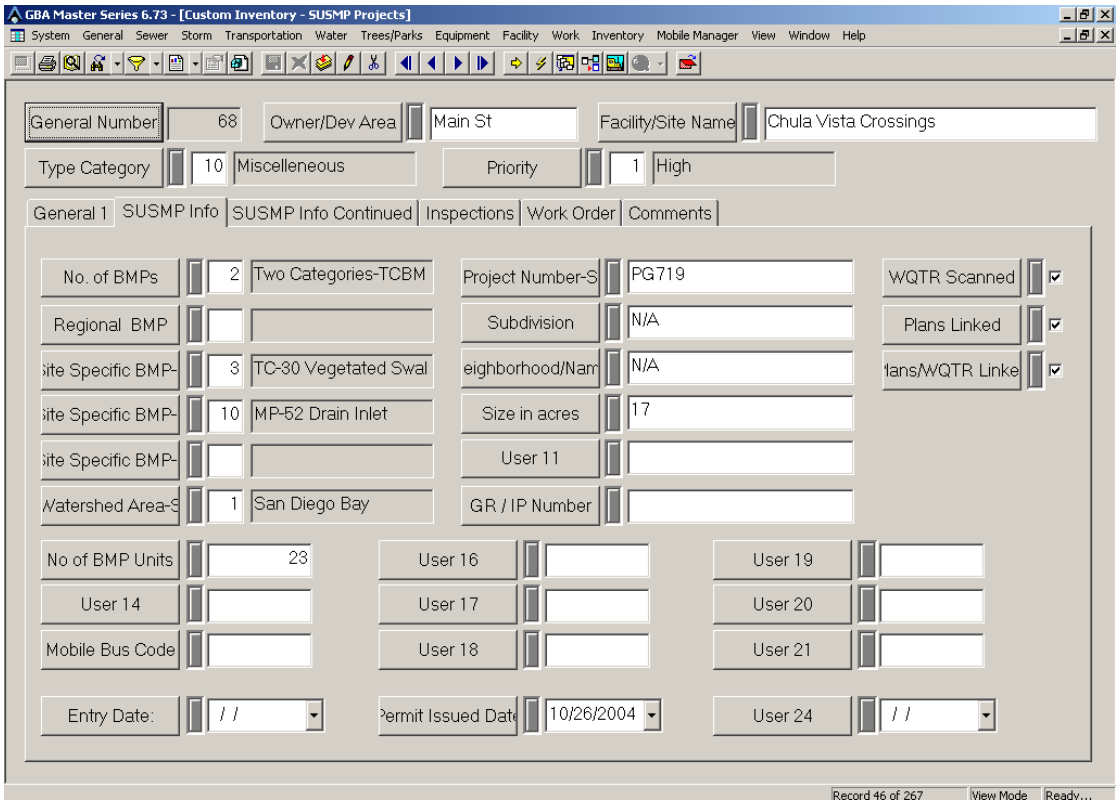

Figure 2-5 GBA Master Series: SUSMP Verification and Maintenance Tracking Database B

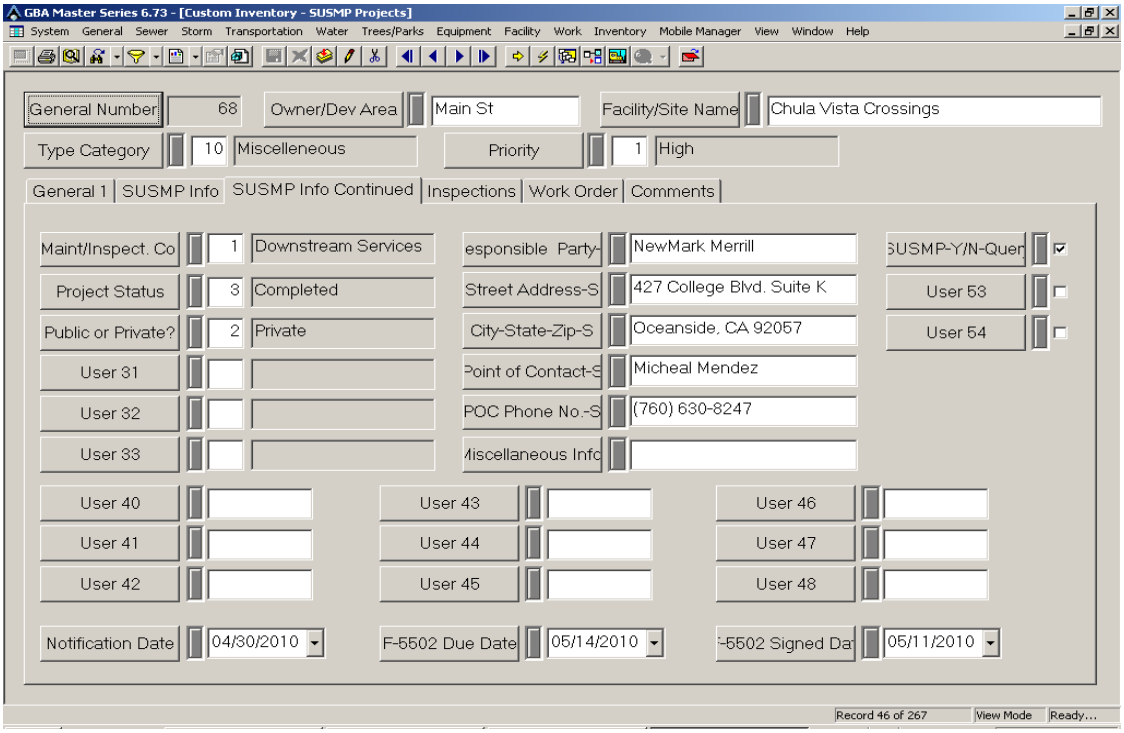

Figure 2-6 GBA Master Series: SUSMP Verification and Maintenance Tracking Database C

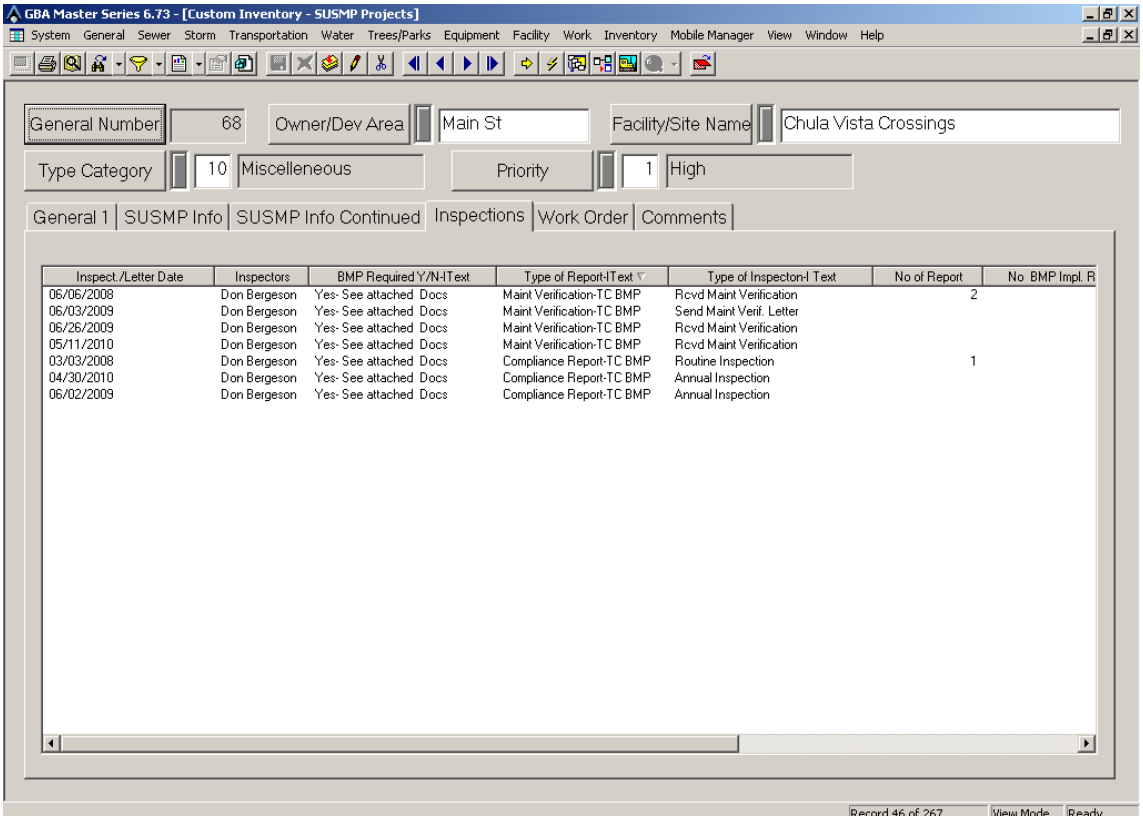

2.4.4.5 EXAMPLE PRIORITY DEVELOPMENT PROJECT

The City works with developers, planners, and consulting engineers to establish standards of Source Control, LID Site Design, Treatment Control, and Hydromodification Control BMPs that meet the requirements of the Manual and the Municipal Permit. An example of such cooperation was with the San Diego Association of Governments (SANDAG). The Metropolitan Transit System (MTS) improvements of the South Bay Bus Maintenance Facility is the expansion of the footprint of an existing bus depot located at 3650 Main Street, Chula Vista, and consists of the demolition of two existing buildings and conversion of the site to permanent bus and auto parking space. The improvements consist of the replacement of existing asphalt pavement and base. The site is approximately 10.6 acres in total; of which 10.2 acres is impervious. Site drainage is from north to south which discharges through an existing underground system into the Otay River. The project replaces less than 50% of the existing impervious areas. Pursuant to criteria established in the Chula Vista Development Storm Water Manual, the project qualifies as a Priority Development Project, and subject to the Standard Urban Storm Water Mitigation Plan (SUSMP). Part of the expansion area was previously used as a lunch truck servicing facility and incorporated two clarifiers, intended to treat truck wash water. Those clarifiers have been removed and replaced with High Rate Media Filters throughout the entire expansion area. MTS will be the responsible party to ensure that post-construction BMPs are maintained into perpetuity.

2.4.4.6 LIST OF PROJECTS WITH LOW EFFICIENCY BMPS

During the current reporting period, all Priority Development Projects that received grading, construction, or building permits from the City proposed medium or high-efficiency treatment control BMPs. No SUSMP projects were permitted to have low-efficiency treatment control BMPs.

2.4.4.7 TREATMENT CONTROL BMP INVENTORY

In Chula Vista there are 194 Priority Development Projects completed or under construction, inventoried from the inception of the SUSMP requirements to the end of the current reporting period. Projects that are still in the review stage are not included in the inventory and are not prioritized until the final WQTR is approved and the project construction commences. Attachment A of this report includes an inventory of all Priority Development Projects that have operational or under construction treatment control BMPs. The information provided in Attachment A includes the project name, subdivision, neighborhood, BMP type, category (residential, commercial, etc.), and inspection priority. The City maintains individual project files that include more detailed information regarding the type, number, and location of Treatment Control BMPs on each Priority Development Project as well as post-construction BMPs inspection records.

2.4.4.8 INSPECTION OF TREATMENT CONTROL BMPS

Storm Water Management Section staff is responsible for annual inspections of private and public constructed permanent BMPs as required by the Municipal Permit. Additionally,

responsible parties for the maintenance of permanent BMPs are required to conduct routine inspections of their treatment facilities. For public permanent BMPs, the City's Public Works Storm Drain Maintenance staff is responsible for conducting routine inspections and maintenance. This duplicate inspections program ensures that all permanent BMPs are maintained to high operational standards.

During the current reporting period, Storm Water Management staff conducted inspections of all High Priority and over fifty percent of Medium Priority constructed permanent BMPs to verify their proper installation and maintenance, which exceeds Permit requirements. A summary of inspections is listed in Table 2-1 below, which includes both private and public permanent BMPs inspections. Where deficiencies were identified, notices were sent out to responsible parties, followed by further contacts to ensure that corrective actions were taken within the specified time period. For a detailed list of projects inspected for post-construction BMPs, please refer to Attachment F.

Table 2-1 Treatment Control BMP Inspection Summary FY 2010-2011

PROJECT PRIORITY	TOTAL NUMBER OF PROJECTS	NUMBER OF PROJECTS INSPECTED
High	58	51
Medium	60	38
Low	76	4
Total	194	93

Note: Of the 58 high priority projects, seven were under construction

As can be seen from Table 2-1, a total of 93 Priority Development Projects were inspected during the current reporting period, which meets and exceeds Municipal Permit requirements. Attachment F to this report includes more detailed information about each project, such as, inspection dates, project names, neighborhood, types of BMPs installed, categories (commercial, residential, etc.), inspection priority, development, and responsible party. The list includes both private and public projects. Depending on the findings during the course of initial inspections, follow-up inspections were conducted as necessary.

Public Works Department Storm Drain Maintenance Section conducts routine inspections and maintenance of publicly owned permanent BMPs. Storm Drain Maintenance Section staff, utilizing GBA Master Series computer software, tracks all publicly owned post-construction BMPs and creates work orders for conducting inspection and scheduling maintenance of the BMPs. Maintenance records for permanent BMPs are tracked in the GBA Master Series computer software. Please refer to Figure 2-7 for a sample of Publicly Maintained Treatment Control BMP Inspection and Maintenance Report.

Figure 2-7 Sample Publicly Maintained Treatment Control BMP Inspection and Maintenance Report

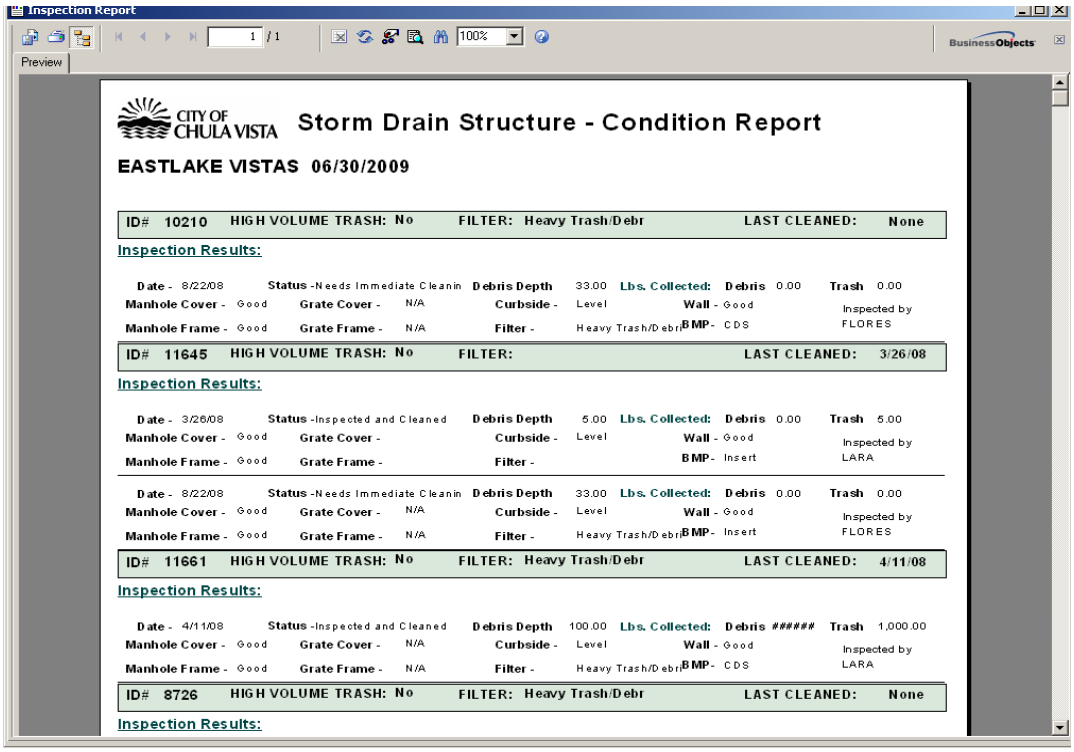

Inspection Report

Preview

CITY OF CHULA VISTA **Storm Drain Structure - Condition Report**

EASTLAKE VISTAS 06/30/2009

ID#	HIGH VOLUME TRASH:	FILTER:	LAST CLEANED:
10210	No	Heavy Trash/Debr	None

Inspection Results:

Date -	8/22/08	Status -	Needs Immediate Cleanin	Debris Depth	33.00	Lbs. Collected:	Debris	0.00	Trash	0.00	
Manhole Cover -	Good	Grate Cover -	N/A	Curbside -	Level		Wall -	Good			Inspected by
Manhole Frame -	Good	Grate Frame -	N/A	Filter -	Heavy Trash/Debri		BMP -	CDS			FLORES

ID#	HIGH VOLUME TRASH:	FILTER:	LAST CLEANED:
11645	No		3/26/08

Inspection Results:

Date -	3/26/08	Status -	Inspected and Cleaned	Debris Depth	5.00	Lbs. Collected:	Debris	0.00	Trash	5.00	
Manhole Cover -	Good	Grate Cover -		Curbside -	Level		Wall -	Good			Inspected by
Manhole Frame -	Good	Grate Frame -		Filter -			BMP -	Insert			LARA
Date -	8/22/08	Status -	Needs Immediate Cleanin	Debris Depth	33.00	Lbs. Collected:	Debris	0.00	Trash	0.00	
Manhole Cover -	Good	Grate Cover -	N/A	Curbside -	Level		Wall -	Good			Inspected by
Manhole Frame -	Good	Grate Frame -	N/A	Filter -	Heavy Trash/Debri		BMP -	Insert			FLORES

ID#	HIGH VOLUME TRASH:	FILTER:	LAST CLEANED:
11661	No	Heavy Trash/Debr	4/11/08

Inspection Results:

Date -	4/11/08	Status -	Inspected and Cleaned	Debris Depth	100.00	Lbs. Collected:	Debris	######	Trash	1,000.00	
Manhole Cover -	Good	Grate Cover -	N/A	Curbside -	Level		Wall -	Good			Inspected by
Manhole Frame -	Good	Grate Frame -	N/A	Filter -	Heavy Trash/Debri		BMP -	CDS			LARA

ID#	HIGH VOLUME TRASH:	FILTER:	LAST CLEANED:
8726	No	Heavy Trash/Debr	None

Inspection Results:

2.4.4.9 VERIFICATION AND MAINTENANCE INSPECTION OF TREATMENT CONTROL BMPS

During the reporting period, a total of 61 notification and inspection letters were sent out to parties responsible for the maintenance of completed private Priority Development Projects (see City's JURMP document Appendix D).

It should be noted that City's Storm Drain Maintenance Section is responsible for the routine inspections and maintenance of Treatment Control BMPs on public right-of-way, facilities, and projects, in accordance with a scheduled maintenance program, which is tracked by the GBA Master Series program. It is not therefore necessary to send out verification letters for publicly maintained permanent BMPs (32 in total). By conducting random inspections of public Treatment Control BMPs, Storm Water Management Section ensures that the level of maintenance on such facilities is adequate.

During this reporting period, responsible parties were aware of their BMP cleaning and maintenance obligations. City staff encountered some resistance, which was mainly believed to be attributable to the current downturn in economy as well as factors such as the transfer of property ownership, changes in property management companies, and a change in the board membership of Homeowners' Associations. For this reason, the City worked closely with the responsible parties to ensure that the BMPs were inspected and maintained. The City continues to re-evaluate its annual maintenance verification procedures and may modify the program if necessary.

Prior to the beginning of the rainy season, the City requires annual verification of proper inspection and maintenance of all treatment control BMPs by the responsible parties. Each year, the City issues to the responsible party, either electronically, by fax, or by certified mail, a Treatment Control BMP Maintenance Package that includes: 1) an annual verification cover letter, 2) a Storm Water Treatment Facilities Inspection/Maintenance Verification Form (Form 5502), and 3) if necessary, a Compliance Report – Treatment Control BMP Inspection, which includes a summary of the inspection results and findings, pertinent sections of the WQTR, and BMP Location Site Plans.

This package informs the responsible parties of the Treatment Control BMPs, for which they are responsible; and requires the responsible parties to sign the verification form and certify that the treatment control BMPs have been properly maintained in accordance with the site's maintenance requirements. This information is tracked utilizing the City's GBA Master Series program. Each package is scanned and linked into the program, which includes the notification, required completion and receipt of the signed verification form. If signed and certified verification forms are not received by the due date, City staff contacts the responsible parties and follows up until Treatment Control BMPs are maintained and verification forms properly completed and returned to the City. Enforcement action may be initiated if a responsible party does not comply with the verification requirement after follow-up actions and proper service of a notice.

2.4.4.10 BMP CONSTRUCTION VERIFICATION

The City's Public Works Inspectors and Storm Water Management staff is responsible for ensuring that permanent BMPs, which are components of the project's drainage systems and grading works, are constructed in accordance with approved specifications and grading plans. Public Works Inspectors and Storm Water Management staff conducts frequent inspections of projects during their grading and construction activities and verify that permanent BMPs are constructed as per approved plans.

In compliance with the Municipal Permit, the City has developed databases for tracking Priority Development Projects that are under construction. Additionally, hard copy files, including information about each project's WQTRs and grading or construction site plans that show locations of permanent BMPs have been created and are continuously updated.

Since LID features are considered components of site hardscape and are not inspected by Public Works Inspectors, a new process has been established in which Public Works Inspectors notify Storm Water Management Section staff immediately after their inspections of grading activities are completed and their presence on the project is no longer necessary. At such time, Storm Water Management staff takes over the responsibility of inspecting permanent BMPs while being constructed. They ensure that LID Site Design features are constructed as shown on approved grading, construction, or landscape plans and per approved specifications.

2.4.4.11 SUSMP WAIVERS

Section D.1.d.(11) of the Municipal Permit includes a waiver provision, under which a Copermittee may provide for a Priority Development Project to receive a waiver from the requirement of meeting numeric sizing criteria for Treatment Control BMPs, if infeasibility can be established. During the reporting period, the City did not grant waivers to any Priority Development Projects.

2.4.4.12 SUSMP WAIVER MITIGATION

During the reporting period, all Priority Development Projects were required to comply with the provisions of the City's local SUSMP. Therefore, the City did not grant waivers to any Priority Development Project during this period.

2.4.4.13 HYDROMODIFICATION MANAGEMENT PLAN COLLABORATION

Soon after Regional Board's adoption of the Municipal Permit on January 24, 2007, the Copermittees formed a Land Development Workgroup to develop Copermittees' Hydromodification Management Plan (HMP) and Model SUSMP, among other regional development related tasks. The Land Development Workgroup planned regular meetings in which various topics, mainly the development of the HMP and Model SUSMP, were discussed. The Copermittees decided to hire a consultant with expertise in those fields to work on the studies needed for this purpose. The consulting team of Brown and Caldwell was selected as the main consultant, with several sub-consultants providing expert services.

A Technical Advisory Committee (TAC), consisting of high-ranking and renowned experts in the fields of hydrology, hydromodification, and SUSMP issues were formed to oversee the Consultant's work, and to provide expert advice. During the reporting period, the TAC continued to meet on a regular basis, and while Copermittees were not on the TAC, they were encouraged to participate in their meetings. Brown and Caldwell developed submittals for the Final Hydromodification Management Plan, which was subsequently approved by the Regional Board and became effective in January 2011. During the current reporting period, the Hydromodification Management Plan and its requirements were incorporated in the updates of the City's local SUSMP.

City of Chula Vista representatives actively participated in all Land Development Workgroup and TAC meetings and activities. They were closely involved in the issues that were discussed, reviewed work products, and provided comments on all related draft documents.

City staff attended all regional workshops and trainings related to HMP and SUSMP issues. A description of such trainings is included in Section 8.0 of this report.

2.4.4.14 PROJECTS REQUIRED TO MEET HMP REQUIREMENTS

Section D.1.g.(5) of the Municipal Permit requires the development of an HMP document at the regional level and incorporation of such HMP into individual local SUSMPs. The HMP is to include limitations on increases of runoff discharge rates and durations from all Priority Development Projects in order to prevent increased downstream channel erosion, sediment pollutant generation, or other impacts to beneficial uses and stream habitat.

Development of a draft HMP was a two-year effort by the Copermittees and their consultants. The Copermittees submitted the first draft HMP to the Regional Board in January 2009. In the meantime, the Municipal Permit required the implementation of an Interim Hydromodification Criteria (IHC) for development projects that were 50 acres or more. The IHC requirement was incorporated into updated local SUSMPs, which came into effect in January 2008.

Adoption of IHC requirements in January 2008 coincided with the collapse in the housing market, and almost all major development projects in Chula Vista came to an abrupt halt. The Final Hydromodification Management Plan (HMP) was incorporated into the City's local SUSMP in January 2011 and became effective for all projects, which had not received their grading or building permits. However, development continued to be slow and occasional major projects submitted for review by City staff have had extended project submittal, review, and permitting schedules.

During the reporting period, 3 major projects continued to be under review as follows:

1. Eastern Urban Center
2. Otay Ranch Village 8
3. Otay Ranch Village 9

All or part of these projects may qualify for HMP requirements, but their project submittals are still under review.

2.4.4.15 PROJECTS EXEMPTED FROM HMP REQUIREMENTS

The current reporting period spans over two different sets of requirements concerning hydromodification control BMPs. From July 1, 2010 to January 9, 2011, Priority Development Projects were subject to the Interim Hydromodification Criteria, while from January 10, 2011 to June 30, 2011, Priority Development Projects were required to meet Final Hydromodification Plan requirements. According to the Chula Vista Development Storm Water Manual, any project that had not obtained their construction permits before January 10, 2011, was required to meet the new standards. As such, the City of Chula Vista did not grant any waivers from the HMP requirements during the current reporting period.

2.4.4.16 PROJECTS DISTURBING 50 ACRES OR MORE

Until January 9, 2011, projects that disturbed 50 acres or more were required to comply with the Interim Hydromodification Criteria. Those projects that disturbed less than 50 acres were required to address Conditions of Concern, which typically included a comparison of pre- and post-development peak discharge rates for 2- and 10-year storm events, and a Best Professional Judgment evaluation of downstream geomorphologic conditions. Under the current Municipal Permit requirements, Priority Development Projects, irrespective of disturbed area, are required to meet the Final Hydromodification Standards. Non-Priority Development Projects, while being subject to BMP implementation, are exempt from hydromodification considerations.

2.4.4.17 ENFORCEMENT ACTION TAKEN FOR DEVELOPMENT PROJECTS

As a result of post-construction treatment BMP verification inspections, the City determined that 12 out of 93 inspected projects were partially or totally deficient in the inspection and maintenance of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, nine projects were brought into compliance. Work is being continued on the remaining three projects. Deficiencies were observed in the cleaning and maintenance of some treatment control BMPs, which were satisfactorily addressed by the responsible persons after written notices. The City has the option of initiating enforcement action on responsible persons who do not demonstrate adequate effort to bring their project to compliance in a timely manner. Such enforcement action may include verbal and written warnings, Notices of Violation, Administrative Citations, and/or Civil or Criminal Penalties. At this time, the City initiated enforcement actions, which included Notice of Violations for three development project with deficient post-construction BMPs.

• Construction

Section 3.0

3.0 CONSTRUCTION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(b).i – Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.

Permit Section J.3.a.(3)(b).ii – Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.

Permit Section J.3.a.(3)(b).iii – A description of modifications made to the construction and grading ordinances and approval processes.

Permit Section J.3.a.(3)(b).iv – Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.

Permit Section J.3.a.(3)(b).v – Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.

Permit Section J.3.a.(3)(b).vi – A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.

Permit Section J.3.a.(3)(b).vii – For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.

Permit Section J.3.a.(3)(b).viii – A description of the general results of the inspections.

Permit Section J.3.a.(3)(b).ix – Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(b).x – The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(b).xi – A description of the notable activities conducted to manage urban runoff from construction sites.

3.1 INTRODUCTION

Pursuant to the Municipal Permit, construction sites are subject to dual regulation insofar as all construction sites that are covered under the NPDES General Construction Permit continue to be inspected and enforced by Regional Board staff. At the same time, the Municipal Permit requires Copermittees to implement a Construction Component to limit the impact of construction and grading activities on receiving waters, which may result from the presence of disturbed soils and building materials. It is important that construction sites take appropriate measures to prevent potential pollutants from entering storm water conveyance systems.

The following section provides an account of the City's program to meet the requirements outlined in Section D.2 of the Permit to reduce the release of pollutants from construction sites into the storm water conveyance systems to the Maximum Extent Practicable (MEP).

3.2 SOURCE CHARACTERIZATION

The City has compiled and monthly updates a watershed-based inventory of all construction sites within its jurisdiction as required by Municipal Permit Section D.2.b. The City utilizes a construction site database to maintain its inventory. The inventory includes details on each construction site, including subdivision, project name, neighborhood, project status, work order number, and priority. A list of construction projects under the City's jurisdiction, all of which are located within the San Diego Bay Watershed, can be found in Attachment B. The list was current at the time of preparation of this report and includes all active and inactive projects.

3.2.1 CONFIRMATION OF INVENTORY MANAGEMENT

During the reporting period, Storm Water Management staff maintained and monthly updated a construction site inventory. As a result of coordination between the Public Works Construction Inspection staff, Engineering Design staff, Development Services staff, and Storm Water Management staff, mechanisms have been established in the maintenance and tracking of an up-to-date and accurate inventory. As such, all significant construction activities are closely monitored, supporting close collaboration and an effective means of tracking such activities Citywide. Storm Water Management staff are notified of all pre-construction meetings as coordinated by Public Works Construction Inspection staff. This provides an additional level of notification regarding the start of construction activities. In support of maintaining an accurate inventory, the City's Development Services Department distributes a monthly Major Project Development Status Report, which apprises City staff of such information as project review status and construction phase. Updates to the inventory include the addition of new construction projects, the removal of completed projects, the assignment of inspection priority, and status.

3.3 UPDATES TO ORDINANCES AND APPROVAL PROCESS

Storm water compliance requirements for construction activities are provided in the City's Development Storm Water Manual (Manual). The City's Storm Water Management and Discharge Control and Grading Ordinances incorporate, by reference, the Development Storm

Water Manual, hence providing legal authority for the enforcement of the Manual's requirements. Such documents and ordinances have been updated and amended to ensure that compliance with the Municipal Permit requirements is met.

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City requires that all proposed construction and grading projects implement measures to ensure that pollutants from the project site are reduced to the MEP and do not cause or contribute to an exceedance of water quality objectives. The following mechanisms have been identified and utilized to promote the implementation of Best Management Practices (BMPs) during construction activities.

- Development Storm Water Manual (Manual)
- Construction site inspection and enforcement
- Construction and development community education

Designated BMPs for each construction site were required to be implemented through the requirement of a Storm Water Pollution Prevention Plan (SWPPP) or a Construction Storm Water Management Plan (CSWMP). SWPPPs are required for projects disturbing one acre or more of land, while CSWMPs are required for all other projects.

Regular and random inspections of construction sites ensure that BMPs are implemented, and where deficiencies are noted, corrective action is required, which in some cases may lead to the initiation of enforcement action.

3.4.1 DEVELOPMENT STORM WATER MANUAL

Construction activity standards and requirements are fully developed and included within the Development Storm Water Manual. The Manual clearly states that it is the responsibility of the property owner and/or contractor to select, install, and maintain appropriate BMPs. The Manual outlines minimum construction BMPs required by the City. Where applicable, current fact sheets are obtained from the CASQA Storm Water BMP Portal and are referenced in the Manual. The following topics are also discussed:

- Site management requirements
- BMP performance standards
- Seasonal requirements
- Limitation of Grading
- Advanced Treatment
- Example Construction Best Management Practices

3.5 PROGRAM IMPLEMENTATION

The Development Storm Water Manual is used by City staff to assist in the review and permitting of development and redevelopment projects with respect to construction activities. The Manual clearly outlines the review process for water quality. It includes descriptive text and charts that guide staff in determining if a project needs to be covered under the NPDES General Construction Permit. If the project is subject to the General Construction Permit, it is required to develop a SWPPP. The project is also required to file a Notice of Intent (NOI) with the State Water Resources Control Board. If the project is not subject to the General Construction Permit, it is required to develop a CSWMP. Both SWPPPs and CSWMPs must be prepared prior to the start of construction activities. All projects are required to include applicable measures to prevent pollution discharges to storm water conveyance systems by implementing BMPs during all phases of construction.

When it is determined that Capital Improvement Projects (CIPs) need coverage under the NPDES General Construction Permit, the Qualified SWPPP Developer or authorized personnel designated by the Legal Responsible Person, electronically submits a Notice of Intent and a SWPPP through the State Water Resources Control Board Storm Water Multiple Application and Report Tracking System (SMARTS). The SWPPP is maintained at the construction site for review by City or Regional Board staff.

The City has ensured compliance with construction BMP requirements through development project reviews, construction site inspections, and enforcement actions as necessary.

Within the defined reporting period, the City made notable efforts in promoting pollution prevention and BMP implementation on construction sites. The following mechanisms have been identified by the City as those integral to the promotion of pollution prevention techniques and BMP implementation.

- Construction site inspection and enforcement
- Construction and development community education
- Integration of pollution prevention and BMP implementation requirements into the development review process, including requirements for erosion control plans.
- Development Storm Water Manual
- Construction specific outreach and education activities

Education of the construction and development community is achieved on a local and regional level. Locally, project proponents including contractors, developers, property owners, superintendents, and other responsible parties are exposed to construction related water quality protection requirements throughout the development review and construction process. Storm Water Management staff provides comments and direction through the review of development proposals and plans. As mentioned above, pre-construction meetings provide Storm Water Management staff with an excellent forum to communicate storm water compliance requirements and for project proponents to have their own concerns addressed.

In addition, City Storm Water Management staff frequently meets with developers and contractors and provides on-site training regarding site management for storm water quality. In preparation for the wet and dry seasons, Storm Water Management staff annually issues wet and dry season reminder letter, normally about one month before the start of each season.

As a result of the slow-down in development, many construction sites are currently inactive or in distress. The City has made notable efforts in the management of inactive construction sites. A site is considered inactive if construction activities have ceased for a period of seven or more consecutive calendar days. The City inspects inactive construction sites and issues formal letters to developers if their sites do not meet City standards for BMP requirements as a result of failure to maintain adequate BMPs. The purpose of such letter is to notify developers of the City's storm water and non-storm water discharge requirements on inactive construction sites and to reiterate the developer's or property owner's responsibility at both active and inactive sites to implement a plan to address all potential discharges from construction sites. If a site is partially inactive, above requirements apply only to inactive areas of the site.

If a construction project is wholly or partially inactive or expected to remain inactive for some time, the City requires the developer to submit a Construction Site Stabilization Plan.

The Stabilization Plan is required to include the following information:

- Project name and a description of inactive areas or those expected to become inactive.
- A description of the stage of work at which the project became inactive.
- An estimate of time that the project, or areas of the project, would remain inactive, and a description of BMPs that would be used to stabilize inactive areas of the construction site.
- A project plan delineating areas of the project that are inactive or expected to become inactive, as well as all erosion control, sediment control, and non-storm water BMPs that would be implemented to prevent the discharge of sediment or other pollutants from the site.

3.5.1 MAXIMUM DISTURBED AREAS

The Development Storm Water Manual limits the area that can be cleared or graded and left exposed at one time to 100 acres for an individual grading permit or a combination of grading permits under the associated tentative map. Detailed requirements for maximum disturbed area limitations are included in the Development Storm Water Manual. During the reporting period, most major development projects remained inactive due to the downturn in the housing industry, and developers in Chula Vista did not undertake new major grading projects. The focus of City inspectors was to ensure that developers of existing graded sites that were planned to become inactive fully stabilized graded areas by implementing adequate BMPs.

3.5.2 ADVANCED TREATMENT

During this reporting period, there were no construction sites that met the conditions requiring advanced treatment methods. These conditions are explained in Section 7.5 of the Development Storm Water Manual. If it is determined that a site poses an Exceptional TTWQ based on criteria outlined in the Manual, the site will be required to implement advanced treatment controls to minimize the discharges from the construction site.

3.5.3 CONSTRUCTION SITE INSPECTIONS

The City's construction site inspection and enforcement program is defined by a consistent and frequent presence of inspectors on construction sites Citywide. It is recognized that construction sites must be regulated through a well-coordinated and highly refined inspection and enforcement program. The City has one Senior Civil Engineer, two full-time Environmental Health Specialists and eight Public Works Inspectors who manage this effort on private and public construction projects.

During this reporting period, all construction sites were assigned appropriate dry and wet season inspection frequencies required by the Municipal Permit. The Municipal Permit does not require prioritization for construction sites. However, the City has determined that this designation is a useful indicator for inspectors to evaluate the priority and relative importance of each construction site with respect to erosion and sediment controls, and the special attention required to the implementation of BMPs during their inspections of each site. The inventory of construction sites, therefore, includes a column indicating the prioritization for each site.

During the current reporting period, the City conducted inspections of construction sites in accordance with the requirements of the Municipal Permit, as applicable. Please see Table 3-1 for the number of construction site inspections. A complete list of inspected construction sites is included in Attachment G. The period of time each construction site was active during the wet or dry seasons, and the number of inspections conducted during the rainy season for each site, are recorded on inspection reports that are available at the City.

Table 3-1 Construction Site Inspection Summary FY 2010-2011

INSPECTION TYPE	NUMBER
Inspections During Wet Season	205
Inspections During Dry Season	35
Total Inspections	240

City inspectors evaluate BMP implementation on construction sites in a site-specific and situation-specific manner. It is through this approach that determinations of the effectiveness of a specific BMP are made, based on an accounting of the overall conditions observed at a specific job site. Established construction site inspection protocols also include a documentation review including site specific SWPPP, monitoring results, training records, etc. for construction sites subject to the General Construction Permit.

City inspectors use construction inspection forms specifically designed as multi-purpose tools. The form provides a checklist of information and potential water quality issues, which serves as a reminder to the inspector of all items requiring attention while on the construction site. The form also provides clear and concise information to the developer or contractor about deficiencies in the implementation of BMPs. It includes information about corrective actions that the developer or contractor needs to take for brining the site into compliance, and the time allowed by the inspector. Inspection forms are designed to enable the inspector and others to assess BMP implementation on each construction site and the effectiveness of BMPs. Inspection reports are often used as supporting documents in enforcement actions against non-compliant construction sites.

Through the above process, the City ensures that the inspections conducted address all the required inspection steps to determine full compliance.

Based on documented information, the trend of inspection issues were related to the following:

- Failure to implement and provide continuous maintenance of existing BMPs to prevent or minimize pollution of the storm water conveyance system in accordance with respective SWPPP or CSWMP.
- Failure to implement good housekeeping practices at the site.
- Failure to comply with previous orders.

City inspectors who conduct site inspections of both public and private development projects have full inspection and enforcement authority. Sites are evaluated for compliance with the minimum BMP requirements of the Municipal Permit, the Development Storm Water Manual, the erosion control plans, and any other development permit conditions imposed by the City prior to the issuance of a grading or construction permit.

Construction site inspections include the following:

- Verification of coverage under the General Construction Permit, where applicable.
- Assessment of the implementation of all required BMPs and any additional controls as needed and required by the City.
- Verification of proper maintenance of the BMPs.
- Evaluation of the effectiveness of the BMPs.
- Verification that site personnel has received adequate training.
- Observations of any non-storm water discharges, illicit connections, and potential discharges into the storm drain system.

3.5.4 CONSTRUCTION SITE ENFORCEMENT

The City enforces its storm water ordinances and development permit conditions at all private and public construction sites, as necessary. The City's ordinances and development permit conditions provide adequate legal authority for the City to enforce its storm water regulations on construction sites through stop work notices, penalties, fines, and other appropriate enforcement mechanisms. City's inspectors work with developers and contractors to identify non-compliance issues and to set deadlines for bringing sites into compliance; however, if the developer/contractor is found to be non-cooperative in bringing a site into compliance in an expeditious manner, City's inspectors initiate enforcement action which, depending upon the severity of the violation, may include one or more of the following:

- Verbal Warning
- Written Warning
- Notice of Violation (Includes Cease and Desist and/or Clean and Abate Orders)
- Enforcement of Contract (for City projects)
- Stop Work Notice
- Denial or Revocation of Permits
- Administrative, Civil, or Criminal Actions

Table 3-2 summarizes enforcement actions taken within the defined reporting period of this report.

Table 3-2 Construction Enforcement Summary FY 2010-2011

ENFORCEMENT ACTION	NUMBER
Written Notices of Violation (Includes Cease and Desist and/or Clean and Abate Orders)	5

As a result of the above enforcement actions, follow-up inspections were conducted within a designated time period until compliance was met.

Within the defined reporting period of this report and as described in the narrative provided throughout this section, the construction component has demonstrated numerous successes as well as undergone notable programmatic developments and enhancements. Through identified needs and associated management decisions, the City has fortified its jurisdictional construction management component in 2010-2011. Further, as the need for further development emerges for construction activities, the City will seek to maintain the level of performance established from years past, and to continue to meet the regulatory standards mandated in the Municipal Permit.

• Municipal

4.0 MUNICIPAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(c).i – Any updates to the municipal inventory and prioritization.

Permit Section J.3.a.(3)(c).ii – Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.

Permit Section J.3.a.(3)(c).iii – A description of inspections and maintenance conducted for municipal treatment controls.

Permit Section J.3.a.(3)(c).iv – Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.

Permit Section J.3.a.(3)(c).v – Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.

Permit Section J.3.a.(3)(c).vi - Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.

Permit Section J.3.a.(3)(c).vii – Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.

Permit Section J.3.a.(3)(c).viii – Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.

Permit Section J.3.a.(3)(c).ix - Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.

Permit Section J.3.a.(3)(c).x – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xi – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xii – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xiii – Identification of the total distance of curb-miles swept.

Permit Section J.3.a.(3)(c).xiv – Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.

Permit Section J.3.a.(3)(c).xv – Amount of material (tons) collected from street and parking lot sweeping.

Permit Section J.3.a.(3)(c).xvi – A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.

Permit Section J.3.a.(3)(c).xvii – Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.

Permit Section J.3.a.(3)(c).xviii – A description of the general results of the inspections.

Permit Section J.3.a.(3)(c).xix – Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(c).xx – The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(c).xxi – A description of notable activities conducted to manage urban runoff from municipal areas and activities.

4.1 INTRODUCTION

The goal of the City's municipal program is to minimize or prevent negative impacts of municipal activities and areas on receiving waters and other environmental resources in the City and where possible, to enhance the quality of these resources. The City maintains the following types of municipal areas and activities:

- Fixed Facilities
- Open Space
- Municipal Separate Storm Sewer System (MS4)
- Sanitary Sewer System
- Roads, Streets, and Parking facilities
- Powerwashing – Graffiti removal

Minimum BMPs for specific municipal facilities and activities have been implemented as applicable and as required by the Municipal Permit. Minimum BMPs for specific facilities and activities have been described in the City's JURMP. BMP implementation is ensured through various levels of enforcement, inspection, communication, and awareness. BMP information is disseminated to City staff through the following resources:

- California Stormwater Quality Association (CASQA) Municipal Stormwater BMP Handbook. January 2003
- Municipal staff training venues (formal and informal training, staff meetings, etc.)
- Routine inspection activities
- Activity specific training

BMP implementation is regulated by City staff through routine inspection activities as described in the JURMP. High priority municipal facilities are inspected annually, and all other facilities are inspected as needed. Inspections are conducted to verify the implementation of an effective combination of BMPs to meet the minimum water quality protection requirements. Applicable minimum activity-specific BMPs, as outlined in the JURMP, have been reviewed and implemented at facilities throughout the City. As needed, BMP implementation has been re-enforced as conditions of concern are identified, and personnel have been briefed on their roles and responsibilities in maintaining and implementing prescribed BMPs.

The following paragraphs include summaries of activities undertaken by the City to meet the Municipal Permit requirements for the Municipal Component of the JURMP. It is important to recognize that such recounted activities, practices, and functions are ongoing efforts by the City and not constrained by the defined reporting period of this report.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City operates and maintains the following types of fixed facilities within its jurisdiction:

- Parks and recreation centers
- Nature Center
- Libraries
- Administration buildings
- Public Works Center
- Animal care facility
- Fire stations
- Land application site

4.2.2 SOURCE CHARACTERIZATION

Attachment C – Municipal Inventory is a list of all the municipal facilities and activities within the City. Table 6-1 of the City's JURMP details the pollutants potentially generated by the area or activity. General operations include landscape maintenance, material handling and storage,

loading/unloading, waste handling, street maintenance, and sewer maintenance. Facilities are classified as high, medium, or low TTWQ based on activities, functions, and various site-specific factors. For more information on the facilities that have additional operations and activities, please see the City's JURMP. The inventory in Attachment C includes a column for facilities that are tributary to a 303(d) listed water body and potentially generate similar pollutants. This column is marked as "Tributary" in the inventory. Map 3 also shows municipal facility locations in relation to the 303(d) listed waterbodies in the City. Some areas of the City discharge to San Diego Bay, which is 303(d) listed for PCBs. Since PCBs have been banned since the early 1970s, no municipal facilities within the City discharge PCBs to San Diego Bay.

4.2.3 BMP REQUIREMENTS

Each fixed municipal facility in the City implements BMPs in accordance with their specific operations and activities. The City uses the CASQA BMP Handbook for Municipal Facilities as a guide for employees as well as a training tool. City staff receives training on storm water BMPs on a regular basis. More information on employee training can be found in Section 8.0. Mobile municipal operations use source control BMPs as pollution prevention measures. During the reporting period, all designated BMPs were implemented for municipal areas and activities as well as special events.

4.2.4 PROGRAM IMPLEMENTATION

4.2.4.1 MAINTENANCE

The City maintains all of its fixed facilities and implements BMPs during operations and activities. Any illegal connections or illegal discharges noticed by City staff are eliminated and BMPs are revised if needed.

4.2.4.2 TRAINING AND EDUCATION

All City employees who work in municipal facilities and activities receive training on general storm water concepts, the City's storm water ordinance, and BMP requirements. More information on employee training can be found in Section 8.0.

4.2.4.3 INSPECTIONS

The City proactively approaches enforcement of its storm water ordinance for all municipal areas and activities. All deficiencies are immediately brought to the attention of the facility manager or the staff member responsible for the facility or activity. The facility managers or the responsible staff members have the authority to implement or require implementation of adequate BMPs for their facility. With the training provided for the operations staff and implementation of BMPs on municipal facilities, it is expected that discharge of pollutants from municipal areas and activities have been minimized.

City storm water staff inspected all high priority municipal facilities and activities during the fiscal year as required by the Municipal Permit. Medium and low priority facilities are inspected

on an as needed basis. No medium or low priority facilities were determined to need inspection this fiscal year. During inspections, storm water staff identified BMPs that were in need of improvement and informed responsible persons to take action to implement additional BMPs. A list of municipal facilities that were inspected during the reporting period is included in Attachment H. Overall, sites were in good condition, however; some facilities needed BMP improvements. For the sites needing BMP improvements, the appropriate supervisor was notified and any corrective actions to bring the facility into compliance were immediately implemented. Enforcement on municipal facilities is in the form of disciplinary process against the responsible staff member when compliance is not met in a timely manner. If a violation of the City's Storm Water Ordinance or the Municipal Permit is observed, which is caused by negligence of City personnel, inspectors work with supervisors to ensure that corrective actions are implemented; provide training to the personnel; and immediately inform the appropriate supervisor. The supervisor will then take action against the violating staff member as necessary, including warnings and other disciplinary measures. City storm water staff is in regular contact with Public Works Maintenance staff and provides training on pollution prevention and BMP implementation, therefore, most deficiencies are taken care of upon first notice.

The City also maintains a number of treatment control BMPs that have been installed at municipal fixed facilities. Public Works Maintenance staff inspects all municipal treatment control BMPs to ensure their proper operation. Additionally, Storm Water Management staff conducts random inspections of such facilities to provide a second layer of confidence and to ensure that maintenance standards are met. The City maintains treatment control BMPs at several of its facilities. City crews conduct annual inspections and clean structural treatment control BMPs on an as needed basis, and their condition is evaluated for effectiveness. Any repairs are noted and carried out on a timely manner. Table 4-1 includes a list of municipal facilities with high priority treatment control BMPs within the City that were inspected during the reporting year. Medium and low priority municipal facilities with treatment control BMPs are inspected on an as needed basis.

Table 4-1 Inspected Municipal Facilities with Treatment Control BMPs

FACILITY NAME	NUMBER & TYPE OF TREATMENT CONTROL BMP	DATE INSPECTED
Montevalle Park	10 Filter Inserts	06/01/10
Salt Creek Park	1 CDS Unit	06/01/10
Harvest Park	1 Filter Insert	06/01/10
Sunset View Park	3 Filter Inserts	06/01/10
Mountain Hawk Park	20 Filter Inserts	04/01/11
Horizon Neighborhood Park	1 Filter Insert	06/01/10
Chula Vista Civic Center	5 Vegetated Swale, 1 CDS Unit, 2 Filter Inserts	06/15/10

4.2.4.4 INTEGRATED PEST MANAGEMENT (IPM)

During the reporting period, the City Parks and Open Space Divisions have implemented the following BMPs in their activities to prevent pollution of storm water conveyance systems:

Fertilizer, Pesticides, and Herbicides

- Minimize fertilizer use.
- All fertilizing is done so that no fertilizer is applied to the walkways or street. Any accidental spill is cleaned up and applied to the plant material. Areas are cleaned using a gas blower.
- All leaf blowing is towards plant material and away from any hardscape.
- Whenever possible, compost and soil amendments are used in place of fertilizers.
- Manual weeding whenever possible along with IPM Practices to minimize chemical application.
- All pesticides, herbicides, and fertilizers are stored in a controlled, locked and properly marked chemical locker.
- Prevent pesticide drift – do not spray on windy days.
- All employees who spray herbicides for weed control are properly trained and possess a valid Qualified Applicator Certificate issued by the State and receive 20 hours of continuing education in order to renew their certifications bi-annually.
- Reporting and record keeping for the use of fertilizers and pesticides includes the location, frequency, amount, type, and date of application.
- Staff is supplied with spill kits in case of an accidental spill.
- All mixing is done in an area that is away from storm drains.
- All employees who handle pesticides are trained and familiar with the most recent Material Safety Data Sheet (MSDS) files.
- MSDS sheets for chemicals being used must be kept with the applicator while applying pesticides.

Proper Planting Techniques

- Proper plant selection for pest resistance to minimize the use of pesticides and fertilizers.
- Removal or pruning of deceased plants and branches.
- Clearing of weeds, grass, and brush from building perimeters and fence lines.
- Plant native vegetation and convert existing turf areas to drought tolerant, sustainable landscaping when possible.
- Increase plant vigor and pest resistance through proper cultural practices; proper water application, clearing of weeds to decrease competition, pruning at the right time of year, and accurate diagnosis of plant pests.
- Control pests by removing diseased plants, pruning to increase air circulation and to remove diseased or injured plant parts.

Minimize Runoff

- The City utilizes several weather stations throughout the City to monitor microclimates to set evapotransporation (ET) rates for Maxicom Irrigation Systems.
- Installation of flow sensors and master valves to prevent water loss in the event of mainline break.
- The City is in the process of reducing large-scale vegetation on curb lines along major roads such as East Palomar, La Media, and Heritage Road. Existing ground cover is reduced by bringing it back from the curb line about 5-10 feet. Mulch is applied in the

vegetated area that was removed and irrigation lines along the curb line are capped off. This cuts down on irrigation overspray, excess water use, and runoff.

4.3 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.3.1 BACKGROUND

Roads, streets, highways, and parking facilities make up a large part of the City. Pollutants associated with roads, streets, highways, and parking facilities include sediment, metals, and trash. The City has implemented various BMPs to reduce the amount of pollutants that come off of these areas.

4.3.2 SOURCE CHARACTERIZATION

Municipal Permit Section D.3.a.(7) designates roads, streets, highways, and parking facilities as high priority municipal areas for inspection purposes. Therefore, the Municipal Inventory (Attachment C) categorizes these facilities as such. Table 6-1 of the City's JURMP details the pollutants potentially generated by roads, streets, highways, and parking facilities. The City maintains 414 miles of roads, streets, and highways.

The City has one stand-alone covered parking facility in downtown Chula Vista that generates a moderate volume of trash and debris that is swept twice per month and is inspected annually as a part of the City's Municipal Inspection Program. Other City parking facilities are associated with other municipal facilities (such as parks) and generate low volumes of trash and/or debris. These are swept on a monthly basis and are inspected annually.

For the purpose of street sweeping, roads, streets, and highways are further classified into high, medium, and low priority based on the amounts of trash, sediment, and debris that are generated by their use. Commercial and industrial streets are classified as high priority; center islands and medians are classified as medium priority; and centerlines and residential streets are classified as low priority. Table 4-2 below provides more information about these classifications, the number of curb miles in each, the type of areas these classes cover, and respective sweeping frequencies.

Table 4-2 Street Sweeping Information Based on Class

CLASS	NUMBER OF CURB MILES	TYPE	SWEEPING FREQUENCY
High	131.61	Industrial and Commercial – 10.5 miles	Twice per week
		Commercial and Business – 121.11 miles	Once per week
Medium	75.47	Center Islands and Medians	Twice per month
Low	702.26	Residential – 656.36 miles	Once per month
		Center Lines – 45.9 miles	Twice per month

4.3.3 BMP REQUIREMENTS

Street sweeping is one of the ongoing city functions that provides for the reduction in pollutants entering the storm drain system and ultimately local receiving waters. It is the main BMP used to maintain roads, streets, highways, and parking areas. It is conducted in a systematic and coordinated manner as to compliment pollution prevention throughout the City.

The City has identified some streets as high Threat to Water Quality (HTTWQ) areas. The main pollutant in these areas is trash. Trash in these areas is mainly attributable to customers of recycling businesses located in the industrial areas of Energy Way and Nirvana Avenue. Also, trash trucks shedding some of their load while traveling to and from the Otay Landfill on Maxwell Road and Main Street east of I-805 are sources of trash on these two streets. As a proactive measure to minimize trash entering the storm drain system, the City has retrofitted existing curb inlets in these areas with filter inserts. The City's storm drain crews conduct regular inspections and cleaning of these filter inserts and replace parts as necessary.

4.3.4 PROGRAM IMPLEMENTATION

4.3.4.1 MAINTENANCE AND INSPECTION

During the reporting period, the City swept approximately 18,000 curb miles and removed more than 1,000 tons of trash, debris, and sediment from Chula Vista streets and parking lots. While regular street sweeping is contracted, the City operates a street sweeper to be used by City crews to maintain City facilities, parking lots, and special events. Figure 4-1 shows the street sweeping schedule for the reporting year.

Figure 4-1 Street Sweeping Schedule

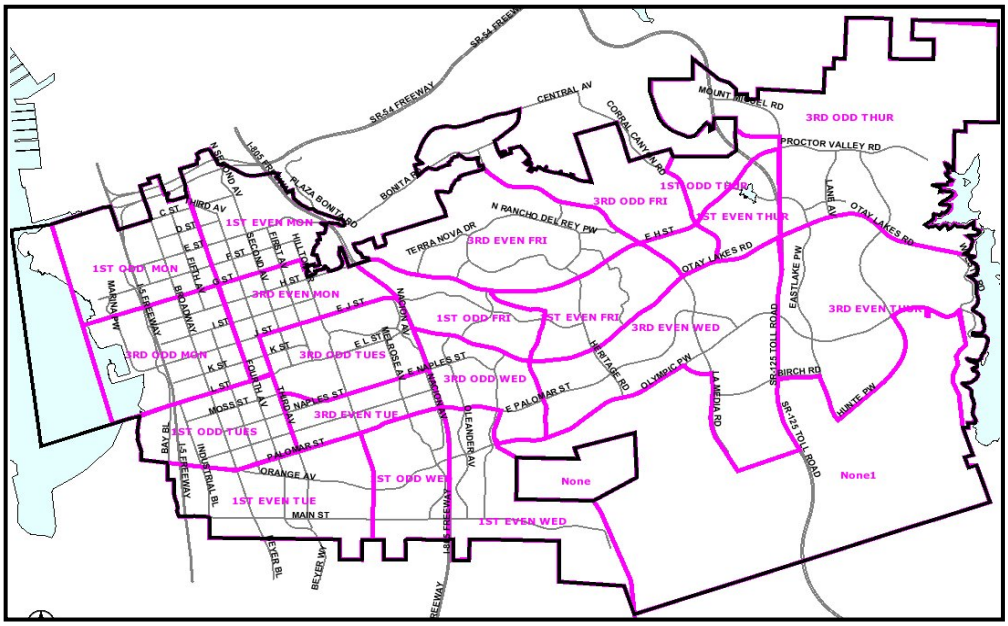

4.4 MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

4.4.1 BACKGROUND

MS4 maintenance is an ongoing city function that is essential for the removal of pollutants that may be discharged to receiving waters. MS4 maintenance activities address pollution prevention through four primary activities: 1) Inspections, 2) catch basin maintenance, 3) channel maintenance, and 4) outfall maintenance.

As part of the City's maintenance protocol, a maintenance supervisor inspects storm drain facilities before and after cleaning operations. Problem sites within the drainage facilities were inspected and cleaned multiple times during the reporting period. In addition, the City's consultant for dry weather field screening annually inspects over 57 outfall locations throughout the City and conducts upstream investigations based on field screening results. They report observed pollution in storm drainage systems to the City, in which case Public Works maintenance crews immediately take action to inspect the drainage area, abate the pollution, and conduct cleanup.

Another method of inspection of storm drainage facilities employed by the City is through investigation of reported violations. When an inspector responds to a reported violation, in addition to normal investigations, he or she inspects the first downstream storm drain inlet to determine if pollution has reached the inlet. In case of presence of any trash, silt, or other visible pollutants in the storm drain inlet, Public Works crews are immediately notified and they take action to clean the storm drainage system, as necessary. This multi-layer inspection program ensures that almost all MS4 facilities are inspected and maintained regularly.

All channel and outfall maintenance activities have been conducted in a manner as to assure compliance with all environmental regulatory standards. Notably, channel and outfall maintenance activities have been limited to manual removal of trash and debris from areas that trash accumulation may cause flooding and damage to life or property.

Currently, three vacuum trucks and three crews are allocated full-time to performing the above tasks on the maintenance and inspection of the City's storm drain systems. In addition, four vacuum trucks, equipment, and wastewater field crews are available on an as-needed basis to help in cleaning and inspecting the storm drain systems in emergencies and other similar situations.

The City maintains an extensive record keeping and maintenance tracking system utilizing George Butler Associates Work Management System (GBA), which is an automated system universally used by the Public Works Department for collecting and tracking data about all its activities. Detailed maintenance logs are available in the City's storm drain maintenance database and can be presented upon request.

All storm drain inlets throughout the City have been marked with prohibitive signs to discourage pedestrians and drivers from dumping into storm drainage systems. They are of various types, including thermoplastic signs, stamped concrete, stenciled markings, or plastic decals.

Figure 4-2 Thermoplastic Storm Drain Stencil

4.4.2 SOURCE CHARACTERIZATION

The City maintains its MS4s, which include open channels, catch basins and inlets, and outfalls. Storm drain pipes are designed to be self-cleaning and do not typically require scheduled cleaning. As required by the Municipal Permit Section D.3.a.(7), the City's MS4 is included in the municipal facility inventory (Attachment C) as a high priority facility for inspection purposes. Table 6-1 of the City's JURMP details the pollutants potentially generated by the MS4.

4.4.3 BMP REQUIREMENTS

The City implements various BMPs to maintain its MS4 and uses the CASQA BMPs for municipal facilities and activities as a guide.

4.4.4 PROGRAM IMPLEMENTATION

4.4.4.1 MAINTENANCE AND INSPECTION

A summary of the City's efforts in the maintenance and inspection of its catch basins and inlets, MS4, and open channels during the reporting period of July 1, 2010 to June 30, 2011 is summarized below. A total of 248 inlets were identified as accumulating a high volume of trash. All high trash volume facilities were inspected and or cleaned at least once during the dry season (May 1 – September 30). Table 4-3 details the amounts of waste collected from the City's storm drain system based on various facility and waste categories.

Catch Basins and Inlets

- There are 10,710 catch basins and inlets in the City
  - 12,236 inspections were conducted (some inlets and catch basins were inspected more than once)
  - Out of all the catch basins and inlets inspected, 2,371 were cleaned
- Data collection for catch basins with accumulated waste exceeding the cleaning criteria (33% or more full) started January 1, 2008. A total of 25 exceeded the criteria from July 1, 2010 – June 30, 2011.

MS4

- There are 224 miles of MS4 in the City
- The storm drain maintenance crews televised 1.33 miles of MS4 during the reporting year. New storm drain pipes were televised to ensure that there was no infiltration from groundwater or the sanitary sewer, and to inspect MS4 where there was obstructed water flow.
- A total of 40.7 feet of MS4 pipe was cleaned. It should be noted that the City's storm drain pipes are designed to be self-cleaning under normal operation.

Open Channels

- There are 32.85 miles of open channels in the City
- A total of 104,967 square feet of open channels were inspected and cleaned

Table 4-3 Amount of Waste in Tons Cleaned from the Storm Drain System FY 2010-2011

STRUCTURE	TRASH	LANDSCAPING DEBRIS	SEDIMENT
MS4	5.69	-	-
Catch Basin/Inlet	3.0	4.75	10.86
Open Channel	26.54	70.65	0.35
Total	35.23	75.4	11.21
Grand Total	121.84		

The City will continue to inspect its MS4 as required by the Municipal Permit and record collected inspection data. During this reporting year, the City reviewed its inspection record and determined that there were no facilities that required inspections less than annually.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

The City recognizes the vital pollution prevention role that sanitary sewer system maintenance plays in the protection of the MS4 system. If not properly maintained, the sewer system can potentially discharge numerous pollutants to the storm drain system such as bacteria, viruses, nutrients, parasites, and chemicals.

The City currently implements a Sewer System Management Plan. Pursuant to the Statewide General Waste Discharge Requirements for Sewer Collection Agencies, in April 2009 the City developed a Sewer System Management Plan. The City is currently working on developing a Fats, Oils, and Grease (FOG) Monitoring Ordinance. As part of the FOG program, the City has conducted a survey in which questionnaires were sent out to all restaurants in the City. Information collected about their FOG practices, and methods of preventing oil and grease from entering sanitary sewer systems will be used to track BMPs, assess their efficiencies, and direct future inspections.

4.5.2 SOURCE CHARACTERIZATION

There are 498 miles of sewer pipes in the City. The Municipal Permit Section D.3.a.(7) requires sanitary sewer collection systems to be identified as high priority facilities for the purpose of inspections. The sanitary sewer system is included in the municipal inventory as such (please see Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by the sanitary sewer system. The City of Chula Vista does not operate a Publicly Owned Treatment Works. Sewage generated in Chula Vista is collected and conveyed to the City of San Diego treatment works at Point Loma.

4.5.3 BMP REQUIREMENTS

The City responds to all sanitary sewer overflows and uses the CASQA BMP Handbook for municipal facilities and activities including sanitary sewer system maintenance as a guide. City staff regularly receives training on inspection and maintenance of the sanitary sewer system.

Concurrent with the arrival of maintenance and cleanup crews at the scene of a sewage spill from private sewer lines to contain and cleanup the spill, a Storm Water Compliance Inspector or an Environmental Health Specialist contacts the responsible person at the residence or facility and makes it a requirement to implement BMPs to prevent the recurrence of similar incidents. Such BMPs frequently include the requirement for regular and frequent inspections and cleaning of private sewer lines, tightly closing the cap on cleanouts, preventing oil and grease from entering sanitary sewer systems, etc.

4.5.4 PROGRAM IMPLEMENTATION

4.5.4.1 MAINTENANCE AND INSPECTION

The City cleaned and maintained a total of 596 miles of sewer main (includes critical maintenance areas, which were cleaned more than once) within the defined reporting period of this report. Identified critical maintenance areas were cleaned on a monthly basis by City crews. In addition to comprehensive sanitary sewer maintenance activities, the City utilizes a number of controls to limit infiltration from the sanitary sewer system to the MS4. Most essential of which, the City's standards require concrete pipes for all new storm drains, which ensure a much longer life, watertight joints, and effectively minimizes infiltration of groundwater and sewage to storm drain pipes. In addition, flow metering is also conducted throughout the City's sanitary sewer system to monitor flow depths and potential capacity concerns, minimizing potential sewer overflows and infiltration. The City has video cameras that can be moved through storm drain or sanitary sewer pipes for close inspection of pipe conditions. If a problem is suspected, that section of the pipe is video surveyed. This practice has greatly minimized the potential for infiltration of sewage into storm drain pipes.

The City also implements a rehabilitation program for aged sewer pipes. Rehabilitation consists of lining deteriorated existing Vitrified Clay Pipes (VCP) with a continuous material. This process eliminates the joints of the VCP, thereby eliminating the potential for ex-filtration of

sewage. Also, only PVC sewer pipes are used for new construction for all but interceptors with diameters larger than 36 inches. PVC pipes have proven to be very watertight and minimize sewage infiltration into the ground and storm drain systems.

Another control to limit infiltration from the sanitary sewer system to the MS4 is the City's initiative to replace aged corrugated metal pipe storm drains with concrete pipes. The City no longer allows metal pipes to be used for storm drains due to their inherent corrosion potential and increased risk of infiltration. Corrugated metal pipes are gradually being replaced with concrete pipes, which are more durable and watertight.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City performs activities that are not confined to a fixed area, such as powerwashing. Pollution prevention using source control BMPs are implemented for such activities.

4.6.2 SOURCE CHARACTERIZATION

The City performs a variety of mobile activities such as power washing for graffiti removal, landscape maintenance, street repairs, and pool maintenance. The Municipal Permit Section D.3.a.(7) requires that power washing be identified as a high priority municipal activity for inspection purposes. Therefore, Attachment C has categorized power washing as such. Table 6-1 of the City's JURMP details the pollutants potentially generated by the area or activity.

4.6.3 BMP REQUIREMENTS

The City implements source control BMPs for mobile activities, including power washing, and uses the CASQA BMP Handbook for Municipal Facilities as a guide. City power washing crews implement BMPs during their activities and receive regular training on storm water pollution prevention.

4.6.4 PROGRAM IMPLEMENTATION – POWER WASHING FOR GRAFFITI REMOVAL

4.6.4.1 MAINTENANCE AND INSPECTION

The City's Graffiti Abatement Program functions under the mission of: *"To deliver in a timely manner, a comprehensive, cost-effective, environmentally sound, and technically reliable graffiti removal, education, and prevention program for the residents of Chula Vista."* The City provides cost-free graffiti removal for the residents of Chula Vista.

The Graffiti Abatement Program utilizes various techniques for effective removal of graffiti Citywide, including power washing and sand blasting. In 2006, in its commitment to this program and to utilize environmentally sound and cost-effective graffiti removal processes, City Council approved the spending of $63,000 for the purchase of highly specialized equipment to capture and treat residual wash water generated from graffiti abatement activities. At the end of 2006, the new equipment was made available to the graffiti crews and has been in use ever since.

As a part of the inspection process, City's Storm Water Management staff annually conducts a ride-along with the graffiti/power washing crews to observe their operations and activities. Storm water staff provides storm water education to the crew and gives any additional BMP recommendations or improvements to their existing pollution prevention measures. During this reporting year, City Storm Water Management staff observed the removal of graffiti from a sidewalk area, close to the curb/gutter. The graffiti crew implemented all BMPs and prevented any wash water from entering the storm drain system. In addition, the crew used the least amount of water necessary to complete the job. All BMPs were in place and working properly.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City hosts a variety of special local events, which include festivals, fairs, and other events for special causes and occasions. Usually, these events involve the participation of outside organizations, community groups, and the general public. The gathering of event participants and crowds is generally a source of trash and debris if BMPs are not implemented.

4.7.2 SOURCE CHARACTERIZATION

Municipal Permit Section D.3.a.(7) requires that special events be designated as high priority for inspection purposes. Therefore, special events are included in the City's municipal inventory as high priority activities (Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by special events.

4.7.3 BMP REQUIREMENTS

The City implements various BMPs for special events such as having special bins available for recyclables and trash, using street sweeping immediately following major events taking place on a street, and having personnel dedicated to litter abatement throughout City events. Also, following every event, City staff inspects the grounds for trash and performs other clean-up activities as necessary. Environmental Services Division and Storm Water Management staff works in conjunction with other City departments and event organizers to ensure that adequate BMPs are implemented during special events.

4.7.4 PROGRAM IMPLEMENTATION

Storm Water Management and Environmental Services staff has active presence at the majority of City events. They set up booths, provide public education on environmental issues, and

distribute informational materials. As necessary, they conduct surveys at the same time to evaluate general public's awareness and practice of BMPs. As a part of storm water education outreach, staff working at the events provides information on pollution prevention and watershed protection. City Environmental Services staff notifies hired personnel if there are overflowing trash bins or areas where more trash receptacles are needed.

• Industrial Commercial

Section 5.0

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(d).i – Any updates to the industrial and commercial inventory.

Permit Section J.3.a.(3)(d).ii – Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.

Permit Section J.3.a.(3)(d).iii - A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.

Permit Section J.3.a.(3)(d).iv - Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.

Permit Section J.3.a.(3)(d).v - Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.

Permit Section J.3.a.(3)(d).vi - Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(d).vii - Identification of the number of third party inspections conducted.

Permit Section J.3.a.(3)(d).viii - Identification of efforts conducted to verify third party inspection effectiveness.

Permit Section J.3.a.(3)(d).ix – A description of efforts implemented to address mobile businesses.

Permit Section J.3.a.(3)(d).x - The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(d).xi - A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.

Permit Section J.3.a.(3)(d).xii - A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.

5.1 INTRODUCTION

The following section describes the development and implementation of program components related to industrial and commercial activities in the City of Chula Vista to minimize the impact of urban runoff on receiving waters. This component is driven by multiple interrelated activities to ensure an effective and complete set of actions. The City recognizes that no program activity is mutually exclusive, and that each is essential to the overall success of the program. The City has compiled an inventory of industrial and commercial sources and developed BMP requirements for each source and activity. Implementation of these requirements will be accomplished through education, inspection, and enforcement.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

The City's industrial and commercial inventories include 1,517 facilities, of which 429 are mobile businesses. Examples of industrial facilities within the City include manufacturing facilities, auto dismantlers, and transportation businesses. Examples of stationary commercial facilities within the City include auto repair shops, restaurants, and wholesalers of many kinds; this does not include mobile commercial facilities. Mobile commercial facilities are detailed in Section 5.3.

The main objective of the industrial and commercial component of the JURMP is to minimize or eliminate the impacts of industrial and commercial activities on receiving waters and other sensitive environmental resources. Each facility has the potential to discharge pollutants into the MS4 and hence degrade local water quality.

5.2.2 SOURCE CHARACTERIZATION

Through ongoing efforts to maintain a more systematic approach to source inventory management, annually, the City conducts updates of its industrial and commercial facility inventories by searching through its business license database and conducting visual observations of new or closed businesses during annual inspections. Additionally, every five years, the City conducts a comprehensive field validation of its industrial and commercial inventories Citywide. The industrial and commercial inventories are also updated on a continuous basis by adding businesses that cause incidents of pollutant discharge or are found to require regular inspections due to the type and amount of pollutants that they generate.

Watershed-based inventories of industrial and commercial sites within the City have been compiled. Information was obtained from the City's business license database (Permits Plus), the State Water Resources Control Board database of industrial sites that have filed NOIs, inspection records, and previous experience.

Inventories of industrial and commercial facilities within the City were compiled during the development of the City's JURMP in 2008, which were later updated for the current reporting period and are included in Attachments D.1 and E.

The inventory for commercial facilities includes such information as:

- Facility name
- Assessor's Parcel Number (APN)
- Facility address
- Business category
- Priority
- SIC Code
- Mobile or stationary
- Tributary to a 303(d) listed waterbody

The inventory for industrial facilities includes such information as:

- Facility name
- Assessor's Parcel Number (APN)
- Type of facility
- Priority
- Facility address
- SIC code
- Waste Discharge Identification Numbers (WDID) for sites that are covered under the State of California's General Industrial Permit.
- Tributary to a 303(d) listed waterbody

The entire City of Chula Vista jurisdiction is located within the San Diego Bay watershed and, therefore, watershed designations are not included separately for each industrial/commercial facility. Table 7.1 – General Pollutant Loading Potentials of Industrial and Commercial Sources in the City's JURMP document identifies the pollutants that may be generated by each business category.

The inventories in Attachments D.1 and E include a column for facilities that are tributary to a 303(d) listed waterbody and potentially generate similar pollutants. This column is marked as "Tributary" in the inventory. In addition, Maps 3 and 4 show each commercial and industrial facility, respectively, in relation to the 303(d) listed waterbodies in the City. Some areas of the City discharge to San Diego Bay, which is 303(d) listed for PCBs. Since PCBs have been banned since the early 1970s, no facilities within the City discharge PCBs to San Diego Bay. Attachment D.2 has additional information about each commercial and industrial facility, including the potential pollutants generated by the business type as well as the latitude and longitude of each facility. The inclusion of the APNs and latitude/longitude allows the City to track its inventories through the City's GIS program.

5.2.3 BEST MANAGEMENT PRACTICES REQUIREMENTS

Pollution prevention methods are used as a primary mechanism for reducing discharges of pollutants into MS4s from existing industrial and commercial facilities. Pollution prevention

methods are cost-effective BMPs that eliminate or reduce the generation of pollutants at their sources. Industrial and commercial facilities produce a range of pollutants, both indoors and outdoors, that can threaten human and environmental health if washed into the storm drain system by way of urban runoff. Businesses can benefit from pollution prevention methods by reducing labor time associated with excess pollutant waste handling, thereby re-directing labor time more efficiently to production, as well as the accompanying costs of storage, disposal or treatment.

The following pollution prevention methods were required to be implemented to the MEP where applicable and feasible:

- Reduce the quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct employees
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

In addition to the methods listed above, the City's Storm Water Management Ordinance provides legal authority for the City to require a SWPPP for any industrial or commercial facility that may potentially discharge significant pollutants into receiving water bodies.

In addition to the pollution prevention BMPs, the City has established a set of minimum BMPs based on the California Stormwater BMP Handbook – Industrial & Commercial (CASQA, 2003) for all industrial and commercial sites. Businesses are required to use an effective combination of the applicable BMPs and activity-specific BMPs. The listings of the BMP fact sheets are available online at www.cabmphandbooks.com.

Insurance of proper BMP implementation at industrial and commercial sites is based on a multi-level approach and information on BMPs are disseminated to the local business community through a number of channels, including:

- Inspection & enforcement activities
- Industrial and commercial outreach & education
- Business license application procedure

The City does not exclusively endorse some of the specific recommended BMP options listed in the CASQA fact sheets because they are less stringent than, and conflict with Municipal Permit requirements or City's ordinances. Those exceptions are listed in Appendix C of the JURMP. Businesses are informed of the exceptions, where necessary.

It is important to recognize that pollution prevention methods are stressed through all interactions between the City and facility owners, operators or their employees. Further, pollution prevention methods are commonly used in compliance with other regulatory management standards. It has been determined that one-on-one interaction between City inspectors and business owners are more effective in knowledge and behavior change than conducting workshops or distributing informational materials, although latter methods are also effective to a lesser degree and are practiced by the City.

5.2.4 PROGRAM IMPLEMENTATION

The City provides education and outreach to industrial and commercial businesses so they are aware of the City's storm water requirements. The City inspects its inventoried businesses to evaluate compliance with its BMP requirements. Enforcement actions are taken as necessary to bring the business into compliance.

Because the City's BMP requirements, as described in the JURMP, are not substantially different from the BMP requirements that the City has been enforcing since 2002, most businesses should already be familiar with what they need to do to comply with the City's requirements. While the City continues to provide education and outreach to industrial and commercial businesses, in most cases a lack of awareness is not accepted as an excuse for noncompliance.

The City provides information and training regarding storm water quality to industrial and commercial owners and operators. In turn, owners and operators are required to train their personnel, employees, and/or other parties involved with industrial or commercial activities. Businesses are given educational materials outlining pollution prevention methods and BMPs during inspections, where appropriate. Storm Water Management staff gives recommendations to businesses where necessary. Based on the City's experience, this site-specific, personal education is among the most effective methods of outreach. The educational program for industrial and commercial businesses is described in more detail in Section 10 of the updated JURMP.

After each inspection, the City provides a copy of the inspection report to the responsible party of the inspected business. Generally electronic inspection forms are completed, and a printout is mailed or faxed to the responsible party after the inspection. If immediate notification is deemed necessary, a paper inspection form with carbon copy is completed onsite, with the carbon copy provided to the responsible party at the time of inspection.

In all cases a copy of the Chula Vista Storm Water Management and Discharge Control Ordinance is handed to the facility owner/manager. The City continues to utilize the following primary mechanisms to provide ongoing education to the industrial and commercial communities within the City:

- Providing one-on-one training and helping business owners to develop their activity and site specific BMPs
- Distributing informational printed materials
- Conducting industrial and commercial inspections and setting standards for compliance

5.2.4.1 INDUSTRIAL/COMMERCIAL SITE INVENTORY AND INSPECTIONS

During this reporting period, 196 industrial facilities and 1,321 commercial facilities, which included 429 mobile businesses were identified and inventoried. These facilities are identified in Attachments D.1 and E.

Through ongoing efforts to maintain a more systematic approach to source inventory management, industrial and commercial facilities were prioritized as potential contributors of identified watershed Pollutants of Concern including bacteria and heavy metals. Inspections were conducted and, observed Pollutants of Concern were addressed through necessary education and enforcement actions.

During this reporting period, the following number of inspections was conducted to ensure compliance with Permit requirements (see Attachments I and J):

- 208 inspections of high priority commercial facilities (Out of 199 facilities, 9 were re-inspected)
- 38 inspections of high priority industrial facilities

Justification and rationale for why industrial and commercial sites/sources were chosen for inspection is as follows:

- Permit compliance – Categories and numbers of facilities selected for inspection were chosen to meet permit requirements of Section D.3.b.(3).
- Threat to Water Quality – Facilities that posed a higher TTWQ was given higher priority for inspections.
- Inspection frequency – Facilities that were not inspected during the previous period were given a higher priority for inspection.
- Past history of non-compliance – Facilities that had a history of non-compliance during previous inspections were targeted for re-inspection during the current reporting period.

City inspectors use industrial and commercial inspection forms specifically designed as multi-purpose tools. The form provides a checklist of information and potential water quality issues, which serves as a reminder to the inspector of all items requiring attention while on the industrial/commercial facility. The form also provides clear and concise information to the business owner or manager about deficiencies in the implementation of BMPs. It includes information about corrective actions that the business owner or manager needs to take for bringing the site into compliance, and the time allowed for bringing the facility into compliance. Inspection forms are designed to enable the inspector and others to assess BMP implementation on each industrial/commercial facility and the effectiveness of BMPs. Inspection reports are often used as supporting documents in enforcement actions against non-compliant industrial/commercial facilities and during administrative hearings.

Through the above process, the City ensures that inspections conducted address all the required inspection steps to determine full compliance.

The Copermittees have standardized industrial/commercial inspections. An Inspection Standards Workgroup was formed with the task of finding a way to standardize industrial-commercial inspections so that the results from each Copermittee's inspections are consistent. The goal of the workgroup was to create minimum regional guidelines while maintaining flexibility for each Copermittee to identify and apply their individual requirements that have been developed to match each Copermittee's respective storm water program.

5.2.4.2 PRIORITIZATION

The Municipal Permit no longer requires industrial and commercial inventories to be categorized into high or low priority for TTWQ, although Section D.3.b.(3) of the Municipal Permit requires inspections of sites determined to pose a high threat to water quality. Based on the City's past experience, prioritization of industrial and commercial facilities into high or low priority provides a powerful tool to identify facilities that require focused attention and more frequent inspections. Therefore, the inventories of industrial and commercial facilities have been prioritized in this report.

The City evaluated each business by incorporating factors specified by the Municipal Permit and by using past experience. Although not specifically required, the City has also continued to classify industrial businesses that have obtained coverage under the General Industrial Permit as high priority. Other industrial businesses, based on past inspections and institutional knowledge, or those that are known to have poor compliance history, or have a high potential for pollutant discharge are also classified as high priority.

Criteria for identification of low priority industrial facilities include the following:

- Land Use Code
- SIC Code
- Type of Activity
- Location

Criteria to identify high priority commercial facilities:

- Auto related businesses
  Businesses operating along the following areas were included due to their proximity to receiving water bodies:
  - Main Street corridor (Otay River and MSCP Preserve areas)
  - Bonita Road corridor (Sweetwater River)
  - Bay Boulevard (San Diego Bay)
- Restaurants
  Restaurants operating along the following areas were included due to their proximity to receiving water bodies:
  - Main Street corridor (Otay River and MSCP Preserve areas)

    - Bonita Road (Sweetwater River)
    - Bay Boulevard (San Diego Bay; facilities within the Port jurisdiction are not included)
- Fast food chains
  This is due to frequent rotation of management and employees, and low awareness about water quality issues. Also, fast food restaurants often have a drive through and more customers who potentially discard food wrappers, etc. in the parking lot.
- Private golf courses
- Entertainment facilities
  Cricket Wireless Amphitheater and Knotts Soak City
- Towing companies
- Building supplies and materials
- Food Markets
- Violation history
  Commercial facilities that have been issued a citation or Notice of Violation within the past two years are included in the list. Also, any business that receives a citation or Notice of Violation in the future will automatically be added to the list.

5.2.4.3 INSPECTIONS CONDUCTED

An inspection of an industrial and commercial business involves verifying information regarding ownership, management, and contact names and phone numbers of the businesses. If the inventoried business is no longer at the listed location or has moved, the inspector makes a note to update the inventory. If a new business has been determined to be included in the inventory, Storm Water Management staff notes that information, and the business is usually inspected at that time.

For industrial sites, Storm Water Management staff reviews the facility's SWPPP, Annual Report, and monitoring results, if applicable. Typically, only sites that are covered under the General Industrial Permit have these documents. Where applicable, Storm Water Management staff checks for coverage under the General Industrial Permit

Monitoring verifications for high priority industrial facilities are conducted through the review of the facility's annual report or by the verification of the facility's participation in the Group Monitoring Program. To ensure that the subject facility is still an active participant of a Group Monitoring Program, the City verifies membership by contacting the Group Leader, and by accessing the State Water Resource Control Board's website:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/groupmonitoring.shtml

During both industrial and commercial business inspections the main focus is reviewing the implementation of pollution prevention methods and other BMPs. A walk-through of the business is conducted to identify potential pollutants and pollutant generating activities. The business contact typically accompanies the Storm Water Compliance Inspector or the Environmental Health Specialist during the walk-through to enable City staff to point out areas

where corrections are needed, and for the business representative to answer any questions and take note of the requirements.

Based on the results of the inspection, the Storm Water Compliance Inspector or the Environmental Health Specialist completes a Storm Water Quality Inspection Report for Commercial/Industrial Facilities. The responsible party is provided with a copy of the inspection report after the inspection. The inspection report contains the following information:

- General information to update the inventory
- General site observations and/or conditions of concern noted
- Results of the SWPPP review, BMP plan, and monitoring results, where applicable
- Assessment of BMP implementation
- Recommended corrective actions
- Enforcement action taken
- Inspector name and signature
- Signature of party receiving the report

The Storm Water Compliance Inspector or the Environmental Health Specialists does not typically prescribe exact BMP solutions; staff does attempt to work with the facility's contact to provide examples of BMPs that could be implemented. Cost-effective BMPs are sought whenever possible, although, more expensive BMPs may be needed to reduce the pollutant discharges to the MEP. The business is also evaluated for its staff training procedures and the storm water quality awareness of the contact person. Educational information is provided as appropriate. The findings of the inspection and corrective actions are discussed with the responsible party while the Storm Water Compliance Inspector is at the site.

As discussed above, the business is provided with a copy of the completed inspection report. Based on observations during the inspection, the City may determine that the business category should be changed from low to high priority or vice versa. Any such changes are reflected in the inventory update submitted in the following JURMP Annual Report.

A detailed account of all industrial and commercial inspections conducted during this reporting period is included in Attachments I and J.

5.2.4.4 THIRD PARTY INSPECTIONS

With a dedicated Storm Water Management staff, industrial and commercial facilities are effectively regulated in the City without the use of a third party inspection program. The City's industrial and commercial inspection program is defined by a consistent presence and strong enforcement standard, and the City's Storm Water Management staff continues to excel in maintaining the needs of the industrial and commercial programmatic elements.

5.2.4.5 VIOLATIONS AND ENFORCEMENT ACTIONS

The City has a number of mechanisms that can be used to bring an industrial or commercial facility into compliance. These mechanisms include:

- Verbal and Written Warnings
- Notices of Code Violation
- Orders to Clean and Abate
- Orders to Cease and Desist
- Orders to prepare a Storm Water Pollution Prevention Plan
- Orders to implement a Monitoring and Testing Program
- Administrative Citations
- Civil Penalties
- Judicial Enforcement

Storm Water Compliance Inspector or Environmental Health Specialists properly document each observed violation at the facility failing to comply with the storm water requirements, and enforcement action is taken when necessary to bring the facility into compliance.

In some cases compliance is achieved and observed at the time the initial enforcement action is taken, and no follow-up is necessary. In other cases, Storm Water Compliance Inspector conducts follow-up inspections to ensure that required corrective actions are adequately addressed.

Where the Storm Water Compliance Inspector or the Environmental Health Specialist observes a significant and/or immediate threat to water quality, immediate enforcement action is taken to require the facility to immediately correct the situation. When necessary, City's maintenance crews respond to illegal discharges, attempt to contain and capture pollutants before entering storm water conveyance system inlets, and stay at the scene until the responsible person terminates the illegal discharge. The affected areas and the storm water conveyance system are cleaned and disinfected as necessary. Costs for such operations are charged to the business owner or the property owner. In any case in which Storm Water Compliance Inspectors or Environmental Health Specialists determine that a noncompliant site poses a threat to human or environmental health, the City notifies the RWQCB by phone and in writing as required by the Municipal Permit.

The City also investigates all reported incidents of illicit discharges or illegal connections from industrial and commercial businesses. This includes findings during the implementation of the City's Dry Weather Field Screening and Analytical Monitoring Program. The investigations are performed in accordance with Section 9.5 of the City's JURMP.

Table 5-1 details the types of violations and the numbers of each during the reporting period. A detailed account of enforcement actions taken during this reporting period is included in Attachment K.

Table 5-1 Industrial/Commercial Enforcement Action Summary FY 2010-2011

VIOLATION TYPE	NUMBER
Administrative Citations-Warning	6
Administrative Citations-Fine	9
Notice of Violation	0
VIOLATION CATEGORY	**NUMBER**
Commercial	13
Industrial	3

NOTE: Total Fines issued - $1,600.

The above referenced enforcement actions were preceded by initial inspections and were followed up by additional inspections as necessary until such non-compliant facilities were brought to full compliance with the City's storm water regulations.

5.2.4.6 IDENTIFICATION OF NON-FILERS

If Storm Water Compliance Inspectors determine that an industrial facility may require coverage under the General Industrial Permit and has not filed a Notice of Intent (NOI), the City requires the responsible party to contact the Regional Board to determine if the facility is required to obtain coverage. At the same time, the Regional Board is notified of the existence of such industrial facility. Additionally, the City coordinates joint site inspections with Regional Board staff to assist in their site inspections.

During the current reporting period, the City did not identify any non-filer facilities that may be eligible for coverage under the General Industrial Permit.

5.3 MOBILE SOURCES ELEMENT

5.3.1 BACKGROUND

Illegal discharges are a concern with mobile businesses working in the City. Due to the nature of their activities, mobile businesses are regulated differently than stationary businesses. Mobile businesses can be difficult to regulate because many do not have permanent locations in the City or may not have a business license. On a continual basis, new mobile businesses are started, existing mobile businesses go out of business, some mobile businesses do not renew their business license, or some operate from their home. Since they are not consistently present at any particular location, regular inspections are difficult and infeasible. For the above reasons, City maintenance crews who normally work on public streets have been trained to report any observed illegal discharges by mobile businesses.

5.3.2 SOURCE CHARACTERIZATION

Mobile businesses that are known to operate within the City are marked as such on the City's commercial inventory in Section B.5 of the City's updated JURMP. The following business

types are addressed by the mobile source element of the City's industrial and commercial program.

- Mobile auto detail/ maintenance
- Window washing/pressure washing/ street sweeping
- Pool and spa cleaning
- Carpet cleaning
- Plumbing/ handyman/ repairman
- Landscaping
- Dog grooming
- Boat cleaning/ hull maintenance
- Fire sprinkler maintenance
- Painting and coating
- Masonry
- Concrete cutting
- Mobile construction trades, which include cement work and masonry

In addition to the business types listed above, other mobile businesses that the City identifies as a TTWQ are added to the inventory. Because not all mobile businesses have obtained a business license in the City or the business is based out of the City's jurisdiction, the City continues to refine and update its inventory of mobile businesses.

The City has established a process by which any mobile business license applicant within the above categories are required to go through a storm water BMP training, and sign a certification verifying that they are aware of the City's BMP requirements and pollution prevention ordinances.

During this reporting period, 140 mobile businesses from the categories listed above applied for a City business license, were trained on BMPs related to their business, completed the City of Chula Vista Storm Water Questionnaire and Certification Statement, and received their business license. Attachment D.3 is a list of the businesses that went through this process during the reporting period. Table 5-2 details the types and numbers of mobile businesses approved during the reporting year.

Table 5-2 Approved Mobile Business Licenses by Category FY 2010-2011

MOBILE BUSINESS TYPE	NUMBER
Construction Related	10
Carpet Cleaning	6
Boat Cleaning and Maintenance	1
Auto Detailing	1
Pool and Spa Cleaning	6
Handyman/ Repairman	30
Powerwashing/ Window Cleaning	7
Plumbing	15
Landscaping	32
Fire Protection Systems	2
Painting and Coatings	13
Pest Control	1
Mobile Mechanic	14
TOTAL	**140**

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 POLLUTION PREVENTION

Pollution prevention comprises procedures and practices that eliminate or reduce the generation of pollutants at their sources. Mobile businesses often deal with a variety of pollutants, both indoors and outdoors, that pose potential environmental threats if transported by way of urban runoff. In mobile business settings, pollution prevention strategies enable the operator to reduce the volume of solid, liquid, and hazardous wastes as well as costs. The City emphasizes the use of the following pollution prevention methods, when appropriate:

- Use smaller quantities of toxic materials or substitute less-toxic materials.
- Minimize the volume of cleaning water to decrease wastewater generation.
- Implement a spill response plan.
- Train employees in pollution prevention practices.

It is important to recognize that pollution prevention methods are stressed through all interactions between the City and the owners, operators, and their employees. Further, pollution prevention methods are commonly used in compliance with other regulatory management standards.

5.3.3.2 BMP REQUIREMENTS

All BMPs required for stationary sources listed in Section 7.2.3.1 of the City's updated JURMP, are also required for mobile businesses where applicable. The most important BMPs used for most mobile businesses are typically Non-Storm Water Discharge Control and Spill Prevention, Control, and Cleanup, as described in fact sheets SC-10 and SC-11 of the CASQA Manual.

In addition, as per the Municipal Permit, the Copermittees developed a set of minimum core BMPs for the various types of mobile businesses. The following BMPs specifically address the unique characteristics of mobile businesses.

- Storm water training
- Spill containment and cleanup (Spill Kits)
- Proper handling of all wastes (Solid, liquid and hazardous)
- Protecting storm water conveyance systems
- Providing proper handling and containment of materials
- Providing equipment washout areas

These practices represent only the minimum required BMPs. Mobile businesses are encouraged to contact City staff for any questions or for information on any additional and more stringent activity-specific requirements.

The Copermittees posted information about mobile business minimum BMPs as a resource in the Project Clean Water Toolbox website. Please see Figure 5-1 – Clean Water Toolbox for the home page of the website.

Figure 5-1 Clean Water Toolbox

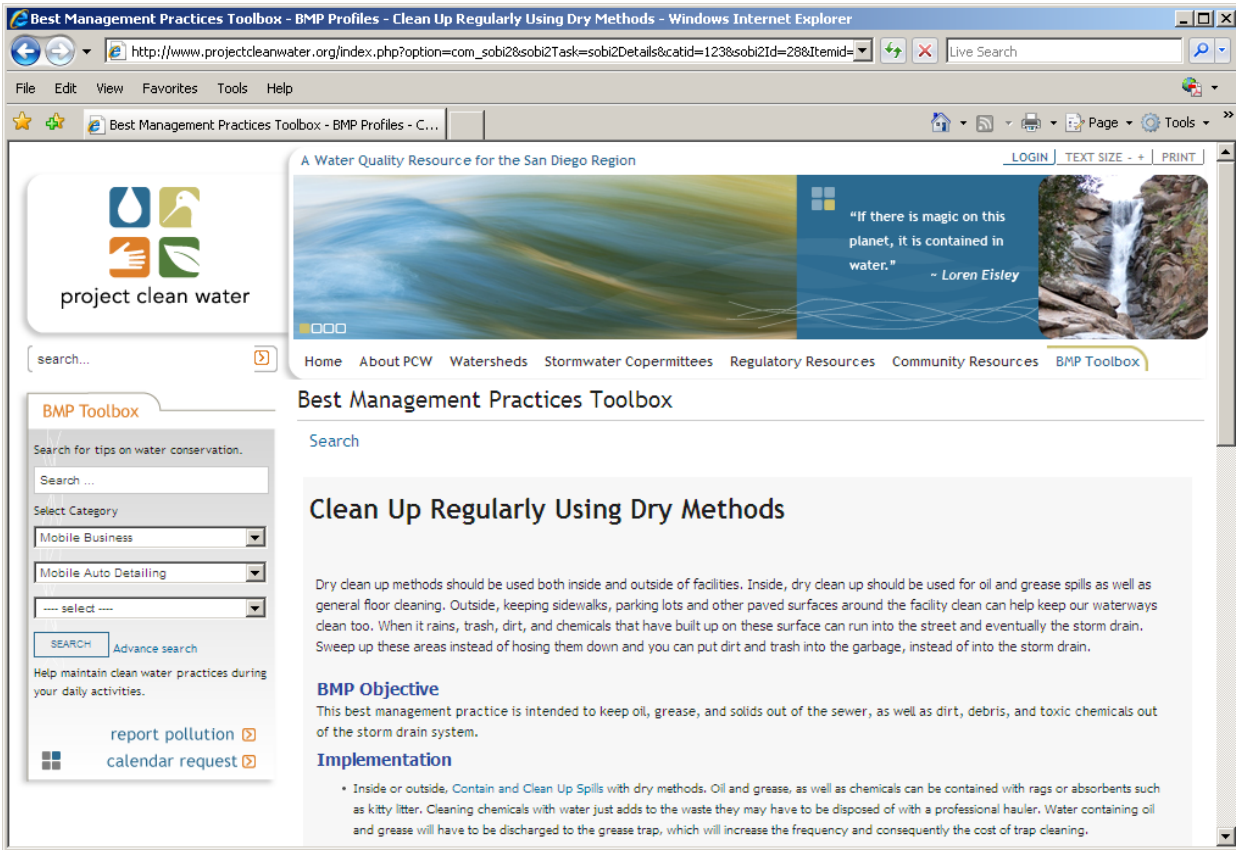

5.3.4 PROGRAM IMPLEMENTATION

The City continues to implement well-developed procedures for mobile businesses through the City's Storm Water Mobile Business License Program. New mobile business license applicants are made aware of applicable requirements and BMPs related to their business prior to the approval and issuance of a business license. Under this program, business license applications that fall under pollutant generating mobile activity types are routed to the Storm Water Management Section for review and approval. Applicants are required to complete a Storm Water Questionnaire regarding their business practices and required BMPs and sign a certification statement that states they are aware of the City' Storm Water regulations and will implement adequate BMPs in their activities. Approved applications and completed Storm Water Questionnaires and Certification Statements are scanned into the City's Mobile Business Database. This process provides a tracking mechanism for Storm Water Management Staff in managing and maintaining priority mobile sources, and identifying repeat violators. The procedures shown below have demonstrated success in requiring new business owners, particularly mobile businesses, to address water quality concerns through the implementation of BMPs.

- The Finance Department receives application from mobile business owner
- The applicant is issued a commercial or construction packet based on business type/description. Each Storm Water Information Packet for Mobile Business contains a transmittal letter, copy of the City's Storm Water Ordinance, and appropriate CASQA BMPs relevant to the type of business activities.
- The applicant is instructed to complete and return the Storm Water Questionnaire and Certification Statement in order to receive approval from the Storm Water Management Section before a business license can be issued.
- The applicant contacts Storm Water Management staff for either a "face-to-face" or phone conversation to review the application and answer any questions prior to approval and issuance of a license.
- In addition to the City's Mobile Business Database, the Copermittees have established a Regional Copermittee Mobile Business Database. The web-based database can make queries on locating a mobile business, finding and viewing violations, and watershed-based reporting. Jurisdictions are able to edit a mobile business that is located or does business in their jurisdiction. See Figure 5-2 – Regional Copermittee Mobile Business Database for a sample web page.

Figure 5-2 Regional Copermittee Mobile Business Database

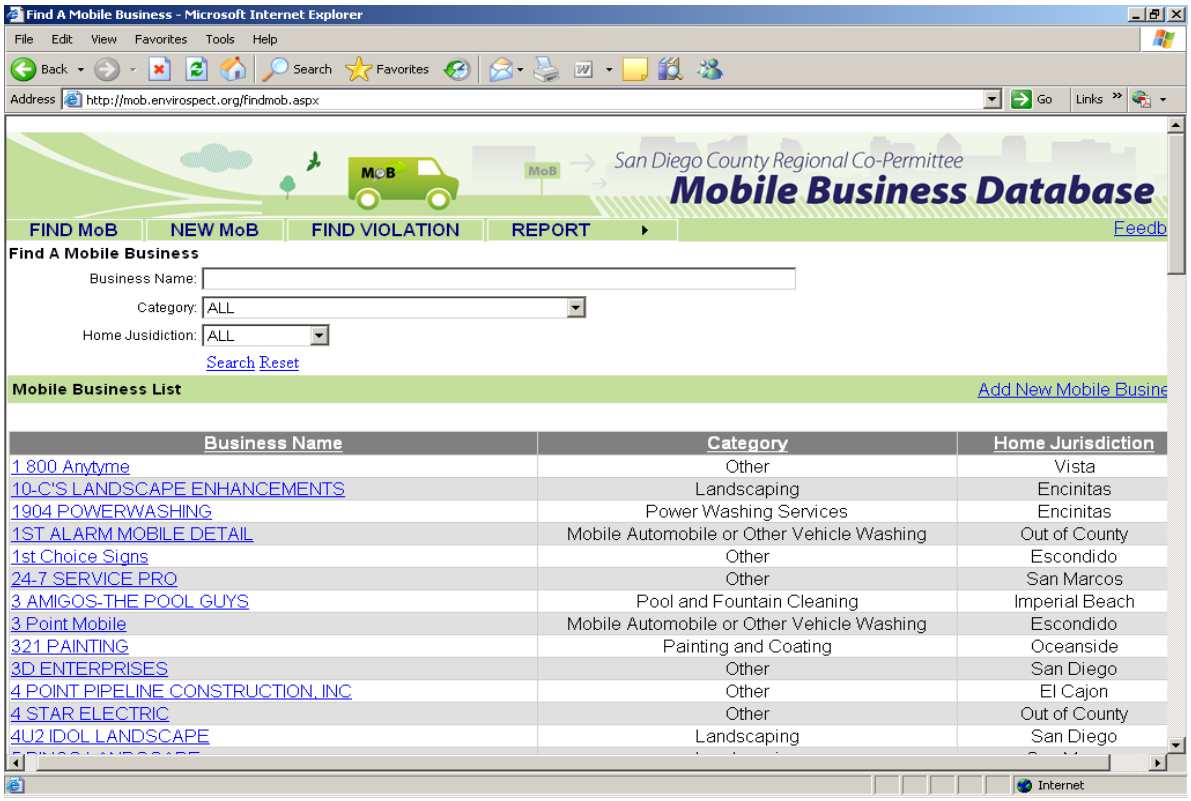

Three types of reports can be generated from this database:

- All mobile businesses home-based within a jurisdiction
- All mobile businesses operating within a jurisdiction
- All violations that have occurred within a jurisdiction

5.3.4.1 EDUCATION AND OUTREACH

During the business license application process, the City provides mobile business owners or operators the necessary information, educational materials, and outreach related to storm water quality issues specific to their type of business. As stated above, businesses are given the educational materials outlining pollution prevention measures and other BMP requirements related to their respective activities prior to the license being issued. A sample of the Storm Water Information Packets for Mobile Businesses is included in Appendix D of the City's updated JURMP. The education program is described in detail in Section 10, of the City's updated JURMP.

5.3.4.2 ENFORCEMENT ACTIONS

Most violations associated with mobile businesses are related to illegal discharges and lack of BMP implementation. Upon arrival at the scene, City inspectors require an immediate stop to any illegal discharge and instruct the responsible person to initiate containment and cleanup of

the affected areas. If the business lacks materials and equipment required for the deployment of adequate BMPs, the responsible person is informed that they will not be able to resume activities until such time that they procure all necessary materials and equipment. Storm Water Compliance Inspectors find out if the business possesses a business license, and has signed a Certification Statement. Mobile businesses that do not have a City business license will be required to obtain one prior to being allowed to resume business operations. Enforcement action, including warnings, citations, civil penalties, or other enforcement measures are initiated where justified. During the current reporting period, a total of 17 administrative citations totaling $3,100 in fines were issued to mobile businesses operating in Chula Vista.

5.3.4.2.1 NOTABLE ACTIVITIES

During the reporting period, the City continued its mobile business license application processing combined with public education, which is considered a notable and very effective method of minimizing pollutant discharges from mobile business activities.

• Residential

Section 6.0

6.0 RESIDENTIAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a. (3)(e). i - Identification of the high threat to water quality residential areas and activities that were focused on.

Permit Section J.3.a.(3)(e).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.

Permit Section J.3.a.(3)(e).iii - A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.

Permit Section J.3.a.(3)(e).iv - Types and amounts of household hazardous waste collected, if applicable.

Permit Section J.3.a.(3)(e).v - A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of evaluation.

Permit Section J.3.a.(3)(e).vi - The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(e).vii - A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.

Permit Section J.3.a.(3)(e).viii - A description of notable activities conducted to manage urban runoff from residential areas and activities.

6.1 INTRODUCTION

The City has developed the residential component of the Jurisdictional Urban Runoff Management Program (JURMP) based upon a multi-faceted approach including pollution prevention; complaint response and enforcement; and outreach and education. It is the overarching goal of this component to offer cost effective and simple solutions to reducing residential discharges of pollutants into the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP) and to support the long-term improvements of water quality through awareness and behavior modification.

6.2 SOURCE CHARACTERIZATION

The information collected from reported illegal discharges and results of subsequent investigations can be analyzed to provide useful tools in effectively characterizing activities, sources, and areas within the City that contribute more to water quality impacts and that need to be targeted. These criteria may stay constant from year to year, or change each year. However,

knowledge of the pattern that they follow will provide the storm water manager an insight that is necessary to develop or modify an effective program. As in previous reporting years, the City has taken a critical look at the hotline calls related to residential activity received during the reporting period (Figure 6-1). Home improvement related discharges continue to be prevalent in this reporting period. The City has continued to focus residential education on pollution prevention during home improvement activities in order to foster a change in behavior and to increase residential BMP implementation. Further, characterizing the sources of pollutants can provide a resource in tailoring public education and outreach programs to the specific needs of the community and improving their effectiveness, while maintaining economic viability. This type of critical look is an important tool in making management decisions on how to approach residential BMP implementation and pollution prevention in the City. It should be noted that such analysis is not intended to offer determinate conclusions; rather it is presented to provide a general evaluation tool to guide residential strategies and BMP implementation guidance. Further, it is an effective way of evaluating and characterizing sources over time.

Figure 6-1 Percentage of Reported Residential Storm Water Violations by Activity FY 2010-2011

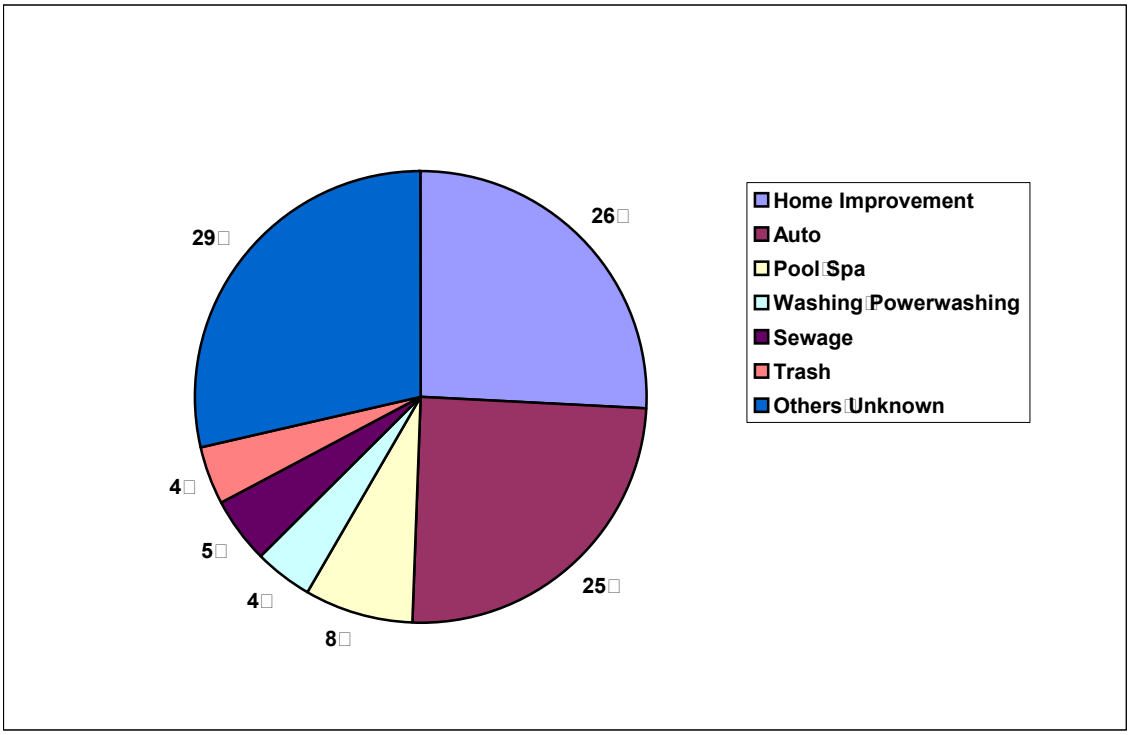

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's JURMP has designated BMPs for a number of high Threat To Water Quality (TTWQ) residential activities including home improvement and maintenance, automotive maintenance, waste management and disposal, and pet waste management. In addition, every year certain residential areas of the City are designated as areas with a high TTWQ. It is important to recognize that the dynamic behind strict enforcement of requirements regulating

residential BMP implementation is quite challenging, however, the City has developed a number of mechanisms through which information on BMPs are disseminated to the public and ultimately enforced through the City's Storm Water Ordinance. Mechanisms such as special community events, school presentations, door hangers, City's environmental website, and community newsletters were utilized within the defined reporting period of this report. Examples of such programs and outlets include:

- Household Hazardous Waste Collection Events
- State-Certified Used-Oil Collection Centers
- Household Collection of Used Cooking Oil
- Christmas Tree Recycling Program
- Residential Complaint Response and Enforcement
- Residential Door Hangers
- City's environmental website at: www.chulavistaca.gov/clean

Notably, all of the mechanisms listed above have been discussed in more detail throughout other sections in this report. It is confirmed that the designated BMPs were required to be implemented primarily through public education, and where necessary by enforcement action.

6.4 PROGRAM IMPLEMENTATION

The residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted, so that pollutants associated with residential activities and areas are minimized to the MEP. The residential program also has an education component, described in the following sections, so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities. The City uses public education and outreach together with enforcement mechanisms, when necessary, to ensure program implementation by residents and compliance with all federal, state, and local laws and regulations.

The City keeps accurate records of all reported residential illegal discharges and non-compliance with BMP requirements. This information can be used in many ways such as identification of pollutants of concern, areas of HTTWQ, increasing/decreasing trends in illegal discharges, and repeat violators. Such analysis is then used to develop new programs or modify existing programs to focus attention on program elements that result in higher effectiveness and quicker results. Map 1 – Violation Location Map was prepared to depict all areas of the City with a visual demonstration of reported illegal discharge distributions. The City then targets higher density areas for more focused public education and surveillance.

6.4.1 MANAGEMENT AND DISPOSAL OF USED OIL AND HOUSEHOLD HAZARDOUS MATERIAL

The City facilitates the proper management and disposal of used oil, toxic materials, and all other Household Hazardous Waste (HHW). Information pertaining to the household hazardous waste and the used oil and filter programs are distributed to residents annually during special events, presentations, point of purchase locations, mobile displays throughout the city offices and

community centers, local realtors/associations, and property management offices. Residents are educated about the disposal of such waste through the City's public education program, which is described in Section 8.0. The City meets and often exceeds requirements set forth by the Cal Recycle (formerly the California Integrated Waste Management Board). The program has the capacity to receive and process used oil and filters generated by City residents. The amount of used oil collected from certified oil centers increased compared to last reporting year as shown in Table 6-1. The City continues encouraging residents to take a proactive approach to changing their oil by draining it, uninstalling their oil filters and taking filters along prior to visiting their local auto supply store. In this way, residents recycle used oil as they purchase their new oil and avoid an extra trip, one that could have added green house gases into the atmosphere. This method also prevents storm drain pollution, as unattended oil could intentionally or unintentionally spill and enter storm drain systems.

The South Bay Used Oil Recycling Program has been evaluated by CalRecycle as a successful program implemented by the City of Chula Vista, National City, and Imperial Beach in terms of improving environmental quality. Residents of Chula Vista can leave oil filters and up to 5 gallons of used oil at the curb on their regular trash and recycling collection day at no additional charge. This used oil will be collected and recycled through the South Bay Used Oil Recycling Program. Residents of Chula Vista also have the option of taking their used oil to various used oil collection facilities in the City for recycling or disposal.

Additionally, the City provides its residents and neighboring municipalities the means to properly dispose of HHW at the facility located at 1800 Maxwell Road, Chula Vista. This facility accepts oil, both clean and contaminated as well as residential hazardous waste. Residents are limited to 15 gallons or 125 pounds of used oil or hazardous waste per vehicle. The facility is open every Saturday and Wednesday from the hours of 9 AM to 1 PM. The City also offers "door-to-door" collection of HHW for a small donation. Under this program, HHW is collected by appointment from residents who are unable to physically take the waste to the permanent facility or because of scheduling conflicts. Every used oil and HHW application has focused on pollution prevention, watershed protection, source reduction and making it easy for residents to do the right thing when it comes to proper disposal.

Table 6-1 Amount of HHW and Used Oil Collected FY 2010-2011

Household Hazardous Waste	Quantity of waste collected (FY 09-10)	Quantity of waste collected (FY 10-11)
	294,217 pounds	412,706 pounds
Used Oil	Quantity of used oil collected from certified centers (FY 09-10)	Quantity of used oil collected from certified centers (FY 10-11)
	22,399 gallons	28,732 gallons

6.4.2 RESIDENTIAL AREAS AND ACTIVITIES EVALUATION METHOD

A total of 25% of the City's 33,366 acres is designated as either multi- or single-family residential. Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the quality of receiving waters. The City has developed various mechanisms that aim to reduce pollutant runoff from residential areas and activities to the MEP. The following mechanisms are used by the City to determine areas where enforcement actions may be necessary, where appropriate:

- Public reporting hotline
- Analysis of Dry Weather Monitoring Program results
- Observations from City maintenance personnel
- City's environmental website at: www.chulavistaca.gov/clean
- Analysis of data collected and managed in the Department of Public Works data management system gbaMS (George Butler Associates Management System)

Further information about the City's hotline reporting system and Dry Weather Field Screening and Analytical Monitoring Program are provided in Section 9 of the JURMP. The City evaluates its methods used to encourage improved pollution prevention practices and the implementation of BMPs through the review of the aforementioned mechanisms. By using a Geographic Information System program and the data collected from these mechanisms, every year residential areas of the City that have had higher numbers of violations, and outfall locations that exceeded pollutant standard limits are mapped (see Map 1 – Violation Locations Map and Map 2– HTTWQ Residential Area Map). City staff then develops programs to inspect and investigate areas of the City that are considered high TTWQ. City staff investigates violations with enforcement authority within a reasonable timeframe. Violations are documented and depending on the nature and severity of the violation, enforcement may consist of any of the following:

- Verbal Warnings
- Written Warnings
- Orders to Clean and Abate
- Monetary Fines

Details of these procedures are included in Section 2 of the JURMP document.

The general public continues to effectively participate in the program by reporting pollutant generating activities or practices observed within their neighborhoods. Based on the number of calls received from the public during this reporting period, it can be construed that the general public's awareness of water quality issues continue to improve and people are more sensitive about the environmental quality of their surroundings. Information collected from the City's illegal discharge reports database can also characterize those activities and sources that have more implications on water quality as presented in Figure 6-1.

The residential areas and activities evaluation method described above indicate that: 1) residents are becoming more environmentally conscious, 2) residents take an active role in environmental

protection by calling the City and reporting illegal discharges, 3) a positive trend in urban runoff discharge quality is emerging. These results are encouraging and provide incentive to City staff to maintain their level of efforts and find innovative methods to accelerate the positive trend.

6.4.3 VIOLATIONS AND ENFORCEMENT ACTIONS TAKEN

Enforcement of the residential program has been established and addressed in Chula Vista Municipal Code Chapter 14.20, Storm Water Management and Discharge Control; and Chula Vista Municipal Code Title 1, General Provisions. During this reporting period, Storm Water Management Section staff responded to 174 reported violations, of which 101 were residential. Thirty-one of the reported violations resulted in citations. The amount of fines collected during this reporting period from residential violations was $2,400. Storm Water staff responded to each reported violation, investigated each case, took appropriate actions regarding containment of pollution, educated the violating party on existing laws and regulations, made follow-up visits where necessary, and proceeded with enforcement action if voluntary compliance was not achieved.

Data management of past violations helps City staff to identify repeat residential violators. Repeat violators are subject to more severe enforcement action due to the fact that the violation can no longer be considered an act of ignorance of water quality protection laws and regulations, but is a deliberate illegal act. Some of the cases were resolved without resorting to enforcement action. In other cases, enforcement actions were taken regarding residential areas. Details of reported violations are included in Attachment K.

6.4.4 RESIDENTIAL EDUCATION PROGRAM

Education is an important step towards improving receiving water quality, both locally and regionally. Increasing public awareness and encouraging a change in both attitude and behavior of the general public and the regulated community, can directly lead to a reduction or elimination of storm water pollution caused by common daily residential activities. Due to the importance of public education and outreach in storm water programs, the Municipal Permit requires public education at jurisdictional, watershed, and regional levels. The following are brief accounts of the implementation of jurisdictional and regional education programs during the reporting period. Additionally, during the reporting period, the City collaborated with the Copermittees of the San Diego Bay Watershed to implement the Watershed Urban Runoff Management Program (WURMP) residential education component. Details of such efforts are fully discussed in this year's WURMP Annual Report, which will be submitted to the Regional Board under a different cover.

6.4.4.1 JURISDICTIONAL RESIDENTIAL EDUCATION PROGRAM

The Storm Water Management Section collaborates with the City's Environmental Services Division and the Conservation Department in the implementation of the Jurisdictional Residential Education Program. Pollution prevention and water quality regulation information is disseminated by actively participating in community events throughout the year. Informational

booths at fairs, flyers, brochures, website postings, advertisements, and other educational materials are the various approaches used by City staff in disseminating storm water information. Such programs raise pubic awareness about the City's storm water regulations and requirements as well as Best Management Practices methods. Residents become aware of the importance of protecting their watersheds and water resources, and recognize that they have the ability to improve local water quality by making a few simple changes to their regular routines. The Storm Water Management Section continues to provide a comprehensive storm water education program to the residential community, general public, and school children.

Many educational efforts such as direct interaction during reported violation investigations or when taking calls to the City's Storm Water Hotline are conducted on an ongoing basis. Educational materials are also distributed throughout the year. Targeted mailings, focused training sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of reported violations, and other similar factors.

Residential hotline calls, response, and enforcement rely heavily upon citizen participation and awareness. As such, an integral component of residential outreach and education is to encourage the reporting of pollutant generating activities or practices observed by citizens within their neighborhoods. To further support the reporting efforts, the City relies heavily upon well-trained municipal staff who effectively operate as the "eyes and ears" of the City.

6.4.4.2 REGIONAL RESIDENTIAL EDUCATION PROGRAM

During this reporting period, the City continued to participate in the Education and Residential Sources (ERS) Workgroup with the San Diego Copermittees. The workgroup is broken down into sub-workgroups that focus on one, or more of the various components undertaken by the ERS. These sub-workgroups address media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment. A few of the activities that the group completed during the reporting year include: 1) Development and implementation of comprehensive media program including ads on TV, radio, movie theaters, and bus shelters; 2) Development and implementation of a county-wide telephone survey to assess citizen storm water knowledge; 3) Development and distribution of the regional 2011 Storm Water Calendar in Spanish; and 4) Continued participation in regional community events such as the Envirofair at the San Diego County Fair.

Comprehensive discussions of each of the above program elements will be included in the Regional Urban Runoff Management Program Annual Report, which will be submitted to the Regional Board under a separate cover.

6.4.5 MANAGEMENT OF URBAN RUNOFF FROM RESIDENTIAL AREAS AND ACTIVITIES

As detailed throughout this report, the City institutes a variety of highly effective pollution prevention programs to provide the residential community with venues and outlets for disposal of wastes and to provide invaluable information and education on the negative impacts of improper waste disposal. A consistent message of stewardship through everyday actions and

behaviors and the importance of protecting and maintaining the quality of our natural resources are presented through a variety of outlets. It is because pollution prevention is the most economical and effective way of protecting water quality, that this element is given higher priority, and has proven to be a successful measure for the City over time.

During the reporting year, the City identified several High Threat to Water Quality (HTTWQ) residential neighborhoods that required focused educational outreach (see Map 2). These areas have been targeted based on storm water inspection observations, reported violations to the City's hotline, and the dry weather monitoring upstream investigation program. The City is currently in the process of finding volunteers to distribute storm water pollution prevention door hangers in addition to brochures targeting specific residential activities and their associated pollutants to these neighborhoods. The activities and pollutants that will be focused on include: 1) vehicle washing and repair (detergents and vehicle fluids), 2) gardening (green waste, fertilizer, and over-irrigation discharge), 3) household activities (pet waste and trash). These areas and their corresponding activities and pollutants have been identified on Map 2. In addition, the City plans to work with Homeowner's Associations to include storm water pollution prevention articles and messages into their community newsletters.

In November 2010, the USEPA approved the 2008-2010 303(d) list for the San Diego Region. Therefore, in addition to the HTTWQ areas shown in Map 2, there are also residential areas of the City that could potentially discharge pollutants of concern to 303(d) listed waterbodies within the City. Table 6-2 shows the pollutant/waterbody combinations within or adjacent to the City. Some areas of the City discharge to San Diego Bay, which is 303(d) listed for PCBs. Since PCBs have been banned since the early 1970s, no residential areas within the City discharge PCBs to San Diego Bay. The pollutant(s) of concern causing toxicity in Poggi Canyon and Sweetwater River are not known, however, previous regional monitoring reports suggest that synthetic pyrethroids are potential cause of toxicity. Synthetic pyrethroids are a component of pesticides, which can come from residential homecare activities. The lower section of Sweetwater River, below the impoundment, is 303(d) listed for a variety of pollutants. Residential activities may potentially affect water quality in this area, mostly through gardening and landscaping activities. It is not clear if selenium is generated through residential activity and accordingly, the City is in the process of further studying selenium and its sources. The City will continue to educate its residents through distribution of educational materials and interaction at community events, with a focus on these pollutants of concern.

Table 6-2 2008-2010 303(d) Listed Waterbodies-Pollutants In or Adjacent to Chula Vista

WATERBODY	POLLUTANT
Poggi Canyon Creek	Toxicity
Telegraph Canyon Creek	Selenium
Sweetwater River, Lower (below Sweetwater Reservoir)	Enterococcus
	Fecal Coliform
	Phosphorus
	TDS
	Total Nitrogen as N
	Toxicity
	Selenium

The City also targets HTTWQ residential areas by having cleanup events that provide residents the opportunity to volunteer to help cleanup their neighborhoods. The annual Beautify Chula Vista event focuses on a different neighborhood each year, frequently in under-privileged areas of the City, and provides graffiti cleanup, tree planting, trash pick-up, and storm drain stenciling. By participating in the event, residents are able to make a connection to their community and environment while learning about storm water pollution prevention.

In addition to targeting HTTWQ areas for public education and outreach, the City has a number of programs in place throughout the City to promote environmental stewardship and storm water pollution prevention among its residents. Section 8.0 details the education programs that the City has implemented in order to encourage positive behavior changes in residents.

• Illicit Discharge Detection Elimination

Section 7.0

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(f).i - Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.

Permit Section J.3.a.(3)(f).ii - Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.

Permit Section J.3.a.(3)(f).iii - Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.

Permit Section J.3.a.(3)(f).iv - A brief description of any other investigations and follow-up activities for illicit discharges and connections.

Permit Section J.3.a.(3)(f).v - The number and brief description of illicit discharges and connections identified.

Permit Section J.3.a.(3)(f).vi - The number of illicit discharges and connections eliminated.

Permit Section J.3.a.(3)(f).vii - Identification and description of all spills to the MS4 and response to the spills.

Permit Section J.3.a.(3)(f).viii - A description of activities implemented to prevent sewage and other spills from entering the MS4.

Permit Section J.3.a.(3)(f).ix - A description of the mechanism whereby notification of sewage spills from private laterals and septic system is received.

Permit Section J.3.a.(3)(f).x - Number of times the hotline was called, as compared to previous reporting period, and a summary of the calls.

Permit Section J.3.a.(3)(f).xi - A description of efforts to publicize and facilitate public reporting of illicit discharges.

Permit Section J.3.a.(3)(f).xii - The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(f).xiii - A description of notable activities conducted to manage illicit discharges and connections.

On September 10, 2008, the Regional Board adopted Addendum No. 2 to the Municipal Permit. The addendum recognized that Dry Weather Field Screening and Analytical Monitoring activities may continue until the end of September each year, and the results would not be available to be included in JURMP Annual Reports, which are also due for submittal on September 30 of each year. Therefore, submittal of Section 7.0 of the JURMP Annual Report (Illicit Discharge Detection and Elimination Component) was allowed to be postponed until December 15 of each year. Pursuant to this requirement, the City of Chula Vista will submit the entire FY 2010-2011 Illicit Discharge Detection and Elimination Component; copies of the City's 2011 Dry Weather Field Screening and Analytical Monitoring Program Report and Follow-Up Investigations; and related attachments no later than December 15, 2011.

• Education

8.0 EDUCATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(g).i - A description of education efforts conducted for each target community.

Permit Section J.3.a.(3)(g).ii - A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.

Permit Section J.3.a.(3)(g).iii - A description of education efforts conducted for municipal departments and personnel.

Permit Section J.3.a.(3)(g).iv - A description of education efforts conducted for the new development and construction communities.

Permit Section J.3.a.(3)(g).v - A description of jurisdictional education efforts conducted for residents, the general public, and school children.

8.1 INTRODUCTION

The City has identified public education and outreach as powerful and effective tools towards increased awareness and behavioral changes that will ultimately lead to reduced pollutant loading from various land uses. The City considers voluntary pollution prevention to be one of the most effective means of achieving long-term reductions in urban runoff pollution. This objective is achievable only through public education and outreach that makes an impression on the community and invokes changes in behavior. As such, the City has approached the development and implementation of educational components by targeting the following audiences:

- Municipal staff
- Residential community, general public, and schools
- Industrial and commercial business owners and operators
- Construction and development community
- Underserved communities

The City's Storm Water Management Program is strongly supported by a variety of environmental programs within the organization that provide an exceptional vehicle for disseminating educational materials to the general public regarding storm water pollution prevention. Specifically, the City's Environmental Services Division, under the South Bay/ East County Regional Used Oil Recycling, Household Hazardous Waste Collection and Recycling Program targets issues directly connected to storm water pollution prevention. The Chula Vista Nature Center also provides an invaluable venue for public participation and the promotion of conserving, preserving, and protecting San Diego Bay. Through these programs and facilities, activities such as annual school presentations, waste collection events, and public outreach events are conducted in collaboration with the Storm Water Management Section. During such

events, the general public is exposed to water quality concerns, pollution prevention techniques, and Best Management Practices (BMPs) to prevent storm drain pollution. The following sections provide a summary of various activities and venues utilized within the defined reporting period of this report to achieve public education and outreach goals for municipal staff, business owner, construction, new development, general public, and targeted communities.

8.2 STAFF TRAINING ELEMENT

Staff education and training on water quality issues takes several forms as follows:

- General storm water education for all City employees
- Education targeting staff engaged in the review, approval, and inspection of new development and redevelopment projects
- Training for City staff responsible for the maintenance of the City's infrastructure

General storm water protection and pollution prevention education for City staff is provided and reinforced on an ongoing basis. While a number of communication venues are available and have been relied upon in previous reporting years, the most valuable education comes through the implementation of Citywide pollution prevention and waste reduction programs. Recycling programs are in place throughout City facilities, and serve as a constant reminder to staff of the City's commitment to pollution prevention.

During the reporting year, Storm Water Management staff continued to receive training as well as provided training to municipal staff (including Public Works Engineering and Development Services Departments) about the new General Construction Permit. Training included general permit overview, risk levels, sampling and monitoring, inspections, reporting, and certification requirements. As construction projects begin to implement the General Construction Permit, the Storm Water Management Section staff will continue its efforts to educate itself as well as municipal staff.

Education for staff engaged in the City's permitting process for new development and redevelopment has been achieved through a number of venues. Targeted training activities have been conducted to reinforce water quality priorities in the field of land development and planning, including Standard Urban Stormwater Mitigation Plans (SUSMP) implementation strategies. In addition, development planning and engineering staff is consistently exposed to water quality priorities on a project-by-project basis through project meetings, workshops, and field visits. City Storm Water Management staff also provides training on the City's Development Storm Water Manual. A continuing focus on internal SUSMP implementation policy, procedure and guidance training has been emphasized during the defined reporting period of this report. Within this framework, those departments and staff involved in the SUSMP review process have been apprised of the need to utilize Low Impact Development (LID) techniques as well as higher efficiency treatment control BMPs for project design in meeting the City's SUSMP requirements. This approach has proven integral in ensuring ongoing SUSMP implementation refinement and in unifying the focus on site design techniques and the use of higher efficiency treatment control BMPs. In addition, presentations by the manufacturers and vendors of structural BMPs have been organized and hosted by the City.

As in previous reporting year, Storm Water Management staff provides focused training on storm water BMPs to various City departments and divisions on an as needed basis. Such training may be in the form of formal workshops, or on the job training. The following staff has received storm water training on an as-needed basis:

- Wastewater Maintenance
- Storm Drain Maintenance
- Street Maintenance
- Open Space Maintenance
- Traffic Signing and Striping
- Transit
- Vehicle Maintenance
- Land Development
- Public Works Inspections

Table 8-1 details the training, workshops, and seminars that City staff attended and/or gave to other departments during the reporting period. Below is a summary of general concepts that were covered during the trainings.

- Federal, state, and local water quality laws and regulations applicable to municipal areas and activities, development and redevelopment projects, and construction projects;
- Required federal, state, and local permits pertaining to water quality;
- Water quality impacts of urbanization, municipal activities and areas, and construction sites;
- The connection between land use decisions and short-term and long-term water quality impacts;
- Methods for minimizing the impacts on receiving water quality and watershed.

Table 8-1 Municipal Staff Education FY 2010-2011

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
09/13/10 – 09/16/10	Basic Inspector Academy	Training for storm water inspectors to review inspecting basics such as violations, sampling, documentation, and record keeping.	Cal EPA Basic Inspector Academy
10/21/10	Rainwater Harvesting Symposium	Learning about the benefits of rainwater harvesting and using rain barrels.	County and City of San Diego

Table 8-1 continued on next page

Table 8-1 continued

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
11/01/10 – 11/03/10	CASQA Conference	Annual conference that covers a variety of issues including the general construction permit, treatment control BMPs, storm water program management, monitoring, etc.	CASQA
12/14/10	BMP Sizing Calculator	Seminar to address the SD BMP sizing calculator that was designed in compliance with HMP requirements.	APWA
02/14/11	State Water Board Staff Workshop on the General Industrial Permit	Discussion of the Draft General Industrial Permit	State Water Resources Control Board
02/16/11	CESSWI Training Overview	Presentation to Public Works Inspectors about the requirements of the General Construction Permit in regard to certification requirements.	City of Chula Vista Storm Water Staff
02/24/11	Environmental Issues Forum	Presentation on lessons learned from the General Construction Permit as well as an introduction to the draft General Industrial Permit.	SCS Engineers
04/06/11	Maintaining LID in San Diego	A overview of LID requirements, how LID BMPs function, inspection and maintenance of these BMPs.	City of San Diego
05/09/11 – 05/11/11	QSP/QSD Training	Training on the CA General Construction Permit.	URS and City of Vista
05/18/11 – 05/20/11	QSP/QSD Training	Training on the CA General Construction Permit.	AGC CA

8.3 EDUCATIONAL OUTREACH ELEMENT

8.3.1 RESIDENTS, GENERAL PUBLIC, AND SCHOOL CHILDREN

The CLEAN group, made up of the City's environmental departments and various environmentally focused stakeholders, has continued to collaborate on various environmental education programs within the City. The following mission statement established by the CLEAN workgroup has guided these efforts:

"Foster environmental awareness in the City of Chula Vista, through stakeholder and community involvement and participation."

The CLEAN education program was developed around three primary elements: 1) Media 2) Community Interaction and 3) Stakeholder Coordination. It is important to distinguish the focus of this program to promote not only community education, but also community action.

In efforts to maximize the overall effectiveness of this program, and to capitalize on the interrelationship of various Chula Vista environmental programs, the program has been branded under the tag line of "**Your Community. Your Environment. *Your Choice*.**"

The culmination of efforts of various involved City divisions has been embodied in the established CLEAN program, which provides an effective and powerful body to guide the significant efforts envisioned for the program. It is also anticipated that these efforts would be further strengthened through support of community stakeholders including non-profit and business entities.

Based on the CLEAN branding, media elements including pollution notification residential door hangers, stickers, stationery, and various brochures were distributed to the general public within the defined reporting period of this report. In addition, the CLEAN web site has been established with pages dedicated to water quality protection and pollution prevention Citywide. The CLEAN website www.chulavistaca.gov/clean has information about the environmentally focused divisions in the City including Storm Water Management, Environmental Services, Conservation, and the Chula Vista Nature Center. The storm water section has information specific to residents, the development community, mobile businesses, and industrial and commercial businesses. Figure 8-1 shows a general snapshot of the CLEAN homepage.

As the CLEAN program continues to evolve, a wide array of media outlets have been explored, and established branding has been incorporated in them. As indicated above, the larger CLEAN campaign has been designed to promote not only education, but also to encourage and facilitate community actions.

While the City has developed and maintained a variety of new residential education and public outreach opportunities, the City has sustained a number of existing outlets and events. In 2010-2011 the City continued to use pollution prevention messages on the side of waste management vehicles to encourage the proper disposal of items such as recyclables, cooking grease, and holiday trees. In addition, the City continued to distribute a number of promotional items with pollution prevention messaging for distribution at presentations and community events. Promotional items included CLEAN branding and messaging on such items as pet waste bag containers, towels, pens, pencils, and rulers. During this reporting year, the CLEAN group and stakeholders collaborated to produce a comprehensive environmental guide that covers various topics such as storm water pollution prevention, recycling, alternative transportation, green gardening, and conservation. This guide is distributed by all CLEAN stakeholders at community events.

Figure 8-1 CLEAN Homepage

The City has continued to maintain six trail displays (Figure 8-2) throughout the City, near walking trails and parks. The trail displays include information on a variety of interrelated environmental issues, and remind the public of the precious resources that exist within the City. The trail display concept provides commercial or industrial entities the opportunity to receive public recognition through the support of such efforts. They demonstrate the connectivity of environmental concerns throughout the City. Trail displays have been installed at the following locations:

- Chula Vista Nature Center
- Mountain Hawk Park
- Hilltop Park
- Salt Creek Park
- Rice Canyon
- Corner of Telegraph Canyon Road and La Media

A poster form of the trail display is also displayed in the City's John Lippit Public Works Center and the Chula Vista Public Library. Chula Vista staff and residents pass this display on a daily basis, reminding them that the City is within the Sweetwater and Otay Watersheds and of the

simple actions they can take to protect their local waterways. Another poster is used for community events to explain watershed concepts and pollution prevention to Chula Vista residents.

Figure 8-2 City of Chula Vista CLEAN Trail Display

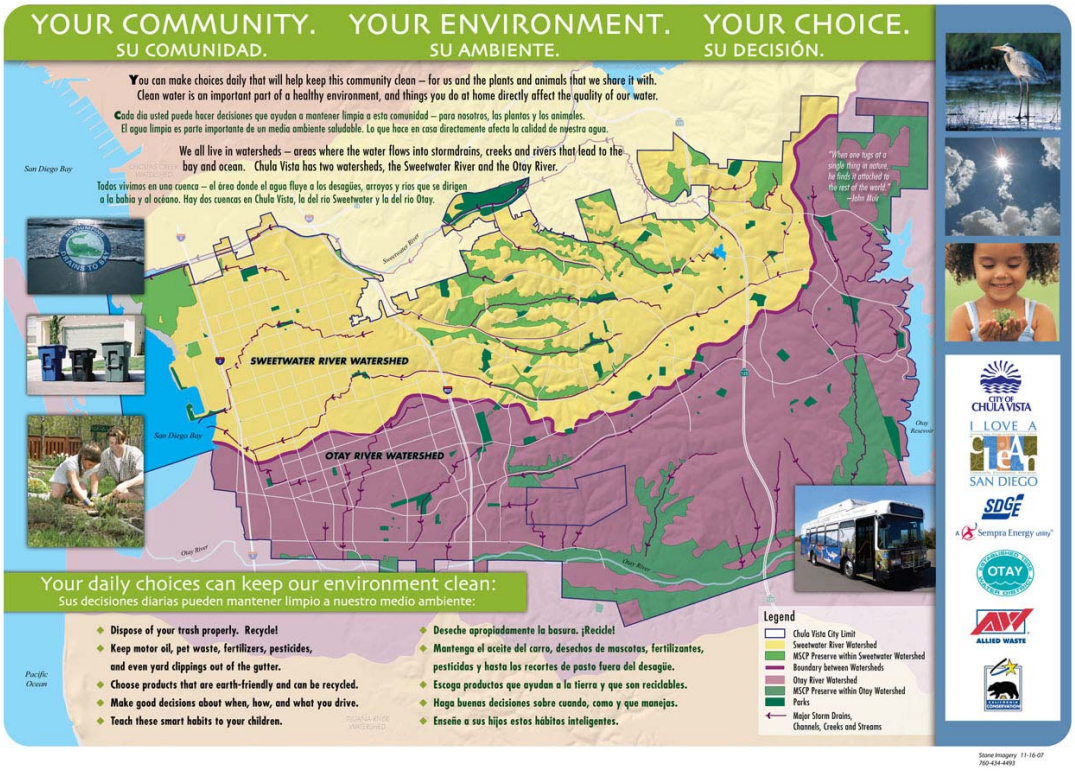

Media Articles

As a member of the CLEAN group, Storm Water Section staff contributed articles about pollution prevention to various publications aimed at residents living in the City. These included The Star News and Your Guide to CLEAN, which is included in residential trash bills. Altogether, these publications reach more than 50,000 households. The City will continue to contribute and place pollution prevention advertisements and articles in these publications as well as continue to explore more venues for reaching citizens through print media.

School Education Efforts

Due to the previous success of the Salt Creek Critters, Southbay Water Warriors, and high school education programs, the City decided to continue its education outreach program to school children. With the help of I Love a Clean San Diego, the City provided storm water education presentations to students at Castle Park High School. The presentation focused on pollutant types and their sources, pollution prevention, watershed protection, and volunteer opportunities. A pre- and post-test were administered to the students receiving the presentations. In addition, an interactive activity was done with each class to enforce the concepts taught in the presentations. Overall, both students and teachers felt that the presentations were beneficial and increased knowledge and interest in environmental issues in their community. The City will continue with school programs such as these into the coming fiscal year, as funding permits.

Community Events
The City of Chula Vista Storm Water Management Section and Environmental Services Division participate in various community events held throughout Chula Vista and San Diego County. Each of these events provides an opportunity to reach citizens throughout the watershed by setting up educational booths and displays.

Community events have been identified as valuable venues providing excellent opportunities to reach large numbers of citizens. During the reporting period the CLEAN group, which includes the Storm Water Management Section and the Department of Conservation and Environmental Services, participated in and set up booths and displays at most major South Bay community events. City staff provided education and outreach materials regarding a variety of interrelated environmental issues. A variety of brochures and pamphlets were distributed to the general public about the effects of storm water pollution on the environment and ways that residents can prevent pollution of their waterways. By participating in these community events, City storm water staff has the opportunity to generate large numbers of impressions each fiscal year. In addition, City staff displayed the EnviroScape model at several community events in order to teach residents about watershed concepts and to reinforce the connection between everyday actions and water quality.

Chula Vista Nature Center
The Chula Vista Nature Center, located within the 316-acre Sweetwater Marsh National Wildlife Refuge of San Diego Bay, is an internationally recognized zoo/aquarium exhibiting plants and animals native to San Diego Bay and marsh/wetland habitats. The Nature Center provides the San Diego Bay watershed with a truly unique and invaluable outreach and education resource.

The Nature Center's mission is to educate the public about the importance of coastal resource conservation and environmental stewardship. Through visits to the Nature Center and its offsite programs thousands of people are exposed to these critical environmental messages each year. To help facilitate educational experiences, the Nature Center offers field trips, guided walks, classes, tours, and special projects. During the reporting year, there were over 430 scheduled tours to the Nature Center, resulting in over 11,280 children and over 2,630 adults learning about San Diego Bay watersheds and watershed protection.

- The Chula Vista Elementary School District (CVESD) funds a full-time Science Resource Teacher who works closely with the Nature Center staff to provide environmental education programs which are integrated in their science and social studies curricula. This teacher works with over 5,000 CVESD students each year.

- Other schools and youth groups schedule field trips to the Chula Vista Nature Center after the leader participates in a 2-hour Field Trip Orientation Workshop (a teacher training program) held at the Center to gain familiarity with the Nature Center and the Sweetwater Marsh National Wildlife Refuge. During these field trips, Nature Center docents guide students around the Center and grounds, where they learn about the importance of watersheds, wetlands, and other coastal resources.

- Students learn to recycle, reuse, and reduce waste. They also learn about storm drains and the types of pollutants commonly identified in the storm drain system. The Chula Vista Nature Center and Conservation Department also conduct a "Less Toxic Gardening Workshop," dealing specifically with pesticide use, as well as weekly composting classes.

Table 8-2 summarizes the education efforts of the City for residents, school children, and the general public during the reporting year.

Table 8-2 Education Outreach Provided During FY 2010-2011

DATE	EVENT	EVENT DESCRIPTION	SITE NAME/ LOCATION
08/08/10	Lemon Festival	City storm water staff manned a booth and distributed information about pollution prevention	Downtown Chula Vista (Third Avenue)
09/18/10	Children's Festival	City storm water staff had a booth at the festival and provided pollution prevention training to citizens	New Hope Community Church
09/25/10	BonitaFest	City storm water staff provided pollution prevention training to citizens	Bonita Shopping Center
10/16/10	Beautify Chula Vista	City storm water staff provided pollution prevention training to citizens	Memorial Park
12/09/10	Understanding the Whys and Hows of Compliance for Your Future Projects	City staff was on a panel discussion about the requirements of the General Construction Permit. Provided education to contractors.	Shea Homes Corporate Office San Diego
12/16/10	A Day Without a Plastic Bag	City staff distributed 1000 reusable grocery bags to shoppers to promote the reduction of plastic bag trash in the environment.	North Park Produce
04/16/11	Go Green and Clean Family Day	City staff manned a booth and provided CLEAN brochures, IPM Pest Tip cards, and other giveaways to promote pollution prevention.	Otay Ranch Town Center
04/30/11	Day of the Child	Storm water staff manned a booth and provided storm water pollution prevention brochures, IPM tip cards, storm water calendars, and environmental giveaways	Memorial Park

Table 8-2 continued on next page

Table 8-2 continued

DATE	EVENT	EVENT DESCRIPTION	SITE NAME/ LOCATION
05/08/11	Cinco de Mayo	Storm water staff manned a booth and provided storm water pollution prevention brochures, IPM tip cards, storm water calendars, and environmental giveaways	Downtown Chula Vista (Third Avenue)
06/04/11	Otay Valley Regional Park Day	City staff provided storm water brochures and CLEAN guides to citizens who attended the event.	Otay Valley Regional Park
06/18/11	Pet Fest and Doggy Dash	Storm water staff implemented a pet waste survey, provided pollution prevention education, and environmental giveaways to citizens	Memorial Park
06/18/11	Enviro-Fair	City staff manned the Think Blue Regional booth at the SD County Fair and provided education to	San Diego County Fair
Year-round	Watershed, Recycling, Storm Drain Pollution Education	Organized School Group Visitors to the Chula Vista Nature Center	Chula Vista Nature Center

Regional Outreach

During the reporting year, Copermittees collaborated on a number of education outreach activities and events, including further development of the Regional Residential Storm Water Education Plan that was submitted to the Regional Board in March 2008. This reporting year, the Copermittees collaborated on improving the regional storm water website, developed and distributed a regional storm water education calendar in Spanish, and had a booth at the EnviroFair at the San Diego County Fair in June 2011.

8.3.2 INDUSTRIAL AND COMMERCIAL FACILITY OWNERS AND OPERATORS EDUCATION

Educational activities targeting industrial and commercial sectors have been produced through local and regional efforts. Regional efforts have included dissemination of information via the County's Clean Water Project website targeting businesses and residents. During the reporting period, the City has utilized the following primary mechanisms to provide ongoing education to the industrial and commercial communities within the City:

- Distribution of printed materials
- One-on-one education of business owners and managers during industrial and commercial inspections

As part of the City's industrial and commercial facility inspections, Storm Water Compliance Inspectors meet with facility owners or managers and explain water quality issues relating to the

particular type of industrial or commercial facility. BMPs relevant to the activities at each facility are explained and, corrective actions are proposed to bring the facility into compliance with the City's ordinances and BMP requirements. Consequences of non-compliance are also brought to the attention of the facility owner/manager. In all cases, copies of the Chula Vista Storm Water Management and Discharge Control Ordinance are handed to the facility owner/manager. The City also distributes the regionally developed "Green Wrench Guide" for automotive facilities, and the "What's Cooking?" guide for food related businesses.

8.3.3 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITY

Education of the development community is approached by the City through two primary audiences: 1) education and training of City staff and 2) education of project applicants, developers, contractors, design engineers, and property owners. As with multiple elements reviewed throughout this report, the City of Chula Vista Development Storm Water Manual provides development project proponents with a fundamental guidance tool for development activities in the City. City Storm Water Management Staff actively engages the development and construction communities working within the City in a proactive effort to educate and expose these entities to the regulatory standards established within the jurisdiction.

As in previous reporting years, education and training of the development community within Chula Vista has primarily been addressed on a project-by-project basis. As the larger development community has been exposed to SUSMP requirements throughout the region and through a broader message, Chula Vista accommodates project applicants with project specific direction and analysis. Through the comprehensive review of development and redevelopment projects, and subsequent meetings and discourse, project applicants are apprised of the suitability of proposed project components in compliance with SUSMP requirements and the City's emphasis on the use of Low Impact Development site design features and high efficiency treatment control BMPs.

Educational activities within the development community are provided throughout the development process from design and planning through construction. As such, educational outlets have been provided by the City at each phase, and have been discussed in Section 2.0 of this report. The following is a list of highlights from the referenced section.

- Project specific post-construction requirements education and training
- The City Development Storm Water Manual
- Pre-construction meeting participation by storm water inspection staff
- On-site construction BMP training
- Participation in regional education and training activities

8.3.4 TARGETING UNDERSERVED COMMUNITIES

The City targets underserved communities through three programs:

- CLEAN education campaign
- Beautify Chula Vista Day

- Graffiti Abatement Program

The CLEAN education campaign has developed a variety of media elements that promote the City's environmental programs such as brochures, website, and giveaways in both English and Spanish. The CLEAN website provides an easy and cost-effective method for the City to reach out to citizens and promote storm water pollution prevention awareness. The City also distributes a variety of giveaways with the CLEAN message to reach different age groups such as notebooks, dustpans, pencils, pens, and pet waste bag holders. This reporting year, the CLEAN Team and Stakeholders continued to distribute the all-inclusive environmental brochure called CLEAN – Your Environmental Guide for Green Living. The brochure covers a wide range of environmental topics such as storm water pollution prevention, water conservation, energy, green living, transportation, recycling, and green gardening.

During the reporting period, the City, with the help of I Love a Clean San Diego, supported the annual Beautify Chula Vista Day that focuses on citizen participation in keeping the City clean. Volunteers have participated in a number of activities during this event, including cleaning of trash, graffiti removal, and planting trees. Efforts are usually focused in underserved areas of the City where more attention is needed due to trash and graffiti problems. Over 600 volunteers participated in the Beautify Chula Vista Day in October 2010.

The Graffiti Abatement Program allows citizens to report graffiti in their neighborhoods by phone, web, or email. City staff is also encouraged to call and report any graffiti they see while they are out in the field. During the current reporting period, and as a result of downsizing City services, the Graffiti Abatement Program was reduced to one day per week. However, volunteers help the City in graffiti removal during weekends. During the current reporting period, the City received over 2,000 requests to remove graffiti, some of which were duplicated by phone, e-mail, or website.

• Public Participation

9.0 PUBLIC PARTICIPATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(h).i - A description of public participation efforts conducted.

9.1 INTRODUCTION

The City encourages and fosters environmental responsibility by supporting community events, activities, and programs that improve storm water awareness. Changing behaviors of residents and the general public can lead to improved water quality. Cleanup events can promote awareness and can lead to a load reduction of trash to receiving waters. In addition to the educational component presented in Section 8.0, the following sections provide an overview of significant public participation opportunities provided or supported by the City within the defined reporting period.

9.2 PROGRAM IMPLEMENTATION

Beautify Chula Vista Day – October 17, 2010

Beautify Chula Vista Day is an annual event that involves citizen participation and involvement in activities that enhance the environmental setting of the City. Every year, this event attracts several hundred volunteers and provides an opportunity for City staff to have direct interaction with the public to discuss environmental issues and the role that citizens can play in protecting their community's health and living standards. Volunteer citizens are able to participate in activities such as tree planting, graffiti removal, clean-up projects, and storm drain stenciling. During this reporting year's event, over 600 volunteers were able to remove more than 2,700 pounds of trash from City streets in addition to cleaning up graffiti.

Otay Valley Regional Park Cleanup

The Otay Valley Regional Park (OVRP) is being developed as a collaborative effort of the cities of Chula Vista and San Diego and the County of San Diego. These jurisdictions have adopted the OVRP Concept Plan, which identifies recreation areas, trails, overlook points, and staging areas for future park use. The park contains several hundred acres of land in the floodway and floodplain areas and undisturbed land along the steep slopes adjacent to the Otay River. Seven fresh water ponds, created from past gravel and sand mining operations, are within the park. OVRP extends from South San Diego Bay to the Lower Otay Reservoir and from Chula Vista's southern boundary to the communities of Otay Mesa and Nestor, encompassing 11.2 square miles of land. The Otay River Valley Cleanup Project (Cleanup Work Project) currently encompasses the Western Otay Valley Regional Park (Nester Creek east to I-805) and Eastern Otay Valley Regional Park – Proctor Valley (North End Upper Otay Lakes Reservoir).

The Cleanup Work Project encompasses efforts by many organizations including the OVRP Citizens Advisory Committee (CAC) coordinating the Donovan Prison Community Crew,

California Conservation Corp (CCC) coordinated by the City of San Diego WOVRP Rangers, County of San Diego Otay Lakes Park Rangers, Friends of the Park (coordinates Proctor Valley Cleanup), Allied Waste (delivering and picking up of large waste bins), City of San Diego Environmental Services, and City of Chula Vista Public Works.

Park cleanup activities include debris removal, encouraging transients to leave the area, improving security by preparing for fencing, trimming foliage, planting trees and other vegetation, and placing signage identifying the OVRP. During this reporting year, workers continued to discourage transients from setting up camps in the park and picked up trash and green waste from the river valley. More information about the Otay Valley Regional Park can be found on their website http://www.ovrp.org/

I Love a Clean San Diego (ILACSD) 9th Annual Creek To Bay Cleanup

The ninth Annual Creek to Bay Cleanup event occurred on Saturday, April 30, 2011. The City co-sponsored this cleanup event, which was coordinated by ILACSD. The San Diego County Board of Supervisors presented this year's cleanup event through the support of a variety of organizations, including the City of Chula Vista through the San Diego Bay Watershed group. The event was able to bring together 5,350 volunteers who spent their Saturday morning cleaning and restoring the health of our coastal and inland waterways and open space areas. Volunteers picked up 80 tons of trash and recyclables from over 172 miles of coastline and inland areas. Commonly found items included plastic items and cigarette butts.

Cleanup sites within or adjacent to Chula Vista included the Otay Valley Regional Park, the Sweetwater Regional Park, J Street Marina, and Salt Creek. At these locations, 211 volunteers removed over 3,000 pounds of trash and recyclables from about 8 miles of Chula Vista waterways.

Household Hazardous Waste and Used Oil Recycling

The Household Hazardous Waste (HHW) Facility at the City of Chula Vista Public Works Center started operation in January 2002. It serves the Cities of Chula Vista, Imperial Beach, National City, and the County of San Diego. The facility is open every Wednesday and Saturday from 9am to 1pm. This facility also offers small businesses the option to dispose of hazardous waste through its Conditionally Exempt Small Quantity Generator (CESQG) program. The City also offers "door-to-door" collection of HHW. Under the door-to-door program, HHW is collected by appointment from residents who are unable to take the waste to the permanent facility or because of scheduling conflicts. The facility is under 24-hour camera surveillance to prevent illegal dumping in and around its surrounding areas. Also, during hours of service operations staff places temporary berms in the proximate storm drain to prevent contamination in the event of a spill. Public participation in this program is expected to minimize the amount of hazardous materials that may otherwise enter storm drain systems. During the reporting period 2,824 residents participated in the collection program from the City of Chula Vista, National City, the County of San Diego, and Imperial Beach, of which 2,487 were Chula Vista residents.

Public IC/ID Reporting and Graffiti Hotline

The City encourages its citizens to partner with the City in keeping Chula Vista clean. Citizens can do so by reporting any illegal discharges to storm drains, as well as reporting any graffiti in

their neighborhoods. Despite budget cuts during the reporting year, the City continued graffiti removal services on public property by using environmentally friendly power washing equipment and BMPs. Storm Water Management Section staff investigates illegal discharges to storm drain systems and provides education and enforcement. In cases of spills or pollutants entering storm drain systems, Public Works maintenance crews provide cleanup as needed. During the reporting period the City received over 170 calls and reports about illegal discharges to storm drain systems. There were over 3,500 calls, emails, and web requests from citizens to the graffiti program during the reporting year (some duplicated), showing that citizens are participating and taking an active part in keeping the City clean.

CLEAN Business Program

As part of its efforts to involve local businesses in keeping the City clean, the CLEAN Team started the CLEAN Business Program in February 2008. The CLEAN Team is made up of the City's Storm Water Management Section, Environmental Services Division, and the Department of Conservation. The CLEAN Business Program was designed to help small businesses exercise environmentally safe practices and become sustainable. This goal could only be achieved by learning basic environmentally responsible and sound methods related to their specific daily activities. The program verifies and promotes businesses that demonstrate environmentally friendly practices and conserve resources. As part of the verification process, the business must complete a packet of checklists with minimum BMPs and request an inspection by the CLEAN Team to verify that the selected BMPs are adequate and have been correctly implemented. The CLEAN Team verifies that the BMPs are in place and functioning. Once a business becomes a CLEAN Business, they receive recognition on the City's website and receive a decal sticker to put on their front window to show consumers that they are shopping at a CLEAN Business. At the time of writing this report, 93 businesses in the City have been verified as a CLEAN Business. Businesses must receive verification on an annual basis in order to maintain their CLEAN Business status.

• Fiscal Analysis

Section 10.0

10.0 FISCAL ANALYSIS COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(j).i - A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.

Permit Section G: Fiscal Analysis

1. *Each Copermittee shall secure the resources necessary to meet all requirement of this Order.*

2. *As part of the Regional Urban Runoff Management Program, the Copermittees shall collectively develop a standardized method and format for annually conducting and reporting fiscal analyses of their urban runoff management programs in their entirety (including jurisdictional, watershed, and regional activities). This standardized method shall:*

    a. *Identify the various categories of expenditures attributable to the urban runoff management programs, including a description of the specific items to be accounted for in each category of expenditures.*
    b. *Identify expenditures that contribute to multiple programs or were in existence prior to implementation of the urban runoff management program.*
    c. *Identify a metric or metrics to be used to report program component and total program expenditures.*

3. *Each Copermittee shall conduct an annual fiscal analysis. Starting January 31, 2010, the annual fiscal analysis shall be conducted consistent with the standardized fiscal analysis method included in the January 31, 2009 Regional Urban Runoff Management Program Annual Report. The annual fiscal analysis shall be conducted and reported on as part of each Copermittee's Jurisdictional Urban Runoff Management Program Annual Reports. For convenience, the fiscal analysis included in the Jurisdictional Urban Runoff Management Program Annual Reports shall address the Copermittee's urban runoff management programs in their entirety, including jurisdictional, watershed, and regional activities. The fiscal analysis shall provide the Copermittee's urban runoff management program budget for the current reporting period. The fiscal analysis shall include a description of the source(s) of the funds that are proposed to be used to meet the necessary expenditures, including legal restrictions on the use of such funds.*

10.1 INTRODUCTION

The Municipal Permit requires the Copermittees to develop a standardized method and format for annually conducting and reporting fiscal analysis of their urban runoff management programs. The Standardized Fiscal Analysis Method and Format (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis

Method document was submitted to the San Diego Regional Water Quality Control Board by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009. The Municipal Permit further requires the Copermittees to conduct their annual fiscal analysis consistent with the standardized method starting January 31, 2010. The fiscal analysis incorporated in this section is based on the standardized method. This is the second year that the standardized method is being used.

10.2 GENERAL BUDGET INFORMATION

The Standardized Fiscal Analysis Method includes a Standardized Fiscal Analysis Reporting Form, which consists of three tables separating jurisdictional, watershed, and regional expenditures. Jurisdictional expenditures are divided into components that mirror those included in the Municipal Permit as follows:

- Administration
- Development Planning
- Construction
- Municipal
- Industrial and Commercial
- Residential
- Illegal Discharge Detection and Elimination (IDDE)
- Education
- Public Participation
- Special Investigations
- Non-Emergency Firefighting

Further, each of the above categories may be broken down into sub-categories. Potential Sub-categories may include:

- Land Use Planning
- Environmental Review
- Development Project Approval and verification
- Public Construction Projects
- Private Construction Projects
- Public Reporting of Illicit Connection or Illegal Discharges (ICIDs)
- Jurisdictional Urban Runoff Monitoring Programs
- Other

Expenditure items to be considered for each category or sub-category may include:

- Administration
- Permitting and Licensing
- Project Planning and Engineering
- Maintenance Inspections
- Compliance Inspection and Enforcement

- BMP Implementation
- Educational Outreach
- Waste Collection and Recycling
- Jurisdictional Urban Runoff and Receiving Water Monitoring
- Other Expenditures

For reporting purposes, only the table incorporating major jurisdictional components will be used. Sub-categories and expenditure items are intended to provide standardization of expenditures and need not be shown in the final report.

City of Chula Vista staff from different departments and divisions contributes to the implementation of the storm water program and their contributions are as follow:

- The Storm Water Management Section is responsible for the development and implementation of storm water programs, participation in regional and watershed activities, oversight of storm water related contracts, data management, and report writing. It is also responsible for inspecting municipal, industrial, commercial, building construction, and residential land uses and responding to reported violations of the City's Storm Water Management and Discharge Control Ordinance. The Storm Water Management Section conducts enforcement action on violators of the City's Storm Water Ordinance.

- The Environmental Planning Division of the Development Services Department reviews development projects for compliance with the California Environmental Quality Act, assesses potential environmental impacts to sensitive areas and requires developers to provide mitigation plans before permits are issued.

- The Land Development Division of the Development Services Department is responsible for ensuring that grading and construction permit applications are in compliance with grading and other engineering ordinances, and that temporary and permanent Best Management Practices are incorporated in the grading plans, tentative maps, and final maps. Land Development Division staff reviews and approves Water Quality Technical Reports submitted to the City as part of development application packages for Priority Development Projects.

- The City Attorney's Office reviews all documents (such as manuals, forms, ordinances, etc.) developed by the Storm water Management Section, to ensure that they are in compliance with current laws and regulations. The City Attorney's Office also assists the Storm water Management Section in the enforcement of City's Municipal Code.

- The Environmental Services Section of the Public Works Department manages the Used Oil Recycling Program, the Household Hazardous Waste Collection Program, the Solid Waste Collection Program, and the Solid Waste Reduction and Recycling Program.

- The Geographic Information Systems (GIS) Section of the Information Technology Services Department is responsible for the City's GIS systems, and provides support to

the Storm Water Management Section by mapping the City's storm water conveyance systems and data management.

- The Operations Division of the Public Works Department is responsible for the maintenance of the City's storm drainage systems and the sanitary sewer collection systems; oversight of the street sweeping program, and oversight of the open space maintenance program. The Wastewater Management Section, in addition to its scheduled maintenance activities, is responsible for emergency responses to sanitary sewer overflows (SSO) and pollutant spills on public streets.

- The Inspection Services Section of the Public Works Department is responsible for the inspection of grading, improvement, and Capital Improvement Projects for compliance with the City's ordinances, including the Storm Water Management and Discharge Control Ordinance.

- Other City departments, divisions, and sections provide support to the Storm Water Management Section in the fulfillment of the City's JURMP and are instrumental in the implementation of that program. Although those departments, divisions, and sections provide important contributions, a detailed accounting of their roles is beyond the scope of this report.

10.3 FISCAL ANALYSIS METHODS

The fiscal analysis method used in this report is based on the standardized fiscal analysis method and format dated January 29, 2009, developed by the Copermittees of the San Diego County NPDES Municipal Permit, Order No. R9-2007-0001.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

10.4.1.1 JURISDICTIONAL

The City's jurisdictional expenditures for FY 2010-2011 related to compliance with the Municipal Permit are listed in Table 10-1 to 10-3.

Table 10-1 NPDES Jurisdictional Expenditures for FY 2010-2011

JURISDICTIONAL COMPONENT		MULTIPLE PROGRAMS	PRIOR PROGRAM
Administration	$169,767		
Development Planning	$79,034		
Construction	$551,724		
Municipal	$1,245,678		
Industrial and Commercial	$128,206		
Residential	$46,876		
IDDE	$371,827		
Education	$38,131		
Public Participation	$1,000		
Special Investigations	$10,199		
Non-Emergency Firefighting	$8,149		
Jurisdictional Total	**$2,650,590**		

Table 10-2 NPDES Jurisdictional Shared Program Expenditures for FY 2010-2011

JURISDICTIONAL COMPONENT SHARED PROGRAMS		MULTIPLE PROGRAMS	PRIOR PROGRAM
Used Oil Recycling	$12,064	x	x
Household hazardous Waste Management	$255,250		
Wastewater Collection Systems Maintenance	$4,398,750	x	x
Flood Management Projects and Flood Control Devices	$174,207	x	x
Jurisdictional Shared Programs Total	**$4,840,271**		

Table 10-3 Jurisdictional Shared Programs For Which Expenditures are Not Readily Available

JURISDICTIONAL COMPONENT SHARED PROGRAMS FOR WHICH COSTS ARE NOT READILY AVAILABLE	MULTIPLE PROGRAMS	PRIOR PROGRAM
Land Use Planning	x	x
Environmental Review	x	x
Development Project Approval and Verification	x	x
Management of Pesticides, Herbicides, and Fertilizers	x	x
Roads, Streets, Highways, and Parking Facilities	x	x
Parks and Recreational Facilities	x	x

10.4.1.2 WATERSHED

The standardized Fiscal Analysis method and format provides a form for total watershed expenditures, which is divided into various watersheds draining each Copermittee's jurisdictional boundaries. The City of Chula Vista is wholly located within the San Diego Bay watershed and, therefore, the sum total of all expenditures associated with watershed activities is shown as one number under Watershed Total.

Table 10-4 NPDES Watershed Expenditures for FY 2010-2011

WATERSHED COMPONENT		MULTIPLE PROGRAMS	PRIOR PROGRAMS
Chula Vista's Share of the Watershed Total	**$32,594**		

During FY 2010-2011, watershed activities in the San Diego Bay Watershed were developed at the watershed level, while each Copermittee implemented their respective watershed activities individually within their jurisdictions and, therefore, no cost sharing occurred at the watershed level. Based on the Municipal Permit requirements for watershed activities, the City allocated $25,000 for watershed activities and $10,000 for watershed education in its FY 2010-2011 budget.

10.4.1.2 REGIONAL

Table 10-5 for total regional expenditures shows the City's share of total regional costs that are determined by using cost share formulae included in the Memorandum of Understanding dated November 16, 2007, and signed by all Copermittees.

The City participates in regional meetings and activities with other Copermittees of San Diego County. Each year, the Regional Management Committee approves a budget for the following Fiscal Year and each Copermittee pays their share of the regional costs to the Principal Copermittee. The Principal Copermittee, on behalf of all the Copermittees, manages an account and pays regional expenses from that account. During the current reporting period, costs associated with activities of the following workgroups were included in the regional expenditures and budgets:

- Program Planning Subcommittee
- Fiscal, Reporting, and Assessment Workgroup
- Education and Residential Sources Workgroup
- Monitoring Workgroup
- Land Development Workgroup
- Municipal Workgroup
- Industrial and Commercial Sources Workgroup
- Regional WURMP Workgroup

Additionally, City staff time for attending regional workgroup meetings has been included in regional expenditures for Fiscal Year 2010-2011. Finally, annual fees for membership in the

California Storm Water Quality Association is paid as a regional expenditures and the appropriate share of the City of Chula Vista has been included in the following regional expenditure analysis.

Table 10-5 NPDES Regional Expenditures for FY 2010-2011

REGIONAL COMPONENT		MULTIPLE PROGRAMS	PRIOR PROGRAMS
Chula Vista's Share of the Regional Total	**$230,454**		

As shown in Table 10-5, City's share of the above expenditures was $230,454 for FY 2010-2011.

10.4.2 FUNDING SOURCES

An analysis of the City's storm water program revenues and expenditures indicates that the program captures its revenues from General Funds, Capital Improvement Project funds, and Storm Drain Fees assessed on property owners or tenants of single family homes, multi-family buildings, and commercial/industrial facilities through the Sweetwater Authority, Otay Water District, and Cal-American Water District. Additional revenues are received from Building Permit Fees and from developer deposits; however, these vary significantly from year to year, depending on the level of development activities within the City. Building Permit Fees, which are used to cover staff time for inspections of construction sites during the building phase of the projects has been reduced drastically as a result of the recent slow down of development projects within the City.

Table 10-6 Funding Sources for FY 2010-2011

No.	FUNDING SOURCE	PROGRAM ELEMENT
1	General Fund	Storm Water Management Program
		Storm Drain Maintenance
2	Storm Drain Fee	Storm Water Management Program
3	Sewer Fee	Wastewater Collection System Maintenance
4	Special Assessment District Fees	Storm Drain Maintenance
		Wastewater Collection System Maintenance
5	Grant Funds	Used Oil Recycling
		Drainage Capital Improvement Projects
6	Solid Waste Fee	Household Hazardous Waste Management Waste Management Recycling
7	Developer Deposits and Fees	Environmental Reviews
8	Loans	Drainage Capital Improvement Projects
9	Transnet	Drainage Capital Improvement Projects

• Program Effectiveness Assessment

Section 11.0

11.0 PROGRAM EFFECTIVENESS ASSESSMENT COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

a. *As part of its Jurisdictional Urban Runoff Management Program, each Copermittee shall annually assess the effectiveness of its Jurisdictional Urban Runoff Management Program implementation. At a minimum, the annual effectiveness assessment shall:*

   (1) *Specifically assess the effectiveness of each of the following:*

      (a) *Each significant jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented;*
      (b) *Implementation of each major component of the Jurisdictional Urban Runoff Management Program (Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education); and*
      (c) *Implementation of the Jurisdictional Urban Runoff Management Program as a whole.*

   (2) *Identify and utilize measurable targeted outcomes, assessment measures, and assessment methods for each of the items listed in section I.1.a.(1) above.*

   (3) *Utilize outcome levels 1-6*[9] *to assess the effectiveness of each of the items listed in section I.1.a.(1) above, where applicable and feasible.*

   (4) *Utilize monitoring data and analysis from the Receiving Waters Monitoring Program to assess the effectiveness each of the items listed in section I.1.a.(1) above, where applicable and feasible.*

   (5) *Utilize Implementation Assessment, Water Quality Assessment, and Integrated Assessment, where applicable and feasible* [10].

b. *Based on the results of the effectiveness assessment, each Copermittee shall annually review its jurisdictional activities or BMPs to identify modifications and improvements needed to maximize Jurisdictional Urban Runoff Management Program effectiveness, as necessary to achieve compliance with section A of this Order. The Copermittees shall develop and implement a plan and schedule to address the identified modifications and improvements. Jurisdictional activities/BMPs that are ineffective or less effective than other comparable jurisdictional activities/BMPs shall be replaced or improved upon by implementation of more effective jurisdictional activities/BMPs. Where monitoring data exhibits persistent water quality problems that are caused or contributed to by MS4 discharges, jurisdictional activities or BMPs applicable to the water quality problems shall be modified and improved to correct the water quality problems.*

c. *As part of its Jurisdictional Urban Runoff Management Program Annual Reports, each Copermittee shall report on its Jurisdictional Urban Runoff Management Program*

effectiveness assessment as implemented under each of the requirements of sections I.1.a and I.1.b above.

11.1 INTRODUCTION

It is the culmination of efforts described throughout this report that supports the application of effectiveness assessment protocols introduced through the document entitled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" as submitted by the Copermittees to the Regional Board on October 16, 2003. The intent of this section is to offer a more critical analysis of programmatic activities to compliment the accounting of the City's accomplishments as presented in other sections of this report.

The 2004-2005 reporting year was highlighted by the Copermittees' regional development of the Baseline Long-Term Effectiveness Assessment (LTEA) conducted as part of the Report of Waste Discharge (ROWD) for the previous Municipal Permit, Order No. 2001-001. This comprehensive assessment incorporated water quality and source data collected by all Copermittees and provided a critical first look at regional water quality presented per watershed. On June 29, 2011, pursuant to the requirements of Section J.2.c-d of the current Municipal Permit, Order No. R9-2007-0001, the Copermittees of San Diego County submitted their Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment for the current permit cycle to the Regional Water Quality Control Board. The ROWD, among other topics, discusses the long-term effectiveness assessment methodology and proposes to adopt the methodology developed by the California Stormwater Quality Association (CASQA) in 2007. If approved by the Regional Board, the Copermittees will start using the CASQA Municipal Stormwater Program Effectiveness Assessment Guide during the next permit cycle.

The City continued to build upon knowledge gained through the implementation of long-term effectiveness strategies on a jurisdictional level through annual reporting, as well as the application of strategies on a regional level through the development of the LTEA. As such, the City continued to augment programs and to gather applicable data to support a more holistic look at storm water program effectiveness.

During the reporting period, the City continued to gather and evaluate data supporting education and outreach efforts. This effort was prompted through the continued implementation of the Chula Vista CLEAN program in order to provide a baseline by which to gauge the overall successes of the program. In addition, this effort is highly supportive of the annual appraisal of the larger Chula Vista Storm Water Management Program, and provides a fitting nexus to the annual long-term effectiveness assessments presented in this report.

In FY 2008-2009 the City of Chula Vista administered a survey instrument designed to measure public awareness of various storm water quality related issues. It is intended that similar surveys be conducted within 3 to 5 year intervals to provide a measurable accounting of the City's public education and awareness programs. In addition, the City continued its source inventory validation process. This effort has been detailed in Sections 2.0 through 6.0 of this report, and focused on source types identified in the LTEA as potential contributors to watershed pollutants

of concern. These activities have also provided the City with valuable data for incorporation into long-term effectiveness evaluation on a jurisdictional level.

11.2 METHODOLOGY

Based on the understanding that long-term effectiveness assessment is an ongoing and iterative process, the regional framework has been developed around three primary elements, each supported by additional key components.

- **Program Planning**
  - Source Characterization
  - BMP Selection
  - Targeted Outcomes
  - Assessment Measures and Indicators

- **Program Implementation**

- **Effectiveness Assessment**
  - Water Quality Assessment
  - Program Assessment
  - Integrated Assessment

Detailed discussions of each of the above topics are included in the document "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003, and developed by the Copermittees. A brief summary is included below to describe the City's approach to program effectiveness assessment. The following discussion has been organized as to address each of the targeted outcome levels under program planning and evaluates the City's effectiveness toward JURMP implementation during the reporting period. It is important to recognize that the whole of this document represents an account of program implementation in 2010-2011, and presents a variety of tracked information supporting overall effectiveness assessment. The following discussion will highlight the development and implementation of targeted efforts, and evaluates the overall effectiveness of the City's Storm Water Management Program.

11.2.1 PROGRAM PLANNING

As discussed in the regional framework document, program planning should include the establishment of meaningful implementation targets and the development of clear measures for assessing them. The four key and interrelated components to effective program planning; 1) source characterization, 2) BMP selection, 3) establishment of targeted outcomes, and 4) establishment of assessment measures and indicators, must be completed prior to program implementation. The primary mechanism in support of program planning was achieved through the development of the Chula Vista JURMP in 2008. This document has provided the initial framework to program planning as implementation has continued, and it is through the annual reporting process and associated programmatic updates detailed through this process that this concept continues to be perpetuated. The City has sought to integrate these key elements in

order to more clearly direct programmatic activities and to support the vital interrelationship of each element.

Source Characterization

Source characterization largely consists of the development and maintenance of site, source, and facility inventories associated with construction, municipal, industrial, commercial, and residential locations. Through the development of the JURMP, and as required by the previous Municipal Permit sections F.2.d, F.3.a.(2), F.3.b.(2), F.3.c.(2), and F.3.d.(2), baseline source inventories were initially compiled in 2001, and have been updated annually ever since. The City employs a number of strategies and mechanisms in tracking source inventories for all of the sectors mentioned above. Such methodologies have been outlined within specific sections of this report, and include GIS systems, GBA database, and comprehensive business license tracking. In recognizing that source characterization needs to be increasingly matched to identified water quality concerns and program results, the City seeks to more fully utilize extensive GIS capabilities to associate sources with pollutants as they are viewed spatially. Construction, municipal, industrial, commercial, and residential source inventory updates have been provided in attachments to this report.

As introduced above, and detailed in Sections 2.0 through 6.0 of this report, the City has continued to fortify source characterization in 2010-2011. Comprehensive field verification of source inventories is conducted approximately every five years with the renewal of the Municipal Permit, while inventory updates based on existing information in the City's databases and observations during regular inspections are conducted annually. In this reporting period, the City continued its source verification utilizing the City's business license database combined with field observations during inspections and investigations to identify all active industrial and commercial facilities Citywide. The Municipal inventory is updated continuously as new facilities are constructed or acquired. While this effort served a number of functions within the larger storm water program, significant value was gained of the data compiled through the resources described above. Ultimately, this data is utilized in overall program assessments, and to guide programmatic development to support long-term effectiveness.

BMP Selection

In terms of BMP selection, activity based BMP selection was conducted as part of the development of the City's JURMP. As required by the previous Municipal Permit's Sections D.2.c.(1), D.3.a.(2)(b), D.3.b.(2)(b), and D.3.c.(2)(a), minimum BMPs were established for each of the major program elements. These minimum BMPs were visited during the City's JURMP update in 2008 and changes were made as needed. The City actively evaluates activity specific BMPs primarily through its well-developed municipal, industrial/commercial, and construction inspection programs.

Targeted Outcomes

The establishment of measurable targeted outcomes is necessary both for incremental program improvement, and as a basis for the future establishment of relationships between implementation and desired water quality outcomes. It is important to recognize that quantifiable outcomes are to be established prior to program implementation to accurately provide measurability and accountability. Included within the regional long-term assessment

framework, is the concept of a hierarchy of targeted outcomes. Six "levels" have been established, representing a gradation from activity-based to water quality based outcomes.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

The above concept can be shown as a pyramid with the base at Level 1 and the apex at Level 6 as shown in Figure 11-1. Each layer of outcome from the bottom to the top represents a gradation from activity-based to water quality-based outcome.

Figure 11-1 Hierarchy of Targeted Outcomes

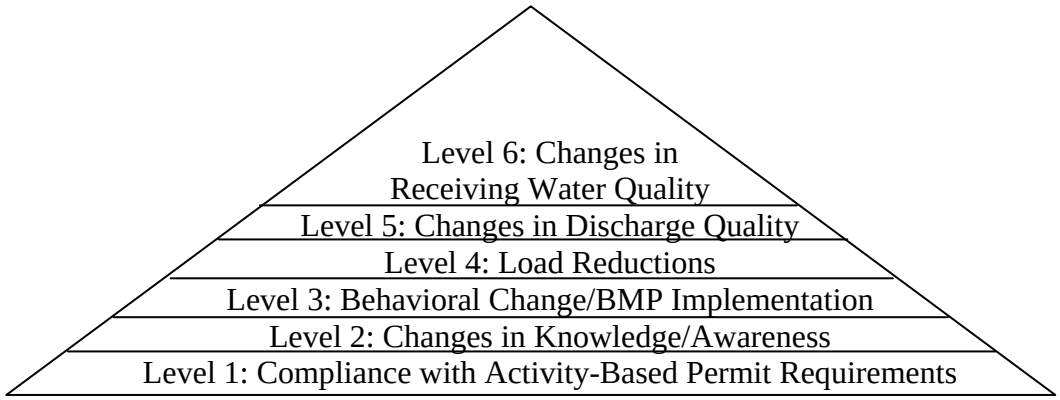

Assessment Measures and Indicators

In order to establish measurability and accountability in the implementation of various water quality program elements, assessment measures for the targeted outcomes need to be developed. Assessment measures may be direct or indirect. Direct measures are those that characterize the quality of water in runoff discharges or within receiving waters. In San Diego County, direct measurements are primarily addressed through regional Receiving Waters Monitoring Program and Dry Weather Field Screening and Analytical Monitoring Program. Indirect measures take into account the degree of activity or program element implementation. Indirect measures are easier and less expensive than direct measures and do not require long-range data.

11.2.2 PROGRAM IMPLEMENTATION

A comprehensive accounting of the City's implementation of its Jurisdictional Urban Runoff Management Program (JURMP) during the current reporting period has been provided in other sections of this report. In this section, it will suffice to say that sufficient data tracking and data management has complemented the implementation of each component of the JURMP to enable an accurate program effectiveness assessment.

11.2.3 EFFECTIVENESS ASSESSMENT

Program effectiveness assessment comprises of three components, i.e., 1) Water Quality Assessment, 2) Program Assessment, and 3) Integrated Assessment. Integrated Assessment is a long-term process by which Copermittees will attempt to establish causal relationships between program implementation activities and changes in water quality. These relationships may be established either hypothetically or empirically. Integrated Assessment is necessarily the most difficult and uncertain step in the overall assessment process. Over time, quantitative "cause and effect" relationships will increasingly be sought. However, because of the sheer number and variety of BMPs and control programs being concurrently implemented at any given time, establishing such relationships will be a considerable challenge. This report, therefore, focuses on Water Quality Assessment and Program Assessment, and will leave the Integrated Assessment to be addressed at the watershed and regional levels.

11.2.3.1 WATER QUALITY ASSESSMENT

Water Quality Assessment may be used to evaluate the water quality of discharges to receiving waters or within the receiving waters themselves. Water Quality Assessment is conducted by taking samples from discharges or the water body within receiving waters and conducting field screening or laboratory analysis. Sampling and testing may be conducted during storm events or from dry weather flows during non-rainy seasons. It is necessary to have benchmarks or other standards such as the Water Quality Control Plan for the San Diego Basin (Basin Plan) to compare the results and make judgment about water quality. It is also beneficial to track the quality of water for long periods of time to enable the Copermittees to assess long-term trends and draw conclusions as to the effectiveness of their storm water programs.

11.2.3.2 PROGRAM ASSESSMENT

As mentioned above, during the planning phase of the program, it is of utmost importance to set measurable goals for each of the program components and track progress through data collection and management. Such data will later be used to evaluate the success or failure of the implementation of the program and derive conclusions regarding each component's effectiveness.

In this report, Program Assessment has been divided into components similar to those established in the Municipal Permit, i.e.:

- Land Use Planning
- Construction
- Municipal
- Industrial and Commercial
- Residential
- Education and Public Participation

11.2.3.3 INTEGRATED ASSESSMENT

Integrated Assessment establishes a relationship between program implementation activities and changes to water quality. This information is critical for the Copermittees to evaluate cost effectiveness of their program elements. However, Integrated Assessment is often the most difficult element of the overall program effectiveness assessment.

11.3 WATER QUALITY ASSESSMENT RESULTS

This section of the report utilizes the methodology described above to arrive at conclusions regarding the effectiveness of the City's storm water management program during the current reporting period. This Section focuses on the three components of the effectiveness assessment described in Section 11.2, i.e.:

- Water Quality Assessment (Levels 5 and 6 of the Hierarchy of Targeted Outcomes in the pyramid of Figure 11-1)
- Program Assessment (Levels 1 to 4 of the pyramid)
- Integrated Assessment

11.3.1 WATER QUALITY ASSESSMENT

Changes in discharge quality and receiving waters quality (Levels 5 and 6 of the Targeted Outcomes) are the ultimate targeted outcomes in describing direct successes of storm water program activities. While such levels have proven challenging in assessing individual JURMP effectiveness, levels 5 and 6 have been thoroughly processed through the ROWD and LTEA development on a regional basis in 2005 and 2011. As such, the City relies to a great extent on the regionally prepared annual Receiving Water Monitoring Reports, ROWD, and LTEA for a detailed look at levels 5 and 6 assessments. Additionally, the City uses results of its jurisdictional Dry Weather Field Screening and Analytical Monitoring program to track long-term trends in the quality of discharges at outfall locations throughout the City. This process has been discussed in more detail below.

Although lines between programmatic efforts and water quality improvements will require long-term data gathering and analysis, the City annually conducts an evaluation of data gathered through the Dry Weather Field Screening and Analytical Monitoring Program. It is important to recognize that the Dry Weather Monitoring Program is primarily used to identify illicit discharges and connections to the MS4 and receiving waters, and not as a surface water characterization mechanism. Alternatively, the dry weather data sets have proven useful in characterizing the quality of non-storm water discharges to surface waters during dry seasons. As such, the City utilizes dry weather data sets to evaluate trends and to steer program priorities on a local level. Dry weather data analysis has been reasoned as a means to further target programmatic components, and to establish target pollutants and to identify geographic areas of concern.

The graph on the following page, Average Percentage of Observations Exceeding Action Levels in Dry Weather Samples, was developed in an effort to track the overall average of samples taken per year in exceedance of numeric action levels as established under the Dry Weather Monitoring Program. This effort is intended to initiate a long-term analysis through tracking detectable improvements or impairments in the quality of non-storm water discharges throughout Chula Vista. This analysis is valuable in evaluating not only the number of exceedances from one year to the next, but also in examining those pollutants that are commonly identified.

In support of the overall average exceedances, the City utilizes constituent-specific trends analysis to develop a clear picture of water quality trends in non-storm water discharges. This analysis evaluates the percentage of annual samples, in relation to a specific constituent, in exceedance of established action levels. Graphs detailing the action level exceedences for each pollutant are on the following pages.

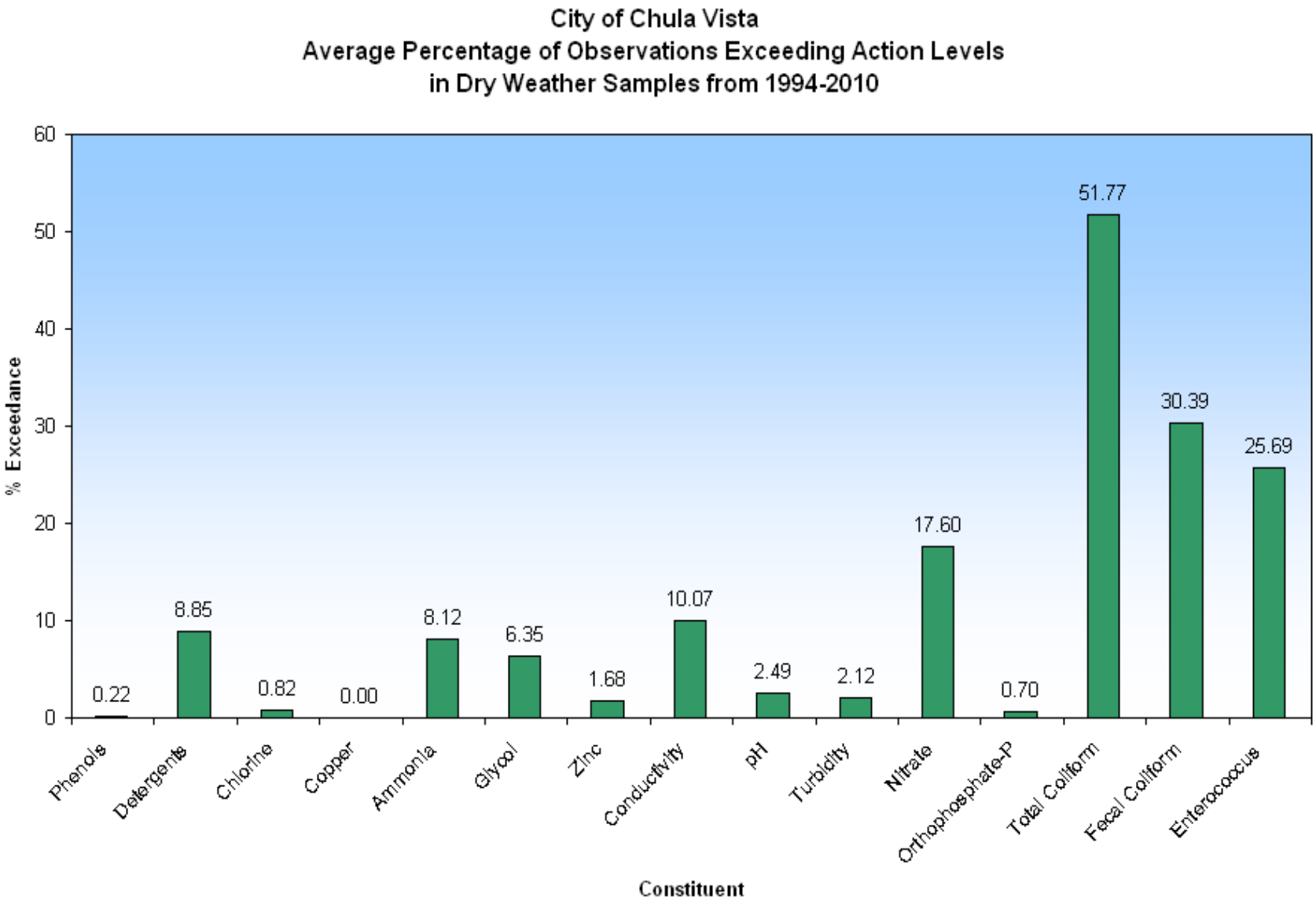
City of Chula Vista
Average Percentage of Observations Exceeding Action Levels
in Dry Weather Samples from 1994-2010
% Exceedance
60
50
40
30
20
10
0
0.22
8.85
0.82
0.00
8.12
6.35
1.68
10.07
2.49
2.12
17.60
0.70
51.77
30.39
25.69
Phenols
Detergents
Chlorine
Copper
Ammonia
Glycol
Zinc
Conductivity
pH
Turbidity
Nitrate
Orthophosphate-P
Total Coliform
Fecal Coliform
Enterococcus
Constituent

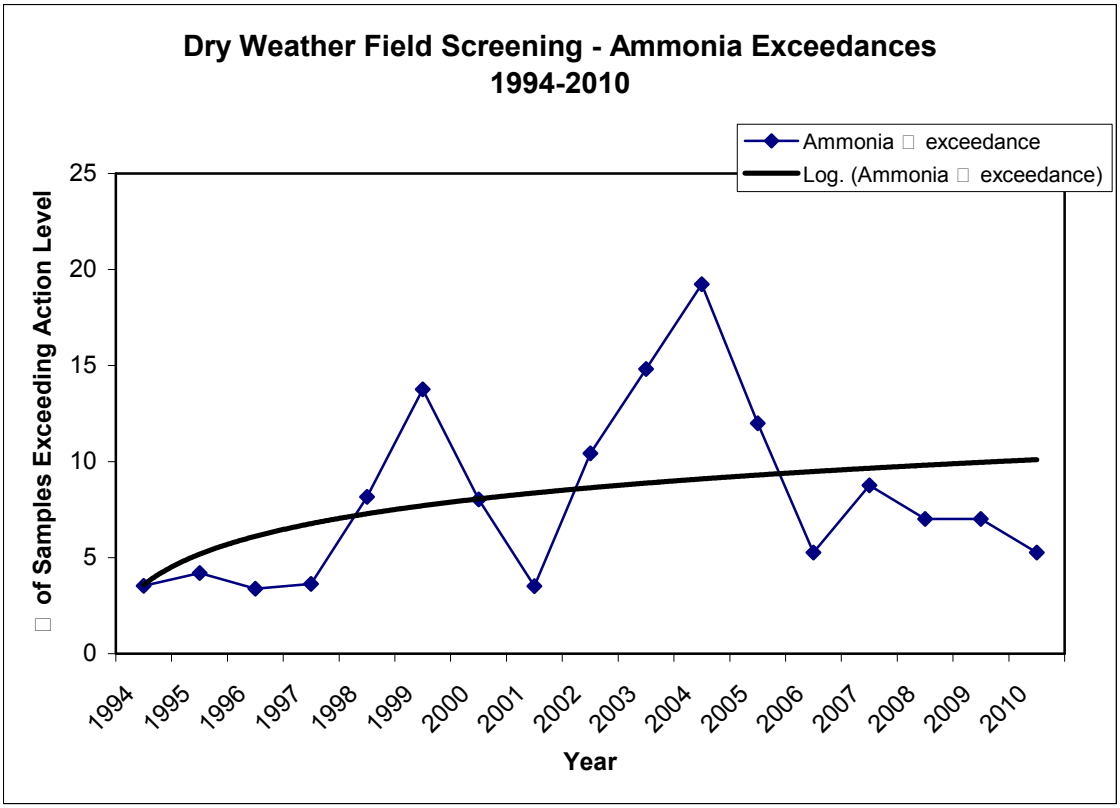
Dry Weather Field Screening - Ammonia Exceedances
1994-2010
Ammonia exceedance
Log. (Ammonia exceedance)
of Samples Exceeding Action Level
0
5
10
15
20
25
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

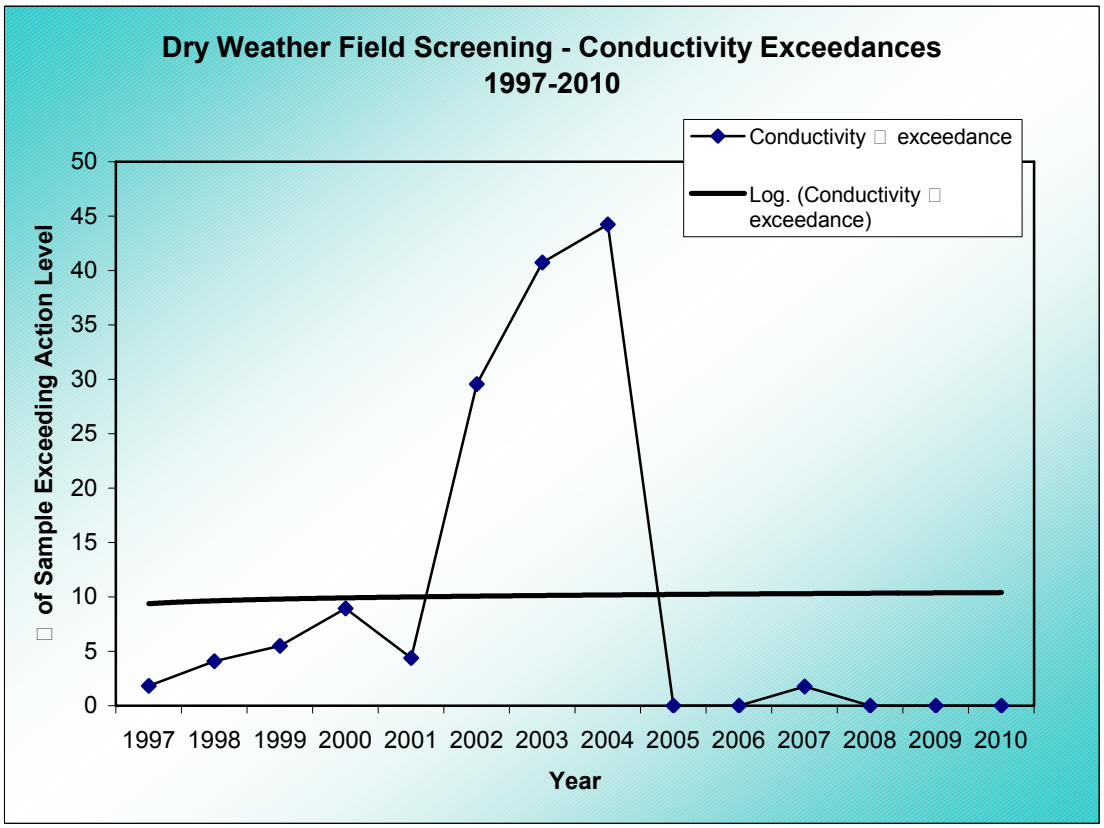
Dry Weather Field Screening - Conductivity Exceedances
1997-2010
Conductivity exceedance
Log. (Conductivity exceedance)
of Sample Exceeding Action Level
0
5
10
15
20
25
30
35
40
45
50
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

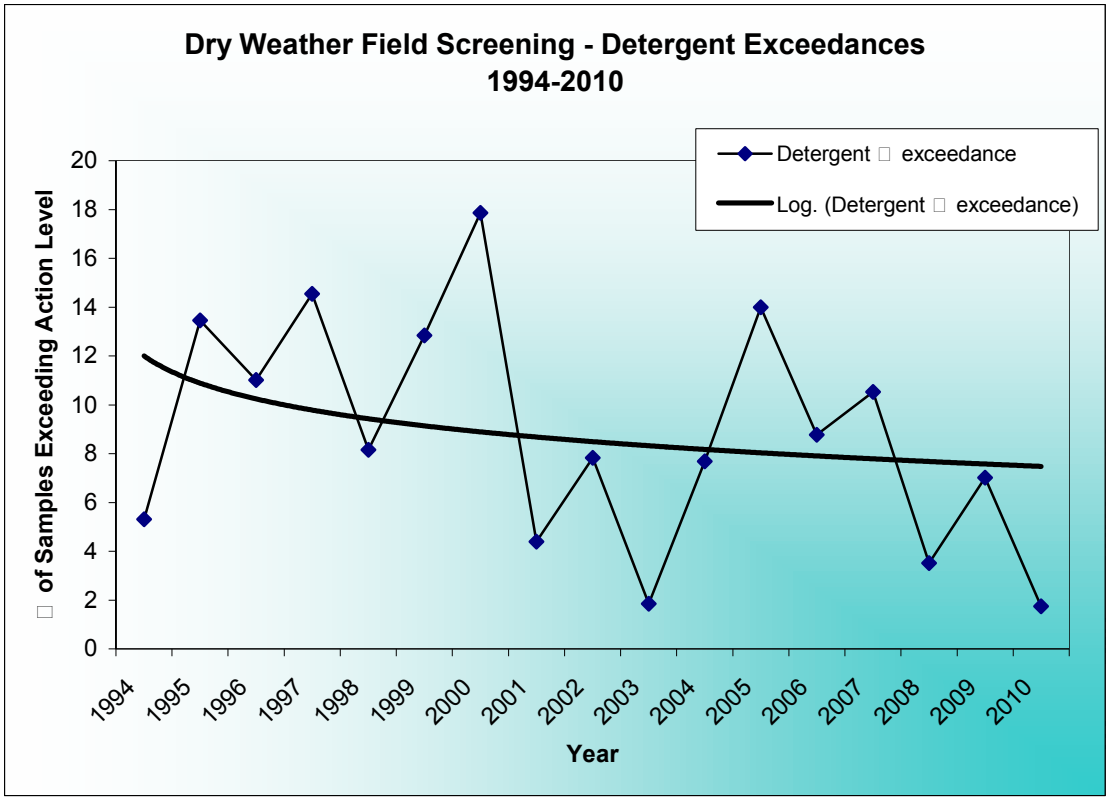
Dry Weather Field Screening - Detergent Exceedances
1994-2010
Detergent exceedance
Log. (Detergent exceedance)
of Samples Exceeding Action Level
0
2
4
6
8
10
12
14
16
18
20
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

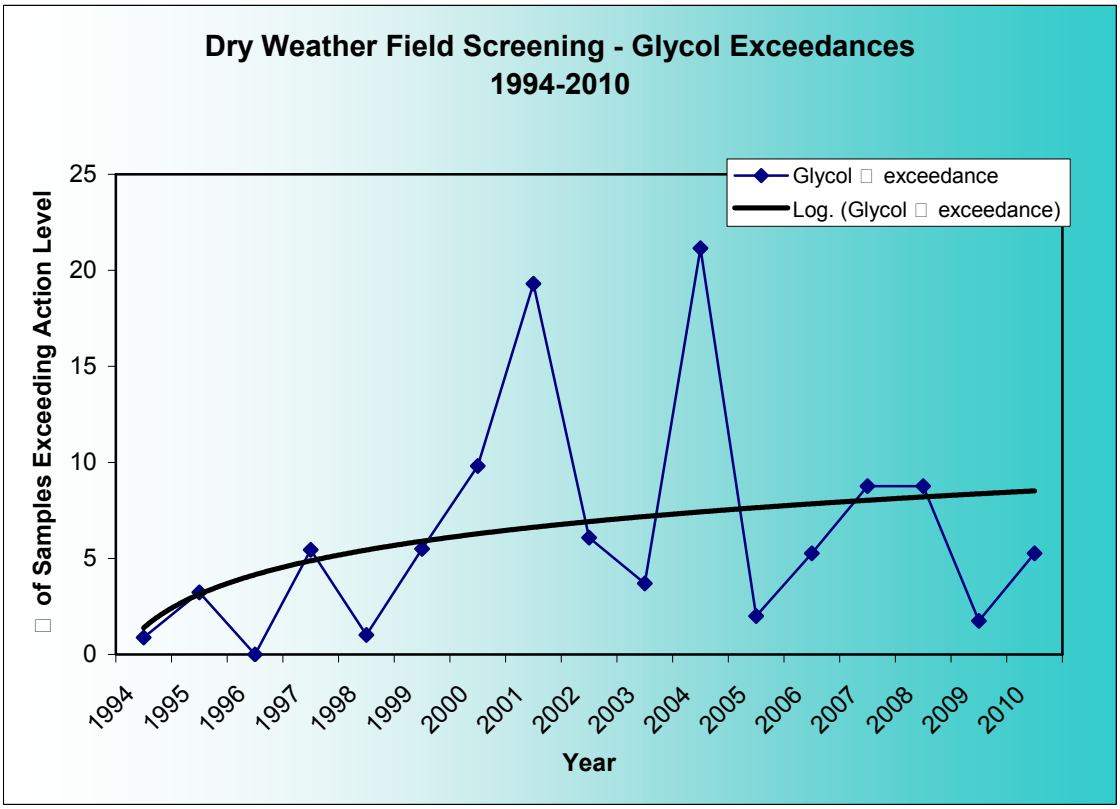
Dry Weather Field Screening - Glycol Exceedances
1994-2010
Glycol exceedance
Log. (Glycol exceedance)
of Samples Exceeding Action Level
0
5
10
15
20
25
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

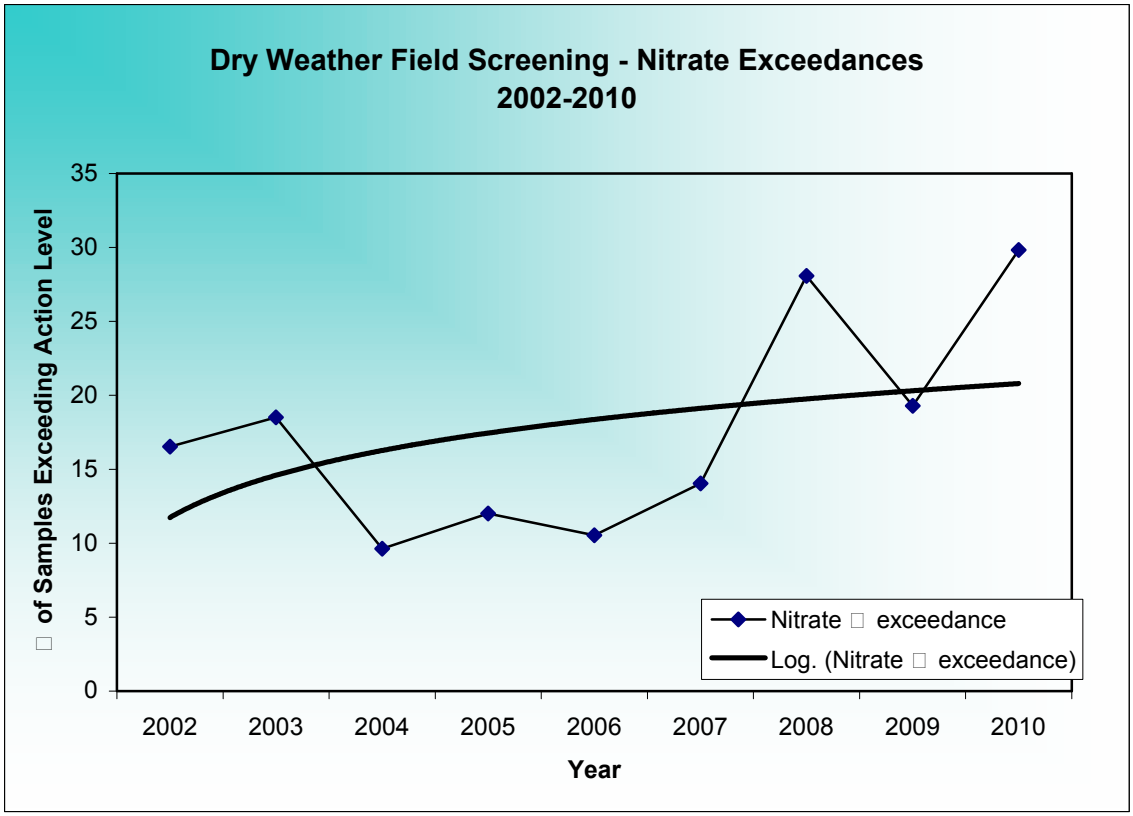
Dry Weather Field Screening - Nitrate Exceedances
2002-2010
of Samples Exceeding Action Level
35
30
25
20
15
10
5
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
Nitrate exceedance
Log. (Nitrate exceedance)

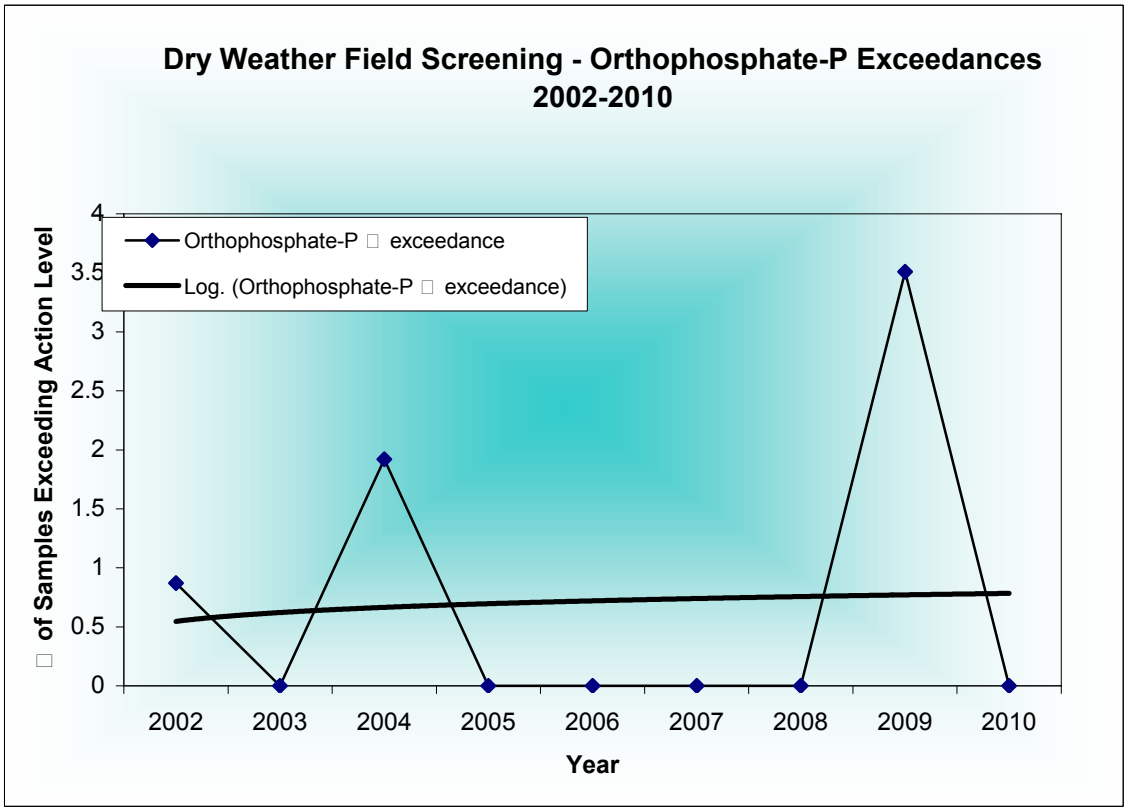
Dry Weather Field Screening - Orthophosphate-P Exceedances
2002-2010
of Samples Exceeding Action Level
4
3.5
3
2.5
2
1.5
1
0.5
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
Orthophosphate-P exceedance
Log. (Orthophosphate-P exceedance)

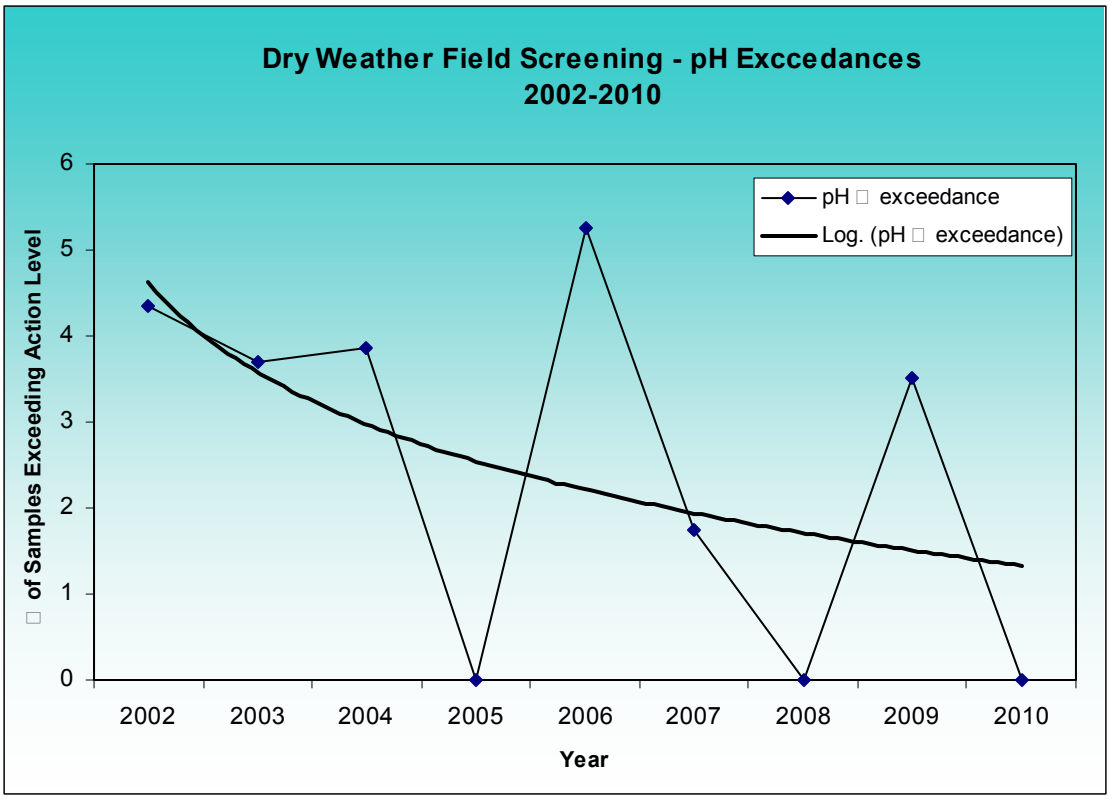
Dry Weather Field Screening - pH Exccedances
2002-2010
pH exceedance
Log. (pH exceedance)
of Samples Exceeding Action Level
0
1
2
3
4
5
6
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

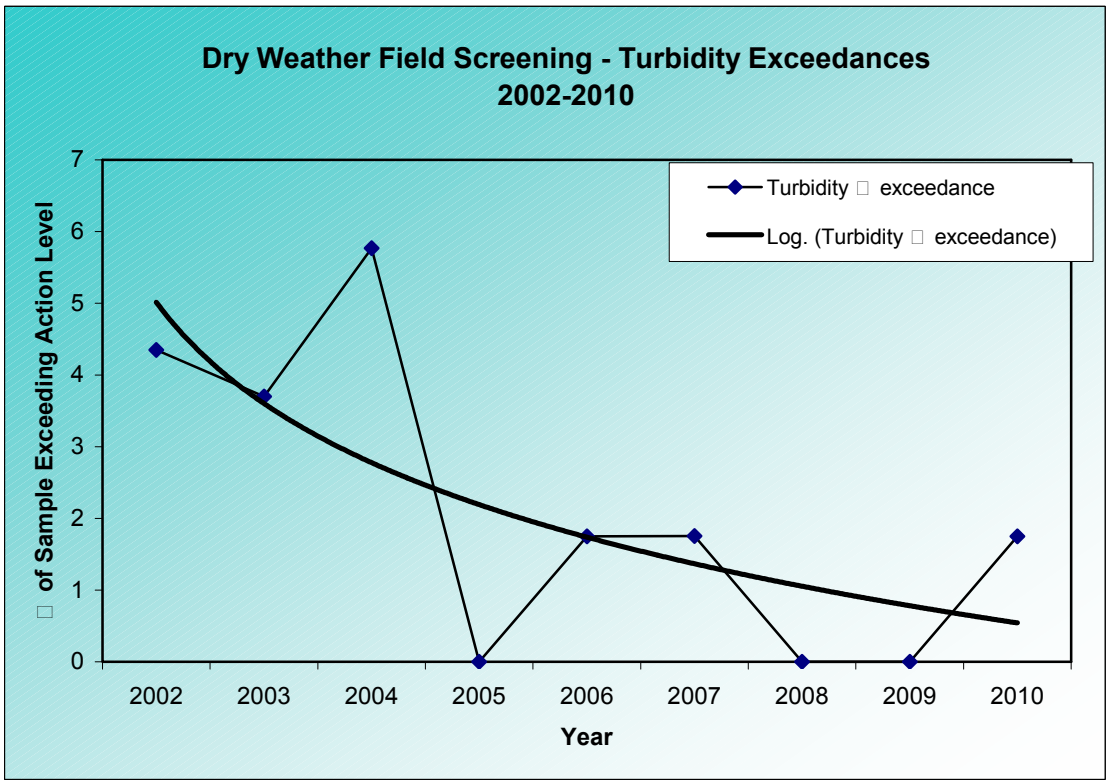
Dry Weather Field Screening - Turbidity Exceedances
2002-2010
Turbidity exceedance
Log. (Turbidity exceedance)
of Sample Exceeding Action Level
0
1
2
3
4
5
6
7
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

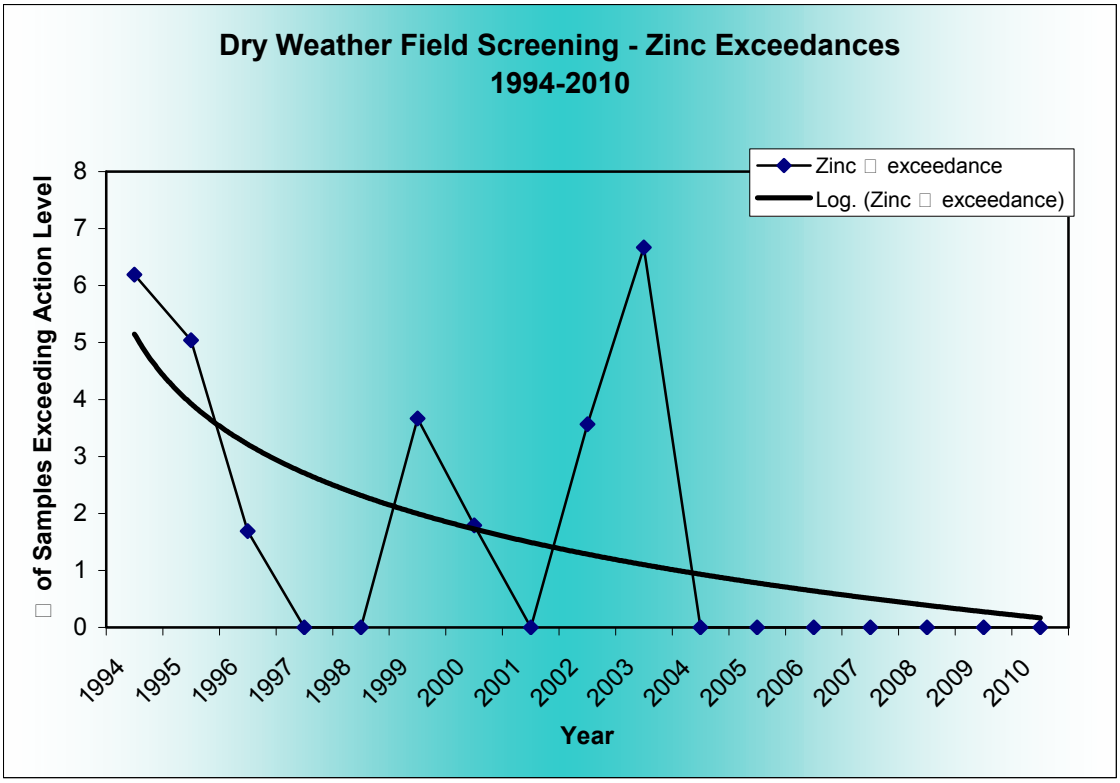
Dry Weather Field Screening - Zinc Exceedances
1994-2010
Zinc exceedance
Log. (Zinc exceedance)
of Samples Exceeding Action Level
0
1
2
3
4
5
6
7
8
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
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2006
2007
2008
2009
2010
Year

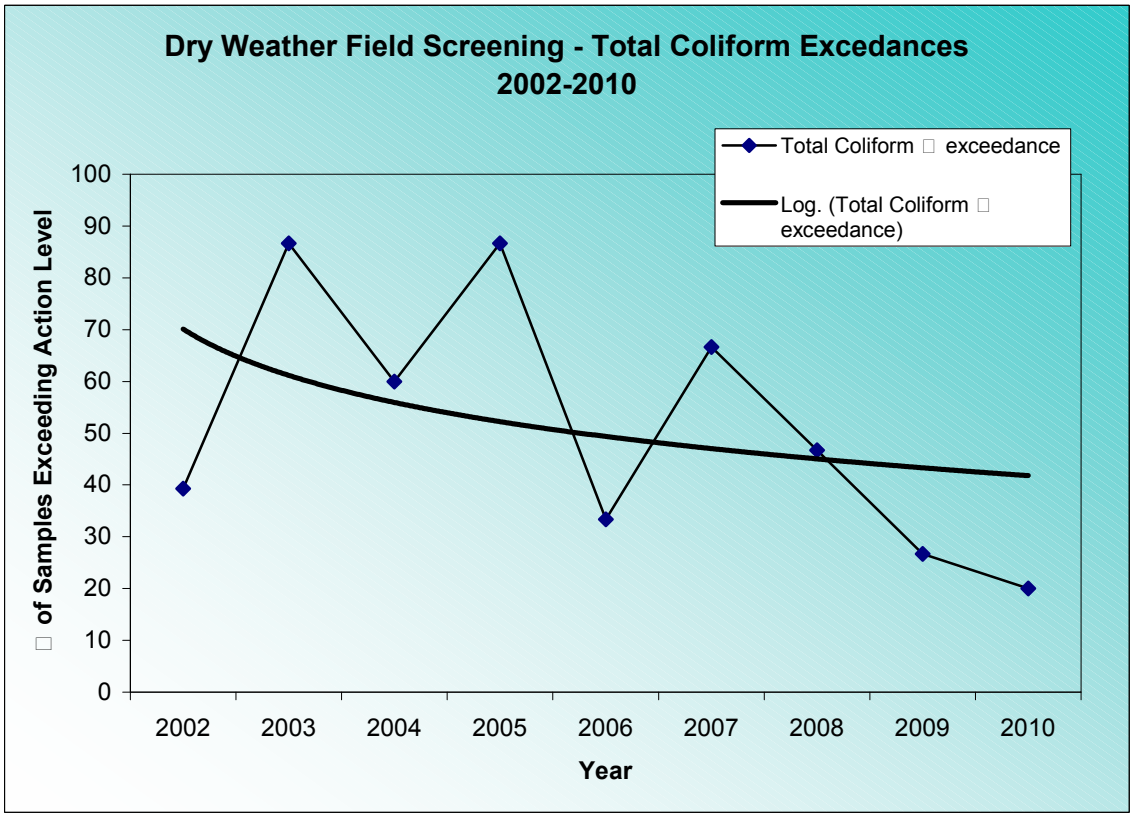
Dry Weather Field Screening - Total Coliform Excedances
2002-2010
Total Coliform exceedance
Log. (Total Coliform exceedance)
of Samples Exceeding Action Level
0
10
20
30
40
50
60
70
80
90
100
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

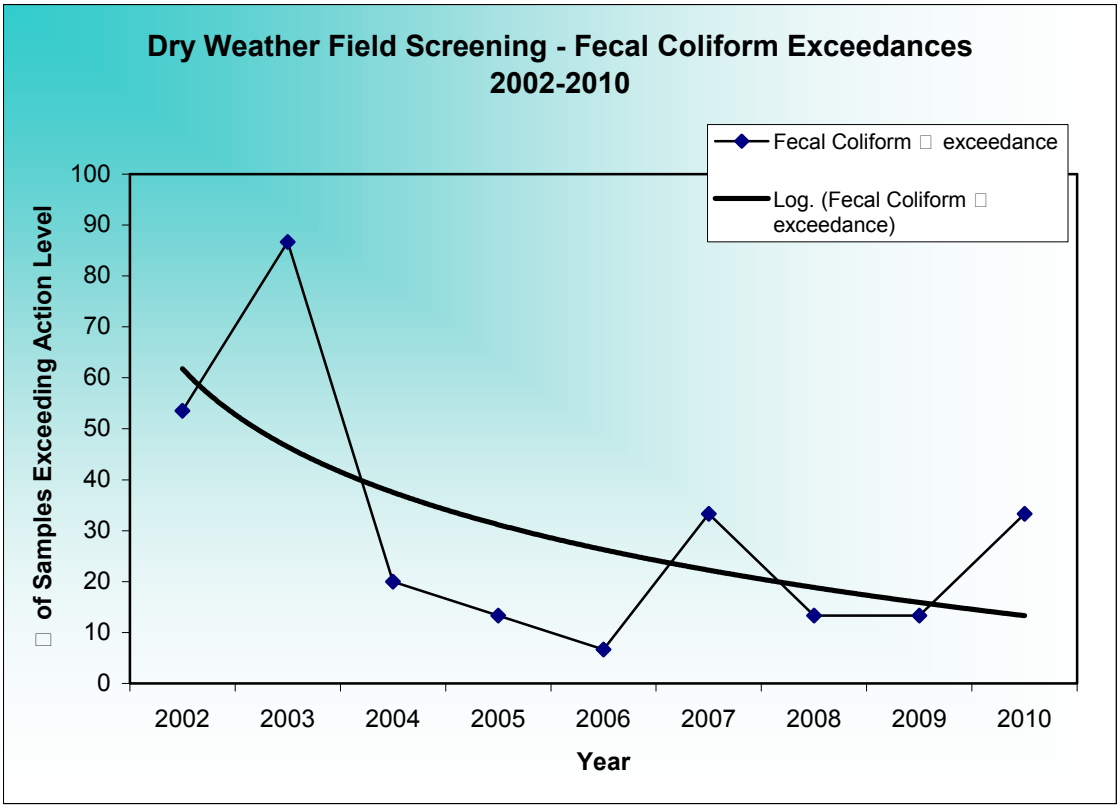
Dry Weather Field Screening - Fecal Coliform Exceedances
2002-2010
Fecal Coliform exceedance
Log. (Fecal Coliform exceedance)
of Samples Exceeding Action Level
100
90
80
70
60
50
40
30
20
10
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

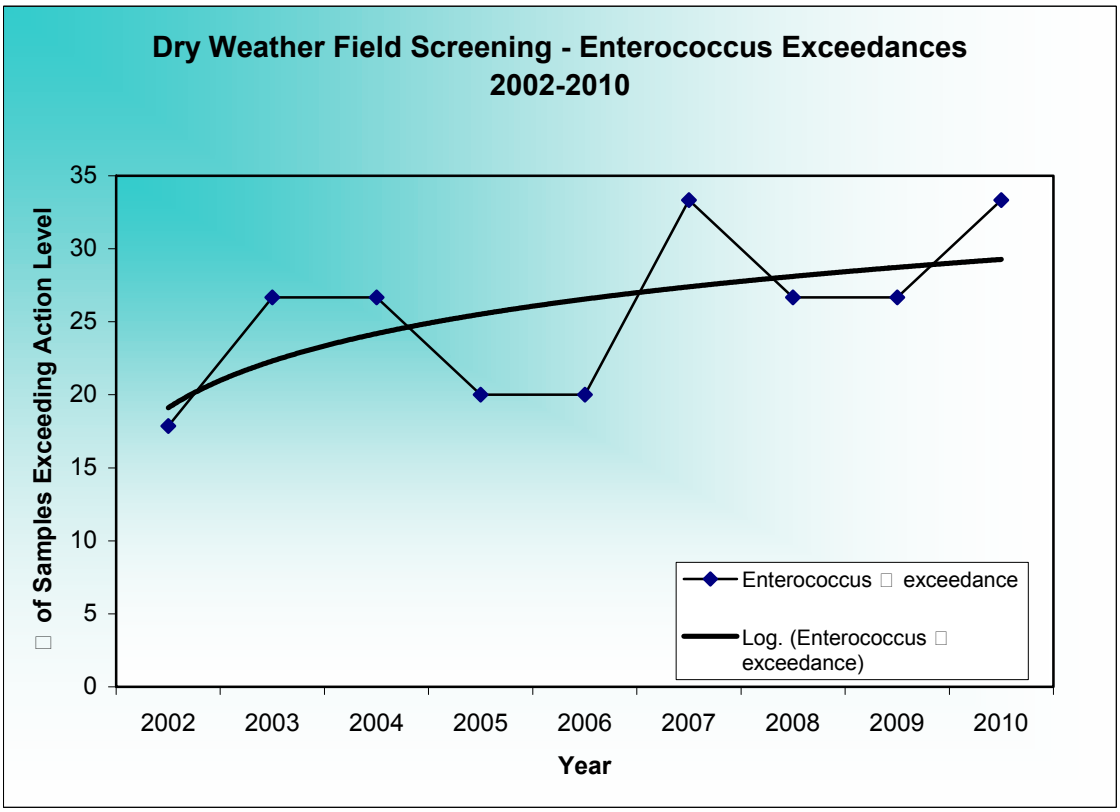
Dry Weather Field Screening - Enterococcus Exceedances
2002-2010
Enterococcus exceedance
Log. (Enterococcus exceedance)
of Samples Exceeding Action Level
35
30
25
20
15
10
5
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

11.3.2 PROGRAM ASSESSMENT

In 2010-2011, the City continued to evaluate programmatic activities and implementation protocols in support of effectiveness assessment strategies. It is important to note that through the ROWD and LTEA process, the City has developed a sound understanding of the association of programmatic activities as they relate to long-term effectiveness assessment. As such, the City has sought to formalize various programmatic elements and implementation protocols in support of the effectiveness assessment framework as demonstrated in the preceding paragraphs. The targeted outcome levels discussed below are not intended to be rigid in their function, and while programmatic activities in 2010-2011 more wholly support these levels, continued advancements and data gathering efforts by the City in the future will support a more complete jurisdictional effectiveness assessment. As mentioned in the preceding paragraphs, Copermittees continued to collaborate in an effort to establish a comprehensive assessment in developing a standardized framework for assessing the effectiveness of Jurisdictional Urban Runoff Management Program.

In previous reporting periods, i.e., in 2005-2006 and 2009-2010, the City conducted two rounds of public awareness surveys. The data collected during these surveys, together with future survey results will provide a better understanding of the effectiveness of the City's storm water education efforts.

The discussion under Program Assessment focuses on Levels 1 to 4 of the Targeted Outcomes on a jurisdictional basis as follows:

11.3.2.1 COMPLIANCE WITH ACTIVITY-BASED PERMIT REQUIREMENTS (LEVEL 1)

This level of effectiveness assessment is intended to provide a quantitative assessment that reflects the regional long-term effectiveness assessment framework through targeted outcomes for the City, based on various components of the Municipal Permit (Tables 11-1 – 11-7). In the following sections, these tables and their associated analysis are divided into Municipal Permit components of land use planning, construction, municipal, industrial and commercial, residential, education and public participation, reflecting various elements of the Municipal Permit, and provide a summary accounting of activities conducted by the City in 2010-2011.

11.3.2.1.1 LAND USE PLANNING

In view of the recent update to the City's local Standard Urban Storm Water Mitigation Plan (SUSMP), and inclusion of Low Impact Development (LID) and Final Hydromodification Management Plan (HMP), the City has sought to continually refine the SUSMP implementation process as deemed necessary to ensure overall effectiveness and compliance with Municipal Permit provisions. During the current reporting period, development activities remain slow and the number of projects submitted to the City for approval and permit issuance was low. As can be seen from Table 11-1, thirteen SUSMP projects were submitted and three SUSMP projects received approval. However, the number of total cumulative projects that have implemented

post-construction BMPs and the number of projects inspected for post-construction BMPs remains high.

During this reporting period, BMP maintenance verification letters were sent to responsible parties reminding them of their responsibility to clean, inspect, and maintain storm water treatment facilities. Responsible parties were required to provide the City with certification of maintenance of the treatment facilities within a set time frame. Additionally, the City has added another GIS layer in our GBA tracking system identifying all public and private treatment category BMPs. These processes provided yet another mechanism to ensure proper maintenance and effectiveness of all treatment facilities and compliance with Municipal permit provisions.

The following tables summarize City of Chula Vista's activities during the reporting period towards ensuring compliance with SUSMP implementation and the review, inspection, and maintenance verification of SUSMP projects.

Table 11-1 FY 2010-2011 Compliance with Activity-Based Requirements – Land Use Planning

PERMIT SECTION	ACTIVITY/ SOURCE TYPE	TARGETED OUTCOME	ACTUAL	MEASURE OF SUCCESS	
D.1 Land Use Planning	Development Projects	# SUSMP Projects Submitted	# SUSMP Projects Approved	Actual/Target	%
		13	3	N/A	N/A
	High Priority Sites (Total Listed = 50)	# Sites Targeted for Inspection	# Sites inspected	Actual/Target	%
		50	50	50/50	100
	Medium Priority Sites (Total Listed = 39)	39	39	39/39	100
	Low Priority Sites (Total Listed = 4)	As Needed	4	N/A	N/A

Please refer to Attachment F for a list of SUSMP projects inspected during the current reporting period.

Based upon the significant achievements and continued refinements experienced in 2010-2011, the City has not identified any ineffective BMPs or management measures in terms of compliance with the Land Use Planning for New Development and Redevelopment permit requirements.

JURMP strengths associated with Land Use Planning for New Development and Redevelopment during the reporting period are described below. The list is not intended to provide comprehensive accounting of programmatic activities; rather it is to highlight those activities that best accentuate the Land Use Planning for New Development and Redevelopment component of the City's JURMP in 2010-2011

The following features distinguish the Land Use Planning for New Development and Redevelopment component of the City's JURMP:

Development Storm Water Manual

The Manual, updated in January 2011, provides the City with a mechanism to effectively articulate all requirements related to water quality and the development or redevelopment of land within the City. The Manual covers all aspects of development, the City's SUSMP requirements, applicable checklists, permanent BMP requirements, construction BMP requirements, and implementation and maintenance requirements. The Manual is available on the City's website, and is used extensively as a reference document by City staff, developers, and consultants.

During this reporting period City staff actively participated in the Regional Land Development Workgroup meetings and activities and collaborated with other participants to update the Model SUSMP and develop a Hydromodification Management Plan (HMP). The current Model SUSMP is dated March 2011. The Copermittees submitted the Final HMP to the Regional Board, which was approved in July 2010. HMP requirements were later incorporated in the City's Development Storm Water Manual in January 2011. The City of Chula Vista has met all the deadlines for updating its local SUSMP and incorporating the Final HMP into its ordinances.

Inter-Departmental Coordination

The City's SUSMP and development review process includes multiple entities throughout the City. As the City continues to grow, it has taken all necessary steps to maintain compliance with SUSMP requirements through the coordination of multiple departments. Although the current economic situation has slowed down the City's growth during the past four years, such coordination has continued in 2010-2011 to require refinement and augmentation, as necessary, to maintain compliance and ultimately improve water quality.

Dedicated Storm Water Management Section

The Development Services Department provides the necessary oversight over all management components of SUSMP implementation. The Storm Water Management Section keeps up with the latest requirements and regulations, and provides technical support to City staff and assist project proponents and consultants. Storm Water Compliance Inspectors and Environmental Health Specialists also perform the functions of post-construction BMP construction verification, inspection, and maintenance verification.

Information System Support

A robust geographic information management system (GIS) supports the City's Storm Water Management Program. The City's GIS currently includes multiple layers used by Storm Water Management staff for various functions. In terms of land development and redevelopment activities, within the reporting period, a BMP layer has been maintained in order to track post-construction BMPs implemented Citywide. Additionally, Permits Plus, which is a specialized permits tracking software, is utilized in tracking a variety of discretionary permits, and specifically is used by the Development Services Department to identify and track Priority Development Projects. Further, Permits Plus is utilized in annual inventory updates. Notably, in

2010-2011, the GIS layer was continuously updated to manage and provide easy access and tracking of post-construction BMP Treatment facilities.

Data Management

As the City continues to grow, challenges associated with data management emerge such as tracking of post-construction BMPs, maintenance agreements, and associated documents. The City continues to address these challenges through the customization of robust data management systems presented in this report, including GIS, GBA, and Permits Plus. However, as requirements and programmatic elements continue to evolve, it is important to update available tools with up-to-date information, as well as information necessary to evaluate overall program effectiveness. The City continues to maintain up-to-date data and effectively track all information related to JURMP activities such as inventories, inspections, violations, notifications, and post-construction BMPs.

New Development and Redevelopment Project Design Elements

With a focus on the use of Low Impact Development Integrated Management Practices and higher efficiency structural treatment BMPs in achieving SUSMP compliance, the City continued to work with the development community to improve the storm water design features of proposed projects. The City continuously stressed this focus in 2010-2011 through requirements of project proponents to provide a detailed level of analysis to justify utilizing design elements in their proposed projects. The recently updated Model SUSMP, which was incorporated in the City SUSMP requirements, will provide a new approach in the level of analysis and project design elements for the development community.

11.3.2.1.2 CONSTRUCTION

Within the reporting period of this report, the construction component continued to demonstrate success by consistent programmatic developments and enhancements. Through identified needs and associated management decisions, the City fortified its jurisdictional construction management component in 2010-2011. As the slowdown in development continued, many construction sites remained inactive or faced sever reductions in construction activities. Within the reporting period, the City worked closely with developers to stabilize inactive construction sites; promote pollution prevention and BMP implementation; and ensure proper maintenance of BMPs to prevent polluted discharges from construction sites. Because of sagging economy, this was a challenge as many developers claimed that they had limited financial resources and were unable to fund their planned maintenance activities. City staff worked with developers to identify cost-effective BMPs and in some instances initiated enforcement action until full compliance was achieved. Mechanisms were identified to promote pollution prevention techniques as described in Section 3 of this report. The City continues to maintain the regulatory standards established by the Municipal Permit for construction activities and the City's construction performance standards included in the Chula Vista Development Storm Water Manual.

Table 11-2 FY 2010-2011 Compliance with Activity-Based Requirements – Construction

PERMIT SECTION	ACTIVITY/ SOURCE TYPE	TARGETED OUTCOME	ACTUAL	MEASURE OF SUCCESS	
D.2.d Construction	High Priority Sites (Total Listed = 3)	# Sites targeted for inspection	# Sites inspected	Actual/ Target	%
		3	3	3/3	100
	Medium Priority Sites (Total Listed = 39)	39	39	39/39	100
	Low Priority Sites (Total Listed = 50)	As Needed	27	NA	NA
	All Sites (Total Listed = 92*)	Total sites identified	# in compliance or on a schedule for compliance	Actual/ Target	%
		92	92	92/92	100
		# of inspections during dry season	# of inspections during wet season	Total # of inspections	N/A
		35	205	240	N/A

*Note: Of the 92 construction sites listed above, 43 sites were inactive during the reporting period and were inspected on an as needed basis. Active sites were inspected according to the Municipal Permit requirements. For a complete list of construction sites inspected during the reporting period, please refer to Attachment G.

The following features distinguish the construction component of the City's JURMP:

Inspection and Enforcement

As demonstrated above, and in previous reporting years, the City has established a comprehensive construction inspection and enforcement program. The Storm Water and Public Works Inspection staff, with broad knowledge and expertise in construction storm water management, ensures compliance with the construction component of the JURMP. Within the reporting period, targeted inspections on development, redevelopment, and capital construction projects have been fully achieved. These goals have been accomplished through an aggressive inspection and follow-up schedule approach that assures compliance in the highly dynamic construction environment.

Education and Training

Storm Water Management staff provides education and training to all entities related to construction activities including developers, site superintendents, sub-contractors, and trades persons. During the previous years, this education and training capacity was further defined by storm water inspection staff participation and expertise provided at regional training seminars and outreach events directed at the construction industry. As a function of the experience gained through a broad spectrum of construction activities in the City, Chula Vista Storm Water Management staff continues to offer a strong asset and broad-based expertise in construction storm water management both locally and regionally. The adoption of the new General

Construction Permit necessitates further education and trainings to all entities related to construction activities. During this reporting period, City staff was given the opportunity to speak at a regional seminar for the construction industry including local municipalities. City staff continued their efforts in educating members of the construction industry at the local level during meetings and site inspections.

It should be noted that programmatic updates and proposed updates presented above have been driven by management decisions to develop more effective JURMP elements. As such, at this time, no significant management measure deficiencies have been identified and no BMPs determined ineffective in 2010-2011. However, in support of an adaptive management approach to jurisdictional elements, the following program areas have been identified for further attention in order to support overall program effectiveness:

BMP Maintenance

During the reporting period, due to an increase in the number of inactive construction sites, BMP maintenance on construction sites continued to be an area of concern. While inspection staff noted significant efforts in BMP implementation, the maintenance needs associated with implemented BMPs did not match implementation efforts on a consistent basis. The City continues to inspect inactive construction sites and issues formal inspection reports to developers if their sites do not meet City standards for BMP requirements as a result of failure to maintain adequate BMPs. The purpose of such formal reports is to notify developers of the City's storm water and non-storm water discharge requirements on inactive construction sites and to reiterate the developer's or property owner's responsibility at both active and inactive sites to implement a plan to address all potential discharges from construction sites.

11.3.2.1.3 MUNICIPAL

As exemplified in program descriptions included in other sections of this report, the City prides itself for outstanding environmental programs, and the interrelated successes that each can account for. The City recognizes the need for far-reaching pollution prevention programs for the general public, but further emphasizes ongoing pollution prevention programs through well-developed City activities such as MS4 maintenance, street sweeping, and Integrated Pest Management techniques. The following table summarizes municipal activities' data.

Table 11-3 FY 2010-2011 Compliance with Activity-Based Requirement – Municipal

PERMIT SECTION	ACTIVITY/ SOURCE TYPE	TARGETED OUTCOME	ACTUAL	MEASURE OF SUCCESS	
D.3.a Municipal	High Priority Sites (Total Listed = 65[1])	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		65	65	65/65	100
	Medium Priority Sites (Total Listed = 5)	As needed	As needed	N/A	N/A
	Low Priority Sites (Total Listed = 16)	As needed	As needed	N/A	N/A
	Catch Basins, Inlets, MS4, Open Channels	Estimated quantity of waste targeted for removal (Tons)	Quantity of waste removed (Tons)	Actual/Target	%
		122	122	122/122	100
	Streets/Parking Lots	Estimated distance of curb/park miles to be cleaned	Total curb/park miles cleaned	Actual/Target	%
		18,000	18,000	18,000/18,000	100
	Catch Basins/ Inlets	# of catch basins and inlets in the City	# of catch basins and inlets inspected	Actual/Target	%
		10,710	10,710[2]	10,710/10,710	100
		# of catch basins and inlets targeted to be cleaned	# of catch basins and inlets cleaned	Actual/Target	%
		2,371	2,371	2,371/2,371	100

[1] Three categories listed in the Municipal Inventory (Attachment C) as follows are inspected on a regular and as needed basis. The frequency of inspection of these categories exceed Municipal Permit requirements:

- MS4
- Roads, Streets, and Highways
- Special Events

[2] 12,236 inspections were conducted on MS4 catch basins and inlets. Comparing this number with the number of catch basins and inlets (10,710) indicates that some catch basins and inlets were inspected more than once during the current reporting period.

With such a well-rounded approach, the City has a significant number of management measures to accurately assess the effectiveness of municipal program component. Further, no BMPs have been identified as ineffective within the reporting period of this report.

The following features distinguish the Municipal component of the City's JURMP:

Municipal Facility Inspections
The City conducts inspections on numerous municipal facilities on an annual basis. Continued in 2010-2011, and as part of this comprehensive inspection process, Storm Water Management staff inspects City owned parks and other facilities for potential maintenance concerns and BMP implementation.

Environmental Programs
As described in other sections of this report, the City manages a number of separate, yet interrelated environmental programs. The City recognizes the tremendous asset that such programs provide to the City's pollution prevention efforts, and will continue to promote the collaborative relationship of these programs in the future. The collaborative successes of each program have continued to capitalize upon in 2010-2011 through the development of a broad-based outreach and educational campaign by the City. The City's CLEAN Business program adopted in 2008 continued to promote partnerships between the City and local businesses that operate in an environmentally responsible manner and protect the environment. The program was well received by local businesses and has increased in membership since its adoption. To date, 93 Chula Vista businesses have enrolled in the program and efforts are being made to increase this number to 100 before the Chula Vista centennial celebrations this year.

Based on exemplary municipal pollution prevention procedures, BMP implementation, and management measures, the City has not identified any significant needs for program improvement or modification at this time.

11.3.2.1.4 INDUSTRIAL AND COMMERCIAL

The 2010-2011 reporting year was a continued maintenance year in terms of industrial and commercial activities within the City. Inventory validation and supplemental inspection efforts remain the highlights of this year's activities. As reported in previous reporting cycles, significant numbers of inspections have been conducted Citywide in order to reach out to numerous industrial and commercial facilities operating within the City. With such a significant variety of commercial and industrial activities in Chula Vista, staff has recognized the need to target those areas and business activities that remain high on the source priority list, and to provide a consistent presence and strong enforcement standard. Notably in this reporting period, Storm Water Section staff continued its one-on-one educational training program on storm water pollution prevention and BMP implementation to specific industrial facilities that have a track record of violations and were identified as High Threat To Water Quality.

The City's FY 2010-2011 inventory of industrial/commercial facilities includes 196 industrial facilities and 1,321 commercial facilities, of which 413 are mobile businesses. However, the 2009-2010 industrial/commercial inventory was used as a basis for inspections during the reporting period, which are shown as targeted outcome in Table 11-4. In 2010-2011, Storm Water Management staff has successfully met, and in some cases exceeded, all compliance-based industrial/commercial requirements of the Municipal Permit through inspection of all high-priority and some low-priority commercial and industrial sites. As such, the City has not

identified any significant management measures, deficiencies or ineffective BMPs within the defined reporting period.

Table 11-4 FY 2010-2011 Compliance with Activity Based Requirements – Industrial/Commercial

PERMIT SECTION	ACTIVITY/SOURCE TYPE	TARGETED OUTCOME	ACTUAL	MEASURE OF SUCCESS	
D.3.b Industrial	High Priority Sites (Total = 43)	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		43	38	38/43	89
	Medium Priority Sites (Total = 5)	As needed	As needed	NA	NA
	Low Priority Sites (Total = 148)	As needed	As needed	NA	NA
D.3.c Stationary Commercial	High Priority Sites (Total Listed = 201)	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		201	199	199/201	99
	Low Priority Sites (Total Listed = 750[1])	As needed	NA	NA	NA

[1] 333 commercial facilities included in the commercial inventory for FY 2010-2011 were mobile businesses that are regulated differently from other businesses. The Municipal Permit does not require annual inspections of mobile businesses.

The following features distinguish the industrial/commercial component of the City's JURMP:

Integrated and Balanced Approach

With a dedicated Storm Water Compliance Inspection staff, industrial and commercial facilities are effectively regulated. Most notably, the City's industrial and commercial inspection program is defined by a consistent presence and strong enforcement standard, and Chula Vista storm water inspection staff continues to excel in maintaining the needs of the industrial and commercial programmatic elements. Needs such as pollution prevention and BMP implementation assurance, business community education and outreach, ongoing inspection and enforcement, and maintenance of a dynamic source inventory characterize the large role these components have in the larger storm water management scheme. Further, Public Works maintenance and landscape crews, whose working environment is in the field, have been trained and educated in storm water pollution prevention, and they report any observed illegal activities or discharges. As such, they are considered the "eyes and ears" of the Storm Water Management Section.

Marked by exemplary inspection and enforcement processes and procedures, the City has not identified any significant need for improvement of the industrial/commercial program at this time.

11.3.2.1.5 RESIDENTIAL

As demonstrated through the narratives in other sections of this report, the expanding residential community that makes up the City of Chula Vista defines the residential component of the City's JURMP. Any small changes in behavior of residents are magnified due to the effect of numbers. As such, the Storm Water Management staff has sought to achieve continued success in the reduction of pollutants from residential areas through a variety of mechanisms geared toward behavior change. This has been approached through the characterization of a variety of activities and pollutant types associated with such activities. The Storm Water Management staff has identified a specific need to reach out to the residential community to communicate a broad based message of environmental stewardship and protection of water quality. Table 11-5 shows the quantity of Household Hazardous Waste and used oil collected from residents in the City of Chula Vista for FY 2010-2011. The significant quantities collected in HHW can be attributed to an aggressive effort by the City on residential outreach and educational efforts. Similarly, the quantity of used oil collected showed an increase of 20% over the previous Fiscal Year, which is an indication of the effectiveness of the program.

Table 11-5 FY 2010-2011 Compliance with Activity-Based Requirements – Residential

PERMIT SECTION	ACTIVITY/ SOURCE TYPE	TARGETED ACTUAL FY 09-10	ACHIEVED ACTUAL FY 10-11	MEASURE OF SUCCESS	
				Actual/Target	%
D.3.c Residential	Household Hazardous Material	294,217 lbs	412,706	412,706/ 294,217	140
	Used Oil	23,560 gallons	28,732 gallons	28,732/23,560	122
	Used Oil Filters	-	9,122	N/A	N/A

Residential Program Strengths:

Pollution Prevention

Various pollution prevention programs offered to residents strengthen the City's residential component. Such pollution prevention programs provide the community with highly cost-effective methods of disposal of such items as used motor oil, oil filters, green waste, recyclables, used cooking oil, household hazardous waste, and electronic waste. While the details of such programs are found throughout this report, it is important to recapture the tremendous asset such programs offer the City's community.

Residential Outreach and Education

The City continued to focus significant resources on residential outreach and education efforts in 2010-2011 and constantly endeavored to devise different avenues in reaching the public. While

these activities are more fully described in Section 7.0 of this report, it is necessary to recognize the importance of this attribute to the overall success of the residential sector of the community.

Residential Program Improvement Areas and Challenges:
Based on exemplary residential pollution prevention procedures, BMP implementation, management measures, and a greatly enhanced outreach and education strategy, the City has not identified any significant needs for improvement at this time.

11.3.2.1.6 EDUCATION AND PUBLIC PARTICIPATION

The City prides in its well-established and comprehensive environmental programs. The Storm Water Management Program plays a vital role in communicating water quality information to local commercial, industrial, residential, and development communities. Further, such messages are supported by cooperative efforts with various City entities such as the Chula Vista Nature Center, the Conservation Department, the Regional Used Oil Recycling Program, and Household Hazardous Waste Program. With the City's commitment to environmental services and resources, the City's Storm Water Management Program has successfully collaborated with City environmental programs and departments in order to effectively reach the community at large with clear and relevant messages of environmental stewardship and protection. The accounting of activities in Sections 8 and 9 of this report has been prepared to demonstrate the broad spectrum of education and public participation opportunities provided to the community of Chula Vista.

While the City continuously strives to improve its JURMP implementation program, it has not identified specific management measures by which to improve education and public participation activities. The Clean Business program was the latest measure added in our public participation activities. The City is committed to the continued development of such efforts as they are evaluated through the effectiveness assessment process.

Education and Public Participation Program Strengths:

Environmental Program Collaboration
As discussed throughout Sections 8 and 9 of this report and highlighted in previous reporting years, the City's Storm Water Management Program is strongly supported by numerous environmental programs within the City. As such, the Storm Water Management Program has been able to reach more diverse audiences and participate in a greater variety of public participation venues. This collaboration of programs that culminated in the creation of the CLEAN program has resulted in clear and consistent messaging to Chula Vista residents and has reinforced City's resources toward more effective and holistic environmental programs.

While the goals of the CLEAN program have been articulated elsewhere in this report, it is important to note the unique approach to education and outreach that the City has taken. Through the collaboration of environmental programs such as conservation, household hazardous waste collection, recycling, and storm water management, citizens receive consistent and interrelated messages, and participate in activities that demonstrate various facets of environmental protection. Such coordinated public education and participation programs have

far reaching and lasting effects that ultimately result in general acceptance of environmental concepts and changes in behavior. It has been recognized that the interrelationship of each of these programs collectively, is integral to the overall success of each of these programs individually. Finally, the City is fortunate to have the Chula Vista Nature Center to showcase the San Diego Bay and to provide tangible access to the resources the community is called to protect.

Internal Staff Training

Through formal or informal training, meetings or individual contact, staff training is conducted each year in the City on an as needed basis. With the status and trends in storm water management in such a dynamic state, Storm Water Management staff has recognized the need to consistently provide updated information to City employees. In addition, the messages must be conveyed consistently at all levels, and cover all necessary City functions.

Chula Vista CLEAN Program

The City continued to take significant steps to further implement an integrated and relevant public education and outreach program aimed at a diverse audience. Utilizing the services of I Love A Clean San Diego (ILACSD) the CLEAN program has been built upon a holistic approach and increased community participation, aiming to utilize the participating community groups, private businesses and organizations, local water agencies, local schools, developers, community groups, and others to create a shared personal commitment and a sense of ownership to the community's environment, water resources and watershed.

Education and Public Participation Program Improvement Areas and Challenges:

Education of the Development Community

The recently updated Model SUSMP, which was incorporated in the City's local SUSMP required extra efforts by City staff, developers, and consultants. The development community, which was used to meeting water quality requirements of their projects by mainly incorporating mechanical treatment BMPs in their drainage systems, was now faced with LID and hydromodification requirements. LID principles are based on site planning for the minimization of impervious areas, utilizing landscaped areas for the benefit of water quality, water conservation, and other natural site design BMPs that mimic the pre-development hydrologic conditions of the site. Integrated Management Practices (IMPs) combine the benefit of natural treatment and flow attenuation methods to both treat runoff and mimic pre-development hydrology by reducing runoff flow peaks and durations.

LID concepts require site planning at the earliest stages of the project conception. A change in perspective and a closer cooperation between architects, planners, and engineers, as well as cross training among these groups are needed. Because of these reasons, and the inevitable fact that normally there is reluctance to change acquired habits and established procedures, City staff faced the challenge of reviewing multiple submittals and meeting with project applicants, on occasions several times, before acceptable site plans were achieved. Through regional and jurisdictional efforts, developers and consultants are becoming familiar with the new requirements and are making the necessary adjustments to incorporate LID principles into their project plans. After the issuance of the current Municipal Permit, the Storm Water Management

staff expanded its inspections and enforcement of post-construction BMPs to ensure BMP implementation and maintenance on development projects, often exceeding minimum requirements of the Permit. It is a priority of the City to communicate and reinforce the requirements associated with development and redevelopment projects through a consistent and clear message. This is most effectively approached through project-by-project interaction with developers and consultants.

Table 11-6 Compliance with Activity-Based Requirements – Education and Public Participation

PERMIT SECTION	ACTIVITY/ SOURCE TYPE	TARGETED OUTCOME	ACTUAL	MEASURE OF SUCCESS	
D.3.g Education	Outreach (External)	# targeted training workshops, outreach events	# training workshops, outreach events conducted	Actual/Target	%
		13	13	13/13	100
	Staff Training	# Training sessions FY 09-10	# Training sessions FY 10-11	Actual/Target	%
		10	10	10/10	100

11.3.2.2 CHANGES IN KNOWLEDGE/AWARENESS (LEVEL 2)

It is generally accepted that expanded knowledge and awareness is fundamental to bringing about desired changes in behavior. As such, the wide variety of activities captured in this report, including workshops, training, and public outreach through the Chula Vista CLEAN program, all support this critical programmatic element. To date, the City of Chula Vista has completed two rounds of surveys designed to measure public awareness of various storm water quality related issues. The surveys are intended to measure the level of knowledge and associated behavioral change. During the reporting period, the City provided a wide cross-section of information through the interrelationship of various environmental programs. The City was able to significantly impact the level of knowledge and awareness within the community through its continued efforts in influencing residential, industrial, commercial, and municipal activities. In order to evaluate levels of knowledge and awareness, the City has established the following indicators:

- Hotline Call Response Tracking (Residential, Industrial, Commercial, Construction)
- Business License Application Screening Procedure (Mobile Businesses)
- Storm Water Web Site (All Community Sectors)
- Development Review Process (Development Community)

It is anticipated that in future reporting years, as these indicators become more wholly developed and additional data is collected; they will provide strong directional measures toward programmatic updates. It is important to recognize that the elements presented below are only

indicators used to evaluate trends in Chula Vista, and are taken collectively to express overall successes and challenges and provide programmatic guidance.

Hotline Call Response Tracking

A comprehensive hotline call response summary is presented in Attachment L – Hotline Call Response Summary. It is important to note that trends in hotline calls received by the City have remained strong since the inception of the program. Figure 11-2 shows the number of hotline calls from FY 1998-1999 to FY 2010-2011. The high level of public participation in reporting illegal discharges can be attributed to two elements, 1) the expanded effort by the City in its public education and outreach that gained substantial increase in public awareness of various storm water quality issues, and 2) publicity of the hotline and its ease of access. It may be inferred that overall programmatic influences are strong throughout the community.

Figure 11-2 Chula Vista Storm Water Hotline Call Summary 1998-2011

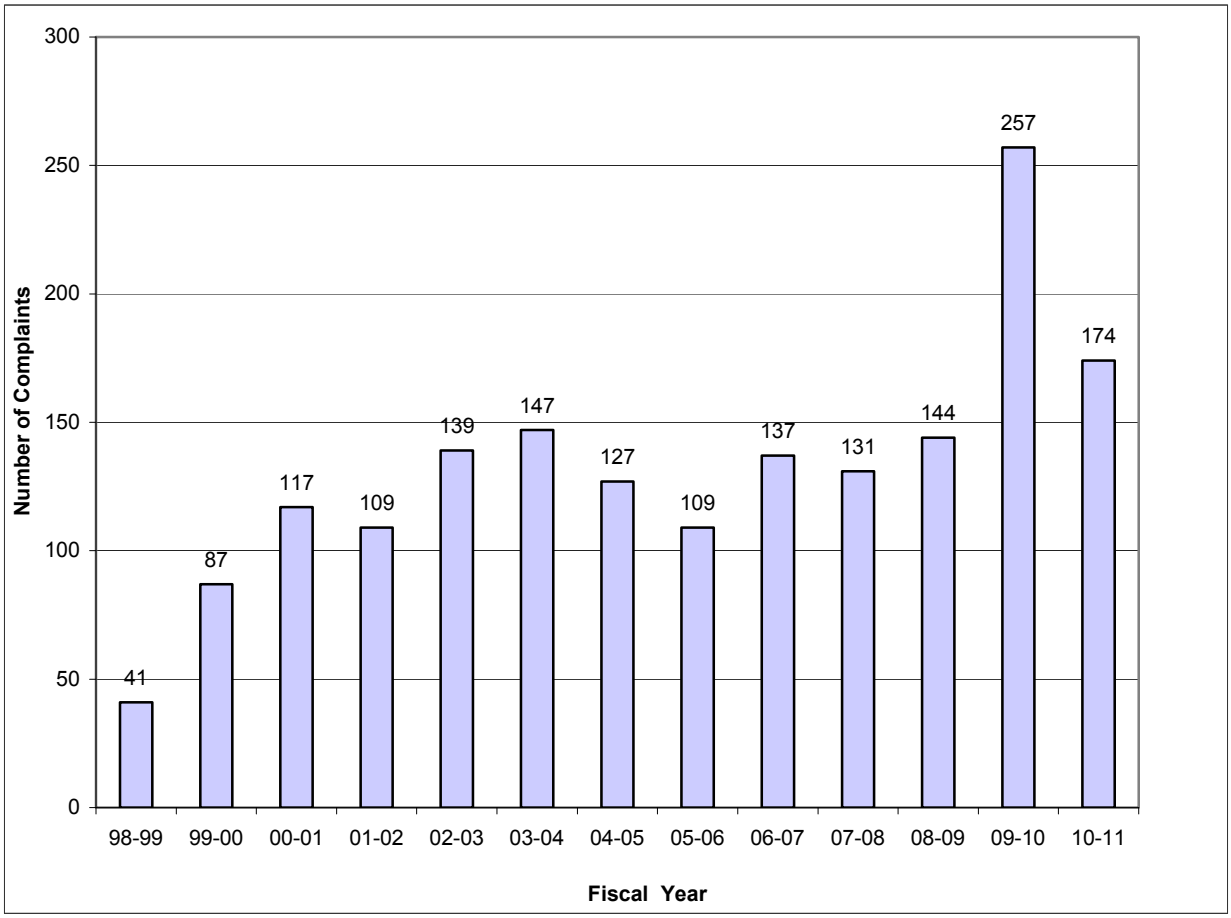

Business License Application Screening Procedure

The Business License Application Procedure, presented in Section 5.3 of this report, has provided the City a unique mechanism in evaluating knowledge and awareness of various mobile business communities. Mobile business owners are required to complete a storm water questionnaire, read the City's Storm Water Ordinance, and review educational BMP information related to their mobile business type. Through direct interaction with business license applicants,

Storm Water Management staff is able to subjectively assess the level of awareness that mobile business owners have, based on their answers to the storm water questionnaire.

The City continued to utilize the regional mobile business database website. The website includes a compilation of all approved mobile business applications in the region, which is categorized by jurisdiction. The creation of regional source inventory is a significant improvement in mobile business database management, which can provide essential information in monitoring and tracking mobile business activities in the entire region.

Storm Water Web Site

The City's CLEAN website development and update continued into 2010-2011. This site offers valuable information to Chula Vista residents and businesses and is intended to facilitate public education on environmental issues, including storm water. The website also provides a means for residents to report illegal discharges to storm drain systems. Due to technical constraints, it is not possible at this time to count the number of people accessing the website. It is hoped that this technical difficulty will be overcome in the future in order to provide a method to assess the usefulness of the website. In the meantime, Storm Water Management Section will continue to resort to other means of assessment such as surveys.

Development Review Process

During the current reporting period, the City continued implementing the environmental review process for all development and redevelopment project submittals. The City's JURMP includes a comprehensive flow chart to show the SUSMP implementation, approval, and verification process, together with responsible departments, divisions, and sections of the City. Through the required submission of Water Quality Technical Reports (WQTR) for Priority Development Projects; subsequent review by City staff; and project pre-construction meetings, in 2010-2011 a notable increase in knowledge and awareness within the development community was observed. The level of knowledge and awareness has been evaluated through a review of the comments provided and direction needed from City staff to ensure compliance with SUSMP requirements. Further, it has been noted that WQTR submittals tend to be more fully developed and generally utilize effective sets of post-construction BMPs as required. A detailed description of the review process has been discussed in section 2 of this report. It should also be noted that while great strides have been observed in the development community, the City has identified the need to consistently convey stronger regulatory standards of construction and post-construction BMPs, including Low Impact Development and hydromodification, and will continue to take this approach in future reporting years.

11.3.2.3 BEHAVIORAL CHANGE/BMP IMPLEMENTATION (LEVEL 3)

During this reporting period, the City continued to implement BMP tracking measures into various components as reviewed in this report. It has been recognized that through the implementation of well-developed BMP tracking measures, the City is able to more fully evaluate BMP implementation and associated behavioral change. The City has identified the following program areas as those most conducive to effectively tracking BMP implementation and evaluating behavioral change within the various regulated communities:

- Inspection Activities
- SUSMP Implementation
- Survey

Inspection Activities
As discussed in applicable sections of this report, the City has developed comprehensive commercial, industrial, municipal, and construction inspection programs. It is through these well-developed inspection programs, that the City is able to utilize BMP implementation tracking and assessment mechanisms.

In the reporting year 2010-2011, the Storm Water Management Section continued to use the GBA database management system to track source inventories, inspection activities, and other data relevant to the assessment of storm water management programs. The use of the GBA was expanded and refined to better serve the purposes of the new Municipal Permit. Through this database program, Storm Water Management staff is able to view the historical activities such as inspections and violations of commercial, industrial, municipal, and construction sites. Further, in support of BMP selection and evaluation throughout various community sectors, staff uses the inspection forms that were developed in FY 2005-2006. The inspection forms developed for commercial, industrial, municipal, and construction inspection activities are intended to provide fully developed BMP implementation tracking mechanisms.

Based on data gathered from such activities, the City is able to take a critical look at BMP selection and implementation Citywide, and be able to evaluate behavioral change within business communities and further validate effectiveness trends in years to come.

SUSMP Implementation
Within the development community, implementation of post-construction BMPs provides the City with the strongest indicator of BMP implementation and behavioral change. As discussed in Section 2.0 of this report, the City has sought to firmly establish SUSMP requirements within the development community, and has successfully implemented SUSMP procedures for all applicable projects within the defined reporting period of this report. Inherently through this process, significant numbers of post-construction BMPs have been implemented throughout the City; including site design, source control, and treatment control level BMPs.

Survey
To date, the City has conducted two rounds of surveys and intends to conduct similar surveys in the future at intervals of 3 to 5 years. The survey questionnaire includes 11 questions designed to measure public awareness of various storm water quality related issues and their relationship to behavioral change. The survey administered in 2005 served as a general baseline for comparison. Although the survey in general is an assessment of public awareness, a few questions were designed to measure behavioral change. The focus of the survey was residential behaviors related to auto maintenance, landscaping, pet care, and swimming pool maintenance. Overall, results show that residents are aware of pollution prevention methods to protect waterways. Results show that some improvement can be made by educating residents about watersheds, the difference between the storm drain and the sewer system, and on BMPs for vehicle washing. Results suggest that although residents know in general how to prevent

pollution, they still may not know the fundamentals of why they should prevent pollution. The City will take this knowledge and use it to better focus its education program.

11.3.2.4 LOAD REDUCTIONS (LEVEL 4)

On a regional level, some Level 4 analysis has been conducted within the ROWD and associated LTEA documents. While load reduction targeted outcomes and estimates have proven challenging on a jurisdictional level, the regional ROWD and LTEA provide the most well developed approach toward such assessments. As such, the City has developed the following snapshot of load reduction estimates on a jurisdictional level to support overall JURMP effectiveness assessment. Notably, the load reduction numbers provided below in Table 11-7 are focused on municipal functions and programs.

Table 11-7 FY 2010-2011 Load Reduction

ACTIVITY/FUNCTION	LOAD REDUCTION	POLLUTANT TYPE
Used Oil Recycling	28,732 gallons	Motor Oil
Household Hazardous Waste Collection	412,706 pounds	Antifreeze, Oils, Paints, Aerosols, etc
MS4 Maintenance	5.69 tons	Trash, Debris, Leaves, Grass, Rock, Silt
MS4 Catch Basin and Inlets	18.61 tons	Trash, Debris, Leaves, Grass
Channel Maintenance	97.54 tons	Trash, Debris
Street Sweeping	1,000 tons	Trash, Debris, Sediment

11.3.3 INTEGRATED ASSESSMENT

A review of the results from the regional monitoring program and the City's Dry Weather Field Screening and Analytical Monitoring indicates that bacterial indicators and nitrate are the persistent constituents of concern in discharges from the City's MS4 and within the receiving waters. Other constituents of concern occasionally exceed established limits, however, they appear to be transient. Sources of bacterial indicators are commonly associated with wildlife; pet waste, improper management of restaurant waste, sewage overflows, and general residential activities and land uses. Nitrate is commonly associated with landscaping activities and groundwater intrusion. Notably, the City continued its special investigation this reporting year to learn more about the sources of nitrate within the City, particularly those areas that show a consistent flow of groundwater into the storm drain system. Based on the findings of the study, it has been determined that groundwater intrusion into surface and underground storm drain conveyance systems is the main source of elevated nitrate levels in MS4 discharges.

The City has implemented a variety of program elements that are described fully in other sections of this report, as summarized below:

- Residential and commercial public education
- Inspection of restaurants and other potential sources of bacteria
- A comprehensive sanitary sewer overflow prevention and cleanup program

- A comprehensive storm water conveyance system maintenance
- Street sweeping
- Requirements for treatment control Best Management Practices on new development and major redevelopment

The Charts included in Section 11.3.1 indicate that a number of pollutants are on a declining trend in this reporting period. Particularly, significant decreases in Total Coliform and Fecal Coliform are encouraging. These results can be interpreted as follows:

The City maintained its expanded public education and outreach in this reporting period. This effort was aimed at increased awareness and changes in public behavior. Based on current and past results from the dry-weather monitoring program, and past violation reports, specific residential areas that were identified as High Threat To Water Quality (HTTWQ) were targeted for disseminating educational materials specific to the type of pollutants and violation activities. Moreover, the implementation of BMPs as described above is considered effective in deceases in fecal coliform and total coliform in urban runoff. This indicates that the City's programs are effective in controlling bacterial indicators. Further, due to the slowdown in construction activities, creation of urban impervious areas slowed down during the reporting period, which may also contribute to decreased instances of observed pollutant discharges. It is important to point out that this analysis should not be construed as a scientific assessment of the effectiveness of all the City's programs. As mentioned before, integrated assessment is the most difficult step in the effectiveness assessment and requires the evaluation of many diverse factors throughout an extended period of time. The recently submitted ROWD and LTEA include more comprehensive evaluation of integrated assessment within the San Diego Bay Watershed and the City.

• Special Investigations

Section 12.0

12.0 SPECIAL INVESTIGATIONS

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(k).i - A description of any special investigations conducted.

12.1 SELENIUM SPECIAL STUDY

In November 2010, the USEPA approved the 2008-2010 303(d) list for the San Diego Region. Table 12-1 shows the pollutant/waterbody combinations within or adjacent to the City. Both Poggi Creek and Telegraph Canyon Creek, listed for toxicity and selenium, respectively, are located entirely within the City of Chula Vista. The lower section of Sweetwater River, below the impoundment (Sweetwater Reservoir), is 303(d) listed for a variety of pollutants. The Cities of San Diego, Chula Vista, National City, Lemon Grove, and La Mesa, as well as the County of San Diego discharge into the Lower Sweetwater River. As a proactive measure, the City, with the help of a consultant, initiated a special study to further investigate selenium concentrations in Telegraph Canyon Creek and augment data collected by the Regional Board as part of the SWAMP monitoring program. The City decided to give priority to selenium due to the fact that exact pollutant(s) causing toxicity within Poggi Canyon Creek and Sweetwater River have yet to be determined through regional monitoring studies. Similar studies for the Sweetwater River will have to be conducted with cooperation from all Copermittees contributing to flows in the Sweetwater River as a collaborative effort.

Table 12-1 2008-2010 303(d) Listed Waterbody-Pollutant Combinations In or Adjacent to Chula Vista

WATERBODY	POLLUTANT
Poggi Canyon Creek	Toxicity
Telegraph Canyon Creek	Selenium
Sweetwater River, Lower (below Sweetwater Reservoir)	Enterococcus
	Fecal Coliform
	Phosphorus
	TDS
	Total Nitrogen as N
	Toxicity
	Selenium

Four sites within Telegraph Canyon Creek were sampled during the reporting period. Preliminary results have been contradictory, with total selenium concentrations being lower than the dissolved fraction concentrations. The City is working with the lab to determine why this result was obtained. The City is also doing more literature reviews about selenium to research potential sources of selenium and to look at selenium studies done in other regions.

The City will continue this long-term special study to characterize selenium within Telegraph Canyon Creek in order to obtain statistically significant data. Potential future directions for selenium studies involve working with other dischargers within Sweetwater River.

• Non-Emergency Firefighting

13.0 NON-EMERGENCY FIRE FIGHTING

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(l).i - A description of any efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.

13.1 INTRODUCTION

The City has developed and implemented a program to reduce pollutants from non-emergency fire fighting flows. BMPs have been implemented when conducting the following activities:

- Regular maintenance of fire and emergency vehicles and equipment
- Training exercises
- Facilities maintenance
- Post-Emergency rehabilitation of response equipment

These activities are conducted in a way to either minimize or eliminate the discharge of pollutants to the storm water conveyance system. Detailed descriptions of BMPs are given for each activity below:

13.2 BEST MANAGEMENT PRACTICES

The City has developed and implemented a program to reduce pollutants from non-emergency fire fighting flows. Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. BMPs and educational methods are used to reduce the discharge of pollutants to the MEP. BMPs are implemented when conducting the activities described in the following sections:

13.2.1 REGULAR MAINTENANCE OF EQUIPMENT

- Vehicles and equipment are cleaned where runoff can be directed to the sanitary sewer system.
- Vehicles and equipment are cleaned where runoff can pond and evaporate and/or where runoff filters through landscaped areas.
- Sewer drains in a vehicle cleaning area are outfitted with a hydro screen fabric barrier to collect debris.
- Spill kits are available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents is minimized and disposed of into the sanitary sewer system.

13.2.2 TRAINING EXERCISES

- Water flows are directed to landscaped areas whenever possible.

- When water flows to an area where landscaping does not prevent runoff, the Officer-in-Charge surveys the area prior to training activities to ensure that drill activities do not wash debris or sediment to storm drain systems.
- Prior to drill activities, debris is removed from downstream areas that could potentially discharge to storm drain systems.
- Live fire training activities are pre-planned to allow integration of barriers to off-site runoff that could contribute to storm water discharges.

13.2.3 FACILITIES MAINTENANCE

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways are swept regularly to remove debris. Debris is placed in the trash.
- Landscaped areas are maintained as required to reduce the introduction of leaves and other landscape waste into the MS4.
- Irrigation systems are monitored and maintained as required to reduce irrigation water from going off-site.
- Spills are cleaned up using spill kits provided at the work site, and the disposal of spilled materials is in accordance with applicable regulations.
- Hazardous materials (Hazmat) spills that require a cleanup beyond the ability of the on-site personnel are reported to the County of San Diego Hazardous Materials Division or a Hazmat certified contractor with appropriate resources to properly address the spill.
- Maintenance and repair of structures are conducted using methods that do not contribute pollutants to the MS4.

13.2.4 POST-EMERGENCY REHABILITATION OF RESPONSE EQUIPMENT

Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency are restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. Water is used only if other practical and immediately available methods cannot be identified. In such cases, BMPs are used to control water usage and effluent flows to prevent discharges to MS4s.

13.2.5 WASHING AND FUELING ACTIVITIES

The City maintains a number of fire stations, as listed in the municipal inventory (See Attachment C). Such facilities are inspected on an as needed basis. Only one fire station (Fire Station No. 4/Training Tower) has training capabilities. This facility is sloped so that all runoff generated by training activities is directed to a pervious infiltration area. Two fire stations within the City, stations No. 2 and No. 7, have fueling stations on site. Trucks from other stations are brought to these locations for fueling. The following fire stations conduct washing activities on site and pursuant to SUSMP regulations have permanent storm water BMPs installed:

- Fire Station No. 6 – 3 filter inserts and a non-storm water diverter
- Fire Station No. 7 – 1 CDS unit and a non-storm water diverter
- Fire Station No. 8 – 1 CDS unit and a non-storm water diverter

Each station is sloped so that all runoff generated by washing activities flows to a drain equipped with a non-storm water diverter mechanism, which diverts the wash water to the sanitary sewer system and rainwater to storm drain systems.

All personnel who conduct washing activities are properly trained on using the diverter device and ensuring it is used appropriately. Trucks that require cleaning from other stations are brought to the stations equipped with washing capabilities.

As part of the City's enforcement program, during this reporting period Station #2 was issued an Administrative Citation for failing to implement BMPs to prevent the discharge of wash water into the storm drain. Station staff was subsequently provided additional training to prevent any future discharges.

• JURMP Revisions

Section 14.0

14.0 JURMP REVISIONS

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(m)i – A description of any proposed revisions to the JURMP.

The following paragraph details proposed updates to the City's JURMP.

APPENDICES

Since the City's JURMP document was developed and submitted to the Regional Board in March 2008, the JURMP Appendices have been updated, as needed, and have been included in the JURMP Annual Reports as Attachments. During the current reporting period, the inventories of construction sites; municipal, commercial, and industrial facilities and activities; and Priority Development Projects with treatment control BMPs were updated. These inventories are included in Attachments A to E of this report.

- Conclusions
Recommendations

15.0 CONCLUSIONS

The present report is an accounting of City of Chula Vista's activities and Jurisdictional Urban Runoff Management Program (JURMP) implementation efforts during the reporting period of July 1, 2010 to June 30, 2011. It has been prepared in compliance with the requirements of the San Diego Regional Water Quality Control Board's Order No. R9-2007-0001, National Pollutant Discharge Elimination System Municipal Permit No. CAS0108758. The report format follows the regional standardized reporting format developed by the Copermittees as required under Section M.6 of the Municipal Permit.

Section 10 "Fiscal Analysis" of this report follows the guidelines provided in the Standardized Fiscal Analysis Method and Format dated January 29, 2009, which was developed by all Copermittees pursuant to the requirements of Section G.3 of the Municipal Permit.

Submittal of Section 7 "Illicit Discharge Detection and Elimination Component" has been deferred to December 15, 2011 as permitted by Addendum No. 2 to Order No. R9-2007-0001. The Regional Board issued Addendum No. 2 in recognition of the fact that field screening and analytical monitoring work could continue to the end of September of each year, and time was required to complete, finalize, and submit the required reports.

As can be construed from the contents of this report, during the reporting period of July 1, 2010 to June 30, 2011, the City of Chula Vista met, and in some cases exceeded, implementation requirements of the Municipal Permit and the City's JURMP.

DEVELOPMENT PLANNING

A notable activity during the current reporting period was the update of the City of Chula Vista Development Storm Water Manual in January 2011. The Manual includes the City's local SUSMP. The updated Manual incorporates the requirements established under the updated regional Model SUSMP and the Final Hydromodification Management Plan. No further SUSMP updates are required under the current Municipal Permit cycle.

During the reporting period, the City successfully completed implementation of the Land Development Component of the JURMP. The 2010-2011 Fiscal Year marked one of the lowest number of private development applications. Although there were a few major development projects under review by the City, only a handful of small projects received construction permits.

The City mailed out post-construction treatment control Best Management Practices (BMPs) maintenance verification letters and forms to responsible parties and followed up to ensure that they were duly certified and returned. Inspections of post-construction treatment control BMPs were conducted on privately maintained facilities. Of all the projects listed as having treatment control BMPs, 48% were inspected, which exceeds Permit requirements of 20%.

Further emphasis was placed on the practice of Low Impact Development site design BMPs. Developers and consulting engineers were encouraged and required to incorporate such BMPs in their site design as much as site conditions permitted. In January 2011, the hydromodification

control requirements went into effect. However, due to the slump in building construction, very few projects that qualify under this requirement have their project submittals under review by City staff.

CONSTRUCTION

The Construction Component of the City's JURMP primarily included inspections of construction sites for BMP implementation. The City successfully conducted all inspections on private and public construction sites and resorted to enforcement action where necessary to bring violating sites into compliance with the requirements of the City's storm water management and grading ordinances. Notices of Violation were issued when necessary. During the reporting period, the majority of graded construction sites remained inactive. Responsible persons for such sites were contacted and they were required to repair and maintain their erosion and sediment control BMPs. The number of construction inspections conducted during the reporting period meets and exceeds the minimum requirements included in Section D.2.d of the Municipal Permit.

MUNICIPAL

The Municipal Component of the City's JURMP primarily includes implementation of BMPs on all City owned facilities and activities. During the reporting period, the City ensured BMP implementation through staff training and inspections. All high priority municipal facilities and some low priority facilities and activities were inspected during the reporting period. The City also conducted street sweeping, storm sewer system maintenance, and sanitary sewer system maintenance as source control preventive measures. Wastewater capture was implemented during graffiti removal, Integrated Pest Management practices were implemented during landscaping and parks maintenance, and waste management activities were conducted after each special community event. In Fiscal Year 2010-2011, the City achieved all its inspections, training, and BMP implementation goals under its JURMP Municipal Component.

INDUSTRIAL AND COMMERCIAL

The Industrial and Commercial Component of the City's JURMP constitutes a major section of its storm water management program. City staff conducts industrial and commercial inspections and provides one-on-one training to business owners and managers throughout the City. During the current reporting period, at least 25% of all inventoried commercial and industrial facilities were inspected as required by the Municipal Permit.

Mobile businesses applying for business licenses were directed to the Storm Water Management Section for training and signing of a certification statement to the effect that they are familiar with the City's storm water regulations and would implement BMPs appropriate to their line of business at all times. An inventory of such businesses is included in Attachment D3 of this report.

RESIDENTIAL

The City has developed the residential component of the JURMP based upon a multi-faceted approach, including pollution prevention; hotline response and enforcement; and outreach and education. The City collects and analyzes information about various aspects of observed and reported violations from multiple sources to identify high-priority residential areas and activities. Such areas and activities are then targeted for public education and outreach. During the current reporting period the number of hotline calls remained relatively high, which can be indicative of the public awareness of storm water regulations and the relative ease of reporting.

During the reporting period, various programs under the City's residential component continued, including 1) Household hazardous waste collection center, 2) State-certified used-oil collection center, 3) Household collection of used oil, 4) Christmas tree recycling program, 5) Residential complaint response and enforcement, 6) Residential door hangers, and 7) City's environmental website.

PUBLIC EDUCATION AND OUTREACH

The City of Chula Vista has identified public education and outreach as powerful and effective tools towards increased awareness and behavioral changes that will ultimately lead to reduced pollutant loading from various land uses and activities. As such, the City places great importance on its education and outreach programs. During the reporting period, City staff organized or participated in several training and educational events.

The CLEAN group continued its activities toward its mission: "Foster environmental awareness in the City of Chula Vista, through stakeholder and community involvement and participation." CLEAN group activities included media articles, school education efforts, community events, and Chula Vista Nature Center presentations and field trips.

City staff provided public education to industrial, commercial, and construction communities by one-on-one contact and on-site training. Business owners and managers, and construction site personnel were trained based on their specific site conditions and pollutant generating activities.
The City's storm water management program is based on the concept of continuous improvement through iterative goal setting, implementation, and assessment cycles. This process requires identifying measurable goals at the beginning of the process, followed by implementation of tasks, and then assessment and comparison of results with identified goals. This illustrates the importance of assessment in any storm water management program.

PROGRAM EFFECTIVENESS ASSESSMENT

During the reporting period, the City of Chula Vista continued using the methodology developed in the regional document "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs." Assessment tools such as assessment of activity based results, surveys, and dry weather monitoring results were used to arrive at acceptable conclusions. Higher levels of assessment such as changes in discharge quality and receiving water quality were deemed to be beyond the scope of jurisdictional programs and, therefore, delegated to regional research and analysis such as the Regional Monitoring Program, Long-Term Effectiveness Assessment, and the Report of Waste Discharge.

Assessment results indicate that during the Fiscal Year 2010-2011, the City of Chula Vista met all its measurable goals for program element implementation. Dry Weather monitoring indicates that the majority of pollutants of concern show decreasing trends, while some still pose a challenge. In particular, nitrate and bacterial indicators appear to pose persistent problems, which the program should focus on.

FISCAL ANALYSIS

A successful storm water program would require adequate funding. During the current reporting period, the City of Chula Vista made such funds available through various sources including the general fund, storm drain fee, sewer fee, special assessment district fees, etc. There were other City programs designed to serve multiple objectives, including storm water pollution prevention, such as wastewater collection system maintenance, household hazardous waste management, etc. While those programs were originally intended to serve other goals and objectives, they, directly or indirectly, help the City's storm water management program by reducing sources of pollution and preventing pollution from reaching receiving waters. Where cost analysis is available for such programs, they have been included in Section 10 of this report.

Additionally, the City contributed its share to watershed and regional activities, which is identified in the Fiscal Analysis included in Section 10 of this report.

As the City of Chula Vista continues its efforts toward environmental protection in general and water quality improvements in particular, its storm water management program becomes more refined and a part of a more holistic sustainability program.

• SUSMP Inventory

Attachment A
SUSMP Projects Inventory
FY 2010-2011

Note: This table represents a comprehensive list of SUSMP projects completed or under construction since the inception of SUSMP requirements.

Project Name	Subdivision	Neighborhood	Types of BMP: BMP Type- Group I	Types of BMP: BMP Type - Group II	Category	Inspection Priority
Ada Street						
Ada Terraces	Ada Street	N/A	MP-52 Drain Insert		Residential	Low
Ada Townhomes	Ada Street	N/A	TC-30 Vegetated Swale		Residential	Low
Ada Villas 1	Ada Street	N/A	MP-52 Drain Insert		Residential	Low
Bella Lago						
Bella Lago	Bella Lago	R-1	TC-40 Media Filter		Residential	High
Bonita						
Bonita Library	Bonita	N/A	MP-52 Drain Insert MP-51 Vortex Separator	TC-30 Vegetated Swale	Municipal	High
Castle Park						
Castle Park Area NPDES Basin CIP	Castle Park	NA	TC-40 Media Filter	TC-40 Medial Filter	CIP With SUSMP	Low
Eastlake						
Doctor's Park	Eastlake	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low
Eastlake - Village Walk	Eastlake	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	High

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Eastlake Business Center-Hale Place	Eastlake	N/A	MP-52 Drain Insert		Commercial	High
Eastlake Commerce-Business Center	Eastlake	N/A	MP-52 Drain Insert		Commercial	High
Eastlake Community Church	Eastlake	N/A	MP-52 Drain Insert	Other	Church	Low
Eastlake Design District	Eastlake	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	High
Eastlake Little League Field	Eastlake	N/A	TC-30 Vegetated Swale		Miscellaneous	Low
Eastlake Marketplace	Eastlake	N/A	MP-51 Vortex Separator		Commercial	High
Eastlake Parkway Professional Plaza	Eastlake	N/A	MP-52 Drain Insert	TC-30 Vegetated Swale	Commercial	High
Eastlake RV & Boat Storage	Eastlake	N/A	TC-40 Media Filter		Commercial	Low
Eastlake Terrace-Landswap	Eastlake	N/A	MP-52 Drain Insert		Commercial	High
Eastlake Terraces North-Ltd Edition	Eastlake	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	Low
Eastlake Village Center East	Eastlake	N/A	MP-52 Drain Insert		Commercial	High
Fenton Business Center	Eastlake	N/A	MP-52 Drain Insert		Commercial	High
High Tech Business Center @ Eastlake	Eastlake	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low
Kohls @ Eastlake	Eastlake	N/A	MP-52 Drain Insert		Commercial	Medium

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
LA Fitness Eastlake Village Center	Eastlake	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	Medium
Otay Lakes Medical Office	Eastlake	N/A	MP-52 Drain Insert		Commercial	Medium
Sunset View Park	Eastlake	N/A	MP-52 Drain Insert		Municipal	High
Village Walk - Medical Arts Center	Eastlake	N/A	MP-52 Drain Insert	TC-30 Vegetated Swale	Commercial	High
Walmart @ Eastlake	Eastlake	N/A	MP-52 Drain Insert		Commercial	High
Showroom Place RV Storage	Eastlake	N/A	TC-30 Vegetated Swale		Commercial	Low
Eastlake Land Swap						
Chevron Station-Olympic Parkway #1975	Eastlake Land Swap	N/A	MP-52 Drain Insert		Commercial	High
Home Depot Eastlake	Eastlake Land Swap	N/A	MP-52 Drain Insert		Commercial	High
Eastlake Vistas						
Abilene	Eastlake Vistas	VR-7	MP-51 Vortex Separator		Residential	Medium
Alder Lane	Eastlake Vistas	VR-12	MP-51 Vortex Separator		Residential	High
Atrium	Eastlake Vistas	VR-2	MP-51 Vortex Separator		Residential	Medium
Bridgepark	Eastlake Vistas	VR-5	MP-51 Vortex Separator		Residential	Medium

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Colrich	Eastlake Vistas	VR-1	MP-51 Vortex Separator		Residential	Medium
Lost Creek	Eastlake Vistas	VR-4	MP-51 Vortex Separator		Residential	Medium
Monticello	Eastlake Vistas	VR-8	MP-51 Vortex Separator		Residential	Medium
Mountain Hawk Park	Eastlake Vistas	N/A	MP-52 Drain Insert		Municipal	High
New Hope Church	Eastlake Vistas	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Church	Low
Olympic Training Center Volleyball Courts	Eastlake Vistas	N/A	MP-52 Drain Insert		Miscelleneous	Low
Sonora Ridge	Eastlake Vistas	VR-9 & 11	MP-51 Vortex Separator		Residential	Medium
Summerhill	Eastlake Vistas	VR-10	MP-51 Vortex Separator		Residential	Medium
Valencia	Eastlake Vistas	VR-6	MP-51 Vortex Separator		Residential	Medium
Eastlake Woods						
Cornerstone	Eastlake Woods	WR-4	MP-51 Vortex Separator		Residential	Medium
Fire Station #8	Eastlake Woods	N/A	MP-51 Vortex Separator		Municipal	Low
K Hovnanian	Eastlake Woods	WR-5	MP-51 Vortex Separator		Residential	Medium
Meredian	Eastlake Woods	WR-6	MP-52 Drain Insert		Residential	Medium

Project Name	Subdivision	Neighborhood	Types of BMP: BMP Type- Group I	Types of BMP: BMP Type - Group II	Category	Inspection Priority
Montevalle Park & Community Center	Eastlake Woods	N/A	MP-52 Drain Insert		Municipal	High
Reserves	Eastlake Woods	WR-2	MP-51 Vortex Separator	MP-52 Drain Inlet	Residential	Medium
Sonoma	Eastlake Woods	WR-7	MP-52 Drain Insert		Residential	Medium
The Woods	Eastlake Woods	WR-3	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Main Street						
2380 Main Street	Main Street	N/A	MP-52 Drain Insert		Commercial	High
Auto Park North	Main Street	N/A	MP-52 Drain Insert		Commercial	High
C.V. Commerce Center	Main Street	N/A	MP-51 Vortex Separator		Commercial	High
C.V. Corporate Center	Main Street	N/A	MP-52 Drain Insert		Commercial	High
Chula Vista Crossings	Main Street	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	High
Chula Vista Toyota	Main Street	N/A	MP-52 Drain Insert		Commercial	High
Enterprise Administration Bldg.	Main Street	N/A	MP-52 Drain Insert		Commercial	High
J&W Redwood	Main Street	N/A	TC-11 Infiltration Basin		Commercial	Low
McCune Chrysler Dodge	Main Street	N/A	MP-52 Drain Insert		Commercial	High

Project Name	Subdivision	Neighborhood	Types of BMP BMP Type- Group I	BMP Type - Group II	Category	Inspection Priority
Office Building - 725 Main Street	Main Street	N/A	MP-52 Drain Insert		Commercial	Low
750 Main Street Rowland Properties	Main Street	NA	TC-30 Vegetated Swale	TC-32 Bioretention	Commercial	High
MTS Maintenance Facility	Main Street		TC-32 Bioretention	TC-40 Media Filter	Industrial	High
Miscellaneous						
805 / Orange Interchange	Miscellaneous	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium
All Seasons Park	Miscellaneous	N/A	TC-30 Vegetated Swale	TC-22 Extended Det Basin	Municipal	High
Aqua Clean	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High
Bonita Arco	Miscellaneous	N/A	TC-30 Vegetated Swale		Commercial	Low
Chula Vista Elementary School District Bus Yard	Miscellaneous	N/A	MP-50 Wet Vault MP-52 Drain Inlet	TC-30 Vegetated Swale	Schools	High
Chula Vista High School	Miscellaneous	NA	TC-40 Media Filter		Schools	Low
Civic Center and Admin Building	Miscellaneous	N/A	MP-51 Vortex Separator TC-30 Vegetated Swale	MP-52 Drain Inlet	Municipal	Medium
COSTCO at Broadway	Miscellaneous	N/A	MP-51 Vortex Separator		Commercial	High
Dixon Drive CIP	Miscellaneous	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium
E Street and First Ave	Miscellaneous	N/A	TC-50 Water Qaulity Inlet		CIP With SUSMP	Low

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
First Avenue-Naples to Palomar CIP	Miscellaneous	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium
Fourth Avenue Sidewalk Improvements CIP	Miscellaneous	N/A	TC-50 Water Qaulity Inlet		CIP With SUSMP	Low
Glenhaven Way Improvements CIP	Miscellaneous	N/A	TC-32 Bioretention		CIP With SUSMP	Low
Jack In The Box	Miscellaneous		TC-32 Bioretention		Commercial	Low
Lady of Guadalupe Church	Miscellaneous	N/A	TC-30 Vegetated Swale		Church	Low
Los Vecinos Apartments	Miscellaneous	N/A	MP-50 Wet Vault Other	Other	Residential	Low
Mace Street Equestrian & 27th Street Staging Areas	Miscellaneous	N/A	TC-30 Vegetated Swale		CIP With SUSMP	Low
North Broadway Basin Reconstruction - CIP	Miscellaneous	N/A	TC-50 Water Quality Inlet		CIP With SUSMP	Medium
Otay Lakes Widening Phase I Ridgeback to SWC	Miscellaneous		TC-40 Media Filter		CIP With SUSMP	Low
Oxford Street Sidewalk Improvements 3rd/Alpine	Miscellaneous	N/A	TC-40 Media Filter		CIP With SUSMP	Low
Palomar Street Improvements Trenton	Miscellaneous	N/A	MP-51 Vortex Separator		CIP With SUSMP	Low
Pharus Plaza	Miscellaneous	N/A	MP-51 Vortex Separator		Commercial	Low
Rancho Rios Condo	Miscellaneous	N/A	MP-52 Drain Insert		Residential	Low
Rancho Vista Apartments	Miscellaneous	N/A	MP-51 Vortex Separator		Residential	Medium

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Retail Center	Miscellaneous	N/A	TC-50 Water Qaulity Inlet		Commercial	Low
Road One of San Diego	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low
Safe Route School Project - Albany	Miscellaneous	N/A	TC-40 Media Filter		CIP With SUSMP	Low
Saint Rose of Lima Catholic Church	Miscellaneous	N/A	TC-30 Vegetated Swale		Church	Low
Salt Creek Park & Community Center	Miscellaneous	N/A	MP-51 Vortex Separator		Municipal	High
Savon-CVS Pharmacy @ Fourth Av.	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	Medium
Second Avenue Improvements	Miscellaneous	N/A	TC-40 Media Filter		CIP With SUSMP	Low
Seniors at Broadway	Miscellaneous	N/A	MP-52 Drain Insert		Residential	Medium
Sharp Hospital Parking Lot	Miscellaneous	N/A	TC-32 Bioretention		Miscelleneous	Low
Southbay Motorsports	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	High
Southbound 805 Off-Ramp Bonita Road - CALTRANS	Miscellaneous	N/A	TC-30 Vegetated Swale		Miscelleneous	Low
Telegraph Canyon CIP	Miscellaneous	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium
Terra Nova Service Plaza	Miscellaneous	N/A	TC-40 Media Filter		Commercial	Low
The Marketplace @ Windingwalk	Miscellaneous	N/A	MP-52 Drain Insert	TC-22 Extended Det Basin	Commercial	High

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
The Shops at San Miguel Ranch	Miscellaneous	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	Low
Tobias Drive CIP	Miscellaneous	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium
Venture Commerce Center	Miscellaneous	N/A	MP-51 Vortex Separator		Commercial	High
Veterans Park & Recreation Center	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Municipal	High
Walgreens @ Third Avenue	Miscellaneous	N/A	MP-52 Drain Insert		Commercial	Low
Walmart at 5305 Broadway	Miscellaneous	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	High
Wells Fargo Bank	Miscellaneous	N/A	TC-30 Vegetated Swale		Commercial	Low
West Air Gas & Equip Inc.	Miscellaneous	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low
Corpus Christi Catholic Church	Miscellaneous	N/A	Other	TC-32 Bioretention	Schools	Low
Rowland Property - Commercial	Miscellaneous	N/A		TC-11 Infiltration Basin	Miscelleneous	High
Sharp Chula Vista Cancer Building Ex	Miscellaneous	N/A	TC-30 Vegetated Swale	Other	Miscelleneous	Low
St Pius X Catholic Church	Miscellaneous	N/A	TC-32 Bioretention	Other	Church	Low
Sunbow Villas	Miscellaneous	N/A	Other		Residential	Medium
Villas at H Street	Miscellaneous	N/A	MP-52 Drain Insert		Residential	Low

Project Name	Subdivision	Neighborhood	Types of BMP: BMP Type- Group I	Types of BMP: BMP Type - Group II	Category	Inspection Priority
Otay Ranch V-1 West						
Canyon View	Otay Ranch V-1 West	R59C & R60	MP-52 Drain Insert		Residential	Medium
Otay Ranch V-11						
Agave	Otay Ranch V-11	R-24A		TC-22 Extended Det Basin	Residential	High
Aristata	Otay Ranch V-11	R-25		TC-22 Extended Det Basin	Residential	High
Azalea	Otay Ranch V-11	R-23	MP-51 Vortex Separator		Residential	High
Cedar Rose I	Otay Ranch V-11	R-7		TC-22 Extended Det Basin	Residential	High
Cedar Rose II	Otay Ranch V-11	R-10		TC-22 Extended Det Basin	Residential	Low
Concordia Church and School	Otay Ranch V-11	N/A	TC-30 Vegetated Swale	TC-32 Bioretention	Schools	Low
Cottage Lane	Otay Ranch V-11	R-20		TC-22 Extended Det Basin	Residential	High
Cottage Lane II	Otay Ranch V-11	R-21		TC-22 Extended Det Basin	Residential	High
Cottage Lane III	Otay Ranch V-11	R-22		TC-22 Extended Det Basin	Residential	High
High Tech High Chula Vista Campus	Otay Ranch V-11	N/A	TC-30 Vegetated Swale TC-11 Infiltration Basin	TC-40 Media Filter	Schools	Low
Lantana	Otay Ranch V-11	R-9		TC-22 Extended Det Basin	Residential	High

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Magnolia I	Otay Ranch V-11	R-4		TC-22 Extended Det Basin	Residential	High
Magnolia II	Otay Ranch V-11	R-5		TC-22 Extended Det Basin	Residential	High
Magnolia III	Otay Ranch V-11	R-6		TC-22 Extended Det Basin	Residential	High
Olympic Parkway to Hunte Pkwy	Otay Ranch V-11	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Maintenance Tracking	Low
Otay Ranch Town Center	Otay Ranch V-11	N/A	MP-51 Vortex Separator		Commercial	High
Otay Ranch Village 11 Rec Center	Otay Ranch V-11	N/A	TC-30 Vegetated Swale		Residential	Low
Picket Fence	Otay Ranch V-11	R-8		TC-22 Extended Det Basin	Residential	High
Twilight I	Otay Ranch V-11	R-2		TC-22 Extended Det Basin	Residential	High
Twilight II	Otay Ranch V-11	R-3		TC-22 Extended Det Basin	Residential	High
Windingwalk Park	Otay Ranch V-11	N/A	TC-30 Vegetated Swale		Municipal	High
Wisteria	Otay Ranch V-11	R-1		TC-22 Extended Det Basin	Residential	High
High Tech High K-8 Phase 2	Otay Ranch V-11	N/A	TC-30 Vegetated Swale	TC-11 Infiltration Basin	Schools	High
Otay Ranch V-11 The Lofts	Otay Ranch V-11	Otay Ranch Village 11	MP-52 Drain Insert	TC-22 Extended Det Basin	Residential	Low
Saguara	Otay Ranch V-11	R-24B		TC-22 Extended Det Basin	Residential	High

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
The Lofts/Landing Apartments	Otay Ranch V-11	R-26		TC-22 Extended Det Basin	Residential	Medium
Otay Ranch V-5						
Goldrush	Otay Ranch V-5	R-30A	MP-51 Vortex Separator		Residential	Low
Horizon Neighborhood Park	Otay Ranch V-5	N/A	MP-52 Drain Insert		Municipal	High
Silver Sage	Otay Ranch V-5	R-30B3	MP-51 Vortex Separator		Residential	Low
Stetson	Otay Ranch V-5	R-30B2	MP-51 Vortex Separator		Residential	Low
Villagio	Otay Ranch V-5	R45	MP-51 Vortex Separator		Residential/Commercia	Low
Winchester	Otay Ranch V-5	R-30B	MP-51 Vortex Separator		Residential	Low
Otay Ranch V-6						
Auburn Lane	Otay Ranch V-6	R-4	MP-52 Drain Insert		Residential	Medium
Cambria	Otay Ranch V-6	R-2A	MP-51 Vortex Separator		Residential	Low
Chateau Belleme	Otay Ranch V-6	R-7A	MP-51 Vortex Separator		Residential	Low
Fire Station #7	Otay Ranch V-6	N/A	MP-51 Vortex Separator	Other	Municipal	Low
Jasmine	Otay Ranch V-6	R-6	MP-52 Drain Insert		Residential	Medium

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Madera	Otay Ranch V-6	R-5A	MP-51 Vortex Separator		Residential	Low
Mandalay	Otay Ranch V-6	R-1	MP-52 Drain Insert		Residential	Medium
Mir Soliel	Otay Ranch V-6	R-8	MP-51 Vortex Separator		Residential	Low
Monet	Otay Ranch V-6	R-9B	MP-51 Vortex Separator		Residential	Medium
Rosewood	Otay Ranch V-6	R-9A	MP-51 Vortex Separator		Residential	Low
Sienna	Otay Ranch V-6	R-3	MP-52 Drain Insert		Residential	Medium
Villas Belleme	Otay Ranch V-6	R-7	MP-51 Vortex Separator		Residential	Low
Willowbrook	Otay Ranch V-6	R-2B	MP-51 Vortex Separator		Residential	Low
Windchime	Otay Ranch V-6	R-9B	MP-51 Vortex Separator		Residential	Low
Marquis	Otay Ranch V-6	MU1	TC-30 Vegetated Swale	MP-51 Vortex Separator	Residential	Low
Otay Ranch V-7						
Mater Dei High School	Otay Ranch V-7	N/A	MP-50 Wet Vault		Schools	Low
Cypress Lane	Otay Ranch V-7	R-2D	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Indigo	Otay Ranch V-7	R-1A	MP-52 Drain Insert		Residential	Medium

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Jacaranda	Otay Ranch V-7	R-1B	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Monte Sereno	Otay Ranch V-7	R-2C	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Mosaic	Otay Ranch V-7	R-7	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Santa Barbara	Otay Ranch V-7	R-2A	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Tapestry	Otay Ranch V-7	R-6A	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Terracotta	Otay Ranch V-7	R-5	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Terraza	Otay Ranch V-7	R-2B	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Medium
Otay Ranch Village 2						
Otay Ranch Village 2 R9 KB Homes	Otay Ranch Village 2	Monterey			Residential	High
Rolling Hills Ranch						
Castillian	Rolling Hills Ranch	N9B		TC-22 Extended Det Basin	Residential	Medium
Clearstory	Rolling Hills Ranch	N12B		TC-22 Extended Det Basin	Residential	Medium
Fairhaven II	Rolling Hills Ranch	N7C	MP-52 Drain Insert		Residential	Medium
Fire Station #6	Rolling Hills Ranch	N/A	MP-52 Drain Insert		Municipal	Low

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Kingdom Hall - Rolling Hills Ranch	Rolling Hills Ranch	N/A	TC-32 Bioretention	TC-11 Infiltration Basin	Church	Low
Provence	Rolling Hills Ranch	N12A		TC-22 Extended Det Basin	Residential	Medium
Quintessa	Rolling Hills Ranch	N9A		TC-22 Extended Det Basin	Residential	Medium
Sedona	Rolling Hills Ranch	N4A2	MP-52 Drain Insert		Residential	Medium
San Miguel Ranch						
Belleza	San Miguel Ranch	Neighborhood B	MP-51 Vortex Separator		Residential	Low
Mantilla	San Miguel Ranch	Neighborhood C	MP-52 Drain Insert		Residential	Medium
Mar Brisa	San Miguel Ranch	N4A1	MP-52 Drain Insert		Residential	Medium
Mount San Miguel Community Park	San Miguel Ranch	N/A	TC-32 Bioretention	TC-30 Vegetated Swale	Municipal	High
Ventana I	San Miguel Ranch	Planning Area F	MP-52 Drain Insert		Residential	Medium
Ventana II	San Miguel Ranch	Planning Area G	MP-52 Drain Insert		Residential	Medium
Estrella	San Miguel Ranch	J2	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Sunbow						
Bella Sol	Sunbow	NA	MP-51 Vortex Separator		Residential	Low
The Summit						

Project Name	Subdivision	Neighborhood	Types of BMP		Category	Inspection Priority
			BMP Type- Group I	BMP Type - Group II		
Andora	The Summit	R-9B	MP-52 Drain Insert		Residential	Medium
Capria	The Summit	R9E	MP-52 Drain Insert		Residential	Medium
Cortina	The Summit	R9D	MP-52 Drain Insert		Residential	Medium
Firenze	The Summit	R9A	MP-52 Drain Insert		Residential	Medium

Total Projects:: **194**

Attachment B

• Construction Inventory

Attachment B
FY 2010-2011 Construction Sites Inventory

The construction site inventory is updated monthly. This attachment lists construction sites for the last month of the reporting period. Previous months' inventories are available in the City's database.

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Eastlake Summit					
Eastlake Summit	Cortina	R9D	Active	EL104I	Low
Eastlake Summit	Andora	R9B	Active	EL103I	Low
Eastlake Summit	Veranza	R9C	Inactive-Not Complete	EL106I	Low
Miscellaneous					
Miscellaneous	St Pius Catholic Church	N/A	Active	PG786	Medium
Miscellaneous	La Roca Comunidad Cristiana	N/A	Inactive-Not Complete	OR196G	Low
Miscellaneous	Oxford Street Improvements	N/A	Active	STL305	High
Miscellaneous	750 Main Street	N/A	Active	PG775	Medium
Miscellaneous	Saint Rose of Lima Parish-Phase 1, 293 H Street	N/A	Active	PG780 / PC1955	Low
Miscellaneous	Fourth Avenue Improvements Between L and Orange		Active	STL291	High
Miscellaneous	MTS Facility Expansion	N/A	Active		Medium
Miscellaneous	Second Avenue Street Improvements	N/A	Active	STL342	High

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Miscellaneous	Curb and Pedramps FY 10-11	N/A	Inactive-Not Complete	STL348	Low
Miscellaneous	Traffic Signal Modification	N/A	Active	TF369	Low
Miscellaneous	Sharp Cancer Center	N/A	Active		Medium
Miscellaneous	100 Walnut Dirve	N/A	Inactive-Not Complete	PC1792	Low
Miscellaneous	Villas at H Street	N/A	Inactive-Not Complete	PG749/PC1817	Low
Otay Ranch Village 11					
Otay Ranch Village 11	Trellis I	R15	Active	OR627I	Medium
Otay Ranch Village 11	Cordova -Courtyard	R17	Active	OR634I	Medium
Otay Ranch Village 11	Agave	R24A	Active	OR624I	Low
Otay Ranch Village 11	Saguaro	R24B	Inactive-Not Complete	OR624I	Low
Otay Ranch Village 11	The Lofts	R26	Inactive-Not Complete	OR635I	Low
Otay Ranch Village 11	Cordova	R17	Active		Low
Otay Ranch Village 11	Clover	R18	Active	OR633I	Medium
Otay Ranch Village 2					
Otay Ranch Village 2	Future SFD (Alley)-OR Village 2, R-5B	R5B	Active		Medium
Otay Ranch Village 2	Future SFD-OR Village 2, R-15	R15	Inactive-Not Complete	OR806I	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch Village 2	Future SFD-OR Village 2, R-18A	R18A	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-18B	R18B	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-19	R19	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-20	R20	Inactive-Not Complete	PG656	Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-23	R23	Inactive-Not Complete		Low
Otay Ranch Village 2	Future MFD-OR Village 2, R-26	R26	Active		Medium
Otay Ranch Village 2	Future SFD-OR Village 2, R-4	R4	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-24	R24	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD- OR Village 2, R-25A	R25A	Inactive-Not Complete		Low
Otay Ranch Village 2	Anacapa	R9B	Active		Medium
Otay Ranch Village 2	Future SFD-OR Village 2, R-21	R21	Inactive-Not Complete		Low
Otay Ranch Village 2	Future MFD-OR Village 2, R-28	R28	Inactive-Not Complete		Low
Otay Ranch Village 2	Anacapa	R9A	Active	OR805I	Medium
Otay Ranch Village 2	Future MFD- OR, V2, R-10	R10	Inactive-Not Complete		Low
Otay Ranch Village 2	Future MFD- OR Village 2, R-11	R11	Inactive-Not Complete		Low
Otay Ranch Village 2	Future MFD- OR Village 2, R-12	R12	Inactive-Not Complete	OR805G	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch Village 2	Future MFD-OR Village 2, R-13	R13 (Village 2 East)	Active	OR815I / G	Medium
Otay Ranch Village 2	Tavera	R29	Active		Medium
Otay Ranch Village 2	Future MFD-OR Village 2, R-17	R17	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-25B	R25B	Inactive-Not Complete		Low
Otay Ranch Village 2	La Purisma	R6	Active		Medium
Otay Ranch Village 2	Future MFD-OR Village 2, R-27	R27	Inactive-Not Complete		Low
Otay Ranch Village 2	Future Mixed Used	MU1	Inactive-Not Complete		Low
Otay Ranch Village 2	Future Mixed Use-OR Village 2, MU2	MU2	Inactive-Not Complete		Low
Otay Ranch Village 2	North- Future Mixed Use-OR Village 2, MU3	MU3	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-8	R8	Inactive-Not Complete		Low
Otay Ranch Village 2	North- Future MFD--OR Village 2, R-16	R16	Inactive-Not Complete		Low
Otay Ranch Village 2	Rosina Vista I	R30	Active	OR814G	Medium
Otay Ranch Village 2	Future MFD- OR, V@, R-14	R14 (Village 2 East)	Active	OR805G	Medium
Otay Ranch Village 2	Monterey	R5A	Active	OR811I	Medium
Otay Ranch Village 2	Mass Grading	N/A	Inactive-Not Complete	OR830G	Low
Otay Ranch Village 2	OR Village2 North Improvement 1	Unit 1	Inactive-Not Complete	OR811I	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch Village 2	OR Village2 North Improvement 2	Unit 2	Inactive-Not Complete	OR812I	Low
Otay Ranch Village 2	North- Future Mixed-OR, V2, R-5 to R-10	R5, R6, R7, R8, R9, R10	Active	OR809G	Medium
Otay Ranch Village 2	Rosina Vistas I	R30	Active	OR814I	Medium
Otay Ranch Village 2	Future Mixed- OR, Village 2, R-12 to R-30	R12, R13, R14, R15, R29, R30,	Active	OR805G	Medium
Otay Ranch Village 2	Presidio	R7	Active	OR808I	Medium
Otay Ranch Village 2	Tavera	R14	Active	OR813I	Medium
Otay Ranch Village 2	Future MFD- OR, V2, -MU3	MU3	Inactive-Not Complete	OR805G	Low
Otay Ranch Village 2	Future MFD- OR, V2, R-30	R30 (Village 2 East)	Active	OR805G	Medium
Otay Ranch Village 2	North- Heritage Road	N/A	Inactive-Not Complete	OR807G	Low
Otay Ranch Village 2, North					
Otay Ranch Village 2, North	Monterey	R5	Active	OR809G	Medium
Otay Ranch Village 6					
Otay Ranch Village 6	Treviana	R10	Active	OR418C	Low
Otay Ranch Village 7					
Otay Ranch Village 7	Indigo	R1A	Inactive-Not Complete	OR457I /OR451G	Low
Otay Ranch Village 7	Tapestry	R6A	Active	OR461G	Medium

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch Village 7	Mosaic I & II	R6B & R7A	Active	OR461G	Medium
Otay Ranch Village 7	OR, Village 7, R-7B	R7B	Inactive-Not Complete		Low
Otay Ranch Village 7	Jacaranda	R1B	Active	OR459I /OR451G	Medium
Otay Ranch Village 7	Otay Ranch Village 7 Backbone	N/A	Inactive-Not Complete		Low
Otay Ranch Village 7	Terracotta	R5	Active	OR458I /OR451G	Medium
Otay Ranch Village 7 ORC					
Otay Ranch Village 7 ORC	Terraza	R2B	Active	OR973I	Medium
Otay Ranch Village 7 ORC	Monte Sereno	R2C	Inactive-Not Complete	OR973I	Low
Otay Ranch Village 7 ORC	Open Space Designated -R4	R4	Inactive-Not Complete		Low
Otay Ranch Village 7 ORC	Santa Barbara	R2A	Active	OR973I	Medium
Rolling Hills Ranch					
Rolling Hills Ranch	Bella Lago -Future-SFD	R1	Active	BE002G /BE002I	Medium
Rolling Hills Ranch	Future SFD	N11	Active	RH241I	Medium
Rolling Hills Ranch	Future MFD- RH, N9-N12 Backbone	N9-N12 Backbone	Active	RH229G	Medium
Rolling Hills Ranch	Portola - Palma	N10A	Active	RH237I	Medium
Rolling Hills Ranch	Rolling Hills-Backbone Improvements	N9-N12	Inactive-Not Complete	RH231C	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Rolling Hills Ranch	Future MFD - RH N-11	N11	Active	RH241I	Medium
San Miguel Ranch					
San Miguel Ranch	Backbone Improvements-Avenida	N/A	Inactive-Not Complete	SM014C	Low
San Miguel Ranch	San Miguel Ranch Road	N/A	Inactive-Not Complete	SM013C	Low
San Miguel Ranch	Montecito	J1	Active	SM016I	Medium
San Miguel Ranch	Marvilla	L	Active	SM022I	Medium
San Miguel Ranch	Estrella	J2	Active	SM018I	Medium
San Miguel Ranch	Patria/Bontera	K	Active	SM015I	Medium
San Miguel Ranch	Westmont Senior Homes -509 Mount Miguel Road	N/A	Inactive-Not Complete	SM026G	Low

Total: **92**

• Municipal Source Inventory

Attachment C

Attachment C

Municipal Facility and Activity Source Inventory and Prioritization
FY 2010-2011

Facility Name	APN Number	Type of Facility	Address			Priority	Tributary
All Seasons Park	6442401000	Parks-Landscape-Rec Areas	1825	MAGDALENA	AV	High	
Animal Care Facility	6290605400	Animal Facilities	130	BEYER	WY	High	
Bay Boulevard Park	5670213201	Parks-Landscape-Rec Areas		BAY	BL	High	
Bonita Library	5930313100	Library	4375	BONITA	RD	High	√
Bonita Long Canyon Park	5941100500	Parks-Landscape-Rec Areas	1745	COLTRIDGE	LN	High	√
Breezewood Park	6425004600	Parks-Landscape-Rec Areas	1091	BREEZEWOOD	DR	High	√
Chula Vista Community Park	5953200200	Parks-Landscape-Rec Areas	1060	EASTLAKE	PW	High	√
Chula Vista Municipal Golf Course	5932402400	Parks-Landscape-Rec Areas	4475	BONITA	RD	High	√
Chula Vista Women's Club	5683004200	Parks-Landscape-Rec Areas	357	G	ST	High	
Civic Center and Admin Building	5681103300	Other Fixed Facilities	276	FOURTH	AV	Medium	
Civic Center Branch Library	5681530200	Other Fixed Facilities	365	F	ST	Low	
Community Youth Center	5723001100	Parks-Landscape-Rec Areas	465	L	ST	High	√
Conneley Park	6233143300	Parks-Landscape-Rec Areas	1559	CONNOLEY	AV	High	
Cottonwood Park	6424210600	Parks-Landscape-Rec Areas	1778	PALOMAR	ST	High	√
Discovery Park	6423930700	Parks-Landscape-Rec Areas	700	BUENA VISTA	WY	High	√
Downtown Parking Facility	5682702900	Other Fixed Facilities	340	F	ST	High	
Eastlake Branch Library	5953201700	Library	1120	EASTLAKE	PW	Low	√
Eucalyptus Park	5651200300	Parks-Landscape-Rec Areas	47	FIFTH	AV	High	√
Explorer Park	6400301900	Parks-Landscape-Rec Areas		RANCHO DEL REY	PW	High	√
Fire Station #1	5681103300	Fire Stations	447	F	ST	Low	
Fire Station #2	5743003300	Fire Stations	80	J	ST	High	√

Facility Name	APN Number	Type of Facility	Address			Priority	Tributary
Fire Station #3	6411213000	Fire Stations	1410	BRANDYWINE	AV	Low	√
Fire Station #4/Training Tower	6423910600	Fire Stations	850	PASEO RANCHERO		Medium	√
Fire Station #5	6192110100	Fire Stations	391	OXFORD	ST	Low	√
Fire Station #6	5955700100	Fire Stations	605	MOUNT MIGUEL	RD	Low	√
Fire Station #7	6443101500	Fire Stations	1640	SANTA VENETIA	ST	Low	√
Fire Station #8	5950805400	Fire Stations	1180	WOODS	DR	Low	
Fire Station #9	6202401700	Fire Stations	266	ONEIDA	ST	Low	
Friendship Park	5681530100	Parks-Landscape-Rec Areas	365	F	ST	High	
Gayle McCandliss Park	6390301300	Parks-Landscape-Rec Areas	415	J	ST	High	√
Greg Rogers Park	6200600300	Parks-Landscape-Rec Areas	1189	OLEANDER	AV	High	
H Street Land Application	5740300800	Other Fixed Facilities		H	ST	High	√
Harborside Park	6182005900	Parks-Landscape-Rec Areas	670	OXFORD	ST	High	√
Harvest Park	6425814800	Parks-Landscape-Rec Areas	1381	PALOMAR	ST	High	√
Heritage Park & Community Center	6425601100	Parks-Landscape-Rec Areas	1550	PALOMAR	ST	High	√
Hilltop Park	5744104600	Parks-Landscape-Rec Areas	780	HILLTOP	DR	High	√
Holiday Estates I&II	6233413100	Other Fixed Facilities	27	CONNOLEY	CI	Low	
Horizon Neighborhood Park	6410721600	Parks-Landscape-Rec Areas	970	PALOMAR	ST	High	√
Independence Park	6423205600	Parks-Landscape-Rec Areas	1248	CALLE SANTIAGO		High	√
John Lippit PWC & Admin Building	6442301100	Other Fixed Facilities	1800	MAXWELL	RD	High	
Ken Lee Administration Building	5681814400	Other Fixed Facilities	430	F	ST	Low	
Lancerlot Park	5711701800	Parks-Landscape-Rec Areas	750	K	ST	High	
Landscape Maintenance		Mobile Mun Activities				Medium	
Lauderbach Park	6192113700	Parks-Landscape-Rec Areas	333	OXFORD	ST	High	√
Loma Verde Park & Recreation Center	6240107200	Parks-Landscape-Rec Areas	1420	LOMA	LN	High	

Facility Name	APN Number	Type of Facility	Address			Priority	Tributary
Los Ninos Park	6243411200	Parks-Landscape-Rec Areas	150	TEAL	ST	High	√
Mackenzie Creek Park	5955700200	Parks-Landscape-Rec Areas	2275	MACKENZIE CREEK	RD	High	√
Marisol Park	5933803600	Parks-Landscape-Rec Areas	916	RANCHO DEL REY	PW	High	√
Memorial Park	5683004300	Parks-Landscape-Rec Areas	373	PARK	WY	High	
Mini Park	5952145100	Parks-Landscape-Rec Areas	753	ASHBROOK	DR	High	√
Montevalle Park & Community Center	5957360600	Parks-Landscape-Rec Areas	840	DUNCAN RANCH	RD	High	
Mount San Miguel Community Park	5950312300	Parks-Landscape-Rec Areas	2335	PASEO VERACRUZ		High	√
Mountain Hawk Park	6435180200	Parks-Landscape-Rec Areas	1475	LAKE CREST	DR	High	
MS4 Throughout the City of CV		Others				High	
Nature Center	5650102900	Parks-Landscape-Rec Areas	1000	GUNPOWDER POINT	DR	High	√
Norman Park and Recreation Center	5683331100	Parks-Landscape-Rec Areas	270	F	ST	High	
Old Public Works Yard	5670312700	Public Work Facilities	707	F	ST	High	√
Orange Avenue Fields	6240107200	Parks-Landscape-Rec Areas	160	ORANGE	AV	High	
Otay Park & Recreation Center	6232302600	Parks-Landscape-Rec Areas	3554	MAIN	ST	High	
Palomar Park	6200504900	Parks-Landscape-Rec Areas	1359	PARK	DR	High	
Parkway Community Center	5683004300	Parks-Landscape-Rec Areas	373	PARK	WY	High	
Paseo Del Rey Park	6401412500	Parks-Landscape-Rec Areas	750	PASEO DEL REY		High	√
Police Administration Building	5682703100	Other Fixed Facilities	315	FOURTH	AV	Low	
Pool, Fountain, Water Feature Maintenance		Mobile Mun Activities				Medium	
Power Washing-Graffiti Removal		Mobile Mun Activities				High	
Rancho Del Rey Park	6422800300	Parks-Landscape-Rec Areas	1131	BUENA VISTA	WY	High	√
Reinstra Ball Fields	6240107300	Parks-Landscape-Rec Areas	1500	MAX	AV	High	
Roads, Streets, Highways		Others				High	
Rohr Park	5932400500	Parks-Landscape-Rec Areas	4548	SWEETWATER	RD	High	√

Facility Name	APN Number	Type of Facility	Address			Priority	Tributary
Salt Creek Park & Community Center	6434830200	Parks-Landscape-Rec Areas	2710	OTAY LAKES	RD	High	
Santa Cora Park	6420804000	Parks-Landscape-Rec Areas	1365	SANTA CORA	AV	High	√
Santa Venetia Park	6430512700	Parks-Landscape-Rec Areas	1500	MAGDALENA	AV	High	√
SDGE Park	6230720700	Parks-Landscape-Rec Areas	1438	HILLTOP	DR	High	
Sherwood Park	6233321900	Parks-Landscape-Rec Areas	69	SHERWOOD	ST	High	
South Branch Library	6230102900	Library	389	ORANGE	AV	Low	
Special Events Throughout the City of CV		Others				High	
Street, Sidewalk Repair & Maintenance		Mobile Mun Activities				Medium	
Sunbow Park	6402725100	Parks-Landscape-Rec Areas	690	NAPLES	ST	High	
Sunridge Park	6400502000	Parks-Landscape-Rec Areas	952	BEECHGLEN	DR	High	√
Sunset View Park	6430330100	Parks-Landscape-Rec Areas	1390	GREENSVIEW	DR	High	√
Terra Nova Park	5921922700	Parks-Landscape-Rec Areas	450	HIDDEN VISTA	DR	High	√
Tiffany Park	6420302900	Parks-Landscape-Rec Areas	1713	ELMHURST	ST	High	√
Valle Lindo Park	6440102600	Parks-Landscape-Rec Areas	545	SEQUOIA	ST	High	√
Veterans Park & Recreation Center	6411221000	Parks-Landscape-Rec Areas	785	PALOMAR	ST	High	
Voyager Park	6400901900	Parks-Landscape-Rec Areas	1178	J	ST	High	√
Windingwalk Park	6436101500	Parks-Landscape-Rec Areas	1675	EXPLORATION FALLS	DR	High	

Total: **86**

- Commercial Source Inventory
  Prioritization Mobile Stationary

Attachment D1

Attachment D.1
Commercial Source Inventory and Prioritization
Mobile and Stationary
FY 2010-2011

Note: All facilities are in the San Diego Bay Watershed Management Area. Businesses marked as tributary drain to a 303(d) listed waterbody. The City is in the process of determining if facilites contribute pollutants for which the waterbody is listed.

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Cat (i-v) Auto Related									
3M Brakes & Lube	6220620500	1550	FRONTAGE	RD	Cat (i-v) Auto Related	Low	7542		
3MC Body & Paint & Auto Center	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	Low	7532		
A Spec Autocare	5957404500	688	CHAPEL HILL	DR	Cat (i-v) Auto Related	Low	7538	√	
A&A Auto Body & Paint	6181520400	1077	BROADWAY		Cat (i-v) Auto Related	Low	7532		√
A&C Machine Shop and Auto Repair	622021800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538		
A&D Automotive	6181421500	1088	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
A&E Smog Test Only	6290603300	231	BEYER	BL	Cat (i-v) Auto Related	Low	7538		
A&V Road Service	6182000100	1100	INDUSTRIAL	BL	Cat (i-v) Auto Related	Low	7538		√
A-1 Auto Detail & Repair	5711531500	696	BROADWAY		Cat (i-v) Auto Related	Low	7538		
A-1 Autobody DBA Calico	5672010200	402	OAKLAWN	AV	Cat (i-v) Auto Related	Low	7532	√	
AARDVARC Racing	5953711700	1007	OAK HILL	DR	Cat (i-v) Auto Related	Low	5531	√	
ABC Electromechanic Projects	6242500800	1550	OCALA	AV	Cat (i-v) Auto Related	Low	7538	√	
ABC Motors Inc./Kirker Customs	5734500500	310	K	ST	Cat (i-v) Auto Related	Low	7532		√
ABC Rebuilders	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7532		
Abel Najera	6291200800	3679	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Abel's Auto Body	6231320800	311	TREMONT	ST	Cat (i-v) Auto Related	Low	7532		
ABS Collision Center	6191211000	1137	THIRD	AV	Cat (i-v) Auto Related	Low	7532		√
Absolute Tinting	5955904200	685	EL PORTAL	DR	Cat (i-v) Auto Related	Low	7549	√	
Access II Towing	6232300600	1350	MAX	AV	Cat (i-v) Auto Related	High	7549		
Ace Auto	6241803500	1647	MARL	AV	Cat (i-v) Auto Related	Low	7538	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
ACE Autocare Experts	6182100600	1135	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Advanced Autobody and Paint	6180621200	951	BROADWAY		Cat (i-v) Auto Related	High	7532		
AG Auto Repair	5651703200	107	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Agustin Auto Repair	6290402100	1747	BROADWAY		Cat (i-v) Auto Related	Low	7532		
Al Smith	6232023100	275	ZENITH	ST	Cat (i-v) Auto Related	Low	7542		
Albert Stiehle Parts	6390106700	627	WINDSOR	CI	Cat (i-v) Auto Related	Low	5531	√	
All Around Service	5730620800	268	SHASTA	ST	Cat (i-v) Auto Related	Low	7538	√	
Almacen Automotriz Pacifico	6424100318	1355	CALLEJON PALACIOS		Cat (i-v) Auto Related	Low	5531	√	
America Test Only & Regular Smog	6290603300	231	BEYER	WY	Cat (i-v) Auto Related	Low	7533		
American Towing & American Dismantling Inc.	6291001600	140	REED	CT	Cat (i-v) Auto Related	High	7549		
Andrade Auto Glass	5671011500	572	MADRONA	ST	Cat (i-v) Auto Related	Low	7532	√	
Andrade Auto Glass	5711920500	721	OAKLAWN	AV	Cat (i-v) Auto Related	Low	7532	√	
Angelos Towing & Recovery	5634512900	260	TROUSDALE	DR	Cat (i-v) Auto Related	High	7549		
Annex San Diego #1 Inc/Cheelys	5653201100	45	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Anthony's Auto Center	5662321200	305	E	ST	Cat (i-v) Auto Related	Low	7549		
Apollo Tire Co	6220433700	1421	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Aragon Car Care Center	5933811700	894	LAGASCA	PL	Cat (i-v) Auto Related	Low	5531	√	
Argent Classics	6421500100	1698	HARVARD	ST	Cat (i-v) Auto Related	Low	7532	√	
Arias Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538		
Auto Express Services	5722705100	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Auto Partes Maya	6411220700	825	PALOMAR	ST	Cat (i-v) Auto Related	Low	5531		√
Auto Servicio La Vuelta	6426704900	1307	MONTERA	ST	Cat (i-v) Auto Related	Low	5531	√	
Auto Smog Check Centers	5672001200	416	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Autoland Inc.	5922001500	354	H	ST	Cat (i-v) Auto Related	Low	5511		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Automaster Automotive Center	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7533		
Automatic Transmission	6180220800	609	ARIZONA	ST	Cat (i-v) Auto Related	Low	7537		√
Autotech Motorsports	6191212700	286	EMERSON	ST	Cat (i-v) Auto Related	Low	7538		√
Autozone #2810	6193001600	1315	THIRD	AV	Cat (i-v) Auto Related	Low	5531		
Autozone #2817	5670411700	225	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Autozone #5643	5722811300	897	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Autozone #5644	6402924000	885	H	ST	Cat (i-v) Auto Related	Low	5531		√
B&J Auto Repair Smog & Sales	5711531500	696	BROADWAY		Cat (i-v) Auto Related	High	7538		
Barajas Auto Tech	5753010200	1017	HILLTOP	DR	Cat (i-v) Auto Related	Low	7538		
Barracuda Wheel Alignment	6290603200	1655	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Batteries Unlimited	6221021800	2244	MAIN	ST	Cat (i-v) Auto Related	Medium	5531		
Battery & Auto Center	6220913200	1510	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Bay Auto Electric	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Becka Automotive	5670900400	736	F	ST	Cat (i-v) Auto Related	Low	7538		
Bellos Rods & Customs	6221023700	1616	INDUSTRIAL	BL	Cat (i-v) Auto Related	High	7532		
Beto's Mobile Mechanic	5734401700	396	SIERRA	WY	Cat (i-v) Auto Related	Low	7538	√	
Better Bumper	6435711400	1586	MOUNT TAMALPAIS	AV	Cat (i-v) Auto Related	Low	7538	√	
Beyer Supreme Tires	6190605600	1055	THIRD	AV	Cat (i-v) Auto Related	Low	7534		√
Beyer Supreme Tires #3	5672002400	647	H	ST	Cat (i-v) Auto Related	Low	7534		
Big O Tires	5671402400	399	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Bolanos Windshield	6231423400	276	MONTGOMERY	ST	Cat (i-v) Auto Related	Low	7532		
Bonita Valley Auto Care Inc.	5912402700	3995	BONITA	RD	Cat (i-v) Auto Related	Low	7538		√
Bowlins Auto Service	5713100800	850	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Brake Depot	6182803200	1232	BROADWAY		Cat (i-v) Auto Related	Low	7538		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Brake Express	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Brakes and Tunes	6220433700	1403	BROADWAY		Cat (i-v) Auto Related	Low	7542		
Broadway Auto Glass Inc.	5650601200	98	BROADWAY		Cat (i-v) Auto Related	Low	7532		√
Broadway Automotive	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Broadway Recycling Center	6290402600	1778	BROADWAY		Cat (i-v) Auto Related	Low	4953		
Budget Tires	6230301200	275	ORANGE	AV	Cat (i-v) Auto Related	Low	5531		
Butlers Auto	5684200700	286	G	ST	Cat (i-v) Auto Related	Low	7538		
C&V Auto	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7538		√
C-1 B Tune Up	5953211449	1055	TORREY PINES	RD	Cat (i-v) Auto Related	Low	7538	√	
Calif Smog Certification Inc.	5660105500	11	THIRD	AV	Cat (i-v) Auto Related	Low	7549		√
California Smog Certification Inc.	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7549		
California Smog Test Only	5623231300	425	C	ST	Cat (i-v) Auto Related	Low	7538		√
California Tire and Service Centers	5672311300	471	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Camacho Tires	6180103000	650	MOSS	ST	Cat (i-v) Auto Related	Low	7534	√	
Candys Auto Body Shop	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7532		√
Castaneda's Auto Repair	5650401500	44	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Charlies Auto Electric	5652301700	186	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Cherniss Tire World Inc.	5651703200	101	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Chichi's Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538		
Chula Vista Auto Inc.	5650401400	24	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Chula Vista Auto Repair	6221901000	2627	FAIVRE	ST	Cat (i-v) Auto Related	High	7538		
Chula Vista Engine Rebuilding	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Chula Vista Smog	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Chula Vista Towing	5711531200	625	J	ST	Cat (i-v) Auto Related	High	7549		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Classic Auto Body	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	High	7532		
Collision Parts Warehouse	6232302800	3740	MAIN	ST	Cat (i-v) Auto Related	High	5531		
Courtney Tire	5712001200	726	BROADWAY		Cat (i-v) Auto Related	Low	7534		
CSK Auto Inc. #1153	5670411900	241	BROADWAY		Cat (i-v) Auto Related	Low	5531		
CSK Auto Inc. #1486	6192806100	1396	THIRD	AV	Cat (i-v) Auto Related	Low	5531		
CV Fast	6230825400	1492	ALBANY	AV	Cat (i-v) Auto Related	Low	5531	√	
D & D Smog Test	6291303100	145	MACE	ST	Cat (i-v) Auto Related	Low	7533		
D and D Smog Station	6291303100	145	MACE	ST	Cat (i-v) Auto Related	Low	7532		
D III Industrial	6291302700	187	MACE	ST	Cat (i-v) Auto Related	High	7513		
DA Tint Shop	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7532		
Daniels Tire Service	5623500600	575	C	ST	Cat (i-v) Auto Related	Low	5531		√
Dave's Auto Service	5634313100	359	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538		√
Diamond Finish	6402131800	897	MESA	PL	Cat (i-v) Auto Related	Low	7542	√	
Doctor Jay Automobile Service	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Dons Auto Service Inc.	6390806800	495	TELEGRAPH CANYON	RD	Cat (i-v) Auto Related	Low	7538		√
Double AA Tire Co Inc.	6231921400	3124	MAIN	ST	Cat (i-v) Auto Related	Low	5531		
DR Kar	5953312500	1153	CRYSTAL DOWNS	DR	Cat (i-v) Auto Related	Low	7538	√	
DR Truck & Trailer Repair	5693802100	10	H	ST	Cat (i-v) Auto Related	Low	7538		
DR Truck & Trailer Repair	6404300722	1136	MAGELLAN	WY	Cat (i-v) Auto Related	Low	7538	√	
Dynamic Results Inc/Eddies Tires & Auto Repai	6221403600	2677	MAIN	ST	Cat (i-v) Auto Related	High	5531		
Earl Scheib of CA Inc 243	6180621200	951	BROADWAY		Cat (i-v) Auto Related	Low	7532		√
Econo Lube N Tune #56	6180612000	903	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Economy Tires	6220412600	1430	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Economy Transmissions	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	High	7538		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Eddie's Tires and Auto Repair	6290101200	1743	BROADWAY		Cat (i-v) Auto Related	High	7549		
Enterprise Rent A Car Sales	6182100200	1129	BROADWAY		Cat (i-v) Auto Related	Low	5511		√
Euro Specialties	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Evans Tire & Service Center #49	6180211100	948	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Explorer Competition Products	5953000600	2311	BOSWELL	RD	Cat (i-v) Auto Related	Low	5531		√
Express Tire	5710502100	646	H	ST	Cat (i-v) Auto Related	Low	7534		
Express Tire dba American Auto Service	5672003600	430	BROADWAY		Cat (i-v) Auto Related	High	7538		
F &V Auto Repair	6290200100	2801	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Fernando's Smog	6180220800	609	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538		√
Fiber Molds	6221023400	767	ANITA	ST	Cat (i-v) Auto Related	Low	7532		
Fily's Auto Shop	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538		
Formiller Motors	6181510100	1001	BROADWAY		Cat (i-v) Auto Related	Low	5511		√
Formula Auto Repair	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538		√
Franks Garage	5634313100	359	TROUSDALE	DR	Cat (i-v) Auto Related	High	7532		
Freeway Tire Co	6441810100	1861	NIRVANA	AV	Cat (i-v) Auto Related	Low	5531		
Fritz Garage	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538		√
Fuller Ford	6440420400	560	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511		
Fuller Honda	6440420500	580	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511		
G & G Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7532		
Galaz Auto Service	6220432200	545	ORANGE	AV	Cat (i-v) Auto Related	Low	7538		
Garage 13 Performance	6436624700	1574	STARGAZE	DR	Cat (i-v) Auto Related	Low	5531	√	
Geos Auto Service	5671030600	355	BROADWAY		Cat (i-v) Auto Related	Low	7538		
German Werks	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538		
GK Smog & Auto Repair	6181421700	1088	BROADWAY		Cat (i-v) Auto Related	Low	7538		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Glass Depot	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7536		√
GMJ Enterprises LLC/Maximus Auto Center	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Goodwins Auto Kraft	6396505400	576	MANZANITA	ST	Cat (i-v) Auto Related	Low	7538	√	
Gre-Laz Complete Auto Repair	5651703200	107	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Guero's Towing	6242103300	485	SATINWOOD	WY	Cat (i-v) Auto Related	Low	7549	√	
H&A Electric Motors	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7538		
Happy Auto Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Henry Auto Glass	6182901400	1255	BROADWAY		Cat (i-v) Auto Related	Low	7532	√	
Hernandez Tire Sales	6232021800	3236	MAIN	ST	Cat (i-v) Auto Related	High	5531		
Hi Voltage Industries	5742111700	649	GRETCHEN	RD	Cat (i-v) Auto Related	Low	7538	√	
Hot Spot Window Tinting	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	7549		
Huerta Ruben	5651610100	101	JEFFERSON	AV	Cat (i-v) Auto Related	Low	7538		√
Hunter Service & Parts Inc.	5721320500	673	ASH	AV	Cat (i-v) Auto Related	Low	7538		
Hypersport Performance	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	5531		
In and Out Transmissions	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538		
In-N-Out Auto Glass	6191102400	1120	THIRD	AV	Cat (i-v) Auto Related	Low	7536		√
International Transmission	6230300900	1580	THIRD	AV	Cat (i-v) Auto Related	Low	7537		
Investruck Inc.	6210100100	1470	BAY	BL	Cat (i-v) Auto Related	Low	7538		√
J&H Auto Repair	5671030100	355	BROADWAY		Cat (i-v) Auto Related	Low	7538		
J&J Chrome & Polish	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532		
J&L Auto Repair Inc.	5670531200	273	BROADWAY		Cat (i-v) Auto Related	High	7538		
J&V Automotive	6220620500	1550	FRONTAGE	RD	Cat (i-v) Auto Related	Low	7538		
JC Towing Inc.	6221901800	2515	FAIVRE	ST	Cat (i-v) Auto Related	High	7549		
Jesse Smog	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	7538		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Jiffy Lube #897	5652402700	593	E	ST	Cat (i-v) Auto Related	High	7549		√
Jim's Glass & Screen	6221113200	2540	MAIN	ST	Cat (i-v) Auto Related	High	7536		
JJ & Vic Auto Service & Repair	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
JJ Auto Body	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532		
John's Towing	6206021700	1298	WAXWING	LN	Cat (i-v) Auto Related	High	7549	√	
JP Truck and Trailer Repair	5651510200	105	WOODLAWN	AV	Cat (i-v) Auto Related	Low	7538	√	
JT Associates Inc/DBA Audio Xperts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Juans Auto Repair Inc.	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Julio C Battery	6232021800	1502	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Just Smog (T & TF Inc)	5731700100	605	THIRD	AV	Cat (i-v) Auto Related	Low	7538		
Kantruds Garage	5651622100	120	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Karillos Truck Tire and Road Service	5954200915	2178	CABO BAHIA		Cat (i-v) Auto Related	Low	7538	√	
Kars Machine Shop	6220121800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538		
KDR Enterprises Inc. DBA WABCO Products	5661903100	753	ANITA	ST	Cat (i-v) Auto Related	Low	5531		
Knova Tools LLC	5720802900	645	BROADWAY		Cat (i-v) Auto Related	Low	7532		
Kpucinos Auto Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538		
Kustom Nation Auto	6221115900	2524	MAIN	ST	Cat (i-v) Auto Related	Other	7538		
L&E Tire Service	6243662500	226	REGENCY	CT	Cat (i-v) Auto Related	Low	7534	√	
L&E Transmission Inc.	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7538		
La Media Operating Co. - World Petroleum Gas	6291303000	3733	MAIN	ST	Cat (i-v) Auto Related	High			
Ledezma Tire and Muffler 2	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	Low	5014		
Ledezma's Muffler Service	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Leemor Sound Inc	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Leer Truck Accessory Center	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	5531		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Low Price Auto Glass	6441820800	880	ENERGY	WY	Cat (i-v) Auto Related	Low	7536		
M&M Mobile Auto Repair	6231710300	437	MONTGOMERY	ST	Cat (i-v) Auto Related	Low	7538		
Madrid Glass	6190506200	1067	FOURTH	AV	Cat (i-v) Auto Related	Low	7532	√	
Main Car Care Inc	6231722700	2952	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
Main Clutch Co	6232301700	3800	MAIN	ST	Cat (i-v) Auto Related	High	5531		
Marc Goodwin Trucking	5741030300	72	MANKATO	ST	Cat (i-v) Auto Related	Low	7549	√	
Marcos Radiator	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Marcos Radiator	6221113200	2530	MAIN	ST	Cat (i-v) Auto Related	High	7539		
Marios Mobile Truck Body Repair & Driver	6240532300	4087	OTAY VALLEY	RD	Cat (i-v) Auto Related	Low	7532		
Marquez Auto Body Inc.	5734500500	310	K	ST	Cat (i-v) Auto Related	Low	7532		√
Martinez Smog Check	6231722700	2952	MAIN	ST	Cat (i-v) Auto Related	High	7533		
Martins Auto Transport	6391040600	1026	NOLAN	LN	Cat (i-v) Auto Related	Low	7549	√	
Max Auto Detail & Auto Elelctric	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7542		
Maximus Auto Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
MBTS Corporation/Econo Lube and Tune #165	5633704200	3008	SECOND	AV	Cat (i-v) Auto Related	Low	7538		√
McCune Chrysler Dodge	6440414200	1885	AUTO PARK	PL	Cat (i-v) Auto Related	High	5511		
MCK Auto Repairr	6291200100	3611	MAIN	ST	Cat (i-v) Auto Related	High	7538		
mdt Electronics	6291201700	3639	MAIN	ST	Cat (i-v) Auto Related	High			
Midas Rajmp Inc.	5671030300	363	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Miguel Auto Mobile Repair	5956303700	2474	FALCON VALLEY	DR	Cat (i-v) Auto Related	Low	7538	√	
Miguel Garnica	6230605800	1420	SECOND	AV	Cat (i-v) Auto Related	Low	7538		
Mike Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Mike's Recycling	6290607200	3151	MAIN	ST	Cat (i-v) Auto Related	High	7389		
Mikes Auto Repair & Smog Center	5662321500	305	E	ST	Cat (i-v) Auto Related	Low	7538		

Facility Name	APN Number		Address		Category	Priority	SIC Number	Mobile Business	Tributary
Mikes Auto Repair & Smog Center	5680442300	300	E	ST	Cat (i-v) Auto Related	Low	7538		
Mobil Mercedez Specialist	6290402100	1747	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Mobile Trenz Autosound	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Monell Brake Service	5722705100	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Monos Brake and Alignment	6290603300	231	BEYER	BL	Cat (i-v) Auto Related	Low	7538	√	
Mossy Nissan	6440414300	1875	AUTO PARK	AV	Cat (i-v) Auto Related	Low	5511		
Mr. Smog	6180221100	960	BROADWAY		Cat (i-v) Auto Related	High	7532		
MTM Mobile Truck Repair	6240420446	1640	MAPLE	DR	Cat (i-v) Auto Related	Low	7538	√	
Murrays Automobile	5634410500	320	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538		√
NAPA Auto Parts	6180103700	680	L	ST	Cat (i-v) Auto Related	Low	5531		
Need Tow Inc.	5670311100	240	WOODLAWN	AV	Cat (i-v) Auto Related	Low	7549		√
Neill's Suzuki Auto Repair	5712610100	804	COLORADO	AV	Cat (i-v) Auto Related	Low	7538	√	
New Auto Concepts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7532		
Nice & Easy Autobody & Paint Inc.	6221116000	2350	MAIN	ST	Cat (i-v) Auto Related	High	7532		
Octavio's Garage	5711230800	632	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Official Brake & Lights Inspection Center	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Oldham Ranch Automotive	5722705100	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
One Stop Auto Access Plus	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
One Stop Under Car	5670902100	360	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Orion's Mobile Auto Service	6433202200	2554	FERN VALLEY	RD	Cat (i-v) Auto Related	Low	7538	√	
P&R Motors	6191710300	1165	THIRD	AV	Cat (i-v) Auto Related	Low	5511		√
Pacific Auto Glass	6191710300	1165	THIRD	AV	Cat (i-v) Auto Related	Low	7536		√
Pacific Auto Glass	6191710800	1193	THIRD	AV	Cat (i-v) Auto Related	Low	7536		√
Pacific Bay Auto	6222111000	150	JACQUA	ST	Cat (i-v) Auto Related	High	5511		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Pacific Supply Co/Parts Plus	6180101500	660	L	ST	Cat (i-v) Auto Related	Low	5531		
Parts Plus Auto	5650601200	98	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Paxton Towing	6290620300	3487	MAIN	ST	Cat (i-v) Auto Related	High	7549		
PB Auto Service	6291201600	3645	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Pep Boys Manny Moe & Jack of CA #651	5672004500	454	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Pep Boys Manny Moe & Jack of CA #872	6402932300	1000	TIERRA DEL REY		Cat (i-v) Auto Related	Low	5531		√
Perfect Star European Auto Repair	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Performance Auto Repair & Smog	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Performance Team Warehouse Inc.	5713100600	842	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Peters Precision Auto	5634512200	310	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538		√
PO Auto Repair	6291201600	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Polos Auto Paint Supply	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532		
Precision Auto Electric	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7532		
Precision Automotive	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	7537		
Precision Motors	5712002900	619	K	ST	Cat (i-v) Auto Related	Low	7538		
Pro Tires	6206012200	437	THRUSH	ST	Cat (i-v) Auto Related	Low	7534	√	
Prokar Products	6222110200	2471	MAIN	ST	Cat (i-v) Auto Related	Low	5531		
Protech Autoglass	5653301100	546	CASSELMAN	ST	Cat (i-v) Auto Related	Low	7536	√	
Quick Tows & Road Service	5680710200	209	THIRD	AV	Cat (i-v) Auto Related	Low	7549		
R&G Auto Electric	6180211300	924	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
R&L Performance Auto Service	6220111900	887	PALOMAR	ST	Cat (i-v) Auto Related	Low	7538		
R&R General Auto Repair	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Rafael General Atuo Repair	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Rags Enterprises Inc./Tip Top Auto	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		

Facility Name	APN Number		Address		Category	Priority	SIC Number	Mobile Business	Tributary
Rainbow Striping	6441301100	981	MONSERATE	AV	Cat (i-v) Auto Related	Low	7532	√	
Ramz Mobile Auto Care	6391510500	394	MONTCLAIR	ST	Cat (i-v) Auto Related	Low	7538	√	
Rauls's Body Shop	6170712200	790	PALOMAR	ST	Cat (i-v) Auto Related	Low	7532		
Rays Mobile Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538		
RG Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538		
Ricardos's Custom Covers	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	5531		
RNA Motor Works	5956503500	737	SAN GABRIEL	PL	Cat (i-v) Auto Related	Low	7538	√	
Road One Towing Inc	6170600200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549		
Roman's Truck Body & Paint MJP	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532		
Romans Tires/Truck & Body	6221902000	2513	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Ruben's Auto Electronics	6220412700	1420	BROADWAY		Cat (i-v) Auto Related	Low	7538		
S & H Motors	6191213000	292	EMERSON	ST	Cat (i-v) Auto Related	Low	7538		√
Safelite Auto Glass #6150	5672001200	416	BROADWAY		Cat (i-v) Auto Related	Low	7536		
Sams Muffler Radiators	6290603200	225	BEYER	WY	Cat (i-v) Auto Related	High	7533		
San Diego Automotive Inc	5661320100	48	HILLTOP	DR	Cat (i-v) Auto Related	Low	5531		√
San Diego Diesel Parts	6392901200	252	INKOPAH	ST	Cat (i-v) Auto Related	Low	5531	√	
San Diego Tires and Brakes	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Sanchez Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538		
SCJ Auto Repair	6240602800	4501	OTAY VALLEY	RD	Cat (i-v) Auto Related	Low	7538		
SCJ Towing	6290606000	3211	MAIN	ST	Cat (i-v) Auto Related	High	7549		
Scotts Porsche	5651623000	118	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Sir Y Incorporated/DBA Sir Y Auto Group	5722120600	777	BROADWAY		Cat (i-v) Auto Related	Low	5511		
Skyline Garage	5650401000	615	CHULA VISTA	ST	Cat (i-v) Auto Related	Low	7538		√
Smog Center	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Smog Check Station	6180221100	960	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
SO California Discount Tire	5711230200	600	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Soundelux	6221112500	2490	MAIN	ST	Cat (i-v) Auto Related	High	5531		
South Bay Auto Haus	5634410100	310	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538		√
South Bay Auto Parts Inc.	6190104100	908	THIRD	AV	Cat (i-v) Auto Related	Low	5531		√
South Bay Auto Repair	5713100500	811	BROADWAY		Cat (i-v) Auto Related	Low	7538		
South Bay Collision Center	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7532		
South Bay Datsun Auto Repairs	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538		
South Beach Auto Sales/El Valle Auto Sales Inc	5713100700	846	BROADWAY		Cat (i-v) Auto Related	Low	5511		
South Coast Alignment	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Southbay Auto Glass	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	Low	7536		
Southbay Motorsports	6440412000	1890	AUTO PARK	PL	Cat (i-v) Auto Related	High	5941		
Southbay Tire & Auto Service	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Southbay Tools	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Medium	7532		
Southbay Tuning Automotive Repair	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	7532		
Southern California Reconditioning	5661020100	67	DEL MAR	AV	Cat (i-v) Auto Related	Low	7532	√	
Sparks Tune Up of CV	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Special Smog Test Only	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Speed Merchant Inc/American Tire Distributor	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	5531		
Sunbelt Towing Inc DBA Western Towing	6170601200	1171	FRONTAGE	RD	Cat (i-v) Auto Related	Low	7549		
Super Low Price Auto Glass #23	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Superior Auto Body Group	5661900600	363	E	ST	Cat (i-v) Auto Related	Low	7538		
Superior Auto Body & Paint	5662311000	347	E	ST	Cat (i-v) Auto Related	Low	7532		
Superior VW Automotive Repair	6221113400	2578	MAIN	ST	Cat (i-v) Auto Related	High	7538		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
T-100 Auto Repair	6232021900	3232	MAIN	ST	Cat (i-v) Auto Related	High	7532		
Tap Acquisition LLC/4 Wheel Parts & Perform Center	6220433700	1427	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Taps Auto Smog	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Tech Transmissions	5651402400	1747	BROADWAY		Cat (i-v) Auto Related	High	7532		
Ted Johnson Garage	6192122600	1270	THIRD	AV	Cat (i-v) Auto Related	Low	7538		
The Autobroker	5680722600	203	CHURCH	AV	Cat (i-v) Auto Related	Low	5511	√	
Tinos Auto Tech	5712003100	720	BROADWAY		Cat (i-v) Auto Related	High	7532		
TK Auto Repair	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
TK Smog Check & Auto Repair	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Tony Discount Tires Brakes & More	6290603300	231	BEYER	WY	Cat (i-v) Auto Related	Low	7542		
Tony's Smog Test Only	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Tony's Tires	6290402700	1771	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Torque Performance Auto Center	6220433700	1421	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Toyo Tire USA Corporation	5952310200	860	KUHN	DR	Cat (i-v) Auto Related	Low	5531		√
Truebar Machine Shop & Auto Repair	6220433700	1403	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Trueline Auto Service	5661903100	377	E	ST	Cat (i-v) Auto Related	Low	7538		
Tune Plus	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Two Bit Tow of San Diego	5670311100	240	WOODLAWN	AV	Cat (i-v) Auto Related	Low	7549		√
U-Do-It / Auto Painting	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7532		√
Ulises Roberto Sanchez dba Batt Recycling	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	4953		
UNIC Smog Repair	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Union Auto Repair	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538		√
V&M Auto Mechanic	6191211000	1135	THIRD	AV	Cat (i-v) Auto Related	Low	7538		√
V&m Auto Mechanic	5684200200	409	THIRD	AV	Cat (i-v) Auto Related	Low	7538		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Valencia's Diesel Mobile	6220121800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538		
Valvoline Instant Oil Change	6420201700	1556	H	ST	Cat (i-v) Auto Related	Low	7538		√
Valvoline Instant Oil Change	6402924800	899	H	ST	Cat (i-v) Auto Related	Low	7538		√
Van's Suspension & Brake Center	6290100500	1741	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Victor's Auto Repair	5670510100	255	ASH	AV	Cat (i-v) Auto Related	Low	7538	√	
Victor's Auto Repair	6426406400	1645	RIDGE ROCK	CT	Cat (i-v) Auto Related	Low	7538	√	
Vidrio Towing	6240606000	2471	MAIN	ST	Cat (i-v) Auto Related	Low	7549		
Villegas Used Tires	5672001900	466	BROADWAY		Cat (i-v) Auto Related	Low	5531		
West Coast Mobile Mechanix	6180610100	935	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
West Coast Transmission	6221112900	1660	SILVAS	ST	Cat (i-v) Auto Related	Low	7537		
Western Towing	6170710200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549		
Wheel Depot	6290200400	2835	MAIN	ST	Cat (i-v) Auto Related	High	5531		
Xpress Motorsports	5623242400	45	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Zepeda's Radiator Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Zeppy Auto Repair	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538		
ZX Team	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	7538		√

Cat (iii-xxi)-Boat/Marina

Garcia's Detail and Repair	5713201400	867	COLORADO	AV	Cat (iii-xxi)-Boat/Marina	Low	3732	√	
Kaiulani Boat Service	6435163600	1446	YELLOWSTONE	AV	Cat (iii-xxi)-Boat/Marina	Low	3732	√	
Magana Yacht Repair	6220723500	778	ANITA	ST	Cat (iii-xxi)-Boat/Marina	Low	3732	√	
Sergio Hernandez Yacht Maintenance	6180611800	934	FIFTH	AV	Cat (iii-xxi)-Boat/Marina	High	3732	√	
Sterling Marine	6395203600	829	WILER	DR	Cat (iii-xxi)-Boat/Marina	Low	3732	√	

Cat iv-Equipment Relaled

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
ABLE Heating and Air Conditioning	6182005800	1020	COLORADO	AV	Cat iv-Equipment Relaled	Low	1711	√	
All Drain Rooter	6423111400	1267	CALLE CANDELERO		Cat iv-Equipment Relaled	Low	1711	√	
Allbrands A1 Appliance Service	5954605800	951	SAINT CLAIRE	DR	Cat iv-Equipment Relaled	Low	7623	√	
Antonio Plumbing	7762204202	577	PALOMAR	ST	Cat iv-Equipment Relaled	Low	1711	√	
Any Drain Rooter Service	6231412100	296	TREMONT	ST	Cat iv-Equipment Relaled	Low	1711	√	
Arrow Appliance Service	6400333300	1164	CALLE FLORECITA		Cat iv-Equipment Relaled	Low	7629	√	
B&D Power Services	6230202700	368	ANITA	ST	Cat iv-Equipment Relaled	Low	7629	√	
BJ's Rental Inc.	5733202000	317	K	ST	Cat iv-Equipment Relaled	Low	7359		
California Plumbing & Heating	6424011200	1434	SOUTHVIEW	CT	Cat iv-Equipment Relaled	Low	1711	√	
Chula Vista Cycle Center	6220913200	1502	BROADWAY		Cat iv-Equipment Relaled	Low	5941		
Clear-Flow Rooter Service	6202730600	218	ORLANDO	ST	Cat iv-Equipment Relaled	Low	1711	√	
Cogswell Marine & Motorsports Inc.	6220122600	865	STELLA	ST	Cat iv-Equipment Relaled	Low	5941	√	
Daves Quality Plumbing Inc.	5634410500	320	TROUSDALE	DR	Cat iv-Equipment Relaled	Low	1711	√	√
DaVinchi Metal Signs	6291002128	3521	MAIN	ST	Cat iv-Equipment Relaled	Low	3993		
Dresser Rand	6180103800	670	L	ST	Cat iv-Equipment Relaled	Low	7699		
Elias Plumbing	6402600500	1129	CLOUDWALK CANYON	DR	Cat iv-Equipment Relaled	Low	1711	√	
Handiworks	5932621100	944	BUCKAROO	LN	Cat iv-Equipment Relaled	Low	7699	√	
J&J Drain & Sewer	5950305513	2355	CALLE SABROSO		Cat iv-Equipment Relaled	Low	1711	√	
Jakes Plumbing	6180718200	430	WESTBY	ST	Cat iv-Equipment Relaled	Low	1711	√	
Jifffy Rooter	6232021800	3236	MAIN	ST	Cat iv-Equipment Relaled	Low	1711	√	
Martin Prep	6424312000	1213	MONTE SERENO	AV	Cat iv-Equipment Relaled	Low	3751	√	
Moys Appliance Repair	6203202900	1458	MAX	AV	Cat iv-Equipment Relaled	Low	7623	√	
Randys Rooter Service	5685123100	223	H	ST	Cat iv-Equipment Relaled	Low	1711	√	
Triple M. Marine Welding & Repair Inc.	6220620500	1550	FRONTAGE	RD	Cat iv-Equipment Relaled	Low	3732	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
TV Jacks Inc.	5932800100	4230	BONITA	RD	Cat iv-Equipment Relaled	Low	7629		√
Uncle Joe Drain Cleaning	6441910500	1660	CABRILLO	DR	Cat iv-Equipment Relaled	Low	1711	√	
Valley Industrial Specialties Inc.	5634312800	110	GLOVER	AV	Cat iv-Equipment Relaled	Low	7699		√
Walashek Industrial & Marine Inc.	5623500100	595	C	ST	Cat iv-Equipment Relaled	Low	7538		√
West Air Gas & Equip Inc.	6220620700	1590	FRONTAGE	RD	Cat iv-Equipment Relaled	Low	5084		
Cat ix-Pest Control ...									
Adios Pest Control Inc.	5957102017	2576	CATAMARAN	WY	Cat ix-Pest Control ...	Low	7342	√	
Atlas Termite	5661103700	25	SECOND	AV	Cat ix-Pest Control ...	Low	7342	√	
Chula Vista Pest Control	5680441300	244	THIRD	AV	Cat ix-Pest Control ...	Low	7342	√	
Indemand Pest Control	6412504200	982	MERCED RIVER	RD	Cat ix-Pest Control ...	Low	7342	√	
King Termite Control Inc.	5681512200	290	LANDIS	AV	Cat ix-Pest Control ...	Low	7342	√	
Lloyds Pest Control	6290201200	2865	MAIN	ST	Cat ix-Pest Control ...	Low	7342	√	
The Works Termite Co	5733601200	119	KEARNEY	ST	Cat ix-Pest Control ...	Low	7342	√	
Turbo Termite & Repair	6170800600	1021	BAY	BL	Cat ix-Pest Control ...	Low	7342	√	
We Got Ya Pest Control Inc.	5660103100	46	THIRD	AV	Cat ix-Pest Control ...	Low	7342	√	
Cat vi-Auto-Washing									
619 Detail	5957400200	2792	SAVANNAH	CT	Cat vi-Auto-Washing	Low	7542	√	
619 Mobile Detailing	6202510800	55	PALOMAR	ST	Cat vi-Auto-Washing	Low	7542	√	
Absolute Auto Detail	6420736100	1390	SANTA ALICIA	AV	Cat vi-Auto-Washing	Low	7542	√	
Advance Mobile Wash & Detail	5954406600	1093	FOREST LAKE	DR	Cat vi-Auto-Washing	Low	7542	√	
AG Autobody & Detail	6431613800	2466	MYRTLE BEACH	WY	Cat vi-Auto-Washing	Low	7542	√	
All American Car Wash C.V.	6182103500	1137	BROADWAY		Cat vi-Auto-Washing	Low	7542		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Amplified Detailing & Restoration	5672600901	423	COLORADO	AV	Cat vi-Auto-Washing	Low	7542	√	
Aqua Clean	5922109000	1435	RIDGEBACK	RD	Cat vi-Auto-Washing	Medium	7542		√
Aqua-Man Mobile Auto Carwash Detailing	6403223600	1184	CAMINO BISCAY		Cat vi-Auto-Washing	Low	7542	√	
Arreola Auto Detailing	6190513000	1047	FOURTH	AV	Cat vi-Auto-Washing	Low	7542	√	
Arreola Auto Detailing	6184200100	1049	FOURTH	AV	Cat vi-Auto-Washing	Low	7542	√	
Auto Detailing By David	5692520900	489	ELM	AV	Cat vi-Auto-Washing	Low	7542	√	
Baja Auto Detail	5650401000	615	CHULA VISTA	ST	Cat vi-Auto-Washing	Low	7542	√	
Bebo's Auto Detail	5713101900	804	BROADWAY		Cat vi-Auto-Washing	Low	7542	√	
Bonita Car Wash	5702204600	3048	BONITA	RD	Cat vi-Auto-Washing	Low	7542		√
Brabus Pro Auto Detailing	6437701700	1743	FENNEL	WY	Cat vi-Auto-Washing	Low	7542	√	
California Sunshine Detail	5957701100	2385	PLAZA EVA		Cat vi-Auto-Washing	Low	7542	√	√
Car Shower	6290620300	3487	MAIN	ST	Cat vi-Auto-Washing	Low	7542		
Del Rey Detailers	6402402600	1030	CORDOVA	DR	Cat vi-Auto-Washing	Low	7542	√	
Deluxe Mobile Detailing	6432320700	2401	VALLEY GARDENS	DR	Cat vi-Auto-Washing	Low	7542	√	
Deluxe Mobile Detailing	6435022400	1320	LONG VIEW	DR	Cat vi-Auto-Washing	Low	7542	√	
Diablos Auto Detail	6191100900	1151	FOURTH	AV	Cat vi-Auto-Washing	Low	7542	√	
Eastlake Mobile Detailing	5955100217	1185	LA VIDA	CT	Cat vi-Auto-Washing	Low	7542	√	
Empire Mobile Auto Detailing	6230606300	250	QUINTARD	ST	Cat vi-Auto-Washing	Low	7542	√	
Ernie's Detail	6221902000	2555	FAIVRE	ST	Cat vi-Auto-Washing	Low	7542		
Finest Auto Detailing	6423801614	1336	SERENA	CI	Cat vi-Auto-Washing	Low	7542	√	
Fresh Detailing	6181102800	615	MOSS	ST	Cat vi-Auto-Washing	Low	7542	√	
GBC Auto Detailing	6434302800	1175	BATTLE CREEK	RD	Cat vi-Auto-Washing	Low	7542	√	
JDA Detailing and Services	6411220700	825	PALOMAR	ST	Cat vi-Auto-Washing	Low	7542	√	
JJ's Mobile Auto Detailing	6191620500	1123	TOBIAS	DR	Cat vi-Auto-Washing	Low	7542	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Jose Gallardo -Auto Detail Mobile	5651701400	561	FLOWER	ST	Cat vi-Auto-Washing	Low	7542	√	
JR S Detail/Mobile Car Wash	6400704400	770	NAPLES	CT	Cat vi-Auto-Washing	Low	7542	√	
JR's Mobile Auto Detail	6242201200	1516	OLEANDER	AV	Cat vi-Auto-Washing	Low	7542	√	
Keen Detail	6423801515	1344	SERENA	CI	Cat vi-Auto-Washing	Low	7542	√	
Klimax Mobile Detail	5733721400	253	K	ST	Cat vi-Auto-Washing	Low	7542	√	
Lad Mobile Vehicle Service	6182910500	557	OXFORD	ST	Cat vi-Auto-Washing	Low	7538	√	
LST Carwash	6180612000	907	BROADWAY		Cat vi-Auto-Washing	Low	7542		√
Luna's Mobile Detailing	5754321900	1143	VISTA	WY	Cat vi-Auto-Washing	Low	7542	√	
Maranatha Carwash	5670324300	298	BROADWAY		Cat vi-Auto-Washing	Low	7542		
Mario's Auto Detailing	6180610500	915	BROADWAY		Cat vi-Auto-Washing	Low	7542		√
Mario's Auto Detailing	6220433700	1409	BROADWAY		Cat vi-Auto-Washing	Low	7542		√
Max Auto Detail & Auto Electric	6220913200	1502	BROADWAY		Cat vi-Auto-Washing	Low	7542		
Max Enterprises	5711331100	691	WOODLAWN	AV	Cat vi-Auto-Washing	Low	7542		
Mobile Car Wash	6426002400	1613	WOODVILLE	AV	Cat vi-Auto-Washing	Low	7542	√	
Moreno Auto Detailing	6431313200	1291	BOCA RATON	DR	Cat vi-Auto-Washing	Low	7542	√	
Nice Car Always	6432331400	1468	ASHFORD CASTLE	DR	Cat vi-Auto-Washing	Low	7542	√	
Oscar Velazquez Auto Detail	6183010600	465	OXFORD	ST	Cat vi-Auto-Washing	Low	7542	√	
Palomar Gas & Carwash	6220112700	878	STELLA	ST	Cat vi-Auto-Washing	Low	5541		
Pearl Carwash/Chula Vista Inc.	5670325000	215	WOODLAWN	AV	Cat vi-Auto-Washing	Low	7542		√
Premier Mobile Auto Detail and Tinting	6435162300	1438	MARBLE CANYON	WY	Cat vi-Auto-Washing	Low	7542	√	
Pro Detailing Services	6420736100	1390	SANTA ALICIA	AV	Cat vi-Auto-Washing	Low	7542	√	
Prontowash Southern CA, LLC	6430610100	2015	BIRCH	RD	Cat vi-Auto-Washing	Low	7542		√
Rancho Mobile Auto Detail	6206200200	227	RIENSTRA	ST	Cat vi-Auto-Washing	Low	7542	√	
Rancho Mobile Detail	6391300400	1087	MELROSE	AV	Cat vi-Auto-Washing	Low	7542	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Roberto's Custom Detailing	6193202000	1307	TOBIAS	DR	Cat vi-Auto-Washing	Low	7542	√	
Shine Mobile Detailing	6411602100	1282	WILD IRIS	PL	Cat vi-Auto-Washing	Low	7542	√	
Shining Star Auto Detail	5953613600	2431	EASTRIDGE	LP	Cat vi-Auto-Washing	Low	7542	√	
Simply Clean Auto Detailing	6400325700	589	BAYONA	LP	Cat vi-Auto-Washing	Low	7542	√	
Sky Auto Detail	6193500900	1340	ELM	AV	Cat vi-Auto-Washing	Low	7542	√	
SOS Auto Mobile	5671011200	336	ASH	AV	Cat vi-Auto-Washing	Low	7538	√	
South 1 Auto Detail	6290500900	3031	MAIN	ST	Cat vi-Auto-Washing	High	7542		
Speed Auto Detailing	6180900700	1018	WOODLAWN	AV	Cat vi-Auto-Washing	Low	5812	√	
Splash Auto Detail	6396902600	731	LORI	LN	Cat vi-Auto-Washing	Low	7542	√	
Splash Mobile Detail	6233122400	1579	CITRUS	WY	Cat vi-Auto-Washing	Low	7542	√	
Spotless Auto Detailing	6436410800	1618	GOLDEN GATE	AV	Cat vi-Auto-Washing	Low	7542	√	
Superior Shine Mobile Detailing	6393141800	398	INKOPAH	ST	Cat vi-Auto-Washing	Low	7542	√	
Terra Nova Car Wash/Fiesta Express	5922001600	350	H	ST	Cat vi-Auto-Washing	High	7542		√
Valencia Headlights Restoration	5957223300	2520	TRAIL MARKER	PL	Cat vi-Auto-Washing	Low	7542		√
Vista Palms Car Wash	5722120500	795	BROADWAY		Cat vi-Auto-Washing	Low	7542		
Wash and Glow Auto Detail	6401104200	886	ENTRADA	PL	Cat vi-Auto-Washing	Low	7542	√	
Wash and Glow Detail - Mobile Business	6441412900	1539	SONORA	DR	Cat vi-Auto-Washing	Low	7542		√
Xclusive Auto Detail	5672001200	416	BROADWAY		Cat vi-Auto-Washing	Low	7542		
Xtreme Enterprises Inc./Xtreme Mobile	6221112500	2446	MAIN	ST	Cat vi-Auto-Washing	Low	7542		
Xtreme Mobile Detailing	6390109000	603	MELROSE	AV	Cat vi-Auto-Washing	Low	7542	√	

Cat vii-Auto Lots Storage

Broadway Palomar RV Storage	6220431100	1375	BROADWAY		Cat vii-Auto Lots Storage	Low	4225		
Chula Vista Toyota	6440407900	650	MAIN	ST	Cat vii-Auto Lots Storage	High	5511		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Convinient Mobile	6221403200	2555	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225		
Eastlake RV and Boat Storage	5952312100	2371	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	4225		√
Eastlake Self Storage	5952312900	2351	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	4225		√
Economy Upholstery	6291200800	3679	MAIN	ST	Cat vii-Auto Lots Storage	High	4225		
Hilltop Main Self Storage	6291302500	3755	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225		
Hofer Corporation	6450300900	5662	OTAY VALLEY	RD	Cat vii-Auto Lots Storage	High	4226		
Irongate Mini Storage	6232502300	3650	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225		
Koa Kampground Storage	5633303600	111	SECOND	AV	Cat vii-Auto Lots Storage	Low	4225		√
Otay Valley RV Storage	6291300300	163	MACE	ST	Cat vii-Auto Lots Storage	Low	4225		
Roman's Auto Electric	6221902000	2555	FAIVRE	ST	Cat vii-Auto Lots Storage	High	7538		
Savon Self Storage	6232300600	3708	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225		
SD Storage-CVS	6221121100	2776	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225		
SD Storage-MSS	6221902700	2385	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225		
SD Storage-VSS	5634421500	325	TROUSDALE	DR	Cat vii-Auto Lots Storage	Low	4225		√
Security First Commercial Storage, LLC	6290501000	1725	FOURTH	AV	Cat vii-Auto Lots Storage	Low	4225		
Security First Self Storage	6290500800	3089	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225		
Security Public Storage	5623232900	471	C	ST	Cat vii-Auto Lots Storage	Low	4225		√
Sentry Storage	6291302900	3885	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225		

Cat viii-Fueling-Rtl/Wsl

Allen Gas Truck Stop	6290606100	3205	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	7538		
Arco AM/PM #5208	5652801400	407	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco AM/PM #5217	5733203900	798	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco AM/PM #5218	6290101300	1725	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Arco AM/PM #607	6231921500	3190	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco AM/PM #633	6170601600	800	PALOMAR	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco At H Street	5710300900	720	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco By The Bay	5653101600	765	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Arco Sunshine Market	6201301600	1401	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Birkdale Corp DBA L Street 76	5713101400	898	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		
Bobar Market 8	5670903900	600	F	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Bonita Arco	5932800700	4498	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Bonita Gas & Mini Mart	5932800700	4498	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Bonita Point Auto Care Inc.	5941311200	149	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Bonita Shell	5701402700	100	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Bonita Vista Gas & Auto	6421701100	903	OTAY LAKES	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Cali Mart	6291303000	3733	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Chevron Inc #1422	5700203200	95	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Chevron Station #1946	6411222000	695	PALOMAR	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411		
Chevron Station Inc. #1837	6402910400	770	PLAZA	CT	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Chevron Station-Eastlake Parkway	5950720500	950	EASTLAKE	PW	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Chevron Station-Olympic Parkway #1975	6430206900	2115	OLYMPIC	PW	Cat viii-Fueling-Rtl/Wsl	High	5541		√
Chula Vista Mobil	6190104500	902	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Chula Vista SVC CTR/SECV Inc.	5734902600	899	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Circle K Store #2964	5650401100	60	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Circle K Store #5708	5701310500	98	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Dons Arco	6390806800	495	TELEGRAPH CANYON	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Fred's Auto Repair	6290606100	3205	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Gas Depot	5652402100	199	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Lamb Fuels Inc.	6441820300	855	ENERGY	WY	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Lorena B Ratonel Shell	5922001600	350	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Melrose 76	6240800700	1495	MELROSE	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Mobil Oil On The Run #12924	5953221800	2210	OTAY LAKES	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Mohsen Oil	6192805900	1328	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		
New West Petroleum LLC #1016	6240800900	1498	MELROSE	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Optima	5672003900	498	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		
Optimart	6230300800	1450	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Palomar Shell	6192225500	1295	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Seven Eleven 13951 B 2131	5662402800	275	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411		
Seven Eleven 24070A 2131	6232716800	1482	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	5411		
Seven Eleven 29540B 2131	6191002400	7	NAPLES	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411		
Shell at Main	6240602800	4555	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Supreme Gasoline	5652302900	196	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Suresh Patel	6240606500	4430	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Terra Nova Service Plaza	5922001600	350	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Thrifty #9568	6394901500	401	TELEGRAPH CANYON	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
World Oil Co. #46	5672010300	685	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
			Cat x-Eating/Drinking ...						
Agave Grill	5672004700	625	H	ST	Cat x-Eating/Drinking ...	High	5812		
Albertson's #6757	5733204500	720	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		
Albertson's #6759	5950305800	2310	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	High	5411		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Alejandro's Mexican Bar & Grill	5953222100	2220	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Ancira Tamales	6221021800	2260	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
Aning's Homemade Specialties	5922102100	449	KRISTA	CT	Cat x-Eating/Drinking ...	Low	5812		√
Anthony's Fish Grotto	5670212900	215	BAY	BL	Cat x-Eating/Drinking ...	High	5812		
Antojito's Lucy's	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	Low	5812		
Apple Tree Market	6231312000	1556	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		
Arbys #7057/Capitals Group LLC	5953220800	2244	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√
Asada Express	6181520200	1067	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Asada Express Inc.	6181520200	1067	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Aunt Emmas	5670310600	700	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
Auto Express Services	5722705100	801	BROADWAY		Cat x-Eating/Drinking ...	Low	7538		
Baja Lobster & Club	6181422700	1060	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Baja Taco	6181422700	1052	BROADWAY		Cat x-Eating/Drinking ...	High	5812		√
Ball 3	5721312000	683	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Baskin Robbins	5941310200	1463	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Bert's Grill	6390806400	525	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Best Price	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	Low	5399		
Birrieria Don Rafa	5720803200	621	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Blimpie	6182803900	1208	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Blimpie Subs and Salads	6430208400	1360	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812		√
Bobbies South	5711530600	686	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Brassco International Inc.	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5399		
Bulls Eye Burger	5713101800	860	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Burger King #11435	5700201700	97	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Burger King #11545	6402924800	899	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Burger King #2339	5720104700	599	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Burger King #952	6192225200	1265	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
Burrito Corona Group LLC	5932800600	4444	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Butcher Shop Steak HS	5710500800	556	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
C&S Discount Store	5683340100	294	CENTER	ST	Cat x-Eating/Drinking ...	Low	5099		
Cafe De Cafe	5932800900	4366	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Cafe Salotto	5953220300	2240	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Caffe Taza	6390806400	533	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Caffe Taza	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5451		√
Cali Dogs	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	Low	5812		√
California Pizza Kitchen	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
California Sushi Bar Inc.	5683340300	337	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Canyon Club Cafe	6394901300	421	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Carls JR #281	6430206800	2097	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812		√
Carls JR #31	5710502400	502	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Carls JR #546	6182006400	1100	BROADWAY		Cat x-Eating/Drinking ...	High	5812		√
Carls JR #575	5941310400	1487	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Carls JR #83	6190100800	996	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
Carrow's Restaurant #953	5720104700	598	H	ST	Cat x-Eating/Drinking ...	Low	5812		
CAT Cheoon Restauranct	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
CDT Catering Services	5634410600	320	TROUSDALE	DR	Cat x-Eating/Drinking ...	Low	5812		√
Cheese Cake Factory	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
Cheesecake Factory	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Chick Fil A at Eastlake Terraces	6430206700	2089	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812		√
Chili's Bar & Grill	6430610200	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
Chili's Bar & Grill #1363	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Chili's Bar & Grill #387	6402924700	800	PASEO DEL REY		Cat x-Eating/Drinking ...	Low	5812		√
China China Restaurant	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
China Gourmet Express	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
China King Buffet	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
China Little Cafe Express	5684505900	492	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Chinese City Restaurant	6230600200	1403	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
Chow King	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	High	5812		
Chriss Chriss Ent Inc./Little Caesar Pizza	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Chriss Chriss Ent Inc./Little Caesar Pizza	5672322300	481	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Chula Vista Nutrition Store	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	Low	5411		
Chula Vista RV Park Store	7600480300	460	SANDPIPER	WY	Cat x-Eating/Drinking ...	Low	5399		
Chula Vista Submarina	6182106300	1177	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Church Fried Chicken	6190610200	1005	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
Churreria	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Ciao Italian Restaurant	6240606000	4360	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5812		
Cilantro Live	5683330500	315	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Claire's #5016	5720104700	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5399		
Coco's #607	5671010400	303	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Coin Toss	5670901500	312	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Cold Stone Creamery #081	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Cold Stone Creamery #244	5950720700	2295	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Colima's Mexican Food	5912522500	4102	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Coors Amp/Valentino Espresso	6450214700	2050	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812		
Corzy Corner Pizza	6441912700	1655	BRANDYWINE	AV	Cat x-Eating/Drinking ...	Low	5812		
COSTCO - East H St	6402925000	895	H	ST	Cat x-Eating/Drinking ...	High	5812		√
COSTCO at Broadway	6182006100	1130	BROADWAY		Cat x-Eating/Drinking ...	High	5399		√
Cotija Taco Shop	5932800600	4404	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Cotijas Mexican Food	5734500700	810	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Cotixan Mexican & Seafood	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		√
Cotixan Taco Shop	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
D & J's Way Inc./Subway	6390806500	559	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
D Lish	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Dairy Queen Orange Julius	6220310500	664	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Daphnes Greek Cafe	5950720800	2275	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		
Del Taco #809	6220310500	670	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		
Deli Shoppe	6170800700	1075	BAY	BL	Cat x-Eating/Drinking ...	Low	5812		
Denny's Restaurant #1719	5701406000	110	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Denny's Restaurant #6962	5670320600	692	E	ST	Cat x-Eating/Drinking ...	High	5812		√
Desserts Plus Chula Vista, Inc	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		
Diamond Jim	5733710400	771	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Dlush LLC	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Docks Cocktail Lounge	5683330600	317	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Dolci Mango	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5451		
Dominos Pizza	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Dominos Pizza #7724	5683004600	380	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		

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Don Pedro Taco Shop	5680711700	247	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Donnys Cafe Inc.	5912404000	3901	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Dragon Express Fast Food	5670320800	678	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
Edelweiss Restaurant	5680441700	230	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Camaron	5652402600	193	BROADWAY		Cat x-Eating/Drinking ...	High	5812		√
El Camaron 2	6231911200	301	MONTGOMERY	ST	Cat x-Eating/Drinking ...	Low	5812		
El Comal Antojitos	5681521900	262	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Comal Antojitos Mexicanos	5680711500	239	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Comal Antojitos Mexicanos	5710500600	534	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
El Dorado Seafood & Grill	6192806300	311	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
El Gordito Feliz Mexican Food	6404400117	1149	CABRILLO	DR	Cat x-Eating/Drinking ...	Low	5812		√
El Jalapeno Mexican Grill	6192806000	1352	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Mexicanos Taco Shop	6390806500	567	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
El Michoacano Taco Shop & Seafood	6437700300	2130	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		
El Nopal Market LLC	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5411		
El Nortena Taco Shop	6192122800	1266	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
El Norteno	6192122800	1266	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Pollo Loco/Bas Food Services	5710622100	666	H	ST	Cat x-Eating/Drinking ...	High	5812		
El Ranchero Factory	6192804300	1324	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Ranchero Factory Taco Shop #2	6232121900	3344	MAIN	ST	Cat x-Eating/Drinking ...	High	5812		
El Torito #89	5670213700	271	BAY	BL	Cat x-Eating/Drinking ...	High	5812		
En Caliente Cafe	5950711500	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812		√
En Caliente Cafe	5950711500	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812		√
Ernie's 50s Diner	5683330800	323	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		

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Estela's Bazaar	6181422000	1080	BROADWAY		Cat x-Eating/Drinking ...	Low	5399		√
Fair Market & Hollywood Pizza	5743003200	72	J	ST	Cat x-Eating/Drinking ...	Low	5812		√
Figaro's Pizza	5950305900	2326	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812		√
Filippis Pizza Grotto	5650600900	82	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Flamingo Cafe	5670902500	396	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Florence Pizza Express	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Food 4 Less #780	6220310500	660	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5411		
Foodland #7	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
Formosa Club	5713100500	840	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Frida Fine Mexican Cuisine	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Other	5812		√
Frutas Inc.	6192805800	1329	THIRD	AV	Cat x-Eating/Drinking ...	Low	5451		
Fuddruckers #3055	5682702300	340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Galley At The Marina	7600480101	550	MARINA	PW	Cat x-Eating/Drinking ...	Low	5812		
General Los Panchos Taco Shop	5672321400	577	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Giant Pizza King $17	6394901300	419	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Gigante Pizza	5670324500	226	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Global Coffee Sidewalk Cafe	5932800900	4366	BONITA	RD	Cat x-Eating/Drinking ...	Low	5451		√
Godfather's Pizza	6182101500	1187	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Godland Inc./Juice It Up	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Godland Inc./Juice It Up	5950720300	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812		√
Golden Star Chinese Food	5734503500	864	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Golden Unique	5720104700	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Goldilocks	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		
Gondola Pizza	6181520200	1067	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		

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Great Happiness II	6230606700	1445	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
H&J Phan DBA Lollicup Tea Zone	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
HDOS ENT	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Henry's Market Place	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		
Henry's Market Place dba Otay Ranch Market	5950711500	878	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5411		√
Heritage Park Cafe	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		√
Hermano's Taco Shop	6182901700	1295	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Hilltop Market	6232716700	1500	HILLTOP	DR	Cat x-Eating/Drinking ...	High	5411		
Home Town Buffet #705	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Home Town IGA	5670320800	646	E	ST	Cat x-Eating/Drinking ...	High	5411		√
Honey Baked Ham Inc.	5922000700	316	H	ST	Cat x-Eating/Drinking ...	High	5411		√
Hot Dog Expressions	6402911300	725	PLAZA	CT	Cat x-Eating/Drinking ...	Low	5812		√
Hungry Hanks Deli	5734503500	866	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Hurshi's Cafe	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Ida's Lompia Palace & China Town	5941310900	732	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
In-N-Out Burger	6437701800	1725	EASTLAKE	PW	Cat x-Eating/Drinking ...	Medium	5812		
International House of Pancakes	5953221000	2258	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Isactaz Inc/Quiznos #3179	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Italy Express	6390806400	527	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Jack Donuts	6220433200	1355	BROADWAY		Cat x-Eating/Drinking ...	Low	5461		
Jack in the Box #15	5734500600	802	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Jack in the Box #6	5672003900	486	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Jack in the Box #63	6230500200	1408	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
Jack in the Box #68	5912511600	4011	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√

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Jack in the Box #86	5632703400	5	FOURTH	AV	Cat x-Eating/Drinking ...	High	5812		√
Jack in the Box #93	6220433300	585	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		
Jack in the Box #99	5922001800	370	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Jack in the Box - DMSD Foods	6421701000	947	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		
Jack-N-The Box	6421701000	919	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low			√
Jalisco Cafe	5912522600	4026	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Jamba Juice #515	5950720800	2275	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Jamba Juice #603	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Janies	5670320800	652	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
Javid Brothers Enterpirse Inc/Quiznos	6182006500	1120	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Jill A Lindstedt	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Jill A Lindstedt	5653102700	725	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
Jimmy J's Espresso	6420202800	900	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Jimmy's Family Restaurant	6191105000	1198	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
JNC Pinoy Foodmart Inc.	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411		√
Jochi's Fast Food Inc.	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Joco Management	5720803100	635	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Joe and Ernie's Pizzeria Inc.	5712006208	730	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Jose Mexican Food	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Jose's Mexican Food	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Joshways Restaurant & Bar	5670531400	299	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Juice Adventure	6421701000	935	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Juice Adventure	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Julian's Mexican Food	6190507200	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√

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Just Java Cafe	5681611200	285	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
JVS ENT LLC/DBA Quiznos Sub #4365	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
K Kiala Inc DBA SD Philly Cheese	5950711500	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812		√
Kaga Sushi	6192113500	1216	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Kanpai Restaurant	6192806300	305	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Karina's Mexican Seafood	6180101700	986	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Karina's Mexican Style Seafood #2	6192122200	1282	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
KD Inc/Krazy Dollar	6170800800	1161	BAY	BL	Cat x-Eating/Drinking ...	Low	5331		
KFC Y450073BL03	5685112000	461	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
KFC-#Y305030	6411221700	1361	MEDICAL CENTER	DR	Cat x-Eating/Drinking ...	High	5812		
KFC-Y450114	6220433400	1327	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
KIC Import & Export	5733310800	737	THIRD	AV	Cat x-Eating/Drinking ...	Low	5399		
King's Fish House	6430601700	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Kings Fish House	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
KMart Corp. #7636	6402923600	875	H	ST	Cat x-Eating/Drinking ...	Low	5399		√
Koopman Enterprise	6396307800	376	THERESA	WY	Cat x-Eating/Drinking ...	Low	5399		
Kotija Taco Shop	6240800800	295	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		√
L & L Barbecue	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√
L Street Shell	6180211800	902	BROADWAY		Cat x-Eating/Drinking ...	Medium	5411		
La Bella Pizza	5683502500	373	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
La Bodega Market	6182101600	1193	BROADWAY		Cat x-Eating/Drinking ...	High	5411		√
La Casa De Dona Maria	6221114100	2530	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
La Escondida	6221114100	2530	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
La Fresca	6181513000	1037	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
La Fuente Mexican Food	5660106500	34	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
La India Bonita	6240800600	1455	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812		√
La Moreliana Bakery	6230602500	275	QUINTARD	ST	Cat x-Eating/Drinking ...	Low	5461		
La Nena Restaurant Inc.	6180621300	975	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
La Parroquia Cafe & Music Lounge	6430610500	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
La Plamita	6192214700	1231	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
La Pulga #2	6182901700	1295	BROADWAY		Cat x-Eating/Drinking ...	Low	5399		
La Quinta Grill	5652302300	625	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
La Taquiza Mexican Restaurant	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	Low	5812		
La Tia Mexican Food/Paula Bakery	5720803200	631	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
La Torta	5710301200	730	H	ST	Cat x-Eating/Drinking ...	Low	5812		
La Tropicana	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Las Golondrinas Taco Shop	5711530600	686	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Liberty Giant Pizza	6201301800	1419	HILLTOP	DR	Cat x-Eating/Drinking ...	Low	5812		
Lisa's Filipino Cuisine	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√
Little Caesars 7636	6402923600	875	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
LJ San Miguel Ranch 22 LP/Los Primos Mex Food	6950300600	2322	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812		√
Lolitas Restaurant	6394901300	413	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Lolitas Taco Shop	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		√
Lolitas Taco Shop	5933500100	4516	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Lomas Cafe Mexican Food	6232022500	3218	MAIN	ST	Cat x-Eating/Drinking ...	High	5812		
Long John Silver	6190611400	1049	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
Lorenzos	5670324500	200	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Los Alazanes Inc.	5941310200	1451	H	ST	Cat x-Eating/Drinking ...	Low	5812		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Los Jalapenos Mexican Restaurant	6180620100	943	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Los Panchos Mexican & Seafood	6421701000	933	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Los Panchos Taco Shop	6190610300	1009	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Los Taquitos	6232022700	1665	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Los Taquitos Mexican Grill	6182803900	1208	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Los Tres Pedros	6192215300	1223	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Lucys Market	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	High	5411		
Lutong Bahay & Oriental Grill	5941310900	732	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Luzitas Taco Shop	5743003200	60	J	ST	Cat x-Eating/Drinking ...	Low	5812		√
Macaroni Grill	6430610200	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Mandarin Canton Restaurant	6390806400	543	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Mandarin Chinese	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Mandarin Gourmet	5932800600	4410	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Mango Exotic Mexican Ice Cream	5710502200	510	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Manhattan	5672000900	400	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Manila Garden Restaurant	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Manna Restaurant	5670903900	600	F	ST	Cat x-Eating/Drinking ...	Low	5812		
Marie Calendar #103	5682702000	330	F	ST	Cat x-Eating/Drinking ...	High	5812		
Marios Taco Shop	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Mariscos El Palmar	5670411600	201	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Mariscos Los Arcos Restaurant	5700203400	89	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Marisol Nite Club	6221114600	2638	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
Maye's Desserts	5932800200	4240	BONITA	RD	Cat x-Eating/Drinking ...	Low	5499		√
McDonalds #14228/Sutherland MGMT Co	5953220900	2254	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
McDonalds #25836/TRS Restaurant	6411221900	687	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		
McDonalds #6840/Sutherland MGMT Co	6390806700	551	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812		√
McDonalds - Telegraph	6390806700	551	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812		√
McDonalds at Broadway	5720803400	619	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
McDonalds at E Street	5653102700	725	E	ST	Cat x-Eating/Drinking ...	High	5812		√
McDonalds at Third #1557	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
McDonalds Corp	6182007100	1150	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
McDonalds Corp #7554	6182803700	1288	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
McDonalds of Bonita	5932800900	4340	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
McDonalds/Tavarua Restaurant Inc	5623242000	75	BROADWAY		Cat x-Eating/Drinking ...	High	5812		√
Mercado International 2000	6230606100	1415	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		
Merkl's Restaurant	5672112200	415	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
MGM Buffet	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Miramar Fish Market	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
MJ's Bar & Grill	6230606700	1445	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
MR Jalapeno	5710502200	520	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
MR VS Giant Pizza	6190507100	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
MRS Rice Oriental Restaurant, LLC	6220433200	1355	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
NAPA Pizza	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Ninna Matty's Mexican Food	6192806000	1352	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Noodles & Company	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Ocean City Partnership	6181510200	1011	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Olive Garden Restaurant #1205	5720104500	585	I	ST	Cat x-Eating/Drinking ...	Low	5812		
Otay Farms Inc.	6290101500	1716	BROADWAY		Cat x-Eating/Drinking ...	High	5411		

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Outside In	6191213600	1121	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Over the Border	6231821400	3008	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
Palap Charbroiled Chicken	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		√
Palomar Importer & Wholesale Co. Inc.	6221114100	2550	MAIN	ST	Cat x-Eating/Drinking ...	Low	5399		
Panda Chef	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√
Panda Express #1098	6240606700	1820	MAIN	ST	Cat x-Eating/Drinking ...	High	5812		
Panda Express #1316	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
Panda Express #960	6182006500	1120	BROADWAY		Cat x-Eating/Drinking ...	High	5812		√
Panda Imperial Chinese	6192113400	1208	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
Panda Imperial Restaurant	6192113400	1208	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Panda King	5941310200	1459	H	ST	Cat x-Eating/Drinking ...	High	5812		
Panera Bread	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Papa Johns Pizza #1977	6190601600	1085	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Papa Johns Pizza #1978	6402932300	1020	TIERRA DEL REY		Cat x-Eating/Drinking ...	Low	5812		√
Papa Murphy's Take & Bake Pizza	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		√
Papayas Juice Bar	5932800200	4244	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Park & Joo Enterprise Inc/DBA Rice King	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Pei Wei Asian Dinner	5950711600	884	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812		√
Pescados Mariscos Hectors	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Pescados Y Mariscos Hectors	6182106300	1177	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
PF Changs	6430610200	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
PF Changs China Bistro	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Pho Vien Dong	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√
Pick Up Stix	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	Low	5812		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Pinas Fruit Salads Smoothies	6180103300	970	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Pinas Fruit Salads Smoothies	6180101100	970	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Pinnochio	5680711200	225	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Pizza & Pasta Express	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		√
Pizza Hut	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812		
Pizza Hut	6430207300	542	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Pizza Hut	6430207300	251	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		
Pizza Hut		885	H	ST	Cat x-Eating/Drinking ...	High	5812		
Pizza Hut #315092	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812		√
Pizza Junction	5670324500	226	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Pizzeria Uno	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Plazas Mexican Food	6220913700	1550	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Poe's Catering	5954100222	2156	LAGO MADERO		Cat x-Eating/Drinking ...	Low	5812		√
Poliza Hollywood Inc	5743003200	72	J	ST	Cat x-Eating/Drinking ...	High	5411		√
Pozoleria Dona Maria	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Prima Supply Inc.	6221115800	649	ANITA	ST	Cat x-Eating/Drinking ...	Low	5399		
Quizno's Classic Subs	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Rally's Hamburger/Ongs Restaurant Group	6190511300	1004	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
Ralphs #235	6411221400	659	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411		
Ralphs #75	5941310100	780	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411		√
Rancho Palomar LP	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Red Hot Java	6410101900	765	MEDICAL CENTER	CT	Cat x-Eating/Drinking ...	Low	5812		
Red Lobster #521	5682702700	342	F	ST	Cat x-Eating/Drinking ...	High	5812		
Red Ribbon Bakery	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		

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Roberto DePhillippis Steak House	5710500800	556	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Robledo's Taco Shop Inc.	5672001500	444	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Romano's Macaroni Grill #339	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Romesco Baja Bistro	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Rosa Giant Pizza	6221114800	1680	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Royal China Palace II	5652302300	625	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
RS Restaurant LLC DBA Subway #2253	5922001700	374	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Rubios Fresh Mexican Grill	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	High	5812		√
Rubios Fresh Mexican Grill at Broadway	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Rubios Fresh Mexican Grill at Eastlake	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812		√
San Diego Cash & Carry	6232502500	3630	MAIN	ST	Cat x-Eating/Drinking ...	Low	5399		
Santa Fe Meats	6221112000	2514	MAIN	ST	Cat x-Eating/Drinking ...	High	5411		
Saphire Lounge	5912522500	4076	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Sareta Food Corporation	6430610500	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Save A Lot #943	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		
Seafood City formerly Albertson's #6729	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5411		√
Seafood City Market	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		
Selecta Mexican Foods	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Senor Pancho Mexican Grill	6231423900	298	MONTGOMERY	ST	Cat x-Eating/Drinking ...	Low	5812		
Seven Eleven #13568E-2131	6394901300	415	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411		√
Seven Eleven #13569E-2131	5712002300	796	BROADWAY		Cat x-Eating/Drinking ...	Low	5411		
Seven Eleven #13570C-2131	5670531100	285	BROADWAY		Cat x-Eating/Drinking ...	High	5411		
Seven Eleven #13576F	5710611000	698	H	ST	Cat x-Eating/Drinking ...	Low	5411		
Seven Eleven #13578D-2131	6240800600	1475	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5411		√

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Seven Eleven #13582C-2131	5731700200	290	I	ST	Cat x-Eating/Drinking ...	Low	5411		
Seven Eleven #13590D-2131	6181520700	1097	BROADWAY		Cat x-Eating/Drinking ...	High	5411		√
Seven Eleven #18547B-2131	6240605700	4300	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5411		√
Seven Eleven #2131	6421700900	913	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411		√
Seven Eleven #21604C-2131	5722811300	899	BROADWAY		Cat x-Eating/Drinking ...	High	5411		√
Seven Eleven #21792C-2131	5684200100	403	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		
Seven Eleven #33715	6182803600	689	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411		
Silver Cup Bakery	6426402800	1352	SANTA CORA	AV	Cat x-Eating/Drinking ...	Low	5461		√
Silver Dollar	5683340400	341	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Sitoo's Deli & Catering	5952313500	2300	BOSWELL	RD	Cat x-Eating/Drinking ...	Low	5812		√
SL Gourmet/Chinese Gourmet Express	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Smart & Final #463 / SFI Corp	6290607500	3141	MAIN	ST	Cat x-Eating/Drinking ...	High	5411		
Smoothie Caffe	5950705500	2070	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Snack Ball	6232301700	3804	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
Sodexho Management Inc.	5743003400	84	J	ST	Cat x-Eating/Drinking ...	Low	5812		√
Southbay Fish and Grill	7600480102	570	MARINA	PW	Cat x-Eating/Drinking ...	Low	5812		
Star Bakery	6192806000	1372	THIRD	AV	Cat x-Eating/Drinking ...	High	5461		
Star Gazer Club	5653201600	33	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Starbucks Coffee #5253	5941310200	1467	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Starbucks Coffee #5665	5684503900	303	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Starbucks Coffee #5885	5672321500	595	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Starbucks Coffee #6589	6411221800	605	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Starbucks Coffee #8750	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	Low	5812		√
Steak Escape Otay Ranch Town Center	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Stellas Deli & Cafe at Third Avenue	5683504000	365	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Steve's Cabana Bar	5652400600	173	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Stuart Anderson Black Angus Restaurant	5653101700	707	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
Submarina	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812		√
Subway #1055	5720803500	609	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Subway #15681/Serler Inc.	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Subway #16107	6390806500	559	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Subway #16107-1	6240800900	1498	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812		√
Subway #28286	5623242400	45	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Subway #29881	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		
Subway #3062	5941310200	1455	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Subway #31595	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Subway #33339	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	High	5812		√
Subway 2253	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Subway at Main	6291303000	3733	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
Subway Sandwiches	5932800900	4378	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Sugar & Spice Delicafe	5720104700	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Sunny's Market	5672122000	449	BROADWAY		Cat x-Eating/Drinking ...	High	5411		
Super Express Chinese Food	5720803500	609	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Sushi Corner	6430610500	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Sushi Loco	5670324500	224	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Sushiya	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Sutherland Management Co.	5932800900	4394	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Sweet Life	5682702100	310	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Taco Bell #15508	6420201700	1548	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Taco Bell #2971	5922001300	340	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Taco Bell #3398	5670320100	696	E	ST	Cat x-Eating/Drinking ...	High	5812		√
Tacos El Gordo	5671902800	689	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Tacos El Gordo De Tijuana, BC Jr	6193001100	1351	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Tacos El Poblano	6402924000	885	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Tacos Toby	6240606200	1682	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812		√
Taqueria El Farolito	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Target Store T-1815	5950720400	910	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5399		√
Tasita D Cafe	6220913300	1550	BROADWAY		Cat x-Eating/Drinking ...	Low	5451		
Texcoco Restaurant	6181512900	1043	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
The Flafel Shoppe	5651703500	115	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
The Lighthearted Gourmet	5683003300	385	FOURTH	AV	Cat x-Eating/Drinking ...	Low	5812		
The Lion's Den	5721803300	725	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
The Perking Lot	5933500100	4502	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
The Plascencia Group LLC	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
The Soup Stone	5682702100	310	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
TheMarshmallow Studio	6435154500	1422	MARBLE CANYON	WY	Cat x-Eating/Drinking ...	Low	5441		
Thien's Optimart	5672003900	498	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Third Avenue Minimart	5733204000	772	THIRD	AV	Cat x-Eating/Drinking ...	Low	5411		
Tijuana Oyster Bar	5932800200	4246	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
TJ Oyster Bar	5932800200	4246	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Tortillas De Harina Elice	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Tortilleria Santa FE, Inc.	6231820400	387	ZENITH	ST	Cat x-Eating/Drinking ...	Low	5812		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Tropical Fruits	6220412700	1410	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Unlimited Dream Ventures		374	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Valerios Tropical Bake Shop	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		
Vanessa Water Store	5670903900	600	F	ST	Cat x-Eating/Drinking ...	Low	5812		
VIP Oriental Buffet	5710500600	542	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Vons Food & Drug #2006	6390806200	505	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411		√
Vons Food & Drug #2071	5953220200	2250	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411		√
Vons Food & Drug #2130	5932800600	4404	BONITA	RD	Cat x-Eating/Drinking ...	High	5411		√
Vons Food & Drug #2336	5922000500	360	H	ST	Cat x-Eating/Drinking ...	High	5411		√
Vons Food & Drug #3063	5734503400	870	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		√
Walmart @ Eastlake	6430208400	1360	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5399		√
Walmart Expansion	5623242000	75	BROADWAY		Cat x-Eating/Drinking ...	Low	5399		√
Water 24 Inc.	6182911200	1215	BROADWAY		Cat x-Eating/Drinking ...	Low	5399		√
Weinershnitzel	6192221400	283	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Wendy's Coastline Food Service Corp	5950720600	960	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812		√
Wendy's Coastline Food Service Corp	5670325100	618	E	ST	Cat x-Eating/Drinking ...	High	5812		√
Wetzel's Pretzels Otay Ranch	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Wienerschitzel	6192221400	283	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Wienerschnitzel #16	5672321800	493	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Wings N Things Restaurant	5672322300	481	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Xana Spree	5957505000	391	PLAZA TOLUCA		Cat x-Eating/Drinking ...	Low	5399		√
Yo Julian's Mexican Food	6190507100	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Yokoz's Shushi Bar & Island Grill	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√
Yoshinoya Beef Bowl	6182901500	1299	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		

Facility Name	APN Number		Address		Category	Priority	SIC Number	Mobile Business	Tributary
Zorba's Family Restaurant	5651622800	100	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√

Cat xi-Mob. Carpet/Drape

Active Carpet Cleaning	5693111900	43	ALVARADO	PL	Cat xi-Mob. Carpet/Drape	Low	7217	√	
America's Finest Carpet	6442302300	730	DESIGN	CT	Cat xi-Mob. Carpet/Drape	High	5713	√	
Bonita Carpet Care	5955205800	2506	SADDLEHORN	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Buena Vista Carpet Care	6243850500	1551	LOMA	LN	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Carlos Sandoval Carpet Center	5731300500	380	I	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Cool Style Carpet Cleaning	5712332000	752	MADISON	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Day & Night Carpet Cleaning Services	5683322200	317	TWIN OAKS	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Del Rey Carpet Service	5933702900	535	PASEO ROSAL		Cat xi-Mob. Carpet/Drape	Low	7217	√	
Dollar Carpet Cleaning	6431823800	2287	SUN VALLEY	RD	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Edwards Carpet Cleaning	6410910400	578	NANTUCKET	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Empire Carpet Service Inc.	5957232000	556	SCENIC TRAIL	PL	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Extreme Carpet Care Services LLC	6233151100	1540	CONNOLEY	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
First Touch Steam Carpet Cleaning	6182106300	1177	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217	√	
Foreign Auto Upholstery	5754000100	55	NAPLES	ST	Cat xi-Mob. Carpet/Drape	Low	7532	√	
Frankys Floor & Carpet Care	6190105200	971	FOURTH	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Golden Care Carpet Cleaning	6243711600	1768	REGENCY	WY	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Hydro Pacific Carpet Cleaning	5680421100	232	GARRETT	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Integrity Carpet Cleaning	5652904100	30	WOODLAWN	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
L&V Cleaning Services	6233331300	64	SHERWOOD	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Lavamax Carpet Cleaning	5634410500	320	TROUSDALE	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Ocean's Carpet	6221112500	2488	MAIN	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Preferred Carpet Care	5651623100	110	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217	√	
RC Carpet & Furniture Cleaning	5735330600	162	L	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
RG Carpet Cleaning	6412710400	1097	MOUNT DANA	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Rosalie's Carpet Cleaning	6181522600	1057	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217	√	
Rueda's Carpet Cleaning	6244213600	274	RANCHO	CT	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Select Carpets	6204202000	4501	OTAY VALLEY	RD	Cat xi-Mob. Carpet/Drape	Low	5713	√	
Servpro of Fire & Water Damage	6411431300	1485	LA CHICA	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Siedschlag Carpet Cleaning	5710620800	537	OAKLAWN	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Southbay Carpet Care	6422404000	1883	GOTHAM	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Sunset Carpet Cleaning	5672111000	557	VANCE	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Sunset Carpet Cleaning & Services	6422724300	931	BUENA VISTA	WY	Cat xi-Mob. Carpet/Drape	Low	7217	√	
TNT Carpets	5742311800	658	CARLA	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Two Brothers Carpet & Upholstery Cleaning	5651312300	50	MONTE VISTA	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Vegas Carpet Cleaning	5754321700	1108	HILLTOP	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Warrior Carpet	6442214600	1546	POINT HUENEME	CT	Cat xi-Mob. Carpet/Drape	Low	7217	√	
We Buff It Too Biz	5682630600	489	G	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
We Care Carpet Cleaning	5951750300	1937	DUKE	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Westcoast Carpet Cleaning	5733712300	297	K	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Cat xii-Cement Mixing/Cut									
Arturo Cervantes Barajas Concrete Co.	6206030400	1264	RAVEN	AV	Cat xii-Cement Mixing/Cut	Low	1771	√	
Buildis and Son Cement	5733322100	720	DEL MAR	AV	Cat xii-Cement Mixing/Cut	Low	1771	√	
California Concrete Designs	6424800400	1631	COOLSPRINGS	CT	Cat xii-Cement Mixing/Cut	Low	1771	√	
Contrera's Concrete Service	5735411300	113	L	ST	Cat xii-Cement Mixing/Cut	Low	1771	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Cuen Fred Concrete Service	6200301000	47	OXFORD	ST	Cat xii-Cement Mixing/Cut	Low	1771	√	
John Tessitore	5735220300	812	FAIRWAY	CT	Cat xii-Cement Mixing/Cut	Low	1771	√	
Nora's Concrete	5691330300	110	F	ST	Cat xii-Cement Mixing/Cut	Low	1771	√	
RDS Concrete Construction	5693020600	479	CORTE HELENA	AV	Cat xii-Cement Mixing/Cut	Low	1771	√	
Rubios Concrete Construction	6220722400	725	BELVIA	LN	Cat xii-Cement Mixing/Cut	Low	1771	√	
The Rock Concrete Pumping	6180901900	1031	COLORADO	AV	Cat xii-Cement Mixing/Cut	Low	1771	√	
			Cat xiii-Masonry						
A&E Carpet & Tile Distributors	6291002300	170	MACE	ST	Cat xiii-Masonry	Low	1743	√	
Alpha-Omega Hardscape	5952931300	861	SOUTHSHORE	DR	Cat xiii-Masonry	Low	1741	√	
Chula Vista Tile & Stone	6182803500	693	PALOMAR	ST	Cat xiii-Masonry	Low	1743	√	
DS Construction	5663002200	172	D	ST	Cat xiii-Masonry	Low	1742	√	
Emerald Plastering	5752001200	947	HELIX	AV	Cat xiii-Masonry	Low	1742	√	
FJL Masonry	5958001500	1002	SUTTER RIDGE	CT	Cat xiii-Masonry	Low	1741	√	
J&J Tile Service	5650801200	54	SMITH	AV	Cat xiii-Masonry	Low	1743	√	
Jasa Concrete	6205101900	1414	MELROSE	AV	Cat xiii-Masonry	Low	1741	√	
JR Drywall	6202621800	121	PALOMAR	ST	Cat xiii-Masonry	Low	1742	√	
Klaser Tile Company Inc.	6222303400	1595	JAYKEN	WY	Cat xiii-Masonry	Low	1743	√	
MAC Plastering Inc.	6424901800	1705	FAWNTAIL	CT	Cat xiii-Masonry	Low	1742	√	
Masonry By Michael	6403810800	573	PLAZA DEL CID		Cat xiii-Masonry	Low	1741	√	
Masonry Pros	5741401800	78	KING	ST	Cat xiii-Masonry	Low	1741	√	
Precison Plastering	5730900800	389	I	ST	Cat xiii-Masonry	Low	1742	√	
South Coast Structures	6392320700	801	HALECREST	DR	Cat xiii-Masonry	Low	1741	√	
TRS Tile	6201610600	1221	HELIX	AV	Cat xiii-Masonry	Low	1743	√	

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USA Stone Design	6180103300	970	BROADWAY		Cat xiii-Masonry	Low	1741	√	
Valencia Stone and Tile	5662503100	241	E	ST	Cat xiii-Masonry	Low	1743	√	
Vent Pros	6192113200	325	OXFORD	ST	Cat xiii-Masonry	Low	1743	√	
WEMAC Marine Insulation	6221023500	753	ANITA	ST	Cat xiii-Masonry	Low	1742	√	

Cat xiv-Painting/Coating

Alfred's Painting	6183600800	544	WELTON	ST	Cat xiv-Painting/Coating	Low	17721	√	
Allstar Painting Services	6433411100	1957	MOSS LANDING	AV	Cat xiv-Painting/Coating	Low	7349	√	
Arrow Professional Painting	6413011600	1170	WIND RIVER	RD	Cat xiv-Painting/Coating	Low	1721	√	
Arroyo Custom Painting Corp	6423800610	1365	SERENA	CI	Cat xiv-Painting/Coating	Low	1721	√	
Barba Painting	6426001000	1537	APPLEGATE	ST	Cat xiv-Painting/Coating	Low	1721	√	
Discount Painting	6423801607	1335	SERENA	CI	Cat xiv-Painting/Coating	Low	1721	√	
G&R Painting	6180623900	580	MOSS	ST	Cat xiv-Painting/Coating	Low	1721	√	
Gaskill Painting Company Inc.	6442302100	744	DESIGN	CT	Cat xiv-Painting/Coating	Low	1721	√	
George Painting	6205412200	1420	CAMELLIA	CT	Cat xiv-Painting/Coating	Low	1721	√	
Hawkin's Painting Company	5752620500	976	GUATAY	AV	Cat xiv-Painting/Coating	Low	1721	√	
Icon Painting Solutions	6411305200	1480	VENTERS	DR	Cat xiv-Painting/Coating	Low	1721	√	
Jam Painting Inc.	6230501400	317	QUINTARD	ST	Cat xiv-Painting/Coating	Low	1721	√	
Lazaro's Painting	6244325700	252	RANCHO	DR	Cat xiv-Painting/Coating	Low	1721	√	
Luther Painting	5680142300	215	GUAVA	AV	Cat xiv-Painting/Coating	Low	1721	√	
Maintenance	6432903800	1150	HITCHING POST	LN	Cat xiv-Painting/Coating	Low	1721	√	
Marcelo's Distinctive Painting	6181511100	567	MOSS	ST	Cat xiv-Painting/Coating	Low	1721	√	
MCS Painting	5663005600	121	SECOND	AV	Cat xiv-Painting/Coating	Low	1721	√	
My Painter Plus.Com	6203600100	1360	MYRA	CT	Cat xiv-Painting/Coating	Low	1721	√	

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NR Painting Inc.	6433914200	2526	KING CREEK	CI	Cat xiv-Painting/Coating	Low	1721	√	
Painters at Work	6182106100	550	OXFORD	ST	Cat xiv-Painting/Coating	Low	1721	√	
Paradise Painting	6403300107	1015	CAMINITO ESTRELLA		Cat xiv-Painting/Coating	Low	1721	√	
Quality Home Painting	5952122100	2019	BRIDGEPORT		Cat xiv-Painting/Coating	Low	1721	√	
Ray Garcia	5700204000	24	FLOWER	ST	Cat xiv-Painting/Coating	Low	1721	√	
Rolling Hills Custom Painting	6192501500	116	PALOMAR	ST	Cat xiv-Painting/Coating	Low	1721	√	
Safari Painting	5681610300	259	THIRD	AV	Cat xiv-Painting/Coating	Low	1721	√	
Sammy's Painting Company	6192221100	225	PALOMAR	ST	Cat xiv-Painting/Coating	Low	1721	√	
Scott Painting Company	6393630200	752	PASEO DEL REY		Cat xiv-Painting/Coating	Low	1721	√	
South Coast Home Painting	6393141300	1015	NORMA	CT	Cat xiv-Painting/Coating	Low	1721	√	
Southbay Painting	5651701100	564	D	ST	Cat xiv-Painting/Coating	Low	1721	√	
Sumaya Painting	5730502200	244	H	ST	Cat xiv-Painting/Coating	Low	1721	√	
Superb Interior Painting	6437335000	1679	PICKET FENCE	DR	Cat xiv-Painting/Coating	Low	1721	√	
Superior Color Painting	6437323200	1604	PICKET FENCE	DR	Cat xiv-Painting/Coating	Low	1721	√	

Cat xvi-Landscaping

A&G Landscaping	6230720428	56	QUINTARD	ST	Cat xvi-Landscaping	Low	0782	√	
A&G Landscaping	6203502500	226	QUINTARD	ST	Cat xvi-Landscaping	Low	0782	√	
AJ Gardening	6411707100	1125	MISTY CREEK	ST	Cat xvi-Landscaping	Low	0782	√	
All Palms Plus	6411307000	1471	VENTERS	DR	Cat xvi-Landscaping	Low	0782	√	
American Veteran Lawn Care	6393530400	431	NAPLES	ST	Cat xvi-Landscaping	Low	0782	√	
Arroyo Landscaping	6424000100	1494	WOODCREST	ST	Cat xvi-Landscaping	Low	0782	√	
AXL Landscaping	6404002000	1136	CALLE DE DAMASCO		Cat xvi-Landscaping	Low	0782	√	
Beltran Landscaping	6433521000	2078	MIRROR LAKE	PL	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Better Greens	6192615100	1230	TOBIAS	DR	Cat xvi-Landscaping	Low	0782	√	
Bufallo Quality Tree Work	5950931100	902	ASPEN GLEN	RD	Cat xvi-Landscaping	Low	0782	√	
C&R Landscaping	6392800300	314	MOSS	ST	Cat xvi-Landscaping	Low	0782	√	
Castro Lawn Care	6233331100	70	SHERWOOD	ST	Cat xvi-Landscaping	Low	0782	√	
Chau Pen Van	5753410400	1037	HELIX	AV	Cat xvi-Landscaping	Low	0782	√	
Chermak Joseph	5751830100	52	FORTUNA	ST	Cat xvi-Landscaping	Low	0782	√	
Clean Cut Lawn Services	5711810100	702	COLORADO	AV	Cat xvi-Landscaping	Low	0782	√	
CMN Lawn Services	5944331800	1208	POSITAS	RD	Cat xvi-Landscaping	Low	0782	√	
Colonial Gardens Inc	5922302100	578	PARKSIDE	DR	Cat xvi-Landscaping	Low	0782	√	
Complete Lawn Maintenance	5652020200	470	D	ST	Cat xvi-Landscaping	Low	0782	√	
Cortez Samuel Landscaping	6403405100	1058	CAMINO ATAJO		Cat xvi-Landscaping	Low	0782	√	
Decasas Garden	6244012100	1539	GRAND TETON	CT	Cat xvi-Landscaping	Low	0782	√	
Desert Garden's & Sons	6423040500	1351	BLUE FALLS	DR	Cat xvi-Landscaping	Low	0782	√	
Dixon Landscaping Solutions	6433801917	1243	CABEZAS COVE		Cat xvi-Landscaping	Low	0782	√	
Dreamview Landscaping	5755401400	226	OXFORD	ST	Cat xvi-Landscaping	Low	0782	√	
E Kim Landscaping	6403514800	1002	CAMINO CALABAZO		Cat xvi-Landscaping	Low	0782	√	
Elite Hauling Services	6191921600	1180	FIRST	AV	Cat xvi-Landscaping	Low	0782	√	
Enrique Ybarra Landscape Maintenance	5710802300	619	WHITNEY	ST	Cat xvi-Landscaping	Low	0782	√	
Epifanio Morales Gardens Landscape	5721723200	684	FOURTH	AV	Cat xvi-Landscaping	Low	0782	√	
Eriks Lawn Maintenance	6202020300	1195	NAPA	AV	Cat xvi-Landscaping	Low	0782	√	
Ernesto Casillas Landscaping	6182105000	555	NAPLES	ST	Cat xvi-Landscaping	Low	0782	√	
Ernie Salazar Landscaping	6180613100	958	CEDAR	AV	Cat xvi-Landscaping	Low	0782	√	
Evergreen Gardening Service	6435432400	1486	OAKPOINT	AV	Cat xvi-Landscaping	Low	0782	√	
Ezequiel Perez Landscaping	5650900800	44	FIFTH	AV	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Fast and Friendly	6412200800	1352	SANTA OLIVIA	RD	Cat xvi-Landscaping	Low	0782	√	
Federal Land Management Corp	6184200700	440	NICKMAN	ST	Cat xvi-Landscaping	Low	0782	√	
Gaeta's Tree Service	6433700124	2543	GARNET PEAK	RD	Cat xvi-Landscaping	Low	0782	√	
Gotta Go Mow & Landscaping	6434102300	1968	MEEKS BAY	DR	Cat xvi-Landscaping	Low	0782	√	
Green Desert	5954406000	1081	FOREST LAKE	DR	Cat xvi-Landscaping	Low	0782	√	
Green Earth Gardening Service	6396840700	145	CORTE MARIA	AV	Cat xvi-Landscaping	Low	0782	√	
Green Grass Landscape	6243930300	149	RAINIER	CT	Cat xvi-Landscaping	Low	0782	√	
Hale Landscaping	5712222000	752	WOODLAWN	AV	Cat xvi-Landscaping	Low	0782	√	
Handy Lawn Care	6435803000	2016	GEYSERVILLE	ST	Cat xvi-Landscaping	Low	0782	√	
Hector Gardening	5951741100	1946	DUKE	ST	Cat xvi-Landscaping	Low	0782	√	
Heldiz Landscape	6204400500	295	RIENSTRA	ST	Cat xvi-Landscaping	Low	0782	√	
Hernandez Gardening	6181020400	1038	JEFFERSON	AV	Cat xvi-Landscaping	Low	0782	√	
Herrera Antonio Landscape	6203304000	140	RIVERA	CT	Cat xvi-Landscaping	Low	0782	√	
Hinkle Tree Service	5651621100	143	MADISON	AV	Cat xvi-Landscaping	Low	0782	√	
JC Landscaping	5952412800	2157	HAMDEN	DR	Cat xvi-Landscaping	Low	0782	√	
Jeff's Lawn Care	5753630100	995	MONSERATE	AV	Cat xvi-Landscaping	Low	0782	√	
Jessica Lopez Design	6412101300	972	MCCAIN VALLEY	CT	Cat xvi-Landscaping	Low	0782	√	
JM Landscaping	6192807715	1303	CALLE TEMPRA		Cat xvi-Landscaping	Low	0782	√	
JM Lawns	6230202700	368	ANITA	ST	Cat xvi-Landscaping	Low	0782	√	
John's Yard Service	5742521800	668	ROBERT	AV	Cat xvi-Landscaping	Low	0782	√	
Johnson Greenery	5735320600	171	L	ST	Cat xvi-Landscaping	Low	0782	√	
Jose's Gardening	5753300800	1013	CUYAMACA	AV	Cat xvi-Landscaping	Low	0782	√	
Jose's Lawn Service	6411444100	1428	LA CHICA	DR	Cat xvi-Landscaping	Low	0782	√	
JR's Landscape	5650310600	689	CHULA VISTA	ST	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Juan J. Hale Landscaping Maint. Service	6181522600	1057	BROADWAY		Cat xvi-Landscaping	Low	0782	√	
Juan Leal Landscape	6310122200	308	PALM	AV	Cat xvi-Landscaping	Low	0782		
Kazper's Landscaping	6192113800	1246	THIRD	AV	Cat xvi-Landscaping	Low	0782	√	
Kiki's Paradise Landscaping	6424101606	1360	CALLEJON CERVANTES		Cat xvi-Landscaping	Low	0782	√	
Kutting Edge	6232903400	1617	JADE	AV	Cat xvi-Landscaping	Low	0782	√	
Kyoto Landscape	6220912600	602	ANITA	ST	Cat xvi-Landscaping	Low	0782	√	
Land Art	6403107400	725	GREDOS	PL	Cat xvi-Landscaping	Low	0782	√	
Landscape Enterprise	5661321600	25	D	ST	Cat xvi-Landscaping	Low	0782	√	
Leo's Landscape	5922210903	480	BELLE VISTA	DR	Cat xvi-Landscaping	Low	0782	√	
Leon's Landscaping Service	6430515004	1453	TROUVILLE	LN	Cat xvi-Landscaping	Low	0782	√	
Lua's Landscaping	6182000100	1100	INDUSTRIAL	BL	Cat xvi-Landscaping	Low	0782	√	
Lucero's Landscaping	6190105800	374	MOSS	ST	Cat xvi-Landscaping	Low	0782	√	
Manzano's Landscaping	6395932400	739	NEPTUNE	CT	Cat xvi-Landscaping	Low	0782	√	
Mario's Landscaping	6411134800	576	SIPES	CI	Cat xvi-Landscaping	Low	0782	√	
Mariposa's Landscape	6396821200	666	MARIPOSA	CI	Cat xvi-Landscaping	Low	0782	√	
Martin & Zamora Landscape Maintenance	5721930600	758	ASH	AV	Cat xvi-Landscaping	Low	0782	√	
Maximum & Green Maintenance	6240552500	309	VALLEY	AV	Cat xvi-Landscaping	Low	0782	√	
Mel's Gardening Service	6412022800	910	ISRAEL	CT	Cat xvi-Landscaping	Low	0782	√	
MG Gardening	6205904000	357	PEPPERWOOD	CT	Cat xvi-Landscaping	Low	0782	√	
MGM Landscape Inc	5943610200	558	TRAILRIDGE	DR	Cat xvi-Landscaping	Low	0782	√	
Miles Bob Irrigation	6395933600	752	NACION	AV	Cat xvi-Landscaping	Low	0782	√	
Ochi Gardens	6397013300	176	CAMINO ENTRADA		Cat xvi-Landscaping	Low	0782	√	
Olguin's Landscape	5662911500	186	CORTE HELENA	AV	Cat xvi-Landscaping	Low	0782	√	
Orlando's Garden	6290201100	2887	MAIN	ST	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Ortega Landscape	6182901200	1225	BROADWAY		Cat xvi-Landscaping	Low	0782	√	
P Gracia Landscape	6183011600	490	SHY	LN	Cat xvi-Landscaping	Low	0782	√	
P&A Garden Landscaping	5721723200	684	FOURTH	AV	Cat xvi-Landscaping	Low	0782	√	
Pacific Turf Specialists	5742520800	681	CLAIRE	AV	Cat xvi-Landscaping	Low	0782	√	
PCM Maintenance Landscape Service	5922109300	400	KRISTA	CT	Cat xvi-Landscaping	Low	0782	√	
Pedro's Landscaping	5652200200	443	FLOWER	ST	Cat xvi-Landscaping	Low	0782	√	
Pena's Gardening Maintenance Service	6200420100	236	OLYMPIA	ST	Cat xvi-Landscaping	Low	0782	√	
Picket Fences Landscaping Inc.	6434844000	1263	POPLAR SPRING	RD	Cat xvi-Landscaping	Low	0782	√	
PK Shedenhelm's Landscaping	5943831200	1606	COUNTRY VISTAS	LN	Cat xvi-Landscaping	Low	0782	√	
Plays in the Dirt	5942112000	575	OTAY LAKES	RD	Cat xvi-Landscaping	Low	0782	√	
PRG Maintenance Gardening Service	6192807715	1303	CALLE TEMPRA		Cat xvi-Landscaping	Low	0782	√	
Pro Care Landscape & Gard	6401961100	1164	PASEO SARINA		Cat xvi-Landscaping	Low	0782	√	
Rafaelo's Tree Trimmer	6231122300	435	TREMONT	ST	Cat xvi-Landscaping	Low	0782	√	
RG Landscape & Design	6200212300	3	PAISLEY	ST	Cat xvi-Landscaping	Low	0782	√	
Rhinotech Landscape	6242400500	459	RIVERA	CT	Cat xvi-Landscaping	Low	0782	√	
Rich Valens Tree Service	6191212300	1106	DEL MAR	AV	Cat xvi-Landscaping	Low	0782	√	
RM Landscape	5752710100	933	GUATAY	AV	Cat xvi-Landscaping	Low	0782	√	
Robert's Gardening Service	5712101600	749	RIVERLAWN	AV	Cat xvi-Landscaping	Low	0782	√	
Romita Landscape	6241802500	20	TOURMALINE	ST	Cat xvi-Landscaping	Low	0782	√	
Rudy Landscaping	6403220400	746	AVENIDA SOLARIA		Cat xvi-Landscaping	Low	0782	√	
Sam's Stump Removal	6191220400	1103	DEL MAR	AV	Cat xvi-Landscaping	Low	0782	√	
Silahua's Landscape and Yard Maintenance	6394110500	1169	OCALA	AV	Cat xvi-Landscaping	Low	0782	√	
Silva's Tree Service	5660200400	75	FOURTH	AV	Cat xvi-Landscaping	Low	0782	√	
Southwing Land Maint Inc.	5693010100	3855	SAN MIGUEL	AV	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
SPS/Creative Curb Landscapes	5933802700	839	CALLE LAGASCA		Cat xvi-Landscaping	Low	0782	√	
Steve Ferlito Gardening Service	6244212500	271	RANCHO	CT	Cat xvi-Landscaping	Low	0782	√	
Trim Around Yard Service	6421202400	914	WAYNE	AV	Cat xvi-Landscaping	Low	0782	√	
Trujillo Landscaping	5742522100	656	ROBERT	AV	Cat xvi-Landscaping	Low	0782	√	
Turf Pros	6441703300	598	RIVERA	ST	Cat xvi-Landscaping	Low	0782	√	
Valle Lawn Service	5941216200	1284	MARBELLA	PL	Cat xvi-Landscaping	Low	0782	√	
Vasquez Landscaping & Hauling	5730810102	398	MANKATO	ST	Cat xvi-Landscaping	Low	0782	√	
Vegas Gardening Landscaping Services	6412023000	901	ISRAEL	CT	Cat xvi-Landscaping	Low	0782	√	
VMG Landscaping	6240514300	270	DATE	ST	Cat xvi-Landscaping	Low	0782	√	
Western Tree Service	5943411100	1756	RIDGE CREEK	DR	Cat xvi-Landscaping	Low	0782	√	
Yonekura Glenn	5672320400	572	OTIS	ST	Cat xvi-Landscaping	Low	0782	√	

Cat xviii-Golf/Parks/Rec

Alcala Park	6424816200	1620	MONTANA	RD	Cat xviii-Golf/Parks/Rec	Low	7996		√
Augusta Park	5953706900	1034	PARK MEADOWS	RD	Cat xviii-Golf/Parks/Rec	Low	7996		√
Bonita Haciendas Mini Park	5943114700	1518	VIA HACIENDA		Cat xviii-Golf/Parks/Rec	Low	7996		√
Boys & Girls Club of Chula Vista	6200601900	1301	OLEANDER	AV	Cat xviii-Golf/Parks/Rec	Low	7999		
Chula Vista Elks Lodge #2011	6391600300	901	ELKS	LN	Cat xviii-Golf/Parks/Rec	Low	7999		√
Circle Park	6433902300		KING CREEK	CI	Cat xviii-Golf/Parks/Rec	Low	7996		
Cobblestone Park	5952035500		LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7996		√
Coors Amphitheatre	6450214700	2050	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	Low	7922		
Countryside Park	6432611000		PINON HILLS	RD	Cat xviii-Golf/Parks/Rec	Low	7996		√
Eastlake Beach Club	5952220700	2050	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7997		√
Eastlake Country Club	5953203000	2375	CLUBHOUSE	DR	Cat xviii-Golf/Parks/Rec	Low	7997		√

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Fun 4 All	6170103000	950	INDUSTRIAL	BL	Cat xviii-Golf/Parks/Rec	Low	7996		√
Kensington Road Park	5955502800	2600	SADDLEBACK	ST	Cat xviii-Golf/Parks/Rec	Low	7996		√
Knotts Soak City USA	6450201700	2052	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	High	7996		
Madison Lane Park	5955201600	640	FALCON VALLEY	DR	Cat xviii-Golf/Parks/Rec	Low	7996		√
Magnolia Hill Park	5956901900	2640	MONTECITO	RD	Cat xviii-Golf/Parks/Rec	Low	7996		
Oak Crest Park	6426222300		SANTA MADERA	AV	Cat xviii-Golf/Parks/Rec	Low	7996		√
Orchard Park	6420712400		MONTE SERENO	AV	Cat xviii-Golf/Parks/Rec	Low	7996		√
Palace Garden Park	6230710400	1425	SECOND	AV	Cat xviii-Golf/Parks/Rec	Low	7996		
Salt Creek Golf Club	5950400800	525	HUNTE	PW	Cat xviii-Golf/Parks/Rec	Low	7997		
San Diego County Club	6190300800	88	L	ST	Cat xviii-Golf/Parks/Rec	Low	7997		√
Scobee Park	5952310700	2351	KUHN	DR	Cat xviii-Golf/Parks/Rec	Low	7996		√
Shorebird Park	5952806400	2088	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7996		√
Wisteria Park	6420735100		SANTA RITA		Cat xviii-Golf/Parks/Rec	Low	7996		√
			Cat xx-Pool/Fountain Clng						
A Environmental Services	5692631100	125	H	ST	Cat xx-Pool/Fountain Clng	Low	7349	√	
ABC Pool Service	5682701746	376	CENTER	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Academy Pool Service & Supplies	6221114800	1680	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389	√	
Acuario Pool & SPA Maintenance	6206334400	1450	MELROSE	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
All Pro Pool Services	5932800100	4248	BONITA	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Ambart Inc.	5710630100	652	H	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Aqua Diamond Pool Service & Repair	6395102000	383	NOVA	PL	Cat xx-Pool/Fountain Clng	Low	7389	√	
Aqua Pro Pool & SPA Service	6433700415	1328	PINNACLE PEAK	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Aquatech Pool Service	5953700300	1057	PARK MEADOWS	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Azul Pool Service	6436716600	1546	HOPSCOTCH	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Blue Wave Pools	5752720100	5116	GLEN VERDE	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Bob Reed's Step Saver Pool Products	5662321300	326	E	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Bonita Vista Pool Service	6422104600	1618	MILLS	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
C&A Maint Service	6242000800	461	RIENSTRA	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
Chlor-Nation	5942221800	510	CAMINO ELEVADO		Cat xx-Pool/Fountain Clng	Low	7389	√	
Choice Maintenance and Repair	5933111500	960	SURREY	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Chula Vista Curbside Agency	6192215100	249	OXFORD	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Constable Pool Service	5952312900	2351	BOSWELL	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Cornerstone	5922107600	458	KARRA	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
Crystal Clear Poolz	6191620500	1123	TOBIAS	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
CTI of San Diego	5954811000	2137	CHATEAU	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
CV Pool Repair & Supply	6181421900	1082	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389	√	
E&D Pool and SPA Service	6204100900	1451	NAPA	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
Fire on Ice of San Diego	6411702900	1080	MOONSTONE	PL	Cat xx-Pool/Fountain Clng	Low	7389	√	
Fix Time	5952221578	2023	LAKERIDGE	CI	Cat xx-Pool/Fountain Clng	Low	7389	√	
Herbur Pool	6426900900	1421	FIELDBROOK	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Jim's Pool Clean Up	5942112000	575	OTAY LAKES	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Jose's Pool Service	5671030100	355	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389	√	
JP's Pool Service	6436312974	1571	CIRCULO BRINDISI		Cat xx-Pool/Fountain Clng	Low	7389	√	
Keep It Clean Pool Service	6403924300	1307	VAQUERO	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
Kelly's Pool and SPA Care	5954902300	1870	MARQUETTE	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Kng D C Pool & SPAS	6244021300	14	QUINTARD	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Leslie's Swimming Pool Supplies #299	5922000700	316	H	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Mack's Maintenance & Repair	5680741800	201	TWIN OAKS	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
Max Swimming Pool Service	6424602300	1298	MORGAN HILL	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Misty Creek Home Improvement	6411705700	1069	MISTY CREEK	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
New Look Concrete Creations	6422205700	1753	YALE	ST	Cat xx-Pool/Fountain Clng	Low	1711	√	
Patrick's Pool & SPA Service	5670801600	155	NAPLES	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Pete & Irma's Pool And SPA	5952034700	2140	STONECREEK	PL	Cat xx-Pool/Fountain Clng	Low	7389	√	
Pressures On	6425401400	1288	SANTA LUCIA	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Pure Water Pool and SPA	5955505500	2642	FLAGSTAFF	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
R3 & Sons	6206334400	1450	MELROSE	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
Robert The Handy Man	6422201800	1803	GOTHAM	ST	Cat xx-Pool/Fountain Clng	Low	7699	√	
San Diego Stone Technicians	6422404200	1863	GOTHAM	ST	Cat xx-Pool/Fountain Clng	Low	1743	√	
Sanchez Handyman Service	5711810600	730	COLORADO	AV	Cat xx-Pool/Fountain Clng	Low	7699	√	
Sanique Development	5921920300	474	H	ST	Cat xx-Pool/Fountain Clng	Low	7699	√	
Schaeffer's Pool Service	5952222327	2067	LAKERIDGE	CI	Cat xx-Pool/Fountain Clng	Low	7389	√	
SD Pool Service	5652904100	30	WOODLAWN	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
Sea Breeze Pool Service	6432321700	1408	ASHFORD CASTLE	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Sharko Pool Service & Maintenance	6397021400	819	AVENIDA MADERA		Cat xx-Pool/Fountain Clng	Low	7389	√	
Southbay Postcon Services	6205004000	1422	LANTANA	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
Spic N Span	5956201100	2057	CHATEAU	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
Superior Home Prep Co.	6423800116	1467	SUMMIT	DR	Cat xx-Pool/Fountain Clng	Low	1721	√	
Three Amigos Pool Service	6200830600	1362	MAX	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
WES C Gallagher	5952931300	861	SOUTHSHORE	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	

Cat xxiii-Bldg/Mat Storag

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Builders Surplus Sales	5634313500	130	GLOVER	AV	Cat xxiii-Bldg/Mat Storag	Low	5211		√
Chase Equestrian	5943622400	575	TRAILRIDGE	DR	Cat xxiii-Bldg/Mat Storag	Low	0752		√
Eastlake RV & Boat Storage	5952312100	2371	BOSWELL	RD	Cat xxiii-Bldg/Mat Storag	Low	4225		√
Ferguson Enterprise	5734903000	895	THIRD	AV	Cat xxiii-Bldg/Mat Storag	Low	5211		√
Home Depot #658/Home Depot USA Inc.	6402911300	725	PLAZA	CT	Cat xxiii-Bldg/Mat Storag	High	5211		√
Home Depot Eastlake	6430206600	1320	EASTLAKE	PW	Cat xxiii-Bldg/Mat Storag	High	5211		√
J&W Redwood	6291303700	3817	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	5211		
Leticia Cano/Nuts and Bolts	6221112500	2446	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	5211		
Lowes Home Improvement Warehouse Inc.	5950720100	2225	OTAY LAKES	RD	Cat xxiii-Bldg/Mat Storag	High	5211		√
Mazal Realty Investment	6182803500	693	PALOMAR	ST	Cat xxiii-Bldg/Mat Storag	Low	8741		
Plastics By Roy Inc.	5952313600	825	KUHN	DR	Cat xxiii-Bldg/Mat Storag	Low	5211		√
RCP Block & Brick Inc.	5632703700	75	FOURTH	AV	Cat xxiii-Bldg/Mat Storag	Low	5211		√
Road One of San Diego	64404061	1805	MAXWELL	RD	Cat xxiii-Bldg/Mat Storag	Low	7549		
Walmart at 5305 Broadway	6182007100	1150	BROADWAY		Cat xxiii-Bldg/Mat Storag	High	5399		√
White Cap Construction Supply	6290620602	3451	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	5211		

Cat xxiv-Animal Facility

A Girl and Her Dog	6436102846	2278	SWEET PEA	LN	Cat xxiv-Animal Facility	Low	0752		
J & R Pet Services	6402524700	664	RAINBOW	DR	Cat xxiv-Animal Facility	Low	0752		√
Kim's Paws Claws * Hoover Pet Care	5702800100	39	SANDALWOOD	DR	Cat xxiv-Animal Facility	Low	0752		√
Paws and Whiskers Gentle Grooming	5683330100	294	F	ST	Cat xxiv-Animal Facility	Low			
Pawz R US	5670530100	251	BROADWAY		Cat xxiv-Animal Facility	Low	0752		
Preen-2-Pristine Pet Parlor & Snack Shack	5950306000	2318	PROCTOR VALLEY	RD	Cat xxiv-Animal Facility	Low	0752		√
SD Doggy Runs	6244010700	1539	MAX	AV	Cat xxiv-Animal Facility	Low	0752		

Facility Name	APN Number	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Unleashed by Petco #1192	5922003300	304	H	ST	Cat xxiv-Animal Facility	Low	0752		√
Waggin N Walkin	5741030400	78	MANKATO	ST	Cat xxiv-Animal Facility	Low	0752		
Cat xxv-Power Washing...									
APM Power Washing	6192215200	228	KENNEDY	ST	Cat xxv-Power Washing...	Low	4959	√	
Fully Restored Surface Cleaning Specialists	5953213006	970	SOMERSET	CT	Cat xxv-Power Washing...	Low	4959	√	
GMR Enterprises	5755001600	91	EMERSON	ST	Cat xxv-Power Washing...	Low	4959	√	
Jay Bright Company	6441812700	787	ENERGY	WY	Cat xxv-Power Washing...	Low	4959	√	
Jet Clean USA Inc.	6403926200	1255	VAQUERO	CT	Cat xxv-Power Washing...	Low	4959	√	
Superior Wash	6435604300	1556	HUNTERS GLEN	AV	Cat xxv-Power Washing...	Low	1721	√	
Retail Store									
C.V. Wholesale Furniture Store	5721312200	655	BROADWAY		Retail Store	Low	5712		
Furniture Mattress Expo	6182911200	1215	BROADWAY		Retail Store	Low	5712		√
Kohls @ Eastlake	5952322900	2325	OTAY LAKES	RD	Retail Store	Medium			√
Target	MULTIPLE	40	FOURTH	AV	Retail Store	Low	5399		√

Grand Total: **1,321**

- Commercial Industrial Inventory
Additional Information

Attachment D2

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
COMMERCIAL FACILITIES														
Cat (i-v) Auto Related														
3M Brakes & Lube	1550	FRONTAGE	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59930	-117.09027
3MC Body & Paint & Auto Center	1612	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59759	-117.06479
A Spec Autocare	688	CHAPEL HILL	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.66334	-116.95304
A&A Auto Body & Paint	1077	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61119	-117.08130
A&C Machine Shop and Auto Repair	876	ADA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60289	-117.09110
A&D Automotive	1088	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61051	-117.08184
A&E Smog Test Only	231	BEYER	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.59252	-117.06289
A&V Road Service	1100	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60963	-117.08920
A-1 Auto Detail & Repair	696	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62415	-117.08722
A-1 Autobody DBA Calico	402	OAKLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63203	-117.09324
AARDVARC Racing	1007	OAK HILL	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.64768	-116.95937
ABC Electromechanic Projects	1550	OCALA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60294	-117.03531
ABC Motors Inc./Kirker Customs	310	K	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62334	-117.07367
ABC Rebuilders	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
Abel Najera	3679	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05424
Abel's Auto Body	311	TREMONT	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59759	-117.06504
ABS Collision Center	1137	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61267	-117.06823
Absolute Tinting	685	EL PORTAL	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.66301	-116.95954
Access II Towing	1350	MAX	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59569	-117.05316
Ace Auto	1647	MARL	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59712	-117.04062
ACE Autocare Experts	1135	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60900	-117.08033
Advanced Autobody and Paint	951	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61523	-117.08286
AG Auto Repair	107	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64456	-117.09422
Agustin Auto Repair	1747	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59346	-117.07347
Al Smith	275	ZENITH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59551	-117.06342
Albert Stiehle Parts	627	WINDSOR	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.63660	-117.05209
All Around Service	268	SHASTA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63339	-117.07525
Almacen Automotriz Pacifico	1355	CALLEJON PALACIOS		N	Y	Y	N	Y	Y	N	Y	Y	32.64570	-117.00625
America Test Only & Regular Smog	231	BEYER	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59252	-117.06289
American Towing & American Dismantling Inc.	140	REED	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59319	-117.05654
Andrade Auto Glass	572	MADRONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63658	-117.09041
Andrade Auto Glass	721	OAKLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62226	-117.08984
Angelos Towing & Recovery	260	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65513	-117.08329
Annex San Diego 1 Inc/Cheelys	45	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64686	-117.09522
Anthony's Auto Center	305	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64489	-117.08187
Apollo Tire Co	1421	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Aragon Car Care Center	894	LAGASCA	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.64646	-117.02640
Argent Classics	1698	HARVARD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64261	-116.98964
Arias Auto Repair	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Auto Express Services	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62033	-117.08451
Auto Partes Maya	825	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61696	-117.01987
Auto Servicio La Vuelta	1307	MONTERA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62227	-117.00147
Auto Smog Check Centers	416	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63370	-117.09091
Autoland Inc.	354	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64006	-117.05023

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Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Automaster Automotive Center	1655	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59750	-117.07581
Automatic Transmission	609	ARIZONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61508	-117.08394
Autotech Motorsports	286	EMERSON	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61234	-117.06787
Autozone 2810	1315	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60646	-117.06535
Autozone 2817	225	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64064	-117.09285
Autozone 5643	897	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61761	-117.08379
Autozone 5644	885	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63638	-117.02380
B&J Auto Repair Smog & Sales	696	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62415	-117.08722
Barajas Auto Tech	1017	HILLTOP	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62025	-117.05773
Barracuda Wheel Alignment	1655	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59278	-117.06316
Batteries Unlimited	2244	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59562	-117.08565
Battery & Auto Center	1510	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Bay Auto Electric	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61495	-117.08368
Becka Automotive	736	F	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63623	-117.09675
Bellos Rods & Customs	1616	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.59791	-117.08469
Beto's Mobile Mechanic	396	SIERRA	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.62069	-117.07610
Better Bumper	1586	MOUNT TAMALPAIS	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61983	-116.98069
Beyer Supreme Tires	1055	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61545	-117.06933
Beyer Supreme Tires 3	647	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63070	-117.09145
Big O Tires	399	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63478	-117.09053
Bolanos Windshield	276	MONTGOMERY	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59714	-117.06328
Bonita Valley Auto Care Inc.	3995	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.65805	-117.04152
Bowlins Auto Service	850	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61869	-117.08512
Brake Depot	1232	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60454	-117.08052
Brake Express	77	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64545	-117.09476
Brakes and Tunes	1403	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Broadway Auto Glass Inc.	98	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64487	-117.09550
Broadway Automotive	1415	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Broadway Recycling Center	1778	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59324	-117.07489
Budget Tires	275	ORANGE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60030	-117.06212
Butlers Auto	286	G	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63786	-117.07776
C&V Auto	1131	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60935	-117.08017
C-1 B Tune Up	1055	TORREY PINES	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64630	-116.95266
Calif Smog Certification Inc.	11	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.65070	-117.08592
California Smog Certification Inc.	1655	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59750	-117.07581
California Smog Test Only	425	C	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.65119	-117.08945
California Tire and Service Centers	471	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63224	-117.08931
Camacho Tires	650	MOSS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61345	-117.08558
Candys Auto Body Shop	1131	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60935	-117.08017
Castaneda's Auto Repair	44	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64657	-117.09602
Charlies Auto Electric	186	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64180	-117.09448
Cherniss Tire World Inc.	101	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64456	-117.09422
Chichi's Auto Repair	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Chula Vista Auto Inc.	24	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64700	-117.09620
Chula Vista Auto Repair	2627	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59242	-117.07695
Chula Vista Engine Rebuilding	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Chula Vista Smog	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Chula Vista Towing	625	J	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62402	-117.08763
Classic Auto Body	1612	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59759	-117.06479
Collision Parts Warehouse	3740	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59510	-117.05208
Courtney Tire	726	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62296	-117.08684
CSK Auto Inc. 1153	241	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64015	-117.09266
CSK Auto Inc. 1486	1396	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60360	-117.06585
CV Fast	1492	ALBANY	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60035	-117.05836
D & D Smog Test	145	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59382	-117.05308
D and D Smog Station	145	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59382	-117.05308
D III Industrial	187	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59239	-117.05232
DA Tint Shop	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Daniels Tire Service	575	C	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64928	-117.09385
Dave's Auto Service	359	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65464	-117.08782
Diamond Finish	897	MESA	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.63296	-117.02856
Doctor Jay Automobile Service	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Dons Auto Service Inc.	495	TELEGRAPH CANYO	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.62923	-117.04264
Double AA Tire Co Inc.	3124	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59507	-117.06630
DR Kar	1153	CRYSTAL DOWNS	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.64164	-116.96016
DR Truck & Trailer Repair	10	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63695	-117.06564
DR Truck & Trailer Repair	1136	MAGELLAN	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.62984	-117.00498
Dynamic Results Inc/Eddies Tires & Auto Repair	2677	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59436	-117.07567
Earl Scheib of CA Inc 243	951	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61523	-117.08286
Econo Lube N Tune 56	903	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61699	-117.08358
Economy Tires	1430	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60092	-117.07805
Economy Transmissions	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Eddie's Tires and Auto Repair	1743	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59413	-117.07421
Enterprise Rent A Car Sales	1129	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60941	-117.08053
Euro Specialties	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Evans Tire & Service Center 49	948	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61555	-117.08384
Explorer Competition Products	2311	BOSWELL	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.65661	-116.96677
Express Tire	646	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63009	-117.09118
Express Tire dba American Auto Service	430	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63313	-117.09099
F &V Auto Repair	2801	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59428	-117.07320
Fernando's Smog	609	ARIZONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61508	-117.08394
Fiber Molds	767	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59795	-117.08613
Fily's Auto Shop	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Formiller Motors	1001	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61360	-117.08226
Formula Auto Repair	590	ARIZONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61520	-117.08253
Franks Garage	359	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65464	-117.08782
Freeway Tire Co	1861	NIRVANA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59619	-117.01371
Fritz Garage	590	ARIZONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61520	-117.08253
Fuller Ford	560	AUTOPARK	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.59379	-117.03054
Fuller Honda	580	AUTOPARK	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.59397	-117.02867
G & G Auto Repair	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Galaz Auto Service	545	ORANGE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60272	-117.07603

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Garage 13 Performance	1574	STARGAZE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62760	-116.95312
Geos Auto Service	355	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63618	-117.09077
German Werks	1409	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
GK Smog & Auto Repair	1088	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61065	-117.08189
Glass Depot	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
GMJ Enterprises LLC/Maximus Auto Center	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Goodwins Auto Kraft	576	MANZANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62685	-117.03911
Gre-Laz Complete Auto Repair	107	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64456	-117.09422
Guero's Towing	485	SATINWOOD	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.60550	-117.03415
H&A Electric Motors	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
Happy Auto Repair	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Henry Auto Glass	1255	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60498	-117.07805
Hernandez Tire Sales	3236	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59506	-117.06350
Hi Voltage Industries	649	GRETCHEN	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.63502	-117.05503
Hot Spot Window Tinting	265	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63901	-117.09223
Huerta Ruben	101	JEFFERSON	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64412	-117.09652
Hunter Service & Parts Inc.	673	ASH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62538	-117.08580
Hypersport Performance	265	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63901	-117.09223
In and Out Transmissions	1409	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
In-N-Out Auto Glass	1120	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61285	-117.06918
International Transmission	1580	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59998	-117.06552
Investruck Inc.	1470	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60272	-117.09357
J&H Auto Repair	355	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63610	-117.09110
J&J Chrome & Polish	2631	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59242	-117.07695
J&L Auto Repair Inc.	273	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63882	-117.09216
J&V Automotive	1550	FRONTAGE	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59930	-117.09027
JC Towing Inc.	2515	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59227	-117.07945
Jesse Smog	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
Jiffy Lube 897	593	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64177	-117.09305
Jim's Glass & Screen	2540	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59590	-117.07825
JJ & Vic Auto Service & Repair	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
JJ Auto Body	2631	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59242	-117.07695
John's Towing	1298	WAXWING	LN	N	Y	Y	N	Y	Y	N	Y	Y	32.61817	-117.03527
JP Truck and Trailer Repair	105	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64343	-117.09845
JT Associates Inc/DBA Audio Xperts	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Juans Auto Repair Inc.	2520	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Julio C Battery	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59506	-117.06350
Just Smog (T & TF Inc)	605	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63075	-117.07547
Kantruds Garage	120	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64398	-117.09490
Karillos Truck Tire and Road Service	2178	CABO BAHIA		N	Y	Y	N	Y	Y	N	Y	Y	32.65819	-116.97221
Kars Machine Shop	876	ADA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60289	-117.09110
KDR Enterprises Inc. DBA WABCO Products	753	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64414	-117.08459
Knova Tools LLC	645	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62608	-117.08717
Kpucinos Auto Car Care	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Kustom Nation Auto	2524	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59608	-117.07919
L&E Tire Service	226	REGENCY	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59257	-117.04305

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
L&E Transmission Inc.	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
La Media Operating Co. - World Petroleum Gas	3733	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59428	-117.05307
Ledezma Tire and Muffler 2	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Ledezma's Muffler Service	1655	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59750	-117.07581
Leemor Sound Inc	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Leer Truck Accessory Center	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Low Price Auto Glass	880	ENERGY	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59546	-117.00854
M&M Mobile Auto Repair	437	MONTGOMERY	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59657	-117.07063
Madrid Glass	1067	FOURTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61398	-117.07252
Main Car Care Inc	2952	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59509	-117.06984
Main Clutch Co	3800	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59544	-117.05034
Marc Goodwin Trucking	72	MANKATO	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63729	-117.06161
Marcos Radiator	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Marcos Radiator	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59590	-117.07825
Marios Mobile Truck Body Repair & Driver	4087	OTAY VALLEY	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59337	-117.04515
Marquez Auto Body Inc.	310	K	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62334	-117.07367
Martinez Smog Check	2952	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59509	-117.06984
Martins Auto Transport	1026	NOLAN	LN	N	Y	Y	N	Y	Y	N	Y	Y	32.62285	-117.04525
Max Auto Detail & Auto Electric	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Maximus Auto Repair	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
MBTS Corporation/Econo Lube and Tune 165	3008	SECOND	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.66041	-117.08450
McCune Chrysler Dodge	1885	AUTO PARK	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.59592	-117.02548
MCK Auto Repairr	3611	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05566
mdt Electronics	3639	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05509
Midas Rajmp Inc.	363	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63570	-117.09094
Miguel Auto Mobile Repair	2474	FALCON VALLEY	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65813	-116.96295
Miguel Garnica	1420	SECOND	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60386	-117.06125
Mike Auto Repair	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Mikes Auto Repair & Smog Center	305	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64512	-117.08189
Mikes Auto Repair & Smog Center	300	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64443	-117.08148
Mike's Recycling	3151	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59423	-117.06515
Mobil Mercedez Specialist	1747	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59346	-117.07347
Mobile Trenz Autosound	265	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63901	-117.09223
Monell Brake Service	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62033	-117.08451
Monos Brake and Alignment	231	BEYER	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.59252	-117.06289
Mossy Nissan	1875	AUTO PARK	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59587	-117.02381
Mr. Smog	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61500	-117.08353
MTM Mobile Truck Repair	1640	MAPLE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.59825	-117.04239
Murrays Automobile	320	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65446	-117.08557
NAPA Auto Parts	680	L	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61539	-117.08864
Need Tow Inc.	240	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63857	-117.09728
Neill's Suzuki Auto Repair	804	COLORADO	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61885	-117.09085
New Auto Concepts	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Nice & Easy Autobody & Paint Inc.	2350	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59552	-117.08328
Octavio's Garage	632	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62637	-117.08805
Official Brake & Lights Inspection Center	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Oldham Ranch Automotive	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62033	-117.08451
One Stop Auto Access Plus	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
One Stop Under Car	360	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63555	-117.09185
Orion's Mobile Auto Service	2554	FERN VALLEY	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.63359	-116.94830
P&R Motors	1165	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61158	-117.06781
Pacific Auto Glass	1165	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61158	-117.06781
Pacific Auto Glass	1193	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61085	-117.06753
Pacific Bay Auto	150	JACQUA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59321	-117.08051
Pacific Supply Co/Parts Plus	660	L	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61603	-117.08605
Parts Plus Auto	98	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64487	-117.09550
Paxton Towing	3487	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59352	-117.05865
PB Auto Service	3645	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05489
Pep Boys Manny Moe & Jack of CA 651	454	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63230	-117.09108
Pep Boys Manny Moe & Jack of CA 872	1000	TIERRA DEL REY		N	Y	Y	N	Y	Y	N	Y	Y	32.63685	-117.02001
Perfect Star European Auto Repair	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61495	-117.08368
Performance Auto Repair & Smog	720	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62335	-117.08703
Performance Team Warehouse Inc.	842	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61902	-117.08526
Peters Precision Auto	310	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65463	-117.08494
PO Auto Repair	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05489
Polos Auto Paint Supply	2513	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59429	-117.07932
Precision Auto Electric	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Precision Automotive	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
Precision Motors	619	K	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62070	-117.08634
Pro Tires	437	THRUSH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61805	-117.03757
Prokar Products	2471	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59451	-117.08052
Protech Autoglass	546	CASSELMAN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64603	-117.09283
Quick Tows & Road Service	209	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64441	-117.08074
R&G Auto Electric	924	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61627	-117.08420
R&L Performance Auto Service	887	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60424	-117.09177
R&R General Auto Repair	720	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62335	-117.08703
Rafael General Atuo Repair	720	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62335	-117.08703
Rags Enterprises Inc./Tip Top Auto	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Rainbow Striping	981	MONSERATE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59935	-117.03021
Ramz Mobile Auto Care	394	MONTCLAIR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62266	-117.04198
Rauls's Body Shop	790	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60434	-117.08765
Rays Mobile Car Care	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
RG Auto Repair	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Ricardos's Custom Covers	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
RNA Motor Works	737	SAN GABRIEL	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.65775	-116.96638
Road One Towing Inc	1187	WALNUT	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60599	-117.08893
Romans Tires/Truck & Body	2513	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Roman's Truck Body & Paint MJP	2513	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59429	-117.07932
Ruben's Auto Electronics	1420	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60136	-117.07886
S & H Motors	292	EMERSON	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61226	-117.06815
Safelite Auto Glass 6150	416	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63370	-117.09091
Sams Muffler Radiators	225	BEYER	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59278	-117.06316

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
San Diego Automotive Inc	48	HILLTOP	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65329	-117.07138
San Diego Diesel Parts	252	INKOPAH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62272	-117.04822
San Diego Tires and Brakes	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Sanchez Auto Repair	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
SCJ Auto Repair	4501	OTAY VALLEY	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59444	-117.03476
SCJ Towing	3211	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59394	-117.06369
Scotts Porsche	118	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64407	-117.09494
Sir Y Incorporated/DBA Sir Y Auto Group	777	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62180	-117.08544
Skyline Garage	615	CHULA VISTA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64614	-117.09608
Smog Center	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
Smog Check Station	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61500	-117.08353
SO California Discount Tire	600	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62716	-117.08839
Soundelux	2490	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
South Bay Auto Haus	310	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65460	-117.08507
South Bay Auto Parts Inc.	908	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61990	-117.07200
South Bay Auto Repair	811	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61915	-117.08531
South Bay Collision Center	1415	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
South Bay Datsun Auto Repairs	1409	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
South Beach Auto Sales/El Valle Auto Sales Inc.	846	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61889	-117.08520
South Coast Alignment	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Southbay Auto Glass	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
Southbay Motorsports	1890	AUTO PARK	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.59597	-117.02689
Southbay Tire & Auto Service	77	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64545	-117.09476
Southbay Tools	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Southbay Tuning Automotive Repair	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
Southern California Reconditioning	67	DEL MAR	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64985	-117.08083
Sparks Tune Up of CV	1415	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Special Smog Test Only	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Speed Merchant Inc/American Tire Distributor	2400	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59580	-117.08169
Sunbelt Towing Inc DBA Western Towing	1171	FRONTAGE	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.60582	-117.08947
Super Low Price Auto Glass 23	265	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63901	-117.09223
Superior Auto Body Group	363	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64435	-117.08378
Superior Auto Body & Paint	347	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64455	-117.08313
Superior VW Automotive Repair	2578	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59514	-117.07806
T-100 Auto Repair	3232	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59506	-117.06381
Tap Acquisition LLC/4 Wheel Parts & Perform Center	1427	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Taps Auto Smog	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Tech Transmissions	1747	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64721	-117.08811
Ted Johnson Garage	1270	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60782	-117.06721
The Autobroker	203	CHURCH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64493	-117.07994
Tinos Auto Tech	720	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62335	-117.08703
TK Auto Repair	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
TK Smog Check & Auto Repair	1409	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Tony Discount Tires Brakes & More	231	BEYER	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59252	-117.06289
Tony's Smog Test Only	2520	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Tony's Tires	1771	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59327	-117.07263

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Torque Performance Auto Center	1421	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Toyo Tire USA Corporation	860	KUHN	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65209	-116.96651
Truebar Machine Shop & Auto Repair	1403	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Trueline Auto Service	377	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64414	-117.08459
Tune Plus	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Two Bit Tow of San Diego	240	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63857	-117.09728
U-Do-It / Auto Painting	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61495	-117.08368
Ulises Roberto Sanchez dba Batt Recycling	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
UNIC Smog Repair	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61495	-117.08368
Union Auto Repair	590	ARIZONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61520	-117.08253
V&M Auto Mechanic	1135	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61267	-117.06823
V&m Auto Mechanic	409	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63749	-117.07809
Valencia's Diesel Mobile	876	ADA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60289	-117.09110
Valvoline Instant Oil Change	1556	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64453	-116.99709
Valvoline Instant Oil Change	899	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63648	-117.02117
Van's Suspension & Brake Center	1741	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59412	-117.07447
Victor's Auto Repair	255	ASH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63972	-117.09141
Victor's Auto Repair	1645	RIDGE ROCK	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.62858	-116.98663
Vidrio Towing	2471	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59438	-117.03914
Villegas Used Tires	466	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63175	-117.09099
West Coast Mobile Mechanix	935	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61604	-117.08317
West Coast Transmission	1660	SILVAS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59588	-117.07740
Western Towing	1187	WALNUT	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60518	-117.08803
Wheel Depot	2835	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59428	-117.07248
Xpress Motorsports	45	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.65033	-117.09555
Zepeda's Radiator Repair	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Zeppy Auto Repair	2520	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
ZX Team	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Cat (iii-xxi)-Boat Marina														
Garcia's Detail and Repair	867	COLORADO	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61694	-117.08953
Kaiulani Boat Service	1446	YELLOWSTONE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63683	-116.94140
Magana Yacht Repair	778	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59905	-117.08685
Sergio Hernandez Yacht Maintenance	934	FIFTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61682	-117.07974
Sterling Marine	829	WILER	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.63265	-117.03796
Cat iv-Equipment Related														
ABLE Heating and Air Conditioning	1020	COLORADO	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61167	-117.08807
All Drain Rooter	1267	CALLE CANDELERO		N	Y	Y	N	Y	Y	N	Y	Y	32.63819	-117.00856
Allbrands A1 Appliance Service	951	SAINT CLAIRE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.64659	-116.97648
Antonio Plumbing	577	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60355	-117.07719
Any Drain Rooter Service	296	TREMONT	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59818	-117.06426
Arrow Appliance Service	1164	CALLE FLORECITA		N	Y	Y	N	Y	Y	N	Y	Y	32.64638	-117.01478
B&D Power Services	368	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59942	-117.06782
BJ's Rental Inc.	317	K	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62405	-117.07416
California Plumbing & Heating	1434	SOUTHVIEW	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.63405	-116.99943
Chula Vista Cycle Center	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Clear-Flow Rooter Service	218	ORLANDO	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61355	-117.04611

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Cogswell Marine & Motorsports Inc.	865	STELLA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60320	-117.09061
Daves Quality Plumbing Inc.	320	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65446	-117.08557
DaVinchi Metal Signs	3521	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59151	-117.05779
Dresser Rand	670	L	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61573	-117.08745
Elias Plumbing	1129	CLOUDWALK CANYON	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62369	-117.02969
Handiworks	944	BUCKAROO	LN	N	Y	Y	N	Y	Y	N	Y	Y	32.65598	-117.02869
J&J Drain & Sewer	2355	CALLE SABROSO		N	Y	Y	N	Y	Y	N	Y	Y	32.66203	-116.96778
Jakes Plumbing	430	WESTBY	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61749	-117.07676
Jifffy Rooter	3236	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59506	-117.06350
Martin Prep	1213	MONTE SERENO	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62791	-116.99932
Moys Appliance Repair	1458	MAX	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60649	-117.04695
Randys Rooter Service	223	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63581	-117.07414
Triple M. Marine Welding & Repair Inc.	1550	FRONTAGE	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59930	-117.09027
TV Jacks Inc.	4230	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.66039	-117.03612
Uncle Joe Drain Cleaning	1660	CABRILLO	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.60156	-117.02742
Valley Industrial Specialties Inc.	110	GLOVER	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.65486	-117.08743
Walashek Industrial & Marine Inc.	595	C	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64876	-117.09572
West Air Gas & Equip Inc.	1590	FRONTAGE	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59890	-117.09024
Cat ix-Pest Control Services														
Adios Pest Control Inc.	2576	CATAMARAN	WY	N	Y	Y	N	N	Y	Y	Y	Y	32.65597	-116.95695
Atlas Termite	25	SECOND	AV	N	Y	Y	N	N	Y	Y	Y	Y	32.65214	-117.07915
Chula Vista Pest Control	244	THIRD	AV	N	Y	Y	N	N	Y	Y	Y	Y	32.64312	-117.08098
Indemand Pest Control	982	MERCED RIVER	RD	N	Y	Y	N	N	Y	Y	Y	Y	32.61481	-117.01156
King Termite Control Inc.	290	LANDIS	AV	N	Y	Y	N	N	Y	Y	Y	Y	32.64129	-117.08137
Lloyds Pest Control	2865	MAIN	ST	N	Y	Y	N	N	Y	Y	Y	Y	32.59428	-117.07183
The Works Termite Co	119	KEARNEY	ST	N	Y	Y	N	N	Y	Y	Y	Y	32.62804	-117.06657
Turbo Termite & Repair	1021	BAY	BL	N	Y	Y	N	N	Y	Y	Y	Y	32.61033	-117.09150
We Got Ya Pest Control Inc.	46	THIRD	AV	N	Y	Y	N	N	Y	Y	Y	Y	32.65002	-117.08402
Cat vi-Auto-Washing														
619 Detail	2792	SAVANNAH	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.66194	-116.95147
619 Mobile Detailing	55	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61114	-117.05205
Absolute Auto Detail	1390	SANTA ALICIA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62378	-116.99294
Advance Mobile Wash & Detail	1093	FOREST LAKE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.64174	-116.96508
AG Autobody & Detail	2466	MYRTLE BEACH	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.63202	-116.95108
All American Car Wash C.V.	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
Amplified Detailing & Restoration	423	COLORADO	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63226	-117.09547
Aqua Clean	1435	RIDGEBACK	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64005	-117.04316
Aqua-Man Mobile Auto Carwash Detailing	1184	CAMINO BISCAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64156	-117.01247
Arreola Auto Detailing	1047	FOURTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61480	-117.07284
Arreola Auto Detailing	1049	FOURTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61402	-117.07406
Auto Detailing By David	489	ELM	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63652	-117.07144
Baja Auto Detail	615	CHULA VISTA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64614	-117.09608
Bebo's Auto Detail	804	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62023	-117.08574
Bonita Car Wash	3048	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64757	-117.05836
Brabus Pro Auto Detailing	1743	FENNEL	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.61880	-116.96059
California Sunshine Detail	2385	PLAZA EVA		N	Y	Y	N	Y	Y	N	Y	Y	32.67026	-116.97004

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Car Shower	3487	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59352	-117.05865
Del Rey Detailers	1030	CORDOVA	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.63166	-117.01621
Deluxe Mobile Detailing	2401	VALLEY GARDENS	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.63191	-116.95302
Deluxe Mobile Detailing	1320	LONG VIEW	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.64110	-116.94360
Diablos Auto Detail	1151	FOURTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61074	-117.07119
Eastlake Mobile Detailing	1185	LA VIDA	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.64337	-116.95600
Empire Mobile Auto Detailing	250	QUINTARD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60262	-117.06313
Ernie's Detail	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Finest Auto Detailing	1336	SERENA	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.64283	-117.00590
Fresh Detailing	615	MOSS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61299	-117.08338
GBC Auto Detailing	1175	BATTLE CREEK	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.63588	-116.97887
JDA Detailing and Services	825	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61696	-117.01987
JJ's Mobile Auto Detailing	1123	TOBIAS	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.61573	-117.05830
Jose Gallardo	561	FLOWER	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64399	-117.09265
JR S Detail/Mobile Car Wash	770	NAPLES	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.62284	-117.02426
JR's Mobile Auto Detail	1516	OLEANDER	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60480	-117.03310
Keen Detail	1344	SERENA	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.64299	-117.00546
Klimax Mobile Detail	253	K	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62480	-117.07139
Lad Mobile Vehicle Service	557	OXFORD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60701	-117.07743
LST Carwash	907	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61699	-117.08358
Luna's Mobile Detailing	1143	VISTA	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.61538	-117.05704
Maranatha Carwash	298	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63800	-117.09260
Mario's Auto Detailing	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Mario's Auto Detailing	1409	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Max Auto Detail & Auto Electric	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Max Enterprises	691	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62328	-117.09110
Mobile Car Wash	1613	WOODVILLE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62619	-116.98816
Moreno Auto Detailing	1291	BOCA RATON	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.63394	-116.96316
Nice Car Always	1468	ASHFORD CASTLE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62992	-116.95313
Oscar Velazquez Auto Detail	465	OXFORD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60809	-117.07430
Palomar Gas & Carwash	878	STELLA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60397	-117.09125
Pearl Carwash/Chula Vista Inc.	215	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63958	-117.09694
Premier Mobile Auto Detail and Tinting	1438	MARBLE CANYON	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.63714	-116.94203
Pro Detailing Services	1390	SANTA ALICIA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62378	-116.99294
Prontowash Southern CA, LLC	2015	BIRCH	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.62376	-116.96689
Rancho Mobile Auto Detail	227	RIENSTRA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60728	-117.04365
Rancho Mobile Detail	1087	MELROSE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62058	-117.04657
Roberto's Custom Detailing	1307	TOBIAS	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.60936	-117.05583
Shine Mobile Detailing	1282	WILD IRIS	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.62283	-117.01227
Shining Star Auto Detail	2431	EASTRIDGE	LP	N	Y	Y	N	Y	Y	N	Y	Y	32.64515	-116.95926
Simply Clean Auto Detailing	589	BAYONA	LP	N	Y	Y	N	Y	Y	N	Y	Y	32.64781	-117.01772
Sky Auto Detail	1340	ELM	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60664	-117.06095
SOS Auto Mobile	336	ASH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63669	-117.09093
South 1 Auto Detail	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Speed Auto Detailing	1018	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61164	-117.08686
Splash Auto Detail	731	LORI	LN	N	Y	Y	N	Y	Y	N	Y	Y	32.63518	-117.03866

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Splash Mobile Detail	1579	CITRUS	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59933	-117.05388
Spotless Auto Detailing	1618	GOLDEN GATE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61851	-116.98166
Superior Shine Mobile Detailing	398	INKOPAH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62439	-117.04242
Terra Nova Car Wash/Fiesta Express	350	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64056	-117.05002
Valencia Headlights Restoration	2520	TRAIL MARKER	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.66569	-116.96324
Vista Palms Car Wash	795	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62121	-117.08521
Wash and Glow Auto Detail	886	ENTRADA	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.63224	-117.03163
Wash and Glow Detail	1539	SONORA	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.60525	-117.03057
Xclusive Auto Detail	416	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63370	-117.09091
Xtreme Enterprises Inc./Xtreme Mobile	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
Xtreme Mobile Detailing	603	MELROSE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63700	-117.05169
Cat vii-Auto Lots Storage														
Broadway Palomar RV Storage	1375	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60188	-117.07638
Chula Vista Toyota	650	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59407	-117.02646
Convinient Mobile	2555	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59417	-117.07858
Eastlake RV and Boat Storage	2371	BOSWELL	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.65603	-116.96392
Eastlake Self Storage	2351	BOSWELL	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.65603	-116.96499
Economy Upholstery	3679	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05424
Hilltop Main Self Storage	3755	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59409	-117.05200
Hofer Corporation	5662	OTAY VALLEY	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.58069	-116.99791
Irongate Mini Storage	3650	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59645	-117.05445
Koa Kampground Storage	111	SECOND	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.65493	-117.07883
Otay Valley RV Storage	163	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59344	-117.05309
Roman's Auto Electric	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Savon Self Storage	3708	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59569	-117.05316
SD Storage-CVS	2776	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59576	-117.07353
SD Storage-MSS	2385	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59387	-117.08163
SD Storage-VSS	325	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65539	-117.08610
Security First Commercial Storage, LLC	1725	FOURTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59392	-117.06791
Security First Self Storage	3089	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59393	-117.06711
Security Public Storage	471	C	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.65117	-117.09085
Sentry Storage	3885	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59213	-117.05030
Cat viii-Fueling Retail Wholesale														
Allen Gas Truck Stop	3205	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59442	-117.06396
Arco AM/PM 5208	407	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64381	-117.08581
Arco AM/PM 5217	798	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62426	-117.07361
Arco AM/PM 5218	1725	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.07460
Arco AM/PM 607	3190	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59508	-117.06490
Arco AM/PM 633	800	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60450	-117.08843
Arco At H Street	720	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62931	-117.09425
Arco By The Bay	765	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64019	-117.09901
Arco Sunshine Market	1401	HILLTOP	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.60425	-117.05145
Birkdale Corp DBA L Street 76	898	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61735	-117.08457
Bobar Market 8	600	F	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63739	-117.09266
Bonita Arco	4498	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.66086	-117.03153
Bonita Gas & Mini Mart	4498	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.66086	-117.03153

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Bonita Point Auto Care Inc.	149	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64482	-117.00001
Bonita Shell	100	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64766	-117.06376
Bonita Vista Gas & Auto	903	OTAY LAKES	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64222	-116.99372
Cali Mart	3733	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59428	-117.05307
Chevron Inc 1422	95	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64828	-117.06409
Chevron Station 1946	695	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61469	-117.02453
Chevron Station Inc. 1837	770	PLAZA	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.63677	-117.02975
Chevron Station-Eastlake Parkway	950	EASTLAKE	PW	N	Y	Y	N	Y	Y	N	Y	Y	32.65023	-116.96665
Chevron Station-Olympic Parkway 1975	2115	OLYMPIC	PW	N	Y	Y	N	Y	Y	N	Y	Y	32.62892	-116.96645
Chula Vista Mobil	902	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62019	-117.07204
Chula Vista SVC CTR/SECV Inc.	899	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62098	-117.07157
Circle K Store 2964	60	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64621	-117.09580
Circle K Store 5708	98	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64764	-117.06442
Dons Arco	495	TELEGRAPH CANYO	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.62923	-117.04264
Fred's Auto Repair	3205	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59442	-117.06396
Gas Depot	199	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64182	-117.09336
Lamb Fuels Inc.	855	ENERGY	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59747	-117.00999
Lorena B Ratonel Shell	350	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64056	-117.05002
Melrose 76	1495	MELROSE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60503	-117.03887
Mobil Oil On The Run 12924	2210	OTAY LAKES	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64637	-116.96858
Mohsen Oil	1328	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60544	-117.06625
New West Petroleum LLC 1016	1498	MELROSE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60478	-117.03950
Optima	498	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63120	-117.09009
Optimart	1450	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60144	-117.06500
Palomar Shell	1295	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60720	-117.06617
Seven Eleven 13951 B 2131	275	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64542	-117.08011
Seven Eleven 24070A 2131	1482	HILLTOP	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.60045	-117.05188
Seven Eleven 29540B 2131	7	NAPLES	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61730	-117.05731
Shell at Main	4555	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59444	-117.03476
Supreme Gasoline	196	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64146	-117.09391
Suresh Patel	4430	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59438	-117.03796
Terra Nova Service Plaza	350	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64056	-117.05002
Thrifty 9568	401	TELEGRAPH CANYO	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.62881	-117.04628
World Oil Co. 46	685	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63032	-117.09292
Cat x-Eating Drinking Establishments														
Agave Grill	625	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63110	-117.09065
Albertson's 6757	720	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62651	-117.07534
Albertson's 6759	2310	PROCTOR VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66099	-116.96913
Alejandro's Mexican Bar & Grill	2220	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64591	-116.96781
Ancira Tamales	2260	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59562	-117.08565
Aning's Homemade Specialties	449	KRISTA	CT	Y	Y	N	N	Y	N	N	Y	Y	32.64147	-117.04555
Anthony's Fish Grotto	215	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.63876	-117.10084
Antojito's Lucy's	1576	INDUSTRIAL	BL	Y	Y	N	N	Y	N	N	Y	Y	32.59900	-117.08449
Apple Tree Market	1556	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59830	-117.06486
Arbys 7057/Capitals Group LLC	2244	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64693	-116.96750
Asada Express	1067	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61155	-117.08144

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Asada Express Inc.	1067	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61155	-117.08144
Aunt Emmas	700	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63982	-117.09767
Auto Express Services	801	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62033	-117.08451
Baja Lobster & Club	1060	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61167	-117.08228
Baja Taco	1052	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61167	-117.08228
Ball 3	683	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62489	-117.08668
Baskin Robbins	1463	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64438	-117.00140
Bert's Grill	525	TELEGRAPH CANYO	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62901	-117.03946
Best Price	1655	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59750	-117.07581
Birrieria Don Rafa	621	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62654	-117.08735
Blimpie	1208	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60588	-117.08016
Blimpie Subs and Salads	1360	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.63167	-116.96778
Bobbies South	686	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62466	-117.08739
Brassco International Inc.	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Bulls Eye Burger	860	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61843	-117.08503
Burger King 11435	97	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64840	-117.06365
Burger King 11545	899	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63648	-117.02117
Burger King 2339	599	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62977	-117.08662
Burger King 952	1265	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60798	-117.06620
Burrito Corona Group LLC	4444	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66028	-117.03190
Butcher Shop Steak HS	556	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62905	-117.08918
C&S Discount Store	294	CENTER	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64024	-117.07913
Cafe De Cafe	4366	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
Cafe Salotto	2240	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64556	-116.96705
Caffe Taza	533	TELEGRAPH CANYO	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62901	-117.03946
Caffe Taza	374	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63967	-117.04958
Cali Dogs	1016	TIERRA DEL REY		Y	Y	N	N	Y	N	N	Y	Y	32.63685	-117.02001
California Pizza Kitchen	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
California Sushi Bar Inc.	337	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64001	-117.07904
Canyon Club Cafe	421	TELEGRAPH CANYO	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62907	-117.04579
Carls JR 281	2097	OLYMPIC	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62983	-116.96685
Carls JR 31	502	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63053	-117.08972
Carls JR 546	1100	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60980	-117.08180
Carls JR 575	1487	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64459	-117.00054
Carls JR 83	996	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61730	-117.07091
Carrow's Restaurant 953	598	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62977	-117.08662
CAT Cheoon Restauranct	1660	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59691	-117.07667
CDT Catering Services	320	TROUSDALE	DR	Y	Y	N	N	Y	N	N	Y	Y	32.65442	-117.08570
Cheese Cake Factory	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Chick Fil A at Eastlake Terraces	2089	OLYMPIC	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62938	-116.96725
Chili's Bar & Grill	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62243	-116.96607
Chili's Bar & Grill 1363	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Chili's Bar & Grill 387	800	PASEO DEL REY		Y	Y	N	N	Y	N	N	Y	Y	32.63658	-117.02863
China China Restaurant	386	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63841	-117.04936
China Gourmet Express	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
China King Buffet	693	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60482	-117.08443

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China Little Cafe Express	492	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63479	-117.07790
Chinese City Restaurant	1403	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60313	-117.06460
Chow King	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Chriss Chriss Ent Inc./Little Caesar Pizza	642	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60239	-117.08125
Chriss Chriss Ent Inc./Little Caesar Pizza	481	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63173	-117.08922
Chula Vista Nutrition Store	1655	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59750	-117.07581
Chula Vista RV Park Store	460	SANDPIPER	WY	Y	Y	N	N	Y	N	N	Y	Y	32.62688	-117.10501
Chula Vista Submarina	1177	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60827	-117.08000
Church Fried Chicken	1005	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61673	-117.06997
Churreria	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Ciao Italian Restaurant	4360	OTAY VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.59438	-117.03914
Cilantro Live	315	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64077	-117.07935
Claire's 5016	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62977	-117.08662
Coco's 607	303	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63769	-117.09172
Coin Toss	312	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63701	-117.09250
Cold Stone Creamery 081	374	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63967	-117.04958
Cold Stone Creamery 244	2295	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64861	-116.96643
Colima's Mexican Food	4102	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65837	-117.03904
Coors Amp/Valentino Espresso	2050	OTAY VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.58808	-117.00630
Corzy Corner Pizza	1655	BRANDYWINE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60166	-117.02888
COSTCO - East H St	895	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63734	-117.02221
COSTCO at Broadway	1130	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60854	-117.08321
Cotija Taco Shop	4404	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66028	-117.03190
Cotijas Mexican Food	810	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62349	-117.07339
Cotixan Mexican & Seafood	1392	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62319	-116.99754
Cotixan Taco Shop	374	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63967	-117.04958
D & J's Way Inc./Subway	559	TELEGRAPH CANYO	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62889	-117.03764
D Lish	386	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63841	-117.04936
Dairy Queen Orange Julius	664	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60282	-117.08173
Daphnes Greek Cafe	2275	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64806	-116.96713
Del Taco 809	670	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60282	-117.08173
Deli Shoppe	1075	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60816	-117.09140
Denny's Restaurant 1719	110	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64763	-117.06323
Denny's Restaurant 6962	692	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63990	-117.09656
Desserts Plus Chula Vista, Inc	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Diamond Jim	771	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62525	-117.07325
Dlush LLC	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Docks Cocktail Lounge	317	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64070	-117.07932
Dolci Mango	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Dominos Pizza	943	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Dominos Pizza 7724	380	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63818	-117.07906
Don Pedro Taco Shop	247	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64321	-117.08028
Donnys Cafe Inc.	3901	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65706	-117.04300
Dragon Express Fast Food	678	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64010	-117.09582
Edelweiss Restaurant	230	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64360	-117.08116
El Camaron	193	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64210	-117.09330

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
El Camaron 2	301	MONTGOMERY	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59655	-117.06471
El Comal Antojitos	262	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64243	-117.08071
El Comal Antojitos Mexicanos	239	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64352	-117.08040
El Comal Antojitos Mexicanos	534	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62931	-117.09012
El Dorado Seafood & Grill	311	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60635	-117.06697
El Gordito Feliz Mexican Food	1149	CABRILLO	DR	Y	Y	N	N	Y	N	N	Y	Y	32.63145	-117.00464
El Jalapeno Mexican Grill	1352	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60450	-117.06625
El Mexicanos Taco Shop	567	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62889	-117.03764
El Michoacano Taco Shop & Seafood	2130	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62037	-116.96132
El Nopal Market LLC	1655	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59750	-117.07581
El Nortena Taco Shop	1266	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60799	-117.06753
El Norteno	1266	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60799	-117.06753
El Pollo Loco/Bas Food Services	666	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62987	-117.09224
El Ranchero Factory	1324	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60568	-117.06673
El Ranchero Factory Taco Shop 2	3344	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59505	-117.06121
El Torito 89	271	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.63730	-117.10018
En Caliente Cafe	872	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.65177	-116.96995
En Caliente Cafe	872	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.65177	-116.96995
Ernie's 50s Diner	323	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64056	-117.07926
Estela's Bazaar	1080	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61091	-117.08199
Fair Market & Hollywood Pizza	72	J	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63131	-117.05946
Figaro's Pizza	2326	PROCTOR VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66062	-116.97033
Filippis Pizza Grotto	82	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64518	-117.09549
Flamingo Cafe	396	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63450	-117.09128
Florence Pizza Express	1550	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64453	-116.99709
Food 4 Less 780	660	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60282	-117.08173
Foodland 7	1340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60511	-117.06659
Formosa Club	840	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61915	-117.08531
Frida Fine Mexican Cuisine	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Frutas Inc.	1329	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60511	-117.06659
Fuddruckers 3055	340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63966	-117.07979
Galley At The Marina	550	MARINA	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62444	-117.10310
General Los Panchos Taco Shop	577	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63148	-117.08867
Giant Pizza King 17	419	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62907	-117.04579
Gigante Pizza	226	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64071	-117.09368
Global Coffee Sidewalk Cafe	4366	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
Godfather's Pizza	1187	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60739	-117.07967
Godland Inc./Juice It Up	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Godland Inc./Juice It Up	872	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.65056	-116.96883
Golden Star Chinese Food	864	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62220	-117.07295
Golden Unique	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62977	-117.08662
Goldilocks	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Gondola Pizza	1067	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61155	-117.08144
Great Happiness II	1445	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60212	-117.06401
H&J Phan DBA Lollicup Tea Zone	1550	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64453	-116.99709
HDOS ENT	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Henry's Market Place	690	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62780	-117.07529
Henry's Market Place dba Otay Ranch Market	878	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.65177	-116.96995
Heritage Park Cafe	1392	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62319	-116.99754
Hermano's Taco Shop	1295	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60391	-117.07791
Hilltop Market	1500	HILLTOP	DR	Y	Y	N	N	Y	N	N	Y	Y	32.59976	-117.05185
Home Town Buffet 705	651	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60412	-117.08248
Home Town IGA	646	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64010	-117.09582
Honey Baked Ham Inc.	316	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63961	-117.05180
Hot Dog Expressions	725	PLAZA	CT	Y	Y	N	N	Y	N	N	Y	Y	32.63756	-117.03198
Hungry Hanks Deli	866	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62220	-117.07295
Hurshi's Cafe	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Ida's Lompia Palace & China Town	732	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64572	-117.00232
In-N-Out Burger	1725	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62037	-116.96132
International House of Pancakes	2258	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64740	-116.96627
Isactaz Inc/Quiznos 3179	303	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63445	-117.07763
Italy Express	527	TELEGRAPH CANYO	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62901	-117.03946
Jack Donuts	1355	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60276	-117.07745
Jack in the Box - DMSD Foods	947	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Jack in the Box 15	802	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62367	-117.07334
Jack in the Box 6	486	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63120	-117.09009
Jack in the Box 63	1408	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60227	-117.06570
Jack in the Box 68	4011	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65851	-117.04070
Jack in the Box 86	5	FOURTH	AV	Y	Y	N	N	Y	N	N	Y	Y	32.65100	-117.08764
Jack in the Box 93	585	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60323	-117.07789
Jack in the Box 99	370	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64004	-117.04903
Jack-N-The Box	919	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Jalisco Cafe	4026	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65795	-117.04011
Jamba Juice 515	2275	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64806	-116.96713
Jamba Juice 603	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Janies	652	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64010	-117.09582
Javid Brothers Enterpirse Inc/Quiznos	1120	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60910	-117.08137
Jill A Lindstedt	1110	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61320	-117.06939
Jill A Lindstedt	725	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64043	-117.09850
Jimmy J's Espresso	900	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64055	-116.99833
Jimmy's Family Restaurant	1198	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61078	-117.06866
JNC Pinoy Foodmart Inc.	943	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Jochi's Fast Food Inc.	1340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60511	-117.06659
Joco Management	635	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62641	-117.08730
Joe and Ernie's Pizzeria Inc.	730	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62256	-117.08683
Jose Mexican Food	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Jose's Mexican Food	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Joshways Restaurant & Bar	299	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63825	-117.09193
Juice Adventure	935	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Juice Adventure	690	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62780	-117.07529
Julian's Mexican Food	1090	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61377	-117.06972
Just Java Cafe	285	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64194	-117.07980

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JVS ENT LLC/DBA Quiznos Sub 4365	2305	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64900	-116.96529
K Kiala Inc DBA SD Philly Cheese	872	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.65177	-116.96995
Kaga Sushi	1216	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60952	-117.06801
Kanpai Restaurant	305	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60635	-117.06697
Karina's Mexican Seafood	986	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61400	-117.08364
Karina's Mexican Style Seafood 2	1282	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60725	-117.06708
KD Inc/Krazy Dollar	1161	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60588	-117.09149
KFC Y450073BL03	461	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63611	-117.07719
KFC- Y305030	1361	MEDICAL CENTER	DR	Y	Y	N	N	Y	N	N	Y	Y	32.61555	-117.02640
KFC-Y450114	1327	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60288	-117.07809
KIC Import & Export	737	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62622	-117.07363
Kings Fish House	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
King's Fish House	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62243	-116.96607
KMart Corp. 7636	875	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63750	-117.02522
Koopman Enterprise	376	THERESA	WY	Y	Y	N	N	Y	N	N	Y	Y	32.61975	-117.04196
Kotija Taco Shop	295	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
L & L Barbecue	2260	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64644	-116.96569
L Street Shell	902	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61682	-117.08432
La Bella Pizza	373	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63857	-117.07847
La Bodega Market	1193	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60721	-117.07960
La Casa De Dona Maria	2530	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59521	-117.07895
La Escondida	2530	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59521	-117.07895
La Fresca	1037	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61276	-117.08189
La Fuente Mexican Food	34	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.65027	-117.08663
La India Bonita	1455	MELROSE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60564	-117.03914
La Moreliana Bakery	275	QUINTARD	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60332	-117.06390
La Nena Restaurant Inc.	975	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61483	-117.08275
La Parroquia Cafe & Music Lounge	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62583	-116.96682
La Plamita	1231	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60934	-117.06677
La Pulga 2	1295	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60391	-117.07791
La Quinta Grill	625	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64137	-117.09444
La Taquiza Mexican Restaurant	1576	INDUSTRIAL	BL	Y	Y	N	N	Y	N	N	Y	Y	32.59900	-117.08449
La Tia Mexican Food/Paula Bakery	631	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62654	-117.08735
La Torta	730	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62917	-117.09477
La Tropicana	1340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60511	-117.06659
Las Golondrinas Taco Shop	686	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62466	-117.08739
Liberty Giant Pizza	1419	HILLTOP	DR	Y	Y	N	N	Y	N	N	Y	Y	32.60389	-117.05131
Lisa's Filipino Cuisine	2260	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64644	-116.96569
Little Caesars 7636	875	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63750	-117.02522
LJ San Miguel Ranch 22 LP/Los Primos Mex Food	2322	PROCTOR VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66162	-116.96959
Lolitas Restaurant	413	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62907	-117.04579
Lolitas Taco Shop	601	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.61495	-117.02634
Lolitas Taco Shop	4516	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66113	-117.03035
Lomas Cafe Mexican Food	3218	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59507	-117.06407
Long John Silver	1049	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61571	-117.06942
Lorenzos	200	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64071	-117.09368

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Los Alazanes Inc.	1451	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64438	-117.00140
Los Jalapenos Mexican Restaurant	943	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61581	-117.08301
Los Panchos Mexican & Seafood	933	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Los Panchos Taco Shop	1009	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61644	-117.06985
Los Taquitos	1665	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59551	-117.06422
Los Taquitos Mexican Grill	1208	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60588	-117.08016
Los Tres Pedros	1223	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60995	-117.06710
Lucys Market	1576	INDUSTRIAL	BL	Y	Y	N	N	Y	N	N	Y	Y	32.59900	-117.08449
Lutong Bahay & Oriental Grill	732	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64572	-117.00232
Luzitas Taco Shop	60	J	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63131	-117.05946
Macaroni Grill	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62243	-116.96607
Mandarin Canton Restaurant	543	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62901	-117.03946
Mandarin Chinese	945	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Mandarin Gourmet	4410	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66028	-117.03190
Mango Exotic Mexican Ice Cream	510	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63017	-117.09020
Manhattan	400	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63412	-117.09107
Manila Garden Restaurant	1660	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59691	-117.07667
Manna Restaurant	600	F	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63739	-117.09266
Marie Calendar 103	330	F	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64072	-117.08089
Marios Taco Shop	642	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60239	-117.08125
Mariscos El Palmar	201	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64115	-117.09305
Mariscos Los Arcos Restaurant	89	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64831	-117.06467
Marisol Nite Club	2638	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59507	-117.07631
Maye's Desserts	4240	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66036	-117.03565
McDonalds - Telegraph	551	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62867	-117.03864
McDonalds 14228/Sutherland MGMT Co	2254	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64721	-116.96681
McDonalds 25836/TRS Restaurant	687	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.61469	-117.02550
McDonalds 6840/Sutherland MGMT Co	551	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62867	-117.03864
McDonalds at Broadway	619	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62693	-117.08747
McDonalds at E Street	725	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64043	-117.09850
McDonalds at Third 1557	1110	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61320	-117.06939
McDonalds Corp	1150	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60702	-117.08245
McDonalds Corp 7554	1288	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60368	-117.07923
McDonalds of Bonita	4340	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
McDonalds/Tavarua Restaurant Inc	75	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.65127	-117.09382
Mercado International 2000	1415	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60270	-117.06422
Merkl's Restaurant	415	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63388	-117.09026
MGM Buffet	693	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60482	-117.08443
Miramar Fish Market	1655	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59750	-117.07581
MJ's Bar & Grill	1445	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60212	-117.06401
MR Jalapeno	520	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63017	-117.09020
MR VS Giant Pizza	1090	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61395	-117.06991
MRS Rice Oriental Restaurant, LLC	1355	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60276	-117.07745
NAPA Pizza	1550	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64453	-116.99709
Ninna Matty's Mexican Food	1352	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60450	-117.06625
Noodles & Company	2305	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64900	-116.96529

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Ocean City Partnership	1011	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61338	-117.08218
Olive Garden Restaurant 1205	585	I	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62817	-117.08715
Otay Farms Inc.	1716	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59388	-117.07510
Outside In	1121	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61329	-117.06849
Over the Border	3008	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59507	-117.06832
Palap Charbroiled Chicken	263	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Palomar Importer & Wholesale Co. Inc.	2550	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59521	-117.07895
Panda Chef	2260	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64644	-116.96569
Panda Express 1098	1820	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59436	-117.03517
Panda Express 1316	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Panda Express 960	1120	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60910	-117.08137
Panda Imperial Chinese	1208	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60982	-117.06796
Panda Imperial Restaurant	1208	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60982	-117.06796
Panda King	1459	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64438	-117.00140
Panera Bread	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Papa Johns Pizza 1977	1085	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61432	-117.06889
Papa Johns Pizza 1978	1020	TIERRA DEL REY		Y	Y	N	N	Y	N	N	Y	Y	32.63685	-117.02001
Papa Murphy's Take & Bake Pizza	263	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Papayas Juice Bar	4244	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66036	-117.03565
Park & Joo Enterprise Inc/DBA Rice King	1550	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64453	-116.99709
Pei Wei Asian Dinner	884	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.65128	-116.96917
Pescados Mariscos Hectors	2305	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64900	-116.96529
Pescados Y Mariscos Hectors	1177	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60827	-117.08000
PF Changs	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62243	-116.96607
PF Changs China Bistro	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Pho Vien Dong	2260	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64644	-116.96569
Pick Up Stix	2127	OLYMPIC	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62857	-116.96569
Pinas Fruit Salads Smoothies	970	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61458	-117.08388
Pinas Fruit Salads Smoothies	970	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61458	-117.08388
Pinnochio	225	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64391	-117.08055
Pizza & Pasta Express	1392	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62319	-116.99754
Pizza Hut	1480	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
Pizza Hut	542	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
Pizza Hut	251	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
Pizza Hut	885	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63638	-117.02380
Pizza Hut 315092	1480	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
Pizza Junction	226	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64071	-117.09368
Pizzeria Uno	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Plazas Mexican Food	1550	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59877	-117.07710
Poe's Catering	2156	LAGO MADERO		Y	Y	N	N	Y	N	N	Y	Y	32.65867	-116.97252
Poliza Hollywood Inc	72	J	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63131	-117.05946
Pozoleria Dona Maria	1660	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59691	-117.07667
Prima Supply Inc.	649	ANITA	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59752	-117.08091
Quizno's Classic Subs	303	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63445	-117.07763
Rally's Hamburger/Ongs Restaurant Group	1004	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61677	-117.07064
Ralphs 235	659	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.61568	-117.02500

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Ralphs 75	780	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64500	-117.00159
Rancho Palomar LP	1315	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60646	-117.06535
Red Hot Java	765	MEDICAL CENTER	CT	Y	Y	N	N	Y	N	N	Y	Y	32.61799	-117.02376
Red Lobster 521	342	F	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64056	-117.08145
Red Ribbon Bakery	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Roberto DePhillippis Steak House	556	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62905	-117.08918
Robledo's Taco Shop Inc.	444	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63291	-117.09060
Romano's Macaroni Grill 339	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Romesco Baja Bistro	4346	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
Rosa Giant Pizza	1680	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59537	-117.07634
Royal China Palace II	625	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64137	-117.09444
RS Restaurant LLC DBA Subway 2253	374	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63967	-117.04958
Rubios Fresh Mexican Grill	1016	TIERRA DEL REY		Y	Y	N	N	Y	N	N	Y	Y	32.63685	-117.02001
Rubios Fresh Mexican Grill at Broadway	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Rubios Fresh Mexican Grill at Eastlake	1480	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
San Diego Cash & Carry	3630	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59631	-117.05548
Santa Fe Meats	2514	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59527	-117.07948
Saphire Lounge	4076	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65837	-117.03904
Sareta Food Corporation	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62583	-116.96682
Save A Lot 943	1315	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60646	-117.06535
Seafood City formerly Albertson's 6729	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Seafood City Market	1340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60511	-117.06659
Selecta Mexican Foods	1340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60511	-117.06659
Senor Pancho Mexican Grill	298	MONTGOMERY	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59715	-117.06419
Seven Eleven 13568E-2131	415	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62907	-117.04579
Seven Eleven 13569E-2131	796	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62085	-117.08583
Seven Eleven 13570C-2131	285	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63846	-117.09201
Seven Eleven 13576F	698	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62959	-117.09313
Seven Eleven 13578D-2131	1475	MELROSE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60564	-117.03914
Seven Eleven 13582C-2131	290	I	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63082	-117.07522
Seven Eleven 13590D-2131	1097	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61057	-117.08102
Seven Eleven 18547B-2131	4300	OTAY VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.59446	-117.04029
Seven Eleven 2131	913	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64229	-116.99331
Seven Eleven 21604C-2131	899	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61761	-117.08379
Seven Eleven 21792C-2131	403	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63768	-117.07816
Seven Eleven 33715	689	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60424	-117.08383
Silver Cup Bakery	1352	SANTA CORA	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62864	-116.98491
Silver Dollar	341	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63985	-117.07898
Sitoo's Deli & Catering	2300	BOSWELL	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65471	-116.96604
SL Gourmet/Chinese Gourmet Express	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Smart & Final 463 / SFI Corp	3141	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59415	-117.06589
Smoothie Caffe	2070	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64413	-116.97232
Snack Ball	3804	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59544	-117.05034
Sodexho Management Inc.	84	J	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63102	-117.05795
Southbay Fish and Grill	570	MARINA	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62438	-117.10121
Star Bakery	1372	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60450	-117.06625

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Star Gazer Club	33	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64710	-117.09531
Starbucks Coffee 5253	1467	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64438	-117.00140
Starbucks Coffee 5665	303	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63445	-117.07763
Starbucks Coffee 5885	595	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63144	-117.08882
Starbucks Coffee 6589	605	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.61495	-117.02634
Starbucks Coffee 8750	2127	OLYMPIC	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62857	-116.96569
Steak Escape Otay Ranch Town Center	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Stellas Deli & Cafe at Third Avenue	365	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63879	-117.07868
Steve's Cabana Bar	173	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64234	-117.09356
Stuart Anderson Black Angus Restaurant	707	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64088	-117.09810
Submarina	1480	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
Subway 1055	609	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62731	-117.08762
Subway 15681/Serler Inc.	642	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60239	-117.08125
Subway 16107	559	TELEGRAPH CANYO	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62889	-117.03764
Subway 16107-1	1498	MELROSE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60478	-117.03950
Subway 28286	45	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.65033	-117.09555
Subway 29881	601	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.61495	-117.02634
Subway 3062	1455	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64438	-117.00140
Subway 31595	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Subway 33339	263	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Subway 2253	374	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63967	-117.04958
Subway at Main	3733	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59428	-117.05307
Subway Sandwiches	4378	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
Sugar & Spice Delicafe	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62977	-117.08662
Sunny's Market	449	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63303	-117.08981
Super Express Chinese Food	609	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62731	-117.08762
Sushi Corner	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62583	-116.96682
Sushi Loco	224	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64071	-117.09368
Sushiya	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Sutherland Management Co.	4394	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
Sweet Life	310	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64068	-117.08028
Taco Bell 15508	1548	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64453	-116.99709
Taco Bell 2971	340	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64086	-117.05069
Taco Bell 3398	696	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63997	-117.09710
Tacos El Gordo	689	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63022	-117.09329
Tacos El Gordo De Tijuana, BC Jr	1351	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60438	-117.06463
Tacos El Poblano	885	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63638	-117.02380
Tacos Toby	1682	MELROSE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59571	-117.04055
Taqueria El Farolito	651	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60412	-117.08248
Target Store T-1815	910	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.65040	-116.96765
Tasita D Cafe	1550	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59883	-117.07738
Texcoco Restaurant	1043	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61232	-117.08173
The Flafel Shoppe	115	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64412	-117.09425
The Lighthearted Gourmet	385	FOURTH	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63725	-117.08261
The Lion's Den	725	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62323	-117.08605
The Perking Lot	4502	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66113	-117.03035

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
The Plascencia Group LLC	4346	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
The Soup Stone	310	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64068	-117.08028
TheMarshmallow Studio	1422	MARBLE CANYON	WY	Y	Y	N	N	Y	N	N	Y	Y	32.63767	-116.94206
Thien's Optimart	498	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63120	-117.09009
Third Avenue Minimart	772	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62496	-117.07394
Tijuana Oyster Bar	4246	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66036	-117.03565
TJ Oyster Bar	4246	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66036	-117.03565
Tortillas De Harina Elice	1660	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59691	-117.07667
Tortilleria Santa FE, Inc.	387	ZENITH	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59552	-117.06833
Tropical Fruits	1410	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60136	-117.07886
Unlimited Dream Ventures	374	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63967	-117.04958
Valerios Tropical Bake Shop	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Vanessa Water Store	600	F	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63739	-117.09266
VIP Oriental Buffet	542	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62931	-117.09012
Vons Food & Drug 2006	505	TELEGRAPH CANYO	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62939	-117.04101
Vons Food & Drug 2071	2250	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64609	-116.96642
Vons Food & Drug 2130	4404	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66028	-117.03190
Vons Food & Drug 2336	360	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63953	-117.05100
Vons Food & Drug 3063	870	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62181	-117.07303
Walmart Eastlake	1360	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.63167	-116.96778
Walmart Expansion	75	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.65127	-117.09382
Water 24 Inc.	1215	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60645	-117.07940
Weinershnitzel	283	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60733	-117.06569
Wendy's Coastline Food Service Corp	960	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.64958	-116.96642
Wendy's Coastline Food Service Corp	618	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64071	-117.09408
Wetzel's Pretzels Otay Ranch	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Wienerschitzel	283	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60733	-117.06569
Wienerschnitzel 16	493	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63138	-117.08935
Wings N Things Restaurant	481	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63173	-117.08922
Xana Spree	391	PLAZA TOLUCA		Y	Y	N	N	Y	N	N	Y	Y	32.66853	-116.97081
Yo Julian's Mexican Food	1090	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61395	-117.06991
Yokoz's Shushi Bar & Island Grill	945	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Yoshinoya Beef Bowl	1299	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60422	-117.07823
Zorba's Family Restaurant	100	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64449	-117.09511
Cat xi-Mobile Carpet Drape Furn Cleaning														
Active Carpet Cleaning	43	ALVARADO	PL	N	Y	N	N	N	Y	N	Y	Y	32.63874	-117.06733
America's Finest Carpet	730	DESIGN	CT	N	Y	N	N	N	Y	N	Y	Y	32.59560	-117.02233
Bonita Carpet Care	2506	SADDLEHORN	DR	N	Y	N	N	N	Y	N	Y	Y	32.66004	-116.96267
Buena Vista Carpet Care	1551	LOMA	LN	N	Y	N	N	N	Y	N	Y	Y	32.59911	-117.04856
Carlos Sandoval Carpet Center	380	I	ST	N	Y	N	N	N	Y	N	Y	Y	32.62975	-117.07893
Cool Style Carpet Cleaning	752	MADISON	AV	N	Y	N	N	N	Y	N	Y	Y	32.62160	-117.08839
Day & Night Carpet Cleaning Services	317	TWIN OAKS	AV	N	Y	N	N	N	Y	N	Y	Y	32.64158	-117.07631
Del Rey Carpet Service	535	PASEO ROSAL		N	Y	N	N	N	Y	N	Y	Y	32.64750	-117.02176
Dollar Carpet Cleaning	2287	SUN VALLEY	RD	N	Y	N	N	N	Y	N	Y	Y	32.63509	-116.95924
Edwards Carpet Cleaning	578	NANTUCKET	DR	N	Y	N	N	N	Y	N	Y	Y	32.61893	-117.03072
Empire Carpet Service Inc.	556	SCENIC TRAIL	PL	N	Y	N	N	N	Y	N	Y	Y	32.66429	-116.96475

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Extreme Carpet Care Services LLC	1540	CONNOLEY	AV	N	Y	N	N	N	Y	N	Y	Y	32.59986	-117.05581
First Touch Steam Carpet Cleaning	1177	BROADWAY		N	Y	N	N	N	Y	N	Y	Y	32.60827	-117.08000
Foreign Auto Upholstery	55	NAPLES	ST	N	Y	N	N	N	Y	N	Y	Y	32.61808	-117.05463
Frankys Floor & Carpet Care	971	FOURTH	AV	N	Y	N	N	N	Y	N	Y	Y	32.61743	-117.07390
Golden Care Carpet Cleaning	1768	REGENCY	WY	N	Y	N	N	N	Y	N	Y	Y	32.59132	-117.04414
Hydro Pacific Carpet Cleaning	232	GARRETT	AV	N	Y	N	N	N	Y	N	Y	Y	32.64303	-117.08315
Integrity Carpet Cleaning	30	WOODLAWN	AV	N	Y	N	N	N	Y	N	Y	Y	32.64582	-117.10002
L&V Cleaning Services	64	SHERWOOD	ST	N	Y	N	N	N	Y	N	Y	Y	32.60355	-117.05456
Lavamax Carpet Cleaning	320	TROUSDALE	DR	N	Y	N	N	N	Y	N	Y	Y	32.65446	-117.08557
Ocean's Carpet	2488	MAIN	ST	N	Y	N	N	N	Y	N	Y	Y	32.59579	-117.08029
Preferred Carpet Care	110	BROADWAY		N	Y	N	N	N	Y	N	Y	Y	32.64427	-117.09502
RC Carpet & Furniture Cleaning	162	L	ST	N	Y	N	N	N	Y	N	Y	Y	32.62230	-117.06627
RG Carpet Cleaning	1097	MOUNT DANA	DR	N	Y	N	N	N	Y	N	Y	Y	32.61881	-117.00807
Rosalie's Carpet Cleaning	1057	BROADWAY		N	Y	N	N	N	Y	N	Y	Y	32.61215	-117.08060
Rueda's Carpet Cleaning	274	RANCHO	CT	N	Y	N	N	N	Y	N	Y	Y	32.59253	-117.04064
Select Carpets	4501	OTAY VALLEY	RD	N	Y	N	N	N	Y	N	Y	Y	32.60847	-117.03877
Servpro of Fire & Water Damage	1485	LA CHICA	DR	N	Y	N	N	N	Y	N	Y	Y	32.61306	-117.01883
Siedschlag Carpet Cleaning	537	OAKLAWN	AV	N	Y	N	N	N	Y	N	Y	Y	32.62881	-117.09189
Southbay Carpet Care	1883	GOTHAM	ST	N	Y	N	N	N	Y	N	Y	Y	32.64658	-116.98535
Sunset Carpet Cleaning	557	VANCE	ST	N	Y	N	N	N	Y	N	Y	Y	32.63428	-117.08871
Sunset Carpet Cleaning & Services	931	BUENA VISTA	WY	N	Y	N	N	N	Y	N	Y	Y	32.63886	-117.00229
TNT Carpets	658	CARLA	AV	N	Y	N	N	N	Y	N	Y	Y	32.63257	-117.06218
Two Brothers Carpet & Upholstery Cleaning	50	MONTE VISTA	AV	N	Y	N	N	N	Y	N	Y	Y	32.64774	-117.08967
Vegas Carpet Cleaning	1108	HILLTOP	DR	N	Y	N	N	N	Y	N	Y	Y	32.61664	-117.05708
Warrior Carpet	1546	POINT HUENEME	CT	N	Y	N	N	N	Y	N	Y	Y	32.60510	-117.02388
We Buff It Too Biz	489	G	ST	N	Y	N	N	N	Y	N	Y	Y	32.63598	-117.08627
We Care Carpet Cleaning	1937	DUKE	ST	N	Y	N	N	N	Y	N	Y	Y	32.64769	-116.98337
Westcoast Carpet Cleaning	297	K	ST	N	Y	N	N	N	Y	N	Y	Y	32.62452	-117.07291
Cat xii-Cement Mixing or Cutting														
Arturo Cervantes Barajas Concrete Co.	1264	RAVEN	AV	N	Y	N	N	Y	N	N	Y	Y	32.61697	-117.03710
Buildis and Son Cement	720	DEL MAR	AV	N	Y	N	N	Y	N	N	Y	Y	32.62726	-117.07249
California Concrete Designs	1631	COOLSPRINGS	CT	N	Y	N	N	Y	N	N	Y	Y	32.63704	-116.99044
Contrera's Concrete Service	113	L	ST	N	Y	N	N	Y	N	N	Y	Y	32.62339	-117.06456
Cuen Fred Concrete Service	47	OXFORD	ST	N	Y	N	N	Y	N	N	Y	Y	32.61385	-117.05379
John Tessitore	812	FAIRWAY	CT	N	Y	N	N	Y	N	N	Y	Y	32.62436	-117.06554
Nora's Concrete	110	F	ST	N	Y	N	N	Y	N	N	Y	Y	32.64320	-117.07214
RDS Concrete Construction	479	CORTE HELENA	AV	N	Y	N	N	Y	N	N	Y	Y	32.63771	-117.06826
Rubios Concrete Construction	725	BELVIA	LN	N	Y	N	N	Y	N	N	Y	Y	32.59915	-117.08504
The Rock Concrete Pumping	1031	COLORADO	AV	N	Y	N	N	Y	N	N	Y	Y	32.61128	-117.08721
Cat xiii-Masonry														
A&E Carpet & Tile Distributors	170	MACE	ST	N	Y	N	N	Y	N	N	Y	Y	32.59307	-117.05425
Alpha-Omega Hardscape	861	SOUTHSHORE	DR	N	Y	N	N	Y	N	N	Y	Y	32.65041	-116.97397
Chula Vista Tile & Stone	693	PALOMAR	ST	N	Y	N	N	Y	N	N	Y	Y	32.60482	-117.08443
DS Construction	172	D	ST	N	Y	N	N	Y	N	N	Y	Y	32.64855	-117.07641
Emerald Plastering	947	HELIX	AV	N	Y	N	N	Y	N	N	Y	Y	32.62418	-117.05305
FJL Masonry	1002	SUTTER RIDGE	CT	N	Y	N	N	Y	N	N	Y	Y	32.65208	-116.94275

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J&J Tile Service	54	SMITH	AV	N	Y	N	N	Y	N	N	Y	Y	32.64669	-117.09355
Jasa Concrete	1414	MELROSE	AV	N	Y	N	N	Y	N	N	Y	Y	32.60891	-117.04216
JR Drywall	121	PALOMAR	ST	N	Y	N	N	Y	N	N	Y	Y	32.61246	-117.04880
Klaser Tile Company Inc.	1595	JAYKEN	WY	N	Y	N	N	Y	N	N	Y	Y	32.59880	-117.08103
MAC Plastering Inc.	1705	FAWNTAIL	CT	N	Y	N	N	Y	N	N	Y	Y	32.63747	-116.98777
Masonry By Michael	573	PLAZA DEL CID		N	Y	N	N	Y	N	N	Y	Y	32.63138	-117.01469
Masonry Pros	78	KING	ST	N	Y	N	N	Y	N	N	Y	Y	32.63072	-117.06563
Precison Plastering	389	I	ST	N	Y	N	N	Y	N	N	Y	Y	32.63024	-117.07947
South Coast Structures	801	HALECREST	DR	N	Y	N	N	Y	N	N	Y	Y	32.63415	-117.03764
TRS Tile	1221	HELIX	AV	N	Y	N	N	Y	N	N	Y	Y	32.61377	-117.05206
USA Stone Design	970	BROADWAY		N	Y	N	N	Y	N	N	Y	Y	32.61458	-117.08388
Valencia Stone and Tile	241	E	ST	N	Y	N	N	Y	N	N	Y	Y	32.64570	-117.07883
Vent Pros	325	OXFORD	ST	N	Y	N	N	Y	N	N	Y	Y	32.60951	-117.06849
WEMAC Marine Insulation	753	ANITA	ST	N	Y	N	N	Y	N	N	Y	Y	32.59794	-117.08551
Cat xiv-Painting Coating														
Alfred's Painting	544	WELTON	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61292	-117.07979
Allstar Painting Services	1957	MOSS LANDING	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64133	-116.97824
Arrow Professional Painting	1170	WIND RIVER	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.61873	-117.00453
Arroyo Custom Painting Corp	1365	SERENA	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.64298	-117.00385
Barba Painting	1537	APPLEGATE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62505	-116.98974
Discount Painting	1335	SERENA	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.64301	-117.00631
G&R Painting	580	MOSS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61459	-117.08153
Gaskill Painting Company Inc.	744	DESIGN	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59515	-117.02048
George Painting	1420	CAMELLIA	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.61009	-117.03333
Hawkin's Painting Company	976	GUATAY	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62325	-117.05249
Icon Painting Solutions	1480	VENTERS	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.61099	-117.02517
Jam Painting Inc.	317	QUINTARD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60278	-117.06570
Lazaro's Painting	252	RANCHO	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.59160	-117.04098
Luther Painting	215	GUAVA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64287	-117.08584
Maintenance	1150	HITCHING POST	LN	N	Y	Y	N	Y	Y	N	Y	Y	32.64255	-116.95384
Marcelo's Distinctive Painting	567	MOSS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61383	-117.08104
MCS Painting	121	SECOND	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64866	-117.07789
My Painter Plus.Com	1360	MYRA	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.61048	-117.04498
NR Painting Inc.	2526	KING CREEK	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.64232	-116.95053
Painters at Work	550	OXFORD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60829	-117.07837
Paradise Painting	1015	CAMINITO ESTRELLA		N	Y	Y	N	Y	Y	N	Y	Y	32.63931	-117.03031
Quality Home Painting	2019	BRIDGEPORT		N	Y	Y	N	Y	Y	N	Y	Y	32.65387	-116.98062
Ray Garcia	24	FLOWER	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64949	-117.06833
Rolling Hills Custom Painting	116	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60914	-117.05906
Safari Painting	259	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64284	-117.08015
Sammy's Painting Company	225	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60808	-117.06362
Scott Painting Company	752	PASEO DEL REY		N	Y	Y	N	Y	Y	N	Y	Y	32.62298	-117.03842
South Coast Home Painting	1015	NORMA	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.62388	-117.04278
Southbay Painting	564	D	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64477	-117.09295
Sumaya Painting	244	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63467	-117.07469
Superb Interior Painting	1679	PICKET FENCE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62538	-116.94700

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Superior Color Painting	1604	PICKET FENCE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62789	-116.94744
Cat xvi-Landscaping														
A&G Landscaping	56	QUINTARD	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60562	-117.05484
A&G Landscaping	226	QUINTARD	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60946	-117.04389
AJ Gardening	1125	MISTY CREEK	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62214	-117.00904
All Palms Plus	1471	VENTERS	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.61135	-117.02476
American Veteran Lawn Care	431	NAPLES	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62226	-117.03978
Arroyo Landscaping	1494	WOODCREST	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.63572	-116.99655
AXL Landscaping	1136	CALLE DE DAMASCO		N	Y	N	Y	N	Y	Y	Y	Y	32.63580	-117.01249
Beltran Landscaping	2078	MIRROR LAKE	PL	N	Y	N	Y	N	Y	Y	Y	Y	32.64315	-116.97443
Better Greens	1230	TOBIAS	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.61202	-117.05743
Bufallo Quality Tree Work	902	ASPEN GLEN	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.65628	-116.94326
C&R Landscaping	314	MOSS	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62381	-117.04747
Castro Lawn Care	70	SHERWOOD	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60349	-117.05476
Chau Pen Van	1037	HELIX	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62034	-117.05418
Chermak Joseph	52	FORTUNA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62373	-117.05709
Clean Cut Lawn Services	702	COLORADO	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62231	-117.09217
CMN Lawn Services	1208	POSITAS	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.64771	-117.01349
Colonial Gardens Inc	578	PARKSIDE	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.64668	-117.04129
Complete Lawn Maintenance	470	D	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.64606	-117.08941
Cortez Samuel Landscaping	1058	CAMINO ATAJO		N	Y	N	Y	N	Y	Y	Y	Y	32.62929	-117.01545
Decasas Garden	1539	GRAND TETON	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.60334	-117.04417
Desert Garden's & Sons	1351	BLUE FALLS	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.64137	-117.00498
Dixon Landscaping Solutions	1243	CABEZAS COVE		N	Y	N	Y	N	Y	Y	Y	Y	32.63633	-116.96917
Dreamview Landscaping	226	OXFORD	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.61597	-117.04664
E Kim Landscaping	1002	CAMINO CALABAZO		N	Y	N	Y	N	Y	Y	Y	Y	32.63227	-117.00588
Elite Hauling Services	1180	FIRST	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61310	-117.06027
Enrique Ybarra Landscape Maintenance	619	WHITNEY	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62819	-117.08927
Epifanio Morales Gardens Landscape	684	FOURTH	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62704	-117.07924
Eriks Lawn Maintenance	1195	NAPA	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61788	-117.04236
Ernesto Casillas Landscaping	555	NAPLES	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60996	-117.07919
Ernie Salazar Landscaping	958	CEDAR	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61698	-117.08018
Evergreen Gardening Service	1486	OAKPOINT	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62367	-116.97940
Ezequiel Perez Landscaping	44	FIFTH	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.64778	-117.09173
Fast and Friendly	1352	SANTA OLIVIA	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.61980	-117.01368
Federal Land Management Corp	440	NICKMAN	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.61372	-117.07515
Gaeta's Tree Service	2543	GARNET PEAK	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.63937	-116.95104
Gotta Go Mow & Landscaping	1968	MEEKS BAY	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.63839	-116.97805
Green Desert	1081	FOREST LAKE	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.64258	-116.96532
Green Earth Gardening Service	145	CORTE MARIA	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62610	-117.03812
Green Grass Landscape	149	RAINIER	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.60220	-117.04379
Hale Landscaping	752	WOODLAWN	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62091	-117.09074
Handy Lawn Care	2016	GEYSERVILLE	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.63315	-116.97364
Hector Gardening	1946	DUKE	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.64745	-116.98271
Heldiz Landscape	295	RIENSTRA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60729	-117.04049
Hernandez Gardening	1038	JEFFERSON	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61187	-117.08457

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Herrera Antonio Landscape	140	RIVERA	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.60518	-117.04589
Hinkle Tree Service	143	MADISON	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.64310	-117.09504
JC Landscaping	2157	HAMDEN	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.65746	-116.97499
Jeff's Lawn Care	995	MONSERATE	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62286	-117.05028
Jessica Lopez Design	972	MCCAIN VALLEY	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.61836	-117.01344
JM Landscaping	1303	CALLE TEMPRA		N	Y	N	Y	N	Y	Y	Y	Y	32.60570	-117.06796
JM Lawns	368	ANITA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59942	-117.06782
John's Yard Service	668	ROBERT	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.63312	-117.05885
Johnson Greenery	171	L	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62276	-117.06681
Jose's Gardening	1013	CUYAMACA	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62185	-117.05456
Jose's Lawn Service	1428	LA CHICA	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.61469	-117.01819
JR's Landscape	689	CHULA VISTA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.64536	-117.09889
Juan J. Hale Landscaping Maint. Service	1057	BROADWAY		N	Y	N	Y	N	Y	Y	Y	Y	32.61215	-117.08060
Juan Leal Landscape	308	PALM	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.59127	-117.04633
Kazper's Landscaping	1246	THIRD	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.60868	-117.06815
Kiki's Paradise Landscaping	1360	CALLEJON CERVANTES		N	Y	N	Y	N	Y	Y	Y	Y	32.64640	-117.00707
Kutting Edge	1617	JADE	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.59771	-117.04949
Kyoto Landscape	602	ANITA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59880	-117.07865
Land Art	725	GREDOS	PL	N	Y	N	Y	N	Y	Y	Y	Y	32.64086	-117.02116
Landscape Enterprise	25	D	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.65159	-117.07154
Leon's Landscaping Service	1453	TROUVILLE	LN	N	Y	N	Y	N	Y	Y	Y	Y	32.62687	-116.97289
Leo's Landscape	480	BELLE VISTA	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.63937	-117.04441
Lua's Landscaping	1100	INDUSTRIAL	BL	N	Y	N	Y	N	Y	Y	Y	Y	32.60963	-117.08920
Lucero's Landscaping	374	MOSS	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.61688	-117.07329
Manzano's Landscaping	739	NEPTUNE	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.63327	-117.04802
Mario's Landscaping	576	SIPES	CI	N	Y	N	Y	N	Y	Y	Y	Y	32.61812	-117.03017
Mariposa's Landscape	666	MARIPOSA	CI	N	Y	N	Y	N	Y	Y	Y	Y	32.62643	-117.03637
Martin & Zamora Landscape Maintenance	758	ASH	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62243	-117.08525
Maximum & Green Maintenance	309	VALLEY	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.59159	-117.04734
Mel's Gardening Service	910	ISRAEL	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.61178	-117.01687
MG Gardening	357	PEPPERWOOD	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.61169	-117.03820
MGM Landscape Inc	558	TRAILRIDGE	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.65502	-116.99435
Miles Bob Irrigation	752	NACION	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.63292	-117.04748
Ochi Gardens	176	CAMINO ENTRADA		N	Y	N	Y	N	Y	Y	Y	Y	32.62899	-117.05310
Olguin's Landscape	186	CORTE HELENA	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.64779	-117.07275
Orlando's Garden	2887	MAIN	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59427	-117.07145
Ortega Landscape	1225	BROADWAY		N	Y	N	Y	N	Y	Y	Y	Y	32.60584	-117.07838
P Gracia Landscape	490	SHY	LN	N	Y	N	Y	N	Y	Y	Y	Y	32.60746	-117.07514
P&A Garden Landscaping	684	FOURTH	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62704	-117.07924
Pacific Turf Specialists	681	CLAIRE	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.63246	-117.05951
PCM Maintenance Landscape Service	400	KRISTA	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.64219	-117.04726
Pedro's Landscaping	443	FLOWER	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.64519	-117.08782
Pena's Gardening Maintenance Service	236	OLYMPIA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.61529	-117.04597
Picket Fences Landscaping Inc.	1263	POPLAR SPRING	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.64171	-116.94645
PK Shedenhelm's Landscaping	1606	COUNTRY VISTAS	LN	N	Y	N	Y	N	Y	Y	Y	Y	32.65733	-117.00076
Plays in the Dirt	575	OTAY LAKES	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.65154	-117.00581

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
PRG Maintenance Gardening Service	1303	CALLE TEMPRA		N	Y	N	Y	N	Y	Y	Y	Y	32.60570	-117.06796
Pro Care Landscape & Gard	1164	PASEO SARINA		N	Y	N	Y	N	Y	Y	Y	Y	32.62727	-117.01187
Rafaelo's Tree Trimmer	435	TREMONT	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59761	-117.07046
RG Landscape & Design	3	PAISLEY	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60978	-117.05375
Rhinotech Landscape	459	RIVERA	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.60314	-117.03298
Rich Valens Tree Service	1106	DEL MAR	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61367	-117.06799
RM Landscape	933	GUATAY	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62398	-117.05198
Robert's Gardening Service	749	RIVERLAWN	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62206	-117.08705
Romita Landscape	20	TOURMALINE	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59639	-117.03929
Rudy Landscaping	746	AVENIDA SOLARIA		N	Y	N	Y	N	Y	Y	Y	Y	32.64288	-117.01385
Sam's Stump Removal	1103	DEL MAR	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61375	-117.06719
Silahua's Landscape and Yard Maintenance	1169	OCALA	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61995	-117.03809
Silva's Tree Service	75	FOURTH	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.64811	-117.08663
Southwing Land Maint Inc.	3855	SAN MIGUEL	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.63838	-117.06941
SPS/Creative Curb Landscapes	839	CALLE LAGASCA		N	Y	N	Y	N	Y	Y	Y	Y	32.64683	-117.03007
Steve Ferlito Gardening Service	271	RANCHO	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.59300	-117.04015
Trim Around Yard Service	914	WAYNE	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.64249	-116.99182
Trujillo Landscaping	656	ROBERT	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.63359	-117.05867
Turf Pros	598	RIVERA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60793	-117.03032
Valle Lawn Service	1284	MARBELLA	PL	N	Y	N	Y	N	Y	Y	Y	Y	32.64544	-117.00987
Vasquez Landscaping & Hauling	398	MANKATO	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.63145	-117.08030
Vegas Gardening Landscaping Services	901	ISRAEL	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.61235	-117.01722
VMG Landscaping	270	DATE	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59158	-117.04919
Western Tree Service	1756	RIDGE CREEK	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.65400	-116.99332
Yonekura Glenn	572	OTIS	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.63193	-117.08850
Cat xviii-Golf Parks Rec Facilities														
Alcala Park	1620	MONTANA	RD	Y	Y	N	Y	N	N	Y	Y	Y	32.63496	-116.98979
Augusta Park	1034	PARK MEADOWS	RD	Y	Y	N	Y	N	N	Y	Y	Y	32.64696	-116.95697
Bonita Haciendas Mini Park	1518	VIA HACIENDA		Y	Y	N	Y	N	N	Y	Y	Y	32.64913	-117.00088
Boys & Girls Club of Chula Vista	1301	OLEANDER	AV	Y	Y	N	Y	N	N	Y	Y	Y	32.61549	-117.03257
Chula Vista Elks Lodge 2011	901	ELKS	LN	Y	Y	N	Y	N	N	Y	Y	Y	32.62627	-117.03449
Circle Park		KING CREEK	CI	Y	Y	N	Y	N	N	Y	Y	Y	32.64241	-116.95118
Cobblestone Park		LAKESHORE	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.65676	-116.97700
Coors Amphitheatre	2050	ENTERTAINMENT	CI	Y	Y	N	Y	N	N	Y	Y	Y	32.58808	-117.00630
Countryside Park		PINON HILLS	RD	Y	Y	N	Y	N	N	Y	Y	Y	32.63975	-116.97574
Eastlake Beach Club	2050	LAKESHORE	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.65307	-116.97848
Eastlake Country Club	2375	CLUBHOUSE	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.64124	-116.95846
Fun 4 All	950	INDUSTRIAL	BL	Y	Y	N	Y	N	N	Y	Y	Y	32.61382	-117.09012
Kensington Road Park	2600	SADDLEBACK	ST	Y	Y	N	Y	N	N	Y	Y	Y	32.65985	-116.95833
Knotts Soak City USA	2052	ENTERTAINMENT	CI	Y	Y	N	Y	N	N	Y	Y	Y	32.58737	-117.01095
Madison Lane Park	640	FALCON VALLEY	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.65973	-116.96212
Magnolia Hill Park	2640	MONTECITO	RD	Y	Y	N	Y	N	N	Y	Y	Y	32.66488	-116.95627
Oak Crest Park		SANTA MADERA	AV	Y	Y	N	Y	N	N	Y	Y	Y	32.62840	-116.99391
Orchard Park		MONTE SERENO	AV	Y	Y	N	Y	N	N	Y	Y	Y	32.62527	-117.00268
Palace Garden Park	1425	SECOND	AV	Y	Y	N	Y	N	N	Y	Y	Y	32.60473	-117.05728
Salt Creek Golf Club	525	HUNTE	PW	Y	Y	N	Y	N	N	Y	Y	Y	32.66909	-116.95612

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San Diego County Club	88	L	ST	Y	Y	N	Y	N	N	Y	Y	Y	32.62166	-117.06579
Scobee Park	2351	KUHN	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.65337	-116.96485
Shorebird Park	2088	LAKESHORE	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.65040	-116.97618
Wisteria Park		SANTA RITA		Y	Y	N	Y	N	N	Y	Y	Y	32.62069	-116.99807
Cat xx-Pool Fountain Cleaning														
A Environmental Services	125	H	ST	N	N	N	N	N	N	N	Y	N	32.63663	-117.07027
ABC Pool Service	376	CENTER	ST	N	N	N	N	N	N	N	Y	N	32.63897	-117.08186
Academy Pool Service & Supplies	1680	BROADWAY		N	N	N	N	N	N	N	Y	N	32.59537	-117.07634
Acuario Pool & SPA Maintenance	1450	MELROSE	AV	N	N	N	N	N	N	N	Y	N	32.60619	-117.04215
All Pro Pool Services	4248	BONITA	RD	N	N	N	N	N	N	N	Y	N	32.66039	-117.03612
Ambart Inc.	652	H	ST	N	N	N	N	N	N	N	Y	N	32.63017	-117.09154
Aqua Diamond Pool Service & Repair	383	NOVA	PL	N	N	N	N	N	N	N	Y	N	32.62577	-117.04482
Aqua Pro Pool & SPA Service	1328	PINNACLE PEAK	DR	N	N	N	N	N	N	N	Y	N	32.63822	-116.95123
Aquatech Pool Service	1057	PARK MEADOWS	RD	N	N	N	N	N	N	N	Y	N	32.64612	-116.95596
Azul Pool Service	1546	HOPSCOTCH	DR	N	N	N	N	N	N	N	Y	N	32.62707	-116.95669
Blue Wave Pools	5116	GLEN VERDE	DR	N	N	N	N	N	N	N	Y	N	32.62460	-117.05096
Bob Reed's Step Saver Pool Products	326	E	ST	N	N	N	N	N	N	N	Y	N	32.64482	-117.08212
Bonita Vista Pool Service	1618	MILLS	ST	N	N	N	N	N	N	N	Y	N	32.64720	-116.99493
C&A Maint Service	461	RIENSTRA	CT	N	N	N	N	N	N	N	Y	N	32.60778	-117.03511
Chlor-Nation	510	CAMINO ELEVADO		N	N	N	N	N	N	N	Y	N	32.65221	-117.01156
Choice Maintenance and Repair	960	SURREY	DR	N	N	N	N	N	N	N	Y	N	32.65309	-117.02748
Chula Vista Curbside Agency	249	OXFORD	ST	N	N	N	N	N	N	N	Y	N	32.61029	-117.06565
Constable Pool Service	2351	BOSWELL	RD	N	N	N	N	N	N	N	Y	N	32.65603	-116.96499
Cornerstone	458	KARRA	CT	N	N	N	N	N	N	N	Y	N	32.64060	-117.04524
Crystal Clear Poolz	1123	TOBIAS	DR	N	N	N	N	N	N	N	Y	N	32.61573	-117.05830
CTI of San Diego	2137	CHATEAU	CT	N	N	N	N	N	N	N	Y	N	32.64814	-116.97402
CV Pool Repair & Supply	1082	BROADWAY		N	N	N	N	N	N	N	Y	N	32.61084	-117.08196
E&D Pool and SPA Service	1451	NAPA	CT	N	N	N	N	N	N	N	Y	N	32.60929	-117.03826
Fire on Ice of San Diego	1080	MOONSTONE	PL	N	N	N	N	N	N	N	Y	N	32.62144	-117.00982
Fix Time	2023	LAKERIDGE	CI	N	N	N	N	N	N	N	Y	N	32.65152	-116.98018
Herbur Pool	1421	FIELDBROOK	ST	N	N	N	N	N	N	N	Y	N	32.62149	-116.99710
Jim's Pool Clean Up	575	OTAY LAKES	RD	N	N	N	N	N	N	N	Y	N	32.65154	-117.00581
Jose's Pool Service	355	BROADWAY		N	N	N	N	N	N	N	Y	N	32.63610	-117.09110
JP's Pool Service	1571	CIRCULO BRINDISI		N	N	N	N	N	N	N	Y	N	32.62852	-116.96048
Keep It Clean Pool Service	1307	VAQUERO	CT	N	N	N	N	N	N	N	Y	N	32.63385	-117.00469
Kelly's Pool and SPA Care	1870	MARQUETTE	RD	N	N	N	N	N	N	N	Y	N	32.64739	-116.97898
Kng D C Pool & SPAS	14	QUINTARD	ST	N	N	N	N	N	N	N	Y	N	32.60314	-117.04268
Leslie's Swimming Pool Supplies 299	316	H	ST	N	N	N	N	N	N	N	Y	N	32.63961	-117.05180
Mack's Maintenance & Repair	201	TWIN OAKS	AV	N	N	N	N	N	N	N	Y	N	32.64521	-117.07771
Max Swimming Pool Service	1298	MORGAN HILL	DR	N	N	N	N	N	N	N	Y	N	32.62322	-117.00344
Misty Creek Home Improvement	1069	MISTY CREEK	ST	N	N	N	N	N	N	N	Y	N	32.62209	-117.01154
New Look Concrete Creations	1753	YALE	ST	N	N	N	N	N	N	N	Y	N	32.64542	-116.98875
Patrick's Pool & SPA Service	155	NAPLES	ST	N	N	N	N	N	N	N	Y	N	32.63910	-117.08843
Pete & Irma's Pool And SPA	2140	STONECREEK	PL	N	N	N	N	N	N	N	Y	N	32.65720	-116.97715
Pressures On	1288	SANTA LUCIA	RD	N	N	N	N	N	N	N	Y	N	32.63021	-116.99302
Pure Water Pool and SPA	2642	FLAGSTAFF	CT	N	N	N	N	N	N	N	Y	N	32.66093	-116.95658

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
R3 & Sons	1450	MELROSE	AV	N	N	N	N	N	N	N	Y	N	32.60619	-117.04215
Robert The Handy Man	1803	GOTHAM	ST	N	N	N	N	N	N	N	Y	N	32.64570	-116.98675
San Diego Stone Technicians	1863	GOTHAM	ST	N	N	N	N	N	N	N	Y	N	32.64637	-116.98574
Sanchez Handyman Service	730	COLORADO	AV	N	N	N	N	N	N	N	Y	N	32.62150	-117.09185
Sanique Development	474	H	ST	N	N	N	N	N	N	N	Y	N	32.63800	-117.04387
Schaeffer's Pool Service	2067	LAKERIDGE	CI	N	N	N	N	N	N	N	Y	N	32.65117	-116.97783
SD Pool Service	30	WOODLAWN	AV	N	N	N	N	N	N	N	Y	N	32.64582	-117.10002
Sea Breeze Pool Service	1408	ASHFORD CASTLE	DR	N	N	N	N	N	N	N	Y	N	32.63061	-116.95455
Sharko Pool Service & Maintenance	819	AVENIDA MADERA		N	N	N	N	N	N	N	Y	N	32.62900	-117.05187
Southbay Postcon Services	1422	LANTANA	AV	N	N	N	N	N	N	N	Y	N	32.60991	-117.03409
Spic N Span	2057	CHATEAU	CT	N	N	N	N	N	N	N	Y	N	32.64906	-116.97735
Superior Home Prep Co.	1467	SUMMIT	DR	N	N	N	N	N	N	N	Y	N	32.64379	-117.00263
Three Amigos Pool Service	1362	MAX	AV	N	N	N	N	N	N	N	Y	N	32.60980	-117.04754
WES C Gallagher	861	SOUTHSHORE	DR	N	N	N	N	N	N	N	Y	N	32.65041	-116.97397
Cat xxiii-Building Material Storage														
Builders Surplus Sales	130	GLOVER	AV	N	Y	Y	Y	Y	N	Y	Y	Y	32.65513	-117.08764
Chase Equestrian	575	TRAILRIDGE	DR	N	Y	Y	Y	Y	N	Y	Y	Y	32.65580	-116.99356
Eastlake RV & Boat Storage	2371	BOSWELL	RD	N	Y	Y	Y	Y	N	Y	Y	Y	32.65603	-116.96392
Ferguson Enterprise	895	THIRD	AV	N	Y	Y	Y	Y	N	Y	Y	Y	32.62139	-117.07160
Home Depot 658/Home Depot USA Inc.	725	PLAZA	CT	N	Y	Y	Y	Y	N	Y	Y	Y	32.63756	-117.03198
Home Depot Eastlake	1320	EASTLAKE	PW	N	Y	Y	Y	Y	N	Y	Y	Y	32.63319	-116.96913
J&W Redwood	3817	MAIN	ST	N	Y	Y	Y	Y	N	Y	Y	Y	32.59371	-117.05120
Leticia Cano/Nuts and Bolts	2446	MAIN	ST	N	Y	Y	Y	Y	N	Y	Y	Y	32.59579	-117.08029
Lowes Home Improvement Warehouse Inc.	2225	OTAY LAKES	RD	N	Y	Y	Y	Y	N	Y	Y	Y	32.64886	-116.96914
Mazal Realty Investment	693	PALOMAR	ST	N	Y	Y	Y	Y	N	Y	Y	Y	32.60482	-117.08443
Plastics By Roy Inc.	825	KUHN	DR	N	Y	Y	Y	Y	N	Y	Y	Y	32.65388	-116.96694
RCP Block & Brick Inc.	75	FOURTH	AV	N	Y	Y	Y	Y	N	Y	Y	Y	32.65308	-117.08832
Road One of San Diego	1805	MAXWELL	RD	N	Y	Y	Y	Y	N	Y	Y	Y	32.59730	-117.01740
Walmart at 5305 Broadway	1150	BROADWAY		N	Y	Y	Y	Y	N	Y	Y	Y	32.60702	-117.08245
White Cap Construction Supply	3451	MAIN	ST	N	Y	Y	Y	Y	N	Y	Y	Y	32.59385	-117.05985
Cat xxiv-Animal Facility														
A Girl and Her Dog	2278	SWEET PEA	LN	Y	N	N	Y	N	N	N	N	N	32.62647	-116.95818
J & R Pet Services	664	RAINBOW	DR	Y	N	N	Y	N	N	N	N	N	32.62214	-117.02843
Kim's Paws Claws Hoover Pet Care	39	SANDALWOOD	DR	Y	N	N	Y	N	N	N	N	N	32.64720	-117.06687
Paws and Whiskers Gentle Grooming	294	F	ST	Y	N	N	Y	N	N	N	N	N	32.64117	-117.07950
Pawz R US	251	BROADWAY		Y	N	N	Y	N	N	N	N	N	32.63948	-117.09241
Preen-2-Pristine Pet Parlor & Snack Shack	2318	PROCTOR VALLEY	RD	Y	N	N	Y	N	N	N	N	N	32.66162	-116.96959
SD Doggy Runs	1539	MAX	AV	Y	N	N	Y	N	N	N	N	N	32.60315	-117.04506
Unleashed by Petco 1192	304	H	ST	Y	N	N	Y	N	N	N	N	N	32.64051	-117.05261
Waggin N Walkin	78	MANKATO	ST	Y	N	N	Y	N	N	N	N	N	32.63736	-117.06139
Cat xxv-Power Washing Services														
APM Power Washing	228	KENNEDY	ST	N	N	Y	N	Y	Y	N	Y	N	32.60972	-117.06440
Fully Restored Surface Cleaning Specialists	970	SOMERSET	CT	N	N	Y	N	Y	Y	N	Y	N	32.64813	-116.96341
GMR Enterprises	91	EMERSON	ST	N	N	Y	N	Y	Y	N	Y	N	32.61698	-117.05120
Jay Bright Company	787	ENERGY	WY	N	N	Y	N	Y	Y	N	Y	N	32.59742	-117.01599
Jet Clean USA Inc.	1255	VAQUERO	CT	N	N	Y	N	Y	Y	N	Y	N	32.63341	-117.00645

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Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Superior Wash	1556	HUNTERS GLEN	AV	N	N	Y	N	Y	Y	N	Y	N	32.62370	-116.97474
Retail Store														
C.V. Wholesale Furniture Store	655	BROADWAY		N	N	Y	Y	Y	N	N	N	Y	32.62566	-117.08699
Furniture Mattress Expo	1215	BROADWAY		N	N	Y	Y	Y	N	N	N	Y	32.60645	-117.07940
Kohls Eastlake	2325	OTAY LAKES	RD	N	N	Y	Y	Y	N	N	N	Y	32.65000	-116.96500
Target	40	FOURTH	AV	N	N	Y	Y	Y	N	N	N	Y	32.65119	-117.08945
INDUSTRIAL FACILITIES														
2 Heavy Equipment/PavementRecycling	855	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59747	-117.00999
A & A Medical Transportation	610	G	ST	N	N	Y	N	Y	N	N	N	N	32.63369	-117.09137
A&A Auto Wrecking	775	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59818	-117.01598
A1 Moulding Supplies	180	MACE	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59216	-117.05432
AAA Foreign Auto Recycling	783	NIRVANA	AV	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59619	-117.01371
Aatlas	791	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59730	-117.01470
ABF Freight System Inc.	875	ENERGY	WY	N	N	Y	N	Y	N	N	N	N	32.59695	-117.00905
ACE Industries Inc.	738	DESIGN	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59515	-117.02121
Acme Bag Company	2528	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Action Auto Dismantlers Inc	151	REED	CT	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59218	-117.05531
ADA Fabrication	2260	MAIN	ST	N	Y	Y	N	Y	Y	Y	Y	Y	32.59562	-117.08565
Advance Auto Wrecking	777	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59817	-117.01460
Advantage Printing & Apparel Inc	681	ANITA	ST	Y	Y	Y	N	N	Y	N	Y	Y	32.59776	-117.08267
Airgas West Inc	3303	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59442	-117.06218
Aker Leather Products	2248	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59562	-117.08565
All Japanese Auto Recycling	775	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59818	-117.01598
All Toyota/Lexus Wrecking	805	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
Alliance Hardwood LLC	775	ANITA	ST	Y	Y	N	N	N	N	N	Y	Y	32.59798	-117.08685
Allied Waste Services	881	ENERGY	WY	Y	Y	Y	Y	Y	Y	N	Y	Y	32.59774	-117.00829
Amerivacs Manufacturing Inc	3800	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59544	-117.05034
Apada Industries Inc	632	MARSAT	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.60114	-117.08074
Aqualarm	1151	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60588	-117.09149
Arise/Waco Scafolding	676	MOSS	ST	N	Y	Y	N	Y	N	N	Y	Y	32.61335	-117.08779
Arroyo Fabrication	2488	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
ASI Distr. & Fabr./Abbet Services Inc	1547	JAYKEN	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.60031	-117.08084
Asian Kars Auto Recycling	777	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59817	-117.01460
BABA Foods	693	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60482	-117.08443
Bacco Produce	1031	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.61033	-117.09150
Baja California Cycle USA Inc	2801	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59428	-117.07320
Bajas 3 Auto Wrecking	811	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
Barbee Valve & Supply	751	DESIGN	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59595	-117.01959
Bastan Corporation	2260	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59562	-117.08565
Bellama Custom Metal Fabrication	3129	MAIN	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59388	-117.06643
Best Recycle LLC	1169	THIRD	AV	N	Y	Y	Y	Y	Y	Y	Y	Y	32.61141	-117.06775
Brenntag Pacific Inc	1888	NIRVANA	AV	N	Y	N	N	Y	Y	Y	Y	Y	32.59446	-117.01648
Brunswick Mattress	1021	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.61033	-117.09150
C&G Swiss	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
Cabinet Tronix LLC	290	TROUSDALE	DR	Y	Y	N	N	N	N	N	Y	Y	32.65474	-117.08456

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Cabinetry Design Inc	675	ANITA	ST	Y	Y	N	N	N	N	N	Y	Y	32.59735	-117.08220
Cal Plastics 7 Metals	1670	INDUSTRIAL	BL	N	Y	Y	N	Y	N	N	Y	Y	32.59649	-117.08504
California Hardcoating Company	675	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59735	-117.08220
California Scrap Logistics Corp	811	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
California Sports Auto Wrecking	781	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59773	-117.01599
Calumet Auto Wrecking Inc	891	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59684	-117.00806
Canvas Concept Inc.	649	ANITA	ST	Y	Y	N	N	N	N	N	Y	Y	32.59752	-117.08091
Career Cap Corporation	1680	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.59649	-117.08504
Choes Wholesale	693	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60482	-117.08443
Chula Vista Bolt	1161	BAY	BL	N	Y	Y	N	Y	N	N	Y	Y	32.60588	-117.09149
Ciannas Creation	744	DESIGN	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59515	-117.02048
Circle Food LLC	1616	SILVAS	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59769	-117.07765
Corsair Marine Inc	150	REED	CT	N	Y	Y	N	Y	N	N	Y	Y	32.59186	-117.05634
Custom Door and Window Sales	1128	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60637	-117.09324
Daves Woodworking	171	MACE	ST	Y	Y	N	N	N	N	N	Y	Y	32.59320	-117.05236
David J Food Products	689	MARSAT	CT	Y	Y	N	N	Y	N	N	Y	Y	32.60053	-117.08310
Davinci Metal Works	3521	MAIN	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59151	-117.05779
DNP Electronics America LLC	2391	FENTON	ST	N	Y	Y	N	Y	N	N	Y	Y	32.65300	-116.96295
Doncaster, GCE Industries	1887	NIRVANA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59427	-117.01811
Downtown Copy & Print Inc	101	GLOVER	AV	Y	Y	Y	N	N	Y	N	Y	Y	32.65516	-117.08680
Dutchmasters Cabinets	2605	FAIVRE	ST	Y	Y	N	N	N	N	N	Y	Y	32.59242	-117.07738
Eagle Foods Distributors Inc	684	ANITA	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59948	-117.08252
Ecology Auto Wrecking	825	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59755	-117.01225
Ecology Auto Wrecking 2	850	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59551	-117.01114
Ecology Auto Wrecking 3	800	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59564	-117.01304
El Sol Industries Inc	679	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59735	-117.08220
Ervey Produce	1031	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.61033	-117.09150
Estes Express Lines	120	PRESS	LN	N	N	Y	N	Y	N	N	N	N	32.65573	-117.08491
Eurotecnics	170	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59307	-117.05425
Explorer Competition	2360	BOSWELL	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65469	-116.96421
Express Furniture	1226	THIRD	AV	Y	Y	N	N	N	N	N	Y	Y	32.60917	-117.06781
Express Pipe & Supply Co	117	PRESS	LN	Y	Y	N	N	Y	N	N	Y	Y	32.65607	-117.08370
FFF Distributors Inc	2474	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Finest City Cabinets	330	TROUSDALE	DR	Y	Y	N	N	N	N	N	Y	Y	32.65421	-117.08645
First Appearance Copy Printing & More	3156	MAIN	ST	Y	Y	Y	N	N	Y	N	Y	Y	32.59507	-117.06550
Five Star Medical Transport Inc	187	MACE	ST	N	N	Y	N	Y	N	N	N	N	32.59239	-117.05232
FJ Willert Construction Co.	1869	NIRVANA	AV	N	Y	Y	Y	Y	N	Y	Y	Y	32.59533	-117.01405
Flag Crafters	1095	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60816	-117.09140
Fleetpride West Inc.	630	BAY	BL	N	N	Y	N	Y	N	N	N	N	32.62433	-117.09531
Formosa Prosonic USA Inc.	303	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63445	-117.07763
Frank B Wood	2474	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59579	-117.08029
Freeway Auto Wrecking	783	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59771	-117.01465
Frontera International	1879	NIRVANA	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59398	-117.01489
Fuji Seimen Corp	170	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59307	-117.05425
G&M Custom Flags and Banners	2240	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59562	-117.08565
G&M Manufacturing	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432

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Gary Manufacturing Inc.	1124	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60637	-117.09324
Granite Gallery Inc	180	MACE	ST	N	Y	N	N	N	N	N	Y	Y	32.59216	-117.05432
H&M Wrought Iron Factory Inc	2560	MAIN	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59590	-117.07825
Hitachi Home Electronic Inc.- America	900	HITACHI	WY	N	Y	Y	N	Y	N	N	Y	Y	32.65152	-116.95947
Honda Acura Parts Auto Recycling	895	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59681	-117.00743
House of Leather and Fabrics	290	TROUSDALE	DR	Y	Y	N	N	N	N	N	Y	Y	32.65471	-117.08469
Hydro Scape Products Inc.	375	TROUSDALE	DR	Y	Y	N	N	Y	N	N	Y	Y	32.65444	-117.08811
Hyspan Precision Prod Inc	1685	BRANDYWINE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59555	-117.02831
Hyundai Livart Furniture Outlet	3121	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59388	-117.06643
Imperial Sprinkler Supply Inc.	280	TROUSDALE	DR	Y	Y	N	N	Y	N	N	Y	Y	32.65492	-117.08396
Import Auto Wrecking	793	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59618	-117.01618
Indu Fashions	680	MARSAT	CT	Y	Y	N	N	N	N	N	Y	Y	32.60114	-117.08326
International Sign Co	3268	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59506	-117.06307
Japan Tech Auto Wrecking	777	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59817	-117.01460
Japanese Auto Wrecking	811	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
K&T Carpet Services Inc	1085	BAY	BL	N	N	N	N	N	Y	N	N	N	32.60816	-117.09140
Kama Tech Corporation	739	DESIGN	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59673	-117.02064
Kelco Packaging Prop	2474	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Kelly Paper Company	630	BAY	BL	Y	Y	N	N	N	N	N	Y	Y	32.62433	-117.09531
KEM LLC	101	GLOVER	AV	Y	Y	N	N	Y	N	N	Y	Y	32.65516	-117.08680
Ken Larcens Cabinet Plus	171	MACE	ST	Y	Y	N	N	N	N	N	Y	Y	32.59320	-117.05236
Kleen Blast Industrial Services	676	MOSS	ST	Y	Y	N	N	Y	N	N	Y	Y	32.61335	-117.08779
L&V Furniture	2560	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59590	-117.07825
LA Natural Tortilla Factory	2765	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59427	-117.07368
Lawrence Hughes Cabinets Unlimited	180	MACE	ST	Y	Y	N	N	N	N	N	Y	Y	32.59216	-117.05432
LC Turbo	2446	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Leticia Cano Nuts and Bolts	2446	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Lopez Iron Works Repairs	2555	FAIVRE	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59228	-117.07851
Lund & Flynn Inc	370	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65383	-117.08772
Lyon Technologies Inc	1690	BRANDYWINE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59570	-117.03008
Marscott Marine and Industrial Supply	2446	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Mask US Inc	3121	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59388	-117.06643
Mikolajczyk Cabinet Shop	926	INDUSTRIAL	BL	Y	Y	N	N	N	N	N	Y	Y	32.61443	-117.09032
MMC Energy - Peak Power Plant	3497	MAIN	ST	N	N	Y	N	Y	Y	N	Y	N	32.59175	-117.05865
Monos Custom Metal Fabrications Inc	1548	JAYKEN	WY	N	Y	Y	N	Y	N	N	Y	Y	32.60005	-117.08168
Montoya's Auto Wrecking	781	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59773	-117.01599
MTS Maintenance Facility	3650	MAIN	ST	N	N	Y	N	Y	N	N	N	Y	32.59573	-117.05446
NCR Neon Specialist	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
Next Day Printed Tees	1075	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60816	-117.09140
Nirvana Produce Distributions	1872	NIRVANA	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59537	-117.01567
Nypro San Diego	505	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59571	-117.03177
Oak Land Furniture	2462	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59579	-117.08029
Ochoa's Cabinet	2446	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59579	-117.08029
Onager Corporation	789	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59721	-117.01599
OSI Security Devices	1580	JAYKEN	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59922	-117.08168
Otay Metal Mart	195	MACE	ST	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59176	-117.05307

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Pacific Auto Wrecking	795	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59689	-117.01475
Pacific Manufacturing Inc	2605	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59242	-117.07738
Pacific Maritime Industries	1664	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.59699	-117.08503
Pallets and Services of SD Corp	1020	COLORADO	AV	Y	Y	N	N	N	N	N	Y	Y	32.61167	-117.08807
PHV Custom Cabinets	3121	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59388	-117.06643
Pick Your Part Auto Wrecking	880	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59546	-117.00854
Plenums Plus, LLC	67	BRISBANE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.65276	-117.08718
Precision Woodworking of SD	1031	BAY	BL	Y	Y	N	N	N	N	N	Y	Y	32.61033	-117.09150
Premier Copper & Brass Pacific Inc	310	TROUSDALE	DR	N	Y	Y	N	Y	N	N	Y	Y	32.65460	-117.08507
Profil Institute for Clinical Research	855	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62230	-117.07171
Prudential Overall Supply	740	F	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63586	-117.09704
Pump Export Distributors	124	27TH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59396	-117.07567
Quality Lift Trucks	115	GLOVER	AV	N	Y	Y	N	Y	N	N	Y	Y	32.65516	-117.08680
R E Moore Inc	1624	SILVAS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59769	-117.07765
R L Stone Fabrications	2446	MAIN	ST	N	Y	N	N	N	N	N	Y	Y	32.59579	-117.08029
R&R Delta Supplies Inc	1161	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60588	-117.09149
RC Import Auto Recycler	777	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59817	-117.01460
Reclaimed Aggregates	855	ENERGY	WY	N	Y	Y	N	N	N	N	Y	N	32.59747	-117.00999
Resslers Welding Service	1550	FRONTAGE	RD	N	Y	Y	N	Y	N	N	Y	Y	32.59930	-117.09027
Ri-Ber Industrial Inc	2488	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Riley Recycling	811	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
Rossin Steel Inc.	1880	NIRVANA	AV	N	Y	Y	N	Y	N	N	Y	Y	32.59460	-117.01547
Sammy's Kitchen & Bath Inc	645	MARSAT	CT	Y	Y	N	N	Y	N	N	Y	Y	32.60051	-117.08194
San Diego Architectural Metals	873	DOROTHY	ST	N	Y	Y	N	Y	N	N	Y	Y	32.60018	-117.09041
San Diego Floor Design	2560	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59590	-117.07825
San Diego Frame MFG Co	1567	FRONTAGE	RD	N	Y	Y	N	Y	N	N	Y	Y	32.59910	-117.08836
San Diego Pallets	1031	BAY	BL	Y	Y	N	N	N	N	N	Y	Y	32.61033	-117.09150
San Diego Screw Products Inc	2865	MAIN	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59428	-117.07183
Seagate Produce	684	ANITA	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59948	-117.08252
Sealed Air Corporation	2311	BOSWELL	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.65595	-116.96727
Serco Inc	1669	BRANDYWINE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59792	-117.02832
Showtime Creations	925	HALE	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.65096	-116.96239
SMR Bakery Inc/Califorina Baking Co	681	ANITA	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59776	-117.08267
Snowbird Transportation	1872	NIRVANA	AV	N	N	Y	N	Y	N	N	N	N	32.59537	-117.01567
SOCAL Ironworks Inc.	1548	JAYKEN	WY	N	Y	Y	N	Y	N	N	Y	Y	32.60005	-117.08168
SOS Metals San Diego LLC	635	ANITA	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59744	-117.07996
Source of Health Inc.	1055	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60816	-117.09140
South Bay Auto Wreckers	811	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01111
South Coast Printing	1151	BAY	BL	Y	Y	Y	N	N	Y	N	Y	Y	32.60588	-117.09149
South Xpress Inc	180	MACE	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59216	-117.05432
Standard Auto Recycling	150	REED	CT	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59186	-117.05634
Stanford Signs	2556	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59338	-117.07859
Suncraft Fence Co	3288	MAIN	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59505	-117.06273
Surface Fleet Supply Co	1550	FRONTAGE	RD	Y	Y	N	N	Y	N	N	Y	Y	32.59930	-117.09027
Surface Technologies Corp	796	ENERGY	WY	Y	Y	N	N	Y	N	N	Y	Y	32.59615	-117.01491
SWE Jon Flexible Packaging Inc	2474	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Synthetic Marble By Ponce	675	MARSAT	CT	N	Y	N	N	N	N	N	Y	Y	32.60053	-117.08310
Tantus Inc	1045	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60816	-117.09140
TBA Mexican Trade	1045	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60816	-117.09140
Texano Auto Recycling	805	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
Tileforce Inc	2446	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Tortilleria Santa Fe Inc.	2765	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59427	-117.07368
Triple M Marine Welding & Repair Inc	1550	FRONTAGE	RD	N	Y	Y	N	Y	N	N	Y	Y	32.59930	-117.09027
Truitt Machine & Fabrication	997	G	ST	N	Y	Y	N	Y	N	N	Y	Y	32.63070	-117.10687
U S Glass & Mirror Co	926	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.61443	-117.09032
United Cutting	677	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59735	-117.08220
United Parcel Service	2300	BOSWELL	CT	N	N	Y	N	Y	N	N	N	N	32.65504	-116.97025
United Rentals Inc	501	C	ST	N	Y	Y	N	Y	N	N	Y	Y	32.64964	-117.09258
UV Xpress Printing	2421	FENTON	ST	Y	Y	Y	N	N	Y	N	Y	Y	32.65362	-116.96156
Vallarta Iron Works	2555	FAIVRE	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59228	-117.07851
Vcella Kilsn Inc	171	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59320	-117.05236
Vesco Metal Craft Inc	2425	FENTON	ST	N	Y	Y	N	Y	N	N	Y	Y	32.65364	-116.96103
Videotel Inc	681	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59776	-117.08267
Vulcan Materials Company - Chula Vista Quarry	2041	HERITAGE	RD	N	Y	Y	N	N	N	N	Y	N	32.59132	-116.98866
West Auto Wreckers	2365	MAIN	ST	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59388	-117.08229
Woodenvision	920	INDUSTRIAL	BL	Y	Y	N	N	N	N	N	Y	Y	32.61443	-117.09032

- **Mobile Commercial Businesses Certified During FY 2010-2011**

Attachment D3

Attachment D.3

Mobile Business Certified During FY 2010-2011

	Business Name	Business Type
1	Oscar Rojas Elite Yacht Services	Boat cleaning
2	Make It Pop	Handyman
3	Bright n Clean Windows	Window cleaning
4	J & M Keystone Inc	Power washing services
5	Hector A Lebran Landscaping	Landscaping
6	HVAC Best Handy Maintenance	HVAC Maintenance
7	B & B Inc. DBA Rapid Plumbing San Diego	Plumbing
8	FGK Painting	Painting and coating
9	Workscape Landscape	Landscaping
10	Tyrone Sandoval	Handyman
11	Miguel Ramos Services	Handyman
12	Specialized Painting Company	Painting and coating
13	Uncle Jack's Home Repair	Handyman
14	Painting and More	Painting and coating
15	L & A Rios Painting	Painting and coating
16	Armando Ramos Landscaping	Landscaping
17	San Diego Fiberglass Pools	Cement mixing or cutting
18	CaliGirls Carwash	Mobile automobile or other vehicle washing
19	Huerta's Concrete	Cement mixing or cutting
20	Arturo Beltran	Handyman
21	Perfection Auto Detail	Mobile automobile or other vehicle washing
22	Alpha Fire Protection	Fire sprinkler maintenance or installation
23	Sol-Fab Soltero Fabrication	Handyman
24	Octavio Celis	Handyman
25	KS Pool and Spa	Pool and fountain cleaning
26	ABC Elecromechanic Projects	Mobile mechanic
27	William R. Hupp	Landscaping design
28	Benjamin Reveles Handyman	Handyman
29	Hugo Padilla Landscape	Landscaping
30	Joseph Bailey Maintenance	Handyman
31	Margaret Vazquez Gardening	Landscaping
32	Krystal Clear Detailing	Mobile automobile or other vehicle washing
33	G-Tavo Detail	Mobile automobile or other vehicle washing
34	Pro Con Concrete Inc.	Cement mixing or cutting
35	Ben's Mobile Car Wash and Auto Detailing	Mobile automobile or other vehicle washing
36	Venustiano Avila Gardening Services	Landscaping
37	Michael Pulliam Bayfront Home Improvements	Handyman
38	Danny Plumbing	Plumbing
39	Alfredo Escalmilla Handyman	Handyman
40	Pro Handyman for Hire	Handyman
41	Urban Concrete Inc.	Cement mixing or cutting
42	Tony Stewart Plumbing	Plumbing
43	Triton Structural Concrete	Cement mixing or cutting
44	Deluxe Mobile Detailing and Carpet Cleaning	Mobile carpet, drape, or furniture cleaning
45	Deluxe Mobile Detailing and Carpet Cleaning	Mobile automobile or other vehicle washing
46	Del Rey Property Preservation	Handyman
47	Elite Window Washing	Window cleaning
48	Pacific Pool Plumbing, Inc.	Swimming pool plumbing
49	Powerwash Solutions	Power washing services
50	Raygoza Builders	Contractor - refrigeration
51	Chris Conway Landscaping	Landscaping

Attachment D.3

Mobile Business Certified During FY 2010-2011

	Business Name	Business Type
52	A & L Painting	Painting and coating
53	Masonry Pros	Masonry
54	Releaf Landscape	Landscaping
55	Pool Maya Service	Pool and fountain cleaning
56	Armando Silvas Window Cleaning	Window cleaning
57	Doctor Piper Inc.	Plumbing
58	Remedy Plumbing	Plumbing
59	Patrick Garcia	Painting and coating
60	Joel Rivera Landscape	Landscaping
61	Felipe Painting	Painting and coating
62	Seabreeze Landscape	Landscaping
63	ATC Plumbing Source	Plumbing
64	123 Carpet Cleaning LLC	Mobile carpet, drape, or furniture cleaning
65	Guillermo Niebla Bueno	Landscaping
66	Ace Rooter Drain Services	Plumbing
67	Maricruz Pena Landscaping	Landscaping
68	Jaime Boites Mobile Auto Body Spot Repair	Auto body repair
69	Spitfire Pest Control	Pest control
70	KB Landscape	Landscaping
71	MJV Landscaping	Landscaping
72	Ortegas and Rosales Landscaping	Landscaping
73	Sea of Glass Pool	Pool and fountain cleaning
74	Patrick Kidd New Level Maintenance	Handyman
75	Southbay Express Auto Detail	Mobile automobile or other vehicle washing
76	Beltran's and Zazueta's Landscape Maintenance	Landscaping
77	7/24 Cleaning And Handywork Services	Handyman
78	Refresh Carpet Cleaning	Mobile carpet, drape, or furniture cleaning
79	Barba Landscaping	Landscaping
80	Don Gato	Landscaping
81	A & J Carpet Cleaning	Mobile carpet, drape, or furniture cleaning
82	Better Community Plumbing	Plumbing
83	All Starz Mobile Auto Detail	Mobile automobile or other vehicle washing
84	Spotless Clean Windows	Window cleaning
85	Rancho West Landscape Inc	Landscaping
86	Fujisaki Landscaping	Landscaping
87	Conder Carpet Cleaning	Mobile carpet, drape, or furniture cleaning
88	Luis's Pools	Pool and fountain cleaning
89	Eco Underwater Pool Repair	Pool repair
90	Luis Verduzco Handyman	Handyman
91	Perry Plumbing	Plumbing
92	Abelardo Rocha Plants & Turf Tech	Landscaping
93	Caleb Painting	Painting and coating
94	Save Our Planet Car Wash	Mobile automobile or other vehicle washing
95	D and D Plumbing	Plumbing
96	R. Montano Landscape Co.	Landscaping
97	Eleazar Smith's Handyman	Handyman
98	Corey Smith's Handyman Services	Handyman
99	Angel Rafael Morales	Landscaping
100	DSR Construction	Handyman
101	RT Handyman Service	Handyman

Attachment D.3

Mobile Business Certified During FY 2010-2011

	Business Name	Business Type
102	R & R Handyman	Handyman
103	Serrano's Handyman	Handyman
104	AMD Handyman Services/ MAD Glass	Handyman
105	JP Plumbing Systems	Plumbing
106	Juan Carlos Ruiz Home Upgrade Pros	Handyman
107	Cusguen	Handyman
108	Bob the Plumber	Plumbing
109	Hector Lua Landscaping	Landscaping
110	Makaveli Mobile Detail	Mobile automobile or other vehicle washing
111	Prodigy Detail	Mobile automobile or other vehicle washing
112	Bernie's Handyman	Handyman
113	Manuel Boroquez	Landscaping
114	Shine Diego Auto Detailing	Mobile automobile or other vehicle washing
115	Fast Plumbing and Drains	Plumbing
116	Performance Power Cleaning Inc.	Power washing services
117	Daniel Aldana	Handyman
118	Verdugo Concrete Construction Inc.	Cement mixing or cutting
119	Joel Gardener	Landscaping
120	Hernandez Handyman	Handyman
121	David Munoz Handyman	Handyman
122	Bensonhurst Corporation	Painting and coating
123	Perfection Painting	Painting and coating
124	US Fire Protection	Fire sprinkler maintenance or installation
125	Vicente Candelaria	Handyman
126	L&R Landscaping	Landscaping
127	TLC Plumbing Inc	Plumbing
128	Arturo Lopez	Painting and coating
129	Albert's Landscaping	Landscaping
130	EZ Clean Inc.	Floor cleaning
131	JB Masonry Inc	Masonry
132	Joseph Holt Plastering Inc	Cement mixing or cutting
133	JC Coatings	Painting and coating
134	Trilogy Plumbing Inc	Painting and coating
135	D&D Wildlife Habitat Restoration Inc	Landscaping
136	Sun Diego Landscape Design	Landscaping
137	Aquatic Arts	Cement mixing or cutting
138	Reliable Plumbing and Drain Cleaning	Plumbing
139	Total Yard	Landscaping
140	L & J Auto Detail	Mobile automobile or other vehicle washing

• Industrial Source Inventory Prioritization

Attachment E

Attachment E

Industrial Source Inventory and Prioritization
FY 2010-2011

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
2 Heavy Equipment/PavementRecycling	6441820300	Metal Recycling	High	855	ENERGY	WY	5093		
A & A Medical Transportation	5672004000	Transportation	Low	610	G	ST	4119		
A&A Auto Wrecking	6441811900	Auto Dismantlers	High	775	ENERGY	WY	5016	937I020792	
A1 Moulding Supplies	6291000600	Warehousing	Low	180	MACE	ST	4225		
AAA Foreign Auto Recycling	6441810100	Auto Dismantlers	High	783	NIRVANA	AV	5015	937i016197	
Aatlas	6441812100	Auto Dismantlers	High	791	ENERGY	WY	5015	937I022394	
ABF Freight System Inc.	6441821700	Transportation	High	875	ENERGY	WY	4213	937I013254	
ACE Industries Inc.	6442302200	Manufacturing	Low	738	DESIGN	CT	3599		
Acme Bag Company	6221114100	Retail	Low	2528	MAIN	ST	5999		
Action Auto Dismantlers Inc	6291001400	Auto Dismantlers	High	151	REED	CT	5015	937I004000	
ADA Fabrication	6221021800	Fabrications	Low	2260	MAIN	ST	3993		
Advance Auto Wrecking	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937i020612	
Advantage Printing & Apparel Inc	6221115300	Printing	Low	681	ANITA	ST	2262		
Airgas West Inc	6291413100	Retail/Sales	Low	3303	MAIN	ST	3563		
Aker Leather Products	6221021800	Manufacturing	Low	2248	MAIN	ST	2386		
All Japanese Auto Recycling	6441811900	Auto Dismantlers	High	775	ENERGY	WY	5015	937I015706	
All Toyota/Lexus Wrecking	6441811500	Auto Dismantlers	High	805	ENERGY	WY	5015	937I018543	
Alliance Hardwood LLC	6221023300	Wholesale	Low	775	ANITA	ST	5031		
Allied Waste Services	6441821600	Waste Management	High	881	ENERGY	WY	4953	937I014355	
Amerivacs Manufacturing Inc	6232301700	Manufacturing	Low	3800	MAIN	ST	3635		
Apada Industries Inc	6222304400	Manufacturing	Low	632	MARSAT	CT	2299		

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Aqualarm	6170800800	Manufacturing	Low	1151	BAY	BL	3635		
Arise/Waco Scafolding	6180103100	Wholesale	Medium	676	MOSS	ST	5082		√
Arroyo Fabrication	6221112500	Fabrications	Low	2488	MAIN	ST	3399		
ASI Distr. & Fabr./Abbet Services Inc	6222304900	Distributor	Low	1547	JAYKEN	WY	5085		
Asian Kars Auto Recycling	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937I017467	
BABA Foods	6182803500	Manufacturing	Low	693	PALOMAR	ST	2099		
Bacco Produce	6170800600	Produce	Low	1031	BAY	BL	5148		
Baja California Cycle USA Inc	6290200100	Wholesale	Low	2801	MAIN	ST	5091		
Bajas #3 Auto Wrecking	6441811500	Auto Dismantlers	High	811	ENERGY	WY	7549	937I022426	
Barbee Valve & Supply	6442302600	Manufacturing	Low	751	DESIGN	CT	3432		
Bastan Corporation	6221021800	Wholesale	Low	2260	MAIN	ST	5142		
Bellama Custom Metal Fabrication	6290604200	Fabrications	Low	3129	MAIN	ST	3499		
Best Recycle LLC	6191710400	Recycling	Low	1169	THIRD	AV	2899		
Brenntag Pacific Inc	6441810800	Chemical Storage	Low	1888	NIRVANA	AV	5169		
Brunswick Mattress	6170800600	Furnitures	Low	1021	BAY	BL	5712		
C&G Swiss	6291000600	Fabrications	Low	180	MACE	ST	3451		
Cabinet Tronix LLC	5634511900	Furnitures	Low	290	TROUSDALE	DR	2517		√
Cabinetry Design Inc	6221115400	Manufacturing	Low	675	ANITA	ST	2434		
Cal Plastics 7 Metals	6221022800	Wholesale	Low	1670	INDUSTRIAL	BL	5162		
California Hardcoating Company	6221115400	Manufacturing	Low	675	ANITA	ST	3479		
California Scrap Logistics Corp		Auto Dismantlers	High	811	ENERGY	WY			
California Sports Auto Wrecking	6441811800	Auto Dismantlers	High	781	ENERGY	WY	5015	937I021145	
Calumet Auto Wrecking Inc	6441821400	Auto Dismantlers	High	891	ENERGY	WY	5015	937I004393	
Canvas Concept Inc.	6221115800	Manufacturing	Low	649	ANITA	ST	2394		

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Career Cap Corporation	6221022800	Manufacturing	Low	1680	INDUSTRIAL	BL	2353		
Choes Wholesale	6182803500	Wholesale	Low	693	PALOMAR	ST	5092		
Chula Vista Bolt	6170800800	Wholesale	Low	1161	BAY	BL	5072		
Ciannas Creation	6442302100	Manufacturing	Low	744	DESIGN	CT	2299		
Circle Food LLC	6221110800	Distributor	Low	1616	SILVAS	ST	5149		
Corsair Marine Inc	6291000400	Boat Building & Repair	Low	150	REED	CT	3732		
Custom Door and Window Sales	6170110300	Wholesale	Low	1128	BAY	BL	5211		√
Daves Woodworking	6291302600	Retail/Sales	Low	171	MACE	ST	5712		
David J Food Products	6222303900	Wholesale	Low	689	MARSAT	CT	5149		
Davinci Metal Works	6291002128	Construction Equipment	Low	3521	MAIN	ST	3537		
DNP Electronics America LLC	5952313300	Manufacturing	Low	2391	FENTON	ST	3571		
Doncaster, GCE Industries	6440404900	Manufacturing	High	1887	NIRVANA	AV	3443	937I022716	
Downtown Copy & Print Inc	5634421600	Printing	Low	101	GLOVER	AV	7334		√
Dutchmasters Cabinets	6221900800	Manufacturing	Low	2605	FAIVRE	ST	2434		
Eagle Foods Distributors Inc	6220810602	Distributor	Low	684	ANITA	ST	5141		
Ecology Auto Wrecking	6441820100	Auto Dismantlers	High	825	ENERGY	WY	5015	937I003325	
Ecology Auto Wrecking 2	6441821000	Auto Dismantlers	High	850	ENERGY	WY	5015	937I019445	
Ecology Auto Wrecking 3	6441821200	Auto Dismantlers	High	800	ENERGY	WY	5015	937I003280	
El Sol Industries Inc	6221115400	Manufacturing	Low	679	ANITA	ST	2389		
Ervey Produce	6170800600	Produce	Low	1031	BAY	BL	5148		
Estes Express Lines	5634521200	Trucking	High	120	PRESS	LN	4231	937I007126	√
Eurotecnics	6291002300	Manufacturing	Low	170	MACE	ST	2434		
Explorer Competition	5952311300	Retail/Sales	Low	2360	BOSWELL	RD	5531		√
Express Furniture	6192113900	Furnitures	Low	1226	THIRD	AV	5712		√

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Express Pipe & Supply Co	5634512600	Wholesale	Low	117	PRESS	LN	5074		√
FFF Distributors Inc	6221112500	Wholesale	Low	2474	MAIN	ST	5063		
Finest City Cabinets	5634411200	Manufacturing	Low	330	TROUSDALE	DR	5712		√
First Appearance Copy Printing & More	6231921800	Printing/Copy Service	Low	3156	MAIN	ST	7334		
Five Star Medical Transport Inc	6291302700	Transportation	Low	187	MACE	ST	4119		
FJ Willert Construction Co.	6441813600	Storage	High	1869	NIRVANA	AV	4953	937I016993	
Flag Crafters	6170800700	Manufacturing	Low	1095	BAY	BL	2399		
Fleetpride West Inc.	5713301900	Trucking	Low	630	BAY	BL	4214		
Formosa Prosonic USA Inc.	5684503900	Manufacturing	Low	303	H	ST	3679		
Frank B Wood	6221112500	Furnitures	Low	2474	MAIN	ST	5712		
Freeway Auto Wrecking	6441812200	Auto Dismantlers	High	783	ENERGY	WY	5015	937I021643	
Frontera International	6441813400	Warehousing	Low	1879	NIRVANA	AV	4225		
Fuji Seimen Corp	6291002300	Manufacturing	Low	170	MACE	ST	2098		
G&M Custom Flags and Banners	6221021800	Manufacturing	Low	2240	MAIN	ST	2399		
G&M Manufacturing	6291000600	Management Service	Low	180	MACE	ST	8741		
Gary Manufacturing Inc.	6170110300	Manufacturing	Low	1124	BAY	BL	2299		√
Granite Gallery Inc	6291000600	Wholesale	Low	180	MACE	ST	5032		
H&M Wrought Iron Factory Inc	6221113200	Manufacturing	Low	2560	MAIN	ST	3315		
Hitachi Home Electronic Inc.- America	5957110400	Manufacturing	Low	900	HITACHI	WY	3639		√
Honda Acura Parts Auto Recycling	6441821500	Auto Dismantlers	High	895	ENERGY	WY	5015	937i011394	
House of Leather and Fabrics	5634512000	Manufacturing	Low	290	TROUSDALE	DR	3111		√
Hydro Scape Products Inc.	5634313000	Retail/Sales	Low	375	TROUSDALE	DR	5039		√
Hyspan Precision Prod Inc	6440402800	Manufacturing	Low	1685	BRANDYWINE	AV	3441		
Hyundai Livart Furniture Outlet	6290604200	Furnitures	Low	3121	MAIN	ST	5712		

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Imperial Sprinkler Supply Inc.	5634511400	Retail/Sales	Low	280	TROUSDALE	DR	5087		√
Import Auto Wrecking	6441812900	Auto Dismantlers	High	793	ENERGY	WY	5015	937I016877	
Indu Fashions	6222303800	Manufacturing	Low	680	MARSAT	CT	2329		
International Sign Co	6232022300	Manufacturing	Low	3268	MAIN	ST	3993		
Japan Tech Auto Wrecking	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937I020121	
Japanese Auto Wrecking	6441811500	Auto Dismantlers	High	811	ENERGY	WY	5015	937I021355	
K&T Carpet Services Inc	6170800700	Service	Low	1085	BAY	BL	7217		
Kama Tech Corporation	6442301300	Manufacturing	Low	739	DESIGN	CT	5131		
Kelco Packaging Prop	6221112500	Warehousing	Low	2474	MAIN	ST	4222		
Kelly Paper Company	5713301900	Wholesale	Low	630	BAY	BL	5111		
KEM LLC	5634421600	Environmental Services	Low	101	GLOVER	AV	8999		√
Ken Larcens Cabinet Plus	6291302600	Manufacturing	Low	171	MACE	ST	2434		
Kleen Blast Industrial Services	6180103100	Retail/Sales	Medium	676	MOSS	ST	5084		√
L&V Furniture	6221113200	Manufacturing	Low	2560	MAIN	ST	2434		
LA Natural Tortilla Factory	6290101100	Manufacturing	Low	2765	MAIN	ST	2099		
Lawrence Hughes Cabinets Unlimited	6291000600	Manufacturing	Low	180	MACE	ST	2434		
LC Turbo	6221112500	Service	Low	2446	MAIN	ST	7699		
Leticia Cano Nuts and Bolts	6221112500	Retail/Sales	Low	2446	MAIN	ST	5072		
Lopez Iron Works Repairs	6221902000	Welding Services	Low	2555	FAIVRE	ST	7692		
Lund & Flynn Inc	5634322400	Manufacturing	Low	370	TROUSDALE	DR	3694		√
Lyon Technologies Inc	6440403700	Manufacturing	Low	1690	BRANDYWINE	AV	3499		
Marscott Marine and Industrial Supply	6221112500	Wholesale	Low	2446	MAIN	ST	5085		
Mask US Inc	6290604200	Fabrications	Low	3121	MAIN	ST	2389		
Mikolajczyk Cabinet Shop	6170102900	Cabinet Installation	Low	926	INDUSTRIAL	BL	1751		√

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
MMC Energy -Peak Power Plant	6290620400	Power Generations	High	3497	MAIN	ST	4911	9371020087	
Monos Custom Metal Fabrications Inc	6222300400	Fabrications	Low	1548	JAYKEN	WY	3499		
Montoya's Auto Wrecking	6441811800	Auto Dismantlers	High	781	ENERGY	WY	5015	937I021427	
MTS Maintenance Facility	6232502200	Transportation	High	3650	MAIN	ST	4111	937I011017	
NCR Neon Specialist	6291000600	Manufacturing	Low	180	MACE	ST	3993		
Next Day Printed Tees	6170800700	Retail/Sales	Low	1075	BAY	BL	5699		
Nirvana Produce Distributions	6441811000	Produce	Low	1872	NIRVANA	AV	5431		
Nypro San Diego	6440402400	Manufacturing	Low	505	MAIN	ST	3061		
Oak Land Furniture	6221112500	Cabinet Installation	Low	2462	MAIN	ST	1751		
Ochoa's Cabinet	6221112500	Manufacturing	Low	2446	MAIN	ST	2434		
Onager Corporation	6441812800	Auto Dismantlers	High	789	ENERGY	WY	5015	9371010014	
OSI Security Devices	6222300200	Fabrications	Low	1580	JAYKEN	WY	3499		
Otay Metal Mart	6291302800	Wholesale	Low	195	MACE	ST	5051		
Pacific Auto Wrecking	6441812000	Auto Dismantlers	High	795	ENERGY	WY	5015	9371015058	
Pacific Manufacturing Inc	6221900800	Manufacturing	Low	2605	FAIVRE	ST	3452		
Pacific Maritime Industries	6221022700	Manufacturing	Low	1664	INDUSTRIAL	BL	3441		
Pallets and Services of SD Corp	6182005800	Wholesale	Low	1020	COLORADO	AV	5031		√
PHV Custom Cabinets	6290604200	Manufacturing	Low	3121	MAIN	ST	2434		
Pick Your Part Auto Wrecking	6441820800	Auto Dismantlers	High	880	ENERGY	WY	5015	937I012114	
Plenums Plus, LLC	5632703900	Fabrications	Low	67	BRISBANE	ST	3441		√
Precision Woodworking of SD	6170800600	Woodworking	Low	1031	BAY	BL	2541		
Premier Copper & Brass Pacific Inc	5634410100	Wholesale	Low	310	TROUSDALE	DR	5051		√
Profil Institute for Clinical Research	5734606400	Others	Low	855	THIRD	AV	8011		√
Prudential Overall Supply	5670900300	Service	Medium	740	F	ST	7213		

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Pump Export Distributors	6221403400	Manufacturing	Low	124	27TH	ST	3561		
Quality Lift Trucks	5634421600	Retail/Sales	Low	115	GLOVER	AV	5084		√
R E Moore Inc	6221110800	Manufacturing	Low	1624	SILVAS	ST	3451		
R L Stone Fabrications	6221112500	Fabrications	Low	2446	MAIN	ST	3281		
R&R Delta Supplies Inc	6170800800	Wholesale	Low	1161	BAY	BL	5013		
RC Import Auto Recycler	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937I010144	
Reclaimed Aggregates	6441820300	Recycling	High	855	ENERGY	WY	5032	937I022251	
Resslers Welding Service	6220620500	Welding Services	Low	1550	FRONTAGE	RD	7692		
Ri-Ber Industrial Inc	6221112500	Wholesale	Low	2488	MAIN	ST	5084		
Riley Recycling	6441811500	Auto Dismantlers	High	811	ENERGY	WY	5015		
Rossin Steel Inc.	6441810900	Fabrications	High	1880	NIRVANA	AV	3441	937I020898	
Sammy's Kitchen & Bath Inc	6222304200	Warehousing	Low	645	MARSAT	CT	4226		
San Diego Architectural Metals	6220610300	Manufacturing	Low	873	DOROTHY	ST	3499		
San Diego Floor Design	6221113200	Wholesale	Low	2560	MAIN	ST	5713		
San Diego Frame MFG Co	6220725900	Manufacturing	Low	1567	FRONTAGE	RD	2499		
San Diego Pallets	6170800600	Distributor	Low	1031	BAY	BL	7389		
San Diego Screw Products Inc	6290201200	Manufacturing	Low	2865	MAIN	ST	3545		
Seagate Produce	6220810602	Produce	Low	684	ANITA	ST	5148		
Sealed Air Corporation	5953000500	Manufacturing	Low	2311	BOSWELL	RD	3565		√
Serco Inc	6440404500	Service	Low	1669	BRANDYWINE	AV	8741		
Showtime Creations	5952320600	Manufacturing	Low	925	HALE	PL	2389		√
SMR Bakery Inc/Califorina Baking Co	6221115300	Bakery	Low	681	ANITA	ST	2099		
Snowbird Transportation	6441811000	Distributor	Low	1872	NIRVANA	AV	4212		
SOCAL Ironworks Inc.	6222300400	Storage	Low	1548	JAYKEN	WY	4225		

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
SOS Metals San Diego LLC	6221115700	Recycling	High	635	ANITA	ST	5093	9371013260	
Source of Health Inc.	6170800700	Manufacturing	Low	1055	BAY	BL	2833		
South Bay Auto Wreckers	6441820200	Auto Dismantlers	High	811	ENERGY	WY	5015	937I004495	
South Coast Printing	6170800800	Printing/Copy Service	Low	1151	BAY	BL	2759		
South Xpress Inc	6291000600	Wholesale	Low	180	MACE	ST	5074		
Standard Auto Recycling	6291000400	Auto Dismantlers	High	150	REED	CT	5015	9371010775	
Stanford Signs	6221403300	Specialty	Low	2556	FAIVRE	ST	3993		
Suncraft Fence Co	6232023800	Distributor	Low	3288	MAIN	ST	5039		
Surface Fleet Supply Co	6220620500	Wholesale	Low	1550	FRONTAGE	RD	5074		
Surface Technologies Corp	6441811100	Service	Low	796	ENERGY	WY	7699		
SWE Jon Flexible Packaging Inc	6221112500	Wholesale	Low	2474	MAIN	ST	5113		
Synthetic Marble By Ponce	6222303900	Fabrications	Low	675	MARSAT	CT	3281		
Tantus Inc	6170800700	Manufacturing	Low	1045	BAY	BL	3645		
TBA Mexican Trade	6170800700	Wholesale	Low	1045	BAY	BL	5411		
Texano Auto Recycling	6441811500	Recycling	High	805	ENERGY	WY	5015	937I1021577	
Tileforce Inc	6221112500	Retail/Sales	Low	2446	MAIN	ST	5713		
Tortilleria Santa Fe Inc.	6290101100	Manufacturing	Medium	2765	MAIN	ST	2099		
Triple M Marine Welding & Repair Inc	6220620500	Welding Services	Low	1550	FRONTAGE	RD	7692		
Truitt Machine & Fabrication	7600481700	Fabrications	Low	997	G	ST	3599		
U S Glass & Mirror Co	6170102900	Manufacturing	Low	926	INDUSTRIAL	BL	3231		
United Cutting	6221115400	Industrial Launderes	Low	677	ANITA	ST	7218		
United Parcel Service	5953001000	Postal Service	High	2300	BOSWELL	CT	4215	9371002086	√
United Rentals Inc	5623501000	Heavy Equipment Rentals	Medium	501	C	ST	7359	9371019886	√
UV Xpress Printing	5952313800	Printing/Copy Service	Low	2421	FENTON	ST	2759		

Facility Name	APN Number	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Vallarta Iron Works	6221902000	Welding Services	Low	2555	FAIVRE	ST	7692		
Vcella Kilsn Inc	6291302600	Manufacturing	Low	171	MACE	ST	3631		
Vesco Metal Craft Inc	5952314200	Manufacturing	Low	2425	FENTON	ST	3312		
Videotel Inc	6221115300	Manufacturing	Low	681	ANITA	ST	3651		
Vulcan Materials Company - Chula Vista Quarry	6440600600	Concrete Work	High	2041	HERITAGE	RD	1429	937I023019	
West Auto Wreckers	6221902600	Auto Dismantlers	High	2365	MAIN	ST	5015	9371001046	
Woodenvision	6170102900	Woodworking	Low	920	INDUSTRIAL	BL	2511		√

Grand Total: **196**

• Treatment Control BMP Inspections

Attachment F

Attachment F

FY 2010-2011 Treatment Control BMP Inspections

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
30-Sep-10	Mount San Miguel Community Par	N/A	TC-32 Bioretention	TC-30 Vegetated Swale	Municipal	High	San Miguel Ranch	City of Chula Vista
29-Apr-11	Canyon View	R59C & R60	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-1 West	Otay Ranch Three HOA c/o**
5-May-11	Eastlake Marketplace	N/A	MP-51 Vortex Separator		Commercial	High	Eastlake	Eastlake Marketplace c/o**
5-May-11	Otay Ranch Town Center	N/A	MP-51 Vortex Separator		Commercial	High	Otay Ranch V-11	GCP-Otay Ranch LP
5-May-11	Walmart @ Eastlake	N/A	MP-52 Drain Insert		Commercial	High	Eastlake	WalMart
5-May-11	Chevron Station-Olympic Parkway	N/A	MP-52 Drain Insert		Commercial	High	Eastlake Land Swap	Chevron Station Inc.
5-May-11	Eastlake Village Center East	N/A	MP-52 Drain Insert		Commercial	High	Eastlake	Gatlin Development Co.
5-May-11	Eastlake Terrace-Landswap	N/A	MP-52 Drain Insert		Commercial	High	Eastlake	Gatlin Development

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
5-May-11	The Marketplace @ Windingwalk	N/A	MP-52 Drain Insert TC-22 Extended Det Basin		Commercial	High	Miscellaneous	Shea Properties
6-May-11	Eastlake Business Center-Hale Pl	N/A	MP-52 Drain Insert		Commercial	High	Eastlake	Tycoon Management
6-May-11	Eastlake - Village Walk	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	High	Eastlake	Sudberry Properties, Inc.
6-May-11	Otay Lakes Medical Office	N/A	MP-52 Drain Insert		Commercial	Medium	Eastlake	Otay Lakes Med. Condo Assoc.
6-May-11	Village Walk - Medical Arts Center	N/A	MP-52 Drain Insert	TC-30 Vegetated Swale	Commercial	High	Eastlake	Heritage Real Estate Advisors
6-May-11	Venture Commerce Center	N/A	MP-51 Vortex Separator		Commercial	High	Miscellaneous	Heritage Real Estate Advisors
6-May-11	Eastlake Design District	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	High	Eastlake	IRE Development
6-May-11	Fenton Business Center	N/A	MP-52 Drain Insert		Commercial	High	Eastlake	Jason Chases
6-May-11	Eastlake Parkway Professional Pl	N/A	MP-52 Drain Insert	TC-30 Vegetated Swale	Commercial	High	Eastlake	IRE Development
9-May-11	Auto Park North	N/A	MP-52 Drain Insert		Commercial	High	Main Street	Chula Vista Auto Park Assoc.

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
9-May-11	Doctor's Park	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low	Eastlake	Otay Lakes Partners, LLC
9-May-11	Bonita Library	N/A	MP-52 Drain Insert	TC-30 Vegetated Swale	Municipal	High	Bonita	Bonita-Sunnyside Branch Librar
9-May-11	Chula Vista Crossings	N/A	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	High	Main Street	NewMark Merrill
9-May-11	Aqua Clean	N/A	MP-52 Drain Insert		Commercial	Medium	Miscellaneous	Aqua Clean C/O Lou Brito
9-May-11	Andora	R-9B	MP-52 Drain Insert		Residential	Medium	The Summit	NN Jaeske
9-May-11	Capria	R9E	MP-52 Drain Insert		Residential	Medium	The Summit	NN Jaeske
9-May-11	Cortina	R9D	MP-52 Drain Insert		Residential	Medium	The Summit	NN Jaeske
9-May-11	Firenze	R9A	MP-52 Drain Insert		Residential	Medium	The Summit	NN Jaeske
9-May-11	2380 Main Street	N/A	MP-52 Drain Insert		Commercial	High	Main Street	Chula Vista Main, LLC**
9-May-11	The Shops at San Miguel Ranch	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	Low	Miscellaneous	Cushman & Wakefield

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
9-May-11	Kohls @ Eastlake	N/A	MP-52 Drain Insert		Commercial	Medium	Eastlake	DENTCO Exterior Services Mgmt
9-May-11	C.V. Commerce Center	N/A	MP-51 Vortex Separator		Commercial	High	Main Street	MarWest Real Estate
9-May-11	C.V. Corporate Center	N/A	MP-52 Drain Insert		Commercial	High	Main Street	Mar West Real Estate
11-May-11	Bella Lago	R-1	TC-40 Media Filter		Residential	High	Bella Lago	KHovnanian
13-May-11	Alder Lane	VR-12	MP-51 Vortex Separator		Residential	High	Eastlake Vistas	Summit Property Management
16-May-11	Walmart at 5305 Broadway	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	High	Miscellaneous	WAL-MART Stores Inc.
16-May-11	COSTCO at Broadway	N/A	MP-51 Vortex Separator		Commercial	High	Miscellaneous	AAA Property Services
16-May-11	Southbay Motorsports	N/A	MP-52 Drain Insert		Commercial	High	Miscellaneous	SB Land, LLC
16-May-11	Enterprise Administration Bldg.	N/A	MP-52 Drain Insert		Commercial	High	Main Street	Floit Properties
17-May-11	McCune Chrysler Dodge	N/A	MP-52 Drain Insert		Commercial	High	Main Street	McCune Chrysler Jeep Dodge

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
2-Jun-11	Provence	N12A	TC-22 Extended Det Basin		Residential	Medium	Rolling Hills Ranch	Cornerstone
2-Jun-11	Quintessa	N9A	TC-22 Extended Det Basin		Residential	Medium	Rolling Hills Ranch	McMillin
2-Jun-11	Castillian	N9B	TC-22 Extended Det Basin		Residential	Medium	Rolling Hills Ranch	McMillin
2-Jun-11	Clearstory	N12B	TC-22 Extended Det Basin		Residential	Medium	Rolling Hills Ranch	McMillin
7-Jun-11	Chula Vista Toyota	N/A	MP-52 Drain Insert		Commercial	High	Main Street	Chula Vista Toyota
14-Jun-11	Eastlake Commerce- Business Ce	N/A	MP-52 Drain Insert		Commercial	High	Eastlake	IRE Development
15-Jun-11	Civic Center and Admin Building	N/A	MP-51 Vortex Separator	MP-52 Drain Inlet	Municipal	Medium	Miscellaneous	City of Chula Vista
23-Jun-11	Mar Brisa	N4A1	MP-52 Drain Insert		Residential	Medium	San Miguel Ranch	Mar Brisa-C/O Prescott Co.
23-Jun-11	First Avenue-Naples to Palomar C	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium	Miscellaneous	City of Chula Vista
28-Jun-11	Wisteria	R-1	TC-22 Extended Det Basin		Residential	High	Otay Ranch V-11	Brookfield Homes

Inspection Date	Project Name	Neighborhood	Type of BMP Installed	Category	Priority	Development	Responsible Party
28-Jun-11	Twilight I	R-2	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Twilight II	R-3	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Magnolia I	R-4	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Magnolia II	R-5	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Magnolia III	R-6	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Cedar Rose I	R-7	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Picket Fence	R-8	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Lantana	R-9	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Cedar Rose II	R-10	TC-22 Extended Det Basin	Residential	Low	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Cottage Lane	R-20	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes

Inspection Date	Project Name	Neighborhood	Type of BMP Installed	Category	Priority	Development	Responsible Party
28-Jun-11	Cottage Lane II	R-21	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Cottage Lane III	R-22	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Agave	R-24A	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Saguara	R-24B	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
28-Jun-11	Aristata	R-25	TC-22 Extended Det Basin	Residential	High	Otay Ranch V-11	Brookfield Homes
30-Jun-11	Colrich	VR-1	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista PW
30-Jun-11	Atrium	VR-2	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
30-Jun-11	Lost Creek	VR-4	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
30-Jun-11	Bridgepark	VR-5	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
30-Jun-11	Abilene	VR-7	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista

Inspection Date	Project Name	Neighborhood	Type of BMP Installed	Category	Priority	Development	Responsible Party
30-Jun-11	Monticello	VR-8	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
30-Jun-11	Sonora Ridge	VR-9 & 11	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
30-Jun-11	Sunset View Park	N/A	MP-52 Drain Insert	Municipal	High	Eastlake	City of Chula Vista-Park Div.
30-Jun-11	Montevalle Park & Community Cei	N/A	MP-52 Drain Insert	Municipal	High	Eastlake Woods	City of Chula Vista
30-Jun-11	Salt Creek Park & Community Cer	N/A	MP-51 Vortex Separator	Municipal	High	Miscellaneous	City of Chula Vista
30-Jun-11	Telegraph Canyon CIP	N/A	MP-52 Drain Insert	CIP With SUSMP	Medium	Miscellaneous	City of Chula Vista
30-Jun-11	805 / Orange Interchange	N/A	MP-52 Drain Insert	CIP With SUSMP	Medium	Miscellaneous	City Of Chula Vista
30-Jun-11	Fairhaven II	N7C	MP-52 Drain Insert	Residential	Medium	Rolling Hills Ranch	City of Chula Vista
30-Jun-11	Meredian	WR-6	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	City of Chula Vista
30-Jun-11	Sonoma	WR-7	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	City of Chula Vista

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
30-Jun-11	Dixon Drive CIP	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium	Miscellaneous	City of Chula Vista
30-Jun-11	Tobias Drive CIP	N/A	MP-52 Drain Insert		CIP With SUSMP	Medium	Miscellaneous	City of Chula Vista
30-Jun-11	Ventana I	Planning Area F	MP-52 Drain Insert		Residential	Medium	San Miguel Ranch	City of Chula Vista
30-Jun-11	Ventana II	Planning Area G	MP-52 Drain Insert		Residential	Medium	San Miguel Ranch	City of Chula Vista
30-Jun-11	Reserves	WR-2	MP-51 Vortex Separator	MP-52 Drain Inlet	Residential	Medium	Eastlake Woods	City of Chula Vista
30-Jun-11	The Woods	WR-3	MP-51 Vortex Separator TC-22 Extended Det Basin		Residential	Medium	Eastlake Woods	City of Chula Vista
30-Jun-11	Cornerstone	WR-4	MP-51 Vortex Separator		Residential	Medium	Eastlake Woods	City Of Chula Vista
30-Jun-11	K Hovnanian	WR-5	MP-51 Vortex Separator		Residential	Medium	Eastlake Woods	City of Chula Vista
30-Jun-11	Mandalay	R-1	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-6	City of Chula Vista
30-Jun-11	Sienna	R-3	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-6	City of Chula Vista

Inspection Date	Project Name	Neighborhood	Type of BMP Installed		Category	Priority	Development	Responsible Party
30-Jun-11	Auburn Lane	R-4	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-6	City of Chula Vista
30-Jun-11	Jasmine	R-6	MP-52 Drain Insert		Residential	Medium	Otay Ranch V-6	City of Chula Vista
30-Jun-11	Cambria	R-2A	MP-51 Vortex Separator		Residential	Low	Otay Ranch V-6	City of Chula Vista
30-Jun-11	Azalea	R-23	MP-51 Vortex Separator		Residential	High	Otay Ranch V-11	City of Chula Vista
30-Jun-11	Chula Vista Elementary School Di:	N/A	MP-50 Wet Vault	TC-30 Vegetated Swale	Schools	High	Miscellaneous	Chula Vista Elementary SD

Total Sites Inspected: 93

• Construction Inspections

Attachment G
FY 2010-2011 Construction Inspections

Construction Inspection records are included in the inspection reports and are on file for each specific project. ***Inspected construction sites with discrepancies had a verbal or written follow-up notice.*** *During this reporting period, all High Priority construction sites were inspected bi-weekly during the rainy season, and all Medium and Low Priority construction sites were inspected at least monthly. Construction projects that were inspected during this reporting period are listed below.*

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Eastlake Summit					
Eastlake Summit	Cortina	R9D	Active	EL104I	Low
Eastlake Summit	Andora	R9B	Active	EL103I	Low
Eastlake Summit	Veranza	R9C	Inactive-Not Complete	EL106I	Low
Miscellaneous					
Miscellaneous	St Pius Catholic Church	N/A	Active	PG786	Medium
Miscellaneous	La Roca Comunidad Cristiana	N/A	Inactive-Not Complete	OR196G	Low
Miscellaneous	Oxford Street Improvements	N/A	Active	STL305	High
Miscellaneous	750 Main Street	N/A	Active	PG775	Medium
Miscellaneous	Saint Rose of Lima Parish-Phase 1, 293 H Street	N/A	Active	PG780 / PC1955	Low
Miscellaneous	Fourth Avenue Improvements Between L and Orange		Active	STL291	High
Miscellaneous	MTS Facility Expansion	N/A	Active		Medium
Miscellaneous	Second Avenue Street Improvements	N/A	Active	STL342	High

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Miscellaneous	Curb and Pedramps FY 10-11	N/A	Inactive-Not Complete	STL348	Low
Miscellaneous	Traffic Signal Modification	N/A	Active	TF369	Low
Miscellaneous	Sharp Cancer Center	N/A	Active		Medium
Miscellaneous	100 Walnut Dirve	N/A	Inactive-Not Complete	PC1792	Low
Miscellaneous	Villas at H Street	N/A	Inactive-Not Complete	PG749/PC1817	Low
Otay Ranch Village 11					
Otay Ranch Village 11	Trellis I	R15	Active	OR627I	Medium
Otay Ranch Village 11	Cordova -Courtyard	R17	Active	OR634I	Medium
Otay Ranch Village 11	Agave	R24A	Active	OR624I	Low
Otay Ranch Village 11	Saguaro	R24B	Inactive-Not Complete	OR624I	Low
Otay Ranch Village 11	The Lofts	R26	Inactive-Not Complete	OR635I	Low
Otay Ranch Village 11	Cordova	R17	Active		Low
Otay Ranch Village 11	Clover	R18	Active	OR633I	Medium
Otay Ranch Village 2					
Otay Ranch Village 2	Future SFD (Alley)-OR Village 2, R-5B	R5B	Active		Medium
Otay Ranch Village 2	Future SFD-OR Village 2, R-15	R15	Inactive-Not Complete	OR806I	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch Village 2	Future SFD-OR Village 2, R-18A	R18A	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-18B	R18B	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-19	R19	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-20	R20	Inactive-Not Complete	PG656	Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-23	R23	Inactive-Not Complete		Low
Otay Ranch Village 2	Future MFD-OR Village 2, R-26	R26	Active		Medium
Otay Ranch Village 2	Future SFD-OR Village 2, R-4	R4	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-24	R24	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD- OR Village 2, R-25A	R25A	Inactive-Not Complete		Low
Otay Ranch Village 2	Anacapa	R9B	Active		Medium
Otay Ranch Village 2	Future SFD-OR Village 2, R-21	R21	Inactive-Not Complete		Low
Otay Ranch Village 2	Future MFD-OR Village 2, R-28	R28	Inactive-Not Complete		Low
Otay Ranch Village 2	Anacapa	R9A	Active	OR805I	Medium
Otay Ranch Village 2	Future MFD- OR, V2, R-10	R10	Inactive-Not Complete		Low
Otay Ranch Village 2	Future MFD- OR Village 2, R-11	R11	Inactive-Not Complete		Low
Otay Ranch Village 2	Future MFD- OR Village 2, R-12	R12	Inactive-Not Complete	OR805G	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch Village 2	Future MFD-OR Village 2, R-13	R13 (Village 2 East)	Active	OR815I / G	Medium
Otay Ranch Village 2	Tavera	R29	Active		Medium
Otay Ranch Village 2	Future MFD-OR Village 2, R-17	R17	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-25B	R25B	Inactive-Not Complete		Low
Otay Ranch Village 2	La Purisma	R6	Active		Medium
Otay Ranch Village 2	Future MFD-OR Village 2, R-27	R27	Inactive-Not Complete		Low
Otay Ranch Village 2	Future Mixed Used	MU1	Inactive-Not Complete		Low
Otay Ranch Village 2	Future Mixed Use-OR Village 2, MU2	MU2	Inactive-Not Complete		Low
Otay Ranch Village 2	North- Future Mixed Use-OR Village 2, MU3	MU3	Inactive-Not Complete		Low
Otay Ranch Village 2	Future SFD-OR Village 2, R-8	R8	Inactive-Not Complete		Low
Otay Ranch Village 2	North- Future MFD--OR Village 2, R-16	R16	Inactive-Not Complete		Low
Otay Ranch Village 2	Rosina Vista I	R30	Active	OR814G	Medium
Otay Ranch Village 2	Future MFD- OR, V@, R-14	R14 (Village 2 East)	Active	OR805G	Medium
Otay Ranch Village 2	Monterey	R5A	Active	OR811I	Medium
Otay Ranch Village 2	Mass Grading	N/A	Inactive-Not Complete	OR830G	Low
Otay Ranch Village 2	OR Village2 North Improvement 1	Unit 1	Inactive-Not Complete	OR811I	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch Village 2	OR Village2 North Improvement 2	Unit 2	Inactive-Not Complete	OR812I	Low
Otay Ranch Village 2	North- Future Mixed-OR, V2, R-5 to R-10	R5, R6, R7, R8, R9, R10	Active	OR809G	Medium
Otay Ranch Village 2	Rosina Vistas I	R30	Active	OR814I	Medium
Otay Ranch Village 2	Future Mixed- OR, Village 2, R-12 to R-30	R12, R13, R14, R15, R29, R30,	Active	OR805G	Medium
Otay Ranch Village 2	Presidio	R7	Active	OR808I	Medium
Otay Ranch Village 2	Tavera	R14	Active	OR813I	Medium
Otay Ranch Village 2	Future MFD- OR, V2, -MU3	MU3	Inactive-Not Complete	OR805G	Low
Otay Ranch Village 2	Future MFD- OR, V2, R-30	R30 (Village 2 East)	Active	OR805G	Medium
Otay Ranch Village 2	North- Heritage Road	N/A	Inactive-Not Complete	OR807G	Low
Otay Ranch Village 2, North					
Otay Ranch Village 2, North	Monterey	R5	Active	OR809G	Medium
Otay Ranch Village 6					
Otay Ranch Village 6	Treviana	R10	Active	OR418C	Low
Otay Ranch Village 7					
Otay Ranch Village 7	Indigo	R1A	Inactive-Not Complete	OR457I /OR451G	Low
Otay Ranch Village 7	Tapestry	R6A	Active	OR461G	Medium

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Otay Ranch Village 7	Mosaic I & II	R6B & R7A	Active	OR461G	Medium
Otay Ranch Village 7	OR, Village 7, R-7B	R7B	Inactive-Not Complete		Low
Otay Ranch Village 7	Jacaranda	R1B	Active	OR459I /OR451G	Medium
Otay Ranch Village 7	Otay Ranch Village 7 Backbone	N/A	Inactive-Not Complete		Low
Otay Ranch Village 7	Terracotta	R5	Active	OR458I /OR451G	Medium
Otay Ranch Village 7 ORC					
Otay Ranch Village 7 ORC	Terraza	R2B	Active	OR973I	Medium
Otay Ranch Village 7 ORC	Monte Sereno	R2C	Inactive-Not Complete	OR973I	Low
Otay Ranch Village 7 ORC	Open Space Designated -R4	R4	Inactive-Not Complete		Low
Otay Ranch Village 7 ORC	Santa Barbara	R2A	Active	OR973I	Medium
Rolling Hills Ranch					
Rolling Hills Ranch	Bella Lago -Future-SFD	R1	Active	BE002G /BE002I	Medium
Rolling Hills Ranch	Future SFD	N11	Active	RH241I	Medium
Rolling Hills Ranch	Future MFD- RH, N9-N12 Backbone	N9-N12 Backbone	Active	RH229G	Medium
Rolling Hills Ranch	Portola - Palma	N10A	Active	RH237I	Medium
Rolling Hills Ranch	Rolling Hills-Backbone Improvements	N9-N12	Inactive-Not Complete	RH231C	Low

Subdivision	Project Name	Neighborhood	Project Status	Work Order No	Priority
Rolling Hills Ranch	Future MFD - RH N-11	N11	Active	RH241I	Medium
San Miguel Ranch					
San Miguel Ranch	Backbone Improvements-Avenida	N/A	Inactive-Not Complete	SM014C	Low
San Miguel Ranch	San Miguel Ranch Road	N/A	Inactive-Not Complete	SM013C	Low
San Miguel Ranch	Montecito	J1	Active	SM016I	Medium
San Miguel Ranch	Marvilla	L	Active	SM022I	Medium
San Miguel Ranch	Estrella	J2	Active	SM018I	Medium
San Miguel Ranch	Patria/Bontera	K	Active	SM015I	Medium
San Miguel Ranch	Westmont Senior Homes -509 Mount Miguel Road	N/A	Inactive-Not Complete	SM026G	Low

Total: **92**

Attachment H

• Municipal Inspections

Attachment H

FY 2010-2011 Municipal Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection activities.

Inspection Date	Facility Name	APN Number	Address			Category	Priority
25-Oct-10	Valle Lindo Park	6440102600	545	SEQUOIA	ST	Parks-Landscape-Rec Areas	High
26-Oct-10	Bonita Long Canyon Park	5941100500	1745	COLTRIDGE	LN	Parks-Landscape-Rec Areas	High
26-Oct-10	Tiffany Park	6420302900	1713	ELMHURST	ST	Parks-Landscape-Rec Areas	High
26-Oct-10	Mini Park	5952145100	753	ASHBROOK	DR	Parks-Landscape-Rec Areas	High
26-Oct-10	Discovery Park	6423930700	700	BUENA VISTA	WY	Parks-Landscape-Rec Areas	High
4-Feb-11	Parkway Community Center	5683004300	373	PARK	WY	Parks-Landscape-Rec Areas	High
4-Feb-11	Friendship Park	5681530100	365	F	ST	Parks-Landscape-Rec Areas	High
4-Feb-11	Eucalyptus Park	5651200300	47	FIFTH	AV	Parks-Landscape-Rec Areas	High
4-Feb-11	Memorial Park	5683004300	373	PARK	WY	Parks-Landscape-Rec Areas	High
18-Feb-11	Downtown Parking Facility	5682702900	340	F	ST	Other Fixed Facilities	High
18-Feb-11	Chula Vista Women's Club	5683004200	357	G	ST	Parks-Landscape-Rec Areas	High
18-Feb-11	Bay Boulevard Park	5670213201		BAY	BL	Parks-Landscape-Rec Areas	High
18-Feb-11	Norman Park and Recreation Center	5683331100	270	F	ST	Parks-Landscape-Rec Areas	High
2-Mar-11	Montevalle Park & Community Center	5957360600	840	DUNCAN RANCH	RD	Parks-Landscape-Rec Areas	High

Inspection Date	Facility Name	APN Number	Address			Category	Priority
2-Mar-11	Hilltop Park	5744104600	780	HILLTOP	DR	Parks-Landscape-Rec Areas	High
2-Mar-11	Independence Park	6423205600	1248	CALLE SANTIAGO		Parks-Landscape-Rec Areas	High
2-Mar-11	Rancho Del Rey Park	6422800300	1131	BUENA VISTA	WY	Parks-Landscape-Rec Areas	High
2-Mar-11	Mackenzie Creek Park	5955700200	2275	MACKENZIE CREEK	RD	Parks-Landscape-Rec Areas	High
2-Mar-11	Lauderbach Park	6192113700	333	OXFORD	ST	Parks-Landscape-Rec Areas	High
2-Mar-11	Harborside Park	6182005900	670	OXFORD	ST	Parks-Landscape-Rec Areas	High
2-Mar-11	H Street Land Application	5740300800		H	ST	Other Fixed Facilities	High
2-Mar-11	Mount San Miguel Community Park	5950312300	2335	PASEO VERACRUZ		Parks-Landscape-Rec Areas	High
18-Mar-11	Otay Park & Recreation Center	6232302600	3554	MAIN	ST	Parks-Landscape-Rec Areas	High
18-Mar-11	Conneley Park	6233143300	1559	CONNOLEY	AV	Parks-Landscape-Rec Areas	High
23-Mar-11	Greg Rogers Park	6200600300	1189	OLEANDER	AV	Parks-Landscape-Rec Areas	High
23-Mar-11	Gayle McCandliss Park	6390301300	415	J	ST	Parks-Landscape-Rec Areas	High
23-Mar-11	Harvest Park	6425814800	1381	PALOMAR	ST	Parks-Landscape-Rec Areas	High
23-Mar-11	Lancerlot Park	5711701800	750	K	ST	Parks-Landscape-Rec Areas	High
23-Mar-11	Old Public Works Yard	5670312700	707	F	ST	Public Work Facilities	High

Inspection Date	Facility Name	APN Number	Address			Category	Priority
23-Mar-11	Los Ninos Park	6243411200	150	TEAL	ST	Parks-Landscape-Rec Areas	High
25-Mar-11	Paseo Del Rey Park	6401412500	750	PASEO DEL REY		Parks-Landscape-Rec Areas	High
25-Apr-11	Loma Verde Park & Recreation Center	6240107200	1420	LOMA	LN	Parks-Landscape-Rec Areas	High
25-Apr-11	Orange Avenue Fields		160	ORANGE	AV	Parks-Landscape-Rec Areas	High
25-Apr-11	Reinstra Ball Fields	6240107300	1500	MAX	AV	Parks-Landscape-Rec Areas	High
25-Apr-11	SDGE Park	6230720700	1438	HILLTOP	DR	Parks-Landscape-Rec Areas	High
27-Apr-11	Sunbow Park	6402725100	690	NAPLES	ST	Parks-Landscape-Rec Areas	High
27-Apr-11	Nature Center	5650102900	1000	GUNPOWDER POINT	DR	Parks-Landscape-Rec Areas	High
27-Apr-11	Power Washing-Graffiti Removal					Mobile Mun Activities	High
27-Apr-11	Palomar Park	6200504900	1359	PARK	DR	Parks-Landscape-Rec Areas	High
27-Apr-11	Sherwood Park	6233321900	69	SHERWOOD	ST	Parks-Landscape-Rec Areas	High
20-May-11	Explorer Park	6400301900		RANCHO DEL REY	PW	Parks-Landscape-Rec Areas	High
23-May-11	Terra Nova Park	5921922700	450	HIDDEN VISTA	DR	Parks-Landscape-Rec Areas	High
23-May-11	Voyager Park	6400901900	1178	J	ST	Parks-Landscape-Rec Areas	High
23-May-11	Sunridge Park	6400502000	952	BEECHGLEN	DR	Parks-Landscape-Rec Areas	High

Inspection Date	Facility Name	APN Number	Address			Category	Priority
23-May-11	Marisol Park	5933803600	916	RANCHO DEL REY	PW	Parks-Landscape-Rec Areas	High
24-May-11	Santa Cora Park	6420804000	1365	SANTA CORA	AV	Parks-Landscape-Rec Areas	High
24-May-11	Salt Creek Park & Community Center	6434830200	2710	OTAY LAKES	RD	Parks-Landscape-Rec Areas	High
24-May-11	Mountain Hawk Park	6435180200	1475	LAKE CREST	DR	Parks-Landscape-Rec Areas	High
24-May-11	Horizon Neighborhood Park	6410721600	970	PALOMAR	ST	Parks-Landscape-Rec Areas	High
25-May-11	Breezewood Park	6425004600	1091	BREEZEWOOD	DR	Parks-Landscape-Rec Areas	High
25-May-11	Cottonwood Park	6424210600	1778	PALOMAR	ST	Parks-Landscape-Rec Areas	High
25-May-11	Chula Vista Community Park	5953200200	1060	EASTLAKE	PW	Parks-Landscape-Rec Areas	High
25-May-11	Windingwalk Park	6436101500	1675	EXPLORATION FALLS	DR	Parks-Landscape-Rec Areas	High
2-Jun-11	Santa Venetia Park	6430512700	1500	MAGDALENA	AV	Parks-Landscape-Rec Areas	High
2-Jun-11	Sunset View Park	6430330100	1390	GREENSVIEW	DR	Parks-Landscape-Rec Areas	High
2-Jun-11	Heritage Park & Community Center	6425601100	1550	PALOMAR	ST	Parks-Landscape-Rec Areas	High
2-Jun-11	John Lippit PWC & Admin Building	6442301100	1800	MAXWELL	RD	Other Fixed Facilities	High
2-Jun-11	Cottonwood Park	6424210600	1778	PALOMAR	ST	Parks-Landscape-Rec Areas	High
7-Jun-11	Animal Care Facility	6290605400	130	BEYER	WY	Animal Facilities	High

Inspection Date	Facility Name	APN Number	Address			Category	Priority
9-Jun-11	Rohr Park	5932400500	4548	SWEETWATER	RD	Parks-Landscape-Rec Areas	High
9-Jun-11	Chula Vista Municipal Golf Course	5932402400	4475	BONITA	RD	Parks-Landscape-Rec Areas	High

Total Inspections: 61

- **Commercial Inspections**

Attachment I

Attachment I

FY 2010-2011 Commercial Inspections

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
27-Sep-10	The Lion's Den	5721803300	725	BROADWAY		Cat x-Eating/Drinking ...	High	5812
26-Jan-11	Chevron Station-Olympic Parkway #1975	6430206900	2115	OLYMPIC	PW	Cat viii-Fueling-Rtl/Wsl	High	5541
26-Jan-11	Carls JR #281	6430206800	2097	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
26-Jan-11	Chick Fil A at Eastlake Terraces	6430206700	2089	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
26-Jan-11	Pizza Hut #315092	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
26-Jan-11	Rubios Fresh Mexican Grill at Eastlake	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
31-Jan-11	Pick Up Stix	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
31-Jan-11	McCune Chrysler Dodge	6440414200	1885	AUTO PARK	PL	Cat (i-v) Auto Related	High	5511
31-Jan-11	Home Depot Eastlake	6430206600	1320	EASTLAKE	PW	Cat xxiii-Bldg/Mat Storag	High	5211
31-Jan-11	Walmart @ Eastlake	6430208400	1360	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5399
31-Jan-11	MCK Auto Repairr	6291200100	3611	MAIN	ST	Cat (i-v) Auto Related	High	7538
31-Jan-11	In-N-Out Burger	6437701800	1725	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
1-Feb-11	mdt Electronics	6291201700	3639	MAIN	ST	Cat (i-v) Auto Related	High	5531
3-Feb-11	Wendy's Coastline Food Service Corp	5950720600	960	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
3-Feb-11	Lisa's Filipino Cuisine	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
3-Feb-11	L & L Barbecue	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
3-Feb-11	Lowes Home Improvement Warehouse Inc.	5950720100	2225	OTAY LAKES	RD	Cat xxiii-Bldg/Mat Storag	High	5211
3-Feb-11	McDonalds #14228/Sutherland MGMT Co	5953220900	2254	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
3-Feb-11	Arbys #7057/Capitals Group LLC	5953220800	2244	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
14-Feb-11	Burger King #11545	6402924800	899	H	ST	Cat x-Eating/Drinking ...	High	5812
14-Feb-11	Panda Chef	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
14-Feb-11	Panda Express #1316	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
14-Feb-11	Ralphs #75	5941310100	780	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
14-Feb-11	Rubios Fresh Mexican Grill	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	High	5812
14-Feb-11	Seven Eleven #2131	6421700900	913	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
14-Feb-11	RS Restaurant LLC DBA Subway #2253	5922001700	374	H	ST	Cat x-Eating/Drinking ...	High	5812
2-Mar-11	Subway #33339	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	High	5812
2-Mar-11	Subway #29881	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
2-Mar-11	Taco Bell #2971	5922001300	340	H	ST	Cat x-Eating/Drinking ...	High	5812
2-Mar-11	Vons Food & Drug #2336	5922000500	360	H	ST	Cat x-Eating/Drinking ...	High	5411
2-Mar-11	Yokoz's Sushi Bar & Island Grill	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
2-Mar-11	Ralphs #235	6411221400	659	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
2-Mar-11	Lolitas Taco Shop	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
2-Mar-11	Pho Vien Dong	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
2-Mar-11	Honey Baked Ham Inc.	5922000700	316	H	ST	Cat x-Eating/Drinking ...	High	5411
2-Mar-11	Jack in the Box #99	5922001800	370	H	ST	Cat x-Eating/Drinking ...	High	5812
2-Mar-11	JNC Pinoy Foodmart Inc.	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
2-Mar-11	Home Depot #658/Home Depot USA Inc.	6402911300	725	PLAZA	CT	Cat xxiii-Bldg/Mat Storag	High	5211
2-Mar-11	Albertson's #6759	5950305800	2310	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	High	5411
2-Mar-11	Aqua Clean	5922109000	1435	RIDGEBACK	RD	Cat vi-Auto-Washing	High	7542
3-Mar-11	Chula Vista Toyota	6440407900	650	MAIN	ST	Cat vii-Auto Lots Storage	High	5511
3-Mar-11	Fuller Ford	6440420400	560	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
3-Mar-11	Fuller Honda	6440420500	580	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
3-Mar-11	Ciao Italian Restaurant	6240606000	4360	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5812
9-Mar-11	Southbay Motorsports	6440412000	1890	AUTO PARK	PL	Cat (i-v) Auto Related	High	5941
10-Mar-11	Hernandez Tire Sales	6232021800	3236	MAIN	ST	Cat (i-v) Auto Related	High	5531
10-Mar-11	Marcos Radiator	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
10-Mar-11	Mike Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
10-Mar-11	Juans Auto Repair Inc.	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
10-Mar-11	Zeppy Auto Repair	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
10-Mar-11	Sanchez Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
10-Mar-11	Superior VW Automotive Repair	6221113400	2578	MAIN	ST	Cat (i-v) Auto Related	High	7538
10-Mar-11	Tony's Smog Test Only	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
10-Mar-11	KFC-#Y305030	6411221700	1361	MEDICAL CENTER	DR	Cat x-Eating/Drinking ...	High	5812
10-Mar-11	McDonalds #6840/Sutherland MGMT Co	6390806700	551	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812
10-Mar-11	Vons Food & Drug #2006	6390806200	505	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411
10-Mar-11	Seven Eleven #13568E-2131	6394901300	415	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411
10-Mar-11	Marcos Radiator	6221113200	2530	MAIN	ST	Cat (i-v) Auto Related	High	7539
14-Mar-11	Taco Bell #15508	6420201700	1548	H	ST	Cat x-Eating/Drinking ...	High	5812
16-Mar-11	Santa Fe Meats	6221112000	2514	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
18-Mar-11	JT Associates Inc/DBA Audio Xperts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
18-Mar-11	Chula Vista Smog	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
18-Mar-11	Smart & Final #463 / SFI Corp	6290607500	3141	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
18-Mar-11	Mike's Recycling	6290607200	3151	MAIN	ST	Cat (i-v) Auto Related	High	7389
24-Mar-11	McDonalds - Telegraph	6390806700	551	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812
28-Mar-11	McDonalds #25836/TRS Restaurant	6411221900	687	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
28-Mar-11	D III Industrial	6291302700	187	MACE	ST	Cat (i-v) Auto Related	High	7513
28-Mar-11	American Towing & American Dismantling Inc.	6291001600	140	REED	CT	Cat (i-v) Auto Related	High	7549
28-Mar-11	ABC Rebuilders	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7532
28-Mar-11	Abel Najera	6291200800	3679	MAIN	ST	Cat (i-v) Auto Related	High	7538
28-Mar-11	H&A Electric Motors	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7538
28-Mar-11	Collision Parts Warehouse	6232302800	3740	MAIN	ST	Cat (i-v) Auto Related	High	5531
28-Mar-11	L&E Transmission Inc.	6291000600	180	MACE	ST	Cat (i-v) Auto Related	High	7538
30-Mar-11	Roman's Truck Body & Paint MJP	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532
30-Mar-11	Romans Tires/Truck & Body	6221902000	2513	MAIN	ST	Cat (i-v) Auto Related	High	7538
7-Apr-11	Chula Vista Auto Repair	6221901000	2627	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
7-Apr-11	Paxton Towing	6290620300	3487	MAIN	ST	Cat (i-v) Auto Related	High	7549
7-Apr-11	Arias Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
7-Apr-11	Polos Auto Paint Supply	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532
7-Apr-11	RG Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
7-Apr-11	Southbay Tools	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
7-Apr-11	Roman's Auto Electric	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
7-Apr-11	Chichi's Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
8-Apr-11	Rays Mobile Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
12-Apr-11	Western Towing	6170710200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549
12-Apr-11	J&J Chrome & Polish	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
12-Apr-11	JC Towing Inc.	6221901800	2515	FAIVRE	ST	Cat (i-v) Auto Related	High	7549
12-Apr-11	McDonalds of Bonita	5932800900	4340	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
12-Apr-11	Mandarin Gourmet	5932800600	4410	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
12-Apr-11	Jack in the Box #68	5912511600	4011	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
12-Apr-11	El Torito #89	5670213700	271	BAY	BL	Cat x-Eating/Drinking ...	High	5812
12-Apr-11	Anthony's Fish Grotto	5670212900	215	BAY	BL	Cat x-Eating/Drinking ...	High	5812
12-Apr-11	Romesco Baja Bistro	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
13-Apr-11	JJ Auto Body	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
13-Apr-11	Lolitas Taco Shop	5933500100	4516	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
13-Apr-11	Dynamic Results Inc/Eddies Tires & Auto Repair	6221403600	2677	MAIN	ST	Cat (i-v) Auto Related	High	5531
13-Apr-11	Road One Towing Inc	6170600200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549
14-Apr-11	Eddie's Tires and Auto Repair	6290101200	1743	BROADWAY		Cat (i-v) Auto Related	High	7549
20-Apr-11	PB Auto Service	6291201600	3645	MAIN	ST	Cat (i-v) Auto Related	High	7538
20-Apr-11	Ulises Roberto Sanchez dba Batt Recycling	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	4953

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
20-Apr-11	Economy Upholstery	6291200800	3679	MAIN	ST	Cat vii-Auto Lots Storage	High	4225
20-Apr-11	Ricardos's Custom Covers	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	5531
20-Apr-11	Wheel Depot	6290200400	2835	MAIN	ST	Cat (i-v) Auto Related	High	5531
20-Apr-11	Jim's Glass & Screen	6221113200	2540	MAIN	ST	Cat (i-v) Auto Related	High	7536
21-Apr-11	Lomas Cafe Mexican Food	6232022500	3218	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
21-Apr-11	El Ranchero Factory Taco Shop #2	6232121900	3344	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
21-Apr-11	Mercado International 2000	6230606100	1415	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
21-Apr-11	Save A Lot #943	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
1-Jun-11	Vons Food & Drug #3063	5734503400	870	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
1-Jun-11	Vons Food & Drug #2071	5953220200	2250	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
1-Jun-11	Terra Nova Car Wash/Fiesta Express	5922001600	350	H	ST	Cat vi-Auto-Washing	High	7542
6-Jun-11	Red Lobster #521	5682702700	342	F	ST	Cat x-Eating/Drinking ...	High	5812
7-Jun-11	Colima's Mexican Food	5912522500	4102	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
7-Jun-11	Cotija Taco Shop	5932800600	4404	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
9-Jun-11	Baja Taco	6181422700	1052	BROADWAY		Cat x-Eating/Drinking ...	High	5812
9-Jun-11	Seven Eleven #13590D-2131	6181520700	1097	BROADWAY		Cat x-Eating/Drinking ...	High	5411
9-Jun-11	Seven Eleven #13570C-2131	5670531100	285	BROADWAY		Cat x-Eating/Drinking ...	High	5411

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
9-Jun-11	Seven Eleven #21604C-2131	5722811300	899	BROADWAY		Cat x-Eating/Drinking ...	High	5411
9-Jun-11	Seven Eleven #33715	6182803600	689	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411
9-Jun-11	Burger King #11435	5700201700	97	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
9-Jun-11	Del Taco #809	6220310500	670	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
9-Jun-11	Denny's Restaurant #6962	5670320600	692	E	ST	Cat x-Eating/Drinking ...	High	5812
9-Jun-11	Denny's Restaurant #1719	5701406000	110	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
9-Jun-11	Jack in the Box #93	6220433300	585	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
9-Jun-11	La Bodega Market	6182101600	1193	BROADWAY		Cat x-Eating/Drinking ...	High	5411
9-Jun-11	Seven Eleven #21792C-2131	5684200100	403	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
9-Jun-11	Agave Grill	5672004700	625	H	ST	Cat x-Eating/Drinking ...	High	5812
13-Jun-11	Access II Towing	6232300600	1350	MAX	AV	Cat (i-v) Auto Related	High	7549
14-Jun-11	Express Tire dba American Auto Service	5672003600	430	BROADWAY		Cat (i-v) Auto Related	High	7538
14-Jun-11	Candys Auto Body Shop	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7532
14-Jun-11	Chula Vista Towing	5711531200	625	J	ST	Cat (i-v) Auto Related	High	7549
14-Jun-11	Rally's Hamburger/Ongs Restaurant Group	6190511300	1004	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
14-Jun-11	Otay Farms Inc.	6290101500	1716	BROADWAY		Cat x-Eating/Drinking ...	High	5411
14-Jun-11	Marie Calendar #103	5682702000	330	F	ST	Cat x-Eating/Drinking ...	High	5812

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
14-Jun-11	KFC Y450073BL03	5685112000	461	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
14-Jun-11	C&V Auto	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7538
14-Jun-11	Classic Auto Body	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	High	7532
15-Jun-11	El Nortena Taco Shop	6192122800	1266	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
15-Jun-11	Star Bakery	6192806000	1372	THIRD	AV	Cat x-Eating/Drinking ...	High	5461
15-Jun-11	Sunny's Market	5672122000	449	BROADWAY		Cat x-Eating/Drinking ...	High	5411
15-Jun-11	Church Fried Chicken	6190610200	1005	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
16-Jun-11	Chinese City Restaurant	6230600200	1403	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
17-Jun-11	Jack in the Box #6	5672003900	486	BROADWAY		Cat x-Eating/Drinking ...	High	5812
17-Jun-11	Panda Express #960	6182006500	1120	BROADWAY		Cat x-Eating/Drinking ...	High	5812
17-Jun-11	Bulls Eye Burger	5713101800	860	BROADWAY		Cat x-Eating/Drinking ...	High	5812
21-Jun-11	Roberto DePhillippis Steak House	5710500800	556	BROADWAY		Cat x-Eating/Drinking ...	High	5812
21-Jun-11	Rubios Fresh Mexican Grill at Broadway	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	High	5812
21-Jun-11	El Camaron	5652402600	193	BROADWAY		Cat x-Eating/Drinking ...	High	5812
21-Jun-11	Burger King #2339	5720104700	599	BROADWAY		Cat x-Eating/Drinking ...	High	5812
21-Jun-11	Carls JR #31	5710502400	502	BROADWAY		Cat x-Eating/Drinking ...	High	5812
21-Jun-11	COSTCO at Broadway	6182006100	1130	BROADWAY		Cat x-Eating/Drinking ...	High	5399

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
22-Jun-11	Albertson's #6757	5733204500	720	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
22-Jun-11	Apple Tree Market	6231312000	1556	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
22-Jun-11	El Nopal Market LLC	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5411
22-Jun-11	El Pollo Loco/Bas Food Services	5710622100	666	H	ST	Cat x-Eating/Drinking ...	High	5812
22-Jun-11	Henry's Market Place	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
22-Jun-11	Hilltop Market	6232716700	1500	HILLTOP	DR	Cat x-Eating/Drinking ...	High	5411
22-Jun-11	McDonalds at Broadway	5720803400	619	BROADWAY		Cat x-Eating/Drinking ...	High	5812
22-Jun-11	Poliza Hollywood Inc	5743003200	72	J	ST	Cat x-Eating/Drinking ...	High	5411
22-Jun-11	Wienerschnitzel #16	5672321800	493	BROADWAY		Cat x-Eating/Drinking ...	High	5812
22-Jun-11	Wendy's Coastline Food Service Corp	5670325100	618	E	ST	Cat x-Eating/Drinking ...	High	5812
24-Jun-11	Long John Silver	6190611400	1049	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
24-Jun-11	McDonalds at Third #1557	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
24-Jun-11	Jack in the Box #63	6230500200	1408	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
27-Jun-11	Knotts Soak City USA	6450201700	2052	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	High	7996
28-Jun-11	Pacific Bay Auto	6222111000	150	JACQUA	ST	Cat (i-v) Auto Related	High	5511
28-Jun-11	SCJ Towing	6290606000	3211	MAIN	ST	Cat (i-v) Auto Related	High	7549
28-Jun-11	Sams Muffler Radiators	6290603200	225	BEYER	WY	Cat (i-v) Auto Related	High	7533

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
28-Jun-11	San Diego Tires and Brakes	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
28-Jun-11	Main Clutch Co	6232301700	3800	MAIN	ST	Cat (i-v) Auto Related	High	5531
28-Jun-11	Jiffy Lube #897	5652402700	593	E	ST	Cat (i-v) Auto Related	High	7549
28-Jun-11	John's Towing	6206021700	1298	WAXWING	LN	Cat (i-v) Auto Related	High	7549
28-Jun-11	J&L Auto Repair Inc.	5670531200	273	BROADWAY		Cat (i-v) Auto Related	High	7538
28-Jun-11	Home Town IGA	5670320800	646	E	ST	Cat x-Eating/Drinking ...	High	5411
28-Jun-11	McDonalds at E Street	5653102700	725	E	ST	Cat x-Eating/Drinking ...	High	5812
28-Jun-11	Lucys Market	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	High	5411
28-Jun-11	Sergio Hernandez Yacht Maintenance	6180611800	934	FIFTH	AV	Cat (iii-xxi)-Boat/Marina	High	3732
28-Jun-11	Taco Bell #3398	5670320100	696	E	ST	Cat x-Eating/Drinking ...	High	5812
28-Jun-11	Martinez Smog Check	6231722700	2952	MAIN	ST	Cat (i-v) Auto Related	High	7533
28-Jun-11	Precision Automotive	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	7537
29-Jun-11	Panda Express #1098	6240606700	1820	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
29-Jun-11	Jesse Smog	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	7538
29-Jun-11	F &V Auto Repair	6290200100	2801	MAIN	ST	Cat (i-v) Auto Related	High	7538
29-Jun-11	Walmart at 5305 Broadway	6182007100	1150	BROADWAY		Cat xxiii-Bldg/Mat Storag	High	5399
29-Jun-11	Nice & Easy Autobody & Paint Inc.	6221116000	2350	MAIN	ST	Cat (i-v) Auto Related	High	7532

Inspection Date	Facility Name	APN Number	Address			Category	Priority	SIC Number
30-Jun-11	Tune Plus	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
30-Jun-11	Speed Merchant Inc/American Tire Distributor	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	5531
30-Jun-11	South 1 Auto Detail	6290500900	3031	MAIN	ST	Cat vi-Auto-Washing	High	7542
30-Jun-11	Euro Specialties	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
30-Jun-11	McDonalds Corp #7554	6182803700	1288	BROADWAY		Cat x-Eating/Drinking ...	High	5812
30-Jun-11	KFC-Y450114	6220433400	1327	BROADWAY		Cat x-Eating/Drinking ...	High	5812
30-Jun-11	Carls JR #546	6182006400	1100	BROADWAY		Cat x-Eating/Drinking ...	High	5812
30-Jun-11	Carls JR #575	5941310400	1487	H	ST	Cat x-Eating/Drinking ...	High	5812
30-Jun-11	Carls JR #83	6190100800	996	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
30-Jun-11	Burger King #952	6192225200	1265	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
30-Jun-11	Chili's Bar & Grill	6430610200	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
30-Jun-11	Cheese Cake Factory	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
30-Jun-11	Subway Sandwiches	5932800900	4378	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
30-Jun-11	Seven Eleven #18547B-2131	6240605700	4300	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5411

Total Inspections: 199

- Industrial Inspections

Attachment J

Attachment J

FY 2010-2011 Industrial Inspections

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	SIC Number
3-Sep-10	Bajas #3 Auto Wrecking	6441811500	811	ENERGY	WY	Auto Dismantlers	High	937I022426	7549
7-Sep-10	Montoya's Auto Wrecking	6441811800	781	ENERGY	WY	Auto Dismantlers	High	937I021427	5015
7-Sep-10	Advance Auto Wrecking	6441812300	777	ENERGY	WY	Auto Dismantlers	High	937i020612	5015
8-Sep-10	All Japanese Auto Recycling	6441811900	775	ENERGY	WY	Auto Dismantlers	High	937I015706	5015
8-Sep-10	All Toyota/Lexus Wrecking	6441811500	805	ENERGY	WY	Auto Dismantlers	High	937I018543	5015
8-Sep-10	RC Import Auto Recycler	6441812300	777	ENERGY	WY	Auto Dismantlers	High	937I010144	5015
8-Sep-10	Freeway Auto Wrecking	6441812200	783	ENERGY	WY	Auto Dismantlers	High	937I021643	5015
9-Sep-10	A&A Auto Wrecking	6441811900	775	ENERGY	WY	Auto Dismantlers	High	937I020792	5016
9-Sep-10	Asian Kars Auto Recycling	6441812300	777	ENERGY	WY	Auto Dismantlers	High	937I017467	5015
9-Sep-10	California Sports Auto Wrecking	6441811800	781	ENERGY	WY	Auto Dismantlers	High	937I021145	5015
10-Sep-10	South Bay Auto Wreckers	6441820200	811	ENERGY	WY	Auto Dismantlers	High	937I004495	5015

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	SIC Number
5-Oct-10	Texano Auto Recycling	6441811500	805	ENERGY	WY	Recycling	High	937I1021577	5015
7-Oct-10	Aatlas	6441812100	791	ENERGY	WY	Auto Dismantlers	High	937I022394	5015
7-Oct-10	AAA Foreign Auto Recycling	6441810100	783	NIRVANA	AV	Auto Dismantlers	High	937i016197	5015
8-Oct-10	Import Auto Wrecking	6441812900	793	ENERGY	WY	Auto Dismantlers	High	937I016877	5015
8-Oct-10	Onager Corporation	6441812800	789	ENERGY	WY	Auto Dismantlers	High	9371010014	5015
8-Oct-10	Pacific Auto Wrecking	6441812000	795	ENERGY	WY	Auto Dismantlers	High	9371015058	5015
11-Oct-10	Japan Tech Auto Wrecking	6441812300	777	ENERGY	WY	Auto Dismantlers	High	937I020121	5015
11-Oct-10	Japanese Auto Wrecking	6441811500	811	ENERGY	WY	Auto Dismantlers	High	937I021355	5015
14-Oct-10	Honda Acura Parts Auto Recycling	6441821500	895	ENERGY	WY	Auto Dismantlers	High	937i011394	5015
14-Oct-10	California Scrap Logistics Corp		811	ENERGY	WY	Auto Dismantlers	High		
20-Oct-10	2 Heavy Equipment/PavementRecycling	6441820300	855	ENERGY	WY	Metal Recycling	High		5093
20-Oct-10	Calumet Auto Wrecking Inc	6441821400	891	ENERGY	WY	Auto Dismantlers	High	937I004393	5015
29-Oct-10	Ecology Auto Wrecking 2	6441821000	850	ENERGY	WY	Auto Dismantlers	High	937I019445	5015

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	SIC Number
29-Oct-10	Ecology Auto Wrecking	6441820100	825	ENERGY	WY	Auto Dismantlers	High	937I003325	5015
29-Oct-10	Ecology Auto Wrecking 3	6441821200	800	ENERGY	WY	Auto Dismantlers	High	937I003280	5015
12-Jan-11	Allied Waste Services	6441821600	881	ENERGY	WY	Waste Management	High	937I014355	4953
12-Jan-11	Calumet Auto Wrecking Inc	6441821400	891	ENERGY	WY	Auto Dismantlers	High	937I004393	5015
13-Jan-11	Action Auto Dismantlers Inc	6291001400	151	REED	CT	Auto Dismantlers	High	937I004000	5015
13-Jan-11	Pick Your Part Auto Wrecking	6441820800	880	ENERGY	WY	Auto Dismantlers	High	937I012114	5015
13-Jan-11	FJ Willert Construction Co.	6441813600	1869	NIRVANA	AV	Storage	High	937I016993	4953
13-Jan-11	Standard Auto Recycling	6291000400	150	REED	CT	Auto Dismantlers	High	9371010775	5015
13-Jan-11	MTS Maintenance Facility	6232502200	3650	MAIN	ST	Transportation	High	937I011017	4111
18-Jan-11	United Parcel Service	5953001000	2300	BOSWELL	CT	Postal Service	High	9371002086	4215
25-Jan-11	Riley Recycling	6441811500	811	ENERGY	WY	Auto Dismantlers	High		5015
2-Feb-11	Vulcan Materials Company - Chula Vista Quarry	6440600600	2041	HERITAGE	RD	Concrete Work	High	937I023019	1429
16-Feb-11	Doncaster, GCE Industries	6440404900	1887	NIRVANA	AV	Manufacturing	High	937I022716	3443

Inspection Date	Facility Name	APN Number	Address			Category	Priority	WDID Number	SIC Number
14-Mar-11	West Auto Wreckers	6221902600	2365	MAIN	ST	Auto Dismantlers	High	9371001046	5015

Total Inspections: 38

- **Enforcement Actions Taken**

Attachment K

Attachment K

FY 2010-2011 Enforcement Action Taken
(Commerical, Industrial, Municipal, and Residential)

Note: During this reporting period, 07/01/10 to 06/30/11, investigation of the following cases have resulted in the issuance of a Notice of Violation, Order to Cease and Desist, Notice to Clean and Abate, and/or Administrative Citation.

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
			Commercial					
14-Jul-10	B&J Auto Repair Smog & Sales	Chemical Disharge	Commercial	696	BROADWAY		Admin Citation - Fine	$200
26-Jul-10	COSTCO - East H St	Grease/Food/Drink Disch.	Commercial	895	H	ST	Admin Citation - Warning	$0
30-Jul-10	PB Auto Service	Vehicle oil discharge	Commercial	3645	MAIN	ST	Admin Citation - Fine	$200
18-Aug-10	Paxton Towing	Failure to Maintain BMPS	Commercial	3487	MAIN	ST	Admin Citation - Fine	$100
16-Sep-10	McDonalds at Third #1557	Sewage Spill/Discharge	Commercial	1110	THIRD	AV	Admin Citation - Warning	$0
21-Oct-10	Roberto DePhillippis Steak House	Power/Pressure Washing	Commercial	556	BROADWAY		Admin Citation - Fine	$200
28-Oct-10	El Nortena Taco Shop	Sewage Spill/Discharge	Commercial	1266	THIRD	AV	Admin Citation -Fine - w/FCR	$200
28-Nov-10	Masonry Pros	Slurry/Concrete Discharge	Commercial	78	KING	ST	Admin Citation - Warning	$0
31-Jan-11	mdt Electronics	Res/Comm Cleaning Residue	Commercial	3639	MAIN	ST	Admin Citation - Warning	$0
8-Mar-11	Panda Imperial Chinese	Power/Pressure Washing	Commercial	1208	THIRD	AV	Admin Citation-Warning	$0
9-Mar-11	Complete Amenity Services (Eastlake	Equipment Washing	Commercial	881	SHOWROOM	PL	Admin Citation - Fine	$100

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
23-Mar-11	McDonalds - Telegraph	Saw Cutting/Sanding Disc.	Commercial	551	TELEGRAPH CANYON	RD	Admin Citation - Fine	$200
28-Mar-11	Days Inn	Sediment Discharge	Commercial	669	E	ST	Admin Citation - Fine	$200
			Construction					
7-Jan-11	Seafood City - Orange Village Plaza	Const. BMPS Violation	Construction		ORANGE	AV	NOV- Clean & Abate Order	$0
21-Jan-11	SoCal C.C.S	Power/Pressure Washing	Construction	276	FOURTH	AV	Admin Citation Warning - w/FCR	$0
29-Mar-11	Otay Ranch Village 2 R9 KB Homes	Sediment Discharge	Construction		PERSHING	RD	NOV - Clean & Abate	$0
14-Apr-11	750 Main Street Rowland Properties	Slurry/Concrete Discharge	Construction	750	MAIN	ST	NOV - Clean & Abate - SWN	$0
			Industrial					
2-Sep-10	Bajas #3 Auto Wrecking	Equipment Washing	Industrial	811	ENERGY	WY	Admin Citation - Fine	$200
7-Sep-10	Freeway Auto Wrecking	Trash/Debris Discharge	Industrial	783	ENERGY	WY	Admin Citation - Warning	$0
7-Sep-10		Failure to Maintain BMPS	Industrial		ENERGY	WY	Admin Citation - Warning	$0
			Municipal					
15-Nov-10	Fire Station #2	Equipment Washing	Municipal	80	J	ST	Admin Citation - Fine	$200
			Residential					
2-Jul-10	Padilla Contractor - Mobile	Slurry/Concrete Discharge	Residential	570	D	ST	Admin Citation - Fine	$200

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
19-Jul-10	Joe Jackson Construction-Mobile	Trash/Debris Discharge	Residential	825	MADISON	AV	Admin Citation - Fine	$200
20-Jul-10	Veronica's Janitorial Service- Mobile	Carpet Clean Wash Water	Residential	1197	CALLE FLORECITA		Admin Citation - Fine	$200
20-Jul-10	Resident - 624 Augustina Pl	Pool-Spa Residue	Residential	624	AUGUSTINA	PL	Admin Citation - Warning	$0
23-Jul-10	Resident - 621 Augustina Pl	Pool-Spa Residue	Residential	621	AUGUSTINA	PL	Admin Citation - Warning	$0
4-Aug-10	Resident - 37 Sierra Way	Vehicle Washing/Dismantle	Residential	37	SIERRA	WY	Admin Citation - Rescinded	$0
11-Aug-10	Resident - 164 Jamul Av	Sewage Spill/Discharge	Residential	164	JAMUL	AV	Admin Citation -Fine w/FCR	$200
18-Aug-10	Aguilar Contractor - Mobile	Power/Pressure Washing	Residential	194	FIFTH	AV	Admin Citation - Fine	$200
25-Aug-10	Resident -21 E Oneida Ct	Slurry/Concrete Discharge	Residential	21	ONEIDA	CT	Admin Citation - Warning	$0
22-Sep-10	Resident - 110 Fortuna St	Slurry/Concrete Discharge	Residential	110	FORTUNA	ST	Admin Citation - Warning w/FCR	$0
27-Sep-10	Resident - Vehicle Plate 6JNN247	Vehicle oil discharge	Residential	885	HELIX	AV	Admin Citation - Warning	$0
28-Oct-10	Resident - 1631 Bull Canyon Rd	Painting-Sanding Residue	Residential	1631	BULL CANYON	RD	Admin Citation - Warning	$0
29-Oct-10	Otay Ranch Village 2 - R30	Failure to Maintain BMPS	Residential		CALLE REAL		Issued Notice of Violation	$0
3-Nov-10	Resident - 735 Cooper Rd	Vehicle oil discharge	Residential	735	COOPER	RD	Admin Citation - Fine	$100
5-Nov-10	Jesse Handyman - Mobile	Power/Pressure Washing	Residential	655	BROADWAY		Admin Citation - Fine	$200

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
17-Nov-10	La Casa Bonita Apartments	Sewage Spill/Discharge	Residential	548	PALOMAR	ST	Admin Citation - Warning w/FCR	$0
18-Nov-10	Otay Ranch Village 2 - R12	Failure to Maintain BMPS	Residential		JONES	ST	Issued Notice of Violation	$0
3-Jan-11	Resident - 2629 Faivre St	Vehicle oil discharge	Residential	26229	FAIVRE	ST	Admin Citation - Fine	$200
6-Jan-11	Resident - 1560 Larkhaven Dr	Slurry/Concrete Discharge	Residential	1560	LARKHAVEN	DR	Admin Citation - Warning	$0
18-Jan-11	Resident - 1272 Orsett St	Painting-Sanding Residue	Residential	1272	ORSETT	ST	Admin Citation - Warning	
1-Feb-11	Resident - 37 Sierra Way	Trash/Debris Discharge	Residential	37	SIERRA	WY	Citation Rescinded	$0
9-Feb-11	Fifth Avenue Apartments	Sewage Spill/Discharge	Residential	340	FIFTH	AV	Admin Citation - Warning	$0
10-Feb-11	Resident - 33 Palomar	Sewage Spill/Discharge	Residential	33	PALOMAR	ST	Admin Citation - Warning	
12-Feb-11	Veteran's Home of California	Sewage Spill/Discharge	Residential	700	NAPLES	CT	Admin Citation - Fine w/ FCR	$200
16-Feb-11		Sewage Spill/Discharge	Residential		NAPLES	CT	Admin Citation	$200
24-Feb-11	Resident - 1202 Via Escalante	Painting-Sanding Residue	Residential	1202	VIA ESCALANTE		Admin Citation Warning	
28-Feb-11	Resident - 418 Tremont St	Sediment Discharge	Residential	418	TREMONT	ST	Admin Citation - Fine	$200
16-Mar-11	Residence - Pacific Chemical Discharge	Pool-Spa Residue	Residential	533	MARIPOSA	ST	Admin Citation	$100
17-Mar-11	Resident - 881 Aspen Glen Road	Saw Cutting/Sanding Disc.	Residential	881	ASPEN GLEN	RD	Admin Citation - Fine	$100

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken	Fine Amount
11-Apr-11	Resident - 2206 Andalusia #7	Power/Pressure Washing	Residential	2206	ANDALUSIA	LN	Admin Citation - Fine	$100
2-May-11	62 Pepper Tree - Sewage Spill -Lift Station	Sewage Spill/Discharge	Residential	62	PEPPER TREE	RD	Admin Citation - Warning	$0

Total Incidents: **52** **Total Fine:** **$4,200.00**

- **Hotline Call Response Summary**

Attachment L

Attachment L

FY 2010-2011 Hotline Call Response Summary

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/01/2010	STORM DRAIN PIPES	Commercial	1870	MAIN	CT	Complaint Response Enforcement
	Comments/ Action Taken:	On 07/01/10 rcvd notification of a illegal discharge at river bed behind Kohls. City staff responded and observed Patriot Environmental conducting the cleanup of the storm drain system from a earlier overturned gasoline tanker on Palm Ave in the City of San Diego. No violation was observed. No further action required.				
07/02/2010	STREET	Residential	624	FOURTH	AV	Leaking Vehicle
	Comments/ Action Taken:	On 07/02/10 rcvd notification of a leaking vehicle at subject address. City staff responded and observed oil staining in front of resident. Resident cleaned oil spill from owners truck. No further action required.				
07/02/2010	STREET	Residential	2206	ANDALUSIA	LN	Power Washing
	Comments/ Action Taken:	On 07/02/10 rcvd notification of resident washing down garage and discharging white substance. City staff responded and observed a white substance at subject address. HOA notified resident to cleanup using dry methods. Compliance met. No further action required.				
07/02/2010	STREET	Residential	247	PAISLEY	ST	Leaking Vehicle
	Comments/ Action Taken:	On 07/02/10 rcvd notification of a leaking vehicle at subject address. City staff responded and observed orange Dodge Pickup leaking oil. Resident removed vehicle from the street and cleaned up spill. No further action required.				
07/02/2010	STREET	Residential	2000	PINON HILLS	RD	Paint Discharge
	Comments/ Action Taken:	On 07/02/10 rcvd notification of paint in the gutter located near subject address. City staff responded and observed a dry residue in the curbline. Could not determine source. Unable to clean. Left door hangers at residences. No further action required.				
07/08/2010	STREET	Residential	1890	TOULOUSE	DR	Complaint Response Enforcement

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/08/2010	STREET	Residential	1890	TOULOUSE	DR	Complaint Response Enforcement
	Comments/ Action Taken:	On 07/08/10 rcvd notification of trash not being placed into dumpster. Referred case to Environmental Services for action. No further actions required.				
07/08/2010	STREET	Residential	1150	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	On 07/08/10 rcvd notification of RV dumping sewage. City staff responded and did not locate RV. Will monitor area. No further action required.				
07/08/2010	STORM DRAIN PIPES	Other	550	MARINA	PW	Construction Debris & Waste
	Comments/ Action Taken:	On 07/08/10 rcvd notification of boat conducting sanding of fiberglass hull at Marina. Notified Port due to their jurisdiction. No further action required.				
07/08/2010	STORM DRAIN PIPES	Commercial	3521	MAIN	ST	Construction Debris & Waste
	Comments/ Action Taken:	On 07/08/10 rcvd notification of trash in the storm drain. City staff observed blown trash from overfilled dumpster. Cleanup conducted by property owner. Notified Environmental Services. No further action required.				
07/09/2010	STREET	Commercial	1301	THIRD	AV	Power Washing
	Comments/ Action Taken:	On 07/08/10 rcvd notification of powerwashing without BMPs at subject address. City staff responded and spoke with contractor who stated that he did have BMPs installed and he knew of the regulations. No evidence of discharge. No further action required.				
07/09/2010	STREET	Residential	713	J	ST	Sewage Spill
	Comments/ Action Taken:	On 07/09/10 rcvd notification of erosion and sediment discharge from subject address. City staff responded and observed a sediment discharge into the storm drain. Property owner installing retaining wall without using BMPs. Issued Admin Citation, Warning. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/12/2010	STORM CHANNEL	Commercial	110	GLOVER	AV	Leaking Vehicle
	Comments/ Action Taken:	On 07/12/10 rcvd notification of abandoned boat leaking oil at subject address. City staff responded and observed boat with minor leaking. Contacted vehicle abatement. Towing company removed and conducted cleanup. No further action required.				
07/12/2010	STREET	Municipal	646	E	ST	Construction Debris & Waste
	Comments/ Action Taken:	On 07/12/10 rcvd notification of gravel tracking from old public works yard. City staff responded and observed minor tracking. MMV Gravel to conduct cleanup. No further action required.				
07/13/2010	STREET	Residential	697	CAZORLA	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 07/13/10 rcvd notification of oil spill coming from back yard drain at subject address. City staff responded and observed oil in curbline but did not enter inlet. Property owner conducted cleanup. Issued verbal warning. No further action required.				
07/15/2010	CATCH BASINS	Commercial	3804	MAIN	ST	Other
	Comments/ Action Taken:	On 07/14/10 rcvd notification of fire system water discharge from subject address. Contractor did not use BMPs. Issued Admin Citation with copy of Municipal Code. No further action required.				
07/15/2010	STREET	Residential	696	BROADWAY		Other
	Comments/ Action Taken:	On 07/15/10 rcvd notification of antifreeze discharge from subject address. City staff responded and did not observe discharge. Complainant sent photos showing discharge. Issued Admin Citation. No further action required.				
07/16/2010	CATCH BASINS	Residential	1320	30TH	ST	Unknown Discharge
	Comments/ Action Taken:	On 07/16/10 rcvd notification of white liquid into storm drain. City staff responded and observed traces of white substance in Sweetwater River. Traced liquid from milk truck that had spilled. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/19/2010	STREET	Commercial	788	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	On 07/19/10 rcvd notification of construction dust in gutter. City staff responded and observed nuisance dust in the curbline. Contractor swept up. No further action required.				
07/19/2010	STREET	Residential	825	MADISON	AV	Dirt/Sediments
	Comments/ Action Taken:	On 07/19/10, rcvd notification of dirt in the right of way at subject location. City staff responded and confirmed. Responsible party conducted cleanup. Issued Admin Citation. No further action required.				
07/19/2010	STREET	Construction Sites	1548	H	ST	Unknown Discharge
	Comments/ Action Taken:	On 07/19/10 rcvd notification of construction company not using BMPs. City staff responded and observed that BMPs were in place. No further action required.				
07/20/2010	STREET	Residential	624	AUGUSTINA	PL	Paint Discharge
	Comments/ Action Taken:	On 07/20/10 rcvd notification of white substance in the curbline. City staff responded and observed diatomaceous earth from pool filter. Owner could not clean. City crews conducted cleanup with full cost recovery. Issued Admin Citation Warning. No further action required.				
07/21/2010	STREET	Commercial	1660	BROADWAY		Dirt/Sediments
	Comments/ Action Taken:	On 07/21/10 rcvd notification of contractor discharging mud into storm drain. City staff responded and observed contractor not using BMPs causing mud to be discharged into storm drain. Issued Admin Citation. No further action required.				
07/21/2010	STREET	Commercial	1197	CALLE FLORECITA		Carpet Cleaning
	Comments/ Action Taken:	On 07/21/10 rcvd notification of carpet cleaning company discharging into storm drain. City staff responded and observed hose into the inlet. Issued Admin Citation. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
07/21/2010	STREET	Residential	742	MADISON	AV	Power Washing
	Comments/ Action Taken:	On 07/21/10 rcvd notification of grease being powerwashed of grill at subject location. City staff responded and did not observe any evidence of discharge. No further action required.				
07/21/2010	STREET	Commercial	570	D	ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 07/21/10 rcvd notification of concrete slurry being discharged into the storm drain. City staff responded and observed individual concrete cutting at property with no BMPs. Conducted cleanup. Issued Admin Citation. No further action required.				
07/21/2010	STREET	Residential	750	ADA	ST	Leaking Vehicle
	Comments/ Action Taken:	On 07/21/10 rcvd notification of vehicle severely leaking oil onto street. City staff responded a few oil stains coming from subject vehicle. Owner took responsibility and removed car from street and took in for repairs. No further action required.				
07/26/2010	STREET	Residential	2534	FALCON VALLEY	DR	Unknown Discharge
	Comments/ Action Taken:	On 07/23/10 rcvd notification of water discharging from under sidewalk drain at subject address. City staff responded and observed water trickling from drain with algae buildup. Property owner conducted cleanup and repaired irrigation. No further action required.				
07/26/2010	STORM DRAIN PIPES	Commercial	895	H	ST	Unknown Discharge
	Comments/ Action Taken:	On 07/26/10 rcvd notification of spill at subject location. City staff responded and observed juice container from trash compactor leaching. Repairs made by COSTCO staff. Issued Admin Citation Warning. No further action required.				
07/27/2010	STREET	Residential	2270	WILLOW CREEK	CI	Washing Vehicle in Street
	Comments/ Action Taken:	On 07/28/10 rcvd notification of vehicle washing in the street. City staff responded and did observe evidence. Posted door hanger at subject address. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/02/2010	STREET	Residential	641	ASH	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 08/03/10 rcvd notification of leaking vehicle at subject address. City staff responded and observed leaking vehicle. Vehicle owner removed vehicle from street and conducted cleanup. Issued verbal warning. No further action required.				
08/03/2010	STREET	Residential	415	OXFORD	ST	Other
	Comments/ Action Taken:	On 08/03/10 rcvd notification of pigeons waste at subject location. City staff responded and observed traces of pigeon waste and one pigeon on powerline. Notified Animal Control. No further action required.				
08/03/2010	STREET	Commercial	804	BROADWAY		Unknown Discharge
	Comments/ Action Taken:	On 08/03/10 rcvd notification of mobile vehicle detailer discharging wash chemicals and water into the storm drain. City staff responded and spoke with business owner who demonstrated that all washwater is discharged into the sewer. Referred to wastewater. No further action required.				
08/04/2010	STREET	Residential	37	SIERRA	WY	Unknown Discharge
	Comments/ Action Taken:	On 08/04/11 rcvd notification of a possible sewage spill. City staff arrived on scene and observed discharge into the SWCS. Source was determined to be motorhome. Rcvd call from resident who stated that she washed her car. Issued Admin Citation Warning. Citation withdrawn on 08/20/11.				
08/05/2010	STREET	Other	80	PROSPECT	ST	Sewage Spill
	Comments/ Action Taken:	On 08/05/11 rcvd notification of unknown discharge at Castle Park High School. City staff responded and observed water leak. Sweetwater Authority conducted repairs. No further actions required.				
08/05/2010	STREET	Commercial	77	BROADWAY		Washing Vehicle in Street
	Comments/ Action Taken:	On 08/05/10 rcvd notification of vehicle washing without containment. City staff responded and business had appropriate business as a mobile business. No further actions required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/06/2010	STREET	Residential	669	REDLANDS	PL	Sewage Spill
	Comments/ Action Taken:	On 08/06/10 rcvd notification of resident washing down restaurant equipment at subject address. City staff did not find any evidence of the cleaning. No further action required.				
08/09/2010	STREET	Residential	2206	WILLOW CREEK	CI	Unknown Discharge
	Comments/ Action Taken:	On 08/09/10 rcvd notification of used cooking oil dumped into the curbline. Arrived on-scene and observed used cooking oil with staining in front of subject resident. No evidence found that it came from address. City crews conducted cleanup. No further action required.				
08/10/2010	STREET	Residential	750	ADA	ST	Leaking Vehicle
	Comments/ Action Taken:	On 08/10/10 rcvd notification of leaking vehicle at subject address. City staff responded and did not observe spill. No further action required.				
08/10/2010	STREET	Residential	24	WALNUT	DR	Complaint Response Enforcement
	Comments/ Action Taken:	On 08/11/10 rcvd notification of green waste being discharged from subject address. City staff responded and did not observe discharge. No further action required.				
08/11/2010	STREET	Commercial	164	JAMUL	AV	Unknown Discharge
	Comments/ Action Taken:	On 8/11/10 rcvd notification of a sewage spill at subject location. City staff responded and observed spill into the street. Property Manager decided to conduct cleanup. Followup observed staff washing sewage into the street. City staff conducted proper cleanup. Issued Admin Citation with full cost recovery. No further action required.				
08/13/2010	STREET	Residential	680	AYAMONTE	WY	Unknown Discharge
	Comments/ Action Taken:	On 08/13/10 rcvd notification of leaking vehicle at subject address. City staff responded and observed drip pan under vehicle to prevent discharge. Some amount ended up on street. Owner conducted cleanup. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/16/2010	STREET	Residential	1395	LAUREL	AV	Paint Discharge
	Comments/ Action Taken:	On 08/16/10 rcvd notification of paint residue spill at subject address. Resident was not aware of discharge. Resident conducted proper cleanup. No further action required.				
08/17/2010	CATCH BASINS	Commercial	3487	MAIN	ST	Other
	Comments/ Action Taken:	On 08/17/10 rcvd notification of multiple oil staining and other project discharged on property. City staff responded and observed business not using BMPs. Followed up with business conducted cleanup. No further action required.				
08/18/2010	STREET	Residential	194	FIFTH	AV	Power Washing
	Comments/ Action Taken:	On 08/18/10 rcvd notification of power washing being conducted at subject address. City staff responded and observed resident power washing paint into the street. Resident conducted proper cleanup. Issued Admin Citation. No further action required.				
08/19/2010	STREET	Commercial	3487	MAIN	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	Response cancelled.				
08/19/2010	STREET	Residential	2578	OAK SPRINGS	DR	Automotive Work
	Comments/ Action Taken:	On 08/29/10 rcvd notification of a antifreeze spill at subject address. City staff responded and observed anitfreeze in the curbline. Spoke with vehicle owner who state that he had a hose fail. Conducted proper cleanup. No further action required.				
08/23/2010	STREET	Residential	497	E	ST	Paint Discharge
	Comments/ Action Taken:	On 08/23/10, rcvd notif. Of paint brushes being washed at subject address. Pilgrim Elementary School staff to conduct cleanup. Issued verbal warning and educational material. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/24/2010	STREET	Commercial	3645	MAIN	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 07/30/10 rcvd notification of oil spill leaching under fence from Auto Repair Shop. City staff responded and observed substantial amount in dirt alley. Owner to conduct cleanup.				
08/25/2010	STREET	Residential	21	ONEIDA	ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 08/25/10 rcvd notification of a concrete slurry spill at subject address. City staff responded and observed the same. Homowner agreed to have City staff to conduct clean up. Issued Admin Citation with full cost recovery. No further action required.				
08/27/2010	STREET		1155	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	Cancelled. Under other Work Request.				
08/27/2010	STREET	Residential	1155	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	On 08/27/10 rcvd notification of a discharge from subject address. City staff responded and observed discharge of irrigation water from a sump. Spoke with owner on option to divert discharge. No further action required.				
08/30/2010	STREET	Construction Sites	2124	ANISE	CT	Washing Vehicle in Street
	Comments/ Action Taken:	On 08/30/10, rcvd notification of vehicle washing on street. Arrived on-scene and observed Shea Home Contractor spraying water into dump truck for dust control. Issued warning to contractor and Shea Homes. Compliance met. No further action required.				
08/30/2010	STREET	Residential	2401	LA COSTA	AV	Other
	Comments/ Action Taken:	On 08/26/10, rcvd anonymous letter from resident of bark being discharged from steep slopes during rain in the Bristlewood HOA at La Costa. Did not observe any bark or discharge in area described from residence. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/31/2010	CATCH BASINS	Residential	1526	GRAND TETON	CT	Possible Dumping into Catch Basin
	Comments/ Action Taken:	On 08/28/10 rcvd notification of trash and debris being discharged at subject address. City staff responded and did not observe discharge. Left door hangers. No further action required.				
09/09/2010	STORM CHANNEL	Commercial	960	BROADWAY		Possible Dumping into Catch Basin
	Comments/ Action Taken:	On 09/10/10 rcvd notification of a discharge from Machine Shop at subject address. City staff responded and did not observed discharge. No further action required.				
09/13/2010	STREET	Residential	301	PINE	CT	Leaking Vehicle
	Comments/ Action Taken:	On 09/15/10, rcvd notification of leaking vehicle at subject address. City staff responded and did not observe leaking vehicle at the location. No further action required.				
09/13/2010	STREET	Residential	750	ADA	ST	Leaking Vehicle
	Comments/ Action Taken:	On 09/13/10 received notification of a leaking vehicle at subject location. City staff responded small oil stain on the street could not locate owner. Left door hanger. No further action required.				
09/15/2010	STREET	Commercial		OTAY LAKES	RD	Accident/Spill
	Comments/ Action Taken:	On 09/15/10, rcvd notification of broken waterline at slope at subject location discharging sediment. Responded and observed discharge into storm drain. Follow up required. Repairs made. No further action required.				
09/16/2010	STREET	Commercial	1110	THIRD	AV	Sewage Spill
	Comments/ Action Taken:	On 09/16/10 rcvd notification of a sewage spill at subject address. City staff responded and observed discharge coming from McDonalds. Spill caused by plumber who was jetting out system. City staff conducted cleanup. Issued Admin Citation Warning with full cost recovery. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
09/17/2010	STREET	Commercial	1046	HILLTOP	DR	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 09/17/10 rcvd notification of a concrete spill at subject address. City staff responded and observed concrete pumper adjusting BMPs to prevent discharge. Contractor conducted cleanup. Verbal warning issued.				
09/20/2010	STREET	Residential	110	FORTUNA	ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 09/20/10 rcvd notification of red concrete slurry discharged. City staff responded and observed red concrete slurry at subject property. Spoke with owner who stated that he will cleanup the curb. No further action required.				
09/22/2010	STREET	Residential	1297	WHEATLAND	ST	Complaint Response Enforcement
	Comments/ Action Taken:	On 09/22/10 rcvd notification of excessive water coming from under side walk drain at subject address. City staff responded that it was groundwater from residents back yard. No further action required.				
09/23/2010	STREET	Residential	881	HELIX	AV	Leaking Vehicle
	Comments/ Action Taken:	On 09/23/10 received notifcation of a vehicle leaking oil onto street. Responded and observed oil leaking from vehicle. Left door hanger to contact city staff. On 09/28/10 issued Admin Citation Warning. Vehicle was not in area on 09/29/10. NFA required.				
09/27/2010	STREET	Commercial	725	BROADWAY		Other
	Comments/ Action Taken:	On 09/27/10 received notification from owner of The Lion's Den on concerns of ice machine condensate possibly discharging illegally. City staff responded and observed discharge hose directed into the floor drain. No further action required.				
09/28/2010	STREET	Residential	833	HALECREST	DR	Pool Filter Discharge
	Comments/ Action Taken:	On 09/28/10 rcvd notification of a pool discharge from subject address. City staff responded and observed discharge. Spoke with owner stating that BMPs will be used. Issued verbal warning. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
09/28/2010	STREET	Residential	663	CANYON	DR	Unknown Discharge
	Comments/ Action Taken:	On 09/28/10 rcvd notification of algae from under sidewalk drain at subject address. City staff responded and observed a spill trickle of water. Otay water stated that it was runoff. No further action required.				
09/29/2010	STREET	Residential		CUYAMACA	AV	Dirt/Sediments
	Comments/ Action Taken:	On 09/28/10 rcvd notification of rock pile in street at subject address. City staff responded and did not observe any evidence of rock. No further action required.				
10/06/2010	STREET	Residential	164	JAMUL	AV	Unknown Discharge
	Comments/ Action Taken:	On 10/06/10 rcvd notification of a sewage discharging from subject address. City staff responded and did not observe spill. Spoke with resident who stated that the spill was from several years ago. No further action required.				
10/08/2010	STREET	Residential	724	MONTEREY	CT	Unknown Discharge
	Comments/ Action Taken:	On 10/08/10 rcvd notification of motor home discharging in front of subject property. City staff responded and did not observe a discharge. No further action required.				
10/12/2010	STREET	Residential	1378	MOUNTAIN VIEW	LN	Leaking Vehicle
	Comments/ Action Taken:	On 10/12/10 rcvd notification of an oil spill from leaking vehicle. City staff responded and observed large oil stain. Spoke with resident who stated that it was a Ice Cream truck. City staff conducted cleanup. No further action required.				
10/12/2010	STREET	Residential	218	PAISLEY	ST	Leaking Vehicle
	Comments/ Action Taken:	On 10/12/10 rcvd notification of a leaking vehicle at the subject address. City Staff responded and observed approx. 5 gallons of hydraulic flluid from broken line in the storm drain. City crew conducted cleanup and Admin Citation - Warning issued to TEMO Transportation. NFA Required.				

Incident Date	Structure Category	Site Category		Address		Type of Violation
10/13/2010	STREET	Construction Sites		PROCTOR VALLEY	RD	Dirt/Sediments
	Comments/ Action Taken:	On 10/13/10 rcvd notification of dirt tracking coming from construction site. City staff responded and observed minor tracking from McMillin site. Cleanup conducted. No further action required.				
10/14/2010	STREET	Commercial	478	ALLVIEW	CT	Paint Discharge
	Comments/ Action Taken:	On 10/14/10 rcvd notification of paint running down street. City staff responded and observed contractor washing roof and collecting wash water using a shop vac. No discharge observed in the storm drain. No further action required.				
10/19/2010	STREET	Residential	520	PARK	WY	Paint Discharge
	Comments/ Action Taken:	On 10/19/10 received notification of a leaking vehicle discharging oil into the gutter. Arrived on-scene and observed oil in the gutter. City conducted proper cleanup. Vehicle not located. No further action required.				
10/21/2010	STREET	Commercial	556	BROADWAY		Power Washing
	Comments/ Action Taken:	On 10/21/10 rcvd notification of business powerwashing debris into the storm drain. City staff responded and observed employees powerwashing gum and debris into the storm drain. Issued educational materials and Admin Citation. No further action required.				
10/21/2010	STREET	Commercial	500	TRAILRIDGE	DR	Dirt/Sediments
	Comments/ Action Taken:	On 10/21/10 rcvd notification of landscaper dropping tree trimming into storm drain. Spoke with employee who cleaned up materials and placed other trimming off the street. No further action required.				
10/21/2010	STREET	Commercial	11	THIRD	AV	Unknown Discharge
	Comments/ Action Taken:	On 10/21/10 rcvd notification from County HAZMAT of subject business washing oil into storm drain. City staff responded and did not observe any discharge. Business utilizes spill kit and Mopping system to control any spills. No further action is required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
10/22/2010	STREET	Other	1441	HILLTOP	DR	Dirt/Sediments
	Comments/ Action Taken:	On 10/22/10 rcvd notification of sediment and debris being discharged from Loma Verde Elementary School due to rain event. City staff responded and confirmed discharge. CVESD Staff responded and conducted cleanup. No further action required.				
10/26/2010	STREET	Municipal	700	BUENA VISTA	WY	Possible Dumping into Catch Basin
	Comments/ Action Taken:	On 10/26/10 rcvd notification for Parks Staff of unknown containers of product at the trash enclosure. Due to safety reason case was forwarded to Fire Dept. No further action is required.				
10/28/2010	STREET	Construction Sites	1422	MAGDALENA	AV	Paint Discharge
	Comments/ Action Taken:	On 10/28/10 rcvd notification of paint spill at subject location. City staff responded and observed that a can of aerosol marking paint run over by vehicle. Builder conducted cleanup of spill. No further action required.				
10/28/2010	STREET	Residential	1631	BULL CANYON	RD	Unknown Discharge
	Comments/ Action Taken:	On 10/28/10 rcvd notification of paint in the curbline from subject address. City staff responded and observed paint residue. Owner issued Admin Citation Warning with full cost recovery. No further action required.				
10/28/2010	STREET	Residential	1630	SANTA FLORA	RD	Dirt/Sediments
	Comments/ Action Taken:	On 10/28/10 rcvd report of an illegal discharge from subject address. City staff responded found dirt and concrete rubble stages in the SWCS. Order was issued for the immediate removal of the materials from the SWCS. Cleanup was conducted upon re-inspection.				
10/28/2010	STREET	Residential	1547	OLEANDER	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 10/28/10 rcvd notification of contractor washing down slurry into the storm drain. Observed colored concrete in the storm drain. Issued Admin Citation Warning with full cost recovery. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
10/29/2010	STREET	Commercial	566	AGUA VISTA	DR	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 10/29/10 rcvd report of an illegal discharge at subject address. City staff responded & found small amounts of dirt spilled onto the SWCS. BMPs were in place but more were required. Pumper staff conducted immediate clean up. Verbal warning issued to deploy additional BMPs as necessary.				
11/01/2010	STREET	Residential	184	CARVER	ST	Unknown Discharge
	Comments/ Action Taken:	On 11/1/10 rcvd report of a discharge onto the SWCS. City staff responded found no spill. Empty pool chemical containers are staged in front of the house in the public right of way. A door hanger was left for resident to call to correct the situation. Property owner agreed to remove items. All items were removed upon reinspection. No further action required.				
11/01/2010	STORM CHANNEL	Residential	585	OXFORD	ST	Other
	Comments/ Action Taken:	On 11/01/10 rcvd notification of debris into a private storm channel. City staff responded and observed trash and debris. Responsible party Sunrise Villas Apartments responsible. Cleanup conducted. No further action required.				
11/03/2010	STREET	Residential	735	COOPER	RD	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 11/3/10 rcvd notification of an illegal discharge at 735 Cooper. City staff responded and found a vehicle leaking oil onto the SWCS. On 2/3/10 a verbal warning was issued to the owner of the vehicle. Administrative Citation #SW B113102 was issued.				
11/03/2010	STREET	Residential		K	AV	Unknown Discharge
	Comments/ Action Taken:	On 11/3/10 rcvd notification of motor home dumping into street. City staff responded found no evidence of a violation. Loc. was revisited on 11/29/10 and saw no evidence of violation. No further action required.				
11/04/2010	CATCH BASINS	Residential	1080	COLORADO	AV	Unknown Discharge
	Comments/ Action Taken:	On 11/4/10 rcvd notification of violation. City staff responded found only a trace of evaporated water on private property. Spoke to business owner who stated there was an accidental hose disconnect from an equipment hose. Verbal notice issued.				

Incident Date	Structure Category	Site Category	Address	Type of Violation
11/05/2010	CATCH BASINS	Commercial	655 BROADWAY	Power Washing
	Comments/ Action Taken:	On 11/05/10 rcvd notification of a discharge at subject address. City staff responded and observed powerwashing being conducted by building owner contractor. Contractor conducted cleanup. Forwarded to Stormwater Inspector for enforcement. Issued Admin Citation Warning. No further action required.		
11/08/2010	STORM WATER	Residential	425 PLAZA CALIMAR	Pool Maintenance
	Comments/ Action Taken:	On 10/26/10 received notification of violation. City staff responded found no evidence violation. Case was referred to Code enforcement for inclusion into the RAP program.		
11/10/2010	STREET	Commercial	1264 THIRD AV	Sewage Spill
	Comments/ Action Taken:	On 10/28/10 rcvd notification of illegal discharge at subject address. City staff responded and found sewage flowing from an uncapped sewage clean out on private property. Issued order to cease and desist, until repairs are made and the sewage line clean out cap is securely in place. City staff cleaned all sections of the SWCS impacted by this spill. Admin Cit #B1028103 was issued.		
11/15/2010	STREET	Residential	SOUTH POINT DR	Leaking Vehicle
	Comments/ Action Taken:	On 11/15/10 rcvd notification of illegal discharge at the subject address. City staff responded and found dried up oil leak approximately 1/2 inch wide and several blocks long. This staining did not pose a threat to water quality and cannot be cleaned. No further action is necessary at this time.		
11/17/2010	STREET	Residential	548 PALOMAR ST	Sewage Spill
	Comments/ Action Taken:	On 11/17/10 rcvd notification of sewage discharge at the subject address. City staff responded found evidence of violation. City crews contained the spill. Complex staff repaired the sewer line and cleaned the private section of the SWCS. Administrative Warning #SW B1117101 issued to the property owner.		
11/18/2010	STREET	Residential	FORTUNA ST	Paint Discharge
	Comments/ Action Taken:	On 11/18/10 rcvd notification of illegal discharge at subject address. City staff found no evidence of a violation. No further action is necessary at this time.		

Incident Date	Structure Category	Site Category	Address			Type of Violation
11/18/2010	STREET	Residential	1262	TOBIAS	DR	Possible Dumping into Catch Basin
	Comments/ Action Taken:	On 11/18/10 rcvd notification of illegal dumping into the inlet at subject address. City staff responded found no evidence of a violation. Re-investigated on 12/13/10 and observed no evidence of violation. No further action required.				
11/18/2010	STREET	Residential	588	ROOSEVELT	ST	Other
	Comments/ Action Taken:	On 11/18/10 rcvd notification of illegal dumping in alley. City staff responded and observed large amounts of fluorescent light bulbs dumped in alley. Called phone# complainant recorded off the truck observed unloading. Called number and owner agreed to properly dispose of bulbs. Re-inspection on 11/19/10 noted everything had been removed. No further action is necessary at this time.				
11/22/2010	STREET	Residential	370	ROOSEVELT	ST	Possible Dumping into Catch Basin
	Comments/ Action Taken:	On 11/22/10 rcvd notification of furniture in back of subject addressed. Was not a stormwater issue. Referred to conservation department and Code Enforcement.				
11/23/2010	STREET	Residential	649	VIA CURVADA		Sewage Spill
	Comments/ Action Taken:	On 11/23/10 rcvd notification of sewage spill from subject address and into the SWCS. City staff responded observed violation. Plumber was in route to fix the problem. City crews cleaned SWCS impacted by this discharge. A verbal warning was issued to the resident. No further action is necessary at this time.				
12/07/2010	STREET	Commercial	1088	BROADWAY		Power Washing
	Comments/ Action Taken:	On 12/7/10 rcvd notification of an illegal discharge at the subject address. City staff responded observed minor evidence of violation. Spoke with property owner. Insufficient evidence was present. A verbal warning was issued. No further action is necessary at this time.				
12/09/2010	STREET	Residential	2077	CHATEAU	CT	Possible Dumping into Catch Basin
	Comments/ Action Taken:	On 12/9/10 rcvd notification of violation. City staff responded and found no evidence of a violation. No further action is necessary at this time.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
12/09/2010	STORM CHANNEL	Residential	1280	CARDINAL	PL	Construction Debris & Waste
	Comments/ Action Taken:	On 12/11/10, city staff responded to debris in brow ditch between both residents. On 01/18/11 conducted follow-up and debris was removed. No further action required.				
12/09/2010	CATCH BASINS	Commercial	1137	BROADWAY		Dirt/Sediments
	Comments/ Action Taken:	On 12/9/10 rcvd notification of dirt and water flowing into SWCS. City staff observed a trickle of water going into SWCS. Activity was ceased. Per Khosro Aminpour, a verbal warning was issued. No further action is necessary at this time.				
12/17/2010	STREET	Residential	1047	PLAZA ELENA		Paint Discharge
	Comments/ Action Taken:	On 12/17/10 rcvd notification of paint spill at home that flowed into the SWCS. Resident immediately began to clean up. City crews cleaned SWCS impacted by this spill. A verbal warning was issued. No further action is necessary at this time.				
12/17/2010	STREET	Residential	117	OTIS	ST	Sewage Spill
	Comments/ Action Taken:	On 12/17/10 rcvd notification of illegal discharge from subject address. City staff responded did not find any evidence of a violation. No further action is necessary at this time.				
12/17/2010	STREET	Commercial		FLOWER	ST	Leaking Vehicle
	Comments/ Action Taken:	On 12/17/10 rcvd notification of tow truck leaking oil at subject address. City staff responded and informed owner to clean spill and remove vehicle out of residential neighborhood. Follow to be conducted. On 01/19/11 conducted follow up. Tow Truck was not parked at subject location. No further action required.				
12/21/2010	CATCH BASINS	Residential	1035	OAKLAWN	AV	Storm Drain Flooding Issues
	Comments/ Action Taken:	Report of Storm Drain flooding. Referred to Storm Drain Section.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
01/03/2011	STREET	Residential	2768	RED ROCK CANYON	RD	Leaking Vehicle
	Comments/ Action Taken:	On 1/3/11, rcv'd notification of vehicle leaking oil onto the SWCS. City staff responded observed violation. Spoke with owner whom parked it on his private driveway. No further action is necessary at this time.				
01/07/2011	STREET	Residential	1191	NOLAN	AV	Leaking Vehicle
	Comments/ Action Taken:	On 01/06/11 received notification of resident conducting vehicle maintenance and oil staining on street. City staff responded and did not observe the same. No further action required.				
01/07/2011	STREET	Commercial	1560	LARKHAVEN	DR	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 01/06/11 rcvd notification of contractor conducting saw cutting without using containment causing discharge of slurry into storm drain. Issued Administrative Citation (Warning) to contractor.				
01/07/2011	STREET	Commercial		ORANGE	AV	Complaint Response Enforcement
	Comments/ Action Taken:	On 01/07/11, rcvd notification of several construction NPDES violation at Seafood City Project, Orange Village Plaza. City staff responded an observed several violations. Issued NOV, Cease & Desist and Clean & Abate Order.				
01/10/2011	STREET	Residential	63	LAS FLORES	DR	Possible Dumping into Catch Basin
	Comments/ Action Taken:	On 01/10/11 rcvd notification of dumping of cement into storm drain. City staff responded and observed small discharge of possible pool filter. Clean up conducted by city crew. Left door hanger for info. No further action required.				
01/10/2011	STREET	Residential	3	LAS FLORES	DR	Paint Discharge
	Comments/ Action Taken:	On 01/10/11 rcvd notification of paint discharge into the catch basin. City staff responded and observed paint residue. Spoke with owner on proper procedures on cleaning brushes. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
01/13/2011	STREET	Residential	1315	PRESTON	PL	Sewage Spill
	Comments/ Action Taken:	On 01/13/11 rcvd notification of gray water from shower discharging into the storm drain. City staff responded and did not observe any discharge or odor. Complainant remained anonymous.				
01/18/2011	STREET	Residential	1272	FOURTH	AV	Paint Discharge
	Comments/ Action Taken:	On 01/18/11 rcvd notification of paint in the curbline. City staff responded and observed paint residue along Orsett Street. Resident at 1272 4th Ave. Washed paint brushes into the street. Issued Admin Citation Warning. City crew conducted cleanup. No further action required.				
01/19/2011	STREET	Residential	362	MILLAN	ST	Pool Filter Discharge
	Comments/ Action Taken:	On 01/19/11 rcvd notification of a discharge coming from a 3 inch hose from the subject address and discharging into the complainant yard. Did not observe. Brow ditch was dry. No further action required.				
01/21/2011	STREET	Residential	1981	DUKE	ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 01/21/11 rcvd notification of a concrete slurry spill into the curbline at subject address. City staff responded and observed dry remnants of concrete in curbline. Cannot be cleaned. Left education material. No further action required.				
01/24/2011	STREET	Commercial		F	ST	Power Washing
	Comments/ Action Taken:	On 01/21/11 rcvd notification of a City contractor powerwashing mud into the street. City staff responded and observed contractor powerwashing sidewalks with mud onto F Street. Issued Admin Citation Warning with Full Cost Recovery for City conducting cleanup.				
01/28/2011	STREET	Residential	385	QUINTARD	ST	Pool Filter Discharge
	Comments/ Action Taken:	On 01/28/11 rcvd notification of a discharge at subject location. City staff responded and observed pool filter discharge. Spoke with owner and gave verbal warning. City staff conducted cleanup with full cost recovery. No further action required.				

Incident Date	Structure Category	Site Category	Address		Type of Violation
01/31/2011	STREET	Commercial	REED	CT	Unknown Discharge
	Comments/ Action Taken:	On 01/31/11 rcvd notification from M/O Crew of discharge of white substance onto Reed Ct. City Staff responded and observed soap/degreaser coming from 3639 Main. Mdt Electronic washed forklift. Issued Admin Citation Warning.			
02/01/2011	STORM DRAIN PIPES	Commercial	MELROSE	AV	Dirt/Sediments
	Comments/ Action Taken:	On 02/01/11 rcvd notification of sediment discharge at subject location. City staff responded and observed to be clean with Inlet protection to prevent the discharge. Minor dirt buildup. Instructed contractor to clean. No further action required at this time.			
02/03/2011	STREET	Residential	665 RUE PARC		Construction Debris & Waste
	Comments/ Action Taken:	On 02/03/11 rcvd notification via Code Enforcement of a resident dumping dirt/debris in storm drain. Responded to Rue Parc and only resident at 665 Rue parc was conducting room addition. No discharge was observed. No further action required at this time.			
02/09/2011	STORM WATER	Residential	33 PALOMAR	ST	Sewage Spill
	Comments/ Action Taken:	On 02/09/11 responded to sewage spill at the subject address. City staff arrived on scene and observed that City crews had stopped the spill from the sewer lateral and had already cleaned the sidewalk and SWCS. Issued Admin Citation Warning to homeowner. No further action required.			
02/10/2011	STREET	Residential	340 FIFTH	AV	Sewage Spill
	Comments/ Action Taken:	On 02/09/11 received notification of a sewer spill at the subject address. City staff responded and observed City crews conducting the clean up of the sidewalk and SWCS. Cause was determined to be a large wooden stake and palm tree debris in the lateral. Issued Admin Citation Warning with FCR. No further action required.			
02/11/2011	STREET	Residential	1165 WALNUT	AV	Other
	Comments/ Action Taken:	On 02/14/11 responded to report of auto repair being conducted at subject location. City staff responded and did not observe auto repairs being conducted. No further action required.			

Incident Date	Structure Category	Site Category	Address			Type of Violation
02/11/2011	STREET	Commercial	1150	WALNUT	AV	Other
	Comments/ Action Taken:	On 02/11/11 rcvd notification of sewer cap missing at subject location. City staff responded and observed same. Road One to purchase new cap and repair on 02/15/11. No further action required.				
02/15/2011	STREET	Residential	1334	CALLE SANTIAGO		Dirt/Sediments
	Comments/ Action Taken:	On 02/15/11 rcvd notification of gravel stockpile in street at subject address. City staff responded and observed City contractor completing ADA Ped Ramps. Stockpile to be removed at end of workday. No further action required.				
02/16/2011	STREET	Commercial	1887	NIRVANA	AV	Other
	Comments/ Action Taken:	On 02/16/11 rcvd storm water referral from City of San Diego Wastewater on possible violations. City staff responded and observed that corrections were made as recommended by San Diego Wastewater. Facility is now covered under the Industrial Storm Water Permit. Added to Inventory. No further action required.				
02/21/2011	STREET	Residential	1202	VIA ESCALANTE		Paint Discharge
	Comments/ Action Taken:	On 02/21/11 rcvd notification of paint spill at subject location. City staff responded and observed paint residue in the curbline. Left note for resident to contact staff. On 02/24/11 follow-up revealed that paint wash bucket tipped over discharging paint residue into the storm drain. Issued Admin Citation Warning. No further action required.				
02/22/2011	STREET	Municipal	1381	PALOMAR	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 02/22/11 rcvd notification of used oil spill in trash enclosure. City staff responded and observed used oil spilled inside trash enclosure. City crews conducted cleanup. No further action required.				
02/23/2011	CATCH BASINS	Other		THIRD	AV	Accident/Spill
	Comments/ Action Taken:	On 02/23/11 rcvd notification of paint spill at subject location. City crews arrived and conducted cleanup. No further action required.				

Incident Date	Structure Category	Site Category	Address	Type of Violation
02/23/2011	STORM CHANNEL	Residential	352 ZENITH ST	Paint Discharge
	Comments/ Action Taken:	On 02/23/11 rcvd notification of paint spill in concrete channel at subject location. City staff responded and observed old paint spill along side of channel next to residence. Spoke with resident who stated that the spill accidentally occurred 2 weeks ago and they could not get into the channel to clean. Paint was dry. No further action required.		
02/28/2011	STREET	Construction Sites	418 TREMONT ST	Dirt/Sediments
	Comments/ Action Taken:	On 02/28/11 rcvd notification of mud being pumped from subject location. City staff responded and observed that foundation footings were pumped and sediment-laden water was discharged into storm drain. Issued Admin Citation. Cleanup conducted by property owner. No further action required.		
02/28/2011	STREETS	Residential	2206 ANDALUSIA LN	Power Washing
	Comments/ Action Taken:	On 02/28/11 rcvd notification of resident washing down pet waste from garage into storm drain at subject address. City staff responded and did not observed evidence of discharge. Left Door Hanger. Spoke with resident. Does not wash out pet waste. Directed to use BMPs. No further action required.		
03/01/2011	STREETS	Residential	AVENIDA ALTAMIRA	Other
	Comments/ Action Taken:	On 02/24/11 rcvd notification from plumbing contractor that competition is illegally connecting soft water softeners backflow drain line into landscaping drains. Based on the information and conversation with complainant city staff cannot confirm that drain line is illegally connected due to line is not a direct connect to the storm drain system. City staff will monitor addresses. No further action required.		
03/01/2011	STREET	Residential	236 MADRONA ST	Leaking Vehicle
	Comments/ Action Taken:	On 03/01/11 rcvd notification of a vehicle leaking transmission fluid in front of subject address. On 03/02/11 City staff responded and vehicle was not at location. Observed multiple oil stains in street throughout neighborhood. Nothing significant was observed. No further action required.		
03/08/2011	STREET	Commercial	1208 THIRD AV	Power Washing
	Comments/ Action Taken:	On 03/08/11 rcvd notification of powerwashing being conducted without BMPs. City staff responded and observed restaurant staff powerwashing without BMPs. Issued Admin Citation - Warning. No further action required.		

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/08/2011	STREET	Residential	702	JEFFERSON	AV	Unknown Discharge
	Comments/ Action Taken:	On 03/09/11, rcvd notification of a transmission fluid spill at subject address. City staff responded and observed transmission fluid in the curbline. Could not determine source. City crews conducted cleanup. Left door hangers at the location. No further action required.				
03/09/2011	STREET	Commercial	881	SHOWROOM	PL	Power Washing
	Comments/ Action Taken:	On 03/09/11 rcvd notification of Eastlake Tavern staff washing down mats and trash can into storm drain. City staff responded and observed that cleaning service washed down mats and trash cans. Issued Admin Citation along with education materials. No further action required.				
03/15/2011	STREET	Residential	533	MARIPOSA	ST	Unknown Discharge
	Comments/ Action Taken:	On 03/16/11 city staff responded to the discharge of diatomaceous earth pool filter into the storm drain. Pacific Chemical, responsible party, conducted the proper cleanup. Issued Admin Citation. No further action required.				
03/17/2011	STREET	Residential	881	ASPEN GLEN	RD	Paint Discharge
	Comments/ Action Taken:	On 03/17/11 rcvd notification of an illegal discharge into the catch basin at the subject address. City staff responded and observed contaminated tile wet saw water in the catch basin. Issued Admin Citation with full cost recovery. No further action required.				
03/22/2011	STREET	Residential	2206	ANDALUSIA	LN	Unknown Discharge
	Comments/ Action Taken:	On 03/22/11, received fourth notification from resident of neighbor washing down dog waste from garage. Resident forwarded photos to confirm. City staff responded and could not confirm discharge. Contacted HOA who stated that they will take care of this matter. HOA to continue follow-up. No further action required at this time.				
03/23/2011	STREET	Residential	1548	CAMINITO SICILIA		Leaking Vehicle
	Comments/ Action Taken:	On 03/24/11, rcvd notification of oil spill at subject address. City staff responded and observed oil staining on shared driveway. Did not enter storm drain and was dried on the asphalt. Left door hangers at all residents sharing driveway. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/24/2011	STREET	Commercial	551	TELEGRAPH CANYON	RD	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 03/24/11 rcvd notification of a concrete slurry discharge from subject address. City staff responded and observed slurry from business and running down into the storm drain. Manager stated that Blue Plant Plumbing was repairing grease interceptor the night before. Blue Planet was notified to conduct cleanup. Issued Admin Citation $200 to McDonalds. No further action required.				
03/28/2011	STREET	Commercial	588	BROADWAY		Washing Vehicle in Street
	Comments/ Action Taken:	On 03/28/11 rcvd notification of Walgreens conducting illegal carwashes. On 03/29/11 spoke with manager on the procedures to allow a charity carwash. Left several business cards for charities to contact City staff. No further action required at this time.				
03/28/2011	STORM DRAIN PIPES	Commercial	699	E	ST	Unknown Discharge
	Comments/ Action Taken:	On 03/28/11 rcvd notification of a sediment and sediment-laden water discharge at subject location. City staff responded and observed discharge coming from the Days Inn. Contractor did not use BMPs while conducting sewer lateral repairs. Issued Admin Citation with Full Cost Recovery. City crews conducted cleanup.				
04/05/2011	STREET	Municipal	707	F	ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 04/05/11 rcvd notification of used oil containers, residual oil and trash in the green waste bins. City staff observed same but was not leaching oil onto the ground. Spoke with contractor WCA and informed that they are not allowed to discharge Haz Waste and trash. Forwarded to Environmental Services. No further action required.				
04/05/2011	STREET	Residential	328	BAY LEAF	DR	Power Washing
	Comments/ Action Taken:	On 04/06/11 rcvd notification of homeowner powerwashing roof and discharging red tile dust into storm drain. Due to the extent of the discharge city crews conducted cleanup. Admin Citation Warning issued with FCR.				
04/06/2011	STREET	Other		RIENSTRA	ST	Accident/Spill
	Comments/ Action Taken:	On 04/06/11 rcvd notification of oil/antifreeze discharged into the storm drain due to car accident. City staff responded and observed same into curbline and catch basin. City contracted North State Enviromental for cleanup. FCR to responsible party. No further action required.				

Incident Date	Structure Category	Site Category	Address		Type of Violation
04/08/2011	STREET	Other	FOURTH	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 04/08/11 rcvd notification of illegal dumping of used oil into the storm drain at subject location. Responsible party unknown. CVFD, SDFD and County Hazmat responded. Contracted North State Environmental to conduct cleanup. No further action required.			
04/11/2011	STREET	Residential 898	MELROSE	AV	Unknown Discharge
	Comments/ Action Taken:	On 04/11/11 rcvd notification of water leaking from subject address onto the sidewalk. City staff responded and observed water leaking from front porch of house. Left door hanger to contact. Discharge does not enter storm drain. No further action required at this time.			
04/11/2011	STREET	Residential	INKOPAH	ST	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 04/11/11 rcvd notification of concrete slurry in the curbline at the corner of Inkopah and Melrose. City staff responded and observed minor white staining coming from under side walk drain. Responsible party not found. Staining was minor and did not pose a threat to water quality. No further action required.			
04/11/2011	STREET	Residential 2206	ANDALUSIA	LN	Other
	Comments/ Action Taken:	On 04/11/11 rcvd email and photos of resident washing down pet pens outside of garage and into the conveyance system. Based on the information rcvd it has been determined that a violation occurred. Issued Admin Citation. No further action required at this time.			
04/19/2011	CATCH BASINS	Commercial 1322	THIRD	AV	Possible Dumping into Catch Basin
	Comments/ Action Taken:	On 04/18/11 rcvd notification of possible illegal dumping of grease/food into the catch basin at the subject address. City staff responded and observed remnants of grease and food products in the catch basin. Spoke with property owner of lunch truck possibly dumping. Owner to speak with employees to ensure that this was not occurring. Will monitor.			
04/19/2011	STREET	Residential	CENTER	ST	Dirt/Sediments
	Comments/ Action Taken:	On 04/19/11 rcvd notification of a sediment discharge at the subject location. City staff responded and observed sediment in the curb line. Spoke with property maintenance supervisor who stated that the property had water main break which caused the discharge. Confirmed that there was a water line break. Contractor to conduct cleanup. No further action required.			

Incident Date	Structure Category	Site Category	Address			Type of Violation
04/25/2011	STREET	Residential	1822	OAK VIEW	TE	Slulry/Concrete Discharge
	Comments/ Action Taken:	On 04/28/11 rcvd notification of concrete slurry in the storm drain. City staff responded and observed pool filter debris washed into the curbline. Spoke with resident and they conducted cleanup of the curbline. Left education material. Verbal warning. No further action required.				
04/26/2011	STREET	Residential	354	NAPLES	ST	Sewage Spill
	Comments/ Action Taken:	On 04/28/11, rcvd notification of motorhome discharging sewage into the street. City staff responded and observed remnants of toilet paper splashed in the street. Resident approached and became extremely agitated and verbally abusive. Staff departing scene due to safety concerns. Will monitor. No further action required at this time.				
04/27/2011	STREET	Residential	1191	NAPA	AV	Pool Filter Discharge
	Comments/ Action Taken:	On 04/27/11 rcvd notification of pool filter product discharge in front of resident. Spoke with son who stated that he will sweep up all the diatomaceous earth in the curbline. Resident stated that he normally cleans in backyard but children were playing. Compliance met. No further action required.				
05/01/2011	STORM CHANNEL		62	PEPPER TREE	RD	Storm Drain Flooding Issues
	Comments/ Action Taken:	On 05/01/11, rcvd notification of private sewage lift station failure at subject address. City staff responded and observed that sewage was overflowing through manhole cover. Contacted Pepper Tree HOA to contact plumber for repairs. City staff placed BMPs to prevent further discharge. Plumber arrived on-scene and conducted temporary repairs. Issued Pepper Tree HOA Admin Citation Warning requiring that they make upgraded repairs and provide maintenance program. Compliance met. No further action required.				
05/02/2011	STREET	Residential	1145	HILLTOP	DR	Construction Debris & Waste
	Comments/ Action Taken:	On 05/02/11 rcvd notification of construction debris on sidewalk. Covered stockpile of dirt and brick in front yard. Did not encroach on sidewalk. No further action required.				
05/02/2011	STREET	Residential	660	DEL REY	PL	Unknown Discharge
	Comments/ Action Taken:	On 05/02/11 rcvd notification of debris, soot on street caused by car fire. Observed debris, sand and soot on street. Conducted initial sweeping and cleanup. Street Sweeper completed cleanup. No further action required.				

Incident Date	Structure Category	Site Category	Address			Type of Violation
05/11/2011	STREET	Commercial	100	BROADWAY		Other
	Comments/ Action Taken:	On 05/11/11, rcvd notification of Zorba's Restaurant sandblasting building causing dust into storm drain. Arrived on-scene and observed crew conducting cleanup of sand. Contacted ACPD in reference to airborne pollutants. Storm drain cleaned. Issued verbal warning on BMPs and washing mats outside. No further action required.				
05/17/2011	STREET	Commercial		MAIN	ST	Power Washing
	Comments/ Action Taken:	On 05/17/11 ecvd notification of Asada Taco Shop washing down parking lot. Arrived on-scene and observed landscaper watering grass on parkway with the water overflowing. Told staff to minimize water use and contain. Compliance met. No further action required.				
05/17/2011	CATCH BASINS	Commercial	1328	THIRD	AV	Slulry/Concrete Discharge
	Comments/ Action Taken:	Response Cancelled				
05/19/2011	STREET	Residential	457	PARK	WY	Unknown Discharge
	Comments/ Action Taken:	On 5/23/11 rcvd notification of resident working on vehicle on street. City staff responded and did not observe any work being conducted on the street. Observed minor oil staining that did not pose a problem. Left door hanger at residence. No further action required.				
05/24/2011	STREET	Commercial	1455	H	ST	Unknown Discharge
	Comments/ Action Taken:	On 5/24/11, rcvd notification of degreaser being discharged from subject location. City staff responded and did not observe any evidence of discharge near dumpster. No further action required.				
05/31/2011	CATCH BASINS	Residential	1250	SANTA CORA	AV	Other
	Comments/ Action Taken:	On 05/31/11 rcvd notification of cooking oil leaching from dumpster. On 06/01/11 responded and observed cooking oil leaching form dumpster and flowing along ribbon gutter. Spoke with maintenance supervisor who conducted cleanup and contacted Allied Waste to change out dumpster. No further action required.				

Incident Date	Structure Category	Site Category		Address		Type of Violation
06/02/2011	STREET	Commercial		THIRD	AV	Other
	Comments/ Action Taken:	On 06/02/11 rcvd notification of a contractor saw cutting without using vacuum system. Arrived on-scene and observed vacuum system deployed with no discharge. No further action required.				
06/08/2011	STREET	Residential		OLD JANAL RANCH	RD	Construction Debris & Waste
	Comments/ Action Taken:	Response Cancelled. Taken care of by Storm Drain Section.				
06/13/2011	STREET	Commercial		BROADWAY		Unknown Discharge
	Comments/ Action Taken:	On 06/13/11 rcvd notification of company discharging water into storm drain. Arrived on scene and observed Advanced Sewer Technologies vac trucks water tank dripping water. Company working for City cleaning sewer line. No further action required.				
06/15/2011	STREET	Residential		QUINTARD	ST	Other
	Comments/ Action Taken:	On 06/14/11 rcvd notification of landscaper blowing leaves and trash into storm drain. City staff responded and did not observe a significant amount of leaves in the storm drain. No further action required.				
06/15/2011	STREET	Commercial	164	BROADWAY		Power Washing
	Comments/ Action Taken:	On 06/15/11, rcvd notification of powerwashing at Rent A Wheel. On-scene observed Gary's Drywall powerwashing paint from side of building. BMPs used were not working. Additional sandbags and shop vac used to contain. Issued Admin Citation Warning. No further action required.				
06/23/2011	STREET	Residential	469	HIDDEN VISTA	DR	Washing Vehicle in Street
	Comments/ Action Taken:	On 06/23/11 rcvd notification of resident washing boat in the street. City staff responded and did not observe boat at the subject address. Left Door Hanger. No further action required.				

Incident Date	Structure Category	Site Category	Address	Type of Violation

Total: 173

Map 1 Violations Locations - All

Map 1

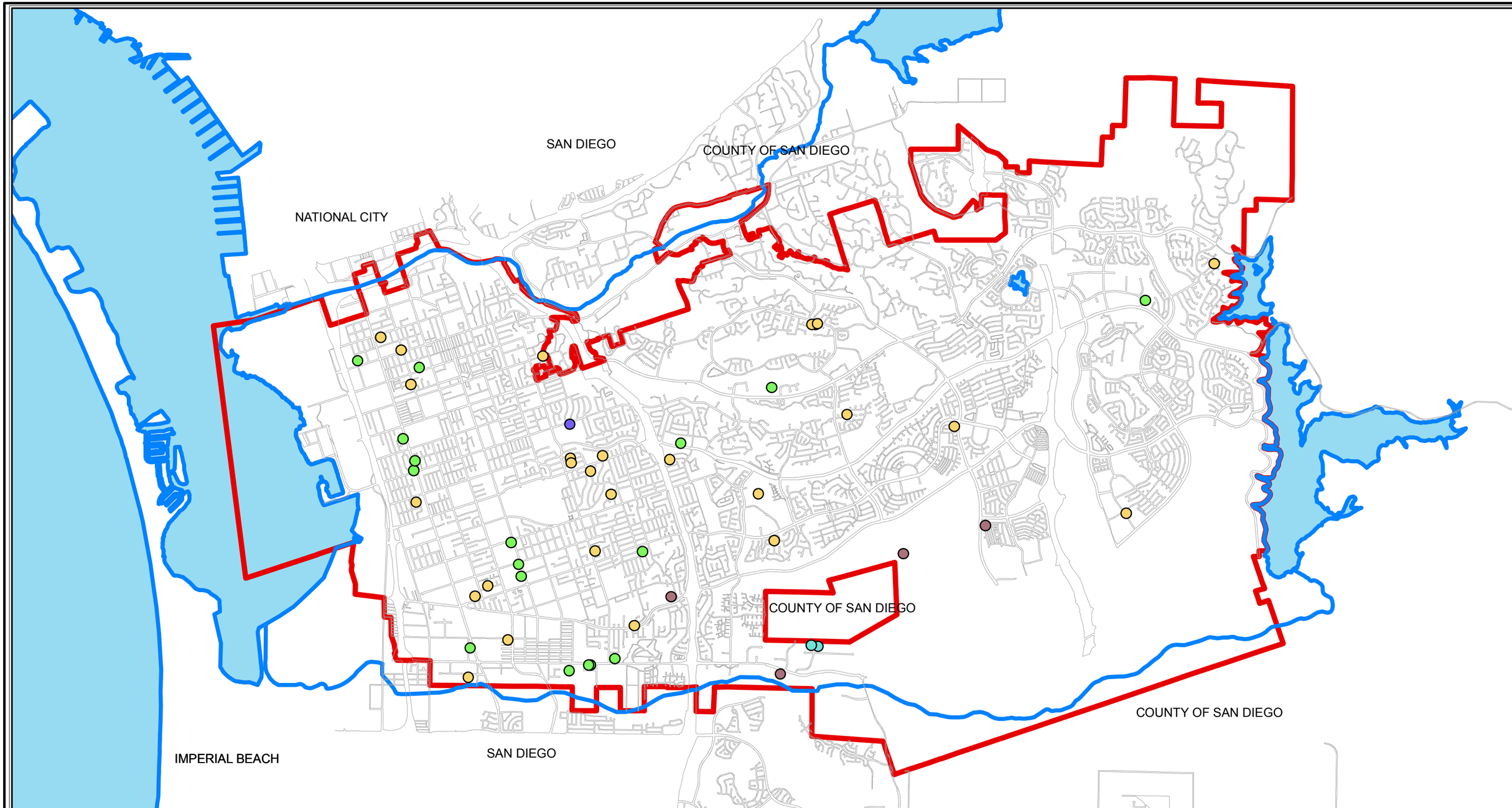

MAP 1

Jurisdictional Urban Runoff Management Program

Violation Locations FY 2010-2011

N W E S

1 0 1 2 Miles

3000 0 3000 6000 9000 12000 Feet

Commercial · Industrial · Residential · Construction · Municipal

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created: 9/22/2011

Path: P:\Projects\PUBLICWORKS\NPDES\JURMP\Jurmp11\Violations_11.mxd

• Map 2 □ HTTWQ Residential Locations

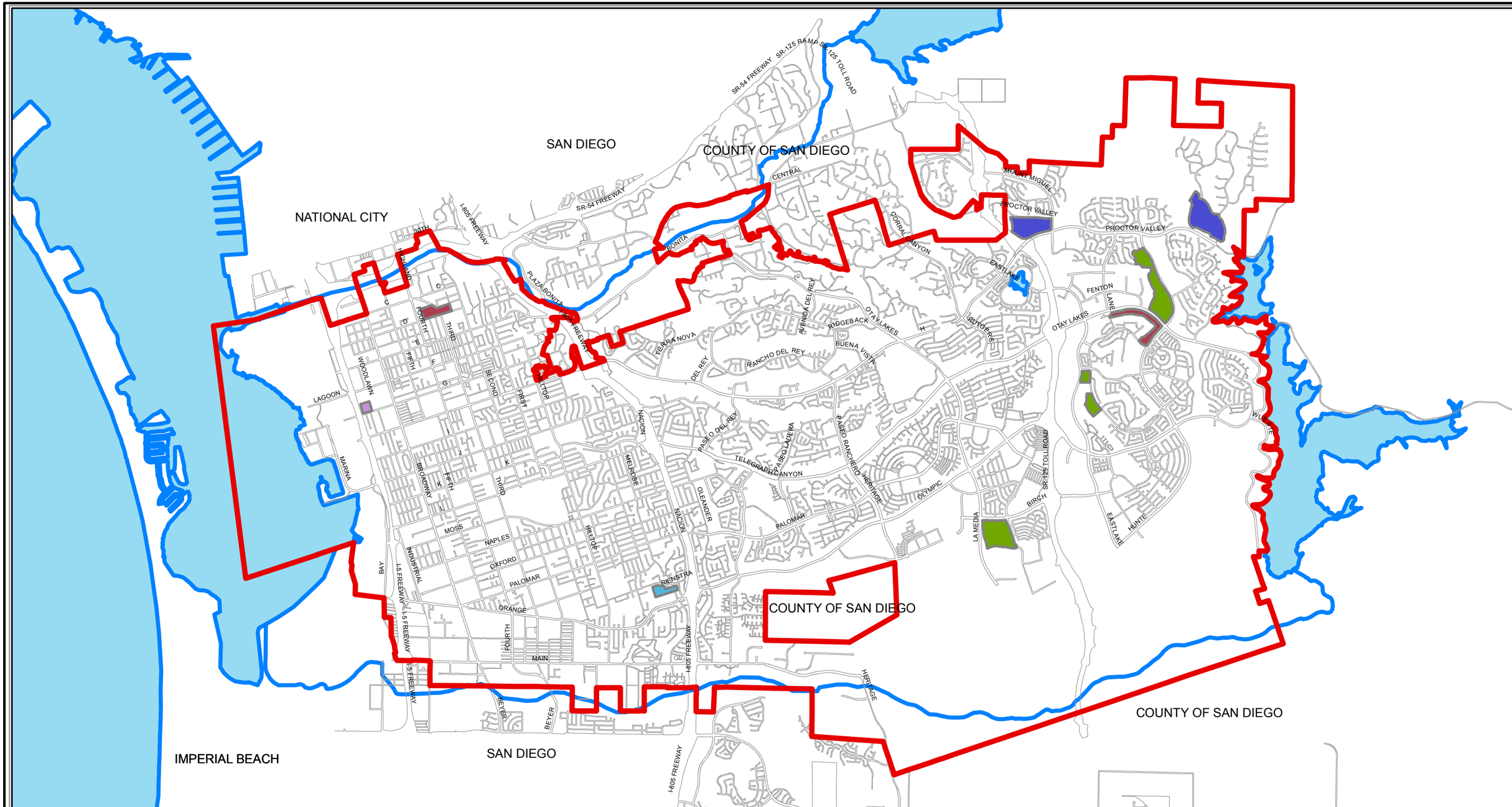

MAP 2

HTTWQ Residential Areas for FY 10 - 11

N W E S

1 0 1 2 Miles

3000 0 3000 6000 9000 12000 Feet

- Landscaping Activities - Fertilizer and Over Irrigation
- Landscaping Activities - Over Irrigation
- Landscaping Activities - Over Irrigation and Pet Waste
- Trash
- Vehicle Washing

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created: 9/22/2011

P:\Projects\PUBLICWORKS\NPDES\HTTWQ\HTTWQ10_11Res.mxd

- **Map 3 Municipal Facility Locations 303(d) Listed Waterbodies**

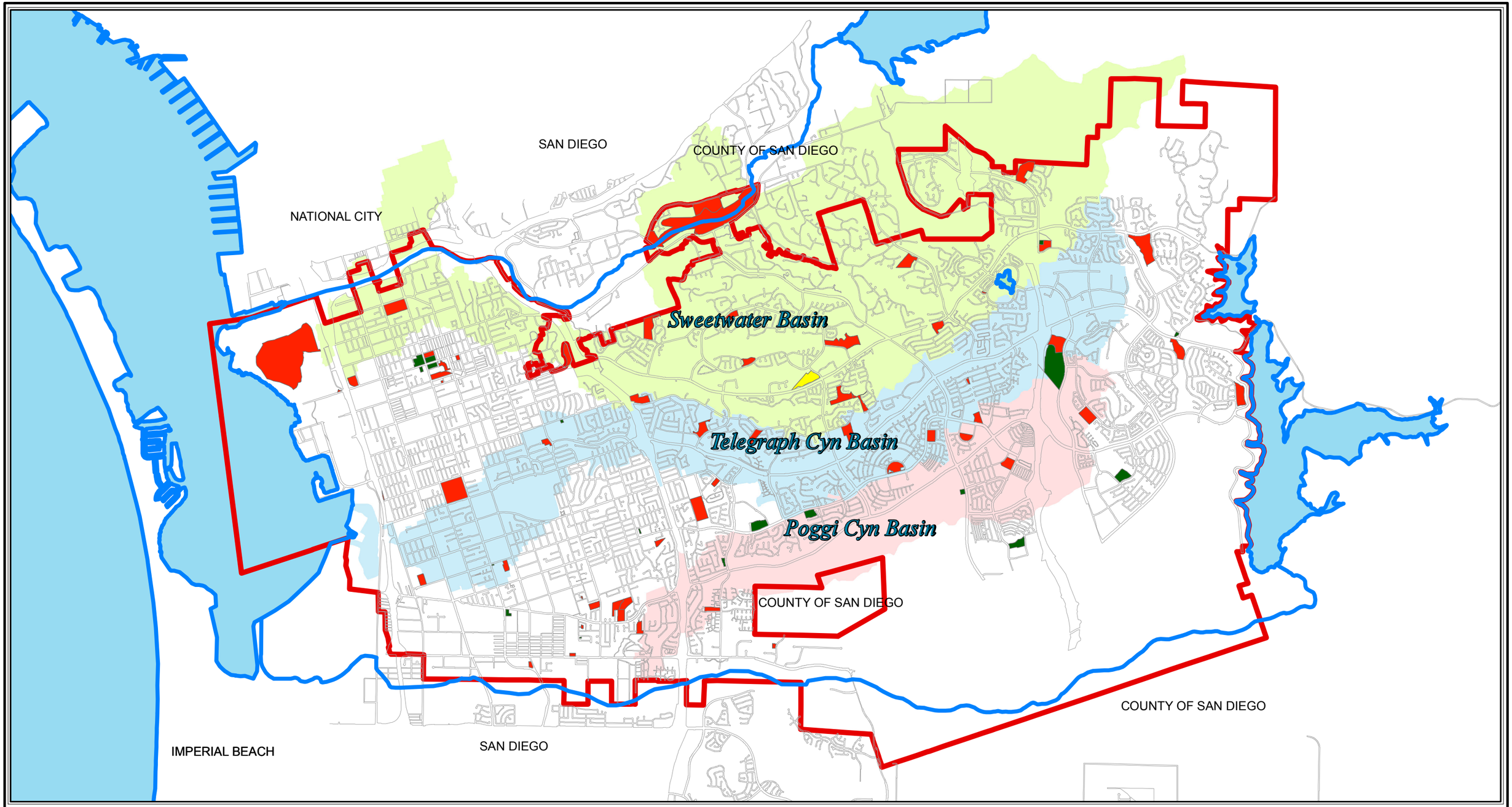

MAP 3

N W E S

1 0 1 2 Miles

3000 0 3000 6000 9000 12000 Feet

Jurisdictional Urban Runoff Management Program

Municipal Locations and Priority FY 2010-2011

Low Medium High

NOTE: Highlighted drainage basins are 303(d) listed

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created: 9/22/2011

Path: P:\Projects\PUBLICWORKS\NPDES\JURMP\Jurmp11\Municipal_by_Basin_11.mxd

- **Map 4 Commercial Facility Locations 303(d) Listed Waterbodies**

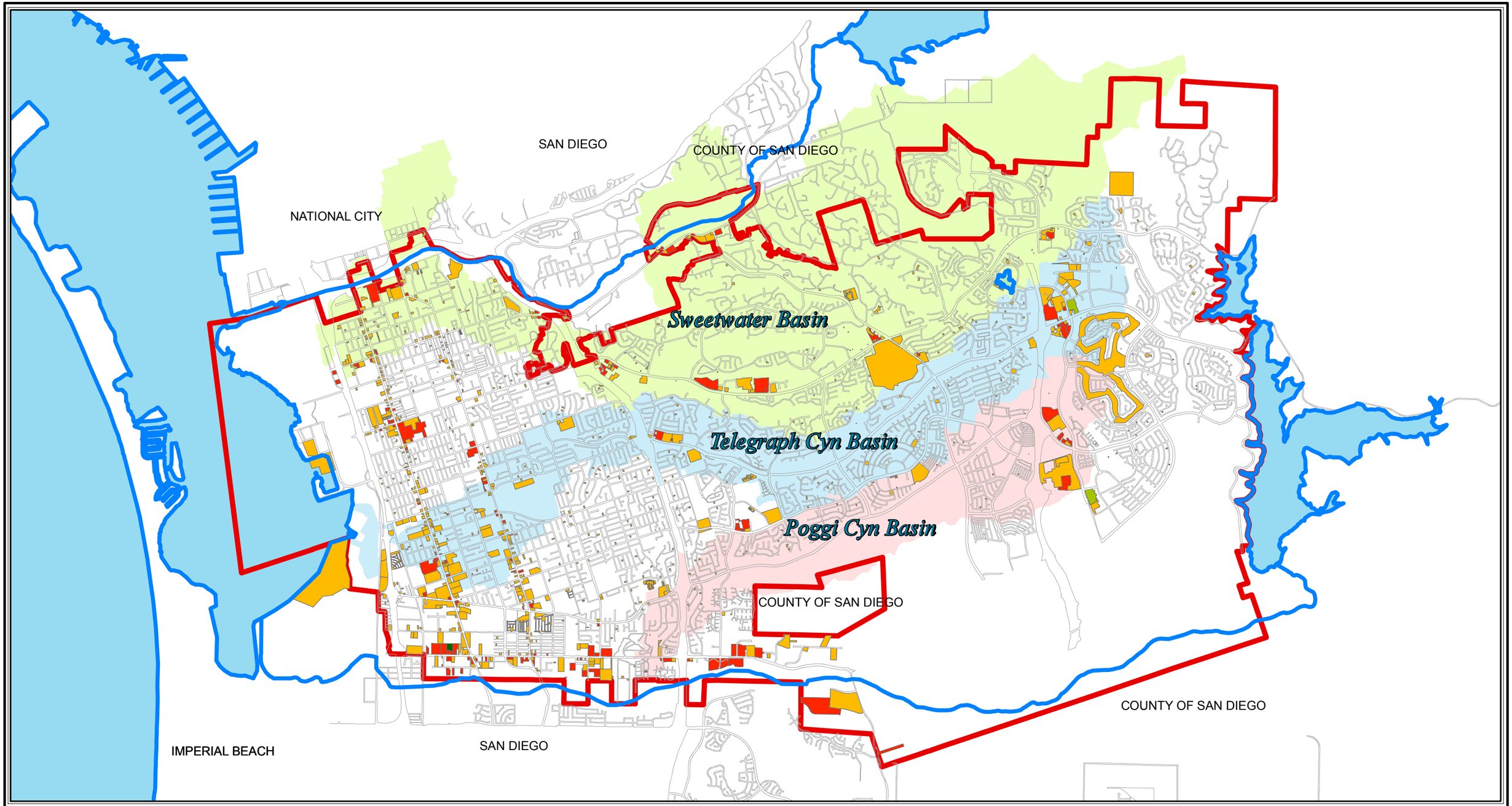

MAP 4

N W E S

1 0 1 2 Miles

3000 0 3000 6000 9000 12000 Feet

Jurisdictional Urban Runoff Management Program

Commercial Locations FY 2010-2011

High Medium

Low Other

NOTE: Highlighted drainage basins are 303(d) listed

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created: 9/22/2011

Path: P:\Projects\PUBLICWORKS\NPDES\JURMP\Jurmp11\Commercial_by_Basin_11.mxd

- **Map 5 Industrial Facility Locations 303(d) Listed Waterbodies**

Map 5

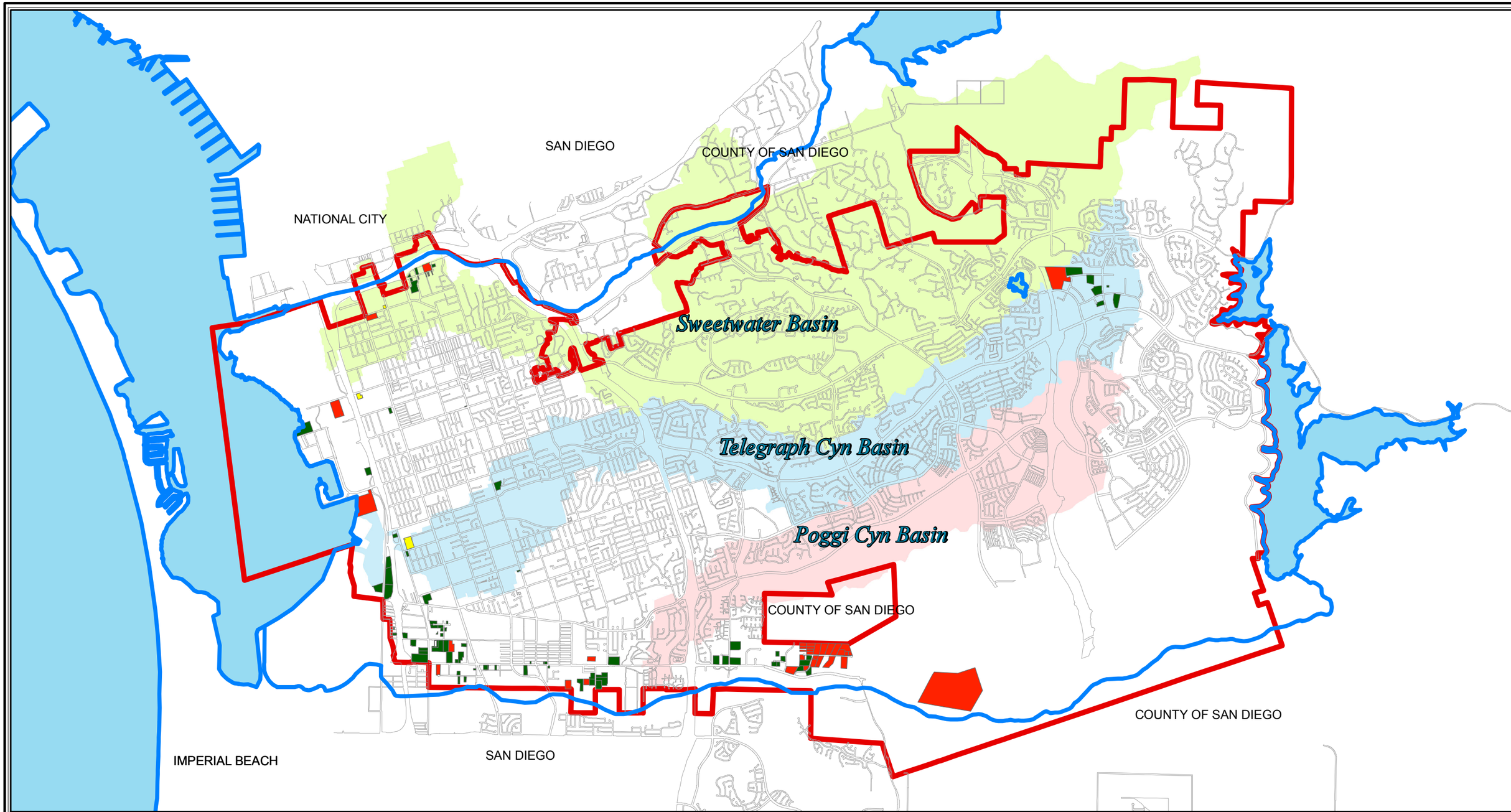

MAP 5

N W E S

1 0 1 2 Miles

3000 0 3000 6000 9000 12000 Feet

Jurisdictional Urban Runoff Management Program

Industrial Locations and Priority FY 2010-2011

Low Medium High

NOTE: Highlighted drainage basins are 303(d) listed

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created: 9/22/2011

Path: P:\Projects\PUBLICWORKS\NPDES\JURMP\Jurmp11\Industrial_by_Basin_11.mxd

Your Community. Your Environment. Your Choice.

Su Comunidad. Su Ambiente. Su Decisión.

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City of Chula Vista

Jurisdictional Urban Runoff Management Program

ANNUAL REPORT

No. 32

July 1, 2011 - June 30, 2012

The bay begins at your front door. Help keep our bay and waterways clean.

La bahía comienza en la puerta de su casa. Ayude a mantener limpios nuestros canales y nuestra bahía.

CITY OF CHULA VISTA

CITY OF CHULA VISTA

Public Works Department

September 26, 2012
File # 0780-85-KY181

San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123
Attention: Mr. David Gibson, Executive Officer

SUBJECT: JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) ANNUAL REPORT NO. 32

Please find enclosed City of Chula Vista's JURMP Annual Report No. 32 for Fiscal Year 2011-2012.

The JURMP Annual Report has been prepared in accordance with the requirements of the San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (NPDES Permit No. CAS0108758) and is a documentation of the City's implementation of and compliance with the requirements of said Permit during the reporting period July 1, 2011 to June 30, 2012.

If you have any questions regarding the submitted report, or need further information, please contact Khosro Aminpour, Senior Civil Engineer, at (619) 397-6111. Please direct any and all correspondence to:

City of Chula Vista, Department of Public Works
1800 Maxwell Road, Chula Vista, CA 91911
Attention: Khosro Aminpour, Senior Civil Engineer

WILLIAM VALLE
ASSISTANT DIRECTOR OF PUBLIC WORKS ENGINEERING

Attachments

C: Richard A. Hopkins, Director of Public Works
Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer

SIGNED CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

WILLIAM VALLE
ASSISTANT DIRECTOR OF PUBLIC WORKS ENGINEERING

9/18/12
DATE

CITY OF CHULA VISTA
JURMP Annual Report No. 32
Fiscal Year 2011-2012
SEPTEMBER 2012

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ACKNOWLEDGEMENTS

This Report has been prepared by or under the supervision of:

Silvester Evetovich, Principal Civil Engineer
Khosro Aminpour, Senior Civil Engineer
Don Bergeson, Environmental Health Specialist
Marisa Soriano, Environmental Health Specialist

Staff from the following City of Chula Vista departments, divisions, or sections has contributed to the implementation of the JURMP in 2011-2012:

Public Works Storm Water Management
Public Works Inspection Services
Public Works Wastewater Management
Public Works Environmental Services
Office of Communications
Geographic Information Systems
Development Services – Land Development
Engineering Design
Development Services – Landscape Architecture
Environmental Planning
City Attorney's Office

The following organizations have contributed to the implementation of the JURMP in 2011-2012:

- D-MAX Engineering, Inc.
- I Love a Clean San Diego, Inc.
- The CLEAN Stakeholder Group

The City of Chula Vista wishes to thank:

- Volunteers who dedicated their time to improve water quality in Chula Vista
- Environmentally conscious citizens who reported illegal discharges
- Citizens, business owners, contractors, and developers who cooperated with City staff in implementing Best Management Practices

LIST OF TERMS AND ABBREVIATIONS

APN	-	Assessors Parcel Number
BMPs	-	Best Management Practices
CASQA	-	California Storm Water Quality Association
City	-	City of Chula Vista
CIWMB	-	California Integrated Waste Management Board
CSWMP	-	Construction Storm Water Management Plan
CWA	-	Clean Water Act
ESA	-	Environmentally Sensitive Area
FY	-	Fiscal Year
GBA	-	George Butler Associates Management System
GIS	-	Geographic Information System
GPU	-	General Plan Update
HHW	-	Household Hazardous Waste
HMP	-	Hydromodification Management Plan
IHC	-	Interim Hydromodification Criteria
IPM	-	Integrated Pest Management
JURMP	-	Jurisdictional Urban Runoff Monitoring Plan
LID	-	Low Impact Development
LTEA		Long Term Effectiveness Assessment
Manual	-	Chula Vista Development Storm Water Manual
MEP	-	Maximum Extent Practicable
MS4	-	Municipal Separate Storm Sewer System
MWS	-	Modular Wetland System
NAICS	-	North American Industrial Classification System
NOI	-	Notice of Intent
NOT	-	Notice of Termination
NPDES	-	National Pollutant Discharge Elimination System
ROWD		Report of Waste Discharge
RWQCB	-	Regional Water Quality Control Board
SIC	-	Standard Industrial Classification
SSO	-	Sanitary Sewer Overflows
SUSMP	-	Standard Urban Storm Water Mitigation Plan
SWPPP	-	Storm Water Pollution Prevention Plan
SWRCB	-	State Water Resources Control Board
TAC	-	Technical Advisory Committee
TTWQ	-	Threat to Water Quality
WDID	-	Waste Discharge Identification
WQTR	-	Water Quality Technical Report

EXECUTIVE SUMMARY

On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (Regional Board) adopted the National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2007-0001 (Municipal Permit). The implementation phase of the Municipal Permit commenced on January 24, 2008. This is the fifth annual report submitted under the current permit and covers the implementation period of July 1, 2011 to June 30, 2012. Reporting requirements of this Jurisdictional Urban Runoff Management Program (JURMP) annual report is in accordance with the stipulations of Section J.3.a of the Municipal Permit.

Among other requirements, the Municipal Permit requires that on September 30th of each year, all municipalities of San Diego County (including Chula Vista) as well as the San Diego Unified Port District, the San Diego County Regional Airport Authority and the County of San Diego, collectively referred to as the Copermittees, submit jurisdictional annual reports, which provide documentation of the activities conducted by each Copermittee during the reporting period covering the previous fiscal year from July 1 to June 30. JURMP annual reports are to include descriptions of each Copermittees' efforts in the implementation of its JURMP document developed in compliance with Municipal Permit requirements to minimize discharges of pollutants to waters of the United States and other receiving waters.

As required under Section M.6 of the Municipal Permit, the Copermittees have developed a regional standardized format for JURMP annual reports. This report has, therefore, been prepared in conformance with the regional standardized format.

The present report covers subjects and areas outlined in Section J.3.a of the Municipal Permit and the Chula Vista JURMP. Although the reporting period is essentially from July 1, 2011 to June 30, 2012, some of the activities could not readily be divided to fall within the above target dates and continuation of the activities may have extended beyond this period to their completion.

This report has been prepared to provide an account of activities conducted by the City of Chula Vista (City) according to the components outlined in Section D of the Municipal Permit including:

- Development Planning
- Construction
- Existing Development (Including Municipal, Industrial and Commercial, Residential)
- Illicit Discharge Detection and Elimination (this section will be submitted under a separate cover on or before December 15, 2012, in accordance with Addendum 2 to Order No. R9-2007-0001)
- Education
- Public Participation
- Fiscal Analysis
- Assessment of JURMP Effectiveness

It is important to note that while the City discharges, directly or indirectly, to water bodies that are listed on the Clean Water Act Section 303(d) as impaired water segments; the City does not discharge to any water bodies with a Total Maximum Daily Load (TMDL) program. Therefore, a discussion of TMDLs is not included in this report.

Prior to the 2007-2008 report, the City submitted copies of its Dry Weather Field Screening and Analytical Monitoring Program report and any follow-up investigation reports for the previous dry weather season as attachments to its JURMP annual reports. Since the annual reports are now due to the Regional Board by September 30th of each year, and Dry Weather Field Screening activities can continue until September 30th, the Regional Board has agreed that Dry Weather Field Screening reports and their analysis can be submitted separately at a later date but no later than December 15th of each year. Section 7.0 of this report, the 2012 Dry Weather Field Screening report, and an analysis of its findings will be submitted to the Regional Board before December 15, 2012, as mandated by Addendum No. 2 to Order No. R9-2007-0001.

During this reporting period, the City of Chula Vista participated in the regional Receiving Water and Urban Runoff Monitoring and Reporting Program as mandated in the Municipal Permit. The County of San Diego, as the Principal Copermittee, will submit to the Regional Board the Receiving Waters and Urban Runoff Monitoring Annual Report for the 2011-2012 rainy season on January 31, 2013.

Section 11.0 of this report includes an effectiveness assessment analysis of the development and implementation of the City's Storm Water Management Program. Such analysis provides a synopsis of activities and a critical look at the overall strengths and challenges associated with the components throughout this report.

The following sections cover City of Chula Vista's strides toward continued implementation and improvement of its JURMP and, participation in regional and watershed level activities and programs from July 1, 2011 to June 30, 2012. The City is in the continuing process of assessing the effectiveness of individual program components and has made adjustments or revisions in some areas in order to improve the overall effectiveness of the program and to assure full compliance under the Municipal Permit. The City recognizes its role as a good steward of local and regional water resources, as well as the overall health of the San Diego Bay watershed.

1.0 INTRODUCTION

1.1 BACKGROUND

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollutions such as urban runoff and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issues to local governments and other agencies.

The California Regional Water Quality Control Board, San Diego Region (Regional Board), adopted the first NPDES General Municipal Permit for the San Diego Region in 1990. The NPDES Municipal Permit is re-issued approximately every five years. On January 24, 2007, the Regional Board adopted the latest NPDES General Municipal Permit for the San Diego Region, Order No. R9-2007-0001 (Municipal Permit). The Municipal Permit regulates all new development, significant redevelopment, existing land use and other activities within the jurisdictional boundaries of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and eighteen municipalities of San Diego County, collectively known as the Copermittees. The Municipal Permit requires all Copermittees to develop and implement programs to reduce the discharge of pollutants into and from their Municipal Separate Storm Sewer Systems (MS4s) and report all their efforts and achievements to the Regional Board on an annual basis.

Report No. 32 is an account of City of Chula Vista's activities and Jurisdictional Urban Runoff Management Program (JURMP) implementation efforts during the reporting period of July 1, 2011 to June 30, 2012.

During this reporting period, and pursuant to the requirements of the Municipal Permit, the City of Chula Vista (City) has:

- Implemented inspection programs of construction, municipal, industrial, commercial, and residential existing land uses.

- Provided education and training for City staff, developers, residents, and businesses on current storm water regulations and applicable Best Management Practices (BMPs) that can be implemented to reduce the discharge of pollutants to the City's storm water conveyance systems.

- Continued Dry Weather Field Screening and Analytical Monitoring, and participated in the region-wide Receiving Water Monitoring Program, both of which are designed to evaluate water quality and identify sources of pollution to and from storm water conveyance systems.

- Inspected and maintained public facilities and activities for compliance with BMPs requirements.

- Participated in watershed and regional meetings and activities.

1.2 PURPOSE AND OBJECTIVES

Report No. 32 is a documentation of the City's efforts to minimize discharge of pollutants to and from its storm water conveyance systems and to reduce the impact of urban runoff on adjacent water bodies and sensitive areas. The following account describes the City's activities on the implementation of, and compliance with, the requirements of the Municipal Permit during the reporting period July 1, 2011 to June 30, 2012. The reporting year has been guided by insight through the Report of Waste Discharge and Long Term Effectiveness Assessments undertaken regionally in 2004-2005. These regional reporting and assessment efforts have provided valuable understanding on both local and watershed conditions, and offered the City information to support programmatic development and priority establishment throughout various elements presented within this report.

Sections 2.0 to 6.0 of this report describe the City's compliance activities during the current reporting period and include the following components:

- Development Planning
- Construction Program
- Municipal Program
- Industrial and Commercial Program
- Residential Program

Section 7.0 includes a description of the City's activities and analysis of the Illicit Discharge Detection and Elimination Component. In previous years, when submittal of JURMP annual reports were due to the Regional Board on or before January 31 of each year, Dry Weather Field Screening and Analytical Monitoring report findings were referenced and analyzed in this Section, and the reports themselves were submitted as attachments to the annual report. Addendum No. 2 to Order No. R9-2007-0001 acknowledges that Dry Weather Field Screening and Analytical Monitoring reports can no longer be completed by the new due date of the JURMP annual report submittal (September 30 of each year) and, therefore, Section 7.0 of this report, together with copies of Dry Weather Field Screening and Analytical Monitoring reports will be submitted to the Regional Board on or before December 15, 2012.

Section 8.0 highlights City's efforts and activities conducted during the reporting period to increase general public awareness about environmental issues and water quality protection and train City staff, business owners, developers, contractors, and other targeted groups to implement BMPs during their daily activities.

Section 9.0 is a description of the City's attempts to promote environmental and water quality awareness among the general public and particularly young people through their involvement and participation in environmental group activities.

Section 10.0 outlines an analysis of the City's storm water management fiscal resources as required by Section G of the Municipal Permit. The Copermittees developed a Standardized Fiscal Analysis Method and Format, dated January 29, 2009, which has been used in this report as a basis for the City's fiscal analysis in this section.

Section 11.0 of this report is dedicated to the effectiveness assessment of the City's implementation of the JURMP. The document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" and Section 13 of the City's JURMP document have been utilized to draw conclusions about the effectiveness of the City's JURMP implementation. It should be noted that effectiveness assessment is an on-going component of the JURMP program, and various program elements are revised as necessary, based on observations and findings.

Section 12.0 of the Standardized Format for JURMP Annual Report is dedicated to descriptions of any special investigations conducted during the reporting period. As indicated in this section, the Telegraph Canyon Channel has been placed on the 2008-2010 303(d) list for Selenium. The listing was based on the results of four samples taken from the Telegraph Canyon Channel within the Hilltop Park, as part of the SWAMP program. During the reporting period, the City initiated a Selenium Study to collect additional samples and obtain further data. Four sites were selected along the Telegraph Canyon Channel and samples were collected and tested in May 2011. This study will be continued in the future until adequate data is available to provide statistically significant results.

Section 13.0 of this report includes a description of the City's efforts to reduce pollutant discharges from non-emergency fire fighting flows. Such efforts include training of Fire Department staff to implement BMPs during their daily activities, fire-fighting exercises, and post-incident spill control and cleanup. Incorporation of post-construction BMPs in the design and construction of new fire stations is considered to be another method for minimizing pollutant discharges from washing fire fighting equipment and other non-emergency activities at fire stations and is discussed in this section.

Section 14.0 of this report is dedicated to descriptions of modifications to the JURMP document that were made during the reporting period, or that are proposed or planned, to maximize the City's JURMP effectiveness.

Section 15.0 includes the report's conclusions and recommendations. It provides an overall view of the City's implementation of its JURMP, assesses its strengths and weaknesses in general terms, and provides recommendations to improve next year's program.

2.0 DEVELOPMENT PLANNING COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a (3)(a) i – A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.

Permit Section J.3.a.(3)(a).ii - Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).iii - A listing of the development projects to which SUSMP requirements were applied.

Permit Section J.3.a.(3)(a).iv - Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).v - At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.

Permit Section J.3.a.(3)(a).vi - A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.

Permit Section J.3.a.(3)(a).vii - An updated treatment control BMP inventory

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Permit Section J.3.a.(3)(a).viii - The number of treatment control BMPs inspected, including a summary of inspection results and findings.

Permit Section J.3.a.(3)(a).ix - A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.

Permit Section J.3.a.(3)(a).x - Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.

Permit Section J.3.a.(3)(a).xi - A listing of any projects which received a SUSMP waiver.

Permit Section J.3.a.(3)(a).xii - A description of implementation of any SUSMP waiver mitigation program.

Permit Section J.3.a.(3)(a).xiii - A description of Hydromodification Management Plan (HMP) development collaboration and participation.

Permit Section J.3.a.(3)(a).xiv - A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.

Permit Section J.3.a.(3)(a).xv - A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.

Permit Section J.3.a.(3)(a).xvi - A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.

Permit Section J.3.a.(3)(a).xvii - The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(a).xviii - A description of notable activities conducted to manage urban runoff from development projects.

2.1 INTRODUCTION

Municipal Permit Section D.1 states "Each Copermittee shall implement a program which meets the requirements of this section and (1) reduces Development Project discharges of pollutants from the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP), (2) prevents Development Project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) manages increases in runoff discharge rates and durations from Development Projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force."

This section describes actions taken during the defined reporting period by the City to minimize short- and long-term impacts of new development or redevelopment with land disturbance activities, structural development (including construction or installation of a building or structure), creation of impervious surfaces, and capital improvement projects. Through the implementation of the Development Planning Component, the City minimizes and manages increases in runoff from development projects to the MEP to protect receiving waters.

2.2 LAND-USE PLANNING

2.2.1 BACKGROUND

The City's land-use planning is guided by its General Plan and the goals, objectives, and policies included therein. The City's comprehensive General Plan Update (GPU) was completed in December of 2005. The GPU program was nearly a five-year effort, and included the

preparation of a citywide master drainage study and assessment and, a water quality baseline study to identify planning issues and policy implications, including compliance with the Municipal Permit and NPDES regulations.

Throughout the GPU process, the City solicited and received significant public input with respect to visions, goals, and objectives and conducted numerous public workshops to present and solicit input on alternative land use concepts. The GPU was adopted by City Council on December 13, 2005.

According to the Environmental Element of the GPU: "With further growth and redevelopment in Chula Vista, the projection of local and regional water resources must be adequately addressed. The City will continue its efforts to reduce the discharge of pollutants into the municipal storm drain system and natural water bodies in accordance with established NPDES standards and watershed planning efforts involving the City." One of the major objectives of the Environmental Element is to "Protect and improve water quality within surface water bodies and groundwater resources within and downstream of Chula Vista."

Water quality policies have been developed based upon those found within the Municipal Permit, and have been composed as to compliment the flow and content of the entire General Plan Update. The following water quality policies are contained in the Environmental Element:

- Ensure safely swimmable and fishable surface waters through careful management of land uses and activities within Chula Vista.
- Pursue safe alternatives to traditional pest management methods in order to reduce toxics in urban runoff and large open uses of land (e.g., golf courses, parks, agricultural lands.)
- Educate residents, business owners and City departments about feasible methods to minimize the discharge of pollutants into natural drainages and the municipal storm water conveyance system.
- Ensure compliance with current federal and state water quality regulations, including the implementation of applicable NPDES requirements and the City's Pollution Prevention Policy.
- Encourage and facilitate construction and land development techniques that minimize water quality impacts from urban development.
- Maximize the protection of potable water supply resources from pollutants.
- Collaborate with other applicable jurisdictions in the development and funding of regional watershed management plans.

In view of the above comprehensive water quality protection provisions in the Updated General Plan, the City does not find it necessary to make any amendments to its General Plan.

2.2.2 SOURCE CHARACTERIZATION

Seven categories of land uses are identified in the City's General Plan: residential, commercial, mixed-use, industrial, public, special planning areas, and streets/freeways/right-of-ways. Each category can be associated with its specific combination of activities and pollutants and the potential impact that those activities and pollutants may have on the environment, including

urban runoff quality. The City's land-use planning, project review, approval, and verification process includes environmental considerations such as source characterization, proximity to sensitive areas, pollutants and conditions of concern in receiving waters and sensitive areas, and measures necessary to minimize environmental impacts to the MEP.

Additionally, the Chula Vista Development Storm Water Manual (Manual), updated in January 2011, provides guidelines and directives for development project applicants and City staff to identify pollutants and conditions of concern for each type of land use, both during and after construction, and recommend BMPs to mitigate negative impacts of proposed activities and increased impervious areas. The City's Jurisdictional Urban Runoff Management Plan (JURMP) includes a map (Map 2 of the JURMP) showing environmentally sensitive areas within the City. Land use planning attempts to prevent, to the MEP, potentially pollutant-generating land uses from being located near environmentally sensitive areas.

During the reporting period, the City subjected all development project applications to applicable environmental review processes, including the Standard Urban Storm Water Mitigation Plan (SUSMP) process.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

To implement the policies outlined within the City's GPU, the City has developed the Manual. The Manual includes a comprehensive description of construction and post-construction BMPs that are required from each development project. Additionally, the Manual includes guidelines, flow charts, and directives for development applicants and City staff on how to identify applicable requirements for priority and non-priority projects. A section of the Manual has been dedicated to the City's SUSMP. Another section of the Manual outlines BMP requirements on construction sites during both dry and rainy seasons.

During the current reporting period, amid continued slump in development activities, the City has ensured compliance with BMP requirements through development project reviews, construction and post-construction site inspections, and enforcement actions as necessary.

2.2.4 PROGRAM IMPLEMENTATION

During the reporting period, the City successfully completed implementation of the Land Development Component of the JURMP as described in Section 2.4.4 of this report.

The Chula Vista Development Storm Water Manual (including the City's SUSMP) was updated in January 2011, in compliance with NPDES Municipal Permit requirements. This update incorporated hydromodification control requirements of the Municipal Permit. No further requirements have come into effect since and, therefore, the 2011 amendment is the current version of the Manual being implemented.

The main objective of this update was to incorporate Hydromodification Control requirements in the City's local SUSMP. During the update process, each of the City's implementation processes were objectively reviewed and, based on extensive experience gained during several

years of Municipal Permit implementation, significant improvements were made throughout all aspects of the program. Those improvements are reflected in the above referenced updated document. A copy of the updated Development Storm Water Manual is available on the City's website at http://www.chulavistaca.gov/clean/StormWater/DevelopAndConst.asp .

2.3 ENVIRONMENTAL REVIEW PROCESS

The Environmental Review Process for development and redevelopment projects occurs in two phases. The Environmental Planning Division of the Development Services Department reviews all development and redevelopment projects for compliance with California Environmental Quality Act (CEQA) requirements, which includes water quality considerations. The Permits and Land Development Divisions of the Development Services Department, and the Storm Water Management Section of the Public Works Department review development and redevelopment projects for compliance with requirements of the Clean Water Act, the Municipal Permit, and the City's Grading and Storm Water Management Ordinance requirements. Further, the Environmental Planning Division and the Storm Water Management Section, as needed, review project Environmental Impact Reports (EIRs) to ensure that water quality issues are adequately addressed at early stages of the Environmental Review Process.

The development review and SUSMP implementation processes within the City take place with close coordination of staff from various departments, divisions, and sections. The following departments, divisions, and sections are responsible for the review of development projects for SUSMP requirements:

- Development Services Department
- Public Works Department, Engineering
- Public Works Department, Operations - Storm Water Management Section

The Development Services Department, which is responsible for issuing grading and improvement permits, is the lead department for coordinating all SUSMP review activities. Development projects initiated in the Planning Division of the Development Services Department or other departments within the City are required to submit environmental documents showing compliance with all applicable environmental regulations. Initial Studies, Environmental Impact Reports, Public Facilities Finance Plans, etc., are routed to the Land Development Division for review and final approval.

Land Development Division staff reviews submitted documents and determines if a project is a Priority Development Project and subject to SUSMP requirements. All applicants are required to complete checklists included in the Manual in order to identify specific SUSMP BMP requirements.

Priority Development Projects are then required to submit Water Quality Technical Reports (WQTR) that include identification of project pollutants; low impact development site design, source control, structural treatment control, and hydromodification control BMPs; calculations for sizing of treatment control and hydromodification control BMPs; and a perpetual maintenance plan and funding mechanism. The applicants are required to sign an agreement

with the City for the maintenance of post-construction BMPs. When necessary, the Land Development Division coordinates with the Storm Water Management Section for the latest developments and requirements in the SUSMP program.

The Land Development Division and Storm Water Management staff reviews WQTRs and ensures that appropriate BMPs are included in the design of projects. Through meetings and phone calls, developers and consultants are educated on the City's SUSMP requirements and are required to revise their WQTRs to include all corrections and amendments required by the City.

As noted above, and within the current reporting period, significant efforts were made by City staff to ensure complete and comprehensive WQTR reviews. This programmatic update was introduced to make certain that each WQTR includes a fully developed assessment of each post-construction BMP considered for the project. BMP analysis is required for low impact development site design, source control, treatment control, and hydromodification control BMPs, and effectively holds project designers accountable for demonstrating the effectiveness of the overall design.

The formal review of WQTRs by the Land Development Division and Storm Water Management staff provides an essential mechanism in emphasizing the use of effective site design features and higher efficiency treatment control BMPs. It is recognized that site design and/or structural BMPs are difficult to add to the completed design of a private development project without causing substantial changes to the project's character or viability. The earlier in the planning and design process that storm water quality facilities are considered, the greater the chance that a successful and efficient design can be achieved. During the reporting period, Land Development Division and Storm Water Management staff has strongly emphasized the use of site design features and high efficiency structural BMPs to be incorporated into project design.

Sufficient analysis and discourse must be included within submitted WQTRs to answer why or why not effective and efficient site design features and treatment controls have been selected and/or incorporated into a given project design. Based on the MEP Standards included within the City's SUSMP, staff will make a determination as to whether or not there has been adequate consideration of site design and high-efficiency BMP recommendations. It is noteworthy that projects without approved WQTRs will not move further along in the development review process, providing Land Development Division and Storm Water Management staff an effective tool in the enforcement of SUSMP requirements.

Public projects are initiated in the Public Works Department, Engineering Design Section. Public projects undergo the same review process as private developments. Engineering staff has received training on SUSMP requirements, identification of SUSMP projects, and application of appropriate BMPs in project design. For complex projects, Storm Water Management staff is available for advice and assistance.

In the case of private SUSMP projects, before final approval of the project and issuance of a grading or improvement permit, the applicant is required to demonstrate that among other provisions, a program and funding mechanism for long-term maintenance of designated BMPs

are in place. The applicant is required to sign an agreement with the City for the long-term maintenance of post-construction BMPs. The agreement is recorded and runs with the land.

Citywide project tracking is managed through specialized computer software utilized by the City (Permits Plus). The Permits Plus software is shared by all development services departments, divisions, and sections within the City. The Permits Plus software package has been customized with a window for identifying SUSMP projects. All SUSMP projects are therefore readily identifiable via the Permits Plus software. Digital copies of final plans, including drainage and BMP plans, are submitted to the City's Geographic Information System (GIS) Section. They are linked to the CVMapper program, the City's internal computer-based mapping tool, for convenient accessibility to the Drainage Layer.

During the current reporting period, the City successfully implemented the environmental review process for all development and redevelopment project submittals.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

The development project approval and verification process is inherently complex due to the fact that many departments, divisions, and sections of the City are involved. As discussed earlier in this Section, and as part of the update of the City's JURMP which culminated in December 2007, specific attention was focused on identifying gaps or inconsistencies within the development project approval and verification process. During a long process of coordination with all departments involved in the development services, adjustments, amendments, and revisions were made to existing processes. As a result, a more elaborate process with new milestones, flags, checks, and notifications were added to warn staff of any shortcomings in the project approval process. A comprehensive flow chart was created to show the SUSMP implementation, approval, and verification process, together with responsible departments, divisions, and sections of the City. A copy of the referenced flow chart is included in Appendix D of the City's JURMP. During the current reporting period, City staff followed all such guidelines and procedures, and it can be asserted that a sound process is now in place. City staff involved with project review and approval is now familiar with their roles and responsibilities regarding water quality aspects of project approvals. They receive adequate training when necessary to stay abreast of the latest developments, including BMPs, Low Impact Development, and Hydromodification.

2.4.2 SOURCE CHARACTERIZATION

Development projects have the potential to discharge different types and amounts of pollutants based on the development project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's updated SUSMP describes 10 specific categories for Priority Projects and indicates common pollutants associated with each category. A Priority Project must identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

All development projects, including non-Priority Projects, are required to meet the applicable BMP requirements as outlined in the Manual.

During the current reporting period, all development projects were required to identify their proposed land uses and activities that may potentially generate pollutants. Such pollutants were compared to pollutants of concern within downstream receiving waters. Applicable BMPs were required during the project approval and verification process.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are outlined below and are included in the Manual (Forms 5501 and 5504A or 5504B of the Manual). All development projects are required to implement the following principles, where applicable:

- Source control BMPs that reduce storm water pollutants in urban runoff, including storm drain stenciling and signage, properly designed material and trash storage areas, and use of efficient irrigation systems.

- Low Impact Development (LID) BMPs that maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary.

- BMPs applicable to individual project categories

- Provide buffer zones or other buffers for natural water bodies.

- Grading and construction activities must implement all applicable erosion and sediment control BMPs and minimize the discharge of non-visible pollutants.

- Submittal of proof of a mechanism for ongoing long-term maintenance of all structural post-construction BMPs.

Priority Development Projects are additionally required to meet the City's SUSMP requirements included in Section 3 of the Manual. Also, projects disturbing one or more acre of land are required to comply with the Construction General Permit requirements of the State Water Resources Control Board.

During the project approval and verification process, all project submittals were reviewed for compliance with the minimum BMP requirements described above.

2.4.4 PROGRAM IMPLEMENTATION

The City's SUSMP document was developed around the regulatory standards mandated in the Municipal Permit to address post-construction urban runoff pollution from new development and significant redevelopment projects. The goal of the SUSMP is to develop and implement policies to ensure that to the maximum extent practicable, development does not increase pollutant loads from a project site and considers runoff flow rates and volumes. The City's SUSMP is incorporated into a document titled "Development Storm Water Manual," available on the web at:

http://www.chulavistaca.gov/clean/StormWater/DevelopAndConst.asp

In addition to the City's SUSMP, the Manual includes guidelines for developers and other interested parties to understand the City's storm water review process; forms required to establish eligibility under various project requirements; and a section on minimum BMPs requirements during project's construction phase.

In January 2011, City Council approved the updates to the City's SUSMP and Manual. The Updated SUSMP and Manual incorporate standards for construction and post-construction phases of development and redevelopment projects that meet the requirements of the Municipal Permit. The City's Storm Water Management and Discharge Control and Grading Ordinances incorporate the Manual (which includes the City's SUSMP) by reference, therefore, making its contents legally enforceable.

2.4.4.1 NOTABLE ACTIVITIES

In 2011-2012, notable improvements in processes and protocols supporting SUSMP implementation were made by Storm Water Management staff in efforts to continually refine this program element. Significant programmatic updates included:

- Adoption of more stringent standards for post-construction Low Impact Development Site Design BMPs, Source Control BMPs, Treatment Control BMPs, and Hydromodification BMPs.
- Emphasis on the use of structural BMPs with high pollutant removal efficiency.
- Requirements to fully develop WQTRs discussions to evaluate the use of all post-construction BMPs considered.
- Continued population of post-construction BMP GIS layer, including the addition of project-specific WQTR document and Maintenance Agreement links through the Grading Plan Layer.
- Creation of flags and checks in the SUSMP review and implementation process to ensure that all SUSMP projects are properly tracked and documented.
- Site inspections of all development projects to ensure proper installation of construction and post-construction BMPs.

On July 14, 2010, the Regional Water Quality Control Board approved the Final Hydromodification Management Plan submitted by the Copermittees. Subsequent to this

approval and throughout the current reporting period, City staff continued active participation in regional meetings and activities, which focused on issues concerning the implementation phase of this program component and other development planning issues.

2.4.4.2 CONFIRMATION OF APPROVAL PROCESS

During the reporting period, all private development projects submitted to the City for review and approval of construction or grading permits, and public projects initiated by the City were required to undergo the urban runoff approval process and meet the applicable project requirements. Private development permit applications are tracked in Permits Plus, which is a project-tracking software shared by all departments and divisions involved in development services. Flags and checks have been established in Permits Plus to ensure that all Priority Development Projects undergo the appropriate review and documentation process. Copies of approved WQTRs, grading or construction plans, and post-construction BMPs' maintenance agreements are scanned and electronically saved. The City maintained the database necessary to link the above referenced documents and the CVMapper software, which is a mapping tool based on the GIS system. This system enables City staff to get copies of the above referenced documents by clicking on the project's grading layer and to make prints as necessary.

Public projects are tracked in a database maintained by the City's Public Works Department, Engineering. A list of all public projects, showing the status of each project, is distributed to various staff members on a monthly basis. The list, among other information, includes a column showing environmental requirements for each project, including WQTRs and Storm Water Pollution Prevention Plans. The list is discussed in monthly meetings set up specifically for public projects. A Storm Water Management Section representative attends such meetings and provides input as necessary.

2.4.4.3 LISTING OF SUSMP PROJECTS

A listing of development projects subject to SUSMP requirements is included in Attachment A. This list includes the names of all Priority Development or Redevelopment Projects from the inception of the SUSMP program on December 9, 2002 to the end of the current reporting period. The list is updated annually to include Priority Development Projects for which development applications have been received and SUSMP eligibility identified during that reporting period. The listed projects may be currently in different phases of review, construction, or occupancy. Some are still under review, while others are under construction or have been completed. The list is categorized for various phases of projects, including: 1) Pending, 2) Inactive, 3) Under Construction, or 4) Completed. Pending refers to projects that have not completed their project review process and are either on hold or being reviewed by City staff. Completed projects have completed their construction and should have permanent BMPs in place.

2.4.4.4 CONFIRMATION OF SUSMP BMP APPLICATION

The Municipal Permit establishes requirements for post-construction BMPs on Priority Development and Redevelopment Projects. In order to develop regional standards and criteria for compliance with Municipal Permit requirements, the Copermittees have developed Model and local SUSMPs. All project applicants are required to complete forms that are included in the Manual to determine post-construction BMP requirements for their projects. City staff verifies proper completion of such forms and informs applicants of their required study reports and project submittals. Project submittals are then reviewed based upon this initial determination.

As required by the Municipal Permit, the City updated its local SUSMP for the first time in January 2008 to include Low Impact Development and Interim Hydromodification Management requirements, as well as other construction and post-construction criteria and standards. Subsequently, the Copermittees updated their Model SUSMP and submitted it for the Regional Boards approval in July 2008. The Regional Board approved the Model SUSMP on March 25, 2009. In March 2010, the City again updated its local SUSMP to incorporate the provisions of the Model SUSMP. In July 2009 and December 2009, the Copermittees submitted their draft and final Hydromodification Management Plans to the Regional Board. The Regional Board considered and approved the final Hydromodification Management Plan on July 14, 2010. The Copermittees had 180 days after approval of the Regional Board to incorporate the HMP into their local SUSMP and implement the HMP for all applicable Priority Development Projects. The City's current Manual, which came into effect on January 10, 2011, includes requirements for Final Hydromodification Control BMPs.

Based on the MEP standards included within the City's SUSMP, staff makes a determination as to whether or not there has been adequate consideration of site design and high efficiency BMP recommendations. Priority Development Projects without approved WQTRs do not move further along in the development review process, providing Land Development and Storm Water Management staff an effective tool in the enforcement of SUSMP requirements.

Project grading or construction plans are required to show all approved structural BMPs. Non-structural BMPs are described in the project's WQTR. Public Works Inspectors and Storm Water Management staff ensure that development projects are constructed according to approved plans. This includes verification inspection and approval of installed or constructed structural treatment control BMPs.

For tracking of post-construction BMPs, Storm Water Management staff has coordinated with the Public Works Inspectors and the Building Inspectors to be notified upon Notice of Final Inspection and Certification of Occupancy and the final release of any Bonds. Copies of notices are sent to Storm Water Management staff for final inspections and confirmation of SUSMP BMP applications of such Priority Development projects to ensure proper installation of post-construction BMPs.

In order to track confirmation of post-construction BMPs, and as an on-going activity, the City's GIS system is continuously updated with post-construction BMP information; further supporting

project tracking and post-construction BMP inventory management. The GIS database is populated with post-construction BMP information including the types of BMPs, and provides links to applicable project plans, copies of WQTRs, and maintenance agreements, where applicable. WQTR documents are made available through the GIS Grading Plan layer as they are linked to individual projects (Figure 2-1 – CVMapper GIS Layer). This process facilitates inspections and verifications of post-construction structural BMPs. A GIS layer containing all publicly or privately maintained treatment control BMPs is utilized to verify and maintain such facilities (Figure 2-2 – GIS Layer: Grading Plans & WQTR Links). In addition, all privately or publicly maintained treatment control BMPs are being added to the BMP layer to facilitate their tracking and mapping. Also, files containing hard copies of grading plans, WQTRs, maintenance agreements, and other pertinent information are being created and maintained to support and facilitate construction verification and maintenance inspections of post-construction BMPs. (Figure 2-3 – GIS Layer: Post Construction BMPs).

Figure 2-1 CVMapper GIS Layer

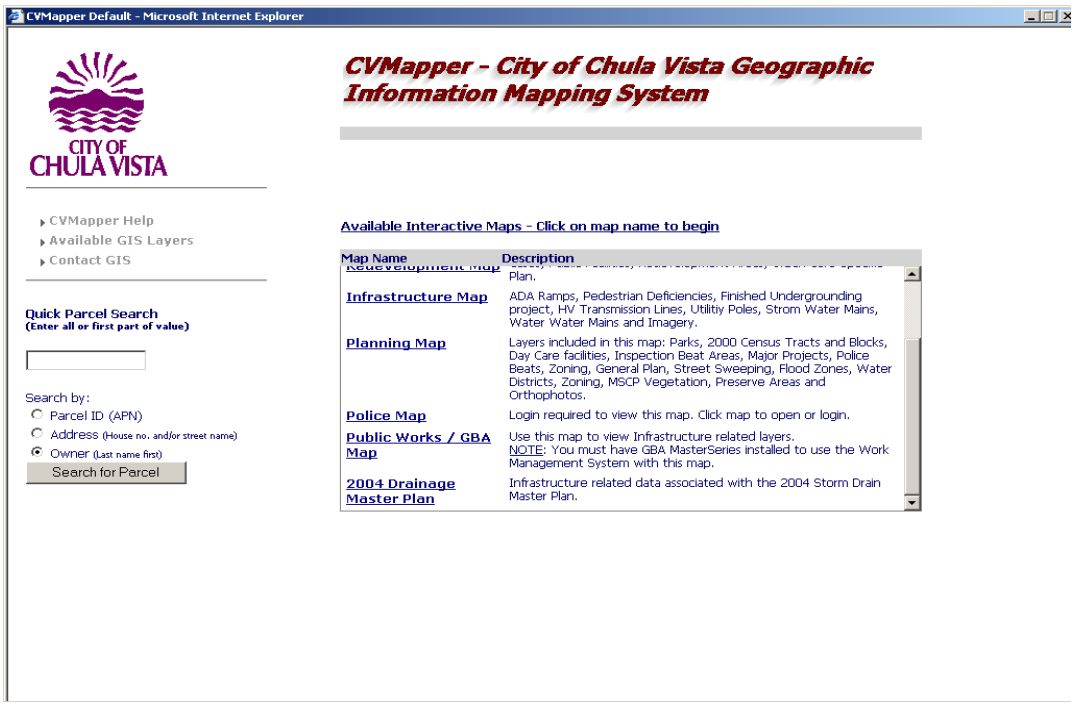

Figure 2-2 GIS Layer: Grading Plans and WQTR

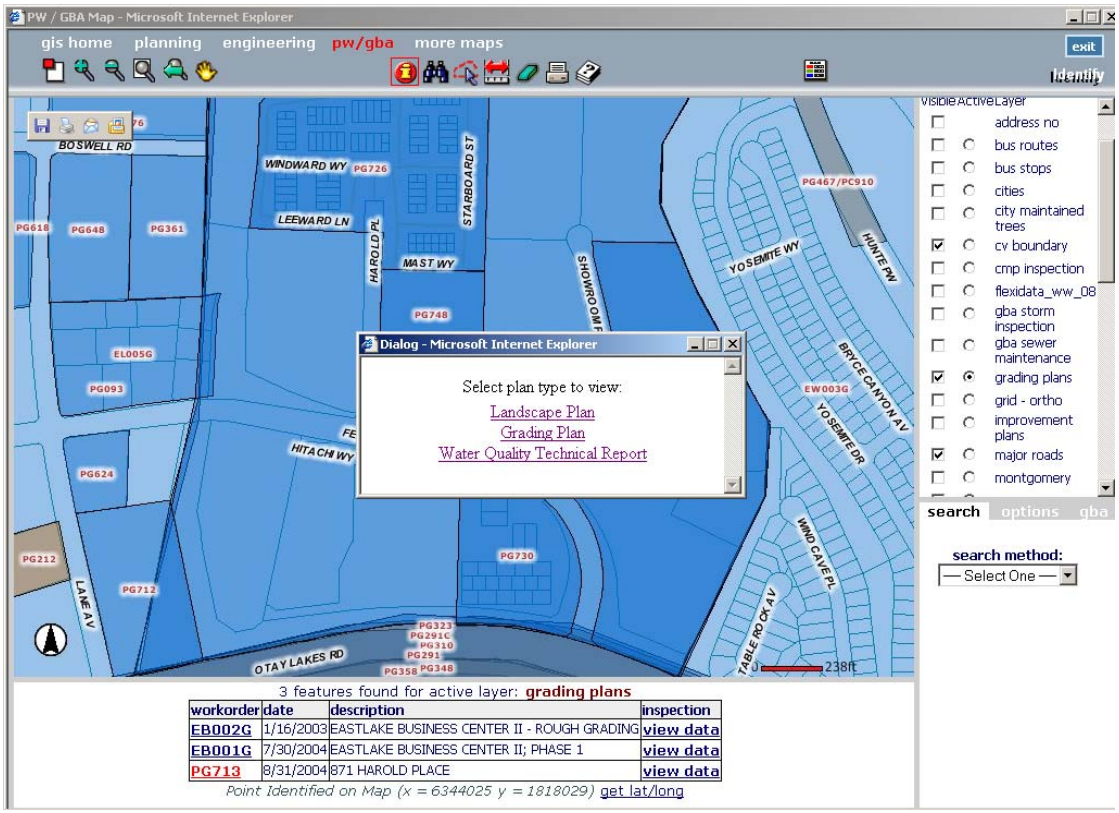

Figure 2-3: GIS Layer: Post Construction BMPs

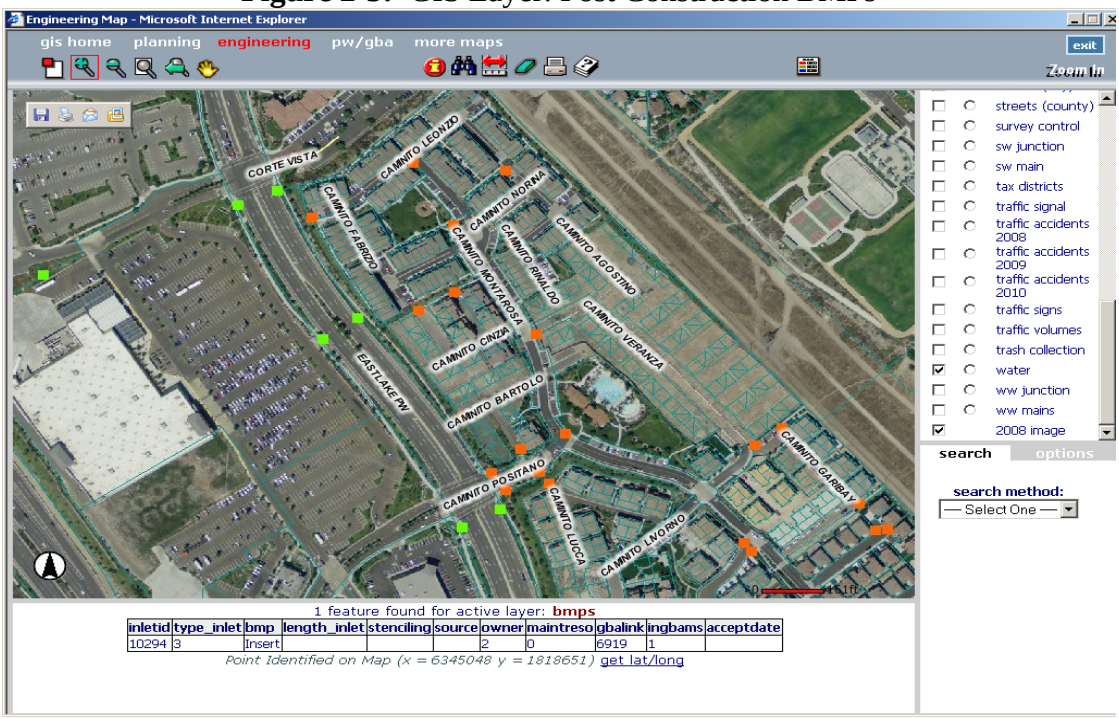

All pending, inactive, under construction, or installed Post-Construction BMPs and Priority Projects are inventoried and tracked by Storm Water Management staff utilizing the City's GBA Master Series program. The database includes the following information:

- Project name
- WQTR, Plans are scanned and linked into GIS (CVMapper)
- Type of treatment control BMP installed or approved
- Number of Treatment Units installed
- Location of the BMP (Development name, area, neighborhood, etc.)
- Project category (Municipal/Capital Improvement Plan, Residential, Commercial, etc.)
- Project status (Pending, inactive, under construction, completed)
- Priority
- Public or privately maintained
- Watershed within which the BMP is located
- The party responsible for maintenance of the BMP
- Name of person or company who conducted maintenance
- Maintenance certifications or verifications
- Inspection reports and findings
- Any corrective actions issued

See Attachment A for an updated listing of Priority Projects that were subject to SUSMP requirements. See Figures 2-4, 2-5, and 2-6 – GBA Master Series – SUSMP Verification and Maintenance Tracking, for examples of SUSMP tracking forms.

Figure 2-4 GBA Master Series: SUSMP Verification and Maintenance Tracking Database A

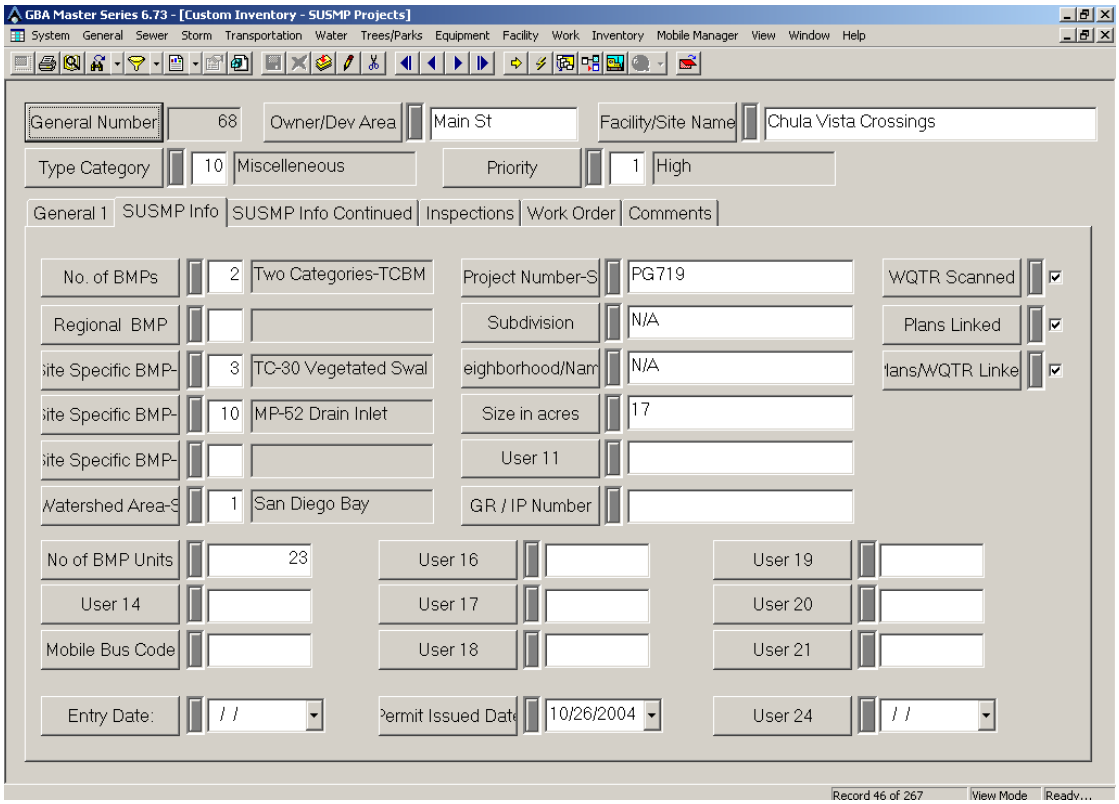

Figure 2-5 GBA Master Series: SUSMP Verification and Maintenance Tracking Database B

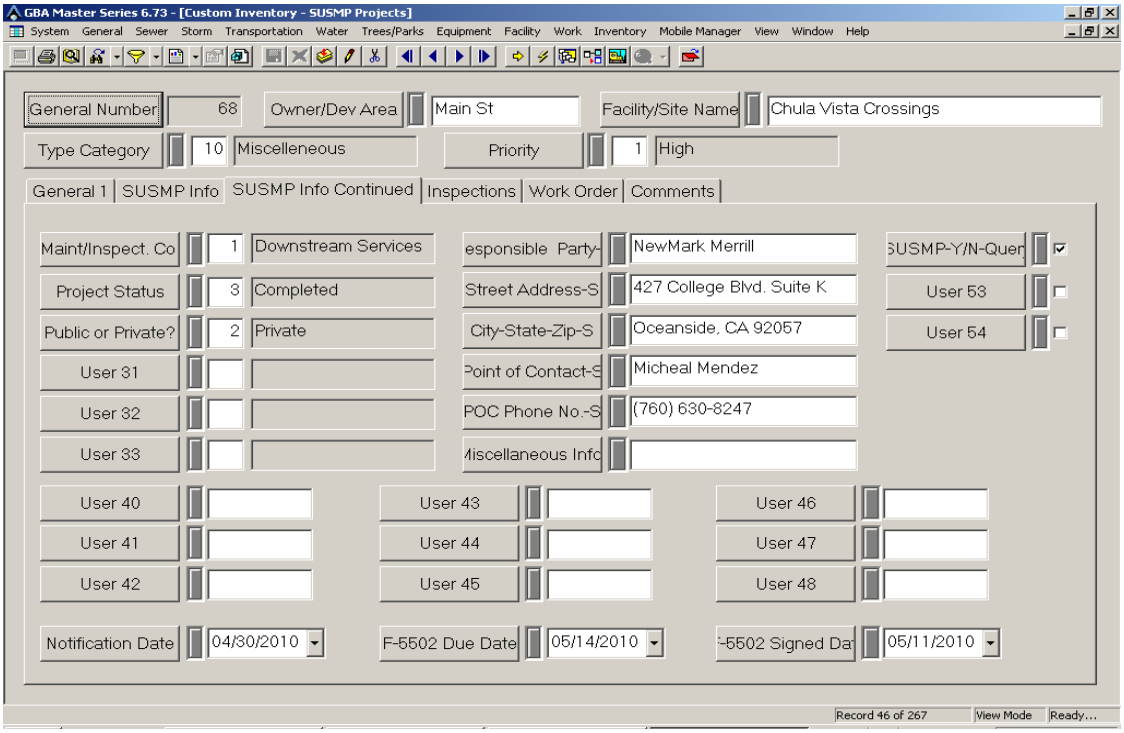

Figure 2-6 GBA Master Series: SUSMP Verification and Maintenance Tracking Database C

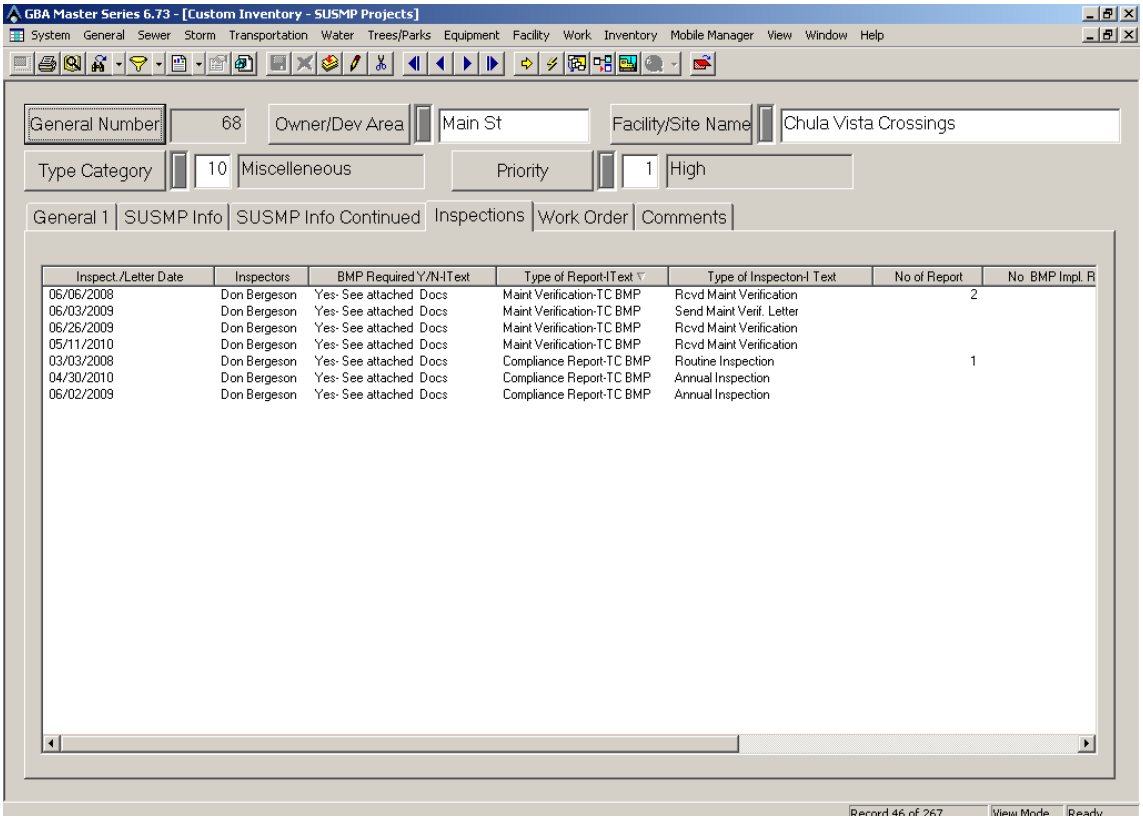

2.4.4.5 EXAMPLE PRIORITY DEVELOPMENT PROJECT

The City works with developers, planners, and consulting engineers to establish standards of source control, LID site design, treatment control, and hydromodification control BMPs that meet the requirements of the Manual and the Municipal Permit. An example of such cooperation during the current reporting period was the Olympic Pointe project. This project, which is located at the intersection of Olympic Parkway and Wuste Road in Chula Vista comprises of 389 apartment units on a 19.6 acre parcel. The pre-project site consisted of a rough graded pad. The project includes three types of condominium units – two-story triplexes, three-story row homes, and three-story carriage units. Private streets within the project consist of a main entrance road, a loop road around the perimeter of the site, and alleys which provide access to the majority of the condominium units. Parking for the units are provided in garages, with surface parking for guest and visitors. Three recreation centers are located throughout the project. The Olympic Pointe project was subject to hydromodification mitigation requirements. Further, the project was subject to the statewide Construction General Permit, Order No. 2009-0009-DWQ. Permanent BMPs in the form of source control, Low Impact Development (LID) site design BMPs, and treatment control BMPs were incorporated into the project. Treatment control BMPs consisted of a combination of media filters and high-rate biofilters, while hydromodification control BMPs were in the form of underground storage facilities. Maintenance of the above referenced permanent BMPs is the responsibility of the property owner(s).

2.4.4.6 LIST OF PROJECTS WITH LOW EFFICIENCY BMPS

During the current reporting period, all Priority Development Projects that received grading, construction, or building permits from the City proposed medium or high-efficiency treatment control BMPs. No SUSMP projects with low-efficiency treatment control BMPs were approved.

2.4.4.7 TREATMENT CONTROL BMP INVENTORY

In Chula Vista there are 286 Priority Development Projects completed or under construction, inventoried from the inception of the SUSMP requirements to the end of the current reporting period. Projects that are still in the review stage are not included in the inventory and are not prioritized until the final WQTR is approved and the project construction commences. Attachment A of this report includes an inventory of all Priority Development Projects that have operational or under construction treatment control BMPs. The information provided in Attachment A includes the project name, subdivision, neighborhood, BMP type, category (residential, commercial, etc.), and inspection priority. The City maintains individual project files that include more detailed information regarding the type, number, and location of Treatment Control BMPs on each Priority Development Project as well as post-construction BMPs inspection records.

2.4.4.8 INSPECTION OF TREATMENT CONTROL BMPS

Storm Water Management Section staff is responsible for annual inspections of private and public constructed permanent BMPs as required by the Municipal Permit. Additionally, responsible parties for the maintenance of permanent BMPs are required to conduct routine

inspections of their treatment facilities. For public permanent BMPs, the City's Public Works Storm Drain Maintenance staff is responsible for conducting routine inspections and maintenance. This duplicate inspections program ensures that all permanent BMPs are maintained to high operational standards.

During the current reporting period, Storm Water Management staff conducted inspections of all High Priority and over fifty percent of Medium Priority constructed permanent BMPs to verify their proper installation and maintenance, which exceeds Permit requirements. A summary of inspections is listed in Table 2-1 below, which includes both private and public permanent BMPs inspections. Where deficiencies were identified, notices were sent out to responsible parties, followed by further contacts to ensure that corrective actions were taken within the specified time period. For a detailed list of projects inspected for post-construction BMPs, please refer to Attachment F.

Table 2-1 Treatment Control BMP Inspection Summary FY 2011-2012

PROJECT PRIORITY	TOTAL NUMBER OF PROJECTS	NUMBER OF PROJECTS INSPECTED
High	118*	93
Medium	105	48
Low	77	2
Total	300	143

**Note: Of the 118 high priority projects, 11 were under construction, 2 were inactive, and 12 projects were pending.*

As can be seen from Table 2-1, a total of 143 development projects were inspected for post-construction BMPs during the current reporting period, which meets and exceeds Municipal Permit requirements. Attachment F to this report includes more detailed information about each project, such as, inspection dates, project names, neighborhood, types of BMPs installed, categories (commercial, residential, etc.), inspection priority, development, and responsible party. The list includes both private and public projects. Depending on the findings during the course of initial inspections, follow-up inspections were conducted as necessary.

Public Works Department Storm Drain Maintenance Section conducts routine inspections and maintenance of publicly owned permanent BMPs. Storm Drain Maintenance Section staff, utilizing GBA Master Series computer software, tracks all publicly owned post-construction BMPs and creates work orders for conducting inspection and scheduling maintenance of the BMPs. Maintenance records for permanent BMPs are tracked in the GBA Master Series computer software. Please refer to Figure 2-7 for a sample of Publicly Maintained Treatment Control BMP Inspection and Maintenance Report.

Figure 2-7 Sample Publicly Maintained Treatment Control BMP Inspection and Maintenance Report

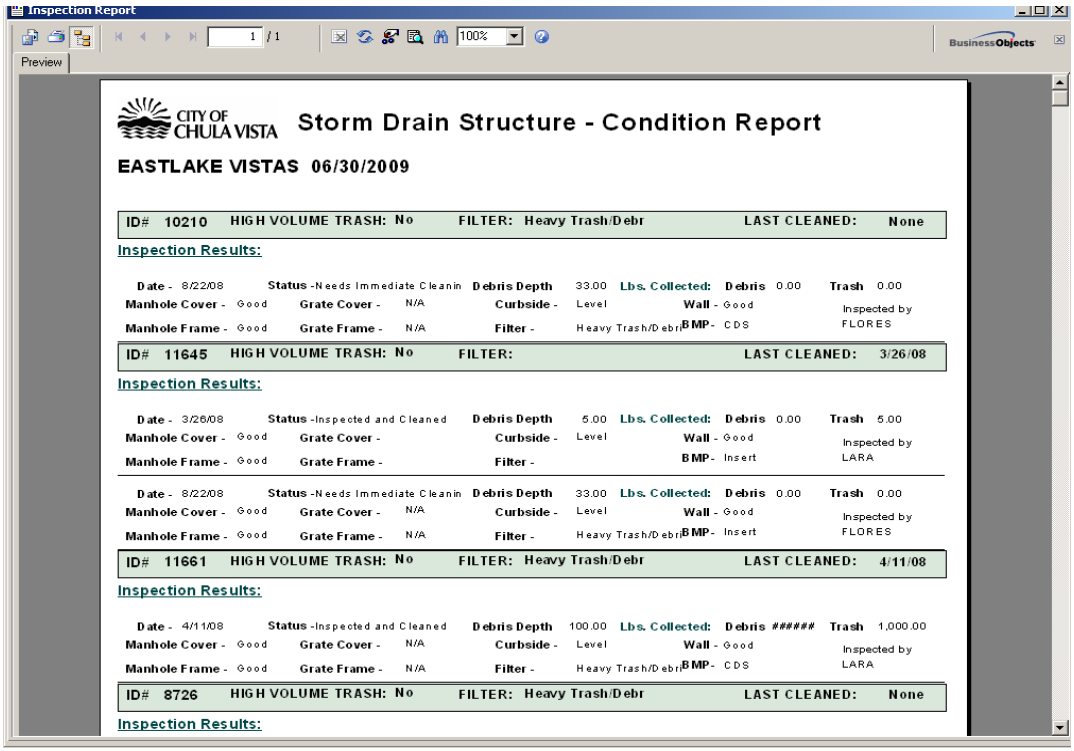

Inspection Report

Preview

CITY OF CHULA VISTA **Storm Drain Structure - Condition Report**

EASTLAKE VISTAS 06/30/2009

ID#	HIGH VOLUME TRASH:	FILTER:	LAST CLEANED:
10210	No	Heavy Trash/Debr	None

Inspection Results:

Date	Status	Debris Depth	Lbs. Collected:	Debris	Trash
8/22/08	Needs Immediate Cleanin	33.00		0.00	0.00

Manhole Cover -	Good	Grate Cover -	N/A	Curbside -	Level	Wall -	Good
Manhole Frame -	Good	Grate Frame -	N/A	Filter -	Heavy Trash/Debri	BMP-	CDS

Inspected by FLORES

ID#	HIGH VOLUME TRASH:	FILTER:	LAST CLEANED:
11645	No		3/26/08

Inspection Results:

Date	Status	Debris Depth	Lbs. Collected:	Debris	Trash
3/26/08	Inspected and Cleaned	5.00		0.00	5.00

Manhole Cover -	Good	Grate Cover -		Curbside -	Level	Wall -	Good
Manhole Frame -	Good	Grate Frame -		Filter -		BMP-	Insert

Inspected by LARA

Date	Status	Debris Depth	Lbs. Collected:	Debris	Trash
8/22/08	Needs Immediate Cleanin	33.00		0.00	0.00

Manhole Cover -	Good	Grate Cover -	N/A	Curbside -	Level	Wall -	Good
Manhole Frame -	Good	Grate Frame -	N/A	Filter -	Heavy Trash/Debri	BMP-	Insert

Inspected by FLORES

ID#	HIGH VOLUME TRASH:	FILTER:	LAST CLEANED:
11661	No	Heavy Trash/Debr	4/11/08

Inspection Results:

Date	Status	Debris Depth	Lbs. Collected:	Debris	Trash
4/11/08	Inspected and Cleaned	100.00		######	1,000.00

Manhole Cover -	Good	Grate Cover -	N/A	Curbside -	Level	Wall -	Good
Manhole Frame -	Good	Grate Frame -	N/A	Filter -	Heavy Trash/Debri	BMP-	CDS

Inspected by LARA

ID#	HIGH VOLUME TRASH:	FILTER:	LAST CLEANED:
8726	No	Heavy Trash/Debr	None

Inspection Results:

2.4.4.9 VERIFICATION AND MAINTENANCE INSPECTION OF TREATMENT CONTROL BMPS

During the reporting period, a total of 106 maintenance self-verification forms were sent out to parties responsible for the maintenance of completed private Priority Development Projects (see City's JURMP document Appendix D).

It should be noted that City's Storm Drain Maintenance Section is responsible for the routine inspections and maintenance of Treatment Control BMPs on public right-of-way as well as private developments covered under Community Facility District (CFD) agreements. Those Treatment Control BMPs are inspected and maintained in accordance with a scheduled maintenance program, which is tracked by the GBA Master Series program. It is therefore not necessary to send out verification letters for that type of projects. By conducting random inspections of public Treatment Control BMPs, Storm Water Management Section ensures that the level of maintenance on such facilities is adequate.

Further, some developments have regional Treatment Control BMPs, for which a single entity is the responsible party for maintenance. Therefore, a single letter was sent to each responsible party for regional Treatment Control BMPs, which covered several SUSMP projects.

The above discussion explains the apparent discrepancy between the total number of SUSMP projects and the total number of maintenance self-verification letters sent out during the current reporting period.

During this reporting period, responsible parties were aware of their BMP cleaning and maintenance obligations. The City worked closely with the responsible parties to ensure that the BMPs were inspected and maintained. The City continues to re-evaluate its annual maintenance verification procedures and may modify the program if necessary.

Prior to the beginning of the rainy season, the City requires annual verification of proper inspection and maintenance of all treatment control BMPs by the responsible parties. Each year, the City issues to the responsible party, either electronically, by fax, or by certified mail, a Treatment Control BMP Maintenance Package that includes: 1) an annual verification cover letter, 2) a Storm Water Treatment Facilities Inspection/Maintenance Verification Form (Form 5502), and 3) if necessary, a Compliance Report – Treatment Control BMP Inspection, which includes a summary of the inspection results and findings, pertinent sections of the WQTR, and BMP Location Site Plans.

This package informs the responsible parties of the Treatment Control BMPs, for which they are responsible; and requires the responsible parties to sign the verification form and certify that the treatment control BMPs have been properly maintained in accordance with the site's maintenance requirements. This information is tracked utilizing the City's GBA Master Series program. Each package is scanned and linked into the program, which includes the notification, required completion and receipt of the signed verification form. If signed and certified verification forms are not received by the due date, City staff contacts the responsible parties and follows up until Treatment Control BMPs are maintained and verification forms properly completed and returned to the City. Enforcement action may be initiated if a responsible party does not comply with the verification requirement after follow-up actions and proper service of a notice.

2.4.4.10 BMP CONSTRUCTION VERIFICATION

The City's Public Works Inspectors and Storm Water Management staff is responsible for ensuring that permanent BMPs, which are components of the project's drainage systems and grading works, are constructed in accordance with approved specifications and grading plans. Public Works Inspectors and Storm Water Management staff conducts frequent inspections of projects during their grading and construction activities and verify that permanent BMPs are constructed as per approved plans.

In compliance with the Municipal Permit, the City has developed databases for tracking Priority Development Projects that are under construction. Additionally, hard copy files, including information about each project's WQTRs and grading or construction site plans that show locations of permanent BMPs have been created and are continuously updated.

Since LID features are considered components of site hardscape and are not inspected by Public Works Inspectors, a new process has been established in which Public Works Inspectors notify Storm Water Management Section staff immediately after their inspections of grading activities are completed and their presence on the project is no longer necessary. At such time, Storm Water Management staff takes over the responsibility of inspecting permanent BMPs while

being constructed. They ensure that LID Site Design features are constructed as shown on approved grading, construction, or landscape plans and per approved specifications.

2.4.4.11 SUSMP WAIVERS

Section D.1.d.(11) of the Municipal Permit includes a waiver provision, under which a Copermittee may provide for a Priority Development Project to receive a waiver from the requirement of meeting numeric sizing criteria for Treatment Control BMPs, if infeasibility can be established. During the reporting period, the City did not grant waivers to any Priority Development Projects.

2.4.4.12 SUSMP WAIVER MITIGATION

During the reporting period, all Priority Development Projects were required to comply with the provisions of the City's local SUSMP. Therefore, the City did not grant waivers to any Priority Development Project during this period.

2.4.4.13 HYDROMODIFICATION MANAGEMENT PLAN

Soon after Regional Board's adoption of the Municipal Permit on January 24, 2007, the Copermittees formed a Land Development Workgroup to develop Copermittees' Hydromodification Management Plan (HMP) and Model SUSMP, among other regional development related tasks. The Land Development Workgroup planned regular meetings in which various topics, mainly the development of the HMP and Model SUSMP, were discussed. A consultant was hired to assist in the development of the San Diego Regional Hydromodification Management Plan. Also, a Technical Advisory Committee (TAC), consisting of high-ranking and renowned experts in the fields of hydrology, hydromodification, and SUSMP issues were formed to oversee the Consultant's work, and to provide expert advice. The latest revision of the regional Hydromodification Management Plan is dated March 2011 and is incorporated by reference in the Chula Vista Development Storm Water Manual. During the current reporting period, all SUSMP projects were required to address hydromodification control requirements.

2.4.4.14 PROJECTS REQUIRED TO MEET HMP REQUIREMENTS

Section D.1.g.(5) of the Municipal Permit requires the development of an HMP document at the regional level and incorporation of such HMP into individual local SUSMPs. The HMP is to include limitations on increases of runoff discharge rates and durations from all Priority Development Projects in order to prevent increased downstream channel erosion, sediment pollutant generation, or other impacts to beneficial uses and stream habitat.

Development of a draft HMP was a two-year effort by the Copermittees and their consultants. The Copermittees submitted the first draft HMP to the Regional Board in January 2009. In the meantime, the Municipal Permit required the implementation of an Interim Hydromodification Criteria (IHC) for development projects that were 50 acres or more. The IHC requirement was incorporated into updated local SUSMPs, which came into effect in January 2008.

Adoption of IHC requirements in January 2008 coincided with the collapse in the housing market, and almost all major development projects in Chula Vista came to an abrupt halt. The Final Hydromodification Management Plan (HMP) was incorporated into the City's local SUSMP in January 2011 and became effective for all projects, which had not received their grading or building permits. However, development continued to be slow and occasional major projects submitted for review by City staff have had extended project submittal, review, and permitting schedules.

During the reporting period, 3 major projects continued to be under review as follows:

1. Eastern Urban Center
2. Otay Ranch Village 8
3. Otay Ranch Village 9

All these projects are required to either comply with HMP requirements or demonstrate exemption as provided in the Final HMP. The above referenced projects were still under review during the reporting period.

2.4.4.15 PROJECTS EXEMPTED FROM HMP REQUIREMENTS

According to the Chula Vista Development Storm Water Manual, any project that had not obtained their construction permits before January 10, 2011, was required to address hydromodification controls per the Final HMP. During the reporting period, development project applicants were required to follow the HMP applicability flow chart provided in Section 6.1 of the Final HMP and to determine their project's status regarding HMP requirements. City staff then verified the accuracy of their findings and required compliance or exempted the project as applicable.

2.4.4.16 PROJECTS DISTURBING 50 ACRES OR MORE

Until January 9, 2011, projects that disturbed 50 acres or more were required to comply with the Interim Hydromodification Criteria. Those projects that disturbed less than 50 acres were required to address Conditions of Concern, which typically included a comparison of pre- and post-development peak discharge rates for 2- and 10-year storm events, and a Best Professional Judgment evaluation of downstream geomorphic conditions. Under the current Municipal Permit requirements, Priority Development Projects, irrespective of disturbed area, are required to meet the Final Hydromodification Standards. Non-Priority Development Projects, while being subject to BMP implementation, are exempt from hydromodification considerations.

2.4.4.17 ENFORCEMENT ACTION TAKEN FOR DEVELOPMENT PROJECTS

As a result of post-construction treatment BMP maintenance inspections, the City determined that 22 out of 143 inspected projects were partially or totally deficient in the inspection and maintenance of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, most of the deficiencies were remedied. The

remaining projects with mainly water quality basins have been issued warning to complete maintenance activities before the end of the current dry season. The City has the option of initiating enforcement action on responsible persons who do not demonstrate adequate effort to maintain their Treatment Control BMPs in an effective condition. Such enforcement action may include verbal and written warnings, Notices of Violation, Administrative Citations, and/or Civil or Criminal Penalties. During the current reporting period, the City worked with the responsible persons to maintain treatment control BMPs, therefore, higher enforcement action did become necessary.

3.0 CONSTRUCTION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(b).i – Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.

Permit Section J.3.a.(3)(b).ii – Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.

Permit Section J.3.a.(3)(b).iii – A description of modifications made to the construction and grading ordinances and approval processes.

Permit Section J.3.a.(3)(b).iv – Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.

Permit Section J.3.a.(3)(b).v – Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.

Permit Section J.3.a.(3)(b).vi – A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.

Permit Section J.3.a.(3)(b).vii – For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.

Permit Section J.3.a.(3)(b).viii – A description of the general results of the inspections.

Permit Section J.3.a.(3)(b).ix – Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(b).x – The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(b).xi – A description of the notable activities conducted to manage urban runoff from construction sites.

3.1 INTRODUCTION

Pursuant to the Municipal Permit, construction sites are subject to dual regulation insofar as all construction sites that are covered under the NPDES General Construction Permit continue to be inspected and enforced by Regional Board staff. At the same time, the Municipal Permit requires Copermittees to implement a Construction Component to limit the impact of construction and grading activities on receiving waters, which may result from the presence of disturbed soils and building materials. It is important that construction sites take appropriate measures to prevent potential pollutants from entering storm water conveyance systems.

The following section provides an account of the City's program to meet the requirements outlined in Section D.2 of the Permit to reduce the release of pollutants from construction sites into the storm water conveyance systems to the Maximum Extent Practicable (MEP).

3.2 SOURCE CHARACTERIZATION

The City has compiled, and monthly updates a watershed-based inventory of all construction sites within its jurisdiction as required by Municipal Permit Section D.2.b. The City utilizes a construction site database to maintain its inventory. The inventory includes details on each construction site, including subdivision, project name, neighborhood, project status, work order number, and priority. A list of construction projects under the City's jurisdiction, all of which are located within the San Diego Bay Watershed, can be found in Attachment B. The list was current at the time of preparation of this report and includes all active and inactive projects.

3.2.1 CONFIRMATION OF INVENTORY MANAGEMENT

During the reporting period, Storm Water Management staff maintained and monthly updated a construction site inventory. As a result of coordination between the Public Works Construction Inspection staff, Engineering Design staff, Development Services staff, and Storm Water Management staff, mechanisms have been established in the maintenance and tracking of an up-to-date and accurate inventory. As such, all significant construction activities are closely monitored, supporting close collaboration and an effective means of tracking such activities Citywide. Storm Water Management staff are notified of all pre-construction meetings as coordinated by Public Works Construction Inspection staff. This provides an additional level of notification regarding the start of construction activities. In support of maintaining an accurate inventory, the City's Development Services Department distributes a monthly Major Project Development Status Report, which apprises City staff of such information as project review status and construction phase. Updates to the inventory include the addition of new construction projects, the removal of completed projects, the assignment of inspection priority, and status.

3.3 UPDATES TO ORDINANCES AND APPROVAL PROCESS

Storm water compliance requirements for construction activities are provided in the City's Development Storm Water Manual (Manual). The City's Storm Water Management and Discharge Control and Grading Ordinances incorporate, by reference, the Development Storm

Water Manual, hence providing legal authority for the enforcement of the Manual's requirements. Such documents and ordinances have been updated and amended to ensure that compliance with the Municipal Permit requirements is met.

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City requires that all proposed construction and grading projects implement measures to ensure that pollutants from the project site are reduced to the MEP and do not cause or contribute to an exceedance of water quality objectives. The following mechanisms have been identified and utilized to promote the implementation of Best Management Practices (BMPs) during construction activities.

- Development Storm Water Manual (Manual)
- Construction site inspection and enforcement
- Construction and development community education

Designated BMPs for each construction site were required to be implemented through the requirement of a Storm Water Pollution Prevention Plan (SWPPP) or a Construction Storm Water Management Plan (CSWMP). SWPPPs are required for projects disturbing one acre or more of land, while CSWMPs are required for all other projects.

Regular and random inspections of construction sites ensure that BMPs are implemented, and where deficiencies are noted, corrective action is required, which in some cases may lead to the initiation of enforcement action.

3.4.1 DEVELOPMENT STORM WATER MANUAL

Construction activity standards and requirements are fully developed and included within the Development Storm Water Manual. The Manual clearly states that it is the responsibility of the property owner and/or contractor to select, install, and maintain appropriate BMPs. The Manual outlines minimum construction BMPs required by the City. Where applicable, current fact sheets are obtained from the CASQA Storm Water BMP Portal and are referenced in the Manual. The following topics are also discussed:

- Site management requirements
- BMP performance standards
- Seasonal requirements
- Limitation of Grading
- Advanced Treatment
- Example Construction Best Management Practices

3.5 PROGRAM IMPLEMENTATION

The Development Storm Water Manual is used by City staff to assist in the review and permitting of development and redevelopment projects with respect to construction activities. The Manual clearly outlines the review process for water quality. It includes descriptive text and charts that guide staff in determining if a project needs to be covered under the NPDES General Construction Permit. If the project is subject to the General Construction Permit, it is required to develop a SWPPP. The project is also required to file a Notice of Intent (NOI) with the State Water Resources Control Board. If the project is not subject to the General Construction Permit, it is required to develop a CSWMP. Both SWPPPs and CSWMPs must be prepared prior to the start of construction activities. All projects are required to include applicable measures to prevent pollution discharges to storm water conveyance systems by implementing BMPs during all phases of construction.

When it is determined that Capital Improvement Projects (CIPs) need coverage under the NPDES General Construction Permit, the Qualified SWPPP Developer or authorized personnel designated by the Legal Responsible Person, electronically submits a Notice of Intent and a SWPPP through the State Water Resources Control Board Storm Water Multiple Application and Report Tracking System (SMARTS). The SWPPP is maintained at the construction site for review by City or Regional Board staff.

The City has ensured compliance with construction BMP requirements through development project reviews, construction site inspections, and enforcement actions as necessary.

Within the defined reporting period, the City made notable efforts in promoting pollution prevention and BMP implementation on construction sites. The following mechanisms have been identified by the City as those integral to the promotion of pollution prevention techniques and BMP implementation.

- Construction site inspection and enforcement
- Construction and development community education
- Integration of pollution prevention and BMP implementation requirements into the development review process, including requirements for erosion control plans.
- Development Storm Water Manual
- Construction specific outreach and education activities

Education of the construction and development community is achieved on a local and regional level. Locally, project proponents including contractors, developers, property owners, superintendents, and other responsible parties are exposed to construction related water quality protection requirements throughout the development review and construction process. Storm Water Management staff provides comments and direction through the review of development proposals and plans. As mentioned above, pre-construction meetings provide Storm Water Management staff with an excellent forum to communicate storm water compliance requirements and for project proponents to have their own concerns addressed.

In addition, City Storm Water Management staff frequently meets with developers and contractors and provides on-site training regarding site management for storm water quality. In preparation for the wet and dry seasons, Storm Water Management staff annually issues wet and dry season reminder letter, normally about one month before the start of each season.

As a result of the slow-down in development, many construction sites are currently inactive or in distress. The City has made notable efforts in the management of inactive construction sites. A site is considered inactive if construction activities have ceased for a period of seven or more consecutive calendar days. The City inspects inactive construction sites and issues formal letters to developers if their sites do not meet City standards for BMP requirements as a result of failure to maintain adequate BMPs. The purpose of such letter is to notify developers of the City's storm water and non-storm water discharge requirements on inactive construction sites and to reiterate the developer's or property owner's responsibility at both active and inactive sites to implement a plan to address all potential discharges from construction sites. If a site is partially inactive, above requirements apply only to inactive areas of the site.

If a construction project is wholly or partially inactive or expected to remain inactive for some time, the City requires the developer to submit a Construction Site Stabilization Plan.

The Stabilization Plan is required to include the following information:

- Project name and a description of inactive areas or those expected to become inactive.
- A description of the stage of work at which the project became inactive.
- An estimate of time that the project, or areas of the project, would remain inactive, and a description of BMPs that would be used to stabilize inactive areas of the construction site.
- A project plan delineating areas of the project that are inactive or expected to become inactive, as well as all erosion control, sediment control, and non-storm water BMPs that would be implemented to prevent the discharge of sediment or other pollutants from the site.

3.5.1 MAXIMUM DISTURBED AREAS

The Development Storm Water Manual limits the area that can be cleared or graded and left exposed at one time to 100 acres for an individual grading permit or a combination of grading permits under the associated tentative map. Detailed requirements for maximum disturbed area limitations are included in the Development Storm Water Manual. During the reporting period, most major development projects remained inactive due to the downturn in the housing industry, and developers in Chula Vista did not undertake new major grading projects. The focus of City inspectors was to ensure that developers of existing graded sites that were planned to become inactive fully stabilized graded areas by implementing adequate BMPs.

3.5.2 ADVANCED TREATMENT

During this reporting period, there were no construction sites that met the conditions requiring advanced treatment methods. These conditions are explained in Section 7.5 of the Development Storm Water Manual. If it is determined that a site poses an Exceptional TTWQ based on criteria outlined in the Manual, the site will be required to implement advanced treatment controls to minimize the discharges from the construction site.

3.5.3 CONSTRUCTION SITE INSPECTIONS

The City's construction site inspection and enforcement program is defined by a consistent and frequent presence of inspectors on construction sites Citywide. It is recognized that construction sites must be regulated through a well-coordinated and highly refined inspection and enforcement program. The City has one Senior Civil Engineer, two full-time Environmental Health Specialists and eight Public Works Inspectors who manage this effort on private and public construction projects.

During this reporting period, all construction sites were assigned appropriate dry and wet season inspection frequencies required by the Municipal Permit. The Municipal Permit does not require prioritization for construction sites. However, the City has determined that this designation is a useful indicator for inspectors to evaluate the priority and relative importance of each construction site with respect to erosion and sediment controls, and the special attention required to the implementation of BMPs during their inspections of each site. The inventory of construction sites, therefore, includes a column indicating the prioritization for each site.

During the current reporting period, the City conducted inspections of construction sites in accordance with the requirements of the Municipal Permit, as applicable. Please see Table 3-1 for the number of construction site inspections. A complete list of inspected construction sites is included in Attachment G. The period of time each construction site was active during the wet or dry seasons, and the number of inspections conducted during the rainy season for each site, are recorded on inspection reports that are available at the City.

Table 3-1 Construction Site Inspection Summary FY 2011-2012

INSPECTION TYPE	NUMBER
Inspections During Wet Season	465
Inspections During Dry Season	48
Total Inspections	513

City inspectors evaluate BMP implementation on construction sites in a site-specific and situation-specific manner. It is through this approach that determinations of the effectiveness of a specific BMP are made, based on an accounting of the overall conditions observed at a specific job site. Established construction site inspection protocols also include a documentation review including site specific SWPPP, monitoring results, training records, etc. for construction sites subject to the General Construction Permit.

City inspectors use construction inspection forms specifically designed as multi-purpose tools. The form provides a checklist of information and potential water quality issues, which serves as a reminder to the inspector of all items requiring attention while on the construction site. The form also provides clear and concise information to the developer or contractor about deficiencies in the implementation of BMPs. It includes information about corrective actions that the developer or contractor needs to take for brining the site into compliance, and the time allowed by the inspector. Inspection forms are designed to enable the inspector and others to assess BMP implementation on each construction site and the effectiveness of BMPs. Inspection reports are often used as supporting documents in enforcement actions against non-compliant construction sites.

Through the above process, the City ensures that the inspections conducted address all the required inspection steps to determine full compliance.

Based on documented information, the trend of inspection issues were related to the following:

- Failure to implement and provide continuous maintenance of existing BMPs to prevent or minimize pollution of the storm water conveyance system in accordance with respective SWPPP or CSWMP.
- Failure to implement good housekeeping practices at the site.
- Failure to comply with previous orders.

City inspectors who conduct site inspections of both public and private development projects have full inspection and enforcement authority. Sites are evaluated for compliance with the minimum BMP requirements of the Municipal Permit, the Development Storm Water Manual, the erosion control plans, and any other development permit conditions imposed by the City prior to the issuance of a grading or construction permit.

Construction site inspections include the following:

- Verification of coverage under the General Construction Permit, where applicable.
- Assessment of the implementation of all required BMPs and any additional controls as needed and required by the City.
- Verification of proper maintenance of the BMPs.
- Evaluation of the effectiveness of the BMPs.
- Verification that site personnel has received adequate training.
- Observations of any non-storm water discharges, illicit connections, and potential discharges into the storm drain system.

3.5.4 CONSTRUCTION SITE ENFORCEMENT

The City enforces its storm water ordinances and development permit conditions at all private and public construction sites, as necessary. The City's ordinances and development permit conditions provide adequate legal authority for the City to enforce its storm water regulations on construction sites through stop work notices, penalties, fines, and other appropriate enforcement mechanisms. City's inspectors work with developers and contractors to identify non-compliance issues and to set deadlines for bringing sites into compliance; however, if the developer/contractor is found to be non-cooperative in bringing a site into compliance in an expeditious manner, City's inspectors initiate enforcement action which, depending upon the severity of the violation, may include one or more of the following:

- Verbal Warning
- Written Warning
- Notice of Violation (Includes Cease and Desist and/or Clean and Abate Orders)
- Enforcement of Contract (for City projects)
- Stop Work Notice
- Denial or Revocation of Permits
- Administrative, Civil, or Criminal Actions

Table 3-2 summarizes enforcement actions taken within the defined reporting period of this report.

Table 3-2 Construction Enforcement Summary FY 2011-2012

ENFORCEMENT ACTION	NUMBER
Written Notices of Violation (Includes Cease and Desist, Clean and Abate, Stop Work and Civil Penalty Orders)	10

As a result of the above enforcement actions, follow-up inspections were conducted within a designated time period until compliance was met.

Within the defined reporting period of this report and as described in the narrative provided throughout this section, the construction component has demonstrated numerous successes as well as undergone notable programmatic developments and enhancements. Through identified needs and associated management decisions, the City has fortified its jurisdictional construction management component in 2011-2012. Further, as the need for further development emerges for construction activities, the City will seek to maintain the level of performance established from years past, and to continue to meet the regulatory standards mandated in the Municipal Permit.

4.0 MUNICIPAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(c).i – Any updates to the municipal inventory and prioritization.

Permit Section J.3.a.(3)(c).ii – Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.

Permit Section J.3.a.(3)(c).iii – A description of inspections and maintenance conducted for municipal treatment controls.

Permit Section J.3.a.(3)(c).iv – Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.

Permit Section J.3.a.(3)(c).v – Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.

Permit Section J.3.a.(3)(c).vi - Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.

Permit Section J.3.a.(3)(c).vii – Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.

Permit Section J.3.a.(3)(c).viii – Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.

Permit Section J.3.a.(3)(c).ix - Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.

Permit Section J.3.a.(3)(c).x – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xi – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xii – Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.

Permit Section J.3.a.(3)(c).xiii – Identification of the total distance of curb-miles swept.

Permit Section J.3.a.(3)(c).xiv – Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.

Permit Section J.3.a.(3)(c).xv – Amount of material (tons) collected from street and parking lot sweeping.

Permit Section J.3.a.(3)(c).xvi – A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.

Permit Section J.3.a.(3)(c).xvii – Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.

Permit Section J.3.a.(3)(c).xviii – A description of the general results of the inspections.

Permit Section J.3.a.(3)(c).xix – Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(c).xx – The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(c).xxi – A description of notable activities conducted to manage urban runoff from municipal areas and activities.

4.1 INTRODUCTION

The goal of the City's municipal program is to minimize or prevent negative impacts of municipal activities and areas on receiving waters and other environmental resources in the City and where possible, to enhance the quality of these resources. The City maintains the following types of municipal areas and activities:

- Fixed Facilities
- Open Space
- Municipal Separate Storm Sewer System (MS4)
- Sanitary Sewer System
- Roads, Streets, and Parking facilities
- Powerwashing – Graffiti removal

Minimum BMPs for specific municipal facilities and activities have been implemented as applicable and as required by the Municipal Permit. Minimum BMPs for specific facilities and activities have been described in the City's JURMP. BMP implementation is ensured through various levels of enforcement, inspection, communication, and awareness. BMP information is disseminated to City staff through the following resources:

- California Stormwater Quality Association (CASQA) Municipal Stormwater BMP Handbook. January 2003
- Municipal staff training venues (formal and informal training, staff meetings, etc.)
- Routine inspection activities
- Activity specific training

BMP implementation is regulated by City staff through routine inspection activities as described in the JURMP. High priority municipal facilities are inspected annually, and all other facilities are inspected as needed. Inspections are conducted to verify the implementation of an effective combination of BMPs to meet the minimum water quality protection requirements. Applicable minimum activity-specific BMPs, as outlined in the JURMP, have been reviewed and implemented at facilities throughout the City. As needed, BMP implementation has been re-enforced as conditions of concern are identified, and personnel have been briefed on their roles and responsibilities in maintaining and implementing prescribed BMPs.

The following paragraphs include summaries of activities undertaken by the City to meet the Municipal Permit requirements for the Municipal Component of the JURMP. It is important to recognize that such recounted activities, practices, and functions are ongoing efforts by the City and not constrained by the defined reporting period of this report.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City operates and maintains the following types of fixed facilities within its jurisdiction:

- Parks and recreation centers
- Libraries
- Administration buildings
- Public Works Center
- Animal care facility
- Fire stations
- Land application site

4.2.2 SOURCE CHARACTERIZATION

Attachment C – Municipal Inventory is a list of all the municipal facilities and activities within the City. Table 6-1 of the City's JURMP details the pollutants potentially generated by the area or activity. General operations include landscape maintenance, material handling and storage, loading/unloading, waste handling, street maintenance, and sewer maintenance. Facilities are

classified as high, medium, or low TTWQ based on activities, functions, and various site-specific factors. For more information on the facilities that have additional operations and activities, please see the City's JURMP. The inventory in Attachment C includes a column for facilities that are tributary to a 303(d) listed water body and potentially generate similar pollutants. This column is marked as "Tributary" in the inventory. Map 3 also shows municipal facility locations in relation to the 303(d) listed waterbodies in the City. Some areas of the City discharge to San Diego Bay, which is 303(d) listed for PCBs. Since PCBs have been banned since the early 1970s, no municipal facilities within the City discharge PCBs to San Diego Bay.

4.2.3 BMP REQUIREMENTS

Each fixed municipal facility in the City implements BMPs in accordance with their specific operations and activities. The City uses the CASQA BMP Handbook for Municipal Facilities as a guide for employees as well as a training tool. City staff receives training on storm water BMPs on a regular basis. More information on employee training can be found in Section 8.0. Mobile municipal operations use source control BMPs as pollution prevention measures. During the reporting period, all designated BMPs were implemented for municipal areas and activities as well as special events.

4.2.4 PROGRAM IMPLEMENTATION

4.2.4.1 MAINTENANCE

The City maintains all of its fixed facilities and implements BMPs during operations and activities. Any illegal connections or illegal discharges noticed by City staff are eliminated and BMPs are revised if needed.

4.2.4.2 TRAINING AND EDUCATION

All City employees who work in municipal facilities and activities have received training and participate in refresher sessions on general storm water concepts, the City's storm water ordinance, and BMP requirements. More information on employee training can be found in Section 8.0.

4.2.4.3 INSPECTIONS

The City proactively approaches enforcement of its storm water ordinance for all municipal areas and activities. All deficiencies are immediately brought to the attention of the facility manager or the staff member responsible for the facility or activity. The facility managers or the responsible staff members have the authority to implement or require implementation of adequate BMPs for their facility. With the training provided for the operations staff and implementation of BMPs on municipal facilities, it is expected that discharge of pollutants from municipal areas and activities have been minimized.

City storm water staff inspected all high priority municipal facilities and activities during the fiscal year as required by the Municipal Permit. Medium and low priority facilities are inspected

on an as needed basis. No medium or low priority facilities were determined to need inspection this fiscal year. During inspections, storm water staff identified BMPs that were in need of improvement and informed responsible persons to take action to implement additional BMPs. A list of municipal facilities that were inspected during the reporting period is included in Attachment H. Overall, sites were in good condition, however; some facilities needed BMP improvements. For the sites needing BMP improvements, the appropriate supervisor was notified and any corrective actions to bring the facility into compliance were immediately implemented. Enforcement on municipal facilities is in the form of disciplinary process against the responsible staff member when compliance is not met in a timely manner. If a violation of the City's Storm Water Ordinance or the Municipal Permit is observed, which is caused by negligence of City personnel, inspectors work with supervisors to ensure that corrective actions are implemented; provide training to the personnel; and immediately inform the appropriate supervisor. The supervisor will then take action against the violating staff member as necessary, including warnings and other disciplinary measures. City storm water staff is in regular contact with Public Works Maintenance staff and provides training on pollution prevention and BMP implementation, therefore, most deficiencies are taken care of upon first notice.

The City also maintains a number of treatment control BMPs that have been installed at municipal fixed facilities. Public Works Maintenance staff inspects all municipal treatment control BMPs to ensure their proper operation. Additionally, Storm Water Management staff conducts random inspections of such facilities to provide a second layer of confidence and to ensure that maintenance standards are met. The City maintains treatment control BMPs at several of its facilities. City crews conduct annual inspections and clean structural treatment control BMPs on an as needed basis and their condition is evaluated for effectiveness. Any repairs are noted and carried out on a timely manner. Table 4-1 includes a list of municipal facilities with high priority treatment control BMPs within the City that were inspected during the reporting year. Medium and low priority municipal facilities with treatment control BMPs are inspected on an as needed basis.

Table 4-1 Inspected Municipal Facilities with Treatment Control BMPs

FACILITY NAME	NUMBER & TYPE OF TREATMENT CONTROL BMP	DATE INSPECTED
Montevalle Park	10 Filter Inserts	05/31/12
Salt Creek Park	1 CDS Unit	05/31/12
Harvest Park	1 Filter Insert	06/18/12
Sunset View Park	3 Filter Inserts	02/08/12
Mountain Hawk Park	20 Filter Inserts	05/31/12
All Seasons Park	Bioretention, Vegetated Swales	02/09/12
Horizon Neighborhood Park	1 Filter Insert	05/31/12
Chula Vista Civic Center	5 Vegetated Swale, 1 CDS Unit, 2 Filter Inserts	03/20/12
Mount San Miguel Park	Bioretention, Vegetated Swales	02/09/12
John Lippitt Public Works Center	8 Filter Inserts	06/06/12
Fire Station 8	1 CDS Unit	05/14/12
Fire Station 6	4 Filter Inserts	03/13/12
Fire Station 7	1 CDS Unit	05/14/12

4.2.4.4 INTEGRATED PEST MANAGEMENT (IPM)

During the reporting period, the City Parks and Open Space Divisions have implemented the following BMPs in their activities to prevent pollution of storm water conveyance systems:

Fertilizer, Pesticides, and Herbicides

- Minimize fertilizer use.
- All fertilizing is done so that no fertilizer is applied to the walkways or street. Any accidental spill is cleaned up and applied to the plant material. Areas are cleaned using a gas blower.
- All leaf blowing is towards plant material and away from any hardscape.
- Whenever possible, compost and soil amendments are used in place of fertilizers.
- Manual weeding whenever possible along with IPM Practices to minimize chemical application.
- All pesticides, herbicides, and fertilizers are stored in a controlled, locked and properly marked chemical locker.
- Prevent pesticide drift – do not spray on windy days.
- All employees who spray herbicides for weed control are properly trained and possess a valid Qualified Applicator Certificate issued by the State and receive 20 hours of continuing education in order to renew their certifications bi-annually.
- Reporting and record keeping for the use of fertilizers and pesticides includes the location, frequency, amount, type, and date of application.
- Staff is supplied with spill kits in case of an accidental spill.
- All mixing is done in an area that is away from storm drains.
- All employees who handle pesticides are trained and familiar with the most recent Material Safety Data Sheet (MSDS) files.
- MSDS sheets for chemicals being used must be kept with the applicator while applying pesticides.

Proper Planting Techniques

- Proper plant selection for pest resistance to minimize the use of pesticides and fertilizers.
- Removal or pruning of deceased plants and branches.
- Clearing of weeds, grass, and brush from building perimeters and fence lines.
- Plant native vegetation and convert existing turf areas to drought tolerant, sustainable landscaping when possible.
- Increase plant vigor and pest resistance through proper cultural practices; proper water application, clearing of weeds to decrease competition, pruning at the right time of year, and accurate diagnosis of plant pests.
- Control pests by removing diseased plants, pruning to increase air circulation and to remove diseased or injured plant parts.

Minimize Runoff

- The City utilizes several weather stations throughout the City to monitor microclimates to set evapotransporation (ET) rates for Maxicom Irrigation Systems.

- Installation of flow sensors and master valves to prevent water loss in the event of mainline break.
- The City is in the process of reducing large-scale vegetation on curb lines along major roads such as East Palomar, La Media, and Heritage Road. Existing ground cover is reduced by bringing it back from the curb line about 5-10 feet. Mulch is applied in the vegetated area that was removed and irrigation lines along the curb line are capped off. This cuts down on irrigation overspray, excess water use, and runoff.

4.3 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.3.1 BACKGROUND

Roads, streets, highways, and parking facilities make up a large part of the City. Pollutants associated with roads, streets, highways, and parking facilities include sediment, metals, and trash. The City has implemented various BMPs to reduce the amount of pollutants that come off of these areas.

4.3.2 SOURCE CHARACTERIZATION

Municipal Permit Section D.3.a.(7) designates roads, streets, highways, and parking facilities as high priority municipal areas for inspection purposes. Therefore, the Municipal Inventory (Attachment C) categorizes these facilities as such. Table 6-1 of the City's JURMP details the pollutants potentially generated by roads, streets, highways, and parking facilities. The City maintains 414 miles of roads, streets, and highways.

The City has one stand-alone covered parking facility in downtown Chula Vista that generates a moderate volume of trash and debris that is swept twice per month and is inspected annually as a part of the City's Municipal Inspection Program. Other City parking facilities are associated with other municipal facilities (such as parks) and generate low volumes of trash and/or debris. These are swept on a monthly basis and are inspected annually.

For the purpose of street sweeping, roads, streets, and highways are further classified into high, medium, and low priority based on the amounts of trash, sediment, and debris that are generated by their use. Commercial and industrial streets are classified as high priority; center islands and medians are classified as medium priority; and centerlines and residential streets are classified as low priority. Table 4-2 below provides more information about these classifications, the number of curb miles in each, the type of areas these classes cover, and respective sweeping frequencies.

Table 4-2 Street Sweeping Information Based on Class

CLASS	NUMBER OF CURB MILES	TYPE	SWEEPING FREQUENCY
High	134.5	Industrial and Commercial – 10.3 miles	Once per week
		Commercial and Business – 124.2 miles	Once per week
Medium	109.9	Center Islands and Medians	Twice per month
Low	758.2	Residential – 734.1 miles	Once per 2 month
		Center Lines – 24.1 miles	Twice per month

4.3.3 BMP REQUIREMENTS

Street sweeping is one of the ongoing city functions that provides for the reduction in pollutants entering the storm drain system and ultimately local receiving waters. It is the main BMP used to maintain roads, streets, highways, and parking areas. It is conducted in a systematic and coordinated manner as to compliment pollution prevention throughout the City.

The City has identified some streets as high Threat to Water Quality (HTTWQ) areas. The main pollutant in these areas is trash. Trash in these areas is mainly attributable to customers of recycling businesses located in the industrial areas of Energy Way and Nirvana Avenue. Also, trash trucks shedding some of their load while traveling to and from the Otay Landfill on Maxwell Road and Main Street east of I-805 are sources of trash on these streets. As a proactive measure to minimize trash entering the storm drain system, the City has retrofitted existing curb inlets in these areas with filter inserts. The City's storm drain crews conduct regular inspections and cleaning of these filter inserts and replace parts as necessary.

4.3.4 PROGRAM IMPLEMENTATION

4.3.4.1 MAINTENANCE AND INSPECTION

During the reporting period, the City swept approximately 18,000 curb miles and removed more than 787 tons of trash, debris, and sediment from Chula Vista streets and parking lots. While regular street sweeping is contracted, the City operates a street sweeper to be used by City crews to maintain City facilities, parking lots, and special events. Figure 4-1 shows the street sweeping schedule for the reporting year.

Figure 4-1 Street Sweeping Schedule

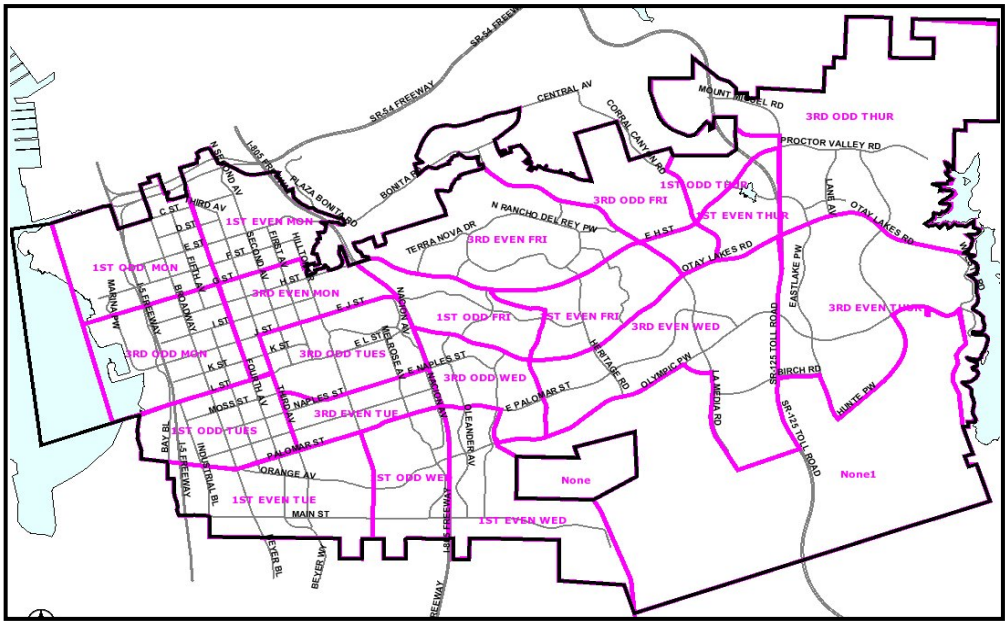

4.4 MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

4.4.1 BACKGROUND

MS4 maintenance is an ongoing city function that is essential for the removal of pollutants that may be discharged to receiving waters. MS4 maintenance activities address pollution prevention through four primary activities: 1) Inspections, 2) catch basin maintenance, 3) channel maintenance, and 4) outfall maintenance.

As part of the City's maintenance protocol, a maintenance supervisor inspects storm drain facilities before and after cleaning operations. Problem sites within the drainage facilities were inspected and cleaned multiple times during the reporting period. In addition, the City's consultant for dry weather field screening annually inspects over 57 outfall locations throughout the City and conducts upstream investigations based on field screening results. They report observed pollution in storm drainage systems to the City, in which case Public Works maintenance crews immediately take action to inspect the drainage area, abate the pollution, and conduct cleanup.

Another method of inspection of storm drainage facilities employed by the City is through investigation of reported violations. When an inspector responds to a reported violation, in addition to normal investigations, he or she inspects the first downstream storm drain inlet to determine if pollution has reached the inlet. In case of presence of any trash, silt, or other visible pollutants in the storm drain inlet, Public Works crews are immediately notified and they take action to clean the storm drainage system, as necessary. This multi-layer inspection program ensures that almost all MS4 facilities are inspected and maintained regularly.

All channel and outfall maintenance activities have been conducted in a manner as to assure compliance with all environmental regulatory standards. Notably, channel and outfall maintenance activities have been limited to manual removal of trash and debris from areas that trash accumulation may cause flooding and damage to life or property.

Currently, two vacuum trucks and two crews are allocated full-time to performing the above tasks on the maintenance and inspection of the City's storm drain systems. In addition, four vacuum trucks, equipment, and wastewater field crews are available on an as-needed basis to help in cleaning and inspecting the storm drain systems in emergencies and other similar situations.

The City maintains an extensive record keeping and maintenance tracking system utilizing George Butler Associates Work Management System (GBA), which is an automated system universally used by the Public Works Department for collecting and tracking data about all its activities. Detailed maintenance logs are available in the City's storm drain maintenance database and can be presented upon request.

All storm drain inlets throughout the City have been marked with prohibitive signs to discourage pedestrians and drivers from dumping into storm drainage systems. They are of various types, including thermoplastic signs, stamped concrete, stenciled markings, or plastic decals.

Figure 4-2 Thermoplastic Storm Drain Stencil

4.4.2 SOURCE CHARACTERIZATION

The City maintains its MS4s, which include open channels, catch basins and inlets, and outfalls. Storm drain pipes are designed to be self-cleaning and do not typically require scheduled cleaning. As required by the Municipal Permit Section D.3.a.(7), the City's MS4 is included in the municipal facility inventory (Attachment C) as a high priority facility for inspection purposes. Table 6-1 of the City's JURMP details the pollutants potentially generated by the MS4.

4.4.3 BMP REQUIREMENTS

The City implements various BMPs to maintain its MS4 and uses the CASQA BMPs for municipal facilities and activities as a guide.

4.4.4 PROGRAM IMPLEMENTATION

4.4.4.1 MAINTENANCE AND INSPECTION

A summary of the City's efforts in the maintenance and inspection of its catch basins and inlets, MS4, and open channels during the reporting period of July 1, 2011 to June 30, 2012 is summarized below. A total of 463 inlets were identified as accumulating a high volume of trash while 774 inlets had moderate to low volumes. All high, moderate, and low trash volume facilities were cleaned at least once during the dry season (May 1 – September 30). Table 4-3 details the amounts of waste collected from the City's storm drain system based on various facility and waste categories.

Catch Basins and Inlets

- There are 12,491 catch basins and inlets in the City
  - 7,379 inspections were conducted (some inlets and catch basins were inspected more than once)
  - Out of all the catch basins and inlets inspected, 1,237 were cleaned
- Data collection for catch basins with accumulated waste exceeding the Permit cleaning criteria (33% or more full) started January 1, 2008. A total of 43 exceeded the criteria from July 1, 2011 – June 30, 2012.

MS4

- There are 224 miles of MS4 in the City
- The storm drain maintenance crews televised 2.99 miles of MS4 during the reporting year. New storm drain pipes were televised to ensure that there was no infiltration from groundwater or the sanitary sewer, and to inspect MS4 where there was obstructed water flow.
- A total of 338 feet of MS4 pipe was cleaned. It should be noted that the City's storm drain pipes are designed to be self-cleaning under normal operation.

Open Channels

- There are 32.85 miles of open channels in the City
- A total of 298,605 square feet of open channels were inspected and cleaned

Table 4-3 Amount of Waste in Tons Cleaned from the Storm Drain System FY 2011-2012

STRUCTURE	TRASH	LANDSCAPING DEBRIS	SEDIMENT
MS4	0	0	0
Catch Basin/Inlet	1.9	3.1	9.6
Open Channel	37.4	88.4	83.3
Total	39.3	91.5	92.9
Grand Total	223.7		

The City will continue to inspect its MS4 as required by the Municipal Permit and record collected inspection data. During this reporting year, the City reviewed its inspection record and determined that there were no facilities that required inspections less than annually.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

The City recognizes the vital pollution prevention role that sanitary sewer system maintenance plays in the protection of the MS4 system. If not properly maintained, the sewer system can potentially discharge numerous pollutants to the storm drain system such as bacteria, viruses, nutrients, parasites, and chemicals.

The City currently implements a Sewer System Management Plan. Pursuant to the Statewide General Waste Discharge Requirements for Sewer Collection Agencies, in April 2009 the City developed a Sewer System Management Plan. Chula Vista Municipal Code provides authority for the City to implement a Fats, Oils, and Grease (FOG) Monitoring Program. As part of the FOG program, the City has conducted a survey in which questionnaires were sent out to all restaurants in the City. Information collected about their FOG practices, and methods of preventing oil and grease from entering sanitary sewer systems will be used to track BMPs, assess their efficiencies, and direct future inspections.

4.5.2 SOURCE CHARACTERIZATION

There are 498 miles of sewer pipes in the City. The Municipal Permit Section D.3.a.(7) requires sanitary sewer collection systems to be identified as high priority facilities for the purpose of inspections. The sanitary sewer system is included in the municipal inventory as such (please see Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by the sanitary sewer system. The City of Chula Vista does not operate a Publicly Owned Treatment Works. Sewage generated in Chula Vista is collected and conveyed to the City of San Diego treatment works at Point Loma.

4.5.3 BMP REQUIREMENTS

The City responds to all sanitary sewer overflows and uses the CASQA BMP Handbook for municipal facilities and activities including sanitary sewer system maintenance as a guide. City staff regularly receives training on inspection and maintenance of the sanitary sewer system.

Concurrent with the arrival of maintenance and cleanup crews at the scene of a sewage spill from private sewer lines to contain and cleanup the spill, a Storm Water Compliance Inspector or an Environmental Health Specialist contacts the responsible person at the residence or facility and makes it a requirement to implement BMPs to prevent the recurrence of similar incidents. Such BMPs frequently include the requirement for regular and frequent inspections and cleaning of private sewer lines, tightly closing the cap on cleanouts, preventing oil and grease from entering sanitary sewer systems, etc.

4.5.4 PROGRAM IMPLEMENTATION

4.5.4.1 MAINTENANCE AND INSPECTION

The City cleaned and maintained a total of 342 miles of sewer main (includes critical maintenance areas, which were cleaned more than once) within the defined reporting period of this report. Identified critical maintenance areas were cleaned on a monthly basis by City crews. In addition to comprehensive sanitary sewer maintenance activities, the City utilizes a number of controls to limit infiltration from the sanitary sewer system to the MS4. Most essential of which, the City's standards require concrete pipes for all new storm drains, which ensure a much longer life, watertight joints, and effectively minimizes infiltration of groundwater and sewage to storm drain pipes. In addition, flow metering is also conducted throughout the City's sanitary sewer system to monitor flow depths and potential capacity concerns, minimizing potential sewer overflows and infiltration. The City has video cameras that can be moved through storm drain or sanitary sewer pipes for close inspection of pipe conditions. If a problem is suspected, that section of the pipe is video surveyed. This practice has greatly minimized the potential for infiltration of sewage into storm drain pipes.

The City also implements a rehabilitation program for aged sewer pipes. Rehabilitation consists of lining deteriorated existing Vitrified Clay Pipes (VCP) with a continuous material. This process eliminates the joints of the VCP, thereby eliminating the potential for ex-filtration of sewage. Also, only PVC sewer pipes are used for new construction for all but interceptors with diameters larger than 36 inches. PVC pipes have proven to be very watertight and minimize sewage infiltration into the ground and storm drain systems.

Another control to limit infiltration from the sanitary sewer system to the MS4 is the City's initiative to replace aged corrugated metal pipe storm drains with concrete pipes. The City no longer allows metal pipes to be used for storm drains due to their inherent corrosion potential and increased risk of infiltration. Corrugated metal pipes are gradually being replaced with concrete pipes, which are more durable and watertight.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City performs activities that are not confined to a fixed area, such as powerwashing. Pollution prevention using source control BMPs are implemented for such activities.

4.6.2 SOURCE CHARACTERIZATION

The City performs a variety of mobile activities such as power washing for graffiti removal, landscape maintenance, street repairs, and pool maintenance. The Municipal Permit Section D.3.a.(7) requires that power washing be identified as a high priority municipal activity for inspection purposes. Therefore, Attachment C has categorized power washing as such. Table 6-1 of the City's JURMP details the pollutants potentially generated by the area or activity.

4.6.3 BMP REQUIREMENTS

The City implements source control BMPs for mobile activities, including power washing, and uses the CASQA BMP Handbook for Municipal Facilities as a guide. City power washing crews implement BMPs during their activities and receive regular training on storm water pollution prevention.

4.6.4 PROGRAM IMPLEMENTATION – POWER WASHING FOR GRAFFITI REMOVAL

4.6.4.1 MAINTENANCE AND INSPECTION

The City provides graffiti removal services for public and private facilities and areas. However, due to financial challenges of the past few years, the size of crews and resources has been cut drastically. The operations include power washing, sand blasting, and color matching.

As a part of the inspection process, City's Storm Water Management staff annually conducts a ride-along with the graffiti/power washing crews to observe their operations and activities. Storm water staff provides storm water education to the crew and gives any additional BMP recommendations or improvements to their existing pollution prevention measures. During this reporting year, City Storm Water Management staff accompanied the graffiti removal crew to inspect its operation and implementation of BMPs. The graffiti crew implemented all BMPs and prevented any wash water from entering the storm drain system. In addition, the crew used the least amount of water necessary to complete the job. All BMPs were in place and working properly.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City hosts or sponsors a variety of special local events, which include festivals, fairs, and other events for special causes and occasions. Usually, these events involve the participation of outside organizations, community groups, and the general public. The gathering of event participants and crowds is generally a source of trash and debris if BMPs are not implemented.

4.7.2 SOURCE CHARACTERIZATION

Municipal Permit Section D.3.a.(7) requires that special events be designated as high priority for inspection purposes. Therefore, special events are included in the City's municipal inventory as high priority activities (Attachment C). Table 6-1 of the City's JURMP details the pollutants potentially generated by special events.

4.7.3 BMP REQUIREMENTS

The City implements various BMPs for special events such as having special bins available for recyclables and trash, using street sweeping immediately following major events taking place on a street, and having personnel dedicated to litter abatement throughout City events. Also, following every event, City staff inspects the grounds for trash and performs other clean-up activities as necessary. Environmental Services Division and Storm Water Management staff works in conjunction with other City departments and event organizers to ensure that adequate BMPs are implemented during special events.

4.7.4 PROGRAM IMPLEMENTATION

Storm Water Management and Environmental Services staff has active presence at the majority of City events. They set up booths, provide public education on environmental issues, and distribute informational materials. As necessary, they conduct surveys at the same time to evaluate general public's awareness and practice of BMPs. As a part of storm water education outreach, staff working at the events provides information on pollution prevention and watershed protection. City Environmental Services staff notifies hired personnel if there are overflowing trash bins or areas where more trash receptacles are needed.

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(d).i – Any updates to the industrial and commercial inventory.

Permit Section J.3.a.(3)(d).ii – Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.

Permit Section J.3.a.(3)(d).iii - A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.

Permit Section J.3.a.(3)(d).iv - Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.

Permit Section J.3.a.(3)(d).v - Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.

Permit Section J.3.a.(3)(d).vi - Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.

Permit Section J.3.a.(3)(d).vii - Identification of the number of third party inspections conducted.

Permit Section J.3.a.(3)(d).viii - Identification of efforts conducted to verify third party inspection effectiveness.

Permit Section J.3.a.(3)(d).ix – A description of efforts implemented to address mobile businesses.

Permit Section J.3.a.(3)(d).x - The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(d).xi - A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.

Permit Section J.3.a.(3)(d).xii - A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.

5.1 INTRODUCTION

The following section describes the development and implementation of program components related to industrial and commercial activities in the City of Chula Vista to minimize the impact of urban runoff on receiving waters. This component is driven by multiple interrelated activities to ensure an effective and complete set of actions. The City recognizes that no program activity is mutually exclusive, and that each is essential to the overall success of the program. The City has compiled an inventory of industrial and commercial sources and developed BMP requirements for each source and activity. Implementation of these requirements will be accomplished through education, inspection, and enforcement.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Examples of industrial facilities within the City include manufacturing facilities, auto dismantlers, and transportation businesses. Examples of stationary commercial facilities within the City include auto repair shops, restaurants, and wholesalers of many kinds; this does not include mobile commercial facilities. Mobile commercial facilities are detailed in Section 5.3.

The main objective of the industrial and commercial component of the JURMP is to minimize or eliminate the impacts of industrial and commercial activities on receiving waters and other sensitive environmental resources. Each facility has the potential to discharge pollutants into the MS4 and hence degrade local water quality.

5.2.2 SOURCE CHARACTERIZATION

Through ongoing efforts to maintain a more systematic approach to source inventory management, annually, the City conducts updates of its industrial and commercial facility inventories by searching through its business license database and conducting visual observations of new or closed businesses during annual inspections. Additionally, with each permit cycle, the City conducts a comprehensive field validation of its industrial and commercial inventories Citywide. The industrial and commercial inventories are also updated on a continuous basis by adding businesses that cause incidents of pollutant discharge or are found to require regular inspections due to the type and amount of pollutants that they generate.

Watershed-based inventories of industrial and commercial sites within the City have been compiled. Information was obtained from the City's business license database (Permits Plus), the State Water Resources Control Board database of industrial sites that have filed NOIs, inspection records, and previous experience.

Inventories of industrial and commercial facilities within the City were compiled during the development of the City's JURMP in 2008, which were later updated for the current reporting period and are included in Attachments D.1 and E.

The inventory for commercial facilities includes such information as:

- Facility name
- Assessor's Parcel Number (APN)
- Facility address
- Business category
- Priority
- SIC Code
- Mobile or stationary
- Tributary to a 303(d) listed waterbody

The inventory for industrial facilities includes such information as:

- Facility name
- Assessor's Parcel Number (APN)
- Type of facility
- Priority
- Facility address
- SIC code
- Waste Discharge Identification Numbers (WDID) for sites that are covered under the State of California's General Industrial Permit.
- Tributary to a 303(d) listed waterbody

The entire City of Chula Vista jurisdiction is located within the San Diego Bay watershed and, therefore, watershed designations are not included separately for each industrial/commercial facility. Table 7.1 – General Pollutant Loading Potentials of Industrial and Commercial Sources in the City's JURMP document identifies the pollutants that may be generated by each business category.

The inventories in Attachments D.1 and E include a column for facilities that are tributary to a 303(d) listed waterbody and potentially generate similar pollutants. This column is marked as "Tributary" in the inventory. In addition, Maps 3 and 4 show each commercial and industrial facility, respectively, in relation to the 303(d) listed waterbodies in the City. Some areas of the City discharge to San Diego Bay, which is 303(d) listed for PCBs. Since PCBs have been banned since the early 1970s, no facilities within the City discharge PCBs to San Diego Bay. Attachment D.2 has additional information about each commercial and industrial facility, including the potential pollutants generated by the business type as well as the latitude and longitude of each facility. The inclusion of the APNs and latitude/longitude allows the City to track its inventories through the City's GIS program.

5.2.3 BEST MANAGEMENT PRACTICES REQUIREMENTS

Pollution prevention methods are used as a primary mechanism for reducing discharges of pollutants into MS4s from existing industrial and commercial facilities. Pollution prevention methods are cost-effective BMPs that eliminate or reduce the generation of pollutants at their sources. Industrial and commercial facilities produce a range of pollutants, both indoors and

outdoors, that can threaten human and environmental health if washed into the storm drain system by way of urban runoff. Businesses can benefit from pollution prevention methods by reducing labor time associated with excess pollutant waste handling, thereby re-directing labor time more efficiently to production, as well as the accompanying costs of storage, disposal or treatment.

The following pollution prevention methods were required to be implemented to the MEP where applicable and feasible:

- Reduce the quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct employees
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

In addition to the methods listed above, the City's Storm Water Management Ordinance provides legal authority for the City to require a SWPPP for any industrial or commercial facility that may potentially discharge significant pollutants into receiving water bodies.

In addition to the pollution prevention BMPs, the City has established a set of minimum BMPs based on the California Stormwater BMP Handbook – Industrial & Commercial (CASQA, 2003) for all industrial and commercial sites. Businesses are required to use an effective combination of the applicable BMPs and activity-specific BMPs. The listings of the BMP fact sheets are available online at www.cabmphandbooks.com.

Insurance of proper BMP implementation at industrial and commercial sites is based on a multi-level approach and information on BMPs are disseminated to the local business community through a number of channels, including:

- Inspection & enforcement activities
- Industrial and commercial outreach & education
- Business license application procedure

The City does not exclusively endorse some of the specific recommended BMP options listed in the CASQA fact sheets because they are less stringent than, and conflict with Municipal Permit requirements or City's ordinances. Those exceptions are listed in Appendix C of the JURMP. Businesses are informed of the exceptions, where necessary.

It is important to recognize that pollution prevention methods are stressed through all interactions between the City and facility owners, operators or their employees. Further,

pollution prevention methods are commonly used in compliance with other regulatory management standards. It has been determined that one-on-one interaction between City inspectors and business owners are more effective in knowledge and behavior change than conducting workshops or distributing informational materials, although latter methods are also effective to a lesser degree and are practiced by the City.

5.2.4 PROGRAM IMPLEMENTATION

The City provides education and outreach to industrial and commercial businesses so they are aware of the City's storm water requirements. The City inspects its inventoried businesses to evaluate compliance with its BMP requirements. Enforcement actions are taken as necessary to bring the business into compliance.

Because the City's BMP requirements, as described in the JURMP, are not substantially different from the BMP requirements that the City has been enforcing since 2002, most businesses should already be familiar with what they need to do to comply with the City's requirements. While the City continues to provide education and outreach to industrial and commercial businesses, in most cases a lack of awareness is not accepted as an excuse for noncompliance.

The City provides information and training regarding storm water quality to industrial and commercial owners and operators. In turn, owners and operators are required to train their personnel, employees, and/or other parties involved with industrial or commercial activities. Businesses are given educational materials outlining pollution prevention methods and BMPs during inspections, where appropriate. Storm Water Management staff gives recommendations to businesses where necessary. Based on the City's experience, this site-specific, personal education is among the most effective methods of outreach. The educational program for industrial and commercial businesses is described in more detail in Section 10 of the updated JURMP.

After each inspection, the City provides a copy of the inspection report to the responsible party of the inspected business. Generally electronic inspection forms are completed, and a printout is mailed or faxed to the responsible party after the inspection. If immediate notification is deemed necessary, a paper inspection form with carbon copy is completed onsite, with the carbon copy provided to the responsible party at the time of inspection.

During inspections of new businesses, a copy of the Chula Vista Storm Water Management and Discharge Control Ordinance is handed to the facility owner/manager. The City continues to utilize the following primary mechanisms to provide ongoing education to the industrial and commercial communities within the City:

- Providing one-on-one training and helping business owners to develop their activity and site specific BMPs
- Distributing informational printed materials
- Conducting industrial and commercial inspections and setting standards for compliance

5.2.4.1 INDUSTRIAL/COMMERCIAL SITE INVENTORY AND INSPECTIONS

The City's 2011-2012 inventory of industrial and commercial facilities include 195 industrial facilities and 1,243 commercial facilities, which includes 593 mobile businesses. These facilities are identified in Attachments D.1 and E.

Through ongoing efforts to maintain a more systematic approach to source inventory management, industrial and commercial facilities were prioritized as potential contributors of identified watershed Pollutants of Concern including bacteria and heavy metals. Inspections were conducted and, observed Pollutants of Concern were addressed through necessary education and enforcement actions.

During this reporting period, industrial and commercial inspections were conducted to ensure compliance with Permit requirements per Attachments I and J.

Justification and rationale for why industrial and commercial sites/sources were chosen for inspection is as follows:

- Permit compliance – Categories and numbers of facilities selected for inspection were chosen to meet permit requirements of Section D.3.b.(3).
- Threat to Water Quality – Facilities that posed a higher TTWQ was given higher priority for inspections.
- Inspection frequency – Facilities that were not inspected during the previous period were given a higher priority for inspection.
- Past history of non-compliance – Facilities that had a history of non-compliance during previous inspections were targeted for re-inspection during the current reporting period.

City inspectors use industrial and commercial inspection forms specifically designed as multi-purpose tools. The form provides a checklist of information and potential water quality issues, which serves as a reminder to the inspector of all items requiring attention while on the industrial/commercial facility. The form also provides clear and concise information to the business owner or manager about deficiencies in the implementation of BMPs. It includes information about corrective actions that the business owner or manager needs to take for bringing the site into compliance, and the time allowed for bringing the facility into compliance. Inspection forms are designed to enable the inspector and others to assess BMP implementation on each industrial/commercial facility and the effectiveness of BMPs. Inspection reports are often used as supporting documents in enforcement actions against non-compliant industrial/commercial facilities and during administrative hearings.

Through the above process, the City ensures that inspections conducted address all the required inspection steps to determine full compliance.

The Copermittees have standardized industrial/commercial inspections. An Inspection Standards Workgroup was formed with the task of finding a way to standardize industrial-commercial

inspections so that the results from each Copermittee's inspections are consistent. The goal of the workgroup was to create minimum regional guidelines while maintaining flexibility for each Copermittee to identify and apply their individual requirements that have been developed to match each Copermittee's respective storm water program.

5.2.4.2 PRIORITIZATION

The Municipal Permit no longer requires industrial and commercial inventories to be categorized into high or low priority for TTWQ, although Section D.3.b.(3) of the Municipal Permit requires inspections of sites determined to pose a high threat to water quality. Based on the City's past experience, prioritization of industrial and commercial facilities into high or low priority provides a powerful tool to identify facilities that require focused attention and more frequent inspections. Therefore, the inventories of industrial and commercial facilities have been prioritized in this report.

The City evaluated each business by incorporating factors specified by the Municipal Permit and by using past experience. Although not specifically required, the City has also continued to classify industrial businesses that have obtained coverage under the General Industrial Permit as high priority. Other industrial businesses, based on past inspections and institutional knowledge, or those that are known to have poor compliance history, or have a high potential for pollutant discharge are also classified as high priority.

Criteria for identification of low priority industrial facilities include the following:

- Land Use Code
- SIC Code
- Type of Activity
- Location

Criteria to identify high priority commercial facilities:

- Auto related businesses
  Businesses operating along the following areas were included due to their proximity to receiving water bodies:
  - Main Street corridor (Otay River and MSCP Preserve areas)
  - Bonita Road corridor (Sweetwater River)
  - Bay Boulevard (San Diego Bay)
- Restaurants
  Restaurants operating along the following areas were included due to their proximity to receiving water bodies:
  - Main Street corridor (Otay River and MSCP Preserve areas)
  - Bonita Road (Sweetwater River)
  - Bay Boulevard (San Diego Bay). Facilities within the Port jurisdiction are not included)
- Fast food chains

This is due to frequent rotation of management and employees, and low awareness about water quality issues. Also, fast food restaurants often have a drive through and more customers who potentially discard food wrappers, etc. in the parking lot.

- Private golf courses
- Entertainment facilities
  Cricket Wireless Amphitheater and Knott's Soak City
- Towing companies
- Building supplies and materials
- Food Markets
- Violation history
  Commercial facilities that have been issued a citation or Notice of Violation within the past two years are included in the list. Also, any business that receives a citation or Notice of Violation in the future will automatically be added to the list.

5.2.4.3 INSPECTIONS CONDUCTED

An inspection of an industrial and commercial business involves verifying information regarding ownership, management, and contact names and phone numbers of the businesses. If the inventoried business is no longer at the listed location or has moved, the inspector makes a note to update the inventory. If a new business has been determined to be included in the inventory, Storm Water Management staff notes that information, and the business is usually inspected at that time.

For industrial sites, Storm Water Management staff reviews the facility's SWPPP, Annual Report, and monitoring results, if applicable. Typically, only sites that are covered under the General Industrial Permit have these documents. Where applicable, Storm Water Management staff checks for coverage under the General Industrial Permit

Monitoring verifications for high priority industrial facilities are conducted through the review of the facility's annual report or by the verification of the facility's participation in the Group Monitoring Program. To ensure that the subject facility is still an active participant of a Group Monitoring Program, the City verifies membership by contacting the Group Leader, and by accessing the State Water Resource Control Board's website:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/groupmonitoring.shtml

During both industrial and commercial business inspections the main focus is reviewing the implementation of pollution prevention methods and other BMPs. A walk-through of the business is conducted to identify potential pollutants and pollutant generating activities. The business contact typically accompanies the Environmental Health Specialist during the walk-through to enable City staff to point out areas where corrections are needed, and for the business representative to answer any questions and take note of the requirements.

Based on the results of the inspection, the Environmental Health Specialist completes a Storm Water Quality Inspection Report for Commercial/Industrial Facilities. The responsible party is

provided with a copy of the inspection report after the inspection. The inspection report contains the following information:

- General information to update the inventory
- General site observations and/or conditions of concern noted
- Results of the SWPPP review, BMP plan, and monitoring results, where applicable
- Assessment of BMP implementation
- Recommended corrective actions
- Enforcement action taken
- Inspector name and signature
- Signature of party receiving the report

The Environmental Health Specialists does not typically prescribe exact BMP solutions; staff does attempt to work with the facility's contact to provide examples of BMPs that could be implemented. Cost-effective BMPs are sought whenever possible, although, more expensive BMPs may be needed to reduce the pollutant discharges to the MEP. The business is also evaluated for its staff training procedures and the storm water quality awareness of the contact person. Educational information is provided as appropriate. The findings of the inspection and corrective actions are discussed with the responsible party while the Environmental Health Specialist is at the site.

As discussed above, the business is provided with a copy of the completed inspection report. Based on observations during the inspection, the City may determine that the business category should be changed from low to high priority or vice versa. Any such changes are reflected in the inventory update submitted in the following JURMP Annual Report.

A detailed account of all industrial and commercial inspections conducted during this reporting period is included in Attachments I and J.

5.2.4.4 THIRD PARTY INSPECTIONS

With a dedicated Storm Water Management staff, industrial and commercial facilities are effectively regulated in the City without the services of a third party. The City's industrial and commercial inspection program is defined by a consistent presence and strong enforcement standard, and the City's Storm Water Management staff continues to excel in maintaining the needs of the industrial and commercial programmatic elements.

5.2.4.5 VIOLATIONS AND ENFORCEMENT ACTIONS

The City has a number of mechanisms that can be used to bring an industrial or commercial facility into compliance. These mechanisms include:

- Verbal and Written Warnings
- Notices of Code Violation
- Orders to Clean and Abate

- Orders to Cease and Desist
- Orders to prepare a Storm Water Pollution Prevention Plan
- Orders to implement a Monitoring and Testing Program
- Administrative Citations
- Civil Penalties
- Judicial Enforcement

Environmental Health Specialists properly document each observed violation at the facility failing to comply with the storm water requirements, and enforcement action is taken when necessary to bring the facility into compliance.

In some cases compliance is achieved and observed at the time the initial enforcement action is taken, and no follow-up is necessary. In other cases, Environmental Health Specialist conducts follow-up inspections to ensure that required corrective actions are adequately addressed.

Where the Environmental Health Specialist observes a significant and/or immediate threat to water quality, immediate enforcement action is taken to require the facility to immediately correct the situation. When necessary, City's maintenance crews respond to illegal discharges; attempt to contain and capture pollutants before entering storm water conveyance system inlets; and stay at the scene until the responsible person terminates the illegal discharge. The affected areas and the storm water conveyance system are cleaned and disinfected as necessary. Costs for such operations are charged to the business owner or the property owner. In any case in which Environmental Health Specialists determine that a noncompliant site poses a threat to human or environmental health, the City notifies the Regional Board by phone and in writing as required by the Municipal Permit.

The City also investigates all reported incidents of illicit discharges or illegal connections from industrial and commercial businesses. This includes findings during the implementation of the City's Dry Weather Field Screening and Analytical Monitoring Program. The investigations are performed in accordance with Section 9.5 of the City's JURMP.

Table 5-1 details the types of violations and the numbers of each during the reporting period. A detailed account of enforcement actions taken during this reporting period is included in Attachment K.

Table 5-1 Industrial/Commercial Enforcement Action Summary FY 2011-2012

VIOLATION TYPE	NUMBER
Administrative Citations – Fine	3
Notice of Violation – Civil Penalties	1
VIOLATION CATEGORY	**NUMBER**
Commercial	3
Industrial	1

NOTE: Total Fines issued - $12,186.

The above referenced enforcement actions were preceded by initial inspections and were followed up by additional inspections as necessary until such non-compliant facilities were brought to full compliance with the City's storm water regulations.

5.2.4.6 IDENTIFICATION OF NON-FILERS

If Environmental Health Specialists determine that an industrial facility may require coverage under the General Industrial Permit and has not filed a Notice of Intent (NOI), the City requires the responsible party to contact the Regional Board to determine if the facility is required to obtain coverage. At the same time, the Regional Board is notified of the existence of such industrial facility. Additionally, the City coordinates joint site inspections with Regional Board staff to assist in their site inspections.

During the current reporting period, the City did not identify any non-filer facilities that may be eligible for coverage under the General Industrial Permit.

5.3 MOBILE SOURCES ELEMENT

5.3.1 BACKGROUND

Illegal discharges are a concern with mobile businesses working in the City. Due to the nature of their activities, mobile businesses are regulated differently than stationary businesses. Mobile businesses can be difficult to regulate because many do not have permanent locations in the City or may not have a business license. On a continual basis, new mobile businesses are started, existing mobile businesses go out of business, some mobile businesses do not renew their business license, or some operate from their home. Since they are not consistently present at any particular location, regular inspections are difficult and infeasible. For the above reasons, City maintenance crews who normally work on public streets have been trained to report any observed illegal discharges by mobile businesses.

5.3.2 SOURCE CHARACTERIZATION

Mobile businesses that are known to operate within the City are marked as such on the City's commercial inventory in Section B.5 of the City's updated JURMP. The following business

types are addressed by the mobile source element of the City's industrial and commercial program.

- Mobile auto detail/ maintenance
- Window washing/pressure washing/ street sweeping
- Pool and spa cleaning
- Carpet cleaning
- Plumbing/ handyman/ repairman
- Landscaping
- Pest Control
- Boat cleaning/ hull maintenance
- Fire sprinkler maintenance
- Painting and coating
- Masonry
- Concrete cutting
- Mobile construction trades, which include cement work and masonry

In addition to the business types listed above, other mobile businesses that the City identifies as a TTWQ are added to the inventory. Because not all mobile businesses have obtained a business license in the City or the business is based out of the City's jurisdiction, the City continues to refine and update its inventory of mobile businesses.

The City has established a process by which any mobile business license applicant within the above categories are required to go through a storm water BMP training, and sign a certification verifying that they are aware of the City's BMP requirements and pollution prevention ordinances.

During this reporting period, 127 mobile businesses from the categories listed above applied for a City business license, were trained on BMPs related to their business, completed the City of Chula Vista Storm Water Questionnaire and Certification Statement, and received their business license. Attachment D.3 is a list of the businesses that went through this process during the reporting period. Table 5-2 details the types and numbers of mobile businesses approved during the reporting year.

Table 5-2 Approved Mobile Business Licenses by Category FY 2011-2012

MOBILE BUSINESS TYPE	NUMBER
Construction Related	17
Carpet Cleaning	9
Boat Cleaning and Maintenance	2
Auto Detailing	17
Pool and Spa Cleaning	3
Handyman/ Repairman	26
Powerwashing/ Window Cleaning	1
Plumbing	19
Landscaping	19
Fire Protection Systems	4
Painting and Coatings	9
Pest Control	1
TOTAL	**127**

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 POLLUTION PREVENTION

Pollution prevention comprises procedures and practices that eliminate or reduce the generation of pollutants at their sources. Mobile businesses often deal with a variety of pollutants, both indoors and outdoors, that pose potential environmental threats if transported by way of urban runoff. In mobile business settings, pollution prevention strategies enable the operator to reduce the volume of solid, liquid, and hazardous wastes as well as costs. The City emphasizes the use of the following pollution prevention methods, when appropriate:

- Use smaller quantities of toxic materials or substitute less-toxic materials.
- Minimize the volume of cleaning water to decrease wastewater generation.
- Implement a spill response plan.
- Train employees in pollution prevention practices.

It is important to recognize that pollution prevention methods are stressed through all interactions between the City and the owners, operators, and their employees. Further, pollution prevention methods are commonly used in compliance with other regulatory management standards.

5.3.3.2 BMP REQUIREMENTS

All BMPs required for stationary sources listed in Section 7.2.3.1 of the City's updated JURMP, are also required for mobile businesses where applicable. The most important BMPs used for most mobile businesses are typically Non-Storm Water Discharge Control and Spill Prevention, Control, and Cleanup, as described in fact sheets SC-10 and SC-11 of the CASQA Manual.

In addition, as per the Municipal Permit, the Copermittees developed a set of minimum core BMPs for the various types of mobile businesses. The following BMPs specifically address the unique characteristics of mobile businesses.

- Storm water training
- Spill containment and cleanup (Spill Kits)
- Proper handling of all wastes (Solid, liquid and hazardous)
- Protecting storm water conveyance systems
- Providing proper handling and containment of materials
- Providing equipment washout areas

These practices represent only the minimum required BMPs. Mobile businesses are encouraged to contact City staff for any questions or for information on any additional and more stringent activity-specific requirements.

The Copermittees posted information about mobile business minimum BMPs as a resource in the Project Clean Water Toolbox website. Please see Figure 5-1 – Clean Water Toolbox for the home page of the website.

Figure 5-1 Clean Water Toolbox

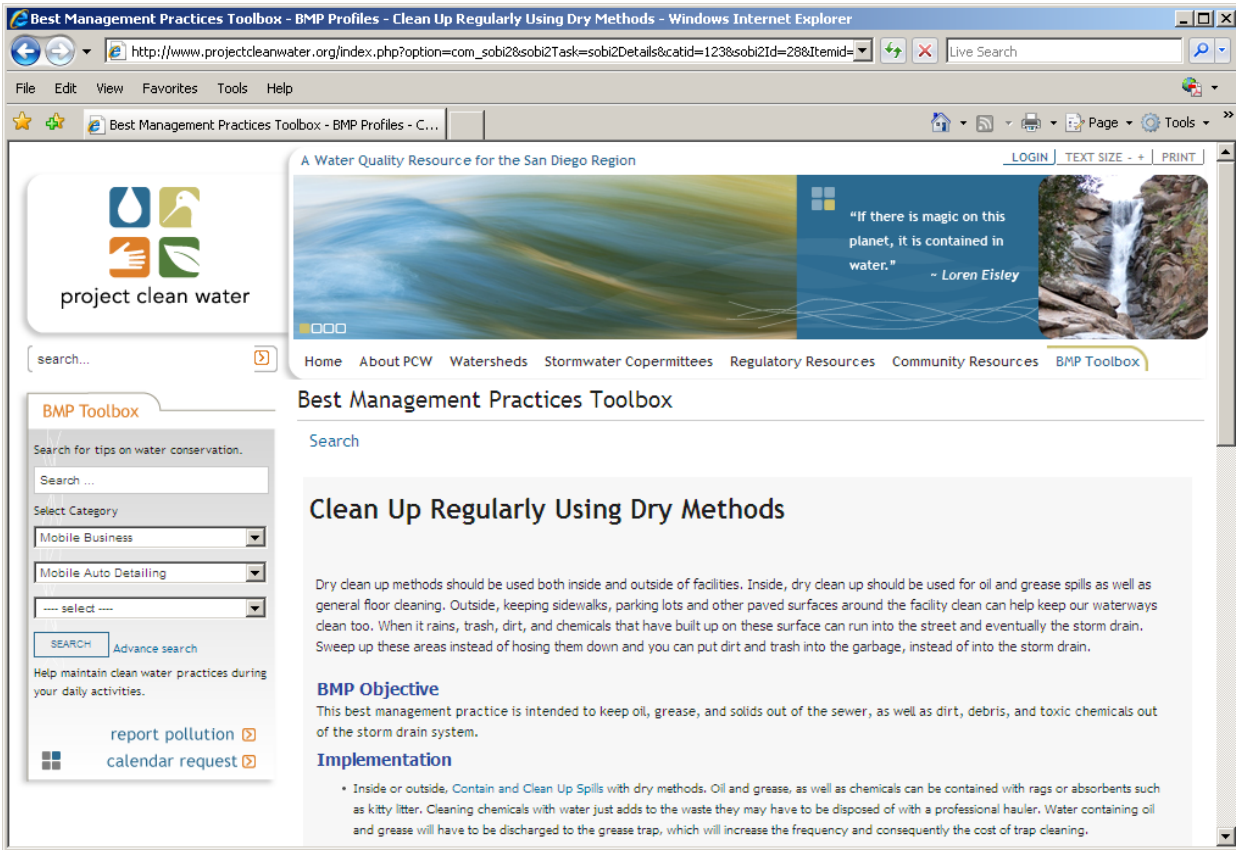

5.3.4 PROGRAM IMPLEMENTATION

The City continues to implement well-developed procedures for mobile businesses through the City's Storm Water Mobile Business License Program. New mobile business license applicants are made aware of applicable requirements and BMPs related to their business prior to the approval and issuance of a business license. Under this program, business license applications that fall under pollutant generating mobile activity types are routed to the Storm Water Management Section for review and approval. Applicants are required to complete a Storm Water Questionnaire regarding their business practices and required BMPs and sign a certification statement that states they are aware of the City' Storm Water regulations and will implement adequate BMPs in their activities. Approved applications and completed Storm Water Questionnaires and Certification Statements are scanned into the City's Mobile Business Database. This process provides a tracking mechanism for Storm Water Management Staff in managing and maintaining priority mobile sources, and identifying repeat violators. The procedures shown below have demonstrated success in requiring new business owners, particularly mobile businesses, to address water quality concerns through the implementation of BMPs.

- The Finance Department's Business License Section receives application from mobile business owner
- The applicant is issued a commercial or construction packet based on business type/description. Each Storm Water Information Packet for Mobile Business contains a transmittal letter, copy of the City's Storm Water Ordinance, and appropriate CASQA BMPs relevant to the type of business activities.
- The applicant is instructed to complete and return the Storm Water Questionnaire and Certification Statement in order to receive approval from the Storm Water Management Section before a business license can be issued.
- The applicant contacts Storm Water Management staff for either a "face-to-face" or phone conversation to review the application and answer any questions prior to approval and issuance of a license.

5.3.4.1 EDUCATION AND OUTREACH

During the business license application process, the City provides mobile business owners or operators the necessary information, educational materials, and outreach related to storm water quality issues specific to their type of business. As stated above, businesses are given the educational materials outlining pollution prevention measures and other BMP requirements related to their respective activities prior to the license being issued. A sample of the Storm Water Information Packets for Mobile Businesses is included in Appendix D of the City's updated JURMP. The education program is described in detail in Section 10, of the City's updated JURMP.

5.3.4.2 ENFORCEMENT ACTIONS

Most violations associated with mobile businesses are related to illegal discharges and lack of BMP implementation. Upon arrival at the scene, City inspectors require an immediate stop to any illegal discharge and instruct the responsible person to initiate containment and cleanup of the affected areas. If the business lacks materials and equipment required for the deployment of adequate BMPs, the responsible person is informed that they will not be able to resume activities until such time that they procure all necessary materials and equipment. Environmental Health Specialists find out if the business possesses a business license, and has signed a Certification Statement. Mobile businesses that do not have a City business license will be required to obtain one prior to being allowed to resume business operations. Enforcement action, including warnings, citations, civil penalties, or other enforcement measures are initiated where justified. During the current reporting period, a total of one administrative citation totaling $300 in fines was issued to mobile businesses operating in Chula Vista.

5.3.4.2.1 NOTABLE ACTIVITIES

During the reporting period, the City continued its mobile business license application processing combined with public education, which is considered a notable and very effective method of minimizing pollutant discharges from mobile business activities.

6.0 RESIDENTIAL COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a. (3)(e). i - Identification of the high threat to water quality residential areas and activities that were focused on.

Permit Section J.3.a.(3)(e).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.

Permit Section J.3.a.(3)(e).iii - A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.

Permit Section J.3.a.(3)(e).iv - Types and amounts of household hazardous waste collected, if applicable.

Permit Section J.3.a.(3)(e).v - A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of evaluation.

Permit Section J.3.a.(3)(e).vi - The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(e).vii - A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.

Permit Section J.3.a.(3)(e).viii - A description of notable activities conducted to manage urban runoff from residential areas and activities.

6.1 INTRODUCTION

The City has developed the residential component of the Jurisdictional Urban Runoff Management Program (JURMP) based upon a multi-faceted approach including pollution prevention; complaint response and enforcement; and outreach and education. It is the overarching goal of this component to offer cost effective and simple solutions to reducing residential discharges of pollutants into the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP) and to support the long-term improvements of water quality through awareness and behavior modification.

6.2 SOURCE CHARACTERIZATION

The information collected from reported illegal discharges and results of subsequent investigations can be analyzed to provide useful tools in effectively characterizing activities, sources, and areas within the City that contribute more to water quality impacts and that need to be targeted. These criteria may stay constant from year to year, or change each year. However,

knowledge of the pattern that they follow will provide the storm water manager an insight that is necessary to develop or modify an effective program. As in previous reporting years, the City has taken a critical look at the hotline calls related to residential activity received during the reporting period (Figure 6-1). Home improvement and auto-related discharges were most prevalent in this reporting period. The City has continued to focus residential education on pollution prevention during home and auto related activities in order to foster a change in behavior and to increase residential BMP implementation. Further, characterizing the sources of pollutants can provide a resource in tailoring public education and outreach programs to the specific needs of the community and improving their effectiveness, while maintaining economic viability. This type of critical look is an important tool in making management decisions on how to approach residential BMP implementation and pollution prevention in the City. It should be noted that such analysis is not intended to offer determinate conclusions; rather it is presented to provide a general evaluation tool to guide residential strategies and BMP implementation guidance. Further, it is an effective way of evaluating and characterizing sources over time.

Figure 6-1 Percentage of Hotline Reported Residential Storm Water Violations by Activity FY 2011-2012

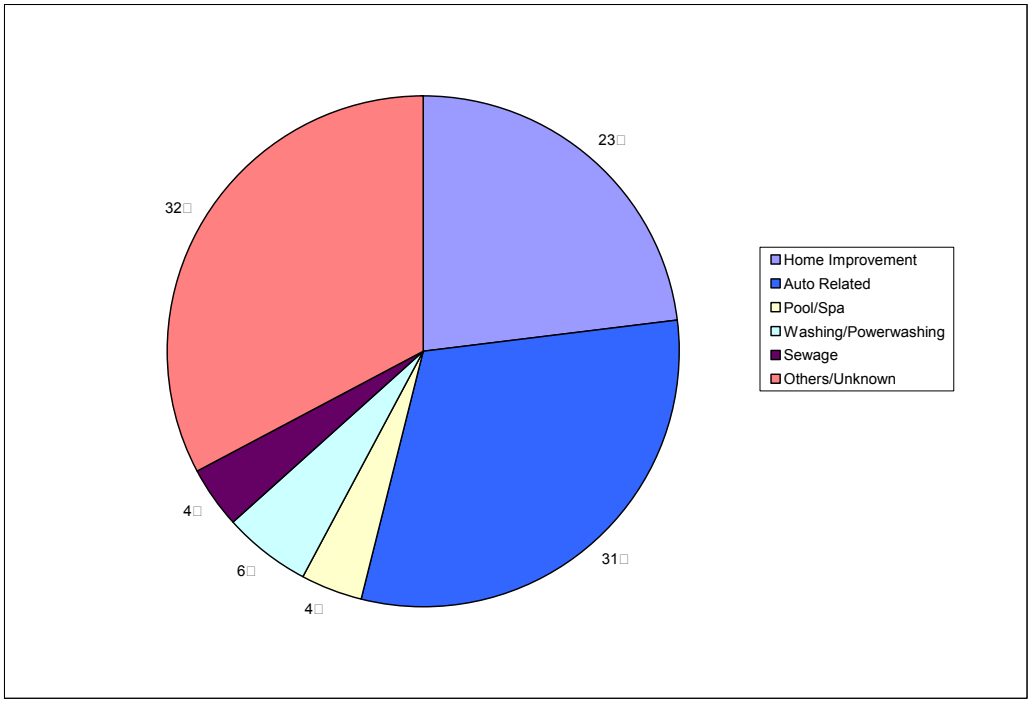

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's JURMP has designated BMPs for a number of high Threat To Water Quality (TTWQ) residential activities including home improvement and maintenance, automotive maintenance, waste management and disposal, and pet waste management. In addition, every year certain residential areas of the City are designated as areas with a high TTWQ. It is important to recognize that the dynamic behind strict enforcement of requirements regulating residential BMP implementation is quite challenging, however, the City has developed a number

of mechanisms through which information on BMPs are disseminated to the public and ultimately enforced through the City's Storm Water Ordinance. Mechanisms such as special community events, school presentations, door hangers, City's environmental website, and community newsletters were utilized within the defined reporting period of this report. Examples of such programs and outlets include:

- Household Hazardous Waste Collection Events
- State-Certified Used-Oil Collection Centers
- Household Collection of Used Cooking Oil
- Christmas Tree Recycling Program
- Residential Complaint Response and Enforcement
- Residential Door Hangers
- City's environmental website at: www.chulavistaca.gov/clean

Notably, all of the mechanisms listed above have been discussed in more detail throughout other sections in this report. It is confirmed that the designated BMPs were required to be implemented primarily through public education, and where necessary by enforcement action.

6.4 PROGRAM IMPLEMENTATION

The residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted so that pollutants associated with residential activities and areas are minimized to the MEP. The residential program also has an education component, described in the following sections, so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities. The City uses public education and outreach together with enforcement mechanisms, when necessary, to ensure program implementation by residents and compliance with all federal, state, and local laws and regulations.

The City keeps accurate records of all reported residential illegal discharges and non-compliance with BMP requirements. This information can be used in many ways such as identification of pollutants of concern, areas of HTTWQ, increasing/decreasing trends in illegal discharges, and repeat violators. Such analysis is then used to develop new programs or modify existing programs to focus attention on program elements that result in higher effectiveness and quicker results. Map 1 – Violation Location Map was prepared to depict all areas of the City with a visual demonstration of reported illegal discharge distributions. The City then targets higher density areas for more focused public education and surveillance.

6.4.1 MANAGEMENT AND DISPOSAL OF USED OIL AND HOUSEHOLD HAZARDOUS MATERIAL

The City facilitates the proper management and disposal of used oil, toxic materials, and all other Household Hazardous Waste (HHW). Information pertaining to the household hazardous waste and the used oil and filter programs are distributed to residents annually during special events, presentations, point of purchase locations, mobile displays throughout the city offices and community centers, local realtors/associations, and property management offices. Residents are

educated about the disposal of such waste through the City's public education program, which is described in Section 8.0. The City meets and often exceeds requirements set forth by the Cal Recycle. The program has the capacity to receive and process used oil and filters generated by City residents. The amount of used oil collected from certified oil centers increased compared to last reporting year as shown in Table 6-1. The City continues encouraging residents to take a proactive approach to changing their oil by draining it, uninstalling their oil filters, and taking the used oil and filters to their local auto supply store. In this way, residents recycle used oil as they purchase their new oil and avoid an extra trip, one that could have added green house gases into the atmosphere. This method also prevents storm drain pollution, as unattended oil could intentionally or unintentionally spill and enter storm drain systems.

The South Bay Used Oil Recycling Program has been evaluated by CalRecycle as a successful program for its effectiveness and regional approach. In a recent consolidation of CalReycle programs, the City of Chula Vista was asked to absorb four cities to its regional program. As such, the City of Chula Vista is now the regional lead of the used oil programs for National City, Imperial Beach, Coronado, La Mesa, Lemon Grove, El Cajon, and Santee, thus improving environmental quality throughout the east and southern San Diego county regions. Residents of Chula Vista can also leave oil filters and up to 5 gallons of used oil at the curb on their regular trash and recycling collection day at no additional charge. This used oil will be collected and recycled through the South Bay Used Oil Recycling Program. Residents of Chula Vista also have the option of taking their used oil to various used oil collection facilities in the City for recycling or disposal.

Additionally, the City provides its residents and neighboring municipalities the means to properly dispose of HHW at the facility located at 1800 Maxwell Road, Chula Vista. This facility accepts oil, both clean and contaminated as well as residential hazardous waste. Residents are limited to 15 gallons or 125 pounds of used oil or hazardous waste per vehicle. The facility is open every Saturday and Wednesday from the hours of 9 AM to 1 PM. The City also offers "door-to-door" collection of HHW for a small donation. Under this program, HHW is collected by appointment from residents who are unable to physically take the waste to the permanent facility or because of scheduling conflicts. Every used oil and HHW application has focused on pollution prevention, watershed protection, source reduction and making it easy for residents to do the right thing when it comes to proper disposal.

Table 6-1 Amount of HHW and Used Oil Collected FY 2011-2012

Household Hazardous Waste	Quantity of waste collected (FY 10-11)	Quantity of waste collected (FY 11-12)
	412,706 pounds	620,929 pounds
Used Oil	Quantity of used oil collected from certified centers (FY 10-11)	Quantity of used oil collected from certified centers (FY 11-12)
	28,732 gallons	78,122 gallons

6.4.2 RESIDENTIAL AREAS AND ACTIVITIES EVALUATION METHOD

A total of 25% of the City's 33,366 acres is designated as either multi- or single-family residential. Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the quality of receiving waters. The City has developed various mechanisms that aim to reduce pollutant runoff from residential areas and activities to the MEP. The following mechanisms are used by the City to determine areas where extra efforts may be necessary:

- Public reporting hotline
- Analysis of Dry Weather Monitoring Program results
- Observations from City maintenance personnel
- City's environmental website at: www.chulavistaca.gov/clean
- Analysis of data collected and managed in the Department of Public Works data management system Lucity

Further information about the City's hotline reporting system and Dry Weather Field Screening and Analytical Monitoring Program are provided in Section 9 of the JURMP document. The City evaluates its methods used to encourage improved pollution prevention practices and the implementation of BMPs through the review of the aforementioned mechanisms. By using a Geographic Information System program and the data collected from these mechanisms, residential areas of the City that have had higher numbers of violations, and outfall locations that exceeded pollutant standard limits are mapped annually (see Map 1 – Violation Locations Map and Map 2– HTTWQ Residential Area Map). City staff then develops programs to inspect and investigate areas of the City that are considered high TTWQ. City staff investigates violations with enforcement authority within a reasonable timeframe. Violations are documented and depending on the nature and severity of the violation, enforcement may consist of any of the following:

- Verbal Warnings
- Written Warnings
- Orders to Clean and Abate
- Monetary Fines

Details of these procedures are included in Section 2 of the JURMP document.

The general public continues to effectively participate in the program by reporting pollutant generating activities or practices observed within their neighborhoods. Based on the number of calls received from the public during this reporting period, it can be construed that the general public's awareness of water quality issues continue to improve and people are more sensitive about the environmental quality of their surroundings. Information collected from the City's illegal discharge reports database can also characterize those activities and sources that have more implications on water quality as presented in Figure 6-1.

The residential areas and activities evaluation method described above indicate that: 1) residents are becoming more environmentally conscious, 2) residents take an active role in environmental protection by calling the City and reporting illegal discharges, 3) a positive trend in urban runoff discharge quality is emerging. These results are encouraging and provide incentive to City staff to maintain their level of efforts and find innovative methods to accelerate the positive trend.

6.4.3 VIOLATIONS AND ENFORCEMENT ACTIONS TAKEN

Enforcement of the residential program has been established and addressed in Chula Vista Municipal Code Chapter 14.20, Storm Water Management and Discharge Control; and Chula Vista Municipal Code Title 1, General Provisions. During this reporting period, Storm Water Management Section staff responded to 81 reported violations, of which 52 were residential. Eight of the reported residential violations resulted in administrative citations. Storm Water staff responded to each reported violation, investigated each case, took appropriate actions regarding containment of pollution, educated the violating party on existing laws and regulations, made follow-up visits where necessary, and proceeded with enforcement action if voluntary compliance was not achieved. The amount of fines collected during this reporting period from residential violations was over $6,000. Although there were fewer residential citations issued during this reporting year compared to last, there were more fines collected due to the fact that there was a civil penalty issued to one resident.

Data management of past violations helps City staff identify repeat residential violators. Repeat violators are subject to more severe enforcement action due to the fact that the violation can no longer be considered an act of ignorance of water quality protection laws and regulations, but is a deliberate illegal act. Some of the cases were resolved without resorting to enforcement action. In other cases, enforcement actions were taken regarding residential areas. Details of the violations issued during the reporting year are included in Attachment K.

6.4.4 RESIDENTIAL EDUCATION PROGRAM

Education is an important step towards improving receiving water quality, both locally and regionally. Increasing public awareness and encouraging a change in both attitude and behavior of the general public and the regulated community, can directly lead to a reduction or elimination of storm water pollution caused by common daily residential activities. Due to the importance of public education and outreach in storm water programs, the Municipal Permit requires public education at jurisdictional, watershed, and regional levels. The following are brief accounts of the implementation of jurisdictional and regional education programs during the reporting period. Additionally, during the reporting period, the City collaborated with the Copermittees of the San Diego Bay Watershed to implement the Watershed Urban Runoff Management Program (WURMP) residential education component. Details of such efforts are fully discussed in this year's WURMP Annual Report, which will be submitted to the Regional Board under a different cover.

6.4.4.1 JURISDICTIONAL RESIDENTIAL EDUCATION PROGRAM

The Storm Water Management Section collaborates with the City's Environmental Services Division and the Conservation Division in the implementation of the Jurisdictional Residential Education Program. Pollution prevention and water quality regulation information is disseminated by actively participating in community events throughout the year. Informational booths at fairs, flyers, brochures, website postings, advertisements, and other educational materials are the various approaches used by City staff in disseminating storm water information. Such programs raise pubic awareness about the City's storm water regulations and requirements as well as Best Management Practice methods. Residents become aware of the importance of protecting their watersheds and water resources, and recognize that they have the ability to improve local water quality by making a few simple changes to their regular routines. The Storm Water Management Section continues to provide a comprehensive storm water education program to the residential community, general public, and school children.

Many educational efforts such as direct interaction during reported violation investigations or when taking calls to the City's Storm Water Hotline are conducted on an ongoing basis. Educational materials are also distributed throughout the year. Targeted mailings, focused training sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of reported violations, and other similar factors.

Residential hotline calls, response, and enforcement rely heavily upon citizen participation and awareness. As such, an integral component of residential outreach and education is to encourage the reporting of pollutant generating activities or practices observed by citizens within their neighborhoods. To further support the reporting efforts, the City relies heavily upon well-trained municipal staff who effectively operate as the "eyes and ears" of the City.

6.4.4.2 REGIONAL RESIDENTIAL EDUCATION PROGRAM

During this reporting period, the City continued to participate in the Education and Residential Sources (ERS) Workgroup with the San Diego Copermittees. The workgroup is broken down into sub-workgroups that focus on one, or more of the various components undertaken by the ERS. These sub-workgroups address media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment. A few of the activities that the group completed during the reporting year include: 1) Continued implementation of a comprehensive media program including ads on TV, radio, and movie theaters; 2) Development and distribution of the bilingual regional Storm Water Coloring books and calendars; and 4) Continued participation in regional community events such as the Envirofair at the San Diego County Fair.

Comprehensive discussions of each of the above program elements will be included in the Regional Urban Runoff Management Program Annual Report, which will be submitted to the Regional Board under a separate cover.

6.4.5 MANAGEMENT OF URBAN RUNOFF FROM RESIDENTIAL AREAS AND ACTIVITIES

As detailed throughout this report, the City institutes a variety of highly effective pollution prevention programs to provide the residential community with venues and outlets for disposal of wastes and to provide invaluable information and education on the negative impacts of improper waste disposal. A consistent message of stewardship through everyday actions and behaviors and the importance of protecting and maintaining the quality of our natural resources are presented through a variety of outlets. It is because pollution prevention is the most economical and effective way of protecting water quality, that this element is given higher priority, and has proven to be a successful measure for the City over time.

During the reporting year, the City identified several High Threat to Water Quality (HTTWQ) residential neighborhoods that required focused educational outreach (see Map 2). These areas have been targeted based on storm water inspection observations, reported violations to the City's hotline, and the dry weather monitoring upstream investigation program. The City distributed storm water pollution prevention door hangers in addition to brochures targeting specific residential activities and their associated pollutants to these neighborhoods. The activities and pollutants that were focused on include: 1) landscaping activities (fertilizer and over-irrigation discharge) and 2) trash. These areas and their corresponding activities and pollutants have been identified on Map 2. In addition, the City provided storm water residential education packets to several Homeowner's Associations to distribute to new homeowners.

In November 2010, the USEPA approved the 2008-2010 303(d) list for the San Diego Region. Therefore, in addition to the HTTWQ areas shown in Map 2, there are also residential areas of the City that could potentially discharge pollutants of concern to 303(d) listed waterbodies within the City. Table 6-2 shows the pollutant/waterbody combinations within or adjacent to the City. Some areas of the City discharge to San Diego Bay, which is 303(d) listed for PCBs. Since PCBs have been banned since the early 1970s, no residential areas within the City discharge PCBs to San Diego Bay. The pollutant(s) of concern causing toxicity in Poggi Canyon and Sweetwater River are not known, however, previous regional monitoring reports suggest that synthetic pyrethroids are potential cause of toxicity. Synthetic pyrethroids are a component of pesticides, which can come from residential homecare activities. The lower section of Sweetwater River, below the impoundment, is 303(d) listed for a variety of pollutants. Residential activities may potentially affect water quality in this area, mostly through gardening and landscaping activities. It is not clear if selenium is generated through residential activity and accordingly, the City is still in the process of further studying selenium and its sources. The City will continue to educate its residents through distribution of educational materials and interaction at community events, with a focus on these pollutants of concern.

Table 6-2 2008-2010 303(d) Listed Waterbodies-Pollutants In or Adjacent to Chula Vista

WATERBODY	POLLUTANT
Poggi Canyon Creek	Toxicity
Telegraph Canyon Creek	Selenium
Sweetwater River, Lower (below Sweetwater Reservoir)	Enterococcus
	Fecal Coliform
	Phosphorus
	TDS
	Total Nitrogen as N
	Toxicity
	Selenium

The City also targets HTTWQ residential areas by having cleanup events that provide residents the opportunity to volunteer to help cleanup their neighborhoods. The annual Beautify Chula Vista event focuses on a different neighborhood each year, frequently in under-privileged areas of the City, and provides graffiti cleanup, tree planting, trash pick-up, and storm drain stenciling. By participating in the event, residents are able to make a connection to their community and environment while learning about storm water pollution prevention.

In addition to targeting HTTWQ areas for public education and outreach, the City has a number of programs in place throughout the City to promote environmental stewardship and storm water pollution prevention among its residents. Section 8.0 details the education programs that the City has implemented in order to encourage positive behavior changes in residents.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(f).i - Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.

Permit Section J.3.a.(3)(f).ii - Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.

Permit Section J.3.a.(3)(f).iii - Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.

Permit Section J.3.a.(3)(f).iv - A brief description of any other investigations and follow-up activities for illicit discharges and connections.

Permit Section J.3.a.(3)(f).v - The number and brief description of illicit discharges and connections identified.

Permit Section J.3.a.(3)(f).vi - The number of illicit discharges and connections eliminated.

Permit Section J.3.a.(3)(f).vii - Identification and description of all spills to the MS4 and response to the spills.

Permit Section J.3.a.(3)(f).viii - A description of activities implemented to prevent sewage and other spills from entering the MS4.

Permit Section J.3.a.(3)(f).ix - A description of the mechanism whereby notification of sewage spills from private laterals and septic system is received.

Permit Section J.3.a.(3)(f).x - Number of times the hotline was called, as compared to previous reporting period, and a summary of the calls.

Permit Section J.3.a.(3)(f).xi - A description of efforts to publicize and facilitate public reporting of illicit discharges.

Permit Section J.3.a.(3)(f).xii - The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

Permit Section J.3.a.(3)(f).xiii - A description of notable activities conducted to manage illicit discharges and connections.

On September 10, 2008, the Regional Board adopted Addendum No. 2 to the Municipal Permit. The addendum recognized that Dry Weather Field Screening and Analytical Monitoring activities may continue until the end of September each year, and the results would not be available to be included in JURMP Annual Reports, which are also due for submittal on September 30 of each year. Therefore, submittal of Section 7.0 of the JURMP Annual Report (Illicit Discharge Detection and Elimination Component) was allowed to be postponed until December 15 of each year. Pursuant to this requirement, the City of Chula Vista will submit the entire FY 2011-2012 Illicit Discharge Detection and Elimination Component; copies of the City's 2012 Dry Weather Field Screening and Analytical Monitoring Program Report and Follow-Up Investigations; and related attachments no later than December 15, 2012.

8.0 EDUCATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(g).i - A description of education efforts conducted for each target community.

Permit Section J.3.a.(3)(g).ii - A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.

Permit Section J.3.a.(3)(g).iii - A description of education efforts conducted for municipal departments and personnel.

Permit Section J.3.a.(3)(g).iv - A description of education efforts conducted for the new development and construction communities.

Permit Section J.3.a.(3)(g).v - A description of jurisdictional education efforts conducted for residents, the general public, and school children.

8.1 INTRODUCTION

The City has identified public education and outreach as powerful and effective tools towards increased awareness and behavioral changes that will ultimately lead to reduced pollutant loading from various land uses. The City considers voluntary pollution prevention to be one of the most effective means of achieving long-term reductions in urban runoff pollution. This objective is achievable only through public education and outreach that makes an impression on the community and invokes changes in behavior. As such, the City has approached the development and implementation of educational components by targeting the following audiences:

- Municipal staff
- Residential community, general public, and schools
- Industrial and commercial business owners and operators
- Construction and development community
- Underserved communities

The City's Storm Water Management Program is strongly supported by a variety of environmental programs within the organization that provide an exceptional vehicle for disseminating educational materials to the general public regarding storm water pollution prevention. Specifically, the City's Environmental Services Division, under the South Bay/ East County Regional Used Oil Recycling, Household Hazardous Waste Collection and Recycling Program targets issues directly connected to storm water pollution prevention. The Chula Vista Nature Center also provides an invaluable venue for public participation and the promotion of conserving, preserving, and protecting San Diego Bay. Through these programs and facilities, activities such as annual school presentations, waste collection events, and public outreach events are conducted in collaboration with the Storm Water Management Section. During such

events, the general public is exposed to water quality concerns, pollution prevention techniques, and Best Management Practices (BMPs) to prevent storm drain pollution. The following sections provide a summary of various activities and venues utilized within the defined reporting period of this report to achieve public education and outreach goals for municipal staff, business owner, construction, new development, general public, and targeted communities.

8.2 STAFF TRAINING ELEMENT

Staff education and training on water quality issues takes several forms as follows:

- General storm water education for all City employees
- Education targeting staff engaged in the review, approval, and inspection of new development and redevelopment projects
- Training for City staff responsible for the maintenance of the City's infrastructure

General storm water protection and pollution prevention education for City staff is provided and reinforced on an ongoing basis. While a number of communication venues are available and have been relied upon in previous reporting years, the most valuable education comes through the implementation of City-wide pollution prevention and waste reduction programs. Recycling programs are in place throughout City facilities, and serve as a constant reminder to staff of the City's commitment to pollution prevention.

During the reporting year, several City staff from Storm Water Management Section, Public Works Inspections, Development Services, and Public Works Engineering attended workshops and received training and certification about the new Construction General Permit. Training included general permit overview, risk levels, sampling and monitoring, inspections, reporting, and certification requirements. As construction projects begin to implement the Construction General Permit, the Storm Water Management Section staff will continue its efforts to educate itself as well as municipal staff.

Education for staff engaged in the City's permitting process for new development and redevelopment has been achieved through a number of venues. Targeted training activities have been conducted to reinforce water quality priorities in the field of land development and planning, including Standard Urban Stormwater Mitigation Plans (SUSMP) and the Hydromodification Plan (HMP). In addition, development planning and engineering staff is consistently exposed to water quality priorities on a project-by-project basis through project meetings, workshops, and field visits. City Storm Water Management staff also provides training on the City's Development Storm Water Manual. A continuing focus on internal SUSMP and HMP implementation policy, procedure and guidance training has been emphasized during the defined reporting period of this report. Within this framework, those departments and staff involved in the SUSMP review process have been apprised of the need to utilize Low Impact Development (LID) techniques as well as higher efficiency treatment control BMPs for project design in meeting the City's SUSMP requirements. This approach has proven integral in ensuring ongoing SUSMP implementation refinement and in unifying the focus on site design techniques and the use of higher efficiency treatment control BMPs. In addition, presentations

by the manufacturers and vendors of structural BMPs have been organized and hosted by the City.

As in previous reporting year, Storm Water Management staff provides focused training on storm water BMPs to various City departments and divisions on an as needed basis. Such training may be in the form of formal workshops, or on the job training. The following staff has received storm water training on an as-needed basis:

- Wastewater Maintenance
- Storm Drain Maintenance
- Street Maintenance
- Open Space Maintenance
- Traffic Signing and Striping
- Vehicle Maintenance
- Land Development
- Public Works Inspectors

Table 8-1 details the training, workshops, and seminars that City staff attended and/or gave to other departments during the reporting period. Below is a summary of general concepts that were covered during the trainings.

- Federal, state, and local water quality laws and regulations applicable to municipal areas and activities, development and redevelopment projects, and construction projects;
- Required federal, state, and local permits pertaining to water quality;
- Water quality impacts of urbanization, municipal activities and areas, and construction sites;
- The connection between land use decisions and short-term and long-term water quality impacts;
- Methods for minimizing the impacts on receiving water quality and watershed.

Table 8-1 Municipal Staff Education FY 2011-2012

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
08/12/11	Hydromodification Management Training	City staff provided training about water balance, sediment transport in natural channels, BMPs, erosion, and sizing calculators to City engineering staff	City Storm Water Staff
08/17/11	Monitoring Trash, TMDLs, and Efforts Towards Compliance	City staff participated in a webinar given by the LA Regional Board who discussed trash TMDLs and how responsible parties are making efforts to fulfill requirements, including monitoring	CA Water Quality Monitoring Collaboration

Table 8-1 continued on next page

Table 8-1 continued

DATE	EVENT	EVENT DESCRIPTION	ORGANIZER
08/21-25/11	StormCon	Staff attended this conference about storm water BMPs, LID, program management, and monitoring. Staff took CPSWQ training and exam.	StormCon
09/06/11	SCCWRP Channel Screening Tool	Staff attended this workshop in which geomorphology experts provided training on the newly developed Hydromodification Screening Tool to determine susceptibility of natural channels, creeks, and rivers to erosion.	Floodplain Management Association
12/07/11	Storm Water and HMP BMPs	Staff attended a presentation on Contech products such as LID BMPs, high-rate media filters, dry wells, underground storm water runoff storage and reuse, and infiltration.	Contech Construction Products
03/13/12	Storm Water Training	Storm water staff conducted annual refresher storm water training to wastewater and storm drains group. Showed video "What We Can Do as Municipal Employees."	City Storm Water Staff
03/15/12	Storm Water Training	Storm water staff conducted annual refresher storm water training to streets department and pump techs. Showed video "Storm Pollution for Municipal Employees – Storm Watch."	City Storm Water Staff
03/26/12	Storm Water Training	Storm water staff conducted annual refresher storm water training to garage staff. Showed video "What We Can Do as Municipal Employees."	City Storm Water Staff
04/05/12	Storm Water Training	Storm water staff conducted annual refresher storm water training to parks staff. Showed video "What We Can Do as Municipal Employees."	City Storm Water Staff
04/19/12	Storm Water Training	Storm water staff conducted annual refresher storm water training to open space and construction staff. Showed video "What We Can Do as Municipal Employees."	City Storm Water Staff
05/09/12	Storm Water Training	Storm water staff conducted annual refresher storm water training to locksmith, Hvac, plumbing, and electrical staff. Showed video "What We Can Do as Municipal Employees."	City Storm Water Staff

8.3 EDUCATIONAL OUTREACH ELEMENT

8.3.1 RESIDENTS, GENERAL PUBLIC, AND SCHOOL CHILDREN

The CLEAN group, made up of the City's environmental departments and various environmentally focused stakeholders, has continued to collaborate on various environmental education programs within the City. The following mission statement established by the CLEAN workgroup has guided these efforts:

"Foster environmental awareness in the City of Chula Vista, through stakeholder and community involvement and participation."

The CLEAN education program was developed around three primary elements: 1) Media 2) Community Interaction and 3) Stakeholder Coordination. It is important to distinguish the focus of this program to promote not only community education, but also community action.

In efforts to maximize the overall effectiveness of this program, and to capitalize on the interrelationship of various Chula Vista environmental programs, the program has been branded under the tag line of "**Your Community. Your Environment. *Your Choice*."**

The culmination of efforts of various involved City divisions has been embodied in the established CLEAN program, which provides an effective and powerful body to guide the significant efforts envisioned for the program. It is also anticipated that these efforts would be further strengthened through support of community stakeholders including non-profit and business entities.

Based on the CLEAN branding, media elements including pollution notification residential door hangers, stickers, brochures, and various giveaways were distributed to the general public within the defined reporting period of this report. In addition, the CLEAN web site has been established with pages dedicated to water quality protection and pollution prevention Citywide. The CLEAN website www.chulavistaca.gov/clean includes information about environmentally focused divisions in the City including Storm Water Management, Environmental Services, and Conservation. The storm water section of the website includes information useful to residents, the development community, mobile businesses, and industrial and commercial businesses. Figure 8-1 shows a general snapshot of the CLEAN homepage.

As the CLEAN program continues to evolve, a wide array of media outlets have been explored, and established branding has been incorporated in them. As indicated above, the larger CLEAN campaign has been designed to promote not only education, but also to encourage and facilitate community actions.

While the City has developed and maintained a variety of new residential education and public outreach opportunities, the City has sustained a number of existing outlets and events. In 2011-2012 the City continued to use pollution prevention messages on the side of waste management vehicles to encourage the proper disposal of items such as recyclables, cooking grease, and holiday trees. In addition, the City continued to distribute a number of promotional items with pollution prevention messaging for distribution at presentations and community events. Promotional items included CLEAN branding and messaging.

Figure 8-1 CLEAN Homepage

The City has continued to maintain six trail displays (Figure 8-2) throughout the City, near walking trails and parks. The trail displays include information on a variety of interrelated environmental issues, and remind the public of the precious resources that exist within the City. The trail display concept provides commercial or industrial entities the opportunity to receive public recognition through the support of such efforts. They demonstrate the connectivity of environmental concerns throughout the City. Trail displays have been installed at the following locations:

- Chula Vista Nature Center
- Mountain Hawk Park

- Hilltop Park
- Salt Creek Park
- Rice Canyon
- Corner of Telegraph Canyon Road and La Media

A poster form of the trail display is also displayed in the City's John Lippit Public Works Center and the Chula Vista Public Library. Chula Vista staff and residents pass this display on a daily basis, reminding them that the City is within the Sweetwater and Otay Watersheds and of the simple actions they can take to protect their local waterways. Another poster is used for community events to explain watershed concepts and pollution prevention to Chula Vista residents.

Figure 8-2 City of Chula Vista CLEAN Trail Display

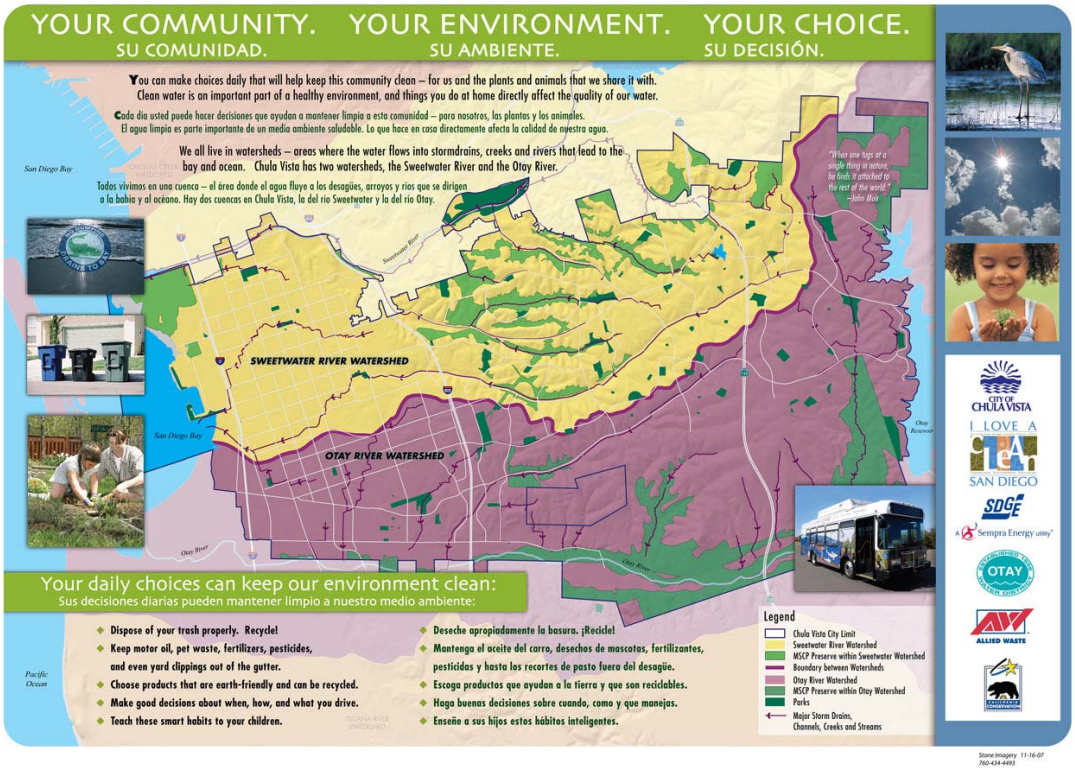

Media Articles

As a member of the CLEAN group, Storm Water Section staff contributed articles about pollution prevention to various publications aimed at residents living in the City. These included The Star News and Your Guide to CLEAN, which is included in residential trash bills. Altogether, these publications reach more than 50,000 households. The City will continue to contribute and place pollution prevention advertisements and articles in these publications as well as continue to explore more venues for reaching citizens through print media.

School Education Efforts

Due to the previous success of the Salt Creek Critters, South Bay Water Warriors, and elementary and high school education programs, the City decided to continue its education

outreach program to school children. With the help of I Love a Clean San Diego, the City provided storm water education presentations to students at Otay Elementary School and Valle Lindo Elementary School. The presentation focused on pollutant types and their sources, pollution prevention, watershed protection, and volunteer opportunities. Pre- and post-tests were administered to the students receiving the presentations. In addition, an interactive activity was done with each class to enforce the concepts taught in the presentations. Overall, both students and teachers felt that the presentations were beneficial and increased knowledge and interest in environmental issues in their community. The City will continue with school programs such as these into the coming fiscal year, as funding permits.

Community Events

The City of Chula Vista Storm Water Management Section and Environmental Services Division participate in various community events held throughout Chula Vista and San Diego County. Each of these events provides an opportunity to reach citizens throughout the watershed by setting up educational booths and displays.

Community events have been identified as valuable venues providing excellent opportunities to reach large numbers of citizens. During the reporting period the CLEAN group, which includes the Storm Water Management Section and the Department of Conservation and Environmental Services, participated in and set up booths and displays at most major South Bay community events. City staff provided education and outreach materials regarding a variety of interrelated environmental issues. A variety of brochures and pamphlets were distributed to the general public about the effects of storm water pollution on the environment and ways that residents can prevent pollution of their waterways. By participating in these community events, City storm water staff has the opportunity to generate large numbers of impressions each fiscal year. In addition, City staff displayed the EnviroScape model at several community events in order to teach residents about watershed concepts and to reinforce the connection between everyday actions and water quality.

Living Coast Discovery Center

The Living Coast Discovery Center, formerly known as the Chula Vista Nature Center, is located within the 316-acre Sweetwater Marsh National Wildlife Refuge of San Diego Bay, is an internationally recognized zoo/aquarium exhibiting plants and animals native to San Diego Bay and marsh/wetland habitats. The Center provides the San Diego Bay watershed with a truly unique and invaluable outreach and education resource.

The Center's mission is to inspire care and exploration of the living Earth by connecting people with coastal animals, plants, and habitats. Through visits to the Center and its offsite programs thousands of people are given the opportunity to connect with local wildlife and learn what they can do to protect coastal habitats. To help facilitate educational experiences, the Center offers interactive permanent and seasonal exhibits, field trips, tours, day camps, scout programs, and much more. During the reporting year, there were over 460 scheduled tours to the Center, resulting in over 10,750 children and over 2,850 adults learning about San Diego Bay wildlife, watersheds, and watershed protection.

- The Chula Vista Elementary School District (CVESD) funds a full-time Science Resource Teacher who works closely with the Center staff to provide environmental education programs which are integrated in their science and social studies curricula. This teacher works with over 5,000 CVESD students each year.

- Other schools and youth groups schedule field trips to the Center after the leader participates in a 2-hour Field Trip Orientation Workshop (a teacher training program) held at the Center to gain familiarity with the Center and the Sweetwater Marsh National Wildlife Refuge. During these field trips, Center docents guide students around the Center and grounds, where they learn about the importance of watersheds, wetlands, and other coastal resources.

- Students learn to recycle, reuse, and reduce waste. They also learn about storm drains and the types of pollutants commonly identified in the storm drain system. The Center also conducts a weekly composting class that is free with admission to the Center through a partnership with the City's Environmental Services Division.

Table 8-2 summarizes the education efforts of the City for residents, school children, and the general public during the reporting year.

Table 8-2 Education Outreach Provided During FY 2011-2012

DATE	EVENT	EVENT DESCRIPTION	LOCATION
07/16/11	Kick-Off Block Party	Community event designed to teach residents how to save on energy bills, tour an energy efficient home, and learn about environmental issues in the City.	Espuelas Court – Rancho del Rey
10/01/11	Annual Fire Department Open House	City storm water staff had a booth at this community event and distributed pollution prevention educational materials and reusable bags.	Chula Vista Fire Station #4
10/22/11	Beautify Chula Vista	Community event where citizens removed graffiti and picked up trash from neighborhoods in southwest Chula Vista.	Harborside Park
10/29/11	South Bay Homeownership Fair	City staff distributed storm water educational materials at this event designed for homebuyers.	Chula Vista City Hall
03/08/12	Reylenn Construction Staff Training	City staff provided training to Reylenn construction staff about SWPPPs, construction BMPs, inspections, and enforcement.	Rosina Vista Development

Table 8-2 continued on next page

DATE	EVENT	EVENT DESCRIPTION	LOCATION
03/31/12	Walk the Watershed	Community event where citizens took a walk though the OVRP and visited various education stations. City staff had an booth and distributed educational material.	Otay Valley Regional Park
04/17/12	San Diego County Apartment Association Conference	City and County of San Diego staff had a booth about storm water pollution prevention geared towards multi-family residential. Provided dog waste bag holders and reusable bags.	San Diego Convention Center
04/21/12	Day of the Child	Storm water staff manned a booth and provided storm water pollution prevention brochures, IPM tip cards, storm water calendars, and environmental giveaways	Memorial Park
04/24/12	Chula Vista Employee Earth Day Fair	City staff provided information about recycling, hazardous waste disposal, and water and energy conservation	Chula Vista City Hall
04/28/12	Go Green and Clean Family Day	City staff manned a booth and provided CLEAN brochures, IPM Pest Tip cards, and other giveaways to promote pollution prevention.	Otay Ranch Town Center
04/28/12	Creek to Bay Cleanup	City staff served as site co-captain for a site and provided educational materials to volunteers who picked up trash and removed graffiti.	Rice Canyon Open Space and Discovery Park
05/06/12	Cinco de Mayo	Storm water staff shared a booth with the CLEAN group and provided storm water pollution prevention brochures, IPM tip cards, and dog waste bag holders.	Downtown Chula Vista (Third Avenue)
06/16/12	Pet Fest and Doggy Dash	Storm water staff implemented a pet waste survey, provided pollution prevention education, and environmental giveaways to citizens	Memorial Park
06/21/12	Chula Vista Green Business Challenge Training	City storm water staff provided information about pollution prevention BMPs to business owners.	Mangia Italiano

Regional Outreach

During the reporting year, Copermittees collaborated on a number of education outreach activities and events, including further implementation of the Regional Residential Storm Water Education Plan that was submitted to the Regional Board in March 2008. The City continued to participate in the Education and Residential Sources (ERS) Workgroup with the San Diego Copermittees. The workgroup is broken down into sub-workgroups that focus on one, or more of the various components undertaken by the ERS. These sub-workgroups address media and

public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment. A few of the activities that the group completed during the reporting year include: 1) Continued implementation of a comprehensive media program including ads on TV, radio, and movie theaters; 2) Development and distribution of a bilingual regional Storm Water Coloring book; and 3) Continued participation in regional community events such as the Envirofair at the San Diego County Fair.

Comprehensive discussions of each of the above program elements will be included in the Regional Urban Runoff Management Program Annual Report, which will be submitted to the Regional Board under a separate cover.

8.3.2 INDUSTRIAL AND COMMERCIAL FACILITY OWNERS AND OPERATORS EDUCATION

Educational activities targeting industrial and commercial sectors have been produced through local and regional efforts. Regional efforts have included dissemination of information via the County's Clean Water Project website targeting businesses and residents. During the reporting period, the City has utilized the following primary mechanisms to provide ongoing education to the industrial and commercial communities within the City:

- Distribution of printed materials
- One-on-one education of business owners and managers during industrial and commercial inspections

As part of the City's industrial and commercial facility inspections, City inspectors meet with facility owners or managers and explain water quality issues relating to the particular type of industrial or commercial facility. BMPs relevant to the activities at each facility are explained and, corrective actions are proposed to bring the facility into compliance with the City's ordinances and BMP requirements. Consequences of non-compliance are also brought to the attention of the facility owner/manager. In all cases, copies of the Chula Vista Storm Water Management and Discharge Control Ordinance are handed to the facility owner/manager. The City also distributes the regionally developed "Green Wrench Guide" for automotive facilities, and the "What's Cooking?" guide for food related businesses.

8.3.3 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITY

Education of the development community is approached by the City through two primary audiences: 1) education and training of City staff and 2) education of project applicants, developers, contractors, design engineers, and property owners. As with multiple elements reviewed throughout this report, the City of Chula Vista Development Storm Water Manual provides development project proponents with a fundamental guidance tool for development activities in the City. City Storm Water Management Staff actively engages the development and construction communities working within the City in a proactive effort to educate and expose these entities to the regulatory standards established within the jurisdiction.

As in previous reporting years, education and training of the development community within Chula Vista has primarily been addressed on a project-by-project basis. As the larger development community has been exposed to SUSMP requirements throughout the region and through a broader message, Chula Vista accommodates project applicants with project specific direction and analysis. Through the comprehensive review of development and redevelopment projects, and subsequent meetings and discourse, project applicants are apprised of the suitability of proposed project components in compliance with SUSMP requirements and the City's emphasis on the use of Low Impact Development site design features and high efficiency treatment control BMPs.

Educational activities within the development community are provided throughout the development process from design and planning through construction. As such, educational outlets have been provided by the City at each phase, and have been discussed in Section 2.0 of this report. The following is a list of highlights from the referenced section.

- Project specific post-construction requirements education and training
- Chula Vista Development Storm Water Manual
- Pre-construction meeting participation by storm water inspection staff
- On-site construction BMP training
- Participation in regional education and training activities

8.3.4 TARGETING UNDERSERVED COMMUNITIES

The City targets underserved communities through three programs:

- CLEAN education campaign
- Beautify Chula Vista Day
- Graffiti Abatement Program

The CLEAN education campaign has developed a variety of media elements that promote the City's environmental programs such as brochures, website, and giveaways in both English and Spanish. The CLEAN website provides an easy and cost-effective method for the City to reach out to citizens and promote storm water pollution prevention awareness. The City also distributes a variety of giveaways with the CLEAN message to reach different age groups such as pencils, pens, and pet waste bag holders. This reporting year, the CLEAN Team and Stakeholders continued to distribute the all-inclusive environmental brochure called CLEAN – Your Environmental Guide for Green Living. The brochure covers a wide range of environmental topics such as storm water pollution prevention, water conservation, energy, green living, transportation, recycling, and green gardening. In addition, Storm Water Management staff reaches underserved communities by distributing educational door hangers in specific neighborhoods that focus on pollutants such as trash, oil and grease, and bacteria.

During the reporting period, the City, with the help of I Love a Clean San Diego supported the annual Beautify Chula Vista Day that focuses on citizen participation in keeping the City clean. Volunteers have participated in a number of activities during this event, including cleaning of trash, graffiti removal, and planting trees. Efforts are usually focused in underserved areas of the

City where more attention is needed due to trash and graffiti problems. Over 900 volunteers participated in the Beautify Chula Vista Day in October 2011.

The Graffiti Abatement Program allows citizens to report graffiti in their neighborhoods by phone, web, or email. City staff is also encouraged to call and report any graffiti they see while they are out in the field. During the current reporting period, and as a result of downsizing City services, the Graffiti Abatement Program was reduced to one day per week. However, volunteers help the City in graffiti removal during weekends. During the current reporting period, the City received over 600 requests to remove graffiti by phone, e-mail, or website.

9.0 PUBLIC PARTICIPATION COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(h).i - A description of public participation efforts conducted.

9.1 INTRODUCTION

The City encourages and fosters environmental responsibility by supporting community events, activities, and programs that improve storm water awareness. Changing behaviors of residents and the general public can lead to improved water quality. Cleanup events can promote awareness and can lead to a load reduction of trash to receiving waters. In addition to the educational component presented in Section 8.0, the following sections provide an overview of significant public participation opportunities provided or supported by the City within the defined reporting period.

9.2 PROGRAM IMPLEMENTATION

Beautify Chula Vista Day – October 22, 2011

Beautify Chula Vista Day is an annual event that involves citizen participation and involvement in activities that enhance the environmental setting of the City. Every year, this event attracts several hundred volunteers and provides an opportunity for City staff to have direct interaction with the public to discuss environmental issues and the role that citizens can play in protecting their community's health and living standards. Volunteer citizens are able to participate in activities such as tree planting, graffiti removal, clean-up projects, and storm drain stenciling. During this reporting year's event, over 900 volunteers were able to remove more than 3,000 pounds of trash from City streets in addition to cleaning up graffiti.

Otay Valley Regional Park Cleanup

The Otay Valley Regional Park (OVRP) is being developed as a collaborative effort of the cities of Chula Vista and San Diego and the County of San Diego. These jurisdictions have adopted the OVRP Concept Plan, which identifies recreation areas, trails, overlook points, and staging areas for future park use. The park contains several hundred acres of land in the floodway and floodplain areas and undisturbed land along the steep slopes adjacent to the Otay River. Seven fresh water ponds, created from past gravel and sand mining operations, are within the park. OVRP extends from South San Diego Bay to the Lower Otay Reservoir and from Chula Vista's southern boundary to the communities of Otay Mesa and Nestor, encompassing 11.2 square miles of land.

Park maintenance and cleanup activities typically include debris removal, encouraging transients to leave the area, improving security by preparing for fencing, trimming foliage, planting trees and other vegetation, repairing trails, and placing signage identifying the OVRP. On March 31, 2012, the San Diego Coastkeeper organized the Walk the Watershed public participation event in the OVRP. Several public and private organizations, including the City of Chula Vista supported

the event. More than 200 citizens participated in the event by taking a walking tour of the OVRP where they visited several education stations within the park and learned about pollution prevention and watershed protection. Participants ended their day by removing trash and/or invasive plant species from the park. More information about the Otay Valley Regional Park can be found on the web at http://www.ovrp.org/

I Love a Clean San Diego (ILACSD) 10th Annual Creek to Bay Cleanup

The tenth Annual Creek to Bay Cleanup event occurred on Saturday, April 28, 2012. The City co-sponsored this cleanup event, which was coordinated by ILACSD. The San Diego County Board of Supervisors presented this year's cleanup event through the support of a variety of organizations, including the City of Chula Vista through the San Diego Bay Watershed group. The event was able to bring together 5,900 volunteers who spent their Saturday morning cleaning and restoring the health of our coastal and inland waterways and open space areas. Volunteers picked up almost 80 tons of trash, green waste, and recyclables from over 185 miles of coastline and inland areas. Commonly found items included plastic items and cigarette butts.

Cleanup sites within or adjacent to Chula Vista included the Otay Valley Regional Park, Otay Lakes, the Sweetwater Regional Park, Rice Canyon, Del Rey Canyon, and J Street Marina. At these locations, 380 volunteers removed almost 2,500 pounds of trash and recyclables from about 17 miles of Chula Vista waterways.

Household Hazardous Waste and Used Oil Recycling

The Household Hazardous Waste (HHW) Facility at the City of Chula Vista Public Works Center started operation in January 2002. It serves the Cities of Chula Vista, Imperial Beach, National City, and the County of San Diego. The facility is open every Wednesday and Saturday from 9am to 1pm. This facility also offers small businesses the option to dispose of hazardous waste through its Conditionally Exempt Small Quantity Generator (CESQG) program. The City also offers "door-to-door" collection of HHW. Under the door-to-door program, HHW is collected by appointment from residents who are unable to take the waste to the permanent facility or because of scheduling conflicts. The facility is under 24-hour camera surveillance to prevent illegal dumping in and around its surrounding areas. Also, during hours of service operations staff places temporary berms in the proximate storm drain to prevent contamination in the event of a spill. Public participation in this program is expected to minimize the amount of hazardous materials that may otherwise enter storm drain systems. During the reporting period 3,430 residents participated in the collection program from the City of Chula Vista, National City, the County of San Diego, and Imperial Beach, of which 2,599 were Chula Vista residents.

Public IC/ID Reporting and Graffiti Hotline

The City encourages its citizens to partner with the City in keeping Chula Vista clean. Citizens can do so by reporting any illegal discharges to storm drains, as well as reporting any graffiti in their neighborhoods. Despite budget cuts from the previous reporting years, the City continued one day per week graffiti removal services on public and private property by using environmentally friendly power washing equipment and BMPs. Storm Water Management Section staff investigates illegal discharges to storm drain systems and provides education and enforcement. In cases of spills or pollutants entering storm drain systems, Public Works maintenance crews provide cleanup as needed. During the reporting period the City received 83

calls and reports about illegal discharges to storm drain systems. There were over 600 calls, emails, and web requests from citizens and City employees to the graffiti program during the reporting year, showing that citizens and employees are participating and taking an active part in keeping the City clean.

CLEAN Business Program

As part of its efforts to involve local businesses in keeping the City clean, the CLEAN Team started the CLEAN Business Program in February 2008. The CLEAN Team is made up of the City's Storm Water Management Section, Environmental Services Division, and the Department of Conservation. The CLEAN Business Program was designed to help small businesses exercise environmentally safe practices and become sustainable. This goal could only be achieved by learning basic environmentally responsible and sound methods related to their specific daily activities. The program verifies and promotes businesses that demonstrate environmentally friendly practices and conserve resources. As part of the verification process, the business must complete a packet of checklists with minimum BMPs and request an inspection by the CLEAN Team to verify that the selected BMPs are adequate and have been correctly implemented. A part of these BMP checklists are items related to storm water pollution prevention. The CLEAN Team verifies that the BMPs are in place and functioning. Once a business becomes a CLEAN Business, they receive recognition on the City's website and receive a decal sticker to put on their front window to show consumers that they are shopping at a CLEAN Business. During this reporting period, 86 businesses were certified, bringing the grand total of CLEAN Businesses to 125. In addition to the CLEAN Business Program, the City has also started the Green Business Challenge, which challenges businesses who are already certified to take extra measures to become more 'green' than they already are. Fifty-one businesses are participating in this program.

10.0 FISCAL ANALYSIS COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(j).i - A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.

Permit Section G: Fiscal Analysis

1. *Each Copermittee shall secure the resources necessary to meet all requirement of this Order.*

2. *As part of the Regional Urban Runoff Management Program, the Copermittees shall collectively develop a standardized method and format for annually conducting and reporting fiscal analyses of their urban runoff management programs in their entirety (including jurisdictional, watershed, and regional activities). This standardized method shall:*

    a. *Identify the various categories of expenditures attributable to the urban runoff management programs, including a description of the specific items to be accounted for in each category of expenditures.*
    b. *Identify expenditures that contribute to multiple programs or were in existence prior to implementation of the urban runoff management program.*
    c. *Identify a metric or metrics to be used to report program component and total program expenditures.*

3. *Each Copermittee shall conduct an annual fiscal analysis. Starting January 31, 2010, the annual fiscal analysis shall be conducted consistent with the standardized fiscal analysis method included in the January 31, 2009 Regional Urban Runoff Management Program Annual Report. The annual fiscal analysis shall be conducted and reported on as part of each Copermittee's Jurisdictional Urban Runoff Management Program Annual Reports. For convenience, the fiscal analysis included in the Jurisdictional Urban Runoff Management Program Annual Reports shall address the Copermittee's urban runoff management programs in their entirety, including jurisdictional, watershed, and regional activities. The fiscal analysis shall provide the Copermittee's urban runoff management program budget for the current reporting period. The fiscal analysis shall include a description of the source(s) of the funds that are proposed to be used to meet the necessary expenditures, including legal restrictions on the use of such funds.*

10.1 INTRODUCTION

The Municipal Permit requires the Copermittees to develop a standardized method and format for annually conducting and reporting fiscal analysis of their urban runoff management programs. The Standardized Fiscal Analysis Method and Format (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis

Method document was submitted to the San Diego Regional Water Quality Control Board by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009. The Municipal Permit further requires the Copermittees to conduct their annual fiscal analysis consistent with the standardized method starting January 31, 2010. The fiscal analysis incorporated in this section is based on the standardized method. This is the third year that the standardized method is being used.

10.2 GENERAL BUDGET INFORMATION

The Standardized Fiscal Analysis Method includes a Standardized Fiscal Analysis Reporting Form, which consists of three tables separating jurisdictional, watershed, and regional expenditures. Jurisdictional expenditures are divided into components that mirror those included in the Municipal Permit as follows:

- Administration
- Development Planning
- Construction
- Municipal
- Industrial and Commercial
- Residential
- Illegal Discharge Detection and Elimination (IDDE)
- Education
- Public Participation
- Special Investigations
- Non-Emergency Firefighting

Further, each of the above categories may be broken down into sub-categories. Potential Sub-categories may include:

- Land Use Planning
- Environmental Review
- Development Project Approval and verification
- Public Construction Projects
- Private Construction Projects
- Public Reporting of Illicit Connection or Illegal Discharges (ICIDs)
- Jurisdictional Urban Runoff Monitoring Programs
- Other

Expenditure items to be considered for each category or sub-category may include:

- Administration
- Permitting and Licensing
- Project Planning and Engineering
- Maintenance Inspections
- Compliance Inspection and Enforcement

- BMP Implementation
- Educational Outreach
- Waste Collection and Recycling
- Jurisdictional Urban Runoff and Receiving Water Monitoring
- Other Expenditures

For reporting purposes, only the table incorporating major jurisdictional components will be used. Sub-categories and expenditure items are intended to provide standardization of expenditures and need not be shown in the final report.

City of Chula Vista staff from different departments and divisions contributes to the implementation of the storm water program and their contributions are as follow:

- The Storm Water Management Section is responsible for the development and implementation of storm water programs, participation in regional and watershed activities, oversight of storm water related contracts, data management, and report writing. It is also responsible for inspecting municipal, industrial, commercial, building construction, and residential land uses and responding to reported violations of the City's Storm Water Management and Discharge Control Ordinance. The Storm Water Management Section conducts enforcement action on violators of the City's Storm Water Ordinance.

- The Environmental Planning Division of the Development Services Department reviews development projects for compliance with the California Environmental Quality Act, assesses potential environmental impacts to sensitive areas and requires developers to provide mitigation plans before permits are issued.

- The Land Development Division of the Development Services Department is responsible for ensuring that grading and construction permit applications are in compliance with grading and other engineering ordinances, and that temporary and permanent Best Management Practices are incorporated in the grading plans, tentative maps, and final maps. Land Development Division staff reviews and approves Water Quality Technical Reports submitted to the City as part of development application packages for Priority Development Projects.

- The City Attorney's Office reviews all documents (such as manuals, forms, ordinances, etc.) developed by the Storm Water Management Section, to ensure that they are in compliance with current laws and regulations. The City Attorney's Office also assists the Storm Water Management Section in the enforcement of City's Municipal Code.

- The Environmental Services Section of the Public Works Department manages the Used Oil Recycling Program, the Household Hazardous Waste Collection Program, the Solid Waste Collection Program, the Conservation Program, and the Solid Waste Reduction and Recycling Program.

- The Geographic Information Systems (GIS) Section of the Information Technology Services Department is responsible for the City's GIS systems, and provides support to the Storm Water Management Section by mapping and updating the City's storm water conveyance systems and data management.

- The Operations Division of the Public Works Department is responsible for the maintenance of the City's storm drainage systems and the sanitary sewer collection systems; oversight of the street sweeping program, and oversight of the open space maintenance program. The Wastewater Management Section, in addition to its scheduled maintenance activities, is responsible for emergency responses to sanitary sewer overflows (SSO) and pollutant spills on public streets.

- The Inspection Services Section of the Public Works Department is responsible for the inspection of grading, improvement, and Capital Improvement Projects for compliance with the City's ordinances, including the Storm Water Management and Discharge Control Ordinance.

- Other City departments, divisions, and sections provide support to the Storm Water Management Section in the fulfillment of the City's JURMP and are instrumental in the implementation of that program. Although those departments, divisions, and sections provide important contributions, a detailed accounting of their roles is beyond the scope of this report.

10.3 FISCAL ANALYSIS METHODS

The fiscal analysis method used in this report is based on the standardized fiscal analysis method and format dated January 29, 2009, developed by the Copermittees of the San Diego County NPDES Municipal Permit, Order No. R9-2007-0001.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

10.4.1.1 JURISDICTIONAL

The City's jurisdictional expenditures for FY 2011-2012 related to compliance with the Municipal Permit are listed in Table 10-1 to 10-3.

Table 10-1 NPDES Jurisdictional Expenditures for FY 2011-2012

JURISDICTIONAL COMPONENT		MULTIPLE PROGRAMS	PRIOR PROGRAM
Administration	$270,111		
Development Planning	$78,916		
Construction	$127,320		
Municipal	$1,053,661		
Industrial and Commercial	$81,430		
Residential	$24,446		
IDDE	$311,231		
Education	$39,374		
Public Participation	$1,000		
Special Investigations	$4,851		
Non-Emergency Firefighting	$8,149		
Jurisdictional Total	**$2,000,489**		

Table 10-2 NPDES Jurisdictional Shared Program Expenditures for FY 2011-2012

JURISDICTIONAL COMPONENT SHARED PROGRAMS		MULTIPLE PROGRAMS	PRIOR PROGRAM
Used Oil Recycling	$10,582	x	x
Household hazardous Waste Management	$360,877		
Wastewater Collection Systems Maintenance	$4,597,347	x	x
Flood Management Projects and Flood Control Devices	$519,239	x	x
Jurisdictional Shared Programs Total	**$5,488,045**		

Table 10-3 Jurisdictional Shared Programs For Which Expenditures are Not Readily Available

JURISDICTIONAL COMPONENT SHARED PROGRAMS FOR WHICH COSTS ARE NOT READILY AVAILABLE	MULTIPLE PROGRAMS	PRIOR PROGRAM
Land Use Planning	x	x
Environmental Review	x	x
Development Project Approval and Verification	x	x
Management of Pesticides, Herbicides, and Fertilizers	x	x
Roads, Streets, Highways, and Parking Facilities	x	x
Parks and Recreational Facilities	x	x

10.4.1.2 WATERSHED

The standardized Fiscal Analysis method and format provides a form for total watershed expenditures, which is divided into various watersheds draining each Copermittee's jurisdictional boundaries. The City of Chula Vista is wholly located within the San Diego Bay watershed and, therefore, the sum total of all expenditures associated with watershed activities is shown as one number under Watershed Total.

Table 10-4 NPDES Watershed Expenditures for FY 2011-2012

WATERSHED COMPONENT		MULTIPLE PROGRAMS	PRIOR PROGRAMS
Chula Vista's Share of the Watershed Total	**$35,441**		

During FY 2011-2012, watershed activities in the San Diego Bay Watershed were developed at the watershed level, while each Copermittee implemented their respective watershed activities individually within their jurisdictions. During the current reporting period, the Copermittees of San Diego Bay Watershed decided to hire a consultant to develop their Watershed Urban Runoff Management Program annual report, and a cost share agreement was signed and each Copermittee contributed their share of the costs for this activity.

10.4.1.2 REGIONAL

Table 10-5 for total regional expenditures shows the City's share of total regional costs that are determined by using cost share formulae included in the Memorandum of Understanding dated November 16, 2007, and signed by all Copermittees.

The City participates in regional meetings and activities with other Copermittees of San Diego County. Each year, the Regional Management Committee approves a budget for the following Fiscal Year and each Copermittee pays their share of the regional costs to the Principal Copermittee. The Principal Copermittee, on behalf of all the Copermittees, manages an account and pays regional expenses from that account. During the current reporting period, costs associated with activities of the following workgroups were included in the regional expenditures and budgets:

- Program Planning Subcommittee
- Fiscal, Reporting, and Assessment Workgroup
- Education and Residential Sources Workgroup
- Monitoring Workgroup
- Land Development Workgroup
- Municipal Workgroup
- Industrial and Commercial Sources Workgroup
- Regional WURMP Workgroup

Additionally, City staff time for attending regional workgroup meetings has been included in regional expenditures for Fiscal Year 2011-2012. Finally, annual fees for membership in the

California Storm Water Quality Association is paid as a regional expenditure and the appropriate share of the City of Chula Vista has been included in the following regional expenditure analysis.

Table 10-5 NPDES Regional Expenditures for FY 2011-2012

REGIONAL COMPONENT		MULTIPLE PROGRAMS	PRIOR PROGRAMS
Chula Vista's Share of the Regional Total	**$236,308**		

As shown in Table 10-5, City's share of the above expenditures was $236,308 for FY 2011-2012.

10.4.2 FUNDING SOURCES

An analysis of the City's storm water program revenues and expenditures indicates that the program captures its revenues from General Funds, Capital Improvement Project funds, and Storm Drain Fees assessed on property owners or tenants of single family homes, multi-family buildings, and commercial/industrial facilities through the Sweetwater Authority, Otay Water District, and Cal-American Water District. Additional revenues are received from Building Permit Fees and from developer deposits; however, these vary significantly from year to year, depending on the level of development activities within the City. Building Permit Fees, which are used to cover staff time for inspections of construction sites during the building phase of the projects has been reduced drastically as a result of the recent slow down of development projects within the City.

Table 10-6 Funding Sources for FY 2011-2012

No.	FUNDING SOURCE	PROGRAM ELEMENT
1	General Fund	Storm Water Management Program
		Storm Drain Maintenance
2	Storm Drain Fee	Storm Water Management Program
3	Sewer Fee	Wastewater Collection System Maintenance
4	Special Assessment District Fees	Storm Drain Maintenance
		Wastewater Collection System Maintenance
5	Grant Funds	Used Oil Recycling
		Drainage Capital Improvement Projects
6	Solid Waste Fee	Household Hazardous Waste Management Waste Management Recycling
7	Developer Deposits and Fees	Environmental Reviews
8	Loans	Drainage Capital Improvement Projects
9	Transnet	Drainage Capital Improvement Projects

11.0 PROGRAM EFFECTIVENESS ASSESSMENT COMPONENT

MUNICIPAL PERMIT REQUIREMENTS:

a. *As part of its Jurisdictional Urban Runoff Management Program, each Copermittee shall annually assess the effectiveness of its Jurisdictional Urban Runoff Management Program implementation. At a minimum, the annual effectiveness assessment shall:*

   (1) *Specifically assess the effectiveness of each of the following:*

      (a) *Each significant jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented;*
      (b) *Implementation of each major component of the Jurisdictional Urban Runoff Management Program (Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education); and*
      (c) *Implementation of the Jurisdictional Urban Runoff Management Program as a whole.*

   (2) *Identify and utilize measurable targeted outcomes, assessment measures, and assessment methods for each of the items listed in section I.1.a.(1) above.*

   (3) *Utilize outcome levels 1-6 to assess the effectiveness of each of the items listed in section I.1.a.(1) above, where applicable and feasible.*

   (4) *Utilize monitoring data and analysis from the Receiving Waters Monitoring Program to assess the effectiveness each of the items listed in section I.1.a.(1) above, where applicable and feasible.*

   (5) *Utilize Implementation Assessment, Water Quality Assessment, and Integrated Assessment, where applicable and feasible* [10].

b. *Based on the results of the effectiveness assessment, each Copermittee shall annually review its jurisdictional activities or BMPs to identify modifications and improvements needed to maximize Jurisdictional Urban Runoff Management Program effectiveness, as necessary to achieve compliance with section A of this Order. The Copermittees shall develop and implement a plan and schedule to address the identified modifications and improvements. Jurisdictional activities/BMPs that are ineffective or less effective than other comparable jurisdictional activities/BMPs shall be replaced or improved upon by implementation of more effective jurisdictional activities/BMPs. Where monitoring data exhibits persistent water quality problems that are caused or contributed to by MS4 discharges, jurisdictional activities or BMPs applicable to the water quality problems shall be modified and improved to correct the water quality problems.*

c. *As part of its Jurisdictional Urban Runoff Management Program Annual Reports, each Copermittee shall report on its Jurisdictional Urban Runoff Management Program*

effectiveness assessment as implemented under each of the requirements of sections I.1.a and I.1.b above.

11.1 INTRODUCTION

It is the culmination of efforts described throughout this report that supports the application of effectiveness assessment protocols introduced through the document entitled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" as submitted by the Copermittees to the Regional Board on October 16, 2003. The intent of this section is to offer a more critical analysis of programmatic activities to compliment the accounting of the City's accomplishments as presented in other sections of this report.

The 2004-2005 reporting year was highlighted by the Copermittees' regional development of the Baseline Long-Term Effectiveness Assessment (LTEA) conducted as part of the Report of Waste Discharge (ROWD) for the previous Municipal Permit, Order No. 2001-001. This comprehensive assessment incorporated water quality and source data collected by all Copermittees and provided a critical first look at regional water quality presented per watershed. On June 29, 2011, pursuant to the requirements of Section J.2.c-d of the current Municipal Permit, Order No. R9-2007-0001, the Copermittees of San Diego County submitted their Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment for the current permit cycle to the Regional Water Quality Control Board. The ROWD, among other topics, discusses the long-term effectiveness assessment methodology and proposes to adopt the methodology developed by the California Stormwater Quality Association (CASQA) in 2007. If approved by the Regional Board, the Copermittees will start using the CASQA Municipal Stormwater Program Effectiveness Assessment Guide during the next permit cycle.

The City continued to build upon knowledge gained through the implementation of long-term effectiveness strategies on a jurisdictional level through annual reporting, as well as the application of strategies on a regional level through the development of the LTEA. As such, the City continued to augment programs and to gather applicable data to support a more holistic look at storm water program effectiveness.

During the reporting period, the City continued to gather and evaluate data supporting education and outreach efforts. This effort was prompted through the continued implementation of the Chula Vista CLEAN program in order to provide a baseline by which to gauge the overall successes of the program. In addition, this effort is highly supportive of the annual appraisal of the larger Chula Vista Storm Water Management Program, and provides a fitting nexus to the annual long-term effectiveness assessments presented in this report.

In FY 2008-2009 the City of Chula Vista administered a survey instrument designed to measure public awareness of various storm water quality related issues. It is intended that similar surveys be conducted in the future to provide a measurable accounting of the City's public education and awareness programs. Additionally, the City of Chula Vista participates in the regional public education and outreach workgroup, which conducts surveys throughout San Diego County to evaluate the effectiveness of its public education programs. In addition, the City continued its source inventory validation process. This effort has been detailed in Sections 2.0 through 6.0 of

this report, and focused on source types identified in the LTEA as potential contributors to watershed pollutants of concern. These activities have also provided the City with valuable data for incorporation into long-term effectiveness evaluation on a jurisdictional level.

11.2 METHODOLOGY

Based on the understanding that long-term effectiveness assessment is an ongoing and iterative process, the regional framework has been developed around three primary elements, each supported by additional key components.

- **Program Planning**
  - Source Characterization
  - BMP Selection
  - Targeted Outcomes
  - Assessment Measures and Indicators

- **Program Implementation**

- **Effectiveness Assessment**
  - Water Quality Assessment
  - Program Assessment
  - Integrated Assessment

Detailed discussions of each of the above topics are included in the document "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003, and developed by the Copermittees. A brief summary is included below to describe the City's approach to program effectiveness assessment. The following discussion has been organized as to address each of the targeted outcome levels under program planning and evaluates the City's effectiveness toward JURMP implementation during the reporting period. It is important to recognize that the whole of this document represents an account of program implementation in 2011-2012, and presents a variety of tracked information supporting overall effectiveness assessment. The following discussion will highlight the development and implementation of targeted efforts, and evaluates the overall effectiveness of the City's Storm Water Management Program.

11.2.1 PROGRAM PLANNING

As discussed in the regional framework document, program planning should include the establishment of meaningful implementation targets and the development of clear measures for assessing them. The four key and interrelated components to effective program planning; 1) source characterization, 2) BMP selection, 3) establishment of targeted outcomes, and 4) establishment of assessment measures and indicators, must be completed prior to program implementation. The primary mechanism in support of program planning was achieved through the development of the Chula Vista JURMP in 2008. This document has provided the initial framework to program planning as implementation has continued, and it is through the annual reporting process and associated programmatic updates detailed through this process that this

concept continues to be perpetuated. The City has sought to integrate these key elements in order to more clearly direct programmatic activities and to support the vital interrelationship of each element.

Source Characterization

Source characterization largely consists of the development and maintenance of site, source, and facility inventories associated with construction, municipal, industrial, commercial, and residential locations. Through the development of the JURMP, and as required by the previous Municipal Permit sections F.2.d, F.3.a.(2), F.3.b.(2), F.3.c.(2), and F.3.d.(2), baseline source inventories were initially compiled in 2001, and have been updated annually ever since. The City employs a number of strategies and mechanisms in tracking source inventories for all of the sectors mentioned above. Such methodologies have been outlined within specific sections of this report, and include GIS systems, GBA database, and comprehensive business license tracking. In recognizing that source characterization needs to be increasingly matched to identified water quality concerns and program results, the City seeks to more fully utilize extensive GIS capabilities to associate sources with pollutants as they are viewed spatially. Construction, municipal, industrial, commercial, and residential source inventory updates have been provided in attachments to this report.

As introduced above, and detailed in Sections 2.0 through 6.0 of this report, the City has continued to fortify source characterization in 2011-2012. Comprehensive field verification of source inventories is conducted approximately every five years with the renewal of the Municipal Permit, while inventory updates based on existing information in the City's databases and observations during regular inspections are conducted annually. In this reporting period, the City continued its source verification utilizing the City's business license database combined with field observations during inspections and investigations to identify all active industrial and commercial facilities Citywide. The Municipal inventory is updated continuously as new facilities are constructed or acquired. While this effort served a number of functions within the larger storm water program, significant value was gained of the data compiled through the resources described above. Ultimately, this data is utilized in overall program assessments, and to guide programmatic development to support long-term effectiveness.

BMP Selection

In terms of BMP selection, activity based BMP selection was conducted as part of the development of the City's JURMP. As required by the previous Municipal Permit's Sections D.2.c.(1), D.3.a.(2)(b), D.3.b.(2)(b), and D.3.c.(2)(a), minimum BMPs were established for each of the major program elements. These minimum BMPs were visited during the City's JURMP update in 2008 and changes were made as needed. The City actively evaluates activity specific BMPs primarily through its well-developed municipal, industrial/commercial, and construction inspection programs.

Targeted Outcomes

The establishment of measurable targeted outcomes is necessary both for incremental program improvement, and as a basis for the future establishment of relationships between implementation and desired water quality outcomes. It is important to recognize that quantifiable outcomes are to be established prior to program implementation to accurately

provide measurability and accountability. Included within the regional long-term assessment framework, is the concept of a hierarchy of targeted outcomes. Six "levels" have been established, representing a gradation from activity-based to water quality based outcomes.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

The above concept can be shown as a pyramid with the base at Level 1 and the apex at Level 6 as shown in Figure 11-1. Each layer of outcome from the bottom to the top represents a gradation from activity-based to water quality-based outcome.

Figure 11-1 Hierarchy of Targeted Outcomes

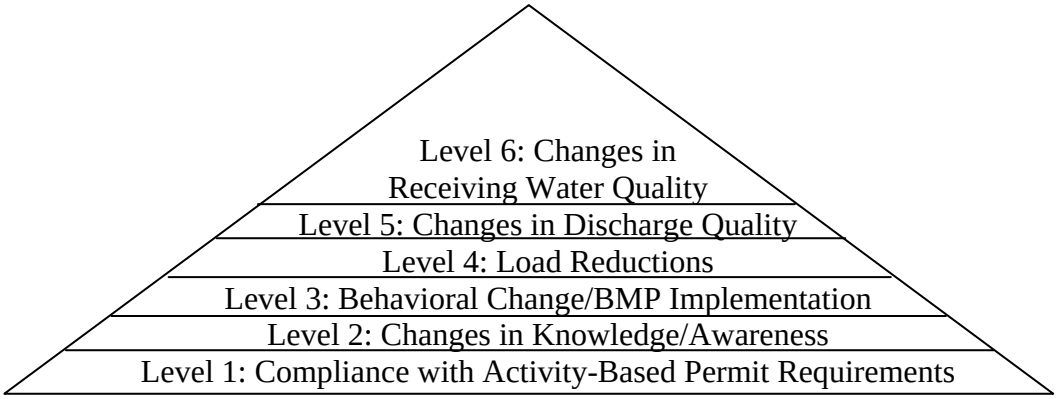

Assessment Measures and Indicators

In order to establish measurability and accountability in the implementation of various water quality program elements, assessment measures for the targeted outcomes need to be developed. Assessment measures may be direct or indirect. Direct measures are those that characterize the quality of water in runoff discharges or within receiving waters. In San Diego County, direct measurements are primarily addressed through regional Receiving Waters Monitoring Program and Dry Weather Field Screening and Analytical Monitoring Program. Indirect measures take into account the degree of activity or program element implementation. Indirect measures are easier and less expensive than direct measures and do not require long-range data.

11.2.2 PROGRAM IMPLEMENTATION

A comprehensive accounting of the City's implementation of its Jurisdictional Urban Runoff Management Program (JURMP) during the current reporting period has been provided in other sections of this report. In this section, it will suffice to say that sufficient data tracking and data management has complemented the implementation of each component of the JURMP to enable an accurate program effectiveness assessment.

11.2.3 EFFECTIVENESS ASSESSMENT

Program effectiveness assessment comprises of three components, i.e., 1) Water Quality Assessment, 2) Program Assessment, and 3) Integrated Assessment. Integrated Assessment is a long-term process by which Copermittees will attempt to establish causal relationships between program implementation activities and changes in water quality. These relationships may be established either hypothetically or empirically. Integrated Assessment is necessarily the most difficult and uncertain step in the overall assessment process. Over time, quantitative "cause and effect" relationships will increasingly be sought. However, because of the sheer number and variety of BMPs and control programs being concurrently implemented at any given time, establishing such relationships will be a considerable challenge. This report, therefore, focuses on Water Quality Assessment and Program Assessment, and will leave the Integrated Assessment to be addressed at the watershed and regional levels.

11.2.3.1 WATER QUALITY ASSESSMENT

Water Quality Assessment may be used to evaluate the quality of storm water or non-storm water discharges to receiving waters or within the receiving waters themselves. Water Quality Assessment is conducted by taking samples from discharges or the water body within receiving waters and conducting field screening or laboratory analysis. Sampling and testing may be conducted during storm events or from dry weather flows during non-rainy seasons. It is necessary to have benchmarks or other standards such as the Water Quality Control Plan for the San Diego Basin (Basin Plan) to compare the results and make judgment about water quality. It is also beneficial to track the quality of water for long periods of time to enable the Copermittees to assess long-term trends and draw conclusions as to the effectiveness of their storm water programs.

11.2.3.2 PROGRAM ASSESSMENT

As mentioned above, during the planning phase of the program, it is of utmost importance to set measurable goals for each of the program components and track progress through data collection and management. Such data will later be used to evaluate the success or failure of the implementation of the program and derive conclusions regarding each component's effectiveness.

In this report, Program Assessment has been divided into components similar to those established in the Municipal Permit, i.e.:

- Land Use Planning
- Construction
- Municipal
- Industrial and Commercial
- Residential
- Education and Public Participation

11.2.3.3 INTEGRATED ASSESSMENT

Integrated Assessment establishes a relationship between program implementation activities and changes to water quality. This information is critical for the Copermittees to evaluate cost effectiveness of their program elements. However, Integrated Assessment is often the most difficult element of the overall program effectiveness assessment.

11.3 WATER QUALITY ASSESSMENT RESULTS

This section of the report utilizes the methodology described above to arrive at conclusions regarding the effectiveness of the City's storm water management program during the current reporting period. This Section focuses on the three components of the effectiveness assessment described in Section 11.2, i.e.:

- Water Quality Assessment (Levels 5 and 6 of the Hierarchy of Targeted Outcomes in the pyramid of Figure 11-1)
- Program Assessment (Levels 1 to 4 of the pyramid)
- Integrated Assessment

11.3.1 WATER QUALITY ASSESSMENT

Changes in discharge quality and receiving waters quality (Levels 5 and 6 of the Targeted Outcomes) are the ultimate targeted outcomes in describing direct successes of storm water program activities. While such levels have proven challenging in assessing individual JURMP effectiveness, levels 5 and 6 have been thoroughly processed through the ROWD and LTEA development on a regional basis in 2005 and 2011. As such, the City relies to a great extent on the regionally prepared annual Receiving Water Monitoring Reports, ROWD, and LTEA for a detailed look at levels 5 and 6 assessments. Additionally, the City uses results of its jurisdictional Dry Weather Field Screening and Analytical Monitoring program to track long-term trends in the quality of discharges at outfall locations throughout the City. This process has been discussed in more detail below.

Although lines between programmatic efforts and water quality improvements will require long-term data gathering and analysis, the City annually conducts an evaluation of data gathered through the Dry Weather Field Screening and Analytical Monitoring Program. It is important to recognize that the Dry Weather Monitoring Program is primarily used to identify illicit discharges and connections to the MS4 and receiving waters, and not as a surface water characterization mechanism. Alternatively, the dry weather data sets have proven useful in characterizing the quality of non-storm water discharges to surface waters during dry seasons. As such, the City utilizes dry weather data sets to evaluate trends and to steer program priorities on a local level. Dry weather data analysis has been reasoned as a means to further target programmatic components, and to establish target pollutants and to identify geographic areas of concern.

The graph on the following page, Average Percentage of Observations Exceeding Action Levels in Dry Weather Samples, was developed in an effort to track the overall average of samples taken per year in exceedance of numeric action levels as established under the Dry Weather Monitoring Program. This effort is intended to initiate a long-term analysis through tracking detectable improvements or impairments in the quality of non-storm water discharges throughout Chula Vista. This analysis is valuable in evaluating not only the number of exceedances from one year to the next, but also in examining those pollutants that are commonly identified.

In support of the overall average exceedances, the City utilizes constituent-specific trends analysis to develop a clear picture of water quality trends in non-storm water discharges. This analysis evaluates the percentage of annual samples, in relation to a specific constituent, in exceedance of established action levels. Graphs detailing the action level exceedences for each pollutant are on the following pages.

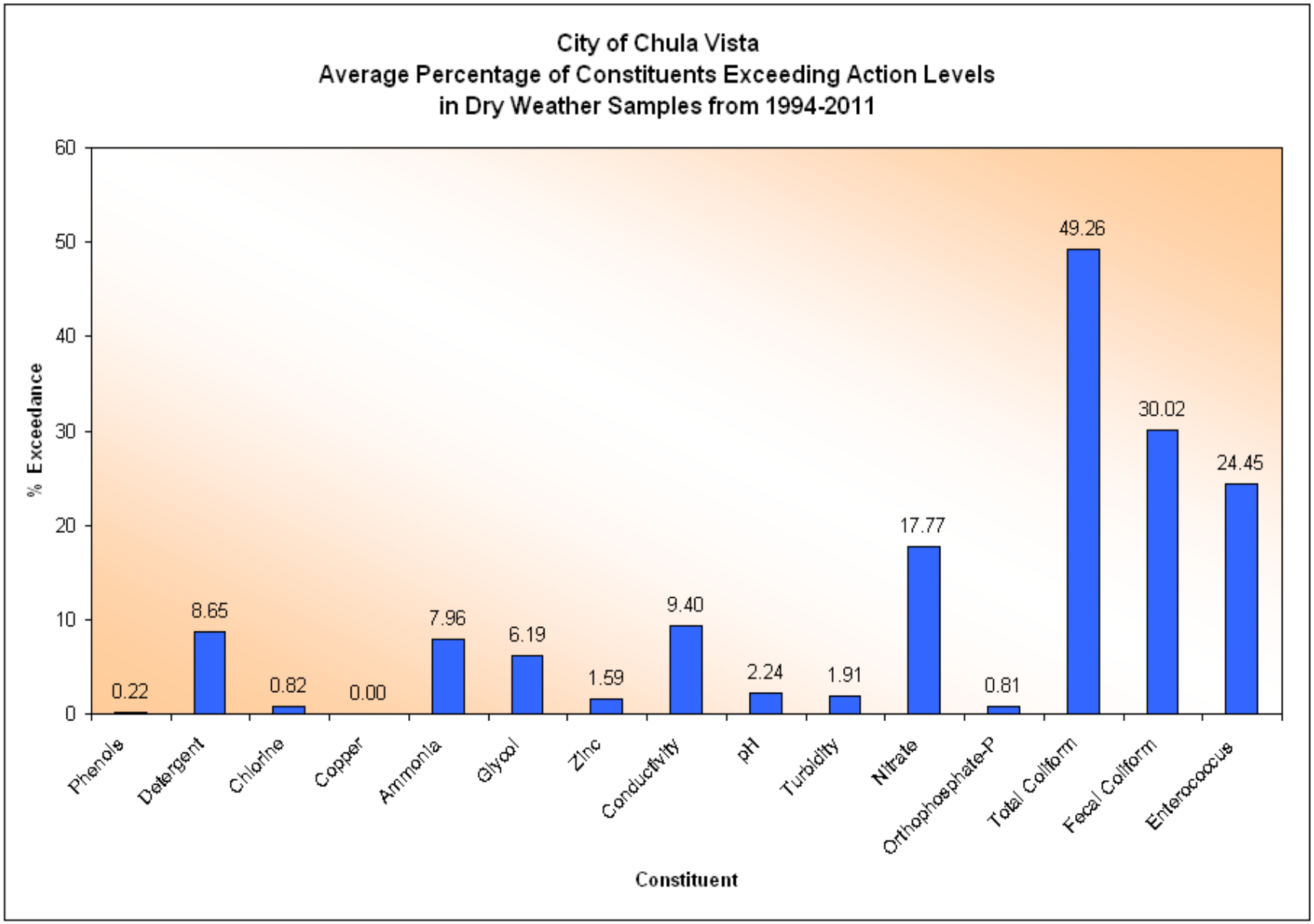
City of Chula Vista
Average Percentage of Constituents Exceeding Action Levels
in Dry Weather Samples from 1994-2011
% Exceedance
60
50
40
30
20
10
0
0.22
8.65
0.82
0.00
7.96
6.19
1.59
9.40
2.24
1.91
17.77
0.81
49.26
30.02
24.45
Phenols
Detergent
Chlorine
Copper
Ammonia
Glycol
Zinc
Conductivity
pH
Turbidity
Nitrate
Orthophosphate-P
Total Coliform
Fecal Coliform
Enterococcus
Constituent

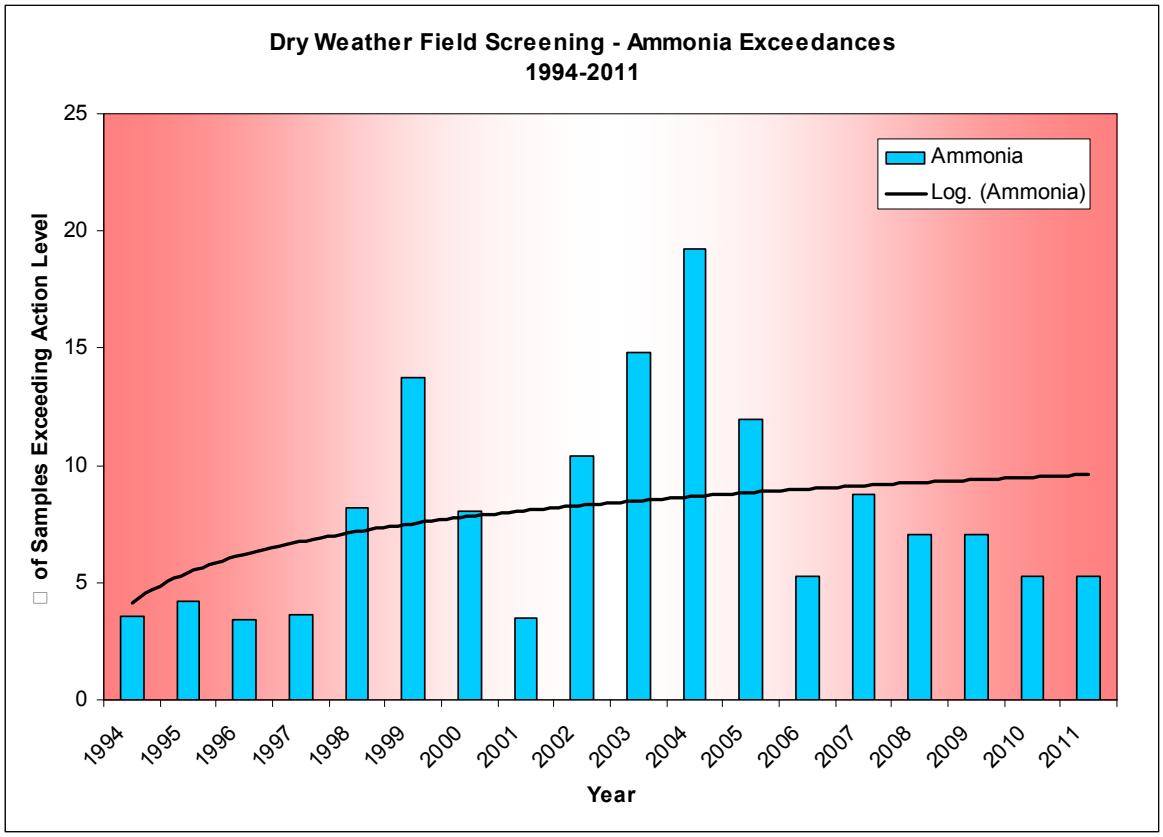
Dry Weather Field Screening - Ammonia Exceedances
1994-2011
Ammonia
Log. (Ammonia)
of Samples Exceeding Action Level
0
5
10
15
20
25
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year

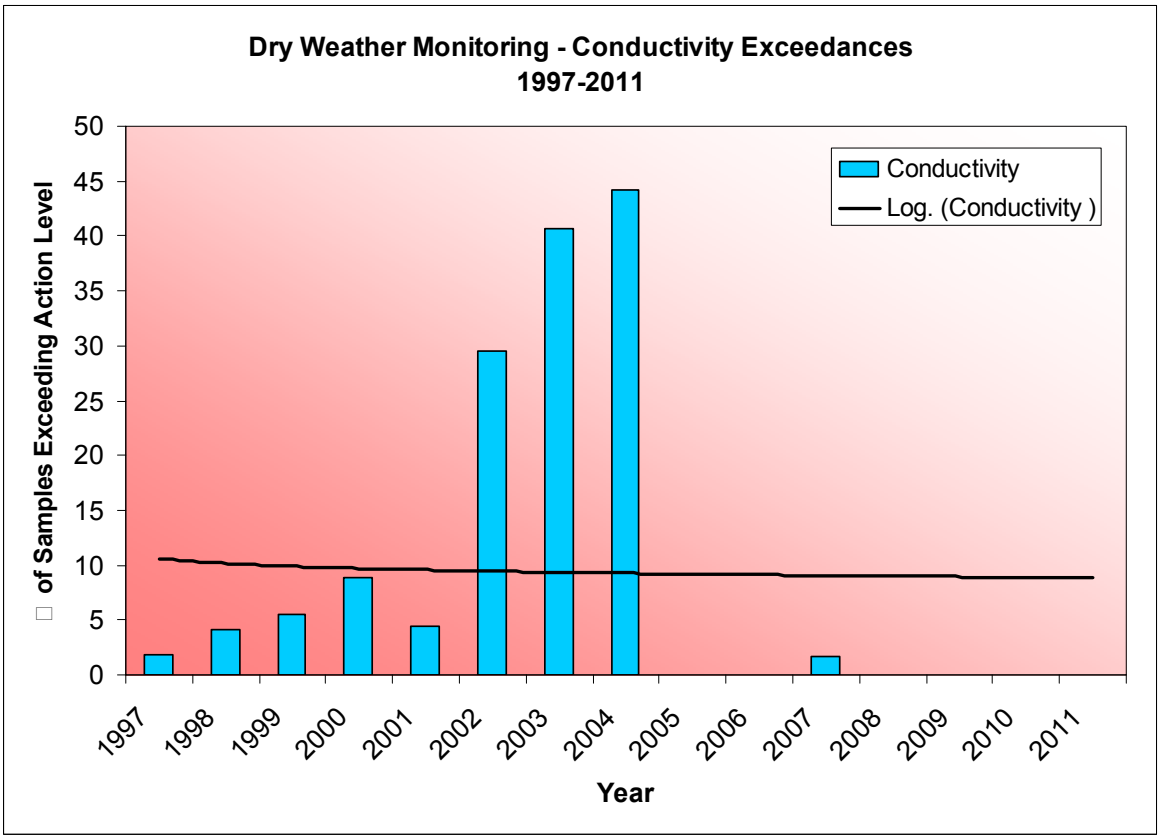
Dry Weather Monitoring - Conductivity Exceedances
1997-2011
Conductivity
Log. (Conductivity)
of Samples Exceeding Action Level
0
5
10
15
20
25
30
35
40
45
50
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year

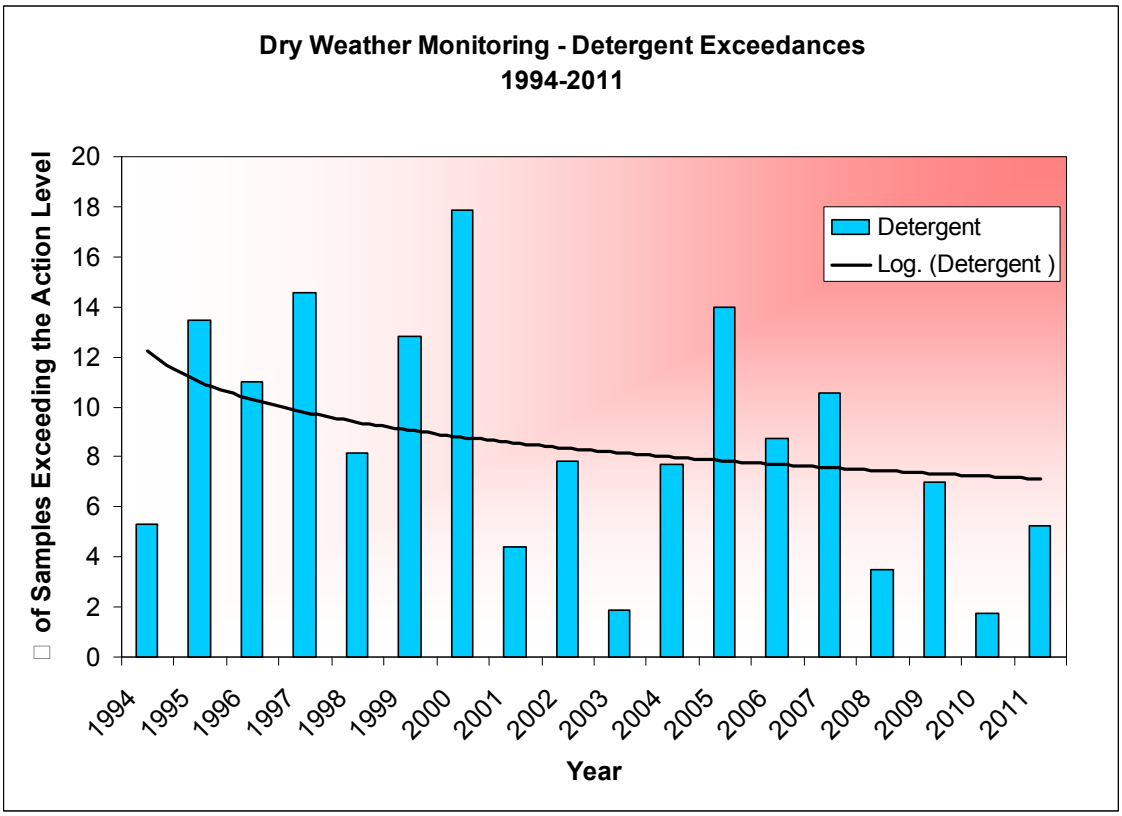
Dry Weather Monitoring - Detergent Exceedances
1994-2011
of Samples Exceeding the Action Level
0
2
4
6
8
10
12
14
16
18
20
Detergent
Log. (Detergent)
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year

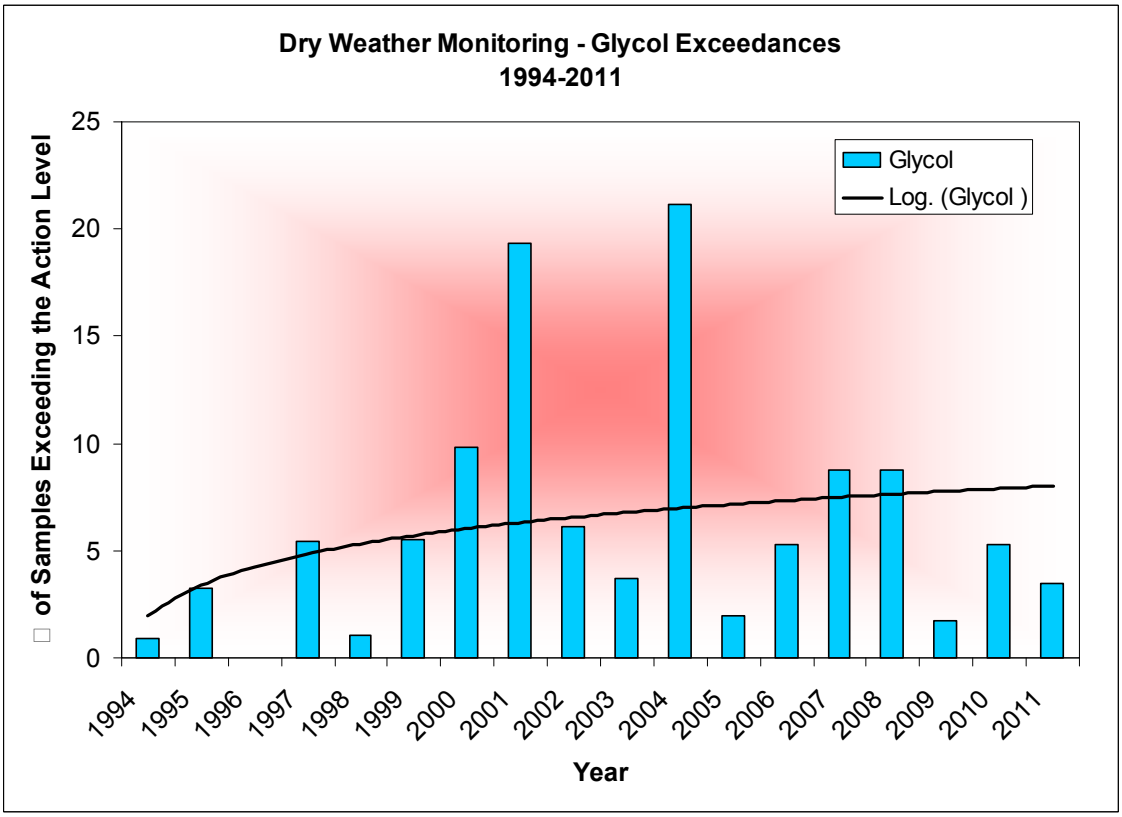
Dry Weather Monitoring - Glycol Exceedances
1994-2011
of Samples Exceeding the Action Level
0
5
10
15
20
25
Glycol
Log. (Glycol)
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year

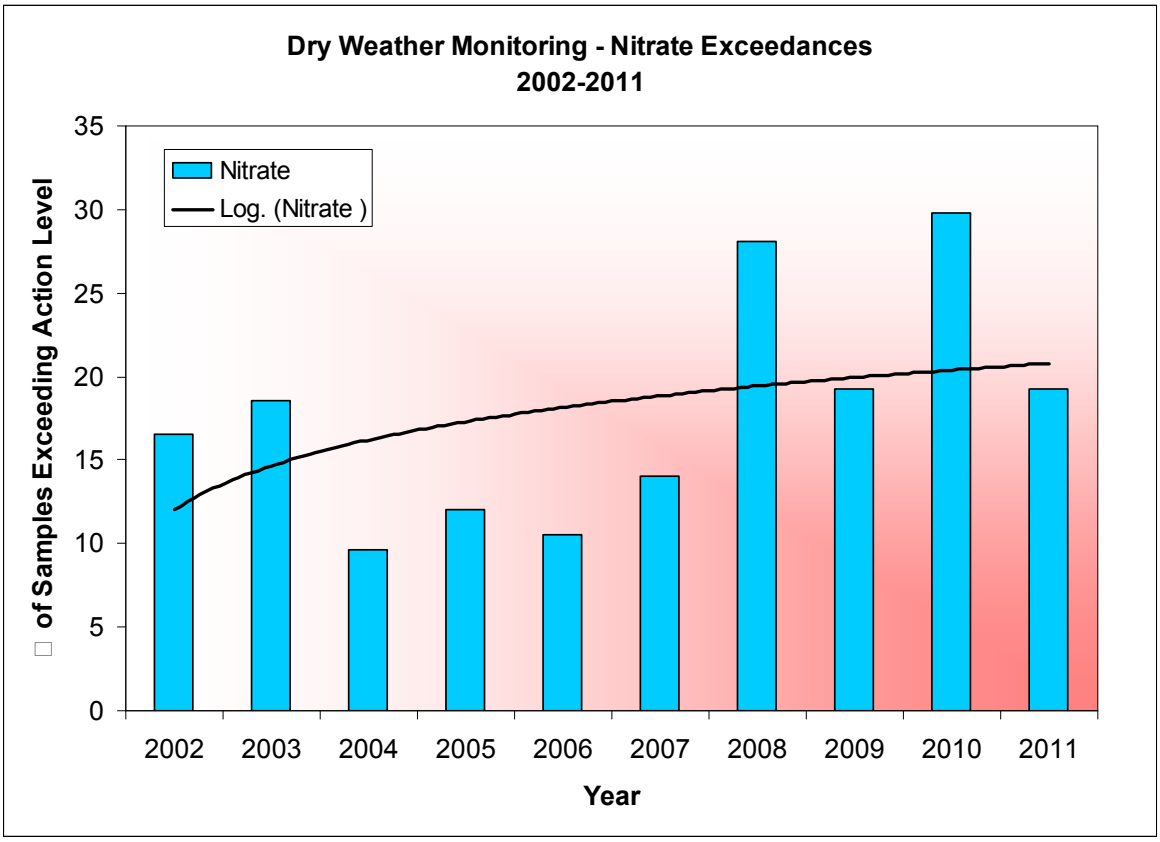
Dry Weather Monitoring - Nitrate Exceedances
2002-2011
Nitrate
Log. (Nitrate)
of Samples Exceeding Action Level
35
30
25
20
15
10
5
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year

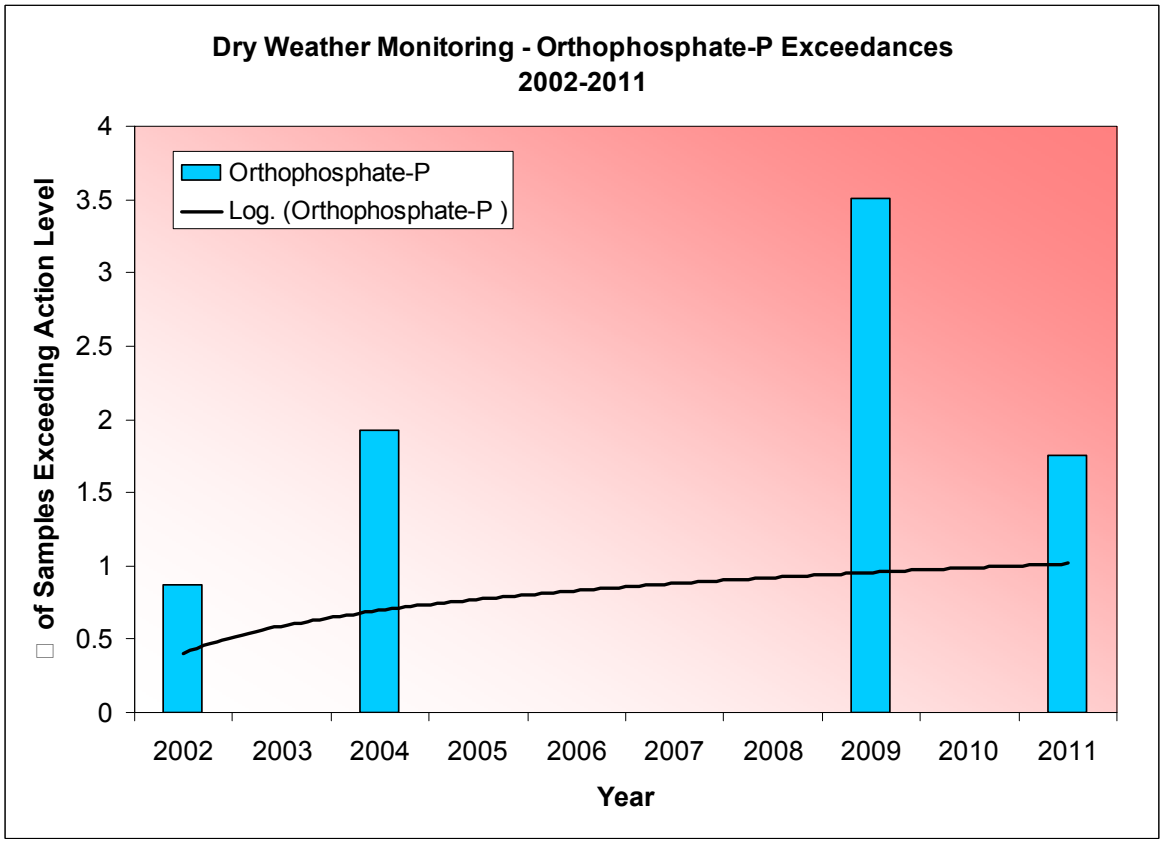
Dry Weather Monitoring - Orthophosphate-P Exceedances
2002-2011
Orthophosphate-P
Log. (Orthophosphate-P)
of Samples Exceeding Action Level
4
3.5
3
2.5
2
1.5
1
0.5
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year

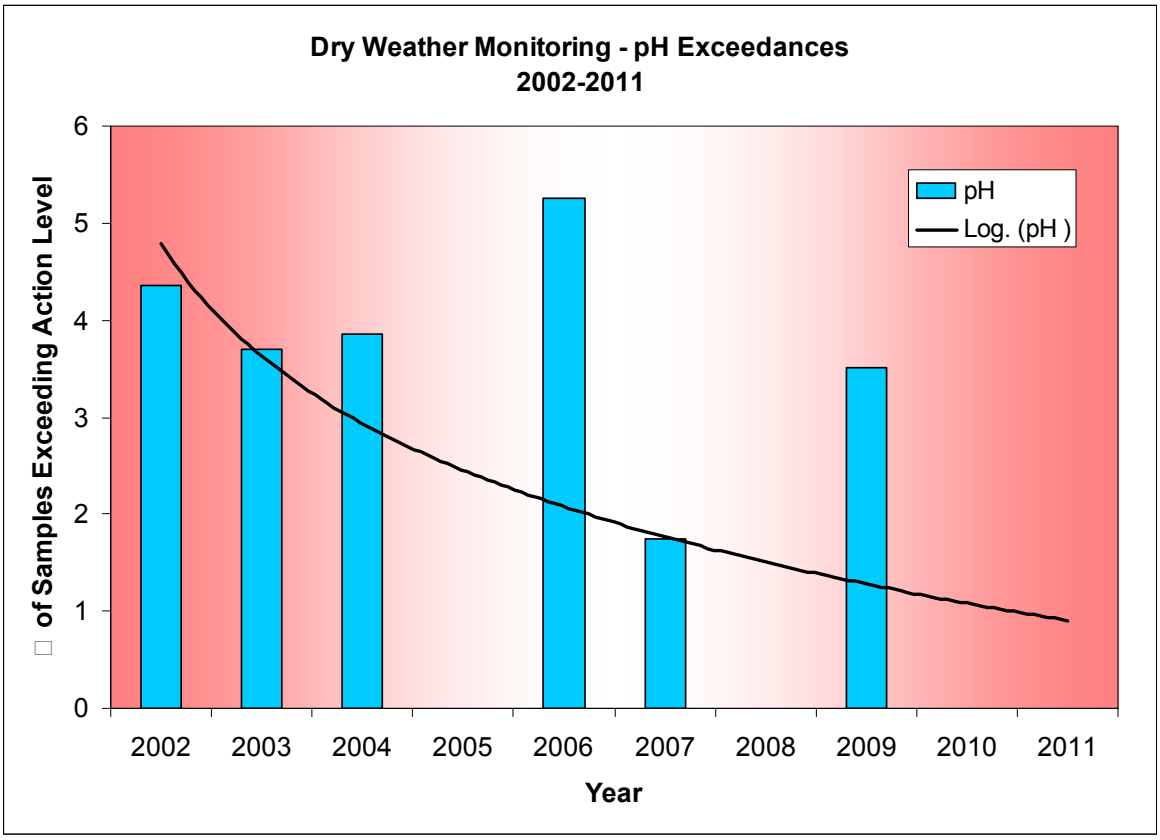
Dry Weather Monitoring - pH Exceedances
2002-2011
of Samples Exceeding Action Level
0
1
2
3
4
5
6
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
pH
Log. (pH)

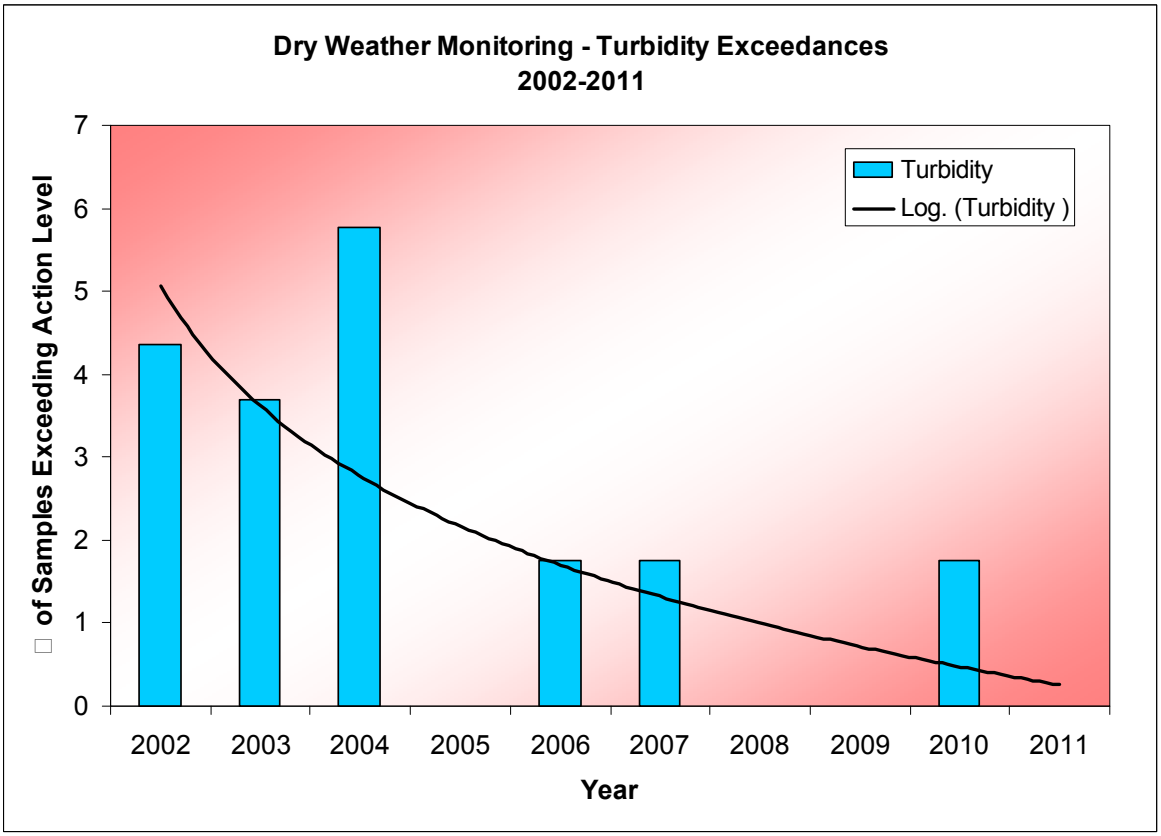
Dry Weather Monitoring - Turbidity Exceedances
2002-2011
of Samples Exceeding Action Level
0
1
2
3
4
5
6
7
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
Turbidity
Log. (Turbidity)

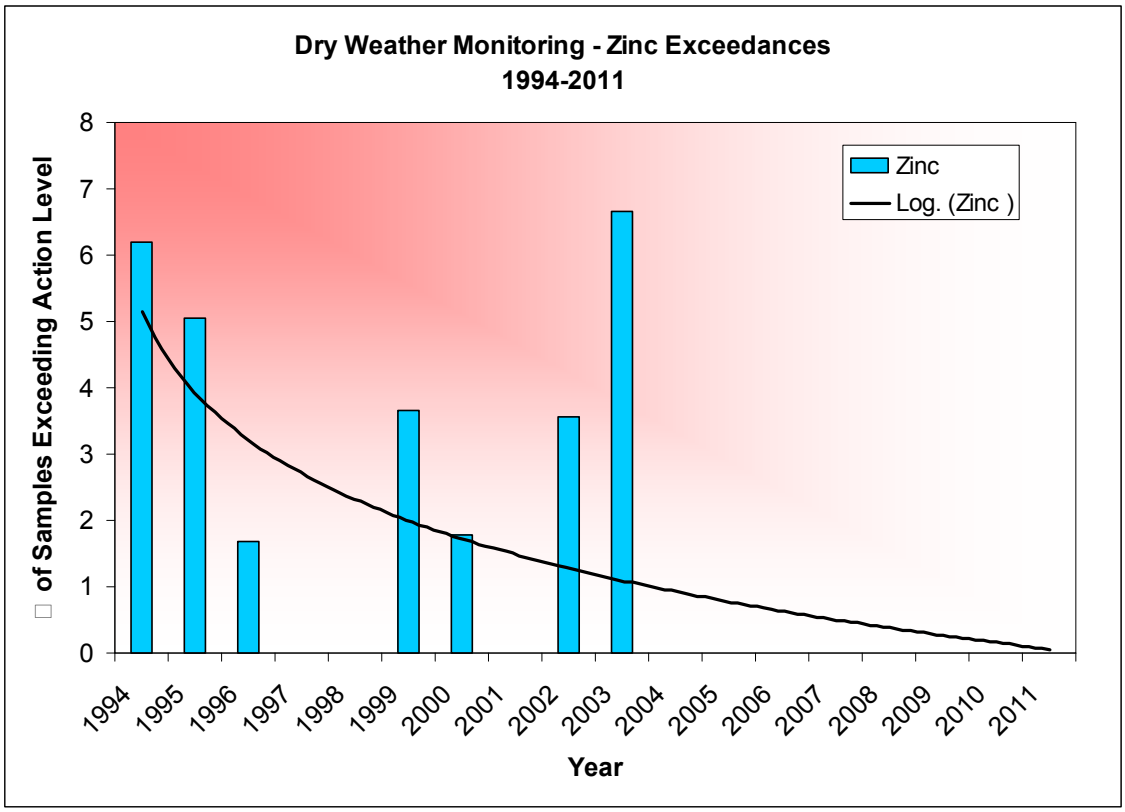
Dry Weather Monitoring - Zinc Exceedances
1994-2011
of Samples Exceeding Action Level
0
1
2
3
4
5
6
7
8
Zinc
Log. (Zinc)
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year

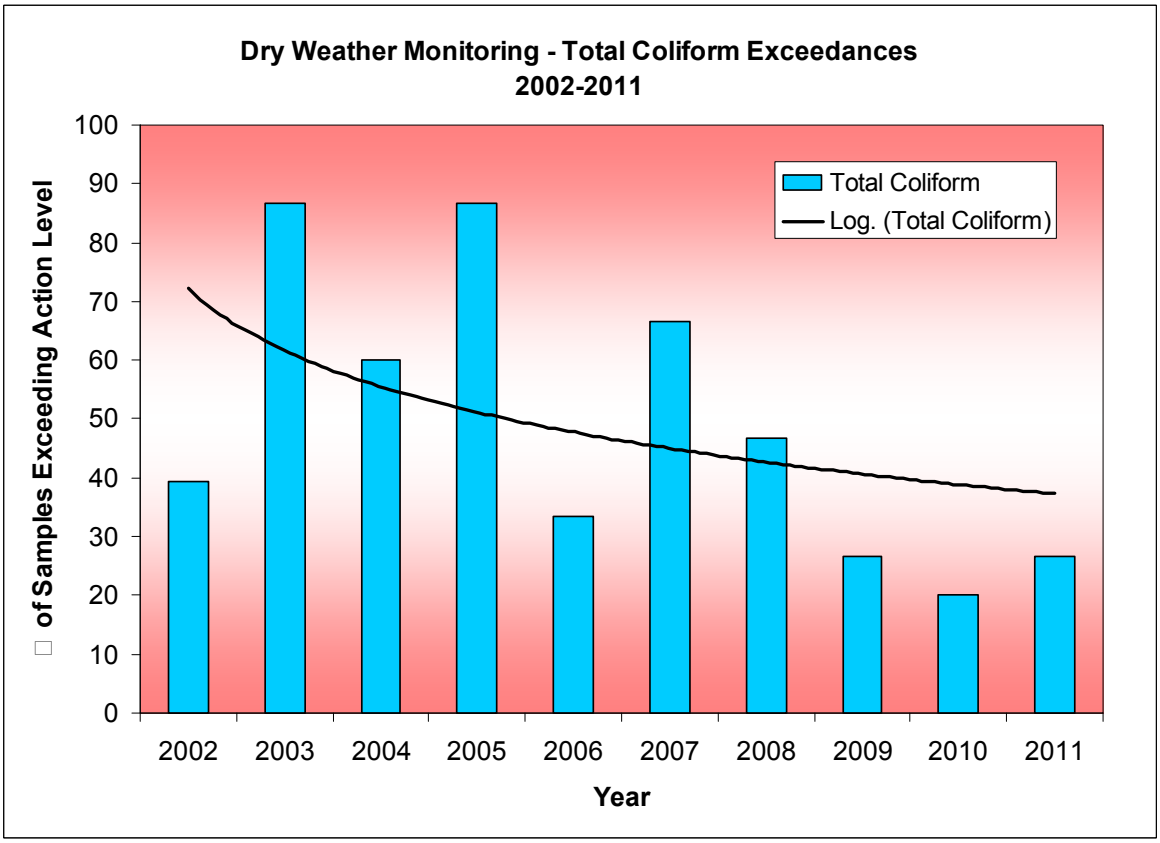
Dry Weather Monitoring - Total Coliform Exceedances
2002-2011
of Samples Exceeding Action Level
0
10
20
30
40
50
60
70
80
90
100
Total Coliform
Log. (Total Coliform)
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year

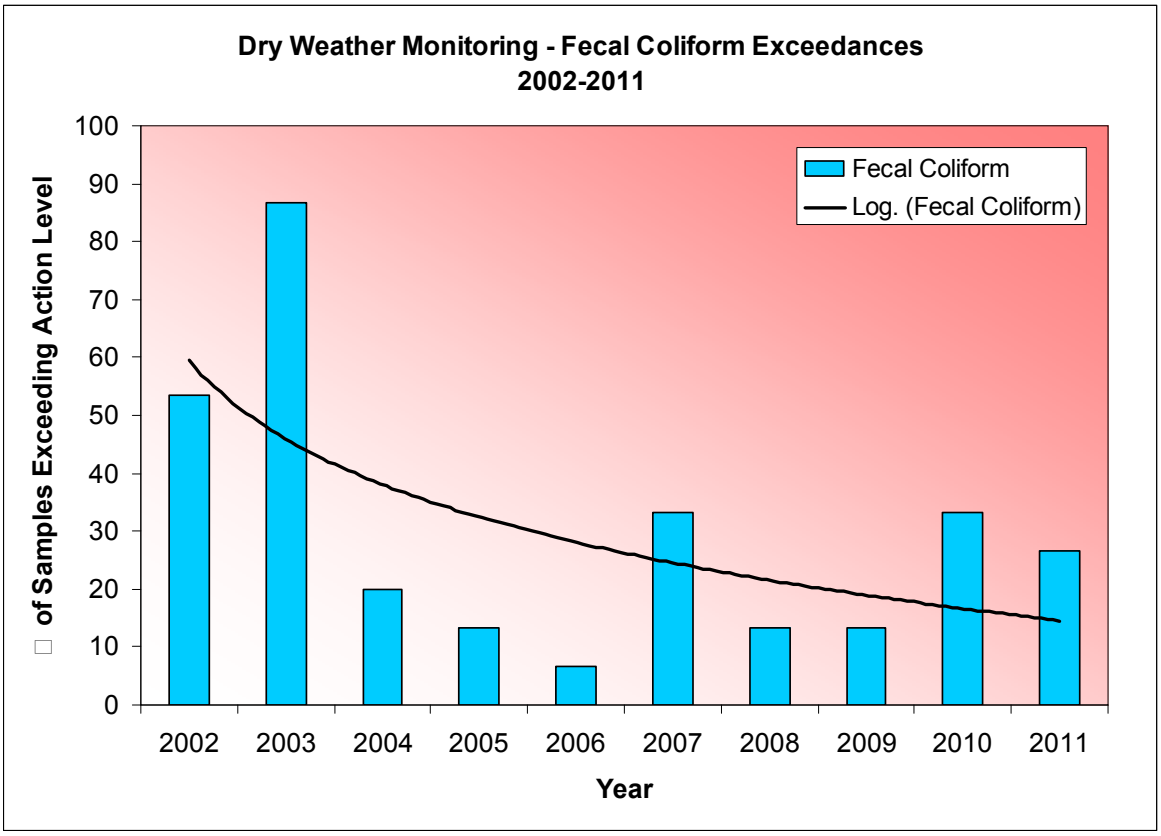
Dry Weather Monitoring - Fecal Coliform Exceedances
2002-2011
Fecal Coliform
Log. (Fecal Coliform)
of Samples Exceeding Action Level
100
90
80
70
60
50
40
30
20
10
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year

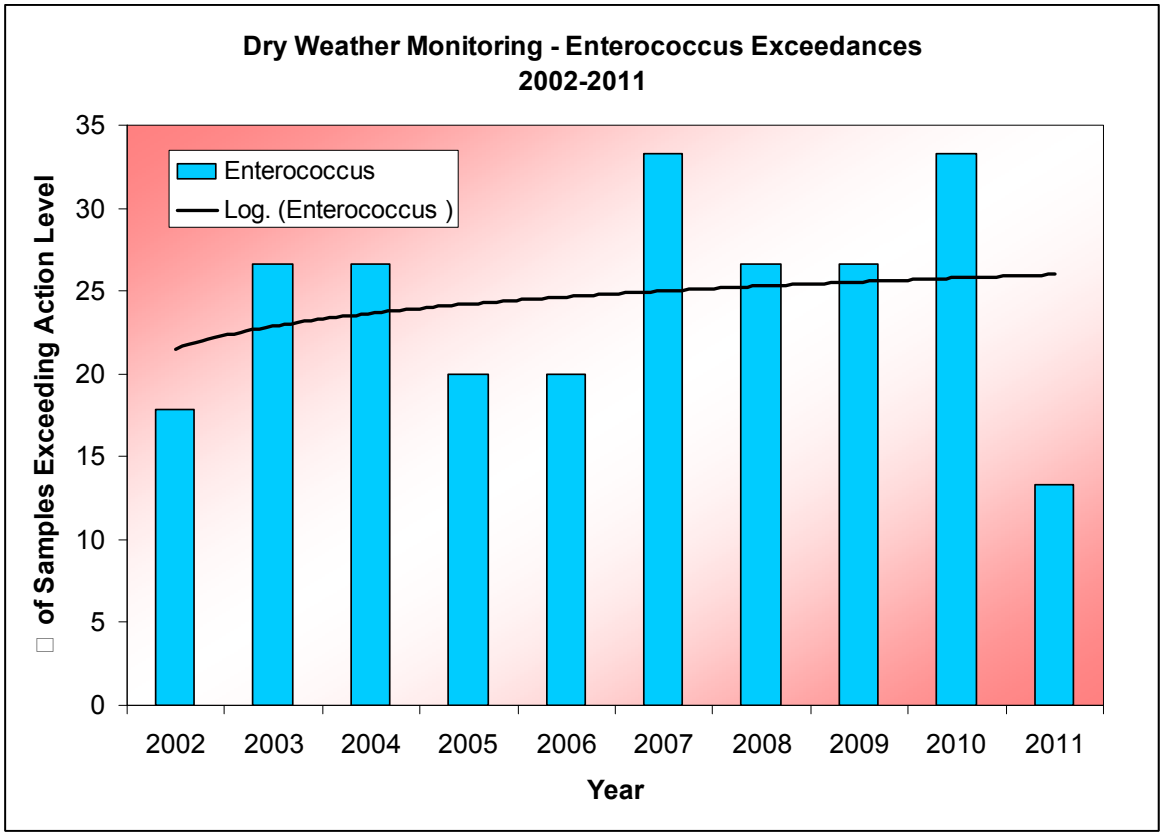
Dry Weather Monitoring - Enterococcus Exceedances
2002-2011
Enterococcus
Log. (Enterococcus)
of Samples Exceeding Action Level
35
30
25
20
15
10
5
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year

11.3.2 PROGRAM ASSESSMENT

In 2011-2012, the City continued to evaluate programmatic activities and implementation protocols in support of effectiveness assessment strategies. It is important to note that through the ROWD and LTEA process, the City has developed a sound understanding of the association of programmatic activities as they relate to long-term effectiveness assessment. As such, the City has sought to formalize various programmatic elements and implementation protocols in support of the effectiveness assessment framework as demonstrated in the preceding paragraphs. The targeted outcome levels discussed below are not intended to be rigid in their function, and while programmatic activities in 2011-2012 more wholly support these levels, continued advancements and data gathering efforts by the City in the future will support a more complete jurisdictional effectiveness assessment. As mentioned in the preceding paragraphs, Copermittees continued to collaborate in an effort to establish a comprehensive assessment in developing a standardized framework for assessing the effectiveness of Jurisdictional Urban Runoff Management Program.

In previous reporting periods, i.e., in 2005-2006 and 2009-2010, the City conducted two rounds of public awareness surveys. The data collected during these surveys, together with future survey results will provide a better understanding of the effectiveness of the City's storm water education efforts.

The discussion under Program Assessment focuses on Levels 1 to 4 of the Targeted Outcomes on a jurisdictional basis as follows:

11.3.2.1 COMPLIANCE WITH ACTIVITY-BASED PERMIT REQUIREMENTS (LEVEL 1)

This level of effectiveness assessment is intended to provide a quantitative assessment that reflects the regional long-term effectiveness assessment framework through targeted outcomes for the City, based on various components of the Municipal Permit (Tables 11-1 – 11-7). In the following sections, these tables and their associated analysis are divided into Municipal Permit components of land use planning, construction, municipal, industrial and commercial, residential, education and public participation, reflecting various elements of the Municipal Permit, and provide a summary accounting of activities conducted by the City in 2011-2012.

11.3.2.1.1 LAND USE PLANNING

In view of the update to the City's local Standard Urban Storm Water Mitigation Plan (SUSMP), and inclusion of Low Impact Development (LID) and Final Hydromodification Management Plan (HMP), the City has sought to continually refine the SUSMP implementation process as deemed necessary to ensure overall effectiveness and compliance with Municipal Permit provisions. During the current reporting period, development activities remain slow and the number of projects submitted to the City for approval and permit issuance was low. As can be seen from Table 11-1, thirteen SUSMP projects were submitted and eight SUSMP projects received approval. However, the number of total cumulative projects that have implemented post-construction BMPs and the number of projects inspected for post-construction BMPs remains high.

During this reporting period, BMP maintenance verification letters were sent to responsible parties reminding them of their responsibility to clean, inspect, and maintain storm water treatment facilities. Responsible parties were required to provide the City with certification of maintenance of the treatment facilities within a set time frame. Additionally, the City has added another GIS layer in the GBA tracking system identifying all public and private treatment category BMPs. These processes provided yet another mechanism to ensure proper maintenance and effectiveness of all treatment facilities and compliance with Municipal permit provisions.

The following tables summarize City of Chula Vista's activities during the reporting period towards ensuring compliance with SUSMP implementation and the review, inspection, and maintenance verification of SUSMP projects.

Table 11-1 FY 2011-2012 Compliance with Activity-Based Requirements – Land Use Planning

PERMIT SECTION	ACTIVITY/ SOURCE TYPE	TARGETED OUTCOME	ACTUAL	MEASURE OF SUCCESS	
D.1 Land Use Planning	Development Projects	# SUSMP Projects Submitted	# SUSMP Projects Approved	Actual/Target	%
		13	8	N/A	N/A
	High Priority Sites (Total Listed = 85)	# Sites Targeted for Inspection	# Sites inspected	Actual/Target	%
		85	85	85/85	100
	Medium Priority Sites (Total Listed = 47)	47	35	35/47	74
	Low Priority Sites (Total Listed = 3)	As Needed	3	N/A	N/A

Please refer to Attachment F for a list of SUSMP projects inspected during the current reporting period.

Based upon the significant achievements and continued refinements experienced in 2011-2012, the City has not identified any ineffective BMPs or management measures in terms of compliance with the Land Use Planning for New Development and Redevelopment permit requirements.

JURMP strengths associated with Land Use Planning for New Development and Redevelopment during the reporting period are described below. The list is not intended to provide comprehensive accounting of programmatic activities; rather it is to highlight those activities that best accentuate the Land Use Planning for New Development and Redevelopment component of the City's JURMP in 2011-2012.

The following features distinguish the Land Use Planning for New Development and Redevelopment component of the City's JURMP:

Development Storm Water Manual

The Manual, updated in January 2011, provides the City with a mechanism to effectively articulate all requirements related to water quality and the development or redevelopment of land within the City. The Manual covers all aspects of development, the City's SUSMP requirements, applicable checklists, permanent BMP requirements, construction BMP requirements, and implementation and maintenance requirements. The Manual is available on the City's website, and is used extensively as a reference document by City staff, developers, and consultants.

During this reporting period City staff actively participated in the Regional Land Development Workgroup meetings and activities and collaborated with other participants on regional activities. The current updated Model SUSMP is dated March 2011. The Copermittees submitted the Final HMP to the Regional Board, which was approved in July 2010. HMP requirements were later incorporated in the City's Development Storm Water Manual in January 2011. The City of Chula Vista has met all the deadlines for updating its local SUSMP and incorporating the Final HMP into its ordinances.

Inter-Departmental Coordination

The City's SUSMP and development review process includes multiple entities throughout the City. As the City continues to grow, it has taken all necessary steps to maintain compliance with SUSMP requirements through the coordination of multiple departments. Although the current economic situation has slowed down the City's growth during the past five years, such coordination has continued in 2011-2012 to require refinement and augmentation, as necessary, to maintain compliance and ultimately improve water quality.

Dedicated Storm Water Management Section

The Development Services Department provides the necessary oversight over all management components of SUSMP implementation. The Storm Water Management Section keeps up with the latest requirements and regulations, and provides technical support to City staff and assist project proponents and consultants. Environmental Health Specialists also perform the functions of post-construction BMP construction verification, inspection, and maintenance verification.

Information System Support

A robust geographic information management system (GIS) supports the City's Storm Water Management Program. The City's GIS currently includes multiple layers used by Storm Water Management staff for various functions. In terms of land development and redevelopment activities, within the reporting period, a BMP layer has been maintained in order to track post-construction BMPs implemented Citywide. Additionally, Permits Plus, which is a specialized permits tracking software, is utilized in tracking a variety of discretionary permits, and specifically is used by the Development Services Department to identify and track Priority Development Projects. Further, Permits Plus is utilized in annual inventory updates. The GIS layer is continuously updated to manage and provide easy access and tracking of post-construction BMP Treatment facilities.

Data Management
As the City continues to grow, challenges associated with data management emerge such as tracking of post-construction BMPs, maintenance agreements, and associated documents. The City continues to address these challenges through the customization of robust data management systems presented in this report, including GIS, GBA, and Permits Plus. However, as requirements and programmatic elements continue to evolve, it is important to update available tools with up-to-date information, as well as information necessary to evaluate overall program effectiveness. The City continues to maintain up-to-date data and effectively track all information related to JURMP activities such as inventories, inspections, violations, notifications, and post-construction BMPs.

New Development and Redevelopment Project Design Elements
With a focus on the use of Low Impact Development Integrated Management Practices and higher efficiency structural treatment BMPs in achieving SUSMP compliance, the City continued to work with the development community to improve the storm water design features of proposed projects. The City continuously stressed this focus in 2011-2012 through requirements of project proponents to provide a detailed level of analysis to justify utilizing design elements in their proposed projects. The updated Model SUSMP, which is incorporated in the City SUSMP requirements, provides an enhanced approach in the level of analysis and project design elements for the development community.

11.3.2.1.2 CONSTRUCTION

Within the reporting period of this report, the construction component continued to demonstrate success by consistent programmatic developments and enhancements. Through identified needs and associated management decisions, the City fortified its jurisdictional construction management component in 2011-2012. As the slowdown in development continued, many construction sites remained inactive or faced sever reductions in construction activities. Within the reporting period, the City worked closely with developers to stabilize inactive construction sites; promote pollution prevention and BMP implementation; and ensure proper maintenance of BMPs to prevent polluted discharges from construction sites. Because of sagging economy, this was a challenge, as many developers claimed that they had limited financial resources and were unable to fund their planned maintenance activities. City staff worked with developers to identify cost-effective BMPs and in some instances initiated enforcement action until full compliance was achieved. Mechanisms were identified to promote pollution prevention techniques as described in Section 3 of this report. The City continues to maintain the regulatory standards established by the Municipal Permit for construction activities and the City's construction performance standards included in the Chula Vista Development Storm Water Manual.

Table 11-2 FY 2011-2012 Compliance with Activity-Based Requirements – Construction

PERMIT SECTION	ACTIVITY/ SOURCE TYPE	TARGETED OUTCOME	ACTUAL	MEASURE OF SUCCESS	
D.2.d Construction	High Priority Sites (Total Listed = 39)	# Sites targeted for inspection	# Sites inspected	Actual/ Target	%
		39	39	39/39	100
	Medium Priority Sites (Total Listed = 27)	27	27	27/27	100
	Low Priority Sites (Total Listed = 3)	As Needed	3	NA	NA
	All Sites (Total Listed = 69*)	Total sites identified	# in compliance or on a schedule for compliance	Actual/ Target	%
		69	69	69/69	100
		# of inspections during dry season	# of inspections during wet season	Total # of inspections	N/A
		48	465	512	N/A

*Note: Of the 69 construction sites listed above, 5 sites were inactive during the reporting period and were inspected on an as needed basis. Active sites were inspected according to the Municipal Permit requirements. For a complete list of construction sites inspected during the reporting period, please refer to Attachment G.

The following features distinguish the construction component of the City's JURMP:

Inspection and Enforcement

As demonstrated above, and in previous reporting years, the City has established a comprehensive construction inspection and enforcement program. The Storm Water and Public Works Inspection staff, with broad knowledge and expertise in construction storm water management, ensures compliance with the construction component of the JURMP. Within the reporting period, targeted inspections on development, redevelopment, and capital construction projects have been fully achieved. These goals have been accomplished through an aggressive inspection and follow-up schedule approach that assures compliance in the highly dynamic construction environment.

Education and Training

Storm Water Management staff provides education and training to all entities related to construction activities including developers, site superintendents, sub-contractors, and trades persons. During the previous years, this education and training capacity was further defined by storm water inspection staff participation and expertise provided at regional training seminars and outreach events directed at the construction industry. As a function of the experience gained through a broad spectrum of construction activities in the City, Chula Vista Storm Water Management staff continues to offer a strong asset and broad-based expertise in construction storm water management both locally and regionally. The adoption of the new Construction

General Permit necessitates further education and trainings to all entities related to construction activities. City staff continued their efforts in educating members of the construction industry at the local level during meetings and site inspections. During the reporting period, many Chula Vista staff members participated in training and certification courses required under the Construction General Permit, Order No. 2009-0009-DWQ and obtained their respective certificates.

It should be noted that programmatic updates and proposed updates presented above have been driven by management decisions to develop more effective JURMP elements. As such, at this time, no significant management measure deficiencies have been identified and no BMPs determined ineffective in 2011-2012. However, in support of an adaptive management approach to jurisdictional elements, the following program areas have been identified for further attention in order to support overall program effectiveness:

BMP Maintenance

During the reporting period, due to an increase in the number of inactive construction sites, BMP maintenance on construction sites continued to be an area of concern. While inspection staff noted significant efforts in BMP implementation, the maintenance needs associated with implemented BMPs did not match implementation efforts on a consistent basis. The City continues to inspect inactive construction sites and issues formal inspection reports to developers if their sites do not meet City standards for BMP requirements as a result of failure to maintain adequate BMPs. The purpose of such formal reports is to notify developers of the City's storm water and non-storm water discharge requirements on inactive construction sites and to reiterate the developer's or property owner's responsibility at both active and inactive sites to implement a plan to address all potential discharges from construction sites.

11.3.2.1.3 MUNICIPAL

As exemplified in program descriptions included in other sections of this report, the City prides itself for outstanding environmental programs, and the interrelated successes that each can account for. The City recognizes the need for far-reaching pollution prevention programs for the general public, but further emphasizes ongoing pollution prevention programs through well-developed City activities such as MS4 maintenance, street sweeping, and Integrated Pest Management techniques. The following table summarizes municipal activities' data.

Table 11-3 FY 2011-2012 Compliance with Activity-Based Requirement – Municipal

PERMIT SECTION	ACTIVITY/ SOURCE TYPE	TARGETED OUTCOME	ACTUAL	MEASURE OF SUCCESS	
D.3.a Municipal	High Priority Sites (Total inventoried in 2010-2011 = 68[1])	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		68	68	68/68	100
	Medium Priority Sites (Total Listed = 5)	As needed	As needed	N/A	N/A
	Low Priority Sites (Total Listed = 12)	As needed	As needed	N/A	N/A
	Catch Basins, Inlets, MS4, Open Channels	Estimated quantity of waste targeted for removal (Tons)	Quantity of waste removed (Tons)	Actual/Target	%
		122	224	224/122	183
	Streets/Parking Lots	Estimated distance of curb/park miles to be cleaned	Total curb/park miles cleaned	Actual/Target	%
		18,000	18,000	18,000/18,000	100
	Catch Basins/ Inlets	# of catch basins and inlets in the City	# of catch basins and inlets inspected	Actual/Target	%
		12,491	7,379	7,379/12,491	59
		# of catch basins and inlets targeted to be cleaned	# of catch basins and inlets cleaned	Actual/Target	%
		43[2]	1,237	1,237/43	2,876

[1] Three categories listed in the Municipal Inventory (Attachment C) as follows are inspected on a regular and as needed basis. The frequency of inspection of these categories exceed Municipal Permit requirements:

- MS4
- Roads, Streets, and Highways
- Special Events

[2] 43 catch basins exceeded the criteria for cleaning (33% or more full).

With such a well-rounded approach, the City has a significant number of management measures to accurately assess the effectiveness of municipal program component. Further, no BMPs have been identified as ineffective within the reporting period of this report.

The following features distinguish the Municipal component of the City's JURMP:

Municipal Facility Inspections
The City conducts inspections on numerous municipal facilities on an annual basis. Continued in 2011-2012, and as part of this comprehensive inspection process, Storm Water Management staff inspects City owned parks and other facilities for potential maintenance concerns and BMP implementation.

Environmental Programs
As described in other sections of this report, the City manages a number of separate, yet interrelated environmental programs. The City recognizes the tremendous asset that such programs provide to the City's pollution prevention efforts, and will continue to promote the collaborative relationship of these programs in the future. The collaborative successes of each program have continued to capitalize upon in 2011-2012 through the development of a broad-based outreach and educational campaign by the City. The City's CLEAN Business program adopted in 2008 continued to promote partnerships between the City and local businesses that operate in an environmentally responsible manner and protect the environment. The program was well received by local businesses and has increased in membership since its adoption. To date, 125 Chula Vista businesses have enrolled in the program.

Based on exemplary municipal pollution prevention procedures, BMP implementation, and management measures, the City has not identified any significant needs for program improvement or modification at this time.

11.3.2.1.4 INDUSTRIAL AND COMMERCIAL

The 2011-2012 reporting year was a continued maintenance year in terms of industrial and commercial activities within the City. Inventory validation and supplemental inspection efforts remain the highlights of this year's activities. As reported in previous reporting cycles, significant numbers of inspections have been conducted Citywide in order to reach out to numerous industrial and commercial facilities operating within the City. With such a significant variety of commercial and industrial activities in Chula Vista, staff has recognized the need to target those areas and business activities that remain high on the source priority list, and to provide a consistent presence and strong enforcement standard. Notably in this reporting period, Storm Water Section staff continued its one-on-one educational training program on storm water pollution prevention and BMP implementation to specific industrial facilities that have a track record of violations and were identified as High Threat To Water Quality.

The City's FY 2011-2012 inventory of industrial/commercial facilities includes 184 industrial facilities and 1,154 commercial facilities, of which 409 are mobile businesses. However, this inventory was not yet available during the reporting period, and the 2010-2011 industrial/commercial inventory was used for inspections. The numbers under Targeted Outcomes in Table 11-4 reflect the 2010-2011 inventory. In 2011-2012, Storm Water Management staff has successfully met, and in some cases exceeded, all compliance-based industrial/commercial requirements of the Municipal Permit through inspection of all high-priority and some low-priority commercial and industrial sites. As such, the City has not

identified any significant management measures, deficiencies or ineffective BMPs within the defined reporting period.

Table 11-4 FY 2011-2012 Compliance with Activity Based Requirements – Industrial/Commercial

PERMIT SECTION	ACTIVITY/SOURCE TYPE	TARGETED OUTCOME	ACTUAL	MEASURE OF SUCCESS	
D.3.b Industrial	High Priority Sites (Total inventoried in 2010-2011 = 43)	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		43	37	37/43	86
	Medium Priority Sites (Total = 5)	As needed	As needed	NA	NA
	Low Priority Sites (Total = 148)	As needed	As needed	NA	NA
D.3.c Stationary Commercial	High Priority Sites (Total inventoried in 2010-2011 = 225)	# Sites targeted for inspection	# Sites inspected	Actual/Target	%
		225	197[1]	197/225	88
	Low Priority Sites (Total = 672[2])	As needed	44	NA	NA

[1] Of the 225 total high priority commercial facilities targeted for inspection, 28 were inspected and found to be either closed, relocated, or did not pose a threat to water quality (had indoor activities only). Therefore, inspection reports for only 197 facilities were prepared. Those facilities that were closed, relocated, or did not pose a threat to water quality were subsequently removed from the 2011-2012 commercial source inventory.

[2] The Municipal Permit does not require annual inspections of mobile businesses. Therefore, mobile businesses marked as such in the Commercial Source Inventory and Prioritization List (Attachment D.1) are not included in the above numbers. Mobile businesses are regulated differently from stationary businesses

The following features distinguish the industrial/commercial component of the City's JURMP:

Integrated and Balanced Approach

With a dedicated storm water compliance inspection staff, industrial and commercial facilities are effectively regulated. Most notably, the City's industrial and commercial inspection program is defined by a consistent presence and strong enforcement standard, and Chula Vista storm water inspection staff continues to excel in maintaining the needs of the industrial and commercial programmatic elements. Needs such as pollution prevention and BMP implementation assurance, business community education and outreach, ongoing inspection and enforcement, and maintenance of a dynamic source inventory characterize the large role these components have in the larger storm water management scheme. Further, Public Works maintenance and landscape crews, whose working environment is in the field, have been trained and educated in storm water pollution prevention, and they report any observed illegal activities or discharges. As such, they are considered the "eyes and ears" of the Storm Water Management Section.

Marked by exemplary inspection and enforcement processes and procedures, the City has not identified any significant need for improvement of the industrial/commercial program at this time.

11.3.2.1.5 RESIDENTIAL

As demonstrated through the narratives in other sections of this report, the expanding residential community that makes up the City of Chula Vista defines the residential component of the City's JURMP. Any small changes in behavior of residents are magnified due to the effect of numbers. As such, the Storm Water Management staff has sought to achieve continued success in the reduction of pollutants from residential areas through a variety of mechanisms geared toward behavior change. This has been approached through the characterization of a variety of activities and pollutant types associated with such activities. The Storm Water Management staff has identified a specific need to reach out to the residential community to communicate a broad based message of environmental stewardship and protection of water quality. Table 11-5 shows the quantity of Household Hazardous Waste and used oil collected from residents in the City of Chula Vista for FY 2010-2011. The significant quantities collected in HHW can be attributed to an aggressive effort by the City on residential outreach and educational efforts. Similarly, the quantity of used oil collected showed an increase of 172% over the previous Fiscal Year, which is an indication of the effectiveness of the program.

Table 11-5 FY 2011-2012 Compliance with Activity-Based Requirements – Residential

PERMIT SECTION	ACTIVITY/ SOURCE TYPE	TARGETED ACTUAL FY 10-11	ACHIEVED ACTUAL FY 11-12	MEASURE OF SUCCESS	
D.3.c Residential	Household Hazardous Material	412,706 lbs	620,929 lbs	Actual/Target	%
				620,929/412,706	150
	Used Oil	28,732 gallons	78,122 gallons	78,122/28,732	272

Residential Program Strengths:

Pollution Prevention

Various pollution prevention programs offered to residents strengthen the City's residential component. Such pollution prevention programs provide the community with highly cost-effective methods of disposal of such items as used motor oil, oil filters, green waste, recyclables, used cooking oil, household hazardous waste, and electronic waste. While the details of such programs are found throughout this report, it is important to recapture the tremendous asset such programs offer the City's community.

Residential Outreach and Education

The City continued to focus significant resources on residential outreach and education efforts in 2011-2012 and constantly endeavored to devise different avenues in reaching the public. While these activities are more fully described in Section 8.0 of this report, it is necessary to recognize the importance of this attribute to the overall success of the residential sector of the community.

Residential Program Improvement Areas and Challenges:
Based on exemplary residential pollution prevention procedures, BMP implementation, management measures, and a greatly enhanced outreach and education strategy, the City has not identified any significant needs for improvement at this time.

11.3.2.1.6 EDUCATION AND PUBLIC PARTICIPATION

The City prides in its well-established and comprehensive environmental programs. The Storm Water Management Program plays a vital role in communicating water quality information to local commercial, industrial, residential, and development communities. Further, such messages are supported by cooperative efforts within various City programs such as the Conservation Program, the Regional Used Oil Recycling Program, the waste management and recycling program, and the Household Hazardous Waste Program. With the City's commitment to environmental services and resources, the City's Storm Water Management Program has successfully collaborated with City environmental programs and departments in order to effectively reach the community at large with clear and relevant messages of environmental stewardship and protection. The accounting of activities in Sections 8 and 9 of this report has been prepared to demonstrate the broad spectrum of education and public participation opportunities provided to the community of Chula Vista.

While the City continuously strives to improve its JURMP implementation program, it has not identified specific management measures by which to improve education and public participation activities. The Clean Business program was the latest measure added in our public participation activities. The City is committed to the continued development of such efforts as they are evaluated through the effectiveness assessment process.

Education and Public Participation Program Strengths:

Environmental Program Collaboration
As discussed throughout Sections 8 and 9 of this report and highlighted in previous reporting years, the City's Storm Water Management Program is strongly supported by numerous environmental programs within the City. As such, the Storm Water Management Program has been able to reach more diverse audiences and participate in a greater variety of public participation venues. This collaboration of programs that culminated in the creation of the CLEAN program has resulted in clear and consistent messaging to Chula Vista residents and has reinforced City's resources toward more effective and holistic environmental programs.

While the goals of the CLEAN program have been articulated elsewhere in this report, it is important to note the unique approach to education and outreach that the City has taken. Through the collaboration of environmental programs such as conservation, waste management, household hazardous waste collection, recycling, and storm water management, citizens receive consistent and interrelated messages, and participate in activities that demonstrate various facets of environmental protection. Such coordinated public education and participation programs have far reaching and lasting effects that ultimately result in general acceptance of environmental concepts and changes in behavior. It has been recognized that the interrelationship of each of

these programs collectively, is integral to the overall success of each of these programs individually.

Internal Staff Training

Through formal or informal training, meetings or individual contact, staff training is conducted each year in the City on an as needed basis. With the status and trends in storm water management in such a dynamic state, Storm Water Management staff has recognized the need to consistently provide updated information to City employees. In addition, the messages must be conveyed consistently at all levels, and cover all necessary City functions.

Chula Vista CLEAN Program

The City continued to take significant steps to further implement an integrated and relevant public education and outreach program aimed at a diverse audience. Utilizing the services of I Love A Clean San Diego (ILACSD) the CLEAN program has been built upon a holistic approach and increased community participation, aiming to utilize the participating community groups, private businesses and organizations, local water agencies, local schools, developers, community groups, and others to create a shared personal commitment and a sense of ownership to the community's environment, water resources and watershed.

Education and Public Participation Program Improvement Areas and Challenges:

Education of the Development Community

The updated Model SUSMP, which was incorporated in the City's local SUSMP required extra efforts by City staff, developers, and consultants. The development community, which was used to meeting water quality requirements of their projects by mainly incorporating mechanical treatment BMPs in their drainage systems, was now faced with LID and hydromodification requirements. LID principles are based on site planning for the minimization of impervious areas, utilizing landscaped areas for the benefit of water quality, water conservation, and other natural site design BMPs that mimic the pre-development hydrologic conditions of the site. Integrated Management Practices (IMPs) combine the benefit of natural treatment and flow attenuation methods to both treat runoff and mimic pre-development hydrology by reducing runoff flow peaks and durations.

LID concepts require site planning at the earliest stages of the project conception. A change in perspective and a closer cooperation between architects, planners, and engineers, as well as cross training among these groups are needed. Because of these reasons, and the inevitable fact that normally there is reluctance to change acquired habits and established procedures, City staff faced the challenge of reviewing multiple submittals and meeting with project applicants, on occasions several times, before acceptable site plans were achieved. Through regional and jurisdictional efforts, developers and consultants are becoming familiar with the new requirements and are making the necessary adjustments to incorporate LID principles into their project plans. After the issuance of the current Municipal Permit, the Storm Water Management staff expanded its inspections and enforcement of post-construction BMPs to ensure BMP implementation and maintenance on development projects, often exceeding minimum requirements of the Permit. It is a priority of the City to communicate and reinforce the requirements associated with development and redevelopment projects through a consistent and

clear message. This is most effectively approached through project-by-project interaction with developers and consultants.

Table 11-6 Compliance with Activity-Based Requirements – Education and Public Participation

PERMIT SECTION	ACTIVITY/ SOURCE TYPE	TARGETED OUTCOME	ACTUAL	MEASURE OF SUCCESS	
D.3.g Education	Outreach (External)	# targeted training workshops, outreach events	# training workshops, outreach events conducted	Actual/Target	%
		14	14	14/14	100
	Staff Training	# Training sessions FY 09-10	# Training sessions FY 10-11	Actual/Target	%
		10	11	11/10	110

11.3.2.2 CHANGES IN KNOWLEDGE/AWARENESS (LEVEL 2)

It is generally accepted that expanded knowledge and awareness is fundamental to bringing about desired changes in behavior. As such, the wide variety of activities captured in this report, including workshops, training, and public outreach through the Chula Vista CLEAN program, all support this critical programmatic element. To date, the City of Chula Vista has completed two rounds of surveys designed to measure public awareness of various storm water quality related issues. The surveys are intended to measure the level of knowledge and associated behavioral change. During the reporting period, the City provided a wide cross-section of information through the interrelationship of various environmental programs. The City was able to significantly impact the level of knowledge and awareness within the community through its continued efforts in influencing residential, industrial, commercial, and municipal activities. In order to evaluate levels of knowledge and awareness, the City has established the following indicators:

- Hotline Call Response Tracking (Residential, Industrial, Commercial, Construction)
- Business License Application Screening Procedure (Mobile Businesses)
- Storm Water Web Site (All Community Sectors)
- Development Review Process (Development Community)

It is anticipated that in future reporting years, as these indicators become more wholly developed and additional data is collected; they will provide strong directional measures toward programmatic updates. It is important to recognize that the elements presented below are only indicators used to evaluate trends in Chula Vista, and are taken collectively to express overall successes and challenges and provide programmatic guidance.

Hotline Call Response Tracking

A comprehensive hotline call response summary is presented in Attachment L – Hotline Call Response Summary. It is important to note that trends in hotline calls received by the City have remained strong since the inception of the program. Figure 11-2 shows the number of hotline calls from FY 1998-1999 to FY 2011-2012. The high level of public participation in reporting illegal discharges can be attributed to two elements, 1) the expanded effort by the City in its public education and outreach that gained substantial increase in public awareness of various storm water quality issues, and 2) publicity of the hotline and its ease of access. It may be inferred that overall programmatic influences are strong throughout the community.

Figure 11-2 Chula Vista Storm Water Hotline Call Summary 1998-2012

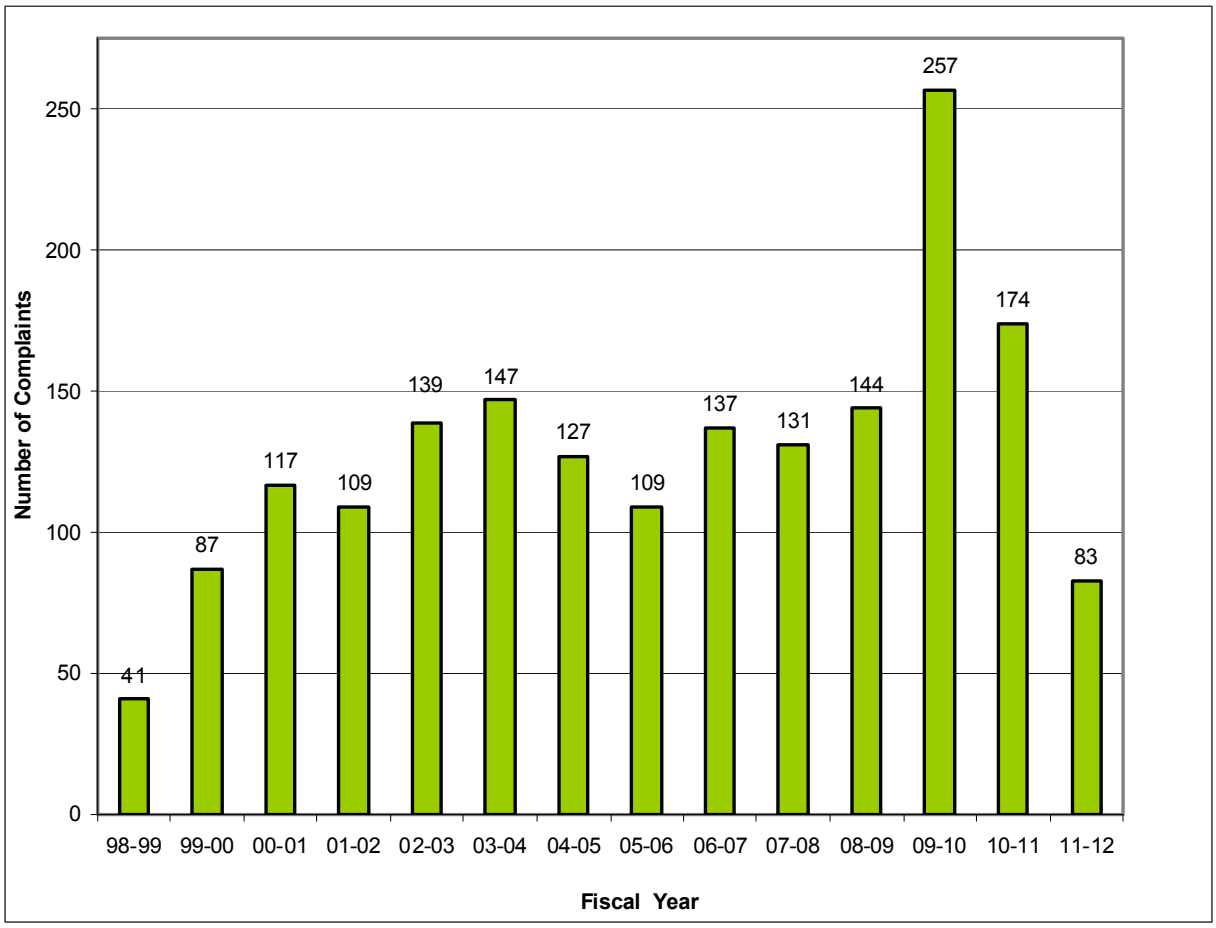

Business License Application Screening Procedure

The Business License Application Procedure, presented in Section 5.3 of this report, has provided the City a unique mechanism in evaluating knowledge and awareness of various mobile business communities. Mobile business owners are required to complete a storm water questionnaire, read the City's Storm Water Ordinance, and review educational BMP information related to their mobile business type. Through direct interaction with business license applicants, Storm Water Management staff is able to subjectively assess the level of awareness that mobile business owners have, based on their answers to the storm water questionnaire.

The City continued to utilize the regional mobile business database website. The website includes a compilation of all approved mobile business applications in the region, which is categorized by jurisdiction. The creation of regional source inventory is a significant improvement in mobile business database management, which can provide essential information in monitoring and tracking mobile business activities in the entire region.

Storm Water Web Site

The City's CLEAN website development and update continued into 2011-2012. This site offers valuable information to Chula Vista residents and businesses and is intended to facilitate public education on environmental issues, including storm water. The website also provides a means for residents to report illegal discharges to storm drain systems. Due to technical constraints, it is not possible at this time to count the number of people accessing the website. It is hoped that this technical difficulty will be overcome in the future in order to provide a method to assess the usefulness of the website. In the meantime, Storm Water Management Section will continue to resort to other means of assessment such as surveys.

Development Review Process

During the current reporting period, the City continued implementing the environmental review process for all development and redevelopment project submittals. The City's JURMP includes a comprehensive flow chart to show the SUSMP implementation, approval, and verification process, together with responsible departments, divisions, and sections of the City. Through the required submission of Water Quality Technical Reports (WQTR) for Priority Development Projects; subsequent review by City staff; and project pre-construction meetings, in 2011-2012 a notable increase in knowledge and awareness within the development community was observed. The level of knowledge and awareness has been evaluated through a review of the comments provided and direction needed from City staff to ensure compliance with SUSMP requirements. Further, it has been noted that WQTR submittals tend to be more fully developed and generally utilize effective sets of post-construction BMPs as required. A detailed description of the review process has been discussed in section 2 of this report. It should also be noted that while great strides have been observed in the development community, the City has identified the need to consistently convey stronger regulatory standards of construction and post-construction BMPs, including Low Impact Development and hydromodification, and will continue to take this approach in future reporting years.

11.3.2.3 BEHAVIORAL CHANGE/BMP IMPLEMENTATION (LEVEL 3)

During this reporting period, the City continued to implement BMP tracking measures into various components as reviewed in this report. It has been recognized that through the implementation of well-developed BMP tracking measures, the City is able to more fully evaluate BMP implementation and associated behavioral change. The City has identified the following program areas as those most conducive to effectively tracking BMP implementation and evaluating behavioral change within the various regulated communities:

- Inspection Activities
- SUSMP Implementation

- Survey

Inspection Activities
As discussed in applicable sections of this report, the City has developed comprehensive commercial, industrial, municipal, and construction inspection programs. It is through these well-developed inspection programs, that the City is able to utilize BMP implementation tracking and assessment mechanisms.

In the reporting year 2011-2012, the Storm Water Management Section continued to use the GBA database management system to track source inventories, inspection activities, and other data relevant to the assessment of storm water management programs. The use of the GBA was expanded and refined to better serve the purposes of the new Municipal Permit. Through this database program, Storm Water Management staff is able to view the historical activities such as inspections and violations of commercial, industrial, municipal, and construction sites. Further, in support of BMP selection and evaluation throughout various community sectors, staff uses the inspection forms that were developed in FY 2005-2006. The inspection forms developed for commercial, industrial, municipal, and construction inspection activities are intended to provide fully developed BMP implementation tracking mechanisms.

Based on data gathered from such activities, the City is able to take a critical look at BMP selection and implementation Citywide, and be able to evaluate behavioral change within business communities and further validate effectiveness trends in years to come.

SUSMP Implementation
Within the development community, implementation of post-construction BMPs provides the City with the strongest indicator of BMP implementation and behavioral change. As discussed in Section 2.0 of this report, the City has sought to firmly establish SUSMP requirements within the development community, and has successfully implemented SUSMP procedures for all applicable projects within the defined reporting period of this report. Inherently through this process, significant numbers of post-construction BMPs have been implemented throughout the City; including site design, source control, and treatment control level BMPs.

Survey
To date, the City has conducted two rounds of surveys and intends to conduct similar surveys in the future with each permit reissuance cycle. The survey questionnaire includes 11 questions designed to measure public awareness of various storm water quality related issues and their relationship to behavioral change. The survey administered in 2005 served as a general baseline for comparison. Although the survey in general is an assessment of public awareness, a few questions were designed to measure behavioral change. The focus of the survey was residential behaviors related to auto maintenance, landscaping, pet care, and swimming pool maintenance. Overall, results show that residents are aware of pollution prevention methods to protect waterways. Results show that some improvement can be made by educating residents about watersheds, the difference between the storm drain and the sewer system, and on BMPs for vehicle washing. Results suggest that although residents know in general how to prevent pollution, they still may not know the fundamentals of why they should prevent pollution. The City will take this knowledge and use it to better focus its education program.

11.3.2.4 LOAD REDUCTIONS (LEVEL 4)

On a regional level, some Level 4 analysis has been conducted within the ROWD and associated LTEA documents. While load reduction targeted outcomes and estimates have proven challenging on a jurisdictional level, the regional ROWD and LTEA provide the most well developed approach toward such assessments. As such, the City has developed the following snapshot of load reduction estimates on a jurisdictional level to support overall JURMP effectiveness assessment. Notably, the load reduction numbers provided below in Table 11-7 are focused on municipal functions and programs.

Table 11-7 FY 2011-2012 Load Reduction

ACTIVITY/FUNCTION	LOAD REDUCTION	POLLUTANT TYPE
Used Oil Recycling	78,122 gallons	Motor Oil
Household Hazardous Waste Collection	620,929 pounds	Antifreeze, Oils, Paints, Aerosols, etc
MS4 Maintenance	0.06 tons	Trash, Debris, Leaves, Grass, Rock, Silt
MS4 Catch Basin and Inlets	14.66 tons	Trash, Debris, Leaves, Grass
Channel Maintenance	209.09 tons	Trash, Debris
Street Sweeping	787.6 tons	Trash, Debris, Sediment

11.3.3 INTEGRATED ASSESSMENT

A review of the results from the regional monitoring program and the City's Dry Weather Field Screening and Analytical Monitoring indicates that bacterial indicators and nitrate are the persistent constituents of concern in discharges from the City's MS4 and within the receiving waters. Other constituents of concern occasionally exceed established limits, however, they appear to be transient. Sources of bacterial indicators are commonly associated with wildlife; pet waste, improper management of restaurant waste, sewage overflows, and general residential activities and land uses. Nitrate is commonly associated with landscaping activities and groundwater intrusion. Notably, the City continued its special investigation this reporting year to learn more about the sources of nitrate within the City, particularly those areas that show a consistent flow of groundwater into the storm drain system. Based on the findings of the study, it has been determined that groundwater intrusion into surface and underground storm drain conveyance systems is the main source of elevated nitrate levels in MS4 discharges.

The City has implemented a variety of program elements that are described fully in other sections of this report, as summarized below:

- Residential and commercial public education
- Inspection of restaurants and other potential sources of bacteria
- A comprehensive sanitary sewer overflow prevention and cleanup program
- A comprehensive storm water conveyance system maintenance
- Street sweeping

- Requirements for treatment control Best Management Practices on new development and major redevelopment

The Charts included in Section 11.3.1 indicate that a number of pollutants are on a declining trend in this reporting period. Particularly, significant decreases in Total Coliform and Fecal Coliform are encouraging. These results can be interpreted as follows:

The City maintained its expanded public education and outreach in this reporting period. This effort was aimed at increased awareness and changes in public behavior. Based on current and past results from the dry-weather monitoring program, and past violation reports, specific residential areas that were identified as High Threat To Water Quality (HTTWQ) were targeted for disseminating educational materials specific to the type of pollutants and violation activities. Moreover, the implementation of BMPs as described above is considered effective in deceases in fecal coliform and total coliform in urban runoff. This indicates that the City's programs are effective in controlling bacterial indicators. Further, due to the slowdown in construction activities, creation of urban impervious areas slowed down during the reporting period, which may also contribute to decreased instances of observed pollutant discharges. It is important to point out that this analysis should not be construed as a scientific assessment of the effectiveness of all the City's programs. As mentioned before, integrated assessment is the most difficult step in the effectiveness assessment and requires the evaluation of many diverse factors throughout an extended period of time. The recently submitted ROWD and LTEA include more comprehensive evaluation of integrated assessment within the San Diego Bay Watershed and the City.

12.0 SPECIAL INVESTIGATIONS

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(k).i - A description of any special investigations conducted.

12.1 SELENIUM SPECIAL STUDY

In November 2010, the USEPA approved the 2008-2010 303(d) list for the San Diego Region. Table 12-1 shows the pollutant/waterbody combinations within or adjacent to the City. Both Poggi Creek and Telegraph Canyon Creek, listed for toxicity and selenium, respectively, are located entirely within the City of Chula Vista. The lower section of Sweetwater River, below the impoundment (Sweetwater Reservoir), is 303(d) listed for a variety of pollutants. The Cities of San Diego, Chula Vista, National City, Lemon Grove, and La Mesa, as well as the County of San Diego discharge into the Lower Sweetwater River. As a proactive measure, the City, with the help of a consultant, initiated a special study to further investigate selenium concentrations in Telegraph Canyon Creek and augment data collected by the Regional Board as part of the SWAMP monitoring program. The City decided to give priority to selenium due to the fact that exact pollutant(s) causing toxicity within Poggi Canyon Creek and Sweetwater River have yet to be determined through regional monitoring studies. Similar studies for the Sweetwater River will have to be conducted with cooperation from all Copermittees contributing to flows in the Sweetwater River as a collaborative effort.

Table 12-1 2008-2010 303(d) Listed Waterbody-Pollutant Combinations In or Adjacent to Chula Vista

WATERBODY	POLLUTANT
Poggi Canyon Creek	Toxicity
Telegraph Canyon Creek	Selenium
Sweetwater River, Lower (below Sweetwater Reservoir)	Enterococcus
	Fecal Coliform
	Phosphorus
	TDS
	Total Nitrogen as N
	Toxicity
	Selenium

The four sites within Telegraph Canyon Creek that were sampled during the previous reporting period were sampled in the current reporting period. Preliminary results have shown that the majority of total selenium concentrations have been below the Water Quality Objective of 5µg/L. The City will continue gathering data to supplement this study in both the wet and dry seasons to obtain better temporal coverage.

The City will continue this long-term special study to characterize selenium within Telegraph Canyon Creek in order to obtain statistically significant data. Potential future directions for selenium studies involve working with other dischargers within Sweetwater River.

13.0 NON-EMERGENCY FIRE FIGHTING

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(l).i - A description of any efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.

13.1 INTRODUCTION

The City has developed and implemented a program to reduce pollutants from non-emergency fire fighting flows. BMPs have been implemented when conducting the following activities:

- Regular maintenance of fire and emergency vehicles and equipment
- Training exercises
- Facilities maintenance
- Post-Emergency rehabilitation of response equipment

These activities are conducted in a way to either minimize or eliminate the discharge of pollutants to the storm water conveyance system. Detailed descriptions of BMPs are given for each activity below:

13.2 BEST MANAGEMENT PRACTICES

The City has developed and implemented a program to reduce pollutants from non-emergency fire fighting flows. Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. BMPs and educational methods are used to reduce the discharge of pollutants to the MEP. BMPs are implemented when conducting the activities described in the following sections:

13.2.1 REGULAR MAINTENANCE OF EQUIPMENT

- Vehicles and equipment are cleaned where runoff can be directed to the sanitary sewer system.
- Vehicles and equipment are cleaned where runoff can pond and evaporate and/or where runoff filters through landscaped areas.
- Sewer drains in a vehicle cleaning area are outfitted with a hydro screen fabric barrier to collect debris.
- Spill kits are available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents is minimized and disposed of into the sanitary sewer system.

13.2.2 TRAINING EXERCISES

- Water flows are directed to landscaped areas whenever possible.

- When water flows to an area where landscaping does not prevent runoff, the Officer-in-Charge surveys the area prior to training activities to ensure that drill activities do not wash debris or sediment to storm drain systems.
- Prior to drill activities, debris is removed from downstream areas that could potentially discharge to storm drain systems.
- Live fire training activities are pre-planned to allow integration of barriers to off-site runoff that could contribute to storm water discharges.

13.2.3 FACILITIES MAINTENANCE

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways are swept regularly to remove debris. Debris is placed in the trash.
- Landscaped areas are maintained as required to reduce the introduction of leaves and other landscape waste into the MS4.
- Irrigation systems are monitored and maintained as required to reduce irrigation water from going off-site.
- Spills are cleaned up using spill kits provided at the work site, and the disposal of spilled materials is in accordance with applicable regulations.
- Hazardous materials (Hazmat) spills that require a cleanup beyond the ability of the on-site personnel are reported to the County of San Diego Hazardous Materials Division or a Hazmat certified contractor with appropriate resources to properly address the spill.
- Maintenance and repair of structures are conducted using methods that do not contribute pollutants to the MS4.

13.2.4 POST-EMERGENCY REHABILITATION OF RESPONSE EQUIPMENT

Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency are restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. Water is used only if other practical and immediately available methods cannot be identified. In such cases, BMPs are used to control water usage and effluent flows to prevent discharges to MS4s.

13.2.5 WASHING AND FUELING ACTIVITIES

The City maintains a number of fire stations, as listed in the municipal inventory (See Attachment C). Such facilities are inspected on an as needed basis. Only one fire station (Fire Station No. 4/Training Tower) has training capabilities. This facility is sloped so that all runoff generated by training activities is directed to a pervious infiltration area. Two fire stations within the City, stations No. 2 and No. 7, have fueling stations on site. Trucks from other stations are brought to these locations for fueling. The following fire stations conduct washing activities on site and pursuant to SUSMP regulations have permanent storm water BMPs installed:

- Fire Station No. 6 – 3 filter inserts and a non-storm water diverter
- Fire Station No. 7 – 1 CDS unit and a non-storm water diverter
- Fire Station No. 8 – 1 CDS unit and a non-storm water diverter

Each station is sloped so that all runoff generated by washing activities flows to a drain equipped with a non-storm water diverter mechanism, which diverts the wash water to the sanitary sewer system and rainwater to storm drain systems.

All personnel who conduct washing activities are properly trained on using the diverter device and ensuring it is used appropriately. Trucks that require cleaning from other stations are brought to the stations equipped with washing capabilities.

14.0 JURMP REVISIONS

MUNICIPAL PERMIT REQUIREMENTS:

Permit Section J.3.a.(3)(m)i – A description of any proposed revisions to the JURMP.

The following paragraph details updates to the City's JURMP.

APPENDICES

Since the City's JURMP document was developed and submitted to the Regional Board in March 2008, the JURMP Appendices have been updated, as needed, and have been included in the JURMP Annual Reports as Attachments. During the current reporting period, the inventories of construction sites; municipal, commercial, and industrial facilities and activities; and Priority Development Projects with treatment control BMPs were updated. These inventories are included in Attachments A to E of this report.

15.0 CONCLUSIONS

The present report is an accounting of City of Chula Vista's activities and Jurisdictional Urban Runoff Management Program (JURMP) implementation efforts during the reporting period of July 1, 2011 to June 30, 2012. It has been prepared in compliance with the requirements of the San Diego Regional Water Quality Control Board's Order No. R9-2007-0001, National Pollutant Discharge Elimination System Municipal Permit No. CAS0108758. The report format follows the regional standardized reporting format developed by the Copermittees as required under Section M.6 of the Municipal Permit.

Section 10 "Fiscal Analysis" of this report follows the guidelines provided in the Standardized Fiscal Analysis Method and Format dated January 29, 2009, which was developed by all Copermittees pursuant to the requirements of Section G.3 of the Municipal Permit.

Submittal of Section 7 "Illicit Discharge Detection and Elimination Component" has been deferred to December 15, 2012 as permitted by Addendum No. 2 to Order No. R9-2007-0001. The Regional Board issued Addendum No. 2 in recognition of the fact that field screening and analytical monitoring work could continue to the end of September of each year, and time was necessary to complete, finalize, and submit the required reports.

As can be construed from the contents of this report, during the reporting period of July 1, 2011 to June 30, 2012, the City of Chula Vista met, and in some cases exceeded, implementation requirements of the Municipal Permit and the City's JURMP.

DEVELOPMENT PLANNING

The latest update of the City of Chula Vista Development Storm Water Manual was made in January 2011, which is the current update. The Manual includes the City's local SUSMP. The updated Manual incorporates the requirements established under the updated regional Model SUSMP and the Final Hydromodification Management Plan. No further SUSMP updates are required under the current Municipal Permit cycle.

During the reporting period, the City successfully completed implementation of the Land Development Component of the JURMP. The 2011-2012 Fiscal Year marked one of the lowest number of private development applications. Although there were a few major development projects under review by the City, only a handful of small projects received construction permits.

The City mailed out post-construction treatment control Best Management Practices (BMPs) maintenance verification letters and forms to responsible parties and followed up to ensure that they were duly certified and returned. Inspections of post-construction treatment control BMPs were conducted on privately maintained facilities. The City successfully met and exceeded the post construction treatment control BMP inspections requirements of the Municipal Permit. The Municipal Permit requires that at least 20% of all SUSMP projects should be inspected annually.

Further emphasis was placed on the practice of Low Impact Development site design BMPs. Developers and consulting engineers were encouraged and required to incorporate such BMPs in

their site design as much as site conditions permitted. In January 2011, the hydromodification control requirements went into effect. However, due to the slump in building construction, very few projects that qualify under this requirement have their project submittals under review by City staff.

CONSTRUCTION

The Construction Component of the City's JURMP primarily included inspections of construction sites for BMP implementation. The City successfully conducted all inspections on private and public construction sites and resorted to enforcement action where necessary to bring violating sites into compliance with the requirements of the City's storm water management and grading ordinances. Notices of Violation were issued when necessary. During the reporting period, the majority of graded construction sites remained inactive. Responsible persons for such sites were contacted and they were required to repair and maintain their erosion and sediment control BMPs. The number of construction inspections conducted during the reporting period meets and exceeds the minimum requirements included in Section D.2.d of the Municipal Permit.

MUNICIPAL

The Municipal Component of the City's JURMP primarily includes implementation of BMPs on all City owned facilities and activities. During the reporting period, the City ensured BMP implementation through staff training and inspections. All high priority municipal facilities and some low priority facilities and activities were inspected during the reporting period. The City also conducted street sweeping, storm sewer system maintenance, and sanitary sewer system maintenance as source control preventive measures. Wastewater capture was implemented during graffiti removal, Integrated Pest Management practices were implemented during landscaping and parks maintenance, and waste management activities were conducted after each special community event. In Fiscal Year 2011-2012, the City achieved all its inspections, training, and BMP implementation goals under its JURMP Municipal Component.

INDUSTRIAL AND COMMERCIAL

The Industrial and Commercial Component of the City's JURMP constitutes a major section of its storm water management program. City staff conducts industrial and commercial inspections and provides one-on-one training to business owners and managers throughout the City. As shown in Attachments I and J, during the current reporting period, commercial and industrial facilities were inspected as required by the Municipal Permit.

Mobile businesses applying for business licenses were directed to the Storm Water Management Section for training and signing of a certification statement to the effect that they are familiar with the City's storm water regulations and would implement BMPs appropriate to their line of business at all times. An inventory of such businesses is included in Attachment D3 of this report.

RESIDENTIAL

The City has developed the residential component of the JURMP based upon a multi-faceted approach, including pollution prevention; hotline response and enforcement; and outreach and education. The City collects and analyzes information about various aspects of observed and reported violations from multiple sources to identify high-priority residential areas and activities. Such areas and activities are then targeted for public education and outreach. During the current reporting period the number of hotline calls decreased from a peak in Fiscal Year 2009-2010, but still remained relatively high, which can be indicative of the public awareness of storm water regulations and the relative ease of reporting.

During the reporting period, various programs under the City's residential component continued, including 1) Household hazardous waste collection center, 2) State-certified used-oil collection center, 3) Household collection of used oil, 4) Christmas tree recycling program, 5) Residential complaint response and enforcement, 6) Residential door hangers, and 7) City's environmental website.

PUBLIC EDUCATION AND OUTREACH

The City of Chula Vista has identified public education and outreach as powerful and effective tools towards increased awareness and behavioral changes that will ultimately lead to reduced pollutant loading from various land uses and activities. As such, the City places great importance on its education and outreach programs. During the reporting period, City staff organized or participated in several training and educational events.

The CLEAN group continued its activities toward its mission: "Foster environmental awareness in the City of Chula Vista, through stakeholder and community involvement and participation." CLEAN group activities included media articles, school education efforts, and community events.

City staff provided public education to industrial, commercial, and construction communities by one-on-one contact and on-site training. Business owners and managers, and construction site personnel were trained based on their specific site conditions and pollutant generating activities.
The City's storm water management program is based on the concept of continuous improvement through iterative goal setting, implementation, and assessment cycles. This process requires identifying measurable goals at the beginning of the process, followed by implementation of tasks, and then assessment and comparison of results with identified goals. This illustrates the importance of assessment in any storm water management program.

PROGRAM EFFECTIVENESS ASSESSMENT

During the reporting period, the City of Chula Vista continued using the methodology developed in the regional document "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs." Assessment tools such as assessment of activity based results, surveys, and dry weather monitoring results were used to arrive at acceptable conclusions. Higher levels of assessment such as changes in discharge quality and receiving water quality were deemed to be beyond the scope of jurisdictional programs and, therefore, delegated to regional research and analysis such as the Regional Monitoring Program, Long-Term Effectiveness Assessment, and the Report of Waste Discharge.

Assessment results indicate that during the Fiscal Year 2011-2012, the City of Chula Vista met all its measurable goals for program element implementation. Dry Weather monitoring indicates that the majority of pollutants of concern show decreasing trends, while some still pose a challenge. In particular, nitrate and bacterial indicators appear to pose persistent problems, which the program should focus on.

FISCAL ANALYSIS

A successful storm water program would require adequate funding. During the current reporting period, the City of Chula Vista made such funds available through various sources including the general fund, storm drain fee, sewer fee, special assessment district fees, etc. There were other City programs designed to serve multiple objectives, including storm water pollution prevention, such as wastewater collection system maintenance, household hazardous waste management, etc. While those programs were originally intended to serve other goals and objectives, they, directly or indirectly, help the City's storm water management program by reducing sources of pollution and preventing pollution from reaching receiving waters. Where cost analysis is available for such programs, they have been included in Section 10 of this report.

Additionally, the City contributed its share to watershed and regional activities, which is identified in the Fiscal Analysis included in Section 10 of this report.

As the City of Chula Vista continues its efforts toward environmental protection in general and water quality improvements in particular, its storm water management program becomes more refined and a part of a more holistic sustainability program.

Attachment A
SUSMP Projects Inventory
FY 2011-2012

Note: This table represents a comprehensive list of SUSMP projects completed or under construction since the inception of SUSMP requirements.

Project Name	Subdivision	Neighborhood	Address			Types of BMP: BMP Type- Group I	Types of BMP: BMP Type - Group II	Category	Inspection Priority
Bella Lago									
Bella Lago	Bella Lago	NA		VIA MAGGIORE		TC-40 Media Filter		Residential	Low
City Project With SUSMP									
805 / Orange Interchange	City Project With SUSMP	NA		ORANGE	AV	MP-52 Drain Insert		City Projects with SUSMP	High
All Seasons Park	City Project with SUSMP	NA	1825	MAGDALENA	AV	TC-30 Vegetated Swale	TC-22 Extended Det Basin	Municipal	Low
Bayshore Bikeway	City Project with SUSMP	NA		BAY	BL	TC-30 Vegetated Swale	Filterra	City Projects with SUSMP	High
Castle Park Area NPDES Basin CIP	City Project with SUSMP	NA		NAPLES	ST		Modular Wetland System	City Projects with SUSMP	High
Civic Center and Admin Building	City Project with SUSMP	NA	276	FOURTH	AV	MP-51 Vortex Separator TC-30 Vegetated Swale	MP-52 Drain Inlet	Municipal	Low
E Street and First Ave	City Project with SUSMP	NA		E	ST		Modular Wetland System	City Projects with SUSMP	High
Fire Station #6	City Project with SUSMP	NA	605	MOUNT MIGUEL	RD	MP-52 Drain Insert		Municipal	Low

Project Name	Subdivision	Neighborhood	Address				Types of BMP		Category	Inspection Priority
							BMP Type- Group I	BMP Type - Group II		
Fire Station #7	City Project with SUSMP	NA	1640		SANTA VENETIA	ST	MP-51 Vortex Separator	Other	Municipal	Low
Fire Station #8	CIty Project with SUSMP	NA	1180		WOODS	DR	MP-51 Vortex Separator		Municipal	Low
First Avenue-Naples to Palomar CIP	City Project with SUSMP	NA			FIRST	AV	MP-52 Drain Insert		City Projects with SUSMP	High
Fourth Avenue Sidewalk Improvements CIP	City Project with SUSMP	NA			FOURTH	AV	Modular Wetland System	Filterra Modular Wetland System	City Projects with SUSMP	High
Glenhaven Way Improvements CIP	City Project with SUSMP	NA			GLENHAVEN	WY	Filterra		City Projects with SUSMP	High
Haborside Elementary - Industrial Blvd Bike Lane	City Project with SUSMP	NA			INDUSTRIAL	BL	Filterra	Filterra	City Projects with SUSMP	High
Harborside Park	City Project with SUSMP	NA	670		OXFORD	ST	MP-52 Drain Insert		Municipal	High
Harvest Park	City Project with SUSMP	NA	1381	E	PALOMAR	ST	MP-52 Drain Insert		Municipal	High
Horizon Neighborhood Park	City Project with SUSMP	NA	970	E	PALOMAR	ST	MP-52 Drain Insert		Municipal	High
Montevalle Park & Community Center	City Project with SUSMP	NA	840		DUNCAN RANCH	RD	MP-52 Drain Insert		Municipal	High
Mount San Miguel Community Park	City Project with SUSMP	NA	2335		PASEO VERACRUZ		TC-32 Bioretention	TC-30 Vegetated Swale	Municipal	High
Mountain Hawk Park	City Project with SUSMP	NA	1475		LAKE CREST	DR	MP-52 Drain Insert		Municipal	High

Project Name	Subdivision	Neighborhood	Address				Types of BMP		Category	Inspection Priority
							BMP Type- Group I	BMP Type - Group II		
Naples Street Between Third & Alpine	City Project with SUSMP	NA			NAPLES	ST	Filterra		City Projects with SUSMP	High
North Broadway Basin Reconstruction - CIP	City Project with SUSMP	NA			BROADWAY			Modular Wetland System	City Projects with SUSMP	High
Otay Lakes Widening Phase I Ridgeback to SWC	City Project with SUSMP	NA			RIDGEBACK	RD	Filterra		City Projects with SUSMP	High
Oxford Street Sidewalk Improvements 3rd/Alpine CIP	City Project with SUSMP	NA			THIRD	AV	Filterra		City Projects with SUSMP	High
Palomar Street Improvements Trenton TCBMP	City Project with SUSMP	NA			TRENTON	AV	MP-50 Wet Vault		City Projects with SUSMP	High
Safe Route School Project - Albany	City Project with SUSMP	NA			ALBANY	AV	Filterra		City Projects with SUSMP	High
Salt Creek Park & Community Center	City Project with SUSMP	NA	2710		OTAY LAKES	RD	MP-51 Vortex Separator		Municipal	High
Second Avenue Improvements Naples/Palomar	City Project with SUSMP	NA			NAPLES	ST	Filterra		City Projects with SUSMP	High
Sunset View Park	City Project with SUSMP	NA	1390	S	GREENSVIEW	DR	MP-52 Drain Insert		Municipal	High
Telegraph Canyon CIP	City Project with SUSMP	NA			TELEGRAPH CANYON	RD	MP-52 Drain Insert		City Projects with SUSMP	High
Tobias Drive CIP	City Project with SUSMP	NA			TOBIAS	DR	MP-52 Drain Insert		City Projects with SUSMP	High
Veterans Park & Recreation Center	City Project with SUSMP	NA	785	E	PALOMAR	ST	TC-30 Vegetated Swale	MP-52 Drain Inlet	Municipal	High

Project Name	Subdivision	Neighborhood	Address			Types of BMP		Category	Inspection Priority
						BMP Type- Group I	BMP Type - Group II		
Windingwalk Park	City Project with SUSMP	NA	1675	EXPLORATION FALLS	DR	TC-30 Vegetated Swale		Municipal	Low
Third Avenue Streetscape Improvement	City Project with SUSMP	NA		THIRD	AV	Porous Pavement	Filterra	City Projects with SUSMP	High
Eastlake									
910 Hale Place	Eastlake	NA	910	HALE	PL	MP-52 Drain Insert		Commercial	Medium
Chase Bank Eastlake Village Marketplace	Eastlake	NA		OTAY LAKES	RD	TC-32 Bioretention		Commercial	Low
Chevron Station-Olympic Parkway #1975	Eastlake	NA	2115	OLYMPIC	PW	MP-52 Drain Insert		Commercial	Low
Eastlake - Village Walk	Eastlake	NA		EASTLAKE	PW	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	High
Eastlake Business Center	Eastlake	NA	910	HALE	PL	MP-52 Drain Insert		Commercial	Medium
Eastlake Commerce Center	Eastlake	NA	821	KUHN	DR	MP-52 Drain Insert		Commercial	Medium
Eastlake Community Church	Eastlake	NA	2351	OTAY LAKES	RD	MP-52 Drain Insert	Porous Pavement	Church	Low
Eastlake Design District	Eastlake	NA	891	SHOWROOM	PL	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Medium
Eastlake Medical Campus	Eastlake	NA	955	LANE	AV	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low

Project Name	Subdivision	Neighborhood	Address			Types of BMP		Category	Inspection Priority
						BMP Type- Group I	BMP Type - Group II		
Eastlake Parkway Professional Plaza	Eastlake	NA	860	KUHN	DR	MP-52 Drain Insert	TC-30 Vegetated Swale	Commercial	Medium
Eastlake Pkwy (Trinidad Cove to Hunte Pkwy)	Eastlake	NA		OLYMPIC	PW	MP-51 Vortex Separator	MP-52 Drain Inlet	Maintenance Tracking ONLY	Other
Eastlake Terrace	Eastlake	NA		EASTLAKE	PW	MP-52 Drain Insert		Commercial	High
Eastlake Village Center East	Eastlake	NA	2315	OTAY LAKES	RD	MP-52 Drain Insert		Commercial	High
Eastlake Village Center West	Eastlake	NA	2070	OTAY LAKES	RD	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	Medium
Eastlake Village Center West - LA Fitness	Eastlake	NA	2080	OTAY LAKES	RD	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	Low
Eastlake Village Marketplace	Eastlake	NA	2295	OTAY LAKES	RD	MP-51 Vortex Separator		Commercial	High
High Tech Business Center @ Eastlake	Eastlake	NA	861	HAROLD	PL	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low
Home Depot Eastlake	Eastlake	NA	1320	EASTLAKE	PW	MP-52 Drain Insert		Commercial	High
Kohls @ Eastlake	Eastlake	NA	2325	OTAY LAKES	RD	MP-52 Drain Insert		Commercial	High
Otay Lakes Medical Office	Eastlake	NA	2440	FENTON	ST	MP-52 Drain Insert		Commercial	Medium
Rancho Vista Apartments	Eastlake	NA	2155	CORTE VISTA		MP-51 Vortex Separator		Residential	Low

Project Name	Subdivision	Neighborhood	Address			Types of BMP		Category	Inspection Priority
						BMP Type- Group I	BMP Type - Group II		
Venture Commerce Center	Eastlake	NA	841	HAROLD	PL	MP-51 Vortex Separator		Commercial	Medium
Village Walk - Medical Arts Center	Eastlake	NA	890	EASTLAKE	PW	MP-52 Drain Insert	TC-30 Vegetated Swale	Commercial	Medium
Village Walk at Eastlake	Eastlake	NA		EASTLAKE	PW	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	High
Walmart @ Eastlake	Eastlake	NA	1360	EASTLAKE	PW	MP-52 Drain Insert		Commercial	High
Eastlake Vistas									
Eastlake Little League Field	Eastlake Vistas	NA		OLYMPIC	PW	TC-30 Vegetated Swale		Miscellaneous	Low
Eastlake Vistas - Abilene	Eastlake Vistas	Abilene		LONG VIEW	DR	MP-51 Vortex Separator		Residential	Medium
Eastlake Vistas - Acqua	Eastlake Vistas	Acqua		OLYMPIC VISTA	RD	MP-51 Vortex Separator		Residential	High
Eastlake Vistas - Alder Lane	Eastlake Vistas	Alder Lane		WHITE ALDER	AV	MP-51 Vortex Separator		Residential	High
Eastlake Vistas - Atrium	Eastlake Vistas	Atrium		LAKE CREST	CT	MP-51 Vortex Separator		Residential	Medium
Eastlake Vistas - Bridgepark	Eastlake Vistas	Bridgepark		BLUE SAGE	WY	MP-51 Vortex Separator		Residential	Medium
Eastlake Vistas - Colrich	Eastlake Vistas	Colrich		N PARADISE RIDGE	WY	MP-51 Vortex Separator		Residential	Medium

Project Name	Subdivision	Neighborhood	Address			Types of BMP		Category	Inspection Priority
						BMP Type- Group I	BMP Type - Group II		
Eastlake Vistas - Lost Creek	Eastlake Vistas	Lost Creek		LOST CREEK	RD	MP-51 Vortex Separator		Residential	Medium
Eastlake Vistas - Monticello	Eastlake Vistas	Monticello		MARBLE CANYON	WY	MP-51 Vortex Separator		Residential	Medium
Eastlake Vistas - Sonora Ridge	Eastlake Vistas	Sonora Ridge		WEEPING WILLOW	RD	MP-51 Vortex Separator		Residential	Medium
Eastlake Vistas - Summerhill	Eastlake Vistas	Summerhill		AMBERCREST	DR	MP-51 Vortex Separator		Residential	Medium
Eastlake Vistas - Valencia	Eastlake Vistas	Valencia		BLUE SAGE	WY	MP-51 Vortex Separator		Residential	Medium
New Hope Church	Eastlake Vistas	NA	2720	OLYMPIC	PW	TC-30 Vegetated Swale	MP-52 Drain Inlet	Church	Low
Olympic Pointe	Eastlake Vistas	Olympic Pointe		VIENTO ESTRELLA		TC-32 Bioretention	MP-50 Wet Vault	Residential	High
Eastlake Woods									
Eastlake Woods - Continental Classics	Eastlake Woods	Continental Classics		WHITE ALDER	AV	MP-51 Vortex Separator		Residential	Medium
Eastlake Woods - Meredian	Eastlake Woods	Meredian		TABLE ROCK	AV	MP-52 Drain Insert		Residential	Medium
Eastlake Woods - Reserves	Eastlake Woods	Reserves		SUTTER RIDGE	WY	MP-51 Vortex Separator	MP-52 Drain Inlet	Residential	Medium
Eastlake Woods - Sonoma	Eastlake Woods	Sonoma		YOSEMITE	DR	MP-52 Drain Insert		Residential	Medium

Project Name	Subdivision	Neighborhood	Address			Types of BMP		Category	Inspection Priority
						BMP Type- Group I	BMP Type - Group II		
Eastlake Woods - WR-1 / The Gates	Eastlake Woods	WR-1/The Gates		GATE FIVE	PL	MP-51 Vortex Separator		Residential	Medium
Eastlake Woods- K Hovnanian	Eastlake Woods	K Hovnanian		ADIRONDACK	PL	MP-51 Vortex Separator		Residential	Medium
Eastlke Woods - Colrich	Eastlake Woods	Colrich		BLUE RIDGE	DR	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Miscellaneous									
2380 Main Street - Commercial Bldg	Miscellaneous	NA	2380	MAIN	ST	MP-52 Drain Insert		Commercial	Medium
815 Ada Street	Miscellaneous	NA	815	ADA	ST	MP-52 Drain Insert		Residential	Low
Ada Court	Miscellaneous	NA	774	ADA	ST	TC-30 Vegetated Swale		Residential	Low
Ada Terraces	Miscellaneous	NA	774	ADA	ST	MP-52 Drain Insert		Residential	Low
Ada Villas 1	Miscellaneous	NA	777	ADA	ST	MP-52 Drain Insert		Residential	Low
Aqua Clean	Miscellaneous	NA	1435	RIDGEBACK	RD	MP-52 Drain Insert		Commercial	Low
Auto Park North	Miscellaneous	NA	1185	AUTO PARK	PL	MP-52 Drain Insert		Commercial	High
Bonita Arco	Miscellaneous	NA	4498	BONITA	RD	TC-30 Vegetated Swale		Commercial	Low

Project Name	Subdivision	Neighborhood	Address			Types of BMP		Category	Inspection Priority
						BMP Type- Group I	BMP Type - Group II		
Bonita Library	Miscellaneous	NA	4375	BONITA	RD	MP-52 Drain Insert MP-51 Vortex Separator	TC-30 Vegetated Swale	City Projects with SUSMP	High
Brisa Del Mar	Miscellaneous	NA	1689	BROADWAY		MP-52 Drain Insert		Residential	Medium
Chula Vista Commerce Center	Miscellaneous	NA	3513	MAIN	ST	MP-51 Vortex Separator		Commercial	High
Chula Vista Corporate Center	Miscellaneous	NA	3441	MAIN	ST	MP-52 Drain Insert		Commercial	High
Chula Vista Crossings	Miscellaneous	NA	4501	MAIN	ST	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	High
Chula Vista High School Expansion	Miscellaneous	NA	820	FOURTH	AV	TC-40 Media Filter		Schools	Low
Chula Vista Toyota	Miscellaneous	NA	650	MAIN	ST	MP-52 Drain Insert		Commercial	Low
Corpus Christi Catholic Church	Miscellaneous	NA	450	CORRAL CANYON	RD	Porous Pavement	TC-32 Bioretention	Church	Low
COSTCO at Broadway	Miscellaneous	NA	1130	BROADWAY		MP-51 Vortex Separator		Commercial	High
CVESD School Bus Corp Yard	Miscellaneous	NA	1855	MAXWELL	RD	MP-50 Wet Vault MP-52 Drain Inlet	TC-30 Vegetated Swale	Schools	High
Enterprise Administration Bldg (aka Payless Auto)	Miscellaneous	NA	1865	AUTO PARK	PL	MP-52 Drain Insert		Commercial	Low
Fenton Business Center	Miscellaneous	NA	871	HAROLD	PL	MP-52 Drain Insert		Commercial	Medium

Project Name	Subdivision	Neighborhood	Address			Types of BMP		Category	Inspection Priority
						BMP Type- Group I	BMP Type - Group II		
J&W Redwood	Miscellaneous	NA	3817	MAIN	ST	TC-11 Infiltration Basin		Commercial	High
Lady of Guadalupe Church	Miscellaneous	NA	1611	FRESNO	AV	TC-30 Vegetated Swale		Church	Low
Los Vecinos Apartments	Miscellaneous	NA	1501	BROADWAY		TC-40 Media Filter	Porous Pavement	Residential	Medium
Marina Gateway	Miscellaneous	NA		BAY	BL	MP-52 Drain Insert		Commercial	Medium
MTS Bus Maintenance Yard	Miscellaneous	NA	3650	MAIN	ST	TC-32 Bioretention	TC-40 Media Filter	Industrial	High
Office Building - 725 Main Street	Miscellaneous	NA	725	MAIN	ST	MP-52 Drain Insert		Commercial	Low
Olympic Training Center BMX Course	Miscellaneous	NA		OLYMPIC	PW	MP-52 Drain Insert		Other	Low
Pharus Plaza	Miscellaneous	NA	1030	BROADWAY		MP-51 Vortex Separator		Commercial	Low
Rancho Rios Condo	Miscellaneous	NA	321	RANCHO	DR	MP-52 Drain Insert		Residential	Low
Road One of San Diego	Miscellaneous	NA	1805	MAXWELL	RD	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low
Saint Rose of Lima Catholic Church	Miscellaneous	NA	293	H	ST	TC-30 Vegetated Swale		Church	Low
Sav-On Drugs	Miscellaneous	NA	16	FOURTH	AV	MP-52 Drain Insert		Commercial	Medium

Project Name	Subdivision	Neighborhood	Address				Types of BMP		Category	Inspection Priority
							BMP Type- Group I	BMP Type - Group II		
Seniors on Broadway	Miscellaneous	NA	845		BROADWAY		MP-52 Drain Insert		Residential	Medium
Sharp Chula Vista Cancer Building Ex	Miscellaneous	NA			MEDICAL CENTER	CT	TC-30 Vegetated Swale	TC-32 Bioretention	Other	Low
Southbay Motorsports	Miscellaneous	NA	1890		AUTO PARK	PL	MP-52 Drain Insert		Commercial	Low
Southbound 805 Off-Ramp Bonita Road - CALTRANS	Miscellaneous	NA			BONITA	RD	TC-30 Vegetated Swale		Miscellaneous	Low
Spotlight on Broadway	Miscellaneous	NA	730		BROADWAY		MP-52 Drain Insert		Residential/Commercial	Medium
St Pius X Catholic Church	Miscellaneous	NA	1120		CUYAMACA	AV	TC-32 Bioretention	Other	Church	Low
Sycamore Estates	Miscellaneous	NA			SYCAMORE	DR	MP-52 Drain Insert		Residential	Low
Terra Nova Gas Station Plaza	Miscellaneous	NA	350	E	H	ST	TC-40 Media Filter		Commercial	Low
Third Ave Center Office/Retail	Miscellaneous	NA	1310		THIRD	AV	TC-50 Water Qaulity Inlet		Commercial	Low
Tuscany Townhomes	Miscellaneous	NA	242		KENNEDY	ST	TC-30 Vegetated Swale		Residential	Low
Villas at H Street	Miscellaneous	NA	245		H	ST	MP-52 Drain Insert		Residential	Medium
Walgreens @ Third Avenue	Miscellaneous	NA	1111		THIRD	AV	MP-52 Drain Insert		Commercial	Medium

Project Name	Subdivision	Neighborhood	Address			Types of BMP		Category	Inspection Priority
						BMP Type- Group I	BMP Type - Group II		
Walmart - Broadway	Miscellaneous	NA	1150	BROADWAY		MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	High
Wells Fargo Bank	Miscellaneous	NA	1232	BROADWAY		TC-30 Vegetated Swale		Commercial	Low
West Air Gas & Equip Inc.	Miscellaneous	NA	1590	FRONTAGE	RD	TC-30 Vegetated Swale	MP-52 Drain Inlet	Commercial	Low
BEVMO	Miscellaneous	NA	2257	OTAY LAKES	RD	TC-30 Vegetated Swale		Commercial	Low
Otay Ranch									
Otay Ranch Town Center	Otay Ranch	NA	2015	BIRCH	RD	MP-51 Vortex Separator		Commercial	High
Otay Ranch Village 1 West									
Canyon View/Cedar Ridge II	Otay Ranch Village 1 West	Canyon View/Cedar Ridge II		SANTA SIERRA	DR	MP-52 Drain Insert		Residential	Medium
Otay Ranch Village 11									
Concordia Church and School	Otay Ranch Village 11	NA	1695	DISCOVERY FALLS	DR	TC-30 Vegetated Swale	TC-32 Bioretention	Schools	Low
High Tech High	Otay Ranch Village 11	NA	1945	DISCOVERY FALLS	DR	TC-30 Vegetated Swale TC-11 Infiltration Basin	Filterra	Schools	Medium
Otay Ranch Village 11 - Amber R11	Otay Ranch Village 11	Amber R11		DRAGONFLY	ST		TC-22 Extended Det Basin	Residential	High

Project Name	Subdivision	Neighborhood	Address	Types of BMP		Category	Inspection Priority
				BMP Type- Group I	BMP Type - Group II		
Otay Ranch Village 11 - Amber R12	Otay Ranch Village 11	Amber R12	HUMMINGBIRD ST		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Aristata	Otay Ranch Village 11	Aristata	KESTREL FALLS RD		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Azalea	Otay Ranch Village 11	Azalea	VOYAGE DR	MP-51 Vortex Separator		Residential	Low
Otay Ranch Village 11 - Cedar Rose I	Otay Ranch Village 11	Cedar Rose I	QUIET TRAIL DR		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Cottage Lane I	Otay Ranch Village 11	Cottage Lane I	DUSK SKY LN		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Cottage Lane II	Otay Ranch Village 11	Cottage Lane II	OLD BARN LN		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Cottage Lane III	Otay Ranch Village 11	Cottage Lane III	WHISTLING LN		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Lantana	Otay Ranch Village 11	Lantana	EVENING STAR ST		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Magnolia I	Otay Ranch Village 11	Magnolia I	HIKERS TRAIL DR		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Magnolia II	Otay Ranch Village 11	Magnolia II	CROSSROADS ST		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Magnolia III	Otay Ranch Village 11	Magnolia III	CROSSROADS ST		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Picket Fence I	Otay Ranch Village 11	Picket Fence I	PICKET FENCE DR		TC-22 Extended Det Basin	Residential	High

Project Name	Subdivision	Neighborhood	Address			Types of BMP		Category	Inspection Priority
						BMP Type- Group I	BMP Type - Group II		
Otay Ranch Village 11 - Picket Fence II	Otay Ranch Village 11	Picket Fence II		PICKET FENCE	DR		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Rec Center	Otay Ranch Village 11	NA	1625	DISCOVERY FALLS	DR	TC-30 Vegetated Swale		Residential	Low
Otay Ranch Village 11 - Saguaro	Otay Ranch Village 11	Saguaro		BIRCH	RD		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Sapphire I	Otay Ranch Village 11	Sapphire I		LADYBUG	PL		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Sapphire II	Otay Ranch Village 11	Sapphire II		CROSSROADS	WY		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - The Landing Apartments	Otay Ranch Village 11	The Landings Apartments		SAFFRON	DR	MP-52 Drain Insert	TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - The Lofts	Otay Ranch Village 11	The Lofts	1710	DISCOVERY FALLS	DR	MP-52 Drain Insert	TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Twilight I	Otay Ranch Village 11	Twilight I		STARGAZE	DR		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Twilight II	Otay Ranch Village 11	Twilight II		TWILIGHT	ST		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village11 - Agave	Otay Ranch Village 11	Agave		RUSTLING	LN		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village11 - Wisteria	Otay Ranch Village 11	Wisteria		TREEHOUSE	ST		TC-22 Extended Det Basin	Residential	High
The Marketplace @ Windingwalk	Otay Ranch Village 11	NA	2110	BIRCH	RD	MP-52 Drain Insert	TC-22 Extended Det Basin	Commercial	High

Project Name	Subdivision	Neighborhood	Address	Types of BMP		Category	Inspection Priority
				BMP Type- Group I	BMP Type - Group II		
CVESD Elementary School	Otay Ranch Village 11	NA	DISCOVERY FALLS DR		Pending Approval	Schools	High
Otay Ranch Village 11 - Clover	Otay Ranch Village 11	Clover	WINDINGWALK ST		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Cordova	Otay Ranch Village 11	Cordova	DISCOVERY FALLS DR		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Trellis I	Otay Ranch Village 11	Trellis I	TRELLIS WY		TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 11 - Trellis II	Otay Ranch Village 11	Trellis II	HUNTE PW		TC-22 Extended Det Basin	Residential	High
SWUHSD -Mid Sch12/High Sch14 Village 11	Otay Ranch Village 11	NA	DISCOVERY FALLS DR			Schools	High

Otay Ranch Village 2

Otay Ranch Village 2 - R13a Casita De Avila	Otay Ranch Village 2	Casita De Avila				Residential	Medium
Otay Ranch Village 2 - R13b Villa De Avila	Otay Ranch Village 2	Villa De Avila				Residential	Medium
Otay Ranch Village 2 - R14 Avalon	Otay Ranch Village 2	Avalon		TC-50 Water Quality Inlet	MP-52 Drain Inlet	Residential	Medium
Otay Ranch Village 2 - R15a Future SF	Otay Ranch Village 2	Future SF				Residential	Medium
Otay Ranch Village 2 - R15b Future SF	Otay Ranch Village 2	Future SF				Residential	Medium

Project Name	Subdivision	Neighborhood	Address	Types of BMP		Category	Inspection Priority
				BMP Type- Group I	BMP Type - Group II		
Otay Ranch Village 2 - R16b Future MF	Otay Ranch Village 2	Future MF				Residential	Medium
Otay Ranch Village 2 - R29 Tavera II	Otay Ranch Village 2	Tavera II				Residential	Medium
Otay Ranch Village 2 - R5a Monterey	Otay Ranch Village 2	Monterey				Residential	Medium
Otay Ranch Village 2 - R7a Presidio II (Bungalow)	Otay Ranch Village 2	Presidio I				Residential	Medium
Otay Ranch Village 2 - R7b Presidio II	Otay Ranch Village 2	Presidio II				Residential	Medium
Otay Ranch Village 2 - R9A Anacapa	Otay Ranch Village 2	Anacapa		MP-52 Drain Insert	TC-22 Extended Det Basin	Residential	Medium
Otay Ranch Village 2 - R9b Future MF	Otay Ranch Village 2	Future MF			TC-22 Extended Det Basin	Residential	Medium
Otay Ranch Village 2 - Rosina Vistas	Otay Ranch Village 2	Rosina Vistas	SANTA VICTORIA RD	MP-52 Drain Insert	TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 2 East	Otay Ranch Village 2	East				Construction	High
Otay Ranch Village 2 North - Otay New Homes	Otay Ranch Village 2	North - Otay New Homes			TC-22 Extended Det Basin	Construction	High
Otay Ranch Village 5							
Otay Ranch Village 5 - Goldrush	Otay Ranch Village 5	Goldrush	GEYSERVILLE ST	MP-51 Vortex Separator		Residential	Low

Project Name	Subdivision	Neighborhood	Address				Types of BMP		Category	Inspection Priority
							BMP Type- Group I	BMP Type - Group II		
Otay Ranch Village 5 - Silver Sage	Otay Ranch Village 5	Silver Sage			GEYSERVILLE	ST	MP-51 Vortex Separator		Residential	Low
Otay Ranch Village 5 - Stetson	Otay Ranch Village 5	Stetson			GEYSERVILLE	ST	MP-51 Vortex Separator		Residential	Low
Otay Ranch Village 5 - Villagio	Otay Ranch Village 5	Villagio		E	PALOMAR	ST	MP-51 Vortex Separator		Residential/Commercial	Low
Otay Ranch Village 5 - Wild Iris	Otay Ranch Village 5	Wild Iris			PARKER MOUNTAIN	RD	MP-51 Vortex Separator		Residential	Low
Otay Ranch Village 5 - Winchester	Otay Ranch Village 5	Winchester			GEYSERVILLE	ST	MP-51 Vortex Separator		Residential	Low
Otay Ranch Village 6										
Mater Dei High School	Otay Ranch Village 6	NA	1615		MATER DEI	DR	MP-50 Wet Vault		Schools	High
Otay Ranch Village 6 - Auburn Lane	Otay Ranch Village 6	Auburn Lane			VENDOLA	DR	MP-52 Drain Insert		Residential	High
Otay Ranch Village 6 - Belleme Chateau	Otay Ranch Village 6	Belleme Chateau			BURGUNDY	DR	MP-51 Vortex Separator		Residential	High
Otay Ranch Village 6 - Belleme Villas	Otay Ranch Village 6	Belleme Villas			CALVEDOS	DR	MP-51 Vortex Separator		Residential	High
Otay Ranch Village 6 - Cambria	Otay Ranch Village 6	Cambria			SAN ANSELMO	ST	MP-51 Vortex Separator		Residential	High
Otay Ranch Village 6 - Jasmine	Otay Ranch Village 6	Jasmine			COBBLECREEK	ST	MP-52 Drain Insert		Residential	High

Project Name	Subdivision	Neighborhood	Address		Types of BMP		Category	Inspection Priority
					BMP Type- Group I	BMP Type - Group II		
Otay Ranch Village 6 - Madera	Otay Ranch Village 6	Madera	SUTTER BUTTES	ST	MP-51 Vortex Separator		Residential	Low
Otay Ranch Village 6 - Mandalay	Otay Ranch Village 6	Mandalay	EDGEHILL	DR	MP-52 Drain Insert		Residential	High
Otay Ranch Village 6 - Marquis Gallery & Townhomes	Otay Ranch Village 6	Marquis Gallery & Townhomes	RHONE VALLEY	WY	TC-30 Vegetated Swale	MP-51 Vortex Separator	Residential	Low
Otay Ranch Village 6 - Mer Soliel	Otay Ranch Village 6	Mer Soliel	NICOLETTE	AV	MP-51 Vortex Separator		Residential	High
Otay Ranch Village 6 - Monet I	Otay Ranch Village 6	Monet I	GIVERNY	WY	MP-51 Vortex Separator		Residential	Low
Otay Ranch Village 6 - Monet II	Otay Ranch Village 6	Monet II	GIVERNY	WY	MP-51 Vortex Separator		Residential	Low
Otay Ranch Village 6 - Rosewood	Otay Ranch Village 6	Rosewood	POLO PEAK	DR	MP-51 Vortex Separator		Residential	Low
Otay Ranch Village 6 - Sienna	Otay Ranch Village 6	Sienna	TRAILWOOD	AV	MP-52 Drain Insert		Residential	High
Otay Ranch Village 6 - The Willows	Otay Ranch Village 6	The Willows	VALLEJO MILLS	ST	MP-51 Vortex Separator		Residential	Low
Otay Ranch Village 6 - Treviana	Otay Ranch Village 6	Treviana	CAMINITO TREVIANA		MP-52 Drain Insert		Residential	Medium
Otay Ranch Village 6 - Willowbrook	Otay Ranch Village 6	Willowbrook	LOKOYA	DR	MP-51 Vortex Separator		Residential	High
Otay Ranch Village 6 - Windchime	Otay Ranch Village 6	Windchime	MOUNT BULLION	DR	MP-51 Vortex Separator		Residential	Low

Project Name	Subdivision	Neighborhood	Address		Types of BMP		Category	Inspection Priority
					BMP Type- Group I	BMP Type - Group II		
Otay Ranch Village 7								
Otay Ranch Village 7 - Cypress Lane	Otay Ranch Village 7	Cypress Lane	BARBOUR	AV	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Otay Ranch Village 7 - Monte Sereno	Otay Ranch Village 7	Monte Sereno	HOYT	ST	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Otay Ranch Village 7 - Montecito	Otay Ranch Village 7	Montecito	BAUM	ST	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Otay Ranch Village 7 - Santa Barbara	Otay Ranch Village 7	Santa Barbara	FLEISHBEIN	ST	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Otay Ranch Village 7 - Indigo	Otay Ranch Village 7	Indigo	WEBBER	WY	MP-52 Drain Insert		Residential	Low
Otay Ranch Village 7 - Jacaranda	Otay Ranch Village 7	Jacaranda	KOESTER	ST	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Otay Ranch Village 7 - Mosaic I	Otay Ranch Village 7	Mosaic I	CRANBERRY	ST	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Otay Ranch Village 7 - Mosaic II	Otay Ranch Village 7	Mosaic II	PEBBLE	ST	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Otay Ranch Village 7 - Tapestry	Otay Ranch Village 7	Tapestry	TAPESTRY	ST	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low
Otay Ranch Village 7 - Terracotta	Otay Ranch Village 7	Terracotta	KOESTER	ST	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	High
Otay Ranch Village 7 - Terraza	Otay Ranch Village 7	Terraza	JONES	ST	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	Low

Rolling Hills Ranch

Project Name	Subdivision	Neighborhood	Address	Types of BMP		Category	Inspection Priority
				BMP Type- Group I	BMP Type - Group II		
Fairhaven II	Rolling Hills Ranch	Fairhaven II	VALLEYCREEK DR	MP-52 Drain Insert		Residential	High
Kingdom Hall	Rolling Hills Ranch	NA	860 DUNCAN RANCH RD	TC-32 Bioretention	TC-11 Infiltration Basin	Church	Medium
Rolling Hills Ranch - Castillian	Rolling Hills Ranch	Castillian	BABBLING BROOK RD		TC-22 Extended Det Basin	Residential	High
Rolling Hills Ranch - Clearstory	Rolling Hills Ranch	Clearstory	FOUR CORNERS ST		TC-22 Extended Det Basin	Residential	High
Rolling Hills Ranch - Provence	Rolling Hills Ranch	Provence	COLBY POINT PL		TC-22 Extended Det Basin	Residential	High
Rolling Hills Ranch - Quintessa	Rolling Hills Ranch	Quintessa	OVERLOOK PL		TC-22 Extended Det Basin	Residential	High
Rolling Hills Ranch - Sedona	Rolling Hills Ranch	Sedona	MACKENZIE CREEK RD	MP-52 Drain Insert		Residential	Medium
San Miguel Ranch							
San Miguel Ranch - Alicante	San Miguel Ranch	Alicante	ALICANTE COVE	MP-51 Vortex Separator		Residential	Low
San Miguel Ranch - Altamira I	San Miguel Ranch	Altamira I	PLAZA LOS OSOS	MP-52 Drain Insert		Residential	Medium
San Miguel Ranch - Altamira II	San Miguel Ranch	Altamira II	CIRCULO CORONADO	MP-52 Drain Insert		Residential	Medium
San Miguel Ranch - Belleza	San Miguel Ranch	Belleza	BELIZE RD	MP-51 Vortex Separator		Residential	Low

Project Name	Subdivision	Neighborhood	Address	Types of BMP		Category	Inspection Priority
				BMP Type- Group I	BMP Type - Group II		
San Miguel Ranch - Mantilla	San Miguel Ranch	Mantilla	CORTE BAUTISTA	MP-52 Drain Insert		Residential	Medium
San Miguel Ranch - Mar Brisa	San Miguel Ranch	Mar Brisa	CALLE BENDITO	MP-52 Drain Insert		Residential	Medium
San Miguel Ranch - Maravilla	San Miguel Ranch	Maravilla	CAMINO MOJAVE		TC-22 Extended Det Basin	Residential	Low
San Miguel Ranch - Ventana I	San Miguel Ranch	Ventana I	CORTE ANACAPA	MP-52 Drain Insert		Residential	Medium
San Miguel Ranch - Ventana II	San Miguel Ranch	Ventana II	PLAZA PARAISO	MP-52 Drain Insert		Residential	Medium
The Shops at San Miguel Ranch	San Miguel Ranch	NA	2318 PROCTOR VALLEY RD	MP-51 Vortex Separator	MP-52 Drain Inlet	Commercial	Low
San Miguel Ranch - Bonterra	San Miguel Ranch	Bonterra	PLAZA ARBOLITOS	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	High
San Miguel Ranch - Estrella	San Miguel Ranch	Estrella	CORTE VERBENA	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	High
San Miguel Ranch- Monecito	San Miguel Ranch	Monticeto	144 AVENIDA LORETTA	MP-51 Vortex Separator	TC-22 Extended Det Basin	Residential	High
Sunbow							
Bella Sol	Sunbow	Bella Sol	MANDEVILLE DR	MP-51 Vortex Separator		Residential	Low
The Summit at Eastlake							

Project Name	Subdivision	Neighborhood	Address	Types of BMP		Category	Inspection Priority
				BMP Type- Group I	BMP Type - Group II		
The Summit - Capria	The Summit at Eastlake	Capria	CAMINITO ELDA	MP-52 Drain Insert		Residential	Medium
The Summit - Cortina	The Summit at Eastlake	Cortina	CAMINITO LUCCA	MP-52 Drain Insert		Residential	Medium
The Summit - Firenze	The Summit at Eastlake	Firenze	CAMINITO PIENZA	MP-52 Drain Insert		Residential	Medium
The Summit - Veranza	The Summit at Eastlake	Veranza	CAMINITO BARTOLO	MP-52 Drain Insert		Residential	Medium

Total Projects:: **238**

Attachment B
FY 2011-2012 Construction Sites Inventory

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
Bella Lago					
Bella Lago	Bella Lago Grading	NA	Completed	BE002G	High Priority
Bella Lago	Bella Lago Improvements Phase II	NA	Under Construction	BE005I	High Priority
Eastlake Vistas					
Eastlake Vistas	Olympic Pointe	NA	Under Construction	PG793	High Priority
NA					
NA	Sharp Cancer Center	NA	Completed	PC-2058	High Priority
NA	Jack In Box - Eastlake	NA	Completed	PG863	Medium Priority
NA	Jack In The Box - Otay Lakes Road	NA	Completed	PG806	Medium Priority
NA	Carls Junior	NA	Completed	PG808	High Priority
NA	Red Lobster Restaurant	NA	Completed	PC2103	High Priority
NA	Industrial Blvd Bike Lane & Ped Improvements	NA	Completed	STL361	High Priority
NA	Eucalypic Park Improvements	NA	Under Construction	STL376	High Priority

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
NA					
NA	559 Moss Street	NA	Completed	PG801	Low Priority
NA	4th and Brisbane Avenue Improvements	NA	Completed	SMT370	High Priority
NA	Chase Bank - Eastlake	NA	Completed	PG804	High Priority
NA	Hernandez Tire Shop	NA	Completed	PG798	High Priority
NA	St. Pius Catholic Church	NA	Completed	PG786	Medium Priority
NA	Sewer Rehab FY11/12	NA	Under Construction	SW268	High Priority
NA	559 Moss Street	NA	Completed	PG801	Low Priority
NA	Bayshore Bikeway	NA	Completed	STL337	High Priority
NA	Industrial Blvd Improvements	NA	Completed	STL361	High Priority
NA	750 Main Street	NA	Inactive	PG775	High Priority
Otay Ranch					
Otay Ranch	Otay Ranch Village 2 East	R13	Under Construction	OR815I	Medium Priority
Otay Ranch	Otay Ranch Village 2 East	R30	Under Construction	OR814I	High Priority
Otay Ranch	Otay Ranch Village 2 East R-14	R14	Under Construction	OR813I	Medium Priority
Otay Ranch	Otay Ranch Village 2 East	R30	Under Construction	OR814I	High Priority
Otay Ranch	Otay Ranch Village 2 East	R13	Under Construction	OR815I	Medium Priority
Otay Ranch	Otay Ranch Village 2 East	R13	Under Construction	OR815I	High Priority
Otay Ranch	Otay Ranch Village 2	R-29	Under Construction	OR819I	Medium Priority

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
Otay Ranch					
Otay Ranch	Otay Ranch Village 2	Heritage Road	Inactive	OR807G	High Priority
Otay Ranch	Otay Ranch Village 2 East	NA	Under Construction	OR805G	High Priority
Otay Ranch	Otay Ranch Village 2 East	R13	Under Construction	OR815I	Medium Priority
Otay Ranch	Otay Ranch Village 2 East	R14	Under Construction	OR813I	High Priority
Otay Ranch	Otay Ranch Village 2 R-5A	R5A	Inactive	OR811I	Medium Priority
Otay Ranch	Otay Ranch Village 2	R9	Under Construction	OR811I	High Priority
Otay Ranch	Otay Ranch Village 7	Santa Barabra	Completed	OR973 I	Medium Priority
Otay Ranch	Otay Ranch Village 2 East	NA	Under Construction	OR805G	Medium Priority
Otay Ranch	Otay Ranch Village 7	Terraza	Under Construction	OR973I	Medium Priority
Otay Ranch	Otay Ranch Village 7	Cypress Lane	Completed	OR973I	Medium Priority
Otay Ranch	Otay Ranch Village 7	Monte Sereno	Completed	OR973 I-01	Medium Priority
Otay Ranch	Otay Ranch Homes	Multible Sites	Under Construction	OR819I	High Priority
Otay Ranch	Otay Ranch Village 2 R7	R7	Under Construction	OR811I	Medium Priority
Otay Ranch Village 11					
Otay Ranch Village 11	Otay Ranch Village 11	Cordova	Under Construction	OR634I	Medium Priority
Otay Ranch Village 11	Otay Ranch Village 11	Trellis	Under Construction	OR628I	Medium Priority
Otay Ranch Village 2					
Otay Ranch Village 2	Otay Ranch Village 2 East R-14	R-14	Under Construction	OR813I	Medium Priority

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
Otay Ranch Village 2					
Otay Ranch Village 2	Otay Ranch Village 2 East	NA	Under Construction	OR805G	Medium Priority
Otay Ranch Village 2	Otay Ranch Village 2 Heritage Road	NA	Inactive	OR807G	High Priority
Otay Ranch Village 2	Otay Ranch Village 2 R-14	R14	Under Construction	OR813I	Medium Priority
Otay Ranch Village 2	Otay Ranch Village 2 R-29	R29	Under Construction	OR819I	Medium Priority
Otay Ranch Village 2	Otay Ranch Village 2 R5A	R5A	Inactive	OR811I	Low Priority
Otay Ranch Village 2 North					
Otay Ranch Village 2 North	Otay Ranch Village 2 - North	Presidio	Under Construction	OR809G	Medium Priority
Otay Ranch Village 7					
Otay Ranch Village 7	Otay Ranch Village 7	Terraza	Under Construction	OR973I	Medium Priority
Otay Ranch Village 7	Otay Ranch Village 7	Cypress Lane	Completed	OR973I	Medium Priority
Otay Ranch Village 7	Otay Ranch Village 7	Santa Barbara	Completed	OR973I	Medium Priority
Otay Ranch Village 7	Otay Ranch Village 7	Santa Barbara	Completed	OR973I	Medium Priority
Rolling Hills Ranch					
Rolling Hills Ranch	Rolling Hills Ranch N-11	R241I	Under Construction	RH241I	High Priority
Rolling Hills Ranch	Rolling Hills Ranch N9	N9	Under Construction	RH229G	High Priority
Rolling Hills Ranch	Rilling Hills Ranch N11	N11	Under Construction	RH241I	High Priority
Rolling Hills Ranch	Rolling Hills Ranch N 11	N-11	Under Construction	RH241I	High Priority
Rolling Hills Ranch	Rolling Hills Ranch N12	N12	Under Construction	RH237I	High Priority

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
Rolling Hills Ranch					
Rolling Hills Ranch	Rolling Hills Ranch N11	N11	Under Construction	RH241I	High Priority
Rolling Hills Ranch	Rolling Hills Ranch N11	N11	Under Construction	RH241I	High Priority
Rolling Hills Ranch	Rolling Hills Ranch N10A	N10A	Under Construction	RH237I	High Priority
San Miguel Ranch					
San Miguel Ranch	San Miguel Ranch Area J2	J2	Under Construction	SM018I	High Priority
San Miguel Ranch	San Miguel Ranch Area L	L	Under Construction	SM022I	High Priority
San Miguel Ranch	San Miguel Ranch III Grading	Phase III	Under Construction	SM011G	High Priority
San Miguel Ranch	San Miguel Ranch Area K	K	Under Construction	SMO15I	High Priority
San Miguel Ranch	San Miguel Ranch III	NA	Under Construction	SMO11G	High Priority
San Miguel Ranch	San Miguel Ranch Area J1	J1	Under Construction	SM016I	High Priority
San Miguel Ranch	San Miguel Ranch Area L	Area L	Under Construction	SM022I	High Priority
San Miguel Ranch	San Miguel Ranch - Area K	Area K	Under Construction	SM015I	Medium Priority

Number of Sites: **69**

Attachment C

Municipal Facility and Activity Source Inventory and Prioritization
FY 2011-2012

Facility Name	APN	Type of Facility	Address			Priority	Tributary
All Seasons Park	6442401000	Parks-Landscape-Rec Areas	1825	MAGDALENA	AV	High	
Animal Care Facility	6290605400	Animal Facilities	130	BEYER	WY	High	
Bay Boulevard Park	5670213201	Parks-Landscape-Rec Areas		BAY	BL	High	
Bonita Long Canyon Park	5941100500	Parks-Landscape-Rec Areas	1745	COLTRIDGE	LN	High	√
Breezewood Park	6425004600	Parks-Landscape-Rec Areas	1091	BREEZEWOOD	DR	High	√
Chula Vista Community Park	5953200200	Parks-Landscape-Rec Areas	1060	EASTLAKE	PW	High	√
Chula Vista Municipal Golf Course	5932402400	Parks-Landscape-Rec Areas	4475	BONITA	RD	High	√
Chula Vista Women's Club	5683004200	Parks-Landscape-Rec Areas	357	G	ST	High	
Civic Center and Admin Building	5681103300	Other Fixed Facilities	276	FOURTH	AV	High	
Civic Center Branch Library	5681530200	Other Fixed Facilities	365	F	ST	Low	
Community Youth Center	5723001100	Parks-Landscape-Rec Areas	465	L	ST	High	√
Conneley Park	6233143300	Parks-Landscape-Rec Areas	1559	CONNOLEY	AV	High	
Cottonwood Park	6424210600	Parks-Landscape-Rec Areas	1778	PALOMAR	ST	High	√

Facility Name	APN	Type of Facility	Address			Priority	Tributary
Discovery Park	6423930700	Parks-Landscape-Rec Areas	700	BUENA VISTA	WY	High	√
Downtown Parking Facility	5682702900	Other Fixed Facilities	340	F	ST	High	
Eastlake Branch Library	5953201700	Library	1120	EASTLAKE	PW	Low	√
Eucalyptus Park	5651200300	Parks-Landscape-Rec Areas	47	FIFTH	AV	High	√
Explorer Park	6400301900	Parks-Landscape-Rec Areas		RANCHO DEL REY	PW	High	√
Fire Station #1	5681103300	Fire Stations	447	F	ST	Low	
Fire Station #2	5743003300	Fire Stations	80	J	ST	High	√
Fire Station #3	6411213000	Fire Stations	1410	BRANDYWINE	AV	Low	√
Fire Station #4/Training Tower	6423910600	Fire Stations	850	PASEO RANCHERO		Medium	√
Fire Station #5	6192110100	Fire Stations	391	OXFORD	ST	Low	√
Fire Station #6	5955700100	Fire Stations	605	MOUNT MIGUEL	RD	Low	√
Fire Station #7	6443101500	Fire Stations	1640	SANTA VENETIA	ST	Low	√
Fire Station #8	5950805400	Fire Stations	1180	WOODS	DR	Low	
Fire Station #9	6202401700	Fire Stations	266	ONEIDA	ST	Low	

Facility Name	APN	Type of Facility	Address			Priority	Tributary
Friendship Park	5681530100	Parks-Landscape-Rec Areas	365	F	ST	High	
Gayle McCandliss Park	6390301300	Parks-Landscape-Rec Areas	415	J	ST	High	√
Greg Rogers Park	6200600300	Parks-Landscape-Rec Areas	1189	OLEANDER	AV	High	
H Street Land Application	5740300800	Other Fixed Facilities		H	ST	High	√
Harborside Park	6182005900	Parks-Landscape-Rec Areas	670	OXFORD	ST	High	
Harvest Park	6425814800	Parks-Landscape-Rec Areas	1381	PALOMAR	ST	High	√
Heritage Park & Community Center	6425601100	Parks-Landscape-Rec Areas	1550	PALOMAR	ST	High	√
Hilltop Park	5744104600	Parks-Landscape-Rec Areas	780	HILLTOP	DR	High	√
Holiday Estates I&II	6233413100	Other Fixed Facilities	27	CONNOLEY	CI	Low	
Horizon Neighborhood Park	6410721600	Parks-Landscape-Rec Areas	970	PALOMAR	ST	High	√
Independence Park	6423205600	Parks-Landscape-Rec Areas	1248	CALLE SANTIAGO		High	√
John Lippit PWC & Admin Building	6442301100	Other Fixed Facilities	1800	MAXWELL	RD	High	
Ken Lee Administration Building	5681814400	Other Fixed Facilities	430	F	ST	Low	
Lancerlot Park	5711701800	Parks-Landscape-Rec Areas	750	K	ST	High	

Facility Name	APN	Type of Facility	Address			Priority	Tributary
Landscape Maintenance		Mobile Mun Activities				Medium	
Lauderbach Park	6192113700	Parks-Landscape-Rec Areas	333	OXFORD	ST	High	√
Loma Verde Park & Recreation Center	6240107200	Parks-Landscape-Rec Areas	1420	LOMA	LN	High	
Los Ninos Park	6243411200	Parks-Landscape-Rec Areas	150	TEAL	ST	High	√
Mackenzie Creek Park	5955700200	Parks-Landscape-Rec Areas	2275	MACKENZIE CREEK	RD	High	√
Marisol Park	5933803600	Parks-Landscape-Rec Areas	916	RANCHO DEL REY	PW	High	√
Memorial Park	5683004300	Parks-Landscape-Rec Areas	373	PARK	WY	High	
Mini Park	5952145100	Parks-Landscape-Rec Areas	753	ASHBROOK	DR	High	√
Montevalle Park & Community Center	5957360600	Parks-Landscape-Rec Areas	840	DUNCAN RANCH	RD	High	
Mount San Miguel Community Park	5950312300	Parks-Landscape-Rec Areas	2335	PASEO VERACRUZ		High	√
Mount San Miguel Park	5950312300	Parks-Landscape-Rec Areas	2335	PASEO VERACRUZ		High	
Mountain Hawk Park	6435180200	Parks-Landscape-Rec Areas	1475	LAKE CREST	DR	High	
MS4 Throughout the City of CV		Others				High	
Nature Center	5650102900	Parks-Landscape-Rec Areas	1000	GUNPOWDER POINT	DR	High	√

Facility Name	APN	Type of Facility	Address			Priority	Tributary
Norman Park and Recreation Center	5683331100	Parks-Landscape-Rec Areas	270	F	ST	High	
Old Public Works Yard	5670312700	Public Work Facilities	707	F	ST	High	√
Orange Avenue Fields	6240107200	Parks-Landscape-Rec Areas	160	ORANGE	AV	High	
Otay Park & Recreation Center	6232302600	Parks-Landscape-Rec Areas	3554	MAIN	ST	High	
Palomar Park	6200504900	Parks-Landscape-Rec Areas	1359	PARK	DR	High	
Palomar Street Improvements Trenton TCBMP	6170711600			TRENTON	AV	High	
Parkway Community Center	5683004300	Parks-Landscape-Rec Areas	373	PARK	WY	High	
Paseo Del Rey Park	6401412500	Parks-Landscape-Rec Areas	750	PASEO DEL REY		High	√
Police Administration Building	5682703100	Other Fixed Facilities	315	FOURTH	AV	Low	
Pool, Fountain, Water Feature Maintenance		Mobile Mun Activities				Medium	
Power Washing-Graffiti Removal		Mobile Mun Activities				High	
Rancho Del Rey Park	6422800300	Parks-Landscape-Rec Areas	1131	BUENA VISTA	WY	High	√
Reinstra Ball Fields	6240107300	Parks-Landscape-Rec Areas	1500	MAX	AV	High	
Roads, Streets, Highways		Others				High	

Facility Name	APN	Type of Facility	Address			Priority	Tributary
Rohr Park	5932400500	Parks-Landscape-Rec Areas	4548	SWEETWATER	RD	High	√
Salt Creek Park & Community Center	6434830200	Parks-Landscape-Rec Areas	2710	OTAY LAKES	RD	High	
Santa Cora Park	6420804000	Parks-Landscape-Rec Areas	1365	SANTA CORA	AV	High	√
Santa Venetia Park	6430512700	Parks-Landscape-Rec Areas	1500	MAGDALENA	AV	High	√
SDGE Park	6230720700	Parks-Landscape-Rec Areas	1438	HILLTOP	DR	High	
Sherwood Park	6233321900	Parks-Landscape-Rec Areas	69	SHERWOOD	ST	High	
South Branch Library	6230102900	Library	389	ORANGE	AV	Low	
Special Events Throughout the City of CV		Others				High	
Street, Sidewalk Repair & Maintenance		Mobile Mun Activities				Medium	
Sunbow Park	6402725100	Parks-Landscape-Rec Areas	690	NAPLES	ST	High	
Sunridge Park	6400502000	Parks-Landscape-Rec Areas	952	BEECHGLEN	DR	High	√
Sunset View Park	6430330100	Parks-Landscape-Rec Areas	1390	GREENSVIEW	DR	High	√
Terra Nova Park	5921922700	Parks-Landscape-Rec Areas	450	HIDDEN VISTA	DR	High	√
Tiffany Park	6420302900	Parks-Landscape-Rec Areas	1713	ELMHURST	ST	High	√

Facility Name	APN	Type of Facility	Address			Priority	Tributary
Valle Lindo Park	6440102600	Parks-Landscape-Rec Areas	545	SEQUOIA	ST	High	√
Veterans Park & Recreation Center	6411221000	Parks-Landscape-Rec Areas	785	PALOMAR	ST	High	
Voyager Park	6400901900	Parks-Landscape-Rec Areas	1178	J	ST	High	√
Windingwalk Park		Parks-Landscape-Rec Areas	1675	EXPLORATION FALLS	DR	High	

Total: **87**

Attachment D.1
Commercial Source Inventory and Prioritization
Mobile and Stationary
FY 2011-2012

Note: All facilities are in the San Diego Bay Watershed Management Area. Businesses marked as tributary drain to a 303(d) listed waterbody. The City is in the process of determining if facilites contribute pollutants for which the waterbody is listed.

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
			Cat (i-v) Auto Related						
3M Brakes & Lube	6220620500	1550	FRONTAGE	RD	Cat (i-v) Auto Related	High	7542		
3MC Body & Paint & Auto Center	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	High	7532		
A Spec Autocare	5957404500	688	CHAPEL HILL	DR	Cat (i-v) Auto Related	Low	7538	√	
A&A Auto Body & Paint	6181520400	1077	BROADWAY		Cat (i-v) Auto Related	High	7532		√
A&C Machine Shop and Auto Repair	622021800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538		
A&D Automotive	6181421500	1088	BROADWAY		Cat (i-v) Auto Related	High	7538		√
A&V Road Service	6182000100	1100	INDUSTRIAL	BL	Cat (i-v) Auto Related	Low	7538		√
A-1 Auto Detail & Repair	5711531500	696	BROADWAY		Cat (i-v) Auto Related	High	7538		
A-1 Autobody DBA Calico	5672010200	402	OAKLAWN	AV	Cat (i-v) Auto Related	Low	7532	√	
AARDVARC Racing	5953711700	1007	OAK HILL	DR	Cat (i-v) Auto Related	Low	5531	√	
ABC Electromechanic Projects	6242500800	1550	OCALA	AV	Cat (i-v) Auto Related	Low	7538	√	
ABC Motors Inc./Kirker Customs	5734500500	310	K	ST	Cat (i-v) Auto Related	Low	7532		√
ABC Rebuilders	6291000600	180	MACE	ST	Cat (i-v) Auto Related	Low	7532		
Abel's Auto Body	6231320800	311	TREMONT	ST	Cat (i-v) Auto Related	Low	7532		
ABS Collision Center	6191211000	1137	THIRD	AV	Cat (i-v) Auto Related	High	7532		√
Absolute Tinting	5955904200	685	EL PORTAL	DR	Cat (i-v) Auto Related	Low	7549	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Ace Auto	6241803500	1647	MARL	AV	Cat (i-v) Auto Related	Low	7538	√	
ACE Autocare Experts	6182100600	1135	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Advance Autobody and Paint	6180621200	951	BROADWAY		Cat (i-v) Auto Related	Low	7532		
AG Auto Repair	5651703200	107	BROADWAY		Cat (i-v) Auto Related	High	7538		√
Agustin Auto Repair	6290402100	1747	BROADWAY		Cat (i-v) Auto Related	Low	7532		
Al Smith	6232023100	275	ZENITH	ST	Cat (i-v) Auto Related	Low	7542	√	
Albert Stiehle Parts	6390106700	627	WINDSOR	CI	Cat (i-v) Auto Related	Low	5531	√	
All Around Service	5730620800	268	SHASTA	ST	Cat (i-v) Auto Related	Low	7538	√	
Almacen Automotriz Pacifico	6424100318	1355	CALLEJON PALACIOS		Cat (i-v) Auto Related	Low	5531	√	
American Tire Distributors	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	7534		
American Towing Inc.	6291001600	140	REED	CT	Cat (i-v) Auto Related	High	7549		
Andrade Auto Glass	5671011500	572	MADRONA	ST	Cat (i-v) Auto Related	Low	7532	√	
Anthony's Auto Center	5662321200	305	E	ST	Cat (i-v) Auto Related	Low	7549		
Apollo Tire Co	6220433700	1421	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Apple Glass	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	Low			
Aragon Car Care Center	5933811700	894	LAGASCA	PL	Cat (i-v) Auto Related	Low	5531	√	
Argent Classics	6421500100	1698	HARVARD	ST	Cat (i-v) Auto Related	Low	7532	√	
Auto Express Services	5722705100	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Auto Parts Maya	6411220700	825	PALOMAR	ST	Cat (i-v) Auto Related	Low	5531		√
Auto Servicio La Vuelta	6426704900	1307	MONTERA	ST	Cat (i-v) Auto Related	Low	5531	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Autoland Inc.	5922001500	354	H	ST	Cat (i-v) Auto Related	Low	5511		√
Automaster Automotive Center	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7533		
Automatic Transmission	6180220800	609	ARIZONA	ST	Cat (i-v) Auto Related	Low	7537		√
Autotech Motorsports	6191212700	286	EMERSON	ST	Cat (i-v) Auto Related	Low	7538		√
Avanti Motors		3261	MAIN	ST	Cat (i-v) Auto Related	High			
B&J Auto Repair Smog & Sales	5711531500	696	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Barajas Auto Tech	5753010200	1017	HILLTOP	DR	Cat (i-v) Auto Related	Low	7538		
Barracuda Wheel Alignment	6290603200	1655	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Batteries Unlimited	6221021800	2244	MAIN	ST	Cat (i-v) Auto Related	Low	5531		
Battery & Auto Center	6220913200	1510	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Bay Auto Electric	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Becka Automotive	5670900400	736	F	ST	Cat (i-v) Auto Related	Low	7538		
Beto's Mobile Mechanic	5734401700	396	SIERRA	WY	Cat (i-v) Auto Related	Low	7538	√	
Better Bumper	6435711400	1586	MOUNT TAMALPAIS	AV	Cat (i-v) Auto Related	Low	7538	√	
Beyer Supreme Tires	6190605600	1055	THIRD	AV	Cat (i-v) Auto Related	Low	7534		√
Beyer Supreme Tires #3	5672002400	647	H	ST	Cat (i-v) Auto Related	Low	7534		
Big O Tires	5671402400	399	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Bolanos Windshield	6231423400	276	MONTGOMERY	ST	Cat (i-v) Auto Related	Low	7532		
Bonita Valley Auto Care Inc.	5912402700	3995	BONITA	RD	Cat (i-v) Auto Related	Low	7538		√
Bowlins Auto Service	5713100800	850	BROADWAY		Cat (i-v) Auto Related	Low	7538		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Brake Depot	6182803200	1232	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Brake Express	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Brakes and Tunes	6220433700	1403	BROADWAY		Cat (i-v) Auto Related	Low	7542		
Broadway Auto Glass Inc.	5650601200	98	BROADWAY		Cat (i-v) Auto Related	Low	7532		√
Broadway Automotive	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Broadway Premier Auto Service	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low			
Broadway Recycling Center	6290402600	1778	BROADWAY		Cat (i-v) Auto Related	Low	4953		
Broadway Transmission		915	BROADWAY		Cat (i-v) Auto Related	Low			
Budget Tires	6230301200	275	ORANGE	AV	Cat (i-v) Auto Related	Low	5531		
Bumper Fix	5650401400	26	BROADWAY		Cat (i-v) Auto Related	Low			
Butlers Auto	5684200700	286	G	ST	Cat (i-v) Auto Related	Low	7538		
C&V Auto	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Cal-Mex Machinery Truck Equipment		869	DOROTHY	ST	Cat (i-v) Auto Related	High			
California Tire and Service Centers	5672311300	471	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Camacho Tires	6180103000	650	MOSS	ST	Cat (i-v) Auto Related	Low	7534	√	
Candys Auto Body Shop	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	Low	7532		√
Castaneda's Auto Repair	5650401500	44	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Charlies Auto Electric	5652301700	186	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Cherniss Tire World Inc.	5651703200	101	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Chichi's Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Chula Vista Auto Inc.	5650401400	24	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Chula Vista Auto Repair	6221901000	2627	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538		
Chula Vista Engine Rebuilding	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Chula Vista Toyota	6440407900	650	MAIN	ST	Cat (i-v) Auto Related	Low	5511		
Classic Auto Body	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	Low	7532		
Courtney Tire	5712001200	726	BROADWAY		Cat (i-v) Auto Related	Low	7534		
CSK Auto Inc. #1153	5670411900	241	BROADWAY		Cat (i-v) Auto Related	Low	5531		
CSK Auto Inc. #1486	6192806100	1396	THIRD	AV	Cat (i-v) Auto Related	Low	5531		
DA Tint Shop	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7532		
Daniels Tire Service	5623500600	575	C	ST	Cat (i-v) Auto Related	Low	5531		√
Dave's Auto Service	5634313100	359	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538		√
Diamond Finish	6402131800	897	MESA	PL	Cat (i-v) Auto Related	Low	7542	√	
Doctor Jay Automobile Service	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Dons Arco & Auto Service Inc.	6390806800	495	TELEGRAPH CANYON	RD	Cat (i-v) Auto Related	Low	7538		√
Double AA Tire Co Inc.	6231921400	3124	MAIN	ST	Cat (i-v) Auto Related	Low	5531		
DR Kar	5953312500	1153	CRYSTAL DOWNS	DR	Cat (i-v) Auto Related	Low	7538	√	
DR Truck & Trailer Repair	5693802100	10	H	ST	Cat (i-v) Auto Related	Low	7538		
DR Truck & Trailer Repair	6404300722	1136	MAGELLAN	WY	Cat (i-v) Auto Related	Low	7538	√	
Dynamic Results Inc/Eddies Tires & Auto Repair	6221403600	2677	MAIN	ST	Cat (i-v) Auto Related	High	5531		
Econo Lube N Tune #56	6180612000	903	BROADWAY		Cat (i-v) Auto Related	Low	7538		√

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Economy Tires	6220412600	1430	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Economy Transmissions	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Eddie's Tires and Auto Repair	6290101200	1743	BROADWAY		Cat (i-v) Auto Related	Low	7549		
Enterprise Rent A Car Sales	6182100200	1129	BROADWAY		Cat (i-v) Auto Related	Low	5511		√
Ernie's Auto Repair and Smog		1415	BROADWAY		Cat (i-v) Auto Related	Low			
Euro Specialties	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
Evans Tire & Service Center #49	6180211100	948	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Explorer Competition		2360	BOSWELL	RD	Cat (i-v) Auto Related	High			
Express Tire	5710502100	646	H	ST	Cat (i-v) Auto Related	Low	7534		
Express Tire dba American Auto Service	5672003600	430	BROADWAY		Cat (i-v) Auto Related	Low	7538		
F & V Auto Repair and Baja CA Cycle	6290200100	2801	MAIN	ST	Cat (i-v) Auto Related	High	7538		
Fiber Molds	6221023400	767	ANITA	ST	Cat (i-v) Auto Related	Low	7532		
Fily's Auto Shop	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538		
Formiller Motors	6181510100	1001	BROADWAY		Cat (i-v) Auto Related	Low	5511		√
Formula Auto Repair	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538		√
Franks Garage	5634313100	359	TROUSDALE	DR	Cat (i-v) Auto Related	High	7532		
Freeway Tire Co	6441810100	1861	NIRVANA	AV	Cat (i-v) Auto Related	Low	5531		
Fritz Garage	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538		√
Fuller Ford	6440420400	560	AUTOPARK	DR	Cat (i-v) Auto Related	Low	5511		
Fuller Honda	6440420500	580	AUTOPARK	DR	Cat (i-v) Auto Related	Low	5511		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
G & G Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7532		
Galaz Auto Service	6220432200	545	ORANGE	AV	Cat (i-v) Auto Related	Low	7538		
Garage 13 Performance	6436624700	1574	STARGAZE	DR	Cat (i-v) Auto Related	Low	5531	√	
Garcia's Auto Electric		2520	MAIN	ST	Cat (i-v) Auto Related	Low			
Geos Auto Service	5671030600	355	BROADWAY		Cat (i-v) Auto Related	Low	7538		
German Werks	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538		
GK Smog & Auto Repair	6181421700	1088	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Glass Depot	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7536		√
GMJ Enterprises LLC/Maximus Auto Center	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Goodwins Auto Kraft	6396505400	576	MANZANITA	ST	Cat (i-v) Auto Related	Low	7538	√	
Gre-Laz Complete Auto Repair	5651703200	107	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Guero's Towing	6242103300	485	SATINWOOD	WY	Cat (i-v) Auto Related	Low	7549	√	
H&A Electric Motors	6291000600	180	MACE	ST	Cat (i-v) Auto Related	Low	7629		
Happy Auto Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Henry Auto Glass	6182901400	1255	BROADWAY		Cat (i-v) Auto Related	Low	7532	√	
Hernandez Tire Sales	6232021800	3236	MAIN	ST	Cat (i-v) Auto Related	High	5531		
Hi Voltage Industries	5742111700	649	GRETCHEN	RD	Cat (i-v) Auto Related	Low	7538	√	
Hot Spot Window Tinting	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	7549		
Hypersport Performance	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	5531		
In and Out Transmissions	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
In-N-Out Auto Glass	6191102400	1120	THIRD	AV	Cat (i-v) Auto Related	Low	7536		√
International Transmission	6230300900	1580	THIRD	AV	Cat (i-v) Auto Related	Low	7537		
Investruck Inc.	6210100100	1470	BAY	BL	Cat (i-v) Auto Related	Low	7538		√
J&H Auto Repair	5671030100	355	BROADWAY		Cat (i-v) Auto Related	Low	7538		
J&J Chrome & Polish	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532		
J&L Auto Repair Inc.	5670531200	273	BROADWAY		Cat (i-v) Auto Related	Low	7538		
J&V Automotive	6220620500	1550	FRONTAGE	RD	Cat (i-v) Auto Related	Low	7538		
Javier Silva Auto Repair		862	ELISE	ST	Cat (i-v) Auto Related	High			
Jbr Auto Repair	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	Low			
JC Towing Inc.	6221901800	2502	FAIVRE	ST	Cat (i-v) Auto Related	High	7549		
Jiffy Lube - 593 E Street	5652402700	593	E	ST	Cat (i-v) Auto Related	Low	7549		√
JJ & Vic Auto Service & Repair	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
JJ Auto Body	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	Low	7532		
Joseph Cobarrubias Auto Repair		821	DOROTHY	ST	Cat (i-v) Auto Related	High			
JP Truck and Trailer Repair	5651510200	105	WOODLAWN	AV	Cat (i-v) Auto Related	Low	7538	√	
Juans Auto Repair Inc.	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
Julio C Battery	6232021800	1502	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Kantruds Garage	5651622100	120	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Karillos Truck Tire and Road Service	5954200915	2178	CABO BAHIA		Cat (i-v) Auto Related	Low	7538	√	
Kars Machine Shop	6220121800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
KDR Enterprises Inc. DBA WABCO Products	5661903100	753	ANITA	ST	Cat (i-v) Auto Related	Low	5531		
Kpucinos Auto Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538		
Kustom Nation Auto	6221115900	2524	MAIN	ST	Cat (i-v) Auto Related	Other	7538		
L & E Trans Parts and Service		117	7TH	ST	Cat (i-v) Auto Related	Low			
L&E Tire Service	6243662500	226	REGENCY	CT	Cat (i-v) Auto Related	Low	7534	√	
Lakeside Auto Sales		3211	MAIN	ST	Cat (i-v) Auto Related	High			
Lalo's Garage		122	DEL MONTE	AV	Cat (i-v) Auto Related	High			
Ledezma Tire and Muffler 2	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	Low	5014		
Ledezma's Muffler Service	6221115000	1655	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Leemor Sound Inc	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Leer Truck Accessory Center	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Leo's Auto Body Work		960	BROADWAY		Cat (i-v) Auto Related	Low			
Low Price Auto Glass	6441820800	880	ENERGY	WY	Cat (i-v) Auto Related	Low	7536		
M&M Mobile Auto Repair	6231710300	437	MONTGOMERY	ST	Cat (i-v) Auto Related	Low	7538		
Madrid Glass	6190506200	1067	FOURTH	AV	Cat (i-v) Auto Related	Low	7532	√	
Main Car Care Inc	6231722700	2952	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
Main Clutch Co	6232301700	3800	MAIN	ST	Cat (i-v) Auto Related	Low	5531		
Manny's Repair Shop		1747	BROADWAY		Cat (i-v) Auto Related	Low			
Marc Goodwin Trucking	5741030300	72	MANKATO	ST	Cat (i-v) Auto Related	Low	7549	√	
Marcos Radiator	6221113200	2530	MAIN	ST	Cat (i-v) Auto Related	Low	7539		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Marios Mobile Truck Body Repair & Driver	6240532300	4087	OTAY VALLEY	RD	Cat (i-v) Auto Related	Low	7532		
Marquez Auto Body Inc.	5734500500	310	K	ST	Cat (i-v) Auto Related	Low	7532		√
Martins Auto Transport	6391040600	1026	NOLAN	LN	Cat (i-v) Auto Related	Low	7549	√	
Max Auto Detail & Auto Elelctric	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7542		
Maximus Auto Repair	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
MBTS Corporation/Econo Lube and Tune #165	5633704200	3008	SECOND	AV	Cat (i-v) Auto Related	Low	7538		√
MCK Auto Repair	6291200100	3611	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
Midas Rajmp Inc.	5671030300	363	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Miguel Auto Mobile Repair	5956303700	2474	FALCON VALLEY	DR	Cat (i-v) Auto Related	Low	7538	√	
Mike Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
Mikes Auto Repair & Smog Center	5680442300	300	E	ST	Cat (i-v) Auto Related	Low	7538		
Mobil Mercedez Specialist	6290402100	1747	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Mobile Trenz Autosound	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Monell Brake Service	5722705100	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Monos Brake and Alignment	6290603300	231	BEYER	BL	Cat (i-v) Auto Related	Low	7538	√	
Moto Medic Motorcycle Repair		935	BROADWAY		Cat (i-v) Auto Related	Low	811111		
Motor Head Rebuilders and Welding		1747	BROADWAY		Cat (i-v) Auto Related	Low			
MTM Mobile Truck Repair	6240420446	1640	MAPLE	DR	Cat (i-v) Auto Related	Low	7538	√	
Murrays Automobile	5634410500	320	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538		√
Neill's Suzuki Auto Repair	5712610100	804	COLORADO	AV	Cat (i-v) Auto Related	Low	7538	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
New Auto Concepts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7530		
Nice & Easy Autobody & Paint Inc.	6221116000	2350	MAIN	ST	Cat (i-v) Auto Related	Low	7532		
Octavio's Garage	5711230800	632	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Official Brake & Lights Inspection Center	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Oldham Ranch Automotive	5722705100	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
One Stop Auto Access Plus	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
One Stop Under Car	5670902100	360	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Orion's Mobile Auto Service	6433202200	2554	FERN VALLEY	RD	Cat (i-v) Auto Related	Low	7538	√	
P & B Brakes and Alignment		3645	MAIN	ST	Cat (i-v) Auto Related	Low			
P&R Motors	6191710300	1165	THIRD	AV	Cat (i-v) Auto Related	Low	5511		√
Pacific Auto Glass	6191710800	1193	THIRD	AV	Cat (i-v) Auto Related	Low	7536		√
Pacific Supply Co/Parts Plus	6180101500	660	L	ST	Cat (i-v) Auto Related	Low	5531		
Parts Plus Auto	5650601200	98	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Paxton Towing	6290620300	3487	MAIN	ST	Cat (i-v) Auto Related	High	7549		
Pep Boys Manny Moe & Jack of CA #651	5672004500	454	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Pep Boys Manny Moe & Jack of CA #872	6402932300	1000	TIERRA DEL REY		Cat (i-v) Auto Related	Low	5531		√
Perfect Star European Auto Repair	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Performance Auto Repair & Smog	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Peters Precision Auto	5634512200	310	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538		√
Platinum Spray Collision		805	E	ST	Cat (i-v) Auto Related	High			

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Pm Auto Service		616	G	ST	Cat (i-v) Auto Related	Low			
PO Auto Repair	6291201600	2530	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
Precision Automotive	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	Low	7537		
Precision Motors	5712002900	619	K	ST	Cat (i-v) Auto Related	Low	7538		
Pro Tires	6206012200	437	THRUSH	ST	Cat (i-v) Auto Related	Low	7534	√	
Prokar Products	6222110200	2471	MAIN	ST	Cat (i-v) Auto Related	Low	5531		
Protech Autoglass	5653301100	546	CASSELMAN	ST	Cat (i-v) Auto Related	Low	7536	√	
Quick Tows & Road Service	5680710200	209	THIRD	AV	Cat (i-v) Auto Related	Low	7549		
R&G Auto Electric	6180211300	924	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
R&L Performance Auto Service	6220111900	887	PALOMAR	ST	Cat (i-v) Auto Related	Low	7538		
R&R General Auto Repair	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Rafael General Atuo Repair	5712003100	720	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Rags Enterprises Inc./Tip Top Auto	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Rainbow Striping	6441301100	981	MONSERATE	AV	Cat (i-v) Auto Related	Low	7532	√	
Ramon's Auto Electric	6221403200	2555	MAIN	ST	Cat (i-v) Auto Related	Low	7629		
Ramz Mobile Auto Care	6391510500	394	MONTCLAIR	ST	Cat (i-v) Auto Related	Low	7538	√	
Rauls's Body Shop	6170712200	790	PALOMAR	ST	Cat (i-v) Auto Related	Low	7532		
Ray's Mobile Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538	√	
RG Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7538		
Ricardos Custom Covers	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	Low	7532		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
RNA Motor Works	5956503500	737	SAN GABRIEL	PL	Cat (i-v) Auto Related	Low	7538	√	
Roman's Tire Truck Body & Paint MJP	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532		
Ruben Delrio		817	DOROTHY	ST	Cat (i-v) Auto Related	High			
Ruben's Auto Electronics	6220412700	1420	BROADWAY		Cat (i-v) Auto Related	Low	7538		
S & H Motors	6191213000	292	EMERSON	ST	Cat (i-v) Auto Related	Low	7538		√
Safelite Auto Glass #6150	5672001200	416	BROADWAY		Cat (i-v) Auto Related	Low	7536		
Sams Muffler Radiators	6290603200	225	BEYER	WY	Cat (i-v) Auto Related	High	7533		
San Diego Automotive Inc	5661320100	48	HILLTOP	DR	Cat (i-v) Auto Related	Low	5531		√
San Diego Diesel Parts	6392901200	252	INKOPAH	ST	Cat (i-v) Auto Related	Low	5531	√	
San Diego Tires and Brakes	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
Sanchez Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
SCJ Auto Repair	6240602800	4501	OTAY VALLEY	RD	Cat (i-v) Auto Related	Low	7538		
Scotts Porsche	5651623000	118	BROADWAY		Cat (i-v) Auto Related	Low	5531		√
Sir Y Incorporated/DBA Sir Y Auto Group	5722120600	777	BROADWAY		Cat (i-v) Auto Related	Low	5511		
Skyline Garage	5650401000	615	CHULA VISTA	ST	Cat (i-v) Auto Related	Low	7538		√
SO California Discount Tire	5711230200	600	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Soto Transmissions		3384	MAIN	ST	Cat (i-v) Auto Related	High			
South Bay Auto Haus	5634410100	310	TROUSDALE	DR	Cat (i-v) Auto Related	Low	7538		√
South Bay Auto Repair	5713100500	811	BROADWAY		Cat (i-v) Auto Related	Low	7538		
South Bay Collision Center	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7532		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
South Bay Datsun Auto Repairs	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538		
South Beach Auto Sales/El Valle Auto Sales Inc.	5713100700	846	BROADWAY		Cat (i-v) Auto Related	Low	5511		
South Coast Alignment	5722705400	801	BROADWAY		Cat (i-v) Auto Related	Low	7538		
South Coast RV Service Center	5722705400	801	BROADWAY		Cat (i-v) Auto Related	High	7538		
Southbay Auto Glass	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	Low	7536		
Southbay Motorsports	6440412000	1890	AUTO PARK	PL	Cat (i-v) Auto Related	Low	5941		
Southbay Tire & Auto Service	5653300100	77	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Southbay Tools	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	7532		
Southern California Reconditioning	5661020100	67	DEL MAR	AV	Cat (i-v) Auto Related	Low	7532	√	
Sparks Tune Up of CV	6220433700	1415	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Speed Merchant Inc/American Tire Distributor	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	Low	5531		
Sunbelt Towing Inc DBA Western Towing	6170601200	1171	FRONTAGE	RD	Cat (i-v) Auto Related	Low	7549		
Super Low Price Auto Glass #23	5670530400	265	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Superior Auto Body Group	5661900600	363	E	ST	Cat (i-v) Auto Related	Low	7538		
Superior Auto Body & Paint	5662311000	347	E	ST	Cat (i-v) Auto Related	Low	7532		
Superior VW Automotive Repair	6221113400	2578	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
T-100 Auto Repair	6232021900	3232	MAIN	ST	Cat (i-v) Auto Related	Low			
Tap Acquisition LLC/4 Wheel Parts & Perform Center	6220433700	1427	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Tech Transmissions		1747	BROADWAY		Cat (i-v) Auto Related	Low			
Ted Johnson Garage	6192122600	1270	THIRD	AV	Cat (i-v) Auto Related	Low	7538		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
The Autobroker	5680722600	203	CHURCH	AV	Cat (i-v) Auto Related	Low	5511	√	
Tinos Auto Tech	5712003100	720	BROADWAY		Cat (i-v) Auto Related	High	7532		
TK Auto Repair	6182103500	1137	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
TK Smog Check & Auto Repair	6220433700	1409	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Tony Discount Tires Brakes & More	6290603300	231	BEYER	WY	Cat (i-v) Auto Related	Low	7542		
Tony's Tires	6290402700	1771	BROADWAY		Cat (i-v) Auto Related	Low	5531		
Torque Performance Auto Center	6220433700	1421	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Toyo Tire USA Corporation	5952310200	860	KUHN	DR	Cat (i-v) Auto Related	Low	5531		√
Truebar Machine Shop & Auto Repair	6220433700	1403	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Trueline Auto Service	5661903100	377	E	ST	Cat (i-v) Auto Related	High	7538		
Tune Plus	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
Turtle Auto Repair and Towing		117	7TH	ST	Cat (i-v) Auto Related	Low			
Two Bit Tow of San Diego	5670311100	240	WOODLAWN	AV	Cat (i-v) Auto Related	High	7549		√
U-Do-It / Auto Painting	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7532		√
UNIC Smog Repair	6180220900	960	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Union Auto Repair	6180621100	590	ARIZONA	ST	Cat (i-v) Auto Related	Low	7538		√
V&M Auto Mechanic	6191211000	1135	THIRD	AV	Cat (i-v) Auto Related	Low	7538		√
V&m Auto Mechanic	5684200200	409	THIRD	AV	Cat (i-v) Auto Related	Low	7538		√
Valencia's Diesel Mobile	6220121800	876	ADA	ST	Cat (i-v) Auto Related	Low	7538		
Valvoline Instant Oil Change	6420201700	1556	H	ST	Cat (i-v) Auto Related	High	7538		√

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Valvoline Instant Oil Change	6402924800	899	H	ST	Cat (i-v) Auto Related	High	7538		√
Van's Suspension & Brake Center	6290100500	1741	BROADWAY		Cat (i-v) Auto Related	Low	7538		
Victor's Auto Repair	5670510100	255	ASH	AV	Cat (i-v) Auto Related	Low	7538	√	
Vidrio Towing	6240606000	2471	MAIN	ST	Cat (i-v) Auto Related	Low	7549		
Villegas Used Tires	5672001900	466	BROADWAY		Cat (i-v) Auto Related	Low	5531		
West Coast Mobile Mechanix	6180610100	935	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
West Coast Transmission	6221112900	1660	SILVAS	ST	Cat (i-v) Auto Related	Low	7537		
Western Towing	6170710200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549		
Wheel Depot	6290200400	2835	MAIN	ST	Cat (i-v) Auto Related	High	5531		
Xtreme Auto Body		2524	MAIN	ST	Cat (i-v) Auto Related	Low			
Zeppy Auto Repair	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	Low	7538		
ZX Team	6180610500	915	BROADWAY		Cat (i-v) Auto Related	Low	7538		√
Cat (iii-xxi)-Boat/Marina									
Garcia's Detail and Repair	5713201400	867	COLORADO	AV	Cat (iii-xxi)-Boat/Marina	Low	3732	√	
Kaiulani Boat Service	6435163600	1446	YELLOWSTONE	AV	Cat (iii-xxi)-Boat/Marina	Low	3732	√	
Magana Yacht Repair	6220723500	778	ANITA	ST	Cat (iii-xxi)-Boat/Marina	Low	3732	√	
Sterling Marine	6395203600	829	WILER	DR	Cat (iii-xxi)-Boat/Marina	Low	3732	√	
Cat iv-Equipment Relaled									
ABLE Heating and Air Conditioning	6182005800	1020	COLORADO	AV	Cat iv-Equipment Relaled	Low	1711	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
All Drain Rooter	6423111400	1267	CALLE CANDELERO		Cat iv-Equipment Relaled	Low	1711	√	
Allbrands A1 Appliance Service	5954605800	951	SAINT CLAIRE	DR	Cat iv-Equipment Relaled	Low	7623	√	
Antonio Plumbing	7762204202	577	PALOMAR	ST	Cat iv-Equipment Relaled	Low	1711	√	
Any Drain Rooter Service	6231412100	296	TREMONT	ST	Cat iv-Equipment Relaled	Low	1711	√	
Arrow Appliance Service	6400333300	1164	CALLE FLORECITA		Cat iv-Equipment Relaled	Low	7629	√	
B&D Power Services	6230202700	368	ANITA	ST	Cat iv-Equipment Relaled	Low	7629	√	
BJ's Rental Inc.	5733202000	317	K	ST	Cat iv-Equipment Relaled	High	7359		
California Plumbing & Heating	6424011200	1434	SOUTHVIEW	CT	Cat iv-Equipment Relaled	Low	1711	√	
Clear-Flow Rooter Service	6202730600	218	ORLANDO	ST	Cat iv-Equipment Relaled	Low	1711	√	
Cogswell Marine & Motorsports Inc.	6220122600	865	STELLA	ST	Cat iv-Equipment Relaled	Low	5941	√	
D III Industrial (Choice Lift)	6291302700	187	MACE	ST	Cat iv-Equipment Relaled	High	7513		
Daves Quality Plumbing Inc.	5634410500	320	TROUSDALE	DR	Cat iv-Equipment Relaled	Low	1711	√	√
DaVinchi Metal Signs	6291002128	3521	MAIN	ST	Cat iv-Equipment Relaled	Low	3993		
Elias Plumbing	6402600500	1129	CLOUDWALK CANYON	DR	Cat iv-Equipment Relaled	Low	1711	√	
Explorers Competition Products	5953000500	2311	BOSWELL	RD	Cat iv-Equipment Relaled	Low	4225		
Handiworks	5932621100	944	BUCKAROO	LN	Cat iv-Equipment Relaled	Low	7699	√	
J&J Drain & Sewer	5950305513	2355	CALLE SABROSO		Cat iv-Equipment Relaled	Low	1711	√	
Jakes Plumbing	6180718200	430	WESTBY	ST	Cat iv-Equipment Relaled	Low	1711	√	
Jifffy Rooter	6232021800	3236	MAIN	ST	Cat iv-Equipment Relaled	Low	1711	√	
Martin Prep	6424312000	1213	MONTE SERENO	AV	Cat iv-Equipment Relaled	Low	3751	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Mike's Recycling	6290607200	3151	MAIN	ST	Cat iv-Equipment Relaled	High	7389		
Moys Appliance Repair	6203202900	1458	MAX	AV	Cat iv-Equipment Relaled	Low	7623	√	
Randys Rooter Service	5685123100	223	H	ST	Cat iv-Equipment Relaled	Low	1711	√	
Triple M. Marine Welding & Repair Inc.	6220620500	1550	FRONTAGE	RD	Cat iv-Equipment Relaled	Low	3732	√	
Uncle Joe Drain Cleaning	6441910500	1660	CABRILLO	DR	Cat iv-Equipment Relaled	Low	1711	√	
Walashek Industrial & Marine Inc.	5623500100	595	C	ST	Cat iv-Equipment Relaled	Low	7538		√
West Air Gas & Equip Inc.	6220620700	1590	FRONTAGE	RD	Cat iv-Equipment Relaled	Low	5084		

Cat iv-Equipment Related

Gopher Pro Backhoe Services		285	MACE	ST	Cat iv-Equipment Related	High			
Lund & Flynn Inc.		370	TROUSDALE	DR	Cat iv-Equipment Related	High			
Quality Lift Trucks		101	GLOVER	AV	Cat iv-Equipment Related	High			
RB&S Electrical Wholesale		3855	MAIN	ST	Cat iv-Equipment Related	High			
Upright Shoring and Scaffolding		910	INDUSTRIAL	BL	Cat iv-Equipment Related	High			

Cat ix-Pest Control ...

Adios Pest Control Inc.	5957102017	2576	CATAMARAN	WY	Cat ix-Pest Control ...	Low	7342	√	
Atlas Termite	5661103700	25	SECOND	AV	Cat ix-Pest Control ...	Low	7342	√	
Chula Vista Pest Control	5680441300	244	THIRD	AV	Cat ix-Pest Control ...	Low	7342	√	
Indemand Pest Control	6412504200	982	MERCED RIVER	RD	Cat ix-Pest Control ...	Low	7342	√	
King Termite Control Inc.	5681512200	290	LANDIS	AV	Cat ix-Pest Control ...	Low	7342	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Lloyds Pest Control	6290201200	2865	MAIN	ST	Cat ix-Pest Control ...	Low	7342	√	
The Works Termite Co	5733601200	119	KEARNEY	ST	Cat ix-Pest Control ...	Low	7342	√	
Turbo Termite & Repair	6170800600	1021	BAY	BL	Cat ix-Pest Control ...	Low	7342	√	
We Got Ya Pest Control Inc.	5660103100	46	THIRD	AV	Cat ix-Pest Control ...	Low	7342	√	
Cat vi-Auto-Washing									
619 Detail	5957400200	2792	SAVANNAH	CT	Cat vi-Auto-Washing	Low	7542	√	
619 Mobile Detailing	6202510800	55	PALOMAR	ST	Cat vi-Auto-Washing	Low	7542	√	
A & G Mobile Services		707	L	ST	Cat vi-Auto-Washing	Low			
Absolute Auto Detail	6420736100	1390	SANTA ALICIA	AV	Cat vi-Auto-Washing	Low	7542	√	
Advance Mobile Wash & Detail	5954406600	1093	FOREST LAKE	DR	Cat vi-Auto-Washing	Low	7542	√	
AG Autobody & Detail	6431613800	2466	MYRTLE BEACH	WY	Cat vi-Auto-Washing	Low	7542	√	
All American Car Wash C.V.	6182103500	1137	BROADWAY		Cat vi-Auto-Washing	High	7542		√
Amplified Detailing & Restoration	5672600901	423	COLORADO	AV	Cat vi-Auto-Washing	Low	7542	√	
Aqua Clean	5922109000	1435	RIDGEBACK	RD	Cat vi-Auto-Washing	Low	7542		√
Aqua-Man Mobile Auto Carwash Detailing	6403223600	1184	CAMINO BISCAY		Cat vi-Auto-Washing	Low	7542	√	
Arreola Auto Detailing	6190513000	1047	FOURTH	AV	Cat vi-Auto-Washing	Low	7542	√	
Arreola Auto Detailing	6184200100	1049	FOURTH	AV	Cat vi-Auto-Washing	Low	7542	√	
Auto Detailing By David	5692520900	489	ELM	AV	Cat vi-Auto-Washing	Low	7542	√	
Baja Auto Detail	5650401000	615	CHULA VISTA	ST	Cat vi-Auto-Washing	Low	7542	√	
Bebo's Auto Detail	5713101900	804	BROADWAY		Cat vi-Auto-Washing	Low	7542	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Bonita Car Wash	5702204600	3048	BONITA	RD	Cat vi-Auto-Washing	Low	7542		√
Brabus Pro Auto Detailing	6437701700	1743	FENNEL	WY	Cat vi-Auto-Washing	Low	7542	√	
California Sunshine Detail	5957701100	2385	PLAZA EVA		Cat vi-Auto-Washing	Low	7542	√	√
Crystal Clean Car Wash - Cv Inc.		1137	BROADWAY		Cat vi-Auto-Washing	Low			
Del Rey Detailers	6402402600	1030	CORDOVA	DR	Cat vi-Auto-Washing	Low	7542	√	
Deluxe Mobile Detailing	6432320700	2401	VALLEY GARDENS	DR	Cat vi-Auto-Washing	Low	7542	√	
Deluxe Mobile Detailing	6435022400	1320	LONG VIEW	DR	Cat vi-Auto-Washing	Low	7542	√	
Diablos Auto Detail	6191100900	1151	FOURTH	AV	Cat vi-Auto-Washing	Low	7542	√	
Eastlake Mobile Detailing	5955100217	1185	LA VIDA	CT	Cat vi-Auto-Washing	Low	7542	√	
Empire Mobile Auto Detailing	6230606300	250	QUINTARD	ST	Cat vi-Auto-Washing	Low	7542	√	
Ernie's Detail	6221902000	2555	FAIVRE	ST	Cat vi-Auto-Washing	Low	7542		
Finest Auto Detailing	6423801614	1336	SERENA	CI	Cat vi-Auto-Washing	Low	7542	√	
GBC Auto Detailing	6434302800	1175	BATTLE CREEK	RD	Cat vi-Auto-Washing	Low	7542	√	
JDA Detailing and Services	6411220700	825	PALOMAR	ST	Cat vi-Auto-Washing	Low	7542	√	
JJ's Mobile Auto Detailing	6191620500	1123	TOBIAS	DR	Cat vi-Auto-Washing	Low	7542	√	
Jose Gallardo	5651701400	561	FLOWER	ST	Cat vi-Auto-Washing	Low	7542	√	
JR S Detail/Mobile Car Wash	6400704400	770	NAPLES	CT	Cat vi-Auto-Washing	Low	7542	√	
JR's Mobile Auto Detail	6242201200	1516	OLEANDER	AV	Cat vi-Auto-Washing	Low	7542	√	
Keen Detail	6423801515	1344	SERENA	CI	Cat vi-Auto-Washing	Low	7542	√	
Klimax Mobile Detail	5733721400	253	K	ST	Cat vi-Auto-Washing	Low	7542	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Lad Mobile Vehicle Service	6182910500	557	OXFORD	ST	Cat vi-Auto-Washing	Low	7538	√	
LST Carwash	6180612000	907	BROADWAY		Cat vi-Auto-Washing	Low	7542		√
Luna's Mobile Detailing	5754321900	1143	VISTA	WY	Cat vi-Auto-Washing	Low	7542	√	
Maranatha Carwash	5670324300	298	BROADWAY		Cat vi-Auto-Washing	Low	7542		
Mario's Auto Detailing	6180610500	915	BROADWAY		Cat vi-Auto-Washing	Low	7542		√
Mario's Auto Detailing	6220433700	1409	BROADWAY		Cat vi-Auto-Washing	Low	7542		√
Max Auto Detail & Auto Electric	6220913200	1502	BROADWAY		Cat vi-Auto-Washing	Low	7542		
Max Enterprises	5711331100	691	WOODLAWN	AV	Cat vi-Auto-Washing	Low	7542	√	
Mobile Car Wash	6426002400	1613	WOODVILLE	AV	Cat vi-Auto-Washing	Low	7542	√	
Moreno Auto Detailing	6431313200	1291	BOCA RATON	DR	Cat vi-Auto-Washing	Low	7542	√	
Nice Car Always	6432331400	1468	ASHFORD CASTLE	DR	Cat vi-Auto-Washing	Low	7542	√	
Oscar Velazquez Auto Detail	6183010600	465	OXFORD	ST	Cat vi-Auto-Washing	Low	7542	√	
Pearl Carwash/Chula Vista Inc.	5670325000	215	WOODLAWN	AV	Cat vi-Auto-Washing	Low	7542		√
Premier Mobile Auto Detail and Tinting	6435162300	1438	MARBLE CANYON	WY	Cat vi-Auto-Washing	Low	7542	√	
Pro Detailing Services	6420736100	1390	SANTA ALICIA	AV	Cat vi-Auto-Washing	Low	7542	√	
Prontowash Southern CA, LLC	6430610100	2015	BIRCH	RD	Cat vi-Auto-Washing	Low	7542		√
Rancho Mobile Auto Detail	6206200200	227	RIENSTRA	ST	Cat vi-Auto-Washing	Low	7542	√	
Rancho Mobile Detail	6391300400	1087	MELROSE	AV	Cat vi-Auto-Washing	Low	7542	√	
Roberto's Custom Detailing	6193202000	1307	TOBIAS	DR	Cat vi-Auto-Washing	Low	7542	√	
Shine Mobile Detailing	6411602100	1282	WILD IRIS	PL	Cat vi-Auto-Washing	Low	7542	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Shining Star Auto Detail	5953613600	2431	EASTRIDGE	LP	Cat vi-Auto-Washing	Low	7542	√	
Simply Clean Auto Detailing	6400325700	589	BAYONA	LP	Cat vi-Auto-Washing	Low	7542	√	
Sky Auto Detail	6193500900	1340	ELM	AV	Cat vi-Auto-Washing	Low	7542	√	
SOS Auto Mobile	5671011200	336	ASH	AV	Cat vi-Auto-Washing	Low	7538	√	
South 1 Auto Detail	6290500900	3031	MAIN	ST	Cat vi-Auto-Washing	High	7542		
Speed Auto Detailing	6180900700	1018	WOODLAWN	AV	Cat vi-Auto-Washing	Low	5812	√	
Splash Auto Detail	6396902600	731	LORI	LN	Cat vi-Auto-Washing	Low	7542	√	
Splash Mobile Detail	6233122400	1579	CITRUS	WY	Cat vi-Auto-Washing	Low	7542	√	
Spotless Auto Detailing	6436410800	1618	GOLDEN GATE	AV	Cat vi-Auto-Washing	Low	7542	√	
Superior Shine Mobile Detailing	6393141800	398	INKOPAH	ST	Cat vi-Auto-Washing	Low	7542	√	
Vista Palms Car Wash	5722120500	795	BROADWAY		Cat vi-Auto-Washing	High	7542		
Wash and Glow Auto Detail	6401104200	886	ENTRADA	PL	Cat vi-Auto-Washing	Low	7542	√	
Wash and Glow Detail	6441412900	1539	SONORA	DR	Cat vi-Auto-Washing	Low	7542	√	
Xclusive Auto Detail	5672001200	416	BROADWAY		Cat vi-Auto-Washing	Low	7542		
Xtreme Mobile Detailing	6390109000	603	MELROSE	AV	Cat vi-Auto-Washing	Low	7542	√	

Cat vii-Auto Lots Storage

Broadway Palomar RV Storage	6220431100	1375	BROADWAY		Cat vii-Auto Lots Storage	High	4225		
Eastlake RV and Boat Storage	5952312100	2371	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	4225		√
Eastlake Self Storage	5952312900	2351	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	4225		√
Hofer Corporation	6450300900	5662	OTAY VALLEY	RD	Cat vii-Auto Lots Storage	Low	4226		

Facility Name	APN		Address		Category	Priority	SIC Number	Mobile Business	Tributary
Otay Valley RV Storage	6291300300	163	MACE	ST	Cat vii-Auto Lots Storage	High	4225		
Road One of San Diego	64404061	1805	MAXWELL	RD	Cat vii-Auto Lots Storage	Low	7549		
Savon Self Storage	6232300600	3708	MAIN	ST	Cat vii-Auto Lots Storage	High	4225		
Sentry Storage	6291302900	3885	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225		
Cat viii-Fueling-Rtl/Wsl									
Allen Gas Truck Stop	6290606100	3205	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	7538		
Arco AM/PM #5208	5652801400	407	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco AM/PM #5217	5733203900	798	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco AM/PM #5218	6290101300	1725	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco AM/PM #607	6231921500	3190	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco AM/PM #633	6170601600	800	PALOMAR	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco At H Street	5710300900	720	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Arco By The Bay	5653101600	765	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Arco Sunshine Market	6201301600	1401	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Birkdale Corp DBA L Street 76	5713101400	898	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		
Bobar Market 8	5670903900	600	F	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Bonita Arco	5932800700	4498	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Bonita Gas & Mini Mart	5932800700	4498	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Bonita Point Auto Care Inc.	5941311200	149	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Bonita Shell	5701402700	100	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Bonita Vista Gas & Auto	6421701100	903	OTAY LAKES	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Cali Mart	6291303000	3733	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Chevron Inc #1422	5700203200	95	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Chevron Station #1946	6411222000	695	PALOMAR	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411		
Chevron Station Inc. #1837	6402910400	770	PLAZA	CT	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Chevron Station-Olympic Parkway #1975	6430206900	2115	OLYMPIC	PW	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Chula Vista Mobil	6190104500	902	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Chula Vista SVC CTR/SECV Inc.	5734902600	899	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Circle K Store #2964	5650401100	60	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Circle K Store #5708	5701310500	98	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Fred's Auto Repair	6290606100	3205	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Gas Depot	5652402100	199	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Lamb Fuels Inc.	6441820300	855	ENERGY	WY	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Lorena B Ratonel Shell	5922001600	350	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Melrose 76	6240800700	1495	MELROSE	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Mobil Oil On The Run #12924	5953221800	2210	OTAY LAKES	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Mohsen Oil	6192805900	1328	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		
New West Petroleum LLC #1016	6240800900	1498	MELROSE	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Optima	5672003900	498	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		
Optimart	6230300800	1450	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Palomar Shell	6192225500	1295	THIRD	AV	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Seven Eleven 13951 B 2131	5662402800	275	E	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411		
Seven Eleven 24070A 2131	6232716800	1482	HILLTOP	DR	Cat viii-Fueling-Rtl/Wsl	Low	5411		
Seven Eleven 29540B 2131	6191002400	7	NAPLES	ST	Cat viii-Fueling-Rtl/Wsl	Low	5411		
Shell at Main	6240602800	4555	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Supreme Gasoline	5652302900	196	BROADWAY		Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Suresh Patel	6240606500	4430	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
Terra Nova Service Plaza	5922001600	350	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
Thrifty #9568	6394901500	401	TELEGRAPH CANYON	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541		√
World Oil Co. #46	5672010300	685	H	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		
World Petroleum Gas - Main	6291303000	3733	MAIN	ST	Cat viii-Fueling-Rtl/Wsl	Low	5541		

Cat x-Eating/Drinking ...

Agave Grill	5672004700	625	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Albertson's - Proctor Valley Rd	5950305800	2310	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	High	5411		√
Albertson's Third Ave	5733204500	720	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		
Alejandro's Mexican Bar & Grill	5953222100	2220	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Ancira Tamales	6221021800	2260	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
Aning's Homemade Specialties	5922102100	449	KRISTA	CT	Cat x-Eating/Drinking ...	Low	5812		√
Antojito's Lucy's	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	Low	5812		
Arbys - 2244 Otay Lakes Rd	5953220800	2244	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Asada Express	6181520200	1067	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Aunt Emmas	5670310600	700	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
Bert's Grill	6390806400	525	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Birrieria Don Rafa	5720803200	621	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Bulls Eye Burger	5713101800	860	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Burger King - 1265 Third Ave	6192225200	1265	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
Burger King - 599 Broadway	5720104700	599	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Burger King - 899 E H Street	6402924800	899	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Burger King - Bonita Rd	5700201700	97	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Burrito Corona Group LLC	5932800600	4444	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Cali Dogs	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	Low	5812		√
California Pizza Kitchen	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
California Sushi Bar Inc.	5683340300	337	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Canyon Club Cafe	6394901300	421	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Carls JR - 1100 Broadway	6182006400	1100	BROADWAY		Cat x-Eating/Drinking ...	High	5812		√
Carls JR - 1487 E H Street	5941310400	1487	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Carls JR - 502 Broadway	5710502400	502	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Carls JR - 996 Third Ave	6190100800	996	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
Carls JR - Olympic PW	6430206800	2097	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812		√
Carrow's Restaurant #953	5720104700	598	H	ST	Cat x-Eating/Drinking ...	Low	5812		

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CAT Cheoon Restaurant	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
CDT Catering Services	5634410600	320	TROUSDALE	DR	Cat x-Eating/Drinking ...	Low	5812		√
Cheese Cake Factory	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
Chick Fil A at Eastlake Terraces	6430206700	2089	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812		√
Chili's Bar & Grill	6430610200	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
Chili's Bar & Grill #387	6402924700	800	PASEO DEL REY		Cat x-Eating/Drinking ...	Low	5812		√
China China Restaurant	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
China King Buffet	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
China Little Cafe Express	5684505900	492	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
China One Inc		45	BROADWAY		Cat x-Eating/Drinking ...	High			
Chinese City Restaurant	6230600200	1403	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
Chow King	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	High	5812		
Chriss Chriss Ent Inc./Little Caesar Pizza	5672322300	481	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Chula Vista RV Park Store	7600480300	460	SANDPIPER	WY	Cat x-Eating/Drinking ...	Low	5399		
Church's Fried Chicken	6190610200	1005	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
Ciao Italian Restaurant	6240606000	4360	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812		
Colima's Mexican Food	5912522500	4102	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Corzy Corner Pizza	6441912700	1655	BRANDYWINE	AV	Cat x-Eating/Drinking ...	Low	5812		
COSTCO - East H St	6402925000	895	H	ST	Cat x-Eating/Drinking ...	High	5812		√
COSTCO at Broadway	6182006100	1130	BROADWAY		Cat x-Eating/Drinking ...	High	5399		√

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Cotija Taco Shop	5932800600	4444	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Cotijas Mexican Food	5734500700	810	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Cotixan Mexican & Seafood	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		√
Cotixan Taco Shop	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
D Lish	5922000200	386	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Dairy Queen Orange Julius	6220310500	664	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Deli Shoppe	6170800700	1075	BAY	BL	Cat x-Eating/Drinking ...	Low	5812		
Denny's Restaurant - Bonita Rd	5701406000	110	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Denny's Restaurant - E Street	5670320600	692	E	ST	Cat x-Eating/Drinking ...	High	5812		√
Desserts Plus Chula Vista, Inc	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		
Diego's Mexican Food	5711530600	686	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Domino's Pizza #7724	5683004600	380	THIRD	AV	Cat x-Eating/Drinking ...	Low			
Domino's Pizza #8503	9421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low			
Don Pedro Taco Shop	5680711700	247	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Dragon Express Fast Food	5670320800	678	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
Edelweiss Restaurant	5680441700	230	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Camaron	5652402600	193	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
El Camaron 2	6231911200	301	MONTGOMERY	ST	Cat x-Eating/Drinking ...	Low	5812		
El Comal Antojitos	5681521900	262	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Comal Antojitos Mexicanos	5680711500	239	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		

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El Comal Antojitos Mexicanos	5710500600	534	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
El Dorado Seafood & Grill	6192806300	311	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
El Gordito Feliz Mexican Food	6404400117	1149	CABRILLO	DR	Cat x-Eating/Drinking ...	Low	5812		√
El Jalapeno Mexican Grill	6192806000	1352	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Mexicanos Taco Shop	6390806500	567	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
El Michoacano Taco Shop & Seafood	6437700300	2130	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		
El Nopal Market LLC	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5411		
El Norteno Restaurant	6192122800	1266	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Pollo Loco/Bas Food Services	5710622100	666	H	ST	Cat x-Eating/Drinking ...	High	5812		
El Ranchero Factory	6192804300	1324	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
El Ranchero Factory Taco Shop #2	6232121900	3344	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
Elks Lodge	6391600300	901	ELKS	LN	Cat x-Eating/Drinking ...	Low	8631		
Ernie's 50s Diner	5683330800	323	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Fair Market & Hollywood Pizza	5743003200	72	J	ST	Cat x-Eating/Drinking ...	Low	5812		√
Figaro's Pizza	5950305900	2326	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812		√
Filippis Pizza Grotto	5650600900	82	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Florence Pizza Express	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Food 4 Less #780	6220310500	660	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5411		
Foodland #7	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
Formosa Club	5713100500	840	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Fuddruckers #3055	5682702300	340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Galley At The Marina	7600480101	550	MARINA	PW	Cat x-Eating/Drinking ...	Low	5812		
General Los Panchos Taco Shop	5672321400	577	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Giant Pizza King #17	6394901300	419	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Gigante Pizza	5670324500	226	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Godland Inc./Juice It Up	5950720300	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812		√
Golden Star Chinese Food	5734503500	864	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Golden Unique	5720104700	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Goldilocks	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		
Gondola Pizza	6181520200	1067	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Great Happiness II	6230606700	1445	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Great Steak		2322	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low			
HDOS ENT	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Heartland Meat Company	6290620700	3461	MAIN	ST	Cat x-Eating/Drinking ...	High	5399		
Henry's Market Place dba Otay Ranch Market	5950711500	878	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5411		√
Hermano's Taco Shop	6182901700	1295	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Hilltop Market	6232716700	1500	HILLTOP	DR	Cat x-Eating/Drinking ...	High	5411		
Hollywood Market	5743003200	72	J	ST	Cat x-Eating/Drinking ...	High	5411		
Home Town Buffet #705	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Home Town IGA	5670320800	646	E	ST	Cat x-Eating/Drinking ...	High	5411		√

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Honey Baked Ham Inc.	5922000700	316	H	ST	Cat x-Eating/Drinking ...	Low	5411		√
Hot Dog Expressions	6402911300	725	PLAZA	CT	Cat x-Eating/Drinking ...	Low	5812		√
Hot Dog On A Stick			BIRCH	RD	Cat x-Eating/Drinking ...	High			
Hungry Hanks Deli	5734503500	866	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Hurshi's Cafe	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Ida's Lompia Palace & China Town	5941310900	732	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
In-N-Out Burger	6437701800	1725	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812		
International House of Pancakes	5953221000	2258	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Italy Express	6390806400	527	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Jack Donuts	6220433200	1355	BROADWAY		Cat x-Eating/Drinking ...	Low	5461		
Jack in the Box		925	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low			
Jack in the Box - 1408 Third Ave	6230500200	1408	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
Jack in the Box - 370 E H Street	5922001800	370	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Jack in the Box - 486 Broadway	5672003900	486	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Jack in the Box - 802 Third Ave	5734500600	802	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
Jack in the Box - Bonita Rd	5912511600	4011	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Jack in the Box - N Fourth Ave	5632703400	5	FOURTH	AV	Cat x-Eating/Drinking ...	High	5812		√
Jack in the Box - Palomar	6220433300	585	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		
Jalisco Cafe	5912522600	4026	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Jimmy's Family Restaurant	6191105000	1198	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√

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JNC Pinoy Foodmart Inc.	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411		√
Jochi's Fast Food Inc.	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Joe and Ernie's Pizzeria Inc.	5712006208	730	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Jordan's Crazy Burgers and Hot Dogs	6427000326	1750	PALOMAR	ST	Cat x-Eating/Drinking ...	High			
Joshways Restaurant & Bar	5670531400	299	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Julian's Mexican Food	6190507200	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Just Java Cafe	5681611200	285	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
K Kiala Inc DBA SD Philly Cheese	5950711500	872	EASTLAKE	PW	Cat x-Eating/Drinking ...	Low	5812		√
Kaga Sushi	6192113500	1216	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Kanpai Restaurant	6192806300	305	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Karina's Mexican Seafood	6180101700	986	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Karina's Mexican Style Seafood #2	6192122200	1282	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
KD Inc/Krazy Dollar	6170800800	1161	BAY	BL	Cat x-Eating/Drinking ...	Low	5331		
KFC - 461Third Ave	5685112000	461	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
KFC-- Medical Center Dr	6411221700	1361	MEDICAL CENTER	DR	Cat x-Eating/Drinking ...	High	5812		
KFC-1327 Broadway	6220433400	1327	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
KIC Import & Export	5733310800	737	THIRD	AV	Cat x-Eating/Drinking ...	Low	5399		
Kings Fish House	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
KMart Corp. #7636	6402923600	875	H	ST	Cat x-Eating/Drinking ...	Low	5399		√
Koopman Enterprise	6396307800	376	THERESA	WY	Cat x-Eating/Drinking ...	Low	5399		

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Kotija Taco Shop	6240800800	295	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		√
Kyoto Sushi		2322	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low			
L & L Barbecue	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
L Street Shell	6180211800	902	BROADWAY		Cat x-Eating/Drinking ...	Medium	5411		
La Bella Pizza	5683502500	373	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
La Bodega Market	6182101600	1193	BROADWAY		Cat x-Eating/Drinking ...	High	5411		√
La Casa De Dona Maria	6221114100	2530	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
La Escondida	6221114100	2530	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
La Fresca	6181513000	1037	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
La Fuente Mexican Food	5660106500	34	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
La India Bonita	6240800600	1455	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812		√
La Kalaka Flaca Gourmet Mexican Food	6192215300	1223	THIRD	AV	Cat x-Eating/Drinking ...	Low			
La Moreliana Bakery	6230602500	275	QUINTARD	ST	Cat x-Eating/Drinking ...	Low	5461		
La Nena's Mexican Restaurant	5670902500	396	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
La Parroquia Cafe & Music Lounge	6430610500	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
La Plamita	6192214700	1231	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
La Quinta Grill	5652302300	625	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
La Taquiza Mexican Restaurant	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	Low	5812		
La Torta	5710301200	730	H	ST	Cat x-Eating/Drinking ...	Low	5812		
La Tropicana	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		

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Las Cazuelas de Nohelia		534	BROADWAY		Cat x-Eating/Drinking ...	Low			
Las Golondrinas Taco Shop	5711530600	686	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Las Gorditas		1187	BROADWAY		Cat x-Eating/Drinking ...	Low			
Liberty Giant Pizza	6201301800	1419	HILLTOP	DR	Cat x-Eating/Drinking ...	Low	5812		
Lisa's Filipino Cuisine	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√
Little Caesar's Pizza		481	BROADWAY		Cat x-Eating/Drinking ...	Low			
Little Caesars 7636	6402923600	875	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
LJ San Miguel Ranch 22 LP/Los Primos Mex Food	5950300600	2322	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low	5812		√
Lolitas Taco Shop - Bonita	5933500100	4516	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Lolitas Taco Shop - Palomar	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		√
Lolitas Taco Shop - Telegraph	6394901300	413	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812		√
Lomas Cafe Mexican Food	6232022500	3218	MAIN	ST	Cat x-Eating/Drinking ...	High	5812		
Long John Silvers	6190611400	1049	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		
Lorenzos	5670324500	200	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Los Alazanes Inc.	5941310200	1451	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Los Chilaquiles		2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low			
Los Jalapenos Mexican Restaurant	6180620100	943	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Los Panchos Authentic Mexican and Seafood		577	H	ST	Cat x-Eating/Drinking ...	Low			
Los Panchos Mexican & Seafood	6421701000	933	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Los Panchos Taco Shop	6190610300	1009	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√

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Los Taquitos	6232022700	1665	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Los Taquitos Mexican Grill	6182803900	1208	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Los Tres Pedros	6192215300	1223	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Lucys Market	6220722000	1576	INDUSTRIAL	BL	Cat x-Eating/Drinking ...	Low	5411		
Luna Grill	5950720800	2275	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		
Lutong Bahay & Oriental Grill	5941310900	732	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Luzitas Taco Shop	5743003200	60	J	ST	Cat x-Eating/Drinking ...	Low	5812		√
Macaroni Grill	6430610200	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		
Mandarin Canton Restaurant	6390806400	543	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812		√
Mandarin Chinese	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Manna Restaurant	5670903900	600	F	ST	Cat x-Eating/Drinking ...	Low	5812		
Marie Calendar #103	5682702000	330	F	ST	Cat x-Eating/Drinking ...	High	5812		
Marios Taco Shop	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Mariscos El Palmar	5670411600	201	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Mariscos Los Arcos Restaurant	5700203400	89	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Marisol Nite Club	6221114600	2638	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
Maye's Desserts	5932800200	4240	BONITA	RD	Cat x-Eating/Drinking ...	Low	5499		√
McDonalds #25836/TRS Restaurant	6411221900	687	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		
McDonalds - Jill A Lindstedt	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
McDonalds - Jill A Lindstedt	5653102700	725	E	ST	Cat x-Eating/Drinking ...	Low	5812		√

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
McDonalds - Telegraph	6390806700	551	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812		√
McDonalds 1150 Broadway	6182007100	1150	BROADWAY		Cat x-Eating/Drinking ...	High	5812		√
McDonalds at 619 Broadway	5720803400	619	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
McDonalds at E Street	5653102700	725	E	ST	Cat x-Eating/Drinking ...	High	5812		√
McDonalds at Third #1557	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
McDonalds Corp 1288 Broadway	6182803700	1288	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
McDonalds of Bonita	5932800900	4340	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
McDonalds Otay Lakes Road	5953220900	2254	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√
Mea Kwan Thai Cuisine		2322	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	Low			
Mercado International 2000	6230606100	1415	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		
MGM Buffet	6182803500	693	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Mike's Giant NY Pizza #7		1445	THIRD	AV	Cat x-Eating/Drinking ...	Low			
Miramar Fish Market	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
MJ's Bar & Grill	6230606700	1445	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
MR VS Giant Pizza	6190507100	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
MRS Rice Oriental Restaurant, LLC	6220433200	1355	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
NAPA Pizza	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Nashikinnos Deli		1419	HILLTOP	DR	Cat x-Eating/Drinking ...	Low			
Negro Durazo	5672112200	415	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Ninna Matty's Mexican Food	6192806000	1352	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Ocean City Partnership	6181510200	1011	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Olive Garden Restaurant #1205	5720104500	585	I	ST	Cat x-Eating/Drinking ...	Low	5812		
Otay Farms Inc.	6290101500	1716	BROADWAY		Cat x-Eating/Drinking ...	High	5411		
Outside In	6191213600	1121	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Palap Charbroiled Chicken	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		√
Palomar Importer & Wholesale Co. Inc.	6221114100	2550	MAIN	ST	Cat x-Eating/Drinking ...	Low	5399		
Panchos Mexican Grill	6421701000	933	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low			
Panda Chef	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√
Panda Express #1098	6240606700	1820	MAIN	CT	Cat x-Eating/Drinking ...	High	5812		
Panda Express #1316	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
Panda Express #960	6182006500	1120	BROADWAY		Cat x-Eating/Drinking ...	High	5812		√
Panda Imperial Chinese	6192113400	1208	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
Panda Imperial Restaurant	6192113400	1208	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Panda King	5941310200	1459	H	ST	Cat x-Eating/Drinking ...	High	5812		
Panera Bread	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
Papa Johns Pizza #1977	6190601600	1085	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Papa Johns Pizza #1978	6402932300	1020	TIERRA DEL REY		Cat x-Eating/Drinking ...	Low	5812		√
Papa Murphy's Take & Bake Pizza	6240800800	263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		√
Park & Joo Enterprise Inc/DBA Rice King	6420201700	1550	H	ST	Cat x-Eating/Drinking ...	Low	5812		√
Pescados Mariscos Hectors	5952323000	2305	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Pescados Y Mariscos Hectors	6182106300	1177	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
PF Changs China Bistro	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Pho Vien Dong	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812		√
Pick Up Stix	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812		√
Pinnochio	5680711200	225	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Pizza & Pasta Express	6425602100	1392	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		√
Pizza Hut	6430207300	542	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Pizza Hut	6430207300	251	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		
Pizza Hut - H St	6400291400	885	H	ST	Cat x-Eating/Drinking ...	High	5812		
Pizza Junction	5670324500	226	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Plazas Mexican Food	6220913700	1550	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Poe's Catering	5954100222	2156	LAGO MADERO		Cat x-Eating/Drinking ...	Low	5812		√
Poliza Hollywood Inc	5743003200	72	J	ST	Cat x-Eating/Drinking ...	High	5411		√
Pozoleria Dona Maria	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Prima Supply Inc.	6221115800	649	ANITA	ST	Cat x-Eating/Drinking ...	Low	5399		
Rally's Hamburger/Ongs Restaurant Group	6190511300	1004	THIRD	AV	Cat x-Eating/Drinking ...	High	5812		√
Ralphs #235	6411221400	659	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411		
Ralphs #75	5941310100	780	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411		√
Rancho Palomar LP	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Red Lobster #521	5682702700	342	F	ST	Cat x-Eating/Drinking ...	High	5812		

Facility Name	APN		Address		Category	Priority	SIC Number	Mobile Business	Tributary
Red Lobster - Chula VIsta Center			H	ST	Cat x-Eating/Drinking ...	Low	5812		
Red Ribbon Bakery	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		
Roberto DePhillippis Steak House	5710500800	556	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Roberto's Taco Shop	6181422700	1052	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Robledo's Taco Shop Inc.	5672001500	444	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Romesco Baja Bistro	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Rosa Giant Pizza	6221114800	1680	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Rubios Fresh Mexican Grill	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	High	5812		√
Rubios Fresh Mexican Grill at Broadway	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Rubios Fresh Mexican Grill at Eastlake	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812		√
San Diego Cash & Carry	6232502500	3630	MAIN	ST	Cat x-Eating/Drinking ...	Low	5399		
Santa Fe Meats	6221112000	2514	MAIN	ST	Cat x-Eating/Drinking ...	High	5411		
Sapphire Lounge	5912522500	4076	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Sareta Food Corporation - Tacos and Beer	6430610500	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
Seafood City Market	6192805800	285	ORANGE	AV	Cat x-Eating/Drinking ...	High	5411		
Selecta Mexican Foods	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Senor Pancho Mexican Grill	6231423900	298	MONTGOMERY	ST	Cat x-Eating/Drinking ...	Low	5812		
Seven Eleven #13569E-2131	5712002300	796	BROADWAY		Cat x-Eating/Drinking ...	Low	5411		
Shakey's Pizza	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Silver Cup Bakery	6426402800	1352	SANTA CORA	AV	Cat x-Eating/Drinking ...	Low	5461		√

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Silver Dollar	5683340400	341	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Sitoo's Deli & Catering	5952313500	2300	BOSWELL	RD	Cat x-Eating/Drinking ...	Low	5812		√
SL Gourmet/Chinese Gourmet Express	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Smart & Final #463 / SFI Corp	6290607500	3141	MAIN	ST	Cat x-Eating/Drinking ...	High	5411		
Smoothie Caffe	5950705500	2070	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812		√
Snack Ball	6232301700	3804	MAIN	ST	Cat x-Eating/Drinking ...	Low	5812		
Sodexho Management Inc.	5743003400	84	J	ST	Cat x-Eating/Drinking ...	Low	5812		√
South Bay Foods Inc.		1680	HILLTOP	DR	Cat x-Eating/Drinking ...	High			
Southbay Fish and Grill	7600480102	570	MARINA	PW	Cat x-Eating/Drinking ...	Low	5812		
Sprouts Market - Formerly Henry's	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		
Star Bakery	6192806000	1372	THIRD	AV	Cat x-Eating/Drinking ...	Low	5461		
Star Gazer Club	5653201600	33	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Steak Escape Otay Ranch Town Center	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812		√
Stuart Anderson Black Angus Restaurant	5653101700	707	E	ST	Cat x-Eating/Drinking ...	Low	5812		√
Sunny's Market	5672122000	449	BROADWAY		Cat x-Eating/Drinking ...	Low	5411		
Super Express Chinese Food	5720803500	609	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Sushi Loco	5670324500	224	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
Sushiya	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812		√
Sutherland Management Co.	5932800900	4394	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
Sweet Life	5682702100	310	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Taco Bell #15508	6420201700	1548	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Taco Bell #2971	5922001300	340	H	ST	Cat x-Eating/Drinking ...	High	5812		√
Taco Bell #3398	5670320100	696	E	ST	Cat x-Eating/Drinking ...	High	5812		√
Tacos El Gordo	5671902800	689	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Tacos El Gordo De Tijuana, BC Jr	6193001100	1351	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Tacos El Poblano	6402924000	885	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Tacos Toby	6240606200	1682	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5812		√
Talavera Azul	5683504000	365	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Taqueria El Farolito	6182803300	651	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Tasita D Cafe	6220913300	1550	BROADWAY		Cat x-Eating/Drinking ...	Low	5451		
Texcoco Restaurant	6181512900	1043	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		√
The Flafel Shoppe	5651703500	115	BROADWAY		Cat x-Eating/Drinking ...	High	5812		√
The Plascencia Group LLC	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812		√
The Soup Stone	5682702100	310	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		
Thien's Optimart	5672003900	498	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Third Avenue Minimart	5733204000	772	THIRD	AV	Cat x-Eating/Drinking ...	Low	5411		
TJ Oyster Bar	5932800200	4410	BONITA	RD	Cat x-Eating/Drinking ...	High	5812		√
Tortillas De Harina Elice	6221114900	1660	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Tortilleria Santa FE, Inc.	6231820400	387	ZENITH	ST	Cat x-Eating/Drinking ...	Low	5812		
Tropical Fruits	6220412700	1410	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Unlimited Dream Ventures		374	H	ST	Cat x-Eating/Drinking ...	Low	5812		
Valerios Tropical Bake Shop	6240800800	285	ORANGE	AV	Cat x-Eating/Drinking ...	Low	5812		
VIP Oriental Buffet	5710500600	542	BROADWAY		Cat x-Eating/Drinking ...	Low	5812		
Vons Food & Drug #2006	6390806200	505	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411		√
Vons Food & Drug #2071	5953220200	2250	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411		√
Vons Food & Drug #2130	5932800600	4404	BONITA	RD	Cat x-Eating/Drinking ...	High	5411		√
Vons Food & Drug #2336	5922000500	360	H	ST	Cat x-Eating/Drinking ...	High	5411		√
Vons Food & Drug #3063	5734503400	870	THIRD	AV	Cat x-Eating/Drinking ...	High	5411		√
Walmart @ Eastlake	6430208400	1360	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5399		√
Weinershnitzel - Palomar	6192221400	283	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812		
Wendy's	5670325100	618	E	ST	Cat x-Eating/Drinking ...	High	5812		√
Wendy's Coastline Food Service Corp	5950720600	960	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812		√
Wienerschitzel	6192221400	283	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812		
Wienerschnitzel #16	5672321800	493	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Wings N Things Restaurant	5672322300	481	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Xana Spree	5957505000	391	PLAZA TOLUCA		Cat x-Eating/Drinking ...	Low	5399		√
Yo Julian's Mexican Food	6190507100	1090	THIRD	AV	Cat x-Eating/Drinking ...	Low	5812		√
Yoshinoya Beef Bowl	6182901500	1299	BROADWAY		Cat x-Eating/Drinking ...	High	5812		
Zorba's Family Restaurant	5651622800	100	BROADWAY		Cat x-Eating/Drinking ...	High	5812		√

Cat xi-Mob. Carpet/Drape

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Active Carpet Cleaning	5693111900	43	ALVARADO	PL	Cat xi-Mob. Carpet/Drape	Low	7217	√	
America's Finest Carpet	6442302300	730	DESIGN	CT	Cat xi-Mob. Carpet/Drape	High	5713	√	
Bonita Carpet Care	5955205800	2506	SADDLEHORN	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Buena Vista Carpet Care	6243850500	1551	LOMA	LN	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Carlos Sandoval Carpet Center	5731300500	380	I	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Cool Style Carpet Cleaning	5712332000	752	MADISON	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Day & Night Carpet Cleaning Services	5683322200	317	TWIN OAKS	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Del Rey Carpet Service	5933702900	535	PASEO ROSAL		Cat xi-Mob. Carpet/Drape	Low	7217	√	
Dollar Carpet Cleaning	6431823800	2287	SUN VALLEY	RD	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Edwards Carpet Cleaning	6410910400	578	NANTUCKET	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Empire Carpet Service Inc.	5957232000	556	SCENIC TRAIL	PL	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Extreme Carpet Care Services LLC	6233151100	1540	CONNOLEY	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
First Touch Steam Carpet Cleaning	6182106300	1177	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217	√	
Foreign Auto Upholstery	5754000100	55	NAPLES	ST	Cat xi-Mob. Carpet/Drape	Low	7532	√	
Frankys Floor & Carpet Care	6190105200	971	FOURTH	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Golden Care Carpet Cleaning	6243711600	1768	REGENCY	WY	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Hydro Pacific Carpet Cleaning	5680421100	232	GARRETT	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Integrity Carpet Cleaning	5652904100	30	WOODLAWN	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
L&V Cleaning Services	6233331300	64	SHERWOOD	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Lavamax Carpet Cleaning	5634410500	320	TROUSDALE	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Ocean's Carpet	6221112500	2488	MAIN	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Preferred Carpet Care	5651623100	110	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217	√	
RC Carpet & Furniture Cleaning	5735330600	162	L	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
RG Carpet Cleaning	6412710400	1097	MOUNT DANA	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Rosalie's Carpet Cleaning	6181522600	1057	BROADWAY		Cat xi-Mob. Carpet/Drape	Low	7217	√	
Rueda's Carpet Cleaning	6244213600	274	RANCHO	CT	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Select Carpets	6204202000	4501	OTAY VALLEY	RD	Cat xi-Mob. Carpet/Drape	Low	5713	√	
Servpro of Fire & Water Damage	6411431300	1485	LA CHICA	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Siedschlag Carpet Cleaning	5710620800	537	OAKLAWN	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Southbay Carpet Care	6422404000	1883	GOTHAM	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Sunset Carpet Cleaning	5672111000	557	VANCE	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Sunset Carpet Cleaning & Services	6422724300	931	BUENA VISTA	WY	Cat xi-Mob. Carpet/Drape	Low	7217	√	
TNT Carpets	5742311800	658	CARLA	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Two Brothers Carpet & Upholstery Cleaning	5651312300	50	MONTE VISTA	AV	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Vegas Carpet Cleaning	5754321700	1108	HILLTOP	DR	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Warrior Carpet	6442214600	1546	POINT HUENEME	CT	Cat xi-Mob. Carpet/Drape	Low	7217	√	
We Buff It Too Biz	5682630600	489	G	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
We Care Carpet Cleaning	5951750300	1937	DUKE	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	
Westcoast Carpet Cleaning	5733712300	297	K	ST	Cat xi-Mob. Carpet/Drape	Low	7217	√	

Cat xii-Cement Mixing/Cut

Facility Name	APN		Address		Category	Priority	SIC Number	Mobile Business	Tributary
Arturo Cervantes Barajas Concrete Co.	6206030400	1264	RAVEN	AV	Cat xii-Cement Mixing/Cut	Low	1771	√	
Buildis and Son Cement	5733322100	720	DEL MAR	AV	Cat xii-Cement Mixing/Cut	Low	1771	√	
California Concrete Designs	6424800400	1631	COOLSPRINGS	CT	Cat xii-Cement Mixing/Cut	Low	1771	√	
Contrera's Concrete Service	5735411300	113	L	ST	Cat xii-Cement Mixing/Cut	Low	1771	√	
Cuen Fred Concrete Service	6200301000	47	OXFORD	ST	Cat xii-Cement Mixing/Cut	Low	1771	√	
John Tessitore	5735220300	812	FAIRWAY	CT	Cat xii-Cement Mixing/Cut	Low	1771	√	
Nora's Concrete	5691330300	110	F	ST	Cat xii-Cement Mixing/Cut	Low	1771	√	
RDS Concrete Construction	5693020600	479	CORTE HELENA	AV	Cat xii-Cement Mixing/Cut	Low	1771	√	
Rubios Concrete Construction	6220722400	725	BELVIA	LN	Cat xii-Cement Mixing/Cut	Low	1771	√	
The Rock Concrete Pumping	6180901900	1031	COLORADO	AV	Cat xii-Cement Mixing/Cut	Low	1771	√	

Cat xiii-Masonry

A&E Carpet & Tile Distributors	6291002300	170	MACE	ST	Cat xiii-Masonry	Low	1743	√	
Alpha-Omega Hardscape	5952931300	861	SOUTHSHORE	DR	Cat xiii-Masonry	Low	1741	√	
Chula Vista Tile & Stone	6182803500	693	PALOMAR	ST	Cat xiii-Masonry	Low	1743	√	
DS Construction	5663002200	172	D	ST	Cat xiii-Masonry	Low	1742	√	
Emerald Plastering	5752001200	947	HELIX	AV	Cat xiii-Masonry	Low	1742	√	
FJL Masonry	5958001500	1002	SUTTER RIDGE	CT	Cat xiii-Masonry	Low	1741	√	
J&J Tile Service	5650801200	54	SMITH	AV	Cat xiii-Masonry	Low	1743	√	
Jasa Concrete	6205101900	1414	MELROSE	AV	Cat xiii-Masonry	Low	1741	√	
JR Drywall	6202621800	121	PALOMAR	ST	Cat xiii-Masonry	Low	1742	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Klaser Tile Company Inc.	6222303400	1595	JAYKEN	WY	Cat xiii-Masonry	Low	1743	√	
MAC Plastering Inc.	6424901800	1705	FAWNTAIL	CT	Cat xiii-Masonry	Low	1742	√	
Masonry By Michael	6403810800	573	PLAZA DEL CID		Cat xiii-Masonry	Low	1741	√	
Masonry Pros	5741401800	78	KING	ST	Cat xiii-Masonry	Low	1741	√	
Precison Plastering	5730900800	389	I	ST	Cat xiii-Masonry	Low	1742	√	
South Coast Structures	6392320700	801	HALECREST	DR	Cat xiii-Masonry	Low	1741	√	
TRS Tile	6201610600	1221	HELIX	AV	Cat xiii-Masonry	Low	1743	√	
USA Stone Design	6180103300	970	BROADWAY		Cat xiii-Masonry	Low	1741	√	
Valencia Stone and Tile	5662503100	241	E	ST	Cat xiii-Masonry	Low	1743	√	
Vent Pros	6192113200	325	OXFORD	ST	Cat xiii-Masonry	Low	1743	√	
WEMAC Marine Insulation	6221023500	753	ANITA	ST	Cat xiii-Masonry	Low	1742	√	

Cat xiv-Painting/Coating

Alfred's Painting	6183600800	544	WELTON	ST	Cat xiv-Painting/Coating	Low	17721	√	
Allstar Painting Services	6433411100	1957	MOSS LANDING	AV	Cat xiv-Painting/Coating	Low	7349	√	
Arrow Professional Painting	6413011600	1170	WIND RIVER	RD	Cat xiv-Painting/Coating	Low	1721	√	
Arroyo Custom Painting Corp	6423800610	1365	SERENA	CI	Cat xiv-Painting/Coating	Low	1721	√	
Barba Painting	6426001000	1537	APPLEGATE	ST	Cat xiv-Painting/Coating	Low	1721	√	
Discount Painting	6423801607	1335	SERENA	CI	Cat xiv-Painting/Coating	Low	1721	√	
G&R Painting	6180623900	580	MOSS	ST	Cat xiv-Painting/Coating	Low	1721	√	
Gaskill Painting Company Inc.	6442302100	744	DESIGN	CT	Cat xiv-Painting/Coating	Low	1721	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
George Painting	6205412200	1420	CAMELLIA	CT	Cat xiv-Painting/Coating	Low	1721	√	
Hawkin's Painting Company	5752620500	976	GUATAY	AV	Cat xiv-Painting/Coating	Low	1721	√	
Icon Painting Solutions	6411305200	1480	VENTERS	DR	Cat xiv-Painting/Coating	Low	1721	√	
Jam Painting Inc.	6230501400	317	QUINTARD	ST	Cat xiv-Painting/Coating	Low	1721	√	
Lazaro's Painting	6244325700	252	RANCHO	DR	Cat xiv-Painting/Coating	Low	1721	√	
Luther Painting	5680142300	215	GUAVA	AV	Cat xiv-Painting/Coating	Low	1721	√	
Maintenance	6432903800	1150	HITCHING POST	LN	Cat xiv-Painting/Coating	Low	1721	√	
Marcelo's Distinctive Painting	6181511100	567	MOSS	ST	Cat xiv-Painting/Coating	Low	1721	√	
MCS Painting	5663005600	121	SECOND	AV	Cat xiv-Painting/Coating	Low	1721	√	
My Painter Plus.Com	6203600100	1360	MYRA	CT	Cat xiv-Painting/Coating	Low	1721	√	
NR Painting Inc.	6433914200	2526	KING CREEK	CI	Cat xiv-Painting/Coating	Low	1721	√	
Painters at Work	6182106100	550	OXFORD	ST	Cat xiv-Painting/Coating	Low	1721	√	
Paradise Painting	6403300107	1015	CAMINITO ESTRELLA		Cat xiv-Painting/Coating	Low	1721	√	
Quality Home Painting	5952122100	2019	BRIDGEPORT		Cat xiv-Painting/Coating	Low	1721	√	
Ray Garcia	5700204000	24	FLOWER	ST	Cat xiv-Painting/Coating	Low	1721	√	
Rolling Hills Custom Painting	6192501500	116	PALOMAR	ST	Cat xiv-Painting/Coating	Low	1721	√	
Safari Painting	5681610300	259	THIRD	AV	Cat xiv-Painting/Coating	Low	1721	√	
Sammy's Painting Company	6192221100	225	PALOMAR	ST	Cat xiv-Painting/Coating	Low	1721	√	
Scott Painting Company	6393630200	752	PASEO DEL REY		Cat xiv-Painting/Coating	Low	1721	√	
South Coast Home Painting	6393141300	1015	NORMA	CT	Cat xiv-Painting/Coating	Low	1721	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Southbay Painting	5651701100	564	D	ST	Cat xiv-Painting/Coating	Low	1721	√	
Sumaya Painting	5730502200	244	H	ST	Cat xiv-Painting/Coating	Low	1721	√	
Superb Interior Painting	6437335000	1679	PICKET FENCE	DR	Cat xiv-Painting/Coating	Low	1721	√	
Superior Color Painting	6437323200	1604	PICKET FENCE	DR	Cat xiv-Painting/Coating	Low	1721	√	

Cat xvi-Landscaping

A & F Landscaping and Concrete	6437601700	1002	MERCED RIVER	RD	Cat xvi-Landscaping	High			
A&G Landscaping	6203502500	226	QUINTARD	ST	Cat xvi-Landscaping	Low	0782	√	
AJ Gardening	6411707100	1125	MISTY CREEK	ST	Cat xvi-Landscaping	Low	0782	√	
All Palms Plus	6411307000	1471	VENTERS	DR	Cat xvi-Landscaping	Low	0782	√	
American Veteran Lawn Care	6393530400	431	NAPLES	ST	Cat xvi-Landscaping	Low	0782	√	
Arroyo Landscaping	6424000100	1494	WOODCREST	ST	Cat xvi-Landscaping	Low	0782	√	
AXL Landscaping	6404002000	1136	CALLE DE DAMASCO		Cat xvi-Landscaping	Low	0782	√	
Beltran Landscaping	6433521000	2078	MIRROR LAKE	PL	Cat xvi-Landscaping	Low	0782	√	
Better Greens	6192615100	1230	TOBIAS	DR	Cat xvi-Landscaping	Low	0782	√	
Bufallo Quality Tree Work	5950931100	902	ASPEN GLEN	RD	Cat xvi-Landscaping	Low	0782	√	
C&R Landscaping	6392800300	314	MOSS	ST	Cat xvi-Landscaping	Low	0782	√	
Castro Lawn Care	6233331100	70	SHERWOOD	ST	Cat xvi-Landscaping	Low	0782	√	
Chau Pen Van	5753410400	1037	HELIX	AV	Cat xvi-Landscaping	Low	0782	√	
Chermak Joseph	5751830100	52	FORTUNA	ST	Cat xvi-Landscaping	Low	0782	√	
Clean Cut Lawn Services	5711810100	702	COLORADO	AV	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
CMN Lawn Services	5944331800	1208	POSITAS	RD	Cat xvi-Landscaping	Low	0782	√	
Colonial Gardens Inc	5922302100	578	PARKSIDE	DR	Cat xvi-Landscaping	Low	0782	√	
Complete Lawn Maintenance	5652020200	470	D	ST	Cat xvi-Landscaping	Low	0782	√	
Cortez Samuel Landscaping	6403405100	1058	CAMINO ATAJO		Cat xvi-Landscaping	Low	0782	√	
Decasas Garden	6244012100	1539	GRAND TETON	CT	Cat xvi-Landscaping	Low	0782	√	
Desert Garden's & Sons	6423040500	1351	BLUE FALLS	DR	Cat xvi-Landscaping	Low	0782	√	
Dixon Landscaping Solutions	6433801917	1243	CABEZAS COVE		Cat xvi-Landscaping	Low	0782	√	
Dreamview Landscaping	5755401400	226	OXFORD	ST	Cat xvi-Landscaping	Low	0782	√	
E Kim Landscaping	6403514800	1002	CAMINO CALABAZO		Cat xvi-Landscaping	Low	0782	√	
Elite Hauling Services	6191921600	1180	FIRST	AV	Cat xvi-Landscaping	Low	0782	√	
Enrique Ybarra Landscape Maintenance	5710802300	619	WHITNEY	ST	Cat xvi-Landscaping	Low	0782	√	
Epifanio Morales Gardens Landscape	5721723200	684	FOURTH	AV	Cat xvi-Landscaping	Low	0782	√	
Eriks Lawn Maintenance	6202020300	1195	NAPA	AV	Cat xvi-Landscaping	Low	0782	√	
Ernesto Casillas Landscaping	6182105000	555	NAPLES	ST	Cat xvi-Landscaping	Low	0782	√	
Ernie Salazar Landscaping	6180613100	958	CEDAR	AV	Cat xvi-Landscaping	Low	0782	√	
Evergreen Gardening Service	6435432400	1486	OAKPOINT	AV	Cat xvi-Landscaping	Low	0782	√	
Ezequiel Perez Landscaping	5650900800	44	FIFTH	AV	Cat xvi-Landscaping	Low	0782	√	
Fast and Friendly	6412200800	1352	SANTA OLIVIA	RD	Cat xvi-Landscaping	Low	0782	√	
Federal Land Management Corp	6184200700	440	NICKMAN	ST	Cat xvi-Landscaping	Low	0782	√	
Gaeta's Tree Service	6433700124	2543	GARNET PEAK	RD	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Gotta Go Mow & Landscaping	6434102300	1968	MEEKS BAY	DR	Cat xvi-Landscaping	Low	0782	√	
Green Desert	5954406000	1081	FOREST LAKE	DR	Cat xvi-Landscaping	Low	0782	√	
Green Earth Gardening Service	6396840700	145	CORTE MARIA	AV	Cat xvi-Landscaping	Low	0782	√	
Green Grass Landscape	6243930300	149	RAINIER	CT	Cat xvi-Landscaping	Low	0782	√	
Hale Landscaping	5712222000	752	WOODLAWN	AV	Cat xvi-Landscaping	Low	0782	√	
Handy Lawn Care	6435803000	2016	GEYSERVILLE	ST	Cat xvi-Landscaping	Low	0782	√	
Hector Gardening	5951741100	1946	DUKE	ST	Cat xvi-Landscaping	Low	0782	√	
Heldiz Landscape	6204400500	295	RIENSTRA	ST	Cat xvi-Landscaping	Low	0782	√	
Hernandez Gardening	6181020400	1038	JEFFERSON	AV	Cat xvi-Landscaping	Low	0782	√	
Herrera Antonio Landscape	6203304000	140	RIVERA	CT	Cat xvi-Landscaping	Low	0782	√	
Hinkle Tree Service	5651621100	143	MADISON	AV	Cat xvi-Landscaping	Low	0782	√	
JC Landscaping	5952412800	2157	HAMDEN	DR	Cat xvi-Landscaping	Low	0782	√	
Jeff's Lawn Care	5753630100	995	MONSERATE	AV	Cat xvi-Landscaping	Low	0782	√	
Jessica Lopez Design	6412101300	972	MCCAIN VALLEY	CT	Cat xvi-Landscaping	Low	0782	√	
JM Landscaping	6192807715	1303	CALLE TEMPRA		Cat xvi-Landscaping	Low	0782	√	
JM Lawns	6230202700	368	ANITA	ST	Cat xvi-Landscaping	Low	0782	√	
John's Yard Service	5742521800	668	ROBERT	AV	Cat xvi-Landscaping	Low	0782	√	
Johnson Greenery	5735320600	171	L	ST	Cat xvi-Landscaping	Low	0782	√	
Jose's Gardening	5753300800	1013	CUYAMACA	AV	Cat xvi-Landscaping	Low	0782	√	
Jose's Lawn Service	6411444100	1428	LA CHICA	DR	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
JR's Landscape	5650310600	689	CHULA VISTA	ST	Cat xvi-Landscaping	Low	0782	√	
Juan J. Hale Landscaping Maint. Service	6181522600	1057	BROADWAY		Cat xvi-Landscaping	Low	0782	√	
Juan Leal Landscape	6310122200	308	PALM	AV	Cat xvi-Landscaping	Low	0782	√	
Kazper's Landscaping	6192113800	1246	THIRD	AV	Cat xvi-Landscaping	Low	0782	√	
Kiki's Paradise Landscaping	6424101606	1360	CALLEJON CERVANTES		Cat xvi-Landscaping	Low	0782	√	
Kutting Edge	6232903400	1617	JADE	AV	Cat xvi-Landscaping	Low	0782	√	
Kyoto Landscape	6220912600	602	ANITA	ST	Cat xvi-Landscaping	Low	0782	√	
Land Art	6403107400	725	GREDOS	PL	Cat xvi-Landscaping	Low	0782	√	
Landscape Enterprise	5661321600	25	D	ST	Cat xvi-Landscaping	Low	0782	√	
Leo's Landscape	5922210903	480	BELLE VISTA	DR	Cat xvi-Landscaping	Low	0782	√	
Leon's Landscaping Service	6430515004	1453	TROUVILLE	LN	Cat xvi-Landscaping	Low	0782	√	
Lua's Landscaping	6182000100	1100	INDUSTRIAL	BL	Cat xvi-Landscaping	Low	0782	√	
Lucero's Landscaping	6190105800	374	MOSS	ST	Cat xvi-Landscaping	Low	0782	√	
Manzano's Landscaping	6395932400	739	NEPTUNE	CT	Cat xvi-Landscaping	Low	0782	√	
Mario's Landscaping	6411134800	576	SIPES	CI	Cat xvi-Landscaping	Low	0782	√	
Mariposa's Landscape	6396821200	666	MARIPOSA	CI	Cat xvi-Landscaping	Low	0782	√	
Martin & Zamora Landscape Maintenance	5721930600	758	ASH	AV	Cat xvi-Landscaping	Low	0782	√	
Maximum & Green Maintenance	6240552500	309	VALLEY	AV	Cat xvi-Landscaping	Low	0782	√	
Mel's Gardening Service	6412022800	910	ISRAEL	CT	Cat xvi-Landscaping	Low	0782	√	
MG Gardening	6205904000	357	PEPPERWOOD	CT	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
MGM Landscape Inc	5943610200	558	TRAILRIDGE	DR	Cat xvi-Landscaping	Low	0782	√	
Miles Bob Irrigation	6395933600	752	NACION	AV	Cat xvi-Landscaping	Low	0782	√	
Ochi Gardens	6397013300	176	CAMINO ENTRADA		Cat xvi-Landscaping	Low	0782	√	
Olguin's Landscape	5662911500	186	CORTE HELENA	AV	Cat xvi-Landscaping	Low	0782	√	
Orlando's Garden	6290201100	2887	MAIN	ST	Cat xvi-Landscaping	Low	0782	√	
Ortega Landscape	6182901200	1225	BROADWAY		Cat xvi-Landscaping	Low	0782	√	
P Gracia Landscape	6183011600	490	SHY	LN	Cat xvi-Landscaping	Low	0782	√	
P&A Garden Landscaping	5721723200	684	FOURTH	AV	Cat xvi-Landscaping	Low	0782	√	
Pacific Turf Specialists	5742520800	681	CLAIRE	AV	Cat xvi-Landscaping	Low	0782	√	
PCM Maintenance Landscape Service	5922109300	400	KRISTA	CT	Cat xvi-Landscaping	Low	0782	√	
Pedro's Landscaping	5652200200	443	FLOWER	ST	Cat xvi-Landscaping	Low	0782	√	
Pena's Gardening Maintenance Service	6200420100	236	OLYMPIA	ST	Cat xvi-Landscaping	Low	0782	√	
Picket Fences Landscaping Inc.	6434844000	1263	POPLAR SPRING	RD	Cat xvi-Landscaping	Low	0782	√	
PK Shedenhelm's Landscaping	5943831200	1606	COUNTRY VISTAS	LN	Cat xvi-Landscaping	Low	0782	√	
Plays in the Dirt	5942112000	575	OTAY LAKES	RD	Cat xvi-Landscaping	Low	0782	√	
PRG Maintenance Gardening Service	6192807715	1303	CALLE TEMPRA		Cat xvi-Landscaping	Low	0782	√	
Pro Care Landscape & Gard	6401961100	1164	PASEO SARINA		Cat xvi-Landscaping	Low	0782	√	
Rafaelo's Tree Trimmer	6231122300	435	TREMONT	ST	Cat xvi-Landscaping	Low	0782	√	
RG Landscape & Design	6200212300	3	PAISLEY	ST	Cat xvi-Landscaping	Low	0782	√	
Rhinotech Landscape	6242400500	459	RIVERA	CT	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Rich Valens Tree Service	6191212300	1106	DEL MAR	AV	Cat xvi-Landscaping	Low	0782	√	
RM Landscape	5752710100	933	GUATAY	AV	Cat xvi-Landscaping	Low	0782	√	
Robert's Gardening Service	5712101600	749	RIVERLAWN	AV	Cat xvi-Landscaping	Low	0782	√	
Romita Landscape	6241802500	20	TOURMALINE	ST	Cat xvi-Landscaping	Low	0782	√	
Rudy Landscaping	6403220400	746	AVENIDA SOLARIA		Cat xvi-Landscaping	Low	0782	√	
Sam's Stump Removal	6191220400	1103	DEL MAR	AV	Cat xvi-Landscaping	Low	0782	√	
Silahua's Landscape and Yard Maintenance	6394110500	1169	OCALA	AV	Cat xvi-Landscaping	Low	0782	√	
Silva's Tree Service	5660200400	75	FOURTH	AV	Cat xvi-Landscaping	Low	0782	√	
Southwing Land Maint Inc.	5693010100	3855	SAN MIGUEL	AV	Cat xvi-Landscaping	Low	0782	√	
SPS/Creative Curb Landscapes	5933802700	839	CALLE LAGASCA		Cat xvi-Landscaping	Low	0782	√	
Steve Ferlito Gardening Service	6244212500	271	RANCHO	CT	Cat xvi-Landscaping	Low	0782	√	
Trim Around Yard Service	6421202400	914	WAYNE	AV	Cat xvi-Landscaping	Low	0782	√	
Trujillo Landscaping	5742522100	656	ROBERT	AV	Cat xvi-Landscaping	Low	0782	√	
Turf Pros	6441703300	598	RIVERA	ST	Cat xvi-Landscaping	Low	0782	√	
Valle Lawn Service	5941216200	1284	MARBELLA	PL	Cat xvi-Landscaping	Low	0782	√	
Vasquez Landscaping & Hauling	5730810102	398	MANKATO	ST	Cat xvi-Landscaping	Low	0782	√	
Vegas Gardening Landscaping Services	6412023000	901	ISRAEL	CT	Cat xvi-Landscaping	Low	0782	√	
VMG Landscaping	6240514300	270	DATE	ST	Cat xvi-Landscaping	Low	0782	√	
Western Tree Service	5943411100	1756	RIDGE CREEK	DR	Cat xvi-Landscaping	Low	0782	√	
Yonekura Glenn	5672320400	572	OTIS	ST	Cat xvi-Landscaping	Low	0782	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
			Cat xviii-Golf/Parks/Rec						
Alcala Park	6424816200	1620	MONTANA	RD	Cat xviii-Golf/Parks/Rec	Low	7996		√
Augusta Park	5953706900	1034	PARK MEADOWS	RD	Cat xviii-Golf/Parks/Rec	Low	7996		√
Bonita Haciendas Mini Park	5943114700	1518	VIA HACIENDA		Cat xviii-Golf/Parks/Rec	Low	7996		√
Boys & Girls Club of Chula Vista	6200601900	1301	OLEANDER	AV	Cat xviii-Golf/Parks/Rec	Low	7999		
Circle Park	6433902300		KING CREEK	CI	Cat xviii-Golf/Parks/Rec	Low	7996		
Cobblestone Park	5952035500		LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7996		√
Coors Amphitheatre	6450214700	2050	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	Low	7922		
Countryside Park	6432611000		PINON HILLS	RD	Cat xviii-Golf/Parks/Rec	Low	7996		√
Eastlake Beach Club	5952220700	2050	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7997		√
Eastlake Country Club	5953203000	2375	CLUBHOUSE	DR	Cat xviii-Golf/Parks/Rec	Low	7997		√
Fun 4 All	6170103000	950	INDUSTRIAL	BL	Cat xviii-Golf/Parks/Rec	Low	7996		√
Kensington Road Park	5955502800	2600	SADDLEBACK	ST	Cat xviii-Golf/Parks/Rec	Low	7996		√
Knotts Soak City USA	6450201700	2052	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	High	7996		
Madison Lane Park	5955201600	640	FALCON VALLEY	DR	Cat xviii-Golf/Parks/Rec	Low	7996		√
Magnolia Hill Park	5956901900	2640	MONTECITO	RD	Cat xviii-Golf/Parks/Rec	Low	7996		
Oak Crest Park	6426222300		SANTA MADERA	AV	Cat xviii-Golf/Parks/Rec	Low	7996		√
Orchard Park	6420712400		MONTE SERENO	AV	Cat xviii-Golf/Parks/Rec	Low	7996		√
Palace Garden Park	6230710400	1425	SECOND	AV	Cat xviii-Golf/Parks/Rec	Low	7996		
Salt Creek Golf Club	5950400800	525	HUNTE	PW	Cat xviii-Golf/Parks/Rec	Low	7997		

Facility Name	APN		Address		Category	Priority	SIC Number	Mobile Business	Tributary
San Diego County Club	6190300800	88	L	ST	Cat xviii-Golf/Parks/Rec	Low	7997		√
Scobee Park	5952310700	2351	KUHN	DR	Cat xviii-Golf/Parks/Rec	Low	7996		√
Shorebird Park	5952806400	2088	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7996		√
Wisteria Park	6420735100		SANTA RITA		Cat xviii-Golf/Parks/Rec	Low	7996		√

Cat xx-Pool/Fountain Clng

A Environmental Services	5692631100	125	H	ST	Cat xx-Pool/Fountain Clng	Low	7349	√	
ABC Pool Service	5682701746	376	CENTER	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Academy Pool Service & Supplies	6221114800	1680	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389	√	
Acuario Pool & SPA Maintenance	6206334400	1450	MELROSE	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
All Pro Pool Services	5932800100	4248	BONITA	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Ambart Inc.	5710630100	652	H	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Aqua Diamond Pool Service & Repair	6395102000	383	NOVA	PL	Cat xx-Pool/Fountain Clng	Low	7389	√	
Aqua Pro Pool & SPA Service	6433700415	1328	PINNACLE PEAK	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Aquatech Pool Service	5953700300	1057	PARK MEADOWS	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Azul Pool Service	6436716600	1546	HOPSCOTCH	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Blue Wave Pools	5752720100	5116	GLEN VERDE	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Bob Reed's Step Saver Pool Products	5662321300	326	E	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Bonita Vista Pool Service	6422104600	1618	MILLS	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
C&A Maint Service	6242000800	461	RIENSTRA	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
Chlor-Nation	5942221800	510	CAMINO ELEVADO		Cat xx-Pool/Fountain Clng	Low	7389	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Choice Maintenance and Repair	5933111500	960	SURREY	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Chula Vista Curbside Agency	6192215100	249	OXFORD	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Constable Pool Service	5952312900	2351	BOSWELL	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Cornerstone	5922107600	458	KARRA	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
Crystal Clear Poolz	6191620500	1123	TOBIAS	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
CTI of San Diego	5954811000	2137	CHATEAU	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
CV Pool Repair & Supply	6181421900	1082	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389	√	
E&D Pool and SPA Service	6204100900	1451	NAPA	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
Fire on Ice of San Diego	6411702900	1080	MOONSTONE	PL	Cat xx-Pool/Fountain Clng	Low	7389	√	
Fix Time	5952221578	2023	LAKERIDGE	CI	Cat xx-Pool/Fountain Clng	Low	7389	√	
Herbur Pool	6426900900	1421	FIELDBROOK	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Jim's Pool Clean Up	5942112000	575	OTAY LAKES	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Jose's Pool Service	5671030100	355	BROADWAY		Cat xx-Pool/Fountain Clng	Low	7389	√	
JP's Pool Service	6436312974	1571	CIRCULO BRINDISI		Cat xx-Pool/Fountain Clng	Low	7389	√	
Keep It Clean Pool Service	6403924300	1307	VAQUERO	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
Kelly's Pool and SPA Care	5954902300	1870	MARQUETTE	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Kng D C Pool & SPAS	6244021300	14	QUINTARD	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Leslie's Swimming Pool Supplies #299	5922000700	316	H	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Mack's Maintenance & Repair	5680741800	201	TWIN OAKS	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
Max Swimming Pool Service	6424602300	1298	MORGAN HILL	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Misty Creek Home Improvement	6411705700	1069	MISTY CREEK	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
New Look Concrete Creations	6422205700	1753	YALE	ST	Cat xx-Pool/Fountain Clng	Low	1711	√	
Patrick's Pool & SPA Service	5670801600	155	NAPLES	ST	Cat xx-Pool/Fountain Clng	Low	7389	√	
Pete & Irma's Pool And SPA	5952034700	2140	STONECREEK	PL	Cat xx-Pool/Fountain Clng	Low	7389	√	
Pressures On	6425401400	1288	SANTA LUCIA	RD	Cat xx-Pool/Fountain Clng	Low	7389	√	
Pure Water Pool and SPA	5955505500	2642	FLAGSTAFF	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
R3 & Sons	6206334400	1450	MELROSE	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
Robert The Handy Man	6422201800	1803	GOTHAM	ST	Cat xx-Pool/Fountain Clng	Low	7699	√	
San Diego Stone Technicians	6422404200	1863	GOTHAM	ST	Cat xx-Pool/Fountain Clng	Low	1743	√	
Sanchez Handyman Service	5711810600	730	COLORADO	AV	Cat xx-Pool/Fountain Clng	Low	7699	√	
Sanique Development	5921920300	474	H	ST	Cat xx-Pool/Fountain Clng	Low	7699	√	
Schaeffer's Pool Service	5952222327	2067	LAKERIDGE	CI	Cat xx-Pool/Fountain Clng	Low	7389	√	
SD Pool Service	5652904100	30	WOODLAWN	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
Sea Breeze Pool Service	6432321700	1408	ASHFORD CASTLE	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	
Sharko Pool Service & Maintenance	6397021400	819	AVENIDA MADERA		Cat xx-Pool/Fountain Clng	Low	7389	√	
Southbay Postcon Services	6205004000	1422	LANTANA	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
Spic N Span	5956201100	2057	CHATEAU	CT	Cat xx-Pool/Fountain Clng	Low	7389	√	
Superior Home Prep Co.	6423800116	1467	SUMMIT	DR	Cat xx-Pool/Fountain Clng	Low	1721	√	
Three Amigos Pool Service	6200830600	1362	MAX	AV	Cat xx-Pool/Fountain Clng	Low	7389	√	
WES C Gallagher	5952931300	861	SOUTHSHORE	DR	Cat xx-Pool/Fountain Clng	Low	7389	√	

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
			Cat xxiii-Bldg/Mat Storag						
Builders Surplus Sales	5634313500	130	GLOVER	AV	Cat xxiii-Bldg/Mat Storag	Low	5211		√
California Concrete Accessories		2640	FAIVRE	ST	Cat xxiii-Bldg/Mat Storag	High			
D. Leaf Sales Inc		2585	MAIN	ST	Cat xxiii-Bldg/Mat Storag	High			
Eastlake Distribution Center		2311	BOSWELL	RD	Cat xxiii-Bldg/Mat Storag	High			
Ferguson Enterprise	5734903000	895	THIRD	AV	Cat xxiii-Bldg/Mat Storag	Low	5211		√
G. Scott Asphalt		358	TROUSDALE	DR	Cat xxiii-Bldg/Mat Storag	High			
Home Depot - Plaza Ct	6402911300	725	PLAZA	CT	Cat xxiii-Bldg/Mat Storag	High	5211		√
Home Depot Eastlake	6430206600	1320	EASTLAKE	PW	Cat xxiii-Bldg/Mat Storag	High	5211		√
J&W Redwood	6291303700	3817	MAIN	ST	Cat xxiii-Bldg/Mat Storag	High	5211		
Lowes Home Improvement Warehouse Inc.	5950720100	2225	OTAY LAKES	RD	Cat xxiii-Bldg/Mat Storag	High	5211		√
Main Street Recycling		1751	FOURTH	AV	Cat xxiii-Bldg/Mat Storag	High			
Otay Metal Mart		195	MACE	ST	Cat xxiii-Bldg/Mat Storag	High			
RCP Block & Brick Inc.	5632703700	75	FOURTH	AV	Cat xxiii-Bldg/Mat Storag	Low	5211		√
Walmart at 5305 Broadway	6182007100	1150	BROADWAY		Cat xxiii-Bldg/Mat Storag	High	5399		√
White Cap Construction Supply	6290620602	3451	MAIN	ST	Cat xxiii-Bldg/Mat Storag	Low	5211		
			Cat xxiv-Animal Facility						
A Girl and Her Dog	6436102846	2278	SWEET PEA	LN	Cat xxiv-Animal Facility	Low	0752		
J & R Pet Services	6402524700	664	RAINBOW	DR	Cat xxiv-Animal Facility	Low	0752		√

Facility Name	APN	Address			Category	Priority	SIC Number	Mobile Business	Tributary
Kim's Paws Claws * Hoover Pet Care	5702800100	39	SANDALWOOD	DR	Cat xxiv-Animal Facility	Low	0752		√
Paws and Whiskers Gentle Grooming	6192215300	1223	THIRD	AV	Cat xxiv-Animal Facility	Low			
Pawz R US	5670530100	251	BROADWAY		Cat xxiv-Animal Facility	Low	0752		
Preen-2-Pristine Pet Parlor & Snack Shack	5950306000	2318	PROCTOR VALLEY	RD	Cat xxiv-Animal Facility	Low	0752		√
Sarah Hargrove/ Southbay Veterinary Hospital		1038	BROADWAY		Cat xxiv-Animal Facility	Low			
SD Doggy Runs	6244010700	1539	MAX	AV	Cat xxiv-Animal Facility	Low	0752		
Unleashed by Petco #1192	5922003300	304	H	ST	Cat xxiv-Animal Facility	Low	0752		√
Waggin N Walkin	5741030400	78	MANKATO	ST	Cat xxiv-Animal Facility	Low	0752		
Cat xxv-Power Washing...									
APM Power Washing	6192215200	228	KENNEDY	ST	Cat xxv-Power Washing...	Low	4959	√	
Fully Restored Surface Cleaning Specialists	5953213006	970	SOMERSET	CT	Cat xxv-Power Washing...	Low	4959	√	
Jay Bright Company	6441812700	787	ENERGY	WY	Cat xxv-Power Washing...	Low	4959	√	
Jet Clean USA Inc.	6403926200	1255	VAQUERO	CT	Cat xxv-Power Washing...	Low	4959	√	
Superior Wash	6435604300	1556	HUNTERS GLEN	AV	Cat xxv-Power Washing...	Low	1721	√	
Retail Store									
Furniture Mattress Expo	6182911200	1215	BROADWAY		Retail Store	Low	5712		√
Multi Tenants		171	MACE	ST	Retail Store	High			
Save A Lot #943	6193001600	1315	THIRD	AV	Retail Store	Low	5411		
Target 4th Ave		40	FOURTH	AV	Retail Store	Low			

Facility Name	APN		Address		Category	Priority	SIC Number	Mobile Business	Tributary
Target Store T-1815	5950720400	910	EASTLAKE	PW	Retail Store	Low	5399		√

Grand Total: **1,154**

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
COMMERCIAL FACILITIES														
Cat (i-v) Auto Related														
3M Brakes & Lube	1550	FRONTAGE	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59930	-117.09027
3MC Body & Paint & Auto Center	1612	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59759	-117.06479
A Spec Autocare	688	CHAPEL HILL	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.66334	-116.95304
A&A Auto Body & Paint	1077	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61119	-117.08130
A&C Machine Shop and Auto Repair	876	ADA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60289	-117.09110
A&D Automotive	1088	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61051	-117.08184
A&E Smog Test Only	231	BEYER	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.59252	-117.06289
A&G Mobile Services	707	L	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61575	-117.09058
A&V Road Service	1100	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60963	-117.08920
A-1 Auto Detail & Repair	696	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62415	-117.08722
A-1 Autobody DBA Calico	402	OAKLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63203	-117.09324
AARDVARC Racing	1007	OAK HILL	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.64768	-116.95937
ABC Electromechanic Projects	1550	OCALA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60294	-117.03531
ABC Motors Inc./Kirker Customs	310	K	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62334	-117.07367
ABC Rebuilders	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
Abel Najera	3679	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05424
Abel's Auto Body	311	TREMONT	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59759	-117.06504
ABS Collision Center	1137	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61267	-117.06823
Absolute Tinting	685	EL PORTAL	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.66301	-116.95954
Access II Towing	1350	MAX	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59569	-117.05316
Ace Auto	1647	MARL	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59712	-117.04062
ACE Autocare Experts	1135	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60900	-117.08033
Advance Autobody and Paint	951	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61523	-117.08286
AG Auto Repair	107	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64456	-117.09422
Agustin Auto Repair	1747	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59346	-117.07347
Al Smith	275	ZENITH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59551	-117.06342
Albert Stiehle Parts	627	WINDSOR	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.63660	-117.05209
All Around Service	268	SHASTA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63339	-117.07525
Almacen Automotriz Pacifico	1355	CALLEJON PALACIOS		N	Y	Y	N	Y	Y	N	Y	Y	32.64570	-117.00625
America Test Only & Regular Smog	231	BEYER	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59252	-117.06289
American Towing & American Dismantling Inc.	140	REED	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59319	-117.05654
Andrade Auto Glass	572	MADRONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63658	-117.09041
Andrade Auto Glass	721	OAKLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62226	-117.08984
Angelos Towing & Recovery	260	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65513	-117.08329
Anthony's Auto Center	305	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64489	-117.08187
Apollo Tire Co	1421	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Apple Glass	3031	MAIN	ST	N	N	Y	N	N	N	N	N	Y	32.59445	-117.06811
Aragon Car Care Center	894	LAGASCA	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.64646	-117.02640
Argent Classics	1698	HARVARD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64261	-116.98964
Arias Auto Repair	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Auto Express Services	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62033	-117.08451
Auto Parts Maya	825	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61696	-117.01987
Auto Servicio La Vuelta	1307	MONTERA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62227	-117.00147
Autoland Inc.	354	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64006	-117.05023

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Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Automaster Automotive Center	1655	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59750	-117.07581
Automatic Transmission	609	ARIZONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61508	-117.08394
Autotech Motorsports	286	EMERSON	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61234	-117.06787
Avanti Motors	3261	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59378	-117.06326
B&J Auto Repair Smog & Sales	696	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62415	-117.08722
Barajas Auto Tech	1017	HILLTOP	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62025	-117.05773
Barracuda Wheel Alignment	1655	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59278	-117.06316
Batteries Unlimited	2244	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59562	-117.08565
Battery & Auto Center	1510	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Bay Auto Electric	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61495	-117.08368
Becka Automotive	736	F	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63623	-117.09675
Bellos Rods & Customs	1616	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.59791	-117.08469
Beto's Mobile Mechanic	396	SIERRA	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.62069	-117.07610
Better Bumper	1586	MOUNT TAMALPAIS	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61983	-116.98069
Beyer Supreme Tires	1055	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61545	-117.06933
Beyer Supreme Tires 3	647	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63070	-117.09145
Big O Tires	399	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63478	-117.09053
Bolanos Windshield	276	MONTGOMERY	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59714	-117.06328
Bonita Valley Auto Care Inc.	3995	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.65805	-117.04152
Bowlins Auto Service	850	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61869	-117.08512
Brake Depot	1232	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60454	-117.08052
Brake Express	77	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64545	-117.09476
Brakes and Tunes	1403	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Broadway Auto Glass Inc.	98	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64487	-117.09550
Broadway Automotive	1415	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Broadway Premier Auto Service	77	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64545	-117.09476
Broadway Recycling Center	1778	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59324	-117.07489
Broadway Transmission	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Budget Tires	275	ORANGE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60030	-117.06212
Butlers Auto	286	G	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63786	-117.07776
C&V Auto	1131	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60935	-117.08017
Cal-Mex Machinery Truck Equipment	869	DOROTHY	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60017	-117.09016
Calif Smog Certification Inc.	11	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.65070	-117.08592
California Smog Certification Inc.	1655	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59750	-117.07581
California Smog Test Only	425	C	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.65119	-117.08945
California Tire and Service Centers	471	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63224	-117.08931
Camacho Tires	650	MOSS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61345	-117.08558
Candys Auto Body Shop	1131	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60935	-117.08017
Castaneda's Auto Repair	44	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64657	-117.09602
Charlies Auto Electric	186	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64180	-117.09448
Cherniss Tire World Inc.	101	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64456	-117.09422
Chichi's Auto Repair	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Chula Vista Auto Inc.	24	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64700	-117.09620
Chula Vista Auto Repair	2627	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59242	-117.07695
Chula Vista Engine Rebuilding	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Chula Vista Smog	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Chula Vista Towing	625	J	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62402	-117.08763
Chula Vista Toyota	650	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59407	-117.02646
Classic Auto Body	1612	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59759	-117.06479
Collision Parts Warehouse	3740	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59510	-117.05208
Courtney Tire	726	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62296	-117.08684
CSK Auto Inc. 1153	241	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64015	-117.09266
CSK Auto Inc. 1486	1396	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60360	-117.06585
D & D Smog Test	145	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59382	-117.05308
D and D Smog Station	145	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59382	-117.05308
D III Industrial	187	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59239	-117.05232
DA Tint Shop	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Daniels Tire Service	575	C	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64928	-117.09385
Dave's Auto Service	359	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65464	-117.08782
Diamond Finish	897	MESA	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.63296	-117.02856
Doctor Jay Automobile Service	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Dons Auto Service Inc.	495	TELEGRAPH CANYO	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.62923	-117.04264
Double AA Tire Co Inc.	3124	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59507	-117.06630
DR Kar	1153	CRYSTAL DOWNS	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.64164	-116.96016
DR Truck & Trailer Repair	10	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63695	-117.06564
DR Truck & Trailer Repair	1136	MAGELLAN	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.62984	-117.00498
Dynamic Results Inc/Eddies Tires & Auto Repair	2677	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59436	-117.07567
Earl Scheib of CA Inc 243	951	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61523	-117.08286
Econo Lube N Tune 56	903	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61699	-117.08358
Economy Tires	1430	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60092	-117.07805
Economy Transmissions	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Eddie's Tires and Auto Repair	1743	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59413	-117.07421
Enterprise Rent A Car Sales	1129	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60941	-117.08053
Ernie's Auto Repair and Smog	1415	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60105	-117.07682
Euro Specialties	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Evans Tire & Service Center 49	948	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61555	-117.08384
Explorer Competition Products	2360	BOSWELL	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.65462	-116.96423
Express Tire	646	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63009	-117.09118
Express Tire dba American Auto Service	430	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63313	-117.09099
F & V Auto Repair & Baja CA Cycle	2801	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59428	-117.07320
Fernando's Smog	609	ARIZONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61508	-117.08394
Fiber Molds	767	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59795	-117.08613
Fily's Auto Shop	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Formiller Motors	1001	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61360	-117.08226
Formula Auto Repair	590	ARIZONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61520	-117.08253
Franks Garage	359	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65464	-117.08782
Freeway Tire Co	1861	NIRVANA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59619	-117.01371
Fritz Garage	590	ARIZONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61520	-117.08253
Fuller Ford	560	AUTOPARK	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.59379	-117.03054
Fuller Honda	580	AUTOPARK	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.59397	-117.02867
G & G Auto Repair	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Galaz Auto Service	545	ORANGE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60272	-117.07603

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Garage 13 Performance	1574	STARGAZE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62760	-116.95312
Garcia's Auto Electric	2520	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Geos Auto Service	355	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63618	-117.09077
German Werks	1409	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
GK Smog & Auto Repair	1088	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61065	-117.08189
Glass Depot	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
GMJ Enterprises LLC/Maximus Auto Center	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Goodwins Auto Kraft	576	MANZANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62685	-117.03911
Gre-Laz Complete Auto Repair	107	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64456	-117.09422
Guero's Towing	485	SATINWOOD	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.60550	-117.03415
H&A Electric Motors	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
Happy Auto Repair	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Henry Auto Glass	1255	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60498	-117.07805
Hernandez Tire Sales	3236	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59506	-117.06350
Hi Voltage Industries	649	GRETCHEN	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.63502	-117.05503
Hot Spot Window Tinting	265	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63901	-117.09223
Hypersport Performance	265	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63901	-117.09223
In and Out Transmissions	1409	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
In-N-Out Auto Glass	1120	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61285	-117.06918
International Transmission	1580	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59998	-117.06552
Investruck Inc.	1470	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60272	-117.09357
J&H Auto Repair	355	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63610	-117.09110
J&J Chrome & Polish	2631	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59242	-117.07695
J&L Auto Repair Inc.	273	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63882	-117.09216
J&V Automotive	1550	FRONTAGE	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59930	-117.09027
Javier Silva Auto Repair	862	ELISE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59976	-117.09005
JBR Auto Repair	2520	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
JC Towing Inc.	2515	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59227	-117.07945
Jesse Smog	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
Jiffy Lube 897	593	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64177	-117.09305
Jim's Glass & Screen	2540	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59590	-117.07825
JJ & Vic Auto Service & Repair	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
JJ Auto Body	2631	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59242	-117.07695
Joseph Cobarrubias Auto Repair	821	DOROTHY	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60017	-117.08878
John's Towing	1298	WAXWING	LN	N	Y	Y	N	Y	Y	N	Y	Y	32.61817	-117.03527
JP Truck and Trailer Repair	105	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64343	-117.09845
JT Associates Inc/DBA Audio Xperts	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Juans Auto Repair Inc.	2520	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Julio C Battery	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59506	-117.06350
Kantruds Garage	120	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64398	-117.09490
Karillos Truck Tire and Road Service	2178	CABO BAHIA		N	Y	Y	N	Y	Y	N	Y	Y	32.65819	-116.97221
Kars Machine Shop	876	ADA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60289	-117.09110
KDR Enterprises Inc. DBA WABCO Products	753	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64414	-117.08459
Kpucinos Auto Car Care	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Kustom Nation Auto	2524	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59608	-117.07919
L&E Tire Service	226	REGENCY	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59257	-117.04305

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Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
L&E Trans Parts and Service	117	7TH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59359	-117.07154
L&E Transmission Inc.	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
Lakeside Auto Sales	3211	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59389	-117.06374
Lalo's Garage	122	DEL MONTE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59379	-117.06275
Ledezma Tire and Muffler 2	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Ledezma's Muffler Service	1655	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59750	-117.07581
Leemor Sound Inc	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Leer Truck Accessory Center	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Leo's Auto Body Work	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61495	-117.08368
Low Price Auto Glass	880	ENERGY	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59546	-117.00854
M&M Mobile Auto Repair	437	MONTGOMERY	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59657	-117.07063
Madrid Glass	1067	FOURTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61398	-117.07252
Main Car Care Inc	2952	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59509	-117.06984
Main Clutch Co	3800	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59544	-117.05034
Manny's Repair Shop	1747	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59338	-117.07345
Marc Goodwin Trucking	72	MANKATO	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63729	-117.06161
Marcos Radiator	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Marcos Radiator	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59590	-117.07825
Marios Mobile Truck Body Repair & Driver	4087	OTAY VALLEY	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59337	-117.04515
Marquez Auto Body Inc.	310	K	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62334	-117.07367
Martins Auto Transport	1026	NOLAN	LN	N	Y	Y	N	Y	Y	N	Y	Y	32.62285	-117.04525
Max Auto Detail & Auto Electric	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Maximus Auto Repair	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
MBTS Corporation/Econo Lube and Tune 165	3008	SECOND	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.66041	-117.08450
MCK Auto Repair	3611	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05566
mdt Electronics	3639	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05509
Midas Rajmp Inc.	363	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63570	-117.09094
Miguel Auto Mobile Repair	2474	FALCON VALLEY	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65813	-116.96295
Mike Auto Repair	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Mikes Auto Repair & Smog Center	305	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64512	-117.08189
Mikes Auto Repair & Smog Center	300	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64443	-117.08148
Mike's Recycling	3151	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59423	-117.06515
Mobil Mercedez Specialist	1747	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59346	-117.07347
Mobile Trenz Autosound	265	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63901	-117.09223
Monell Brake Service	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62033	-117.08451
Monos Brake and Alignment	231	BEYER	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.59252	-117.06289
Moto Medic Motorcycle Repair	935	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61604	-117.08317
Motor Head Rebuilders and Welding	1747	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59338	-117.07345
Mr. Smog	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61500	-117.08353
MTM Mobile Truck Repair	1640	MAPLE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.59825	-117.04239
Murrays Automobile	320	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65446	-117.08557
Neill's Suzuki Auto Repair	804	COLORADO	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61885	-117.09085
New Auto Concepts	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Nice & Easy Autobody & Paint Inc.	2350	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59552	-117.08328
Octavio's Garage	632	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62637	-117.08805
Official Brake & Lights Inspection Center	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748

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Oldham Ranch Automotive	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62033	-117.08451
One Stop Auto Access Plus	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
One Stop Under Car	360	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63555	-117.09185
Orion's Mobile Auto Service	2554	FERN VALLEY	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.63359	-116.94830
P & B Brakes and Alignment	3645	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05473
P & R Motors	1165	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61158	-117.06781
Pacific Auto Glass	1165	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61158	-117.06781
Pacific Auto Glass	1193	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61085	-117.06753
Pacific Bay Auto	150	JACQUA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59321	-117.08051
Pacific Supply Co/Parts Plus	660	L	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61603	-117.08605
Parts Plus Auto	98	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64487	-117.09550
Paxton Towing	3487	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59352	-117.05865
PB Auto Service	3645	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05489
Pep Boys Manny Moe & Jack of CA 651	454	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63230	-117.09108
Pep Boys Manny Moe & Jack of CA 872	1000	TIERRA DEL REY		N	Y	Y	N	Y	Y	N	Y	Y	32.63685	-117.02001
Perfect Star European Auto Repair	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61495	-117.08368
Performance Auto Repair & Smog	720	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62335	-117.08703
Peters Precision Auto	310	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65463	-117.08494
Platinum Spray Collision	305	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64509	-117.08214
PM Auto Service	616	G	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63308	-117.09194
PO Auto Repair	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05489
Polos Auto Paint Supply	2513	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59429	-117.07932
Precision Auto Electric	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Precision Automotive	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
Precision Motors	619	K	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62070	-117.08634
Pro Tires	437	THRUSH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61805	-117.03757
Prokar Products	2471	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59451	-117.08052
Protech Autoglass	546	CASSELMAN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64603	-117.09283
Quick Tows & Road Service	209	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64441	-117.08074
R&G Auto Electric	924	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61627	-117.08420
R&L Performance Auto Service	887	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60424	-117.09177
R&R General Auto Repair	720	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62335	-117.08703
Rafael General Auto Repair	720	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62335	-117.08703
Rags Enterprises Inc./Tip Top Auto	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Rainbow Striping	981	MONSERATE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59935	-117.03021
Ramz Mobile Auto Care	394	MONTCLAIR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62266	-117.04198
Rauls's Body Shop	790	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60434	-117.08765
Rays Mobile Car Care	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
RG Auto Repair	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Ricardos's Custom Covers	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
RNA Motor Works	737	SAN GABRIEL	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.65775	-116.96638
Roman's Tire Truck Body & Paint MJP	2513	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59429	-117.07932
Ruben's Auto Electronics	1420	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60136	-117.07886
Ruben Delrio	817	DOROTHY	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59990	-117.08852
S & H Motors	292	EMERSON	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61226	-117.06815
Safelite Auto Glass 6150	416	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63370	-117.09091

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Sams Muffler Radiators	225	BEYER	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59278	-117.06316
San Diego Automotive Inc	48	HILLTOP	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65329	-117.07138
San Diego Diesel Parts	252	INKOPAH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62272	-117.04822
San Diego Tires and Brakes	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Sanchez Auto Repair	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
SCJ Auto Repair	4501	OTAY VALLEY	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59444	-117.03476
SCJ Towing	3211	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59394	-117.06369
Scotts Porsche	118	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64407	-117.09494
Sir Y Incorporated/DBA Sir Y Auto Group	777	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62180	-117.08544
Skyline Garage	615	CHULA VISTA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64614	-117.09608
SO California Discount Tire	600	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62716	-117.08839
Soto Transmissions	3384	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59504	-117.06060
Soundelux	2490	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
South Bay Auto Haus	310	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65460	-117.08507
South Bay Auto Repair	811	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61915	-117.08531
South Bay Collision Center	1415	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
South Bay Datsun Auto Repairs	1409	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
South Beach Auto Sales/El Valle Auto Sales Inc.	846	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61889	-117.08520
South Coast Alignment	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
South Coast RV Service Center	2524	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.07920
Southbay Auto Glass	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
Southbay Motorsports	1890	AUTO PARK	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.59597	-117.02689
Southbay Tire & Auto Service	77	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64545	-117.09476
Southbay Tools	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Southbay Tuning Automotive Repair	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
Southern California Reconditioning	67	DEL MAR	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64985	-117.08083
Sparks Tune Up of CV	1415	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Speed Merchant Inc/American Tire Distributor	2400	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59580	-117.08169
Sunbelt Towing Inc DBA Western Towing	1171	FRONTAGE	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.60582	-117.08947
Super Low Price Auto Glass 23	265	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63901	-117.09223
Superior Auto Body Group	363	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64435	-117.08378
Superior Auto Body & Paint	347	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64455	-117.08313
Superior VW Automotive Repair	2578	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59514	-117.07806
T-100 Auto Repair	3232	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59506	-117.06381
Tap Acquisition LLC/4 Wheel Parts & Perform Center	1427	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Taps Auto Smog	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Tech Transmissions	1747	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64721	-117.08811
Ted Johnson Garage	1270	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60782	-117.06721
The Autobroker	203	CHURCH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64493	-117.07994
Tinos Auto Tech	720	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62335	-117.08703
TK Auto Repair	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
TK Smog Check & Auto Repair	1409	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Tony Discount Tires Brakes & More	231	BEYER	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59252	-117.06289
Tony's Smog Test Only	2520	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Tony's Tires	1771	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59327	-117.07263
Torque Performance Auto Center	1421	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683

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Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Toyo Tire USA Corporation	860	KUHN	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65209	-116.96651
Truebar Machine Shop & Auto Repair	1403	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Trueline Auto Service	377	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64414	-117.08459
Tune Plus	2530	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
Turtle Auto Repair and Towing	117	7TH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59359	-117.07154
Two Bit Tow of San Diego	240	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63857	-117.09728
U-Do-It / Auto Painting	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61495	-117.08368
Ulises Roberto Sanchez dba Batt Recycling	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
UNIC Smog Repair	960	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61495	-117.08368
Union Auto Repair	590	ARIZONA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61520	-117.08253
V&M Auto Mechanic	1135	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61267	-117.06823
V&m Auto Mechanic	409	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63749	-117.07809
Valencia's Diesel Mobile	876	ADA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60289	-117.09110
Valvoline Instant Oil Change	1556	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64453	-116.99709
Valvoline Instant Oil Change	899	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63648	-117.02117
Van's Suspension & Brake Center	1741	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59412	-117.07447
Victor's Auto Repair	255	ASH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63972	-117.09141
Victor's Auto Repair	1645	RIDGE ROCK	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.62858	-116.98663
Vidrio Towing	2471	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59438	-117.03914
Villegas Used Tires	466	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63175	-117.09099
West Coast Mobile Mechanix	935	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61604	-117.08317
West Coast Transmission	1660	SILVAS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59588	-117.07740
Western Towing	1187	WALNUT	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60518	-117.08803
Wheel Depot	2835	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59428	-117.07248
Zepeda's Radiator Repair	801	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62054	-117.08375
Zeppy Auto Repair	2520	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59521	-117.07895
ZX Team	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Cat (iii-xxi)-Boat Marina														
Garcia's Detail and Repair	867	COLORADO	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61694	-117.08953
Kaiulani Boat Service	1446	YELLOWSTONE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63683	-116.94140
Magana Yacht Repair	778	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59905	-117.08685
Sergio Hernandez Yacht Maintenance	934	FIFTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61682	-117.07974
Sterling Marine	829	WILER	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.63265	-117.03796
Cat iv-Equipment Related														
ABLE Heating and Air Conditioning	1020	COLORADO	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61167	-117.08807
All Drain Rooter	1267	CALLE CANDELERO		N	Y	Y	N	Y	Y	N	Y	Y	32.63819	-117.00856
Allbrands A1 Appliance Service	951	SAINT CLAIRE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.64659	-116.97648
Antonio Plumbing	577	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60355	-117.07719
Any Drain Rooter Service	296	TREMONT	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59818	-117.06426
Arrow Appliance Service	1164	CALLE FLORECITA		N	Y	Y	N	Y	Y	N	Y	Y	32.64638	-117.01478
B&D Power Services	368	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59942	-117.06782
BJ's Rental Inc.	317	K	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62405	-117.07416
California Plumbing & Heating	1434	SOUTHVIEW	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.63405	-116.99943
Chula Vista Cycle Center	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Clear-Flow Rooter Service	218	ORLANDO	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61355	-117.04611
Cogswell Marine & Motorsports Inc.	865	STELLA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60320	-117.09061

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D III Industrial (Choice Lift)	187	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.05201
Daves Quality Plumbing Inc.	320	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65446	-117.08557
DaVinchi Metal Signs	3521	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59151	-117.05779
Elias Plumbing	1129	CLOUDWALK CANYON	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62369	-117.02969
Gopher Pro Backhoe Services	285	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59138	-117.05206
Handiworks	944	BUCKAROO	LN	N	Y	Y	N	Y	Y	N	Y	Y	32.65598	-117.02869
J&J Drain & Sewer	2355	CALLE SABROSO		N	Y	Y	N	Y	Y	N	Y	Y	32.66203	-116.96778
Jakes Plumbing	430	WESTBY	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61749	-117.07676
Jifffy Rooter	3236	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59506	-117.06350
Lund & Flynn Inc.	370	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65383	-117.08772
Martin Prep	1213	MONTE SERENO	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62791	-116.99932
Moys Appliance Repair	1458	MAX	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60649	-117.04695
Quality Lift Trucks	101	GLOVER	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.65518	-117.08681
RB&S Electrical Wholesale	3855	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59416	-117.05041
Randys Rooter Service	223	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63581	-117.07414
Triple M. Marine Welding & Repair Inc.	1550	FRONTAGE	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59930	-117.09027
Uncle Joe Drain Cleaning	1660	CABRILLO	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.60156	-117.02742
Upright Shoring & Scaffolding	910	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.61495	-117.09045
Walashek Industrial & Marine Inc.	595	C	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64876	-117.09572
West Air Gas & Equip Inc.	1590	FRONTAGE	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.59890	-117.09024
Cat ix-Pest Control Services														
Adios Pest Control Inc.	2576	CATAMARAN	WY	N	Y	Y	N	N	Y	Y	Y	Y	32.65597	-116.95695
Atlas Termite	25	SECOND	AV	N	Y	Y	N	N	Y	Y	Y	Y	32.65214	-117.07915
Chula Vista Pest Control	244	THIRD	AV	N	Y	Y	N	N	Y	Y	Y	Y	32.64312	-117.08098
Indemand Pest Control	982	MERCED RIVER	RD	N	Y	Y	N	N	Y	Y	Y	Y	32.61481	-117.01156
King Termite Control Inc.	290	LANDIS	AV	N	Y	Y	N	N	Y	Y	Y	Y	32.64129	-117.08137
Lloyds Pest Control	2865	MAIN	ST	N	Y	Y	N	N	Y	Y	Y	Y	32.59428	-117.07183
The Works Termite Co	119	KEARNEY	ST	N	Y	Y	N	N	Y	Y	Y	Y	32.62804	-117.06657
Turbo Termite & Repair	1021	BAY	BL	N	Y	Y	N	N	Y	Y	Y	Y	32.61033	-117.09150
We Got Ya Pest Control Inc.	46	THIRD	AV	N	Y	Y	N	N	Y	Y	Y	Y	32.65002	-117.08402
Cat vi-Auto-Washing														
619 Detail	2792	SAVANNAH	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.66194	-116.95147
619 Mobile Detailing	55	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61114	-117.05205
Absolute Auto Detail	1390	SANTA ALICIA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62378	-116.99294
Advance Mobile Wash & Detail	1093	FOREST LAKE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.64174	-116.96508
AG Autobody & Detail	2466	MYRTLE BEACH	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.63202	-116.95108
All American Car Wash C.V.	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60890	-117.08002
Amplified Detailing & Restoration	423	COLORADO	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63226	-117.09547
Aqua Clean	1435	RIDGEBACK	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64005	-117.04316
Aqua-Man Mobile Auto Carwash Detailing	1184	CAMINO BISCAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64156	-117.01247
Arreola Auto Detailing	1047	FOURTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61480	-117.07284
Arreola Auto Detailing	1049	FOURTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61402	-117.07406
Auto Detailing By David	489	ELM	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63652	-117.07144
Baja Auto Detail	615	CHULA VISTA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64614	-117.09608
Bebo's Auto Detail	804	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62023	-117.08574
Bonita Car Wash	3048	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64757	-117.05836

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Brabus Pro Auto Detailing	1743	FENNEL	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.61880	-116.96059
California Sunshine Detail	2385	PLAZA EVA		N	Y	Y	N	Y	Y	N	Y	Y	32.67026	-116.97004
Car Shower	3487	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59352	-117.05865
Crystal Clean Car Wash - Cv Inc.	1137	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60893	-117.07988
Del Rey Detailers	1030	CORDOVA	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.63166	-117.01621
Deluxe Mobile Detailing	2401	VALLEY GARDENS	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.63191	-116.95302
Deluxe Mobile Detailing	1320	LONG VIEW	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.64110	-116.94360
Diablos Auto Detail	1151	FOURTH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61074	-117.07119
Eastlake Mobile Detailing	1185	LA VIDA	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.64337	-116.95600
Empire Mobile Auto Detailing	250	QUINTARD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60262	-117.06313
Ernie's Detail	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Finest Auto Detailing	1336	SERENA	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.64283	-117.00590
Fresh Detailing	615	MOSS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61299	-117.08338
GBC Auto Detailing	1175	BATTLE CREEK	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.63588	-116.97887
JDA Detailing and Services	825	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61696	-117.01987
JJ's Mobile Auto Detailing	1123	TOBIAS	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.61573	-117.05830
Jose Gallardo	561	FLOWER	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64399	-117.09265
JR S Detail/Mobile Car Wash	770	NAPLES	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.62284	-117.02426
JR's Mobile Auto Detail	1516	OLEANDER	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60480	-117.03310
Keen Detail	1344	SERENA	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.64299	-117.00546
Klimax Mobile Detail	253	K	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62480	-117.07139
Lad Mobile Vehicle Service	557	OXFORD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60701	-117.07743
LST Carwash	907	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61699	-117.08358
Luna's Mobile Detailing	1143	VISTA	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.61538	-117.05704
Maranatha Carwash	298	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63800	-117.09260
Mario's Auto Detailing	915	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61662	-117.08343
Mario's Auto Detailing	1409	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60106	-117.07683
Max Auto Detail & Auto Electric	1502	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59952	-117.07748
Max Enterprises	691	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62328	-117.09110
Mobile Car Wash	1613	WOODVILLE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62619	-116.98816
Moreno Auto Detailing	1291	BOCA RATON	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.63394	-116.96316
Nice Car Always	1468	ASHFORD CASTLE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62992	-116.95313
Oscar Velazquez Auto Detail	465	OXFORD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60809	-117.07430
Palomar Gas & Carwash	878	STELLA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60397	-117.09125
Pearl Carwash/Chula Vista Inc.	215	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63958	-117.09694
Premier Mobile Auto Detail and Tinting	1438	MARBLE CANYON	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.63714	-116.94203
Pro Detailing Services	1390	SANTA ALICIA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62378	-116.99294
Prontowash Southern CA, LLC	2015	BIRCH	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.62376	-116.96689
Rancho Mobile Auto Detail	227	RIENSTRA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60728	-117.04365
Rancho Mobile Detail	1087	MELROSE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62058	-117.04657
Roberto's Custom Detailing	1307	TOBIAS	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.60936	-117.05583
Shine Mobile Detailing	1282	WILD IRIS	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.62283	-117.01227
Shining Star Auto Detail	2431	EASTRIDGE	LP	N	Y	Y	N	Y	Y	N	Y	Y	32.64515	-116.95926
Simply Clean Auto Detailing	589	BAYONA	LP	N	Y	Y	N	Y	Y	N	Y	Y	32.64781	-117.01772
Sky Auto Detail	1340	ELM	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60664	-117.06095
SOS Auto Mobile	336	ASH	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63669	-117.09093

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
South 1 Auto Detail	3031	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.06811
Speed Auto Detailing	1018	WOODLAWN	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61164	-117.08686
Splash Auto Detail	731	LORI	LN	N	Y	Y	N	Y	Y	N	Y	Y	32.63518	-117.03866
Splash Mobile Detail	1579	CITRUS	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59933	-117.05388
Spotless Auto Detailing	1618	GOLDEN GATE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.61851	-116.98166
Superior Shine Mobile Detailing	398	INKOPAH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62439	-117.04242
Terra Nova Car Wash/Fiesta Express	350	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64056	-117.05002
Vista Palms Car Wash	795	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.62121	-117.08521
Wash and Glow Auto Detail	886	ENTRADA	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.63224	-117.03163
Wash and Glow Detail	1539	SONORA	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.60525	-117.03057
Xclusive Auto Detail	416	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63370	-117.09091
Xtreme Enterprises Inc./Xtreme Mobile	2446	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
Xtreme Mobile Detailing	603	MELROSE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.63700	-117.05169
Cat vii-Auto Lots Storage														
Broadway Palomar RV Storage	1375	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.60188	-117.07638
Convenient Mobile	2555	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59417	-117.07858
Eastlake RV and Boat Storage	2371	BOSWELL	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.65603	-116.96392
Eastlake Self Storage	2351	BOSWELL	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.65603	-116.96499
Economy Upholstery	3679	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59441	-117.05424
Hofer Corporation	5662	OTAY VALLEY	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.58069	-116.99791
Otay Valley RV Storage	163	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59344	-117.05309
Roman's Auto Electric	2555	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59228	-117.07851
Savon Self Storage	3708	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59569	-117.05316
Sentry Storage	3885	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59213	-117.05030
Cat viii-Fueling Retail Wholesale														
Allen Gas Truck Stop	3205	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59442	-117.06396
Arco AM/PM 5208	407	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64381	-117.08581
Arco AM/PM 5217	798	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62426	-117.07361
Arco AM/PM 5218	1725	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.59445	-117.07460
Arco AM/PM 607	3190	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59508	-117.06490
Arco AM/PM 633	800	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60450	-117.08843
Arco At H Street	720	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62931	-117.09425
Arco By The Bay	765	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64019	-117.09901
Arco Sunshine Market	1401	HILLTOP	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.60425	-117.05145
Birkdale Corp DBA L Street 76	898	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.61735	-117.08457
Bobar Market 8	600	F	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63739	-117.09266
Bonita Arco	4498	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.66086	-117.03153
Bonita Gas & Mini Mart	4498	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.66086	-117.03153
Bonita Point Auto Care Inc.	149	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64482	-117.00001
Bonita Shell	100	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64766	-117.06376
Bonita Vista Gas & Auto	903	OTAY LAKES	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64222	-116.99372
Cali Mart	3733	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59428	-117.05307
Chevron Inc 1422	95	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64828	-117.06409
Chevron Station 1946	695	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61469	-117.02453
Chevron Station Inc. 1837	770	PLAZA	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.63677	-117.02975
Chevron Station-Eastlake Parkway	950	EASTLAKE	PW	N	Y	Y	N	Y	Y	N	Y	Y	32.65023	-116.96665

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Chevron Station-Olympic Parkway 1975	2115	OLYMPIC	PW	N	Y	Y	N	Y	Y	N	Y	Y	32.62892	-116.96645
Chula Vista Mobil	902	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62019	-117.07204
Chula Vista SVC CTR/SECV Inc.	899	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62098	-117.07157
Circle K Store 2964	60	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64621	-117.09580
Circle K Store 5708	98	BONITA	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64764	-117.06442
Dons Arco	495	TELEGRAPH CANYO	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.62923	-117.04264
Fred's Auto Repair	3205	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59442	-117.06396
Gas Depot	199	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64182	-117.09336
Lamb Fuels Inc.	855	ENERGY	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59747	-117.00999
Lorena B Ratonel Shell	350	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64056	-117.05002
Melrose 76	1495	MELROSE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60503	-117.03887
Mobil Oil On The Run 12924	2210	OTAY LAKES	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.64637	-116.96858
Mohsen Oil	1328	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60544	-117.06625
New West Petroleum LLC 1016	1498	MELROSE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60478	-117.03950
Optima	498	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.63120	-117.09009
Optimart	1450	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60144	-117.06500
Palomar Shell	1295	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.60720	-117.06617
Seven Eleven 13951 B 2131	275	E	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64542	-117.08011
Seven Eleven 24070A 2131	1482	HILLTOP	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.60045	-117.05188
Seven Eleven 29540B 2131	7	NAPLES	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61730	-117.05731
Shell at Main	4555	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59444	-117.03476
Supreme Gasoline	196	BROADWAY		N	Y	Y	N	Y	Y	N	Y	Y	32.64146	-117.09391
Suresh Patel	4430	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59438	-117.03796
Terra Nova Service Plaza	350	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64056	-117.05002
Thrifty 9568	401	TELEGRAPH CANYO	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.62881	-117.04628
World Oil Co. 46	685	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63032	-117.09292
Cat x-Eating Drinking Establishments														
Agave Grill	625	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63110	-117.09065
Albertson's 6757	720	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62651	-117.07534
Albertson's 6759	2310	PROCTOR VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66099	-116.96913
Alejandro's Mexican Bar & Grill	2220	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64591	-116.96781
Ancira Tamales	2260	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59562	-117.08565
Aning's Homemade Specialties	449	KRISTA	CT	Y	Y	N	N	Y	N	N	Y	Y	32.64147	-117.04555
Anthony's Fish Grotto	215	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.63876	-117.10084
Antojito's Lucy's	1576	INDUSTRIAL	BL	Y	Y	N	N	Y	N	N	Y	Y	32.59900	-117.08449
Apple Tree Market	1556	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59830	-117.06486
Arbys 7057/Capitals Group LLC	2244	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64693	-116.96750
Asada Express	1067	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61155	-117.08144
Asada Express Inc.	1067	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61155	-117.08144
Aunt Emmas	700	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63982	-117.09767
Auto Express Services	801	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62033	-117.08451
Bert's Grill	525	TELEGRAPH CANYO	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62901	-117.03946
Birrieria Don Rafa	621	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62654	-117.08735
Bulls Eye Burger	860	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61843	-117.08503
Burger King 11435	97	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64840	-117.06365
Burger King 11545	899	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63648	-117.02117

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Burger King 2339	599	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62977	-117.08662
Burger King 952	1265	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60798	-117.06620
Burrito Corona Group LLC	4444	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66028	-117.03190
C&S Discount Store	294	CENTER	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64024	-117.07913
Cali Dogs	1016	TIERRA DEL REY		Y	Y	N	N	Y	N	N	Y	Y	32.63685	-117.02001
California Pizza Kitchen	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
California Sushi Bar Inc.	337	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64001	-117.07904
Canyon Club Cafe	421	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62907	-117.04579
Carls JR 281	2097	OLYMPIC	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62983	-116.96685
Carls JR 31	502	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63053	-117.08972
Carls JR 546	1100	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60980	-117.08180
Carls JR 575	1487	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64459	-117.00054
Carls JR 83	996	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61730	-117.07091
Carrow's Restaurant 953	598	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62977	-117.08662
CAT Cheoon Restauranct	1660	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59691	-117.07667
CDT Catering Services	320	TROUSDALE	DR	Y	Y	N	N	Y	N	N	Y	Y	32.65442	-117.08570
Cheese Cake Factory	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Chick Fil A at Eastlake Terraces	2089	OLYMPIC	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62938	-116.96725
Chili's Bar & Grill	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62243	-116.96607
Chili's Bar & Grill 1363	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Chili's Bar & Grill 387	800	PASEO DEL REY		Y	Y	N	N	Y	N	N	Y	Y	32.63658	-117.02863
China China Restaurant	386	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63841	-117.04936
China King Buffet	693	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60482	-117.08443
China Little Cafe Express	492	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63479	-117.07790
China One Inc	45	N BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.65026	-117.09556
Chinese City Restaurant	1403	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60313	-117.06460
Chow King	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Chriss Chriss Ent Inc./Little Caesar Pizza	642	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60239	-117.08125
Chriss Chriss Ent Inc./Little Caesar Pizza	481	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63173	-117.08922
Chula Vista RV Park Store	460	SANDPIPER	WY	Y	Y	N	N	Y	N	N	Y	Y	32.62688	-117.10501
Church Fried Chicken	1005	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61673	-117.06997
Ciao Italian Restaurant	4360	OTAY VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.59438	-117.03914
Colima's Mexican Food	4102	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65837	-117.03904
Coors Amp/Valentino Espresso	2050	OTAY VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.58808	-117.00630
Corzy Corner Pizza	1655	BRANDYWINE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60166	-117.02888
COSTCO - East H St	895	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63734	-117.02221
COSTCO at Broadway	1130	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60854	-117.08321
Cotija Taco Shop	4404	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66028	-117.03190
Cotijas Mexican Food	810	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62349	-117.07339
Cotixan Mexican & Seafood	1392	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62319	-116.99754
Cotixan Taco Shop	374	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63967	-117.04958
D & J's Way Inc./Subway	559	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62889	-117.03764
D Lish	386	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63841	-117.04936
Dairy Queen Orange Julius	664	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60282	-117.08173
Daphnes Greek Cafe	2275	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64806	-116.96713
Del Taco 809	670	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60282	-117.08173

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Deli Shoppe	1075	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60816	-117.09140
Denny's Restaurant 1719	110	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64763	-117.06323
Denny's Restaurant 6962	692	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63990	-117.09656
Desserts Plus Chula Vista, Inc	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Diamond Jim	771	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62525	-117.07325
Diego's Mexican Food	686	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62466	-117.08739
Dlush LLC	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Docks Cocktail Lounge	317	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64070	-117.07932
Dominos Pizza	943	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Dominos Pizza 7724	380	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63818	-117.07906
Dominos Pizza 8503	943	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99257
Don Pedro Taco Shop	247	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64321	-117.08028
Dragon Express Fast Food	678	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64010	-117.09582
Edelweiss Restaurant	230	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64360	-117.08116
El Camaron	193	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64210	-117.09330
El Camaron 2	301	MONTGOMERY	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59655	-117.06471
El Comal Antojitos	262	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64243	-117.08071
El Comal Antojitos Mexicanos	239	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64352	-117.08040
El Comal Antojitos Mexicanos	534	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62931	-117.09012
El Dorado Seafood & Grill	311	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60635	-117.06697
El Gordito Feliz Mexican Food	1149	CABRILLO	DR	Y	Y	N	N	Y	N	N	Y	Y	32.63145	-117.00464
El Jalapeno Mexican Grill	1352	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60450	-117.06625
El Mexicanos Taco Shop	567	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62889	-117.03764
El Michoacano Taco Shop & Seafood	2130	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62037	-116.96132
El Nopal Market LLC	1655	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59750	-117.07581
El Nortena Taco Shop	1266	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60799	-117.06753
El Norteno	1266	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60799	-117.06753
El Pollo Loco/Bas Food Services	666	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62987	-117.09224
El Ranchero Factory	1324	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60568	-117.06673
El Ranchero Factory Taco Shop 2	3344	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59505	-117.06121
El Torito 89	271	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.63730	-117.10018
Ernie's 50s Diner	323	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64056	-117.07926
Fair Market & Hollywood Pizza	72	J	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63131	-117.05946
Figaro's Pizza	2326	PROCTOR VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66062	-116.97033
Filippis Pizza Grotto	82	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64518	-117.09549
Florence Pizza Express	1550	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64453	-116.99709
Food 4 Less 780	660	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60282	-117.08173
Foodland 7	1340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60511	-117.06659
Fuddruckers 3055	340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63966	-117.07979
Galley At The Marina	550	MARINA	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62444	-117.10310
General Los Panchos Taco Shop	577	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63148	-117.08867
Giant Pizza King 17	419	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62907	-117.04579
Gigante Pizza	226	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64071	-117.09368
Golden Star Chinese Food	864	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62220	-117.07295
Golden Unique	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62977	-117.08662
Goldilocks	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Gondola Pizza	1067	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61155	-117.08144
Great Happiness II	1445	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60212	-117.06401
Great Steak	2322	PROCTOR VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66158	-116.96966
HDOS ENT	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Henry's Market Place	690	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62780	-117.07529
Henry's Market Place dba Otay Ranch Market	878	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.65177	-116.96995
Hermano's Taco Shop	1295	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60391	-117.07791
Hilltop Market	1500	HILLTOP	DR	Y	Y	N	N	Y	N	N	Y	Y	32.59976	-117.05185
Home Town Buffet 705	651	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60412	-117.08248
Home Town IGA	646	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64010	-117.09582
Honey Baked Ham Inc.	316	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63961	-117.05180
Hot Dog Expressions	725	PLAZA	CT	Y	Y	N	N	Y	N	N	Y	Y	32.63756	-117.03198
Hungry Hanks Deli	866	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62220	-117.07295
Hurshi's Cafe	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Ida's Lompia Palace & China Town	732	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64572	-117.00232
In-N-Out Burger	1725	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62037	-116.96132
International House of Pancakes	2258	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64740	-116.96627
Italy Express	527	TELEGRAPH CANYO	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62901	-117.03946
Jack Donuts	1355	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60276	-117.07745
Jack in the Box - DMSD Foods	947	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Jack in the Box 15	802	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62367	-117.07334
Jack in the Box 6	486	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63120	-117.09009
Jack in the Box 63	1408	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60227	-117.06570
Jack in the Box 68	4011	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65851	-117.04070
Jack in the Box 86	5	FOURTH	AV	Y	Y	N	N	Y	N	N	Y	Y	32.65100	-117.08764
Jack in the Box 93	585	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60323	-117.07789
Jack in the Box 99	370	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64004	-117.04903
Jack-N-The Box	919	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Jack in the Box	925	EASTLAKE	PKWY	Y	Y	N	N	Y	N	N	Y	Y	32.64994	-116.96507
Jalisco Cafe	4026	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65795	-117.04011
Jill A Lindstedt	1110	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61320	-117.06939
Jill A Lindstedt	725	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64043	-117.09850
Jimmy's Family Restaurant	1198	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61078	-117.06866
JNC Pinoy Foodmart Inc.	943	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Jochi's Fast Food Inc.	1340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60511	-117.06659
Joe and Ernie's Pizzeria Inc.	730	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62256	-117.08683
Jordan's Crazy Burgers and Hot Dogs	1750	E PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63159	-116.98470
Joshways Restaurant & Bar	299	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63825	-117.09193
Juice Adventure	935	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Julian's Mexican Food	1090	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61377	-117.06972
Just Java Cafe	285	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64194	-117.07980
K Kiala Inc DBA SD Philly Cheese	872	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.65177	-116.96995
Kaga Sushi	1216	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60952	-117.06801
Kanpai Restaurant	305	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60635	-117.06697
Karina's Mexican Seafood	986	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61400	-117.08364
Karina's Mexican Style Seafood 2	1282	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60725	-117.06708

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
KD Inc/Krazy Dollar	1161	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60588	-117.09149
KFC Y450073BL03	461	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63611	-117.07719
KFC- Y305030	1361	MEDICAL CENTER	DR	Y	Y	N	N	Y	N	N	Y	Y	32.61555	-117.02640
KFC-Y450114	1327	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60288	-117.07809
KIC Import & Export	737	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62622	-117.07363
Kings Fish House	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
King's Fish House	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62243	-116.96607
KMart Corp. 7636	875	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63750	-117.02522
Koopman Enterprise	376	THERESA	WY	Y	Y	N	N	Y	N	N	Y	Y	32.61975	-117.04196
Kotija Taco Shop	295	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Kyoto Sushi	2322	PROCTOR VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66158	-116.96966
L & L Barbecue	2260	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64644	-116.96569
L Street Shell	902	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61682	-117.08432
La Bella Pizza	373	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63857	-117.07847
La Bodega Market	1193	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60721	-117.07960
La Casa De Dona Maria	2530	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59521	-117.07895
La Escondida	2530	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59521	-117.07895
La Fresca	1037	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61276	-117.08189
La Fuente Mexican Food	34	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.65027	-117.08663
La India Bonita	1455	MELROSE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60564	-117.03914
La Kalaka Flaca Gourmet Mexican Food	1223	3RD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60996	-117.06711
La Moreliana Bakery	275	QUINTARD	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60332	-117.06390
La Nena's Mexican Restaurant	396	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63450	-117.09128
La Parroquia Cafe & Music Lounge	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62583	-116.96682
La Plamita	1231	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60934	-117.06677
La Quinta Grill	625	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64137	-117.09444
La Taquiza Mexican Restaurant	1576	INDUSTRIAL	BL	Y	Y	N	N	Y	N	N	Y	Y	32.59900	-117.08449
La Torta	730	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62917	-117.09477
La Tropicana	1340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60511	-117.06659
Las Cazuelas de Nohelia	534	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62930	-117.09001
Las Golondrinas Taco Shop	686	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62466	-117.08739
Las Gorditas	1187	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60739	-117.07967
Liberty Giant Pizza	1419	HILLTOP	DR	Y	Y	N	N	Y	N	N	Y	Y	32.60389	-117.05131
Lisa's Filipino Cuisine	2260	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64644	-116.96569
Little Caesars	481	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63172	-117.08922
Little Caesars 7636	875	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63750	-117.02522
LJ San Miguel Ranch 22 LP/Los Primos Mex Food	2322	PROCTOR VALLEY	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66162	-116.96959
Lolitas Restaurant	413	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62907	-117.04579
Lolitas Taco Shop	601	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.61495	-117.02634
Lolitas Taco Shop	4516	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66113	-117.03035
Lomas Cafe Mexican Food	3218	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59507	-117.06407
Long John Silver	1049	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61571	-117.06942
Lorenzos	200	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64071	-117.09368
Los Alazanes Inc.	1451	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64438	-117.00140
Los Chilaquiles	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62470	-116.96496
Los Jalapenos Mexican Restaurant	943	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61581	-117.08301

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Los Panchos Authentic Mexican and Seafood	577	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63148	-117.08867
Los Panchos Mexican & Seafood	933	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Los Panchos Taco Shop	1009	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61644	-117.06985
Los Taquitos	1665	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59551	-117.06422
Los Taquitos Mexican Grill	1208	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60588	-117.08016
Los Tres Pedros	1223	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60995	-117.06710
Lucys Market	1576	INDUSTRIAL	BL	Y	Y	N	N	Y	N	N	Y	Y	32.59900	-117.08449
Lutong Bahay & Oriental Grill	732	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64572	-117.00232
Luzitas Taco Shop	60	J	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63131	-117.05946
Macaroni Grill	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62243	-116.96607
Mandarin Canton Restaurant	543	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62901	-117.03946
Mandarin Chinese	945	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99238
Manna Restaurant	600	F	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63739	-117.09266
Marie Calendar 103	330	F	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64072	-117.08089
Marios Taco Shop	642	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60239	-117.08125
Mariscos El Palmar	201	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64115	-117.09305
Mariscos Los Arcos Restaurant	89	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64831	-117.06467
Marisol Nite Club	2638	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59507	-117.07631
Maye's Desserts	4240	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66036	-117.03565
McDonalds - Telegraph	551	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62867	-117.03864
McDonalds 14228/Sutherland MGMT Co	2254	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64721	-116.96681
McDonalds 25836/TRS Restaurant	687	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.61469	-117.02550
McDonalds 6840/Sutherland MGMT Co	551	TELEGRAPH CANYC	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62867	-117.03864
McDonalds at Broadway	619	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62693	-117.08747
McDonalds at E Street	725	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64043	-117.09850
McDonalds at Third 1557	1110	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61320	-117.06939
McDonalds Corp	1150	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60702	-117.08245
McDonalds Corp 7554	1288	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60368	-117.07923
McDonalds of Bonita	4340	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
McDonalds/Tavarua Restaurant Inc	75	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.65127	-117.09382
Mercado International 2000	1415	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60270	-117.06422
MGM Buffet	693	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60482	-117.08443
Mike's Giant NY Pizza 7	1445	3RD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60211	-117.06400
Miramar Fish Market	1655	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59750	-117.07581
MJ's Bar & Grill	1445	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60212	-117.06401
MR VS Giant Pizza	1090	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61395	-117.06991
MRS Rice Oriental Restaurant, LLC	1355	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60276	-117.07745
NAPA Pizza	1550	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64453	-116.99709
Nashikinos Deli	1419	HILLTOP	DR	Y	Y	N	N	Y	N	N	Y	Y	32.60389	-117.05131
Negro Durazo	415	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63388	-117.09026
Ninna Matty's Mexican Food	1352	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60450	-117.06625
Ocean City Partnership	1011	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61338	-117.08218
Olive Garden Restaurant 1205	585	I	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62817	-117.08715
Otay Farms Inc.	1716	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59388	-117.07510
Outside In	1121	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61329	-117.06849
Palap Charbroiled Chicken	263	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Palomar Importer & Wholesale Co. Inc.	2550	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59521	-117.07895
Panchos Mexican Grill	933	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64183	-116.99257
Panda Chef	2260	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64644	-116.96569
Panda Express 1098	1820	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59436	-117.03517
Panda Express 1316	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Panda Express 960	1120	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60910	-117.08137
Panda Imperial Chinese	1208	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60982	-117.06796
Panda Imperial Restaurant	1208	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60982	-117.06796
Panda King	1459	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64438	-117.00140
Panera Bread	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Papa Johns Pizza 1977	1085	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61432	-117.06889
Papa Johns Pizza 1978	1020	TIERRA DEL REY		Y	Y	N	N	Y	N	N	Y	Y	32.63685	-117.02001
Papa Murphy's Take & Bake Pizza	263	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Park & Joo Enterprise Inc/DBA Rice King	1550	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64453	-116.99709
Pescados Mariscos Hectors	2305	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64900	-116.96529
Pescados Y Mariscos Hectors	1177	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60827	-117.08000
PF Changs	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62243	-116.96607
PF Changs China Bistro	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Pho Vien Dong	2260	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64644	-116.96569
Pick Up Stix	2127	OLYMPIC	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62857	-116.96569
Pinnochio	225	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64391	-117.08055
Pizza & Pasta Express	1392	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62319	-116.99754
Pizza Hut	1480	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
Pizza Hut	542	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
Pizza Hut	251	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
Pizza Hut	885	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63638	-117.02380
Pizza Hut 315092	1480	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
Pizza Junction	226	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64071	-117.09368
Plazas Mexican Food	1550	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59877	-117.07710
Poe's Catering	2156	LAGO MADERO		Y	Y	N	N	Y	N	N	Y	Y	32.65867	-116.97252
Poliza Hollywood Inc	72	J	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63131	-117.05946
Pozoleria Dona Maria	1660	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59691	-117.07667
Prima Supply Inc.	649	ANITA	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59752	-117.08091
Rally's Hamburger/Ongs Restaurant Group	1004	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61677	-117.07064
Ralphs 235	659	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.61568	-117.02500
Ralphs 75	780	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64500	-117.00159
Rancho Palomar LP	1315	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60646	-117.06535
Red Lobster 521	342	F	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64056	-117.08145
Red Lobster	598	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.62982	-117.08756
Red Ribbon Bakery	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Roberto DePhillippis Steak House	556	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62905	-117.08918
Roberto's Taco Shop	1052	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61167	-117.08228
Robledo's Taco Shop Inc.	444	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63291	-117.09060
Romano's Macaroni Grill 339	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Romesco Baja Bistro	4346	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
Rosa Giant Pizza	1680	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59537	-117.07634

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
RS Restaurant LLC DBA Subway 2253	374	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63967	-117.04958
Rubios Fresh Mexican Grill	1016	TIERRA DEL REY		Y	Y	N	N	Y	N	N	Y	Y	32.63685	-117.02001
Rubios Fresh Mexican Grill at Broadway	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Rubios Fresh Mexican Grill at Eastlake	1480	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62883	-116.96534
San Diego Cash & Carry	3630	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59631	-117.05548
Santa Fe Meats	2514	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59527	-117.07948
Saphire Lounge	4076	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65837	-117.03904
Sareta Food Corporation	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62583	-116.96682
Seafood City formerly Albertson's 6729	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
Selecta Mexican Foods	1340	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60511	-117.06659
Senor Pancho Mexican Grill	298	MONTGOMERY	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59715	-117.06419
Seven Eleven 13569E-2131	796	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62085	-117.08583
Shakey's Pizza	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Silver Cup Bakery	1352	SANTA CORA	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62864	-116.98491
Silver Dollar	341	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63985	-117.07898
Sitoo's Deli & Catering	2300	BOSWELL	RD	Y	Y	N	N	Y	N	N	Y	Y	32.65471	-116.96604
SL Gourmet/Chinese Gourmet Express	555	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63099	-117.08651
Smart & Final 463 / SFI Corp	3141	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59415	-117.06589
Snack Ball	3804	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59544	-117.05034
Sodexho Management Inc.	84	J	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63102	-117.05795
South Bay Foods, Inc.	1680	HILLTOP	DR	Y	Y	N	N	Y	N	N	Y	Y	32.59572	-117.05208
Southbay Fish and Grill	570	MARINA	PW	Y	Y	N	N	Y	N	N	Y	Y	32.62438	-117.10121
Star Bakery	1372	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60450	-117.06625
Star Gazer Club	33	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64710	-117.09531
Steak Escape Otay Ranch Town Center	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Stuart Anderson Black Angus Restaurant	707	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64088	-117.09810
Sunny's Market	449	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63303	-117.08981
Super Express Chinese Food	609	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62731	-117.08762
Sushi Corner	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62583	-116.96682
Sushi Loco	224	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64071	-117.09368
Sushiya	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Sutherland Management Co.	4394	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
Sweet Life	310	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64068	-117.08028
Taco Bell 15508	1548	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64453	-116.99709
Taco Bell 2971	340	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64086	-117.05069
Taco Bell 3398	696	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63997	-117.09710
Tacos El Gordo	689	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63022	-117.09329
Tacos El Gordo De Tijuana, BC Jr	1351	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60438	-117.06463
Tacos El Poblano	885	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63638	-117.02380
Tacos Toby	1682	MELROSE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59571	-117.04055
Taqueria El Farolito	651	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60412	-117.08248
Talavera Azul	365	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.63879	-117.07868
Tasita D Cafe	1550	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59883	-117.07738
Texcoco Restaurant	1043	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.61232	-117.08173
The Flafel Shoppe	115	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64412	-117.09425
The Lion's Den	725	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62323	-117.08605

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The Plascencia Group LLC	4346	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66008	-117.03351
The Soup Stone	310	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.64068	-117.08028
Thien's Optimart	498	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63120	-117.09009
Third Avenue Minimart	772	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62496	-117.07394
TJ Oyster Bar	4410	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66036	-117.03565
Tortillas De Harina Elice	1660	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.59691	-117.07667
Tortilleria Santa FE, Inc.	387	ZENITH	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59552	-117.06833
Tropical Fruits	1410	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60136	-117.07886
Unlimited Dream Ventures	374	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63967	-117.04958
Valerios Tropical Bake Shop	285	ORANGE	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60503	-117.04020
VIP Oriental Buffet	542	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.62931	-117.09012
Vons Food & Drug 2006	505	TELEGRAPH CANYO	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62939	-117.04101
Vons Food & Drug 2071	2250	OTAY LAKES	RD	Y	Y	N	N	Y	N	N	Y	Y	32.64609	-116.96642
Vons Food & Drug 2130	4404	BONITA	RD	Y	Y	N	N	Y	N	N	Y	Y	32.66028	-117.03190
Vons Food & Drug 2336	360	H	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63953	-117.05100
Vons Food & Drug 3063	870	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.62181	-117.07303
Walmart Eastlake	1360	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.63167	-116.96778
Walmart Expansion	75	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.65127	-117.09382
Weinershnitzel	493	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63138	-117.08934
Weinershnitzel	283	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60733	-117.06569
Wendy's Coastline Food Service Corp	960	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.64958	-116.96642
Wendy's Coastline Food Service Corp	618	E	ST	Y	Y	N	N	Y	N	N	Y	Y	32.64071	-117.09408
Wetzel's Pretzels Otay Ranch	2015	BIRCH	RD	Y	Y	N	N	Y	N	N	Y	Y	32.62376	-116.96689
Wings N Things Restaurant	481	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.63173	-117.08922
Xana Spree	391	PLAZA TOLUCA		Y	Y	N	N	Y	N	N	Y	Y	32.66853	-116.97081
Yo Julian's Mexican Food	1090	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.61395	-117.06991
Yoshinoya Beef Bowl	1299	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.60422	-117.07823
Zorba's Family Restaurant	100	BROADWAY		Y	Y	N	N	Y	N	N	Y	Y	32.64449	-117.09511
Cat xi-Mobile Carpet Drape Furn Cleaning														
Active Carpet Cleaning	43	ALVARADO	PL	N	Y	N	N	N	Y	N	Y	Y	32.63874	-117.06733
America's Finest Carpet	730	DESIGN	CT	N	Y	N	N	N	Y	N	Y	Y	32.59560	-117.02233
Bonita Carpet Care	2506	SADDLEHORN	DR	N	Y	N	N	N	Y	N	Y	Y	32.66004	-116.96267
Buena Vista Carpet Care	1551	LOMA	LN	N	Y	N	N	N	Y	N	Y	Y	32.59911	-117.04856
Carlos Sandoval Carpet Center	380	I	ST	N	Y	N	N	N	Y	N	Y	Y	32.62975	-117.07893
Cool Style Carpet Cleaning	752	MADISON	AV	N	Y	N	N	N	Y	N	Y	Y	32.62160	-117.08839
Day & Night Carpet Cleaning Services	317	TWIN OAKS	AV	N	Y	N	N	N	Y	N	Y	Y	32.64158	-117.07631
Del Rey Carpet Service	535	PASEO ROSAL		N	Y	N	N	N	Y	N	Y	Y	32.64750	-117.02176
Dollar Carpet Cleaning	2287	SUN VALLEY	RD	N	Y	N	N	N	Y	N	Y	Y	32.63509	-116.95924
Edwards Carpet Cleaning	578	NANTUCKET	DR	N	Y	N	N	N	Y	N	Y	Y	32.61893	-117.03072
Empire Carpet Service Inc.	556	SCENIC TRAIL	PL	N	Y	N	N	N	Y	N	Y	Y	32.66429	-116.96475
Extreme Carpet Care Services LLC	1540	CONNOLEY	AV	N	Y	N	N	N	Y	N	Y	Y	32.59986	-117.05581
First Touch Steam Carpet Cleaning	1177	BROADWAY		N	Y	N	N	N	Y	N	Y	Y	32.60827	-117.08000
Foreign Auto Upholstery	55	NAPLES	ST	N	Y	N	N	N	Y	N	Y	Y	32.61808	-117.05463
Frankys Floor & Carpet Care	971	FOURTH	AV	N	Y	N	N	N	Y	N	Y	Y	32.61743	-117.07390
Golden Care Carpet Cleaning	1768	REGENCY	WY	N	Y	N	N	N	Y	N	Y	Y	32.59132	-117.04414
Hydro Pacific Carpet Cleaning	232	GARRETT	AV	N	Y	N	N	N	Y	N	Y	Y	32.64303	-117.08315

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Integrity Carpet Cleaning	30	WOODLAWN	AV	N	Y	N	N	N	Y	N	Y	Y	32.64582	-117.10002
L&V Cleaning Services	64	SHERWOOD	ST	N	Y	N	N	N	Y	N	Y	Y	32.60355	-117.05456
Lavamax Carpet Cleaning	320	TROUSDALE	DR	N	Y	N	N	N	Y	N	Y	Y	32.65446	-117.08557
Ocean's Carpet	2488	MAIN	ST	N	Y	N	N	N	Y	N	Y	Y	32.59579	-117.08029
Preferred Carpet Care	110	BROADWAY		N	Y	N	N	N	Y	N	Y	Y	32.64427	-117.09502
RC Carpet & Furniture Cleaning	162	L	ST	N	Y	N	N	N	Y	N	Y	Y	32.62230	-117.06627
RG Carpet Cleaning	1097	MOUNT DANA	DR	N	Y	N	N	N	Y	N	Y	Y	32.61881	-117.00807
Rosalie's Carpet Cleaning	1057	BROADWAY		N	Y	N	N	N	Y	N	Y	Y	32.61215	-117.08060
Rueda's Carpet Cleaning	274	RANCHO	CT	N	Y	N	N	N	Y	N	Y	Y	32.59253	-117.04064
Select Carpets	4501	OTAY VALLEY	RD	N	Y	N	N	N	Y	N	Y	Y	32.60847	-117.03877
Servpro of Fire & Water Damage	1485	LA CHICA	DR	N	Y	N	N	N	Y	N	Y	Y	32.61306	-117.01883
Siedschlag Carpet Cleaning	537	OAKLAWN	AV	N	Y	N	N	N	Y	N	Y	Y	32.62881	-117.09189
Southbay Carpet Care	1883	GOTHAM	ST	N	Y	N	N	N	Y	N	Y	Y	32.64658	-116.98535
Sunset Carpet Cleaning	557	VANCE	ST	N	Y	N	N	N	Y	N	Y	Y	32.63428	-117.08871
Sunset Carpet Cleaning & Services	931	BUENA VISTA	WY	N	Y	N	N	N	Y	N	Y	Y	32.63886	-117.00229
TNT Carpets	658	CARLA	AV	N	Y	N	N	N	Y	N	Y	Y	32.63257	-117.06218
Two Brothers Carpet & Upholstery Cleaning	50	MONTE VISTA	AV	N	Y	N	N	N	Y	N	Y	Y	32.64774	-117.08967
Vegas Carpet Cleaning	1108	HILLTOP	DR	N	Y	N	N	N	Y	N	Y	Y	32.61664	-117.05708
Warrior Carpet	1546	POINT HUENEME	CT	N	Y	N	N	N	Y	N	Y	Y	32.60510	-117.02388
We Buff It Too Biz	489	G	ST	N	Y	N	N	N	Y	N	Y	Y	32.63598	-117.08627
We Care Carpet Cleaning	1937	DUKE	ST	N	Y	N	N	N	Y	N	Y	Y	32.64769	-116.98337
Westcoast Carpet Cleaning	297	K	ST	N	Y	N	N	N	Y	N	Y	Y	32.62452	-117.07291
Cat xii-Cement Mixing or Cutting														
Arturo Cervantes Barajas Concrete Co.	1264	RAVEN	AV	N	Y	N	N	Y	N	N	Y	Y	32.61697	-117.03710
Buildis and Son Cement	720	DEL MAR	AV	N	Y	N	N	Y	N	N	Y	Y	32.62726	-117.07249
California Concrete Designs	1631	COOLSPRINGS	CT	N	Y	N	N	Y	N	N	Y	Y	32.63704	-116.99044
Contrera's Concrete Service	113	L	ST	N	Y	N	N	Y	N	N	Y	Y	32.62339	-117.06456
Cuen Fred Concrete Service	47	OXFORD	ST	N	Y	N	N	Y	N	N	Y	Y	32.61385	-117.05379
John Tessitore	812	FAIRWAY	CT	N	Y	N	N	Y	N	N	Y	Y	32.62436	-117.06554
Nora's Concrete	110	F	ST	N	Y	N	N	Y	N	N	Y	Y	32.64320	-117.07214
RDS Concrete Construction	479	CORTE HELENA	AV	N	Y	N	N	Y	N	N	Y	Y	32.63771	-117.06826
Rubios Concrete Construction	725	BELVIA	LN	N	Y	N	N	Y	N	N	Y	Y	32.59915	-117.08504
The Rock Concrete Pumping	1031	COLORADO	AV	N	Y	N	N	Y	N	N	Y	Y	32.61128	-117.08721
Cat xiii-Masonry														
A&E Carpet & Tile Distributors	170	MACE	ST	N	Y	N	N	Y	N	N	Y	Y	32.59307	-117.05425
Alpha-Omega Hardscape	861	SOUTHSHORE	DR	N	Y	N	N	Y	N	N	Y	Y	32.65041	-116.97397
Chula Vista Tile & Stone	693	PALOMAR	ST	N	Y	N	N	Y	N	N	Y	Y	32.60482	-117.08443
DS Construction	172	D	ST	N	Y	N	N	Y	N	N	Y	Y	32.64855	-117.07641
Emerald Plastering	947	HELIX	AV	N	Y	N	N	Y	N	N	Y	Y	32.62418	-117.05305
FJL Masonry	1002	SUTTER RIDGE	CT	N	Y	N	N	Y	N	N	Y	Y	32.65208	-116.94275
J&J Tile Service	54	SMITH	AV	N	Y	N	N	Y	N	N	Y	Y	32.64669	-117.09355
Jasa Concrete	1414	MELROSE	AV	N	Y	N	N	Y	N	N	Y	Y	32.60891	-117.04216
JR Drywall	121	PALOMAR	ST	N	Y	N	N	Y	N	N	Y	Y	32.61246	-117.04880
Klaser Tile Company Inc.	1595	JAYKEN	WY	N	Y	N	N	Y	N	N	Y	Y	32.59880	-117.08103
MAC Plastering Inc.	1705	FAWNTAIL	CT	N	Y	N	N	Y	N	N	Y	Y	32.63747	-116.98777
Masonry By Michael	573	PLAZA DEL CID		N	Y	N	N	Y	N	N	Y	Y	32.63138	-117.01469

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Masonry Pros	78	KING	ST	N	Y	N	N	Y	N	N	Y	Y	32.63072	-117.06563
Precison Plastering	389	I	ST	N	Y	N	N	Y	N	N	Y	Y	32.63024	-117.07947
South Coast Structures	801	HALECREST	DR	N	Y	N	N	Y	N	N	Y	Y	32.63415	-117.03764
TRS Tile	1221	HELIX	AV	N	Y	N	N	Y	N	N	Y	Y	32.61377	-117.05206
USA Stone Design	970	BROADWAY		N	Y	N	N	Y	N	N	Y	Y	32.61458	-117.08388
Valencia Stone and Tile	241	E	ST	N	Y	N	N	Y	N	N	Y	Y	32.64570	-117.07883
Vent Pros	325	OXFORD	ST	N	Y	N	N	Y	N	N	Y	Y	32.60951	-117.06849
WEMAC Marine Insulation	753	ANITA	ST	N	Y	N	N	Y	N	N	Y	Y	32.59794	-117.08551
Cat xiv-Painting Coating														
Alfred's Painting	544	WELTON	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61292	-117.07979
Allstar Painting Services	1957	MOSS LANDING	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64133	-116.97824
Arrow Professional Painting	1170	WIND RIVER	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.61873	-117.00453
Arroyo Custom Painting Corp	1365	SERENA	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.64298	-117.00385
Barba Painting	1537	APPLEGATE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.62505	-116.98974
Discount Painting	1335	SERENA	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.64301	-117.00631
G&R Painting	580	MOSS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61459	-117.08153
Gaskill Painting Company Inc.	744	DESIGN	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59515	-117.02048
George Painting	1420	CAMELLIA	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.61009	-117.03333
Hawkin's Painting Company	976	GUATAY	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.62325	-117.05249
Icon Painting Solutions	1480	VENTERS	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.61099	-117.02517
Jam Painting Inc.	317	QUINTARD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60278	-117.06570
Lazaro's Painting	252	RANCHO	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.59160	-117.04098
Luther Painting	215	GUAVA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64287	-117.08584
Maintenance	1150	HITCHING POST	LN	N	Y	Y	N	Y	Y	N	Y	Y	32.64255	-116.95384
Marcelo's Distinctive Painting	567	MOSS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61383	-117.08104
MCS Painting	121	SECOND	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64866	-117.07789
My Painter Plus.Com	1360	MYRA	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.61048	-117.04498
NR Painting Inc.	2526	KING CREEK	CI	N	Y	Y	N	Y	Y	N	Y	Y	32.64232	-116.95053
Painters at Work	550	OXFORD	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60829	-117.07837
Paradise Painting	1015	CAMINITO ESTRELLA		N	Y	Y	N	Y	Y	N	Y	Y	32.63931	-117.03031
Quality Home Painting	2019	BRIDGEPORT		N	Y	Y	N	Y	Y	N	Y	Y	32.65387	-116.98062
Ray Garcia	24	FLOWER	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64949	-117.06833
Rolling Hills Custom Painting	116	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60914	-117.05906
Safari Painting	259	THIRD	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.64284	-117.08015
Sammy's Painting Company	225	PALOMAR	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.60808	-117.06362
Scott Painting Company	752	PASEO DEL REY		N	Y	Y	N	Y	Y	N	Y	Y	32.62298	-117.03842
South Coast Home Painting	1015	NORMA	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.62388	-117.04278
Southbay Painting	564	D	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.64477	-117.09295
Sumaya Painting	244	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63467	-117.07469
Superb Interior Painting	1679	PICKET FENCE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62538	-116.94700
Superior Color Painting	1604	PICKET FENCE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.62789	-116.94744
Cat xvi-Landscaping														
A&G Landscaping	56	QUINTARD	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60562	-117.05484
A&G Landscaping	226	QUINTARD	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60946	-117.04389
AJ Gardening	1125	MISTY CREEK	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62214	-117.00904
All Palms Plus	1471	VENTERS	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.61135	-117.02476

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American Veteran Lawn Care	431	NAPLES	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62226	-117.03978
Arroyo Landscaping	1494	WOODCREST	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.63572	-116.99655
AXL Landscaping	1136	CALLE DE DAMASCO		N	Y	N	Y	N	Y	Y	Y	Y	32.63580	-117.01249
Beltran Landscaping	2078	MIRROR LAKE	PL	N	Y	N	Y	N	Y	Y	Y	Y	32.64315	-116.97443
Better Greens	1230	TOBIAS	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.61202	-117.05743
Bufallo Quality Tree Work	902	ASPEN GLEN	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.65628	-116.94326
C&R Landscaping	314	MOSS	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62381	-117.04747
Castro Lawn Care	70	SHERWOOD	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60349	-117.05476
Chau Pen Van	1037	HELIX	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62034	-117.05418
Chermak Joseph	52	FORTUNA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62373	-117.05709
Clean Cut Lawn Services	702	COLORADO	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62231	-117.09217
CMN Lawn Services	1208	POSITAS	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.64771	-117.01349
Colonial Gardens Inc	578	PARKSIDE	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.64668	-117.04129
Complete Lawn Maintenance	470	D	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.64606	-117.08941
Cortez Samuel Landscaping	1058	CAMINO ATAJO		N	Y	N	Y	N	Y	Y	Y	Y	32.62929	-117.01545
Decasas Garden	1539	GRAND TETON	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.60334	-117.04417
Desert Garden's & Sons	1351	BLUE FALLS	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.64137	-117.00498
Dixon Landscaping Solutions	1243	CABEZAS COVE		N	Y	N	Y	N	Y	Y	Y	Y	32.63633	-116.96917
Dreamview Landscaping	226	OXFORD	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.61597	-117.04664
E Kim Landscaping	1002	CAMINO CALABAZO		N	Y	N	Y	N	Y	Y	Y	Y	32.63227	-117.00588
Elite Hauling Services	1180	FIRST	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61310	-117.06027
Enrique Ybarra Landscape Maintenance	619	WHITNEY	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62819	-117.08927
Epifanio Morales Gardens Landscape	684	FOURTH	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62704	-117.07924
Eriks Lawn Maintenance	1195	NAPA	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61788	-117.04236
Ernesto Casillas Landscaping	555	NAPLES	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60996	-117.07919
Ernie Salazar Landscaping	958	CEDAR	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61698	-117.08018
Evergreen Gardening Service	1486	OAKPOINT	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62367	-116.97940
Ezequiel Perez Landscaping	44	FIFTH	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.64778	-117.09173
Fast and Friendly	1352	SANTA OLIVIA	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.61980	-117.01368
Federal Land Management Corp	440	NICKMAN	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.61372	-117.07515
Gaeta's Tree Service	2543	GARNET PEAK	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.63937	-116.95104
Gotta Go Mow & Landscaping	1968	MEEKS BAY	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.63839	-116.97805
Green Desert	1081	FOREST LAKE	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.64258	-116.96532
Green Earth Gardening Service	145	CORTE MARIA	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62610	-117.03812
Green Grass Landscape	149	RAINIER	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.60220	-117.04379
Hale Landscaping	752	WOODLAWN	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62091	-117.09074
Handy Lawn Care	2016	GEYSERVILLE	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.63315	-116.97364
Hector Gardening	1946	DUKE	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.64745	-116.98271
Heldiz Landscape	295	RIENSTRA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60729	-117.04049
Hernandez Gardening	1038	JEFFERSON	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61187	-117.08457
Herrera Antonio Landscape	140	RIVERA	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.60518	-117.04589
Hinkle Tree Service	143	MADISON	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.64310	-117.09504
JC Landscaping	2157	HAMDEN	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.65746	-116.97499
Jeff's Lawn Care	995	MONSERATE	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62286	-117.05028
Jessica Lopez Design	972	MCCAIN VALLEY	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.61836	-117.01344
JM Landscaping	1303	CALLE TEMPRA		N	Y	N	Y	N	Y	Y	Y	Y	32.60570	-117.06796

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
JM Lawns	368	ANITA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59942	-117.06782
John's Yard Service	668	ROBERT	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.63312	-117.05885
Johnson Greenery	171	L	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.62276	-117.06681
Jose's Gardening	1013	CUYAMACA	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62185	-117.05456
Jose's Lawn Service	1428	LA CHICA	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.61469	-117.01819
JR's Landscape	689	CHULA VISTA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.64536	-117.09889
Juan J. Hale Landscaping Maint. Service	1057	BROADWAY		N	Y	N	Y	N	Y	Y	Y	Y	32.61215	-117.08060
Juan Leal Landscape	308	PALM	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.59127	-117.04633
Kazper's Landscaping	1246	THIRD	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.60868	-117.06815
Kiki's Paradise Landscaping	1360	CALLEJON CERVANTES		N	Y	N	Y	N	Y	Y	Y	Y	32.64640	-117.00707
Kutting Edge	1617	JADE	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.59771	-117.04949
Kyoto Landscape	602	ANITA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59880	-117.07865
Land Art	725	GREDOS	PL	N	Y	N	Y	N	Y	Y	Y	Y	32.64086	-117.02116
Landscape Enterprise	25	D	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.65159	-117.07154
Leon's Landscaping Service	1453	TROUVILLE	LN	N	Y	N	Y	N	Y	Y	Y	Y	32.62687	-116.97289
Leo's Landscape	480	BELLE VISTA	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.63937	-117.04441
Lua's Landscaping	1100	INDUSTRIAL	BL	N	Y	N	Y	N	Y	Y	Y	Y	32.60963	-117.08920
Lucero's Landscaping	374	MOSS	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.61688	-117.07329
Manzano's Landscaping	739	NEPTUNE	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.63327	-117.04802
Mario's Landscaping	576	SIPES	CI	N	Y	N	Y	N	Y	Y	Y	Y	32.61812	-117.03017
Mariposa's Landscape	666	MARIPOSA	CI	N	Y	N	Y	N	Y	Y	Y	Y	32.62643	-117.03637
Martin & Zamora Landscape Maintenance	758	ASH	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62243	-117.08525
Maximum & Green Maintenance	309	VALLEY	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.59159	-117.04734
Mel's Gardening Service	910	ISRAEL	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.61178	-117.01687
MG Gardening	357	PEPPERWOOD	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.61169	-117.03820
MGM Landscape Inc	558	TRAILRIDGE	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.65502	-116.99435
Miles Bob Irrigation	752	NACION	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.63292	-117.04748
Ochi Gardens	176	CAMINO ENTRADA		N	Y	N	Y	N	Y	Y	Y	Y	32.62899	-117.05310
Olguin's Landscape	186	CORTE HELENA	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.64779	-117.07275
Orlando's Garden	2887	MAIN	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59427	-117.07145
Ortega Landscape	1225	BROADWAY		N	Y	N	Y	N	Y	Y	Y	Y	32.60584	-117.07838
P Gracia Landscape	490	SHY	LN	N	Y	N	Y	N	Y	Y	Y	Y	32.60746	-117.07514
P&A Garden Landscaping	684	FOURTH	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62704	-117.07924
Pacific Turf Specialists	681	CLAIRE	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.63246	-117.05951
PCM Maintenance Landscape Service	400	KRISTA	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.64219	-117.04726
Pedro's Landscaping	443	FLOWER	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.64519	-117.08782
Pena's Gardening Maintenance Service	236	OLYMPIA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.61529	-117.04597
Picket Fences Landscaping Inc.	1263	POPLAR SPRING	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.64171	-116.94645
PK Shedenhelm's Landscaping	1606	COUNTRY VISTAS	LN	N	Y	N	Y	N	Y	Y	Y	Y	32.65733	-117.00076
Plays in the Dirt	575	OTAY LAKES	RD	N	Y	N	Y	N	Y	Y	Y	Y	32.65154	-117.00581
PRG Maintenance Gardening Service	1303	CALLE TEMPRA		N	Y	N	Y	N	Y	Y	Y	Y	32.60570	-117.06796
Pro Care Landscape & Gard	1164	PASEO SARINA		N	Y	N	Y	N	Y	Y	Y	Y	32.62727	-117.01187
Rafaelo's Tree Trimmer	435	TREMONT	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59761	-117.07046
RG Landscape & Design	3	PAISLEY	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60978	-117.05375
Rhinotech Landscape	459	RIVERA	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.60314	-117.03298
Rich Valens Tree Service	1106	DEL MAR	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61367	-117.06799

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				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
RM Landscape	933	GUATAY	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62398	-117.05198
Robert's Gardening Service	749	RIVERLAWN	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.62206	-117.08705
Romita Landscape	20	TOURMALINE	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59639	-117.03929
Rudy Landscaping	746	AVENIDA SOLARIA		N	Y	N	Y	N	Y	Y	Y	Y	32.64288	-117.01385
Sam's Stump Removal	1103	DEL MAR	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61375	-117.06719
Silahua's Landscape and Yard Maintenance	1169	OCALA	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.61995	-117.03809
Silva's Tree Service	75	FOURTH	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.64811	-117.08663
Southwing Land Maint Inc.	3855	SAN MIGUEL	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.63838	-117.06941
SPS/Creative Curb Landscapes	839	CALLE LAGASCA		N	Y	N	Y	N	Y	Y	Y	Y	32.64683	-117.03007
Steve Ferlito Gardening Service	271	RANCHO	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.59300	-117.04015
Trim Around Yard Service	914	WAYNE	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.64249	-116.99182
Trujillo Landscaping	656	ROBERT	AV	N	Y	N	Y	N	Y	Y	Y	Y	32.63359	-117.05867
Turf Pros	598	RIVERA	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.60793	-117.03032
Valle Lawn Service	1284	MARBELLA	PL	N	Y	N	Y	N	Y	Y	Y	Y	32.64544	-117.00987
Vasquez Landscaping & Hauling	398	MANKATO	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.63145	-117.08030
Vegas Gardening Landscaping Services	901	ISRAEL	CT	N	Y	N	Y	N	Y	Y	Y	Y	32.61235	-117.01722
VMG Landscaping	270	DATE	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.59158	-117.04919
Western Tree Service	1756	RIDGE CREEK	DR	N	Y	N	Y	N	Y	Y	Y	Y	32.65400	-116.99332
Yonekura Glenn	572	OTIS	ST	N	Y	N	Y	N	Y	Y	Y	Y	32.63193	-117.08850
Cat xviii-Golf Parks Rec Facilities														
Alcala Park	1620	MONTANA	RD	Y	Y	N	Y	N	N	Y	Y	Y	32.63496	-116.98979
Augusta Park	1034	PARK MEADOWS	RD	Y	Y	N	Y	N	N	Y	Y	Y	32.64696	-116.95697
Bonita Haciendas Mini Park	1518	VIA HACIENDA		Y	Y	N	Y	N	N	Y	Y	Y	32.64913	-117.00088
Boys & Girls Club of Chula Vista	1301	OLEANDER	AV	Y	Y	N	Y	N	N	Y	Y	Y	32.61549	-117.03257
Chula Vista Elks Lodge 2011	901	ELKS	LN	Y	Y	N	Y	N	N	Y	Y	Y	32.62627	-117.03449
Circle Park		KING CREEK	CI	Y	Y	N	Y	N	N	Y	Y	Y	32.64241	-116.95118
Cobblestone Park		LAKESHORE	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.65676	-116.97700
Coors Amphitheatre	2050	ENTERTAINMENT	CI	Y	Y	N	Y	N	N	Y	Y	Y	32.58808	-117.00630
Countryside Park		PINON HILLS	RD	Y	Y	N	Y	N	N	Y	Y	Y	32.63975	-116.97574
Eastlake Beach Club	2050	LAKESHORE	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.65307	-116.97848
Eastlake Country Club	2375	CLUBHOUSE	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.64124	-116.95846
Fun 4 All	950	INDUSTRIAL	BL	Y	Y	N	Y	N	N	Y	Y	Y	32.61382	-117.09012
Kensington Road Park	2600	SADDLEBACK	ST	Y	Y	N	Y	N	N	Y	Y	Y	32.65985	-116.95833
Knotts Soak City USA	2052	ENTERTAINMENT	CI	Y	Y	N	Y	N	N	Y	Y	Y	32.58737	-117.01095
Madison Lane Park	640	FALCON VALLEY	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.65973	-116.96212
Magnolia Hill Park	2640	MONTECITO	RD	Y	Y	N	Y	N	N	Y	Y	Y	32.66488	-116.95627
Oak Crest Park		SANTA MADERA	AV	Y	Y	N	Y	N	N	Y	Y	Y	32.62840	-116.99391
Orchard Park		MONTE SERENO	AV	Y	Y	N	Y	N	N	Y	Y	Y	32.62527	-117.00268
Palace Garden Park	1425	SECOND	AV	Y	Y	N	Y	N	N	Y	Y	Y	32.60473	-117.05728
Salt Creek Golf Club	525	HUNTE	PW	Y	Y	N	Y	N	N	Y	Y	Y	32.66909	-116.95612
San Diego County Club	88	L	ST	Y	Y	N	Y	N	N	Y	Y	Y	32.62166	-117.06579
Scobee Park	2351	KUHN	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.65337	-116.96485
Shorebird Park	2088	LAKESHORE	DR	Y	Y	N	Y	N	N	Y	Y	Y	32.65040	-116.97618
Wisteria Park		SANTA RITA		Y	Y	N	Y	N	N	Y	Y	Y	32.62069	-116.99807
Cat xx-Pool Fountain Cleaning														
A Environmental Services	125	H	ST	N	N	N	N	N	N	N	Y	N	32.63663	-117.07027

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ABC Pool Service	376	CENTER	ST	N	N	N	N	N	N	N	Y	N	32.63897	-117.08186
Academy Pool Service & Supplies	1680	BROADWAY		N	N	N	N	N	N	N	Y	N	32.59537	-117.07634
Acuario Pool & SPA Maintenance	1450	MELROSE	AV	N	N	N	N	N	N	N	Y	N	32.60619	-117.04215
All Pro Pool Services	4248	BONITA	RD	N	N	N	N	N	N	N	Y	N	32.66039	-117.03612
Ambart Inc.	652	H	ST	N	N	N	N	N	N	N	Y	N	32.63017	-117.09154
Aqua Diamond Pool Service & Repair	383	NOVA	PL	N	N	N	N	N	N	N	Y	N	32.62577	-117.04482
Aqua Pro Pool & SPA Service	1328	PINNACLE PEAK	DR	N	N	N	N	N	N	N	Y	N	32.63822	-116.95123
Aquatech Pool Service	1057	PARK MEADOWS	RD	N	N	N	N	N	N	N	Y	N	32.64612	-116.95596
Azul Pool Service	1546	HOPSCOTCH	DR	N	N	N	N	N	N	N	Y	N	32.62707	-116.95669
Blue Wave Pools	5116	GLEN VERDE	DR	N	N	N	N	N	N	N	Y	N	32.62460	-117.05096
Bob Reed's Step Saver Pool Products	326	E	ST	N	N	N	N	N	N	N	Y	N	32.64482	-117.08212
Bonita Vista Pool Service	1618	MILLS	ST	N	N	N	N	N	N	N	Y	N	32.64720	-116.99493
C&A Maint Service	461	RIENSTRA	CT	N	N	N	N	N	N	N	Y	N	32.60778	-117.03511
Chlor-Nation	510	CAMINO ELEVADO		N	N	N	N	N	N	N	Y	N	32.65221	-117.01156
Choice Maintenance and Repair	960	SURREY	DR	N	N	N	N	N	N	N	Y	N	32.65309	-117.02748
Chula Vista Curbside Agency	249	OXFORD	ST	N	N	N	N	N	N	N	Y	N	32.61029	-117.06565
Constable Pool Service	2351	BOSWELL	RD	N	N	N	N	N	N	N	Y	N	32.65603	-116.96499
Cornerstone	458	KARRA	CT	N	N	N	N	N	N	N	Y	N	32.64060	-117.04524
Crystal Clear Poolz	1123	TOBIAS	DR	N	N	N	N	N	N	N	Y	N	32.61573	-117.05830
CTI of San Diego	2137	CHATEAU	CT	N	N	N	N	N	N	N	Y	N	32.64814	-116.97402
CV Pool Repair & Supply	1082	BROADWAY		N	N	N	N	N	N	N	Y	N	32.61084	-117.08196
E&D Pool and SPA Service	1451	NAPA	CT	N	N	N	N	N	N	N	Y	N	32.60929	-117.03826
Fire on Ice of San Diego	1080	MOONSTONE	PL	N	N	N	N	N	N	N	Y	N	32.62144	-117.00982
Fix Time	2023	LAKERIDGE	CI	N	N	N	N	N	N	N	Y	N	32.65152	-116.98018
Herbur Pool	1421	FIELDBROOK	ST	N	N	N	N	N	N	N	Y	N	32.62149	-116.99710
Jim's Pool Clean Up	575	OTAY LAKES	RD	N	N	N	N	N	N	N	Y	N	32.65154	-117.00581
Jose's Pool Service	355	BROADWAY		N	N	N	N	N	N	N	Y	N	32.63610	-117.09110
JP's Pool Service	1571	CIRCULO BRINDISI		N	N	N	N	N	N	N	Y	N	32.62852	-116.96048
Keep It Clean Pool Service	1307	VAQUERO	CT	N	N	N	N	N	N	N	Y	N	32.63385	-117.00469
Kelly's Pool and SPA Care	1870	MARQUETTE	RD	N	N	N	N	N	N	N	Y	N	32.64739	-116.97898
Kng D C Pool & SPAS	14	QUINTARD	ST	N	N	N	N	N	N	N	Y	N	32.60314	-117.04268
Leslie's Swimming Pool Supplies 299	316	H	ST	N	N	N	N	N	N	N	Y	N	32.63961	-117.05180
Mack's Maintenance & Repair	201	TWIN OAKS	AV	N	N	N	N	N	N	N	Y	N	32.64521	-117.07771
Max Swimming Pool Service	1298	MORGAN HILL	DR	N	N	N	N	N	N	N	Y	N	32.62322	-117.00344
Misty Creek Home Improvement	1069	MISTY CREEK	ST	N	N	N	N	N	N	N	Y	N	32.62209	-117.01154
New Look Concrete Creations	1753	YALE	ST	N	N	N	N	N	N	N	Y	N	32.64542	-116.98875
Patrick's Pool & SPA Service	155	NAPLES	ST	N	N	N	N	N	N	N	Y	N	32.63910	-117.08843
Pete & Irma's Pool And SPA	2140	STONECREEK	PL	N	N	N	N	N	N	N	Y	N	32.65720	-116.97715
Pressures On	1288	SANTA LUCIA	RD	N	N	N	N	N	N	N	Y	N	32.63021	-116.99302
Pure Water Pool and SPA	2642	FLAGSTAFF	CT	N	N	N	N	N	N	N	Y	N	32.66093	-116.95658
R3 & Sons	1450	MELROSE	AV	N	N	N	N	N	N	N	Y	N	32.60619	-117.04215
Robert The Handy Man	1803	GOTHAM	ST	N	N	N	N	N	N	N	Y	N	32.64570	-116.98675
San Diego Stone Technicians	1863	GOTHAM	ST	N	N	N	N	N	N	N	Y	N	32.64637	-116.98574
Sanchez Handyman Service	730	COLORADO	AV	N	N	N	N	N	N	N	Y	N	32.62150	-117.09185
Sanique Development	474	H	ST	N	N	N	N	N	N	N	Y	N	32.63800	-117.04387
Schaeffer's Pool Service	2067	LAKERIDGE	CI	N	N	N	N	N	N	N	Y	N	32.65117	-116.97783

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SD Pool Service	30	WOODLAWN	AV	N	N	N	N	N	N	N	Y	N	32.64582	-117.10002
Sea Breeze Pool Service	1408	ASHFORD CASTLE	DR	N	N	N	N	N	N	N	Y	N	32.63061	-116.95455
Sharko Pool Service & Maintenance	819	AVENIDA MADERA		N	N	N	N	N	N	N	Y	N	32.62900	-117.05187
Southbay Postcon Services	1422	LANTANA	AV	N	N	N	N	N	N	N	Y	N	32.60991	-117.03409
Spic N Span	2057	CHATEAU	CT	N	N	N	N	N	N	N	Y	N	32.64906	-116.97735
Superior Home Prep Co.	1467	SUMMIT	DR	N	N	N	N	N	N	N	Y	N	32.64379	-117.00263
Three Amigos Pool Service	1362	MAX	AV	N	N	N	N	N	N	N	Y	N	32.60980	-117.04754
WES C Gallagher	861	SOUTHSHORE	DR	N	N	N	N	N	N	N	Y	N	32.65041	-116.97397
Cat xxiii-Building Material Storage														
Builders Surplus Sales	130	GLOVER	AV	N	Y	Y	Y	Y	N	Y	Y	Y	32.65513	-117.08764
California Concrete Accessories	2640	FAIVRE	ST	N	Y	Y	Y	Y	N	Y	Y	Y	32.59341	-117.07705
Chase Equestrian	575	TRAILRIDGE	DR	N	Y	Y	Y	Y	N	Y	Y	Y	32.65580	-116.99356
D. Leaf Sales Inc.	2585	MAIN	ST	N	Y	Y	Y	Y	N	Y	Y	Y	32.59383	-117.07793
Eastlake Distribution Center	2311	BOSWELL	RD	N	Y	Y	Y	Y	N	Y	Y	Y	32.65588	-116.96719
Ferguson Enterprise	895	THIRD	AV	N	Y	Y	Y	Y	N	Y	Y	Y	32.62139	-117.07160
G. Scott Asphalt	358	TROUSDALE	DR	N	Y	Y	Y	Y	N	Y	Y	Y	32.65390	-117.08748
Home Depot 658/Home Depot USA Inc.	725	PLAZA	CT	N	Y	Y	Y	Y	N	Y	Y	Y	32.63756	-117.03198
Home Depot Eastlake	1320	EASTLAKE	PW	N	Y	Y	Y	Y	N	Y	Y	Y	32.63319	-116.96913
J&W Redwood	3817	MAIN	ST	N	Y	Y	Y	Y	N	Y	Y	Y	32.59371	-117.05120
Lowes Home Improvement Warehouse Inc.	2225	OTAY LAKES	RD	N	Y	Y	Y	Y	N	Y	Y	Y	32.64886	-116.96914
Main Street Recycling	1751	FOURTH	AV	N	Y	Y	Y	Y	N	Y	Y	Y	32.59356	-117.06541
Otay Metal Mart	195	MACE	ST	N	Y	Y	Y	Y	N	Y	Y	Y	32.59176	-117.05307
RCP Block & Brick Inc.	75	FOURTH	AV	N	Y	Y	Y	Y	N	Y	Y	Y	32.65308	-117.08832
Road One of San Diego	1805	MAXWELL	RD	N	Y	Y	Y	Y	N	Y	Y	Y	32.59730	-117.01740
Walmart at 5305 Broadway	1150	BROADWAY		N	Y	Y	Y	Y	N	Y	Y	Y	32.60702	-117.08245
White Cap Construction Supply	3451	MAIN	ST	N	Y	Y	Y	Y	N	Y	Y	Y	32.59385	-117.05985
Cat xxiv-Animal Facility														
A Girl and Her Dog	2278	SWEET PEA	LN	Y	N	N	Y	N	N	N	N	N	32.62647	-116.95818
J & R Pet Services	664	RAINBOW	DR	Y	N	N	Y	N	N	N	N	N	32.62214	-117.02843
Kim's Paws Claws Hoover Pet Care	39	SANDALWOOD	DR	Y	N	N	Y	N	N	N	N	N	32.64720	-117.06687
Paws and Whiskers Gentle Grooming	294	3RD	AV	Y	N	N	Y	N	N	N	N	N	32.64150	-117.08036
Pawz R US	251	BROADWAY		Y	N	N	Y	N	N	N	N	N	32.63948	-117.09241
Preen-2-Pristine Pet Parlor & Snack Shack	2318	PROCTOR VALLEY	RD	Y	N	N	Y	N	N	N	N	N	32.66162	-116.96959
Sara Hargrove/South Bay Veterinary Hospital	1038	BROADWAY		Y	N	N	Y	N	N	N	N	N	32.61217	-117.08280
SD Doggy Runs	1539	MAX	AV	Y	N	N	Y	N	N	N	N	N	32.60315	-117.04506
Unleashed by Petco 1192	304	H	ST	Y	N	N	Y	N	N	N	N	N	32.64051	-117.05261
Waggin N Walkin	78	MANKATO	ST	Y	N	N	Y	N	N	N	N	N	32.63736	-117.06139
Cat xxv-Power Washing Services														
APM Power Washing	228	KENNEDY	ST	N	N	Y	N	Y	Y	N	Y	N	32.60972	-117.06440
Fully Restored Surface Cleaning Specialists	970	SOMERSET	CT	N	N	Y	N	Y	Y	N	Y	N	32.64813	-116.96341
GMR Enterprises	91	EMERSON	ST	N	N	Y	N	Y	Y	N	Y	N	32.61698	-117.05120
Jay Bright Company	787	ENERGY	WY	N	N	Y	N	Y	Y	N	Y	N	32.59742	-117.01599
Jet Clean USA Inc.	1255	VAQUERO	CT	N	N	Y	N	Y	Y	N	Y	N	32.63341	-117.00645
Superior Wash	1556	HUNTERS GLEN	AV	N	N	Y	N	Y	Y	N	Y	N	32.62370	-116.97474
Retail Store														
Furniture Mattress Expo	1215	BROADWAY		N	N	Y	Y	Y	N	N	N	Y	32.60645	-117.07940

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Kohls Eastlake	2325	OTAY LAKES	RD	N	N	Y	Y	Y	N	N	N	Y	32.65000	-116.96500
Multi-Tenant	171	MACE	ST	N	N	Y	Y	Y	N	N	N	Y	32.59326	-117.05254
Save A Lot 943	1315	THIRD	AV	Y	Y	N	N	Y	N	N	Y	Y	32.60646	-117.06535
Target Store T-1815	910	EASTLAKE	PW	Y	Y	N	N	Y	N	N	Y	Y	32.65040	-116.96765
Target	40	FOURTH	AV	N	N	Y	Y	Y	N	N	N	Y	32.65119	-117.08945
INDUSTRIAL FACILITIES														
A & A Medical Transportation	610	G	ST	N	N	Y	N	Y	N	N	N	N	32.63369	-117.09137
A&A Auto Wrecking	775	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59818	-117.01598
A1 Moulding Supplies	180	MACE	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59216	-117.05432
AAA Foreign Auto Recycling	783	NIRVANA	AV	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59619	-117.01371
Aatlas	791	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59730	-117.01470
ABF Freight System Inc.	875	ENERGY	WY	N	N	Y	N	Y	N	N	N	N	32.59695	-117.00905
ACE Industries Inc.	738	DESIGN	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59515	-117.02121
ACE Metal Trading	2675	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59246	-117.07608
Action Auto Dismantlers Inc	151	REED	CT	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59218	-117.05531
ADA Fabrication	2260	MAIN	ST	N	Y	Y	N	Y	Y	Y	Y	Y	32.59562	-117.08565
Advance Auto Wrecking	777	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59817	-117.01460
Advantage Printing & Apparel Inc	681	ANITA	ST	Y	Y	Y	N	N	Y	N	Y	Y	32.59776	-117.08267
Aker Leather Products	2248	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59562	-117.08565
All Japanese Auto Recycling	775	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59818	-117.01598
All Toyota/Lexus Auto Recycling	805	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
Alliance Hardwood LLC	775	ANITA	ST	Y	Y	N	N	N	N	N	Y	Y	32.59798	-117.08685
Allied Waste Services	881	ENERGY	WY	Y	Y	Y	Y	Y	Y	N	Y	Y	32.59774	-117.00829
Amerivacs Manufacturing Inc	3800	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59544	-117.05034
Apada Industries Inc	632	MARSAT	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.60114	-117.08074
Aqualarm	1151	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60588	-117.09149
Arise/Waco Scafolding	676	MOSS	ST	N	Y	Y	N	Y	N	N	Y	Y	32.61335	-117.08779
Arroyo Fabrication	2488	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59579	-117.08029
ASI Distr. & Fabr./Abbet Services Inc	1547	JAYKEN	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.60031	-117.08084
Asian Kars Auto Recycling	777	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59817	-117.01460
BABA Foods	693	PALOMAR	ST	Y	Y	N	N	Y	N	N	Y	Y	32.60482	-117.08443
Bacco Produce	1031	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.61033	-117.09150
Baja California Cycle USA Inc	2801	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59428	-117.07320
Bajas 3 Auto Wrecking	811	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
Barbee Valve & Supply	751	DESIGN	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59595	-117.01959
Bastan Corporation	2260	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59562	-117.08565
Bellama Custom Metal Fabrication	3129	MAIN	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59388	-117.06643
Best Recycle LLC	1169	THIRD	AV	N	Y	Y	Y	Y	Y	Y	Y	Y	32.61141	-117.06775
Brenntag Pacific Inc	1888	NIRVANA	AV	N	Y	N	N	Y	Y	Y	Y	Y	32.59446	-117.01648
C&G Swiss	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
Cabinet Tronix LLC	290	TROUSDALE	DR	Y	Y	N	N	N	N	N	Y	Y	32.65474	-117.08456
Cabinetry Design Inc	675	ANITA	ST	Y	Y	N	N	N	N	N	Y	Y	32.59735	-117.08220
California Hardcoating Company	675	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59735	-117.08220
California Scrap Logistics Corp	811	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
California Sports Auto Wrecking	781	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59773	-117.01599

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Calumet Auto Wrecking Inc	891	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59684	-117.00806
Canvas Concept Inc.	649	ANITA	ST	Y	Y	N	N	N	N	N	Y	Y	32.59752	-117.08091
Career Cap Corporation	1680	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.59649	-117.08504
Ciannas Creation	744	DESIGN	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59515	-117.02048
Circle Food LLC	1616	SILVAS	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59769	-117.07765
Custom Door and Window Sales	1128	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60637	-117.09324
Daves Woodworking	171	MACE	ST	Y	Y	N	N	N	N	N	Y	Y	32.59320	-117.05236
David J Food Products	689	MARSAT	CT	Y	Y	N	N	Y	N	N	Y	Y	32.60053	-117.08310
Davinci Metal Works	3521	MAIN	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59151	-117.05779
Del Rey Screenprinting	2555	FAIVRE	ST	N	N	N	N	N	Y	N	N	Y	32.59230	-117.07851
DNP Electronics America LLC	2391	FENTON	ST	N	Y	Y	N	Y	N	N	Y	Y	32.65300	-116.96295
Doncaster, GCE Industries	1887	NIRVANA	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59427	-117.01811
Dresser Rand	670	L	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.61573	-117.08745
Dutchmasters Cabinets	2605	FAIVRE	ST	Y	Y	N	N	N	N	N	Y	Y	32.59242	-117.07738
Eagle Foods Distributors Inc	684	ANITA	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59948	-117.08252
Ecology Auto Wrecking	825	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59755	-117.01225
Ecology Auto Wrecking 2	850	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59551	-117.01114
Ecology Auto Wrecking 3	800	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59564	-117.01304
El Sol Industries Inc	679	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59735	-117.08220
Ervey Produce	1031	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.61033	-117.09150
Estes Express Lines	120	PRESS	LN	N	N	Y	N	Y	N	N	N	N	32.65573	-117.08491
Eurotecnics	170	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59307	-117.05425
Express Furniture	1226	THIRD	AV	Y	Y	N	N	N	N	N	Y	Y	32.60917	-117.06781
Express Pipe & Supply Co	117	PRESS	LN	Y	Y	N	N	Y	N	N	Y	Y	32.65607	-117.08370
FFF Distributors Inc	2474	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Finest City Cabinets	330	TROUSDALE	DR	Y	Y	N	N	N	N	N	Y	Y	32.65421	-117.08645
FJ Willert Construction Co.	1869	NIRVANA	AV	N	Y	Y	Y	Y	N	Y	Y	Y	32.59533	-117.01405
Flag Crafters	1095	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60816	-117.09140
Formosa Prosonic USA Inc.	303	H	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.63445	-117.07763
Frank B Wood	2474	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59579	-117.08029
Freeway Auto Wrecking	783	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59771	-117.01465
Frontera International	1879	NIRVANA	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59398	-117.01489
Fuji Seimen Corp	170	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59307	-117.05425
G&M Custom Flags and Banners	2240	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59562	-117.08565
G&M Manufacturing	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
Gary Manufacturing Inc.	1124	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60637	-117.09324
Granite Gallery Inc	180	MACE	ST	N	Y	N	N	N	N	N	Y	Y	32.59216	-117.05432
H&M Wrought Iron Factory Inc	2560	MAIN	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59590	-117.07825
Hitachi Home Electronic Inc.- America	900	HITACHI	WY	N	Y	Y	N	Y	N	N	Y	Y	32.65152	-116.95947
Honda Acura Parts Auto Recycling	895	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59681	-117.00743
House of Leather and Fabrics	290	TROUSDALE	DR	Y	Y	N	N	N	N	N	Y	Y	32.65471	-117.08469
Husks Unlimited Inc.	1616	SILVAS	ST	Y	Y	N	Y	N	Y	N	N	Y	32.59769	-117.07765
HVAC Exchange Inc.	2675	FAIVRE	ST	Y	Y	N	Y	N	Y	N	N	Y	32.59246	-117.07608
Hydro Scape Products Inc.	375	TROUSDALE	DR	Y	Y	N	N	Y	N	N	Y	Y	32.65444	-117.08811
Hyspan Precision Prod Inc	1685	BRANDYWINE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59555	-117.02831
Hyundai Livart Furniture Outlet	3121	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59388	-117.06643

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Imperial Sprinkler Supply Inc.	280	TROUSDALE	DR	Y	Y	N	N	Y	N	N	Y	Y	32.65492	-117.08396
Import Auto Wrecking	793	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59618	-117.01618
Indu Fashions	680	MARSAT	CT	Y	Y	N	N	N	N	N	Y	Y	32.60114	-117.08326
International Sign Co	3268	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59506	-117.06307
J and L Enterprises	1885	NIRVANA	AV	N	N	Y	N	Y	N	N	N	Y	32.59363	-117.01581
Japan Tech Auto Wrecking	777	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59817	-117.01460
Japanese Auto Wrecking	811	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
Kama Tech Corporation	739	DESIGN	CT	N	Y	Y	N	Y	Y	N	Y	Y	32.59673	-117.02064
Kelco Packaging Prop	2474	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Kelly Paper Company	630	BAY	BL	Y	Y	N	N	N	N	N	Y	Y	32.62433	-117.09531
Ken Larcens Cabinet Plus	171	MACE	ST	Y	Y	N	N	N	N	N	Y	Y	32.59320	-117.05236
Kleen Blast Industrial Services	676	MOSS	ST	Y	Y	N	N	Y	N	N	Y	Y	32.61335	-117.08779
L&V Furniture	2560	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59590	-117.07825
LA Natural Tortilla Factory	2765	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59427	-117.07368
Lawrence Hughes Cabinets Unlimited	180	MACE	ST	Y	Y	N	N	N	N	N	Y	Y	32.59216	-117.05432
Lund & Flynn Inc	370	TROUSDALE	DR	N	Y	Y	N	Y	Y	N	Y	Y	32.65383	-117.08772
Lyon Technologies Inc	1690	BRANDYWINE	AV	N	Y	Y	N	Y	Y	N	Y	Y	32.59570	-117.03008
Marscott Marine and Industrial Supply	2446	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Mask US Inc	3121	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59388	-117.06643
MMC Energy - Peak Power Plant	3497	MAIN	ST	N	N	Y	N	Y	Y	N	Y	N	32.59175	-117.05865
Monos Custom Metal Fabrications Inc	1548	JAYKEN	WY	N	Y	Y	N	Y	N	N	Y	Y	32.60005	-117.08168
Montoya's Auto Wrecking	781	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59773	-117.01599
MTS Maintenance Facility	3650	MAIN	ST	N	N	Y	N	Y	N	N	N	Y	32.59573	-117.05446
NCR Neon Specialist	180	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59216	-117.05432
Nirvana Produce Distributions	1872	NIRVANA	AV	Y	Y	N	N	Y	N	N	Y	Y	32.59537	-117.01567
Nutrition Private Label Inc	3031	MAIN	ST	N	N	N	N	N	N	N	N	Y	32.59445	-117.06811
Nutritional Supplement Manufacturers Inc.	1055	BAY	BL	N	N	N	N	N	N	N	N	Y	32.60826	-117.09142
Nypro San Diego	505	MAIN	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59571	-117.03177
Oak Land Furniture	2462	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59579	-117.08029
Ochoa's Cabinet	2446	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59579	-117.08029
Onager Corporation	789	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59721	-117.01599
One Self Graphics	1231	3RD	AV	N	N	N	N	N	N	N	N	Y	32.60934	-117.06677
OSI Security Devices	1580	JAYKEN	WY	N	Y	Y	N	Y	Y	N	Y	Y	32.59922	-117.08168
Oshitani America Inc.	333	H	ST	N	N	Y	N	N	N	N	N	Y	32.63475	-117.07793
Otay Metal Mart	195	MACE	ST	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59176	-117.05307
Pacific Auto Wrecking	795	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59689	-117.01475
Pacific Manufacturing Inc	2605	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59242	-117.07738
Pacific Maritime Industries	1664	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.59699	-117.08503
Pallets and Services of SD Corp	1020	COLORADO	AV	Y	Y	N	N	N	N	N	Y	Y	32.61167	-117.08807
PHV Custom Cabinets	3121	MAIN	ST	Y	Y	N	N	N	N	N	Y	Y	32.59388	-117.06643
Pick and Pack America Inc	1055	BAY	BL	N	N	N	N	N	N	N	N	Y	32.60826	-117.09142
Pick Your Part Auto Wrecking	880	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59546	-117.00854
Plenums Plus, LLC	67	BRISBANE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.65276	-117.08718
Precision Woodworking of SD	1031	BAY	BL	Y	Y	N	N	N	N	N	Y	Y	32.61033	-117.09150
Premier Copper & Brass Pacific Inc	310	TROUSDALE	DR	N	Y	Y	N	Y	N	N	Y	Y	32.65460	-117.08507
Prudential Overall Supply	740	F	ST	Y	Y	N	N	Y	N	N	Y	Y	32.63586	-117.09704

Attachment D.2 - Additional Information for Industrial and Commercial Inventories

Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Pump Export Distributors	124	27TH	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59396	-117.07567
Quality Lift Trucks	115	GLOVER	AV	N	Y	Y	N	Y	N	N	Y	Y	32.65516	-117.08680
R E Moore Inc	1624	SILVAS	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59769	-117.07765
R L Stone Fabrications	2446	MAIN	ST	N	Y	N	N	N	N	N	Y	Y	32.59579	-117.08029
R&R Delta Supplies Inc	1161	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60588	-117.09149
RC Import Auto Recycler	777	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59817	-117.01460
Reclaimed Aggregates	855	ENERGY	WY	N	Y	Y	N	N	N	N	Y	N	32.59747	-117.00999
Ri-Ber Industrial Inc	2488	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Riley Recycling	811	ENERGY	WY	N	Y	Y	Y	Y	Y	N	Y	Y	32.59753	-117.01341
Romeo Trevino	2675	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59246	-117.07608
Rossin Steel Inc.	1880	NIRVANA	AV	N	Y	Y	N	Y	N	N	Y	Y	32.59460	-117.01547
Sammy's Kitchen & Bath Inc	645	MARSAT	CT	Y	Y	N	N	Y	N	N	Y	Y	32.60051	-117.08194
San Diego Architectural Metals	873	DOROTHY	ST	N	Y	Y	N	Y	N	N	Y	Y	32.60018	-117.09041
San Diego Floor Design	2560	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59590	-117.07825
San Diego Frame MFG Co	1567	FRONTAGE	RD	N	Y	Y	N	Y	N	N	Y	Y	32.59910	-117.08836
San Diego Screw Products Inc	2865	MAIN	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59428	-117.07183
Sarah Wholesale	693	PALOMAR	ST	N	N	Y	N	Y	N	N	N	Y	32.60477	-117.08435
Seagate Produce	684	ANITA	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59948	-117.08252
Sealed Air Corporation	2311	BOSWELL	RD	N	Y	Y	N	Y	Y	N	Y	Y	32.65595	-116.96727
Showtime Creations	871	HAROLD	PL	N	Y	Y	N	Y	Y	N	Y	Y	32.65272	-116.95716
SMR Bakery Inc/Califorina Baking Co	681	ANITA	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59776	-117.08267
Snowbird Transportation	1872	NIRVANA	AV	N	N	Y	N	Y	N	N	N	N	32.59537	-117.01567
SOCAL Ironworks Inc.	1548	JAYKEN	WY	N	Y	Y	N	Y	N	N	Y	Y	32.60005	-117.08168
SOS Metals San Diego LLC	635	ANITA	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59744	-117.07996
Source of Health Inc.	1055	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60816	-117.09140
South Bay Auto Wreckers	811	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01111
South Xpress Inc	180	MACE	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59216	-117.05432
Standard Auto Recycling	150	REED	CT	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59186	-117.05634
Stanford Signs	2556	FAIVRE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59338	-117.07859
Suncraft Fence Co	3288	MAIN	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59505	-117.06273
Surface Fleet Supply Co	1550	FRONTAGE	RD	Y	Y	N	N	Y	N	N	Y	Y	32.59930	-117.09027
Surface Technologies Corp	796	ENERGY	WY	Y	Y	N	N	Y	N	N	Y	Y	32.59615	-117.01491
SWE Jon Flexible Packaging Inc	2474	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59579	-117.08029
Synthetic Marble By Ponce	675	MARSAT	CT	N	Y	N	N	N	N	N	Y	Y	32.60053	-117.08310
Tantus Inc	1045	BAY	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.60816	-117.09140
TBA Mexican Trade	1045	BAY	BL	Y	Y	N	N	Y	N	N	Y	Y	32.60816	-117.09140
Texano Auto Recycling	805	ENERGY	WY	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59753	-117.01341
Top Quality Power Coating	2605	FAIVRE	ST	N	Y	Y	Y	Y	Y	N	N	N	32.59244	-117.07738
Tortilleria Santa Fe Inc.	2765	MAIN	ST	Y	Y	N	N	Y	N	N	Y	Y	32.59427	-117.07368
Triple M Marine Welding & Repair Inc	1550	FRONTAGE	RD	N	Y	Y	N	Y	N	N	Y	Y	32.59930	-117.09027
Truitt Machine & Fabrication	997	G	ST	N	Y	Y	N	Y	N	N	Y	Y	32.63070	-117.10687
U S Glass & Mirror Co	926	INDUSTRIAL	BL	N	Y	Y	N	Y	Y	N	Y	Y	32.61443	-117.09032
United Cutting	677	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59735	-117.08220
United Parcel Service	2300	BOSWELL	CT	N	N	Y	N	Y	N	N	N	N	32.65504	-116.97025
United Rentals Inc	501	C	ST	N	Y	Y	N	Y	N	N	Y	Y	32.64964	-117.09258
Vallarta Iron Works	2555	FAIVRE	ST	N	Y	Y	N	Y	N	N	Y	Y	32.59228	-117.07851

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Facility Name	Address Number	Street Name	Street Designation	Potential Pollutants									GIS	
Name used to identify facility in database	Street number of facility, this is the numeric street address	Name of street facility is located on.	**NOTE:** Chula Vista Database has separate column for street designation	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Each Copermittee shall use best professional judgement to determine potential pollutants for each facility. Copermittees may elect to use "likely" or "unlikely" rather than "yes" or "no" for valid entries.									The following fields are optional. The purpose of these fields are to supply a coordinate system for the purposes of GIS mapping.	
				Bacteria	Oxygen Demanding	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Latitude / Longitude (Decimal Degrees) NAD 83	
Vcella Kilsn Inc	171	MACE	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59320	-117.05236
Vesco Metal Craft Inc	2425	FENTON	ST	N	Y	Y	N	Y	N	N	Y	Y	32.65364	-116.96103
Videotel Inc	681	ANITA	ST	N	Y	Y	N	Y	Y	N	Y	Y	32.59776	-117.08267
Vulcan Materials Company - Chula Vista Quarry	2041	HERITAGE	RD	N	Y	Y	N	N	N	N	Y	N	32.59132	-116.98866
West Auto Wreckers	2365	MAIN	ST	N	Y	Y	Y	Y	Y	Y	Y	Y	32.59388	-117.08229
Woodenvision	920	INDUSTRIAL	BL	Y	Y	N	N	N	N	N	Y	Y	32.61443	-117.09032

Attachment D.3

Mobile Businesses Certified During FY 2011-2012

	Business Name	Business Type
1	Triton Power Washing	Power washing services
2	Ocean's Carpet	Mobile carpet, drape, or furniture cleaning
3	Chulas Auto Detailing	Mobile automobile or other vehicle washing
4	Southwest Landscape	Landscaping construction
5	Rapid Plumbing	Plumbing
6	DL Long Landscaping Inc.	Landscaping construction
7	Teyos Landscape Construction	Landscaping construction
8	JOY Cleaning Carpet and Housekeeping	Mobile carpet, drape, or furniture cleaning
9	Cheryl Gonzales Services	Handyman
10	Blue Diamond Plumbing and Mechanical	Plumbing
11	Scott D. Kennedy	Handyman
12	JF Prieto Handyman Service	Handyman
13	Selah Landscape Inc.	Landscaping construction
14	United Paving Company	Concrete (AC)
15	Pure Quality Detailing	Mobile automobile or other vehicle washing
16	Lavamax Carpet Cleaning	Mobile carpet, drape, or furniture cleaning
17	RCR Property Maintenance	Handyman
18	JJ's Handyman Service	Handyman
19	AKM Fire Inc.	Fire sprinkler maintenance or installation
20	Village Plumbing and Heating	Plumbing
21	Saul Gutierrez Handyman	Handyman
22	C & H Gardens Landscape and Tree Service Inc.	Landscaping construction
23	Nick Maganda Handyman Service	Handyman
24	BP Plumbing	Plumbing
25	T & R Construction Group	Painting and coating
26	At Your Door Mobile Detailing Services	Mobile automobile or other vehicle washing
27	Jerry Foster Plumbing	Plumbing
28	Wastegate Detailing	Mobile automobile or other vehicle washing
29	J & R Services	Not a mobile business
30	Wagner Plumbing Services	Plumbing
31	Royal Commerical Construction Inc.	Plumbing
32	Cesar Guerrero	Handyman
33	Mario's Landscaping	Landscaping
34	Premium Pool Construction	Pool construction
35	Johnny O Window Cleaning	Window cleaning
36	J&J Enterprises	Cement mixing or cutting
37	Certified Contractors Inc.	Painting and coating
38	Sunflower Landscaping	Landscaping
39	Concrete Building System Construction Co. Inc.	Cement mixing or cutting
40	Herman Alvarado	Handyman
41	Villa-Rivera Landscape Services	Landscaping
42	Safari Company Inc.	Painting and coating
43	AHL Plumbing	Painting and coating
44	Clean Motor Vehicles	Mobile automobile or other vehicle washing
45	JG Tate Fire Protection Systems Inc.	Fire sprinkler maintenance or installation
46	Thomas P Browne Painting	Painting and coating
47	Z-Best Concrete Inc.	Cement mixing or cutting
48	Just With Detail	Mobile automobile or other vehicle washing
49	Guardian Fire Protection	Fire sprinkler maintenance or installation

Attachment D.3

Mobile Businesses Certified During FY 2011-2012

	Business Name	Business Type
50	Kaufman's Painting	Painting and coating
51	Bradley Lower	Landscaping
52	Epic Landscape Construction	Landscaping
53	Ray White Cement	Cement mixing or cutting
54	Express Contractors	Granite countertop installation
55	Quality Yacht Detail	Yacht detail
56	Charlie's Plumbing and Drain	Plumbing
57	First Class Mobile Detailing	Mobile automobile or other vehicle washing
58	Emergency Plumbing Services	Plumbing
59	Bill McNulty Plumbing	Plumbing
60	Blue Water Yacht Services	Boat cleaning
61	Coronado Auto Detailing	Mobile automobile or other vehicle washing
62	RAC Plumbing	Plumbing
63	Westar Plumbing	Plumbing
64	KPS Alarms/KPS Fire Sprinklers	Fire sprinkler maintenance or installation
65	Eagle Plumbing and Drain Cleaning	Plumbing
66	Estrada Plumbing	Plumbing
67	Mr. Fix-It Handyman Services	Handyman
68	Peimbert Enterprises	Handyman
69	Blue Moon Window Cleaning	Window cleaning
70	One Stop Plumbing and Drains	Plumbing
71	Maverick Caulking and Coatings Inc.	Coating Caulking
72	AB Landscaping	Landscaping
73	Exclusive Auto Detail	Mobile automobile or other vehicle washing
74	Hector Gonzalez Carpet Cleaner	Mobile carpet, drape, or furniture cleaning
75	Back Yard Vacations	Swimming pool construction
76	Ecochic Auto Spa	Mobile automobile or other vehicle washing
77	Paver D□cor Masonry Inc.	Interlocking pavers
78	Valenzuela's Handyman Service	Handyman
79	Accenture Carpet Cleaning	Mobile carpet, drape, or furniture cleaning
80	Roque and Sons	Cement mixing or cutting
81	PR Services	Handyman
82	A & E Pool Services	Pool and fountain cleaning
83	DSM Masonry, Concrete, and Tile Inc	Masonry
84	Michael Jaso Handyman Service	Handyman
85	Handyman Oscpan	Handyman
86	Myron Plumbing	Plumbing
87	Unique Touch Mobile Car Wash and Detail	Mobile automobile or other vehicle washing
88	Pyramid Landscape Inc.	Landscape contractor
89	JCC Detailing	Mobile automobile or other vehicle washing
90	Masonry Innovations Inc.	Masonry
91	J's Auto Detail	Mobile automobile or other vehicle washing
92	Reliable Carpet Care	Mobile carpet, drape, or furniture cleaning
93	Revival Landscape	Landscaping
94	Baja Pool Maintenance	Pool and fountain cleaning
95	Simon's Truck and Auto Detailing	Mobile automobile or other vehicle washing
96	Tomas Payon Avina Landscaping	Landscaping
97	MGD Construction	Cement mixing or cutting
98	Nequey Castro Painting	Painting and coating
99	Hunter Greens Landscaping	Landscaping

Attachment D.3

Mobile Businesses Certified During FY 2011-2012

	Business Name	Business Type
100	VIP Car Wash and Detailing	Mobile automobile or other vehicle washing
101	Victor Solorio Landscaping	Landscaping
102	Fabulous Plumbing & Leak Detection	Plumbing
103	JV Mobile Auto Detail	Mobile automobile or other vehicle washing
104	Insta Dry Organic Carpet Cleaning	Mobile carpet, drape, or furniture cleaning
105	Rudy's Curbs and Concrete Inc.	Cement mixing or cutting
106	Organic Dry Carpet Cleaning	Mobile carpet, drape, or furniture cleaning
107	Sergio Cayetano Construction Services	Handyman
108	Jesse Cota Handyman	Handyman
109	Sean Shumate Construction	Handyman
110	Osver Construction	Handyman
111	Antimite Termite and Pest Control/ Terminix Int'l Co. LP	Pest Control
112	R & R Landscaping	Landscaping
113	GGA Plumbing	Plumbing
114	Andre Mannione Mick Baca Hanyman Painting	Handyman
115	MSE Plumbing	Plumbing
116	Adrogue	Handyman
117	CRV Bathtub Refinishers	Bathtub refinishing
118	Southbay Landscaping	Landscaping
119	General Patio	Cement mixing or cutting
120	Econo Mobil Carwash	Mobile automobile or other vehicle washing
121	Aqua Dulce Pool and Spa Maintenance	Pool and fountain cleaning
122	El Eden Landscaping	Landscaping
123	David Franso	Handyman
124	ASAP Carpet Cleaning	Mobile carpet, drape, or furniture cleaning
125	Fresh Walls Painting	Painting and coating
126	Thomas Brooks Handyman's Specialist	Handyman
127	Marco Haro	Handyman
128	Ray's Drywall Repair, Painting, and Decorating	Handyman

Attachment E
Industrial Source Inventory and Prioritization
FY 2011-2012

Note: All facilities are in the San Diego Bay Watershed Management Area. Businesses marked as tributary drain to a 303(d) listed waterbody. The City is in the process of determining if facilites contribute pollutants for which the waterbody is listed.

Facility Name	APN	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
A&A Auto Wrecking	6441811900	Auto Dismantlers	High	775	ENERGY	WY	5016	937I020792	
A1 Moulding Supplies	6291000600	Warehousing	Low	180	MACE	ST	4225		
AAA Foreign Auto Recycling	6441810100	Auto Dismantlers	High	783	NIRVANA	AV	5015	937I016197	
AAtlas Auto Recycling	6441812100	Auto Dismantlers	High	791	ENERGY	WY	5015	937I022394	
ABF Freight Systems		Transportation	High	875	ENERGY	WY		937I013254	
ACE Industries Inc.	6442302200	Manufacturing	Low	738	DESIGN	CT	3599		
ACE Metal Trading		Other Fixed Facilities	High	2675	FAIVRE	ST			
Action Auto Dismantlers Inc	6291001400	Auto Dismantlers	High	151	REED	CT	5015	937I004000	
ADA Fabrication	6221021800	Fabrications	Low	2260	MAIN	ST	3993		
Advance Auto Wrecking	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015		
Advantage Printing & Apparel Inc	6221115300	Printing	Low	681	ANITA	ST	2262		
Aker Leather Products	6221021800	Manufacturing	Low	2248	MAIN	ST	2386		
All Japanese Auto Recycling	6441811900	Auto Dismantlers	High	775	ENERGY	WY	5015	937I015706	
All Toyota/Lexus Auto Recycling	6441811500	Auto Dismantlers	High	805	ENERGY	WY	5015	937I018543	
Alliance Hardwood LLC	6221023300	Wholesale	Low	775	ANITA	ST	5031		
Allied Waste Services	6441821600	Waste Management	High	881	ENERGY	WY	4953	937I014355	

Facility Name	APN	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Amerivacs Manufacturing Inc	6232301700	Manufacturing	Low	3800	MAIN	ST	3635		
Apada Industries Inc	6222304400	Manufacturing	Low	632	MARSAT	CT	2299		
Aqualarm	6170800800	Manufacturing	Low	1151	BAY	BL	3635		
Arise/Waco Scafolding	6180103100	Wholesale	Low	676	MOSS	ST	5082		√
Arroyo Fabrication	6221112500	Fabrications	Low	2488	MAIN	ST	3399		
ASI Distr. & Fabr./Abbet Services In	6222304900	Distributor	Low	1547	JAYKEN	WY	5085		
Asian Kars Auto Recycling	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937I017467	
BABA Foods	6182803500	Manufacturing	Low	693	PALOMAR	ST	2099		
Bacco Produce	6170800600	Produce	Low	1031	BAY	BL	5148		
Baja California Cycle USA Inc	6290200100	Wholesale	Low	2801	MAIN	ST	5091		
Bajas #3 Auto Wrecking	6441811500	Auto Dismantlers	High	811	ENERGY	WY	7549	937I022426	
Barbee Valve & Supply	6442302600	Manufacturing	Low	751	DESIGN	CT	3432		
Bastan Corporation	6221021800	Wholesale	Low	2260	MAIN	ST	5142		
Bellama Custom Metal Fabrication	6290604200	Fabrications	Low	3129	MAIN	ST	3499		
Best Recycle LLC	6191710400	Recycling	Low	1169	THIRD	AV	2899		
Brenntag Pacific Inc	6441810800	Chemical Storage	Low	1888	NIRVANA	AV	5169		
C&G Swiss	6291000600	Fabrications	Low	180	MACE	ST	3451		
Cabinet Tronix LLC	5634511900	Furnitures	Low	290	TROUSDALE	DR	2517		√
Cabinetry Design Inc	6221115400	Manufacturing	Low	675	ANITA	ST	2434		

Facility Name	APN	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
California Hardcoating Company	6221115400	Manufacturing	Low	675	ANITA	ST	3479		
California Sports Auto Wrecking	6441811800	Auto Dismantlers	High	781	ENERGY	WY	5015	937I023398	
Calumet Auto Wrecking Inc	6441821400	Auto Dismantlers	High	891	ENERGY	WY	5015	937I004393	
Canvas Concept Inc.	6221115800	Manufacturing	Low	649	ANITA	ST	2394		
Career Cap Corporation	6221022800	Manufacturing	Low	1680	INDUSTRIAL	BL	2353		
Ciannas Creation	6442302100	Manufacturing	Low	744	DESIGN	CT	2299		
Circle Food LLC	6221110800	Distributor	Low	1616	SILVAS	ST	5149		
Custom Door and Window Sales	6170110300	Wholesale	Low	1128	BAY	BL	5211		√
Daves Woodworking	6291302600	Retail/Sales	Low	171	MACE	ST	5712		
David J Food Products	6222303900	Wholesale	Low	689	MARSAT	CT	5149		
Davinci Metal Works	6291002128	Construction Equipment	Low	3521	MAIN	ST	3537		
Del Rey Screenprinting		Printing/Copy Service	Low	2555	FAIVRE	ST			
DNP Electronics America LLC	5952313300	Manufacturing	Low	2391	FENTON	ST	3571		
Doncaster, GCE Industries	6440404900	Manufacturing	High	1887	NIRVANA	AV	3443	937I022716	
Dutchmasters Cabinets	6221900800	Manufacturing	Low	2605	FAIVRE	ST	2434		
Eagle Foods Distributors Inc	6220810602	Distributor	Low	684	ANITA	ST	5141		
Ecology Auto Parts	6441820100	Auto Dismantlers	High	825	ENERGY	WY			
Ecology Auto Wrecking	6441820100	Auto Dismantlers	High	825	ENERGY	WY	5015	937I003325	
Ecology Auto Wrecking 2	6441821000	Auto Dismantlers	High	850	ENERGY	WY	5015	937I019445	

Facility Name	APN	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Ecology Auto Wrecking 3	6441821200	Auto Dismantlers	High	800	ENERGY	WY	5015	937I003280	
El Sol Industries Inc	6221115400	Manufacturing	Low	679	ANITA	ST	2389		
Ervey Produce	6170800600	Produce	Low	1031	BAY	BL	5148		
Estes Express Lines	5634521200	Trucking	High	120	PRESS	LN	4231	937I007126	√
Eurotecnics	6291002300	Manufacturing	Low	170	MACE	ST	2434		
Express Furniture	6192113900	Furnitures	Low	1226	THIRD	AV	5712		√
Express Pipe & Supply Co	5634512600	Wholesale	Low	117	PRESS	LN	5074		√
FFF Distributors Inc	6221112500	Wholesale	Low	2474	MAIN	ST	5063		
Finest City Cabinets	5634411200	Manufacturing	Low	330	TROUSDALE	DR	5712		√
FJ Willert Construction Co.	6441813600	Construction Equipment	High	1869	NIRVANA	AV	4953	937I016993	
FJ Willert Office Bldg.	6441813600		High	1875	NIRVANA	AV			
Flag Crafters	6170800700	Manufacturing	Low	1095	BAY	BL	2399		
Formosa Prosonic USA Inc.	5684503900	Manufacturing	Low	303	H	ST	3679		
Frank B Wood	6221112500	Furnitures	Low	2474	MAIN	ST	5712		
Freeway Auto Wrecking	6441812200	Auto Dismantlers	High	783	ENERGY	WY	5015	937I021643	
Frontera International	6441813400	Warehousing	Low	1879	NIRVANA	AV	4225		
Fuji Seimen Corp	6291002300	Manufacturing	Low	170	MACE	ST	2098		
G&M Custom Flags and Banners	6221021800	Manufacturing	Low	2240	MAIN	ST	2399		
G&M Manufacturing	6291000600	Management Service	Low	180	MACE	ST	8741		

Facility Name	APN	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Gary Manufacturing Inc.	6170110300	Manufacturing	Low	1124	BAY	BL	2299		√
Granite Gallery Inc	6291000600	Wholesale	Low	180	MACE	ST	5032		
H&M Wrought Iron Factory Inc	6221113200	Manufacturing	Low	2560	MAIN	ST	3315		
Hitachi Home Electronic Inc.- Ameri	5957110400	Manufacturing	Low	900	HITACHI	WY	3639		√
Honda Acura Parts Auto Recycling	6441821500	Auto Dismantlers	High	895	ENERGY	WY	5015	937I011394	
House of Leather and Fabrics	5634512000	Manufacturing	Low	290	TROUSDALE	DR	3111		√
Husks Unlimited Inc.	6221110800	Manufacturing	Low	1616	SILVAS	ST			
HVAC Exchange, Inc.		Other Fixed Facilities	High	2675	FAIVRE	ST			
Hydro Scape Products Inc.	5634313000	Retail/Sales	Low	375	TROUSDALE	DR	5039		√
Hyspan Precision Prod Inc	6440402800	Manufacturing	Low	1685	BRANDYWINE	AV	3441		
Hyundai Livart Furniture Outlet	6290604200	Furnitures	Low	3121	MAIN	ST	5712		
Imperial Sprinkler Supply Inc.	5634511400	Retail/Sales	Low	280	TROUSDALE	DR	5087		√
Import Auto Wrecking	6441812900	Auto Dismantlers	High	793	ENERGY	WY	5015	937I016877	
Indu Fashions	6222303800	Manufacturing	Low	680	MARSAT	CT	2329		
International Sign Co	6232022300	Manufacturing	Low	3268	MAIN	ST	3993		
J and L Enterprises		Trucking	Low	1885	NIRVANA	AV			
Japan Tech Auto Wrecking	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937I020121	
Japanese Auto Wrecking	6441811500	Auto Dismantlers	High	811	ENERGY	WY	5015	937I021355	
Kama Tech Corporation	6442301300	Manufacturing	Low	739	DESIGN	CT	5131		

Facility Name	APN	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Kelco Packaging Prop	6221112500	Warehousing	Low	2474	MAIN	ST	4222		
Kelly Paper Company	5713301900	Wholesale	Low	630	BAY	BL	5111		
Ken Larcens Cabinet Plus	6291302600	Manufacturing	Low	171	MACE	ST	2434		
Kleen Blast Industrial Services	6180103100	Retail/Sales	Low	676	MOSS	ST	5084		√
L&V Furniture	6221113200	Manufacturing	Low	2560	MAIN	ST	2434		
LA Natural Tortilla Factory	6290101100	Manufacturing	Low	2765	MAIN	ST	2099		
Lawrence Hughes Cabinets Unlimite	6291000600	Manufacturing	Low	180	MACE	ST	2434		
Lund & Flynn Inc	5634322400	Manufacturing	Low	370	TROUSDALE	DR	3694		√
Lyon Technologies Inc	6440403700	Manufacturing	Low	1690	BRANDYWINE	AV	3499		
Marscott Marine and Industrial Supp	6221112500	Wholesale	Low	2446	MAIN	ST	5085		
Mask US Inc	6290604200	Fabrications	Low	3121	MAIN	ST	2389		
MMC Energy - Peak Power Plant	6290620400	Power Generations	Low	3497	MAIN	ST	4911	937I020087	
Monos Custom Metal Fabrications I	6222300400	Fabrications	Low	1548	JAYKEN	WY	3499		
Montoya's Auto Wrecking	6441811800	Auto Dismantlers	High	781	ENERGY	WY	5015	937I021427	
MTS Maintenance Facility	6232502200	Transportation	High	3650	MAIN	ST	4111	937I011017	
NCR Neon Specialist	6291000600	Manufacturing	Low	180	MACE	ST	3993		
Nirvana Produce Distributions	6441811000	Produce	Low	1872	NIRVANA	AV	5431		
Nutrition Private Label Inc.		Manufacturing	Low	3031	MAIN	ST			
Nutritional Supplement Manufacture		Manufacturing	Low	1055	BAY	BL			

Facility Name	APN	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Nypro San Diego	6440402400	Manufacturing	Low	505	MAIN	ST	3061		
Oak Land Furniture	6221112500	Cabinet Installation	Low	2462	MAIN	ST	1751		
Ochoa's Cabinet	6221112500	Manufacturing	Low	2446	MAIN	ST	2434		
Onager Corporation	6441812800	Auto Dismantlers	High	789	ENERGY	WY	5015	937I010014	
One Self Graphics		Sign/Graphics	Low	1231	THIRD	AV			
Oshitani America Inc		Manufacturing	Low	2566	CATAMARAN	WY			
Oshitani America Inc.		Other Fixed Facilities	Low	333	H	ST			
OSI Security Devices	6222300200	Fabrications	Low	1580	JAYKEN	WY	3499		
Otay Metal Mart	6291302800	Wholesale	Low	195	MACE	ST	5051		
Pacific Auto Wrecking	6441812000	Auto Dismantlers	High	795	ENERGY	WY	5015	937I015058	
Pacific Manufacturing Inc	6221900800	Manufacturing	Low	2605	FAIVRE	ST	3452		
Pacific Maritime Industries	6221022700	Manufacturing	Low	1664	INDUSTRIAL	BL	3441		
Pallets and Services of SD Corp	6182005800	Wholesale	Low	1020	COLORADO	AV	5031		√
Pavement Recycling Systems	6441820300	Concrete Work	High	855	ENERGY	WY	5093		
PHV Custom Cabinets	6290604200	Manufacturing	Low	3121	MAIN	ST	2434		
Pick and Pack America Inc.		Service	Low	1055	BAY	BL			
Pick Your Part Auto Wrecking	6441820800	Auto Dismantlers	High	880	ENERGY	WY	5015	937I012114	
Plenums Plus, LLC	5632703900	Fabrications	Low	67	BRISBANE	ST	3441		√
Precision Woodworking of SD	6170800600	Woodworking	Low	1031	BAY	BL	2541		

Facility Name	APN	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Premier Copper & Brass Pacific Inc	5634410100	Wholesale	Low	310	TROUSDALE	DR	5051		√
Prudential Overall Supply	5670900300	Service	Low	740	F	ST	7213		
Pump Export Distributors	6221403400	Manufacturing	Low	124	27TH	ST	3561		
Quality Lift Trucks	5634421600	Retail/Sales	Low	115	GLOVER	AV	5084		√
R E Moore Inc	6221110800	Manufacturing	Low	1624	SILVAS	ST	3451		
R L Stone Fabrications	6221112500	Fabrications	Low	2446	MAIN	ST	3281		
R&R Delta Supplies Inc	6170800800	Wholesale	Low	1161	BAY	BL	5013		
RC Import Auto Recycler	6441812300	Auto Dismantlers	High	777	ENERGY	WY	5015	937I010144	
Ri-Ber Industrial Inc	6221112500	Wholesale	Low	2488	MAIN	ST	5084		
Riley Recycling	6441811500	Auto Dismantlers	High	811	ENERGY	WY	5015		
Romeo Trevino		Other Fixed Facilities	High	2675	FAIVRE	ST			
Rossin Steel Inc.	6441810900	Fabrications	Other	1880	NIRVANA	AV	3441	937I020898	
Sammy's Kitchen & Bath Inc	6222304200	Warehousing	Low	645	MARSAT	CT	4226		
San Diego Architectural Metals	6220610300	Manufacturing	Low	873	DOROTHY	ST	3499		
San Diego Floor Design	6221113200	Wholesale	Low	2560	MAIN	ST	5713		
San Diego Frame MFG Co	6220725900	Manufacturing	Low	1567	FRONTAGE	RD	2499		
San Diego Screw Products Inc	6290201200	Manufacturing	Low	2865	MAIN	ST	3545		
Sarah Wholesale		Wholesale	Low	693	PALOMAR	ST			
Seagate Produce	6220810602	Produce	Low	684	ANITA	ST	5148		

Facility Name	APN	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Sealed Air Corporation	5953000500	Manufacturing	Low	2311	BOSWELL	RD	3565		√
Showtime Creations	5952320600	Manufacturing	Low	871	HAROLD	PL	2389		√
SMR Bakery Inc/Califorina Baking C	6221115300	Bakery	Low	681	ANITA	ST	2099		
Snowbird Transportation	6441811000	Distributor	Low	1872	NIRVANA	AV	4212		
SOCAL Ironworks Inc.	6222300400	Storage	Low	1548	JAYKEN	WY	4225		
SOS Metals San Diego LLC	6221115700	Recycling	High	635	ANITA	ST	5093	937I013260	
Source of Health Inc.	6170800700	Manufacturing	Low	1055	BAY	BL	2833		
South Bay Auto Wreckers	6441820200	Auto Dismantlers	High	811	ENERGY	WY	5015	937I004495	
South Xpress Inc	6291000600	Wholesale	Low	180	MACE	ST	5074		
Standard Auto Recycling	6291000400	Auto Dismantlers	High	150	REED	CT	5015	9371010775	
Stanford Signs	6221403300	Specialty	Low	2556	FAIVRE	ST	3993		
Suncraft Fence Co	6232023800	Distributor	Low	3288	MAIN	ST	5039		
Surface Fleet Supply Co	6220620500	Wholesale	Low	1550	FRONTAGE	RD	5074		
Surface Technologies Corp	6441811100	Service	Low	796	ENERGY	WY	7699		
SWE Jon Flexible Packaging Inc	6221112500	Wholesale	Low	2474	MAIN	ST	5113		
Synthetic Marble By Ponce	6222303900	Fabrications	Low	675	MARSAT	CT	3281		
Tantus Inc	6170800700	Manufacturing	Low	1045	BAY	BL	3645		
TBA Mexican Trade	6170800700	Wholesale	Low	1045	BAY	BL	5411		
Texano Auto Recycling	6441811500	Recycling	High	805	ENERGY	WY	5015	937I1021577	

Facility Name	APN	Type of Facility	Priority	Address			SIC Number	WDID Number	Tributary
Top Quality Power Coating		Manufacturing	Low	2605	FAIVRE	ST			
Tortilleria Santa Fe Inc.	6290101100	Manufacturing	Medium	2765	MAIN	ST	2099		
Triple M Marine Welding & Repair Ir	6220620500	Welding Services	Low	1550	FRONTAGE	RD	7692		
Truitt Machine & Fabrication	7600481700	Fabrications	Low	997	G	ST	3599		
U S Glass & Mirror Co	6170102900	Manufacturing	Low	926	INDUSTRIAL	BL	3231		
United Cutting	6221115400	Industrial Launderes	Low	677	ANITA	ST	7218		
United Parcel Service	5953001000	Postal Service	High	2300	BOSWELL	CT	4215	937I002086	√
United Rentals Inc	5623501000	Heavy Equipment Rentals	High	501	C	ST	7359	9371019886	√
United States Postal Service	5733204300	Postal Service	High	750	THIRD	AV			√
Vallarta Iron Works	6221902000	Welding Services	Low	2555	FAIVRE	ST	7692		
Vcella Kilsn Inc	6291302600	Manufacturing	Low	171	MACE	ST	3631		
Vesco Metal Craft Inc	5952314200	Manufacturing	Low	2425	FENTON	ST	3312		
Videotel Inc	6221115300	Manufacturing	Low	681	ANITA	ST	3651		
Vulcan Materials Company - Chula '	6440600600	Concrete Work	High	2041	HERITAGE	RD	1429	937I023019	
West Auto Wreckers	6221902600	Auto Dismantlers	High	2365	MAIN	ST	5015	937I001046	
Woodenvision	6170102900	Woodworking	Low	920	INDUSTRIAL	BL	2511		√

Grand Total: **184**

Attachment F

FY 2011-2012 Treatment Control BMP Inspections

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
7/1/11	Eastlake Vistas - Valencia	Valencia	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City Of Chula Vista
10/12/11	Otay Ranch Village 11 - The Lofts	The Lofts	MP-52 Drain Insert TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Windingwalk Residential LLC
10/12/11	Otay Ranch Village 11 - Saguaro	Saguaro	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes/Shea
10/12/11	Otay Ranch Village 11 - Magnolia II	Magnolia II	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/12/11	Otay Ranch Village 11 - Magnolia I	Magnolia I	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/13/11	Otay Ranch Village 11 - Picket Fence II	Picket Fence II	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/13/11	Otay Ranch Village 11 - Trellis II	Trellis II	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	
10/13/11	Otay Ranch Village 11 - Trellis I	Trellis I	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	
10/13/11	Otay Ranch Village 11 - The Landing Apartments	The Landings Apartments	MP-52 Drain Insert TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Landings II LP

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
10/13/11	Otay Ranch Village 11 - Sapphire II	Sapphire II	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/13/11	Otay Ranch Village 11 - Sapphire I	Sapphire I	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Shea Homes
10/13/11	Otay Ranch Village11 - Wisteria	Wisteria	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/13/11	Otay Ranch Village11 - Agave	Agave	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/13/11	Otay Ranch Village 11 - Magnolia III	Magnolia III	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/14/11	Otay Ranch Village 11 - Twilight I	Twilight I	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/14/11	Otay Ranch Village 11 - Twilight II	Twilight II	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/14/11	Otay Ranch Village 11 - Saguaro	Saguaro	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes/Shea
10/14/11	Otay Ranch Village 11 - Picket Fence I	Picket Fence I	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/14/11	Otay Ranch Village 11 - Lantana	Lantana	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
10/14/11	Otay Ranch Village 11 - Cottage Lane II	Cottage Lane II	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/14/11	Otay Ranch Village 11 - Cottage Lane I	Cottage Lane I	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/14/11	Otay Ranch Village 11 - Cedar Rose I	Cedar Rose I	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
10/14/11	Otay Ranch Village 11 - Aristata	Aristata	TC-22 Extended Det Basin	Residential	High	Otay Ranch Village 11	Brookfield Homes
2/2/12	Chula Vista Elementary School District Bus Yard	NA	MP-50 Wet Vault TC-30 Vegetated Swale	Schools	High	School	Chula Vista Elementary SD
2/13/12	Oxford Street Sidewalk Improvements 3rd/Alpine CIP	NA	Filterra	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
2/21/12	MTS Maintenance Facility	NA	TC-32 Bioretention TC-40 Media Filter	Industrial	High	Miscellaneous	SANDAG
3/13/12	Fire Station #6	NA	MP-52 Drain Insert	Municipal	Low	City Project with SUSMP	City of Chula Vista
4/5/12	Emerson & Oxford St. CIP	NA	Filterra	:y Projects with SUSM	High	City Project with SUSMP	
4/5/12	E Street and First Ave	NA	Modular Wetland System	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista-PW

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
4/5/12	Second Avenue Improvements Naples/Palomar	NA	Filterra	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
4/5/12	North Broadway Basin Reconstruction - CIP	NA	Modular Wetland System	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
4/16/12	Sunset View Park	NA	MP-52 Drain Insert	Municipal	High	City Project with SUSMP	City of Chula Vista-Park Div.
4/19/12	Mount San Miguel Community Park	NA	TC-32 Bioretention TC-30 Vegetated Swale	Municipal	High	City Project with SUSMP	City of Chula Vista
4/23/12	First Avenue-Naples to Palomar CIP	NA	MP-52 Drain Insert	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
4/26/12	Otay Ranch Village 6 - Treviana	Treviana	MP-52 Drain Insert	Residential	Medium	Otay Ranch Village 6	NN Jaeske
5/4/12	Naples Street Between Third & Alpine	NA	Filterra	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
5/4/12	Otay Lakes Widening Phase I Ridgeback to SWC	NA	Filterra	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
5/14/12	Fire Station #8	NA	MP-51 Vortex Separator	Municipal	Low	CIty Project with SUSMP	City of Chula Vista
5/14/12	Eastlake Woods - Continental Classics	Continental Classics	MP-51 Vortex Separator	Residential	Medium	Eastlake Woods	City Of Chula Vista

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
5/14/12	Eastlake Woods - Meredian	Meredian	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	City of Chula Vista
5/14/12	Eastlake Woods - Reserves	Reserves	MP-51 Vortex Separator MP-52 Drain Inlet	Residential	Medium	Eastlake Woods	City of Chula Vista
5/14/12	Eastlake Woods - Sonoma	Sonoma	MP-52 Drain Insert	Residential	Medium	Eastlake Woods	City of Chula Vista
5/14/12	Eastlake Woods - WR-1 / The Gates	WR-1/The Gates	MP-51 Vortex Separator	Residential	Medium	Eastlake Woods	City of Chula Vista
5/14/12	Eastlake Woods- K Hovnanian	K Hovnanian	MP-51 Vortex Separator	Residential	Medium	Eastlake Woods	City of Chula Vista
5/14/12	Eastlke Woods - The Woods	WR-3	MP-51 Vortex Separator TC-22 Extended Det Basin	Residential	Medium	Eastlake Woods	City of Chula Vista
5/14/12	Eastlake Terrace	NA	MP-52 Drain Insert	Commercial	High	Commercial	Gatlin Development
5/15/12	Home Depot Eastlake	NA	MP-52 Drain Insert	Commercial	High	Commercial	Home Depot USA, Inc.
5/15/12	Walmart @ Eastlake	NA	MP-52 Drain Insert	Commercial	High	Commercial	WALMART Stores Inc.
5/15/12	Eastlake Commerce Center	NA	MP-52 Drain Insert	Commercial	Medium	Commercial	IRE Development

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
5/15/12	Auto Park North	NA	MP-52 Drain Insert	Commercial	High	Commercial	Chula Vista Auto Park Assoc.
5/15/12	Veterans Park & Recreation Center	NA	TC-30 Vegetated Swale MP-52 Drain Inlet	Municipal	High	City Project with SUSMP	City of Chula Vista
5/15/12	Eastlake Village Center East	NA	MP-52 Drain Insert	Commercial	High	Commercial	Gatlin Development Co.
5/15/12	Glenhaven Way Improvements CIP	NA	Filterra	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
5/17/12	Eastlake - Village Walk	NA	MP-51 Vortex Separator MP-52 Drain Inlet	Commercial	High	Commercial	Sudberry Properties, Inc.
5/17/12	Chevron Station-Olympic Parkway #1975	NA	MP-52 Drain Insert	Commercial	High	Commercial	Chevron Station Inc.
5/22/12	Chula Vista Corporate Center	NA	MP-52 Drain Insert	Commercial	High	Commercial	Mar West Real Estate
5/22/12	Chula Vista Crossings	NA	TC-30 Vegetated Swale MP-52 Drain Inlet	Commercial	High	Commercial	NewMark Merrill
5/23/12	Fenton Business Center	NA	MP-52 Drain Insert	Commercial	Medium	Commercial	Seymour/Lewis Development
5/23/12	Terra Nova Service Plaza	NA	TC-40 Media Filter	Commercial	High	Commercial	Big Jag LP

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
5/29/12	2380 Main Street - Commercial Bldg	NA	MP-52 Drain Insert	Commercial	Medium	Commercial	Chula Vista Main, LLC
5/29/12	Mountain Hawk Park	NA	MP-52 Drain Insert	Municipal	High	City Project with SUSMP	City of Chula Vista
5/30/12	Palomar Street Improvements Trenton TCBMP	NA	MP-50 Wet Vault	Municipal	High	City Project with SUSMP	City of Chula Vista
5/30/12	Fairhaven II	Fairhaven II	MP-52 Drain Insert	Residential	High	Rolling Hills Ranch	City of Chula Vista
5/31/12	Horizon Neighborhood Park	NA	MP-52 Drain Insert	Municipal	High	City Project with SUSMP	City of Chula Vista
5/31/12	Montevalle Park & Community Center	NA	MP-52 Drain Insert	Municipal	High	City Project with SUSMP	City of Chula Vista
5/31/12	Salt Creek Park & Community Center	NA	MP-51 Vortex Separator	Municipal	High	City Project with SUSMP	City of Chula Vista
6/1/12	Village Walk at Eastlake	NA	MP-51 Vortex Separator MP-52 Drain Inlet	Commercial	High	Village Walk at Eastlake	Sudbury Properties
6/4/12	Safe Route School Project - Albany	NA	Filterra	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
6/6/12	San Miguel Ranch - Ventana I	Ventana I	MP-52 Drain Insert	Residential	Medium	San Miguel Ranch	City of Chula Vista

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
6/6/12	San Miguel Ranch - Ventana II	Ventana II	MP-52 Drain Insert	Residential	Medium	San Miguel Ranch	City of Chula Vista
6/12/12	Spotlight on Broadway	NA	MP-52 Drain Insert	esidential/Commerci	Medium	Residential/Commercial	Yusunas Jeanine Louise Trust
6/12/12	Eastlake Vistas - Abilene	Abilene	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
6/12/12	Eastlake Vistas - Atrium	Atrium	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
6/12/12	Eastlake Vistas - Bridgepark	Bridgepark	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
6/12/12	Eastlake Vistas - Colrich	Colrich	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista PW
6/12/12	Eastlake Vistas - Lost Creek	Lost Creek	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
6/12/12	Eastlake Vistas - Monticello	Monticello	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
6/12/12	Eastlake Vistas - Sonora Ridge	Sonora Ridge	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista
6/12/12	Eastlake Vistas - Summerhill	Summerhill	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City of Chula Vista

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
6/12/12	Eastlake Vistas - Valencia	Valencia	MP-51 Vortex Separator	Residential	Medium	Eastlake Vistas	City Of Chula Vista
6/12/12	Otay Ranch Village 6 - Auburn Lane	Auburn Lane	MP-52 Drain Insert	Residential	High	Otay Ranch Village 6	City of Chula Vista
6/12/12	Otay Ranch Town Center	NA	MP-51 Vortex Separator	Commercial	High	Commercial	GCP-Otay Ranch LP
6/14/12	Rolling Hills Ranch - Water Quality Basin	Castillian	TC-22 Extended Det Basin	Residential	High	Rolling Hills Ranch	McMillin
6/14/12	Rolling Hills Ranch - Quintessa	Quintessa	TC-22 Extended Det Basin	Residential	High	Rolling Hills Ranch	McMillin
6/14/12	Rolling Hills Ranch - Provence	Provence	TC-22 Extended Det Basin	Residential	High	Rolling Hills Ranch	McMillin
6/14/12	Rolling Hills Ranch - Clearstory	Clearstory	TC-22 Extended Det Basin	Residential	High	Rolling Hills Ranch	McMillin
6/14/12	Eastlake Parkway Professional Plaza	NA	MP-52 Drain Insert TC-30 Vegetated Swale	Commercial	Medium	Commercial	IRE Development
6/15/12	Otay Ranch Village 6 - Jasmine	Jasmine	MP-52 Drain Insert	Residential	High	Otay Ranch Village 6	City of Chula Vista
6/15/12	Otay Ranch Village 6 - Belleme Chateau	Belleme Chateau	MP-51 Vortex Separator	Residential	High	Otay Ranch Village 6	The Merit Companies

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
6/15/12	Eastlake Design District	NA	TC-30 Vegetated Swale MP-52 Drain Inlet	Commercial	Medium	Commercial	IRE Development
6/15/12	Otay Ranch Village 6 - Mer Soliel	Mer Soliel	MP-51 Vortex Separator	Residential	High	Otay Ranch Village 6	The Merit Company
6/15/12	805 / Orange Interchange	NA	MP-52 Drain Insert	:y Projects with SUSM	High	City Project With SUSMP	City Of Chula Vista
6/15/12	Otay Ranch Village 6 - Belleme Villas	Belleme Villas	MP-51 Vortex Separator	Residential	High	Otay Ranch Village 6	Hillsborough @ Otay HOA
6/15/12	Otay Ranch Village 6 - Willowbrook	Willowbrook	MP-51 Vortex Separator	Residential	High	Otay Ranch Village 6	City of Chula Vista
6/18/12	Harvest Park	NA	MP-52 Drain Insert	Municipal	High	City Project with SUSMP	City of Chula Vista
6/18/12	Tobias Drive CIP	NA	MP-52 Drain Insert	Municipal-CIP	High	City Project with SUSMP	City of Chula Vista
6/18/12	Telegraph Canyon CIP	NA	MP-52 Drain Insert	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
6/18/12	Mater Dei High School	NA	MP-50 Wet Vault	Schools	High	School	Mater Dei High School **
6/18/12	Kohls @ Eastlake	NA	MP-52 Drain Insert	Commercial	High	Commercial	DENTCO Exterior Services Mgmt

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
6/19/12	The Summit - Firenze	Firenze	MP-52 Drain Insert	Residential	Medium	The Summit	NN Jaeske
6/19/12	The Summit - Capria	Capria	MP-52 Drain Insert	Residential	Medium	The Summit	NN Jaeske
6/19/12	The Summit - Cortina	Cortina	MP-52 Drain Insert	Residential	Medium	The Summit	NN Jaeske
6/19/12	The Summit - Veranza	Veranza	MP-52 Drain Insert	Residential	Medium	The Summit	NN Jaeske
6/19/12	Fourth Avenue Sidewalk Improvements CIP	NA	Modular Wetland System Modular Wetland System Filterra	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
6/19/12	Castle Park Area NPDES Basin CIP	NA	Modular Wetland System	:y Projects with SUSM	High	City Project with SUSMP	City of Chula Vista
6/19/12	Chula Vista Commerce Center	NA	MP-51 Vortex Separator	Commercial	High	Commercial	MarWest Real Estate
6/19/12	The Marketplace @ Windingwalk	NA	MP-52 Drain Insert TC-22 Extended Det Basin	Commercial	High	Commercial	Shea Properties
6/19/12	Otay Lakes Medical Office	NA	MP-52 Drain Insert	Commercial	Medium	Commercial	Otay Lakes Med. Condo Assoc.
6/20/12	Eastlake Marketplace	NA	MP-51 Vortex Separator	Commercial	High	Commercial	Eastlake Marketplace

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
6/20/12	Eastlake Village Center West	NA	MP-51 Vortex Separator MP-52 Drain Inlet	Commercial	Medium	Commercial	EL Vill. Center Comm. Assc.**
6/20/12	Otay Ranch Village 6 - Sienna	Sienna	MP-52 Drain Insert	Residential	High	Otay Ranch Village 6	City of Chula Vista
6/20/12	Otay Ranch Village 6 - Mandalay	Mandalay	MP-52 Drain Insert	Residential	High	Otay Ranch Village 6	City of Chula Vista
6/21/12	Otay Ranch Village 6 - Cambria	Cambria	MP-51 Vortex Separator	Residential	High	Otay Ranch Village 6	City of Chula Vista
6/25/12	COSTCO at Broadway	NA	MP-51 Vortex Separator	Commercial	High	Commercial	KIMCO Realty
6/25/12	Fire Station #7	NA	MP-51 Vortex Separator Other	Municipal	Low	City Project with SUSMP	City of Chula Vista
6/26/12	Los Vecinos Apartments	NA	TC-40 Media Filter Porous Pavement	Residential	Medium	Residential	Los Vecinos, LP
6/26/12	J&W Redwood	NA	TC-11 Infiltration Basin	Commercial	High	Commercial	J&W Redwood
6/26/12	Chula Vista Toyota	NA	MP-52 Drain Insert	Commercial	High	Commercial	Chula Vista Toyota
6/27/12	910 Hale Place	NA	MP-52 Drain Insert	Commercial	Medium	Commercial	910 Hale Place, LLC

Inspection Date	Project Name	Neighborhood	Type(s) of BMP Installed	Category	Priority	Development	Responsible Party
6/28/12	Bonita Library	NA	MP-52 Drain Insert TC-30 Vegetated Swale	Miscellaneous	High	Miscellaneous	Bonita-Sunnyside Branch Librar
6/29/12	Chula Vista Toyota	NA	MP-52 Drain Insert	Commercial	High	Commercial	Chula Vista Toyota
6/29/12	Eastlake Business Center	NA	MP-52 Drain Insert	Commercial	Medium	Commercial	Tycoon Management
6/29/12	Walmart at 5305 Broadway	NA	MP-51 Vortex Separator MP-52 Drain Inlet	Commercial	High	Commercial	WALMART Stores Inc.

Total Sites Inspected: **123**

Attachment G
FY 2011-2012 Construction Sites Inspected

Construction Inspection records are included in the inspection reports and are on file for each specific project. ***Inspected construction sites with discrepancies had a verbal or written follow-up notice.*** *During this reporting period, all High Priority construction sites were inspected bi-weekly during the rainy season, and all Medium and Low Priority construction sites were inspected at least monthly. Construction projects that were inspected during this reporting period are listed below.*

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
Bella Lago					
Bella Lago	Bella Lago Grading	NA	Completed	BE002G	High Priority
Bella Lago	Bella Lago Improvements Phase II	NA	Under Construction	BE005I	High Priority
Eastlake Vistas					
Eastlake Vistas	Olympic Pointe	NA	Under Construction	PG793	High Priority
NA					
NA	Sharp Cancer Center	NA	Completed	PC-2058	High Priority
NA	Jack In Box - Eastlake	NA	Completed	PG863	Medium Priority
NA	Jack In The Box - Otay Lakes Road	NA	Completed	PG806	Medium Priority

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
NA					
NA	Carls Junior	NA	Completed	PG808	High Priority
NA	Red Lobster Restaurant	NA	Completed	PC2103	High Priority
NA	Industrial Blvd Bike Lane & Ped Improvements	NA	Completed	STL361	High Priority
NA	Eucalypic Park Improvements	NA	Under Construction	STL376	High Priority
NA	559 Moss Street	NA	Completed	PG801	Low Priority
NA	4th and Brisbane Avenue Improvements	NA	Completed	SMT370	High Priority
NA	Chase Bank - Eastlake	NA	Completed	PG804	High Priority
NA	Hernandez Tire Shop	NA	Completed	PG798	High Priority
NA	St. Pius Catholic Church	NA	Completed	PG786	Medium Priority
NA	Sewer Rehab FY11/12	NA	Under Construction	SW268	High Priority
NA	559 Moss Street	NA	Completed	PG801	Low Priority
NA	Bayshore Bikeway	NA	Completed	STL337	High Priority
NA	Industrial Blvd Improvements	NA	Completed	STL361	High Priority
NA	750 Main Street	NA	Inactive	PG775	High Priority

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
Otay Ranch					
Otay Ranch	Otay Ranch Village 2 East	R13	Under Construction	OR815I	Medium Priority
Otay Ranch	Otay Ranch Village 2 East	R30	Under Construction	OR814I	High Priority
Otay Ranch	Otay Ranch Village 2 East R-14	R14	Under Construction	OR813I	Medium Priority
Otay Ranch	Otay Ranch Village 2 East	R30	Under Construction	OR814I	High Priority
Otay Ranch	Otay Ranch Village 2 East	R13	Under Construction	OR815I	Medium Priority
Otay Ranch	Otay Ranch Village 2 East	R13	Under Construction	OR815I	High Priority
Otay Ranch	Otay Ranch Village 2	R-29	Under Construction	OR819I	Medium Priority
Otay Ranch	Otay Ranch Village 2	Heritage Road	Inactive	OR807G	High Priority
Otay Ranch	Otay Ranch Village 2 East	NA	Under Construction	OR805G	High Priority
Otay Ranch	Otay Ranch Village 2 East	R13	Under Construction	OR815I	Medium Priority
Otay Ranch	Otay Ranch Village 2 East	R14	Under Construction	OR813I	High Priority
Otay Ranch	Otay Ranch Village 2 R-5A	R5A	Inactive	OR811I	Medium Priority
Otay Ranch	Otay Ranch Village 2	R9	Under Construction	OR811I	High Priority

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
Otay Ranch					
Otay Ranch	Otay Ranch Village 7	Santa Barabra	Completed	OR973 I	Medium Priority
Otay Ranch	Otay Ranch Village 2 East	NA	Under Construction	OR805G	Medium Priority
Otay Ranch	Otay Ranch Village 7	Terraza	Under Construction	OR973I	Medium Priority
Otay Ranch	Otay Ranch Village 7	Cypress Lane	Completed	OR973I	Medium Priority
Otay Ranch	Otay Ranch Village 7	Monte Sereno	Completed	OR973 I-01	Medium Priority
Otay Ranch	Otay Ranch Homes	Multible Sites	Under Construction	OR819I	High Priority
Otay Ranch	Otay Ranch Village 2 R7	R7	Under Construction	OR811I	Medium Priority
Otay Ranch Village 11					
Otay Ranch Village 11	Otay Ranch Village 11	Cordova	Under Construction	OR634I	Medium Priority
Otay Ranch Village 11	Otay Ranch Village 11	Trellis	Under Construction	OR628I	Medium Priority
Otay Ranch Village 2					
Otay Ranch Village 2	Otay Ranch Village 2 East R-14	R-14	Under Construction	OR813I	Medium Priority
Otay Ranch Village 2	Otay Ranch Village 2 East	NA	Under Construction	OR805G	Medium Priority

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
Otay Ranch Village 2					
Otay Ranch Village 2	Otay Ranch Village 2 Heritage Road	NA	Inactive	OR807G	High Priority
Otay Ranch Village 2	Otay Ranch Village 2 R-14	R14	Under Construction	OR813I	Medium Priority
Otay Ranch Village 2	Otay Ranch Village 2 R-29	R29	Under Construction	OR819I	Medium Priority
Otay Ranch Village 2	Otay Ranch Village 2 R5A	R5A	Inactive	OR811I	Low Priority
Otay Ranch Village 2 North					
Otay Ranch Village 2 North	Otay Ranch Village 2 - North	Presidio	Under Construction	OR809G	Medium Priority
Otay Ranch Village 7					
Otay Ranch Village 7	Otay Ranch Village 7	Terraza	Under Construction	OR973I	Medium Priority
Otay Ranch Village 7	Otay Ranch Village 7	Cypress Lane	Completed	OR973I	Medium Priority
Otay Ranch Village 7	Otay Ranch Village 7	Santa Barbara	Completed	OR973I	Medium Priority
Otay Ranch Village 7	Otay Ranch Village 7	Santa Barbara	Completed	OR973I	Medium Priority
Rolling Hills Ranch					
Rolling Hills Ranch	Rolling Hills Ranch N-11	R241I	Under Construction	RH241I	High Priority

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
Rolling Hills Ranch					
Rolling Hills Ranch	Rolling Hills Ranch N9	N9	Under Construction	RH229G	High Priority
Rolling Hills Ranch	Rilling Hills Ranch N11	N11	Under Construction	RH241I	High Priority
Rolling Hills Ranch	Rolling Hills Ranch N 11	N-11	Under Construction	RH241I	High Priority
Rolling Hills Ranch	Rolling Hills Ranch N12	N12	Under Construction	RH237I	High Priority
Rolling Hills Ranch	Rolling Hills Ranch N11	N11	Under Construction	RH241I	High Priority
Rolling Hills Ranch	Rolling Hills Ranch N11	N11	Under Construction	RH241I	High Priority
Rolling Hills Ranch	Rolling Hills Ranch N10A	N10A	Under Construction	RH237I	High Priority
San Miguel Ranch					
San Miguel Ranch	San Miguel Ranch Area J2	J2	Under Construction	SM018I	High Priority
San Miguel Ranch	San Miguel Ranch Area L	L	Under Construction	SM022I	High Priority
San Miguel Ranch	San Miguel Ranch III Grading	Phase III	Under Construction	SM011G	High Priority
San Miguel Ranch	San Miguel Ranch Area K	K	Under Construction	SMO15I	High Priority
San Miguel Ranch	San Miguel Ranch III	NA	Under Construction	SMO11G	High Priority
San Miguel Ranch	San Miguel Ranch Area J1	J1	Under Construction	SM016I	High Priority

Subdivision	Project Name	Neighborhood	Project Status	Work Order #	Priority
San Miguel Ranch					
San Miguel Ranch	San Miguel Ranch Area L	Area L	Under Construction	SM022I	High Priority
San Miguel Ranch	San Miguel Ranch - Area K	Area K	Under Construction	SM015I	Medium Priority

Number of Sites: 69

Attachment H

FY 2011-2012 Municipal Inspections

Note: All noted findings/discrepancies were addressed by City Staff/Crews following inspection activities.

Inspection Date	Facility Name	APN	Address			Category	Priority
2/9/12	Veterans Park & Recreation Center	6411221000	785	PALOMAR	ST	Parks-Landscape-Rec Areas	High
2/24/12	Harvest Park	6425814800	1381	PALOMAR	ST	Parks-Landscape-Rec Areas	High
2/24/12	Horizon Neighborhood Park	6410721600	970	PALOMAR	ST	Parks-Landscape-Rec Areas	High
2/24/12	Heritage Park & Community Center	6425601100	1550	PALOMAR	ST	Parks-Landscape-Rec Areas	High
2/24/12	Santa Cora Park	6420804000	1365	SANTA CORA	AV	Parks-Landscape-Rec Areas	High
3/1/12	Salt Creek Park & Community Center	6434830200	2710	OTAY LAKES	RD	Parks-Landscape-Rec Areas	High
3/7/12	Sunset View Park	6430330100	1390	GREENSVIEW	DR	Parks-Landscape-Rec Areas	High
3/7/12	Memorial Park	5683004300	373	PARK	WY	Parks-Landscape-Rec Areas	High
3/7/12	Chula Vista Community Park	5953200200	1060	EASTLAKE	PW	Parks-Landscape-Rec Areas	High
3/7/12	Chula Vista Municipal Golf Course	5932402400	4475	BONITA	RD	Parks-Landscape-Rec Areas	High
3/7/12	Downtown Parking Facility	5682702900	340	F	ST	Other Fixed Facilities	High
3/7/12	Parkway Community Center	5683004300	373	PARK	WY	Parks-Landscape-Rec Areas	High
3/7/12	Power Washing-Graffiti Removal					Mobile Mun Activities	High
3/7/12	Rohr Park	5932400500	4548	SWEETWATER	RD	Parks-Landscape-Rec Areas	High

Inspection Date	Facility Name	APN	Address			Category	Priority
3/8/12	SDGE Park	6230720700	1438	HILLTOP	DR	Parks-Landscape-Rec Areas	High
3/8/12	Lancerlot Park	5711701800	750	K	ST	Parks-Landscape-Rec Areas	High
3/8/12	Nature Center	5650102900	1000	GUNPOWDER POINT	DR	Parks-Landscape-Rec Areas	High
3/8/12	Old Public Works Yard	5670312700	707	F	ST	Public Work Facilities	High
3/13/12	Tiffany Park	6420302900	1713	ELMHURST	ST	Parks-Landscape-Rec Areas	High
3/13/12	Voyager Park	6400901900	1178	J	ST	Parks-Landscape-Rec Areas	High
3/13/12	Rancho Del Rey Park	6422800300	1131	BUENA VISTA	WY	Parks-Landscape-Rec Areas	High
3/13/12	Independence Park	6423205600	1248	CALLE SANTIAGO		Parks-Landscape-Rec Areas	High
3/13/12	Breezewood Park	6425004600	1091	BREEZEWOOD	DR	Parks-Landscape-Rec Areas	High
3/13/12	Explorer Park	6400301900		RANCHO DEL REY	PW	Parks-Landscape-Rec Areas	High
3/13/12	Winding Walk Park		1675	EXPLORATION FALLS	DR	Parks-Landscape-Rec Areas	High
3/13/12	Harborside Park	6182005900	670	OXFORD	ST	Parks-Landscape-Rec Areas	High
3/13/12	Montevalle Park & Community Center	5957360600	840	DUNCAN RANCH	RD	Parks-Landscape-Rec Areas	High
3/15/12	Orange Avenue Fields	6240107200	160	ORANGE	AV	Parks-Landscape-Rec Areas	High
3/15/12	Loma Verde Park & Recreation Center		1420	LOMA	LN	Parks-Landscape-Rec Areas	High

Inspection Date	Facility Name	APN	Address			Category	Priority
3/15/12	Palomar Park	6200504900	1359	PARK	DR	Parks-Landscape-Rec Areas	High
3/15/12	Reinstra Ball Fields	6240107300	1500	MAX	AV	Parks-Landscape-Rec Areas	High
3/15/12	Sherwood Park	6233321900	69	SHERWOOD	ST	Parks-Landscape-Rec Areas	High
3/15/12	Animal Care Facility	6290605400	130	BEYER	WY	Animal Facilities	High
4/6/12	Greg Rogers Park	6200600300	1189	OLEANDER	AV	Parks-Landscape-Rec Areas	High
4/9/12	Sunbow Park	6402725100	690	NAPLES	ST	Parks-Landscape-Rec Areas	High
4/9/12	Mini Park	5952145100	753	ASHBROOK	DR	Parks-Landscape-Rec Areas	High
4/9/12	All Seasons Park	6442401000	1825	MAGDALENA	AV	Parks-Landscape-Rec Areas	High
4/9/12	Mackenzie Creek Park	5955700200	2275	MACKENZIE CREEK	RD	Parks-Landscape-Rec Areas	High
4/11/12	Santa Venetia Park	6430512700	1500	MAGDALENA	AV	Parks-Landscape-Rec Areas	High
4/11/12	Mount San Miguel Park	5950312300	2335	PASEO VERACRUZ		Parks-Landscape-Rec Areas	High
4/11/12	Bonita Long Canyon Park	5941100500	1745	COLTRIDGE	LN	Parks-Landscape-Rec Areas	High
4/11/12	Eucalyptus Park	5651200300	47	FIFTH	AV	Parks-Landscape-Rec Areas	High
4/11/12	Bay Boulevard Park	5670213201		BAY	BL	Parks-Landscape-Rec Areas	High
4/11/12	Chula Vista Women's Club	5683004200	357	G	ST	Parks-Landscape-Rec Areas	High

Inspection Date	Facility Name	APN	Address			Category	Priority
4/11/12	Norman Park and Recreation Center	5683331100	270	F	ST	Parks-Landscape-Rec Areas	High
4/11/12	Friendship Park	5681530100	365	F	ST	Parks-Landscape-Rec Areas	High
4/11/12	Conneley Park	6233143300	1559	CONNOLEY	AV	Parks-Landscape-Rec Areas	High
4/11/12	Lauderbach Park	6192113700	333	OXFORD	ST	Parks-Landscape-Rec Areas	High
4/11/12	Otay Park & Recreation Center	6232302600	3554	MAIN	ST	Parks-Landscape-Rec Areas	High
4/11/12	Valle Lindo Park	6440102600	545	SEQUOIA	ST	Parks-Landscape-Rec Areas	High
4/16/12	Hilltop Park	5744104600	780	HILLTOP	DR	Parks-Landscape-Rec Areas	High
4/16/12	Paseo Del Rey Park	6401412500	750	PASEO DEL REY		Parks-Landscape-Rec Areas	High
4/16/12	Los Ninos Park	6243411200	150	TEAL	ST	Parks-Landscape-Rec Areas	High
4/16/12	Gayle McCandliss Park	6390301300	415	J	ST	Parks-Landscape-Rec Areas	High
4/16/12	Sunridge Park	6400502000	952	BEECHGLEN	DR	Parks-Landscape-Rec Areas	High
4/16/12	Marisol Park	5933803600	916	RANCHO DEL REY	PW	Parks-Landscape-Rec Areas	High
4/16/12	H Street Land Application	5740300800		H	ST	Other Fixed Facilities	High
4/16/12	Cottonwood Park	6424210600	1778	PALOMAR	ST	Parks-Landscape-Rec Areas	High
4/16/12	Discovery Park	6423930700	700	BUENA VISTA	WY	Parks-Landscape-Rec Areas	High

Inspection Date	Facility Name	APN	Address			Category	Priority
4/16/12	Terra Nova Park	5921922700	450	HIDDEN VISTA	DR	Parks-Landscape-Rec Areas	High
6/7/12	John Lippit PWC & Admin Building	6442301100	1800	MAXWELL	RD	Other Fixed Facilities	High

Total Inspections: 61

Attachment I

FY 2011-2012 Commercial Inspections

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
2/23/12	H&A Electric Motors		180	MACE	ST	Cat (i-v) Auto Related	Low	
3/7/12	Road One of San Diego	64404061	1805	MAXWELL	RD	Cat xxiii-Bldg/Mat Storag	High	7549
3/7/12	ABC Rebuilders	6291000600	180	MACE	ST	Cat (i-v) Auto Related	Low	7532
3/7/12	Paxton Towing	6290620300	3487	MAIN	ST	Cat (i-v) Auto Related	High	7549
3/7/12	Romans Tires/Truck & Body	6221902000	2513	MAIN	ST	Cat (i-v) Auto Related	High	7538
3/7/12	Roman's Truck Body & Paint MJP	6221402500	2513	MAIN	ST	Cat (i-v) Auto Related	High	7532
3/8/12	McCune Chrysler Dodge	6440414200	1885	AUTO PARK	PL	Cat (i-v) Auto Related	High	5511
3/8/12	Mossy Nissan	6440414300	1875	AUTO PARK	AV	Cat (i-v) Auto Related	Other	5511
3/12/12	Eddie's Tires and Auto Repair	6290101200	1743	BROADWAY		Cat (i-v) Auto Related	High	7549
3/12/12	Chichi's Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
3/13/12	World Petroleum Gas - Main		3733	MAIN	ST	Cat x-Eating/Drinking ...	Low	
3/13/12	JJ Auto Body	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
3/13/12	Ramon's Auto Electric	6221403200	2555	MAIN	ST	Cat (i-v) Auto Related	Low	
3/13/12	Ricardos Custom Covers	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	Low	
3/13/12	Ray's Mobile Car Care	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	Low	

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
3/13/12	Chula Vista Auto Repair	6221901000	2627	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
3/13/12	Southbay Tools	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
3/13/12	RG Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7538
3/13/12	J&J Chrome & Polish	6221901000	2631	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
3/28/12	KFC-1327 Broadway	6220433400	1327	BROADWAY		Cat x-Eating/Drinking ...	High	5812
3/28/12	La Bodega Market	6182101600	1193	BROADWAY		Cat x-Eating/Drinking ...	High	5411
3/29/12	El Camaron	5652402600	193	BROADWAY		Cat x-Eating/Drinking ...	High	5812
3/29/12	Jack in the Box - 486 Broadway	5672003900	486	BROADWAY		Cat x-Eating/Drinking ...	High	5812
3/29/12	Carls JR - 502 Broadway	5710502400	502	BROADWAY		Cat x-Eating/Drinking ...	High	5812
3/29/12	Jack in the Box - 1408 Third Ave	6230500200	1408	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
3/29/12	McDonalds at 619 Broadway	5720803400	619	BROADWAY		Cat x-Eating/Drinking ...	High	5812
3/29/12	Rubios Fresh Mexican Grill at Broadway	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	High	5812
3/29/12	Burger King - 599 Broadway	5720104700	599	BROADWAY		Cat x-Eating/Drinking ...	High	5812
3/29/12	Carls JR - 1100 Broadway	6182006400	1100	BROADWAY		Cat x-Eating/Drinking ...	High	5812
3/29/12	Pizza Hut	6430207300	542	BROADWAY		Cat x-Eating/Drinking ...	High	5812
3/29/12	Baja Taco		1052	BROADWAY		Cat x-Eating/Drinking ...	Low	
3/29/12	Seven Eleven #135706-Broadway		285	BROADWAY		Cat x-Eating/Drinking ...	High	

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
3/29/12	Seven Eleven 899 Broadway		899	BROADWAY		Cat x-Eating/Drinking ...	High	
3/29/12	Seven Eleven - 1097 Broadway		1097	BROADWAY		Cat x-Eating/Drinking ...	High	
3/29/12	Wienerschnitzel #16	5672321800	493	BROADWAY		Cat x-Eating/Drinking ...	High	5812
3/29/12	Roberto DePhillippis Steak House	5710500800	556	BROADWAY		Cat x-Eating/Drinking ...	High	5812
4/2/12	Miramar Fish Market	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5812
4/2/12	Bulls Eye Burger	5713101800	860	BROADWAY		Cat x-Eating/Drinking ...	High	5812
4/2/12	Sunny's Market	5672122000	449	BROADWAY		Cat x-Eating/Drinking ...	Low	5411
4/2/12	Carls JR - 1487 E H Street	5941310400	1487	H	ST	Cat x-Eating/Drinking ...	High	5812
4/2/12	Agave Grill	5672004700	625	H	ST	Cat x-Eating/Drinking ...	High	5812
4/2/12	Otay Farms Inc.	6290101500	1716	BROADWAY		Cat x-Eating/Drinking ...	High	5411
4/2/12	Denny's Restaurant - E Street	5670320600	692	E	ST	Cat x-Eating/Drinking ...	High	5812
4/2/12	El Pollo Loco/Bas Food Services	5710622100	666	H	ST	Cat x-Eating/Drinking ...	High	5812
4/4/12	Subway 2253	5922001700	374	H	ST	Cat x-Eating/Drinking ...	Low	5812
4/5/12	Home Town IGA	5670320800	646	E	ST	Cat x-Eating/Drinking ...	High	5411
4/10/12	Church's Fried Chicken	6190610200	1005	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
4/10/12	Zeppy Auto Repair	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538
4/10/12	Juans Auto Repair Inc.	6221114100	2520	MAIN	ST	Cat (i-v) Auto Related	High	7538

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
4/10/12	Mike Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
4/10/12	PO Auto Repair	6291201600	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
4/10/12	Sanchez Auto Repair	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	High	7538
4/10/12	Wheel Depot	6290200400	2835	MAIN	ST	Cat (i-v) Auto Related	High	5531
4/10/12	Marcos Radiator	6221113200	2530	MAIN	ST	Cat (i-v) Auto Related	High	7539
4/10/12	Martinez Smog Check	6231722700	2952	MAIN	ST	Cat (i-v) Auto Related	Low	7533
4/11/12	Taco Bell #2971	5922001300	340	H	ST	Cat x-Eating/Drinking ...	High	5812
4/12/12	Vons Food & Drug #2336	5922000500	360	H	ST	Cat x-Eating/Drinking ...	High	5411
4/12/12	Jack in the Box - 370 E H Street	5922001800	370	H	ST	Cat x-Eating/Drinking ...	High	5812
4/16/12	Jack in the Box - N Fourth Ave	5632703400	5	FOURTH	AV	Cat x-Eating/Drinking ...	High	5812
4/16/12	Pizza Hut - H St		885	H	ST	Cat x-Eating/Drinking ...	High	
4/16/12	Seven Eleven - Otay Lakes Rd		4300	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	
4/16/12	Seven Eleven - 4300 Otay		4300	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	
4/16/12	Seven Eleven Palomar		689	PALOMAR	ST	Cat x-Eating/Drinking ...	High	
4/17/12	Seven Eleven - 415 Telegraph		415	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	
4/17/12	Long John Silvers		1049	THIRD	AV	Cat x-Eating/Drinking ...	High	
4/17/12	McDonalds at Third #1557	6191104200	1110	THIRD	AV	Cat x-Eating/Drinking ...	High	5812

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
4/18/12	COSTCO at Broadway	6182006100	1130	BROADWAY		Cat x-Eating/Drinking ...	High	5399
4/20/12	L & L Barbecue		2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	
4/23/12	Seven Eleven #2131-Otay		913	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	
4/23/12	JNC Pinoy Foodmart Inc.	6421701000	943	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
4/26/12	Chow King		285	ORANGE	AV	Cat x-Eating/Drinking ...	High	
4/26/12	Subway #33339- Orange		263	ORANGE	AV	Cat x-Eating/Drinking ...	Low	
4/26/12	Wendy's Coastline Food Service Corp	5950720600	960	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
4/27/12	McDonalds #25836/TRS Restaurant	6411221900	687	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
4/27/12	Jack in the Box - Palomar	6220433300	585	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
5/1/12	Burger King - 899 E H Street	6402924800	899	H	ST	Cat x-Eating/Drinking ...	High	5812
5/2/12	Lomas Cafe Mexican Food	6232022500	3218	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
5/2/12	Santa Fe Meats	6221112000	2514	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
5/2/12	Smart & Final #463 / SFI Corp	6290607500	3141	MAIN	ST	Cat x-Eating/Drinking ...	High	5411
5/3/12	Taco Bell #15508	6420201700	1548	H	ST	Cat x-Eating/Drinking ...	High	5812
5/3/12	COSTCO - East H St	6402925000	895	H	ST	Cat x-Eating/Drinking ...	High	5812
5/4/12	Cotija Taco Shop	5932800600	4414	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5/4/12	Subway - Bonita		4378	BONITA	RD	Cat x-Eating/Drinking ...	Low	

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
5/4/12	Lolitas Taco Shop - Bonita	5933500100	4516	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5/4/12	Denny's Restaurant - Bonita Rd	5701406000	110	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5/4/12	Burger King - Bonita Rd	5700201700	97	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5/4/12	Sams Muffler Radiators	6290603200	225	BEYER	WY	Cat (i-v) Auto Related	High	7533
5/7/12	Knotts Soak City USA	6450201700	2052	ENTERTAINMENT	CI	Cat xviii-Golf/Parks/Rec	High	7996
5/7/12	Panda Express #1316	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
5/7/12	Seafood City Market	6192805800	285	ORANGE	AV	Cat x-Eating/Drinking ...	High	5411
5/7/12	Chili's Bar & Grill	6430610200	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
5/7/12	Cheese Cake Factory	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
5/7/12	Hofer Corporation	6450300900	5662	OTAY VALLEY	RD	Cat vii-Auto Lots Storage	High	4226
5/7/12	Heartland Meat Company		3461	MAIN	ST	Cat x-Eating/Drinking ...	High	
5/8/12	Red Lobster #521	5682702700	342	F	ST	Cat x-Eating/Drinking ...	High	5812
5/8/12	Rubios Fresh Mexican Grill	6402932300	1016	TIERRA DEL REY		Cat x-Eating/Drinking ...	High	5812
5/8/12	Marie Calendar #103	5682702000	330	F	ST	Cat x-Eating/Drinking ...	High	5812
5/8/12	KFC-- Medical Center Dr	6411221700	1361	MEDICAL CENTER	DR	Cat x-Eating/Drinking ...	High	5812
5/10/12	El Nopal Market LLC	6221115000	1655	BROADWAY		Cat x-Eating/Drinking ...	High	5411
5/10/12	Road One Towing Inc	6170600200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
5/15/12	Albertson's Third Ave	5733204500	720	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
5/15/12	Carls JR - 996 Third Ave	6190100800	996	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
5/15/12	Ciao Italian Restaurant	6240606000	4360	OTAY VALLEY	RD	Cat x-Eating/Drinking ...	High	5812
5/15/12	Fuller Honda	6440420500	580	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
5/15/12	MCK Auto Repairr	6291200100	3611	MAIN	ST	Cat (i-v) Auto Related	High	7538
5/15/12	Main Clutch Co	6232301700	3800	MAIN	ST	Cat (i-v) Auto Related	High	5531
5/15/12	American Towing Inc.	6291001600	140	REED	CT	Cat (i-v) Auto Related	High	7549
5/15/12	F &V Auto Repair	6290200100	2801	MAIN	ST	Cat (i-v) Auto Related	High	7538
5/15/12	Fuller Ford	6440420400	560	AUTOPARK	DR	Cat (i-v) Auto Related	High	5511
5/15/12	Pho Vien Dong	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
5/15/12	Jack in the Box - 802 Third Ave	5734500600	802	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
5/15/12	Honey Baked Ham Inc.	5922000700	316	H	ST	Cat x-Eating/Drinking ...	High	5411
5/15/12	KFC - 461Third Ave	5685112000	461	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
5/15/12	Lolitas Taco Shop - Palomar	6411221800	601	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
5/15/12	McDonalds Corp 1288 Broadway	6182803700	1288	BROADWAY		Cat x-Eating/Drinking ...	High	5812
5/15/12	Rally's Hamburger/Ongs Restaurant Group	6190511300	1004	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
5/15/12	Ralphs #235	6411221400	659	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5411

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
5/15/12	New Auto Concepts	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	
5/15/12	Macaroni Grill		2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	
5/15/12	Vons Food & Drug #3063	5734503400	870	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
5/15/12	Vons Food & Drug #2071	5953220200	2250	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
5/15/12	Vons Food & Drug #2006	6390806200	505	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5411
5/15/12	McDonalds - Telegraph	6390806700	551	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812
5/15/12	Pizza Hut	6430207300	251	PALOMAR	ST	Cat x-Eating/Drinking ...	High	5812
5/16/12	Terra Nova Service Plaza	5922001600	350	H	ST	Cat viii-Fueling-Rtl/Wsl	High	5541
5/16/12	Bonita Arco	5932800700	4498	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	High	5541
5/16/12	Lisa's Filipino Cuisine	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
5/16/12	Chevron Station-Olympic Parkway #1975	6430206900	2115	OLYMPIC	PW	Cat viii-Fueling-Rtl/Wsl	High	5541
5/16/12	Aqua Clean	5922109000	1435	RIDGEBACK	RD	Cat vi-Auto-Washing	High	7542
5/17/12	Western Towing	6170710200	1187	WALNUT	AV	Cat (i-v) Auto Related	High	7549
5/18/12	McDonalds 1150 Broadway	6182007100	1150	BROADWAY		Cat x-Eating/Drinking ...	High	5812
5/22/12	Jack in the Box - Bonita Rd	5912511600	4011	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5/22/12	McDonalds of Bonita	5932800900	4340	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5/22/12	Colima's Mexican Food	5912522500	4102	BONITA	RD	Cat x-Eating/Drinking ...	High	5812

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
5/22/12	Romesco Baja Bistro	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
5/22/12	Vons Food & Drug #2130	5932800600	4404	BONITA	RD	Cat x-Eating/Drinking ...	High	5411
5/23/12	Wendy's	5670325100	618	E	ST	Cat x-Eating/Drinking ...	High	5812
5/23/12	Yokoz's Sushi Bar & Island Grill	6421701000	945	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
5/23/12	In-N-Out Burger	6437701800	1725	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
5/23/12	Arbys - 2244 Otay Lakes Rd	5953220800	2244	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
5/23/12	Walmart @ Eastlake	6430208400	1360	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5399
5/23/12	Panda Chef	5953220100	2260	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
5/23/12	Pick Up Stix	6430207400	2127	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
5/23/12	Ralphs #75	5941310100	780	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5411
5/23/12	Rubios Fresh Mexican Grill at Eastlake	6430207300	1480	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5812
5/23/12	Carls JR - Olympic PW	6430206800	2097	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
5/23/12	Chick Fil A at Eastlake Terraces	6430206700	2089	OLYMPIC	PW	Cat x-Eating/Drinking ...	High	5812
5/23/12	McDonalds Otay Lakes Road	5953220900	2254	OTAY LAKES	RD	Cat x-Eating/Drinking ...	High	5812
5/29/12	McDonalds at E Street	5653102700	725	E	ST	Cat x-Eating/Drinking ...	High	5812
5/29/12	Dynamic Results Inc/Eddies Tires & Auto Repair	6221403600	2677	MAIN	ST	Cat (i-v) Auto Related	High	5531
5/29/12	JC Towing Inc.	6221901800	2502	FAIVRE	ST	Cat (i-v) Auto Related	High	7549

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
5/29/12	Franks Garage	5634313100	359	TROUSDALE	DR	Cat (i-v) Auto Related	High	7532
5/30/12	Hollywood Market		72			Cat x-Eating/Drinking ...	High	
5/30/12	Albertson's - Proctor Valley Rd	5950305800	2310	PROCTOR VALLEY	RD	Cat x-Eating/Drinking ...	High	5411
5/30/12	Panda Express #960	6182006500	1120	BROADWAY		Cat x-Eating/Drinking ...	High	5812
5/30/12	Seven Eleven #13578D-2131	6240800600	1475	MELROSE	AV	Cat x-Eating/Drinking ...	Low	5411
5/31/12	Save A Lot #943	6193001600	1315	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
5/31/12	Mercado International 2000	6230606100	1415	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
5/31/12	Chinese City Restaurant	6230600200	1403	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
5/31/12	Express Tire dba American Auto Service	5672003600	430	BROADWAY		Cat (i-v) Auto Related	High	7538
5/31/12	Foodland #7	6192805800	1340	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
5/31/12	Panda Imperial Chinese	6192113400	1208	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
5/31/12	El Norteno Restaurant	6192122800	1266	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
5/31/12	D III Industrial	6291302700	187	MACE	ST	Cat iv-Equipment Relaled	High	7513
5/31/12	Taco Bell #3398	5670320100	696	E	ST	Cat x-Eating/Drinking ...	High	5812
5/31/12	Target 4th Ave		40	FOURTH	AV	Cat x-Eating/Drinking ...	High	
6/1/12	America's Finest Carpet	6442302300	730	DESIGN	CT	Cat xi-Mob. Carpet/Drape	High	5713
6/5/12	Advanced Autobody and Paint	6180621200	951	BROADWAY		Cat (i-v) Auto Related	High	7532

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
6/5/12	El Ranchero Factory Taco Shop #2	6232121900	3344	MAIN	ST	Cat x-Eating/Drinking ...	High	5812
6/18/12	Superior VW Automotive Repair	6221113400	2578	MAIN	ST	Cat (i-v) Auto Related	High	7538
6/20/12	Blimpie	6182803900	1208	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
6/20/12	California Pizza Kitchen	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
6/20/12	Sprouts Market - Formerly Henry's	5732400500	690	THIRD	AV	Cat x-Eating/Drinking ...	High	5411
6/20/12	Sapphire Lounge	5912522500	4076	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
6/20/12	Panera Bread	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
6/20/12	Kings Fish House	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
6/20/12	Chili's Bar & Grill	6430610200	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
6/20/12	Sareta Food Corporation - Tacos and Beer	6430610500	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
6/20/12	Hot Dog On A Stick			BIRCH	RD	Cat x-Eating/Drinking ...	High	
6/20/12	Sushiya	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
6/21/12	Olive Garden Restaurant #1205	5720104500	585	I	ST	Cat x-Eating/Drinking ...	Low	5812
6/21/12	Circle Park	6433902300		KING CREEK	CI	Cat xviii-Golf/Parks/Rec	Low	7996
6/21/12	Cobblestone Park	5952035500		LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7996
6/21/12	Eastlake Beach Club	5952220700	2050	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7997
6/21/12	Magnolia Hill Park	5956901900	2640	MONTECITO	RD	Cat xviii-Golf/Parks/Rec	Low	7996

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
6/21/12	Orchard Park	6420712400		MONTE SERENO	AV	Cat xviii-Golf/Parks/Rec	Low	7996
6/21/12	Scobee Park	5952310700	2351	KUHN	DR	Cat xviii-Golf/Parks/Rec	Low	7996
6/21/12	Shorebird Park	5952806400	2088	LAKESHORE	DR	Cat xviii-Golf/Parks/Rec	Low	7996
6/21/12	Hilltop Main Self Storage	6291302500	3755	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
6/21/12	Security First Self Storage	6290500800	3089	MAIN	ST	Cat vii-Auto Lots Storage	Low	4225
6/26/12	TV Jacks Inc.	5932800100	4230	BONITA	RD	Cat iv-Equipment Relaled	Low	7629
6/26/12	Circle K Store #5708	5701310500	98	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	High	5541
6/26/12	Speed Merchant Inc/American Tire Distributor	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	5531
6/26/12	J&L Auto Repair Inc.	5670531200	273	BROADWAY		Cat (i-v) Auto Related	High	7538
6/26/12	PF Changs China Bistro	6430610100	2015	BIRCH	RD	Cat x-Eating/Drinking ...	Low	5812
6/26/12	Southbay Fish and Grill	7600480102	570	MARINA	PW	Cat x-Eating/Drinking ...	Low	5812
6/26/12	Subway #15681/Serler Inc.	6220310600	642	PALOMAR	ST	Cat x-Eating/Drinking ...	Low	5812
6/26/12	Subway #28286	5623242400	45	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
6/26/12	Subway #3062	5941310200	1455	H	ST	Cat x-Eating/Drinking ...	Low	5812
6/26/12	Subway #31595	5720103100	555	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
6/26/12	Subway #1055	5720803500	609	BROADWAY		Cat x-Eating/Drinking ...	Low	5812
6/26/12	Subway #16107	6390806500	559	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	Low	5812

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
6/26/12	Hilltop Market	6232716700	1500	HILLTOP	DR	Cat x-Eating/Drinking ...	High	5411
6/26/12	Galley At The Marina	7600480101	550	MARINA	PW	Cat x-Eating/Drinking ...	Low	5812
6/26/12	Juice Adventure	6421701000	935	OTAY LAKES	RD	Cat x-Eating/Drinking ...	Low	5812
6/26/12	Jalisco Cafe	5912522600	4026	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
6/26/12	Target Store T-1815	5950720400	910	EASTLAKE	PW	Cat x-Eating/Drinking ...	High	5399
6/26/12	The Plascencia Group LLC	5932800900	4346	BONITA	RD	Cat x-Eating/Drinking ...	Low	5812
6/26/12	Tijuana Oyster Bar	5932800200	4246	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
6/26/12	TJ Oyster Bar	5932800200	4246	BONITA	RD	Cat x-Eating/Drinking ...	High	5812
6/26/12	Elks Lodge		901	ELKS	LN	Cat x-Eating/Drinking ...	Low	
6/26/12	Mike's Recycling	6290607200	3151	MAIN	ST	Cat iv-Equipment Relaled	High	7389
6/26/12	Tinos Auto Tech	5712003100	720	BROADWAY		Cat (i-v) Auto Related	High	7532
6/27/12	Lolitas Taco Shop - Telegraph	6394901300	413	TELEGRAPH CANYON	RD	Cat x-Eating/Drinking ...	High	5812
6/27/12	Subway 31595		555	BROADWAY		Cat x-Eating/Drinking ...	High	
6/28/12	Classic Auto Body	6231320900	1612	THIRD	AV	Cat (i-v) Auto Related	High	7532
6/28/12	Precision Automotive	6221112500	2446	MAIN	ST	Cat (i-v) Auto Related	High	7537
6/28/12	C&V Auto	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7538
6/28/12	Economy Transmissions	6220913200	1502	BROADWAY		Cat (i-v) Auto Related	High	7538

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
6/28/12	Panda King	5941310200	1459	H	ST	Cat x-Eating/Drinking ...	High	5812
6/28/12	American Tire Distributors	6221112600	2400	MAIN	ST	Cat (i-v) Auto Related	High	
6/28/12	Poliza Hollywood Inc	5743003200	72	J	ST	Cat x-Eating/Drinking ...	High	5411
6/28/12	Panda Express #1098	6240606700	1820	MAIN	CT	Cat x-Eating/Drinking ...	High	5812
6/28/12	San Diego Tires and Brakes	6290500900	3031	MAIN	ST	Cat (i-v) Auto Related	High	7538
6/28/12	Chula Vista Toyota	6440407900	650	MAIN	ST	Cat vii-Auto Lots Storage	High	5511
6/28/12	Euro Specialties	6221114100	2530	MAIN	ST	Cat (i-v) Auto Related	Low	7538
6/28/12	B&J Auto Repair Smog & Sales	5711531500	696	BROADWAY		Cat (i-v) Auto Related	High	7538
6/28/12	Candys Auto Body Shop	6182100300	1131	BROADWAY		Cat (i-v) Auto Related	High	7532
6/28/12	Burger King - 1265 Third Ave	6192225200	1265	THIRD	AV	Cat x-Eating/Drinking ...	High	5812
6/29/12	Corzy Corner Pizza	6441912700	1655	BRANDYWINE	AV	Cat x-Eating/Drinking ...	Low	5812
6/29/12	Eastlake RV and Boat Storage	5952312100	2371	BOSWELL	RD	Cat vii-Auto Lots Storage	Medium	4225
6/29/12	Eastlake Self Storage	5952312900	2351	BOSWELL	RD	Cat vii-Auto Lots Storage	Low	4225
6/29/12	Home Depot - Plaza Ct	6402911300	725	PLAZA	CT	Cat xxiii-Bldg/Mat Storag	High	5211
6/29/12	Lowes Home Improvement Warehouse Inc.	5950720100	2225	OTAY LAKES	RD	Cat xxiii-Bldg/Mat Storag	High	5211
6/29/12	Bonita Shell	5701402700	100	BONITA	RD	Cat viii-Fueling-Rtl/Wsl	Low	5541
6/29/12	Hernandez Tire Sales	6232021800	3236	MAIN	ST	Cat (i-v) Auto Related	High	5531

Inspection Date	Facility Name	APN	Address			Category	Priority	SIC Number
6/29/12	Jiffy Lube - 593 E Street	5652402700	593	E	ST	Cat (i-v) Auto Related	High	7549
6/29/12	Nice & Easy Autobody & Paint Inc.	6221116000	2350	MAIN	ST	Cat (i-v) Auto Related	High	7532
6/29/12	Explorers Competition Products		2311	BOSWELL	RD	Cat iv-Equipment Relaled	Low	
6/29/12	Mandarin Gourmet		4410	BONITA	RD	Cat x-Eating/Drinking ...	High	
6/29/12	G & G Auto Repair	6221902000	2555	FAIVRE	ST	Cat (i-v) Auto Related	High	7532
6/29/12	Star Bakery	6192806000	1372	THIRD	AV	Cat x-Eating/Drinking ...	Low	5461
6/29/12	La Parroquia Cafe & Music Lounge	6430610500	2015	BIRCH	RD	Cat x-Eating/Drinking ...	High	5812
6/29/12	Subway 28286		45	BROADWAY		Cat x-Eating/Drinking ...	High	

Total Inspections: 244

Attachment J

FY 2011-2012 Industrial Inspections

Inspection Date	Facility Name	APN	Address			Category	Priority	WDID Number	SIC Number
8/10/11	AAtlas Auto Recycling	6441812100	791	ENERGY	WY	Auto Dismantlers	High	937I022394	5015
10/25/11	Vulcan Materials Company - Chula Vis	6440600600	2041	HERITAGE	RD	Concrete Work	High	937I023019	1429
1/12/12	Texano Auto Recycling	6441811500	805	ENERGY	WY	Recycling	High	937I1021577	5015
1/12/12	Bajas #3 Auto Wrecking	6441811500	811	ENERGY	WY	Auto Dismantlers	High	937I022426	7549
1/12/12	Riley Recycling	6441811500		ENERGY	WY	Auto Dismantlers	High		5015
1/12/12	Rossin Steel Inc.	6441810900	1880	NIRVANA	AV	Fabrications	Other	937I020898	3441
1/12/12	Calumet Auto Wrecking Inc	6441821400	891	ENERGY	WY	Auto Dismantlers	High	937I004393	5015
1/13/12	Allied Waste Services	6441821600	881	ENERGY	WY	Waste Management	High	937I014355	4953
1/13/12	Estes Express Lines	5634521200	120	PRESS	LN	Trucking	High	937I007126	4231
1/13/12	FJ Willert Construction Co.	6441813600	1869	NIRVANA	AV	Construction Equipment	High	937I016993	4953
1/13/12	Honda Acura Parts Auto Recycling	6441821500	895	ENERGY	WY	Auto Dismantlers	High	937i011394	5015
1/13/12	South Bay Auto Wreckers	6441820200	811	ENERGY	WY	Auto Dismantlers	High	937I004495	5015
1/13/12	United Parcel Service	5953001000	2300	BOSWELL	CT	Postal Service	High	9371002086	4215

Inspection Date	Facility Name	APN	Address			Category	Priority	WDID Number	SIC Number
1/13/12	AAA Foreign Auto Recycling	6441810100	783	NIRVANA	AV	Auto Dismantlers	High	937i016197	5015
1/18/12	Standard Auto Recycling	6291000400	150	REED	CT	Auto Dismantlers	High	9371010775	5015
1/18/12	Doncaster, GCE Industries	6440404900	1887	NIRVANA	AV	Manufacturing	High	937I022716	3443
1/31/12	Pacific Auto Wrecking	6441812000	795	ENERGY	WY	Auto Dismantlers	High	9371015058	5015
2/6/12	Japan Tech Auto Wrecking	6441812300	777	ENERGY	WY	Auto Dismantlers	High	937I020121	5015
2/6/12	Asian Kars Auto Recycling	6441812300		ENERGY	WY	Auto Dismantlers	High	937I017467	5015
2/6/12	All Japanese Auto Recycling	6441811900	775	ENERGY	WY	Auto Dismantlers	High	937I015706	5015
2/6/12	RC Import Auto Recycler	6441812300	777	ENERGY	WY	Auto Dismantlers	High	937I010144	5015
2/7/12	Japanese Auto Wrecking	6441811500	811	ENERGY	WY	Auto Dismantlers	High	937I021355	5015
2/8/12	Pavement Recycling Systems	6441820300	855	ENERGY	WY	Concrete Work	High		5093
2/16/12	Pick Your Part Auto Wrecking	6441820800	880	ENERGY	WY	Auto Dismantlers	High	937I012114	5015
2/16/12	Import Auto Wrecking	6441812900	793	ENERGY	WY	Auto Dismantlers	High	937I016877	5015
2/21/12	All Toyota/Lexus Wrecking	6441811500	805	ENERGY	WY	Auto Dismantlers	High	937I018543	5015
2/21/12	Action Auto Dismantlers Inc	6291001400	151	REED	CT	Auto Dismantlers	High	937I004000	5015
2/21/12	SOS Metals San Diego LLC	6221115700	635	ANITA	ST	Recycling	High	9371013260	5093

Inspection Date	Facility Name	APN	Address			Category	Priority	WDID Number	SIC Number
2/21/12	United Rentals Inc	5623501000	501	C	ST	Heavy Equipment Rentals	High	9371019886	7359
2/21/12	West Auto Wreckers	6221902600	2365	MAIN	ST	Auto Dismantlers	High	9371001046	5015
2/21/12	United States Postal Service	5733204300	750	THIRD	AV	Postal Service	High		
2/23/12	Freeway Auto Wrecking	6441812200	783	ENERGY	WY	Auto Dismantlers	High	937I021643	5015
2/23/12	Montoya's Auto Wrecking	6441811800	781	ENERGY	WY	Auto Dismantlers	High	937I021427	5015
2/23/12	California Sports Auto Wrecking	6441811800		ENERGY	WY	Auto Dismantlers	High	937I023398	5015
6/21/12	Ecology Auto Wrecking 2	6441821000	850	ENERGY	WY	Auto Dismantlers	High	937I019445	5015
6/21/12	Ecology Auto Wrecking	6441820100	825	ENERGY	WY	Auto Dismantlers	High	937I003325	5015
6/21/12	Ecology Auto Wrecking 3	6441821200	800	ENERGY	WY	Auto Dismantlers	High	937I003280	5015

Total Inspections: 37

Attachment K

FY 2011-2012 Enforcement Action Taken
(Commerical, Industrial, Municipal, and Residential)

Note: During this reporting period, 07/01/11 to 06/30/12, investigation of the following cases have resulted in the issuance of a Notice of Violation, Order to Cease and Desist, Notice to Clean and Abate, and/or Administrative Citation.

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken
			Commercial				
8/18/11	Harding Asphalt Seal Coat	Power/Pressure Washing	Commercial	1099	THIRD	AV	Adminstrative Citation
10/22/11	Santos Bros Trucking Co	Accident Spill	Commercial	951	BROADWAY		Administrative Citation
3/1/12	A & F Landscaping and Concrete	Painting-Sanding Residue	Commercial	1002	MERCED RIVER	RD	Administrative Citation
			Construction				
10/3/11	750 Main Street Rowland Properties	Const. BMPS Violation	Construction	750	MAIN	ST	NOV
10/27/11	750 Main Street Rowland Properties	Const. BMPS Violation	Construction		MAIN	ST	Civil Penalty
11/4/11	750 Main Street Rowland Properties	Const. BMPS Violation	Construction		MAIN	ST	Civil Penalty
11/7/11	750 Main Street Rowland Properties	Const. BMPS Violation	Construction		MAIN	ST	Civil Penalty
11/9/11	ProCircuit	Slurry/Concrete Discharge	Construction	691	THIRD	AV	Adminstrative Citation
11/15/11	750 Main Street Rowland Properties	Const. BMPS Violation	Construction	750	MAIN	ST	Civil Penalty
11/22/11	750 Main Street Rowland Properties	Const. BMPS Violation	Construction		MAIN	ST	Civil Penalty
12/5/11	750 Main Street Rowland Properties	Const. BMPS Violation	Construction		MAIN	ST	Civil Penalty
12/19/11	750 Main Street Rowland Properties	Const. BMPS Violation	Construction		MAIN	ST	Civil Penalty

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken
12/20/11	750 Main Street Rowland Properties	Slurry/Concrete Discharge	Construction	750	MAIN	ST	NOV - Clean & Abate - SWN
12/27/11	750 Main Street Rowland Properties	Const. BMPS Violation	Construction		MAIN	ST	Civil Penalty
2/22/12	Otay Ranch Village 2 - Rosina Vistas	Sediment Discharge	Construction		SANTA VICTORIA	RD	NOV - Civil Penalty
3/13/12	Otay Ranch Village 2 East	Failure To Install TCBMP	Construction				Civil Penalty
3/27/12	Otay Ranch Village 2 North - Otay New Homes	Failure To Install TCBMP	Construction				Civil Penalty
5/4/12	Otay Ranch Village 2 - Rosina Vistas	Const. BMPS Violation	Construction		SANTA VICTORIA	RD	Civil Penalty
5/14/12	Otay Ranch Village 2 - Rosina Vistas	Const. BMPS Violation	Construction		SANTA VICTORIA	RD	Stop Work Order
6/26/12	Carolino Construction	Slurry/Concrete Discharge	Construction	557	CENTER	ST	Administrative Citation
			Industrial				
11/17/11	Ecology Auto Parts	Others/Unknown Discharge	Industrial	825	ENERGY	WY	Civil Penalty
			Mobile Business				
7/18/11	AAA Carpet Cleaning Service	Carpet Clean Wash Water	Mobile Business		CORTE DE VELA		Administrative Citation
			Residential				
8/4/11	Duplex - 1052 Fifth Ave	Sewage Spill/Discharge	Residential	1052	FIFTH	AV	Admin Citation
8/15/11	Eucalyptus Grove Apartments	Sewage Spill/Discharge	Residential	55	FLOWER	ST	Administrative Citation
10/20/11	Resident - 845 Crest Drive	Others/Unknown Discharge	Residential	845	CREST	DR	Administrative Citation

Date of Incident	Business Name	Violation Category	Site Category	Address			Action Taken
1/24/12	Resident - 165 Vance Street	Slurry/Concrete Discharge	Residential	165	VANCE	ST	Admin Citation - Warning
5/1/12	Sunbow Villas	Sewage Spill/Discharge	Residential	760	PASO DE LUZ		Administrative Citation
5/22/12	Warick & Sutton Properties, Inc.	Sewage Spill/Discharge	Residential	125	FOURTH	AV	Administrative Citation
6/27/12	Residence - 557 Azalea Street	Slurry/Concrete Discharge	Residential	557	AZALEA	ST	Administrative Citation
6/29/12	Resident - 1306 Calle Santiago	Driveway/Trash Washing	Residential	1306	CALLE SANTIAGO		Administrative Citation
			Schools/ Church/Offices				
10/13/11	Sweetwater Union High School District - Bus	Accident Spill	Schools/ Church/Offices		TELEGRAPH CANYON	RD	Admin Citation - Warning

Total Incidents: **31**

Attachment L

FY 2011-2012 Hotline Call Response Summary

Incident Date	Structure Category	Site Category		Address		Type of Violation
07/11/2011	STREET	Residential	805	OAKLAWN	AV	Power Washing
	Comments/ Action Taken:	On 07/11/11, City staff responded to a complaint call at 805 Oaklawn. Upon arrival, saw a puddle of brownish water in front of 805 Oaklawn at the southeast corner of K St and Oaklawn. There was a powerwashing machine in the front yard of the subject address, but there was no evidence showing that an illegal discharge came from the subject address.				
07/12/2011	STREET	Residential	1525	MARBLE CANYON	WY	Automotive Work
	Comments/ Action Taken:	On 07/12/11 responded to a complaint call at the subject address about welding with no containment. Upon arrival at the home, there was no welding activity occurring. The street and driveway appeared to have no evidence of welding debris. There was some landscaping irrigation discharge in the gutter from the french drain. Photos taken for record. A door hanger was left on the inside of the front door gate with the home improvement brochure attached. No further action required.				
07/28/2011	STREET	Construction Sites		AGUA VISTA	DR	Other
	Comments/ Action Taken:	On 07/27/11 rcvd notification of algae buildup in curbline from model home in Rolling Hills Ranch. City staff responded and observed same. Home was overwatering causing discharge. Spoke with superintendent who will clean curbline. No further action required.				
07/28/2011	STORM CHANNEL	Construction Sites	942	THIRD	AV	Other
	Comments/ Action Taken:	On 07/25/11 rcvd notification of a transient camp located near the storm channel at subject location. Contacted PD Watch Commander who forwarded the issue to [redacted] of the Street Crime Division. On 07/27/11 PD staff responded and made contact with one transient. PD has given him 72 hours to depart the area. Individual complied. No further action required.				
07/29/2011	STREET	Residential	1182	DE ANZA	CT	Pool Maintenance
	Comments/ Action Taken:	On 07/29/11 rcvd notification of pool filter backwash at subject address. City staff responded and observed diatomaceous earth in the curbline. Resident was not home. Left door hanger and education material and have resident contact me ASAP. Resident conducted cleanup. No further action required.				
07/29/2011	STORM CHANNEL	Municipal		WILLOW	ST	Other

Incident Date	Structure Category	Site Category	Address	Type of Violation
07/29/2011	STORM CHANNEL	Municipal	WILLOW ST	Other
	Comments/ Action Taken:	On 07/28/11 rcvd notification from County consultant of possible oil in the draining area at Willow Street Bridge. City staff responded and observed black stagnant water. In addition, they referred possible transient camp. Observed trash and debris but no evidence of camp. Site in County. No further action required.		
08/03/2011	STREET	Residential	225 PALOMAR ST	Unknown Discharge
	Comments/ Action Taken:	On 08/03/ rcvd notification of discharge from apartment complex for some time. City staff responded and observed that discharge was from irrigation system. Spoke with staff to have maintenance check system for any breaks. No further action required.		
08/04/2011	STREET	Residential	1052 FIFTH AV	Sewage Spill
	Comments/ Action Taken:	On 08/04/11 rcvd notification of a sewage from the subject property. City staff responded and observed large pools of sewage along with approximately 30 gallons of used oil. Owner conducted repairs and cleanup. Issued Admin Citation for $2000. No further action required.		
08/08/2011	STREET	Commercial	1206 BROADWAY	Unknown Discharge
	Comments/ Action Taken:	On 08/08/11 rcvd notification of unknown discharge coming from IHOP parking lot. City staff responded and observed trash enclosure that needed cleanup. No discharge was observed. No further action required.		
08/11/2011	STREET	Commercial	495 TELEGRAPH CANYON RD	Possible Dumping into Catch Basi
	Comments/ Action Taken:	On 08/11/11 received notification of Jack's BBQ discharging grease into the storm drain system. City staff responded and observed minor grease drip from under grill. Instructed employees to cleanup. Compliance met. No further action required.		
08/11/2011	STREET	Residential	9 J ST	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 08/11/11 rcvd notification of oil being dumped into back yard from subject address. City staff responded and did not observe any discharge into the storm drain. No further action required.		
08/11/2011	STREET	Residential	1517 STANISLAUS DR	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/11/2011	STREET	Residential	1517	STANISLAUS	DR	Other
	Comments/ Action Taken:	On 08/11/11 rcvd notification of portable toilet at subject address. Determined that there was no discharge and that containment pan was intact. No further action required.				
08/15/2011	STREET	Residential	50	FLOWER	ST	Sewage Spill
	Comments/ Action Taken:	On 08/15/11 informed by wastewater of sewer lateral broken at subject address. Did not enter storm drain. BMPs were placed to contain spill. No further action required.				
08/15/2011	MISC		50	FLOWER	ST	Accident/Spill
	Comments/ Action Taken:	Duplicate				
08/15/2011	STREET	Residential	2185	HAMDEN	DR	Other
	Comments/ Action Taken:	On 08/15/11 city staff observed broken waterline from subject address. City staff contacted Otay Water District. No further action required.				
08/15/2011	STREET	Other	1600	SILVAS	ST	Sewage Spill
	Comments/ Action Taken:	On 08/15/11 parking enforcement staff observed motor home sewage tank discharge onto street when vehicle was towed. City staff responded and discharge trailed several hundred yards and did not discharge into the storm drain. No further action required.				
08/18/2011	STREET	Residential	1099	THIRD	AV	Power Washing
	Comments/ Action Taken:	On 08/18/11 received notification of powerwashing mud into the storm drain system. Arrived on-scene and observed Harding Asphalt staff powerwashing mud into storm drain. Clean up conducted. Issued Admin Citation. No further action required.				
08/22/2011	STORM CHANNEL	Commercial		SECOND	AV	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/22/2011	STORM CHANNEL	Commercial	SECOND		AV	Unknown Discharge
	Comments/ Action Taken:	On 08/22/12 City staff responded to a report of a spill coming from the business at the subject address. Staff scheduled on inspection of the business. On 09/06/11 City staff responded and did a walk through of site. Manager to conduct cleanup of staining of lot and conduct thorough housekeeping. No further action required.				
08/22/2011	STREET	Residential	845	CREST	DR	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	08/22/2011 10:30 AM Visited 845 Crest Dr. There was stain on the sidewalk and in the gutter indicating discharge of fluid from a small diameter drain pipe. The trace continued to just south of Tiffany Ct. Resident did not respond. Admin Citation was issued.				
08/23/2011	STREET	Residential	1156	NAPA	AV	Leaking Vehicle
	Comments/ Action Taken:	On 08/23/11 rcvd notification of leaking vehicle at subject address. City staff responded and did not observe description of vehicle or significant oil leaks in the neighborhood. No further actions required.				
08/25/2011	STREET	Residential	686	NAPLES	ST	Unknown Discharge
	Comments/ Action Taken:	On 08/25/11 rcvd notification of pet waste being washed down the street and body work being conducted at subject address. City staff responded and did not observe evidence of any washing down pet waste. Personal vehicle in driveway did not appear to be worked on. No further actions required.				
08/25/2011	STREET	Residential	561	MCINTOSH	ST	Unknown Discharge
	Comments/ Action Taken:	On 08/25/11 rcvd notification of a sewage spill from subject property. City staff responded and observed overflow in grassy area. Spoke with Manager who stated that it happened over weekend. Sewage did not enter storm drain and proper cleanup was conducted. No further actions required.				
08/26/2011	STREET	Residential	1003	NEPTUNE	DR	Unknown Discharge
	Comments/ Action Taken:	On 08/26/11 rcvd notification of a white substance discharged onto street from subject location. City staff responded and observed diatomaceous earth from pool filter discharged onto sidewalk. Spoke with homeowner who stated that the sidewalk will be cleaned. No further actions required.				
08/29/2011	STREET	Residential	1670	DEREK	WY	Leaking Vehicle

Incident Date	Structure Category	Site Category	Address			Type of Violation
08/29/2011	STREET	Residential	1670	DEREK	WY	Leaking Vehicle
	Comments/ Action Taken:	On 08/29/11 rcvd notification of multiple vehicles leaking oil and transmission fluid into storm drain. City staff responded and observed multiple vehicles but did not observe significant staining that would cause a discharge. No further action required.				
08/30/2011	STREET	Other		SILVAS	ST	Leaking Vehicle
	Comments/ Action Taken:	On 08/30/11 rcvd notification of motorhomes discharging sewage into storm drain. City staff responded and observe approx. 7 motorhomes along the street. Did not observe evidence of discharged. Referred to PD. No further actions required.				
08/30/2011	STREET	Residential	473	SMOKY	CI	Power Washing
	Comments/ Action Taken:	On 08/30/11 rcvd notification of tile cutting water being discharged into storm drain. City staff responded and observed tile cutting water coming from subject address. Spoke with handyman who stated that it went into sewer. Handyman relocated to back yard grassy area. Issued verbal warning. No further actions required.				
08/31/2011	STREET	Construction Sites		PASEO LADERA		Other
	Comments/ Action Taken:	On 08/31/11 rcvd notification of excessive amounts of water being discharged at subject location. City staff responded and observed fire hose with baffle discharging water. Water was being flushed for line testing at Sharp construction site. No further actions required.				
09/01/2011	STREET	Residential	620	PORT TRINITY		Unknown Discharge
	Comments/ Action Taken:	On 09/01/11 rcvd notification of tile cutting slurry being discharged into the storm drain. City staff responded and observed city crew cleaning catch basin. Discharge coming from under sidewalk drain. Informed contractor to move unit and sweep slurry in driveway. Issued verbal warning				
09/09/2011	CATCH BASINS	Residential		BROADWAY		Slurry/Concrete Discharge
	Comments/ Action Taken:	On 09/09/11 rcvd notification of concrete pumper discharging slurry into the storm drain. City staff responded and observed that company was using proper BMPs and slurry did not enter the nearest catch basin. No further action required.				
09/22/2011	STREET	Commercial	70	BROADWAY		Unknown Discharge

Incident Date	Structure Category	Site Category	Address		Type of Violation
09/22/2011	STREET	Commercial	70 BROADWAY		Unknown Discharge
	Comments/ Action Taken:	On 09/23/11 rcvd notification of Zorba;s staff washing down pans on back lot. City staff responded and did not observe any evidence. Spoke with owner to talk to employees stating that washing down is a violation. No further actions required.			
09/23/2011	STREET	Construction Sites	D	ST	Construction Debris & Waste
	Comments/ Action Taken:	On 09/23/11 rcvd notification of City contractor laydown area having trash and slurry residue in the storm drain. City staff responded and observed stockpile of trash and spills of slurry in street. Due to location of area this did not pose a threat to water quality. Spoke with foreman to clean up area. No further action required.			
10/04/2011	STREET	Residential	HAMPTON	CT	Leaking Vehicle
	Comments/ Action Taken:	On 09/23/11 rcvd notification of leaking vehicle at subject location. City staff responded and observed floor mat filled with oil in front of inlet. Spoke with homeowner and directed her to cleanup oil with absorbent and park vehicle in driveway until repairs are completed. No further action required.			
10/04/2011	STREET	Residential	GOLFCREST	LP	Leaking Vehicle
	Comments/ Action Taken:	On 09/23/11 rcvd notification of leaking Honda Pilot at subject location. City staff responded and observed mechanic conducting repairs to vehicle. Vehicle broke down. Observed minor staining of brake fluid. Mechanic conducted cleanup. No further action required.			
10/04/2011	STREET	Other	H	ST	Dirt Tracking
	Comments/ Action Taken:	On 10/05/11 rcvd notification of dirt tracking from Hilltop High School onto E H St. City staff responded and observed significant mud tracking from FAT Transportation trucks. Shut down operation until mud is cleaned between duals tires. Conducted removal and were allowed to continue. Verbal Warning issued. No further action required.			
10/05/2011	STORM CHANNEL	Residential	665 COLORADO	AV	Unknown Discharge
	Comments/ Action Taken:	On 10/05/11 rcvd notification of orange garden hose in the storm channel at subject address. City staff responded and did not observe the hose or unusual discharge. No further action required.			
10/06/2011	STREET	Residential	526 FLOWER	ST	Possible Dumping into Catch Basi

Incident Date	Structure Category	Site Category		Address		Type of Violation
10/06/2011	STREET	Residential	526	FLOWER	ST	Possible Dumping into Catch Basi
	Comments/ Action Taken:	On 10/06/11 rcvd notification of unusual set up of storm water discharge from subject property. City staff responded and observed broken pvc piping connected to pump storm water to street. System is not operational and has not been for some time. Matter is a civil issue with neighbors. No further action required.				
10/11/2011	STREET	Residential		BUENA VISTA	WY	Leaking Vehicle
	Comments/ Action Taken:	On 10/11/11 rcvd notification of hydraulic fluid spill at subject location. Observed approximately 1-2 gallons of fliud spilled along a 100ft section of Buena Vista Way. RP unknown. City staff conducted cleanup. No further action required.				
10/12/2011	STREET	Residential		CARLA	AV	Pool Maintenance
	Comments/ Action Taken:	On 10/12/11 rcvd notification of pool plaster discharge into storm drain at subject location. City staff responded and made contact with company who stated that employee discharged without approval. Issued verbal warning. City staff conducted cleanup. No further action required.				
10/13/2011	STREET	Other		TELEGRAPH CANYON	RD	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 10/13/11 rcvd notification of diesel spill from SUHSD bus at subject location. City staff responded and observe SUHSD staff conducting cleanup. Approximately 1 pint discharged into storm drain. Basin cleaned. Issued Admin Citation - Warning. No further action required.				
10/24/2011	STREET	Residential	384	MINOT	AV	Other
	Comments/ Action Taken:	On 10/21/11, rcvd notification of dog waste being dumped from resident over fence onto Elm. City Staff responded and observed a significant amount of waste. Spoke with resident who was unaware of dumping. He spoke with his son who conducted cleanup of waste. Verbal Warning issued. No further action required.				
10/24/2011	STREET	Residential	18	I	ST	Construction Debris & Waste
	Comments/ Action Taken:	On 10/20/11 rcvd notification of resident washing concrete slurry onto street. City staff responded and observed a discharge of dry wall debris into storm drain. Spoke with resident who cleaned up the drywall. Will not wash truck on street. Issued verbal warning. No further action required.				
10/24/2011	STREET	Commercial		BROADWAY		Other

Incident Date	Structure Category	Site Category		Address		Type of Violation
10/24/2011	STREET	Commercial		BROADWAY		Other
	Comments/ Action Taken:	On 10/24/11 rcvd notification of business tossing cigarette butts all over parking lot and walkway. City staff responded and observed a few on the ground and a ashtray in front of the business in question. Spoke with Mary's Nails staff who stated that they will ensure that the employees will dispose of the them properly. No further action required.				
10/24/2011	STREET	Commercial	951	BROADWAY		Accident/Spill
	Comments/ Action Taken:	On 10/22/11 responded to diesel fuel spill in front of the subject address. City staff responded and observed a truck that had leaked diesel fuel into the curb line. The responsible party stopped the spill and treated it with dry absorbent. Administrative Citation issued. No further action required.				
10/31/2011	STREET	Commercial	196	GUAVA	AV	Carpet Cleaning
	Comments/ Action Taken:	On 10/31/11 responded to complaint call about a carpet cleaning company discharging soapy water to the curb/gutter at the corner of E Street and Guava, near the subject address. City crews had gone to the site earlier and observed water in the gutter, but the carpet company was no longer there. Upon arrival, observed water in the gutter. Contacted carpet cleaning company and informed them of the complaint and of their previous citation. Informed the owner that further violations will result in Civil Penalties. No further action required.				
11/01/2011	STREET	Construction Sites		FRONTAGE	RD	Dirt Tracking
	Comments/ Action Taken:	On 10/31/11 received notification about a contractor tracking dirt onto the street and not containing dirt stockpiles. Spoke to contractor about BMPs. Upon follow-up, the contractor had cleaned the site and removed the dirt stockpiles. No further action required.				
11/07/2011	STORM CHANNEL	Residential	1579	COUNTRY VISTAS	LN	Dirt/Sediments
	Comments/ Action Taken:	On 11/07/11 rcvd notification of stockpiling of soil in front yard and discharge of sediment inot storm drain. City staff responded and observed the discharge. Left door hanger for homeowner to contact me.				
11/09/2011	STREET	Construction Sites		J	ST	Dirt Tracking
	Comments/ Action Taken:	On 11/09/11 rcvd notification of sediment discharge coming subject location. City staff arrived on-scene and observed discharge of sediment and sediment laden water into the storm drain. Instructed contractor to cease pumpinp ops and conduct proper cleanup. Issued Admin Citation $200 to contractor.				
11/14/2011	STREET	Residential	1128	ALPINE	AV	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
11/14/2011	STREET	Residential	1128	ALPINE	AV	Other
	Comments/ Action Taken:	On 11/14/11 City staff responded to a illegal discharge from property sump. Arrived on-scene and observed a 3 inch pvc pipe from front side of subject property. Contacted Building Inspector to assess if pump was allowed to be installed. City staff put sand bags at gate to prevent water running into the yard. Street has no curb and gutter and is in poor shape. Water pools throughout street during a rain event. Building Inspector to look at permit to see if it was as per plans.				
11/16/2011	STORM CHANNEL	Other	1474	JADE	CT	Construction Debris & Waste
	Comments/ Action Taken:	On 11/16/11, received notification of sediment being discharged from the under sidewalk drain and into the cul de sac at the subject address. City staff responded and observed sediment throughout the street. Spoke with nearby school and found that an asphalt berm was installed many months ago to ensure that the discharge was not coming the school. School will replace broken gravel bags and monitor the site. No further action required.				
11/17/2011	CATCH BASINS	Industrial	825	ENERGY	WY	Possible Dumping into Catch Basi
	Comments/ Action Taken:	On 11/17/11 received notification that the business at the subject address was illegally discharging to the storm drain system. On 11/18/11 received follow up email and photos from the reporting party showing evidence of the discharge. City staff investigated and found that the business had pumped polluted water into the storm drain system. Issued Notice of Violation and Civil Penalty Notice and Order. Business complied with the corrective actions and appealed the NOV and Civil Penalty. Appeal hearing result was in favor of the City. No further action required.				
11/29/2011	STREET	Residential		FIFTH	AV	Slurry/Concrete Discharge
	Comments/ Action Taken:	On 11/29/11, received notification of a slurry spill as subject location. Arrived on-scene and observed white substance in the storm drain. Did not reach the inlet. Property owner cleaned up spill. Verbal Warning issued. No further actions required.				
12/05/2011	STREET	Residential		GREENSVIEW	DR	Unknown Discharge
	Comments/ Action Taken:	On 12/05/11, received notification of a unknown discharge into the storm drain. City staff responded and did not observe a discharge in this location. No further action required.				
12/06/2011	STORM DRAIN PIPES	Commercial	4414	BONITA	RD	Other
	Comments/ Action Taken:	On 12/06/11 received notification of grease discharge at the back of subject address. City staff responded and observed grease container stall full of used oil. Pumping company was at the site conducting the cleanup. Spoke with restaurant who shared container with another business. Company conducted cleanup and brought in new container. No further actions required.				
12/12/2011	STREET	Residential	1040	COLORADO	AV	Unknown Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
12/12/2011	STREET	Residential	1040	COLORADO	AV	Unknown Discharge
	Comments/ Action Taken:	On 12/12/11 received notification of a white substance being discharged from the subject address from the business gutters. Discharge was caused by poly-roof coating not drying properly. City staff contained. Contacted contractor who arrived on-scene who covered entire roof with tarp to stop the spill. Due to the quick response by contractor a Verbal Warning was issued. Any future violations will result in Civil Penalties. No further action required.				
01/03/2012	STREET	Residential	1191	NOLAN	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 01/03/12 received notification of an oil spill in the curb line at subject address. City staff responded and observed oil in the conveyance system. Spoke with tenant who stated that the seal broke from the vehicle. Tenant conducted cleanup. Oil did nor reach an inlet. No further action required.				
01/05/2012	STREET	Residential	231	ONEIDA	ST	Automotive Work
	Comments/ Action Taken:	On 1/5/12, rcvd notification of auto detailing on the side of the subject address. City staff responded and at the time did not observe any discharge evidence of a discharge. No further actions required.				
01/09/2012	STREET	Residential		PALOMAR	DR	Dirt Tracking
	Comments/ Action Taken:	On 01/18/12 rcvd notification of sand dumped into street. Did not observe. No further action required.				
01/11/2012	STREET	Residential	1541	MELROSE	AV	Leaking Vehicle
	Comments/ Action Taken:	On 01/11/12 received notification of oil staining from a vehicle parked on the street. Arrived on scene and did not observe an unusual amount of oil staining on street. Subject vehicle was not at the location. No further action required.				
01/12/2012	STORM DRAIN PIPES	Residential	1035	SURREY	DR	Dirt/Sediments
	Comments/ Action Taken:	On 1/12/12 rcvd notification of sand in the curbline at subject address. City staff responded and observed homeowner sweeping up sand and remove the stockpile. No further actions required.				
01/24/2012	STREET	Residential	170	VANCE	ST	Slurry/Concrete Discharge

Incident Date	Structure Category	Site Category	Address			Type of Violation
01/24/2012	STREET	Residential	170	VANCE	ST	Slurry/Concrete Discharge
	Comments/ Action Taken:	On 01/24/12 received complaint call of concrete slurry in the storm drain near the subject address. Upon arrival, City vactor crew was on site. Concrete slurry had been washed into the curb. No slurry entered the storm drain inlet. Owner had hired a contractor to do concrete work and they washed out into the street. City crews cleaned the area. Owner provided with education and issued Warning Citation with Full Cost Recovery. Photos taken for reference. No further action required.				
01/26/2012	STREET	Residential	1126	ALPINE	AV	Unknown Discharge
	Comments/ Action Taken:	On 01/26/12, received complaint of unknown water pooling in the street in front of the subject address. Saw pooled water near french drain coming from the from property. Did not observe any water coming from the drain. Left door hanger. Received phone call from resident who said that it was rain water. When it rains, water always pools in that area. No further action required.				
02/21/2012	STREET	Residential	1191	NOLAN	AV	Accident/Spill
	Comments/ Action Taken:	On 02/21/12 received notification of auto repairs being conducted in the street and dumping of oil into the curbline. City staff arrived on scene and observed vehicle in front of subject house with absorbents to contain minor leak. There was no evidence of illegal dumping. Spoke with renter about conducting repairs in the street. This was the second visit by city staff about the importance to conduct his vehicle repairs in the driveway. Verbal Warning was issued.				
02/27/2012	STREET	Residential	1948	VERSAILLES	RD	Construction Debris & Waste
	Comments/ Action Taken:	On 02/27/12 received notification of construction debris in street at subject address. City staff responded and observed pavers and sand in the street. Informed contractor to remove. Follow-up completed.				
02/27/2012	STREET	Construction Sites	1500	MAGDALENA	AV	Dirt Tracking
	Comments/ Action Taken:	On 02/27/12 received notification of a significant amount of dirt tracking on Magdalena Road at East Palomar. Arrived on-scene and observed mud in the street from E. Palomar to Santa Venetia. Mud was coming from contractor's empty lot that was being used as a laydown area. Spoke with contractor and had crew clean up the mud.				
02/27/2012	STREET	Residential	1197	AGUA TIBIA	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 02/27/12 received notification of oil spill in front of subject address. Kitty litter was put on the spills, but it was not swept up. Drove by address, saw spills and kitty litter. Cars were on jacks in front of the house indicating that they may perform auto repairs at the house. Took photos for file. Left door hanger and auto care maintenance brochure and asked that the litter be swept up and disposed of properly.				
03/01/2012	STREET	Residential	2394	TRELLIS	WY	Construction Debris & Waste

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/01/2012	STREET	Residential	2394	TRELLIS	WY	Construction Debris & Waste
	Comments/ Action Taken:	On 03/01/12 received notification that a contractor was discharging red concrete wash water from the subject address. Contractor was asked by nearby construction superintendent to stop discharging, but the contractor did not stop. Upon arrival, contactor had left the site, but there was obvious discharge to the storm drain system from the red staining, color of the discharge, and accumulation around construction BMPs. A vactor crew was used to clean up the discharge along the street. Spoke to contractor supervisor/business owner. Issued Administrative Citation with FCR to the contractor. No further action required.				
03/05/2012	CATCH BASINS	Commercial	699	E	ST	Sewage Spill
	Comments/ Action Taken:	On 03/05/12 received notification of sewer spill that entered the storm drain system at the subject address. Spill was discovered by City crews doing storm drain cleaning. Upon arrival, saw City storm drain crew containing and cleaning the spill. Spoke to manager of business who said that the sewer lateral where the spill was occurring was installed last year and has been maintained regularly. A plumber was called and was en route. Photos taken for file. Issued Administrative Citation Warning with full cost recovery. No further action required.				
03/08/2012	CATCH BASINS		726	EASTSHORE	TE	Accident/Spill
	Comments/ Action Taken:	Request cancelled				
03/13/2012	STREET	Commercial	1038	BROADWAY		Paint Discharge
	Comments/ Action Taken:	On 03/13/12 received notification of dumping of paint thinner into storm drain. City staff responded and did not observe signs of a discharge. No further action required.				
03/14/2012	STREET	Construction Sites	692	H	ST	Other
	Comments/ Action Taken:	On 03/15/12 received notification that a construction contractor was discharging fire sprinkler water into the storm drain system at the subject address, which was a hotel in the process of renovation. Observed evidence of discharge of water from the sprinkler system to the storm drain. Talked to site superintendants. Provided education for fire sprinkler maintenance. Gave verbal warning. No further action required.				
03/15/2012	STREET	Commercial	600	BROADWAY		Other
	Comments/ Action Taken:	On 04/03/12 rcvd notification of broken irrigation line at subject address. Responded and business was conducting repairs.				
03/15/2012	STORM CHANNEL	Residential	1187	NEPTUNE	DR	Storm Misc

Incident Date	Structure Category	Site Category	Address			Type of Violation
03/15/2012	STORM CHANNEL	Residential	1187	NEPTUNE	DR	Storm Misc
	Comments/ Action Taken:	On 03/15/12 received notification of a used oil container next to an inlet. City staff responded and observed a 5-gallon bucket on top of manhole lid. Moved oil bucket and covered due to predicted rain. Placed covered bucket near responsible party address. Left door hanger. Follow-up next day and bucket removed. No further action required.				
03/23/2012	STREET	Residential	160	E	ST	Other
	Comments/ Action Taken:	On 03/19/12, rcvd notification of resident discharging washing machine effluent into storm drain. City staff responded and did not observe discharge. Complainant stated that discharge has stopped.				
04/09/2012	CATCH BASINS		985	BROADWAY		Construction Debris & Waste
	Comments/ Action Taken:	Request cancelled				
04/19/2012	CATCH BASINS	Residential	707	TERRA NOVA	DR	Construction Debris & Waste
	Comments/ Action Taken:	On 04/19/12, rcvd notification from city staff of sand, decorated brick in the street. City staff responded of spoke landscaper who removed sand and brick and placed on residents drive way. No further action required.				
05/02/2012	STREET	Residential	1135	MONTEREY	AV	Other
	Comments/ Action Taken:	On 05/02/12, rcvd email notification from Code Enforcement of a broken irrigation line coming from subject property. City staff arrived on scene and observed that a irrigation line was broken and discharging onto 1136 Nolan. Contacted property agent and real estate company.				
05/09/2012	STREET	Other		H	ST	Other
	Comments/ Action Taken:	On 05/7/12 rcvd notification from resident of human waste near the storm channel at the H Street Trolley Station. City staff responded and observed the same. City staff contacted MTS staff and voiced our concerns and conduct the cleanup.				
05/23/2012	STREET	Residential	344	HILLTOP	DR	Other

Incident Date	Structure Category	Site Category	Address			Type of Violation
05/23/2012	STREET	Residential	344	HILLTOP	DR	Other
	Comments/ Action Taken:	On 05/21/12, received email from Code Enforcement about a resident who reported that her yard has been flooding on and off for the past few months due to neighbor discharging washing machine water. Code Enforcement explained to her that it was a civil issue. She told Code Enforcement that her neighbor has dug a ditch to have the water drain to the curb. Code Enforcement referred the issue to NPDES since there was the potential for illegal discharge. City staff investigated and did not see evidence of illegal discharge. Made attempts to contact resident via telephone and by going to house.				
05/23/2012	STREET	Residential	637	ELDER	AV	Construction Debris & Waste
	Comments/ Action Taken:	On 05/23/12 rcvd notification of debris in the street. City staff responded and observed minor amounts of concrete, tree trimmings. Contacted homeowner who conducted the cleanup. No further action required.				
05/29/2012	STREET	Residential	1618	HAYFORD	RD	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 05/29/12 rcvd notification of fuel and oil in the street at the subject address. City staff responded on 05/30/12 and only observed normal vehicle stains. No further action required.				
06/15/2012	STREET	Commercial	225	THIRD	AV	Construction Debris & Waste
	Comments/ Action Taken:	On 06/15/12, received call from [redacted] of TAVA about possible illegal discharge of construction wash water containing paint or concrete from construction activities behind 225 and 227 Third Avenue. Did not observe same. No further action required.				
06/25/2012	STREET	Residential	712	JEFFERSON	AV	Fuel/Oil/Gas Spill
	Comments/ Action Taken:	On 06/25/12 rcvd notification of oil in the street at subject address. City staff responded and observed normal vehicle leaks. No further actions required.				
06/26/2012	STREET	Residential		EXPLORATION FALLS	DR	Over-Irrigation/Pesticide
	Comments/ Action Taken:	On 06/26/12 rcvd notification of landscaping company discharging chemicals in the street. City staff responded and observed Rainscape using a Plant Growth Regulator chemical on the bushes. Due to the smell caused resident that a spill occurred. No further action required.				

Total: 83

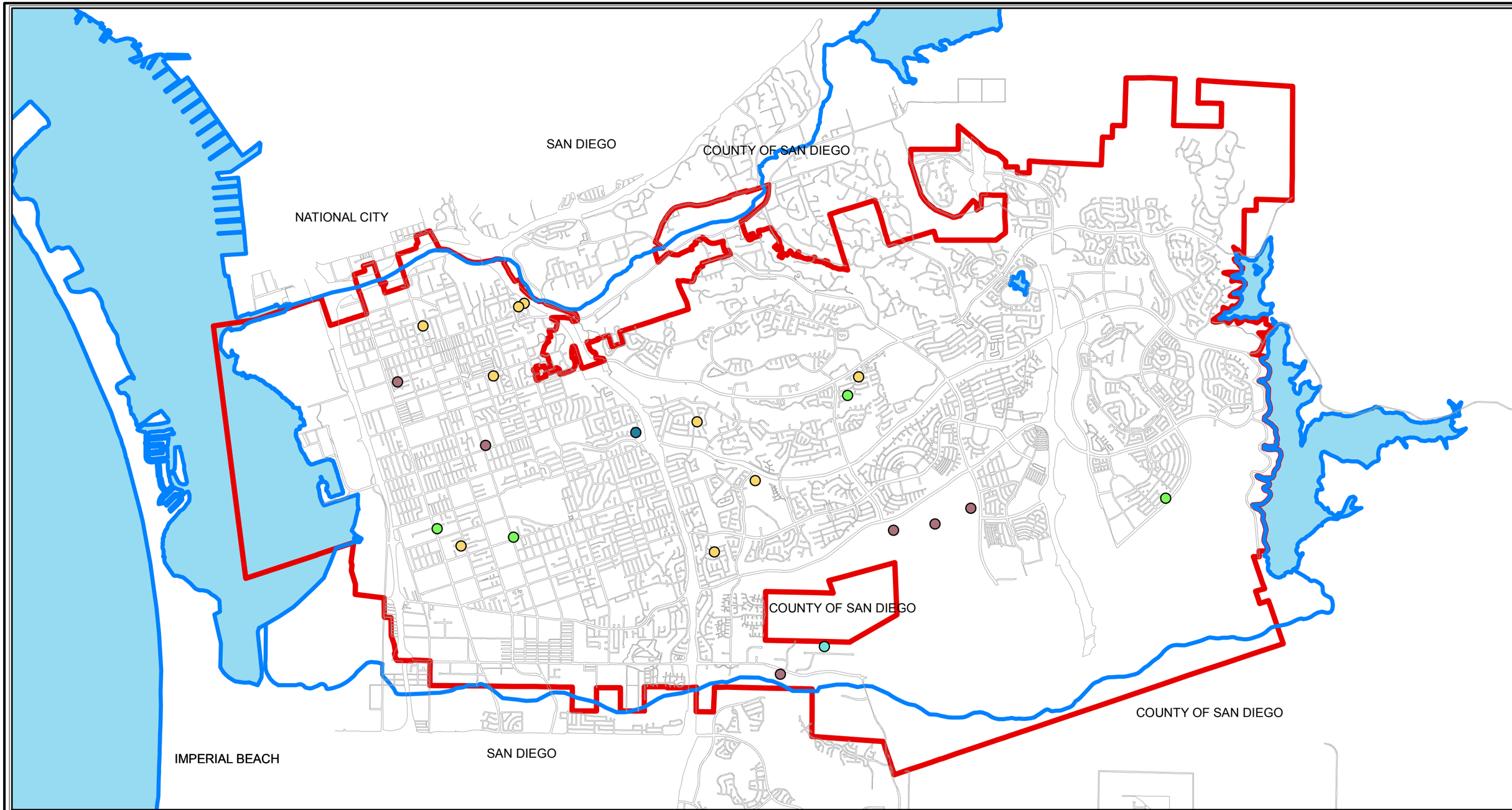

MAP 1

Jurisdictional Urban Runoff Management Program

Violation Locations FY 2011-2012

N W E S

1 0 1 2 Miles

3000 0 3000 6000 9000 12000 Feet

Commercial
Industrial
School
Construction
Residential

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created: 8/14/2012

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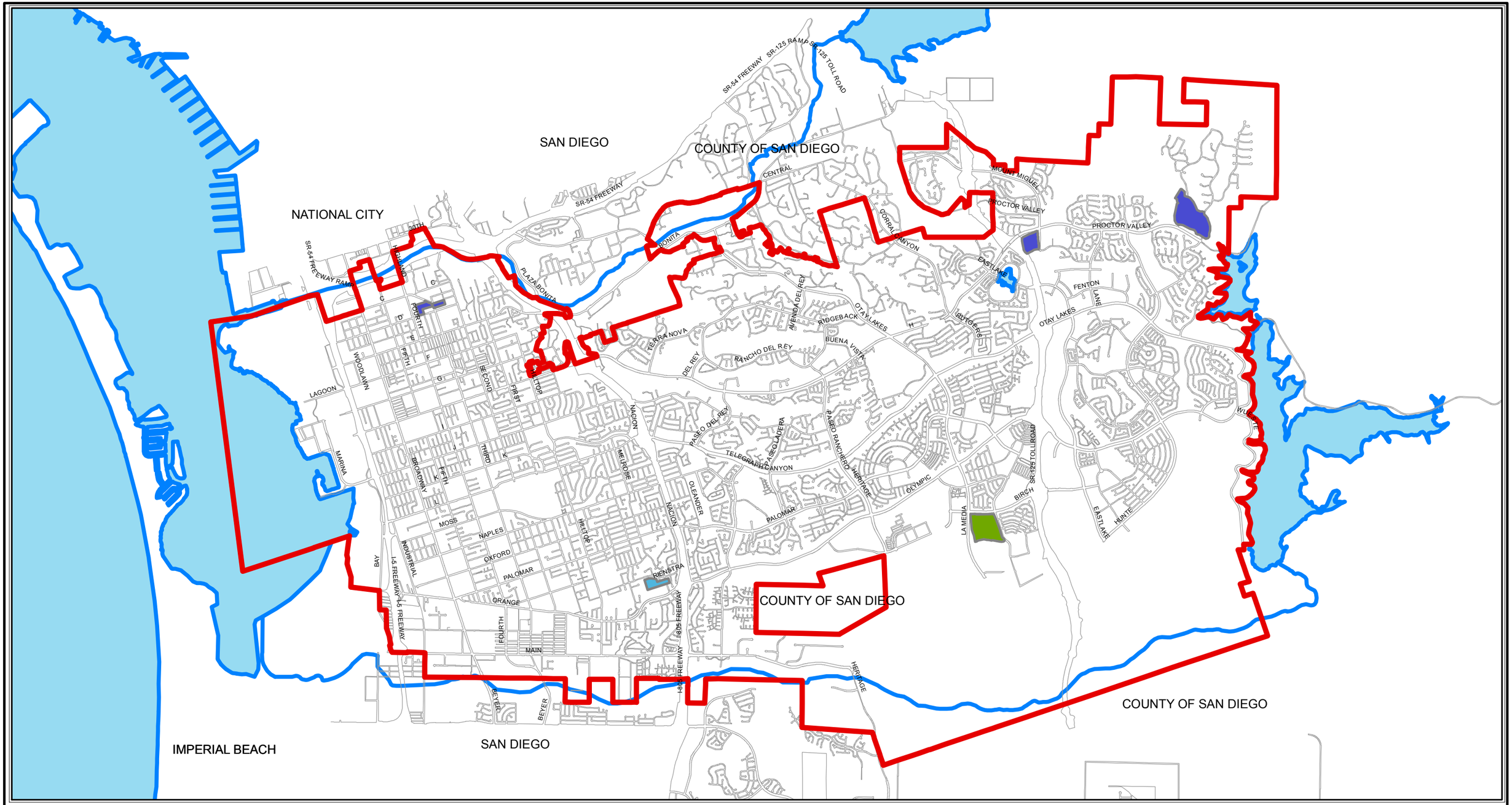

MAP 2

HTTWQ Residential Areas for FY 11 - 12

N W E S

1 0 1 2 Miles

3000 0 3000 6000 9000 12000 Feet

Landscaping Activities - Fertilization and Over Irrigation (1)

Landscaping Activities - Over Irrigation (3)

Trash (1)

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created: 8/15/2012

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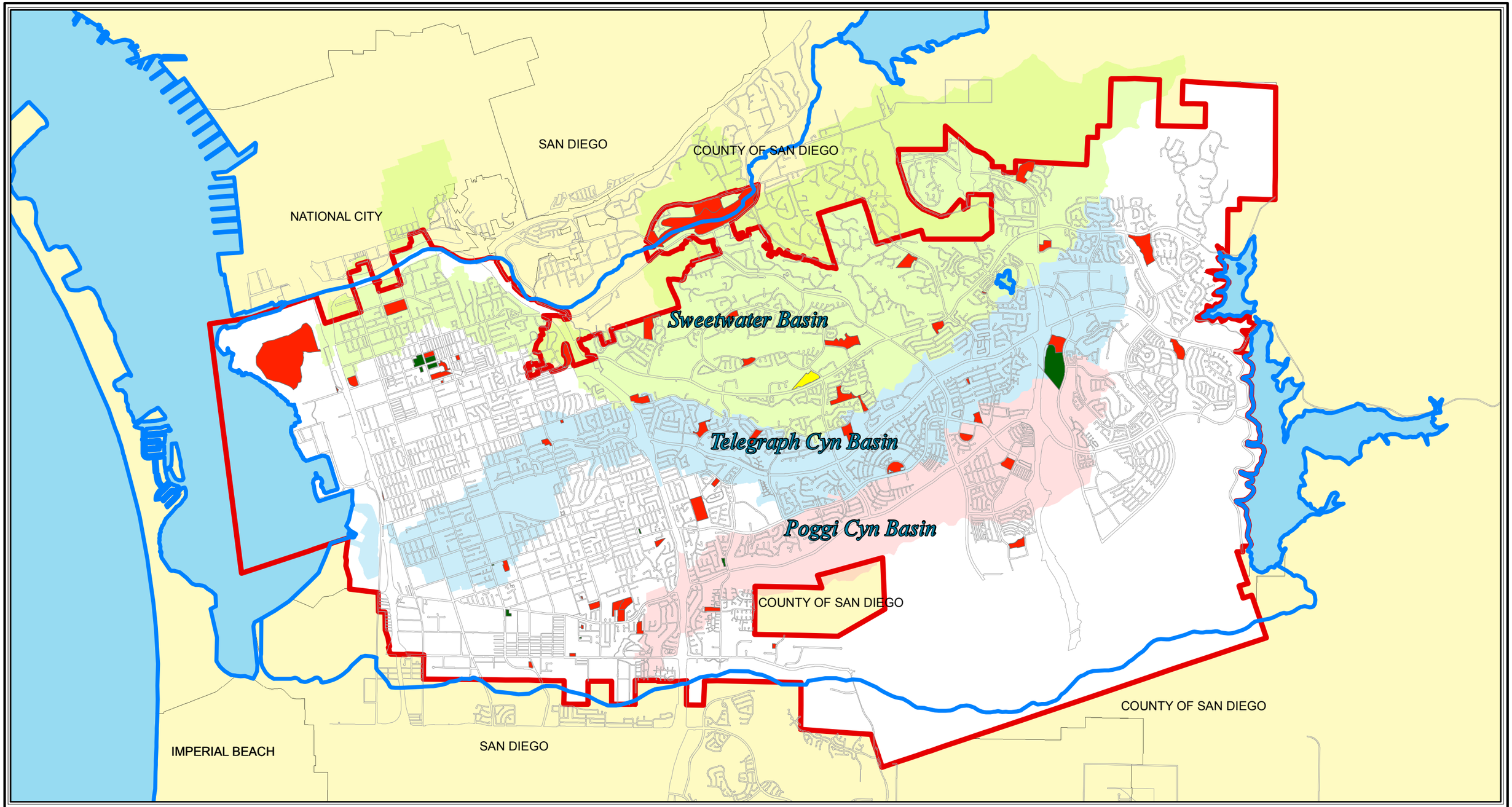

MAP 3

N W E S

1 0 1 2 Miles

3000 0 3000 6000 9000 12000 Feet

Jurisdictional Urban Runoff Management Program

Municipal Locations and Priority FY 2011-2012

Low Medium High

NOTE: Highlighted drainage basins are 303(d) listed

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created: 9/4/2012

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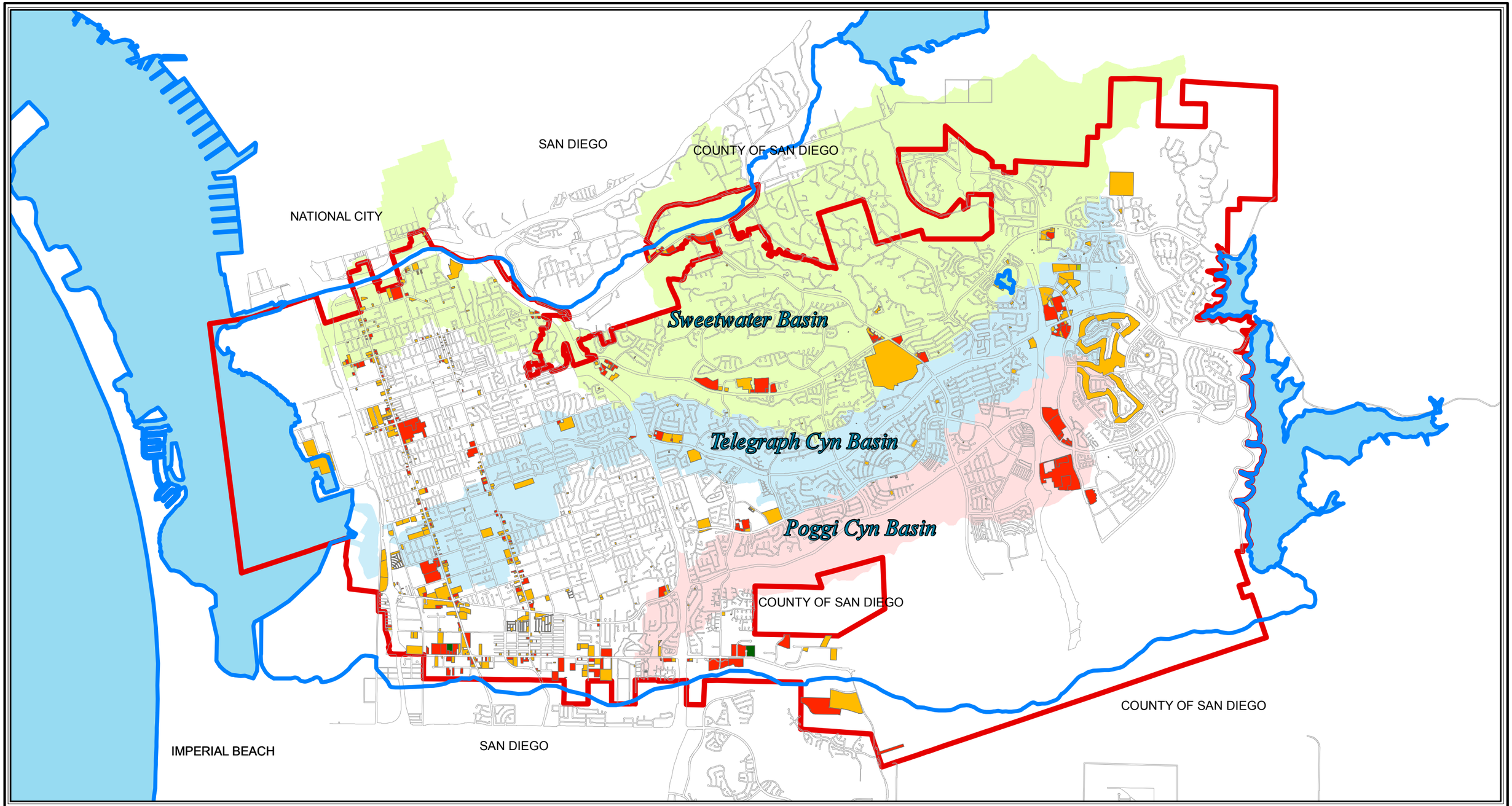

MAP 4

N W E S

1 0 1 2 Miles

3000 0 3000 6000 9000 12000 Feet

Jurisdictional Urban Runoff Management Program

Commercial Locations FY 2011-2012

Priority High Low Medium Other

NOTE: Highlighted drainage basins are 303(d) listed

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created: 8/30/2012

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SAN DIEGO

COUNTY OF SAN DIEGO

NATIONAL CITY

Sweetwater Basin

Telegraph Cyn Basin

Poggi Cyn Basin

COUNTY OF SAN DIEGO

COUNTY OF SAN DIEGO

IMPERIAL BEACH

SAN DIEGO

MAP 5

Jurisdictional Urban Runoff Management Program

Industrial Locations and Priority FY 2011-2012

1 0 1 2 Miles

3000 0 3000 6000 9000 12000 Feet

High Medium Low Other

NOTE: Highlighted drainage basins are 303(d) listed

CITY OF CHULA VISTA
GEOGRAPHIC INFORMATION SYSTEM

Map Created: 8/30/2012

Path: P:\Projects\PUBLICWORKS\NPDES\JURMP\Jurmp12\Ind_by_Basin_12.mxd

City of Del Mar

Jurisdictional Urban Runoff Management Program (JURMP)

Annual Report

2007 - 2008

September 30, 2008

Prepared for:

San Diego Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA. 92123-4340

Prepared by:

The City of Del Mar
1050 Camino Del Mar
Del Mar, CA 92014-2604

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Executive Summary

The City of Del Mar (City) developed its Jurisdictional Urban Runoff Management Program (JURMP) in 2008 to meet the requirements of the Municipal Separate Storm Sewer System (MS4) Urban Runoff Discharge Permit (NPDES Order No. R9-2007-0001) (Permit) issued to the City and the Regional Copermittees by the California Regional Water Quality Control Board, San Diego Region (RWQCB). The Permit requires the Copermittees to individually, but collaboratively, develop comprehensive programs to reduce and eliminate urban runoff pollutants that are discharged from their storm drain systems to the receiving waters. The programs and activities designed to meet these requirements are described in detail in each Copermittees JURMP. In accordance with the requirements of the Permit, the City has revised the JURMP and updated it to provide a written account of how the City s programs comply with the latest requirements.

The City of Del Mar has prepared this JURMP Annual Report to provide a comprehensive description of all the activities conducted by the City to comply with all the requirements of Section D of the Permit, as described in its 2008 JURMP. This first JURMP Annual Report covers the implementation of jurisdictional activities during the period from July 1, 2007 through June 30, 2008 (Reporting Period), and follows the standardized format created by the Regional Copermittees and adapted as appropriate for the City of Del Mar.

During the Reporting Period, the City took the necessary steps to begin the implementation of the new Permit requirements, including the adoption of the revised JURMP in March 2008, and expanded the City s Clean Water Program and activities to the levels outlined in the City s newly adopted JURMP. The City completed the necessary revisions to the goals and policies in its Community (General) Plan to facilitate the implementation of practices such as Low Impact Design (LID) and to clarify previously existing language to reflect the new requirements. In addition, the City made substantive changes to its Stormwater Management and Discharge Control Ordinance (Chapter 11.30 of the Del Mar Municipal Code) to ensure enforceability of the new requirements. These changes, along with the new Ordinance, were adopted by the City Council on March 3, 2008.

Education and outreach to commercial, industrial, and residential stakeholders has been at the core of the City s program. As such, the development of workshops, a new outreach video, and use of television and print media has been crucial to reach the largest audience possible with information regarding the new requirements. Combined with an increased enforcement presence, the City of Del Mar is getting the message out and a visible change is occurring in the way business is being conducted for the improvement of water quality. Residents, local businesses, and City staff are working diligently to protect the waterways and improve water quality in the beaches and lagoons.

Overall, the City s effectiveness in continuing the implementation of the program was high. However, some minor challenges were identified due to a combination of the new Permit requirements and staff turnover in a few positions. City staff has identified areas of improvement and taken steps to begin their implementation. However, there were no substantive changes to the 2008 JURMP identified as necessary during this Reporting Period.

Funding of these programs remains an issue for many of the Copermittees and the City of Del Mar is no exception. However, the City has committed to the success of its program and sufficient funds have been allocated to meet the requirements of the Permit. In addition, staff is diligently working with community leaders and non-profit groups to identify ways to fund the activities necessary to meet the challenges offered by the Permit without sole reliance on General Fund monies. As such, the development of community-based partnerships and identification of grant opportunities is a priority for the City. In addition, the City is moving ahead with a City-wide vote during the first quarter of FY2008/2009 to meet the requirements of Proposition 218 with the desire to enact the Clean Water Service Fee as a permanent revenue source to fund the Clean Water Program.

In assessing the first few months of the implementation of the new Permit requirements and transitioning from the 2001 Permit, the City has met its obligations under both permits and is looking toward the first year of full implementation in FY2008/2009.

Certification Statement

FY2007/2008 JURMP ANNUAL REPORT

I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Date 9/26/08

Karen P. Brust, City Manager
City of Del Mar

Section 1
Introduction

This document is the first annual report for the City of Del Mar's 2008 Jurisdictional Urban Runoff Management Plan (2008 JURMP) which went into effect March 25, 2008 in accordance with NPDES Order No. R9-2007-0001 (Permit), and any subsequent amendments. The JURMP Annual Report follows the standardized format prepared and submitted to the San Diego Regional Water Quality Control Board by the Copermittees in June 2007, and any deviations are minor and correspond to the format of the 2008 JURMP. The reporting period covered by this document is from July 1, 2007 through June 30, 2008 under two different permits. The period from July 1, 2007 through March 24, 2008 complies with NPDES Order No. 2001-01 and the period from March 25 through June 30, 2008 with NPDES Order No. R9-2007-0001.

1.1 Background

This section provides background information, including a brief overview, of the City of Del Mar Clean Water Program which implements its JURMP.

1.1.1 Overview of the City of Del Mar

The name Del Mar means "of the sea," and highlights the symbiotic relationship between the City and Pacific Ocean. The City of Del Mar is a coastal, primarily residential community in the northern section of San Diego County. Del Mar is bounded by Solana Beach to the north, San Diego to the south and east, and the Pacific Ocean to the west (see Figure 1.1-1). The City covers an area of approximately two square miles, with a population of approximately 4,500 residents. The main attraction of visitors is the beach and sunny weather. The annual San Diego County Fair, horse racing, and other events held at the Del Mar Fairgrounds bring in people from the surrounding area and beyond.

1.1.2 Watershed(s)

The City of Del Mar is part of the San Dieguito Hydrologic Unit and the Los Peñasquitos Hydrologic Unit, as shown in Figure 1.1-1.

1.2 Purpose and Objectives

This Annual Report has been prepared to cover the implementation of jurisdictional activities during the reporting period from July 1, 2007 through June 30, 2008. The Annual Report is a comprehensive description of all the activities conducted by the City of Del Mar to comply with all the requirements of Section D of Order No. R9-2007-0001, as described in the 2008 JURMP, and the equivalent requirements in Order No. 2001-01.

Figure 1.1-1
City of Del Mar Location within San Diego County

Section 2
Development Planning Component

2.1 Introduction

As indicated in Section 1, the City of Del Mar is a coastal, primarily residential community nestled within two-square miles between an open space area, two lagoons, and the Pacific Ocean. The majority of the developable land within the City's limits is already developed, and as such, there is limited opportunity for the larger-scale projects seen in other jurisdictions. Moreover, tight land-use controls via a Design Review process, combined with the limited development potential, provides a unique opportunity to apply development review processes outlined within the City's JURMP on more direct level. This section provides information that the City has determined is relevant to the implementation activities of the Development Planning Component of its 2008 JURMP.

2.2 Land Use Planning

2.2.1 Background

Section 4.2.1 of 2008 JURMP described the goal of the Planning and Community Development Department of the City of Del Mar to prepare a variety of short-, mid-, and long-range plans that direct and guide residential and commercial development and encourage land uses that are compatible, sustainable and most beneficial to the community. No modifications in Section 4.2.1 of the 2008 JURMP have been recorded during this reporting period.

2.2.2 Source Characterization

This section provides a general description of the priority pollutants, sources, and activities that were addressed through the City's land use planning process. Section 4.2.2 of 2008 JURMP provided a general description of the priority pollutants, sources, and activities to be addressed through modifications to land use planning practices. No modifications in Section 4.2.2 of the 2008 JURMP have been recorded during this reporting period.

2.2.3 Best Management Practice Requirements

This section provides a description of modifications to the water quality and watershed protection principles that were addressed in the City's land use planning process. Section 4.2.3 of 2008 JURMP provided a description of the comprehensive JURMP Development Planning Component designed by the City of Del Mar in order to reduce pollutant discharges, prevent violations of water quality standards and manage runoff discharge. No modifications in Section 4.2.3 of the 2008 JURMP have been recorded during this reporting period.

2.2.4 Program Implementation

This section includes a description of the steps that were taken to require the implementation of water quality and watershed protection principles through the City's General Plan, other plans, or other applicable methods. Section 4.2.4 of 2008 JURMP described how the City of Del Mar assessed existing plans and processes and implemented necessary changes in order to

implement water quality and watershed protection principles. No modifications in Section 4.2.4 of the 2008 JURMP have been recorded during this reporting period.

Community (General) Plan Revisions

Section D.1.a of the Municipal Permit requires each Copermittee revise as needed its General Plan or equivalent plan (e.g., Comprehensive, Master, or Community Plan) for the purpose of providing effective water quality and watershed protection principles and policies that direct land-use decisions and require implementation of consistent water quality protection measures for Development Projects.

After careful review by City staff, several modifications were proposed to the Goals and Policies in the Del Mar Community Plan. The changes were accomplished by adding more general policy wording to what currently exists in the identified elements of the Del Mar Community Plan. However, these changes facilitated the implementation of practices such as Low Impact Design (LID), and clarified language that existed previously as Policy. As required by the Del Mar Municipal Code, the proposed amendments to the Community Plan were reviewed by the Planning Commission on February 12, 2008, and forwarded, with recommendations, to the City Council for review and approval. On March 3, 2008, the City Council of the City of Del Mar adopted the proposed amendments to the Community Plan. The text of the adopted changes to the Del Mar Community (General) Plan are included in the Staff Report from the March 3, 2008 City Council Meeting, along with the minutes of the February 12, 2008 Planning Commission Hearing, and are provided as Appendix 2-A.

Revisions to the Del Mar Municipal Code

In addition to the revisions to the Del Mar Community (General) Plan, City staff recommended changes to the City's Stormwater Management and Discharge Control Ordinance, Chapter 11.30 of the Del Mar Municipal Code (DMMC). Because of the substantive changes required to make DMMC Chapter 11.30 consistent with the requirements of the 2008 Permit, and for easier use by staff and the public, City staff proposed repealing DMMC Chapter 11.30 in its entirety and introduced a new Chapter 11.30 on March 3, 2008.

The major changes to the existing Ordinance included new and updated definitions to be consistent with the 2008 Permit. Additional Best Management Practices (BMPs) and requirements for residential development were added, including stormwater treatment requirements for some projects. The definitions were expanded to include new terminology such as Low Impact Development (LID); establishment of new criteria for priority projects that are linked to Water Quality Sensitive Areas (WQSA), and requiring water quality treatment for priority projects with long term operation and maintenance requirements.

At the March 3, 2008 Hearing, the Del Mar City Council accepted staff's recommendations, and repealed DMMC Chapter 11.30 replacing it with the new Ordinance. With the second reading on March 17, 2008, the new DMMC 11.30 went into effect, consistent with the City's JURMP and the requirements of the 2008 Permit. The text of the new Ordinance is included in the Staff Report from the March 3, 2008 City Council Meeting and provided as Appendix 2-B.

2.3 Environmental Review Process

Section 4.3 of 2008 JURMP described the City of Del Mar Environmental Review process that aimed at accurately evaluating water quality and cumulative impacts and identifying appropriate

measures to avoid, minimize and mitigate development project impacts to water quality. No modifications in Section 4.3 of the 2008 JURMP have been recorded during this reporting period.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City's Planning and Community Development Department is responsible for coordinating all aspects of development project approval and seeking input from other City departments to ensure that policies, regulations and standards are met. The Development Project Approval and Verification Process is described in Section 4.4 of the 2008 JURMP and includes the various sections described below.

2.4.2 Source Characterization

Section 4.4.2 of 2008 JURMP described how each project is evaluated to identify priority pollutant sources and activities. No modifications in Section 4.4.2 of the 2008 JURMP have been recorded during this reporting period.

2.4.3 Best Management Practice Requirements

Section 4.4.3 of 2008 JURMP described how best management practices (BMPs) during the development project approval phase are selected based on the type and size of the project, pollutant sources, and other factors. No modifications in Section 4.4.3 of the 2008 JURMP have been recorded during this reporting period.

2.4.4 Program Implementation

This section describes the results of implementing of the City's strategy for conditioning development projects and verifying compliance with established conditions and minimum BMP requirements. Section 4.4.4 of 2008 JURMP described the City's program implementation process which depicts the main steps for private and capital improvement project approval. Moreover, the City of Del Mar is implementing the strategies and processes outlined in Section 4.4.4 of the JURMP, and no modifications in the 2008 JURMP have been recorded during this reporting period.

Priority Development Projects

As discussed above, given the City of Del Mar's relatively limited land development potential, the majority of the projects reviewed by staff are redevelopment projects that are often small in size and scope. All development projects were required to undergo the City's urban runoff approval process and meet the applicable project requirements. Because of the limited number of projects, these are tracked by the Planning and Community Development Department using a centralized spreadsheet. The Clean Water Program Manager and Interim Planning Director are presently reviewing alternative ways of tracking projects, and anticipate implementing an enhanced system of tracking during the next reporting period. During the reporting period, a total of 196 permit applications were reviewed by the Planning and Community Development Department. Appendix 2-C contains a complete list of the permits reviewed by the Department during this reporting period.

Of the projects reviewed during this reporting period, only four (4) projects meet the definition of Priority Development Projects under the Permit, and were subject to SUSMP requirements. These projects and their current status are found in Table 2.4-1 below. As of June 30, 2008, the City of Del Mar has not granted any Priority Project a SUSMP waiver, and as such has not needed to implement a SUSMP waiver mitigation program.

Table 2.4-1
FY2007–2008 City of Del Mar Priority Development Projects (PDP)

Project Name	Description	Status During FY2007–2008
Review in Process		
Garden Del Mar Specific Plan (SP-07-01; LCPA-08-02; CDP-08-17)	The proposed project is a mixed-use commercial development with restaurant, retail, and office uses situated in six two-story structures (totaling 19,600 square feet) built over a two-level subterranean parking garage.	As of June 30, 2008, the Project was still making its way through the adoption process. Staff has reviewed the Project, and required appropriate structural and treatment control, and LID BMPs to the project design. The approval of this project is subject to legislative action, and approval by the voters. Staff anticipates action on this project during FY2008/2009.
Riverview Project (CUP-08-01; CDP-08-19; FDP-08-02)	The project proposes to construct two, two-story, commercial office buildings totaling 23,293 square feet, with 83 parking spaces on two vacant parcels of land. The proposed project includes grading, hardscaping, and landscaping, and lies within 200 feet of the San Dieguito Lagoon.	As of June 30, 2008, staff is working with the project proponents to redesign portions of the project to meet the new SUSMP requirements, and to incorporate the required changes into the Project EIR. The project is expected to go to hearing during FY2008/2009.
Under Construction		
Pacifica Stratford	The project proposes approval of a Final Subdivision Map which subdivides two existing legal lots into five two-unit condominium lots with required public improvements.	The project received project approval in April 2006. However, no groundbreaking or demolition of the existing structures had occurred until February 2008. Staff reviewed project conditions and designs during permitting of the grading operations and required subsequent changes to the project to incorporate SUSMP BMPs on-site. The project is currently under construction.
Morotta/James Single Family Residence	This project is a single family residence on a vacant lot within 200 feet of an environmentally sensitive area (the San Dieguito Lagoon).	Construction drawings for this project were approved in April 2008. The project incorporates LID to the MEP through the use of minimal hardscape and the incorporation of vegetated swale/bio-retention areas. The structure itself is elevated, allowing for preservation of pervious surface conditions under what would otherwise be the building footprint.

The Garden Del Mar Project identified as a Priority Development Project in Table 2.4-1, above, is a good example of the application of SUSMP requirements in the City of Del Mar. A copy of the Conditions of Approval, and a description of the required BMPs applied to the Garden Del Mar Project has been included as Appendix 2-D of this report.

During this reporting period, no priority development projects were allowed to implement treatment control BMPs with low removal efficiency rankings, and as such no feasibility analyses were conducted to exhibit that more effective BMPs were infeasible. As of June 30, 2008, the City of Del Mar does not have any treatment control BMPs approved for priority projects under SUSMP provisions. As SUSMP Projects are approved in the future, updated treatment control BMP inventory will be provided.

Prior to final occupancy of all Priority Development Projects, the project proponent will be required to provide a signed, sealed certification from the Engineer of Record that all treatment control BMPs have been inspected and constructed according to the approved plans.

As indicated in Section 4 of the 2008 JURMP, City of Del Mar participated in the development of the Hydromodification Management Plan (HMP) due to be submitted in January 2009. Staff from the Department of Engineering and the Department of Planning both participated in the Regional Copermittee Workgroup, attending meetings on a regular basis, and providing substantive comments on the interim drafts of the Model HMP and Model SUSMP. The City of Del Mar revised its local SUSMP to accommodate LID and source control measures as required to meet the principles of hydromodification.

Of the five (5) identified Priority Development Projects listed in Table 2.4-1 above, none of them disturb 50 acres or more, and as such Interim HMP requirements were not applied.

2.4.5 Enforcement Measures for Development Projects

This section provides the number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions that were being taken to achieve compliance. Section 4.4.4.3 of the 2008 JURMP provides a description of the general process for applying enforcement to development projects urban runoff related violations. No modifications in Section 4.4.4.3 of the 2008 JURMP have been recorded during this reporting period.

No enforcement actions for development projects were taken during the reporting period. Enforcement actions related to construction activities are listed in Section 3 of this report.

2.4.6 Notable Activities

This section provides a description of notable activities conducted to manage urban runoff from development projects. No notable activities other than those identified above were conducted during this reporting period.

2.5 Development Planning Component Effectiveness Assessment

This section includes assessment of the effectiveness of the City's Development Planning Component. Section 4.5 of 2008 JURMP included the effectiveness assessment for Development Planning component. No modifications in Section 4.5 of the 2008 JURMP have

been recorded during this reporting period. The City is presently reviewing alternative ways of tracking projects and anticipates implementing an enhanced system of tracking during the next reporting period. During the reporting period, a total of 196 permit applications were reviewed by the Planning and Community Development Department.

2.6 Program Review and Modification

This section identifies and documents modifications to the Development Planning Component. Section 4.6 of 2008 JURMP included the list any changes made to the JURMP to meet the requirements. No modifications in Section 4.6 of the 2008 JURMP have been recorded during this reporting period.

No modifications were made to Section 4 Development Planning Component of the 2008 JURMP during this reporting period.

Appendix 2-A
City Council Staff Report for Community (General) Plan Amendments March 3, 2008

City of Del Mar
Staff Report

TO: Honorable Mayor and City Council

FROM: Linda S. Niles, Director of Planning & Community Development
Via Karen P. Brust, City Manager
Prepared by Joseph M. DeStefano II, Clean Water Manager

DATE: March 3, 2008

SUBJECT: A request to review and add policies to the Community Development, Environmental Management, and Transportation Elements of the Del Mar Community Plan (GPA 08-01) regarding City stormwater management and discharge control regulations as revised under the new National Pollutant Discharge Elimination System (NPDES) Permit (SDRWQCB Order No. R9-2007-0001).

ISSUE:

Whether to adopt the attached draft resolution which amends the City of Del Mar Community (General) Plan adding policies to the Community Development, Environmental Management, and Transportation Elements that require all development, subject to review by the City of Del Mar, to comply with the City's Stormwater Management and Discharge Control regulations.

FISCAL ANALYSIS:

Funding for the NPDES/Stormwater Program i.e. assessment of the Community Plan and associated amendments, ordinance revisions, program development, etc. is included in the approved budget for FY 07/08.

CEQA ANALYSIS:

This project is categorically exempt from environmental review under the California Environmental Quality Act (CEQA) guidelines as specified under Section 15307

City Council Action:

and Section 15308 of the State CEQA Guidelines because it is an action by a regulatory agency for the protection of natural resources and the environment.

RECOMMENDATION:

Review and adopt draft Resolution No. 2008-xx amending the Community (General) Plan as it relates to stormwater management and discharge control.

BACKGROUND:

This is a request to review and adopt draft Resolution No. 2008-xx which amends the Community Development, Environmental Management, and Transportation Elements of the Del Mar Community (General) Plan as it relates to stormwater management and discharge control regulations.

In 2001, the City of Del Mar adopted a series of Municipal Code amendments and Community Plan amendments to comply with the requirements of the San Diego Regional Water Quality Control Board (Regional Board) Order No. 2001-01, issued under the National Pollutant Discharge Elimination System (NPDES), and adopted on February 21, 2001. It was anticipated that amendments to the regional municipal stormwater permit (Permit) would be required approximately every five years. Although it took longer than five years, the Regional Board issued an updated Permit on January 24, 2007 to the County, all 18 cities within the county, the Port District, and the County Regional Airport Authority, collectively designated as Copermittees. As a result of the 2007 Wildfires, and at the request of the Copermittees, the Regional Board extended the Permit implementation deadline by eight weeks to March 24, 2008.

There are substantial new requirements in the Permit, including additional requirements for education, inspection, reporting, and monitoring that must be completed by all Copermittees. The Permit also requires each Copermittee to review their respective general plans and implementing ordinances, and make necessary modifications and additions to ensure enforceability with the requirements of the Permit. The proposed Community Plan amendments, included in Attachment "A" for your review and consideration, fulfill this requirement.
Staff presented these proposed amendments to the Planning Commission for their consideration and review at their regular meeting on February 12, 2008. The Planning Commission endorsed these amendments, and has forwarded them on to you, with minor modifications, for your review and consideration.

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ANALYSIS:

The new Permit requirements greatly expand the responsibilities of the Copermittees from those required under the 2001 permit. The amendments to the Community Plan will include modified or additional policies that will further address the elimination, to the maximum extent practicable (MEP), or significant reduction of pollutants found in urban runoff from Del Mar that is discharged into the municipal separate storm sewer system (MS4) and subsequently into San Dieguito Lagoon, the Los Peñasquitos Lagoon, and ultimately into the Pacific Ocean. Both State and Federal authorities have identified urban runoff as a major source of pollution adversely affecting the beneficial uses of waters statewide. Some of those impaired beneficial uses are recreation, commercial and sport fishing, estuarine habitat, and the preservation of rare and endangered species.

In response to the requirements of the new Permit, modifications to the Del Mar Community (General) Plan are required. The requirement is listed in Section D.1.a of the Permit which reads:

> **Development Planning Component**
> Each Copermittee shall implement a program which meets the requirements of this section and (1) reduces Development Project discharges of pollutants from the MS4 to the MEP, (2) prevents Development Project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) manages increases in runoff discharge rates and durations from Development Projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.
>
> a. GENERAL PLAN
> Each Copermittee shall revise as needed its General Plan or equivalent plan (e.g., Comprehensive, Master, or Community Plan) for the purpose of providing effective water quality and watershed protection principles and policies that direct land-use decisions and require implementation of consistent water quality protection measures for Development Projects.

The proposed amendments to the Community Plan will strengthen the goals and policies in the Community Development, Environmental Management, and Transportation Elements to support the requirements in the new permit. In addition to the amendments to the Community Plan, the new Permit also necessitates amendments to the Municipal Code that will be reviewed and approved by the City

Council. Any Municipal Code changes will be reviewed by the Council along with the amendments to the Community Plan after review and recommendation by the Planning Commission.

The new permit has many additional or revised provisions that the City must enforce and that development and redevelopment projects will be required to comply with including the following:

- Modification to private development application processing and documentation as required by Low Impact Development (LID) standards;
- Annual inspection of all commercial sites;
- Inspection of all special events and special event venues (festivals, street fairs, farmer's market, etc);
- Dual regulation and inspection of State permitted construction and industrial sites;
- New Watershed Urban Runoff Management Plan (WURMP) requirements specifically aimed at reducing "priority pollutants";
- Increased requirements to comply with investigative and TMDL (Total Maximum Daily Load) orders;
- Significant increase in local and regional water quality monitoring requirements;
- Expanded Regional Education & Program Management requirements;
- Upgrading the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements and establishing Hydromodification controls;
- Amending ordinances and the City's General Plan;
- A significant increase in data tracking, documentation and reporting;
- Revised long-term assessment and fiscal reporting of the Clean Water Program;
- Other elements that still need to be completed: regional and local educational material purchase and distribution to residents and

businesses, regional and local water quality monitoring, municipal facility inspections, illegal discharge and hotline/citizen complaint investigations, annual municipal employee training, special investigations and studies, industrial and construction inspections, and grant support;

- Modified Municipal Operations and Maintenance for street sweeping and storm drain inlet cleaning;

- Dual regulation of sanitary sewage system with more reporting requirements; and

- Implementation of additional Best Management Practices (BMP's) to improve water quality.

Staff proposes that revised policies be added to the Community Development, Environmental Management, and Transportation Elements of the Community Plan (see Attachment "A") to satisfy the requirements of the stormwater management and discharge control requirements as set forth in Regional Board Order No. R9-2007-0001. These proposed changes to the Community Plan goals and policies are not in conflict with any of the current goals and policies, but will compliment them by adding detail, slightly expanding the scope, and emphasizing more regional coordination. The changes have been accomplished by adding more general policy wording to what currently exists in the identified elements of the Del Mar Community Plan.

As required by the Del Mar Municipal Code, the proposed amendments to the Community Plan were reviewed by the Planning Commission on February 12, 2008 and forwarded, with recommendations, to the Council for your review and approval. A draft of the Minutes for this Planning Commission Hearing is included as Attachment "C" of this report.

RECOMMENDATION/FINDINGS:

Staff recommends that the City Council adopt the proposed amendments to the Community Development, Environmental Management, and Transportation Elements of the Community Plan as shown in Attachment "A". Staff further recommends the Council adopt the findings shown below supporting the amendments to the Community Plan. The suggested findings are listed below and in the draft resolution of approval included as Attachment "B".

1. The amendments to the Community Development, Environmental Management, and Transportation Elements of the Del Mar Community Plan will

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be in the interest of furtherance of the public health, safety, comfort, convenience and general welfare, and will not adversely affect the established character of the City of Del Mar or the surrounding neighborhood, nor be injurious to other properties in the vicinity in which the amendments may have impact.

2. By addressing the long-term protection of water quality, the amendments to the Community Development, Environmental Management, and Transportation Elements of the Del Mar Community Plan conform to the existing general purpose, planned uses, and intent of the adopted Community Plan, and all ordinances, regulations, and plans in effect to implement said Community Plan.

3. The amendments to the Community Development, Environmental Management, and Transportation Elements of the Del Mar Community Plan are consistent with, and will compliment current goals and policies and strengthen their intent by adding clarity, expanding the scope of existing drainage policies, and emphasizing more regional coordination, by revising general policy wording that currently exists in the identified elements of the Del Mar Community Plan.

As a reminder, an amendment of the Del Mar Community Plan requires an affirmative vote of at least four members of the City Council.

ATTACHMENTS:

Attachment A	Draft Resolution of Approval
Attachment B	Draft Amendments to the Community Plan
Attachment C	Draft Planning Commission Meeting Minutes for February 12, 2008

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ATTACHMENT A

For City Council Report dated March 3, 2008

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RESOLUTION NO. 2008-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DEL MAR, CALIFORNIA, AMENDING THE GENERAL PLAN (GPA-08-01), SPECIFICALLY ADDING POLICIES TO THE COMMUNITY DEVELOPMENT, ENVIRONMENTAL MANAGEMENT, AND TRANSPORTATION ELEMENTS OF THE COMMUNITY PLAN RELATING TO STORMWATER MANAGEMENT AND DISCHARGE CONTROL

WHEREAS, the City of Del Mar is required to comply with the City Stormwater Management and Discharge Control regulations and requirements of the new San Diego Regional Water Quality Control Board Order No. R9-2007-0001 adopted on January 24, 2007; and

WHEREAS, the City of Del Mar is required to amend the goals and policies of the Del Mar Community (General) Plan to ensure that the Plan shall include water quality and watershed protection principles and policies to direct land use decisions and require implementation of consistent water quality protection measures for development projects that include more natural management approaches to be used during the land use planning and zoning processes; and

WHEREAS, on February 12, 2008, the Planning Commission of the City of Del Mar held a public hearing on the application of GPA-08-01, at which time all persons desiring to be heard were heard, and the Planning Commission recommended that the City Council approve the amendments to the Community (General) Plan; and

WHEREAS, the Community Plan Amendment application GPA-08-01 has been determined to be exempt from the provisions of the California Environmental Quality Act pursuant to Sections 15307 and 15308; and

NOW THERFEFORE BE IT RESOLVED that the City Council finds:

1. The amendments to the Community Development, Environmental Management, and Transportation Elements of the Del Mar Community Plan will be in the interest of furtherance of the public health, safety, comfort, convenience and general welfare, and will not adversely affect the established character of the City of Del Mar or the surrounding neighborhood, nor be injurious to other properties in the vicinity in which the amendments may have impact;

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2. By addressing the long-term protection of water quality, the amendments to the Community Development, Environmental Management, and Transportation Elements of the Del Mar Community Plan conform to the existing general purpose, planned uses, and intent of the adopted Community Plan, and all ordinances, regulations, and plans in effect to implement said Community Plan; and

3. The amendments to the Community Development, Environmental Management, and Transportation Elements of the Del Mar Community Plan are consistent with, and will compliment current goals and policies and strengthen their intent by adding clarity, slightly expanding the scope of existing drainage policies, and emphasizing more regional coordination, in the more general policy wording that currently exists in the identified elements of the Del Mar Community Plan.

BE IT FURTHER RESOLVED that the City Council of the City of Del Mar:

Hereby amends the Community Development, Environmental Management, and Transportation Elements of the Del Mar Community Plan as set forth as follows:

See Exhibit "A"

PASSED AND ADOPTED this _____ day of _____, 2008 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
David Druker, Mayor
City of Del Mar, California

ATTEST:

_____
Mercedes Martin, City Clerk
City of Del Mar, California

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ATTACHMENT B

For City Council Report dated March 3, 2008

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Goal 1

ESTABLISH WITHOUT DELAY A COMPREHENSIVE PROGRAM TO PRESERVE AND ACQUIRE PERMANENT OPEN SPACE SUFFICIENT TO MEET THE LONG-RANGE NEEDS OF THE COMMUNITY, PRESERVE AND ENHANCE NATURAL RESOURCES, AND PROTGECT AREAS AND PEOPLE SUSCEPTIBLE TO SEISMIC AND FLOODING HAZARDS.

Objectives and Policies

A. SECURE SUFFICIENT LAND AS PERMANENT OPEN SPACE TO PRESERVE INTACT THE LOCALLY AND REGIONALLY SIGNIFICANT NATURAL ENVIRONMENTAL CHARACTERISTICS OF DEL MAR: BLUFFS, BEACH, CANYONS, OUTSTANDING GEOLOGICAL FORMATIONS, AND THE SAN DIEGUITO LAGOON.

B. SECURE OPEN SPACE NECESSARY TO IDENTIFY DEL MAR AS A DISTINCT AND SEPARATE COMMUNITY, AND TO PROTECT SCENIC.

C. SECURE SUFFICIENT OPEN SPACE TO MEET RECOGNIZED STANDARDS FOR OUTDOOR RECREATION AND EDUCATION, INCLUDING LAND FOR TRAILS AND SMALL NEIGHBORHOOD PARKS.

1. Consider the Comprehensive Planning Organization's recreational standard of 15 acres per thousand inhabitants (including in the total the acreage of beach above mean sea level) in defining the needs of Del Mar.

2. Protect open space areas to satisfy recreational needs or to preserve particularly unique natural features in specific neighborhoods.

3. Develop a continuous pedestrian loop trail which extends around the perimeter of the City while connecting and passing through areas of natural and scenic value without unnecessarily imposing on residential privacy.

4. Establish a Parks and Recreation Commission to administer the parks and scenic preserves and to plan for specific development of open space areas.

D. INSURE THAT ALL FUTURE DEVELOPMENT BE SUCH AS TO PRESERVE AN ATMOSPHERE OF OPENNESS AND ACCESS TO PUBLIC OPEN SPACES, INCLUDING THE BLUFFS AND BEACH.

1. Undertake a comprehensive survey and legal analysis of areas of potential public prescriptive rights throughout the City. Where such rights are believed to exist actively pursue the establishment and recognition of such rights through judicial proceeding as appropriate

E. PROTECT SPECIFIC OPEN SPACE AREAS AS SHOWN ON THE DEL MAR ENVIRONMENTAL MANAGEMENT PLAN.

1. Preserve, as open space, areas such as the 100-year floodway and the beach bluffs west of the railroad tracks that are too hazardous to justify permanent construction.

2. Preserve, as City-owned open space, areas desirable as City parks and preserves.

3. Preserve, as open space, pending possible acquisition by other jurisdictions, areas of regional significance.

4. Preserve and where necessary acquire easements for the protection of access to the beach and other public open space.

5. Protect the scenic quality of the air space above the railroad tracks by allowing only railroad transportation and open space uses, and restrict stretches of right-of-way with adjacent landslide danger to single track usage.

6. Control building, signing and paving on publicly owned open space so such use will not be objectionable to Del Mar residents.

7. Open space areas should be managed with erosion control and pollution prevention measures in the forefront.

F. AGGRESIVELY DEVELOP BOTH INNOVATIVE AND CONVENTIONAL MEANS FOR IMPLEMENTING THE OPEN SPACE PROGRAM.

1. Insure that the implementation of the Open Space Program be one of the highest priority planning activities within the City government.

2. Establish and schedule revenue-generating techniques sufficient to accomplish a permanent program of open space implementation aimed at achieving the goals explicit in this Plan. This program shall include the creation of an open space fund which will be used exclusively to buy land for public use.

   a. Prepare a ballot measure to be submitted to the voters requesting approval of the mechanism for financing open space acquisition and improvements and the sources of revenues to be used for these purposes.

3. Control the impact of private development on areas designated as having open space sensitivities.

4. Require City approval prior to development of areas designated as neighborhood parks, so that if they are not acquired by the City, the neighborhood will have a reasonable period in which to form an assessment district following development application.

5. Establish special controls to protect the natural environment in areas of bluffs, slopes, and canyons having special conservation sensitivity. (See Precise Plan for Bluffs, Slopes and Canyons.)

G. COOPERATE WITH OTHER JURISDICTIONS TO COORDINATE OPEN SPACE ACQUISITION, ~~AND~~ PRESERVATION AND PROTECTION POLICY.

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1. Encourage and support efforts of the City of San Diego to preserve sufficient open space within the Torrey Pines Community Planning Area that is adjacent to Del Mar.

2. Coordinate and request assistance from the Comprehensive Planning Organization, the State of California, the City of San Diego, San Diego County, and other jurisdictions in preserving areas of mutual concern.

3. Obtain community comment through the public hearing process on any proposal to encourage acquisition of land within the City of Del Mar Planning impact area by other jurisdictions.

4. Support open space acquisition as part of the Los Penasquitos and San Dieguito Watershed Management Plans. In order to do this, close coordination should take place with the County, the cities, stakeholder organizations, and the various special districts whose decisions and activities affect open space, water resources, and water quality in these watersheds.

H. CONSERVE THE NATURAL CHARACTER OF LAND, WATER, VEGETATIVE AND WILDLIFE RESOURCES WITHIN THE COMMUNITY.

1. Participate in regional and/or statewide efforts to evaluate and control beach and bluff erosion problems.

2. Prohibit the encroachment of private development on the public beach.

3. Prohibit the use of private vehicles on the public beach

4. Insure that future development results in a minimum disturbance of existing or natural terrain and vegetation and does not create soil erosion, silting of lower slopes, slide damage, flooding problems and/or severe cutting or scarring.

5. Minimize particulate matter pollution that leads to sedimentation or siltation through implementation of erosion control plans and permits for new and redevelopment projects which pose such a threat to water quality.

6. Minimize land uses which pose a major threat to water quality-including commercial and industrial uses such as automobile dismantlers, transportation and vehicle storage facilities, waste transfer disposal facilities, light industries, and other uses that have a significant potential for pollution of streams, reservoirs, or percolation facilities or where pollutants could easily come in contact with flood waters, high groundwater, flowing streams, or reservoirs.

7. Require commercial and industrial facilities and residential developments which pose a high threat to water quality to reduce any threat of pollution to an insignificant level, as a condition of approval.

8. Reduce the quantity and duration of runoff and discharge of pollutants to the maximum extent practicable by integrating low impact design features, surface runoff source and treatment controls into new development and redevelopment land use decisions through conditions of approval.

9. Implement the City's jurisdictional urban runoff program to maximize pollution prevention and control measures that reduce and control the discharge of pollutants into Del Mar's storm drains, local creeks, beaches, and lagoons to the maximum extent practicable.

10. Work with other local government agencies to develop cross-jurisdictional land use development standards and policies in order to maintain a watershed-based approach to land use, erosion, flood control, and nonpoint source pollution.

11. Minimize or prevent development in hazard and resource areas with the following characteristics: flood potential; wetlands; riparian corridors and areas with a greater than 25% slope.

12. Encourage reductions and modifications to air pollution generating activities and sources to reduce the deposition of air-borne pollutants and improve urban and stormwater runoff water quality.

I. RETAIN AND ENHANCE NATURAL BENEFITS WITHIN THE SAN DIEGUITO RIVER FLOODWAY AND LAGOON HABITAT.

1. Establish a comprehensive master plan and management program for the lagoon including biological productivity potential, health controls, future water supply, the preservation and enhancement of wildlife, and opportunities for educational and recreational enjoyment.

2. Land use policies established within the San Dieguito River Floodway and Lagoon Habitat should be consistent with the long-range goal of returning the entire area to the natural lagoon condition.

3. Identify public ownership and public use rights in the lagoon and tidelands and restrict therein uses inconsistent with such public rights.

4. Support and continue education with regard to biological resource values of the lagoon ecosystem.

5. Require the placement of beach quality sand on Del Mar beaches whenever beach quality sand results from the dredging of the San Dieguito lagoon. If placement within Del Mar is not needed or desirable, consideration shall be given to placement elsewhere within the Oceanside littoral cell or where exceptional biological benefits can be demonstrated.

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6. Require the proper disposal of less than beach quality sand in a manner that protects against the pollution of beaches, lagoons, or other waterways and minimizes as much as possible any potentially adverse environmental impacts that could result from the disposal.

7. Prohibit the placement of sand in areas that may result in negative long term impacts including, but not limited to, the filling of wetlands, the closing of the rivermouth, or the disturbance of sensitive habitat near shore or in the lagoon unless exceptional biological benefits can be demonstrated.

8. Prohibit any development, dredging, protective devices, and/or enhancement that would exacerbate flooding or erosion.

9. Prohibit placement of fill within the effective flow area as delineated using the FESWNS (Federal Highway Administration, 1992) Model.

10. Maintain existing public uses of the beach.

11. Preserve the natural appearance and open space character of the river mouth region.

12. Protect and enhance the biological resources of the river mouth region.

13. Maintain existing east-west public access to the beach from Camino del Mar. Public access shall be enhanced provided that there are no significant negative impacts upon the natural appearance and/or biological resources of the river mouth region.

14. Maintain existing lateral, north-south access to the beach without negatively impacting the beauty and biological resources of the river mouth region. Public access shall be enhanced provided that there are no significant negative impacts upon the natural appearance and/or biological resources of the river mouth region.

15. Mitigate for impacts that, while beneficial to the biological resources of the San Dieguito Lagoon, adversely impact public access. If lateral access across the river mouth is impacted by Lagoon restoration, access shall be enhanced between the beach and Camino del Mar both north and south of the San Dieguito River, including a pedestrian access connection over San Dieguito River.

16. Preserve and, where necessary, acquire easements for the protection or enhancement of access to the beach and other public open space in the San Dieguito River mouth and Lagoon.

17. Prohibit adverse environmental impacts from all types of uses and/or pollution including, but not limited to, public access, visual blight, noise, light, air, and water pollution.

J. RESTORE ENVIRONMENTALLY DEGRADED AREAS TO THE HIGH QUALITY STANDARDS IMPLIED IN THE OBJECTIVES ABOVE.

K. REQUIRE DEVELOPMENT IN AREAS OF ARCHEOLOGICAL SIGNIFICANCE TO BE REVIIEWED BY THE CITY OF DEL MAR TO INSURE THAT SUCH USES DO NOT RESULT IN A PERMANENT DESTRUCTION OF ANY ARCHEOLOGICAL SITES OR CULTURAL INFORMATION.

L. REDUCE ENERGY CONSUMPTION AND ENCOURAGE MATERIAL RECYCLING.

1. Encourage the maximum feasible insulation in buildings.

2. Encourage energy efficient heating, lighting and ventilation systems and discourage completely air-conditioned buildings in favor of buildings designed to maximize natural temperature regulating conditions (e.g., buildings with windows that open for ventilation).

3. Encourage an increased degree of energy self-sufficiency through such means as solar heating, particularly for swimming pools.

4. Establish and publicize a local recycling program for solid waste material.

5. Support statewide use of returnable beverage containers.

M. PROMOTE THE PRUDENT USE OF WATER RESOURCES BY ENCOURAGING NATURAL LANDSCAPING THAT REQUIRES LITTLE WATERING.

1. Encourage conservation measures and water recycling programs that eliminate or discourage wasteful uses and urban water runoff.

2. Maximize a development's pervious landscaping footprint by reducing lawn areas, promoting turf that requires low irrigation, and taking advantage of permeable material areas (i.e. mulch, gravel, porous pavers).

3. Strategically plant and increase use of deciduous shade trees, evergreen trees, and drought tolerant native vegetation, as appropriate.

4. Implement water conservation measures in buildings and landscaping site design.

N. SUPPORT GASOLINE CONSERVATION ACTIVITIES SUCH AS CAR-POOLING AND PUBLIC TRANSPORTATION.

O. MINIMIZE THE LOSS OF LIFE AND DESTRUCTION OF PROPERTY FROM SEISMIC AND GEOLOGICAL OCCURRENCES.

1. Develop a well-coordinated disaster plan, which includes preparation for earthquakes, Tsunamis and storm waves.

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2. Supplement and update geologic information available to the City.

P. INSURES PUBLIC SAFETY WITHIN THE SAN DIEGUITO RIVER FLOOD PLAIN.

1. Prohibit structures in the floodway.

2. Locate proposed development so as to eliminate the need for protective construction such as seawalls, retaining walls, or flood control devices.

3. Discourage landfill, land removal, and structures within the flood plain that would limit water-holding capacity or impede water movement so as to adversely affect other property.

4. Development in the flood-fringe shall sustain periodic flooding without creating public burdens by aggravating the flood problem or impeding flood storage capacity.

5. ~~Water quality protection measures set forth throughout this Community (General) Plan are the result of United States Environmental Protection Agency legislation under the Clean Water Act. The intent of these measures is to protect the health and safety of humans as well as to protect the beneficial uses of receiving waters.~~

5. The water quality protection measures set forth throughout this Community (General) Plan are based on the Federal Clean Water Act (CWA), the Porter-Cologne Water Quality control Act (Division 7 of the Water code, commending with Section 13000), applicable state and federal regulations, all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the State Water Resources Control Board (SWRCB), the *Water Quality Control Plan for the San Diego* Basin adopted by the Regional Board, the California Toxics Rule, and the California Toxics Rule Implementation Plan.

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Goal 2

MINIMIZE THE IMPACT OF THE AUTOMOBILE ON THE CHARACTER OF DEL MAR AND EMPHASIZE A MORE PEDESTRIAN ORIENTED ENVIRONMENT, SAFER SIDEWALKS, LANDSCAPED BUFFER ZONES, AND ALTERNATE MEANS OF TRANSPORTATION.

Objectives and Policies

A. ENCOURAGE A PEDESTRIAN-ORIENTED, NON-MOTORIZED COMMUNITY BY DEVELOPING A SYSTEM OF BICYCLE RIGHTS-OF-WAY AND PEDESTRIAN PATHS, AND DISCOURAGING HIGH SPEED TRAFFIC ALONG CITY STREETS.

1. Redesign Camino del Mar to improve its appearance as a scenic coastal route and accommodate low-speed vehicular traffic.
2. Improve the safety of Camino del Mar pedestrian crossings, particularly in the north and south ends of the community.
3. Provide a continuous north-south bicycle network through the City.
4. Develop a continuous pedestrian loop trail which extends around the perimeter of the City while connecting and passing through areas of natural and scenic value without unnecessarily imposing on residential privacy.
5. Preserve and improve pedestrian access to and along beaches and sea cliffs by use of all public rights-of-way and prescriptive public easements.
6. Encourage all unimproved public rights-of-way to be used solely for pedestrian movement unless absolutely necessary for vehicular access.
7. Oppose any attempts to widen Carmel Valley Road.

B. FACILITATE THE MOVEMENT OF TRAFFIC IN A SAFE AND UNCONGESTED MANNER CONSISTENT WITH A PEDESTRIAN-ORIENTED COMMUNITY.

1. Encourage the development of an improved intersection design at Via de la Valle, Stevens Street, Turf Road and Jimmy Durante Boulevard.

C. ENCOURAGE ALTERNATE SOLUTIONS TO THE TRANSPORTATION NEEDS OF DEL MAR SUCH AS LOCAL TRANSIT AND DELIVERY SYSTEMS AND REGIONAL RAPID TRANSIT.

1. Consider the feasibility of a local transit system serving residential areas, the downtown commerical area, the beach, the fairgrounds and racetrack, and railroad station.
2. Support the expansion of convenient bus or other transit service between Del Mar and downtown San Diego.
3. Encourage and participate in the initiation of a long-range regional multi-modal transportation system.

D. REDUCE THE LEVEL OF NOISE CREATED BY MAJOR TRANSPORTATION ROUTES IN THE COMMUNITY.

1. Limit the speed of vehicular traffic along City streets, particularly Camino del Mar.
2. Encourage sound reduction construction techniques in new buildings within the 65 decibel boundaries adjacent to Camino del Mar and the railroad right-of-way.

E. MINIMIZE AIR POLLUTION BY ENCOURAGING ALTERNATIVES TO THE USE OF THE AUTOMOBILE.

F. WORK TO REDUCE TRANSPORTATION RELATED SOURCES OF WATER POLLUTION, PARTICULARLY IN STORM WATER RUNOFF.

1. ~~Seek to~~ Promote the reduction of vehicle-miles-traveled, thereby reducing congestion and reducing air and water pollution.
2. Educate the public as to ~~Recognize and publicize~~ the relationship between air pollution and water pollution in the deposition onto streets and other surfaces of airborne contaminants, including metals and fine particulate matter (PM10).

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PRELIMINARY DRAFT

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Goal 4

FOCUS MAJOR RETAIL AND OFFICE ACTIVITY INTO ONE ECONOMICALLY VIABLE, PEDESTRIAN ORIENTED AND ATTRACTIVE AREA THAT SERVES THE NEEDS OF BOTH REIDENTS AND VISITORS AND IS WELL INTEGRATED INTO THE RESIDENTIAL FABRIC OF THE COMMUNITY.

Objectives and Policies

A. ENCOURAGE QUALITY RESIDENT-ORIENTED BUSNESSES WHICH SERVE THE INTELLECTUAL, SOCIAL, AND MATERIAL NEEDS OF THE LOCAL COMMUNITY.

1. Limit the amount of office space within the downtown area and discourage office space which does not primarily serve local residents.

B. INSURE THAT THE DOWNTOWN AREA IS WELL INTEGRATED INTO THE RESIDENTIAL FABRIC OF THE COMMUNITY.

1. Encourage alternatives to the use of the automobile for tourist access to the downtown.

2. Discourage high volume or evening commercial activity on the perimeter of the downtown area that may be detrimental to the liveability of adjacent residential areas.

3. Encourage mixed residential commercial land uses adjacent to the western boundary of the downtown areas near 15th Street.

4. Explore mixed residential-commercial land uses within other areas of the commercially zoned downtown area.

5. Establish strict limits on noise within the downtown area.

C. CREATE A PEDESTRIAN ORIENTED DOWNTOWN WHICH GROUPS RETAIL SERVICES WITH FACILITIES FOR CIVIC AND COMMUNITY ACTIVITIES.

1. Maintain commercial uses within the retail core composed primarily of retail sales and service establishments and offices which primarily serve local residents.

2. Discourage commercial uses which are automotive oriented (such as drive-in establishments).

3. Encourage developments which provide social, cultural and recreational activities.

4. Develop a pedestrian network which ties all parts of the downtown together in a way which reduces conflicts with the automobile.

D. MAINTAIN ARCHITECTURAL DESIGN AND LOW MASS-INTENSITY SCALE WITHIN THE DOWNTOWN AREA THAT IS IN KEEPING WITH THE TRADITIONAL VILLAGE CHARACTER OF THE COMMUNITY.

1. Promote informality of design with varied and interesting setbacks.

2. Limit floor areas and require building siting which provides ocean views and open space.

3. Limit the height of structures on the west side of Camino del Mar to one story above street level, and maintain a strict two story limitation elsewhere.

4. Encourage building designs and uses that utilize the advantages of Del Mar's warm, sunny climate.

E. INITIATE A BEAUTIFICATION PROGRAM FOR THE DOWNTOWN AREA.

1. Provide benches, mini-parks, and street trees, and require extensive landscaping of private open space and parking areas.

2. Require undergrounding of all utilities, and the use of low intensity lighting.

3. Require the removal of inappropriate or out-of-scale signing and encourage signing which is well integrated into building or site design.

F. DEVELOP GUIDELINES FOR THE DESIGN OF THE DOWNTONW AREA THAT INCLUDES CAMINO DEL MAR CIRCULATION, PARKING, ARCHITECTURAL DESIGN, AND WALKWAYS.

1. Consider the conversion of Del Mar Lane between 13th and 15th Streets into a pedestrian mall.

G. DISCOURAGE COMMERCIAL USES OUTSIDE OF THE DOWNTOWN AREA THAT WOULD MINIMIZE ITS SOCIAL AND ECONOMIC VITALITY.

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DEL MAR DOWNTOWN

ATTACHMENT C

For City Council Report dated March 3, 2008

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NEW APPLICATIONS

ITEM 1 **GPA-08-01** *Forward to City Council*	**Location:** City-wide **Applicant/Owners:** City of Del Mar **Contact Person:** Linda S. Niles, Planning and Community Development Director **Description:** Amendments to the Community (General) Plan to add policies to the Community Development, Environmental Management, and Transportation Elements regarding City Storm Water Management and Discharge Control regulations as revised under the new NPDES Permit.

Chair Price wanted to confirm that this would be moving on to Council and that these are the changes mandated by the Clean Water Program.

Planning & Community Development Director Niles stated that the Commissions' recommendations will be forwarded to the City Council. Council will be hearing the amendments and the Planning Commission's recommendations to the amendments to the Community Plan in addition to some municipal code amendments on March 3.

Chair Price asked Planning & Community Development Director Niles to clarify 'recommendations' and whether it included additions or modifications to the wording.

Planning & Community Development Director Niles responded in the affirmative. She then introduced Joe DeStefano, the new Clean Water Manager for Del Mar, and Rosanna Lacarra, of PBS&J, who has served in that capacity for the past three years. She also advised that these are all requirements of the new permit that she just mentioned which will be reviewed at the community workshop February 25, and then go on to a public hearing at the March 3 City Council meeting on the Community Plan amendments along with some amendments to the Municipal Code that go directly to the Council for their review.

Rosanna Lacarra presented an overview of the staff report.

Chair Price suggested that the Commission review the comments in red on the Stormwater documents, starting with number 7, and that Commissioners make their comments before moving on to the next proposed change.

Rosanna Lacarra read number 7: Open space areas should be managed with erosion control and pollution prevention measures in the forefront.

Commissioner Kerridge commented that having done his due diligence, there is nothing in the proposed changes that he has questions or comments about. However, he stated he has not given any thought into what may have been missed. He is not sure to what extent the Commission is supposed to think hard about the issues that, conceivably, the professionals might have missed. He stated that although he does not mistrust staff, he could not swear that all the bases have been covered.

Chair Price confirmed with Commissioner Kerridge that he does not have any problems with the proposed changes in red.

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Commissioner Kerridge responded affirmatively.

Commissioner Nordhoff and Chair Price stated they also do not have any problems with the proposed changes.

Commissioner Ehrenfeld wanted to know if on page 32, number 5, when it talks about particulate matter, if that included air pollution.

Commissioner Nordhoff wanted to know if he might be referring to wood-burning fireplaces.

Rosanna Lacarra stated she did not know if that particular item is specific enough to address particulate matter as airborne pollutants. It is under the heading of "Conserve the natural character of land, water and vegetation," so she believes it has more to do with land erosion preservation. She stated it is used commonly as an air pollutant description, which she believes may be addressed under Transportation.

Commissioner Ehrenfeld stated he wasn't sure how the term 'particulate' was used in the report versus how it has been used by the Planning Commission.

Rosanna Lacarra stated it is commonly used as an air pollutant description which is addressed under Transportation on page 48.

Commissioner Ehrenfeld felt that the term 'educate the public' was a little weak; however, stated that might be about as strong as they want to get in this document. He wanted to know if that left the City open to create Code or whatever would encourage work in this direction or if the word 'educate' simply stopped with a brochure and a TV ad. He asked if the word 'educate' would be strong enough if the City eventually wanted to create guidelines, through its development standards, for City vehicles if it decided the relationship between air pollution and water pollution was an issue it wanted to address, or if there was need to suggest stronger language now so there would be room to do that in the future.

Rosanna Lacarra responded that she does not believe the current document addresses where Commissioner Ehrenfeld is going with Transportation. She stated she believes it would be complicated to try to address transportation air pollution at a City level because the City would not have much control other than to limit certain traffic patterns and things like that to prevent additional traffic through the City. As far as emission-related things, she believes it would be very difficult to regulate locally because there are a lot of standards that come from Federal and State governments, so to the degree that the City can educate the public to those standards and requirements, she believes they are doing a pretty good job. She stated she is not inclined to recommend additional, more stringent language at this time, because she believes the regulations are changing and are too volatile right now when it comes to emissions at the State and Federal levels.

Commissioner Ehrenfeld stated he was curious about whether electric fire engines would service the City properly. It may be something the City wants to set as a priority in the long-run, or at least alternative fuel or hybrid fire engines would be something that would be encouraged and it really isn't addressed in the document other than stating 'educate the public'. He stated he does not have any suggestions on what language

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could be proposed to bring the City more to action and less to talking on the issue of air pollution.

Planning & Community Development Director Niles stated that one of Commissioner Ehrenfelds' issues was particulates coming from outdoor fireplaces which may be related to development. She asked Rosanna Lacarra and Clean Water Manager DeStefano if there was any policy or goal that could be added to the Community Development element regarding development that could work towards reducing those kinds of particulates and then, as they move forward in Municipal Code Amendments to the language, the City could consider something in there regarding that.

Rosanna Lacarra stated that she could add some language that would say "support reduction of emissions through" and then address some of things like possibly obtaining grant funding for replacement vehicles of the City's fleet. She advised that language like that can be incorporated so the City could control its fleet. She can also add something to support reductions in emissions regarding fireplaces and related issues that the Planning Commission has influence over.

Commissioner Ehrenfeld stated that is his agenda.

Chair Price added that with regard to fireplaces and related issues, he burns wood in his own fireplace and he is sure a lot of people around town do also, so he thinks that it should be added as a discussion item at City Council. He stated he is not so sure they should adopt something unless everyone wants to vote on it to say they should put it in.

Commissioner Nordhoff clarified that these are just goals and objectives.

Commissioner Kerridge stated that this is the Community Plan; it's not the Municipal Code.

Rosanna Lacarra suggested the wording "seek opportunities to reduce emissions" which would not necessarily prescribe that they were prohibiting or limiting; it would just look for opportunities for those things to happen in the future, so they are broader goals.

Commissioner Ehrenfeld stated that thanks to Planning & Community Development Director Niles, they've expanded into the Community Development area now.

Commissioner Kerridge noted that if the Planning Commission is going to start micro-managing the connection between air pollution and water pollution, then there's almost no limit to where they could go. For example, when he would argue that one of the biggest contributors to air pollution which could get into the water system is from vehicles on the main drag that are required to stop and restart frequently, they would produce less pollutants if they were allowed to drive straight through town without stopping at stop signs. He stated he would not be ashamed to make the argument that if the Planning Commission is seriously interested in reducing air pollution, particularly of heavy metals and things that can get from the air into the water, then they should consider revising the City's traffic management plan because there is a real nexus between the two. He is not suggesting that they should do that, but if that Pandora's box is opened, then this is one of the things that should be discussed.

Commissioner Ehrenfeld stated research backs up the fact that a sealed fireplace that's

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properly designed will put out a lot more heat and a lot less pollution. Those are the kinds of things that cities all over the country are encouraging. Right now, outdoor fireplaces are incredibly inefficient when it comes to burning; they put an incredible amount of particulate into the air; that's one end of the spectrum. He stated he's not saying they should outlaw them, he's simply saying that there are cities all over the State that have rules that say only certain kinds of wood can be burned because it cuts down the pollution. He shared that when he was travelling once, he met a scientist who studied how airborne pollutants get into the water and it started him thinking about it; if they have stuff floating out of fireplaces and then washing down into the ocean, that's pretty direct. He stated he understands what Commissioner Kerridge is saying and he agrees with him that there's a public good to having the cars moving more efficiently through the City in terms of air pollution.

Commissioner Kerridge clarified that his point was really if the City does get involved in discussions of outdoor fireplaces, what logic is there to stopping at that point and not going on to other sources of air pollution that can get into the wastewater. He commented that Commissioner Ehrenfeld is making an arbitrary decision that outdoor fireplaces constitute a problem the city should tackle, but it shouldn't necessarily get into other potential sources, and he doesn't see any logic to that.

Commissioner Ehrenfeld stated he thinks air pollution should be a major point within the document; whether they end up discussing indoor or outdoor fireplaces, he thinks they have sources of pollution within the City that could easily be controlled. He stated that it's within the control of the population and it's not unheard of to have these kinds of rules. He agrees that anything could be taken to the extreme, but he thinks every way to eliminate air pollution is worthy of discussion and he wants to see air pollution in the document, because he thinks it is a critical issue. It is not his plan to use this document to get his own personal agenda through, but he thinks that to have a document such as the one before them that does not specifically address air pollution, there's a major gap that he would like to see filled to a point where reducing air pollution is a priority within the City as much as possible. It's mostly a regional issue; the City can't really affect the air pollution coming from Los Angeles or Tijuana but there are sources of pollution within the City that, through development, the City can properly affect, even in terms of building materials that are used.

Commissioner Kerridge confirmed that Commissioner Ehrenfeld wanted to see wording that was more proactive than simply "educate the public", but still general enough to encompass any locally manipulatable source or pollution.

Commissioner Ehrenfeld stated that "educate the public" is in the Transportation element, and it may be strong enough there, but in the Development standards that the Planning Commission could possibly have an impact on, he would like to see air pollution addressed as something that should be minimized. He is not talking about the source at this point because it's not really important.

Chair Price wanted to know how that applied to what the Planning Commission was talking about tonight.

Rosanna Lacarra stated she is trying to think of some additional examples so she can craft some general language, because the goals should be broad. She noted to the degree that the City doesn't use leaf blowers that are powered by small engines, they

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are improving air pollution quality around the city and that leads to an environmental benefit to water quality, so she is trying to think of other examples the Planning Commission could potentially give her to incorporate some language regarding air pollution that the City has already effectively implemented that she can use as examples. She suggested "Promoting the reduction of air emissions or particulate emissions from fireplaces and small equipment motors" or similar can be used to draft that language that would be in sync with the goal.

Commissioner Kerridge stated Rosanna Lacarra was right about the statute concerning leaf blowers. He stated he has noticed that since they no longer have a Code Enforcement Officer, the frequency of leaf blower usage has sky-rocketed - at least in his neighborhood, so that's worth bearing in mind.

Chair Price stated that even what Commissioner Kerridge said about traffic management, things can be listed to make a more encompassing statement.

Planning & Community Development Director Niles stated that Staff can come up with general language with the examples that have been provided. Over the next three to five years, Staff will be updating all the elements of the General Plan, not just these portions of these elements, so there will be a conservation element and all the regular elements like transportation / circulation of the Community Plan. These kinds of goals will fall into some of the other elements much better. Air quality is in the conservation element specifically, so staff can add specific language regarding the water quality and how the air quality relates to the water quality and then they can put more specific language in the upcoming elements as they come to Staff and perhaps they propose some different language for some of the Code Amendments that are coming up. She also advised Chair Price that a full-time Code Enforcement Officer has been hired who started last week and she will be going out and finding the people using leaf blowers.

Chair Price confirmed that this document will be forwarded to the City Council.

Planning & Community Development Director Niles stated that the document will be going to City Council. She provided an overview of all of the elements contained in the staff report that are being revised. The new permit contains new and revised provisions that the City must enforce. That will include the City making changes to its standards and doing different kinds of enforcement, so some of the things the City will have to comply with include:

- Modifications to private development application processing and documentation as required by low impact development standards (LID), so there will be changes to project designs that the City and residents will see on their projects to help with water quality, so the Design Review Board will be seeing a lot of different changes and requirements that the City will be placing on those developments that come through the City.

- She stated we have to do an annual inspection of all commercial sites. Currently, the City does not have to do that but every three years.

- The inspection of all special events and special event venues, like festivals and street fairs and farmer's markets. In the past, the City has not been required to inspect those and ensure that their operation meets any of the clean water

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standards.

Commissioner Kerridge asked if the responsibility of the inspection lies with the City or the organizers of the event.

Planning & Community Development Director Niles answered that the organizers of the event need to design the event to meet the standards. The City will help them when they are coming in for their permits for those events, and then it will be Joe DeStefano, the Clean Water Manager, who will do the inspection of those events.

Chair Price asked that since the Farmer's Market meets every week, if the City will need to conduct weekly inspections.

Clean Water Manager DeStefano responded that it was his understanding that once the City meets with them and set up a plan that ensures they meet all the standards required of the permit, it will result in an occasional inspection to make sure they are doing what they agreed to do.

Planning & Community Development Director Niles continued with the revisions and additions:

- Dual regulation and inspection of State-permitted construction industrial sites, which includes the Fairgrounds and at least one industrial site in town.

- The new watershed urban runoff management plan requirement specifically aimed at reducing priority pollutants.

- Increased requirements to comply with investigative and TMDL (Total Maximum Daily Load) orders, which are pretty complicated, so it will take awhile to explain those to the public.

- There's a significant increase in local and regional water quality monitoring requirements, so PBS&J and Clean Water Manager DeStefano will be doing a lot more monitoring and reporting of that monitoring to the Water Quality Control Board.

- Expanded regional education and program management requirements. The workshop that the Planning Department will be holding on February 25 will be part of the educational program that will be done to comply with the new standards.

- Upgrading the standard urban stormwater mitigation plan which is call the SUSUMP requirements and establishing hydromodification controls. Those are also pretty detailed and will be explained at the Council Meeting.

- Amending ordinances and the General Plan, which is what the Planning Commission is looking at this evening; the General Plan Amendments.

- Significant increase in data tracking documentation and reporting, as she indicated earlier. That includes when the planners go out and conduct site inspections on development projects that are under construction at the moment.

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They will be writing out forms that indicate how that project construction is complying with the best management practices for erosion control and things and the City will keep a record of those so they can be forwarded in the Annual Report to the Regional Water Quality Control Board.

- Revise long-term assessment and physical reporting of the Clean Water Program. Clean Water Manager DeStefano and Rosanna Lacarra will be putting together a new program by which the City can document everything that is being done in the Clean Water program so that under the permit, the City will be able to highlight any questions that come up or keep track of anything they do in all areas under the requirements of the new permit.

- Other elements are regional, local educational materials. We participate in those; we have in the past and will continue to do that and distribution to the residents and businesses.

- Regional and Local Water Quality Monitoring municipal facility inspections, which we do now; all of our facilities are inspected and Rosanna Lacarra gives classes to all the staff several times a year on what we need to be doing to make sure we comply with the Clean Water standards.

- There will be a hotline citizen complaint line

- Annual municipal employee training

- Special investigation and studies

- Industrial and construction inspections

- Grant support for when there's an occasion where we need to do some additional work, we may be able to get some grant funding for some of the things we need to do to meet the requirements of the Permit.

- Modified municipal operations and maintenance for street sweeping and storm drain inlet cleaning. We are now required to do that more often and in a different manner.

- Dual regulation of sanitary sewage system with more reporting requirements

- Implementation of additional best management practices which we call (BMPs) to improve water quality.

She stated there are a lot of things that go into the requirements of the new Permit. It's spread out over a lot of things that we do in the City, not only as a municipal government, but the citizens as well. Staff will try to get everyone updated on what else needs to be done individually and as a City.

Commissioner Ehrenfeld asked on page 33, section M, there are many things there could potentially end up in Code is in terms of pervious landscaping footprint and giving numbers to that. He wanted to know what the process is that goes forward to creating numbers that go along with those things and how will those things begin to affect the

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landscaped plans for projects.

Rosanna Lacarra deferred the question to Clean Water Manager DeStefano, who worked on the County's Handbook that PBS&J uses as a guidance document for LID. It shows the preliminary standards for design and inclusion of these types of features which include landscaping, irrigation systems, etc.

Clean Water Manager DeStefano stated that the Permit itself is requiring that specific LID components go into effect with this first iteration of permit changes. Within the next year, the copermittees, which are all the individual Cities, the County, the Airport Authority and Port District are actually going to develop the specific site standards by which impervious and pervious surfaces are going to be adjusted on site, so a lot of the individual details are not yet developed. While he still worked at the County, they created a program by which LID measures could be identified that work in the air environment which had not been done before. Much of the LID work had been done in Seattle and the east coast where rainfall is much higher and there are far less dry weather flows. In general, the areas the current permit and things the City will be enforcing soon have outlined areas that the City must implement at this time: disconnection of impervious surfaces so that parking lots don't sheet flow into the storm system; breaking them up so that they flow into areas of vegetation and that the vegetated areas have been designed to receive that runoff where possible infiltration. In larger developments, the most obvious example of that is in the use of landscaping medians in parking areas that have been crowned in such a way with curb cuts so that sheet flows towards the center parking lots so that they run through vegetated areas before discharge. It gives the opportunity for the natural vegetation to actually filter the water prior to discharge into the storm system. One of the other items the City is being required to do is the use of downspouts on rooftops focusing the water away from sheet-flowing down driveways and into vegetated areas, and wherever possible, the use of pervious pavers, pervious asphalt and pervious concrete in site design, with the idea being to mimic natural runoff flows and keeping much of the stormwater on site.

Commissioner Ehrenfeld asked if the addition of this would be an extra level of compliance for a permit, or if those things would be put into the City's own Code as time goes on.

Planning & Community Development Director Niles stated she thought some of these would be added as Code requirements, and Staff will be working on those during the next year, but they would be including some minor changes in the next review by Council.

Rosanna Lacarra added that because of the way the LID measures were written in the past, sometimes projects didn't incorporate the best designs and did not appeal to the aesthetics and the landscaping was done very roughly. To make it appealing to the public and to incorporate some of the aesthetics of some of these features, the idea is to offer something similar to a cafeteria menu of choices to the developer and architect so they aren't being locked in and projects can be designed with architecture that will blend in across the county; not just the City, to meet with the community desires. So the idea will be somewhat prescriptive but at the same time, allowing some flexibility, so that the Planning Commission can pick and choose what items best fit the design and features of the site.

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COMMISSIONER KERRIDGE MOVED TO RECOMMEND TO THE CITY COUNCIL THE PROPOSED ADOPTION OF ITEM #1 (GPA-08-01) WITH MODIFICATION, AS NOTED IN COMMISSION DISCUSSION. COMMISSIONER NORDHOFF SECONDED.

VOTE: 4-0-1; MOTION APPROVED, FILANC ABSENT.

ADJOURNMENT – 6:47 p.m.

Minutes prepared by:

Heather Glenn, Minutes Clerk
City of Del Mar Planning Department

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Appendix 2-B
City Council Staff Report for Modifications to Del Mar Municipal Code Section 11.30 - March 3, 2008

City of Del Mar
Staff Report

TO: Honorable Mayor and City Council

FROM: Carmen Kasner, City Engineer CK
Rosanna Lacarra, Clean Water Program Technical Advisor
Linda Niles, Community Development Director
Via Karen Brust, City Manager KB

DATE: March 3, 2008

SUBJECT: Del Mar Municipal Code (DMMC) Chapter 11.30; Repeal of DMMC Chapter 11.30 and introduction of new DMMC Chapter 11.30 to comply with the San Diego Regional Water Quality Control Board Order 2007-0001.

ISSUE:

Whether to repeal DMMC Chapter 11.30 and introduce a new DMMC Chapter 11.30 Stormwater Management Ordinance to comply with the San Diego Regional Water Quality Control Board Order 2007-0001.

FISCAL ANALYSIS:

Funding for the NPDES/Stormwater Program (i.e., ordinance revisions, assessment of the General Plan, program development, etc.) was included in the approved budget.

ENVIRONMENTAL REVIEW:

In accordance with CEQA standards, the Jurisdictional Urban Runoff Management Program does not meet the definition of a project, and is therefore exempt from the provisions of CEQA.

RECOMMENDATION:

Repeal DMMC Chapter 11.30 and Introduce a new Chapter 11.30 Stormwater Management Ordinance included in Attachment "A".

City Council Action:

BACKGROUND:

The San Diego Regional Water Quality Control Board (RWQCB) adopted new NPDES Permit requirements on January 24, 2007, Order No. 2007-0001, which increased the requirements for the City's regulation of urban runoff discharges. All of the Cities in San Diego County, including the City of Del Mar are listed in the Order as Copermittees and are required to update and implement a program of stormwater management that is even more rigorous then previously adopted. The permit requirements are very proscriptive and do not offer much flexibility for local interpretation.

ANALYSIS:

The major changes to the existing Ordinance include new and updated definitions to be in compliance with the new permit. Additional Best Management Practices (BMPs) and requirements for residential development are added, including stormwater treatment requirements for some projects. The definitions have been expanded to include new terminology such as Low Impact Development (LID), a design approach that requires minimizing hardscape and increasing pervious area in all development; establishment of new criteria for priority projects that are linked to Water Quality Sensitive Areas (WQSA), and requiring water quality treatment for priority projects with long term operation and maintenance requirements.

Another major change to this Ordinance is that under the Permit non-stormwater discharges need to be evaluated and verified not to cause or contribute pollutants to the receiving waters (beaches, creeks, lagoons). As a result of this assessment, it has been determined that discharges from landscape irrigation, irrigation water, and lawn watering should be considered a source of pollutants, but more importantly, the excessive flows that they can generate in the Municipal Separate Storm Sewer System (MS4) increase the possibility of moving pollutants through the MS4 and into the receiving waters that otherwise would have been stationary and subject to removal by regular MS4 maintenance and cleaning. Therefore, these irrigation and landscape water activities have been determined to have the possibility of discharging pollutants and are subject to BMPs. These BMPs are to be implemented by property owners and their contractors to control pollutants from these activities. The implementation of BMPs is considered significant in lieu of a prohibition of the discharge from these activities.

The Ordinance is supported by the Jurisdictional Urban Runoff Management Plan (JURMP) that is also being considered this evening. The staff report for that item includes an Executive Summary of the new permit and many more details regarding the new permit and the requirements for enforcement.

Attachment A – Draft Ordinance

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF DEL MAR, CALIFORNIA, REPEALING THE EXISTING CHAPTER 11.30 AND ADDING CHAPTER 11.30 IN THE MUNICIPAL CODE RELATING TO STORMWATER MANAGEMENT AND DISCHARGE CONTROL.

WHEREAS, the City of Del Mar intends to ensure the future health, safety, and general welfare of the citizens of the City of Del Mar by: 1) controlling non-stormwater discharges to the stormwater conveyance system; 2) eliminating discharges to the stormwater conveyance system from spills, dumping or disposal of materials other than stormwater; 3) reducing pollutants in stormwater discharges, including those pollutants taken up by stormwater as it flows over urban areas (Urban Runoff), to the maximum extent practicable; and 4) reducing pollutants in stormwater discharges in order to achieve applicable water quality objectives for surface waters in San Diego County; and

WHEREAS, the City of Del Mar intends to protect and enhance the water quality of its watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Clean Water Act and the San Diego Regional Water Quality Control Board Order Number No. R9-2007-0001 (NPDES Permit Number CAS0108758); and

WHEREAS, DMMC Chapter 11.30, Stormwater Management and Discharge Control, regulates and controls the discharge of non-stormwater discharges and quality of stormwater discharges.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF DEL MAR DOES HEREBY ORDAIN AS FOLLOWS:

SECTION ONE:

That the existing Chapter 11.30 of the Municipal Code is repealed and that a Chapter 11.30 is hereby added to the Del Mar Municipal Code to read as follows:

See Exhibit "A"

SECTION TWO:

This ordinance was introduced on _____

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SECTION THREE:

The City Clerk is directed to prepare and have published a summary of this ordinance no less than five days prior to the consideration of its adoption and again within 15 days following adoption indicating votes cast.

PASSED AND ADOPTED this 3rd day of March of 2008, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
David Druker, Mayor of the
City of Del Mar, California

ATTEST AND CERTIFICATION

I hereby certify that this is a true and correct copy of Ordinance No. _____, which has been published pursuant to law.

_____
Mercedes Martin, City Clerk
City of Del Mar, California

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ATTACHMENT "A" TO ORDINANCE NO. ____

Chapter 11.30
STORMWATER MANAGEMENT AND DISCHARGE CONTROL

11.30.010 Title. This Chapter shall be known as the "City of Del Mar Stormwater Management, and Discharge Control Ordinance." [Ord. 652, 739, 752]

11.30.020 Purposes and Intent. The purposes of this Ordinance are to protect the health, safety and general welfare of City of Del Mar residents; to protect water resources and to improve water quality; to cause the use of management practices by the City and its citizens that will reduce the adverse effects of polluted runoff discharges on waters of the state; to secure benefits from the use of stormwater as a resource; and to ensure the City is compliant with applicable state and federal law. The Ordinance seeks to promote these purposes by:

- Prohibiting polluted non-stormwater discharges to the stormwater conveyance system;
- Establishing minimum requirements for stormwater management, including source control requirements, to prevent and reduce pollution;
- Establishing requirements for development project low impact development site design, to reduce stormwater pollution and erosion;
- Establishing requirements for the management of stormwater flows from development projects, both to prevent erosion and to protect and enhance existing water-dependent habitats;
- Establishing standards for the use of off-site facilities for stormwater management to supplement on-site practices at new development sites; and
- Establishing notice procedures and standards for adjusting stormwater and non-stormwater management requirements where necessary.

11.30.030 Definitions. The following definitions shall be applicable when the following words or phrases are used hereafter in this Ordinance (including use in the City Stormwater Standards Manuals), whether or not these words or phrases are capitalized:

Accelerated Erosion: means erosion caused by development activities that exceeds the natural processes by which the surface of the land is worn away. Erosion includes the movement or loss of soil by the action of water, wind, or chemical action.

Authorized Enforcement Staff: means any City employee assigned to duties involving permits and other City approvals, inspections, and enforcement related to this Ordinance.

Authorized Enforcement Official: means the City Manager or her/his designee.

Best Management Practices: means schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to Stormwater, Receiving Waters, or the Stormwater Conveyance System. Best Management Practices also include but are not limited to treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage. Best Management Practices may include any type of pollution prevention and pollution control measure that can help to achieve compliance with this Ordinance.

BMPs: means Best Management Practices.

BMP Upgrade: means a modification, retrofit or improvement of a stormwater BMP designed for an existing development site or activity that previously had either no stormwater management BMPs in place or that relied on BMPs inadequate to meet the stormwater management requirements of the site or activity. Channel: means a natural or improved watercourse with a definite bed and banks that conducts continuously or intermittently flowing water.

City: means the City of Del Mar.

City Stormwater Standards Manuals: means the manuals described in section 11.30.040 G. of this Ordinance.

Commercial Discharger: means a Discharger who operates a Regulated Commercial Facility.

Constructed Wetland: means a vegetated area that has been deliberately designed and constructed as a BMP to provide or enhance habitat, to provide water quality benefits, or to moderate water flow rates or velocities, that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

County: means the County of San Diego.

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Detention: means the temporary storage of storm runoff in a manner that controls peak discharge rates and provides some gravity settling of pollutants.

Detention Facility: means a detention basin or alternative structure designed for the purpose of temporary storage of stream flow or surface runoff and gradual release of stored water at controlled rates.

Developer: means a person who seeks or receives permits for or who undertakes land development activities.

Development Project Proponent: means Developer.

Discharge: when used as a verb, means to allow pollutants to directly or indirectly enter stormwater, or to allow stormwater or non-stormwater to directly or indirectly enter the Stormwater Conveyance System or Receiving Waters, from an activity or operations that one owns or operates. When used as a noun, "Discharge" means the pollutants, stormwater and/or non-stormwater that are discharged.

Discharger: means any person or entity engaged in activities or operations or owning facilities, which will or may result in pollutants entering stormwater, the Stormwater Conveyance System, or Receiving Waters; and the owners of real property on which such activities, operations or facilities are located; provided however that a local government or public authority is not a discharger as to activities conducted by others in public rights of way.

Discharges Directly To: means that stormwater or non-stormwater enters

Receiving Waters from a facility or activity, without mixing with any stormwater or non-stormwater from another facility or activity prior to entering such Receiving Waters.

Drainage Easement: means a legal right granted by a landowner to a grantee allowing the use of private land for stormwater management purposes.

Dry Season: means May 1 through September 30 of each year.

Environmentally Sensitive Area: means areas that include but are not limited to all Impaired Water Bodies per Clean Water Act Section 303(d), areas designated as Areas of Special Biological Significance or with the RARE beneficial use by the SWRCB in the Water Quality Control Plan for the San Diego Basin (1994 and amendments), National Wildlife Refuges, and areas designated as

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preserves for species-protection purposes by the State of California or a local government.

Erosion and Sediment Control Plan: means a Stormwater Management Plan that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.

ESA: means Environmentally Sensitive Area

Forecast Rain Event: means a forecast rain event of greater than 1/10th of an inch with an equal or greater than 50% probability by the National Weather Services or comparable weather forecasting services.

Household Hazardous Waste: means a household hazardous material that no longer has a use and is discarded or intended to be discarded. The term includes but is not limited to paint and paint-related materials; yard and garden treatment products (i.e. fertilizers, herbicides); household cleaners; used oil; Vehicle fluids, batteries and oil filters; pesticides; and household batteries.

Hydrologic Soil Group: means the classification system for soil erodability set out in "Soil Survey - San Diego Area, California" (December 1973), issued by the U.S. Department of Agriculture Soil Conservation Service and U.S. Forest Service. (In this system soils are categorized into four runoff potential groups. The groups range from "A" soils, which have high permeability and little runoff production, to "D" soils, which have low permeability rates and produce much more runoff.)

Illegal Connection: means a pipe, facility, or other device connected to the Stormwater Conveyance System or Receiving Waters, which has not been reviewed and authorized by the City; or a permitted/authorized pipe, facility, or other device, which conveys Illegal Discharges.

Illegal Discharge: means any discharge into Stormwater, the Stormwater Conveyance System, or Receiving Waters that is prohibited by this Ordinance. This includes but is not limited to discharges of non-stormwater that are not exempt discharges listed in Section 11.30.060, any discharge from an Illegal Connection, and any discharge that contains additional pollutants due to the absence of a required BMP or the failure of a BMP unless it qualifies as an Upset. Discharges that require a City/County permit or an RWQCB permit that has not been issued or has not been acknowledged by the Discharger to be applicable are Illegal Discharges. Discharges regulated under an applicable RWQCB or City/County permit or SWPPP are Illegal Discharges for purposes of

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this Ordinance unless compliance with all applicable permit and SWPPP conditions is maintained. [Ord. 752]

Impaired Water Body: means a water body that is listed by the SWRCB as impaired by a particular pollutant or pollutants, pursuant to section 303(d) of the Federal Clean Water Act. "303(d) listed water body" has the same meaning.

Impervious Cover or Impervious Surface: means constructed or modified surfaces that cannot effectively infiltrate rainfall. The term includes but is not limited to building rooftops, pavement, sidewalks, and driveways.

Impervious Surface Area: means the ground area covered or sheltered by an impervious surface, measured in plan view (i.e., as if from directly above). For example, the "impervious surface area" for a pitched roof is equal to the ground area it shelters, rather than the surface area of the roof itself.

Industrial Activity: means manufacturing, processing, or raw materials storage at a commercial, industrial or municipal facility. The term includes, but is not limited to, industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials; manufactured products, waste material, or by-product creation or storage; material handling; refuse storage or disposal; the application or disposal of process wastewaters; storage and maintenance of material handling equipment; treatment, storage or disposal of residuals; outdoor shipping and receiving; activities in manufacturing buildings; storage of raw materials and intermediate and finished products; and areas where significant industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product. This includes activities of the 22nd District Agricultural Association.

Industrial Discharger: means a Discharger who operates a Regulated Industrial Facility.

Industrial Stormwater Permit: means the State General Industrial Stormwater Permit.

Infiltration: means the process of percolating stormwater or non-stormwater into the subsoil.

Infiltration BMPs or Infiltration Facility: means any structural treatment BMP designed primarily to percolate water into the

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subsurface, such as an infiltration trench or infiltration basin. An infiltration facility may include filtering prior to or during infiltration. BMPs that infiltrate some water but which are designed primarily to retain water or to treat water, such as retention basins, constructed wetlands, or filtering swales are not infiltration facilities.

Jurisdictional Urban Runoff Management Program: means the detailed plans and procedures developed and implemented by the City and Dischargers for activities and areas associated with development planning, construction, residential, commercial, industrial, municipal components; education, public participation, program effectiveness assessment, and fiscal analysis of the programs; and the illegal discharge detection and elimination program.

JURMP: means Jurisdictional Urban Runoff Management Program.

Jurisdictional Wetland: means an area that is naturally inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation. This includes but is not limited to areas previously designated by the City as wetlands. Constructed wetlands are not jurisdictional wetlands.

Land Development Activity: means any activity or proposed activity that requires any of the permits or approvals listed in section 11.30.040 F. of this Ordinance.

Land Disturbance Activity: means any activity that moves soils or substantially alters the pre-existing vegetated or man-made cover of any land. This includes, but is not limited to, grading, digging, cutting, scraping, stockpiling or excavating of soil: placement of fill materials: paving, pavement removal, exterior construction: substantial removal of vegetation where soils are disturbed including but not limited to removal by clearing or grubbing: or any activity which bares soil or rock or involves streambed alterations or the diversion or piping of any watercourse. Land Disturbance Activity does not include routine maintenance to maintain original line and grade, hydraulic capacity, or the original purpose of the facility, nor does it include emergency construction activities (i.e., land disturbances) required to protect public health and safety.

Land Owner: means the holder of legal title to the land, and other persons or entities that exercise control over a land development project pursuant to rights granted in a purchase agreement, joint venture agreement, development agreement, or long term lease.

Maintenance [of a BMP]: means periodic action taken to maintain the

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as-designed performance of a BMP, and includes but is not limited to operation of the BMPs as specified by the engineer, manufacturer or architect, repairs to the BMP as necessary, and replacement of the BMP by an equally effective or more effective BMP at the end of its useful life.

Maximum Extent Practicable: is the technologically-based standard for Best Management Practices (BMPs). When BMPs are required to meet this standard, the BMPs must be the most effective set of BMPs that is still practicable. A BMP is effective if it prevents, reduces or removes the pollutants that would otherwise be present in runoff due to human activity. A BMP is practicable if it complies with other regulations as well as stormwater regulations; is compatible with the area's land use, character, facilities, and activities; is technically feasible (considering area soil, geography, water resources, and other resources available); is economically feasible; and provides benefits that are reasonable in relation to costs.

MEP: means Maximum Extent Practicable.

Mobile Business: means any Regulated Commercial Business providing services at the client's premises (residential, municipal, commercial or industrial). Mobile businesses include, but are not limited to, activities providing commercial repair, maintenance, cleaning, manufacturing, food preparation or painting or any other activity determined by the City to have the potential to result in the discharge of non-stormwater or pollutants to stormwater.

Municipal Facility: means a facility owned or operated by the City that is used for a governmental purpose. Facilities on municipally owned land that are leased or rented to others to generate municipal revenues are not Municipal Facilities. (The commercial or industrial lessees of such facilities may, however, be subject to this Ordinance as Commercial Dischargers or Industrial Dischargers.)

NPDES Permit: means a National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency, the SWRCB, or the RWQCB.

NPDES Permit No. CAS 0108758: means RWQCB Order No. 2007-0001, NPDES Permit No. CAS 0108758, "Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District, and the San Diego County Regional Airport Authority."

Nuisance: as define the Porter-Cologne Water Quality Control Act means "anything which meets all of the following requirements: 1) Is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. 2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. 3) Occurs during, or as a result of, the treatment or disposal of wastes."

Off-Site BMP: means a stormwater management measure located outside the subject property boundary of a facility or outside the boundary described in the permit application for a land development activity.

On-Site BMP: means a stormwater management measure located within the subject property boundary or a facility, or inside the boundary described in the permit application for a land development activity.

Performance Standard: means a requirement under this Ordinance that specifies a result that must be achieved (e.g., "minimize impervious surface area" or "do not impair receiving water quality") without specifying the means that must be used to achieve that result. (This Ordinance applies performance standards only to certain land development and redevelopment projects that require discretionary City/County permits; those permits will typically include enforceable project-specific requirements intended to achieve the result required by the performance standard.)

Pollutant: means any agent introduced to stormwater or non-stormwater through human activity that may cause or contribute to the degradation of water quality such that public health, the environment, or beneficial uses of waters may be affected. The term may include but is not limited to dredged spoil, rock, sand, or silt (excluding sediment, silt, or substances in quantities which would enter Stormwater from a natural undeveloped watershed); solid waste, sewage, garbage, or medical waste; wrecked or discarded equipment; radioactive materials; industrial waste; fecal coliform, fecal streptococcus, and enterococcus bacteria and other pathogens that pose a threat to human health; volatile organic carbon, surfactants, oil and grease, petroleum hydrocarbons, total organic carbon, lead, copper, chromium, cadmium, silver, nickel, zinc, cyanides, phenols, and biocides; and any contaminant which can significantly degrade the quality of Receiving Waters by altering pH, total suspended or settleable solids, biochemical oxygen demand, chemical oxygen demand, nutrients, or temperature.

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Primary Pollutant of Concern: means any Pollutant, if that pollutant may be discharged from a priority development project or redevelopment project, and is also a basis for a listing of the receiving water for the project as impaired pursuant to Section 303(d) of the federal Clean Water Act. [Ord. 752]

Priority Development Project: means a development project that falls within any of the following categories: [Ord. 752]

(1) *Housing subdivisions of 10 or more dwelling units.* This category includes single-family homes, multi-family homes, condominiums, and apartments.

(2) *Commercial developments greater than 1 acre.* This category is defined as any development on private land that is not for heavy industrial or residential uses where the land area for development is greater than 1 acre. The category includes, but is not limited to: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; commercial airfields; and other light industrial facilities.

(3) *Developments of heavy industry greater than one acre.* This category includes, but is not limited to, manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).

(4) *Automotive repair shops.* This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

(5) *Restaurants.* This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for the structural treatment BMP, numeric sizing criteria, and hydromodification requirements.

(6) *All hillside development greater than 5,000 square feet.* This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.

(7) *Water Quality Sensitive Areas: All development and*

redevelopment located within or directly adjacent to or discharging directly to an water quality sensitive area (where discharges from the development or redevelopment will enter receiving waters within the water quality sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the water quality sensitive area. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

(8) *Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.* Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

(9) *Street, roads, highways, and freeways.* This category includes construction of any paved surface which is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. [Ord. 752]

(10) *Retail Gasoline Outlets (RGOs).* This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

(11) *Redevelopment projects.* Projects that create, add or replace at least 5,000 square feet of impervious surfaces on an already developed site that falls under the project categories or locations listed above (in (1) through (10)) where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in the City's SUSMP applies only to the addition, and not to the entire development. Where redevelopment results in an increase of more than fifty percent of the impervious surfaces of a previously existing development, the numeric sizing criteria applies to the entire development. Where a new Development Project feature, such as a parking lot, falls into a Priority Development Project Category, the entire project footprint is subject to SUSMP requirements.

Rainy Season: means, from October 1 through April 30. [Ord. 752]

Receiving Waters means surface bodies of water, which directly or indirectly receive discharges from urban runoff conveyance systems,

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including naturally occurring wetlands, streams (perennial, intermittent, and ephemeral (exhibiting bed, bank, and ordinary high water mark)), creeks, rivers, reservoirs, lakes, lagoons, estuaries, harbors, bays and the Pacific Ocean. The City shall determine the definition for wetlands and the limits thereof for the purposes of this definition, which shall be as protective as the Federal definition utilized by the United States Army Corps of Engineers and the United States Environmental Protection Agency. Constructed wetlands are not considered wetlands under this definition, unless the wetlands were constructed as mitigation for habitat loss. Other constructed BMPs are not considered receiving waters under this definition, unless the BMP was originally constructed in receiving waters. [Ord. 754]

Redevelopment: means the creation, addition, and or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bikelane on existing roads; and routine replacement of damaged pavement, such as pothole repair.

Regulated Commercial Facility: means all non-residential facilities engaged in business or commerce, whether for profit or not-for-profit, or publicly or privately owned, including Mobile Businesses; plus residences used for commercial repair, maintenance, cleaning, manufacturing, food preparation or painting activity if that activity or any other activity has been determined by the City to have the potential to result in the discharge of non-stormwater or the discharge of pollutants to the stormwater conveyance system. It does not include Regulated Industrial Facilities and Municipal Facilities.

Regulated Commercial Business: means any Regulated Commercial Facility.

Regulated Industrial Facility: means any facility subject to the State General Industrial Stormwater Permit; any other facility primarily engaged in manufacturing, processing, storage or handling of raw materials, processed bulk materials, or refuse; and any other facility with a total outdoor uncovered area of more than two (2) acres that is used for an Industrial Activity. Municipal Facilities are not Regulated Industrial Facilities, unless they are

subject to the State General Industrial Stormwater Permit.

Residential Discharger: means, for an occupied residence, the occupants; and for a vacant residence, the owner and the manager of the residence.

RWQCB: means the California Regional Water Quality Control Board for the San Diego Region.

Secondary Pollutant of Concern: means any of the following Pollutants, discharged from a priority development project or redevelopment project that is not a primary pollutant of concern for that project. [Ord. 752]

Standard Urban Stormwater Mitigation Plan: means the SUSMP. [Ord. 752]

State General Construction Stormwater Permit: means NPDES Permit No. CAS000002, Waste Discharge Requirements for Discharges of Stormwater Associated with Construction Activities, and any amendments thereto.

State General Industrial Stormwater Permit: means NPDES Permit No.99-08-DWQ, Waste Discharge Requirements for Discharges of Stormwater Associated with Industrial Activities Excluding Construction Activities, and any amendments thereto.

Stop Work Order: means an order issued which requires that specifically identified activity or all activity on a site be halted.

Stormwater: means surface runoff and drainage associated with storm events.

Stormwater Conveyance System: means private and public drainage facilities other than sanitary sewers within the City by which urban run-off may be conveyed to Receiving Waters, and includes but is not limited to roads, streets, constructed channels, aqueducts, storm drains, pipes, street gutters, inlets to storm drains or pipes, or catch basins.

Stormwater Management: means the use of structural or non-structural BMPs that are designed to reduce urban run-off pollutant loads, discharge volumes, and/or peak discharge flow rates or velocities. When applied to the City or another municipality, stormwater management also includes planning and programmatic measures.

Stormwater Management Plan: means a plan, submitted on a City form or in a City-specific format in connection with a development

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permit application for a City/County permit or other City/County approval, identifying the measures that will be used for stormwater and non-stormwater management during the permitted activity.

Stormwater Pollution Prevention Plan: means a document (other than a Stormwater Management Plan), which meets the requirements for a Stormwater Pollution Prevention Plan (SWPPP) set out in the State General Construction Stormwater Permit or State General Industrial Stormwater Permit. A SWPPP submitted to the City must describe the BMPs to be implemented and other steps to be taken by the Discharger to meet the requirements of this Ordinance.

Structural BMP: means a BMP that relies on either a physical condition (other than an entirely natural and undisturbed condition), or on a constructed or installed device to reduce or prevent pollutants in stormwater discharges and authorized non-stormwater discharges. Constructed or enhanced BMPs that depend on natural materials and processes (e.g., constructed drainage swales or buffers, or constructed wetlands), and that require periodic maintenance to function as designed, are Structural BMPs.

Structural Post-Construction BMP: means a structural BMP (other than a temporary construction-related BMP) put in place in connection with a land development or redevelopment project to prevent or reduce contamination in stormwater or Receiving Waters, or to prevent or reduce erosion and/or pollutant discharges downstream from the project.

Structural Treatment BMPs: means a structural post construction BMP that treats or filters stormwater to remove pollutants, or that infiltrates stormwater to soils. [Ord. 752]

SUSMP: means the Standard Urban Stormwater Mitigation Plan for Land Development Projects and Public Improvement Projects. [Ord. 752]

SWPPP: means Stormwater Pollution Prevention Plan.

SWRCB: means the State Water Resources Control Board.

Tributary To an Impaired Water Body: a facility or activity is tributary to an impaired water body if urban runoff from that facility or activity enters (1) the stormwater conveyance system at a place and in a manner that will carry pollutants for which that water body is impaired in that discharge to the impaired water; (2) a flowing stream that will carry pollutants for which that water body is impaired in that discharge to the impaired water; or (3) an ephemeral stream that reaches the impaired water during storm events and that will carry pollutants for which that water body is impaired from the facility or activity to the impaired water body

during such storm events.

Upset: means an exceptional incident in which there is unintentional and temporary noncompliance with technology based effluent limitations because of factors beyond the reasonable control of the discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. [Ord. 752]

Urban Runoff: means all flows in a stormwater conveyance system in the City other than point source discharges in violation of a site-specific NPDES permit. Urban run-off includes but is not limited to stormwater, exempt non-stormwater discharges, and illicit discharges.

Vehicle: means any automobile, car, truck, bus, motor home or other self-propelled vehicle used or suited to use for on-road transportation: and any similar vehicle modified for off-road use; motorized equipment (cement mixers, compressors, etc.); and un-motorized equipment (trailers, campers, etc.)

Water Main: means a potable or recycled water delivery line greater than or equal to four (4) inches in diameter.

Watercourse: means a permanent or intermittent stream or other body of water, either natural or improved, which gathers or carries surface water.

Water Quality Sensitive Area: means the areas located within or discharging directly to, or Tributary To an ESAs (including open space, bluff/slope/canyon(s), and Floodway and Lagoon Habitat) that may be subject to additional BMP or other water quality protection measures to protect beneficial uses and comply with water quality standards. Development Projects, commercial and industrial dischargers located within WQSA are categorized as high priority because they pose a higher threat to water quality.

Water Quality Standards: are defined as the beneficial uses (e.g., swimming, fishing, municipal drinking water supply, etc.) of water and the water quality objectives adopted by the SWRCB or the United States Environmental Protection Agency to protect those uses.

Waters of the United States: means water subject to the regulatory jurisdiction of the United States under the Federal Clean Water Act and applicable case law. (In general, this includes "navigable" waters, waters tributary to "navigable" waters, and adjacent wetlands.)

11.30.040 General Provisions.

A. Responsibility for Administration. This Ordinance shall be administered for the City of Del Mar by its Authorized Enforcement Officials.

B. Effective Date. This Ordinance shall take effect on XXXXX XX, 2008.

C. Construction and Application. Interpretation of the meanings of parts of this Ordinance shall assure consistency with the purpose and intent of this Ordinance. This includes but is not limited to consistency with the requirements of NPDES Permit No. CAS108758. This Ordinance is not intended to interfere with, abrogate or annul any other ordinance, rule or regulation, statute, or other provision of law. The requirements of this Ordinance should be considered minimum requirements, and where any provision of this Ordinance imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall take precedence.

D. Recycled Water. This Ordinance is not intended to prohibit or prevent the use of recycled water, or the discharge of recycled water after use. This Ordinance is intended to require the use of BMPs for such uses and discharges as necessary to protect human health and the environment.

E. Severability and Validity. If any section of this Ordinance is declared invalid by a court of law, the remaining sections shall remain valid.

F. City/County Permits and Approvals.

(1) Discretionary Permits. An application for any of the following discretionary permits or approvals shall be accompanied by plans demonstrating how the requirements of this Ordinance will be met, and the permit or approval shall not be approved unless the decision maker determines that the application complies with the requirements of this Ordinance: [Ord. 752]

a. Demolition Permit
b. Agricultural Exemption
c. Final Map Modification
d. Grading Plan (including Modification or Renewal)
e. Improvement Plan (including Modification)
f. Landscape Plan
g. Conditional Use Permit (including Modification or Minor Deviation)

h. Design Review Permit (including Modification, Minor Deviation, or Extension)
i. Land Conservation Permit
j. Parcel Map Modification
k. Reclamation Plan
l. Site Plan (including Amendment)
m. Solid Waste Facility Permit
n. Tentative Map (including Resolution Amendment or Time Extension)
o. Tentative Parcel Map
p. Variance
q. Watercourse Permit
r. Coastal Development Permit
s. Encroachment Permit - Discretionary

(2) Ministerial Permits. An application for any of the following ministerial permits or approvals shall be accompanied by plans demonstrating how the specifically applicable requirements, if any, set out in corresponding sections of the City Stormwater Standards Manuals will be met, and the permit or approval shall not be approved unless the decision maker determines that the application complies with those requirements.

a. Building Permit
b. Encroachment Permit - Ministerial
c. On Site Wastewater System Permit
d. Underground Tank Permit
e. Well Permit

G. City Stormwater Standards Manuals. The City adopts Stormwater Standards Manuals to standardize the process and requirements of compliance methods. Stormwater Standards Manuals are part of the City's JURMP. Authorized Enforcement Officials may provide additional flexibility using the Guidance Documents authorized in subsection 11.30.040 H. below. The SUSMP requirements shall be incorporated into the Stormwater Manuals of the City of Del Mar. [Ord. 752]

H. Guidance Documents. Any Authorized Enforcement Official may prepare, circulate for public comment, disseminate and maintain guidance documents addressing the use of pollution prevention practices and BMPs for specific activities or facilities, and the elimination of illicit connections, and illegal disposal to the Stormwater Conveyance System or Waters of the United States. Guidance Documents may be included or reference in the City JURMP. Guidance Documents may include the County of San Diego Low Impact Development Handbook, the California Stormwater Quality Association BMP handbooks, the County of San Diego's Project Clean Water

Toolbox (of BMPs), and other comparable resources.

These guidance documents may set out additional compliance alternatives that, in specified circumstances, can provide the same environmental protection that is afforded by the BMPs required by this Ordinance or specified in the City Stormwater Standards Manuals.

These guidance documents may also identify practices that have been determined by the Authorized Enforcement Official to be additional BMPs that may be implemented for Land Disturbance Activities and Land Development Activities to prevent or control pollution to the Maximum Extent Practicable (MEP). These additional BMPs shall become mandatory for affected Dischargers after being issued through an Order pursuant to subsection 11.30.040 I. below. Authorized Enforcement Officials and Authorized Enforcement Staff may also take these guidance documents into account when determining whether any practices used by a Discharger, or proposed in a grading plan, a Stormwater Pollution Prevention Plan (SWPPP), Stormwater Management Plan, an enforcement settlement offer, or any other submittal to the City, are BMPs that will prevent or control pollution to the MEP. These case-specific discretionary decisions may involve circumstances that were not anticipated when general guidance documents were prepared. Therefore, these guidance documents do not confer rights on Dischargers in these circumstances and do not constrain the discretion of Authorized Enforcement Officials or Authorized Enforcement Staff. Where appropriate, and provided the same protection is provided to the environment, Authorized Enforcement Officials and Authorized Enforcement Staff may depart from these guidance documents when making case-specific decisions authorized by this Ordinance.

I. Significant Sources of Pollutants. Authorized Enforcement Officials shall identify Discharges and categories of facilities and activities that are a significant source of contaminants to Waters of the United States, despite compliance with this Ordinance. If any such contamination problem is identified by the Authorized Enforcement Official or by Authorized Enforcement staff the Dischargers shall be Ordered by the Authorized Enforcement Official or by Authorized Enforcement Staff to install, implement and maintain additional BMPs to prevent or reduce contamination in stormwater and non-stormwater to the MEP. Any such Order shall specify a reasonable date by which those BMPs must be put in place. A failure to install, implement, or maintains additional BMPs as required by any such Order is a violation of this Ordinance.

J. Determining Whether a Discharge is "Tributary To" an Impaired Water Body. Areas within which facilities and sources will be presumed to be tributary to an impaired water body are identified by the City. The presumption that a discharge is

tributary to an impaired water body can be overcome for a particular discharge based on specific facts and analysis presented by a Discharger. In making a site-specific determination as to whether a discharge is tributary to an impaired water body, consideration may be given to the amount of water and pollutant discharged; to whether the pollutant for which the water body is impaired is a suspended or dissolved pollutant; to whether the pollutant is volatile or degradable; and to whether the pollutant is substantially removed during transport by any natural or man-made features or BMPs (sinks, infiltration areas, ponds or impoundments, vegetated swales or wetlands, media filtration devices, etc.) located between the site and the impaired water body. Any such analysis must consider common mechanisms for pollutant mobilization, remobilization, and transport over time. Any such analysis and determination shall be disclosed for public review and comment to the extent required by CEQA or by City procedures for permit issuance.

K. Collection and Use of Stormwater. An Authorized Enforcement Official may modify any requirement imposed by this Ordinance to allow the on-site collection and use of stormwater, or the collection of stormwater for delivery to and use at City-designated sites, provided the modified requirements are enforceable and provide equivalent environmental protection.

11.30.050 Discharge Prohibitions.

A. Illegal Discharges. The discharge of Pollutants directly or indirectly into the Stormwater Conveyance System or Receiving Waters in non-stormwater is prohibited, except as exempted in Section 11.30.060 of this Ordinance. The discharge of Pollutants directly or indirectly into the Stormwater Conveyance System or Receiving Waters in stormwater is prohibited, unless the applicable requirements of this Ordinance have been met.

B. Illegal Connection. The establishment of Illegal Connections is prohibited. The use of Illegal Connections is prohibited, even if the connection was established pursuant to a valid City/County permit and was legal at the time it was constructed.

C. Litter, Dumps, and Stockpiles. Throwing, depositing, leaving, abandoning, maintaining or keeping materials or wastes on public or private lands in a manner and place where they may result in an Illegal Discharge is prohibited unless written authorization is provided by the City.

D. Emergency Flares. The non-emergency use of flares is prohibited unless written authorization is provided by the City.

11.30.060 Discharges Exempted from Discharge Prohibitions

A. Categorically Allowed Discharges. The following categories of non-stormwater discharges are exempt from discharge prohibitions established by this Ordinance and are not subject to section 11.30.070. Dischargers must, however, comply with any Order issued pursuant to subsection 11.30.040 I. of this Ordinance; and must install, implement and maintain the specifically applicable minimum BMPs, if any, set out in the City Stormwater Standards Manuals:

- discharges from potable water sources not subject to NPDES Permit No. CAG679001
- air conditioning condensation;
- flows from emergency fire fighting activities;
- springs;
- water line flushing.
- diverted stream flows (provided required permits are obtained);
- flows from riparian habitats and wetlands;
- foundation drains
- individual residential washing of vehicles on private property;
- rising ground water;
- swimming pool and spa discharges (if dechlorinated to less than one PPM chlorine);
- uncontaminated ground water infiltration [defined in 40 CFR 35.2005(20)] to stormwater conveyance system;
- uncontaminated pumped ground water;
- water from crawl space pumps; and
- water from footing drains.

B. Exemptions to Protect Public Health and Safety. Discharges determined by any Authorized Enforcement Official or by Authorized Enforcement Staff to be necessary to protect public health and safety are exempt from discharge prohibitions established by this Ordinance, provided any conditions on such discharges imposed by

the Authorized Enforcement Official or Authorized Enforcement Staff are satisfied. In emergency circumstances, the determination of an Authorized Enforcement Official or Authorized Enforcement Staff that a discharge is necessary may initially be oral but must be promptly confirmed in writing by an Authorized Enforcement Official or by Authorized Enforcement Staff. In non-emergency situations, a prior written determination is required to exempt a discharge.

C. On-site wastewater systems. Discharges to the subsurface from permitted properly functioning on-site wastewater systems are not prohibited by this Ordinance.

D. Exemptions Not Absolute. Any discharge category described in subsection 11.30.060 A. above that is a significant source of pollutant to waters of the United States shall be prohibited from entering the stormwater conveyance system, or shall be subjected to a requirement to implement additional BMPs to reduce pollutants in that discharge to the MEP and as described in the Stormwater Standards Manuals. Such prohibitions shall be effective on a schedule specified by an Authorized Enforcement Official in a written notice to the Discharger. That schedule may take into account the nature and severity of any effects caused by the discharge; and the time required to design, engineer, fund, procure, construct and make appropriate BMPs operational.

11.30.070 Best Management Practice Requirements and General Requirements of All Dischargers.

A. Applicable Requirements. All Dischargers in the City must comply with the generally applicable prohibitions and requirements in sections 11.30.010 through 11.30.070 of this Ordinance, and must also comply with any other parts of this Ordinance that are applicable to the type of facility or activity owned or operated by that Discharger.

B. Minimum Best Management Practices for All Dischargers. All dischargers in the City must install, implement and maintain the minimum BMPs outlined in the City's Stormwater Standard Manuals. General categories of minimum BMPs include:

(1) Soil Erosion. Prior to a forecast rain event, Dischargers shall install BMPs to prevent erosion, and significant accumulations of eroded soils from slopes, previously disturbed by clearing or grading, to prevent sediment from entering the Stormwater Conveyance System or Receiving Waters.

(2) Pollution Prevention. Dischargers shall implement those stormwater pollution prevention practices that are generally recognized in that Discharger's industry or business as being

effective and economically feasible.

(3) Prevention of Illegal Discharges. Illicit connections must be eliminated (even if the connection was established pursuant to a valid permit and was legal at the time it was constructed), and illegal discharge practices eliminated.

(4) Slopes. Completed slopes that are more than five feet in height, more than 250 square feet in total area, and steeper than 3:1 (run-to-rise) that have been disturbed at any time by clearing, grading, or landscaping, shall be protected from erosion immediately following completion of the slope, and continuously thereafter.

(5) Storage of Materials and Wastes. All materials and wastes with the potential to pollute urban runoff shall be stored in a manner that either prevents contact with rainfall and stormwater, or the contaminated runoff contained for proper and legal treatment and disposal.

(6) Use of Materials. All materials with the potential to pollute urban run-off (including but not limited to cleaning and maintenance products used outdoors, fertilizers, pesticides and herbicides, etc.) shall be used in accordance with label directions. No such product may be disposed of or rinsed into Receiving Waters or the Stormwater Conveyance System.

C. Inspection, Maintenance, Repair and Upgrading of BMPs. BMPs at manned facilities must be inspected by the Discharger before forecast rain events and when safe and feasible during and after a rain event. BMPs at unmanned facilities must be inspected by the Discharger at least once during the rainy season and at least once between each rainy season. These BMPs must be maintained so that they continue to function as designed. BMPs that fail must be repaired as soon as it is safe to do so. If the failure of a BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances.

D. Stormwater Pollution Prevention Plan. An Authorized Enforcement Official may require a Commercial, Industrial or Land Disturbance Activities Discharger to prepare and submit a SWPPP for approval by that official if (1) the Discharger does not come into compliance with this Ordinance after one or more warnings or other enforcement action, because BMPs are inadequate or are not being adequately maintained; or (2) the facility or activity at issue is a significant source of contaminants to the Stormwater Conveyance System or Receiving Waters despite compliance with this Ordinance. Any Discharger required to submit and to obtain approval of a SWPPP

should install, implement and maintain the BMPs specified in the approved SWPPP.

The SWPPP shall identify the BMPs that will be used by the Discharger to prevent or control pollution of stormwater to the MEP. If the facility is an industrial facility, the SWPPP submitted to the City shall at a minimum meet the requirements of the State General Industrial Stormwater Permit. If the activity at issue is a construction or land disturbance activity, the SWPPP submitted to the City shall at a minimum meet the requirements of the State General Construction Stormwater Permit.

Whenever submission of a SWPPP is required pursuant to this Ordinance, an Authorized Enforcement Official or Authorized Enforcement Staff may take existing City guidance documents into account when determining whether the BMPs proposed in the SWPPP will prevent or control pollution to the required level of MEP.

E. Notification of Spills, Releases and Illegal Discharges. Spills, releases, and illegal discharges of Pollutants to Receiving Waters or to the Stormwater Conveyance System shall be reported by the Discharger as required by all applicable state and federal laws. In addition, any such spills, releases and illegal discharges with the potential to endanger health, safety or the environment shall be reported to the City within 24 hours after discovery of the spill, release or discharge. If safe to do so, necessary actions shall be taken to contain and minimize the spill, release or illegal discharge.

F. Sampling, Testing, Monitoring, and Reporting. Commercial, Industrial or Land Disturbance Activities Dischargers shall perform the sampling, testing, monitoring and reporting required by this Ordinance. In addition, an Authorized Enforcement Official or Authorized Enforcement Staff may order a Discharger to conduct testing or monitoring and to report the results to the City if (1) the Authorized Enforcement Official determines that testing or monitoring is needed to determine whether BMPs are effectively preventing or reducing pollution in stormwater to the MEP, or to determine whether the facility is a significant source of contaminants to Receiving Waters; or (2) the Authorized Enforcement Official or Authorized Enforcement Staff determines that testing or monitoring is needed to assess the impacts of an illegal discharge on health, safety or the environment; or (3) an Illegal Discharge has not been eliminated after written notice by an Authorized Enforcement Official or Authorized Enforcement Staff; or (4) repeated violations have been documented by written notices from Authorized Enforcement Officials or Authorized Enforcement Staff; or (5) the RWQCB requires the City to provide any information related to the Discharger's activities.

Testing and monitoring ordered pursuant to this subsection may include the following:

(1) Visual monitoring of dry weather flows, wet weather erosion, and/or BMPs;

(2) Visual monitoring of premises for spills or discharges;

(3) Laboratory analyses of stormwater or non-stormwater discharges for Pollutants;

(4) Background or baseline monitoring or analysis; and

(5) Monitoring of Receiving Waters or sediments that may be affected by Pollutant discharges by the Discharger (or by a group of Dischargers including the Discharger).

The Authorized Enforcement Official or Authorized Enforcement Staff may direct the manner in which the results of required testing and monitoring are reported, and may determine when required sampling, testing or monitoring may be discontinued.

G. Mitigation. All Illegal Discharges must be mitigated within a reasonable period of time to correct or compensate for all damage to the environment caused by the illegal discharge. The Authorized Enforcement Official or Authorized Enforcement Staff, who issued notice to the Discharger that a discharge was illegal, or Authorized Enforcement Staff designated by that official, shall determine whether mitigation measures proposed or completed by the discharger meet this standard. The Authorized Enforcement Official or Authorized Enforcement Staff shall require the Discharger to submit a mitigation plan and schedule by a specified date prior to taking action, and to submit a summary of completed mitigation by a specified date.

H. Access for Inspections. All dischargers shall provide access to authorized enforcement staff, upon reasonable notice, for inspection of facilities and discharges subject to this Ordinance. [Ord. 752]

11.30.080 Additional Minimum Best Management Practice Requirements for Residential Activities and Facilities

A. Applicable Requirements. The requirements in this section apply to all Residential Dischargers and any Regulated Commercial Business conducting residential activities on behalf of a Residential Discharger. All Residential Dischargers conducting activities must install, implement and maintain the BMPs identified in Section 11.30.070 B. for all Dischargers, and at least the

additional minimum BMPs specified in the City's Stormwater Standards Manuals for the category of activities conducted by that Discharger including but not limited to:

(1) Vehicle maintenance;
(2) Vehicle washing;
(3) irrigation practices and management;
(4) irrigation system testing;
(5) landscape maintenance;
(6) fertilizer application;
(7) pesticide application;
(8) pest waste disposal;
(9) power washing;
(10) septic system maintenance;
(11) sanitary sewer system maintenance;
(12) minor home maintenance, repair and upgrades.

11.30.090 Additional Minimum Best Management Practice Requirements for Commercial Activities and Facilities

A. Priorities and Requirements. Regulated Commercial Facilities are classified in this section as High Priority, and additional requirements are imposed on those facilities by this section based on those classifications. All commercial Dischargers must install, implement and maintain at least the additional minimum BMPs, if any, specified in this section or in the City Stormwater Standards Manuals for the priority classification and category of activity or facility owned or operated by that Discharger. All Regulated Commercial Facilities shall review their facilities, activities, operations and procedures at least annually to detect and eliminate illicit connections and illegal discharges. Corrective training shall be provided as needed (and documented in training records) whenever an illegal disposal practice is discovered.

B. High Priority Commercial Facilities Identified. As required by NPDES Permit No. CAS 0108758, facilities in the City having any of the following characteristics are High Priority Commercial Facilities:

(1) The facility is a Regulated Commercial Facilities primarily engaged in any of the following commercial activities:

- Airplane mechanical repair, maintenance, fueling, or cleaning;
- Vehicle parking lots and storage facilities;

- Vehicle body repair or painting;
- Vehicle repair, maintenance, fueling, or cleaning;
- Botanical or zoological gardens and exhibits;
- Cement mixing or cutting;
- Cemeteries;
- Eating or drinking establishments, including food markets;
- Golf courses, parks and other recreational areas/facilities;
- Landscaping;
- Marinas;
- Masonry;
- Mobile Vehicle washing;
- Mobile carpet, drape or furniture cleaning;
- Nurseries and greenhouses operations;
- Painting and coating;
- Pest control services;
- Pool and fountain cleaning;
- Portable sanitary services;
- Retail or wholesale fueling;
- Building material retailers and storage;
- Animal facilities or services; or
- Power washing services.

(2) The facility is a Regulated Commercial Facility that has outdoor Industrial Areas totaling two (2) acres or more or an outdoor parking lot for 100 or more vehicles; and stormwater or runoff from the facility may adversely affect impaired

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waters or waters within an ESA.

(3) The facility is a Regulated Commercial Facility and has been notified in writing by an Authorized Enforcement Official or Authorized Enforcement Staff that it is a High Priority Commercial Facility. Such designations shall take effect 90 days after mailing or service of this notice. These designations shall be made where the facility discharges a pollutant load in stormwater or runoff that causes or contributes to the violation of water quality standards.

C. Additional Minimum Best Management Practices for All Regulated Commercial Facilities. All Regulated Commercial Facilities shall install, implement and maintain the BMPs specified in the City Stormwater Standards Manuals in the following areas or for these activities:

- Employee training, including attendance logs;
- Stormwater pollution prevention plans;
- Storm drain tileage and signing;
- Pollution prevention;
- Materials and waste management loading and storage;
- Vehicles and equipment storage and operations;
- Building and Outdoor areas, including power washing and cleaning.

11.30.100 Additional Minimum Best Management Practice Requirements for Industrial Activities and Facilities

A. Priorities and Requirements. Regulated Industrial Facilities are classified in this section as High Priority, and additional requirements are imposed on those facilities by this section based on those classifications. All Industrial Dischargers must install, implement and maintain at least the additional minimum BMPs, if any, specified in this section or in the City Stormwater Standards Manuals for the priority classification and category of activity or facility owned or operated by that Discharger. All Regulated Industrial Facilities shall review their facilities, activities, operations and procedures at least annually to detect and eliminate illicit connections and illegal discharges. Corrective training shall be provided as needed (and documented in training records) whenever an illegal disposal practice is

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discovered.

B. High Priority Industrial Facilities. Regulated Industrial Facilities that have any of the characteristics listed below are High Priority Industrial Facilities:

(1) The facility is subject to the State General Industrial Stormwater Permit, taking into account all of the provisions of that permit.
(2) The facility is a Regulated Industrial Facility and urban runoff from the facility is Tributary To or discharges directly to an Impaired Water Body, and the facility generates a pollutant for which that water body is impaired.
(3) The facility is a Regulated Industrial Facility and is located within or adjacent to (i.e., within 200 ft. of), or discharges directly to, a WQSA.
(4) The facility is subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).
(5) The facility was notified in writing by an Authorized Enforcement Official or Authorized Enforcement Staff that it has been designated a High Priority Industrial Facility. Such designations shall take effect 90 days after mailing or service of notice. These designations shall be made where the facility discharges a pollutant load in stormwater or runoff that causes or contributes to the violation of water quality standards.

C. Additional Minimum BMPs and Other Additional Requirements for High Priority Industrial Facilities.

(1) Notice of Intent. High Priority Industrial Dischargers required to comply with the State Industrial General Stormwater Permit shall maintain on site and make available for inspection on request by the City the state-issued Waste Discharge Identification Number (WDID) for the facility, and a copy of the Notice of Intent (NOI) filed with the SWRCB pursuant to comply with that permit. The Discharger shall submit the WDID and a copy of that NOI to the City by mail if directed to do so by an Authorized Enforcement Official or Authorized Enforcement Staff.

(2) Stormwater Pollution Prevention Plan. Dischargers required to prepare a SWPPP under the State General Industrial Stormwater Permit must prepare the Plan, implement the Plan and maintain it at the site readily available for review. If a High Priority Industrial Facility is not required to prepare a state SWPPP, the facility shall prepare a SWPPP, submit that SWPPP for approval or modification and approval, implement the SWPPP, and maintain it on site. Failure to comply with an

applicable state-required or City-required SWPPP is a violation of this Ordinance.

(3) Pollution Prevention Practices. High Priority Industrial Facilities shall consider and where determined to be appropriate by the facility shall implement the following measures to prevent the pollution of stormwater and runoff:

- The use of smaller quantities of toxic materials or substitution of less toxic materials;
- Changes to production processes to reduce waste;
- Decreases in waste water flows;
- Recycling of wastes as part of the production process;
- Segregation of wastes, and
- Treatment of wastes on site to decrease volume and/or toxicity.

(4) Non-Structural BMPs. High Priority Industrial Facilities shall incorporate into the SWPPP, and install implement and maintain, the following non-structural BMPs for the specified activities or areas. The implementation of these BMPs shall be consistent with specifications, if any, contained in the City Stormwater Standards Manuals.

- Material handling and storage
- Non-hazardous and hazardous waste handling and recycling;
- Employee training programs;
- Good housekeeping;
- Equipment and building preventive maintenance;
- Self inspection; and
- Spill response planning and prevention.

(5) BMPs for Specific Activities. High Priority Industrial Facilities shall incorporate into the SWPPP, and install implement and maintain BMPs as specified in the City Stormwater Standards Manuals for any commercial activities conducted at the facility (as identified in section 11.30.090 C.), and for areas at the facility where industrial activities

are conducted. Industrial areas or activities include but are not limited to the following:

- Raw or processes materials bulk storage;
- Mixing, where there is the potential for release of a pollutant;
- Cutting, trimming or grinding in connection with a production process;
- Casting, forging, or forming;
- Hazardous materials storage (including tanks);
- Construction, painting and coating;
- Pesticide or other chemical products formulation or packaging;
- Process water pre-treatment;
- Solid waste storage;
- Wastewater treatment;
- Welding;
- Blasting;
- Chemical treatment; and
- Power washing.

(6) Additional Structural BMPs. High Priority Industrial Facilities shall incorporate into the SWPPP, and install, implement and maintain one or more of the additional structural BMPs listed below where practicable, if use of such BMPs would significantly reduce pollution in run-off from the facility. The Discharger shall determine in the first instance which of these BMPs to implement. However, an Authorized Enforcement Official or Authorized Enforcement Staff can order that additional BMPs be used at a particular facility pursuant to section 11.30.040 I.

- Overhead coverage of outdoor work areas or chemical storage;
- Retention ponds, basins, or surface impoundments that

confine stormwater to the site;

- Berms and concrete swales or channels that divert run-on and runoff away from contact with pollutant sources;

- Secondary containment structures; and

- Treatment controls, e.g., infiltration devices and oil/water separators, to reduce pollutants in stormwater or authorized non-stormwater discharges.

D. Monitoring at High Priority Industrial Facilities. Dischargers owning or operating High Priority Industrial Facilities required to conduct monitoring under the State Industrial General Stormwater Permit shall make records of such monitoring available for inspection, and submit a copy of such records to the City if directed to do so by an Authorized Enforcement Official or Authorized Enforcement Staff. State exceptions from monitoring requirements are also applicable to this requirement, and group monitoring approved by the State is also acceptable to the City. The City may direct that any required records be submitted in a specified electronic format. Dischargers owning or operating manned High Priority Industrial Facilities that are not required to conduct monitoring under the State Industrial General Stormwater Permit, and which would not qualify for an exemption from monitoring under the terms of that permit if the permit were applicable, must develop and implement a monitoring program that meets the following minimum criteria:

(1) Quantitative stormwater data must be obtained from two storm events in a year;

(2) These monitoring events must address:

- Pollutants listed in any effluent guidelines subcategories applicable to the facility;

- Pollutants with effluent limits established by an existing NPDES permit for that facility;

- Oil/grease or total organic carbon;

- pH;

- Total suspended solids;

- Specific conductance; and

- Toxic chemicals and other pollutants likely to be present

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in stormwater discharges.

This monitoring must be conducted under the conditions set out in the State Industrial General Stormwater Permit. The Discharger must retain records of such monitoring on site, make such records available for inspection, and submit a copy of such records to the City if directed to do so by an Authorized Enforcement Official or Authorized Enforcement Staff.

11.30.110 Additional Minimum Best Management Practice Requirements for Agricultural Operations.

A. Nursery and Greenhouse Operations. Pursuant to NPDES Permit No. CAS0108758, nursery and greenhouse operations are classified as commercial operations for purposes of this Ordinance, and are subject to all requirements for Regulated Commercial Facilities set out in this Ordinance.

B. Agricultural Grading and Clearing. The BMP requirements imposed by section 11.30.140 of this Ordinance for land disturbance activities apply to agricultural grading and clearing, whether or not a City/County-issued grading and clearing permit is required for that activity. Tilling or cultivating land exclusively for the purpose of growing plants or animals is not considered to be grading or clearing, provided all disturbed material remains on the same site, the tilling or cultivating will not block or divert any natural drainage way, and the land to be tilled or cultivated has been in agricultural production for at least one (1) of the preceding five (5) years.

C. Land Development Associated with Agricultural Operations. The requirements imposed by section 11.30.150 of this Ordinance for land development activities apply to such activities when they are associated with agricultural operations.

D. Manure Management.

(1) Where practicable, all runoff from areas where livestock, horses or other large animals are confined must be collected and managed in a manner that avoids a discharge to the stormwater conveyance system or receiving waters. Where this is not practicable, manure must be cleaned up at least twice weekly; and must either be composted, or stored prior to disposal.
(2) Areas used for storing or composting manure must be located, configured or managed to prevent runoff to receiving waters or the stormwater conveyance system.
(3) Animal wastes shall not be disposed to the stormwater conveyance system or receiving waters.

E. Other Agricultural Operations. Other agricultural operations are subject to the discharge prohibitions and other requirements set out in sections 11.30.010 through 11.30.070 of this Ordinance.

11.30.120 Additional Best Management Practice Requirements for Municipal Activities and Facilities.

A. Municipal Facilities. Municipal Facilities must meet the requirements set out in sections 11.30.010 through 11.30.070, and where applicable, sections 11.30.140 and 11.30.150 of this Ordinance. In addition, these facilities and activities must install, implement and maintain at least the additional minimum BMPs, if any, specified in section 11.30.090 or in the City Stormwater Standards Manuals, for municipal areas and activities at the municipal facility.

B. Public Improvement Projects. It is the policy of the City that public improvement projects in the City shall conform to the requirements this ordinance would impose on similar private development projects within the City. These projects must meet the requirements set out in this Ordinance, and must be designed and constructed in accordance with the SUSMP if applicable. [Ord. 752]

11.30.130 City Stormwater Standards Manuals.

A. City Stormwater Standards Manuals. All Dischargers who are required by this Ordinance to install, implement and maintain BMPs shall ensure that their selection of BMPs is consistent with the applicable specifications, if any, contained in the City Stormwater Standards Manual, for the category and priority of activity or facility owned or operated by that Discharger. All BMPs installed, implemented or maintained to meet the requirements of this Ordinance must conform to the applicable specifications, if any, set out in the City Stormwater Standards Manuals.

B. Existing Facilities. The City Stormwater Standards Manuals sets out minimum BMPs and other objective specifications for specific types and categories of existing facilities and activities. Where minimum BMPs and objective specification are specified, they are mandatory. Where no minimum BMPs have been specified in the City Stormwater Standards Manuals for a type and category of facility or activity, only the requirements set out in this Ordinance are applicable. Deviations from the minimum BMPs set out in the manuals are allowed in the following circumstances: (1) the City determines pursuant to subsection 11.30.040 I. of this Ordinance to issue an Order to require alternative BMPs, and provides the required written notice; or (2) a City Guidance

Document prepared pursuant to subsection 11.30.040 H. sets out additional compliance alternatives that may be used in lieu of the BMPs specified in the manuals, and the Discharger secures a permit enforceable by the City that requires the use of specific equally effective alternative BMPs.

C. Ministerial Land Development Projects. Requirements applicable to development projects requiring only the kinds of ministerial permits listed in subsection 11.30.040 F.(2) of this Ordinance are set out in separately identified sections of the manuals. Other requirements in the manuals are not applicable to these projects during the development process. However, some additional requirements will apply to completed projects when they become subject to this Ordinance as residential, commercial or industrial facilities.

D. Discretionary Land Development and Redevelopment Projects. The manuals set out minimum BMPs, other objective specifications, and Performance Standards for Land Development projects requiring one or more of discretionary permits listed in subsection 11.30.040 F.(1) of this Ordinance. The minimum BMPs and other objective specifications in the manuals are applicable to both ministerial and discretionary land development projects. The Performance Standards in the manuals are applicable to projects that require a discretionary City/County permit or approval, and shall be implemented through specific permit conditions. Development project proponents must determine whether their project low impact development design, source control and any required treatment control BMPs will meet these Performance Standards for their facility or activity, and must redesign their project and/or install, implement and maintain additional BMPs where needed to meet applicable Performance Standards.

11.30.140 Additional Requirements for Land Disturbance Activities.

A. Permit Issuance. No land owner or development project proponent shall receive any City/County grading, clearing, building or other land development permit required for Land Disturbance Activity without first meeting the requirements of this Ordinance with respect to the portion of the development project and the Land Disturbance Activity to which the permit at issue would apply.

B. Owners and Operators Both Responsible and Liable. Persons or entities performing Land Disturbance Activities (including but not limited to construction activities) in the City, and the owners of land on which Land Disturbance Activities are performed, are Dischargers for purposes of this Ordinance; provided however that a local government or public authority is not a Discharger as to

activities conducted by others in public rights of way.

C. Stormwater Management Plan. All applications to the City for a permit or approval associated with a Land Disturbance Activity must be accompanied by a Stormwater Management Plan, on a form or in a format specified by the City. The Stormwater Management Plan shall specify the manner in which the Discharger/Applicant will implement the BMPs required by this Ordinance for the activity at issue, including but not limited to the applicable BMPs required by subsection (d) below.

D. Additional Minimum BMPs for Land Disturbance Activities. Whether a City/County permit or approval is required or not, and whether a Stormwater Management Plan is required to be submitted or not, all Discharges engaged in Land Disturbance Activities shall implement General Site Management and Erosion and Sediment Control BMPs as detailed in the City Stormwater Standards Manuals. The BMPs shall be considered in the following additional areas if applicable to the project: [Ord. 752]

(1) General Site Management

- Pollution prevention, where appropriate.
- Development and implementation of a storm water management plan.
- Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction
- Minimization of exposure time of disturbed soil areas;
- Minimization of grading during the rainy season and correlation of grading with seasonal dry weather periods to the extent feasible.
- Limitation of grading to a maximum disturbed area as feasible for the site conditions and project phase before either temporary or permanent erosion controls are implemented to prevent storm water pollution. The City may temporarily increasing the size of disturbed soil areas by a set amount beyond the defined maximum, if the individual site implemented initial adequate BMPs prevent storm water pollution.
- Temporary stabilization and reseeding of disturbed soil areas as rapidly as feasible;
- Preservation of natural hydrologic features where feasible;
- Preservation of riparian buffers and corridors where feasible;
- Maintenance of all BMPs, until removed; and
- Retention, reduction, and proper management of all pollutant discharges on site to the MEP standard.

(2) Erosion and Sediment Controls

- Erosion prevention, as the primary BMP to keep sediment on site during construction;
- Sediment controls, as a supplement BMPs to erosion prevention;
- Slope stabilization on all inactive slopes during the rainy season and during rain events in the dry season;
- Slope stabilization on all active slopes during rain events regardless of the season; and
- Permanent revegetation or landscaping as early as feasible.

E. Advanced Treatment Control. The City will consider project Stormwater Management Plans using Advanced Treatment control for sediment as an alternative to the BMPs in subsections 11.30.140 D.(1) and 11.30.140 D.(2) if the applicant can demonstrate, to the satisfaction of the City, that the Advanced Treatment Control is at least as effective as General Site Management and Erosion and Sediment Controls.

F. Control to the Maximum Extent Practicable. All Dischargers engaged in Land Disturbance Activities must install, implement and maintain those additional BMPs, if any that are needed to prevent or reduce pollutant discharges in stormwater from land disturbance to the MEP.

G. Notice of Intent. Dischargers required to comply with the State Construction General Stormwater Permit shall maintain on site and make available for inspection on request by the City any state-issued Waste Discharge Identification Number (WDID) for the site, and a copy of the Notice of Intent (NOI) filed with the SWRCB pursuant to that permit.

H. Stormwater Pollution Prevention Plan. Dischargers required to prepare a SWPPP under the State General Construction Stormwater Permit must prepare the Plan, implement the Plan and maintain it at the site, readily available for review. Failure to comply with an applicable state-required SWPPP is a violation of this Ordinance.

I. Facility Monitoring. Dischargers required to conduct monitoring under the State Construction General Stormwater Permit must conduct such monitoring in conformance with requirements specified by the State, retain records of such monitoring on site, and make such records available for inspection by an Authorized Enforcement Official or Authorized Enforcement Staff.

11.30.150 Additional Planning, Design and Post-Construction Requirements for All Land Development and Redevelopment Projects.

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A. Application to Development and Redevelopment Projects. No landowner or development project proponent in the City shall receive any City/County permit or approval listed in subsection 11.30.040 F. of this Ordinance for Land Development Activity or redevelopment activity unless the project meets or will meet the requirements of this Ordinance. Post-Construction BMP requirements imposed by this section and by the City Stormwater Standards Manuals shall not apply to those physical aspects of the project that have been completed or substantially completed pursuant to and as required by a valid City/County permit or approval, at the time a complete application for a subsequent permit or approval is submitted.

B. Owners and Developers Responsible and Liable. Developers, Development Project Proponents, and Land Owners for land on which Development Activities are performed, are Dischargers for purposes of this Ordinance; provided however that a local government or public authority is not a Discharger as to activities conducted by others in public rights of way.

C. Post-construction Best Management Practices Required. Land development and redevelopment projects with the potential to add pollutants to stormwater or to affect the flow rate or velocity of stormwater runoff after construction is completed, shall be designed to include and shall implement post-construction BMPs to ensure that pollutants and runoff from the development will be reduced to the MEP, will not significantly degrade receiving water quality, and will not cause or contribute to an exceedance of receiving water quality standards.

D. Post-construction BMPs shall be selected, designed, and sized for approval by the City as part of the development permit application by submitting the plans or documents specified in the City SUSMP and using the City templates or forms.

E. Post-Construction Stormwater Management Plan. All applications to the City for a permit or approval associated with a land development or redevelopment activity must be accompanied by a Post-Construction Stormwater Management Plan on a form or in a format specified by the City. The plan shall specify the manner in which the Discharger/Applicant will implement the post-construction BMPs required by this Ordinance. The plan must address those aspects of the project that, at the time a complete application is submitted, are subject to further environmental review pursuant to section 15162 of the California Environmental Quality Act.

F. Stormwater Management Plan Review Deposit. Stormwater Management Plan Review, including SWPPPs, fees may be set, from time to time, by resolution of the City Council.

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G. Additional Minimum Post-Construction BMPs for Land Development Activities. Whether a City/County permit or approval is required or not, and whether a Post-Construction Stormwater Management Plan is required to be submitted or not, all Dischargers engaged in land development or redevelopment activities in the City shall implement post-construction BMPs in the following areas if applicable to the project:

(1) BMPs for permanent control of erosion from slopes. These BMPs can include structures to convey runoff safely from the tops of slopes, vegetation or alternative stabilization of all disturbed slopes, the use of natural drainage systems to the MEP, flow and velocity controls upstream of sites; and stabilization or permanent channel crossings, unless the crossing is not publicly accessible and is not frequently used.

(2) BMPs to control flows, velocity and erosion. These BMPs can include but are not limited to the use of energy dissipaters, such as riprap, at the outlets of storm drains, culverts, conduits, or lined channels that enter unlined channels to minimize erosion; installation of retention or equalization basins, or other measures. Flow control and downstream erosion protection measures shall prevent any significant increase in downstream erosion as a result of the new development, but shall not prevent flows needed to sustain downstream riparian habitats or wetlands.

(3) Pollution prevention and source control BMPs, to minimize the release of pollutants into Stormwater.

(4) Site design BMPs, such as impervious surface minimization; and appropriate use of buffer areas to protect natural water bodies.

(5) Site planning BMPs, such as siting and clustering of development to conserve natural areas to the extent practicable.

(6) The installation of storm drain tiles or concrete stamping, and appropriate signage to discourage illegal discharges.

(7) BMPs for trash storage and disposal and materials storage areas.

(8) Structural BMPs to treat and/or to infiltrate stormwater where a development project would otherwise cause or contribute to a violation of water quality standards in

receiving waters. Off-site structural BMPs may be used for treatment and infiltration necessary to meet water quality standards only if the conveyance of run-off to those facilities prior to treatment will not cause or contribute to an exceedance of water quality standards, or deprive wetlands or riparian habitats of needed flows. Offsite facilities shall not substitute for the use of any on-site source control BMPs required by the City Stormwater Standards Manuals.

(9) When an Infiltration BMPs is used, related BMPs set out in the City Stormwater Standards Manuals (including but not limited to siting constraints), to protect present uses of ground water, and future uses of that ground water as currently designated in the applicable RWQCB Basin Plan. (Discharges to infiltration BMPs may also require an RWQCB permit, and additional state requirements may also be applicable to these discharges.)

(10) Other applicable BMPs required by the City Stormwater Standards Manuals.

H. Control to the Maximum Extent Practicable. All Discharges engaged in Land Development and Redevelopment Activities shall install, implement and maintain post-construction BMPs as needed to prevent or reduce pollutant discharges in stormwater from land disturbance to the MEP.

I. Priority Development Projects. All priority development projects and redevelopment projects (including ministerial projects) shall be designed using the methods and including the studies and reviews described in the SUSMP. [Ord. 752]

11.30.160 Maintenance of BMPs

A. Existing Development. Residential, commercial, industrial, agricultural and municipal dischargers shall maintain the BMPs implemented to achieve and maintain compliance with this Ordinance.

B. New Development. The owners and occupants of lands on which structural post-construction BMPs have been installed to meet the requirements of this Ordinance shall ensure the maintenance of those BMPs, and shall themselves maintain those BMPs if other persons or entities who are also obliged to maintain those BMPs (by contract or covenant, or pursuant to this Ordinance) fail to do so.

C. Maintenance Obligations Assumed by Contract or Other Agreement. Primary responsibility to maintain a BMP may be transferred through a contract or other agreement. If that contract provides that it will be submitted to the City pursuant to this

Ordinance as part of a development permit application, and if that contract is so submitted, the person or entity accepting a maintenance obligation in such a contact or agreement will also be legally obliged to maintain that BMP pursuant to this Ordinance.

D. Obligation to Maintain BMPs Not Avoided by Contracts or Other Agreements. For purposes of City enforcement, no contract or other agreement imposing an obligation to maintain a BMP can relieve a person or entity of any obligation to maintain a BMP imposed by this Ordinance.

E. Disclosure of Maintenance Obligations: Any developer who transfers ownership of land on which a BMP is located or will be located, or who otherwise transfers ownership of a BMP or responsibility for the maintenance of a BMP to another person or entity, shall provide clear written notice of the maintenance obligations associated with that BMP to the new or additional responsible party prior to that transfer.

F. Maintenance Plans for Land Development Projects. The proponents of any land development project or redevelopment project that requires a discretionary City/County permit, shall provide to the City for review and approval prior to issuance of such permit, a plan for maintenance of all post-construction structural BMPs associated with the project. The plan shall specify the persons or entities responsible for maintenance activity, the persons or entities responsible for funding, schedules and procedures for inspection and maintenance of the BMPs, worker training requirements, and any other activities necessary to ensure BMP maintenance. The plan shall provide for servicing of all post-construction structural treatment -BMPs at least annually and prior to the start of the rainy season, and for the retention of inspection and maintenance records for at least three (3) years.

G. Access Easement/Agreement. The proponents of any land development project or redevelopment project that requires a discretionary City/County permit, shall provide to the City for review and approval prior to issuance of such permit an executed, permanent, easement onto the land on which post-construction structural BMPs will be located (and across other lands as necessary for access), to allow inspection, operation, and/or maintenance of those BMPs.

H. Assurance of Maintenance for Land Development Projects. The proponents of any land development or redevelopment project that requires a discretionary City/County permit, shall provide to the City prior to issuance of such permit, proof of a mechanism acceptable to the City which will ensure ongoing long-term maintenance of all structural post-construction BMPs associated

with the proposed project. The proponents shall be responsible for maintenance of BMPs unless and until an alternative mechanism for ensuring maintenance is accepted by the City and becomes effective.

11.30.170 Inspection/Sampling

A. Regulatory Inspections. Authorized Enforcement Officials and Authorized Enforcement Staff may inspect facilities, activities and residences subject to this Ordinance at reasonable times and in a reasonable manner to carry out the purposes of this Ordinance. If entry for a regulatory inspection is refused by the facility owner or operator, or by the occupant of a residence, an inspection warrant shall be obtained prior to inspection.

B. Access Easements. When any new structural BMP is installed on private property as part of a project that requires a City/County permit, in order to comply with this Ordinance, the property owner shall grant to the City an easement to enter the property at reasonable times and in a reasonable manner to ensure that the BMP is working properly. This includes the right to enter the property without prior notice once per year for routine inspections, to enter as needed for additional inspections when the City has a reasonable basis to believe that the BMP is not working properly, to enter for any needed follow-up inspections, and to enter when necessary for abatement of a nuisance or correction of a violation of this Ordinance.

C. Scope of Inspections. Inspections may include all actions necessary to determine whether any Illegal Discharges or Illegal Connections exist, whether the BMPs installed and implemented are adequate to comply with this Ordinance, whether those BMPs are being properly operated and maintained, and whether the facility or activity complies with the other requirements of this Ordinance. This may include but may not be limited to sampling, metering, visual inspections, and records review. Where samples are collected the owner or operator may request and receive split samples. Records, reports, analyses, or other information required under this Ordinance may be inspected and copied, and photographs taken to document a condition and/or a violation of this Ordinance.

11.30.180 Enforcement Authorized Enforcement Officials and Authorized Enforcement Staff may enforce this Ordinance and abate public nuisances as follows:

A. Administrative Authorities.

(1) Administrative Penalties. Administrative penalties may be imposed pursuant to Chapter 1, Division 8 of Title 1 of the County Code of Regulatory Ordinances (Sections 18.101 et

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seq.), hereby adopted by reference. Any later-enacted administrative penalty provision in the County Code shall also be applicable to this Ordinance, unless otherwise provided therein.

(2) Warning Notices. Written and/or verbal warning notices of a violation may be issued for any impending Violation or Violation of this Ordinance including any Illegal Discharges and/or remove Illegal Connections.

(3) Notices of Violation. Written and/or verbal notices of violation may be issued for any Violation of this Ordinance including any Illegal Discharges and/or remove Illegal Connections. Issuance of a written and/or verbal Notice of Violation may also be subject to Enforcement provisions in Sections 1.08.010 through 1.08.050, and Administrative Citations in Chapter 1.10.

(4) Cease and Desist Orders. Written and/or verbal orders may be issued to stop Illegal Discharges and/or remove Illegal Connections.

(5) Notice and Order to Clean, Test, or Abate. Written and/or verbal orders may be issued to perform activities listed in Section 11.30.070 where conditions warrant.

(6) Public Nuisance Abatement. Violations of this Ordinance are deemed a threat to public health, safety, and welfare; and are identified as a public nuisance. If actions ordered pursuant to this chapter are not performed, the Authorized Enforcement Official may abate any public nuisance. City costs for pollution detection and abatement, if not paid in full by the Discharger in addition to any other penalties, may be made a lien against the property in accordance with this procedure.

(7) Stop Work Orders. Whenever any work is being done contrary to the provisions of this Ordinance, or other laws implemented through enforcement of this Ordinance, an Authorized Enforcement Official may order the work stopped by notice in writing served on any person engaged in the doing or causing such work to be done, and any such person shall immediately stop such work until authorized by the Authorized Enforcement Official to proceed with the work.

(8) Permit Suspension or Revocation. Violations of this Ordinance may be grounds for permit and/or other City license suspension or revocation.

B. Judicial Authorities.

(1) Civil penalties and remedies. The Del Mar City Attorney is hereby authorized to file civil actions in Superior Court to enforce this Ordinance, seeking civil penalties and/or other remedies as provided in this section and in Section 11.30.200 of this Ordinance. There is no requirement that administrative enforcement procedures be pursued before such actions are filed.

(2) Injunctive Relief. Any violation of this Ordinance may be enforced by a judicial action for injunctive relief.

(3) Arrest or Issue Citations. The assistance of a peace officer may be enlisted to arrest violators as provided in California Penal Code, and/or a citation and notice to appear as prescribed in DMMC Chapter 1.08 and/or Title 3, Part 2 of the Penal Code, including Section 853.6 (or as amended) may be issued. There is no requirement that administrative enforcement authorities be used before such actions are filed. The immunities prescribed in Section 836.5 of the Penal Code are applicable to Authorized Enforcement Officials and Authorized Enforcement Staff acting in the course and scope of their employment pursuant to this Ordinance.

11.30.190 Other Acts and Omissions that are Violations In addition to the violations identified in sections 11.30.010 through 11.30.170 of this Ordinance, the following acts and omissions are violations of this Ordinance, whether committed by a Discharger or by another person or entity:

A. Causing, Permitting, Aiding, or Abetting Non-compliance. Causing, permitting, aiding, or abetting non-compliance with any part of this Ordinance constitutes a violation of this Ordinance.

B. Concealment, Misrepresentation and False Statements. Any falsification or misrepresentation made to the City concerning compliance with this Ordinance, including any misrepresentation in a voluntary disclosure, any submission of a report that omits required material facts without disclosing such omission, and any withholding of information required to be submitted by or pursuant to this Ordinance in order to delay City enforcement action, is a violation of this Ordinance. Concealing a violation of this Ordinance is a violation of this Ordinance.

C. Failure to Promptly Correct Non-compliance. Violations of this Ordinance must be corrected with the time period specified by an Authorized Enforcement Official or Authorized Enforcement Staff. Each day (or part thereof) in excess of that period during which action necessary to correct a violation is not initiated and

diligently pursued is a separate violation of this Ordinance.

D. City/County Permits and SWPPPs. Any failure to conform to an applicable stormwater pollution prevention plan (SWPPP) prepared pursuant to this Ordinance; any failure to comply with stormwater-related provisions of a City/County-issued grading permit or grading plan prepared to secure such a permit; and any failure to comply with stormwater-related provisions in any other City/County permit or approval, is also a violation of this Ordinance. For purposes of this Ordinance a permit provision or condition of approval is "stormwater-related" if compliance with the provision or condition would have the effect of preventing or reducing contamination of stormwater or of moderating run-off flows rates or velocities, whether or not the provision or condition was initially imposed to promote those outcomes.

11.30.200 Penalties

A. Administrative Penalties. Administrative penalties may be imposed pursuant to Code of Regulatory Ordinances, Division 8, title 1, sections 18.101 et seq., hereby adopted by reference. Any later-enacted administrative penalty provision in the County Code shall also be applicable to Ordinance, unless otherwise provided therein.

B. Misdemeanor Penalties. Non-compliance with any part of this Ordinance, other than section 11.30.080 (Residential Activities), constitutes a misdemeanor and may be enforced and punished as prescribed in the Penal Code and Government Code of the State of California.

C. Penalties For Infractions. Authorized Enforcement Officials and Authorized Enforcement Staff may charge any violation of this Ordinance as an infraction at their discretion. Infractions may be abated as a nuisance or enforced and punished as prescribed in the Penal Code and Government Code of the State of California.

D. For Civil Actions. In addition to other penalties and remedies permitted in this Ordinance, a violation of this Ordinance may result in civil actions. Except where a maximum monetary amount is specified, the following may also be awarded without monetary limitations in any civil action:

- Injunctive relief;
- Costs to investigate, inspect, monitor, survey, or litigate;
- Costs to place or remove soils or erosion control materials, costs to correct any violation, and costs to restore

environmental damage or to end any other adverse effects of a violation;

- Compensatory damages for losses to the City or any other plaintiff caused by violations; and/or Restitution to third parties for losses caused by violations; and

- Civil Penalties.

As part of a civil action filed by the City to enforce provisions of this Ordinance, a court may assess a maximum civil penalty of $2500 per violation of this Ordinance for each day during which any violation of any provision of this Ordinance is committed, continued, permitted or maintained by such person(s).

In determining the amount of any civil liability to be imposed pursuant to this Ordinance, the superior court shall take into consideration the nature, circumstances, extent, and gravity of the violation or violations, whether any discharge caused the violation is susceptible to cleanup or abatement, and, with respect to the violator, the ability to pay, the effect on ability to continue in business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic savings, if any resulting from the violation, an such other matters as justice may require.

Penalties and Remedies Not Exclusive. Penalties and remedies under this Article may be cumulative and in addition to other administrative, civil or criminal remedies.

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Appendix 2-C
List of Permit Applications/Development Projects Reviewed During FY2007/2008

JURMP Annual Report

Parcel #	St. #	Street Name	Project Name	Project #
		Administrative Design Review Permits opened between 7.1.07 and 6.30.08		
299-100-45	2150	Balboa Avenue	Daly	ADR-08-33
301-024-29	444	Hidden Pines Lane	Foster	ADR-08-32
299-220-42	340	Serpentine Drive	Walker	ADR-08-31
300-074-07	1217	Camino del Mar	Soul Shine	ADR-08-30
299-131-12	2020	Santa Fe Avenue	Padovani	ADR-08-29/DRB-05-42Mod
299-072-26	2124	San Dieguito Drive	James	ADR-08-28
299-141-01	221	10th Street	Dastin	ADR-08-27
299-220-68	1640	Stratford Way	Scheele	ADR-08-26
301-024-11	336	Ocean View Ave.	Blumenfeld	ADR-08-25
300-011-21	1333	Ocean Avenue	Tullie	ADR-08-24
299-220-11	1725	Grand Avenue	Bryne	ADR-08-23
299-220-25	1760	Seaview Avenue	Monsef	ADR-08-22
300-075-04;05	1231	Camino del Mar	J. Carl Shoes	ADR-08-21
300-271-06	766	Hoska Drive	Gilliland	ADR-08-20
300-060-10	1200	Oribia Road	Koll	ADR-08-19
300-072-12	155	13th Street	Childs	ADR-08-18
300-075-04	1229	Camino del Mar	Dexter's Deli	ADR-08-17
299-147-04	1838/1836	Ocean Front	Scripps/Mattson	ADR-08-16
300-181-14	156	7th Street	Emery	ADR-08-15
299-280-53	1524	Luneta Drive	Engel	ADR-08-14
300-143-38	650	Rimini Road	Dijkstra	ADR-08-13
300-410-03	1127	Cuchara Drive	Baum	ADR-08-12
300-174-16	147	9th Street	Oringher	ADR-08-11
300-231-06	742	Nob Avenue	Nelson	ADR-08-10
300-011-21	1333	Ocean Avenue	Tullie	ADR-08-09
301-033-37	454	W. Ocean View Avenue	Looney	ADR-08-08
300-012-17	1328	Camino del Mar	Blackwell	ADR-08-07
300-030-76	480	Carolina Road	Wheelock	ADR-08-06
299-146-05	1924	Ocean Front	Starkey	ADR-08-05
299-310-06-05	1562	Camino del Mar, #447	Bacha	ADR-08-04
299-260-29	1619	Forest Way	Jaffe	ADR-08-03
299-260-29	420	Avenida Primavera	Allred	ADR-08-02
299-141-15	212	19th Street	Spencer/Lehman	ADR-08-01
300-072-20	1246	Stratford Court	Hilliard	ADR-07-59
301-033-34	421	W. Ocean View Avenue	Eckmann	ADR-07-58
300-400-05	1141	Luneta Drive	Cox	ADR-07-57
301-024-05	404	Hidden Pines Lane	Phillips	ADR-07-56
301-022-04	156	Ocean View Ave.	Granucci	ADR-07-55
300-220-12	355	13th Street	Carson/Palmer	ADR-07-54
300-410-10	555	Amphitheatre Drive	Scipiene	ADR-07-53
300-321-36	111	4th Street	Flamm	ADR-07-52
300-181-15	154	7th Street	Papciak	ADR-07-51
301-023-10	470	Pine Needles Drive	Safley	ADR-07-50

300-222-07	343	9th Street	Ray/Barrigan	ADR-07-49
299-072-38	2127	Heather Lane	Shields	ADR-07-48
300-030-83	1431	Camino del Mar	DM Delphi LLC	ADR-07-47
300-020-16	325	14th Street		ADR-07-46
300-030-12	1455	Luneta Drive	Inbody	ADR-07-45
299-136-05	2034	Ocean Front	Callaway	ADR-07-44
300-181-15	152,154	7th Street	Papciak	ADR-07-43
300-033-20	345	El Amigo	Anderson	ADR-07-42
300-030-73	1425	Luneta Drive	Nakayama	ADR-07-41
299-261-08	548	Serpentine Drive	Gruber	ADR-07-40
299-092-09	207	24th Street	Abbot	ADR-07-39
300-333-05	335	El Amigo Road	Hall	ADR-07-38
300-144-05	1110	Crest Road	Levine	ADR-07-37
300-071-03	1344	Ocean Avenue	CCN Properties	DRB-04-54 Admin. Mod.
300-321-50	157	Stratford Court	Parise	ADR-07-36
300-242-05	1101	Klish Way	Kirkpatrick	ADR-07-35
300-071-11	118	13th Street	Rhodes	ADR-07-34
300-242-14	610	Amphitheatre Drive	Khabushani	ADR-07-33
300-251-01	505	Tewa Court	Miller	ADR-07-32
299-232-08	1762	Coast Boulevard	Del Mar Motel	ADR-07-31
300-251-25	610	Hoska Drive	Haines	ADR-07-30
300-331-03	319	La Amatista	LaQua	ADR-07-29
299-181-06	2080	Gatun Street	Zwass	ADR-07-07

Parcel #	**St. #**	**Street Name**	**Project Name**	**Project #**
		Design Review Board Permits opened between 7.1.07 and 6.30.08		
300-075-05	1217	Camino del Mar	Soul Shine	DRB-08-29 Sign
299-100-47,48	San Dieguito/Jimmy Durante		Del Mar Charette	DRB-08-28
299-173-11	420	Luzon Avenue	Mankwitz	DRB-08-27
300-075-04	1229	Camino del Mar	Dexter's Deli	DRB-08-26 Sign
300-181-05	143	8th Street	Bierman	DRB-08-25
299-071-06	2010	Jimmy Durante Blvd.	Turner & Assoc.	DRB-08-24
300-221-33	941	Camino del Mar	Del Mar Garden	DRB-08-23
300-091-17	100	11th Street	Tarkington	DRB-08-22
300-012-02	215	15th Street	Sbicca	DRB-08-21
300-181-07	157 & 159	8th Street	Deal	DRB-08-20
300-182-17	149	7th Street	DM 7th St. LLC	DRB-08-19
300-182-17	151	Sherrie Lane	DM 7th St. LLC	DRB-08-19
299-092-10	260	23rd Street	Buck	DRB-05-39 MOD
300-241-04	610	Kalamath Street	Zupan	DRB-06-05 MOD
301-320-09	227	Stratford Park Circle	Swartz	DRB-08-18
299-097-08	144	22nd Street	Smith	DRB-07-16 MOD
300-075-06	1201	Camino del Mar	Conkwright	DRB-08-17
301-024-19	264	Torrey Pines Terrace	Fried	DRB-08-16
300-252-07	641	Hoska Drive	Lasensky	DRB-08-15
300-040-36	1420	Crest Road	Valentine	DRB-08-14

300-020-06,07	1309	Camino del Mar	City of Del Mar	DRB-08-13
300-091-12	118	11th Street	Parker	DRB-08-12
300-012-12	1307	Stratford Court	Lutz	DRB-08-11
299-310-08	1540	Camino del Mar	Destination Resorts	DRB-08-10
300-011-21-01	1333	Ocean Avenue	Tullie	DRB-08-09
300-011-07	1339	Ocean Avenue	Fyfe	DRB-90-02 MOD II
299-134-03	2007	Santa Fe Avenue	Savage	DRB-08-08
299-134-02	2011-2013	Santa Fe Avenue	Oliphant	DRB-06-23 MOD
301-033-16	537	Torrey Pointe Road	Baker	DRB-08-07
301-021-02	116	Nob Avenue	Reid	DRB-08-06
300-400-05	1141	Luneta Drive	Cox	DRB-08-05
299-091-13	226	24th Street	Donner	DRB-08-04
300-242-05	1101	Klish Way	Kirkpatrick	DRB-08-03
299-280-43	478	Zuni Drive	Maple	DRB-08-02
299-136-08	2020	Ocean Front	Lindsey	DRB-08-01
300-011-06	1345/1355	Ocean Avenue	Harrington	DRB-07-27
300-144-05	1110	Crest Road	Levine	DRB-07-26
299-220-42	340	Serpentine	Walker	DRB-01-13 MOD
299-091-05	235	25th Street	Crouch	DRB-06-31 MOD
300-060-10	1420	Oribia Road	California Bluffs	DRB-07-25
299-141-03	1942	Santa Fe Avenue	Goldberg	DRB-07-24
300-321-59-04	526	Stratford Court, #D	Trainor	DRB-07-23
300-174-08	152	8th Street	Herbruck/Jenkens	DRB-07-22
300-072-16	1206	Stratford Court	LeBlanc	DRB-07-21
300-410-31	336	10th Street	Vint	DRB-07-20
299-091-12	236	24th Street	Fisher	DRB-07-19

Parcel #	**St. #**	**Street Name**	**Project Name**	**Project #**
		Administrative Design Review Permits approved between 7.1.07 and 6.30.08		
299-181-06	2080	Gatun Street	Zwass	ADR-07-07

Parcel #	**St. #**	**Street Name**	**Project Name**	**Project #**
		Design Review Board Permits approved between 7.1.07 and 6.30.08		
300-251-28	642	Hoska Drive	Kanetis	DRB-07-09
299-172-03	1955	Jimmy Durante Boulevard	Turner-Thomas Design Build	DRB-02-50 MOD
300-092-10	230	11th Street	Gross	DRB-07-08
299-097-08	144	22nd Street	Smith	DRB-07-16
300-232-37	431	8th Street	Welch	DRB-07-18
300-143-24	636	Rimini Road	Kelley	DRB-07-03
299-261-08	548	Serpentine Drive	Gruber	DRB-07-17
299-310-08	1540	Camino del Mar	Destination Resorts	DRB-07-14

Parcel #	St. #	Street Name	Project Name	Project #
		Active Construction Sites between the dates of 7.1.07 and 6.30.08		
301-033-13	415	Torrey Point Rd.	Klipstein	DRB-05-24 MOD
300-092-10	230	11th Street	Gross	DRB-07-08
299-065-15	155	27th Street	Moore	DRB-06-34
299-091-12	236	24th Street	Fisher	DRB-07-19
299-095-03	2410	Ocean Front	Richardson	DRB-06-15
299-062-09	264	26th Street	Holliday/Sohn	DRB-06-22
299-091-05	235	25th Street	Crouch	DRB-06-31
300-333-05	335	El Amigo Road	Hall	DRB-06-13
300-092-20	1105	Stratford Court	McGuire	DRB-04-13
300-263-05	963	Klish Way	Richards (Demich)	DRB-04-08
300-072-19	1236	Stratford Court	Chesnut	DRB-06-08
299-097-08	144	22nd Street	Smith	DRB-07-16
301-024-07	350	Hidden Pines Road	Schneider/Louie	DRB-04-52
300-331-03	335	La Amatista	Bakker	DRB-98-32 MOD
299-100-29	2132	Jimmy Durante Blvd.	Williams Vetrinary Clinic	DRB-01-04
300-091-20	147	12th Street	Costello	DRB-02-18
300-074-04	1210	Stratford Court	LaFlamme	DRB-07-10
299-021-07	2720	Ocean Front	Hagestad	DRB-04-45
299-092-10	260	23rd Street	Buck	DRB-05-39
299-220-42	340	Serpentine Drive	Walker	DRB-01-13
300-241-04	610	Kalamath Street	Zupan	DRB-06-05
300-143-21	730	Kalamath Street	Hoen	DRB-05-33
300-071-03	1344	Ocean Avenue	Nicholas	DRB-04-54
300-252-17	701	Hoska Drive	Engel	DRB-06-11
300-391-09	333	13th Street	Wegner	DRB-06-25
300-072-04	139-141	13th Street	Beach Village Villas (Batterkay)	DRB-06-29
300-500-05	535/537	Stratford Court	Pacifica Stratford Duplexes	DRB-05-27
300-500-04	545/547	Stratford Court	Pacifica Stratford Duplexes	DRB-05-28
300-500-03	555/557	Stratford Court	Pacifica Stratford Duplexes	DRB-05-29
300-500-02	605/607	Stratford Court	Pacifica Stratford Duplexes	DRB-05-30
300-500-01	615/617	Stratford Court	Pacifica Stratford Duplexes	DRB-05-31
299-260-63	420	Avenida Primavera	Davidson	DRB-03-19
300-181-03	123	8th Street	Jones	DRB-03-17
299-142-09	1905	Santa Fe	Begent	DRB-05-02
300-181-15	152	7th Street	Papciak	DRB-04-49
299-092-09	267	24th Street	Matthews	DRB-06-04
301-033-35	400	W. Oceanview Avenue	Countryman	DRB-05-19
300-321-36	111	4th Street	Flamm	DRB-05-06
300-222-14	445	9th Street	Grant	DRB-05-08
299-174-03	1928	Balboa	Del Mar Charrette	DRB-03-39

Parcel #	St. #	Street Name	Project Name	Project #
		Encroachment Permits between the dates of 7.1.07 and 6.30.08		
ROW		CDM & 4th Street	Next G Networks	EP-08-36
300-321-34	402	Stratford Court	Clayton Clarke	EP-08-35
ROW	2260	Jimmy Durante (Public Works)	Ninyon & Moore	EP-08-34
300-011-06	1345-1355	Ocean Ave.	Harrington	EP-08-33
300-020-20	386	13th Street	Hoar	EP-08-32
299-072-26	2124	San Dieguito Drive	James	EP-08-31
299-146-01	1948	Ocean Front	Rapid Plumbing/Lyon	EP-08-30
ROW	139	18th Street	Collins/Arrow Pipeline	EP-08-29
ROW	2260	Jimmy Durante	Quality Permits	EP-08-28
ROW	1246	Stratford Court	Hilliard	EP-08-27
ROW	1255	Luneta Drive	Oster	EP-08-26
300-500-01/05		Stratford Court	Pacifica Stratford	EP-08-25
299-095-03	2410	Ocean Front	Richardson	EP-08-24
ROW		Via de la Valle	Cox	EP-08-23
301-024-11	336	Ocean View	Blumenfeld	EP-08-22
300-030-04	1401	Camino del Mar	Kraft	EP-08-21
300-144-04	1122	Klish Way	Anderson	EP-08-20
300-241-04	610	Kalamath Drive	Zupan	EP-08-19
299-220-42	340	Serpentine Drive	Walker	EP-08-18
ROW	2000 Block	Santa Fe Ave.	Santa Fe Coalition for Better Circ	EP-08-17
299-290-30	467	Avenida Primavera	Calabro	EP-08-16
299-220-10	1648	Camino del Mar	McCracken	EP-08-15
299-200-65	690	Serpentine Drive	Neeley	EP-08-14
ROW	457	Avenida Primavera	Isabrook	EP-08-13
ROW	1540	Camino del Mar	L'Auberge	EP-08-12
299-260-63	420	Avenida Primavera	Allred	EP-08-11
ROW	1492	Crest Rd.	Hilliard	EP-08-10
ROW		4th & Camino del Mar; Nob A	Next G Networks	EP-08-09
300-410-32	342	10th Street	Maysent	EP-08-08
299-260-29	1619	Forest Way	Jaffe	EP-08-07
299-261-09	608	Serpentine Drive	Barrigan	EP-08-06
ROW	585	Van Dyke	Patterson	EP-08-05
299-260-30	1605	Forest Way	McDonnell	EP-08-04
300-263-09	980	Crest Rd.	Countryman	EP-08-03
299-261-09	608	Serpentine Drive	Barrigan	EP-08-02
ROW	5465	Luneta Drive	Oster	EP-08-01
300-070-20	1246	Stratford Court	Hilliard	EP-07-70
ROW	333	13th Street	Diamond Construction	EP-07-69
299-220-25	1760	Seaview Ave	Monsef	EP-07-68
ROW	1010	Crest Rd.	Chisari	EP-07-67
ROW	1540	Camino del Mar	L'Auberge	EP-07-66
ROW	1239	Luneta Drive	McCracken	EP-07-65
ROW	110	Border	California Boring	EP-07-64
299-021-07	2720	Ocean Front	Hagestad	EP-07-63
ROW	1140	Camino del Mar	Halper	EP-07-62

ROW	111 &115	4th Street	Hanley	EP-07-61
ROW		Crest Rd.	McCracken	EP-07-60
ROW	1619	Forest Way	Jaffe, Charles	EP-07-59
ROW		15th St. & Forest Way	McCracken	EP-07-58
ROW		13th Street & CDM	Project Design Consultants (NCTI	EP-07-57
300-092-22	220	11th Street	Arrow Pipeline Repair	EP-07-56
ROW		9th Street & Melanie	Blough	EP-07-55
299-072-34	2131	David Way	Dan Meacham	EP-07-54
ROW	641	Serpentine Drive	Rescue Rooter	EP-07-53
ROW	351	13th Street	Gad	EP-07-52
ROW	100 Block	4th Street	Vigil	EP-07-51
301-024-01	295	Ocean View	Bizzack	EP-07-50
ROW	235	25th Street	Crouch	EP-07-49
ROW	1344	Ocean Ave.	Nichols/CCN Properties	EP-07-48
300-011-13	1302	Camino del Mar	Davidson Communities	EP-07-47
299-092-09	267	24th Street	Abbott/SDGE	EP-07-46
300-263-05	963	Klish Way	Demich	EP-07-45
300-072-21	115	13th Street	Childs	EP-07-44
300-091-10	134	11th Street	Engebrits	EP-07-43
300-410-11	545	11th Street	Martin	EP-07-42

Parcel #	**St. #**	**Street Name**	**Project Name**	**Project #**
		Land Conservation Permits between the dates of 7.1.07 and 6.30.08		
299-100-47/48		San Dieguito & Jimmy Durante	Del Mar Charette	LC-08-08
299-173-11	420	Luzon	Mankwitz	LC-08-07
301-024-19	264	Torrey Pines Terrace	Fried	LC-08-06
300-252-07	641	Hoska Drive	Lasensky	LC-08-05
300-091-12	118	11th Street	Parker	LC-08-04
301-033-16	537	Torrey Pointe	Baker	LC-08-03
301-021-02	116	Nob Ave.	Wilson	LC-08-02
300-242-05	1101	Klish Way	Nelley/Kirkpatrick	LC-08-01
299-141-03	1942	Santa Fe	Goldberg	LC-07-09

Appendix 2-D
Example of Priority Development Project SUSMP Conditions Garden Del Mar Project

Standard Stormwater Quality Conditions of Approved for the Gardens Del Mar Project

E-10 *[Detailed Grading Plan]*
Prior to issuance of Building Permits, the applicant shall obtain a Grading Permit from the City of Del Mar. A grading plan shall be prepared in accordance with the latest edition of City of Del Mar's "Applicant's Guide to Procedures for a Grading Permit." The Grading Plan shall be prepared to the satisfaction of the City Engineer and shall: … (stormwater quality related conditions listed below):

E-10 L Depict the location of erosion control devices to be implemented in the event of rainfall;

E-10 M The methods for providing temporary erosion control during the construction phase of the project, complete with the inclusion of standard grading and erosion control notes on the plans;

E-10 S Include landscaping plans consistent with the approved Stormwater Management Plan with characteristics that maximize infiltration, provide retention, reduce irrigation and storm water run-off, use efficient irrigation, and minimize the use of fertilizers, herbicides and pesticides;

E-10 T Include plans showing source control BMPs in place with an accompanying certified letter noting the implementation plans for said BMPs;

E-10 U NA

E-10 V Provide evidence of coverage under the State of California's statewide General NPDES permit for Storm Water Discharges Associated with Construction Activities at all times;

E-10 W Ensure that the grading and other construction activities meet the provisions specified in the California RWQCB, San Diego Region, Order 2007-0001 NPDES No. CAS0108758 – Section D.2 and subsequent orders;

E-10 X Specify the manner in which the proposed water feature will be drained. The plan shall specify that water feature drainage will be collected and conveyed into public storm drain systems unless otherwise required or authorized by the Planning Director. The plan shall also include the following note: water feature discharge water shall be dechlorinated, free of debris or litter, and the type and content of chemical additives must be verified to determine any residual pollutants that may have a detrimental impact on water quality downstream or contribute to pollutant discharges prior to discharge to City rights-of-way"; All water systems shall be protected from backflow contamination and shall be subject to review and inspection by the PW Department's Cross Connection Specialist.

E-10Y The BMPs described in the project's approved Storm Water Mitigation Plan (SWMP) shall only be replaced with comparable BMPs as outlined in the City's Standard Urban Stormwater Mitigation Plan (SUSMP). Such changes must be approved by the Community Development/Planning and Engineering departments. Any deletion or significant modification to the approved SWMP must receive formal approval by either an Administrative Substantial Conformance issued by the Community Development Department and the Development Review Board chair or the project's final approving authority (Planning Commission/Development Review Board/City Council) at a public

hearing. The determination of whatever action is required for changes to a project's approved SWMP shall be made by the Community Development/Planning and Engineering departments. A completed operation and maintenance certification letter must be signed by the responsible party.

E-10Z Incorporate Low Impact Development BMP design features (landscaping, pervious concrete, porous asphalt, unit pavers, and granular materials) that are properly designed, constructed, and include drainage from impervious areas (rooftops, parking lots, sidewalks, walkways, patios, etc.) to provide infiltration and treatment based on the site's soil conditions, slope and other pertinent factors. The recommended owner's operation and maintenance specifications for each of the BMPs shall be signed by the owner or responsible parties and included with the submittal.

E-10AA Incorporate Low Impact Development BMP design features that minimize the impervious footprint and minimize connectivity between pervious surfaces of the project by conserving natural areas, vegetation and soil; constructing impervious areas (sidewalks, streets, parking lots) to the minimum widths necessary to provide for public safety and a walkable environment; minimize soil compaction; and minimize disturbances to natural drainages (e.g., natural swales, topographic depressions, etc.). The recommended owner's operation and maintenance specifications for each of the BMPs shall be signed by the owner or responsible parties and included with the submittal.

E-10AB Incorporate Source Control BMP requirements that minimize storm water pollutants of concern in urban runoff; include storm drain system stenciling or signage on public property, as appropriate; included properly designed outdoor material storage and trash areas; and include efficient irrigation systems. The recommended owner's operation and maintenance specifications for each of the BMPs shall be signed by the owner or responsible parties and included with the submittal.

E-17 *[Long Term Maintenance of Treatment Control BMP's for Priority Projects]*

Prior to issuance of Development Permit and for all high priority projects that include treatment Best Management Practices (BMPs), the applicant shall enter into a Stormwater Treatment Control BMP Inspection, Operation and Maintenance Agreement (Agreement) with the City obliging the project proponent to inspect operate, maintain or repair, and replace the stormwater treatment control BMPs identified in the project's approved Storm Water Mitigation Plan (SWMP), as detailed in the O&M Plan into perpetuity. The Agreement shall be approved by the City Attorney and shall be recorded at the County Recorder's Office prior to issuance of any building permit. Security in the form of cash (or certificate of deposit payable to the City) or an irrevocable, City-Standard Letter of Credit shall be required prior to issuance of a precise grading permit. The amount of the security shall be equal to 10 years of inspection, operation, and maintenance costs, as identified by the O&M Plan. The O&M cost estimate shall be prepared by a registered civil engineer and approved by the City Engineering department.

At a minimum, Agreements shall require training and outreach (of staff for businesses, and contractors for residences), inspection, operation, and maintenance of all BMPs on an annual basis and no later than the start of the rainy season. Verification of completion of

annual inspection and maintenance is due to the City by August 1st of each year. The project proponent or responsible party shall implement and maintain the O&M Plan to document all maintenance activities. Parties responsible for the O&M Plan shall retain records at the subject property for at least 5 years. These documents shall be made available to the City for inspection upon request at any time.

The Agreement shall include a copy of executed onsite and offsite access easements necessary for the inspection, operation and maintenance of BMPs that shall be binding on the land throughout the life of the project to the benefit of the party responsible for the BMPs, until such time that the stormwater BMP requiring access is replaced, satisfactory to the City Engineer and/or Public Works Director. The Agreement shall be an integral part of the SWMP and the O&M Plan approved by the City Engineer and/or Public Works Director.

E-19 [*Identification of receiving waters]*
Prior to the issuance of Development Permits, the applicant shall submit, for City review and approval, a report that identifies water quality impaired receiving water bodies (as listed by the State Water Resources Control Board on the 303(d) list), applicable water-quality objectives (Regional Water Quality Control Board (RWQCB)) and pollutants of concern, and estimates of post-construction discharge rates (with all BMPs in place) and explains why the projected pollutant loads will not cause a violation of the water quality objectives.

E-20 *[Treatment Control Best Management Practices (BMPs)]*
Prior to issuance of development permits, the applicant shall submit a Stormwater Mitigation Plan (SWMP) with a site plan and supporting reports, for City review and approval that includes a combination of low impact development, source control and treatment control BMPs as specified in the City's SUSMP. Treatment control includes:

E-20-A Control the post-development peak storm water run-off discharge rates and velocities to maintain or reduce pre-development downstream erosion;
E-20-B Conserve natural areas and include buffer zones;
E-20-C Minimize pollutants of concern from urban runoff through implementation of source control BMPs;
E-20-D Remove pollutants of concern from urban runoff through implementation of structural BMPs;
E-20-E Avoid directly connected impervious areas where feasible;
E-20-F Protect slopes and channels from eroding;
E-20-G Include storm drain stenciling and signage;
E-20-H Include properly designed outdoor material storage areas;
E-20-I Include properly designed trash storage areas; and
E-20-J Ensure that post-development runoff does not contain pollutant loads which have not been reduced to the maximum extent practicable.
E-20-K Comply with the City of Del Mar Standard Urban Stormwater Mitigation Plan (SUSMP), including submittal of a Stormwater Mitigation Plan (SWMP) describing the BMP selection criteria and sizing based on pollutant loadings for the project area. . The SWMP and the project design plans indicating all post-construction BMPs must be recorded with the County Recorder.
E-20-L Include a detailed Operations and Maintenance Plan (O&M Plan) for all treatment control BMPs, that includes at a minimum, the designated responsible parties to manage the storm water BMPs, employee training program and duties, operating schedule, maintenance frequency, routine

service schedule, specific maintenance activities, copies of any additional required permits; cost estimate for implementation of the O&M Plan.

The structural BMPs required herein shall conform with the City's SUSMP and be designed so as to filter or treat the volume or flow outlined in the numeric sizing criteria outlined below:

Volume
Volume based BMPs shall be designed to filter or treat the volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record; or
Flow
Flow based BMPs shall be designed to filter or treat the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event; or the maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity (for each hour of a storm event), as determine from the local historical rainfall record, multiplied by a factor of two.

E-21 *[BMP details]*
All post construction BMPs shall be shown in detail on the construction plans, be in conformance with the approved SWMP, and submitted to the City for review and approval.

E-22 *[SWPPP requirement]*
Prior to issuance of Development Permits, the applicant shall submit for City review and approval and implement a Storm Water Pollution Prevention Plan (SWPPP), per the latest Caltrans SWPPP Preparation Manual or equivalent as approved by the City Engineer, to manage storm water and non-storm water discharges from the site at all times. The SWPPP shall describe all BMPs to be implemented year round. Specific BMP implementation may be dependent upon wet or dry season operations. The SWPPP shall also emphasize that erosion prevention is the most important measure for keeping sediment on-site during construction.

E-23 *[Soil Stabilization]*
The applicant shall utilize sediment controls only as a supplement to erosion prevention for keeping sediment on-site during construction – NEVER as a single or primary method.

E-23-A The applicant shall clear and grade only the areas on the project site that are necessary for construction. These areas shall be clearly denoted on the plans and in the required SWPPP.

E-23-B The applicant shall minimize exposure time of disturbed soil areas.

E-23-C The applicant shall submit a schedule to the City for review and approval, with proposed dates, demonstrating the minimization of grading during the wet season and coinciding the grading with dry weather periods, permanent revegetation and landscaping as early as feasible, temporary stabilization and reseeding of disturbed soil areas as early as feasible.

E-23-D The applicant shall stabilize all slopes per City approved method.

E-23-E The applicant shall provide evidence of existing coverage under the State of California's statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities at all times.

E-27 *[Compliance with City of Del Mar JURMP]*
This project shall conform with City of Del Mar's Jurisdictional Urban Runoff Management Program (JURMP). In addition, the construction practices are subject to inspection, and must conform to the requirements set forth in Section 5, "Construction Component" of the JURMP.

Special (non standard) Conditions of Approval:

SC E-2 Prior to final plan approval, the applicant will be required to establish a clean water monitoring and reporting program to the satisfaction of the City Stormwater Manager. Sampling ports will be required at proposed storm drain connections to the satisfaction of the City Engineer and City Stormwater manager.

PW-4 The owners shall train and certify that maintenance firms who service water features contain a City Business License and are aware of the requirements of the City related to discharging water which shall be de-chlorinated, free of debris or litter, and the type and content of chemical additives must be verified to determine any residual pollutants that may have a detrimental impact on water quality downstream or contribute to pollutant discharges prior to discharge to City rights-of-way.

BMPs approved in project SWMP:

LID elements include: Utilization of Green Roofs and incorporation of landscape buffers to the MEP.

Source Control BMPs include: Owner, Tenant and Occupant education programs, stormwater quality guidelines, litter control guidelines, landscape maintenance guidelines and a spill contingency program shall be incorporated into the project CC&Rs. A BMP operation and maintenance certification program with annual reporting requirements will be required. Other source control BMPs include efficient irrigation systems, properly designed trash enclosure areas and storm drain system signage/stenciling.

Treatment Control BMPs:
Runoff from the site will be filtered and re-used for irrigation. Excess runoff will be processed through a clarifier to remove pollutants of concern prior to discharge into the City's MS4. In addition to the use of filtration devices, the project design will also utilize the proposed green roofs as bioretention facilities, and incorporate drain inserts and water quality inlets into the treatment train prior to discharging stormwater runoff from the site.

Section 3
Construction Component

3.1 Introduction

This section provides an overview to the City's efforts to comply with the Construction Component of its 2008 JURMP as required under the terms of the Municipal Permit.

3.2 Source Characterization

Construction sites in Del Mar are required to implement BMPs to control pollutants on-site and prevent their release to the MS4 and the environment. This section outlines the measures that the City includes in this program, in accordance with the Permit, to prevent pollution from being discharged from construction sites and provides confirmation that all construction sites were required to undergo the City's construction urban runoff approval process and meet the applicable construction requirements.

The City is required under the Permit to establish priority classifications for each construction site with regard to the potential threat that the site may have on the water quality of urban runoff. Section 5.2.1 of the 2008 JURMP defines the project priorities and describes the process used to perform the classification. No modifications in Section 5.2.1 of the 2008 JURMP have been recorded during this reporting period.

Section 5.2.3 of the 2008 JURMP provides a description of the steps taken to develop, and update monthly, a watershed-based inventory of all construction sites within the City's jurisdiction that are subject to storm water regulation and control. No modifications in Section 5.2.3 of the 2008 JURMP have been recorded during this reporting period. Appendix 3-A located at the end of this section provides confirmation that a regularly updated construction site inventory was developed, maintained, and managed. The City's inventory is fluid since construction project sites are constantly approved, cancelled (permits withdrawn by the applicant, denied by the City, expire, etc.), and completed.

In addition to the regular updates, staff continues to routinely patrol construction sites to "field truth" data received from the Planning and Building Departments, and annotate areas of surface disturbance that may, or may not be, permitted.

3.3 Updates to Ordinances and Approval Processes

The City is required by the Permit to review and update its grading ordinance as necessary for compliance with the Permit. Section 5.3 of 2008 JURMP provides a description of the modifications made to the City's construction-related regulations and provides updates to the grading ordinance and other applicable ordinances.

As indicated in Section 2.2.4, during this reporting period, City staff reviewed the applicable City ordinances and determined that revisions were needed in the City of Del Mar's Stormwater Management and Discharge Control Ordinance (DMMC Section 11.30) for consistency with the changes required by the new Permit. Because of the substantive changes required, and to make the ordinance easier to use by staff and the public, City staff proposed repealing DMMC

Chapter 11.30 in its entirety and introduced a new Chapter 11.30 on March 3, 2008. The Del Mar City Council accepted staff's recommendations. With the second reading on March 17, 2008, the new DMMC 11.30 went into effect, consistent with the City's JURMP and the requirements of the 2008 Permit.

No other modification to City Ordinances affecting construction activities were made during this reporting period, and no modifications in Section 5.3 of the 2008 JURMP have been recorded.

3.4 Best Management Practice Requirements

Section 5.4.1 of the 2008 JURMP provided a description of minimum BMPs that were implemented, or required to be implemented, including pollution prevention. No modifications in Section 5.4.1 of the 2008 JURMP have been recorded during this reporting period. This section provides confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.

3.5 Program Implementation

The 2008 JURMP Section 5.5 describes the steps taken by the City to implement the Construction Component of the JURMP. No modifications were made to Section 5.5 of the 2008 JURMP during this reporting period.

This section describes the steps that were taken by the City of Del Mar to require and verify the implementation of designated BMPs at all construction sites, including those reporting requirements outlined in Permit sections J.3.a.(3)(b) i and iv-xi). As required by the Permit and outlined in the 2008 JURMP, all permitted construction sites were required to undergo the City's construction urban runoff approval process and meet the applicable construction requirements; designated BMPs were required to be implemented for all construction sites.

As indicated in the JURMP, this information is tracked by the Clean Water Manager, and updated regularly via formal inspections. In addition to the formal inspection program, and as indicated previously, staff regularly patrols the City as part of other duties and activities to confirm inventory data and verify that perimeter BMPs are in place, and that appropriate controls are in place for deliveries and storage areas.

3.5.1 Maximum Disturbed Area for Erosion Controls

Section 5.4.3 of 2008 JURMP identifies one acre as the maximum disturbed area that the City allows to be graded before either temporary or permanent erosion controls are required. No modifications in Section 5.4.3 of the 2008 JURMP have been recorded during this reporting period. Although rarely applied in the small projects in Del Mar, the City confirms that the maximum disturbed area for grading was applied to applicable construction sites.

3.5.2 Advanced Treatment Methods

Section 5.4.4 of the 2008 JURMP identified and listed the construction site conditions that will require the use of advanced treatment methods. No modifications in Section 5.4.4 of the 2008 JURMP have been recorded during this reporting period.

During this reporting period, no construction site met the requirements necessitating advanced treatment methods, and as such, none were required nor tracked.

3.5.3 Inspection and Enforcement Measures for Construction Sites

This section describes the steps that were taken to require and verify the implementation of designated BMPs at all construction sites, and provides confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Section 5.5.5 of 2008 JURMP provided a description of several educational and compliance verification activities that are included as part of the City's inspections of construction sites and the general results of the inspections conducted on construction sites. No modifications in Section 5.5.5 of the 2008 JURMP have been recorded during this reporting period. This section

Construction Inspections

As required by the Permit and outlined in the 2008 JURMP, all permitted construction sites were required to undergo the City's construction urban runoff approval process, meet the applicable construction requirements, and implement designated BMPs.

As indicated in the JURMP, this information is tracked by the Department of Planning and Community Development, and updated regularly via both formal and informal inspections. Because of the small size of the community, staff has regular interaction with the applicants and contractors during the process and is able to do verify conditions when on routine patrol on a regular basis. In addition to the formal inspection program by staff, and as indicated above, the City regularly patrols sites in-route to other assignment and this allows staff to "field truth" data and verify that perimeter BMPs are in place, and that appropriate controls are in place for deliveries and storage areas.

The new Permit requirements went into effect on March 25, 2008. Since the defined rainy season only runs through March 31 of each year, the City of Del Mar's tracking system did not break down the information into the period of time (weeks) the site was active within the rainy season; the number of inspections conducted during the rainy season; the number of inspections conducted during the dry season; and the total number of inspections conducted for all sites.

Appendix 3-B contains a partial list of formal construction inspections conducted during the reporting period. During preparation of this report, some inspection forms were identified as deficient although staff performed the requisite inspections. The Clean Water Manager is working with staff on ensuring that all logging and documentation is in place. Although staff has been trained to perform inspections to address the JURMP guidelines, documentation of the inspections has become a priority of the City and was being stream lined at the end of the reporting period to better address the requirements of the new Permit. The improved tracking of inspections is being implemented in the current Fiscal Year and any updates to the process will be reporting in the next Annual Report.

Enforcement Measures for Construction Sites

This section provides the number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions that were being taken to achieve compliance. Section 5.5.6 of the 2008 JURMP provides a description of the general process for applying enforcement to construction sites for urban runoff related

violations. No modifications in Section 5.5.6 of the 2008 JURMP have been recorded during this reporting period.

Del Mar has implemented a policy of education first, with aggressive enforcement measures only being used when compliance is not achieved or requests are ignored. In general, contractors have been compliant with BMP requirements at their respective construction sites. In the majority of those instances where compliance has not been attained, a single verbal or written warning was all that was required to achieve compliance.

During this reporting period, nine (9) enforcement actions, including written warnings; Notices of Violation; and/or issuance of Administrative Citations were issued by staff. This does not include verbal warnings issued during informal patrols, unless the contractor failed to comply with the direction of the inspector. In one instance, a full Stop Work order was issued and construction halted for more than 24 hours until appropriate BMPs and permits were obtained from the City. Table 3.5-1 below provides a summary of formal enforcement actions taken by the City for construction activities not in compliance with BMP requirements under the City s 2008 JURMP.

3.6 Notable Activities

This section describes the notable activities conducted to manage urban runoff from construction sites by the City. This reporting period, the City worked closely with its largest resort property during the resort s proposed redevelopment. Although not a priority construction project by definition, the City gained the cooperation of the developer and resort owner in conducting the redevelopment of the resort in the same manner as a priority construction development. A SWPPP was required and the project was subject to increased scrutiny and inspection for BMP implementation during the construction process. Construction began on this project late 2007, and is largely complete, though smaller phases of the remodel are still underway.

3.7 Construction Activities Effectiveness Assessment

Section 5.7 of 2008 JURMP addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l). No modifications in Section 5.7 of the 2008 JURMP have been recorded during this reporting period. Efforts to better track inspections to satisfy the new Permit requirements, as outlined in the City s 2008 JURMP, were put into motion at the end of this reporting period and it is apparent that adjustments in record keeping are necessary to improve annual reporting. Staff has been notified of the new procedures and newly-created tracking data base which will be reflected in next year s Annual Report. In addition, staff is presently preparing a standard procedure manual for stormwater inspections and enforcement for use by all staff, and to assist in training and education.

3.8 Program Review and Modification

No modifications were made to Section 5 of the 2008 JURMP during this reporting period.

Table 3.5-1
Construction-related Enforcement Actions □ FY2007□2008

Action No.	Date of Action	Contractor	Project Address	Warn	NOV Issued	Cite Issued	Cite No.	Stop Work	Fines	Comments
08-001	2/1/2008	JP Chambers Construction	333 13th Street		Yes	Yes	633		□200	Discharge of sediment via power wash into MS4. Inappropriate BMPs.
08-003	2/14/2008	Claus Construction & Demo	529 Stratford Ct.	Yes				Yes		No BMPs in place during storm event - BMPs installed within hour of site visit. Stop Work ordered - No Demo Permit.
08-004	2/15/2008	Hughes Construction	139-140 13th St.	Yes				No		Discharge of sediment into MS4. Cleanup and Abatement required.
08-005	2/15/2008	JP Chambers Construction	333 13th St.	2nd	Yes	Yes	Waived on Appeal	Yes	N/A	New potential for sediment ditch. Failure to Maintain BMPs, mudtrack in Street - Cleanup/Abatement Ordered
08-006	2/25/2008	Hughes Construction	139-140 13th St.	2nd	Yes	Yes	636	No	□100	Discharge of lime and/or cement washings into MS4. Cleanup and Abatement required.
08-012	3/10/2008	Dirt Cheap Demolition	144 22nd St.		Yes	Yes	640	No	□200	Discharge of wash water sediment into storm drain.
08-013	3/18/2008	Hughes Construction	139-141 13th St.	2nd	Yes	Yes	645	No	□200	No BMPs in place for trenching operations. Storm drain unprotected.
08-014	3/25/2008	Premier Construction	139-141 13th St.	Yes	Yes	Yes	647	No	□200	No BMPs in place for Cement Pour. Storm drain unprotected. Discharge of materials in drain.
08-015	3/25/2008	Hanley Construction	111 4th Street	Yes						No BMPs in place around Storm drain. Clean-up of sediment at edge of drain required, with implementation of BMPs.

Appendix 3-A
Construction Inventory

						Potential Pollutants												
Del Mar Account Number	Facility Name	Number	Street	Hydrologic Area	Description of Area/Activity	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	None	Receiving Water Body	303(d) Listed Water Body	Priority Project
DRB-04-52	Schneider/Louie	350	Hidden Pines Road	Los Penasquitos	NSFR					X			X	X		Pacific Ocean	No	No
DRB-05-06	Flamm	111	4th Street	Los Penasquitos	duplex					X			X	X		Pacific Ocean	No	No
DRB-05-19	Countryman	400	W. Oceanview Avenue	Los Penasquitos	NSFR					X			X	X		Los Penasquitos Lagoon	Yes, sediment	No
DRB-05-24	Klipstein	415	Torrey Point Rd.	Los Penasquitos	NSFR					X			X	X		Los Penasquitos Lagoon	Yes, sediment	No
DRB-06-13	Hall	335	El Amigo Road	Los Penasquitos	new entry-way					X			X	X		Pacific Ocean	No	No
DRB-07-23	Trainor	526	Stratford Court, #D	Los Penasquitos	deck					X			X	X		Pacific Ocean	No	No
DRB-08-06	Reid	116	Nob Avenue	Los Penasquitos	NSFR					X			X	X		Pacific Ocean	No	No
DRB-08-07	Baker	537	Torrey Pointe Road	Los Penasquitos	NSFR					X			X	X		Los Penasquitos Lagoon	Yes, sediment	No
DRB-08-16	Fried	264	Torrey Pines Terrace	Los Penasquitos	trellis & fencing										X	Los Penasquitos Lagoon	Yes, sediment	No
DRB-01-04	Williams Vetrinary Clinic	2132	Jimmy Durante Blvd.	San Dieguito	addition					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-01-13	Walker	340	Serpentine Drive	San Dieguito	remodel & addition					X			X	X		Pacific Ocean	No	No
DRB-01-13 MOD	Walker	340	Serpentine	San Dieguito	A/C units, walls					X			X	X		Pacific Ocean	No	No
DRB-02-18	Costello	147	12th Street	San Dieguito	rooftop deck & bay window					X			X	X		Pacific Ocean	No	No
DRB-02-50	Turner-Thomas Design Build	1955	Jimmy Durante Boulevard	San Dieguito	NSFR					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-03-17	Jones	123	8th Street	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-03-19	Davidson	420	Avenida Primavera	San Dieguito	remodel					X			X	X		Pacific Ocean	No	No
DRB-03-39	Del Mar Charrette	1928	Balboa	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-04-08	Richards (Demich)	963	Klish Way	San Dieguito	NSFR w/ pool/spa					X			X	X		Pacific Ocean	No	No
DRB-04-13	McGuire	1105	Stratford Court	San Dieguito	remodel					X			X	X		Pacific Ocean	No	No
DRB-04-45	Hagestad	2720	Ocean Front	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-04-49	Papciak	152	7th Street	San Dieguito	2 NSFR					X			X	X		Pacific Ocean	No	No
DRB-04-54	Nicholas	1344	Ocean Avenue	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-05-02	Begent	1905	Santa Fe	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-05-08	Grant	445	9th Street	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-05-27	Pacifica Stratford Duplexes	535/537	Stratford Court	San Dieguito	2 unit condo					X			X	X		Pacific Ocean	No	Yes
DRB-05-28	Pacifica Stratford Duplexes	545/547	Stratford Court	San Dieguito	2 unit condo					X			X	X		Pacific Ocean	No	Yes
DRB-05-29	Pacifica Stratford Duplexes	555/557	Stratford Court	San Dieguito	2 unit condo					X			X	X		Pacific Ocean	No	Yes
DRB-05-30	Pacifica Stratford Duplexes	605/607	Stratford Court	San Dieguito	2 unit condo					X			X	X		Pacific Ocean	No	Yes
DRB-05-31	Pacifica Stratford Duplexes	615/617	Stratford Court	San Dieguito	2 unit condo					X			X	X		Pacific Ocean	No	Yes
DRB-05-33	Hoen	730	Kalamath Street	San Dieguito	demo & NSFR					X			X	X		Pacific Ocean	No	No
DRB-05-39	Buck	260	23rd Street	San Dieguito	NSFR					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-05-39 MOD	Buck	260	23rd Street	San Dieguito	wall/fence					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-06-04	Matthews	267	24th Street	San Dieguito	NSFR					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-06-05	Zupan	610	Kalamath Street	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-06-05 MOD	Zupan	610	Kalamath Street	San Dieguito	A/C units, walls					X			X	X		Pacific Ocean	No	No
DRB-06-08	Chesnut	1236	Stratford Court	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No

						Potential Pollutants												
Del Mar Account Number	Facility Name	Number	Street	Hydrologic Area	Description of Area/Activity	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	None	Receiving Water Body	303(d) Listed Water Body	Priority Project
DRB-06-11	Engel	701	Hoska Drive	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-06-15	Richardson	2410	Ocean Front	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-06-22	Holliday/Sohn	264	26th Street	San Dieguito	NSFR					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-06-23	Oliphant	2011-2013	Santa Fe Avenue	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-06-25	Wegner	333	13th Street	San Dieguito	remodel					X			X	X		Pacific Ocean	No	No
DRB-06-29	Beach Village Villas (Batterkay)	139-141	13th Street	San Dieguito	duplex					X			X	X		Pacific Ocean	No	No
DRB-06-31	Crouch	235	25th Street	San Dieguito	NSFR					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-06-31 MOD	Crouch	235	25th Street	San Dieguito	landscaping modifications					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-06-34	Moore	155	27th Street	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-07-03	Kelley	636	Rimini Road	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-07-08	Gross	230	11th Street	San Dieguito	2nd unit					X			X	X		Pacific Ocean	No	No
DRB-07-09	Kanetis	642	Hoska Drive	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-07-10	LaFlamme	1210	Stratford Court	San Dieguito	trellis & outdoor fireplace					X			X	X		Pacific Ocean	No	No
DRB-07-14	Destination Resorts (L'Auberge)	1540	Camino del Mar	San Dieguito	remodel					X			X	X		Pacific Ocean	No	Yes
DRB-07-16	Smith	144	22nd Street	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-07-16 MOD	Smith	144	22nd Street	San Dieguito	Yard modifications					X			X	X		Pacific Ocean	No	No
DRB-07-17	Gruber	548	Serpentine Drive	San Dieguito	addition					X			X	X		Pacific Ocean	No	No
DRB-07-18	Welch	431	8th Street	San Dieguito	Addition & Fireplace					X			X	X		Pacific Ocean	No	No
DRB-07-19	Fisher	236	24th Street	San Dieguito	NSFR					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-07-20	Vint	336	10th Street	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-07-21	LeBlanc	1206	Stratford Court	San Dieguito	replace deck					X			X	X		Pacific Ocean	No	No
DRB-07-22	Herbruck/Jenkens	152	8th Street	San Dieguito	2 NSFR					X			X	X		Pacific Ocean	No	No
DRB-07-24	Goldberg	1942	Santa Fe Avenue	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-07-25	California Bluffs	1420	Oribia Road	San Dieguito	NSFR					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-07-26	Levine	1110	Crest Road	San Dieguito	deck					X			X	X		Pacific Ocean	No	No
DRB-07-27	Harrington	1345/1355	Ocean Avenue	San Dieguito	remodel					X			X	X		Pacific Ocean	No	No
DRB-08-01	Lindsey	2020	Ocean Front	San Dieguito	remodel					X			X	X		Pacific Ocean	No	No
DRB-08-02	Maple	478	Zuni Drive	San Dieguito	Interior Remodel										X	Pacific Ocean	No	No
DRB-08-03	Kirkpatrick	1101	Klish Way	San Dieguito	NSFR & Grading					X			X	X		Pacific Ocean	No	No
DRB-08-04	Donner	226	24th Street	San Dieguito	remodel & addition					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-08-05	Cox	1141	Luneta Drive	San Dieguito	entryway pillars					X			X	X		Pacific Ocean	No	No
DRB-08-08	Savage	2007	Santa Fe Avenue	San Dieguito	remodel					X			X	X		Pacific Ocean	No	No
DRB-08-09	Tullie	1333	Ocean Avenue	San Dieguito	2nd story deck					X			X	X		Pacific Ocean	No	No
DRB-08-10	Destination Resorts	1540	Camino del Mar	San Dieguito	material changes					X			X	X		Pacific Ocean	No	No
DRB-08-11	Lutz	1307	Stratford Court	San Dieguito	trellis										X	Pacific Ocean	No	No
DRB-08-12	Parker	118	11th Street	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-08-13	City of Del Mar	1309	Camino del Mar	San Dieguito	addition					X			X	X		Pacific Ocean	No	No
DRB-08-14	Valentine	1420	Crest Road	San Dieguito	pool & landscaping					X			X	X		Pacific Ocean	No	No

						Potential Pollutants												
Del Mar Account Number	**Facility Name**	**Number**	**Street**	**Hydrologic Area**	**Description of Area/Activity**	**Bacteria**	**Gross Pollutants**	**Metals**	**Nutrients**	**Oil & Grease**	**Organics**	**Pesticides**	**Sediment**	**Trash**	**None**	**Receiving Water Body**	**303(d) Listed Water Body**	**Priority Project**
DRB-08-15	Lasensky	641	Hoska Drive	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-08-17	Conkwright	1201	Camino del Mar	San Dieguito	trellis & stairway										X	Pacific Ocean	No	No
DRB-08-18	Swartz	227	Stratford Park Circle	San Dieguito	remodel, enclose carport, landscaping					X			X	X		Pacific Ocean	No	No
DRB-08-19	DM 7th St. LLC	149	7th Street	San Dieguito	2 NSFR					X			X	X		Pacific Ocean	No	No
DRB-08-19	DM 7th St. LLC	151	Sherrie Lane	San Dieguito	2 NSFR					X			X	X		Pacific Ocean	No	No
DRB-08-20	Deal	157 & 159	8th Street	San Dieguito	2 NSFR w/ basement					X			X	X		Pacific Ocean	No	No
DRB-08-21	Sbicca	215	15th Street	San Dieguito	canopy					X			X	X		Pacific Ocean	No	No
DRB-08-22	Tarkington	100	11th Street	San Dieguito	2nd story addition					X			X	X		Pacific Ocean	No	No
DRB-08-23	Del Mar Garden	941	Camino del Mar	San Dieguito	mixed-use					X			X	X		Pacific Ocean	No	No
DRB-08-24	Turner & Assoc.	2010	Jimmy Durante Blvd.	San Dieguito	trash enclosure					X			X	X		San Dieguito Lagoon	Yes, bacteria	No
DRB-08-25	Bierman	143	8th Street	San Dieguito	remodel					X			X	X		Pacific Ocean	No	No
DRB-08-26 Sign	Dexter's Deli	1229	Camino del Mar	San Dieguito	Signage										X	Pacific Ocean	No	No
DRB-08-27	Mankwitz	420	Luzon Avenue	San Dieguito	NSFR					X			X	X		Pacific Ocean	No	No
DRB-08-28	Del Mar Charette		San Dieguito/Jimmy Durante	San Dieguito	commercial complex					X			X	X		San Dieguito Lagoon	Yes, bacteria	Yes
DRB-08-29 Sign	Soul Shine	1217	Camino del Mar	San Dieguito	Signage										X	Pacific Ocean	No	No

Appendix 3-B
Construction Inspection Inventory

City of Del Mar
FY 2007-2008 Construction Inspection Log

Inspection Date	Permit	Priority	Project Address	Contractor/Project Name	Season	Insp. By	Notes
7/10/2007	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Dry	AB	All controls in place.
7/10/2007	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Dry	AB	No BMPs in place. Attention required for sediment runoff.
7/10/2007	DRB-06-04	No	24th Street	Matthews	Dry	MB	All controls in place.
7/11/2007	DRB-02-50	No	1955 Jimmy Durante	Turner	Dry	JC	Nothing noted. Controls in place.
7/11/2007	DRB-05-32	No	542 Van Dyke	Bockman	Dry	JC	Nothing noted. Controls in place.
7/11/2007	DRB-06-07	No	834 Crest Way	Sharp	Dry	JC	Nothing noted. Controls in place.
7/11/2007	DRB-06-10	No	118 13th Street	Rhodes	Dry	JC	Nothing noted. Controls in place.
7/11/2007	DRB-06-15	No	2410 Ocean Front	Richardson	Dry	JC	Nothing noted. Controls in place.
7/11/2007	DRB-06-22	No	264 26th Street	Sohn	Dry	JC	Nothing noted. Controls in place.
7/11/2007	DRB-06-31	No	235 25th Street	Crouch	Dry	JC	Nothing noted. Controls in place.
7/11/2007	DRB-06-32	No	1619 Forest Way	Jaffe	Dry	JC	Nothing noted. Controls in place.
8/13/2007	DRB-02-50	No	1955 Jimmy Durante	Turner	Dry	JC	Nothing noted. Controls in place.
8/13/2007	DRB-05-32	No	542 Van Dyke	Bockman	Dry	JC	Nothing noted. Controls in place.
8/13/2007	DRB-06-07	No	834 Crest Way	Sharp	Dry	JC	Nothing noted. Controls in place.
8/13/2007	DRB-06-10	No	118 13th Street	Rhodes	Dry	JC	Nothing noted. Controls in place.
8/13/2007	DRB-06-15	No	2410 Ocean Front	Richardson	Dry	JC	Nothing noted. Controls in place.
8/13/2007	DRB-06-22	No	264 26th Street	Sohn	Dry	JC	Nothing noted. Controls in place.
8/13/2007	DRB-06-31	No	235 25th Street	Crouch	Dry	JC	Nothing noted. Controls in place.
8/13/2007	DRB-06-32	No	1619 Forest Way	Jaffe	Dry	JC	Nothing noted. Controls in place.
8/14/2007	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Dry	AB	All controls in place.
8/14/2007	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Dry	AB	No BMPs in place. Attention required for sediment runoff.
9/7/2007	DRB 06-05	No	610 Kalamath Way	Zupan	Dry	DM	South side of construction site requires attention.
9/10/2007	DRB-05-19	No	W. Oceanview Avenue	Countryman	Dry	MB	All controls in place.
9/19/2007	DRB 05-06	No	111 4th Street	Hanley	Dry	DM	All controls in place.
9/19/2007	DRB 05-02	No	1905 Santa Fe	Owner	Dry	MB	All controls in place.
9/19/2007	DRB 06-11	No	701 Hoska	Engle	Dry	DM	Attention to materials storage area required
9/19/2007	DRB-02-50	No	1955 Jimmy Durante	Turner	Dry	JC	Nothing noted. Controls in place.
9/19/2007	DRB-05-32	No	542 Van Dyke	Bockman	Dry	JC	Nothing noted. Controls in place.
9/19/2007	DRB-06-07	No	834 Crest Way	Sharp	Dry	JC	Nothing noted. Controls in place.
9/19/2007	DRB-06-10	No	118 13th Street	Rhodes	Dry	JC	Nothing noted. Controls in place.
9/19/2007	DRB-06-15	No	2410 Ocean Front	Richardson	Dry	JC	Nothing noted. Controls in place.
9/19/2007	DRB-06-22	No	264 26th Street	Sohn	Dry	JC	Nothing noted. Controls in place.
9/19/2007	DRB-06-31	No	235 25th Street	Crouch	Dry	JC	Nothing noted. Controls in place.
9/19/2007	DRB-06-32	No	1619 Forest Way	Jaffe	Dry	JC	Nothing noted. Controls in place.
9/20/2007	DRB 06-07	No	834 Crest	Fitzpatrick	Dry	BLS	All controls in place.
9/20/2007	DRB 02-50	No	1955 Jimmy Durante	Thomas	Dry	BLS	Some correction required with gravel bags.
9/20/2007	DRB 06-32	No	1619 Forest Way	Jaffe	Dry	BLS	No sediment controls in place. Storm drain protected.
9/20/2007	DRB 04-08	No	963 Klish	Demich	Dry	BLS	Stockpile coverings needed.
9/20/2007	DRB 06-28	No	641 Serpentine	Ward	Dry	BLS	Attention to materials storage area required
9/20/2007	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Dry	AB	No BMPs in place. Attention required for sediment runoff.
9/21/2007	DRB 04-49	No	152 7th	Del Mar Restoration	Dry	BLS	Controls in place. Covers/mats not on-site.
9/21/2007	DRB 04-45	No	1928 Balboa	Brian Bracken	Dry	BLS	Substantial attention required. Controls for sediment needs attention.
9/21/2007	DRB 05-39	No	260 23rd Street	Owner	Dry	BLS	Additional BMPs required. Homeowner to address ASAP.
9/21/2007	DRB 06-13	No	335 El Amigo	Hall	Dry	BLS	Tracking controls required.
10/11/2007	DRB 04-49	No	152 7th Street	Del Mar Restoration	Rainy	MB	All controls in place.
10/19/2007	DRB-04-08	No	Klish Way	Richards (Demich)	Rainy	MB	All controls in place.
10/19/2007	DRB-04-52	No	Hidden Pines Road	Schneider/Louie	Rainy	MB	All controls in place.
10/19/2007	DRB-98-32 Mod	No	La Amatista	Bakker	Rainy	MB	All controls in place.
10/19/2007	DRB-06-11	No	Hoska Drive	Engel	Rainy	MB	All controls in place.

Inspection Date	Permit	Priority	Project Address	Contractor/Project Name	Season	Insp. By	Notes
10/19/2007	DRB-05-06	No	4th Street	Flamm	Rainy	MB	All controls in place.
10/23/2007	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	All controls in place.
10/24/2007	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Rainy	AB	No BMPs in place. Attention required for sediment runoff.
10/24/2007	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	All controls in place.
10/24/2007	DRB-02-50	No	1955 Jimmy Durante	Turner	Rainy	JC	Nothing noted. Controls in place.
10/24/2007	DRB-05-32	No	542 Van Dyke	Bockman	Rainy	JC	Nothing noted. Controls in place.
10/24/2007	DRB-06-07	No	834 Crest Way	Sharp	Rainy	JC	Nothing noted. Controls in place.
10/24/2007	DRB-06-10	No	118 13th Street	Rhodes	Rainy	JC	Nothing noted. Controls in place.
10/24/2007	DRB-06-15	No	2410 Ocean Front	Richardson	Rainy	JC	Nothing noted. Controls in place.
10/24/2007	DRB-06-22	No	264 26th Street	Sohn	Rainy	JC	Nothing noted. Controls in place.
10/24/2007	DRB-06-31	No	235 25th Street	Crouch	Rainy	JC	Nothing noted. Controls in place.
10/24/2007	DRB-06-32	No	1619 Forest Way	Jaffe	Rainy	JC	Nothing noted. Controls in place.
10/25/2007	DRB-06-05	No	Kalamath Street	Zupan	Rainy	MB	All controls in place.
10/25/2007	DRB-06-25	No	13th Street	Wegner	Rainy	MB	All controls in place.
10/25/2007	DRB-03-17	No	8th Street	Jones	Rainy	MB	All controls in place.
10/26/2007	DRB-07-16	No	22nd Street	Smith	Rainy	MB	All controls in place.
10/26/2007	DRB-02-18	No	12th Street	Costello	Rainy	MB	All controls in place.
10/26/2007	DRB-04-45	No	Ocean Front	Hagestad	Rainy	MB	All controls in place.
10/26/2007	DRB-05-39	No	23rd Street	Buck	Rainy	MB	All controls in place.
11/1/2007	DRB-01-04	No	Jimmy Durante Blvd.	Williams Vetrinary Clinic	Rainy	MB	All controls in place.
11/1/2007	DRB-01-13	No	Serpentine Drive	Walker	Rainy	MB	All controls in place.
11/1/2007	DRB-04-54	No	Ocean Avenue	Nicholas	Rainy	MB	All controls in place.
11/1/2007	DRB-03-39	No	Balboa	Del Mar Charrette	Rainy	MB	All controls in place.
11/7/2007	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	All controls in place.
11/7/2007	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Rainy	AB	All controls in place.
11/9/2007	DRB 06-29	No	139-141 13th Street	Brian Bracken	Rainy	MB	Substantial attention required. Controls for sediment needs attention.
11/9/2007	DRB-06-29	No	13th Street	Beach Village Villas (Batterkay)	Rainy	MB	All controls in place.
11/9/2007	DRB-05-02	No	Santa Fe	Begent	Rainy	MB	All controls in place.
11/9/2007	DRB-05-08	No	9th Street	Grant	Rainy	MB	All controls in place.
11/19/2007	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Rainy	AB	All controls in place.
11/22/2007	DRB-02-50	No	1955 Jimmy Durante	Turner	Rainy	JC	Nothing noted. Controls in place.
11/22/2007	DRB-06-07	No	834 Crest Way	Sharp	Rainy	JC	Nothing noted. Controls in place.
11/22/2007	DRB-06-10	No	118 13th Street	Rhodes	Rainy	JC	Nothing noted. Controls in place.
11/22/2007	DRB-06-15	No	2410 Ocean Front	Richardson	Rainy	JC	Nothing noted. Controls in place.
11/22/2007	DRB-06-22	No	264 26th Street	Sohn	Rainy	JC	Nothing noted. Controls in place.
11/22/2007	DRB-06-31	No	235 25th Street	Crouch	Rainy	JC	Nothing noted. Controls in place.
11/22/2007	DRB-06-32	No	1619 Forest Way	Jaffe	Rainy	JC	Nothing noted. Controls in place.
11/30/2007	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Rainy	BLS	No BMPs in place. Attention required for sediment runoff.
11/30/2007	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Rainy	AB	No BMPs in place. Attention required for sediment runoff.
12/3/2007	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	All controls in place.
12/3/2007	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Rainy	AB	Insufficient BMPs. Attention required.
12/13/2007	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	All controls in place.
12/13/2007	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Rainy	AB	All controls in place.
12/13/2007	DRB-02-50	No	1955 Jimmy Durante	Turner	Rainy	JC	Nothing noted. Controls in place.
12/13/2007	DRB-06-07	No	834 Crest Way	Sharp	Rainy	JC	Nothing noted. Controls in place.
12/13/2007	DRB-06-10	No	118 13th Street	Rhodes	Rainy	JC	Nothing noted. Controls in place.
12/13/2007	DRB-06-15	No	2410 Ocean Front	Richardson	Rainy	JC	Nothing noted. Controls in place.
12/13/2007	DRB-06-22	No	264 26th Street	Sohn	Rainy	JC	Nothing noted. Controls in place.
12/13/2007	DRB-06-31	No	235 25th Street	Crouch	Rainy	JC	Nothing noted. Controls in place.

Inspection Date	Permit	Priority	Project Address	Contractor/Project Name	Season	Insp. By	Notes
12/13/2007	DRB-06-32	No	1619 Forest Way	Jaffe	Rainy	JC	Nothing noted. Controls in place.
12/21/2007	DRB 05-33	No	730 Kalamath	Hoehn	Rainy	MB	Stormdrain inlet protection required.
12/21/2007	DRB-05-33	No	Kalamath Street	Hoen	Rainy	MB	All controls in place.
12/21/2007	DRB-03-19	No	Avenida Primavera	Davidson	Rainy	MB	All controls in place.
12/21/2007	DRB-04-49	No	7th Street	Papciak	Rainy	MB	All controls in place.
1/2/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Rainy	AB	All controls in place.
1/8/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	All controls in place.
1/8/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Rainy	AB	Insufficient BMPs. Attention required.
1/11/2008	DRB-02-50	No	1955 Jimmy Durante	Turner	Rainy	JC	Nothing noted. Controls in place.
1/11/2008	DRB-06-07	No	834 Crest Way	Sharp	Rainy	JC	Nothing noted. Controls in place.
1/11/2008	DRB-06-10	No	118 13th Street	Rhodes	Rainy	JC	Nothing noted. Controls in place.
1/11/2008	DRB-06-15	No	2410 Ocean Front	Richardson	Rainy	JC	Nothing noted. Controls in place.
1/11/2008	DRB-06-22	No	264 26th Street	Sohn	Rainy	JC	Nothing noted. Controls in place.
1/11/2008	DRB-06-31	No	235 25th Street	Crouch	Rainy	JC	Nothing noted. Controls in place.
1/11/2008	DRB-06-32	No	1619 Forest Way	Jaffe	Rainy	JC	Nothing noted. Controls in place.
1/17/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Rainy	AB	All controls in place.
1/25/2008	DRB-06-08	No	Stratford Court	Chesnut	Rainy	MB	All controls in place.
1/29/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	Additional BMP Maintenance Required. Will return COB
1/29/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	All controls in place.
1/29/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Rainy	AB	All controls in place.
1/29/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Rainy	AB	Insufficient BMPs. Attention required.
2/6/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Rainy	AB	All controls in place.
2/12/2008	DRB-06-07	No	834 Crest Way	Sharp	Rainy	JC	Nothing noted. Controls in place.
2/12/2008	DRB-06-10	No	118 13th Street	Rhodes	Rainy	JC	Nothing noted. Controls in place.
2/12/2008	DRB-06-15	No	2410 Ocean Front	Richardson	Rainy	JC	Nothing noted. Controls in place.
2/12/2008	DRB-06-22	No	264 26th Street	Sohn	Rainy	JC	Nothing noted. Controls in place.
2/12/2008	DRB-06-31	No	235 25th Street	Crouch	Rainy	JC	Nothing noted. Controls in place.
2/12/2008	DRB-06-32	No	1619 Forest Way	Jaffe	Rainy	JC	Nothing noted. Controls in place.
2/13/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	All controls in place.
2/13/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Rainy	AB	Insufficient BMPs. Attention required.
2/14/2008	DRB-05-27	Yes	Stratford Court	Pacifica Stratford Duplexes	Rainy	MB	All controls in place.
2/14/2008	DRB-05-28	Yes	Stratford Court	Pacifica Stratford Duplexes	Rainy	MB	All controls in place.
2/14/2008	DRB-05-29	Yes	Stratford Court	Pacifica Stratford Duplexes	Rainy	MB	All controls in place.
2/14/2008	DRB-05-30	Yes	Stratford Court	Pacifica Stratford Duplexes	Rainy	MB	All controls in place.
2/14/2008	DRB-05-31	Yes	Stratford Court	Pacifica Stratford Duplexes	Rainy	MB	All controls in place.
2/21/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Rainy	AB	All controls in place.
2/28/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Rainy	AB	Insufficient BMPs. Attention required.
3/3/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	All controls in place.
3/3/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Rainy	AB	All controls in place.
3/3/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Rainy	AB	Insufficient BMPs. Attention required.
3/11/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Rainy	AB	All controls in place.
3/14/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Rainy	AB	Insufficient BMPs. Attention required.
3/14/2008	DRB-05-27	Yes	Stratford Court	Pacifica Stratford Duplexes	Rainy	MB	All controls in place.
3/14/2008	DRB-05-28	Yes	Stratford Court	Pacifica Stratford Duplexes	Rainy	MB	All controls in place.
3/14/2008	DRB-05-29	Yes	Stratford Court	Pacifica Stratford Duplexes	Rainy	MB	All controls in place.
3/14/2008	DRB-05-30	Yes	Stratford Court	Pacifica Stratford Duplexes	Rainy	MB	All controls in place.
3/14/2008	DRB-05-31	Yes	Stratford Court	Pacifica Stratford Duplexes	Rainy	MB	All controls in place.
3/19/2008	DRB-06-07	No	834 Crest Way	Sharp	Rainy	JC	Nothing noted. Controls in place.
3/19/2008	DRB-06-15	No	2410 Ocean Front	Richardson	Rainy	JC	Nothing noted. Controls in place.

Inspection Date	Permit	Priority	Project Address	Contractor/Project Name	Season	Insp. By	Notes
3/19/2008	DRB-06-22	No	264 26th Street	Sohn	Rainy	JC	Nothing noted. Controls in place.
3/19/2008	DRB-06-31	No	235 25th Street	Crouch	Rainy	JC	Nothing noted. Controls in place.
3/19/2008	DRB-06-32	No	1619 Forest Way	Jaffe	Rainy	JC	Nothing noted. Controls in place.
3/28/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Rainy	AB	All controls in place.
4/3/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Dry	AB	All controls in place.
4/4/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Dry	AB	All controls in place.
4/5/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Dry	AB	Insufficient BMPs. Attention required.
4/8/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Dry	AB	All controls in place.
4/22/2008	DRB-06-07	No	834 Crest Way	Sharp	Dry	JC	Nothing noted. Controls in place.
4/22/2008	DRB-06-15	No	2410 Ocean Front	Richardson	Dry	JC	Nothing noted. Controls in place.
4/22/2008	DRB-06-22	No	264 26th Street	Sohn	Dry	JC	Nothing noted. Controls in place.
4/22/2008	DRB-06-31	No	235 25th Street	Crouch	Dry	JC	Nothing noted. Controls in place.
4/22/2008	DRB-06-32	No	1619 Forest Way	Jaffe	Dry	JC	Nothing noted. Controls in place.
4/29/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Dry	AB	All controls in place.
5/2/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Dry	AB	All controls in place.
5/2/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Dry	AB	Insufficient BMPs. Attention required.
5/5/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Dry	AB	All controls in place.
5/15/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Dry	AB	All controls in place.
5/21/2008	DRB-06-15	No	2410 Ocean Front	Richardson	Dry	JC	Nothing noted. Controls in place.
5/21/2008	DRB-06-22	No	264 26th Street	Sohn	Dry	JC	Nothing noted. Controls in place.
5/21/2008	DRB-06-31	No	235 25th Street	Crouch	Dry	JC	Nothing noted. Controls in place.
5/22/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Dry	AB	All controls in place.
5/22/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Dry	AB	Insufficient BMPs. Attention required.
5/28/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Dry	AB	All controls in place.
6/4/2008	DRB 07-14	Yes	L'Auberge Del Mar 1540 CDM	Roel Construction	Dry	AB	Final Sign-Off Hotel Structure
6/11/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Dry	AB	All controls in place.
6/12/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Dry	AB	Insufficient BMPs. Attention required.
6/17/2008	DRB-06-15	No	2410 Ocean Front	Richardson	Dry	JC	Nothing noted. Controls in place.
6/17/2008	DRB-06-22	No	264 26th Street	Sohn	Dry	JC	Nothing noted. Controls in place.
6/17/2008	DRB-06-31	No	235 25th Street	Crouch	Dry	JC	Nothing noted. Controls in place.
6/26/2008	DRB 02-34	No	La Atalaya /Serpentine	Neeley	Dry	AB	All controls in place.
6/26/2008	DRB 06-03	No	Oester Property - 1255 Lunetta	Sandy	Dry	AB	Insufficient BMPs. Attention required.

Section 4
Municipal Component

4.1 Introduction

This section provides information on how the City of Del Mar developed and implemented the Municipal Component. In this section, an overview of the City's municipal operations and facilities is presented and the overall implementation for the various areas and facilities.

Permit Section D.3.a. establishes requirements for local jurisdictions to develop and implement a program to reduce municipal discharges of pollutants from the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP), and prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards.

The 2008 JURMP Municipal Component includes the areas and activities listed in the Permit and is organized using the recommended Copermittee regional outline dated July 2007. The City of Del Mar does not operate several of the areas or activities listed in the Permit, including: Flood Management Projects, Active or Closed Municipal Landfills, Publicly Owned Treatment Works, Solid Waste Transfer Facilities, Land Application Sites, and Municipal Airfields. All these non-existent areas and/or activities sections will not be included in this Annual Report as summarized below and in Table 4.1-1. This table also includes a cross-reference to the 2008 JURMP areas and activities by the section number and the Annual Report section that addresses it.

4.2 Operation and Maintenance of the Municipal Separate Storm Sewer System (MS4) and Structural Controls

4.2.1 Background

This section describes the program which aims at reducing the impact of storm drain operation and maintenance activities on storm water quality. Section 6.2 of the 2008 JURMP described the activities involved in the program to maintain the storm drain system so that pollutant discharges are minimized during storms. Section 6.2 of the 2008 JURMP lists the sources characterization approach, BMP requirements, and update BMP requirements. No modifications in Section 6.2 of the 2008 JURMP have been recorded during this reporting period, excepted as noted below.

The City's complete MS4 is shown in Figure 4.2-1 and reflects the most recently available system updates Included at the end of this component.

The City's MS4 inventory was updated as shown in Table 4.2-1 to reflect the most recently available information. The data necessary to verify the high and low trash designations is being collected by the Department of Public Works. This year was the first of two years of data collection of this effort.

Table 4.1-1
Municipal Component Annual Report Organization and Summary

JURMP Municipal Areas and Activities Categories	Applicable in Del Mar	Municipal Areas and Activities Included in this Category	Annual Report Section
6.2 O&M of MS4 and Structural Controls	YES	All structures and pipes that make up the MS4	4.2
6.3 Management of Pesticides, Herbicides, and Fertilizers	YES	All	4.3
6.4 Sweeping of Municipal Areas	YES	All city streets, alleys and parking facilities	4.4
6.5 Infiltration from Sanitary Sewer to MS4 / Preventive Maintenance	YES	All sanitary sewer structures and pipes, including pump and lift stations	4.5
6.6 Roads, Streets, Highways, and Parking Facilities	YES	All city streets, alleys and parking facilities	4.6
Flood Management Projects and Flood Control Devices	NO	Not Applicable	Not Included
6.7 Areas Tributary to 303(d) Water Body Segments / Adjacent or Discharging to ESAs	YES	All facilities or activities located within the drainage basins discharging to the latest 303(d) listed water bodies that have the pollutants of concern	4.7
Active or Closed Municipal Landfills	NO	Not applicable	Not Included
Publicly Owned Treatment Works	NO	Not applicable	Not Included
Solid Waste Transfer Facilities	NO	Not applicable	Not Included
Land Application Sites	NO	Not applicable	Not Included
6.8 Corporate Yards	YES	Includes the City only public yard	4.8
Household Hazardous Waste Collection Facilities	NO	Not applicable	Not Included
Municipal Airfields	NO	Not applicable	Not Included
6.9 Parks and Recreational Facilities	YES	All parks, beaches and other community event facilities	4.9
6.10 Special Event Venues	YES	All parks, beaches and other community event facilities	4.10
6.11 Power Washing	YES	Citywide and applicable to all municipal activities or areas	4.11
6.12 Fire Services □ Non-emergency Fire Fighting	YES	Non-emergency fire fighting training and associated maintenance conducted at parks or fire stations	4.12

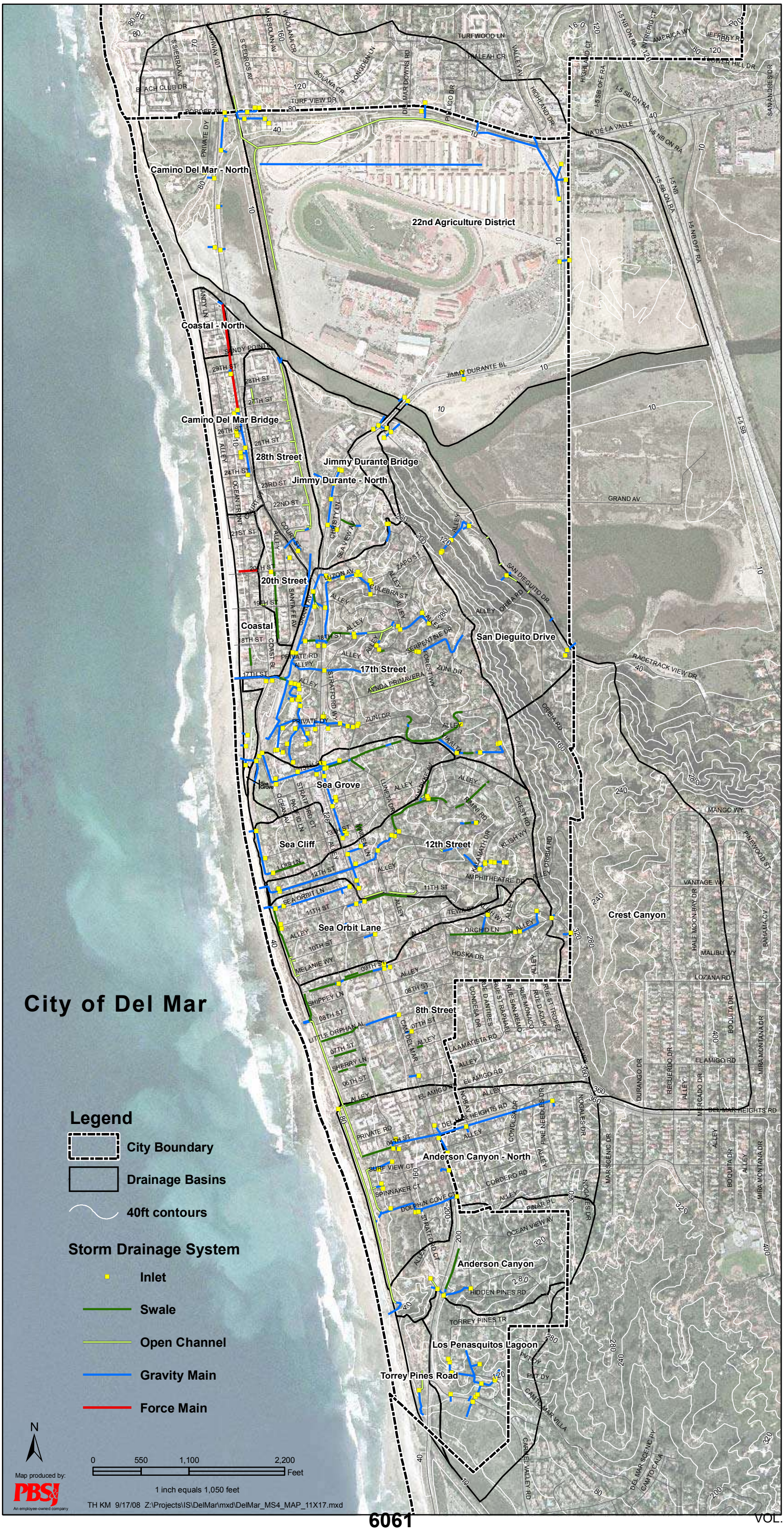
City of Del Mar
Legend
City Boundary
Drainage Basins
40ft contours
Storm Drainage System
Inlet
Swale
Open Channel
Gravity Main
Force Main
N
0
550
1,100
2,200
Feet
1 inch equals 1,050 feet
Map produced by:
PBSJ
An employee-owned company
TH KM 9/17/08 Z:\Projects\IS\DelMar\mxd\DelMar_MS4_MAP_11X17.mxd
Camino Del Mar - North
22nd Agriculture District
Coastal - North
Camino Del Mar Bridge
28th Street
Jimmy Durante Bridge
Jimmy Durante - North
20th Street
Coastal
San Dieguito Drive
17th Street
Sea Grove
Sea Cliff
12th Street
Sea Orbit Lane
Crest Canyon
8th Street
Anderson Canyon - North
Anderson Canyon
Los Penasquitos Lagoon
Torrey Pines Road

Table 4.2-1
MS4 Operation and Maintenance Inventory □ Public Works

City of Del Mar MS4 Facilities	Subtype	Total Length or Number of Features	Inspection	
			High Trash	Low Trash
Gravity Main Lines (underground)	All	5.87 mi (31,000 ft)	TBD	TBD
Channels (surface flow)	Open Channel	0.07 mi (352 ft)	TBD	TBD
	Swale	2.78 mi (14,695 ft)	TBD	TBD
	Total	*2.85 mi (15,047 ft)*	TBD	TBD
Catch Basins/Inlets□	Inlet	218	TBD	TBD
	Inlets w/ filters	6	TBD	TBD
	Percolation Pit	7	TBD	TBD
	Total	*231*	TBD	TBD
Junction Box	with manhole□□	49	TBD	TBD
Pumped Inlets□□□	Permanent	3	TBD	TBD
	Seasonal	1	TBD	TBD
	Total	*4*	TBD	TBD

□Inlets include: manholes and clean outs in the GIS attributes

□□Junction Boxes with manhole are labeled as Network structures with cleanouts in GIS. Network structures without cleanouts and headwalls are cleaned when the connecting main lines are cleaned

□□□Pumped inlets are labeled as pump stations in GIS. These are minor structures that do not qualify as pump stations. The City of Del Mar does not own or maintain any detention basins, catch basins.

Facilities Connected to Del Mar MS4 but Owned by Other Entities	Ownership	Subtype	Total Length or Number of Features
Gravity Main Lines	NCTD	All	0.48 mi (2,557 ft)
	Private	All	1.41 mi (7,440 ft)
Channels	NCTD	All	1.77 mi (9,322 ft)
	Private	All	0.76 mi (4,016 ft)
Inlets□	NCTD	All	40□□
	Private	All	0
Network Structures□	NCTD	All	0
	Private	All	0
Pump Stations□	NCTD	All	0
	Private	All	0

□The City□s GIS does not have a complete database of private or NCTD drainage system structures.

□□The City□s GIS does not have all NCTD inlets in the database but the City has knowledge of approximately 40 in NCTD□s drainage system within the City□s limits.

4.2.2 Program Implementation

The following report data has been collected to document MS4 operation and maintenance activities as required by the Permit and listed in Section 6.2.4.5 of the 2008 JURMP.

1. Confirmation that the designated BMPs were implemented, or required to be implemented during MS4 cleaning activities to eliminate waste discharges when cleaning is taking place.

   The City s Public Works employees implement BMPs for MS4 maintenance activities as outlined in the 2008 JURMP in order to prevent the release of pollutants downstream as a result of maintenance activities. Generally, dry clean methods are preferred; however if jetting is required, socks and waddles are used downstream to trap the wash water and the collected water is then vacuumed and disposed of in the sanitary sewer. Any sediment or debris collected from MS4 maintenance activities is disposed of in the landfill, along with other debris collected throughout the City. The city keeps logs of all MS4 inspection and maintenance activities in order to satisfy the reporting requirements of the JURMP Annual Report. Detailed information is provided in Section 4.2.3 below.

2. A description of inspections and maintenance conducted for municipal treatment controls, as applicable.

   Trash Guards Treatment Control

   These grates have been installed on inlets on Camino del Mar to minimize the introduction of debris and trash into storm drain catch basins and maximize the effectiveness of street sweeping since the guards do not allow these materials to enter the drain and are more efficiently removed by the street sweeper. Inspections of the guards are performed to verify they are still operations and performing as planned.

   Inlet Filter Treatment Control– North County Transit District

   As reported in Section 6.2.3.2 of the 2008 JURMP, the City of Del Mar has a Maintenance Agreement in place with the North San Diego County Transit Development Board as part of the Del Mar Stabilization Project 1 (Drainage Improvements and Landslide Warning System), which consists of fifty-four (54) structures. Fossil filters have been installed in some of the structures to address water quality and Permit requirements. The Maintenance Agreement requires the City to maintain fourteen (14) of the structures, while NCTD will be maintaining the remaining forty (40) structures. Out of the fourteen structures maintained by the City, six have been fitted with filters that are serviced by the City s contractor (Downstream Services, Inc.). This fiscal year, all six filters were inspected and five of them required maintenance. The Maintenance Agreement has been implemented to ensure that the structures will be maintained properly to address water quality.

   Downstream Services, Inc. performs maintenance of the inlet structures without jetting or the use of any water in order to avoid flushes of polluted water downstream. All debris is removed either manually or by vacuum, stored in a 55-gallon drum, and taken to their facility for pollutant testing. In this manner, Downstream Services, Inc. can dispose of the removed debris properly, depending on the pollutants identified, if any. Downstream

Services, Inc. keeps inspection and maintenance records and provides them in a report to the City annually.

3. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria (33 capacity), and the number of catch basins and inlets cleaned.

   The City is responsible for the inspection and maintenance of 284 drainage structures that are part of the MS4, including inlets and catch basins (see Table 4.2-1 for the MS4 inventory). In FY2007/2008, 100 of the MS4 inlets and catch basins were inspected and cleaned. None of the structures were found to have accumulated waste exceeding 33 capacity.

4. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.

   The City owns a total of 8.72 linear miles of MS4, of which mostly is gravity main lines (underground). 100 of the MS4 was inspected and cleaned (as needed) during FY2007/2008. A total of 51.19 cubic yards of waste were removed from the entire MS4 including inlets, catch basins and underground facilities for the reporting period, but no stretch of MS4 was reported as exceeding the cleaning criteria threshold.

5. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.

   There are 2.85 linear miles of open channel or swale type drainage in the City, and these drainage structures are considered to be part of the MS4 inventory (Table 4.2-1). All 100 of these drainage structures were inspected and cleaned. The City s inspection and maintenance records indicate that type of waste removed during cleaning consisted mostly of mud or sediment and plant material, but no observations of significant amounts of anthropogenic litter were noted.

6. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category. Proper disposal of waste removed pursuant to applicable laws. **Please Note:** *the Permit requires the material collected to be reported in tons, However, the City's measurements are in cubic yards. Cubic yards will be reported in tons using a 1,000 pound per cubic yard conversion.*

   The total amount of material removed from catch basins, inlets, open channels, and the MS4 for the FY2007/2008 was 51.19 cubic yards, or approximately 25.6 tons. By drainage structure category, it is estimated that approximately 7.1 tons of material were removed from catch basins and inlets (combined), 4.8 tons of material were removed from swales and open channels, and the remaining 13.7 tons of material was collected from the MS4 cleanings.

7. The City has the option to review the program after completion of the inspections completed in 2009 to reduce the inspection frequency. In order to assess this, the City

would identify any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.

The City will assess the results of the FY2008/2009 MS4 inspection and maintenance activities to see if any MS4 facilities qualify for this reduction of inspection frequency. Any proposed changes will be included in the FY2008/2009 JURMP Annual Report.

Additional Controls for Municipal Areas and Activities

The City coordinates with the 22nd District Agricultural Association (DAA) to ensure that additional pollutant loading from the DAA facilities does not contribute to pollution in the MS4. Although the City conducts MS4 maintenance activities along the DAA facility, the DAA does provide additional catch basin cleaning on an as-needed basis, especially during the high season, and reports its activities to the City. During FY2007/2008, the DAA performed two cleaning events of catch basins in addition to the City's MS4 maintenance efforts. Three curb-side inlets were cleaned on both occasions, yielding a total of 6.37 cubic yards of material, or approximately 3.2 tons. As noted above, although the Permit requires the material collected be reported in tons, the City records the measurement in cubic yards. Measurements will be reported in tons using a 1,000 pound per cubic yard conversion.

4.3 Management of Pesticides, Herbicides and Fertilizers

4.3.1 Background

This annual report section describes the activities implemented which aims at preventing or reducing the use of pesticides and fertilizers, and subsequently their entry or discharge into the MS4 and ultimately, receiving waters. Section 6.3 of 2008 JURMP described the activities involved in the program which is committed to the application of Integrated Pest Management (IPM) procedures and the use of updated BMPs to meet the goal of this program. No modifications in Section 6.3 of the 2008 JURMP have been recorded during this reporting period. This section also provides confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented as described in Section 6.3 of the 2008 JURMP.

4.3.2 Program Implementation

For annual reporting purposes, the City must provide confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities. Confirmation may be achieved through one of the following: 1) annual inspection conducted by the Clean Water Program of the pesticide application practices and implementation of BMPs; 2) supplemental information collected by the contracting departments; 3) additional contract compliance inspections of landscaped areas periodically conducted by City staff knowledgeable of the requirements; 4) any discrepancies with contract requirements are noted in Field Inspection Notices (FIN) which are forwarded to the contractor for corrective action within a specified timeframe (these inspections are mainly for contract compliance and to evaluate quality services, but serve indirectly to provide oversight for compliance with the requirements in this component).

The City of Del Mar contracts with Aztec Landscaping for all of the maintenance of its municipal landscaped areas including: fertilization, pest control, and herbicide application. All chemicals

are applied by licensed contractors and application of any landscaping-related chemicals is done per current San Diego County Department of Agriculture regulations and the City encourages manual weed and pest removal whenever possible; furthermore, any contract employee applying or mixing landscaping-related chemicals is required to possess a valid Qualified Applicators Certificate for Class B as issued by the State Department of Food and Agriculture. To regulate landscaping chemical use in the City, the contract company is required per its contract with the City to submit a proposed fertilization schedule prior to commencement of fertilization and to provide a monthly chemical application report to the City. In FY2007/2008, there were no perceived increases in landscaping-related chemicals as compared to previous years and as in other years, the pesticides included as part of the annual Dry Weather Monitoring Program were not detected in City-wide sampling.

4.4 Sweeping of Municipal Areas

4.4.1 Background

This section describes the City's established street sweeping program that is aimed at effectively removing pollutants anticipated in the areas that make up this program. Section 6.4 of 2008 JURMP described the activities involved in the program which is aimed at meeting minimum sweeping requirements for high, moderate, and low trash volume areas. No modifications in Section 6.4 of the JURMP 2008 have been recorded during this reporting period.

This section identifies the total distance of curb-miles of improved roads and streets identified as consistently generating high, moderate, and low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets. The section includes identification of the total distance of curb-miles swept and identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping. This information is presented in Table 4.4-1. Street sweeping includes both improved curb and gutter streets, and non-improved, rural design residential streets as shown in Figure 4.4-1.

Figure 4.4-1

City of Del Mar

Street Sweeping Schedule

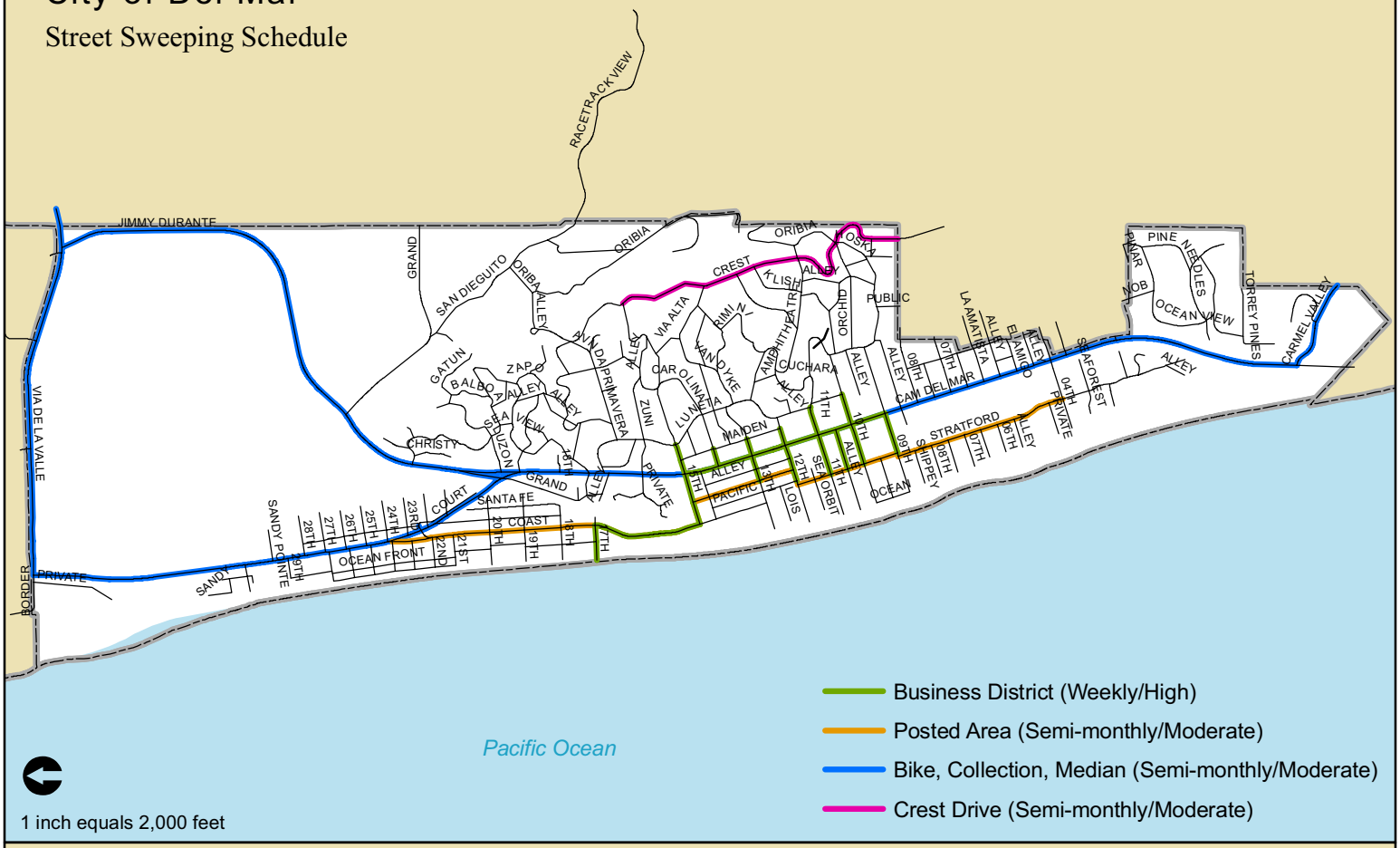

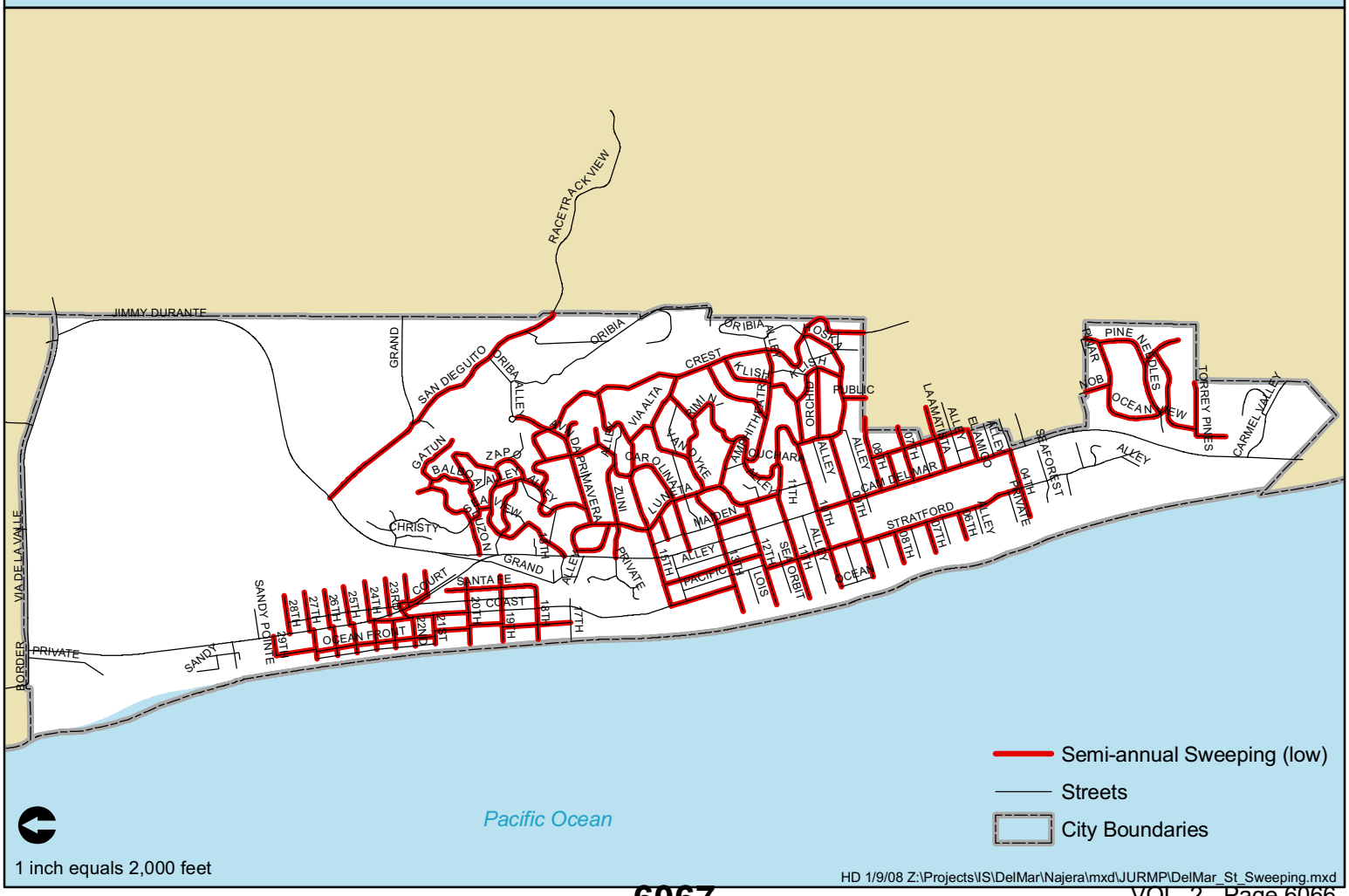

4.4.2 Program Implementation

As required in the Permit and described in the City's JURMP, Section 6.4.4.10 for Sweeping of Municipal areas, the annual reported data is as follows:

1. Identification of the total distance of curb-miles of improved roads and streets identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.

   As reported in the 2008 JURMP, the City has extensive recordkeeping in place that tracks the daily operations of the street sweeper including the total number of broom hours. The precise number of miles swept for each distinct high, moderate, and low volume area cannot be effectively tracked due to the method of operation of the equipment and the schedule which may include sweeping several combinations of the various areas within the same day or week. The City does have the ability to calculate the curb-miles based on the various daily data entries. The reported swept curb-miles provided in the annual report will be based on these calculations as reported below in item no. 4.

2. Identification of the total distance of curb-miles of improved roads and streets identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.

   As reported in the 2008 JURMP, the City has extensive recordkeeping in place that tracks the daily operations of the street sweeper including the total number of broom hours. The precise number of miles swept for each distinct high, moderate, and low volume area cannot be effectively tracked due to the method of operation of the equipment and the schedule which may include sweeping several combinations of the various areas within the same day or week. The City does have the ability to calculate the curb-miles based on the various daily data entries. The reported swept curb-miles provided in the annual report will be based on these calculations as reported below in item no. 4.

3. Identification of the total distance of curb-miles of improved roads and streets identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.

   As reported in the 2008 JURMP, the City has extensive recordkeeping in place that tracks the daily operations of the street sweeper including the total number of broom hours. The precise number of miles swept for each distinct high, moderate, and low volume area cannot be effectively tracked due to the method of operation of the equipment and the schedule which may include sweeping several combinations of the various areas within the same day or week. The City does have the ability to calculate the curb-miles based on the various daily data entries. The reported swept curb-miles provided in the annual report will be based on these calculations as reported below in item no. 4.

4. Identification of the total distance of curb-miles swept.

   This Fiscal Year, it is calculated that approximately 1,168.8 City curb-miles were swept.

5. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping:

   The two municipal parking lots in the City's municipal facility inventory are the 17th Street Lifeguard station parking lot and the City Hall Parking lot. Both are considered to be high trash volume designations and thus, are swept semi-monthly. Sweeping was completed as scheduled.

6. Amount of material (tons) collected from street and parking lot sweeping:

   The total amount of material collected from street sweeping activities of municipal areas for FY2007/2008 was 231 cubic yards*, or an estimated 115.5 tons* (see Table 4.4-1). This figure includes all three trash volume categories. **Please Note:** *the Permit requires the material collected to be reported in tons, however, the City's measurements are in cubic yards. Cubic yards are reported in tons using a 1,000 pound per cubic yard conversion.*

As mentioned in Section 4.2.3, the City coordinates with the 22nd District Agricultural Association (DAA) to ensure that additional pollutant loading from the DAA facilities does not contribute to pollution in the MS4. Although the City conducts street sweeping along the DAA facility, the DAA does provide additional street sweeping on an as-needed basis, especially during its high season.

4.5 Infiltration from Sanitary Sewer to MS4 Provide Preventive Maintenance of Both Elements

4.5.1 Background

This section describes the City's sanitary sewer operation and maintenance program which is the basis for the prevention of infiltration into the MS4 system. Section 6.5 of 2008 JURMP described the activities involved in the program which aimed at efficiently transporting all sewage and reducing and eliminating stoppages and/or spills by implementing a proactive preventive maintenance and capital improvement program. No modifications in Section 6.5 of the 2008 JURMP have been recorded during this reporting period.

The Public Works Department is responsible for operation and maintenance of both the sanitary sewer system and the MS4. The operation and maintenance program for the MS4 is included in Section 6.2 above. The operation and maintenance program for the sanitary sewer includes a comprehensive inspection, cleaning, repair, and maintenance program. The City's Capital Improvement Project (CIP) program includes funding for sanitary sewer replacement, improvements, and major repairs. The CIP program meets industry standards and other regulatory requirements.

Sanitary Sewer Infrastructure

The sanitary sewer system infrastructure in Del Mar includes approximately 24.75 miles of gravity main, 0.07 miles (or approximately 387ft) of force main and 387 service points. Del Mar's system includes three sewer pump/lift stations, 112 clean out facilities, and approximately 549 manhole structures.

Table 4.4-1
Street Sweeping Schedule and Implementation (2007 2008) Public Works

SCHEDULE Sweeping by Trash Volume Designation			
	High Volume	**Moderate Volume**	**Low Volume**
Minimum Permit Required Frequency	Semi-monthly	Monthly	Annually
Permit Compliance Achieved	Yes	Yes	Yes
Areas Included	• Business District • 17th Street Parking Lot (Lifeguard) • City Hall Parking Lot	• Stratford Court • Coast Boulevard • Ocean Avenue • Camino del Mar • Via de la Valle • Carmel Valley Road • Jimmy Durante Blvd • Crest Road	• All City streets 4th 15th Streets (West of Camino del Mar) • All City Streets 10th 15th Streets (East of Camino del Mar) • All City Streets 15th to San Dieguito (East side) • All City Streets 15th to 29th Streets (West side) • All City Streets Del Mar Heights to 10th Street (East of Camino del Mar)

ACTUAL Sweeping by Trash Volume Designation			
	High Volume	**Moderate Volume**	**Low Volume**
Frequency Implemented	Semi-monthly	Monthly	Annually
Volume (combined)	231 CY		
Weight (calculated)	115.5 tons		
Total Miles Swept	1168.8		
Permit Compliance Achieved	Yes	Yes	Yes

The municipal inventory in Appendix 4-A includes all sanitary sewer pump stations, and pipes as high priority sources that require minimum BMPs as specified in the table. Specifically, the City s sanitary sewer pump stations are considered a high priority source of pollutants due to the potential for spills and mechanical failure. The main pump stations are located at 21st Street, 7th Street and San Dieguito Road

4.5.2 Program Implementation

A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 is provided in this section.

Sanitary sewer operation and maintenance procedures are established by the City and record keeping is utilized by the Public Works Department to increase implementation efficiency and the effectiveness through a work order system. The sanitary sewer inspection, maintenance, and cleaning logs are kept to ensure that the schedule shown in Appendix 4-A is implemented for permit compliance and the data and information is compiled for various regulatory annual reports.

Other means that can be used to document and record inspection results of the sanitary sewer system assessment include field notes, bacterial testing, timed and dated photographs, video, drawings, and maps. The video or visual inspection of the sanitary sewer is a very effective means of assessing infiltration into the MS4. All records are retained at the Public Works Yard for at least three years after the date the record was established. In some instances, records may require a five year retention time (see Attachment B of the Permit, Section 4.).

Recordkeeping of sewage and other spills entering the MS4 system will be tracked and reported according to the requirements outlined in Section 9 Illicit Discharge Detection and Elimination Component.

4.6 Roads, Streets, Highways, and Parking Facilities

4.6.1 Background

This section describes the City s activities that complement the street sweeping practices by focusing on parking facilities and the additional management measures implemented to minimize their pollutant contributions to the MS4. Section 6.6 of 2008 JURMP described the activities involved in this element which included the minimum BMPs required during maintenance and minor construction or repair activities for streets, roads, and parking facilities. No modifications in Section 6.6 of the JURMP 2008 have been recorded during this reporting period.

Del Mar has approximately 747 curb-miles of streets that are swept per year and two public parking lots or facilities (City Hall and Lifeguard Station) as shown on the map and table provided in Section 4.4 - Street Sweeping. The City does not maintain any highways and they are not addressed in this element.

The City is applying the street sweeping activity as the primary BMP to reduce pollutants from streets and parking facilities.

4.6.2 Program Implementation

4.6.2.1 Sweeping of Municipal Areas Program

This section describes the steps that were taken to require and verify the implementation of the designated BMPs at roads, streets, and parking facilities or other municipal sites/ sources. Data and reporting for street sweeping is provided in Section 4.4.

4.6.2.2 Litter Management Requirements

This section includes the amount of waste and litter (tons) removed from streets as part of the litter management program. Street Sweeping is the City's main BMP and means for litter removal from its streets; litter removal is documented in Section 4.4 as part of the Sweeping of Municipal Areas Program and in Section 4.2 as part of Operation and Maintenance of the Municipal Separate Storm Sewer System (MS4) and Structural Controls for removal of debris, litter and other materials.

4.6.2.3 Notable Activities

This section describes the notable activities conducted to manage urban runoff from roads, streets, and parking facilities by the City.

The City works in conjunction with volunteers from Arc of San Diego in performing its litter removal program. In FY2007/2008, the Arc of San Diego volunteers collected approximately 6 tons of trash from the City's streets as well as parks and recreational facilities.

In addition to street sweeping activities, the City has also installed inlet trash and debris baskets at 2 locations where debris loading from the street has been noted to be moderate to heavy. These BMPs are being assessed for further implementation at other locations throughout the City. Any future additions will be noted in Annual Reports to follow, as necessary.

4.6.3 Roads, Streets, Highways, and Parking Facilities Element Effectiveness Assessment

Section 6.20 of 2008 JURMP addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l). No modifications in Section 6.20 of the 2008 JURMP have been recorded during this reporting period.

4.7 Areas Tributary to 303(d) Water Body Segments Adjacent or Discharging to ESAs

This section of the JURMP, describes the identified areas tributary to 303(d) listed water bodies in each of the relevant municipal activities and defines the priority areas for consideration in development planning decisions and to facilitate the selection of priority municipal areas/activities. Section 6.8 of the 2008 JURMP provided information on how the priority areas for consideration in development planning decisions are selected that facilitates the selection of priority municipal areas/activities. No modifications in Section 6.8 of the 2008 JURMP have been recorded during this reporting period.

4.8 Corporate Yards

This section describes the City's program that aims at ensuring that storm water pollution prevention and best management practices are considered when conducting activities at municipal facilities. Section 6.13 of the 2008 JURMP described the activities at this facility that generated waste, spills, and leaks that could potentially reach the storm drain system and receiving waters in storm water runoff or as non-storm water discharges. No modifications in Section 6.13 of the 2008 JURMP have been recorded during this reporting period.

The City's only corporate yard is the Public Works Yard, as shown in the updated municipal facility inventory provided in Appendix 4-A, and was inspected on June 26, 2008. The inspection revealed that all prescribed BMPs were being implemented by staff, and thus the facility was in compliance with JURMP requirements.

4.9 Parks and Recreational Facilities

This section describes the activities of the City's Community Services Department which provides primary oversight of the City's park and beach maintenance activities, community center activities and uses, and building maintenance at these facilities. Section 6.16 of 2008 JURMP described the activities including all routine maintenance activities at these facilities performed by the City. No modifications in Section 6.16 of the 2008 JURMP have been recorded during this reporting period. See Appendix 4-A for a complete list of municipal parks and recreational facilities.

4.9.1 Background

The Community Services Department overseas numerous functions of the City including Lifeguard Services, Parking Enforcement, Park Ranger operations, Beach Maintenance, and all facility use permits for the parks, beach area, and the Powerhouse Community Center.
The City of Del Mar has a written policy to encourage and regulate the use of City-owned parks and recreational facilities or right of ways by individuals and organizations for special community or personal events. The Community Services Department has oversight over parks and recreational facilities in Del Mar and all special events.

Events conducted at Del Mar's Powerhouse Community Center are subject to the City of Del Mar Community Services Facility Use Fees and Policies, and all events are staffed by the City. The City or its contractors perform all routine maintenance activities at these facilities, including landscaping which is covered in the Management of Pesticides, Herbicides, and Fertilizers Element found in Section 6.3 of 2008 JURMP.

4.9.2 Source Characterization

This section includes all the updates made to the City's parks and recreational facilities inventory and prioritization. No modifications in Section 6.16.2 of the 2008 JURMP have been recorded during this reporting period.

4.9.3 Best Management Practice Requirements

Section 6.16.3 of the 2008 JURMP identified and described updated BMP requirements for, City's parks and recreational facilities. This section described which BMPs will be implemented,

or required to be implemented for the City's parks and recreational facilities. No modifications in Section 6.16.3 of the 2008 JURMP have been recorded during this reporting period. This section provides confirmation that the designated BMPs were implemented, or required to be implemented, for all City's parks and recreational facilities.

4.9.4 Program Implementation

This section describes the steps that were taken to require and verify the implementation of the designated BMPs at City's parks and recreational facilities. Section 6.16.4 of 2008 JURMP identified and described updated BMP requirements for, City's parks and recreational facilities. This section described which BMPs will be implemented, or required to be implemented for City's parks and recreational facilities. No modifications in Section 6.16.4 of the 2008 JURMP have been recorded during this reporting period which includes inspection, maintenance, litter management, and enforcement practices at parks and other recreational facilities.

The results of the City's inspection of park and recreational facilities in found in Appendix 4-A.

4.9.5 Enforcement Measures for City's Parks and Recreational Facilities

This section provides the number of violations and enforcement actions (including types) taken for City's parks and recreational facilities, including information on any necessary follow-up actions taken.

The results of the City's inspection of park and recreational facilities are found in Appendix 4-A.

4.9.6 Notable Activities

This section describes the notable activities conducted to manage urban runoff from parks and recreational facilities by the City.

The City works in conjunction with volunteers from Arc of San Diego in performing its park litter removal program. In FY2007/2008, the Arc of San Diego volunteers collected approximately 6 tons of trash from the City's parks, streets, and recreational facilities.

This Fiscal Year, the City applied with the California Department of Conservation for a grant from its Beverage Container Recycling and Litter Reduction Program to assist in the City's litter clean up efforts. Disbursement of funds is determined by the California Department of Finance and the amount of the grant is contingent on the population of eligible cities or counties applying for the grant. The City of Del Mar received 5,000 for FY2007/2008 which was the maximum amount eligible. A portion of the grant money was used to fund beach clean-up activities as well as to purchase dog nuisance clean-up bag stations (Mutt Mitt Stations) for placement in parks and at Dog Beach; the remaining money was used to assist in the purchase of a new street sweeper to continue to effectively reduce the amount of trash and debris entering the MS4. The City has again applied for the grant and has received money for use in FY2008/2009. The results of where these funds are allocated will be reported in the next Annual Report.

4.9.7 City's Parks and Recreational Facilities Element Effectiveness Assessment

Section 6.20 of 2008 JURMP addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l). No modifications in Section 6.20 of the 2008 JURMP have been recorded during this reporting period.

4.10 Special Events Venues

This section describes the policy of the City to regulate the use of City-owned facilities or right-of-ways by individuals and organizations for either special community or personal events by requiring submittal of a Use of Public Facility Permit application and acknowledgment of all the applicable rules, regulations and fees. Section 6.17 of the 2008 JURMP described the public event policy and process enforced by the City which aimed at safeguarding the City s facilities and the environment. A Major Event is defined as an activity which entails *in excess of 200 participants and/or spectators* and which affects City personnel, resources, services, facilities, traffic circulation, or impacts the community and/or its citizens. Examples of past major events include the La Jolla Half Marathon, Concerts in the Park, and Holiday Wonderland in Del Mar.
No modifications in Section 6.17 of the 2008 JURMP have been recorded during this reporting period.

Table 4.10-1 provides a summary of the number of major events, number of inspections, and the inspection results recorded on the inspection form (2008 JURMP, Appendix 6-B). The completed inspection forms are kept on file by the Clean Water Program Manager. Some inspection form deficiencies were identified in the early implementation phase of the program and have been corrected with training of recently hired staff.

Table 4.10-1
City of Del Mar Major Events FY2007 2008

Event Name	Event Date	Inspection Date(s)	Notes Comments
Concerts in the Park	7/10/07	Post-event inspection by clean up crews no spills or incidents reported	Additional trash receptacles and portable toilets provided by the City
Bocce Ball Tournament	7/17/07	Post-event inspection by clean up crews no spills or incidents reported	Additional trash receptacles and portable toilets provided by the City
Concerts in the Park	8/14/07	Post-event inspection by clean up crews no spills or incidents reported	Additional trash receptacles and portable toilets provided by the City
Concerts in the Park	9/16/07	Post-event inspection by clean up crews no spills or incidents reported	Additional trash receptacles and portable toilets provided by the City
Del Mar Village Association Winter Wonderland	12/2/07	During event by Clean Water Program staff no spills or incidents reported	Additional trash receptacles and portable toilets provided by the City
La Jolla Marathon	4/24/08	Post-event inspection by clean up crews no spills or incidents reported	
Special Olympics	6/4/08	Post-event inspection by clean up crews no spills or incidents reported	
Concerts in the Park	6/17/08	Post-event inspection by clean up crews no spills or incidents reported	Additional trash receptacles and portable toilets provided by the City
Del Mar Village Association Summer Solstice Event	6/19/08	Post-event inspection by clean up crews no spills or incidents reported	Additional trash receptacles and portable toilets provided by the City

4.11 Power Washing

This section addresses power washing activities associated with municipal facilities or activities. Section 6.18 of 2008 JURMP described the power washing activities associated with municipal facilities or activities. No modifications in Section 6.18 of the JURMP 2008 have been recorded during this reporting period.

4.11.1 Background

This section addresses power washing activities associated with municipal facilities or activities. Due to its potential to introduce pollutants into the MS4 and thus receiving waters, power washing is limited as much as possible and regulated to comply with the Permit and Del Mar Municipal Code Title 11.30 Storm water Management and Discharge Control.

4.11.2 Source Characterization

Currently, there is no regularly scheduled power washing activities at specific locations. This activity is conducted in various areas of the City depending on the need and as a result of other maintenance functions. This activity and the BMPs listed below are considered to apply citywide for all municipal operations. Power washing may be conducted by City staff or under contract depending on the need.

4.11.3 Best Management Practice Requirements

Section 6.18.3 of 2008 JURMP identifies and describes updated BMP requirements for, power washing activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor surfaces. This section describes which BMPs will be implemented, or are required to be implemented for power washing activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor surfaces. No modifications in Section 6.18.3 of the 2008 JURMP have been recorded during this reporting period. This section provides confirmation that the designated BMPs were implemented, or required to be implemented for all power washing activities.

4.11.4 Program Implementation

This section describes the steps that were taken to require and verify the implementation of the designated BMPs during power washing activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor surfaces. Section 6.18.4 of 2008 JURMP identifies and describes updated BMP requirements for, power washing activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor surfaces. This section describes which BMPs will be implemented, or required to be implemented for power washing activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor surfaces. No modifications in Section 6.18.4 of the 2008 JURMP have been recorded during this reporting period.

4.11.5 Inspection and Maintenance requirements

This section provides a summary of inspections and maintenance activities conducted for power washing activities involving buildings, windows, parking lots, sidewalks, and any other applicable municipal outdoor surfaces. Included here are the identification of any power washing activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor

surfaces found to require inspection less than annually following two years of inspection, including justification for the finding. This section includes identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections. A description of the general results of the inspections is also provided. Overall, this section provides confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.

Table 4.11-1
Municipal Facility Area Power Washing Inspection Summary

Sites Requiring Inspection	Inspections Conducted (Dates)	Notes/Comments
Side walk cleaning	April 2, 2008	In compliance water collected

As Table 4.11-1 indicates, only one municipal power washing activity was conducted during FY2007/2008. The inspection of the side walk power washing activity on April 2, 2008 revealed that the activity was in compliance with Permit and City Municipal Code requirements since all wash water was collected and vacuumed for proper disposal into the sanitary sewer. Thus, no additional pollutants were introduced into the MS4 as a result of this power washing activity.

4.11.6 Enforcement Measures for Power Washing Activities

This section provides the number of violations and enforcement actions (including types) taken for power washing activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor surfaces, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions that were being taken to achieve compliance. Section 6.1.3.5 of 2008 JURMP provides a description of the general process for applying enforcement to power washing activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor surfaces for urban runoff related violations. No modifications in Section 6.1.3.5 of the 2008 JURMP have been recorded during this reporting period.

No violations were reported in FY2007/2008. As mentioned in Section 4.11.5, only one power washing event took place in FY2007/2008 and the event was in compliance with City and Permit requirements.

4.11.7 Notable Activities

This section describes the notable activities conducted to manage urban runoff from power washing activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor surfaces by the City.

The City limits its use of power washing as a means of cleaning municipal facilities and prefers to implement dry clean methods whenever possible. When power washing does take place, wash water recovery and proper disposal of wash water are two BMPs that are implemented.

4.11.8 Power Washing Activities Effectiveness Assessment

Section 6.20 of 2008 JURMP addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l). No modifications in Section 6.20 of the 2008 JURMP have been recorded during this reporting period.

4.12 Fire Services – Non-Emergency Fire Fighting

This section describes the City's program to reduce pollutants from non-emergency fire fighting flows (i.e. flows from controlled or practice blazes and maintenance activities) determined to be a significant source of pollutants to waters of the U.S. Section 6.19 of the 2008 JURMP described the City's program to reduce pollutants from non-emergency fire fighting flows. No modifications in Section 6.19 of the JURMP 2008 have been recorded during this reporting period.

4.13 Municipal Component Effectiveness Assessment

Section 6.20 of 2008 JURMP addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l). No modifications in Section 6.20 of the 2008 JURMP have been recorded during this reporting period.

4.14 Program Modification and Review

Section 6.21 of 2008 JURMP addresses the program modification and review requirements. No modifications in Section 6.21 of the 2008 JURMP have been recorded during this reporting period. No modifications have been noted for this reporting period to any sections of the Municipal Component as submitted in the 2008 JURMP.

Appendix 4-A
Municipal Inventory

																Potential Pollutants																																				
Facility ID	Agency	Facility Name	Facility Type	Address Number	Street	Ste.	City	State	Zip	HA Name	Hydrologic Area	Drainage Basin	SIC Code	BLTEA Category Number	Description of Area/ Activity	Bacteria	Gross Pollutants	Metals	Nutrients	Oil / Grease	Organics	Pesticides	Sediment	Trash	Receiving Waterbody	303(d) Listed Water Body	High Priority/ Non-Priority	SC-10 Non-Stormwater Discharges	SC-11 Spill Prev. Control, Cleanup	SC-20 Vehicle and Equip Fueling	SC-21 Vehicle and Equipment Cleaning	SC-22 Vehicle and Equipment Repair	SC-30 Outdoor Loading/Unloading	SC-31 Outdoor Container Storage	SC-32 Outdoor Equipment Maintenance	SC-33 Outdoor Raw Materials Storage	SC-34 Waste Handling Disposal	SC-41 Building, Grounds Maintenance	SC-43 Parking Storage Area Maint.	SC-60 Housekeeping Practices	SC-61 Safer Alternative Products	SC-70 Road and Street Maintenance	SC-71 Plaza and Sidewalk Cleaning	SC-72 Fountain/ Pool Maintenance	SC-73 Landscape Maintenance	SC-74 Drainage System Maintenance	SC-75 Waste Handling and Disposal	SC-76 Water/ Sewer Utility Maintenance	Date of Most Recent Inspection (High Priority Sites)	In Complainace? (Y/ N)	Description of Enforcement Action
																												Minimum Best Management Practices																								
1	DM	Public Works Yard	Municipal	2240	Jimmy Durante Blvd		Del Mar	CA	92014	San Dieguito	905.11				Public Works Admin building, shops, parking lot, open and covered storage yards. Fueling station, storage, vehicle/equipment cleaning and repair. Temporary storage of trash, recycling and landscape materials. Hazardous waste materials storage.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	San Dieguito Lagoon	Yes, Bacteria	High Priority	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓		✓		6/26/2008	Y	N/A
2	DM	Del Mar Fire Station	Municipal	2220	Jimmy Durante Blvd		Del Mar	CA	92014	San Dieguito	905.11				Building and parking lot. Vehicle storage and cleaning. Hazardous waste materials storage.			Yes		Yes	Yes		Yes	Yes	San Dieguito Lagoon	Yes, Bacteria	Non-Priority	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓				✓				N/A	N/A	N/A
3	DM	Community Library	Municipal	1309	Camino Del Mar		Del Mar	CA	92014	San Dieguito	905.11				Building, parking lot, and landscape maintenance.			Yes	Yes	Yes		Yes		Yes	Pacific Ocean	No	Non-Priority		✓										✓		✓			✓		✓					
4	DM	City Hall	Municipal	1050	Camino Del Mar		Del Mar	CA	92014	San Dieguito	905.11				Building and landscape maintenance.				Yes			Yes		Yes	Pacific Ocean	No	Non-Priority	✓	✓									✓	✓	✓		✓			✓					
5	DM	City Hall Parking Lot	Municipal	1050	Camino Del Mar		Del Mar	CA	92014	San Dieguito	905.11				Parking and landscaping.			Yes		Yes		Yes		Yes	Pacific Ocean	No	High Priority	✓	✓									✓	✓	✓		✓	✓		✓	✓			6/24/2008	Y	N/A
6	DM	Main Lifeguard Station	Municipal	1700	Coast Blvd		Del Mar	CA	92014	San Dieguito	905.11				Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.	Yes			Yes		Yes		Yes	Yes	Pacific Ocean	No	High Priority	✓	✓		✓		✓	✓	✓		✓	✓	✓	✓	✓		✓						5/27/2008	Y	N/A
7	DM	Main Lifeguard Station Parking Lot	Municipal	1700	Coast Blvd		Del Mar	CA	92014	San Dieguito	905.11				Parking and landscaping.			Yes		Yes		Yes		Yes	Pacific Ocean	No	High Priority	✓	✓									✓	✓	✓		✓	✓		✓	✓			6/24/2008	Y	N/A
8	DM	20th Street Lifeguard Station	Municipal		20th St		Del Mar	CA	92014	San Dieguito	905.11				Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.	Yes			Yes		Yes		Yes	Yes	Pacific Ocean	No	High Priority	✓	✓				✓				✓	✓		✓									6/24/2008	Y	N/A
9	DM	25th Street Lifeguard Station	Municipal		25th St		Del Mar	CA	92014	San Dieguito	905.11				Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.	Yes			Yes		Yes		Yes	Yes	Pacific Ocean	No	High Priority	✓	✓				✓				✓	✓		✓									6/24/2008	Y	N/A
10	DM	Tennis Court Facilities	Municipal		Court St		Del Mar	CA	92014	San Dieguito	905.11				Tennis courts.									Yes	Pacific Ocean	No	Non-Priority	✓	✓									✓		✓							✓			
11	DM	Zuni Water Reservoir	Municipal	627	Zuni Dr		Del Mar	CA	92014	San Dieguito	905.11				Potable water storage tank and equipment maintenance.	Yes			Yes	Yes	Yes				Pacific Ocean	No	High Priority	✓	✓					✓	✓	✓			✓	✓								✓	✓		
12	DM	Crest Water Reservoir	Municipal	706	Crest Rd		Del Mar	CA	92014	San Dieguito	905.11				Potable water storage tank and equipment maintenance.	Yes			Yes	Yes	Yes				Pacific Ocean	No	High Priority	✓	✓					✓	✓	✓			✓	✓								✓	✓		
13	DM	11th Street Water Reservoir	Municipal	562	11th St		Del Mar	CA	92014	San Dieguito	905.11				Potable water storage tank and equipment maintenance.	Yes			Yes	Yes	Yes				Pacific Ocean	No	High Priority	✓	✓					✓	✓	✓			✓	✓								✓	✓	6/26/2008	Y	N/A
14	DM	Torrey Pines Water Reservoir	Municipal	487	Pine Needles Dr		Del Mar	CA	92014	Penasquitos	906.10				Potable water storage tank and equipment maintenance.	Yes			Yes	Yes	Yes				Pacific Ocean	No	High Priority	✓	✓					✓	✓	✓			✓	✓								✓	✓	6/26/2008	Y	N/A
15	DM	Seagrove Park	Municipal	1500	Coast Blvd		Del Mar	CA	92014	San Dieguito	905.11				Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Pacific Ocean	No	High Priority	✓	✓								✓			✓	✓		✓		✓					6/24/2008	Y	N/A
16	DM	Powerhouse Community Center	Municipal	1630	Coast Blvd		Del Mar	CA	92014	San Dieguito	905.11				Special events, food prep, restrooms. Building and landscape maintenenace.	Yes	Yes		Yes	Yes	Yes			Yes	Pacific Ocean	No	High Priority	✓	✓								✓	✓	✓	✓	✓		✓						6/24/2008	Y	N/A
17	DM	Powerhouse Park	Municipal	1630	Coast Blvd		Del Mar	CA	92014	San Dieguito	905.11				Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application. Restrooms and showers.	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Pacific Ocean	No	High Priority	✓	✓								✓			✓	✓		✓		✓					6/24/2008	Y	N/A
18	DM	Caminito Park	Municipal	1500	Camino Del Mar		Del Mar	CA	92014	San Dieguito	905.11				Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Pacific Ocean	No	High Priority	✓	✓								✓			✓	✓		✓		✓					6/24/2008	Y	N/A
19	DM	Minipark	Municipal	1300	Maiden Ln		Del Mar	CA	92014	San Dieguito	905.11				Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Pacific Ocean	No	High Priority	✓	✓								✓			✓	✓		✓		✓					6/24/2008	Y	N/A
20	DM	Sea Cliff Park	Municipal	1500	Coast Blvd		Del Mar	CA	92014	San Dieguito	905.11				Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Pacific Ocean	No	High Priority	✓	✓								✓			✓	✓		✓		✓					6/24/2008	Y	N/A
21	DM	Riverpath Del Mar	Municipal	2240	Jimmy Durante Blvd		Del Mar	CA	92014	San Dieguito	905.11				Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Yes			Yes		Yes	Yes	Yes	Yes	San Dieguito Lagoon	Yes, Bacteria	High Priority	✓	✓								✓			✓	✓		✓		✓					6/24/2008	Y	N/A
22	DM	Sewer Lift Station	Municipal	201	21st St		Del Mar	CA	92014	San Dieguito	905.11				Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	Yes	Yes		Yes	Yes	Yes				San Dieguito Lagoon	Yes, Bacteria	High Priority	✓	✓									✓		✓							✓	✓	6/26/2008	Y	N/A
23	DM	Sewer Lift Station	Municipal	120	7th St		Del Mar	CA	92014	San Dieguito	905.11				Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	Yes	Yes		Yes	Yes	Yes				Pacific Ocean	No	High Priority	✓	✓									✓		✓							✓	✓	6/26/2008	Y	N/A
24	DM	Sewer Lift Station	Municipal	2110	San Dieguito Dr		Del Mar	CA	92014	San Dieguito	905.11				Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	Yes	Yes		Yes	Yes	Yes				San Dieguito Lagoon	Yes, Bacteria	High Priority	✓	✓									✓		✓							✓	✓	6/26/2008	Y	N/A
25	DM	Storm Drain System	Municipal		Citywide		Del Mar	CA	92014	San Diegiuto, Los Pe□asquitos	905.11 and 906.10	All			5.96 miles of gravity mains and approx. 350 ft of open channel, and 2.78 miles of cobble/hardscape open swales. Conveyance of storm water/urban runoff.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	San Diegiuto, Los Pe□asquitos Lagoon, Pacific Ocean	SD: Yes, Bacteria, LP: Yes, Phosphate, TSS, PO: No	High Priority	✓	✓					✓						✓					✓	✓		On-going	Y	N/A
26	DM	Streets and Alleys	Municipal		Citywide		Del Mar	CA	92014	San Diegiuto, Los Pe□asquitos	905.11 and 906.10	All			22 miles of streets and alleys. Vehicular traffic.	Yes			Yes				Yes	Yes	San Diegiuto, Los Pe□asquitos Lagoon, Pacific Ocean	SD: Yes, Bacteria, LP: Yes, Phosphate, TSS, PO: No	High Priority	✓	✓											✓		✓	✓				✓		On-going	Y	N/A
27	DM	Beach	Municipal		Coast		Del Mar	CA	92014	San Diegiuto, Los Pe□asquitos	905.11 and 906.10				2.8 miles of beach main access at 17th street. Sand replenishment, trash and debris removal, recreation.									Yes	Pacific Ocean	No	Non-Priority	✓	✓							✓				✓							✓				
28	DM	Underground Pipelines, Sanitary Sewer	Municipal		Citywide		Del Mar	CA	92014	San Diegiuto, Los Pe□asquitos	905.11 and 906.10	All			24.75 miles of underground piping. Sewer spills, leaks and breaks. Maintenance of piping.	Yes	Yes		Yes	Yes	Yes				San Diegiuto, Los Pe□asquitos Lagoon, Pacific Ocean	SD: Yes, Bacteria, LP: Yes, Phosphate, TSS, PO: No	High Priority	✓	✓			✓		✓						✓								✓	On-going	Y	N/A
29	DM	Preserves and Open Space	Municipal		Citywide		Del Mar	CA	92014	San Diegiuto, Los Pe□asquitos	905.11 and 906.10	All			Open Space										San Diegiuto, Los Pe□asquitos Lagoon, Pacific Ocean	No	Non-Priority																							

Section 5
Industrial and Commercial Component

5.1 Introduction

This section provides introductory information that the City determined is relevant to the implementation of the Industrial and Commercial Component for the applicable reporting period.

5.2 Industrial Sites Sources Element

5.2.1 Background

The Industrial Component specifies best management practices for industrial areas and activities that occur within the City. These methods are industry site specific and are described below in Section 5.2.3. Industrial businesses are required to implement BMPs pursuant to the City s Storm water Ordinance. The City will enforce the implementation of these methods pursuant to the City s Storm Water Ordinance, Del Mar Municipal Code (DMMC) Section 11.30.

The procedures listed in this industrial component address the City s program as stated in Permit section D.3.b and the City s role to provide general oversight of industrial facilities covered under the General Storm Water Industrial Permit (Order 97-03-DWQ) and any subsequent amendments/addendums. The City is not directly responsible for the industrial facility s compliance with the General Storm Water Industrial Permit, as this is an activity performed by the San Diego RWQCB, but it does inspect and require compliance with DMMC to protect storm water quality and prevent urban runoff.

5.2.2 Source Characterization

Section 7.2.2 of the 2008 JURMP provided the methodology for industrial source characterization and a prioritized watershed-based inventory of all industrial sites/sources that could contribute a significant pollutant load to the MS4. No modifications in Section 7.2.2 or the industrial inventory in the 2008 JURMP have been recorded during this reporting period.

The industrial inventory for the City of Del Mar can be found in Appendix 5-A at the end of this component.

5.2.3 Best Management Practice Requirements

Section 7.2.3 of 2008 JURMP included a list and description of minimum BMPs to be implemented, or required to be implemented, for each industrial site/source, including pollution prevention. This reporting period, minor adjustments were made to the required BMPs listed in Appendix 5-A as compared to the BMP Inventory in Section 7.2.3 of the 2008 JURMP. The changes were based on applicability, or lack thereof, determined from the inspections conducted this reporting period. This section along with the BMPs listed in Appendix 5-A provides confirmation that the designated BMPs were implemented, or required to be implemented, for industrial sites/sources.

5.2.4 Program Implementation

This section describes the steps to require and verify the implementation of designated BMPs for industrial sources as described in Section 7.2.4 of the 2008 JURMP which detailed the different aspects of program implementation for priority industrial facilities. No modifications in Section 7.2.4 of the 2008 JURMP have been recorded during this reporting period. A description of efforts taken to notify owners/operators of industrial sites/sources of BMP requirements is provided below.

Inspection and education protocols for Priority Industrial facilities were followed as specified in the City's 2008 JURMP. During the inspection, the City inspector verified that BMPs throughout the facility were being implemented as indicated in the facility's industrial SWPPP. The facility operator was also made aware of the City's new Clean Water Program video, which could be incorporated in the annual employee training.

5.2.5 Inspection of Industrial Sites

This section describes the City's program for inspections of industrial sites. Section 7.2.5 of 2008 JURMP describes the City's program for inspections of industrial sites including inspection frequency, procedures, referrals, filing, and follow-up inspections. No modifications in Section 7.2.5 of the 2008 JURMP have been recorded during this reporting period.

This section identifies the total number of industrial sites/sources inventoried and the total number inspected. It also includes justification and rationale for why the industrial sites/sources inspected were chosen for inspection. The section also provides confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance. The section identifies the number of third party inspections conducted and provides identification of efforts conducted to verify third party inspection effectiveness.

The City of Del Mar has two priority industrial facilities in its inventory and only one, Eucalyptus Stoneware, is within the City's jurisdiction (see Appendix 5-A). As stated in the City's JURMP Section 7.2.5.1, 100% of the facilities were selected for inspection during the reporting period. The San Diego RWQCB led the inspection of the 22nd District Agricultural Association (22nd DAA) on August 22, 2007 with representation from the City Engineer. A routine inspection of Eucalyptus Stoneware was conducted on May 27, 2008 as shown in Table 5.2.-1. All steps to the inspection and follow-up activities as listed in the 2008 JURMP were completed for Eucalyptus. Since the inspection of the 22nd DAA was conducted by the San Diego RWQCB, it qualifies as a third party inspection. This is a unique situation because the third party inspection team is also the regulating party, so not all of the JURMP third party inspection requirements need be applied.

Table 5.2-1
Industrial Facility Inspections

Facility Name	Regulatory Agency	SIC	Inspection Date	Comments
Del Mar Fair-grounds / Race Track (22nd DAA)	RWQCB	9900	8/22/07	Inspection conducted by RWQCB with City of Del Mar representation
Eucalyptus Stoneware	City of Del Mar	3200	5/27/08	Facility in compliance

5.2.6 Enforcement Measures for Industrial Sites/Sources

This section provides the number of violations and enforcement actions (including types) taken for industrial sites/sources, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions that were being taken to achieve compliance. Section 7.2.5.7 of 2008 JURMP provides a description of the general process for applying enforcement to for industrial sites/sources urban runoff related violations. This section also describes the steps taken to identify non-filers and a list of non-filers identified by the City of Del Mar. No modifications in Section 7.2.5.7 of the 2008 JURMP have been recorded during this reporting period.

The RWQCB inspection of the 22nd DAA facility resulted in several violations being noted in the RWQCB inspection report; however, follow-up inspections and enforcement actions regarding these violations will be handled by the RWQCB since this facility is a State agency. Any resulting enforcement or compliance achievement will be reported in the next JURMP Annual Report. The City's annual inspection of its other priority industrial facility resulting in no enforcement measures since the facility was deemed to be in compliance with requirements.

Table 5.2-2
Industrial Facility Enforcement

Facility Name	Regulatory Agency	Initial Compliance Action (Date)	Follow-up Action (Date) if applicable	Comments
Del Mar Fair-grounds / Race Track (22nd DAA)	RWQCB	8/22/07	Follow-up Inspection by RWQCB staff prior to rainy season. Updates to SWPPP required.	Routine non-sampling compliance inspection
Eucalyptus Stoneware	City of Del Mar	5/27/08	N/A	N/A

Due to its limited Industrial Zoning area, there were no new priority industrial facilities in the City for FY2007/2008, thus no action was taken to identify non-filers. The procedure to identify non-filers in JURMP Section 7.2.5.8 will be followed as needed in the future.

5.2.7 Notable Activities

This section describes the notable activities conducted to manage urban runoff from industrial sites/sources by the City.

Notable activities included the City's participation providing comments to the 22nd DAA's Roof Arena project. Involvement included meetings, document review and written comments to various proposal and documents, including the proposed enclosure of the Arena facility by the addition of a roof structure. As a result of the City's participation, 22nd DAA has voluntarily included water quality measures, BMPs and other features to reduce the impact of urban runoff from operations at the arena and storm water runoff which is anticipated to increase due to the addition of the impervious surface (roof). It should be noted that the 22nd DAA, as a State agency, is not required to incorporate the City's SUSMP requirements, but did provide City staff the opportunity to comment on the development project.

Furthermore, the City produced an education video to be aired on the local television station as well as during a public stormwater awareness workshop. The video will be used for future outreach to industrial/commercial businesses.

5.2.8 Industrial Sites/Sources Effectiveness Assessment

This section addresses the effectiveness assessment requirements for industrial sites / sources element. Section 7.2.7 of 2008 JURMP provides the effectiveness assessment requirements for stationary industrial sites / sources element. No modifications in Section 7.2.7 of the 2008 JURMP have been recorded during this reporting period.

5.2.9 Program Review and Modification for Industrial Sites/Sources

This section addresses the identification of the location in the JURMP of any changes made to the JURMP in order to meet the permit requirements. Section 7.2.8 of 2008 JURMP addresses the identification of the location in the JURMP of any changes made to the JURMP in order to meet the permit requirements. No modifications in Section 7.2.8 of the 2008 JURMP have been recorded during this reporting period.

5.3 Stationary Commercial Sites/Sources Element

5.3.1 Background

This section contains the information required for stationary commercial businesses, pollution prevention methods and BMPs for priority commercial businesses, and related activities that occur within the City. The selected BMPs are activity and site specific and are described under Section 5.3.4 below. Commercial businesses are required to implement these methods pursuant to the City's Storm water Ordinance, DMMC 11.30. The City, through an inspection program described below, will verify implementation of pollution prevention methods and BMPs.

5.3.2 Source Characterization

Section 7.3.2 of 2008 JURMP provides a completed and prioritized watershed-based inventory of all commercial sites/sources that could contribute a significant pollutant load to the MS4. The commercial inventory is provided in Appendix 5-B located at the end of this component. No

modifications in Section 7.3.2 of the 2008 JURMP have been recorded during this reporting period. Appendix 5-C and this section contain any updates made to the commercial inventory from when it was populated for the 2008 JURMP.

5.3.3 Best Management Practice Requirements

Section 7.3.3 of the 2008 JURMP includes a list and description of minimum BMPs to be implemented, or required to be implemented, for each commercial site/source, including pollution prevention as noted in Appendix 5-B. This reporting period, minor adjustments were made to the required BMPs listed in Appendix 5-A as compared to the BMP Inventory in Section 7.3.3 of the 2008 JURMP. The changes were based on applicability, or lack thereof, determined from the inspections conducted this reporting period. For the facilities that were inspected this Fiscal Year the dates and types are shown in Appendix 5-C.

5.3.4 Program Implementation

This section describes the steps to require and verify the implementation of designated BMPs for commercial sources. Section 7.3.4 of 2008 JURMP described the steps to require and verify the implementation of designated BMPs for stationary commercial sources. This reporting period, inspection and education protocols were followed as prescribed in JURMP Section 7.3.4. Appendix 5-C indicates which commercial facilities were inspected during the reporting period. No modifications in Section 7.3.4 of the 2008 JURMP have been recorded during this reporting period. Outreach was provided to owners/operators of commercial facilities as part of commercial facility inspections as prescribed in JURMP Section 7.3.4. The City is in the process of developing a proactive outreach plan to notify all priority commercial facilities owner/operators of specific BMP requirements required of their specific type of business prior to their inspection. This outreach would likely minimize BMP violations at the time of inspection and increase the efficacy of the minimum BMP requirements.

5.3.5 Inspection of Commercial Sites

This section describes the City's program for inspections of commercial sites. Sections 7.3.4.3 to 7.3.4.8 of 2008 JURMP described the City's program for inspections of commercial sites including inspection frequency, procedures, referrals, filing, follow-up inspections, and third party inspections. No modifications in Sections 7.3.4.3 to 7.3.4.8 of the 2008 JURMP have been recorded during this reporting period.

This section identifies the total number of commercial sites/sources inventoried and the total number inspected. It also includes justification and rationale for why the commercial sites/sources inspected were chosen for inspection. The section also provides confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance. The section identifies the number of third party inspections conducted and provides identification of efforts conducted to verify third party inspection effectiveness.

The City's inspection summary is provided in Appendix 5-C at the end of this component. The total number of inspections conducted in the reporting year was 18 out of 40 priority facilities with one additional facility closing due to fire.

5.3.6 Enforcement Measures for Commercial Sites/Sources

This section provides the number of violations and enforcement actions (including types) taken for commercial sites/sources, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions that were being taken to achieve compliance. Section 7.3.4.9 of 2008 JURMP provides a description of the general process for applying enforcement to for commercial sites/sources urban runoff related violations. No modifications in Section 7.3.4.9 of the 2008 JURMP have been recorded during this reporting period. This section also describes the steps taken to identify business that have not obtained a business license with the City of Del Mar.

Enforcement action for this reporting period are found in Appendix 5-C at the end of this component.

5.3.7 Notable Activities

This section describes the notable activities conducted to manage urban runoff from commercial sites/sources by the City.

No notable activities were documented during this reporting year.

5.3.8 Stationary Commercial Sites/Sources Effectiveness Assessment

This section addresses the effectiveness assessment requirements for stationary commercial sites / sources element. Section 7.3.6 of 2008 JURMP provides the effectiveness assessment requirements for stationary commercial sites / sources element. No modifications in Section 7.3.6 of the 2008 JURMP have been recorded during this reporting period. Improved scheduling of routine and follow-up inspection will be instituted to meet the 100% inspection requirement in FY2008/2009.

5.3.9 Program Review and Modification for Commercial Sites/Sources

This section addresses the identification of the location in the JURMP of any changes made to the JURMP in order to meet the permit requirements. Section 7.3.7 of 2008 JURMP addresses the identification of the location in the JURMP of any changes made to the JURMP in order to meet the permit requirements. No modifications in Section 7.3.7 of the 2008 JURMP have been recorded during this reporting period.

5.4 Mobile Sources Element

5.4.1 Background

The City will use its business license database to annually update the list of those priority mobile businesses that pose a high threat to water quality. The City will also collaborate with the Copermittees in the development of a regional strategy to educate, inspect, and regulate mobile businesses. The section also includes a preliminary priority commercial source inventory for mobile businesses that have obtained a business license with the City in 2007 as part of the 2008 JURMP.

5.4.2 Source Characterization

This section provides a prioritized inventory of mobile sites / sources that have the potential to contribute pollutants to the MS4. Section 7.4.2 of 2008 JURMP provided a completed and prioritized watershed-based inventory of all mobile businesses that could contribute a significant pollutant load to the MS4. No modifications in Section 7.4.2 of the 2008 JURMP have been recorded during this reporting period. The updated mobile businesses inventory is found in Appendix 5-D at the end of this component.

5.4.3 Best Management Practice Requirements

Section 7.4.3 of 2008 JURMP included a list and description of minimum BMPs to be implemented, or required to be implemented, for each mobile businesses, including pollution prevention No modifications in Section 7.4.3 of the 2008 JURMP have been recorded during this reporting period. This section provides confirmation that the designated BMPs were implemented, or required to be implemented, for mobile businesses in Appendix 5-D.

5.4.4 Program Implementation

This section describes the steps to require and verify the implementation of designated BMPs for mobile businesses. Section 7.4.4 of 2008 JURMP described the steps to require and verify the implementation of designated BMPs for mobile businesses. It detailed the different aspects of program implementation for mobile businesses. No modifications in Section 7.4.4 of the 2008 JURMP have been recorded during this reporting period. A description of efforts implemented to address mobile businesses is provided in this section.

5.4.5 Inspection of Mobile Businesses

This section describes the City s program for inspections of commercial sites. Section 7.4.4.2 of 2008 JURMP described the City s program for inspections of mobile businesses including inspection frequency. No modifications in Section 7.4.4.2 of the 2008 JURMP have been recorded during this reporting period.

The inspections conduct of mobile businesses is provided in Appendix 5-E at the end of this component.

5.4.6 Enforcement Measures for Mobile Businesses

This section provides the number of violations and enforcement actions (including types) taken for mobile businesses, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions that were being taken to achieve compliance. Section 7.4.4.3 of 2008 JURMP provides a description of the general process for applying enforcement to for mobile businesses urban runoff related violations. No modifications in Section 7.4.4.3 of the 2008 JURMP have been recorded during this reporting period. Enforcement measures for mobile businesses will be conducted in the same manner as specified for commercial businesses.

Enforcement actions taken on mobile businesses are included in Appendix 5-E located at the end of this component.

5.4.7 Notable Activities

This section describes the notable activities conducted to manage urban runoff from mobile businesses by the City.

5.4.8 Mobile Sources Effectiveness Assessment

This section addresses the effectiveness assessment requirements for mobile sources element. Section 7.4.5 of 2008 JURMP provides the effectiveness assessment requirements for mobile sources element. No modifications in Section 7.4.5 of the 2008 JURMP have been recorded during this reporting period.

5.4.9 Mobile Businesses Effectiveness Assessment

This section addresses the effectiveness assessment requirements for mobile businesses element. Section 7.4.7 of 2008 JURMP provides the effectiveness assessment requirements for mobile businesses element. No modifications in Section 7.4.7 of the 2008 JURMP have been recorded during this reporting period.

5.4.10 Program Review and Modification for Mobile Businesses

This section addresses the identification of the location in the JURMP of any changes made to the JURMP in order to meet the permit requirements. Section 7.4.8 of 2008 JURMP addresses the identification of the location in the JURMP of any changes made to the JURMP in order to meet the permit requirements. No modifications in Section 7.4.8 of the 2008 JURMP have been recorded during this reporting period.

Appendix 5-A
Industrial Inventory

Industrial Facilities			Inspection (Date and Type)					Enforcement Actions (Date and Type)				
Facility ID	Agency	Facility Name	2007-08	2008-09	2009-10	2010-11	2011-12	2007-08	2008-09	2009-10	2010-11	2011-12
1	City	Eucalyptus Stoneware	5/28/2008					N/A				
2	SRWCB	22nd District Agricultural Association (DAA)	8/22/2007					N/A				

Appendix 5-B
Commercial Inventory

			Potential Pollutants										Non-Stormwater Management					Vehicle and Equipment Maintenance				
													SC- 10 Non-Stormwater Discharges and SC-11 Spill Prevention, Control Cleanup					SC-20 Vehicle and Equipment Fueling SC-21 Vehicle and Equipment Cleaning SC-22 Vehicle and Equipment Repair				
Facility ID	Facility Name	Description of Area Activity	Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Priority Non-Priority	Proper Containment, Storage, and Disposal of Solid/Liquid/Fluid Spill	Development of Spill Prevention Control and Countermeasure (SPCC) Program	Development of Effective Recycle Program	Usage of Storm Drain Marking and Placards to Promote Public Education and Participation	Proper Routine Maintenance of Storage Area	Proper Disposal of Solid/Liquid/Fluid Spill from Automobiles/Equipment	Proper Drainage of Fluids from Automobiles/Equipment	Regular Cleaning up Using Dry Methods and mechanical cleaning (Self-Contained)	Proper Collection and Disposal of Water used for Vehicle/Equipment Cleaning	Proper Handling of Material and Waste
1	Animal And Bird Hosp Of Del Mar (Freeflight)	Animal and Bird Speciality Services	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Priority	✓			✓	✓					
2	The Curry Comb	Animal and Bird Speciality Services	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Priority	✓			✓	✓					
3	Onffroy Relief Services	Animal and Bird Speciality Services	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Priority	✓			✓	✓					
4	Del Mar Koi	Animal and Bird Speciality Services	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Priority	✓			✓	✓					
5	Diamond Parking Services, LLC	Automotive Services		Yes	Yes		Yes			Yes	Yes	Priority	✓			✓	✓	✓		✓	✓	
6	Sunset Parking Service, LLC	Automotive Services		Yes	Yes		Yes			Yes	Yes	Priority	✓			✓	✓	✓		✓	✓	
7	Del Mar Automotive Service	Automotive Services		Yes	Yes		Yes			Yes	Yes	Priority	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	Del Mar German Car Service	Automotive Services		Yes	Yes		Yes			Yes	Yes	Priority	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	Rose Towing, Inc.	Automotive Services		Yes	Yes		Yes			Yes	Yes	Priority	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	Seagrove Parking	Automotive Services		Yes	Yes		Yes			Yes	Yes	Priority	✓			✓	✓	✓		✓	✓	
11	Del Mar Farmer's Market	Grocery Store	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓				✓					
12	Harvest Ranch Market	Grocery Store	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓	✓		✓	✓					
13	Del Mar Liquor & Deli	Grocery Store	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓	✓		✓	✓					
14	Caf Secret	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
15	French Bakery Caf / Distinctive Coffees	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
16	Americana	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
17	Board & Brew	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
18	The Brigantine	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
19	Breugger's Bagels	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
20	Cafe Del Mar	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
21	Chinese Double Happiness	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
22	Del Mar Pizza, Inc	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
23	Del Mar Rendezvous	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
24	Del Mar Snack Shack	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
25	En Fuego, Cantina & Grill	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
26	Il Fornaio Cucina Italiana	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
27	Java Kai	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
28	JF Japanese Cafe & Sushi Bar	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
29	J. Taylors of Del Mar (at L'Auberge)	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
30	Matsugawa	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
31	Pearl Sushi	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					

			Potential Pollutants										Non-Stormwater Management					Vehicle and Equipment Maintenance				
													SC- 10 Non-Stormwater Discharges and SC-11 Spill Prevention, Control Cleanup					SC-20 Vehicle and Equipment Fueling SC-21 Vehicle and Equipment Cleaning SC-22 Vehicle and Equipment Repair				
Facility ID	Facility Name	Description of Area Activity	Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Priority Non-Priority	Proper Containment, Storage, and Disposal of Solid/Liquid/Fluid Spill	Development of Spill Prevention Control and Countermeasure (SPCC) Program	Development of Effective Recycle Program	Usage of Storm Drain Marking and Placards to Promote Public Education and Participation	Proper Routine Maintenance of Storage Area	Proper Disposal of Solid/Liquid/Fluid Spill from Automobiles/Equipment	Proper Drainage of Fluids from Automobiles/Equipment	Regular Cleaning up Using Dry Methods and mechanical cleaning (Self-Contained)	Proper Collection and Disposal of Water used for Vehicle/Equipment Cleaning	Proper Handling of Material and Waste
32	Sbicca American Bistro	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
33	Starbuck's Coffee 526	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
34	The Stratford Court Cafe	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
35	Bully's North	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
36	Epazote	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
37	Jake's Del Mar	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
38	Jimmy O's	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
39	Osteria Pescatore Inc.	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
40	Pacifica Del Mar/Pacific Breeze	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
41	The Poseidon Restaurant	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Priority	✓		✓	✓	✓					
Category of Facility	**Specific Description of Area/Activity**																					
Food Establishment	Restaurant, Coffee shop, snack shop, and convenience food store																					
Grocery Store	Fruits, produce, and vegetable markets and stands, Grocery store, and Liquor store.																					
Automotive Services	Automotive repair and services, parking lot, Automotive towing service																					
Animal and Bird Speciality Services	Veterinarian services and pet hospital, Showing of pets and other animal specialties , pet care, pet store, and dog sitting.																					
Key Note:																						
- The referred source control BMPs are described in CASQA Stormwater Best																						

			Minimum Source Control BMPs for Commercial Properties																
			Material and Waste Management					Building and Grounds Management		*** General Stormwater Management				*** Municipal Field Program BMPs					
			SC-30 Outdoor Loading/Unloading, SC-31 Outdoor Container Storage, SC-32 Outdoor Equipment Maintenance,SC-33 Outdoor Storage of Raw Materials, and SC-34 Waste Handling & Disposal					SC-41 Building and Grounds Maintenance and SC-43 Parking/Storage Area Maintenance		SC-60 Housekeeping Practices and SC-61 Safer Alternative Products				SC-71 Plaza and Sidewalk Cleaning, SC-72 Fountain & Pool Maintenance, SC-73 Landscape Maintenance, and SC-74 Drainage System Maintenance					
Facility ID	Facility Name	Description of Area Activity	Development of Operation Procedures Plan for Outdoor Loading/Unloading of Materials	Prevention of Aboveground Storage Facility Leak and Spill Control Using Containment Dikes or Curbing	Maintenance of Storage Facility	Proper Containment of Raw Materials	Usage of Effective Land Treatment System to Minimize Runoff of Polluted Stormwater from Land Application	Pressure Washing of Buildings, Rooftops, and other Large Objects	Adoption of Proper Disposal Practices to dispose Waste from Building Repair, Remodeling, and Construction Activities	Promote Efficient and Safe Housekeeping Practices (Storage, Use, and Cleanup)when Handling Potentially Harmful Materials	Development of Environmentally Preferable Purchasing Program	Development of Integrated Pest Management (IPM) or Less-Toxic Pesticide Program	Development of Energy Efficiency Program	Implementation of Proper Surface cleaning, Surface Removal and Repair Practices	Proper Maintenance of Pools and Fountains and water bodies such as Lakes and Lagoons	Adoption of Proper Landscaping Practices	Proper Maintenance of Catch Basins/ Inlet Structures	Routine Inspections for Detection of Illicit Connections, Discharges and Dumping	Annual Employee Training
1	Animal And Bird Hosp Of Del Mar (Freeflight)	Animal and Bird Speciality Services				✓		✓	✓	✓				✓		✓	✓	✓	✓
2	The Curry Comb	Animal and Bird Speciality Services				✓		✓	✓	✓				✓		✓	✓	✓	✓
3	Onffroy Relief Services	Animal and Bird Speciality Services				✓		✓	✓	✓				✓		✓	✓	✓	✓
4	Del Mar Koi	Animal and Bird Speciality Services				✓		✓	✓	✓				✓	✓	✓	✓	✓	✓
5	Diamond Parking Services, LLC	Automotive Services						✓		✓				✓		✓	✓		✓
6	Sunset Parking Service, LLC	Automotive Services						✓		✓				✓		✓	✓		✓
7	Del Mar Automotive Service	Automotive Services	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓
8	Del Mar German Car Service	Automotive Services	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓
9	Rose Towing, Inc.	Automotive Services	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓	✓
10	Seagrove Parking	Automotive Services						✓		✓				✓		✓	✓		✓
11	Del Mar Farmer's Market	Grocery Store	✓	✓	✓	✓													✓
12	Harvest Ranch Market	Grocery Store	✓	✓	✓	✓		✓	✓	✓						✓	✓	✓	✓
13	Del Mar Liquor & Deli	Grocery Store	✓	✓	✓	✓		✓	✓	✓						✓	✓	✓	✓
14	Caf Secret	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
15	French Bakery Caf / Distinctive Coffees	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
16	Americana	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
17	Board & Brew	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
18	The Brigantine	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
19	Breugger's Bagels	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
20	Cafe Del Mar	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
21	Chinese Double Happiness	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
22	Del Mar Pizza, Inc	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
23	Del Mar Rendezvous	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
24	Del Mar Snack Shack	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
25	En Fuego, Cantina & Grill	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
26	Il Fornaio Cucina Italiana	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
27	Java Kai	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
28	JF Japanese Cafe & Sushi Bar	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
29	J. Taylors of Del Mar (at L'Auberge)	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
30	Matsugawa	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
31	Pearl Sushi	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓

			Minimum Source Control BMPs for Commercial Properties																
			Material and Waste Management					Building and Grounds Management		*** General Stormwater Management				*** Municipal Field Program BMPs					
			SC-30 Outdoor Loading/Unloading, SC-31 Outdoor Container Storage, SC-32 Outdoor Equipment Maintenance,SC-33 Outdoor Storage of Raw Materials, and SC-34 Waste Handling & Disposal					SC-41 Building and Grounds Maintenance and SC-43 Parking/Storage Area Maintenance		SC-60 Housekeeping Practices and SC-61 Safer Alternative Products				SC-71 Plaza and Sidewalk Cleaning, SC-72 Fountain & Pool Maintenance, SC-73 Landscape Maintenance, and SC-74 Drainage System Maintenance					
Facility ID	**Facility Name**	**Description of Area Activity**	**Development of Operation Procedures Plan for Outdoor Loading/Unloading of Materials**	**Prevention of Aboveground Storage Facility Leak and Spill Control Using Containment Dikes or Curbing**	**Maintenance of Storage Facility**	**Proper Containment of Raw Materials**	**Usage of Effective Land Treatment System to Minimize Runoff of Polluted Stormwater from Land Application**	**Pressure Washing of Buildings, Rooftops, and other Large Objects**	**Adoption of Proper Disposal Practices to dispose Waste from Building Repair, Remodeling, and Construction Activities**	**Promote Efficient and Safe Housekeeping Practices (Storage, Use, and Cleanup)when Handling Potentially Harmful Materials**	**Development of Environmentally Preferable Purchasing Program**	**Development of Integrated Pest Management (IPM) or Less-Toxic Pesticide Program**	**Development of Energy Efficiency Program**	**Implementation of Proper Surface cleaning, Surface Removal and Repair Practices**	**Proper Maintenance of Pools and Fountains and water bodies such as Lakes and Lagoons**	**Adoption of Proper Landscaping Practices**	**Proper Maintenance of Catch Basins/ Inlet Structures**	**Routine Inspections for Detection of Illicit Connections, Discharges and Dumping**	**Annual Employee Training**
32	Sbicca American Bistro	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
33	Starbuck's Coffee 526	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
34	The Stratford Court Cafe	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
35	Bully's North	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
36	Epazote	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
37	Jake's Del Mar	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
38	Jimmy O's	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
39	Osteria Pescatore Inc.	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
40	Pacifica Del Mar/Pacific Breeze	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
41	The Poseidon Restaurant	Food Establishment	✓					✓	✓	✓				✓		✓	✓	✓	✓
Category of Facility	**Specific Description of Area/Activity**																		
Food Establishment	Restaurant, Coffee shop, snack shop, and convenience food store																		
Grocery Store	Fruits, produce, and vegetable markets and stands, Grocery store, and Liquor store.																		
Automotive Services	Automotive repair and services, parking lot, Automotive towing service																		
Animal and Bird Speciality Services	Veterinarian services and pet hospital, Showing of pets and other animal specialties , pet care, pet store, and dog sitting.																		
Key Note:																			
- The referred source control BMPs are described in CASQA Stormwater Best																			

Appendix 5-C
Commercial Inspection and Enforcement

Commercial Facilities							Inspection (Date and Type)					Enforcement Actions (Date and Type)				
Facility ID	Facility Name	Facility Type	Address Number	Street	Suite	SIC Code	2007-08	2008-09	2009-10	2010-11	2011-12	2007-08	2008-09	2009-10	2010-11	2011-12
1	Animal And Bird Hosp Of Del Mar (Freeflight)	Commercial	2132	Jimmy Durante Blvd		0742, 0752	A 5/26/08					N/A				
2	The Curry Comb	Commercial	1210	Camino Del Mar		0742										
3	Onffroy Relief Services	Commercial	639	Stratford Court	8	0742										
4	Del Mar Koi	Commercial	1101	Camino Del Mar	B	5999										
5	Diamond Parking Services, LLC	Commercial	3790	Via De La Valle		7521										
6	Sunset Parking Service, LLC	Commercial	1555	Camino Del Mar		7521										
7	Del Mar Automotive Service	Commercial	2201	San Dieguito Dr		7538	A 6/24/08					N/A				
8	Del Mar German Car Service	Commercial	155	Carmel Valley Rd		7538										
9	Rose Towing, Inc.	Commercial	2201	San Dieguito Dr		7549										
10	Seagrove Parking	Commercial	1601	Coast Blvd		7521										
11	Del Mar Farmer's Market	Commercial	1050	Camino Del Mar		5411	A - 5/24/08					N/A				
12	Harvest Ranch Market	Commercial	1555	Camino Del Mar		5431	A 5/28/08					N/A				
13	Del Mar Liquor & Deli	Commercial	1149	Camino Del Mar		5812, 5921, 5411										
14	Caf□Secret	Commercial	1140	Camino Del Mar		5812										
15	French Bakery Caf□/ Distinctive Coffees	Commercial	1328	Camino Del Mar		5812										
16	Americana	Commercial	1454	Camino Del Mar		5812	A 5/27/08					N/A				
17	Board & Brew	Commercial	1212	Camino Del Mar		5812										
18	The Brigantine	Commercial	3263	Camino Del Mar		5812										
19	Breugger's Bagels	Commercial	1435	Camino Del Mar	D	5812										
20	Cafe Del Mar	Commercial	1247	Camino Del Mar		5812										
21	Chinese Double Happiness	Commercial	1011	Camino Del Mar		5812	A 5/28/08					N/A				
22	Del Mar Pizza, Inc	Commercial	211	15th St		5812	A 5/27/08					VW 5/27/08				
23	Del Mar Rendezvous	Commercial	1555	Camino Del Mar	102	5812	A 5/28/08					N/A				

Commercial Facilities							Inspection (Date and Type)					Enforcement Actions (Date and Type)				
Facility ID	Facility Name	Facility Type	Address Number	Street	Suite	SIC Code	2007-08	2008-09	2009-10	2010-11	2011-12	2007-08	2008-09	2009-10	2010-11	2011-12
24	Del Mar Snack Shack	Commercial	1670	Coast Blvd		5812										
25	En Fuego, Cantina & Grill	Commercial	1342	Camino Del Mar		5812	A 5/28/08					N/A				
26	Il Fornaio Cucina Italiana	Commercial	1555	Camino Del Mar	301	5812	A 5/29/08					N/A				
27	Java Kai	Commercial	1555	Camino Del Mar	118	5812	A 5/28/08					N/A				
28	JF Japanese Cafe & Sushi Bar	Commercial	1555	Camino Del Mar	201	5812	A 5/28/08					N/A				
29	J. Taylors of Del Mar (at L'Auberge)	Commercial	1540	Camino Del Mar		5812										
30	Matsugawa	Commercial	1101	Camino Del Mar		5812										
31	Pearl Sushi	Commercial	2010	Jimmy Durante Blvd		5812	A 5/27/08 (closed due to fire - not reopening)									
32	Sbicca American Bistro	Commercial	215	15th St		5812	CI 5/27/08					N/A				
33	Starbuck's Coffee 526	Commercial	1435	Camino Del Mar	D	5812	A 5/28/08					N/A				
34	The Stratford Court Cafe	Commercial	1307	Stratford Ct		5812										
35	Bully's North	Commercial	1404	Camino Del Mar		5812	A 5/28/2008					N/A				
36	Epazote	Commercial	1555	Camino Del Mar	322	5812	A 5/28/08					N/A				
37	Jake's Del Mar	Commercial	1660	Coast Blvd		5812										
38	Jimmy O's	Commercial	225	W 15th St		5812										
39	Osteria Pescatore Inc.	Commercial	1201	Camino Del Mar	101	5812										
40	Pacifica Del Mar/Pacific Breeze	Commercial	1555	Camino Del Mar	321	5812	A 5/28/08					N/A				
41	The Poseidon Restaurant	Commercial	1670	Coast Blvd		5812										

FU Follow-up Inspection
A Annual
CI Complaint Investigation

VW Verbal Warning (if written in log/report)
WW Written Warning
AC Administrative Citation
NOV Notice of Violation or similar Administrative Action
P Permit suspension, revocation or denial
CA Court Action (Civil or Criminal)
N/A Not Applicable

Appendix 5-D
Mobile Business Inventory

			Potential Pollutants										Minimum Source Control BMPs for Mobile Business															
													Non-Stormwater Management		Vehicle and Equipment Maintenance					Material and Waste Management		Building and Grounds Management		*** General Stormwater Management		*** Municipal Field Program BMPs		
													SC- 10 Non-Stormwater Discharges and SC-11 Spill Prevention, Control Cleanup		SC-20 Vehicle and Equipment Fueling SC-21 Vehicle and Equipment Cleaning SC-22 Vehicle and Equipment Repair					SC-30 Outdoor Loading/Unloading, SC-31 Outdoor Container Storage, SC-32 Outdoor Equipment Maintenance,SC-33 Outdoor Storage of Raw Materials, and SC-34 Waste Handling & Disposal		SC-41 Building and Grounds Maintenance and SC-43 Parking/Storage Area Maintenance		SC-60 Housekeeping Practices and SC-61 Safer Alternative Products		SC-71 Plaza and Sidewalk Cleaning, SC-72 Fountain & Pool Maintenance, SC-73 Landscape Maintenance, and SC-74 Drainage System Maintenance		
Facility ID	Facility Name	Description of Area Activity	Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash	Priority Non-Priority	Proper Containment, Storage, and Disposal of Solid/Liquid/Fluid Spill	Proper Routine Maintenance of Toolkit Box	Proper Disposal of Solid/Liquid/Fluid Spill from Automobiles/Equipment	Proper Drainage of Fluids from Automobiles/Equipment	Regular Cleaning up Using Dry Methods and mechanical cleaning (Self-Contained)	Proper Collection and Disposal of Water used for Vehicle/Equipment Cleaning	Proper Handling of Material and Waste	Development of Operation Procedures Plan for Outdoor Loading/Unloading of Materials	Proper Containment of Raw Materials	Pressure Washing of Buildings, Rooftops, and other Large Objects	Adoption of Proper Disposal Practices to dispose Waste from Building Repair, Remodeling, and Construction Activities	Promote Efficient and Safe Housekeeping Practices (Storage, Use, and Cleanup)when Handling Potentially Harmful Materials	Usage of Environmentally Preferable Items	Implementation of Proper Surface cleaning, Surface Removal and Repair Practices	Adoption of Proper Landscaping Practices	Annual Employee Training
1	Black Car Specialized	Car Wash Service			Yes	Yes	Yes	Yes		Yes	Yes	Priority	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓		✓
2	Your Chef Robert	Catering	Yes				Yes	Yes			Yes	Priority	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓			✓
3	Fred Wendland	Handyman			Yes		Yes	Yes			Yes	Priority	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
4	Dog Sit Del Mar	Pet Care Service	Yes	Yes			Yes	Yes		Yes	Yes	Priority	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓		✓
5	Access Plumbing	Plumber	Yes				Yes	Yes			Yes	Priority	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓
6	Kevin Mills Landscape	Professional Landscape		Yes		Yes		Yes	Yes	Yes	Yes	Priority	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Key Note:																												
- The referred source control BMPs are described in CASQA Stormwater Best Management Practice Handbook for Municipal Properties. The reason for listing the source control BMPs described in the Municipal section, in the inventory for commercial properties is due to the applicability of the listed BMPs for Mobile Business activities.																												

Appendix 5-E
Mobile Business Inspection and Enforcement

Mobile Businesses			Inspection (Date and Type)					Enforcement Actions (Date and Type)				
Facility ID	Facility Name	Description of Area Activity	2007-08	2008-09	2009-10	2010-11	2011-12	2007-08	2008-09	2009-10	2010-11	2011-12
1	Black Car Specialized	Car Wash Service										
2	Your Chef Robert	Catering										
3	Fred Wendland	Handyman										
4	Dog Sit Del Mar	Pet Care Service										
5	Access Plumbing	Plumber										
6	Kevin Mills Landscape	Professional Landscape										

	FU Follow-up Inspection	VW Verbal Warning (if written in log/report) WW Written Warning AC Administrative Citation NOV Notice of Violation or similar Administrative Action P Permit suspension, revocation or denial CA Court Action (Civil or Criminal)

Section 6
Residential Component

6.1 Introduction

This section provides introductory information that the City of Del Mar determined is relevant to the implementation of the Residential Component for this reporting period. This section summarizes the program which was developed with the intent to reduce residential discharges of pollutants from the MS4 to the maximum extent practical and prevent residential discharges to the MS4 from causing or contributing to an exceedance of water quality standards.

6.2 Source Characterization

This section provides a list of residential areas and activities that were identified as having a high threat to water quality. Section 8.2 of the 2008 JURMP provided a list of residential areas and activities that were designated as a threat to water quality. No modifications in Section 8.2 of the 2008 JURMP have been recorded during this reporting period.

6.3 Best Management Practice Requirements

Section 8.3 of the 2008 JURMP provided a list of residential areas and activities that were designated as a threat to water quality, identifies updated BMP requirements for residential areas and activities, including pollution prevention, and provides a list of minimum BMPs that were required to be implemented when high priority residential activities are conducted within the City of Del Mar. Section 8.3 of the 2008 JURMP also includes a description of which pollution prevention methods will be encouraged to be used by Del Mar residents. No modifications in Section 8.3 of the 2008 JURMP have been recorded during this reporting period. This section provides confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.

6.4 Program Implementation

Section 8.4 of 2008 JURMP described the Residential education which included the local educational outreach program prepared by the City and the Regional Residential Education Program and it describes the strategy and tools used by the City of Del Mar Clean Water Program staff to require and encourage residents to implement the designated minimum BMPs. No modifications in Section 8.4 of the 2008 JURMP have been recorded during this reporting period.

The City continues implement and facilitate proper management and disposal of used oil and household hazardous materials as described in Section 8.4.3 of the 2008 JURMP.

This reporting period, the program to provide curbside pick-up and drop-off of household hazardous waste for City of Del Mar residents continued. Table 6.4-1 shows this year's user numbers by type of service, as provided by Clean Harbors Environmental Services, and compares to the previous year's totals.

Table 6.4-1
Household Hazardous Waste Program

Fiscal Year	Pick-Up Service Users	Drop-off Service Users	Total Users	Total Weight of HHW Disposal	Waste Oil (gallons)
2007-2008	130	34	164	11,698 lbs	50
2006-2007	104	31	135	12,845 lbs	NA

The City of Del Mar is also committed to continuing collaboration efforts with Regional Copermittee residential education efforts through the Copermittee Workgroups.

6.5 Inspection of Residential Areas and Activities

The City s methods for oversight of residential areas and activities are unchanged from the 2008 JURMP (Sections 8.3 and 8.4). The City evaluated program implementation and deems it complete and functional. No changes were made or have been identified this reporting period.

6.6 Enforcement Measures for Residential Areas and Activities

This section provides the number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions that were being taken to achieve compliance. Section 8.5 of the 2008 JURMP provides a description of the general process for applying enforcement to for residential areas and activities urban runoff related violations. No modifications in Section 8.5 of the 2008 JURMP have been recorded during this reporting period.

As indicated in Section 8.5 of the 2008 JURMP, education plays a significant role in the enforcement of stormwater regulations as it relates to residential activities. The majority of calls received by the Clean Water Manager, or Code Enforcement Officer, are related to construction operations in residential neighborhoods. These are documented in Section 3 of this report. However, during the reporting period, six (6) calls were received by the Clean Water Manager s Office regarding alleged illegal discharges from residential activities, not related to construction activities. One of these calls resulted in the issuance of a Notice of Violation and Warning to three (3) residents on the 100 Block of 13th Street in Del Mar. After further review by City staff, the NOVs were rescinded, and reduced to Written Warnings, with no further action necessary as noted in Table 6.6-1 below. A second call resulted in a NOV and Warning issued to the management company of the Del Mar Woods Apartment complex for power washing without recovery; the management was informed about the City s Stormwater and BMP requirements and informed of the potential escalating enforcement actions for further violations. The remainder of the calls resulted in no further action after investigation, or a verbal warning issued. Table 6.6-1 contains a summary of the residential complaints received, not related to construction operations, during this reporting period.

Table 6.6-1
Residential Area and Activity Enforcement Action Summary

Action No.	Date	Complaint	Action Taken
RC08-001	2/25/2008	Discharge of paint or stain into MS4	NOV/Warnings issued to 3 residents. After further review, NOV rescinded. "Staining" was light sediment caused by runoff from ally in French Drains. Refer to public works for review of ally drainage. (NOV Nos. CW08-007; 008;009)
RC08-002	3/15/2008	Excess water flow on 10th Street	Runoff caused by basement drains and landscape drains along 10th street. No action necessary.
RC08-003	3/31/2008	Excess water flow along Stratford Court	Runoff from power washing operations. NOV/Warning issued; NOV No. CW08-016
RC08-004	4/4/2008	Excess water flow along Cuchara	Runoff caused by basement drains along 11th street. No action necessary.
RC08-005	5/16/2008	Excess water flow on 10th Street	Overwatering of landscaped area due to timer failure at 1001 Highland.
RC08-006	5/28/2008	Excess water flow along Cuchara	Unable to identify source of runoff.

6.7 Notable Activities

This section describes the notable activities conducted to manage urban runoff from residential areas and activities by the City. During this reporting period the City of Del Mar has begun working on coordinating outreach related to emergency water conservation activities with stormwater requirements. During FY2008/2009, staff from the Del Mar Public Works Department and Clean Water Program will be jointly conducting outreach, including public workshops for the residents of Del Mar, to fully inform them of the requirements for water conservation and to prevent discharges, including low-flow or drip irrigation, metering, etc. As part of this outreach, discussion of enforcement mechanisms (including fines) will be presented.

The City of Del Mar also funds the Regional Residential Education Program in collaboration with the other Copermittees primarily through cost-sharing contributions to support the program activities. A summary of the Regional Residential Education Program is found in Appendix 6-A.

6.8 Residential Component Effectiveness Assessment

This section summarizes the effectiveness assessment of the Residential component which was based on the established regional effectiveness assessment guidelines. Section 8.7 of 2008 JURMP provides the effectiveness assessment of the Residential Component consisting of the educational and outreach efforts and BMP implementation in the residential sectors of the community. No modifications in Section 8.7 of the 2008 JURMP have been recorded during this reporting period.

6.9 Program Review and Modification

This section addresses the identification of the location in the JURMP of any changes made to the Residential component in order to meet the permit requirements. Section 8.8 of the 2008 JURMP addresses the identification of the location in the JURMP of any changes made to the JURMP in order to meet the permit requirements. No modifications in Section 8.8 of the 2008 JURMP have been recorded during this reporting period.

Appendix 6-A
Regional Residential Education Program

Regional Education Activities FY 07/08

The San Diego Regional Storm Water Copermittees sponsored the San Diego County Fair (Fair) in 2008 as an education and outreach activity. The sponsorship was a joint effort between the City of San Diego's Think Blue program and the regional Copermittees with each entity contributing approximately half towards the overall cost. The Fair was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental message. The Residential Sources and Outreach Workgroup (Outreach Workgroup) was responsible for overseeing sponsorship activities with the City of San Diego leading the coordination and implementation efforts.

The 2008 Fair was held June 14th through July 6th, spanning two fiscal years and will be included in both the FY 07/08 and FY 08/09 annual reports. The attendance for the fair was estimated at 1,235,698 persons for the 21 days the event occurred. Sponsorship for the Fair included staffing an outreach booth for 11 days, in which the majority of the jurisdictions provided staffing support. The outreach booth served as the primary method for educating the public about watershed protection and pollution prevention. The Outreach Workgroup elected to promote Integrated Pest Management (IPM) as the primary theme and collaborated on the distribution of IPM materials in both English and Spanish. Individual jurisdictions were invited to distribute their own materials in addition to the IPM materials. The Copermittees received billing as both a Flower & Garden Show sponsor and an Enviro-Fair sponsor.

Think Blue was designated as the brand for the Copermittees' during the event and signage demarking the symbol included banners, planter box displays and recycle bin stickers, which were visible at over 500 locations at the Fair. Media exposure included TV, radio and press releases. The sponsorship was printed in both the Fair program and included on the Fair map. Other promotions included newspaper advertisements, electronic messaging over the Jumbo Tron, website logos and links, and PA system announcements in both English and Spanish.

Think Blue, City of San Diego developed an event survey for the purposes of assessment. Over 1,200 survey cards were completed during the 11 days the booth was staffed. The questions focused on general storm water knowledge and awareness. The results are being tabulated and will be reported in FY 08/09.

THINK BLUE EVENT SURVEY CARDS

Before attending today's event, had you ever seen or heard the slogan, "Think Blue San Diego?" ☐ Yes ☐ No

In a few words of your own, what do you think that the slogan "Think Blue San Diego" is asking you to do?

_____

_____

When water goes into the storm drains in San Diego, does it go to a sewage treatment plant before it is released, or is it released into creeks or the ocean without treatment?
☐ Treated ☐ Not Treated ☐ Don't Know

How important of an issue is storm water pollution in San Diego? (Please Circle)

1	2	3	4
Not at All Important	Somewhat Important	Very Important	Extremely Important

As a result of the event today, how likely are you to take actions to prevent storm water pollution? (Please Circle)

1	2	3	4
Not at All Likely	Somewhat Likely	Very Likely	Extremely Likely

Name one thing you can do to help prevent storm water pollution: _____

_____

Would you like to hear about upcoming Think Blue events or promotions? ☐ Yes ☐ No

Please provide your contact information to get on our mailing list:
Name: _____

Address: _____

_____

Phone: _____ E-mail: _____

For staff use only: Event/Location:
_____

Date:_____

This information is available in alternative formats upon request.

think BLUE
SAN DIEGO

Printed on recycled paper.

Section 7
Illicit Discharge Detection and Elimination Component

This section of the Annual Report would describe all the notable activities conducted to manage illicit discharges and connections. In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Del Mar will submit the entire FY2007/2008 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2008.

Section 8
Education Component

This section will provide a description of education efforts conducted by the City for each target community to satisfy the requirements under Section J.3.a.(3)(g)i) of the Permit.

8.1 Introduction

Section D.5 and J.3.a(3)(i) of the Permit identifies a comprehensive educational program designed to measurably increase awareness within target populations with respect to urban runoff, its impacts on receiving waters, and the rules and regulations under local, State, and federal law. This section will provide any introductory information that the City of Del Mar has determined to be relevant to the implementation of the Education Component (JURMP Section 10) for the 2007-2008 reporting period.

The City of Del Mar s 2008 JURMP outlined a reporting format that varies slightly from standardized regional format. The reason for the difference in the reporting format is the intent for this section to be consistent with the specified order of general and specific education requirements for the various target communities in the Permit. As a built-out coastal community, with extremely limited industrial discharges, the focus of education in the City of Del Mar is on the residential sector, food establishments, construction and re-development, and mobile services. A description of education efforts conducted for each target community is provided below.

8.2 Staff Training Element

This section will describe the education efforts conducted for municipal departments and personnel as required under Permit section J.3.a.(3)(g)iii. Section 10.3 of the 2008 JURMP described content, form and frequency of education efforts that will be conducted with municipal departments and personnel. No modifications in Section 10.3 of the 2008 JURMP have been recorded during this reporting period.

During this reporting period the City of Del Mar held multiple, focused training sessions to educate staff in all departments on basic stormwater principals and requirements. With the implementation of the new Permit, focus for staff has been specifically on the new stormwater requirements, including Low Impact Development requirements and inspection/enforcement. The City of Del Mar has a total of 51 full-time employees spread out over 7 departments. During the reporting period, 80 of all field and technical staff, 100 of all administrative staff, and 100 of all management staff received training on stormwater topics, including specific focused training on the new Permit requirements. In addition, public meetings and forums were utilized to ensure that the elected members of the City Council were educated as to specific permit requirements and program elements that they would encounter as part of the discretionary review and public hearing processes. All five (5) elected members of the City Council received training during the reporting period. Table 8.2-1, below provides a list of municipal staff trainings conducted during the reporting period,

Table 8.2-1
FY2007 2008 Municipal Staff Education and Training

Date	How Conducted	Conducted by	Topic of Education Activity	Attendance
Various	Planning Department Staff Meeting	Clean Water Manager and Staff	Project Specific Stormwater Discussions at Weekly Staff Meeting	Varies
07/10/2007	Public Works Department Training session	PBS&J	JURMP Municipal Requirements, BMPs	No Attendance Log
07/26/2007	Planning Department Staff Meeting-Training Session	PBS&J	JURMP, SUSMP, LID, BMPs	No Attendance Log
08/29/2007	Department Head Meeting	Agenda Topic by staff	NPDES, JURMP Coordination and Requirements	8
09/13/2007	Quarterly Department Coordination Meeting	Agenda Topic by Staff	NPDES, BMPs and JURMP Coordination	No Attendance Log
11/27/2007	Public Works Department Training session	PBS&J	JURMP Municipal Requirements, BMPs	No Attendance Log
12/13/2007	Planning Department Training Session (Development Planning Requirements No.1)	PBS&J	JURMP, SUSMP, LID, BMPs	No Attendance Log
1/29/2008	Planning Department Training Session (Development Planning Requirements No.2)	PBS&J	JURMP, SUSMP, LID, BMPs	No Attendance Log
1/30/2008	Quarterly Department Coordination Meeting	Agenda Topic by Staff	NPDES, BMPs and JURMP Coordination	No Attendance Log
2/4/2008	Planning Department Focused Training	PBS&J & Clean Water Manager	Low Impact Development Concepts and Implementation	8
2/25/2008	Planning Department Training Session (Development Planning Requirements No.3)	PBS&J	JURMP, SUSMP, LID, BMPs	9
3/3/2008	City Council Meeting; Cable TV	Clean Water Manager & City Engineer	JURMP Overview for City Council and General Public	Televised Mtg. 3 staff all 5 Council Members Present

Date	How Conducted	Conducted by	Topic of Education Activity	Attendance
3/25/2008	Public Workshop & Staff Training	County of San Diego	LID Seminar	4
4/08/2008	Department Head Meeting Video Presentation	Clean Water Manager	Clean Water Program and Regulatory Overview	8
05/14/2008	Clean Water Workshop and Video Presentation	Clean Water Manager and Staff from PBS&J	Clean Water Program and Regulatory Overview	Live Broadcast 3 Staff all 5 Council Members Present
06/23/2008	City Council Meeting; Cable TV	Clean Water Manager	Clean Water Program Overview and Financial Considerations (part of Budget Workshops)	Live Broadcast 6 Staff Members 5 Council Members Present
06/26/2008	Public Works Departmental Training	Clean Water Manager	Regulatory Program Overview for Field Staff BMPs and Stormwater	9

Workshop attended by four (4) Staff Members from City of Del Mar. Total attendance at County of San Diego-sponsored workshop unknown.

8.3 Educational Outreach Element

This section describes education efforts conducted for each target community by the City of Del Mar. Section 10.4 of 2008 JURMP described the program which aimed at educating project applicants, developers, contractors, property owners, community planning groups, and other responsible parties. No modifications in Section 10.4 of the 2008 JURMP have been recorded during this reporting period.

8.3.1 Media Use in Outreach Activities

In an effort to reach the widest audience possible about the Clean Water Program, the regulatory requirements, and the requirements of the new Permit, the City of Del Mar developed a 12 minute video in April 2008. This video, entitled The Del Mar Clean Water Program: Keeping the Water Clean for You! highlights the municipal programs conducted by the City, and provides a complete overview of the Permit elements. The video is available on-demand on the City of Del Mar website (www.delmar.ca.us/cleanwater.htm), and was made into DVDs for distribution to public groups, residents, and schools. In addition, the video became the centerpiece for discussions at City Council Meetings during the annual budget workshop and during staff training. Table 8.3-1 below provides information on the number of times the video was viewed on the City s website since its release in April 2008.

Table 8.3-1
FY2007 2008 Clean Water Video Webcasts

Month	No. Hits
April 2008	1
May 2008	78
June 2008	44

As part of an ongoing effort to reach the widest possible audience, all public workshops and all hearings related to the City s Clean Water Program are televised live via Del Mar Television (DMTV), and then replayed the next day in a standard timeslot. DMTV can be viewed on Time Warner Public Access Channel 24 within the 92014 zip code, and reaches approximately 2,000 subscribers in this area. Recently DMTV was made available to North County Time Warner Digital Cable customers, where it can now be viewed through Digital Cable on Time Warner Channel 130, which reaches approximately 65,000 subscribers. In addition, DMTV is streamed live 24 hours per day, 7 days per week on the DMTV website: www.delmartv.com. Table 8.3-2, below, includes all public broadcasts of the Clean Water Video, and all public workshops and hearings Clean Water topics via DMTV.

In addition to television and webcasts of the Clean Water Video and program-related workshops and hearings, the City of Del Mar began a media campaign through the local newspaper consisting of articles by the Mayor focusing on the program and the new requirements. The first two articles appeared in the Del Mar Times on June 20 and March 28, 2008, and provided a brief discussion on the Clean Water Program (and the Permit) as well as funding needs for the program.

8.3.2 Educational Efforts by Target Audience

This section provides a description of how education efforts targeted underserved target audiences, high-risk behaviors, and allowable behaviors and discharges. A description of education efforts conducted for the new development and construction communities is provided in this section, as well as to residents, the general public, and school children.

As indicated above, the City of Del Mar made a concerted effort to reach out to the residents and the general public regarding the Clean Water program through media and public workshops. In addition, in February 2008, the City Manager and City Council launched a new community outreach program called Community Conversations to actively listen to residents and businesses in two-way discussions about city services and budget priorities. The program included neighborhood and business coffee for informal discussions about city issues, an expansion of the City s email communications, and a Town Hall meeting in April. The neighborhood coffees were hosted by community residents and future discussions will be led by at least two council members and a senior city staff member. These informal discussions will give residents the opportunity not only to learn more about their city government but to also ask questions and share opinions about city services, facilities, and budget issues. A key topic on the Community Conversations agenda was the City s Clean Water Program and the funding aspects of the program.
Table 8.3-2 below provides a list of all public meetings, workshops, and Community Conversations in which water quality protection, the new Permit, and the City s Clean Water Program were focal points.

Table 8.3-2
Educational and Outreach Efforts by Target Audience

Date	How Conducted	Conducted by	Topic of Education Activity	Attendance
Development Planning (Developers, Planners, Architects)				
2/12/2008	Televised Public Planning Commission Hearing	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Public Hearing and Live Broadcast
2/13/2008	Televised Public Workshop Planning Commission Hearing	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Replay of Live Broadcast
2/25/2008	Televised Public Workshop	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Public Workshop and Live Broadcast (12 in Studio)
2/26/2008	Televised Public Workshop	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Replay of Live Broadcast
3/3/2008	Televised Public Hearing: City Council	Clean Water Manager & City Engineer	JURMP Overview for City Council and General Public	Public Hearing and Live Broadcast
3/4/2008	Televised Public Hearing: City Council	Clean Water Manager & City Engineer	JURMP Overview for City Council and General Public	Replay of Live Broadcast
5/14/2008	Clean Water Workshop and Video Presentation	Clean Water Manager and Staff	Clean Water Program and Regulatory Overview	Public Hearing and Live Broadcast
5/15/2008	Clean Water Workshop and Video Presentation	Clean Water Manager and Staff	Clean Water Program and Regulatory Overview	Replay of Live Broadcast
6/23/2008	Televised Public Hearing: City Council	Clean Water Manager	Clean Water Program Overview and Financial Considerations (as part of Budget Workshops)	Public Hearing and Live Broadcast
6/24/2008	Televised Public Hearing: City Council	Clean Water Manager	Clean Water Program Overview and Financial Considerations (as part of Budget Workshops)	Replay of Live Broadcast
Construction				
9/14/2007	Flyer Distribution by mail or personal delivery to site	Written Notice - Construction BMPs	NPDES, BMPs and Compliance	41
2/12/2008	Televised Public Planning Commission Hearing	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Public Hearing and Live Broadcast
2/13/2008	Televised Public Workshop Planning Commission Hearing	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Replay of Live Broadcast

Date	How Conducted	Conducted by	Topic of Education Activity	Attendance
2/25/2008	Televised Public Workshop	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Public Hearing and Live Broadcast (12 in Studio)
2/26/2008	Televised Public Workshop	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Replay of Live Broadcast
5/14/2008	Clean Water Workshop and Video Presentation	Clean Water Manager and Staff	Clean Water Program and Regulatory Overview	Public Workshop and Live Broadcast
5/15/2008	Clean Water Workshop and Video Presentation	Clean Water Manager and Staff	Clean Water Program and Regulatory Overview	Replay of Live Broadcast
Industrial and Commercial (Including Mobile Businesses)				
Varies	Individual Meetings with Mobile Business	Staff	BMP Requirements for Mobile Businesses (Mobile Detailing)	3
2/25/2008	Televised Public Workshop	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Public Workshop and Live Broadcast
2/26/2008	Televised Public Workshop	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Replay of Live Broadcast
5/14/2008	Clean Water Workshop and Video Presentation	Clean Water Manager and Staff	Clean Water Program and Regulatory Overview	Public Workshop and Live Broadcast
5/15/2008	Clean Water Workshop and Video Presentation	Clean Water Manager and Staff	Clean Water Program and Regulatory Overview	Replay of Live Broadcast
General Audience (Residents, General Public, and School Children)				
7/5/2007	Beach Clean-up	NPO Keep Del Mar Clean and Staff	Clean Water Program, Water Quality Awareness	No Data
9/15/2007	Beach Clean-up	NPO Keep Del Mar Clean and Staff	Clean Water Program, Water Quality Awareness	No Data
3/03/2008	Televised Public Hearing: City Council	City Staff	JURMP, WURMP, RURMP acceptance. Clean Water Program Requirements, General information, BMPs. Municipal Code Revisions	Public Hearing and Live Broadcast
3/3/2008	Televised Public Hearing: City Council	Clean Water Manager & City Engineer	JURMP Overview for City Council: Televised Public Meeting	Public Hearing and Live Broadcast
3/04/2008	Televised Public Hearing: City Council	City Staff	JURMP, WURMP, RURMP acceptance. Clean Water Program Requirements, General information, BMPs. Municipal Code Revisions	Replay of Live Broadcast

Date	How Conducted	Conducted by	Topic of Education Activity	Attendance
3/4/2008	Televised Public Hearing: City Council	Clean Water Manager & City Engineer	JURMP Overview for City Council: Televised Public Meeting	Replay of Live Broadcast
3/9/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	16
3/17/2008	Televised Public Hearing: City Council	City Staff	Municipal Code Revisions, Second Reading and Adoption	Public Hearing and Live Broadcast
3/18/2008	Televised Public Hearing: City Council	City Staff	Municipal Code Revisions, Second Reading and Adoption	Replay of Live Broadcast
3/26/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	32
3/30/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	25
4/2/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	8
4/6/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	14
4/9/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	8
4/10/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	5
4/13/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	16
4/17/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	12
4/22/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	13
4/23/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	15
4/27/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	8
4/27/2008	Lagoon Day Exhibit Table	City staff and video show	Clean Water Program Requirements, General information, BMPs	50
4/29/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	9
4/30/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	10

Date	How Conducted	Conducted by	Topic of Education Activity	Attendance
5/4/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	22
5/7/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	36
5/8/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	19
5/14/2008	Clean Water Workshop and Video Presentation	Clean Water Manager and Staff from PBS&J	Televised Presentation of Clean Water Video With Program and Regulatory Overview	Public Hearing and Live Broadcast
5/15/2008	Clean Water Workshop and Video Presentation	Clean Water Manager and Staff	With NPDES Program and Regulatory Overview	Replay of Live Broadcast
5/15/2008	Clean Water Workshop and Video Presentation	Clean Water Manager and Staff from PBS&J	Televised Presentation of Clean Water Video With Program and Regulatory Overview	Replay of Live Broadcast
5/20/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	13
5/20/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Overview of Clean Water Program, new requirements, and funding considerations	13
6/23/2008	Clean Water Program Financial Considerations	Clean Water Manager	Overview of Clean Water Program, NPDES and JURMP (part of Budget Workshops)	Public Hearing and Live Broadcast
6/23/2008	Televised Public Hearing: City Council	Clean Water Manager	Clean Water Program Overview (part of Budget Workshops)	Public Hearing and Live Broadcast
6/24/2008	Televised Public Hearing: City Council	Clean Water Manager	Clean Water Program overview (part of Budget Workshops)	Replay of Live Broadcast

8.4 Outreach Component Effectiveness Assessment

The City s 2007-08 effectiveness assessment did not reveal any action items for the upcoming fiscal year as summarized in Section 11.

8.5 Program Review and Modification

Section 10.11 of 2008 JURMP described proposed or required modifications to the program after each annual assessment of the Education Component s effectiveness. While no specific modifications in Section 10.11 of the 2008 JURMP have been recorded during this reporting period, staff has identified several areas for specific education and outreach focus for the upcoming FY2008/2009, based on a review of program activities conducted during this reporting period. Details on the implementation of these items will be discussed in the following Annual Report. Table 8.5-1 below:

Table 8.5-1
Focused Educational and Outreach for FY2008 2009

Targeted Audience	Proposed Format of Outreach or Education	Topic of Education Activity
Commercial Businesses: Mobile Operators (Auto Detailers, Power Washers, Mobile Pet Groomers, and Catering Businesses)	Direct one-on-one training of City-licensed mobile operators, and distribution of written materials and guidance.	JURMP and Focused BMP Requirements for Mobile Businesses
Commercial Businesses: Restaurants	Public Workshops and one-on-one staff training for local restaurateurs and their staff, in cooperation with the Del Mar Village Association (DMVA)	JURMP, Focused BMP Requirements for Restaurants, including staff training and documentation.
Municipal Training & Education: Special Events	Direct one-on-one training with Community Services staff	JURMP inspection requirements for permitted special events.

Section 9
Public Participation Component

Section 11 of the 2008 JURMP described the public participation element which aimed at promoting the community's stewardship of the City's JURMP. No modifications in Section 11 of the 2008 JURMP have been recorded during this reporting period. This section describes the steps that were conducted to include public participation in the development and implementation of City of Del Mar's s JURMP. This section provides a description of public participation efforts conducted by the City.

9.1 Local Participation Element

The City conducted a comprehensive local public participation campaign during this reporting period. The campaigns focused on allowing the public multiple opportunities to provide input to the development of the JURMP, SUSMP, municipal code revisions, and other requirements during late 2007 and early 2008.

Table 9.1-1
Local Opportunities for Public Participation during FY2007-2008

Date	Event Type	Conducted by	Topic	Public Participation Mechanism
Beach Clean Ups				
07/5/2007	Beach Clean-up	NPO "Keep Del Mar Clean" and Staff	Clean Water Program, Water Quality Awareness	Public Involvement
09/15/2007	Beach Clean-up	NPO "Keep Del Mar Clean" and Staff	Clean Water Program, Water Quality Awareness	Public Involvement
Public Workshops				
2/25/2008	Televised Public Workshop	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Public Workshop/Forum
05/14/2008	Televised Public Workshop	Clean Water Manager and Staff	Clean Water Program and Regulatory Overview	Public Workshop/Forum
06/23/2008	Televised Public Workshop	Clean Water Manager	Clean Water Program Overview and Financial Considerations (as part of Budget Workshops)	Public Hearing Forum
Public Hearings				
2/12/2008	Televised Public Planning Commission Hearing	Staff	JURMP, SUSMP, LID, BMP Requirements for Land Development	Noticed Public Hearing
3/3/2008	Televised Public Hearing: City Council	Clean Water Manager & City Engineer	JURMP Overview for City Council and General Public	Public Hearing and Live Broadcast

Date	Event Type	Conducted by	Topic	Public Participation Mechanism
03/17/2008	Televised Public Hearing: City Council	City Staff	Municipal Code Revisions, Second Reading and Adoption	Public Hearing and Live Broadcast
06/23/2008	Televised Public Workshop	Clean Water Manager	Clean Water Program Overview and Financial Considerations (as part of Budget Workshops)	Public Hearing and Live Broadcast
City Hotline Clean Water Mailbox				
Ongoing	Direct Access to Clean Water Manager	Staff	Feedback Mechanism for Program and Code Enforcement Notice	Specific Mailbox and Hotline for Reporting Issues
Public Feedback Forums Community Conversations				
3/9/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
3/26/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
3/30/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
4/2/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
4/6/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
4/9/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
4/10/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
4/13/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
4/17/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum

Date	Event Type	Conducted by	Topic	Public Participation Mechanism
4/22/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
4/23/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
4/27/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
4/29/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
4/30/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
5/4/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
5/7/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
5/8/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum
5/20/2008	Community Conversation Coffee	Clean Water Manager, and/or Staff	Direct Access to Staff and Management to provide feedback on programs and issues	Small Feedback Forum

The complete tally of events and opportunities for public participation also serves as public education events since presentations include extensive information on the implementation of the Permit requirements, JURMP and BMPs as shown in Section 8. These also include beach clean-up events, organized by the City's Keep Del Mar Clean several times per year, and sponsored by the City of Del Mar.

9.2 Regional Participation Element

The City continues to participate and facilitate public participation through regional workgroups and public outreach such as Project Clean Water, the Regional Management Meetings, and the Regional Stormwater Hotline. Staff from the City utilized the Regional Hotline on two (2) separate occasions during this Reporting Period to provide information to the City of San Diego on stormwater runoff in the MS4 system outside of the City of Del Mar's jurisdictional

boundaries. In addition, the City regularly refers callers from the Del Mar Heights portion of the City of San Diego and other areas within the 92014 zip code, but outside of the City of Del Mar jurisdictional boundaries, to the regional stormwater hotlines.

Section 10
Fiscal Analysis Component

Section 12 of 2008 JURMP provided a strategy for effectively conducting a fiscal analysis of the Program in its entirety. The fiscal analysis evaluated in 2008 JURMP included the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities of the Program. No modifications in Section 12 of the 2008 JURMP have been recorded during this reporting period. As indicated in Section 12.3.1 of 2008 JURMP, the Copermittees will prepare a standardized fiscal analysis method by January 31, 2009 that will allow the City of Del Mar to perform the review and annual reporting as required in Permit Section G starting in January 31, 2010. This section provides a fiscal analysis of the City's urban runoff management programs which meets all requirements of the Permit.

The City of Del Mar Clean Water Program is a multi-departmental program, which is funded as an enterprise fund in the City's Annual Budget. Enterprise funds account for operations that are financed and operated in a manner similar to private businesses, with the costs of providing the services recovered largely through user fees. Fund 55 (The Clean Water Fund), is one of three (3) enterprise funds in the City's budget, and was added to the City's budget in FY2003/2004 to account for the mandated costs of the City's NPDES responsibilities.

10.1 Clean Water Program Budget

For the FY2007/2008 reporting period, the final amended budget for Fund 55 totaled $544,749.00, or approximately 2.3% of the total City of Del Mar Operating Budget of $23.2M. Actual program expenditures during FY2007/2008 the City of Del Mar totaled $527,595.53 for NPDES related-activities. Table 10.1-1 below provides a breakdown of program budget by major budget category for FY2007/2008, while Appendix 10-A contains a complete report of the final adjusted budget and expenditures for FY2007/2008.

Prior to FY2007/2008, the City of Del Mar relied on subcontractors to oversee the City's Clean Water Program. In an effort to reduce program costs, and to ensure that the program continued to run smoothly, the City created a new "Clean Water Manager" position in September 2007. The new position was filled in January 2008. One of the first tasks assigned to the new Clean Water Manager was to streamline costs associated with the program, and to work with the City Manager to ensure that all required program elements were accounted for in the Program's budget. Based on a review of the requirements of the new Permit, and the projected expenditures from FY2007/2008, an updated budget for FY2008/2009 for the Clean Water Program was presented to the City Council at a public budget workshop held on June 23, 2008, and adopted as part of the City Manager's Proposed Budget by the City Council at a public hearing held on June 30, 2008.

For FY2008/2009, the adopted budget for the City's Clean Water Program totals $507,402, approximately 2.2% of the total City of Del Mar Operating Budget of $21.8M. Table 10.1-1 also includes a breakdown of the adopted budget by major category, while Appendix 10-B presents the Final Adopted budget for FY2008/2009, with a line-item breakdown of the budget components.

Table 10.1-1
Budget Summary □Clean Water Fund 55

Account		Amended Budget FY2009	Adopted Budget FY2009	Comments
55-5220	Clean Water Engineering	□292,500	□85,500	Engineering contractual services including: Program management (FY2008) water quality testing, development and distribution of educational materials, fees to agencies (FY2008), and engineering services.
55-5530	Clean Water Planning	32,688	37,533	Active enforcement of Clean water regulations including project plan review, permitting, construction monitoring and plan review of BMPs.
55-5536	Clean Water Code Enforcement	10,800	28,464	Active in-field enforcement clean water regulations, including response to resident complaints.
55-5539	Clean Water Management	62,805	196,294	Beginning mid-year FY2008, all program management and reporting activities, fees to agencies, and interaction with regional Copermittee groups.
55-5840	Public Works	13,097	13,961	Provides for administration and general support for all clean water programs for property and facilities, including supervision of maintenance staff.
55-5841	Flood Control & Drainage	5,058	4,985	Provides for necessary monitoring, water quality testing, and labor associated with program requirements when Flood Control pumps are operated.
55-5845	Street Maintenance	92,056	98,464	Provides for a portion of sidewalk and street cleaning including street sweeping and storm drain maintenance within the City limits of Del Mar. Also covers costs with testing, recording contents, and recovering all deposited materials that otherwise would discharge to the beach, river, or lagoon.
55-5847	Street Landscaping	15,843	19,041	Provides for landscape supervision, documentation, and controls for the Clean Water aspects of the street landscaping for medians, islands, street ends, and other street related areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting.
55-5848	Park Maintenance	19,902	23,212	Provides for park maintenance supervision, documentation, and controls for the Clean Water aspects of the landscaping for parks and open space areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting.
Total Clean Water Program □Fund 55		**□544,749**	**□507,402**	

10.2 Funding Sources

To provide funding for the Clean Water Fund, the City uses a combination of user fees, grant funding, and general fund monies. This section identifies the three (3) sources of funding for the Clean Water Program: (1) The Clean Water Service Charge; (2) City of Del Mar General Fund; and (3) grant monies and community partnerships. The following sections provide a discussion of each of these funding sources.

10.2.1 Clean Water Service Charge

In 2003, the City of Del Mar City Council created and adopted a user fee, called the Clean Water Service Charge, to offset the costs of the program. Initially, the rate was adopted to collect □100,000.00 of the estimated □300,000.00 for the program, with an escalator to achieve full cost recovery by 2009. Approximately mid-way through the five-year schedule, on July 24, 2006, the California Supreme Court published a decision in the case of Bighorn-Desert View Water Agency v. Verjil (2006) 39 Cal. 4th 205, which held that consumption-based rates such as water and sewer rates are subject to the notice and hearing requirements of California Constitution, Article XIIID, Section 6 (commonly known as "Proposition 218"). Therefore, on January 22, 2007 and February 5, 2007, the Del Mar City Council held public hearings to receive written protests to comply with Proposition 218. No majority protest was received; and the Council ratified the previously approved five-year rate schedule, including the City's Clean Water Service Charge. However, the adopted rate increases did not account for the actual increases in the costs associated program requirements.

As an additional measure to obtain voter approval of the five-year rate schedule for the City's Clean Water Service Charge, the Council directed staff on April 2, 2007 to start the process to perform a mail ballot election procedure. During the process of researching the mail ballot election procedures and the current rates, it became apparent that the process would immediately need to be repeated to set the Fiscal Year 2009-2010 rates and charges, since the current five-year rate schedule was due to expire in June of 2009. Due to the additional costs incurred in complying with the new requirements of the 2007 Permit, increases to the Clean Water Service Charge were proposed, including an annual 5□ escalator.

During FY2007/2008 approximately □295,216 were collected from the Clean Water Service Charge. All monies appropriated as part of the Clean Water Service Charge are directly identified for the Clean Water Program, and pursuant to Del Mar Municipal Code, may not be used by the City for any other purpose.

During the next reporting period, in compliance with Proposition 218, both the majority protest hearing and mail ballot process will be conducted for the proposed increases. Should mail ballot result in voter approval of the Clean Water Service Charge, the City will continue to have a secure funding source for the Clean Water Program, outside of general fund monies. These proposed increases are anticipated to result in approximately □392,900 during FY2008/2009, and approximately □505,624 in FY2009/2010.

10.2.2 General Fund Monies

The City of Del Mar General Fund accounts for all the revenues received by the City that are not designated for a specific purpose either by the City Council, State or Federal requirements, or special requirements such as those associated with bond debt. The City monitors the General Fund dollars most closely because these revenues fund the backbone of City government. The

major sources of General Fund revenues include property tax, sales tax, transient occupancy tax, and parking fees and fines.

During FY2007/2008, □249,533, or approximately 46□ of the program budget, was funded out of General Fund monies. During FY2008/2009, General Fund monies are anticipated to account for □109,502 or approximately 22□, of the funding for the Clean Water Program. If the Clean Water Service Charge passes, the amount of General Fund monies used will be greatly reduced beginning in FY2009/2010, and freed up for other services, including special projects.

10.2.3 Grant Monies and Community Partnerships

In an attempt to find alternatives to the use of General Fund monies to fund the Clean Water Program, the City of Del Mar continues to look for appropriate grants from the State of California and the Federal Government to assist in funding program elements and special projects.

As part of the California Beverage Container Recycling and Litter Reduction Act, the California Department of Conservation (DOC) distributes a portion of the California Refund Value (CRV) monies collected on sales of aluminum, glass, plastic and bi-metal beverage containers to jurisdictions to assist in programs aimed at beverage container recycling and litter cleanup activities. Incorporated cities and counties and unincorporated counties in California, as identified by the California Department of Finance, are eligible to receive funding under this program, with funding amounts dependent on population.

In FY2007/2008, the City applied for, and received, a DOC grant for □5,000 under this program (the maximum amount the City was eligible for). These funds were earmarked for litter and beach cleanup activities, and used to providing doggie cleanup bags (□mutt mitt stations□) at various locations throughout the city's parks and beaches. In addition, a portion of the funds were used to maintain/purchase a beach cleaner to help reduce any litter going into the ocean and the storm drain system.

For FY2008/2009, the DOC is distributing □10,500,000 to eligible cities and counties. The City again applied for these funds to assist with on-going litter and beach clean-ups throughout the City's parks and beaches, reducing the litter going into the ocean and the storm drain system. The funds have been earmarked for use in the funding education and outreach to pet owners, the purchase of portable □mutt mitt□dispensers and the printing of tip cards for distribution, and beach cleanups. The City was notified on June 27, 2008 that the grant application had been approved for FY2008/2009.

In addition to grant monies, the City of Del Mar is actively developing community partnerships with community groups and non-profit organizations to identify private funding sources and assistance to offset costs of implementing special projects and education/outreach activities as part of the program.

Appendix 10-A
Final Amended Program Budget and Expenditure Report FY2007 2008

Expenditure Status Report

City of Del Mar

7/1/2007 through 6/30/2008

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5220	ENGINEERING SERVICES						
5220.3200	CONTRACTUAL SERVICES	40,000.00	36,966.33	36,966.33	0.00	3,033.67	92.42
5220.3210	CITY ENGINEER	252,500.00	252,496.05	252,496.05	0.00	3.95	100.00
Total	ENGINEERING SERVICES	292,500.00	289,462.38	289,462.38	0.00	3,037.62	98.96
5530	PLANNING						
5530.1000	SALARIES . PERMANENT	23,895.00	20,460.70	20,460.70	0.00	3,434.30	85.63
5530.1200	EE BENEFITS	7,969.00	6,898.87	6,898.87	0.00	1,070.13	86.57
5530.1205	WORKERS COMPENSATION	824.00	629.08	629.08	0.00	194.92	76.34
5530.1400	OVERTIME	0.00	2.97	2.97	0.00	-2.97	0.00
5530.2300	OPERATING SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00
5530.3700	MEMBERSHIPS/SUBSCRIPTIONS	0.00	0.00	0.00	0.00	0.00	0.00
5530.3800	MEETINGS/TRAVEL	0.00	0.00	0.00	0.00	0.00	0.00
5530.3801	TRAINING & EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00
Total	PLANNING	32,688.00	27,991.62	27,991.62	0.00	4,696.38	85.63
5536	CODE ENFORCEMENT						
5536.1000	SALARIES . PERMANENT	7,007.00	5,240.01	5,240.01	0.00	1,766.99	74.78
5536.1200	EE BENEFITS	2,781.00	2,253.66	2,253.66	0.00	527.34	81.04
5536.1205	WORKERS COMPENSATION	925.00	477.51	477.51	0.00	447.49	51.62
5536.1310	PART TIME PLANNING	87.00	0.00	0.00	0.00	87.00	0.00
5536.1400	OVERTIME	0.00	0.00	0.00	0.00	0.00	0.00
5536.2131	VEHICLE MATERIALS/SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00
5536.2800	GAS & OIL	0.00	0.00	0.00	0.00	0.00	0.00
5536.3200	CONTRACTUAL SERVICES	0.00	0.00	0.00	0.00	0.00	0.00
5536.3801	TRAINING & EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00
Total	CODE ENFORCEMENT	10,800.00	7,971.18	7,971.18	0.00	2,828.82	73.81
5539	CLEAN WATER MANAGEMENT						
5539.1000	SALARIES . PERMANENT	43,457.00	43,703.05	43,703.05	0.00	-246.05	100.57
5539.1200	EE BENEFITS	14,692.00	14,829.27	14,829.27	0.00	-137.27	100.93
5539.1205	WORKERS COMPENSATION	1,456.00	1,464.64	1,464.64	0.00	-8.64	100.59

Expenditure Status Report

City of Del Mar

7/1/2007 through 6/30/2008

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5539.2131	VEHICLE MATERIALS/SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00
5539.2300	OPERATING SUPPLIES	1,900.00	676.89	676.89	0.00	1,223.11	35.63
5539.2800	GAS & OIL	0.00	0.00	0.00	0.00	0.00	0.00
5539.3200	CONTRACTUAL SERVICES	0.00	3,382.51	3,382.51	0.00	-3,382.51	0.00
5539.3700	MEMBERSHIPS/SUBSCRIPTIONS	0.00	0.00	0.00	0.00	0.00	0.00
5539.3800	MEETINGS/TRAVEL	1,000.00	0.00	0.00	0.00	1,000.00	0.00
5539.3801	TRAINING & EDUCATION	300.00	413.00	413.00	0.00	-113.00	137.67
Total	CLEAN WATER MANAGEMENT	62,805.00	64,469.36	64,469.36	0.00	-1,664.36	102.65
5840	PW.GENL & ADMIN						
5840.1000	SALARIES . PERMANENT	7,558.00	7,558.64	7,558.64	0.00	-0.64	100.01
5840.1200	EE BENEFITS	2,631.00	2,586.58	2,586.58	0.00	44.42	98.31
5840.1205	WORKERS COMPENSATION	288.00	515.47	515.47	0.00	-227.47	178.98
5840.1400	OVERTIME	10.00	4.38	4.38	0.00	5.62	43.80
5840.1803	OUTSIDE CLERICAL	0.00	37.29	37.29	0.00	-37.29	0.00
5840.2000	BUILDING MAINTENANCE/REPAIR	67.00	27.60	27.60	0.00	39.40	41.19
5840.2100	EQUIPMENT MAINTENANCE/REPAIR	10.00	21.52	21.52	0.00	-11.52	215.20
5840.2131	VEHICLE MATERIALS/SUPPLIES	45.00	26.03	26.03	0.00	18.97	57.84
5840.2133	VEHICLE CONTRACTUAL SERVICES	100.00	99.21	99.21	0.00	0.79	99.21
5840.2140	COMPUTER MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00
5840.2300	OPERATING SUPPLIES	135.00	313.75	313.75	0.00	-178.75	232.41
5840.2400	UNIFORMS	15.00	9.76	9.76	0.00	5.24	65.07
5840.2600	SMALL TOOLS & EQUIPMENT	58.00	41.23	41.23	0.00	16.77	71.09
5840.2800	GAS & OIL	165.00	235.41	235.41	0.00	-70.41	142.67
5840.3000	ADVERTISING, PRINTING & PUB	6.00	0.00	0.00	0.00	6.00	0.00
5840.3200	CONTRACTUAL SERVICES	1,600.00	1,297.94	1,297.94	0.00	302.06	81.12
5840.3300	UTILITIES	67.00	80.04	80.04	0.00	-13.04	119.46
5840.3400	TELEPHONE	80.00	58.38	58.38	0.00	21.62	72.98
5840.3600	PROPERTY/EQUIPMENT RENTAL	23.00	15.77	15.77	0.00	7.23	68.57
5840.3700	MEMBERSHIPS/SUBSCRIPTIONS	7.00	3.88	3.88	0.00	3.12	55.43
5840.3800	MEETINGS/TRAVEL	40.00	16.52	16.52	0.00	23.48	41.30
5840.3801	TRAINING & EDUCATION	17.00	69.30	69.30	0.00	-52.30	407.65
5840.4950	BAD DEBT	0.00	-265.88	-265.88	0.00	265.88	0.00
5840.5500	VEHICLES	175.00	183.00	183.00	0.00	-8.00	104.57
5840.5800	DEPRECIATION	0.00	0.00	0.00	0.00	0.00	0.00

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
Total	PW.GENL & ADMIN	13,097.00	12,935.82	12,935.82	0.00	161.18	98.77
5841	FLOOD CONTROL/DRAINAGE						
5841.1000	SALARIES . PERMANENT	2,481.00	2,383.87	2,383.87	0.00	97.13	96.09
5841.1200	EE BENEFITS	998.00	955.47	955.47	0.00	42.53	95.74
5841.1205	WORKERS COMPENSATION	227.00	222.09	222.09	0.00	4.91	97.84
5841.1400	OVERTIME	162.00	15.13	15.13	0.00	146.87	9.34
5841.2300	OPERATING SUPPLIES	700.00	218.00	218.00	0.00	482.00	31.14
5841.2400	UNIFORMS	40.00	24.63	24.63	0.00	15.37	61.58
5841.3200	CONTRACTUAL SERVICES	450.00	411.88	411.88	0.00	38.12	91.53
Total	FLOOD CONTROL/DRAINAGE	5,058.00	4,231.07	4,231.07	0.00	826.93	83.65
5845	STREET MAINTENANCE						
5845.1000	SALARIES . PERMANENT	41,006.00	40,985.47	40,985.47	0.00	20.53	99.95
5845.1200	EE BENEFITS	16,282.00	15,733.71	15,733.71	0.00	548.29	96.63
5845.1205	WORKERS COMPENSATION	3,735.00	3,825.27	3,825.27	0.00	-90.27	102.42
5845.1300	SALARIES . SEASONAL	0.00	0.00	0.00	0.00	0.00	0.00
5845.1400	OVERTIME	2,187.00	453.51	453.51	0.00	1,733.49	20.74
5845.2000	BUILDING MAINTENANCE/REPAIR	725.00	345.00	345.00	0.00	380.00	47.59
5845.2100	EQUIPMENT MAINTENANCE/REPAIR	200.00	268.63	268.63	0.00	-68.63	134.32
5845.2131	VEHICLE MATERIALS/SUPPLIES	4,635.00	4,494.17	4,494.17	0.00	140.83	96.96
5845.2133	VEHICLE CONTRACTUAL SERVICES	2,400.00	2,251.52	2,251.52	0.00	148.48	93.81
5845.2300	OPERATING SUPPLIES	2,200.00	2,285.45	2,285.45	0.00	-85.45	103.88
5845.2400	UNIFORMS	630.00	274.25	274.25	0.00	355.75	43.53
5845.2600	SMALL TOOLS & EQUIPMENT	973.00	515.56	515.56	0.00	457.44	52.99
5845.2800	GAS & OIL	3,500.00	3,490.65	3,490.65	0.00	9.35	99.73
5845.3000	ADVERTISING, PRINTING & PUB	110.00	0.00	0.00	0.00	110.00	0.00
5845.3200	CONTRACTUAL SERVICES	9,018.00	8,258.47	8,258.47	0.00	759.53	91.58
5845.3300	UTILITIES	1,200.00	830.41	830.41	0.00	369.59	69.20
5845.3400	TELEPHONE	700.00	280.02	280.02	0.00	419.98	40.00
5845.3700	MEMBERSHIPS/SUBSCRIPTIONS	70.00	36.26	36.26	0.00	33.74	51.80
5845.3800	MEETINGS/TRAVEL	300.00	152.83	152.83	0.00	147.17	50.94
5845.3801	TRAINING & EDUCATION	150.00	0.00	0.00	0.00	150.00	0.00
5845.5500	VEHICLES	2,035.00	2,130.00	2,130.00	0.00	-95.00	104.67
Total	STREET MAINTENANCE	92,056.00	86,611.18	86,611.18	0.00	5,444.82	94.09

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5847	STREET LANDSCAPING						
5847.1000	SALARIES . PERMANENT	4,962.00	5,041.31	5,041.31	0.00	-79.31	101.60
5847.1200	EE BENEFITS	1,996.00	2,015.36	2,015.36	0.00	-19.36	100.97
5847.1205	WORKERS COMPENSATION	453.00	466.88	466.88	0.00	-13.88	103.06
5847.1400	OVERTIME	324.00	42.03	42.03	0.00	281.97	12.97
5847.2100	EQUIPMENT MAINTENANCE/REPAIR	22.00	0.00	0.00	0.00	22.00	0.00
5847.2200	GENERAL MAINTENANCE/REPAIR	114.00	0.00	0.00	0.00	114.00	0.00
5847.2300	OPERATING SUPPLIES	114.00	176.89	176.89	0.00	-62.89	155.17
5847.2400	UNIFORMS	70.00	57.51	57.51	0.00	12.49	82.16
5847.2600	SMALL TOOLS & EQUIPMENT	33.00	0.00	0.00	0.00	33.00	0.00
5847.3200	CONTRACTUAL SERVICES	4,467.00	4,561.17	4,561.17	0.00	-94.17	102.11
5847.3300	UTILITIES	3,200.00	3,368.60	3,368.60	0.00	-168.60	105.27
5847.3600	PROPERTY/EQUIPMENT RENTAL	88.00	0.00	0.00	0.00	88.00	0.00
Total	STREET LANDSCAPING	15,843.00	15,729.75	15,729.75	0.00	113.25	99.29
5848	PARK MAINTENANCE						
5848.1000	SALARIES . PERMANENT	992.00	953.29	953.29	0.00	38.71	96.10
5848.1200	EE BENEFITS	400.00	381.12	381.12	0.00	18.88	95.28
5848.1205	WORKERS COMPENSATION	93.00	88.83	88.83	0.00	4.17	95.52
5848.1400	OVERTIME	100.00	6.06	6.06	0.00	93.94	6.06
5848.2200	GENERAL MAINTENANCE/REPAIR	340.00	18.53	18.53	0.00	321.47	5.45
5848.2300	OPERATING SUPPLIES	159.00	460.35	460.35	0.00	-301.35	289.53
5848.2400	UNIFORMS	52.00	9.92	9.92	0.00	42.08	19.08
5848.3200	CONTRACTUAL SERVICES	15,223.00	14,228.74	14,228.74	0.00	994.26	93.47
5848.3300	UTILITIES	2,543.00	2,046.33	2,046.33	0.00	496.67	80.47
Total	PARK MAINTENANCE	19,902.00	18,193.17	18,193.17	0.00	1,708.83	91.41
Total	CLEAN WATER	544,749.00	527,595.53	527,595.53	0.00	17,153.47	96.85
	Grand Total	544,749.00	527,595.53	527,595.53	0.00	17,153.47	96.85

Appendix 10-B
Final Adopted Program Budget FY2007 2008

Account		Adopted FY09 Budget	Itemized FY09 Budget	Comments
5220	**CLEAN WATER ENGINEERING**			
5220.3200	CONTRACTUAL SERVICES	$ 22,500		
	2000 - JURMP Mgmt & Reporting - Printing		500	
	3000 - Monitoring and Assessment Lab		22,000	
5220.3210	CITY ENGINEER	63,000		
	1000 - Project Management		2,500	
	2000 - JURMP Management & Reporting		16,000	
	3000 - Monitoring & Assessment		38,000	
	4000 - WMP, TMDL & Special Invest.		6,500	
TOTAL	CLEAN WATER ENGINEERING	$ 85,500	$ 85,500	
5530	**CLEAN WATER PLANNING**			
5530.1000	SALARIES - PERMANENT	$ 27,398		
	6 Planners (4%) and 1 Planning Director (8%)		27,398	
5530.1200	EMPLOYEE BENEFITS	9,264		
	6 Planners (4%) and 1 Planning Director (8%)		9,264	
5530.1305	WORKERS' COMPENSATION	871		
	6 Planners (4%) and 1 Planning Director (8%)		871	
5530.2300	OPERATING SUPPLIES	-		
5530.3700	MEMBERSHIPS & SUBSCRIPTIONS	-		
5530.3800	MEETINGS & TRAVEL	-		
5530.3801	TRAINING & EDUCATION	-		
TOTAL	CLEAN WATER PLANNING	$ 37,533	$ 37,533	
5536	**CLEAN WATER CODE ENFORCEMENT**			
5536.1000	SALARIES - PERMANENT	$ 14,870		
	0.25 FTE - Code Enforce. Officer II Step E		14,870	
5536.1200	EMPLOYEE BENEFITS	5,792		
	0.25 FTE - Code Enforce. Officer II Step E		5,792	
5536.1205	WORKERS' COMPENSATION	1,352		
	0.25 FTE - Code Enforce. Officer II Step E		1,352	
5536.1310	PART-TIME PLANNING	6,300		
	40% of 0.5 FTE - Code Enf. Clrk - Step E		6,300	
5536.1400	OVERTIME	-		
5536.2131	VEHICLE MAINTENANCE	-		
5536.2800	GAS & OIL	-		
5536.3801	TRAINING & EDUCATION	150		
	CESWRI Training - Inspector/Clerk		150	
5536.3200	CONTRACTUAL SERVICES	-	-	
TOTAL	CLEAN WATER CODE ENFORCEMENT	$ 28,464	$ 28,464	

	Account	Adopted FY09 Budget	Itemized FY09 Budget	Comments
5539	**CLEAN WATER MANAGEMENT**			
5539.1000	SALARIES - PERMANENT	$ 111,916		
	1 FTE - Clean Water Manager		111,916	
5539.1200	EMPLOYEE BENEFITS	34,770		
	1 FTE - Clean Water Manager		34,770	
5539.1205	WORKERS' COMPENSATION	3,781		
	1 FTE - Clean Water Manager		3,781	
5539.2131	VEHICLE MAINTENANCE	-		
5539.2300	OPERATING SUPPLIES	500	500.00	
5536.2800	GAS & OIL	-	-	
5539.3200	CONTRACTUAL SERVICES	43,085		
	Pass-through Permit-related costs			
	SWRCB NPDES Stormwater Permit Fee		4,000	
	MOU - Lead Copermittee Staff		1,221	
	MOU - Regional Monitoring Program		10,534	
	MOU - Regional Outreach		1,526	
	MOU - Mobile Business Program		305	
	MOU - CASQA Fees		128	
	MOU - Hydromod. Management Plan		2,230	
	WURMP Cost Share Agreements - LP		500	
	WURMP Cost Share Agreements - SD		800	
	TMDL Cost Share Agreements - LP		6,840	
	TMDL Cost Share Agreements - SD		1,500	
	Discretionary Costs - Implementation			
	JURMPAR Printing		1,000	
	Outreach/Educ/Public Particpation		2,000	
	WURMP Activity Implementation		7,000	
	RURMP Activity Implementation		2,500	
	Watershed Management Plans		1,000	
5539.3700	MEMBERSHIPS & SUBSCRIPTIONS	490		
	California Stormwater Quality Association		265	
	AEP		140	
	Env. & Water Resources Institute ASCE		85	
5539.3800	MEETINGS & TRAVEL	1,200		
	CASQA Meetings/Workshops (2)		400	
	ASCE/EWRI LID Conference - Seattle		600	
	Misc. Meetings/Travel		200	
5539.3801	TRAINING & EDUCATION	500		
	Misc. Trainings for stormwater		500	
TOTAL	CLEAN WATER MANAGEMENT	$ 196,242	$ 196,242	

Account		Adopted FY09 Budget	Itemized FY09 Budget	Comments
5840	**PUBLIC WORKS**			
5840.1000	SALARIES - PERMANENT	$ 8,006	$ 8,006	
5840.1200	EMPLOYEE BENEFITS	2,772	2,772	
5840.1205	WORKERS' COMPENSATION	302	302	
5840.1400	OVERTIME	10	10	
5840.2000	BUILDING MAINT & REPAIR	69	69	
5840.2100	EQUIP/RADIO MAINT & REPAIR	10	10	
5840.2131	VEHICLE MAINTENANCE	46	46	
5840.2133	VEHICLE CONTRACTUAL SERVICES	103	103	
5840.2300	OPERATING SUPPLIES	299	299	
5840.2400	UNIFORMS	15	15	
5840.2600	SMALL TOOLS & EQUIPMENT	41	41	
5840.2800	GAS & OIL	210	210	
5840.3000	ADVERTISING & PRINTING	6	6	
5840.3300	UTILITIES	69	69	
5840.3400	TELEPHONE	85	85	
5840.3600	PROPERTY/EQUIPMENT RENTAL	24	24	
5840.3700	MEMBERSHIPS & SUBSCRIPTIONS	7	7	
5840.3800	MEETINGS & TRAVEL	41	41	
5840.3801	TRAINING & EDUCATION	18	18	
5840.3200	CONTRACTUAL SERVICES	1,648	1,648	
5840.5500	VEHICLES	180	180	
TOTAL	PUBLIC WORKS	$ 13,961	$ 13,961	
5841	**FLOOD CONTROL & DRAINAGE**			
5841.1000	SALARIES - PERMANENT	$ 2,539	$ 2,539	
5841.1200	EMPLOYEE BENEFITS	1,031	1,031	
5841.1205	WORKERS' COMPENSATION	227	227	
5841.1400	OVERTIME	162	162	
5841.2300	OPERATING SUPPLIES	521	521	
5841.2400	UNIFORMS	41	41	
5841.3200	CONTRACTUAL SERVICES	464	464	
TOTAL	FLOOD CONTROL & DRAINAGE	$ 4,985	$ 4,985	
5845	**STREET MAINTENANCE**			
5845.1000	SALARIES - PERMANENT	$ 42,173	$ 42,173	
5845.1200	EMPLOYEE BENEFIT	16,868	16,868	
5845.1205	WORKERS' COMPENSATION	3,764	3,764	
5845.1400	OVERTIME	1,687	1,687	
5845.2000	BUILDING MAINT & REPAIR	797	797	
5845.2100	EQUIP/RADIO MAINT & REPAIR	206	206	
5845.2131	VEHICLE MATERIALS & SUPPLIES	4,774	4,774	
5845.2133	VEHICLE CONTRACTUAL SERVICES	6,972	6,972	
5845.2300	OPERATING SUPPLIES	2,266	2,266	
5845.2400	UNIFORMS	649	649	
5845.2600	SMALL TOOLS & EQUIPMENT	773	773	
5845.2800	GAS & OIL	3,605	3,605	
5845.3000	ADVERTISING & PRINTING	113	113	
5845.3300	UTILITIES	1,236	1,236	
5845.3400	TELEPHONE	721	721	
5845.3700	MEMBERSHIPS/SUBSCRIPTIONS	72	72	
5845.3800	MEETINGS/TRAVEL	309	309	
5845.3801	TRAINING	155	155	
5845.3200	CONTRACTUAL SERVICES	9,289	9,289	
5845.5500	VEHICLES	2,035	2,035	
TOTAL	STREET MAINTENANCE	$ 98,464	$ 98,464	

Account		Adopted FY09 Budget	Itemized FY09 Budget	Comments
5847	**STREET LANDSCAPING**			
5847.1000	SALARIES - PERMANENT	$ 5,078	$ 5,078	
5847.1200	EMPLOYEE BENEFIT	2,062	2,062	
5847.1205	WORKERS' COMPENSATION	454	454	
5847.1400	OVERTIME	324	324	
5847.2100	EQUIP MAINT & REPAIR	23	23	
5847.2200	GENERAL MAINT & REPAIR	117	117	
5847.2300	OPERATING SUPPLIES	167	167	
5847.2400	UNIFORMS	72	72	
5847.2600	SMALL TOOLS & EQUIPMENT	34	34	
5847.3300	UTILITIES	3,546	3,546	
5847.3600	PROPERTY/EQUIPMENT RENTAL	91	91	
5847.3200	CONTRACTUAL SERVICES	7,073	7,073	
TOTAL	STREET LANDSCAPING	$ 19,041	$ 19,041	
5848	**PARK MAINTENANCE**			
5848.1000	SALARIES - PERMANENT	$ 1,016	$ 1,016	
5848.1200	EMPLOYEE BENEFITS	413	413	
5848.1205	WORKERS' COMPENSATION	93	93	
5848.1400	OVERTIME	100	100	
5848.2200	GENERAL MAINT & REPAIR	350	350	
5848.2300	OPERATING SUPPLIES	464	464	
5848.2400	UNIFORMS	54	54	
5848.3300	UTILITIES	2,619	2,619	
5848.3200	CONTRACTUAL SERVICES	18,103	18,103	
TOTAL	PARK MAINTENANCE	$ 23,212	$ 23,212	
	TOTAL CLEAN WATER FUND	$ 507,402	$ 507,402	

Section 11
Effectiveness Assessment Component

11.1 Introduction

As part of its Jurisdictional Urban Runoff Management Program, the City of Del Mar will conduct an annual effectiveness assessment of its Jurisdictional Urban Runoff Management Program implementation. At a minimum, and as described in Permit Section I.1, this annual effectiveness assessment will include:

1. Specific assessment of the effectiveness of each of the following:
   - Each significant jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented;
   - Implementation of each major component of the Jurisdictional Urban Runoff Management Program (Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education); and
   - Implementation of the Jurisdictional Urban Runoff Management Program as a whole.

2. Identification of, and the use of measurable targeted outcomes, assessment measures, and assessment methods for each of the items listed above.

3. The use of outcome levels 1-6 (as defined in Attachment C of the Permit) to assess the effectiveness of each of the items listed in Section 1 above, where applicable and feasible.

4. The use of monitoring data and analysis from the Receiving Waters Monitoring Program to assess the effectiveness each of the items listed in section 1 above, where applicable and feasible.

5. The use of Implementation Assessment, Water Quality Assessment, and Integrated Assessment, where applicable and feasible (as defined in Attachment C of the Permit)

11.2 Effectiveness Assessment Approach

The City's approach to incorporating effectiveness assessment includes using the "Initial Standards for Reporting and Assessment of Copermittee Urban Runoff Management Programs" included in the Regional Urban Runoff Management Plan (RURMP) as Attachment 6, and adopting them as appropriate based on the program implementation and reporting strategies as presented in the JURMP. The City's 2007-08 effectiveness assessment was developed using the elements described in Section 11.1 above and following the annual reporting requirements itemized in Section J.3.a of the Permit.

Appendix 11-A is a compilation of all the required items of the Annual Report as listed in Section J.3 and also with determinations to the applicability in the City of Del Mar, that is, is or was the requirement subject to implementation in this jurisdiction, and then any quantifiable data related to the requirements and a suite of assessment questions to determine if action is required to

modify program activities to meet requirements or to improve effectiveness. The full explanation of any required action items to improve or correct any deficiencies are referenced back to the original component as noted in the far right hand column of the assessment table (Appendix 11-A).

The majority of the effectiveness assessment measures required under the Permit (Section J.3.a) fall into level 1, or are Activity based, since they relate to compliance tasks performed by the City, as shown in Appendix 11-A. Overall, the City's effectiveness in continuing the implementation of the program was high with some minor challenges due to the implementation of new Permit requirements combined with staff turnover in a few positions including the Code Enforcement Officer, Enforcement Technician, and Building Inspector. Notwithstanding these changes, City staff identified several areas of improvement as noted below:

- Improved documentation tracking and inspections related to the Construction Component
- Improved documentation for new or modified permit requirements such as the Major Special Events
- Preparations to complete 100% of commercial inspections for FY2008/2009.

Details of the program implementation and actions are found in each of the respective components.

11.3 Program Review and Modification

Based on the results of the effectiveness assessment, the City annually review its jurisdictional activities or BMPs to identify modifications and improvements needed to maximize Jurisdictional Urban Runoff Management Program effectiveness, as necessary to achieve compliance with Section A of the Permit. The City has developed an implement plan and schedule to address the identified modifications and improvements as stated in the JURMP Annual Report Jurisdictional activities/BMPs that are ineffective or less effective than other comparable jurisdictional activities/BMPs may be replaced or improved upon by implementation of more effective jurisdictional activities/BMPs. Where monitoring data exhibits persistent water quality problems that are caused or contributed to by MS4 discharges, jurisdictional activities or BMPs applicable to the water quality problems may be required of potential dischargers, modified and improved to correct the water quality problems.

Appendix 11-A
Effectiveness Assessment Spreadsheet

					Assessment					
Section	Report on:	Requirement Applicable?	Number	Unit	Measurable or Quatifiable?	Level (1-6)	Effective?	Acceptable?	Action Required?	JURMP AR Location of Action Item
Devel Planni	Describe:									
	Amendments to General Plan	Yes			Yes	1-Activity	Yes	Yes	No	
	Amendments to environmental review process	Yes			Yes	1-Activity	Yes	Yes	No	
	Amendments to development project approval processes	Yes			Yes	1-Activity	Yes	Yes	No	
	Amendments to development project requirements	Yes			Yes	1-Activity	Yes	Yes	No	
	Confirm:									
	All development projects were required to undergo the urban runoff approval process	Yes			Yes	1-Activity	Yes	Yes	No	
	All development projects met the applicable project requirements	Yes			Yes	1-Activity	Yes	Yes	No	
	How was information tracked?	Yes			Yes	1-Activity	Yes	Yes	No	
	List of development projects to which SUSMP requirements were applied	Yes			Yes	1-Activity	Yes	Yes	No	
	Priority Development Projects:									
	Residential development of 10 dwelling units	Yes	1	projects	Yes	1-Activity	Yes	Yes	No	
	Heavy industry or industrial development 1 acre	No								
	Commercial development 1 acre	No								
	Automotive repair shop	No								
	Restaurant 5,000 square feet	None this FY	0	projects	Yes	1-Activity	Yes	Yes	No	
	Hillside development 5,000 square feet	None this FY			Yes	1-Activity	Yes	Yes	No	
	Projects within or directly adjacent to or directly discharging to receiving water within Water Quality Environmentally Sensitive Areas (WQSAs).	Yes	1	projects	Yes	1-Activity	Yes	Yes	No	
	Parking lots 5,000 sf or 15 parking spaces, and potentially exposed to urban runoff or precipitation.	Yes	1	projects	Yes	1-Activity	Yes	Yes	No	
	Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 sf	None this FY			Yes	1-Activity	Yes	Yes	No	
	Retail gasoline outlet	No								
	Confirm:									
	All applicable SUSMP BMP requirements were applied to all priority development projects.	Yes			Yes	1-Activity	Yes	Yes	No	
	How was information tracked?	Yes			Yes	1-Activity	Yes	Yes	No	
	One example of a priority development project that was conditioned to meet SUSMP requirements, and a description of the required BMPs	None this FY			Yes	1-Activity	Yes	Yes	No	
	List of priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	None this FY			Yes	1-Activity	Yes	Yes	No	
	Updated treatment control BMP inventory	None this FY			Yes	1-Activity	Yes	Yes	No	
	Number of treatment control BMPs inspected	None this FY	0	BMPs	Yes	1-Activity	Yes	Yes	No	
	Summary of inspection results and findings	None this FY			Yes	1-Activity	Yes	Yes	No	
	Describe:									
	Annual verification of operation and maintenance of treatment control BMPs.	None this FY			Yes	1-Activity	Yes	Yes	No	
	Summarize verification results and findings.	None this FY			Yes	1-Activity	Yes	Yes	No	
	Confirm:									
	BMP verification was conducted for all priority development projects prior to occupancy.	None this FY			Yes	1-Activity	Yes	Yes	No	
	How was information tracked?	None this FY			Yes	None	Yes	Yes	No	
	List of any projects which received a SUSMP waiver.	None this FY			Yes	1-Activity	Yes	Yes	No	
	Describe the implementation of any SUSMP waiver mitigation program.	None this FY			Yes	1-Activity	Yes	Yes	No	

					Assessment					
Section	Report on:	Requirement Applicable?	Number	Unit	Measurable or Quatifiable?	Level (1-6)	Effective?	Acceptable?	Action Required?	JURMP AR Location of Action Item
	Describe Hydromodification Management Plan (HMP) development collaboration and participation.	Yes			Yes	1-Activity	Yes	Yes	No	
	List of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	None this FY			Yes	1-Activity	Yes	Yes	No	
	List of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	None this FY			Yes	1-Activity	Yes	Yes	No	
	List of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implement for each applicable project.	No								
	Number of violations and enforcement actions taken for development projects, including information on any necessary follow-up actions taken. Discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	None this FY								
	Warning	None this FY	0	W						
	Notice of Violation	None this FY	0	NoV						
	Descripion of notable activities conducted to manage urban runoff from development projects.	Yes			Yes	1-Activity	Yes	Yes	No	
Construction	Confirm:									
	All construction sites required to undergo the construction urban runoff approval process.	Yes			Yes	1-Activity	Yes	Yes	No	
	All construction sites meet the applicable construction requirements.	Yes			Yes	1-Activity	Yes	Yes	No	
	How was this tracked?	Yes			Yes	1-Activity	Yes	Yes	No	
	Confirm:									
	A regularly updated construction site inventory was maintained.	Yes			Yes	1-Activity	No	No	Yes	Section 3.7
	How was inventory managed?	Yes			Yes	1-Activity	No	No	Yes	Section 3.7
	Describe:									
	Modifications to construction and grading ordinances.	Yes			Yes	1-Activity	Yes	Yes	No	
	Modifications to approval processes.	Yes			Yes	1-Activity	Yes	Yes	No	
	Confirm:									
	Designated BMPs were implemented, or required to be implemented, for all construction sites.	Yes			Yes	1-Activity	Yes	Yes	No	
	Confirm:									
	Maximum disturbed area for grading was applied to all applicable construction sites.	No								
	List:									
	All construction sites with conditions requiring advanced treatment.	No								
	Confirm:									
	Advanced treatment was required at such construction sites.	No								
	For each construction site within the priority and non-priority category:									
	Period of time (weeks) site was active within the rainy season.	Yes	Not Available	Weeks	Yes	1-Activity	No	No	Yes	Section 3.5.3
	Number of inspections conducted during the rainy season.	Yes	Not Available	Inspections	Yes	1-Activity	No	No	Yes	Section 3.5.3
	Number of inspections conducted during the dry season.	Yes	Not Available	Inspections	Yes	1-Activity	No	No	Yes	Section 3.5.3
	Total number of inspections for all sites.	Yes	104	Inspections	Yes	1-Activity	Yes	Yes	No	
	Describe:									
	General results of the inspections.	Yes			Yes	1-Activity	Yes	Yes	No	

					Assessment					
Section	Report on:	Requirement Applicable?	Number	Unit	Measurable or Quatifiable?	Level (1-6)	Effective?	Acceptable?	Action Required?	JURMP AR Location of Action Item
	Confirm:									
	All inspections conducted addressed all the required inspection steps to determine full compliance.	Yes			Yes	1-Activity	Yes	Yes	No	
	Number of violations and enforcement actions taken for construction sites, including information on any necessary follow-up actions taken. Discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Yes			Yes	1-Activity	Yes	Yes	No	
	Warning	Yes	7	W	Yes	1-Activity	Yes	Yes	No	
	Notice of Violation	Yes	6	NoV	Yes	1-Activity	Yes	Yes	No	
	Descripion of notable activities conducted to manage urban runoff from construction sites.	None this FY			Yes	1-Activity	Yes	Yes	No	
Municipal	Update Municipal inventory/prioritization	Yes			Yes	1-Activity	Yes	Yes	No	
	Confirm: designated BMPs were implemented, or required to be implemented, for:									
	Municipal areas	Yes			Yes	1-Activity	Yes	Yes	No	
	Municipal activities	Yes			Yes	1-Activity	Yes	Yes	No	
	Special events	Yes			Yes	1-Activity	Yes	Yes	No	
	Describe:									
	Inspections and maintenance conducted for municipal treatment controls.	Yes			Yes	1-Activity	Yes	Yes	No	
	Identify:									
	Total number of catch basins	Yes	7	Catch Basins	Yes	1-Activity	Yes	Yes	No	
	Number of catch basins inspected	Yes	7	Inspected	Yes	1-Activity	Yes	Yes	No	
	Number of catch basins with accumulated waste exceeding 33	Yes	0	Catch Basins	Yes	1-Activity	Yes	Yes	No	
	Number of catch basins cleaned	Yes	7	Catch Basins	Yes	1-Activity	Yes	Yes	No	
	Total number of inlets	Yes	224	Inlets	Yes	1-Activity	Yes	Yes	No	
	Number of inlets inspected	Yes	224	Inspected	Yes	1-Activity	Yes	Yes	No	
	Number of inlets with accumulated waste exceeding 33	Yes	0	Inlets	Yes	1-Activity	Yes	Yes	No	
	Number of inlets cleaned	Yes	224	Inlets	Yes	1-Activity	Yes	Yes	No	
	Identify:									
	Total distance (miles) of MS4	Yes	8.72	Miles	Yes	1-Activity	Yes	Yes	No	
	Distance of MS4 inspected	Yes	8.72	Miles	Yes	1-Activity	Yes	Yes	No	
	Distance of MS4 found with accumulated waste exceeding cleaning criteria	Yes	0	Miles	Yes	1-Activity	Yes	Yes	No	
	Distance of MS4 cleaned	Yes	8.72	Miles	Yes	1-Activity	Yes	Yes	No	
	Identify									
	Total distance (miles) of open ditches/swales	Yes	2.85	Miles	Yes	1-Activity	Yes	Yes	No	
	Distance of open ditches/swales inspected	Yes	2.85	Miles	Yes	1-Activity	Yes	Yes	No	
	Distance of open ditches/swales found with anthropogenic litter	No			Yes	1-Activity	Yes	Yes	No	
	Distance of open channels/swales cleaned	Yes	2.85	Miles	Yes	1-Activity	Yes	Yes	No	
	Amount of waste and litter (tons) removed from:									
	Inlets (combined with catch basins)	Yes	7.1	Tons	Yes	1-Activity	Yes	Yes	No	
	MS4	Yes	13.7	Tons	Yes	1-Activity	Yes	Yes	No	
	Open ditches/swales	Yes	4.8	Tons	Yes	1-Activity	Yes	Yes	No	
	Identify:									
	Any MS4 facility found to require inspection less than annually following two years of inspection.	NA			Yes	1-Activity	Yes	Yes	No	
	Justification for the finding	NA			Yes	1-Activity	Yes	Yes	No	
	Confirm:									

					Assessment					
Section	Report on:	Requirement Applicable?	Number	Unit	Measurable or Quatifiable?	Level (1-6)	Effective?	Acceptable?	Action Required?	JURMP AR Location of Action Item
	Designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	Yes			Yes	1-Activity	Yes	Yes	No	
	Identify total distance of curb-miles of improved roads, streets and highways classified as:									
	High volume of trash and/or debris	Yes	Not Available	Curb-miles	Yes	1-Activity	No	Yes	No	
	Sweeping frequency for high volume	Yes	Semi-monthly	Frequency	Yes	1-Activity	Yes	Yes	No	
	Moderate volume of trash and/or debris	Yes	Not Available	Curb-miles	Yes	1-Activity	No	Yes	No	
	Sweeping frequency for moderate volume	Yes	Semi-monthly	Frequency	Yes	1-Activity	Yes	Yes	No	
	Low volume of trash and/or debris	Yes	Not Available	Curb-miles	Yes	1-Activity	No	Yes	No	
	Low frequency for moderate volume	Yes	Semi-monthly	Frequency	Yes	1-Activity	Yes	Yes	No	
	Total distance of curb-miles swept	Yes	1168.8	Curb-miles	Yes	1-Activity	Yes	Yes	No	
	Identify:									
	Number of municipal parking lots	Yes	2	Lots	Yes	1-Activity	Yes	Yes	No	
	Number of municipal parking lots swept	Yes	2	Lots	Yes	1-Activity	Yes	Yes	No	
	Frequency of sweeping	Yes	Semi-monthly	Frequency	Yes	1-Activity	Yes	Yes	No	
	Amount of material collected (tons) from street and parking lot sweeping.	Yes	115.5	Tons	Yes	1-Activity	Yes	Yes	No	
	Describe:									
	Efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.	Yes			Yes	1-Activity	Yes	Yes	No	
	Identify number of high priority municipal areas and activities by category:									
	Roads, streets, highways and parking facilities:									
	Number requiring inspections	Yes	2	Sites	Yes	1-Activity	Yes	Yes	No	
	Number of sites inspected	Yes	2	Sites	Yes	1-Activity	Yes	Yes	No	
	Frequency of inspections	Yes	Annually	Frequency	Yes	1-Activity	Yes	Yes	No	
	Flood management projects and flood control devices									
	Number requiring inspections	No								
	Number of sites inspected	No								
	Frequency of inspections	No								
	Tributary to 303(d) impaired water body where area or activity generates pollutants for which the water body is impaired.									
	Number requiring inspections	No								
	Number of sites inspected	No								
	Frequency of inspections	No								
	Active or closed municipal landfills									
	Number requiring inspections	No								
	Number of sites inspected	No								
	Frequency of inspections	No								
	Treatment works (water and wastewater treatment plants)									
	Number requiring inspections	No								
	Number of sites inspected	No								
	Frequency of inspections	No								
	Treatment works (sanitary sewage collection systems)									
	Number requiring inspections	Yes	3	Sites	Yes	1-Activity	Yes	Yes	No	
	Number of sites inspected	Yes	3	Sites	Yes	1-Activity	Yes	Yes	No	
	Frequency of inspections	Yes	Annually	Frequency	Yes	1-Activity	Yes	Yes	No	
	Solid waste transfer facilities									
	Number requiring inspections	No								
	Number of sites inspected	No								
	Frequency of inspections	No								

					Assessment					
Section	Report on:	Requirement Applicable?	Number	Unit	Measurable or Quatifiable?	Level (1-6)	Effective?	Acceptable?	Action Required?	JURMP AR Location of Action Item
	Land application sites									
	Number requiring inspections	No								
	Number of sites inspected	No								
	Frequency of inspections	No								
	Corporate yards including maintenenance and storage yards for materials, waste, equipment and vehicles									
	Number requiring inspections	Yes	1	Sites	Yes	1-Activity	Yes	Yes	No	
	Number of sites inspected	Yes	1	Sites	Yes	1-Activity	Yes	Yes	No	
	Frequency of inspections	Yes	Annually	Frequency	Yes	1-Activity	Yes	Yes	No	
	Household Hazardous Waste collection facilities									
	Number requiring inspections	No								
	Number of sites inspected	No								
	Frequency of inspections	No								
	Municipal airports									
	Number requiring inspections	No								
	Number of sites inspected	No								
	Frequency of inspections	No								
	Parks and recreation facilities									
	Number requiring inspections	Yes	6	Sites	Yes	1-Activity	Yes	Yes	No	
	Number of sites inspected	Yes	6	Sites	Yes	1-Activity	Yes	Yes	No	
	Frequency of inspections	Yes	Annually	Frequency	Yes	1-Activity	Yes	Yes	No	
	Special event venues following special events									
	Number of major events requiring inspections	Yes	9	Sites	Yes	1-Activity	Yes	Yes	No	
	Number of sites inspected	Yes	9	Sites	Yes	1-Activity	Yes	No	Yes	Section 4.10
	Frequency of inspections	Yes	As needed	Frequency	Yes	1-Activity	Yes	Yes	No	
	Number of moderate events requiring inspections	No			Yes	1-Activity	Yes	Yes	No	
	Number of sites inspected	No			Yes	1-Activity	Yes	Yes	No	
	Frequency of inspections	No			Yes	1-Activity	Yes	Yes	No	
	Power washing									
	Number requiring inspections	Yes	1	Sites	Yes	1-Activity	Yes	Yes	No	
	Number of sites inspected	Yes	1	Sites	Yes	1-Activity	Yes	Yes	No	
	Frequency of inspections	Yes	As needed	Frequency	Yes	1-Activity	Yes	Yes	No	
	Other municipal areas and activities determined to contribute a significant pollutant load									
	Number requiring inspections	None this FY	0	Sites	Yes	1-Activity	Yes	Yes	No	
	Number of sites inspected	None this FY	0	Sites	Yes	1-Activity	Yes	Yes	No	
	Frequency of inspections	Unknown	As needed	Frequency	Yes	1-Activity	Yes	Yes	No	
	Describe general results of inspections	Yes			Yes	1-Activity	Yes	Yes	No	
	Confirm that inspections conducted addressed all the required inspection steps to determine full compliance.	Yes			Yes	1-Activity	Yes	Yes	No	
	Number of violations and enforcement actions taken for municipal areas and activities, including information on any necessary follow-up actions taken. Discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Yes			Yes	1-Activity	Yes	Yes	No	
	Warning	Yes	0	W	Yes	1-Activity	Yes	Yes	No	
	Notice of Violation	Yes	0	NoV	Yes	1-Activity	Yes	Yes	No	
	Description of notable activities conducted to manage urban runoff from municipal areas and activities.	Yes			Yes	1-Activity	Yes	Yes	No	
Indust/Comm	Update industrial/commercial inventory	Yes			Yes	1-Activity	Yes	Yes	No	

					Assessment					
Section	Report on:	Requirement Applicable?	Number	Unit	Measurable or Quatifiable?	Level (1-6)	Effective?	Acceptable?	Action Required?	JURMP AR Location of Action Item
	Confirm that designated BMPs were implemented, or required to be implemented, for industr/commercial sites/sources.	Yes			Yes	3-BehavCh	Yes	Yes	No	
	Describe:									
	Efforts to notify owners/operators of industrial/commercial sites/sources of BMP requirements	Yes			Yes	1-Activity	No	No	Yes	Section 5.3.4
	Requirement: Minimum of 50□ of high threat sites inspected year one, 100□ of high threat sites year two and subsequently.	Yes			Yes	1-Activity	Yes	Yes	No	
	Number of:									
	Industrial sites	Yes	2	Sites	Yes	1-Activity	Yes	Yes	No	
	Industrial sites inspected	Yes	2	Sites	Yes	1-Activity	Yes	Yes	No	
	Number of third party inspections	Yes	1	Sites	Yes	1-Activity	Yes	Yes	No	
	Number of:									
	Commercial sites	Yes	40	Sites	Yes	1-Activity	Yes	Yes	No	
	Commercial sites inspected	Yes	18	Sites	Yes	1-Activity	Yes	Yes	Yes	Section 5.3.8
	Number of third party inspections	NA	0	Sites	Yes	1-Activity	Yes	Yes	No	
	Justifiction and rationale for why the commercial sites/sources inspected were chosen for inspection.	Yes			No	None	NA	NA	No	
	Confirm that all inspections conducted addressed all the required inspection steps to determine full compliance.	Yes			Yes	2-AKA	Yes	Yes	No	
	Identify efforts conducted to verify third party inspection effectiveness	NA			Yes	1-Activity	NA	NA	No	
	Identify efforts implemented to address mobile businesses.	Yes			Yes	1-Activity	Yes	Yes	No	
	Update mobile business inventory	Yes			Yes	1-Activity	Yes	Yes	No	
	Confirm that the designated BMPs were implemented, or required to be implemented, for mobile businesses.	Yes			Yes	1-Activity	Yes	Yes	No	
	Efforts to notify owners/operators of mobile business sites/sources of BMP requirements	Yes			Yes	1-Activity	Yes	NA	NA	
	Total Number:									
	Mobile businesses inventoried	Yes	6	Businesses	Yes	1-Activity	Yes	Yes	No	
	Mobile businesses inspected	Yes	0	Businesses	Yes	1-Activity	Yes	NA	NA	
	Justification and rationale for why the mobile businesses inspected were chosen for inspection.	Yes			No	None	NA	NA	No	
	Number of violations and enforcement actions taken for industrial/commercial sites/sources, including information on any necessary follow-up actions taken. Discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Yes			Yes	1-Activity	Yes	Yes	No	
	Warning	Yes	1	W	Yes	1-Activity	Yes	Yes	No	
	Notice of Violation	Yes	0	NoV	Yes	1-Activity	Yes	Yes	No	
	Describe efforts taken to identify non-filers	No			Yes	1-Activity	Yes	Yes	No	
	Provide a list of non-filers (under the General Industrial Permit)	No			Yes	1-Activity	Yes	Yes	No	
	Describe notable activities conducted to manage urban runoff from industrial/commercial sites/sources	Yes			Yes	1-Activity	Yes	Yes	No	
Residential	Identify:									
	High threat to water quality residential areas focused on	Yes			Yes	1-Activity	Yes	Yes	No	
	High threat to water quality residential activities focused on	Yes			Yes	1-Activity	Yes	Yes	No	

					Assessment					
Section	Report on:	Requirement Applicable?	Number	Unit	Measurable or Quatifiable?	Level (1-6)	Effective?	Acceptable?	Action Required?	JURMP AR Location of Action Item
	Confirm that the designated BMPs were implemented, or required to be implemented, for residential areas and activities	Yes			Yes	1-Activity	Yes	Yes	No	
	Describe efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	Yes			Yes	1-Activity	Yes	Yes	No	
	Types and amounts of HHW collected:									
	Total HHW collected	Yes	11, 698	Pounds	Yes	None	Yes	Yes	No	
	Reclaimable									
	Motor Oil/Oil Products	Yes	50	Gallons	Yes	None	Yes	Yes	No	
	Oil Filters	Yes	Not Available	Pounds	Yes	None	Yes	Yes	No	
	Describe:									
	Methods used for oversight of residential areas, as well as any findings	Yes			Yes	1-Activity	Yes	Yes	No	
	Methods used for oversight of residential activities, as well as any findings	Yes			Yes	1-Activity	Yes	Yes	No	
	Number of violations and enforcement actions taken for residential areas and activities, including information on any necessary follow-up actions taken. Discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Yes			Yes	1-Activity	Yes	Yes	No	
	Warning	Yes	0	W	Yes	1-Activity	Yes	No	No	
	Notice of Violation	Yes	6	NoV	Yes	1-Activity	Yes	Yes	No	
	Describe:									
	Collaboration efforts taken to develop and implement the Regional Residential Education Program.	Yes			Yes	1-Activity	Yes	Yes	No	
	Notable activities conducted to manage urban runoff from residential areas and activities.				Yes	1-Activity	Yes	Yes	No	
IDDE	Correct:									
DUE 12/15/0	Inaccuracies in MS4 map	Yes			Yes	1-Activity	Yes	Yes	No	
	Inaccuracies in Dry Weather Field Screening and Analytical Stations map	Yes			Yes	1-Activity	Yes	Yes	No	
	Dry weather field screening and analytical monitoring results:									
	Tabular	Yes	6	Tables	Yes	None	Yes	Yes	No	To be updated 12/15/08
	Graphical	Yes	0	Graphs	Yes	None	Yes	Yes	No	To be updated 12/15/08
	Include:									
	Station locations	Yes	15	Stations	Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Sites where results exceeded action levels	Yes	0	Stations	Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Follow-up and elemination activities for potential illicit discharges/connections	Yes			Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Rationale for why follow-up investigations were not conducted	Yes			Yes	None	Yes	Yes	No	To be updated 12/15/08
	Consultant program recommendations/changes resulting from monitoring	Yes			Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Documentation that recommendations have been implemented	Yes			Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Include dry weather report as an attachment	Yes			Yes	None	Yes	Yes	No	To be updated 12/15/08
	Requirement: Follow-up within two days of test results indicating an exceedance.	Yes			Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Describe:									
	Any other investigations and follow-up activities for illicit discharges and connections.	Yes			Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Illicit discharges and connections identified									
	Number of illicit discharges	Yes	20	Discharges	Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Number of illicit discharges eliminated	Yes	20	Discharges	Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Number of illegal connections	Yes	0	Connections	Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Number of illegal connections eliminated	Yes	0	Connections	Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Identify:									
	Number of spills to MS4	Yes	0	Spills	Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08

					Assessment					
Section	Report on:	Requirement Applicable?	Number	Unit	Measurable or Quatifiable?	Level (1-6)	Effective?	Acceptable?	Action Required?	JURMP AR Location of Action Item
	Describe:									
	Spill	Yes			Yes	None	Yes	Yes	No	To be updated 12/15/08
	Response	Yes			Yes	None	Yes	Yes	No	To be updated 12/15/08
	Describe:									
	Activities implemented to prevent sewage and other spills from entering the MS4	Yes			Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Mechanism whereby notification of sewage spills from private laterals is received	Yes			Yes	None	Yes	Yes	No	To be updated 12/15/08
	Hotline:									
	Number of times hotline was called, compared to previous reporting periods	Yes	2	Calls	Yes	1-Activity	NA	Yes	No	To be updated 12/15/08
	Summary of the calls	Yes			Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Describe:									
	Efforts to publicize and facilitate public reporting of illicit discharges	Yes			Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Yes			Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Warning	Yes	5	W	Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Notice of Violation	Yes	16	NoV	Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
	Describe notable activities conducted to manage illicit discharges and connections				Yes	1-Activity	Yes	Yes	No	To be updated 12/15/08
Education	Address each target community specifically as follows:									
	Municipal									
	Development Planning									
	Federal, state and local water qualtiy laws and regulations applicable to development projects	Yes			Yes	1-Activity	Yes	Yes	No	
	Impacts of land development and urbanization	Yes			Yes	1-Activity	Yes	Yes	No	
	How to integrate LID BMP requirements into local regulatory programs	Yes			Yes	1-Activity	Yes	Yes	No	
	Methods of minimizing impacts to receiving water quality:	Yes			Yes	1-Activity	Yes	Yes	No	
	Storm water management plan development and review	Yes			Yes	1-Activity	Yes	Yes	No	
	Methods to control downstream erosion control impacts	Yes			Yes	1-Activity	Yes	Yes	No	
	Identification of pollutants of concern	Yes			Yes	1-Activity	Yes	Yes	No	
	LID BMP techniques	Yes			Yes	1-Activity	Yes	Yes	No	
	Source control BMPs	Yes			Yes	1-Activity	Yes	Yes	No	
	Selection of the most effective treatment control BMPs for the pollutants of concern	Yes			Yes	1-Activity	Yes	Yes	No	
	Municipal Construction									
	Federal, state and local water qualtiy laws and regulations applicable to construction and grading activities	Yes			Yes	1-Activity	Yes	Yes	No	
	Impacts from land development and urbanization and impacts from construction material such as sediment	Yes			Yes	1-Activity	Yes	Yes	No	
	Proper implementation of erosion and sediment control and other BMPs to minimize the impacts to receiving water quality from construction activities.	Yes			Yes	1-Activity	Yes	Yes	No	
	City's inspection, plan review, and enforcement policies and procedures to verify consistent application	Yes			Yes	1-Activity	Yes	Yes	No	
	Current advancements in BMP technologies	Yes			Yes	1-Activity	Yes	Yes	No	
	SUSMP requirements including treatment options, LID BMPs, source control and applicable tracking mechanisms	Yes			Yes	1-Activity	Yes	Yes	No	
	Staff responsible for conducting storm water compliance inspections once per year, training to cover inspection and enforcement procedures, BMP implementation, and review of monitoring data	Yes		Times	Yes	1-Activity	Yes	Yes	No	
	Municipal "other"									

					Assessment					
Section	Report on:	Requirement Applicable?	Number	Unit	Measurable or Quatifiable?	Level (1-6)	Effective?	Acceptable?	Action Required?	JURMP AR Location of Action Item
	Implement a program for personnel and contractors performing activities which generate pollutants so they have an understanding of the activity-specific BMPs for each activity performed	Yes			Yes	1-Activity	Yes	Yes	No	
	New Development Construction Education									
	Laws, regulations, permits, requirements	Yes			Yes	1-Activity	Yes	Yes	No	
	BMPs	Yes			Yes	1-Activity	Yes	Yes	No	
	General urban runoff concepts	Yes			Yes	1-Activity	Yes	Yes	No	
	Other topics	Yes			Yes	1-Activity	Yes	Yes	No	
	Residential, general public and school children education, using:									
	Laws, regulations, permits, requirements	Yes			Yes	1-Activity	Yes	Yes	No	
	BMPs	Yes			Yes	1-Activity	Yes	Yes	No	
	General urban runoff concepts	Yes			Yes	1-Activity	Yes	Yes	No	
	Other topics	Yes			Yes	1-Activity	Yes	Yes	No	
Public Participation	Incorporate a mechanism for public participation in the updating, development, and implementation of the Jurisdictional Urban Runoff Management Program	Yes			Yes	1-Activity	Yes	Yes	No	

Section 12
Special Investigations

This section provides a description of any special investigations conducted by the City of Del Mar during the reporting period. Special investigations may include water quality studies, BMP pilot studies, surveys and other data collection activities to better understand the program's operations and effectiveness. Special investigations may also be undertaken as requirements under other mandates like 13267 letters, TMDLs, etc. and implemented either solely by the City or in collaboration with other agencies or non-profit organizations.

Special studies may be funded by grants or from the City's Clean Water Fund. Regardless, of the funding sources, these investigations, projects or studies may be scheduled in advance or be undertaken as the need arises during the course of the reporting year.

During this reporting period, the City of Del Mar actively participated in two separate Regional Total Maximum Daily Load (TMDL) studies. This Section provides a brief discussion of the City's involvement in these two studies. No other special investigation took place during the Reporting Period.

12.1 Los Peñasquitos Lagoon – Sediment TMDL

For FY2007/2008, the City actively participated in the Los Peñasquitos Lagoon TMDL Investigative Order No. R9-2006-076 by attending stakeholder and group management meetings, contributing funding under the cost-share agreement, and providing technical comments to various documents prepared for submittal to the San Diego RWQCB.

Notable activities in which City of Del Mar Clean Water Program staff has participated include:

- Review and comments of the projects Quality Assurance Program Project Plan (QAPPP)
- San Diego RWQCB's TMDL Model Selection Workshop (January 29, 2008)
- Preparation and execution of Cost Sharing Agreement or MOU
- Project funding
- Contractor scope of work
- Review and comment on quarterly reports to the San Diego RWQCB

The project schedule is provided in Figure 12-1. The City will continue to be actively involved in this program. The monitoring activities in the field were extensive during late 2007 and early 2008 during which time continuous monitoring data was collected from the pre-designated sampling locations, several storm events were monitored for water quality and also sediment sampling were all performed.

12.2 Bacteria TMDL

The City of Del Mar has also been actively following the development of the Bacteria TMDL for the San Diego Region, especially the Project 1 for Beaches and Creeks in the San Diego Region. During the next reporting period, the City will continue to follow the development of this project, and become involved as circumstances require and opportunities arise.

Los Penasquitos Lagoon TMDL Monitoring Schedule of Events

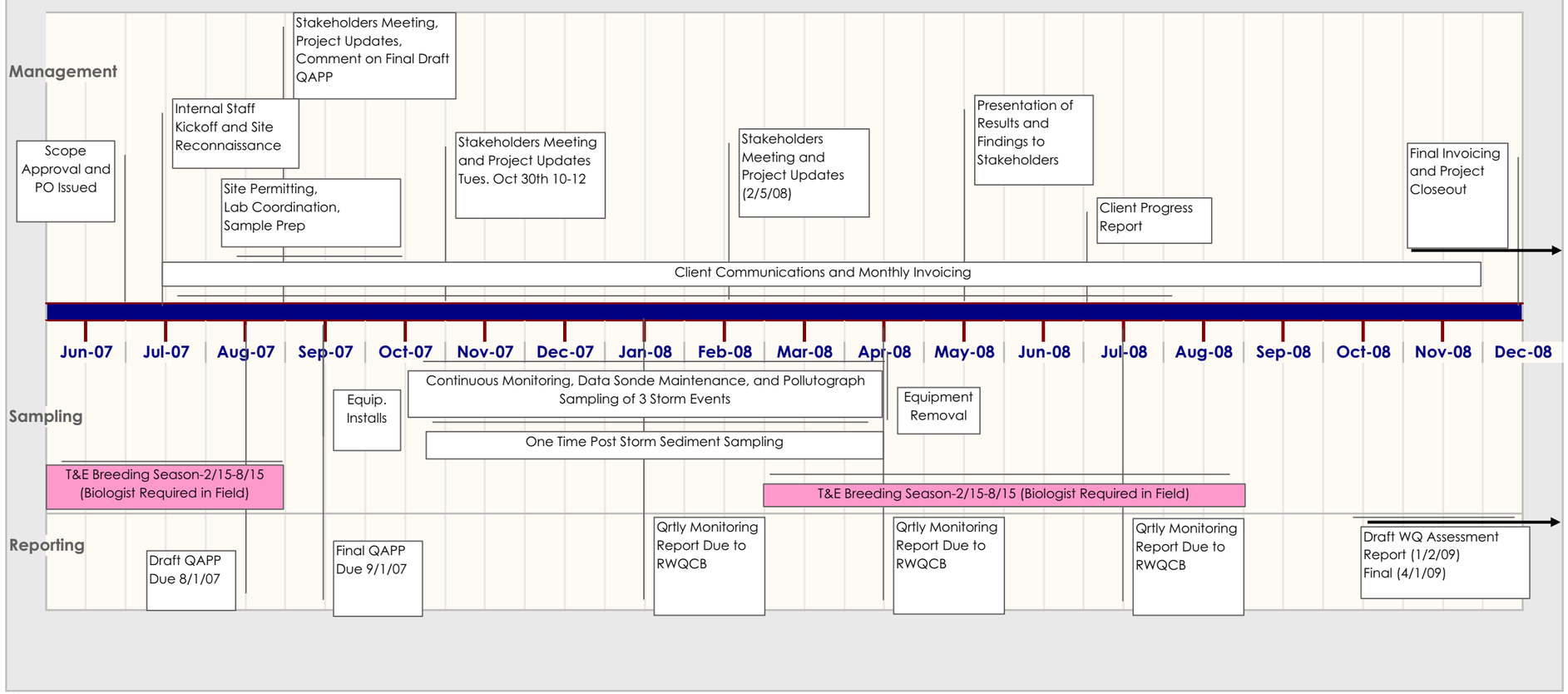

Contacts:
Stakeholder Project Manager: Ruth Kolb (619-525-8636, rkolb@sandiego.gov)
Weston Project Manager: Dave Renfrew (760-795-6903, dave.renfrew@westonsolutions.com)
Weston Field Task Leader: Dan McCoy (760-795-6920, daniel.mccoy@westonsolutions.com)
State Parks/Los Penasquitos Site Manager: Darren Smith (619-278-3785, darren@parks.ca.gov)

Section 13
Non-emergency Fire Fighting

This section provides a description of any efforts by the City of Del Mar conducted to reduce pollutant discharges from non-emergency fire fighting flows (i.e. flows from controlled or practice blazes and maintenance activities) determined to be a significant source of pollutants to waters of the U.S. As discussed in Section 4.12 of this JURMP Annual Report, Section 6.19 of the 2008 JURMP described the City's program to reduce pollutants from non-emergency fire fighting flows. During this reporting period, all training sessions were held at Regional Training facilities outside the City of Del Mar, and any vehicle maintenance (including washing) was conducted in accordance with Section 6.19 of the 2008 JURMP. No non-emergency fire fighting flows from training or other maintenance activities occurred which would require any additional efforts to reduce pollutant discharges.

Section 14
JURMP Revisions

Section 14 of 2008 JURMP emphasized the documentation of information pertinent to any changes made to the JURMP based on the results of the program review and effectiveness assessment. No modifications in Section 14 of the 2008 JURMP have been recorded during this reporting period.

During this reporting period, the City of Del Mar operated under two (2) different but similar JURMPs. In compliance with the 2007 Permit, City staff prepared and presented the 2008 JURMP to the Del Mar City Council on March 3, 2008, who accepted the document, and directed staff to begin its implementation. No significant modifications of the 2008 JURMP have been recorded, planned or proposed to date with the exception of those items, as shown in this Annual Report, that are dynamic and updated as part of the requirements, including inventories, minimum BMPs based on site or activity inspections, and minor corrections or enhancements to forms or data spreadsheets.

Section 15
Conclusions and Recommendations

During the FY2007/2008 reporting period, the City of Del Mar took the necessary steps to implement the new Municipal Permit requirements, including the expansion of the City's stormwater program and activities to meet or exceed levels required under the Permit. These program activities are outlined in the City's JURMP, which was revised and adopted during this reporting period. The City continues to support a comprehensive stormwater management program which is evident in, and reflected by, the City's significant efforts to implement the JURMP as described in this annual report.

The annual report generally consists of descriptions of what the City has done to implement various programs such as education, inspections, inventory maintenance, monitoring, and public participation. No updates to the 2008 JURMP were developed this reporting period. Overall, the City's effectiveness in the continued implementation of the program was high. While some minor challenges were identified, resulting from a combination of the new Permit requirements and staff turnover in a few positions, staff has identified areas of needed improvement and taken the steps to begin their implementation.

In assessing the first few months of the implementation of the new Permit requirements and transitioning from the 2001 Permit, the City has met its obligations under both permits and is looking toward the first year of full implementation of the 2007 Permit during FY2008/2009. The City will continue to take the appropriate actions required to implement the JURMP and compile the necessary information to track implementation progress and effectiveness.

City of Del Mar

Jurisdictional Urban Runoff Management Program Annual Report

for

Fiscal Year 2008-2009

Submitted to

Regional Water Quality Control Board
San Diego Region

SEPTEMBER 2009

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City of Del Mar Jurisdictional Urban Runoff Management Program Annual Report

for Fiscal Year 2008/2009

Submitted to the
Regional Water Quality Control Board
San Diego Region

September 30, 2009

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Executive Summary

The City of Del Mar (City) developed its Jurisdictional Urban Runoff Management Program (JURMP) in 2008 to meet the requirements of the Municipal Separate Storm Sewer System (MS4) Urban Runoff Discharge Permit (Order No. R9-2007-0001) (Permit) issued to the City and the Regional Copermittees by the California Regional Water Quality Control Board, San Diego Region (Regional Board). The Permit requires the Copermittees to individually, but collaboratively, develop and implement comprehensive programs to reduce and eliminate urban runoff pollutants that are discharged from their storm drain systems to the receiving waters. The City's program and activities, designed to meet these requirements, are described in detail in the City's 2008 JURMP.

The City has prepared this JURMP Annual Report to provide a comprehensive description of all the activities conducted by the City to comply with all the requirements of Section D of the Permit, as described in the 2008 City of Del Mar JURMP. This Annual Report covers the implementation of jurisdictional activities during the period from July 1, 2008 through June 30, 2009 (Reporting Period), and follows the standardized format developed by the Regional Copermittees and adapted as appropriate for the City.

During the Reporting Period, the City continued implementation its 2008 JURMP, including all baseline Permit requirements. The City believes that the core program activities outlined in the Permit: education; inspections; monitoring; and enforcement are the most effective at reducing pollutant generating activities. Within the City's program, the inspections and monitoring programs are not only implemented to identify wrongdoers, but provide the City with opportunities to educate the community. It is through the outreach and education of the general population that awareness and behaviors will change for the betterment of water quality. On the occasion where outreach is not effective at changing behaviors, the City uses its enforcement authorities to obtain compliance.

The City's diligent efforts towards BMP implementation is a key element for this year's report. City staff has been active and consistent in activity/area specific BMP implementation as demonstrated through the municipal facility inspection program. Another supporting effort for municipal activities has been data tracking and the ability to report the results of the City's own activities with ease. With each year of program implementation, the City becomes more effective and efficient at tracking meaningful data accurately – and this year was no exception. City staff has developed an elaborate system for tracking street sweeping, pipe cleaning, and call out activities such as power washing.

Some interesting and key numbers associated with the City staffs' efforts to implement the program follow:

- **23 tons** – The amount of debris, sediment and trash removed from the City's storm drain system thereby prevented from entering the lagoons and Pacific Ocean;
- **1,310 miles** – The number of miles the street sweeper swept during FY2008/2009;
- **126 tons** – The amount of material collected from street sweeping during FY2008/2009, and thereby prevented from entering the lagoons and Pacific Ocean.

Overall, the City's effectiveness in continuing the implementation of the program was high. However, City staff did identify areas for improvement, and have taken the appropriate steps to begin their implementation. Even with these changes, there were no substantive modifications to the 2008 JURMP identified as necessary during this Reporting Period.

The City remains an active voice in regional groups and activities as well by co-chairing a regional Copermittee workgroup and actively participating in other workgroups, both permit-mandated workgroups and other workgroups, such as the Los Peñasquitos Lagoon TMDL Workgroup, whose impact on the City's program is recognized.

Funding of municipal programs, including stormwater programs, continues to be an issue for all of the cities in San Diego County. The City of Del Mar is no exception. Given its economic ties to the beach and ocean, the City of Del Mar recognizes the importance of clean water and its NPDES program. As such, the City took steps to ensure that adequate funding is available on a more permanent basis. During the Reporting Period, the City took steps to bring the Clean Water Service Fee before the voters, following the requirements of Proposition 218. With the successful passage of the fee the City has ensured that a substantial portion of the program will continue to be funded into the future.

By and large, the City has been very successful at implementing its Clean Water Program. Residents, local businesses, and City staff are working diligently to protect the waterways and improve water quality at the beaches and lagoons, and will continue to carry out these efforts in the future.

Certification Statement

FY2008/2009 JURMP ANNUAL REPORT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Karen P. Brust — 9/28/09

Signature — Date

Karen P. Brust, City Manager
City of Del Mar

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Section 1
Introduction

This document is the second annual report for the City of Del Mar's 2008 Jurisdictional Urban Runoff Management Plan (2008 JURMP) which went into effect March 25, 2008 in accordance with NPDES Order No. R9-2007-0001 (Permit), and subsequent amendments. The JURMP Annual Report generally follows the standardized format prepared and submitted to the San Diego Regional Water Quality Control Board (Regional Board) by the Copermittees in June 2007, and any deviations are minor and correspond to the format of the 2008 JURMP. The Reporting Period covered by this document is from July 1, 2008 through June 30, 2009.

1.1 Background

This section provides background information, including a brief overview, of the City of Del Mar Clean Water Program which implements its JURMP.

1.1.1 Overview of the City of Del Mar

The name Del Mar means "of the sea," and highlights the symbiotic relationship between the City and Pacific Ocean. The City of Del Mar is a coastal, primarily residential community in the northern section of San Diego County. Del Mar is bounded by Solana Beach to the north, San Diego to the south and east, and the Pacific Ocean to the west (see Figure 1.2-1). The City covers an area of approximately two square miles, with a population of approximately 4,500 residents. The main attraction of visitors is the beach and sunny weather. The annual San Diego County Fair, horse racing, and other events held at the Del Mar Fairgrounds bring in people from the surrounding area and beyond.

The Clean Water Program is a multi-departmental program coordinated by the City's Clean Water Manager and is an integral part of making the City of Del Mar a beautiful place to live, work and visit. Day-to-day compliance activities are conducted by staff from the Planning & Community Development Department, the Department of Public Works, the City Engineering Department, and the Department of Community Services. The Program is committed to ensuring city-wide compliance with the San Diego Regional Water Quality Control Board's Regional Municipal Stormwater Permit.

1.1.2 Watershed(s)

The City of Del Mar is part of the San Dieguito Hydrologic Unit and the Los Peñasquitos Hydrologic Unit, as shown in Figure 1.2-1 below.

1.2 Purpose and Objectives

The Annual Report is a comprehensive description of all the jurisdictional activities conducted by the City of Del Mar to comply with all the requirements of Section D of Order No. R9-2007-0001, as described in the 2008 JURMP, and covers the period from July 1, 2008 through June 30, 2008.

Figure 1.2-1: The City of Del Mar and its location relative to its associated watersheds in San Diego County.

Section 2
Development Planning Component

2.1 Introduction

Section 4 of the 2008 JURMP provides information on the implementation of the Development Planning Component of the Municipal Permit within the City of Del Mar, and was developed pursuant to Section D.1 of the Permit. This section of the JURMP Annual Report provides information relevant to the implementation of the Development Planning Component of the 2008 JURMP for the FY2008/2009 Reporting Period.

2.2 Land Use Planning

Section D.1.a of the Municipal Permit requires each Copermittee "revise as needed its General Plan or equivalent plan (e.g., Comprehensive, Master, or Community Plan) for the purpose of providing effective water quality and watershed protection principles and policies that direct land-use decisions and require implementation of consistent water quality protection measures for Development Projects." Appropriate modifications to the Del Mar Community Plan were adopted during FY 2007-2008, and no further modifications were made during this Reporting Period.

Chapter 11.30 of the Del Mar Municipal Code (DMMC), entitled "Stormwater Management and Discharge Control," was rewritten in its entirety to implement the requirements of the Municipal Permit, and adopted on March 17, 2008 by the Del Mar City Council. No further modifications were made during this Reporting Period.

2.3 Environmental Review Process

The City of Del Mar Environmental Review process is aimed at accurately evaluating water quality and cumulative impacts and identifying appropriate measures to avoid, minimize and mitigate development project impacts to water quality. There were no modifications to the environmental review process made during the reporting period.

2.4 Development Project Approval and Verification Process

This section provides a general description of the various activities conducted as part of the City's development project approval and verification processes.

2.4.1 Program Implementation

During the FY2008/2009 Reporting Period, all development projects were required to undergo review under the City's urban runoff approval process and meet applicable project requirements. However, given the City of Del Mar's relatively limited land development potential, a majority of the projects reviewed are redevelopment projects that are often small in size and scope. A description of the City's efforts toward conditioning development projects and verifying compliance with established conditions and minimum BMP requirements is described below.

Development Project Approval Process and Project Requirements

During this Reporting Period, a total of 149 permit applications were reviewed by the Planning and Community Development Department. Appendix 2-A contains a complete list of the permit applications reviewed by the Department during this Reporting Period.

During the Reporting Period, no new projects meeting the definition of a "Priority Development Project" (PDP) under the Permit were proposed. During the previous Reporting Period, four (4) PDP projects were either proposed or approved. These projects and their current status are found in Table 2-1 below. As indicated in Table 2-1 below, the Morotta/James Project, a single family residence, was designated as a PDP as a result of its proximity to the San Dieguito Lagoon. Appendix 2-B of this report includes a summary page demonstrating the application of SUSMP requirements to this project by the City of Del Mar.

During this Reporting Period, no priority development projects were allowed to implement treatment control BMPs with low removal efficiency rankings, and as such no feasibility analyses were conducted to exhibit that more effective BMPs were infeasible.

Table 2-1: Priority Development Projects within the City of Del Mar

Project Name	Description	Status During FY2008/2009
PDP Projects with Permit Approval		
Garden Del Mar Specific Plan (SP-07-01; LCPA-08-02; CDP-08-17)	The proposed project is a mixed-use commercial development with restaurant, retail, and office uses situated in six two-story structures (totaling 19,600 square feet) built over a two-level subterranean parking garage.	Project was approved during the FY2008/2009 Reporting Period. However, due to funding issues, the project proponents have not moved forward with the project, and the property remains vacant and is currently for sale.
Riverview Project (CUP-08-01; CDP-08-19; FDP-08-02)	The project proposed to construct two, two-story, commercial office buildings totaling 23,293 square feet, with 83 parking spaces on two vacant parcels of land. The proposed project includes grading, hardscaping, and landscaping, and lies within 200 feet of the San Dieguito Lagoon.	Project was approved during the FY2008/2009 Reporting Period. However, the project proponents have not moved forward with the project, and the property remains vacant and undeveloped.
Pacifica Stratford (DRB-05-27, 28, 29, 30, 31)	The project proposes approval of a Final Subdivision Map which subdivides two existing legal lots into five two-unit condominium lots with required public improvements	The project received project approval in April 2006. However, no groundbreaking or demolition of the existing structures had occurred until February 2008. During FY2007/2008, staff reviewed project conditions and designs during permitting of the grading operations and required subsequent changes to the project to incorporate SUSMP BMPs on-site. The project is currently under construction.
Completed Project(s)		
Morotta/James Single Family Residence (DRB-03-37)	This project is a single family residence on a previously vacant lot within 200 feet of an environmentally sensitive area (the San Dieguito Lagoon)	Construction drawings for this project were approved in April 2008. The project incorporates LID to the MEP through the use of minimal hardscape and the incorporation of a vegetated swales and bioretention areas. The structure itself is elevated, allowing for preservation of pervious surface conditions under what would otherwise be the building footprint. Signed certification of BMP implementation by the Project Engineers was submitted to the City in March 2009.

Standard Urban Stormwater Mitigation Plan (SUSMP) Implementation and Development

During the Reporting Period, the City of Del Mar continued to implement the requisite SUSMP requirements outlined in the 2008 JURMP. As discussed in the FY2007-2008 JURMP Annual Report, the City of Del Mar participated in the development of the Model SUSMP which was submitted to the

Regional Board in July 2008. The City also participated in the preparation of the revisions to the Model requested by the Regional Board in September 2008, and re-submitted to the Regional Board on January 2, 2009. The Copermittees, including the City of Del Mar, were notified that Model SUSMP was found adequate by the Regional Board on March 25, 2009. Pursuant to the Permit, the City has 365 days from the date of notification to implement the revised Model SUSMP. The City has begun developing revisions to its local SUSMP, including possible modifications to its plans and ordinances, and anticipates adoption of the revision by the March 25, 2010 due date. No modifications to the City's SUSMP were made during this Reporting Period.

Priority Treatment Control BMP Inventory Tracking and Maintenance

The City has developed and is utilizing a watershed-based database to track and inventory approved treatment control BMPs along with maintenance within its jurisdiction. Because of the limited number of approved PDPs within the City of Del Mar, the database is a simple Excel® Spreadsheet which includes the required information on treatment control BMP type, location, watershed, date of construction, party responsible for maintenance, maintenance certifications or verifications, inspections, inspection findings, and corrective actions. No treatment control BMPs were approved during the last permit cycle, since no high priority projects qualified under the previous SUSMP criteria. As of June 30, 2009, only four (4) development applications for projects have triggered the PDP criteria. Appendix 2-C contains the current database (spreadsheet) for approved PDPs.

BMP Construction Verification

As of June 30, 2008, the Morotta/James Project, a single family residence, is the only approved PDP under SUSMP provisions which has been constructed in the City of Del Mar. As outlined in the 2008 JURMP, prior to occupancy of a Project subject to SUSMP requirements, the Engineer of Record is required to inspect the constructed LID site design, source control, and treatment control BMPs to verify that they were constructed in compliance with all specifications, plans, permits, ordinances, and the Permit. The Engineer of Record conducted this required inspection, and submitted a signed certification to the City in March 2009.

Annual BMP Operation & Maintenance Verification

As indicated above, as of June 30, 2009, only one (1) project, the Morotta/James Residence, has been approved under SUSMP provisions and constructed. The Engineer of Record conducted the required BMP Construction Verification in March 2009. As such, no Annual BMP O&M Verification has been conducted to date. The first verification, including a record of inspection, is not due to be submitted until Fall 2009, prior to the start of the wet season.

SUSMP Waiver Mitigation Program

As of June 30, 2009, the City of Del Mar has not granted any SUSMP Waivers, and as such has not needed to implement a SUSMP waiver mitigation program.

Enforcement Measures for Development Projects

This section provides the number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions that were being taken to achieve compliance. Section 4.4.4.3 of the 2008 JURMP provides a description of the general process for applying enforcement to urban runoff related violations by development projects. No modifications to this section of the 2008 JURMP were recorded during this Reporting Period.

No enforcement actions for development projects were taken during the Reporting Period. Enforcement actions related to construction activities are listed in Section 3 of this report.

Education Efforts Focused on Development and Redevelopment

The City of Del Mar continued to focus on one-on-one education for the municipal staff, planning boards, project applicants, developers, contractors property owners and community planning groups water quality issues. As a full-time staff member of the Planning and Community Development Department, the Clean Water Manager attended weekly Department Meetings where projects were reviewed and discussed by the planning team. This provided the opportunity to discuss both project-specific water quality issues, and provide general updates to the team on changes that may have developed as a result of discussions among the Regional and Watershed Copermittees.

As indicated in the 2008 JURMP the City conducted regular coordination meetings organized by the Planning Department to discuss development review procedures, issues, cases, and other subjects. The meetings, which are attended by the Planning, Engineering, Building and Public Works departments, provided a forum for information exchange and to educate City staff on the federal, state and local water quality laws and regulations applicable to development projects; the nexus between land use decisions and short and long-term water quality impacts; and how impacts to receiving water quality resulting from development can be minimized. In addition, the Clean Water Manager regularly attended the City's weekly Executive Team/Department Head meetings to ensure that upper management is kept abreast of requirements.

Lastly, the Clean Water Manager also continued to meet one-on-one with developers and project proponents on an as-needed basis to assist them in understanding the requirements under both the Permit and the City's SUSMP.

Hydromodification

The City of Del Mar revised its local SUSMP to accommodate LID and source control measures as required to meet the principles of hydromodification during a previous Reporting Period. The City has also participated in the development of the draft Hydromodification Management Plan (HMP) and submitted to the Regional Board, with staff from the Department of Engineering and the Department of Planning participating in the Regional Copermittee Workgroup, attending meetings on a regular basis, and providing substantive comments on the interim drafts of the Model HMP. A final iteration of the HMP is due to be submitted to the Regional Board in December 2009. Once approved by the Regional Board, the City of Del Mar will revise its local SUSMP to address any additional requirements under the HMP.

Of the four (4) identified Priority Development Projects listed in Table 2.4-1 above, none of them disturb 50 acres or more, and as such Interim HMP requirements were not applied.

2.4.2 Notable Activities

No notable activities other than those identified above were conducted during this Reporting Period.

2.5 Development Planning Component Effectiveness Assessment

A complete assessment of the effectiveness of the City's implantation of its 2008 JURMP, including the Development Component, is included as Chapter 11 of this Annual Report.

2.6 Program Review and Modification

No modifications were made to the Development Planning Component of the 2008 JURMP during this Reporting Period.

Appendix 2-A
List of Permit Applications Reviewed by Planning & Community Development Department during FY2008/2009

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Development Planning Applications Processed During FY2008/2009
with SUSMP Review

Parcel #	St. #	Street Name	Project Name	Project #	Hydrologic Unit	Comments
		Administrative Design Review Permits reviewed between 7.1.08 and 6.30.09				
299-280-43	478	Zuni Drive	Maple	ADR-08-34	San Dieguito	minor project - no significant surface disturbance
299-095-03	2410	Ocean Front	Richardson	ADR-08-35	San Dieguito	minor project - no significant surface disturbance
300-153-13		City Park on Crest Rd between Amphitheatre Dr and Klish Way	Del Mar Garden Club	ADR-08-36	San Dieguito	minor project - no significant surface disturbance
300-071-03	1344	Ocean Ave.	Nicholas	DRB-04-54 Admin Mod II	San Dieguito	minor project - no significant surface disturbance
300-143-29	750	Kalamath Street	Baird	ADR-08-37	San Dieguito	minor project - no significant surface disturbance
300-144-04	1122	Klish Way	Anderson	ADR-08-38	San Dieguito	minor project - no significant surface disturbance
299-260-20	466	Avenida Primavera	Dallas	DRB-07-06 Admin Mod	San Dieguito	minor project - no significant surface disturbance
299-091-04	225	25th Street	Nore	ADR-08-39	San Dieguito	minor project - no significant surface disturbance
299-021-28	2830	Camino del Mar	Nicholas	ADR-08-40	San Dieguito	minor project - no significant surface disturbance
299-072-13	2105	Balboa Ave.	Kunkle	ADR-08-41	San Dieguito	minor project - no significant surface disturbance
301-320-09	227	Stratford Park Circle	Swartz	ADR-08-42	Los Penasquitos	minor project - no significant surface disturbance
300-030-61	424	Carolina Road	Bellezzuoli	ADR-08-43	San Dieguito	minor project - no significant surface disturbance
301-320-09	227	Stratford Park Circle	Swartz	ADR-08-44	Los Penasquitos	minor project - no significant surface disturbance
299-260-20	466	Avenida Primavera	Dallas	DRB-07-06 Admin Mod II	San Dieguito	minor project - no significant surface disturbance
299-200-65	690	Serpentine Drive	Neeley	ADR-08-45	San Dieguito	minor project - no significant surface disturbance
300-012-07	1409	Stratford Court	Sporn	ADR-08-46	San Dieguito	minor project - no significant surface disturbance
300-333-15	314	Del Mar Heights	Schwarz	ADR-08-47	Los Penasquitos	minor project - no significant surface disturbance
299-261-09	608	Serpentine Drive	Ray	ADR-08-48	San Dieguito	minor project - no significant surface disturbance
299-020-16	2902	Oceanfront	Naftzger	ADR-08-49	San Dieguito	minor project - no significant surface disturbance
300-252-17	701	Hoska Drive	Engel	ADR-08-50	San Dieguito	minor project - no significant surface disturbance
300-172-04	944	Camino del Mar	Halper	ADR-08-51	San Dieguito	minor project - no significant surface disturbance
N/A	N/A	4th Street & Camino del Mar	City of Del Mar	ADR-08-52	Los Penasquitos	minor project - no significant surface disturbance
301-024-26	339	Hidden Pines Road	Casper	ADR-08-53	Los Penasquitos	minor project - no significant surface disturbance
300-200-03	720	Camino del Mar	Del Mar Inn	ADR-08-54	San Dieguito	minor project - no significant surface disturbance
299-100-43	2147	Heather Lane	McMahon	ADR-09-01	San Dieguito	minor project - no significant surface disturbance
300-093-02	1050	Camino del Mar	City of Del Mar	ADR-09-02	San Dieguito	minor project - no significant surface disturbance
300-222-07	343	9th Street	Ray	ADR-09-03	San Dieguito	minor project - no significant surface disturbance
300-182-18	155	7th Street	Ozaki	ADR-09-04	San Dieguito	minor project - no significant surface disturbance
299-147-00-02	1818	Oceanfront	Simmons	ADR-09-05	San Dieguito	minor project - no significant surface disturbance
300-012-13	1302	Camino del Mar	Davidson Communities	ADR-09-06	San Dieguito	minor project - no significant surface disturbance
300-321-03	510	Stratford Court	Funke	ADR-09-07	Los Penasquitos	minor project - no significant surface disturbance
300-200-30	717	Stratford Court	Kurtz	ADR-09-08	San Dieguito	minor project - no significant surface disturbance
300-251-15	810	Klish Way	Kling	ADR-09-09	San Dieguito	minor project - no significant surface disturbance
299-220-25	1760	Seaview Ave.	Monsef	ADR-09-10	San Dieguito	minor project - no significant surface disturbance
300-232-37	431	8th Street	Welch	ADR-09-11	San Dieguito	minor project - no significant surface disturbance
300-012-07	1409	Stratford Court	Sporn	ADR-09-12	San Dieguito	minor project - no significant surface disturbance
299-260-22	484	Avenida Primavera	Brown	ADR-09-13	San Dieguito	minor project - no significant surface disturbance
300-391-16	355	13th Street	Palmer	ADR-09-14	San Dieguito	minor project - no significant surface disturbance
300-410-19	420	10th Street	Nolan	ADR-09-15	San Dieguito	minor project - no significant surface disturbance
299-146-13	1925	Oceanfront	Karaghuesian	ADR-09-16	San Dieguito	minor project - no significant surface disturbance
300-321-56-41	114	Spinnaker Court	Duncan	ADR-09-17	Los Penasquitos	minor project - no significant surface disturbance
300-271-09	750	Hoska Drive	Ludlow	ADR-09-18	San Dieguito	minor project - no significant surface disturbance
299-020-05	3002	Sandy Lane	Carson	ADR-09-19	San Dieguito	minor project - no significant surface disturbance

Parcel #	St. #	Street Name	Project Name	Project #	Hydrologic Unit	Comments
		Design Review Board Permits reviewed between 7.1.08 and 6.30.09				
301-021-09	262	Ocean View Ave.	Bligh	DRB-05-41 MOD	Los Penasquitos	NSFR
299-230-10	1601	Coast Blvd	King	DRB-08-30	San Dieguito	Rental Tent
300-251-28	642	Hoska Drive	Kanetis	DRB-08-31	San Dieguito	Addition and Pool/Spa
300-242-17	1111	Klish Way	Gardner	DRB-08-32	San Dieguito	Addition
300-410-33	1155	Cuchara Drive	Kidd/Wohlford	DRB-08-33	San Dieguito	Addition and Remodel
300-012-04	225	15th Street	Jim Watkins	DRB-08-34	San Dieguito	New Windows/Doors
299-095-11	131	25th Street	Wilkinson	DRB-08-35	San Dieguito	Remodel/Addition
299-141-10	1943/1943A/1945	Coast Blvd	Moore	DRB-08-36	San Dieguito	NSFR
299-146-13	1926	Coast Blvd	Wiggins	DRB-08-37	San Dieguito	Roof Deck/Remodel
301-023-25	205	Ocean View Ave.	Nerenberg	DRB-08-38	Los Penasquitos	NSFR

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300-072-19	1236	Stratford Court	Chesnut	DRB-06-27 MOD	San Dieguito	NSFR
299-092-05	235/237	24th Street	Snyder	DRB-08-39	San Dieguito	Remodel
299-132-19	243	22nd Street	Schwartz	DRB-08-40	San Dieguito	Remodel
300-040-34	1415	Via Alta	Farrell	DRB-08-41	San Dieguito	Deck Repairs
300-221-31	427	10th Street	Delgadillo	DRB-08-42	San Dieguito	Remodel/Addition
300-390-03	431	Van Dyke Ave	Hardke	DRB-08-43	San Dieguito	NSFR
300-333-22	318	Del Mar Heights Road	Lipkin-Eve	DRB-08-44	Los Penasquitos	NSFR
		21st Street Pump Station	City of Del Mar	DRB-08-45	San Dieguito	New Pump Station
300-410-10	555	Amphitheatre Drive	Scipione	DRB-08-46	San Dieguito	Rear-Yard Improvements
299-132-12	2020	Santa Fe Drive	Padovani	DRB-05-42 MOD	San Dieguito	NSFR
300-012-20	1342	Camino del Mar	En Fuego	DRB-09-01	San Dieguito	Awning
300-143-21	730	Kalamath Drive	Hoehn	DRB-05-33 MOD	San Dieguito	NSFR
300-391-09	333	13th Street	Wegner	DRB-09-02	San Dieguito	Trellis
	1700	Coast Blvd	City of Del Mar	DRB-09-03	San Dieguito	New Safety Center
300-232-37	431	8th Street	Welch	DRB-07-18 MOD	San Dieguito	Deck and Fencing
300-092-18	1135	Stratford Court	McGreal	DRB-09-05	San Dieguito	Addition
300-075-06	1201	Camino del Mar	Conkwright	DRB-09-06	San Dieguito	Roof Deck

Parcel #	St. #	Street Name	Project Name	Project #	Hydrologic Unit	Comments
			Active Construction Sites between 7.1.08 and 6.30.09			
301-033-13	415	Torrey Point Rd.	Klipstein	DRB-05-24 MOD	Los Penasquitos	NSFR
300-092-10	230	11th Street	Gross	DRB-07-08	San Dieguito	New Second Unit
299-065-15	155	27th Street	Moore	DRB-06-34	San Dieguito	NSFR
299-091-12	236	24th Street	Fisher	DRB-07-19	San Dieguito	NSFR
299-095-03	2410	Ocean Front	Richardson	DRB-06-15	San Dieguito	NSFR
299-062-09	264	26th Street	Holliday/Sohn	DRB-06-22	San Dieguito	NSFR
299-091-05	235	25th Street	Crouch	DRB-06-31	San Dieguito	NSFR
300-092-20	1105	Stratford Court	McGuire	DRB-04-13	San Dieguito	NSFR
300-263-05	963	Klish Way	Richards (Demich)	DRB-04-08	San Dieguito	NSFR
300-072-19	1236	Stratford Court	Chesnut	DRB-06-08	San Dieguito	NSFR
299-097-08	144	22nd Street	Smith	DRB-07-16	San Dieguito	NSFR
300-331-03	335	La Amatista	Bakker	DRB-98-32 MOD	Los Penasquitos	Remodel/Addition
299-021-07	2720	Ocean Front	Hagestad	DRB-04-45	San Dieguito	NSFR
299-220-42	340	Serpentine Drive	Walker	DRB-01-13	San Dieguito	Remodel/Addition
300-241-04	610	Kalamath Street	Zupan	DRB-06-05	San Dieguito	NSFR
300-143-21	730	Kalamath Street	Hoehn	DRB-05-33	San Dieguito	NSFR
300-071-03	1344	Ocean Avenue	Nicholas	DRB-04-54	San Dieguito	NSFR
300-252-17	701	Hoska Drive	Engel	DRB-06-11	San Dieguito	NSFR
300-500-05	535/537	Stratford Court	Pacifica Stratford Duplexes	DRB-05-27	San Dieguito	New Duplex
300-500-04	545/547	Stratford Court	Pacifica Stratford Duplexes	DRB-05-28	San Dieguito	New Duplex
300-500-03	555/557	Stratford Court	Pacifica Stratford Duplexes	DRB-05-29	San Dieguito	New Duplex
300-500-02	605/607	Stratford Court	Pacifica Stratford Duplexes	DRB-05-30	San Dieguito	New Duplex
300-500-01	615/617	Stratford Court	Pacifica Stratford Duplexes	DRB-05-31	San Dieguito	New Duplex
301-021-09	262	Ocean View	Bligh	DRB-05-41	Los Penasquitos	NSFR
300-172-04	944	Camino del Mar	Halper	DRB-06-26	San Dieguito	Remodel/Addition
300-232-22	425	8th Street	Pinney/Asciutto	DRB-04-34	San Dieguito	NSFR
300-390-01	405	Van Dyke	Gilman	EP-08-61	San Dieguito	Driveway Repairs
299-141-04	1942	Santa Fe Ave.	Goldberg	DRB-07-24	San Dieguito	NSFR
300-333-15	314	Del Mar Heights	Pogue	ADR-08-47	Los Penasquitos	Exterior windows/doors
299-091-12	236	24th Street	Fisher	DRB-07-19	San Dieguito	NSFR
300-181-05	143	8th Street	Bierman	DRB-08-25	San Dieguito	Remodel/Addition
299-091-04	225	25th Street	Nore	ADR-08-39	San Dieguito	Fencing
301-023-29	187	Ocean View Ave.	Eaton	DRB-07-05	Los Penasquitos	Remodel/Addition
300-012-07	1407/1409	Stratford Ct.	Sporn	ADR-08-46	San Dieguito	Front-Yard Site Walls
300-012-31	1454	Camino del Mar	Americana	SCP-09-02	San Dieguito	Sidewalk Café
300-012-30	211	15th Street	Del Mar Pizza	SCP-09-03	San Dieguito	Sidewalk Café
300-012-02	225	15th Street	Jimmy O's	SCP-09-01	San Dieguito	Sidewalk Café
301-033-16	537	Torrey Pointe Rd.	Baker	DRB-08-07	Los Penasquitos	NSFR
300-012-02	215	15th Street	Sbicca	SCP-09-04	San Dieguito	Sidewalk Café
300-251-15	810	Klish Way	Kling	ADR-09-09	San Dieguito	Exterior windows/doors

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300-390-03	431	Van Dyke Ave.	Hardke	DRB-08-43	San Dieguito	NSFR
300-040-34	1415	Via Alta	Farrell	DRB-08-41	San Dieguito	Deck Repairs
299-146-13	1925	Oceanfront	Karagheusian	ADR-09-16	San Dieguito	Interior Remodel
299-131-12	2020	Santa Fe Ave.	Oliphant	DRB-06-23	San Dieguito	NSFR
301-033-37	454	W. Ocean View Ave.	Cunningham	DRB-05-22	Los Penasquitos	Remodel/Addition
301-024-14	362	Ocean View Ave.	Deal	DRB-07-15	Los Penasquitos	Remodel/Addition
301-024-29	444	Hidden Pines Lane	Foster	ADR-08-32	Los Penasquitos	Front-Yard Improvements
300-011-06	1345	Ocean Avenue	Harrington	DRB-07-27	San Dieguito	Remodel/Addition
300-231-06	742	Nob Ave.	Nelson	ADR-08-10	San Dieguito	Windows/Doors
300-410-31	336	10th Street	Vint	DRB-07-20	San Dieguito	NSFR
300-020-06	1309	Camino del Mar	Del Mar Library	DRB-08-13	San Dieguito	Remodel/Addition
300-030-61	424	Carolina Road	Bellezzuoli	ADR-08-43	San Dieguito	Remodel/Addition
300-040-36	1420	Crest Road	Valentine	DRB-08-14	San Dieguito	Remodel/Addition
299-200-65	690	Serpentine Drive	Neeley	DRB-02-34	San Dieguito	NSFR
299-260-20	466	Avenida Primavera	Dallas	DRB-07-06	San Dieguito	NSFR
299-310-09	1540	Camino del Mar	L'Auberge	DRB-08-10	San Dieguito	Remodel/Addition
299-072-26	2124	San Dieguito Drive	James	DRB-03-37	San Dieguito	NSFR
299-072-15	2136	San Dieguito Drive	Gillies	DRB-84-52	San Dieguito	NSFR
299-091-13	226	24th Street	Donner	DRB-08-04	San Dieguito	Remodel/Addition

Parcel #	St. #	Street Name	Project Name	Project #	Hydrologic Unit	Comments
			Encroachment Permits reviewed between 7.1.08 and 6.30.09			
300-321-34	402	Stratford Ct.	Clarke	EP-08-37	Los Penasquitos	minor ROW permits - no significant surface disturbance
300-221-33	941	Camino del Mar	Stantec Consulting	EP-08-38	San Dieguito	minor ROW permits - no significant surface disturbance
299-021-27	2727	Ocean Front Drive	Prestige Concrete	EP-08-39	San Dieguito	minor ROW permits - no significant surface disturbance
301-024-29	444	Hidden Pines Lane	Foster	EP-08-40	Los Penasquitos	minor ROW permits - no significant surface disturbance
300-030-86	1555	Camino del Mar	G & I III Del Mar LP	EP-08-41	San Dieguito	minor ROW permits - no significant surface disturbance
300-143-15	1230	Crest Road	Davis	EP-08-42	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	500 Block	Stratford Ct.	Pacifica Stratford	EP-08-43	San Dieguito	minor ROW permits - no significant surface disturbance
299-065-15	155	27th Street	Moore	EP-08-44	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	N/A	4th Street and Camino del Mar	Traffic Signal Maintenance	EP-08-45	Los Penasquitos	minor ROW permits - no significant surface disturbance
299-021-07	2720	Ocean Front	Maxim Crane Works	EP-08-46	San Dieguito	minor ROW permits - no significant surface disturbance
299-193-01	1958	Zapo Street	Rock	EP-08-47	San Dieguito	minor ROW permits - no significant surface disturbance
300-252-17	701	Hoska Drive	Engel	EP-08-48	San Dieguito	minor ROW permits - no significant surface disturbance
299-290-28	590	15th Street	Engel	EP-08-49	San Dieguito	minor ROW permits - no significant surface disturbance
299-194-05	1944	Balboa Ave.	Grundler	EP-08-50	San Dieguito	minor ROW permits - no significant surface disturbance
300-410-24	343	11th Street	Ellis	EP-08-51	San Dieguito	minor ROW permits - no significant surface disturbance
300-242-03	709	Kalamath Street	Parks	EP-08-52	San Dieguito	minor ROW permits - no significant surface disturbance
299-097-08	144	22nd Street	Smith	EP-08-53	San Dieguito	minor ROW permits - no significant surface disturbance
301-021-09	262	Ocean View Ave.	Bligh	EP-08-54	Los Penasquitos	minor ROW permits - no significant surface disturbance
300-020-06	1309	Camino del Mar	City of Del Mar (Library)	EP-08-55	San Dieguito	minor ROW permits - no significant surface disturbance
300-041-03	1429	Coast Blvd	Wegner	EP-08-56	San Dieguito	minor ROW permits - no significant surface disturbance
300-072-25	100	12th Street	Handzel	EP-08-57	San Dieguito	minor ROW permits - no significant surface disturbance
300-060-22	1233	Crest Road	Holliday	EP-08-58	San Dieguito	minor ROW permits - no significant surface disturbance
300-060-21	1305	Crest Road	Holliday	EP-08-59	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	1800 block	Camino del Mar	Bartanyi/Price	EP-08-60	San Dieguito	minor ROW permits - no significant surface disturbance
300-390-01	405	Van Dyke Ave	Gilman	EP-08-61	San Dieguito	minor ROW permits - no significant surface disturbance
300-143-21	730	Kalamath Street	Hoehn	EP-08-62	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	N/A	Rimini Road	Hrga/Schindler	EP-08-63	San Dieguito	minor ROW permits - no significant surface disturbance
300-030-83	1431 & 1435	Camino del Mar	DM Union/DM Delphi	EP-08-64	San Dieguito	minor ROW permits - no significant surface disturbance
299-200-65	690	Serpentine Drive	Neeley	EP-08-65	San Dieguito	minor ROW permits - no significant surface disturbance
299-134-01, 02	2011	Santa Fe Ave	Oliphant	EP-08-66	San Dieguito	minor ROW permits - no significant surface disturbance
300-092-10	230	11th Street	Gross	EP-08-67	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	City r-o-w	Haul Route	Quality Permits	EP-08-68	N/A	minor ROW permits - no significant surface disturbance
N/A	City r-o-w	Haul Route	Quality Permits	EP-08-69	N/A	minor ROW permits - no significant surface disturbance
N/A	City r-o-w	Haul Route	Quality Permits	EP-08-70	N/A	minor ROW permits - no significant surface disturbance
N/A	City r-o-w	Haul Route	Quality Permits	EP-08-71	N/A	minor ROW permits - no significant surface disturbance
N/A	City r-o-w	Haul Route	Quality Permits	EP-08-72	N/A	minor ROW permits - no significant surface disturbance
N/A	City r-o-w	Haul Route	Quality Permits	EP-08-73 A & B	N/A	minor ROW permits - no significant surface disturbance
N/A	N/A	Stratford Ct. & 6th Street	Pacifica Stratford	EP-08-74	San Dieguito	minor ROW permits - no significant surface disturbance

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	111-123	Via de la Valle	Boca del Mar	EP-08-75	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	City r-o-w	Haul Route	Quality Permits	EP-08-76 A & B	N/A	minor ROW permits - no significant surface disturbance
N/A	N/A	29th Street	SCE	EP-08-77	San Dieguito	minor ROW permits - no significant surface disturbance
	1737	Grand Ave.	Serras	EP-08-78	San Dieguito	minor ROW permits - no significant surface disturbance
300-221-17	410	9th Street	Lyons	EP-08-79	San Dieguito	minor ROW permits - no significant surface disturbance
300-072-19	1236	Stratford Ct.	Chesnut	EP-09-01	San Dieguito	minor ROW permits - no significant surface disturbance
	2240	Jimmy Durante Blvd	Newest Construction	EP-09-02	San Dieguito	minor ROW permits - no significant surface disturbance
300-012-07	1409	Stratford Ct.	RE Hughes Construction (Sporn)	EP-09-03	San Dieguito	minor ROW permits - no significant surface disturbance
299-280-20	485	Zuni Drive	McCracken/Morse	EP-09-04	San Dieguito	minor ROW permits - no significant surface disturbance
301-010-31	111	Stratford Ct.	Don Hubbard Contracting	EP-09-05	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	N/A	Stratford Ct.	Pacifica Stratford	EP-09-06	San Dieguito	minor ROW permits - no significant surface disturbance
299-095-03	2410	Oceanfront	Richardson	EP-09-07	San Dieguito	minor ROW permits - no significant surface disturbance
300-030-83	1435	Camino del Mar	DM Union LLC, Dave Kraft	EP-09-08	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	N/A	Stratford Ct. & 6th Street	Schilling Corp	EP-09-10	San Dieguito	minor ROW permits - no significant surface disturbance
299-092-02	2315	Camino del Mar	Jay McClellan	EP-09-11	San Dieguito	minor ROW permits - no significant surface disturbance
301-021-09	262	Ocean View Ave.	Bligh	EP-09-12	Los Penasquitos	minor ROW permits - no significant surface disturbance
300-030-86	1555	15th Street	Asphalt & Concrete	EP-09-13	San Dieguito	minor ROW permits - no significant surface disturbance
299-030-20	2260	Jimmy Durante Blvd	City of Del Mar	EP-09-14	San Dieguito	minor ROW permits - no significant surface disturbance
	110	7th Street	Larson	EP-09-15	San Dieguito	minor ROW permits - no significant surface disturbance
301-025-09	437	Pine Needles Drive	Trozera	EP-09-16	Los Penasquitos	minor ROW permits - no significant surface disturbance
300-012-14	N/A	15th Street sidewalk	Lord	EP-09-17	San Dieguito	minor ROW permits - no significant surface disturbance
300-263-05	963	Klish Way	Demich	EP-09-18	San Dieguito	minor ROW permits - no significant surface disturbance
300-012-03	221	15th Street	Del Mar Pizza (Bob Fleet)	EP-09-19	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	N/A	Camino del Mar	Weston Solution (City of Del Mar)	EP-09-20	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	1300 block	Ocean Ave.	Nelson	EP-09-21	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	N/A	15th Street	L'Auberge Resort	EP-09-22	San Dieguito	minor ROW permits - no significant surface disturbance
300-040-53	1440	Crest Road	McCracken	EP-09-23	San Dieguito	minor ROW permits - no significant surface disturbance
299-141-05	1942	Santa Fe Ave	Goldberg	EP-09-24	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	N/A	10th St. & Camino del Mar	Blainetech	EP-09-25	San Dieguito	minor ROW permits - no significant surface disturbance
300-012-02	215	15th Street	Sbicca	EP-09-26	San Dieguito	minor ROW permits - no significant surface disturbance
300-072-19	1236	Stratford Ct.	Chesnut	EP-09-27	San Dieguito	minor ROW permits - no significant surface disturbance
300-390-03	431	Van Dyke Ave	Hardke	EP-09-28	San Dieguito	minor ROW permits - no significant surface disturbance
N/A	N/A	Camino del Mar & El Amigo Rd.	Reineck	EP-09-29	Los Penasquitos	minor ROW permits - no significant surface disturbance

Parcel #	St. #	Street Name	Project Name	Project #	Hydrologic Unit	Comments
			Land Conservation Permits reviewed between 7.1.08 and 6.30.09			
300-251-28	642	Hoska Drive	Kanetis	LC-08-09	San Dieguito	Grading
300-410-33	1155	Cuchara Drive	Kidd/Wohlford	LC-08-10	San Dieguito	Grading
300-012-07	1409	Stratford Court	Sporn	LC-08-11	San Dieguito	Grading
301-023-25	205	Ocean View Ave	Nerenberg	LC-08-12	Los Penasquitos	Grading
299-141-10	1943-1943A/1945	Coast Blvd	Moore	LC-08-13	San Dieguito	Grading
300-390-03	431	Van Dyke	Hardke	LC-08-14	San Dieguito	Grading
		21st Street Pump Station	City of Del Mar	LC-08-15	San Dieguito	Grading
300-232-37	431	8th Street	Welch	LC-09-01	San Dieguito	Grading

Appendix 2-B
Example of SUSMP Requirements Applied to Priority Development Project – Morotta/James Residence

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B.M.P. LOCATION MAP

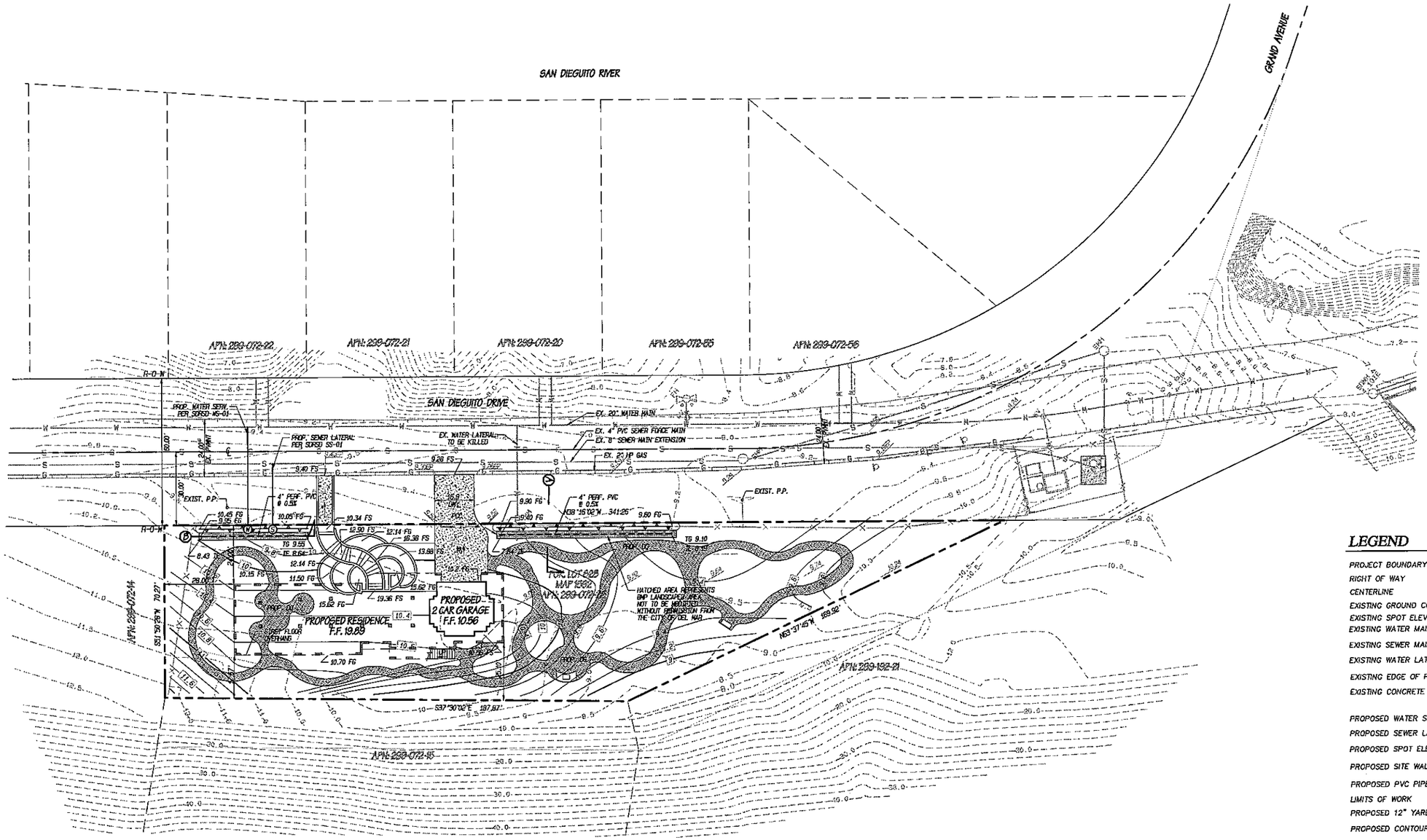

PLAN VIEW

1"=20'

LEGEND

- PROJECT BOUNDARY (PROPERTY LINE)
- RIGHT OF WAY
- CENTERLINE
- EXISTING GROUND CONTOURS
- EXISTING SPOT ELEVATION
- EXISTING WATER MAIN
- EXISTING SEWER MAIN
- EXISTING WATER LATERAL
- EXISTING EDGE OF PAVEMENT
- EXISTING CONCRETE
- PROPOSED WATER SERVICES PER SDRSD WS-01
- PROPOSED SEWER LATERAL PER SDRSD SS-01
- PROPOSED SPOT ELEVATION
- PROPOSED SITE WALL (PER SEPERATE PERMIT)
- PROPOSED PVC PIPE AND DRAIN PER NDS OR EQUIVALENT
- LIMITS OF WORK
- PROPOSED 12" YARD DRAIN PER NDS OR EQUIVALENT
- PROPOSED CONTOURS
- PROPOSED BMP AREA
- PROPOSED DG
- PROPOSED CONCRETE

GRAPHIC SCALE 1"=20'

0 20 40 60

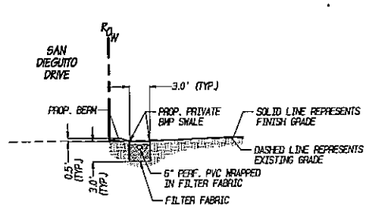

SECTION A: BMP SWALE (TYPICAL)

N.T.S.

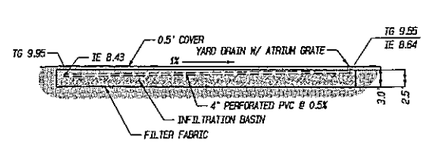

SECTION B: INFILTRATION TRENCH (TYPICAL)

N.T.S.

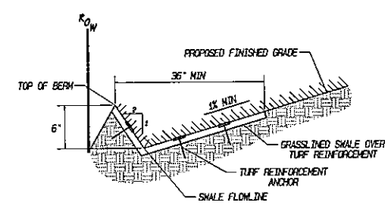

PVT. 3' WIDE BMP SWALE DETAIL

NTS

SHEET 1	CITY OF DEL MAR ENGINEERING DEPARTMENT	SHEETS 1

B.M.P. LOCATION MAP FOR: APN 299-072-26

JAMES RESIDENCE

DWN BY: BJC	PROJECT NO.	DRAWING NO.
CHKD BY: BMA		
RVWD BY:		

Mon Sep 21 10:39:24 2009N:\1659.pro PE 1659

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Appendix 2-C
Priority Treatment Control BMP
Inventory Tracking and Maintenance

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City of Del Mar Treatment Control BMP Inventory Inspection Database

As of July 1, 2009

Project Name	Project Number	Address	Hydrologic Unit (Watershed)	Treatment Control BMP Type(s)	Date of Construction	Construction Verification Received	Party Responsible for Mainetance	Date of Last Inspection	Inspection Findings	Corrective Actions
Garden Del Mar Specific Plan	DRB-08-23; SP-07-01; LCPA-08-02; CDP-08-17	941 Camino del Mar	San Dieguito	1. Underground Retention Vault	N/A	N/A	Owner	N/A	N/A	N/A
				2. Green (vegetated) Roofs	N/A	N/A	Owner	N/A	N/A	N/A
				3. Media Filter/Clarifier/Water Qty Inlet	N/A	N/A	Owner	N/A	N/A	N/A
Riverview Project	DRB-08-28; CUP-08-01; CDP-08-19; FDP-08-02	Two vacant lots at the SW corner of San Dieguito Drive & Jimmy Durante Blvd	San Dieguito	1. Permeable pavement and sub-drains	N/A	N/A	Owner	N/A	N/A	N/A
				2. Vegetated Buffer Strip	N/A	N/A	Owner	N/A	N/A	N/A
				3. Detention/Infiltration Basin	N/A	N/A	Owner	N/A	N/A	N/A
				4. Infiltraton Trench	N/A	N/A	Owner	N/A	N/A	N/A
Pacifica Stratford	DRB-05-27, 28, 29, 30, 31	535/537; 545/547; 555/557; 605/607; 615/617 Stratford	San Dieguito	1. Pervious Pavers	Under Construction	N/A	Owner(s)	N/A	N/A	N/A
				2. Vegetated Buffer Strip	Under Construction	N/A	Owner(s)	N/A	N/A	N/A
Morotta/James Single Family Residence	DRB-03-37	2124 San Dieguito Drive	San Dieguito	1. Infiltration Trench	2009	3/30/2009	Owner	N/A	N/A	None
				2. Vegetated Swale	2009	3/30/2009	Owner	N/A	N/A	None
				3. Vegetated Buffer Strip	2009	3/30/2009	Owner	N/A	N/A	None
				4. Multiple Systems	2009	3/30/2009	Owner	N/A	N/A	None

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Section 3
Construction Component

3.1 Introduction

This section provides an overview to the City's efforts to comply with the Construction Component of its 2008 JURMP as required under the terms of the Permit.

3.2 Source Characterization

Section 5.2.2 of the 2008 JURMP describes how a watershed-based inventory of all construction sites is prepared by the City of Del Mar, while Section 5.2.3 provides a description of the steps taken to develop, and update this inventory on a monthly basis. As indicated in the FY 2007/2008 JURMP Annual Report, and included in the Supplemental Information provided to Regional Board Staff on February 17, 2009, the City of Del Mar updated its construction inspection tracking system in September 2008 to ensure that the system meets the reporting requirements outlined in Section J.3.a.(3)(b)vii of the Permit. The tracking system itself is a combined database which includes Geographical Information System (GIS) input, and spreadsheet tallies. Information is entered into the database on a regular basis, no less than monthly. City enforcement staff are tasked with maintaining the GIS information via "drive-by" verification of the status of all construction sites, and entering it into the GIS system. Monthly inventories of active construction sites are then produced for use in the field by staff. Regular patrols by City staff are also used to determine if a site's status has changed in the interim. In addition, the Clean Water Manager is notified by the staff when a Pre-Construction meeting has been held and/or construction commences at a site. This information is then used to assist in the population of the database.

Since construction project sites are constantly approved, cancelled (permits withdrawn by the applicant, denied by the City, expire, etc.), and completed, the City's inventory is fluid. In addition to the regular updates, staff continues to routinely patrol construction sites to "field truth" data received from the Planning and Building Departments, and annotate areas of surface disturbance that may, or may not be, permitted.

Appendix 3-A located at the end of this section provides a copy of the monthly construction site inventory, including the priority classification for each site.. Appendix 3-B includes printouts of the GIS Construction Site Inventory Maps for each month that the new system was in place, beginning with the start of the 2008/2009 Wet Season (October 1). As a result of the implementation of this inventory, minor modifications to Section 5.2.2 and Section 5.2.3 of the 2008 JURMP were made. The specific changes and program modifications are discussed below.

3.3 Updates to Ordinances and Approval Processes

The City is required by the Permit to review and update its grading ordinance as necessary. Section 5.3 of the 2008 JURMP provides a description of the modifications made to the City's construction-related regulations and provides updates to the grading ordinance and other applicable ordinances. No modification to City Ordinances affecting construction activities were made during this Reporting Period, and no modifications in Section 5.3 of the 2008 JURMP were recorded.

3.4 Best Management Practice Requirements

Section 5.4.1 of the 2008 JURMP provided a description of minimum BMPs that were implemented, or required to be implemented, including pollution prevention. No modifications in Section 5.4.1 of the 2008

JURMP have been recorded during this Reporting Period. All appropriate, designated BMPs were implemented, or required to be implemented, at all construction sites within the City of Del Mar in accordance with the requirements of the 2008 JURMP during FY2008/2009.

3.5 Program Implementation

As required by the Permit, and outlined in the 2008 JURMP, all permitted construction sites were required to undergo the City's construction urban runoff approval process, and meet the applicable construction requirements. Appropriate, designated BMPs were required to be implemented for all construction sites. Information regarding construction activities is tracked by the Clean Water Program, and updated via formal inspections by City Staff. In addition to the formal inspection program, and as discussed above, staff regularly patrol the City as part of other duties and activities to confirm inventory data and verify that perimeter BMPs are in place, and that appropriate controls are in place for deliveries and storage areas.

3.5.1 Maximum Disturbed Area for Erosion Controls

Section 5.4.3 of 2008 JURMP identifies one acre as the maximum disturbed area that the City allows to be graded before either temporary or permanent erosion controls are required. No modifications in Section 5.4.3 of the 2008 JURMP have been recorded during this Reporting Period. Although rarely applied in the small projects in Del Mar, the City confirms that the maximum disturbed area for grading was applied to applicable construction sites.

3.5.2 Advanced Treatment Methods

Section 5.4.4 of the 2008 JURMP identified and listed the construction site conditions that will require the use of advanced treatment methods. No modifications in Section 5.4.4 of the 2008 JURMP have been recorded during this Reporting Period. During FY2008/2009, no construction site met the requirements necessitating advanced treatment methods, and as such, none were required nor tracked.

3.5.3 Inspection and Enforcement Measures for Construction Sites

This section provides confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance with the 2008 JURMP. Section 5.5.5 of the 2008 JURMP provided a description of several educational and compliance verification activities that are included as part of the City's inspections of construction sites and the general results of the inspections conducted on construction sites. No modifications in Section 5.5.5 of the 2008 JURMP have been recorded during this Reporting Period.

Construction Inspections

As required by the Permit and outlined in the 2008 JURMP, all permitted construction sites were required to undergo the City's construction urban runoff approval process, meet the applicable construction requirements, including the implementation of appropriate designated BMPs. As indicated in the 2008 JURMP, this information is tracked by the Department of Planning and Community Development, and updated regularly via both formal and informal inspections.

Because of the small size of the community, staff has regular interaction with the applicants and contractors during the process and is able to verify conditions on a regular basis when on routine patrol. In addition to the formal inspection program by staff, and as indicated above, staff regularly patrols sites in-route to other assignments which allows staff to "field truth" data and verify that perimeter BMPs are in place, and appropriate controls are in place for deliveries and storage areas.

Appendix C of the Permit defines the wet season as October 1 through April 30 of each year, and prescribes minimum inspection frequencies for construction sites during this period as defined in Section

D.2.d. of the Permit. Section D.2.d.(1) of the Permit requires bi-weekly inspections of all construction sites meeting certain size requirements, or identified by either the Regional Board or the City of Del Mar as having a "significant threat to water quality." Section D.2.d.(2) of the Permit requires a minimum of monthly inspections of all construction sites with one acre or more of soil disturbance not meeting the criteria in Section D.2.d.(1) of the Permit. As indicated in Section 5.2.1 of the 2008 JURMP, the City of Del Mar does not differentiate between these "High" and "Medium" Classifications, and treats projects meeting the criteria of Section D.2.d.(2) of the permit as "High Priority" construction sites. During this Reporting Period, only one (1) active construction site met the criteria for this designation. This project, the Pacifica Stratford project, located on Stratford Court was inspected at a minimum of bi-weekly during the FY2008/2009 Wet Season. All remaining construction projects were classified as "Low" priority sites, and inspected as needed during the FY2008/2009 Wet Season. As required by Section D.2.d.(4) of the Permit, all construction sites, regardless of priority classification, continue to be inspected on an "as-needed" basis during the remainder of the year.

Appendix 3-C contains the construction inspection inventory, including a report of the period of time (in weeks) that the site was active within the rainy season, the number of inspection conducted during the rainy season, the number of inspections conducted during the dry season, and the total number of inspections for each site.

Enforcement Measures for Construction Sites

Section 5.5.6 of the 2008 JURMP provides a description of the general process for applying enforcement to construction sites for urban runoff related violations. No modifications in Section 5.5.6 of the 2008 JURMP have been recorded during this Reporting Period.

This section provides the number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions taken to achieve compliance

Del Mar has implemented a policy of education first, with aggressive enforcement measures only being used when compliance requests are ignored and/or in the event of an actual discharge which has the potential to impact to receiving waters. In general, contractors have been compliant with BMP requirements at their respective construction sites. In the majority of those instances where compliance has not been attained, a single verbal or written warning was all that was required to achieve compliance.

During this Reporting Period, eight (8) enforcement actions, including any written warnings; Notices of Violation (NOVs); and/or Administrative Citations were issued by staff. This does not include verbal warnings issued during patrols which were handled immediately, unless the contractor failed to comply with the direction of the inspector. In one instance, a full "Stop Work" order was issued and construction halted for more than 24 hours until appropriate BMPs and permits were obtained from the City.

In general, the inspections conducted revealed that education efforts over the past several years have resulted in a high level of compliance. In those incidents where contractors were not in full compliance, it was either easily remedied by replacement or re-installation of BMPs. Only one (1) project site was a repeat offender. This project, the City's only "high priority" construction site, has a number of subcontractors. Failure to reinstall BMPs as a result of changes in contractors tended to be a problem. However, after multiple citations, on-site supervisors have made a noticeable effort to prevent further violations. Moreover, subcontractors on site have been cooperative and responsive to direction from City staff. Table 3-1 provides a summary of formal enforcement actions taken by the City for construction activities not in compliance with BMP requirements under the City's 2008 JURMP.

Table 3-1: Construction-Related Enforcement Actions for FY2008/2009

Case No.*	Date of Action	Contractor	Project Address	NOV	Cite Issued	Cite No.	Stop Work	Fine Levied	Comments/Action's Taken
09-236	8/12/2008	Superior Ready Mix	963 Klish Way	Yes	Yes	705	No	$200	Delivery at Klish Way - No BMPs in place. Fine dismissed by City Management.
09-235	8/22/2008	Allen Landscape Inc.	1127 Cuchara	Yes	No	N/A	No	N/A	Partial BMPs in place/no business license. First offense. Contractor cleaned up site immediately, and installed additional BMPs.
09-009	11/26/2008	Pacifica Stratford	100 blk. Stratford Ct.	Yes	No	N/A	No	N/A	Failure to adequately maintain BMPs and discharge of sediment from project site.
09-009	12/3/2008	Pacifica Stratford	100 blk. Stratford Ct.	Yes	Yes	740	No	$200	Repeat offense. Failure to adequately maintain BMPs and discharge of sediment from project site.
09-009	02/6/2009	Pacifica Stratford	100 blk. Stratford Ct.	Yes	Yes	718	No	$400	Repeat offense. Failure to adequately maintain BMPs and discharge of sediment from project site. Compliance was achieved after meeting with Clean Water Manager.
09-059	4/2/2009	Superior Ready Mix	1344 Ocean Avenue	Yes	Yes	748	No	$100	Concrete spill along Camino Del Mar beginning at Via De La Valle and ending at 1344 Ocean (approximately 0.75 miles long trail). Contractor-supplied street sweepers were immediately dispatched to the site, and compliance achieved.
09-237	5/12/2009	AT&T Fiber Optic Installation (SoCal Construction & Contracting)	100 blk 10th Street	Yes	No	N/A	Yes	N/A	No BMPs. No Bus License. Discharge of sediment into MS4. Stop work order issued with immediate clean up required.
09-242	11/10/2008	Owner/Contractor J.C. Dyer Construction	2720 Ocean Front	Yes	No	N/A	No	N/A	No BMPs in place. Contractor used hose to wash down construction debris. Order to clean up using wet vacuum. Contractor complied immediately. NOV issued.

3.5.4 Notable Activities

This section describes the notable activities conducted to manage urban runoff from construction sites by the City. During this Reporting Period, the City of Del Mar continued its policy of education first and aggressive enforcement as necessary. With a relatively limited number of projects with any significant amount of surface disturbance within the City, and only one project meeting the criteria to be designated a "high priority" construction site, this policy continues to be successful in providing staff the opportunity to develop more cooperative working relationships with developers, many of whom live and work in the community, all while implementing the necessary programmatic elements to protect water quality.

As discussed above, the City of Del Mar also updated its Construction Inventory and Inspection Tracking System to better meet the reporting requirements of the Municipal Permit. The implementation of this new system is discussed above.

3.6 Construction Activities Effectiveness Assessment

A complete assessment of the effectiveness of the City's implementation of its 2008 JURMP, including the Construction Component, is included as Chapter 11 of this Annual Report.

3.7 Program Review and Modification

As indicated above, as a result of the program review conducted during the FY 2007-2008 Annual Report process, the City of Del Mar revised its construction inventory process, and implemented a new GIS-based tracking system. Modifications to Section 5.2.2 and Section 5.2.3 of the 2008 JURMP were made during this Reporting Period to reflect the implementation of the updated tracking and inventory systems implemented during this Reporting Period. The updated pages to the JURMP are provided as an Appendix in Section 14 of this Report. No other modifications to the Construction Component of the 2008 JURMP were made during this Reporting Period.

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Appendix 3-A
FY2008/2009 Watershed-based Construction Inventory including Priority Classifications for Each Site

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FY2008/2009 Watershed Based Construction Inventory

Del Mar Account Number	Facility Name	Number	Street	Hydrologic Unit	Description of Activity	Receiving Water Body	303(d) Listed Water Body
High and Medium Priority Contruction Projects							
DRB-05-27	Pacifica Stratford Duplexes	535/537	Stratford Ct.	San Dieguito	2 unit Condo	Pacific Ocean	No
DRB-05-28	Pacifica Stratford Duplexes	545/547	Stratford Ct.	San Dieguito	2 unit Condo	Pacific Ocean	No
DRB-05-29	Pacifica Stratford Duplexes	555/557	Stratford Ct.	San Dieguito	2 unit Condo	Pacific Ocean	No
DRB-05-30	Pacifica Stratford Duplexes	605/607	Stratford Ct.	San Dieguito	2 unit Condo	Pacific Ocean	No
DRB-05-31	Pacifica Stratford Duplexes	615/617	Stratford Ct.	San Dieguito	2 unit Condo	Pacific Ocean	No
Low Priority Construction Projects							
DRB-05-24 MOD	Klipstein	415	Torrey Point Rd.	Los Penasquitos	NSFR	Los Penasquitos Lagoon	Yes, sediment
DRB-07-08	Gross	230	11th Street	San Dieguito	New Second Unit	Pacific Ocean	No
DRB-06-34	Moore	155	27th Street	San Dieguito	NSFR	San Dieguito Lagoon	Yes, bacteria
DRB-07-19	Fisher	236	24th Street	San Dieguito	NSFR	San Dieguito Lagoon	Yes, bacteria
DRB-06-15	Richardson	2410	Ocean Front	San Dieguito	NSFR	Pacific Ocean	No
DRB-06-22	Holliday/Sohn	264	26th Street	San Dieguito	NSFR	San Dieguito Lagoon	Yes, bacteria
DRB-06-31	Crouch	235	25th Street	San Dieguito	NSFR	San Dieguito Lagoon	Yes, bacteria
DRB-04-13	McGuire	1105	Stratford Court	San Dieguito	NSFR	Pacific Ocean	No
DRB-04-08	Richards (Demich)	963	Klish Way	San Dieguito	NSFR	Pacific Ocean	No
DRB-06-08	Chesnut	1236	Stratford Court	San Dieguito	NSFR	Pacific Ocean	No
DRB-07-16	Smith	144	22nd Street	San Dieguito	NSFR	San Dieguito Lagoon	Yes, bacteria
DRB-98-32 MOD	Bakker	335	La Amatista	Los Penasquitos	Remodel/Addition	Pacific Ocean	No
DRB-04-45	Hagestad	2720	Ocean Front	San Dieguito	NSFR	Pacific Ocean	No
DRB-01-13	Walker	340	Serpentine Drive	San Dieguito	Remodel/Addition	Pacific Ocean	No
DRB-06-05	Zupan	610	Kalamath Street	San Dieguito	NSFR	Pacific Ocean	No
DRB-05-33	Hoehn	730	Kalamath Street	San Dieguito	NSFR	Pacific Ocean	No
DRB-04-54	Nicholas	1344	Ocean Avenue	San Dieguito	NSFR	Pacific Ocean	No
DRB-06-11	Engel	701	Hoska Drive	San Dieguito	NSFR	Pacific Ocean	No
DRB-05-41	Bligh	262	Ocean View	Los Penasquitos	NSFR	Los Penasquitos Lagoon	Yes, sediment
DRB-06-26	Halper	944	Camino del Mar	San Dieguito	Remodel/Addition	Pacific Ocean	No
DRB-04-34	Pinney/Asciutto	425	8th Street	San Dieguito	NSFR	Pacific Ocean	No
EP-08-61	Gilman	405	Van Dyke	San Dieguito	Driveway Repairs	Pacific Ocean	No
DRB-07-24	Goldberg	1942	Santa Fe Ave.	San Dieguito	NSFR	Pacific Ocean	No
ADR-08-47	Pogue	314	Del Mar Heights	Los Penasquitos	Exterior windows/doors	Pacific Ocean	No
DRB-07-19	Fisher	236	24th Street	San Dieguito	NSFR	San Dieguito Lagoon	Yes, bacteria
DRB-08-25	Bierman	143	8th Street	San Dieguito	Remodel/Addition	Pacific Ocean	No
ADR-08-39	Nore	225	25th Street	San Dieguito	Fencing	San Dieguito Lagoon	Yes, bacteria
DRB-07-05	Eaton	187	Ocean View Ave.	Los Penasquitos	Remodel/Addition	Pacific Ocean	No
ADR-08-46	Sporn	1407/1409	Stratford Ct.	San Dieguito	Front-Yard Site Walls	Pacific Ocean	No
SCP-09-02	Americana	1454	Camino del Mar	San Dieguito	Sidewalk Café	Pacific Ocean	No
SCP-09-03	Del Mar Pizza	211	15th Street	San Dieguito	Sidewalk Café	Pacific Ocean	No
SCP-09-01	Jimmy O's	225	15th Street	San Dieguito	Sidewalk Café	Pacific Ocean	No
DRB-08-07	Baker	537	Torrey Pointe Rd.	Los Penasquitos	NSFR	Pacific Ocean	No
SCP-09-04	Sbicca	215	15th Street	San Dieguito	Sidewalk Café	Pacific Ocean	No

FY2008/2009 Watershed Based Construction Inventory

Del Mar Account Number	Facility Name	Number	Street	Hydrologic Unit	Description of Activity	Receiving Water Body	303(d) Listed Water Body
Low Priority Construction Projects (Continued)							
ADR-09-09	Kling	810	Klish Way	San Dieguito	Exterior windows/doors	Pacific Ocean	No
DRB-08-43	Hardke	431	Van Dyke Ave.	San Dieguito	NSFR	Pacific Ocean	No
DRB-08-41	Farrell	1415	Via Alta	San Dieguito	Deck Repairs	Pacific Ocean	No
ADR-09-16	Karagheusian	1925	Oceanfront	San Dieguito	Interior Remodel	Pacific Ocean	No
DRB-06-23	Oliphant	2020	Santa Fe Ave.	San Dieguito	NSFR	Pacific Ocean	No
DRB-05-22	Cunningham	454	W. Ocean View Ave.	Los Penasquitos	Remodel/Addition	Los Penasquitos Lagoon	Yes, sediment
DRB-07-15	Deal	362	Ocean View Ave.	Los Penasquitos	Remodel/Addition	Pacific Ocean	No
ADR-08-32	Foster	444	Hidden Pines Lane	Los Penasquitos	Front-Yard Improvements	Pacific Ocean	No
DRB-07-27	Harrington	1345	Ocean Avenue	San Dieguito	Remodel/Addition	Pacific Ocean	No
ADR-08-10	Nelson	742	Nob Ave.	San Dieguito	Windows/Doors	Pacific Ocean	No
DRB-07-20	Vint	336	10th Street	San Dieguito	NSFR	Pacific Ocean	No
DRB-08-13	Del Mar Library	1309	Camino del Mar	San Dieguito	Remodel/Addition	Pacific Ocean	No
ADR-08-43	Bellezzuoli	424	Carolina Road	San Dieguito	Remodel/Addition	Pacific Ocean	No
DRB-08-14	Valentine	1420	Crest Road	San Dieguito	Remodel/Addition	Pacific Ocean	No
DRB-02-34	Neeley	690	Serpentine Drive	San Dieguito	NSFR	Pacific Ocean	No
DRB-07-06	Dallas	466	Avenida Primavera	San Dieguito	NSFR	Pacific Ocean	No
DRB-08-10	L'Auberge	1540	Camino del Mar	San Dieguito	Remodel/Addition	Pacific Ocean	No
DRB-03-37	James	2124	San Dieguito Drive	San Dieguito	NSFR	Pacific Ocean	No
DRB-84-52	Gillies	2136	San Dieguito Drive	San Dieguito	NSFR	Pacific Ocean	No
DRB-08-04	Donner	226	24th Street	San Dieguito	Remodel/Addition	San Dieguito Lagoon	Yes, bacteria

Appendix 3-B
Monthly GIS Construction Site Inventory Maps
for October 1 – June 30, 2009

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Active Construction as of October 1, 2008

Active Construction as of November 1, 2008

Active Construction as of December 1, 2008

Active Construction as of January 1, 2009

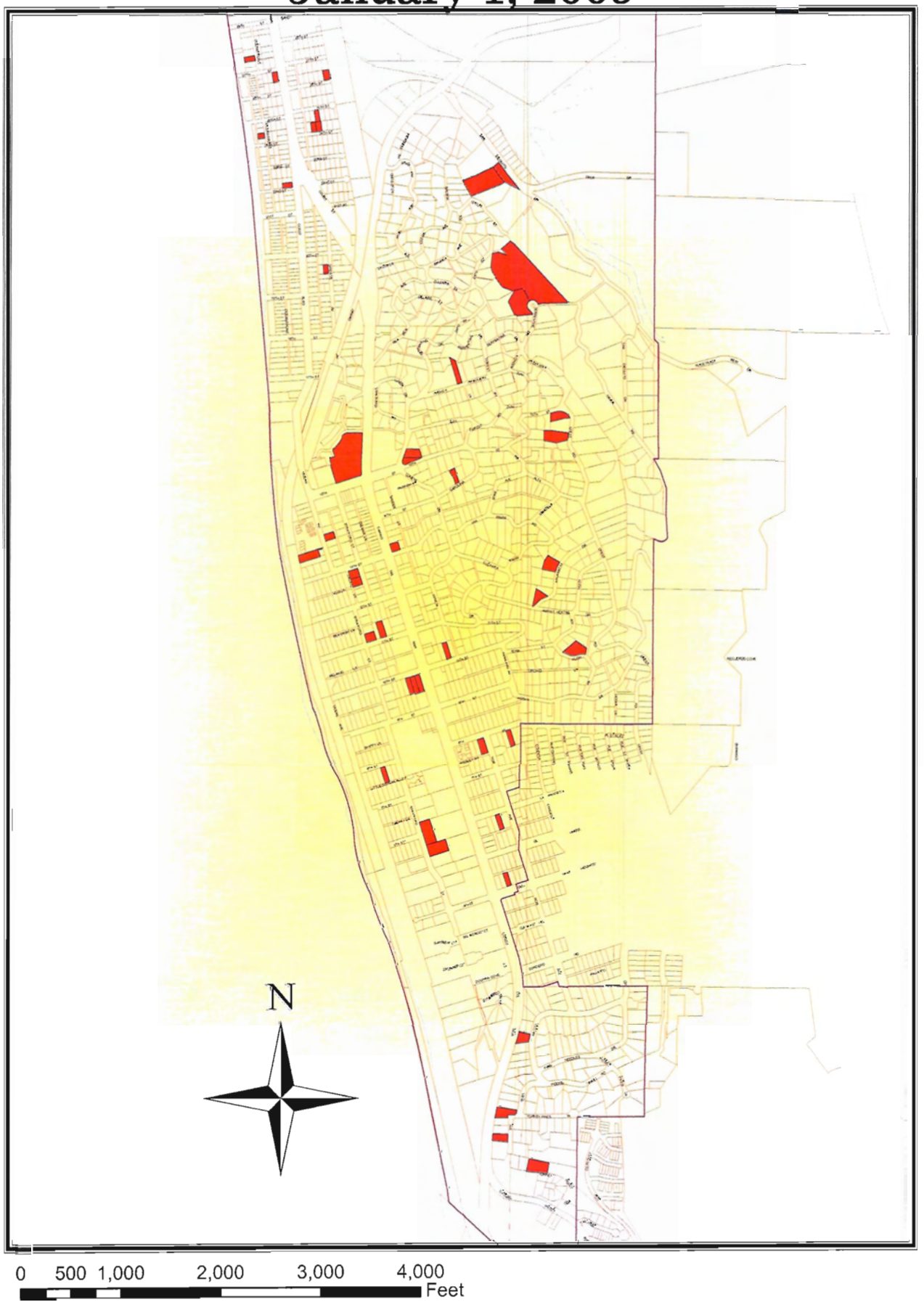

Active Construction as of February 1, 2009

Active Construction as of March 1, 2009

Active Construction as of April 1, 2009

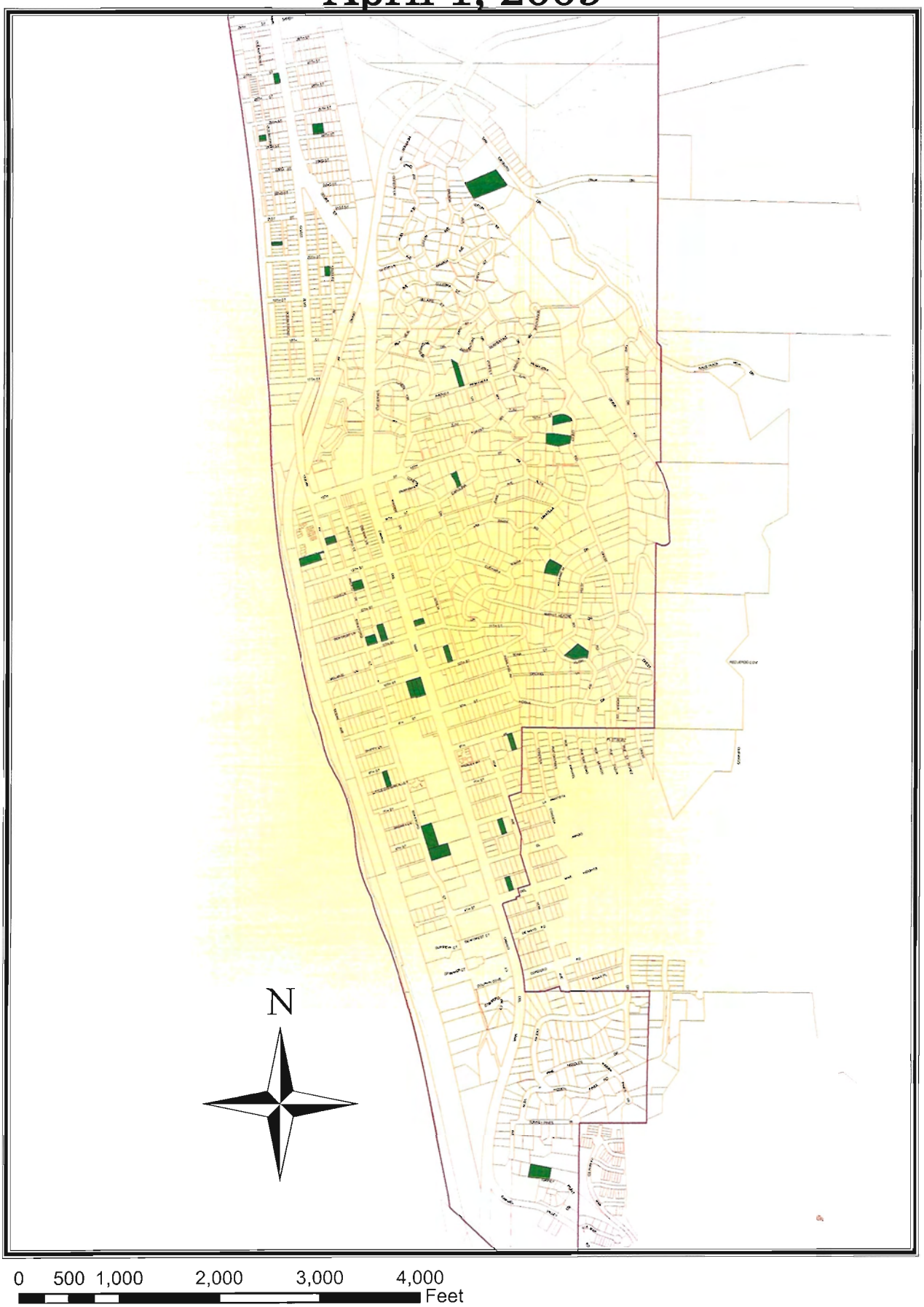

Active Construction as of May 1, 2009

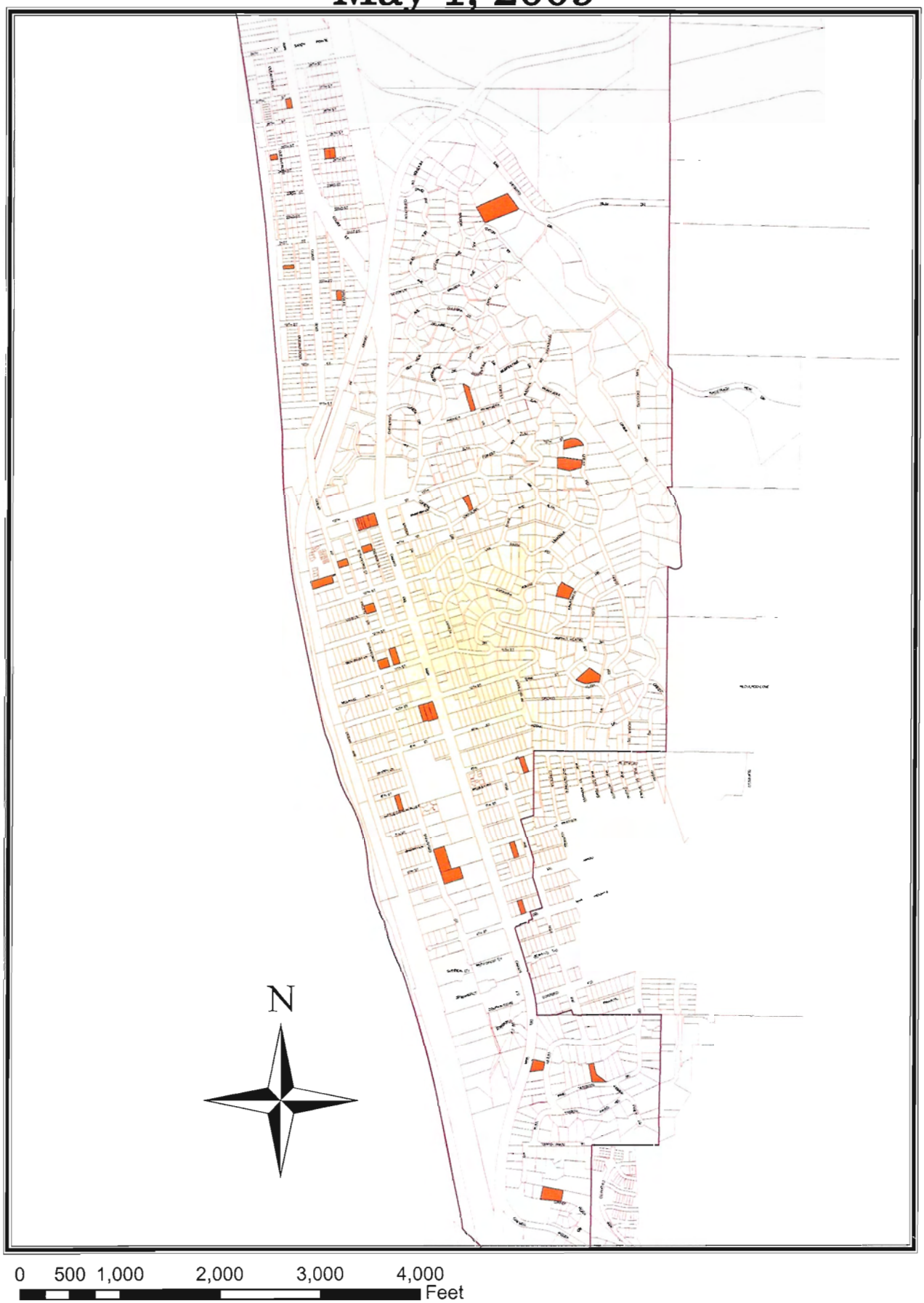

Active Construction as of June 1, 2009

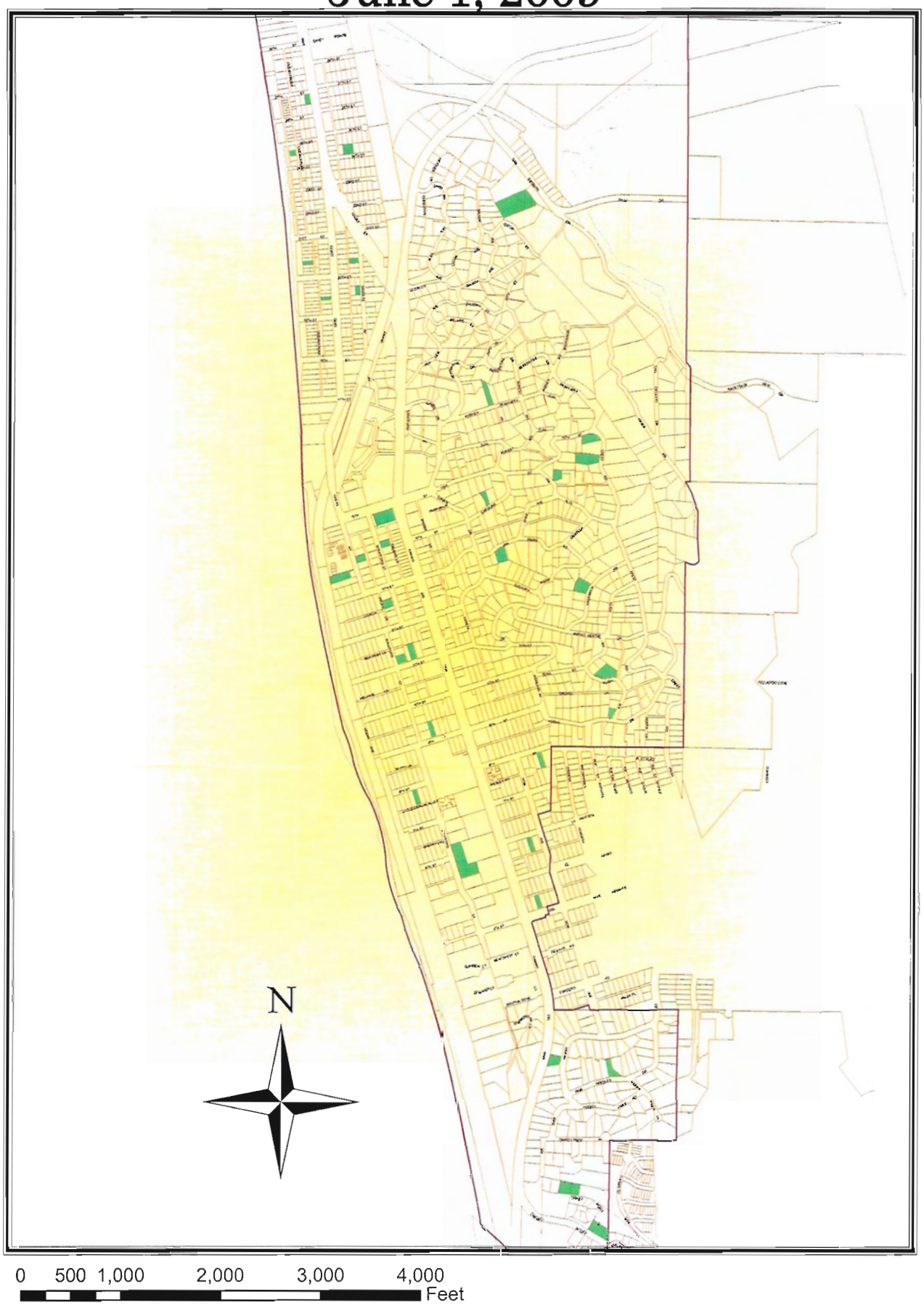

Active Construction as of July 1, 2009

Appendix 3-C
FY2008/2009 Construction Inspection Inventory

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FY2008/2009 Construction Inspection Summary Table

Del Mar Account Number	Facility Name	Number	Street	Hydrologic Unit	Description of Activity	Start Date	End Date	Weeks Active (WET)	Weeks Active (DRY)	No. Inspections (Wet)	No. Inspections (Dry)	Total Inspections
High and Medium Priority Contruction Projects (Wet: Bi-Weekly/Dry: As Needed)												
DRB-05-27	Pacifica Stratford Duplexes	535/537	Stratford Ct.	San Dieguito	2 unit Condo	6/7/2008	Active	31	21	20	1	21
DRB-05-28	Pacifica Stratford Duplexes	545/547	Stratford Ct.	San Dieguito	2 unit Condo	6/7/2008	Active	31	21	20	1	21
DRB-05-29	Pacifica Stratford Duplexes	555/557	Stratford Ct.	San Dieguito	2 unit Condo	6/7/2008	Active	31	21	20	1	21
DRB-05-30	Pacifica Stratford Duplexes	605/607	Stratford Ct.	San Dieguito	2 unit Condo	6/7/2008	Active	31	21	20	1	21
DRB-05-31	Pacifica Stratford Duplexes	615/617	Stratford Ct.	San Dieguito	2 unit Condo	6/7/2008	Active	31	21	20	1	21
Low Priority Construction Projects (As Needed Only)												
DRB-05-24 MOD	Klipstein	415	Torrey Point Rd.	Los Penasquitos	NSFR	8/22/2008	Active	31	21	1	0	1
DRB-07-08	Gross	230	11th Street	San Dieguito	New Second Unit	4/11/2008	Active	31	21	0	1	1
DRB-06-34	Moore	155	27th Street	San Dieguito	NSFR	3/30/2008	Active	31	21	0	0	0
DRB-07-19	Fisher	236	24th Street	San Dieguito	NSFR	12/15/2008	Active	20	12	0	0	0
DRB-06-15	Richardson	2410	Ocean Front	San Dieguito	NSFR	7/9/2007	4/16/2009	29	15	0	0	0
DRB-06-22	Holliday/Sohn	264	26th Street	San Dieguito	NSFR	10/16/2006	2/11/2009	21	13	0	0	0
DRB-06-31	Crouch	235	25th Street	San Dieguito	NSFR	8/14/2006	1/22/2009	20	13	0	0	0
DRB-04-13	McGuire	1105	Stratford Court	San Dieguito	NSFR	9/13/2007	Active	31	21	1	0	1
DRB-04-08	Richards (Demich)	963	Klish Way	San Dieguito	NSFR	8/21/2007	Active	31	21	1	0	1
DRB-06-08	Chesnut	1236	Stratford Court	San Dieguito	NSFR	11/14/2007	Active	31	21	2	0	2
DRB-07-16	Smith	144	22nd Street	San Dieguito	NSFR	3/17/2008	3/5/2009	23	13	1	0	1
DRB-98-32 MOD	Bakker	335	La Amatista	Los Penasquitos	Remodel/Addition	4/21/2005	Active	31	21	0	0	0
DRB-04-45	Hagestad	2720	Ocean Front	San Dieguito	NSFR	2/24/2008	2/19/2009	21	13	1	0	1
DRB-01-13	Walker	340	Serpentine Drive	San Dieguito	Remodel/Addition	4/7/2002	8/21/2008	0	8	0	0	0
DRB-06-05	Zupan	610	Kalamath Street	San Dieguito	NSFR	5/12/2006	1/23/2009	16	13	2	0	2
DRB-05-33	Hoehn	730	Kalamath Street	San Dieguito	NSFR	1/10/2007	Active	31	21	1	0	1
DRB-04-54	Nicholas	1344	Ocean Avenue	San Dieguito	NSFR	12/19/2006	Active	31	21	1	0	1
DRB-06-11	Engel	701	Hoska Drive	San Dieguito	NSFR	9/18/2006	11/13/2008	7	13	2	0	2
DRB-05-41	Bligh	262	Ocean View	Los Penasquitos	NSFR	4/13/2009	Active	3	8	1	0	1
DRB-06-26	Halper	944	Camino del Mar	San Dieguito	Remodel/Addition	10/22/2008	5/20/2009	28	3	0	0	0
DRB-04-34	Pinney/Asciutto	425	8th Street	San Dieguito	NSFR	10/20/2008	Active	28	8	0	0	0
EP-08-61	Gilman	405	Van Dyke	San Dieguito	Driveway Repairs	10/13/2008	12/12/2008	9	0	0	0	0
DRB-07-24	Goldberg	1942	Santa Fe Ave.	San Dieguito	NSFR	11/10/2008	Active	25	8	0	0	0
ADR-08-47	Pogue	314	Del Mar Heights	Los Penasquitos	Exterior windows/doors	11/18/2008	Active	24	8	0	0	0
DRB-08-25	Bierman	143	8th Street	San Dieguito	Remodel/Addition	12/10/2008	Active	21	8	0	0	0
ADR-08-39	Nore	225	25th Street	San Dieguito	Fencing	1/12/2009	2/13/2009	5	0	0	0	0
DRB-07-05	Eaton	187	Ocean View Ave.	Los Penasquitos	Remodel/Addition	4/27/2009	Active	1	8	0	0	0
ADR-08-46	Sporn	1407/1409	Stratford Ct.	San Dieguito	Front-Yard Site Walls	4/13/2009	6/10/2009	3	6	0	0	0
SCP-09-02	Americana	1454	Camino del Mar	San Dieguito	Sidewalk Café	4/6/2009	6/9/2009	4	6	1	0	1
SCP-09-03	Del Mar Pizza	211	15th Street	San Dieguito	Sidewalk Café	4/6/2009	6/16/2009	4	7	1	0	1
SCP-09-01	Jimmy O's	225	15th Street	San Dieguito	Sidewalk Café	4/6/2009	6/17/2009	4	7	1	0	1
DRB-08-07	Baker	537	Torrey Pointe Rd.	Los Penasquitos	NSFR	4/27/2009	6/15/2009	1	7	0	0	0
SCP-09-04	Sbicca	215	15th Street	San Dieguito	Sidewalk Café	6/1/2009	Active	0	5	1	0	1
ADR-09-09	Kling	810	Klish Way	San Dieguito	Exterior windows/doors	5/26/2009	Active	0	6	0	0	0
DRB-08-43	Hardke	431	Van Dyke Ave.	San Dieguito	NSFR	5/26/2009	Active	0	6	0	0	0
DRB-08-41	Farrell	1415	Via Alta	San Dieguito	Deck Repairs	5/11/2009	Active	0	8	0	0	0
ADR-09-16	Karagheusian	1925	Oceanfront	San Dieguito	Interior Remodel	5/27/2009	Active	0	6	0	0	0
DRB-06-23	Oliphant	2020	Santa Fe Ave.	San Dieguito	NSFR	6/1/2009	Active	0	5	0	0	0
DRB-05-22	Cunningham	454	W. Ocean View Ave.	Los Penasquitos	Remodel/Addition	11/21/2005	1/15/2009	16	0	0	0	0
DRB-07-15	Deal	362	Ocean View Ave.	Los Penasquitos	Remodel/Addition	9/15/2008	3/20/2009	25	2	0	0	0
ADR-08-32	Foster	444	Hidden Pines Lane	Los Penasquitos	Front-Yard Improvements	6/16/2008	11/12/2008	7	13	0	0	0
DRB-07-27	Harrington	1345	Ocean Avenue	San Dieguito	Remodel/Addition	9/19/2008	Active	31	9	1	0	1
ADR-08-10	Nelson	742	Nob Ave.	San Dieguito	Windows/Doors	9/15/2008	2/11/2009	23	2	0	0	0
DRB-07-20	Vint	336	10th Street	San Dieguito	NSFR	6/18/2008	4/16/2009	29	13	4	0	4
DRB-08-13	Del Mar Library	1309	Camino del Mar	San Dieguito	Remodel/Addition	9/13/2008	3/20/2009	25	2	1	0	1

FY2008/2009 Construction Inspection Summary Table

Del Mar Account Number	Facility Name	Number	Street	Hydrologic Unit	Description of Activity	Start Date	End Date	Weeks Active (WET)	Weeks Active (DRY)	No. Inspections (Wet)	No. Inspections (Dry)	Total Inspections
Low Priority Construction Projects (As Needed Only) - Continued												
ADR-08-43	Bellezzuoli	424	Carolina Road	San Dieguito	Remodel/Addition	9/4/2006	Active	31	4	0	0	0
DRB-08-14	Valentine	1420	Crest Road	San Dieguito	Remodel/Addition	7/1/2008	Active	31	21	1	0	1
DRB-02-34	Neeley	690	Serpentine Drive	San Dieguito	NSFR	3/1/2004	3/6/2009	23	13	1	0	1
DRB-07-06	Dallas	466	Avenida Primavera	San Dieguito	NSFR	7/7/2008	Active	31	12	1	0	1
DRB-08-10	L'Auberge	1540	Camino del Mar	San Dieguito	Remodel/Addition	8/11/2008	3/19/2009	25	7	0	0	0
DRB-03-37	James	2124	San Dieguito Drive	San Dieguito	NSFR	4/15/2008	3/13/2009	24	13	3	0	3
DRB-84-52	Gillies	2136	San Dieguito Drive	San Dieguito	NSFR	12/14/1998	Active	31	21	0	0	0
DRB-08-04	Donner	226	24th Street	San Dieguito	Remodel/Addition	9/15/2008	6/12/2009	31	7	0	0	0

Section 4
Municipal Component

4.1 Introduction

This section describes the implementation of the Municipal Component of the 2008 JURMP during the Reporting Period. The Municipal Component was implemented to: (1) reduce municipal discharges of pollutants from the MS4 to the MEP, and; (2) prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards.

This section addresses two types of municipal operations: fixed or stationary facilities; and field activities. A fixed facility is a specific building or physical location at which municipal operations occur (e.g. a corporate yard). Conversely, field activities are actions or programs that staff or City contractors implement as a part of their work duties at various locations across the City (e.g. street maintenance).

4.2 Municipal Activities

4.2.1 Source Characterization

During the Reporting Period, there were no additions or deletions to the City's municipal activity inventory, including the: MS4 system; street sweeping routes; or, special event venues (Appendix 4-A). Additionally, there were no changes to the prioritization of the City's storm drain facilities.

The City's complete MS4 is shown in Figure 4.2-1 below and reflects the most recently available system updates.

4.2.2 Best Management Practice Requirements

During the Reporting Period, the City did not make changes to its BMP requirements for municipal activities. For more details on the current BMP requirements, please refer to the 2008 JURMP.

The required BMPs for all municipal activities were implemented and required to be implemented through contracts, agreements or permits.

4.2.3 Program Implementation

During the Reporting Period, the City made changes to its municipal activities program implementation. These changes were focused on the special events program. For more details on the changes, please see Section 14 (JURMP Revisions) of this Annual Report. No additional changes to the Municipal Component of the 2008 JURMP were made during the FY2008/2009 Reporting Period.

The following sub-sections discuss the program implementation for the municipal activities programs.

Municipal Separate Storm Sewer System (MS4) Program

During the Reporting Period, the City did not make changes to its MS4 program implementation. For more details on the City's MS4 program implementation please refer to the 2008 JURMP.

The following data and information was collected and is provided to document MS4 operation and maintenance activities as required by the Permit and the City's 2008 JURMP:

1. Confirmation that the designated BMPs were implemented or required to be implemented during MS4 cleaning activities to eliminate waste discharges when cleaning is taking place.

During the Reporting Period, the City's Public Works employees implemented BMPs for MS4 maintenance activities to prevent the release of pollutants downstream as a result of maintenance activities. Generally, dry clean methods were conducted; however if jetting was required, socks and waddles were used downstream to trap the wash water. The wash water was then vacuumed and disposed of in the sanitary sewer. Any sediment or debris collected from MS4 maintenance activities was disposed of in a landfill, along with other debris collected throughout the City. The City kept logs of all MS4 inspection and maintenance activities in order to satisfy the reporting requirements of the JURMP Annual Report.

2. A description of inspections and maintenance conducted for municipal treatment controls, as applicable.

Trash Guards Treatment Control: The purpose of the "trash guards", installed on the face of storm drain inlets along Camino del Mar, is to minimize the amount of debris and trash entering into storm drain catch basins and to maximize the effectiveness of street sweeping. The guards keep the trash and debris on the street in order for it to be removed by the street sweeper. Inspections of the guards were performed to verify they were still operational and performing as purposed.

Inlet Filter Treatment Control– North County Transit District: As reported in the 2008 JURMP, the City of Del Mar has a Maintenance Agreement in place with the North San Diego County Transit Development Board as part of the Del Mar Stabilization Project 1 (Drainage Improvements and Landslide Warning System), which consists of fifty-four (54) structures. Fossil filters have been installed in some of the structures to address water quality and Permit requirements. The Maintenance Agreement requires the City to maintain fourteen (14) of the structures, while NCTD maintains the remaining forty (40) structures. Out of the fourteen structures maintained by the City, six have been fitted with filters that are serviced by the City's contractor (Downstream Services, Inc.). This fiscal year, all six filters were inspected and five required maintenance.

Table 4-1 below represents a summary of the maintenance performed on the inlet filters.

City of Del Mar
Legend
City Boundary
Drainage Basins
40ft contours
Storm Drainage System
Inlet
Swale
Open Channel
Gravity Main
Force Main
N
0
550
1,100
2,200
Feet
1 inch equals 1,050 feet
Map produced by:
PBSJ
An employee-owned company
TH KM 9/17/08 Z:\Projects\IS\DelMar\mxd\DelMar_MS4_MAP_11X17.mxd
Camino Del Mar - North
22nd Agriculture District
Coastal - North
Camino Del Mar Bridge
28th Street
Jimmy Durante Bridge
Jimmy Durante - North
20th Street
Coastal
17th Street
San Dieguito Drive
Sea Grove
Sea Cliff
12th Street
Sea Orbit Lane
Crest Canyon
8th Street
Anderson Canyon - North
Anderson Canyon
Los Penasquitos Lagoon
Torrey Pines Road

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Table 4-1: Summary of Inlet Filter Maintenance for FY 2009-2009

ID #	Location	Inlet Type	Materials	%Vol used	Comments
1	West end of 4th Street	Combo	Dirt, Silt, or Sediment (D) 70% Gravel (G) 5%	75%	Wired geoweb added, Clips & Gasket, Replaced (3) pouches.
2	West end of 8th Street	Grate	D 50% G 40%	90%	Tied insert corner.
3	SW 11th Street	Curb	D 60% G 10% Organics (O) 5%	75%	Replaced (2) pouches.
4	NW side of 11th Street	Curb	D 80% O 10%	90%	Replaced (1) pouch.
5	W of 13th Street	Curb	D 95% O 5%	100%	Replaced (2) pouches.
6	50' SW of pedestrian RR crossing, between RR tracks and Coast Blvd.	Grate	O 15%	15%	No maintenance required.

3. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria (33% capacity), and the number of catch basins and inlets cleaned.

The City is responsible for the inspection and maintenance of 284 drainage structures that are part of the MS4, including inlets and catch basins. In FY2009, 100% (284) of the MS4 inlets and catch basins were inspected and cleaned. None of the structures were found to have accumulated waste exceeding 33% capacity.

4. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.

The City owns a total of 5.87 lineal miles of MS4. The City's MS4 pipe inspection program consists of cleaning crews inspecting pipes based on accessibility and visually inspecting pipe conditions during the inspection or cleaning of inlets and catch basins. During the Reporting Period, the City visually inspected approximately 3,500 lineal feet of MS4 pipe and cleaned approximately 2,500 lineal feet of MS4 pipe. No pipes were reported as exceeding the cleaning criteria threshold.

5. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.

There are 2.85 linear miles of open channel or swale type drainage in the City, and these drainage structures are considered to be part of the MS4 inventory. During the Reporting Period, 100% (2.85 miles) of the open channels and swales was inspected. When necessary, the City cleaned sand, mud and sediment from the open channels and swales. The City's inspection and maintenance records indicate that no observations of significant amounts of anthropogenic litter were noted.

6. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category. Proper disposal of waste removed pursuant to applicable laws.

The total amount of material removed from catch basins, inlets, open channels, and the MS4 for the FY2009 was 46.9 cubic yards, or approximately 23.4 tons. By drainage structure category, it is estimated that approximately 18.4 tons of materials were removed from catch basins and inlets (combined inlets, basins and junctions), 3 tons of materials were removed from swales and open channels (headwall cleanings as channels), and the remaining estimated 2 tons of material was collected from the MS4 cleanings. *Please Note: the Permit requires the material collected to be reported in tons. However, the City's measurements are in cubic yards, and converted to tons for reporting purposes using a 1,000 pound per cubic yard conversion.*

Street Sweeping Program

During the Reporting Period, the City did not make changes to its street sweeping implementation. For more details on the City's street sweeping implementation please refer to the 2008 JURMP.

The following data and information was collected and is provided to document street sweeping activities as required by the Permit and the City's 2008 JURMP.

1. Identification of the total distance of curb-miles of improved roads and streets identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.

The total distance of curb-miles of improved roads and streets that consistently generate the highest volumes of trash and/or debris is approximately 5.7 miles, including curbed medians. The frequency at which these roads and streets are swept is at a minimum, weekly.

2. Identification of the total distance of curb-miles of improved roads and streets identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.

The total distance of curb-miles of improved roads and streets that consistently generate moderate volumes of trash and/or debris is approximately 14.5, including curbed medians. The frequency at which these roads and streets are swept is at a minimum, bimonthly.

3. Identification of the total distance of curb-miles of improved roads and streets identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.

The total distance of curb-miles of improved roads and streets that consistently generate low volumes of trash and/or debris is 31.2, including curbed medians. The frequency at which these roads and streets are swept is at a minimum, biannually.

4. Identification of the total distance of curb-miles swept.

During the FY2009 Reporting Period, the City swept a total of 1,310 curb miles. The brooms were engaged for a total of 183.4 hours.

5. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping:

The two municipal parking lots in the City's municipal facility inventory are the 17th Street Lifeguard Station parking lot and the City Hall Parking lot. Both are considered to be high trash volume designations and thus, were swept semi-monthly during the Reporting Period.

6. Amount of material (tons) collected from street and parking lot sweeping:

The total amount of material collected from street sweeping activities of municipal areas for FY2008/2009 was 251.5 cubic yards*, or an estimated 125.75 tons. This amount includes all three trash volume categories and parking lot sweeping for the Reporting Period. *Please Note: the Permit requires the material collected to be reported in tons. However, the City's measurements are in cubic yards, and converted to tons for reporting purposes using a 1,000 pound per cubic yard conversion.*

The City coordinates with the 22nd District Agricultural Association (22DAA) (aka Del Mar Fairgrounds) to ensure that additional pollutant loading from the 22DAA facilities does not contribute to pollution in the MS4. Although the City conducts street sweeping along the 22DAA facility, the City requires the 22DAA to provide additional street sweeping on an as-needed basis, especially during its high seasons – San Diego Fair and racing season. The City does not quantify the amount of sediment and debris that is collected by the DAA sweepings.

Pesticide, Herbicide and Fertilizer Management

During the Reporting Period, the City did not make changes to its pesticide, herbicide and fertilizer management implementation. For more details on the City's pesticide, herbicide and fertilizer management implementation please refer to the 2008 JURMP.

The following data and information was collected and is provided to document pesticide, herbicide and fertilizer management activities as required by the Permit and the City's 2008 JURMP.

1. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities

The City confirms that during the Reporting Period, designated BMPs for pesticides, herbicides and fertilizers were required to be implemented and implemented for municipal areas and activities.

The City of Del Mar contracts with Aztec Landscaping for all of the maintenance of its municipal landscaped areas including: fertilization, pest control, and herbicide application. All chemicals are applied by licensed contractors and application of any landscaping-related chemicals is done per current San Diego County Department of Agriculture regulations and the City encourages manual weed and pest removal whenever possible; furthermore, any contract employee applying or mixing landscaping-related chemicals is required to possess a valid Qualified Applicators Certificate for Class B as issued by the State Department of Food and Agriculture. To regulate landscaping chemical use in the City, the contract company is required per its contract with the City to submit a proposed fertilization schedule prior to commencement of fertilization and to provide a monthly chemical application report to the City. In FY2008/2009, there were no apparent increases in landscaping-related chemicals as compared to previous years.

As in previous years, pesticides that are analyzed for as part of the annual Dry Weather Monitoring Program were not detected in City-wide sampling providing another validation of the proper use of the chemicals.

Sanitary Sewer Program

The City's sanitary sewer system includes the collection system and various sanitary sewer systems. The sewer system infrastructure includes approximately 24.75 miles of gravity main, 0.07 miles (or approximately 387ft) of force main and 387 service points. Del Mar's system includes three sewer pump/lift stations, 112 clean out facilities, and approximately 549 manhole structures. These facilities all are required to implement minimum BMPs and for the most part are inspected to verify BMP implementation and compliance. A description of the City's efforts for these facilities is included below.

Of the approximately 24.75 miles of the sanitary sewer collection system, approximately 23.3 miles were cleaned as part of the regular schedule of inspection and cleaning. Some portions of the collection system were cleaned more than once due to priority and build up of materials. The City tracks "hot spot" portions of the sewer collection system and depending upon the likelihood of materials build up, will perform cleaning two, three or up to four times per year. During FY2008/2009, the City conducted multiple cleanings of 1.2 miles of collection lines.

A total of six (6) sanitary sewer overflows occurred during the Reporting Period, three (3) from City mains and three (3) from private laterals. Out of the total of 3,611 gallons that spilled, 2,925 gallons were recovered with the remaining 686 gallons discharged to the environment. All of the overflows were reported both to the Regional Board (via CIWQS) and the County of San Diego Department of Environmental Health (via fax).

Special Events

During the Reporting Period, the City did not make changes to its special events program implementation. For more details on the special events program, please see the 2008 JURMP submitted in March 2008.

Table 4-2 below provides a summary of the major events that were monitored by the City staff. All special events had City staff present who have been trained on Clean Water Program requirements to make observations and implement corrective actions as necessary during the events. In addition to the staff presence during the events, City staff responsible for each venue would inspect and take corrective actions the morning following special events. The City is in the process of revising its Special Events protocols to better reflect current procedures to continue to ensure that all Clean Water Program requirements are met for special events and special event venues.

Table 4-2: Major Event Summary Table

Event Name	Event Date	Estimated Attendance	Venue	Inspection Date(s) & Comments
Bocce Ball Championships	7/12/2008	600	North Beach	Post-event inspection by cleanup crews – no spills or incidents reported
Summer Twilight Concert Series	7/15/2008	3,000	Powerhouse Park	Post-event inspection by cleanup crews – no spills or incidents reported
Summer Twilight Concert Series	8/19/2009	3,000	Powerhouse Park	Post-event inspection by cleanup crews – no spills or incidents reported
MS Society Walk	9/5/2008	325	Streets through Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
Dog Surf Event	9/7/2008	5,000	North Beach	Post-event inspection by cleanup crews – no spills or incidents reported
Summer Twilight Concert Series	9/21/2008	3,000	Powerhouse Park	Post-event inspection by cleanup crews – no spills or incidents reported
MS Bike Tour	10/12/2008	800	Streets of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
NPT Breast Cancer 3Day LLC	11/21/2008	4,000	Streets of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
Del Mar Village Association Winter Wonderland	12/7/2008	2,500	Del Mar Village	Post-event inspection by cleanup crews – no spills or incidents reported
Tour de Cure	4/18/2009	450	Streets of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported

Event Name	Event Date	Estimated Attendance	Venue	Inspection Date(s) & Comments
La Jolla 1/2 Marathon	4/26/2009	5,000	Streets of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
San Diego Century Bicycle Tour	5/16/2009	1,000	Streets of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
Iron Girl 10K & 5K	6/7/2009	3,000	Solana Beach to Fairgrounds	Post-event inspection by cleanup crews – no spills or incidents reported
Summer Twilight Concert Series	6/16/2009	3,000	Powerhouse Park	Post-event inspection by cleanup crews – no spills or incidents reported
Summer Solstice	6/18/2009	600	Powerhouse Park	Post-event inspection by cleanup crews – no spills or incidents reported

Beach Cleaning

The City's beaches are a vital part of the City's community – not only for the natural settings they provide, but also for the economic sustainability of the City. In an effort to prevent pollutants from entering the Pacific Ocean and causing the potential impairment to the receiving waters, the City implements a regular beach cleaning program. The program is described in Section 14, JURMP revisions.

During the Reporting Period, the beach cleaner was operated two to three times per week during the spring and summer and more frequently for holidays when the beach has the most use. The primary collections for disposal included plastic bottles and paper trash. The kelp is sorted and left on the beach

The City does not track the amount of debris collected from the beaches, as the cleaner dumps the debris at the Public Works Yard into a trash dumpster that is mixed with other refuse and waste.

Power Washing

Currently, the City does not regularly schedule power washing activities at specific locations. This activity is conducted in various areas of the City depending on the need and as a result of other maintenance functions. This activity and the BMPs identified in the City's 2008 JURMP are considered to apply citywide for all municipal operations. Power washing may be conducted by City staff or under contract depending on the need.

The City utilizes dry cleaning methods as its primary cleaning method. The use of power washing is limited. However, the City conducted three power washing activities during the Reporting Period as shown in Table 4-3 below. The City confirms that all applicable BMPS were implemented during the power washings. The BMPs include vacuum collection of all wash water and disposal into the sanitary sewer system.

Table 4-3: Municipal Power Washing Activities

Location	Date	BMPs Implemented	Comments
Powerhouse Park	3/9/09	Yes	Power wash all walkways, decks and sidewalks. All wash water was collected and disposed of into the sanitary sewer system.
17th Street Lifeguard Tower	10/8/08	Yes	Power wash building and remove bird guano from roof. All wash water was collected and disposed of into the sanitary sewer system.

Location	Date	BMPs Implemented	Comments
25th Street Lifeguard Tower and Bathrooms	10/7/08	Yes	Power wash tower and bathrooms. All wash water was collected and disposed of into the sanitary sewer system.

4.3 Municipal Facilities

4.3.1 Source Characterization

During the Reporting Period, there were no additions or deletions to the City's municipal facility inventory. The municipal facilities inventory is located in Appendix 4-A.

In general, the municipal facilities include the following types:

1. MS4 System,
2. Roads and Streets,
3. Public Facilities,
4. Municipal Facilities, and
5. Sanitary Sewer.

Discussion of the stormwater program implementation for these facilities is addressed in Section 4.2.3 above.

The City's roads and streets network includes 747 curb miles of streets and two public parking lots. As described in Section 4.2.3 above, street sweeping is the primary BMP implemented for the roads network.

The City's public facilities primarily include parks and recreational facilities, beaches and the Powerhouse Community Center. All of these facilities all are required to implement minimum BMPs are inspected to verify BMP implementation and compliance. A description of the City's efforts for these facilities is included below.

The City's municipal facilities include the Public Works Yard, City Hall, and various potable water reservoirs. These facilities all are required to implement minimum BMPs and are inspected to verify BMP implementation and compliance. A description of the City's efforts for these facilities is included below.

The City's sanitary sewer system includes approximately 24.75 miles of gravity main, 0.07 miles (or approximately 387ft) of force main and 387 service points. Del Mar's system includes three sewer pump/lift stations, 112 clean out facilities, and approximately 549 manhole structures. The sewer facilities were inspected as a part of the municipal inspections as described below.

4.3.2 Best Management Practice Requirements

During the Reporting Period there were no updates to the BMP requirements for municipal facilities described in the 2008 JURMP. The City confirms that required BMPs were implemented at all facilities.

4.3.3 Inspections

Per the 2008 JURMP, the City formally inspects all high priority municipal sites. Municipal sites are considered to be fixed facilities where high priority municipal activities occur. The streets and road network are routinely inspected under various programs such as street sweeping, streets maintenance, and MS4 inspections. Formal inspection forms are not generated for the general routine inspections performed of these municipal network areas.

The City conducted facility inspections for each of its high priority facilities during FY2009. The purpose of these inspections was to ensure that BMPs (including those for pollution prevention) were being implemented. Of the high priority municipal areas, 24 are actual municipally operated sites/facilities, while the remainders are networks including streets and roads.

All inspections conducted during FY2008/2009 addressed all of the required inspection steps to determine full compliance by utilizing the City's standard municipal inspection form. The results of the inspections can be found in Appendix 4-B. For each facility, recommendations for follow-up corrective actions were listed if applicable.

4.4 Enforcement

There were no violations or enforcement actions taken at any municipal activities or facilities during FY2008/2009.

4.5 Notable Activities

The City works in conjunction with volunteers from Arc of San Diego in performing its litter removal program. In FY2008/2009, the Arc of San Diego volunteers collected approximately 7 cubic yards (3.5 tons) of trash from the City's streets as well as parks and recreational facilities.

This Fiscal Year, the City once again applied with the California Department of Conservation for a grant from its Beverage Container Recycling and Litter Reduction Program to assist in the City's litter cleanup efforts. Disbursement of funds is determined by the California Department of Finance and the amount of the grant is contingent on the population of eligible cities or counties applying for the grant. The City of Del Mar received $5,000 for FY2009 which was the maximum amount eligible for a jurisdiction of its size. A portion of the grant money was used to fund beach clean-up activities as well as to purchase dog nuisance clean-up bags ("Mutt Mitt") for distribution to the general public at City outreach events; the remaining money was used to assist in public cleanup days to continue to effectively reduce the amount of trash and debris entering the MS4 and the City's waterways. The City has again applied for the grant and has received money for use in FY2010. The results of where these funds are allocated will be reported in the next Annual Report.

4.6 Program Review and Modification

Minor modifications to the Municipal Component (Section 6) of the 2008 JURMP were recorded during the FY2008/2009 Reporting Period as a result of comments from Regional Board Staff. These minor revisions are discussed in Section 14 of this Annual Report.

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Appendix 4-A
City of Del Mar Municipal Facilities Inventory

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City of Del Mar
Municipal Inventory

Facility Name	Description of Area/ Activity	Address Number	Street	City	State	Zip	HA Name	Hydrologic Area	Potential Pollutants									Receiving Waterbody	303(d) Listed Water Body
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
Public Works Yard	Public Works Admin building, shops, parking lot, open and covered storage yards. Fueling station, storage, vehicle/equipment cleaning and repair. Temporary storage of trash, recycling and landscape materials. Hazardous waste materials storage.	2240	Jimmy Durante Blvd	Del Mar	CA	92014	San Dieguito	905.11	Y	Y	Y	Y	Y	Y	Y	Y	Y	San Dieguito Lagoon	Yes, Bacteria
Del Mar Fire Station	Building and parking lot. Vehicle storage and cleaning. Hazardous waste materials storage.	2220	Jimmy Durante Blvd	Del Mar	CA	92014	San Dieguito	905.11			Y		Y	Y		Y	Y	San Dieguito Lagoon	No
Community Library	Building, parking lot, and landscape maintenance.	1309	Camino Del Mar	Del Mar	CA	92014	San Dieguito	905.11			Y	Y	Y		Y		Y	Pacific Ocean	No
City Hall	Building and landscape maintenance.	1050	Camino Del Mar	Del Mar	CA	92014	San Dieguito	905.11				Y			Y		Y	Pacific Ocean	No
City Hall Parking Lot	Parking and landscaping.	1050	Camino Del Mar	Del Mar	CA	92014	San Dieguito	905.11			Y		Y		Y		Y	Pacific Ocean	No
Main Lifeguard Station	Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.	1700	Coast Blvd	Del Mar	CA	92014	San Dieguito	905.11	Y			Y		Y		Y	Y	Pacific Ocean	No
Main Lifeguard Station Parking Lot	Parking and landscaping.	1700	Coast Blvd	Del Mar	CA	92014	San Dieguito	905.11			Y		Y		Y		Y	Pacific Ocean	No
20th Street Lifeguard Station	Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.		20th St	Del Mar	CA	92014	San Dieguito	905.11	Y			Y		Y		Y	Y	Pacific Ocean	No
25th Street Lifeguard Station	Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.		25th St	Del Mar	CA	92014	San Dieguito	905.11	Y			Y		Y		Y	Y	Pacific Ocean	No
Tennis Court Facilities	Tennis courts.		Court St	Del Mar	CA	92014	San Dieguito	905.11									Y	Pacific Ocean	No
Zuni Water Reservoir	Potable water storage tank and equipment maintenance.	627	Zuni Dr	Del Mar	CA	92014	San Dieguito	905.11	Y			Y	Y	Y				Pacific Ocean	No
Crest Water Reservoir	Potable water storage tank and equipment maintenance.	706	Crest Rd	Del Mar	CA	92014	San Dieguito	905.11	Y			Y	Y	Y				Pacific Ocean	No
11th Street Water Reservoir	Potable water storage tank and equipment maintenance.	562	11th St	Del Mar	CA	92014	San Dieguito	905.11	Y			Y	Y	Y				Pacific Ocean	No
Torrey Pines Water Reservoir	Potable water storage tank and equipment maintenance.	487	Pine Needles Dr	Del Mar	CA	92014	Penasquitos	906.10	Y			Y	Y	Y				Pacific Ocean	No
Seagrove Park	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	1500	Coast Blvd	Del Mar	CA	92014	San Dieguito	905.11	Y	Y		Y		Y	Y	Y	Y	Pacific Ocean	No
Powerhouse Community Center	Special events, food prep, restrooms. Building and landscape maintenenace.	1630	Coast Blvd	Del Mar	CA	92014	San Dieguito	905.11	Y	Y		Y	Y	Y			Y	Pacific Ocean	No
Powerhouse Park	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application. Restrooms and showers.	1630	Coast Blvd	Del Mar	CA	92014	San Dieguito	905.11	Y	Y		Y		Y	Y	Y	Y	Pacific Ocean	No
Caminito Park	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	1500	Camino Del Mar	Del Mar	CA	92014	San Dieguito	905.11	Y	Y		Y		Y	Y	Y	Y	Pacific Ocean	No
Minipark	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	1300	Maiden Ln	Del Mar	CA	92014	San Dieguito	905.11	Y	Y		Y		Y	Y	Y	Y	Pacific Ocean	No
Sea Cliff Park	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	1500	Coast Blvd	Del Mar	CA	92014	San Dieguito	905.11	Y	Y		Y		Y	Y	Y	Y	Pacific Ocean	No
Riverpath Del Mar	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	2240	Jimmy Durante Blvd	Del Mar	CA	92014	San Dieguito	905.11	Y			Y		Y	Y	Y	Y	San Dieguito Lagoon	Yes, Bacteria
Sewer Lift Station	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	201	21st St	Del Mar	CA	92014	San Dieguito	905.11	Y	Y		Y	Y	Y				San Dieguito Lagoon	Yes, Bacteria
Sewer Lift Station	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	120	7th St	Del Mar	CA	92014	San Dieguito	905.11	Y	Y		Y	Y	Y				Pacific Ocean	No
Sewer Lift Station	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	2110	San Dieguito Dr	Del Mar	CA	92014	San Dieguito	905.11	Y	Y		Y	Y	Y				San Dieguito Lagoon	Yes, Bacteria

City of Del Mar
Municipal Inventory

Facility Name	Description of Area/ Activity	Address Number	Street	City	State	Zip	HA Name	Hydrologic Area	Potential Pollutants									Receiving Waterbody	303(d) Listed Water Body
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash		
Storm Drain System	5.96 miles of gravity mains and approx. 350 ft of open channel, and 2.78 miles of cobble/hardscape open swales. Conveyance of storm water/urban runoff.		Citywide	Del Mar	CA	92014	San Diegiuto, Los Peñasquitos	905.11 and 906.10	Y	Y	Y	Y	Y	Y	Y	Y	Y	San Diegiuto, Los Peñasquitos Lagoon, Pacific Ocean	SD: Yes, Bacteria, LP: Yes, Phosphate, TSS, PO: No
Streets and Alleys	22 miles of streets and alleys. Vehicular traffic.		Citywide	Del Mar	CA	92014	San Diegiuto, Los Peñasquitos	905.11 and 906.10	Y			Y				Y	Y	San Diegiuto, Los Peñasquitos Lagoon, Pacific Ocean	SD: Yes, Bacteria, LP: Yes, Phosphate, TSS, PO: No
Beach	2.8 miles of beach main access at 17th street. Sand replenishment, trash and debris removal, recreation.		Coast	Del Mar	CA	92014	San Diegiuto, Los Peñasquitos	905.11 and 906.10									Y	Pacific Ocean	No
Underground Pipelines, Sanitary Sewer	24.75 miles of underground piping. Sewer spills, leaks and breaks. Maintenance of piping.		Citywide	Del Mar	CA	92014	San Diegiuto, Los Peñasquitos	905.11 and 906.10	Y	Y		Y	Y	Y				San Diegiuto, Los Peñasquitos Lagoon, Pacific Ocean	SD: Yes, Bacteria, LP: Yes, Phosphate, TSS, PO: No
Preserves and Open Space	Open Space		Citywide	Del Mar	CA	92014	San Diegiuto, Los Peñasquitos	905.11 and 906.10										San Diegiuto, Los Peñasquitos Lagoon, Pacific Ocean	No

Appendix 4-B
Summary of FY2008/2009 Municipal Facility Inspections

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Municipal Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Public works administration building, parking lot, open and covered storage yards. Fueling station, storage, vehicle/equipment cleaning and repair. Area serves as a hazardous waste materials storage. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Public Works Yard		Corrective Actions Required:	No
Address:	2240 Jimmy Durante Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/4/2009			
Facility Name:	Zuni Water Reservoir		Corrective Actions Required:	No
Address:	627 Zuni Dr			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Public Park. Turf, tree, and landscape maintenance, fertilization and pesticide application. Restrooms and showers. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Powerhouse Park		Corrective Actions Requred:	No
Address:	1630 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/4/2009			
Facility Name:	11th Street Water Reservoir		Corrective Actions Requred:	No
Address:	562 11th St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Tennis courts. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Tennis Court Facilities		Corrective Actions Requred:	No
Address:	Del Mar, CA			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/4/2009			
Facility Name:	Crest Water Reservoir		Corrective Actions Requred:	No
Address:	706 Crest Rd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/4/2009			
Facility Name:	Torrey Pines Water Reservoir		Corrective Actions Requred:	No
Address:	487 Pine Needles Dr			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	Penasquitos (906.10)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Building and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	City Hall		Corrective Actions Requred:	No
Address:	1050 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Parking and landscaping. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	City Hall Parking Lot		Corrective Actions Requred:	No
Address:	1050 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Sanitary sewer pump station. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	7th Street Sewer Lift Station		Corrective Actions Requred:	No
Address:	120 7th St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Sanitary sewer pump station. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	21st Street Sewer Lift Station		Corrective Actions Requred:	No
Address:	201 21st St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Sanitary sewer pump station. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	San Dieguito Sewer Lift Station		Corrective Actions Requred:	No
Address:	2110 San Dieguito Dr			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Public park. Tree and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Riverpath Del Mar		Corrective Actions Requred:	No
Address:	2240 Jimmy Durante Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Building, parking lot, and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Community Library		Corrective Actions Requred:	No
Address:	1309 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Seagrove Park		Corrective Actions Requred:	No
Address:	1500 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Building and parking lot, vehicle storage and cleaning. Hazardous waste materials storage. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Del Mar Fire Station		Corrective Actions Requred:	No
Address:	2220 Jimmy Durante Blvd			
			Corrective Action Description:	
Contact:	Robert Burron			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Minipark		Corrective Actions Requred:	No
Address:	1300 Maiden Ln			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Caminito Park		Corrective Actions Requred:	No
Address:	1500 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Sea Cliff Park		Corrective Actions Requred:	No
Address:	1500 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Building, first aid care, and restroom facilities. Building maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/9/2009			
Facility Name:	20th Street Lifeguard Station		Corrective Actions Requred:	No
Address:	20th St			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Building, first aid care, and restroom facilities. Building and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/9/2009			
Facility Name:	25th Street Lifeguard Station		Corrective Actions Requred:	No
Address:	25th St			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Building, first aid care, and restroom facilities. Building and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/9/2009			
Facility Name:	Main Lifeguard Station		Corrective Actions Requred:	No
Address:	1700 Coast Blvd			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Special events, food preperation, and restroom facilities. Building and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	6/9/2009			
Facility Name:	Powerhouse Community Center		Corrective Actions Requred:	No
Address:	1630 Coast Blvd			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Parking and landscaping. No issues to report.	Enforcement Action:	None
Inspection Date:	6/9/2009			
Facility Name:	Main Lifegaurd Station Parking Lot		Corrective Actions Requred:	No
Address:	1700 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Section 5
Industrial/Commercial Component

5.1 Introduction

The City continued to implement the Industrial and Commercial Component of its 2008 JURMP in FY2008/2009 to prevent and reduce pollutants in runoff from industrial and commercial facilities within the City.

5.2 Stationary Industrial and Commercial Sites/Sources Element

5.2.1 Background

This section focuses on fixed business sources, combining industrial and commercial businesses as defined by their activities. Fixed business sources are defined as businesses that have a stationary location where business activities are conducted. The referenced businesses are those that are identified in Order R9-2007-0001.

5.2.2 Source Characterization

A watershed-based inventory and prioritization of known industrial and commercial facilities within the City's jurisdiction has been updated for the FY2008/2009 Reporting Period and is included as Appendix 5-A. This inventory is based on multiple sources of information including the City's business license list, the Statewide General Industrial Storm Water database and other sources of information, as appropriate. The current inventory lists 41 stationary businesses facilities within the City of Del Mar. Of the 41 inventoried stationary facilities the City considers all to be "high" threats to water quality (TTWQ). One of the 41 businesses is also a high TTWQ industrial facility.

One deletion from the City's inventory that occurred during the Reporting Period is the 22nd District Agricultural Association (22DAA). The 22DAA is a state entity for which the City does not have the responsibility to regulate. During the Reporting Period, City staff corresponded with Regional Board staff and together determined that the City does not hold the responsibility for regulation of the 22DAA for urban runoff issues. A copy of the email correspondence between Regional Board Staff and the City is included as Appendix 5-B. However, the City continues to coordinate with the 22DAA on urban runoff issues related to 22DAA Operations which may impact the City of Del Mar.

5.2.3 Best Management Practice Requirements

During the Reporting Period, the City did not make changes to its BMP requirements for the commercial and industrial facilities. The requisite BMPs for all commercial and industrial facilities were required to be implemented through the City's 2008 JURMP and municipal code.

5.2.4 Program Implementation

During FY2008/2009, the City provided notification to owners/operators of industrial and commercial businesses of the applicable BMP requirements. This information was specific to automotive and food establishment businesses. Only three (3) businesses operating within the City of Del Mar did not fall into one of these two categories. These included two (2) animal facilities and one (1) waste management (recycling) site. These notification efforts will continue through FY2009/2010 and will be reported on in the next annual report.

Inspections

The City performed an inspection of all businesses on the City's industrial and commercial inventory (e.g. one industrial facility and 40 commercial facilities). The City considers all of the businesses on the inventory to be a high TTWQ. Appendix 5-C has a summary of all of the inspections conducted during the Reporting Period.

All inspections conducted during FY2008/2009 addressed all of the required inspection steps to determine full compliance by utilizing the City's standard industrial/commercial inspection form.

During implementation of the inspection program, no businesses were found to be in violation of the City's Municipal Stormwater Ordinance, or the requirements of the Permit. Some businesses were given verbal warnings about potential violations, while others were provided with guidance for proper implementation of BMPs.

Under inspection procedures outlined in the 2008 JURMP, facilities may require follow-up inspections if they are found to be in violation of the City's Municipal Stormwater Ordinance for a BMP-related deficiency. Based on the results of the FY2008/2009 Industrial and Commercial Inspections, three (3) follow-up inspections were recommended and will be conducted during the FY2009/2010 reporting period.

Enforcement

The City's enforcement process is to perform a follow-up visit for those businesses found to be out of compliance during inspections. If after the follow-up visit, the business is still out of compliance, the City Code Enforcement is notified and upon a visit, if there is no evidence of compliance, a Notice of Violation (NOV) or citation is issued. Although three (3) businesses were noted as requiring follow-up inspections, during FY2008/2009 no NOVs were issued to businesses as a result of the City's inspection program. As noted above, follow-up inspections for these three (3) facilities will be conducted during the FY2009/2010 Reporting Period.

In addition to inspection follow-ups, the City also receives complaints or initiates investigations based on staff's observations of stormwater violations. After reviewed the facts of the case, the Code Enforcement Officer or Clean Water Manager determines the level of violation (if any) and may issue an NOV and/or administrative citation as appropriate. The City has made it a policy that education is to play a significant role in the enforcement of stormwater regulations. In most cases, a verbal warning is all that is necessary, and compliance is achieved. However, in some instances, further enforcement action is required. At present, the City does not actively track contacts made with local businesses that result in verbal warnings only. However, during FY2008/2009, four (4) investigated incidents involving commercial or industrial operations warranted formal NOV and/or issuance of Administrative Citations by the City. Table 5-1 below provides a detail of enforcement actions taken against commercial or industrial operations.

Table 5-1: Commercial/Industrial Activity Enforcement Action Summary

Case No.	Date	Business	Complaint	Action Taken
Commercial/Industrial Activity - Stationary				
09-018	08/12/2008	Sbicca: An American Bistro	Illegal discharge of wash water and food waste from kitchen	Repeat violation. Written Warning and NOV issued. Owner met with staff to discuss remedy. Administrative Citation and fine issued $200.00.
09-234	9/5/2008	Poseidon Restaurant	Illegal discharge of wash water and food waste from enclosed wash racks. Failure of BMPs.	First violation. Written Warning and NOV issued. Owner and Executive Chef met with staff to discuss remedy, modifications made to facility and process.
09-013	9/6/2008	En Fuego Restaurant	Power wash of Patio and walkways no BMP or reclamation	Second violation within 1 year. NOV/Citation issued with fine of $200.00.
08-172	12/31/2008	Avenue Montaigne Investments	Power wash of Patio and walkways no BMP or reclamation	First violation. Written Warning and NOV issued.

5.3 Mobile Sources Element

5.3.1 Background

This section focuses on mobile business sources; those defined as businesses not having a stationary business location and their business activities are conducted at various locations throughout the City or in some cases, the region. Due to the nature of their activities, mobile businesses are regulated differently than other businesses.

5.3.2 Source Characterization

An inventory of known mobile businesses within the City's jurisdiction has been updated for FY2009 and is included as Appendix 5-D. This inventory is based on the City's business license list, and is updated on a regular basis. The current inventory lists over 590 mobile businesses operating within the City of Del Mar and, all are presently considered high TTWQ facilities. During FY2009/2010, the City will be reviewing this inventory to refine the prioritization of these mobile businesses and address education and outreach opportunities for these mobile sources.

5.3.3 Best Management Practice Requirements

During the Reporting Period, the City did not make changes to its BMP requirements for the mobile businesses. The most important BMPs for most mobile businesses typically involve non-stormwater discharge control, and spill prevention, control, and cleanup.

BMPs for all mobile businesses were required to be implemented in accordance with the 2008 JURMP and the Del Mar Municipal Code.

5.3.4 Program Implementation

During the FY2008/2009 Reporting Period, the City continued to provide notification to owners/operators of mobile business of the BMP requirements applicable to their businesses. New mobile businesses registering with the City for business licenses are required to meet briefly with the Clean Water Manager to discuss the BMP requirements for their businesses. During the Reporting Period, the Clean Water Manager met with 3 new mobile businesses owners/operators. During the FY2009-2010 Reporting Period, these practices will be expanded through the development of additional educational materials for mobile businesses. In addition, the City plans to conduct additional targeted

outreach to licensed mobile businesses regarding BMP implementation for catering, power washing operations, and mobile auto detailing operations during FY2009/2010.

Enforcement

During the FY2008/2009 Reporting Period, the City investigated no public complaints involving mobile businesses. However, during routine patrols of the City by enforcement staff, nine (9) mobile businesses were identified operating without appropriate BMPs and/or causing illegal discharge. Table 5-2 below includes enforcement actions for stormwater violations which were taken against mobile businesses during the FY2008/2009 Reporting Period. Please note: Enforcement actions against mobile businesses related to construction operations, including concrete operations, and delivery of goods and materials, are included in Section 3.5.3 above (Construction Component), and are not duplicated here.

Table 5-2: Mobile Business Enforcement Action Summary

Case No.	Date	Business	Complaint	Action Taken
09-238	8/26/2008	Sō-Cal Mobile Auto Detail– 2120 Jimmy Durante Blvd.	Mobile detailing operation conducting business with no BMPs in place. Limited water use, and no discharge noted.	First offense. Written Warning and NOV issued to contractor. Contractor cleaned up site immediately.
09-239	9/16/2008	Torrey Pines Landscape Co., Inc. – 709 Stratford Ct.	Power washing operations with no BMPs or water capture. Erodible soils exposed, no BMPs.	First offense. Verbal warning issued to English speaker on-site, with direction stop work until BMPs installed.
08-177	09/21/2008	Residential Landscape Contractor– 1407 Luneta	Landscaper identified using hose to wash down driveway and walk ways	First offense. Written Warning and NOV issued to property owner.
08-176	09/24/2008	Residential Landscape Contractor– 152 27th Street	Landscaper identified using hose to wash down walk ways	First offense. Written Warning and NOV issued to property owner.
08-175	09/24/2008	Residential Landscape Contractor – 160 27th Street	Landscaper identified using hose to wash down walk ways	First offense. Written Warning and NOV issued to property owner.
08-178	9/26/2008	Independent Contractors – 639 Stratford Court	Contractors power washing walkways with no reclamation or BMPs in place.	First offense. Contractor warned verbally, with written Warning and NOV issued to owners and contractor.
09-240	12/04/2008	Schmuckle Painting– 2704 Ocean Front	Contractor BMPs and Reclamation Unit Failure during power washing operation.	Onsite contractors contacted, immediately ceased operations and restored BMPs. Discharge reclaimed with wet vacuum. No discharge to waterway occurred. Written warning sent to owner.
09-032	12/10/2008	Residential Landscape Contractor – 1219 Stratford Court	Landscaper identified using hose to wash down walk ways	First offense. Contractor warned verbally, with written Warning and NOV issued to property owner.
09-241	3/10/2009	Pacific Coast Kwik Dry Carpet Cleaners - Del Mar Woods 269 Stratford Court	Direct Discharge to MS4 of Line Prime Water (Tap).	First offense. Contractor warned verbally, and instructed on BMP use. Written follow-up issued.

Appendix 5-A
FY2008/2009 Industrial and Commercial Facility Inventory for the City of Del Mar

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Del Mar Stationary Commercial and Industrial Facilities

Facility Name	Address Number	Street Name	Zip Code	Hydrologic Area	SIC Code	Industrial/ Commercial	Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	Threat to water quality	Industrial Permit	APN	GIS Mapping	
								Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash						
Americana	1454	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-04	117.260478	32.959406
Animal And Bird Hosp Of Del Mar (Freeflight)	2132	Jimmy Durante Blvd.	92014	905.11	0742	Commercial	Animal and Bird Specialty Services	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	299-100-29	117.264064	32.970172
Board & Brew	1212	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-074-07	117.264631	32.956778
Bruegger's Bagels	1435	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-82	117.264856	32.959483
Bully's North	1404	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-24	117.265322	32.958647
Café Del Mar - to be reopened as Wooden Nickel	1247	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-075-01	117.264242	32.957442
Café Secret	1140	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-092-06	117.264367	32.956122
Chinese Double Happiness	1011	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-410-29	117.263067	32.954683
Crepes & Corks Café	1328	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-17	117.265053	32.957989
Del Mar Automotive Services	2201	San Dieguito Dr.	92014	905.11	7538	Commercial	Automotive Services		Yes	Yes		Yes			Yes	Yes	No	Yes	No	299-100-34	117.261772	32.969722
Del Mar Farmer's Market	1050	Camino del Mar	92014	905.11	5411	Commercial	Grocery Store	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-092-03	117.264156	32.955047
Del Mar German Car Service	155	Carmel Valley Rd.	92014	906.10	7538	Commercial	Automotive Services		Yes	Yes		Yes			Yes	Yes	Yes	Yes	No	301-032-11	117.259189	32.939311
Del Mar Koi	1101	Camino del Mar	92014	905.11	5999	Commercial	Animal and Bird Specialty Services	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	300-401-10	117.263542	32.955672
Del Mar Liquor & Deli	1149	Camino del Mar	92014	905.11	5812	Commercial	Grocery Store/Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-400-28	117.263989	32.956333
Del Mar Pizza, Inc.	211	15th Street	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-30	117.266017	32.959453
Del Mar Plaza	1555	Camino del Mar	92014	905.11	7389	Commercial	Shopping Center	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No		117.265078	32.960489
Del Mar Rendezvous	1555	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
Del Mar Snack Shack	1670	Coast Blvd.	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	299-230-29	117.268125	32.962039
En Fuego, Cantina & Grill	1342	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-20	117.265169	32.958272
Eucalyptus Stoneware	2201	San Dieguito Dr.	92014	905.11	3269	Industrial	Pottery Manufacturing			Yes			Yes		Yes	Yes	No	Yes	Yes		117.261978	32.969992
Harvest Ranch Market	1555	Camino del Mar	92014	905.11	5431	Commercial	Grocery Store	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
Il Fornaio Cucina Italiana	1555	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
Jake's Del Mar	1660	Coast Blvd.	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	299-230-03	117.268172	32.961903
Java Kai - Now Rumi Café	1555	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.264747	32.960478
Jimmy O's	225	15th Street	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	299-091-04	117.265789	32.959494
Kitchen 1540	1540	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	299-310-09	117.265908	32.960325
Matsugawa	1101	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-401-10	117.263542	32.955672
Osteria Pescatore Inc.	1201	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-075-06	117.263911	32.956878
Pacifica Del Mar / Pacifica Breeze	1555	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
Rose Towing, Inc.	2201	San Dieguito Dr.	92014	905.11	7549	Commercial	Automotive Services		Yes	Yes		Yes			Yes	Yes	No	Yes	No	299-100-34	117.261772	32.969722
Sbicca American Bistro	215	15th Street	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-02	117.265839	32.959194
Seagrove Parking	1601	Coast Blvd.	92014	905.11	7521	Commercial	Automotive Services		Yes	Yes		Yes			Yes	Yes	No	Yes	No	299-230-10	117.267231	32.961722
Shimbashi Izakaya-Seasonal Japanese Tapas & Sake Bar	1555	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
Starbucks Coffee #526	1435	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-82	117.264856	32.959483
Sunset Parking Services, LLC	1555	Camino del Mar	92014	905.11	7521	Commercial	Automotive Services		Yes	Yes		Yes			Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
The Brigantine	3263	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	298-241-08	117.268814	32.979389
The Curry Comb	1210	Camino del Mar	92014	905.11	5812	Commercial	Animal and Bird Specialty Services	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-074-06	117.264356	32.956808
The Poseiden Restaurant	1670	Coast Blvd.	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	299-230-29	117.018125	32.962039
The Stratford Court Café	1307	Stratford Ct.	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-12	117.265339	32.957558
Waste Management Recycling	2201	San Dieguito Dr.	92014	905.11	5093	Commercial	Waste Removal		Yes	Yes					Yes	Yes	No	Yes	No	299-100-34	117.261939	32.969942
Yogo Yogurt	1231	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-075-04	117.264306	32.957186

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Appendix 5-B
Copies of Email Correspondence between Regional Board Staff and the City of Del Mar regarding 22nd District Agricultural Association Operations

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Joseph DeStefano

From: Peter Peuron [PPeuron waterboards.ca.gov]
Sent: Friday, April 10, 2009 9:03 AM
To: Joseph DeStefano
Subject: RE: Del Mar Fairgrounds

Joe,

Yes, that is correct. This is why many of our enforcement actions (e.g., NOVs and ACLs) are against school districts and other state districts (because we are the only ones regulating them, at least where storm water is concerned).

Pete

>>> "Joseph DeStefano" <jdestefano@delmar.ca.us> 4/9/2009 4:57 PM >>>
Thank you Pete. A couple of additional questions -- in a similar vein.
Am I correct, then, that State Parks, State Lands Commission, and North County Transit Authority would be in the same position (as State Agencies), and not subject to our regulation? What about School Districts (as Phase II Designees).

Thanks again,

Joe

Joseph M. DeStefano II, MSE, CPP
Clean Water Manager, City of Del Mar
Direct:(858)704-3652
Cell: (858) 336-9139
Fax: (858) 793-7612
jdestefano@delmar.ca.us

-----Original Message-----
From: Peter Peuron [mailto:PPeuron@waterboards.ca.gov]
Sent: Thursday, April 09, 2009 4:46 PM
To: Joseph DeStefano
Subject: Del Mar Fairgrounds

Joe,

Pursuant to your request, I am documenting the Regional Board's assertion that the Del Mar Fairgrounds, as a State Agricultural District and also current applicant for Phase II status under the Small MS4 Permit Program is exempt from regulatory oversight under the City of Del Mar's Municipal Storm Water Program. As I mentioned in our earlier discussion on the phone,the 22nd Agricultural District owns and operates its MS4 and, as a State agency and "nontraditional Small MS4 owner" is directly regulated by the Regional Board instead of being subject to the City of Del Mar's regulatory oversight. We are currently reviewing the District's Storm Water Management Plan and we intend to hold the District to a high standard given the extremely sensitive environment in which the Fairgrounds is located. I have added you to the list of interested parties and we will keep you updated regularly.

Pete Peuron
(858) 637-7137

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Appendix 5-C
Summary of FY2008/2009 Commercial/Industrial Facility Inspections

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Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/15/2009			
Facility Name:	Il Fornaio Cucina Italiana		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Roberto Gerbino			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Grocery store. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/15/2009			
Facility Name:	Del Mar Liquor & Deli		Corrective Actions Required:	No
Address:	1149 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Jamil Gahbara			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Grocery store. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/15/2009			
Facility Name:	Harvest Ranch Market		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Michael & Douray Dallo			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/15/2009			
Facility Name:	Pacifica Del Mar / Pacifica Breeze		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Kipp Downing			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/15/2009			
Facility Name:	Americana		Corrective Actions Required:	No
Address:	1454 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Randy Gruber			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/15/2009			
Facility Name:	Shimbashi Izakaya		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Bob Berry (Shimbashi LLC)			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/15/2009			
Facility Name:	Yogo Yogurt		Corrective Actions Required:	No
Address:	1231 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Lee			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/14/2009			
Facility Name:	Chinese Double Happiness		Corrective Actions Required:	No
Address:	1011 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	De Gou Li			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Automotive repair services. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/14/2009			
Facility Name:	Del Mar Automotive		Corrective Actions Required:	No
Address:	2201 San Dieguito Dr			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Al Phillips			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Automotive repair services. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/14/2009			
Facility Name:	Del Mar German Car Service		Corrective Actions Required:	No
Address:	155 Carmel Valley Rd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Ray Duffy			
Hydrologic Area:	Penasquitos (906.10)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. Violation of storm water ordinance - mop water being dumped into parking lot, which feeds into storm drain system. Owner/operator directed to dispose of mop water in sink only. No follow up inspection necessary.	Enforcement Action:	Verbal
Inspection Date:	5/14/2009			
Facility Name:	Del Mar Pizza, Inc		Corrective Actions Required:	Yes
Address:	211 15th Street			
Business Type:	Commercial		Corrective Action Description:	
			Mop water to be disposed into the sink.	
Contact:	Shaun Arsent, Bob Fleet			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/14/2009			
Facility Name:	Del Mar Rendezvous		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Michael Chang			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Automotive services. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/14/2009			
Facility Name:	Rose Towing		Corrective Actions Required:	No
Address:	2201 San Dieguito Rd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Stacey & Ali Dehbozorgi			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/22/2009			
Facility Name:	The Brigantine		Corrective Actions Required:	No
Address:	3263 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Matt Morton			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Veterinary clinic. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/20/2009			
Facility Name:	Animal & Bird Hospital of Del Mar		Corrective Actions Required:	No
Address:	2132 Jimmy Durante Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Pam Stenebreaker			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/20/2009			
Facility Name:	Bruegger's Bagels		Corrective Actions Required:	No
Address:	1435 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Paul Abelowitz			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/18/2009			
Facility Name:	Bully's North		Corrective Actions Required:	No
Address:	1404 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Shanon Delmonico			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Parking structure. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/20/2009			
Facility Name:	Sunset Parking Services LLC		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Michael Harth			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued for lack of a FOG tank on the premises. Follow up inspection is required and should be performed during the tank installation.	Enforcement Action:	Verbal
Inspection Date:	5/20/2009			
Facility Name:	Sbicca American Bistro		Corrective Actions Required:	Yes
Address:	215 15th Street			
Business Type:	Commercial		Corrective Action Description:	
			Fog tank needs to be installed by program deadline.	
Contact:	Dan Sbicca			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2010
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Pet grooming establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/21/2009			
Facility Name:	The Curry Comb		Corrective Actions Required:	No
Address:	1210 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Cathy Wachter			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/18/2009			
Facility Name:	The Stratford Court Café		Corrective Actions Required:	No
Address:	1307 Stratford Ct			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Gregg & Terry Sonker			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/21/2009			
Facility Name:	Jimmy O's		Corrective Actions Required:	No
Address:	225 15th Street			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Keith Nordling			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/21/2009			
Facility Name:	En Fuego		Corrective Actions Required:	No
Address:	1342 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Wingate			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/18/2009			
Facility Name:	Starbucks Coffee #526		Corrective Actions Required:	No
Address:	1435 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Kira Rigoni			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Marketplace. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/20/2009			
Facility Name:	Del Mar Farmer's Market		Corrective Actions Required:	No
Address:	1050 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Jacqueline Winterer			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/18/2009			
Facility Name:	Jake's Del Mar		Corrective Actions Required:	No
Address:	1660 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Dustin Anselm			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Parking lot. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/18/2009			
Facility Name:	Seagrove Parking		Corrective Actions Required:	No
Address:	1601 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Allen King			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Café Del Mar		Corrective Actions Required:	No
Address:	1247 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Greg Glassman			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Shopping area. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Del Mar Plaza		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Amy Schroeder			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Recycling operations. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	6/3/2009			
Facility Name:	Waste Management Recycling		Corrective Actions Required:	No
Address:	2201 San Dieguito Dr			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Stella Lopez			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/27/2009			
Facility Name:	Crepes & Corks Café		Corrective Actions Required:	No
Address:	1328 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Nicolo & Lana Becucci			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued for lack of secondary containment and overhead cover on grease container. Follow up inspection required once necessary materials have been installed.	Enforcement Action:	Verbal
Inspection Date:	5/27/2009			
Facility Name:	Board & Brew		Corrective Actions Required:	Yes
Address:	1212 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
			Owner will obtain secondary containment and overhead cover from manufacturer and install as appropriate.	
Contact:	Ron, Tom Powers			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2010
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Animal & bird specialty services. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/27/2009			
Facility Name:	Del Mar Koi		Corrective Actions Required:	No
Address:	1101 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Juni Young			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/21/2009			
Facility Name:	Matsugawa		Corrective Actions Required:	No
Address:	1101 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Munhwa Kim			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/22/2009			
Facility Name:	Rumi Café		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	David Dickert			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/27/2009			
Facility Name:	Kitchen 1540		Corrective Actions Required:	No
Address:	1540 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Raul Sandoval			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/27/2009			
Facility Name:	Café Secret		Corrective Actions Required:	No
Address:	1140 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Chris Lakey			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/27/2009			
Facility Name:	Osteria Pescatore Inc.		Corrective Actions Required:	No
Address:	1201 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Jorge A Vasquez Ramirez			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued for lack of secondary containment and cover on recyclable grease container, and for the inability to close lids on trash dumpsters. Follow up inspection is required following corrective actions.	Enforcement Action:	Verbal
Inspection Date:	5/27/2009			
Facility Name:	The Poseidon Restaurant		Corrective Actions Required:	Yes
Address:	1670 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
			Facility will ask Green Leaf to provide grease containment and cover, and will ask Waste Management not to push dumpsters against wall with lids open.	
Contact:	Tom Ranglas			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2010
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2008-09

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/27/2009			
Facility Name:	Del Mar Snack Shack		Corrective Actions Required:	No
Address:	1670 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Tom Ranglas			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Stoneware manufacturer; industrial permit issued in 2002. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	5/27/2009			
Facility Name:	Eucalyptus Stoneware		Corrective Actions Required:	No
Address:	2201 San Dieguito Dr			
Business Type:	Industrial		Corrective Action Description:	
Contact:	Alison Young			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Appendix 5-D
FY2008/2009 Mobile Business Inventory

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FY2008/2009 Mobile Business Inventory

Businesses Operating as of June 30, 2009

Firm Name	Firm Name (Addl)	Business Type Code	Firm Address	Firm City	Firm State	Firm ZIP	Phone Number
La Costa Auto Detailing		Auto Detailing	740 Avenida Codorniz	San Marcos	CA	92069	(760) 944-9500
Black Forest Detail		Auto Detailing	P O Box 675853	Rancho Santa Fe	CA	92067	(858) 558-0244
Black Car Specialized		Auto Detailing	P O Box 102	Del Mar	CA	92014	(858) 603-3863
Kiks Mobile Detailing		Auto Detailing	6992 Torrey Santa Fe Rd	San Diego	CA	92129	(858) 405-5373
Pristine Auto Detailing		Auto Detailing	2426 MANCHESTER AVE	CARDIFF BY THE SEA	CA	92007	
Performance Auto Detail		Auto Detailing	9150 La Larga Vista	Spring Valley	CA	91977	(619) 665-9288
Polished Image Mobile Detailing		Auto Detailing	772 ANNS WY	VISTA	CA	92083	(760) 724-4233
Zimms Detail		Auto Detailing	7546 Gibraltar St A	CARLSBAD	CA	92009	(760) 717-2185
Metro Detailing Specialists		Auto Detailing	8910 University Center Ln P-4	SAN DIEGO	CA	92122	(858) 623-8568
CONNER DETAIL		Auto Detailing	1721 RED BARN RD	ENCINITAS	CA	92024	(760) 522-6034
VISUAL MOBILE DETAILING		Auto Detailing	13644 CATAWBA DR	POWAY	CA	92064	(858) 212-1438
Mark A. Miville dba Executive Detail		Auto Detailing	10607 Birch Bluff Ave.	San Diego	CA	92131	(858) 493-0612
BROADWAY AUTO GLASS		Automotive - Misc.	98 BROADWAY	CHULA VISTA	CA	91910	(619) 426-0187
STRICKLAND BROS CARPET CLEANING		Carpet Cleaning	5504 GALA AVE	SAN DIEGO	CA	92120	(619) 234-1591
Country Carpets		Carpet Cleaning	2201 San Dieguito Dr	Del Mar	CA	92014	(858) 316-6730
CHEF DK CATERING		Catering	2502 NAVARRA DR #221	CARLSBAD	CA	92009	(760) 828-0596
Hospitality Inc.	DBA Picnic People	Catering	9558 Camino Ruiz	San Diego	CA	92126	(619) 586-2121
Continental Catering		Catering	8238 Parkway Dr	La Mesa	CA	91942	(619) 698-3500
Crown Point Catering, Inc.		Catering	4927 Voltaire St	San Diego	CA	92107	(619) 223-1211
Katman Inc. Ba Culinary	Concepts	Catering	8575 Commerce Ave	San Diego	CA	92121	(858) 530-1885
Waters Fine Catering		Catering	1105 W Morena Blvd	San Diego	CA	92110	(619) 276-8803
The French Gourmet, Inc.	Dba: French Gourmet	Catering	960 Turquoise St	San Diego	CA	92109	(858) 488-1725
Feast On This Inc.		Catering	8395 Camino Santa Fe Ste D	San Diego	CA	92121	(858) 597-0740
Ranch Catering, Inc.		Catering	3560 Mount Acadia Blvd	San Diego	CA	92111	(858) 492-9100
Buckboard Catering		Catering	9265 Activity Rd 108	San Diego	CA	92126	(858) 748-1617
Romeo Villarreal Dba Baja Sessions	Catering	Catering	462 W Los Angeles Dr	Vista	CA	92083	(760) 639-6439
Personal Touch Dining		Catering	9888 Waples St	SAN DIEGO	CA	92121	(619) 593-2296
Your Chef Robert		Catering	728 Crest Rd	Del Mar	CA	92014	(858) 837-2736
Rotisserie Affair Catering		Catering	P O Box 927473	San Diego	CA	92192	(858) 578-8891
Four Seasons Foods		Catering	4230 Voltaire Ave	San Diego	CA	92107	(619) 221-0087
Bekker's Catering		Catering	7455 Mission Gorge Road	San Diego	CA	92120	(619) 287-9027
Premier Food Services Management Group, Inc.	DBA Carriage Trade Catering	Catering	7966 Arjons Drive	San Diego	CA	92126	(858) 621-5151
Martino's Catering		Catering	4140 Morena Blvd #A	San Diego	CA	92117	(858) 490-9005
Peartrees Catering, Inc.		Catering	2243 Venus St	San Diego	CA	92154	(619) 575-5500
The Abbey Catering		Catering	3361 Sandrock Rd.	San Diego	CA	92103	(619) 218-1970
David Tepper	dba Affordable Affairs Catering	Catering	2940 Lincoln Ave.	San Diego	CA	92104	(619) 282-1064
Catering by Barry Layne, Inc.	dba Coast Catering	Catering	3732 Gum Tree Glen	Escondido	CA	92025	(760) 212-7780
GCIUFFA, Inc.	dba Giuseppe Restaurants & fine Catering	Catering	700 Prospect	La Jolla	CA	92037	(858) 581-2205
Phil's B.B.Q.		Catering	3750 Sports Arena Blvd	San Diego	CA	92110	(619) 814-0050
Plaster Playhouse Dba Elijah's Restaurant		Catering	8861 Villa La Jolla Dr.	San Diego	CA	92037	(858) 955-1461
Impressions Culinary Art At Its Finest""		Catering	3430 Lake Circle Dr.	FALLBROOK	CA	92028	(858) 342-3366
SLICE OF HEAVEN CATERING		Catering	3830 OCEANIC DRIVE STE 411	OCEANSIDE	CA	92056	(760) 721-1054
SAMMY'S WOODFIRED PIZZA		Catering	12925 EL CAMINO REAL	SAN DIEGO	CA	92130	(858) 456-8018
EVENTS BY CHRISTOPHER	CHRISTOPHER DURST PRODUCTIONS, LLC	Catering	1574 CAMINITO SOLIDAGO	LA JOLLA	CA	92037	(858) 454-2267
Stir Fresh		Catering	17120 Bernardo Center Dr	SAN DIEGO	CA	92128	(858) 385-0020
ChileCo Catering		Catering	735 E Mission Rd	SAN MARCOS	CA	92069	(760) 670-4502
Cafe Merlot Custom Catering		Catering	13330 Paseo del Verano	SAN DIEGO	CA	92128	(858) 592-7785
Elegant Events Catering Co		Catering	7516 Mesa College Dr	SAN DIEGO	CA	92111	(858) 278-5691
Lady Di's Elegant Events		Catering	3231 Petunia Ct	SAN DIEGO	CA	92117	(619) 370-6374
Chiefs Kitchen		Catering	298 W 5th St	WESTMORLAND	CA	92281	(760) 256-5903
Paella Valenciana		Catering	14471 Yazoo St	SAN DIEGO	CA	92129	(858) 672-2243
Infused Food Inc		Catering	521 Mar Vista Dr	SOLANA BEACH	CA	92075	(858) 829-1789
The Wild Thyme Company		Catering	7163 Construction Ct Ste B	SAN DIEGO	CA	92121	(858) 527-0226
Holcomb Enterprises Inc	DBA KI's Resturant	Catering	2591 S Coast Hwy 101	CARDIFF BY THE SEA	CA	92007	(760) 436-5236
Bar Works Catering		Catering	8504 Commerce Ave	SAN DIEGO	CA	92121	(858) 566-6077

FY2008/2009 Mobile Business Inventory

Businesses Operating as of June 30, 2009

Firm Name	Firm Name (Addl)	Business Type Code	Firm Address	Firm City	Firm State	Firm ZIP	Phone Number
Chefaxel, Inc.		Catering	7097 University Ave	LA MESA	CA	91941	(619) 421-8844
STEPHANIE EMERSON CATERING		Catering	144 S ORANGE	EL CAJON	CA	92020	(619) 218-3658
EPIC CATERING		Catering	4942 CAPE MAY AVE	SAN DIEGO	CA	92107	(619) 223-8200
DECIDEDLY BETTER, LLC.		Catering	3645 28TH ST	SAN DIEGO	CA	92104	(619) 299-0889
CAFE CATERING		Catering	960 RANCHEROS DR # A	SAN MARCOS	CA	92069	(760) 745-9700
CATERING BY FELICIA G.		Catering	13790 ROSTRATA AVE	POWAY	CA	92064	(619) 742-4747
CREATIVE FOOD & BEVERAGE		Catering	240 DAHLIA AVE	IMPERIAL BEACH	CA	91932	(619) 647-4199
SAN DIEGO CATERING CONCEPTS		Catering	570 MARINA PKWY	CHULA VISTA	CA	91910	(619) 223-1722
PACIFIC WEST CATERING		Catering	841 EUGENIE AVE	ENCINITAS	CA	92024	(760) 846-0913
MAISON LLC		Catering	716 S LOS ANGELES ST #404	LOS ANGELES	CA	90014	(213) 612-0181
METRO CATERING		Catering	6625 TOP GUN ST #9	SAN DIEGO	CA	92121	(858) 626-2800
C. PARK INC		Catering	6835 FLANDERS DR STE 200	SAN DIEGO	CA	92121	(858) 558-7618
BAR NONE BARBEQUE, INC		Catering	7401 PRINCESS VIEW DR STE E	SAN DIEGO	CA	92120	(619) 285-0801
YAPOS HOME CATERING		Catering	4783 JUTLAND DR	SAN DIEGO	CA	92117	(858) 581-0518
AMIR'S CATERING & EVENT PLANNING		Catering	2565 ABEDUL ST	CARLSBAD	CA	92009	(760) 929-0707
MONSOON INVESTMENTS	DBA BOMBAY	Catering	3960 5TH AVE	SAN DIEGO	CA	92103	(619) 297-7777
ROLLING WHEEL RESTAURANT INC.	DBA WAGON WHEEL	Catering	427 W MISSION AVE	ESCONDIDO	CA	92025	(760) 745-3227
CHEF DAVE SIMMONS		Catering	1179 LAKE BERRYESSA ST	HENDERSON	NV	89002	(702) 489-2201
TERRA RESTAURANT & CATERING		Catering	1270 CLEVELAND AVE STE K	DEL MAR	CA	92014	(619) 293-7088
LA TAQUIZA		Catering	1413-B JAYKEN WAY	CHULA VISTA	CA	91911	(619) 426-7368
EL COMAL ANTOJITOS BAR & GRILL		Catering	3946 ILLINOIS ST	SAN DIEGO	CA	92104	(619) 294-8292
TACOS EL GORDO DE TIJUANA BC, INC.		Catering	1351 THIRD AVE	CHULA VISTA	CA	91911	(619) 424-7465
Stratton Specialty Coatings		Coatings	5280 Riley Street	San Diego	CA	92110	(619) 294-2600
Mountain Valley Waterproofing		Coatings	10054 Mesa Ridge Ct. #102	San Diego	CA	92121	(858) 643-9001
SOUTH COAST WATERPROOFING		Coatings	7966 ARJONS DR STE C	SAN DIEGO	CA	92126	(858) 673-7267
Saddleback Waterproofing		Coatings	22521 Avenida Empresa # 125	RANCHO SANTA MARGARITA	CA	92688	(949) 589-3422
Goodwin Construction Inc		Contractors	12985 Caminito Pt	Del Mar	CA	92014	(619) 755-3522
G.f. Whillock Grading		Contractors	1298 Distribution Way Vista	Vista	CA	92083	(760) 599-6800
H.G. Smith Lumber Co., Inc.		Contractors	6144 Federal Blvd	San Diego	CA	92114	(619) 263-3131
James Chambers Construction		Contractors	208 Barbara Ave	Solana Beach	CA	92075	(858) 806-2039
Tekton Master Builders		Contractors	1010 So. Coast Hwy. 101 Suite 108 Bldg.A	Encinitas	CA	92024	(760) 436-3333
Mike Lloyd Excavating Inc.		Contractors	626 Lower Springs Rd	Fallbrook	CA	92028	(760) 728-8661
ARMSTRONG WOODWORKING		Contractors	14263 TYLER RD	VALLEY CENTER	CA	92082	(760) 297-2186
TEST AMERICA DRILLING CORP.		Contractors	7888 OTHELLO AVE	SAN DIEGO	CA	92111	(858) 496-9654
DH MAINTENANCE SERVICES		Contractors	2320 BACK NINE ST	OCEANSIDE	CA	92056	(760) 721-0440
SURE-FIT SCREENS & SERVICES LLC		Contractors	130 CALLE DEL PACIFICO	SAN CLEMENTE	CA	92672	(949) 498-9412
Wardell Builders, Inc.		Contractors	649 Valley Ave Ste A	Solana Beach	CA	920752429	(858) 793-4190
Hanson Aggregates Pacific		Contractors	SOUTHWEST, INC. 9229 HARRIS PLANT RD	San Diego	CA	92163	(858) 277-5481
Whillock Contracting Inc		Contractors	346 Front St	El Cajon	CA	92020	(619) 579-0700
R.E. Hughes Construction Inc.		Contractors	1556 Cerro De Orro	Vista	CA	92084	(760) 727-4125
Jensen Drywall & Stucco		Contractors	3714 Lynda Pl	National City	CA	91950	(619) 267-0705
Four By Four Construction		Contractors	1055 Torrey Pines Rd/Ste 201	La Jolla	CA	92037	(858) 456-0610
Sweig General Contracting, Inc		Contractors	5328 Metro St	San Diego	CA	92110	(619) 325-6333
L.d. Richards Co. Builder		Contractors	1701 Grand Ave	Del Mar	CA	92014	(858) 793-2682
Pacifica Contracting, Inc		Contractors	P O Box 90668	San Diego	CA	921692668	(858) 483-9988
B.A. Worthing, Inc		Contractors	P O Box 1041	Carlsbad	CA	92018	(760) 729-3965
Roel Construction Co.		Contractors	3366 Kurtz St	San Diego	CA	92110	(619) 297-4156
DRP Construction		Contractors	1093 Crest Dr	Encinitas	CA	92024	(760) 944-4409
Lalley Construction		Contractors	927 Highland Dr.	Solana Beach	CA	92075	(858) 481-1462
Foshay Electric Co, Inc		Contractors	7676 Engineer Rd	San Diego	CA	92111	(858) 277-7676
Zeis Construction		Contractors	P O Box 226	Solana Beach	CA	92075	(858) 481-8003
Besemer Construction Inc		Contractors	5159 Del Mar Mesa Rd	San Diego	CA	92130	(858) 755-2987
Amg Demolition & Environmental Service		Contractors	1220 Rosecrans St S-523	San Diego	CA	92106	(619) 501-7427
Dana Construction		Contractors	315 First St Ste U #53	Encinitas	CA	92021	(760) 807-3373
Western Foundations & Shoring, Inc.		Contractors	10875 Highway 67	Lakeside	CA	92040	(619) 561-3510

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Firm Name	Firm Name (Addl)	Business Type Code	Firm Address	Firm City	Firm State	Firm ZIP	Phone Number
DBC Construction Inc.		Contractors	6805 Nancy Ridge Dr	San Diego	CA	92121	(858) 450-6990
Robert's General Engineering		Contractors	2855 Progress Pl	Escondido	CA	92029	(760) 746-9935
Ferguson Construction		Contractors	1925 Glasgow	Cardiff	CA	92007	(760) 634-3106
John C. Read Construction Co.		Contractors	2126 Jimmy Durante Blvd	Del Mar	CA	92014	(858) 453-2100
Del Mar Restoration		Contractors	P O Box 2646	Del Mar	CA	92014	(858) 793-3456
Parker Construction		Contractors	3202 Via Arcilla	San Diego	CA	92111	(858) 278-7922
Hammond & Masing Gen Contractors Inc		Contractors	26157 JEFFERSON AVE Ste A	MURRIETA	CA	92562	(858) 536-2440
Richard Thaisz Construction		Contractors	1403 Caminito Septimo	Cardiff	CA	92007	(760) 635-1640
Masco Contractor Services of California, Inc.		Contractors	13000 Kirkham Way Suite 101	Poway	CA	92064	(386) 304-2222
Arrow Pipeline Repair Inc		Contractors	1228 Keystone Wy	VISTA	CA	92081	(760) 476-9388
Steve Maskal Construction		Contractors	29249 Hydrangea St.	Murrieta	CA	92563	(760) 505-0297
Design Builders		Contractors	4092 Wooster Dr.	Oceanside	CA	92056	(760) 726-8564
San Diego Stucco, Inc.		Contractors	625 North Avenue	Vista	CA	92083	(619) 238-0455
John A. Spring dba Spring View Window and Door		Contractors	8733 N Magnolia Ave. #104	Santee	CA	92040	(619) 562-8266
ROBERT BUCK CONSTRUCTION CORP.		Contractors	2620 MALLORCA PL	CARLSBAD	CA	92009	(858) 449-3636
SIMUNEC CONSTRUCTION & DESIGN, INC		Contractors	10208 PROSPECT AVE	SANTEE	CA	92071	(619) 562-6266
UNIVERSAL CONSTRUCTION		Contractors	5745 KEARNY VILLA ROAD	SAN DIEGO	CA	92123	(858) 278-3320
MICHAEL DEMICH CONST	dba RANCHO PACIFIC CONSTRUCT	Contractors	7592 VISTA RANCHO COURT	RANCHO SANTA FE	CA	92067	(619) 972-6106
J & D CONSTRUCTION		Contractors	4782 CAMINITO BORREGO	SAN DIEGO	CA	92130	(858) 449-8603
Baldassari		Contractors	8615 F Via Mallorca	La Jolla	CA	92037	(619) 987-6946
George Mosher		Contractors	5153 Muir Ave	SAN DIEGO	CA	92107	(619) 851-0185
L.C.I. Backhoe Service		Contractors	508 N Cedros Ave	SOLANA BEACH	CA	92075	(858) 243-4637
T-MAR CONSTRUCTION INC	DBA: MARTIN CORPORATION	Contractors	2340 MEYERS AVE	ESCONDIDO	CA	92029	(760) 489-7010
KYNE CONSTRUCTION		Contractors	9215 BRIETTE PL	EL CAJON	CA	92021	(619) 749-2400
Louis Beacham Construction		Contractors	405 Via Del Norte	LA JOLLA	CA	92037	(858) 454-2999
KHF Inc.	DBA U.S. Building & Development	Contractors	243 N Hwy 101 #19	SOLANA BEACH	CA	92075	(858) 350-0710
Partitions & Accessories Co of CA Inc.		Contractors	10320 Camino Santa Fe. Ste G	SAN DIEGO	CA	92121	(858) 597-9551
WILLIS CONTRACTORS		Contractors	19843 MT ISRAEL PL	ESCONDIDO	CA	92029	(760) 741-7118
CREW BUILDERS		Contractors	6191 CORNERSTONE CT # 101	SAN DIEGO	CA	92121	(858) 587-0900
TURNER CONSTRUCTION COMPANY		Contractors	9330 SCRANTON RD STE 300	SAN DIEGO	CA	92121	(858) 320-4040
M.R. CONTRERAS CONSTRUCTION, INC		Contractors	226 LANDIS AVE	CHULA VISTA	CA	91910	(619) 422-4747
LANG HOMES		Contractors	150 BASIL ST	ENCINITAS	CA	92024	(760) 419-5103
NRM BUILDERS		Contractors	200 OLIVE AVE #104	VISTA	CA	92083	(760) 631-2602
KEENA CONSTRUCTION		Contractors	PO BOX 490	POWAY	CA	92074	(858) 576-1364
JUANA CORPORATION	DBA JONDEL	Contractors	9216 ABRAHAM WY STE A	SANTEE	CA	92071	(619) 596-8916
CTM CONTRACTING, INC.		Contractors	1820 HORSEMAN LN	RANCHO SANTA FE	CA	92091	(858) 756-2024
ACUTERRA INC.		Contractors	3525 DEL MAR HEIGHTS RD # 119	SAN DIEGO	CA	92130	(858) 509-1500
DON HUBBARD CONTRACTING		Contractors	1015-A LINDA VISTA DR	SAN MARCOS	CA	92078	(760) 736-3241
WEST COAST UNDERGROUNDING		Contractors	7929 SILVERTON AVE #613	SAN DIEGO	CA	92126	(858) 689-7900
A.R. BARDSLEY CONSTRUCTION		Contractors	PO BOX 512	JAMUL	CA	91935	(619) 669-6593
PORTILLO CONCRETE INC.		Contractors	3528 HARRIS ST	LEMON GROVE	CA	91945	(619) 466-4639
J.M. KEYSTONE, INC		Contractors	2709 VIA ORANGE WY	SPRING VALLEY	CA	91978	(619) 466-9876
NEWest CONSTRUCTION		Contractors	7847 DUNBROOK RD STE C	SAN DIEGO	CA	92126	(858) 537-0774
Marcotte & Hearne Builders, Inc		Contractors	11696 Sorrento Valley Rd # 200	San Diego	CA	92121	(858) 793-4101
RIMA CONSTRUCTION		Contractors	15791 ROCKFIELD BLVD #A	IRVINE	CA	92618	(949) 305-2930
DICK MILLER, INC.		Contractors	930 BOARDWALK STE G	SAN MARCOS	CA	92078	(760) 471-6842
F.J. BRAWLEY CONCRETE INC.		Contractors	1868 NATIONAL AVE	SAN DIEGO	CA	92113	(619) 231-7778
CRS COMPANY		Contractors	1345 CAMINO LINDA DR	SAN MARCOS	CA	92078	(760) 975-9698
SCHILLING CORPORATION		Contractors	697 GREENFIELD DR	EL CAJON	CA	92021	(619) 579-6500
VIEMEISTER CONSTRUCTION		Contractors	1607 TENNIS MATCH WY	ENCINITAS	CA	92024	(858) 204-7684
ASPHALT & CONCRETE SPECIALIST, INC.		Contractors	7200 PONTO DR STE B	CARLSBAD	CA	92011	
LBL CONSTRUCTORS		Contractors	2180 SUMMIT DR	ESCONDIDO	CA	92025	(760) 740-0103
J.W. GROSWITH CUSTOM BUILDING		Contractors	PO BOX 1016	DEL MAR	CA	92014	(858) 481-0740
BELTRAN CONSTRUCTION		Contractors	799 HYGEIA AVE	ENCINITAS	CA	92024	(760) 802-7073
SETH HOENIG		Contractors	2714 MADISON ST	CARLSBAD	CA	92008	(760) 434-9668

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CASS CONSTRUCTION, INC.		Contractors	1100 WAGNER DR	EL CAJON	CA	92020	(619) 590-0929
INTEGRITY CONCRETE		Contractors	540 OPPER ST	ESCONDIDO	CA	92029	(760) 744-4444
FORTNEY & WEYGANDT INC.		Contractors	31269 BRADLEY RD	NORTH OLMSTED	OH	44070	(440) 716-4000
KB CONSTRUCTION		Contractors	23025 ARJO LN	RAMONA	CA	92065	(760) 788-1504
MAILE CONSTRUCTION		Contractors	2348 LA COSTA AVE #216	CARLSBAD	CA	92009	(760) 707-4543
SANDPOINT CONSTRUCTION		Contractors	736 VAN NUYS ST	SAN DIEGO	CA	92109	(858) 488-2661
PETER MADSEN BUILDER, INC.		Contractors	7618 REPOSADO DR	CARLSBAD	CA	92009	(760) 943-9766
THOMAS CONSTRUCTION		Contractors	11835 CARMEL MOUNTAIN RD STE 1304-210	SAN DIEGO	CA	92128	(619) 778-5929
FRANKE CONTRACTING INC.		Contractors	9040 CARROLL WY #8	SAN DIEGO	CA	92121	(858) 689-8799
APEX PACIFIC, INC.		Contractors	8911 COMPLEX DR STE F	SAN DIEGO	CA	92123	(858) 496-0072
IDEAL MECHANICAL CO.		Contractors	8524 ABLETTE	SANTEE	CA	92071	(619) 449-6116
COMMUNITY CONTRACTORS		Contractors	1130 DEVON SHIRE	ENCINITAS	CA	92024	(760) 753-3531
PAUL HOCK	DBA H.C.CO./HOCK CONSTRUCTION CO.	Contractors	1125 CAMINO DEL MAR STE E	DEL MAR	CA	92014	(858) 259-5102
DIG DUG UNDERGROUND, INC.		Contractors	21475 WEBSTER AVE	PERRIS	CA	92570	(951) 242-2202
PDI COATINGS INC.		Contractors	13125 DANIELSON ST. #111	POWAY	CA	92064	(858) 679-0742
TLB CONSTRUCTION		Contractors	30354 TWAIN DR	MENIFEE	CA	92584	(619) 954-6314
PROLA DRILLING		Contractors	700 SECOND ST STE E	ENCINITAS	CA	92024	(760) 815-3621
A.K. STUART CONSTRUCTION		Contractors	1502 VIA RANCHO PARKWAY	ESCONDIDO	CA	92029	(760) 839-5751
DAVID READ FINE CARPENTRY & CONSTRUCTION		Contractors	4715 MURAT PL	SAN DIEGO	CA	92117	(619) 981-1804
HAR-BRO CONSTRUCTION & CONSULTING, INC		Contractors	455 54TH ST STE 101	SAN DIEGO	CA	92114	(619) 398-0200
B.E. KAYLOR RESTORATION, INC		Contractors	4820 MERCURY ST STE D	SAN DIEGO	CA	92111	(858) 974-7787
AMERICAN TECHNOLOGIES INC.		Contractors	8444 MIRALANI DR	SAN DIEGO	CA	92126	(858) 530-2400
Del Mar Fabrication & Welding		Contractors	1745 Olivenhain Rd	Encinitas	CA	92024	(760) 753-2266
R F McKenna Construction		Contractors	507 S Cedros Ave	Solana Beach	CA	92075	(858) 755-2290
Ehmcke Sheet Metal Corp		Contractors	840 W 19th St	National City	CA	91950	(619) 477-6484
Cut 'n Core		Contractors	9194 Chesapeake Dr	San Diego	CA	92123	(619) 560-6627
R T D Construction, Inc.		Contractors	2216 Soto St	San Diego	CA	92107	(619) 225-0240
A & A Glass & Mirror Co.		Contractors	518 Cassou Rd	SAN MARCOS	CA	92069	(760) 489-0307
Abc Construction Co., Inc.		Contractors	3120 National Ave	San Diego	CA	921132597	(619) 239-3428
Robinson Company Contractors		Contractors	8871 Troy St	Spring Valley	CA	91977	(619) 697-6040
Gary's Construction, Inc.		Contractors	2517 Dos Lomas	Fallbrook	CA	92028	(760) 639-4456
J.t. Wimsatt Contracting Co, Inc		Contractors	28064 Avenue Stanford Unit B	Valencia	CA	91355	(661) 775-8090
L & G Cable Construction		Contractors	2776 E Miraloma Ave	Anaheim	CA	92806	(714) 630-6174
Alcal Arcade Contracting, Inc.		Contractors	31164 Huntwood Ave	Hayward	CA	94544	(510) 477-9380
Del Mar Epoxy		Contractors	12950 Carmel Creek Rd #104	SAN DIEGO	CA	92130	
Sutherlin Contracting, Inc.		Contractors	2007 Muira Lane	El Cajon	CA	92019	(619) 588-8895
Del Mar Glazing and Construction		Contractors	2126 Jimmy Durante Blvd. C""	Del Mar	CA	92014	(858) 847-0163
OJ Insulation LP		Contractors	600 S Vicent Ave	azusa	CA	91702	(626) 812-6070
PARADISE CUSTOM POOLS, INC.		Contractors	P O BOX 900454	SAN DIEGO	CA	92190	(619) 286-0009
ADVANCED WATERSCAPE INC		Contractors	P O BOX 70121	SAN DIEGO	CA	92167	(619) 222-6767
Smith Brothers Construction		Contractors	444 South Cedros Ave	SOLANA BEACH	CA	92075	(858) 350-1445
Concrete Contractors Interstate		Contractors	12599 Stotler Ct	POWAY	CA	92064	(858) 679-5550
McBride Door & Hardware Inc		Contractors	13811 DANIELSON ST	POWAY	CA	92064	(858) 842-4480
Sheldon Site Utilities, Inc		Contractors	12255 Kirkham Rd Ste 400	POWAY	CA	92064	(858) 486-8004
Ulitmate Xscapes Pool & Spa		Contractors	301 Santa Helena	SOLANA BEACH	CA	92075	(858) 717-2815
California Sheet Metal Works Inc.		Contractors	1020 Marshall St	EL CAJON	CA	92020	(619) 562-7010
Peter Van Gaale & Sons Construction		Contractors	35375 Briggs Rd	MURRIETA	CA	92563	(951) 677-8112
Ball General Contracting		Contractors	3855 Manchester	ENCINITAS	CA	92024	(760) 634-5548
CLEAN ENERGY CONSTRUCTION		Contractors	2808 OCEAN FRONT RD	DEL MAR	CA	92014	(562) 493-7227
HESS CONTRACTING, INC.		Contractors	1024 PINE DR	EL CAJON	CA	92020	(619) 442-6333
CJ'S INTERIORS, INC.		Contractors	8265 COMMERICAL ST #6	LA MESA	CA	91942	(619) 464-0042
Premier Contracting Group, Inc.		Contractors	25691 Atlantic Oean Dr # B-10	LAKE FOREST	CA	92630	(949) 305-0900
SEQUOIA SOLAR		Contractors	343 S HIGHWAY 101	SOLANA BEACH	CA	92075	(858) 259-7659
DARYL GRIFFIS ACOUSTICS, INC.		Contractors	4958 NAPLES ST	SAN DIEGO	CA	92110	(619) 275-3060
STEVE DUICH, INC.	DBA H&D CONSTRUCTION CO.	Contractors	PO BOX 12859	EL CAJON	CA	92022	(619) 444-6118

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JOHN GRIFFIN CONSTRUCTION		Contractors	244 JASON CT	CORONA	CA	92879	(951) 278-2377
SO CAL CONSTRUCTION & CONSULTING SERVICE INC	DBA SO CAL CCS	Contractors	1030 KNOLL PARK LN	FALLBROOK	CA	92028	(760) 723-8907
ARCHIBALD INC. DBA AFFORDABLE RAIN GUTTERS		Contractors	1402 N MAGNOLIA AVE	EL CAJON	CA	92020	(619) 469-0400
GAMBOA INC.	DBA METRO STEEL	Contractors	10520 KENNY ST	SANTEE	CA	92071	(619) 448-9995
CAM CONTRACTORS, INC.		Contractors	938 S ANDREASEN DR	ESCONDIDO	CA	92029	(760) 796-4085
ADG OVERHEAD DOORS INC.	DBA LOCKOUT GARAGE DOORS	Contractors	7933 SILVERTON AVE #716	SAN DIEGO	CA	92126	(858) 481-3123
FERGUSON BUILDERS INC.		Contractors	14066 SADDLEWOOD DR.	POWAY	CA	92064	(858) 335-2893
NATURAL ENERGY		Contractors	147 S VINEWOOD ST	ESCONDIDO	CA	92029	(760) 743-6400
RICHARDSON CONSTRUCTION		Contractors	1421 DEVIN DRIVE	FALLBROOK	CA	92028	(760) 644-0571
CHARLIE'S TRACTOR SERVICE		Contractors	5656 LA SENCILLA	RANCHO SANTA FE	CA	92067	(760) 753-5804
GUARDIAN WATERPROOFING		Contractors	8622 ARGENT ST #D	SANTEE	CA	92071	(619) 448-3700
COAST SIGN		Contractors	1500 W EMBASSY	ANAHEIM	CA	92802	(714) 520-9144
MARK BELL CONSTRUCTION		Contractors	26637 BRICKENRIDGE	MURRIETA	CA	92563	(858) 442-3378
Del Mar Screens		Contractors	12295 Caminito Mira Del Mar	SAN DIEGO	CA	92130	(858) 356-9994
Redflex Traffic Systems, Inc.		Contractors	23751 N 23rd Ave Ste # 150	Phoenix	AZ	850851854	(480) 998-8431
Wurfl Construction		Contractors	3413 CARLETON ST	SAN DIEGO	CA	92106	(858) 353-9755
MV Coffman Construction		Contractors	1028 C St	Encinitas	CA	92024	(760) 942-1197
Turner Thomas Design Building, Inc.		Contractors	2010 Jimmy Durante 210	Del Mar	CA	92014	(858) 755-1662
Marathon Construction Corporation		Contractors	10108 Riverford Road	Lakeside	CA	92040	(619) 276-4401
Pacific Drilling Co.		Contractors	5220 Anna Ave. Ste A	San Diego	CA	92110	(619) 294-3682
Tom Nelson, General Contractor		Contractors	236 24th St.	Del Mar	CA	92014	(858) 735-6857
Apex Construction		Contractors	29536 Avenida Del Sol	Temecula	CA	92591	(951) 693-1969
Geogrid Retaining Wall Systems, Inc.		Contractors	1295 Distribution Way	Vista	CA	92081	(760) 509-0079
JANKS CONSTRUCTION INC		Contractors	7887 DUNBROOK RD #H	SAN DIEGO	CA	92126	(858) 693-9700
Prowall Drywall, Inc.		Drywall	345 N Market Place	Escondido	CA	92029	(760) 747-8556
Dominguez Drywall		Drywall	566 Hilldale Circle	Vista	CA	92083	(760) 455-3946
SUN COAST DRYWALL		Drywall	4401 TWAIN AVE STE 3	SAN DIEGO	CA	92120	(619) 641-7695
D.W. QUALITY DRYWALL		Drywall	3525 DEL MAR HEIGHTS RD	SAN DIEGO	CA	92130	(858) 259-8750
High Quality Drywall, Inc		Drywall	2078 Montiel Rd	San Marcos	CA	92069	(760) 735-6329
Seaport Electric		Electrical	43185 Corte Almeria	TEMECULA	CA	92592	(951) 302-4500
S.F. Electrical Services, Inc.		Electrical	2337 Catalina Ave	Vista	CA	92084	(760) 724-3666
Ambiance Electric		Electrical	4982 Mt Frissell Dr	San Diego	CA	92117	(858) 268-3558
Barton Electric		Electrical	4089 Helena St	Fallbrook	CA	92028	(760) 723-1651
Lekos Electric Inc.		Electrical	1370 Pioneer Way	El Cajon	CA	92020	(619) 447-7661
Schelect Inc. Dba Schmidt Electric		Electrical	203 S Rancho Santa Fe Rd	Encinitas	CA	92024	(760) 753-3855
Linear Electric Inc.		Electrical	7676 Engineer Rd Ste L	San Diego	CA	92111	(858) 277-5303
Macgray Electric Inc.		Electrical	2718 Waterbury Way	CARLSBAD	CA	92010	(760) 802-0140
Besek Electric		Electrical	525 F St.	Chula Vista	CA	91910	(619) 691-8748
Jamar Electric San Diego Inc.		Electrical	9830 Prospect Ave. Ste. D	Santee	CA	92071	(619) 448-7770
ANDREW ELECTRIC		Electrical	402 ALPINE HEIGHTS RD	ALPINE	CA	91901	(619) 445-8955
PAR ELECTRICAL CONTRACTORS INC		Electrical	2410 AUTO PARKWAY	ESCONDIDO	CA	92029	(760) 291-1192
Prime Electrical Services		Electrical	480 Enterprise St	SAN MARCOS	CA	92078	(760) 471-6634
HARDESTY ELECTRIC		Electrical	11131 CALGARY WY	VALLEY CENTER	CA	92082	(760) 751-1249
A C ELECTRIC CORP.		Electrical	PO BOX 530	POWAY	CA	92074	(858) 748-6973
WEST COAST ELECTRIC SOLUTIONS INC		Electrical	3121 SKIPPER ST	SAN DIEGO	CA	92123	(858) 565-7897
APEX LIGHTING & ELECTRIC INC.		Electrical	1939 FRIENDSHIP DR STE A	EL CAJON	CA	92020	(619) 448-6400
SELECT ELECTRIC		Electrical	1425 PRESIOCA ST	SPRING VALLEY	CA	91977	(619) 460-6060
GALLANT ELECTRIC CO.		Electrical	1735 IVY RD	OCEANSIDE	CA	92054	(760) 722-9016
ELECTRONIC HOMES INC		Electrical	1954 BIENVENIDO LN	ESCONDIDO	CA	92026	(760) 420-9898
ALARMS UNLIMITED/CUSTOM ELECTRONICS		Electrical	4584 PARK BLVD	SAN DIEGO	CA	92116	(619) 297-4500
WALT WEHSENER DBA THINK ELECTRIC		Electrical	5002 SANTA FE ST STE B	SAN DIEGO	CA	92109	(858) 274-1150
COAST LINE ELECTRIC		Electrical	4251 10TH AVE	SAN DIEGO	CA	92103	(858) 456-1753
DOUBLE E ELECTRIC		Electrical	26741 PORTOLA PKWY #672	FOOTHILL RANCH	CA	92610	(949) 830-9473
GA ABELL DBA PRECISION ELECTRIC COMPANY		Electrical	8137 WINTER GARDENS BLVD	LAKESIDE	CA	92040	(619) 390-2991
CUSTOM THEATER SYSTEMS		Electrical	124 LOMAS SANTA FE DR #206	SOLANA BEACH	CA	92075	(858) 509-7900

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AHE, INC. dba AMERICAN HOME ENTERTAINMENT		Electrical	7373 ENGINEER RD #D	SAN DIEGO	CA	92111	(858) 430-1701
DHF INC.	DBA LOW VOLTAGE SYSTEMS	Electrical	12315 Oak Knoll Rd #110	Poway	CA	92064	(858) 699-4379
RANCH & COAST SECURITY, INC.		Electrical	9540 WAPLES ST #D	SAN DIEGO	CA	92121	(858) 657-9100
Swinson Electric		Electrical	4885 Ronson Ct ste L	San Diego	CA	92111	(858) 874-2920
PDM Electric Inc		Electrical	33964 Verbena Ave	MURRIETA	CA	92563	(760) 715-4280
So.Cal.Soil & Testing, Inc		Engineering	6280 Riverdale St	San Diego	CA	921600627	(619) 280-4321
Diamond Environmental		Environmental Services	807 E Mission Rd	San Marcos	CA	92069	(760) 744-7191
Sequoia Environmental		Environmental Services	543 Nantucket Ct	Leucadia	CA	92024	(760) 753-9126
Spanky's Portable Services, Inc.		Environmental Services	555 Enterprise Street	Escondido	CA	92029	(760) 731-5252
Rancho Environmental Services, Inc.		Environmental Services	P O Box 3372	Vista	CA	92085	(760) 726-2405
National Construction Rentals		Equipment Suppliers	15319 Chatsworth St	Mission Hills	CA	91345	(818) 221-6057
American Bobcat & Backhoe Service, Inc.		Equipment Suppliers	1334 Descanso Ave	San Marcos	CA	92069	(619) 520-2042
Marco Crane & Rigging		Equipment Suppliers	10168 Channel Rd	Lakeside	CA	92040	(619) 938-8081
Golden State Fence Company		Fencing	870 N Main St	Riverside	CA	925011016	(909) 788-5620
Tri City Fence Company, Inc.		Fencing	825 W Washington St	Escondido	CA	92029	(760) 233-9890
San Diego Fence Co., Inc.		Fencing	7920 Engineer Rd	San Diego	CA	92111	(858) 279-8442
Area-west Fence Co		Fencing	12566 Vigilante Rd	Lakeside	CA	92040	(619) 561-4900
Frontier Fence Co		Fencing	1314 W Mission Rd	ESCONDIDO	CA	92029	(760) 745-5609
Vinyl Pro Fence		Fencing	8440 Eastgate Ct #233	SAN DIEGO	CA	92121	(800) 605-4029
FRIENDLY FENCE		Fencing	1273 LINDA VISTA DR	SAN MARCOS	CA	92078	(760) 304-4611
A & D Fire Sprinklers Inc.		Fire Sprinklers	11465 Woodside Ave	SANTEE	CA	92071	(619) 448-1962
CITY FIRE EQUIPMENT INC.		Fire Sprinklers	1816 COUNTRY CLUB	ESCONDIDO	CA	92029	(619) 917-3580
MILLENNIUM FIRE PROTECTION CORP		Fire Sprinklers	101 COPPERWOOD WY STE H	OCEANSIDE		92058	(760) 722-2722
J.G. TATE FIRE PRTECTION SYSTEMS, INC		Fire Sprinklers	13691 DANIELSON ST STE C	POWAY	CA	92064	(858) 486-0900
Woodchuck Flooring Inc		Flooring	7166 Convoy Ct	San Diego	CA	92111	(858) 279-4677
CRESCENT FLOORS		Flooring	6841 MIMOSA DR	CARLSBAD	CA	92011	(760) 310-0948
CUSTOM HARDWOOD FLOORS		Flooring	3232 N TWIN OAKS VALLEY RD	SAN MARCOS	CA	92069	(760) 744-6248
SILVER CARPET		Flooring	119 ABERDEEN DR STE 1	CARDIFF BY THE SEA	CA	92007	(760) 632-1770
SERRANO FAMILY FLOORING & DESIGN		Flooring	24116 GOLDEN MIST DR	MURRIETA	CA	92562	(760) 716-6077
CHRISTIAN BROTHERS FLOORING & INTERIORS		Flooring	12086 WOODSIDE AVE	LAKESIDE	CA	92040	(760) 789-6234
Jw Floor Covering, Inc.		Flooring	9881 Carroll Centre Rd	San Diego	CA	92126	(858) 536-8565
Hidalgo Flowers		Florist	29920 Disney Ln	Vista	CA	92084	(760) 940-0414
Angel's Feeds Inc.		Food Service - Delivery	4518 Rowland Ave	El Monte	CA	91731	(818) 442-2680
Coca-Cola Bottling Co Of Sd		Food Service - Delivery	1348 47th St	San Diego	CA	92101	(619) 266-3300
Darling International Inc		Food Service - Delivery	8096 Miramar Rd	San Diego	CA	91926	(619) 566-8600
Alta Dena Certified Dairy Inc.		Food Service - Delivery	17637 E Valley Blvd	City Of Industry	CA	91744	(818) 964-6401
RG BAR SERVICES		Food Service - Delivery	247 RANCHO DR #C	CHULA VISTA	CA	91911	(858) 395-3043
American Fish & Seafood Co.		Food Service - Delivery	625 Kohler St	Los Angeles	CA	90021	(213) 612-0353
Central Meat & Provision Co		Food Service - Delivery	1603 National Ave	San Diego	CA	92113	(619) 239-1391
Farmers Bros. Co.		Food Service - Delivery	20333 S Normandie Ave	Torrance	CA	90502	(610) 787-5200
Leong-kuba Sea Products, Inc.		Food Service - Delivery	6230 Marindustry Dr	San Diego	CA	92121	(858) 693-7561
U. S. Foodservice, Inc.	San Diego Division	Food Service - Delivery	1201 Park Center Dr	Vista	CA	92083	(760) 599-6220
Stremicks Heritage Foods Llc		Food Service - Delivery	2790 Kurtz St	San Diego	CA	92110	(714) 775-5000
Seven-up Bottling Co.		Food Service - Delivery	5770 Morehouse Dr	San Diego	CA	92121	(858) 457-3177
Nestle Waters North America Inc.		Food Service - Delivery	601 Potero Grande	Monterey Park	CA		(203) 531-4100
Circle Foods LLC		Food Service - Delivery	8411 SIEMPRE VIVA RD	SAN DIEGO	CA	92154	(619) 263-8000
DS WATERS OF AMERICA, INC.	DBA SPARKLETTS	Food Service - Delivery	2615 TEMPLE HEIGHTS DR	OCEANSIDE	CA	92056	(770) 933-1400
Challenge Dairy Products, Inc		Food Service - Delivery	3510 Hancock St	San Diego	CA	92101	(619) 297-3541
Pure-flo Water Co		Food Service - Delivery	7737 Mission Gorge Rd	Santee	CA	92071	(619) 596-4111
Davis Framing Inc		Framing	8103 Commercial St	LA MESA	CA	91942	(619) 463-2394
Mike Lloyd Excavating, Inc.		Grading & Demolition	Po Box 1994	FALLBROOK	CA	92088	(760) 728-8661
Dirt Cheap Demolition,Inc.		Grading & Demolition	171 Mace Street Ste A-4	Chula Vista	CA	91911	(619) 426-9598
John Smith Earthworks, Inc.		Grading & Demolition	5216 ANNA AVE	San Diego	CA	92110	(619) 276-0946
Independence Grading & Excavating		Grading & Demolition	329 Festival Dr	OCEANSIDE	CA	92057	(619) 701-2868
ANDERSON DRILLING/SJA INC		Grading & Demolition	10303 CHANNEL ROAD	LAKESIDE	CA	92040	(619) 443-3891

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California Boring, Inc.		Grading & Demolition	770 N Eckhoff St	ORANGE	CA	92868	(714) 456-9650
Pacific Grading & Erosion Control, Inc.		Grading & Demolition	10541 A PROSPECT AVE	SANTEE	CA	92071	(619) 938-3514
H & H DEMOLITION, INC.		Grading & Demolition	2182 EL CAMINO REAL #105	OCEANSIDE	CA	92054	(760) 439-3652
Ronnie's Repair Service		Handymen	9286 Colorama Wy	LAKESIDE	CA	92040	(619) 390-3117
Bela Bartanyi Home and Land Maintenance		Handymen	1321 Stratford Ct	DEL MAR	CA	92014	(858) 259-5782
Gus-Of-All-Trades		Handymen	5019 Biltmore St.	San Diego	CA	92117	(858) 775-0353
Cmc Home Repair		Handymen	33034 Puffin St	Temecula	CA	92592	(951) 694-6044
J & L INSULATION		Insulation Services	10035 MAINE AVE	LAKESIDE	CA	92040	(619) 561-8632
AMERICAN INSULATION, INC.		Insulation Services	8305 MIRALANI DR	SAN DIEGO	CA	92126	(858) 527-0100
SAN GABRIEL INSULATION, INC	DBA USI OF SAN DIEGO	Insulation Services	930 ARMORLITE DR	SAN MARCOS	CA	92069	(760) 736-4115
Trugreen Landcare #6241	A General Partnership	Landscape Service	770 Metcalf St	Escondido	CA	92025	(901) 597-8229
Sutton Tree Service Inc		Landscape Service	2236 S Santa Fe Ave	Vista	CA	92084	(760) 941-3992
ECOSCAPE INDUSTRIES		Landscape Service	13275 BENCHLEY ST	SAN DIEGO	CA	92014	(858) 275-8969
Schnetz Landscape Inc.		Landscape Service	427 Venture St	Escondido	CA	92029	(760) 591-3453
Bradley Landscape Dev. Inc.		Landscape Service	607 N Vulcan Ave Ste B	Encinitas	CA	92024	(760) 436-0554
San Diego Greencare Inc.	dba Western Tree Service	Landscape Service	6549 MISSION GORGE RD # 336	SAN DIEGO	CA	921202306	(619) 421-7119
R.E. Johnson Inc. dba Solana Mar Landscape		Landscape Service	239 N Acacia Ave.	Solana Beach	CA	92075	___
L R DESIGN WORKS		Landscape Service	140 12TH STREET	Del Mar	CA	92014	(858) 531-2724
Aztec Landscaping Inc.		Landscape Service	7980 Lemon Grove Way	Lemon Grove	CA	91945	(619) 464-3303
Green Garden Landscape & Design		Landscape Service	4910 Cass St	San Diego	CA	92109	(858) 483-8802
SHORELINE LANDCARE INC	DBA LANDCARE LOGIC	Landscape Service	8148 RONSON RD STE A	SAN DIEGO	CA	92111	(858) 560-8555
Cesar's Exterior Designs Inc		Landscape Service	PO BOX 124511	SAN DIEGO	CA	92112	(619) 850-4826
Stauffer's Landscape Inc		Landscape Service	411 Business Center Ct	REDLANDS	CA	92373	(909) 798-1391
Gold Crown Landscape		Landscape Service	1245 Morning View Dr 131	ESCONDIDO	CA	92026	(760) 297-0468
Crossman Landscape Inc		Landscape Service	8617 Cuyamaca St	SANTEE	CA	92071	___
Green Leaf Tree Care, Inc		Landscape Service	1011 Dearborn Dr	SAN DIEGO	CA	92154	(619) 575-1332
One Tripp Tree Service Inc		Landscape Service	3880 Begonia St	SAN DIEGO	CA	92121	(858) 571-3710
Fox Direct		Landscape Service	40740 Symphony Park	MURRIETA	CA	92562	(951) 294-0315
SUNRISE LANDSCAPE		Landscape Service	140 7TH ST	DEL MAR	CA	92014	(619) 602-3181
P. VERNON SMITH LANDSCAPING		Landscape Service	5224 JACK PINE CT.	OCEANSIDE	CA	92056	(760) 390-1483
STUMPMASTERS TREE SERVICE		Landscape Service	13826 LITTLE POND RD	VALLEY CENTER	CA	92082	(760) 749-5330
MACARIO CARRASCO LANDSCAPE & MAINTANENCE		Landscape Service	3949 WOOSTER DR	OCEANSIDE	CA	92056	(760) 310-4036
BRIAN CAIN LANSCAPE CO.		Landscape Service	1784 GLIDDEN CT.	SAN DIEGO	CA	92111	(619) 582-0233
SUSAN R. LANDERS		Landscape Service	306 N W. EL NORTE PRKWY # 469	ESCONDIDO	CA	92026	(760) 580-4253
PINNACLE HOLDINGS GROUP INC.	DBA PINNACLE LANDSCAPE COMPANY	Landscape Service	2200 S FAIRVIEW ST	SANTA ANA	CA	92704	(714) 434-7472
PITECO'S LANDSCAPING		Landscape Service	11455 HADAR DR	SAN DIEGO	CA	92126	(858) 831-0273
NORTH CITIES LANDSCAPE MAINTENANCE		Landscape Service	PO BOX 3143	RANCHO SANTA FE	CA	92067	(858) 259-6162
SECRET GARDENS LANDSCAPE		Landscape Service	2683 VIA DE LA VALLE G-703	DEL MAR	CA	92014	(951) 212-0580
GORDEN BENJAMIN ANGUIANO		Landscape Service	471 COLE RANCH RD	ENCINITAS	CA	92024	
HAI LONG INC	DBA JUAN'S TREE SERVICE	Landscape Service	1150 CAMINO DEL MAR #D	DEL MAR	CA	92014	(619) 916-7280
FLORES LANDSCAPE		Landscape Service	3609 GRAND AVE	SAN MARCOS	CA	92078	(760) 271-4676
LAND DOCTOR LANDSCAPING		Landscape Service	3525 DEL MAR HEIGHTS #225	SAN DIEGO	CA	92130	(760) 432-6000
TEGRISCAPE		Landscape Service	1310 PARK HILL LN	ESCONDIDO	CA	92025	(760) 743-8857
TORREY PINES LANDSCAPE CO., INC		Landscape Service	5560 EASTGATE MALL	SAN DIEGO	CA	92121	(858) 454-1433
Chris Coulter Landscape		Landscape Service	P O Box 465	Solana Beach	CA	92075	(760) 942-7547
Davey Tree Surgery		Landscape Service	1500 N Mantua St	Kent	OH	442405193	(925) 443-1723
Green Paradise Company		Landscape Service	910 Camino Del Mar Ste A	Del Mar	CA	92014	(858) 793-1809
Columbine Landscape, Inc.		Landscape Service	2268 Buena Creek Rd	Vista	CA	92084	(760) 598-3600
Tree Of Life Tree Service, Inc.		Landscape Service	4591 Mt La Platta Pl	San Diego	CA	92117	(619) 560-6622
H.a. Casillas Landscape		Landscape Service	3498 Wallace Dr	Bonita	CA	91902	(619) 267-1343
Valleycrest Landscape Maint		Landscape Service	8500 Miramar Pl	San Diego	CA	92121	(858) 458-1900
Holmes Landscape Company		Landscape Service	4616 North Ave	OCEANSIDE	CA	92056	(760) 732-3379
Escondido Landscape Inc	Dba Nature Designs	Landscape Service	116 Hannalei Dr	Vista	CA	92083	(760) 945-4321
Blue Pacific Landscape & Design		Landscape Service	709 Oceanview Ave	Encinitas	CA	92024	(760) 635-3806
Garcia Landscape Services		Landscape Service	10236 Moorpark St	Spring Valley	CA	91978	(619) 670-6746

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Benchmark Landscape Inc		Landscape Service	12575 Stowe Dr	POWAY	CA	92064	(858) 513-7190
LOCKETT ENTERPRISES, INC.	DBA AMERICAN ARBOR TREE SERVICE	Landscape Service	3041 INDUSTRY ST	OCEANSIDE	CA	92054	(760) 754-3166
ARBOR WEST TREE SURGEONS, INC.		Landscape Service	8553 AVENIDA COSTA BLANCA	SAN DIEGO	CA	92154	(619) 661-5001
PRO TREES		Landscape Service	523 VULCAN	ENCINITAS	CA	92024	(760) 753-4800
WATERSEDGE LANDSCAPE, INC.		Landscape Service	4255 RUFFIN RD			92125	(760) 858-1112
Plant-tek, Inc.		Landscape Service	20110-B Elfin Forest Ln	Escondido	CA	92029	(760) 471-6420
Kevin Mills Landscape		Landscape Service	427 Zuni Dr	Del Mar	CA	92014	(858) 755-1331
Andrew Mccracken Tree Service		Landscape Service	11730 Tierra Del Sur	San Diego	CA	92130	(858) 755-7362
Yasuda Landscape, Inc.		Landscape Service	2419 Erie St	San Diego	CA	92110	(619) 276-5280
Randy's Landscaping		Landscape Service	817 Via Barauero	San Marcos	CA	92069	
Mariano's Landscaping		Landscape Service	3231 Madison St Apt B	Carlsbad	CA	92008	(760) 720-2867
Junglescapes, Inc.		Landscape Service	25929 N Centre City Pkwy	Escondido	CA	92026	(760) 747-8733
SOUTH COAST EDIBLE GARDEN DESIGN		Landscape Service	460 CAMINO DEL MAR #6	DEL MAR	CA	92014	(858) 463-6007
RENS MANSORY INC		Masonry	PO BOX 461210	ESCONDIDO	CA	92046	(760) 738-8827
Elston Masonry, Inc.		Masonry	1422 Santa Margarita Dr	Fallbrook	CA	92028	(760) 728-3593
Kevin Vint Masonry & Concrete		Masonry	2201 San Dieguito Dr	Del Mar	CA	92014	(858) 481-7033
Endurance Masonry		Masonry	534 N Cedros Ave	Solana Beach	CA	92075	(760) 801-7203
Ray F. Brookhart Concrete, Inc.		Masonry	2911 State St P	Carlsbad	CA	92008	(760) 434-3082
American Fireplaces, Inc.		Masonry	9938 Mesa Rim Rd	San Diego	CA	92121	(858) 578-4062
R.J.A. Masonry		Masonry	10057 Pebble Beach Dr	Santee	CA	92071	(619) 449-4573
Casper's Concrete Cutting, Inc.	Dba Casper Company	Masonry	3825 Bancroft Dr	Spring Valley	CA	91977	
AST STONE CORPORATION		Masonry	5300 THE GRAND DEL MAR WAY	SAN DIEGO	CA	92102	(619) 401-8871
Prestige Concrete		Masonry	13507 Midland Rd	POWAY	CA	92064	(858) 679-2772
Centex Glazing Inc		Masonry	8260 Commercial St	LA MESA	CA	91942	(619) 644-1981
Paramount Tile Inc		Masonry	2054 Cecilia Cir	CORONA	CA	92881	(951) 736-4570
William J. Olson Masonry		Masonry	1510 Spring Creek Ln.	OCEANSIDE	CA	92057	(760) 518-9184
RAY WHITE CEMENT		Masonry	3108 HIGHWAY 76	FALLBROOK	CA	92028	(760) 728-0170
CASEY'S CONCRETE SERVICE		Masonry	1257 MAPLE AVE	BEAUMONT	CA	92223	(951) 845-4704
CEMENT CUTTING INC.		Masonry	3610 HANCOCK ST	SAN DIEGO	CA	92110	(619) 296-0849
PACIFIC COAST CONCRETE		Masonry	10625 PROSPECT AVE	SANTEE	CA	92071	(619) 938-3811
HARRIS CONCRETE, INC.		Masonry	8265 COMMERICAL ST	LA MESA	CA	91942	(619) 464-0152
The Masonry Group Ca So, Lp		Masonry	8188 Lincoln Ave # 100	Riverside	CA	92504	(951) 509-5300
REEF CONCRETE INC.		Masonry	3646 CHESHIRE AVE	CARLSBAD	CA	92010	(760) 613-3361
WICHERT TILE, INC.		Masonry	1925 ENCINO DR	ESCONDIDO	CA	92025	(760) 703-0947
GSC CONCRETE CONSTRUCTION, INC.		Masonry	1413 W INDUSTRIAL AVE	ESCONDIDO	CA	92029	(760) 739-9177
L&C TILE		Masonry	3465 LAURASHAWN LN	ESCONDIDO	CA	92026	(760) 743-6516
DAVIS STONE INC		Masonry	519 VENTURE ST	ESCONDIDO	CA	92029	(760) 745-7881
Town & Country Tile		Masonry	3684 Via Baldona	OCEANSIDE	CA	92056	(619) 972-8040
CAPO VALLEY FIRESIDE		Masonry	26401 VIA DE ANZA	SAN JUAN CAPISTRANO	CA	92675	(949) 364-5118
RANCHO SANTA FE STONE & GARDEN	DBA SANTA FE WATER GARDENS	Masonry	16081 SAN DIEGUITO RD #G1A	RANCHO SANTA FE	CA	92067	(858) 759-7553
HOURANI CONCRETE		Masonry	5014 E MOUNTAIN VIEW DR	SAN DIEGO	CA	92116	(858) 699-6920
ARIAS WATERPROOFING		Masonry	1133 SWEETWATER LN	SPRING VALLEY	CA	91977	(619) 884-7923
E & J CUSTOM GRANITE INC.		Masonry	795 NORTH AVE # E	VISTA	CA	92083	(760) 940-1633
BROOKWOOD PLASTERING INC.		Masonry	4876 ELSA RD	SAN DIEGO	CA	92120	(619) 520-7828
KIRBY CONCRETE		Masonry	7048 IVY ST	CARLSBAD	CA	92009	(760) 603-1952
CHRISTOPHER AYERS PLASTERING		Masonry	1282 VIA ANGELICA	VISTA	CA	92081	(760) 622-9343
GMG STONE, INC		Masonry	165 DENNY WAY	EL CAJON	CA	92020	(619) 258-6899
ALL SORTS CONCRETE		Masonry	221 MELINDA WAY	OCEANSIDE	CA	92057	
Superior Ready Mix Concrete, L.p.		Masonry	1508 W Mission Rd	Escondido	CA	92029	(760) 745-0556
Wirtz Tile & Stone, Inc.		Masonry	7932 Armour St	SAN DIEGO	CA	92111	(858) 569-3816
FIREPLACES PLUS INC.		Masonry	1833 DIAMOND ST # 101	SAN MARCOS	CA	92078	(760) 752-7789
Shane Masonry & Concrete Inc.		Masonry	10540 Burned Oak Lane	Escondido	CA	92026	(760) 743-0155
Sherwood Mechanical, Inc.		Mechanical	6630 Top Gun St	SAN DIEGO	CA	92121	(858) 679-3000
Thyssen Elevator Corporation		Mechanical	5745 Kearney Villa Rd Ste B	San Diego	CA	92123	(858) 569-9091
SIRIUS MECHANICAL INC		Mechanical	11824 GRAHAM ST	MORENO VALLEY	CA	92557	(951) 640-5098

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Mariner Mechanical		Mechanical	1135 Garnet Ave Ste 13	SAN DIEGO	CA	92109	(858) 483-3568
Sterling Corporate Custom Elevator		Mechanical	340 W 26th St Ste I	NATIONAL CITY	CA	91950	(619) 477-9654
BRIAN COX MECHANINCAL, INC.		Mechanical	12155 KIRKHAM RD	POWAY	CA	92064	(858) 679-5757
COUNTYWIDE MECHANICAL SYSTEMS		Mechanical	9330 STEVENS RD.	SANTEE	CA	92071	(619) 449-9900
Amtech Elevator Services		Mechanical	4837 Mercury St	San Diego	CA	92111	(858) 637-4660
California Custom Lift, Inc.		Mechanical	13802 West St	Garden Grove	CA	92843	(714) 554-1300
Ankeney Bros Painting		Painting	879 Starflower Rd	Encinitas	CA	92024	(760) 944-2930
Chism Brothers Painting		Painting	9235 Chesapeake Dr Ste R	San Diego	CA	92123	(858) 571-0676
K.H. Minton Painting		Painting	2518 Camino Lagarto St	Alpine	CA	91901	(619) 445-8148
ADDED TOUCH PAINT PROFESSIONALS		Painting	3733 CURTIS ST	SAN DIEGO	CA	92106	(619) 886-1229
EXTERIOR RESTORATION SPECIALISTS		Painting	970 W VALLEY PKWY STE #404	ESCONDIDO	CA	92025	(760) 466-1205
NELSON-LYMAN PAINTING, INC.		Painting	659 UNION ST	ENCINITAS	CA	92024	(858) 775-3624
SPECIALIZED PAINTING SERVICES		Painting	2737 WINDMILL VIEW RD	EL CAJON	CA	92020	(619) 258-7234
RUSSELL HANDY PAINTING		Painting	2056 BELRUSH LN	CARDIFF BY THE SEA	CA	92007	(858) 414-8423
SEAN'S PAINTING		Painting	300 CARLSBAD VILLAGE DR STE 108A-257	CARLSBAD	CA	92008	(760) 613-1336
Canseco's Painting		Painting	119 PLIMOUTH DR	Vista	CA	92083	(760) 758-5945
STATEWIDE STRIPES		Paving	7320 MISSION GORGE RD	SAN DIEGO	CA	92120	(858) 560-6887
Pavement Recycling System Inc		Paving	121 N Main St	RIVERSIDE	CA	92501	(951) 682-1091
George W. Weir Asphalt Construction, Inc.		Paving	610 Metcalf	Escondido	CA	92025	(760) 746-0232
Palomar Transit Mix Co.		Paving	849 W Washington Ave	Escondido	CA	92025	(760) 737-3486
D.A.D. Asphalt		Paving	14781 Pomerado Rd #246	POWAY	CA	92064	(858) 748-8988
PALOMAR GRADING & PAVING, INC.		Paving	2150 N CENTER CITY PRKWY STE C	ESCONDIDO	CA	92026	(760) 743-3007
K & G ASPHALT PAVING & SEAL COATING		Paving	204 N CITRUS	VISTA	CA	92083	(800) 237-2970
LUZAICH STRIPING INC.		Paving	14219 OLDE HWY 80	EL CAJON	CA	92021	(619) 443-7755
FULLER PAVING & DEVELOPMENT, INC.		Paving	536-A OLIVE AVE	VISTA	CA	92083	(760) 451-0181
System Paving Inc.		Paving	7925 Silverton Ave Ste 501	San Diego	CA		(949) 263-8300
Sigge Malkvist Inc.	DBA Sigge's Paving	Paving	4540 Kearny Villa Road Suite 202	San Diego	CA	92123	(619) 278-3444
Vulcan Materials Co. - Western Div		Paving	3200 San Fernando Rd	Los Angeles	CA	90065	(213) 258-2777
Antimite Associates, Inc.		Pest Control	1931 Plaza Real	OCEANSIDE	CA	92056	(858) 451-0440
Columbia Pest Control Of San Diego		Pest Control	127 W 9TH STREET	National City	CA	91950	(619) 264-6443
Dewey Pest Control		Pest Control	4623 Desoto St	San Diego	CA	92109	(619) 272-3611
Knott's Pest Control, Inc.		Pest Control	5141 Guild St	La Mesa	CA	91942	(619) 466-0464
Lloyd Pest Control		Pest Control	935 Sherman St	San Diego	CA	92110	(619) 298-9865
Corky's Pest Control, Inc.		Pest Control	909 Rancheros Dr	San Marcos	CA	92069	(760) 432-8801
M.B. OLIVER INC.	DBA AGRICULTURAL PEST CONTROL	Pest Control	9917 MAINE AVE	LAKESIDE	CA	92040	(858) 536-2999
Truly Nolen Of America, Inc.		Pest Control	913 Rancheros Dr	San Marcos	CA	92069	(760) 744-7631
Cartwright Termite & Pest Control Inc		Pest Control	1376 Broadway	El Cajon	CA	92021	(619) 442-9613
Pamper Your Pet		Pet Grooming	6340 Citracado Cir	CARLSBAD	CA	92009	(858) 794-1822
Hilltop Dog Grooming		Pet Grooming	5510 Santa Margarita St	SAN DIEGO	CA	92114	(619) 922-0608
Happy Dogs Inc DBA TLC Dog Care		Pet Grooming	20177 Colina Encantada Wy	ESCONDIDO	CA	92029	(760) 744-6565
DIVINE PET CARE		Pet Grooming	12950 ILENE ST	POWAY	CA	92064	(858) 397-8338
PAWS EXPRESS MOBILE DOG GROOMING		Pet Grooming	1780 S EL CAMINO REAL UNIT C205	ENCINITAS	CA	92024	(760) 707-9779
VET2YOU, INC		Pet Grooming	13546 MANGO DR	DEL MAR	CA	92014	(619) 997-9789
Rchs Dba Doggy Day Care		Pet Grooming	389 Requeza St	Encinitas	CA	92024	(760) 436-3311
Coastal Pet Care		Pet Grooming	930 Via Mil Cumbres # 138	Solana Beach	CA	92075	(760) 715-7951
Sunshine Mobile Dog Grooming		Pet Grooming	3355 Bernardo Ln	ESCONDIDO	CA	92029	(760) 480-6739
MIRSTONE PLASTERING, INC.		Plastering	1374 PRESIOCA ST	SPRING VALLEY	CA	91977	(619) 464-1123
Beach Plumbing Inc		Plumbing and A/C	241 Calle Pintoresco	SAN CLEMENTE	CA	92672	(949) 498-6000
Pipes Plumbing, Inc.		Plumbing and A/C	1145 Law St	San Marcos	CA	92069	(760) 434-3067
Rt Chimney Sweeping		Plumbing and A/C	11376 Camarosa Ct	San Diego	CA	92126	(858) 566-8599
Academy Backflow Service		Plumbing and A/C	P O Box 1528	Lakeside	CA	92010	(619) 561-0991
CLEAN AIR DIAGNOSTICS AND SOLUTIONS		Plumbing and A/C	1546 AVENIDA LA POSTA	ENCINITAS	CA	92024	(760) 277-5262
Ahlee Backflow Service		Plumbing and A/C	905 4th St	El Cajon	CA	92019	(619) 444-7781
S.o.s. Rooter		Plumbing and A/C	3485 Pickwick St	San Diego	CA	92102	(619) 231-6670
Kmp Plumbing		Plumbing and A/C	435 S Cedros Ave	Solana Beach	CA	92075	(858) 259-9300

FY2008/2009 Mobile Business Inventory

Businesses Operating as of June 30, 2009

Firm Name	Firm Name (Addl)	Business Type Code	Firm Address	Firm City	Firm State	Firm ZIP	Phone Number
Hanna Plumbing & Supply Co.		Plumbing and A/C	643 S Santa Fe Ave	Vista	CA	92083	(760) 726-2002
Pacific Backflow Co., Inc.		Plumbing and A/C	1690 Ord Wy	OCEANSIDE	CA	92056	(760) 639-4000
Carpenter's Plumbing Inc.		Plumbing and A/C	722 Suzanne Ln	Escondido	CA	92026	(760) 745-0465
Coastal Plumbing, Inc.		Plumbing and A/C	1228 KEYSTONE WY	VISTA	CA	92081	(760) 720-2991
Dependable Plumbing		Plumbing and A/C	12120 Tech Center Dr Ste A	Poway	CA	92064	(858) 486-5111
My Plumber San Diego Llc		Plumbing and A/C	7150 Convoy Ct	SAN DIEGO	CA	92111	(619) 667-5500
National Air Inc.	Dba Nat'l Air & Energy	Plumbing and A/C	2053 Kurtz St	San Diego	CA	92110	(619) 299-2500
Aaaa Dba Drain Patrol		Plumbing and A/C	7764 Arjons Dr	San Diego	CA	92126	(858) 560-1137
Accurate Comfort Systems Inc.	Action Air Conditioning & Heating	Plumbing and A/C	2750 S Santa Fe Ave	San Marcos	CA	92069	(760) 727-4152
Baer Heating and Air		Plumbing and A/C	13030 S Mountain Dr	LAKESIDE	CA	92040	(619) 328-5900
Bingham Heating & Air		Plumbing and A/C	6387 Nancy Ridge Dr Ste B	SAN DIEGO	CA	92121	(858) 200-0680
BLACK MOUNTAIN PLUMBING, INC.		Plumbing and A/C	9929 HIBERT ST.	SAN DIEGO	CA	92131	(858) 536-4161
DBG PLUMBING, INC.	DBA: DG PLUMBING	Plumbing and A/C	206 GREENFIELD DR STE G	EL CAJON	CA	92020	(619) 447-9497
RASSAC AIR SYSTEMS		Plumbing and A/C	4734 LOWELL AVE	LA CRESCENTA	CA	91214	(818) 957-2970
CUSTOM PLUMBING INNOVATIONS		Plumbing and A/C	1374 S GRADE RD	ALPINE	CA	91901	(619) 937-1564
RAMONA PACIFIC PLUMBING INC		Plumbing and A/C	1171 ASH ST	RAMONA	CA	92065	(760) 518-8889
DM CONCRETE PUMPING INC		Plumbing and A/C	30610 ROLLING HILLS DR	VALLEY CENTER	CA	92082	(760) 749-4200
Beyer Heating & Air Conditioning		Plumbing and A/C	772 Jamacha Rd PMB 348	EL CAJON	CA	92019	(619) 579-1139
A.B. PLUMBING		Plumbing and A/C	239 ESTRELITA DR	VISTA	CA	92084	(760) 715-1165
CAMPBELL ESCONDIDO REFRIG, INC.		Plumbing and A/C	1948 DON LEE PL ST 3	ESCONDIDO	CA	92029	(760) 745-4431
MIKE CARROLL PLUMBING, INC.		Plumbing and A/C	1938 WILLOW RIDGE DR	VISTA	CA	92081	(760) 714-6272
HENDERSON HEATING & AIR CONDITIONING, INC		Plumbing and A/C	3047 DEGEN DR	BONITA	CA	91902	(619) 479-1028
Culligan		Plumbing and A/C	7575 Carroll Rd	San Diego	CA	92121	(760) 729-1171
Duke's Root Control, Inc.		Plumbing and A/C	1020 Hiawatha Blvd. West	Syracuse	NY	13204	(315) 472-4781
California Backflow		Plumbing and A/C	1701 Alta Vista Dr	Vista	CA	92084	(858) 755-2758
Alessio Heating & Air Inc.		Plumbing and A/C	550 W 6th Ave	Escondido	CA	92025	(760) 489-2299
Advanced Backflow Preventer Svc	West End Holdings	Plumbing and A/C	8260 Engineer Rd	San Diego	CA	92111	(858) 573-0842
SOUTHCOAST HEATING AND AIR		Plumbing and A/C	2664 VISTA PACIFICA DR	OCEANSIDE	CA	92056	(760) 941-7000
Anytyme Plumbing, Inc.		Plumbing and A/C	1064 La Mirada Ct	VISTA	CA	92081	
American Residential Services	DBA Rescue Rooter	Plumbing and A/C	9895 Olson Dr 720	San Diego	CA	92121	(858) 642-4745
Major Plumbing Co. Inc.		Plumbing and A/C	1914 Mission Rd	Escondido	CA	92029	(760) 749-7383
Gus Ballas Plumbing, Inc.		Plumbing and A/C	12320 Oak Knoll Road Suite A	Poway	CA	92064	(858) 679-6899
Access Plumbing		Plumbing and A/C	7525 JUAREZ CT # B	CARLSBAD	CA	92009	(858) 755-4213
Plotke Plumbing		Plumbing and A/C	321 La Costa Avenue	Encinitas	CA	92024	(760) 632-0461
Berck's Family Plumbing, Heating & Air		Plumbing and A/C	38415 Innovation Ct Ste E	Murrieta	CA	92563	(877) 423-7257
Quality Rooter and Plumbing, Inc.		Plumbing and A/C	1798 Pepper Villa Dr.	El Cajon	CA	92021	(619) 438-3267
Backflow Services		Plumbing and A/C	9420 Loren Drive	La Mesa	CA	91942	(619) 303-1561
GREGORY D CASO PLUMBING, INC	DBA APEX PLUMBING	Plumbing and A/C	361 ENGEL STREET	ESCONDIDO	CA	92029	(760) 839-0428
Mr. Rooter Plumbing RDS INC		Plumbing and A/C	5605 Kearny Villa Rd	SAN DIEGO	CA	92123	(858) 976-6837
Nu Flow America Inc		Plumbing and A/C	7150 Carroll Rd	SAN DIEGO	CA	92121	(888) 683-5691
T.R. Stevens Construction		Plumbing and A/C	1004 E Walnut # C	FULLERTON	CA	92831	
Rapid Plumbing Inc		Plumbing and A/C	1036 W Taft Ave	ORANGE	CA	92865	(800) 997-2743
Assurance Plumbing		Plumbing and A/C	Po Box 397	CARLSBAD	CA	92018	(760) 433-7646
SO CAL JETTING & PLUMBING		Plumbing and A/C	38368 VIA CALORIN	MURRIETA	CA	92562	(800) 377-9400
ZALLAR PLUMBING, INC.		Plumbing and A/C	10757 OAK CREEK DR	LAKESIDE	CA	92040	(619) 443-1009
J.M. VANDERHAM PLUMBING		Plumbing and A/C	4489 JUTLAND DR	SAN DIEGO	CA	92117	(858) 568-1399
MYRON PLUMBING INC.		Plumbing and A/C	5218 CASTLE HILLS DR	SAN DIEGO	CA	92109	(858) 488-1522
ALMENDARIZ PLUMBING SYSTEMS		Plumbing and A/C	1513 VALLEDA LN	ENCINITAS	CA	92024	(760) 419-4211
COMPLETE BUILDING SOLUTIONS INC		Plumbing and A/C	2458 MELISSA CT	VISTA	CA	92081	(760) 597-4761
Stillman Aire Serv Heating & A/C Inc.		Plumbing and A/C	7200 Ponto Dr. Ste. A	Carlsbad	CA	92011	(760) 431-8266
Affordable Water Heaters		Plumbing and A/C	24663 RAILROAD AVE	SANTA CLARITA	CA	91321	(661) 259-7131
Fast Water Heater, Inc.		Plumbing and A/C	275 N Marshall Ave.	El Cajon	CA	92020	(800) 454-8955
Pool N Spa Center Inc	Dba Pacific Sun Pool	Pool or Spa Care	8550 Production Ave	San Diego	CA	92121	(619) 271-8822
GARDNER POOL COMPANY, INC		Pool or Spa Care	801 GABLE WAY	EL CAJON	CA	92020	(619) 593-8880
Jay's Pool & Spa		Pool or Spa Care	40120 Lucero Dr	TEMECULA	CA	92592	

FY2008/2009 Mobile Business Inventory

Businesses Operating as of June 30, 2009

Firm Name	Firm Name (Addl)	Business Type Code	Firm Address	Firm City	Firm State	Firm ZIP	Phone Number
Mission Pools Of Escondido Inc.		Pool or Spa Care	755 W Grand Ave	Escondido	CA	92025	(760) 743-2605
POOL 1		Pool or Spa Care	1150 SOCORRO CT	SAN DIEGO	CA	92150	(858) 472-2122
NORTH COUNTY POOLS		Pool or Spa Care	19915 FOUNTIAN DEL ESTE	ESCONDIDO	CA	92029	(760) 439-5802
PARAMOUNT POOLS INC		Pool or Spa Care	PO BOX 694	RAMONA	CA	92065	(760) 788-0120
EVT Pool Service		Pool or Spa Care	3850 Elijah Ct #934	San Diego	CA	92130	(858) 792-7103
The Crest Company, Inc	DBA Crest Pools	Pool or Spa Care	1265 Rubenstein Ave	CARDIFF BY THE SEA	CA	92007	(760) 942-5391
William's Window Cleaning Co.		Power Washing/Window Cleaning	2550 E Valley Pkwy 117	Escondido	CA	92027	(760) 484-4081
ADVANCED WINDOW WASHING		Power Washing/Window Cleaning	1611 CALLE COLORADO	VISTA	CA	92084	(760) 630-5773
Keystone Roofing, Inc.		Roofing	2133 Valley Rd	Oceanside	CA	92056	(760) 730-9888
Sylvester Roofing Co., Inc.		Roofing	812 W Washington St	Escondido	CA	92025	(760) 743-0048
Steele Roofing Inc.		Roofing	227 Pawnee Street/ 101	San Marcos	CA	92078	(760) 744-3400
JEREMIAH NOLAN ROOFING		Roofing	3612 36TH ST	SAN DIEGO	CA	92104	(619) 212-6645
CLAIREMONT ROOFING CO, INC.		Roofing	4232 BALBOA AVE STE 16	SAN DIEGO	CA	92117	(858) 483-7345
BLIGH ROOF	DBA BLIGH PACIFIC	Roofing	11043 FOREST PL.	SANTA FE SPRINGS	CA	90670	(562) 944-9753
RC ROOFING		Roofing	132 N EL CAMINO REAL #285	ENCINITAS	CA	92024	(858) 274-8920
GORDON E. COPELAND, INC.	DBA MISSION ROOFING CO	Roofing	443 VENTURE ST	ESCONDIDO	CA	92029	(760) 747-3205
RANCHO SOLAR, INC.		Roofing	13354 TINING DR.	POWAY	CA	92064	(858) 677-6527
CONEX ROOFING COMPANY		Roofing	2011 W BATAVIA ST	ORANGE	CA	92865	(888) 874-6649
SULLIVAN SOLAR POWER		Roofing	7964 ARJONS DR.	SAN DIEGO	CA	92126	(858) 271-7758
COASTAL ROOFING & SHEET METAL		Roofing	5171 SANTA FE ST B	SAN DIEGO	CA	92109	(858) 277-1131
Gold Coast Skylights, Inc.		Roofing	1338 N Melrose Dr. # I	Vista	CA	92083	(760) 758-2864
Schott Roofing Inc.		Roofing	225 E Carmel St 1	San Marcos	CA	92078	(760) 744-6450
Bob Piva Roofing		Roofing	1192 Industrial Ave	Escondido	CA	92029	(760) 745-4700
Secure Roof, Inc.		Roofing	976B Andreasen Dr	Escondido	CA	92029	(760) 546-0254
Knudsen Roofing, Inc.		Roofing	1657 Silvertree Lane	Escondido	CA	92027	(760) 747-1864
J.P. Witherow Roofing Co.		Roofing	1001 Morena Blvd.	San Diego	CA	92110	(619) 297-4701
Martin Roofing Co. Inc.		Roofing	6608 Federal Blvd.	Lemon Grove	CA	91945	(619) 287-6860
RSI ROOFING		Roofing	8285 BUCKHORN ST	SAN DIEGO	CA	92111	(858) 278-7200
Coast Waste Management, Inc.		Solid Waste Haulers	5960 El Camino Real	Carlsbad	CA	920180947	(760) 753-9412
M.w. Reid Welding, Inc.	Dba So. Bay Welding	Welding or Ironwork	781 O'connor St	El Cajon	CA	92020	(619) 401-5880
D & M Shelley's Inc.	DBA D & M Welding	Welding or Ironwork	7952 North Ave	Lemon Grove	CA	91945	(619) 460-1710
SAN DIEGO CONSTRUCTION WELDING		Welding or Ironwork	1167 SWEETWATER LN	SPRING VALLEY	CA	91977	(619) 462-9087
SAN DIEGO WELDING SERVICES		Welding or Ironwork	1815 MAIN ST STE B	SAN DIEGO	CA	92113	(619) 994-6098
MISSION IRON SHOP		Welding or Ironwork	255 S BENT AVE #89	SAN MARCOS	CA	92078	(760) 744-3740
MCLEAN DOOR & TRIM AKA WINDOWS		Windows	9260 ISAAC ST STE E	SANTEE	CA	92071	(619) 596-5416
Werhanowicz Window & Door, Inc.		Windows	40678 E Benton Rd.	Hemet	CA	92544	(951) 767-3025
SOUTHWEST MILLWORK, INC.		Woodwork	7925 DUNBROOK RD STE A & B	SAN DIEGO	CA	92126	(858) 578-4640
COLES CUSTOM CABINETS INC.		Woodworking	750 DESIGN CT # 108	CHULA VISTA	CA	91911	(619) 216-1170
MILL BROTHERS FINE WOODWORKING, INC.		Woodworking	9356 WHEATLANDS RD STE C	SANTEE	CA	92071	(619) 562-6944
TRAVELINE WOODWORKS, INC.		Woodworking	3810 OCEANIC DR STE 207	OCEANSIDE	CA	92056	(760) 757-0200
Dynamic Cabinet Designs		Woodworking	10215 Canoga Ave	Chatsworth	CA	91311	(818) 700-1658
Royal Industries, Inc.	DBA Royal Cabinets	Woodworking	1299 E Phillips Blvd	POMONA	CA	91766	(909) 629-8565

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Section 6
Residential Component

6.1 Introduction

Section 6 of this JURMP Annual Report provides information that the City of Del Mar determined is relevant to the implementation of the Residential Component for this Reporting Period. The program was developed with the intent to reduce residential discharges of pollutants to the MS4 to the maximum extent practical and prevent residential discharges to the MS4 from causing or contributing to an exceedance of water quality standards.

6.2 Source Characterization

Section 8.2 of the 2008 JURMP provided a list of residential areas and activities that were designated as a high threat to water quality (TTWQ). No modifications in Section 8.2 of the 2008 JURMP have been recorded during this Reporting Period.

6.3 Best Management Practice Requirements

Section 8.3 of the 2008 JURMP identifies updated BMP requirements for residential areas and activities, including pollution prevention methods to be encouraged, and provides a list of minimum BMPs that were required to be implemented when high TTWQ residential activities are conducted within the City of Del Mar. No modifications in Section 8.3 of the 2008 JURMP have been recorded during this Reporting Period. During FY2008/2009, the designated BMPs were required to be implemented for residential areas and activities.

6.4 Program Implementation

Section 8.4 of 2008 JURMP described the Residential education including the Regional Education Program and the local educational outreach program prepared by the City which incorporated the strategy and tools used by the City of Del Mar Clean Water Program staff to require and encourage residents to implement the designated minimum BMPs. No modifications in Section 8.4 of the 2008 JURMP have been recorded during this Reporting Period.

The City continues to implement and facilitate proper management and disposal of used oil and household hazardous materials as described in Section 8.4.3 of the 2008 JURMP. During this Reporting Period, the City's contractor, Clean Harbors Environmental Services, continued to provide, curbside pick-up and drop-off of household hazardous waste for City of Del Mar residents. Table 6-1 below provides a summary of the HHW collection for FY2008/2009 as compared to the two previous reporting periods.

Table 6-1: Household Hazardous Waste Program Summary Table

Fiscal Year	Pick-up Service Users	Drop-off Service Users	Total Users	Total Weight of HHW Disposal	Waste Oil Disposal
FY2008/2009	96	16	112	12,542 lbs	6.9 gal*
FY2007/2008	130	34	164	11,698 lbs	50 gal
FY2006/2007	104	31	135	12,845 lbs	ND

** The specific amount of waste oil collected was not tracked by the City's contractors during the FY2008/2009 Reporting Period. This number represents participation by residents in the program, and is based on participation (0.001%) multiplied by the total amount collected (6,884 gal).*

The City of Del Mar also continued collaboration efforts with other Copermittees in the implementation of the Regional Residential Education Program during FY 2008/2009. The City of Del Mar provides funds for the Regional Residential Education Program in collaboration with the other Copermittees primarily through cost-sharing contributions to support the program activities. A complete discussion of the Regional Education Program can be found in the Regional Urban Runoff Management Program, submitted to the Regional Board under separate cover.

6.5 Oversight of Residential Areas and Activities

During FY 2008/2009 the City continued to utilize a combination of residential education, complaint investigation and code enforcement as methods for oversight of residential areas and activities as noted in the 2008 JURMP (Sections 8.3 and 8.4). The City evaluated the methods for oversight of residential areas and activities and deemed it complete and functional. Therefore, no changes were made or have been identified during this reporting period.

6.6 Enforcement Measures for Residential Areas and Activities

This section provides the number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions that were being taken to achieve compliance. Section 8.5 of the 2008 JURMP provides a description of the general process for applying enforcement for residential areas and activities urban runoff related violations. No modifications in Section 8.5 of the 2008 JURMP have been recorded during this Reporting Period.

All reports of alleged illegal discharges are investigated by the City, and appropriate is action taken. As indicated in Section 8.5 of the 2008 JURMP, education plays a significant role in the enforcement of stormwater regulations as it relates to residential activities. During the Reporting Period, 26 calls were received by the Clean Water Manager's Office regarding alleged illegal discharges from residential activities, not related to construction activities. The majority of these calls related to allowable discharges from foundation drains and other residential activities allowed under Section B.2 of the Municipal Permit and allowed under the City's Stormwater Management and Discharge Control Ordinance (Section 11.30 of the Del Mar Municipal Code). However, three (3) of these calls resulted in the issuance of Notices of Violation (NOVs) and Written Warnings to residents as a result of substantial over-irrigation or illegal power washing activities. As part of regular patrols of the City, the City's code enforcement staff identified nine (9) additional discharges which warranted the issuance of a formal Notice of Violation. Two (2) of these incidents resulted in discharges that warranted the issuance of Administration Citations with appropriate fines being levied. The remainder of the calls resulted in no further action after investigation, or a verbal warning issued. Table 6-2 below contains a summary of the residential complaints received, not related to construction operations, during this Reporting Period. Please note: enforcement actions related to Construction Activities in residential areas are documented in Section 3 of this Annual Report and are not duplicated here.

Table 6-2: Residential Area Enforcement Action Summary

Date	Residential Address	Complaint	Action Taken
06/15/2009	212 22nd Street	Residential Discharge: Power washing no reclamation or BMPs in place.	First offense. Resident stopped discharge immediately. Written Warning and NOV issued.
09/16/2009	Villa Cresta Condominiums HOA, 460 Camino Del Mar	Power washing operations with no BMPs or Water Capture – Pool area. Discharge to MS4.	Warning issued to property manager onsite, with direction to install the BMPs, and refrain from additional discharge.
06/10/2009	215 10th Street	Discharge from over-Irrigation	First offense. Discharge stopped immediately. Written Warning and NOV issued.
06/10/2009	403 10th Street	Discharge from over-Irrigation	First offense. Written Warning and NOV issued.
06/10/2009	407 10th Street	Discharge from over-Irrigation	First offense. Written Warning and NOV issued.
06/11/2009	524 Zuni Street	Discharge from over-Irrigation	First offense. Written Warning and NOV issued.
06/15/2009	225 11th Street	Discharge from over-Irrigation	First offense. Written Warning and NOV issued.
11/24/2008	1407 Ocean Front	Resident washing vehicles with no reclamation of water	First offense. Written Warning and NOV issued.
11/12/2008	135 9th Street	Illegal discharge of chlorinated pool water	NOV and Administrative Citation issued for failure to dechlorinate pool water prior to discharge. $100.00 fine issued.
7/15/2008	615 Stratford Court	Resident hosing down drive way, leaving hose to run unattended for more than 1 hour.	NOV and Administrative Citation issued for excessive discharge. $100.00 fine issued.
7/29/2008	1425 Ocean Avenue	Building maintenance crew using hose to wash down walkways	Verbal warning issued, with order to implement BMPs to prevent discharge of sediment into MS4. On return, BMPs had been installed incorrectly. Written Warning and NOV issued to owner and management firm.

6.7 Notable Activities

This section describes the notable activities conducted to manage urban runoff from residential areas and activities by the City. During this Reporting Period the City of Del Mar has begun working on coordinating outreach related to emergency water conservation activities with stormwater requirements. During FY2008/2009, staff from the Del Mar Public Works Department and Clean Water Program began jointly conducting outreach, including public workshops to the residents of Del Mar, to fully inform them of the requirements for water conservation and to prevent discharges, including low-flow or drip irrigation, metering, etc. In addition, during this Reporting Period, the Del Mar City Council established an Ad-Hoc Water Conservation Citizen's Advisory Committee to look at the City's ordinances and policies related to conservation practices City-wide. As part of this work, the Committee will be reviewing issues relating to over-irrigation, which may have a direct impact on the implementation of the Residential Component of the 2008 JURMP. City of Del Mar Water Conservation workshop(s) are scheduled for July 2009, and will be reported on in the next annual report.

6.8 Residential Component Effectiveness Assessment

A complete assessment of the effectiveness of the City's implementation of its 2008 JURMP, including the Residential Component, is included as Chapter 11 of this Annual Report.

6.9 Program Review and Modification

No modifications were made to the Residential Component of the 2008 JURMP during this Reporting Period.

Section 7
Illicit Discharge Detection and Elimination Component

This section of the Annual Report would describe all the notable activities conducted to manage illicit discharges and connections. In accordance with requirements of Addendum No. 2 to Order R9-2007-0001, which was adopted by the Regional Board on September 10, 2008, the City of Del Mar will submit the entire FY2008/2009 Illicit Discharge Detection and Elimination Component and its attachments no later than December 15, 2009.

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Section 8
Education Component

This section provides a description of education efforts conducted by the City for each target community to satisfy the requirements under Section J.3.a.(3)(g) of the Permit.

8.1 Introduction

Section D.5 and J.3.a(g) of the Permit identifies a comprehensive educational program designed to measurably increase awareness within target populations with respect to urban runoff, its impacts on receiving waters, and the rules and regulations under local, State, and federal law. This section will provide any introductory information that the City of Del Mar has determined to be relevant to the implementation of the Education Component (JURMP Section 10) for the FY2008/2009 Reporting Period.

The City of Del Mar's 2008 JURMP outlined a reporting format that varies slightly from standardized regional format. The reason for the difference in the reporting format is the intent for this section to be consistent with the specified order of general and specific education requirements for the various target communities in the Permit. As a built-out coastal community, with extremely limited industrial discharges, the focus of education in the City of Del Mar is on the residential sector, food establishments, construction and re-development, and mobile services. A description of education efforts conducted during the reporting period for each target community is provided below.

8.2 Staff Training Element

This section will describe the education efforts conducted for municipal departments and personnel as required under Permit section J.3.a.(3)(g)iii. Section 10.3 of the 2008 JURMP described content, form and frequency of education efforts that will be conducted with municipal departments and personnel. No modifications in Section 10.3 of the 2008 JURMP have been recorded during this Reporting Period.

During this Reporting Period, the City of Del Mar held two (2) focused training sessions to educated field staff on job-specific stormwater principals and requirements, including the required "pre-wet season" training for construction inspections held for planning and code enforcement staff. 100% of the staff from the Planning and Community Development Department and the Public Works Department (including management) attended these trainings. The Clean Water Manager also arranged for attendance at the California Stormwater Quality Association (CASQA) Quarterly Meeting via Webcast for planners from the Planning and Community Development Department to review issues relating to Low Impact Design and Stormwater Harvesting and Re-use. As an ongoing part of staff training, the Clean Water Manager regularly attended the weekly Planning and Community Service Department Staff Meetings, where he provided feedback on project-specific stormwater issues and gave staff direction on JURMP and SUSMP implementation. In addition, the Clean Water Manager regularly attended the City's bi-weekly Executive Team Meetings to ensure that Departmental and City Management were kept abreast of issues related to program implementation. Lastly, the Clean Water Manager informally met with the City's Park Ranger, Community Service Officer(s), Code Enforcement Officer, and Code Enforcement Technician on a regular basis to provide clarification of stormwater BMP requirements under the Permit and the City's Stormwater Management and Discharge Control Ordinance.

During the Reporting Period, 75% of all field and technical staff, and 100% of all management staff received some training on stormwater topics, including specific focused training on Permit requirements.

In addition, public meetings and forums were utilized to ensure that the elected members of the City Council were educated on specific permit requirements and program elements they would encounter as part of the discretionary review and public hearing processes. Table 8-1, below provides a list of municipal staff trainings conducted during the Reporting Period.

Table 8-1: Staff Education and Training Summary

Date.	How Conducted	Conducted By	Education Topic	Attendees
09/30/2008	Planning and Community Development Staff Training Session	Clean Water Manager	Overview of JURMP Construction Inspection Requirements	Departmental Staff & Line Management
05/15/2009	CASQA Quarterly Workshop Webcast	CASQA	LID: Stormwater Harvesting and Reuse	Planning & Community Development Staff
06/11/2009	Public Works Department Training Session	Clean Water Manager	Overview of JURMP Municipal Requirements, BMPs	Departmental Staff & Line Management
Weekly	Planning and Community Development Weekly Staff Meeting Discussions	Clean Water Manager	Project Specific Stormwater Discussion	Departmental Staff & Management
Bi-Weekly	Executive Meeting Discussions	Clean Water Manager	Misc. Program Issues Relating to Stormwater	Executive and Departmental Management
Ongoing	In-service/Field Training	Clean Water Manager	Stormwater Enforcement Issues	Community Service Officer(s); Park Ranger; Code Enforcement Officer; Code Enforcement Technician

Additional training will be provided during the next Reporting Period to staff from Community Services Department and the City of Del Mar Fire Department to target 100% training for City field staff.

8.3 Educational Outreach Element

This section describes education efforts conducted for each target community by the City of Del Mar. Section 10.4 of the 2008 JURMP described the program which aimed at educating project applicants, developers, contractors, property owners, community planning groups, and other responsible parties. No modifications in Section 10.4 of the 2008 JURMP have been recorded during this Reporting Period.

8.3.1 Media Use in Outreach Activities

The City of Del Mar developed a 12 minute video in April 2008 in an effort to reach and educate a wide audience about the Clean Water Program and regulatory requirements. This video, entitled "The Del Mar Clean Water Program: Keeping the Water Clean for You!" highlights the municipal programs conducted by the City, and provides a complete overview of the Permit elements. The video continues to remain available "on-demand" on the City of Del Mar website (www.delmar.ca.us/cleanwater.htm), and was made into DVD's for distribution to public groups, residents, and schools. In addition, the video has been used for discussions at City Council Meetings and during staff training. During the previous Reporting Period, the Clean Water Video was reviewed more than 150 times via the City's Website. Table 8.3-1 below provides a breakdown by month on the number of times the video was viewed on the City's website during the FY2008/2009 Reporting Period.

Table 8-2: Clean Water Video Webcast Summary

Month	Number of Views
Jul-08	119
Aug-08	15
Sep-08	8
Oct-08	0
Nov-08	0
Dec-08	0
Jan-09	2
Feb-09	6
Mar-09	3
Apr-09	0
May-09	0
Jun-09	1
TOTAL VIEWS	**154**

Another ongoing effort the City conducted to try to reach a wide audience, includes the live broadcast of all public workshops and hearings related to the City's Clean Water Program on Del Mar Television (DMTV). The public workshops and hearings are then replayed the next day in a standard timeslot. DMTV can be viewed on Time Warner Public Access Channel 24 within the 92014 zip code, and reaches approximately 2,000 subscribers in this area. Recently DMTV was made available to North County Time Warner Digital Cable customers, where it can now be viewed through Digital Cable on Time Warner Channel 130, which reaches approximately 65,000 subscribers. In addition, DMTV is streamed live 24 hours per day, 7 days per week on the DMTV website: www.delmartv.com. During FY2008/2009, the 2008 Clean Water Program Workshop held in May 2008 was replayed numerous times to ensure the public was adequately informed about the program and its responsibilities. Table 8-3 below provides a listing of all broadcasts of workshops related to the Clean Water Program.

Table 8-3: FY2008/2009 Public Workshop & Hearing Broadcast Summary

Date	Event Type	Presenter	Topic	Public Involvement Mechanism
7/7/2008	City Council Hearing	Staff	Clean Water Service Charge	Noticed Public Hearing
7/26/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
7/31/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/2/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/3/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum

Date	Event Type	Presenter	Topic	Public Involvement Mechanism
8/6/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/7/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/9/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/10/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/14/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/14/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/16/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/20/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/23/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/25/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
8/30/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
9/1/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
9/3/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
9/6/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
9/10/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
9/13/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
9/15/2008	Replay: Clean Water Workshop (Original Broadcast 5/14/2008)	Clean Water Manager and City Engineer	Overview of Clean Water Program	Rebroadcast of Noticed Public Workshop and Forum
9/22/2008	City Council Hearing	Staff	Jurisdictional Urban Runoff Management Program (JURMP) Annual Report	Noticed Public Hearing

Date	Event Type	Presenter	Topic	Public Involvement Mechanism
9/22/2008	City Council Hearing	Staff	Ordinance Change: Water Conservation and Emergency Water Management	Noticed Public Hearing
9/22/2008	City Council Hearing	Staff	Clean Water Service Charge Mail Ballot Proceeding	Noticed Public Hearing
11/10/2008	City Council Hearing	Staff	Statewide Beach Monitoring Program.	Noticed Public Hearing
11/10/2008	City Council Hearing	Staff	Establishment of an Ad Hoc Water Conservation Citizens' Advisory Committee.	Noticed Public Hearing
11/17/2008	City Council Hearing	Staff	Establishment of an Ad Hoc Water Conservation Citizens' Advisory Committee	Noticed Public Hearing
12/15/2008	City Council Hearing	Staff	2009 Street, Drainage and Water Improvements Project.	Noticed Public Hearing
4/6/2009	City Council Hearing	Staff	Membership and Makeup of the Ad Hoc Water Conservation Citizens' Advisory Committee	Noticed Public Hearing
4/20/2009	City Council Hearing	Staff	Appointments to the Ad Hoc Water Conservation Citizens' Advisory Committee.	Noticed Public Hearing
5/4/2009	City Council Hearing	Staff	Contract with Mikhail Ogawa Engineering to provide as needed inspection services for the Clean Water Program	Noticed Public Hearing
5/20/2009	City Council Hearing	Staff	Overview of Proposed Two Year Budget for Fiscal Years 2009/2010 and 2010/2011	Noticed Public Hearing
5/21/2009	City Council Hearing	Staff	City Budget Workshop (continued), including presentation on Clean Water Program	Noticed Public Hearing
6/8/2009	City Council Hearing	Staff	Grant Application to the California Department of Conservation to Assist with Litter Cleanup and Outreach Activities as Part of the Clean Water Program.	Noticed Public Hearing
6/22/2009	City Council Hearing	Staff	Declaration of Stage 2 – Drought Alert, including implementation of water management measures	Noticed Public Hearing

In addition to the televised and webcast workshops and hearings, DMTV regularly broadcasts public service announcements (PSAs) related to stormwater. Shorter PSAs, including ThinkBlue San Diego PSA's produced by the City of San Diego are aired in-between scheduled programs an average of 2-3 times per day, 365 days per year. Table 8-4 below provides a summary of the PSAs aired during FY2008/2009 on DelMar TV.

Table 8-4: FY2008/2009 Clean Water PSA Summary

Program or PSA	Source	Number of Airings
City of Del Mar's Clean Water Program: Keeping the Water Clean for You!	Del Mar Clean Water Program	40
PSA: Wild, Wild Wet West	Ventura County Stormwater Program	7
PSA: It! Terror from the Stormdrain	Ventura County Stormwater Program	7
PSA: Ventura's Green	Ventura County Stormwater Program	4
PSA: Save It for Me	Ventura County Stormwater Program	16
PSA: Razzle Dazzle	Ventura County Stormwater Program	10
Clean Water Tip and Information Cards	DMTV Community Bulletin Board	Airs daily every 5 minutes between 12pm-3pm & 12am-9am
ThinkBlue San Diego! (Various)	City of San Diego Stormwater Program	Airs daily 2-3 times per day

As an additional education and outreach tool, the City of Del Mar began a media campaign through the local newspaper consisting of articles by the Mayor focusing on the program and the new requirements. These articles began appearing in June 2008. During FY2008/2009, two (2) articles appeared in the Del Mar Times on topics related to the City's Clean Water Program. The first was on August 14, 2009 and focused on the requirements of the Permit and the need for adequate funding. The second appeared on April 9, 2009, and looked at water conservation in general, and discussed ways to prevent water quality impacts while saving water. Both articles appeared in print and on the web.

8.3.2 Additional Educational Outreach by Target Audience

As indicated above, the City of Del Mar made a concerted effort to reach out to the residents and the general public regarding the Clean Water program through media and public workshops. Table 8-5 below provides a summary description of the education efforts conducted to reach target audiences including the general public, residents, school children and commercial and mobile business owners and operators.

Table 8-5: Educational and Outreach Efforts by Target Audience

Date.	Activity	Conducted By	Education Topic	Target Audience
5/3/2009	Outreach Booth: Fiesta de Los Peñasquitos	Staff and Regional Copermittees	General Watershed and Stormwater Information	General Public, Residents, and School-aged Children
6/20/2009	Outreach Booth: San Diego County Fair Flower and Garden Pavilion	Staff and Regional Copermittees	General Watershed and Stormwater Information	General Public, Residents, and School-aged Children
4/19/2009	Outreach Booth: San Dieguito Lagoon Day	Staff and Community Volunteers	General Watershed Information	General Public, Residents, and School-aged Children
May 2009	Outreach as Part of Commercial Inspections	Staff and Consultants	Commercial Specific BMPs and Regulations	"High Risk" Commercial Operators

Date.	Activity	Conducted By	Education Topic	Target Audience
Ongoing	Outreach to Mobile Businesses	Staff	Mobile Business Specific BMPs and Regulations	"High Risk" Commercial Operators – Mobile

8.4 Outreach Component Effectiveness Assessment

A complete assessment of the effectiveness of the City's implementation of its 2008 JURMP, including the Education Component, is included as Chapter 11 of this Annual Report.

8.5 Program Review and Modification

Section 10.11 of 2008 JURMP described proposed or required modifications to the program after each annual assessment of the Education Component's effectiveness. While no specific modifications in Section 10.11 of the 2008 JURMP have been recorded during this Reporting Period, staff has identified several areas for specific education and outreach focus for the upcoming FY2009/2010, based on a review of program activities conducted during this Reporting Period, the extent of which will be dependent on funding and staff availability. Details on the implementation of these items will be discussed in the following Annual Report. Table 8-6 below contains a list of focused education and outreach identified for FY2009/2010.

Table 8-6: Focused Outreach by Target Audience for FY2009/2010

Targeted Audience	Format of Outreach	Education Topic
Community Services Department Staff: Life Guards & Special Events Staff	Staff Training Session/Online Media	Stormwater and Job Related Water Quality Information (JURMP Related)
Commercial Businesses: Mobile Operators	Continued Direct One-on-One Training of City-licensed mobile operators, with distribution of written materials and guidance	JURMP and Focused BMP Requirements for Mobile Businesses
Commercial Business: Restaurants	Public workshops and one-on-one staff training for local restaurateurs in cooperation with Del Mar Village Association (DMVA)	Requirements for Restaurants, including staff training and documentation
Residential Community	Public Workshops and Flyers/Bill Inserts	Water conservation and its effect on water quality pollution (i.e. adjusting irrigation sprays, use of hose to clean impermeable surfaces, etc.)

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Section 9
Public Participation Component

This section of the JURMP Annual Report provides a description of public participation efforts conducted by the City, and the steps that were conducted to include public participation in the implementation of City of Del Mar's JURMP.

9.1 Local Participation Element

During FY2008/2009 the City continued to encourage and provide multiple opportunities for, public participation in all aspects of its Clean Water Program.

9.1.1 General Public Feedback Mechanisms

The City continues to maintain an active website (www.delmar.ca.us) which provides the public with opportunities to contact City staff directly, and find information regarding any of the City's programs. The Clean Water Program has its own webpage that is updated as needed (http://www.delmar.ca.us/Government/dept/Pages/CleanWater.aspx) and allows the public to contact the Clean Water Manager and Code Enforcement Officer to report potential violations of the City's Stormwater Management and Discharge Control Ordinance (Section 11.30 of the Del Mar Municipal Code). The webpage also allows the public to ask questions regarding water use and runoff, and download information on the City's JURMP, and contains links to the Citizen's Complaint Form, the City's various BMP Manuals, the City's Clean Water video, and the Regional Board's website and the Permit itself.

The City also continues to maintain a specific e-mailbox and hotline for reporting issues. This email address (CleanWater@delmar.ca.us) and hotline (858) 755-9313 x172 are directly answered by the City's Clean Water Manager. Every attempt is made to respond to any inquiry by the close of the next business day. When inquiries are made from areas within the 92014 zip code, but outside the City's jurisdiction (i.e. the "Del Mar Heights" portion of the City of San Diego), City of Del Mar staff attempt to respond to the complaint directly, and notify City of San Diego staff for follow-up.

The City continues to provide opportunities for the general public to become involved with the implementation of the JURMP, by working with the community in reducing pollutant discharge through recycling opportunities, eliminating off-site drainage, and other activities aimed at protecting water quality through the reduction of water waste.

9.1.2 Formal Public Hearings and Workshops

The general public is given the opportunity to provide testimony and provide feedback on issues related to the Clean Water Program at regular meetings and workshops held by the Del Mar City Council, the Del Mar Planning Commission, and other City Committees. This can include public testimony on development planning and capital improvement projects relating to the project-specific implementation of stormwater controls. All testimony, concerns, and input are then referred to staff for review, comment, and action as appropriate.

During the FY2008/2009 Reporting Period, the Del Mar City Council held 40 public meetings (including two (2) public workshops) in which the general public was given the opportunity to provide feedback on the Clean Water Program, or any topics they wished to bring before the elected officials of the City. During the Reporting Period, there were sixteen (16) specific agenda items relating to the Clean Water Program and/or the implementation of the JURMP, not including development project-specific items. To

reach the widest audience possible, these hearings and workshops are streamed live over the internet, broadcast live on DelMarTV (Time Warner Cable Channels 19 & 24), replayed in their entirety the day following the hearing on DelMarTV, and available on-demand through the City's website. Table 9-1 below provides a list of the specific City Council Agenda items relating to the Clean Water Program and JURMP for the FY2008/2009 Reporting Period.

Table 9-1: FY2008/2009 Del Mar City Council Agenda Items Relating to the Clean Water Program

Hearing Date	Agenda Item	Subject
7/7/2008	Item 10	Majority protest public hearing regarding a proposed Clean Water Service Charge
9/22/2008	Item 07	Jurisdictional Urban Runoff Management Program (JURMP) Annual Report Submittals to the San Diego Regional Water Quality Control Board.
9/22/2008	Item 17	An Ordinance of the City of Del Mar, California, amending the Del Mar Municipal Code regarding Water Conservation and Emergency Water Management, Sections 21.70.110 through 21.70.140 and deleting Sections 21.70.150 through 21.70.170.
9/22/2008	Item 18	Results of the Clean Water Service Charge Mail Ballot Proceeding for the existing Clean Water Service Charge Rate Structure and the proposed Fiscal Year 2009-2010 Clean Water Service Charge Rate Structure.
11/10/2008	Item 11	Letter to the State Water Resources Control Board in support of restoring the funding for the statewide beach monitoring program.
11/10/2008	Item 13	Establishment of an Ad Hoc Water Conservation Citizens' Advisory Committee.
11/17/2008	Item 07	Resolution establishing an Ad Hoc Water Conservation Citizens' Advisory Committee for the review of the ordinances.
12/15/2008	Item 08	2009 Street, Drainage and Water Improvements Project.
4/6/2009	Item 09	Membership and Makeup of the Ad Hoc Water Conservation Citizens' Advisory Committee
4/20/2009	Item 06	Appointments to the Ad Hoc Water Conservation Citizens' Advisory Committee.
5/4/2009	Item 09	Contract with Mikhail Ogawa Engineering to provide as needed inspection services for the Clean Water Program in a not-to-exceed amount of $6,500.
5/20/2009	Item 02	Overview of Proposed Two Year Budget for Fiscal Years 2009/2010 and 2010/2011
5/21/2009	Item 01	City Budget Workshop (continued), including presentation on Clean Water Program
6/8/2009	Item 09	Grant Application to the California Department of Conservation to Assist with Litter Cleanup and Outreach Activities as Part of the Clean Water Program.
6/22/2009	Item 06	Authorization for the City Manager to negotiate Professional Engineering Services contracts to provide City Engineering and As-Needed Engineering Services.
6/22/2009	Item 17	Declaration of Stage 2 – Drought Alert, including implementation of water management measures

In November 2008, the Del Mar City Council established the Ad-Hoc Citizen's Water Conservation Citizen's Advisory Committee, staffed by the City's Clean Water Manager. The Committee is tasked specifically with the review of the City's ordinances relating to water conservation and landscape planning. This includes reviewing the City's Stormwater Management and Discharge Control Ordinance. The Committee met biweekly, beginning in March 2009, and is actively looking at issues such as resident

education and outreach with regard to overwatering and irrigation runoff, and water conservation techniques which will have a direct impact on urban runoff.

9.1.3 Staff as Feedback Mechanism

As indicated in the 2008 JURMP, the City of Del Mar believes that City Staff are the public at work. More importantly, field staff are the eyes and ears of the City, interacting with the general public during their day-to-day work. Staff is continually encouraged to report violations and provide feedback to the City's Clean Water Manager on the implementation of the JURMP, and can provide valuable information on which systems and programs are working and suggestions on improving the programs. Often, it is field staff that identifies potential issues and/or violations and reports them to the Clean Water Manager, enabling program staff to address it in a prompt manner. During FY 2008/2009 the City continued to utilize and encourage staff feedback and reporting of potential violations.

9.2 Regional Participation Element

The City continues to participate and facilitate public participation through regional workgroups and public outreach such as Project Clean Water, the Regional Management Meetings, and the Regional Stormwater Hotline. Staff from the City utilized the Regional Hotline on at least three (3) separate occasions during this Reporting Period to provide information to the City of San Diego on stormwater runoff in the MS4 system outside of the City of Del Mar's jurisdictional boundaries. In addition, the City regularly refers callers from the "Del Mar Heights" portion of the City of San Diego and other areas within the 92014 zip code, but outside of the City of Del Mar jurisdictional boundaries, to the regional stormwater hotlines. In addition, when City of Del Mar residents use the Regional Stormwater Hotline to report problems or ask questions, City of San Diego and County of San Diego staff manning the hotlines are able to promptly refer the issues to the Clean Water Manager for follow-up.

9.3 Program Review and Modification

No modifications in Section 11 of the 2008 JURMP were recorded during the FY2008/2009 Reporting Period.

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Section 10
Fiscal Analysis Component

Section 12 of 2008 JURMP provided a strategy for effectively conducting a fiscal analysis of the Program in its entirety. The fiscal analysis evaluated in 2008 JURMP included the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities of the Program. No modifications in Section 12 of the 2008 JURMP were made during this Reporting Period. On January 29, 2009, the San Diego Municipal Copermittees produced their final "Standardized Fiscal Method and Format" which will allow the City of Del Mar and the other Copermittees to perform the review and annual reporting as required in Permit Section G starting in January 31, 2010. This section provides a fiscal analysis of the City's urban runoff management programs which meets all requirements of the Permit.

The City of Del Mar Clean Water Program is a multi-departmental program, funded as an enterprise fund in the City's Annual Budget. Enterprise funds account for operations that are financed and operated in a manner similar to private businesses, with the costs of providing the services recovered largely through user fees. Fund 55 (The Clean Water Fund), is one of three (3) enterprise funds in the City's budget, and was added to the City's budget in FY2003/2004 to account for the mandated costs of the City's responsibilities Municipal Permit.

10.1 Clean Water Program Budget

For the FY2008/2009 Reporting Period, the final amended budget for Fund 55 totaled $511,781.00, or approximately 4.5% of the total City of Del Mar budget for General Operations and Maintenance of $11.4 million. Table 10-1 below provides a breakdown of program budget by major budget category for FY2008/2009. Actual program expenditures during FY2008/2009 totaled $441,678.90 for NPDES related-activities. Appendix 10-A contains a complete report of the final adjusted budget and expenditures for FY2008/2009.

The City of Del Mar Operating and Capital Improvement Budgets for FY2009/2010 and FY2010/2011 were presented to the Del Mar City Council in a series of public workshops held in May and June 2009, and was adopted by the City Council at a public hearing held on June 22, 2009. At that time, the Del Mar Clean Water Program budget was adopted as part of the City Manager's Proposed Budget. For FY2009/2010, the adopted budget for the City's Clean Water Program totals $467,258, approximately 4.2% of the total City of Del Mar budget for General Operations and Maintenance of $11.1M. For FY2010/2011, the adopted budget increases slightly to $467,258, approximately 4.2% total City of Del Mar budget for General Operations and Maintenance of $11.0M. Appendix 10-B presents the Final Adopted budgets for FY2009/2010 & FY2010/ 2011, with a line-item breakdown of the budget components.

Table 10-1: Budget Summary – Clean Water Fund 55

Fund Account		Amended Budget FY2008/2009	Adopted Budget FY2009/2010	Description/Comments
55-5220	Clean Water Engineering	$85,500.00	$82,200.00	Engineering contractual services including: Program management (FY2008) water quality testing, development and distribution of educational materials, fees to agencies (FY2008), and engineering services.
55-5530	Clean Water Planning	$37,533.00	$25,623.00	Active enforcement of Clean water regulations including project plan review, permitting, construction monitoring and plan review of BMPs.
55-5536	Clean Water Code Enforcement	$30,984.00	$29,657.00	Active in-field enforcement clean water regulations, including response to resident complaints
55-5539	Clean Water Program Management	$191,242.00	$196,050.00	Beginning mid-year FY2008, all program management and reporting activities, fees to agencies, and interaction with regional Copermittee groups.
55-5840	Public Works (General)	$19,111.00	$16,527.00	Provides for administration and general support for all clean water programs for property and facilities, including supervision of maintenance staff.
55-5841	Flood Control & Drainage	$4,985.00	$4,351.00	Provides for necessary monitoring, water quality testing, and labor associated with program requirements when Flood Control pumps are operated.
55-5845	Street Maintenance	$100,173.00	$81,699.00	Provides for a portion of sidewalk and street cleaning including street sweeping and storm drain maintenance within the City limits of Del Mar. Also covers costs with testing, recording contents, and recovering all deposited materials that otherwise would discharge to the beach, river, or lagoon.
55-5847	Street Landscaping	$19,041.00	$18,207.00	Provides for landscape supervision, documentation, and controls for the Clean Water aspects of the street landscaping for medians, islands, street ends, and other street related areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting.
55-5848	Park Maintenance	$23,212.00	$12,944.00	Provides for park maintenance supervision, documentation, and controls for the Clean Water aspects of the landscaping for parks and open space areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting.
Total Clean Water Program Budget – Fund 55		$439,009.00	$467,258.00	

10.2 Funding Sources

To ensure adequate funding for the Clean Water Program, the City uses a combination of user fees, grant funding, and general fund monies. This section identifies the three (3) sources of funding for the Clean Water Program: (1) The Clean Water Service Charge; (2) City of Del Mar General Fund; and (3) grant monies and community partnerships, and provides a discussion of each of these funding sources.

10.2.1 Clean Water Service Charge

In 2003, the City of Del Mar City Council created and adopted a user fee, called the Clean Water Service Charge, to offset the costs of the program. Initially, the rate was adopted to collect $100,000.00 of the estimated $300,000.00 for the program, with an escalator to achieve full cost recovery by 2009. Mid-way through the five-year schedule, on July 24, 2006, the California Supreme Court published a decision in the case of Bighorn-Desert View Water Agency v. Verjil (2006) 39 Cal. 4th 205, which held that consumption-based rates such as water and sewer rates are subject to the notice and hearing requirements of California Constitution, Article XIIID, Section 6 (commonly known as "Proposition 218"). Therefore, on January 22, 2007 and February 5, 2007, the Del Mar City Council held public hearings to receive written protests to comply with Proposition 218. No majority protest was received; and the Council ratified the previously approved five-year rate schedule, including the City's Clean Water Service Charge. However, the adopted rate increases did not account for the actual increases in the costs associated program requirements.

As an additional measure to obtain voter approval of the five-year rate schedule for the City's Clean Water Service Charge, the Council directed staff on April 2, 2007 to start the process to perform a mail ballot election procedure. During the process of researching the mail ballot election procedures and the current rates, it became apparent that the process would immediately need to be repeated to set the Fiscal Year 2009-2010 rates and charges, since the current five-year rate schedule was due to expire in June of 2009. Due to the additional costs incurred in complying with the new requirements of the 2007 Permit, increases to the Clean Water Service Charge were proposed, including an annual 5% rate escalator.

All monies appropriated as part of the Clean Water Service Charge are directly identified for the Clean Water Program, and pursuant to Del Mar Municipal Code, may not be used by the City for any other purpose.

During the FY2008/2009 Reporting Period, in compliance with Proposition 218, both the majority protest hearing and mail ballot process were conducted for the proposed increases. Both the ratification of the existing rate structure (required by Proposition 218), and the new rates, including the rate escalator, passed by more than 62%. As a result of the passage of the Clean Water Service Charge, the City will continue to have a secure funding source for the Clean Water Program, outside of general fund monies. Based on current water allocations for the City of Del Mar, the projected revenues from the Clean Water Service Fee will be $459,579.40 for FY2009/2010 and $471,068.89 in FY2010/2011.

10.2.2 General Fund Monies

The City of Del Mar General Fund accounts for all the revenues received by the City that are not designated for a specific purpose either by the City Council, State or Federal requirements, or special requirements such as those associated with bond debt. The City monitors the General Fund dollars most closely because these revenues fund the backbone of City government. The major sources of General Fund revenues include property tax, sales tax, transient occupancy tax, and parking fees and fines.

During FY2008/2009, $163,385, or approximately 31% of the program budget, was funded out of General Fund monies. With the passage of the Clean Water Service Fee, the amount of General Fund monies used

are expected to be greatly reduced beginning in FY2009/2010, and freed up for other services, including special projects. However, the City of Del Mar has committed the necessary funds to meet all permit requirements, should the Clean Water Service Fee not cover all costs of the program.

10.2.3 Grant Monies and Community Partnerships

In an attempt to find alternatives to the use of General Fund monies to fund the Clean Water Program, the City of Del Mar continues to look for appropriate grants from the State of California and the Federal Government to assist in funding program elements and special projects. As part of the California Beverage Container Recycling and Litter Reduction Act, the California Department of Conservation (DOC) distributes a portion of the California Refund Value (CRV) monies collected on sales of aluminum, glass, plastic and bi-metal beverage containers to jurisdictions to assist in programs aimed at beverage container recycling and litter cleanup activities. Incorporated cities and counties and unincorporated counties in California, as identified by the California Department of Finance, are eligible to receive funding under this program, with funding amounts dependent on population.

In FY2008/2009, the City applied for, and received, a DOC grant for $5,000 under this program (the maximum amount the City was eligible for). These funds were earmarked for litter and beach cleanup activities, and used to providing doggie cleanup bags ("mutt mitt stations") at various locations throughout the city's parks and beaches. In addition, a portion of the funds were used to maintain/purchase a beach cleaner to help reduce any litter going into the ocean and the storm drain system.

For FY2009/2010, the DOC has continued the funding of this program. The City again applied for these funds to assist with on-going litter and beach clean-ups throughout the City's parks and beaches, reducing the litter going into the ocean and the storm drain system. The funds have been earmarked for use in the funding education and outreach to pet owners, the purchase of portable "mutt mitt" dispensers and the printing of tip cards for distribution, and beach cleanups. The City was notified in June that the City's grant application had once again been approved, and $5,000 in funding would be received for FY2009/2010.

In addition to grant monies, the City of Del Mar is actively developing community partnerships with community groups and non-profit organizations to identify private funding sources and assistance to offset costs of implementing special projects and education/outreach activities as part of the program. The City will continue this strategy in an effort to fund projects and opportunities which arise outside of the normal permit-required activities that have a direct benefit on water quality.

Appendix 10-A
Budget and Expenditures for Fiscal Year 2008/2009
City of Del Mar Clean Water Fund (Fund 55)

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Expenditure Status Report

City of Del Mar

7/1/2008 through 6/30/2009

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5220	ENGINEERING SERVICES						
5220.3200	CONTRACTUAL SERVICES	10,500.00	6,064.75	6,064.75	0.00	4,435.25	57.76
5220.3210	CITY ENGINEER	75,000.00	74,916.49	74,916.49	0.00	83.51	99.89
Total	ENGINEERING SERVICES	85,500.00	80,981.24	80,981.24	0.00	4,518.76	94.71
5530	PLANNING						
5530.1000	SALARIES . PERMANENT	27,398.00	17,765.61	17,765.61	0.00	9,632.39	64.84
5530.1200	EE BENEFITS	9,264.00	5,760.97	5,760.97	0.00	3,503.03	62.19
5530.1205	WORKERS COMPENSATION	832.00	541.11	541.11	0.00	290.89	65.04
5530.1400	OVERTIME	39.00	38.80	38.80	0.00	0.20	99.49
5530.2300	OPERATING SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00
5530.3700	MEMBERSHIPS/SUBSCRIPTIONS	0.00	0.00	0.00	0.00	0.00	0.00
5530.3800	MEETINGS/TRAVEL	0.00	0.00	0.00	0.00	0.00	0.00
5530.3801	TRAINING & EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00
Total	PLANNING	37,533.00	24,106.49	24,106.49	0.00	13,426.51	64.23
5536	CODE ENFORCEMENT						
5536.1000	SALARIES . PERMANENT	14,870.00	12,790.57	12,790.57	0.00	2,079.43	86.02
5536.1200	EE BENEFITS	5,792.00	5,138.04	5,138.04	0.00	653.96	88.71
5536.1205	WORKERS COMPENSATION	1,352.00	1,180.33	1,180.33	0.00	171.67	87.30
5536.1310	PART TIME PLANNING	8,820.00	2,056.33	2,056.33	0.00	6,763.67	23.31
5536.1400	OVERTIME	0.00	0.00	0.00	0.00	0.00	0.00
5536.2131	VEHICLE MATERIALS/SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00
5536.2800	GAS & OIL	0.00	0.00	0.00	0.00	0.00	0.00
5536.3200	CONTRACTUAL SERVICES	0.00	0.00	0.00	0.00	0.00	0.00
5536.3801	TRAINING & EDUCATION	150.00	0.00	0.00	0.00	150.00	0.00
Total	CODE ENFORCEMENT	30,984.00	21,165.27	21,165.27	0.00	9,818.73	68.31
5539	CLEAN WATER MANAGEMENT						
5539.1000	SALARIES . PERMANENT	106,916.00	103,991.04	103,991.04	0.00	2,924.96	97.26
5539.1200	EE BENEFITS	34,770.00	31,714.54	31,714.54	0.00	3,055.46	91.21
5539.1205	WORKERS COMPENSATION	3,781.00	3,500.57	3,500.57	0.00	280.43	92.58

Expenditure Status Report

City of Del Mar

7/1/2008 through 6/30/2009

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5539.2131	VEHICLE MATERIALS/SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00
5539.2300	OPERATING SUPPLIES	500.00	412.79	412.79	0.00	87.21	82.56
5539.2800	GAS & OIL	0.00	0.00	0.00	0.00	0.00	0.00
5539.3000	ADVERTISING, PRINTING & PUB	1,000.00	323.25	323.25	0.00	676.75	32.33
5539.3200	CONTRACTUAL SERVICES	12,540.00	8,770.66	8,770.66	0.00	3,769.34	69.94
5539.3205	INVESTMENT FEES	0.00	0.00	0.00	0.00	0.00	0.00
5539.3700	MEMBERSHIPS/SUBSCRIPTIONS	490.00	225.00	225.00	0.00	265.00	45.92
5539.3800	MEETINGS/TRAVEL	850.00	87.00	87.00	0.00	763.00	10.24
5539.3801	TRAINING & EDUCATION	850.00	824.00	824.00	0.00	26.00	96.94
5539.4800	ASSESSMENTS	29,545.00	27,964.48	27,964.48	0.00	1,580.52	94.65
Total	CLEAN WATER MANAGEMENT	191,242.00	177,813.33	177,813.33	0.00	13,428.67	92.98
5840	PW.GENL & ADMIN						
5840.1000	SALARIES . PERMANENT	13,006.00	13,576.48	13,576.48	0.00	-570.48	104.39
5840.1200	EE BENEFITS	2,772.00	2,693.27	2,693.27	0.00	78.73	97.16
5840.1205	WORKERS COMPENSATION	302.00	300.95	300.95	0.00	1.05	99.65
5840.1400	OVERTIME	10.00	0.00	0.00	0.00	10.00	0.00
5840.1803	OUTSIDE CLERICAL	0.00	0.00	0.00	0.00	0.00	0.00
5840.2000	BUILDING MAINTENANCE/REPAIR	69.00	6.90	6.90	0.00	62.10	10.00
5840.2100	EQUIPMENT MAINTENANCE/REPAIR	10.00	23.47	23.47	0.00	-13.47	234.70
5840.2131	VEHICLE MATERIALS/SUPPLIES	46.00	43.05	43.05	0.00	2.95	93.59
5840.2133	VEHICLE CONTRACTUAL SERVICES	103.00	63.03	63.03	0.00	39.97	61.19
5840.2140	COMPUTER MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00
5840.2300	OPERATING SUPPLIES	299.00	129.15	129.15	0.00	169.85	43.19
5840.2400	UNIFORMS	15.00	12.06	12.06	0.00	2.94	80.40
5840.2600	SMALL TOOLS & EQUIPMENT	41.00	43.03	43.03	0.00	-2.03	104.95
5840.2800	GAS & OIL	210.00	190.71	190.71	0.00	19.29	90.81
5840.3000	ADVERTISING, PRINTING & PUB	6.00	6.84	6.84	0.00	-0.84	114.00
5840.3200	CONTRACTUAL SERVICES	1,636.00	1,342.08	1,342.08	0.00	293.92	82.03
5840.3205	INVESTMENT FEES	0.00	20.82	20.82	0.00	-20.82	0.00
5840.3300	UTILITIES	69.00	89.51	89.51	0.00	-20.51	129.72
5840.3400	TELEPHONE	85.00	53.34	53.34	0.00	31.66	62.75
5840.3600	PROPERTY/EQUIPMENT RENTAL	24.00	16.36	16.36	0.00	7.64	68.17
5840.3700	MEMBERSHIPS/SUBSCRIPTIONS	7.00	4.82	4.82	0.00	2.18	68.86
5840.3800	MEETINGS/TRAVEL	41.00	0.49	0.49	0.00	40.51	1.20

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5840.3801	TRAINING & EDUCATION	18.00	0.10	0.10	0.00	17.90	0.56
5840.3900	AUTO ALLOWANCE	0.00	0.00	0.00	0.00	0.00	0.00
5840.4950	BAD DEBT	12.00	11.64	11.64	0.00	0.36	97.00
5840.5500	VEHICLES	330.00	352.93	352.93	0.00	-22.93	106.95
5840.5800	DEPRECIATION	0.00	1,632.11	1,632.11	0.00	-1,632.11	0.00
Total	PW.GENL & ADMIN	19,111.00	20,613.14	20,613.14	0.00	-1,502.14	107.86
5841	FLOOD CONTROL/DRAINAGE						
5841.1000	SALARIES . PERMANENT	2,539.00	2,458.65	2,458.65	0.00	80.35	96.84
5841.1200	EE BENEFITS	1,031.00	983.54	983.54	0.00	47.46	95.40
5841.1205	WORKERS COMPENSATION	227.00	222.26	222.26	0.00	4.74	97.91
5841.1400	OVERTIME	162.00	5.11	5.11	0.00	156.89	3.15
5841.2300	OPERATING SUPPLIES	521.00	35.01	35.01	0.00	485.99	6.72
5841.2400	UNIFORMS	41.00	17.84	17.84	0.00	23.16	43.51
5841.3200	CONTRACTUAL SERVICES	464.00	26.90	26.90	0.00	437.10	5.80
Total	FLOOD CONTROL/DRAINAGE	4,985.00	3,749.31	3,749.31	0.00	1,235.69	75.21
5845	STREET MAINTENANCE						
5845.1000	SALARIES . PERMANENT	42,173.00	41,030.26	41,030.26	0.00	1,142.74	97.29
5845.1200	EE BENEFITS	16,868.00	16,369.96	16,369.96	0.00	498.04	97.05
5845.1205	WORKERS COMPENSATION	3,764.00	3,700.70	3,700.70	0.00	63.30	98.32
5845.1300	SALARIES . SEASONAL	0.00	0.00	0.00	0.00	0.00	0.00
5845.1400	OVERTIME	1,687.00	0.00	0.00	0.00	1,687.00	0.00
5845.2000	BUILDING MAINTENANCE/REPAIR	797.00	86.25	86.25	0.00	710.75	10.82
5845.2100	EQUIPMENT MAINTENANCE/REPAIR	206.00	293.29	293.29	0.00	-87.29	142.37
5845.2131	VEHICLE MATERIALS/SUPPLIES	4,774.00	3,552.82	3,552.82	0.00	1,221.18	74.42
5845.2133	VEHICLE CONTRACTUAL SERVICES	6,972.00	725.04	725.04	0.00	6,246.96	10.40
5845.2300	OPERATING SUPPLIES	2,266.00	1,662.27	1,662.27	0.00	603.73	73.36
5845.2400	UNIFORMS	649.00	433.54	433.54	0.00	215.46	66.80
5845.2600	SMALL TOOLS & EQUIPMENT	773.00	318.51	318.51	0.00	454.49	41.20
5845.2800	GAS & OIL	3,605.00	3,156.59	3,156.59	0.00	448.41	87.56
5845.3000	ADVERTISING, PRINTING & PUB	113.00	40.52	40.52	0.00	72.48	35.86
5845.3200	CONTRACTUAL SERVICES	9,289.00	9,341.13	9,341.13	0.00	-52.13	100.56
5845.3300	UTILITIES	1,236.00	952.87	952.87	0.00	283.13	77.09

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5845.3400	TELEPHONE	721.00	262.52	262.52	0.00	458.48	36.41
5845.3700	MEMBERSHIPS/SUBSCRIPTIONS	72.00	60.26	60.26	0.00	11.74	83.69
5845.3800	MEETINGS/TRAVEL	309.00	6.18	6.18	0.00	302.82	2.00
5845.3801	TRAINING & EDUCATION	155.00	1.21	1.21	0.00	153.79	0.78
5845.5500	VEHICLES	3,744.00	4,210.81	4,210.81	0.00	-466.81	112.47
Total	STREET MAINTENANCE	100,173.00	86,204.73	86,204.73	0.00	13,968.27	86.06
5847	STREET LANDSCAPING						
5847.1000	SALARIES . PERMANENT	5,078.00	5,022.44	5,022.44	0.00	55.56	98.91
5847.1200	EE BENEFITS	2,062.00	2,029.78	2,029.78	0.00	32.22	98.44
5847.1205	WORKERS COMPENSATION	454.00	453.96	453.96	0.00	0.04	99.99
5847.1400	OVERTIME	324.00	0.00	0.00	0.00	324.00	0.00
5847.2100	EQUIPMENT MAINTENANCE/REPAIR	23.00	0.00	0.00	0.00	23.00	0.00
5847.2200	GENERAL MAINTENANCE/REPAIR	117.00	0.00	0.00	0.00	117.00	0.00
5847.2300	OPERATING SUPPLIES	167.00	23.92	23.92	0.00	143.08	14.32
5847.2400	UNIFORMS	72.00	19.24	19.24	0.00	52.76	26.72
5847.2600	SMALL TOOLS & EQUIPMENT	34.00	0.00	0.00	0.00	34.00	0.00
5847.3200	CONTRACTUAL SERVICES	7,073.00	5,071.88	5,071.88	0.00	2,001.12	71.71
5847.3300	UTILITIES	3,546.00	3,747.37	3,747.37	0.00	-201.37	105.68
5847.3600	PROPERTY/EQUIPMENT RENTAL	91.00	0.00	0.00	0.00	91.00	0.00
Total	STREET LANDSCAPING	19,041.00	16,368.59	16,368.59	0.00	2,672.41	85.96
5848	PARK MAINTENANCE						
5848.1000	SALARIES . PERMANENT	1,016.00	983.51	983.51	0.00	32.49	96.80
5848.1010	COMPENSATED ABSENCES	0.00	0.00	0.00	0.00	0.00	0.00
5848.1200	EE BENEFITS	413.00	393.71	393.71	0.00	19.29	95.33
5848.1205	WORKERS COMPENSATION	93.00	88.90	88.90	0.00	4.10	95.59
5848.1400	OVERTIME	100.00	2.04	2.04	0.00	97.96	2.04
5848.2200	GENERAL MAINTENANCE/REPAIR	350.00	162.46	162.46	0.00	187.54	46.42
5848.2300	OPERATING SUPPLIES	464.00	124.88	124.88	0.00	339.12	26.91
5848.2400	UNIFORMS	54.00	7.07	7.07	0.00	46.93	13.09
5848.3200	CONTRACTUAL SERVICES	18,103.00	8,430.44	8,430.44	0.00	9,672.56	46.57
5848.3300	UTILITIES	2,619.00	2,115.90	2,115.90	0.00	503.10	80.79
Total	PARK MAINTENANCE	23,212.00	12,308.91	12,308.91	0.00	10,903.09	53.03

Expenditure Status Report

City of Del Mar

7/1/2008 through 6/30/2009

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5890	NON-DEPARTMENTAL						
5890.3205	INVESTMENT FEES	0.00	0.00	0.00	0.00	0.00	0.00
5890.5999	CAPITALIZED EXPENDITURES	0.00	-4,301.98	-4,301.98	0.00	4,301.98	0.00
Total	NON-DEPARTMENTAL	0.00	-4,301.98	-4,301.98	0.00	4,301.98	0.00
5999	*** Title Not Found ***						
5999.5908	TRANSFER OUT EXPENDITURE	0.00	0.00	0.00	0.00	0.00	0.00
Total	*** Title Not Found ***	0.00	0.00	0.00	0.00	0.00	0.00
Total	CLEAN WATER	511,781.00	439,009.03	439,009.03	0.00	72,771.97	85.78
	Grand Total	511,781.00	439,009.03	439,009.03	0.00	72,771.97	85.78

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Appendix 10-B
Final Adopted Budget for Fiscal Years 2009/2010 & 2010/2011
City of Del Mar Clean Water Fund (Fund 55)

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CITY OF DEL MAR
FISCAL YEARS 2009-2010 AND 2010-2011
EXPENDITURE DETAIL

FUND: 55 CLEAN WATER PROGRAM

ACCOUNT	DESCRIPTION	ADOPTED 2009-2010	ADOPTED 2010-2011
	ENGINEERING		
55-5220-3200	CONTRACTUAL SERVICES	10,500	10,500
55-5220-3210	CITY ENGINEER	71,700	71,700
	CONTRACT SERVICES	**82,200**	**82,200**
	ENGINEERING	**82,200**	**82,200**
	PLANNING		
55-5530-1000	SALARIES - PERMANENT	13,144	23,440
55-5530-1200	EMPLOYEE BENEFITS	4,584	7,808
55-5530-1205	WORKERS' COMPENSATION	95	504
	EMPLOYEE SERVICES	**17,822**	**31,752**
55-5530-2300	OPERATING SUPPLIES	-	-
55-5530-3700	MEMBERSHIPS & SUBSCRIPTIONS	-	-
55-5530-3800	MEETINGS & TRAVEL	-	-
55-5530-3801	TRAINING & EDUCATION	-	-
	MAINTENANCE OPERATIONS	**-**	**-**
55.5530.3200	**CONTRACTUAL SERVICES**	7,800	
	PLANNING	**25,622**	**31,752**
	CODE ENFORCEMENT		
55-5536-1000	SALARIES - PERMANENT	15,241	15,241
55-5536-1200	EMPLOYEE BENEFITS	6,521	6,667
55-5536-1205	WORKERS' COMPENSATION	395	1,106
55-5536-1310	PART TIME PLANNING	6,800	6,800
55-5536-1400	OVERTIME	-	-
	EMPLOYEE SERVICES	**28,958**	**29,815**
55-5536-2131	VEHICLE MAINTENANCE	-	-
55-5536-2800	GAS & OIL	-	-
55-5536-3801	TRAINING & EDUCATION	700	150
	MAINTENANCE OPERATIONS	**700**	**150**
55-5536-3200	**CONTRACTUAL SERVICES**	**-**	**-**
	CODE ENFORCEMENT	**29,658**	**29,965**
	CLEAN WATER MANAGEMENT		
55-5539-1000	SALARIES - PERMANENT	111,916	111,916
55-5539-1200	EMPLOYEE BENEFITS	35,170	35,619
55-5539-1205	WORKERS' COMPENSATION	924	2,588
55-5539-1310	PART TIME PLANNING	-	-
55-5539-1400	OVERTIME	-	-
	EMPLOYEE SERVICES	**148,011**	**150,124**
55-5539-2131	VEHICLE MAINTENANCE	-	-
55-5539-2300	OPERATING SUPPLIES	500	500
55-5539-2800	GAS & OIL	-	-
55-5539-3000	ADVERTISING, PRINTING, PUBLISHING	2,600	1,600

FUND: 55 CLEAN WATER PROGRAM

ACCOUNT	DESCRIPTION	ADOPTED 2009-2010	ADOPTED 2010-2011
	CLEAN WATER MANAGEMENT (CONTINUED)		
55-5539-3700	MEMBERSHIPS & SUBSCRIPTIONS	225	225
55-5539-3800	MEETINGS AND TRAVEL	400	400
55-5539-3801	TRAINING & EDUCATION	500	300
55-5539-4800	ASSESSMENTS	34,615	24,815
	MAINTENANCE OPERATIONS	**38,840**	**27,840**
55-5539-3200	**CONTRACTUAL SERVICES**	**9,200**	**12,500**
	CLEAN WATER MANAGEMENT	**196,051**	**190,464**
	PUBLIC WORKS	-	-
55-5840-1000	SALARIES - PERMANENT	10,307	10,307
55-5840-1200	EMPLOYEE BENEFITS	3,536	3,598
55-5840-1205	WORKERS' COMPENSATION	93	259
55-5840-1400	OVERTIME	10	11
55-5840-1803	OUTSIDE CLERICAL	-	-
	EMPLOYEE SERVICES	**13,946**	**14,176**
55-5840-2000	BUILDING MAINT & REPAIR	25	25
55-5840-2100	EQUIP/RADIO MAINT & REPAIR	12	12
55-5840-2131	VEHICLE MAINTENANCE	32	33
55-5840-2133	VEHICLE CONTRACTUAL SERVICES	80	80
55-5840-2140	COMPUTER MAINTENANCE	-	-
55-5840-2300	OPERATING SUPPLIES	120	120
55-5840-2400	UNIFORMS	18	18
55-5840-2600	SMALL TOOLS & EQUIPMENT	59	60
55-5840-2800	GAS & OIL	200	200
55-5840-3000	ADVERTISING & PRINTING	6	-
55-5840-3300	UTILITIES	85	87
55-5840-3400	TELEPHONE	60	61
55-5840-3600	PROPERTY/EQUIPMENT RENTAL	20	21
55-5840-3700	MEMBERSHIPS & SUBSCRIPTIONS	7	7
55-5840-3800	MEETINGS & TRAVEL	10	10
55-5840-3801	TRAINING & EDUCATION	5	5
55-5840-3900	AUTO ALLOWANCE	96	96
55-5840-5800	DEPRECIATION	-	-
	MAINTENANCE OPERATIONS	**835**	**835**
55-5840-3200	**CONTRACTUAL SERVICES**	**1,746**	**1,790**
55-5840-5500	VEHICLES	-	-
	CAPITAL OUTLAY	**-**	**-**
	PUBLIC WORKS	**16,527**	**16,801**
	FLOOD CONTROL DRAINAGE		
55-5841-1000	SALARIES - PERMANENT	2,599	2,599
55-5841-1200	EMPLOYEE BENEFITS	1,069	1,100
55-5841-1205	WORKERS' COMPENSATION	55	153
55-5841-1400	OVERTIME	15	15
	EMPLOYEE SERVICES	**3,738**	**3,867**
55-5841-2300	OPERATING SUPPLIES	100	103
55-5841-2400	UNIFORMS	20	21
	MAINTENANCE OPERATIONS	**120**	**124**
55-5841-3200	**CONTRACTUAL SERVICES**	**493**	**506**
	FLOOD CONTROL DRAINAGE	**4,351**	**4,497**

FUND: 55 CLEAN WATER PROGRAM

ACCOUNT	DESCRIPTION	ADOPTED 2009-2010	ADOPTED 2010-2011
	STREET MAINTENANCE		
55-5845-1000	SALARIES - PERMANENT	43,069	43,069
55-5845-1200	EMPLOYEE BENEFIT	17,484	17,973
55-5845-1205	WORKERS' COMPENSATION	933	2,615
55-5845-1300	SALARIES -SEASONAL	-	-
55-5845-1400	OVERTIME	1,729	1,772
	EMPLOYEE SERVICES	**63,216**	**65,429**
55-5845-2000	BUILDING MAINT & REPAIR	50	52
55-5845-2100	EQUIP/RADIO MAINT & REPAIR	300	308
55-5845-2131	VEHICLE MATERIALS & SUPPLIES	4,893	5,016
55-5845-2133	VEHICLE CONTRACTUAL SERVICES	2,700	2,700
55-5845-2300	OPERATING SUPPLIES	2,323	2,381
55-5845-2400	UNIFORMS	665	682
55-5845-2600	SMALL TOOLS & EQUIPMENT	792	812
55-5845-2800	GAS & OIL	4,000	4,100
55-5845-3000	ADVERTISING & PRINTING	100	100
55-5845-3300	UTILITIES	1,267	1,299
55-5845-3400	TELEPHONE	300	300
55-5845-3700	MEMBERSHIPS/SUBSCRIPTIONS	74	76
55-5845-3800	MEETINGS/TRAVEL	200	205
55-5845-3801	TRAINING	200	205
	MAINTENANCE OPERATIONS	**17,864**	**18,236**
55-5845-3200	**CONTRACTUAL SERVICES**	**620**	**1,000**
55-5845-5500	VEHICLES	-	-
	CAPITAL OUTLAY	**-**	**-**
	STREET MAINTENANCE	**81,700**	**84,665**
	STREET LANDSCAPING		
55-5847-1000	SALARIES - PERMANENT	5,198	5,198
55-5847-1200	EMPLOYEE BENEFIT	2,140	2,201
55-5847-1205	WORKERS' COMPENSATION	111	309
55-5847-1400	OVERTIME	150	103
	EMPLOYEE SERVICES	**7,599**	**7,811**
55-5847-2100	EQUIP MAINT & REPAIR	20	21
55-5847-2200	GENERAL MAINT & REPAIR	100	102
55-5847-2300	OPERATING SUPPLIES	80	82
55-5847-2400	UNIFORMS	30	31
55-5847-2600	SMALL TOOLS & EQUIPMENT	10	10
55-5847-3300	UTILITIES	3,635	3,726
55-5847-3600	PROPERTY/EQUIPMENT RENTAL	93	96
	MAINTENANCE OPERATIONS	**3,968**	**4,068**
55-5847-3200	**CONTRACTUAL SERVICES**	**6,640**	**7,301**
	STREET LANDSCAPING	**18,207**	**19,180**

FUND: 55 CLEAN WATER PROGRAM

ACCOUNT	DESCRIPTION	ADOPTED 2009-2010	ADOPTED 2010-2011
	PARK MAINTENANCE	-	-
55-5848-1000	SALARIES - PERMANENT	1,040	1,040
55-5848-1200	EMPLOYEE BENEFITS	429	441
55-5848-1205	WORKERS' COMPENSATION	23	65
55-5848-1400	OVERTIME	103	105
	EMPLOYEE SERVICES	**1,595**	**1,651**
55-5848-2200	GENERAL MAINT & REPAIR	200	205
55-5848-2300	OPERATING SUPPLIES	165	169
55-5848-2400	UNIFORMS	12	12
55-5848-3300	UTILITIES	2,684	2,752
	MAINTENANCE OPERATIONS	**3,061**	**3,138**
55-5848-3200	**CONTRACTUAL SERVICES**	**8,288**	**9,000**
	PARK MAINTENANCE	**12,944**	**13,789**
TOTAL CLEAN WATER FUND		**467,259**	**473,313**

Section 11
Effectiveness Assessment

11.1 Introduction

The City of Del Mar conducts an annual effectiveness assessment of its JURMP implementation. At a minimum, and as described in Permit Section I.1, this annual effectiveness assessment includes:

1. Specific assessment of the effectiveness of each of the following:
   - Each significant jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented;
   - Implementation of each major component of the JURMP (Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education); and
   - Implementation of the JURMP as a whole.
2. Identification of, and the use of measurable targeted outcomes, assessment measures, and assessment methods for each of the items listed above.
3. The use of outcome levels 1-6 (as defined in Attachment C of the Permit) to assess the effectiveness of each of the items listed in Section 1 above, where applicable and feasible.
4. The use of monitoring data and analysis from the Receiving Waters Monitoring Program to assess the effectiveness each of the items listed in section 1 above, where applicable and feasible.
5. The use of Implementation Assessment, Water Quality Assessment, and Integrated Assessment, where applicable and feasible (as defined in Attachment C of the Permit)

This component evaluates the progress of the City's program towards the overall goal of reducing pollutants associated with stormwater and urban runoff. The objectives of the assessment component are to assess the performance of the City's JURMP, assess the effectiveness of improving receiving water quality, and identify changes that will increase the effectiveness of the program.

In the past, the RWQCB has noted deficiencies in the effectiveness assessment strategy for nearly all the Copermittees in the region; therefore a regional effort was started and continues to improve upon standardizing a process of effectiveness assessment. The Copermittees continued to meet during the permit cycle to develop a more appropriate strategy.

A guidance document was prepared by the Copermittees and submitted to the RWQCB on October 16, 2003, titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs". This guideline presents a comprehensive assessment strategy that initially focuses on programmatic assessments and moves toward water quality-based assessments to determine program effectiveness. More specifically, it addresses six levels of assessment:

1. Compliance with Activity-based Permit Requirements
2. Changes in Knowledge/Awareness
3. Behavioral Changes
4. Load Reductions
5. Changes in Discharge Quality

6. Changes in Receiving Water Quality

The City has begun adopting this assessment strategy and will more fully adopt it as the regional program strategy becomes available. The levels of assessment have been limited to four rather than six this year because there is limited data available to assess all six levels on a jurisdictional basis. The City believes that levels 5 & 6 are more appropriately assessed at the watershed level.

The first level is Level 1: Compliance with Activity-based Permit Requirements, and includes the assessment tables from the JURMP. Level 2 and 3 are combined and discuss the program strengths (accomplishment and outcomes) for each component. Level 4: Load Reductions, is partially addressed this year. Level 5 and 6 are combined to present a water quality assessment and at this time are addressed only at a regional level. The strategy uses both quantitative and qualitative measures of program effectiveness.

11.2 Effectiveness Assessment Results

11.2.1 Compliance with Activity-Based Permit Requirements (Level 1)

The table in Appendix 11-A summarizes the activities that have been tracked by the program to demonstrate compliance with the Permit and the City's JURMP.

11.2.2 Changes in Knowledge/Awareness and Behavioral Changes (Levels 2 & 3)

The City has begun the process of collecting information necessary to gauge the changes in knowledge and awareness with respect to urban runoff. The City hopes to assess the changes in knowledge and awareness through questions posed to commercial and industrial dischargers. Any results of the assessment will be included in future JURMP Annual Reports.

In general, City staff have found that knowledge and awareness with respect to urban runoff at construction activities is relatively high. Therefore, the City intends to provide more of a focus on BMP implementation rather than awareness for construction activities in order to utilize its resources and staff efficiently.

11.2.3 Load Reductions (Level 4)

Due to the lack of regionally standardized accurate load reduction estimating tools and methods, only limited load reductions have been assessed for the program. At this time the City does not have the means to accomplish load reductions beyond the collected information directly related to physical removal of materials (e.g., debris, sediments, etc.). As regional standards are developed, the City will participate in collection of standardized information and perform further load reduction estimates. The load reduction information available is summarized in the table in Appendix 11-A.

11.2.4 Significant Activities Assessment

In Table 11-1 below, the identified significant activities are listed along with the measured outcomes from FY 2008/2009 implementation. The City's assessment demonstrates effectiveness for all significant activities

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Table 11-1: Effectiveness Assessment – Significant Activities, Methods, Measures and Targeted Outcomes

Component	Significant Activity	Method	Measure	Level	Targeted Outcome	Result	Program Effective? YES/NO			
							Compliance Level 1	Knowledge Change Level 2	Behavior Change Level 3	Load Reduction Level 4
Land Development	1. Post construction BMP inspection: inspections performed/inspections required.	Confirmation	Performed /Required	Compliance (1)	100%	Not applicable yet	Yes	N/A	N/A	N/A
Construction	1. Were all required inspections performed during the wet season?	Confirmation	Performed /Required	Compliance (1)	100%	100%	Yes	N/A	N/A	N/A
Municipal	1. Were all required inspections performed during the fiscal year?	Confirmation	Performed /Required	Compliance (1)	100%	100%	Yes	N/A	N/A	Yes
	2. Were all required catch basin inspections performed?	Confirmation	Performed /Required	Compliance (1)	100%	100%				
	3. How much debris was removed from the MS4 prior to the rainy season?	Direct Measure	Tons	Load Reduction (4)	N/A	23.4				
	4. How much debris was removed from street sweeping activities?	Direct Measure	Tons	Load Reduction (4)	N/A	125.75				
	5. Were all special events applications reviewed for potential coverage under City requirements?	Confirmation	# Reviewed /Total	Compliance (1)	100%	100%				

Component	Significant Activity	Method	Measure	Level	Targeted Outcome	Result	Program Effective? YES/NO			
							Compliance Level 1	Knowledge Change Level 2	Behavior Change Level 3	Load Reduction Level 4
Commercial-Industrial	1. Were all inspections performed as required?	Confirmation	Performed /Required	Compliance (1)	100%	100%	Yes	No	No	N/A
IDDE	1. Were all urban runoff related complaints responded to and resolved?	Confirmation	# Responses /Total Complaints	Compliance (1)	100%	100%	Yes	N/A	N/A	N/A
Education	1. Were changes in knowledge demonstrated or verified (i.e. quizzes?)	Analysis	Average Score Before/After	Knowledge Change (2)	%Change	N/A	N/A at this time	N/A at this time	N/A	N/A at this time

Appendix 11-A
FY2008/2009 Permit Component Compliance Table

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for reproduction purposes.

Appendix 11-A: Effectiveness Assessment Permit Component Table

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Development Planning	1	A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	1	Confirmation	No Changes	2.2
	2	Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	1	Confirmation	Confirmed	2.4.1
	3	A listing of the development projects to which SUSMP requirements were applied.	1	Confirmation	See Appendix 2-A for listing	
	4	Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	1	Confirmation	Confirmed	2.4.1
	5	At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	1	Confirmation	See Appendix 2-B for example	
	6	A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	1	Confirmation	None	
	7	An updated treatment control BMP inventory.	1	Confirmation	See Appendix 2-C	
	8	The number of treatment control BMPs inspected, including a summary of inspection results and findings.	1	Confirmation	0 - Not Applicable	2.4.1
	9	A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	1	Confirmation	See Section 2.4.1	
	10	Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	1	Confirmation	Confirmed	2.4.1
	11	A listing of any projects which received a SUSMP waiver.	1	Confirmation	No Waiver Program In Place - No waivers issued	
	12	A description of implementation of any SUSMP waiver mitigation program.	1	Confirmation		
	13	A description of Hydromodification Management Plan (HMP) development collaboration and participation.	1	Confirmation	See Section 2.4.1	
	14	A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	1	Confirmation	Since the interim HMP requirements took effect, there have been no development projects that trigger HMP requirements	
	15	A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	1	Confirmation		
	16	A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	1	Confirmation		
	17	The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	1	Confirmation / Tabulation	None	2.4.1
	18	A description of notable activities conducted to manage urban runoff from development projects	1	Confirmation	None	2.4.2

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Construction	1	Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	1	Confirmation	Confirmed	3.5
	2	Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	1	Confirmation	Confirmed	3.2
	3	A description of modifications made to the construction and grading ordinances and approval processes.	1	Confirmation	Completed changes in FY 2008	3.3
	4	Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	1	Confirmation	Confirmed	3.4
	5	Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	1	Confirmation	Since the maximum disturbed area and advanced treatment requirements took effect, no projects have triggered these requirements	3.5.1
	6	A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	1	Confirmation		3.5.2
	7	For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	1 & 3	Confirmation / Tabulation / Inspection	See Section 3.5.3 and Appendix 3-C	
	8	A description of the general results of the inspections.	1	Confirmation	Confirmed	3.5.3
	9	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	1	Confirmation	Confirmed	3.5.3
	10	The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	1	Confirmation / Tabulation	NOV = 8 Citation = 4	3.5.3
	11	A description of notable activities conducted to manage urban runoff from construction sites.	1	Confirmation	3.5.4	

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Municipal	1	Any updates to the municipal inventory and prioritization.	1	Confirmation	See Section 4.2.1 and Appendix 4-A	
	2	Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	1	Confirmation	Confirmed	4.2.2
	3	A description of inspections and maintenance conducted for municipal treatment controls.	1	Confirmation	Section 4.2.3	
	4	Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	1 / 3	Tabulation / Inspection	Inventory = 284 Inspected = 284 Catch Basins/Inlets Cleaned = 284	4.2.3
	5	Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	1	Tabulation	Total Distance of MS4 pipes = 5.87 miles Total Distance inspected ~ 3,500 feet Total Distance cleaned ~ 2,500 feet	4.2.3
	6	Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	1	Tabulation	Open Channels = 2.85 miles Inspected = 2.85 miles Cleaned ~ 1 mile	4.2.3
	7	Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4	Quantification	Catch Basins/Inlets = 23.4 tons MS4 Pipes = 2 tons Open Channels = 3 tons	4.2.3
	8	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	1	Confirmation	None at this time	
	9	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	1	Confirmation	Confirmed	4.2.3
	10	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	1	Tabulation	5.7 miles	4.2.3
	11	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	1	Tabulation	14.5 miles	4.2.3
	12	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	1	Tabulation	31.2 miles	4.2.3
	13	Identification of the total distance of curb-miles swept.	1	Tabulation	1,310 miles	4.2.3

Municipal (continued)	14	Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	1	Confirmation	Lots = 2 Swept = 2 times per month	4.2.3
	15	Amount of material (tons) collected from street and parking lot sweeping.	4	Quantification	Street and Parking Lot Sweeping = 125.75 tons	4.2.3
	16	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	1	Confirmation	See Section 4.2.3	
	17	Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	3	Inspection	Sites requiring inspections = 24 Sites inspected = 24 Frequency of inspections = 1X per year	4.3.3
	18	A description of the general results of the inspections.	1	Confirmation	See Appendix 4-B	
	19	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	1	Confirmation	Confirmed	4.3.3
	20	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	1	Confirmation / Tabulation	None	4.4
	21	A description of notable activities conducted to manage urban runoff from municipal areas and activities.	1	Confirmation / Tabulation	None	4.5

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Industrial and Commercial	1	Any updates to the industrial and commercial inventory.	1	Confirmation	See Section 5.2.2 and Appendix 5-A	
	2	Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	1	Confirmation	Confirmed	5.2.3
	3	A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	1	Confirmation	Through inspections and investigations	5.2.4
	4	Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	1 / 3	Confirmation / Inspection / Tabulation	As of June 30th, 2009 the City's inventory includes 1 industrial and 40 commercial facilities 41 sites were inspected	Appendices 5-A and 5-C
	5	Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	1	Confirmation	See Section 5.2.4	
	6	Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	1	Confirmation	Confirmed	5.2.4
	7	Identification of the number of third party inspections conducted.	1	Confirmation	None	
	8	Identification of efforts conducted to verify third party inspection effectiveness.	1	Confirmation	None	
	9	A description of efforts implemented to address mobile businesses.	1	Confirmation	See Section 5.3	
	10	The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	1	Confirmation / Tabulation	NOV = 10 Citation = 2 Verbal Warning = 3	5.2.4
	11	A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	1	Confirmation	None - Only 1 Industrial Business in the City	
	12	A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	1	Confirmation	None	

Appendix 11-A: Effectiveness Assessment Permit Component Table

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Residential	1	Identification of the high threat to water quality residential areas and activities that were focused on.	1	Confirmation	See Section 6.2	
	2	Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	1	Confirmation	Confirmed	6.3
	3	A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	1	Confirmation	Section 6.4	
	4	Types and amounts of household hazardous wastes collected, if applicable.	1	Confirmation	Section 6.4	
	5	A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	1	Confirmation	Section 6.5	
	6	The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	1	Confirmation	NOV = 10 Citation = 2 Verbal Warning = 2	6.6
	7	A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	1	Confirmation	See Section 6.4	
	8	A description of notable activities conducted to manage urban runoff from residential areas and activities	1	Confirmation	See Section 6.7	

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Education	1	A description of education efforts conducted for each target community.	1	Confirmation	Section 8	
	2	A description of how education efforts targeted underserved target audiences, high-risk behaviors, and “allowable” behaviors and discharges.	1	Confirmation	Section 8.3	
	3	A description of education efforts conducted for municipal departments and personnel.	1	Confirmation	Section 8.2	
	4	A description of education efforts conducted for the new development and construction communities.	1	Confirmation	Section 8.3	
	5	A description of jurisdictional education efforts conducted for residents, the general public, and school children.	1	Confirmation	Section 8.3	

	No.	Compliance Item	Outcome Level	Assessment Method	Section / Appendix
Miscellaneous	1	A description of public participation efforts conducted.	1	Confirmation	Section 9
	2	An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program	1	Confirmation	Section 11
	3	A description of any efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	1	Confirmation	See Section 13
	4	A fiscal analysis of the Copermittee's urban runoff management programs	1	Confirmation	Section 10
	5	A description of any special investigations conducted.	1	Confirmation	Section 12
	6	A description of any proposed revisions to the JURMP.	1	Confirmation	Section 14

Section 12
Special Investigations

This section provides a description of special investigations conducted, or participated in, by the City of Del Mar during the FY2008/2009 Reporting Period. Special investigations may include water quality studies, BMP pilot studies, surveys and other data collection activities to better understand the program's operations and effectiveness. Special investigations may also be undertaken as requirements under other mandates like 13267 letters, TMDLs, etc. and implemented either solely by the City or in collaboration with other agencies or non-profit organizations. Special studies may be funded by grants or from the City's Clean Water Fund. Regardless, of the funding sources, these investigations, projects or studies may be scheduled in advance or be undertaken as the need arises during the course of the reporting year.

During this Reporting Period, the City of Del Mar participated in the development process for the Los Peñasquitos Sediment Total Maximum Daily Load (TMDL), and the Residential Area Runoff Assessment Program conducted by Weston Solutions, Inc. on behalf of the Regional Copermittee Monitoring Workgroup, as part of the Regional Source Identification Monitoring Residential Area Runoff Assessment. This Section provides a brief discussion of the City's involvement in these programs. No other special investigations took place during the Reporting Period.

12.1 Lagoon TMDL Studies: Los Peñasquitos Lagoon Sediment TMDL

During the FY2008/2009 Reporting Period, the City actively participated in the Los Peñasquitos Lagoon TMDL development by taking part in both the Investigative Order No. R9-2006-076 process and the Regional Board driven coordination process.

The City participated in the Investigative Order process by attending stakeholder and group management meetings, contributing funding under the cost-share agreement, and providing technical comments to various documents prepared for submittal to the Regional Board. The primary work product developed by the Copermittees was the Los Peñasquitos Lagoon TMDL-Watershed Phase I Sediment Source Identification Study (Weston Solutions). This document was completed in June 2009. The report works in conjunction with the previously published 2007-2008 TMDL Monitoring for Sedimentation/Siltation in the Los Peñasquitos Lagoon Report, also prepared by Weston Solutions. These reports have been provided to the Regional Board to be used in the TMDL development process.

The other major TMDL development effort that the City has participated in is the TMDL development coordination process with the Regional Board. During the Reporting Period, the Regional Board approached some of the Los Peñasquitos watershed dischargers and asked for them to participate in the lagoon TMDL development process. As a part of this process, the City has been attending meetings with the Regional Board and the other dischargers to discuss a problem statement, points of compliance and other TMDL related topics. While unable to regularly attend the weekly coordination meetings, the City is actively following the process, and will continue to provide input and review documents produced during the process. As the TMDL development continues, the City will participate in the development as resources allow.

12.2 Regional Source Identification Monitoring Residential Area Runoff Assessment

During the spring of 2009, the City of Del Mar was one of two jurisdictions selected as subject sites for the 2008-2009 Regional Source Identification Monitoring Program. The Source Identification Program is

required under Regional Board Order R9-2007-0001 as part of the Receiving Waters and Urban Runoff Monitoring and Reporting Program. As discussed in the 2008-2009 Workplan, submitted to the Regional Board, the goal of this study is to compare dry weather residential land use discharge data in San Diego County to data collected from an intensive residential land use runoff study under a Proposition 50 Grant in Orange County. The data would then provide information on of dry weather nuisance flows from single family residences. It is the Copermittees' hope that this data could then be used to develop effective BMP strategies for residential areas, which is one of the most common land uses in the San Diego region. As indicated in the submitted workplan, the study is being conducted in coordination with the separate jurisdictional programs conducted by the City of La Mesa and the City of Del Mar.

As part of the study, flow monitoring and water quality sampling was conducted from April 1, 2009 through June 30, 2009. Water quality sampling conducted during all three sampling events. In addition to providing one the study area, the City worked with Weston Solutions to obtain the necessary clearances to work in the City, and worked with the Copermittee Monitoring Workgroup to ensure the success of the program. Detailed discussion and information on the Regional Source Identification Monitoring program, including the Residential Area Runoff Assessment will be included in Regional Submittals provided by the County of San Diego under separate cover.

For FY2009-2010, the City of Del Mar will continue to participate in the Residential Area Runoff Assessment. The proposed work for the 2009-2010 San Diego County Source Identification Monitoring Program includes expanding on the work done in the Anderson Canyon Drainage Area in the City, and to collect wet weather residential land use discharge data building on the data collected during the 2008-2009 Dry Weather Source Identification Program. These data would then be used by Copermittees to develop effective strategies to reduce dry weather nuisance flows and potentially reduce pollutant loads in wet weather runoff from residential areas. The City will continue to work with the County's subcontractors to facilitate data collection in the area, provide input on Del Mar specific information, and review work products as needed.

12.3 Other Special Investigations or Studies

No other special investigations took place during the Reporting Period. During the FY2009-2010 Reporting Period, the City is reviewing other potential study areas to address dry weather flows resulting from foundation drains and irrigation runoff from residential areas in the south end of the City. Implementation of these studies will depend entirely on availability of resources and funding.

Section 13
Non-Emergency Fire Fighting Flows

This section provides a description of any efforts by the City of Del Mar conducted to reduce pollutant discharges from non-emergency fire fighting flows (i.e. flows from controlled or practice blazes and maintenance activities) determined to be a significant source of pollutants to waters of the U.S.

As discussed in Section 4 of this JURMP Annual Report, Section 6.19 of the 2008 JURMP described the City's program to reduce pollutants from non-emergency fire fighting flows. During this Reporting Period, all training sessions were held at Regional Training facilities outside the City of Del Mar, and any vehicle maintenance (including washing) was conducted in accordance with Section 6.19 of the 2008 JURMP. No non-emergency fire fighting flows from training or other maintenance activities occurred which would require any additional efforts to reduce pollutant discharges.

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Section 14
JURMP Revisions

In response to comments received from the Regional Board during the FY2008/2009 Reporting Period, the City made minor revisions to its 2008 JURMP. These four (4) specific revisions were made to portions of the Municipal Component, Section 6 of the 2008 JURMP, and Appendix 7-D and Appendix 7-G of the Industrial/Commercial Component, Section 7 of the 2008 JURMP. These modifications are summarized in Table 14-1 below. A copy of the revised Section 6 of the 2008 JURMP in "redline/strikethrough" format is included as Appendix 14-A of this Annual Report. Appendices 7-D and 7-G are replaced by the new version included as part of Appendix 14-A.

Table 14-1: Summary of Revisions to 2008 JURMP Made During FY2008/2009

Revised JURMP Section	Revisions Made
Municipal Component Section 6.3.3.1	Additional language that describes BMPs for unused pesticides, herbicides and fertilizers
Municipal Component Section 6.5.4.5	Correction to Sanitary Sewer Overflow Orders from SWRCB and RWQCB
Municipal Component Table 6.1-1	Addition of reference to CASQA BMP Handbooks for BMP titles in Table 6.1-1
Industrial/Commercial Component Appendix 7-D & Appendix 7-G	Additions to appendices to reflect accurate procedures for commercial and industrial inspections.

As discussed in the FY2007/2008 Annual Report, prior to January 2008, the Clean Water Program was managed by an outside consultant. At the end of January 2008, the City hired a full-time, in-house Clean Water Manager to oversee the program. As part of his responsibilities, the Clean Water Manager has been tasked with reviewing the City's Program, and looking for ways to be more efficient and cost effective at meeting the Permit requirements. As part of this internal program efficiency "audit", the Clean Waster Manager is in the process of reviewing its 2008 JURMP, and working with each Department to find better, more efficient ways, to document and implement the Clean Water Program requirements. FY2008/2009 represents the first full year of program implementation under the current Clean Water Manager, and during this time, program areas have been identified that could benefit from revisions to improve program documentation, implementation, and effectiveness.

The City estimates completion of this program "audit" by the end of the 2nd quarter of the FY 2009/2010 Reporting Period. While the City may provide JURMP updates prior to the next Annual Report, it is likely that any revisions made to the program will be provided as a part of the FY 2009/2010 JURMP Annual Report.

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Appendix 14-A
Revisions Made to the 2008 JURMP

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Section 6
Municipal Component

6.1 Introduction

This section provides information on how the City of Del Mar developed and will implement the Municipal Component. In this section, an overview of the City's municipal operations and facilities is presented and the overall implementation for the various areas and facilities.

Approximately 4,500 people live in Del Mar and enjoy the city amenities including its beaches, parks and downtown. Effective management of the municipal infrastructure (streets, parks, beaches, facilities, open space, sewer system and stormwater system) is required to maintain the quality of life that the population enjoys and to minimize its impact on the surrounding environment and water bodies.

Order No. 2007-0001 (Permit) Section D.3.a. establishes requirements for local jurisdictions to develop and implement a program to reduce municipal discharges of pollutants from the Municipal Separate Storm Sewer System (MS4) to the Maximum Extent Practicable (MEP), and prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards.

Urban runoff originating from existing municipal facilities or activities can a source of pollutants and the sources have been identified and listed below as described in the Permit; included are the minimum BMPs based on the type of activities or operations, potential to generate pollutants, location and other factors.

The goal of this component is to minimize or avoid the impacts of municipal activities on receiving waters and other environmental resources in Del Mar and to enhance the quality of these resources. In support of this goal, this component addresses the following primary objectives:

1. To implement policies and practices that minimize the impacts of municipal activities on Del Mar's receiving waters and water quality sensitive areas and to provide useful guidance to City staff in developing programs for municipal activities that will meet and in some cases exceed compliance obligations under Order No. 2007-0001.
2. To identify appropriate BMPs for high priority and non-priority municipal areas/activities.
3. To maintain compliance with NPDES permit requirements and other applicable environmental laws and regulations.
4. To establish and maintain a viable balance between the municipality's obligations and the protection of its environmental resources.
5. To evaluate program effectiveness and modify the City's efforts when appropriate.

6.1.1 Source Identification and Prioritization Overview

In 2002, the City of Del Mar developed and has continued to update annually a watershed-based inventory of all municipal areas and activities that includes the facility's name, address (if applicable), a description of the area/activity, the potential pollutants generated by the area/activity, and identification of whether the area/activity is tributary to a CWA section 303(d) water body segment and generates pollutants for which the water body segment is impaired. The City's complete inventory is provided in Table 6.1-1 located at the end of this section "Municipal Areas and Activities Inventory" as required in the Permit.

It is also important to note that, within the geographical boundaries of the City of Del Mar, there are other governmental entities with areas and activities that contribute stormwater and may have urban runoff discharges in and around Del Mar. There are three State government entities, the 22nd District Agricultural Association (22nd DAA), North County Transit District, and Torrey Pines State Beach. Each of these agencies has its own responsibility to protect water quality and comply with various permits; however, all of these agencies work with the City towards enhancing water quality.

This section complies with the J.1.a.(3)(e) for the JURMP to meet the requirements of this component by providing:

1. A completed inventory of all municipal facilities and activities.
2. A description of which BMPs will be implemented, or required to be implemented, for municipal facilities and activities, including pollution prevention.

Del Mar has considered the types of municipal areas and activities within the jurisdiction and has verified program priorities and requirements based on the criteria defined in the Permit. All municipal areas and activities have been classified as either "high priority" or "non-priority". The high priority areas and activities designations include a complete review of all the areas and activities listed in Permit Sections D.3.a.(3) through D.3.a(7) to determine the degree to which they pose a high threat to water quality.

1. **High Priority Areas and Activities.** The previous Permit (Order No. 2001-01) required municipal areas and activity prioritization into High, Medium and Low Threat to Water Quality. The current Permit requires a complete inventory of all areas and activities, and annual inspections for high priority areas and activities (Permit section D.3.a.(7)). The City of Del Mar has completed a revision of its existing inventory as of August 30, 2007 and designated each area/activity as high priority or non-priority based on a variety of criteria including the type, location, pollutant sources, past inspection results, etc. The priority designations are included as part of the inventory in Table 6.1-1. The 2007 prioritization has resulted in several facilities being "upgraded" and classified as high priority compared to their previous listing as medium or low priority. Examples of high priority areas and activities include: all parks and beaches with restroom facilities; areas or activities tributary to a CWA 303(d) impaired water body segment, where an area or activity generates pollutants for which the water body segment is impaired; areas and activities that discharge directly to 303(d) listed water bodies; and areas or activities with a higher risk of illegal discharges or accidental spills or leaks like sanitary sewer pump stations. In most cases, the change in prioritization is due to the 2007 Permit revisions and not as a result of increase or known sources or pollutants from the specific areas/activities.

2. **Non-Priority Areas and Activities.** Several municipal areas and activities have been identified as not posing a threat to water quality since no measurable pollutants are known to exist or excessive pollutant discharges have not been recorded or measured from these sites during the last five-year permit cycle. Also, the majority of the areas and activities do not include storage areas or buildings, thus eliminating potential pollutant sources. A number of ancillary areas or activities associated with these facilities are covered in other main categories such as: management of pesticides, herbicides, and fertilizers; parking facilities; power washing; and special events. Nevertheless, areas and activities designated to be non-priority will be subjected to the specific minimum BMPs listed in Table 6.1-1. In some cases, non-priority areas and

activities include other minimum BMPs for the specific type of operation or maintenance performed at the site or location. The detailed and site specific selection of BMPs is provided in Table 6.1-1 and will be modified at minimum on a yearly basis as part of the JURMP Annual Report based on new information, inspection results, or modification to the area or activity.

6.1.2 Municipal Component Organization

The Municipal component includes the areas and activities listed in the Permit and is organized using the recommended Copermittee regional outline dated July 2007. The City of Del Mar does not operate several of the areas or activities listed in the Permit, including: Flood Management Projects, Active or Closed Municipal Landfills, Publicly Owned Treatment Works, Solid Waste Transfer Facilities, Land Application Sites, and Municipal Airfields. All the areas and/or activities sections will be included in this component to preserve the numbering integrity of the regional outline but noted as “Not Applicable” when not found within the City of Del Mar.

Detailed information for each of the High Priority areas or activities is included in this component and organized as summarized below and in Table 6.1-2 located at the end of this section. This table also includes a cross-reference to the main areas and activities covered by the section and the Permit section that it addresses. In some cases, areas and activities overlap and may not include information that would be repeated and instead the reader will find a reference to the appropriate section. Examples include: Management of Pesticides, Herbicides, and Fertilizers (Section 6.3) which is an activity that may be implemented in Parks and Recreational Facilities (Section 6.16) which are municipal area, and Sweeping of Municipal Areas (Section 6.4) which is an activity that serves as a BMP for Roads, Streets, Highways, and Parking Facilities (Section 6.6) which are municipal areas in which sweeping is applied.

6.1.3 Municipal Component Implementation

The following sections describe common or general implementation procedures applicable to the entire Municipal Component. If more specific implementation procedures, such as Standard Operating Procedures (SOPs), are used by the City for a specific municipal area or activity (i.e. Operations & Maintenance of MS4 and Structural Controls, Management of Pesticides, Herbicides, and Fertilizers, etc.) they are considered an augmentation of the general implementation procedures.

6.1.3.1 Education and Training

City of Del Mar employees receive annual training on storm water regulations and JURMP program implementation strategies. Training is provided by Clean Water Program staff or a knowledgeable manager or supervisor for that area or activity.

Employees also receive job-specific training which is described in each Municipal component area or activity as appropriate.

6.1.3.2 Contract Specifications

Procurement of contract municipal services includes participation by City department(s) administering the contractor. During the bid preparation stage, the City includes specific requirements in the scope of work that identify the minimum BMPs that should be included as

part of the activity or service, or the City includes minimum BMPs as part of the final contract with the selected bidder.

The minimum BMPs for contract municipal operations are specified in the section for that type of service. For example, landscaping service contractors would implement the BMPs found in Section 6.3 - Management of Pesticides, Herbicides, and Fertilizers.

The city department administering the contractor is responsible for ensuring that the minimum BMP requirements are communicated and implemented by the contractor, and the Clean Water Program staff is responsible for independent verification of compliance with the minimum BMP requirements. The Clean Water Program staff will verify compliance in the same manner that compliance is verified for these activities or areas, as if being performed by City employees, and use the same procedures and forms outlined in Section 6.1.3.4 below. Enforcement procedures are applicable to municipal contractors as described in this component and may in addition include suspension, revision or termination of the contract in order to achieve compliance with this component, the JURMP, and the Permit.

The source identification and prioritization does not change as a result of an activity being performed or area being serviced by an independent contractor working on behalf of the City. The high priority designations identified in Table 6.1-1 apply unless specifically amended and recorded by the City. Any such amendments would be included in the corresponding JURMP Annual Report.

6.1.3.3 Administrative Controls (internal processes, policies, procedures, etc.)

The City's BMPs and SOPs are strictly followed by employees assigned to any of the duties related to areas or activities in this Municipal component. Employees are trained prior to performing these assignments and must adhere to these BMPs and SOPs in order to receive acceptable employee performance ratings. Newly hired or promoted employees are subject to probationary periods and performance evaluations that include performing their job functions according to established city processes and procedures. Employee performance policies are followed by all departments.

Specific administrative controls apply to specific areas or activities included in this component.

6.1.3.4 Compliance Assessment – Municipal Area/Activity Inspections

Del Mar will strive to achieve compliance at municipal areas/activities by implementing, at a minimum, the water quality protection requirements and applicable BMPs prescribed in this component and verify their effectiveness through site inspections, review of self-audits by facility managers or staff, enforcement procedures, and other means as described in this section.

1. **Inspection Responsibilities.** Del Mar has revised its inspection program to better assess compliance with the 2007 revisions to the JURMP, applicable ordinances, and the Permit. Del Mar has revised site inspection procedures to ensure that municipal area/activities implement an effective combination of BMPs to meet water quality protection requirements, based upon the site's threat to water quality prioritization. Del Mar has in place enforcement procedures requiring that corrective actions be undertaken when these requirements are not met. The program includes the following elements:

a. Inspections by Clean Water Program staff;
b. Area/Activity manager or supervisor self-inspections consisting of implementation, maintenance, monitoring and revision of BMPs; and
c. Enforcement procedures.

2. **Clean Water Program Staff Inspection Procedures and Frequencies.** The City's trained Clean Water Program (stormwater) staff is committed to inspecting all high priority areas/activities annually. The inspection consists of a walk-through or visual observation of each area/activity, evaluating existing Pollution Prevention Measures and BMPs, determining if the prescribed minimum BMPs are protective of receiving water bodies and offer the most cost-effective water quality protection. Clean Water Program staff will also recommend self-inspections to appropriate area/activity supervisors, crew leaders, or other responsible party so that all municipal areas/activities are in compliance. If the inspected site does not meet Del Mar's minimum BMP requirements or there is a discharge related to municipal activities, Clean Water Program or Code Enforcement staff will immediately provide direction and advise on the applicable steps to take to comply and conduct follow-up inspections as necessary to confirm that compliance is attained. Additional inspections will be conducted as necessary to ensure continued compliance.

   Del Mar has developed inspection requirements, procedures, and forms to, at a minimum, complete the following:

   a. Ensure that all applicable JURMP and Permit requirements are met;
   b. Verify that required Pollution Prevention Measures are being followed;
   c. Verify that there is an effective combination of BMPs implemented and maintained to prevent the discharge of pollutants into stormwater conveyances and receiving waters; and
   d. Ensure that municipal facilities implement their stormwater management plan on a year round basis, as applicable.

The City's municipal area and activity inspection checklist used by Clean Water Program staff is included in Appendix 6-A. Alternatively, Clean Water Program staff may use written letter reports and/or photo reports to document inspection findings and actions to facility owners and operators. Any self-inspections conducted by activity or area supervisors can be logged using the checklist found in Appendix 6-A, but the inspections are not mandatory, unless requested or required by the Clean Water Program as a result of a failed inspection or other recommendation.

These checklists are used to determine if minimum BMPs for municipal activities are being implemented and are in good condition at each area/activity. The recommended minimum BMP requirements can be found in sections 6.2 through 6.19 in this component and summarized in Table 6.1-1, as noted earlier. The minimum BMP requirements are intended to be easy to interpret field observations that allow an assessment of site conditions during both dry and wet conditions. Inspectors may verify whether minimum BMPs are adequate for water quality protection at any time during the year during dry or wet weather.

3. **Area and Activity Self-Inspections.** Stormwater management is a dynamic operation where changes are expected. Minimum BMPs for stormwater management require frequent maintenance to sustain their effectiveness and may require relocation, revision, and re-installation, particularly as the area/activity changes. Therefore, facility manager

or supervisor self-inspections are important particularly just prior and during the rainy season. The five goals of the self-inspections are:

- To ensure accountability for stormwater management by each area/activity supervisor or other responsible party;
- To ensure that BMPs are properly implemented and functioning effectively;
- To identify BMP maintenance (e.g., material removal) and repair needs;
- To ensure the proper implementation of pollution prevention measures; and
- To ensure staff's awareness of the stormwater management requirements.

Self-inspections should be performed by the facility managers, supervisors, or designated employees. At a minimum, a self-inspection checklist such as the one provided in Appendix 6-A, noting date, time, BMP condition, and any actions taken, should be kept on-site and made available for inspection, if requested. Self-inspections should be performed periodically and preferably no less than once a year and preferably prior to the onset of the rainy season, or October 1st.

4. **Inspection Frequencies.** Del Mar has established inspection frequencies and priorities as determined by the threat to water quality prioritization described in Section 6.1.2. At a minimum each area/activity that is determined to be high priority will be inspected annually by Clean Water Program staff. Inspections by Clean Water Program staff are the most comprehensive inspections and satisfy the requirements of Permit Section D.3.a.(7)(a). Additional inspections conducted by area/activity supervisors are considered minor in scope (to correct a BMP, etc.) and serve to supplement the inspection requirement. In some cases, these two may be combined, but must be comprehensive and use the inspection checklist found in Appendix 6-A

   Additional inspections conducted by area/activity supervisors, preferably prior to the rainy season, are considered secondary and can only fulfill the requirements in Permit section D.3.a.(7)(a) if the inspection form in Appendix 6-A is used.

6.1.3.5 Municipal Area/Activity Enforcement Measures

If BMPs are lacking or being implemented improperly, this section provides a discussion of appropriate enforcement actions. If the inspected area/activity does not meet the minimum BMP and water quality protection requirements, inspectors shall follow-up within a reasonable time frame to assure that all applicable requirements are implemented by the area/activity supervisor or other identified responsible party.

The City has an established organizational structure (See Figure 2.1-1 in Section 2.1) and identified responsibilities for Permit compliance. The City's Clean Water Program is considered primarily responsible for identifying any deficiencies in the selection and implementation of minimum BMP or program implementation by other City departments. The Clean Water Program is part of the Planning Department is responsible for reporting any deficiencies, violations, or corrective actions directly to the area/activity supervisor or responsible party in order to effectively implement the requirements in a timely manner. Clean Water Program staff is required to notify the Supervisor and/or Department Director, if the conditions warrant additional attention from the area/activity department director. Clean Water Program staff must facilitate compliance and prepare written documentation and records (e.g. photos, emails) to demonstrate the deficiencies, as necessary. The City Manager may act to resolve any disputes

that may arise regarding stormwater compliance actions, responsibilities, efforts, and costs, at the request of any department director.

In some instances and for the most severe cases, the enforcement procedures may include those described below.

Enforcement Actions

Del Mar is required under the Permit to develop an enforcement program to obtain compliance with the Permit at its municipal facilities. Enforcement procedures for non-compliance at municipal facilities will be specific to the jurisdiction, and in Del Mar's case are primarily handled by the Clean Water Program. The Clean Water Program staff/inspectors will conduct enforcement of stormwater pollution prevention requirements for municipal activities and at municipal facilities. The inspectors in accordance with Del Mar's procedures for recording violations shall document observed violations. Depending on the severity of the violation, enforcement can range from a verbal warning to disciplinary actions. If the non-compliance is a result of negligence by a contractor hired by the City, the enforcement action(s) are comparable and can range from a verbal warning to the assessment of fines. Del Mar's enforcement program goals are the following:

1. To educate the regulated community (municipal staff and contractors);
2. To promote compliance of the laws and regulations;
3. To return violators to compliance in a timely manner;
4. To initiate and conclude enforcement activities in a timely manner;
5. To penalize violators, as appropriate, and to deprive violators of any significant benefit gained from violations; and
6. To treat similar facility owners and operators equally and consistently with regard to the same types of violations.

Del Mar's Clean Water Program staff/inspectors conduct follow-up inspections to determine if corrective actions have been taken in accordance with Del Mar's ordinances and minimum BMP requirements. Escalating enforcement steps have been defined but also provide flexibility for the inspectors to select the appropriate level of enforcement and establish appropriate compliance time frames on a case-by-case basis that will ensure compliance.

The Clean Water Program or enforcement staff/inspector will inform a responsible party to cease a discharge if a significant and/or immediate threat to water quality is observed. The site or activity-specific threat to water quality shall be assessed by inspectors; examples of such situations are runoff from a construction site that will not be reasonably controlled by the measures in place or if failure of a BMPs is resulting in the release of sediments or other pollutants to a degree that may be substantially degrading water quality. The typical progressive enforcement steps that Del Mar will apply to the municipal inspection program are:

1. Verbal or written warning;
2. Written notices of violation;
3. Disciplinary actions;
4. Enforcement of contracts (municipal activities performed by City contractors);
5. Cease and Desist orders (municipal activities performed by City contractors);
6. Notice and Order to Clean, Test, or Abate (municipal activities performed by City contractors);
7. Stop Work Orders (municipal activities performed by City contractors);

8. Permit Suspension or Revocation (municipal activities performed by City contractors);
9. Civil or Criminal Action (municipal activities performed by City contractors).

A discussion of these measures is provided below. These are just some of the tools Del Mar will use to enforce the Permit and ordinance requirements. All enforcement actions related to municipal areas or activities are to be reviewed by the City Manager.

1. **Verbal or Written Warning.** A common initial method of requesting corrective action and enforcing compliance is a verbal or written warning from Clean Water Program enforcement staff/inspector to the responsible party. Verbal warnings are often sufficient to achieve correction of the violation, often while the inspector is present. The inspector should notify the responsible party and the facility supervisor of the violation, document the violation and the notification to the project supervisor in the inspection file. A specific time frame for correcting the problem and a follow-up inspection date should be documented by the inspector. In judging the degree of severity, the enforcement staff/inspector may also take into account any history of similar or repeated violations by the responsible party at this or other sites.

2. **Written Notice of Violation.** If the deficiency noted in a verbal warning is not corrected by the next inspection or the violation is more severe, a written Notice Of Violation (NOV) shall be issued. The NOV shall describe the nuisance or infraction that is to be corrected, the time frame for correction, and date of the follow-up inspection. A copy of the NOV should be given to the responsible party and facility supervisor and placed in the active inspection file. If the violation has been corrected to the satisfaction of the inspector, the inspector will document compliance in the inspection file.

3. **Disciplinary Actions.** If a City of Del Mar employee causes or contributes to non-compliant activities, the City may choose to take disciplinary actions against the employee in accordance with established procedures. These records are kept as part of the employee's official personnel files and access will be limited.

4. **Enforcement of Contracts.** If a contractor is performing contract work for the City, then the City can use the provisions within the contract for enforcement of non-compliance. Del Mar will confirm language is included in all contracts that allows the City the right to refuse payment, stop work (without time penalties), or revocation of contracts if the contractors performing the activities do not comply with appropriate contract requirements, permits, laws, regulations and ordinances.

5. **Cease and Desist Orders**. If an NOV has not been addressed by the next inspection; or if the contractor has not complied with their permit requirements; *or if a significant threat to water quality is observed* (such as a failure of BMPs resulting in a significant release of pollutants off site), a cease and desist order may be issued by the appropriate Clean Water Program staff or Code Enforcement. Cease and desist orders prohibit further activity until the problem is resolved and provide a time frame for correcting the problem. The cease and desist order should describe the infraction and specify what corrective action must be taken. A copy of the cease and desist order should be given to the responsible party and the facility manager/supervisor and placed in the active inspection file. To restart work once a cease and desist order has been issued, the project supervisor must request the inspector to re-inspect the project and verify that the deficiencies have been satisfactorily corrected. If the inspector is satisfied with the

corrections, the inspector may sign off on that phase of the project, and activities may resume. The cease and desist order is equivalent to a stop work order.

6. **Notice and Order to Clean, Test, or Abate**. If an NOV has not been addressed by the next inspection; or if the contractor has not complied with their permit requirements; *or if a significant threat to water quality is observed* (such as a failure of BMPs resulting in a significant release of pollutants off site), a notice and order to clean, test, or abate may be issued by the appropriate Clean Water Program staff or Code Enforcement. Notices and orders to clean, test, or abate are issued to further correct a violation, illegal discharge and/or remove an illicit connection problem. The notice and order should describe the infraction and specify what corrective action must be taken. Corrective actions typically include any clean-up of the discharge, testing to monitor pollutants in the discharge in the MS4 or receiving waters, and other abatement measures as deemed appropriate by the City. A copy of the notice and order should be given to the responsible party and the facility manager/supervisor and placed in the active inspection file.

7. **Stop Work Orders**. If an NOV has not been addressed by the next inspection; or if the contractor has not complied with their permit requirements; *or if a significant threat to water quality is observed* (such as a failure of BMPs resulting in a significant release of pollutants off site), a stop work order may be issued by the appropriate Clean Water Program staff or Code Enforcement. Stop work orders prohibit further activity until the problem is resolved and provide a time frame for correcting the problem. The stop work order should describe the infraction and specify what corrective action must be taken. A copy of the stop work order should be given to the responsible party and the facility manager/supervisor and placed in the active inspection file. To restart work once a stop work order has been issued, the project supervisor must request the inspector to re-inspect the project and verify that the deficiencies have been satisfactorily corrected. If the inspector is satisfied with the corrections, the inspector may sign off on that phase of the project, and work may proceed.

8. **Denial or Revocation of Permits.** In severe cases of non-compliance or significant discharges, it may be appropriate to revoke the business license, building or grading permits, or any other permit that a municipal contractor is working under or deny future permits on the project. The project proponents would then have to re-apply for permits and meet any requirements that Del Mar may place on the project.

9. **Civil and Criminal Court Actions.** As a final resort, Del Mar may use Civil and or Criminal court actions under the State Porter Cologne Water Quality Act or the Federal Clean Water Act, which may result in significant fines levied upon the non-compliant municipal contractor.

6.1.3.6 RWQCB Notifications

Notifications to the RWQCB shall be in accordance with Permit requirements in Attachment B, Section 5.e.(1) through (3) as quoted below:

> *"Twenty-four hour reporting* [40 CFR Section 122.41(l)(6)]
> (1) The Copermittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Copermittee becomes aware of the circumstances. A written submission shall also be

provided within five (5) days of the time the Copermittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
(2) The following shall be included as information, which must be reported within 24 hours under this paragraph:
i) Any unanticipated bypass that exceeds any effluent limitation in the Order (See 40 CFR 122.41(g)).
ii) Any upset which exceeds any effluent limitation in this Order.
(3) The Regional Board may waive the above-required written report under this provision on a case-by-case basis if the oral report has been received within 24 hours.

6.1.3.7 Annual Reporting and Recordkeeping

Del Mar has centralized JURMP annual reporting responsibilities led by the Clean Water Program. The City uses a variety of data tracking systems, logs, and records to document the compliance activities described in this component. All data is collected during the reporting year by the individual departments implementing the activity and BMPs. Ultimately the data is compiled, reviewed, and assembled for reporting purposes by the Clean Water Program. Any deficiencies in data collection or reporting are identified by the Clean Water Program and reported to various departments as applicable. The Clean Water Program works with and supports the departments with any modifications or adjustments to data compilation and reporting to effectively prepare the JURMP Annual Reports.

Specific recordkeeping varies by activity or area and may be included in each of the sections below as necessary to ensure that appropriate documentation is kept to comply with reporting requirements.

6.2 Operation and Maintenance of Municipal Separate Storm Sewer System (MS4) and Structural Controls

6.2.1 Background

This program component is applicable to Del Mar's Municipal Separate Storm Sewer System (MS4) which functions primarily to collect and convey surface runoff to receiving waters during storms. This section describes the program requirements to comply with Section D.3.a.(3) of the Permit. It is a common activity to maintain the storm drain system so that it functions hydraulically as intended during storms. The goal of this program is to reduce the impact of storm drain operation and maintenance activities on stormwater quality.

In 2007, the City of Del Mar completed a comprehensive review and update of the MS4 GIS database. The spatial and informational accuracy of each storm drainage feature was assessed during this update and accuracy is being verified. Printing of the latest version of the City of Del Mar's MS4 map book using this updated GIS data will be conducted upon completion of peer review (2008). This map book will serve as a vital tool for City staff that operate and maintain the MS4.

According the most current GIS data summarized in Table 6.2-1, the City's MS4 includes approximately 5.9 miles of storm drain pipeline, approximately three miles of open channels and swales which are mostly narrow swales in lieu of curve and gutter, 231 inlets (including catch basins), 49 junction boxes, four pumped inlets of which three are permanent located at 20th Street, 27th Street and 29th Streets and one seasonal pumped inlet located at 28th Street, and approximately 30 outfalls. The City's complete MS4 is shown on Figure 6.2-1 located at the end of this section. The City does not own or maintain any detention or retention basins.

North County Transit District (NCTD) also owns, operates and maintains its own storm drainage system as part of the protection and preservation of its rail system within its right-of-way. The City's GIS these sections are identified as approximately 2,500 feet of storm drain pipeline and 1.8 miles of channel owned and maintained by NCTD. A portion of the City's MS4 system drains into NCTD's MS4 system and vice versa. As part of an agreement with NCTD, the City maintains fossil filter inserts which have been installed at each of the City's six inlets to the NCTD system. This maintenance agreement is described in Section 6.2.3.2. The City has also identified private storm drain facilities in its GIS that include approximately 7,400 ft of underground drainage lines and 4,000 ft of swales. The majority of the remaining private storm drain facilities are under the jurisdiction of 22nd District Agricultural Association also known as the Del Mar Fairgrounds.

6.2.2 Source Characterization

City staff has reviewed several past years' dry weather monitoring, ICID reports, source identification activity results, and MS4 cleaning activities and field observations, complaints, and compliance and enforcement records; and based on this review, has verified that the MS4 is a high priority area and activity. Also, maintenance and cleaning activities associated with the MS4 constitute a BMP.

As detailed in Table 6.1-1, the MS4 can be a source of pollutants from all residential, commercial and municipal activities, and storm event and urban runoff flows. Even if unpolluted, storm discharges can result in the mobilization of accumulated materials and pollutants to the receiving waters. Regular cleaning and maintenance can reduce and eliminate most of these discharges and benefits water quality in the receiving waters.

Potential pollutants of concern discharged from the MS4 include: sediment, trash, organic matter (leaf litter), oils & grease, petroleum hydrocarbons, pesticides, herbicides, fertilizers, bacteria, metals, nutrients and detergents originating from residential and commercial activities, roadways and other impervious surfaces.

The City of Del Mar is a coastal community that includes several distinct water bodies. As a result, the majority of the City's MS4 outfalls discharge to the Pacific Ocean on the west side, some to San Dieguito Lagoon in the northern end of the City, and a very small area flowing south to the Los Peñasquitos Lagoon.

6.2.3 Best Management Practice Requirements

As noted above, Del Mar has verified that the MS4 is a high priority area and activity, and that maintenance and cleaning activities associated with the MS4 constitute a BMP.

The implementation of the various JURMP components has a positive impact on pollutant sources and prevents pollutants from making their way into the MS4. The minimum BMPs

associated with the operation and maintenance of the MS4 overlap with other JURMP components.

The Public Works Department is responsible for the implementation of the Operation and Maintenance of the MS4 section with support from the Clean Water Program for any illicit and illegal discharges that may be detected by Public Works crews.

Public Works staff uses a variety of cleaning methods to remove debris and litter from the MS4 including manual and mechanical methods when accessing inlets or catch basins and flushing with downstream capture and removal of wash water. All operation and maintenance activities are conducted by trained Public Works staff and in a manner that minimizes and prevents the discharge of materials found in the MS4.

6.2.3.1 Updated BMP Requirements

The following are the updated and required JURMP Municipal activities or programs that include specific BMPs that support an effective operation and maintenance of the MS4 that reduces the introduction of pollutants to the system and minimizes storm related discharges:

1. Implement the Management of Pesticides, Herbicides, and Fertilizers component of the JURMP (Section 6.3)
2. Implement the Sweeping of Municipal Areas component of the JURMP(Section 6.4)
3. Implement the Infiltration from the Sanitary Sewer to the MS4 and Provide Preventive Maintenance Program for the Sanitary Sewer and MS4 (Section 6.5)
4. Inspection of Municipal Areas and Activities

    a. Corporate and Maintenance yards (Section 6.13)
    b. Park and recreation facilities (Section 6.16)
    c. Special events (Section 6.17)
    d. Power washing (Section 6.18)
    e. Perform non-emergency MS4 facility repairs and construction.
    f. Perform emergency MS4 facility repairs and construction as needed/year round.
    g. Implement the Illicit Discharge Detection and Elimination Component (Section 9.0)
    h. Handle and dispose of all waste removed during maintenance activities in a manner that will not re-release the material into the MS4 or the receiving waters.

6.2.3.2 Additional Controls for Municipal Areas and Activities

Inlet Filter Treatment Control– North County Transit District

The City of Del Mar has a Maintenance Agreement in place with the North San Diego County Transit Development Board as part of the Del Mar Stabilization Project 1 – Drainage Improvements and Landslide Warning System which consists of fifty-four (54) structures. Fossil filters installed in some of the structures to address water quality and Permit requirements. The Maintenance Agreement requires the City to maintain fourteen (14) of the structures, while NCTD will be maintaining the remaining forty (40) structures. Out of the fourteen structures maintained by the City, six have been fitted with filters that are services by a contractor. The Maintenance Agreement has been implemented to ensure that the structures will be maintained properly to address water quality.

6.2.4 Program Implementation

This section describes the various steps used to verify the implementation of designated minimum BMPs and compliance with the Permit, beyond the general component implementation steps described in Section 6.1.

6.2.4.1 Education and Staff Training

City of Del Mar employees receive annual training on storm water regulations and JURMP program implementation strategies. Employees in the Public Works Department also receive job-specific training to perform the tasks associated with MS4 operation and maintenance. The City's cleaning methodology is also relayed to employees as part of its training. The City's cleaning methodology is updated as necessary and training is implemented immediately after revisions are completed. In Del Mar the MS4 and the sanitary sewer are operated and maintained by the same Public Works crew(s) which results in a very knowledgeable workforce that is familiar with both systems and the intricacies of the two systems.

6.2.4.2 Inspection, Cleaning and Preventive Maintenance Practices

The City of Del Mar has a comprehensive MS4 inspection, cleaning, and preventive maintenance program implemented using the MS4 cleaning methodology described below. This program follows a pre-established schedule as shown in Table 6.2-2 found at the end of this chapter. MS4 structures that are part of the program include catch basins, inlets, underground storm drain pipes, pump stations, percolation pits, and inlet filters. The inspection and cleaning frequency and schedule is shown by structure type in Table 6.2-2. The MS4 operation and maintenance activities have been verified against the Permit requirements and are determined to be in compliance.

The Permit requires that MS4 catch basins and inlets that are known to collect a high volume of trash and debris areas be inspected at least once a year between May 1 and September 30. All other MS4 facilities are inspected at least once annually throughout the year. The City of Del Mar will select the "high volume trash and debris" catch basins and inlets by documenting those that have greater than 33% of design capacity (by volume) between May 1 and September 30, 2008. Once this data is collected the City will be refining the inventory of "high volume trash and debris" catch basins and inlets and reporting the update in the corresponding annual report.

During any year, any catch basin or storm drain inlet that has accumulated trash and debris greater than 33% of design capacity will be cleaned in a timely manner. Open channels shall be cleaned of observed anthropogenic litter in a timely manner and no less than annually. The City of Del Mar only has one channel at the end of 17th Street.

Following two years of inspections, that is, starting on May 1, 2010 the City may evaluate the inspection and cleaning records to determine which MS4 facilities require inspection and cleaning less than annually and change the frequency to be inspected as needed, but not less that every other year. In which case those MS4 facilities would be inspected on even numbered years, if started the program is modified in 2010.

The City's MS4 inspection and cleaning methodology is relayed to employees as part of their training. The City generally divides the City's MS4 into four quadrants that are the basis for systematic cleaning of the system starting on the northwest end going south to Torrey Point,

and going east up the hill, then back south to north, according to a pre-established schedule following the City's MS4 map. Headwalls and network structures without manholes are cleaned when the pipeline is cleaned.

6.2.4.3 Administrative Controls (Internal Processes, Policies, Procedures, etc.)

As noted above the City's cleaning methodology is strictly followed by employees assigned to the operation and maintenance of the MS4. Employees are trained prior to performing these assignments and must adhere to these methods in order to receive acceptable employee performance ratings. Newly hired or promoted employees are subject to probationary periods and performance evaluations that include performing their job functions according to established processes and procedures. Employee performance policies are followed.

6.2.4.4 Compliance Assessment

The City verifies adherence to the established MS4 operation and maintenance practices and schedule and with ample leeway to perform any necessary follow-up activities to comply with Permit requirements and the practices established in this JURMP component section. The MS4 operation and maintenance activities (and any deficiencies) will be reported in the JURMP Annual Report and corrective actions identified.

6.2.4.5 MS4 Facility Inspections Procedures and Recordkeeping

MS4 facility operation and maintenance procedures established by the City and record keeping is effectively implemented by the Public Works Department to increase implementation efficiency through a work order system. The MS4 inspection and cleaning logs are kept to ensure that the schedule shown in Table 6.2-2 is implemented for Permit compliance and the data and information is compiled for the Annual Report. The Public Works Department has an established work order system that tracks all proposed, pending, and completed tasks assigned to its crews. The work order system is used to schedule and track completion of the MS4 facility inspection and cleanings every year. Public Works staff completes a work order and turns it in to the department's administrative section for data entry. MS4 inspection and cleaning documentation contain the following information:

1. The date and time the inspection/cleaning was performed;
2. Name of the inspector;
3. Items inspected/cleaned;
4. Locations of facilities inspected or cleaned;
5. Overall amount of material removed (estimated in either volume or dry weight, preferably by weight);
6. Type of material;
7. Problems noted;
8. Illegal/illicit connection detected;
9. Corrective action required;
10. Date corrective action was taken; and
11. Issue notices of violation as needed.

Other means used to document and record inspection results are field notes, timed and dated photographs, video, drawings, and maps. All records are retained at the Public Works Department for at least three years after completion of the task or activity, as required in Attachment B of the Permit.

Annual Report Recordkeeping

For annual reporting purposes, the following data will be collected to document MS4 operation and maintenance activities:

1. Confirmation that the designated BMPs were implemented, or required to be implemented during MS4 cleaning activities to eliminate waste discharges when cleaning is taking place.
2. A description of inspections and maintenance conducted for municipal treatment controls, as applicable. This requirement applies to the NCTD inlet filters and any others installed in the future.
3. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria (33% capacity), and the number of catch basins and inlets cleaned.
4. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.
5. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.
6. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category. Proper disposal of waste removed pursuant to applicable laws. NOTE: The City does not have the ability to provide the removed waste and litter in tons and will report it in cubic yards using a 1,000 pound per cubic yard conversion.
7. The City has the option to review the program after completion of the inspections completed in 2009 to reduce the inspection frequency. In order to assess this, the City would identify any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.

6.2.5 Operation and Maintenance of MS4 and Structural Controls Effectiveness Assessment (Optional)

Section 13.0 addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l).

The City may have the ability to measure the effectiveness of the MS4 inlet filter treatment control based on the performance or effectiveness data reported by the manufacturer, if supported or verified independently. This additional effectiveness assessment data or information will be provided in JURMP annual reports, if it becomes available or is deemed appropriate for pollutant loading removal estimations. The City may use this assessment in the future as part of TMDLs or other regulatory requirements.

6.3 Management of Pesticides, Herbicides, and Fertilizers

6.3.1 Background

This program component is applicable to all City properties and facilities utilizing pesticides and fertilizers. Pesticides are defined in this section as all chemical applications used to control or reduce various types of pests including pesticides, rodenticides, fungicides, algaecides,

herbicides, etc. all of which are designated as "pesticides" in this section. The goal of this program is to prevent or reduce the use of pesticides and fertilizers, and subsequently their entry or discharge into the MS4 and ultimately, receiving waters. This section describes the City's program to comply with Section D.3.a(4) of the Permit.

The City of Del Mar is committed to the application of Integrated Pest Management (IPM) procedures and the use of updated BMPs to meet the goal of this program. The City's applicators (employees or contractors) must meet these requirements and follow the City's minimum BMPs and comply with this JURMP section. The City's current practice is to contract landscaping activities, including pesticide applications, and it has in place the minimum BMPs for all the pesticide application activities which are included in the contract(s) with these service providers. City employees do not engage in pesticide applications that require licensing. They are only involved in minor applications of Round-up and receive the appropriate annual pesticide safety training.

6.3.2 Source Characterization

Del Mar has identified several areas and activities associated with Pesticides, Herbicides, and Fertilizers as high priority. The high priority areas and activities are locations that have the highest potential as a source of these pollutants and non-priority to those that do not pose a high threat to water quality. The extensive regulation and oversight of this activity makes it feasible to designate high priority to a set number of areas such as large parks and to use them as the basis for the selection of additional or future BMP at both high and non-priority locations. This approach allows the City to give a non-priority designation to similar lower threat to water quality areas. Non-priority Pesticides, Herbicides, and Fertilizers areas and activities are still assigned minimum BMPs but are subjected to lesser inspection and oversight by Clean Water Program staff. In the event that new or innovative BMPs are found to apply to high priority areas/activities, they will be assessed for their appropriateness and application at non-priority areas.

Municipal sources of pesticides may include areas and activities such as buildings, parks, and paved areas. Fertilizers are more likely to originate from landscaped areas. Pesticide entry into the MS4 is more likely to occur from:

1. Runoff from improper or over-irrigation after the application of pesticides and fertilizers;
2. Application of pesticides and fertilizers during or prior to storm events, thus causing the chemicals to flow into the MS4;
3. Use of improper pesticides or fertilizers that do not absorb into the soil or the plant and are then likely to enter the MS4; and
4. Over spray during pesticide applications discharging into the MS4.

The following are possible sources of pesticides and fertilizers from Municipal areas or activities that may enter the MS4:

1. Buildings
2. Parks
3. Landscaped grounds
4. Right-of-ways
5. Open space
6. Waterways (may require an Aquatic Pesticide Permit from the SWRCB)

7. Paved areas
8. Recreational trails

6.3.3 Best Management Practice Requirements

6.3.3.1 Updated BMP Requirements

The minimum BMPs shown in Table 6.1-1 have been established for all City pesticides and fertilizers applications. Adjustments to these BMPs should be made as a result of inspections, complaints, other regulatory changes, or at least evaluated on an annual basis as part of the JURMP Annual Report preparation and program assessment.

Landscaping and pest control services for the City are provided by outside contractors. No large quantities of unused pesticides, herbicides or fertilizers are stored at City facilities. Pursuant to the contracts, all service providers must collect and store unused quantities of the materials at their own facilities, and dispose of any unused quantities in accordance with State and County guidelines.

Occasionally, City staff use a minimal amount of herbicide, "Round Up", for touch up applications. Storage of the herbicide amounts to less than two gallons. Unused portions are stored in an enclosed, hazardous material shed, with secondary containment, located at the City Public Works Yard for use as needed. Empty containers are rinsed and disposed of in accordance with State and County guidelines.

6.3.3.2 Additional Controls for Municipal Areas and Activities

This section describes the minimum BMPs that will be implemented, or required to be implemented, for the Pesticides, Herbicides, and Fertilizer component including pollution prevention practices to comply with Permit sections D.3.a.(1)-(2), D.3.a.(4), and J.1.a.(3)(e).
Del Mar has a three-prong approach to pesticide and fertilizer application BMPs by implementing:

1. Minimum BMPs that are compatible with other requirements and practices for application of pesticides
2. Integrated Pest Management practices
3. BMPs established for high priority areas

These three BMP approaches are described in more detail below.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling and specify training, annual refresher, and testing requirements. The regulations generally cover: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs. All public agency employees who apply pesticides and herbicides in "agricultural use" areas such as parks, golf courses, rights-of-way and recreation areas should be properly certified in accordance with state regulations. Contracts for landscape maintenance should include similar requirements.

All City employees or contractors who handle pesticides are familiar with the most recent MSDS for the materials being handled and used. Additional required BMPs include: always use caution when handling any hazardous product; read and follow use instructions, use up all of the product before disposing; do not dispose of product down storm drains, into creeks, onto the ground, or by burning.

The City has established a very comprehensive set of supplemental BMPs from the CASQA Handbook describing the minimum performance standards for pesticide application, storage, safety, application schedule, and mixing and loading. In addition, supplemental BMP information can be found in the City's Storm Water Manual. The procedures and requirements for pesticide application are adhered to by all City employees and contractors authorized to handle, use, and apply pesticides and fertilizers. Any applications conducted by City staff are recorded on a log.

6.3.4 Program Implementation

This section describes the various activities or steps used to require and verify the implementation of designated BMPs for the application of pesticides and fertilizers.

6.3.4.1 Education and Staff Training

In addition to the education and training described in Section 6.1, all applicators must either hold a California Department of Pesticides Regulation Qualified Applicator Certificate or have undergone annual pesticide safety training. The City's applicators (employees or contractors) must meet these requirements and follow the City's minimum BMPs.

Employees in the Public Works and Community Services Departments also receive job-specific training to identify any issues associated with pesticide application conducted by employees or contractors and may refer the matter to the Clean Water Program for additional review or BMP implementation. The City's current practice is to contract landscaping activities, including pesticide applications, and it has in place the minimum BMPs for all the pesticide application activities which are included in the contract(s) with these service providers.

City employees receive the annual pesticide safety training in order to perform the minimal pesticide applications they perform (RoundUp).

Inspections of landscaped areas are periodically conducted by City staff knowledgeable of the requirements, and any discrepancies with contract requirements are noted in Field Inspection Notices (FIN) and are forwarded to the contractor for corrective action within the specified timeframe. The City may withhold payment for failure to meet the requirements in the FIN.

6.3.4.2 Contract Specifications

See Section 6.1.3.2 for a description of municipal services contract specifications and procedures. Additional landscaping contract specifications include monetary disincentives (deducted from the invoice) for various wasteful practices including over-watering and by controlling chemical usage, as noted in Section 6.3.4.4.

6.3.4.3 Administrative Controls (Internal Processes, Policies, Procedures, etc.)

See Section 6.1.3.3 for a description of the citywide Administrative Control policies and procedures applicable to the Municipal component.

6.3.4.4 Direct implementation of BMPs

In addition to the minimum BMPs selected for this area and activity, the City will continue to implement the IPM procedures described below.

Integrated Pest Management (IPM) Procedures

Specific IPM practices which have been implemented by the City of Del Mar include the following:

1. Central Irrigation Control System: The City maintains the irrigation control system to minimize water use and runoff to the public right-of-way. Inspections are required of the contractor on a weekly basis for automatic systems and on a monthly basis for the entire system to ensure satisfactory performance. Wasting water is discouraged with monetary disincentives in the contract.
2. Aerification of Turf Areas. Aerification improves overall health and growth of turf grasses, thereby suppressing unwanted weed growth. This cultural practice generally reduces the need for other weed control measures such as herbicide treatments.
3. Use of Fertilizers: Application rates are specified by the City and strictly controlled with oversight of the purchased and delivered amounts of fertilizers used by contractors. The application of coated urea fertilizers is preferred and gives turf a more even nutrient availability. Slow release fertilizers reduce potential nutrient leaching and promote more even turf growth, generally with less fertilizer use. Water methods are also prescribed to manage the dissolution of fertilizers and prevent discharge and runoff.
4. Pest Monitoring and Developing Threshold Limits: Pest populations are monitored and cultural control methods are implemented to keep populations within tolerable limits. Pesticides are only considered once population threshold limits are exceeded. All individuals who supervise the mixing and application of herbicides, pesticides and rodenticides shall possess valid Qualified Applicators Certificate for Category B issued to them by the State Dept. of Food and Agriculture.
5. Use of Mechanical Weed Control: Mechanical weed control is preferable. Chemical weed control is used as a last resort.
6. Use of Mulches: Mulches are used to suppress weed growth on bare soil areas. Other benefits of mulches include improved soil flocculation and water infiltration. Mulching allows reuse wood chips generated by municipal tree trimming operations.

Pollution Prevention

Consider specific alternative, safer, or less toxic (or non-toxic) products in lieu of current pesticide formulations to control insects, fungi, and weeds.

6.3.4.5 Compliance Assessment

Compliance assessment is performed through area/activity inspections as described in Section 6.1.3.4 above.

6.3.4.6 Facility Inspections and Improvements

The City's annual inspection program for Municipal areas and activities includes high priority areas with landscaping that will serve to verify the implementation of the IPM procedures and minimum BMPs described in this section. Inspection of these high priority areas serves as the

basis for identifying modifications to the procedures or BMPs for all areas in which pesticides and fertilizers are applied. These inspections are conducted by Clean Water Program staff. Any procedural or BMP modifications to the high priority areas will be applied to non-priority areas as well.

The same regulations that govern pesticide application and handling also cover storage and inspection. These requirements apply to appropriate City staff or contractors which are included in landscape maintenance contracts. The following is a brief summary of the applicable portions of the regulations:

1. The Qualified Applicator Certificate holder will conduct monthly inspections to monitor storage, handling and disposal of the pesticides.
2. At least quarterly, the County Agricultural Commissioner will consult with public agencies concerned with air and water quality, fish and wildlife, and others, to identify past or potential problems associated with the use of pesticides.
3. The Commissioner may enter and inspect any fields, areas, structures and greenhouses where pesticides are handled, stored, or applied.

Additional contract compliance inspections of landscaped areas are periodically conducted by City staff knowledgeable of the requirements, and any discrepancies with contract requirements are noted in Field Inspection Notices (FIN) and are forwarded to the contractor for corrective action within the specified timeframe. The City may withhold payment for failure to meet the requirements in the FIN. These inspections are mainly for contract compliance and to evaluate quality services, but serve indirectly to provide oversight for compliance with the requirements in this section.

6.3.4.7 Enforcement Measures

The City's enforcement measures and procedures are outlined in Section 6.1.3.5.

6.3.4.8 RWQCB Notifications

The City's RWQCB notification procedures are outlined in Section 6.1.3.6.

6.3.4.9 Annual Reporting

All pesticide applications are recorded as part of the California Department of Pesticide Regulations. The City's JURMP Annual Report will include a summary of the BMP verification activities as outlined in Section 6.1.3.7.

For annual reporting purposes, the City must provide confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities. This will be achieved through an annual inspection conducted by the Clean Water Program of the pesticide application practices and implementation of BMPs. Supplemental information may be used that is collected by the contracting departments.

6.3.5 Pesticides, Herbicides, and Fertilizers Effectiveness Assessment (Optional)

Section 13.0 addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(I).

6.4 Sweeping of Municipal Areas Element

6.4.1 Background

Street sweeping is widely recognized as an effective method of reducing the amount of pollutants (litter, green waste, oils and grease bound to particles, and sediment) on street surfaces that may impact stormwater. The City of Del Mar has in place an established street sweeping program that is effective at removing these pollutants.

It should be noted that this section overlaps in content with Section 6.6 – Roads, Streets, Highways, and Parking Facilities Element. The City has determined that the street sweeping activity is a BMP and that the municipal area defined as roads, streets, and parking facilities are priority areas to which the BMP applies.

Section D.3.a.(5) of the Permit requires that the City implement a sweeping program on improved (possessing curb and gutter) roads, streets, and parking facilities. The program must meet minimum sweeping requirements for high, moderate, and low trash volume areas. The City evaluated the entire street sweeping schedule and all routes to determine compliance with these requirements.

The City of Del Mar conducts street sweeping on improved streets and other streets regardless of the presence of curve and gutter. It should be noted that the City of Del Mar features rural street design in the majority of its residential areas. Street sweeping includes both improved curve and gutter streets, and non-improved, rural design residential streets as shown in Figure 6.4-1.

6.4.2 Source Characterization

This section provides an inventory of roads, streets, highways, and parking facilities in the City of Del Mar that are subject to street sweeping as required in Permit sections D.3.a.(5) and J.1.a.(3)(e).

The City does not have jurisdiction over any highways. The road, street and parking lot inventory provided in Table 6.4-1 at the end of this chapter shows the three designations for high, moderate, and low trash and/or debris volume as identified by the City based on knowledge from several years of street sweeping. Based on Permit language, the City of Del Mar is required to sweep high volume areas at least twice per month, moderate volume areas at least monthly, and low volume areas at least once per year.

The City of Del Mar has concluded that it is meeting the minimum street sweeping requirements in the Permit based on the source characterization and analysis presented in this section and as shown in Table 6.4-1.

6.4.3 Best Management Practice Requirements

6.4.3.1 Updated BMP Requirements

This section will describe which BMPs will be implemented, or required to be implemented, for street sweeping, including pollution prevention to comply with Permit sections D.3.a.(5), and J.1.a.(3)(e).

It should be noted that street sweeping is considered a BMP and that the street sweeping activity is implemented as a BMP by the City of Del Mar to remove pollutants on the roads, streets and parking facilities listed as part of its municipal inventory. The City designates roads, streets, and parking facilities as high priority municipal areas to comply with Permit section D.3.a.(7) and addresses them in Section 6.6, the Roads, Streets, Highways, and Parking Facilities Element of this JURMP.

The minimum BMPs shown in **Table 6.1-1** for streets apply in addition to street sweeping of these areas at the established frequencies described in Section 6.4.2. More information is provided in Section 6.6 - Roads, Streets, Highways, and Parking Facilities Element.

6.4.3.2 Additional Controls for Municipal Areas and Activities

Not applicable.

6.4.4 Program Implementation

Based on the Copermittee template for the JURMP, the following program implementation activities apply for Sweeping of Municipal Areas.

6.4.4.1 Education and Staff Training

See section 6.1.3.1 for education and staff training procedure for City employees. In order to increase cleaning efficiency, sweeper operators are advised to familiarize themselves with the equipment's maximum performance specifications as specified by the manufacturer, including optimal driving speed during sweeping. The City maintains and keeps the street sweeper in optimum working condition to effectively perform this activity.

6.4.4.2 Maintenance Inspections

Not applicable to street sweeping activity.

6.4.4.3 Contract Specifications

Not applicable to street sweeping activities at this time. General contract specifications and procurement procedures would apply per Section 6.1.3.2.

6.4.4.4 Administrative Controls (Internal Processes, Policies, Procedures, etc.)

See Section 6.2.4 for a description of the citywide Administrative control policies and procedures applicable to the Municipal component.

6.4.4.5 Direct Implementation of BMPs (e.g., street sweeping)

In areas of chronic hindrances due to parked cars, the City crew will either post temporary "No Parking" signs. Crews also remove large litter (cardboard boxes, etc.) and broken glass from streets. The sweeper operator will make note of problem areas and generate a work order for additional cleaning or inspection, as appropriate.

Visual Observations

The street sweeper operator(s) shall note street and inlet problem areas and potential pollutant sources on their daily routes and report those items as "work orders" so they can be resolved including spills, and illegal discharges or activities. The Clean Water Program may also be contacted to handle any illegal spill or discharge investigations.

6.4.4.6 Compliance Assessment

The sweeper operator(s) will be able to identify problems early on because of the frequency of street sweeping in high traffic areas. In addition to this effort, all public rights-of-way are thoroughly inspected periodically. Public Works personnel conduct any follow-up inspections of the streets and parking lots (including gutters) when reported by the street sweeper operator. Spills or illegal discharges may be reported to the Fire Department for potentially hazardous materials, or the Clean Water Program for special handling and any follow-up investigations.

6.4.4.7 Facility Inspections and Improvements

See Sections 6.4.4.5 and 6.4.4.6 above for details.

6.4.4.8 Enforcement Measures

The City's enforcement measures and procedures are outlined in Section 6.1.3.5.

6.4.4.9 RWQCB Notifications

The City's RWQCB notification procedures are outlined in Section 6.1.3.6.

6.4.4.10 Annual Reporting

The City's annual reporting and recordkeeping procedures are found in Section 6.1.3.7.

The annual reporting requirements for street sweeping include:

1. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.
2. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.
3. Identification of the total distance of curb-miles of improved roads and streets identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.
4. Identification of the total distance of curb-miles swept.
   NOTE for items no. 1-4 above: the City has extensive recordkeeping in place that tracks the daily operations of the street sweeper including the total number of broom hours, the precise number of miles swept for each distinct high, moderate and low volume area cannot be effectively tracked due to the method of operation of the equipment and the schedule which may include sweeping several combinations of the various areas in a within the same day or week. The City does have the ability to calculate the curb-miles based on the various, daily data entries. The reported swept curb-miles provided in the annual report will be based on these calculations.

5. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.
6. Amount of material (tons) collected from street and parking lot sweeping. NOTE: The Permit requires the material collected be reported in tons, yet the City's measurement is in cubic yards. Cubic yards will be reported in tons using a 1,000 pound per cubic yard conversion.

6.4.5 Sweeping of Municipal Areas Effectiveness Assessment (Optional)

Section 13.0 addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l).

6.5 Infiltration from Sanitary Sewer to MS4/Provide Preventive Maintenance of Both Elements

This section is applicable to Del Mar's sanitary sewer system. The MS4 operation and maintenance activities and programs related to infiltration overlap with Section 6.2 – Operation and Maintenance of Municipal Separate Storm Sewer System (MS4) and Structural Controls. The detection of infiltration of sanitary sewer wastewater may also be determined through the implementation of the Illegal Discharge Detection and Elimination program described in Section 9 of this JURMP.

The sanitary sewer system functions primarily for the collection and conveyance of sewerage from commercial and residential properties, as well as the 22nd District Agricultural Association property, also known as the Del Mar Fairgrounds. Sewage is ultimately delivered to the City of San Diego for treatment. The goal of this program is to efficiently transport all sewage and reduce and eliminate stoppages and/or spills by implementing a proactive preventive maintenance and capital improvement program.

The City's sanitary sewer operation and maintenance program is the basis for the prevention of infiltration into the MS4 system. The City of Del Mar's existing programs have been evaluated to verify that they meet the requirements and comply with Permit per D.3.a.(6). This section provides a description of those programs and the City's determination that they are comprehensive and do not require modification to satisfy the requirements in the Permit.

6.5.1 Background

The City maintains the sanitary sewer system and is subjected to various WDRs and permits for its operation and maintenance. This section provides an overview of the City's implementation of various sanitary sewer maintenance plans and programs to comply with mandates from the San Diego RWQCB and SWRCB.

The Public Works Department is responsible for operation and maintenance of both the sanitary sewer system and the MS4. The operation and maintenance program for the MS4 is included in Section 6.2 above. The operation and maintenance program for the sanitary sewer includes a comprehensive inspection, cleaning, repair, and maintenance program. The City's Capital Improvement Project (CIP) program includes funding for sanitary sewer replacement, improvements, and major repairs. The CIP program meets industry standards and other regulatory requirements.

The City's sanitary sewer program includes preventive maintenance activities to reduce the risk of failure and leaks that could lead to the infiltration of sanitary sewage to the MS4 or releases to the receiving waters (directly or indirectly). As needed, the City contracts and uses closed-circuit television inspection of sanitary sewer and underground MS4 pipes to assist City crews in identifying specific problem areas and sewer system leaks infiltrating the MS4.

6.5.2 Source Characterization

This section provides an explanation of the City's inventory of the sanitary sewer system and prioritization assignments to comply with Permit sections D.3.a.(1) and J.1.a.(3)(e).

Sanitary Sewer Infrastructure

The sanitary sewer system infrastructure in Del Mar includes approximately 24.75 miles of gravity main, 0.07 miles (or approximately 387ft) of force main and 387 service points. Del Mar's system includes three sewer pump/lift stations, 112 clean out facilities, and approximately 549 manhole structures.

The municipal inventory in Table 6.1-1 includes all sanitary sewer pump stations, and pipes as high priority sources that require minimum BMPs as specified in the table. Specifically, the City's sanitary sewer pump stations are considered a high priority source of pollutants due to the potential for spills and mechanical failure. The main pump stations are located at 21st Street, 7th Street and San Dieguito Road.

6.5.3 Best Management Practice Requirements

6.5.3.1 Updated BMP Requirements

This section will describe which BMPs will be implemented, or required to be implemented when operation and maintenance activities associated with the sanitary sewer are performed by City personnel or contractors. This section provides a listing of BMPs, including pollution prevention to comply with Permit section D.3.a.(6)and J.1.a.

Del Mar implements or will be implementing within the course of this five-year permit, three overlapping layers for the operation and maintenance of the sanitary sewer system, as a result of multiple and overlapping regulations and requirements. As a result no additional measures (BMPs) are necessary to comply with the Municipal Stormwater Permit. The three layers of implementation are:

1. The City's Sanitary Sewer Standard Operating Procedures
2. Minimum BMPs or procedures compatible with other permits or JURMP components (e.g. construction component, Illegal Discharge Detection and Elimination)
3. Sanitary Sewer Overflow (SSO) response plan; and Fats, Oil and Grease (FOG) Prevention Program to comply with other state permits.

Activity specific minimum BMPs associated with the task of operation and maintenance of the sanitary sewer system by Public Works Department staff are listed in Table 6.1-1. These minimum BMPs were specifically selected from the CASQA BMP manual for Municipal activities and are augmented by additional measures through the other overlapping programs mentioned above.

6.5.3.2 Additional Controls for Municipal Areas and Activities

See Section 6.5.3.1 above.

6.5.4 Program Implementation

This section will describe the steps taken to require and verify the implementation of designated BMPs for the operation and maintenance of the sanitary sewer system to comply with Permit sections D.3.a.(6) and J.1.a.(3)(e).

This section describes the various activities or steps used to require and verify the implementation of designated BMPs.

6.5.4.1 Education and Staff Training

City of Del Mar employees receive annual training on storm water regulations and JURMP program implementation strategies. Employees in the Public Works Department also receive job-specific training to perform the tasks associated with the operation and maintenance practices for the operation and maintenance of the sanitary sewer system. The City practices in place for all its sanitary sewer operation and cleaning activities and they are the basis for job-specific training implemented for this component. The City's procedures are updated periodically and training is implemented immediately after revisions are completed.

6.5.4.2 Inspection, Cleaning and Preventive Maintenance Practices

The City of Del Mar has a comprehensive sanitary sewer inspection, cleaning and preventive maintenance program implemented as described above and the City implements a pre-established schedule as shown in Table 6.5-1 included at the end of this chapter.

Sanitary sewer structures inspected, cleaned, and maintained include pump/lift stations, underground pipes, and manhole structures. The frequency and schedule is shown by structure type and a description of the activity is included. The specific sanitary sewer operation and maintenance activities have been verified against the Permit requirements as shown in Table 6.5-1.

6.5.4.3 Contract Specifications

General contract specifications and procurement procedures would apply per Section 6.1.3.2.

6.5.4.4 Administrative Controls (internal processes, policies, procedures, etc.)

See Section 6.1.3.3 for a description of the citywide Administrative control policies and procedures applicable to the Municipal component.

6.5.4.5 Direct Implementation of BMPs

Del Mar ~~has implemented~~ implements the following specific Best Management Practices for sewer conveyance, to the maximum extent practicable, and those specific requirements under ~~SDRWQCB Order 96-04~~State Board Order 2006-003-DWQ and Regional Board Order R9-2007-005.

1. Inspecting and cleaning underground sanitary sewer system pipes using the vacuum truck or other methods as appropriate as noted in the schedule (Table 6.5-1);
2. Inspecting and cleaning known priority areas (or hot spots) at a higher frequency (semiannually);
3. Inspecting all pump stations at least twice weekly for preventive maintenance;
4. Performing non-emergency sewer facility repairs and construction as needed;
5. Performing emergency sewer facility repairs and construction as needed;
6. In all cases, properly handling materials and disposing of waste removed during maintenance activities in a manner that will not release the material to the storm drain system, or in any other way contaminate stormwater runoff; and
7. Posting receiving waters as required by the Department of Health.

6.5.4.6 Compliance Assessment

The City verifies adherence to the established sanitary sewer system operation and maintenance practices and schedule in order to reallocate or allocate additional resources to perform any necessary follow-up activities to comply with the various regulatory requirements. The sanitary sewer system operation and maintenance activities (and any deficiencies) will be reported in the JURMP Annual Report and corrective actions identified.

6.5.4.7 Facility Inspections and Improvements

Sanitary sewer system operation and maintenance procedures are established by the City and record keeping is utilized by the Public Works Department to increase implementation efficiency and the effectiveness through a work order system. The sanitary sewer system inspection and cleaning logs are kept to ensure that the schedule shown in Table 6.5-1 is implemented for various permit compliance requirements, including this JURMP Municipal component element, and the data and information is compiled for the Annual Report. The Public Works Department has an established work order system that tracks all proposed, pending, and completed tasks assigned to its crews. The work order system is used to schedule and track completion of the sanitary sewer system inspections and cleanings. Public Works staff completes a work order and turns it in to the department's administrative section for data entry. Sanitary sewer system inspection and cleaning documentation will contain the following information:

1. The date and time the inspection/cleaning was performed;
2. Name of the inspector;
3. Items inspected/cleaned;
4. Locations of facilities inspected or cleaned;
5. Overall amount of material removed (estimated in either volume or weight);
6. Type of material;
7. Problems noted;
8. Illegal – illicit connection detected;
9. Corrective action required;
10. Date corrective action was taken; and
11. Issue notices of violation as needed.

Other means used to document and record inspection results are field notes, timed and dated photographs, video, drawings, and maps. All records are retained at the Public Works Department for at least three years after completion of the task or activity, as required in Attachment B of the Permit.

6.5.4.8 Enforcement Measures

The City's enforcement measures and procedures are outlined in Section 6.1.3.5.

6.5.4.9 RWQCB Notifications

The City's RWQCB notification procedures to comply with the Permit 2007-0001 requirement are outlined in Section 6.1.3.6. It should be noted that the City may be subject to additional reporting requirements based on other state permits and regulations associated with reporting of sanitary sewer overflows, and beach posting and closures.

6.5.4.10 Annual Reporting and Recordkeeping

Sanitary sewer operation and maintenance procedures are established by the City and record keeping is utilized by the Public Works Department to increase implementation efficiency and the effectiveness through a work order system. The sanitary sewer inspection, maintenance, and cleaning logs are kept to ensure that the schedule shown in Table 6.5-1 is implemented for permit compliance and the data and information is compiled for various annual reports. The Public Works Department has an established work order system that tracks all proposed, pending, and completed tasks assigned to its crews. The work order system is used to schedule and track completion of tasks and is verified on a quarterly basis. Public Works staff completes a work order and turns it in to the department's administrative section for data entry. Annual Reporting to comply with the requirements of the Permit with respect to sanitary sewer inspection and cleaning includes at minimum the following:

1. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4

Other means that can be used to document and record inspection results of the sanitary sewer system assessment include field notes, bacterial testing, timed and dated photographs, video, drawings, and maps. The video or visual inspection of the sanitary sewer is a very effective means of assessing infiltration into the MS4. All records are retained at the Public Works Yard for at least three years after the date the record was established. In some instances, records may require a five year retention time (see Attachment B of the Permit, Section 4.).

Recordkeeping of sewage and other spills entering the MS4 system will be tracked and reported according to the requirements outlined in Section 9 – Illicit Discharge Detection and Elimination Component.

6.5.5 Infiltration from Sanitary Sewer to MS4/Preventive Maintenance Effectiveness Assessment (Optional)

The Infiltration from Sanitary Sewer to MS4/Preventive Maintenance Effectiveness Assessmetn can be included in this section (optional) or in Section 13. The City will address all JURMP effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l) in Section 13.

6.6 Roads, Streets, Highways, and Parking Facilities Element

6.6.1 Background

Del Mar has approximately 747 curve miles of streets that are swept per year and two public parking lots or facilities (City Hall and Lifeguard Station) as shown on the map in Figure 6.4-1 found at the end of this chapter. The City does not maintain any highways and they are not addressed in this element.

The City's street sweeping program described in Section 6.4 applies to this element and provides the basis of the prioritization and minimum BMPs to comply with the requirements in the Permit. The City has deemed street sweeping as the minimal BMP for the City's streets and parking facilities.

This element will complement the street sweeping practices by focusing on parking facilities and the additional management measures implemented to minimize their pollutant contributions to the MS4. This element will also include the minimum BMPs required during maintenance and minor construction or repair activities for streets, roads, and parking facilities. Major construction BMPs for roads, streets, and parking facilities are further described in Section 5 of the JURMP and complement this section.

6.6.2 Source Characterization

This section provides a completed inventory of streets, alleys, and parking facilities to comply with Permit sections D.3.a.(1) and J.1.a.(1)(e)i).

The City has prioritized its streets based on high, moderate, or low trash volume to comply with the street sweeping element of the Municipal component (Section 6.4) and for consistency is applying that prioritization in this element. The City is also applying the street sweeping activity as the primary BMP to reduce pollutants from streets and parking facilities. The street and parking facility inventory and potential pollutants are shown in Table 6.1-1 found at the end of this chapter.

The City has identified the two city public parking facilities as a high priority source and has designated minimum BMPs for these parking facilities, as shown in Table 6.1-1. Additional activities generating pollutants in parking lots or facilities may include:

1. Power Washing (of vehicles and/or structures by mobile cleaners)
2. Degreasing of surfaces
3. Leaks from vehicles and equipment

6.6.3 Best Management Practice Requirements

6.6.3.1 Updated BMP Requirements

This section describes which BMPs will be implemented, or required to be implemented for streets, roads, and parking facilities, including pollution prevention to comply with Permit sections D.3.c.(2), (3), (4), and (5), and J.1.a.(1)(e)ii, iii, v, vi, vii, and viii.

The City has identified minimum BMPs for streets and two individual public parking facilities as shown in Table 6.1-1 found at the end of this chapter. In addition, specific BMPs have been selected that are appropriate for certain activities associated with minor repair and maintenance of this type of infrastructure.

Routine Street Cleaning Operations (Street Sweeping)

Street sweeping has been deemed the most appropriate BMP to reduce pollutants from the City's streets and parking facilities. The street sweeping program is described in detail in Section 6.4 of this JURMP component which includes the street sweeping prioritization and schedule.

Litter Management

The Public Works and Community Services Departments are responsible for litter management throughout the City using municipal staff (permanent or contract employees) or several contractual services.

For example, the City's landscape contractor is responsible for litter removal from the City's trash receptacles at parks, in the business district area near bus stops, landscaped medians including median curbs and noses, sidewalks, and foot paths, curbs and gutters adjacent to landscaped areas on the streets, cleaning the parking areas of City Hall, the City Library and other properties. Community Services and/or its contractors remove litter from the business district (downtown) and bus stops, the beach area and beach trash receptacles, and city facilities it manages such as the Powerhouse Community building and surrounding areas . The City has a specialized contractor that removes litter from the city's arterial streets leading to the business district and bus stops during the peak tourist season. Furthermore, businesses also perform litter management around their properties located in the downtown business district.

In summary, the City has a comprehensive litter management program that covers all of the city's public areas.

Street and Parking Facility Repair Activities

Routine repair and maintenance activities for streets and parking facilities include: asphalt sealing, filling potholes, minor construction or repair of sidewalks and curbs and gutters. Minor construction, repair, and maintenance of City streets and parking facilities follow the procedures and applicable minimum BMPs noted in Table 6.1-1, and in addition include:

1. Repairing potholes to reduce sediment loss and erosion. Minor repairs and temporary repairs of major problems are to be completed as soon as possible;
2. Ensuring that all materials are kept secured or collected once the job is completed;
3. Additional sweeping to ensure debris/dirt are removed from the worksite at the end of the workday.

Parking Facilities

The Public Works Department is responsible for the sweeping and minor repair of parking facilities. The Clean Water Program is responsible for verifying that the parking facilities are meeting the BMPs and that all departments which utilize these facilities informed of stormwater requirements. Both of these parking facilities are used by the general public and have generally

unrestricted access. Activities in and around parking facilities may generate waste, spills, and leaks that could potentially reach the MS4 and receiving waters as stormwater runoff or as non-stormwater discharges. The minimum BMPs for the two high priority parking facilities are shown in Table 6.1-1. In addition to the minimum BMPs, the following measures also support controlling non-stormwater discharges and pollutants:

Routine Facility Cleaning (Power Washing)

Whenever possible, the City will employ dry cleaning methods rather than power washing for cleaning activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor surfaces. In cases where power washing is deemed necessary or appropriate, the City requires that all wash water resulting from power washing be captured prior to entering the MS4 and disposed pursuant to applicable laws; this will serve as the minimum BMP for this activity. Power washing is conducted, mainly for the City's downtown or business district sidewalks, by the City's Public Works Department using a capture and vacuum method. In order to maintain compliance with Order 2007-0001 and the City's Municipal Code Section 11.30.050 – Discharge Prohibitions, this minimum BMP shall be properly applied and enforced with any City power washing activities in order to prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards. Any contracted power washing services will conform to the contract specification in JURMP Section 6.1.3.2. For more details on municipal power washing activities and procedures, see JURMP Section 6.18.

Parking Restrictions
Parking restrictions are enforced throughout the City to minimize overnight or extended parking or vehicle storage. This reduces the potential for spills, leaks, debris, and trash associated with overnight campers, parking, maintenance and repair, and vehicle storage.

Housekeeping Practices

1. Vehicle washing in the City's public parking lots is prohibited.
2. Trash receptacles are provided.
3. Routine sweeping, litter pick up and disposal is performed.

Additional BMPs may be appropriate for street and parking lot construction activities and are found in the Construction component of this JURMP.

6.6.3.2 Additional Controls for Municipal Areas and Activities

This section describes any additional controls the City will implement for municipal areas and activities tributary to CWA section 303(d) impaired water body segments where an area or activity generates pollutants for which the water body segment is impaired, or for municipal areas and activities within, adjacent to, or discharging directly to coastal lagoons or other receiving waters within water quality sensitive areas (Permit section D.3.a.(2)(e)).

The October 2006 303(d) list includes designations of impairment for the mouth of San Dieguito River. The City has designated several high priority municipal areas and activities to meet the minimum requirements and BMPs to control discharges to San Dieguito Lagoon and the mouth.

6.6.4 Program Implementation

This section will describe the steps that will be taken to require and verify the implementation of designated BMPs for municipal areas and activities as described in Permit sections D.3.c.(6), (7), and (8), and J.1.a.(1)(d)iv, ix, and x.

6.6.4.1 Education and Staff Training

See section 6.1.3.1 for education and staff training procedure for City employees.

6.6.4.2 Inspections

The City's inspection procedures for high priority facilities are described in Section 6.1.3.4 and are applicable to this element.

6.6.4.3 Contract Specifications (e.g., for power washing, cleaning)

General contract specifications and procurement procedures would apply per Section 6.1.3.2.

6.6.4.4 Administrative controls (internal processes, policies, procedures, etc.)

See Section 6.1.3.3 for a description of the citywide Administrative control policies and procedures applicable to the Municipal component.

6.6.4.5 Direct implementation of BMPs

The street sweeping element described in Section 6.4 is directly applied as a BMP for streets, roads and parking facilities in Del Mar.

6.6.4.6 Compliance Assessment

The City verifies adherence to the established street and parking lot BMP and sweeping schedule. Prior to the end of the fiscal year any necessary follow-up activities to comply with the various regulatory requirements will be conducted, to the degree practicable.

The sweeper operator(s) will be able to identify problems in a timely manner due to the frequency of this activity. In addition to this effort, all public rights-of-way are thoroughly inspected periodically for defects and repair needs. Clean Water Program staff will conduct any follow-up inspections of the streets and parking lots when reported by the street sweeper operator for illegal discharges or spills, as appropriate.

6.6.4.7 Facility Inspections

The inspection procedures are described in Sections 6.4.4.5 and 6.4.4.6 under street sweeping.

6.6.4.8 Enforcement Measures

The City's enforcement measures and procedures are outlined in Section 6.1.3.5.

6.6.4.9 RWQCB Notifications

The City's RWQCB notification procedures to comply with the Permit 2007-0001 requirement are outlined in Section 6.1.3.6.

6.6.4.10 Annual Reporting

The City's annual reporting and recordkeeping procedures are found in Section 6.1.3.7. The street sweeping component in Section 6.4 includes all documentation necessary for annual reporting of the roads, streets and parking facility BMP.

6.6.5 Roads, Streets, Highways, and Parking Facilities Effectiveness Assessment (Optional)

Section 13.0 addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l).

6.7 Flood Management Projects and Flood Control Devices Element

This element is not applicable in the City of Del Mar.

6.8 Areas Tributary to 303(d) Water Body Segments/Adjacent or Discharging to ESAs Element

The areas tributary to 303(d) listed water bodies have been identified in each of the relevant municipal activities and BMPs designated within each section to facilitate implementation. The City has also prepared a local Water Quality Sensitive Area (WQSA) map shown in Figure 1.1-2 that defines the priority areas for consideration in development planning decisions and to facilitate the selection of priority municipal areas/activities.

6.8.1 Background

This section provides background information that the City believes is relevant to this specific element of the Municipal Component.

6.8.2 Source Characterization

The mouth of San Dieguito River and Anderson Canyon are 303(d) listed for bacterial indicators, and Los Penasquitos Lagoon is listed for sediment/siltation in the October 2006 version of the impaired water quality bodies list. As a result, BMPs have been evaluated to reduce bacterial indicators, to the maximum extent practical from municipal operations. The area within Del Mar that discharges to Los Peñasquitos Lagoon is a limited to one small residential area with minimum municipal activities. Discharges to the Anderson Canyon beach outfall also include flows from the North County Transit District MS4.

6.8.3 Best Management Practice Requirements

6.8.3.1 Updated BMP Requirements

This section describes the BMPs that will be implemented, or required to be implemented, for areas and activities tributary to 303(d) listed water bodies, including pollution prevention (Permit sections D.3.c.(2), (3), (4), and (5), and J.1.a.(1)(e)ii, iii, v, vi, vii, and viii).

The City has identified the municipal areas surrounding and contributing to the MS4 into San Dieguito River as a high priority area for BMPs that reduce bacterial indicator discharges. The City has designated street sweeping of parking facilities and streets at a high frequency to reduce the contribution of sediment that may contain bacterial indicators. The specifics of the program are described in Section 6.6.3.2.

In addition, the City has designated all three sanitary sewer lift stations and conveyance system as high priority to minimize this potential source of bacterial indicators by implementing the Infiltration from Sanitary Sewer to MS4/Provide Preventive Maintenance of Both Element described in Section 6.5 above.

Street sweeping of areas discharging to Los Peñasquitos Lagoon are control for sediment discharges by performing street sweeping on a moderate (bimonthly) and low (biannual) frequency.

6.8.3.2 Additional Controls for Municipal Areas and Activities

See above.

6.8.4 Program Implementation

See above.

6.8.5 Areas Tributary to 303(d) Water Body Segments/Adjacent or Discharging to ESAs Effectiveness Assessment (Optional)

Not applicable.

6.9 Active or Closed Municipal Landfills Element

This element is not applicable in the City of Del Mar.

6.10 Publicly Owned Treatment Works Element

This element is not applicable in the City of Del Mar.

6.11 Solid Waste Transfer Facilities Element

This element is not applicable in the City of Del Mar.

6.12 Land Application Sites Element

This element is not applicable in the City of Del Mar.

6.13 Corporate Yards Element

6.13.1 Background

The City has a main Public Works Corporation Yard located near Jimmy Durante Boulevard and San Dieguito Road. The yard also includes storage areas or sheds used by various City departments and/or temporary use by contractors and a centralized trash management area.

This section is applicable to the Public Works and Community Services departments that operate vehicle and equipment maintenance, and material storage facilities as described in the Permit. Activities at this facility may generate waste, spills, and leaks that could potentially reach the storm drain system and receiving waters in stormwater runoff or as non-stormwater discharges. The goal of this element is to ensure that stormwater pollution prevention practices and best management practices are considered when conducting activities at these municipal facilities.

For the purposes of this element, public vehicle and equipment maintenance, and material storage facilities are determined to be any City-owned or operated facility or portion thereof that: conducts municipal activities; operates equipment; handles materials; performs fleet vehicle maintenance including repair, maintenance, washing, and fueling; performs maintenance and/or repair of heavy machinery/equipment; and stores chemicals, raw materials, or waste materials in quantities that require a hazardous materials business plan or a Spill Prevention, Control, and Counter-measures (SPCC) plan.

6.13.2 Source Characterization

The City has designated the Public Works Corporation Yard as a high priority facility as noted in Table 6.1-1 found at the end of this chapter and includes assigned minimum BMPs to correspond with the high priority designation.

At a minimum, the potential to discharge the following pollutants shall be addressed by the BMPs implemented at this facility:

1. Waste oil;
2. Paint and cleaning products;
3. Used antifreeze;
4. Used oil filters;
5. Oily rags or towels;
6. Sediment;
7. Trash and refuse associated with daily operations
8. Pesticides and fertilizer storage;
9. Wash water.

6.13.3 Best Management Practice Requirements

6.13.3.1 Updated BMP Requirements

The minimum BMPs are in place at these facilities to provide for stormwater pollution prevention and protection from non-stormwater discharges. Public Works Department staff is located at this facility and they are the stewards of the facility. The Clean Water Program is responsible for inspecting the facility and providing recommendations to the Public Works Department on BMP implementation and compliance with this JURMP section and the Permit. The same BMPs apply to other users of the facility, including Community Services, the Fire Department, and any City contractors located on or using the premises.

The minimum BMPs for the maintenance yard are listed in Table 6.1-1 found at the end of this chapter.

The City's main equipment and vehicle wash pad is located at the Public Works Yard and is used to wash and clean all City vehicles and equipment. Additional vehicle was areas connected to the sanitary sewer are located at 17th Street and 25th Street Lifeguard Stations where Community Services vehicle and equipment washing takes place.

The City's main trash bin area is located at the Public Works yard. This area is surrounded by a berm and drainage is directed to the sanitary sewer system.

6.13.3.2 Additional Controls for Municipal Areas and Activities

This section describes any additional controls that the City will implement or require implementation of for municipal areas and activities tributary to CWA section 303(d) impaired water body segments (where an area or activity generates pollutants for which the water body segment is impaired), or for municipal areas and activities within, adjacent to, or discharging directly to coastal lagoons or other receiving waters within water quality sensitive areas (Permit section D.3.a.(2)(e)).

The Corporation Yard has not been deemed to have a high probability of contributing bacterial indicators to the receiving waters in San Dieguito River which are 303(d) listed for this pollutant. No additional controls have been identified at this time.

6.13.4 Program Implementation

This section will describe the steps taken to require and verify the implementation of designated BMPs for the corporation yard to comply with Permit sections D.3.a.(6) and J.1.a.(3)(e).

This section describes the various activities or steps used to require and verify the implementation of designated BMPs.

6.13.4.1 Education and Staff Training

City of Del Mar employees receive annual training on storm water regulations and JURMP program implementation strategies. Employees in the Public Works Department also receive job-specific training to perform the tasks associated with the operation and maintenance practices at the yard or related to the activities being performed. The City has in place Standard

Operating Procedures (SOPs) for numerous tasks and activities and job-specific training is implemented for each of those tasks or activities. The City's SOPs are updated periodically and training is implemented immediately after revisions are completed. The City's overall education and training program is provided in Section 6.1.3.1. The Clean Water Program is responsible for providing annual training and information to the Public Works and Community Services departments regarding compliance with this JURMP section, BMPs and other applicable requirements in the Permit.

The BMPs applicable at the City's Corporation Yard are included in the facility's Storm Water Management Plan and activity specific BMPs are posted near the work areas or sites throughout the yard for easy reference.

6.13.4.2 Inspection, Cleaning and Preventive Maintenance Practices

The City's inspection procedures for high priority facilities are described in Section 6.1.3.4 and are applicable to this element.

6.13.4.3 Contract Specifications

General contract specifications and procurement procedures would apply per Section 6.1.3.2.

6.13.4.4 Administrative Controls (internal processes, policies, procedures, etc.)

See Section 6.1.3.3 for a description of the citywide Administrative control policies and procedures applicable to the Municipal component.

6.13.4.5 Direct Implementation of BMPs

See Section 6.13.3 for the minimum BMPs and implementation strategies.

6.13.4.6 Compliance Assessment

Compliance assessment is performed through area/activity inspections as described in Section 6.1.3.4 above.

6.13.4.7 Facility Inspections and Improvements

See section 6.1.3.4 for a description of the facility inspection procedures applicable to the Municipal component.

6.13.4.8 Enforcement Measures

The City's enforcement measures and procedures are outlined in Section 6.1.3.5.

6.13.4.9 RWQCB Notifications

The City's RWQCB notification procedures to comply with the Permit 2007-0001 requirement are outlined in Section 6.1.3.6. It should be noted that the City may be subject to additional reporting requirements based on other state permits and regulations applicable to the Corporation Yard.

6.13.4.10 Annual Reporting and Recordkeeping

See section 6.1.3.7 for the overall reporting and recordkeeping strategy for the Municipal component. This facility will be inspected annually for compliance with the BMP requirements, stormwater management plan elements and the Permit. The results will be summarized in the annual report.

6.13.5 Corporate Yards Effectiveness Assessment (Optional)

Section 13.0 addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l).

6.14 Household Hazardous Waste Collection Facilities Element

This element is not applicable in the City of Del Mar. Household Hazardous Waste disposal for residents is provided at remote facilities located in Poway and Vista. The Poway facility is located at 12325 Crosthwaite Circle on Saturdays only. The Vista facility is located at 1145 E. Taylor Street and is open on Saturdays only.

6.15 Municipal Airfields Element

This element is not applicable in the City of Del Mar.

6.16 Parks and Recreational Facilities Element

6.16.1 Background

The Community Services Department overseas numerous functions of the City including Lifeguard Services, Parking Enforcement, Park Ranger operations, Beach Maintenance, and all facility use permits for the parks, beach area, and the Powerhouse Community Center. The Community Services Department is the steward and provides primary oversight of the City's park and beach maintenance activities, community center activities and uses, and building maintenance at these facilities.

The City of Del Mar has a written policy to encourage and regulate the use of City-owned parks and recreational facilities or right of ways by individuals and organizations for special community or personal events. The Community Services Department has oversight over parks and recreational facilities in Del Mar and all special events. The majority of the activities conducted by residents and other users are covered under an event permit and are included as part of the Special Events Element in Section 6.17 below.

Events conducted at Del Mar's Powerhouse Community Center are subject to the City of Del Mar Community Services Facility Use Fees and Policies, and all events are staffed by the City. The City or its contractors performs all routine maintenance activities at these facilities, including landscaping which is covered in the Management of Pesticides, Herbicides, and Fertilizers Element found in Section 6.3 above.

6.16.2 Source Characterization

The City's parks and recreational facilities have been identified in the inventory (Table 6.1-1) as either high-priority or non-priority areas based on best professional judgment and the designation for these facilities is based primarily on presence of landscaped area and restroom facilities. Examples of facilities included in this element are all parks, beaches, the city's community center, and tennis court facilities.

Del Mar has identified several areas and activities associated with Pesticides, Herbicides, and Fertilizers as high priority (as noted in Section 6.3). The high priority areas and activities are locations that have the highest potential as a source of these pollutants. The extensive regulation and oversight of this activity makes it feasible to designate high priority to a set number of areas such as large parks and to use them as the basis for the selection of additional or future BMP. This approach allows the City to give a non-priority designation to similar lower threat to water quality areas. Non-priority Pesticides, Herbicides, and Fertilizers areas and activities are still assigned minimum BMPs but are subjected to lesser inspection and oversight by the Clean Water Program. In the event that new or innovative BMPs are found to apply to high priority areas/activities, they will be assessed for their appropriateness and application at non-priority areas.

The Powerhouse Community Center is a contained facility that has public restrooms that serve the center and adjacent parks, and the beach; and may be a source of pollutants from outdoor cleaning or power washing. The most important BMP implemented at the Community Center is trash management which is provided by the City year-round. No other sources have been identified from this facility.

The City's recreational facilities also include two tennis courts with trash as the primary source of pollutants. Trash management is provided on a daily basis.

The Community Services Department also includes the Lifeguard program housed at the Main Lifeguard station which includes a parking lot at the end of 17th Street. Two other lifeguard stations are located at the end of 20th and 25th streets. The City's three lifeguard stations are considered high priority due to their proximity to the Pacific Ocean and the availability of restroom facilities. The Main Lifeguard station also includes storage, vehicle or equipment fueling, and other activities that can be a source of pollutants. The lifeguard stations have existing stormwater management plans that further describe the applicable BMPs included in Table 6.1-1.

The most attractive recreational area in the City of Del Mar is the 2.8 miles of beaches, especially the stretch near the Community Center. The beach is cleaned daily by a beach maintenance crew to control trash and debris. In addition, the City holds beach clean-up events to supplement trash management efforts through the Keep Del Mar Clean organization. These clean-up events cover the parks and beaches, and are further described in the Outreach Section of this JURMP.

6.16.3 Best Management Practice Requirements

6.16.3.1 Updated BMP Requirements

The minimum BMPs for the parks and recreational facilities are identified as part of the inventory listing in Table 6.1-1. The minimum BMPs apply at each facility and as noted in Section 6.17 – Special Event Venues Element below may be modified to accommodate special events and therefore would required any additional BMPs as listed in Section 6.17.3.

6.16.3.2 Additional Controls for Municipal Areas and Activities

The City does not allow smoking on public beaches and parks which minimizes or eliminates cigarette butt litter, has a high level of trash collection and control at all parks and beaches with daily litter and trash removal from facilities on a year-round basis. Litter removal on the beach includes the use of a beach comber machine that sifts litter from the sand.

6.16.4 Program Implementation

6.16.4.1 Education and Staff Training

City of Del Mar employees receive annual training on storm water regulations and JURMP program implementation strategies. Employees in the Community Services Department also receive job-specific training to perform the tasks associated with the operation and maintenance practices at parks and recreational facilities, or related to the activity being performed such as pesticide application, if applicable. The City has in place operating procedures for numerous tasks and activities (as presented in this Municipal component of the JURMP) and job-specific training is implemented for each of those tasks or activities. The City periodically updates its procedures and conducts training of its employees. The City's overall education and training program is provided in Section 6.1.3.1 and specific Education activities are covered in more detail in Section 10 – Education in this JURMP.

6.16.4.2 Inspection, Cleaning and Preventive Maintenance Practices

The City's inspection procedures for high priority facilities are described in Section 6.1.3.4 and are applicable to this element.

6.16.4.3 Contract Specifications

General contract specifications and procurement procedures would apply per Section 6.1.3.2.

6.16.4.4 Administrative Controls (internal processes, policies, procedures, etc.)

See Section 6.1.3.3 for a description of the citywide Administrative control policies and procedures applicable to the Municipal component.

6.16.4.5 Direct Implementation of BMPs

See Section 6.16.3 for the minimum BMPs and implementation strategies.

6.16.4.6 Compliance Assessment

Compliance assessment is performed through area/activity inspections as described in Section 6.1.3.4 above.

6.16.4.7 Facility Inspections and Improvements

See section 6.1.3.4 for a description of the facility inspection procedures applicable to the Municipal component.

6.16.4.8 Enforcement Measures

The City's enforcement measures and procedures are outlined in Section 6.1.3.5.

6.16.4.9 RWQCB Notifications

The City's RWQCB notification procedures to comply with the Permit 2007-0001 requirement are outlined in Section 6.1.3.6.

6.16.4.10 Annual Reporting and Recordkeeping

See section 6.1.3.7 for the overall reporting and recordkeeping strategy for the Municipal component.

6.16.5 Parks and Recreational Facilities Effectiveness Assessment (Optional)

Section 13.0 addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l).

6.17 Special Event Venues Element

6.17.1 Background

The City of Del Mar has a policy to regulate the use of City-owned facilities or right-of-ways by individuals and organizations for either special community or personal events by requiring submittal of a Use of Public Facility Permit application and acknowledgment of all the applicable rules, regulations and fees. Once submitted to the City, a review of the application for Use of Public Facility by Community Services staff ensures that the event will be held safely with minimum disruption to the surrounding community; and that the cost of the event is borne by the organizers.

The City of Del Mar enforces public event policy and process which safeguards the City's facilities and the environment.

6.17.2 Source Characterization

6.17.2.1 Event Definitions and Applicability

The Use of Facility Permit applies to various special events by size and potential impact on City services and facilities. The City has determined that only Major Events have the potential to generate significant amounts of trash and litter. Major events will be subject to inspection as a municipal area and activity as required in Section D.3.a.(7)(a)vii of the Municipal Storm Water Permit.

1. **Special Event:** A Special Event is any scheduled or planned non-emergency event occurring within the City of Del Mar which can reasonably be expected to require increased or modified emergency or non-emergency services or support by City government and/or personnel. "Major Events" and "Minor Events" are defined as "Special Events."
2. **Major Events:** A Major Event is defined as an activity which entails *in excess of 200 participants and/or spectators* and which affects City personnel, resources, services, facilities, traffic circulation, or impacts the community and/or its citizens. Examples of past major events include the La Jolla Half Marathon, Concerts in the Park, Taste of Del Mar, and Holiday Wonderland in Del Mar.
3. **Minor Events:** A Minor Event is defined as any activity *for a small and/or specialized group of less than 200 participants and/or spectators that does not add special burden* on City personnel, resources, services, facilities, traffic circulation or impact the community and/or its citizens.

Any event over 200 people is considered a Major Event and requires submittal and approval of a Use of Public Facility application including use of the City's beachfront parks (Powerhouse and Seagrove). Commercial Use of Public Property is regulated under section 6.48 of the Del Mar Municipal Code (DMMC) and includes additional requirements and fees. Events that include large assemblage of 50 or more people require an Operation Permit per DMMC 6.52 even if held on private property if it is to affect the public.

The Community Services Department has the discretion to circulate the application to the Office of the City Manager, Public Works, Fire Department, Planning Department, and Clean Water Program for their review and input. If applicable, once concurrence is received from all departments, a contract is issued.

6.17.3 Best Management Practice Requirements

Best Management Practices should be imposed by the City on Major Event organizers based on the information provided to the City regarding the event and the City's knowledge of the potential impact the event may pose on the MS4 and the receiving waters, especially from trash and litter. The City's Community Services Department is the lead in coordinating with other City Departments to include additional BMPs to control the most common pollutants at these events, which may include: litter and trash, wash water, and spills (food waste, beverages). BMPs for each Major Event are discussed and documented during the initial coordination meetings with the event organizers or sponsors. The BMP requirements are recorded on the Major Event Clean Water and Pollution Control Checklist (Appendix 6-B).

6.17.3.1 Updated BMP Requirements

Major Event BMP List

The Municipal Storm Water Permit requires that the City consider six (6) types of controls or BMPs to eliminate of reduce trash and litter from leaving the event area and potentially entering both the MS4 and/or receiving waters. The Community Services Department will consider the following BMPs for all Major Events held at the City's facilities or the public right-of-way.

The City of Del Mar has reviewed the controls listed in Permit Section D.3.a.(2)(f)i through D.3.a.(2)(f)vi and has determined their applicability and effectiveness during Major Events.

Major Event BMPs:

1. Temporary screens on catch basins and storm drain inlets; catch basin, drop inlet, and curb inlet structures are all considered "inlets" to the MS4 in this section. Temporary screens may not be feasible in all cases due to size variations and locations. Del Mar has determined that gravel or sand bags are not an acceptable method to protect inlets or secure fabric materials around inlets because they can rupture and contribute debris to the MS4. Ruptured bags can also reduce inlet cleaning efficiency.

    a. Drop inlets (parking lots and other areas). Del Mar may need to consider drop inlet protection when special events are conducted. One of two methods may be used on drop inlets: 1) drop inlets that are located within the areas used for Major Events will be temporarily covered or sealed to prevent trash and debris from entering; or 2) drop inlets can be inspected after each event and scheduled for cleaning, as necessary, after the event and prior to the next storm. See Item 4 below for additional details. The second alternative is less desirable, since it takes additional city resources and provides less protection of the MS4.
    b. Curb inlets. Curb inlet protection will be provided on a case by case basis and will depend on the type of event. The method selected will be determined by the City during the Major Event pre-event BMP requirement and coordination meeting. One of two methods may be used on curb inlets: 1) cover or seal curve inlets to provide protection; or 2) curb inlets may be inspected and cleaned, as necessary, after the event and prior to the next storm. The second alternative is less desirable, since it takes additional city resources and provides less protection of the MS4.

2. Temporary fencing to prevent windblown trash from entering adjacent water bodies and MS4 channels; Del Mar's Major Events are a very limited number and are the type of events that do not facilitate the installation and use of temporary fencing. Past experience during the last couple of years managing these events has not shown windblown trash to be a concern due to the diligence of the City's trash and litter management practices. Major Events such as concerts, art walks, and other community events are routinely staffed during and immediately after the event for trash removal and cleaning. The most feasible alternative to this BMP is a combination of proper trash and litter management (Item 3) and, as needed, inlet protection (Item 1) and cleaning following the event (Item 4).

3. Proper management of trash and litter; The Community Services Department staffs all Major Events to monitor the implementation and repair of planned BMPs, including trash

and litter management. Expanded trash services are implemented at all Major Events and are augmented by trash management requirements imposed on the event organizers or sponsors. Beach trash and litter pickup is performed by foot patrol on a daily basis and trash receptacles are emptied. Parks are patrolled to monitor trash receptacle capacity and emptied as needed.

4. Catch basin cleaning following the special event and prior to an anticipated rain event; inspecting and cleaning drop or curb inlets may be more feasible and performed in lieu of temporary covers or screens, if they are located such that covering or sealing them may result in a tripping hazard to pedestrians or interfere with the Americans with Disability Act (ADA) requirements.

   Inspection of inlets within and near the Major Event area will be conducted immediately after the event, and if necessary, cleaning will be scheduled to take place as soon as feasible and no later than the next anticipate storm event. Additional information regarding MS4 cleaning activities can be found in Section 6.2.

5. Sweeping of streets and parking facilities following the major event; Del Mar will determine the extent of street sweeping following a Major Event, either during the pre-event coordination meeting or the post-event inspection. Additional information regarding the City's routine street sweeping program can be found in Section 6.4.

6. Other equivalent controls.

   a. Smoking prohibition. The City prohibits the smoking of tobacco in public places, parks, beaches, and places of employment except in designated smoking areas per DMMC 11.08. This restriction is a BMP that eliminates cigarette butts from public areas and has a positive effect on water quality and litter control. Cigarette butts are considered one of the most prevalent forms of litter in public places. This prohibition acts as a BMP that is in effect at all Major events.
   b. Pet restrictions. The City has prohibited the presence of dogs and specified the time periods and locations at several public beaches and parks (DMMC 4.08) where this is enforced. The City also provides doggie waste bags where dogs are permitted.
   c. Trash receptacles and trash removal must be provided by the event organizers.
   d. Portable toilet facilities. Permanent restroom facilities are located at the Powerhouse Community Center which is readily accessible from these two locations. Portable toilets may be considered for other Major Events on a case-by-case basis.
   e. Washing or cleaning activities. Washing and cleaning of any temporary or portable equipment or materials (chairs, tables, tents, etc.) used during the events is not allowed. Sidewalk or street wash down has to be performed in such a manner that wash water is not allowed to enter the storm drains and must be captured and removed for offsite disposal.
   f. Decorations and other materials such as flower petals, rice, confetti, etc. are absolutely prohibited at special events.

Minor Events Applicability and Procedures

The City of Del Mar has reviewed its policies and procedures for Minor Events. Minor Events require a permit from the Community Services Department and have been determined not to be a significant source of trash and litter requiring the implementation of additional controls or BMPs. Their designation as Minor Events does not imply that BMPs will not apply, only that they

will not be specifically documented and tracked for reporting purposes under the Permit, instead the City will rely on the oversight by City staff, routine and daily trash and litter management practices, and inspection and cleaning of the MS4 (described in Section 6.2 above) and complaint mechanisms to identify persistent problems and consider modifications to these procedures.

The City has strict requirements for all organized use of City park facilities. Use permits are required for:

1. Use specific to a particular time or location in a park or beach
2. Use by a group of more than 25 people

Groups of larger than 25 persons require special consideration for locations including the beach. Applications must be submitted in advance. Persons requesting use of a City facility are required to pay applicable fees.

The Community Services Department has the discretion to circulate the application to the Office of the City Manager, Public Works, Fire Department, Planning Department, and Clean Water Program for their review and input. If applicable, once concurrence is received from all departments, a contract is issued. Only one event is scheduled per park or beach area per day.

Minor Event BMP List

Del Mar has determined that Minor Events are not a significant source of trash and litter and do not pose a risk to water quality degradation, but will require implementation of minimum BMPs or controls. These BMPs were in place prior to the Permit requirement for special events. Use restrictions will also apply. Minor events at the Powerhouse Community Center are always staffed and strictly controlled, especially outdoor areas.

Minor Events located at City parks and beaches are permitted by the Community Services Department and are not specifically staffed by the City. Community Services and other City department staff monitor Minor Events year-round or an as-needed or random basis, including weekends and holidays. Litter and trash management staffing is increased during the high season (late May through early September).

Minimum BMPs for Minor Events

The Permit issued by the Community Services Department to each applicant has specific terms and conditions that include conditions of use listed in the permit and are provided in writing. Examples of BMPs included in the use permit are:

1. Permittee is responsible for ensuring that the park is left clean;
2. All trash and debris associated with the event must be picked up and removed from the beach or park by the applicant;
3. Smoking is not allowed.

The City also implements BMPs for the same locations that act as an additional BMP or control for parks and beaches:

1. Trash and Litter Management. Beach trash and litter pickup is performed by foot patrol and trash receptacles are emptied on a daily basis. Parks are patrolled to monitor trash receptacle capacity and emptied as needed.
2. Facility Cleaning. Restroom facilities are monitored and cleaned at least once daily, including weekends and holidays and more often during the high season, as needed. Restrooms are located at the Powerhouse Community Center.

6.17.3.2 Additional Controls for Municipal Areas and Activities

Not applicable. See Section 6.17.3.1 which includes all controls for events.

6.17.4 Program Implementation

6.17.4.1 Education and Staff Training

The special events procedures described in this section have been in place for several years and have worked effectively to prevent pollutants from entering the City's MS4 and receiving waters. The City has augmented the program, to meet Permit requirements, by adding documentation of meetings and activities conducted between City staff and the event organizers as well as documentation of inspections of the major events. The documentation and the process to follow-up on any deficiencies are all minor improvements that will require staff training during the first year of implementation.

6.17.4.2 Maintenance Inspections

This section is not applicable to this activity.

6.17.4.3 Contract Specifications (e.g., for landscape services)

The City of Del Mar enters into agreements, in the form of permits and other letter agreements, with individuals or organizations holding any major event. Information on the requirements and regulations that apply to special events are found on the City's website or by contacting the Community Services Department.

6.17.4.4 Administrative Controls (internal processes, policies, procedures, etc.)

The Administrative Controls applicable to this section are generally described in Section 6.1.3.3. Additional administrative controls specific to Special Event coordination and implementation are described in this section.

6.17.4.5 Direct Implementation of BMPs

The process to identify major events and determine the appropriate BMPs is described in more detail in Sections 6.17.2 and 6.17.3 above. In summary:

Major Event Application Procedures

The City requires an application and issues a permit for all major events. Major events have oversight by the City. The Community Services Department is the lead coordinator for Major Events in the City of Del Mar and will complete the Major Event Clean Water and Pollution

Control Checklist (Appendix 6-B) to document the required BMPs and post-event inspection results.

The Major Events in Del Mar include:

1. Taste of Del Mar
2. The La Jolla Half Marathon
3. Concerts in the Park
4. Holiday Wonderland in Del Mar

Moderate Events: No moderate event definition will apply in Del Mar. Events are either classified as Major or Minor.

BMPs are required as applicable and determined during coordination meetings with the event sponsors or organizers.

6.17.4.6 Compliance Assessment

The City's Community Services Department will be assessing compliance for all major events to verify implementation and compliance with the specified BMPs. The assessments will be conducted during the event, as appropriate, and at the conclusion of the event.

6.17.4.7 Facility Inspections and Improvements

The City's Community Services Department will be conducting inspections of all major events to verify implementation and compliance with the BMPs selected for the event, as shown on the completed form (Appendix 6-B) for each major event. Inspections and any immediate corrective actions will be determined during the event and documented on the form. The post-event inspection will also serve to identify any improvements needed in both the application and in the permitting process for BMP selection for the type of event, and any additional BMPs for future events. The post-event inspection will provide the feedback mechanism to improve the program, as needed.

6.17.4.8 Enforcement Measures

Any follow-up activities related to non-compliance, clean-up or enforcement will be initiated by the Community Services Department upon completion of the post-event inspection. Any follow-up activities will be documented in the form and completed in the prescribed timeframe. The Clean Water Program may also assist the Community Services Department upon request.

6.17.4.9 RWQCB Notifications

Although none are anticipated, any RWQCB notifications as a result of conducting special events in the City of Del Mar would comply with the Permit 2007-0001 requirement are outlined in Section 6.1.3.6.

6.17.4.10 Annual Reporting

The City will be reporting the number of major events and a summary of the inspection results recorded on the inspection form (Appendix 6-B). The completed forms will be provided to the Clean Water Program Manager to summarize the program as part of the annual reporting

process. Any modification to the policies, procedures or BMPs will also be reported annually. Also see Section 6.1.3.7.

6.17.5 Special Event Venues Effectiveness Assessment (Optional)

Section 13.0 addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l).

6.18 Power Washing Element

6.18.1 Background

This section addresses power washing activities associated with municipal facilities or activities. Due to its potential to introduce pollutants into the MS4 and thus receiving waters, power washing is limited as much as possible and regulated to comply with the Permit and Del Mar Municipal Code Title 11.30 – Stormwater Management and Discharge Control.

6.18.2 Source Characterization

Currently, there are no regularly scheduled power washing activities at specific locations. This activity is conducted in various areas of the City depending on the need and as a result of other maintenance functions. This activity and the BMPs listed below are considered to apply citywide for all municipal operations. Power washing may be conducted by City staff or under contract depending on the need.

6.18.3 Best Management Practice Requirements

6.18.3.1 Updated BMP Requirements

Whenever possible, the City will employ dry cleaning methods rather than power washing for cleaning activities involving buildings, windows, parking lots, sidewalks, and any other applicable outdoor surfaces. In cases where power washing is deemed necessary or appropriate, the City requires that all wash water resulting from power washing to be captured prior to entering the MS4 and disposed pursuant to applicable laws; in areas where it is appropriate wash water may be directed to the sanitary sewer. Generally this may take place by capturing and disposing of the wash water at the City's Corporation Yard where a wash rack is located. These practices will satisfy the minimum BMP requirements for municipal power washing activities. In order to maintain compliance with Order 2007-0001 and the City's Municipal Code section 11.30, this minimum BMP shall be properly employed and enforced with any City power washing activities in order to prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards. Any contracted power washing services will conform to the contract specification in JURMP Section 6.1.3.2 and the BMPs designated for Power Washing described in this section.

6.18.3.2 Additional Controls for Municipal Areas and Activities

The BMPs and protocols listed above offer a high level of source control for the introduction of pollutants into the MS4 and thus do not require additional controls for municipal areas and activities.

6.18.4 Program Implementation

6.18.4.1 Education and Staff Training

City of Del Mar employees receive annual training on storm water regulations and JURMP program implementation strategies. Additional information regarding employee training is provided in Section 6.1.3.1. The City's Public Works Department employees implement the power washing activities related to municipal areas and are trained in the proper BMPs described in this section.

6.18.4.2 Contract Specifications

See Section 6.1.3.2 for a description of municipal services contract specifications and procedures.

6.18.4.3 Administrative Controls (internal processes, policies, procedures, etc.)

See Section 6.1.3.3 for a description of the citywide Administrative control policies and procedures applicable to the Municipal component.

6.18.4.4 Compliance Assessment

Compliance assessment is performed through area/activity inspections as described in Section 6.1.3.4 above.

6.18.4.5 Enforcement Measures

The City's enforcement measures and procedures are outlined in Section 6.1.3.5.

6.18.4.6 RWQCB Notifications

The City's RWQCB notification procedures are outlined in detail in Section 6.1.3.6.

6.18.4.7 Annual Reporting

The City's Annual Report will include a summary of the BMP verification activities as outlined in Section 6.1.3.7.

6.18.5 Power Washing Effectiveness Assessment (Optional)

Section 13.0 addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l).

6.19 Fire Services – Non-Emergency Fire Fighting

6.19.1 Background

This section describes the City's program to reduce pollutants from non-emergency fire fighting flows (i.e. flows from controlled or practice blazes and maintenance activities) determined to be a significant source of pollutants to waters of the U.S. According to the Permit, emergency fire fighting flows (i.e. flows necessary for the protection of life or property) do not require BMPs and need not be prohibited.

6.19.2 Source Characterization

Since 2001, the City's Fire Department conducts very few, and only minor non-emergency fire fighting exercises most training is held at regional facilities outside of the City. The current non-emergency fire fighting exercises are limited to hand line training conducted at the Del Mar Fairgrounds. Any other exercises or training events (non-emergency activities) would be scheduled and coordinated with the Clean Water Program to incorporate the minimum BMPs for the specific activity. The Public Works Department would work with the Fire Department to coordinate such training exercises if there is any potential for flooding or excessive flows to the MS4. This is important because some segments of the MS4 include pump stations.

A secondary source of pollutants associated with non-emergency fire fighting may originate from fire fighting equipment maintenance and cleaning. The Fire Department conducts all equipment cleaning at the Public Works Corporation Yard located near the fire station. Cleaning is performed at the wash rack that is connected to the sanitary sewer system.

Discharges other than stormwater runoff are not allowed to enter the City's MS4, and activities associated with maintenance or upkeep of fire equipment is included in the prohibition. The BMPs described in the following section shall be implemented when non-emergency fire fighting activities are performed in Del Mar.

6.19.3 Best Management Practice Requirements

6.19.3.1 Updated BMP Requirements

This section describes which BMPs will be implemented, or required to be implemented for non-emergency fire fighting and associated maintenance activities for equipment, including pollution prevention measures to comply with Permit sections B.3.

The minimum BMPs for non-emergency fire fighting are limited to minor training exercises and include the following:

Runoff and Pollution Prevention

Fire Department staff will conduct hand line training at designated areas of the Del Mar Fairgrounds that do not discharge runoff water to the MS4 or receiving waters (beaches or San Dieguito lagoon). Water discharged from fire equipment shall be limited in time and the area of discharge so that it can infiltrate into porous areas.

Storm Drain Inlets

Any additional training exercises that have an increase volume or duration may increase the runoff potential based on the flow and length of time of the training event. These training events shall be coordinated with the Public Works Department or Clean Water Program staff to identify any inlets or other storm drain structures that will need to be blocked or covered to prevent the introduction of discharges and/or pollutants from land (i.e. fertilizer, sediment from landscaped areas). Public Works may also need to be contacted if any discharges are anticipated to the storm drain system to verify pump station operations.

6.19.3.2 Additional Controls for Municipal Areas and Activities

No additional controls are anticipated or require implementation for non-emergency fire fighting activities tributary to CWA section 303(d) impaired water body segments, or for municipal areas and activities within, adjacent to, or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas (Permit section D.3.a.(2)(e)).

The Fire Department is aware that any changes to non-emergency fire fighting activities or training exercises must be reviewed by Clean Water Program staff to verify Permit compliance, and that each activity must take into account implementing BMPs to the MEP.

6.19.4 Program Implementation

6.19.4.1 Education and Staff Training

City of Del Mar employees receive annual training on storm water regulations and JURMP program implementation strategies. Employees in the Fire Department also receive job-specific training to perform the tasks associated with the BMPs described in Section 6.19.1 through 6.19.3 above regarding the sources and BMPs associated with non-emergency fire fighting activities.

6.19.4.2 Inspection, Cleaning and Preventive Maintenance Practices

The City's inspection procedures for high priority facilities are described in Section 6.1.3.4 and are applicable to this element.

6.19.4.3 Contract Specifications

General contract specifications and procurement procedures would apply per Section 6.1.3.2, but are not anticipated for this activity.

6.19.4.4 Administrative Controls (internal processes, policies, procedures, etc.)

See Section 6.2.4.3 for a description of the citywide Administrative control policies and procedures applicable to the Municipal component.

6.19.4.5 Direct Implementation of BMPs

See Section 6.19.3 for the minimum BMPs and implementation strategies for non-emergency fire fighting and associated maintenance activities.

6.19.4.6 Compliance Assessment

Compliance assessment is performed through area/activity inspections as described in Section 6.1.3.4 above.

6.19.4.7 Facility Inspections and Improvements

See section 6.1.3.4 for a description of the facility inspection procedures applicable to the Municipal component.

6.19.4.8 Enforcement Measures

The City's enforcement measures and procedures are outlined in Section 6.1.3.5.

6.19.4.9 RWQCB Notifications

The City's RWQCB notification procedures to comply with the Permit 2007-0001 requirement are outlined in Section 6.1.3.6.

6.19.4.10 Annual Reporting and Recordkeeping

See section 6.1.3.7 for the overall reporting and recordkeeping strategy for the Municipal component.

6.19.5 Other Non-Emergency Fire Fighting Activities that May Contribute a Significant Pollutant Load to the MS4

All such activities have been included above.

6.20 Municipal Component Effectiveness Assessment (Optional)

Section 13.0 addresses the effectiveness assessment requirements of Permit sections I.1 and J.1.(3)(l).

6.21 Program Modification and Review

The City will be identifying and documenting future modifications to the Municipal Component in this section. Section 14.0 will also identify the location in the JURMP of any changes made to the JURMP to meet the requirements of the Permit.

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City of Del Mar
Commercial and Industrial Facility Inspection Procedures

(Rev. February 2009)

These procedures have been developed to ensure compliance with the minimum inspection requirements outlined in Section D.3.b.(3) of the 2007 San Diego County Municipal Permit (R9-20070001). Commencing in FY 2008-2009, 100% of all industrial facilities will be inspected annually, except when such facility has been inspected by Regional Board staff during that given year (Municipal Permit Section D.3.b.(3)(f)). Inspections may be conducted by City of Del Mar Staff or third party contractors. In the event that third party inspectors are used, all inspector certification and audit requirements identified in Municipal Permit Section D.3.b.(3)(d) will be included in the program.

Step 1: Initiation of Inspection

An inspection is initiated as a result of one of the following:

- As part of the annual schedule for priority industrial/commercial sites/sources
- A public or municipal staff reporting of illicit/non-stormwater discharges or related investigation
- As a follow up to a previous inspection, violation, or citation
- In response to a referral by an inspector of a different program or agency
- Identification of potential threat to water quality from a industrial facility or business identified by staff during routine patrols of the City.

The inspectors will conduct a complete inspection of the business using one of the following as appropriate:

1) The City of Del Mar Industrial Facility Inspection Form (included as Appendix 7-D-1 of the City of Del Mar's 2007 JURMP);
2) The City of Del Mar Commercial Facility Inspection Form (included as Appendix 7-G-1 of the City of Del Mar's 2007 JURMP); or
3) By preparing an inspection letter with or without a photo report (City of Del Mar Staff Inspectors Only).

In cases of non-routine or follow-up inspections, the focus of the inspection should primarily be on any issue(s) that were identified during the initiation inspection.

Step 2: Pre-Inspection Preparation

Before visiting a facility, the inspector should access the existing site (commercial or industrial) inventory facility folder and complete the following actions:

1) Print out or copy an inspection form and any relevant information for the site, such as previous inspection records.

2) The inspector should review the information to determine the following:
   - The site's identified potential threat to water quality;
   - The site's primary commercial or industrial activity based on SIC Code;
   - The proximity to CWA 303(d) listed water body segments

- The minimum BMPs that it should be implemented and other relevant information.
- Any new 303(d) listings shall be addressed with additional BMPs, as appropriate, to ensure that the site does not contribute to the impairment of its 303(d) receiving water.
- Confirm the potential threat to water quality based on criteria outlined in Municipal Permit Section §D.3.b.(3)(c).
- The inspector should also note incomplete portions of the facility's profile so as to attempt to complete the information during the inspection.

3) The inspector should review any existing Stormwater Pollution Prevention Plans or BMP Implementation Plans for the facility.

Step 3: The Site Visit

1) Arrival

Before entering the facility grounds, the inspector should make note of the following:

- Nearby conveyances or water bodies.
- Visible discharge points along perimeter of the site.
- Outdoor areas of intensive activity.
- The condition of outdoor trash storage and used oil/grease storage areas, if applicable
- Signs of recent additions or remodels.

2) The Management Office

After introductions, the inspector can obtain the following information from this initial contact with the facility operator:

- Update of information for the industrial inventory, including changes in ownership or operations
- Verification of SIC code and other facility descriptions
- Clarification of observations noted before entering the facility, (i.e. any changes in activities, materials, or physical structures)
- Other considerations, such as existing pollution prevention plans or an environmental management system.
- Check for coverage under the General Industrial Permit (Notice of Intent (N01) and/or Waste Discharge Identification No.), if applicable;
- Review of facility monitoring data, if the site monitors its runoff, and confirm submittal to the Regional Board as necessary.

3) Facility Walk-through with Management or Facility Supervisor

A site map, if available, should be used to assess areas in which on-site activities and areas are exposed to precipitation, increasing the risk of pollutants entering storm water. Attention should also be paid to run-on and runoff in these areas, as well as pollution prevention measures. From the walk-through, an inspector can assess the following:

- Accuracy of site map, industrial activities, materials list, and any existing pollution prevention plan
- Confirmation of additions or changes observed while approaching the facility

- Evidence of illegal discharges (i.e. on-going leaks or recent spills or connections not authorized under an NPDES permit)
- Effectiveness of BM P implementation for each area or activity
- Any new receiving water 303(d) listings which require additional BMPs, as appropriate, to ensure that the site does not contribute to the impairment of the receiving water
- Photo documentation of any potential storm water violations identified during the inspection.

Step 3: Completion of Inspection Forms

Whenever possible, the inspector should complete the inspection form while on-site (during or at the conclusion of the inspection) or prepare the necessary notes to complete a letter report to be sent at a later date. If the form is completed on-site, a signature on the form shall be obtained by the responsible person, or designated responsible person, at the business.

Step 4: Follow-up

Once the inspection is completed, the inspector will complete the following steps (as appropriate):

1) Provide copies of all inspection report forms to the responsible person, or designated responsible person, at the each business.
2) In the event that inadequacies are identified, a follow-up inspection should be scheduled within 21 days. Determination of potential Notices of Violation and or issuances of Administrative Citations shall be made by the City's Clean Water Manager or Code Enforcement Officer. Such decision shall be made based on facility compliance record, severity of inadequacy, and existence of illicit discharge.
3) Based on the results of the facility inspection, notify the City's Clean Water Manager if any changes to the sites activities results in a change to the facility's potential threat to water quality. If there is a change, the facility records should be modified to reflect this change.
4) Provide follow-up education and training on storm water pollution prevention, as conditions warrant.
5) Log the inspection reports in the appropriate log, or provide documentation to clerical staff for data entry.
6) For industrial sites, the Inspector will notify the Clean Water Manager of any industrial activity which may require coverage under the General Industrial Permit, for which an NOl has not been filed. A log of Industrial Non-Filers will be kept by the Clean Water Manager, and will include the name, address, and SIC code of the business, and included in the City's JURMP Annual Report.
7) For those sites inspected by a third party, on behalf of the City of Del Mar, these additional follow-up steps will be taken:
   - All inspection findings will be reported to the City of Del Mar within one week of the inspection being conducted, including any transmittals of photo documentation.
   - The City of Del Mar will be notified of *any* significant potential violations within 24 hours of the inspection. Appropriate follow-up and/or enforcement actions for any potential stormwater violations identified during the inspections will be completed within two (2) business days of the inspection or receipt of the report of potential violation.

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Section 15
Conclusions and Recommendations

During the FY2008/2009 Reporting Period, the City of Del Mar implemented the Municipal Permit requirements and the activities described in the City's 2008 JURMP. The City continues to support a comprehensive stormwater management program, which is evident in, and reflected by, the City's efforts to implement its JURMP. This Annual Report documents the City's efforts to implement various JURMP programs such as education, inspections, inventories, monitoring, and public participation. These activities and their compliance are reflected in Permit Component Tables contained in the Effectiveness Assessment addressed in Section 11 of this Annual Report.

In addition to the activities identified in the Permit Component Tables, the City has been involved in several other regional efforts including:

- Continued contributions to the San Dieguito and Los Peñasquitos WURMP implementation;
- Los Peñasquitos Lagoon TMDL development; and
- Co-chairing the Regional Copermittees' Municipal Workgroup

This section draws conclusions from the collected data contained in this Annual Report, and makes appropriate recommendations based on the review of program implementation during the FY2008/2009 Reporting Period.

15.1 Recommendations and Program Modifications

The City's Clean Water Program continued to evolve during the FY2008/2009 Reporting Period. As indicated in the City's 2008 JURMP, the program will require periodic revision. The City remains committed to working with its staff, other Copermittees and the Regional Board to improve and adapt its plan and make all efforts necessary to comply with the Permit requirements and to make improvements to water quality. As lessons are learned, and as a result of City staff input, modifications may be required to make sure that the City's program continues to be effective.

As described in Section 14 of this Annual Report, the City has made some modifications to its program as outlined in the 2008 JURMP to reflect existing program implementation, and to improve processes and procedures necessary to implement the Permit requirements. Some of these modifications were made as a result of the Regional Board review of the 2008 JURMP and FY2007/2008 Annual Report, and were outlined in the City's response from February 2009. All modifications made were directly related to the program effectiveness assessment described in Section 12.

Some of the key recommendations for program implementation during FY2009/2010 are as follows:

- Continue implementation of the City's 2008 JURMP, as revised;
- Modify staff training to address all employees – including seasonal staff – consideration may be given to electronic training sessions;
- Continue improvements to activity/document tracking systems;

- In depth assessment of the operating procedures as related to the City's 2008 JURMP – focusing particularly on field implementation of the requirements, and whether the efficiency of implementation can be improved;
- Continue to engage and involve the community in the program implementation; and
- Continue to coordinate with the Regional Copermittees for consistent approaches to program implementation.

15.2 Conclusions

As evidenced in the Permit Component Tables, the City has largely been successful at implementing its clean water program. With continued review and modifications of its 2008 JURMP, and ongoing input on the implementation of its program, the partnership between residents, local businesses, and City staff will continue to allow the City to work diligently in protecting its waterways, and improve water quality at its beaches and lagoons.

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City of Del Mar
Jurisdictional Urban Runoff Management Program Annual Report
for
Fiscal Year 2009 - 2010

Submitted to
Regional Water Quality Control Board
San Diego Region

SEPTEMBER 2010

City of Del Mar Jurisdictional Urban Runoff Management Program Annual Report

for Fiscal Year 2009-2010

Submitted to the
Regional Water Quality Control Board
San Diego Region

September 30, 2010

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Executive Summary

The City of Del Mar (City) developed its Jurisdictional Urban Runoff Management Program (JURMP) in 2008 to meet the requirements of the Municipal Separate Storm Sewer System (MS4) Urban Runoff Discharge Permit (Order No. R9-2007-0001) (Permit) issued to the City and the Regional Copermittees by the California Regional Water Quality Control Board, San Diego Region (Regional Board). The Permit requires the Copermittees individually, but collaboratively, to develop and implement comprehensive programs to reduce and eliminate urban runoff pollutants that are discharged from their storm drain systems to the receiving waters. The City's program and activities, designed to meet these requirements, are described in detail in the City's 2008 JURMP.

The City has prepared this JURMP Annual Report to provide a comprehensive description of all the activities conducted by the City to comply with all the requirements of Section D of the Permit, as described in the 2008 City of Del Mar JURMP. This Annual Report covers the implementation of jurisdictional activities during the period from July 1, 2009 through June 30, 2010 (Reporting Period), and follows the standardized format developed by the Regional Copermittees and adapted as appropriate for the City.

During the Reporting Period, the City continued implementation its 2008 JURMP, including all baseline Permit requirements. The City believes that the core program activities outlined in the Permit: education; inspections; monitoring; and enforcement are the most effective at reducing pollutant generating activities. Within the City's program, the inspections and monitoring programs are not only implemented to identify wrongdoers, but provide the City with opportunities to educate the community. It is through the outreach and education of the general population that awareness and behaviors will change for the betterment of water quality. On the occasion where outreach is not effective at changing behaviors, the City uses its enforcement authorities to obtain compliance.

The City's diligent efforts towards best management practice (BMP) implementation are, once again, a key element for this year's report. City staff has been active and consistent in activity/area specific BMP implementation as demonstrated through the municipal facility inspection program. Another supporting effort for municipal activities has been data tracking and the ability to report the results of the City's own activities with ease. With each year of program implementation, the City becomes more effective and efficient at tracking meaningful data accurately – and this year was no exception. Staff continues to use and refine the elaborate system for tracking street sweeping, pipe cleaning, and call out activities such as power washing developed by City staff in previous reporting periods.

Some interesting and key numbers associated with the City staffs' efforts to implement the program follow:

43.2 tons – The amount of debris, sediment and trash removed from the City's storm drain system thereby prevented from entering the lagoons and Pacific Ocean;

1,156 miles – The number of miles the street sweeper swept during Fiscal Year 2009-2010;

117.25 tons – The amount of material collected from street sweeping during Fiscal Year 2009-2010, and thereby prevented from entering the lagoons and Pacific Ocean.

Overall, the City's effectiveness in continuing the implementation of the program was high, and there were no substantive modifications to the 2008 JURMP identified as necessary during this Reporting Period.

The City remains an active voice in regional groups and activities as well by co-chairing a regional Copermittee workgroup and actively participating in other workgroups, both permit-mandated workgroups and other workgroups, such as the Los Peñasquitos Lagoon TMDL Workgroup, whose impact on the City's program is recognized. In addition, the City continues to be involved in other workgroups that, while not directly related to Municipal Permit requirements, work toward water quality protection and water conservation goals of the City's program. This includes the San Dieguito Lagoon Joint Powers Authority (JPA), the San Dieguito Lagoon Restoration Project, the County Water Authority Water Conservation Committee, and the City's own San Dieguito Lagoon Committee.

Funding of municipal programs, including stormwater programs, continues to be an issue for all of the cities in San Diego County. The City of Del Mar is no exception. Given its economic ties to the beach and ocean, the City of Del Mar recognizes the importance of clean water and its NPDES program. During Fiscal Year 2008-2009, the City took steps to ensure that adequate funding is available on a more permanent basis through voter-approved passage of the Clean Water Service Charge. This fee continues to fund a substantial portion of the program. In addition the City continues to seek other sources of funding, including State and Federal grants, for special projects and to make up the deficit between the cost of implementing the program and the portion covered by the Clean Water Service Charge.

By and large, the City continues to be very successful at implementing its Clean Water Program. Residents, local businesses, and City staff are working diligently to protect the waterways and improve water quality at the beaches and lagoons, and will continue to carry out these efforts in the future.

Certification Statement

FISCAL YEAR 2009-2010 JURMP ANNUAL REPORT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature _____ Date 9/27/10

Karen P. Brust, City Manager
City of Del Mar

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Section 1
Introduction

This document is the third annual report for the City of Del Mar's 2008 Jurisdictional Urban Runoff Management Plan (2008 JURMP) which went into effect March 25, 2008 in accordance with NPDES Order No. R9-2007-0001 (Permit), and subsequent amendments. The JURMP Annual Report generally follows the standardized format prepared and submitted to the San Diego Regional Water Quality Control Board (Regional Board) by the Copermittees in June 2007, and any deviations are minor and correspond to the format of the 2008 JURMP. The Reporting Period covered by this document is from July 1, 2009 through June 30, 2010.

1.1 Background

This section provides background information, including a brief overview, of the City of Del Mar Clean Water Program which implements its JURMP.

1.1.1 Overview of the City of Del Mar

The name Del Mar means "of the sea," and highlights the symbiotic relationship between the City and Pacific Ocean. The City of Del Mar is a coastal, primarily residential community in the northern section of San Diego County. Del Mar is bounded by Solana Beach to the north, San Diego to the south and east, and the Pacific Ocean to the west (see Figure 1-1). The City covers an area of approximately two square miles, with a population of approximately 4,500 residents. The main attraction of visitors is the beach and sunny weather. The annual San Diego County Fair, horse racing, and other events held at the Del Mar Fairgrounds bring in people from the surrounding area and beyond.

The Clean Water Program is a multi-departmental program coordinated by the City's Clean Water Manager and is an integral part of making the City of Del Mar a beautiful place to live, work and visit. Day-to-day compliance activities are conducted by staff from the Planning & Community Development Department, the Department of Public Works, the City Engineering Department, and the Department of Community Services. The Program is committed to ensuring city-wide compliance with the San Diego Regional Water Quality Control Board's Regional Municipal Stormwater Permit.

1.1.2 Watershed(s)

The City of Del Mar is part of the San Dieguito Hydrologic Unit and the Los Peñasquitos Hydrologic Unit, as shown in Figure 1-1, below.

1.2 Purpose and Objectives

The Annual Report is a comprehensive description of all the jurisdictional activities conducted by the City of Del Mar to comply with all the requirements of Section D of Order No. R9-2007-0001, as described in the 2008 JURMP, and covers the period from July 1, 2009 through June 30, 2010.

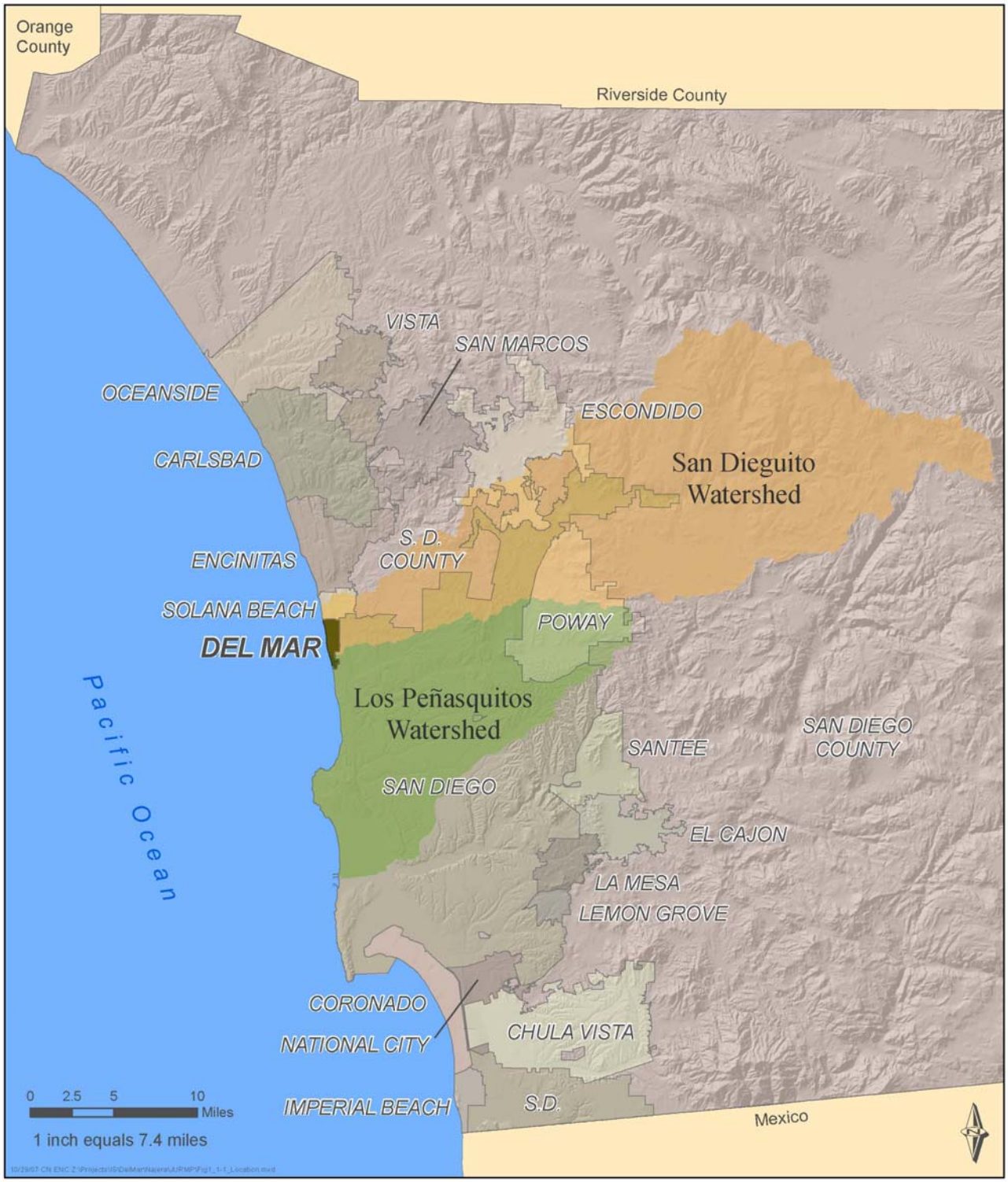

Figure 1-1: The City of Del Mar and its location relative to its associated watersheds in San Diego County.

Section 2
Development Planning Component

2.1 Introduction

Section 4 of the 2008 JURMP provides information on the implementation of the Development Planning Component of the Municipal Permit within the City of Del Mar, and was developed pursuant to Section D.1 of the Permit. This section of the JURMP Annual Report provides information relevant to the implementation of the Development Planning Component of the 2008 JURMP for the Fiscal Year 2009-2010 Reporting Period.

2.2 Land Use Planning

Section D.1.a of the Municipal Permit requires each Copermittee "revise as needed its General Plan or equivalent plan (e.g., Comprehensive, Master, or Community Plan) for the purpose of providing effective water quality and watershed protection principles and policies that direct land-use decisions and require implementation of consistent water quality protection measures for Development Projects." Appropriate modifications to the Del Mar Community Plan were adopted during Fiscal Year 2007-2008, and no further modifications were made during this Reporting Period.

Chapter 11.30 of the Del Mar Municipal Code (DMMC), entitled "Stormwater Management and Discharge Control," was rewritten in its entirety to implement the requirements of the Municipal Permit, and adopted on March 17, 2008 by the Del Mar City Council. No further modifications were made during this Reporting Period.

2.3 Environmental Review Process

The City of Del Mar Environmental Review process is aimed at accurately evaluating water quality and cumulative impacts and identifying appropriate measures to avoid, minimize and mitigate development project impacts to water quality. There were no modifications to the environmental review process made during the reporting period.

2.4 Development Project Approval and Verification Process

This section provides a general description of the various activities conducted as part of the City's development project approval and verification processes.

2.4.1 Program Implementation

During the Reporting Period, all development projects were required to undergo review under the City's urban runoff approval process and meet applicable project requirements. However, given the City of Del Mar's relatively limited land development potential, a majority of the projects reviewed are redevelopment projects that are often small in size and scope. A description of the City's efforts toward conditioning development projects and verifying compliance with established conditions and minimum BMP requirements is described below.

2.4.1.1 Development Project Approval Process and Project Requirements

During this Reporting Period, a total of 122 permit applications were reviewed by the Planning and Community Development Department. Appendix 2-A contains a complete list of the permit applications reviewed by the Department during this Reporting Period.

During the Reporting Period, no new projects meeting the definition of a "Priority Development Project" (PDP) under the Permit were proposed. During previous reporting periods, a total of four (4) PDP projects were either proposed or approved. These projects and their current status are found in Table 2-1 below. For an example of how the City of Del Mar applies SUSMP requirements to Priority Development Projects, please see Appendix 2-B of the Fiscal Year 2008-2009 JURMP Annual Report.

During this Reporting Period, no priority development projects were allowed to implement treatment control BMPs with low removal efficiency rankings, and as such no feasibility analyses were conducted to exhibit that more effective BMPs were infeasible.

Table 2-1: Priority Development Projects within the City of Del Mar

Project Name	Description	Status During Fiscal Year 2009-2010
PDP Projects with Permit Approval		
Garden Del Mar Specific Plan (SP-07-01; LCPA-08-02; CDP-08-17)	The proposed project is a mixed-use commercial development with restaurant, retail, and office uses situated in six two-story structures (totaling 19,600 square feet) built over a two-level subterranean parking garage.	Project was approved during the Fiscal Year 2008-2009 Reporting Period. However, due to funding issues, the project proponents have not moved forward with the project, and the property remains vacant and is currently for sale.
Riverview Project (CUP-08-01; CDP-08-19; FDP-08-02)	The project proposed to construct two, two-story, commercial office buildings totaling 23,293 square feet, with 83 parking spaces on two vacant parcels of land. The proposed project includes grading, hardscaping, and landscaping, and lies within 200 feet of the San Dieguito Lagoon.	Project was approved during the Fiscal Year 2008-2009 Reporting Period. However, the project proponents have not moved forward with the project, and the property remains vacant and undeveloped. It should be noted that during the RWQCB site visit in November 2009, this site was identified as a concern by RWQCB Staff as it was being used as an unimproved parking lot by local businesses. This use was resulting in minor sediment discharges to the City's MS4. City staff worked with the property owner, the site has been secured eliminating this potential discharge.
Pacifica Stratford (DRB-05-27, 28, 29, 30, 31)	The project proposes approval of a Final Subdivision Map which subdivides two existing legal lots into five two-unit condominium lots with required public improvements	The project received project approval in April 2006. During Fiscal Year 2009-2010, two of the five proposed two-unit condominiums were completed. Staff will begin inspection of the limited treatment control BMPs implemented for these units during Fiscal Year 2010-2011. The remaining portions of the project are unbuilt, and construction activity has been suspended on-site due to economic considerations.. Staff continues to monitor the project site on a regular basis.
Completed Project(s)		
Morotta/James Single Family Residence (DRB-03-37)	This project is a single family residence on a previously vacant lot within 200 feet of an environmentally sensitive area (the San Dieguito Lagoon)	Construction drawings for this project were approved in April 2008. The project incorporates LID to the MEP through the use of minimal hardscape and the incorporation of a vegetated swales and bioretention areas. The structure itself is elevated, allowing for preservation of pervious surface conditions under what would otherwise be the building footprint. Signed certification of BMP implementation by the Project Engineers was submitted to the City in March 2009. As discussed below, City staff conducted their annual inspection of the site on September 30, 2010, and found the site to be well maintained and in conformance with the project conditions of approval.

2.4.1.2 Standard Urban Stormwater Mitigation Plan (SUSMP) Implementation and Development

During the Reporting Period, the City of Del Mar continued to implement the requisite SUSMP requirements outlined in the 2008 JURMP. Pursuant to the requirements of D.1.d.(1)(b) of the Permit, on January 22, 2010 the City implemented modifications to the definition of a Priority Development Project to include "all other pollutant generating Development Projects that result in the disturbance of one acre or more of land." This modification was implemented by Departmental policy memo, and subsequently adopted as part of modifications to the Del Mar Municipal Code (DMMC), Chapter 11.30 (Stormwater Management and Discharge Control) during the City Council Hearing held on April 19, 2010. Copies of the department policy email and the City Council Staff Report for April 19, 2010 are included as Appendix 2-B of this Annual Report.

During the previous reporting period, the Copermittees, including the City of Del Mar, were notified that the Model SUSMP, submitted to the Regional Board in January 2009, was found adequate on March 25, 2009. Pursuant to the Permit, the City had 365 days from the date of notification to implement the revised Model SUSMP. During the Fiscal Year 2009-2010 Reporting Period, the City revised its local SUSMP to reflect the Regional Model SUSMP. The City's new SUSMP was implemented on March 24, 2010, as required under the Municipal Permit. A copy of the City's SUSMP is included as 2-C.

2.4.1.3 Priority Treatment Control BMP Inventory Tracking and Maintenance

The City has developed and is utilizing a watershed-based database to track and inventory approved treatment control BMPs along with maintenance within its jurisdiction. Because of the limited number of approved PDPs within the City of Del Mar, the database is a simple Excel® Spreadsheet which includes the required information on treatment control BMP type, location, watershed, date of construction, party responsible for maintenance, maintenance certifications or verifications, inspections, inspection findings, and corrective actions. No treatment control BMPs were approved during the last permit cycle, since no high priority projects qualified under the previous SUSMP criteria. As of June 30, 2010, only four (4) development applications for projects have triggered the PDP criteria. Appendix 2-D contains the current database (spreadsheet) for approved PDPs.

2.4.1.4 BMP Construction Verification

As of June 30, 2010, the Morotta/James Project, a single family residence, is the only approved PDP under SUSMP provisions which has been fully constructed in the City of Del Mar. As outlined in the 2008 JURMP, prior to occupancy of a Project subject to SUSMP requirements, the Engineer of Record is required to inspect the constructed LID site design, source control, and treatment control BMPs to verify that they were constructed in compliance with all specifications, plans, permits, ordinances, and the Permit. The Engineer of Record conducted this required inspection, and submitted a signed certification to the City in March 2009. No additional PDP projects have been full constructed in the City to date.

2.4.1.5 Annual BMP Operation & Maintenance Verification

As indicated above, as of June 30, 2010, only one (1) project, the Morotta/James Residence, has been approved under SUSMP provisions and constructed. The Engineer of Record conducted the required BMP Construction Verification in March 2009. The first annual BMP O&M Verification was conducted by the City of Del Mar on September 30, 2009, prior to the start of the wet season. During that inspection, it was noted that minor modifications to the BMPs had been made by landscaping crews. In response, the City issued a Notice of Violation (NOV) and Compliance Order on October 1, 2009

requesting that the Treatment Control BMPs be repaired. This was corrected by the owner, and noted during follow-up inspections by the City of Del Mar on October 14, 2009. No further action was required. No other BMP O&M Verifications were required or necessary during the Reporting Period.

2.4.1.6 SUSMP Waiver Mitigation Program

As of June 30, 2010, the City of Del Mar has not granted any SUSMP Waivers, and as such has not needed to implement a SUSMP waiver mitigation program.

2.4.1.7 Enforcement Measures for Development Projects

This section provides the number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions that were being taken to achieve compliance. Section 4.4.4.3 of the 2008 JURMP provides a description of the general process for applying enforcement to urban runoff related violations by development projects. No modifications to this section of the 2008 JURMP were recorded during this Reporting Period.

With the exception of the Notice of Violation and Compliance Order issued for the Morotta/James Residence discussed above, no other enforcement actions for development projects were taken during the Reporting Period. Enforcement actions related to construction activities are listed in Section 3 of this report.

2.4.1.8 Education Efforts Focused on Development and Redevelopment

The City of Del Mar continued to focus on one-on-one education for the municipal staff, planning boards, project applicants, developers, contractors property owners and community planning groups water quality issues. As a full-time staff member of the Planning and Community Development Department, the Clean Water Manager attended weekly Department Meetings where projects were reviewed and discussed by the planning team. This provided the opportunity to discuss both project-specific water quality issues, and provide general updates to the team on changes that may have developed as a result of discussions among the Regional and Watershed Copermittees.

As indicated in the 2008 JURMP the City conducted regular coordination meetings organized by the Planning Department to discuss development review procedures, issues, cases, and other subjects. The meetings, which are attended by the Planning, Engineering, Building and Public Works departments, provided a forum for information exchange and to educate City staff on the federal, state and local water quality laws and regulations applicable to development projects; the nexus between land use decisions and short and long-term water quality impacts; and how impacts to receiving water quality resulting from development can be minimized. In addition, the Clean Water Manager regularly attended the City's weekly Executive Team/Department Head meetings to ensure that upper management is kept abreast of requirements.

Lastly, the Clean Water Manager also continued to meet one-on-one with developers and project proponents on an as-needed basis to assist them in understanding the requirements under both the Permit and the City's SUSMP.

2.4.1.9 Hydromodification

The City of Del Mar revised its local SUSMP to accommodate LID and source control measures as required to meet the principles of hydromodification during a previous Reporting Period. The City has also participated in the development of the draft Hydromodification Management Plan (HMP). Staff from

the Department of Engineering and the Department of Planning participated in the Regional Copermittee Workgroup, attending meetings on a regular basis, and providing substantive comments on the interim drafts of the Model HMP, including submittal of comments to the Regional Board during Hearings on the final iteration of the HMP. The final iteration of the HMP was heard by the Regional Board during their July 2010 hearing. The City of Del Mar will revise its local SUSMP to address any additional requirements under the adopted HMP during the Fiscal Year 2010-2011 reporting period.

Of the four (4) identified Priority Development Projects listed in Table 2.4-1 above, none of them disturb 50 acres or more, and as such Interim HMP requirements were not applied.

2.4.2 Notable Activities

No notable activities other than those identified above were conducted during this Reporting Period.

2.5 Development Planning Component Effectiveness Assessment

A complete assessment of the effectiveness of the City's implantation of its 2008 JURMP, including the Development Component, is included as Chapter 11 of this Annual Report.

2.6 Program Review and Modification

No modifications were made to the Development Planning Component of the 2008 JURMP during this Reporting Period.

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Appendix 2-A
List of Permit Applications Reviewed by Planning & Community Development Department during Fiscal Year 2009-2010

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Appendix 2-B
January 22, 2010 Department Policy Email on PDP Definition and April 19, 2010 City Council Staff Report

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Joseph DeStefano

From: Joseph DeStefano
Sent: Tuesday, January 12, 2010 12:41 PM
To: Planning; Tim Thiele; Richard Lucera; 'SCARTWRIGHT rbf.com'
Cc: 'Mikhail Ogawa'
Subject: IMPORTANT CHANGE IN SUSMP IMPLEMENTATION - EFFECTIVE FRIDAY, JANUARY 22, 2010

Importance: High

EFFECTIVE FRIDAY, JANUARY 22, 2010

In addition to the Project Categories described in the City s Interim Standard Urban Stormwater Mitigation Plan (SUSMP) which are identified as Priority Development Projects (PDPs), the City now considers ANY development that disturbs one acre or more of land to be a PDP. PDP projects are required to implement incorporate post-construction BMPs into their project, including LID Site Design, Source Control and Treatment Control BMPs.

Appropriate revisions to the City s Code, Documents and Forms will be completed to include the new PDP category as soon as possible. This change is being made in preparation for the adoption of the new Model SUSMP approved by the Regional Board, and in accordance with requirements in the Municipal Permit.

If you should have any questions, please contact me.

Thanks,

Joe

Joseph M. DeStefano II, M.Sc., CPP, CCIS™, CSI
Clean Water Manager
City of Del Mar
1050 Camino del Mar
Del Mar, CA 92014
Tel: (858)755-9313 x172
Fax: (858) 793-7612
jdestefano@delmar.ca.us

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City of Del Mar
Staff Report

TO: Honorable Mayor and City Council Members

FROM: Joseph M. DeStefano II, Clean Water Manager
Via Karen P. Brust, City Manager

DATE: April 19, 2010

SUBJECT: An ordinance amending Del Mar Municipal Code (DMMC) Chapter 11.30 relating to Stormwater Management and Discharge Control to comply with the requirements of the San Diego Regional Water Quality Control Board Order R9-2007-0001.

ISSUE:

Whether to approve the recommended revisions to DMMC Chapter 11.30, and introduce an ordinance amending the Chapter.

FISCAL IMPACT:

The City's Clean Water Program is supported by the Clean Water Service Fee, which is paid by all users connected to the City's water distribution system. The funds are collected and deposited in the Clean Water Fund. Funding for the Clean Water Program was included in the approved budget. The recommended ordinance revisions do not result in any changes to the approved budget.

ENVIRONMENTAL IMPACT:

The activity is not a "Project" as defined under Section 15378 of the State CEQA Guidelines. Moreover, adoption of these proposed revisions to the DMMC constitute an action for the protection of the environment and, as such, the action is exempt from environmental review pursuant to Section 15308 of the State CEQA Guidelines.

City Council Action:

APR 19 2010 ITEM 12

RECOMMENDATION:

Conduct a public hearing; introduce the proposed ordinance amending DMMC Chapter 11.30 (Stormwater Management & Discharge Control) included in Attachment "A."

BACKGROUND:

The San Diego Regional Water Quality Control Board (Regional Board) adopted new National Pollutant Discharge Elimination System Permit requirements on January 24, 2007 under Regional Board Order R9-2007-0001 (Order), which increased the requirements for the City's regulation of urban runoff discharges. All of the Cities in San Diego County, including the City of Del Mar are listed in the Order as Copermittees and are required to update and implement a program of stormwater management that is even more rigorous than previously adopted. The permit requirements are very prescriptive and do not offer much flexibility for local interpretation.

DISCUSSION:

On March 3, 2008, the City Council adopted Ordinance 802 which implemented the initial requirements of the Order. However, the Order also provided for staged implementation of certain requirements including changes in classification of projects as Priority Development Projects, and inclusion of hydromodification requirements. In accordance with the requirements of the Section D.1.d.(1)(b) of the Order, as of January 24, 2010, all jurisdictions were required to consider any "pollutant generating project" that results in "a disturbance of one acre or more of land" as a Priority Development Project. This requirement was incorporated as an official policy change by the Planning and Community Development Department on January 23, 2010. The major change to the existing Ordinance being made at this time reflects the codification of this policy change.

In addition, the Proposed Ordinance includes definitions that have been added to reflect new terminology from the Order not included in Ordinance 802, and corrects minor typographical errors. Staff has also included an underline/strikethrough version of the relevant sections of DMMC Chapter 11.30 to clearly mark the revisions included in this Ordinance.

CONCLUSION:

Staff recommends that Council conduct the public hearing, and introduce the Ordinance approving the proposed revisions in DMMC Chapter 11.30 (Stormwater Management & Discharge Control).

Attachment A: Proposed Ordinance No. XXXX amending DMMC Chapter 11.30 (Stormwater Management & Discharge Control)

Attachment B: Underline/strike-out version of the relevant sections of DMMC Chapter 11.30 reflecting the proposed revisions

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APR 19 2010 ITEM 12

ATTACHMENT A

For City Council Report dated April 19, 2010

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APR 19 2010 ITEM 12

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF DEL MAR, CALIFORNIA AMENDING CHAPTER 11.30 OF THE DEL MAR MUNICIPAL CODE RELATING TO STORMWATER MANAGEMENT AND DISCHARGE CONTROL.

WHEREAS, the City of Del Mar intends to ensure the future health, safety, and general welfare of the citizens of the City of Del Mar by: 1) controlling non-stormwater discharges to the stormwater conveyance system; 2) eliminating discharges to the stormwater conveyance system from spills, dumping or disposal of materials other than stormwater; 3) reducing pollutants in stormwater discharges, including those pollutants taken up by stormwater as it flows over urban areas (Urban Runoff), to the maximum extent practicable; and 4) reducing pollutants in stormwater discharges in order to achieve applicable water quality objectives for surface waters in San Diego County; and

WHEREAS, the City of Del Mar intends to protect and enhance the water quality of its watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Clean Water Act and the San Diego Regional Water Quality Control Board Order Number No. R9-2007-0001 (NPDES Permit Number CAS0108758); and

WHEREAS, DMMC Chapter 11.30, Stormwater Management and Discharge Control, regulates and controls the discharge of non-stormwater discharges and quality of stormwater discharges.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF DEL MAR DOES HEREBY ORDAIN AS FOLLOWS:

SECTION ONE:

That Section 11.30.030 of the Municipal Code is amended to add the following new definitions, with the remaining sub-subsections re-alphabetized accordingly:

Hydromodification: The change in the natural watershed hydrologic processes and runoff characteristics (i.e., interception, infiltration, overland flow, interflow and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and sediment transport. In addition, alteration of stream and river channels, installation of dams and water impoundments, and excessive streambank and

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APR 19 2010 ITEM 12

shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

Hydromodification Management Plan (HMP): A plan to manage increases in runoff discharge rates and durations from all Priority Development Projects, where such increased rates and durations are likely to cause increased erosion of channelbeds and banks, sediment pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

Low Impact Development (LID): A storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

Source Control BMP: Land use or site planning practices, or structural or nonstructural measures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff.

Treatment Control BMP: Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

SECTION TWO:

That definition of "Priority Development Project" in Section 11.30.030 of the Municipal Code is amended to add a new category to read as follows:

(12) *Projects that disturb one (1) acre or more.* All other pollutant generating Development Projects that result in the disturbance of one acre or more of land.

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SECTION THREE:

That Section 11.30.080 of the Municipal Code is amended to read as follows:

11.30.080 Additional Minimum Best Management Practice Requirements for Residential Activities and Facilities

A. Applicable Requirements. The requirements in this section apply to all Residential Dischargers and any Regulated Commercial Business conducting residential activities on behalf of a Residential Discharger. All Residential Dischargers conducting activities must install, implement and maintain the BMPs identified in Subsection B of Section 11.30.070 for all Dischargers, and at least the additional minimum BMPs specified in the City's Stormwater Standards Manuals for the category of activities conducted by that Discharger including but not limited to:

(1) vehicle maintenance;
(2) vehicle washing;
(3) irrigation practices and management;
(4) irrigation system testing;
(5) landscape maintenance;
(6) fertilizer application;
(7) pesticide application;
(8) pet waste disposal;
(9) power washing;
(10) septic system maintenance;
(11) sanitary sewer system maintenance;
(12) minor home maintenance, repair and upgrades.

SECTION FOUR:

That Sub-subsection 1 of subsection B of Section 11.30.070 of the Municipal Code is amended to read as follows:

(1) Soil Erosion. Dischargers shall install BMPs to prevent erosion, and significant accumulations of eroded soils from slopes, previously disturbed by clearing or grading, to prevent sediment from entering the Stormwater Conveyance System or Receiving Waters.

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APR 19 2010 ITEM 12

SECTION FIVE:

This Ordinance was introduced on April 19, 2010.

SECTION SIX:

PASSED, APPROVED AND ADOPTED at a regular meeting of the City Council held on the _____ day of _____ 2010.

_____
RICHARD EARNEST, Mayor
City of Del Mar

APPROVED AS TO FORM:

_____
Leslie E. Devaney, City Attorney
City of Del Mar

ATTEST AND CERTIFICATION:

STATE OF CALIFORNIA
COUNTY OF SAN DIEGO
CITY OF DEL MAR

I, MERCEDES MARTIN, City Clerk of the City of Del Mar, California, DO HEREBY CERTIFY, that the foregoing is a true and correct copy of Ordinance No. ____, which has been published pursuant to law, and adopted by the City Council of the City of Del Mar, California, at a Regular Meeting held the ____ day of _____, 2010, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Mercedes Martin, City Clerk
City of Del Mar

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APR 19 2010 ITEM 12

ATTACHMENT B

For City Council Report dated April 19, 2010

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APR 19 2010 ITEM 12

Proposed Language Revisions to DMMC Chapter 11.30
Stormwater Management and Discharge Control

Please Note: *For clarity, all proposed language inserted is shown as double-underlined text, while proposed deletions are shown as ~~strike through text~~. All other existing language in Chapter 11.30 remains unchanged.*

11.30.030 Definitions. The following definitions shall be applicable when the following words or phrases are used hereafter in this Ordinance (including use in the City Stormwater Standards Manuals), whether or not these words or phrases are capitalized:

Hydromodification: The change in the natural watershed hydrologic processes and runoff characteristics (i.e., interception, infiltration, overland flow, interflow and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and sediment transport. In addition, alteration of stream and river channels, installation of dams and water impoundments, and excessive streambank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

Hydromodification Management Plan (HMP): A plan to manage increases in runoff discharge rates and durations from all Priority Development Projects, where such increased rates and durations are likely to cause increased erosion of channelbeds and banks, sediment pollutant generation, or other impacts to beneficial uses
and stream habitat due to increased erosive force.

Low Impact Development (LID): A storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

Priority Development Project: means a development project that falls within any of the following categories: [Ord. 752]

(1) *Housing subdivisions of 10 or more dwelling units*. This category includes single-family homes, multi-family homes, condominiums, and apartments.

(2) *Commercial developments greater than 1 acre*. This category is defined as any development on private land that is not for heavy industrial or residential uses where the land area for development is greater than 1 acre. The category includes, but is not limited to: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; commercial nurseries; multi-apartment buildings; car wash

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APR 19 2010 ITEM 12
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facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; commercial airfields; and other light industrial facilities.

(3) *Developments of heavy industry greater than one acre.* This category includes, but is not limited to, manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).

(4) *Automotive repair shops.* This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

(5) *Restaurants.* This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for the structural treatment BMP, numeric sizing criteria, and hydromodification requirements.

(6) *All hillside development greater than 5,000 square feet.* This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.

(7) *Water Quality Sensitive Areas: All development and redevelopment located within or directly adjacent to or discharging directly to a water quality sensitive area (where discharges from the development or redevelopment will enter receiving waters within the water quality sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition.* "Directly adjacent" means situated within 200 feet of the water quality sensitive area. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

(8) *Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.*

Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

(9) *Street, roads, highways, and freeways*. This category includes construction of any paved surface which is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. [Ord. 752]

(10) *Retail Gasoline Outlets (RGOs)*. This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

(11) *Redevelopment projects*. Projects that create, add or replace at least 5,000 square feet of impervious surfaces on an already developed site that falls under the project categories or locations listed above (in (1) through (10)) where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in the City's SUSMP applies only to the addition, and not to the entire development. Where redevelopment results in an increase of more than fifty percent of the impervious surfaces of a previously existing development, the numeric sizing criteria applies to the entire development. Where a new Development Project feature, such as a parking lot, falls into a Priority Development Project Category, the entire project footprint is subject to SUSMP requirements.

(12) *Projects that disturb one (1) acre or more*. All other pollutant generating Development Projects that result in the disturbance of one acre or more of land.

Source Control BMP: Land use or site planning practices, or structural or nonstructural measures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff.

Treatment Control BMP: Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

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11.30.070 Best Management Practice Requirements and General Requirements of All Dischargers.

B. Minimum Best Management Practices for All Dischargers. All dischargers in the City must install, implement and maintain the minimum BMPs outlined in the City's Stormwater Standard Manuals. General categories of minimum BMPs include:

(1) Soil Erosion. ~~Prior to a forecast rain event,~~ Dischargers shall install BMPs to prevent erosion, and significant accumulations of eroded soils from slopes, previously disturbed by clearing or grading, to prevent sediment from entering the Stormwater Conveyance System or Receiving Waters.
treatment and disposal.

11.30.080 Additional Minimum Best Management Practice Requirements for Residential Activities and Facilities

A. Applicable Requirements. The requirements in this section apply to all Residential Dischargers and any Regulated Commercial Business conducting residential activities on behalf of a Residential Discharger. All Residential Dischargers conducting activities must install, implement and maintain the BMPs identified in Section 11.30.070 B. for all Dischargers, and at least the additional minimum BMPs specified in the City's Stormwater Standards Manuals for the category of activities conducted by that Discharger including but not limited to:

(1) vehicle maintenance;
(2) vehicle washing;
(3) irrigation practices and management;
(4) irrigation system testing;
(5) landscape maintenance;
(6) fertilizer application;
(7) pesticide application;
(8) ~~pest~~ pet waste disposal;
(9) power washing;
(10) septic system maintenance;
(11) sanitary sewer system maintenance;
(12) minor home maintenance, repair and upgrades.

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Appendix 2-C
City of Del Mar Revised Standard Urban Stormwater Mitigation Plan (SUSMP)

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City of Del Mar

March 25, 2010

Mr. David Gibson, Executive Officer
San Diego Regional Water Quality Control Board (Regional Board)
9174 Sky Park Court, Suite 100
San Diego, California 92123

2010 CITY OF DEL MAR STANDARD URBAN STORMWATER MITIGATION PLAN (SUSMP)

Dear Mr. Gibson:

Enclosed, you will find an electronic copy of the City of Del Mar Standard Urban Stormwater Mitigation Plan (SUSMP) as revised and implemented by the City of Del Mar effective March 24, 2010. It is being submitted to the Regional Board pursuant to the requirements of Section J.2.b. of the San Diego County Municipal Stormwater Permit (Permit).

The updated Del Mar SUSMP incorporates the requirements outlined in the Regional Model SUSMP as approved by the Regional Board, on March 25, 2009, with minor modifications to reflect local conditions, and consistent with the requirements of Section D.1.d.(8)(c) of the Permit.

I certify under penalty of law that this document and all the attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

If you have any questions regarding the submittal, or require additional information, please feel free to contact me directly at (858) 755-9313 x172, or by email at jdestefano@delmar.ca.us.

Sincerely,

JOSEPH M. DE STEFANO II, M.Sc., CPP, CSI, CCIS™
Clean Water Manager

JMD:ns

Enclosure

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City of Del Mar

March 24, 2010

2010 STANDARD URBAN STORMWATER MITIGATION PLAN (SUSMP)

In January 2007, the San Diego Regional Water Quality Control Board reissued a municipal stormwater permit (Municipal Permit) to San Diego area municipal Copermittees, including the City of Del Mar. The reissued permit updated and expanded stormwater requirements for new developments and redevelopments. Stormwater treatment requirements have been made more widely applicable and more stringent; minimum standards for Low Impact Development (LID) have been added, and the Copermittees are required to develop and implement criteria for the control of runoff peaks and durations from development sites.

In 2002, the City of Del Mar implemented a Standard Urban Stormwater Mitigation Plan (SUSMP) document that described the specific requirements and process for meeting the stormwater requirements for new development and redevelopment projects outlined in the 2001 Municipal Permit. The SUSMP was updated in 2008 to meet the requirements of the 2007 Municipal Permit. The City is also required to update the SUSMP to incorporate new requirements and standards.

Effective Thursday, March 25, 2010, the City's revised SUSMP document (attached) shall be implemented for all development projects in the City of Del Mar. As discussed in the SUSMP, certain projects of limited scope and scale are exempt from SUSMP requirements. However, the list of project types not subject to at least a portion of these requirements is limited.

Staff is presently preparing revised implementation tools to assist staff and applicants through the process. In the meantime, the Clean Water Manager will be working with staff to ensure that projects are able to comply with these requirements. Thank you in advance for your cooperation in this matter.

Sincerely,

JOSEPH M. DE STEFANO II, M.Sc., CPP, CSI, CCIS™
Clean Water Manager

JMD:ns

Attachment

1050 Camino Del Mar · Del Mar, CA 92014-2698 · Telephone: (858) 755-9313 · Fax: (858) 755-2794 · www.delmar.ca.us

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CITY OF DEL MAR SUSMP

Standard Urban Stormwater Mitigation Plan
Requirements for Development Applications

March 24, 2010

Visit www.delmar.ca.us for updates.

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Glossary

Best Management Practice (BMP)	Any procedure or device designed to minimize the quantity of pollutants that enter the storm drain system.
California Association of Stormwater Quality Agencies (CASQA)	Publisher of the California Stormwater Best Management Practices Handbooks, available at www.cabmphandbooks.com. Successor to the Storm Water Quality Task Force (SWQTF).
California BMP Method	A method for determining the required volume of stormwater treatment facilities. Described in Section 5.5.1 of the California Stormwater Best Management Practice Manual (New Development) (CASQA, 2003).
Conditions of Approval (COAs)	Requirements a municipality may adopt for a project in connection with a discretionary action (e.g., adoption of an EIR or negative declaration or issuance of a use permit). COAs may include features to be incorporated into the final plans for the project and may also specify uses, activities, and operational measures that must be observed over the life of the project.
Continuous Simulation Modeling	A method of hydrological analysis in which a set of rainfall data (typically hourly for 30 years or more) is used as input, and runoff rates are calculated on the same time step. The output is then analyzed statistically for the purposes of comparing runoff patterns under different conditions (for example, pre- and post-development-project).
Copermittee	See **Dischargers**.
Detention	The practice of holding stormwater runoff in ponds, vaults, within berms, or in depressed areas and letting it discharge slowly to the storm drain system. See definitions of **infiltration** and **retention**.
Directly Connected Impervious Area	Any impervious surface which drains into a catch basin, area drain, or other conveyance structure without first allowing flow across pervious areas (e.g. lawns).
Direct Infiltration	Infiltration via methods or devices, such as dry wells or infiltration trenches, designed to bypass unsaturated surface soils and transmit runoff directly to groundwater.
Dischargers	The agencies named in the **stormwater NPDES permit** (see definition): the County of San Diego; the Cities of Carlsbad, El Cajon, La Mesa, Poway, Solana Beach, Chula Vista, Encinitas, Lemon Grove, San Diego, Vista, Coronado, Escondido, National City, San Marcos, Del Mar, Imperial Beach, Oceanside, and Santee; the San Diego Unified Port District, and the San Diego County Regional Airport Authority.
Drainage Management Areas	Areas delineated on a map of the development site showing how drainage is detained, dispersed, or directed to **Integrated Management Practices**. There are four types of Drainage Management Areas, and specific criteria apply to each type of area. See Chapter 4.

Drawdown time	The time required for a stormwater detention or infiltration facility to drain and return to the dry-weather condition. For detention facilities, drawdown time is a function of basin volume and outlet orifice size. For infiltration facilities, drawdown time is a function of basin volume and infiltration rate.
Environmentally Sensitive Areas	Areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other equivalent environmentally sensitive areas which have been identified by the City of Del Mar.
Flow Control	Control of runoff rates and durations as required by the Hydromodification Management Plan.
Head	In hydraulics, energy represented as a difference in elevation. In slow-flowing open systems, the difference in water surface elevation, e.g., between an inlet and outlet.
Higher-Rate Biofilter	A biofilter with a design surface loading rate higher than the 5 inches per hour rate specified in this document for bioretention facilities and planter boxes.
Hydrograph	Runoff flow rate plotted as a function of time.
Hydromodification Management Plan (HMP)	A Regional Plan implemented by the City so that post-project runoff shall not exceed estimated pre-project rates and/or durations, where increased runoff would result in increased potential for erosion or other adverse impacts to beneficial uses. Also see definition for **flow control.**
Hydrologic Soil Group	Classification of soils by the Natural Resources Conservation Service (NRCS) into A, B, C, and D groups according to infiltration capacity.
Impervious surface	Any material that prevents or substantially reduces infiltration of water into the soil. See discussion of imperviousness in Chapter Two.
Infeasible	As applied to best management practices, impossible to implement because of technical constraints specific to the site.

Infiltration	Seepage of runoff into soils underlying the site. See definition of **retention.**
Infiltration Device	Any structure, such as a dry well, that is designed to infiltrate stormwater into the subsurface and, as designed, bypasses the natural groundwater protection afforded by surface or near-surface soil. See definition for **direct infiltration**.
Integrated Management Practice (IMP)	A facility **(BMP)** that provides small-scale treatment, retention, and/or detention and is integrated into site layout, landscaping and drainage design. See **Low Impact Development.**
Integrated Pest Management (IPM)	An approach to pest management that relies on information about the life cycles of pests and their interaction with the environment. Pest control methods are applied with the most economical means and with the least possible hazard to people, property, and the environment.
Interim Hydromodification Criteria	Pursuant to NPDES permit Provision D.1.d.g.(6), the Copermittees prepared Interim Hydromodification Management criteria, which apply to projects disturbing 50 acres or more. The criteria are described in Chapter 2 and in memoranda on the Project Clean Water website.
Jurisdictional Urban Runoff Management Plan (JURMP)	A written description of the specific jurisdictional urban runoff management measures and programs that the City implements to comply with the **stormwater NPDES permit** and ensure pollutant discharges are reduced to the MEP and do not cause or contribute to a violation of water quality standards. See **Stormwater Pollution Prevention Program.**
Lead Agency	The public agency that has the principal responsibility for carrying out or approving a project. (CEQA Guidelines §15367).
Low Impact Development	An integrated site design methodology that uses small-scale detention and retention (Integrated Management Practices, or **IMPs**) to mimic pre-existing site hydrological conditions.
Maximum Extent Practicable (MEP)	Standard, established by the 1987 amendments to the Clean Water Act, for the implementation of municipal **stormwater pollution prevention programs** (see definition). According to the Act, municipal stormwater NPDES permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."
National Pollutant Discharge Elimination System (NPDES)	As part of the 1972 Clean Water Act, Congress established the NPDES permitting system to regulate the discharge of pollutants from municipal sanitary sewers and industries. The NPDES was expanded in 1987 to incorporate permits for stormwater discharges as well.
Numeric Criteria	Sizing requirements for stormwater treatment facilities established in Provision D.1.d.(6)(c) of the San Diego RWQCB's stormwater NPDES permit.

Operation and Maintenance (O&M)	Refers to requirements in the **Stormwater NPDES Permit** to inspect treatment BMPs and implement preventative and corrective maintenance in perpetuity. See Chapter Five.
Parking Lot	A land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.
Permeable Pavements	Pavements for roadways, sidewalks, or plazas that are designed to infiltrate a portion of rainfall, including pervious concrete, pervious asphalt, unit-pavers-on-sand, and crushed gravel.
Priority Development Project	A project subject to SUSMP requirements. Defined in **Stormwater NPDES Permit** Provision D.1.d.(1). See Chapter One.
Project Area	The entire project area comprises all areas to be altered or developed by the project, plus any additional areas that drain on to areas to be altered or developed.
Project Submittal	Documents submitted to a municipality in connection with an application for development approval and demonstrating compliance with Stormwater NPDES Permit requirements for the project. Specific requirements vary from municipality to municipality.
Proprietary	A proprietary device is one marketed under legal right of the manufacturer.
Redevelopment	The creation, addition, and or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bikelane on existing roads; and routine replacement of damaged pavement, such as pothole repair.
Rational Method	A method of calculating runoff flows based on rainfall intensity, tributary area, and a factor representing the proportion of rainfall that runs off.
Regional (or Watershed) Stormwater Treatment Facility	A facility that treats runoff from more than one project or parcel.
Regional Water Quality Control Board (Regional Water Board or RWQCB)	California RWQCBs are responsible for implementing pollution control provisions of the Clean Water Act and California Water Code within their jurisdiction. There are nine California RWQCBs.
Retention	The practice of holding stormwater in ponds or basins, or within berms or depressed areas, and allowing it to slowly infiltrate into underlying soils. Some portion will evaporate. See definitions for **infiltration** and **detention**.

Self-retaining area An area designed to retain runoff. Self-retaining areas may include graded depressions with landscaping or pervious pavements and may also include tributary impervious areas up to a 2:1 impervious-to-pervious ratio.

Self-treating area A natural, landscaped, or turf area drains directly off site or to the public storm drain system.

Source Control Land use or site planning practices, or structural or nonstructural measures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff.

Standard Industrial Classification (SIC) A Federal government system for classifying industries by 4-digit code. It is being supplanted by the North American Industrial Classification System but SIC codes are still referenced by the Regional Water Board in identifying development sites subject to regulation under the NPDES permit. Information and an SIC search function are available at http://www.bls.gov/bls/NAICS.htm

Stormwater NPDES Permit A permit issued by a **Regional Water Quality Control Board** (see definition) to local government agencies (**Dischargers**) placing provisions on allowable discharges of municipal stormwater to waters of the state.

Storm Water Pollution Prevention Plan (SWPPP) A plan providing for temporary measures to control sediment and other pollutants during construction as required by the statewide stormwater NPDES permit for construction activities.

Stormwater Pollution Prevention Program A comprehensive program of activities designed to minimize the quantity of pollutants entering storm drains. See **Jurisdictional Urban Runoff Management Plan.**

Standard Urban Stormwater Mitigation Plan (SUSMP) Refers to various documents prepared in connection with implementation of the stormwater **NPDES permit** mandate to control pollutants from new development and redevelopment. Each **discharger** will adapt this **model countywide SUSMP** to create a **local SUSMP** for their respective jurisdiction. Applicants for development project approvals will use the local SUSMP to prepare a submittal for each **Priority Development Project** they propose.

Treatment Removal of pollutants from runoff, typically by filtration or settling.

Water Board See **Regional Water Quality Control Board.**

Water Quality Volume (WQV) For stormwater treatment facilities that depend on detention to work, the volume of water that must be detained to achieve maximum extent practicable pollutant removal. This volume of water must be detained for a specified **drawdown time**.

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Start

How to Use the SUSMP

Review Chapters 1 and 2 to get a general understanding of the requirements. Then follow step-by-step instructions in Chapter 3 to prepare your Project Submittal.

This *Standard Urban Stormwater Mitigation Plan (SUSMP)* will help you ensure your project complies with the City's requirements. Most applicants will require the assistance of a qualified civil engineer, architect, and/or landscape architect. Because every project is different, you should begin by checking specific requirements with City staff.

To use the *SUSMP,* start by reviewing **Chapter One** to find out whether and how stormwater quality requirements apply to your project. Chapter One also provides an overview of the process of planning, design, construction, operation, and maintenance leading to compliance.

If there are terms and issues you find puzzling, try finding answers in the glossary or in **Chapter Two**. Chapter Two provides background on key stormwater concepts and water quality regulations, including design criteria.

Then proceed to **Chapter Three** and follow the step-by-step guidance to prepare a Project Submittal for your site.

Chapter Four, the Low Impact Development Design Guide, includes design procedures, calculation procedures, and instructions for presenting your design and calculations in your Project Submittal.

In **Chapter Five** you'll find a detailed description of the process for ensuring operation and maintenance of your stormwater facilities over the life of the project. The chapter includes step-by-step instructions for preparing a Stormwater Facilities Operation and Maintenance Plan.

Throughout each Chapter, you'll find references and resources to help you understand the regulations, complete your Project Submittal, and design stormwater control measures for your project.

► PLAN AHEAD TO AVOID THE THREE MOST COMMON MISTAKES

Construction-Phase Controls

Your Project Submittal for SUSMP compliance is a separate document from the Storm Water Pollution Prevention Plan (SWPPP). A SWPPP provides for temporary measures to control sediment and other pollutants during construction at sites that disturb one acre or more. See the Construction Handbook at www.cabmphandbooks.org for more information on SWPPPs.

The most common (and costly) errors made by applicants for development approvals with respect to stormwater quality compliance are:

1. Not planning for compliance early enough. You should think about your strategy for stormwater quality compliance before completing a conceptual site design or sketching a layout of subdivision lots (Chapter 3).

2. Assuming proprietary stormwater treatment facilities will be adequate for compliance. Most aren't (Chapter 2).

3. Not planning for periodic inspections and maintenance of treatment and flow-control facilities. Consider who will own and who will maintain the facilities in perpetuity and how they will obtain access, and identify which arrangements are acceptable to your municipality (Chapter 5).

Chapter

1

Policies and Procedures

Determine if your development project must comply with stormwater quality requirements, and review the steps to compliance.

A Low Impact Development Design Procedure

The San Diego Regional Water Board reissued a municipal stormwater NPDES permit to the municipal **Copermittees** in January 2007. The permit updates and expands stormwater requirements for new developments and redevelopments. Stormwater treatment requirements have been made more stringent, minimum standards for **Low Impact Development** (LID) have been added, and the Copermittees are required to develop and implement criteria for the control of runoff peaks and durations from development sites.

To assist the land development community, streamline project reviews, and maximize cost-effective environmental benefits, the Copermittees have developed a unified LID design procedure. This design procedure integrates site planning and design measures with engineered, small-scale **Integrated Management Practices** (IMPs) such as bioretention. By following the procedure, applicants can develop a single integrated design which complies with the complex and overlapping NPDES permit LID requirements, stormwater treatment requirements, and flow-control (**hydromodification management**) requirements.

The design approach is detailed in Chapter 4. General instructions for preparing a complete Project Submittal are in Chapter 3, and specific submittal requirements are available from municipal staff.

Applicants may choose not to use this design procedure, in which case they will need to demonstrate, in their submittal, compliance with applicable LID criteria, stormwater treatment criteria, and flow-control criteria. These criteria are described in Chapter 2 and in the NPDES permit.

Requirements for All Development Projects

All development projects must include control measures to reduce the discharge of stormwater pollutants to the maximum extent practicable.

In general, for projects that are not "Priority Development Projects," this will include:

- Implementation of source control BMPs as listed in the Appendix.
- Inclusion of some LID features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, and retain and slow runoff.
- Compliance with requirements for construction-phase controls on sediment and other pollutants.

Municipal staff may also require additional controls appropriate to the project, which may include stormwater treatment controls. LID treatment controls such as infiltration or bioretention are preferred. See "Selection of Stormwater Treatment Facilities" on page 17. If treatment facilities are included, provisions must be made to ensure their long-term maintenance.

Priority Development Projects

The NPDES permit requires that more specific runoff treatment controls be incorporated into Priority Development Projects.

► NEW DEVELOPMENT

Projects on previously undeveloped land are Priority Development Projects if they are in one or more of the categories listed in Table 1-1. If a project feature such as a parking lot falls into a Priority Development Project category, then the entire project footprint is subject to Priority Project requirements. To use the table, review each definition A through J. If any of the definitions match, the project is a **Priority Development Project**. Note some thresholds are defined by square footage of impervious area created; others by the total area of the development.

► PREVIOUSLY DEVELOPED SITES

Projects on previously developed sites ("**redevelopment** projects") are Priority Development Projects if they create, add, or replace 5,000 square feet or more of impervious surface and also are in one of the categories listed in Table 1-1.

TABLE 1-1. Priority Development Projects.

			Is the project or any element of the project in any of these categories?
Yes ❑	No ❑	**A**	**Housing subdivisions of 10 or more dwelling units.** Examples: single-family homes, multi-family homes, condominiums, and apartments.
Yes ❑	No ❑	**B**	**Commercial—greater than one acre.** Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.
Yes ❑	No ❑	**C**	**Heavy industry—greater than one acre.** Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).
Yes ❑	No ❑	**D**	**Automotive repair shops.** A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.
Yes ❑	No ❑	**E**	**Restaurants.** Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development [project footprint] is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.
Yes ❑	No ❑	**F**	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
Yes ❑	No ❑	**G**	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.
Yes ❑	No ❑	**H**	**Parking lots 5,000 square feet or more** or with 15 or more parking spaces and potentially exposed to urban runoff.
Yes ❑	No ❑	**I**	**Street, roads, highways, and freeways.** Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
Yes ❑	No ❑	**J**	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

The "50% Rule" for previously developed projects. Projects on previously developed sites may also need to retrofit drainage of ALL impervious areas of the ENTIRE project site. For projects creating or replacing more than 5,000 square feet of impervious area:

- If the new project results in an increase of, or replacement of, 50% or more of the previously existing impervious surface, and the existing development was not subject to SUSMP requirements, then the entire project must be included in the treatment measure design.
- If less than 50% of the previously impervious surface is to be affected, only that portion must be included in the treatment measure design.

If a Redevelopment project feature such as a parking lot falls into a Priority Development Project category, then the entire project footprint is subject to Priority Project requirements.

Redevelopment projects limited to interior remodels, routine maintenance or repair, roof or exterior surface replacement, resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, or bike lanes on existing roads, and routine replacement of damaged pavement such as pothole repair are not subject to treatment requirements. However, other requirements, including incorporation of appropriate source controls, still apply. If your project is exempt, the project is still obligated to meet the Requirements for All Development Projects outlined in the previous section.

► POLLUTANT GENERATING PROJECTS WHICH DISTRUB ONE ACRE OR MORE OF LAND

Projects that generate pollutants at levels greater than background levels and disturb one acre or more of land are considered Priority Development Projects. In most cases linear pathway projects that are for infrequent vehicle use (such as emergency or maintenance access) or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they allow runoff to sheet flow to surrounding pervious surfaces.

Compliance Process at a Glance

For development project approval, stormwater compliance follows these general steps:

1. Discuss requirements during a pre-application meeting with municipal staff.
2. Review the instructions in this SUSMP before you prepare your tentative map, preliminary site plan, drainage plan, and landscaping plan.
3. Prepare your **Project Submittal**, which is made with your application for development approvals (entitlements).
4. Create your detailed project design, incorporating the features described in your Project Submittal.
5. In a table on your construction plans, list each stormwater compliance feature and facility and the plan sheet where it appears.

6. Prepare and submit a draft Stormwater Facility Operation and Maintenance (O + M) Plan for approval.

7. Maintain stormwater facilities during construction and following construction in accordance with required warranties.

8. When applicable, following construction, formally transfer responsibility for maintenance to the owner.

9. The owner must maintain the facilities in accordance with the O + M Plan.

10. The owner must periodically verify stormwater facilities are properly maintained.

Preparation of a complete and detailed Project Submittal is the key to cost-effective stormwater compliance and expeditious review of your project. Instructions for preparing your Project Submittal are in Chapter 3.

Phased Projects

When determining whether SUSMP requirements apply, a "project" should be defined consistent with California Environmental Quality Act (CEQA) definitions of "project." That is, the "project" is the whole of an action which has the potential for adding or replacing or resulting in the addition or replacement of roofs, pavement, or other impervious surfaces and thereby resulting in increased flows and stormwater pollutants. "Whole of an action" means the project may not be segmented or piecemealed into small parts if the effect is to reduce the quantity of impervious area for any part to below the SUSMP thresholds.

CEQA
Preparers of CEQA documents may wish to visit the Project Clean Water website for guidanSketch conceptuBegin with general project requirements and program studies and Environmental Impact Reports.

Municipal staff may require, as part of an application for approval of a phased development project, a conceptual or master Project Submittal which describes and illustrates, in broad outline, how the drainage for the project will comply with the SUSMP requirements. The level of detail in the conceptual or master Project Submittal should be consistent with the scope and level of detail of the development approval being considered. The conceptual or master Project Submittal should specify that a more detailed Project Submittal for each later phase or portion of the project will be submitted with subsequent applications for discretionary approvals.

New Subdivisions

If a tentative map approval would potentially entitle future owners to construct new or replaced impervious area which, in aggregate, could exceed one of the SUSMP thresholds (Table 1-1), then the applicant must take steps to ensure SUSMP requirements can and will be implemented as the subdivision is built out.

If the tentative map application does not include plans for site improvements, the applicant should nevertheless identify the type, size, location, and final ownership of stormwater treatment and flow-control facilities adequate to serve common private roadways and any other common areas, and to also manage runoff from an expected reasonable estimate of the square footage of future roofs, driveways, and other impervious surfaces on each individual lot. The City may condition approval of the map on implementation of stormwater treatment and other SUSMP measures when construction occurs on the individual lots. At the City's discretion, this condition may be enforced by a grant deed of development rights or by a development agreement.

If the City deems it necessary, the future impervious area of one or more lots may be limited by a deed restriction. This might be necessary when a project is exempted from one or all SUSMP provisions because the total impervious area is below a threshold, or to ensure runoff from impervious areas added after the project is approved does not overload a stormwater treatment and flow-control facility.

The City may require subdivision maps to dedicate an "open space easement, as defined by Government Code Section 51075," to suitably restrict the future building of structures at each stormwater facility location if necessary.

In general, in new subdivisions **stormwater treatment, infiltration, or flow-control facilities should not be located on individual single-family residential lots**, particularly when those facilities manage runoff from other lots, from streets, or from common areas. A better alternative is to locate stormwater facilities on one or more separate, jointly owned parcels.

After consulting with the Planning Department, applicants for subdivision approvals will propose one of the following four options, depending on project characteristics:

1. Show the number of parcels and the total impervious area to be created on all parcels could not, in the future, exceed any of the thresholds in Table 1-1.

2. Show that, for each and every lot, the intended use can be achieved with a design which disperses runoff from roofs, driveways, streets, and other impervious areas to self-retaining pervious areas, using the criteria in Chapter 4.

3. Prepare improvement plans showing drainage to treatment and/or flow-control facilities designed in accordance with this SUSMP, and commit to constructing the facilities prior to transferring the lots.

4. Prepare improvement plans showing drainage to treatment and/or flow-control facilities designed in accordance with this SUSMP, and provide appropriate legal instruments to ensure the proposed facilities will be constructed and maintained by subsequent owners.

For the option selected, municipal staff will determine the appropriate conditions of approval, easements, deed restrictions, or other legal instruments necessary to assure future compliance.

Compliance with Flow-Control Requirements

Priority Development Projects (Table 1-1) must be designed so that runoff rates and durations are controlled to maintain or reduce downstream erosion conditions and protect stream habitat.

For projects disturbing areas smaller than 50 acres, this can be accomplished by implementing **Low Impact Development** (LID) design using the design criteria and procedures in Chapter 4. The criteria may be updated following RWQCB approval of the Copermittees' **Hydromodification Management Plan**.

Project Clean Water has developed a Hydromodification Management Plan (HMP) in compliance with Provision D.1.g of the NPDES Permit. The HMP is pending acceptance by the RWQCB As required, the City has adopted interim hydromodification criteria which will be superseded after the HMP is accepted by the Regional Water Board.

Priority Development Projects **disturbing 50 acres or more** must meet the following **interim hydromodification standard**:

> "…post-project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations … where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to increased flow rates and durations."

References and Resources:

- RWQCB Order R9-2007-0001 (Stormwater NPDES Permit)
- Project Clean Water web page

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Chapter

2

Concepts and Criteria

Technical background and explanations of policies and design requirements

The Regional Water Board reissued a municipal stormwater NPDES permit to San Diego County, its 18 cities, the San Diego Unified Port District, and the San Diego Regional Airport Authority in January 2007. The permit mandates a comprehensive program to prevent stormwater pollution. That program now includes street sweeping, maintenance of storm drains, business inspections, public outreach, construction site inspections, monitoring and studies of stream and ocean health, and control of runoff pollutants from new developments and redevelopments.

Permit Provision D.1.d. requires Copermittees to regulate projects in specific categories (Table 1-1) to:

1. Reduce discharges of pollutants to the maximum extent practicable.
2. Prevent runoff discharges from causing or contributing to a violation of water quality standards.

The Copermittees have created a Low Impact Development (LID) design procedure (Chapter 4) that ensures consistent and thorough implementation of the Regional Water Board's requirements. This chapter explains the technical background of the LID approach and how it was derived.

The previous permit, issued in 2001, included a requirement to control the post-development peak storm water runoff rates and velocities to maintain or reduce pre-development downstream erosion and protect stream habitat. The 2007 permit includes, in addition to this ongoing requirement, a new requirement to develop a hydromodification management plan (HMP) to identify and define a methodology and performance criteria to ensure flow rates and durations do not exceed pre-project runoff where increased runoff could cause erosion or other significant adverse impacts to beneficial uses.

As required by the NPDES permit, the Copermittees have adopted interim hydromodification criteria. See Chapter One.

Water-Quality Regulations

Provision D.1 requires the Copermittees to condition development approvals on incorporation of specified stormwater controls.

Provision D.1 requires applicable new developments and redevelopments to:

- Design the site to conserve natural areas, existing trees and vegetation and soils, to maintain natural drainage patterns, to minimize imperviousness, to detain runoff, and to infiltrate runoff where feasible
- Cover or control sources of stormwater pollutants
- Treat runoff prior to discharge. Provision E.10 states: "Urban runoff treatment and/or mitigation must occur prior to the discharge of urban runoff into a receiving water. Federal regulations at 40 CFR 131.10(a) state that in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S."
- Ensure runoff does not exceed pre-project peaks and durations where increases could affect downstream habitat or other beneficial uses
- Maintain treatment and flow-control facilities

The municipalities each maintain a database to track approved installations of treatment facilities and to verify facilities are maintained. The Copermittees' annual report to the Regional Water Board includes a list of development projects subject to SUSMP conditions and descriptions of those projects that:

- Received a waiver from SUSMP criteria;
- Used hydrologic controls used to meet HMP requirements, including a description of the controls;
- Have an area of 50 acres or greater, thus subject to **Interim Hydromodification Criteria**; and

The Copermittees must also report the number of violations and enforcement actions taken upon development projects. The Copermittees' programs are subject to audit by the Regional Water Board.

The municipalities—not the Regional Water Board or its staff—are charged with ensuring development projects comply with the D.1 requirements. Regional Water Board staff sometimes review stormwater controls and hydromodification impacts in connection with applications for Clean Water Act Section 401 water-quality certification, which is required for projects that involve work, such as dredging or placement of fill, within streams, creeks, or other waters of the US.

► MAXIMUM EXTENT PRACTICABLE

Clean Water Act Section 402(p)(3)(iii) sets the standard for stormwater controls as "maximum extent practicable," but doesn't define that term. As implemented, "maximum extent practicable" is ever-changing and varies with conditions.

Many stormwater controls, including LID facilities, have proven to be practicable in most site development projects. To achieve fair and effective implementation, criteria and guidance, requirements for controls must be detailed and specific—while also offering the right amount of flexibility or exceptions for special cases. The NPDES permit includes various standards, including hydrologic criteria, which have been found to comprise "maximum extent practicable." This SUSMP is to be continuously improved and refined based on the experience of municipal planners and engineers, with input from land developers and development professionals. By following the SUSMP, applicants can ensure their project design meets "maximum extent practicable."

► BEST MANAGEMENT PRACTICES

Clean Water Act Section 402(p) and USEPA regulations (40 CFR 122.26) specify a municipal program of "management practices" to control stormwater pollutants. **Best Management Practice (BMP)** refers to any kind of procedure, activity or device designed to minimize the quantity of pollutants that enter the storm drain system. BMPs are typically used in place of assigning numeric effluent limits. The criteria for source control BMPs and treatment and flow-control facilities are crafted to fulfill "maximum extent practicable."

To minimize confusion, this guidebook refers to "facilities," "features," or "controls" to be incorporated into development projects. All of these are BMPs.

Pollutants of Concern

NPDES Permit Provision D.1.d.(3) requires each Copermittee to develop and implement a procedure for pollutants of concern to be identified for each Priority Development Project. The Copermittees have considered this requirement jointly and have determined the LID design procedures in Chapters 3 and 4 of this model SUSMP fully address the need to identify pollutants of concern insofar as that identification may affect the selection of source control BMPs and treatment facilities.

Documentation of the approach to identifying pollutants of concern and selecting BMPs and facilities follows.

► GROUPING OF POTENTIAL POLLUTANTS OF CONCERN

Urban runoff from a developed site has the potential to contribute pollutants, including oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system and receiving waters. For the purposes of identifying pollutants of concern and associated storm water BMPs, pollutants are grouped in nine general categories as follows:

- **Sediments** are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

- **Nutrients** are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

- **Metals** are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary sources of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

- **Organic compounds** are carbon-based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.

- **Trash** (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.

- **Oxygen-Demanding Substances** includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds.

Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

- Primary sources of **oil and grease** are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

- **Bacteria and Viruses** are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

- **Pesticides** (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

► IDENTIFYING POLLUTANTS OF CONCERN BASED ON LAND USES

Table 2-1 associates pollutants with the categories of Priority Development Projects. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

► WATERSHEDS WITH SPECIAL POLLUTANT CONCERNS

Local receiving water conditions may require specialized attention. The three local conditions to consider include:

- Ocean waters designated as an "Area of Special Biological Significance" (ASBS)
- 303(d) listed waters;
- Waters with established TMDLs; and
- Environmentally Sensitive Areas.

TABLE 2-1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >one acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

The NPDES Permit identifies several receiving waters as impaired for constituents or water quality effects pursuant to **Section 303(d)** of the Clean Water Act. Placement of a water onto the list requires the Regional Board to make further analysis of the impairment and development of total maximum daily loads (TMDLs) for addressing the impairment. The 303(d) listing in itself does not demand that a project proponent select BMPs on the basis of the impairment; however, the project proponent should be cognizant of the impairment and the future implications a TMDL might have upon the proposed land use.

> Once a TMDL is established it may impose conditions on development either through an implementation plan and schedule for the listed water, or through special conditions required of the municipality affected by the numeric criteria of the TMDL.

The applicant should meet with City staff to determine if any project characteristics or watershed characteristics affect selection and design of BMPs. Except in rare circumstances, the use of the LID Design Guide (Chapter 4) and the Stormwater Pollutant Sources/Source Control Checklist (Appendix) will ensure your project complies with all stormwater requirements.

Selection of Permanent Source Control BMPs

Based on identification of potential pollutants of concern associated with various types of facilities, the applicant shall utilize the Stormwater Pollutant Sources/Source Control Checklist (Appendix) of "maximum extent practicable" source controls associated with each facility type. This approach ensures appropriate BMPs are applied to potential sources of each pollutant of concern.

Selection of Stormwater Treatment Facilities

The SUSMP process groups pollutants of concern by how easily they are removed by various treatment processes (Table 2-2).

Table 2-3 provides a general comparison of how various types of treatment facilities perform for each group of pollutants (Table 2-3).

TABLE 2-2. Grouping of Potential Pollutants of Concern by Fate During Stormwater Treatment.

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

TABLE 2-3. Groups of Pollutants and Relative Effectiveness of Treatment Facilities.

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro -dynamic Devices	Vegetated Swales
Coarse Sediment and Trash	High	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low	Medium
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low	Low

*See page 19 for a discussion of selection of treatment facilities in special situations.

Based on this analysis, the following types of facilities are appropriate for treatment of runoff potentially containing most pollutants of concern. These types of facilities can be used for stormwater treatment for all land uses in all watersheds, except where site-specific constraints make them infeasible.

- Infiltration facilities or practices, including dry wells, infiltration trenches, infiltration basins, and other facilities that infiltrate runoff to native soils (sized to detain and infiltrate a volume equivalent to the 85th percentile 24-hour event).
- Bioretention facilities and media filters that detain stormwater and filter it slowly through soil or sand (sized with a surface area at least 0.04 times the effectively impervious tributary area).
- Extended detention basins, wet ponds, and wetlands or other facilities using settling (sized to detain a volume equivalent to runoff from the tributary area generated by the 85th percentile 24-hour event).

The recommended design procedure in Chapter 4 integrates LID practices—optimizing the site design, using pervious surfaces, and dispersing of runoff to adjacent pervious areas—with the use of infiltration facilities and practices and bioretention facilities to meet NPDES permit LID requirements, treatment requirements, and flow-control requirements in a cost-effective, unified design.

Oil/water separators ("water quality inlets"), storm drain inlet filters, and hydrodynamic separators, including vortex separators and continuous deflection separators ("CDS units"), are less effective means of stormwater treatment, although they may be used in series with more effective facilities.

Underground vaults typically lack the detention time required for settling of fine particles associated with stormwater pollutants. They also require frequent maintenance and may retain stagnant water, potentially providing harborage for mosquitoes. Because vaults may be "out of sight, out of mind," experience shows that the required maintenance may not occur.

Lack of space, in itself, is not a suitable justification for using a less-effective treatment on a development site, because the uses of the site and the site design can be altered as needed to accommodate bioretention facilities or planter boxes. In most cases, these effective facilities can be fit into required landscaping setbacks, easements, or other unbuildable areas.

Where possible, drainage to inlets, and drainage away from overflows and underdrains, should be by gravity. Where site topography makes it infeasible to accommodate gravity-fed facilities in the project design, the design flow may be captured in a vault or sump and pumped via force main to an effective facility.

The following situations sometimes present special challenges:

- Portions of sites which are not being developed or redeveloped, but which must be retrofit to meet treatment requirements in accordance with Provision D.1.d.(1)(a) which states in part: "Where redevelopment results in an increase of, or replacement of, more than fifty percent of the impervious surface of a previously existing development, the numeric sizing criteria applies to the entire development."
- Sites smaller than one acre approved for development or redevelopment as part of a municipality's stated objective to preserve or enhance a pedestrian-oriented "smart-growth" type of urban design. Municipalities are encouraged to identify areas where this objective applies, based on General Plans or zoning.
- Roadway widening projects.

In these special situations, the following types of facilities should each be evaluated in priority order (depending on the specific characteristics of the site and as determined by the municipal stormwater coordinator) until a feasible design is found.

1. Bioretention areas or planter boxes fed by gravity.

2. Capture of the design flow in a vault or sump and pumping to bioretention areas or planter boxes.

3. A subsurface sand or media filter with a maximum design surface loading rate of 5 inches per hour and a minimum media depth of 18 inches. The sand surface must be made accessible for periodic inspection and maintenance (for example, via a removable grating).

4. A higher-rate surface biofilter, such as a tree-pit-style unit. The grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units.

5. A higher-rate vault-based filtration unit (for example, vaults with replaceable cartridge filters filled with inorganic media).

Proprietary Devices
Many currently available proprietary devices do not meet municipalities' requirements when used alone for stormwater treatment. Consult with municipal staff before proposing these devices.

Many proprietary stormwater treatment devices are currently marketed, and new brands will be introduced. Applicants and applicants' engineers and design professionals should review with City staff any proposals for using proprietary devices for stormwater treatment before they commence work on preliminary site layout, drainage plans, grading plans, or landscape plans.

Hydrology for NPDES Compliance

► IMPERVIOUSNESS

Schueler (1995) proposed **imperviousness** as a "unifying theme" for the efforts of planners, engineers, landscape architects, scientists, and local officials concerned with urban watershed protection. Schueler argued (1) that imperviousness is a useful indicator linking urban land development to the degradation of aquatic ecosystems, and (2) imperviousness can be quantified, managed, and controlled during land development.

Imperviousness has long been understood as the key variable in urban hydrology. Peak runoff flow and total runoff volume from small urban catchments is usually calculated as a function of the ratio of impervious area to total area **(rational method)**. The ratio correlates to the runoff factor, usually designated "C". Increased flows resulting from urban development tend to increase the frequency of small-scale flooding downstream.

Imperviousness links urban land development to degradation of aquatic ecosystems in two ways.

First, the combination of paved surfaces and piped runoff efficiently collects urban pollutants and transports them, in suspended or dissolved form, to surface waters. These pollutants may originate as airborne dust, be washed from the atmosphere during rains, or may be generated by automobiles and outdoor work activities.

Second, increased peak flows and runoff durations typically cause erosion of stream banks and beds, transport of fine sediments, and disruption of aquatic habitat. Measures taken to control

stream erosion, such as hardening banks with riprap or concrete, may permanently eliminate habitat. By reducing infiltration to groundwater, imperviousness may also reduce dry-weather stream flows.

Imperviousness has two major components: rooftops and transportation (including streets, highways, and parking areas). The transportation component is usually larger and is more likely to be **directly connected** to the storm drain system.

The effects of imperviousness can be mitigated by disconnecting impervious areas from the drainage system and by encouraging detention and retention of runoff near the point where it is generated. Detention and retention reduce peak flows and volumes and allow pollutants to settle out or adhere to soils before they can be transported downstream.

► LOW IMPACT DEVELOPMENT REQUIREMENTS

The NPDES permit requires LID be used on all projects to minimize directly connected impervious area and promote infiltration. For Priority Development Projects, the minimum standards are:

- Drain a portion of impervious areas into pervious areas, if any.
- Design and construct pervious areas, if any, to effectively receive and infiltrate runoff from impervious areas, taking into account soil conditions, slope, and other pertinent factors.
- Construct a portion of paved areas with low traffic and appropriate soil conditions with permeable surfaces.

The LID design procedure in Chapter 4 incorporates these requirements into an integrated design which also meets sizing requirements for stormwater treatment facilities and flow-control (hydromodification management) requirements.

► SIZING REQUIREMENTS FOR STORMWATER TREATMENT FACILITIES

The guidance in Chapter 4 was crafted to ensure LID facilities comply with the NPDES permit's hydraulic sizing requirements for stormwater treatment facilities and flow-control facilities. The technical background follows.

Most runoff is produced by frequent storms of small or moderate intensity and duration. Treatment facilities are designed to treat smaller storms and the first flush of larger storms—approximately 80% of average annual runoff.

The NPDES permit identifies two types of treatment facilities—volume-based and flow-based.

Volume-based facilities must be designed to infiltrate, filter, or treat the volume of runoff produced from a 24-hour 85th percentile storm event as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map. As shown on the map, rainfall depths vary from about 0.55" to 1.55".

For **flow-based** facilities, the NPDES permit specifies the rational method be used to determine flow. The rational method uses the equation

Q = CiA, where

Q = flow

C = weighted runoff factor between 0 and 1

i = rainfall intensity

A = area

The permit identifies two alternatives for calculating rainfall intensity:

1. the 85th percentile rainfall intensity times two, or
2. 0.2 inches per hour.

It is typically found that both methods yield similar results. The 0.2 inches per hour rainfall intensity should be used for sizing flow-based treatment facilities within the Copermittees' jurisdiction.

The 0.2 inches per hour criterion is the basis for a **consistent countywide sizing factor** for bioretention facilities when used for stormwater treatment only (i.e., not for flow control). The factor is based on maintaining a minimum percolation rate of 5 inches per hour through the engineered soil mix. The sizing factor is the ratio of the design intensity of rainfall on tributary impervious surfaces (0.2 inches/hour) to the design percolation rate in the facility (5 inches/hour), or **0.04** (dimensionless).

► FLOW-CONTROL (HYDROMODIFICATION MANAGEMENT)

The NPDES permit specifies for applicable projects:

> … post-project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

Under current Interim Hydromodification Criteria, the requirement applies to projects disturbing 50 acres or more, and applicants may select among **three options** for compliance: Use a continuous simulation model to compare pre-project and post-project runoff, use LID facilities with sizing factors and design criteria developed by the Copermittees, or identify a specified exemption. See Chapter One.

The technical background for the Interim Hydromodification Criteria is in the memorandum "Development of Interim Hydromodification Criteria" (October 30, 2007) and other technical documents available on the Project Clean Water website.

Criteria for Infiltration Devices

The NPDES permit restricts the design and location of "infiltration devices" that, as designed, may bypass filtration through surface soils before reaching groundwater. These devices include:

- Infiltration basins.
- Infiltration trenches (includes French drains).
- Unlined retention basins (i.e., basins with no outlets).
- Unlined or open-bottomed vaults or boxes installed below grade (dry wells).

Infiltration devices may not be used in:

- Areas west of Camino del Mar and south of 15th Street without geotechnical analysis to determine potential impacts to bluff stability. Infiltration within these areas are subject to approval of the City;
- Areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway);
- Automotive repair shops;
- Car washes;
- Fleet storage areas (bus, truck, etc.);
- Nurseries;
- Other areas with pollutant sources that could pose a threat to groundwater, as designated by each City.

The vertical distance from the base of any infiltration device to the seasonal high groundwater mark shall be at least 10 feet. Infiltration devices shall be located a minimum of 100 feet horizontally from any known water supply wells.

In addition, infiltration devices are not recommended where:

- The infiltration device would receive drainage from areas where chemicals are used or stored, where vehicles or equipment are washed, or where refuse or wastes are handled.

- Surface soils or groundwater are polluted.
- The facility could receive sediment-laden runoff from disturbed areas or unstable slopes.
- Increased soil moisture could affect the stability of slopes of foundations.
- Soils are insufficiently permeable to allow the device to drain within 72 hours.

► MOST LID FEATURES AND FACILITIES ARE NOT INFILTRATION DEVICES

Self-treating and self-retaining areas, pervious pavements, bioretention facilities, and planter boxes are not considered to be infiltration devices.

Bioretention facilities work by percolating runoff through 18 inches or more of engineered soil. This removes most pollutants before the runoff is allowed to seep into native soils below. Further pollutant removal typically occurs in the unsaturated (vadose) zone before moisture reaches groundwater.

Where there is concern about the effects of increased soil moisture on slopes or foundations, an impermeable barrier may be added so the facility is "flow through" and all treated runoff is underdrained away from the facility. See the design sheets for Bioretention Facilities and Flow-Through Planters in Chapter 4.

References and Resources:

- RWQCB Order R9-2007-0001 (Stormwater NPDES Permit)
- *County of San Diego Low Impact Development Handbook*
- Clean Water Act Section 402(p)
- 40 CFR 122.26
- San Diego Regional Water Quality Control Board—TMDLs
- State Water Resources Control Board—Ocean Standards
- *Site Planning for Urban Stream Protection* (Scheuler, 1995).
- "Application of Water-Quality Engineering Fundamentals to the Assessment of Stormwater Treatment Devices" (Salvia, 2000).

Chapter

3

Preparing Your Project Submittal

Step-by-step assistance to demonstrate compliance.

Your Project Submittal will demonstrate your project complies with all applicable requirements in the stormwater NPDES permit—to minimize imperviousness, retain or detain stormwater, slow runoff rates, incorporate required source controls, treat stormwater prior to discharge, control runoff rates and durations, and provide for operation and maintenance of treatment and flow-control facilities.

Typically, your Project Submittal must be coordinated with your application for discretionary approvals and must have sufficient detail to ensure the stormwater design, site plan, and landscaping plan are congruent. A complete and thorough Project Submittal will facilitate quicker review and fewer cycles of review.

Be sure to obtain specific submittal requirements from the jurisdiction in which your project is located. Your Project Submittal consists of a report and an exhibit. **City staff uses the following checklist** to evaluate your Project Submittal:

PROJECT SUBMITTAL CHECKLIST

CONTENTS OF EXHIBIT

Show all of the following on drawings:

- ❒ Existing natural hydrologic features (depressions, watercourses, floodplains, relatively undisturbed areas) and significant natural resources. (Step 1 in the following step-by-step instructions)
- ❒ Soil types and depth to groundwater. (Step 1)
- ❒ Existing and proposed site drainage network and connections to drainage off-site. (Step 3)
- ❒ Proposed design features and surface treatments used to minimize imperviousness. (Step 3)
- ❒ Entire site divided into separate drainage areas, with each area identified as self-treating, self-retaining (zero-discharge), draining to a self-retaining area, or draining to an IMP. (Step 3)
- ❒ For each drainage area, types of impervious area proposed (roof, plaza/sidewalk, and streets/parking) and area of each. (Step 3)
- ❒ Proposed locations and sizes of treatment or flow-control facilities. (Step 3)
- ❒ Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in the Appendix and corresponding required source controls. (Step 4)

CONTENTS OF REPORT

Include all of the following in a report:

- ❒ Narrative analysis or description of site features and conditions that constrain, or provide opportunities for, stormwater control. (Step 2)
- ❒ Narrative description of site design characteristics that protect natural resources. (Step 3)
- ❒ Narrative description and/or tabulation of site design characteristics, building features, and pavement selections that reduce imperviousness of the site. (Step 3)
- ❒ Tabulation of proposed pervious and impervious area, showing self-treating areas, self-retaining areas, and areas tributary to each treatment or flow-control facility. (Step 3)
- ❒ Preliminary designs, including calculations, for each infiltration, treatment, or flow-control facility. Elevations should show sufficient hydraulic head for each. (Step 3)
- ❒ A table of identified pollutant sources and for each source, the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in the Appendix. (Step 4)
- ❒ General maintenance requirements for infiltration, treatment, and flow-control facilities (Step 5)
- ❒ Means by which facility maintenance will be financed and implemented in perpetuity. (Step 5)
- ❒ Statement accepting responsibility for interim operation & maintenance of facilities (Step 5).
- ❒ Identification of any conflicts with codes or requirements or other anticipated obstacles to implementing the proposed facilities in the submittal (Step 6).
- ❒ Construction Plan SUSMP Checklist (Step 6).
- ❒ Certification by a civil engineer, architect, and landscape architect (Step 6).

Step by Step

Suggested coordination with site and landscape design

Plan and design your stormwater controls integrally with the site planning and landscaping for your project. It's best to start with general project requirements and preliminary site design concepts, then prepare the detailed site design, landscape design, and stormwater control design simultaneously. **This will help ensure that your site plan, landscape plan, and Project Submittal are congruent.**

The following step-by-step procedure should optimize your design by identifying the best opportunities for stormwater controls **early in the design process.**

Begin with general project requirements and program.

The recommended steps are:

1. Assemble needed information.

Sketch conceptual site layout, building locations, and circulation.

2. Identify site opportunities and constraints.

3. Follow the LID design guidance in Chapter 4 to analyze your project for LID and to develop and document your drainage design.

Revise site layout, building locations, and circulation to accommodate LID design. Develop land-scaping plan.

4. Specify source controls using the sources/source control checklist in the Appendix.

5. Plan for ongoing maintenance of treatment and flow-control facilities.

6. Complete the Project Submittal.

Submit Site Plan, Landscape Plan, and SUSMP Submittal

City staff may recommend you prepare and submit a preliminary site design prior to formally applying for planning and zoning approvals. Your preliminary site design should incorporate a conceptual plan for site drainage, including self-treating and self-retaining areas and the location and approximate sizes of any treatment facilities. This additional up-front design effort will save time and avoid potential delays later in the review process.

Step 1: Assemble Needed Information

To select types and locations of treatment facilities, the designer needs to know the following site characteristics:

- **Existing natural hydrologic features** and natural resources, including any contiguous natural areas, wetlands, watercourses, seeps, or springs.

- **Existing site topography**, including contours of any slopes of 4% or steeper, general direction of surface drainage, local high or low points or depressions, any outcrops or other significant geologic features.

- **Zoning**, including requirements for **setbacks** and **open space**.

- **Public Works Standards** or other local codes governing minimum street widths, sidewalk construction, allowable pavement types, and drainage. These codes may conflict with Low Impact Development objectives to minimize imperviousness and to maintain or restore natural site hydrology. Municipalities are encouraged to review and revise codes to resolve these conflicts where it is possible to do so.

- Soil types (including **hydrologic soil groups**) and depth to groundwater, which may determine whether infiltration is a feasible option for managing site runoff. Depending on site location and characteristics, and on the selection of treatment and flow-control facilities, site-specific information (e.g. from boring logs or geotechnical studies) may be required.

- **Existing site drainage.** For undeveloped sites, this should be obtained by inspecting the site and examining topographic maps and survey data. For previously developed sites, site drainage and connection to the municipal storm drain system can be located from site inspection, municipal storm drain maps, and plans for previous development.

- Existing **vegetative cover** and **impervious areas**, if any.

References and Resources

- *Site Planning for Urban Stream Protection* (Scheuler 1995).
- *Start at the Source* (BASMAA 1999), p. 36

Step 2: Identify Constraints & Opportunities

Review the information collected in Step 1. Identify the principal constraints on site design and selection of treatment and flow-control facilities as well as opportunities to reduce imperviousness and incorporate facilities into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, restricted right-of-way, or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention facilities), and differences in elevation (which can provide hydraulic head). Note stormwater treatment facilities should not be located within protected riparian areas.

Prepare a brief **narrative** describing site opportunities and constraints. This narrative will help you as you proceed with LID design and explain your design decisions to others.

Step 3: Prepare and Document Your LID Design

Use the Low Impact Development Design Guide (Chapter 4) to analyze your project for LID, design and document drainage, and specify preliminary design details for integrated management practices. **Follow the detailed instructions in Chapter 4 to ensure your project complies with NPDES permit LID requirements (Provision D.1.d.(4)) as well as stormwater treatment requirements in Provision D.1.d.(6)).** In future editions of this model SUSMP, the LID Design Guide will be updated so that additional hydromodification management requirements are also met via this unified design procedure. Chapter 4 includes calculation procedures and formats for presenting your calculations.

As shown in the example checklist (page 26), your Project Submittal may need to include a drawing showing:

- The entire site divided into separate drainage management areas (DMAs), with each area identified as one of the following: self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. Each area should be clearly marked with a unique identifier.
- For each drainage area, the types of impervious area proposed, and the area of each.
- Proposed locations and sizes of treatment facilities. Each facility should be clearly marked with a unique identifier.

Compliance

The design criteria for DMAs in Chapter 4 ensure the required volume of flow from all developed portions of the project, including landscaped areas, is infiltrated, filtered, or treated (Provision D.1.d.(6)(a).

Your Project Submittal may need to include:

- Tabulation of proposed self-treating areas, self-retaining areas, areas draining to self-retaining areas, and areas draining to IMPs, and the corresponding IMPs identified on the Exhibit.
- Calculations, in the format shown in Chapter 4, showing the minimum square footage required and proposed square footage for each IMP.
- Preliminary designs for each IMP. The design sheets and accompanying drawings in Chapter 4 may be used or adapted for this purpose.

The following may also be required, or may be advisable to assist the reviewer to understand your design:

- A narrative overview of your design and how your design decisions optimize the site layout, use pervious surfaces, disperse runoff from impervious surfaces, and drain impervious surfaces to engineered IMPs. See Chapter 4.
- A narrative briefly describing each **drainage management area** (DMA), its drainage, and where drainage will be directed.

- A narrative briefly describing each IMP. Include any special characteristics or features distinct from the design sheets in Chapter 4.

References and Resources

- Chapter 4
- *County of San Diego Low Impact Development Handbook*
- Your municipality's *General Plan*
- Your municipality's Zoning Ordinance and Development Codes
- *Low Impact Development Manual* (Prince George's County, Maryland, 1999).
- *Bioretention Manual* (Prince George's County, Maryland, rev. 2002)
- *Site Planning for Urban Stream Protection* (Schueler, 1995b).
  Low Impact Development Technical Guidance Manual for Puget Sound (Puget Sound Action Team, 2005)
- *LID for Big Box Retailers* (Low Impact Development Center, 2006)

Step 4. Specify Source Control BMPs

Some everyday activities – such as trash recycling/disposal and washing vehicles and equipment – generate pollutants that tend to find their way into storm drains. These pollutants can be minimized by applying **source control BMPs**.

Source control BMPs include **permanent**, structural features that must be incorporated into your project plans and **operational** BMPs, such as regular sweeping and "housekeeping," that must be implemented by the site's occupant or user. The maximum extent practicable standard typically requires both types of BMPs. In general, operational BMPs cannot be substituted for a feasible and effective permanent BMP.

Use the following procedure to specify source control BMPs for your site:

► IDENTIFY POLLUTANT SOURCES

Review the first column in the **Pollutant Sources/Source Control Checklist** (Appendix). Check off the potential sources of pollutants that apply to your site.

► NOTE LOCATIONS ON SUBMITTAL DRAWING

Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist (Appendix). Show the location of each pollutant source and each permanent source control BMP in your submittal drawing.

► PREPARE A TABLE AND NARRATIVE

Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist (Appendix). Now, create a table using the format in Table 3-1. In the left column, list each potential source on your site (from Appendix, Column 1). In the middle column, list the corresponding **permanent, structural BMPs** (from Columns 2 and 3, Appendix) used to prevent pollutants from entering runoff. Accompany this table with a narrative that explains any special features, materials, or methods of construction that will be used to implement these permanent, structural BMPs.

► IDENTIFY OPERATIONAL SOURCE CONTROL BMPS

TABLE 3-1. Format for Table of Permanent and Operational Source Control Measures.

Potential source of runoff pollutants	*Permanent source control BMPs*	*Operational source control BMPs*

To complete your table, refer once again to the Pollutant Sources/Source Control Checklist (Appendix, Column 4). List in the right column of your table the operational BMPs that should be implemented as long as the anticipated activities continue at the site. The same BMPs may also be required as a condition of a use permit or other revocable discretionary approval for use of the site.

References and Resources

- Appendix: Stormwater Pollutant Sources/Source Control Checklist
- RWQCB Order R9-2007-0001, Provision D.1.d.(5)
- *Start at the Source*, Section 6.7: Details, Outdoor Work Areas
- *California Stormwater Industrial/Commercial Best Management Practice Handbook*
- *Urban Runoff Quality Management* (WEF/ASCE, 1998) Chapter 4: Source Controls

Step 5: Stormwater Facility Maintenance

As required by NPDES Permit Provision D.1.c.(5), the City requires submittal of proof of a mechanism under which ongoing long-term maintenance of stormwater treatment and flow-control facilities will be conducted. The City requires the following items be included in your Project Submittal:

1. A means to finance and implement facility maintenance in perpetuity.
2. Acceptance of responsibility for maintenance from the time the facilities are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the treatment and flow-control facilities you have selected.

The City also requires that you prepare and submit a detailed plan that sets forth a maintenance schedule for each of the treatment and flow-control facilities built on your site.

Details of these requirements, and instructions for preparing a detailed operation and maintenance plan, are in Chapter 5.

References and Resources

- *Chapter 5*
- Operation, Maintenance, and Management of Stormwater Management Systems (Watershed Management Institute, 1997)

Step 6: Complete Your Project Submittal

Local City staff will provide specific instructions for the content and format of your Project Submittal. Your Project Submittal should document the information gathered and decisions made in Steps 1-5. A clear, complete, well-organized Project Submittal will make it possible to confirm your design meets the minimum requirements of the NPDES permit, the municipal stormwater pollution prevention ordinance, and this *SUSMP*.

► COORDINATION WITH SITE, ARCHITECTURAL, AND LANDSCAPING PLANS

Before completing your Project Submittal, ensure your stormwater control design is fully coordinated with the site plan, grading plan, and landscaping plan being proposed for the site.

Submittals must incorporate relevant aspects of the stormwater design. In particular, ensure:

- Curb elevations, elevations, grade breaks, and other features of the drainage design are consistent with the delineation of DMAs.
- The top edge (overflow) of each bioretention facility is level all around its perimeter—this is particularly important in parking lot medians.
- The resulting grading and drainage design is consistent with the design for parking and circulation.
- Bioretention facilities and other IMPs do not create conflicts with pedestrian access between parking and building entrances.
- Vaults and utility boxes can be accommodated outside bioretention facilities and will not be placed within bioretention facilities.
- The visual impact of stormwater facilities, including planter boxes at building foundations and any terracing or retaining walls required for the stormwater control design, is shown in renderings and other architectural drawings.
- Landscaping plans, including planting plans, show locations of bioretention facilities, and the plant requirements are consistent with the engineered soils and conditions in the bioretention facilities.
- Renderings and representation of street views incorporate any stormwater facilities located in street-side buffers and setbacks

► CONSTRUCTION PLAN SUSMP CHECKLIST

When you submit construction plans for City review and approval, the reviewer will compare that submittal with your earlier Project Submittal. By creating a Construction Plan SUSMP Checklist for your project, you can facilitate the reviewer's comparison and speed review of your project.

TABLE 3-2. Format for Construction Plan SUSMP Checklist.

SUSMP Page #	*BMP Description*	*See Plan Sheet #s*

Here's how:

1. Create a table similar to Table 3-2. Number and list each measure or BMP you have specified in your Project Submittal in Columns 1 and 2 of the table. Leave Column 3 blank. Incorporate the table into your Project Submittal.

2. When you submit construction plans, **duplicate the table** (by photocopy or electronically). Now fill in Column 3, identifying the plan sheets where the BMPs are shown. List all plan sheets on which the BMP appears. Submit the updated table with your construction plans.

Note that the updated table—or Construction Plan SUSMP Checklist—is **only a reference tool** to facilitate comparison of the construction plans to your Project Submittal. Planning Department staff can advise you regarding the process required to propose changes to your approved Project Submittal.

► CERTIFICATION

The City requires that your Final Project Submittal be certified by a registered civil engineer.

The certification should state: "The selection, sizing, and preliminary design of stormwater treatment and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments."

► EXAMPLE PROJECT SUBMITTALS

Example Project Submittals and templates will be available from City staff. Your submittal will reflect the unique character of your own project and should meet the requirements identified in this *SUSMP*. City staff can assist you to determine how specific requirements apply to your project.

Chapter

4

Low Impact Development Design Guide

Guidance for designing and documenting your LID site drainage, stormwater treatment facilities, and flow-control facilities

Follow the Low Impact Development (LID) design in this SUSMP to achieve compliance with the stormwater treatment requirements as well as the LID requirements in the stormwater NPDES permit.

This will require careful documentation of:

- Pervious and impervious areas in the planned project.
- Drainage from each of these areas.
- Locations, sizes, and types of proposed treatment facilities.

Your Project Submittal must include calculations showing the site drainage and proposed LID treatment facilities meet the criteria in this *SUSMP*.

This Low Impact Development Design Guide will help you:

- **Analyze your project** and identify and select options for implementing LID techniques to meet runoff treatment requirements—and flow-control requirements, if they apply.
- **Design and document drainage** for the whole site and document how that design meets this *SUSMP's* stormwater treatment criteria.
- **Specify preliminary design details** and integrate your LID drainage design with your paving and landscaping design.

Alternatives to LID design are discussed in the final section of this chapter.

Analyze Your Project for LID

Conceptually, there are four LID strategies for managing runoff from buildings and paving:

1. **Optimize the site layout** by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.

2. **Use pervious surfaces** such as turf, gravel, or pervious pavement—or use surfaces that retain rainfall, such as vegetated roofs. All drainage from these surfaces is considered to be "self-retained" (a detailed definition corresponding to this concept is on page 42). No further management of runoff is necessary. An emergency overflow should be provided for extreme events.

3. **Disperse runoff** from impervious surfaces on to adjacent pervious surfaces (e.g., direct a roof downspout to disperse runoff onto a lawn).

4. Drain impervious surfaces to engineered **Integrated Management Practices** (IMPs), such as bioretention facilities, planter boxes, cisterns, or dry wells. IMPs infiltrate runoff to groundwater and/or percolate runoff through engineered soil and allow it to drain away slowly. Depending on site conditions and local regulations, it may be possible to harvest and reuse rainwater in conjunction with IMPs.

A combination of two or more strategies may work best for your project. With forethought in design, the four strategies can provide multiple, complementary benefits to your development. Pervious surfaces reduce heat island effects and temperature extremes. Landscaping improves air quality, creates a better place to live or work, and upgrades value for rental or sale. Retaining natural hydrology helps preserve and enhance the natural character of the area. LID drainage design can also conserve water and reduce the need for drainage infrastructure.

Table 4-1 includes ideas for applying LID strategies to site conditions and types of development.

TABLE 4-1. Ideas for Runoff Management.

Site Features and Design Objectives	*Vegetated Roof*	*Self-retaining Areas*	*Pervious Pavement*	*Bioretention Facility*	*Flow-through Planter*	*Dry Well*	*Cistern with bioretention*
Clayey native soils	✓			✓	✓		✓
Permeable native soils	✓		✓	✓	✓	✓	
Very steep slopes	✓				✓		
Shallow groundwater	✓				✓		
Avoid saturating subsurface soils	✓		✓		✓		
Connect to roof downspouts		✓		✓	✓	✓	✓
Parking lots/islands and medians			✓	✓		✓	
Sites with extensive landscaping		✓	✓	✓			
Densely developed sites with limited space/landscape	✓		✓		✓	✓	✓
Fit IMPs into landscape and setback areas				✓			✓
Make drainage a design feature		✓		✓			✓
Convey as well as treat stormwater				✓			

► OPTIMIZE THE SITE LAYOUT

To minimize stormwater-related impacts, apply the following design principles to the layout of newly developed and redeveloped sites.

Conserve natural areas, soils, and vegetation. Define the development envelope and protected areas, identifying areas that are most suitable for development and areas that should be left undisturbed. Use the following guideline to determine the least sensitive areas of the site, in order of increasing sensitivity:

1. Areas devoid of vegetation, including previously graded areas and agricultural fields.
2. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands where receiving waters are not present.
3. Areas of chamise or mixed chaparral, and non-native grasslands.
4. Areas containing coastal scrub communities.
5. All other upland communities.
6. Occupied habitat of sensitive species and all wetlands (as both are defined by the local jurisdiction).

Within each of the previous categories, hillside areas should be considered more sensitive than flatter areas.

Coordination
Chapter One includes a presentation of how review of your project's site design and landscape design is coordinated with review for compliance with stormwater NPDES requirements.

Where possible, conform the site layout along natural landforms, avoid excessive grading and disturbance of vegetation and soils, and replicate the site's natural drainage patterns. Set back development from creeks, wetlands, and riparian habitats. Preserve significant trees, especially native trees and shrubs, and identify locations for planting additional native or drought tolerant trees and large shrubs. Concentrate development on portions of the site with less permeable soils, and preserve areas that can promote infiltration.

For all types of development, **limit overall coverage** of paving and roofs. Where allowed by local zoning and design standards—and provided public safety and a walkable environment are not compromised—this can be accomplished by designing compact, taller structures, narrower and shorter streets and sidewalks, smaller parking lots (fewer stalls, smaller stalls, and more efficient lanes), and indoor or underground parking. Examine site layout and circulation patterns and identify areas where landscaping can be substituted for pavement.

Detain and retain runoff throughout the site. On flatter sites, it typically works best to intersperse landscaped areas and IMPs among the buildings and paving. On hillside sites, drainage from upper areas may be collected in conventional catch basins and piped to landscaped areas and IMPs in lower areas.

Use drainage as a design element. Use depressed landscape areas, vegetated buffers, and bioretention areas as amenities and focal points within the site and landscape design. Bioretention areas can be almost any shape and should be located at low points. Bioretention areas shaped as swales can detain and treat low runoff flows and also convey higher flows.

► USE PERVIOUS SURFACES

Consider a vegetated roof. Although not yet widely used in California, vegetated or "green" roofs are growing in popularity. Potential benefits include longer roof life, lower heating and cooling costs, and better sound insulation, in addition to air quality and water quality benefits. For SUSMP compliance purposes, vegetated roofs are considered not to produce increased runoff or runoff pollutants (i.e., any runoff from a vegetated roof requires no further treatment or detention). For more information on vegetated roofs, see www.greenroofs.org.

Consider permeable pavements and surface treatments. Inventory paved areas on your preliminary site plan. Identify where permeable pavements, such as crushed aggregate, turf block, unit pavers, pervious concrete, or pervious asphalt could be substituted for impervious concrete or asphalt paving.

► DISPERSE RUNOFF TO ADJACENT PERVIOUS AREAS

Look for opportunities to direct runoff from impervious areas to adjacent landscaping. The design, including slopes and soils, must reflect a reasonable expectation that an inch of rainfall will soak into the soil and produce no runoff. For example, a lawn or garden depressed 3-4" below surrounding walkways or driveways provides a simple but functional landscape design element.

For sites subject to stormwater treatment requirements only, a 2:1 maximum ratio of impervious to pervious area is acceptable. Be sure soils will drain adequately.

Under some circumstances, it may be allowable to direct runoff from impervious areas to pervious pavement (for example, from roof downspouts to a parking lot paved with crushed aggregate or turf block). The pore volume of pavement and base course must be sufficient to retain an inch of rainfall, including runoff from the tributary area. The slopes and soils must be compatible with infiltrating that volume without producing runoff.

► DIRECT RUNOFF TO INTEGRATED MANAGEMENT PRACTICES

Project Clean Water has developed design criteria for the following IMPs:

- **Bioretention facilities**, which can be configured as swales, free-form areas, or planters to integrate with your landscape design.
- **Flow-through planters**, which can be used near building foundations and other locations where infiltration to native soils is not desired.
- **Dry wells** and other infiltration facilities, which can be used only where soils are permeable.

- **Cisterns**, in combination with a bioretention facility.

See the design sheets at the end of this chapter.

It may be possible to create a site-specific design that uses cisterns to achieve stormwater flow control, stormwater treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Such a design could expand the multiple benefits of LID to include water conservation. Keep in mind:

- Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8 below. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse.

- Storage of water for longer than 48 hours creates the potential for mosquito harborage. Cisterns must be designed to prevent entry by mosquitoes.

- Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Some references and resources for water harvesting appear at the end of this chapter.

Finding the right location for treatment facilities on your site involves a careful and creative integration of several factors:

- To make the most efficient use of the site and to maximize aesthetic value, **integrate IMPs with site landscaping**. Many local zoning codes may require landscape setbacks or buffers, or may specify that a minimum portion of the site be landscaped. It may be possible to locate some or all of your site's treatment and flow-control facilities within this same area, or within utility easements or other non-buildable areas.

- Planter boxes and bioretention areas must be **level or nearly level** all the way around. Bioretention areas configured as swales may be gently sloped in the linear direction, but opposite sides must be at the same elevation.

- For effective, low-maintenance operation, **locate facilities so drainage into and out of the device is by gravity flow.** Pumped systems are feasible, but are expensive, require more maintenance, are prone to untimely failure, and can cause mosquito control problems. Most IMPs require 3 feet or more of head.

- If the property is being subdivided now or in the future, the facility should be in a **common, accessible area.** In particular, avoid locating facilities on private residential lots. Even if the facility will serve only one site owner or operator, make sure the facility is located for ready access by inspectors from the local municipality and local mosquito control agency.

- The facility must be accessible to equipment needed for its maintenance. **Access requirements for maintenance** will vary with the type of facility selected. Planter boxes and bioretention areas will typically need access for the same types of equipment used for landscape maintenance.

To complete your analysis, include in your Project Submittal a brief **narrative** documenting the site layout and site design decisions you made. This will provide background and context for how your design meets the quantitative LID design criteria.

Rationale

Pollutants in rainfall and windblown dust will tend to become entrained in the vegetation and soils of landscaped areas, so no additional treatment is needed. It is assumed the self-treating landscaped areas will produce runoff less than or equal to the pre-project site condition.

Develop and Document Your Drainage Design

The **design documentation procedure** begins with careful delineation of pervious areas and impervious areas (including roofs) throughout the site. The procedure accounts for how runoff from each delineated area is managed. For areas draining to IMPs, the procedure ensures each IMP is appropriately sized.

The procedure results in a space-efficient, cost-efficient LID design for meeting SUSMP requirements on most residential and commercial/industrial developments. The procedure arranges documentation of drainage design and IMP sizing in a consistent format for presentation and review.

This procedure is intended to facilitate, not substitute for, creative interplay among site design, landscape design, and drainage design. **Several iterations may be needed** to optimize your drainage design as well as aesthetics, circulation, and use of available area for your site.

You should be able to complete the needed calculations using only the project's site development plan.

► STEP 1: DELINEATE DRAINAGE MANAGEMENT AREAS

This is the key first step. You must divide the **entire project area** into individual, discrete Drainage Management Areas (DMAs). Typically, lines delineating DMAs follow grade breaks and roof ridge lines. The Exhibit, tables, text, and calculations in your Project Submittal will illustrate, describe, and account for runoff from each of these areas.

Use separate DMAs for each surface type (e.g., landscaping, pervious paving, or roofs). Each DMA must be assigned a single hydrologic soil group. Assign each DMA an identification number and determine its size in square feet.

► STEP 2: CLASSIFY DMAS AND DETERMINE RUNOFF FACTORS

Next, determine how drainage from each DMA will be handled. Each DMA will be one of the following four types:

1. Self-treating areas.

2. Self-retaining areas (also called "zero-discharge" areas).
3. Areas that drain to self-retaining areas.
4. Areas that drain to IMPs.

Self-treating areas are landscaped or turf areas that do not drain to IMPs, but rather drain directly off site or to the storm drain system. Examples include upslope undeveloped areas which are ditched and drained around a development and grassed slopes which drain off-site to a street or storm drain. In general, self-treating areas include no impervious areas, unless the impervious area is very small (5% or less) in relationship to the receiving pervious area and slopes are gentle enough to ensure runoff will be absorbed into the vegetation and soil. Criteria for self-treating areas are in the design sheet "Self Treating and Self-Retaining Areas" at the end of this chapter.

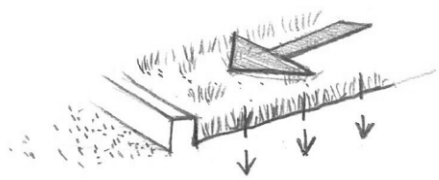

FIGURE 4-1. Self-treating areas are entirely pervious and drain directly off-site or to the storm drain system.

Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that a one-inch rainfall event would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Specify slopes, if any, toward the center of the pervious area. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

Criteria for self-retaining areas are in the design sheet "Self Treating and Self-Retaining Areas" following this chapter.

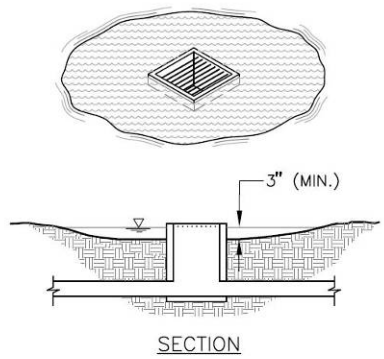

FIGURE 4-2. Self-retaining areas. Berm or depress the grade to retain at least an inch of rainfall and set inlets of any area drains at least 3 inches above low point to allow ponding.

Areas draining to self-retaining areas. Runoff from impervious or partially pervious areas can be managed by routing it to self-retaining pervious areas. For example, roof downspouts can be directed to lawns, and driveways can be sloped toward landscaped areas. The maximum ratio is 2 parts impervious area for every 1 part pervious area.

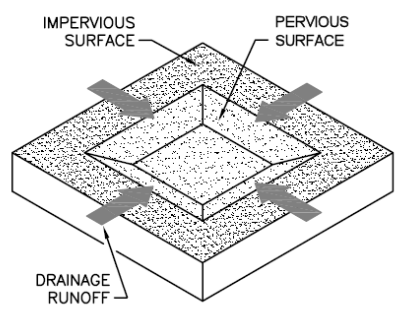

FIGURE 4-3. Relationship of impervious to pervious area for self-retaining areas. Ratio: ***pervious ≥ ½ impervious***

The drainage from the impervious area must be directed to and dispersed within the pervious area, and the entire area must be designed to retain an inch of rainfall without flowing off-site. For example, if the maximum ratio of 2 parts impervious area into 1 part pervious area is used, then the pervious area must absorb 3 inches of water over its surface before overflowing to an off-site drain.

A partially pervious area may be drained to a self-retaining area. For example, a driveway composed of unit pavers may drain to an adjacent lawn. In this case, the maximum ratios are:

(Runoff factor) x (tributary area) ≤ 2 x (self-retaining area) *Equation 4-1*

Use the runoff factors in Table 4-2.

Prolonged ponding is a potential problem at higher impervious/pervious ratios. In your design, ensure that the pervious area soils can handle the additional run-on and are sufficiently well-drained.

Under some circumstances, pervious pavement (e.g., crushed stone, pervious asphalt, or pervious concrete) can be self-retaining. Adjacent roofs or impervious pavement may drain on to the pervious pavement in the same maximum ratios as described above.

To design a pervious pavement to be a self-treating area, ensure:

- The gravel base course is a minimum of four or more inches deep.
- The base course is not to be underdrained.
- A qualified engineer has been consulted regarding infiltration rates, pavement stability, and suitability for the intended traffic.

Runoff from self-treating and self-retaining areas does not require any further treatment or flow control.

TABLE 4-2. Runoff Factors for Surfaces Draining to IMPs.

Surface	Factor
Roofs	1.0
Concrete	1.0
Pervious Concrete	0.1
Porous Asphalt	0.1
Grouted Unit Pavers	1.0
Solid Unit Pavers on granular base, min. 3/16 inch joint space	0.2
Crushed Aggregate	0.1
Turfblock	0.1
Amended, mulched soil	0.1
Landscape	0.1

Areas draining to IMPs are multiplied by a sizing factor to calculate the required size of the IMP. On most densely developed sites—such as commercial and mixed-use developments and small-lot residential subdivisions—most DMAs will drain to IMPs.

More than one drainage area can drain to the same IMP. However, because the minimum IMP sizes are determined by ratio to drainage area size, a drainage area may not drain to more than one IMP. See Figures 4-4 and 4-5.

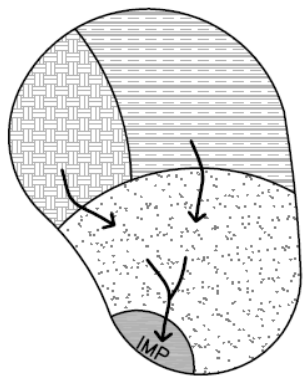

FIGURE 4-4. MORE THAN ONE
Drainage Management Area can drain to a single IMP.

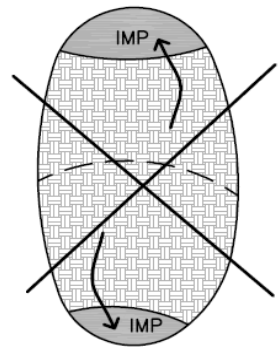

FIGURE 4-5. ONE DRAINAGE
Management Area cannot drain to more than one IMP. Use a grade break to divide the DMA.

Where possible, design site drainage so **only impervious roofs and pavement** drain to IMPs. This yields a simpler, more efficient design and also helps protect IMPs from becoming clogged by sediment.

If it is necessary to include turf, landscaping, or pervious pavements within the area draining to an IMP, list each surface as a separate DMA. A runoff factor (similar to a "C" factor used in the rational method) is applied to account for the reduction in the quantity of runoff. For example, when a turf or landscaped drainage management area drains to an IMP, the resulting increment in IMP size is:

$$\Delta \text{ (Area)} = \text{(pervious area)} \times \text{(runoff factor)} \times \text{(sizing factor)}.$$

Use the runoff factors in Table 4-2.

► STEP 3: TABULATE DRAINAGE MANAGEMENT AREAS

- Tabulate self-treating areas in the format shown in Table 4-3.
- Tabulate self-retaining areas in the format shown in Table 4-4.
- Tabulate areas draining to self-retaining areas in the format shown in Table 4-5. Check to be sure the total product of (square feet of tributary area × runoff factor) for all DMAs draining to a receiving self-retaining area is no greater than a 2:1 ratio to the square footage of the receiving self-retaining area itself.
- Compile a list of DMAs draining to IMPs. Proceed to Step 4 to check the sizing of the IMPs.

TABLE 4-3. Format for Tabulating Self-Treating Areas.

DMA Name	*Area (square feet)*

TABLE 4-4. Format for Tabulating Self-Retaining Areas.

DMA Name	*Area (square feet)*

TABLE 4-5. Format for Tabulating Areas Draining to Self-Retaining Areas.

DMA Name	*Area (square feet)*	*Post-project surface type*	*Runoff factor*	*Receiving self-retaining DMA*	*Receiving self-retaining DMA Area (square feet)*

► STEP 4: SELECT AND LAY OUT IMPS ON SITE PLAN

Select from the list of IMPs in Table 4-6. Illustrations, designs, and design criteria for the IMPs are in the "IMP Design Details and Criteria" at the end of this chapter.

Once you have laid out the IMPs, calculate the square footage you have set aside on your site plan for each IMP.

► STEP 5: REVIEW SIZING FOR EACH IMP

For each of the IMPs, use the appropriate sizing from Table 4-6.

TABLE 4-6. IMP Sizing.

Bioretention Facilities	Sizing Factor for Area = 0.04
Flow-through Planters	Sizing Factor for Area = 0.04
Dry Well or Infiltration Basin	See Step 6 to Calculate Min. Volume
Cistern with Bioretention	See Step 6 to Calculate Min. Volume of Cistern; then use 0.04 to calculate minimum size of bioretention area

► STEP 6: CALCULATE MINIMUM AREA AND VOLUME OF EACH IMP

The minimum area of bioretention facilities and flow-through planters is found by summing up the contributions of each tributary DMA and multiplying by the adjusted sizing factor for the IMP.

Equation 4-7

$$Min.\,IMP\,Area = \sum \begin{pmatrix} DMA & DMA \\ Square & \times Runoff \\ Footage & Factor \end{pmatrix} \times \begin{pmatrix} IMP \\ Sizing \\ Factor \end{pmatrix}$$

Use the format of Table 4-7 to present the calculations of the required minimum area and volumes for **bioretention areas** and **planter boxes**:

TABLE 4-7. Format for Presenting Calculations of Minimum IMP Areas for Bioretention Areas and Planter Boxes.

DMA Name	*DMA Area (square feet)*	*Post-project surface type*	*DMA Runoff factor*	*DMA Area × runoff factor*	*Soil Type:*	*IMP Name*			
					IMP Sizing factor		*Minimum Area*	*Proposed Area*	
			Total		***0.04***				***IMP Area***

To size **dry wells**, **infiltration basins**, or **infiltration trenches**, use the following procedure:

1. Use the County of San Diego's 85th Percentile Isopluvial Map to determine the minimum unit volume.
2. Determine the weighted runoff factor ("C" factor) for the area tributary to the facility. The factors in Table 4-2 may be used.
3. Multiply the weighted runoff factor times the tributary area times the minimum unit volume.

Equation 4-8

$$Volume = [Tributary\ Area] \times [weighted\ runoff\ \ factor] \times [unit\ volume]$$

4. Select a facility depth.
5. Determine the required facility area. Dry wells may be designed as an open vault or with rock fill. If rock fill is used, assume a porosity of 40%.
6. Ensure the facility can infiltrate the entire volume within 72 hours.

To size a **cistern in series with a bioretention facility**:

1. Use Equation 4-8 to calculate the required cistern volume.
2. Design a discharge orifice for a drawdown time of 24 hours.
3. Determine the maximum discharge from the orifice.
4. The minimum area of the bioretention facility must treat this flow based on a percolation rate of 5" per hour through the engineered soil.

► STEP 7: DETERMINE IF AVAILABLE SPACE FOR IMP IS ADEQUATE

Sizing and configuring IMPs may be an iterative process. After computing the minimum IMP area using Steps 1 – 6, review the site plan to determine if the reserved IMP area is sufficient. If so, the planned IMPs will meet the SUSMP sizing requirements. If not, revise the plan accordingly. Revisions may include:

- Reducing the overall imperviousness of the project site.
- Changing the grading and drainage to redirect some runoff toward other IMPs which may have excess capacity.
- Making tributary landscaped DMAs self-treating or self-retaining.
- Expanding IMP surface area.

► STEP 8: COMPLETE YOUR SUMMARY REPORT

Present your IMP sizing calculations in tabular form. Adapt the following format as appropriate to your project. Coordinate your presentation of DMAs and calculation of minimum IMP sizes with the Project Submittal drawing (labeled to show delineation of DMAs and locations of IMPs). It is also helpful to incorporate a brief description of each DMA and each IMP.

Sum the total area of all DMAs and IMPs listed and show it is equal to the total project area. This step may include adjusting the square footage of some DMAs to account for area used for IMPs.

Format:

Project Name:

Project Location:

APN or Subdivision Number:

Total Project Area (square feet):

Mean Annual Precipitation at Project Site:

I. Self-treating areas:

DMA Name	*Area (square feet)*

II. Self-retaining areas:

DMA Name	*Area (square feet)*

III. Areas draining to self-retaining areas:

DMA Name	*Post-project surface type*	*Runoff factor*	*Area (square feet)*	*Receiving self-retaining DMA*	*Receiving self-retaining DMA Area (square feet)*

IV. Areas draining to IMPs (repeat for each IMP):

DMA Name	*DMA Area (square feet)*	*Post-project surface type*	*DMA Runoff factor*	*DMA Area × runoff factor*	*Soil Type:*	*IMP Name*			
					IMP Sizing factor		*Minimum Area or Volume*	*Proposed Area or Volume*	
			Total						***IMP Area***

Specify Preliminary Design Details

In your Project Submittal, describe your IMPs in sufficient detail to demonstrate the area, volume, and other criteria of each can be met within the constraints of the site.

Ensure these details are consistent with preliminary site plans, landscaping plans, and architectural plans submitted with your application for planning and zoning approvals.

Following are design sheets for:

- Self-treating and self-retaining areas
- Pervious pavements
- Bioretention facilities
- Flow-through planter
- Dry wells and infiltration basins
- Cistern with bioretention facility

These design sheets include recommended configurations and details, and example applications, for these IMPs. **The information in these design sheets must be adapted and applied to the conditions specific to the development project such as unstable slopes or the lack of available head.**

Keep in mind that proper and functional design of the IMP is the responsibility of the applicant. Effective operation of the IMP throughout the project's lifetime will be the responsibility of the property owner.

Alternatives to Integrated LID Design

If you believe design of features and facilities as described above is infeasible for your development site, consult with City staff before preparing an alternative design for stormwater treatment, flow control, and LID compliance.

Local Requirements
Cities or the County may have requirements that differ from, or are in addition to, this countywide model SUSMP. Check with local planning and community development staff.

For all alternative designs, the applicant must prepare a complete Project Submittal, including a drawing showing the entire site divided into discrete Drainage Management Areas, text and tables showing how drainage is routed from each DMA to a treatment facility, and calculations demonstrating the design achieves the applicable design criteria for each stormwater treatment facility. Alternative treatment facilities are limited to the circumstances and selection criteria identified beginning on page 17. The Project Submittal must also show how the project meets the minimum LID criteria (page 21) and ensures runoff rates, durations, and velocities are controlled to maintain or reduce downstream erosion conditions and protect stream habitat (NPDES Permit Provision D.1.d.(10)).

► DESIGN OF ALTERNATIVE TREATMENT FACILITIES

Here are criteria and design considerations for some alternative treatment facilities:

Sand Filters. To ensure effectiveness is not compromised by compacting or clogging of the filter surface, sand filters must be maintained frequently.

The following criteria apply to sand filters:

- Calculate the design flow using the rational method with an intensity of 0.2"/hour and the "C" factors for "treatment only" from Table 4-2.
- To determine the required filter surface area, divide the design flow by an allowable design surface loading rate of 5"/hour.
- The minimum depth of filter media is 18". The media should be washed sand, with gradation similar to that specified for fine aggregate in ASTM C-33.
- The entire filter area must be accessible for easy maintenance without the need to enter a confined space.

A typical filter design includes a gravel drain layer and a perforated pipe underdrain. Filter fabric may be used to prevent the filter media from entering the gravel layer.

The design should not include any permanent pool or other standing water. Instead of including a pretreatment basin, consider the following features in the area tributary to the filter to reduce the potential for filter clogging:

- Limit the size of the Drainage Management Area.
- Include only impervious areas in the DMA.
- Stabilize slopes and eliminate sources of sediment in the DMA.
- Provide screens for trash and leaves at storm drain inlets (if allowed by municipality).

For additional design considerations and details, see *Design of Stormwater Filtering Systems* by Richard A. Claytor and Thomas R. Schueler, The Center for Watershed Protection, 1996, and *California Stormwater BMP Handbooks* Fact Sheet TC-40, Media Filter.

Extended ("Dry") Detention Basins. The required detention volume is based on the 85th percentile 24-hour storm depth. The steps to calculate the required detention volume are:

1. Use the County of San Diego's 85th Percentile Isopluvial Map to determine the unit basin volume.
2. Determine the weighted runoff factor ("C" factor) for the area tributary to the basin. The factors in Table 4-2 may be used.
3. Multiply the weighted runoff factor times the tributary area times the unit basin volume.

For maximum effectiveness the basin should not be sized substantially larger than this volume.

For design considerations and details, see the *California Stormwater Best Management Practice Handbooks*, Fact Sheet TC-22, "Extended Detention Basins." The basin outlet should be designed for a 24-hour drawdown time.

As noted in Fact Sheet TC-22, "dry" detention basins may not be practicable for drainage areas less than 5 acres. The potential for mosquito harborage is a concern. In the design, do not create any areas that will hold standing water for 72 hours or more.

"Wet" Detention Ponds and Constructed Wetlands. The required detention volume is determined as with a "dry" detention basin. Before proceeding with design, contact the local mosquito control agency to coordinate the design and plan ongoing inspection and maintenance of the facility for mosquito control. For design considerations and details, see the *California Stormwater Best Management Practices Handbooks*, Fact Sheet TC-20, "Wet Ponds," and Fact Sheet TC-21, "Constructed Wetlands."

Vegetated Swales. Design recommendations for conventional vegetated swales are in the *California Stormwater Best Management Practices Handbooks*. The conventional swale design uses available on-site soils and does not include an underdrain system. Where soils are clayey, there is little infiltration. Treatment occurs as runoff flows through grass or other vegetation before exiting at the downstream end. Recommended detention times are on the order of 10 minutes.

Conventional vegetated swales may be used to meet NPDES permit treatment requirements and LID requirements (see page 21). The following should be incorporated in the design:

- Determine the weighted runoff factor ("C" factor) for the area tributary to the swale. The factors in Table 4-2 may be used.
- Calculate the design flow by multiplying the weighted runoff factor times the tributary area times either (1) 0.2 inches of rainfall per hour, or (2) twice the 85th percentile hourly rainfall intensity.
- When sizing the swale, use a value of 0.25 for Manning's "n".
- Ensure that all flow enters the swale near its highest point and that no flow short-circuits treatment by entering the swale along its length.
- The swale should be a minimum 100 feet in length.
- Longitudinal slopes should not exceed 2.5%; on flatter slopes, incorporate measures to avoid prolonged surface ponding.

Consider using linear-shaped bioretention areas (see page 60) in place of conventional vegetated swales because:

- Conventional swale design has resulted in standing water and associated nuisances.

- Conventional swales often don't obtain even the design residence time because of the length required and because proper design requires runoff enter the swale at the upstream end rather than at various locations along its length, and
- Bioretention areas provide a more flexible drainage design, more effective practicable treatment, and more effective flow control within the same footprint.

► TREATMENT FACILITIES FOR SPECIAL CIRCUMSTANCES

Higher-rate surface filters and vault-based proprietary filters can only be used in the circumstances described beginning on page 17 and when sand filters, extended "dry" detention basins, and "wet" detention ponds or constructed wetlands have been found infeasible.

For surface filters, the grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units. Proprietary facilities should be installed consistent with the manufacturer's instructions.

References and Resources:

- RWQCB Order R9-2007-0001 (Stormwater NPDES Permit)
- Low Impact Development Center
- *County of San Diego Low Impact Development Handbook*
- *California Best Management Practices Handbooks*
- *Design of Stormwater Filtering Systems* (Claytor and Scheuler, 1996)
- American Rainwater Catchment Systems Association
- Water Conservation Alliance of Southern Arizona
- *Rainwater Harvesting for Drylands and Beyond*
- *The Texas Manual on Rainwater Harvesting*
- *Managing Wet Weather With Green Infrastructure: Municipal Handbook, Rainwater Harvesting Policies* (Low Impact Development Center, 2008)

Self-Treating and Self-Retaining Areas

Best Uses

- Heavily landscaped sites

Advantages

- No maintenance verification requirement
- Complements site landscaping

Limitations

- Requires substantial square footage
- Grading requirements must be coordinated with landscape design

► **CRITERIA**

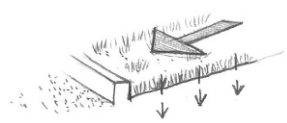

Rainfall on self-treating areas infiltrates or—during intense storms— drains directly off-site or to the storm drain system.

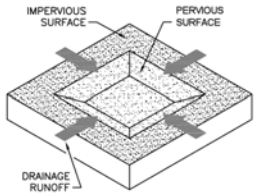

Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. During intense storms, runoff may drain off-site, to the storm drain system, or to IMPs.

LID design seeks to manage runoff from roofs and paving so effects on water quality and hydrology are minimized. Runoff from landscaping, however, does not need to be managed the same way.

Runoff from landscaping can be managed by creating self-treating and self-retaining areas.

Self-treating areas are natural, landscaped, or turf areas that drain directly off site or to the storm drain system. Examples include upslope undeveloped areas that are ditched and drained around a development and grassed slopes that drain offsite to a street or storm drain. Self-treating areas may not drain on to adjacent paved areas.

Where a landscaped area is upslope from or surrounded by paved areas, a **self-retaining area** (also called a zero-discharge area) may be created. Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that the first inch of rainfall would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

Areas draining to self retaining areas. Drainage from roofs and paving can be directed to self-retaining areas and allowed to infiltrate into the soil. The maximum allowable ratio is 2 parts impervious: 1 part pervious.

The self-retaining area must be bermed or depressed to retain an inch of rainfall including the flow from the tributary impervious area.

► DETAILS

Drainage from self-treating areas must flow to off-site streets or storm drains without flowing on to paved areas.

Pavement within a self-treating area cannot exceed 5% of the total area.

In self-retaining areas, overflows and area drain inlets should be set high enough to ensure ponding over the entire surface of the self-retaining area.

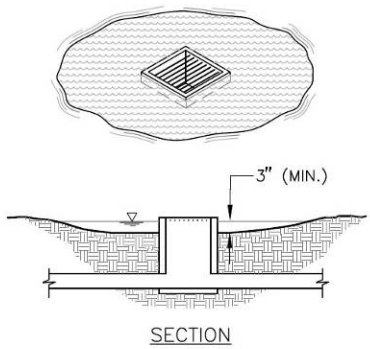

Set overflows and area drain inlets high enough to ensure ponding (3" deep) over the surface of the self-retaining area.

Self–retaining areas should be designed to promote even distribution of ponded runoff over the area.

Leave enough reveal (from pavement down to landscaped surface) to accommodate buildup of turf or mulch.

► APPLICATIONS

Lawn or landscaped areas adjacent to streets can be considered self-treating areas.

Self-retaining areas can be created by depressing lawn and landscape below surrounding sidewalks and plazas.

Runoff from walkways or driveways in parks and park-like areas can sheet-flow to self-retaining areas.

Roof leaders can be connected to self-retaining areas by piping beneath plazas and walkways. If necessary, a "bubble-up" can be used.

Connecting a roof leader to a self-retaining area. The head from the eave height makes it possible to route roof drainage some distance away from the building.

Self-retaining areas can be created by terracing mild slopes. The elevation difference promotes subsurface drainage.

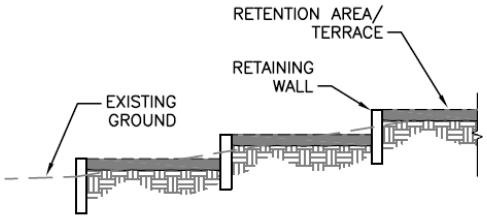

Mild slopes can be terraced to create self-retaining areas.

► DESIGN CHECKLIST FOR SELF-TREATING AREAS

- ❒ The self-treating area is at least 95% lawn or landscaping (not more than 5% impervious).
- ❒ Re-graded or re-landscaped areas have amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- ❒ Runoff from the self-treating area does not enter an IMP or another drainage management area, but goes directly to the storm drain system.

► DESIGN CHECKLIST FOR SELF-RETAINING AREAS

- ❒ Area is bermed all the way around or graded concave.
- ❒ Slopes do not exceed 4%.
- ❒ Entire area is lawn, landscaping, or pervious pavement (see criteria in Chapter 4).
- ❒ Area has amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- ❒ Any area drain inlets are at least 3 inches above surrounding grade.

► DESIGN CHECKLIST FOR AREAS DRAINING TO SELF-RETAINING AREAS

- ❒ Ratio of tributary impervious area to self-retaining area is not greater than 2:1.
- ❒ Roof leaders collect runoff and route it to the self-retaining area.
- ❒ Paved areas are sloped so drainage is routed to the self-retaining area.
- ❒ Inlets are designed to protect against erosion and distribute runoff across the area.

Pervious Pavements

► CRITERIA

Impervious roadways, driveways, and parking lots account for much of the hydrologic impact of land development. In contrast, pervious pavements allow rainfall to collect in a gravel or sand base course and infiltrate into native soil.

Pervious pavements are designed to transmit rainfall through the surface to storage in a base course. For example, a 4-inch-deep base course provides approximately 1.6 inches of storage. Runoff stored in the base course infiltrates to native soils over time. Except in the case of solid pavers, the surface course provides additional storage.

Areas with the following pervious pavements may be regarded as "self-treating" and require no additional treatment or flow control if they drain off-site (not to an IMP).

- Pervious concrete
- Porous asphalt
- Crushed aggregate (gravel)
- Open pavers with grass or plantings
- Open pavers with gravel
- Artificial turf

Areas with these pervious pavements can also be **self-retaining areas** and may receive runoff from impervious areas if they are bermed or depressed to retain the first one inch of rainfall, including runoff from the tributary impervious area.

Solid unit pavers—such as bricks, stone blocks, or precast concrete shapes—are considered to reduce runoff compared to impervious pavement, when the unit pavers are set in sand or gravel with d" gaps between the pavers. Joints must be filled with an open-graded aggregate free of fines.

Best Uses

- Areas with permeable native soils
- Low-traffic areas
- Where aesthetic quality can justify higher cost

Advantages

- No maintenance verification requirement
- Variety of surface treatments can complement landscape design

Limitations

- Initial cost
- Placement requires specially trained crews
- Geotechnical concerns, especially in clay soils
- Concerns about pavement strength and surface integrity
- Some municipalities do not allow in public right of way

When draining pervious pavements to an IMP, use the runoff factors in Table 4-2.

► DETAILS

Permeable pavements can be used in clay soils; however, special design considerations, including an increased depth of base course, typically apply and will increase the cost of this option. Geotechnical fabric between the base course and underlying clay soil is recommended.

Pavement strength and durability typically determines the required depth of base course. If underdrains are used, the outlet elevation must be a minimum of 3 inches above the bottom elevation of the base course.

Pervious concrete and porous asphalt must be installed by crews with special training and tools. Industry associations maintain lists of qualified contractors.

Parking lots with crushed aggregate or unit pavers may require signs or bollards to organize parking.

► DESIGN CHECKLIST FOR PERVIOUS PAVEMENTS

- ❒ No erodible areas drain on to pavement.
- ❒ Subgrade is uniform. Compaction is minimal.
- ❒ Reservoir base course is of open-graded crushed stone. Base depth is adequate to retain rainfall and support design loads.
- ❒ If a subdrain is provided, outlet elevation is a minimum of 3 inches above bottom of base course.
- ❒ Subgrade is uniform and slopes are not so steep that subgrade is prone to erosion.
- ❒ Rigid edge is provided to retain granular pavements and unit pavers.
- ❒ Solid unit pavers are installed with open gaps filled with open-graded aggregate free of fines.
- ❒ Permeable pavements are installed by industry-certified professionals according to vendor's recommendations.
- ❒ Selection and location of pavements incorporates Americans with Disabilities Act requirements, site aesthetics, and uses.

Resources

- Southern California Concrete Producers www.concreteresources.net.
- California Asphalt Pavement Association http://www.californiapavements.org/stormwater.html
- Interlocking Concrete Pavement Institute http://www.icpi.org/
- *Start at the Source Design Manual for Water Quality Protection,* pp. 47-53. www.basmaa.org
- *Porous Pavements,* by Bruce K. Ferguson. 2005. ISBN 0-8493-2670-2.

Bioretention Facilities

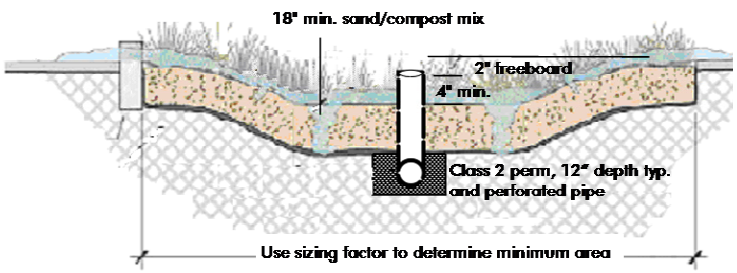

Bioretention facility configured for treatment-only requirements. Bioretention facilities can be rectangular, linear, or nearly any shape.

Bioretention detains runoff in a surface reservoir, filters it through plant roots and a biologically active soil mix, and then infiltrates it into the ground. Where native soils are less permeable, an underdrain conveys treated runoff to storm drain or surface drainage.

Bioretention facilities can be configured in nearly any shape. When configured as linear **swales**, they can convey high flows while percolating and treating lower flows.

Bioretention facilities can be configured as in-ground or above-ground planter boxes, with the bottom open to allow infiltration to native soils underneath. If infiltration cannot be allowed, use the sizing factors and criteria for the Flow-Through Planter.

► CRITERIA

For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)
Soil mix surface area	0.04 times tributary impervious area (or equivalent)
Surface reservoir depth	6 inches minimum; may be sloped to 4 inches where adjoining walkways.

Best Uses

- Commercial areas
- Residential subdivisions
- Industrial developments
- Roadways
- Parking lots
- Fit in setbacks, medians, and other landscaped areas

Advantages

- Can be any shape
- Low maintenance
- Can be landscaped

Limitations

- Require 4% of tributary impervious square footage
- Typically requires 3-4 feet of head
- Irrigation typically required

Parameter	Criterion
Underdrain	Required in Group "C" and "D" soils. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► **DETAILS**

Plan. On the surface, a bioretention facility should be one level, shallow basin—or a series of basins. As runoff enters each basin, it should flood and fill throughout before runoff overflows to the outlet or to the next downstream basin. This will help prevent movement of surface mulch and soil mix.

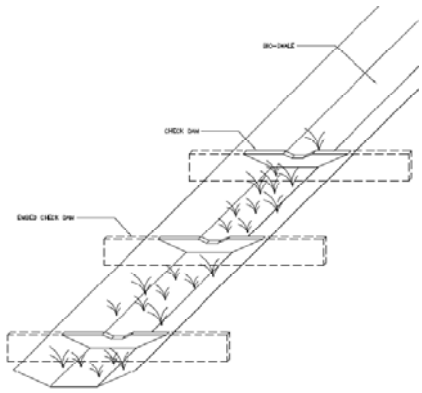

Use check dams for linear bioretention facilities (swales) on a slope.

In a linear swale, check dams should be placed so that the lip of each dam is at least as high as the toe of the next upstream dam. A similar principle applies to bioretention facilities built as terraced roadway shoulders.

Inlets. Paved areas draining to the facility should be graded, and inlets should be placed, so that runoff remains as sheet flow or as dispersed as possible. Curb cuts should be wide (12" is recommended) to avoid clogging with leaves or debris. Allow for a minimum reveal of 4"-6" between the inlet and soil mix elevations to ensure turf or mulch buildup does not block the inlet. In addition, place an apron of stone or concrete, a foot square or larger, inside each inlet to prevent vegetation from growing up and blocking the inlet.

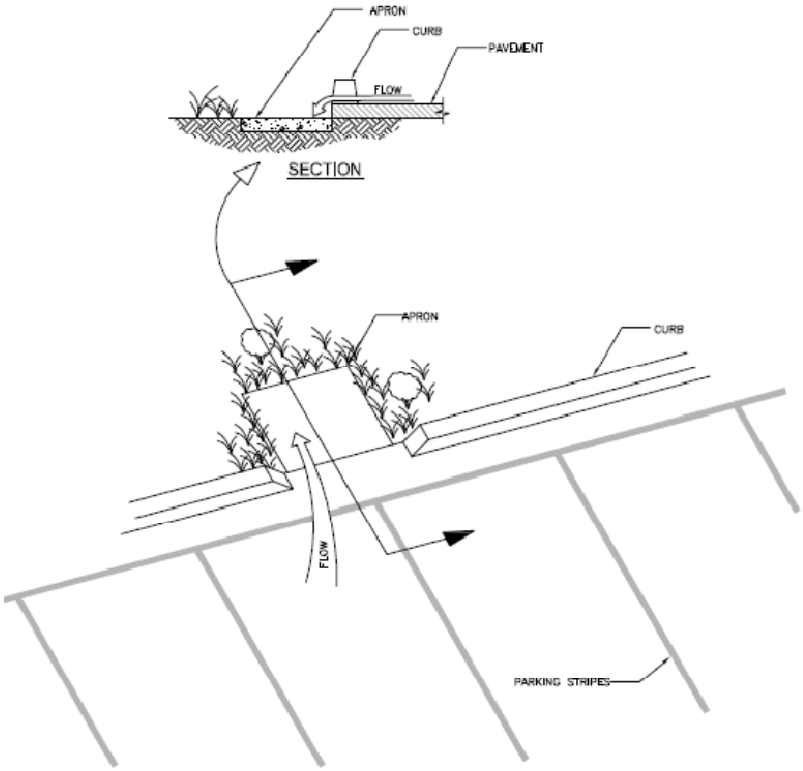

Recommended design details for bioretention facility inlets (see text).

Where runof [illegible] landscaping from high-velocity flows with energy-dissipating rocks. In larger installations, provide cobble-lined channels to better distribute flows throughout the facility.

Upturned pipe outlets can be used to dissipate energy when runoff is piped from roofs and upgradient paved areas.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" washed pea gravel be substituted at the top of the crushed rock gravel layers. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer or the gravel drainage layer from the native soil.

Underdrains. No underdrain is required where native soils beneath the facility are Hydrologic Soil Group A or B. For treatment-only facilities where native soils are Group C or D, a

perforated pipe must be bedded in the gravel layer and must terminate at a storm drain or other approved discharge point.

Outlets. In treatment-only facilities, outlets must be set high enough to ensure the surface reservoir fills and the entire surface area of soil mix is flooded before the outlet elevation is reached. In swales, this can be achieved with appropriately placed check dams.

The outlet should be designed to exclude floating mulch and debris.

Vaults, utility boxes and light standards. It is best to locate utilities outside the bioretention facility—in adjacent walkways or in a separate area set aside for this purpose. If utility structures are to be placed within the facility, the locations should be anticipated and adjustments made to ensure the minimum bioretention surface area and volumes are achieved. Leaving the final locations to each individual utility can produce a haphazard, unaesthetic appearance and make the bioretention facility more difficult to maintain.

Emergency overflow. The site grading plan should anticipate extreme events and potential clogging of the overflow and route emergency overflows safely.

Trees. Bioretention areas can accommodate small or large trees. There is no need to subtract the area taken up by roots from the effective area of the facility. Extensive tree roots maintain soil permeability and help retain runoff. Normal maintenance of a bioretention facility should not affect tree lifespan.

The bioretention facility can be integrated with a tree pit of the required depth and filled with structural soil. If a root barrier is used, it can be located to allow tree roots to spread throughout the bioretention facility while protecting adjacent pavement. Locations and planting elevations should be selected to avoid blocking the facility's inlets and outlets.

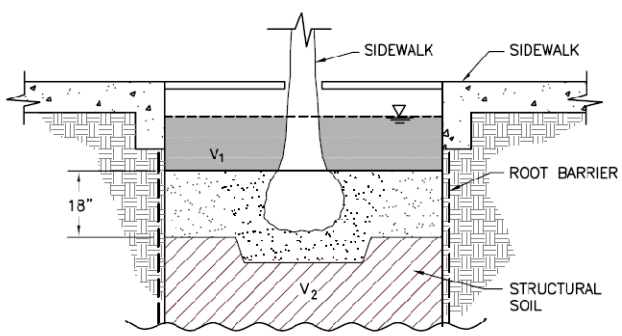

Bioretention facility configured as a tree well.
The root barrier is optional.

► APPLICATIONS

Multi-purpose landscaped areas. Bioretention facilities are easily adapted to serve multiple purposes. The loamy sand soil mix will support turf or a plant palette suitable to the location and a well-drained soil.

Example landscape treatments:

- Lawn with sloped transition to adjacent landscaping.
- Swale in setback area
- Swale in parking median
- Lawn with hardscaped edge treatment
- Decorative garden with formal or informal plantings
- Traffic island with low-maintenance landscaping
- Raised planter with seating
- Bioretention on a terraced slope

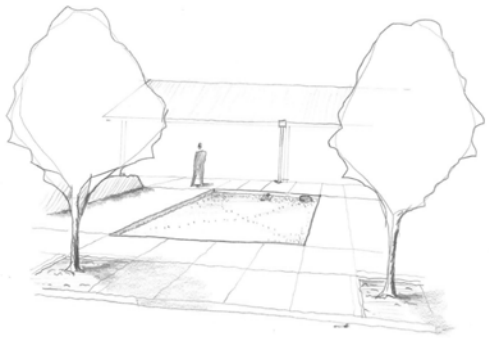

Bioretention facility configured as a recessed decorative lawn with hardscaped edge.

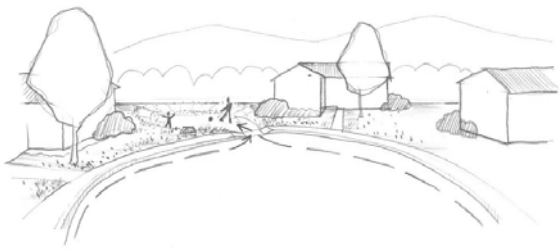

Bioretention facility configured and planted as a lawn/ play area.

Residential subdivisions. Some subdivisions are designed to drain roofs and driveways to the streets (in the conventional manner) and then drain the streets to bioretention areas, with one bioretention area for each 1 to 6 lots, depending on subdivision layout and topography.

If allowed by the local jurisdiction, bioretention areas can be placed on a separate, dedicated parcel with joint ownership.

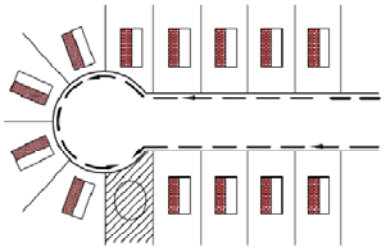

Bioretention facility receiving drainage from individual lots and the street in a residential subdivision.

Sloped sites. Bioretention facilities must be constructed as a basin, or series of basins, with the circumference of each basin set level. It may be necessary to add curbs or low retaining walls.

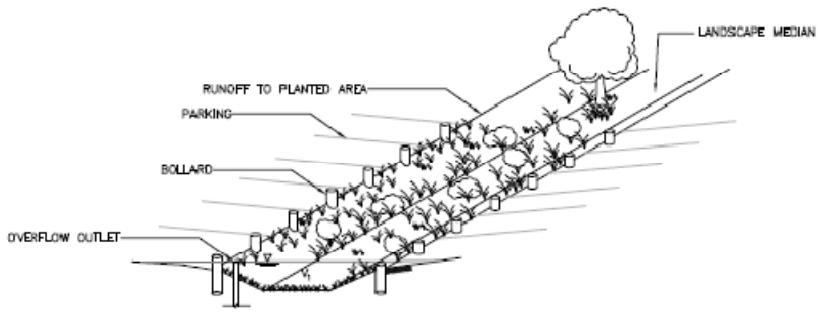

Bioretention facility configured as a parking median.
Note use of bollards in place of curbs, eliminating the need for curb cuts.

Design Checklist for Bioretention

- ❒ Volume or depth of surface reservoir meets or exceeds minimum.
- ❒ 18" depth "loamy sand" soil mix with minimum long-term percolation rate of 5"/hour.
- ❒ Area of soil mix meets or exceeds minimum.
- ❒ Perforated pipe underdrain bedded in "Class 2 perm" with connection and sufficient head to storm drain or discharge point (except in "A" or "B" soils).
- ❒ No filter fabric.
- ❒ Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, with a minimum diameter of 6 inches and a watertight cap.
- ❒ Location and footprint of facility are shown on site plan and landscaping plan.
- ❒ Bioretention area is designed as a basin (level edges) or a series of basins, and grading plan is consistent with these elevations. If facility is designed as a swale, check dams are set so the lip of each dam is at least as high as the toe of the next upstream dam.
- ❒ Inlets are 12" wide, have 4"-6" reveal and an apron or other provision to prevent blockage when vegetation grows in, and energy dissipation as needed.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Plantings are suitable to the climate and a well-drained soil.
- ❒ Irrigation system with connection to water supply.
- ❒ Vaults, utility boxes, and light standards are located outside the minimum soil mix surface area.
- ❒ When excavating, avoid smearing of the soils on bottom and side slopes. Minimize compaction of native soils and "rip" soils if clayey and/or compacted. Protect the area from construction site runoff.

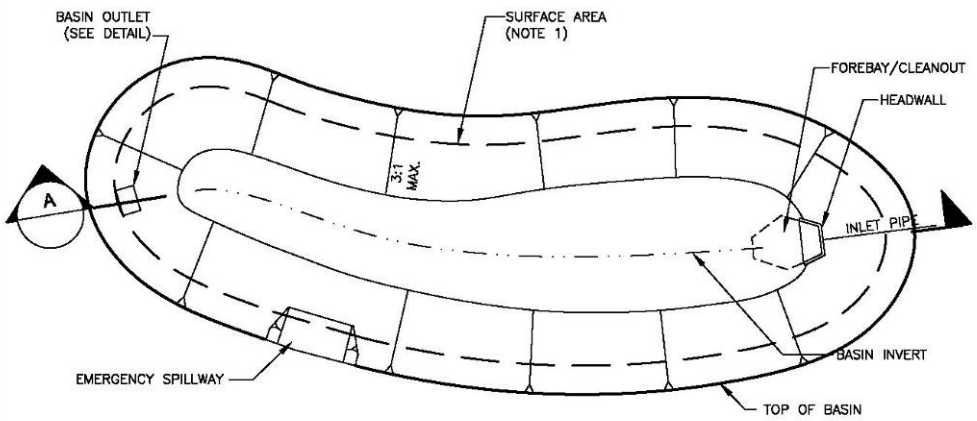

PLAN VIEW
NOT TO SCALE

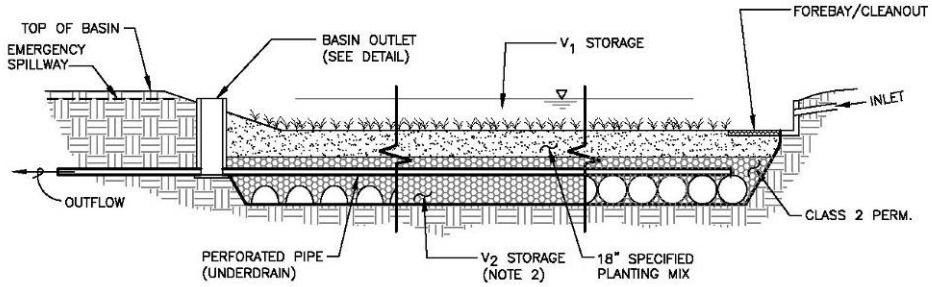

A SECTION
NOT TO SCALE

NOTE

1. SURFACE AREA LIMIT DETERMINED BY EXTENT OF SPECIFIED PLANTING MIX, WHICH IS GOVERNED BY THE OUTLET SPILL ELEVATION. FOR REQUIRED SURFACE AREA REFER TO THE FACTORS AND EQUATIONS IN THE STORMWATER C.3 GUIDEBOOK.
2. V_2 STORAGE ACCOMPLISHED WITH INFILTRATION ARCHES, PERFORATED PIPES, CLASS 2 PERM OR OTHER AT THE DESIGNERS DISCRETION.

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Bioretention Facility

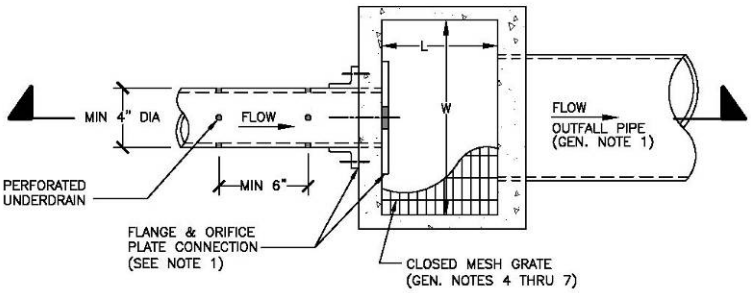

PLAN
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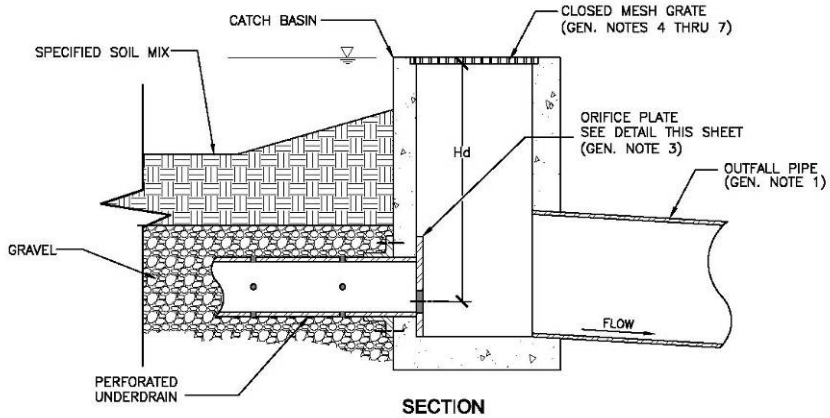

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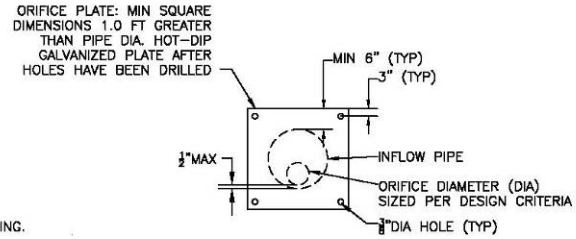

FLOW CONTROL ORIFICE PLATE

NOTE

1. ORIFICE PLATE & FLANGE CONNECTION TO CONCRETE SHALL BE FITTED WITH 30 DUROMETER NEOPRENE RING.

Bioretention Facility Outlet Detail - A

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Flow-through Planter

Portland 2004 Stormwater Manual

Best Uses

- Management of roof runoff
- Next to buildings
- Dense urban areas
- Where infiltration is not desired

Advantages

- Can be used next to structures
- Versatile
- Can be any shape
- Low maintenance

Limitations

- Can be used for flow-control only on sites with "C" and "D" soils
- Requires underdrain
- Requires 3-4 feet of head

Flow-through planters treat and detain runoff without allowing seepage into the underlying soil. They can be used next to buildings and on slopes where stability might be affected by adding soil moisture.

Flow-through planters typically receive runoff via downspouts leading from the roofs of adjacent buildings. However, they can also be set in-ground and receive sheet flow from adjacent paved areas.

Pollutants are removed as runoff passes through the soil layer and is collected in an underlying layer of gravel or drain rock. A perforated-pipe underdrain is typically connected to a storm drain or other discharge point. An overflow inlet conveys flows which exceed the capacity of the planter.

► CRITERIA

Treatment only. For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)
Soil mix surface area	0.04 times tributary impervious area (or equivalent)
Surface reservoir depth	6" minimum; may be sloped to 4" where adjoining walkways.
Underdrain	Typically used. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► DETAILS

Configuration. The planter must be level. To avoid standing water in the subsurface layer, set the perforated pipe underdrain and orifice as nearly flush with the planter bottom as possible.

Inlets. Protect plantings from high-velocity flows by adding rocks or other energy-dissipating structures at downspouts and other inlets.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Gravel storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" of washed pea gravel be substituted at the top of the crushed rock layer. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer.

Emergency overflow. The planter design and installation should anticipate extreme events and potential clogging of the overflow and route emergency overflows safely.

► APPLICATIONS

Adjacent to buildings. Flow-through planters may be located adjacent to buildings, where the planter vegetation can soften the visual effect of the building wall. A setback with a raised planter box may be appropriate even in some neo-traditional pedestrian-oriented urban streetscapes.

At plaza level. Flow-through planters have been successfully incorporated into podium-style developments, with the planters placed on the plaza level and receiving runoff from the tower

roofs above. Runoff from the plaza level is typically managed separately by additional flow-through planters or bioretention facilities located at street level.

Steep slopes. Flow-through planters provide a means to detain and treat runoff on slopes that cannot accept infiltration from a bioretention facility. The planter can be built into the slope similar to a retaining wall. The design should consider the need to access the planter for periodic maintenance. Flows from the planter underdrain and overflow must be directed in accordance with local requirements. It is sometimes possible to disperse these flows to the downgradient hillside.

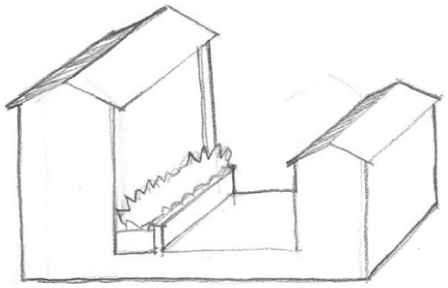

Flow-through planter on the plaza level of a podium-style development.

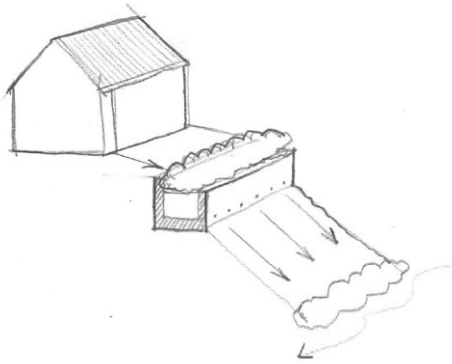

Flow-through planter built into a hillside. Flows from the underdrain and overflow must be directed in accordance with local requirements.

Design Checklist for Flow-through Planter

- ❒ Reservoir depth is 4-6" minimum.
- ❒ 18" depth "loamy sand" soil mix with minimum long-term infiltration rate of 5"/hour.
- ❒ Area of soil mix meets or exceeds minimum.
- ❒ "Class 2 perm" drainage layer.
- ❒ No filter fabric.
- ❒ Perforated pipe underdrain with outlet located flush or nearly flush with planter bottom. Connection with sufficient head to storm drain or discharge point.
- ❒ Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, with a minimum diameter of 6 inches and a watertight cap.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Location and footprint of facility are shown on site plan and landscaping plan.
- ❒ Planter is set level.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Plantings are suitable to the climate and a well-drained soil.
- ❒ Irrigation system with connection to water supply.

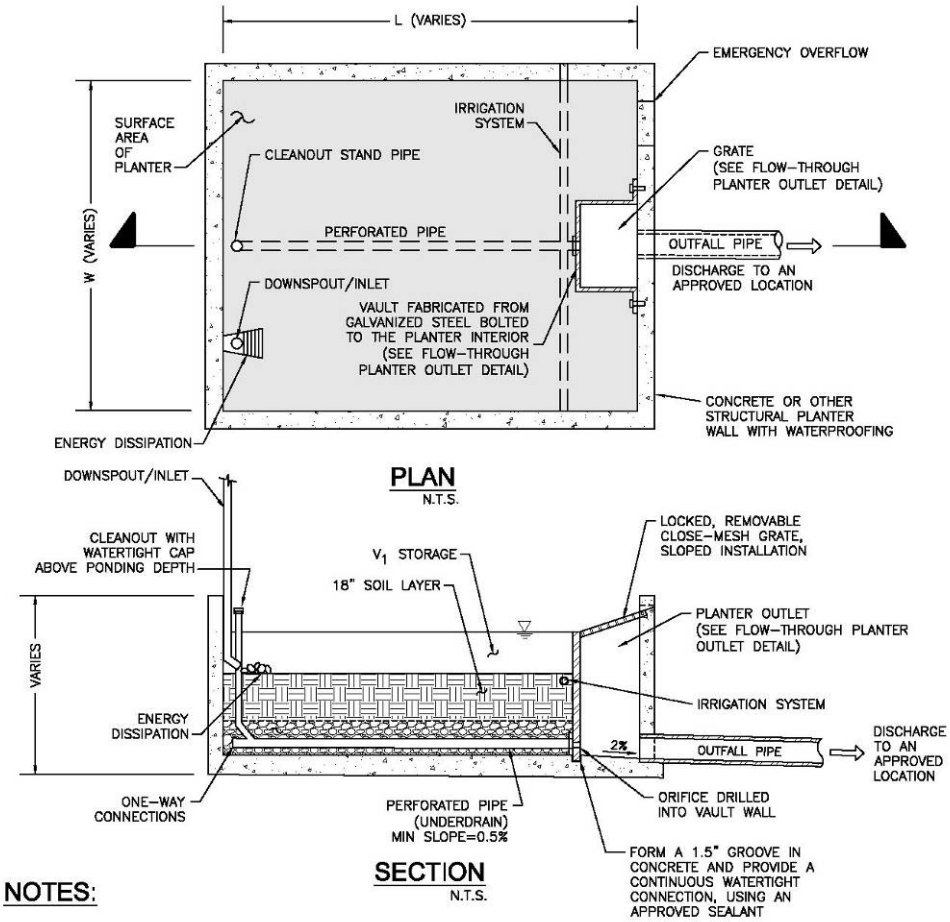

NOTES:

1. FLOW-THROUGH PLANTER SHALL BE SIZED TO MEET CCCWP CRITERIA FOR TREATMENT AND/OR FLOW CONTROL.
2. MINIMUM SURFACE AREA OF PLANTER IS 4% OF TRIBUTARY IMPERVIOUS AREA FOR TREATMENT ONLY DESIGN. FOR FLOW CONTROL AND TREATMENT, REFER TO CCCWP SIZING TOOL CRITERIA.
3. SHAPE OF PLANTER CAN VARY TO MEET PROJECT DESIGN REQUIREMENTS AND LOCATION.
4. CLASS 2 PERMEABLE MATERIAL
5. DOWNSPOUTS/INLET PIPES REQUIRE ENERGY DISSIPATION.
6. USE COUNTY APPROVED ADDITIVE MIXTURE FOR WATERPROOFING CONCRETE.
7. PLANTINGS: SEE CCCWP RECOMMENDED PLANT LIST AND GUIDELINES.
8. PLANTER DESIGN MAY REQUIRE STRUCTURAL ENGINEERING DESIGN.
9. AREA = W x L (ABOVE). EXCLUDES AREA OF VAULT

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Flow-Through Planter Detail

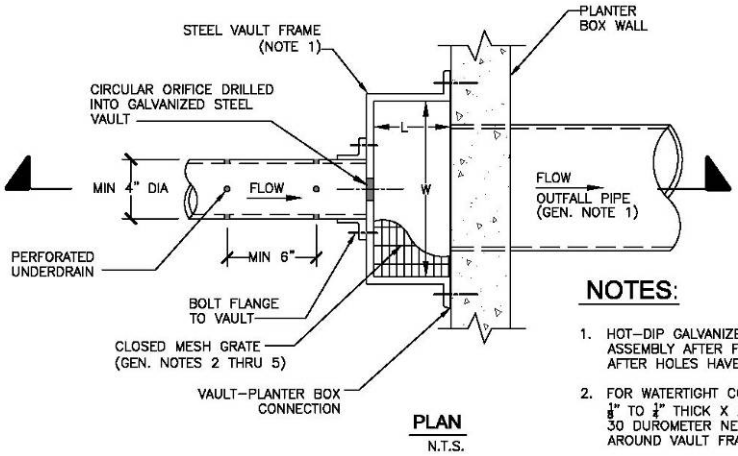

PLAN
N.T.S.

NOTES:

1. HOT–DIP GALVANIZE ENTIRE FRAME ASSEMBLY AFTER FABRICATION AND AFTER HOLES HAVE BEEN DRILLED.
2. FOR WATERTIGHT CONNECTION, INSTALL $\frac{1}{8}$" TO $\frac{1}{4}$" THICK X 2" WIDE CONTINUOUS 30 DUROMETER NEOPRENE GASKET, ALL AROUND VAULT FRAME.

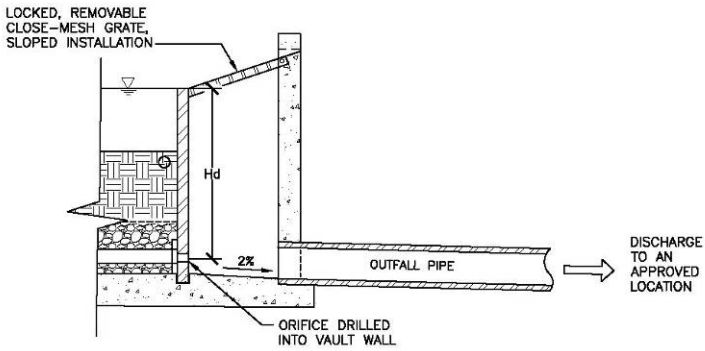

SECTION
N.T.S.

GENERAL OUTLET DETAIL NOTES:

1. OUTFALL PIPE SHALL BE SIZED TO CONVEY DESIGN STORM PER CCCWP DESIGN CRITERIA.
2. GRATE SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
3. GRATE SHALL BE STAINLESS STEEL, ALUMINUM OR STEEL. STEEL GRATES SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER PAINTED AFTER GALVANIZING.
4. GRATE SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
5. STRUCTURAL DESIGN OF GRATE SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF GRATE.

Flow-Through Planter Outlet Detail

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Dry Wells and Infiltration Basins

The typical dry well is a prefabricated structure, such as an open-bottomed vault or box, placed in an excavation or boring. The vault may be empty, which provides maximum space efficiency, or may be filled in rock.

An infiltration basin has the same functional components—a volume to store runoff and sufficient area to infiltrate that volume into the native soil—but is open rather than covered.

Best Uses

- Alternative to bioretention in areas with permeable soils

Advantages

- Compact footprint
- Can be installed in paved areas

Limitations

- Can be used only on sites with "A" and "B" soils
- Requires minimum of 10' from bottom of facility to seasonal high groundwater
- Not suitable for drainage from some industrial areas or arterial roads
- Must be maintained to prevent clogging.

► CRITERIA

Dry wells and infiltration basins must be designed with the minimum volume calculated by Equation 4-8 using a unit volume based on the County of San Diego's 85th Percentile Isopluvial Map.

Consult with the local jurisdiction engineer regarding the need to verify soil permeability and other site conditions are suitable for dry wells and infiltration basins. Some proposed criteria are on Page 5-12 of Caltrans' 2004 *BMP Retrofit Pilot Study Final Report* (CTSW-RT-01-050).

The infiltration rate and infiltrative area must be sufficient to drain a full facility within 72 hours.

► DETAILS

Dry wells should be sited to allow for the potential future need for removal and replacement.

In locations where native soils are coarser than a medium sand, the area directly beneath the facility should be over-excavated by two feet and backfilled with sand as a groundwater protection measure.

Design Checklist for Dry Well

- ❒ Volume and infiltrative area meet or exceed minimum.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Depth from bottom of the facility to seasonally high groundwater elevation is ≥10'.
- ❒ Areas tributary to the facility do not include automotive repair shops; car washes; fleet storage areas (Bus, truck, etc.); nurseries, or other uses that may present an exceptional threat to groundwater quality.
- ❒ Underlying soils are in Hydrologic Soil Group A or B. Infiltration rate is sufficient to ensure a full basin will drain completely within 72 hours. Soil infiltration rate has been confirmed.
- ❒ Set back from structures 10' or as recommended by structural or geotechnical engineer

Cistern with Bioretention Facility

A cistern in series with a bioretention facility can meet treatment requirements where space is limited. In this configuration, the cistern is equipped with a flow-control orifice and the bioretention facility is sized to treat a trickle outflow from the cistern.

Best Uses

- In series with a bioretention facility to meet treatment requirement in limited space.
- Management of roof runoff
- Dense urban areas

Advantages

- Storage volume can be in any configuration

Limitations

- Somewhat complex to design, build, and operate
- Requires head for both cistern and bioretention facility

► CRITERIA

Cistern. The cistern must detain the volume calculated by Equation 4-8 and must include an orifice or other device designed for a 24-hour drawdown time.

Bioretention facility. See the design sheet for bioretention facilities. The area of the bioretention facility must be sized to treat the maximum discharge flow, assuming a percolation rate of 5" per hour through the engineered soil.

Use with sand filter. A cistern in series with a sand filter can meet treatment requirements. See the discussion of treatment facility selection in Chapter 2 and the design guidance for sand filters in Chapter 4.

► DETAILS

Flow-control orifice. The cistern must be equipped with an orifice plate or other device to limit flow to the bioretention area.

Preventing mosquito harborage. Cisterns should be designed to drain completely, leaving no standing water. Drains should be located flush with the bottom of the cistern. Alternatively—or in addition—all entry and exit points, should be provided with traps or sealed or screened to prevent mosquito entry. Note mosquitoes can enter through openings $^{1}/_{16}$" or larger and will fly for many feet through pipes as small as ¼".

Exclude debris. Provide leaf guards and/or screens to prevent debris from accumulating in the cistern.

Ensure access for maintenance. Design the cistern to allow for cleanout. Avoid creating the need for maintenance workers to enter a confined space. Ensure the outlet orifice can be easily accessed for cleaning and maintenance.

► APPLICATIONS

Shallow ponding on a flat roof. The "cistern" storage volume can be designed in any configuration, including simply storing rainfall on the roof where it falls and draining it away slowly. See the County of San Diego's 85th percentile isopluvial diagrams for required average depths.

Cistern attached to a building and draining to a planter. This arrangement allows a planter box to be constructed with a smaller area.

Vault with pumped discharge to bioretention facility. In this arrangement, runoff from a parking lot and/or building roofs can be captured and detained underground and then pumped to a bioretention facility on the surface. Alternatively, treatment can be accomplished with a sand filter. See the discussion of selection of stormwater treatment facilities in Chapter 2.

Water harvesting or graywater reuse. It may be possible to create a site-specific design that uses cisterns to achieve stormwater flow control, stormwater treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse. Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Design Checklist for Cistern

- ❒ Volume meets or exceeds minimum.
- ❒ Outlet with orifice or other flow-control device restricts flow and is designed to provide a 24-hour drawdown time.
- ❒ Outlet is piped to a bioretention facility designed to treat the maximum discharge from the cistern orifice.
- ❒ Cistern is designed to drain completely and/or sealed to prevent mosquito harborage.
- ❒ Design provides for exclusion of debris and accessibility for maintenance.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.

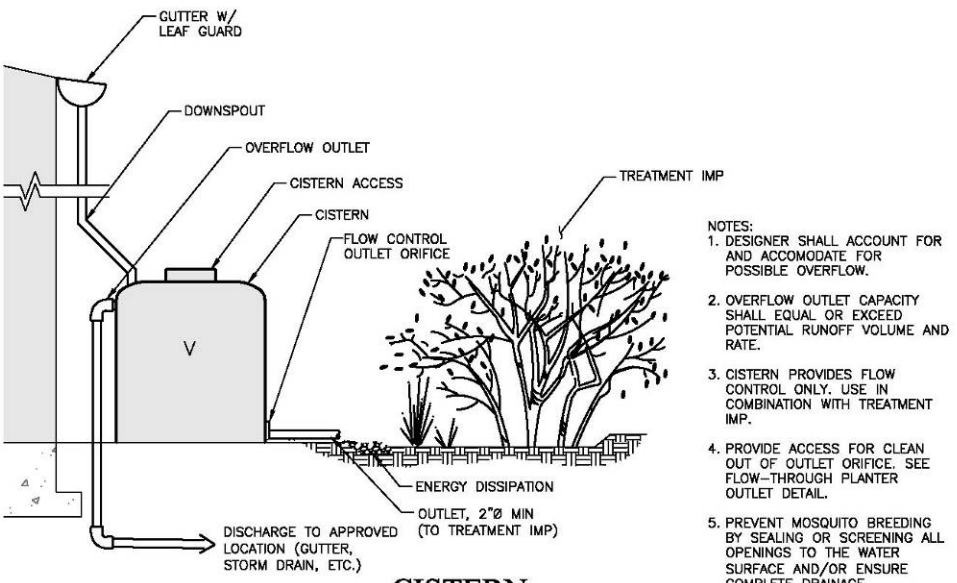

NOTES:
1. DESIGNER SHALL ACCOUNT FOR AND ACCOMODATE FOR POSSIBLE OVERFLOW.
2. OVERFLOW OUTLET CAPACITY SHALL EQUAL OR EXCEED POTENTIAL RUNOFF VOLUME AND RATE.
3. CISTERN PROVIDES FLOW CONTROL ONLY. USE IN COMBINATION WITH TREATMENT IMP.
4. PROVIDE ACCESS FOR CLEAN OUT OF OUTLET ORIFICE. SEE FLOW-THROUGH PLANTER OUTLET DETAIL.
5. PREVENT MOSQUITO BREEDING BY SEALING OR SCREENING ALL OPENINGS TO THE WATER SURFACE AND/OR ENSURE COMPLETE DRAINAGE.

CISTERN

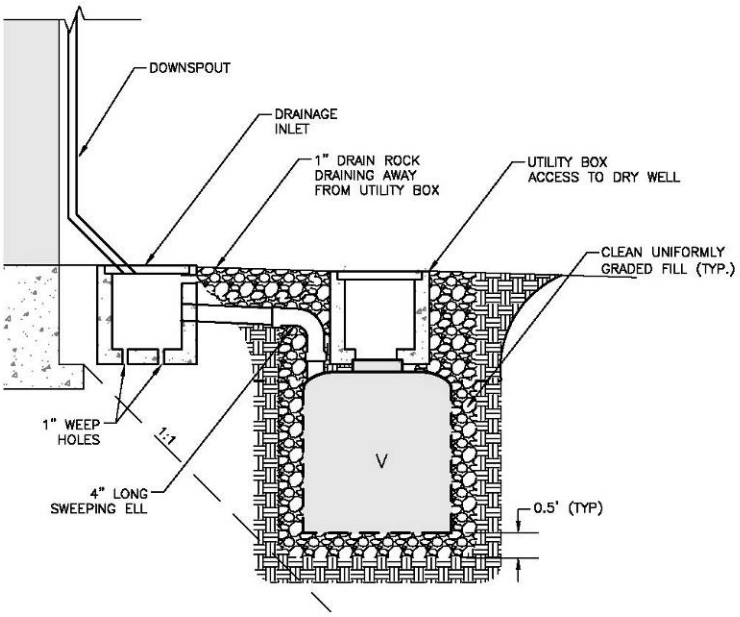

DRY WELL

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Chapter

5

Operation & Maintenance of Stormwater Facilities

How to prepare a customized Stormwater Maintenance Plan for the treatment BMPs on your site.

The stormwater NPDES Permit requires the City to verify all treatment and flow-control facilities are adequately maintained. Facilities you install as part of your project will be verified for effectiveness and proper performance. The City may also verify the ongoing function of stormwater management features that are not treatment or flow control facilities, such as permeable pavements and limitations on impervious area.

Operation and maintenance of stormwater facilities is a six-stage process:

1. Determine **who will own** the facility and be responsible for the maintenance of treatment facilities. Identify the means by which ongoing maintenance will be assured (for example, a maintenance agreement that runs with the land).

2. Identify typical maintenance requirements, and allow for these requirements in your project planning and preliminary design.

3. Prepare a **maintenance plan** for the site incorporating detailed requirements for **each treatment and flow-control facility**.

4. **Maintain** the facilities from the time they are constructed until ownership and maintenance responsibility is formally transferred.

5. **Formally transfer** operation and maintenance **responsibility** to the site owner or occupant. A warranty, secured by a bond, or other financial instrument, may be required to secure against lack of performance due to flaws in design or construction.

6. Maintain the facilities in perpetuity and comply with your municipality's self-inspection, reporting, and verification requirements.

See the schedule for these stages in Table 5-1.

Stage 1: Ownership and Responsibility

You must specify a means to **ensure maintenance** of treatment and flow-control facilities **in perpetuity.**

Depending on the intended use of your site, this may require one or more of the following:

- Execution of a maintenance agreement that "runs with the land."
- Formation of a new community facilities district or other special district, or addition of the properties to an existing special district.
- Dedication of fee title or easement transferring ownership of the facility (and the land under it) to the City.

Ownership and maintenance responsibility for treatment and flow-control facilities should be discussed at the **beginning of project planning**, typically at the pre-application meeting for planning and zoning review. Experience has shown provisions to finance and implement maintenance of treatment and flow-control facilities can be a major stumbling block to project approval, particularly for **small residential subdivisions**. (See "New Subdivisions" in Chapter 1.)

► PRIVATE OWNERSHIP AND MAINTENANCE

The municipality may require—as a condition of project approval—that a maintenance agreement be executed.

TABLE 5-1. Schedule for Planning Operation and Maintenance of Stormwater Treatment BMPs.

Stage	*Description*	*Schedule*
1	Determine facility ownership and maintenance responsibility	Discuss with planning staff at pre-application meeting
2	Identify typical maintenance requirements	In initial submittal, coordinate with planning & zoning application
3	Develop detailed operation and maintenance plan	As required by municipality
4	Interim operation and maintenance of facilities	During and following construction including warranty period
5	Formal transfer of operation & maintenance responsibility	On sale and transfer of property or permanent occupancy
6	Ongoing maintenance and compliance with inspection & reporting requirements	In perpetuity

Typically, these agreements may provide that the City may collect a management and/or inspection fee established by a standard fee schedule. The agreement may provide that, if the property owner fails to maintain the stormwater facility, the City may enter the property, restore the stormwater facility to good working order and obtain reimbursement, including administrative costs, from the property owner.

Stage 2: General Maintenance Requirements

Include in your Project Submittal a general description of anticipated facility maintenance requirements. This will help ensure that:

- Ongoing costs of maintenance have been considered in your facility selection and design.
- Site and landscaping plans provide for access for inspections and by maintenance equipment.
- Landscaping plans incorporate irrigation requirements for facility plantings.
- Initial maintenance and replacement of facility plantings is incorporated into landscaping contracts and guarantees.

Fact sheets available on the Project Clean Water web page describe general maintenance requirements for the types of stormwater facilities featured in the LID Design Guide (Chapter 4). You can use this information to specify general maintenance requirements in your Project Submittal.

Maintenance fact sheets for conventional stormwater facilities are available in the California Stormwater BMP Handbooks.

Stage 3: Detailed Maintenance Plan

Prepare and submit a detailed maintenance plan. Your detailed maintenance plan should be kept on-site for use by maintenance personnel and during site inspections. It is also recommended that a copy of your initial Project Submittal be kept onsite as a reference.

► YOUR DETAILED MAINTENANCE PLAN: STEP BY STEP

The following step-by-step guidance will help you prepare your detailed maintenance plan.

Preparation of the plan will require familiarity with your stormwater facilities as they have been or will be constructed and a fair amount of "thinking through" plans for their operation and maintenance.

► STEP 1: DESIGNATE RESPONSIBLE INDIVIDUALS

To begin creating your detailed maintenance plan, designate and identify:

- The individual who will have direct responsibility for the maintenance of stormwater controls. This individual should be the designated contact with City inspectors and should sign self-inspection reports and any correspondence with the City regarding verification inspections.
- Employees or contractors who will report to the designated contact and are responsible for carrying out BMP operation and maintenance.
- The corporate officer authorized to negotiate and execute any contracts that might be necessary for future changes to operation and maintenance or to implement remedial measures if problems occur.
- Your designated respondent to problems, such as clogged drains or broken irrigation mains, that would require immediate response should they occur during off-hours.

Updated contact information must be provided to the City immediately whenever a property is sold and whenever designated individuals or contractors change.

Draw or sketch an **organization chart** to show the relationships of authority and responsibility between the individuals responsible for maintenance. This need not be elaborate, particularly for smaller organizations.

Describe how **funding for BMP operation and maintenance** will be assured, including sources of funds, budget category for expenditures, process for establishing the annual maintenance budget, and process for obtaining authority should unexpected expenditures for major corrective maintenance be required.

Describe how your organization will accommodate initial **training** of staff or contractors regarding the purpose, mode of operation, and maintenance requirements for the stormwater

facilities on your site. Also, describe how your organization will ensure ongoing training as needed and in response to staff changes.

► STEP 2: SUMMARIZE DRAINAGE AND BMPS

Incorporate the following information from your Project Submittal into your maintenance plan:

- Figures delineating and designating pervious and impervious areas.
- Figures showing locations of stormwater facilities on the site.
- Tables of pervious and impervious areas served by each facility.

Review the Project Submittal narrative, if any, that describes each facility and its tributary drainage area and update the text to incorporate any changes that may have occurred during planning and zoning review, building permit review, or construction. Incorporate the updated text into your maintenance plan.

► STEP 3: DOCUMENT FACILITIES "AS BUILT"

Include the following information from final construction drawings:

- Plans, elevations, and details of all facilities. Annotate if necessary with designations used in the initial Project Submittal.
- Design information or calculations submitted in the detailed design phase (i.e., not included in the initial Project Submittal.)
- Specifications of construction for facilities, including sand or soil, compaction, pipe materials and bedding.

In the maintenance plan, note field changes to design drawings, including changes to any of the following:

- Location and layouts of inflow piping, flow splitter boxes, and piping to off-site discharge
- Depths and layering of soil, sand, or gravel
- Placement of filter fabric or geotextiles
- Changes or substitutions in soil or other materials.
- Natural soils encountered (e.g., sand or clay lenses)

► STEP 4: PREPARE MAINTENANCE PLANS FOR EACH FACILITY

Prepare a maintenance plan, schedule, and inspection checklists (routine, annual, and after major storms) for each facility. Plans and schedules for two or more similar facilities on the same site may be combined.

Use the following resources to prepare your customized maintenance plan, schedule, and checklists.

- Specific information noted in Steps 2 and 3, above.
- Other input from the facility designer, City staff, or other sources.
- Operation and Maintenance Fact Sheets (available on the Project Clean Water website).

Note any particular characteristics or circumstances that could require attention in the future, and include any troubleshooting advice.

Also include manufacturer's data, operating manuals, and maintenance requirements for any:

- Pumps or other mechanical equipment.
- Proprietary devices used as BMPs.

Manufacturers' publications should be referenced in the text (including models and serial numbers where available). Copies of the manufacturers' publications should be included as an attachment in the back of your maintenance plan or as a separate document.

► STEP 5: COMPILE MAINTENANCE PLAN

The following general outline is provided as an example.

I. Inspection and Maintenance Log

II. Updates, Revisions and Errata

III. Introduction

A. Narrative overview describing the site; drainage areas, routing, and discharge points; and treatment facilities.

IV. Responsibility for Maintenance

A. General

(1) Name and contact information for responsible individual(s).

(2) Organization chart or charts showing organization of the maintenance function and location within the overall organization.

(3) Reference to Operation and Maintenance Agreement (if any). A copy of the agreement should be attached.

(4) Maintenance Funding

(1) Sources of funds for maintenance

(2) Budget category or line item

(3) Description of procedure and process for ensuring adequate funding for maintenance

B. Staff Training Program

C. Records

D. Safety

V. Summary of Drainage Areas and Stormwater Facilities

A. Drainage Areas

(1) Drawings showing pervious and impervious areas (copied or adapted from initial Project Submittal).

(2) Designation and description of each drainage area and how flow is routed to the corresponding facility.

B. Treatment and Flow-Control Facilities

(1) Drawings showing location and type of each facility

(2) General description of each facility (Consider a table if more than two facilities)

(1) Area drained and routing of discharge.

(2) Facility type and size

VI. Facility Documentation

A. "As-built" drawings of each facility (design drawings in the draft Plan)

B. Manufacturer's data, manuals, and maintenance requirements for pumps, mechanical or electrical equipment, and proprietary facilities (include a "placeholder" in the draft plan for information not yet available).

C. Specific operation and maintenance concerns and troubleshooting

VII. Maintenance Schedule or Matrix

A. Maintenance Schedule for each facility with specific requirements for:

(1) Routine inspection and maintenance

(2) Annual inspection and maintenance

(3) Inspection and maintenance after major storms

B. Service Agreement Information

Assemble and make copies of your maintenance plan. One copy must be submitted to the municipality, and at least one copy kept on-site. Here are some suggestions for formatting the maintenance plan:

- Format plans to 8½" x 11" to facilitate duplication, filing, and handling.
- Include the revision date in the footer on each page.
- Scan graphics and incorporate with text into a single electronic file. Keep the electronic file backed-up so that copies of the maintenance plan can be made if the hard copy is lost or damaged.

► STEP 6: UPDATES

Your maintenance plan will be **a living document**.

Operation and maintenance personnel may change; mechanical equipment may be replaced, and additional maintenance procedures may be needed. Throughout these changes, the maintenance plan must be kept up-to-date.

Updates may be transmitted to the local municipality at any time. However, at a minimum, updates to the maintenance plan must accompany the annual inspection report.

Stage 4: Interim Maintenance

Applicants will typically be required to warranty stormwater facilities against lack of performance due to flaws in design or construction. The warranty may need to be secured by a bond or other financial instrument.

Stage 5: Transfer Responsibility

As part of the detailed maintenance plan, note the expected date when responsibility for operation and maintenance will be transferred. Notify the City when this transfer of responsibility takes place.

Stage 6: Operation & Maintenance Verification

The City implements an operation and maintenance verification program, including periodic site inspections.

City staff will perform inspections at least once prior to the rainy season annually.

References and Resources

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WEF/ASCE. 1998. Water Environment Foundation/American Society of Civil Engineers. Urban Runoff Quality Management. WEF Manual of Practice No. 23, ASCE Manual and Report on Engineering Practice No. 87. ISBN 1-57278-039-8 ISBN 0-7844-0174-8. 259 pp. Access: Order from WEF or ASCE, www.wef.org or www.asce.org.

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APPENDIX—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

How to use this worksheet:

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.

2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your Project-Specific SUSMP drawings.

3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in a table in your Project-Specific SUSMP. Use the format shown in Table 3-1 on page 31 of the *SUSMP*. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternatives.

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **A.** On-site storm drain inlets	❑ Locations of inlets.	❑ Mark all inlets with the words "No Dumping! Flows to Bay" or similar.	❑ Maintain and periodically repaint or replace inlet markings. ❑ Provide stormwater pollution prevention information to new site owners, lessees, or operators. ❑ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ❑ Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."
❑ **B.** Interior floor drains and elevator shaft sump pumps	-------	❑ State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **C.** Interior parking garages	-------	❑ State that parking garage floor drains will be plumbed to the sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.
❑ **D1.** Need for future indoor & structural pest control	-------	❑ Note building design features that discourage entry of pests.	❑ Provide Integrated Pest Management information to owners, lessees, and operators.
❑ **D2.** Landscape/ Outdoor Pesticide Use	❑ Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. ❑ Show self-retaining landscape areas, if any. ❑ Show stormwater treatment facilities.	State that final landscape plans will accomplish all of the following. ❑ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ❑ Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. ❑ Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. ❑ Consider using pest-resistant plants, especially adjacent to hardscape. ❑ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	❑ Maintain landscaping using minimum or no pesticides. ❑ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ❑ Provide IPM information to new owners, lessees and operators.

APPENDIX—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **E.** Pools, spas, ponds, decorative fountains, and other water features.	❑ Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet.	❑ If the local municipality requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.	❑ See applicable operational BMPs in Fact Sheet SC-72, "Fountain and Pool Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
❑ **F.** Food service	❑ For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. ❑ On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	❑ Describe the location and features of the designated cleaning area. ❑ Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	-------

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **G.** Refuse areas	❑ Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. ❑ If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. ❑ Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	❑ State how site refuse will be handled and provide supporting detail to what is shown on plans. ❑ State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	❑ State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
❑ **H.** Industrial processes.	❑ Show process area.	❑ If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."	❑ See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **I.** Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	❑ Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. ❑ Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. ❑ Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	❑ Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains. Where appropriate, reference documentation of compliance with the requirements of local Hazardous Materials Programs for: ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank	❑ See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials " in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **J.** Vehicle and Equipment Cleaning	❑ Show on drawings as appropriate: (1) Commercial/industrial facilities having vehicle /equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses. (2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use). (3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer. (4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.	❑ If a car wash area is not provided, describe measures taken to discourage on-site car washing and explain how these will be enforced.	Describe operational measures to implement the following (if applicable): ❑ Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system. ❑ Car dealerships and similar may rinse cars with water only. ❑ See Fact Sheet SC-21, "Vehicle and Equipment Cleaning," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
❑ **K.** Vehicle/Equipment Repair and Maintenance	❑ Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater. ❑ Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. ❑ Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.	❑ State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. ❑ State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. ❑ State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	In the SUSMP report, note that all of the following restrictions apply to use the site: ❑ No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains. ❑ No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. ❑ No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **L.** Fuel Dispensing Areas	❑ Fueling areas[1] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable. ❑ Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.	-------	❑ The property owner shall dry sweep the fueling area routinely. ❑ See the Business Guide Sheet, "Automotive Service—Service Stations" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

[1] The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
❑ **M.** Loading Docks	❑ Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas should be drained to the sanitary sewer where feasible. Direct connections to storm drains from depressed loading docks are prohibited. ❑ Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. ❑ Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.	-------	❑ Move loaded and unloaded items indoors as soon as possible. ❑ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
❑ **N.** Fire Sprinkler Test Water	-------	❑ Provide a means to drain fire sprinkler test water to the sanitary sewer.	❑ See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
O. Miscellaneous Drain or Wash Water ❑ Boiler drain lines ❑ Condensate drain lines ❑ Rooftop equipment ❑ Drainage sumps ❑ Roofing, gutters, and trim.	-------	❑ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. ❑ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. ❑ Rooftop mounted equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ❑ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. ❑ Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.	-------
❑ **P.** Plazas, sidewalks, and parking lots.	-------	-------	❑ Plazas, sidewalks, and parking lots shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing shall be collected to prevent entry into the storm drain system. Washwater containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain.

Appendix 2-D
Priority Treatment Control BMP
Inventory Tracking and Maintenance

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City of Del Mar Treatment Control BMP Inventory Inspection Database

As of July 1, 2010

Project Name	Project Number	Address	Hydrologic Unit (Watershed)	Treatment Control BMP Type(s)	Date of Construction	Construction Verification Received	Party Responsible for Mainetance	Date of Last Inspection	Inspection Findings	Corrective Actions
Garden Del Mar Specific Plan	DRB-08-23; SP-07-01; LCPA-08-02; CDP-08-17	941 Camino del Mar	San Dieguito	1. Underground Retention Vault	N/A	N/A	Owner	N/A	N/A	N/A
				2. Green (vegetated) Roofs	N/A	N/A	Owner	N/A	N/A	N/A
				3. Media Filter/Clarifier/Water Qty Inlet	N/A	N/A	Owner	N/A	N/A	N/A
Riverview Project	DRB-08-28; CUP-08-01; CDP-08-19; FDP-08-02	Two vacant lots at the SW corner of San Dieguito Drive & Jimmy Durante Blvd	San Dieguito	1. Permeable pavement and sub-drains	N/A	N/A	Owner	N/A	N/A	N/A
				2. Vegetated Buffer Strip	N/A	N/A	Owner	N/A	N/A	N/A
				3. Detention/Infiltration Basin	N/A	N/A	Owner	N/A	N/A	N/A
				4. Infiltraton Trench	N/A	N/A	Owner	N/A	N/A	N/A
Pacifica Stratford	DRB-05-27, 28, 29, 30, 31	535/537; 545/547; 555/557; 605/607; 615/617 Stratford	San Dieguito	1. Pervious Pavers	Under Construction	N/A	Owner(s)	N/A	N/A	N/A
				2. Vegetated Buffer Strip	Under Construction	N/A	Owner(s)	N/A	N/A	N/A
Morotta/James Single Family Residence	DRB-03-37	2124 San Dieguito Drive	San Dieguito	1. Infiltration Trench	2009	3/30/2009	Owner	9/30/2009 (10/14/2009)	Site in good repair. Drain covers need replacing.	NOV/CO issued. Modifications made as requested.
				2. Vegetated Swale	2009	3/30/2009	Owner			
				3. Vegetated Buffer Strip	2009	3/30/2009	Owner			
				4. Multiple Systems	2009	3/30/2009	Owner			

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Section 3
Construction Component

3.1 Introduction

This section provides an overview to the City's efforts to comply with the Construction Component of its 2008 JURMP as required under the terms of the Permit.

3.2 Source Characterization

Section 5.2.2 of the 2008 JURMP describes how a watershed-based inventory of all construction sites is prepared by the City of Del Mar, while Section 5.2.3 provides a description of the steps taken to develop, and update this inventory on a monthly basis. The City of Del Mar continues to use the construction inspection tracking system discussed in the Supplemental Information provided to Regional Board Staff in February 2009, to ensure that it's system meets the reporting requirements outlined in Section J.3.a.(3)(b)vii of the Permit. The tracking system itself is a combined database which includes Geographical Information System (GIS) input, and spreadsheet tallies. Information is entered into the database on a regular basis, no less than monthly. City enforcement staff maintain the GIS information via "drive-by" verification of the status of all construction sites, and subsequently entering the data into the GIS system. Monthly inventories of active construction sites are then produced for use in the field by staff. Regular patrols by City staff are also used to determine if a site's status has changed in the interim. In addition, the Clean Water Manager is notified by the staff when a Pre-Construction meeting has been held and/or construction commences at a site. This information is then used to assist in the population of the database.

Since construction project sites are constantly approved, cancelled (permits withdrawn by the applicant, denied by the City, expire, etc.), and completed, the City's inventory is fluid. In addition to the regular updates, staff continues to routinely patrol construction sites to "field truth" data received from the Planning and Building Departments, and annotate areas of surface disturbance that may, or may not be, permitted.

Appendix 3-A located at the end of this section provides a copy of the monthly construction site inventory, including the priority classification for each site. Appendix 3-B includes printouts of the GIS Construction Site Inventory Maps for each month of the Reporting Period.

3.3 Updates to Ordinances and Approval Processes

The City is required by the Permit to review and update its grading ordinance as necessary. Section 5.3 of the 2008 JURMP provides a description of the modifications made to the City's construction-related regulations and describes previous updates to the grading ordinance and other applicable ordinances. No modification to City Ordinances affecting construction activities were made during this Reporting Period, and no modifications in Section 5.3 of the 2008 JURMP were recorded.

3.4 Best Management Practice Requirements

Section 5.4.1 of the 2008 JURMP provided a description of minimum BMPs that were implemented, or required to be implemented, including pollution prevention. No modifications in Section 5.4.1 of the 2008 JURMP have been recorded during this Reporting Period. All appropriate, designated BMPs were

implemented, or required to be implemented, at all construction sites within the City of Del Mar in accordance with the requirements of the 2008 JURMP during Fiscal Year 2009-2010.

3.5 Program Implementation

As required by the Permit, and outlined in the 2008 JURMP, all permitted construction sites were required to undergo the City's construction urban runoff approval process, and meet the applicable construction requirements. Appropriate, designated BMPs were required to be implemented for all construction sites. Information regarding construction activities is tracked by the Clean Water Program, and updated via formal inspections by City Staff. In addition to the formal inspection program, and as discussed above, staff regularly patrol the City as part of other duties and confirm inventory data, verify that perimeter BMPs are in place and that appropriate controls are in place for deliveries and storage areas.

3.5.1 Maximum Disturbed Area for Erosion Controls

Section 5.4.3 of 2008 JURMP identifies one acre as the maximum disturbed area that the City allows to be graded before either temporary or permanent erosion controls are required. No modifications in Section 5.4.3 of the 2008 JURMP have been recorded during this Reporting Period. Although rarely applied in the small projects in Del Mar, the City confirms that the maximum disturbed area for grading was applied to applicable construction sites.

3.5.2 Advanced Treatment Methods

Section 5.4.4 of the 2008 JURMP identified and listed the construction site conditions that will require the use of advanced treatment methods. No modifications in Section 5.4.4 of the 2008 JURMP have been recorded during this Reporting Period. During Fiscal Year 2009-2010, no construction site met the requirements necessitating advanced treatment methods, and as such, none were required nor tracked.

3.5.3 Inspection and Enforcement Measures for Construction Sites

This section provides confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance with the 2008 JURMP. Section 5.5.5 of the 2008 JURMP provided a description of several educational and compliance verification activities that are included as part of the City's inspections of construction sites and the general results of the inspections conducted on construction sites.

3.5.3.1 Construction Inspections

As required by the Permit and outlined in the 2008 JURMP, all permitted construction sites were required to undergo the City's construction urban runoff approval process, meet the applicable construction requirements, including the implementation of appropriate designated BMPs. As indicated in the 2008 JURMP, this information is tracked by the Department of Planning and Community Development, and updated regularly via both formal and informal inspections.

Because of the small size of the community, staff has regular interaction with the applicants and contractors during the process and able to verify conditions on a regular basis when on routine patrol. In addition to the formal inspection program by staff, and as indicated above, staff regularly patrols sites in-route to other assignments which allows staff to "field truth" data and verify that perimeter BMPs are in place, and appropriate controls are in place for deliveries and storage areas.

Appendix C of the Permit defines the wet season as October 1 through April 30 of each year, and prescribes minimum inspection frequencies for construction sites during this period as defined in Section D.2.d. of the Permit. Section D.2.d.(1) of the Permit requires bi-weekly inspections of all construction sites meeting certain size requirements, or identified by either the Regional Board or the City of Del Mar as having a "significant threat to water quality." Section D.2.d.(2) of the Permit requires a minimum of monthly inspections of all construction sites with one acre or more of soil disturbance not meeting the criteria in Section D.2.d.(1) of the Permit. As indicated in Section 5.2.1 of the 2008 JURMP, the City of Del Mar does not differentiate between these "High" and "Medium" Classifications, and treats projects meeting the criteria of Section D.2.d.(2) of the permit as "High Priority" construction sites.

During this Reporting Period, only one (1) active construction site met the criteria for this designation. This project, the Pacifica Stratford project, located on Stratford Court was inspected at a minimum of bi-weekly during the Fiscal Year 2009-2010 Wet Season. All remaining construction projects were classified as "Low" priority sites, and inspected as needed during the Fiscal Year 2009-2010 Wet Season. As required by Section D.2.d.(4) of the Permit, <u>all</u> construction sites, regardless of priority classification, continued to be inspected on an "as-needed" basis during the remainder of the year.

Appendix 3-C contains the construction inspection inventory, including a report of the period of time (in weeks) that the site was active within the rainy season, the number of inspection conducted during the rainy season, the number of inspections conducted during the dry season, and the total number of inspections for each site.

3.5.3.2 Enforcement Measures for Construction Sites

Section 5.5.6 of the 2008 JURMP provides a description of the general process for applying enforcement to construction sites for urban runoff related violations. No modifications in Section 5.5.6 of the 2008 JURMP have been recorded during this Reporting Period.

This section provides the number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions taken to achieve compliance.

Del Mar has implemented a policy of education first, with aggressive enforcement measures only being used when compliance requests are ignored and/or in the event of an actual discharge which has the potential to impact to receiving waters. In general, contractors have been compliant with BMP requirements at their respective construction sites. In the majority of those instances where compliance has not been attained, a single verbal or written warning was all that was required to achieve compliance.

During this Reporting Period, six (6) enforcement actions, including any written warnings; Notices of Violation (NOVs); and/or Administrative Citations were issued by staff. This does not include verbal warnings issued during patrols which were handled immediately, unless the contractor failed to comply with the direction of the inspector. In general, the inspections conducted revealed that education efforts over the past several years have resulted in a high level of compliance. In those incidents where contractors were not in full compliance, it was either easily remedied by replacement or re-installation of BMPs. Only one (1) contractor was a repeat offender. Table 3-1 provides a summary of formal enforcement actions taken by the City for construction activities not in compliance with BMP requirements under the City's 2008 JURMP.

Table 3-1: Construction-Related Enforcement Actions for Fiscal Year 2009-2010

Date of Action	Contractor	Project Address	NOV	Cite Issued	Cite No.	Stop Work	Fine Levied	Comments/Action's Taken
10/26/2009	4x4 Construction	1236 Stratford Court	Yes	Yes	895	No	$100	Failure to implement BMPs. Contractor warned previously
10/27/2009	4x4 Construction	1942 Santa Fe	Yes	Yes	897	No	$200	Failure to implement BMPs. Contractor warned previously
11/30/2009	Lifedeck Coating	1101 Camino del Mar	Yes	Yes	669	No	$400	No permits/license/bmps. Failure to multiple warnings. Temporary stop work until BMPs in place.
7/30/2009	Beacham Construction	466 Avenida Primavera	Yes	Yes	858	No	$200	Failure to implement appropriate BMPs with Illegal discharge. Contractor complied immediately.
7/30/2009	Brookwood Plastering	466 Avenida Primavera	Yes	Yes	856	No	$200	Failure to implement appropriate BMPs with Illegal discharge. Contractor complied immediately.
1/15/2010	Cisco Painting	122 24th Street	Yes	Yes	928	No	$200	Powerwash discharge from painting operations. Cleanup and abatement addressed immediately.

3.5.4 Notable Activities

This section describes the notable activities conducted to manage urban runoff from construction sites by the City. During this Reporting Period, the City of Del Mar continued its policy of education first and aggressive enforcement as necessary. With a relatively limited number of projects with any significant amount of surface disturbance within the City, and only one project meeting the criteria to be designated a "high priority" construction site, this policy continues to be successful in providing staff the opportunity to develop more cooperative working relationships with developers, many of whom live and work in the community, all while implementing the necessary programmatic elements to protect water quality.

3.6 Construction Activities Effectiveness Assessment

A complete assessment of the effectiveness of the City's implementation of its 2008 JURMP, including the Construction Component, is included as Chapter 11 of this Annual Report.

3.7 Program Review and Modification

The City of Del Mar continues to utilize the construction inventory process and GIS-based tracking system that was developed out of programmatic reviews conducted during Fiscal Year 2007-2008. Minor modifications to the process were made, and a procedure document developed during the Fiscal Year 2009-2010 reporting period. No modifications to the Construction Component of the 2008 JURMP were made during this Reporting Period.

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Appendix 3-A
Fiscal Year 2009-2010 Watershed-based Construction Inventory including Priority Classifications for Each Site

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FY2009/2010 Watershed Based Construction Inventory

Del Mar Account Number	Facility Name	Number	Street	Hydrologic Unit	Description of Activity	Receiving Water Body	303(d) Listed Water Body
High and Medium Priority Contruction Projects							
DRB-05-27	Pacifica Stratford Duplexes	531/533	Stratford Ct.	San Dieguito	2 unit Condo	Pacific Ocean	No
DRB-05-28	Pacifica Stratford Duplexes	541/543	Stratford Ct.	San Dieguito	2 unit Condo	Pacific Ocean	No
DRB-05-29	Pacifica Stratford Duplexes	551/553	Stratford Ct.	San Dieguito	2 unit Condo	Pacific Ocean	No
DRB-05-30	Pacifica Stratford Duplexes	601/603	Stratford Ct.	San Dieguito	2 unit Condo	Pacific Ocean	No
DRB-05-31	Pacifica Stratford Duplexes	611/613	Stratford Ct.	San Dieguito	2 unit Condo	Pacific Ocean	No
Low Priority Construction Projects							
DRB-05-24	Klipstein	415	Torrey Pointe Road	Los Penasquitos	NSFR w/ basement	Los Penasquitos Lagoon	Yes, sediment
DRB-04-13	McGuire	1105	Stratford Ct.	San Dieguito	remodel	Pacific Ocean	No
DRB-06-08; 06-17	Chesnut	1236	Stratford Ct.	San Dieguito	NSFR	Pacific Ocean	No
DRB-04-54	Nicholas	1344	Ocean Ave.	San Dieguito	NSFR	Pacific Ocean	No
DRB-07-27	Harrington	1345	Ocean Ave.	San Dieguito	remodel	Pacific Ocean	No
DRB-04-08	Richards (Demich)	963	Klish Way	San Dieguito	NSFR	Pacific Ocean	No
DRB-05-33	Hoehn	730	Kalamath Street	San Dieguito	NSFR	Pacific Ocean	No
DRB-05-23	Belezzuoli	424	Carolina Road	San Dieguito	windows/pool	Pacific Ocean	No
DRB-08-14	Valentine	1420	Crest Road	San Dieguito	site improvements / pool	Pacific Ocean	No
DRB-04-15	Hilliard	1492	Crest Road	San Dieguito	site improvements	Pacific Ocean	No
DRB-07-06	Dallas	466	Avenida Primavera	San Dieguito	NSFR w/ basement & pool	Pacific Ocean	No
DRB-06-34	Moore	155	27th Street	San Dieguito	NSFR	San Dieguito Lagoon	Yes, bacteria
DRB-84-52	Gillies	2136	San Dieguito Drive	San Dieguito	NSFR	San Dieguito Lagoon	Yes, bacteria
DRB-98-32 Mod	Bakker	335	La Amatista	San Dieguito	remodel and addition	Pacific Ocean	No
DRB-07-19	Fisher	236	24th Street	San Dieguito	NSFR	San Dieguito Lagoon	Yes, bacteria
DRB-04-34	Pinney/Asciutto	425	8th Street	San Dieguito	remodel and pool/spa	Pacific Ocean	No
DRB-07-24	Goldberg	1942	Santa Fe Ave.	San Dieguito	NSFR	Pacific Ocean	No
ADR-08-47	Pogue	314	Del Mar Heights	Los Penasquitos	window/siding replacement	Pacific Ocean	No
DRB-08-25	Bierman	143	8th Street	San Dieguito	remodel	Pacific Ocean	No
N/A	Lindsey	2020	Oceanfront	San Dieguito	siding	Pacific Ocean	No
DRB-07-05	Eaton	187	Ocean View Ave.	Los Penasquitos	remodel/addition	Pacific Ocean	No
DRB-05-41	Bligh	262	Ocean View Ave.	Los Penasquitos	NSFR	Pacific Ocean	No
None	Bouma	2418	Oceanfront	San Dieguito	demolition	San Dieguito Lagoon	Yes, bacteria
SCP-09-04	Sbicca	215	15th Street	San Dieguito	sidewalk café	Pacific Ocean	No
ADR-09-09	Kling	810	Klish Way	San Dieguito	windows, doors, stucco	Pacific Ocean	No
DRB-08-43	Hardke	431	Van Dyke Ave.	San Dieguito	NSFR w/ basement and pool	Pacific Ocean	No
DRB-08-41	Farrell	1415	Via Alta	San Dieguito	deck repair	Pacific Ocean	No
ADR-09-16	Karagheusian	1925	Oceanfront	San Dieguito	windows, doors, garage door	Pacific Ocean	No
DRB-06-23	Oliphant	2020	Santa Fe Ave.	San Dieguito	NSFR	Pacific Ocean	No
DRB-06-18	Gardner	1111	Klish Way	San Dieguito	skylights/roofing	Pacific Ocean	No
N/A	Wadia	1660	Luneta Drive	San Dieguito	site wall along right-of-way	Pacific Ocean	No
ADR-09-04	Ozaki	155	7th Street	San Dieguito	site improvements	Pacific Ocean	No
DRB-08-46	Scipione	555	Amphitheatre Drive	San Dieguito	rear-yard improvements	Pacific Ocean	No
ADR-09-23	Gradinger	434	8th Street	San Dieguito	front-yard improvements	Pacific Ocean	No
DRB-08-35	Wilkinson	131	25th Street	San Dieguito	addtion & remodel	San Dieguito Lagoon	Yes, bacteria

FY2009/2010 Watershed Based Construction Inventory

Del Mar Account Number	Facility Name	Number	Street	Hydrologic Unit	Description of Activity	Receiving Water Body	303(d) Listed Water Body
N/A	KSA No. 1	1709	Coast Blvd	San Dieguito	rear-yard improvements	Pacific Ocean	No
DRB-08-08	Savage	2007/2009	Santa Fe Ave	San Dieguito	remodel	Pacific Ocean	No
N/A	Walton	2018/2020	Coast Blvd	San Dieguito	driveway work	Pacific Ocean	No
N/A	Novakovic	328	El Amigo	Los Penasquitos	painting and siding	Pacific Ocean	No
N/A	Shenuski	376	Serpentine Drive	San Dieguito	minor interior work	Pacific Ocean	No
DRB-08-38	Nerenberg	205	Ocean View Ave	Los Penasquitos	NSFR	Pacific Ocean	No
DRB-08-37	Wiggins	1926	Coast Blvd	San Dieguito	remodel & roof deck	Pacific Ocean	No
ADR-09-35	Vaughn	335	10th Street	San Dieguito	porch cover & windows	Pacific Ocean	No
ADR-09-31	Drago	210	Oceanview Ave.	Los Penasquitos	rear-yard site walls	Pacific Ocean	No
DRB-10-02	Linnell	411	Hidden Pines Lane	Los Penasquitos	interior work (sub. garage)	Pacific Ocean	No
N/A	Bjornson	471	Carolina Road	San Dieguito	interior and landscaping	Pacific Ocean	No
N/A	Schibanoff	443	Zuni Drive	San Dieguito	roofing	Pacific Ocean	No
not yet applied	Everingham	1555	San Dieguito Drive	San Dieguito	interior, windows/doors, walls	San Dieguito Lagoon	Yes, bacteria
N/A	McCarthy	2528	Oceanfront	San Dieguito	interior	San Dieguito Lagoon	Yes, bacteria
ADR-10-06	Benham	1935	Oceanfront	San Dieguito	windows and doors	Pacific Ocean	No
DRB-08-33	Wohlford-Kidd	1155	Cuchara Drive	San Dieguito	remodel	Pacific Ocean	No
ADR-10-02	Thomas	259	24th Street	San Dieguito	front porch remodel-interior	San Dieguito Lagoon	Yes, bacteria
N/A	Hook	635	Hoska Drive	San Dieguito	interior remodel	Pacific Ocean	No
ADR-09-32	Voss	543	Tewa Street	San Dieguito	pool	Pacific Ocean	No
DRB-10-12	Ogilvy	340	Serpentine Drive	San Dieguito	deck	Pacific Ocean	No

Appendix 3-B
Monthly GIS Construction Site Inventory Maps for Fiscal Year 2009-2010

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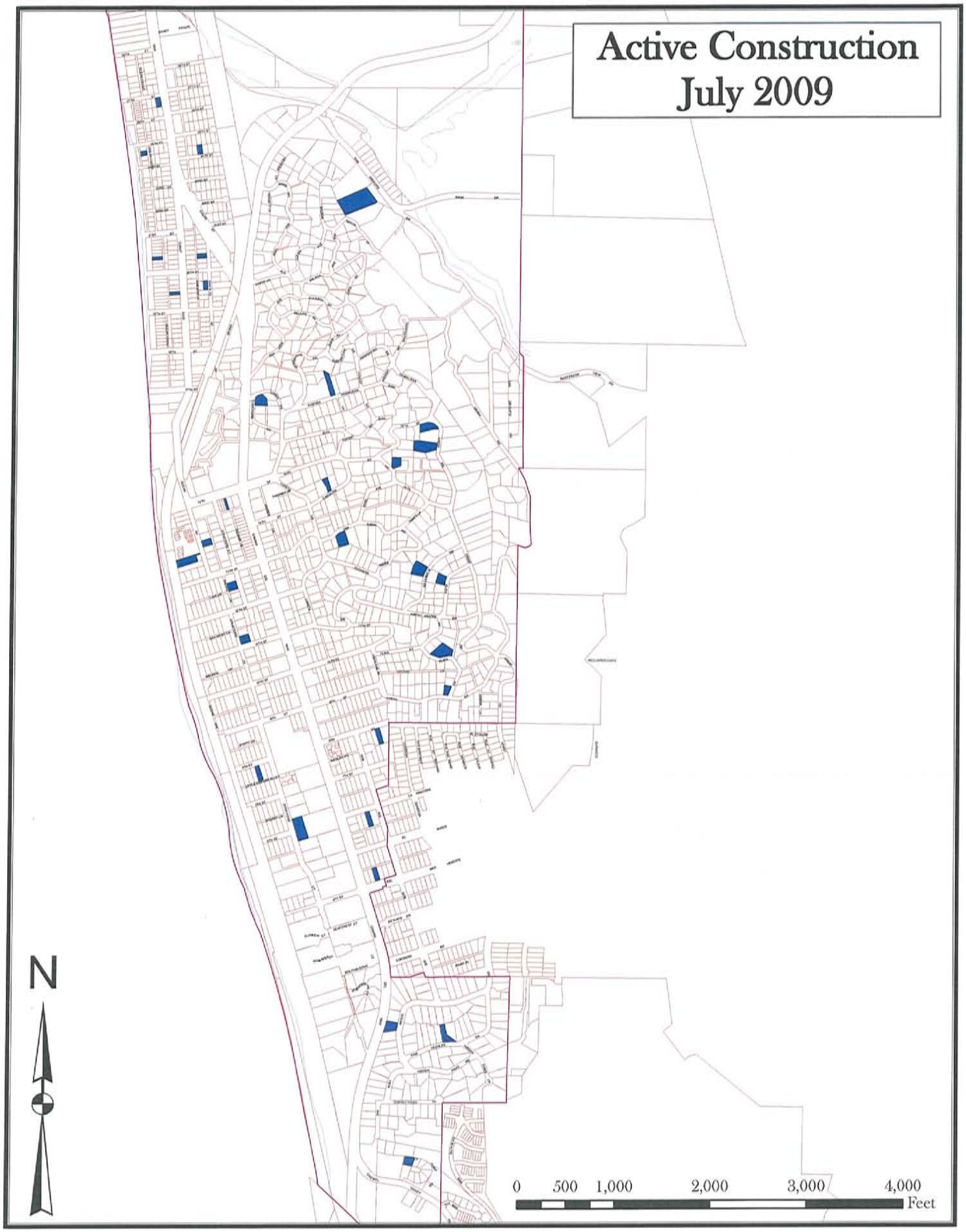
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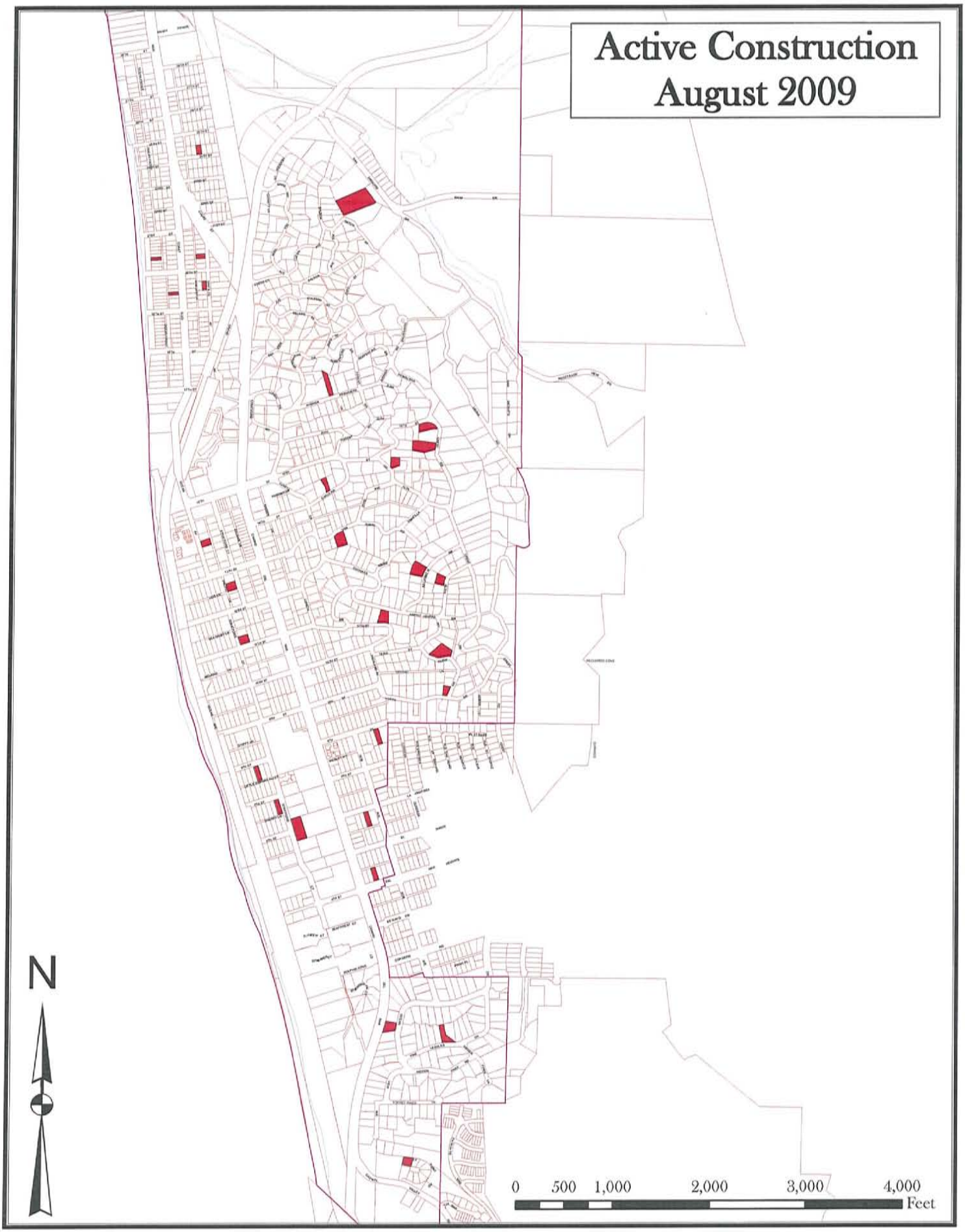
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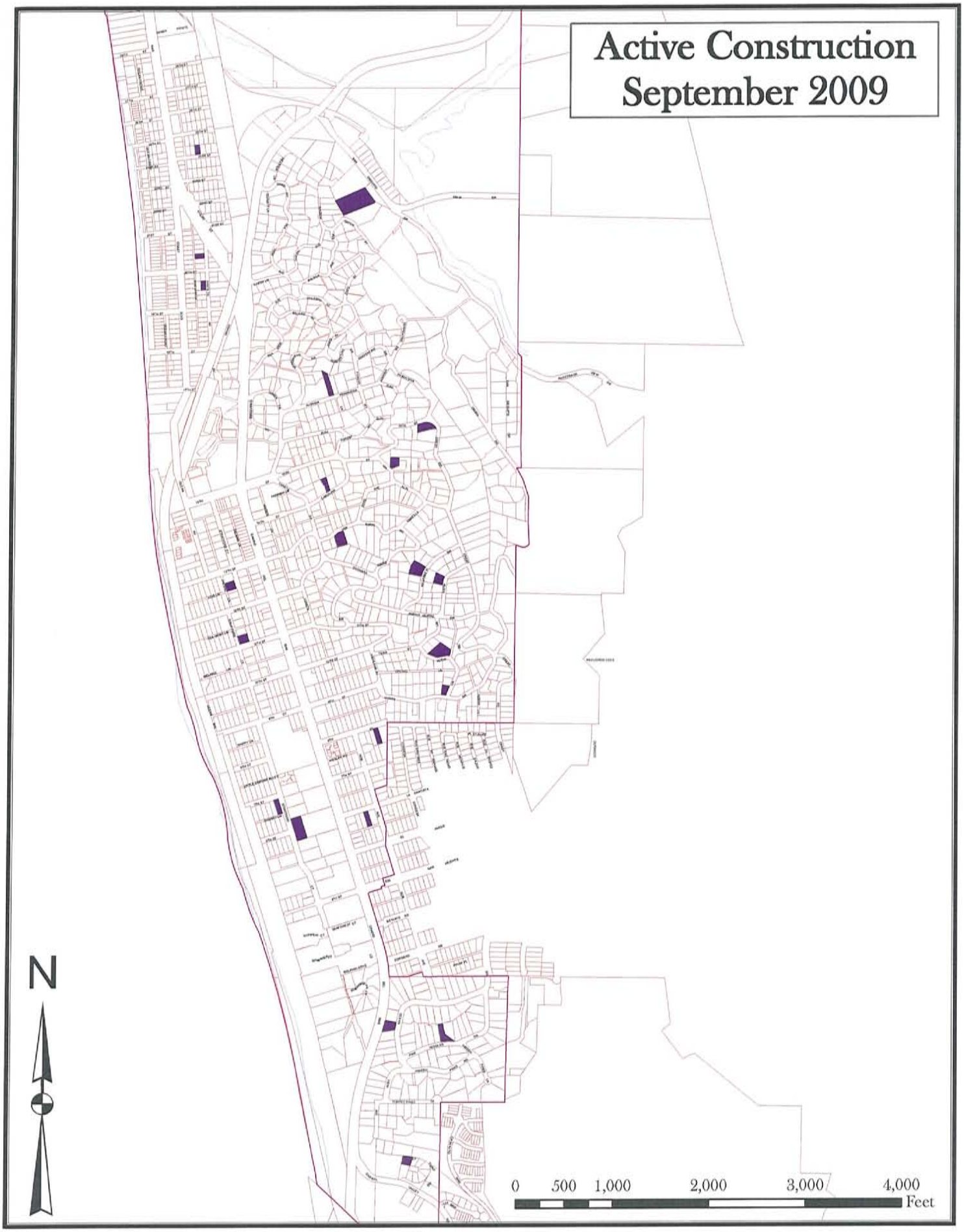
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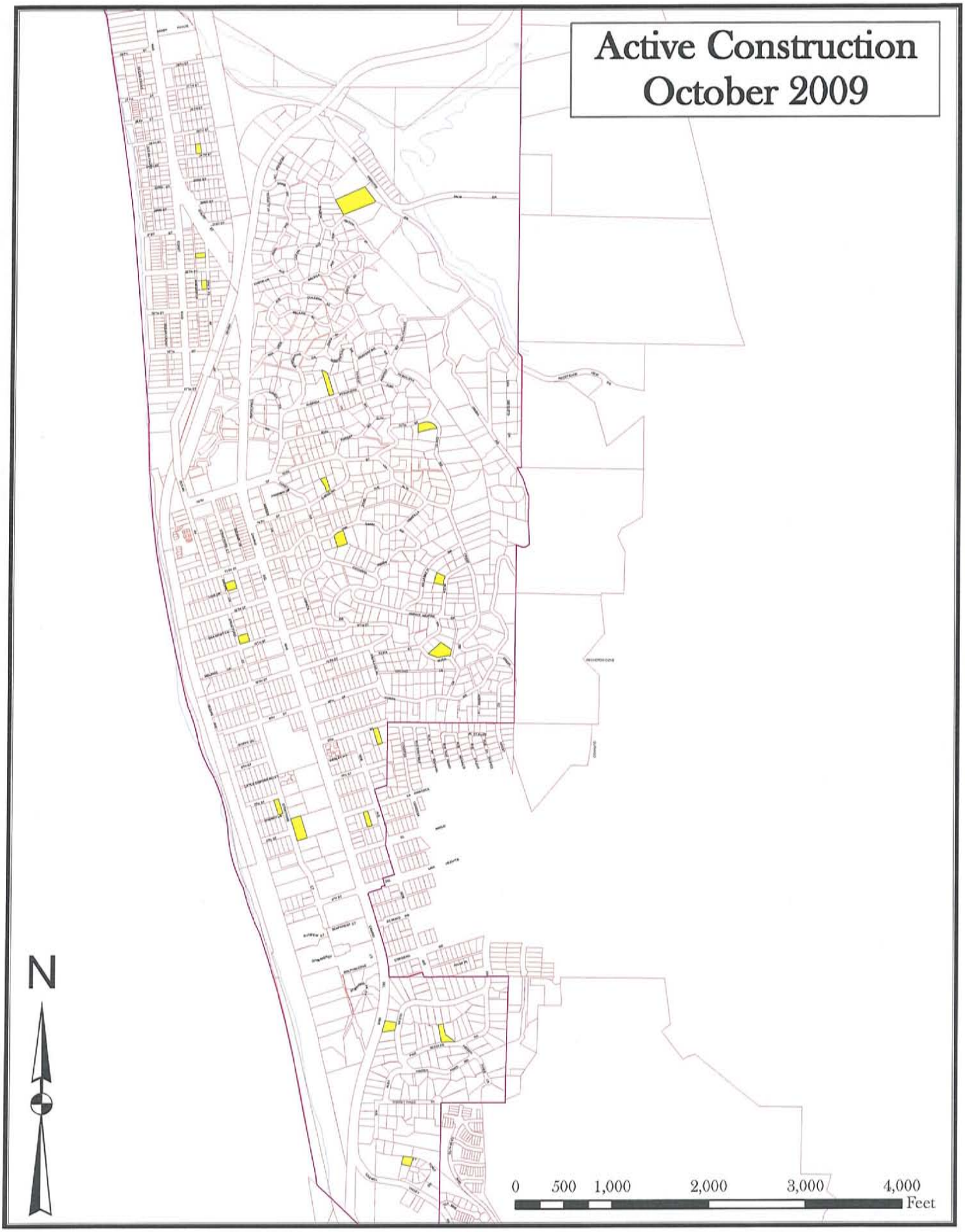
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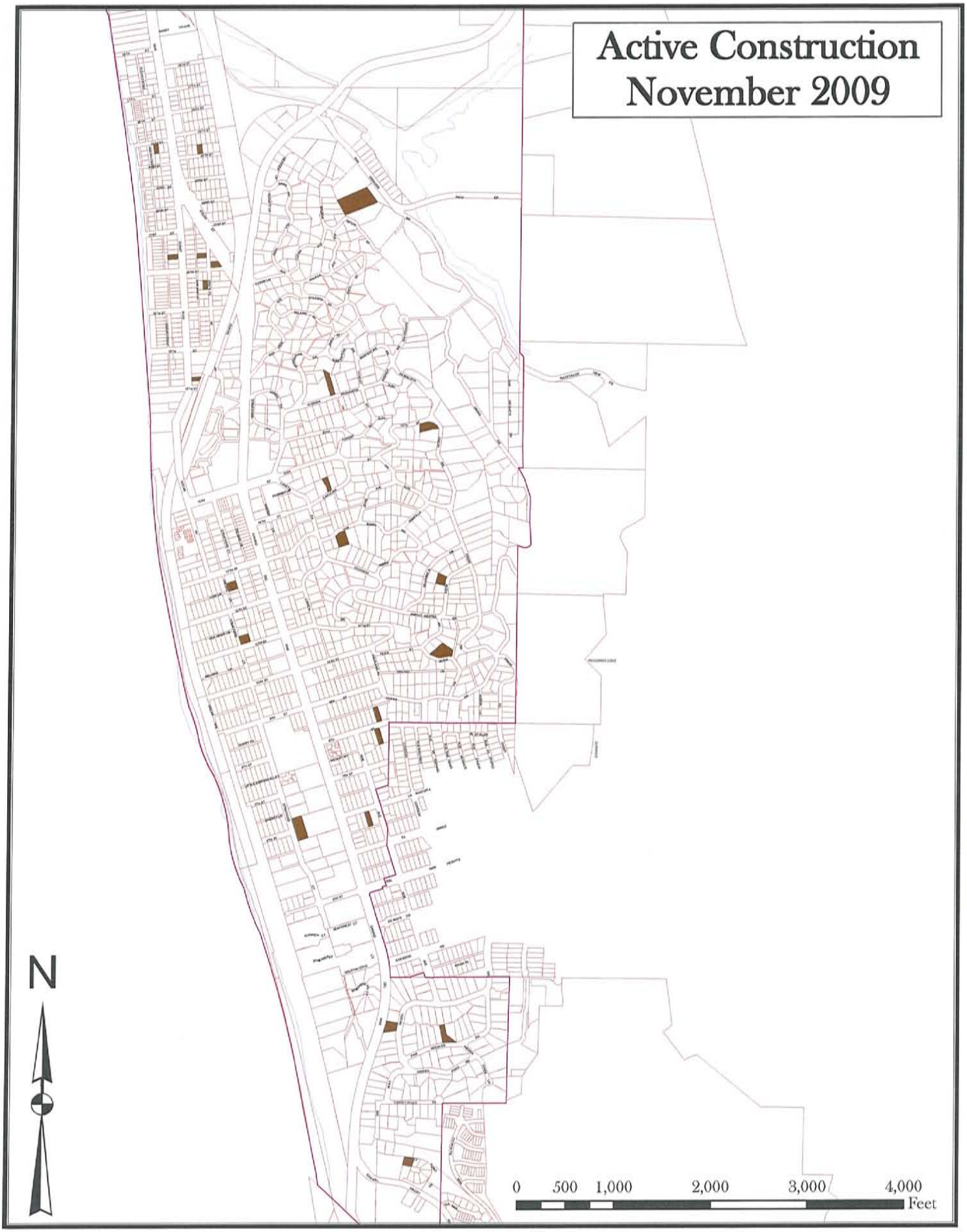
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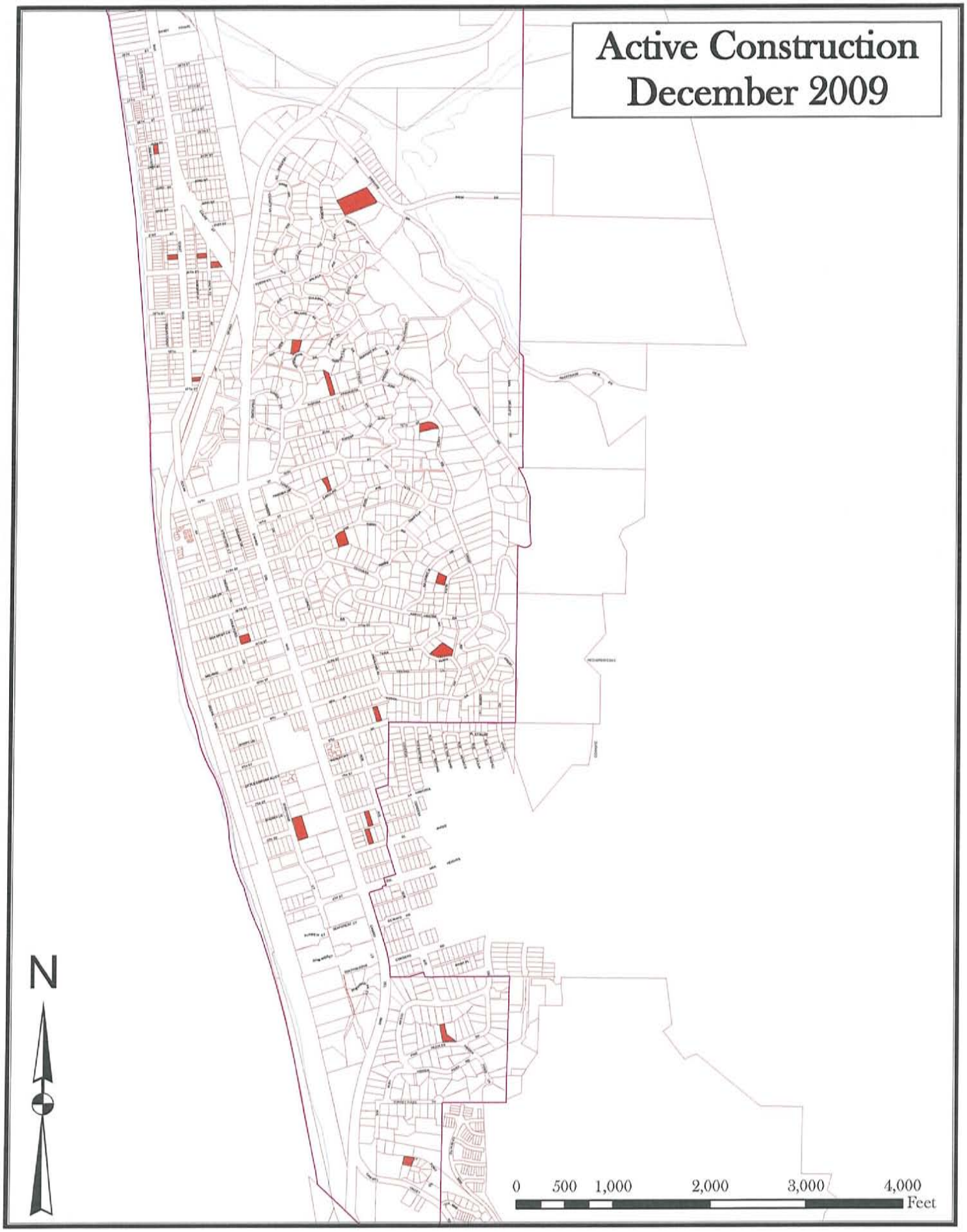
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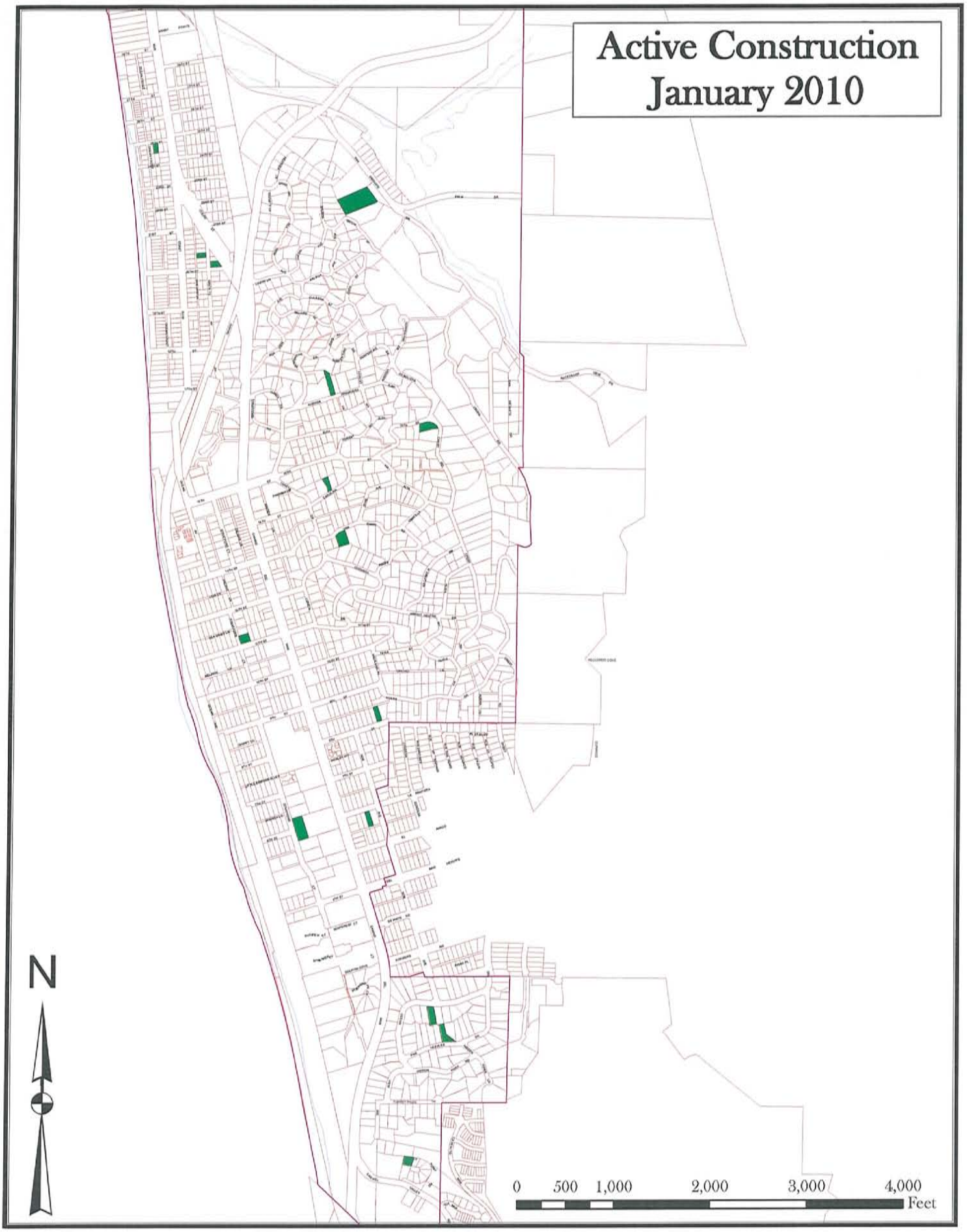
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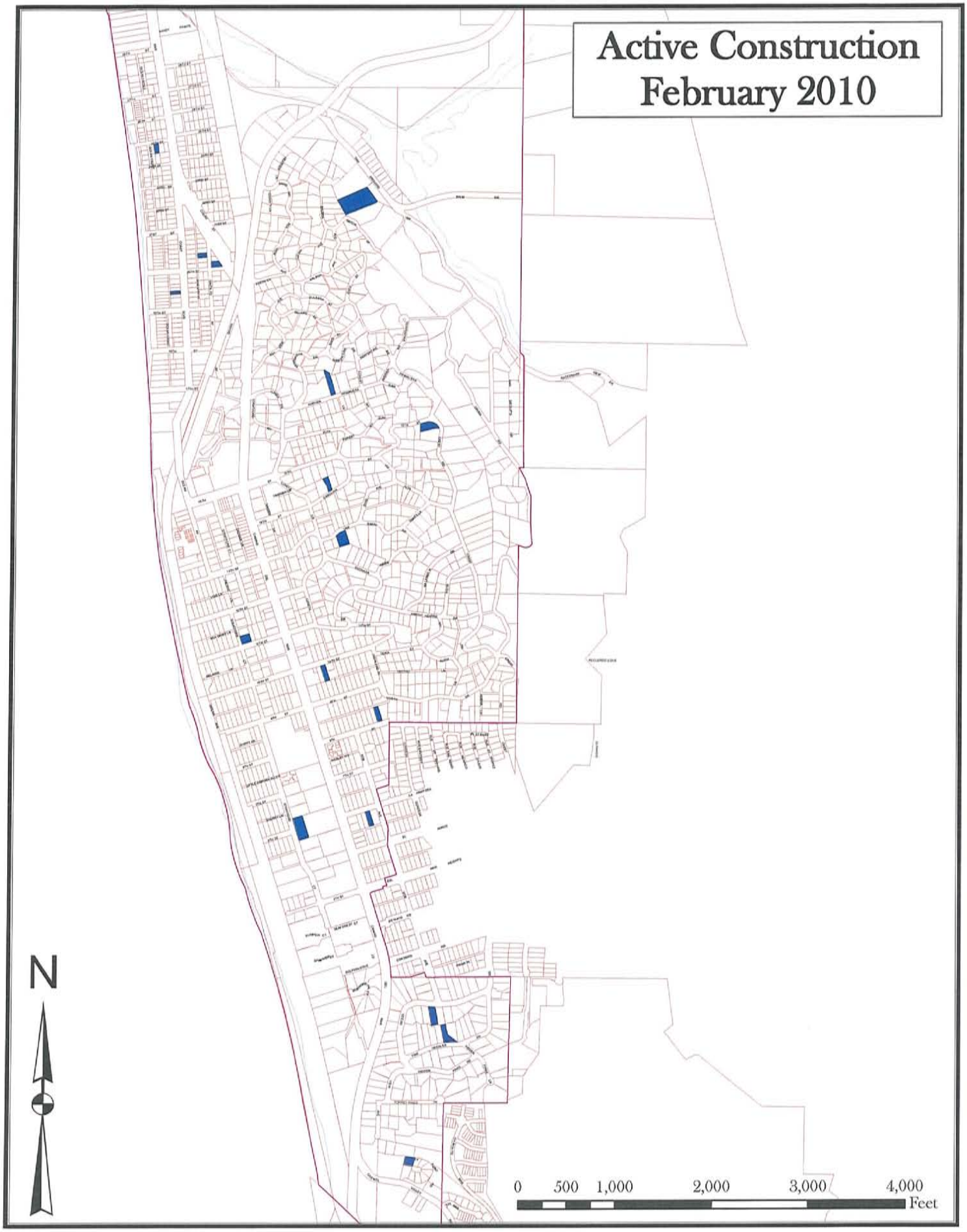
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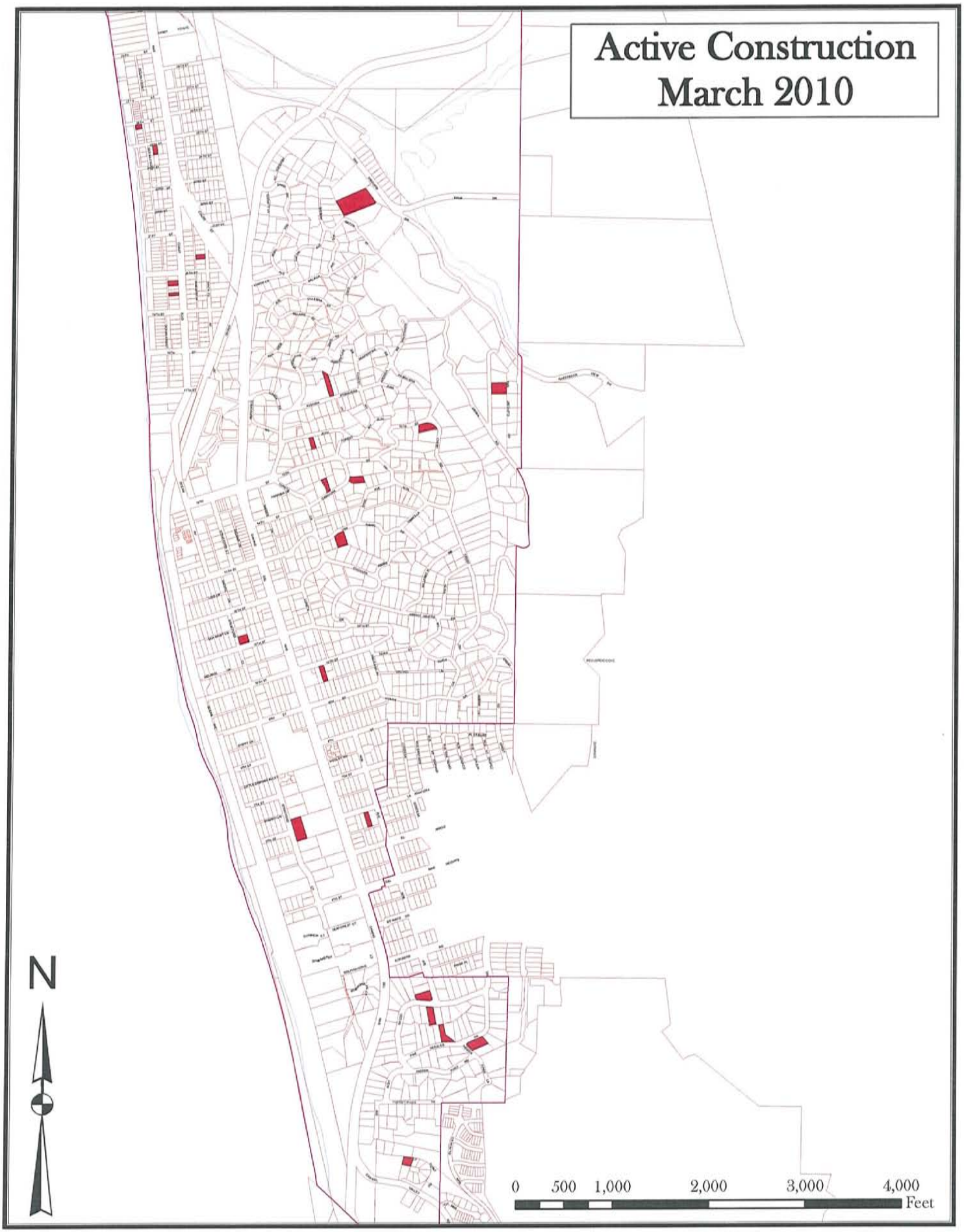
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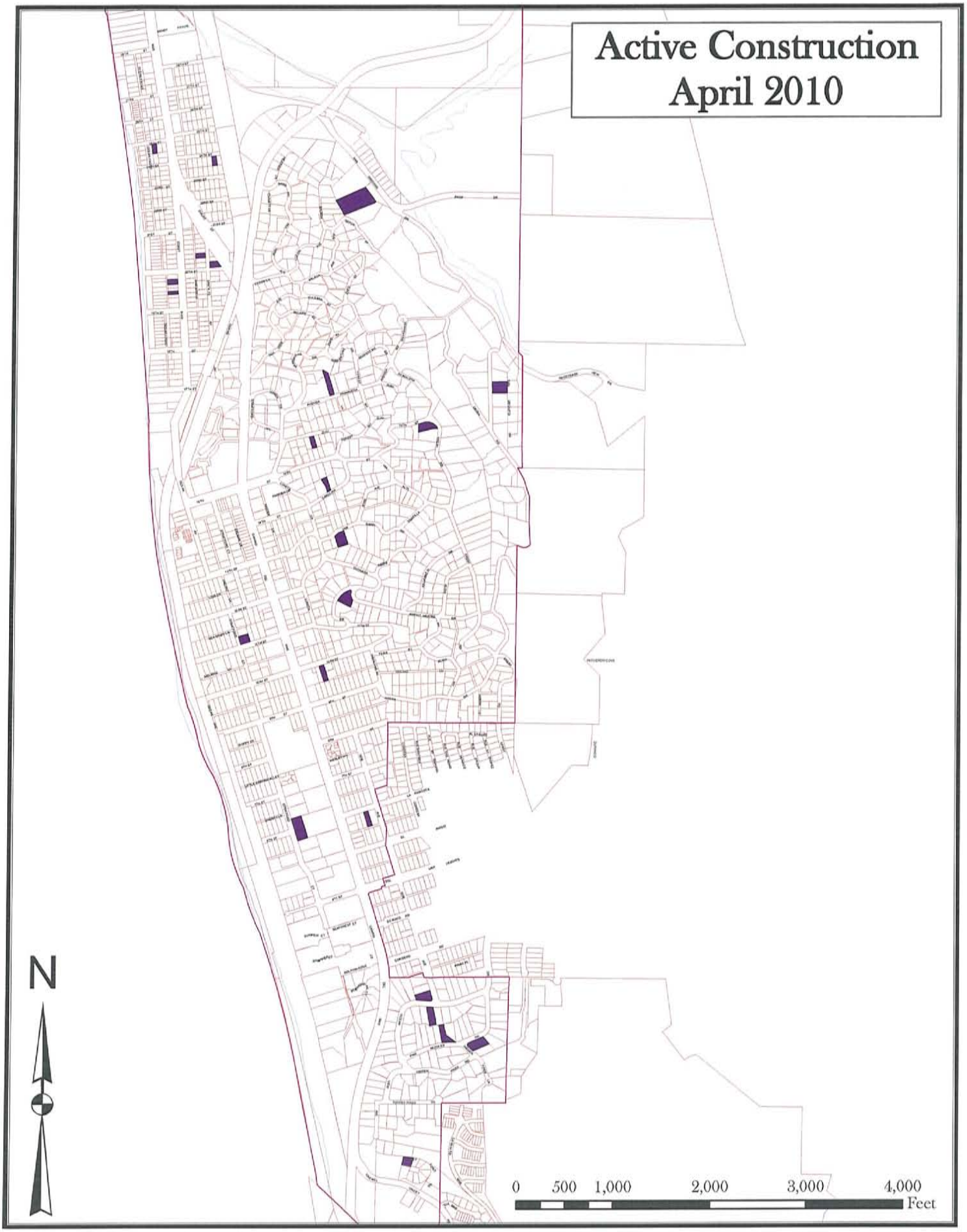
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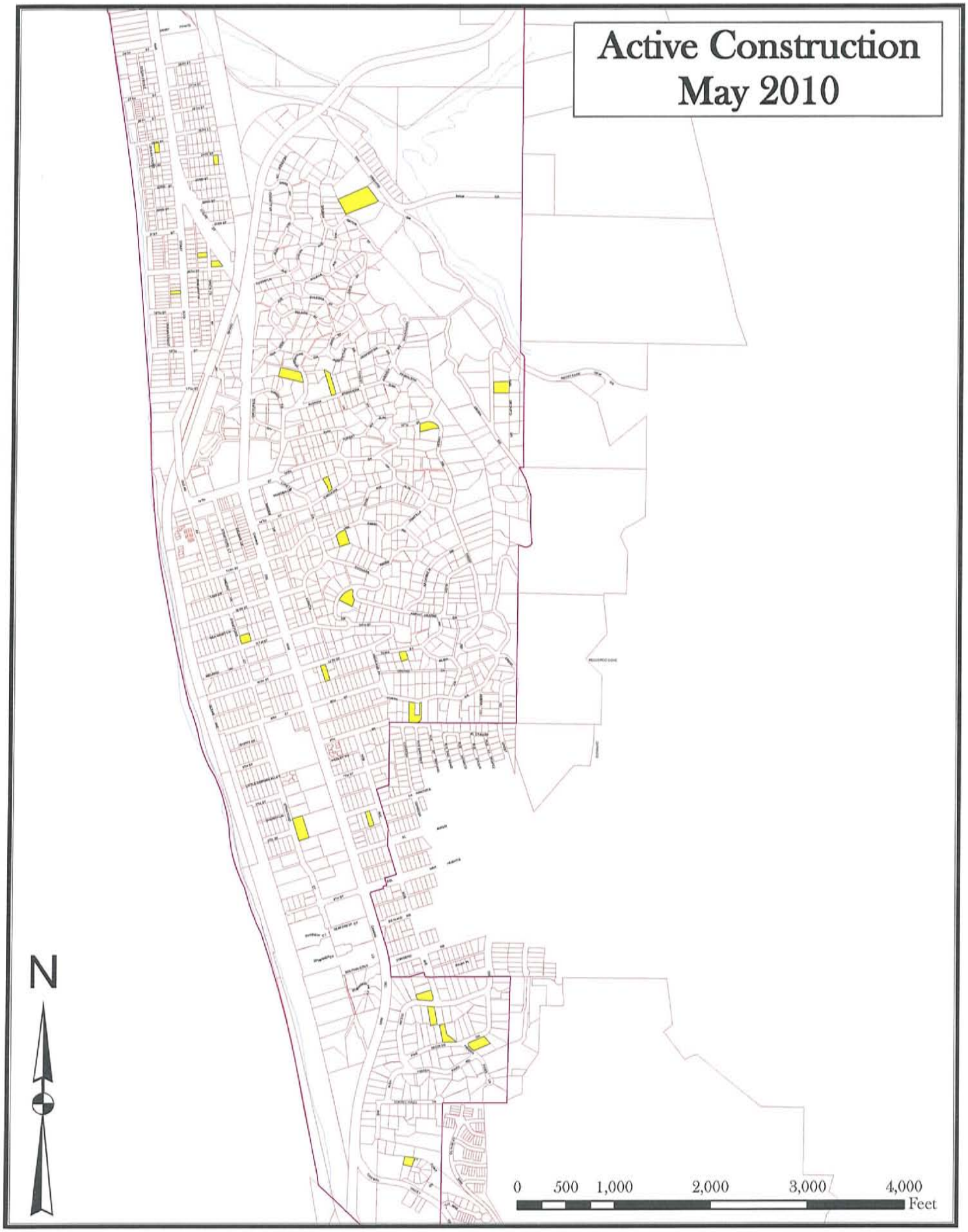
Active Construction
May 2010
N
0
500
1,000
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Feet

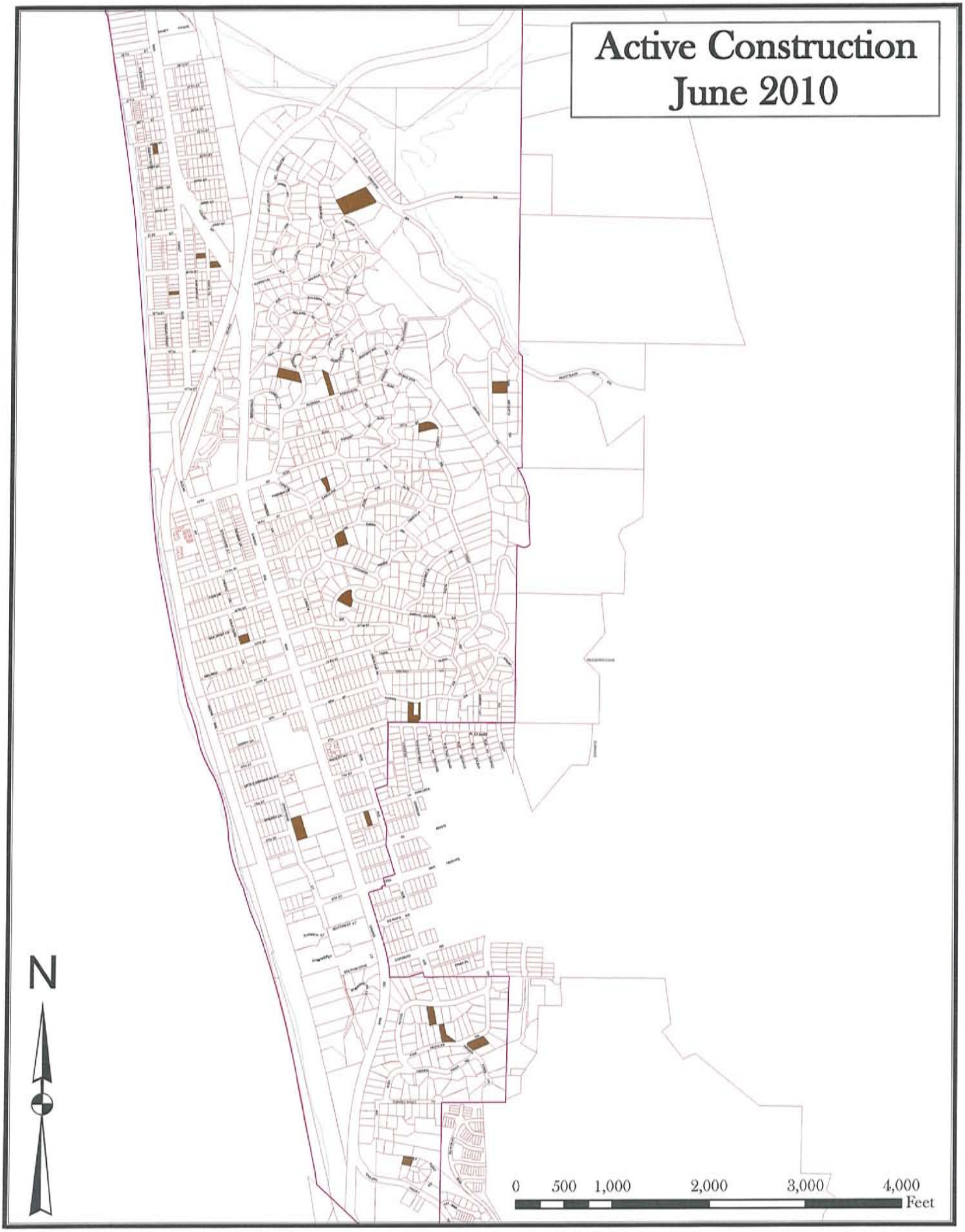
Active Construction
June 2010
N
0
500
1,000
2,000
3,000
4,000
Feet

Appendix 3-C
Fiscal Year 2009-2010 Construction Inspection Inventory

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FY2009/2010 Construction Inspection Summary Table

Del Mar Account Number	Facility Name	Number	Street	Hydrologic Unit	Description of Activity	Start Date	End Date	Weeks Active (WET)	Weeks Active (DRY)	No. Inspections (Wet)	No. Inspections (Dry)	Total Inspections
High and Medium Priority Contruction Projects (Wet: Bi-Weekly/Dry: As Needed)												
DRB-05-27	Pacifica Stratford Duplexes	531/533	Stratford Ct.	San Dieguito	2 unit Condo	6/7/2008	5/20/2010	30	6	16	1	17
DRB-05-28	Pacifica Stratford Duplexes	541/543	Stratford Ct.	San Dieguito	2 unit Condo	6/7/2008	5/20/2010	30	6	16	1	17
DRB-05-29	Pacifica Stratford Duplexes	551/553	Stratford Ct.	San Dieguito	2 unit Condo	6/7/2008	Active	30	22	16	5	21
DRB-05-30	Pacifica Stratford Duplexes	601/603	Stratford Ct.	San Dieguito	2 unit Condo	6/7/2008	Active	30	22	16	5	21
DRB-05-31	Pacifica Stratford Duplexes	611/613	Stratford Ct.	San Dieguito	2 unit Condo	6/7/2008	Active	30	22	16	5	21
Low Priority Construction Projects (As Needed Only)												
DRB-98-32 MOD	Bakker	335	La Amatista	Los Penasquitos	Remodel/Addition	4/21/2005	Active	30	22	1	1	2
DRB-05-23/ADR-08-43	Belezzuoli	424	Carolina Road	San Dieguito	windows/pool	9/4/2006	Active	30	22	1	0	1
ADR-10-06	Benham	1935	Oceanfront	San Dieguito	windows and doors	2/24/2010	4/14/2010	7	0	1	0	1
DRB-08-25	Bierman	143	8th Street	San Dieguito	Remodel/Addition	12/10/2008	8/18/2009	0	8	0	1	1
N/A	Bjornson	471	Carolina Road	San Dieguito	interior and landscaping	2/8/2010	3/25/2010	7	0	1	0	1
DRB-05-41	Bligh	262	Ocean View	Los Penasquitos	NSFR	4/13/2009	11/24/2009	8	13	1	1	2
N/A	Bouma	2418	Oceanfront	San Dieguito	demolition	4/27/2009	7/23/2009	0	4	0	1	1
DRB-06-08	Chesnut	1236	Stratford Court	San Dieguito	NSFR	11/14/2007	11/6/2009	5	13	1	0	1
DRB-07-06	Dallas	466	Avenida Primavera	San Dieguito	NSFR	7/7/2008	6/17/2010	30	20	1	0	1
ADR-09-31	Drago	210	Oceanview Ave.	Los Penasquitos	rear-yard site walls	2/16/2010	5/13/2010	9	2	1	0	1
DRB-07-05	Eaton	187	Ocean View Ave.	Los Penasquitos	Remodel/Addition	4/27/2009	Active	30	22	1	1	2
N/A	Everingham	1555	San Dieguito Drive	San Dieguito	interior, windows/doors, walls	2/22/2010	6/18/2010	10	7	0	0	0
DRB-08-41	Farrell	1415	Via Alta	San Dieguito	Deck Repairs	5/11/2009	9/17/2009	0	11	0	1	1
DRB-07-19	Fisher	236	24th Street	San Dieguito	NSFR	12/15/2008	11/24/2009	9	13	1	1	2
N/A	Gardner	1111	Klish Way	San Dieguito	skylights/roofing	6/23/2009	12/17/2009	12	13	0	0	0
DRB-84-52	Gillies	2136	San Dieguito Drive	San Dieguito	NSFR	12/14/1998	Active	30	22	1	1	2
DRB-07-24	Goldberg	1942	Santa Fe Ave.	San Dieguito	NSFR	11/10/2008	11/13/2009	7	13	1	1	2
ADR-09-23	Gradinger	434	8th Street	San Dieguito	front-yard improvements	10/19/2009	2/12/2010	16	0	1	0	1
DRB-08-43	Hardke	431	Van Dyke Ave.	San Dieguito	NSFR	5/26/2009	Active	30	22	1	1	2
DRB-07-27	Harrington	1345	Ocean Avenue	San Dieguito	Remodel/Addition	9/19/2008	8/5/2009	0	6	0	1	1
DRB-04-15	Hilliard	1492	Crest Road	San Dieguito	site improvements	4/2/2007	Active	30	22	1	1	2
DRB-05-33	Hoehn	730	Kalamath Street	San Dieguito	NSFR	1/10/2007	9/10/2009	0	12	1	1	2
N/A	Hook	635	Hoska Drive	San Dieguito	interior remodel	4/13/2010	6/22/2010	3	7	0	0	0
ADR-09-16	Karagheusian	1925	Oceanfront	San Dieguito	Interior Remodel	5/27/2009	8/18/2009	0	7	0	0	0
ADR-09-09	Kling	810	Klish Way	San Dieguito	Exterior windows/doors	5/26/2009	9/15/2009	0	11	0	1	1
DRB-05-24	Klipstein	415	Torrey Pointe Road	Los Penasquitos	NSFR w/ basement	8/22/2008	Active	30	22	1	1	2
N/A	KSA No. 1	1709	Coast Blvd	San Dieguito	rear-yard improvements	10/28/2009	12/10/2009	7	0	1	0	1
N/A	Lindsey	2020	Oceanfront	San Dieguito	siding	3/30/2009	8/7/2009	0	6	0	0	0
DRB-10-02	Linnell	411	Hidden Pines Lane	Los Penasquitos	interior work (sub. garage)	2/8/2010	Active	30	22	1	1	2
N/A	McCarthy	2528	Oceanfront	San Dieguito	interior	2/3/2010	4/16/2010	10	0	0	0	0
DRB-04-13	McGuire	1105	Stratford Court	San Dieguito	NSFR	9/13/2007	Active	30	22	1	1	2
DRB-06-34	Moore	155	27th Street	San Dieguito	NSFR	3/30/2008	7/23/2009	0	3	0	1	1
DRB-09-12	More	408	Luzon Ave	San Dieguito	exterior improvements	6/28/2010	Active	0	1	0	1	1
DRB-08-38	Nerenberg	205	Ocean View Ave	Los Penasquitos	NSFR	12/28/2009	Active	30	22	1	1	2
DRB-04-54	Nicholas	1344	Ocean Avenue	San Dieguito	NSFR	12/19/2006	7/14/2009	0	2	0	1	1
N/A	Novakovic	328	El Amigo	San Dieguito	painting and siding	11/16/2009	12/10/2009	4	0	1	0	1
DRB-10-12	Ogilvy	340	Serpentine Drive	San Dieguito	deck	4/26/2010	6/10/2010	1	5	0	0	0
DRB-06-23	Oliphant	2020	Santa Fe Ave.	San Dieguito	NSFR	6/1/2009	Active	30	22	1	1	2
ADR-09-04	Ozaki	155	7th Street	San Dieguito	site improvements	7/13/2009	10/15/2009	2	11	1	1	2
DRB-04-34	Pinney/Asciutto	425	8th Street	San Dieguito	NSFR	10/20/2008	11/12/2009	6	13	1	1	2
ADR-08-47	Pogue	314	Del Mar Heights	Los Penasquitos	Exterior windows/doors	11/18/2008	8/6/2009	0	5	0	1	1
N/A	RHN	1846	Oceanfront	San Dieguito	interior improvements	6/28/2010	Active	0	1	0	0	0
DRB-04-08	Richards (Demich)	963	Klish Way	San Dieguito	NSFR	8/21/2007	12/9/2009	10	13	1	1	2
DRB-08-08	Savage	2007/2009	Santa Fe Ave	San Dieguito	remodel	10/19/2009	Active	27	9	1	1	2
SCP-09-04	Sbicca	215	15th Street	San Dieguito	Sidewalk Café	6/1/2009	7/9/2009	0	1	0	1	1
N/A	Schibanoff	443	Zuni Drive	San Dieguito	roofing	2/22/2010	4/8/2010	6	0	0	0	0

FY2009/2010 Construction Inspection Summary Table

DRB-08-46	Scipione	555	Amphitheatre Drive	San Dieguito	rear-yard improvements	7/13/2009	8/18/2009	0	5	0	1	1
N/A	Shenuski	376	Serpentine Drive	San Dieguito	minor interior work	11/18/2009	12/22/2009	5	0	0	0	0
ADR-10-02	Thomas	259	24th Street	San Dieguito	front porch remodel-interior	3/10/2010	5/18/2010	7	3	1	1	2
DRB-08-14	Valentine	1420	Crest Road	San Dieguito	Remodel/Addition	7/1/2008	8/11/2009	0	6	0	1	1
ADR-09-35	Vaughn	335	10th Street	San Dieguito	porch cover & windows	1/25/2010	5/13/2010	13	2	1	1	2
ADR-09-32	Voss	543	Tewa Street	San Dieguito	pool	4/19/2010	5/26/2010	1	5	1	1	2
N/A	Wadia	1660	Luneta Drive	San Dieguito	site wall along right-of-way	6/29/2009	7/23/2009	0	3	0	1	1
N/A	Walton	2018/2020	Coast Blvd	San Dieguito	driveway work	10/29/2009	11/19/2009	3	0	1	0	1
DRB-08-37	Wiggins	1926	Coast Blvd	San Dieguito	remodel & roof deck	1/25/2010	Active	13	9	1	1	2
DRB-08-35	Wilkinson	131	25th Street	San Dieguito	addtion & remodel	10/26/2009	Active	26	9	1	1	2
DRB-08-33	Wohlford-Kidd	1155	Cuchara Drive	San Dieguito	remodel	3/23/2010	Active	5	9	1	1	2

Section 4
Municipal Component

4.1 Introduction

This section describes the implementation of the Municipal Component of the 2008 JURMP during the Fiscal Year 2009-2010 Reporting Period. The Municipal Component was implemented to: (1) reduce municipal discharges of pollutants from the MS4 to the MEP, and; (2) prevent municipal discharges from the MS4 from causing or contributing to a violation of water quality standards.

This section addresses two types of municipal operations: fixed or stationary facilities; and field activities. A fixed facility is a specific building or physical location at which municipal operations occur (e.g. a corporate yard). Conversely, field activities are actions or programs that staff or City contractors implement as a part of their work duties at various locations across the City (e.g. street maintenance).

4.2 Municipal Activities

4.2.1 Source Characterization

During the Reporting Period, there were no additions or deletions to the City's municipal activity inventory, including the: MS4 system; street sweeping routes; or special event venues. Additionally, there were no changes to the prioritization of the City's storm drain facilities.

The City's complete MS4 is shown in Figure 4-1 below and reflects the most recently available system updates.

4.2.2 Best Management Practice Requirements

During the Reporting Period, the City did not make changes to its BMP requirements for municipal activities. For more details on the current BMP requirements, please refer to the 2008 JURMP submitted in March 2008.

The required BMPs for all municipal activities were implemented and required to be implemented through contracts, agreements or permits.

4.2.3 Program Implementation

During the Reporting Period, the City did not make any changes to its the Municipal Component of the 2008 JURMP during the Fiscal Year 2009-2010 Reporting Period. The following sub-sections discuss the program implementation for the municipal activities programs.

4.2.3.1 Municipal Separate Storm Sewer System (MS4) Program

During the Reporting Period, the City did not make changes to its MS4 program implementation. For more details on the City's MS4 program implementation please refer to the 2008 JURMP submitted in March 2008.

The following data and information was collected and is provided to document MS4 operation and maintenance activities as required by the Permit and the City's 2008 JURMP:

1. Confirmation that the designated BMPs were implemented or required to be implemented during MS4 cleaning activities to eliminate waste discharges when cleaning is taking place.

During the reporting period, the City's Public Works employees implemented BMPs for MS4 maintenance activities to prevent the release of pollutants downstream as a result of maintenance activities. Generally, dry clean methods were conducted; however if jetting was required, socks and waddles were used downstream to trap the wash water. The wash water was then vacuumed and disposed of in the sanitary sewer. Any sediment or debris collected from MS4 maintenance activities was disposed of in a landfill, along with other debris collected throughout the City. The City kept logs of all MS4 inspection and maintenance activities in order to satisfy the reporting requirements of the JURMP Annual Report.

2. A description of inspections and maintenance conducted for municipal treatment controls, as applicable.

Trash Guards Treatment Control: The purpose of the "trash guards", installed on the face of storm drain inlets along Camino del Mar, is to minimize the amount of debris and trash entering into storm drain catch basins and to maximize the effectiveness of street sweeping. The guards keep the trash and debris on the street in order for it to be removed by the street sweeper. Inspections of the guards were performed to verify they were still operational and performing as purposed.

Inlet Filter Treatment Control– North County Transit District: As reported in the 2008 JURMP, the City of Del Mar has a Maintenance Agreement in place with the North San Diego County Transit Development Board as part of the Del Mar Stabilization Project 1 (Drainage Improvements and Landslide Warning System), which consists of fifty-four (54) structures. Fossil filters have been installed in some of the structures to address water quality and Permit requirements. The Maintenance Agreement requires the City to maintain fourteen (14) of the structures, while NCTD maintains the remaining forty (40) structures. Out of the fourteen structures maintained by the City, six have been fitted with filters that are serviced by the City's contractor (Downstream Services, Inc.). This fiscal year, all six filters were inspected and required maintenance.

Table 4-1 below represents a summary of the maintenance performed on the inlet filters.

Figure 4–1: MS4 Drainage System Map

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Table 4-1: Summary of Inlet Filter Maintenance for Fiscal Year 2009-2010

ID #	Location	Inlet Type	Materials	%Vol used*	Comments
1	West end of 4th Street	Combo	Dirt, Silt, or Sediment (D) 70% Trash (E) 5%	130%	Replaced (12) pouches and placed storm drain marker.
2	West end of 8th Street	Grate	D 70% Gravel (G) 20% Organics (O) 15%	105%	Replaced (4) pouches and placed storm drain marker.
3	SW 11th Street	Curb	D 70% G 20% O 10%	105%	Replaced (2) pouches and placed storm drain marker.
4	NW side of 11th Street	Curb	D 70% G 10% O 20%	100%	Replaced (3) pouches, placed storm drain marker, and retied.
5	W of 13th Street	Curb	D 95% E 5% O 5%	105%	Replaced (1) pouch and placed storm drain marker.
6	50' SW of pedestrian RR crossing, between RR tracks and Coast Blvd.	Grate	Asphalt (A) 10% D 50% O 10%	70%	Replaced (4) pouches and placed storm drain marker.

*where the "%Vol used" is greater than 100%, the inspection found more material at the inlet than the capacity of the filter

Based on a review of the Inlet Filter Maintenance Reports submitted by the City's Contractors, it is clear that a more frequent inspection and maintenance schedule may be necessary to ensure that no materials overwhelm the filters. Beginning in Fiscal Year 2010-2011, the City of Del Mar Public Works Department will be increasing visual inspections of the inlet filters identified in Table 4-1 and requesting additional service as needed from its contractor (Downstream Services, Inc.).

3. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria (33% capacity), and the number of catch basins and inlets cleaned.

The City is responsible for the inspection and maintenance of 284 drainage structures that are part of the MS4, including inlets and catch basins. In Fiscal Year 2009-2010, 100% (284) of the MS4 inlets and catch basins were inspected and cleaned. None of the inlets or catch basins were found to have accumulated waste exceeding 33% capacity.

4. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.

The City owns a total of 5.87 lineal miles of MS4. The City's MS4 pipe inspection program consists of cleaning crews inspecting pipes based on accessibility and visually inspecting pipe conditions during the inspection or cleaning of inlets and catch basins. During the Reporting Period, the City visually inspected approximately 3,500 lineal feet of MS4 pipe and cleaned approximately 2,500 lineal feet of MS4 pipe. No pipes were reported as exceeding the cleaning criteria threshold.

5. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.

There are 2.85 linear miles of open channel or swale type drainage in the City, and these drainage structures are considered to be part of the MS4 inventory. During the Reporting Period, 100% (2.85 miles) of the open channels and swales were inspected. When necessary, the City cleaned sand, mud and sediment from the open channels and swales. The City's inspection and maintenance records indicate that no observations of significant amounts of anthropogenic litter were noted.

6. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category. Proper disposal of waste removed pursuant to applicable laws.

The total amount of material removed from catch basins, inlets, open channels, and the MS4 for the Fiscal Year 2009-2010 was 86.5 cubic yards, or approximately 43.2 tons. By drainage structure category, it is estimated that approximately 35.8 tons of materials were removed from catch basins and inlets (combined inlets, basins and junctions), 7.1 tons of materials were removed from swales and open channels (headwall cleanings as channels), and the remaining estimated 0.3 tons of material was collected from the MS4 cleanings. *Please Note: the Permit requires the material collected to be reported in tons. However, the City's measurements are in cubic yards, and converted to tons for reporting purposes using a 1,000 pound per cubic yard conversion.*

4.2.3.2 Street Sweeping Program

During the Reporting Period, the City did not make changes to its street sweeping implementation. For more details on the City's street sweeping implementation please refer to the 2008 JURMP.

The following data and information were collected and are provided to document street sweeping activities as required by the Permit and the City's 2008 JURMP.

1. Identification of the total distance of curb-miles of improved roads and streets identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.

The total distance of curb-miles of improved roads and streets that consistently generate the highest volumes of trash and/or debris is approximately 5.7 miles, including curbed medians. The frequency at which these roads and streets are swept is at a minimum, weekly.

2. Identification of the total distance of curb-miles of improved roads and streets identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.

The total distance of curb-miles of improved roads and streets that consistently generate moderate volumes of trash and/or debris is approximately 14.5, including curbed medians. The frequency at which these roads and streets are swept is at a minimum, bimonthly.

3. Identification of the total distance of curb-miles of improved roads and streets identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads and streets.

The total distance of curb-miles of improved roads and streets that consistently generate low volumes of trash and/or debris is 31.2, including curbed medians. The frequency at which these roads and streets are swept is at a minimum, biannually.

4. Identification of the total distance of curb-miles swept.

During the Fiscal Year 2010 Reporting Period, the City swept a total of 1,156 curb miles. The brooms were engaged for a total of 180.7 hours.

5. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping:

The two municipal parking lots in the City's municipal facility inventory are the 17th Street Lifeguard Station parking lot and the City Hall Parking lot. Both are considered to be high trash volume designations and thus, were swept semi-monthly during the Reporting Period.

6. Amount of material (tons) collected from street and parking lot sweeping:

The total amount of material collected from street sweeping activities of municipal areas for Fiscal Year 2009-2010 was 234.5 cubic yards*, or an estimated 117.25 tons. This amount includes all three trash volume categories and parking lot sweeping for the Reporting Period. *Please Note: the Permit requires the material collected to be reported in tons. However, the City's measurements are in cubic yards, and converted to tons for reporting purposes using a 1,000 pound per cubic yard conversion.*

The City coordinates with the 22nd District Agricultural Association (22DAA) (aka Del Mar Fairgrounds) to ensure that additional pollutant loading from the 22DAA facilities does not contribute to pollution in the MS4. Although the City conducts street sweeping along the 22DAA facility, the City requires the 22DAA to provide additional street sweeping on an as-needed basis, especially during its peak seasons – San Diego County Fair and Del Mar Thoroughbred Club racing season. The City does not quantify the amount of sediment and debris that is collected by the DAA sweepings.

4.2.3.3 Pesticide, Herbicide and Fertilizer Management

During the Reporting Period, the City did not make changes to its pesticide, herbicide and fertilizer management implementation. For more details on the City's pesticide, herbicide and fertilizer management implementation please refer to the 2008 JURMP.

The following data and information was collected and is provided to document pesticide, herbicide and fertilizer management activities as required by the Permit and the City's 2008 JURMP.

1. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities

The City confirms that during the Reporting Period, designated BMPs for pesticides, herbicides and fertilizers were required to be implemented and implemented for municipal areas and activities.

The City of Del Mar contracts with Aztec Landscaping for all of the maintenance of its municipal landscaped areas including: fertilization, pest control, and herbicide application. All chemicals are applied by licensed contractors and application of any landscaping-related chemicals is done per current San Diego County Department of Agriculture regulations and the City encourages manual weed and pest removal whenever possible; furthermore, any contract employee applying or mixing landscaping-related chemicals is required to possess a valid Qualified Applicators Certificate for Class B as issued by the State Department of Food and Agriculture. To regulate landscaping chemical use in the City, the contract company is required per its contract with the City to submit a proposed fertilization schedule prior to commencement of fertilization and to provide a monthly chemical application report to the City. In Fiscal Year 2009-2010, there were no apparent increases in landscaping-related chemicals as compared to previous years.

As in previous years, the annual Dry Weather Monitoring program included analysis for pesticides. No pesticides were detected in City-wide sampling during this reporting period, providing another validation of the proper use of the chemicals.

4.2.3.4 Sanitary Sewer Program

The City's sanitary sewer system includes the collection system and various sanitary sewer systems. The sewer system infrastructure includes approximately 24.75 miles of gravity main, 0.07 miles (or approximately 387ft) of force main and 387 service points. Del Mar's system includes three sewer pump/lift stations, 112 clean out facilities, and approximately 549 manhole structures. These facilities all are required to implement minimum BMPs and for the most part are inspected to verify BMP implementation and compliance. A description of the City's efforts for these facilities is included below.

Of the approximately 24.75 miles of the sanitary sewer collection system, approximately 19.2 miles were cleaned as part of the regular schedule of inspection and cleaning. Some portions of the collection system were cleaned more than once due to priority and buildup of materials. The City tracks "hot spot" portions of the sewer collection system and depending upon the likelihood of materials build up, will perform cleaning two, three or up to four times per year. No sanitary sewer overflows occurred during the Reporting Period. The Regional Board (via CIWQS) and the San Diego County Department of Environmental Health (via facsimile) verified that there were no reported overflows during Fiscal Year 2009-2010 for the City of Del Mar.

4.2.3.5 Special Events

During the Reporting Period, the City did not make changes to its special events program implementation. For more details on the special events program, please see the 2008 JURMP submitted in March 2008.

Table 4-2 below provides a summary of the major events that were monitored by the City staff. All special events had City staff present that has been trained on Clean Water Program requirements to make observations and implement corrective actions as necessary during the events. In addition to the staff presence during the events, City staff responsible for each venue would inspect and take corrective actions the morning following special events.

Table 4-2: Major Event Summary Table

Event Name	Event Date	Estimated Attendance	Venue	Inspection Date(s) & Comments
Bocce Ball Tournament	7/18/2009	600	North Beach	Post-event inspection by cleanup crews – no spills or incidents reported
Summer Concerts In The Park	7/21/2009	3000	Powerhouse Park	Post-event inspection by cleanup crews – no spills or incidents reported
Summer Concerts In The Park	8/18/2009	3000	Powerhouse Park	Post-event inspection by cleanup crews – no spills or incidents reported
MS Walk	9/11/2009	350	Streets Of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
Dog Surf Event	9/13/2009	4000	North Beach	Post-event inspection by cleanup crews – no spills or incidents reported
Summer Concerts In The Park	9/13/2009	3000	Powerhouse Park	Post-event inspection by cleanup crews – no spills or incidents reported
Del Mar Village Assoc. Art Stroll	10/3/2009	4000	Streets Of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
MS Bike Ride	10/11/2009	2500	Streets Of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
3 Day Breast Cancer Walk	11/20/2009	4000	Streets Of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported

Event Name	Event Date	Estimated Attendance	Venue	Inspection Date(s) & Comments
Del Mar Village Assoc. Winter Wonderland	12/6/2009	2500	Streets Of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
Tour De Cure Bike Ride	4/17/2010	600	Streets Of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
La Jolla Half Marathon	4/25/2010	5000	Streets Of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
Irongirl 5k And 10k	5/8/2010	3000	Streets Of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
SD Century Bike Ride	5/22/2010	1000	Streets Of Del Mar	Post-event inspection by cleanup crews – no spills or incidents reported
Summer Concerts In The Park	6/15/2010	2000	Powerhouse Park	Post-event inspection by cleanup crews – no spills or incidents reported
Summer Solstice	6/17/2010	250	Powerhouse Park	Post-event inspection by cleanup crews – no spills or incidents reported

4.2.3.6 Beach Cleaning

The City's beaches are a vital part of the City's community – not only for the natural settings they provide, but also for the economic sustainability of the City. In an effort to prevent pollutants from entering the Pacific Ocean and causing the potential impairment to the receiving waters, the City implements a regular beach cleaning program.

During the Reporting Period, the beach cleaner was operated two to three times per week during the spring and summer and more frequently for holidays when the beach has the most use. The primary collections for disposal included plastic bottles and paper trash. The collected kelp is sorted and left on the beach.

The City does not track the amount of debris collected from the beaches, as the cleaner dumps the debris at the Public Works Yard into a trash dumpster that is mixed with other refuse and waste.

4.2.3.7 Power Washing

Currently, the City does not regularly schedule power washing activities at specific locations. This activity is conducted in various areas of the City depending on the need and as a result of other maintenance functions. This activity and the BMPs identified in the City's 2008 JURMP are considered to apply citywide for all municipal operations. Power washing may be conducted by City staff or under contract depending on the need.

The City utilizes dry cleaning methods as its primary cleaning method, and the use of power washing is limited. However, the City conducted one (1) power washing activity during the Reporting Period. This activity was conducted on October 12, 2009 at the Del Mar Branch of the County Library. The power washing was used in conjunction with a graffiti removal project. The City confirms that all applicable BMPs were implemented during the power washing. The BMPs include vacuum collection of all wash water and disposal into the sanitary sewer system.

4.3 Municipal Facilities

4.3.1 Source Characterization

During the Reporting Period, there were no additions or deletions to the City's municipal facility inventory. The municipal facilities inventory is located in Appendix 4-A.

In general, the municipal facilities include the following types:

1. MS4 System,
2. Roads and Streets,
3. Public Facilities,
4. Municipal Facilities, and
5. Sanitary Sewer.

Discussion of the stormwater program implementation for these facilities is addressed in Section 4.2.3 above.

The City's roads and streets network includes 747 curb miles of streets and two public parking lots. As described in Section 4.2.3 above, street sweeping is the primary BMP implemented for the roads network.

The City's public facilities primarily include parks and recreational facilities, beaches and the Powerhouse Community Center. All of these facilities are required to implement minimum BMPs and are inspected to verify BMP implementation and compliance. A description of the City's BMP efforts for these facilities is included below.

The City's municipal facilities include the Public Works Yard, City Hall, the Del Mar Fire Station, and various potable water reservoirs. These facilities all are required to implement minimum BMPs and are inspected to verify BMP implementation and compliance. A description of the City's BMP efforts for these facilities is included below.

The City's sanitary sewer system includes approximately 24.75 miles of gravity main, 0.07 miles (or approximately 387ft) of force main and 387 service points. Del Mar's system includes three sewer pump/lift stations, 112 clean out facilities, and approximately 549 manhole structures. The sewer facilities were inspected as a part of the municipal inspections as described below.

4.3.2 Best Management Practice Requirements

During the Reporting Period there were no updates to the BMP requirements for municipal facilities described in the 2008 JURMP. The City confirms that required BMPs were implemented at all facilities.

4.3.3 Inspections

Per the 2008 JURMP, the City formally inspects all high priority municipal sites. Municipal sites are considered to be fixed facilities where high priority municipal activities occur. The streets and road network are routinely inspected under various programs such as street sweeping, streets maintenance, and MS4 inspections. Formal inspection forms are not generated for the general routine inspections performed of these municipal network areas.

The City conducted facility inspections for each of its high priority facilities during Fiscal Year 2009-2010. The purpose of these inspections was to ensure that BMPs (including those for pollution prevention) were

being implemented. Of the high priority municipal areas, 25 are actual municipally operated sites/facilities, while the remainder are networks including streets and roads.

All inspections conducted during Fiscal Year 2009-2010 addressed all of the required inspection steps to determine full compliance by utilizing the City's standard municipal inspection form. The results of the inspections can be found in Appendix 4-B. For each facility, recommendations for follow-up corrective actions were listed if applicable.

4.4 Enforcement

There were no violations or enforcement actions taken at any municipal activities or facilities during Fiscal Year 2009-2010.

4.5 Notable Activities

This Fiscal Year, the City once again applied with the California Department of Conservation for a grant from its Beverage Container Recycling and Litter Reduction Program to assist in the City's litter cleanup efforts. Disbursement of funds is determined by the California Department of Finance and the amount of the grant is contingent on the population of eligible cities or counties applying for the grant. The City of Del Mar was awarded a grant of $5,000 for Fiscal Year 2009-2010 which was the maximum amount eligible for a jurisdiction of its size. A portion of the grant money was allocated to fund beach clean-up activities as well as to purchase dog nuisance clean-up bags ("Mutt Mitt") for distribution to the general public at City outreach events; the remaining money was allocated to assist in public cleanup days to continue to effectively reduce the amount of trash and debris entering the MS4 and the City's waterways. Due to the State's budget crisis, these monies were not received until June 30, 2010. As such, the grant money will be spent in the next reporting period. The City of Del Mar continued to work with community groups in hosting beach clean-up days, and utilized General Fund monies to purchase the necessary "Mutt Mitts".

4.6 Program Review and Modification

No modifications were made to the Municipal Facilities Component of the 2008 JURMP during this Reporting Period.

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Appendix 4-A
Fiscal Year 2009-2010 City of Del Mar Municipal Facilities Inventory

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Facility Name	Contact Person	Phone Number	Priority	Address No.	Street	Zip Code	HA Name	HA	Description of Area/Activity	Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash
Public Works Yard	Doug Blackstock	(858) 755-3294	High	2240	Jimmy Durante Blvd	92014	San Dieguito	905.11	Public Works Admin building, shops, parking lot, open and covered storage yards. Fueling station, storage, vehicle/equipment cleaning and repair. Temporary storage of trash, recycling and landscape materials. Hazardous waste materials storage.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Del Mar Fire Station	Robert Burron	(858) 755-1522	Non	2220	Jimmy Durante Blvd	92014	San Dieguito	905.11	Building and parking lot. Vehicle storage and cleaning. Hazardous waste materials storage.			Yes		Yes	Yes		Yes	Yes
Community Library	Doug Blackstock	(858) 755-3294	Non	1309	Camino Del Mar	92014	San Dieguito	905.11	Building, parking lot, and landscape maintenance.			Yes	Yes	Yes		Yes		Yes
City Hall	Doug Blackstock	(858) 755-3294	Non	1050	Camino Del Mar	92014	San Dieguito	905.11	Building and landscape maintenance.				Yes			Yes		Yes
City Hall Parking Lot	Doug Blackstock	(858) 755-3294	High	1050	Camino Del Mar	92014	San Dieguito	905.11	Parking and landscaping.			Yes		Yes		Yes		Yes
Main Lifeguard Station	Pat Vergne	(858) 755-1556	High	1700	Coast Blvd	92014	San Dieguito	905.11	Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.	Yes			Yes		Yes		Yes	Yes
Main Lifeguard Station Parking Lot	Doug Blackstock	(858) 755-3294	High	1700	Coast Blvd	92014	San Dieguito	905.11	Parking and landscaping.			Yes		Yes		Yes		Yes
20th Street Lifeguard Station	Pat Vergne	(858) 755-1556	Medium		20th St	92014	San Dieguito	905.11	Building. First Aid Care. Restroom Facilities. Building maintenance.	Yes			Yes		Yes		Yes	Yes
25th Street Lifeguard Station	Pat Vergne	(858) 755-1556	High		25th St	92014	San Dieguito	905.11	Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.	Yes			Yes		Yes		Yes	Yes
Tennis Court Facilities	Doug Blackstock	(858) 755-3294	Non		Court St	92014	San Dieguito	905.11	Tennis courts with parking and access.									Yes
Zuni Water Reservoir	Doug Blackstock	(858) 755-3294	High	627	Zuni Dr	92014	San Dieguito	905.11	Potable water storage tank and equipment maintenance.	Yes			Yes	Yes	Yes			
Crest Water Reservoir	Doug Blackstock	(858) 755-3294	High	706	Crest Rd	92014	San Dieguito	905.11	Potable water storage tank and equipment maintenance.	Yes			Yes	Yes	Yes			
11th Street Water Reservoir	Doug Blackstock	(858) 755-3294	Medium	562	11th St	92014	San Dieguito	905.11	Potable water storage tank and equipment maintenance.	Yes			Yes	Yes	Yes			
Torrey Pines Water Reservoir	Doug Blackstock	(858) 755-3294	High	487	Pine Needles Dr	92014	Penasquitos	906.10	Potable water storage tank and equipment maintenance.	Yes			Yes	Yes	Yes			
Seagrove Park	Doug Blackstock	(858) 755-3294	High	1500	Coast Blvd	92014	San Dieguito	905.11	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Yes	Yes		Yes		Yes	Yes	Yes	Yes
Powerhouse Community Center	Pat Vergne	(858) 755-1556	High	1630	Coast Blvd	92014	San Dieguito	905.11	Special events, food prep, restrooms. Building and landscape maintenenace.	Yes	Yes		Yes	Yes	Yes			Yes
Powerhouse Park	Doug Blackstock	(858) 755-3294	High	1630	Coast Blvd	92014	San Dieguito	905.11	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application. Restrooms and showers	Yes	Yes		Yes		Yes	Yes	Yes	Yes
Caminito Park	Doug Blackstock	(858) 755-3294	High	1500	Camino Del Mar	92014	San Dieguito	905.11	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Yes	Yes		Yes		Yes	Yes	Yes	Yes
Minipark	Doug Blackstock	(858) 755-3294	High	1300	Maiden Ln	92014	San Dieguito	905.11	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Yes	Yes		Yes		Yes	Yes	Yes	Yes
Sea Cliff Park	Doug Blackstock	(858) 755-3294	High	1500	Coast Blvd	92014	San Dieguito	905.11	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Yes	Yes		Yes		Yes	Yes	Yes	Yes
Riverpath Del Mar	Doug Blackstock	(858) 755-3294	High	2240	Jimmy Durante Blvd	92014	San Dieguito	905.11	Public park. Tree and landscape maintenance.	Yes			Yes		Yes	Yes	Yes	Yes
21st St Sewer Lift Station	Doug Blackstock	(858) 755-3294	High	201	21st St	92014	San Dieguito	905.11	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	Yes	Yes		Yes	Yes	Yes			
7th St Sewer Lift Station	Doug Blackstock	(858) 755-3294	Medium	120	7th St	92014	San Dieguito	905.11	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	Yes	Yes		Yes	Yes	Yes			
San Dieguito Sewer Lift Station	Doug Blackstock	(858) 755-3294	High	2110	San Dieguito Dr	92014	San Dieguito	905.11	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	Yes	Yes		Yes	Yes	Yes			
Winston School Ball Field	Doug Blackstock	(858) 755-3294	Medium	215	9th St	92014	San Dieguito	905.11	Ball field and parking.	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes

New:

Winston School Ball Field

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Appendix 4-B
Summary of Fiscal Year 2009-2010 Municipal Facility Inspections

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Municipal Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Public works administration building, shops, parking lot, open and covered storage yards. Fueling station, storage, vehicle/equipment cleaning and repair. Temporary storage of trash, recycling and landscape materials. Area serves as a hazardous waste materials storage. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Public Works Yard		Corrective Actions Required:	No
Address:	2240 Jimmy Durante Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Zuni Water Reservoir		Corrective Actions Required:	No
Address:	627 Zuni Dr			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Public Park. Turf, tree, and landscape maintenance, fertilization and pesticide application. Restrooms and showers. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Powerhouse Park		Corrective Actions Requred:	No
Address:	1630 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	11th Street Water Reservoir		Corrective Actions Requred:	No
Address:	562 11th St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Tennis courts with parking and access. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Tennis Court Facilities		Corrective Actions Requred:	No
Address:	Del Mar, CA			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Crest Water Reservoir		Corrective Actions Requred:	No
Address:	706 Crest Rd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Torrey Pines Water Reservoir		Corrective Actions Requred:	No
Address:	487 Pine Needles Dr			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	Penasquitos (906.10)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Building and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	City Hall		Corrective Actions Requred:	No
Address:	1050 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Parking and landscaping. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	City Hall Parking Lot		Corrective Actions Requred:	No
Address:	1050 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Sanitary sewer pump station. Sewer spills, pump repairs and replacement. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	7th Street Sewer Lift Station		Corrective Actions Requred:	No
Address:	120 7th St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Sanitary sewer pump station. Sewer spills, pump repairs and replacement. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	21st Street Sewer Lift Station		Corrective Actions Requred:	No
Address:	201 21st St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Sanitary sewer pump station. Sewer spills, pump repairs and replacement. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	San Dieguito Sewer Lift Station		Corrective Actions Requred:	No
Address:	2110 San Dieguito Dr			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Public park. Tree and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Riverpath Del Mar		Corrective Actions Requred:	No
Address:	2240 Jimmy Durante Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Building, parking lot, and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Community Library		Corrective Actions Requred:	No
Address:	1309 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Seagrove Park		Corrective Actions Requred:	No
Address:	1500 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Building and parking lot, vehicle storage and cleaning. Hazardous waste materials storage. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Del Mar Fire Station		Corrective Actions Requred:	No
Address:	2220 Jimmy Durante Blvd			
			Corrective Action Description:	
Contact:	Robert Burron			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Minipark		Corrective Actions Requred:	No
Address:	1300 Maiden Ln			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Caminito Park		Corrective Actions Requred:	No
Address:	1500 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Sea Cliff Park		Corrective Actions Requred:	No
Address:	1500 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Building, first aid care, and restroom facilities. Building maintenance. City of Del Mar Lifeguard Tower/ Beach Activitiy SWMP needs to be updated and a copy kept at this lifeguard tower.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	20th Street Lifeguard Station		Corrective Actions Requred:	No
Address:	20th St			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Building, first aid care, and restroom facilities. Building and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	25th Street Lifeguard Station		Corrective Actions Requred:	No
Address:	25th St			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Building, first aid care, and restroom facilities. Building and landscape maintenance. City of Del Mar Lifeguard Tower/ Beach Activity SWMP not on site but at City. Needs to be updated to include 25th St tower bathrooms and be kept on site.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Main Lifeguard Station		Corrective Actions Requred:	No
Address:	1700 Coast Blvd			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Special events, food preperation, and restroom facilities. Building and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Powerhouse Community Center		Corrective Actions Requred:	No
Address:	1630 Coast Blvd			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Parking and landscaping. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Main Lifegaurd Station Parking Lot		Corrective Actions Requred:	No
Address:	1700 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Municipal Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Ballfield and parking. No issues to report.	Enforcement Action:	None
Inspection Date:	3/11/2010			
Facility Name:	Winston School Ballfield		Corrective Actions Requred:	No
Address:	215 9th St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

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Section 5
Industrial/Commercial Component

5.1 Introduction

The City continued to implement the Industrial and Commercial Component of its 2008 JURMP in Fiscal Year 2009-2010 to prevent and reduce pollutants in runoff from industrial and commercial facilities within the City.

5.2 Stationary Industrial and Commercial Sites/Sources Element

5.2.1 Background

This section focuses on fixed business sources, combining industrial and commercial businesses as defined by their activities. Fixed business sources are defined as businesses that have a stationary location where business activities are conducted. The referenced businesses are those that are identified in Order R9-2007-0001 for inclusion on the City's inventory.

5.2.2 Source Characterization

A watershed-based inventory and prioritization of known industrial and commercial facilities within the City's jurisdiction has been updated for the Fiscal Year 2009-2010 Reporting Period and is included as Appendix 5-A. This inventory is based on multiple sources of information including the City's business license list, the Statewide General Industrial Storm Water database and other sources of information, as appropriate. The current inventory lists 40 stationary businesses facilities within the City of Del Mar. Of the 40 inventoried stationary facilities the City considers all to be "high" threats to water quality (TTWQ), including one high TTWQ industrial facility.

5.2.3 Best Management Practice Requirements

During the Reporting Period, the City did not make changes to its BMP requirements for the commercial and industrial facilities. The requisite BMPs for all commercial and industrial facilities were required to be implemented through the City's 2008 JURMP and municipal code.

5.2.4 Program Implementation

During Fiscal Year 2009-2010, the City provided notification to owners/operators of industrial and commercial businesses of the applicable BMP requirements. This information was specific to automotive and food establishment businesses. Only five (5) businesses operating within the City of Del Mar did not fall into one of these two categories. These included three (3) animal facilities and one (1) waste management (recycling) site. These notification efforts will continue through Fiscal Year 2010-2011 and will be reported on in the next annual report.

During the Fiscal Year 2009-2010 reporting period, the City of Del Mar implemented it's Fats, Oils, and Grease (FOG) program, including modifications to the City's Municipal Code (DMMC Chapters 22.04 and 22.08). The regulations, applicable to food service establishments, limit the amount of fats, oils, and grease entering the private and public sewer system. This limitation, and inspection/enforcement

mechanism, directly affects stormwater discharges by preventing a leading cause of sewer system overflows. The modification of the Municipal Code was adopted by the City Council on July 13, 2010.

5.2.4.1 Inspections

The City performed an inspection of all businesses on the City's industrial and commercial inventory (e.g. one industrial facility and 39 commercial facilities). As discussed above, the City considers all of the businesses on the inventory to be a high TTWQ. Appendix 5-B has a summary of all of the inspections conducted during the Reporting Period.

All inspections conducted during Fiscal Year 2009-2010 addressed all of the required inspection steps to determine full compliance by utilizing the City's standard industrial/commercial inspection form.

During implementation of the inspection program, no businesses were found to be in violation of the City's Municipal Stormwater Ordinance, or the requirements of the Permit. Some businesses were given verbal warnings about potential violations, while others were provided with guidance for proper implementation of BMPs.

Under inspection procedures outlined in the 2008 JURMP, facilities may require follow-up inspections if they are found to be in violation of the City's Municipal Stormwater Ordinance for a BMP-related deficiency. Based on the results of the Fiscal Year 2009-2010 Industrial and Commercial Inspections, five (5) follow-up inspections for potential violations were recommended, and will be conducted during the Fiscal Year 2010-2011 reporting period.

5.2.4.2 Enforcement

The City's enforcement process is to perform a follow-up visit for those businesses found to be out of compliance during inspections. If after the follow-up visit, the business is still out of compliance, the City Code Enforcement is notified and upon a visit, if there is no evidence of compliance, a Notice of Violation (NOV) or citation is issued. Although five (5) businesses were noted as requiring follow-up inspections, during Fiscal Year 2009-2010 no NOVs were issued as a result of the City's inspection program. As noted above, follow-up inspections for these will be conducted during the Fiscal Year 2010-2011 Reporting Period.

In addition to inspection follow-ups, the City also receives complaints or initiates investigations based on staff's observations of stormwater violations. After reviewing the facts of the case, the Code Enforcement Officer or Clean Water Manager determines the level of violation (if any) and may issue an NOV and/or administrative citation as appropriate. The City has made it a policy that education is to play a significant role in the enforcement of stormwater regulations. In most cases, a verbal warning is all that is necessary, and compliance is achieved. However, in some instances, further enforcement action is required. At present, the City does not actively track contacts made with local businesses that result in verbal warnings only. However, during Fiscal Year 2009-2010, seven (7) investigated incidents involving commercial or industrial operations warranted formal NOV and/or issuance of Administrative Citations by the City. Table 5-1 below provides a detail of enforcement actions taken against commercial or industrial operations.

Table 5-1: Commercial/Industrial Activity Enforcement Action Summary

Date	Business	Address	Complaint	Action Taken
07/25/2009	Prudential Realty	1234 Camino del Mar	Common area hosed down by unknown building occupant	Administrative Citation and fine issued $100.00.
8/16/2010	Bully's North	1404 Camino del Mar	Hose-down of rear of restaurant/loading area – No BMPs implemented.	Administrative Citation and NOV issued with fine of $200.00
9/25/2010	Bully's North	1404 Camino del Mar	Discharge from irrigation system.	Second violation. Administrative Citation and NOV issued with fine of $100.00
11/7/2009	Zel's Del Mar	1247 Camino del Mar	Backup of kitchen grease trap, with overflow into parking lot.	NOV issued to new owners, with Clean-up and Abatement Order. No fine levied.
12/9/2009	Batter-Kaye	Vacant Lot on Corner of Jimmy Durante Blvd. and San Dieguito Drive	Sediment discharge from unimproved lot used as illegal parking area.	Administrative Citation and NOV issued with fine of $200.00. Owners secured site to prohibit future discharges, and installed appropriate BMPs.
4/16/2010	Robert Angelo Properties	944 10th Street	Sediment discharge to parking lot due to hillside failure.	NOV and Clean-up and Abatement Order issued. Owners repaired hillside and cleaned up parking lot prior to discharge event occurring from site. No further action warranted.
6/7/2010	Rusty's Del Mar	201 15th Street	Excessive irrigation/overflow from property due to failure to shut off hose	NOV issued after discussion with owners. No fine issued. No further action warranted.

5.3 Mobile Sources Element

5.3.1 Background

This section focuses on mobile business sources; those defined as businesses not having a stationary business location and their business activities are conducted at various locations throughout the City or in some cases, the region. Due to the nature of their activities, mobile businesses are regulated differently than other businesses.

5.3.2 Source Characterization

An inventory of known mobile businesses within the City's jurisdiction was compiled for Fiscal Year 2008-2009 and is included in the Fiscal Year 2008-2009 Annual Report. This inventory is based on the City's business license list. The current inventory lists over 590 mobile businesses operating within the City of Del Mar and, all are presently considered high TTWQ sources. During Fiscal Year 2009-2010, additional sources were added to the inventory. During Fiscal Year 2010-2011, the City will, based on staffing and funding availability, be reviewing this inventory to further refine the prioritization of these mobile businesses and address education and outreach opportunities for these mobile sources.

5.3.3 Best Management Practice Requirements

During the Reporting Period, the City did not make changes to its BMP requirements for the mobile businesses. The most important BMPs for most mobile businesses typically involve non-stormwater discharge control, and spill prevention, control, and cleanup. BMPs for all mobile businesses were required to be implemented in accordance with the 2008 JURMP and the Del Mar Municipal Code.

5.3.4 Program Implementation

During the Fiscal Year 2009-2010 Reporting Period, the City continued to provide notification to owners/operators of mobile business of the BMP requirements applicable to their businesses. New mobile businesses registering with the City for business licenses are required to meet briefly with the Clean Water Manager to discuss the BMP requirements for their businesses. During the Reporting Period, the Clean Water Manager met with ten (10) new mobile businesses owners/operators. During the Fiscal Year 2010-2011 Reporting Period, these practices will be expanded through the development of additional educational materials for mobile businesses. In addition, the City plans to conduct additional targeted outreach to licensed mobile businesses regarding BMP implementation for catering, power washing operations, and mobile auto detailing operations during Fiscal Year 2010-2011.

5.3.4.1 Enforcement

During the Fiscal Year 2009-2010 Reporting Period, the City investigated no public complaints involving mobile businesses. However, during routine patrols of the City by enforcement staff, one (1) mobile business was identified operating without appropriate BMPs and/or causing illegal discharge. Table 5-2 below includes the enforcement action for stormwater violations that was taken against this mobile business during the Fiscal Year 2009-2010 Reporting Period. Please note: Enforcement actions against mobile businesses related to construction operations, including concrete operations, and delivery of goods and materials, are included in Section 3.5.3 above (Construction Component), and are not duplicated here.

Table 5-2: Mobile Business Enforcement Action Summary

Date	Business	Violation Address	Complaint	Action Taken
5/24/2010	Rancho Encinitas Pools & Spas	524 Zuni	Discharge of diatomaceous earth and water from backwashing of pool filter. No business license or BMPs.	Administrative Citation and NOV issued along with Clean-up and Abatement Order. $200.00 fine levied for failure to implement appropriate BMPs and for illegal discharge. No further action warranted.

Appendix 5-A
Fiscal Year 2009-2010 Industrial and Commercial Facility Inventory for the City of Del Mar

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for reproduction purposes.

Facility Name	Address Number	Street Name	Zip Code	Hydrologic Area	SIC Code	Industrial / Commerical	Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	Threat to water quality	Industrial Permit	APN	GIS Mapping	
								Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash						
Americana	1454	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-04	117.260478	32.959406
Animal And Bird Hospital Of Del Mar (Freeflight)	2132	Camino del Mar	92014	905.11	742	Commercial	Animal and Bird Specialty Services	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	299-100-29	117.264064	32.970172
Board & Brew	1212	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-074-07	117.264631	32.956778
Bruegger's Bagels	1435	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-82	117.264856	32.959483
Bully's North	1404	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-24	117.265322	32.958647
Zel's Del Mar	1247	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-075-01	117.264242	32.957442
Café Secret	1140	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-092-06	117.264367	32.956122
Chinese Double Happiness	1011	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-410-29	117.263067	32.954683
Crepes & Corks Café	1328	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-17	117.265053	32.957989
Del Mar Automotive Services	2201	San Dieguito Dr.	92014	905.11	7538	Commercial	Automotive Services		Yes	Yes		Yes			Yes	Yes	No	Yes	No	299-100-34	117.261772	32.969722
Del Mar Farmer's Market	1050	Camino del Mar	92014	905.11	5411	Commercial	Grocery Store	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-092-03	117.264156	32.955047
Del Mar German Car Service	155	Carmel Valley Rd.	92014	906.11	7538	Commercial	Automotive Services		Yes	Yes		Yes			Yes	Yes	Yes	Yes	No	301-032-11	117.259189	32.939311
Del Mar Koi	1105	Camino del Mar	92014	905.11	5999	Commercial	Animal and Bird Specialty Services	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	300-401-10	117.263542	32.955672
Del Mar Liquor & Deli	1149	Camino del Mar	92014	905.11	5812	Commercial	Grocery Store/Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-400-28	117.263989	32.956333
Del Mar Pizza, Inc.	211	15th Street	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-30	117.266017	32.959453
Del Mar Plaza	1555	Camino del Mar	92014	905.11	7389	Commercial	Shopping Center	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	300-030-86	117.265078	32.960489
Del Mar Rendezvous	1555	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
Del Mar Snack Shack	1670	Coast Blvd.	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	299-230-29	117.268125	32.962039
En Fuego, Cantina & Grill	1342	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-20	117.265169	32.958272
Eucalyptus Stoneware	2201	San Dieguito Dr.	92014	905.11	3269	Industrial	Pottery Manufacturing			Yes			Yes		Yes	Yes	No	Yes	Yes	299-100-34	117.261978	32.969992
Harvest Ranch Market	1555	Camino del Mar	92014	905.11	5431	Commercial	Grocery Store	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
Il Fornaio Cucina Italiana/Enoteca del Fornaio	1555	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
Jake's Del Mar	1660	Coast Blvd.	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	299-230-03	117.268172	32.961903
Jimmy O's	225	15th Street	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	299-091-04	117.265789	32.959494
Kitchen 1540	1540	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	299-310-09	117.265908	32.960325
Sushi Japone	1101	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-401-10	117.263542	32.955672
Osteria Pescatore Inc.	1201	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-075-06	117.263911	32.956878
Pacifica Del Mar / Pacifica Breeze	1555	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
Rose Towing, Inc.	2201	San Dieguito Dr.	92014	905.11	7549	Commercial	Automotive Services		Yes	Yes		Yes			Yes	Yes	No	Yes	No	299-100-34	117.261772	32.969722
Sbicca American Bistro	215	15th Street	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-02	117.265839	32.959194
Seagrove Parking	1601	Coast Blvd.	92014	905.11	7521	Commercial	Automotive Services		Yes	Yes		Yes			Yes	Yes	No	Yes	No	299-230-10	117.267231	32.961722
Shimbashi Izakaya-Seasonal Japanese Tapas & Sake Bar	1555	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
Starbucks Coffee #526	1435	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-030-82	117.264856	32.959483
Stratford Court Café	1307	Stratford Court	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-12	117.265339	32.957558
Sunset Parking Services, LLC	1555	Camino del Mar	92014	905.11	7521	Commercial	Automotive Services		Yes	Yes		Yes			Yes	Yes	No	Yes	No	300-030-86	117.265111	32.960683
The Brigantine	3263	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	298-241-08	117.268814	32.979389
The Curry Comb	1212	Camino del Mar	92014	905.11	5812	Commercial	Animal and Bird Specialty Services	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-074-06	117.264356	32.956808
The Poseiden Restaurant	1670	Coast Blvd.	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	299-230-29	117.018125	32.962039
Waste Management Recycling	2201	San Dieguito Dr.	92014	905.11	5093	Commercial	Waste Removal		Yes	Yes					Yes	Yes	No	Yes	No	299-100-34	117.261939	32.969942
La Tienda Wine Shop	1342	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-012-20	117.265169	32.958272
Seaside Yogurt	1231	Camino del Mar	92014	905.11	5812	Commercial	Food Establishment	Yes	Yes		Yes	Yes	Yes		Yes	Yes	No	Yes	No	300-075-04	117.264306	32.957186

Changes from FY2009

Café del Mar	→Now "Zel's Del Mar"
Java Kai (plaza)	→Coming soon "Smash Burger
Matsugawa	→Now "Sushi Japone"
Yogo Yogurt	→Now "Seaside Yogurt"
Il Fornaio Cucina Italiano	→Now "Il Fornaio Cucina Italiano / Enoteca del Fornaio"

New

La Tienda Wine Shop

Removed

L'Auberge Del Mar (Room Service)

Hotels (Possible Future Inspections)

Best Western Stratford Inn	710 Camino del Mar
Del Mar Inn	720 Camino del Mar
Les Artistes Inn of Del Mar	944 Camino del Mar
Secret Inn	1040 Camino del Mar
L'Auberge Del Mar	1540 Camino del Mar
Del Mar Motel on the Beach	1702 Coast Blvd.

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Appendix 5-B
Summary of Fiscal Year 2009-2010 Commercial/Industrial Facility Inspections

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Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/1/2010			
Facility Name:	Il Fornaio Cucina Italiana		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Roberto Gerbino			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Grocery store. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/25/2010			
Facility Name:	Del Mar Liquor & Deli		Corrective Actions Required:	No
Address:	1149 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Ted Talia			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Grocery store. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/26/2010			
Facility Name:	Harvest Ranch Market		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Bill Pitineo			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/27/2010			
Facility Name:	Pacifica Del Mar / Pacifica Breeze		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Chris Idso			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/26/2010			
Facility Name:	Americana		Corrective Actions Required:	No
Address:	1454 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Randy Gruber			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/15/2010			
Facility Name:	Shimbashi Izakaya		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Bob Berry (Shimbashi LLC)			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. Previous facility name was Yogo Yogurt. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/15/2010			
Facility Name:	Seaside Yogurt		Corrective Actions Required:	No
Address:	1231 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Lee			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/18/2010			
Facility Name:	Chinese Double Happiness		Corrective Actions Required:	No
Address:	1011 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	De Gou Li			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Automotive repair services. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/18/2010			
Facility Name:	Del Mar Automotive		Corrective Actions Required:	No
Address:	2201 San Dieguito Dr			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Al Phillips			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Automotive repair services. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/25/2010			
Facility Name:	Del Mar German Car Service		Corrective Actions Required:	No
Address:	155 Carmel Valley Rd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Ray Duffy			
Hydrologic Area:	Penasquitos (906.10)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/ violations reported.	Enforcement Action:	None
Inspection Date:	3/25/2010			
Facility Name:	Del Mar Pizza, Inc		Corrective Actions Required:	No
Address:	211 15th Street			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Shaun Argent, Bob Fleet			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/1/2010			
Facility Name:	Del Mar Rendezvous		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Tony Su			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Automotive services. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/18/2010			
Facility Name:	Rose Towing		Corrective Actions Required:	No
Address:	2201 San Dieguito Rd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Stacey & Ali Dehbozorgi			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/25/2010			
Facility Name:	The Brigantine		Corrective Actions Required:	No
Address:	3263 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Matt Morton			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Veterinary clinic. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/26/2010			
Facility Name:	Animal & Bird Hospital of Del Mar		Corrective Actions Required:	No
Address:	2132 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Pam Stonebreaker			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/26/2010			
Facility Name:	Bruegger's Bagels		Corrective Actions Required:	No
Address:	1435 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Paul Abelowitz			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/25/2010			
Facility Name:	Bully's North		Corrective Actions Required:	No
Address:	1404 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Sharron Delmonico			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Parking structure. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/1/2010			
Facility Name:	Sunset Parking Services LLC		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Michael Harth			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/26/2010			
Facility Name:	Bruegger's Bagels		Corrective Actions Required:	No
Address:	1435 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Paul Abelowitz			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/25/2010			
Facility Name:	Bully's North		Corrective Actions Required:	No
Address:	1404 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Sharron Delmonico			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Parking structure. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/1/2010			
Facility Name:	Sunset Parking Services LLC		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Michael Harth			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued for lack of secondary containment and cover on recyclable grease container. Follow up inspection is required following corrective actions.	Enforcement Action:	Verbal
Inspection Date:	4/27/2010			
Facility Name:	Sbicca American Bistro		Corrective Actions Required:	Yes
Address:	215 15th Street			
Business Type:	Commercial		Corrective Action Description:	
			Secondary containment and recyclable grease container needs to be installed by program deadline.	
Contact:	Dan Sbicca			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2011
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Pet grooming establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/26/2010			
Facility Name:	The Curry Comb		Corrective Actions Required:	No
Address:	1212 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Cathy Wachter			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/26/2010			
Facility Name:	Jimmy O's		Corrective Actions Required:	No
Address:	225 15th Street			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Keith Nordling			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued to clean spills around grease container. Follow up inspection is required following corrective actions.	Enforcement Action:	Verbal
Inspection Date:	4/19/2010			
Facility Name:	En Fuego		Corrective Actions Required:	Yes
Address:	1342 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
			Facility will clean spills around grease container.	
Contact:	John Wingate			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2011
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/16/2010			
Facility Name:	Starbucks Coffee #526		Corrective Actions Required:	No
Address:	1435 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Kira Rigoni			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Marketplace. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/27/2010			
Facility Name:	Del Mar Farmer's Market		Corrective Actions Required:	No
Address:	1050 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Jacqueline Winterer			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/16/2010			
Facility Name:	Jake's Del Mar		Corrective Actions Required:	No
Address:	1660 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Perry Ustick			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Parking lot. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/23/2010			
Facility Name:	Seagrove Parking		Corrective Actions Required:	No
Address:	1601 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Allen King			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Shopping area. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/22/2010			
Facility Name:	Del Mar Plaza		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Amy Schroeder			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued for lack of secondary containment and cover on recyclable grease container. Follow up inspection is required following corrective actions.	Enforcement Action:	Verbal
Inspection Date:	4/27/2010			
Facility Name:	Sbicca American Bistro		Corrective Actions Required:	Yes
Address:	215 15th Street			
Business Type:	Commercial		Corrective Action Description:	
			Secondary containment and recyclable grease container needs to be installed by program deadline.	
Contact:	Dan Sbicca			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2011
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Pet grooming establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/26/2010			
Facility Name:	The Curry Comb		Corrective Actions Required:	No
Address:	1212 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Cathy Wachter			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/26/2010			
Facility Name:	Jimmy O's		Corrective Actions Required:	No
Address:	225 15th Street			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Keith Nordling			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued to clean spills around grease container. Follow up inspection is required following corrective actions.	Enforcement Action:	Verbal
Inspection Date:	4/19/2010			
Facility Name:	En Fuego		Corrective Actions Required:	Yes
Address:	1342 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
			Facility will clean spills around grease container.	
Contact:	John Wingate			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2011
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/16/2010			
Facility Name:	Starbucks Coffee #526		Corrective Actions Required:	No
Address:	1435 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Kira Rigoni			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Marketplace. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/27/2010			
Facility Name:	Del Mar Farmer's Market		Corrective Actions Required:	No
Address:	1050 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Jacqueline Winterer			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/16/2010			
Facility Name:	Jake's Del Mar		Corrective Actions Required:	No
Address:	1660 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Perry Ustick			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Parking lot. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/23/2010			
Facility Name:	Seagrove Parking		Corrective Actions Required:	No
Address:	1601 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Allen King			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Shopping area. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/22/2010			
Facility Name:	Del Mar Plaza		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Amy Schroeder			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Recycling operations. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/15/2010			
Facility Name:	Waste Management Recycling		Corrective Actions Required:	No
Address:	2201 San Dieguito Dr			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Stella Lopez			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/26/2010			
Facility Name:	Crepes & Corks Café		Corrective Actions Required:	No
Address:	1328 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Lana Blackwell			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued for lack of secondary containment and overhead cover on grease container. Follow up inspection required once necessary materials have been installed.	Enforcement Action:	Verbal
Inspection Date:	4/1/2010			
Facility Name:	Board & Brew		Corrective Actions Required:	Yes
Address:	1212 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
			Owner will obtain secondary containment and overhead cover from manufacturer and install as appropriate.	
Contact:	Ron, Tom Powers			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2011
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Animal & bird specialty services. No issues/violations reported. It is recommended that Del Mar Koi be removed from inspection list for next Fiscal Year.	Enforcement Action:	None
Inspection Date:	3/25/2010			
Facility Name:	Del Mar Koi		Corrective Actions Required:	No
Address:	1101 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Junie Young			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/22/2010			
Facility Name:	Kitchen 1540		Corrective Actions Required:	No
Address:	1540 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Raul Sandoval			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/2/2010			
Facility Name:	Café Secret		Corrective Actions Required:	No
Address:	1140 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Halper			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. Establishment closed in late April. New restaurant will be moving in. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/23/2010			
Facility Name:	Giorgio's Osteria del Pescatore		Corrective Actions Required:	No
Address:	1201 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Jorge A Vasquez Ramirez			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued for lack of secondary containment and to clean the grease off the area surrounding the grease collection container. Follow up inspection is required following corrective actions.	Enforcement Action:	Verbal
Inspection Date:	4/15/2010			
Facility Name:	The Poseidon Restaurant		Corrective Actions Required:	Yes
Address:	1670 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
			Facility will ask New Leaf to provide grease containment, and will clean the area surrounding the grease collection container.	
Contact:	Tom Ranglas			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2011
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued for lack of secondary containment and cover on grease container as well as the need for grease on the ground to be cleaned. Follow up inspection is required following corrective actions.	Enforcement Action:	Verbal
Inspection Date:	4/15/2010			
Facility Name:	Del Mar Snack Shack		Corrective Actions Required:	Yes
Address:	1670 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
			Facility will ask New Leaf to provide grease containment, and will clean the grease from the ground.	
Contact:	Tom Ranglas			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2011
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Stoneware manufacturer; industrial permit issued in 2002. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/25/2010			
Facility Name:	Eucalyptus Stoneware		Corrective Actions Required:	No
Address:	2201 San Dieguito Dr			
Business Type:	Industrial		Corrective Action Description:	
Contact:	Alison Young			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Hotel establishment. No issues/ violations reported.	Enforcement Action:	None
Inspection Date:	4/14/2010			
Facility Name:	Stratford Court Café		Corrective Actions Required:	No
Address:	1307 Stratford Court			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Gregg Sonken			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/ violations reported.	Enforcement Action:	None
Inspection Date:	4/1/2010			
Facility Name:	Sushi Japone		Corrective Actions Required:	No
Address:	1101 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Akira Konishi			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Business Inspections Summary Table
FY 2009-10

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. Part of En Fuego Restaurant. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/19/2010			
Facility Name:	La Tienda Wine Shop		Corrective Actions Required:	No
Address:	1342 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Wingate			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/ violations reported.	Enforcement Action:	None
Inspection Date:	4/1/2010			
Facility Name:	Zel's Del Mar		Corrective Actions Required:	No
Address:	1247 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Jennifer Powers			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Section 6
Residential Component

6.1 Introduction

Section 6 of this JURMP Annual Report provides information that the City of Del Mar determined is relevant to the implementation of the Residential Component for this Reporting Period. The program was developed with the intent to reduce residential discharges of pollutants to the MS4 to the maximum extent practical and prevent residential discharges to the MS4 from causing or contributing to an exceedance of water quality standards.

6.2 Source Characterization

Section 8.2 of the 2008 JURMP provided a list of residential areas and activities that were designated as a high threat to water quality (TTWQ). No modifications in Section 8.2 of the 2008 JURMP have been recorded during this Reporting Period.

6.3 Best Management Practice Requirements

Section 8.3 of the 2008 JURMP identifies updated BMP requirements for residential areas and activities, including pollution prevention methods to be encouraged, and provides a list of minimum BMPs that were required to be implemented when high TTWQ residential activities are conducted within the City of Del Mar. No modifications in Section 8.3 of the 2008 JURMP have been recorded during this Reporting Period. During Fiscal Year 2009-2010, the designated BMPs were required to be implemented for residential areas and activities.

6.4 Program Implementation

Section 8.4 of 2008 JURMP described the Residential education including the Regional Education Program and the local educational outreach program prepared by the City which incorporated the strategy and tools used by the City of Del Mar Clean Water Program staff to require and encourage residents to implement the designated minimum BMPs. No modifications in Section 8.4 of the 2008 JURMP have been recorded during this Reporting Period.

The City continues to implement and facilitate proper management and disposal of used oil and household hazardous materials as described in Section 8.4.3 of the 2008 JURMP. During this Reporting Period, the City's contractor, PSC Environmental Services, LLC, continued to provide, curbside pick-up and drop-off of household hazardous waste for City of Del Mar residents. Table 6-1 below provides a summary of the HHW collection for Fiscal Year 2009-2010 as compared to the three (3) previous reporting periods.

Table 6-1: Household Hazardous Waste Program Summary Table

Fiscal Year	Pick-up Service Users	Drop-off Service Users	Total Users	Total Weight of HHW Disposal	Waste Oil Disposal
Fiscal Year 2009-2010	43	17	60	6,686 lbs	15.9 gal
Fiscal Year 2008-2009	96	16	112	12,542 lbs	6.9 gal*
Fiscal Year 2007-2008	130	34	164	11,698 lbs	50 gal
Fiscal Year 2006-2007	104	31	135	12,845 lbs	ND

* The specific amount of waste oil collected was not tracked by the City's contractor. This number represents participation by residents in the program, and is estimated based on participation multiplied by the total amount collected.

The City of Del Mar also continued collaboration efforts with other Copermittees in the implementation of the Regional Residential Education Program during Fiscal Year 2009-2010. The City of Del Mar provides funds for the Regional Residential Education Program in collaboration with the other Copermittees primarily through cost-sharing contributions to support the program activities. A complete discussion of the Regional Education Program can be found in the Regional Urban Runoff Management Program, submitted to the Regional Board under separate cover.

6.5 Oversight of Residential Areas and Activities

During Fiscal Year 2009-2010 the City continued to utilize a combination of residential education, complaint investigation and code enforcement as methods for oversight of residential areas and activities as noted in the 2008 JURMP (Sections 8.3 and 8.4). The City evaluated the methods for oversight of residential areas and activities and deemed it complete and functional. Therefore, no changes were made or have been identified during this reporting period.

6.6 Enforcement Measures for Residential Areas and Activities

Section 8.5 of the 2008 JURMP provides a description of the general process for applying enforcement for residential areas and activities urban runoff related violations. No modifications in Section 8.5 of the 2008 JURMP were recorded during this Reporting Period.

All reports of alleged illegal discharges are investigated by the City, and appropriate is action taken. As indicated in Section 8.5 of the 2008 JURMP, education plays a significant role in the enforcement of stormwater regulations as it relates to residential activities. During the Reporting Period, 55 calls were received by the Clean Water Manager's Office regarding alleged illegal discharges from residential activities, not related to construction activities. The majority of these calls related to allowable discharges from foundation drains and other residential activities allowed under Section B.2 of the Municipal Permit and allowed under the City's Stormwater Management and Discharge Control Ordinance (Chapter 11.30 of the Del Mar Municipal Code). However, three (3) of these calls resulted in the issuance of Notices of Violation (NOVs), Written Warnings, or Administrative Citations to residents as a result of substantial over-irrigation or other illegal activities. The remainder of the calls resulted in no further action after investigation, or a verbal warning issued. Table 6-2 below contains a summary of the residential complaints received, not related to construction operations, during this Reporting Period. Please note:

enforcement actions related to Construction Activities in residential areas are documented in Section 3 of this Annual Report and are not duplicated here.

Table 6-2: Residential Area Enforcement Action Summary

Date	Residential Address	Complaint	Action Taken
7/28/2009	415 Stratford Court	Irrigation runoff due to hose being left on for more than two hours.	Repeat offense. Written Warning and NOV issued. Administrative penalties of $200.00 levied.
08/06/2009	1151 Lunetta	Resident seen hosing down driveway and allowing runoff to enter MS4.	Warning issued to resident, with subsequent written NOV. Clean Water Manager met with resident after incident to explain program and requirements. No further action was warranted, and no fines were levied.
08/13/2009	415 Stratford Court	Discharge from over-Irrigation	Third offense. Written Warning and NOV issued, with fines of $400.00 levied. Discussions with property owner regarding resident held, and action was taken by owner to insure that discharges would stop. No further action warranted.

6.7 Notable Activities

This section describes the notable activities conducted to manage urban runoff from residential areas and activities by the City. During this Reporting Period the City of Del Mar began working on coordinated outreach related to emergency water conservation activities with stormwater requirements. During Fiscal Year 2009-2010, staff from the Del Mar Public Works Department and Clean Water Program jointly conducted outreach, including public workshops to the residents of Del Mar, to fully inform them of the requirements for water conservation and to prevent discharges, including low-flow or drip irrigation, metering, etc. During July 2010, a workshop on water conservation was sponsored by the City of Del Mar and was attended by more than 60 residents. Included in the workshop was lengthy discussions relating to irrigation runoff and its impact on water quality. The workshop was also videotaped and aired on the City's local cable channel as part of the City's on-going education and outreach efforts.

6.8 Residential Component Effectiveness Assessment

A complete assessment of the effectiveness of the City's implementation of its 2008 JURMP, including the Residential Component, is included as Chapter 11 of this Annual Report.

6.9 Program Review and Modification

No modifications were made to the Residential Component of the 2008 JURMP during this Reporting Period.

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Section 7
Illicit Discharge Detection and Elimination Component

This section of the Annual Report would describe all the notable activities conducted to manage illicit discharges and connections. In accordance with requirements of Addendum No. 2 to Order R9-2007-0001, which was adopted by the Regional Board on September 10, 2008, the City of Del Mar will submit the entire Fiscal Year 2009-2010 Illicit Discharge Detection and Elimination (IDDE) Component and its attachments no later than December 15, 2010.

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Section 8
Education Component

This section provides a description of education efforts conducted by the City for each target audience to satisfy the requirements under Section J.3.a.(3)(g) of the Permit.

8.1 Introduction

Section D.5 and J.3.a(g) of the Permit identifies a comprehensive educational program designed to measurably increase awareness within target audiences with respect to urban runoff, its impacts on receiving waters, and the rules and regulations under local, State, and federal law. The City of Del Mar's 2008 JURMP outlined a reporting format that varies slightly from standardized regional format. The reason for the difference in the reporting format is the intent for this section to be consistent with the specified order of general and specific education requirements for the various target audiences in the Permit. As a built-out coastal community, with extremely limited number of industrial dischargers, the focus of education in the City of Del Mar is on the residential sector, food establishments, construction and redevelopment, and mobile businesses ("service by vehicle"). A description of education efforts conducted during the reporting period for each target community is provided below.

8.2 Staff Training Element

Education efforts were conducted for municipal departments and personnel. Section 10.3 of the 2008 JURMP described content, form and frequency of education efforts to be conducted with municipal departments and personnel as required under Permit section J.3.a.(3)(g)iii.. No modifications in Section 10.3 of the 2008 JURMP have been recorded during this Reporting Period. However, the City is presently reviewing the training requirements as outlined in the 2008 JURMP and may make modifications during Fiscal Year 2010-2011.

During the Reporting Period, 100% of all staff received some training on stormwater topics, including specific training focused on Permit requirements. To accomplish this, educational handouts/pamphlets were distributed to staff along with their biweekly paychecks, in addition to the face-to-face training opportunities. The City of Del Mar held one (1) focused training sessions to educate field staff on job-specific stormwater principals and requirements, including the required "pre-wet season" training for construction inspections held for planning and code enforcement staff. 100% of the staff from the Planning and Community Development Department, the Code Enforcement Division, and the City Engineer's Office attended these trainings. The Clean Water Manager also hosted a workshop on the revised SUSMP requirements which was attended by staff from Planning and Community Development, Engineering, and Public Works.

As an ongoing part of staff training, the Clean Water Manager regularly attended the weekly Planning and Community Service Department Staff Meetings, where he provided feedback on project-specific stormwater issues and gave staff direction on JURMP and SUSMP implementation. In addition, the Clean Water Manager regularly attended the City's weekly Executive Team Meetings to ensure that Departmental and City Management were kept abreast of issues related to program implementation. Lastly, the Clean Water Manager informally met with the City's Park Ranger, Community Service Officer(s), Code Enforcement Officer, and Code Enforcement Technician on a regular basis to provide clarification of stormwater BMP requirements under the Permit and the City's Stormwater Management and Discharge Control Ordinance. As part of the City's procedures for hiring of full-time/permanent staff,

all new employees view and discuss the City's "Clean Water Video." Developed in April 2008, this 12 minute video, entitled "The Del Mar Clean Water Program: Keeping the Water Clean for You!" highlights the municipal programs conducted by the City, and provides a complete overview of the Permit elements.

Lastly, public meetings and forums were utilized to ensure that the elected members of the City Council were educated on specific permit requirements and program elements they would encounter as part of the discretionary review and public hearing processes. Table 8-1, below provides a list of municipal staff trainings conducted during the Reporting Period.

Table 8-1: Staff Education and Training Summary

Date.	How Conducted	Conducted By	Education Topic	Attendees
09/29/2009	Planning and Community Development Staff Training Session	Clean Water Manager	Overview of JURMP Construction Inspection Requirements ("Wet Season""	Departmental Staff & Line Management
3/16/2010	Staff Workshop/Training Session	Clean Water Manager	Discussion on New SUSMP Requirements and Development of SUSMP Forms	Department Staff & Line Management – Planning and Engineering
06/18/2010	Paystub Insert	Clean Water Manager	Overview of Field Requirements for Operations – "Clean Water Begins With You!"	City Wide
Weekly	Planning and Community Development Weekly Staff Meeting Discussions	Clean Water Manager	Project Specific Stormwater Discussion	Departmental Staff & Management
Weekly	Executive Meeting Discussions	Clean Water Manager	Misc. Program Issues Relating to Stormwater	Executive and Departmental Management
Ongoing	In-service/Field Training	Clean Water Manager	Stormwater Enforcement Issues	Community Service Officer(s); Park Ranger; Code Enforcement Officer; Code Enforcement Technician
Ongoing	On-Demand Webcast	Clean Water Manager (Via Webcast)	Overview of City's Clean Water Program and the Municipal Permit Requirements	All New Hires - Permanent

8.3 Educational Outreach Element

This section describes education efforts conducted for each target community by the City of Del Mar. Section 10.4 of the 2008 JURMP described the program which aimed at educating project applicants, developers, contractors, property owners, community planning groups, and other responsible parties. No modifications in Section 10.4 of the 2008 JURMP have been recorded during this Reporting Period.

8.3.1 Media Use in Outreach Activities

The City of Del Mar developed a 12 minute video in April 2008 in an effort to reach and educate a wide audience about the Clean Water Program and regulatory requirements. This video, entitled "The Del Mar Clean Water Program: Keeping the Water Clean for You!" highlights the municipal programs conducted by the City, and provides a complete overview of the Permit elements. The video continues to remain

available "on-demand" on the City of Del Mar website (www.delmar.ca.us/cleanwater.htm), and was made into DVD's for distribution to public groups, residents, and schools. In addition, the video has been used for discussions at City Council Meetings and during staff training. During the Reporting Period, the Clean Water Video was reviewed more than 258 times via the City's Website. In addition, the City distributed 20 copies of the DVD to community groups and other jurisdictions. Table 8.3-1 below provides a breakdown by month on the number of times the video was viewed on the City's website during the Fiscal Year 2009-2010 Reporting Period.

Table 8-2: Clean Water Video Webcast Summary

Month	Number of Views
Jul-09	12
Aug-09	17
Sep-09	25
Oct-09	17
Nov-09	18
Dec-09	18
Jan-10	29
Feb-10	28
Mar-10	34
Apr-10	16
May-10	27
Jun-10	17
TOTAL VIEWS	**258**

Another ongoing effort the City conducted to try to reach a wide audience includes the live broadcast of all public workshops and hearings related to the City's Clean Water Program on Del Mar Television (DMTV). The public workshops and hearings are then replayed the next day in a standard timeslot. DMTV can be viewed on Time Warner Public Access Channel 24 within the 92014 zip code, and reaches approximately 2,000 subscribers in this area. Recently DMTV was made available to North County Time Warner Digital Cable customers, where it can now be viewed through Digital Cable on Time Warner Channel 130, which reaches approximately 65,000 subscribers. In addition, DMTV is streamed live 24 hours per day, 7 days per week on the DMTV website: www.delmartv.com. During Fiscal Year 2009-2010, both the Clean Water Program Workshop held in May 2008 and the "Being Waterwise" Water Conservation Workshop held in July 2009, were rebroadcast numerous times to ensure the public was adequately informed about the program and its responsibilities. Table 8-3 below provides a listing of all broadcasts of workshops related to the Clean Water Program.

Table 8-3: Fiscal Year 2009-2010 Public Workshop & Hearing Broadcast Summary

Date	Event Type	Presenter	Topic	Public Involvement Mechanism
7/13/2009	City Council Hearing	Staff	Modification of DMMC 22.04/22.08 for Fats, Oils, and Grease Controls at Food Establishments	Noticed Public Hearing
7/14/2009	Replay: City Council Hearing of 7/13/2009	Staff	Modification of DMMC 22.04/22.08 for Fats, Oils, and Grease Controls at Food Establishments	Rebroadcast of Noticed Public Hearing
7/15/2009	Replay: City Council Hearing of 7/13/2009	Staff	Modification of DMMC 22.04/22.08 for Fats, Oils, and Grease Controls at Food Establishments	Rebroadcast of Noticed Public Hearing
7/25/2009	Being Waterwise: Del Mar Water Conservation Workshop	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Noticed Public Workshop and Forum
7/27/2009	City Council Hearing	Staff and Citizen's Advisory Committee Chair/Vice Chair	Ad Hoc Water Conservation Citizens' Advisory Committee Progress Report; Amendment of DMMC to prevent fishing, diving, swimming in upper San Dieguito Lagoon.	Noticed Public Hearing
7/28/2009	Replay: City Council Hearing of 7/17/2009	Staff and Citizen's Advisory Committee Chair/Vice Chair	Ad Hoc Water Conservation Citizens' Advisory Committee Progress Report; Amendment of DMMC to prevent fishing, diving, swimming in upper San Dieguito Lagoon.	Rebroadcast of Noticed Public Hearing
7/29/2009	Replay: City Council Hearing of 7/17/2009	Staff and Citizen's Advisory Committee Chair/Vice Chair	Ad Hoc Water Conservation Citizens' Advisory Committee Progress Report; Amendment of DMMC to prevent fishing, diving, swimming in upper San Dieguito Lagoon.	Rebroadcast of Noticed Public Hearing
9/2/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/3/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/4/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/5/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/6/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum

Date	Event Type	Presenter	Topic	Public Involvement Mechanism
9/9/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/10/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/11/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/12/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/13/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/16/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/17/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/18/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/19/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/20/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/23/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum

Date	Event Type	Presenter	Topic	Public Involvement Mechanism
9/24/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/25/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/26/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
9/27/09	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/2/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/4/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/5/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/9/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/11/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/12/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/16/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum

Date	Event Type	Presenter	Topic	Public Involvement Mechanism
10/18/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/19/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/23/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/25/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/26/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
10/30/2009	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
12/7/2009	City Council Hearing	Staff	Los Peñasquitos Lagoon TMDL Presentation and MOU Approval	Noticed Public Hearing
12/8/2009	Replay: City Council Hearing of 12/7/2009	Staff	Los Peñasquitos Lagoon TMDL Presentation and MOU Approval	Rebroadcast of Noticed Public Hearing
12/9/2009	Replay: City Council Hearing of 12/7/2009	Staff	Los Peñasquitos Lagoon TMDL Presentation and MOU Approval	Rebroadcast of Noticed Public Hearing
1/6/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
1/7/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
1/13/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
1/14/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum

Date	Event Type	Presenter	Topic	Public Involvement Mechanism
1/20/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
1/21/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
1/27/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
1/28/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
4/5/2010	City Council Hearing	Staff and Citizen's Advisory Committee Chair/Vice Chair	Report on Del Mar Greenway (SB1177) – Creating buffer for San Dieguito Lagoon and River; Annual Report from Lagoon Committee	Noticed Public Hearing
4/6/2010	Replay: City Council Hearing of 4/5/2010	Staff and Citizen's Advisory Committee Chair/Vice Chair	Report on Del Mar Greenway (SB1177) – Creating buffer for San Dieguito Lagoon and River; Annual Report from Lagoon Committee	Rebroadcast of Noticed Public Hearing
4/7/2010	Replay: City Council Hearing of 4/5/2010	Staff and Citizen's Advisory Committee Chair/Vice Chair	Report on Del Mar Greenway (SB1177) – Creating buffer for San Dieguito Lagoon and River; Annual Report from Lagoon Committee	Rebroadcast of Noticed Public Hearing
4/19/10	City Council Hearing	Clean Water Manager and City Engineer	Modifications to the City's Stormwater Management and Discharge Control Ordinance; Report from the Water Conservation Citizen's Advisory Committee; Modifications to the Regional Copermittee MOU relating.	Noticed Public Hearing
4/20/10	Replay: City Council Hearing of 4/19/2010	Clean Water Manager and City Engineer	Modifications to the City's Stormwater Management and Discharge Control Ordinance; Report from the Water Conservation Citizen's Advisory Committee; Modifications to the Regional Copermittee MOU relating.	Rebroadcast of Noticed Public Hearing
4/21/10	Replay: City Council Hearing of 4/19/2010	Clean Water Manager and City Engineer	Modifications to the City's Stormwater Management and Discharge Control Ordinance; Report from the Water Conservation Citizen's Advisory Committee; Modifications to the Regional Copermittee MOU relating.	Rebroadcast of Noticed Public Hearing
5/3/2010	City Council Hearing	Staff and Citizen's Advisory Committee Chair/Vice Chair	Modifications to DMMC 11.30 (Stormwater Management and Discharge Control) codifying New Regional Board Requirements; Report of Water Conservation Committee	Noticed Public Hearing

Date	Event Type	Presenter	Topic	Public Involvement Mechanism
5/4/2010	Replay: City Council Hearing of 5/3/2010	Staff and Citizen's Advisory Committee Chair/Vice Chair	Modifications to DMMC 11.30 (Stormwater Management and Discharge Control) codifying New Regional Board Requirements; Report of Water Conservation Committee	Rebroadcast of Noticed Public Hearing
5/5/2010	Replay: City Council Hearing of 5/3/2010	Staff and Citizen's Advisory Committee Chair/Vice Chair	Modifications to DMMC 11.30 (Stormwater Management and Discharge Control) codifying New Regional Board Requirements; Report of Water Conservation Committee	Rebroadcast of Noticed Public Hearing
5/17/2010	City Council Hearing	Staff	Second Reading of DMMC 11.30 Modifications; Disbanding of Water Conservation Advisory Committee; Grant Funding authorization for vector and water quality grants	Noticed Public Hearing
5/18/2010	Replay: City Council Hearing of 5/17/2010	Staff	Second Reading of DMMC 11.30 Modifications; Disbanding of Water Conservation Advisory Committee; Grant Funding authorization for vector and water quality grants	Rebroadcast of Noticed Public Hearing
5/19/2010	Replay: City Council Hearing of 5/17/2010	Staff	Second Reading of DMMC 11.30 Modifications; Disbanding of Water Conservation Advisory Committee; Grant Funding authorization for vector and water quality grants	Rebroadcast of Noticed Public Hearing
6/4/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
6/6/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
6/11/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
6/13/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
6/14/2010	City Council Hearing	Staff	Ongoing discussion of SB1177 (Del Mar Greenway) creating a water quality buffer for the San Dieguito Lagoon and River	Noticed Public Hearing
6/15/2010	Replay: City Council Hearing of 6/14/2010	Staff	Ongoing discussion of SB1177 (Del Mar Greenway) creating a water quality buffer for the San Dieguito Lagoon and River	Rebroadcast of Noticed Public Hearing
6/16/2010	Replay: City Council Hearing of 6/14/2010	Staff	Ongoing discussion of SB1177 (Del Mar Greenway) creating a water quality buffer for the San Dieguito Lagoon and River	Rebroadcast of Noticed Public Hearing

Date	Event Type	Presenter	Topic	Public Involvement Mechanism
6/18/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
6/20/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
6/25/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum
6/27/10	Replay: Being Waterwise: Del Mar Water Conservation Workshop (Original Workshop 7/25/2009)	Professional Speakers and Staff	Water Efficient Landscaping, including ways to prevent stormwater runoff	Rebroadcast of Noticed Public Workshop and Forum

In addition to the televised and webcast workshops and hearings, DMTV regularly broadcasts public service announcements (PSAs) related to stormwater. Shorter PSAs, including ThinkBlue San Diego PSA's produced by the City of San Diego are aired in-between scheduled programs an average of 2-3 times per day, 365 days per year. In addition Del Mar TV Productions has created several PSAs which began airing in Fiscal Year 2009-2010. Table 8-4 below provides a summary of the PSAs aired during Fiscal Year 2009-2010 on Del Mar TV.

Table 8-4: Fiscal Year 2009-2010 Clean Water PSA Summary

Program or PSA	Source	Number of Airings
City of Del Mar's Clean Water Program: Keeping the Water Clean for You!	Del Mar Clean Water Program	17
Help Keep Del Mar Clean: Ocean and Beaches	Del Mar TV Production	20
Caring for our Valuable Oceans	Del Mar TV Production	18
Clean Water Tip and Information Cards	DMTV Community Bulletin Board	Airs daily every 5 minutes between 12pm-3pm & 12am-9am
ThinkBlue San Diego! (Various)	City of San Diego Stormwater Program	Airs daily 2-3 times per day

8.3.2 Additional Educational Outreach by Target Audience

As indicated above, the City of Del Mar made a concerted effort to reach out to the residents and the general public regarding the Clean Water program through media and public workshops. Table 8-5 below provides a summary description of the education efforts conducted to reach target audiences including the general public, residents, school children and commercial and mobile business owners and operators.

Table 8-5: Educational and Outreach Efforts by Target Audience

Date.	Activity	Conducted By	Education Topic	Target Audience
5/2/2010	Outreach Booth: Fiesta de Los Peñasquitos	Staff and Regional Copermittees	General Watershed and Stormwater Information	General Public, Residents, and School-aged Children
6/19/2010	Outreach Booth: San Diego County EnviroFair Flower and Garden Pavilion	Staff and Regional Copermittees	General Watershed and Stormwater Information	General Public, Residents, and School-aged Children
March – April 2009	Outreach as Part of Commercial Inspections	Staff and Consultants	Commercial Specific BMPs and Regulations	"High Risk" Commercial Operators
Ongoing	Outreach to Mobile Businesses	Staff	Mobile Business Specific BMPs and Regulations	"High Risk" Commercial Operators – Mobile

8.4 Outreach Component Effectiveness Assessment

A complete assessment of the effectiveness of the City's implementation of its 2008 JURMP, including the Education Component, is included as Chapter 11 of this Annual Report.

8.5 Program Review and Modification

Section 10.11 of 2008 JURMP described proposed or required modifications to the program after each annual assessment of the Education Component's effectiveness. While no specific modifications in Section 10.11 of the 2008 JURMP have been recorded during this Reporting Period, staff has identified several areas for specific education and outreach focus for the upcoming Fiscal Year 2010-2011, based on a review of program activities conducted during this Reporting Period, the extent of which will be dependent on funding and staff availability. Details on the implementation of these items will be discussed in the following Annual Report. Table 8-6 below contains a list of focused education and outreach identified for Fiscal Year 2010/2011.

Table 8-6: Focused Outreach by Target Audience for Fiscal Year 2010-2011

Targeted Audience	Format of Outreach	Education Topic
Commercial Businesses: Mobile Operators	Continued Direct One-on-One Training of City-licensed mobile operators, with distribution of written materials and guidance	JURMP and Focused BMP Requirements for Mobile Businesses
Commercial Business: Restaurants	Public workshops and one-on-one staff training for local restaurateurs in cooperation with Del Mar Village Association (DMVA)	Requirements for Restaurants, including staff training and documentation
Residential Community	Public Workshops and Flyers/Bill Inserts	Water conservation and its effect on water quality pollution (i.e. adjusting irrigation sprays, use of hose to clean impermeable surfaces, etc.)

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Section 9
Public Participation Component

This section of the JURMP Annual Report provides a description of public participation efforts conducted by the City, and the steps that were conducted to include public participation in the implementation of City of Del Mar's JURMP.

9.1 Local Participation Element

During Fiscal Year 2009-2010 the City continued to encourage and provide multiple opportunities for, public participation in all aspects of its Clean Water Program.

9.1.1 General Public Feedback Mechanisms

The City continues to maintain an active website (www.delmar.ca.us) which provides the public with opportunities to contact City staff directly, and find information regarding any of the City's programs. The Clean Water Program has its own webpage that is updated as needed (http://www.delmar.ca.us/Government/dept/Pages/CleanWater.aspx) and allows the public to contact the Clean Water Manager and Code Enforcement Officer to report potential violations of the City's Stormwater Management and Discharge Control Ordinance (Section 11.30 of the Del Mar Municipal Code). The webpage also allows the public to ask questions regarding water use and runoff, and download information on the City's JURMP, and contains links to the Citizen's Complaint Form, the City's various BMP Manuals, the City's Clean Water video, and the Regional Board's website and the Permit itself.

The City also continues to maintain a specific e-mailbox and hotline for reporting issues. This email address (CleanWater@delmar.ca.us) and hotline (858) 755-9313 x172 are directly answered by the City's Clean Water Manager. Every attempt is made to respond to any inquiry by the close of the next business day. When inquiries are made from areas within the 92014 zip code, but outside the City's jurisdiction (i.e. the "Del Mar Heights" portion of the City of San Diego), City of Del Mar staff attempt to respond to the complaint directly, and notify City of San Diego staff for follow-up.

The City continues to provide opportunities for the general public to become involved with the implementation of the JURMP, by working with the community in reducing pollutant discharge through recycling opportunities, eliminating off-site drainage, and other activities aimed at protecting water quality through the reduction of water waste.

9.1.2 Formal Public Hearings and Workshops

The general public is given the opportunity to provide testimony and provide feedback on issues related to the Clean Water Program at regular meetings and workshops held by the Del Mar City Council, the Del Mar Planning Commission, and other City Committees. This can include public testimony on development planning and capital improvement projects relating to the project-specific implementation of stormwater controls. All testimony, concerns, and input are then referred to staff for review, comment, and action as appropriate.

During the Fiscal Year 2009-2010 Reporting Period, the Del Mar City Council held 30 public meetings (including public workshops) in which the general public was given the opportunity to provide feedback on the Clean Water Program, or on any topics they wished to bring before the elected officials of the City.

During the Reporting Period, there were sixteen (16) specific agenda items relating to the Clean Water Program and/or the implementation of the JURMP, not including development project-specific items. To reach the widest audience possible, these hearings and workshops are streamed live over the internet, broadcast live on DelMarTV (Time Warner Cable Channels 19 & 24), replayed in their entirety the two days following the hearing on DelMarTV, and available on-demand through the City's website. Table 8-3 in the previous chapter includes a list of broadcast dates of the hearings during the Reporting Period. Table 9-1 below provides a list of the specific City Council Agenda items relating to the Clean Water Program, JURMP, or other water quality related issues for the Fiscal Year 2009-2010 Reporting Period.

Table 9-1: Fiscal Year 2009-2010 Del Mar City Council Agenda Items Relating to the Clean Water Program

Hearing Date	Agenda Item	Subject
7/13/2009	Item 09	Second Reading and Adoption of an Ordinance amending Chapters 22.04 and 22.08 of the Del Mar Municipal Code establishing Fats, Oils and Grease Control Regulations
7/13/2009	Item 12	Professional Engineering Services Contracts to provide City Engineering and As-Needed Engineering Services, including water quality support services.
7/27/2009	Item 13	Ad-Hoc Water Conservation Citizens' Advisory Committee Progress Report by Committee Secretary Rick Ehrenfeld
12/7/2009	Item 08	Los Peñasquitos Lagoon Total Maximum Daily Load (TMDL) Development Project Memorandum of Understanding (MOU).
4/5/2010	Item 08	Approval of the City of Del Mar Sanitary Sewer Management Plan
4/5/2010	Item 18	Direction to Council Representatives and Staff regarding Senator Kehoe's proposed Senate Bill 1177 – Del Mar Greenway designed to place a water quality protection buffer along the San Dieguito Lagoon (Crawford/Hilliard).
4/19/2010	Item 02	Presentation of recommendations by the Ad Hoc Water Conservation Citizens' Advisory Committee on the implementation of the State Model Water Efficient Landscape Ordinance by the City of Del Mar.
4/19/2010	Item 09	Resolution to Approve the First Amendment to the 2007 National Pollutant Discharge Elimination System San Diego Regional Stormwater Copermittees Memorandum of Understanding (MOU), dated March 18, 2010.
4/19/2010	Item 12	An Ordinance amending Del Mar Municipal Code (DMMC) Chapter 11.30 relating to Stormwater Management and Discharge Control to comply with the requirements of the San Diego Regional Water Quality Control Board Order R9-2007-0001.
5/3/2010	Item 07	Second Reading and Adoption of an changes to the Stormwater Management and Discharge Control Ordinance.
5/17/2010	Item 12	Resolution disbanding the Ad Hoc Water Conservation Citizens' Advisory Committee (Hilliard/Mosier) [Continued from May 3, 2010]
6/14/2010	Item 13	Discussion of Amended Senate Bill 1177 (Kehoe) Del Mar Greenway (Crawford/Hilliard).

In November 2008, the Del Mar City Council established the Ad-Hoc Citizen's Water Conservation Citizen's Advisory Committee, staffed by the City's Clean Water Manager. The Committee was tasked specifically with the review of the City's ordinances relating to water conservation and landscape planning. This includes reviewing the City's Stormwater Management and Discharge Control Ordinance. The Committee met biweekly, beginning in March 2009, and is actively looking at issues such as resident education and outreach with regard to overwatering and irrigation runoff, and water conservation techniques which will have a direct impact on urban runoff. Recommendations from the Advisory Committee were presented to Council and included several revisions to the Del Mar Municipal Code

which address irrigation runoff prevention beyond the requirements of the Municipal Permit and current Stormwater Management and Discharge Control Ordinances. Staff has been directed to implement as many of their recommendations as feasible, and bring the modifications to the Municipal Code back to Council in Fiscal Year 2010-2011.

9.1.3 Staff as Feedback Mechanism

As indicated in the 2008 JURMP, the City of Del Mar believes that City staff are the public at work. More importantly, field staff are the eyes and ears of the City, interacting with the general public during their day-to-day work. Staff is continually encouraged to report violations and provide feedback to the City's Clean Water Manager on the implementation of the JURMP, and can provide valuable information on which systems and programs are working and suggestions on improving the programs. Often, it is field staff that identifies potential issues and/or violations and reports them to the Clean Water Manager, enabling program staff to address it in a prompt manner. During Fiscal Year 2009-2010 the City continued to utilize and encourage staff feedback and reporting of potential violations, with more than 2 dozen reports coming to the Clean Water Manager from field staff during the Reporting Period.

9.2 Regional Participation Element

The City continues to participate and facilitate public participation through regional workgroups and public outreach such as Project Clean Water, the Regional Management Meetings, and the Regional Stormwater Hotline. Staff from the City utilized the Regional Hotline on at least four (4) separate occasions during this Reporting Period to provide information to the City of San Diego on stormwater runoff in the MS4 system outside of the City of Del Mar's jurisdictional boundaries. In addition, the City regularly refers callers from the "Del Mar Heights" portion of the City of San Diego and other areas within the 92014 zip code, but outside of the City of Del Mar jurisdictional boundaries, to the regional stormwater hotlines. In addition, when City of Del Mar residents use the Regional Stormwater Hotline to report problems or ask questions, City of San Diego and County of San Diego staff manning the hotlines are able to promptly refer the issues to the Clean Water Manager for follow-up.

9.3 Program Review and Modification

No modifications in Section 11 of the 2008 JURMP were recorded during the Fiscal Year 2008-2009 Reporting Period.

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Section 10
Fiscal Analysis Component

Section 12 of 2008 JURMP provided a strategy for effectively conducting a fiscal analysis of the Program in its entirety. The fiscal analysis strategy in the 2008 JURMP included the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities of the Program. No modifications in Section 12 of the 2008 JURMP were made during this Reporting Period.

On January 29, 2009, the San Diego Municipal Copermittees adopted the "Standardized Fiscal Method and Format" which provides a model for the City of Del Mar and other Copermittees to perform the review and annual reporting as required in Order R9-2007-0001, Section G. This methodology and reporting format became effective in January 31, 2010. The "Standardized Fiscal Analysis Method and Format" (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k) and J.1.c(1)(d) of the Permit. The Fiscal Analysis Method document was submitted to the San Diego RWQCB on January 31, 2009, as Attachment 1 of the "Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009."

As required, the City of Del Mar is utilizing the format and guidelines described in the Fiscal Analysis Method for this reporting period. This section of the Annual Report provides a fiscal analysis of the City's urban runoff management programs which meets all requirements of the Permit.

10.1 General Budget Information

10.1.1 Clean Water Program Budget

The City of Del Mar Clean Water Program is a multi-departmental program, funded as an enterprise fund in the City's Annual Budget. Enterprise funds account for operations that are financed and operated in a manner similar to private businesses, with the costs of providing the services recovered largely through user fees. Fund 55 ("The Clean Water Fund"), is one of three (3) enterprise funds in the City's budget, and was added to the City's budget in Fiscal Year 2003-2004 to account for the mandated costs of the City's responsibilities Municipal Permit.

The City of Del Mar Operating and Capital Improvement Budgets for Fiscal Year 2009-2010 and Fiscal Year 2010-2011 were presented to the Del Mar City Council in a series of public workshops held in May and June 2009, and was adopted by the City Council at a public hearing held on June 22, 2009. Appendix 10-A presents the Final Adopted budgets for Fiscal Year 2009-2010 & Fiscal Year 2010-2011.

For the Fiscal Year 2009-2010 Reporting Period, the final amended budget for Fund 55 totaled $471,141.00, or approximately 4.1% of the total City of Del Mar budget for General Operations and Maintenance of $11.4 million. Table 10-1 below provides a breakdown of program budget by major budget category for Fiscal Year 2009-2010. Actual program expenditures during Fiscal Year 2009-2010 totaled $429,083.00 for NPDES related-activities. Appendix 10-B contains a complete report of the final adjusted budget and expenditures for Fiscal Year 2009-2010.

Table 10-1: Budget Summary – Clean Water Fund 55

Fund Account		Adopted Budget Fiscal Year 2009-2010	Description/Comments
55-5220	Clean Water Engineering	$82,200	Engineering contractual services including: Program management (Fiscal Year 2008) water quality testing, development and distribution of educational materials, fees to agencies (Fiscal Year 2008), and engineering services.
55-5530	Clean Water Planning	$30,303	Active enforcement of Clean water regulations including project plan review, permitting, construction monitoring and plan review of BMPs.
55-5536	Clean Water Code Enforcement	$29,657	Active in-field enforcement clean water regulations, including response to resident complaints
55-5539	Clean Water Program Management	$196,050	Beginning mid-year Fiscal Year 2008, all program management and reporting activities, fees to agencies, and interaction with regional Copermittee groups.
55-5840	Public Works (General)	$16,527	Provides for administration and general support for all clean water programs for property and facilities, including supervision of maintenance staff.
55-5841	Flood Control & Drainage	$4,351	Provides for necessary monitoring, water quality testing, and labor associated with program requirements when Flood Control pumps are operated.
55-5845	Street Maintenance	$85,851	Provides for a portion of sidewalk and street cleaning including street sweeping and storm drain maintenance within the City limits of Del Mar. Also covers costs with testing, recording contents, and recovering all deposited materials that otherwise would discharge to the beach, river, or lagoon.
55-5847	Street Landscaping	$18,258	Provides for landscape supervision, documentation, and controls for the Clean Water aspects of the street landscaping for medians, islands, street ends, and other street related areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting.
55-5848	Park Maintenance	$12,944	Provides for park maintenance supervision, documentation, and controls for the Clean Water aspects of the landscaping for parks and open space areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting.
Total Clean Water Program Budget – Fund 55		$476,141	

10.2 Fiscal Analysis Methods

The City of Del Mar utilized the format and guidelines included in the Fiscal Analysis Method for reporting purposes; however, given the City's financial accounting methods, a few modifications were necessary. These adjustments are described below.

10.3 Fiscal Analysis Results

The City's Fiscal Year 2009-2010 jurisdictional (JURMP), watershed, (WURMP), and regional (RURMP) projected expenditures and actual expenditures for the implementation of the Municipal Permit requirements are summarized in Table 10-2 below.

10.3.1 JURMP Expenditures

The City of Del Mar utilized the expenditure categories detailed in the Fiscal Analysis Method for jurisdictional reporting. However, due to the implementation overlap of some of the City's municipal permit components; it is difficult to separate out individual component costs. As a result, the expenditures for residential, education, and public participation are reported as one expenditure category. Additionally, since the City does not explicitly track expenditures by municipal permit component for its budgeting purposes, in many cases estimated percentages were utilized to allocate expenditures into the appropriate municipal permit component categories.

A total of $388,062 was projected to be expended in Fiscal Year 2009-2010 for the implementation of JURMP activities, and a total of $352,041 was actually expended in Fiscal Year 2009-2010. An overview of the expenditures reflected in JURMP activity components is described below.

10.3.1.1 Administration

Activities identified in this component represent labor and non-labor expenditures for materials, supplies, equipment, or tools that are not otherwise incorporated into other expenditure categories, general administrative functions (e.g., program planning, budgeting, staff supervision), and program assessment and reporting

10.3.1.2 Development Planning

Activities identified in this component represent labor and non-labor expenditures related to issuance or oversight of permits or of plans (e.g., permit counter support, plan checks, permit or application processing), project planning and engineering (e.g. project design specifications, capital improvement projects).

10.3.1.3 Construction

Activities identified in this component represent labor and non-labor expenditures related to construction site inspections and enforcement.

10.3.1.4 Municipal

Activities identified in this component represent labor and non-labor expenditures related to maintenance inspections of streets, roads, catch basins and inlets, open channels, and the MS4, municipal facility inspections, street and parking lot sweeping, catch basins and inlets, open channels, and MS4 cleaning, and municipal BMP implementation. Since the City of Del Mar conducts all fire fighting training outside of the City, and no non-emergency fire fighting flows occurred during the Reporting Period, the City does

not currently track expenditures relating non-emergency fire fighting flows. Any costs associated with preparing for these flows are included in the municipal component.

Table 10-2: Fiscal Year 2009-2010 Expenditure Summary by Program Component

Component Description	Fiscal Year 2009-2010 Projected Expenditures	Fiscal Year 2009-2010 Actual Expenditures
Jurisdictional Component		
Administration	69,073	49,153
Development Planning	45,104	43,320
Construction	13,332	15,357
Municipal (Including Non-Emergency Fire Flows)	129,396	122,370
Industrial and Commercial	17,901	14,759
Residential, Education, and Public Participation	45,556	38,476
IDDE	76,702	68,635
Jurisdictional Total	**388,062**	**352,041**
Watershed Component		
San Dieguito Watershed	30,602	28,729
Los Peñasquitos Watershed	32,452	25,176
Watershed Total	**63,054**	**53,904**
Regional Component		
Total Copermittee Cost Share for Del Mar	19,065	16,534
Additional Regional Costs	5,960	6,604
Regional Total	**25,025**	**23,138**
Total Costs	**$476,141**	**$429,083**

10.3.1.5 Industrial and Commercial

Activities identified in this component represent labor and non-labor expenditures related to evaluation and enforcement of program requirements at industrial and commercial sites or sources (e.g. routine inspections and complaint investigations).

10.3.1.6 Residential, Education, and Public Participation

Activities identified in these components represent labor and non-labor expenditures related to investigation and enforcement of residential areas or activities, staffing outreach events, development and production of outreach materials, and any expenditures associated with waste collection and recycling (e.g. HHW, used oil).

10.3.1.7 Illicit Discharge Detection and Elimination

Activities identified in this component represent labor and non-labor expenditures related to the identification and elimination of illicit discharges or connections, enforcing the City of Del Mar's storm water ordinance, and any expenditures related to monitoring programs (e.g. Dry weather monitoring, coastal storm drain monitoring, special investigations, field or sampling equipment, materials and supplies).

10.3.2 WURMP Expenditures

The City of Del Mar utilized the expenditure categories (administration, watershed activities, cost share contribution, and other) detailed in the Fiscal Analysis Method for watershed reporting. The watershed expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees included in the watershed(s).

A total of $63,054 was projected to be expended in Fiscal Year 2009-2010 for the implementation of WURMP activities, and a total of $53,904 was actually expended in Fiscal Year 2009-2010. The amounts also include costs for the implementation of applicable TMDLs (Los Peñasquitos Lagoon Sediment TMDL development), which are considered Special Studies.

10.3.3 RURMP Expenditures

The City of Del Mar utilized the expenditure categories (administration, cost share contribution, regional activities, and other) detailed in the Fiscal Analysis Method for regional reporting. The regional expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees in the region. A total of $25,025 was projected to be expended in Fiscal Year 2009-2010 for the implementation of RURMP activities, and a total of $23,138 was actually expended.

10.4 Funding Sources

To ensure adequate funding for the Clean Water Program, the City uses a combination of user fees, grant funding, and general fund monies. This section identifies the three (3) sources of funding for the Clean Water Program: (1) The Clean Water Service Charge; (2) City of Del Mar General Fund; and (3) grant monies and community partnerships, and provides a discussion of each of these funding sources.

10.4.1 Clean Water Service Charge

In 2003, the City of Del Mar City Council created and adopted a user fee, called the Clean Water Service Charge, to offset the costs of the program. Initially, the rate was adopted to collect $100,000.00 of the estimated $300,000.00 for the program, with an escalator to achieve full cost recovery by 2009. Mid-way through the five-year schedule, on July 24, 2006, the California Supreme Court published a decision in the case of Bighorn-Desert View Water Agency v. Verjil (2006) 39 Cal. 4th 205, which held that consumption-based rates such as water and sewer rates are subject to the notice and hearing

requirements of California Constitution, Article XIIID, Section 6 (commonly known as "Proposition 218"). Therefore, on January 22, 2007 and February 5, 2007, the Del Mar City Council held public hearings to receive written protests to comply with Proposition 218. No majority protest was received; and the Council ratified the previously approved five-year rate schedule, including the City's Clean Water Service Charge. However, the adopted rate increases did not account for the actual increases in the costs associated program requirements.

As an additional measure to obtain voter approval of the five-year rate schedule for the City's Clean Water Service Charge, the Council directed staff on April 2, 2007 to start the process to perform a mail ballot election procedure. During the process of researching the mail ballot election procedures and the current rates, it became apparent that the process would immediately need to be repeated to set the Fiscal Year 2009-2010 rates and charges, since the current five-year rate schedule was due to expire in June of 2009. Due to the additional costs incurred in complying with the new requirements of the 2007 Permit, increases to the Clean Water Service Charge were proposed, including an annual 5% rate escalator. All monies appropriated as part of the Clean Water Service Charge are directly identified for the Clean Water Program, and pursuant to law, may not be used by the City for any other purpose.

During the Fiscal Year 2008-2009 Reporting Period, in compliance with Proposition 218, both the majority protest hearing and mail ballot process were conducted for the proposed increases. Both the ratification of the existing rate structure (required by Proposition 218), and the new rates, including the rate escalator, passed by more than 62%. As a result of the passage of the Clean Water Service Charge, the City will continue to have a secure funding source for the Clean Water Program, outside of general fund monies. Based on current water allocations for the City of Del Mar, the projected revenues from the Clean Water Service Fee will be $471,068.89 in Fiscal Year 2010-2011.

10.4.2 General Fund Monies

The City of Del Mar General Fund accounts for all the revenues received by the City that are not designated for a specific purpose either by the City Council, State or Federal requirements, or special requirements such as those associated with bond debt. The City monitors the General Fund dollars most closely because these revenues fund the backbone of City government. The major sources of General Fund revenues include property tax, sales tax, transient occupancy tax, and parking fees and fines.

During Fiscal Year 2009-2010, $38,431, or approximately 11% of the overall program expenditures was funded out of General Fund monies. This is a significant reduction from previous years. It is the hope of the City that the Clean Water Service Fee collected is sufficient to cover all costs associated with the program, and that General Fund monies may be freed up for other services, including special projects. However, the City is committed to ensuring that the necessary funds to meet all permit requirements is available, should the Clean Water Service Fee not cover all costs of the program.

10.4.3 Grant Monies and Community Partnerships

In an attempt to find alternatives to the use of General Fund monies to fund the Clean Water Program, the City of Del Mar continues to look for appropriate grants from the State of California and the Federal Government to assist in funding program elements and special projects. As part of the California Beverage Container Recycling and Litter Reduction Act, the California Department of Conservation (DOC) distributes a portion of the California Refund Value (CRV) monies collected on sales of aluminum, glass, plastic and bi-metal beverage containers to jurisdictions to assist in programs aimed at beverage container recycling and litter cleanup activities. Incorporated cities and counties and unincorporated counties in California, as identified by the California Department of Finance, are eligible to receive funding under this program, with funding amounts dependent on population.

As with previous years, for Fiscal Year 2009-2010, the City applied for, and received, a DOC grant for $5,000 under this program (the maximum amount the City was eligible for). These funds were earmarked for litter and beach cleanup activities, and used to providing doggie cleanup bags ("mutt mitt stations") at various locations throughout the city's parks and beaches. In addition, a portion of the funds were used to maintain/purchase a beach cleaner to help reduce any litter going into the ocean and the storm drain system. However, due to the State's budget crisis, payment of these grant monies was held up, and not distributed until June 2010. As such, these revenues were not available for Fiscal Year 2009-2010, and are included in the Fiscal Year 2010-2011 budget. Moreover, the DOC has not renewed the program for Fiscal Year 2010-2011, and the future of the program is uncertain at this time. The City will continue to monitor this grant opportunity, and should it become available, will apply as it has in the past. In the interim, the City will continue to use budgeted program monies to cover this shortfall.

In addition to grant monies, the City of Del Mar is actively developing community partnerships with community groups and non-profit organizations to identify private funding sources and assistance to offset costs of implementing special projects and education/outreach activities as part of the program. The City will continue this strategy in an effort to fund projects and opportunities which arise outside of the normal permit-required activities that have a direct benefit on water quality.

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Appendix 10-A
Budget and Expenditures for Fiscal Year 2009-2010
City of Del Mar Clean Water Fund (Fund 55)

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Expenditure Status Report

City of Del Mar

7/1/2009 through 6/30/2010

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5220	ENGINEERING SERVICES						
5220.3200	CONTRACTUAL SERVICES	10,500.00	9,476.95	9,476.95	0.00	1,023.05	90.26
5220.3210	CITY ENGINEER	71,700.00	56,181.21	56,181.21	0.00	15,518.79	78.36
Total	ENGINEERING SERVICES	82,200.00	65,658.16	65,658.16	0.00	16,541.84	79.88
5530	PLANNING						
5530.1000	SALARIES . PERMANENT	13,144.00	13,140.42	13,140.42	0.00	3.58	99.97
5530.1200	EE BENEFITS	4,584.00	4,514.72	4,514.72	0.00	69.28	98.49
5530.1205	WORKERS COMPENSATION	95.00	95.20	95.20	0.00	-0.20	100.21
5530.1400	OVERTIME	0.00	0.00	0.00	0.00	0.00	0.00
5530.2300	OPERATING SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00
5530.3200	CONTRACTUAL SERVICES	12,480.00	12,477.60	12,477.60	0.00	2.40	99.98
5530.3700	MEMBERSHIPS/SUBSCRIPTIONS	0.00	0.00	0.00	0.00	0.00	0.00
5530.3800	MEETINGS/TRAVEL	0.00	0.00	0.00	0.00	0.00	0.00
5530.3801	TRAINING & EDUCATION	0.00	0.00	0.00	0.00	0.00	0.00
Total	PLANNING	30,303.00	30,227.94	30,227.94	0.00	75.06	99.75
5536	CODE ENFORCEMENT						
5536.1000	SALARIES . PERMANENT	15,241.00	13,818.15	13,818.15	0.00	1,422.85	90.66
5536.1200	EE BENEFITS	6,521.00	5,451.24	5,451.24	0.00	1,069.76	83.60
5536.1205	WORKERS COMPENSATION	395.00	315.97	315.97	0.00	79.03	79.99
5536.1310	PART TIME PLANNING	6,800.00	4,150.59	4,150.59	0.00	2,649.41	61.04
5536.1400	OVERTIME	0.00	0.00	0.00	0.00	0.00	0.00
5536.2131	VEHICLE MATERIALS/SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00
5536.2800	GAS & OIL	0.00	0.00	0.00	0.00	0.00	0.00
5536.3200	CONTRACTUAL SERVICES	0.00	0.00	0.00	0.00	0.00	0.00
5536.3801	TRAINING & EDUCATION	700.00	349.00	349.00	0.00	351.00	49.86
Total	CODE ENFORCEMENT	29,657.00	24,084.95	24,084.95	0.00	5,572.05	81.21
5539	CLEAN WATER MANAGEMENT						
5539.1000	SALARIES . PERMANENT	111,916.00	106,665.87	106,665.87	0.00	5,250.13	95.31
5539.1200	EE BENEFITS	35,170.00	32,252.34	32,252.34	0.00	2,917.66	91.70

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5539.1205	WORKERS COMPENSATION	924.00	885.44	885.44	0.00	38.56	95.83
5539.2131	VEHICLE MATERIALS/SUPPLIES	0.00	0.00	0.00	0.00	0.00	0.00
5539.2300	OPERATING SUPPLIES	500.00	81.54	81.54	0.00	418.46	16.31
5539.2800	GAS & OIL	0.00	0.00	0.00	0.00	0.00	0.00
5539.3000	ADVERTISING, PRINTING & PUB	2,600.00	257.90	257.90	0.00	2,342.10	9.92
5539.3200	CONTRACTUAL SERVICES	18,500.00	14,698.75	14,698.75	0.00	3,801.25	79.45
5539.3205	INVESTMENT FEES	0.00	0.00	0.00	0.00	0.00	0.00
5539.3700	MEMBERSHIPS/SUBSCRIPTIONS	225.00	225.00	225.00	0.00	0.00	100.00
5539.3800	MEETINGS/TRAVEL	400.00	91.18	91.18	0.00	308.82	22.80
5539.3801	TRAINING & EDUCATION	500.00	349.00	349.00	0.00	151.00	69.80
5539.4800	ASSESSMENTS	25,315.00	22,241.92	22,241.92	0.00	3,073.08	87.86
Total	CLEAN WATER MANAGEMENT	196,050.00	177,748.94	177,748.94	0.00	18,301.06	90.67
5840	PW.GENL & ADMIN						
5840.1000	SALARIES . PERMANENT	10,307.00	11,739.18	11,739.18	0.00	-1,432.18	113.90
5840.1200	EE BENEFITS	3,536.00	3,379.70	3,379.70	0.00	156.30	95.58
5840.1205	WORKERS COMPENSATION	93.00	91.89	91.89	0.00	1.11	98.81
5840.1400	OVERTIME	10.00	0.00	0.00	0.00	10.00	0.00
5840.1803	OUTSIDE CLERICAL	0.00	0.00	0.00	0.00	0.00	0.00
5840.2000	BUILDING MAINTENANCE/REPAIR	25.00	0.00	0.00	0.00	25.00	0.00
5840.2100	EQUIPMENT MAINTENANCE/REPAIR	12.00	29.28	29.28	0.00	-17.28	244.00
5840.2131	VEHICLE MATERIALS/SUPPLIES	32.00	17.10	17.10	0.00	14.90	53.44
5840.2133	VEHICLE CONTRACTUAL SERVICES	80.00	94.26	94.26	0.00	-14.26	117.83
5840.2140	COMPUTER MAINTENANCE	0.00	0.00	0.00	0.00	0.00	0.00
5840.2300	OPERATING SUPPLIES	120.00	269.25	269.25	0.05	-149.30	224.42
5840.2400	UNIFORMS	18.00	10.85	10.85	4.61	2.54	85.89
5840.2600	SMALL TOOLS & EQUIPMENT	59.00	21.27	21.27	0.00	37.73	36.05
5840.2800	GAS & OIL	200.00	207.96	207.96	0.00	-7.96	103.98
5840.3000	ADVERTISING, PRINTING & PUB	6.00	0.00	0.00	0.00	6.00	0.00
5840.3200	CONTRACTUAL SERVICES	1,746.00	1,496.44	1,496.44	0.00	249.56	85.71
5840.3205	INVESTMENT FEES	0.00	3.17	3.17	0.00	-3.17	0.00
5840.3300	UTILITIES	85.00	91.65	91.65	0.00	-6.65	107.82
5840.3400	TELEPHONE	60.00	58.38	58.38	0.00	1.62	97.30
5840.3600	PROPERTY/EQUIPMENT RENTAL	20.00	16.36	16.36	0.00	3.64	81.80

Expenditure Status Report

City of Del Mar

7/1/2009 through 6/30/2010

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5840.3700	MEMBERSHIPS/SUBSCRIPTIONS	7.00	17.00	17.00	0.00	-10.00	242.86
5840.3800	MEETINGS/TRAVEL	10.00	0.95	0.95	0.00	9.05	9.50
5840.3801	TRAINING & EDUCATION	5.00	3.10	3.10	0.00	1.90	62.00
5840.3900	AUTO ALLOWANCE	96.00	96.00	96.00	0.00	0.00	100.00
5840.4950	BAD DEBT	0.00	344.29	344.29	0.00	-344.29	0.00
5840.5500	VEHICLES	0.00	0.00	0.00	0.00	0.00	0.00
5840.5800	DEPRECIATION	0.00	2,266.95	2,266.95	0.00	-2,266.95	0.00
Total	PW.GENL & ADMIN	16,527.00	20,255.03	20,255.03	4.66	-3,732.69	122.59
5841	FLOOD CONTROL/DRAINAGE						
5841.1000	SALARIES . PERMANENT	2,599.00	2,550.41	2,550.41	0.00	48.59	98.13
5841.1200	EE BENEFITS	1,069.00	1,016.14	1,016.14	0.00	52.86	95.06
5841.1205	WORKERS COMPENSATION	55.00	56.47	56.47	0.00	-1.47	102.67
5841.1400	OVERTIME	15.00	0.00	0.00	0.00	15.00	0.00
5841.2300	OPERATING SUPPLIES	100.00	226.58	226.58	0.00	-126.58	226.58
5841.2400	UNIFORMS	20.00	18.09	18.09	11.04	-9.13	145.65
5841.3200	CONTRACTUAL SERVICES	493.00	77.75	77.75	0.00	415.25	15.77
Total	FLOOD CONTROL/DRAINAGE	4,351.00	3,945.44	3,945.44	11.04	394.52	90.93
5845	STREET MAINTENANCE						
5845.1000	SALARIES . PERMANENT	43,069.00	42,890.07	42,890.07	0.00	178.93	99.58
5845.1200	EE BENEFITS	17,484.00	17,078.70	17,078.70	0.00	405.30	97.68
5845.1205	WORKERS COMPENSATION	933.00	952.77	952.77	0.00	-19.77	102.12
5845.1300	SALARIES . SEASONAL	0.00	0.00	0.00	0.00	0.00	0.00
5845.1400	OVERTIME	1,729.00	209.53	209.53	0.00	1,519.47	12.12
5845.2000	BUILDING MAINTENANCE/REPAIR	50.00	0.00	0.00	0.00	50.00	0.00
5845.2100	EQUIPMENT MAINTENANCE/REPAIR	300.00	366.92	366.92	0.00	-66.92	122.31
5845.2131	VEHICLE MATERIALS/SUPPLIES	4,893.00	2,348.72	2,348.72	0.00	2,544.28	48.00
5845.2133	VEHICLE CONTRACTUAL SERVICES	2,700.00	1,292.10	1,292.10	0.00	1,407.90	47.86
5845.2300	OPERATING SUPPLIES	2,323.00	3,692.28	3,692.28	0.63	-1,369.91	158.97
5845.2400	UNIFORMS	665.00	570.82	570.82	121.26	-27.08	104.07
5845.2600	SMALL TOOLS & EQUIPMENT	792.00	265.62	265.62	0.00	526.38	33.54
5845.2800	GAS & OIL	4,000.00	2,599.62	2,599.62	0.00	1,400.38	64.99
5845.3000	ADVERTISING, PRINTING & PUB	100.00	0.00	0.00	0.00	100.00	0.00

Expenditure Status Report

City of Del Mar

7/1/2009 through 6/30/2010

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5845.3200	CONTRACTUAL SERVICES	4,772.00	5,189.02	5,189.02	0.00	-417.02	108.74
5845.3300	UTILITIES	1,267.00	959.62	959.62	0.00	307.38	75.74
5845.3400	TELEPHONE	300.00	329.56	329.56	0.00	-29.56	109.85
5845.3700	MEMBERSHIPS/SUBSCRIPTIONS	74.00	101.97	101.97	0.00	-27.97	137.80
5845.3800	MEETINGS/TRAVEL	200.00	29.13	29.13	0.00	170.87	14.57
5845.3801	TRAINING & EDUCATION	200.00	27.51	27.51	0.00	172.49	13.76
5845.5500	VEHICLES	0.00	0.00	0.00	0.00	0.00	0.00
Total	STREET MAINTENANCE	85,851.00	78,903.96	78,903.96	121.89	6,825.15	92.05
5847	STREET LANDSCAPING						
5847.1000	SALARIES . PERMANENT	5,239.00	5,236.46	5,236.46	0.00	2.54	99.95
5847.1200	EE BENEFITS	2,149.00	2,117.07	2,117.07	0.00	31.93	98.51
5847.1205	WORKERS COMPENSATION	112.00	116.10	116.10	0.00	-4.10	103.66
5847.1400	OVERTIME	150.00	0.00	0.00	0.00	150.00	0.00
5847.2100	EQUIPMENT MAINTENANCE/REPAIR	20.00	0.00	0.00	0.00	20.00	0.00
5847.2200	GENERAL MAINTENANCE/REPAIR	100.00	0.00	0.00	0.00	100.00	0.00
5847.2300	OPERATING SUPPLIES	80.00	9.30	9.30	0.00	70.70	11.63
5847.2400	UNIFORMS	30.00	50.82	50.82	13.24	-34.06	213.53
5847.2600	SMALL TOOLS & EQUIPMENT	10.00	0.00	0.00	0.00	10.00	0.00
5847.3200	CONTRACTUAL SERVICES	6,640.00	5,743.81	5,743.81	0.00	896.19	86.50
5847.3300	UTILITIES	3,635.00	3,424.83	3,424.83	0.00	210.17	94.22
5847.3600	PROPERTY/EQUIPMENT RENTAL	93.00	0.00	0.00	0.00	93.00	0.00
Total	STREET LANDSCAPING	18,258.00	16,698.39	16,698.39	13.24	1,546.37	91.53
5848	PARK MAINTENANCE						
5848.1000	SALARIES . PERMANENT	1,040.00	1,020.19	1,020.19	0.00	19.81	98.10
5848.1010	COMPENSATED ABSENCES	0.00	0.00	0.00	0.00	0.00	0.00
5848.1200	EE BENEFITS	429.00	406.61	406.61	0.00	22.39	94.78
5848.1205	WORKERS COMPENSATION	23.00	22.55	22.55	0.00	0.45	98.04
5848.1400	OVERTIME	103.00	0.00	0.00	0.00	103.00	0.00
5848.2200	GENERAL MAINTENANCE/REPAIR	200.00	43.53	43.53	0.00	156.47	21.77
5848.2300	OPERATING SUPPLIES	165.00	189.82	189.82	0.00	-24.82	115.04
5848.2400	UNIFORMS	12.00	7.19	7.19	3.34	1.47	87.75
5848.3200	CONTRACTUAL SERVICES	8,288.00	7,889.01	7,889.01	0.00	398.99	95.19

Expenditure Status Report

City of Del Mar

7/1/2009 through 6/30/2010

55 CLEAN WATER

Account Number		Adjusted Appropriation	Expenditures	Year-to-date Expenditures	Year-to-date Encumbrances	Balance	Prct Used
5848.3300	UTILITIES	2,684.00	2,270.71	2,270.71	0.00	413.29	84.60
Total	PARK MAINTENANCE	12,944.00	11,849.61	11,849.61	3.34	1,091.05	91.57
5890	NON-DEPARTMENTAL						
5890.3205	INVESTMENT FEES	0.00	0.00	0.00	0.00	0.00	0.00
5890.5997	EQUIPMENT REPLACEMENT	0.00	2,603.55	2,603.55	0.00	-2,603.55	0.00
5890.5999	CAPITALIZED EXPENDITURES	0.00	-2,603.55	-2,603.55	0.00	2,603.55	0.00
Total	NON-DEPARTMENTAL	0.00	0.00	0.00	0.00	0.00	0.00
5999	TRANSFERS OUT						
5999.5908	TRANSFER OUT EXPENDITURE	0.00	0.00	0.00	0.00	0.00	0.00
Total	TRANSFERS OUT	0.00	0.00	0.00	0.00	0.00	0.00
Total	CLEAN WATER	476,141.00	429,372.42	429,372.42	154.17	46,614.41	90.21
	Grand Total	476,141.00	429,372.42	429,372.42	154.17	46,614.41	90.21

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Appendix 10-B
Final Adopted Budget for Fiscal Years 2009-2010 & 2010-2011
City of Del Mar Clean Water Fund (Fund 55)

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PROGRAM: CLEAN WATER ENGINEERING — ACCT #55-5220

This program provides technical assistance to the Clean Water Program in compliance with the San Diego Regional Water Quality Control Board Municipal Stormwater Permit. Engineering contractual services include costs for preparation of annual reports, water quality testing, education and outreach, and engineering services. These services are administered under contract with outside firms.

	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
Employee Services	$0	$0	$0	$0	$0
Maintenance & Operations	0	0	0	0	0
Contractual Services	185,677	289,461	85,500	82,200	82,200 (1)
Debt Service	0	0	0	0	0
Capital Outlay	0	0	0	0	0
GRAND TOTAL	**$185,677**	**$289,461**	**$85,500**	**$82,200**	**$82,200**
POSITIONS (FTE)	**0**	**0**	**0**	**0**	**0**

(1) Increased costs for implementation of this State and federally-mandated stormwater program evolved over the requirements of the 2001 Permit. As a result, in Fiscal Year 2007-2008, the City hired a full-time Clean Water Manager to take over general administration and day-to-day activities for the Clean Water Program. Because of the scope of the program requirements, outside consultants are still utilized for their technical expertise in monitoring and assessment, and to assist on an as-needed basis. These costs also include laboratory fees and costs associated with the monitoring program required under the Municipal Permit.

PROGRAM: CLEAN WATER PLANNING — ACCT #55-5530

The Planning Department assists in the active enforcement of the Clean Water regulations as per the Municipal Stormwater Permit issued by the Regional Water Quality Control Board. Responsibilities include project and plan review, permitting, construction monitoring, and implementation of best management practices.

	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
Employee Services	$18,359	$27,992	$37,533	$17,822	$31,752 (1)
Maintenance & Operations	0	0	0	0	0
Contractual Services	0	0	0	7,800	0
Debt Service	0	0	0	0	0
Capital Outlay	0	0	0	0	0
GRAND TOTAL	**$18,359**	**$27,992**	**$37,533**	**$25,622**	**$31,752**
POSITIONS (FTE)	**0.25**	**0.25**	**0.25**	**0.16**	**0.24** (1)

(1) For purposes of review of projects and permitting and construction monitoring, eight percent of the Planning Director's time and four percent of the time for five planning staff are charged to this account.

PROGRAM: CLEAN WATER CODE ENFORCEMENT — ACCT # 55-5536

Active code enforcement is required as part of the Clean Water regulations under the Municipal Stormwater Permit issued by the San Diego Regional Water Quality Control Board. The City's Code Enforcement Officer and Code Enforcement Technician assist the Clean Water Manager in this regard.

	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
Employee Services	$23,513	$7,971	$25,794	$28,958	$29,815 (1)
Maintenance & Operations	0	0	150	700	150
Contractual Services	0	0	5,040	0	0
Debt Service	0	0	0	0	0
Capital Outlay	0	0	0	0	0
GRAND TOTAL	**$23,513**	**$7,971**	**$30,984**	**$29,658**	**$29,965**
POSITIONS (FTE)	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**

(1) 25 percent of the City's full-time code enforcement officer and 40 percent of the part-time code enforcement technician/clerk are charged to this program to comply with the requirements for active code enforcement.

PROGRAM: CLEAN WATER PROGRAM MANAGEMENT — ACCT #55-5539

In Fiscal Year 2007-2008, the City hired a full-time Clean Water Manager to take over general administration and day-to-day activities for the Clean Water Program. Because of the scope of the program requirements, outside consultants are still utilized for their technical expertise on an as-needed basis. Management costs include fees to agencies, development and distribution of educational materials, and general compliance activities with the Municipal Stormwater Permit.

	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011	
Employee Services	$0	$59,997	$150,467	$148,011	$150,124	(1)
Maintenance & Operations	0	1,090	$2,690	$38,840	$27,840	(2)
Contractual Services	0	5,410	$43,085	$9,200	$12,500	(3)
Debt Service	0	0	0	0	0	
Capital Outlay	0	0	0	0	0	
GRAND TOTAL	**$0**	**$66,497**	**$196,242**	**$196,051**	**$190,464**	
POSITIONS (FTE)	**0.00**	**1.00**	**1.00**	**1.00**	**1.00**	

(1) 100 percent of the City's full-time Clean Water Manager is charged to this account.

(2) Maintenance and Operations fees include assessments from outside agencies, including the State of California, permit fees, in addition to general operational costs.

(3) Contractual service costs under program management include programmatic implementation contracts which are not a part of engineering services. These costs include implementation programs required under the Watershed Urban Runoff Management Program and special studies.

PROGRAM: CLEAN WATER PUBLIC WORKS — ACCT #55-5840

Provides administration and general support for all Clean Water programs for property and building. Also provides for supervision of maintenance staff as it relates to the program and administers associated contracts.

	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
Employee Services	$10,478	$10,702	$11,090	$13,946	$14,176
Maintenance & Operations	2,874	2,650	1,043	835	835
Contractual Services	1,735	1,298	1,648	1,746	1,790
Debt Service	0	0	0	0	0
Capital Outlay	0	34	330	0	0
GRAND TOTAL	**$15,087**	**$14,684**	**$14,111**	**$16,527**	**$16,801**
POSITIONS (FTE)	**0.10**	**0.10**	**0.10**	**0.12**	**0.12**

PROGRAM: CLEAN WATER FLOOD CONTROL — ACCT #55-5841

This program provides the needed monitoring, water quality testing, and labor associated with the Clean Water (NPDES) program requirements when the Flood Control pumps are in operation.

	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
Employee Services	3,676	3,576	3,959	3,738	3,867
Maintenance & Operations	471	243	562	120	124
Contractual Services	275	412	464	493	506
Debt Service	0	0	0	0	0
Capital Outlay	0	0	0	0	0
GRAND TOTAL	**$4,422**	**$4,231**	**$4,985**	**$4,351**	**$4,497**
POSITIONS (FTE)	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**

PROGRAM: CLEAN WATER STREET MAINTENANCE — ACCT #55-5845

This program provides for a portion of the sidewalk and street cleaning including street sweeping and storm drain maintenance within the City limits of Del Mar. Special activities include testing, recording contents and recovering all deposited materials that otherwise would discharge to the beach, river, or lagoon.

	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011	
Employee Services	$61,659	$60,998	$64,492	$63,216	$65,429	
Maintenance & Operations	18,410	15,225	22,648	17,864	18,236	
Contractual Services	6,801	8,258	9,289	620	1,000	(1)
Debt Service	0	0	0	0	0	
Capital Outlay	0	422	3,744	0	0	
GRAND TOTAL	**$86,870**	**$84,903**	**$100,173**	**$81,700**	**$84,665**	
POSITIONS (FTE)	**0.80**	**0.80**	**0.80**	**0.80**	**0.80**	

(1) Fiscal Year 2006-2007 amounts reflect 50 percent of contract costs with ARC of San Diego for litter removal shared with the Gas Tax Fund's Street Maintenance program. For Fiscal Year 2009-2010, the Community Services Department will assume the duty of litter removal from the bus stop and arterial roadways.

PROGRAM: CLEAN WATER LANDSCAPING — ACCT #55-5847

This program provides for landscape supervision, documentation and controls for the Clean Water aspects of the street landscaping for the City of Del Mar's street medians, islands, street ends and other street related areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting for the NPDES permit requirements.

	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
Employee Services	$7,617	$7,565	$7,918	$7,599	$7,811
Maintenance & Operations	3,845	3,604	4,050	3,968	4,068
Contractual Services	5,720	4,561	7,073	6,640	7,301
Debt Service	0	0	0	0	0
Capital Outlay	0	0	0	0	0
GRAND TOTAL	**$17,182**	**$15,730**	**$19,041**	**$18,207**	**$19,180**
POSITIONS (FTE)	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**

PROGRAM: CLEAN WATER PARK MAINTENANCE — ACCT #55-5848

This program provides for park maintenance supervision, documentation and controls for the Clean Water aspects of the landscaping for Del Mar's parks, open spaces, building landscaping, and other street related areas. It also provides for improved litter control, pesticide and fertilization monitoring, and reporting for the NPDES permit requirements.

	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
Employee Services	$1,465	$1,933	$1,622	$1,595	$1,651
Maintenance & Operations	1,804	2,535	3,487	3,061	3,138
Contractual Services	4,703	14,229	18,103	8,288	9,000
Debt Service	0	0	0	0	0
Capital Outlay	0	0	0	0	0
GRAND TOTAL	**$7,972**	**$18,697**	**$23,212**	**$12,944**	**$13,789**
POSITIONS (FTE)	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**

CITY OF DEL MAR
FISCAL YEARS 2009-2010 AND 2010-2011
EXPENDITURE DETAIL

FUND: 55 CLEAN WATER PROGRAM

ACCOUNT	DESCRIPTION	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
	ENGINEERING					
55-5220-3200	CONTRACTUAL SERVICES	31,600	36,966	10,500	10,500	10,500
55-5220-3210	CITY ENGINEER	154,077	252,495	75,000	71,700	71,700
	CONTRACT SERVICES	**185,677**	**289,461**	**85,500**	**82,200**	**82,200**
	ENGINEERING	**185,677**	**289,461**	**85,500**	**82,200**	**82,200**
	PLANNING					
55-5530-1000	SALARIES - PERMANENT	13,161	20,464	27,398	13,144	23,440
55-5530-1200	EMPLOYEE BENEFITS	4,692	6,899	9,264	4,584	7,808
55-5530-1205	WORKERS' COMPENSATION	506	629	871	95	504
	EMPLOYEE SERVICES	**18,359**	**27,992**	**37,533**	**17,822**	**31,752**
55-5530-2300	OPERATING SUPPLIES	-	-	-	-	-
55-5530-3700	MEMBERSHIPS & SUBSCRIPTIONS	-	-	-	-	-
55-5530-3800	MEETINGS & TRAVEL	-	-	-	-	-
55-5530-3801	TRAINING & EDUCATION	-	-	-	-	-
	MAINTENANCE & OPERATIONS	**-**	**-**	**-**	**-**	**-**
55.5530.3200	**CONTRACTUAL SERVICES**				7,800	
	PLANNING	**18,359**	**27,992**	**37,533**	**25,622**	**31,752**
	CODE ENFORCEMENT					
55-5536-1000	SALARIES - PERMANENT	13,656	5,239	14,870	15,241	15,241
55-5536-1200	EMPLOYEE BENEFITS	4,964	2,254	5,792	6,521	6,667
55-5536-1205	WORKERS' COMPENSATION	855	478	1,352	395	1,106
55-5536-1310	PART TIME PLANNING	2,863	-	3,780	6,800	6,800
55-5536-1400	OVERTIME	1,175	-	-	-	-
	EMPLOYEE SERVICES	**23,513**	**7,971**	**25,794**	**28,958**	**29,815**
55-5536-2131	VEHICLE MAINTENANCE	-	-	-	-	-
55-5536-2800	GAS & OIL	-	-	-	-	-
55-5536-3801	TRAINING & EDUCATION	-	-	150	700	150
	MAINTENANCE & OPERATIONS	**-**	**-**	**150**	**700**	**150**
55-5536-3200	**CONTRACTUAL SERVICES**	-	-	5,040	**-**	**-**
	CODE ENFORCEMENT	**23,513**	**7,971**	**30,984**	**29,658**	**29,965**
	CLEAN WATER MANAGEMENT					
55-5539-1000	SALARIES - PERMANENT	-	43,703	111,916	111,916	111,916
55-5539-1200	EMPLOYEE BENEFITS	-	14,829	34,770	35,170	35,619
55-5539-1205	WORKERS' COMPENSATION	-	1,465	3,781	924	2,588
55-5539-1310	PART TIME PLANNING	-	-	-	-	-
55-5539-1400	OVERTIME	-	-	-	-	-
	EMPLOYEE SERVICES	**-**	**59,997**	**150,467**	**148,011**	**150,124**
55-5539-2131	VEHICLE MAINTENANCE	-	-	-	-	-
55-5539-2300	OPERATING SUPPLIES	-	677	500	500	500
55-5539-2800	GAS & OIL	-	-	-	-	-
55-5539-3000	ADVERTISING, PRINTING, PUBLISHING	-	-	-	2,600	1,600
55-5539-3700	MEMBERSHIPS & SUBSCRIPTIONS	-	-	490	225	225
55-5539-3800	MEETINGS AND TRAVEL	-	-	850	400	400
55-5539-3801	TRAINING & EDUCATION	-	413	850	500	300
55-5539-4800	ASSESSMENTS	-	-	-	34,615	24,815
	MAINTENANCE & OPERATIONS	**-**	**1,090**	**2,690**	**38,840**	**27,840**
55-5539-3200	**CONTRACTUAL SERVICES**	-	5,410	**43,085**	**9,200**	**12,500**
	CLEAN WATER MANAGEMENT	**-**	**66,497**	**196,242**	**196,051**	**190,464**

CITY OF DEL MAR
FISCAL YEARS 2009-2010 AND 2010-2011
EXPENDITURE DETAIL

FUND: 55 CLEAN WATER PROGRAM

ACCOUNT	DESCRIPTION	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
	PUBLIC WORKS				-	-
55-5840-1000	SALARIES - PERMANENT	7,156	7,559	8,006	10,307	10,307
55-5840-1200	EMPLOYEE BENEFITS	2,436	2,587	2,772	3,536	3,598
55-5840-1205	WORKERS' COMPENSATION	886	515	302	93	259
55-5840-1400	OVERTIME	-	4	10	10	11
55-5840-1803	OUTSIDE CLERICAL	-	37	-	-	-
	EMPLOYEE SERVICES	**10,478**	**10,702**	**11,090**	**13,946**	**14,176**
55-5840-2000	BUILDING MAINT & REPAIR	45	28	69	25	25
55-5840-2100	EQUIP/RADIO MAINT & REPAIR	19	22	10	12	12
55-5840-2131	VEHICLE MAINTENANCE	35	26	46	32	33
55-5840-2133	VEHICLE CONTRACTUAL SERVICES	118	99	103	80	80
55-5840-2140	COMPUTER MAINTENANCE	-	-	-	-	-
55-5840-2300	OPERATING SUPPLIES	132	314	299	120	120
55-5840-2400	UNIFORMS	8	10	15	18	18
55-5840-2600	SMALL TOOLS & EQUIPMENT	97	41	41	59	60
55-5840-2800	GAS & OIL	209	235	210	200	200
55-5840-3000	ADVERTISING & PRINTING	-	-	6	6	-
55-5840-3300	UTILITIES	81	80	69	85	87
55-5840-3400	TELEPHONE	40	58	85	60	61
55-5840-3600	PROPERTY/EQUIPMENT RENTAL	15	16	24	20	21
55-5840-3700	MEMBERSHIPS & SUBSCRIPTIONS	5	4	7	7	7
55-5840-3800	MEETINGS & TRAVEL	26	17	41	10	10
55-5840-3801	TRAINING & EDUCATION	4	69	18	5	5
55-5840-3900	AUTO ALLOWANCE	-	-	-	96	96
55-5840-5800	DEPRECIATION	2,040	1,631	-	-	-
	MAINTENANCE & OPERATIONS	**2,874**	**2,650**	**1,043**	**835**	**835**
55-5840-3200	**CONTRACTUAL SERVICES**	1,735	1,298	**1,648**	**1,746**	**1,790**
55-5840-5500	VEHICLES	-	34	330	-	-
	CAPITAL OUTLAY	**-**	**34**	**330**	**-**	**-**
	PUBLIC WORKS	**15,087**	**14,684**	**14,111**	**16,527**	**16,801**
	FLOOD CONTROL & DRAINAGE					
55-5841-1000	SALARIES - PERMANENT	2,350	2,384	2,539	2,599	2,599
55-5841-1200	EMPLOYEE BENEFITS	929	955	1,031	1,069	1,100
55-5841-1205	WORKERS' COMPENSATION	397	222	227	55	153
55-5841-1400	OVERTIME	-	15	162	15	15
	EMPLOYEE SERVICES	**3,676**	**3,576**	**3,959**	**3,738**	**3,867**
55-5841-2300	OPERATING SUPPLIES	447	218	521	100	103
55-5841-2400	UNIFORMS	24	25	41	20	21
	MAINTENANCE & OPERATIONS	**471**	**243**	**562**	**120**	**124**
55-5841-3200	**CONTRACTUAL SERVICES**	275	412	**464**	**493**	**506**
	FLOOD CONTROL & DRAINAGE	**4,422**	**4,231**	**4,985**	**4,351**	**4,497**

CITY OF DEL MAR
FISCAL YEARS 2009-2010 AND 2010-2011
EXPENDITURE DETAIL

FUND: 55 CLEAN WATER PROGRAM

ACCOUNT	DESCRIPTION	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
	STREET MAINTENANCE					
55-5845-1000	SALARIES - PERMANENT	39,593	40,985	42,173	43,069	43,069
55-5845-1200	EMPLOYEE BENEFIT	15,143	15,734	16,868	17,484	17,973
55-5845-1205	WORKERS' COMPENSATION	6,727	3,825	3,764	933	2,615
55-5845-1300	SALARIES -SEASONAL	-	-	-	-	-
55-5845-1400	OVERTIME	196	454	1,687	1,729	1,772
	EMPLOYEE SERVICES	**61,659**	**60,998**	**64,492**	**63,216**	**65,429**
55-5845-2000	BUILDING MAINT & REPAIR	472	345	797	50	52
55-5845-2100	EQUIP/RADIO MAINT & REPAIR	238	269	206	300	308
55-5845-2131	VEHICLE MATERIALS & SUPPLIES	5,026	4,494	4,774	4,893	5,016
55-5845-2133	VEHICLE CONTRACTUAL SERVICES	2,637	2,252	6,972	2,700	2,700
55-5845-2300	OPERATING SUPPLIES	2,644	2,285	2,266	2,323	2,381
55-5845-2400	UNIFORMS	277	274	649	665	682
55-5845-2600	SMALL TOOLS & EQUIPMENT	1,271	516	773	792	812
55-5845-2800	GAS & OIL	4,548	3,491	3,605	4,000	4,100
55-5845-3000	ADVERTISING & PRINTING	-	-	113	100	100
55-5845-3300	UTILITIES	857	830	1,236	1,267	1,299
55-5845-3400	TELEPHONE	328	280	721	300	300
55-5845-3700	MEMBERSHIPS/SUBSCRIPTIONS	69	36	72	74	76
55-5845-3800	MEETINGS/TRAVEL	-	153	309	200	205
55-5845-3801	TRAINING	43	-	155	200	205
	MAINTENANCE & OPERATIONS	**18,410**	**15,225**	**22,648**	**17,864**	**18,236**
55-5845-3200	**CONTRACTUAL SERVICES**	6,801	8,258	**9,289**	**620**	**1,000**
55-5845-5500	VEHICLES	-	422	3,744	-	-
	CAPITAL OUTLAY	**-**	**422**	**3,744**	**-**	**-**
	STREET MAINTENANCE	**86,870**	**84,903**	**100,173**	**81,700**	**84,665**
	STREET LANDSCAPING					
55-5847-1000	SALARIES - PERMANENT	4,866	5,041	5,078	5,198	5,198
55-5847-1200	EMPLOYEE BENEFIT	1,929	2,015	2,062	2,140	2,201
55-5847-1205	WORKERS' COMPENSATION	822	467	454	111	309
55-5847-1400	OVERTIME	-	42	324	150	103
	EMPLOYEE SERVICES	**7,617**	**7,565**	**7,918**	**7,599**	**7,811**
55-5847-2100	EQUIP MAINT & REPAIR	-	-	23	20	21
55-5847-2200	GENERAL MAINT & REPAIR	675	-	117	100	102
55-5847-2300	OPERATING SUPPLIES	53	177	167	80	82
55-5847-2400	UNIFORMS	57	58	72	30	31
55-5847-2600	SMALL TOOLS & EQUIPMENT	-	-	34	10	10
55-5847-3300	UTILITIES	3,060	3,369	3,546	3,635	3,726
55-5847-3600	PROPERTY/EQUIPMENT RENTAL	-	-	91	93	96
	MAINTENANCE & OPERATIONS	**3,845**	**3,604**	**4,050**	**3,968**	**4,068**
55-5847-3200	**CONTRACTUAL SERVICES**	5,720	4,561	**7,073**	**6,640**	**7,301**
	STREET LANDSCAPING	**17,182**	**15,730**	**19,041**	**18,207**	**19,180**

CITY OF DEL MAR
FISCAL YEARS 2009-2010 AND 2010-2011
EXPENDITURE DETAIL

FUND: 55 CLEAN WATER PROGRAM

ACCOUNT	DESCRIPTION	ACTUAL 2006-2007	ACTUAL 2007-2008	AMENDED 2008-2009	ADOPTED 2009-2010	ADOPTED 2010-2011
	PARK MAINTENANCE				-	-
55-5848-1000	SALARIES - PERMANENT	940	953	1,016	1,040	1,040
55-5848-1200	EMPLOYEE BENEFITS	366	885	413	429	441
55-5848-1205	WORKERS' COMPENSATION	159	89	93	23	65
55-5848-1400	OVERTIME	-	6	100	103	105
	EMPLOYEE SERVICES	**1,465**	**1,933**	**1,622**	**1,595**	**1,651**
55-5848-2200	GENERAL MAINT & REPAIR	221	19	350	200	205
55-5848-2300	OPERATING SUPPLIES	119	460	464	165	169
55-5848-2400	UNIFORMS	7	10	54	12	12
55-5848-3300	UTILITIES	1,457	2,046	2,619	2,684	2,752
	MAINTENANCE & OPERATIONS	**1,804**	**2,535**	**3,487**	**3,061**	**3,138**
55-5848-3200	**CONTRACTUAL SERVICES**	4,703	14,229	**18,103**	**8,288**	**9,000**
	PARK MAINTENANCE	**7,972**	**18,697**	**23,212**	**12,944**	**13,789**
TOTAL CLEAN WATER FUND		**359,082**	**463,669**	**511,781**	**467,259**	**473,313**

Section 11
Effectiveness Assessment

11.1 Introduction

The City of Del Mar conducts an annual effectiveness assessment of its JURMP implementation. At a minimum, and as described in Permit Section I.1, this annual effectiveness assessment includes:

1. Specific assessment of the effectiveness of each of the following:
   - Each significant jurisdictional activity/BMP or type of jurisdictional activity/BMP implemented;
   - Implementation of each major component of the JURMP (Development Planning, Construction, Municipal, Industrial/Commercial, Residential, Illicit Discharge Detection and Elimination, and Education); and
   - Implementation of the JURMP as a whole.
2. Identification of, and the use of measurable targeted outcomes, assessment measures and assessment methods for each of the items listed above.
3. The use of outcome levels 1-6 (as defined in Attachment C of the Permit) to assess the effectiveness of each of the items listed in Section 1 above, where applicable and feasible.
4. The use of monitoring data and analysis from the Receiving Waters Monitoring Program to assess the effectiveness each of the items listed in list item number 1 above, where applicable and feasible.
5. The use of Implementation Assessment, Water Quality Assessment, and Integrated Assessment, where applicable and feasible (as defined in Attachment C of the Permit)

This component evaluates the progress of the City's program towards the overall goal of reducing pollutants associated with stormwater and urban runoff. The objectives of the assessment component are to assess the performance of the City's JURMP, assess the effectiveness of improving receiving water quality, and identify changes that will increase the effectiveness of the program.

In the past, the RWQCB has noted deficiencies in the effectiveness assessment strategy for nearly all the Copermittees in the region; therefore a regional effort was started and continues to improve upon standardizing a process of effectiveness assessment. The Copermittees continued to meet during the permit cycle to develop a more appropriate strategy. The standardized reporting and assessment structure is planned to be implemented during the Fiscal Year 2010-2011 reporting period and will be included in the next annual report.

A guidance document was prepared by the Copermittees and submitted to the RWQCB on October 16, 2003, titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs". This guideline presents a comprehensive assessment strategy that initially focuses on programmatic assessments and moves toward water quality-based assessments to determine program effectiveness. More specifically, it addresses six levels of assessment:

1. Compliance with Activity-based Permit Requirements

2. Changes in Knowledge/Awareness
3. Behavioral Changes
4. Load Reductions
5. Changes in Discharge Quality
6. Changes in Receiving Water Quality

The City has begun adopting this assessment strategy and will more fully adopt it as the regional program strategy becomes available. The levels of assessment have been limited to four rather than six this year because there is limited data available to assess all six levels on a jurisdictional basis. The City believes that levels 5 & 6 are more appropriately assessed at the watershed level.

The first level is Level 1: Compliance with Activity-based Permit Requirements, and includes the assessment tables from the JURMP. Level 2 and 3 are combined and discuss the program strengths (accomplishment and outcomes) for each component. Level 4: Load Reductions, is partially addressed this year. Level 5 and 6 are combined to present a water quality assessment and at this time are addressed only at a regional level. The strategy uses both quantitative and qualitative measures of program effectiveness.

11.2 Effectiveness Assessment Results

11.2.1 Compliance with Activity-Based Permit Requirements (Level 1)

The table in Appendix 11-A summarizes the activities that have been tracked by the program to demonstrate compliance with the Permit and the City's JURMP.

11.2.2 Changes in Knowledge/Awareness and Behavioral Changes (Levels 2 & 3)

The City has begun the process of collecting information necessary to gauge the changes in knowledge and awareness with respect to urban runoff. The City hopes to assess the changes in knowledge and awareness through questions posed to commercial and industrial dischargers. Any results of the assessment will be included in future JURMP Annual Reports.

In general, City staff have found that knowledge and awareness with respect to urban runoff at construction activities is relatively high. Therefore, the City intends to provide more of a focus on BMP implementation rather than awareness for construction activities in order to utilize its resources and staff efficiently.

11.2.3 Load Reductions (Level 4)

Due to the lack of regionally standardized accurate load reduction estimating tools and methods, only limited load reductions have been assessed for the program. At this time the City does not have the means to accomplish load reductions beyond the collected information directly related to physical removal of materials (e.g., debris, sediments, etc.). As regional standards are developed, the City will participate in collection of standardized information and perform further load reduction estimates. The load reduction information available is summarized in the table in Appendix 11-A.

11.2.4 Significant Activities Assessment

In Table 11-1 below, the identified significant activities are listed along with the measured outcomes from Fiscal Year 2009-2010 implementation. The City's assessment demonstrates effectiveness for all significant activities.

Table 11-1: Effectiveness Assessment – Significant Activities, Methods, Measures and Targeted Outcomes

Component	Significant Activity	Method	Measure	Level	Targeted Outcome	Result	Program Effective? YES/NO			
							Compliance Level 1	Knowledge Change Level 2	Behavior Change Level 3	Load Reduction Level 4
Land Development	1. Post construction BMP inspection: inspections performed/inspections required.	Confirmation	Performed /Required	Compliance (1)	100%	Not applicable yet	Yes	N/A	N/A	N/A
Construction	1. Were all required inspections performed during the wet season?	Confirmation	Performed /Required	Compliance (1)	100%	100%	Yes	N/A	N/A	N/A
Municipal	1. Were all required inspections performed during the fiscal year?	Confirmation	Performed /Required	Compliance (1)	100%	100%	Yes	N/A	N/A	Yes
	2. Were all required catch basin inspections performed?	Confirmation	Performed /Required	Compliance (1)	100%	100%				
	3. How much debris was removed from the MS4 prior to the rainy season?	Direct Measure	Tons	Load Reduction (4)	N/A	43.2				
	4. How much debris was removed from street sweeping activities?	Direct Measure	Tons	Load Reduction (4)	N/A	117.25				
	5. Were all special events applications reviewed for potential coverage under City requirements?	Confirmation	# Reviewed /Total	Compliance (1)	100%	100%				

Component	Significant Activity	Method	Measure	Level	Targeted Outcome	Result	Program Effective? YES/NO			
							Compliance Level 1	Knowledge Change Level 2	Behavior Change Level 3	Load Reduction Level 4
Commercial-Industrial	1. Were all inspections performed as required?	Confirmation	Performed /Required	Compliance (1)	100%	100%	Yes	No	No	N/A
IDDE	1. Were all urban runoff related complaints responded to and resolved?	Confirmation	# Responses /Total Complaints	Compliance (1)	100%	100%	Yes	N/A	N/A	N/A
Education	1. Were changes in knowledge demonstrated or verified (i.e. quizzes?)	Analysis	Average Score Before/After	Knowledge Change (2)	%Change	N/A	N/A at this time	N/A at this time	N/A	N/A

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Appendix 11-A
Fiscal Year 2009-2010 Permit Component Compliance Table

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FISCAL YEAR 2009-2010 CITY OF DEL MAR PERMIT COMPLIANCE TABLE

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Development Planning	1	A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	1	Confirmation	No Changes	2.2
	2	Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	1	Confirmation	Confirmed	2.4.1
	3	A listing of the development projects to which SUSMP requirements were applied.	1	Confirmation	See Appendix 2-A for listing	
	4	Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	1	Confirmation	Confirmed	2.4.1
	5	At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	1	Confirmation	Not Applicable for FY 2009/2010 - No PDP projects	
	6	A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	1	Confirmation	None	
	7	An updated treatment control BMP inventory.	1	Confirmation	See Appendix 2-D	
	8	The number of treatment control BMPs inspected, including a summary of inspection results and findings.	1	Confirmation	1	2.4.1
	9	A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	1	Confirmation	See Section 2.4.1	
	10	Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	1	Confirmation	Confirmed	2.4.1
	11	A listing of any projects which received a SUSMP waiver.	1	Confirmation	No Waiver Program In Place - No waivers issued	
	12	A description of implementation of any SUSMP waiver mitigation program.	1	Confirmation		
	13	A description of Hydromodification Management Plan (HMP) development collaboration and participation.	1	Confirmation	See Section 2.4.1	
	14	A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	1	Confirmation	Since the interim HMP requirements took effect, there have been no development projects that trigger HMP requirements	
	15	A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	1	Confirmation		
	16	A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	1	Confirmation		
	17	The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	1	Confirmation / Tabulation	None	2.4.1
	18	A description of notable activities conducted to manage urban runoff from development projects	1	Confirmation	None	2.4.2

FISCAL YEAR 2009-2010 CITY OF DEL MAR PERMIT COMPLIANCE TABLE

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Construction	1	Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	1	Confirmation	Confirmed	3.5
	2	Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	1	Confirmation	Confirmed	3.2
	3	A description of modifications made to the construction and grading ordinances and approval processes.	1	Confirmation	Completed changes in FY 2008	3.3
	4	Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	1	Confirmation	Confirmed	3.4
	5	Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	1	Confirmation	Since the maximum disturbed area and advanced treatment requirements took effect, no projects have triggered these requirements	3.5.1
	6	A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	1	Confirmation		3.5.2
	7	For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	1 & 3	Confirmation / Tabulation / Inspection	See Section 3.5.3 and Appendix 3-C	
	8	A description of the general results of the inspections.	1	Confirmation	Confirmed	3.5.3
	9	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	1	Confirmation	Confirmed	3.5.3
	10	The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	1	Confirmation / Tabulation	NOV = 6 Citation = 6	3.5.3
	11	A description of notable activities conducted to manage urban runoff from construction sites.	1	Confirmation	3.5.4	

FISCAL YEAR 2009-2010 CITY OF DEL MAR PERMIT COMPLIANCE TABLE

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Municipal	1	Any updates to the municipal inventory and prioritization.	1	Confirmation	See Section 4.2.1 and Appendix 4-A	
	2	Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	1	Confirmation	Confirmed	4.2.2
	3	A description of inspections and maintenance conducted for municipal treatment controls.	1	Confirmation	Section 4.2.3	
	4	Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	1 / 3	Tabulation / Inspection	Inventory = 284 Inspected = 284 Catch Basins/Inlets Cleaned = 284	4.2.3
	5	Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	1	Tabulation	Total Distance of MS4 pipes = 5.87 miles Total Distance inspected ~ 3,500 feet Total Distance cleaned ~ 2,500 feet	4.2.3
	6	Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	1	Tabulation	Open Channels = 2.85 miles Inspected = 2.85 miles Cleaned ~ 1 mile	4.2.3
	7	Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4	Quantification	Catch Basins/Inlets = 38.5 tons MS4 Pipes = 0.3 tons Open Channels = 7.1 tons	4.2.3
	8	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	1	Confirmation	None at this time	
	9	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	1	Confirmation	Confirmed	4.2.3
	10	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	1	Tabulation	5.7 miles	4.2.3
	11	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	1	Tabulation	14.5 miles	4.2.3
	12	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	1	Tabulation	31.2 miles	4.2.3
	13	Identification of the total distance of curb-miles swept.	1	Tabulation	1,156 miles	4.2.3

FISCAL YEAR 2009-2010 CITY OF DEL MAR PERMIT COMPLIANCE TABLE

Municipal (continued)	14	Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	1	Confirmation	Lots = 2 Swept = 2 times per month	4.2.3
	15	Amount of material (tons) collected from street and parking lot sweeping.	4	Quantification	Street and Parking Lot Sweeping = 117.25 tons	4.2.3
	16	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	1	Confirmation	See Section 4.2.3	
	17	Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	3	Inspection	Sites requiring inspections = 25 Sites inspected = 25 Frequency of inspections = 1X per year	4.3.3
	18	A description of the general results of the inspections.	1	Confirmation	See Appendix 4-B	
	19	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	1	Confirmation	Confirmed	4.3.3
	20	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	1	Confirmation / Tabulation	None	4.4
	21	A description of notable activities conducted to manage urban runoff from municipal areas and activities.	1	Confirmation / Tabulation	None	4.5

FISCAL YEAR 2009-2010 CITY OF DEL MAR PERMIT COMPLIANCE TABLE

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Industrial and Commercial	1	Any updates to the industrial and commercial inventory.	1	Confirmation	See Section 5.2.2 and Appendix 5-A	
	2	Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	1	Confirmation	Confirmed	5.2.3
	3	A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	1	Confirmation	Through inspections and investigations	5.2.4
	4	Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	1 / 3	Confirmation / Inspection / Tabulation	As of June 30th, 2010 the City's inventory includes 1 industrial and 39 commercial facilities 40 sites were inspected	Appendices 5-A and 5-B
	5	Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	1	Confirmation	See Section 5.2.4	
	6	Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	1	Confirmation	Confirmed	5.2.4
	7	Identification of the number of third party inspections conducted.	1	Confirmation	None	
	8	Identification of efforts conducted to verify third party inspection effectiveness.	1	Confirmation	None	
	9	A description of efforts implemented to address mobile businesses.	1	Confirmation	See Section 5.3	
	10	The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	1	Confirmation / Tabulation	NOV = 7 Citation = 5 Verbal Warning = 0	5.2.4
	11	A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	1	Confirmation	None - Only 1 Industrial Business in the City	
	12	A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	1	Confirmation	None	

FISCAL YEAR 2009-2010 CITY OF DEL MAR PERMIT COMPLIANCE TABLE

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Residential	1	Identification of the high threat to water quality residential areas and activities that were focused on.	1	Confirmation	See Section 6.2	
	2	Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	1	Confirmation	Confirmed	6.3
	3	A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	1	Confirmation	Section 6.4	
	4	Types and amounts of household hazardous wastes collected, if applicable.	1	Confirmation	Section 6.4	
	5	A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	1	Confirmation	Section 6.5	
	6	The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	1	Confirmation	NOV = 3 Citation = 2 Verbal Warning = 0	6.6
	7	A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	1	Confirmation	See Section 6.4	
	8	A description of notable activities conducted to manage urban runoff from residential areas and activities	1	Confirmation	See Section 6.7	

FISCAL YEAR 2009-2010 CITY OF DEL MAR PERMIT COMPLIANCE TABLE

	No.	Compliance Item	Outcome Level	Assessment Method	Confirmation and/or result	Section / Appendix
Education	1	A description of education efforts conducted for each target community.	1	Confirmation	Section 8	
	2	A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	1	Confirmation	Section 8.3	
	3	A description of education efforts conducted for municipal departments and personnel.	1	Confirmation	Section 8.2	
	4	A description of education efforts conducted for the new development and construction communities.	1	Confirmation	Section 8.3	
	5	A description of jurisdictional education efforts conducted for residents, the general public, and school children.	1	Confirmation	Section 8.3	

FISCAL YEAR 2009-2010 CITY OF DEL MAR PERMIT COMPLIANCE TABLE

	No.	Compliance Item	Outcome Level	Assessment Method	Section / Appendix
Miscellaneous	1	A description of public participation efforts conducted.	1	Confirmation	Section 9
	2	An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program	1	Confirmation	Section 11
	3	A description of any efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	1	Confirmation	See Section 13
	4	A fiscal analysis of the Copermittee's urban runoff management programs	1	Confirmation	Section 10
	5	A description of any special investigations conducted.	1	Confirmation	Section 12
	6	A description of any proposed revisions to the JURMP.	1	Confirmation	Section 14

Section 12
Special Projects

This section provides a description of special projects conducted, or participated in, by the City of Del Mar during the Fiscal Year 2009-2010 Reporting Period. Special projects may include water quality studies, BMP pilot studies, surveys and other data collection activities to better understand the program's operations and effectiveness. Special projects may also be undertaken as requirements under other mandates like 13267 letters, TMDLs, etc. and implemented either solely by the City or in collaboration with other agencies or non-profit organizations. Special studies may be funded by grants or from the City's Clean Water Fund. Regardless, of the funding sources, these projects or studies may be scheduled in advance or be undertaken as the need arises during the course of the reporting year.

During this Reporting Period, the City of Del Mar continued its participation in the development process for the Los Peñasquitos Sediment Total Maximum Daily Load (TMDL), and the implementation of the Residential Area Runoff Assessment Program conducted by Weston Solutions, Inc. on behalf of the Regional Copermittee Monitoring Workgroup, as part of the Regional Source Identification Monitoring Residential Area Runoff Assessment. This Section provides a brief discussion of the City's involvement in these programs. No other special investigations took place during the Reporting Period.

12.1 Lagoon TMDL Studies: Los Peñasquitos Lagoon Sediment TMDL

During the Fiscal Year 2009-2010 Reporting Period, the City actively participated in the Los Peñasquitos Lagoon TMDL development by taking part in the Regional Board driven coordination process.

During the Fiscal Year 2008-2009 Reporting Period, the Regional Board approached some of the Los Peñasquitos watershed dischargers and asked for them to participate in the lagoon TMDL development process. As a part of this process, the City has been attending meetings with the Regional Board and other dischargers to discuss a problem statement, points of compliance and other TMDL related topics. The City is actively following the process, and will continue to provide input and review documents produced during the process. As the TMDL development continues, the City will participate in the development as resources allow.

12.2 Regional Source Identification Monitoring Residential Area Runoff Assessment

During the spring of 2009, the City of Del Mar was one of two jurisdictions selected as subject sites for the 2008-2009 Regional Source Identification Monitoring Program. The Del Mar site was selected as a subject site for the Fiscal Year 2010-2011 program as well. The Source Identification Program is required under Regional Board Order R9-2007-0001 as part of the Receiving Waters and Urban Runoff Monitoring and Reporting Program.

The goal of the study for Fiscal Year 2010-2011 is to collect dry weather and wet weather residential land use discharge data in San Diego County and to build on the data collected during the 2008-2009 and 2009-2010 Source Identification Programs. These data can then be used by Copermittees for the development of effective strategies to reduce dry weather nuisance flows and potentially reduce pollutant loads in wet weather runoff from residential areas, one of the most common land uses in the San Diego region.

As part of the study, flow monitoring and water quality sampling was conducted from April 1, 2009 through June 30, 2009. Water quality sampling was conducted during all three sampling events. In addition to providing one of the study areas, the City worked with Weston Solutions to obtain the necessary clearances to work in the City, and worked with the Copermittee Monitoring Workgroup to ensure the success of the program. Detailed discussion and information on the Regional Source Identification Monitoring program, including the Residential Area Runoff Assessment was included in Annual Regional Monitoring Report provided by the County of San Diego under separate cover.

12.3 Other Special Investigations or Studies

No other special investigations took place during the Reporting Period. For the upcoming Fiscal Year 2010-2011 Reporting Period, the City is reviewing potential study areas to address dry weather flows resulting from foundation drains and irrigation runoff from residential areas in the south end of the City. Implementation of these studies will depend entirely on availability of resources and funding.

Section 13
Non-Emergency Fire Fighting Flows

This section provides a description of any efforts by the City of Del Mar conducted to reduce pollutant discharges from non-emergency fire fighting flows (i.e. flows from controlled or practice blazes and maintenance activities) determined to be a significant source of pollutants to waters of the U.S.

As discussed in Section 4 of this JURMP Annual Report, Section 6.19 of the 2008 JURMP described the City's program to reduce pollutants from non-emergency fire fighting flows. During this Reporting Period, all training sessions were held at Regional Training facilities outside the City of Del Mar, and any vehicle maintenance (including washing) was conducted in accordance with Section 6.19 of the 2008 JURMP. No non-emergency fire fighting flow from training or other maintenance activities occurred during Fiscal Year 2009-2010 which would require any additional efforts to reduce pollutant discharges.

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Section 14
JURMP Revisions

During Fiscal Year 2009-2010 no revisions to the 2008 JURMP were made by the City of Del Mar. As discussed in previous Annual Reports, prior to January 2008, the Clean Water Program was managed by an outside consulting firm. As part of his responsibilities, the Clean Water Manager is tasked with reviewing the City's Program, and looking for ways to be more efficient and cost effective at meeting the Permit requirements. This continues to be a priority for the City, and the Clean Water Manager, in conjunction with the City's consulting team, is presently reviewing the 2008 JURMP and modifications required to implement the new Hydromodification Plan (HMP) requirements, as well as working with each Department to find better, more efficient ways, to document and implement the Clean Water Program requirements. As the result of work done during Fiscal Year 2009-2010, the City has identified some areas where more efficient methods can be employed and is working to integrate them into the program during the next JURMP update. Any necessary changes to the 2008 JURMP as a result of new procedures, and as the result of the introduction of the adopted Final HMP requirements, will be documented in the Fiscal Year 2010-2011 Annual Report.

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Section 15
Conclusions and Recommendations

During the Fiscal Year 2009-2010 Reporting Period, the City of Del Mar implemented the Municipal Permit requirements and the activities described in the City's 2008 JURMP. The City continues to support a comprehensive stormwater management program, which is evident in, and reflected by, the City's efforts to implement its JURMP. This Annual Report documents the City's efforts to implement various JURMP programs such as education, inspections, inventories, monitoring, and public participation. These activities and their compliance are reflected in Permit Component Tables contained in the Effectiveness Assessment addressed in Section 11 of this Annual Report.

In addition to the activities identified in the Permit Component Tables, the City has been involved in several other regional efforts including:

- Continued contributions to the San Dieguito and Los Peñasquitos WURMP implementation;
- Los Peñasquitos Lagoon TMDL development; and
- Co-chairing the Regional Copermittees' Municipal Workgroup

This section draws conclusions from the collected data contained in this Annual Report, and makes appropriate recommendations based on the review of program implementation during the Fiscal Year 2009-2010 Reporting Period.

15.1 Recommendations and Program Modifications

The City's Clean Water Program continued to evolve during the Fiscal Year 2009-2010 Reporting Period. As indicated in the City's 2008 JURMP, the program will require periodic revision. The City remains committed to working with its staff, other Copermittees and the Regional Board to improve and adapt its plan and make all efforts necessary to comply with the Permit requirements and to make improvements to water quality. As lessons are learned, and as a result of City staff input, modifications may be required to make sure that the City's program continues to be effective.

As described in Section 14 of this Annual Report, the City did not make modifications to its program.

Some of the key recommendations for program implementation during Fiscal Year 2010-2011 are as follows:

- Continue implementation of the City's 2008 JURMP;
- Modify staff training to address all employees – including seasonal staff – consideration may be given to electronic training sessions;
- Continue improvements to activity/document tracking systems;
- In depth assessment of the operating procedures as related to the City's 2008 JURMP – focusing particularly on field implementation of the requirements, and whether the efficiency of implementation can be improved;
- Continue to engage and involve the community in the program implementation; and

- Continue to coordinate with the Regional Copermittees for consistent approaches to program implementation.

15.2 Conclusions

As evidenced in the Permit Component Tables, the City has largely been successful at implementing its clean water program. With continued review and modifications of its 2008 JURMP, and ongoing input on the implementation of its program, the partnership between residents, local businesses, and City staff will continue to allow the City to work diligently in protecting its waterways, and improve water quality at its beaches and lagoons.

CITY OF DEL MAR JURISDICTIONAL URBAN RUNOFF MANAGEMENT PLAN FISCAL YEAR 2011 ANNUAL REPORT

SUBMITTED TO:
SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD
9174 SKY PARK COURT, SUITE 100
SAN DIEGO, CA. 92123

SEPTEMBER 30, 2011

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EXECUTIVE SUMMARY

The City of Del Mar (City) developed its Jurisdictional Urban Runoff Management Program (JURMP) in 2008 to meet the requirements of the Municipal Separate Storm Sewer System (MS4) Urban Runoff Discharge Order No. R9-2007-0001 (Permit) issued to the City and the Regional Copermittees by the California Regional Water Quality Control Board, San Diego Region (Regional Board). The Permit requires the Copermittees individually, but collaboratively, to develop and implement comprehensive programs to reduce and eliminate urban runoff pollutants that are discharged from their storm drain systems to the receiving waters. The City's program and activities, designed to meet these requirements, are described in detail in the City's 2008 JURMP.

The City has prepared this JURMP Annual Report to provide a comprehensive description of all the activities conducted by the City to comply with all the requirements of Section D of the Permit, as described in the 2008 City of Del Mar JURMP. This Annual Report covers the implementation of jurisdictional activities during the period from July 1, 2010 through June 30, 2011 (reporting period).

The City was compliant with the Permit through its continued implementation of the 2008 JURMP. The City believes that the core program activities outlined in the Permit: education; inspections; monitoring; and enforcement are most effective at reducing pollutant generating activities. Within the City's program, the inspections and monitoring programs are not only implemented to identify sources, but provide the City with opportunities to educate the community. It is through the outreach and education of the general population that awareness and behaviors will change for the betterment of water quality. On the occasion where outreach is not effective at changing behaviors, the City uses its enforcement authorities to obtain compliance.

The City's diligent efforts towards best management practice (BMP) implementation are a key element for this year's report. City staff has been active in activity/area specific BMP implementation as demonstrated through the municipal facility inspection program. Another supporting effort for municipal activities has been data tracking and the ability to report the results of the City's own activities. With each year of program implementation, the City becomes more effective and efficient at tracking meaningful data accurately. Staff continues to refine the systems for tracking. During the reporting period the City implemented an online database for tracking construction inspections and refined the web-based urban runoff reporting system.

Some interesting and key numbers associated with the City staff's efforts to implement the program follow:

- **66.9 tons** – The amount of debris, sediment and trash removed during Fiscal Year 2011 from the City's storm drain system thereby prevented from entering the lagoons and Pacific Ocean;
- **1,131 miles** – The number of miles the street sweeper swept during Fiscal Year 2011;
- **94.5 tons** – The amount of material collected from street sweeping during Fiscal Year 2011, and thereby prevented from entering the lagoons and Pacific Ocean.

The City continued to implement an effective level of service which included the following notable activities:

- Improvements to the handouts used to inform and communicate development project information with applicants. The intent is to streamline the process while ensuring that the correct information and requirements are in place.
- Initiated use of its electronic database designed specifically to track storm water inspections at construction sites. The database tracks projects and inspection results to ease reporting and allows City personnel to easily access the database from multiple computers.
- Continued to exceed Permit requirements by inspecting 100% of the inventoried commercial and industrial businesses – this is above the required 25%.
- Developed a door hangar that can be used to notify residents and businesses of issues related to the Clean Water Program identified at or near their location.

Funding of municipal programs, including stormwater programs, continues to be an issue for all of the cities in San Diego County. The City of Del Mar is no exception. Given its economic ties to the beach and ocean, the City of Del Mar recognizes the importance of clean water and its NPDES program. During Fiscal Year 2009, the City took steps to ensure that adequate funding is available on a more permanent basis through voter-approved passage of the Clean Water Service Charge. This fee continues to fund a substantial portion of the program.

By and large, the City continues to be very successful at implementing its Clean Water Program. Residents, local businesses, and City staff are working diligently to protect the waterways and improve water quality at the beaches and lagoons, and will continue to carry out these efforts in the future.

1. INTRODUCTION

The name Del Mar means "of the sea," and highlights the symbiotic relationship between the City and Pacific Ocean. The City of Del Mar is a coastal, primarily residential community in the northern section of San Diego County. Del Mar is bounded by Solana Beach to the north, San Diego to the south and east, and the Pacific Ocean to the west. As the smallest City in the region, the City covers an area of approximately two (2) square miles, with a population of approximately 4,500 residents. The main attraction of visitors is the beach and sunny weather. The annual San Diego County Fair, horse racing, and other events held at the Del Mar Fairgrounds bring in people from the surrounding area and beyond.

The City's Clean Water Program is a multi-departmental program coordinated by the City's Clean Water Manager and is an integral part of making the City of Del Mar a beautiful place to live, work and visit. Day-to-day compliance activities are conducted by staff from the Planning & Community Development Department, the Department of Public Works, the City Engineering Department, and the Department of Community Services. The Program is committed to ensuring city-wide compliance with the San Diego Regional Water Quality Control Board's Regional Municipal Stormwater Permit.

This document is the fourth annual report for the City of Del Mar's 2008 Jurisdictional Urban Runoff Management Plan (2008 JURMP) which went into effect March 25, 2008 in accordance with NPDES Order No. R9-2007-0001 (Permit), and subsequent amendments. The reporting period covered by this document is from July 1, 2010, through June 30, 2011.

1.1 REPORT ORGANIZATION

This Fiscal Year 2011 Annual Report has been organized into sections matching the table of contents agreed upon and submitted by the Copermittees to the San Diego RWQCB. The City has modified its reporting format to tabulate applicable data and information in an effort to streamline the report presentation. **Figure 1-1** below represents the basic format for the majority of the report.

Under the requirements of the Municipal Permit, various types of data and information must be presented in JURMP Annual Reports. Quantifiable data and required confirmations are presented directly in the tabular format. However, in some cases, further descriptions or explanations of results are required. When this occurs, the supporting narrative is supplied in the sections following the tables, and referenced within the table itself. Lastly, some of the required information (e.g., inventories) is best included as appendices. In these cases, their locations are referenced in the tables.

Municipal Permit Requirements | **Reporting Results**

No.	Program Implementation Description	Confirmation and/or Result
1	Any updates to the industrial and commercial inventory.	See Appendix E for inventory update. (1)
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	Confirmed per the City's JURMP.
3	A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	See 5.2.1 below for description. (2)
4	Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	Inventoried: 38 Inspected: 38 (3)
5	Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	See Section 5.2.2 below.
6	Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed per the City's JURMP. See Section 5.2.3 below for description.

1 REFERENCE INFORMATION
Provides references for the reporting information such as appendices to the report.

2 DESCRIPTIVE RESULTS
Any reporting results that need further descriptions, or explanations will be noted in the table and provided as text in the sections below the table.

3 REPORTING RESULTS
Reporting information that can be reported solely in the table (i.e. numbers, confirmations, etc.)

Figure 1-1: Example of Revised Reporting Format (for illustrative purposes only)

2. DEVELOPMENT PLANNING

2.1 PROGRAM IMPLEMENTATION

Table 2-1 represents the City of Del Mar's implementation of the Development Planning component as it relates to the requirements of the Municipal Permit during Fiscal Year 2011. Where reporting requirements necessitate information that is not easily tabularized, references are made in the table to locations where the information, or further explanation(s), is located.

During Fiscal Year 2011, the City was compliant with Section D.1 of the Municipal Permit, with the exceptions of any issues identified in the table below.

Table 2-1: Development Planning Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	See 2.2.1 below for descriptions
2	Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	Confirmed – the information is tracked in individual project files and Excel.
3	A listing of the development projects to which Standard Urban Stormwater Mitigation Plan (SUSMP) requirements were applied.	See **Appendix A**
4	Confirmation that all applicable SUSMP BMP requirements were applied to all Priority Development Projects (PDPs), including a description of how this information was tracked.	Not Applicable – The City did not process any PDPs during the reporting period.
5	At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	Not Applicable – The City did not process any PDPs during the reporting period.
6	A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	Not Applicable – The City did not process any PDPs during the reporting period.
7	An updated treatment control BMP inventory.	See 2.2.2 below
8	The number of treatment control BMPs inspected, including a summary of inspection results and findings.	One (1) project was inspected including two (2) TCBMPs. See 2.2.2 below for summary
9	100% of projects with high priority TCBMPs were inspected.	One (1) project is rated as high priority and the one (1) project was inspected.
10	Confirmation that the high priority TCBMPs were inspected prior to the rainy season.	Confirmed. See Section 2.2.2 below
11	At least 50% of projects with drainage insert TCBMPs were inspected.	There have been no projects developed within the City that used drainage inserts to satisfy TCBMP requirements. This requirement currently does not apply in the City.

Item No.	Program Implementation Description	Confirmation and/or result
12	A minimum of 20% of the total number of projects with approved TCBMPs, and a maximum of 200% of the average number of projects with TCBMPs approved per year were inspected.	100% of all projects with approved (and constructed) TCBMPs were inspected: there is one project with approved and constructed TCBMPs within the City.
13	A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	See 2.2.2 below for description and summary
14	Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	Not Applicable – During the reporting period, no Priority Development Projects were completed to the point of obtaining occupancy.
15	A listing of any projects which received a SUSMP waiver.	Not applicable. No Waiver Program in place, and no waivers issued.
16	A description of implementation of any SUSMP waiver mitigation program.	Not applicable. No Waiver Program in place and no waivers issued.
17	A description of Hydromodification Management Plan (HMP) development collaboration and participation.	No further development of the HMP took place during the reporting period – the RWQCB adopted the Copermittees HMP on July 14, 2010.
18	A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	No projects were required to meet HMP requirements: no Priority Development Projects were approved during the reporting period.
19	A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	
20	A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	
21	The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	No enforcement actions were taken for development projects during the reporting period.
22	A description of notable activities conducted to manage urban runoff from development projects.	See 2.2.3 below for descriptions

2.2 TABLE 2-1 SUPPLEMENTAL INFORMATION

2.2.1 Table 2-1 Item No. 1

General Plan Updates
During Fiscal Year 2011, there were no amendments to the City's environmental review process.

Environmental Review Process Amendments
During Fiscal Year 2011, there were no amendments to the City's environmental review process.

Development Project Approval Process Amendments
The City revised its counter materials that are used by applicants when applying for development permits. The purpose of the revisions was to more clearly describe the responsibilities of the applicants. The revised counter materials contain BMP and documentation requirements to limit any confusion on the part of the applicants or their representatives.

Development Project Requirements Amendments
During the reporting period the City made updates to its Standard Urban Stormwater Mitigation Plan (SUSMP) document. The modifications were required to adequately include Hydromodification Management Plan requirements. The updated SUSMP was completed and took effect on January 14, 2011 – a copy can be found in **Appendix B**.

2.2.2 Table 2-1 Items No. 7, No. 8, No. 10 and No. 13

The City of Del Mar is the smallest City in the County and rarely has Priority Development Projects (PDPs) processed for development. Therefore, there has only been one PDP project that has been constructed. The following is a summary of the project:

Morotta / James Single Family Residence
The project is a single family residence constructed within 200 feet of the San Dieguito Lagoon (an environmentally sensitive area). The project BMPs were verified prior to receiving occupancy in March 2009. The project TCBMPs are two bioswales that cover the majority of the property fronting San Dieguito Drive. On September 30, 2010, City staff conducted an on-site inspection and verified the TCBMPs still exist and appear to be maintained and effective.

2.2.3 Table 2-1 Item No. 22

The City performed the following notable activities during the Fiscal Year 2011 reporting period:

- Revisions to the counter materials to improve the process and the applications received by the development community.

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3. CONSTRUCTION

3.1 PROGRAM IMPLEMENTATION

Table 3-1 represents the City of Del Mar's Fiscal Year 2011 implementation of the Construction component as it relates to the requirement of the Municipal Permit. Where reporting requirements necessitate information that is not easily tabularized, references are made in the table to locations where the information, or further explanation(s), is located.

During Fiscal Year 2011, the City was compliant with Section D.2 of the Municipal Permit with the exception of any issues identified below.

Table 3-1: Construction Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	Confirmed – See Section 3.2.1 below for descriptions
2	Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	Confirmed – See Section 3.2.2 below for descriptions
3	A description of modifications made to the construction and grading ordinances and approval processes.	Changes were completed in FY 2008. No additional changes were implemented in Fiscal Year 2011
4	Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	Confirmed
5	Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	Confirmed
6	A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	Since the advanced treatment requirements took effect, no projects have triggered these requirements
7	For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	See **Appendix E**

Item No.	Program Implementation Description	Confirmation and/or result
8	A description of the general results of the inspections.	See Section 3.2.3 below
9	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed
10	The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 3.2.4 below
11	A description of notable activities conducted to manage urban runoff from construction sites.	See Section 3.2.5 below

3.2 TABLE 3-1 SUPPLEMENTAL INFORMATION

3.2.1 Table 3-1 Item No. 1

As required by the Permit, and outlined in the 2008 JURMP, all permitted construction sites were required to undergo the City's construction urban runoff approval process, and meet the applicable construction requirements. Appropriate, designated BMPs were required to be implemented for all construction sites. This information is tracked in individual project files as well as though the inspection database.

3.2.2 Table 3-1 Item No. 2

Section 5.2.2 of the 2008 JURMP describes how a watershed-based inventory of all construction sites is prepared by the City of Del Mar, while Section 5.2.3 provides a description of the steps taken to develop, and update this inventory on a monthly basis. The City of Del Mar continues to use the construction inspection tracking system discussed in the Supplemental Information provided to Regional Board Staff in February 2009, to ensure that its system meets the reporting requirements outlined in Section J.3.a.(3)(b)vii of the Permit. The tracking system itself is a combined database which includes Geographical Information System (GIS) input, and spreadsheet tallies. Information is entered into the database on a regular basis, no less than monthly. City enforcement staff maintain the GIS information via "drive-by" verification of the status of all construction sites, and subsequently entering the data into the GIS system. Monthly inventories of active construction sites are then produced for use in the field by staff. Regular patrols by City staff are also used to determine if a site's status has changed in the interim.

Since construction project sites are constantly approved, cancelled (permits withdrawn by the applicant, denied by the City, expire, etc.), and completed, the City's inventory is fluid. In addition to the regular updates, staff continues to routinely patrol construction sites to "field truth" data received from the Planning and Building Departments, and annotate areas of surface disturbance that may, or may not be, permitted.

Appendix C provides a copy of the monthly construction site inventory, including the priority classification for each site. **Appendix D** includes printouts of the GIS Construction Site Inventory Maps for each month of the reporting period.

3.2.3 Table 3-1 Item No. 8

During the reporting period, four (4) active construction sites met the high priority criteria designation. High priority projects and their respective addresses are listed below:

- Pacifica Stratford: 500-600 Stratford Court
- Batchelder: 100 Stratford Court
- Handzel: 100 12th Street
- 21st Street Pump Station: 21st Street at Court Street

These properties were inspected at a minimum of bi-weekly during the Fiscal Year 2011 wet season. All remaining construction projects were classified as "Low" priority sites, and inspected "as-needed" during the Fiscal Year 2011 Wet Season. As required by Section D.2.d.(4) of the Permit, all construction sites, regardless of priority classification, continued to be inspected on an "as-needed" basis during the remainder of the year.

During Fiscal Year 2011, 44 construction sites were, at some point during the year, in the active construction phase: 4 high priority sites and 40 low priority sites. In total, the Clean Water Program conducted 106 documented storm water inspections throughout the reporting period.

The following is a summary table of the number of inspections conducted at each type of construction project.

Table 3-2: Fiscal Year 2011 Construction Inspection Summary

Inspection Item	No. of Sites
High Priority Site Inspections	72
Low Priority Site Inspections	34

In general, the Fiscal Year 2011 inspections resulted in compliant construction sites, although follow-up inspections were required at some sites due to BMP deficiencies. Common corrections needed after review by the City included:

- Maintaining construction exit/entrances
- Uncovered trash dumpsters
- Uncovered stock piles/equipment storage
- Inadequate or poorly maintained silt fence
- Inadequate or poorly maintained erosion control

Through verbal warnings, and in some cases written warnings, the BMP deficiencies were adequately addressed. At the end of the reporting period, there were no on-going compliance issues.

3.2.4 Table 3-1 Item No. 10

This section provides the number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions taken to achieve compliance.

Del Mar has implemented a policy of education first, with aggressive enforcement measures only being used when compliance requests are ignored and/or in the event of an actual discharge which has the potential to impact to receiving waters. In general, contractors have been compliant with BMP requirements at their respective construction sites. In the majority of those instances where compliance has not been attained, a single verbal or written warning was all that was required to achieve compliance.

During the reporting period, two (2) enforcement actions, including any written warnings, Notices of Violation (NOVs), and/or Administrative Citations were issued by staff. This does not include verbal warnings issued during patrols which were addressed in a timely manner, unless the contractor failed to comply with the direction of the inspector. In general, the inspections conducted revealed that education efforts over the past several years have resulted in a high level of compliance. In those incidents where contractors were not in full compliance, it was either easily remedied by maintenance or re-installation of BMPs. **Table 3-3** provides a summary of formal enforcement actions taken by the City for construction activities not in compliance with BMP requirements under the City's 2008 JURMP.

Table 3-3: Fiscal Year 2011 Construction-Related Enforcement

Date	Project Address	Enforcement Action	Comments/Actions Taken
10/22/2010	519 Stratford Court	NOV, Admin Citation	Non-authorized storm water discharge and BMP violations; fine of $200
3/22/2011	500 Stratford Court	NOV, Admin Citation	Non-authorized storm water discharge and BMP violations; fine of $200

3.2.5 Table 3-1 Item No. 11

During the reporting period, the Clean Water Program initiated the use of its online database designed specifically to track storm water inspections at construction sites. The database tracks projects and inspection results to ease reporting and allows City personnel to easily access the database from multiple computers. Additionally, the City was able to directly communicate with construction site owners and contractors through email using the inspection records, thereby informing the responsible parties of deficiencies and further educating the construction community in regards to storm water issues.

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4. MUNICIPAL

4.1 PROGRAM IMPLEMENTATION

Table 4-1 represents the City of Del Mar's Fiscal Year 2011 implementation of the Municipal component as it relates to the Municipal Permit requirements. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table, and are included as an Appendix, or are provided in Section 4.2.

During Fiscal Year 2011, the City was compliant with Section D.3.a. of the Municipal Permit with the exceptions of any issues identified below.

Table 4-1: Municipal Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Any updates to the municipal inventory and prioritization.	No changes occurred to the municipal inventory or prioritization during the reporting period. See **Appendix F** for the current inventory.
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	Confirmed. BMPs were required to be implemented per the JURMP.
3	A description of inspections and maintenance conducted for municipal treatment controls.	See Section 4.2.1 below
4	Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	Inventory = 284 basins and inlets
		Inspected = 284 basins and inlets
		Catch basins found with accumulated waste exceeding cleaning criteria = None
		Cleaned = 284 basins and inlets
5	Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Total Distance of MS4 pipes = 5.87 miles
		Distance of MS4 inspected = 3,500 lineal feet
		Distance of MS4 found with accumulated waste exceeding cleaning criteria = None

Item No.	Program Implementation Description	Confirmation and/or result
		Cleaned = 2,500 lineal feet
6	Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	Open Channels = 2.85 miles
		Inspected = 2.85 miles
		Distance found with anthropogenic litter = Estimated 10% of locations
		Cleaned = 2.85 miles
7	Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category. The Permit requires reporting in tons; however, the City's measurements are in cubic yards. Cubic yards are reported in tons using a 1,000 pound per cubic yard conversion.	Catch Basins/Inlets and MS4 = 55.2 tons (100.4 cubic yards)
		Open Channels = 11.7 tons (23.4 cubic yards, includes sediment and headwall cleanings)
8	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	None identified at this time.
9	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	Confirmed.
10	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	5.7 curb-miles swept a minimum of weekly, including curbed medians.
11	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	14.5 curb-miles swept a minimum of bimonthly, including curbed medians.
12	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	31.2 curb-miles swept a minimum of biannually, including curbed medians.
13	Identification of the total distance of curb-miles swept.	1,131.7 miles; brooms were engaged 158.7 hours
14	Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	Total Parking Lots = 2
		Sweeping frequency = Semi-monthly
		Parking Lots Swept = 2

Item No.	Program Implementation Description	Confirmation and/or result
15	Amount of material (tons) collected from street and parking lot sweeping. The Permit requires reporting in tons; however, the City's measurements are in cubic yards. Cubic yards are reported in tons using a 1,000 pound per cubic yard conversion.	94.5 tons (189.0 cubic yards)
16	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.	See Section 4.2.2 below
17	Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	Sites requiring inspections = 25
		Sites inspected = 25
		Frequency of inspections = Annually
18	A description of the general results of the inspections.	See Section 4.2.3 below and **Appendix G**
19	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed. Inspections implemented in accordance with the JURMP.
20	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 4.2.4 below
21	A description of any efforts conducted to reduce pollutant discharges from non-emergency firefighting flows.	See Section 4.2.5 below
22	A description of notable activities conducted to manage urban runoff from municipal areas and activities.	No notable activities beyond those already described in this section were conducted for the municipal component.

4.2 TABLE 4-1 SUPPLEMENTAL INFORMATION

4.2.1 Table 4-1 Item No. 3

Trash Guards Treatment Control

Trash Guard grates have been installed on the face of storm drain inlets along Camino del Mar in order to minimize the amount of debris and trash entering into storm drain catch basins and to maximize the effectiveness of street sweeping. The guards keep the trash and debris on the street to be removed by the street sweeper. Inspections of the guards were performed to verify they were still operational and performing as purposed.

Inlet Filter Treatment Control – North County Transit District

As reported in the 2008 JURMP, the City of Del Mar has a Maintenance Agreement in place with the North San Diego County Transit Development Board as part of the Del Mar Stabilization Project 1 (Drainage Improvements and Landslide Warning System), which consists of fifty-four (54) structures. Inlet filters have been installed in some of the structures to address water quality. The Maintenance Agreement requires the City to maintain fourteen (14) of the structures, while NCTD will be maintaining the remaining forty (40) structures. Out of the fourteen (14) structures maintained by the City, six (6) have been fitted with filters that are serviced by the City's contractor (Downstream Services, Inc.). This fiscal year, all six (6) filters were inspected and all of them required maintenance.

The following table represents a summary of the maintenance performed on the inlet filters.

Table 4-2: Summary of Inlet Filter Maintenance for Fiscal Year 2011

ID #	Location	Inlet Type	Materials	%Vol used	Comments
1	West end of 4th Street	Combo	D 100%	100%	Replaced (1) pouch. Was only able to clean to the FGP-48CIRF. The City was flushing hydrants.
2	West end of 8th Street	Grate	D 80% G 20%	100%	Replaced (3) pouches.
3	SW 11th Street	Curb	D 80% E 10% O 10%	100%	Replaced (2) pouches.
4	NW side of 11th Street	Curb	D 75% O 25%	100%	Replaced (3) pouches.
5	W of 13th Street	Curb	D 80% E 10% O 10%	100%	Replaced (2) pouches.
6	50' SW of pedestrian RR crossing, between RR tracks and Coast Blvd.	Grate	D 50% E 5% O 10%	65%	Replaced (3) pouches.

Note: D=Dirt/Silt/Sediment, E=Trash, G=Gravel. O=Organics

4.2.2 Table 4-1 Item No. 16

The City's sanitary sewer system includes the collection system and various sanitary sewer systems. The sewer system infrastructure includes approximately 24.75 miles of gravity main, 0.07 miles (or approximately 387 feet) of force main and 387 service points. The City's system also includes three (3) sewer pump/lift stations, 112 clean out facilities, and approximately 549 manhole structures. These facilities all are required to implement minimum BMPs and for the most part are inspected to verify BMP implementation and compliance. A description of the City's efforts for these facilities is included below.

Of the approximately 24.75 miles of the sanitary sewer collection system, approximately 19.2 miles were cleaned as part of the regular schedule of inspection and cleaning. Some portions of the collection system were cleaned more than once due to priority and buildup of materials. The City tracks "hot spot" portions of the sewer collection system and depending upon the likelihood of materials build up, will perform cleaning between two to four times per year.

Two (2) sanitary sewer overflows occurred during the reporting period. RWQCB (via CIWQS) and the County of San Diego Department of Environmental Health (via fax) verified that two overflows occurred during Fiscal Year 2011.

Table 4-3 below provides a summary of the two sewers found when overflows were occurring. Where possible, the spilled water from the sanitary sewer system was collected and recovered prior to being released to the surrounding environment.

Table 4-3: Reporting of Public Spills

Date	Location	Volume (gal)	Recovered (gal)	Released to Environment (gal)	Probable Cause
12/2/2010	2115 Balboa Avenue	80	80	0	Cleaning rags found in sewer line.
1/5/2011	347 Serpentine Drive	50	0	50	Buildup of sludge at bottom of cleanout obstructing the sewer water coming from 347 Serpentine Drive. Lateral cleanout is on quarterly high maintenance zone, and now will be checked monthly.
Total		**130**	**80**	**50**	

4.2.3 Table 4-1 Item No. 18

Municipal Facilities

The City's public facilities primarily include parks and recreational facilities, beaches and the Powerhouse Community Center. These facilities all are required to implement minimum BMPs and are inspected to verify BMP implementation and compliance.

The City's municipal facilities include the Public Works Yard, City Hall, the Del Mar Fire Station, and various potable water reservoirs. These facilities all are required to implement minimum BMPs and are inspected to verify BMP implementation and compliance. The municipal facilities were inspected as a part of the municipal inspections as described below.

Per the 2008 JURMP, the City formally inspects all high priority municipal sites. Municipal sites are considered to be fixed facilities where high priority municipal activities occur. The City conducted facility inspections for all 25 of its high priority facilities during Fiscal Year 2011 to ensure that BMPs (including those for pollution prevention) were being implemented.

The streets and road network are routinely inspected under various programs such as street sweeping, streets maintenance, and MS4 inspections. Formal inspection forms are not generated for the general routine inspections performed of these municipal network areas.

All inspections conducted during Fiscal Year 2011 addressed the required inspection steps to determine full compliance by utilizing the City's standard municipal inspection form. The

results of the inspections can be found in **Appendix G**. For each facility, recommendations for follow-up corrective actions were listed if applicable.

Special Events

During Fiscal Year 2011, the Community Services Department conducted inspections for all eighteen (18) special events. **Table 4-4** below provides a summary of the major events and the inspection results.

Table 4-4: Major Event Summary during Fiscal Year 2011

Event Name	Event Date	Estimated Attendance	Venue	Inspection Date(s) & Comments
Bocce Ball Tournament	7/17/2010	350	North Beach	Post-event inspection by cleanup crews; no spills or incidents reported
Summer Twilight Concert Series	7/20/2010	5,000	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported
Del Mar Shores Lobster Bake	7/31/2010	250	Del Mar Shores Park	Post-event inspection by cleanup crews; no spills or incidents reported
Summer Twilight Concert Series	8/17/2010	5,000	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported
Dog Surf Event	9/12/2010	5,000	North Beach	Post-event inspection by cleanup crews; no spills or incidents reported
Summer Twilight Concert Series	9/12/2010	5,000	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported
MS Walk	9/24/2010	350	Del Mar Beach	Post-event inspection by cleanup crews; no spills or incidents reported
Del Mar Village Art Stroll	10/2/2010	2,500	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Ducky Derby	10/9/2010	500	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported
MS Bike Ride	10/17/2010	2,500	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Bike Ride	11/6/2010	500	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
NPT Breast Cancer 3Day LLC	11/19/2010	4,000	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Del Mar Village Winter Wonderland	12/5/2010	2,000	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
La Jolla Half Marathon	4/17/2011	6,000	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Tour de Cure	5/7/2011	600	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
San Diego Century Bicycle Tour	5/21/2011	1,500	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Summer Twilight Concert Series	6/21/2011	5,000	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported
Del Mar Village Summer Solstice	6/23/2010	250	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported

Beach Cleaning

The City's beaches are a vital part of the City's community – not only for the natural settings they provide, but also for the economic sustainability of the City. In an effort to prevent pollutants from entering the Pacific Ocean and potentially impacting the receiving waters, the City implements a regular beach cleaning program.

During the reporting period, the beaches were inspected on a daily basis and cleaned two to three times per week during the spring and summer and more frequently for holidays when the beach had the most use. The primary collections for disposal included plastic bottles and paper trash. When located, kelp wrack was sorted and left on the beach.

The City does not track the amount of debris collected from the beaches, as the cleaner dumps the debris at the Public Works Yard into a trash dumpster that is mixed with other refuse and waste.

4.2.4 Table 4-1 Item No. 20

There were no violations or enforcement actions taken at any municipal activities or facilities during Fiscal Year 2011.

4.2.5 Table 4-1 Item No. 21

Section 6.19 of the 2008 JURMP describes the City's program to reduce pollutants from non-emergency firefighting flows (i.e. flows from controlled or practice blazes and/or maintenance activities). During this reporting period, all training sessions were held at Regional Training facilities outside the City of Del Mar, and any vehicle maintenance (including washing) was conducted in accordance with Section 6.19 of the 2008 JURMP. No non-emergency firefighting flow from training or other maintenance activities occurred during Fiscal Year 2011 which would require any additional efforts to reduce pollutant discharges.

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5. INDUSTRIAL AND COMMERCIAL

5.1 PROGRAM IMPLEMENTATION

Table 5-1 represents the City of Del Mar's Fiscal Year 2011 implementation of the Industrial and Commercial component as it relates to the Municipal Permit requirements. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table and are included as an Appendix or are provided in Section 5.2.

During Fiscal Year 2011, the City was compliant with Section D.3.b. of the Municipal Permit.

Table 5-1: Industrial and Commercial Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Any updates to the industrial and commercial inventory.	See **Appendix H** for the inventory update
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	Confirmed
3	A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	See 5.2.1 below for description
4	Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	Inventoried = 44 stationary facilities Inspected = 44 stationary facilities
5	Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	Followed justification and rationale provided in 2008 JURMP
6	Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed
7	At a minimum, 100% of all sites (excluding mobile sources) determined to pose a high threat to water quality (TTWQ) shall be inspected.	100% of all inventoried stationary sites determined to pose a high TTWQ were inspected.
8	At a minimum, 25% of the sites inventoried as required in section D.3.b.(1) of the Permit (excluding mobile businesses) shall be inspected.	The City's entire commercial and industrial inventory (100%) received site visits and/or inspections. **See Appendix I**

Item No.	Program Implementation Description	Confirmation and/or result
9	Identification of the number of third party inspections conducted.	None
10	Identification of efforts conducted to verify third party inspection effectiveness.	None
11	A description of efforts implemented to address mobile businesses.	See 5.2.2 below for description
12	The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See 5.2.3 below for discussion
13	A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	Followed steps described in JURMP
14	A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	The City continued to exceed Permit requirements by inspecting 100% of the inventoried commercial and industrial businesses.

5.2 TABLE 5-1 SUPPLEMENTAL INFORMATION

5.2.1 Table 5-1 Item No. 3

During Fiscal Year 2011, the City provided notification to owners/operators of industrial and commercial businesses of the applicable BMP requirements. This information was specific to automotive and food establishment businesses. Only seven (7) businesses operating within the City of Del Mar did not fall into one of these two categories - these included three (3) animal facilities, one (1) pottery manufacturing company, and three (3) hotels. These notification efforts will continue through the next Fiscal Year and will be reported in the next annual report.

Mobile businesses completing business license applications are directed to the Clean Water Manager for a one-on-one discussion regarding applicable BMPs and other applicable City program requirements.

5.2.2 Table 5-1 Item No. 11

An inventory of known mobile businesses within the City's jurisdiction has been updated for Fiscal Year 2011 and is included as **Appendix J**. This inventory is based on the City's business license list, and is updated on a regular basis. The current inventory lists over 880 mobile businesses operating within the City of Del Mar, and all are presently considered high TTWQ facilities. The City continues to take opportunities to educate mobile sources when poor practices are observed or reported to the City.

5.2.3 Table 5-1 Item No. 12

Industrial and Commercial Inspection Follow-up and Enforcement

The City's enforcement process is to perform a follow-up visit for those businesses found to be out of compliance during inspections. If the business is still out of compliance after the follow-up visit, City Code Enforcement is notified whereby a Notice of Violation (NOV) or citation will be issued if there is still no evidence of compliance. Although one (1) business was noted as requiring a follow-up due to the Fiscal Year 2011 inspection program, no NOVs were issued to any business as a result of the inspections. The follow-up inspection for the one (1) facility will be conducted during the Fiscal Year 2012 reporting period.

Complaint Investigation Follow-up and Enforcement – Industrial and Commercial Facilities

In addition to inspection follow-ups, the City also receives complaints or initiates investigations based on staff's observations of storm water violations. After reviewing the facts of the case, the Code Enforcement Officer or Clean Water Manager determines the level of violation (if any) and may issue an NOV and/or administrative citation as appropriate. The City has made it a policy that education is to play a significant role in the enforcement of storm water regulations. In most cases, a verbal warning is all that is necessary and compliance is achieved. However, in some instances, further enforcement action is required.

At present, the City does not actively track contacts made with local businesses that result in verbal warnings only. However, during Fiscal Year 2011, ten (10) investigated incidents involving commercial or industrial operations warranted formal NOVs and/or issuance of Administrative Citations by the City. The City's Code Enforcement Officer issued NOVs as a result of the ten (10) investigations. Additionally, fines were levied at three (3) businesses totaling to $500.

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6. RESIDENTIAL

6.1 PROGRAM IMPLEMENTATION

Table 6-1 represents the City of Del Mar's implementation of the Residential component as it relates to the Municipal Permit requirements during Fiscal Year 2011. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table, and are included as an Appendix or are provided in Section 6.2.

During Fiscal Year 2011, the City was compliant with Section D.3.c. of the Municipal Permit.

Table 6-1: Residential Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Identification of the high threat to water quality residential areas and activities that were focused on.	As described in Section 8.2 of the City's 2008 JURMP, the City considers all residential areas within City limits to be high threat to water quality residential areas and activities.
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	Confirmed. Designated BMPs, per Appendix 8-A of the 2008 JURMP, were required to be implemented.
3	A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	See Section 6.2.1 below
4	Types and amounts of household hazardous wastes (HHW) collected, if applicable.	6.25 tons of mixed HHW; See Section 6.2.1
5	The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 6.2.2 below
6	A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	See Section 6.2.3 for description
7	A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	See Section 6.2.4 below
8.	A description of notable activities conducted to manage urban runoff from residential areas and activities	See Section 6.2.5 below

6.2 TABLE 6-1 SUPPLEMENTAL INFORMATION

6.2.1 Table 6-1 Item No. 3 and No. 4

The City continues to implement and facilitate proper management and disposal of used oil and household hazardous materials as described in Section 8.4.3 of the 2008 JURMP. During the reporting period, the City's contractor, PSC Environmental Services, LLC, continued to provide curbside pick-up and drop-off of household hazardous waste (HHW) for the City's residents. Table 6-2 below provides a summary of the HHW collection for the reporting period.

Table 6-2: Household Hazardous Waste Data

Fiscal Year	Pick-Up Service Users	Drop-off Services Users	Total Users	Total Weights of HHW Disposal (lbs)	Waste Oil Disposal (gal)
2010-2011	82	30	112	12,500*	No Data
2009-2010	43	17	60	6,686	15.9
2008-2009	96	16	112	12,542	6.9
2007-2008	130	34	165	11,698	50
2006-2007	104	31	135	12,845	No Data

*estimated by service provider

6.2.2 Table 6-1 Item No. 5

As a result of the investigations conducted by City staff, the enforcement actions in **Table 6-3** were taken. All enforcement actions resulted in compliance.

Table 6-3: Fiscal Year 2011 Residential Enforcement Actions Taken

Type of Enforcement Action	Number of Actions
Notice of Violation	15
Administrative Citation	2
Total Fines	**$300**

6.2.3 Table 6-1 Item No. 6

During the reporting period the City continued to utilize a combination of residential education, complaint investigation and code enforcement as methods for oversight of residential areas and activities as noted in the City's 2008 JURMP (Sections 8.3 and 8.4). The City evaluated the methods historically used and decided to implement an additional method of oversight – random patrols of residential neighborhoods. At least once a month, staff patrols all of the residential streets in the City to identify issues that require follow-up.

The City also developed a door hangar that can be used to notify residents and businesses of issues related to the Clean Water Program identified at or near their location. See **Appendix K** for a copy of the door hangar.

6.2.4 Table 6-1 Item No. 7

Regional Residential Education Program

The City continued to collaborate with other Copermittees in the implementation of the Regional Residential Education Program during Fiscal Year 2011. The City of Del Mar provides funds for the Regional Residential Education Program in collaboration with other Copermittees. A complete discussion, including program element development and implementation, of the Regional Education Program can be found in the Regional Urban Runoff Management Program annual report, submitted by the Principal Permittee under separate cover.

6.2.5 Table 6-1 Item No. 8

The City decided to implement an additional method of oversight for residential areas and activities – random patrols of residential neighborhoods. At least once a month, staff patrols all of the residential streets in the City to identify issues that require follow-up.

As previously stated, the City developed a door hangar that can be used to notify residents and businesses of issues related to the Clean Water Program identified at or near their location. See **Appendix K** for a copy of the door hangar.

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7. ILLICIT DISCHARGE DETECTION AND ELIMINATION

Per RWQCB Addendum No. 2 to Order R9-2007-0001, the City will submit this section in its entirety on December 15, 2011.

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8. EDUCATION

8.1 PROGRAM IMPLEMENTATION

Table 8-1 represents the City of Del Mar's implementation of the Education component as it relates to the Municipal Permit requirements during Fiscal Year 2011. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table and are included as an Appendix or are provided in Section 8.2.

During Fiscal Year 2011, the City was compliant with Section D.5 of the Municipal Permit.

Table 8-1: Education Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	A description of education efforts conducted for each target community.	The target communities are covered in items 2-6 of this table and all descriptions provided in Sections 8.2 below and noted Appendices are applicable to this item.
2	A description of how education efforts targeted underserved target audiences, high risk behaviors, and "allowable" behaviors and discharges.	See section 8.2.1 below
3	A description of education efforts conducted for municipal departments and personnel.	See section 8.2.2 below
4	A description of education efforts conducted for the new development and construction communities.	See section 8.2.3 below
5	A description of education efforts conducted for Industrial and Commercial owners/operators.	See section 8.2.4 below
6	A description of jurisdictional education efforts conducted for residents, the general public and school children.	See section 8.2.5 below

8.2 TABLE 8-1 SUPPLEMENTAL INFORMATION

8.2.1 Table 8-1 Item No. 2

As stated in the City's 2008 JURMP, there are no underserved or low-socioeconomic communities that have been identified in the City of Del Mar. However, the high-risk behaviors have been associated with non-stormwater discharges including residential over-irrigation and some mobile business practices.

To address the residential over-irrigation and other types of illegal discharges, the City developed a door hangar to be used to inform residents and businesses of non-stormwater discharges occurring at or near their locations. The City has begun using the hangars during the summer of 2011. The door hangar can be seen in **Appendix K.**

To address mobile businesses, the City has a policy where new business license applications for mobile businesses are directed to the Clean Water Manager to set up a one-on-one meeting with the applicants. This is setup to allow for education and outreach regarding the City's program and requirements. During the reporting period, business licenses for two new mobile businesses were applied for – however, contact was made with only one of the applicants. Subsequently, neither of the businesses completed the business license process.

8.2.2 Table 8-1 Item No. 3

Municipal Departments and Personnel

During the reporting period, staff received training on stormwater topics, including specific training focused on Permit requirements. The City of Del Mar held three (3) focused training sessions to educate field staff on job-specific stormwater principals and requirements, including the required "pre-wet season" training for construction inspections held for planning and code enforcement staff. 100% of the staff from the Planning and Community Development Department and Code Enforcement Division attended these trainings. The Clean Water Manager also hosted a workshop on SUSMP requirements which was attended by staff from Planning and Community Development and Engineering. Lastly, the Clean Water Manager provided training to the Public Works Department on issues related to their line of work. **Table 8-2** below summarizes the training conducted during the reporting period.

Table 8-2: Staff Education and Training Summary

Date	How Conducted	Education Topic	Attendees
09/30/2010	Planning and Community Development Staff Training Session	Overview of JURMP Construction Inspection Requirements (Wet Season)	Departmental Staff & Line Management
5/24/2011	Public Works Training Session	Clean Water Program and Public Works Specific Requirements	Public Works Staff and Management
6/14/2011	Planning and Community Development and Engineering Staff Training Session	Discussion on Land Development Requirements and Development of SUSMP Forms	Department Staff & Line Management – Planning and Engineering

City Council

In an effort to keep members of the City Council informed and aware of Clean Water Program issues, the Clean Water Manager provided updates at two City Council meetings. The emphasis

was placed on TMDLs that the City is currently involved with: bacteria in both San Dieguito and Los Peñasquitos watersheds and the sediment in the Los Peñasquitos watershed. Meeting dates include April 25, 2011, and May 11, 2011.

8.2.3 Table 8-1 Item No. 4

The City has two governing bodies whose purview is development activities within the City: the Design Review Board and the Planning Commission. The Clean Water Manager provided training to the Planning Commission on June 14, 2011, and to the Design Review Board on June 22, 2011. The trainings to both the Board/Commission and the development community in the audience were focused on Clean Water Program requirements for all development activity within the City. This included a discussion on impacts of development as well as the mitigation required through design and implementation of site design, source control and treatment control BMPs.

8.2.4 Table 8-1 Item No. 5

During Fiscal Year 2011, the City utilized its direct contact with the industrial and commercial businesses to provide outreach and activity specific education. The inspection staff has developed an excellent rapport with most of the business community and provides information and guidance as-needed. During site inspections or investigations, the City provided educational materials, e.g., posters and guidebooks, to the businesses.

8.2.5 Table 8-1 Item No. 6

In addition to the methods described above, the City of Del Mar uses media as a means of outreach to the general public. The City developed a 12 minute video in 2008 in an effort to reach and educate a wide audience about the Clean Water Program and regulatory requirements. The video, entitled "The Del Mar Clean Water Program: Keeping the Water Clean for You!" highlights the municipal programs conducted by the City, and provides a complete overview of the Permit elements. The video continues to remain available "on-demand" on the City of Del Mar website (www.delmar.ca.us/cleanwater.htm), and was made into DVD's for distribution to public groups, residents, and schools. In addition, the video has been used for discussions at City Council Meetings and during staff training. During the reporting period, the Clean Water Video was reviewed more than 108 times via the City's Website. In addition, the City distributed 20 copies of the DVD to community groups and other jurisdictions. **Table 8-3** below provides a breakdown by month on the number of times the video was viewed on the City's website during the Fiscal Year 2011 reporting period.

Table 8-3: Clean Water Video Webcast Summary

Month	Number of Views
Jul-10	10
Aug-10	13
Sep-10	4
Oct-10	18
Nov-10	8
Dec-10	9
Jan-11	14
Feb-11	9
Mar-11	8
Apr-11	3
May-11	7
Jun-11	5
TOTAL VIEWS	**108**

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9. PUBLIC PARTICIPATION

9.1 PROGRAM IMPLEMENTATION

During Fiscal Year 2011, the City was compliant with all elements of Section D.6 of the Municipal Permit.

General Public Feedback Mechanisms

The City continues to maintain an active website (www.delmar.ca.us) which provides the public with opportunities to contact City staff directly, and find information regarding any of the City's programs. The Clean Water Program has its own webpage that is updated as needed (http://www.delmar.ca.us/Government/dept/Pages/CleanWater.aspx) and allows the public to contact the Clean Water Manager and Code Enforcement Officer to report potential violations of the City's Stormwater Management and Discharge Control Ordinance (Section 11.30 of the Del Mar Municipal Code). The webpage also allows the public to ask questions regarding water use and runoff, and download information on the City's JURMP, and contains links to the City's various BMP Manuals and the Permit itself.

The City also continues to maintain a specific e-mailbox and hotline for reporting issues. This email address (cleanwater@delmar.ca.us) and hotline (858) 755-9313 x172 are directly answered by the City's Clean Water Manager. Every attempt is made to respond to any inquiry by the close of the next business day. When inquiries are made from areas within the 92014 zip code, but outside the City's jurisdiction (i.e. the "Del Mar Heights" portion of the City of San Diego), City of Del Mar staff notify City of San Diego staff for follow-up.

The City continues to provide opportunities for the general public to become involved with the implementation of the JURMP, by working with the community in reducing pollutant discharge through recycling opportunities, eliminating off-site drainage, and other activities aimed at protecting water quality through the reduction of water waste.

Formal Public Hearings and Workshops

The general public is given the opportunity to provide testimony and provide feedback on issues related to the Clean Water Program at regular meetings and workshops held by the Del Mar City Council, the Del Mar Planning Commission, and other City Committees. This can include public testimony on development planning and capital improvement projects relating to the project-specific implementation of stormwater controls. All testimony, concerns, and input are then referred to staff for review, comment, and action as appropriate.

During the Fiscal Year 2011 reporting period, the Del Mar City Council held 37 public meetings (including public workshops) in which the general public was given the opportunity to provide feedback on the Clean Water Program, or on any topics they wished to bring before the elected officials of the City.

During the reporting period, there were specific City Council agenda items relating to the Clean Water Program including implementation of the JURMP. To reach the widest audience possible, these hearings and workshops are streamed live over the internet, broadcast live on DelMarTV (Time Warner Cable Channels 19 & 24), replayed in their entirety the two days following the hearing on DelMarTV, and available on-demand through the City's website. **Table 9-1** below provides a list of the specific City Council Agenda items relating to the Clean Water Program, JURMP, or other water quality related issues for the Fiscal Year 2011 reporting period.

Table 9-1: Public Participation Program Implementation

Hearing Date	Subject
Sept. 20 , 2010	Clean Water Program Update/Standard Urban Stormwater Mitigation Plan (SUSMP) Update/JURMP Annual Report Update
April 25, 2011	Clean Water Program Update/Bacteria and Sediment TMDL Updates
May 11, 2011	Clean Water Program Budget Hearing

Staff as Feedback Mechanism

As indicated in the 2008 JURMP, the City of Del Mar believes that City staff are the public at work. More importantly, field staff are the eyes and ears of the City, interacting with the general public during their day-to-day work. Staff is continually encouraged to report violations and provide feedback to the City's Clean Water Manager on the implementation of the JURMP, and can provide valuable information on which systems and programs are working and suggestions on improving the programs.

During the reporting period, Development and Planning staff made recommendations for changes to the counter materials used to both inform applicants and receive project information related to the Clean Water Program. As previously mentioned (Section 2 of this report), the Clean Water Program made modifications to the counter material based upon this feedback from staff.

10. FISCAL ANALYSIS

10.1 PROGRAM IMPLEMENTATION

During Fiscal Year 2011, the City was compliant with Section G of the Municipal Permit.

Section 12 of 2008 JURMP provided a strategy for effectively conducting a fiscal analysis of the Program in its entirety. The fiscal analysis strategy in the 2008 JURMP included the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities of the Program. No modifications in Section 12 of the 2008 JURMP were made during this reporting period.

On January 29, 2009, the San Diego Municipal Copermittees adopted the "Standardized Fiscal Method and Format" which provides a model for the City of Del Mar and other Copermittees to perform the review and annual reporting as required in Order R9-2007-0001, Section G. This methodology and reporting format became effective in January 31, 2010. The "Standardized Fiscal Analysis Method and Format" (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k) and J.1.c(1)(d) of the Permit. The Fiscal Analysis Method document was submitted to the San Diego RWQCB on January 31, 2009, as Attachment 1 of the "Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009."

As required, the City of Del Mar is utilizing the format and guidelines described in the Fiscal Analysis Method for this reporting period. This section of the Annual Report provides a fiscal analysis of the City's urban runoff management programs which meets all requirements of the Permit.

10.1.1 Clean Water Program Budget

The City of Del Mar Clean Water Program is a multi-departmental program, funded as an enterprise fund in the City's Annual Budget. Enterprise funds account for operations that are financed and operated in a manner similar to private businesses, with the costs of providing the services recovered largely through user fees. Fund 55 ("The Clean Water Fund"), is one of three (3) enterprise funds in the City's budget, and was added to the City's budget in Fiscal Year 2004 to account for the mandated costs of the City's responsibilities Municipal Permit.

The City of Del Mar Operating and Capital Improvement Budgets for Fiscal Year 2010 and Fiscal Year 2011 were presented to the Del Mar City Council in a series of public workshops held in May and June 2009, and was adopted by the City Council at a public hearing held on June 22, 2009.

For the Fiscal Year 2010-2011 reporting period, the final amended budget for Fund 55 totaled $473,311.

Table 10-1 below provides a breakdown of program budget by major budget category for Fiscal Year 2011.

Table 10-1: Budget Summary – Clean Water Fund 55

Fund Account		Adopted Budget Fiscal Year 2011	Description/Comments
55-5220	Clean Water Engineering	82,200	Engineering contractual services including: Program management (Fiscal Year 2008) water quality testing, development and distribution of educational materials, fees to agencies (Fiscal Year 2008), and engineering services.
55-5530	Clean Water Planning	31,752	Active enforcement of Clean water regulations including project plan review, permitting, construction monitoring and plan review of BMPs.
55-5536	Clean Water Code Enforcement	29,964	Active in-field enforcement clean water regulations, including response to resident complaints
55-5539	Clean Water Program Management	190,463	Beginning mid-year Fiscal Year 2008, all program management and reporting activities, fees to agencies, and interaction with regional Copermittee groups.
55-5840	Public Works (General)	16,801	Provides for administration and general support for all clean water programs for property and facilities, including supervision of maintenance staff.
55-5841	Flood Control & Drainage	4,497	Provides for necessary monitoring, water quality testing, and labor associated with program requirements when Flood Control pumps are operated.
55-5845	Street Maintenance	84,665	Provides for a portion of sidewalk and street cleaning including street sweeping and storm drain maintenance within the City limits of Del Mar. Also covers costs with testing, recording contents, and recovering all deposited materials that otherwise would discharge to the beach, river, or lagoon.
55-5847	Street Landscaping	19,180	Provides for landscape supervision, documentation, and controls for the Clean Water aspects of the street landscaping for medians, islands, street ends, and other street related areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting.
55-5848	Park Maintenance	13,789	Provides for park maintenance supervision, documentation, and controls for the Clean Water aspects of the landscaping for parks and open space areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting.
Total Clean Water Program Budget – Fund 55		**$473,311**	

10.1.2 Fiscal Analysis Methods

The City of Del Mar utilized the format and guidelines included in the Fiscal Analysis Method for reporting purposes; however, given the City's financial accounting methods, a few modifications were necessary. These adjustments are described below.

10.1.3 Fiscal Analysis Results

The City's Fiscal Year 2011 jurisdictional (JURMP), watershed, (WURMP), and regional (RURMP) projected expenditures for the implementation of the Municipal Permit requirements are summarized in **Table 10-2** below.

10.1.4 JURMP Expenditures

The City of Del Mar utilized the expenditure categories detailed in the Fiscal Analysis Method for jurisdictional reporting. However, due to the implementation overlap of some of the City's municipal permit components; it is difficult to separate out individual component costs. As a result, the expenditures for residential, education, and public participation are reported as one expenditure category. Additionally, since the City does not explicitly track expenditures by municipal permit component for its budgeting purposes, in many cases estimated percentages were utilized to allocate expenditures into the appropriate municipal permit component categories.

A total of $473,311 was projected to be expended in Fiscal Year 2011 for the implementation of JURMP activities. An overview of the expenditures reflected in JURMP activity components is described below.

Administration
Activities identified in this component represent labor and non-labor expenditures for materials, supplies, equipment, or tools that are not otherwise incorporated into other expenditure categories, general administrative functions (e.g., program planning, budgeting, staff supervision), and program assessment and reporting.

Development Planning
Activities identified in this component represent labor and non-labor expenditures related to issuance or oversight of permits or of plans (e.g., permit counter support, plan checks, permit or application processing), project planning and engineering (e.g. project design specifications, capital improvement projects).

Construction
Activities identified in this component represent labor and non-labor expenditures related to construction site inspections and enforcement.

Municipal
Activities identified in this component represent labor and non-labor expenditures related to maintenance inspections of streets, roads, catch basins and inlets, open channels, and the MS4, municipal facility inspections, street and parking lot sweeping, catch basins and inlets, open channels, and MS4 cleaning, and municipal BMP implementation. Since the City of Del Mar conducts all fire-fighting training outside of the City, and no non-emergency fire-fighting flows occurred during the reporting period, the City does not currently track expenditures relating to non-emergency fire-fighting flows. Any costs associated with preparing for these flows are included in the municipal component.

Table 10-2: Fiscal Year 2011 Expenditure Summary by Program Component

Component Description	Fiscal Year 2011 Projected Expenditures
Jurisdictional Component	
Administration	59,763
Development Planning	34,483
Construction	23,025
Municipal (Including Non-Emergency Fire Flows)	130,092
Industrial and Commercial	16,131
Residential, Education, and Public Participation	45,099
IDDE	77,080
Jurisdictional Total	**385,673**
Watershed Component	
San Dieguito Watershed	35,006
Los Peñasquitos Watershed	30,500
Watershed Total	**65,506**
Regional Component	
Total Copermittee Cost Share for Del Mar	19,065
Additional Regional Costs	3,067
Regional Total	**22,132**
Total Costs	**$473,311**

Industrial and Commercial

Activities identified in this component represent labor and non-labor expenditures related to evaluation and enforcement of program requirements at industrial and commercial sites or sources (e.g. routine inspections and complaint investigations).

Residential, Education, and Public Participation

Activities identified in these components represent labor and non-labor expenditures related to investigation and enforcement of residential areas or activities, staffing outreach events, development and production of outreach materials, and any expenditures associated with waste collection and recycling (e.g. HHW, used oil).

Illicit Discharge Detection and Elimination

Activities identified in this component represent labor and non-labor expenditures related to the identification and elimination of illicit discharges or connections, enforcing the City of Del Mar's storm water ordinance, and any expenditures related to monitoring programs (e.g. Dry weather monitoring, coastal storm drain monitoring, special investigations, field or sampling equipment, materials and supplies).

10.1.5 WURMP Expenditures

The City of Del Mar utilized the expenditure categories (administration, watershed activities, cost share contribution, and other) detailed in the Fiscal Analysis Method for watershed reporting. The watershed expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees included in the watershed(s).

A total of $65,506 was projected to be expended in Fiscal Year 2011 for the implementation of WURMP activities. This also includes costs for the implementation of applicable TMDLs (Los Peñasquitos Lagoon Sediment TMDL development and Bacteria TMDL Revised Project I Twenty Beaches and Creeks in San Diego Region), which are considered Special Studies.

10.1.6 RURMP Expenditures

The City of Del Mar utilized the expenditure categories (administration, cost share contribution, regional activities, and other) detailed in the Fiscal Analysis Method for regional reporting. The regional expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees in the region. A total of $22,132 was projected to be expended in Fiscal Year 2011 for the implementation of RURMP activities.

10.1.7 Funding Sources

To ensure adequate funding for the Clean Water Program, the City uses a combination of user fees and general fund monies.

10.1.8 Clean Water Service Charge

The City of Del Mar City Council created and adopted a user fee, called the Clean Water Service Charge to offset the costs of the program. Initially, the rate was adopted to collect $100,000.00 of the estimated $300,000.00 for the program, with an escalator to achieve full cost recovery by 2009. Mid-way through the five-year schedule, on July 24, 2006, the California Supreme Court published a decision in the case of Bighorn-Desert View Water Agency v. Verjil (2006) 39 Cal. 4th 205, which held that consumption-based rates such as water and sewer rates are subject to the notice and hearing requirements of California Constitution, Article XIIID, Section 6 (commonly known as "Proposition 218"). Therefore, on January 22, 2007, and February 5, 2007, the Del Mar City Council held public hearings to receive written protests to comply with Proposition 218. No majority protest was received; and the Council ratified the previously approved five-year rate schedule, including the City's Clean Water Service Charge. However, the adopted rate increases did not account for the actual increases in the costs associated program requirements.

As an additional measure to obtain voter approval of the five-year rate schedule for the City's Clean Water Service Charge, the Council directed staff on April 2, 2007, to start the process to perform a mail ballot election procedure. During the process of researching the mail ballot

election procedures and the current rates, it became apparent that the process would immediately need to be repeated to set the Fiscal Year 2010 rates and charges, since the current five-year rate schedule was due to expire in June of 2009. Due to the additional costs incurred in complying with the new requirements of the 2007 Permit, increases to the Clean Water Service Charge were proposed, including an annual rate escalator. All monies appropriated as part of the Clean Water Service Charge are directly identified for the Clean Water Program, and pursuant to law, may not be used by the City for any other purpose.

During the Fiscal Year 2009 reporting period, in compliance with Proposition 218, both the majority protest hearing and mail ballot process were conducted for the proposed increases. Both the ratification of the existing rate structure (required by Proposition 218), and the new rates, including the rate escalator, passed by more than 62%. As a result of the passage of the Clean Water Service Charge, the City will continue to have a secure funding source for the Clean Water Program, outside of general fund monies. Based on current water allocations for the City of Del Mar, the projected revenues from the Clean Water Service Fee will be $477,731 for Fiscal Year 2012.

10.1.9 General Fund Monies

The City of Del Mar General Fund accounts for all the revenues received by the City that are not designated for a specific purpose either by the City Council, State or Federal requirements, or special requirements such as those associated with bond debt. The City monitors the General Fund dollars most closely because these revenues fund the backbone of City government. The major sources of General Fund revenues include property tax, sales tax, transient occupancy tax, and parking fees and fines.

During Fiscal Year 2011 a portion of the overall program expenditures was funded out of General Fund monies. It is the hope of the City that the Clean Water Service Fee collected is sufficient to cover all costs associated with the program, and that General Fund monies may be freed up for other services, including special projects. However, the City is committed to ensuring that the necessary funds to meet all permit requirements is available, should the Clean Water Service Fee not cover all costs of the program.

11. EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The Municipal Permit specifies that Copermittees assess the effectiveness of their JURMP at three levels: programmatic, component, and activity-specific. The City uses these effectiveness assessments as part of a feedback loop that incorporates planning, implementation and assessment of its overall Clean Water Program.

This section outlines an integrated effectiveness assessment process that includes compliance assessment results for Fiscal Year 2011 and program changes that reflect the City's approach to adaptive management. In addition to learning from its own program assessment, the City learns from other Copermittees' programs. The information that is shared amongst the Regional Copermittees is used by the City to evaluate its activities and make improvements.

11.2 EFFECTIVENESS ASSESSMENT RESULTS

11.2.1 Baseline BMP Assessment

The City assesses the effectiveness of its specific activities, program components and overall JURMP by evaluating at the following outcome levels.

Table 11-1: Effectiveness Assessment Outcome Levels 1-4

Outcome Level	Description	Assessment
1	Program Compliance	Measured by comparison to targeted outcomes, and the City's effectiveness at implementing the Municipal Permit
2	Changes in Attitudes, Awareness and Knowledge	Measured by pre- & post-surveys and questioning of specific regulated communities
3	Behavioral Changes and BMP Implementation	Measured by analysis of inspection findings
4	Load Reductions	Measured by direct method – how much waste material is collected and disposed

Level 1 – Compliance Assessment—Activity, Components and Program

Overall program compliance is based on the summation of the individual Municipal Permit component compliance evaluations. Municipal permit component compliance is determined by comparing data to the targeted outcomes for specific activities. For Fiscal Year 2011, the targeted outcomes for each permit activity are defined as fulfilling the baseline Municipal Permit requirements of Order R9-2007-0001. The assessment results are provided below.

Overall, the City met 100% of its targeted outcomes for Baseline BMP significant activities.

Table 11-2: Assessment of Development Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2011 Targeted Outcome	Confirmation and/or result
1	Require all development projects to undergo the City's urban runoff approval process and meet applicable project requirements	1	Confirmation	100% of development projects undergo urban runoff approval process and meet requirements	Confirmed
2	Require all applicable SUSMP BMPs to be applied to all priority development projects	1	Confirmation	100% of PDPs to have SUSMP BMPs applied	Not Applicable for Fiscal Year 2011 - No PDP projects
3	If PDPs are allowed to implement treatment control BMPs with low removal efficiency rankings, require that a feasibility analyses is conducted to exhibit that more effective BMPs were infeasible	1	Confirmation	Allow 0% to implement TCBMPs with low efficiency ranking - unless paired with higher efficiency TCBMPs	Not Applicable for Fiscal Year 2011 - No PDP projects
4	Maintain an updated treatment control BMP inventory	1	Confirmation	Conduct 100% of updates	Confirmed - no updates
5	Inspect TCBMPs per minimum requirements in Permit	1	Confirmation	Inspect 100% of TCBMPs in City inventory	Completed
6	Conduct annual verification of operation and maintenance of TCBMPs	1	Confirmation	Verify 100% of TCBMPs in City inventory	Completed
7	Conduct BMP verification for all PDPs prior to occupancy	1	Confirmation	Perform inspections at 100% of PDPs to ensure BMPs are constructed prior to occupancy	Not Applicable for Fiscal Year 2011 - No PDP projects
8	For all qualifying HMP Projects, ensure that HMP requirements are applied	1	Confirmation	Require 100% of qualifying projects to implement HMP requirements	Not Applicable for Fiscal Year 2011 - No PDP/HMP projects
9	Enforce the development projects throughout their process including post-construction TCBMP maintenance	1	Confirmation / Tabulation	Enforce as necessary	No enforcement necessary for Fiscal Year 2011

Table 11-3: Assessment of Construction Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2011 Targeted Outcome	Confirmation and/or result
1	Require all construction sites projects to undergo the City's urban runoff approval process and meet applicable construction requirements	1	Confirmation	100% of development projects undergo construction urban runoff approval process	Confirmed
2	Maintain a regularly updated construction site inventory	1	Confirmation	Maintain inventory on monthly basis	Confirmed
3	Require designated BMPs to be implemented for all construction sites.	1	Confirmation	Require construction BMPs at 100% of construction sites	Confirmed
4	Apply maximum disturbed area requirements for all applicable construction sites.	1	Confirmation	Require maximum disturbed area requirements at 100% of applicable sites	Not applicable during Fiscal Year 2011 - no applicable sites
5	Maintain a listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites	1	Confirmation	Require advanced treatment requirements at 100% of applicable sites	
6	Conduct construction site/activity inspections at the required frequencies	1 & 3	Confirmation / Tabulation / Inspection	Conduct 100% of required inspections at proper frequencies	Confirmed
7	Take enforcement actions against the construction community as-needed to obtain compliance with the City's Municipal Code	1	Confirmation / Tabulation	Enforce as necessary	Confirmed – 2 NOVs and Fines

Table 11-4: Assessment of Municipal Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2011 Targeted Outcome	Confirmation and/or result
1	Update the municipal inventory and prioritization	1	Confirmation	Update inventory and prioritization as necessary	Confirmed - however, no updates during Fiscal Year 2011
2	Require designated BMPs to be implemented, for municipal areas and activities, as well as special events	1	Confirmation	Require BMPs at 100% of municipal sites and activities	Confirmed
3	Inspect and maintain municipal treatment controls.	1	Confirmation	Conduct 100% of required inspections at proper frequencies	Confirmed
4	Inspect and clean catch basins/inlets at appropriate frequencies	1 / 3	Tabulation / Inspection	Inspect basins/inlets at proper frequencies	Inventory = 284 Inspected = 284 Catch Basins/Inlets Cleaned = 284
5	Inspect and clean MS4 pipes at appropriate frequencies	1	Tabulation	Inspect MS4 at proper frequencies	Total Distance of MS4 pipes = 5.87 miles Total Distance inspected ~ 3,500 feet Total Distance cleaned ~ 2,500 feet
6	Inspect and clean open channels at appropriate frequencies	1	Tabulation	Inspect channels at proper frequencies	Open Channels = 2.85 miles Inspected = 2.85 miles Cleaned ~ 2.85 miles
7	Remove waste and litter from catch basins, inlets, the MS4, and open channels as required	4	Quantification	Clean MS4 system as required	Catch Basins/Inlets and MS4 = 55.2 tons
8	Require designated BMPs for pesticides, herbicides, and fertilizers to be implemented for municipal areas and activities.	1	Confirmation	Require BMPs for pesticides, herbicides and fertilizers at 100% of municipal sites and activities	Confirmed

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2011 Targeted Outcome	Confirmation and/or result
9	Track number of miles swept	1	Tabulation	Conduct sweeping at required intervals	Confirmed - 1,131 miles
10	Sweep parking lots and streets	4	Quantification	Conduct sweeping at required intervals	Street and Parking Lot Sweeping = 94.5 tons
11	Implement efforts to prevent and eliminate infiltration from the sanitary sewer to the MS4	1	Confirmation	Conduct sanitary sewer efforts	Confirmed
12	Conduct inspections of the City's municipal areas and activities	1	Confirmation	Conduct inspections at the required frequencies	Confirmed
13	Take enforcement actions against the municipality as-needed to obtain compliance with the City's Municipal Code	1	Confirmation / Tabulation	Enforce as necessary	Confirmed - none during Fiscal Year 2011

Table 11-5: Assessment of Industrial/Commercial Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2011 Targeted Outcome	Confirmation and/or result
1	Update the industrial and commercial inventory	1	Confirmation	Update inventory and prioritization as necessary	Confirmed
2	Require designated BMPs to be implemented, for industrial and commercial sites/sources.	1	Confirmation	Require BMPs at 100% of commercial and industrial businesses	Confirmed
3	Notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses	1	Confirmation	Notify 100% of inventoried businesses of Clean Water Program requirements	Confirmed
4	Inspect the businesses on the City's inventory at the percentages identified in the Permit (at least 25% of inventory)	1 / 3	Confirmation / Inspection / Tabulation	Inspect 100% of inventoried businesses	Confirmed
5	Take enforcement actions against the business community as-needed to obtain compliance with the City's Municipal Code	1	Confirmation / Tabulation	Enforce as necessary	NOV = 10 Citation = 3

Table 11-6: Assessment of Residential Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2011 Targeted Outcome	Confirmation and/or result
1	Require designated BMPs to be implemented for residential areas and activities	1	Confirmation	Require BMPs at 100% of the City's residential areas and activities	Confirmed
2	Facilitate proper management and disposal of used oil and other household hazardous materials	1	Confirmation	Implement a household hazardous waste program	Confirmed
3	Take enforcement actions against the residential community as-needed to obtain compliance with the City's Municipal Code	1	Confirmation	Enforce as necessary	NOV = 15
					Citation = 2
4	Collaborate with Regional Education Program	1	Confirmation	Collaborate with Regional Education Program	Confirmed

Table 11-7: Assessment of Education Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2011 Targeted Outcome	Confirmation and/or result
1	Conduct outreach to high-risk dischargers	1	Confirmation	Conduct outreach to high-risk dischargers	Confirmed
2	Conduct training of municipal departments and personnel	1	Confirmation	Conduct training of municipal departments and personnel	Confirmed
3	Conduct outreach to the development and construction communities	1	Confirmation	Conduct outreach to the development and construction communities	Confirmed
4	Conduct outreach to the general public.	1	Confirmation	Conduct outreach to the general public	Confirmed

Table 11-8: Assessment of Miscellaneous Program Items

No.	Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2011 Targeted Outcome	Confirmation and/or result
1	Conduct public participation activities	1	Confirmation	Conduct public participation activities as-needed	Confirmed
2	Conduct a fiscal analysis of the City's urban runoff management programs.	1	Confirmation	Conduct a fiscal analysis of the program	Confirmed
3	Conduct special investigations as-needed	1	Confirmation	Conduct special investigations	Confirmed
4	Identify and make any revisions necessary to the JURMP	1	Confirmation	Revise JURMP as-needed	No revisions during Fiscal Year 2011

Level 2 – Changes in Knowledge, Awareness and Attitudes Assessment

During Fiscal Year 2011, the City continued its efforts to collect data and information regarding changes in attitude, awareness and knowledge. In general, the regulated community continued to show a greater awareness and knowledge of the Clean Water Program, its purpose and goals. The inspected businesses in particular showed a greater understanding of the program and its requirements.

Level 3 – Behavioral Changes and BMP Implementation Assessment

During the reporting period the City continued its efforts to collect data and information for assessing behavioral changes and BMP implementation. The primary method of data collection was inspections of various sites/facilities to determine BMP implementation. Based on the findings of the inspections of municipal, commercial and construction sites, it is evident that the community as a whole is exhibiting a greater rate of BMP implementation.

Level 4 – Load Reduction Assessment

During Fiscal Year 2011, the City continued its efforts to collect data and information for assessing pollutant load reductions. The primary method for determining pollutant load reductions was to collect and analyze data on specific storm water activities; such as storm drain cleanings, street sweeping, and municipal inspections. Until more data and information becomes available to accurately estimate pollutant load reductions from non-cleaning activities, the City will rely on these activities as the primary quantifiable pollutant load reduction activities.

Below is a summary of the quantifiable pollutant load reduction activities that the City conducted during the Fiscal Year 2011 reporting period:

- Collected 6.25 tons of HHW.
- Public Works conducted 284 inspections of catch basins and inlets, and cleaned 284 catch basins and inlets with accumulated waste.
- Total debris removed from catch basins, inlets, cleanouts, and the MS4 was 55.2 tons of waste and litter by the Public Works Department.
- Through the implementation of the City's street sweeping program, 1,131 curb miles were swept and 94.5 tons of debris (including parking lots) was removed within the City.

11.2.2 Integrated Program Assessment

Water quality and integrated assessments will be performed at long-term intervals (every five years), and the results will be presented in the Annual Report. The Fiscal Year 2012 report will include a comprehensive water quality and integrated assessment. The assessment will include information collected from regional, watershed, jurisdictional, and Municipal Permit-required programs (e.g., TMDL programs) and will be compiled and assessed for areas within the City's jurisdiction. In the future, MS4 and receiving water data will be analyzed separately to assist in the development of Outcome Level 5 and 6 assessments.

Integrated Program Planning

The City will continue to adapt its program based upon assessments of the baseline program and the BMP efficiencies. These two assessments and their resulting changes to the City's program are described below.

Baseline BMP Assessment

During the reporting period, the City met its targeted outcomes. Based upon this key assessment, the City does not plan to make modifications to its Baseline BMP implementation.

Adaptive Management

During Fiscal Year 2011, the City met with other Copermittees, through WURMP meetings and other forums, and learned about pilot and special studies recently conducted. During the Fiscal Year 2012 reporting period, the City of Del Mar plans to apply adaptive management to their program. The adaptive management will be based upon findings from other Copermittees' studies and activities.

The program modifications will be a part of the City's Fiscal Year 2012 WURMP Activity to assess the effectiveness of revised inspections processes. The revised processes include more frequent patrol property-based inspections. The City anticipates that it can inspect a significantly greater portion of the community on a more frequent basis. Results of this activity will be reported in the Fiscal Year 2012 WURMP Annual Reports and Fiscal Year 2012 JURMP Annual Report.

12. JURMP REVISIONS

The City did not make changes to its 2008 JURMP during the Fiscal Year 2011 reporting period.

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13. CONCLUSIONS AND RECOMMENDATIONS

During the Fiscal Year 2011 reporting period, the City of Del Mar implemented the Municipal Permit requirements and the activities described in the City's 2008 JURMP. The City continues to support a comprehensive stormwater management program, which is evident in, and reflected by, the City's efforts to implement its JURMP. This Annual Report documents the City's efforts to implement various JURMP programs such as education, inspections, inventories, monitoring, and public participation. These activities and their compliance are reflected in Program Assessment tables contained in the Effectiveness Assessment addressed in Section 11 of this Annual Report.

This section draws conclusions from the collected data contained in this Annual Report, and makes appropriate recommendations based on the review of program implementation during the Fiscal Year 2011 reporting period.

13.1 RECOMMENDATIONS AND PROGRAM MODIFICATIONS

The City's Clean Water Program continued to evolve during the Fiscal Year 2011 reporting period. As indicated in the City's 2008 JURMP, the program will require periodic revision. The City remains committed to working with its staff, other Copermittees and the Regional Board to improve and adapt its plan and make all efforts necessary to comply with the Permit requirements and to make improvements to water quality. As lessons are learned, and as a result of City staff input, modifications may be required to make sure that the City's program continues to be effective.

As described in Section 12 of this Annual Report, the City did not make modifications to its program.

Some of the key recommendations for program implementation during Fiscal Year 2012 are as follows:

- Continue implementation of the City's 2008 JURMP;
- Continue improvements to activity/document tracking systems through database revisions and implementation;
- In depth assessment of the operating procedures as related to the City's 2008 JURMP – focusing particularly on field implementation of the requirements, and whether the efficiency of implementation can be improved;
- Continue to engage and involve the community in the program implementation through increased personal contact and enhancements to the City's website; and
- Continue to coordinate with the Regional Copermittees for consistent approaches to program implementation.

13.2 CONCLUSIONS

As evidenced in the Permit Component Tables, the City has largely been successful at implementing its clean water program. With continued review and modifications of its 2008 JURMP, and ongoing input on the implementation of its program, the partnership between residents, local businesses, and City staff will continue to allow the City to work diligently in protecting its waterways, and improve water quality at its beaches and lagoons.

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Administrative Design Review Permits ***REVIEWED*** *between 7.1.10 to 6.30.11*

Parcel #	St. #	Street Name	Project Name	Project #	Comments
299-072-41	2136	Heather Lane	Rattner	ADR-10-16 MOD	minor project-no significant surface disturbance
299-136-24	2004	Coast	Huebner	ADR-10-24	minor project-no significant surface disturbance
299-136-24	411	11th Street	Entous	ADR-10-25	minor project-no significant surface disturbance
299-231-05	1709	Coast	Bloum	ADR-10-26	minor project-no significant surface disturbance
299-095-05	122	24th Street	Neely	ADR-10-27	minor project-no significant surface disturbance
300-075-06	1201	Camino del Mar	Conkwright	ADR-10-28	minor project-no significant surface disturbance
301-012-25	205	Oceanview	Nerenberg	ADR-10-29	minor project-no significant surface disturbance
300-200-03	720	Camino del Mar	Del Mar Inn	ADR-10-30	minor project-no significant surface disturbance
299-280-45	454	Zuni	Davidson	ADR-11-01	minor project-no significant surface disturbance
299-146-17	1912	Oceanfront	Hayward	ADR-11-02	minor project-no significant surface disturbance
301-021-01	108	Nob Ave	Sinnott	ADR-11-03	minor project-no significant surface disturbance
299-132-19	243	22nd Street	Schwartz	ADR-11-04	minor project-no significant surface disturbance
300-012-17	1328	Camino del Mar	Crepes and Cork	ADR-11-05	minor project-no significant surface disturbance
298-241-08	3263	Camino del Mar	Brigantine	ADR-11-06	minor project-no significant surface disturbance
299-065-06	2614	Oceanfront	Cassidy	ADR-11-07	minor project-no significant surface disturbance
300-222-09	405	9th Street	Patapoutan	ADR-11-08	minor project-no significant surface disturbance
300-072-02	123	13th Street	Jankowski	ADR-11-09	minor project-no significant surface disturbance
300-040-21	1345	Via Alta	Danola	ADR-11-10	minor project-no significant surface disturbance
300-222-31	853	Camino del Mar	Del Mar Building Corp	ADR-11-11	minor project-no significant surface disturbance
300-200-20	519	Stratford Ct	Ortman	ADR-11-12	minor project-no significant surface disturbance
300-093-02	235	11th Street	City of Del Mar - Annex	ADR-11-13	minor project-no significant surface disturbance
300-030-04	1401	Camino del Mar	Del Mar Partnership	ADR-11-14	minor project-no significant surface disturbance
300-321-46-06	269	Stratford Ct	Ipema	ADR-11-15	minor project-no significant surface disturbance
300-500-03	533	Stratford Ct	Quesnell	ADR-11-16	minor project-no significant surface disturbance
300-263-05	963	Klish Way	Demich	ADR-11-17	minor project-no significant surface disturbance
299-06-506	2614	Oceanfront	Cassidy	ADR-11-07 MOD	minor project-no significant surface disturbance
299-146-26	1929	Oceanfront	Moore	ADR-11-18	minor project-no significant surface disturbance
300-181-15	154	Little Orphan Alley	Levin	ADR-11-19	minor project-no significant surface disturbance
300-391-09	333	13th Street	Wegner	ADR-11-20	minor project-no significant surface disturbance
299-232-05	1734	Oceanfront	Kuhle	ADR-11-21	minor project-no significant surface disturbance
300-074-07	1212	Camino del Mar	Board and Brew	ADR-11-22	minor project-no significant surface disturbance

Encroachment Permits ***REVIEWED*** *between 7.1.10 and 6.30.11*

Parcel #	St. #	Street Name	Project Name	Project #	Comments
		Via de la Valle/E of Cedros	man hole	EP-10-14	construction of manhole
		Varios locations in ROW	SDG&E	EP-10-15	tree removal
		Pine Needles/Adj to 187 Oceanview	slurry with type 1	EP-10-16	slurry
300-075-06	1201	Camino del Mar	Conkwright	EP-10-17	crain in ROW
300-410-14	461	15th Street	Davis	EP-10-18	replace driveway
300-410-12	527	11th Street	Simons	EP-10-19	dumpster in ROW
300-030-83	1431	Camino del Mar	Alpha Fire (Chasan)	EP-10-20	fire service line in street
			Timewarner Cable	EP-10-21	datalog
300-017-25	100	12th Street	Public easements	EP-10-22	public easements
300-075-06	1201	Camino del Mar	Conkwright	EP-10-23	parking realignment
299-066-13	157	26th Street	Vint / Mattson	EP-10-24	new curb and gutter
300-040-33	1150	Cuchara	Chestnut / McKenna	EP-10-25	remove/replace sewer lateral
		Southbound lane 1400 Ocean	Wavecrest	EP-10-26	tree trimming
300-410-33	1155	Cuchara	Kidd / Wohlford	EP-10-27	underground utilities
298-560-24		Via de la Valle	Timewarner Cable	EP-10-28	sidewalk repair
300-390-03	431	Van Dyke	Hardke	EP-10-29	utilities
		end of 12th St on northside	Gerrity	EP-10-30	tree trimming
		29th St beach access	laydown and employee parking	EP-10-31	beach access
300-012-02	215	15th Street	Sbicca	EP-10-32	construction parking
300-321-34-02	404	Stratford Ct	Miller (Arrow Pipeline)	EP-11-01	sewer line repair
300-272-22	810	Crest Rd	Aljain (Arrow Pipeline)	EP-11-02	sewer line repair
300-030-83	1431	Camino del Mar	Chasan	EP-11-03	sidewalk repair
		Crest Rd	City of Del Mar	EP-11-04	chicanes
		San Dieguito from JD	Airv Utility Surveyors	EP-11-05	potholes
300-200-35	710	Camino del Mar	Del Mar Inn (Simplex)	EP-11-06	misc.
		WITHDRAWN		EP-11-07	
300-094-23-04	118	11th Street	O'Brien	EP-11-08	parking
300-072-05-01	145	13th Street	Whaley / Robson	EP-11-09	electrical trenching in alley
		Via de La Valle	HP Comm / AT&T	EP-11-10	utility trenching
299-173-11	420	Luzon		EP-11-11	retaining wall construction
300-012-28,29,30	201-211	15th Street	Johnson Badger Co	EP-11-12	overhang encroachment
300-072-25	100	12th Street	Handzel	EP-11-13	crane parking
		Del Mar Bluffs	NCTD	EP-11-14	bluff stabilization project

*Design Review Board Permits **REVIEWED** between the dates of 7.1.10 and 6.30.11*

Parcel #	St. #	Street Name	Project Name	Project #	Comments
300-263-25	964	Crest Rd.	Wolfson	DRB-10-15	Addition
300-390-03	431	Van Dyke	Hardke	DRB-08-43 MOD	Fence and BBQ
300-072-26	104	12th St	Loomis	DRB-10-16	Detached room and bathroom
299-200-58	1601	San Dieguito	From	DRB-10-17	Misc.
299-137-11	2112	Oceanfront	Gross	DRB-10-18	Addition/remodel
300-200-35	710	Camino del Mar	Pacifica Stratford	DRB-10-19	Addition
300-040-45	627	15th St	Jenson / DeLonge	DRB-10-20	Deck enclosure
300-072-22	119	13th St	Luddy	DRB-10-21	Remodel
300-241-07	538	Amphitheater	Rowe	DRB-10-22	Remodel
300-251-10	560	Orchid Ln	Rafferty	DRB-10-23	Remodel
301-024-03	334	Hidden Pines	Anderson / Campbell	DRB-10-24	Addition
299-072-50	2104	Christy Lane	Bacha	DRB-11-01	Additon / Remodel
299-065-08/07	2606-2610	Oceanfront	EWM Investments	DRB-11-02	Remodel
299-280-52	1563	Luneta Dr	Jordan / Schwab	DRB-11-03	Deck
300-012-28/29/30	201-211	12th St	Dorfman	DRB-11-04	Roof
300-030-86	1555	Camino del Mar	Rendezous Restaurant	DRB-11-05	Awning
299-390-09	545	Rimini Rd	Yayla	DRB-11-06	Remodel / Decks
299-230-35	1720	Zapo	Friedland	DRB-11-07	NSFR
299-290-27	1511	Forest Way	Baenziger	DRB-11-08	NSFR
300-094-15	150	10th St	Irish	DRB-11-09	NSFR
300-391-09	333	13th St	Wegner	DRB-11-10	Trellis
299-220-32	1779	Seaview	Preston	DRB-11-11	Addition
300-272-05	735	Hoska	Gans	DRB-11-12	Patio cover
299-146-17	1912	Oceanview	Hayward	DRB-11-13	Roof/balconies/closets

*Land Conservation Permits **REVIEWED** between the dates of 7.1.10 and 6.30.11*

Parcel #	St. #	Street Name	Project Name	Project #	Comments
300-072-22	119	13th St	Luddy	LC-10-06	grading
300-390-09	545	Rimini Rd	Yayla	LC-11-01	grading
299-230-35	1720	Zapo	Friedlander	LC-11-02	grading
300-094-15-01	150	10th St	Irish	LC-11-03	grading
299-220-32	1779	Seaview	Preston	LC-11-04	grading

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CITY OF DEL MAR SUSMP

Standard Urban Stormwater Mitigation Plan
Requirements for Development Applications

January 14, 2011

Visit www.delmar.ca.us for updates.

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Glossary

Best Management Practice (BMP)	Any procedure or device designed to minimize the quantity of pollutants that enter the storm drain system.
California Association of Stormwater Quality Agencies (CASQA)	Publisher of the California Stormwater Best Management Practices Handbooks, available at www.cabmphandbooks.com. Successor to the Storm Water Quality Task Force (SWQTF).
California BMP Method	A method for determining the required volume of stormwater treatment facilities. Described in Section 5.5.1 of the California Stormwater Best Management Practice Manual (New Development) (CASQA, 2003).
Conditions of Approval (COAs)	Requirements a municipality may adopt for a project in connection with a discretionary action (e.g., adoption of an EIR or negative declaration or issuance of a use permit). COAs may include features to be incorporated into the final plans for the project and may also specify uses, activities, and operational measures that must be observed over the life of the project.
Continuous Simulation Modeling	A method of hydrological analysis in which a set of rainfall data (typically hourly for 30 years or more) is used as input, and runoff rates are calculated on the same time step. The output is then analyzed statistically for the purposes of comparing runoff patterns under different conditions (for example, pre- and post-development-project).
Copermittee	See **Dischargers**.
Detention	The practice of holding stormwater runoff in ponds, vaults, within berms, or in depressed areas and letting it discharge slowly to the storm drain system. See definitions of **infiltration** and **retention**.
Directly Connected Impervious Area	Any impervious surface which drains into a catch basin, area drain, or other conveyance structure without first allowing flow across pervious areas (e.g. lawns).
Direct Infiltration	Infiltration via methods or devices, such as dry wells or infiltration trenches, designed to bypass unsaturated surface soils and transmit runoff directly to groundwater.
Dischargers	The agencies named in the **stormwater NPDES permit** (see definition): the County of San Diego; the Cities of Carlsbad, El Cajon, La Mesa, Poway, Solana Beach, Chula Vista, Encinitas, Lemon Grove, San Diego, Vista, Coronado, Escondido, National City, San Marcos, Del Mar, Imperial Beach, Oceanside, and Santee; the San Diego Unified Port District, and the San Diego County Regional Airport Authority.
Drainage Management Areas	Areas delineated on a map of the development site showing how drainage is detained, dispersed, or directed to **Integrated Management Practices**. There are four types of Drainage Management Areas, and specific criteria apply to each type of area. See Chapter 4.

Drawdown time The time required for a stormwater detention or infiltration facility to drain and return to the dry-weather condition. For detention facilities, drawdown time is a function of basin volume and outlet orifice size. For infiltration facilities, drawdown time is a function of basin volume and infiltration rate.

Environmentally Sensitive Areas Areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other equivalent environmentally sensitive areas which have been identified by the City of Del Mar.

Flow Control Control of runoff rates and durations as required by the Hydromodification Management Plan.

Head In hydraulics, energy represented as a difference in elevation. In slow-flowing open systems, the difference in water surface elevation, e.g., between an inlet and outlet.

Higher-Rate Biofilter A biofilter with a design surface loading rate higher than the 5 inches per hour rate specified in this document for bioretention facilities and planter boxes.

Hydrograph Runoff flow rate plotted as a function of time.

Hydromodification Management Plan (HMP) A Regional Plan implemented by the City so that post-project runoff shall not exceed estimated pre-project rates and/or durations, where increased runoff would result in increased potential for erosion or other adverse impacts to beneficial uses. Also see definition for **flow control.**

Hydrologic Soil Group Classification of soils by the Natural Resources Conservation Service (NRCS) into A, B, C, and D groups according to infiltration capacity.

Impervious surface Any material that prevents or substantially reduces infiltration of water into the soil. See discussion of imperviousness in Chapter Two.

Infeasible As applied to best management practices, impossible to implement because of technical constraints specific to the site.

Infiltration Seepage of runoff into soils underlying the site. See definition of **retention.**

Infiltration Device Any structure, such as a dry well, that is designed to infiltrate stormwater into the subsurface and, as designed, bypasses the natural groundwater protection afforded by surface or near-surface soil. See definition for **direct infiltration**.

Integrated Management Practice (IMP) A facility **(BMP)** that provides small-scale treatment, retention, and/or detention and is integrated into site layout, landscaping and drainage design. See **Low Impact Development.**

Integrated Pest Management (IPM) An approach to pest management that relies on information about the life cycles of pests and their interaction with the environment. Pest control methods are applied with the most economical means and with the least possible hazard to people, property, and the environment.

Interim Hydromodification Criteria Pursuant to NPDES permit Provision D.1.d.g.(6), the Copermittees prepared Interim Hydromodification Management criteria, which apply to projects disturbing 50 acres or more. The criteria are described in Chapter 2 and in memoranda on the Project Clean Water website.

Jurisdictional Urban Runoff Management Plan (JURMP) A written description of the specific jurisdictional urban runoff management measures and programs that the City implements to comply with the **stormwater NPDES permit** and ensure pollutant discharges are reduced to the MEP and do not cause or contribute to a violation of water quality standards. See **Stormwater Pollution Prevention Program.**

Lead Agency The public agency that has the principal responsibility for carrying out or approving a project. (CEQA Guidelines §15367).

Low Impact Development An integrated site design methodology that uses small-scale detention and retention (Integrated Management Practices, or **IMPs**) to mimic pre-existing site hydrological conditions.

Maximum Extent Practicable (MEP) Standard, established by the 1987 amendments to the Clean Water Act, for the implementation of municipal **stormwater pollution prevention programs** (see definition). According to the Act, municipal stormwater NPDES permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."

National Pollutant Discharge Elimination System (NPDES) As part of the 1972 Clean Water Act, Congress established the NPDES permitting system to regulate the discharge of pollutants from municipal sanitary sewers and industries. The NPDES was expanded in 1987 to incorporate permits for stormwater discharges as well.

Numeric Criteria Sizing requirements for stormwater treatment facilities established in Provision D.1.d.(6)(c) of the San Diego RWQCB's stormwater NPDES permit.

Operation and Maintenance (O&M)	Refers to requirements in the **Stormwater NPDES Permit** to inspect treatment BMPs and implement preventative and corrective maintenance in perpetuity. See Chapter Five.
Parking Lot	A land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.
Permeable Pavements	Pavements for roadways, sidewalks, or plazas that are designed to infiltrate a portion of rainfall, including pervious concrete, pervious asphalt, unit-pavers-on-sand, and crushed gravel.
Priority Development Project	A project subject to SUSMP requirements. Defined in **Stormwater NPDES Permit** Provision D.1.d.(1). See Chapter One.
Project Area	The entire project area comprises all areas to be altered or developed by the project, plus any additional areas that drain on to areas to be altered or developed.
Project Submittal	Documents submitted to a municipality in connection with an application for development approval and demonstrating compliance with Stormwater NPDES Permit requirements for the project. Specific requirements vary from municipality to municipality.
Proprietary	A proprietary device is one marketed under legal right of the manufacturer.
Redevelopment	The creation, addition, and or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bikelane on existing roads; and routine replacement of damaged pavement, such as pothole repair.
Rational Method	A method of calculating runoff flows based on rainfall intensity, tributary area, and a factor representing the proportion of rainfall that runs off.
Regional (or Watershed) Stormwater Treatment Facility	A facility that treats runoff from more than one project or parcel.
Regional Water Quality Control Board (Regional Water Board or RWQCB)	California RWQCBs are responsible for implementing pollution control provisions of the Clean Water Act and California Water Code within their jurisdiction. There are nine California RWQCBs.
Retention	The practice of holding stormwater in ponds or basins, or within berms or depressed areas, and allowing it to slowly infiltrate into underlying soils. Some portion will evaporate. See definitions for **infiltration** and **detention**.

Self-retaining area An area designed to retain runoff. Self-retaining areas may include graded depressions with landscaping or pervious pavements and may also include tributary impervious areas up to a 2:1 impervious-to-pervious ratio.

Self-treating area A natural, landscaped, or turf area drains directly off site or to the public storm drain system.

Source Control Land use or site planning practices, or structural or nonstructural measures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff.

Standard Industrial Classification (SIC) A Federal government system for classifying industries by 4-digit code. It is being supplanted by the North American Industrial Classification System but SIC codes are still referenced by the Regional Water Board in identifying development sites subject to regulation under the NPDES permit. Information and an SIC search function are available at http://www.bls.gov/bls/NAICS.htm

Stormwater NPDES Permit A permit issued by a **Regional Water Quality Control Board** (see definition) to local government agencies (**Dischargers**) placing provisions on allowable discharges of municipal stormwater to waters of the state.

Storm Water Pollution Prevention Plan (SWPPP) A plan providing for temporary measures to control sediment and other pollutants during construction as required by the statewide stormwater NPDES permit for construction activities.

Stormwater Pollution Prevention Program A comprehensive program of activities designed to minimize the quantity of pollutants entering storm drains. See **Jurisdictional Urban Runoff Management Plan.**

Standard Urban Stormwater Mitigation Plan (SUSMP) Refers to various documents prepared in connection with implementation of the stormwater **NPDES permit** mandate to control pollutants from new development and redevelopment. Each **discharger** will adapt this **model countywide SUSMP** to create a **local SUSMP** for their respective jurisdiction. Applicants for development project approvals will use the local SUSMP to prepare a submittal for each **Priority Development Project** they propose.

Treatment Removal of pollutants from runoff, typically by filtration or settling.

Water Board See **Regional Water Quality Control Board.**

Water Quality Volume (WQV) For stormwater treatment facilities that depend on detention to work, the volume of water that must be detained to achieve maximum extent practicable pollutant removal. This volume of water must be detained for a specified **drawdown time**.

Start

How to Use the SUSMP

Review Chapters 1 and 2 to get a general understanding of the requirements. Then follow step-by-step instructions in Chapter 3 to prepare your Project Submittal.

This *Standard Urban Stormwater Mitigation Plan (SUSMP)* will help you ensure your project complies with the City's requirements. Most applicants will require the assistance of a qualified civil engineer, architect, and/or landscape architect. Because every project is different, you should begin by checking specific requirements with City staff.

To use the *SUSMP,* start by reviewing **Chapter One** to find out whether and how stormwater quality requirements apply to your project. Chapter One also provides an overview of the process of planning, design, construction, operation, and maintenance leading to compliance.

If there are terms and issues you find puzzling, try finding answers in the glossary or in **Chapter Two**. Chapter Two provides background on key stormwater concepts and water quality regulations, including design criteria.

Then proceed to **Chapter Three** and follow the step-by-step guidance to prepare a Project Submittal for your site.

Chapter Four, the Low Impact Development Design Guide, includes design procedures, calculation procedures, and instructions for presenting your design and calculations in your Project Submittal.

In **Chapter Five** you'll find a detailed description of the process for ensuring operation and maintenance of your stormwater facilities over the life of the project. The chapter includes step-by-step instructions for preparing a Stormwater Facilities Operation and Maintenance Plan.

Throughout each Chapter, you'll find references and resources to help you understand the regulations, complete your Project Submittal, and design stormwater control measures for your project.

► PLAN AHEAD TO AVOID THE THREE MOST COMMON MISTAKES

Construction-Phase Controls

Your Project Submittal for SUSMP compliance is a separate document from the Storm Water Pollution Prevention Plan (SWPPP). A SWPPP provides for temporary measures to control sediment and other pollutants during construction at sites that disturb one acre or more. See the Construction Handbook at www.cabmphandbooks.org for more information on SWPPPs.

The most common (and costly) errors made by applicants for development approvals with respect to stormwater quality compliance are:

1. Not planning for compliance early enough. You should think about your strategy for stormwater quality compliance before completing a conceptual site design or sketching a layout of subdivision lots (Chapter 3).

2. Assuming proprietary stormwater treatment facilities will be adequate for compliance. Most aren't (Chapter 2).

3. Not planning for periodic inspections and maintenance of treatment and flow-control facilities. Consider who will own and who will maintain the facilities in perpetuity and how they will obtain access, and identify which arrangements are acceptable to your municipality (Chapter 5).

Chapter

1

Policies and Procedures

Determine if your development project must comply with stormwater quality requirements, and review the steps to compliance.

A Low Impact Development Design Procedure

The San Diego Regional Water Board reissued a municipal stormwater NPDES permit to the municipal **Copermittees** in January 2007. The permit updates and expands stormwater requirements for new developments and redevelopments. Stormwater treatment requirements have been made more stringent, minimum standards for **Low Impact Development** (LID) have been added, and the Copermittees are required to develop and implement criteria for the control of runoff peaks and durations from development sites.

To assist the land development community, streamline project reviews, and maximize cost-effective environmental benefits, the Copermittees have developed a unified LID design procedure. This design procedure integrates site planning and design measures with engineered, small-scale **Integrated Management Practices** (IMPs) such as bioretention. By following the procedure, applicants can develop a single integrated design which complies with the complex and overlapping NPDES permit LID requirements, stormwater treatment requirements, and flow-control (**hydromodification management**) requirements.

The design approach is detailed in Chapter 4. General instructions for preparing a complete Project Submittal are in Chapter 3, and specific submittal requirements are available from municipal staff.

Applicants may choose not to use this design procedure, in which case they will need to demonstrate, in their submittal, compliance with applicable LID criteria, stormwater treatment criteria, and flow-control criteria. These criteria are described in Chapter 2 and in the NPDES permit.

Requirements for All Development Projects

All development projects must include control measures to reduce the discharge of stormwater pollutants to the maximum extent practicable.

In general, for projects that are not "Priority Development Projects," this will include:

- Implementation of source control BMPs as listed in the Appendix.
- Inclusion of some LID features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, and retain and slow runoff.
- Compliance with requirements for construction-phase controls on sediment and other pollutants.

Municipal staff may also require additional controls appropriate to the project, which may include stormwater treatment controls. LID treatment controls such as infiltration or bioretention are preferred. See "Selection of Stormwater Treatment Facilities" on page 31. If treatment facilities are included, provisions must be made to ensure their long-term maintenance.

Priority Development Projects

The NPDES permit requires that more specific runoff treatment controls be incorporated into Priority Development Projects.

► NEW DEVELOPMENT

Projects on previously undeveloped land are Priority Development Projects if they are in one or more of the categories listed in Table 1-1. If a project feature such as a parking lot falls into a Priority Development Project category, then the entire project footprint is subject to Priority Project requirements. To use the table, review each definition A through J. If any of the definitions match, the project is a **Priority Development Project**. Note some thresholds are defined by square footage of impervious area created; others by the total area of the development.

► PREVIOUSLY DEVELOPED SITES

Projects on previously developed sites ("**redevelopment** projects") are Priority Development Projects if they create, add, or replace 5,000 square feet or more of impervious surface and also are in one of the categories listed in Table 1-1.

TABLE 1-1. Priority Development Projects.

			Is the project or any element of the project in any of these categories?
Yes ❑	No ❑	**A**	**Housing subdivisions of 10 or more dwelling units.** Examples: single-family homes, multi-family homes, condominiums, and apartments.
Yes ❑	No ❑	**B**	**Commercial—greater than one acre.** Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.
Yes ❑	No ❑	**C**	**Heavy industry—greater than one acre.** Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).
Yes ❑	No ❑	**D**	**Automotive repair shops.** A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.
Yes ❑	No ❑	**E**	**Restaurants.** Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development [project footprint] is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.
Yes ❑	No ❑	**F**	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
Yes ❑	No ❑	**G**	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.
Yes ❑	No ❑	**H**	**Parking lots 5,000 square feet or more** or with 15 or more parking spaces and potentially exposed to urban runoff.
Yes ❑	No ❑	**I**	**Street, roads, highways, and freeways.** Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
Yes ❑	No ❑	**J**	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

The "50% Rule" for previously developed projects. Projects on previously developed sites may also need to retrofit drainage of ALL impervious areas of the ENTIRE project site. For projects creating or replacing more than 5,000 square feet of impervious area:

- If the new project results in an increase of, or replacement of, 50% or more of the previously existing impervious surface, and the existing development was not subject to SUSMP requirements, then the entire project must be included in the treatment measure design.
- If less than 50% of the previously impervious surface is to be affected, only that portion must be included in the treatment measure design.

If a Redevelopment project feature such as a parking lot falls into a Priority Development Project category, then the entire project footprint is subject to Priority Project requirements.

Redevelopment projects limited to interior remodels, routine maintenance or repair, roof or exterior surface replacement, resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, or bike lanes on existing roads, and routine replacement of damaged pavement such as pothole repair are not subject to treatment requirements. However, other requirements, including incorporation of appropriate source controls, still apply. If your project is exempt, the project is still obligated to meet the Requirements for All Development Projects outlined in the previous section.

► POLLUTANT GENERATING PROJECTS WHICH DISTRUB ONE ACRE OR MORE OF LAND

Projects that generate pollutants at levels greater than background levels and disturb one acre or more of land are considered Priority Development Projects. In most cases linear pathway projects that are for infrequent vehicle use (such as emergency or maintenance access) or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they allow runoff to sheet flow to surrounding pervious surfaces.

Compliance Process at a Glance

For development project approval, stormwater compliance follows these general steps:

1. Discuss requirements during a pre-application meeting with municipal staff.
2. Review the instructions in this SUSMP before you prepare your tentative map, preliminary site plan, drainage plan, and landscaping plan.
3. Prepare your **Project Submittal**, which is made with your application for development approvals (entitlements).
4. Create your detailed project design, incorporating the features described in your Project Submittal.
5. In a table on your construction plans, list each stormwater compliance feature and facility and the plan sheet where it appears.

6. Prepare and submit a draft Stormwater Facility Operation and Maintenance (O + M) Plan for approval.

7. Maintain stormwater facilities during construction and following construction in accordance with required warranties.

8. When applicable, following construction, formally transfer responsibility for maintenance to the owner.

9. The owner must maintain the facilities in accordance with the O + M Plan.

10. The owner must periodically verify stormwater facilities are properly maintained.

Preparation of a complete and detailed Project Submittal is the key to cost-effective stormwater compliance and expeditious review of your project. Instructions for preparing your Project Submittal are in Chapter 3.

Phased Projects

When determining whether SUSMP requirements apply, a "project" should be defined consistent with California Environmental Quality Act (CEQA) definitions of "project." That is, the "project" is the whole of an action which has the potential for adding or replacing or resulting in the addition or replacement of roofs, pavement, or other impervious surfaces and thereby resulting in increased flows and stormwater pollutants. "Whole of an action" means the project may not be segmented or piecemealed into small parts if the effect is to reduce the quantity of impervious area for any part to below the SUSMP thresholds.

CEQA
Preparers of CEQA documents may wish to visit the Project Clean Water website for guidanSketch conceptuBegin with general project requirements and program studies and Environmental Impact Reports.

Municipal staff may require, as part of an application for approval of a phased development project, a conceptual or master Project Submittal which describes and illustrates, in broad outline, how the drainage for the project will comply with the SUSMP requirements. The level of detail in the conceptual or master Project Submittal should be consistent with the scope and level of detail of the development approval being considered. The conceptual or master Project Submittal should specify that a more detailed Project Submittal for each later phase or portion of the project will be submitted with subsequent applications for discretionary approvals.

New Subdivisions

If a tentative map approval would potentially entitle future owners to construct new or replaced impervious area which, in aggregate, could exceed one of the SUSMP thresholds (Table 1-1), then the applicant must take steps to ensure SUSMP requirements can and will be implemented as the subdivision is built out.

If the tentative map application does not include plans for site improvements, the applicant should nevertheless identify the type, size, location, and final ownership of stormwater treatment and flow-control facilities adequate to serve common private roadways and any other common areas, and to also manage runoff from an expected reasonable estimate of the square footage of future roofs, driveways, and other impervious surfaces on each individual lot. The City may condition approval of the map on implementation of stormwater treatment and other SUSMP measures when construction occurs on the individual lots. At the City's discretion, this condition may be enforced by a grant deed of development rights or by a development agreement.

If the City deems it necessary, the future impervious area of one or more lots may be limited by a deed restriction. This might be necessary when a project is exempted from one or all SUSMP provisions because the total impervious area is below a threshold, or to ensure runoff from impervious areas added after the project is approved does not overload a stormwater treatment and flow-control facility.

The City may require subdivision maps to dedicate an "open space easement, as defined by Government Code Section 51075," to suitably restrict the future building of structures at each stormwater facility location if necessary.

In general, in new subdivisions **stormwater treatment, infiltration, or flow-control facilities should not be located on individual single-family residential lots**, particularly when those facilities manage runoff from other lots, from streets, or from common areas. A better alternative is to locate stormwater facilities on one or more separate, jointly owned parcels.

After consulting with the Planning Department, applicants for subdivision approvals will propose one of the following four options, depending on project characteristics:

1. Show the number of parcels and the total impervious area to be created on all parcels could not, in the future, exceed any of the thresholds in Table 1-1.

2. Show that, for each and every lot, the intended use can be achieved with a design which disperses runoff from roofs, driveways, streets, and other impervious areas to self-retaining pervious areas, using the criteria in Chapter 4.

3. Prepare improvement plans showing drainage to treatment and/or flow-control facilities designed in accordance with this SUSMP, and commit to constructing the facilities prior to transferring the lots.

4. Prepare improvement plans showing drainage to treatment and/or flow-control facilities designed in accordance with this SUSMP, and provide appropriate legal instruments to ensure the proposed facilities will be constructed and maintained by subsequent owners.

For the option selected, municipal staff will determine the appropriate conditions of approval, easements, deed restrictions, or other legal instruments necessary to assure future compliance.

Compliance with Flow-Control Requirements

Priority Development Projects (Table 1-1) must be designed so that runoff rates and durations are controlled to maintain or reduce downstream erosion conditions and protect stream habitat.

► HMP APPLICABILITY REQUIREMENTS

To determine if a proposed project must implement hydromodification controls, refer to the HMP Decision Matrix in Figure 1-1. The HMP Decision Matrix can be used for all projects. For redevelopment projects, flow controls would only be required if the redevelopment project increases impervious area or peak flow rates as compared to pre-project conditions.

It should be noted that all Priority Development Projects will be subject to the Permit's LID and water quality treatment requirements even if hydromodification flow controls are not required.

As noted in Figure 1-1, projects may be exempt from HMP criteria under the following conditions.

- If the project is not a Priority Development Project
- If the proposed project does not increase the impervious area or peak flows to any discharge location.
- If the proposed project discharges runoff directly to an exempt receiving water such as the Pacific Ocean, an exempt river reach, or a tidally-influenced area.
- If the proposed project discharges to a stabilized conveyance system that extends to the Pacific Ocean, a tidally-influenced area, or an exempt river reach.
- If the contributing watershed area to which the project discharges has an impervious area percentage greater than 70 percent
- If an urban infill project discharges to an existing hardened or rehabilitated conveyance system that extends beyond the "domain of analysis," the potential for cumulative impacts in the watershed are low, and the ultimate receiving channel has a Low susceptibility to erosion as defined in the SCCWRP channel assessment tool.

If the proposed project decreases the pre-project impervious area and peak flows to each discharge location, then a flow-duration analysis is implicitly not required. If continuous simulation flow-frequency and flow duration curves were developed for such a scenario, the unmitigated post-project flows and durations would be less as compared to pre-project curves.

Proposed exemptions for projects discharging runoff directly to the Pacific Ocean or to hardened conveyance systems which transport runoff directly to the Pacific Ocean are referred to the 2007 Municipal Permit. Per the Permit, hardened conveyance systems can include existing concrete channels, storm drain systems, etc.

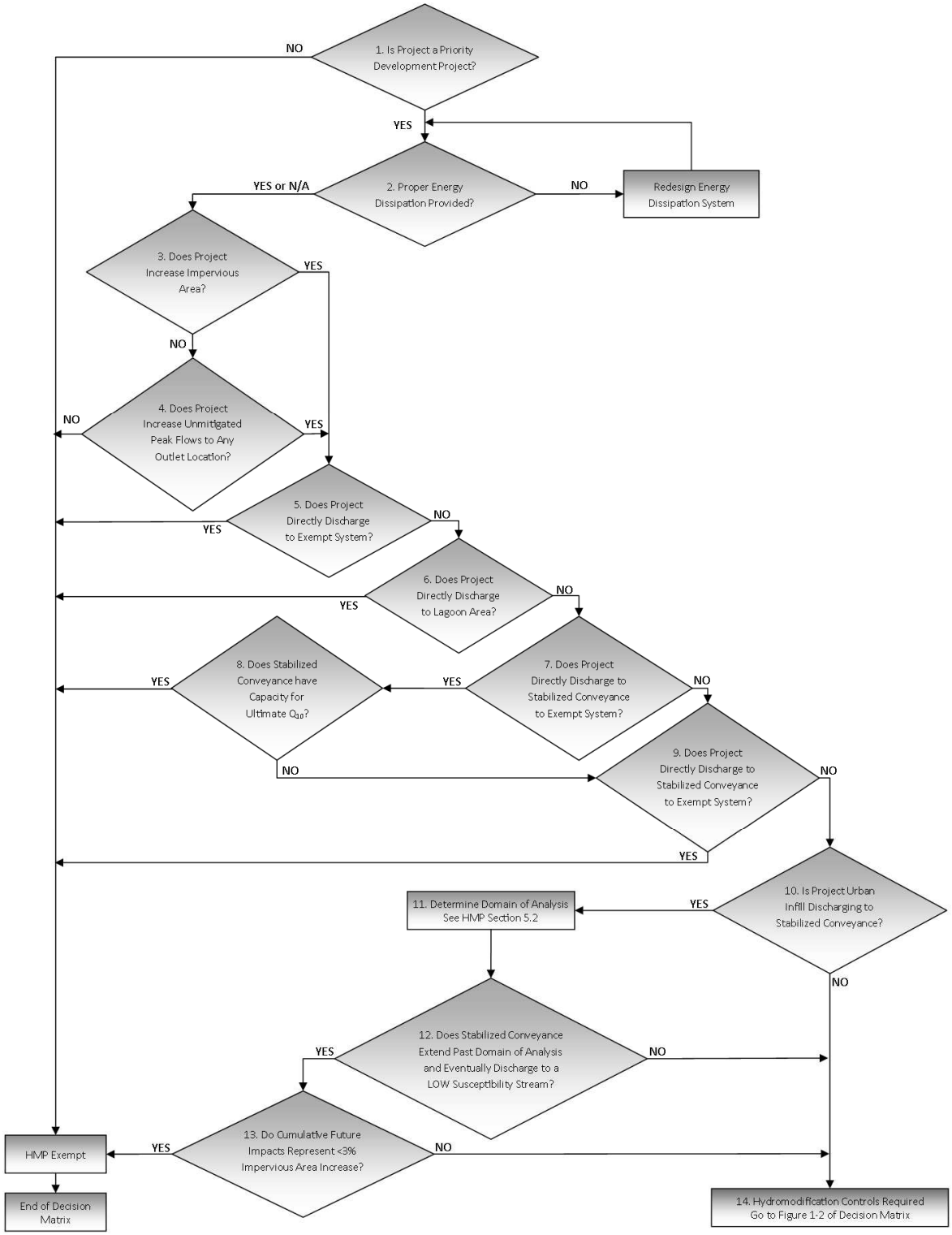

FIGURE 1-1. HMP Applicability Determination

The Municipal Permit also contains language to support exemptions for projects located in highly urbanized areas where the impervious percentage exceeds 70 percent (as calculated for the sub-watershed between the project outfall downstream to the exempt receiving water).

The following are descriptions of the flow diagram nodes in Figure 1-1:

- Figure 1-1, Node 1 – Hydromodification mitigation measures are only required if the proposed project is a Priority Development Project.

- Figure 1-1, Node 2 – Properly designed energy dissipation systems are required for all project outfalls to unlined channels. Such systems should be designed in accordance with the County of San Diego's Drainage Design Manual to ensure downstream channel protection from concentrated outfalls.

- Figure 1-1, Nodes 3 and 4 – Projects may be exempt from hydromodification criteria if the proposed project reduces the pre-project impervious area and if unmitigated post-project outflows (outflows without detention routing) to each outlet location are less as compared to the pre-project condition. The pre and post-project hydrologic analysis should be conducted for the 2 and 10-year design storms and follow single-event methodology set forth in the San Diego County Hydrology Manual. This scenario may apply to redevelopment projects in particular.

- Figure 1-1, Node 5 – Potential exemptions may be granted for projects discharging runoff directly to the Pacific Ocean or the San Dieguito River.

- Figure 1-1, Node 6 – For projects discharging runoff directly to a tidally-influenced lagoon, potential exemptions may also be granted. Regarding the potential exemption, additional analysis would be required to assess the effects of the freshwater / saltwater balance and the resultant effects on lagoon-system biology. This assessment, which would be required by other permitting processes such as the Army Corps of Engineers, California Department of Fish and Game, etc., must be provided by a certified biologist or other specialist as approved by the City of Del Mar. Such discharges would include an energy dissipation system (riprap, etc.) designed to mitigate 100-year outlet velocities based upon a free outfall condition. Such a design would be protective of the channel bed and bank from an erosion standpoint.

- Figure 1-1, Nodes 7 and 8 – For projects discharging runoff directly to a hardened conveyance or rehabilitated stream system that extends to exempt receiving waters detailed in Node 5, potential exemptions from hydromodification criteria may be granted. Such hardened or rehabilitated systems could include existing storm drain systems, existing concrete channels, or stable engineered unlined channels. To qualify for this exemption, the existing hardened or rehabilitated conveyance system must continue uninterrupted to the exempt system. In other words, the hardened or rehabilitated conveyance system cannot discharge to an unlined, non-engineered channel segment prior to discharge to the exempt system. Additionally, the project proponent must demonstrate that the hardened or rehabilitated conveyance system has

capacity to convey the 10-year ultimate condition flow through the conveyance system. The 10-year flow should be calculated based upon single-event hydrologic criteria as detailed in the San Diego County Hydrology Manual.

- Figure 1-1, Node 9 – Projects discharging runoff to a highly urbanized watershed (defined as an existing, pre-project impervious percentage greater than 70 percent) may be eligible for an exemption from hydromodification criteria.

  Watershed impervious area calculations for this potential exemption will be measured between the project site discharge location and the connection to the Pacific Ocean or San Dieguito River. If a tributary area connects with the main line drainage path between the project site and the Pacific Ocean or San Dieguito River, then the entire watershed area contributing to the tributary shall be included in the calculation.

  Percent imperviousness will be calculated based on an area-weighted average of impervious areas associated with commercial, industrial, single-family residential, multi-family residential, open space, and other miscellaneous areas (schools, churches, etc.) representative for the watershed. Representative percent imperviousness values for each land use type may correspond to values recommended in Table 3-1 of the San Diego County Hydrology Manual and detailed below or by more specific representative percent impervious calculations (using GIS, etc.), which are often required to represent impervious area percentages for park, school and church sites.

- Figure 1-1, Nodes 10 through 13 – For urban infill projects discharging runoff to an existing hardened or rehabilitated conveyance system, potential limited exemptions from hydromodification criteria may apply where the existing impervious area percentage in the watershed exceeds 40 percent. For the potential exemption application, the domain of analysis must be determined and the existing hardened or rehabilitated conveyance system must extend beyond the downstream terminus of the domain of analysis. The hardened or rehabilitated conveyance system must discharge to a receiving channel with a Low susceptibility to erosion for this exemption to be granted (channel susceptibility determined using SCCWRP channel assessment tool). Finally, continuous simulation sensitivity analysis shows that an exemption could only be granted if the potential future development impacts in the watershed would increase the watershed's impervious area percentage by less than 3 percent (as compared to the existing condition in the year 2010). If the potential future cumulative impacts in the watershed could increase the impervious area percentage by more than 3 percent (as compared to existing condition), then no exemption could be granted based on this item. Watershed impervious area calculations for this potential exemption, in which a project discharges to a watershed with an existing impervious areas greater than 40 percent, will be measured upstream from the outfall of the urban conveyance system (to a non-crete, non-riprap-lined or non-engineered channel) to the contributing watershed boundary (the entire watershed contributing to the discharge outfall).

  Percent imperviousness will be calculated based on an area-weighted average of impervious areas associated with commercial, industrial, single-family residential, multi-

family residential, open space, and other miscellaneous areas (schools, churches, etc.) representative for the watershed. Representative percent imperviousness values for each land use type may correspond to values recommended in Table 3-1 of the San Diego County Hydrology Manual and detailed below or by more specific representative percent impervious calculations (using GIS, etc.), which are often required to represent impervious area percentages for park, school and church sites.

The final exemption category focuses on small urban infill projects where the potential for future cumulative watershed impacts is minimal.

Urban infill projects may be exempt from HMP criteria if:

1. The potential future development impacts within the sub-watershed, as measured from the entire sub-watershed area draining to the existing conveyance system outfall, would not increase the composite impervious area percentage of the sub-watershed by more than 3 percent

11. The project discharges runoff to an existing hardened or rehabilitated conveyance system (storm drain, concrete channel, or engineered vegetated channel) that extends beyond the Domain of Analysis determined for the project site, and

12. The stabilized conveyance system eventually discharges to a channel with a Low susceptibility to erosion, as designed by the SCCWRP channel assessment tool.

► FLOW CONTROL PERFORMANCE CRITERIA

Figures 1-2 and 1-3, which are part of the HMP Decision Matrix and are presented on the following pages, detail how lower flow thresholds would be determined for a project site. Figures 1-4 and 1-5, which detail the SCCWRP lateral and vertical channel susceptibility requirements, complete the HMP Decision Matrix.

The project applicant must first determine whether field investigations will be conducted pursuant to the SCCWRP channel screening tools. If the screening tools are not completed for a proposed project, then the site must mitigate peak flows and durations based on a pre-project condition lower flow threshold of $0.1Q_2$. While a project applicant would be held to the $0.1Q_2$ standard if channel screening tools and assessments are not conducted, less restrictive standards are possible for more erosion-resistant receiving channel sections if the screening tools are completed and the SCCWRP method indicates either a Medium or Low susceptibility to channel erosion .

In such a scenario, the project applicant would also use the critical shear stress calculator to assist in determination of the predicted lower flow threshold. The SCCWRP screening tools and critical shear stress calculator work in concert to determine the lower flow threshold for a given site. Lower flow limits determined by the calculator have been grouped into one of three thresholds – $0.1Q_2$, $0.3Q_2$ or $0.5Q_2$. "Low" susceptibilities from the SCCWRP tool generally correspond to the $0.5Q_2$ threshold, "Medium" susceptibilities generally correspond to the $0.3Q_2$ threshold, and "High" susceptibilities generally correspond to the $0.1Q_2$ threshold. The

SCCWRP channel screening tools are required to identify channel conditions not considered by the critical shear stress calculator, which focuses on channel material and cross section. Conversely, the SCCWRP channel screening tools considers other channel conditions including channel braiding, mass wasting, and proximity to the erosion threshold. In cases where the critical shear stress calculator and the SCCWRP screening tools return divergent values, then the most conservative value shall be used as the lower flow threshold for the analysis.

Low-Impact Development (LID) and extended detention facilities are required to meet peak flow and duration controls as follows:

1. For flow rates ranging from 10 percent, 30 percent or 50 percent of the pre-project 2-year runoff event ($0.1Q_2$, $0.3Q_2$, or $0.5Q_2$) to the pre-project 10-year runoff event (Q10), the post-project discharge rates and durations shall not deviate above the pre-project rates and durations by more than 10 percent over and more than 10 percent of the length of the flow duration curve. The specific lower flow threshold will depend on results from the SCCWRP channel screening study and the critical flow calculator.

13. For flow rates ranging from the lower flow threshold to Q_5, the post-project peak flows shall not exceed pre-project peak flows. For flow rates from Q_5 to Q_{10}, post-project peak flows may exceed pre-project flows by up to 10 percent for a 1-year frequency interval. For example, post-project flows could exceed pre-project flows by up to 10 percent for the interval from Q_9 to Q_{10} or from $Q_{5.5}$ to $Q_{6.5}$, but not from Q_8 to Q_{10}.

The HMP recommends the use of LID facilities to satisfy both 85th percentile water quality treatment as well as HMP flow control criteria. Detailed standards for LID implementation have been developed and are provided in Chapter 4 of this SUSMP.

The following methods may be used to meet mitigation requirements.

- Install BMPs that meet design requirements to control runoff from new impervious areas. BMPs including bioretention basins, vegetated swales, planter boxes, extended detention basins, etc. shall be designed pursuant to standard sizing and specification criteria detailed in the Chapter 4 and the HMP/LID Sizing Calculator to ensure compliance with hydromodification criteria.

- Use of the automated sizing calculator (San Diego Sizing Calculator) that will allow project applicants to select and size LID treatment devices or flow control basins. The tool uses pre-calculated sizing factors to determine required footprint sizes for flow control BMPs. The Sizing Calculator also includes an automated pond sizing tool to assist in the design of extended detention facilities for mitigation of hydromodification effects. Because of the Sizing Calculator's ease of implementation, and since hydromodification BMPs can also serve as treatment BMPs, project applicants may choose this option instead of seeking compliance through site-specific continuous simulation model preparation.

- Prepare continuous simulation hydrologic models and compare the pre-project and mitigated post-project runoff peaks and durations (with hydromodification flow controls) until compliance to flow control standards can be demonstrated. The project applicant will be required to quantify the long-term pre- and post-project runoff response from the site and establish runoff routing and stage-storage-discharge relationships for the planned flow control devices. Public domain software such as HSPF, HEC-HMS and SWMM can be used for preparation of a continuous simulation hydrologic analysis.

- Points of compliance must be selected to conduct the comparisons of pre-project and post-project flows and durations. Generally, points of compliance are selected at locations along the project boundary where concentrated flows discharge from the project site. If a point of compliance is selected downstream of the project boundary, then the governing municipality should be consulted in advance of the hydromodification analysis. For projects which convey offsite runoff through the site, it is assumed that the offsite runoff would be separated from site runoff. If this is not the case, then the governing municipality should be consulted to further refine the points of compliance for the site (an interior project site point of compliance could be required in such a scenario).

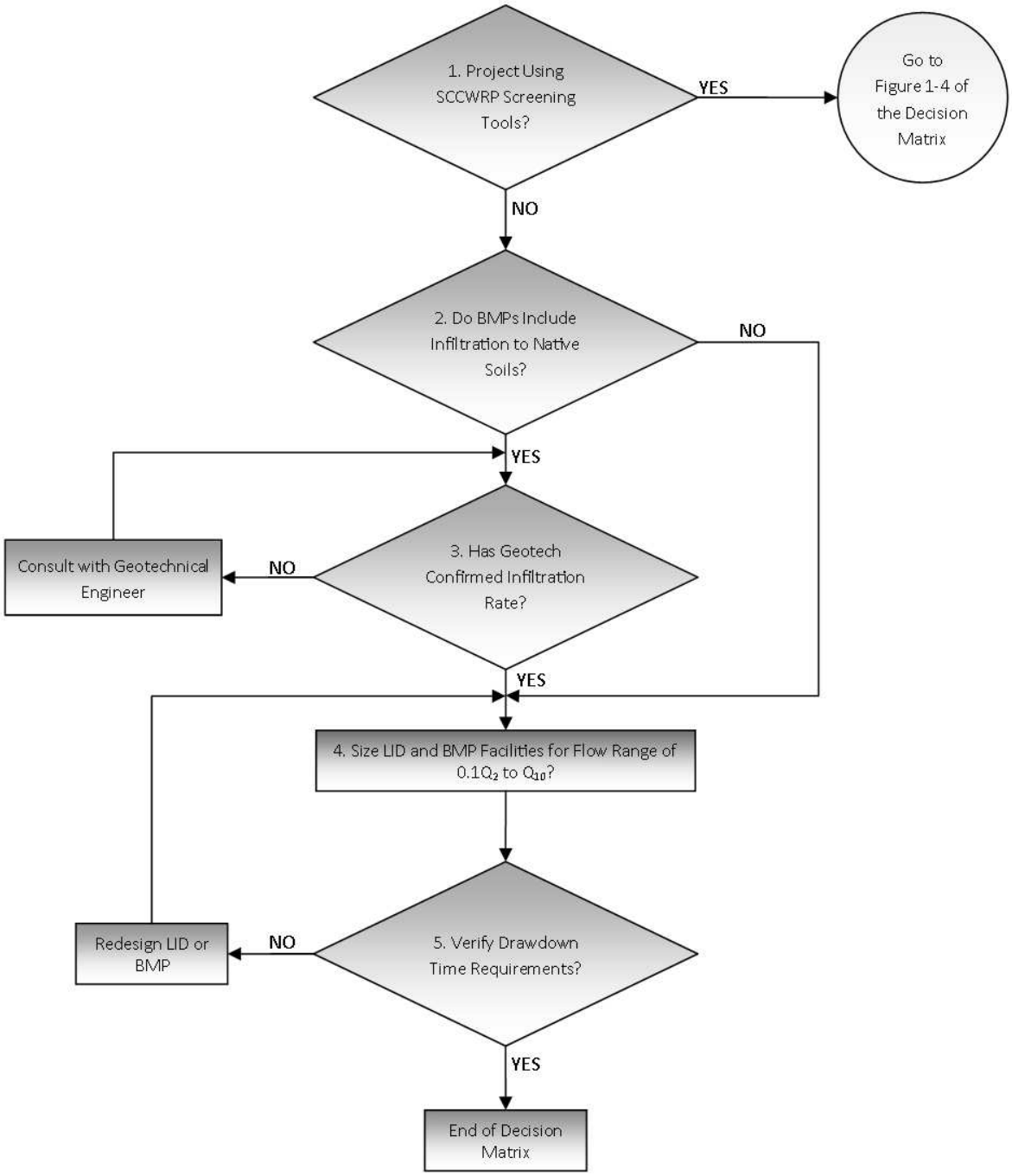

FIGURE 1-2. Mitigation Criteria and Implementation

The following are descriptions of the flow diagram nodes in Figure 1-2:

- Figure 1-2, Node 1 – If the project applicant chooses to complete SCCWRP channel screening tools, then the applicant moves to Figures 1-4 and 1-5 to assess the vertical and lateral susceptibility of the receiving channel systems. Depending on the results of the SCCWRP screening tools and critical flow calculator, it is possible that lower flow thresholds in excess of $0.1Q_2$ may be used. If the project applicant chooses not to complete the SCCWRP channel assessment, then the applicant proceeds with Figure 1-2 of the Decision Matrix.

- Figure 1-2, Node 2 – If the project's LID or BMP approach accounts for the infiltration of runoff to native surrounding soils (below amended soil layers), then consultation with a geotechnical engineer or engineering geologist is required (Node 3). If the project mitigation approach does not account for infiltration of runoff, then the applicant would proceed to Node 4.

- Figure 1-2, Node 3 – A geotechnical engineer should determine the allowable infiltration rates to be used for the design of each LID or BMP facility. The geotechnical assessment should also identify potential portions of the project which are feasible for infiltration of runoff.

- Figure 1-2, Node 4 – In this scenario, the SCCWRP channel assessment was not conducted. Therefore, the project applicant would be held to the $0.1Q_2$ lower flow threshold. LID and extended detention facilities must be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.1Q_2$ to Q_{10}.

- Figure 1-2, Node 5 - The Decision Matrix includes language regarding a drawdown time requirements so that standards set forth by the County's Department of Environmental Health are met. The County's Department of Environmental Health has stated that the drawdown requirement would be applied to underground vaults in addition to extended detention basins and the surface ponding areas of LID facilities. Proper maintenance of hydromodification mitigation facilities is essential to guard against potential vector issues as well potential safety issues resulting from long-term standing water. If mitigation facility outlets clog, then runoff will bypass the system and potentially result in additional erosion problems downstream of a site. The County Department of Environmental Health recently amended its drawdown time requirement to 96 hours.

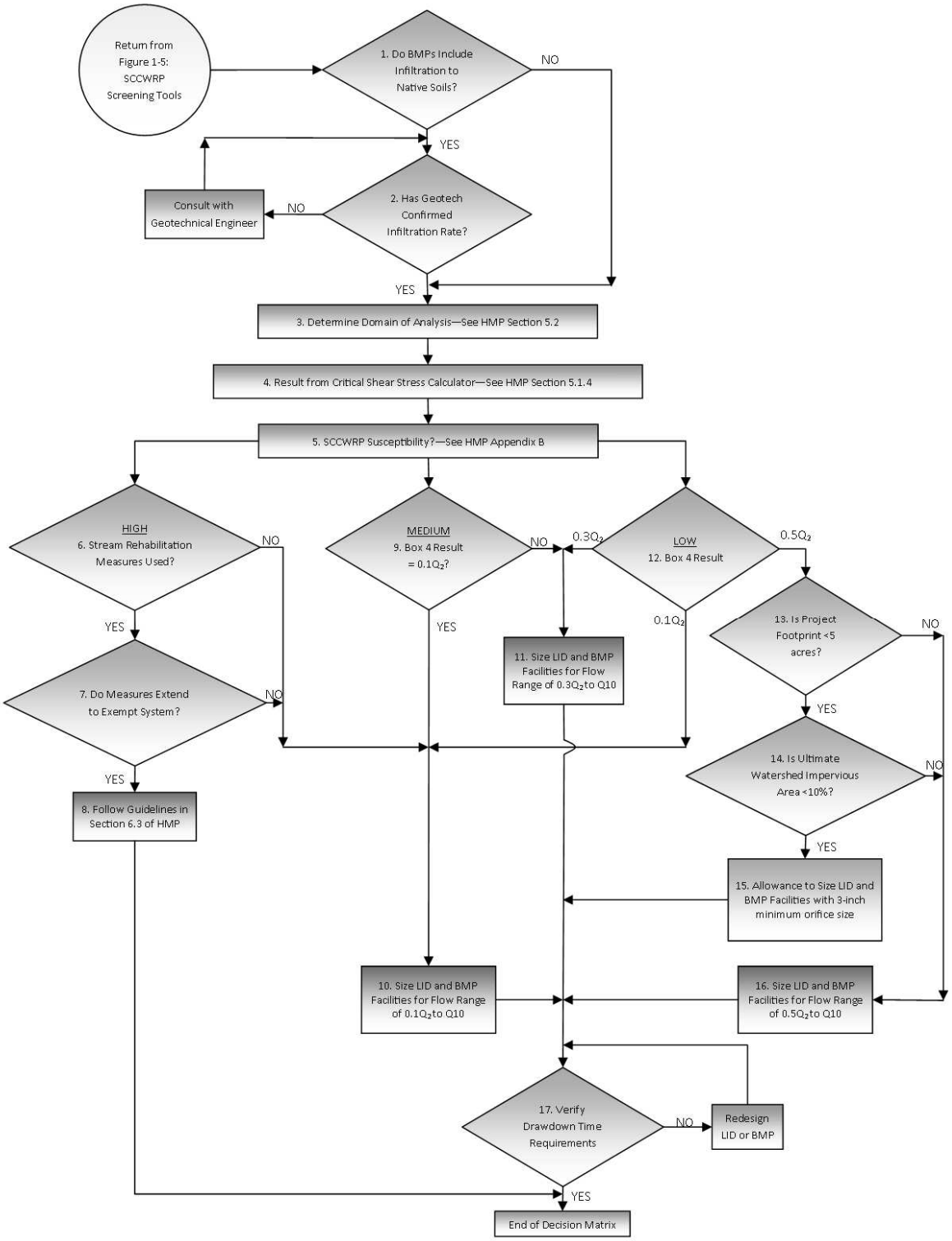

FIGURE 1-3. Mitigation Criteria and Implementation

The following are descriptions of the flow diagram nodes in Figure 1-3:

- Figure 1-3, Node 1 – Use of Figure 1-3 assumes that the project applicant conducted the SCCWRP channel assessment. Node 1 would begin following completion of both the lateral and vertical susceptibility flow charts depicted in Figures 1-4 and 1-5. Node 1 is a decision box asking if the project's LID or BMP approach accounts for the infiltration of runoff to native surrounding soils (below amended soil layers). If the answer is Yes, then consultation with a geotechnical engineer or engineering geologist is required (Node 2). If the project mitigation approach does not account for infiltration of runoff, then the applicant would proceed to Node 3.

- Figure 1-3, Node 2 – A geotechnical engineer or engineering geologist should determine the allowable infiltration rates to be used for the design of each LID or BMP facility. The geotechnical assessment should also identify potential portions of the project which are feasible for infiltration of runoff.

- Figure 1-3, Node 3 – Pursuant to criteria detailed in HMP Section 5.2, the Domain of Analysis is determined downstream and upstream of the project site. This determination is used to ascertain the required reach length for data collection (channel bed and bank material, channel cross section data, etc.) required for the critical flow calculator (see Node 4),

- Figure 1-3, Node 4 – Pursuant to criteria detailed in HMP Section 5.1.4, the project applicant would run the critical shear stress calculator to determine if the recommended critical flow threshold should be $0.1Q_2$, $0.3Q_2$, or $0.5Q_2$. This result will be compared to the result from the SCCWRP screening analysis (Node 5) to determine the final lower flow threshold for the project.

- Figure 1-3, Node 5 – Pursuant to criteria detailed in HMP Appendix B, the project applicant would determine both the lateral and vertical channel susceptibility rating per guidelines set forth by SCCWRP. If the lateral and vertical tools returned divergent results, then the more conservative result would be used. SCCWRP susceptibility ratings include "High," "Medium" and "Low."

- Figure 1-3, Node 6 – A project applicant would arrive at Node 6 if the SCCWRP channel susceptibility rating was determined to be "High." This decision box inquires as to whether stream rehabilitation measures such as grade control and channel widening will be used as a mitigation measure instead of flow control. It should be noted that stream rehabilitation options are only allowed if the existing receiving channel susceptibility is considered to be "High."

- Figure 1-3, Node 7 – Stream rehabilitation measures are only allowed if the proposed mitigation project extends to a downstream exempt system (such as an exempt river system). If the mitigation measure did not extend to an exempt system, then the potential for cumulative watershed impacts would be more pronounced.

- Figure 1-3, Node 8 – If stream rehabilitation measures are allowed, then guidelines outlined in Section 6.3 of the HMP should be followed to design the in-stream mitigation approach.

- Figure 1-3, Node 9 - A project applicant would arrive at Node 9 if the SCCWRP channel susceptibility rating was determined to be "Medium." If the result from the critical shear stress calculator is also "Medium" (or $0.3Q_2$), then the lower flow threshold would be $0.3Q_2$ (Node 11). If the result from the critical shear stress calculator is "High" (or $0.1Q_2$), then the more conservative value would be used and the lower flow threshold would be $0.1Q_2$ (Node 10).

- Figure 1-3, Node 10 – For stream reaches determined by either the critical flow calculator or the SCCWRP screening tools to have a "High" susceptibility to erosion, LID and extended detention flow control facilities should be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.1Q_2$ to Q_{10}.

- Figure 1-3, Node 11 - For stream reaches determined by either the critical flow calculator or the SCCWRP screening tools to have a "Medium" susceptibility to erosion, LID and extended detention flow control facilities should be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.3Q_2$ to Q_{10}.

- Figure 1-3, Node 12 - A project applicant would arrive at Node 12 if the SCCWRP channel susceptibility rating was determined to be "Low." If the result from the critical shear stress calculator is also "Low" (or $0.5Q_2$), then the lower flow threshold would be $0.5Q_2$ (Node 16 – note potential waiver in Node 13). If the result from the critical shear stress calculator is "High" (or $0.1Q_2$), then the more conservative value would be used and the lower flow threshold would be $0.1Q_2$ (Node 10). If the result from the critical flow calculator is "Medium" (or $0.3Q_2$), then the more conservative value would be used and the lower flow threshold would be $0.3Q_2$ (Node 11).

- Figure 1-3, Node 13 – In some limited situations, namely small developments in rural or lightly developed areas, an allowance for a minimum outlet orifice size may be granted when the receiving channel susceptibility is "Low." This criteria may potentially be used for project footprints less than 5 acres. If the project footprint is greater than 5 acres, then the allowance may not be granted and the applicant would proceed to Node 16.

- Figure 1-3, Node 14 – The potential allowance discussed in Node 13 could only be granted if the ultimate potential impervious area in the sub-watershed is less than 10 percent. If there is potential for the sub-watershed impervious area to exceed 10 percent, then the minimum orifice size criteria may not be granted.

- Figure 1-3, Node 15 – If Nodes 12, 13, and 14 are satisfied, then mitigation facilities may be designed using a 3-inch minimum outlet orifice size.

- Figure 1-3, Node 16 - For stream reaches determined by either the critical flow calculator or the SCCWRP screening tools to have a "Low" susceptibility to erosion – and for projects where the minimum outlet orifice criteria does not apply - LID and extended detention flow control facilities should be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.5Q_2$ to Q_{10}.

- Figure 1-3, Node 17 – For all hydromodification mitigation designs, the Decision Matrix includes language regarding drawdown time requirements so that standards set forth by the County's Department of Environmental Health are met. The County's Department of Environmental Health has stated that the drawdown requirement would be applied to underground vaults in addition to extended detention basins and the surface ponding areas of LID facilities. Proper maintenance of hydromodification mitigation facilities is essential to guard against potential vector issues as well potential safety issues resulting from long-term standing water. If mitigation facility outlets clog, then runoff will bypass the system and potentially result in additional erosion problems downstream of a site. The County Department of Environmental Health recently amended its drawdown time requirement to 96 hours.

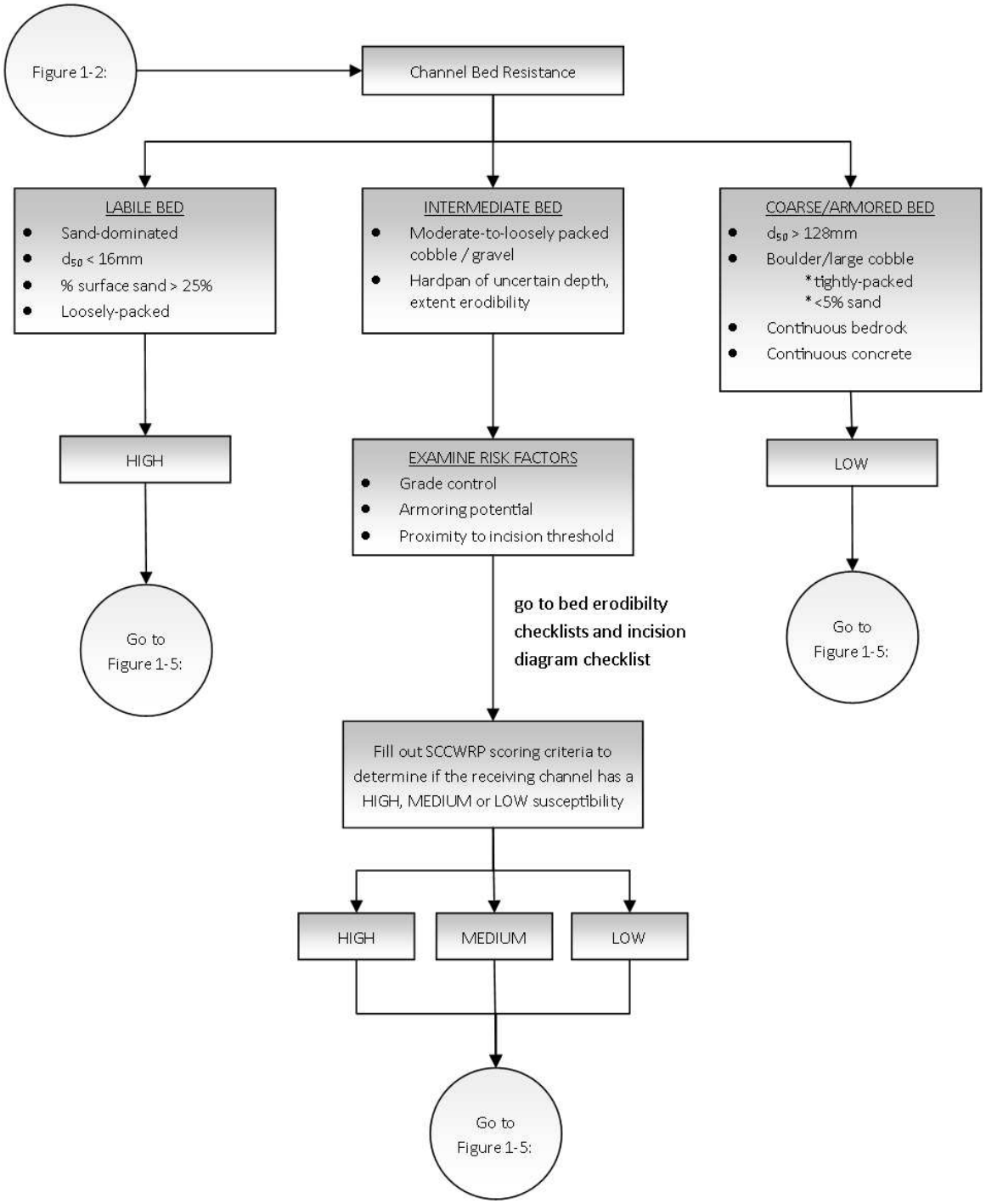

FIGURE 1-4. SCCWRP Vertical Susceptibility

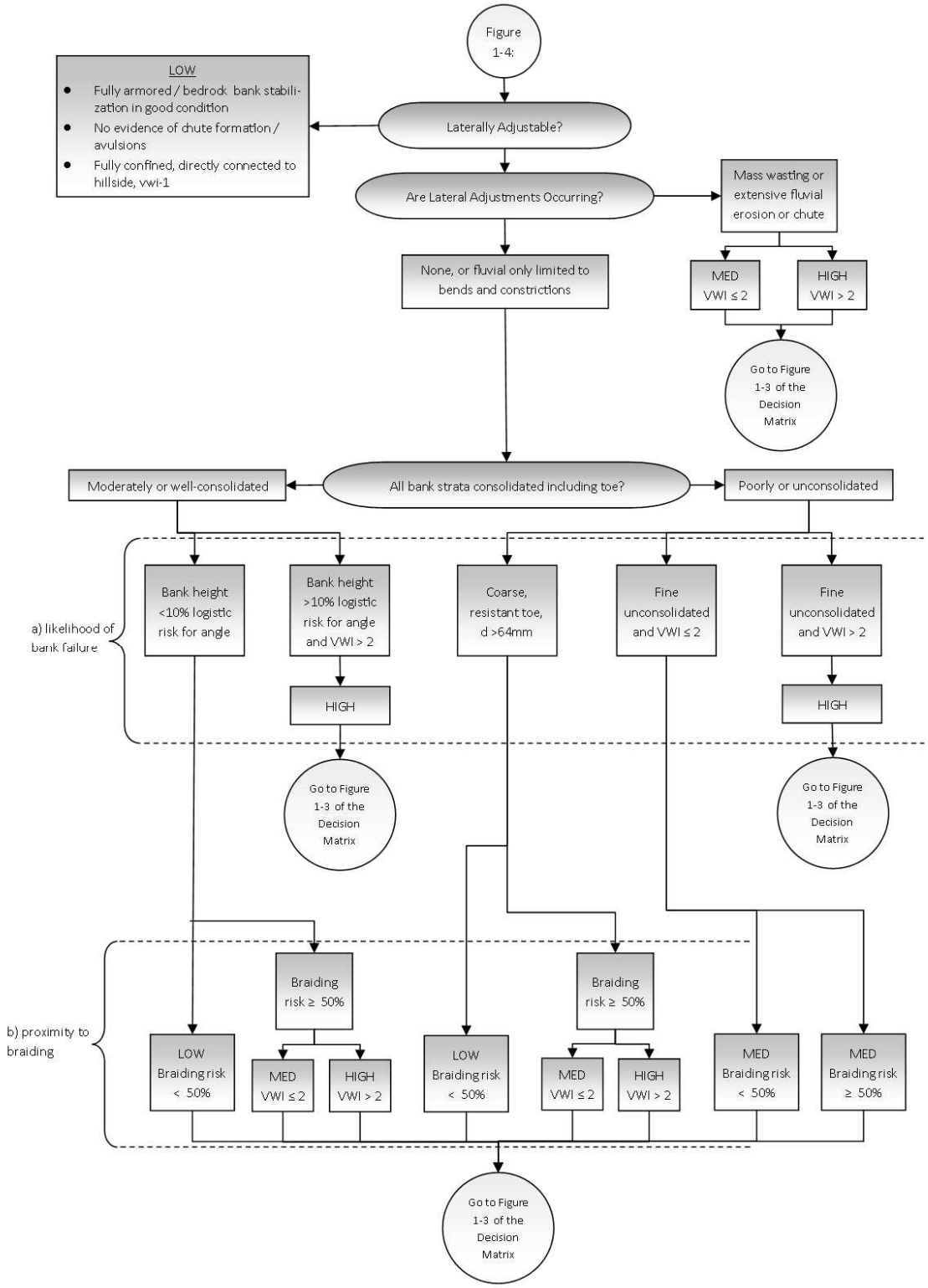

FIGURE 1-5. Lateral Channel Susceptibility

Grandfathering. Projects with prior lawful approval (such as a development agreement, vested tentative map, or a building or grading permit) before January 14, 2010, may not have to meet the hydromodification management requirements. Verify with City staff.

References and Resources:

- RWQCB Order R9-2007-0001 (Stormwater NPDES Permit)
- Project Clean Water web page

Chapter

2

Concepts and Criteria

Technical background and explanations of policies and design requirements

The Regional Water Board reissued a municipal stormwater NPDES permit to San Diego County, its 18 cities, the San Diego Unified Port District, and the San Diego Regional Airport Authority in January 2007. The permit mandates a comprehensive program to prevent stormwater pollution. That program now includes street sweeping, maintenance of storm drains, business inspections, public outreach, construction site inspections, monitoring and studies of stream and ocean health, and control of runoff pollutants from new developments and redevelopments.

Permit Provision D.1.d. requires Copermittees to regulate projects in specific categories (Table 1-1) to:

1. Reduce discharges of pollutants to the maximum extent practicable.
2. Prevent runoff discharges from causing or contributing to a violation of water quality standards.

The Copermittees have created a Low Impact Development (LID) design procedure (Chapter 4) that ensures consistent and thorough implementation of the Regional Water Board's requirements. This chapter explains the technical background of the LID approach and how it was derived.

The previous permit, issued in 2001, included a requirement to control the post-development peak storm water runoff rates and velocities to maintain or reduce pre-development downstream erosion and protect stream habitat. The 2007 permit includes, in addition to this ongoing requirement, a new requirement to develop a hydromodification management plan (HMP) to identify and define a methodology and performance criteria to ensure flow rates and durations do not exceed pre-project runoff where increased runoff could cause erosion or other significant adverse impacts to beneficial uses.

As required by the NPDES permit, the Copermittees have adopted final hydromodification criteria. See Chapter One.

Water-Quality Regulations

Provision D.1 requires the Copermittees to condition development approvals on incorporation of specified stormwater controls.

Provision D.1 requires applicable new developments and redevelopments to:

- Design the site to conserve natural areas, existing trees and vegetation and soils, to maintain natural drainage patterns, to minimize imperviousness, to detain runoff, and to infiltrate runoff where feasible
- Cover or control sources of stormwater pollutants
- Treat runoff prior to discharge. Provision E.10 states: "Urban runoff treatment and/or mitigation must occur prior to the discharge of urban runoff to receiving waters. Federal regulations at 40 CFR 131.10(a) state that in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S."
- Ensure runoff does not exceed pre-project peaks and durations where increases could affect downstream habitat or other beneficial uses
- Maintain treatment and flow-control facilities

The municipalities each maintain a database to track approved installations of treatment facilities and to verify facilities are maintained. The Copermittees' annual report to the Regional Water Board includes a list of development projects subject to SUSMP conditions and descriptions of those projects that:

- Received a waiver from SUSMP criteria;
- Used hydrologic controls used to meet HMP requirements, including a description of the controls

The Copermittees must also report the number of violations and enforcement actions taken upon development projects. The Copermittees' programs are subject to audit by the Regional Water Board.

The municipalities—not the Regional Water Board or its staff—are charged with ensuring development projects comply with the D.1 requirements. Regional Water Board staff sometimes review stormwater controls and hydromodification impacts in connection with applications for Clean Water Act Section 401 water-quality certification, which is required for projects that involve work, such as dredging or placement of fill, within streams, creeks, or other waters of the US.

► MAXIMUM EXTENT PRACTICABLE

Clean Water Act Section 402(p)(3)(iii) sets the standard for stormwater controls as "maximum extent practicable," but doesn't define that term. As implemented, "maximum extent practicable" is ever-changing and varies with conditions.

Many stormwater controls, including LID facilities, have proven to be practicable in most site development projects. To achieve fair and effective implementation, criteria and guidance, requirements for controls must be detailed and specific—while also offering the right amount of flexibility or exceptions for special cases. The NPDES permit includes various standards, including hydrologic criteria, which have been found to comprise "maximum extent practicable." This SUSMP is to be continuously improved and refined based on the experience of municipal planners and engineers, with input from land developers and development professionals. By following the SUSMP, applicants can ensure their project design meets "maximum extent practicable."

► BEST MANAGEMENT PRACTICES

Clean Water Act Section 402(p) and USEPA regulations (40 CFR 122.26) specify a municipal program of "management practices" to control stormwater pollutants. **Best Management Practice (BMP)** refers to any kind of procedure, activity or device designed to minimize the quantity of pollutants that enter the storm drain system. BMPs are typically used in place of assigning numeric effluent limits. The criteria for source control BMPs and treatment and flow-control facilities are crafted to fulfill "maximum extent practicable."

To minimize confusion, this guidebook refers to "facilities," "features," or "controls" to be incorporated into development projects. All of these are BMPs.

Pollutants of Concern

NPDES Permit Provision D.1.d.(3) requires each Copermittee to develop and implement a procedure for pollutants of concern to be identified for each Priority Development Project. The Copermittees have considered this requirement jointly and have determined the LID design procedures in Chapters 3 and 4 of this model SUSMP fully address the need to identify pollutants of concern insofar as that identification may affect the selection of source control BMPs and treatment facilities.

Documentation of the approach to identifying pollutants of concern and selecting BMPs and facilities follows.

► GROUPING OF POTENTIAL POLLUTANTS OF CONCERN

Urban runoff from a developed site has the potential to contribute pollutants, including oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system and receiving waters. For the purposes of identifying pollutants of concern and associated storm water BMPs, pollutants are grouped in nine general categories as follows:

- **Sediments** are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

- **Nutrients** are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

- **Metals** are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary sources of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

- **Organic compounds** are carbon-based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.

- **Trash** (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.

- **Oxygen-Demanding Substances** includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds.

Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

- Primary sources of **oil and grease** are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

- **Bacteria and Viruses** are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

- **Pesticides** (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

► IDENTIFYING POLLUTANTS OF CONCERN BASED ON LAND USES

Table 2-1 associates pollutants with the categories of Priority Development Projects. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

► WATERSHEDS WITH SPECIAL POLLUTANT CONCERNS

Local receiving water conditions may require specialized attention. The three local conditions to consider include:

- 303(d) listed waters;
- Waters with established TMDLs; and
- Environmentally Sensitive Areas.

TABLE 2-1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >one acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

The NPDES Permit identifies several receiving waters as impaired for constituents or water quality effects pursuant to **Section 303(d)** of the Clean Water Act. Placement of a water onto the list requires the Regional Board to make further analysis of the impairment and development of total maximum daily loads (TMDLs) for addressing the impairment. The 303(d) listing in itself does not demand that a project proponent select BMPs on the basis of the impairment; however, the project proponent should be cognizant of the impairment and the future implications a TMDL might have upon the proposed land use.

Once a TMDL is established it may impose conditions on development either through an implementation plan and schedule for the listed water, or through special conditions required of the municipality affected by the numeric criteria of the TMDL. Currently, the only adopted TMDL for the City is the Indicator Bacteria for beaches and creeks in the San Diego region.

The applicant should meet with City staff to determine if any project characteristics or watershed characteristics affect selection and design of BMPs. Except in rare circumstances, the use of the LID Design Guide (Chapter 4) and the Stormwater Pollutant Sources/Source Control Checklist (Appendix) will ensure your project complies with all stormwater requirements.

Selection of Permanent Source Control BMPs

Based on identification of potential pollutants of concern associated with various types of facilities, the applicant shall utilize the Stormwater Pollutant Sources/Source Control Checklist (Appendix) of "maximum extent practicable" source controls associated with each facility type. This approach ensures appropriate BMPs are applied to potential sources of each pollutant of concern.

Selection of Stormwater Treatment Facilities

The SUSMP process groups pollutants of concern by how easily they are removed by various treatment processes (Table 2-2).

Table 2-3 provides a general comparison of how various types of treatment facilities perform for each group of pollutants (Table 2-3).

TABLE 2-2. Grouping of Potential Pollutants of Concern by Fate During Stormwater Treatment.

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

TABLE 2-3. Groups of Pollutants and Relative Effectiveness of Treatment Facilities.

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro -dynamic Devices	Vegetated Swales
Coarse Sediment and Trash	High	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low	Medium
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low	Low

Based on this analysis, the following types of facilities are appropriate for treatment of runoff potentially containing most pollutants of concern. These types of facilities can be used for stormwater treatment and hydromodification flow control for all land uses in all watersheds, except where site-specific constraints make them infeasible.

- Infiltration facilities or practices, including dry wells, infiltration trenches, infiltration basins, and other facilities that infiltrate runoff to native soils (sized to detain and infiltrate a volume equivalent to the 85th percentile 24-hour event water quality runoff event – greater capacity required to provide hydromodification flow control).

- Bioretention facilities and media filters that detain stormwater and filter it slowly through soil or sand (sized with a surface area at least 0.04 times the effectively impervious tributary area for water quality treatment – a larger sizing factor is required to provide hydromodification flow control).

- Extended detention basins, wet ponds, and wetlands or other facilities using settling (sized to detain a volume equivalent to runoff from the tributary area generated by the

85th percentile 24-hour event water quality runoff event – greater capacity required to provide hydromodification flow control).

The recommended design procedure in Chapter 4 integrates LID practices—optimizing the site design, using pervious surfaces, and dispersing of runoff to adjacent pervious areas—with the use of infiltration facilities, detention basins, and bioretention facilities to meet NPDES permit LID requirements, treatment requirements, and flow-control requirements in a cost-effective, unified design.

Oil/water separators ("water quality inlets"), storm drain inlet filters, and hydrodynamic separators, including vortex separators and continuous deflection separators ("CDS units"), are less effective means of stormwater treatment, although they may be used in series with more effective facilities.

Underground vaults typically lack the detention time required for settling of fine particles associated with stormwater pollutants. They also require frequent maintenance and may retain stagnant water, potentially providing harborage for mosquitoes. Because vaults may be "out of sight, out of mind," experience shows that the required maintenance may not occur.

Lack of space, in itself, is not a suitable justification for using a less-effective treatment on a development site, because the uses of the site and the site design can be altered as needed to accommodate bioretention facilities or planter boxes. In most cases, these effective facilities can be fit into required landscaping setbacks, easements, or other unbuildable areas.

Where possible, drainage to inlets, and drainage away from overflows and underdrains, should be by gravity. Where site topography makes it infeasible to accommodate gravity-fed facilities in the project design, the design flow may be captured in a vault or sump and pumped via force main to an effective facility.

The following situations sometimes present special challenges:

- Portions of sites which are not being developed or redeveloped, but which must be retrofit to meet treatment requirements in accordance with Provision D.1.d.(1)(a) which states in part: "Where redevelopment results in an increase of, or replacement of, more than fifty percent of the impervious surface of a previously existing development, the numeric sizing criteria applies to the entire development."

- Sites smaller than one acre approved for development or redevelopment as part of a municipality's stated objective to preserve or enhance a pedestrian-oriented "smart-growth" type of urban design. Municipalities are encouraged to identify areas where this objective applies, based on General Plans or zoning.

- Roadway widening projects.

In these special situations, the following types of facilities should each be evaluated in priority order (depending on the specific characteristics of the site and as determined by the municipal stormwater coordinator) until a feasible design is found.

1. Bioretention areas or planter boxes fed by gravity.
2. Capture of the design flow in a vault or sump and pumping to bioretention areas or planter boxes.
3. A subsurface sand or media filter with a maximum design surface loading rate of 5 inches per hour and a minimum media depth of 18 inches. The sand surface must be made accessible for periodic inspection and maintenance (for example, via a removable grating).
4. A higher-rate surface biofilter, such as a tree-pit-style unit. The grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units.
5. A higher-rate vault-based filtration unit (for example, vaults with replaceable cartridge filters filled with inorganic media).

Proprietary Devices
Many currently available proprietary devices do not meet municipalities' requirements when used alone for stormwater treatment. Consult with municipal staff before proposing these devices.

Many proprietary stormwater treatment devices are currently marketed, and new brands will be introduced. Applicants and applicants' engineers and design professionals should review with City staff any proposals for using proprietary devices for stormwater treatment before they commence work on preliminary site layout, drainage plans, grading plans, or landscape plans.

Hydrology for NPDES Compliance

► IMPERVIOUSNESS

Schueler (1995) proposed **imperviousness** as a "unifying theme" for the efforts of planners, engineers, landscape architects, scientists, and local officials concerned with urban watershed protection. Schueler argued (1) that imperviousness is a useful indicator linking urban land development to the degradation of aquatic ecosystems, and (2) imperviousness can be quantified, managed, and controlled during land development.

Imperviousness has long been understood as the key variable in urban hydrology. Peak runoff flow and total runoff volume from small urban catchments is usually calculated as a function of the ratio of impervious area to total area **(rational method)**. The ratio correlates to the runoff factor, usually designated "C". Increased flows resulting from urban development tend to increase the frequency of small-scale flooding downstream.

Imperviousness links urban land development to degradation of aquatic ecosystems in two ways.

First, the combination of paved surfaces and piped runoff efficiently collects urban pollutants and transports them, in suspended or dissolved form, to surface waters. These pollutants may originate as airborne dust, be washed from the atmosphere during rains, or may be generated by automobiles and outdoor work activities.

Second, increased peak flows and runoff durations typically cause erosion of stream banks and beds, transport of fine sediments, and disruption of aquatic habitat. Measures taken to control stream erosion, such as hardening banks with riprap or concrete, may permanently eliminate habitat. By reducing infiltration to groundwater, imperviousness may also reduce dry-weather stream flows.

Imperviousness has two major components: rooftops and transportation (including streets, highways, and parking areas). The transportation component is usually larger and is more likely to be **directly connected** to the storm drain system.

The effects of imperviousness can be mitigated by disconnecting impervious areas from the drainage system and by encouraging detention and retention of runoff near the point where it is generated. Detention and retention reduce peak flows and volumes and allow pollutants to settle out or adhere to soils before they can be transported downstream.

► LOW IMPACT DEVELOPMENT REQUIREMENTS

The NPDES permit requires LID be used on all projects to minimize directly connected impervious area and promote infiltration. For Priority Development Projects, the minimum standards are:

- Drain a portion of impervious areas into pervious areas, if any.
- Design and construct pervious areas, if any, to effectively receive and infiltrate runoff from impervious areas, taking into account soil conditions, slope, and other pertinent factors.
- Construct a portion of paved areas with low traffic and appropriate soil conditions with permeable surfaces.

The LID design procedure in Chapter 4 incorporates these requirements into an integrated design which meets sizing requirements for stormwater treatment facilities and flow-control (hydromodification management) requirements.

► SIZING REQUIREMENTS FOR STORMWATER TREATMENT FACILITIES

The guidance in Chapter 4 was crafted to ensure LID facilities comply with the NPDES permit's hydraulic sizing requirements for stormwater treatment facilities and flow-control facilities. The technical background follows.

Most runoff is produced by frequent storms of small or moderate intensity and duration. Treatment facilities are designed to treat smaller storms and the first flush of larger storms—approximately 80% of average annual runoff.

The NPDES permit identifies two types of treatment facilities—volume-based and flow-based.

Volume-based facilities must be designed to infiltrate, filter, or treat the volume of runoff produced from a 24-hour 85th percentile storm event as determined from the County of San

Diego's 85th Percentile Precipitation Isopluvial Map. As shown on the map, rainfall depths vary from about 0.55" to 1.55".

For **flow-based** facilities, the NPDES permit specifies the rational method be used to determine flow. The rational method uses the equation

Q = CiA, where

Q = flow

C = weighted runoff factor between 0 and 1

i = rainfall intensity

A = area

The permit identifies two alternatives for calculating rainfall intensity:

1. the 85th percentile rainfall intensity times two, or
2. 0.2 inches per hour.

It is typically found that both methods yield similar results. The 0.2 inches per hour rainfall intensity should be used for sizing flow-based treatment facilities within the Copermittees' jurisdiction.

The 0.2 inches per hour criterion is the basis for a **consistent countywide sizing factor** for bioretention facilities when used for stormwater treatment only (i.e., not for flow control). The factor is based on maintaining a minimum percolation rate of 5 inches per hour through the engineered soil mix. The sizing factor is the ratio of the design intensity of rainfall on tributary impervious surfaces (0.2 inches/hour) to the design percolation rate in the facility (5 inches/hour), or **0.04** (dimensionless).

► FLOW-CONTROL (HYDROMODIFICATION MANAGEMENT)

The NPDES permit specifies for applicable projects:

> … post-project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

Refer to Appendix B to review the final Hydromodification Management Plan (HMP) developed by the San Diego Copermittees and approved by the RWQCB in July 2010. A summary of the HMP document is provided in Chapter 1 of this SUSMP.

Criteria for Infiltration Devices

The NPDES permit restricts the design and location of "infiltration devices" that, as designed, may bypass filtration through surface soils before reaching groundwater. These devices include:

- Infiltration basins.
- Infiltration trenches (includes French drains).
- Unlined retention basins (i.e., basins with no outlets).
- Unlined or open-bottomed vaults or boxes installed below grade (dry wells).

Infiltration devices may not be used in:

- Areas west of Camino del Mar and south of 15th Street without geotechnical analysis to determine potential impacts to bluff stability. Infiltration within these areas are subject to approval of the City;
- Areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway);
- Automotive repair shops;
- Car washes;
- Fleet storage areas (bus, truck, etc.);
- Nurseries;
- Other areas with pollutant sources that could pose a threat to groundwater, as designated by each City.

The vertical distance from the base of any infiltration device to the seasonal high groundwater mark shall be at least 10 feet. Infiltration devices shall be located a minimum of 100 feet horizontally from any known water supply wells.

In addition, infiltration devices are not recommended where:

- The infiltration device would receive drainage from areas where chemicals are used or stored, where vehicles or equipment are washed, or where refuse or wastes are handled.
- Surface soils or groundwater are polluted.
- The facility could receive sediment-laden runoff from disturbed areas or unstable slopes.

- Increased soil moisture could affect the stability of slopes of foundations.
- Soils are insufficiently permeable to allow the device to drain within 72 hours.

► MOST LID FEATURES AND FACILITIES ARE NOT INFILTRATION DEVICES

Self-treating and self-retaining areas, pervious pavements, bioretention facilities, and planter boxes are not considered to be infiltration devices.

Bioretention facilities work by percolating runoff through 18 inches or more of engineered soil. This removes most pollutants before the runoff is allowed to seep into native soils below. Further pollutant removal typically occurs in the unsaturated (vadose) zone before moisture reaches groundwater.

Where there is concern about the effects of increased soil moisture on slopes or foundations, an impermeable barrier may be added so the facility is "flow through" and all treated runoff is underdrained away from the facility. See the design sheets for Bioretention Facilities and Flow-Through Planters in Chapter 4.

References and Resources:

- RWQCB Order R9-2007-0001 (Stormwater NPDES Permit)
- *County of San Diego Low Impact Development Handbook*
- Clean Water Act Section 402(p)
- 40 CFR 122.26
- San Diego Regional Water Quality Control Board—TMDLs
- State Water Resources Control Board—Ocean Standards
- *Site Planning for Urban Stream Protection* (Scheuler, 1995).
- "Application of Water-Quality Engineering Fundamentals to the Assessment of Stormwater Treatment Devices" (Salvia, 2000).

Chapter

3

Preparing Your Project Submittal

Step-by-step assistance to demonstrate compliance.

Your Project Submittal will demonstrate your project complies with all applicable requirements in the stormwater NPDES permit—to minimize imperviousness, retain or detain stormwater, slow runoff rates, incorporate required source controls, treat stormwater prior to discharge, control runoff rates and durations, and provide for operation and maintenance of treatment and flow-control facilities.

Typically, your Project Submittal must be coordinated with your application for discretionary approvals and must have sufficient detail to ensure the stormwater design, site plan, and landscaping plan are congruent. A complete and thorough Project Submittal will facilitate quicker review and fewer cycles of review.

Be sure to obtain specific submittal requirements from the jurisdiction in which your project is located. Your Project Submittal consists of a report and an exhibit. **City staff uses the following checklist** to evaluate your Project Submittal:

PROJECT SUBMITTAL CHECKLIST

CONTENTS OF EXHIBIT
Show all of the following on drawings:

- ❒ Existing natural hydrologic features (depressions, watercourses, floodplains, relatively undisturbed areas) and significant natural resources. (Step 1 in the following step-by-step instructions)
- ❒ Soil types and depth to groundwater. (Step 1)
- ❒ Existing and proposed site drainage network and connections to drainage off-site. (Step 3)
- ❒ Proposed design features and surface treatments used to minimize imperviousness. (Step 3)
- ❒ Entire site divided into separate drainage areas, with each area identified as self-treating, self-retaining (zero-discharge), draining to a self-retaining area, or draining to an IMP. (Step 3)
- ❒ For each drainage area, types of impervious area proposed (roof, plaza/sidewalk, and streets/parking) and area of each. (Step 3)
- ❒ Proposed locations and sizes of treatment or flow-control facilities. (Step 3)
- ❒ Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix A and corresponding required source controls. (Step 4)

CONTENTS OF REPORT
Include all of the following in a report:

- ❒ Narrative analysis or description of site features and conditions that constrain, or provide opportunities for, stormwater control. (Step 2)
- ❒ Narrative description of site design characteristics that protect natural resources. (Step 3)
- ❒ Narrative description and/or tabulation of site design characteristics, building features, and pavement selections that reduce imperviousness of the site. (Step 3)
- ❒ Tabulation of proposed pervious and impervious area, showing self-treating areas, self-retaining areas, and areas tributary to each treatment or flow-control facility. (Step 3)
- ❒ Preliminary designs, including calculations, for each infiltration, treatment, or flow-control facility. Elevations should show sufficient hydraulic head for each. (Step 3)
- ❒ A table of identified pollutant sources and for each source, the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix A. (Step 4)
- ❒ General maintenance requirements for infiltration, treatment, and flow-control facilities (Step 5)
- ❒ Means by which facility maintenance will be financed and implemented in perpetuity. (Step 5)
- ❒ Statement accepting responsibility for interim operation & maintenance of facilities (Step 5).
- ❒ Identification of any conflicts with codes or requirements or other anticipated obstacles to implementing the proposed facilities in the submittal (Step 6).
- ❒ Construction Plan SUSMP Checklist (Step 6).
- ❒ Certification by a civil engineer, architect, and landscape architect (Step 6).

Step by Step

Suggested coordination with site and landscape design

Plan and design your stormwater controls integrally with the site planning and landscaping for your project. It's best to start with general project requirements and preliminary site design concepts, then prepare the detailed site design, landscape design, and stormwater control design simultaneously. **This will help ensure that your site plan, landscape plan, and Project Submittal are congruent.**

The following step-by-step procedure should optimize your design by identifying the best opportunities for stormwater controls **early in the design process.**

Begin with general project requirements and program.

The recommended steps are:

1. Assemble needed information.

Sketch conceptual site layout, building locations, and circulation.

2. Identify site opportunities and constraints.
3. Follow the LID design guidance in Chapter 4 to analyze your project for LID and to develop and document your drainage design.

Revise site layout, building locations, and circulation to accommodate LID design. Develop land-scaping plan.

4. Specify source controls using the sources/source control checklist in the Appendix.
5. Plan for ongoing maintenance of treatment and flow-control facilities.
6. Complete the Project Submittal.

Submit Site Plan, Landscape Plan, and SUSMP Submittal

City staff may recommend you prepare and submit a preliminary site design prior to formally applying for planning and zoning approvals. Your preliminary site design should incorporate a conceptual plan for site drainage, including self-treating and self-retaining areas and the location and approximate sizes of any treatment facilities. This additional up-front design effort will save time and avoid potential delays later in the review process.

Step 1: Assemble Needed Information

To select types and locations of treatment facilities, the designer needs to know the following site characteristics:

- **Existing natural hydrologic features** and natural resources, including any contiguous natural areas, wetlands, watercourses, seeps, or springs.

- **Existing site topography**, including contours of any slopes of 4% or steeper, general direction of surface drainage, local high or low points or depressions, any outcrops or other significant geologic features.
- **Zoning**, including requirements for **setbacks** and **open space**.
- **Public Works Standards** or other local codes governing minimum street widths, sidewalk construction, allowable pavement types, and drainage. These codes may conflict with Low Impact Development objectives to minimize imperviousness and to maintain or restore natural site hydrology. Municipalities are encouraged to review and revise codes to resolve these conflicts where it is possible to do so.
- Soil types (including **hydrologic soil groups**) and depth to groundwater, which may determine whether infiltration is a feasible option for managing site runoff. Depending on site location and characteristics, and on the selection of treatment and flow-control facilities, site-specific information (e.g. from boring logs or geotechnical studies) may be required.
- **Existing site drainage.** For undeveloped sites, this should be obtained by inspecting the site and examining topographic maps and survey data. For previously developed sites, site drainage and connection to the municipal storm drain system can be located from site inspection, municipal storm drain maps, and plans for previous development.
- Existing **vegetative cover** and **impervious areas**, if any.

References and Resources

- *Site Planning for Urban Stream Protection* (Scheuler 1995).
- *Start at the Source* (BASMAA 1999), p. 36

Step 2: Identify Constraints & Opportunities

Review the information collected in Step 1. Identify the principal constraints on site design and selection of treatment and flow-control facilities as well as opportunities to reduce imperviousness and incorporate facilities into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, restricted right-of-way, or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention facilities), and differences in elevation (which can provide hydraulic head). Note stormwater treatment facilities should not be located within protected riparian areas.

Prepare a brief **narrative** describing site opportunities and constraints. This narrative will help you as you proceed with LID design and explain your design decisions to others.

Step 3: Prepare and Document Your LID Design

Use the Low Impact Development Design Guide (Chapter 4) to analyze your project for LID, design and document drainage, and specify preliminary design details for integrated management practices. **Follow the detailed instructions in Chapter 4 to ensure your project complies with NPDES permit LID requirements (Provision D.1.d.(4)) and stormwater treatment requirements in Provision D.1.d.(6)).** The LID Design Guide has been developed so that hydromodification management requirements are also met via this unified design procedure. Chapter 4 includes calculation procedures and formats for presenting your calculations.

As shown in the example checklist above, your Project Submittal may need to include a drawing showing:

- The entire site divided into separate drainage management areas (DMAs), with each area identified as one of the following: self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. Each area should be clearly marked with a unique identifier.
- For each drainage area, the types of impervious area proposed, and the area of each.
- Proposed locations and sizes of treatment facilities. Each facility should be clearly marked with a unique identifier.

Compliance
The design criteria for DMAs in Chapter 4 ensure the required volume of flow from all developed portions of the project, including landscaped areas, is infiltrated, filtered, or treated (Provision D.1.d.(6)(a).

Your Project Submittal may need to include:

- Tabulation of proposed self-treating areas, self-retaining areas, areas draining to self-retaining areas, and areas draining to IMPs, and the corresponding IMPs identified on the Exhibit.
- Calculations, in the format shown in Chapter 4, showing the minimum square footage required and proposed square footage for each IMP.
- Preliminary designs for each IMP. The design sheets and accompanying drawings in Chapter 4 may be used or adapted for this purpose.

The following may also be required, or may be advisable to assist the reviewer to understand your design:

- A narrative overview of your design and how your design decisions optimize the site layout, use pervious surfaces, disperse runoff from impervious surfaces, and drain impervious surfaces to engineered IMPs. See Chapter 4.
- A narrative briefly describing each **drainage management area** (DMA), its drainage, and where drainage will be directed.

- A narrative briefly describing each IMP. Include any special characteristics or features distinct from the design sheets in Chapter 4.

References and Resources

- Chapter 4
- *County of San Diego Low Impact Development Handbook*
- Your municipality's *General Plan*
- Your municipality's Zoning Ordinance and Development Codes
- *Low Impact Development Manual* (Prince George's County, Maryland, 1999).
- *Bioretention Manual* (Prince George's County, Maryland, rev. 2002)
- *Site Planning for Urban Stream Protection* (Schueler, 1995b).
  Low Impact Development Technical Guidance Manual for Puget Sound (Puget Sound Action Team, 2005)
- *LID for Big Box Retailers* (Low Impact Development Center, 2006)

Step 4. Specify Source Control BMPs

Some everyday activities – such as trash recycling/disposal and washing vehicles and equipment – generate pollutants that tend to find their way into storm drains. These pollutants can be minimized by applying **source control BMPs**.

Source control BMPs include **permanent**, structural features that must be incorporated into your project plans and **operational** BMPs, such as regular sweeping and "housekeeping," that must be implemented by the site's occupant or user. The maximum extent practicable standard typically requires both types of BMPs. In general, operational BMPs cannot be substituted for a feasible and effective permanent BMP.

Use the following procedure to specify source control BMPs for your site:

► IDENTIFY POLLUTANT SOURCES

Review the first column in the **Pollutant Sources/Source Control Checklist** (Appendix). Check off the potential sources of pollutants that apply to your site.

► NOTE LOCATIONS ON SUBMITTAL DRAWING

Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist (Appendix). Show the location of each pollutant source and each permanent source control BMP in your submittal drawing.

► PREPARE A TABLE AND NARRATIVE

Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist (Appendix). Now, create a table using the format in Table 3-1. In the left column, list each potential source on your site (from Appendix, Column 1). In the middle column, list the corresponding **permanent, structural BMPs** (from Columns 2 and 3, Appendix) used to prevent pollutants from entering runoff. Accompany this table with a narrative that explains any special features, materials, or methods of construction that will be used to implement these permanent, structural BMPs.

► IDENTIFY OPERATIONAL SOURCE CONTROL BMPS

TABLE 3-1. Format for Table of Permanent and Operational Source Control Measures.

Potential source of runoff pollutants	*Permanent source control BMPs*	*Operational source control BMPs*

To complete your table, refer once again to the Pollutant Sources/Source Control Checklist (Appendix, Column 4). List in the right column of your table the operational BMPs that should be implemented as long as the anticipated activities continue at the site. The same BMPs may also be required as a condition of a use permit or other revocable discretionary approval for use of the site.

References and Resources

- Appendix: Stormwater Pollutant Sources/Source Control Checklist
- RWQCB Order R9-2007-0001, Provision D.1.d.(5)
- *Start at the Source*, Section 6.7: Details, Outdoor Work Areas
- *California Stormwater Industrial/Commercial Best Management Practice Handbook*
- *Urban Runoff Quality Management* (WEF/ASCE, 1998) Chapter 4: Source Controls

Step 5: Stormwater Facility Maintenance

As required by NPDES Permit Provision D.1.c.(5), the City requires submittal of proof of a mechanism under which ongoing long-term maintenance of stormwater treatment and flow-control facilities will be conducted. The City requires the following items be included in your Project Submittal:

1. A means to finance and implement facility maintenance in perpetuity.
2. Acceptance of responsibility for maintenance from the time the facilities are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the treatment and flow-control facilities you have selected.

The City also requires that you prepare and submit a detailed plan that sets forth a maintenance schedule for each of the treatment and flow-control facilities built on your site.

Details of these requirements, and instructions for preparing a detailed operation and maintenance plan, are in Chapter 5.

References and Resources

- *Chapter 5*
- Operation, Maintenance, and Management of Stormwater Management Systems (Watershed Management Institute, 1997)

Step 6: Complete Your Project Submittal

Local City staff will provide specific instructions for the content and format of your Project Submittal. Your Project Submittal should document the information gathered and decisions made in Steps 1-5. A clear, complete, well-organized Project Submittal will make it possible to confirm your design meets the minimum requirements of the NPDES permit, the municipal stormwater pollution prevention ordinance, and this *SUSMP*.

► COORDINATION WITH SITE, ARCHITECTURAL, AND LANDSCAPING PLANS

Before completing your Project Submittal, ensure your stormwater control design is fully coordinated with the site plan, grading plan, and landscaping plan being proposed for the site.

Submittals must incorporate relevant aspects of the stormwater design. In particular, ensure:

- Curb elevations, elevations, grade breaks, and other features of the drainage design are consistent with the delineation of DMAs.
- The top edge (overflow) of each bioretention facility is level all around its perimeter—this is particularly important in parking lot medians.
- The resulting grading and drainage design is consistent with the design for parking and circulation.
- Bioretention facilities and other IMPs do not create conflicts with pedestrian access between parking and building entrances.
- Vaults and utility boxes can be accommodated outside bioretention facilities and will not be placed within bioretention facilities.
- The visual impact of stormwater facilities, including planter boxes at building foundations and any terracing or retaining walls required for the stormwater control design, is shown in renderings and other architectural drawings.
- Landscaping plans, including planting plans, show locations of bioretention facilities, and the plant requirements are consistent with the engineered soils and conditions in the bioretention facilities.
- Renderings and representation of street views incorporate any stormwater facilities located in street-side buffers and setbacks

► CONSTRUCTION PLAN SUSMP CHECKLIST

When you submit construction plans for City review and approval, the reviewer will compare that submittal with your earlier Project Submittal. By creating a Construction Plan SUSMP Checklist for your project, you can facilitate the reviewer's comparison and speed review of your project.

TABLE 3-2. Format for Construction Plan SUSMP Checklist.

SUSMP Page #	*BMP Description*	*See Plan Sheet #s*

Here's how:

1. Create a table similar to Table 3-2. Number and list each measure or BMP you have specified in your Project Submittal in Columns 1 and 2 of the table. Leave Column 3 blank. Incorporate the table into your Project Submittal.

2. When you submit construction plans, **duplicate the table** (by photocopy or electronically). Now fill in Column 3, identifying the plan sheets where the BMPs are shown. List all plan sheets on which the BMP appears. Submit the updated table with your construction plans.

Note that the updated table—or Construction Plan SUSMP Checklist—is **only a reference tool** to facilitate comparison of the construction plans to your Project Submittal. Planning Department staff can advise you regarding the process required to propose changes to your approved Project Submittal.

► CERTIFICATION

The City requires that your Final Project Submittal be certified by a registered civil engineer.

The certification should state: "The selection, sizing, and preliminary design of stormwater treatment and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments."

► EXAMPLE PROJECT SUBMITTALS

Example Project Submittals and templates will be available from City staff. Your submittal will reflect the unique character of your own project and should meet the requirements identified in this *SUSMP*. City staff can assist you to determine how specific requirements apply to your project.

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Chapter

4

Low Impact Development Design Guide

Guidance for designing and documenting your LID site drainage, stormwater treatment facilities, and flow-control facilities

Follow the Low Impact Development (LID) design in this SUSMP to achieve compliance with the stormwater treatment requirements as well as the LID requirements in the stormwater NPDES permit.

This will require careful documentation of:

- Pervious and impervious areas in the planned project.
- Drainage from each of these areas.
- Locations, sizes, and types of proposed treatment facilities.

Your Project Submittal must include calculations showing the site drainage and proposed LID treatment facilities meet the criteria in this *SUSMP*.

This Low Impact Development Design Guide will help you:

- **Analyze your project** and identify and select options for implementing LID techniques to meet runoff treatment requirements—and flow-control requirements, if they apply.
- **Design and document drainage** for the whole site and document how that design meets this *SUSMP's* stormwater treatment criteria.
- **Specify preliminary design details** and integrate your LID drainage design with your paving and landscaping design.

Alternatives to LID design are discussed in the final section of this chapter.

Analyze Your Project for LID

Conceptually, there are four LID strategies for managing runoff from buildings and paving:

1. **Optimize the site layout** by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.

3. **Use pervious surfaces** such as turf, gravel, or pervious pavement—or use surfaces that retain rainfall, such as vegetated roofs. All drainage from these surfaces is considered to be "self-retained" (a detailed definition corresponding to this concept is on page 56). No further management of runoff is necessary. An emergency overflow should be provided for extreme events.

4. **Disperse runoff** from impervious surfaces on to adjacent pervious surfaces (e.g., direct a roof downspout to disperse runoff onto a lawn).

5. Drain impervious surfaces to engineered **Integrated Management Practices** (IMPs), such as bioretention facilities, planter boxes, cisterns, or dry wells. IMPs infiltrate runoff to groundwater and/or percolate runoff through engineered soil and allow it to drain away slowly. Depending on site conditions and local regulations, it may be possible to harvest and reuse rainwater in conjunction with IMPs.

A combination of two or more strategies may work best for your project. With forethought in design, the four strategies can provide multiple, complementary benefits to your development. Pervious surfaces reduce heat island effects and temperature extremes. Landscaping improves air quality, creates a better place to live or work, and upgrades value for rental or sale. Retaining natural hydrology helps preserve and enhance the natural character of the area. LID drainage design can also conserve water and reduce the need for drainage infrastructure.

Table 4-1 includes ideas for applying LID strategies to site conditions and types of development.

TABLE 4-1. Ideas for Runoff Management.

Site Features and Design Objectives	*Vegetated Roof*	*Self-retaining Areas*	*Pervious Pavement*	*Bioretention Facility*	*Flow-through Planter*	*Dry Well*	*Cistern with bioretention*
Clayey native soils	✓			✓	✓		✓
Permeable native soils	✓		✓	✓	✓	✓	
Very steep slopes	✓				✓		
Shallow groundwater	✓				✓		
Avoid saturating subsurface soils	✓		✓		✓		
Connect to roof downspouts		✓		✓	✓	✓	✓
Parking lots/islands and medians			✓	✓		✓	
Sites with extensive landscaping		✓	✓	✓			
Densely developed sites with limited space/landscape	✓		✓		✓	✓	✓
Fit IMPs into landscape and setback areas				✓			✓
Make drainage a design feature		✓		✓			✓
Convey as well as treat stormwater				✓			

► OPTIMIZE THE SITE LAYOUT

To minimize stormwater-related impacts, apply the following design principles to the layout of newly developed and redeveloped sites.

Conserve natural areas, soils, and vegetation. Define the development envelope and protected areas, identifying areas that are most suitable for development and areas that should be left undisturbed. Use the following guideline to determine the least sensitive areas of the site, in order of increasing sensitivity:

1. Areas devoid of vegetation, including previously graded areas and agricultural fields.
2. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands where receiving waters are not present.
3. Areas of chamise or mixed chaparral, and non-native grasslands.
4. Areas containing coastal scrub communities.
5. All other upland communities.
6. Occupied habitat of sensitive species and all wetlands (as both are defined by the local jurisdiction).

Within each of the previous categories, hillside areas should be considered more sensitive than flatter areas.

Coordination
Chapter One includes a presentation of how review of your project's site design and landscape design is coordinated with review for compliance with stormwater NPDES requirements.

Where possible, conform the site layout along natural landforms, avoid excessive grading and disturbance of vegetation and soils, and replicate the site's natural drainage patterns. Set back development from creeks, wetlands, and riparian habitats. Preserve significant trees, especially native trees and shrubs, and identify locations for planting additional native or drought tolerant trees and large shrubs. Concentrate development on portions of the site with less permeable soils, and preserve areas that can promote infiltration.

For all types of development, **limit overall coverage** of paving and roofs. Where allowed by local zoning and design standards—and provided public safety and a walkable environment are not compromised—this can be accomplished by designing compact, taller structures, narrower and shorter streets and sidewalks, smaller parking lots (fewer stalls, smaller stalls, and more efficient lanes), and indoor or underground parking. Examine site layout and circulation patterns and identify areas where landscaping can be substituted for pavement.

Detain and retain runoff throughout the site. On flatter sites, it typically works best to intersperse landscaped areas and IMPs among the buildings and paving. On hillside sites, drainage from upper areas may be collected in conventional catch basins and piped to landscaped areas and IMPs in lower areas.

Use drainage as a design element. Use depressed landscape areas, vegetated buffers, and bioretention areas as amenities and focal points within the site and landscape design. Bioretention areas can be almost any shape and should be located at low points. Bioretention areas shaped as swales can detain and treat low runoff flows and also convey higher flows.

► USE PERVIOUS SURFACES

Consider a vegetated roof. Although not yet widely used in California, vegetated or "green" roofs are growing in popularity. Potential benefits include longer roof life, lower heating and cooling costs, and better sound insulation, in addition to air quality and water quality benefits. For SUSMP compliance purposes, vegetated roofs are considered not to produce increased runoff or runoff pollutants (i.e., any runoff from a vegetated roof requires no further treatment or detention). For more information on vegetated roofs, see www.greenroofs.org.

Consider permeable pavements and surface treatments. Inventory paved areas on your preliminary site plan. Identify where permeable pavements, such as crushed aggregate, turf block, unit pavers, pervious concrete, or pervious asphalt could be substituted for impervious concrete or asphalt paving.

► DISPERSE RUNOFF TO ADJACENT PERVIOUS AREAS

Look for opportunities to direct runoff from impervious areas to adjacent landscaping. The design, including slopes and soils, must reflect a reasonable expectation that an inch of rainfall will soak into the soil and produce no runoff. For example, a lawn or garden depressed 3-4" below surrounding walkways or driveways provides a simple but functional landscape design element.

For sites subject to stormwater treatment requirements only, a 2:1 maximum ratio of impervious to pervious area is acceptable. Be sure soils will drain adequately.

Under some circumstances, it may be allowable to direct runoff from impervious areas to pervious pavement (for example, from roof downspouts to a parking lot paved with crushed aggregate or turf block). The pore volume of pavement and base course must be sufficient to retain an inch of rainfall, including runoff from the tributary area. The slopes and soils must be compatible with infiltrating that volume without producing runoff.

► DIRECT RUNOFF TO INTEGRATED MANAGEMENT PRACTICES

Project Clean Water has developed design criteria for the following IMPs:

- **Bioretention facilities**, which can be configured as swales, free-form areas, or planters to integrate with your landscape design.
- **Flow-through planters**, which can be used near building foundations and other locations where infiltration to native soils is not desired.
- **Dry wells** and other infiltration facilities, which can be used only where soils are permeable.

- **Cisterns or valuts**, in combination with a bioretention facility.

See the design sheets at the end of this chapter.

It may be possible to create a site-specific design that uses cisterns to achieve stormwater flow control, stormwater treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Such a design could expand the multiple benefits of LID to include water conservation. Keep in mind:

- Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8 below. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse.

- Storage of water for longer than minimum standards set forth by the City (96 hours) creates the potential for mosquito harborage. Cisterns and vaults must be designed to prevent entry by mosquitoes.

- Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Some references and resources for water harvesting appear at the end of this chapter.

Finding the right location for treatment facilities on your site involves a careful and creative integration of several factors:

- To make the most efficient use of the site and to maximize aesthetic value, **integrate IMPs with site landscaping**. Many local zoning codes may require landscape setbacks or buffers, or may specify that a minimum portion of the site be landscaped. It may be possible to locate some or all of your site's treatment and flow-control facilities within this same area, or within utility easements or other non-buildable areas.

- Planter boxes and bioretention areas must be **level or nearly level** all the way around. Bioretention areas configured as swales may be gently sloped in the linear direction, but opposite sides must be at the same elevation.

- For effective, low-maintenance operation, **locate facilities so drainage into and out of the device is by gravity flow.** Pumped systems are feasible, but are expensive, require more maintenance, are prone to untimely failure, and can cause mosquito control problems. Most IMPs require 3 feet or more of head.

- If the property is being subdivided now or in the future, the facility should be in a **common, accessible area.** In particular, avoid locating facilities on private residential lots. Even if the facility will serve only one site owner or operator, make

sure the facility is located for ready access by inspectors from the local municipality and local mosquito control agency.

- The facility must be accessible to equipment needed for its maintenance. **Access requirements for maintenance** will vary with the type of facility selected. Planter boxes and bioretention areas will typically need access for the same types of equipment used for landscape maintenance.

To complete your analysis, include in your Project Submittal a brief **narrative** documenting the site layout and site design decisions you made. This will provide background and context for how your design meets the quantitative LID design criteria.

Develop and Document Your Drainage Design

The **design documentation procedure** begins with careful delineation of pervious areas and impervious areas (including roofs) throughout the site. The procedure accounts for how runoff from each delineated area is managed. For areas draining to IMPs, the procedure ensures each IMP is appropriately sized.

The procedure results in a space-efficient, cost-efficient LID design for meeting SUSMP requirements on most residential and commercial/industrial developments. The procedure arranges documentation of drainage design and IMP sizing in a consistent format for presentation and review.

This procedure is intended to facilitate, not substitute for, creative interplay among site design, landscape design, and drainage design. **Several iterations may be needed** to optimize your drainage design as well as aesthetics, circulation, and use of available area for your site.

You should be able to complete the needed calculations using only the project's site development plan.

► STEP 1: DELINEATE DRAINAGE MANAGEMENT AREAS

This is the key first step. You must divide the **entire project area** into individual, discrete Drainage Management Areas (DMAs). Typically, lines delineating DMAs follow grade breaks and roof ridge lines. The Exhibit, tables, text, and calculations in your Project Submittal will illustrate, describe, and account for runoff from each of these areas.

Use separate DMAs for each surface type (e.g., landscaping, pervious paving, or roofs). Each DMA must be assigned a single hydrologic soil group. Assign each DMA an identification number and determine its size in square feet.

► STEP 2: CLASSIFY DMAS AND DETERMINE RUNOFF FACTORS

Next, determine how drainage from each DMA will be handled. Each DMA will be one of the following four types:

1. Self-treating areas.
2. Self-retaining areas (also called "zero-discharge" areas).
3. Areas that drain to self-retaining areas.
4. Areas that drain to IMPs.

Self-treating areas are landscaped or turf areas that do not drain to IMPs, but rather drain directly off site or to the storm drain system. Examples include upslope undeveloped areas which are ditched and drained around a development and grassed slopes which drain off-site to a street or storm drain. In general, self-treating areas include no impervious areas, unless the impervious area is very small (5 percent or less) in relationship to the receiving pervious area and slopes are gentle enough to ensure runoff will be absorbed into the vegetation and soil. Criteria for self-treating areas are in the design sheet "Self Treating and Self-Retaining Areas" at the end of this chapter.

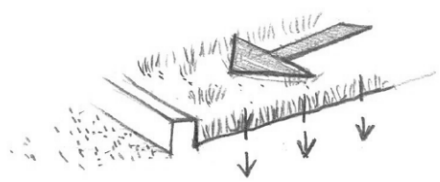

FIGURE 4-1. Self-treating areas are entirely pervious and drain directly off-site or to the storm drain system.

Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that a one-inch rainfall event would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Specify slopes, if any, toward the center of the pervious area. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

Criteria for self-retaining areas are in the design sheet "Self Treating and Self-Retaining Areas" following this chapter.

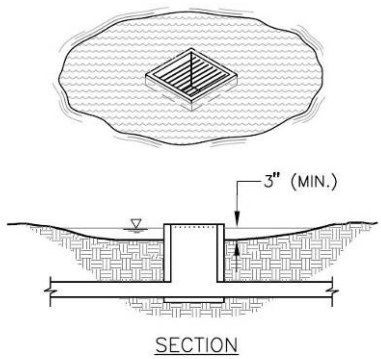

FIGURE 4-2. Self-retaining areas. Berm or depress the grade to retain at least an inch of rainfall and set inlets of any area drains at least 3 inches above low point to allow ponding.

Areas draining to se[illegible]ly pervious areas can be managed by routing it to self-retaining pervious areas. For example, roof downspouts can be directed to lawns, and driveways can be sloped toward landscaped areas. The maximum ratio is 2 parts impervious area for every 1 part pervious area.

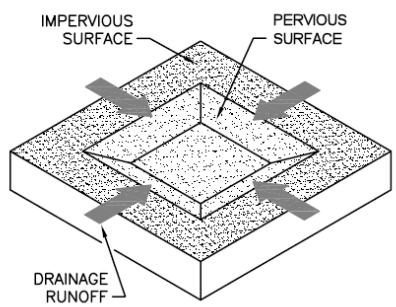

FIGURE 4-3. Relationship of impervious to pervious area for self-retaining areas. Ratio: ***pervious ≥ ½ impervious***

The drainage from the impervious area must be directed to and dispersed within the pervious area, and the entire area must be designed to retain an inch of rainfall without flowing off-site. For example, if the maximum ratio of 2 parts impervious area into 1 part pervious area is used, then the pervious area must absorb 3 inches of water over its surface before overflowing to an off-site drain.

A partially pervious area may be drained to a self-retaining area. For example, a driveway composed of unit pavers may drain to an adjacent lawn. In this case, the maximum ratios are:

(Runoff factor) x (tributary area) ≤ 2 x (self-retaining area) *Equation 4-1*

Use the runoff factors in Table 4-2.

Prolonged ponding is a potential problem at higher impervious/pervious ratios. In your design, ensure that the pervious area soils can handle the additional run-on and are sufficiently well-drained.

Under some circumstances, pervious pavement (e.g., crushed stone, pervious asphalt, or pervious concrete) can be self-retaining. Adjacent roofs or impervious pavement may drain on to the pervious pavement in the same maximum ratios as described above.

To design a pervious pavement to be a self-treating area, ensure:

- The gravel base course is a minimum of four or more inches deep.
- The base course is not to be underdrained.
- A qualified engineer has been consulted regarding infiltration rates, pavement stability, and suitability for the intended traffic.

Runoff from self-treating and self-retaining areas does not require any further treatment or flow control.

TABLE 4-2. Runoff Factors for Surfaces Draining to IMPs.

Surface	Factor
Roofs	1.0
Concrete	1.0
Pervious Concrete	0.1
Porous Asphalt	0.1
Grouted Unit Pavers	1.0
Solid Unit Pavers on granular base, min. 3/16 inch joint space	0.2
Crushed Aggregate	0.1
Turfblock	0.1
Amended, mulched soil	0.1
Landscape	0.1

Areas draining to IMPs are multiplied by a sizing factor to calculate the required size of the IMP. On most densely developed sites—such as commercial and mixed-use developments and small-lot residential subdivisions—most DMAs will drain to IMPs.

More than one drainage area can drain to the same IMP. However, because the minimum IMP sizes are determined by ratio to drainage area size, a drainage area may not drain to more than one IMP. See Figures 4-4 and 4-5.

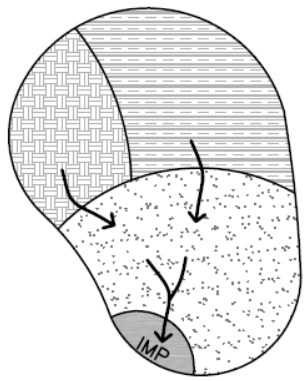

FIGURE 4-4. MORE THAN ONE
Drainage Management Area can drain to a single IMP.

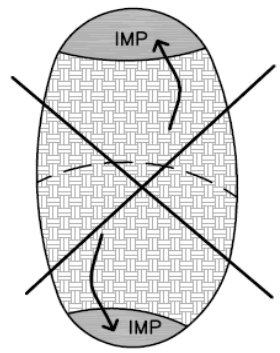

FIGURE 4-5. ONE DRAINAGE
Management Area cannot drain to more than one IMP. Use a grade break to divide the DMA.

Where possible, design site drainage to **only impo**[illegible] IMPs. This yields a simpler, more efficient design and also helps protect IMPs from becoming clogged by sediment.

If it is necessary to include turf, landscaping, or pervious pavements within the area draining to an IMP, list each surface as a separate DMA. A runoff factor (similar to a "C" factor used in the rational method) is applied to account for the reduction in the quantity of runoff. For example, when a turf or landscaped drainage management area drains to an IMP, the resulting increment in IMP size is:

$$\Delta \text{ (Area)} = \text{(pervious area)} \times \text{(runoff factor)} \times \text{(sizing factor)}.$$

Use the runoff factors in Table 4-2.

► STEP 3: TABULATE DRAINAGE MANAGEMENT AREAS

- Tabulate self-treating areas in the format shown in Table 4-3.
- Tabulate self-retaining areas in the format shown in Table 4-4.
- Tabulate areas draining to self-retaining areas in the format shown in Table 4-5. Check to be sure the total product of (square feet of tributary area × runoff factor) for all DMAs draining to a receiving self-retaining area is no greater than a 2:1 ratio to the square footage of the receiving self-retaining area itself.
- Compile a list of DMAs draining to IMPs. Proceed to Step 4 to check the sizing of the IMPs.

TABLE 4-3. Format for Tabulating Self-Treating Areas.

DMA Name	*Area (square feet)*

TABLE 4-4. Format for Tabulating Self-Retaining Areas.

DMA Name	*Area (square feet)*

TABLE 4-5. Format for Tabulating Areas Draining to Self-Retaining Areas.

DMA Name	*Area (square feet)*	*Post-project surface type*	*Runoff factor*	*Receiving self-retaining DMA*	*Receiving self-retaining DMA Area (square feet)*

► STEP 4: SELECT AND LAY OUT IMPS ON SITE PLAN

Select from the list of IMPs in Table 4-6. Illustrations, designs, and design criteria for the IMPs are in the "IMP Design Details and Criteria" at the end of this chapter.

Once you have laid out the IMPs, calculate the square footage you have set aside on your site plan for each IMP.

► STEP 5: REVIEW SIZING FOR EACH IMP

For each of the IMPs, use the appropriate "water quality only" sizing factor from Table 4-6. *Sizing factors for integrated facilities that provide both water quality treatment and hydromodification flow control are currently under development and will be included in this document at a later time – please check the City's website at www.delmar.ca.us for updates.*

TABLE 4-6. Sizing Factors (Water Quality Only)

Bioretention Facilities	Sizing Factor for Area = 0.04
Flow-through Planters	Sizing Factor for Area = 0.04
Dry Well or Infiltration Basin	See Step 6 to Calculate Min. Volume
Cistern and Vaults with Bioretention	See Step 6 to Calculate Min. Volume of Cistern or Vault; then use 0.04 to calculate minimum size of bioretention area

► STEP 6: CALCULATE MINIMUM AREA AND VOLUME OF EACH IMP

The minimum area of bioretention facilities and flow-through planters is found by summing up the contributions of each tributary DMA and multiplying by the adjusted sizing factor for the IMP. *Note that if the IMP is designed to provide hydromodification flow control, then hydromodification sizing factors should be used in lieu of the "water quality only" sizing factors presented in Table 4-6. These sizing factors are currently under development and will be included at a later time – please check the City's website at www.delmar.ca.us for updates.*

Equation 4-7

$$Min.\ IMP\ Area = \sum \begin{pmatrix} DMA & DMA \\ Square & \times Runoff \\ Footage & Factor \end{pmatrix} \times \begin{pmatrix} IMP \\ Sizing \\ Factor \end{pmatrix}$$

Use the format of Table 4-7 to present the calculations of the required minimum area and volumes for **bioretention areas** and **planter boxes**:

TABLE 4-7. Format for Presenting Calculations of Minimum IMP Areas for Bioretention Areas and Planter Boxes.

DMA Name	*DMA Area (square feet)*	*Post-project surface type*	*DMA Runoff factor*	*DMA Area × runoff factor*	*Soil Type:*	*IMP Name*			
					IMP Sizing factor (WQ Only)		*Minimum Area*	*Proposed Area*	
			Total		***0.04***				***IMP Area***

To size **dry wells**, **infiltration basins**, or **infiltration trenches for the "water quality treatment option**, use the following procedure:

1. Use the County of San Diego's 85th Percentile Isopluvial Map to determine the minimum unit volume.
2. Determine the weighted runoff factor ("C" factor) for the area tributary to the facility. The factors in Table 4-2 may be used.
3. Multiply the weighted runoff factor times the tributary area times the minimum unit volume.

Equation 4-8

$$Volume = [Tributary\ Area] \times [weighted\ runoff\ \ factor] \times [unit\ volume]$$

4. Select a facility depth.
5. Determine the required facility area. Dry wells may be designed as an open vault or with rock fill. If rock fill is used, assume a porosity of 40%.
6. Ensure the facility can infiltrate the entire volume within the minimum drawdown time as determined by the governing jurisdiction..

To size a **cistern or vault in series with a bioretention facility (criteria below for "water quality treatment: only option)**:

1. Use Equation 4-8 to calculate the required cistern or vaults volume.
2. Design a discharge orifice for a drawdown time of 24 hours.
3. Determine the maximum discharge from the orifice.
4. The minimum area of the bioretention facility must treat this flow based on a percolation rate of 5" per hour through the engineered soil.

► STEP 7: DETERMINE IF AVAILABLE SPACE FOR IMP IS ADEQUATE

Sizing and configuring IMPs may be an iterative process. After computing the minimum IMP area using Steps 1 – 6, review the site plan to determine if the reserved IMP area is sufficient. If so, the planned IMPs will meet the SUSMP sizing requirements. If not, revise the plan accordingly. Revisions may include:

- Reducing the overall imperviousness of the project site.
- Changing the grading and drainage to redirect some runoff toward other IMPs which may have excess capacity.
- Making tributary landscaped DMAs self-treating or self-retaining.
- Expanding IMP surface area.

► STEP 8: COMPLETE YOUR SUMMARY REPORT

Present your IMP sizing calculations in tabular form. Adapt the following format as appropriate to your project. Coordinate your presentation of DMAs and calculation of minimum IMP sizes with the Project Submittal drawing (labeled to show delineation of DMAs and locations of IMPs). It is also helpful to incorporate a brief description of each DMA and each IMP.

Sum the total area of all DMAs and IMPs listed and show it is equal to the total project area. This step may include adjusting the square footage of some DMAs to account for area used for IMPs.

Format:

Project Name:

Project Location:

APN or Subdivision Number:

Total Project Area (square feet):

Mean Annual Precipitation at Project Site:

I. Self-treating areas:

DMA Name	*Area (square feet)*

II. Self-retaining areas:

DMA Name	*Area (square feet)*

III. Areas draining to self-retaining areas:

DMA Name	*Post-project surface type*	*Runoff factor*	*Area (square feet)*	*Receiving self-retaining DMA*	*Receiving self-retaining DMA Area (square feet)*

IV. Areas draining to IMPs (repeat for each IMP):

DMA Name	*DMA Area (square feet)*	*Post-project surface type*	*DMA Runoff factor*	*DMA Area × runoff factor*	*Soil Type:*	*IMP Name*			
					IMP Sizing factor		*Minimum Area or Volume*	*Proposed Area or Volume*	
				Total					***IMP Area***

Specify Preliminary Design Details

In your Project Submittal, describe your IMPs in sufficient detail to demonstrate the area, volume, and other criteria of each can be met within the constraints of the site.

Ensure these details are consistent with preliminary site plans, landscaping plans, and architectural plans submitted with your application for planning and zoning approvals.

Following are design sheets for:

- Self-treating and self-retaining areas
- Pervious pavements
- Bioretention facilities
- Flow-through planter
- Dry wells and infiltration basins
- Cistern with bioretention facility

These design sheets include recommended configurations and details, and example applications, for these IMPs. **The information in these design sheets must be adapted and applied to the conditions specific to the development project such as unstable slopes or the lack of available head.**

Keep in mind that proper and functional design of the IMP is the responsibility of the applicant. Effective operation of the IMP throughout the project's lifetime will be the responsibility of the property owner.

Alternatives to Integrated LID Design

If you believe design of features and facilities as described above is infeasible for your development site, consult with City staff before preparing an alternative design for stormwater treatment, flow control, and LID compliance.

Local Requirements
Cities or the County may have requirements that differ from, or are in addition to, this countywide model SUSMP. Check with local planning and community development staff.

For all alternative designs, the applicant must prepare a complete Project Submittal, including a drawing showing the entire site divided into discrete Drainage Management Areas, text and tables showing how drainage is routed from each DMA to a treatment facility, and calculations demonstrating that the design achieves the applicable design criteria for each stormwater treatment facility. Alternative treatment facilities are limited to the circumstances and selection criteria identified. The Project Submittal must also show how the project meets the minimum LID criteria (page 35) and ensures runoff rates, durations,

and velocities are controlled to maintain or reduce downstream erosion conditions and protect stream habitat (NPDES Permit Provision D.1.d.(10)).

► DESIGN OF ALTERNATIVE TREATMENT FACILITIES

Here are criteria and design considerations for some alternative treatment facilities:

Sand Filters. To ensure effectiveness is not compromised by compacting or clogging of the filter surface, sand filters must be maintained frequently.

The following criteria apply to sand filters:

- Calculate the design flow using the rational method with an intensity of 0.2"/hour and the "C" factors for "treatment only" from Table 4-2.
- To determine the required filter surface area, divide the design flow by an allowable design surface loading rate of 5"/hour.
- The minimum depth of filter media is 18". The media should be washed sand, with gradation similar to that specified for fine aggregate in ASTM C-33.
- The entire filter area must be accessible for easy maintenance without the need to enter a confined space.

A typical filter design includes a gravel drain layer and a perforated pipe underdrain. Filter fabric may be used to prevent the filter media from entering the gravel layer.

The design should not include any permanent pool or other standing water. Instead of including a pretreatment basin, consider the following features in the area tributary to the filter to reduce the potential for filter clogging:

- Limit the size of the Drainage Management Area.
- Include only impervious areas in the DMA.
- Stabilize slopes and eliminate sources of sediment in the DMA.
- Provide screens for trash and leaves at storm drain inlets (if allowed by municipality).

For additional design considerations and details, see *Design of Stormwater Filtering Systems* by Richard A. Claytor and Thomas R. Schueler, The Center for Watershed Protection, 1996, and *California Stormwater BMP Handbooks* Fact Sheet TC-40, Media Filter.

Sand filters do not provide adequate hydromodification flow controls.

Extended ("Dry") Detention Basins. The required detention volume for water quality treatment based on the 85th percentile 24-hour storm depth. The steps to calculate the required detention volume are:

1. Use the County of San Diego's 85th Percentile Isopluvial Map to determine the unit basin volume.

2. Determine the weighted runoff factor ("C" factor) for the area tributary to the basin. The factors in Table 4-2 may be used.

3. Multiply the weighted runoff factor times the tributary area times the unit basin volume.

For maximum effectiveness the basin should not be sized substantially larger than this volume. If the basin is to be used for hydromodification flow control, then the BMP Sizing Calculator pond sizer or a continuous simulation model must be used to prove the basin meets peak flow and flow duration criteria

For design considerations and details, see the *California Stormwater Best Management Practice Handbooks*, Fact Sheet TC-22, "Extended Detention Basins." The basin outlet should be designed for a 24-hour drawdown time.

As noted in Fact Sheet TC-22, "dry" detention basins may not be practicable for drainage areas less than 5 acres. The potential for mosquito harborage is a concern. In the design, do not create any areas that will hold standing water for time periods in excess of the maximum vector control detention hours.

"Wet" Detention Ponds and Constructed Wetlands. The required water quality detention volume is determined as with a "dry" detention basin. Before proceeding with design, contact the local mosquito control agency to coordinate the design and plan ongoing inspection and maintenance of the facility for mosquito control. For design considerations and details, see the *California Stormwater Best Management Practices Handbooks,* Fact Sheet TC-20, "Wet Ponds," and Fact Sheet TC-21, "Constructed Wetlands."

Vegetated Swales. Design recommendations for conventional vegetated swales are in the *California Stormwater Best Management Practices Handbooks*. The conventional swale design uses available on-site soils and does not include an underdrain system. Where soils are clayey, there is little infiltration. Treatment occurs as runoff flows through grass or other vegetation before exiting at the downstream end. Recommended detention times are on the order of 10 minutes. It should be noted that such designs would not provide the required hydromodification flow control benefit.

Conventional vegetated swales may be used to meet NPDES permit treatment requirements and LID requirements (see page 21). The following should be incorporated in the design:

- Determine the weighted runoff factor ("C" factor) for the area tributary to the swale. The factors in Table 4-2 may be used.

- Calculate the design flow by multiplying the weighted runoff factor times the tributary area times either (1) 0.2 inches of rainfall per hour, or (2) twice the 85th percentile hourly rainfall intensity.

- When sizing the swale, use a value of 0.25 for Manning's "n".

- Ensure that all flow enters the swale near its highest point and that no flow short-circuits treatment by entering the swale along its length.
- The swale should be a minimum 100 feet in length.
- Longitudinal slopes should not exceed 2.5%; on flatter slopes, incorporate measures to avoid prolonged surface ponding.

Consider using linear-shaped bioretention areas (see page 60) in place of conventional vegetated swales because:

- Conventional swale design has resulted in standing water and associated nuisances.
- Conventional swales often don't obtain even the design residence time because of the length required and because proper design requires runoff enter the swale at the upstream end rather than at various locations along its length, and
- Bioretention areas provide a more flexible drainage design, more effective practicable treatment, and more effective flow control within the same footprint.

► TREATMENT FACILITIES FOR SPECIAL CIRCUMSTANCES

Higher-rate surface filters and vault-based proprietary filters can only be used in the circumstances described beginning on page 31 and when sand filters, extended "dry" detention basins, and "wet" detention ponds or constructed wetlands have been found infeasible.

For surface filters, the grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units. Proprietary facilities should be installed consistent with the manufacturer's instructions.

Such facilities do not provide hydromodification flow control benefit.

References and Resources:

- RWQCB Order R9-2007-0001 (Stormwater NPDES Permit)
- Low Impact Development Center
- *County of San Diego Low Impact Development Handbook*
- *California Best Management Practices Handbooks*
- *Design of Stormwater Filtering Systems* (Claytor and Scheuler, 1996)
- American Rainwater Catchment Systems Association
- Water Conservation Alliance of Southern Arizona
- *Rainwater Harvesting for Drylands and Beyond*
- *The Texas Manual on Rainwater Harvesting*
- *Managing Wet Weather With Green Infrastructure: Municipal Handbook, Rainwater Harvesting Policies* (Low Impact Development Center, 2008)

Self-Treating and Self-Retaining Areas

Best Uses

- Heavily landscaped sites

Advantages

- No maintenance verification requirement
- Complements site landscaping

Limitations

- Requires substantial square footage
- Grading requirements must be coordinated with landscape design

► **CRITERIA**

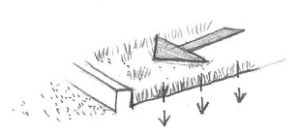

Rainfall on self-treating areas infiltrates or—during intense storms— drains directly off-site or to the storm drain system.

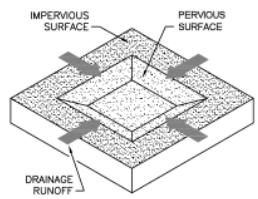

Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. During intense storms, runoff may drain off-site, to the storm drain system, or to IMPs.

LID design seeks to manage runoff from roofs and paving so effects on water quality and hydrology are minimized. Runoff from landscaping, however, does not need to be managed the same way.

Runoff from landscaping can be managed by creating self-treating and self-retaining areas.

Self-treating areas are natural, landscaped, or turf areas that drain directly off site or to the storm drain system. Examples include upslope undeveloped areas that are ditched and drained around a development and grassed slopes that drain offsite to a street or storm drain. Self-treating areas may not drain on to adjacent paved areas.

Where a landscaped area is upslope from or surrounded by paved areas, a **self-retaining area** (also called a zero-discharge area) may be created. Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that the first inch of rainfall would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

Areas draining to self retaining areas. Drainage from roofs and paving can be directed to self-retaining areas and allowed to infiltrate into the soil. The maximum allowable ratio is 2 parts impervious: 1 part pervious.

The self-retaining area must be bermed or depressed to retain an inch of rainfall including the flow from the tributary impervious area.

► DETAILS

Drainage from self-treating areas must flow to off-site streets or storm drains without flowing on to paved areas.

Pavement within a self-treating area cannot exceed 5% of the total area.

In self-retaining areas, overflows and area drain inlets should be set high enough to ensure ponding over the entire surface of the self-retaining area.

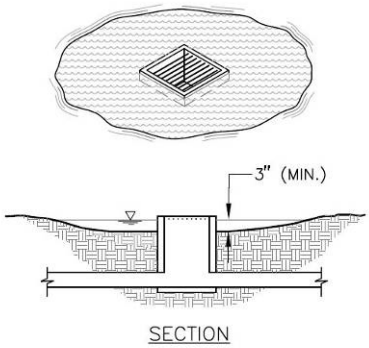

Set overflows and area drain inlets high enough to ensure ponding (3" deep) over the surface of the self-retaining area.

Self–retaining areas should be designed to promote even distribution of ponded runoff over the area.

Leave enough reveal (from pavement down to landscaped surface) to accommodate buildup of turf or mulch.

► APPLICATIONS

Lawn or landscaped areas adjacent to streets can be considered self-treating areas.

Self-retaining areas can be created by depressing lawn and landscape below surrounding sidewalks and plazas.

Runoff from walkways or driveways in parks and park-like areas can sheet-flow to self-retaining areas.

Roof leaders can be connected to self-retaining areas by piping beneath plazas and walkways. If necessary, a "bubble-up" can be used.

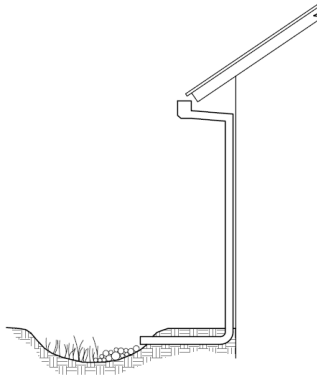

Connecting a roof leader to a self-retaining area. The head from the eave height makes it possible to route roof drainage some distance away from the building.

Self-retaining areas can be create[illegible] ne elevation difference promotes subsurface drainage.

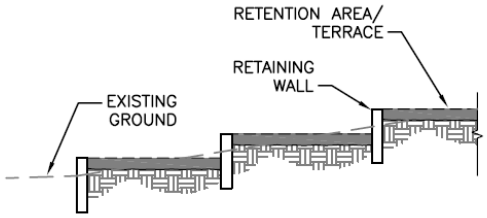

Mild slopes can be terraced to create self-retaining areas.

► DESIGN CHECKLIST FOR SELF-TREATING AREAS

- ❒ The self-treating area is at least 95% lawn or landscaping (not more than 5% impervious).
- ❒ Re-graded or re-landscaped areas have amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- ❒ Runoff from the self-treating area does not enter an IMP or another drainage management area, but goes directly to the storm drain system.

► DESIGN CHECKLIST FOR SELF-RETAINING AREAS

- ❒ Area is bermed all the way around or graded concave.
- ❒ Slopes do not exceed 4%.
- ❒ Entire area is lawn, landscaping, or pervious pavement (see criteria in Chapter 4).
- ❒ Area has amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- ❒ Any area drain inlets are at least 3 inches above surrounding grade.

► DESIGN CHECKLIST FOR AREAS DRAINING TO SELF-RETAINING AREAS

- ❒ Ratio of tributary impervious area to self-retaining area is not greater than 2:1.
- ❒ Roof leaders collect runoff and route it to the self-retaining area.
- ❒ Paved areas are sloped so drainage is routed to the self-retaining area.
- ❒ Inlets are designed to protect against erosion and distribute runoff across the area.

Pervious Pavements

► CRITERIA

Impervious roadways, driveways, and parking lots account for much of the hydrologic impact of land development. In contrast, pervious pavements allow rainfall to collect in a gravel or sand base course and infiltrate into native soil.

Pervious pavements are designed to transmit rainfall through the surface to storage in a base course. For example, a 4-inch-deep base course provides approximately 1.6 inches of storage. Runoff stored in the base course infiltrates to native soils over time. Except in the case of solid pavers, the surface course provides additional storage.

Areas with the following pervious pavements may be regarded as "self-treating" and require no additional treatment or flow control if they drain off-site (not to an IMP).

- Pervious concrete
- Porous asphalt
- Crushed aggregate (gravel)
- Open pavers with grass or plantings
- Open pavers with gravel
- Artificial turf

Areas with these pervious pavements can also be **self-retaining areas** and may receive runoff from impervious areas if they are bermed or depressed to retain the first one inch of rainfall, including runoff from the tributary impervious area.

Solid unit pavers—such as bricks, stone blocks, or precast concrete shapes—are considered to reduce runoff compared to impervious pavement, when the unit pavers are set in sand or gravel with d" gaps between the pavers. Joints must be filled with an open-graded aggregate free of fines.

Best Uses

- Areas with permeable native soils
- Low-traffic areas
- Where aesthetic quality can justify higher cost

Advantages

- No maintenance verification requirement
- Variety of surface treatments can complement landscape design

Limitations

- Initial cost
- Placement requires specially trained crews
- Geotechnical concerns, especially in clay soils
- Concerns about pavement strength and surface integrity
- Some municipalities do not allow in public right of way

When draining pervious pavements to an IMP, use the runoff factors in Table 4-2.

► DETAILS

Permeable pavements can be used in clay soils; however, special design considerations, including an increased depth of base course, typically apply and will increase the cost of this option. Geotechnical fabric between the base course and underlying clay soil is recommended.

Pavement strength and durability typically determines the required depth of base course. If underdrains are used, the outlet elevation must be a minimum of 3 inches above the bottom elevation of the base course.

Pervious concrete and porous asphalt must be installed by crews with special training and tools. Industry associations maintain lists of qualified contractors.

Parking lots with crushed aggregate or unit pavers may require signs or bollards to organize parking.

► DESIGN CHECKLIST FOR PERVIOUS PAVEMENTS

- ❒ No erodible areas drain on to pavement.
- ❒ Subgrade is uniform. Compaction is minimal.
- ❒ Reservoir base course is of open-graded crushed stone. Base depth is adequate to retain rainfall and support design loads.
- ❒ If a subdrain is provided, outlet elevation is a minimum of 3 inches above bottom of base course.
- ❒ Subgrade is uniform and slopes are not so steep that subgrade is prone to erosion.
- ❒ Rigid edge is provided to retain granular pavements and unit pavers.
- ❒ Solid unit pavers are installed with open gaps filled with open-graded aggregate free of fines.
- ❒ Permeable pavements are installed by industry-certified professionals according to vendor's recommendations.
- ❒ Selection and location of pavements incorporates Americans with Disabilities Act requirements, site aesthetics, and uses.

Resources

- Southern California Concrete Producers www.concreteresources.net.
- California Asphalt Pavement Association
  http://www.californiapavements.org/stormwater.html
- Interlocking Concrete Pavement Institute
  http://www.icpi.org/
- *Start at the Source Design Manual for Water Quality Protection,* pp. 47-53. www.basmaa.org
- *Porous Pavements,* by Bruce K. Ferguson. 2005. ISBN 0-8493-2670-2.

Bioretention Facilities

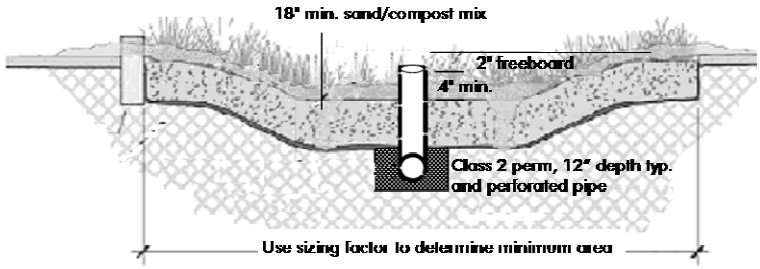

Bioretention facility configured for treatment-only requirements. Bioretention facilities can be rectangular, linear, or nearly any shape.

Bioretention detains runoff in a surface reservoir, filters it through plant roots and a biologically active soil mix, and then infiltrates it into the ground. Where native soils are less permeable, an underdrain conveys treated runoff to storm drain or surface drainage.

Bioretention facilities can be configured in nearly any shape. When configured as linear **swales**, they can convey high flows while percolating and treating lower flows.

Bioretention facilities can be configured as in-ground or above-ground planter boxes, with the bottom open to allow infiltration to native soils underneath. If infiltration cannot be allowed, use the sizing factors and criteria for the Flow-Through Planter.

► CRITERIA

For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)
Soil mix surface area	0.04 times tributary impervious area (or equivalent)

Best Uses

- Commercial areas
- Residential subdivisions
- Industrial developments
- Roadways
- Parking lots
- Fit in setbacks, medians, and other landscaped areas

Advantages

- Can be any shape
- Low maintenance
- Can be landscaped

Limitations

- Require 4% of tributary impervious square footage
- Typically requires 3-4 feet of head
- Irrigation typically required

Parameter	Criterion
Surface reservoir depth	6 inches minimum; may be sloped to 4 inches where adjoining walkways.
Underdrain	Required in Group "C" and "D" soils. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► **DETAILS**

Plan. On the surface, a bioretention facility should be one level, shallow basin—or a series of basins. As runoff enters each basin, it should flood and fill throughout before runoff overflows to the outlet or to the next downstream basin. This will help prevent movement of surface mulch and soil mix.

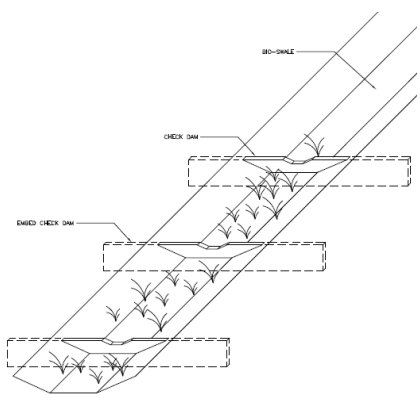

Use check dams for linear bioretention facilities (swales) on a slope.

In a linear swale, check dams should be placed so that the lip of each dam is at least as high as the toe of the next upstream dam. A similar principle applies to bioretention facilities built as terraced roadway shoulders.

Inlets. Paved areas draining to the facility should be graded, and inlets should be placed, so that runoff remains as sheet flow or as dispersed as possible. Curb cuts should be wide (12" is recommended) to avoid clogging with leaves or debris. Allow for a minimum reveal of 4"-6" between the inlet and soil mix elevations to ensure turf or mulch buildup does not block the inlet. In addition, place an apron of stone or concrete, a foot square or larger, inside each inlet to prevent vegetation from growing up and blocking the inlet.

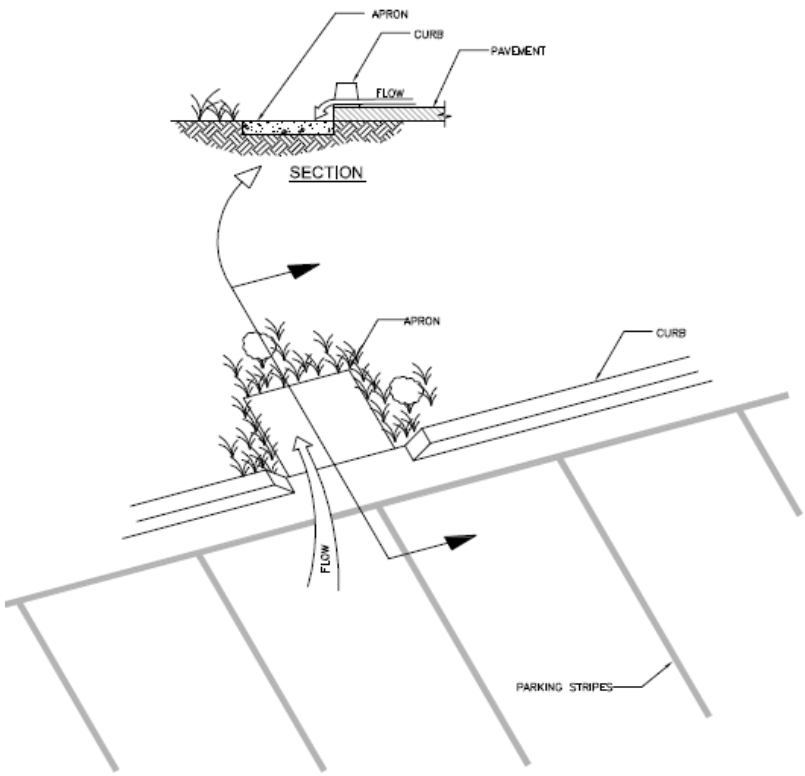

Recommended design details for bioretention facility inlets (see text).

Where runof [illegible] e landscaping from high-velocity flows with energy-dissipating rocks. In larger installations, provide cobble-lined channels to better distribute flows throughout the facility.

Upturned pipe outlets can be used to dissipate energy when runoff is piped from roofs and upgradient paved areas.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" washed pea gravel be substituted at the top of the crushed rock gravel layers. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer or the gravel drainage layer from the native soil.

Underdrains. No underdrain is required where native soils beneath the facility are Hydrologic Soil Group A or B. For treatment-only facilities where native soils are Group C or D, a

perforated pipe must be bedded in the gravel layer and must terminate at a storm drain or other approved discharge point.

Outlets. In treatment-only facilities, outlets must be set high enough to ensure the surface reservoir fills and the entire surface area of soil mix is flooded before the outlet elevation is reached. In swales, this can be achieved with appropriately placed check dams.

The outlet should be designed to exclude floating mulch and debris.

Vaults, utility boxes and light standards. It is best to locate utilities outside the bioretention facility—in adjacent walkways or in a separate area set aside for this purpose. If utility structures are to be placed within the facility, the locations should be anticipated and adjustments made to ensure the minimum bioretention surface area and volumes are achieved. Leaving the final locations to each individual utility can produce a haphazard, unaesthetic appearance and make the bioretention facility more difficult to maintain.

Emergency overflow. The site grading plan should anticipate extreme events and potential clogging of the overflow and route emergency overflows safely.

Trees. Bioretention areas can accommodate small or large trees. There is no need to subtract the area taken up by roots from the effective area of the facility. Extensive tree roots maintain soil permeability and help retain runoff. Normal maintenance of a bioretention facility should not affect tree lifespan.

The bioretention facility can be integrated with a tree pit of the required depth and filled with structural soil. If a root barrier is used, it can be located to allow tree roots to spread throughout the bioretention facility while protecting adjacent pavement. Locations and planting elevations should be selected to avoid blocking the facility's inlets and outlets.

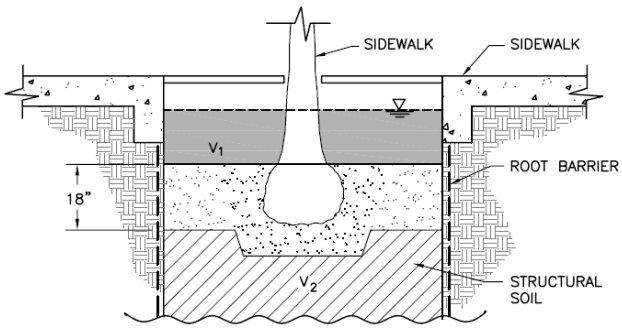

Bioretention facility configured as a tree well.
The root barrier is optional.

► APPLICATIONS

Multi-purpose landscaped areas. Bioretention facilities are easily adapted to serve multiple purposes. The loamy sand soil mix will support turf or a plant palette suitable to the location and a well-drained soil.

Example landscape treatments:

- Lawn with sloped transition to adjacent landscaping.
- Swale in setback area
- Swale in parking median
- Lawn with hardscaped edge treatment
- Decorative garden with formal or informal plantings
- Traffic island with low-maintenance landscaping
- Raised planter with seating
- Bioretention on a terraced slope

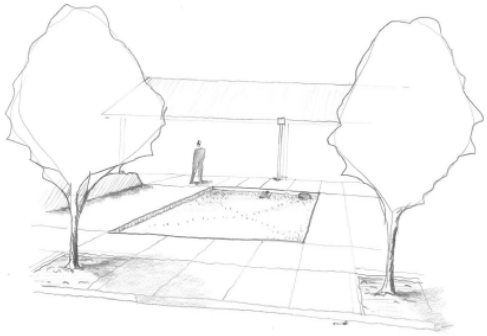

Bioretention facility configured as a recessed decorative lawn with hardscaped edge.

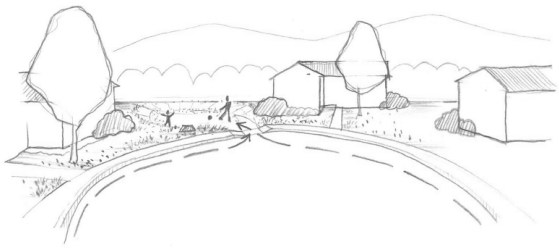

Bioretention facility configured and planted as a lawn/ play area.

Residential subdivisions. Some subdivisions are designed to drain roofs and driveways to the streets (in the conventional manner) and then drain the streets to bioretention areas, with one bioretention area for each 1 to 6 lots, depending on subdivision layout and topography.

If allowed by the local jurisdiction, bioretention areas can be placed on a separate, dedicated parcel with joint ownership.

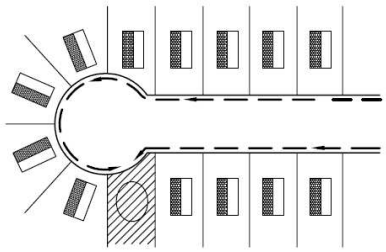

Bioretention facility receiving drainage from individual lots and the street in a residential subdivision.

Sloped sites. Bioretention facilities must be constructed as a basin, or series of basins, with the circumference of each basin set level. It may be necessary to add curbs or low retaining walls.

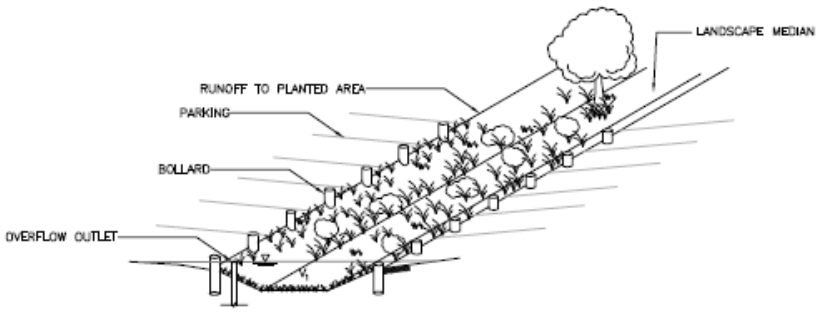

Bioretention facility configured as a parking median.
Note use of bollards in place of curbs, eliminating the need for curb cuts.

Design Checklist for Bioretention

- ❒ Volume or depth of surface reservoir meets or exceeds minimum.
- ❒ 18" depth "loamy sand" soil mix with minimum long-term percolation rate of 5"/hour.
- ❒ Area of soil mix meets or exceeds minimum.
- ❒ Perforated pipe underdrain bedded in "Class 2 perm" with connection and sufficient head to storm drain or discharge point (except in "A" or "B" soils).
- ❒ No filter fabric.
- ❒ Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, with a minimum diameter of 6 inches and a watertight cap.
- ❒ Location and footprint of facility are shown on site plan and landscaping plan.
- ❒ Bioretention area is designed as a basin (level edges) or a series of basins, and grading plan is consistent with these elevations. If facility is designed as a swale, check dams are set so the lip of each dam is at least as high as the toe of the next upstream dam.
- ❒ Inlets are 12" wide, have 4"-6" reveal and an apron or other provision to prevent blockage when vegetation grows in, and energy dissipation as needed.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Plantings are suitable to the climate and a well-drained soil.
- ❒ Irrigation system with connection to water supply.
- ❒ Vaults, utility boxes, and light standards are located outside the minimum soil mix surface area.
- ❒ When excavating, avoid smearing of the soils on bottom and side slopes. Minimize compaction of native soils and "rip" soils if clayey and/or compacted. Protect the area from construction site runoff.

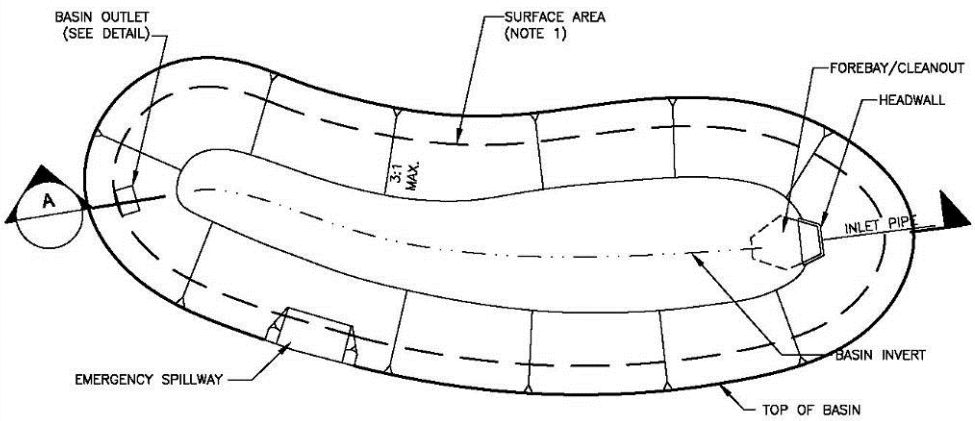

PLAN VIEW
NOT TO SCALE

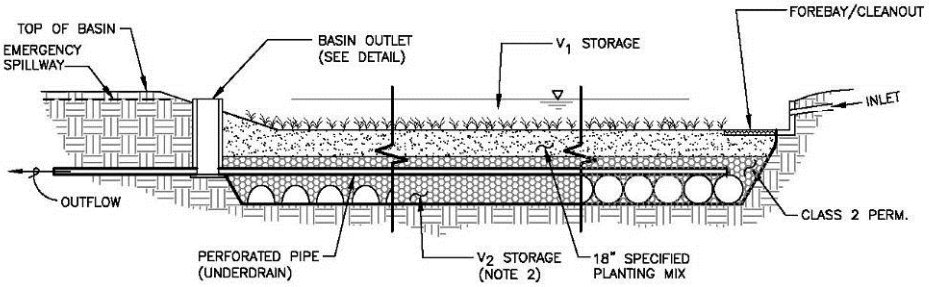

A SECTION
NOT TO SCALE

NOTE

1. SURFACE AREA LIMIT DETERMINED BY EXTENT OF SPECIFIED PLANTING MIX, WHICH IS GOVERNED BY THE OUTLET SPILL ELEVATION. FOR REQUIRED SURFACE AREA REFER TO THE FACTORS AND EQUATIONS IN THE STORMWATER C.3 GUIDEBOOK.
2. V_2 STORAGE ACCOMPLISHED WITH INFILTRATION ARCHES, PERFORATED PIPES, CLASS 2 PERM OR OTHER AT THE DESIGNERS DISCRETION.

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Bioretention Facility

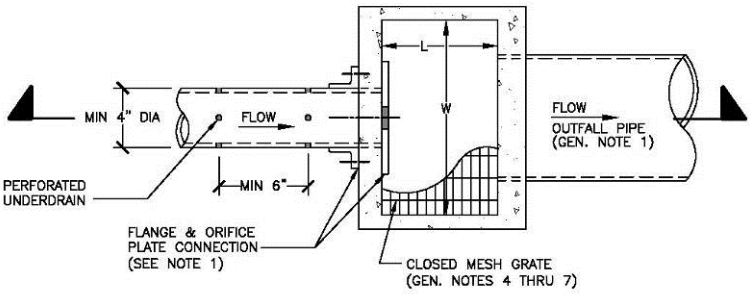

PLAN
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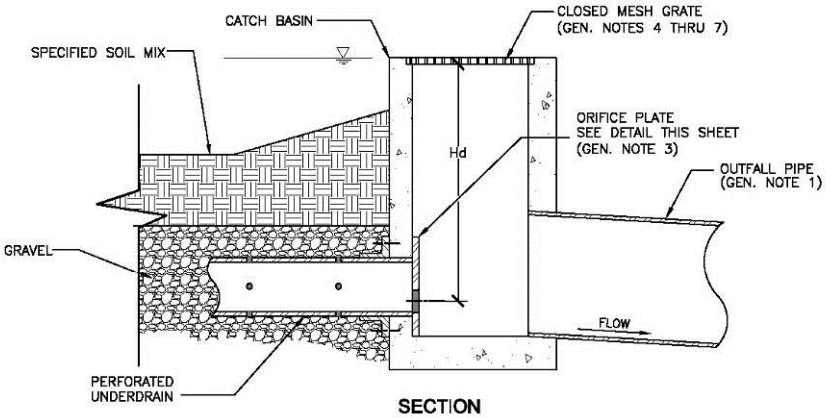

SECTION
N.T.S.

ORIFICE PLATE: MIN SQUARE DIMENSIONS 1.0 FT GREATER THAN PIPE DIA. HOT-DIP GALVANIZED PLATE AFTER HOLES HAVE BEEN DRILLED

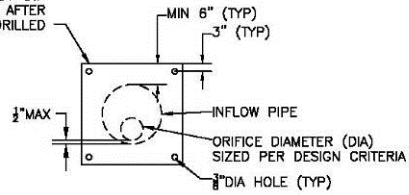

FLOW CONTROL ORIFICE PLATE

NOTE

1. ORIFICE PLATE & FLANGE CONNECTION TO CONCRETE SHALL BE FITTED WITH 30 DUROMETER NEOPRENE RING.

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Bioretention Facility Outlet Detail - A

Flow-through Planter

Portland 2004 Stormwater Manual

Best Uses

- Management of roof runoff
- Next to buildings
- Dense urban areas
- Where infiltration is not desired

Advantages

- Can be used next to structures
- Versatile
- Can be any shape
- Low maintenance

Limitations

- Can be used for flow-control only on sites with "C" and "D" soils
- Requires underdrain
- Requires 3-4 feet of head

Flow-through planters treat and detain runoff without allowing seepage into the underlying soil. They can be used next to buildings and on slopes where stability might be affected by adding soil moisture.

Flow-through planters typically receive runoff via downspouts leading from the roofs of adjacent buildings. However, they can also be set in-ground and receive sheet flow from adjacent paved areas.

Pollutants are removed as runoff passes through the soil layer and is collected in an underlying layer of gravel or drain rock. A perforated-pipe underdrain is typically connected to a storm drain or other discharge point. An overflow inlet conveys flows which exceed the capacity of the planter.

► CRITERIA

Treatment only. For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)
Soil mix surface area	0.04 times tributary impervious area (or equivalent)
Surface reservoir depth	6" minimum; may be sloped to 4" where adjoining walkways.
Underdrain	Typically used. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► DETAILS

Configuration. The planter must be level. To avoid standing water in the subsurface layer, set the perforated pipe underdrain and orifice as nearly flush with the planter bottom as possible.

Inlets. Protect plantings from high-velocity flows by adding rocks or other energy-dissipating structures at downspouts and other inlets.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Gravel storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" of washed pea gravel be substituted at the top of the crushed rock layer. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer.

Emergency overflow. The planter design and installation should anticipate extreme events and potential clogging of the overflow and route emergency overflows safely.

► APPLICATIONS

Adjacent to buildings. Flow-through planters may be located adjacent to buildings, where the planter vegetation can soften the visual effect of the building wall. A setback with a raised planter box may be appropriate even in some neo-traditional pedestrian-oriented urban streetscapes.

At plaza level. Flow-through planters have been successfully incorporated into podium-style developments, with the planters placed on the plaza level and receiving runoff from the tower

roofs above. Runoff from the plaza level is typically managed separately by additional flow-through planters or bioretention facilities located at street level.

Steep slopes. Flow-through planters provide a means to detain and treat runoff on slopes that cannot accept infiltration from a bioretention facility. The planter can be built into the slope similar to a retaining wall. The design should consider the need to access the planter for periodic maintenance. Flows from the planter underdrain and overflow must be directed in accordance with local requirements. It is sometimes possible to disperse these flows to the downgradient hillside.

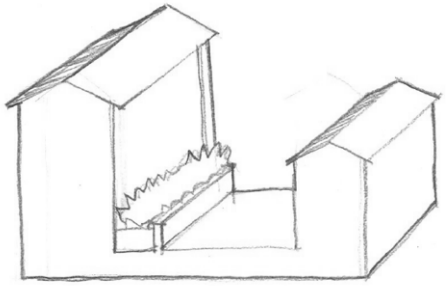

Flow-through planter on the plaza level of a podium-style development.

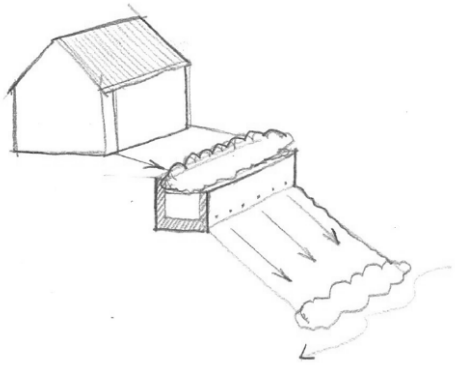

Flow-through planter built into a hillside. Flows from the underdrain and overflow must be directed in accordance with local requirements.

Design Checklist for Flow-through Planter

- ❒ Reservoir depth is 4-6" minimum.
- ❒ 18" depth "loamy sand" soil mix with minimum long-term infiltration rate of 5"/hour.
- ❒ Area of soil mix meets or exceeds minimum.
- ❒ "Class 2 perm" drainage layer.
- ❒ No filter fabric.
- ❒ Perforated pipe underdrain with outlet located flush or nearly flush with planter bottom. Connection with sufficient head to storm drain or discharge point.
- ❒ Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, with a minimum diameter of 6 inches and a watertight cap.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Location and footprint of facility are shown on site plan and landscaping plan.
- ❒ Planter is set level.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Plantings are suitable to the climate and a well-drained soil.
- ❒ Irrigation system with connection to water supply.

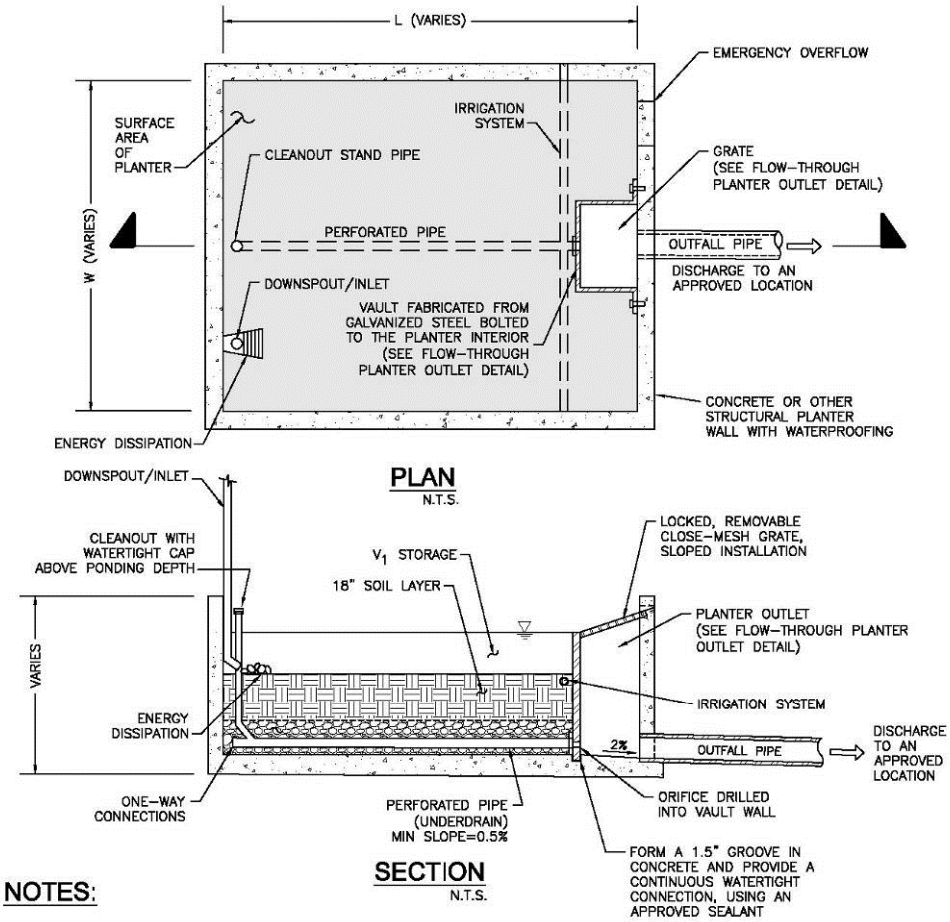

NOTES:

1. FLOW-THROUGH PLANTER SHALL BE SIZED TO MEET CCCWP CRITERIA FOR TREATMENT AND/OR FLOW CONTROL.
2. MINIMUM SURFACE AREA OF PLANTER IS 4% OF TRIBUTARY IMPERVIOUS AREA FOR TREATMENT ONLY DESIGN. FOR FLOW CONTROL AND TREATMENT, REFER TO CCCWP SIZING TOOL CRITERIA.
3. SHAPE OF PLANTER CAN VARY TO MEET PROJECT DESIGN REQUIREMENTS AND LOCATION.
4. CLASS 2 PERMEABLE MATERIAL
5. DOWNSPOUTS/INLET PIPES REQUIRE ENERGY DISSIPATION.
6. USE COUNTY APPROVED ADDITIVE MIXTURE FOR WATERPROOFING CONCRETE.
7. PLANTINGS: SEE CCCWP RECOMMENDED PLANT LIST AND GUIDELINES.
8. PLANTER DESIGN MAY REQUIRE STRUCTURAL ENGINEERING DESIGN.
9. AREA = W x L (ABOVE). EXCLUDES AREA OF VAULT

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Flow-Through Planter Detail

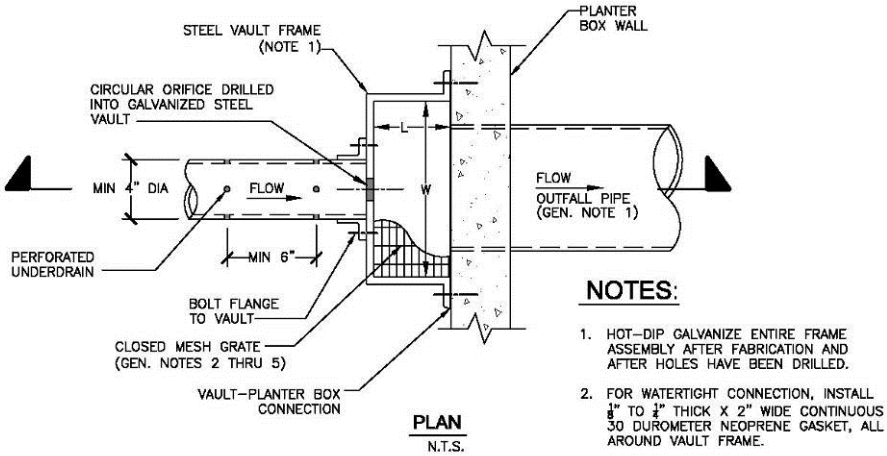

PLAN
N.T.S.

NOTES:

1. HOT–DIP GALVANIZE ENTIRE FRAME ASSEMBLY AFTER FABRICATION AND AFTER HOLES HAVE BEEN DRILLED.
2. FOR WATERTIGHT CONNECTION, INSTALL $\frac{1}{8}$" TO $\frac{1}{4}$" THICK X 2" WIDE CONTINUOUS 30 DUROMETER NEOPRENE GASKET, ALL AROUND VAULT FRAME.

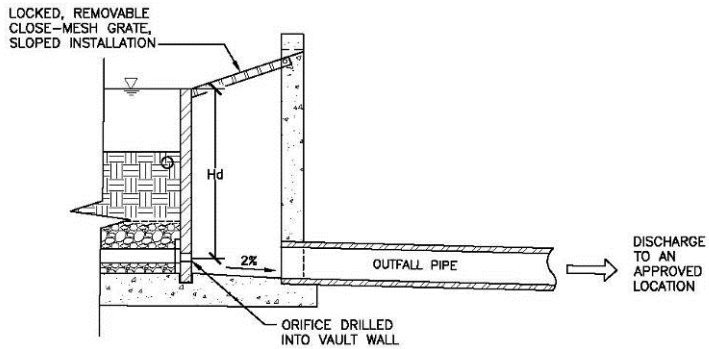

SECTION
N.T.S.

GENERAL OUTLET DETAIL NOTES:

1. OUTFALL PIPE SHALL BE SIZED TO CONVEY DESIGN STORM PER CCCWP DESIGN CRITERIA.
2. GRATE SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
3. GRATE SHALL BE STAINLESS STEEL, ALUMINUM OR STEEL. STEEL GRATES SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER PAINTED AFTER GALVANIZING.
4. GRATE SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
5. STRUCTURAL DESIGN OF GRATE SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF GRATE.

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Flow-Through Planter Outlet Detail

Dry Wells and Infiltration Basins

The typical dry well is a prefabricated structure, such as an open-bottomed vault or box, placed in an excavation or boring. The vault may be empty, which provides maximum space efficiency, or may be filled in rock.

An infiltration basin has the same functional components—a volume to store runoff and sufficient area to infiltrate that volume into the native soil—but is open rather than covered.

Best Uses

- Alternative to bioretention in areas with permeable soils

Advantages

- Compact footprint
- Can be installed in paved areas

Limitations

- Can be used only on sites with "A" and "B" soils
- Requires minimum of 10' from bottom of facility to seasonal high groundwater
- Not suitable for drainage from some industrial areas or arterial roads
- Must be maintained to prevent clogging.

► CRITERIA

Dry wells and infiltration basins must be designed with the minimum volume calculated by Equation 4-8 using a unit volume based on the County of San Diego's 85th Percentile Isopluvial Map.

Consult with the local jurisdiction engineer regarding the need to verify soil permeability and other site conditions are suitable for dry wells and infiltration basins. Some proposed criteria are on Page 5-12 of Caltrans' 2004 *BMP Retrofit Pilot Study Final Report* (CTSW-RT-01-050).

The infiltration rate and infiltrative area must be sufficient to drain a full facility within 72 hours.

► DETAILS

Dry wells should be sited to allow for the potential future need for removal and replacement.

In locations where native soils are coarser than a medium sand, the area directly beneath the facility should be over-excavated by two feet and backfilled with sand as a groundwater protection measure.

Design Checklist for Dry Well

- ❒ Volume and infiltrative area meet or exceed minimum.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Depth from bottom of the facility to seasonally high groundwater elevation is ≥10'.
- ❒ Areas tributary to the facility do not include automotive repair shops; car washes; fleet storage areas (Bus, truck, etc.); nurseries, or other uses that may present an exceptional threat to groundwater quality.
- ❒ Underlying soils are in Hydrologic Soil Group A or B. Infiltration rate is sufficient to ensure a full basin will drain completely within 72 hours. Soil infiltration rate has been confirmed.
- ❒ Set back from structures 10' or as recommended by structural or geotechnical engineer

Cistern with Bioretention Facility

A cistern in series with a bioretention facility can meet treatment requirements where space is limited. In this configuration, the cistern is equipped with a flow-control orifice and the bioretention facility is sized to treat a trickle outflow from the cistern.

Best Uses

- In series with a bioretention facility to meet treatment requirement in limited space.
- Management of roof runoff
- Dense urban areas

Advantages

- Storage volume can be in any configuration

Limitations

- Somewhat complex to design, build, and operate
- Requires head for both cistern and bioretention facility

► CRITERIA

Cistern. The cistern must detain the volume calculated by Equation 4-8 and must include an orifice or other device designed for a 24-hour drawdown time.

Bioretention facility. See the design sheet for bioretention facilities. The area of the bioretention facility must be sized to treat the maximum discharge flow, assuming a percolation rate of 5" per hour through the engineered soil.

Use with sand filter. A cistern in series with a sand filter can meet treatment requirements. See the discussion of treatment facility selection in Chapter 2 and the design guidance for sand filters in Chapter 4.

► DETAILS

Flow-control orifice. The cistern must be equipped with an orifice plate or other device to limit flow to the bioretention area.

Preventing mosquito harborage. Cisterns should be designed to drain completely, leaving no standing water. Drains should be located flush with the bottom of the cistern. Alternatively—or in addition—all entry and exit points, should be provided with traps or sealed or screened to prevent mosquito entry. Note mosquitoes can enter through openings 1/16" or larger and will fly for many feet through pipes as small as ¼".

Exclude debris. Provide leaf guards and/or screens to prevent debris from accumulating in the cistern.

Ensure access for maintenance. Design the cistern to allow for cleanout. Avoid creating the need for maintenance workers to enter a confined space. Ensure the outlet orifice can be easily accessed for cleaning and maintenance.

► APPLICATIONS

Shallow ponding on a flat roof. The "cistern" storage volume can be designed in any configuration, including simply storing rainfall on the roof where it falls and draining it away slowly. See the County of San Diego's 85th percentile isopluvial diagrams for required average depths.

Cistern attached to a building and draining to a planter. This arrangement allows a planter box to be constructed with a smaller area.

Vault with pumped discharge to bioretention facility. In this arrangement, runoff from a parking lot and/or building roofs can be captured and detained underground and then pumped to a bioretention facility on the surface. Alternatively, treatment can be accomplished with a sand filter. See the discussion of selection of stormwater treatment facilities in Chapter 2.

Water harvesting or graywater reuse. It may be possible to create a site-specific design that uses cisterns to achieve stormwater flow control, stormwater treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse. Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Design Checklist for Cistern

- ❒ Volume meets or exceeds minimum.
- ❒ Outlet with orifice or other flow-control device restricts flow and is designed to provide a 24-hour drawdown time.
- ❒ Outlet is piped to a bioretention facility designed to treat the maximum discharge from the cistern orifice.
- ❒ Cistern is designed to drain completely and/or sealed to prevent mosquito harborage.
- ❒ Design provides for exclusion of debris and accessibility for maintenance.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.

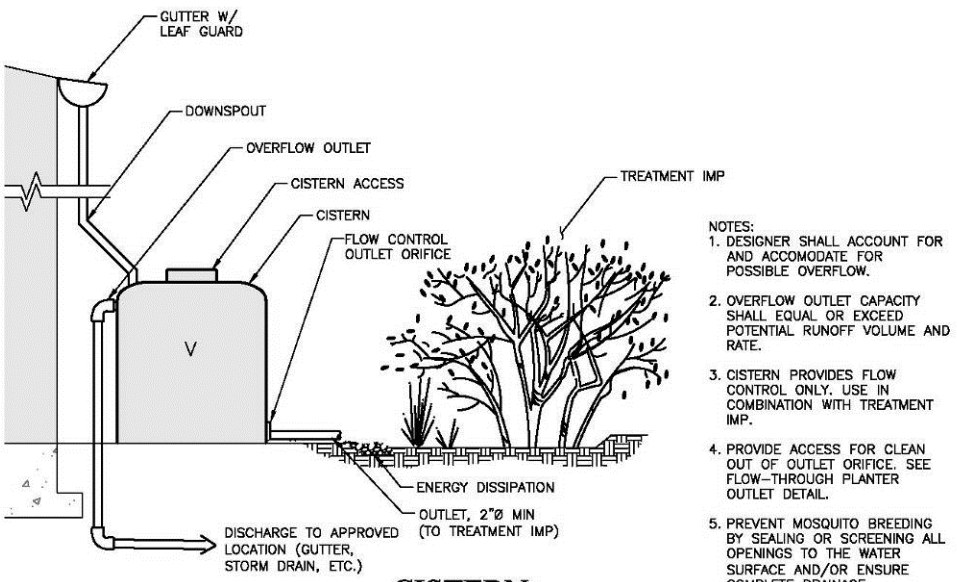

NOTES:
1. DESIGNER SHALL ACCOUNT FOR AND ACCOMODATE FOR POSSIBLE OVERFLOW.
2. OVERFLOW OUTLET CAPACITY SHALL EQUAL OR EXCEED POTENTIAL RUNOFF VOLUME AND RATE.
3. CISTERN PROVIDES FLOW CONTROL ONLY. USE IN COMBINATION WITH TREATMENT IMP.
4. PROVIDE ACCESS FOR CLEAN OUT OF OUTLET ORIFICE. SEE FLOW-THROUGH PLANTER OUTLET DETAIL.
5. PREVENT MOSQUITO BREEDING BY SEALING OR SCREENING ALL OPENINGS TO THE WATER SURFACE AND/OR ENSURE COMPLETE DRAINAGE.

CISTERN

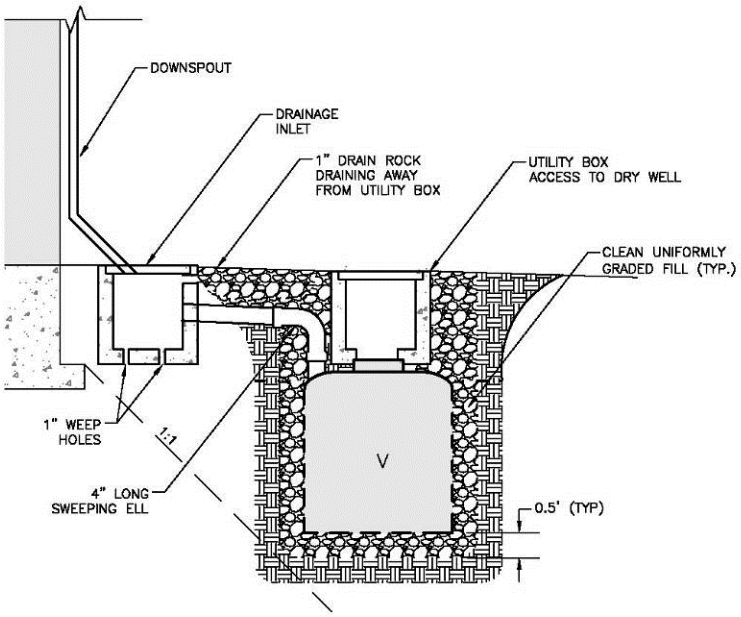

DRY WELL

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Chapter

5

Operation & Maintenance of Stormwater Facilities

How to prepare a customized Stormwater Maintenance Plan for the treatment BMPs on your site.

The stormwater NPDES Permit requires the City to verify all treatment and flow-control facilities are adequately maintained. Facilities you install as part of your project will be verified for effectiveness and proper performance. The City may also verify the ongoing function of stormwater management features that are not treatment or flow control facilities, such as permeable pavements and limitations on impervious area.

Operation and maintenance of stormwater facilities is a six-stage process:

1. Determine **who will own** the facility and be responsible for the maintenance of treatment facilities. Identify the means by which ongoing maintenance will be assured (for example, a maintenance agreement that runs with the land).

2. Identify typical maintenance requirements, and allow for these requirements in your project planning and preliminary design.

3. Prepare a **maintenance plan** for the site incorporating detailed requirements for **each treatment and flow-control facility**.

4. **Maintain** the facilities from the time they are constructed until ownership and maintenance responsibility is formally transferred.

5. **Formally transfer** operation and maintenance **responsibility** to the site owner or occupant. A warranty, secured by a bond, or other financial instrument, may be required to secure against lack of performance due to flaws in design or construction.

6. Maintain the facilities in perpetuity and comply with your municipality's self-inspection, reporting, and verification requirements.

See the schedule for these stages in Table 5-1.

Stage 1: Ownership and Responsibility

You must specify a means to **ensure maintenance** of treatment and flow-control facilities **in perpetuity.**

Depending on the intended use of your site, this may require one or more of the following:

- Execution of a maintenance agreement that "runs with the land."
- Formation of a new community facilities district or other special district, or addition of the properties to an existing special district.
- Dedication of fee title or easement transferring ownership of the facility (and the land under it) to the City.

Ownership and maintenance responsibility for treatment and flow-control facilities should be discussed at the **beginning of project planning**, typically at the pre-application meeting for planning and zoning review. Experience has shown provisions to finance and implement maintenance of treatment and flow-control facilities can be a major stumbling block to project approval, particularly for **small residential subdivisions**. (See "New Subdivisions" in Chapter 1.)

► PRIVATE OWNERSHIP AND MAINTENANCE

The municipality may require—as a condition of project approval—that a maintenance agreement be executed.

TABLE 5-1. Schedule for Planning Operation and Maintenance of Stormwater Treatment BMPs.

Stage	*Description*	*Schedule*
1	Determine facility ownership and maintenance responsibility	Discuss with planning staff at pre-application meeting
2	Identify typical maintenance requirements	In initial submittal, coordinate with planning & zoning application
3	Develop detailed operation and maintenance plan	As required by municipality
4	Interim operation and maintenance of facilities	During and following construction including warranty period
5	Formal transfer of operation & maintenance responsibility	On sale and transfer of property or permanent occupancy
6	Ongoing maintenance and compliance with inspection & reporting requirements	In perpetuity

Typically, these agreements may provide that the City may collect a management and/or inspection fee established by a standard fee schedule. The agreement may provide that, if the property owner fails to maintain the stormwater facility, the City may enter the property, restore the stormwater facility to good working order and obtain reimbursement, including administrative costs, from the property owner.

Stage 2: General Maintenance Requirements

Include in your Project Submittal a general description of anticipated facility maintenance requirements. This will help ensure that:

- Ongoing costs of maintenance have been considered in your facility selection and design.
- Site and landscaping plans provide for access for inspections and by maintenance equipment.
- Landscaping plans incorporate irrigation requirements for facility plantings.
- Initial maintenance and replacement of facility plantings is incorporated into landscaping contracts and guarantees.

Fact sheets available on the Project Clean Water web page describe general maintenance requirements for the types of stormwater facilities featured in the LID Design Guide (Chapter 4). You can use this information to specify general maintenance requirements in your Project Submittal.

Maintenance fact sheets for conventional stormwater facilities are available in the California Stormwater BMP Handbooks.

Stage 3: Detailed Maintenance Plan

Prepare and submit a detailed maintenance plan. Your detailed maintenance plan should be kept on-site for use by maintenance personnel and during site inspections. It is also recommended that a copy of your initial Project Submittal be kept onsite as a reference.

► YOUR DETAILED MAINTENANCE PLAN: STEP BY STEP

The following step-by-step guidance will help you prepare your detailed maintenance plan.

Preparation of the plan will require familiarity with your stormwater facilities as they have been or will be constructed and a fair amount of "thinking through" plans for their operation and maintenance.

► STEP 1: DESIGNATE RESPONSIBLE INDIVIDUALS

To begin creating your detailed maintenance plan, designate and identify:

- The individual who will have direct responsibility for the maintenance of stormwater controls. This individual should be the designated contact with City inspectors and should sign self-inspection reports and any correspondence with the City regarding verification inspections.
- Employees or contractors who will report to the designated contact and are responsible for carrying out BMP operation and maintenance.
- The corporate officer authorized to negotiate and execute any contracts that might be necessary for future changes to operation and maintenance or to implement remedial measures if problems occur.
- Your designated respondent to problems, such as clogged drains or broken irrigation mains, that would require immediate response should they occur during off-hours.

Updated contact information must be provided to the City immediately whenever a property is sold and whenever designated individuals or contractors change.

Draw or sketch an **organization chart** to show the relationships of authority and responsibility between the individuals responsible for maintenance. This need not be elaborate, particularly for smaller organizations.

Describe how **funding for BMP operation and maintenance** will be assured, including sources of funds, budget category for expenditures, process for establishing the annual maintenance budget, and process for obtaining authority should unexpected expenditures for major corrective maintenance be required.

Describe how your organization will accommodate initial **training** of staff or contractors regarding the purpose, mode of operation, and maintenance requirements for the stormwater facilities on your site. Also, describe how your organization will ensure ongoing training as needed and in response to staff changes.

► STEP 2: SUMMARIZE DRAINAGE AND BMPS

Incorporate the following information from your Project Submittal into your maintenance plan:

- Figures delineating and designating pervious and impervious areas.
- Figures showing locations of stormwater facilities on the site.
- Tables of pervious and impervious areas served by each facility.

Review the Project Submittal narrative, if any, that describes each facility and its tributary drainage area and update the text to incorporate any changes that may have occurred during planning and zoning review, building permit review, or construction. Incorporate the updated text into your maintenance plan.

► STEP 3: DOCUMENT FACILITIES "AS BUILT"

Include the following information from final construction drawings:

- Plans, elevations, and details of all facilities. Annotate if necessary with designations used in the initial Project Submittal.
- Design information or calculations submitted in the detailed design phase (i.e., not included in the initial Project Submittal.)
- Specifications of construction for facilities, including sand or soil, compaction, pipe materials and bedding.

In the maintenance plan, note field changes to design drawings, including changes to any of the following:

- Location and layouts of inflow piping, flow splitter boxes, and piping to off-site discharge
- Depths and layering of soil, sand, or gravel
- Placement of filter fabric or geotextiles
- Changes or substitutions in soil or other materials.
- Natural soils encountered (e.g., sand or clay lenses)

► STEP 4: PREPARE MAINTENANCE PLANS FOR EACH FACILITY

Prepare a maintenance plan, schedule, and inspection checklists (routine, annual, and after major storms) for each facility. Plans and schedules for two or more similar facilities on the same site may be combined.

Use the following resources to prepare your customized maintenance plan, schedule, and checklists.

- Specific information noted in Steps 2 and 3, above.
- Other input from the facility designer, City staff, or other sources.
- Operation and Maintenance Fact Sheets (available on the Project Clean Water website).

Note any particular characteristics or circumstances that could require attention in the future, and include any troubleshooting advice.

Also include manufacturer's data, operating manuals, and maintenance requirements for any:

- Pumps or other mechanical equipment.
- Proprietary devices used as BMPs.

Manufacturers' publications should be referenced in the text (including models and serial numbers where available). Copies of the manufacturers' publications should be included as an attachment in the back of your maintenance plan or as a separate document.

► STEP 5: COMPILE MAINTENANCE PLAN

The following general outline is provided as an example.

I. Inspection and Maintenance Log

II. Updates, Revisions and Errata

III. Introduction

A. Narrative overview describing the site; drainage areas, routing, and discharge points; and treatment facilities.

IV. Responsibility for Maintenance

A. General

(1) Name and contact information for responsible individual(s).

(2) Organization chart or charts showing organization of the maintenance function and location within the overall organization.

(3) Reference to Operation and Maintenance Agreement (if any). A copy of the agreement should be attached.

(4) Maintenance Funding

(1) Sources of funds for maintenance

(2) Budget category or line item

(3) Description of procedure and process for ensuring adequate funding for maintenance

B. Staff Training Program

C. Records

D. Safety

V. Summary of Drainage Areas and Stormwater Facilities

A. Drainage Areas

(1) Drawings showing pervious and impervious areas (copied or adapted from initial Project Submittal).

(2) Designation and description of each drainage area and how flow is routed to the corresponding facility.

B. Treatment and Flow-Control Facilities

(1) Drawings showing location and type of each facility

(2) General description of each facility (Consider a table if more than two facilities)

(1) Area drained and routing of discharge.

(2) Facility type and size

VI. Facility Documentation

A. "As-built" drawings of each facility (design drawings in the draft Plan)

B. Manufacturer's data, manuals, and maintenance requirements for pumps, mechanical or electrical equipment, and proprietary facilities (include a "placeholder" in the draft plan for information not yet available).

C. Specific operation and maintenance concerns and troubleshooting

VII. Maintenance Schedule or Matrix

A. Maintenance Schedule for each facility with specific requirements for:

(1) Routine inspection and maintenance

(2) Annual inspection and maintenance

(3) Inspection and maintenance after major storms

B. Service Agreement Information

Assemble and make copies of your maintenance plan. One copy must be submitted to the municipality, and at least one copy kept on-site. Here are some suggestions for formatting the maintenance plan:

- Format plans to 8½" x 11" to facilitate duplication, filing, and handling.
- Include the revision date in the footer on each page.
- Scan graphics and incorporate with text into a single electronic file. Keep the electronic file backed-up so that copies of the maintenance plan can be made if the hard copy is lost or damaged.

► **STEP 6: UPDATES**

Your maintenance plan will be **a living document**.

Operation and maintenance personnel may change; mechanical equipment may be replaced, and additional maintenance procedures may be needed. Throughout these changes, the maintenance plan must be kept up-to-date.

Updates may be transmitted to the local municipality at any time. However, at a minimum, updates to the maintenance plan must accompany the annual inspection report.

Stage 4: Interim Maintenance

Applicants will typically be required to warranty stormwater facilities against lack of performance due to flaws in design or construction. The warranty may need to be secured by a bond or other financial instrument.

Stage 5: Transfer Responsibility

As part of the detailed maintenance plan, note the expected date when responsibility for operation and maintenance will be transferred. Notify the City when this transfer of responsibility takes place.

Stage 6: Operation & Maintenance Verification

The City implements an operation and maintenance verification program, including periodic site inspections.

City staff will perform inspections at least once prior to the rainy season annually.

References and Resources

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Appendix

A

Stormwater Pollutant Sources/ Source Control Checklist

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APPENDIX—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

How to use this worksheet:

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.

2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your Project-Specific SUSMP drawings.

3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in a table in your Project-Specific SUSMP. Use the format shown in Table 3-1 on page 31 of the *SUSMP*. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternatives.

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **A.** On-site storm drain inlets	❑ Locations of inlets.	❑ Mark all inlets with the words "No Dumping! Flows to Bay" or similar.	❑ Maintain and periodically repaint or replace inlet markings. ❑ Provide stormwater pollution prevention information to new site owners, lessees, or operators. ❑ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ❑ Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."
❑ **B.** Interior floor drains and elevator shaft sump pumps	-------	❑ State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **C.** Interior parking garages	-------	❑ State that parking garage floor drains will be plumbed to the sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.
❑ **D1.** Need for future indoor & structural pest control	-------	❑ Note building design features that discourage entry of pests.	❑ Provide Integrated Pest Management information to owners, lessees, and operators.
❑ **D2.** Landscape/ Outdoor Pesticide Use	❑ Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. ❑ Show self-retaining landscape areas, if any. ❑ Show stormwater treatment facilities.	State that final landscape plans will accomplish all of the following. ❑ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ❑ Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. ❑ Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. ❑ Consider using pest-resistant plants, especially adjacent to hardscape. ❑ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	❑ Maintain landscaping using minimum or no pesticides. ❑ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ❑ Provide IPM information to new owners, lessees and operators.

APPENDIX—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **E.** Pools, spas, ponds, decorative fountains, and other water features.	❑ Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet.	❑ If the local municipality requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.	❑ See applicable operational BMPs in Fact Sheet SC-72, "Fountain and Pool Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
❑ **F.** Food service	❑ For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. ❑ On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	❑ Describe the location and features of the designated cleaning area. ❑ Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	-------

APPENDIX—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **G.** Refuse areas	❑ Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. ❑ If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. ❑ Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	❑ State how site refuse will be handled and provide supporting detail to what is shown on plans. ❑ State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	❑ State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
❑ **H.** Industrial processes.	❑ Show process area.	❑ If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."	❑ See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

APPENDIX—STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **I.** Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	❑ Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. ❑ Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. ❑ Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	❑ Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains. Where appropriate, reference documentation of compliance with the requirements of local Hazardous Materials Programs for: ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank	❑ See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials " in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
❑ **J.** Vehicle and Equipment Cleaning	❑ Show on drawings as appropriate: (1) Commercial/industrial facilities having vehicle /equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses. (2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use). (3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer. (4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.	❑ If a car wash area is not provided, describe measures taken to discourage on-site car washing and explain how these will be enforced.	Describe operational measures to implement the following (if applicable): ❑ Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system. ❑ Car dealerships and similar may rinse cars with water only. ❑ See Fact Sheet SC-21, "Vehicle and Equipment Cleaning," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
❑ **K.** Vehicle/Equipment Repair and Maintenance	❑ Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater. ❑ Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. ❑ Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.	❑ State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. ❑ State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. ❑ State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	In the SUSMP report, note that all of the following restrictions apply to use the site: ❑ No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains. ❑ No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. ❑ No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
❑ **L.** Fuel Dispensing Areas	❑ Fueling areas[1] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable. ❑ Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.	-------	❑ The property owner shall dry sweep the fueling area routinely. ❑ See the Business Guide Sheet, "Automotive Service—Service Stations" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

[1] The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
❑ **M.** Loading Docks	❑ Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas should be drained to the sanitary sewer where feasible. Direct connections to storm drains from depressed loading docks are prohibited. ❑ Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer. ❑	-------	❑ Move loaded and unloaded items indoors as soon as possible. ❑ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
❑ **N.** Fire Sprinkler Test Water	-------	❑ Provide a means to drain fire sprinkler test water to the sanitary sewer.	❑ See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
O. Miscellaneous Drain or Wash Water ❑ Boiler drain lines ❑ Condensate drain lines ❑ Rooftop equipment ❑ Drainage sumps ❑ Roofing, gutters, and trim.	-------	❑ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. ❑ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. ❑ Rooftop mounted equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ❑ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. ❑ Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.	-------
❑ **P.** Plazas, sidewalks, and parking lots.	-------	-------	❑ Plazas, sidewalks, and parking lots shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing shall be collected to prevent entry into the storm drain system. Washwater containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain.

Appendix

B

Hydromodification Management Plan

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Planning File #	Site Name	Number	Street	Hydrologic Unit	Description of Activity	Receiving Waterbody	303(d) Listed Waterbody
High and Medium Priority Contruction Projects							
DRB-08-27	Pacifica Stratford	615/617	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No
DRB-08-28	Pacifica Stratford	605/607	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No
DRB-08-29	Pacifica Stratford	555/557	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No
DRB-09-04	Batchelder	100	Stratford Ct.	Los Peñasquitos	home remodel and grading	Pacific Ocean	No
DRB-09-09	Handzel	100	12th Street	San Dieguito	NSFR with basement	Pacific Ocean	No
No Planning File	21st Street Pump Station		21st St. & Court St.	San Dieguito	CIP - replace pump station	Pacific Ocean	No
Low Priority Contruction Projects							
DRB-09-16	Assi	1997	Zapo Street	San Dieguito	NSFR	Pacific Ocean	No
DRB-98-32 Mod	Bakker	335	La Amatista	San Dieguito	remodel and addition	Pacific Ocean	No
DRB-05-23	Belezzuoli	424	Carolina Rd.	San Dieguito	windows/pool	Pacific Ocean	No
DRB-10-08	Bingham	150/152	11th Street	San Dieguito	NSFR and second unit	Pacific Ocean	No
DRB-10-24	Campbell	334	Hidden Pines Rd.	Los Peñasquitos	home remodel	Pacific Ocean	No
ADR-11-07	Cassidy	2614	Ocean Front	San Dieguito	home remodel	San Dieguito Lagoon	Bacteria
HZR-10-01 / ADR-10-09	Chasen Medical	1431	Camino del Mar	San Dieguito	commercial remodel	Pacific Ocean	No
DRB-10-13	Collins	139	18th Street	San Dieguito	home remodel	Pacific Ocean	No
DRB-08-17	Conkwright	1201	Camino del Mar	San Dieguito	roofing and siding commercial bldg	Pacific Ocean	No
DRB-08-20	Deal	157/159	8th Street	San Dieguito	NSFR with basement - 2 detached	Pacific Ocean	No
DRB-07-05	Eaton	187	Ocean View Ave.	Los Peñasquitos	home remodel/addition	Pacific Ocean	No
DRB-10-04	Fermanian	2430	Ocean Front	San Dieguito	home remodel and new roof	San Dieguito Lagoon	Bacteria
DRB-84-52	Gillies	2136	San Dieguito Dr.	San Dieguito	NSFR	San Dieguito Lagoon	Bacteria
DRB-08-43	Hardke	431	Van Dyke Ave.	San Dieguito	NSFR w/ basement and pool	Pacific Ocean	No
DRB-04-15	Hilliard	1492	Crest Rd.	San Dieguito	site improvements	Pacific Ocean	No
DRB-09-07	Kenyon	463	15th Street	San Dieguito	NSFR w/ basement	Pacific Ocean	No
DRB-05-24	Klipstein	415	Torrey Pointe Rd.	Los Peñasquitos	NSFR w/ basement	Los Peñasquitos Lagoon	Bacteria, Sediment
DRB-10-02	Linnell	411	Hidden Pines Ln.	Los Peñasquitos	interior work - garage	Pacific Ocean	No
DRB-08-27	Mankwitz	420	Luzon Ave.	San Dieguito	NSFR	San Dieguito Lagoon	Bacteria
ADR-10-13	Marier	141	4th Street	Los Peñasquitos	outdoor landscaping, concrete	Pacific Ocean	No
DRB-04-13	McGuire	1105	Stratford Ct.	San Dieguito	home remodel	Pacific Ocean	No
DRB-10-11	Milligan	1382	Via Alta	San Dieguito	home remodel and landscape	Pacific Ocean	No
DRB-09-12	More	408	Luzon Ave.	San Dieguito	exterior improvements	San Dieguito Lagoon	Bacteria
DRB-08-38	Nerenberg	205	Ocean View Ave.	Los Peñasquitos	NSFR	Pacific Ocean	No
DRB-06-23	Oliphant	2020	Santa Fe Ave.	San Dieguito	NSFR	Pacific Ocean	No
DRB-08-12	Parker-O'Brien	116/118	11th Street	San Dieguito	NSFR	Pacific Ocean	No
DRB-10-07	Rehfeld	385	Belaire St.	San Dieguito	NSFR	Pacific Ocean	No

Appendix C - FY 2011 Watershed Based Construction Inventory

Planning File #	Site Name	Number	Street	Hydrologic Unit	Description of Activity	Receiving Waterbody	303(d) Listed Waterbody
DRB-08-06	Reid	116	Nob Ave.	Los Peñasquitos	NSFR	Pacific Ocean	No
No Planning File	RHN	1846	Ocean Front	San Dieguito	interior improvements	Pacific Ocean	No
DRB-10-22	Rowe	538	Amphitheatre Dr.	San Dieguito	home remodel	Pacific Ocean	No
DRB-08-08	Savage	2007/2009	Santa Fe Ave.	San Dieguito	home remodel	Pacific Ocean	No
DRB-08-40	Schwartz	243	22nd Street	San Dieguito	home remodel	Pacific Ocean	No
ADR-10-17	Taylor	1408	Via Alta	San Dieguito	home remodel	Pacific Ocean	No
No Planning File	Unknown	2054	David Way	San Dieguito	home remodel	San Dieguito Lagoon	Bacteria
No Planning File	Unknown	114	9th Street	San Dieguito	home remodel - siding	Pacific Ocean	No
No Planning File	Unknown	2600	Ocean Front	San Dieguito	home remodel - siding	San Dieguito Lagoon	Bacteria
DRB-09-14	Vint	140	7th Street	San Dieguito	NSFR with basement	Pacific Ocean	No
DRB-08-37	Wiggins	1926	Coast Blvd.	San Dieguito	home remodel & roof deck	Pacific Ocean	No
DRB-08-35	Wilkinson	131	25th Street	San Dieguito	home remodel & addition	San Dieguito Lagoon	Bacteria
DRB-08-33	Wohlford-Kidd	1155	Cuchara Drive	San Dieguito	home remodel	Pacific Ocean	No

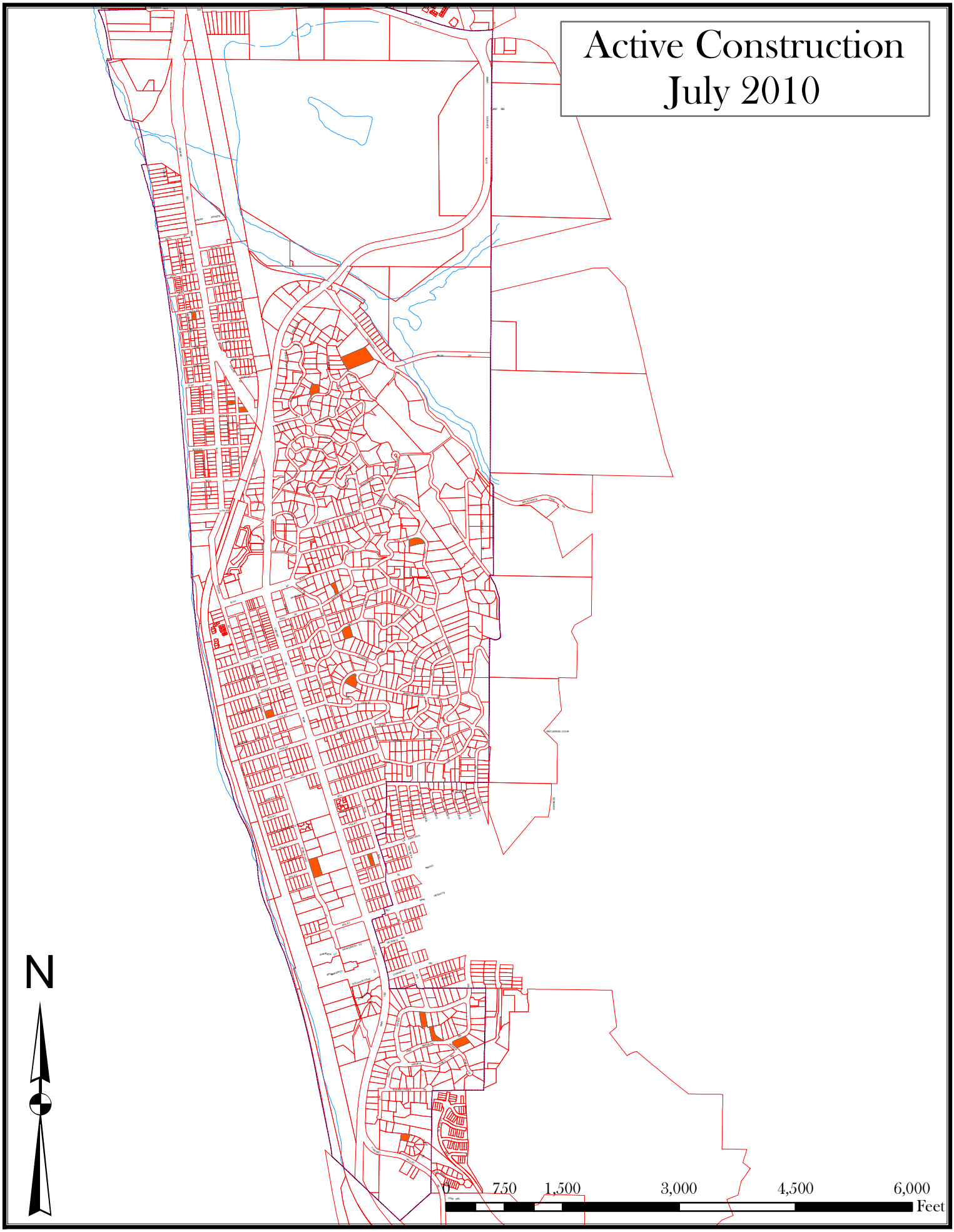
Active Construction
July 2010
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3,000
4,500
6,000
Feet

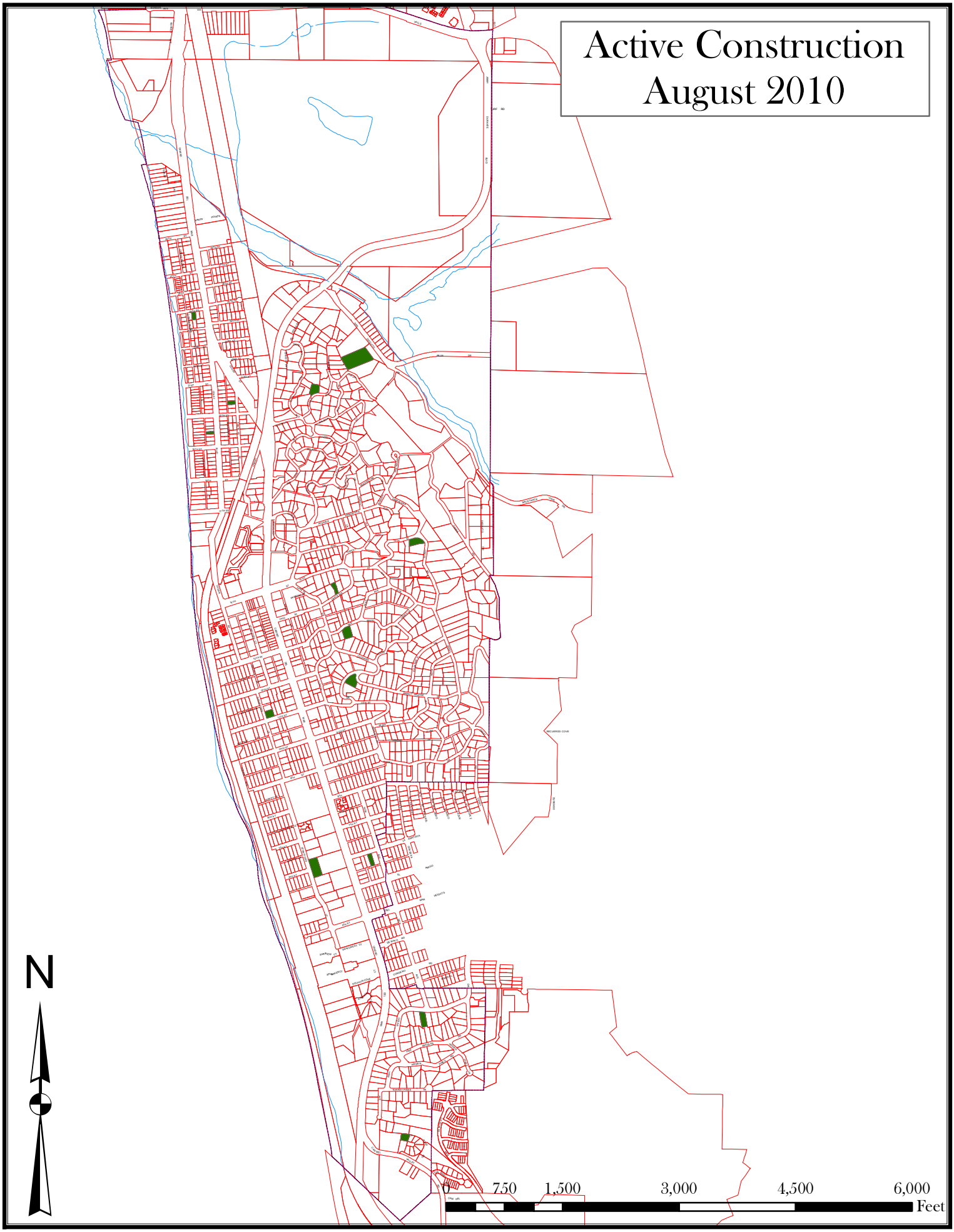
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4,500
6,000
Feet

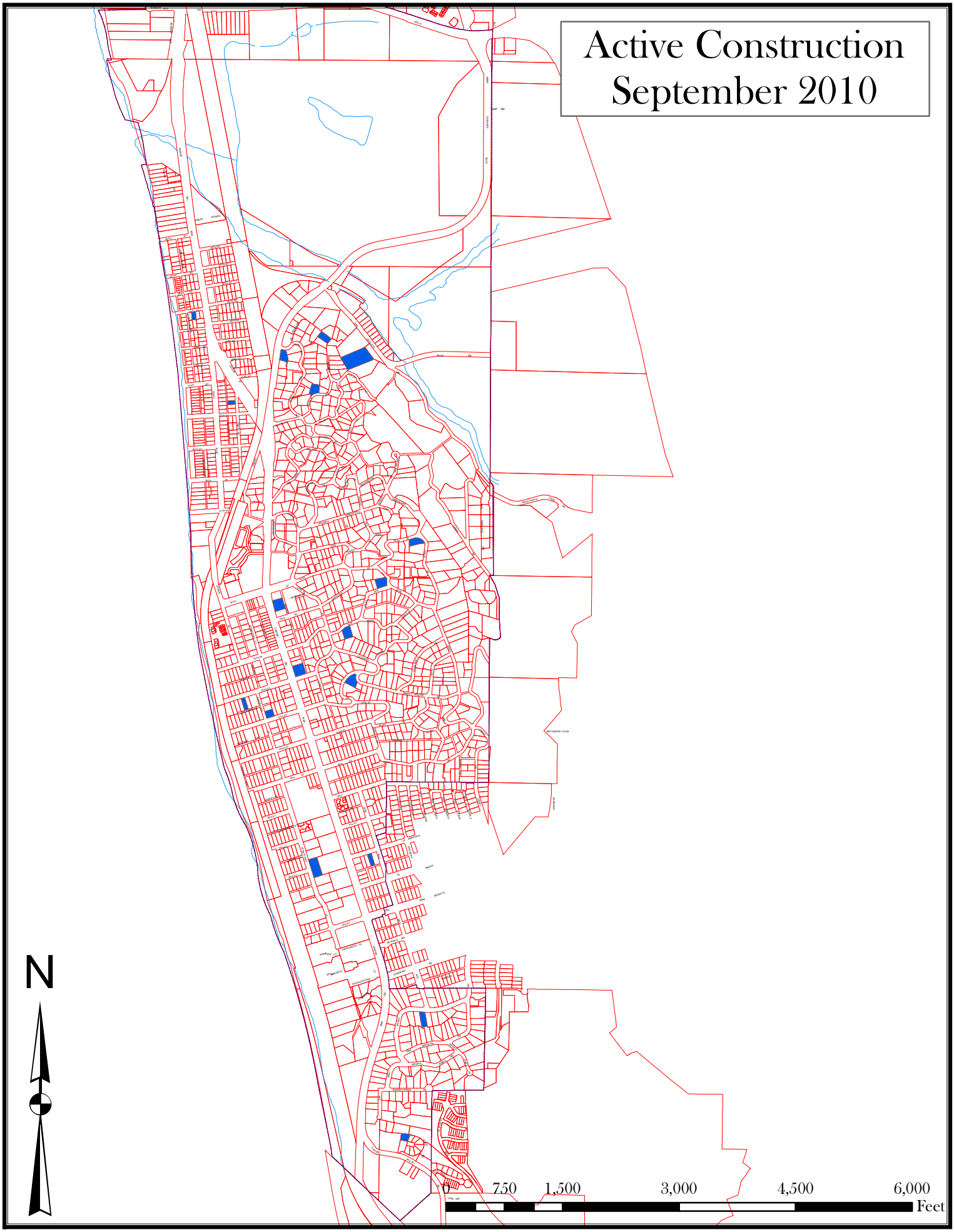
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September 2010
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Feet

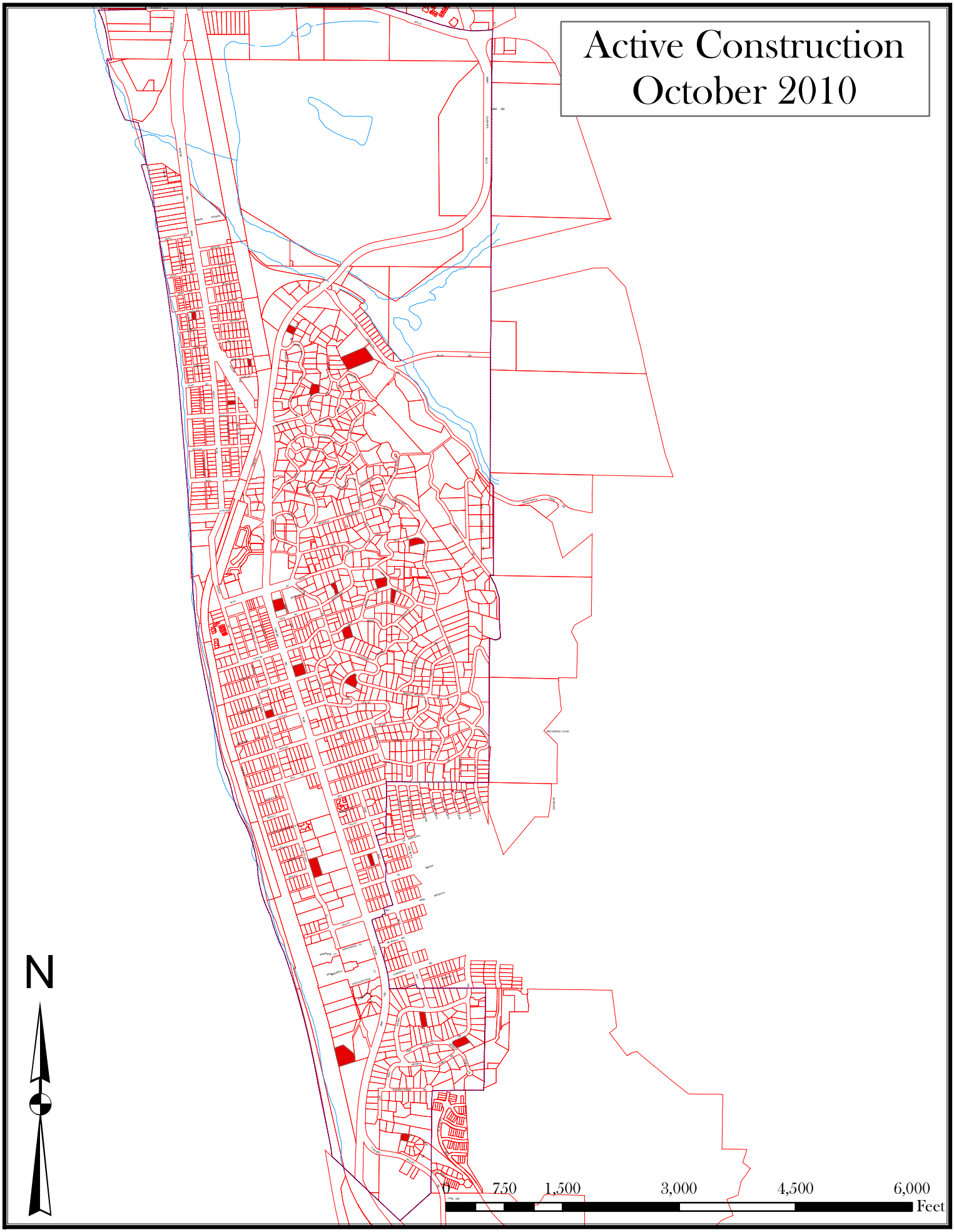
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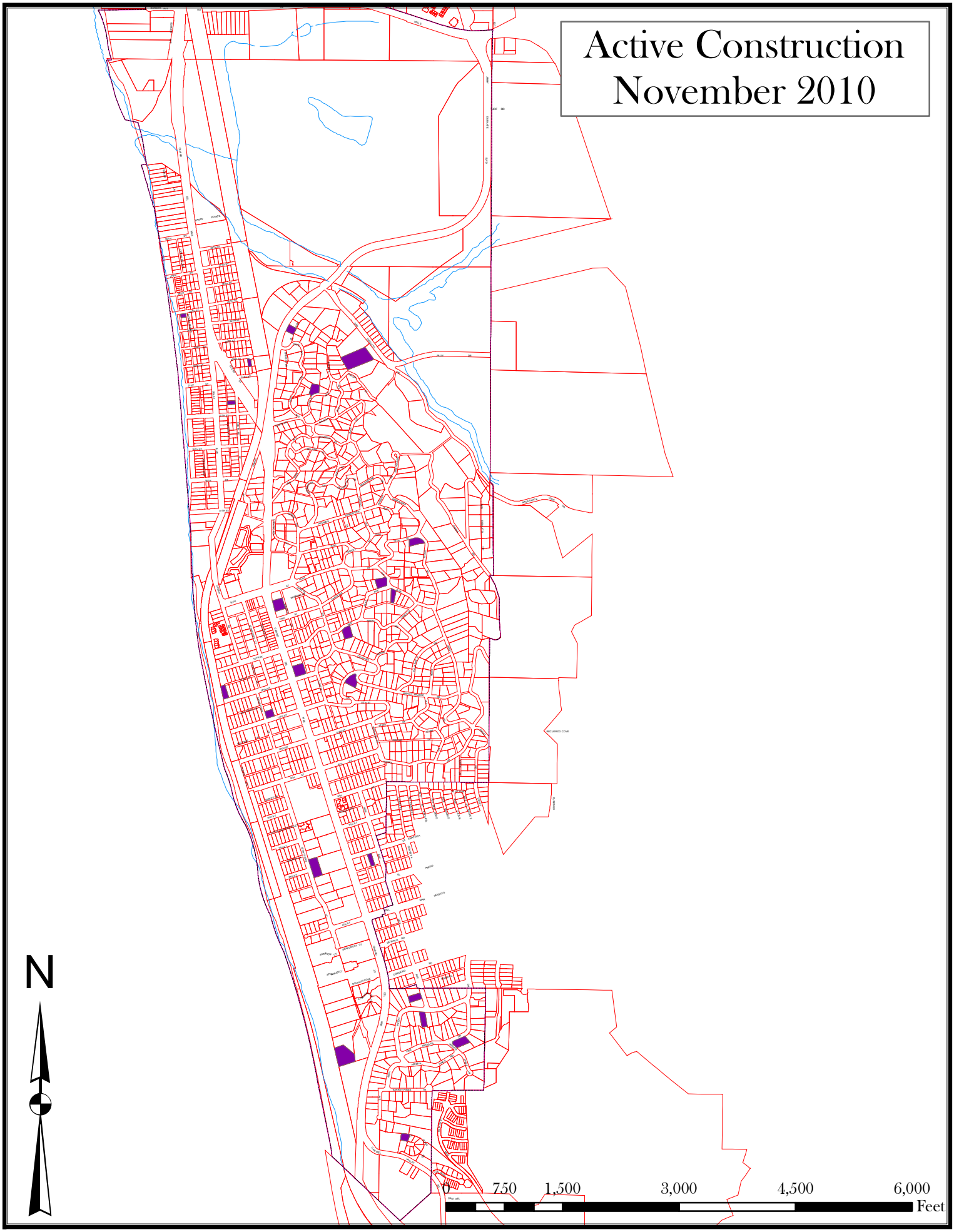
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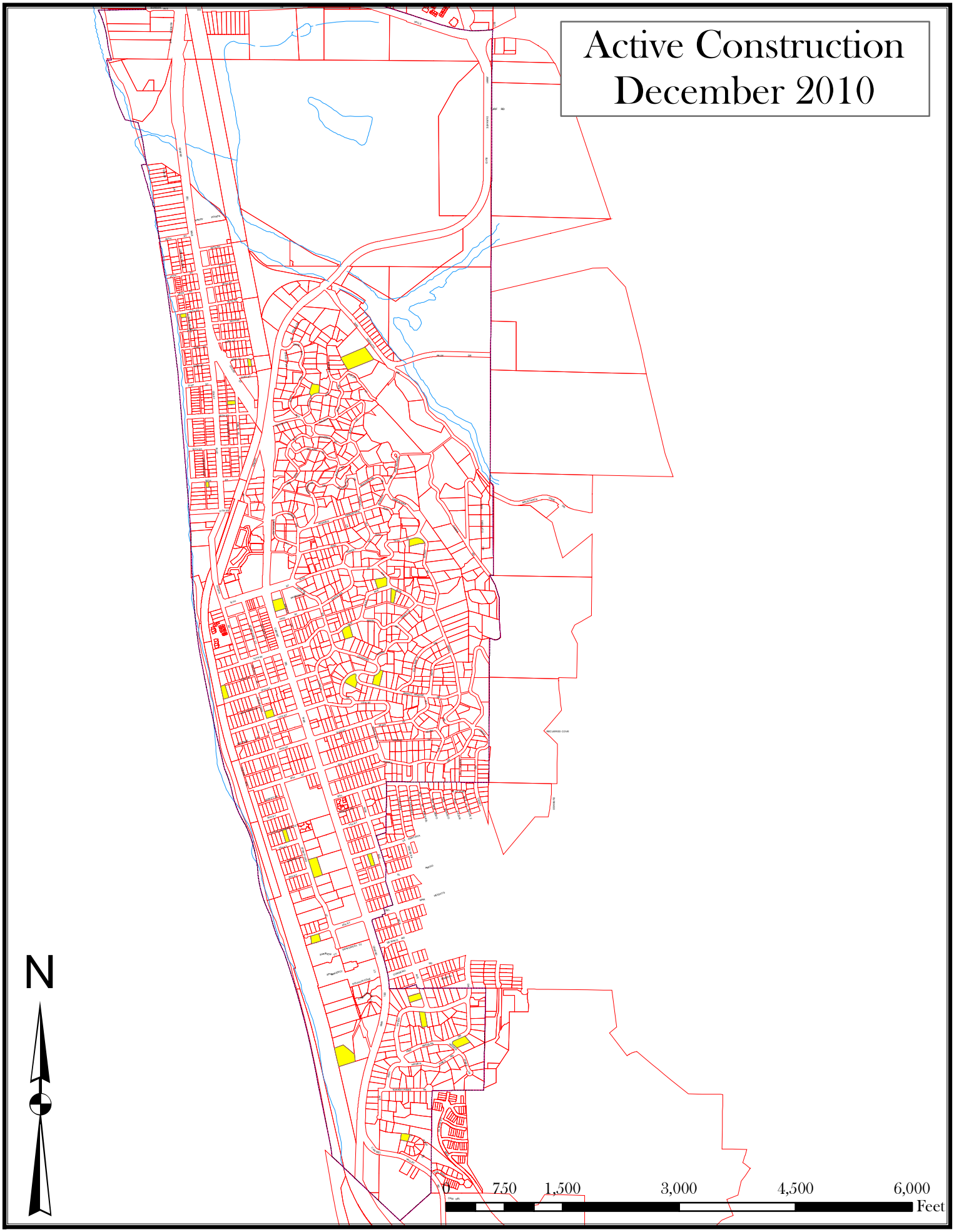
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Feet

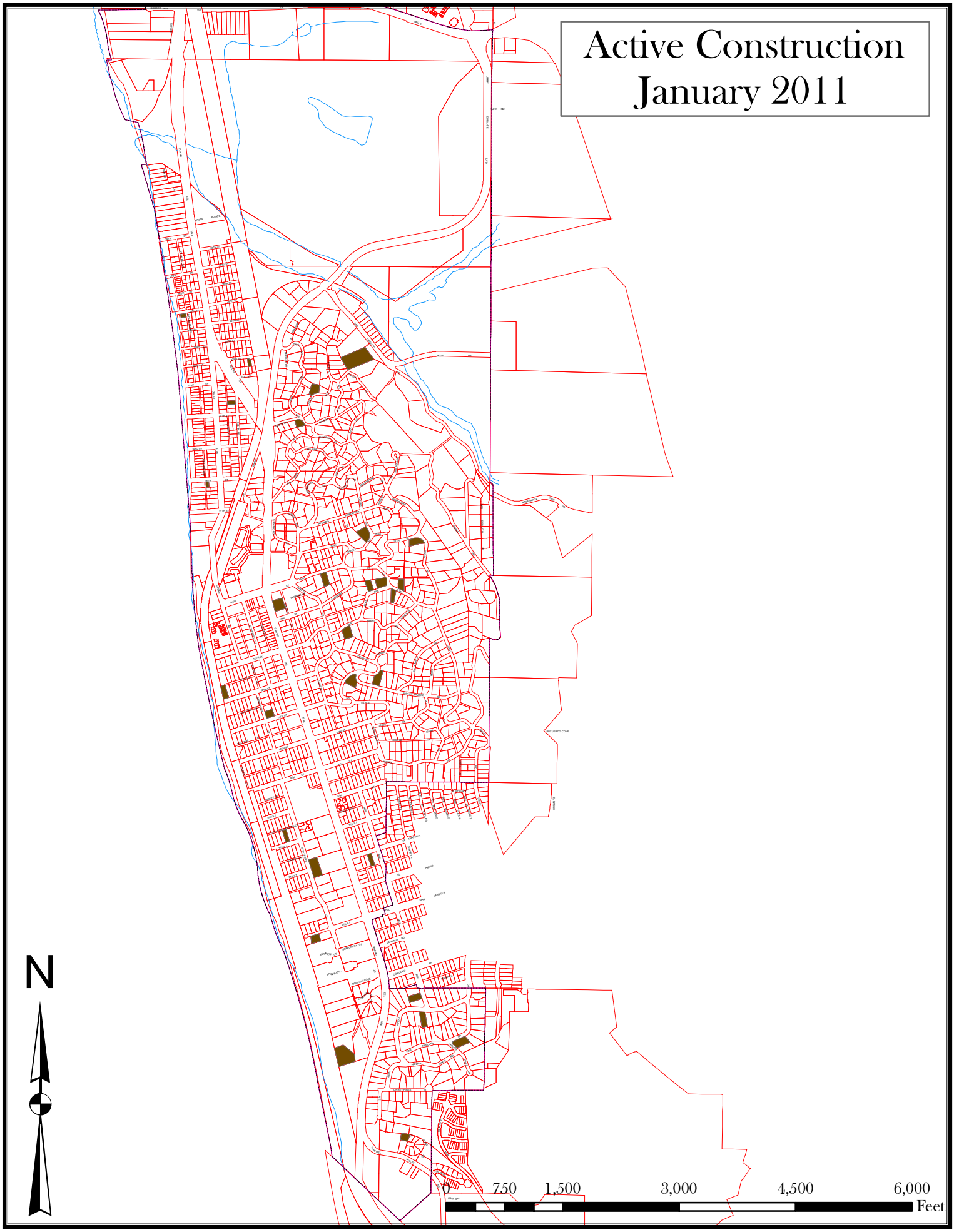
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January 2011
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6,000
Feet

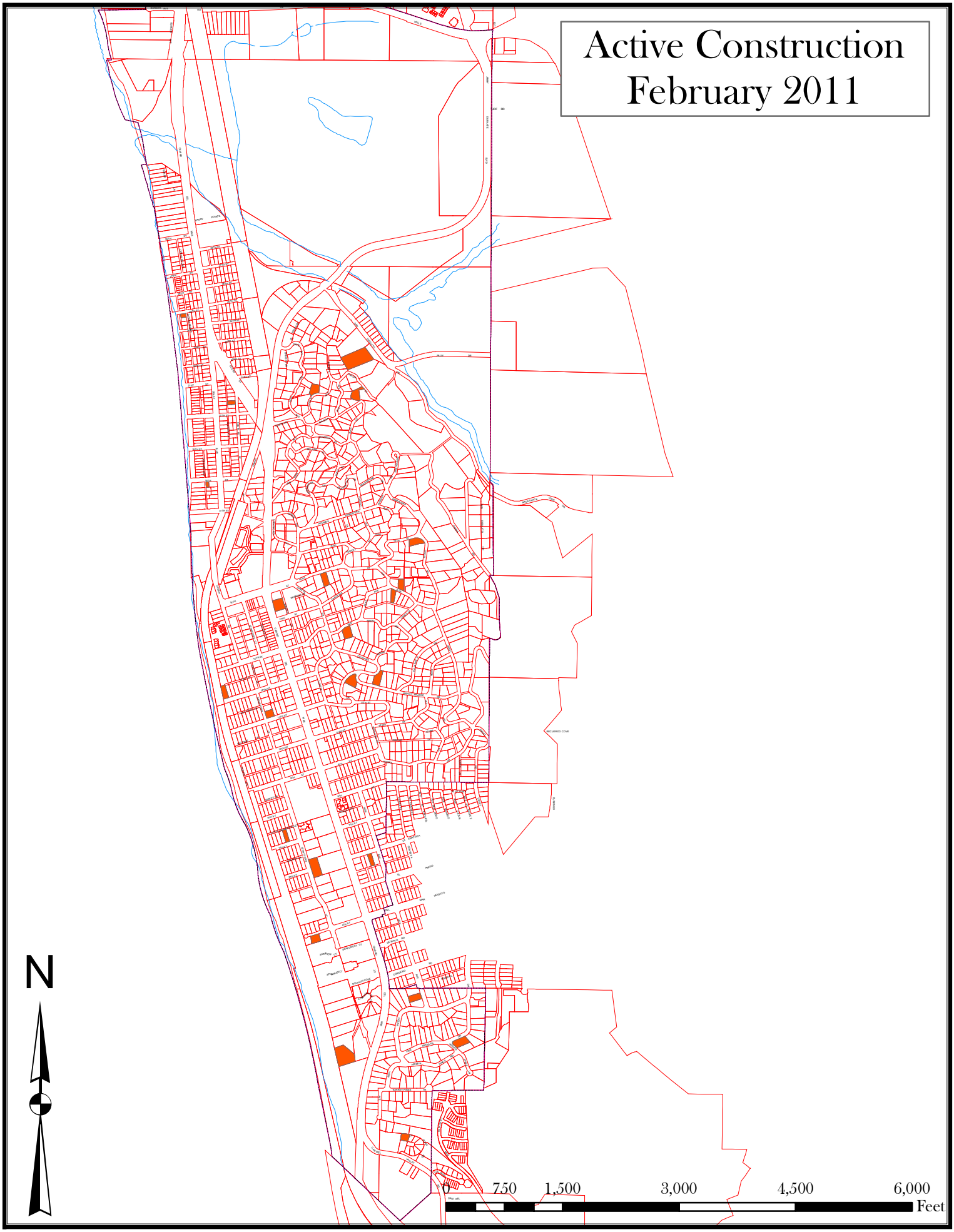
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Feet

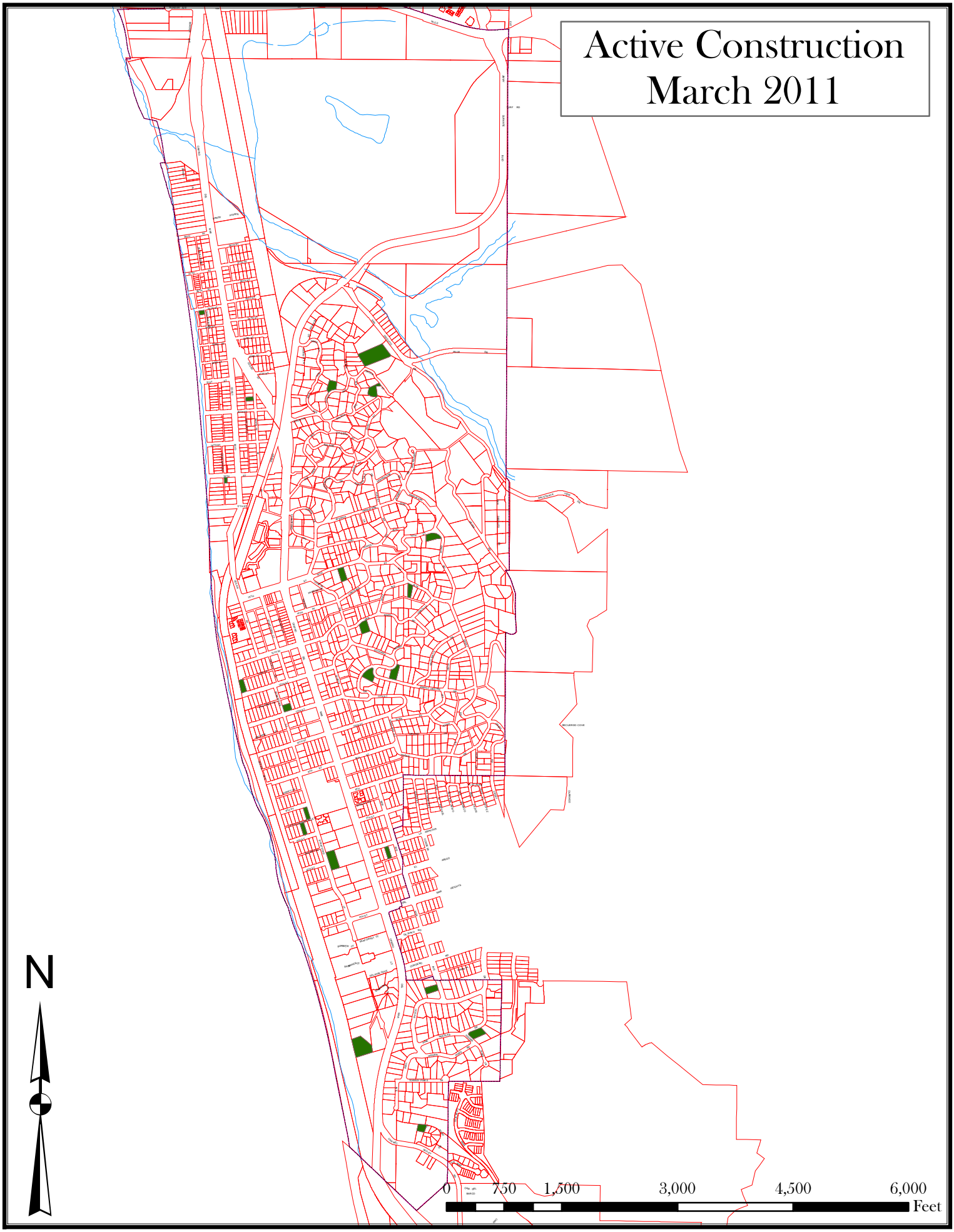
Active Construction
March 2011
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750
1,500
3,000
4,500
6,000
Feet

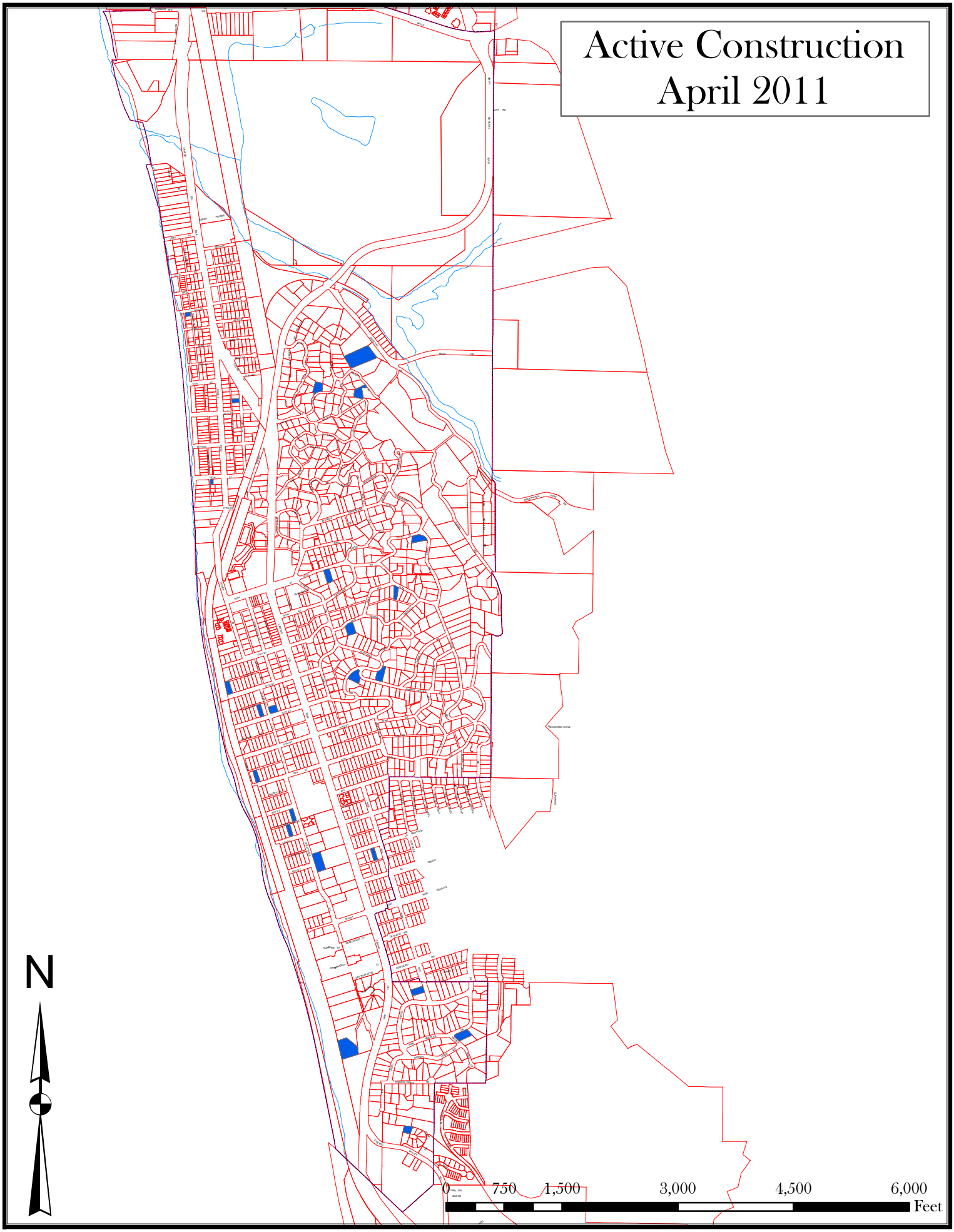
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April 2011
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0
750
1,500
3,000
4,500
6,000
Feet

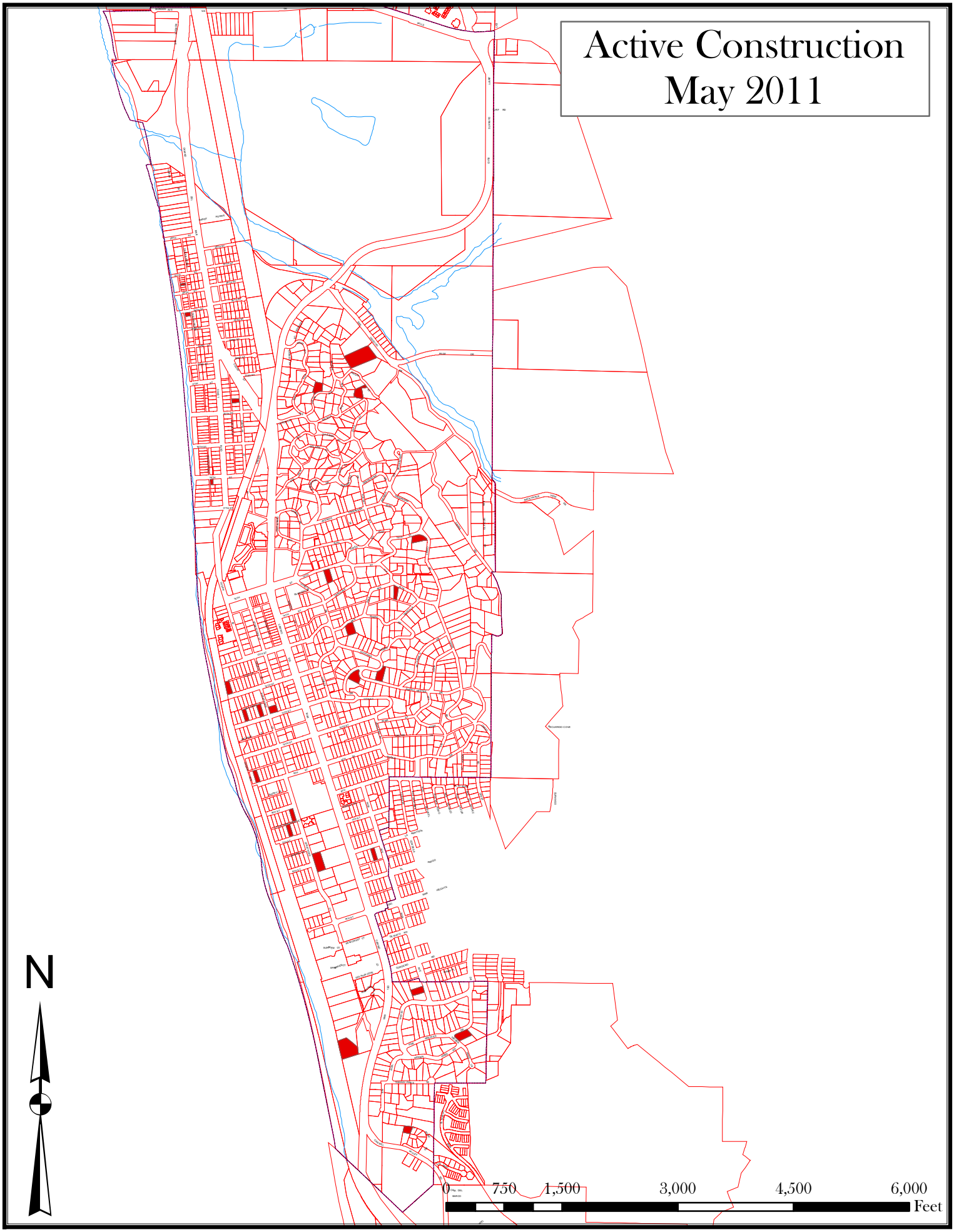
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May 2011
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0
750
1,500
3,000
4,500
6,000
Feet

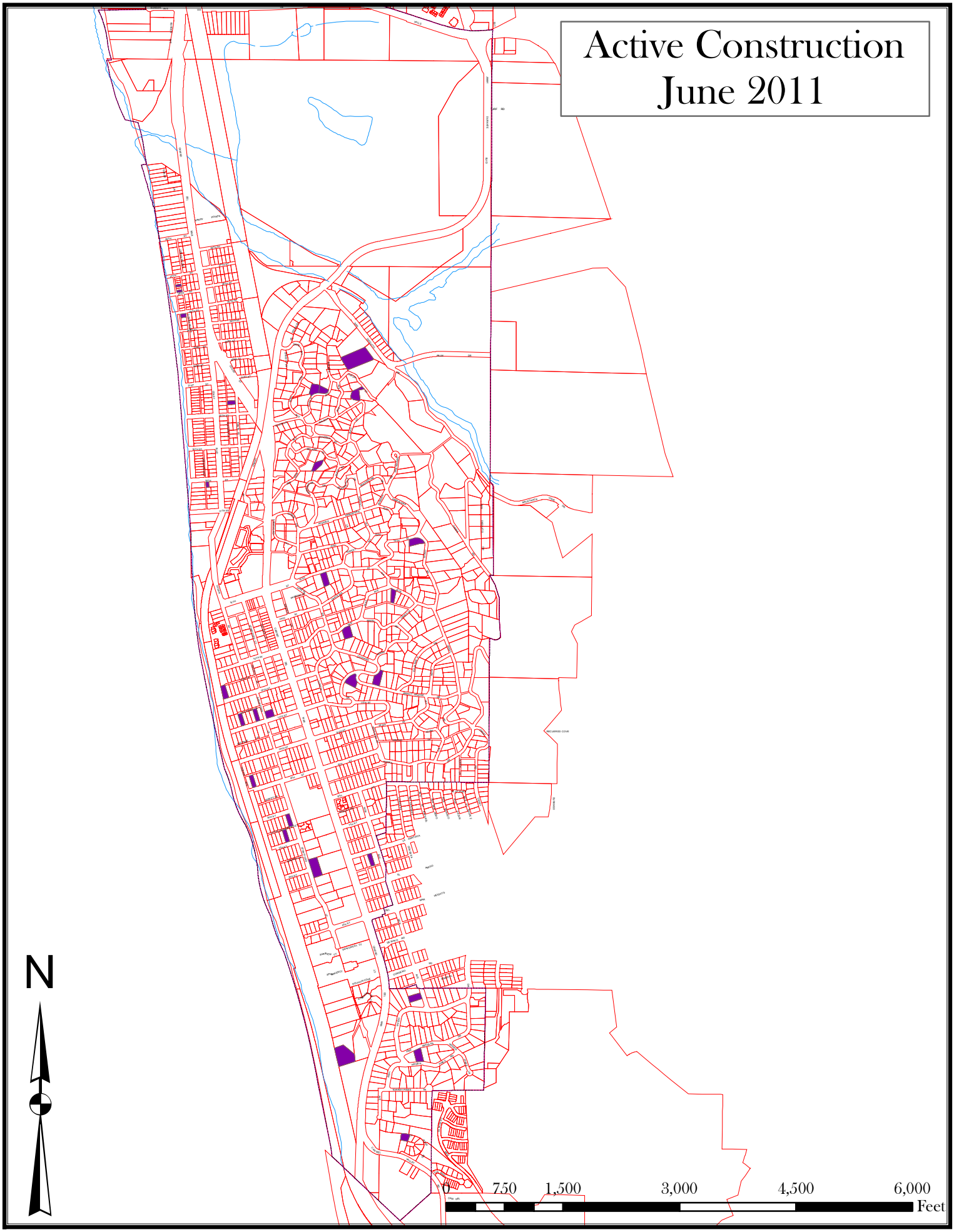
Active Construction
June 2011
N
0
750
1,500
3,000
4,500
6,000
Feet

Appendix E - FY 2011 Construction Inspection Summary Table

Planning File #	Site Name	Street No.	Street Name	Hydrologic Unit	Description of Activity	Receiving Waterbody	303(d) Listed Waterbody	Start Date	End Date	Weeks Active (Wet)	Weeks Active (Dry)	No. Inspections (Wet)	No. Inspections (Dry)	Total Inspections
High and Medium Priority Contruction Projects														
DRB-08-27	Pacifica Stratford	615/617	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No	6/7/2008	Active	30	22	19	2	21
DRB-08-28	Pacifica Stratford	605/607	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No	6/7/2008	Active	30	22	19	2	21
DRB-08-29	Pacifica Stratford	555/557	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No	6/7/2008	Active	30	22	19	2	21
DRB-09-04	Batchelder	100	Stratford Ct.	Los Peñasquitos	home remodel and grading	Pacific Ocean	No	7/1/2009	Active	30	22	18	2	20
DRB-09-09	Handzel	100	12th Street	San Dieguito	NSFR with basement	Pacific Ocean	No	10/18/2010	Active	28	8	17	2	19
No Planning File	21st Street Pump Station		21st Street & Court Street	San Dieguito	CIP - replace pump station	Pacific Ocean	No	1/4/2011	Active	16	8	10	2	12
Low Priority Contruction Projects														
DRB-09-16	Assi	1997	Zapo Street	San Dieguito	NSFR	Pacific Ocean	No	1/15/2011	Active	15	8	1	0	1
DRB-98-32 Mod	Bakker	335	La Amatista	San Dieguito	remodel and addition	Pacific Ocean	No	4/21/2005	Active	30	22	0	0	0
DRB-05-23	Belezzuoli	424	Carolina Rd.	San Dieguito	windows/pool	Pacific Ocean	No	9/4/2006	9/2/2010	30	9	0	0	0
DRB-10-08	Bingham	150/152	11th Street	San Dieguito	NSFR and second unit	Pacific Ocean	No	4/1/2011	Active	4	8	2	1	3
DRB-10-24	Campbell	334	Hidden Pines Rd.	Los Peñasquitos	home remodel	Pacific Ocean	No	6/1/2011	Active	0	4	0	1	1
ADR-11-07	Cassidy	2614	Ocean Front	San Dieguito	home remodel	San Dieguito Lagoon	Bacteria	3/1/2011	Active	8	8	1	0	1
HZR-10-01 / ADR-10-09	Chasen Medical	1431	Camino del Mar	San Dieguito	commercial remodel	Pacific Ocean	No	1/10/2011	2/28/2011	7	0	0	0	0
DRB-10-13	Collins	139	18th Street	San Dieguito	home remodel	Pacific Ocean	No	12/1/2010	Active	21	8	1	0	1
DRB-08-17	Conkwright	1201	Camino del Mar	San Dieguito	roofing and siding commercial bldg	Pacific Ocean	No	6/12/2010	12/1/2010	9	14	0	0	0
DRB-08-20	Deal	157/159	8th Street	San Dieguito	NSFR with basement - 2 detached	Pacific Ocean	No	2/21/2011	Active	9	8	1	0	1
DRB-07-05	Eaton	187	Ocean View Ave.	Los Peñasquitos	home remodel/addition	Pacific Ocean	No	4/27/2009	7/30/2010	0	4	0	0	0
DRB-10-04	Fermanian	2430	Ocean Front	San Dieguito	home remodel and new roof	San Dieguito Lagoon	Bacteria	10/15/2010	Active	28	8	1	1	2
DRB-84-52	Gillies	2136	San Dieguito Dr.	San Dieguito	NSFR	San Dieguito Lagoon	Bacteria	12/14/1998	Active	30	22	0	0	0
DRB-08-43	Hardke	431	Van Dyke Ave.	San Dieguito	NSFR w/basement and pool	Pacific Ocean	No	5/26/2009	Active	30	22	1	0	1
DRB-04-15	Hilliard	1492	Crest Rd.	San Dieguito	site improvements	Pacific Ocean	No	4/2/2007	Active	30	22	0	0	0
DRB-09-07	Kenyon	463	15th Street	San Dieguito	NSFR w/basement	Pacific Ocean	No	1/4/2011	Active	16	8	1	0	1
DRB-05-24	Klipstein	415	Torrey Pointe Rd.	Los Peñasquitos	NSFR w/basement	Los Peñasquitos Lagoon	Sediment, Bacteria	8/22/2008	Active	30	22	0	0	0

Appendix E - FY 2011 Construction Inspection Summary Table

Planning File #	Site Name	Street No.	Street Name	Hydrologic Unit	Description of Activity	Receiving Waterbody	303(d) Listed Waterbody	Start Date	End Date	Weeks Active (Wet)	Weeks Active (Dry)	No. Inspections (Wet)	No. Inspections (Dry)	Total Inspections
DRB-10-02	Linnell	411	Hidden Pines Ln.	Los Peñasquitos	interior work - garage	Pacific Ocean	No	2/8/2010	7/28/2010	0	4	0	0	0
DRB-08-27	Mankwitz	420	Luzon Ave.	San Dieguito	NSFR	San Dieguito Lagoon	Bacteria	6/1/2011	Active	0	4	0	0	0
ADR-10-13	Marier	141	4th Street	Los Peñasquitos	outdoor landscaping, concrete	Pacific Ocean	No	9/9/2010	2/28/2011	21	3	0	0	0
DRB-04-13	McGuire	1105	Stratford Ct.	San Dieguito	home remodel	Pacific Ocean	No	9/13/2007	Active	30	22	1	0	1
DRB-10-11	Milligan	1382	Via Alta	San Dieguito	home remodel and landscape	Pacific Ocean	No	9/15/2010	Active	30	2	2	1	3
DRB-09-12	More	408	Luzon Ave.	San Dieguito	exterior improvements	San Dieguito Lagoon	Bacteria	6/28/2010	Active	30	22	0	0	0
DRB-08-38	Nerenberg	205	Ocean View Ave.	Los Peñasquitos	NSFR	Pacific Ocean	No	12/28/2009	12/15/2010	19	14	0	1	1
DRB-06-23	Oliphant	2020	Santa Fe Ave.	San Dieguito	NSFR	Pacific Ocean	No	6/1/2009	Active	30	22	0	0	0
DRB-08-12	Parker-O'Brien	116/118	11th Street	San Dieguito	NSFR	Pacific Ocean	No	4/15/2011	Active	2	8	2	1	3
DRB-10-07	Rehfeld	385	Belaire St.	San Dieguito	NSFR	Pacific Ocean	No	6/1/2011	Active	0	4	0	0	0
DRB-08-06	Reid	116	Nob Ave.	Los Peñasquitos	NSFR	Pacific Ocean	No	11/1/2010	Active	26	8	2	5	7
No Planning File	RHN	1846	Ocean Front	San Dieguito	interior improvements	Pacific Ocean	No	6/28/2010	7/28/2010	0	4	0	0	0
DRB-10-22	Rowe	538	Amphitheatre Dr.	San Dieguito	home remodel	Pacific Ocean	No	11/20/2010	Active	23	8	0	0	0
DRB-08-08	Savage	2007/ 2009	Santa Fe Ave.	San Dieguito	home remodel	Pacific Ocean	No	10/19/2009	7/20/2010	0	3	0	0	0
DRB-08-40	Schwartz	243	22nd Street	San Dieguito	home remodel	Pacific Ocean	No	7/1/2009	1/15/2011	15	8	0	0	0
ADR-10-17	Taylor	1408	Via Alta	San Dieguito	home remodel	Pacific Ocean	No	9/1/2010	1/20/2011	16	4	0	0	0
No Planning File	Unknown	2054	David Way	San Dieguito	siding repair	San Dieguito Lagoon	Bacteria	8/10/2010	9/20/2010	0	7	0	0	0
No Planning File	Unknown	114	9th Street	San Dieguito	siding repair	Pacific Ocean	No	3/25/2011	Active	5	8	0	0	0
No Planning File	Unknown	2600	Ocean Front	San Dieguito	siding repair	San Dieguito Lagoon	Bacteria	5/28/2011	Active	0	4	0	0	0
DRB-09-14	Vint	140	7th Street	San Dieguito	NSFR with basement	Pacific Ocean	No	11/1/2010	Active	26	8	5	0	5
DRB-08-37	Wiggins	1926	Coast Blvd.	San Dieguito	home remodel & roof deck	Pacific Ocean	No	1/25/2010	8/20/2010	0	7	0	0	0
DRB-08-35	Wilkinson	131	25th Street	San Dieguito	home remodel & addition	San Dieguito Lagoon	Bacteria	10/26/2009	10/15/2010	2	8	0	0	0
DRB-08-33	Wohlford-Kidd	1155	Cuchara Drive	San Dieguito	home remodel	Pacific Ocean	No	3/23/2010	Active	30	22	1	1	2

Facility Name	Contact Person	Phone Number	Priority	Street No.	Street Name	Zip Code	Description of Area/Activity	Potential Pollutants									Hydrologic Area	HA	Tributary to 303(d) Listed Waterbody	303(d) Waterbody Impairment	Site Potentially Generates 303(d) Impairment Pollutants*
								Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash					
11th Street Water Reservoir	Doug Blackstock	(858) 755-3294	Medium	562	11th St	92014	Potable water storage tank and equipment maintenance.	Y			Y	Y	Y				San Dieguito**	905.11	No	None	No
20th Street Lifeguard Station	Pat Vergne	(858) 755-1556	Medium		20th St and Coast Blvd	92014	Building. First Aid Care. Restroom Facilities. Building maintenance.	Y			Y		Y		Y	Y	San Dieguito**	905.11	No	None	No
21st St Sewer Lift Station	Doug Blackstock	(858) 755-3294	High	201	21st St	92014	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	Y	Y		Y	Y	Y				San Dieguito	905.11	Yes	Bacteria	Yes
25th Street Lifeguard Station	Pat Vergne	(858) 755-1556	High		25th St and Coast Blvd	92014	Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.	Y			Y		Y		Y	Y	San Dieguito**	905.11	No	None	No
7th St Sewer Lift Station	Doug Blackstock	(858) 755-3294	Medium	120	7th St	92014	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	Y	Y		Y	Y	Y				San Dieguito**	905.11	No	None	No
Caminito Park	Doug Blackstock	(858) 755-3294	High	1500	Camino Del Mar	92014	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Y	Y		Y		Y	Y	Y	Y	San Dieguito**	905.11	No	None	No
City Hall	Doug Blackstock	(858) 755-3294	Non	1050	Camino Del Mar	92014	Building and landscape maintenance.				Y			Y		Y	San Dieguito**	905.11	No	None	No
City Hall Parking Lot	Doug Blackstock	(858) 755-3294	High	1050	Camino Del Mar	92014	Parking and landscaping.			Y		Y		Y		Y	San Dieguito**	905.11	No	None	No
Community Library	Doug Blackstock	(858) 755-3294	Non	1309	Camino Del Mar	92014	Building, parking lot, and landscape maintenance.			Y	Y	Y		Y		Y	San Dieguito**	905.11	No	None	No
Crest Water Reservoir	Doug Blackstock	(858) 755-3294	High	706	Crest Rd	92014	Potable water storage tank and equipment maintenance.	Y			Y	Y	Y				San Dieguito**	905.11	No	None	No
Del Mar Fire Station	Robert Burron	(858) 755-1522	Non	2220	Jimmy Durante Blvd	92014	Building and parking lot. Vehicle storage and cleaning. Hazardous waste materials storage.			Y		Y	Y		Y	Y	San Dieguito	905.11	Yes	Bacteria	No
Main Lifeguard Station	Pat Vergne	(858) 755-1556	High	1700	Coast Blvd	92014	Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.	Y			Y		Y		Y	Y	San Dieguito**	905.11	No	None	No
Main Lifeguard Station Parking Lot	Doug Blackstock	(858) 755-3294	High	1700	Coast Blvd	92014	Parking and landscaping.			Y		Y		Y		Y	San Dieguito**	905.11	No	None	No
Minipark	Doug Blackstock	(858) 755-3294	High	1300	Maiden Ln	92014	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Y	Y		Y		Y	Y	Y	Y	San Dieguito**	905.11	No	None	No
Powerhouse Community Center	Pat Vergne	(858) 755-1556	High	1630	Coast Blvd	92014	Special events, food prep, restrooms. Building and landscape maintenenace.	Y	Y		Y	Y	Y			Y	San Dieguito**	905.11	No	None	No
Powerhouse Park	Doug Blackstock	(858) 755-3294	High	1630	Coast Blvd	92014	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application. Restrooms and showers	Y	Y		Y		Y	Y	Y	Y	San Dieguito**	905.11	No	None	No
Public Works Yard	Doug Blackstock	(858) 755-3294	High	2240	Jimmy Durante Blvd	92014	Public Works Admin building, shops, parking lot, open and covered storage yards. Fueling station, storage, vehicle/equipment cleaning and repair. Temporary storage of trash, recycling and landscape materials. Hazardous waste materials storage.	Y	Y	Y	Y	Y	Y	Y	Y	Y	San Dieguito	905.11	Yes	Bacteria	Yes
Riverpath Del Mar	Doug Blackstock	(858) 755-3294	High	2240	Jimmy Durante Blvd	92014	Public park. Tree and landscape maintenance.	Y			Y		Y	Y	Y	Y	San Dieguito	905.11	Yes	Bacteria	Yes
San Dieguito Sewer Lift Station	Doug Blackstock	(858) 755-3294	High	2110	San Dieguito Dr	92014	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	Y	Y		Y	Y	Y				San Dieguito	905.11	Yes	Bacteria	Yes
Sea Cliff Park	Doug Blackstock	(858) 755-3294	High	1500	Coast Blvd	92014	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Y	Y		Y		Y	Y	Y	Y	San Dieguito**	905.11	No	None	No
Seagrove Park	Doug Blackstock	(858) 755-3294	High	1500	Coast Blvd	92014	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	Y	Y		Y		Y	Y	Y	Y	San Dieguito**	905.11	No	None	No
Tennis Court Facilities	Doug Blackstock	(858) 755-3294	Non		21st St and Court St	92014	Tennis courts with parking and access.									Y	San Dieguito	905.11	Yes	Bacteria	No
Torrey Pines Water Reservoir	Doug Blackstock	(858) 755-3294	High	487	Pine Needles Dr	92014	Potable water storage tank and equipment maintenance.	Y			Y	Y	Y				Penasquitos**	906.10	No	None	No
Winston School Ball Field	Doug Blackstock	(858) 755-3294	Medium	215	9th St	92014	Ball field and parking.	Y	Y		Y	Y	Y	Y	Y	Y	San Dieguito**	905.1	No	None	No
Zuni Water Reservoir	Doug Blackstock	(858) 755-3294	High	627	Zuni Dr	92014	Potable water storage tank and equipment maintenance.	Y			Y	Y	Y				San Dieguito	905.11	Yes	Bacteria	Yes

* Identification of site/source that is a tributary to CWA Section 303(d) waterbody segment and potentially generates pollutants for which the waterbody segment is impaired.
** Drainage from the inventoried facility leads to the Pacific Ocean.

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Public works administration building, shops, parking lot, open and covered storage yards. Fueling station, storage, vehicle/equipment cleaning and repair. Temporary storage of trash, recycling and landscape materials. Area serves as a hazardous waste materials storage. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Public Works Yard		Corrective Actions Required:	No
Address:	2240 Jimmy Durante Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Zuni Water Reservoir		Corrective Actions Required:	No
Address:	627 Zuni Dr			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Public Park. Turf, tree, and landscape maintenance, fertilization and pesticide application. Restrooms and showers. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Powerhouse Park		Corrective Actions Requred:	No
Address:	1630 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	11th Street Water Reservoir		Corrective Actions Requred:	No
Address:	562 11th St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Tennis courts with parking and access. New pubp station under construction will occupy portion of tennis court parking lot. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Tennis Court Facilities		Corrective Actions Requred:	No
Address:	Del Mar, CA			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Crest Water Reservoir		Corrective Actions Requred:	No
Address:	706 Crest Rd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Potable water storage tank and equipment maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Torrey Pines Water Reservoir		Corrective Actions Requred:	No
Address:	487 Pine Needles Dr			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	Penasquitos (906.10)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Building and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	City Hall		Corrective Actions Requred:	No
Address:	1050 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Parking and landscaping. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	City Hall Parking Lot		Corrective Actions Requred:	No
Address:	1050 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Sanitary sewer pump station. Sewer spills, pump repairs and replacement. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	7th Street Sewer Lift Station		Corrective Actions Requred:	No
Address:	120 7th St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Sanitary sewer pump station. This station serves a majority of the City and undergoing construction to build and house new facilities. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	21st Street Sewer Lift Station		Corrective Actions Requred:	No
Address:	201 21st St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Sanitary sewer pump station. Sewer spills, pump repairs and replacement. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	San Dieguito Sewer Lift Station		Corrective Actions Requred:	No
Address:	2110 San Dieguito Dr			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Public park. Tree and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Riverpath Del Mar		Corrective Actions Requred:	No
Address:	2240 Jimmy Durante Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Building, parking lot, and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Community Library		Corrective Actions Requred:	No
Address:	1309 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Seagrove Park		Corrective Actions Requred:	No
Address:	1500 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Building and parking lot, vehicle storage and cleaning. No issues to report.	Enforcement Action:	None
Inspection Date:	4/21/2011			
Facility Name:	Del Mar Fire Station		Corrective Actions Requred:	No
Address:	2220 Jimmy Durante Blvd			
			Corrective Action Description:	
Contact:	Robert Burron			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Minipark		Corrective Actions Requred:	No
Address:	1300 Maiden Ln			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Caminito Park		Corrective Actions Requred:	No
Address:	1500 Camino Del Mar			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Public park. Turf, tree, and landscape maintenance. Fertilization and pesticide application. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Sea Cliff Park		Corrective Actions Requred:	No
Address:	1500 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Building, first aid care, and restroom facilities. Building maintenance. City of Del Mar Lifeguard Tower/ Beach Activitiy SWMP needs to be updated and a copy kept at this lifeguard tower.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	20th Street Lifeguard Station		Corrective Actions Requred:	No
Address:	20th St			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Inspection Type:	Municipal	Building, first aid care, and restroom facilities. Building and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	25th Street Lifeguard Station		Corrective Actions Requred:	No
Address:	25th St			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Building, first aid care, and restroom facilities. Building and landscape maintenance. City of Del Mar Lifeguard Tower/Beach Activity SWMP not on site but at City. Needs to be updated to include 25th St. tower bathrooms and be kept on site.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Main Lifeguard Station		Corrective Actions Requred:	No
Address:	1700 Coast Blvd			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Special events, food preperation, and restroom facilities. Building and landscape maintenance. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Powerhouse Community Center		Corrective Actions Requred:	No
Address:	1630 Coast Blvd			
			Corrective Action Description:	
Contact:	Pat Vergne			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Municipal	Parking and landscaping. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Main Lifegaurd Station Parking Lot		Corrective Actions Requred:	No
Address:	1700 Coast Blvd			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Municipal	Ballfield and parking. No issues to report.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Winston School Ballfield		Corrective Actions Requred:	No
Address:	215 9th St			
			Corrective Action Description:	
Contact:	Doug Blackstock			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Facility Name	Street No.	Street Name	Zip Code	SIC Code	Industrial/ Commerical	Principal Products/ Services	Potential Pollutants									Threat to Water Quality	Hydrologic Area	Tributary to 303(d) Listed Waterbody	303(d) Waterbody Impairment	Site Potentially Generates 303(d) Impairment Pollutants*	Industrial Permit	APN	GIS Mapping	
							Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash									
Americana	1454	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-012-04	117.2605	32.95941
Animal And Bird Hospital Of Del Mar (Freeflight)	2132	Jimmy Durante Blvd.	92014	742	Commercial	Animal and Bird Specialty Services	Y	Y		Y	Y	Y	Y	Y	Y	High	905.11	Yes	Bacteria	Yes	No	299-100-29	117.2641	32.97017
Best Western Stratford Inn	710	Camino del Mar	92014	7011	Commercial	Hotel	Y	Y		Y	Y	Y	Y	Y	Y	High	905.11**	No	None	No	No	300-200-35	117.262	32.95018
Board & Brew	1212	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-074-07	117.2646	32.95678
Bruegger's Bagels	1435	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-030-82	117.2649	32.95948
Bully's North	1404	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-012-24	117.2653	32.95865
Café Secret	1140	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-092-06	117.2644	32.95612
Chinese Double Happiness	1011	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-410-29	117.2631	32.95468
Clarion Del Mar Inn	720	Camino del Mar	92014	7011	Commercial	Hotel	Y	Y		Y	Y	Y	Y	Y	Y	High	905.11**	No	None	No	No	300-200-21	117.2622	32.95079
Crepes & Corks Café	1328	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-012-17	117.2651	32.95799
Del Mar Automotive Services	2201	San Dieguito Dr.	92014	7538	Commercial	Automotive Services		Y	Y		Y			Y	Y	High	905.11	Yes	Bacteria	No	No	299-100-34	117.2618	32.96972
Del Mar Farmer's Market	1050	Camino del Mar	92014	5411	Commercial	Grocery Store	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-092-03	117.2642	32.95505
Del Mar German Car Service	155	Carmel Valley Rd.	92014	7538	Commercial	Automotive Services		Y	Y		Y			Y	Y	High	906.11	Yes	Bacteria, Sediment	Yes	No	301-032-11	117.2592	32.93931
Del Mar Koi	1105	Camino del Mar	92014	5999	Commercial	Animal and Bird Specialty Services	Y	Y		Y	Y	Y	Y	Y	Y	High	905.11**	No	None	No	No	300-401-10	117.2635	32.95567
Del Mar Liquor & Deli	1149	Camino del Mar	92014	5812	Commercial	Grocery Store/Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-400-28	117.264	32.95633
Del Mar Motel on the Beach	1702	Coast Blvd.	92014	7011	Commercial	Hotel	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	299-232-08	117.268	32.9626
Del Mar Pizza, Inc.	211	15th Street	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-012-30	117.266	32.95945
Del Mar Plaza	1555	Camino del Mar	92014	7389	Commercial	Shopping Center	Y	Y		Y	Y	Y	Y	Y	Y	High	905.11**	No	None	No	No	300-030-86	117.2651	32.96049
Del Mar Rendezvous***	1555	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-030-86	117.2651	32.96068
Del Mar Snack Shack	1670	Coast Blvd.	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	299-230-29	117.2681	32.96204
En Fuego, Cantina & Grill	1342	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-012-20	117.2652	32.95827
Eucalyptus Stoneware	2201	San Dieguito Dr.	92014	3269	Industrial	Pottery Manufacturing			Y			Y		Y	Y	High	905.11	Yes	Bacteria	No	Yes	299-100-34	117.262	$32.97
Harvest Ranch Market***	1555	Camino del Mar	92014	5431	Commercial	Grocery Store	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-030-86	117.2651	32.96068
Il Fornaio Cucina Italiana/Enoteca del Fornaio***	1555	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-030-86	117.2651	32.96068
Jake's Del Mar	1660	Coast Blvd.	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	299-230-03	117.2682	32.9619
Jimmy O's	225	15th Street	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	299-091-04	117.2658	32.95949
Kitchen 1540	1540	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	299-310-09	117.2659	32.96033
La Tienda Wine Shop	1342	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-012-20	117.2652	32.95827

Facility Name	Street No.	Street Name	Zip Code	SIC Code	Industrial/ Commerical	Principal Products/ Services	Potential Pollutants									Threat to Water Quality	Hydrologic Area	Tributary to 303(d) Listed Waterbody	303(d) Waterbody Impairment	Site Potentially Generates 303(d) Impairment Pollutants*	Industrial Permit	APN	GIS Mapping	
							Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash									
Osteria Pescatore Inc.	1201	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-075-06	117.2639	32.95688
Pacifica Del Mar / Pacifica Breeze***	1555	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-030-86	117.2651	32.96068
Prep Kitchen	1201	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-075-06	117.2639	32.95688
Rose Towing, Inc.	2201	San Dieguito Dr.	92014	7549	Commercial	Automotive Services		Y	Y		Y			Y	Y	High	905.11	Yes	Bacteria	No	No	299-100-34	117.2618	32.96972
Sbicca American Bistro	215	15th Street	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-012-02	117.2658	32.95919
Seagrove Parking	1601	Coast Blvd.	92014	7521	Commercial	Automotive Services		Y	Y		Y			Y	Y	High	905.11**	No	None	No	No	299-230-10	117.2672	32.96172
Seaside Yogurt	1231	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-075-04	117.2643	32.95719
Shimbashi Izakaya-Seasonal Japanese Tapas & Sake Bar***	1555	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-030-86	117.2651	32.96068
Starbucks Coffee #526	1435	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-030-82	117.2649	32.95948
Stratford Court Café	1307	Stratford Court	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-012-12	117.2653	32.95756
Sunset Parking Services***	1555	Camino del Mar	92014	7521	Commercial	Automotive Services		Y	Y		Y			Y	Y	High	905.11**	No	None	No	No	300-030-86	117.2651	32.96068
Sushi Japone	1101	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-401-10	117.2635	32.95567
The Brigantine	3263	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	298-241-08	117.2688	32.97939
The Curry Comb	1212	Camino del Mar	92014	742	Commercial	Animal and Bird Specialty Services	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-074-06	117.2644	32.95681
The Poseiden Restaurant	1670	Coast Blvd.	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	299-230-29	117.0181	32.96204
Zel's Del Mar	1247	Camino del Mar	92014	5812	Commercial	Food Establishment	Y	Y		Y	Y	Y		Y	Y	High	905.11**	No	None	No	No	300-075-01	117.2642	32.95744

* Identification of site/source that is a tributary to CWA Section 303(d) waterbody segment and potentially generates pollutants for which the waterbody segment is impaired.
** Drainage from the inventoried facility leads to the Pacific Ocean.
*** Businesses located in Del Mar Plaza. For inspection purposes, these are covred in one property-based inspection.

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/18/2011			
Facility Name:	Il Fornaio Cucina Italiana		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Roberto Gerbino/Ulisse Vicinanza			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Liquor store with deli. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/18/2011			
Facility Name:	Del Mar Liquor & Deli		Corrective Actions Required:	No
Address:	1149 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Ted Talia			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/18/2011			
Facility Name:	Americana		Corrective Actions Required:	No
Address:	1454 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Randy Gruber			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/31/2011			
Facility Name:	Seaside Yogurt		Corrective Actions Required:	No
Address:	1231 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Lee			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Chinese Double Happiness		Corrective Actions Required:	No
Address:	1011 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	De Gou Li			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Automotive repair services. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/17/2011			
Facility Name:	Del Mar Automotive		Corrective Actions Required:	No
Address:	2201 San Dieguito Dr			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Al Phillips			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Automotive repair services. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/25/2011			
Facility Name:	Del Mar German Car Service		Corrective Actions Required:	No
Address:	155 Carmel Valley Rd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Ray Duffy			
Hydrologic Area:	Peñasquitos (906.10)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/ violations reported.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Del Mar Pizza, Inc		Corrective Actions Required:	No
Address:	211 15th Street			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Victor			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Automotive services. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/31/2011			
Facility Name:	Rose Towing		Corrective Actions Required:	No
Address:	2201 San Dieguito Rd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Sam Mahdii			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/7/2011			
Facility Name:	The Brigantine		Corrective Actions Required:	No
Address:	3263 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Tyler Martin			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Veterinary clinic. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/31/2011			
Facility Name:	Animal & Bird Hospital of Del Mar		Corrective Actions Required:	No
Address:	2132 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Pam Stonebreaker			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Bruegger's Bagels		Corrective Actions Required:	No
Address:	1435 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Jorge Rosas			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/31/2011			
Facility Name:	Bully's North		Corrective Actions Required:	No
Address:	1404 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Sharron Delmonico			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/7/2011			
Facility Name:	Sbicca American Bistro		Corrective Actions Required:	Yes
Address:	215 15th Street			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Dan Sbicca			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Pet grooming establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/7/2011			
Facility Name:	The Curry Comb		Corrective Actions Required:	No
Address:	1212 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Cathy Wachter			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/14/2011			
Facility Name:	Jimmy O's		Corrective Actions Required:	No
Address:	225 15th Street			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Billy/Keith Nordling			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/reported violations.	Enforcement Action:	None
Inspection Date:	4/19/2011			
Facility Name:	En Fuego		Corrective Actions Required:	No
Address:	1342 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Wingate			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/14/2011			
Facility Name:	Starbucks Coffee #526		Corrective Actions Required:	No
Address:	1435 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Laura Billings			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Market. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/27/2011			
Facility Name:	Del Mar Farmer's Market		Corrective Actions Required:	No
Address:	1050 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Estella Madrid			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/21/2011			
Facility Name:	Jake's Del Mar		Corrective Actions Required:	No
Address:	1660 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Perry Ustick			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Parking lot. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/14/2011			
Facility Name:	Seagrove Parking		Corrective Actions Required:	No
Address:	1601 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Allen King			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Shopping area. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/21/2011			
Facility Name:	Del Mar Plaza		Corrective Actions Required:	No
Address:	1555 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Michael Hull			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/24/2011			
Facility Name:	Crepes & Corks Café		Corrective Actions Required:	No
Address:	1328 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Lana Blackwell/Nico			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. Verbal warning issued for lack of overhead cover on grease container. Follow up inspection required once necessary materials have been installed.	Enforcement Action:	Verbal
Inspection Date:	3/18/2011			
Facility Name:	Board & Brew		Corrective Actions Required:	Yes
Address:	1212 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
			Owner will construct overhead cover as appropriate.	
Contact:	Tom Powers/Sergio			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	Yes
Inspector:	Don Scoles		Follow Up Inspection Date:	To be completed in early FY 2012
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Animal & bird specialty services. No issues/violations reported. It is recommended that Del Mar Koi be removed from inspection list for next Fiscal Year.	Enforcement Action:	None
Inspection Date:	3/31/2011			
Facility Name:	Del Mar Koi		Corrective Actions Required:	No
Address:	1101 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Junie Young			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment/Hotel. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/14/2011			
Facility Name:	Kitchen 1540/L'Auberge Del Mar		Corrective Actions Required:	No
Address:	1540 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Raul Sandoval			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/7/2011			
Facility Name:	Café Secret		Corrective Actions Required:	No
Address:	1140 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Halper			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. Prep Kitchen is new this year. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/21/2011			
Facility Name:	Prep Kitchen		Corrective Actions Required:	No
Address:	1201 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Ryan Studebaker			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/14/2011			
Facility Name:	The Poseidon Restaurant		Corrective Actions Required:	No
Address:	1670 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
			Facility will ask New Leaf to provide grease containment, and will clean the area surrounding the grease collection container.	
Contact:	Tom Ranglas/Toni Bretzing			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/14/2011			
Facility Name:	Del Mar Snack Shack		Corrective Actions Required:	No
Address:	1670 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Tom Ranglas/Toni Bretzing			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Stoneware manufacturer; industrial permit issued in 2002. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	3/25/2011			
Facility Name:	Eucalyptus Stoneware		Corrective Actions Required:	No
Address:	2201 San Dieguito Dr			
Business Type:	Industrial		Corrective Action Description:	
Contact:	Alison Young			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Hotel establishment. No issues/ violations reported.	Enforcement Action:	None
Inspection Date:	4/14/2011			
Facility Name:	Stratford Court Café		Corrective Actions Required:	No
Address:	1307 Stratford Court			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Gregg Sonken			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Food establishment. No issues/ violations reported.	Enforcement Action:	None
Inspection Date:	3/18/2011			
Facility Name:	Sushi Japone		Corrective Actions Required:	No
Address:	1101 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Akira Konishi/Kazu Osaka			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Food establishment. Part of En Fuego Restaurant. No issues/violations reported.	Enforcement Action:	None
Inspection Date:	4/21/2011			
Facility Name:	La Tienda Wine Shop		Corrective Actions Required:	No
Address:	1342 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	John Wingate			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Hotel. New restaurant under construction.	Enforcement Action:	None
Inspection Date:	5/4/2011			
Facility Name:	Best Western Stratford Inn		Corrective Actions Required:	No
Address:	710 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Mario Leon			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	
Inspection Type:	Annual Inspection	Hotel establishment. No issues/ violations reported.	Enforcement Action:	None
Inspection Date:	4/21/2011			
Facility Name:	Clarion Del Mar Inn		Corrective Actions Required:	No
Address:	720 Camino del Mar			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Thomas Mackee			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

General Information		General Description of Findings	Enforcement and Follow Up	
Inspection Type:	Annual Inspection	Hotel establishment. No issues/ violations reported.	Enforcement Action:	None
Inspection Date:	5/13/2011			
Facility Name:	Del Mar Hotel on the Beach		Corrective Actions Required:	No
Address:	1702 Coast Blvd			
Business Type:	Commercial		Corrective Action Description:	
Contact:	Mikki Ellis			
Hydrologic Area:	San Dieguito (905.11)			
			Follow Up Inspection Required:	No
Inspector:	Don Scoles		Follow Up Inspection Date:	
			Corrective Actions Verified:	

Firm Name	Firm Name (Addl)	Business Type	Firm Address	City	State	Zipcode	Phone Number
A & A Glass & Mirror Co.		Contractors	518 Cassou Rd	San Marcos	CA	92069	(760) 489-0307
A & D Fire Sprinklers Inc.		Fire Sprinklers	11465 Woodside Ave	Santee	CA	92071	(619) 448-1962
A & D Glass Inc.		Contractor - Specialty	1903 West Vista Way	Vista	CA	92083	760-758-1673
A + B Sheet Metal		Contractor - Specialty	13420 Orange Blossom Lane	Poway	CA	92064	619-987-9058
A C Electric Corp.		Electrical	PO Box 530	Poway	CA	92074	(858) 748-6973
A.B. Plumbing		Plumbing and A/C	239 Estrelita Dr	Vista	CA	92084	(760) 715-1165
A.K. Stuart Construction		Contractors	1502 Via Rancho Parkway	Escondido	CA	92029	(760) 839-5751
A.O. Reed & Co., Inc.		Contractor - Specialty	4777 Ruffner St	San Diego	CA	92111	858-565-4131
A.R. Bardsley Construction		Contractors	PO Box 512	Jamul	CA	91935	(619) 669-6593
Aaaa Dba Drain Patrol		Plumbing and A/C	7764 Arjons Dr	San Diego	CA	92126	(858) 560-1137
Abc Construction Co., Inc.		Contractors	3120 National Ave	San Diego	CA	92113-2597	(619) 239-3428
Abundant Sun Sustainable		Contractor - Specialty	2136 San Dieguito Drive	Del Mar	CA	92014	858-755-3740
Academy Backflow Service		Plumbing and A/C	PO Box 1528	Lakeside	CA	92010	(619) 561-0991
Access Plumbing		Plumbing and A/C	7525 Juarez Ct # B	Carlsbad	CA	92009	(858) 755-4213
Accurate Comfort Systems Inc.	Action Air Conditioning & Heating	Plumbing and A/C	2750 S Santa Fe Ave	San Marcos	CA	92069	(760) 727-4152
Acuterra Inc.		Contractors	3525 Del Mar Heights Rd # 119	San Diego	CA	92130	(858) 509-1500
Adalberto Landscape		Landscaping	835 Del Riego Avenue	Encinitas	CA	92024	760-633-4561
Added Touch Paint Professionals		Painting	3733 Curtis St	San Diego	CA	92106	(619) 886-1229
Adg Overhead Doors Inc.	Dba Lockout Garage Doors	Contractors	7933 Silverton Ave #716	San Diego	CA	92126	(858) 481-3123
Advanced Backflow Preventer Svc	West End Holdings	Plumbing and A/C	8260 Engineer Rd	San Diego	CA	92111	(858) 573-0842
Advanced Waterscape Inc		Contractors	PO Box 70121	San Diego	CA	92167	(619) 222-6767
Advanced Window Washing		Power Washing/Window Cleaning	1611 Calle Colorado	Vista	CA	92084	(760) 630-5773
Affordable Water Heaters		Plumbing and A/C	24663 Railroad Ave	Santa Clarita	CA	91321	(661) 259-7131
Ahe, Inc. Dba American Home Entertainment		Electrical	7373 Engineer Rd #D	San Diego	CA	92111	(858) 430-1701
Ahlee Backflow Service		Plumbing and A/C	905 4Th St	El Cajon	CA	92019	(619) 444-7781
Air Flohs		Contractor - Specialty	16232 Martincoip Road	Poway	CA	92064	858-748-6437
Air Temperature Specialists		Contractor - Specialty	41659 Date St Ste 200	Murrieta	CA	92562	888-588-1602
Air West Mechanical Inc		Contractor - Specialty	1341 Distribution Way 13	Vista	CA	92081	760-734-4526
Airx Utility Surveyors Inc.		Contractor - Specialty	2534 E El Norte Parkway Ste C	Escondido	CA	92027	760-480-2347
Akeena Solar Inc		Contractor - Specialty	5784 Miramar Rd	San Diego	CA	92121	858-558-8337
Alarms Unlimited/Custom Electronics		Electrical	4584 Park Blvd	San Diego	CA	92116	(619) 297-4500
Alcal Arcade Contracting, Inc.		Contractors	31164 Huntwood Ave	Hayward	CA	94544	(510) 477-9380
Alessio Heating & Air Inc.		Plumbing and A/C	550 W 6Th Ave	Escondido	CA	92025	(760) 489-2299
All Seasons Insulation, Inc		Contractor - Specialty	22421 Barton Rd #166	Grand Terrace	CA	92313	909-824-2634
All Sorts Concrete		Masonry	221 Melinda Way	Oceanside	CA	92057	
All Star Water Heaters		Contractor - Specialty	26867 Pelham Pl	Hayward	CA	94542	951-712-5115
Alliance Environmental Group,		Contractor - Specialty	8390 Juniper Creek Ln	San Diego	CA	92126	619-229-6135
Almendariz Plumbing Systems		Plumbing and A/C	1513 Valleda Ln	Encinitas	CA	92024	(760) 419-4211
Alpine Plumbing & Backhoe Inc		Contractor - Specialty	2538 Alpine Blvd	Alpine	CA	91901	619-445-5288
Alta Dena Certified Dairy Inc.		Food Service-Delivery	17637 E Valley Blvd	City Of Industry	CA	91744	(818) 964-6401
Am Cabinets Inc.		Contractor - Specialty	239 East Gardena Boulevard	Gardena	CA	90248	310-532-1919
Ambiance Electric		Electrical	4982 Mt Frissell Dr	San Diego	CA	92117	(858) 268-3558
American Bobcat& Backhoe Service, Inc.		Equipment Suppliers	1334 Descanso Ave	San Marcos	CA	92069	(619) 520-2042
American Fireplaces, Inc.		Masonry	9938 Mesa Rim Rd	San Diego	CA	92121	(858) 578-4062
American Fish & Seafood Co.		Food Service - Delivery	625 Kohler St	Los Angeles	CA	90021	(213) 612-0353
American Insulation, Inc.		Insulation Services	8305 Miralani Dr	San Diego	CA	92126	(858) 527-0100
American Marble-Kammerer Ent		Contractor - Specialty	1280 N Melrose Dr	Vista	CA	92083	760-560-0550
American Residential Services	Dba Rescue Rooter	Plumbing and A/C	9895 Olson Dr 720	San Diego	CA	92121	(858) 642-4745
American Technologies Inc.		Contractors	8444 Miralani Dr	San Diego	CA	92126	(858) 530-2400

Firm Name	Firm Name (Addl)	Business Type	Firm Address	City	State	Zipcode	Phone Number
Amg Demolition & Environmental Service		Contractors	1220 Rosecrans St S-523	San Diego	CA	92106	(619) 501-7427
Amir's Catering & Event Planning		Catering	2565 Abedul St	Carlsbad	CA	92009	(760) 929-0707
Amtech Elevator Services		Mechanical	4837 Mercury St	San Diego	CA	92111	(858) 637-4660
Anderson Drilling/Sja Inc		Grading & Demolition	10303 Channel Road	Lakeside	CA	92040	(619) 443-3891
Andrew Electric		Electrical	402 Alpine Heights Rd	Alpine	CA	91901	(619) 445-8955
Andrew Mccracken Tree Service		Landscape Service	11730 Tierra Del Sur	San Diego	CA	92130	(858) 755-7362
Angel's Feeds Inc.		Food Service - Delivery	4518 Rowland Ave	El Monte	CA	91731	(818) 442-2680
Angel'S Tree Service		Gardening	629 C Avenue	National City	CA	91950	
Ankeney Bros Painting		Painting	879 Starflower Rd	Encinitas	CA	92024	(760) 944-2930
Anning Johnson Company		Contractor - Specialty	13250 Temple Ave	Temple	CA	91746	626-369-7131
Antimite Associates, Inc.		Pest Control	1931 Plaza Real	Oceanside	CA	92056	(858) 451-0440
Anytyme Plumbing, Inc.		Plumbing and A/C	1064 La Mirada Ct	Vista	CA	92081	
Apex Construction		Contractors	29536 Avenida Del Sol	Temecula	CA	92591	(951) 693-1969
Apex Lighting & Electric Inc.		Electrical	1939 Friendship Dr Ste A	El Cajon	CA	92020	(619) 448-6400
Apex Pacific, Inc.		Contractors	8911 Complex Dr Ste F	San Diego	CA	92123	(858) 496-0072
Apptek Coachella Inc		Contractor - Specialty	10685 Roselle St #200	San Diego	CA	92121	858-875-1850
Apw Construction, Inc Dba Ace		Contractor - Specialty	727 N Glendora Ave	La Puente	CA	91744	626-333-0727
Aquatech Raingutters		Contractor - Specialty	4965 Brighton Ave	San Diego	CA	92107	619-248-9297
Arbor West Tree Surgeons, Inc.		Landscape Service	8553 Avenida Costa Blanca	San Diego	CA	92154	(619) 661-5001
Archibald Inc. Dba Affordable Rain Gutters		Contractors	1402 N Magnolia Ave	El Cajon	CA	92020	(619) 469-0400
Area-West Fence Co		Fencing	12566 Vigilante Rd	Lakeside	CA	92040	(619) 561-4900
Arias Waterproofing		Masonry	1133 Sweetwater Ln	Spring Valley	CA	91977	(619) 884-7923
Armstrong Woodworking		Contractors	14263 Tyler Rd	Valley Center	CA	92082	(760) 297-2186
Arrow Pipeline Repair Inc		Contractors	1228 Keystone Wy	Vista	CA	92081	(760) 476-9388
Ars Of San Diego #8118		Contractor - Specialty	965 Ridge Lake Blvd Ste 201	Memphis	TN	38120	858-805-0613
Artistic Metal Working		Contractor - Specialty	1332 Simpson Way	Escondido	CA	92029	760-889-9427
Artquest Catering		Catering	10717 Cariuto Court	San Diego	CA	92124	619-823-9531
Asphalt& Concrete Specialist, Inc.		Contractors	7200 Ponto Dr Ste B	Carlsbad	CA	92011	___
Asplundh Tree Expert Co		Gardening	708 Blairmill Road	Willow Grove	PA	19090	858-583-8776
Assurance Plumbing		Plumbing and A/C	PO Box 397	Carlsbad	CA	92018	(760) 433-7646
Assured Quality Woodcraft		Contractor - Specialty	602 N Pacific Coast Highway	Redondo Beach	CA	90277	310-376-5809
Ast Stone Corporation		Masonry	5300 The Grand Del Mar Way	San Diego	CA	92102	(619) 401-8871
Authentic Flavors Catering		Catering	7004 Carroll Rd	San Diego	CA	92121	858-404-0606
Avidex Systems, Inc		Contractor - Specialty	13555 Bel-Red Rd Ste 2210	Bellevue	WA	98005	425-646-0890
Aztec Landscaping Inc.		Landscape Service	7980 Lemon Grove Way	Lemon Grove	CA	91945	(619) 464-3303
B.A. Worthing, Inc		Contractors	PO Box 1041	Carlsbad	CA	92018	(760) 729-3965
B.E. Kaylor Restoration, Inc		Contractors	4820 Mercury St Ste D	San Diego	CA	92111	(858) 974-7787
Backflow Services		Plumbing and A/C	9420 Loren Drive	La Mesa	CA	91942	(619) 303-1561
Baer Heating and Air		Plumbing and A/C	13030 S Mountain Dr	Lakeside	CA	92040	(619) 328-5900
Baj Backflow & Plumbing		Contractor - Specialty	125 Willowside Terrace	Alpine	CA	91901	619-241-1990
Baker'S Booth Co., Inc.		Contractor - Specialty	5975 Fairmount Avenue	San Diego	CA	92120	619-284-6094
Baldassari		Contractors	8615 F Via Mallorca	La Jolla	CA	92037	(619) 987-6946
Baldwin Electrical		Contractor - Specialty	2179 Mardavido Ln	Fallbrook	CA	92028	619-972-0910
Ball General Contracting		Contractors	3855 Manchester	Encinitas	CA	92024	(760) 634-5548
Banker Insulation Of Ca, Inc		Contractor - Specialty	2357 Auto Park Way	Escondido	CA	92029	760-738-6980
Bar None Barbeque, Inc		Catering	7401 Princess View Dr Ste E	San Diego	CA	92120	(619) 285-0801
Bar Works Catering		Catering	8504 Commerce Ave	San Diego	CA	92121	(858) 566-6077
Barbara Reed'S Pro. Cleaning		Contractor - Specialty	13676 Cynthia Lane	Poway	CA	92064	858-748-6227
Barton Electric		Electrical	4089 Helena St	Fallbrook	CA	92028	(760) 723-1651
Beach Plumbing Inc		Plumbing and A/C	241 Calle Pintoresco	San Clemente	CA	92672	(949) 498-6000
Behind The Scenes, Inc.		Catering	9888 Waples St	San Diego	CA	92121	858-638-1400

Firm Name	Firm Name (Addl)	Business Type	Firm Address	City	State	Zipcode	Phone Number
Bekker's Catering		Catering	7455 Mission Gorge Road	San Diego	CA	92120	(619) 287-9027
Bela Bartanyi Home and Land Maintenance		Handymen	1321 Stratford Ct	Del Mar	CA	92014	(858) 259-5782
Beltran Construction		Contractors	799 Hygeia Ave	Encinitas	CA	92024	(760) 802-7073
Benchmark Landscape Inc		Landscape Service	12575 Stowe Dr	Poway	CA	92064	(858) 513-7190
Benitez Landscape		Landscaping	3350 Currant St	San Diego	CA	92111	858-688-2488
Berck's Family Plumbing, Heating & Air		Plumbing and A/C	38415 Innovation Ct Ste E	Murrieta	CA	92563	(877) 423-7257
Besek Electric		Electrical	525 F St.	Chula Vista	CA	91910	(619) 691-8748
Besemer Construction Inc		Contractors	5159 Del Mar Mesa Rd	San Diego	CA	92130	(858) 755-2987
Beyer Heating & Air Conditioning		Plumbing and A/C	772 Jamacha Rd Pmb 348	El Cajon	CA	92019	(619) 579-1139
Bgm Installationtion Inc.		Contractor - Specialty	25022 S Vermont Avenue	Harbor City	CA	90710	310-536-0110
Bill Howe Plumbing, Inc		Contractor - Specialty	1364 Morena Blvd	San Diego	CA	92110	619-286-6348
Bingham Heating & Air		Plumbing and A/C	6387 Nancy Ridge Dr Ste B	San Diego	CA	92121	(858) 200-0680
Black Car Specialized		Auto Detailing	PO Box 102	Del Mar	CA	92014	(858) 603-3863
Black Forest Detail		Auto Detailing	PO Box 675853	Rancho Santa Fe	CA	92067	(858) 558-0244
Black Hawk Electric Co. Inc		Contractor - Specialty	PO Box 461208	Escondido	CA	92046	619-286-0360
Black Mountain Plumbing, Inc.		Plumbing and A/C	9929 Hibert St.	San Diego	CA	92131	(858) 536-4161
Bligh Roof	Dba Bligh Pacific	Roofing	11043 Forest Pl.	Santa Fe Springs	CA	90670	(562) 944-9753
Blue Moon Pools, Inc.		Contractor - Specialty	PO Box 711807	Santee	CA	92072	619-258-7665
Blue Pacific Landscape & Design		Landscape Service	709 Oceanview Ave	Encinitas	CA	92024	(760) 635-3806
Bob Piva Roofing		Roofing	1192 Industrial Ave	Escondido	CA	92029	(760) 745-4700
Bradley Landscape Dev. Inc.		Landscape Service	607 N Vulcan Ave Ste B	Encinitas	CA	92024	(760) 436-0554
Breeze Point Heating & Air		Contractor - Specialty	1518 Seabrook Ln	San Diego	CA	92139	858-864-3780
Brian Cain Lanscape Co.		Landscape Service	1784 Glidden Ct.	San Diego	CA	92111	(619) 582-0233
Brian Cox Mechanincal, Inc.		Mechanical	12155 Kirkham Rd	Poway	CA	92064	(858) 679-5757
Broadway Auto Glass		Automotive - Misc.	98 Broadway	Chula Vista	CA	91910	(619) 426-0187
Brookwood Plastering Inc.		Masonry	4876 Elsa Rd	San Diego	CA	92120	(619) 520-7828
Buckboard Catering		Catering	9265 Activity Rd 108	San Diego	CA	92126	(858) 748-1617
Burke Lighting Design, Inc.		Contractor - Specialty	4886 Monroe Avenue	San Diego	CA	92115	619-564-7600
Burris Plumbing, Inc.		Contractor - Specialty	1305 I Avenue	National City	CA	91950	619-477-7510
Business Advisory Services		Contractor - Specialty	5042 Seashell Place	San Diego	CA	92130	760-930-6060
Buzcor Heating & Air		Contractor - Specialty	PO Box 891286	Temecula	CA	92589	760-224-2896
C & C Partnership		Contractor - Specialty	6661 Carthage St	San Diego	CA	92120	619-286-9202
C & M Stucco Specialist Inc.		Contractor - Specialty	475 Corporate Drive	Escondido	CA	92029	760-735-9783
C. Park Inc		Catering	6835 Flanders Dr Ste 200	San Diego	CA	92121	(858) 558-7618
Cafe Catering		Catering	960 Rancheros Dr # A	San Marcos	CA	92069	(760) 745-9700
Cafe Merlot Custom Catering		Catering	13330 Paseo Del Verano	San Diego	CA	92128	(858) 592-7785
Cafe Sevilla, Inc.		Catering	8560 A Production Ave	San Diego	CA	92121	858-860-0382
Cali D'Cuisine		Catering	13330 Paseo Del Verano Norte Suite E	San Diego	CA	92128	858-592-7785
California Backflow		Plumbing and A/C	1701 Alta Vista Dr	Vista	CA	92084	(858) 755-2758
California Boring, Inc.		Grading & Demolition	770 N Eckhoff St	Orange	CA	92868	(714) 456-9650
California Cuisine		Catering	PO Box 600310	San Diego	CA	92160	619-543-0790
California Custom Lift, Inc.		Mechanical	13802 West St	Garden Grove	CA	92843	(714) 554-1300
California Glass Enterprises,		Contractor - Specialty	13220 Evening Creek Dr So. #106	San Diego	CA	92128	858-486-2500
California Mirror &		Contractor - Specialty	10045 Carroll Canyon Road Ste B	San Diego	CA	92131	858-566-0603
California Sheet Metal Works Inc.		Contractors	1020 Marshall St	El Cajon	CA	92020	(619) 562-7010
Cam Contractors, Inc.		Contractors	938 S andreasen Dr	Escondido	CA	92029	(760) 796-4085
Camino Air Conditioning, Inc.		Contractor - Specialty	13135 Claire Drive	Poway	CA	92064	858-486-1136
Campbell Escondido Refrig, Inc.		Plumbing and A/C	1948 Don Lee Pl St 3	Escondido	CA	92029	(760) 745-4431

Firm Name	Firm Name (Addl)	Business Type	Firm Address	City	State	Zipcode	Phone Number
Can Am Marine Enterprise Inc		Contractor - Specialty	19952 Lei Garden Road	Burlington	WA	98233	360-757-3249
Canseco's Painting		Painting	119 Plimouth Dr	Vista	CA	92083	(760) 758-5945
Capo Valley Fireside		Masonry	26401 Via De Anza	San Juan Capistrano	CA	92675	(949) 364-5118
Cardiff By The Sea Roofing		Contractor - Specialty	PO Box 280	Cardiff By The Sea	CA	92007	760-753-2622
Cardiff Seaside Market		Catering	2087 San Elijo Avenue	Cardiff By The Sea	CA	92007	760-753-5445
Carlsbad Lanscaping &		Landscaping	3190 Roosevelt Street	Carlsbad	CA	92008	760-730-3764
Carmel Valley Pest Control		Contractor - Specialty	2658 Del Mar Heights Road #523	Del Mar	CA	92014	858-350-8838
Carpenter's Plumbing Inc.		Plumbing and A/C	722 Suzanne Ln	Escondido	CA	92026	(760) 745-0465
Cartwright Termite & Pest Control Inc		Pest Control	1376 Broadway	El Cajon	CA	92021	(619) 442-9613
Casey's Concrete Service		Masonry	1257 Maple Ave	Beaumont	CA	92223	(951) 845-4704
Casper's Concrete Cutting, Inc.	Dba Casper Company	Masonry	3825 Bancroft Dr	Spring Valley	CA	91977	
Cass Construction, Inc.		Contractors	1100 Wagner Dr	El Cajon	CA	92020	(619) 590-0929
Catering By Barry Layne, Inc.	Dba Coast Catering	Catering	3732 Gum Tree Glen	Escondido	CA	92025	(760) 212-7780
Catering By Daniela		Catering	9121 Atlanta Ave #710	Huntington Beach	CA	92646	714-305-8431
Catering By Felicia G.		Catering	13790 Rostrata Ave	Poway	CA	92064	(619) 742-4747
Catering By Felicia G.		Catering	13790 Rostrata Ave	Poway	CA	92064	619-742-4747
Ccs Cabinets		Contractor - Specialty	7360 Trade St	San Diego	CA	92121	858-536-9095
Cement Cutting Inc.		Masonry	3610 Hancock St	San Diego	CA	92110	(619) 296-0849
Centex Glazing Inc		Masonry	8260 Commercial St	La Mesa	CA	91942	(619) 644-1981
Central Meat & Provision Co		Food Service - Delivery	1603 National Ave	San Diego	CA	92113	(619) 239-1391
Cesar's Exterior Designs Inc		Landscape Service	PO Box 124511	San Diego	CA	92112	(619) 850-4826
Challenge Dairy Products, Inc		Food Service - Delivery	3510 Hancock St	San Diego	CA	92101	(619) 297-3541
Charlie's Tractor Service		Contractors	5656 La Sencilla	Rancho Santa Fe	CA	92067	(760) 753-5804
Chef Dave Simmons		Catering	1179 Lake Berryessa St	Henderson	NV	89002	(702) 489-2201
Chef Dk Catering		Catering	2502 Navarra Dr #221	Carlsbad	CA	92009	(760) 828-0596
Chefaxel, Inc.		Catering	7097 University Ave	La Mesa	CA	91941	(619) 421-8844
Chief Plastering		Contractor - Specialty	1660 E Lexington Ave	El Cajon	CA	92019	619-579-1639
Chiefs Kitchen		Catering	298 W 5Th St	Westmorland	CA	92281	(760) 256-5903
Chileco Catering		Catering	735 E Mission Rd	San Marcos	CA	92069	(760) 670-4502
Chism Brothers Painting		Painting	9235 Chesapeake Dr Ste R	San Diego	CA	92123	(858) 571-0676
Chris Coulter Landscape		Landscape Service	PO Box 465	Solana Beach	CA	92075	(760) 942-7547
Christian Brothers Flooring & Interiors		Flooring	12086 Woodside Ave	Lakeside	CA	92040	(760) 789-6234
Christopher Ayers Plastering		Masonry	1282 Via Angelica	Vista	CA	92081	(760) 622-9343
Circle Foods Llc		Food Service - Delivery	8411 Siempre Viva Rd	San Diego	CA	92154	(619) 263-8000
City Fire Equipment Inc.		Fire Sprinklers	1816 Country Club	Escondido	CA	92029	(619) 917-3580
CJ's Interiors, Inc.		Contractors	8265 Commerical St #6	La Mesa	CA	91942	(619) 464-0042
Clairemont Roofing Co, Inc.		Roofing	4232 Balboa Ave Ste 16	San Diego	CA	92117	(858) 483-7345
Clay Leaf Building Contractor,		Contractor - Specialty	7533 Draper Ave	La Jolla	CA	92037	858-459-2995
Clean Air Diagnostics and Solutions		Plumbing and A/C	1546 Avenida La Posta	Encinitas	CA	92024	(760) 277-5262
Clean Energy Construction		Contractors	2808 Oceanfront Rd	Del Mar	CA	92014	(562) 493-7227
Cmc Home Repair		Handymen	33034 Puffin St	Temecula	CA	92592	(951) 694-6044
Cms Interiors, Inc.		Contractor - Specialty	9373 Activity Road Suite D	San Diego	CA	92126	858-693-9000
Coast Line Electric		Electrical	4251 10Th Ave	San Diego	CA	92103	(858) 456-1753
Coast Sign		Contractors	1500 W Embassy	Anaheim	CA	92802	(714) 520-9144
Coast Waste Management, Inc.		Solid Waste Haulers	5960 El Camino Real	Carlsbad	CA	92018-0947	(760) 753-9412
Coastal Flooring, Inc.		Contractor - Specialty	377 E Street	Chula Vista	CA	91910	619-426-1245
Coastal Pet Care		Pet Grooming	930 Via Mil Cumbres # 138	Solana Beach	CA	92075	(760) 715-7951

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Coastal Plumbing, Inc.		Plumbing and A/C	1228 Keystone Wy	Vista	CA	92081	(760) 720-2991
Coastal Roofing & Sheet Metal		Roofing	5171 Santa Fe St B	San Diego	CA	92109	(858) 277-1131
Coca-Cola Bottling Co Of Sd		Food Service - Delivery	1348 47Th St	San Diego	CA	92101	(619) 266-3300
Coles Custom Cabinets Inc.		Woodworking	750 Design Ct # 108	Chula Vista	CA	91911	(619) 216-1170
Columbia Pest Control Of San Diego		Pest Control	127 W 9Th Street	National City	CA	91950	(619) 264-6443
Columbine Landscape, Inc.		Landscape Service	2268 Buena Creek Rd	Vista	CA	92084	(760) 598-3600
Community Contractors		Contractors	1130 Devon Shire	Encinitas	CA	92024	(760) 753-3531
Complete Building Solutions Inc		Plumbing and A/C	2458 Melissa Ct	Vista	CA	92081	(760) 597-4761
Concrete Contractors Interstate		Contractors	12599 Stotler Ct	Poway	CA	92064	(858) 679-5550
Conex Roofing Company		Roofing	2011 W Batavia St	Orange	CA	92865	(888) 874-6649
Conner Detail		Auto Detailing	1721 Red Barn Rd	Encinitas	CA	92024	(760) 522-6034
Continental Catering		Catering	8238 Parkway Dr	La Mesa	CA	91942	(619) 698-3500
Corky's Pest Control, Inc.		Pest Control	909 Rancheros Dr	San Marcos	CA	92069	(760) 432-8801
Coronado Catering		Catering	PO Box 180411	Coronado	CA	92178	619-717-3392
Co'S Traffic Control, Inc.		Contractor - Specialty	PO Box 1101	Del Mar	CA	92014	858-259-0300
Country Carpets		Carpet Cleaning	2201 San Dieguito Dr	Del Mar	CA	92014	(858) 316-6730
Countywide Mechanical Systems		Mechanical	9330 Stevens Rd.	Santee	CA	92071	(619) 449-9900
Coutts Brother Inc.		Contractor - Specialty	PO Box 1777	San Marcos	CA	92079	760-751-8777
Craig Peterson Plumbing		Contractor - Specialty	1649 Honeysuckle Ct	Encinitas	CA	92024	760-942-6160
Creative Food & Beverage		Catering	240 Dahlia Ave	Imperial Beach	CA	91932	(619) 647-4199
Creative Stone & Tile, Inc		Contractor - Specialty	5661 Palmer Way Ste 14	Carlsbad	CA	92010	760-603-8282
Crescent Floors		Flooring	6841 Mimosa Dr	Carlsbad	CA	92011	(760) 310-0948
Crew Builders		Contractors	6191 Cornerstone Ct # 101	San Diego	CA	92121	(858) 587-0900
Cross Way Fire		Contractor - Specialty	1220 Rosecrans St # 303	San Diego	CA	92106	619-589-1141
Crossman Landscape Inc		Landscape Service	8617 Cuyamaca St	Santee	CA	92071	___
Crown Point Catering, Inc.		Catering	4927 Voltaire St	San Diego	CA	92107	(619) 223-1211
Crs Company		Contractors	1345 Camino Linda Dr	San Marcos	CA	92078	(760) 975-9698
Ctm Contracting, Inc.		Contractors	1820 Horseman Ln	Rancho Santa Fe	CA	92091	(858) 756-2024
Culligan		Plumbing and A/C	7575 Carroll Rd	San Diego	CA	92121	(760) 729-1171
Custom Hardwood Floors		Flooring	3232 N Twin Oaks Valley Rd	San Marcos	CA	92069	(760) 744-6248
Custom Plastering, Inc.		Contractor - Specialty	2308 Denova Dr	Alpine	CA	91901	619-445-4216
Custom Plumbing Innovations		Plumbing and A/C	1374 S Grade Rd	Alpine	CA	91901	(619) 937-1564
Custom Theater Systems		Electrical	124 Lomas Santa Fe Dr #206	Solana Beach	CA	92075	(858) 509-7900
Cut 'N Core		Contractors	9194 Chesapeake Dr	San Diego	CA	92123	(619) 560-6627
Cypress Landscape		Landscaping	PO Box 462854	Escondido	CA	92046	760-455-4279
D & M Shelley's Inc.	Dba D & M Welding	Welding Or Ironwork	7952 North Ave	Lemon Grove	CA	91945	(619) 460-1710
D.A.D. Asphalt		Paving	14781 Pomerado Rd #246	Poway	CA	92064	(858) 748-8988
D.W. Quality Drywall		Drywall	3525 Del Mar Heights Rd	San Diego	CA	92130	(858) 259-8750
Damianos Services Inc		Contractor - Specialty	PO Box 2607	Valley Center	CA	92082	760-749-9757
Dana Construction		Contractors	315 First St Ste U #53	Encinitas	CA	92021	(760) 807-3373
Daniel F. Schaldach Inc. Dba D&S		Contractor - Specialty	1277 Pacific Oaks Place Suite 100	Escondido	CA	92029	760-743-0339
Daniel Schaeffer Dba Landmark		Contractor - Specialty	8015 Balboa Ave	San Diego	CA	92111	858-279-1222
Darband/Fifth Ave Grill		Catering	1556 5Th Ave	San Diego	CA	92101	619-230-1001
Darling International Inc		Food Service - Delivery	8096 Miramar Rd	San Diego	CA	91926	(619) 566-8600
Daryl Griffis Acoustics, Inc.		Contractors	4958 Naples St	San Diego	CA	92110	(619) 275-3060
Davenport Development Corp		Contractor - Specialty	6210 Marindustry Dr	San Diego	CA	92121	858-455-9966
Davey Tree Surgery		Landscape Service	1500 N Mantua St	Kent	OH	44240-5193	(925) 443-1723
David Brown		Contractor - Specialty	632 Cerro St	Encinitas	CA	92024	760-436-2138
David Read Fine Carpentry & Construction		Contractors	4715 Murat Pl	San Diego	CA	92117	(619) 981-1804
David Tepper	Dba Affordable Affairs Catering	Catering	2940 Lincoln Ave.	San Diego	CA	92104	(619) 282-1064

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Davis Framing Inc		Framing	8103 Commercial St	La Mesa	CA	91942	(619) 463-2394
Davis Stone Inc		Masonry	519 Venture St	Escondido	CA	92029	(760) 745-7881
DBC Construction Inc.		Contractors	6805 Nancy Ridge Dr	San Diego	CA	92121	(858) 450-6990
DBG Plumbing, Inc.	Dba: Dg Plumbing	Plumbing and A/C	206 Greenfield Dr Ste G	El Cajon	CA	92020	(619) 447-9497
Decidedly Better, Llc.		Catering	3645 28Th St	San Diego	CA	92104	(619) 299-0889
Del Mar Epoxy		Contractors	12950 Carmel Creek Rd #104	San Diego	CA	92130	
Del Mar Fabrication & Welding		Contractors	1745 Olivenhain Rd	Encinitas	CA	92024	(760) 753-2266
Del Mar Glass, Inc.		Contractor - Specialty	2120 Jimmy Durante Blvd 116	Del Mar	CA	92014	858-755-7505
Del Mar Glazing and Construction		Contractors	2126 Jimmy Durante Blvd. C""	Del Mar	CA	92014	(858) 847-0163
Del Mar Restoration		Contractors	PO Box 2646	Del Mar	CA	92014	(858) 793-3456
Del Mar Screens		Contractors	12295 Caminito Mira Del Mar	San Diego	CA	92130	(858) 356-9994
Demcon Concete Contractors		Contractor - Specialty	13795 Blaisdell Place #202	Poway	CA	92064	858-748-5090
Demdo Drywall Co., Inc.		Contractor - Specialty	419 S Marshall Avenue	El Cajon	CA	92020	619-590-0025
Dependable Plumbing		Plumbing and A/C	12120 Tech Center Dr Ste A	Poway	CA	92064	(858) 486-5111
Design Builders		Contractors	4092 Wooster Dr.	Oceanside	CA	92056	(760) 726-8564
Dewey Pest Control		Pest Control	4623 Desoto St	San Diego	CA	92109	(619) 272-3611
DH Maintenance Services		Contractors	2320 Back Nine St	Oceanside	CA	92056	(760) 721-0440
DHF Inc.	Dba Low Voltage Systems	Electrical	12315 Oak Knoll Rd #110	Poway	CA	92064	(858) 699-4379
Diamond Environmental		Environmental Services	807 E Mission Rd	San Marcos	CA	92069	(760) 744-7191
Dick Miller, Inc.		Contractors	930 Boardwalk Ste G	San Marcos	CA	92078	(760) 471-6842
Dig Dug Underground, Inc.		Contractors	21475 Webster Ave	Perris	CA	92570	(951) 242-2202
Dillon Waterproofing Inc		Contractor - Specialty	PO Box 675211	Rancho Santa Fe	CA	92067	858-759-7590
Dirt Cheap Demolition,Inc.		Grading & Demolition	171 Mace Street Ste A-4	Chula Vista	CA	91911	(619) 426-9598
Divine Pet Care		Pet Grooming	12950 Ilene St	Poway	CA	92064	(858) 397-8338
Dixon'S Grading And Paving		Contractor - Specialty	140 S Stetson Ave #341	Hemet	CA	92139	877-734-9766
Dm Concrete Pumping Inc		Plumbing and A/C	30610 Rolling Hills Dr	Valley Center	CA	92082	(760) 749-4200
Domingo Landscaping		Landscaping	1309 E Mission Ave.	Escondido	CA	92027	760-755-7483
Dominguez Drywall		Drywall	566 Hilldale Circle	Vista	CA	92083	(760) 455-3946
Don Hubbard Contracting		Contractors	1015-A Linda Vista Dr	San Marcos	CA	92078	(760) 736-3241
Double E Electric		Electrical	26741 Portola Pkwy #672	Foothill Ranch	CA	92610	(949) 830-9473
Draves Pipeline Incorporated		Contractor - Specialty	PO Box 1051	Bonsall	CA	92003	760-728-7094
DRP Construction		Contractors	1093 Crest Dr	Encinitas	CA	92024	(760) 944-4409
DS Waters Of America, Inc.	Dba Sparkletts	Food Service - Delivery	2615 Temple Heights Dr	Oceanside	CA	92056	(770) 933-1400
Duke's Root Control, Inc.		Plumbing and A/C	1020 Hiawatha Blvd. West	Syracuse	NY	13204	(315) 472-4781
Dunnington Inc		Contractor - Specialty	9883 Pacific Heights Blvd Ste E	San Diego	CA	92121	858-457-9100
Duran Maintenance		Landscaping	15624 Via Monte Cristo	San Diego	CA	92127	858-336-0487
Dynamic Cabinet Designs		Woodworking	10215 Canoga Ave	Chatsworth	CA	91311	(818) 700-1658
Dywidag Systems International		Contractor - Specialty	2154 E South St	Long Beach	CA	90805	562-531-6161
E & J Custom Granite Inc.		Masonry	795 North Ave # E	Vista	CA	92083	(760) 940-1633
Eco Caters		Catering	4934 Voltaire Street	San Diego	CA	92107	858-246-6129
Ecoscape Industries		Landscape Service	13275 Benchley St	San Diego	CA	92014	(858) 275-8969
Ehmcke Sheet Metal Corp		Contractors	840 W 19Th St	National City	CA	91950	(619) 477-6484
Ekedal Concrete, Inc.		Contractor - Specialty	220 Newport Center Drive #11-288	Newport Beach	CA	92660	949-729-8082
El Comal Antojitos Bar & Grill		Catering	3946 Illinois St	San Diego	CA	92104	(619) 294-8292
El Indio Shops		Catering	3695 India St	San Diego	CA	92103	619-299-0385
El Nopalito, Inc.		Catering	560 Santa Fe Dr	Encinitas	CA	92024	760-436-5775
Elecore Inc		Contractor - Specialty	2215 Via Cerro	Riverside	CA	92509	951-779-3200
Electronic Homes Inc		Electrical	1954 Bienvenido Ln	Escondido	CA	92026	(760) 420-9898
Elegant Events Catering Co		Catering	7516 Mesa College Dr	San Diego	CA	92111	(858) 278-5691
Elpidio V. Castro		Landscaping	PO Box 963	Cardiff By The Sea	CA	92007	760-846-3148
Elston Masonry, Inc.		Masonry	1422 Santa Margarita Dr	Fallbrook	CA	92028	(760) 728-3593
Emilio & Sons Inc.		Contractor - Specialty	2255 Micro Place	Escondido	CA	92029	760-233-1112

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Endurance Masonry		Masonry	534 N Cedros Ave	Solana Beach	CA	92075	(760) 801-7203
Epic Catering		Catering	4942 Cape May Ave	San Diego	CA	92107	(619) 223-8200
Escondido Landscape Inc	Dba Nature Designs	Landscape Service	116 Hannalei Dr	Vista	CA	92083	(760) 945-4321
Events By Christopher	Christopher Durst Productions, Llc	Catering	1574 Caminito Solidago	La Jolla	CA	92037	(858) 454-2267
Evt Pool Service		Pool Or Spa Care	3850 Elijah Ct #934	San Diego	CA	92130	(858) 792-7103
Expo Tile & Marble		Contractor - Specialty	2278 Del Mar Heights Rd	Del Mar	CA	92014	858-259-8453
Exterior Restoration Specialists		Painting	970 W Valley Pkwy Ste #404	Escondido	CA	92025	(760) 466-1205
F & S Asphalt Seal And Sripe,		Contractor - Specialty	PO Box 789	Fallbrook	CA	92088	760-723-3533
F.J. Brawley Concrete Inc.		Contractors	1868 National Ave	San Diego	CA	92113	(619) 231-7778
Farmers Bros. Co.		Food Service - Delivery	20333 S Normandie Ave	Torrance	CA	90502	(610) 787-5200
Farwest Insulation Contracting		Contractor - Specialty	1375 S Acacia Ave Ste A	Fullerton	CA	92831	714-520-5600
Fast Water Heater, Inc.		Plumbing and A/C	275 N Marshall Ave.	El Cajon	CA	92020	(800) 454-8955
Feast On This Inc.		Catering	8395 Camino Santa Fe Ste D	San Diego	CA	92121	(858) 597-0740
Ferandell Tennis Courts, Inc		Contractor - Specialty	2120 Jimmy Durante Blvd 102	Del Mar	CA	92014	858-350-3444
Ferguson Builders Inc.		Contractors	14066 Saddlewood Dr.	Poway	CA	92064	(858) 335-2893
Ferguson Construction		Contractors	1925 Glasgow	Cardiff	CA	92007	(760) 634-3106
Finish Right		Contractor - Specialty	1115 Camelia St	Oceanside	CA	92054	760-754-8428
Finishing Touch Millwork, Inc		Contractor - Specialty	1240 Activity Drive Suite C	Vista	CA	92081	760-598-3200
Fireplaces Plus Inc.		Masonry	1833 Diamond St # 101	San Marcos	CA	92078	(760) 752-7789
Fishel Company, The		Contractor - Specialty	1366 Dublin Rd	Columbus	OH	43215	760-967-6930
Flores Landscape		Landscape Service	3609 Grand Ave	San Marcos	CA	92078	(760) 271-4676
Fortney & Weygandt Inc.		Contractors	31269 Bradley Rd	North Olmsted	OH	44070	(440) 716-4000
Foshay Electric Co, Inc		Contractors	7676 Engineer Rd	San Diego	CA	92111	(858) 277-7676
Four By Four Construction		Contractors	1055 Torrey Pines Rd/Ste 201	La Jolla	CA	92037	(858) 456-0610
Four Seasons Foods		Catering	4230 Voltaire Ave	San Diego	CA	92107	(619) 221-0087
Fox Direct		Landscape Service	40740 Symphony Park	Murrieta	CA	92562	(951) 294-0315
Franke Contracting Inc.		Contractors	9040 Carroll Wy #8	San Diego	CA	92121	(858) 689-8799
Fredricks Electric, Inc.		Contractor - Specialty	2211 Newcastle Ave	Cardiff	CA	92007	760-436-9172
Friendly Fence		Fencing	1273 Linda Vista Dr	San Marcos	CA	92078	(760) 304-4611
Frontier Fence Co		Fencing	1314 W Mission Rd	Escondido	CA	92029	(760) 745-5609
Fry Specialty Company		Contractor - Specialty	10735 Prospect Avenue	Santee	CA	92071	619-562-8446
Fuller Paving & Development, Inc.		Paving	536-Aoliveave	Vista	CA	92083	(760) 451-0181
G.F. Whillock Grading		Contractors	1298 Distribution Way Vista	Vista	CA	92083	(760) 599-6800
Ga Abell Dba Precision Electric		Contractor - Specialty	8137 Winter Gardens Blvd	Lakeside	CA	92040	619-390-2991
GA Abell Dba Precision Electric Company		Electrical	8137 Winter Gardens Blvd	Lakeside	CA	92040	(619) 390-2991
Gallant Electric Co.		Electrical	1735 Ivy Rd	Oceanside	CA	92054	(760) 722-9016
Gamboa Inc.	Dba Metro Steel	Contractors	10520 Kenny St	Santee	CA	92071	(619) 448-9995
Garcia Landscape Services		Landscape Service	10236 Moorpark St	Spring Valley	CA	91978	(619) 670-6746
Gardner Pool Company, Inc		Pool Or Spa Care	801 Gable Way	El Cajon	CA	92020	(619) 593-8880
Gary's Construction, Inc.		Contractors	2517 Dos Lomas	Fallbrook	CA	92028	(760) 639-4456
Gciuffa, Inc.	Dba Giuseppe Restaurants & Fine Catering	Catering	700 Prospect	La Jolla	CA	92037	(858) 581-2205
General Coatings Corporation		Contractor - Specialty	6711 Nancy Ridge Dr	San Diego	CA	92121	858-587-1277
Genesis Innovations, Llc		Contractor - Specialty	4004 Medford Drive	Loveland	CO	80538	970-635-9315
Geoff O'Brien		Contractor - Specialty	11414 Caminito Garcia	San Diego	CA	92131	
Geogrid Retaining Wall Systems, Inc.		Contractors	1295 Distribution Way	Vista	CA	92081	(760) 509-0079
George Mosher		Contractors	5153 Muir Ave	San Diego	CA	92107	(619) 851-0185
George W. Weir Asphalt Construction, Inc.		Paving	610 Metcalf	Escondido	CA	92025	(760) 746-0232
GMG Stone, Inc		Masonry	165 Denny Way	El Cajon	CA	92020	(619) 258-6899

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Gold Coast Skylights, Inc.		Roofing	1338 N Melrose Dr. # I	Vista	CA	92083	(760) 758-2864
Gold Crown Landscape		Landscape Service	1245 Morning View Dr 131	Escondido	CA	92026	(760) 297-0468
Golden State Fence Company		Fencing	870 N Main St	Riverside	CA	92501-1016	(909) 788-5620
Goodwin Construction Inc		Contractors	12985 Caminito Pt	Del Mar	CA	92014	(619) 755-3522
Gorden Benjamin Anguiano		Landscape Service	471 Cole Ranch Rd	Encinitas	CA	92024	
Gordon E. Copeland, Inc.	Dba Mission Roofing Co	Roofing	443 Venture St	Escondido	CA	92029	(760) 747-3205
Great Western Roofing		Contractor - Specialty	1005 Honey Suckle	San Marcos	CA	92078	760-712-7525
Green Garden Landscape & Design		Landscape Service	4910 Cass St	San Diego	CA	92109	(858) 483-8802
Green Leaf Tree Care, Inc		Landscape Service	1011 Dearborn Dr	San Diego	CA	92154	(619) 575-1332
Green Paradise Company		Landscape Service	910 Camino Del Mar Ste A	Del Mar	CA	92014	(858) 793-1809
Green Rainbow Landscape		Landscaping	1352 Hedionda Ave	Vista	CA	92081	760-941-4134
Greg Stein Tree Service		Contractor - Specialty	6947 Weller Street	San Diego	CA	92122	858-636-0903
Gregory D Caso Plumbing, Inc	Dba Apex Plumbing	Plumbing and A/C	361 Engel Street	Escondido	CA	92029	(760) 839-0428
GSC Concrete Construction, Inc.		Masonry	1413 W Industrial Ave	Escondido	CA	92029	(760) 739-9177
Guardian Waterproofing		Contractors	8622 Argent St #D	Santee	CA	92071	(619) 448-3700
Gus Ballas Plumbing, Inc.		Plumbing and A/C	12320 Oak Knoll Road Suite A	Poway	CA	92064	(858) 679-6899
Gus-Of-All-Trades		Handymen	5019 Biltmore St.	San Diego	CA	92117	(858) 775-0353
H & H Demolition, Inc.		Grading & Demolition	2182 El Camino Real #105	Oceanside	CA	92054	(760) 439-3652
H.A. Casillas Landscape		Landscape Service	3498 Wallace Dr	Bonita	CA	91902	(619) 267-1343
H.G. Smith Lumber Co., Inc.		Contractors	6144 Federal Blvd	San Diego	CA	92114	(619) 263-3131
H.R. Schlegel & Sons, Inc		Gardening	PO Box 488	La Jolla	CA	92038	858-273-0740
Hai Long Inc	Dba Juan's Tree Service	Landscape Service	1150 Camino Del Mar #D	Del Mar	CA	92014	(619) 916-7280
Hammond & Masing Gen Contractors Inc		Contractors	26157 Jefferson Ave Ste A	Murrieta	CA	92562	(858) 536-2440
Hanna Plumbing & Supply Co.		Plumbing and A/C	643 S Santa Fe Ave	Vista	CA	92083	(760) 726-2002
Hanson Aggregates Pacific		Contractors	Southwest, Inc. 9229 Harris Plant Rd	San Diego	CA	92163	(858) 277-5481
Happy Dogs Inc Dba Tlc Dog Care		Pet Grooming	20177 Colina Encantada Wy	Escondido	CA	92029	(760) 744-6565
Har-Bro Construction& Consulting, Inc		Contractors	455 54Th St Ste 101	San Diego	CA	92114	(619) 398-0200
Hardesty Drywall, Inc.		Contractor - Specialty	19451 Split Rock Road	Ramona	CA	92065	760-788-0220
Hardesty Electric		Electrical	11131 Calgary Wy	Valley Center	CA	92082	(760) 751-1249
Harris Concrete, Inc.		Masonry	8265 Commerical St	La Mesa	CA	91942	(619) 464-0152
Hawthorne Masonry		Contractor - Specialty	2760 Secret Lake Lane	Fallbrook	CA	92028	760-723-3441
Hayward Baker Inc.		Contractor - Specialty	1780 Lemonwood Dr	Santa Paula	CA	93060	805-933-1331
Henderson Heating & Air Conditioning, Inc		Plumbing and A/C	3047 Degen Dr	Bonita	CA	91902	(619) 479-1028
Hernandez Landscaping		Landscaping	PO Box 2285	Oceanside	CA	92051	760-805-2057
Hernandez Roofing, Inc.		Contractor - Specialty	PO Box 344	San Luis Rey	CA	92068	760-721-7417
Hess Contracting, Inc.		Contractors	1024 Pine Dr	El Cajon	CA	92020	(619) 442-6333
Hidalgo Flowers		Florist	29920 Disney Ln	Vista	CA	92084	(760) 940-0414
High Quality Drywall, Inc		Drywall	2078 Montiel Rd	San Marcos	CA	92069	(760) 735-6329
Hilltop Dog Grooming		Pet Grooming	5510 Santa Margarita St	San Diego	CA	92114	(619) 922-0608
Hodad'S Jr Catering		Catering	5010 Newport Ave	San Diego	CA	92107	619-818-2243
Holcomb Enterprises Inc	Dba Ki's Resturant	Catering	2591 S Coast Hwy 101	Cardiff By The Sea	CA	92007	(760) 436-5236
Holmes Landscape Company		Landscape Service	4616 North Ave	Oceanside	CA	92056	(760) 732-3379
Homestead Sheet Metal		Contractor - Specialty	9031 Memory Lane	Spring Valley	CA	91977	619-469-4373
Hospitality Inc.	Dba Picnic People	Catering	9558 Camino Ruiz	San Diego	CA	92126	(619) 586-2121
Hourani Concrete		Masonry	5014 E Mountain View Dr	San Diego	CA	92116	(858) 699-6920
Howards Rug Co. Of San Diego Inc		Contractor - Specialty	6110 Nancy Ridge Dr	San Diego	CA	92121	858-558-3939
Hume & Co. Inc		Pest Control	1949 Avenida Del Oro #102	Oceanside	CA	92056	760-598-2201
Huntamer Inc. Dba Window		Contractor - Specialty	10054 Prospect Avenue	Santee	CA	92071	619-258-0515
I Love Tacos Catering		Catering	6187 University Avenue	San Diego	CA	92115	619-303-8567

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Ideal Mechanical Co.		Contractors	8524 Ablette	Santee	CA	92071	(619) 449-6116
Impressions "Culinary Art At Its Finest"		Catering	3430 Lake Circle Dr.	Fallbrook	CA	92028	(858) 342-3366
Independence Grading & Excavating		Grading & Demolition	329 Festival Dr	Oceanside	CA	92057	(619) 701-2868
Indulge Contemporary Catering		Catering	5131 Santa Fe St.	San Diego	CA	92109	858-270-5700
Industrial Skylights, Inc.		Contractor - Specialty	133 Newport Drive Ste C.	San Marcos	CA	92069	760-434-6001
Infused Food Inc		Catering	521 Mar Vista Dr	Solana Beach	CA	92075	(858) 829-1789
Ink Electric		Contractor - Specialty	7845 North Ave	Lemon Grove	CA	91945	619-644-1684
Inland Plaster Inc.		Contractor - Specialty	38372 C Innocation Ct. #301	Murrieta	CA	92563	951-698-2335
Integrity Concrete		Contractors	540 Opper St	Escondido	CA	92029	(760) 744-4444
Island Construction Corp.		Contractor - Specialty	2683 Via De La Valle G605	Del Mar	CA	92014	858-273-3100
Islanders Luau		Catering	23811 Washington Ave	Murrieta	CA	92562	951-677-3148
J & D Construction		Contractors	4782 Caminito Borrego	San Diego	CA	92130	(858) 449-8603
J & L Insulation		Insulation Services	10035 Maine Ave	Lakeside	CA	92040	(619) 561-8632
J & S Asphalt Pavina		Contractor - Specialty	PO Box 600525	San Diego	CA	92160	619-528-0593
J.D. Paving, Inc.		Contractor - Specialty	1412 Barham Dr	San Marcos	CA	92078	760-233-2980
J.G. Tate Fire Prtection Systems, Inc		Fire Sprinklers	13691 Danielson St Ste C	Poway	CA	92064	(858) 486-0900
J.M. Keystone, Inc		Contractors	2709 Via Orange Wy	Spring Valley	CA	91978	(619) 466-9876
J.M. Vanderham Plumbing		Plumbing and A/C	4489 Jutland Dr	San Diego	CA	92117	(858) 568-1399
J.P. Witherow Roofing Co.		Roofing	1001 Morena Blvd.	San Diego	CA	92110	(619) 297-4701
J.T. Wimsatt Contracting Co, Inc		Contractors	28064 Avenue Stanford Unit B	Valencia	CA	91355	(661) 775-8090
J.T.H. Inc.		Contractor - Specialty	31459 Sonoma Lane	Temecula	CA	92591	909-731-2271
J.W. Groswith Custom Building		Contractors	PO Box 1016	Del Mar	CA	92014	(858) 481-0740
J.W. Strauss Llc		Catering	514 Via De La Valle Ste. 100	Solana Beach	CA	92075	858-792-9090
Ja. Williams Masonry		Contractor - Specialty	542 Valley Drive	Vista	CA	92084	858-688-3353
Jackson & Blanc		Contractor - Specialty	7929 Arjons Dr	San Diego	CA	92126	858-831-7900
Jackson'S Concrete Cutting		Contractor - Specialty	970 W Valley Parkway #658	Escondido	CA	92025	760-801-5221
Jamar Electric San Diego Inc.		Electrical	9830 Prospect Ave. Ste. D	Santee	CA	92071	(619) 448-7770
James Chambers Construction		Contractors	208 Barbara Ave	Solana Beach	CA	92075	(858) 806-2039
Janks Construction Inc		Contractors	7887 Dunbrook Rd #H	San Diego	CA	92126	(858) 693-9700
Javier Garcia		Landscaping	1822 Cottage Grove Dr	Encinitas	CA	92024	760-943-1670
Jay's Pool & Spa		Pool Or Spa Care	40120 Lucero Dr	Temecula	CA	92592	
Jensen Drywall & Stucco		Contractors	3714 Lynda Pl	National City	CA	91950	(619) 267-0705
Jeremiah Nolan Roofing		Roofing	3612 36Th St	San Diego	CA	92104	(619) 212-6645
Joe Tree Service		Landscaping	PO Box 1151	Vista	CA	92083	760-945-0936
John A. Spring Dba Spring View Window and Door		Contractors	8733 N Magnolia Ave. #104	Santee	CA	92040	(619) 562-8266
John C. Read Construction Co.		Contractors	2126 Jimmy Durante Blvd	Del Mar	CA	92014	(858) 453-2100
John Griffin Construction		Contractors	244 Jason Ct	Corona	CA	92879	(951) 278-2377
John Little Catering		Catering	24270 Hwy 78 Ramona	Ramona	CA	92065	760-787-1077
John Smith Earthworks, Inc.		Grading & Demolition	5216 Anna Ave	San Diego	CA	92110	(619) 276-0946
John Stevenson Plumbing &		Contractor - Specialty	6351 Corte Del Abeto A-108	Carlsbad	CA	92011	760-918-0456
Johnson Controls Inc		Contractor - Specialty	PO Box 591	Milwaukee	WI	53210	414-524-2674
Jose Ybarra Dba Catering Express		Catering	987 Camino Del Sol	Chula Vista	CA	91910	619-843-3241
Juana Corporation	Dba Jondel	Contractors	9216 Abraham Wy Ste A	Santee	CA	92071	(619) 596-8916
Junglescapes, Inc.		Landscape Service	25929 N Centre City Pkwy	Escondido	CA	92026	(760) 747-8733
Jw Floor Covering, Inc.		Flooring	9881 Carroll Centre Rd	San Diego	CA	92126	(858) 536-8565
Jwg Cabinet		Contractor - Specialty	2721 Plumeria Drive	Carlsbad	CA	92009	760-214-5383
K & G Asphalt Paving & Seal Coating		Paving	204 N Citrus	Vista	CA	92083	(800) 237-2970
K.H. Minton Painting		Painting	2518 Camino Lagarto St	Alpine	CA	91901	(619) 445-8148

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Kacon, Inc.		Contractor - Specialty	PO Box 1630	El Centro	CA	92244	619-208-7748
Katman Inc. Ba Culinary	Concepts	Catering	8575 Commerce Ave	San Diego	CA	92121	(858) 530-1885
Kb Construction		Contractors	23025 Arjo Ln	Ramona	CA	92065	(760) 788-1504
Keena Construction		Contractors	PO Box 490	Poway	CA	92074	(858) 576-1364
Kevin Mills Landscape		Landscape Service	427 Zuni Dr	Del Mar	CA	92014	(858) 755-1331
Kevin Vint Masonry & Concrete		Masonry	2201 San Dieguito Dr	Del Mar	CA	92014	(858) 481-7033
Keystone Roofing, Inc.		Roofing	2133 Valley Rd	Oceanside	CA	92056	(760) 730-9888
Khf Inc.	Dba U.S. Building & Development	Contractors	243 N Hwy 101 #19	Solana Beach	CA	92075	(858) 350-0710
Kiks Mobile Detailing		Auto Detailing	6992 Torrey Santa Fe Rd	San Diego	CA	92129	(858) 405-5373
King Fine Woodworking		Contractor - Specialty	512 West California Ave #203	Vista	CA	92083	760-639-0231
Kirby Concrete		Masonry	7048 Ivy St	Carlsbad	CA	92009	(760) 603-1952
Kmp Plumbing		Plumbing and A/C	435 S Cedros Ave	Solana Beach	CA	92075	(858) 259-9300
Knott's Pest Control, Inc.		Pest Control	5141 Guild St	La Mesa	CA	91942	(619) 466-0464
Knudsen Roofing, Inc.		Roofing	1657 Silvertree Lane	Escondido	CA	92027	(760) 747-1864
Koloa Pacific Construction, Inc.		Contractor - Specialty	12527 Kirkham Court	Poway	CA	92064	858-486-7800
Kyne Construction		Contractors	9215 Briette Pl	El Cajon	CA	92021	(619) 749-2400
L & G Cable Construction		Contractors	2776 E Miraloma Ave	Anaheim	CA	92806	(714) 630-6174
L R Design Works		Landscape Service	140 12Th Street	Del Mar	CA	92014	(858) 531-2724
L&C Tile		Masonry	3465 Laurashawn Ln	Escondido	CA	92026	(760) 743-6516
L.D. Richards Co. Builder		Contractors	1701 Grand Ave	Del Mar	CA	92014	(858) 793-2682
La Costa Auto Detailing		Auto Detailing	740 Avenida Codorniz	San Marcos	CA	92069	(760) 944-9500
La Taquiza		Catering	1413-Bjayken Way	Chula Vista	CA	91911	(619) 426-7368
Lady Di's Elegant Events		Catering	3231 Petunia Ct	San Diego	CA	92117	(619) 370-6374
Lalley Construction		Contractors	927 Highland Dr.	Solana Beach	CA	92075	(858) 481-1462
Lance Patterson Plastering		Contractor - Specialty	3164 Old Oaktree Ln	Escondido	CA	92026	760-741-5382
Land Doctor Landscaping		Landscape Service	3525 Del Mar Heights #225	San Diego	CA	92130	(760) 432-6000
Land Graphics Enterprises, Inc		Landscaping	5752 Kearny Villa Road	San Diego	CA	92123	858-541-1600
Lang Homes		Contractors	150 Basil St	Encinitas	CA	92024	(760) 419-5103
Lara Air Conditioning		Contractor - Specialty	312 E Barioni Blvd	Imperial	CA	92251	760-352-2619
Larry Methvin Installation		Contractor - Specialty	501 Keltering Drive	Ontario	CA	91761	909-605-6468
Las Olas Inc.		Catering	2655 S Highway 101	Cardiff	CA	92007	760-942-1860
LBL Constructors		Contractors	2180 Summit Dr	Escondido	CA	92025	(760) 740-0103
LCI Backhoe Service		Contractors	508 N Cedros Ave	Solana Beach	CA	92075	(858) 243-4637
Leathem & Company		Contractor - Specialty	1524 Avenida De Las Adelsas	Encinitas	CA	92024	858-342-0966
Lekos Electric Inc.		Electrical	1370 Pioneer Way	El Cajon	CA	92020	(619) 447-7661
Lemler Plastering		Contractor - Specialty	3657 Foxley Dr	Escondido	CA	92027	760-741-5410
Leong-Kuba Sea Products, Inc.		Food Service - Delivery	6230 Marindustry Dr	San Diego	CA	92121	(858) 693-7561
Linear Electric Inc.		Electrical	7676 Engineer Rd Ste L	San Diego	CA	92111	(858) 277-5303
Lloyd Pest Control		Pest Control	935 Sherman St	San Diego	CA	92110	(619) 298-9865
Ln Iron Co.		Contractor - Specialty	2740 S Santa Fe Ave Ste 103	San Marcos	CA	92069	760-727-7548
Lockett Enterprises, Inc.	Dba American Arbor Tree Service	Landscape Service	3041 Industry St	Oceanside	CA	92054	(760) 754-3166
Logan Grapp Construction		Contractor - Specialty	PO Box 300062	Escondido	CA	92030	760-741-2600
Los Cabos, L.L.C.		Catering	12955 El Camino Real Ste G-7	San Diego	CA	92130	858-792-2226
Louis Beacham Construction		Contractors	405 Via Del Norte	La Jolla	CA	92037	(858) 454-2999
Luna Caprese Lp		Catering	3870 Valley Centre Drive #301	San Diego	CA	92130	858-720-8777
Luzaich Striping Inc.		Paving	14219 Olde Hwy 80	El Cajon	CA	92021	(619) 443-7755
M. J. Ratzlaff Inc		Contractor - Specialty	PO Box 21088	El Cajon	CA	92021	619-444-1310
M.B. Oliver Inc.	Dba Agricultural Pest Control	Pest Control	9917 Maine Ave	Lakeside	CA	92040	(858) 536-2999
M.C. Napoli		Contractor - Specialty	PO Box 2176	Carlsbad	CA	92018	619-818-2557
M.R. Contreras Construction, Inc		Contractors	226 Landis Ave	Chula Vista	CA	91910	(619) 422-4747
M.W. Reid Welding, Inc.	Dba So. Bay Welding	Welding Or Ironwork	781 O'Connor St	El Cajon	CA	92020	(619) 401-5880

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Mabon Sheet Metal		Contractor - Specialty	1930 S Coast Highway	Oceanside	CA	92054	760-757-0187
Macario Carrasco Landscape & Maintanence		Landscape Service	3949 Wooster Dr	Oceanside	CA	92056	(760) 310-4036
Macgray Electric Inc.		Electrical	2718 Waterbury Way	Carlsbad	CA	92010	(760) 802-0140
Magnesite Specialties Inc.		Contractor - Specialty	8686 Production Ave Ste A	San Diego	CA	92121	619-578-4186
Maile Construction		Contractors	2348 La Costa Ave #216	Carlsbad	CA	92009	(760) 707-4543
Maison Llc		Catering	716 S Los Angeles St #404	Los Angeles	CA	90014	(213) 612-0181
Major Plumbing Co. Inc.		Plumbing and A/C	1914 Mission Rd	Escondido	CA	92029	(760) 749-7383
Make It Shine Mobile Detailing		Auto Detailer	PO Box 270821	San Diego	CA	92198	858-848-5507
Malcolm Drilling Co., Inc.		Contractor - Specialty	4926 N Azusa Cyn Road	Irwindale	CA	91706	626-338-0035
Marathon Construction Corporation		Contractors	10108 Riverford Road	Lakeside	CA	92040	(619) 276-4401
Marco Crane & Rigging		Equipment Suppliers	10168 Channel Rd	Lakeside	CA	92040	(619) 938-8081
Marcotte & Hearne Builders, Inc		Contractors	11696 Sorrento Valley Rd # 200	San Diego	CA	92121	(858) 793-4101
Mariano's Landscaping		Landscape Service	3231 Madison St Apt B	Carlsbad	CA	92008	(760) 720-2867
Mariner Mechanical		Mechanical	1135 Garnet Ave Ste 13	San Diego	CA	92109	(858) 483-3568
Mark A. Miville Dba Executive Detail		Auto Detailing	10607 Birch Bluff Ave.	San Diego	CA	92131	(858) 493-0612
Mark Bell Construction		Contractors	26637 Brickenridge	Murrieta	CA	92563	(858) 442-3378
Mark Stangl Construction, Inc		Contractor - Specialty	715 H Avenue	Coronado	CA	92118	619-250-2706
Martel Electric Inc.		Contractor - Specialty	9932 Prospect Avenue # 146	Santee	CA	92071	619-258-5848
Martin Roofing Co. Inc.		Roofing	6608 Federal Blvd.	Lemon Grove	CA	91945	(619) 287-6860
Martino's Catering		Catering	4140 Morena Blvd #A	San Diego	CA	92117	(858) 490-9005
Masco Contractor Services Of California, Inc.		Contractors	13000 Kirkham Way Suite 101	Poway	CA	92064	(386) 304-2222
Matzinger Construction, Inc.		Contractor - Specialty	PO Box 2555	Rancho Santa Fe	CA	92067	760-943-1034
Maxim Crane Works, L.P.		Contractor - Specialty	6232 Fairmount Ave	San Diego	CA	92120	619-563-7910
Mcbride Door & Hardware Inc		Contractors	13811 Danielson St	Poway	CA	92064	(858) 842-4480
Mckinley Equipment Corp		Contractor - Specialty	17611 Armstrong Ave	Irvine	CA	92614	949-261-9222
Mclean Door& Trim Aka Windows		Windows	9260 Isaac St Ste E	Santee	CA	92071	(619) 596-5416
Mega Fume, Inc.		Pest Control	PO Box 17716	Anaheim	CA	92817	714-447-4640
Metro Catering		Catering	6625 Top Gun St #9	San Diego	CA	92121	(858) 626-2800
Metro Detailing Specialists		Auto Detailing	8910 University Center Ln P-4	San Diego	CA	92122	(858) 623-8568
Mhs Heating & Air Conditioning,		Contractor - Specialty	525 N Andreasen Drive N	Escondido	CA	92029	760-744-9450
Michael Demich Const	Dba Rancho Pacific Construct	Contractors	7592 Vista Rancho Court	Rancho Santa Fe	CA	92067	(619) 972-6106
Middle Way Power, Inc.		Contractor - Specialty	3928 Conde Street #2	San Diego	CA	92110	619-249-9361
Mike And Mike Construction Inc		Contractor - Specialty	2603 Figueroa	San Diego	CA	92109	858-273-3150
Mike Carroll Plumbing, Inc.		Plumbing and A/C	1938 Willow Ridge Dr	Vista	CA	92081	(760) 714-6272
Mike Lloyd Excavating Inc.		Contractors	626 Lower Springs Rd	Fallbrook	CA	92028	(760) 728-8661
Mike Lloyd Excavating, Inc.		Grading & Demolition	PO Box 1994	Fallbrook	CA	92088	(760) 728-8661
Mill Brothers Fine Woodworking, Inc.		Woodworking	9356 Wheatlands Rd Ste C	Santee	CA	92071	(619) 562-6944
Millennium Fire Protection Corp		Fire Sprinklers	101 Copperwood Wy Ste H	Oceanside		92058	(760) 722-2722
Mirstone Plastering, Inc.		Plastering	1374 Presioca St	Spring Valley	CA	91977	(619) 464-1123
Mission Iron Shop		Welding Or Ironwork	255 S Bent Ave #89	San Marcos	CA	92078	(760) 744-3740
Mission Pools Of Escondido Inc.		Pool Or Spa Care	755 W Grand Ave	Escondido	CA	92025	(760) 743-2605
Mission Solar Electric		Contractor - Specialty	4153 Falcon St	San Diego	CA	92103	619-895-2953
Mission Valley Roofing, Inc.		Contractor - Specialty	9908 Prospect Ave	Santee	CA	93417	619-449-9744
Monsoon Investments	Dba Bombay	Catering	3960 5Th Ave	San Diego	CA	92103	(619) 297-7777
Motivational Systems Inc		Contractor - Specialty	2200 Cleveland Ave	National City	CA	91950	619-474-8246
Mountain Valley Waterproofing		Coatings	10054 Mesa Ridge Ct. #102	San Diego	CA	92121	(858) 643-9001
Mr. Rooter Plumbing Rds Inc		Plumbing and A/C	5605 Kearny Villa Rd	San Diego	CA	92123	(858) 976-6837
Mr. Scape, Inc.		Landscaping	11490 Shadow Ranch Rd	La Mesa	CA	91941	619-660-9187

Firm Name	Firm Name (Addl)	Business Type	Firm Address	City	State	Zipcode	Phone Number
Mv Coffman Construction		Contractors	1028 C St	Encinitas	CA	92024	(760) 942-1197
My Plumber San Diego Llc		Plumbing and A/C	7150 Convoy Ct	San Diego	CA	92111	(619) 667-5500
Myron Plumbing Inc.		Plumbing and A/C	5218 Castle Hills Dr	San Diego	CA	92109	(858) 488-1522
National Air Inc.	Dba Nat'L Air & Energy	Plumbing and A/C	2053 Kurtz St	San Diego	CA	92110	(619) 299-2500
National Construction Rentals		Equipment Suppliers	15319 Chatsworth St	Mission Hills	CA	91345	(818) 221-6057
Natural Energy		Contractors	147 S Vinewood St	Escondido	CA	92029	(760) 743-6400
Neal Electric Inc.		Contractor - Specialty	13250 Kirkham Way	Poway	CA	92064	858-513-2525
Nelson-Lyman Painting, Inc.		Painting	659 Union St	Encinitas	CA	92024	(858) 775-3624
Nestle Waters North America Inc.		Food Service - Delivery	601 Potrero Grande	Monterey Park	CA	91755	(203) 531-4100
New Image Const.		Contractor - Specialty	14115 Margarita Lane	Valley Center	CA	92082	619-599-4660
New Image Painting		Contractor - Specialty	734 Grand Ave	Spring Valley	CA	91977	619-464-8362
New Vision Drywall Inc.		Contractor - Specialty	4204 Jutland Drive A2	San Diego	CA	92117	858-490-8888
Newest Construction		Contractors	7847 Dunbrook Rd Ste C	San Diego	CA	92126	(858) 537-0774
Nicholas Grant Corporation		Contractor - Specialty	5370 Eastgate Mall	San Diego	CA	92121	858-642-7500
North Cities Landscape Maintenance		Landscape Service	PO Box 3143	Rancho Santa Fe	CA	92067	(858) 259-6162
North County Deck & Patio		Contractor - Specialty	448 W Citracado Parkway	Escondido	CA	92025	760-658-6249
North County Pools		Pool Or Spa Care	19915 Fountian Del Este	Escondido	CA	92029	(760) 439-5802
NRM Builders		Contractors	200 Olive Ave #104	Vista	CA	92083	(760) 631-2602
Nu Flow America Inc		Plumbing and A/C	7150 Carroll Rd	San Diego	CA	92121	(888) 683-5691
OJ Insulation Lp		Contractors	600 S Vicent Ave	Azusa	CA	91702	(626) 812-6070
On Fire Food Company		Catering	PO Box 230306	Encinitas	CA	92023	760-212-2048
One Tripp Tree Service Inc		Landscape Service	3880 Begonia St	San Diego	CA	92121	(858) 571-3710
P. Vernon Smith Landscaping		Landscape Service	5224 Jack Pine Ct.	Oceanside	CA	92056	(760) 390-1483
Pacific Backflow Co., Inc.		Plumbing and A/C	1690 Ord Wy	Oceanside	CA	92056	(760) 639-4000
Pacific Coast Concrete		Masonry	10625 Prospect Ave	Santee	CA	92071	(619) 938-3811
Pacific Drilling Co.		Contractors	5220 Anna Ave. Ste A	San Diego	CA	92110	(619) 294-3682
Pacific Grading & Erosion Control, Inc.		Grading & Demolition	10541 A Prospect Ave	Santee	CA	92071	(619) 938-3514
Pacific Pebbles Inc, Dba Life		Contractor - Specialty	770 Gateway Center Drive	San Diego	CA	92102	619-262-8600
Pacific Rim Mechanical		Contractor - Specialty	7655 Convoy Ct.	San Diego	CA	92111	858-974-6500
Pacific West Catering		Catering	841 Eugenie Ave	Encinitas	CA	92024	(760) 846-0913
Pacifica Contracting, Inc		Contractors	PO Box 90668	San Diego	CA	92169-2668	(858) 483-9988
Paella Valenciana		Catering	14471 Yazoo St	San Diego	CA	92129	(858) 672-2243
Pal General Engineering Inc		Contractor - Specialty	2615 Camino Del Rio South Ste 308	San Diego	CA	92108	619-677-3949
Palapa Kings Inc.		Contractor - Specialty	305 Airport Road	Oceanside	CA	92058	760-757-7296
Palomar Grading & Paving, Inc.		Paving	2150 N Center City Prkwy Ste C	Escondido	CA	92026	(760) 743-3007
Palomar Specialists, Inc.		Contractor - Specialty	1608 Madrone Glen	Escondido	CA	92027	760-747-5080
Palomar Transit Mix Co.		Paving	849 W Washington Ave	Escondido	CA	92025	(760) 737-3486
Pamper Your Pet		Pet Grooming	6340 Citracado Cir	Carlsbad	CA	92009	(858) 794-1822
Par Electrical Contractors Inc		Electrical	2410 Auto Parkway	Escondido	CA	92029	(760) 291-1192
Paradise Custom Pools, Inc.		Contractors	PO Box 900454	San Diego	CA	92190	(619) 286-0009
Paragon Hospitality Enterprises,		Catering	1221 Vista Way	Oceanside	CA	92054	760-433-2633
Paramount Pools Inc		Pool Or Spa Care	PO Box 694	Ramona	CA	92065	(760) 788-0120
Paramount Scatfold, Inc.		Contractor - Specialty	16525 S Avalon Blvd.	Carson	CA	90746	310-818-8155
Paramount Tile Inc		Masonry	2054 Cecilia Cir	Corona	CA	92881	(951) 736-4570
Park Care		Gardening	PO Box 1005	Carlsbad	CA	92010	760-729-0890
Parker Construction		Contractors	3202 Via Arcilla	San Diego	CA	92111	(858) 278-7922
Parsons Field & Boyd		Catering	1197 Mustang Dr	Santa Ynez	CA	93460	805-569-5747
Partitions & Accessories Co Of Ca Inc.		Contractors	10320 Camino Santa Fe. Ste G	San Diego	CA	92121	(858) 597-9551
Party Time Tacos		Catering	6975 Saranac St.	San Diego	CA	92115	858-610-5933

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Pat & Oscars		Catering	1959 Palomar Oaks Wy Ste 300	Carlsbad	CA	92011	858-695-8500
Paul Hock	Dba H.C.Co./Hock Construction Co.	Contractors	1125 Camino Del Mar Ste E	Del Mar	CA	92014	(858) 259-5102
Pavement Recycling System Inc		Paving	121 N Main St	Riverside	CA	92501	(951) 682-1091
Paws Express Mobile Dog Grooming		Pet Grooming	1780 S El Camino Real Unit C205	Encinitas	CA	92024	(760) 707-9779
Pbc Residential		Contractor - Specialty	1560 W Lambert Rd.	Brea	CA	92821	714-278-0488
PDI Coatings Inc.		Contractors	13125 Danielson St. #111	Poway	CA	92064	(858) 679-0742
PDM Electric Inc		Electrical	33964 Verbena Ave	Murrieta	CA	92563	(760) 715-4280
Peartrees Catering, Inc.		Catering	2243 Venus St	San Diego	CA	92154	(619) 575-5500
Pella Architectural		Contractor - Specialty	PO Box 9427	Brea	CA	92822	714-256-0565
Pellegrino Stonecare		Contractor - Specialty	7965 Silverton Ave. #1302	San Diego	CA	92126	858-530-8185
Performance Auto Detail		Auto Detailing	9150 La Larga Vista	Spring Valley	CA	91977	(619) 665-9288
Personal Touch Dining		Catering	9888 Waples St	San Diego	CA	92121	(619) 593-2296
Peter Madsen Builder, Inc.		Contractors	7618 Reposado Dr	Carlsbad	CA	92009	(760) 943-9766
Peter Van Gaale & Sons Construction		Contractors	35375 Briggs Rd	Murrieta	CA	92563	(951) 677-8112
Phil's B.B.Q.		Catering	3750 Sports Arena Blvd	San Diego	CA	92110	(619) 814-0050
Photon Solar Construction		Contractor - Specialty	3323 Vista Norte	Escondido	CA	92025	760-556-8170
Pierce Productions Inc.		Catering	805 Grandview Drive	Maryville	TN	37803	865-789-2666
Pinnacle Holdings Group Inc.	Dba Pinnacle Landscape Company	Landscape Service	2200 S Fairview St	Santa Ana	CA	92704	(714) 434-7472
Pinnacle Security Ca, Lp		Contractor - Specialty	1290 S Sandhill Rd	Orem	UT	84058	801-437-1020
Pipes Plumbing, Inc.		Plumbing and A/C	1145 Law St	San Marcos	CA	92069	(760) 434-3067
Piteco's Landscaping		Landscape Service	11455 Hadar Dr	San Diego	CA	92126	(858) 831-0273
Plant-Tek, Inc.		Landscape Service	20110-B Elfin Forest Ln	Escondido	CA	92029	(760) 471-6420
Plaster Playhouse Dba Elijah's Restaurant		Catering	8861 Villa La Jolla Dr.	San Diego	CA	92037	(858) 955-1461
Plotke Plumbing		Plumbing and A/C	321 La Costa Avenue	Encinitas	CA	92024	(760) 632-0461
Polished Image Mobile Detailing		Auto Detailing	772 Anns Wy	Vista	CA	92083	(760) 724-4233
Pool 1		Pool Or Spa Care	1150 Socorro Ct	San Diego	CA	92150	(858) 472-2122
Pool N Spa Center Inc	Dba Pacific Sun Pool	Pool Or Spa Care	8550 Production Ave	San Diego	CA	92121	(619) 271-8822
Portillo Concrete Inc.		Contractors	3528 Harris St	Lemon Grove	CA	91945	(619) 466-4639
Power Plus Solutions Corp.		Contractor - Specialty	1210 Red Gum Ave	Anaheim	CA	92806	760-839-9436
Powerhouse Construction		Contractor - Specialty	PO Box 104	Del Mar	CA	92014	619-972-6428
Pratt Equipment Corp		Contractor - Specialty	PO Box 230026	Encinitas	CA	92023	760-310-9095
Precision Tech Connect		Contractor - Specialty	1441 N Cuyamaca Street	El Cajon	CA	92020	619-588-0800
Premier Contracting Group, Inc.		Contractors	25691 Atlantic Oean Dr # B-10	Lake Forest	CA	92630	(949) 305-0900
Premier Food Services Management Group, Inc.	Dba Carriage Trade Catering	Catering	7966 Arjons Drive	San Diego	CA	92126	(858) 621-5151
Prestige Concrete		Masonry	13507 Midland Rd	Poway	CA	92064	(858) 679-2772
Prestige Pools		Contractor - Specialty	970 W Valley Parkway #179	Escondido	CA	92025	760-747-6700
Primary Mechanical, Inc.		Contractor - Specialty	5345 Timken Street Ste I	La Mesa	CA	91942	619-698-7751
Prime Electrical Services		Electrical	480 Enterprise St	San Marcos	CA	92078	(760) 471-6634
Pristine Auto Detailing		Auto Detailing	2426 Manchester Ave	Cardiff By The Sea	CA	92007	
Pro Trees		Landscape Service	523 Vulcan	Encinitas	CA	92024	(760) 753-4800
Pro Wall Lathe Plaster, Inc		Contractor - Specialty	360 S Spruce Street	Escondido	CA	92025	760-480-9001
Professional Floor Installation		Contractor - Specialty	2005 Cassia Road 212	Carlsbad	CA	92009	760-310-8869
Prola Drilling		Contractors	700 Second St Ste E	Encinitas	CA	92024	(760) 815-3621
Prowall Drywall, Inc.		Drywall	345 N Market Place	Escondido	CA	92029	(760) 747-8556
Pure-Flo Water Co		Food Service - Delivery	7737 Mission Gorge Rd	Santee	CA	92071	(619) 596-4111
Quality Reinforcing Inc.		Contractor - Specialty	13275 Gregg St	Poway	CA	92064	858-748-8400
Quality Rooter and Plumbing, Inc.		Plumbing and A/C	1798 Pepper Villa Dr.	El Cajon	CA	92021	(619) 438-3267

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R & R Custom Builders		Contractor - Specialty	119 Aberdeen Dr #5	Cardiff By The Sea	CA	92007	760-436-0187
R F Mckenna Construction		Contractors	507 S Cedros Ave	Solana Beach	CA	92075	(858) 755-2290
R T D Construction, Inc.		Contractors	2216 Soto St	San Diego	CA	92107	(619) 225-0240
R. Montanez Contracting Inc. Dba		Contractor - Specialty	117 7th Street #A	Chula Vista	CA	91911	619-571-4755
R.E. Hughes Construction Inc.		Contractors	1556 Cerro De Orro	Vista	CA	92084	(760) 727-4125
R.E. Johnson Inc. Dba Solana Mar Landscape		Landscape Service	239 N Acacia Ave.	Solana Beach	CA	92075	
R.J.A. Masonry		Masonry	10057 Pebble Beach Dr	Santee	CA	92071	(619) 449-4573
R.L.P. Company, Inc.		Contractor - Specialty	3246 F Street	San Diego	CA	92102	619-231-9377
Ramona Pacific Plumbing Inc		Plumbing and A/C	1171 Ash St	Ramona	CA	92065	(760) 518-8889
Ranch & Coast Security, Inc.		Electrical	9540 Waples St #D	San Diego	CA	92121	(858) 657-9100
Ranch Catering, Inc.		Catering	3560 Mount Acadia Blvd	San Diego	CA	92111	(858) 492-9100
Rancho Environmental Services, Inc.		Environmental Services	PO Box 3372	Vista	CA	92085	(760) 726-2405
Rancho Santa Fe Stone & Garden	Dba Santa Fe Water Gardens	Masonry	16081 San Dieguito Rd #G1A	Rancho Santa Fe	CA	92067	(858) 759-7553
Rancho Solar, Inc.		Roofing	13354 Tining Dr.	Poway	CA	92064	(858) 677-6527
Randy's Landscaping		Landscape Service	817 Via Barauero	San Marcos	CA	92069	
Rapid Plumbing Inc		Plumbing and A/C	1036 W Taft Ave	Orange	CA	92865	(800) 997-2743
Rassac Air Systems		Plumbing and A/C	4734 Lowell Ave	La Crescenta	CA	91214	(818) 957-2970
Ray F. Brookhart Concrete, Inc.		Masonry	2911 State St P	Carlsbad	CA	92008	(760) 434-3082
Ray White Cement		Masonry	3108 Highway 76	Fallbrook	CA	92028	(760) 728-0170
RC Roofing		Roofing	132 N El Camino Real #285	Encinitas	CA	92024	(858) 274-8920
RCHS Dba Doggy Day Care		Pet Grooming	389 Requeza St	Encinitas	CA	92024	(760) 436-3311
Rec Solar Inc.		Contractor - Specialty	8545 Arjons Dr #H	San Diego	CA	92126	619-727-2981
Redflex Traffic Systems, Inc.		Contractors	23751 N 23Rd Ave Ste # 150	Phoenix	AZ	85085-1854	(480) 998-8431
Reef Concrete Inc.		Masonry	3646 Cheshire Ave	Carlsbad	CA	92010	(760) 613-3361
Rens Mansory Inc		Masonry	PO Box 461210	Escondido	CA	92046	(760) 738-8827
RG Bar Services		Food Service - Delivery	247 Rancho Dr #C	Chula Vista	CA	91911	(858) 395-3043
Richard Thaisz Construction		Contractors	1403 Caminito Septimo	Cardiff	CA	92007	(760) 635-1640
Richardson Construction		Contractors	1421 Devin Drive	Fallbrook	CA	92028	(760) 644-0571
Richardson Steel. Inc.		Contractor - Specialty	9102 Harness St	Spring Valley	CA	91977	619-697-5892
Rigo's Garden Maintenance		Gardening		Solana Beach	CA	92075	760-942-1358
Rima Construction		Contractors	15791 Rockfield Blvd #A	Irvine	CA	92618	(949) 305-2930
Robert Buck Construction Corp.		Contractors	2620 Mallorca Pl	Carlsbad	CA	92009	(858) 449-3636
Robert's General Engineering		Contractors	2855 Progress Pl	Escondido	CA	92029	(760) 746-9935
Robinson Company Contractors		Contractors	8871 Troy St	Spring Valley	CA	91977	(619) 697-6040
Roel Construction Co.		Contractors	3366 Kurtz St	San Diego	CA	92110	(619) 297-4156
Rolling Wheel Restaurant Inc.	Dba Wagon Wheel	Catering	427 W Mission Ave	Escondido	CA	92025	(760) 745-3227
Romeo Villarreal Dba Baja Sessions	Catering	Catering	462 W Los Angeles Dr	Vista	CA	92083	(760) 639-6439
Ron Lea Construction		Contractor - Specialty	1453 Buena Vista Way	Carlsbad	CA	92008	760-230-8942
Ronnie's Repair Service		Handymen	9286 Colorama Wy	Lakeside	CA	92040	(619) 390-3117
Rotisserie Affair Catering		Catering	PO Box 927473	San Diego	CA	92192	(858) 578-8891
Royal Industries, Inc.	Dba Royal Cabinets	Woodworking	1299 E Phillips Blvd	Pomona	CA	91766	(909) 629-8565
Royalty Staffing		Catering	1528 India Street Suite 318	San Diego,Ca	21	-2466	619-940-7524
RSI Roofing		Roofing	8285 Buckhorn St	San Diego	CA	92111	(858) 278-7200
RT Chimney Sweeping		Plumbing and A/C	11376 Camarosa Ct	San Diego	CA	92126	(858) 566-8599
Rubio Turf, Inc		Landscaping	10531 4S Commons Dr #465	San Diego	CA	92127	877-271-1697
Russell Handy Painting		Painting	2056 Belrush Ln	Cardiff By The Sea	CA	92007	(858) 414-8423
Rwp Plumbing		Contractor - Specialty	9216 Birchcrest Blvd	Santee	CA	92071	619-719-3834
S.F. Electrical Services, Inc.		Electrical	2337 Catalina Ave	Vista	CA	92084	(760) 724-3666
S.O.S. Rooter		Plumbing and A/C	3485 Pickwick St	San Diego	CA	92102	(619) 231-6670
Saddleback Waterproofing		Coatings	22521 Avenida Empresa # 125	Rancho Santa Margarita	CA	92688	(949) 589-3422

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Sal Hernandez Tree Service		Gardening	2014 Montecito Road	Ramona	CA	92065	760-525-3247
Sammy's Woodfired Pizza		Catering	12925 El Camino Real	San Diego	CA	92130	(858) 456-8018
Sampo Engineering, Inc.		Contractor - Specialty	1034 Second Street	Encinitas	CA	92024	760-436-0660
San Diego Catering Concepts		Catering	570 Marina Pkwy	Chula Vista	CA	91910	(619) 223-1722
San Diego Construction Welding		Welding Or Ironwork	1167 Sweetwater Ln	Spring Valley	CA	91977	(619) 462-9087
San Diego Fence Co., Inc.		Fencing	7920 Engineer Rd	San Diego	CA	92111	(858) 279-8442
San Diego Fume Works Company		Pest Control	PO Box 4542	Oceanside	CA	92052	760-758-1869
San Diego Greencare Inc.	Dba Western Tree Service	Landscape Service	6549 Mission Gorge Rd # 336	San Diego	CA	92120-2306	(619) 421-7119
San Diego Paella		Catering	14531 Yukon St	San Diego	CA	92129	858-204-0413
San Diego Stucco, Inc.		Contractors	625 North Avenue	Vista	CA	92083	(619) 238-0455
San Diego Welding Services		Welding Or Ironwork	1815 Main St Ste B	San Diego	CA	92113	(619) 994-6098
San Gabriel Insulation, Inc	Dba Usi Of San Diego	Insulation Services	930 Armorlite Dr	San Marcos	CA	92069	(760) 736-4115
Sanchez Roofing Co., Inc.		Contractor - Specialty	3528 Citrus Street	Lemon Grove	CA	91945	619-464-6137
Sancon Engineering, Inc.		Contractor - Specialty	5841 Engineer Drive	Huntington Beach	CA	92649	714-891-2323
Sandpoint Construction		Contractors	736 Van Nuys St	San Diego	CA	92109	(858) 488-2661
Santa Fe Plaster		Contractor - Specialty	620 Alpine Way	Escondido	CA	92029	760-747-9950
Santana Electric		Contractor - Specialty	PO Box 1231	El Cajon	CA	92022	619-252-1510
Schelect Inc. Dba Schmidt Electric		Electrical	203 S Rancho Santa Fe Rd	Encinitas	CA	92024	(760) 753-3855
Schilling Corporation		Contractors	697 Greenfield Dr	El Cajon	CA	92021	(619) 579-6500
Schnetz Landscape Inc.		Landscape Service	427 Venture St	Escondido	CA	92029	(760) 591-3453
Schott Roofing Inc.		Roofing	225 E Carmel St 1	San Marcos	CA	92078	(760) 744-6450
Schreiber Framing, Inc.		Contractor - Specialty	8657 Harbison Canyon Rd	Alpine	CA	91901	619-722-1230
Sean's Painting		Painting	300 Carlsbad Village Dr Ste 108A-257	Carlsbad	CA	92008	(760) 613-1336
Seaport Electric		Electrical	43185 Corte Almeria	Temecula	CA	92592	(951) 302-4500
Seaside Roofing		Contractor - Specialty	330 Barbara Ave	Solana Beach	CA	92075	858-481-4993
Secret Gardens Landscape		Landscape Service	2683 Via De La Valle G-703	Del Mar	CA	92014	(951) 212-0580
Secure Roof, Inc.		Roofing	976B andreasen Dr	Escondido	CA	92029	(760) 546-0254
Select Electric		Electrical	1425 Presioca St	Spring Valley	CA	91977	(619) 460-6060
Select Electric		Contractor - Specialty	PO Box 1457	Spring Valley	CA	91977	619-460-6060
Sequoia Environmental		Environmental Services	543 Nantucket Ct	Leucadia	CA	92024	(760) 753-9126
Sequoia Solar		Contractors	343 S Highway 101	Solana Beach	CA	92075	(858) 259-7659
Serrano Family Flooring & Design		Flooring	24116 Golden Mist Dr	Murrieta	CA	92562	(760) 716-6077
Servicemaster By Rapid Response		Contractor - Specialty	5780 Chesapeake Ct	San Diego	CA	92123	858-715-0842
Servpro Of Del Mar		Contractor - Specialty	2658 Del Mar Heights Rd #537	Del Mar	CA	92014	858-695-6242
Seth Hoenig		Contractors	2714 Madison St	Carlsbad	CA	92008	(760) 434-9668
Seven-Up Bottling Co.		Food Service - Delivery	5770 Morehouse Dr	San Diego	CA	92121	(858) 457-3177
Shane Masonry & Concrete Inc.		Masonry	10540 Burned Oak Lane	Escondido	CA	92026	(760) 743-0155
Sheldon Site Utilities, Inc		Contractors	12255 Kirkham Rd Ste 400	Poway	CA	92064	(858) 486-8004
Sherwood Mechanical, Inc.		Mechanical	6630 Top Gun St	San Diego	CA	92121	(858) 679-3000
Shoreline Landcare Inc	Dba Landcare Logic	Landscape Service	8148 Ronson Rd Ste A	San Diego	CA	92111	(858) 560-8555
Sigge Malkvist Inc.	Dba Sigge's Paving	Paving	4540 Kearny Villa Road Suite 202	San Diego	CA	92123	(619) 278-3444
Silver Carpet		Flooring	119 Aberdeen Dr Ste 1	Cardiff By The Sea	CA	92007	(760) 632-1770
Simplex Grinnell		Contractor - Specialty	3568 Ruffin Road South	San Diego	CA	92123	
Simply Unforgettable		Catering	9932 Mesa Rim Rd Ste A	San Diego	CA	92121	619-521-1000
Simunec Construction & Design, Inc		Contractors	10208 Prospect Ave	Santee	CA	92071	(619) 562-6266
Sin Nombre Inc. Dba Miho Gastro		Catering	4641 Ohio St. #205	San Diego	CA	92116	619-867-4295
Sirius Mechanical Inc		Mechanical	11824 Graham St	Moreno Valley	CA	92557	(951) 640-5098
Slice Of Heaven Catering		Catering	3830 Oceanic Drive Ste 411	Oceanside	CA	92056	(760) 721-1054
Smith Brothers Construction		Contractors	444 South Cedros Ave	Solana Beach	CA	92075	(858) 350-1445
Smokehouse Catering		Catering	1220 E Mission Road	San Marcos	CA	92069	800-737-3614

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So Cal Construction & Consulting Service Inc	Dba So Cal Ccs	Contractors	1030 Knoll Park Ln	Fallbrook	CA	92028	(760) 723-8907
So Cal Jetting & Plumbing		Plumbing and A/C	38368 Via Calorin	Murrieta	CA	92562	(800) 377-9400
So.Cal.Soil & Testing, Inc		Engineering	6280 Riverdale St	San Diego	CA	92160-0627	(619) 280-4321
Son Energy Inc.		Contractor - Specialty	525 Opper St.	Escondido	CA	92029	760-738-4066
South Coast Cabinet, Inc		Contractor - Specialty	755 Pinefalls Avenue	Walnut	CA	91789	909-594-3089
South Coast Edible Garden Design		Landscape Service	460 Camino Del Mar #6	Del Mar	CA	92014	(858) 463-6007
South Coast Specialty Systems		Contractor - Specialty	7966 Arjons Dr Ste C	San Diego	CA	92126	858-673-7267
South Coast Waterproofing		Coatings	7966 Arjons Dr Ste C	San Diego	CA	92126	(858) 673-7267
Southcoast Heating and Air		Plumbing and A/C	2664 Vista Pacifica Dr	Oceanside	CA	92056	(760) 941-7000
Southwest Millwork, Inc.		Woodwork	7925 Dunbrook Rd Ste A & B	San Diego	CA	92126	(858) 578-4640
Southwest Signal Service		Contractor - Specialty	397 Raleigh Ave	El Cajon	CA	92020	619-442-3343
Spanky's Portable Services, Inc.		Environmental Services	555 Enterprise Street	Escondido	CA	92029	(760) 731-5252
Specialized Painting Services		Painting	2737 Windmill View Rd	El Cajon	CA	92020	(619) 258-7234
Specified Resistant Coatings		Contractor - Specialty	630 Faith Avenue	Cardiff By The Sea	CA	92007	760-942-8353
Spring Valley Insulation Contr		Contractor - Specialty	3151 Bancroft Dr	Spring Valley	CA	91977	619-463-0266
Star Of India Restaurant		Catering	3860 Valley Centre Drive # 401	San Diego	CA	92130	858-792-1111
Statewide Stripes		Paving	7320 Mission Gorge Rd	San Diego	CA	92120	(858) 560-6887
Stauffer's Landscape Inc		Landscape Service	411 Business Center Ct	Redlands	CA	92373	(909) 798-1391
Steele Roofing Inc.		Roofing	227 Pawnee Street/ 101	San Marcos	CA	92078	(760) 744-3400
Stephanie Emerson Catering		Catering	144 S Orange	El Cajon	CA	92020	(619) 218-3658
Sterling Corporate Custom Elevator		Mechanical	340 W 26Th St Ste I	National City	CA	91950	(619) 477-9654
Steve Duich, Inc.	Dba H&D Construction Co.	Contractors	PO Box 12859	El Cajon	CA	92022	(619) 444-6118
Steve Maskal Construction		Contractors	29249 Hydrangea St.	Murrieta	CA	92563	(760) 505-0297
Stillman Aire Serv Heating & A/C Inc.		Plumbing and A/C	7200 Ponto Dr. Ste. A	Carlsbad	CA	92011	(760) 431-8266
Stir Fresh		Catering	17120 Bernardo Center Dr	San Diego	CA	92128	(858) 385-0020
Stratton Specialty Coatings		Coatings	5280 Riley Street	San Diego	CA	92110	(619) 294-2600
Stremicks Heritage Foods Llc		Food Service - Delivery	2790 Kurtz St	San Diego	CA	92110	(714) 775-5000
Strickland Bros Carpet Cleaning		Carpet Cleaning	5504 Gala Ave	San Diego	CA	92120	(619) 234-1591
Stumpmasters Tree Service		Landscape Service	13826 Little Pond Rd	Valley Center	CA	92082	(760) 749-5330
Sullivan Solar Power		Roofing	7964 Arjons Dr.	San Diego	CA	92126	(858) 271-7758
Sun Coast Drywall		Drywall	4401 Twain Ave Ste 3	San Diego	CA	92120	(619) 641-7695
Sundancer Pools N Spas		Contractor - Specialty	728 Inspiration Ln	Escondido	CA	92025	760-489-5850
Sundown Plumbing		Contractor - Specialty	6965 El Camino Real	Carlsbad	CA	92009	760-942-3696
Sunrise Landscape		Landscape Service	140 7Th St	Del Mar	CA	92014	(619) 602-3181
Sunset Lawn & Sprinklers		Landscaping	3233 Via Arcilla	San Diego	CA	92111	858-277-1855
Sunset Roofing Co., Inc.		Contractor - Specialty	8721 Magnolia Ave #C	Santee	CA	92071	619-258-7015
Sunshine Mobile Dog Grooming		Pet Grooming	3355 Bernardo Ln	Escondido	CA	92029	(760) 480-6739
Sunstone Durante Lessee, Inc		Catering	120 Vantis #350	Aliso Viejo	CA	92656	858-792-5200
Sunwest Electric, Inc.		Contractor - Specialty	3064 E Miraloma Avenue	Anaheim	CA	92806	714-630-8700
Superior Ready Mix Concrete, L.P.		Masonry	1508 W Mission Rd	Escondido	CA	92029	(760) 745-0556
Supreme Catering & Events		Catering	1512 29th St	San Diego	CA	92102	619-549-4228
Sure-Fit Screens & Services Llc		Contractors	130 Calle Del Pacifico	San Clemente	CA	92672	(949) 498-9412
Susan R. Landers		Landscape Service	306 N W. El Norte Prkwy # 469	Escondido	CA	92026	(760) 580-4253
Sutherlin Contracting, Inc.		Contractors	2007 Muira Lane	El Cajon	CA	92019	(619) 588-8895
Sutton Tree Service Inc		Landscape Service	2236 S Santa Fe Ave	Vista	CA	92084	(760) 941-3992
Sweig General Contracting, Inc		Contractors	5328 Metro St	San Diego	CA	92110	(619) 325-6333
Swinson Electric		Electrical	4885 Ronson Ct Ste L	San Diego	CA	92111	(858) 874-2920
Sylvester Roofing Co., Inc.		Roofing	812 W Washington St	Escondido	CA	92025	(760) 743-0048
System Paving Inc.		Paving	7925 Silverton Ave Ste 501	San Diego	CA	92121	(949) 263-8300

Firm Name	Firm Name (Addl)	Business Type	Firm Address	City	State	Zipcode	Phone Number
T S Stone And Tile Inc.		Contractor - Specialty	14677 Via Bettona Ste 110 #232	San Diego	CA	92127	
T.N. Janitorial Services		Contractor - Specialty	1150 Camino Del Mar #D	Del Mar	CA	92014	858-792-7416
T.R. Stevens Construction		Plumbing and A/C	1004 E Walnut # C	Fullerton	CA	92831	
Tacos El Gordo De Tijuana Bc, Inc.		Catering	1351 Third Ave	Chula Vista	CA	91911	(619) 424-7465
Tacos El Panson		Catering	4433 El Cajon Blvd.	San Diego	CA	92115	619-241-2222
Tazz Lighting , Inc.		Contractor - Specialty	6179 El Camino Real , Suite 100	Carlsbad	CA	92011	760-603-2020
Tegriscape		Landscape Service	1310 Park Hill Ln	Escondido	CA	92025	(760) 743-8857
Tekton Master Builders		Contractors	1010 So. Coast Hwy. 101 Suite 108 Bldg.A	Encinitas	CA	92024	(760) 436-3333
Telford Jones, Inc.		Contractor - Specialty	25920 Iris Ave. Ste.13A -400	Moreno Valley	CA	92551	951-486-0337
Terra Aqua, Inc.		Contractor - Specialty	3691 54Th Street	San Diego	CA	92105	619-795-8800
Terra Restaurant& Catering		Catering	1270 Cleveland Ave Ste K	Del Mar	CA	92014	(619) 293-7088
Test America Drilling Corp.		Contractors	7888 Othello Ave	San Diego	CA	92111	(858) 496-9654
The Abbey Catering		Catering	3361 Sandrock Rd.	San Diego	CA	92103	(619) 218-1970
The Brickman Group, Ltd		Contractor - Specialty	6218 Fairmount Ave	San Diego	CA	92120	619-281-8887
The Crest Company, Inc	Dba Crest Pools	Pool Or Spa Care	1265 Rubenstein Ave	Cardiff By The Sea	CA	92007	(760) 942-5391
The Culinary Wizard, Llc		Catering	PO Box 230350	Encinitas	CA	92024	760-479-1746
The Flavor Chef		Catering	6753 Corintia St	Carlsbad	CA	92009	760-685-2433
The French Gourmet, Inc.	Dba: French Gourmet	Catering	960 Turquoise St	San Diego	CA	92109	(858) 488-1725
The French Tradition		Contractor - Specialty	13700 Crenshaw Blvd	Gardena	CA	90249	310-719-9977
The Jason Jarvis Building Corp		Contractor - Specialty	16856 Saintsbury Glen	San Diego	CA	92127	858-206-1799
The Masonry Group Ca So, Lp		Masonry	8188 Lincoln Ave # 100	Riverside	CA	92504	(951) 509-5300
The Pool Doctor		Contractor - Specialty	PO Box 114	Bonsall	CA	92003	760-745-9069
The Wild Thyme Company		Catering	7163 Construction Ct Ste B	San Diego	CA	92121	(858) 527-0226
Thomas Construction		Contractors	11835 Carmel Mountain Rd Ste 1304-210	San Diego	CA	92128	(619) 778-5929
Thyssen Elevator Corporation		Mechanical	5745 Kearney Villa Rd Ste B	San Diego	CA	92123	(858) 569-9091
TLB Construction		Contractors	30354 Twain Dr	Menifee	CA	92584	(619) 954-6314
TLC Plumbing Inc.		Contractor - Specialty	4569 Mission Gorge Place E	San Diego	CA	92120	619-667-0234
T-Mar Construction Inc	Dba: Martin Corporation	Contractors	2340 Meyers Ave	Escondido	CA	92029	(760) 489-7010
Toast		Catering	7000 Saranac Street #72	La Mesa	CA	91942	858-208-9422
Tom Nelson, General Contractor		Contractors	236 24Th St.	Del Mar	CA	92014	(858) 735-6857
Tony Keller Custom Painting		Contractor - Specialty	40086 Cannes Court	Temecula	CA	92591	619-885-6958
Tony'S Landscaping		Landscaping	9941 Lake Canyon Ct	Santee	CA	92071	619-854-3111
Torrey Pines Landscape Co., Inc		Landscape Service	5560 Eastgate Mall	San Diego	CA	92121	(858) 454-1433
Town & Country Landscape		Landscaping	PO Box 231561	Encinitas	CA	92024	760-744-5090
Town & Country Tile		Masonry	3684 Via Baldona	Oceanside	CA	92056	(619) 972-8040
Traveline Woodworks, Inc.		Woodworking	3810 Oceanic Dr Ste 207	Oceanside	CA	92056	(760) 757-0200
Tree Of Life Tree Service, Inc.		Landscape Service	4591 Mt La Platta Pl	San Diego	CA	92117	(619) 560-6622
Tri City Fence Company, Inc.		Fencing	825 W Washington St	Escondido	CA	92029	(760) 233-9890
Trueline Woodworks, Inc.		Contractor - Specialty	3810 Oceanic Dr Ste 207	Oceanside	CA	92056	760-757-0200
Truewall Builders		Contractor - Specialty	7794 San Benito Street	Highland	CA	92346	909-793-0721
Trugreen Landcare #6241	A General Partnership	Landscape Service	770 Metcalf St	Escondido	CA	92025	(901) 597-8229
Truly Nolen Of America, Inc.		Pest Control	913 Rancheros Dr	San Marcos	CA	92069	(760) 744-7631
Turner Construction Company		Contractors	9330 Scranton Rd Ste 300	San Diego	CA	92121	(858) 320-4040
Turner Thomas Design Building, Inc.		Contractors	2010 Jimmy Durante 210	Del Mar	CA	92014	(858) 755-1662
U. S. Foodservice, Inc.	San Diego Division	Food Service - Delivery	1201 Park Center Dr	Vista	CA	92083	(760) 599-6220
Ulitmate Xscapes Pool & Spa		Contractors	301 Santa Helena	Solana Beach	CA	92075	(858) 717-2815
Underwater Earth Movers, Inc.		Contractor - Specialty	2410 Ne 106Th Street	Vancouver	WA	98686	360-573-2160
United Drywallers Inc		Contractor - Specialty	PO Box 1083	Lakeside	CA	92040	619-270-7201
United Pacific Services		Landscaping	120 E La Habra Blvd Suite 107	La Habra	CA	90631	562-691-4600
United Subcontractors Inc.		Contractor - Specialty	930 Armorlite Drive	San Marcos	CA	92069	760-736-4115

Firm Name	Firm Name (Addl)	Business Type	Firm Address	City	State	Zipcode	Phone Number
Universal Construction		Contractors	5745 Kearny Villa Road	San Diego	CA	92123	(858) 278-3320
V & H Perry, Inc.		Contractor - Specialty	205 W 35th St #K	National City	CA	91950	619-472-2112
Valleycrest Landscape Maint		Landscape Service	8500 Miramar Pl	San Diego	CA	92121	(858) 458-1900
Vanguard Fire Protection Inc		Contractor - Specialty	925 Poinsettia Avenue #11	Vista	CA	92081	760-727-8540
Vet2You, Inc		Pet Grooming	13546 Mango Dr	Del Mar	CA	92014	(619) 997-9789
Viemeister Construction		Contractors	1607 Tennis Match Wy	Encinitas	CA	92024	(858) 204-7684
Vina & Co.		Catering	1444 Pioneer Way #11	El Cajon	CA	92020	619-888-4495
Vinyl Pro Fence		Fencing	8440 Eastgate Ct #233	San Diego	CA	92121	(800) 605-4029
Vista Plumbing Inc		Contractor - Specialty	623 S Santa Fe #C	Vista	CA	92083	760-758-2345
Visual Mobile Detailing		Auto Detailing	13644 Catawba Dr	Poway	CA	92064	(858) 212-1438
Visual Tint & Detail		Auto Detailer	12604 Carmel Country Rd #15	San Diego	CA	92130	858-212-1438
Vulcan Materials Co. - Western Div		Paving	3200 San Fernando Rd	Los Angeles	CA	90065	(213) 258-2777
Walt Wehsener Dba Think Electric		Electrical	5002 Santa Fe St Ste B	San Diego	CA	92109	(858) 274-1150
Walter Anderson		Contractor - Specialty	1150 N Marshall Ave	El Cajon	CA	92020	619-449-3852
Wanke, Industrial, Commerical,		Contractor - Specialty	PO Box 1150	Cathedral City	CA	92235	760-327-8641
Wardell Builders, Inc.		Contractors	649 Valley Ave Ste A	Solana Beach	CA	92075-2429	(858) 793-4190
Wasserman Masonry & Stone		Contractor - Specialty	7529 Draper Avenue	La Jolla	CA	92037	858-551-7096
Waters Fine Catering		Catering	1105 W Morena Blvd	San Diego	CA	92110	(619) 276-8803
Watersedge Landscape, Inc.		Landscape Service	4255 Ruffin Rd			92125	(760) 858-1112
Weatherby Diversified Inc. Dba		Contractor - Specialty	10843 Los Vaqyeros Circle	Los Alamitos	CA	90720	
Werhanowicz Window & Door, Inc.		Windows	40678 E Benton Rd.	Hemet	CA	92544	(951) 767-3025
West Coast Appliance Service,		Contractor - Specialty	1282 Fayette St	El Cajon	CA	92020	619-557-0446
West Coast Electric Solutions Inc		Electrical	3121 Skipper St	San Diego	CA	92123	(858) 565-7897
West Coast General Corp.		Contractor - Specialty	13700 Stowe Drive Suite 100	Poway	CA	92064	619-561-4200
West Coast Undergrounding		Contractors	7929 Silverton Ave #613	San Diego	CA	92126	(858) 689-7900
Western Fire Protection, Inc		Contractor - Specialty	13630 Danielson St	Poway	CA	92064	858-513-4949
Western Foundations & Shoring, Inc.		Contractors	10875 Highway 67	Lakeside	CA	92040	(619) 561-3510
Whillock Contracting Inc		Contractors	346 Front St	El Cajon	CA	92020	(619) 579-0700
Wichert Tile, Inc.		Masonry	1925 Encino Dr	Escondido	CA	92025	(760) 703-0947
Wildflower Catering		Catering	780 2nd Ave	El Cajon	CA	92021	619-442-7880
William J. Olson Masonry		Masonry	1510 Spring Creek Ln.	Oceanside	CA	92057	(760) 518-9184
William's Window Cleaning Co.		Power Washing/Window Cleaning	2550 E Valley Pkwy 117	Escondido	CA	92027	(760) 484-4081
Willis Contractors		Contractors	19843 Mt Israel Pl	Escondido	CA	92029	(760) 741-7118
Winfield Floor & Window		Contractor - Specialty	7031 Carroll Rd	San Diego	CA	92121	858-587-9007
Wirtz Tile & Stone, Inc.		Masonry	7932 Armour St	San Diego	CA	92111	(858) 569-3816
Woodchuck Flooring Inc		Flooring	7166 Convoy Ct	San Diego	CA	92111	(858) 279-4677
Wurfl Construction		Contractors	3413 Carleton St	San Diego	CA	92106	(858) 353-9755
Xl Plastering Inc.		Contractor - Specialty	2240 S Susan Street	Santa Ana	CA	92704	714-241-7004
Yapos Home Catering		Catering	4783 Jutland Dr	San Diego	CA	92117	(858) 581-0518
Yasuda Landscape, Inc.		Landscape Service	2419 Erie St	San Diego	CA	92110	(619) 276-5280
Your Castle Installations		Contractor - Specialty	35156 Golden Poppy Ct	Winchester	CA	92596	951-809-8035
Your Chef Robert		Catering	728 Crest Rd	Del Mar	CA	92014	(858) 837-2736
Zallar Plumbing, Inc.		Plumbing and A/C	10757 Oak Creek Dr	Lakeside	CA	92040	(619) 443-1009
Zeis Construction		Contractors	PO Box 226	Solana Beach	CA	92075	(858) 481-8003
Zimms Detail		Auto Detailing	7546 Gibraltar St A	Carlsbad	CA	92009	(760) 717-2185

OTHER WATER CONSERVATION AND POLLUTION PREVENTION TECHNIQUES

NATIVE VEGETATION AND MAINTENANCE

"California Friendly" plants or native vegetation can significantly reduce water use. These plants often require far less fertilizers and pesticides. Replacing "thirsty" plants and grasses with water efficient native plants is a great way to save water and reduce the need for potentially harmful pesticides and fertilizer.

WEED FREE YARDS

Weeds are water thieves. They often reproduce quickly and rob your yard of both water and nutrients. Weed your yard by hand if possible. If you use herbicides to control the weeds, use only the amount recommended on the label and never use it if rain is forecasted within the next 48 hours.

SOIL AMENDMENTS

Soil amendments such as green waste (e.g. grass clippings, compost, etc.) can be a significant source of nutrients and can help retain soil moisture. However, green waste can cause algae blooms and oxygen depletion if allowed to decompose in our waterways. It is important to apply soil amendments more than 48 hours prior to a predicted rainfall and till amendments into the topsoil.

IRRIGATE EFFICIENTLY

Smart Irrigation Controllers

Smart Irrigation Controllers have internal clocks as well as sensors that will turn off the sprinklers in response to environmental changes. If it is raining, too windy or too cold, the smart irrigation control sprinklers will automatically shut off.

- ***Aim your sprinklers at your lawn/gardens, not the street***
  By simply adjusting the direction of your sprinklers you can save water, prevent water pollution from runoff, keep your lawn healthy and save money.
- ***Set a timer for your sprinklers***
  Lawns/gardens absorb the water they need to stay healthy within a few minutes of turning on the sprinklers. Time your sprinklers; when water begins running off your lawn / garden, you can turn them off. Your timer can be set to water your lawn for this duration every time and prevent excess runoff.
- ***Use Low Flow Irrigation***
  Switching to low flow irrigation (drip) can help control flows and direction of irrigation runoff. It also uses less water.

City of Del Mar
Clean Water Program
www.delmar.ca.us
(858) 755-9313

Del Mar Municipal Code Section 11.30

A FRIENDLY REMINDER

Dear Resident: This is not a citation, however pollutants were found in your neighborhood storm drain / and or adjacent to your property.

Clean Water Program staff observed the following in the storm drain system (curb, street, gutter) near your home:

- ☐ Over irrigation usage / Nuisance water
- ☐ Motor oil / Antifreeze / Transmission fluids
- ☐ Cooking Grease
- ☐ Detergents / Solvents / Degreaser
- ☐ Paint / Paint products
- ☐ Home improvement / Construction debris
- ☐ Sewage
- ☐ Animal waste
- ☐ Yard waste (grass clippings, leaves, etc.)
- ☐ Uncovered dirt and / Or loose gravel piles
- ☐ Trash / Litter
- ☐ Other _____

YOU CAN PREVENT POLLUTION!

Storm Water Pollution is a problem that affects all of us in Del Mar. Rain water and urban runoff flows from our streets and yards and carry pollutants into local storm drains. These pollutants are carried untreated directly to our lagoons and beaches.

Remember:
Less Runoff = Cleaner Beaches and Oceans

WHAT HAPPENS WITH WATER RUNOFF?

Residential activities can result in water pollution.

What happens here... *...generates pollutants here.*

Pollutants accumulate on the ground (dirt, non-visible bacteria, trash, lawn clippings, oil, etc.)

Water hits the ground (rain, over-irrigation, hosing, car washing)

Water picks up the pollutants from the ground

Water carrying pollutants gets into the street/curb & gutter/ditch/storm drain

Water flows through pipes carrying pollutants

The wet dark pipes are a breeding location for bacteria

Water and pollutants exit pipes and enters the ocean/lagoon water

In heavy rain conditions, the slime/bacteria that has built up in the pipes is scoured and washes out into the ocean/lagoons, carrying bacteria

HOW CAN I HELP?

Several residential activities can result in water pollution. Here are some of the common pollutants for which you can be part of the solution:

1 Pet Waste

Pet waste carries bacteria through our watersheds that is eventually washed out to the ocean. This can pose a health risk to swimmers and surfers.

The Solution: Pick up after your pets!

2 Pesticides and Fertilizer

The same pesticides that are designed to be toxic to pests can have an equally lethal impact on our marine life. The same fertilizer that promotes plant growth in lawns and gardens can also create nuisance algae blooms. Algae can remove oxygen from the water and clog waterways when it decomposes.

The Solution: Never use pesticides or fertilizer within 48 hours of an anticipated rainstorm. Use only as much as is directed on the label, till it into the soil, and keep it off driveways and sidewalks.

3 Dirt and Sediment

Dirt or sediment can impede the flow of the stormwater and negatively impact stream habitats as it travels through waterways and deposits downstream. Pollutants can attach to sediment, which can then be transported through our waterways.

The Solution: Protect dirt stockpiles by covering them with tarps or secure plastic sheets to prevent wind or rain from washing dirt or sediment into the storm drain system. Mulch your yard.

4 Trash and Debris

Trash and debris can enter waterways by wind, littering and careless maintenance of trash receptacles. Street sweeping collects some of this trash; however, much of what is not captured ends up in our storm drain system where it flows untreated out to the ocean.

The Solution: Don't litter. Make sure trash containers are properly covered. It is far more expensive to clean up the trash in our waterways than it is to prevent litter in the first place.

5 Motor Oil / Vehicle Fluids

Oil and petroleum products are toxic to people, wildlife and plants.

The Solution: Fix any leaks from your vehicle and keep up the maintenance on your car. Use absorbent material such as cat litter on oil spills, then sweep it up and dispose of it in the trash. Recycle used motor oil at a local Household Hazardous Waste Collection Center.

6 Metals

Metals and other toxins present in car wash runoff can harm important plankton. These plankton are at the base of the aquatic food chain.

The Solution: Take your car to a commercial car wash where the wash water is captured and treated at a local wastewater treatment plant.

See back for more ways to help...

CITY OF DEL MAR JURISDICTIONAL URBAN RUNOFF MANAGEMENT PLAN FISCAL YEAR 2012 ANNUAL REPORT

SUBMITTED TO:
SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD
9174 SKY PARK COURT, SUITE 100
SAN DIEGO, CA 92123

SEPTEMBER 30, 2012

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EXECUTIVE SUMMARY

The City of Del Mar (City) developed its Jurisdictional Urban Runoff Management Program (JURMP) in 2008 to meet the requirements of the Municipal Separate Storm Sewer System (MS4) Urban Runoff Discharge Order No. R9-2007-0001 (Permit) issued to the City and the Regional Copermittees by the California Regional Water Quality Control Board, San Diego Region (Regional Board). The Permit requires the Copermittees individually, but collaboratively, to develop and implement comprehensive programs to reduce and eliminate urban runoff pollutants that are discharged from their storm drain systems to the receiving waters. The City's program and activities, designed to meet these requirements, are described in detail in the City's 2008 JURMP.

The City has prepared this JURMP Annual Report to provide a comprehensive description of all the activities conducted by the City to comply with all the requirements of the Permit, as described in the 2008 City of Del Mar JURMP. This Annual Report covers the implementation of jurisdictional activities during the period from July 1, 2011 through June 30, 2012 (reporting period).

The City was compliant with the Permit through its continued implementation of the 2008 JURMP. The City believes that the core program activities outlined in the Permit: education, inspections, monitoring, and enforcement are most effective at reducing pollutant generating activities. Within the City's program, the inspections and monitoring programs are not only implemented to identify sources, but provide the City with opportunities to educate the community. It is through the outreach and education of the general population that awareness and behaviors will change for the betterment of water quality. On the occasion where outreach is not effective at changing behaviors, the City uses its enforcement authorities to obtain compliance.

The City's diligent efforts towards best management practice (BMP) implementation are a key element for this year's report. During the fiscal year, Clean Water staff implemented a patrolling inspection program that covers municipal, commercial/industrial, and residential components within the City. With each year of program implementation, the City becomes more effective and efficient at tracking meaningful data accurately. Staff continues to refine the systems for tracking Clean Water inspections, utilizing online databases for remote access.

Some results of the City staff's implementation of the program follow:

- **48.3 tons** – The amount of debris, sediment and trash removed during Fiscal Year 2012 from the City's storm drain system thereby prevented from entering the lagoons and Pacific Ocean;
- **1,198 miles** – The number of miles of City streets swept during Fiscal Year 2012;
- **143.6 tons** – The amount of material collected from street sweeping during Fiscal Year 2012, and thereby prevented from entering the lagoons and Pacific Ocean.
- **11 patrolling inspections** – The number of inspections at 100% of inventoried commercial/industrial properties and businesses, municipal facilities, and City parks over the course of the reporting period, exceeding permit requirements.
- **118** – Number of issues/BMP deficiencies discovered by Clean Water inspectors during the commercial patrolling inspections, an increase of 117 observed deficiencies from FY 2011. All issues were resolved by the end of the reporting period, through use of the Clean Water reminder letters and follow-up inspections.

The City continued to implement an effective level of service which included the following notable activities:

- Improvements to the City's construction brochure targeted at contractors and property owners. The brochure outlines minimum BMPs to be implemented at all construction sites and stormwater requirements pertaining to the construction industry.
- Initiated a patrolling program for inspections of residential, commercial, industrial and municipal components of the Clean Water program. The inspection program exceeded Permit requirements by inspecting 100% of the inventoried commercial and industrial businesses on a monthly basis. The commercial/industrial and residential patrolling programs are resulting in fewer observations of BMP deficiencies now that the programs have been in place for over a year, suggesting BMP implementation is on the rise.
- Introduction of Clean Water reminder letters targeted at commercial and industrial business and property owners as a result of observed BMP deficiencies during the City's patrolling inspections. These educational letters were created to inform the target audience of issues noted on their site and that the deficiency must be addressed as soon as possible.
- Continued use of its electronic database designed specifically to track storm water inspections at construction sites. The database tracks projects and inspection results to ease reporting and allows City personnel to easily access the database from multiple computers.

Funding of municipal programs, including stormwater programs, continues to be an issue for all of the cities in San Diego County. The City of Del Mar is no exception. Given its economic ties to the beach and ocean, the City of Del Mar recognizes the importance of clean water and its NPDES program. During Fiscal Year 2009, the City took steps to ensure that adequate funding is available on a more permanent basis through voter-approved passage of the Clean Water Service Charge. This fee currently funds the program in its entirety.

By and large, the City continues to be very successful at implementing its Clean Water Program. Residents, local businesses, and City staff are working diligently to protect the waterways and improve water quality at the beaches and lagoons, and will continue to carry out these efforts in the future.

1. INTRODUCTION

The City of Del Mar is a coastal, primarily residential community in the northern section of San Diego County. The name Del Mar means "of the sea," and highlights the symbiotic relationship between the City and Pacific Ocean. Del Mar is surrounded by the City of Solana Beach to the north, City of San Diego to the south and east, and the Pacific Ocean to the west. As the smallest City in the region, the City covers an area of approximately two (2) square miles, with a population of approximately 4,500 residents. The main attraction of visitors is the beach and sunny weather. The annual San Diego County Fair, horse racing, and other events held at the Del Mar Fairgrounds bring in people from the surrounding area and beyond.

The City's Clean Water Program is a multi-departmental program coordinated by the City's Clean Water Manager and is an integral part of making the City of Del Mar a beautiful place to live, work and visit. Day-to-day compliance activities are conducted by staff from the Planning & Community Development Department, the Department of Public Works, the City Engineering Department, and the Department of Community Services. The Program is committed to ensuring city-wide compliance with the San Diego Regional Water Quality Control Board's Regional Municipal Stormwater Permit.

This document is the fifth annual report for the City of Del Mar's 2008 Jurisdictional Urban Runoff Management Plan (2008 JURMP) which went into effect March 25, 2008, in accordance with NPDES Order No. R9-2007-0001 (Permit) and subsequent amendments. This document covers the reporting period from July 1, 2011, through June 30, 2012.

1.1 REPORT ORGANIZATION

This Fiscal Year 2012 Annual Report has been organized into sections matching the table of contents agreed upon and submitted by the Copermittees to the San Diego RWQCB. The City has modified its reporting format to tabulate applicable data and information in an effort to streamline the report presentation. **Figure 1-1** below represents the basic format for the majority of the report.

Under the requirements of the Municipal Permit, various types of data and information must be presented in JURMP Annual Reports. Quantifiable data and required confirmations are presented directly in the tabular format. However, in some cases, further descriptions or explanations of results are required. When this occurs, the supporting narrative is supplied in the sections following the tables, and referenced within the table itself. Lastly, some of the required information (e.g., inventories) is best included as appendices. In these cases, their locations are referenced in the tables.

Municipal Permit Requirements | **Reporting Results**

No.	Program Implementation Description	Confirmation and/or Result
1	Any updates to the industrial and commercial inventory.	See Appendix E for inventory update. (1)
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	Confirmed per the City's JURMP.
3	A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	See 5.2.1 below for description. (2)
4	Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	Inventoried: 38 Inspected: 38 (3)
5	Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	See Section 5.2.2 below.
6	Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed per the City's JURMP. See Section 5.2.3 below for description.

1 REFERENCE INFORMATION
Provides references for the reporting information such as appendices to the report.

2 DESCRIPTIVE RESULTS
Any reporting results that need further descriptions, or explanations will be noted in the table and provided as text in the sections below the table.

3 REPORTING RESULTS
Reporting information that can be reported solely in the table (i.e. numbers, confirmations, etc.)

Figure 1-1: Example of Revised Reporting Format (for illustrative purposes only)

2. Development Planning

2.1 Program Implementation

Table 2-1 represents the City of Del Mar's implementation of the Development Planning component as it relates to the requirements of the Municipal Permit during Fiscal Year 2012. Where reporting requirements necessitate information that is not easily tabularized, references are made in the table to locations where the information, or further explanation(s), is located.

During Fiscal Year 2012, the City was compliant with Section D.1 of the Municipal Permit.

Table 2-1: Development Planning Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	No updates were made during the reporting period
2	Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	Confirmed – the information is tracked in individual project files and Excel
3	A listing of the development projects to which Standard Urban Stormwater Mitigation Plan (SUSMP) requirements were applied.	See **Appendix A**
4	Confirmation that all applicable SUSMP BMP requirements were applied to all Priority Development Projects (PDPs), including a description of how this information was tracked.	Not Applicable – The City did not process any PDPs during the reporting period
5	At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	Not Applicable – The City did not process any PDPs during the reporting period
6	A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	Not Applicable – The City did not process any PDPs during the reporting period
7	An updated treatment control BMP inventory.	See 2.2.1 below
8	The number of treatment control BMPs inspected, including a summary of inspection results and findings.	Two (2) projects were inspected including four (4) TCBMPs. See 2.2.1 below for summary
9	100% of projects with high priority TCBMPs were inspected.	Two (2) projects are rated as high priority and both projects were inspected.
10	Confirmation that the high priority TCBMPs were inspected prior to the rainy season.	Confirmed. See Section 2.2.1 below

Item No.	Program Implementation Description	Confirmation and/or result
11	At least 50% of projects with drainage insert TCBMPs were inspected.	There have been no projects developed within the City that used drainage inserts to satisfy TCBMP requirements. This requirement currently does not apply in the City
12	A minimum of 20% of the total number of projects with approved TCBMPs, and a maximum of 200% of the average number of projects with TCBMPs approved per year were inspected.	100% of all projects with approved (and constructed) TCBMPs were inspected: there are two projects with approved and constructed TCBMPs within the City
13	A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	See 2.2.1 below for description and summary
14	Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	Not Applicable – During the reporting period, no Priority Development Projects were completed to the point of obtaining occupancy
15	A listing of any projects which received a SUSMP waiver.	Not applicable. No Waiver Program in place, and no waivers issued
16	A description of implementation of any SUSMP waiver mitigation program.	Not applicable. No Waiver Program in place and no waivers issued
17	A description of Hydromodification Management Plan (HMP) development collaboration and participation.	No further development of the HMP took place during the reporting period – the RWQCB adopted the Copermittees HMP on July 14, 2010
18	A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	No projects were required to meet HMP requirements: no Priority Development Projects were approved during the reporting period
19	A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	
20	A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	
21	The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	No enforcement actions were taken for development projects during the reporting period
22	A description of notable activities conducted to manage urban runoff from development projects.	No notable activities were conducted in FY 12

2.2 TABLE 2-1 SUPPLEMENTAL INFORMATION

2.2.1 Table 2-1 Items No. 7, No. 8, No. 10 and No. 13

The City of Del Mar is the smallest City in the County and rarely has Priority Development Projects (PDPs) processed for development. Therefore, there have only been two PDP projects that have been constructed. The following is a summary of the projects:

Morotta / James Single Family Residence
The project is a single family residence constructed within 200 feet of the San Dieguito Lagoon (an environmentally sensitive area). The project BMPs were verified prior to receiving occupancy in March 2009. Two bioswales that cover the majority of the property fronting San Dieguito Drive are required as the treatment control BMPs (TCBMPs). On September 9, 2011, City staff conducted an on-site inspection and verified the TCBMPs still exist and appear to be maintained and effective.

Pacifica Stratford Condominiums
The phased project effectively subdivides two existing legal lots into five two-unit condominium lots with required public improvements. TCBMPs in the site design for all five lots include pervious pavers and vegetated buffer strips. During Fiscal Year 2010, two of the five proposed two-unit condominiums were completed as the first phase of the project. Staff inspected the limited TCBMPs implemented for these units in May 2010 prior to receiving occupancy. The third lot was completed during the reporting period, and the TCBMPs were inspected prior to occupancy on June 12, 2012. During the on-site inspection, staff verified the TCBMPs exist and appear to be maintained and effective. The second phase of construction at the remaining two lots was on-going at the end of the fiscal year. City staff will inspect these lots prior to occupancy during FY 2013.

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3. CONSTRUCTION

3.1 PROGRAM IMPLEMENTATION

Table 3-1 represents the City of Del Mar's Fiscal Year 2012 implementation of the Construction component as it relates to the requirement of the Municipal Permit. Where reporting requirements necessitate information that is not easily tabularized, references are made in the table to locations where the information, or further explanation(s), is located.

During Fiscal Year 2012, the City was compliant with Section D.2 of the Municipal Permit.

Table 3-1: Construction Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	Confirmed – See Section 3.2.1 below for descriptions
2	Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	Confirmed – See Section 3.2.2 below for descriptions, **Appendix B**
3	A description of modifications made to the construction and grading ordinances and approval processes.	Changes were completed in FY 2008. No additional changes were implemented in Fiscal Year 2012
4	Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	Confirmed
5	Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	Confirmed
6	A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	Since the advanced treatment requirements took effect, no projects have triggered these requirements
7	For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	See **Appendix D**

Item No.	Program Implementation Description	Confirmation and/or result
8	A description of the general results of the inspections.	See Section 3.2.3 below
9	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed
10	The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 3.2.4 below
11	A description of notable activities conducted to manage urban runoff from construction sites.	See Section 3.2.5 below, **Appendix E**

3.2 TABLE 3-1 SUPPLEMENTAL INFORMATION

3.2.1 Table 3-1 Item No. 1

As required by the Permit, and outlined in the 2008 JURMP, all permitted construction sites were required to undergo the City's construction urban runoff approval process and meet the applicable construction requirements. Appropriate, designated BMPs were required to be implemented for all construction sites. This information is tracked in individual project files as well as though the City's online construction inspection database.

3.2.2 Table 3-1 Item No. 2

Section 5.2.2 of the 2008 JURMP describes how a watershed-based inventory of all construction sites is prepared by the City of Del Mar, while Section 5.2.3 provides a description of the steps taken to develop, and update this inventory on a monthly basis. The City of Del Mar continues to use the construction inspection tracking system discussed in the Supplemental Information provided to Regional Board Staff in February 2009, to ensure that its system meets the reporting requirements outlined in Section J.3.a.(3)(b)vii of the Permit. The tracking system itself is a combined database which includes Geographical Information System (GIS) input, and spreadsheet tallies. Information is entered into the database on a regular basis, no less than monthly, and City staff maintain the GIS information via "drive-by" verification of the status of all construction sites, and subsequently entering the data into the GIS system. Monthly inventories of active construction sites are then produced for use in the field by staff. Regular patrols by City staff are also used to determine if a site's status has changed in the interim.

Since construction project sites are constantly approved, cancelled (permits withdrawn by the applicant, denied by the City, expire, etc.), and completed, the City's inventory is fluid. In addition to the regular updates, staff continues to routinely patrol construction sites to "field truth" data received from the Planning and Building Departments, and annotate areas of surface disturbance that may, or may not be, permitted.

Appendix B provides a copy of the monthly construction site inventory, including the priority classification for each site. **Appendix C** includes printouts of the Active Construction Site Inventory GIS Maps for each month of the reporting period.

3.2.3 Table 3-1 Item No. 8

During the reporting period, five (5) active construction sites met the high priority criteria designation. High priority projects and their respective addresses are listed below:

- Pacifica Stratford: 500-600 Stratford Court
- Batchelder: 100 Stratford Court
- Handzel: 100 12th Street
- 21st Street Pump Station: 21st Street at Court Street
- North Torrey Pines Bridge Retrofit

These properties were inspected at a minimum of bi-weekly during the Fiscal Year 2012 wet season. All remaining construction projects were classified as "Low" priority sites, and inspected "as-needed" during the Fiscal Year 2012 wet season. As required by Section D.2.d.(4) of the Permit, all construction sites, regardless of priority classification, continued to be inspected on an "as-needed" basis during the remainder of the year.

During Fiscal Year 2012, 51 construction sites were, at some point during the year, in the active construction phase: 5 high priority sites and 46 low priority sites. In total, the Clean Water Program conducted 135 documented storm water inspections throughout the reporting period. An additional 43 inspections were conducted by the Qualified SWPPP Practitioner (QSP) on the Torrey Pines Bridge Retrofit project.

The following is a summary table of the number of inspections conducted at each type of construction project.

Table 3-2: Fiscal Year 2012 Construction Inspection Summary

Inspection Item	No. of Site Inspections
High Priority Site Inspections	127*
Low Priority Site Inspections	51
Total	**178**

Note:
* Includes 43 high priority inspections performed by QSP at N Torrey Pines Bridge Retrofit

In general, the Fiscal Year 2012 inspections resulted in compliant construction sites, although follow-up inspections were required at some sites due to BMP deficiencies. Common corrections needed after review by the City included:

- Maintaining construction site entrances and exits
- Uncovered trash dumpsters
- Uncovered stockpiles/equipment storage
- Inadequate or poorly maintained silt fence and perimeter controls
- Inadequate or poorly maintained erosion control
- Unauthorized encroachment or stockpiles on City roadways

Through verbal and written warnings, the BMP deficiencies were adequately addressed at all construction sites. At the end of the reporting period, there were no on-going compliance issues.

3.2.4 Table 3-1 Item No. 10

This section provides the number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The section also exhibits that compliance has been achieved and describes the actions taken to achieve compliance where necessary.

Del Mar has implemented a policy of education first, with aggressive enforcement measures only being used when compliance requests are ignored and/or in the event of an actual discharge which has the potential to impact to receiving waters. In general, contractors have been compliant with BMP requirements at their respective construction sites. In the majority of those instances where compliance has not been attained, a single verbal or written warning was all that was required to achieve compliance. In these cases, the deficiency had been addressed by the time the follow-up inspection was conducted.

No enforcement actions were required for construction sites during the reporting period. This does not include verbal warnings issued during the inspections which were addressed in a timely manner through the maintenance or re-installation of BMPs. In general, the inspections

conducted revealed that education efforts over the past several years have resulted in a high level of compliance.

3.2.5 Table 3-1 Item No. 11

During the reporting period, the Clean Water Program continued the use of an online database designed specifically to track storm water inspections at construction sites. The database tracks projects and inspection results to ease reporting and allows City personnel to easily access the database from multiple computers and while in the field. Additionally, the City was able to directly communicate with construction site owners and contractors through email using the inspection records, thereby informing the responsible parties of deficiencies and further educating the construction community in regards to storm water issues.

The Clean Water Program also refined its construction brochure and BMP poster targeted at the construction and contractor industry during the reporting period. The original brochure used in the City was a collaborative effort between North San Diego County cities from a decade ago, and in order to make the brochure more applicable to Del Mar, additional BMPs were added to address issues noted during Clean Water construction inspections. In addition to the BMP poster, the brochure outlines the regulatory background, local construction ordinances, and the City's inspection and enforcement program for construction sites. These brochures have been made available to developers, contractors, and site owners through the Planning Department's pre-construction meetings, at the Planning Department counter in City Hall, and provided by Clean Water inspectors during construction site visits. A copy of the construction brochure and BMP poster is included in **Appendix E**.

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4. MUNICIPAL

4.1 PROGRAM IMPLEMENTATION

Table 4-1 represents the City of Del Mar's Fiscal Year 2012 implementation of the Municipal component as it relates to the Municipal Permit requirements. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table, and are included as an Appendix, or are provided in Section 4.2.

During Fiscal Year 2012, the City was compliant with Section D.3.a. of the Municipal Permit.

Table 4-1: Municipal Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Any updates to the municipal inventory and prioritization.	No changes occurred to the municipal inventory or prioritization during the reporting period. See **Appendix F** for the current inventory
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	Confirmed. BMPs were required to be implemented per the JURMP
3	A description of inspections and maintenance conducted for municipal treatment controls.	See Section 4.2.1 below
4	Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	Inventory = 284 basins and inlets
		Inspected = 284 basins and inlets
		Catch basins found with accumulated waste exceeding cleaning criteria = None
		Cleaned = 284 basins and inlets
5	Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Total Distance of MS4 pipes = 5.87 miles
		Distance of MS4 inspected = 3,500 lineal feet
		Distance of MS4 found with accumulated waste exceeding cleaning criteria = None
		Cleaned = 2,500 lineal feet

Item No.	Program Implementation Description	Confirmation and/or result
6	Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	Open Channels = 2.85 miles
		Inspected = 2.85 miles
		Distance found with anthropogenic litter = Less than 5% of locations
		Cleaned = 2.85 miles as-needed
7	Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category. The Permit requires reporting in tons; however, the City's measurements are in cubic yards. Cubic yards are reported in tons using a 1,000 pound per cubic yard conversion.	Catch Basins/Inlets and MS4 = 41.5 tons (82.95 cubic yards)
		Open Channels = 6.85 tons (13.7 cubic yards, includes sediment and headwall cleanings)
8	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	None identified at this time
9	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	Confirmed
10	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	5.7 curb-miles swept a minimum of weekly, including curbed medians
11	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	14.5 curb-miles swept a minimum of bimonthly, including curbed medians
12	Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	31.2 curb-miles swept a minimum of biannually, including curbed medians
13	Identification of the total distance of curb-miles swept.	1,197.8 miles; brooms were engaged for an estimated 288.6 hours
14	Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	Total Parking Lots = 2
		Sweeping frequency = Semi-monthly
		Parking Lots Swept = 2

Item No.	Program Implementation Description	Confirmation and/or result
15	Amount of material (tons) collected from street and parking lot sweeping. The Permit requires reporting in tons; however, the City's measurements are in cubic yards. Cubic yards are reported in tons using a 1,000 pound per cubic yard conversion.	143.6 tons (287.2 cubic yards)
16	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.	See Section 4.2.2 below
17	Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	Sites requiring inspections = 25
		Sites inspected = 25
		Frequency of inspections = Approximately monthly
18	A description of the general results of the inspections.	See Section 4.2.3 below
19	Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed. Inspections implemented in accordance with the JURMP.
20	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	No violations. See Section 4.2.4 below
21	A description of any efforts conducted to reduce pollutant discharges from non-emergency firefighting flows.	See Section 4.2.5 below
22	A description of notable activities conducted to manage urban runoff from municipal areas and activities.	See Section 4.2.6 below

4.2 TABLE 4-1 SUPPLEMENTAL INFORMATION

4.2.1 Table 4-1 Item No. 3

Trash Guards Treatment Control

Trash Guard grates have been installed on the curb entry of storm drain inlets along Camino del Mar in order to minimize the amount of debris and trash entering into storm drain catch basins and to maximize the effectiveness of street sweeping. The guards keep the trash and debris on the street to be removed by the street sweeper. Inspections of the guards were performed to verify they were still operational and performing as intended.

Inlet Filter Treatment Control – North County Transit District

As reported in the 2008 JURMP, the City of Del Mar has a Maintenance Agreement in place with the North San Diego County Transit Development Board as part of the Del Mar Stabilization Project 1 (Drainage Improvements and Landslide Warning System), which consists of fifty-four (54) structures. Inlet filters have been installed in some of the structures to address water quality. The Maintenance Agreement requires the City to maintain fourteen (14) of the structures, while NCTD will be maintaining the remaining forty (40) structures. Out of the fourteen (14) structures maintained by the City, six (6) have been fitted with filters that are serviced by the City's contractor (Downstream Services, Inc.). This fiscal year, all six (6) filters were inspected at least once and all but one required maintenance.

The following table represents a summary of the maintenance performed on the inlet filters.

Table 4-2: Summary of Inlet Filter Maintenance for Fiscal Year 2012

ID #	Location	Inlet Type	Date Inspected	Materials	%Vol used	Comments
1	West end of 4th Street	Combo	10/25/2011	D 80% O 20%	100%	Replaced (4) pouches. Recommend straw waddle
			3/20/2012	D 80% E 5% O 20%	105%	Replaced (8) pouches
2	West end of 8th Street	Grate	10/25/2011	-	-	Inlet not inspected. No access due to construction
			3/20/2012	D 40% G 40% O 20%	100%	Replaced (3) pouches. Pressure washed, box was full of sand and gravel
3	SW 11th Street	Curb	10/25/2011	D 70% E 5% O 20%	95%	Replaced (2) pouches
			3/20/2012	D 75% E 5% O 25%	105%	Replaced (3) pouches
4	NW side of 11th Street	Curb	10/25/2011	D 70% E 5% O 20%	95%	Replaced (2) pouches
			3/20/2012	D 75% E 5% O 20%	100%	Replaced (3) pouches
5	W of 13th Street	Curb	10/25/2011	D 75% E 5% O 10%	90%	Replaced (2) pouches
			3/20/2012	D 70% E 5% O 25%	100%	No comment
6	50' SW of pedestrian RR crossing, between RR tracks and Coast Blvd.	Grate	10/25/2011	D 15% O 10%	25%	No comment
			3/20/2012	D 10% O 5%	15%	No comment

Note: D=Dirt/Silt/Sediment, E=Trash, G=Gravel. O=Organics

4.2.2 Table 4-1 Item No. 16

The City's sanitary sewer system includes the collection system and infrastructure of approximately 24.75 miles of gravity main and 0.07 miles (or approximately 387 feet) of force main. The City's system also includes three (3) sewer pump/lift stations, 112 clean out facilities, and approximately 549 manhole structures. These facilities all are required to implement minimum operation and maintenance BMPs, such as implementing good housekeeping procedures. A description of the City's efforts for these facilities is included below.

Of the approximately 24.75 miles of the sanitary sewer collection system, approximately 2.92 miles were cleaned as part of the regular schedule of inspection and cleaning. Some portions of the collection system were cleaned more than once due to priority and buildup of materials. The City tracks "hot spot" portions of the sewer collection system and depending upon the likelihood of materials build up, will perform cleaning between two to four times per year.

Five (5) sanitary sewer overflows occurred during the reporting period. The RWQCB (via CIWQS) and the County of San Diego Department of Environmental Health (via fax) verified that five overflows occurred during Fiscal Year 2012.

Table 4-3 below provides a summary of the overflows during the reporting period. Where possible, the overflowed water from the sanitary sewer system was collected and recovered prior to being released to the surrounding environment.

Table 4-3: Reporting of Sanitary Sewer Overflows

Date	Location	Volume (gal)	Recovered (gal)	Released to Environment (gal)	Probable Cause
9/23/2011	710 Camino del Mar	975	0	975	Root build-up in line, surrounded by paper materials.
1/3/2012	1231 Camino del Mar	400	400	0	Debris, cleaning rags, and hygiene products found in sanitary sewer main.
1/7/2012	2115 Balboa Ave	100	50	50	Rags and plant roots caused clog in sewer main.
2/9/2012	157 6th Street	100	100	0	Plant roots released into sanitary sewer system due to herbicide treatment.
4/28/2012	526 Stratford Ct.	120	0	120	Roots and paper in main leading to sanitary sewer overflow.
Total		**1,695**	**550**	**1,145**	

4.2.3 Table 4-1 Item No. 18

Municipal Facilities

The City's public facilities primarily include parks and recreational facilities, beaches and the Powerhouse Community Center. Municipal facilities include the Public Works Yard, City Hall, the Del Mar Fire Station, and various potable water reservoirs. All facilities are required to implement minimum BMPs and are inspected to verify BMP implementation and compliance. The municipal facilities were inspected as a part of the municipal inspections as described below.

Per the 2008 JURMP, the City inspects all high priority municipal sites. Municipal sites are considered to be fixed facilities where high priority municipal activities occur. The City conducted facility inspections for all 25 of its high priority facilities during Fiscal Year 2012 to ensure that BMPs (including those for pollution prevention) were being implemented. Municipal inspections were conducted through the comprehensive patrolling inspection and active construction drive-around programs, allowing City staff to inspect all municipal facilities on a monthly basis. The streets and road network are routinely inspected under various programs such as street sweeping, streets maintenance, City drive-around inspections, and MS4 inspections.

All inspections conducted during Fiscal Year 2012 addressed the required inspection steps to determine full compliance by utilizing the City's patrolling inspections. More information regarding the patrol inspections can be found in Section 4.2.6 and in the Commercial/Industrial component of this report (Section 5).

Special Events

During Fiscal Year 2012, the Community Services Department conducted inspections for all nineteen (19) special events. **Table 4-4** below provides a summary of the major events and the inspection results.

Table 4-4: Major Event Summary during Fiscal Year 2012

Event Name	Event Date	Estimated Attendance	Venue	Inspection Date(s) & Comments
Bocce Ball Tournament	7/16/2011	600	North Beach	Post-event inspection by cleanup crews; no spills or incidents reported
Summer Concert In The Park	7/19/2011	5,000	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported
Summer Concert In The Park	8/16/2011	5,000	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported
Dog Surf Event	9/25/2011	5,000	North Beach	Post-event inspection by cleanup crews; no spills or incidents reported
Summer Concert In The Park	9/18/2011	5,000	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported
MS Walk	9/24/2011	350	Del Mar Beach	Post-event inspection by cleanup crews; no spills or incidents reported
Del Mar Village Art Stroll	10/2/2011	2,500	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Ducky Derby	10/15/2011	500	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported
MS Bike Ride	10/23/2011	2,500	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Irongirl 5K/10K	11/6/2011	2,500	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
3 Day Breast Cancer Walk	11/18/2011	4,000	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Del Mar Village Winter Wonderland	12/4/2011	2,000	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Penguin Plunge	1/1/2012	600	Beach of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported

Event Name	Event Date	Estimated Attendance	Venue	Inspection Date(s) & Comments
Walk Run Bark 5K	1/15/2012	800	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Women's Head To Toe 5K/10K	3/18/2012	1,200	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
La Jolla Half Marathon	4/29/2012	6,000	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Century Bike Ride	5/9/2012	1,500	Streets of Del Mar	Post-event inspection by cleanup crews; no spills or incidents reported
Summer Concert In The Park	6/19/2012	5,000	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported
Del Mar Village Summer Solstice	6/21/2012	250	Powerhouse Park	Post-event inspection by cleanup crews; no spills or incidents reported

Beach Cleaning

The City's beaches are a vital part of the City's community – not only for the natural settings they provide, but also for the economic sustainability of the City. In an effort to prevent pollutants from entering the Pacific Ocean and potentially impacting the receiving waters, the City implements a regular beach cleaning program.

During the reporting period, the beaches were inspected on a daily basis and cleaned two to three times per week during the spring and summer and more frequently for holidays when the beach had the most use. The primary collections for disposal included plastic bottles and paper trash. When located, kelp wrack was sorted and left on the beach.

The City does not track the amount of debris collected from the beaches, as the cleaner dumps the debris at the Public Works Yard into a trash dumpster that is mixed with other refuse and waste.

4.2.4 Table 4-1 Item No. 20

There were no violations or enforcement actions taken at any municipal activities or facilities during Fiscal Year 2012. BMP deficiencies at municipal facilities were immediately addressed by the responsible departments, and all sites were brought into compliance.

4.2.5 Table 4-1 Item No. 21

Section 6.19 of the 2008 JURMP describes the City's program to reduce pollutants from non-emergency firefighting flows (i.e. flows from controlled or practice blazes and/or maintenance activities). During this reporting period, all training sessions were held at Regional Training facilities outside the City of Del Mar. No non-emergency firefighting flow from training or other maintenance activities occurred during Fiscal Year 2012 which would require any additional efforts to reduce pollutant discharges.

4.2.6 Table 4-1 Item No. 22

The City implemented a new type of inspection mechanism through its patrolling inspections during Fiscal Year 2012. Municipal facilities were inspected through the patrol inspection process and construction drive-around, and BMP deficiencies were noted when observed and reported to the responsible City department.

The monthly patrolling inspections at municipal facilities focus on the presence of trash, animal wastes, and overall cleanliness of each site. Facility-dependent BMPs are also inspected to ensure that BMPs are maintained and appropriately implemented. All trash cans throughout the five (5) Municipal Parks in the City are inspected to ensure lids are tightly closed and all trash is contained. If cans are missing lids or litter is observed during the patrols, the Community Service Department is notified and responds to correct the issue. City parking lots and the Public Works Yard are inspected to confirm implementation of good housekeeping measures. If issues are noted at Municipal areas during the inspections, Clean Water Personnel immediately follow-up with the responsible City departments in order to rectify any deficiencies. For more information regarding the Clean Water patrols, see Section 5.

5. INDUSTRIAL AND COMMERCIAL

5.1 PROGRAM IMPLEMENTATION

Table 5-1 represents the City of Del Mar's Fiscal Year 2012 implementation of the Industrial and Commercial component as it relates to the Municipal Permit requirements. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table and are included as an Appendix or are provided in Section 5.2.

During Fiscal Year 2012, the City was compliant with Section D.3.b. of the Municipal Permit.

Table 5-1: Industrial and Commercial Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Any updates to the industrial and commercial inventory.	City moved to a property-based inventory. See 5.2.1 for a description and **Appendix G** for the inventory update
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	Confirmed
3	A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	See 5.2.2 below for description
4	Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	Inventoried = 50 stationary facilities at 68 properties Inspected = All stationary facilities and properties
5	Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	Followed justification and rationale provided in 2008 JURMP; all inventoried sites/sources were inspected
6	Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	Confirmed through patrol inspections, see 5.2.3 and **Appendix H**
7	At a minimum, 100% of all sites (excluding mobile sources) determined to pose a high threat to water quality (TTWQ) shall be inspected.	100% of all inventoried stationary sites determined to pose a high TTWQ were inspected
8	At a minimum, 25% of the sites inventoried as required in section D.3.b.(1) of the Permit (excluding mobile businesses) shall be inspected.	The City's entire commercial and industrial inventory (100%) received site visits through the inspection process. See **Appendix I**

Item No.	Program Implementation Description	Confirmation and/or result
9	Identification of the number of third party inspections conducted.	None
10	Identification of efforts conducted to verify third party inspection effectiveness.	None
11	A description of efforts implemented to address mobile businesses.	See 5.2.4 below for description
12	The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See 5.2.5 below for discussion
13	A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	Not needed during FY 12
14	A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	See 5.2.6 below for discussion

5.2 TABLE 5-1 SUPPLEMENTAL INFORMATION

5.2.1 Table 5-1 Item No. 1

With the implementation of the patrolling inspection program, the commercial/industrial inventory was modified to accommodate additional information, cataloging all properties within the City involved in commercial and/or industrial land uses. Businesses within these properties were also captured, and the updated property-based inventory lists high priority businesses as tenants within their respective property. The City will continue updating the inventory through the results of the patrolling inspections. See **Appendix G** for the FY 2012 inventory update.

5.2.2 Table 5-1 Item No. 3

During Fiscal Year 2012, the City provided notification to owners/operators of industrial and commercial businesses of the applicable BMP requirements. This information was specific to automotive and food establishment businesses. Thirteen (13) inventoried businesses operating within the City of Del Mar did not fall into one of these two categories - these included three (3) animal facilities, one (1) pottery manufacturing company, one (1) printing services business, six (6) hotels, and two (2) doctors' offices. Additional information regarding BMP deficiencies was distributed through letters as a result of the City's patrolling inspections (see Section 5.2.3).

Mobile businesses completing business license applications are directed to the Clean Water Manager for a one-on-one discussion regarding applicable BMPs and other applicable City program requirements.

5.2.3 Table 5-1 Item No. 6

The City has implemented a patrolling inspection program to routinely inspect City businesses, commercial arterials, and municipal facilities for clean water violations of the Municipal Code. The patrols are a proactive way the City can enforce compliance, discover and abate trouble areas/hotspots, and better educate business owners and property managers regarding the City's clean water requirements.

Inspectors patrol the City's main commercial arterials, inspecting all properties and businesses on the City's commercial/industrial inventory on a four to five-week rotation. Municipal parks and facilities, and multi-family residences (apartments and condos) are included in the patrols in order to focus on shared outdoor areas and activities (this includes trash dumpsters and grease bins, irrigation systems, washing activities, and discharges to City streets and storm drain system). Inspectors note any deficiency per the City's Municipal Code during the patrol for follow-up. Immediate contact with the business owner or property manager is not initiated unless an active IC/ID is observed, in which case all attempts are made to abate the illegal discharge. The City's commercial/industrial patrolling protocol is presented in **Appendix H**.

The Clean Water Program conducted patrols eleven (11) times during the reporting period, resulting in 118 issues requiring follow-up. Clean Water reminder letters were sent to the responsible parties following each patrol, and all outstanding issues were resolved by the end of the reporting period. Issues observed during the commercial/industrial patrol inspections are summarized in **Table 5-2**. A full listing of the results of the commercial/industrial inspections are presented in **Appendix I**.

Table 5-2: Industrial and Commercial Patrol Inspection Summary

Issue	No. Observed
Irrigation Runoff	5
Leaking Hose	5
Leaking Fountain	1
Broken Sprinkler Causing Runoff	1
Uncontained Hosing	5
Dumpster Lids Open or Missing	37
Dumpster Overflowing	15
Excessive Trash	7
Grease Lid Open or Missing	11
Grease Stains or Tracking	15
Excessive Leaves, Sediment Build-up	1
Secondary Containment Missing or Inadequate	9
MS4 Discharge or Evidence of Discharge	6
Total	**118**

5.2.4 Table 5-1 Item No. 11

An inventory of known mobile businesses within the City's jurisdiction was reviewed for Fiscal Year 2012 and is included as **Appendix J**. This inventory is based on the City's business license list, and is updated on a regular basis. The current inventory lists over 740 mobile businesses operating within the City of Del Mar, and all are presently considered high TTWQ facilities. The City continues to take opportunities to educate mobile sources when encountered or reported to the City, and when new mobile applicants file a business license application at City Hall. All mobile businesses are asked for proof of license when performing activities within the City and are required to obtain a license if not provided.

5.2.5 Table 5-1 Item No. 12

Industrial and Commercial Inspection Follow-up and Enforcement

The City's enforcement process is to perform a follow-up visit for those businesses found to be out of compliance during the patrol inspections. After a BMP deficiency is initially observed during the patrol inspection, the City mails a Clean Water letter outlining the issue to the business owner or property manager. The letter includes information on how the deficiency can impact local beaches and water quality, and further provides assistance by offering recommendations for how the issue can be resolved. Inspectors will then follow-up with the business or property by performing another patrol inspection to see whether the issue has been corrected. If the business is still out of compliance after the follow-up visit, City Code Enforcement is notified whereby a Notice of Violation (NOV) or citation may be issued if there is still no evidence of compliance.

One (1) NOV was issued to a commercial property during FY 2012 as a result of the patrolling inspections. The issue prompting the NOV was resolved by the end of the reporting period.

One (1) business was noted as requiring a follow-up in the last JURMP Annual Report due to the Fiscal Year 2011 inspection program. The follow-up was conducted during the current reporting period's patrol inspections – the facility came into compliance by obtaining secondary containment for its used grease container.

Complaint Investigation Follow-up and Enforcement – Industrial and Commercial Facilities
In addition to inspection follow-ups, the City also receives complaints or initiates investigations based on staff's observations of storm water violations. After reviewing the facts of the case, the Code Enforcement Officer or Clean Water Manager determines the level of violation (if any) and may issue an NOV and/or administrative citation as appropriate. The City has made it a policy that education is to play a significant role in the enforcement of storm water regulations. In most cases, a verbal warning is all that is necessary and compliance is achieved. However, in some instances, further enforcement action is required.

The City began tracking contacts made with business owners and property managers during the year using the online database. During the reporting period, the City tracked 22 contacts under the new system, which included conversations and verbal warnings, letters, and NOVs. During Fiscal Year 2012, two (2) investigated incidents involving commercial or industrial operations warranted formal NOVs. The City's Code Enforcement Officer issued the NOVs as a result of the investigations. Both issues were resolved in a timely manner, and there were no outstanding enforcement issues at the end of the reporting period.

5.2.6 Table 5-1 Item No. 14

As discussed above, the City modified its inspection process for industrial and commercial facilities during the reporting period. The patrolling inspection program has led to more of a Clean Water presence in the industrial/commercial community and helped to identify and abate potential stormwater issues within the City. It is anticipated that by continuing the program and using the Clean Water reminder letters for addressing potential issues, storm water education in the business community will continue to increase into the foreseeable future.

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6. RESIDENTIAL

6.1 PROGRAM IMPLEMENTATION

Table 6-1 represents the City of Del Mar's implementation of the Residential component as it relates to the Municipal Permit requirements during Fiscal Year 2012. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table, and are included as an Appendix or are provided in Section 6.2.

During Fiscal Year 2012, the City was compliant with Section D.3.c. of the Municipal Permit.

Table 6-1: Residential Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	Identification of the high threat to water quality residential areas and activities that were focused on.	As described in Section 8.2 of the City's 2008 JURMP, the City considers all residential areas within City limits to be high threat to water quality residential areas and activities
2	Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	Confirmed. Designated BMPs, per Appendix 8-A of the 2008 JURMP, were required to be implemented
3	A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	See Section 6.2.1 below
4	Types and amounts of household hazardous wastes (HHW) collected, if applicable.	2.42 tons of mixed HHW; See Section 6.2.1
5	The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 6.2.2 below
6	A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	See Section 6.2.3 for description
7	A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	See Section 6.2.4 below
8.	A description of notable activities conducted to manage urban runoff from residential areas and activities	See Section 6.2.5 below

6.2 TABLE 6-1 SUPPLEMENTAL INFORMATION

6.2.1 *Table 6-1 Item No. 3 and No. 4*

The City continues to implement and facilitate proper management and disposal of used oil and household hazardous materials as described in Section 8.4.3 of the 2008 JURMP. During the reporting period, the City's contractor, PSC Environmental Services, LLC, continued to provide curbside pick-up and drop-off of household hazardous waste (HHW) for the City's residents. Table 6-2 below provides a summary of the HHW collection for the reporting period.

Table 6-2: Household Hazardous Waste Data

Fiscal Year	Pick-Up Service Users	Drop-off Services Users	Total Users	Total Weights of HHW Disposal (lbs)	Waste Oil Disposal (gal)
2011-2012	56	24	80	4,835*	No Data
2010-2011	82	30	112	12,500**	No Data
2009-2010	43	17	60	6,686	15.9
2008-2009	96	16	112	12,542	6.9
2007-2008	130	34	165	11,698	50.0
2006-2007	104	31	135	12,845	No Data

*calculated based on program-wide disposal per user
**estimated by service provider

6.2.2 *Table 6-1 Item No. 5*

As a result of the investigations conducted by City staff, the enforcement actions in **Table 6-3** were taken. All enforcement actions resulted in compliance.

Table 6-3: Fiscal Year 2012 Residential Enforcement Actions

Type of Enforcement Action	Quantity
Notice of Violation	10
Administrative Citation	2
Total Fines	**$400**

6.2.3 *Table 6-1 Item No. 6*

During the reporting period the City continued to utilize a combination of residential education, complaint investigation and code enforcement as methods for oversight of residential areas and activities as noted in the City's 2008 JURMP (Sections 8.3 and 8.4). During FY 2011, the City evaluated the methods historically used and decided to implement an additional method of oversight through the random patrols of residential neighborhoods. In FY 2012, City staff patrolled all of the residential streets in the City to identify issues that require follow-up.

During FY 2012, eighteen (18) residential patrolling inspections were conducted where inspectors covered all residential streets and areas within the City. When runoff was observed, the inspector would trace the flow upstream to investigate the potential source of the runoff. In addition to the date and time of the observance, inspectors recorded information on the source or activity causing the runoff and the responsible party (when identifiable). Due to the local

topography and border with other jurisdictions, runoff originating in the City of San Diego would occasionally flow onto City streets and storm water conveyances. The City is coordinating with local jurisdictions in cases of residential urban runoff coming from other municipalities, and has been in the works to setup a mechanism whereby runoff issues from other cities can be addressed.

The City also developed a door hangar during the last reporting period that is used to notify residents and businesses of issues related to the Clean Water Program identified at or near their location. Inspectors mark the residential door hangers with any Clean Water issues observed during the patrol, which is used as an educational tool for the residents in the community. A copy of the door hanger used during the residential patrols was provided in the FY 2011 JURMP Annual Report.

6.2.4 Table 6-1 Item No. 7

Regional Residential Education Program

The City continued to collaborate with other Copermittees in the implementation of the Regional Residential Education Program during Fiscal Year 2012. The City of Del Mar provides funds for the Regional Residential Education Program in collaboration with other Copermittees. A complete discussion, including program element development and implementation, of the Regional Education Program can be found in the Regional Urban Runoff Management Program annual report, submitted by the Principal Permittee under separate cover.

6.2.5 Table 6-1 Item No. 8

The City continued implementing its patrols of residential neighborhoods in efforts to provide an additional method of oversight for residential areas and activities. Staff patrol all residential streets in the City to identify issues that require follow-up and identify active illegal discharges. The City observed 241 instances of urban runoff within the City of Del Mar during the first full year of patrols. Educational door hangers were used to notify residents when runoff or other issues were occurring on their property.

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7. ILLICIT DISCHARGE DETECTION AND ELIMINATION

Per RWQCB Addendum No. 2 to Order R9-2007-0001, the City will submit this section in its entirety on December 15, 2012.

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8. EDUCATION

8.1 PROGRAM IMPLEMENTATION

Table 8-1 represents the City of Del Mar's implementation of the Education component as it relates to the Municipal Permit requirements during Fiscal Year 2012. For any items in the table where an explanation, description, results, inventory, or examples are necessary, references are noted in the table and are included as an Appendix or are provided in Section 8.2.

During Fiscal Year 2012, the City was compliant with Section D.5 of the Municipal Permit.

Table 8-1: Education Program Implementation

Item No.	Program Implementation Description	Confirmation and/or result
1	A description of education efforts conducted for each target community.	The target communities are covered in items 2-6 of this table and all descriptions provided in Sections 8.2 below
2	A description of how education efforts targeted underserved target audiences, high risk behaviors, and "allowable" behaviors and discharges.	See section 8.2.1 below
3	A description of education efforts conducted for municipal departments and personnel.	See section 8.2.2 below
4	A description of education efforts conducted for the new development and construction communities.	See section 8.2.3 below
5	A description of education efforts conducted for Industrial and Commercial owners/operators.	See section 8.2.4 below
6	A description of jurisdictional education efforts conducted for residents, the general public and school children.	See section 8.2.5 below

8.2 TABLE 8-1 SUPPLEMENTAL INFORMATION

8.2.1 Table 8-1 Item No. 2

As stated in the City's 2008 JURMP, there are no underserved or low-socioeconomic communities that have been identified in the City of Del Mar. However, high-risk behaviors have been associated with non-stormwater discharges including residential over-irrigation and some mobile business practices.

To address residential over-irrigation and other types of illegal discharges, the City developed a door hangar to be used to inform residents and businesses of non-stormwater discharges occurring at or near their locations, which the City began using during the summer of 2011. The door hangers were presented in the FY 2011 JURMP Annual Report.

To address mobile businesses, the City has a policy where new business license applications for mobile businesses are directed to the Clean Water Manager to set up a one-on-one meeting with the applicants. This is setup to allow for education and outreach regarding the City's program and requirements. During the reporting period, no new mobile businesses applied for a business license. Subsequently, no mobile businesses completed the business license process.

8.2.2 Table 8-1 Item No. 3

Municipal Departments and Personnel

During the reporting period, staff received training on stormwater topics, including specific training focused on Permit requirements. The City of Del Mar held two (2) focused training sessions to educate field staff on job-specific stormwater principals and requirements, including the required "pre-wet season" training for construction inspections held for planning and code enforcement staff. All of the staff from the Planning and Community Development Department and Code Enforcement Division attended these trainings. The Clean Water Department also provided training to the Public Works Department on issues related to their line of work. **Table 8-2** below summarizes the training conducted during the reporting period.

Table 8-2: Staff Education and Training Summary

Date	How Conducted	Education Topic	Attendees
9/27/2011	Planning and Community Development Staff Training Session	Overview of JURMP Construction Inspection Requirements (Wet Season)	Departmental Staff & Line Management
6/28/2012	Public Works Training Session	Clean Water Program and Public Works Specific Requirements	Public Works Staff and Management

City Council

In an effort to keep members of the City Council informed and aware of Clean Water Program issues, staff provided a program update at one of the City Council meetings. The emphasis was placed on a funding resolution for the Clean Water Service Charge increase for Fiscal Year 2012-2013 and an overall update on the Clean Water Program. The City Council meeting date occurred on June 4, 2012.

8.2.3 Table 8-1 Item No. 4

The City has two governing bodies whose purview is development activities within the City: the Design Review Board and the Planning Commission. The Clean Water Manager provided

training to the Planning Commission and to the Design Review Board during the FY 2011 reporting period. The trainings to both the Board/Commission and the development community in the audience were focused on Clean Water Program requirements for all development activity within the City. This included a discussion on impacts of development as well as the mitigation required through design and implementation of site design, source control and treatment control BMPs. Land development and SUSMP training occurs every other year, and will be performed again during the next reporting period.

8.2.4 Table 8-1 Item No. 5

During Fiscal Year 2012, the City utilized its contact with the industrial and commercial businesses to provide outreach and activity specific education when issues were observed during the Commercial and Industrial Patrolling Inspections. The inspection staff has developed an excellent rapport with most of the business community and provides information and guidance as-needed. When issues were observed during the patrol inspections, the City contacted the responsible business owners and property managers in order to inform them of the BMP deficiencies.

8.2.5 Table 8-1 Item No. 6

In addition to the methods described above, the City of Del Mar uses media as a means of outreach to the general public. The City developed a 12 minute video in 2008 in an effort to reach and educate a wide audience about the Clean Water Program and regulatory requirements. The video, entitled "The Del Mar Clean Water Program: Keeping the Water Clean for You!" highlights the municipal programs conducted by the City, and provides a complete overview of the Permit elements. The video continues to remain available "on-demand" on the City of Del Mar website (www.delmar.ca.us/cleanwater.htm), and was made into DVD's for distribution to public groups, residents, and schools. In addition, the video has been used for discussions at City Council Meetings and during staff training. During the reporting period, the Clean Water Video was reviewed 95 times via the City's Website. **Table 8-3** below provides a breakdown by month on the number of times the video was viewed on the City's website during the Fiscal Year 2012 reporting period.

Table 8-3: Clean Water Video Webcast Summary

Month	Number of Views
Jul-11	4
Aug-11	8
Sep-11	11
Oct-11	9
Nov-11	5
Dec-11	16
Jan-12	8
Feb-12	3
Mar-12	12
Apr-12	7
May-12	10
Jun-12	2
Total Views	**95**

The local television station, Del Mar TV, airs the "Keeping the Water Clean for You!" video throughout the year. Other clean water related Public Service Announcements (PSAs) and bulletins are routinely aired on the station in order to educate the public on how they can help

reduce urban runoff and storm water pollution. **Table 8-4** outlines the clean water related airings by Del Mar TV during the reporting period.

Table 8-4: FY 2012 Del Mar TV Clean Water PSAs and Bulletins

Program or PSA	Source	Airings
Working for Water	Water Board Training Academy	14
City of Del Mar's Clean Water Program: Keeping the Water Clean For You!	Del Mar Clean Water Program	10
Being Waterwise	Del Mar TV Production	8
Slow the Flow: Make Your Landscape Act More Like A Sponge	Potrero Industries (San Francisco)	8
Help Keep Del Mar Clean: Ocean & Beaches PSA	Del Mar TV Production	20
Clean Water Tips and Information Bulletins	DMTV Community Bulletin Board	Multiple/Day
Think Blue San Diego! (various PSAs)	City of San Diego Stormwater Program	2/Day

9. PUBLIC PARTICIPATION

9.1 PROGRAM IMPLEMENTATION

During Fiscal Year 2012, the City was compliant with all elements of Section D.6 of the Municipal Permit.

General Public Feedback Mechanisms

The City continues to maintain an active website (www.delmar.ca.us) which provides the public with opportunities to contact City staff directly, and find information regarding any of the City's programs. The Clean Water Program has its own webpage that is updated as needed (http://www.delmar.ca.us/Government/dept/Pages/CleanWater.aspx) and allows the public to contact the Clean Water Manager and Code Enforcement Officer to report potential violations of the City's Stormwater Management and Discharge Control Ordinance (Section 11.30 of the Del Mar Municipal Code) using an online reporting form. The webpage also allows the public to ask questions regarding water use and runoff, download information on the City's JURMP, and link to the City's various BMP Manuals and the Permit itself.

The City continues to maintain a specific e-mailbox and phone hotline for reporting issues. This email address (cleanwater@delmar.ca.us) and hotline (858) 755-9313 x172 are directly answered by the City's Clean Water Manager. Every attempt is made to respond to any inquiry by the close of the next business day, although issues are typically addressed within an hour of receipt of information. When inquiries are made from areas within the 92014 zip code, but outside the City's jurisdiction (i.e. the "Del Mar Heights" portion of the City of San Diego), City of Del Mar staff notify City of San Diego staff for follow-up. During the reporting period there were no such referrals.

Formal Public Hearings and Workshops

The general public is given the opportunity to provide testimony and provide feedback on issues related to the Clean Water Program at regular meetings and workshops held by the Del Mar City Council, the Del Mar Planning Commission, and other City Committees. This can include public testimony on development planning and capital improvement projects relating to the project-specific implementation of stormwater controls. All testimony, concerns, and input are then referred to staff for review, comment, and action as appropriate.

During the Fiscal Year 2012 reporting period, the Del Mar City Council held 31 public meetings (including public workshops) in which the general public was given the opportunity to provide feedback on the Clean Water Program, or on any topics they wished to bring before the elected officials of the City.

During the reporting period, there were specific City Council agenda items relating to the Clean Water Program including implementation of the JURMP increases to the Clean Water funding mechanism, and overall update to the Clean Water Program. To reach the widest audience possible, these hearings and workshops are streamed live over the internet, broadcast live on DelMarTV (Time Warner Cable Channels 19 & 24), replayed in their entirety the two days following the hearing on DelMarTV, and available on-demand through the City's website. **Table 9-1** below provides a list of the specific City Council Agenda items relating to the Clean Water Program, JURMP, or other water quality related issues for the Fiscal Year 2012 reporting period.

Table 9-1: Public Participation Program Implementation

Hearing Date	Subject
June 4, 2012	Clean Water Program Update, Resolution for Clean Water Service Charge Increase for FY 2012-2013

Staff as Feedback Mechanism

As indicated in the 2008 JURMP, the City of Del Mar believes that City staff are the public at work. More importantly, field staff are the eyes and ears of the City, interacting with the general public during their day-to-day work. Staff is continually encouraged to report violations and provide feedback to the City's Clean Water Manager on the implementation of the JURMP, and can provide valuable information on which systems and programs are working and suggestions on improving the programs.

10. FISCAL ANALYSIS

10.1 PROGRAM IMPLEMENTATION

During Fiscal Year 2012, the City was compliant with Section G of the Municipal Permit.

Section 12 of 2008 JURMP provided a strategy for effectively conducting a fiscal analysis of the Program in its entirety. The fiscal analysis strategy in the 2008 JURMP included the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities of the Program. No modifications in Section 12 of the 2008 JURMP were made during this reporting period.

On January 29, 2009, the San Diego Municipal Copermittees adopted the "Standardized Fiscal Method and Format" which provides a model for the City of Del Mar and other Copermittees to perform the review and annual reporting as required in Order R9-2007-0001, Section G. This methodology and reporting format became effective in January 31, 2010. The "Standardized Fiscal Analysis Method and Format" (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k) and J.1.c(1)(d) of the Permit. The Fiscal Analysis Method document was submitted to the San Diego RWQCB on January 31, 2009, as Attachment 1 of the "Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009."

As required, the City of Del Mar is utilizing the format and guidelines described in the Fiscal Analysis Method for this reporting period. This section of the Annual Report provides a fiscal analysis of the City's urban runoff management programs which meets all requirements of the Permit.

10.1.1 Clean Water Program Budget

The City of Del Mar Clean Water Program is a multi-departmental program, funded as an enterprise fund in the City's Annual Budget. Enterprise funds account for operations that are financed and operated in a manner similar to private businesses, with the costs of providing the services recovered largely through user fees. Fund 55 ("The Clean Water Fund"), is one of three (3) enterprise funds in the City's budget, and was added to the City's budget in Fiscal Year 2004 to account for the mandated costs of the City's responsibilities in order to comply with the Municipal Permit.

The City of Del Mar Operating and Capital Improvement Budgets for Fiscal Year 2012 and Fiscal Year 2013 were presented to the Del Mar City Council on June 4, 2012. The budget was formally adopted during the same meeting.

For the Fiscal Year 2011-2012 reporting period, the final amended budget for Fund 55 totaled $462,922. **Table 10-1** below provides a breakdown of program budget by major budget category for Fiscal Year 2012.

Table 10-1: Budget Summary – Clean Water Fund 55

Fund Account		Adopted Budget Fiscal Year 2012	Description/Comments
55-5220	Clean Water Engineering	-	Engineering contractual services including: Program management (Fiscal Year 2008) water quality testing, development and distribution of educational materials, fees to agencies (Fiscal Year 2008), and engineering services.
55-5530	Clean Water Planning	44,761	Active enforcement of Clean water regulations including project plan review, permitting, construction monitoring and plan review of BMPs.
55-5536	Clean Water Code Enforcement	23,068	Active in-field enforcement of clean water regulations, including response to resident complaints.
55-5539	Clean Water Program Management	237,975	Beginning mid-year Fiscal Year 2008, all program management and reporting activities, fees to agencies, and interaction with regional Copermittee groups.
55-5840	Public Works (General)	19,195	Provides for administration and general support for all clean water programs for property and facilities, including supervision of maintenance staff.
55-5841	Flood Control & Drainage	4,772	Provides for necessary monitoring, water quality testing, and labor associated with program requirements when Flood Control pumps are operated.
55-5845	Street Maintenance	99,718	Provides for a portion of sidewalk and street cleaning including street sweeping and storm drain maintenance within the City limits of Del Mar. Also covers costs with testing, recording contents, and recovering all deposited materials that otherwise would discharge to the beach, river, or lagoon.
55-5847	Street Landscaping	19,608	Provides for landscape supervision, documentation, and controls for the Clean Water aspects of the street landscaping for medians, islands, street ends, and other street related areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting.
55-5848	Park Maintenance	13,825	Provides for park maintenance supervision, documentation, and controls for the Clean Water aspects of the landscaping for parks and open space areas. The program also provides for improved litter control, pesticide and fertilization monitoring and reporting.
Total Clean Water Program Budget – Fund 55		**$462,922**	

10.1.2 Fiscal Analysis Methods

The City of Del Mar utilized the format and guidelines included in the Fiscal Analysis Method for reporting purposes; however, given the City's financial accounting methods, a few modifications were necessary. These adjustments are described below.

10.1.3 Fiscal Analysis Results

The City's Fiscal Year 2012 jurisdictional (JURMP), watershed, (WURMP), and regional (RURMP) projected expenditures for the implementation of the Municipal Permit requirements are summarized in **Table 10-2** below.

10.1.4 JURMP Expenditures

The City of Del Mar utilized the expenditure categories detailed in the Fiscal Analysis Method for jurisdictional reporting. However, due to the implementation overlap of some of the City's municipal permit components; it is difficult to separate out individual component costs. As a result, the expenditures for residential, education, and public participation are reported as one expenditure category. Additionally, since the City does not explicitly track expenditures by permit component for its budgeting purposes, in many cases estimated percentages were utilized to allocate expenditures into the appropriate municipal permit component categories.

A total of $462,922 was projected to be expended in Fiscal Year 2012 for the implementation of JURMP activities. An overview of the expenditures reflected in JURMP activity components is described below.

Administration
Activities identified in this component represent labor and non-labor expenditures for materials, supplies, equipment, or tools that are not otherwise incorporated into other expenditure categories, general administrative functions (e.g., program planning, budgeting, staff supervision), and program assessment and reporting.

Development Planning
Activities identified in this component represent labor and non-labor expenditures related to issuance or oversight of permits or of plans (e.g., permit counter support, plan checks, permit or application processing), project planning and engineering (e.g. project design specifications, capital improvement projects).

Construction
Activities identified in this component represent labor and non-labor expenditures related to construction site inspections and enforcement.

Municipal
Activities identified in this component represent labor and non-labor expenditures related to maintenance inspections of streets, roads, catch basins and inlets, open channels, and the MS4, municipal facility inspections, street and parking lot sweeping, catch basins and inlets, open channels, and MS4 cleaning, and municipal BMP implementation. Since the City of Del Mar conducts all fire-fighting training outside of the City, and no non-emergency fire-fighting flows occurred during the reporting period, the City does not currently track expenditures relating to non-emergency fire-fighting flows. Any costs associated with preparing for these flows are included in the municipal component.

Table 10-2: Fiscal Year 2012 Expenditure Summary by Program Component

Component Description	Fiscal Year 2012 Projected Expenditures
Jurisdictional Component	
Administration	43,020
Development Planning	50,093
Construction	25,927
Municipal (Including Non-Emergency Fire Flows)	148,733
Industrial and Commercial	16,948
Residential, Education, and Public Participation	42,150
IDDE	28,269
Jurisdictional Total	**$355,138**
Watershed Component	
San Dieguito Watershed	42,900
Los Peñasquitos Watershed	35,015
Watershed Total	**$77,915**
Regional Component	
Total Copermittee Cost Share for Del Mar	19,065
Additional Regional Costs	10,804
Regional Total	**$29,869**
Total Costs	**$462,922**

Industrial and Commercial

Activities identified in this component represent labor and non-labor expenditures related to evaluation and enforcement of program requirements at industrial and commercial sites or sources (e.g. routine inspections and complaint investigations).

Residential, Education, and Public Participation

Activities identified in these components represent labor and non-labor expenditures related to investigation and enforcement of residential areas or activities, staffing outreach events, development and production of outreach materials, and any expenditures associated with waste collection and recycling (e.g. household hazardous waste, used oil).

Illicit Discharge Detection and Elimination

Activities identified in this component represent labor and non-labor expenditures related to the identification and elimination of illicit discharges or connections, enforcing the City of Del Mar's storm water ordinance, and any expenditures related to monitoring programs (e.g. dry weather monitoring, coastal storm drain monitoring, special investigations, field or sampling equipment, materials and supplies).

10.1.5 WURMP Expenditures

The City of Del Mar utilized the expenditure categories (administration, watershed activities, cost share contribution, and other) detailed in the Fiscal Analysis Method for watershed reporting. The watershed expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees included in the watershed(s).

A total of $77,915 was projected to be expended in Fiscal Year 2012 for the implementation of WURMP activities. This also includes costs for the implementation of applicable TMDLs (Los Peñasquitos Lagoon Sediment TMDL development and Bacteria TMDL Revised Project I Twenty Beaches and Creeks in San Diego Region), which are considered Special Studies.

10.1.6 RURMP Expenditures

The City of Del Mar utilized the expenditure categories (administration, cost share contribution, regional activities, and other) detailed in the Fiscal Analysis Method for regional reporting. The regional expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees in the region. A total of $29,869 was projected to be expended in Fiscal Year 2012 for the implementation of RURMP activities.

10.1.7 Funding Sources

To ensure adequate funding for the Clean Water Program, the City uses a combination of user fees and general fund monies.

10.1.8 Clean Water Service Charge

The City of Del Mar City Council created and adopted a user fee, called the Clean Water Service Charge to offset the costs of the program. Initially, the rate was adopted to collect $100,000 of the estimated $300,000 for the program, with an escalator to achieve full cost recovery by 2009. Mid-way through the five-year schedule, on July 24, 2006, the California Supreme Court published a decision in the case of Bighorn-Desert View Water Agency v. Verjil (2006) 39 Cal. 4th 205, which held that consumption-based rates such as water and sewer rates are subject to the notice and hearing requirements of California Constitution, Article XIIID, Section 6 (commonly known as "Proposition 218"). Therefore, on January 22, 2007, and February 5, 2007, the Del Mar City Council held public hearings to receive written protests to comply with Proposition 218. No majority protest was received, and the Council ratified the previously approved five-year rate schedule, including the City's Clean Water Service Charge. However, the adopted rate increases did not account for the actual increases in the costs associated program requirements.

As an additional measure to obtain voter approval of the five-year rate schedule for the City's Clean Water Service Charge, the Council directed staff on April 2, 2007, to start the process to perform a mail ballot election procedure. During the process of researching the mail ballot election procedures and the current rates, it became apparent that the process would

immediately need to be repeated to set the Fiscal Year 2010 rates and charges, since the current five-year rate schedule was due to expire in June of 2009. Due to the additional costs incurred in complying with the new requirements of the 2007 Permit, increases to the Clean Water Service Charge were proposed, including an annual rate escalator. All monies appropriated as part of the Clean Water Service Charge are directly identified for the Clean Water Program, and pursuant to law, may not be used by the City for any other purpose.

During the Fiscal Year 2009 reporting period, in compliance with Proposition 218, both the majority protest hearing and mail ballot process were conducted for the proposed increases. Both the ratification of the existing rate structure (required by Proposition 218), and the new rates, including the rate escalator, passed by more than 62%. As a result of the passage of the Clean Water Service Charge, the City will continue to have a secure funding source for the Clean Water Program, outside of general fund monies. Based on current water allocations for the City of Del Mar, the projected revenues from the Clean Water Service Fee will be $441,081 for Fiscal Year 2012.

11. EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The Municipal Permit specifies that Copermittees assess the effectiveness of their JURMP at three levels: programmatic, component, and activity-specific. The City uses these effectiveness assessments as part of a feedback loop that incorporates planning, implementation and assessment of its overall Clean Water Program.

This section outlines an integrated effectiveness assessment process that includes compliance assessment results for Fiscal Year 2012 and program changes that reflect the City's approach to adaptive management. In addition to learning from its own program assessment, the City learns from other Copermittees' programs. The information that is shared amongst the Regional Copermittees is used by the City to evaluate its activities and make improvements.

11.2 EFFECTIVENESS ASSESSMENT RESULTS

11.2.1 Baseline BMP Assessment

The City assesses the effectiveness of its specific activities, program components and overall JURMP by evaluating at the following outcome levels listed in **Table 11-1**. An effectiveness assessment of each program component is presented in **Tables 11-2** through **11-8**.

Table 11-1: Effectiveness Assessment Outcome Levels 1-6

Outcome Level	Description	Assessment
1	Program Compliance	Measured by comparison to targeted outcomes, and the City's effectiveness at implementing the Municipal Permit
2	Changes in Attitudes, Awareness and Knowledge	Measured by pre- & post-surveys and questioning of specific regulated communities
3	Behavioral Changes and BMP Implementation	Measured by analysis of inspection findings
4	Load Reductions	Measured by direct method – how much waste material is collected and disposed
5	MS4 Discharge Quality and Hydrology	Measured through program implementation, monitoring results, and observations during inspections
6	Receiving Water Conditions	Measured by compliance with water quality standards, receiving water monitoring results, and beneficial use attainment

Level 1 – Compliance Assessment—Activity, Components and Program

Overall program compliance is based on the summation of the individual Municipal Permit component compliance evaluations. Municipal permit component compliance is determined by comparing data to the targeted outcomes for specific activities. For Fiscal Year 2012, the targeted outcomes for each permit activity are defined as fulfilling the baseline Municipal Permit requirements of Order R9-2007-0001. The assessment results are provided in the tables below.

Overall, the City met 100% of its targeted outcomes for Baseline BMP significant activities.

Table 11-2: Assessment of Development Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2012 Targeted Outcome	Confirmation and/or result
1	Require all development projects to undergo the City's urban runoff approval process and meet applicable project requirements	1	Confirmation	100% of development projects undergo urban runoff approval process and meet requirements	Confirmed
2	Require all applicable SUSMP BMPs to be applied to all priority development projects	1	Confirmation	100% of PDPs to have SUSMP BMPs applied	Not Applicable for Fiscal Year 2012 - No PDP projects
3	If PDPs are allowed to implement treatment control BMPs with low removal efficiency rankings, require that a feasibility analyses is conducted to exhibit that more effective BMPs were infeasible	1	Confirmation	Allow 0% to implement TCBMPs with low efficiency ranking - unless paired with higher efficiency TCBMPs	Not Applicable for Fiscal Year 2012 - No PDP projects
4	Maintain an updated treatment control BMP inventory	1	Confirmation	Conduct 100% of updates	Confirmed - no updates
5	Inspect TCBMPs per minimum requirements in Permit	1	Confirmation	Inspect 100% of TCBMPs in City inventory	Completed
6	Conduct annual verification of operation and maintenance of TCBMPs	1	Confirmation	Verify 100% of TCBMPs in City inventory	Completed
7	Conduct BMP verification for all PDPs prior to occupancy	1	Confirmation	Perform inspections at 100% of PDPs to ensure BMPs are constructed prior to occupancy	Not Applicable for Fiscal Year 2012 - No PDP projects
8	For all qualifying HMP Projects, ensure that HMP requirements are applied	1	Confirmation	Require 100% of qualifying projects to implement HMP requirements	Not Applicable for Fiscal Year 2012 - No PDP/HMP projects
9	Enforce the development projects throughout their process including post-construction TCBMP maintenance	1	Confirmation / Tabulation	Enforce as necessary	No enforcement necessary for Fiscal Year 2012

Table 11-3: Assessment of Construction Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2012 Targeted Outcome	Confirmation and/or result
1	Require all construction sites projects to undergo the City's urban runoff approval process and meet applicable construction requirements	1	Confirmation	100% of development projects undergo construction urban runoff approval process	Confirmed
2	Maintain a regularly updated construction site inventory	1	Confirmation	Maintain inventory on monthly basis	Confirmed
3	Require designated BMPs to be implemented for all construction sites	1	Confirmation	Require construction BMPs at 100% of construction sites	Confirmed
4	Apply maximum disturbed area requirements for all applicable construction sites	1	Confirmation	Require maximum disturbed area requirements at 100% of applicable sites	Not applicable during Fiscal Year 2012 - no applicable sites
5	Maintain a listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites	1	Confirmation	Require advanced treatment requirements at 100% of applicable sites	
6	Conduct construction site/activity inspections at the required frequencies	1 & 3	Confirmation / Tabulation / Inspection	Conduct 100% of required inspections at proper frequencies	Confirmed
7	Take enforcement actions against the construction community as-needed to obtain compliance with the City's Municipal Code	1	Confirmation / Tabulation	Enforce as necessary	No enforcement necessary for Fiscal Year 2012

Table 11-4: Assessment of Municipal Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2012 Targeted Outcome	Confirmation and/or result
1	Update the municipal inventory and prioritization	1	Confirmation	Update inventory and prioritization as necessary	Confirmed - however, no updates during Fiscal Year 2012
2	Require designated BMPs to be implemented, for municipal areas and activities, as well as special events	1	Confirmation	Require BMPs at 100% of municipal sites and activities	Confirmed
3	Inspect and maintain municipal treatment controls.	1	Confirmation	Conduct 100% of required inspections at proper frequencies	Confirmed
4	Inspect and clean catch basins/inlets at appropriate frequencies	1 & 3	Tabulation / Inspection	Inspect basins/inlets at proper frequencies	Inventory = 284 Inspected = 284 Catch Basins/Inlets Cleaned = 284
5	Inspect and clean MS4 pipes at appropriate frequencies	1	Tabulation	Inspect MS4 at proper frequencies	Total Distance of MS4 pipes = 5.87 miles Total Distance inspected ~ 3,500 feet Total Distance cleaned ~ 2,500 feet
6	Inspect and clean open channels at appropriate frequencies	1	Tabulation	Inspect channels at proper frequencies	Open Channels = 2.85 miles Inspected = 2.85 miles Cleaned ~ 2.85 miles
7	Remove waste and litter from catch basins, inlets, the MS4, and open channels as required	4	Quantification	Clean MS4 system as required	Catch Basins/Inlets, MS4, and open channels = 48.35 tons
8	Require designated BMPs for pesticides, herbicides, and fertilizers to be implemented for municipal areas and activities.	1	Confirmation	Require BMPs for pesticides, herbicides and fertilizers at 100% of municipal sites and activities	Confirmed

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2012 Targeted Outcome	Confirmation and/or result
9	Track number of miles swept	1	Tabulation	Conduct sweeping at required intervals	Confirmed – 1,198 miles
10	Sweep parking lots and streets	4	Quantification	Conduct sweeping at required intervals	Street and Parking Lot Sweeping = 143.6 tons
11	Implement efforts to prevent and eliminate infiltration from the sanitary sewer to the MS4	1	Confirmation	Conduct sanitary sewer efforts	Confirmed
12	Conduct inspections of the City's municipal areas and activities	1	Confirmation	Conduct inspections at the required frequencies	Confirmed
13	Take enforcement actions against the municipality as-needed to obtain compliance with the City's Municipal Code	1	Confirmation / Tabulation	Enforce as necessary	No enforcement necessary for Fiscal Year 2012

Table 11-5: Assessment of Industrial/Commercial Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2012 Targeted Outcome	Confirmation and/or result
1	Update the industrial and commercial inventory	1	Confirmation	Update inventory and prioritization as necessary	Confirmed; new property-based inventory
2	Require designated BMPs to be implemented, for industrial and commercial sites/sources.	1	Confirmation	Require BMPs at 100% of commercial and industrial businesses	Confirmed
3	Notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses	1	Confirmation	Notify 100% of inventoried businesses of Clean Water Program requirements	Confirmed
4	Inspect the businesses on the City's inventory at the percentages identified in the Permit (at least 25% of inventory)	1, 2, & 3*	Confirmation / Inspection / Tabulation	Inspect 100% of inventoried businesses	City inspected 100% of inventoried businesses and all commercial/industrial properties City-wide
5	Take enforcement actions against the business community as-needed to obtain compliance with the City's Municipal Code	1	Confirmation / Tabulation	Enforce as necessary	NOV = 3 No citations were issued to commercial or industrial facilities in FY 2012

* For more information, see Levels 2 and 3 beginning on page 11-9

Table 11-6: Assessment of Residential Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2012 Targeted Outcome	Confirmation and/or result
1	Require designated BMPs to be implemented for residential areas and activities	1, 2, & 3*	Confirmation	Require BMPs at 100% of the City's residential areas and activities	Confirmed; inspected and tracked through residential patrols
2	Facilitate proper management and disposal of used oil and other household hazardous materials	1	Confirmation	Implement a household hazardous waste program	Confirmed; collected ~2.42 tons HHW
3	Take enforcement actions against the residential community as-needed to obtain compliance with the City's Municipal Code	1	Confirmation	Enforce as necessary	NOV = 10 Citation = 2
4	Collaborate with Regional Education Program	1	Confirmation	Collaborate with Regional Education Program	Confirmed

* For more information, see Levels 2 and 3 beginning on page 11-9

Table 11-7: Assessment of Education Component

No.	Permit Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2012 Targeted Outcome	Confirmation and/or result
1	Conduct outreach to high-risk dischargers	1	Confirmation	Conduct outreach to high-risk dischargers	Confirmed
2	Conduct training of municipal departments and personnel	1	Confirmation	Conduct training of municipal departments and personnel	Confirmed
3	Conduct outreach to the development and construction communities	1	Confirmation	Conduct outreach to the development and construction communities	Confirmed
4	Conduct outreach to the general public	1	Confirmation	Conduct outreach to the general public	Confirmed

Table 11-8: Assessment of Miscellaneous Program Items

No.	Compliance Item	Outcome Level	Assessment Method	City Fiscal Year 2012 Targeted Outcome	Confirmation and/or result
1	Conduct public participation activities	1	Confirmation	Conduct public participation activities as-needed	Confirmed
2	Conduct a fiscal analysis of the City's urban runoff management programs.	1	Confirmation	Conduct a fiscal analysis of the program	Confirmed
3	Conduct special investigations as-needed	1	Confirmation	Conduct special investigations	Confirmed
4	Identify and make any revisions necessary to the JURMP	1	Confirmation	Revise JURMP as-needed	Revisions to the JURMP were made during Fiscal Year 2012; see Section 12

Level 2 – Changes in Knowledge, Awareness and Attitudes Assessment

During Fiscal Year 2012, the City continued its efforts to collect data and information regarding changes in attitude, awareness and knowledge. In general, the regulated community continued to show a greater awareness and knowledge of the Clean Water Program, its purpose and goals. The inspected businesses in particular showed a greater understanding of the program and its requirements.

Through the patrolling inspections, the residential and industrial/commercial communities were further educated using door hangers and clean water notification letters. As discussed in the previous report components, both educational materials were distributed to the target communities during the reporting period. Door hangers were used to notify residents and clean water reminder letters used to inform business and property owners of issues observed by staff. More than 70 letters were mailed to business/property owners and over 110 door hangers were left at residential properties as a result of the patrol implementation. These numbers represent a net increase in public education as compared to previous years when these educational materials were not distributed.

Level 3 – Behavioral Changes and BMP Implementation Assessment

During the reporting period the City continued its efforts to collect data and information for assessing behavioral changes and BMP implementation. The primary method of data collection was through construction site and patrolling inspections of various facilities to determine BMP implementation. Based on the findings of the inspections of municipal, commercial and construction sites, it is evident that the community as a whole is exhibiting a greater rate of BMP implementation.

During the fiscal year, BMP deficiencies were observed at 32 commercial properties within the City. Of these, 18 (approximately 56%) corrected the issue after the first Clean Water reminder letter was mailed to the responsible party. At all 18 facilities, the deficiency was not observed a second time during the remainder of the year. Other facilities were eventually brought into full compliance, although additional letters and inspections were required. With the help of the City's educational materials, business owners and residents are making the behavioral changes and beginning to implement BMPs to protect water quality.

Level 4 – Load Reduction Assessment

During Fiscal Year 2012, the City continued its efforts to collect data and information for assessing pollutant load reductions. The primary method for determining pollutant load reductions was to collect and analyze data on specific storm water activities; such as storm drain cleanings, street sweeping, and patrolling inspections. Until more data and information becomes available to accurately estimate pollutant load reductions from non-cleaning activities, the City will rely on these activities as the primary quantifiable pollutant load reduction activities.

Below is a summary of the quantifiable pollutant load reduction activities that the City conducted during the Fiscal Year 2012 reporting period:

- Collected 2.42 tons of HHW.
- Public Works conducted 284 inspections of catch basins and inlets, and cleaned 284 catch basins and inlets with accumulated waste.
- Total debris removed from catch basins, inlets, cleanouts, and the MS4 was approximately 48.4 tons of waste and litter by the Public Works Department.

- Through the implementation of the City's street sweeping program, 1,198 curb miles were swept and 143.6 tons of debris (including parking lots) was removed within the City.

Other programs are likely causing load reductions through behavior changes in the City's business and residential populations, although this cannot be quantified at this time. The commercial/industrial and residential patrolling programs are resulting in fewer observations of BMP deficiencies now that the programs have been in place for over a year. This suggests BMP implementation is on the rise, which will result in positive load reduction impacts in the long term. Additional analysis will be presented in future JURMP Annual Reports when more data is available.

11.2.2 Integrated Program Assessment

In order to present a comprehensive water quality and integrated assessment, the City analyzed information collected from regional, watershed, jurisdictional, and Municipal Permit-required programs to assess Outcome Levels 5 and 6, shown in **Table 11-1**, above.

Level 5 – MS4 Discharge Quality Assessment

The City's MS4 discharge water quality can be evaluated through various permit-designated programs such as the Coastal Storm Drain Monitoring (CSDM) and Dry Weather Monitoring (DWM) Programs. The City monitors seven (7) coastal outfalls on a monthly basis for the CSDM Program, and collects and analyzes urban runoff for indicator bacteria. Samples from coastal outfalls are collected when observed to be flowing. **Table 11-9** highlights the mean indicator bacteria concentrations at the City's coastal outfalls during the previous four program years. Although the concentration data is variable, the fewest samples per monitoring event were taken during the 2011-2012 program year. Less urban runoff was observed during this period, suggesting less impact to the City's beaches.

Table 11-9: CSDM Indicator Bacteria Concentrations in Coastal Outfall Samples

Program Year*	Mean Concentrations (MPN/100mL)			Mean Samples/Month
	Total Coliform	Fecal Coliform	Enterococcus	
2008-2009	43,767	3,059	879	4.2
2009-2010	14,462	3,720	1,081	5.0
2010-2011	22,555	8,110	432	6.7
2011-2012	32,654	4,132	1,063	3.4

*CSDM Program Year is from October to September of the following year

Level 6 – Receiving Water Quality Assessment

Receiving Water Quality can be evaluated through municipal and regional monitoring programs. The County of San Diego Department of Environmental Health (DEH) monitors the receiving water at three (3) beaches within the City's jurisdiction between the San Dieguito and Los Peñasquitos Lagoons. **Table 11-10** presents beach postings at AB411 beaches between 2009 and September 2012. There were 9 postings at FM-100, 8 postings at EH-380, and 1 posting at EH-360 during the timeframe.

Table 11-10: AB411 Exceedances

Station	Patrol Date	2009	2010	2011	2012*	Total
EH-360	Powerhouse Park/15th Street Del Mar	1	0	0	0	**1**
EH-380	San Dieguito River Beach Del Mar	4	3	1	0	**8**
FM-100	Torrey Pines State Beach	0	4	3	2	**9**
Total		**5**	**7**	**4**	**2**	**18**

*2012 data represents January 2012 to September 2012

Receiving water samples are also collected and analyzed through the City's CSDM program. Per the Permit, the City collects receiving water samples as part of the CSDM program only when urban runoff from one of the seven outfalls reaches the Pacific Ocean. Receiving water samples analyzed from the 2011-2012 program year contained the lowest concentrations of the three indicator bacteria when compared to samples taken during the previous three years. The current year also had the lowest average number of samples taken per month, suggesting that less urban runoff is reaching and potentially impacting the receiving water (and thus being sampled per program protocol).

Table 11-11: CSDM Indicator Bacteria Concentrations in Receiving Water Samples

Program Year*	Mean Concentrations (MPN/100mL)			Mean Samples/Month
	Total Coliform	Fecal Coliform	Enterococcus	
2008-2009	8,676	23	21	1.3
2009-2010	31	13	8	1.2
2010-2011	301	21	11	1.5
2011-2012	17	8	6	0.67

*CSDM Program Year is from October to September of the following year

Integrated Program Planning

The City will continue to adapt its program based upon assessments of the baseline program and the BMP efficiencies. These two assessments and their resulting changes to the City's program are described below.

Baseline BMP Assessment

During the reporting period, the City met its targeted outcomes. Based upon this key assessment, the City does not plan to make modifications to its Baseline BMP implementation.

Adaptive Management

During Fiscal Year 2012, the City met with other Copermittees, through WURMP meetings and other forums, and continued to discuss pilot and special studies conducted during past and present reporting periods. During the Fiscal Year 2012 reporting period, the City of Del Mar applied adaptive management to their program through the use of patrolling inspections.

The program modifications have been included as a FY 2012 WURMP Activity to assess the effectiveness of revised inspection processes, which includes more frequent patrol property-based inspections. The City has found that it can inspect a significantly greater portion of the community on a more frequent basis using the patrolling inspections, while remaining within program budget. A summary of the results have been presented in the previous components of

this report, and additional information and results will be presented in the FY 2012 WURMP Annual Reports.

12. JURMP REVISIONS

In order to reflect changes to the City's inspection process, the following updates were made to the City of Del Mar's 2008 JURMP document. The revisions were made to portions of the Industrial/Commercial Component (Section 7 of the 2008 JURMP) and IDDE Component (Section 9 of the 2008 JURMP). These modifications are summarized in **Table 12-1** below. The redlined revised versions of Section 7, Section 9, Appendix 7-D, and Appendix 7-G of the 2008 JURMP are included in **Appendix K**.

Table 12-1: Summary of FY 2012 Revisions to 2008 JURMP

2008 JURMP Section	FY 2012 Revisions
Industrial and Commercial Component, Section 7.2.5	Section 7.2.5 – Inspection of Industrial Facilities: Revised language for patrolling inspections, reporting and follow-up procedures
Industrial and Commercial Component, Section 7.3	Section 7.3 – Stationary Commercial Sources: Revised inventory prioritization, inspections, reporting and follow-up procedures
Industrial and Commercial Component, Appendix 7-D	Appendix 7-D – Industrial Facility Inspection Procedures: Revised description of industrial inspections, follow-up, and enforcement
Industrial and Commercial Component, Appendix 7-G	Appendix 7-G – Stationary Commercial Facility Inspection Procedures: Revised description of industrial inspections, follow-up, and enforcement
Illicit Discharge Detection and Elimination Component, Section 9.4.4	Section 9.4.4 – Coastal Storm Drain Monitoring: Additional language regarding Sampling Frequency Reduction Criteria (SFRC) sites within the City for reduced monitoring

Revisions to the 2008 JURMP focus primarily around the City's patrolling inspections. With the implementation of the new inspection procedures, the commercial/industrial inventory was modified to accommodate additional information, cataloging all properties involved in commercial and/or industrial land uses. The new property-based inventory lists high priority businesses as tenants within their respective property (see Section 7.3 of the revised 2008 JURMP).

Section 9 of the 2008 JURMP was also updated to reflect changes to the Coastal Storm Drain Monitoring (CSDM) program. Three (3) of the City's coastal outfalls have met the sampling frequency reduction criteria (SFRC) established by the CSDM Copermittees and thus will be monitored every other month per Section II.A.6.b. of the Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program.

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13. CONCLUSIONS AND RECOMMENDATIONS

During the Fiscal Year 2012 reporting period, the City of Del Mar implemented the Municipal Permit requirements and the activities described in the City's 2008 JURMP. The City continues to support a comprehensive stormwater management program, with an integrated assessment approach through the implementation of the JURMP. This Annual Report documents the City's efforts to implement the various JURMP components, and these activities and their compliance are reflected in Program Assessment tables contained in the Effectiveness Assessment addressed in Section 11.

This section draws conclusions from the collected data contained in this Annual Report, and makes appropriate recommendations based on the review of program implementation during the Fiscal Year 2012 reporting period.

13.1 RECOMMENDATIONS AND PROGRAM MODIFICATIONS

The City's Clean Water Program continued to evolve during the Fiscal Year 2012 reporting period, through revising implementation techniques and tracking and reporting mechanisms. The City remains committed to working with its staff, other Copermittees, and the Regional Board to continue improving and adapting its program and make all efforts necessary to comply with the Permit requirements while improving water quality. With the feedback mechanisms and comprehensive assessment programs in place, future modifications may be required to make sure that the City's program continues to be effective.

As indicated in the City's 2008 JURMP, the City's Clean Water Program will require periodic revision. The City made the following modifications to its program during the reporting period:

- Inspection of Industrial Facilities (Section 7.2.5): Revised language for patrolling inspections, reporting and follow-up procedures;
- Stationary Commercial Sources (Section 7.3): Revised inventory prioritization, inspections, reporting and follow-up procedures;
- Industrial Facility Inspection Procedures (Appendix 7-D): Revised description of industrial inspections, follow-up, and enforcement;
- Stationary Commercial Facility Inspection Procedures (Appendix 7-G): Revised description of industrial inspections, follow-up, and enforcement; and
- Coastal Storm Drain Monitoring SFRC sites (Section 9.4.4): Added language to describe SFRC outfalls and reduced sampling frequency.

Some of the key recommendations for program implementation during Fiscal Year 2013 are as follows:

- Continue implementation of the City's 2008 JURMP;
- Continue improvements to activity/document tracking systems through database revisions and implementation;
- Continued assessment of the operating procedures as related to the City's 2008 JURMP, focusing particularly on field implementation of the requirements, and whether the efficiency of implementation can be improved;
- Continue to engage and involve the community in the program implementation through increased personal contact, inspection letters, residential patrols, and enhancements to the City's website; and
- Continue to coordinate with the Regional Copermittees for consistent and updated approaches to program implementation.

13.2 CONCLUSIONS

During Fiscal Year 2012, the City has been successful at implementing the Clean Water Program. The City modified the 2008 JURMP in order to employ new program elements such as the patrolling inspections and property-based commercial/industrial inventory. These new elements have reinforced the Clean Water Program's influence in the public sphere, and have allowed for new educational and outreach opportunities with residents, local businesses, and property owners. In the future, the City will continue to reevaluate its program and use feedback from the general public and City staff in order to improve and best protect the water quality at the local beaches and lagoons.

Appendix A
Development Planning SUSMP Projects

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Administrative Design Review Permits ***REVIEWED*** *between 7/1/2011 to 6/30/2012*

Parcel #	St. #	Street Name	Project Name	Project #	Comments
300-410-33	1155	Cuchara	Wohlford- Kidd	DRB-08-33 AD MOD	minor project-no significant surface disturbance
300-252-16	635	Hoska	Wilson/Hook	ADR-11-23	minor project-no significant surface disturbance
299-021-09	2704	Ocean Front Ave	Harris	ADR-11-24	minor project-no significant surface disturbance
301-024-37	296	Ocean View Ave	Todd	ADR-11-25	minor project-no significant surface disturbance
300-072-04	141	13th Street	Brown	ADR-11-26	minor project-no significant surface disturbance
299-310-17-06	1552	Camino del Mar #405	Spatrano	ADR-11-27	minor project-no significant surface disturbance
300-222-06	333	9th Street	Hillenbrand	ADR-11-28	minor project-no significant surface disturbance
299-146-17	1912	Ocean Front Ave	Hayward	ADR-11-29	minor project-no significant surface disturbance
		11th Street	City of Del Mar	ADR-11-30	minor project-no significant surface disturbance
299-220-35	1720	Zapo	Friedlander	DRB-10-07 AD MOD	minor project-no significant surface disturbance
300-243-10	573	Amphitheatre	Sills	ADR-11-31	minor project-no significant surface disturbance
	221	20th Street	Dastin	ADR-11-32	minor project-no significant surface disturbance
301-022-05	144	Ocean View Ave	Bollman	ADR-11-33	minor project-no significant surface disturbance
301-025-11	425	Hidden Pines	Rice	ADR-11-34	minor project-no significant surface disturbance
299-091-13/04	225/226	24th and 25th Street	Donner	ADR-11-35	minor project-no significant surface disturbance
300-040-53	1440	Crest Road	Dunham	ADR-11-36	minor project-no significant surface disturbance
300-200-15	710	Camino del Mar	Pacifica Stratford	ADR-11-37	minor project-no significant surface disturbance
300-092-09	234	11th Street	Dutia	ADR-12-01	minor project-no significant surface disturbance
		Post Office	DM Garden Club	ADR-12-02	minor project-no significant surface disturbance
299-185-16	385	Bellaire	Rehfeld	ADR-12-03	minor project-no significant surface disturbance
298-241-08	3263	Camino del Mar	Brigantine	ADR-11-06 MOD	minor project-no significant surface disturbance
300-091-03-05	119-135	12th Street	Baldwin	ADR-12-03	minor project-no significant surface disturbance
300-012-08	1353	Stratford Ct	Olman	ADR-12-04	minor project-no significant surface disturbance
299-310-06-19	1552	Camino del Mar #532	1552 CDM, LLC	ADR-12-05	minor project-no significant surface disturbance
299-200-66	1450	Oribia Road	Achtel-Simek	ADR-12-06	minor project-no significant surface disturbance
299-131-05	2037	Coast Blvd	Russell	ADR-12-07	minor project-no significant surface disturbance
299-172-12	1963	Christy Lane	Humphreys	ADR-12-08	minor project-no significant surface disturbance
	220	12th Street	Hair Candy	ADR-12-09	minor project-no significant surface disturbance
299-200-19	1561	San Dieguito	Haydu	ADR-12-10	minor project-no significant surface disturbance
300-200-20	519	Stratford Ct	Marouf	ADR-12-11	minor project-no significant surface disturbance
300-221-16	416	9th Street	Wheeler	ADR-12-12	minor project-no significant surface disturbance
299-260-55	521	Avenida Primavera	Arya/Bloum	ADR-12-13	minor project-no significant surface disturbance
299-093-06	211	23rd Street	Rock	ADR-12-14	minor project-no significant surface disturbance

Encroachment Permits ***REVIEWED*** *between 7/1/2011 to 6/30/2012*

Parcel #	St. #	Street Name	Project Name	Project #	Comments
300-182-12	120	6th Street	Ace Exec. Environmental	EP-11-15	sewer emergency
300-263-02	711	Amphitheatre	Next G	EP-11-16	new wireless node
300-181-07	730, 750	Stratford Ct	Deal	EP-11-17	underground utilities, driveway and alley imp.
300-182-10	132	6th Street	Frieder	EP-11-18	storage unit
N/A		Via de la Valle/Jimmy Durante	Cox Communication	EP-11-19	trenching utilities
N/A		Via de la Valle/Solana Circle	Pacific States Engineering	EP-11-20	replace a 12in valve on an existing waterline
300-390-03	431	Van Dyke	Hardke	EP-11-21	driveway/trench repair
300-030-17	463	15th	Kenyon	EP-11-22	underground electrical service
300-092-20	1105	Stratford Ct	McGuire	EP-11-23	gas line
300-072-22	119	13th Street	Ludey	EP-11-24	gas trench
N/A		14th Street & Camino del Mar	Institute for Public Health	EP-11-25	pedestrian / bike counter
N/A	512	Via de la Valle	Cox Communication	EP-11-26	trenching cable
300-091-09	140	11th Street	Arrow Pipeline	EP-12-01	gas line / sewer
300-181-16	140	7th Street	Vint	EP-12-02	gas line
N/A	1223	Crest Road	Next G	EP-12-04	new wireless node
299-172-18	1997	Zapo	Bardsey/Assi	EP-12-05	sewer conx, trench, street improvements
299-220-35	1720	Zapo	Friedlander	EP-12-06	street repairs
300-200-03	720	Camino del Mar	Del Mar Inn	EP-12-07	ada space restripe / city property
300-410-33	1155	Cuchara	Wohlford	EP-12-08	driveway
299-063-13	228	25th Street	Natrud Design/Donner	EP-12-09	crane in ROW
N/A	2265	Jimmy Durante Blvd	Marathon Construction	EP-12-10	using city lot for construction storage
301-021-02	116	Nob	Reid	EP-12-11	gas line/nsfr
300-091-12	118	11th Street	O'Brien	EP-12-12	driveway and street improvements
300-333-04	325	El Amigo	Daly	EP-12-13	new paver driveway
299-091-13	226	24th Street	Roto Rooter	EP-12-14	repair SD-35
299-290-27	1511	Forest Way	Baenziger	EP-12-15	storage of construction equip in alley
299-260-32	567	Serpentine Drive	Carney	EP-12-16	driveway
300-091-12	118	11th Street	O'Brien	EP-12-12 MOD	locate water tank in row underground
N/A		East side of Crest Rd	Next G	EP-12-17	overlash cable to ext to Stratford
N/A	201-211	15th Street	Johnson	EP-12-18	
299-280-38	410	15th Street	Gayler	EP-12-19	demo stairs row and repair grade and landscaping
300-030-17	463	15th Street	Kenyon	EP-12-20	street improvement
N/A	1050	Camino del Mar	Saturn Electric	EP-12-21	installation of EV chargers
N/A		17th Street	Beach Safety Center	EP-12-22	installation of EV chargers
N/A		15th Street at Camino del Mar	Crown Castle NG	EP-12-23	new wireless node
N/A	201	Court Street	US Peroxide	EP-12-24	

Parcel #	St. #	Street Name	Project Name	Project #	Comments
N/A		Various locations	Crown Castle NG	EP-12-25	wireless node upgrades
760-145-03	2260	Jimmy Durate Blvd	22nd DAA	EP-12-26	
	941	Camino del Mar	Stantec	EP-12-27	destroy monitoring wells
299-093-06	211	23rd Street	Rock	EP-12-28	wall in ROW

*Design Review Board Permits **REVIEWED** between the dates of 7/1/2011 to 6/30/2012*

Parcel #	St. #	Street Name	Project Name	Project #	Comments
299-021-06	2728	Ocean Front Ave.	McGaughy	DRB-11-14	NSFR with basement
300-222-08	343	9th Street	Garrett	DRB-11-15	addition
299-280-38	410	15th Street	Gayler	DRB-11-16	addition
299-072-16	2801	Gatun	Mazur	DRB-11-17	addition
300-072-22	119	13th Street	Luddy	DRB-10-21 MOD	
300-030-17	463	15th Street	Kenyon	DRB-09-07 AD MOD	rood mod, ac units, bbq
300-180-07	157-159	8th Street	Deal	DRB-08-20 AD MOD	change in material wood fence to block
299-072-10	2160	Balboa	PDMI, LLC	DRB-11-18	NSFR
300-251-01	505	Tewa	Miller	DRB-11-19	addition
300-410-34	428	10th Street	Porter	DRB-11-20	addition / remodel
300-410-35	444	10th Street	DMIG #1	DRB-11-21	WITHDRAWN
300-410-21	456	10th Street	Francis	DRB-11-22	remodel
301-320-04	250	Stratford Park Circle	Lonbom	DRB-11-23	remodel
301-022-04	156	Ocean View Ave.	Sze	DRB-11-24	addition / remodel
299-097-14	2211	Ocean Front Ave.	Garber	DRB-11-25	second-story addition
299-185-16	385	Bellaire	Rehfeld	DRB-10-07 AD MOD 2	window and fence
300-241-08	550	Amphitheatre	Wendland	DRB-12-01	second-story addition
299-147-20	1840	Coast Blvd	Fakhimi	DRB-12-02	remodel
300-072-06	148	12th Street	Belk	DRB-12-03	NSFR
299-185-01	307	Bellaire	Rosenthal-Sims	DRB-12-04	remodel
300-030-76	480	Carolina	Wheelock	DRB-12-05	deck
300-410-35	444	10th Street	DMIG #1	DRB-12-06	NSFR
299-230-01	1700	Coast Blvd	City of Del Mar	DRB-09-03 AD MOD	trellises
301-024-37	296	Ocean View Ave.	Todd	DRB-12-08	trellis
300-222-04-02	327	9th Street	Hudson	DRB-12-09	
300-251-10	560	Orchid Lane	Rafferty	DRB-10-23 AD MOD	landscape
299-136-07	2024	Ocean Front Ave.	Cooper	DRB-12-10	NSFR w basement
300-321-34	915	Camino del Mar	AT&T	DRB-12-11	wireless antenna
300-040-45	627	15th Street	Chloe Grey Trust	DRB-10-20 AD MOD	pool, wood fence, roof height increase
299-097-14	2211	Ocean Front Ave.	Garber	DRB-11-25 AD MOD	entry gable, bbq, windows
299-280-38	410	15th Street	Gayler	DRB-11-16 AD MOD	new washer/dryer pop out

Parcel #	St. #	Street Name	Project Name	Project #	Comments
299-260-17	347	Serpentine	347 Serpentine, LLC	DRB-12-12	
300-251-08	543	Tewa	Voss	DRB-12-13	addition to NSFR

*Land Conservation Permits **REVIEWED** between the dates of 7/1/2011 and 6/30/2012*

Parcel #	St. #	Street Name	Project Name	Project #	Comments
299-072-10	2160	Balboa	PDMI, LLC	LC-11-05	grading
300-200-25	710	Camino del Mar	Hotel Indigo - parking	LC-11-07 AD	grading
300-410-35	444	10th Street	DMIG #1	LC-12-01	grading

Appendix B
Watershed Based Construction Inventory

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Appendix B - FY 2012 Watershed Based Construction Inventory

Planning File #	Site Name	Number	Street	Hydrologic Unit	Description of Activity	Receiving Waterbody	303(d) Listed Waterbody
High and Medium Priority Contruction Projects							
No Planning File	21st Street Pump Station		21st St. & Court St.	San Dieguito	CIP - replace pump station	Pacific Ocean	No
DRB-09-04	Batchelder	100	Stratford Ct.	Los Peñasquitos	home remodel and grading	Pacific Ocean	No
DRB-09-09	Handzel	100	12th Street	San Dieguito	NSFR with basement	Pacific Ocean	No
DRB-08-27	Pacifica Stratford	615/617	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No
DRB-08-28	Pacifica Stratford	605/607	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No
DRB-08-29	Pacifica Stratford	555/557	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No
No Planning File	N. Torrey Pines Bridge		N. Torrey Pines Road	Los Peñasquitos	CIP - bridge retrofit	Los Peñasquitos Lagoon	Bacteria, Sediment
Low Priority Contruction Projects							
No Planning File	17th Street Beach Safety Center	1700	Coast Blvd.	San Dieguito	CIP - replace lifeguard tower	Pacific Ocean	No
No Planning File	2012 Street and Drainage	Various	Camino del Mar	San Dieguito	CIP - street and sidewalk repair	Pacific Ocean	No
DRB-09-16	Assi	1997	Zapo Street	San Dieguito	NSFR	Pacific Ocean	No
DRB-11-01	Bacha	2104	Christy Lane	San Dieguito	home remodel	San Dieguito Lagoon	Bacteria
DRB-11-08	Baenziger	1511	Forest Way	San Dieguito	NSFR	Pacific Ocean	No
DRB-98-32 Mod	Bakker	335	La Amatista	San Dieguito	remodel and addition	Pacific Ocean	No
DRB-10-08	Bingham	150/152	11th Street	San Dieguito	NSFR and second unit	Pacific Ocean	No
12-068	Bloum	505	Avenida Primavera	San Dieguito	home remodel	Pacific Ocean	No
ADR-11-06	Brigantine Del Mar	3263	Camino del Mar	San Dieguito	commercial remodel	San Dieguito Lagoon	Bacteria
DRB-10-24	Campbell	334	Hidden Pines Rd.	Los Peñasquitos	home remodel	Pacific Ocean	No
ADR-11-07	Cassidy	2614	Ocean Front	San Dieguito	home remodel	San Dieguito Lagoon	Bacteria
DRB-10-20	Chloe Grey	627	15th Street	San Dieguito	home remodel	Pacific Ocean	No
DRB-10-13	Collins	139	18th Street	San Dieguito	home remodel	Pacific Ocean	No
12-022	Collins	154	9th Street	San Dieguito	home remodel	Pacific Ocean	No
DRB-08-20	Deal	157/159	8th Street	San Dieguito	NSFR with basement - 2 detached	Pacific Ocean	No
11-131	Doliva	1782	Sea View Ave	San Dieguito	home remodel	Pacific Ocean	No
DRB-10-04	Fermanian	2430	Ocean Front	San Dieguito	home remodel and new roof	San Dieguito Lagoon	Bacteria
12-035	Friedlander	1720	Zapo Street	San Dieguito	home remodel	Pacific Ocean	No
DRB-11-25	Garber	2211	Ocean Front	San Dieguito	home remodel	Pacific Ocean	No
DRB-11-16	Gayler	410	15th Street	San Dieguito	home remodel	Pacific Ocean	No
DRB-84-52	Gillies	2136	San Dieguito Dr.	San Dieguito	NSFR	San Dieguito Lagoon	Bacteria
DRB-08-43	Hardke	431	Van Dyke Ave.	San Dieguito	NSFR w/ basement and pool	Pacific Ocean	No
DRB-11-13	Hayward	1912	Ocean Front	San Dieguito	home remodel	Pacific Ocean	No
DRB-04-15	Hilliard	1492	Crest Rd.	San Dieguito	site improvements	Pacific Ocean	No
DRB-10-19	Hotel Indigo	710	Camino del Mar	San Dieguito	hotel/commercial remodel	Pacific Ocean	No
DRB-11-09	Irish	150	10th Street	San Dieguito	NSFR	Pacific Ocean	No
DRB-09-07	Kenyon	463	15th Street	San Dieguito	NSFR w/ basement	Pacific Ocean	No
DRB-08-03	Kirkpatrick	1101	Klish Way	San Dieguito	home remodel/addition	Pacific Ocean	No
DRB-05-24	Klipstein	415	Torrey Pointe Rd.	Los Peñasquitos	NSFR w/ basement	Los Peñasquitos Lagoon	Bacteria, Sediment

Appendix B - FY 2012 Watershed Based Construction Inventory

Planning File #	Site Name	Number	Street	Hydrologic Unit	Description of Activity	Receiving Waterbody	303(d) Listed Waterbody
DRB-10-21	Luddy	119	13th Street	San Dieguito	home remodel	Pacific Ocean	No
DRB-08-27	Mankwitz	420	Luzon Ave.	San Dieguito	NSFR	San Dieguito Lagoon	Bacteria
DRB-11-17	Mazur	2081	Gatun	San Dieguito	home remodel	San Dieguito Lagoon	Bacteria
DRB-04-13	McGuire	1105	Stratford Ct.	San Dieguito	home remodel	Pacific Ocean	No
DRB-11-24	Miller	505	Tewa Court	San Dieguito	home remodel	Pacific Ocean	No
DRB-10-11	Milligan	1382	Via Alta	San Dieguito	home remodel and landscape	Pacific Ocean	No
DRB-06-23	Oliphant	2020	Santa Fe Ave.	San Dieguito	NSFR	Pacific Ocean	No
DRB-08-12	Parker-O'Brien	116/118	11th Street	San Dieguito	NSFR	Pacific Ocean	No
DRB-11-20	Porter	428	10th Street	San Dieguito	home remodel	Pacific Ocean	No
DRB-10-07	Rehfeld	385	Belaire St.	San Dieguito	NSFR	Pacific Ocean	No
DRB-08-06	Reid	116	Nob Ave.	Los Peñasquitos	NSFR	Pacific Ocean	No
DRB-10-22	Rowe	538	Amphitheatre Dr.	San Dieguito	home remodel	Pacific Ocean	No
ADR-11-25	Todd	296	Ocean View	Los Peñasquitos	home remodel and roof	Pacific Ocean	No
11-170	Unknown	635	Hoska	San Dieguito	home remodel	Pacific Ocean	No
No Planning File	Unknown	1210	Camino del Mar	San Dieguito	parking lot, sidewalk	Pacific Ocean	No
DRB-09-14	Vint	140	7th Street	San Dieguito	NSFR with basement	Pacific Ocean	No
DRB-08-33	Wohlford-Kidd	1155	Cuchara Drive	San Dieguito	home remodel	Pacific Ocean	No

Appendix C
FY 2012 Construction Inventory Mapping

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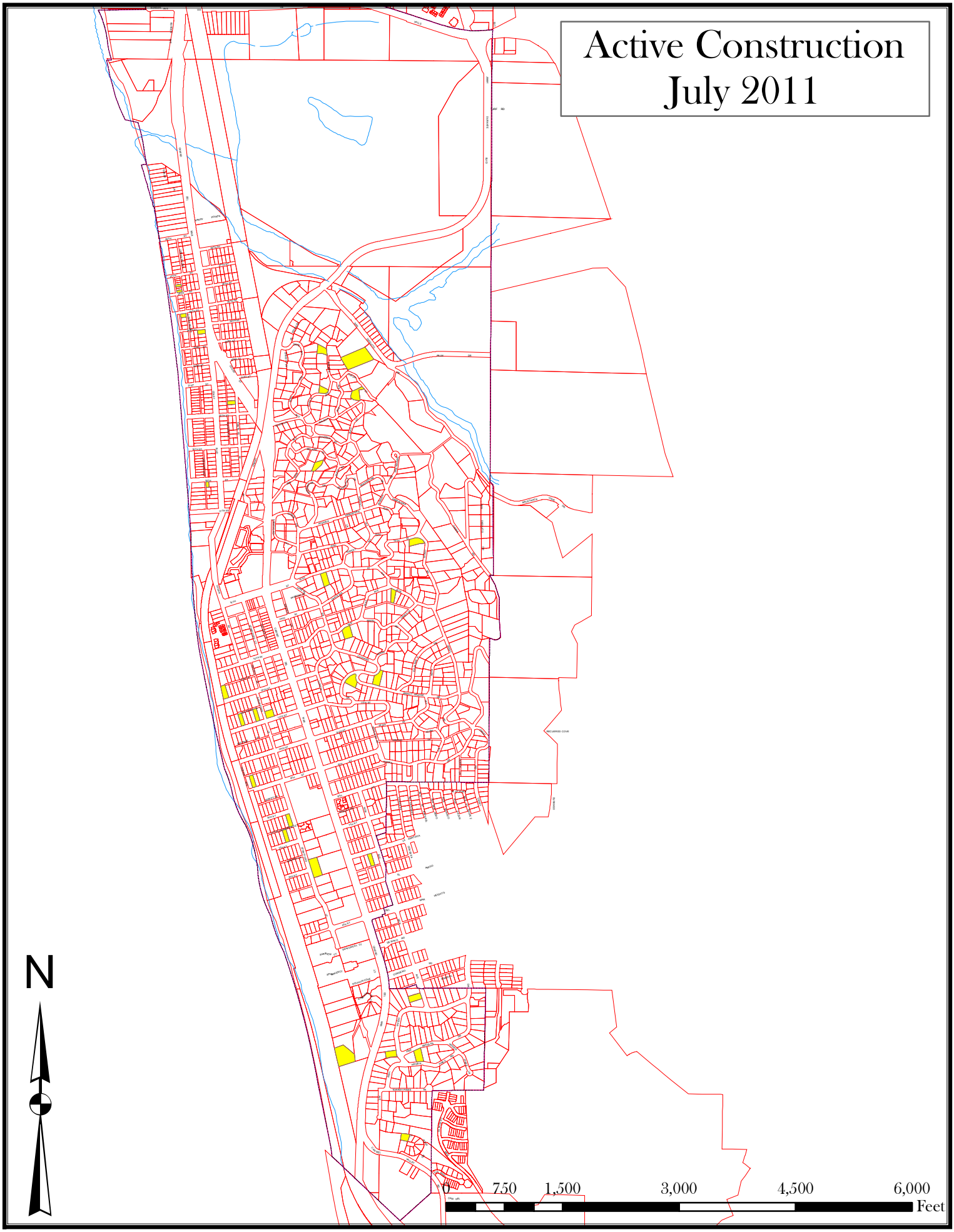
Active Construction
July 2011
N
0
750
1,500
3,000
4,500
6,000
Feet

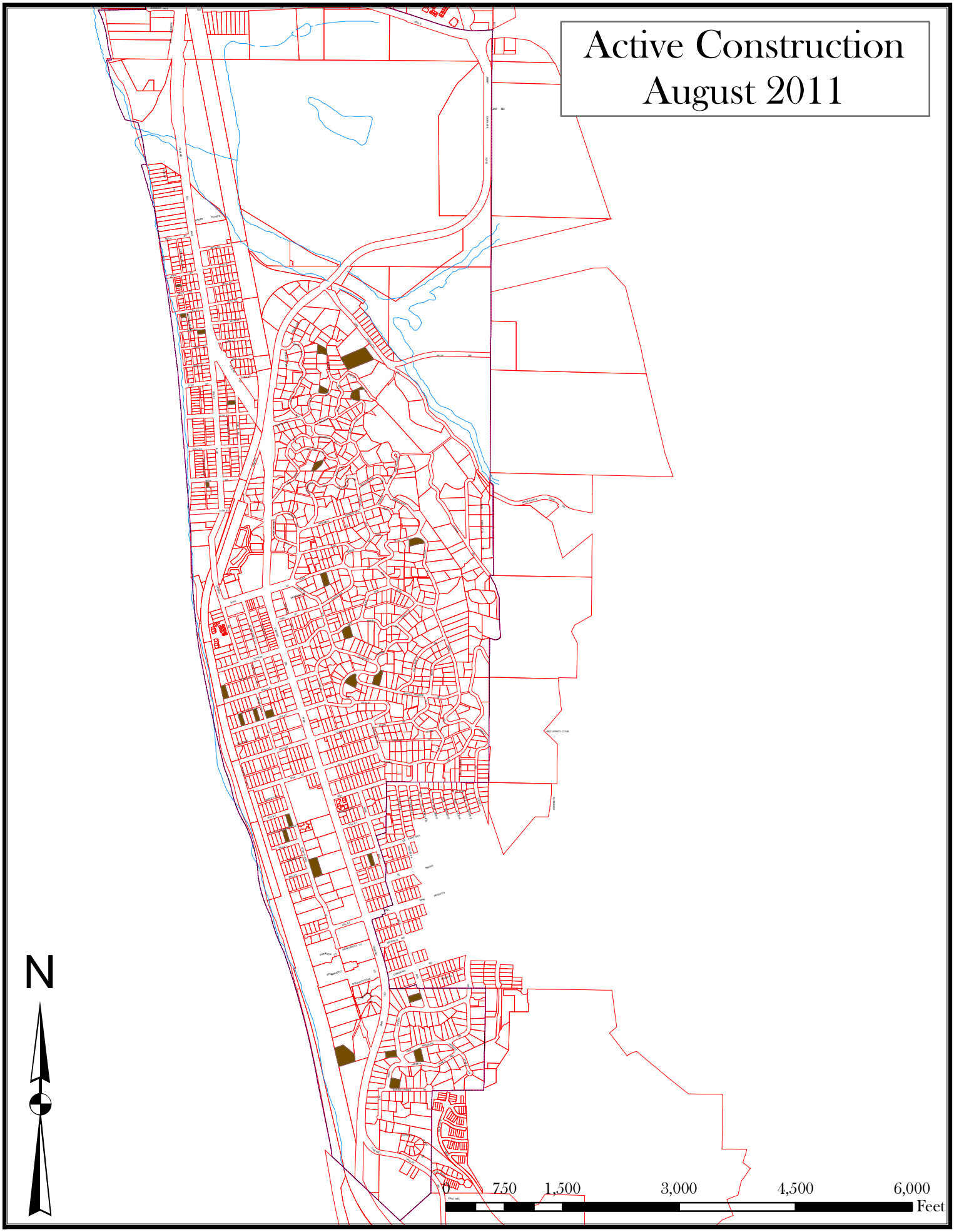
Active Construction
August 2011
N
0
750
1,500
3,000
4,500
6,000
Feet

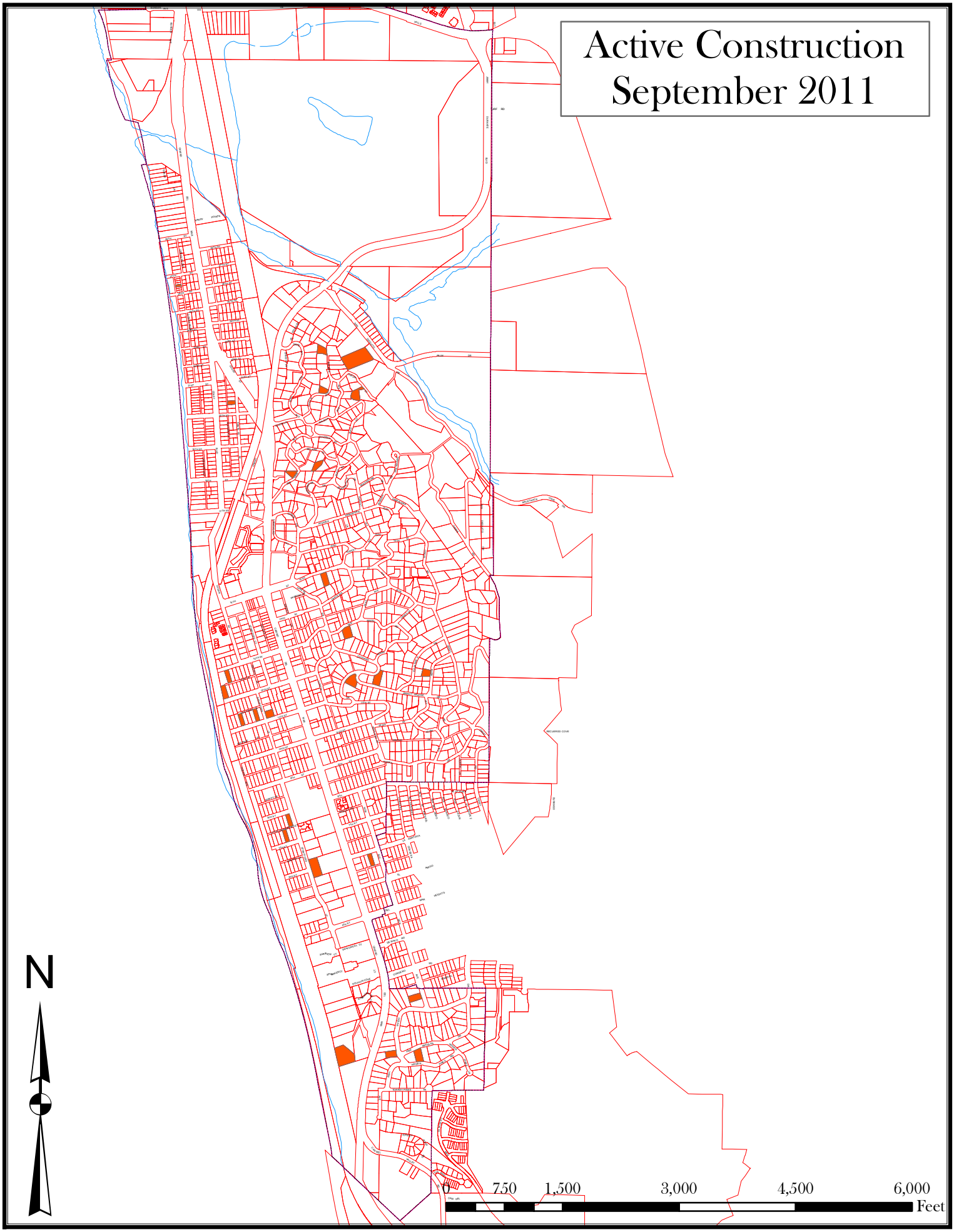
Active Construction
September 2011
N
0
750
1,500
3,000
4,500
6,000
Feet

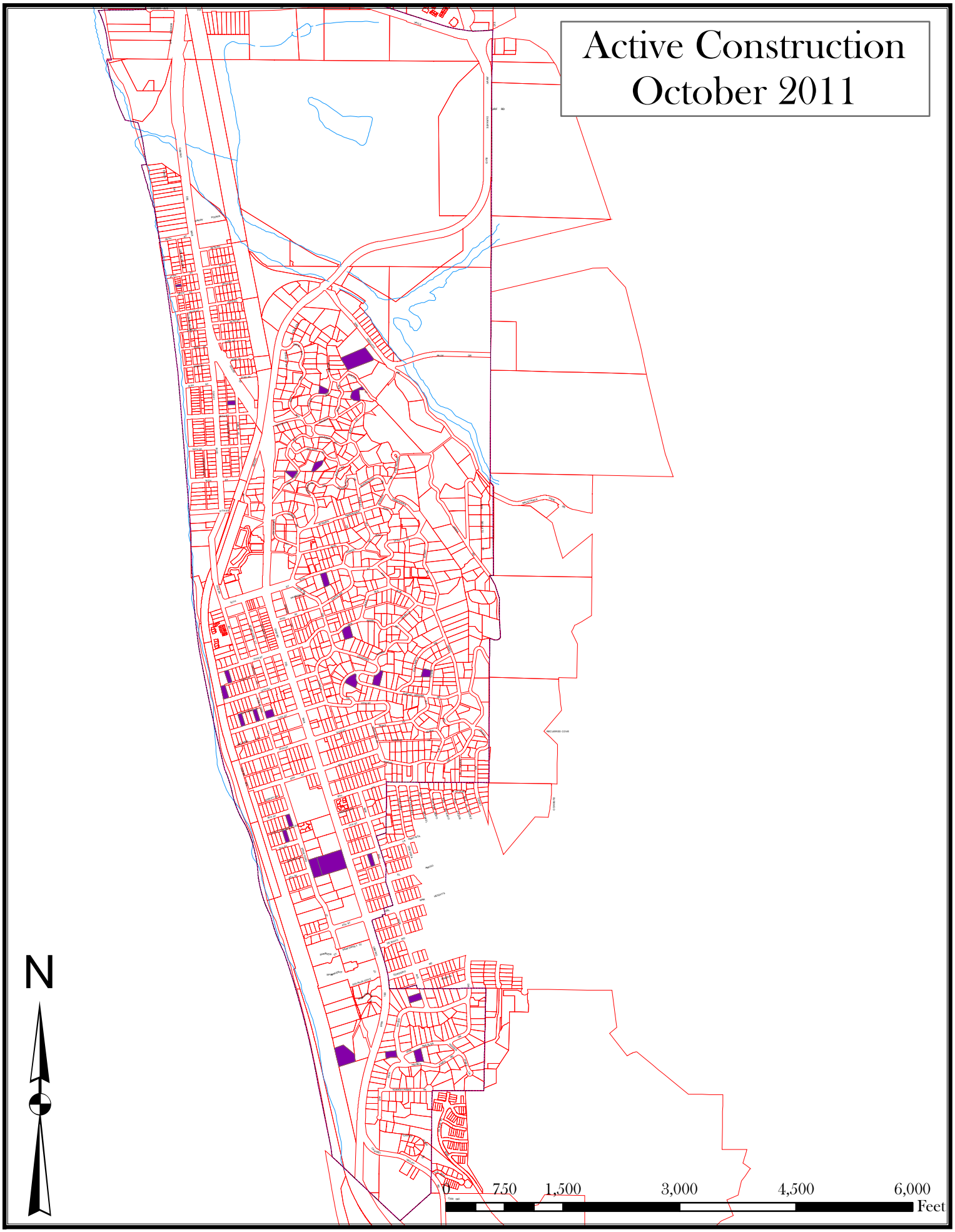
Active Construction
October 2011
N
0
750
1,500
3,000
4,500
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Feet

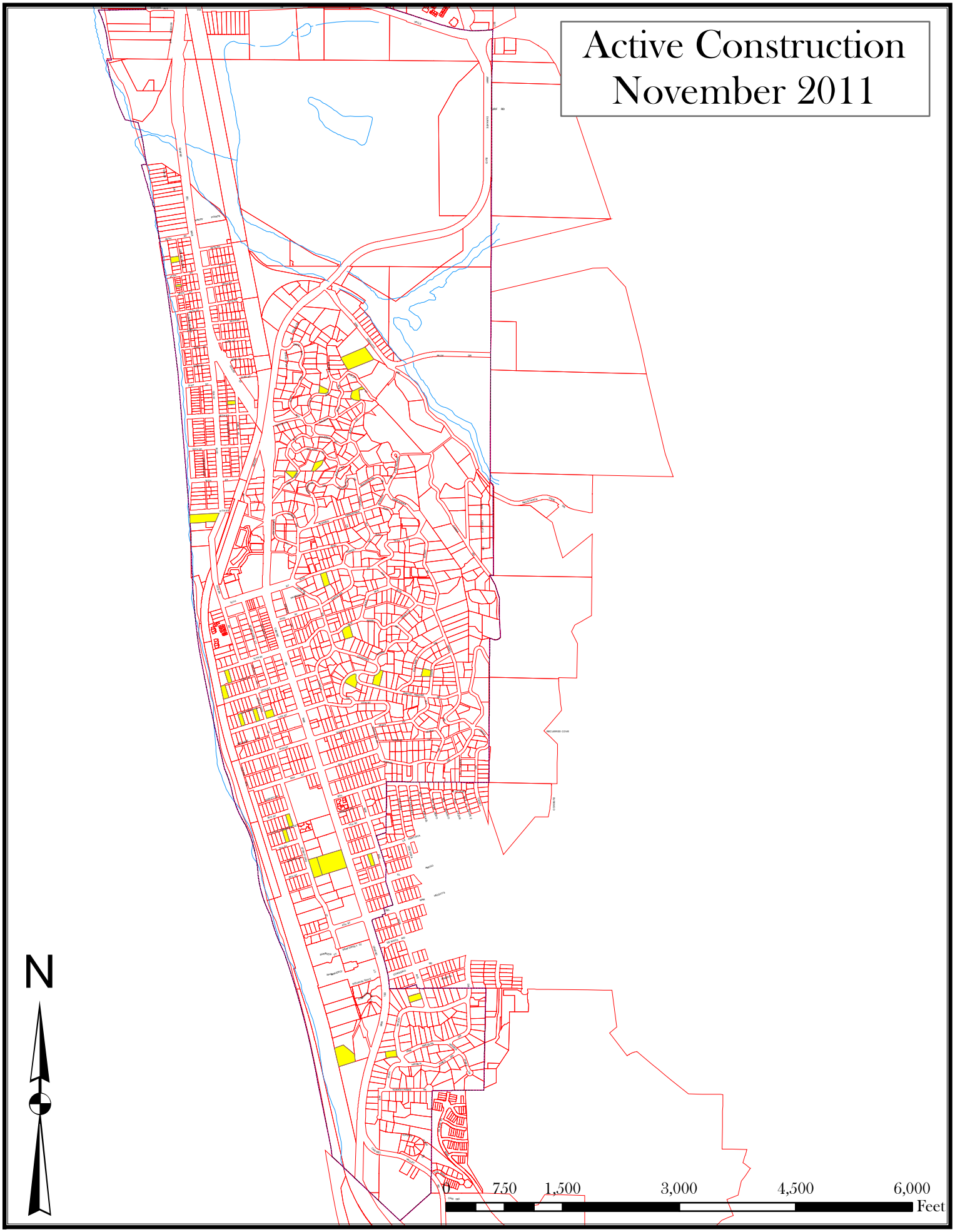
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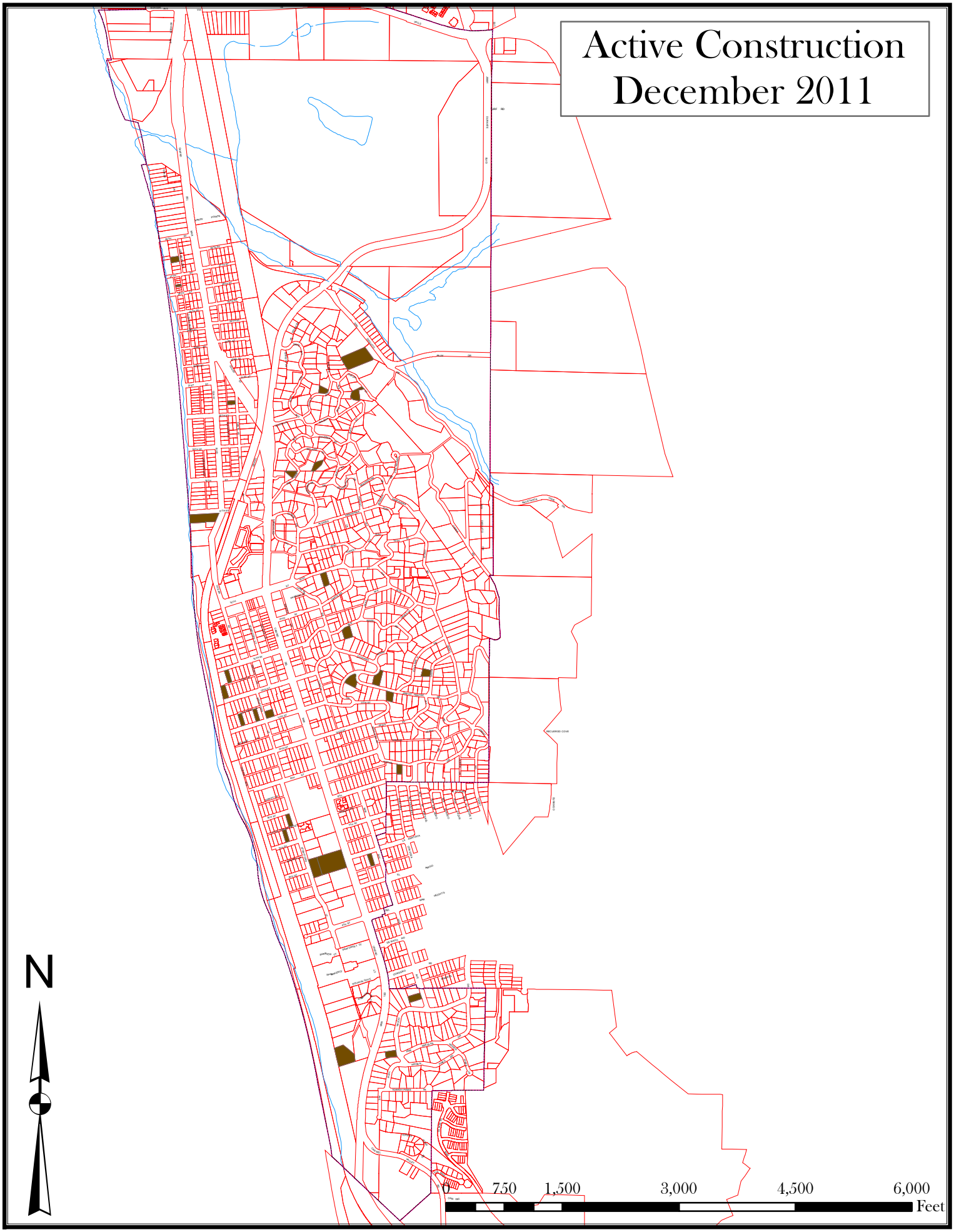
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Feet

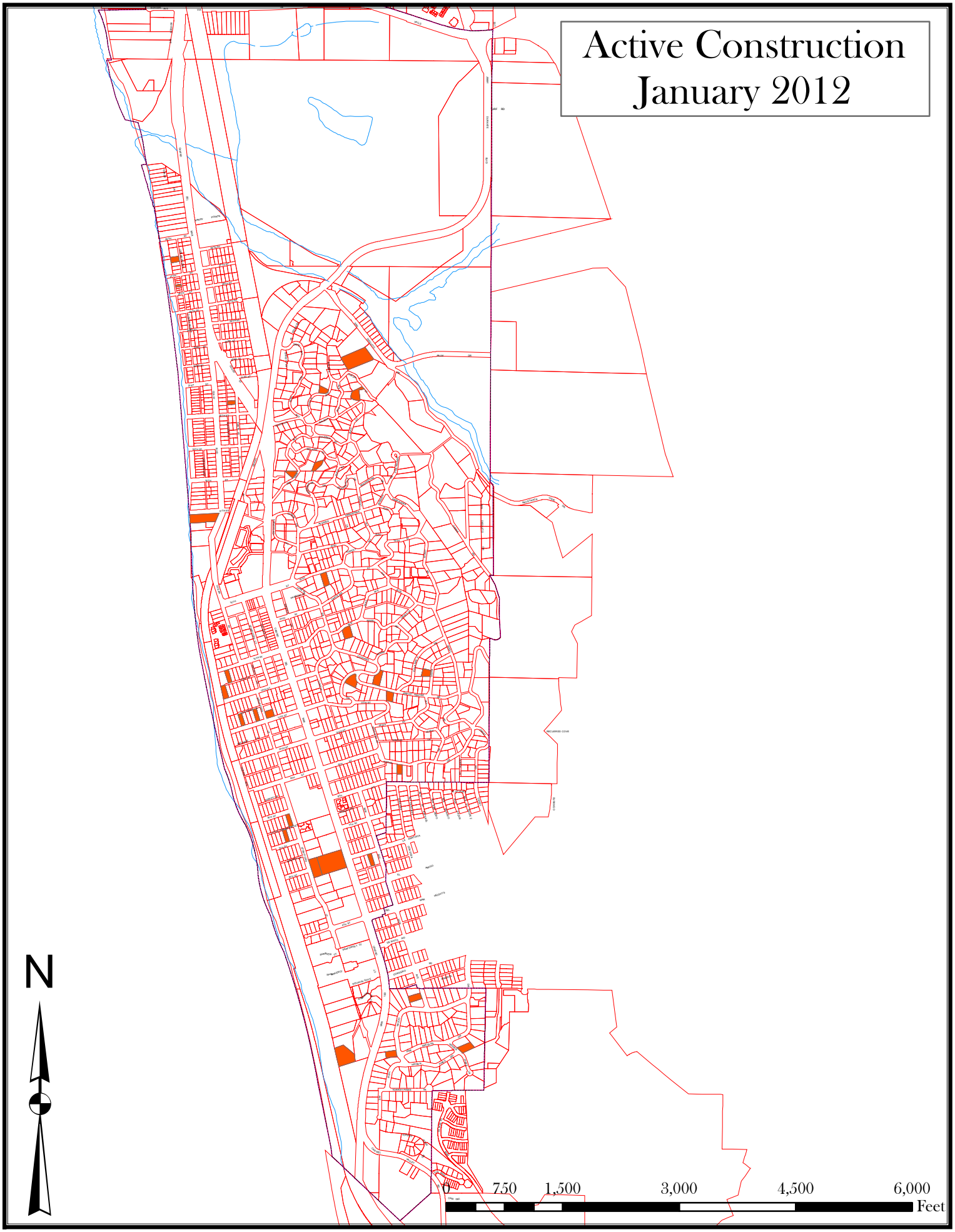
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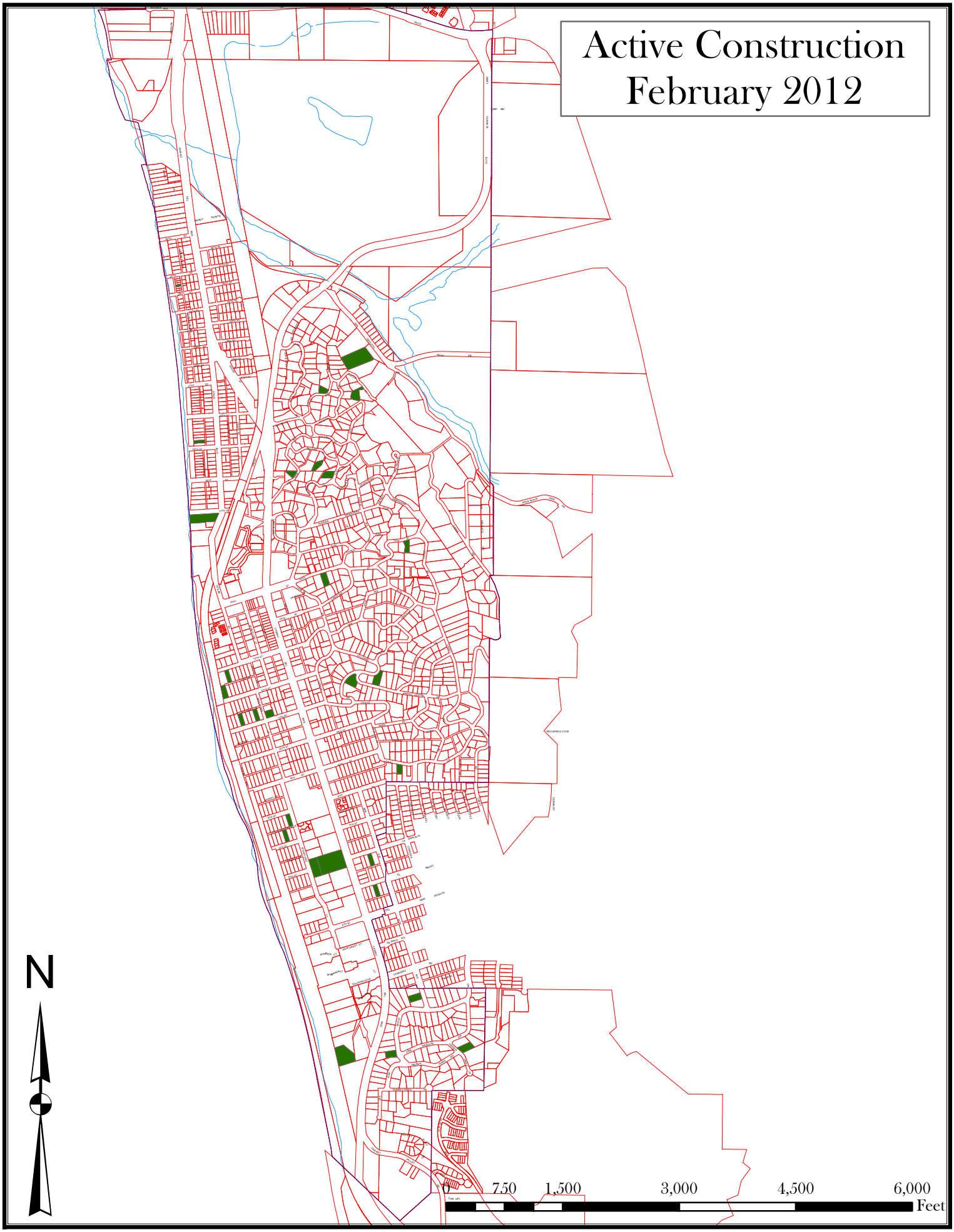
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Feet

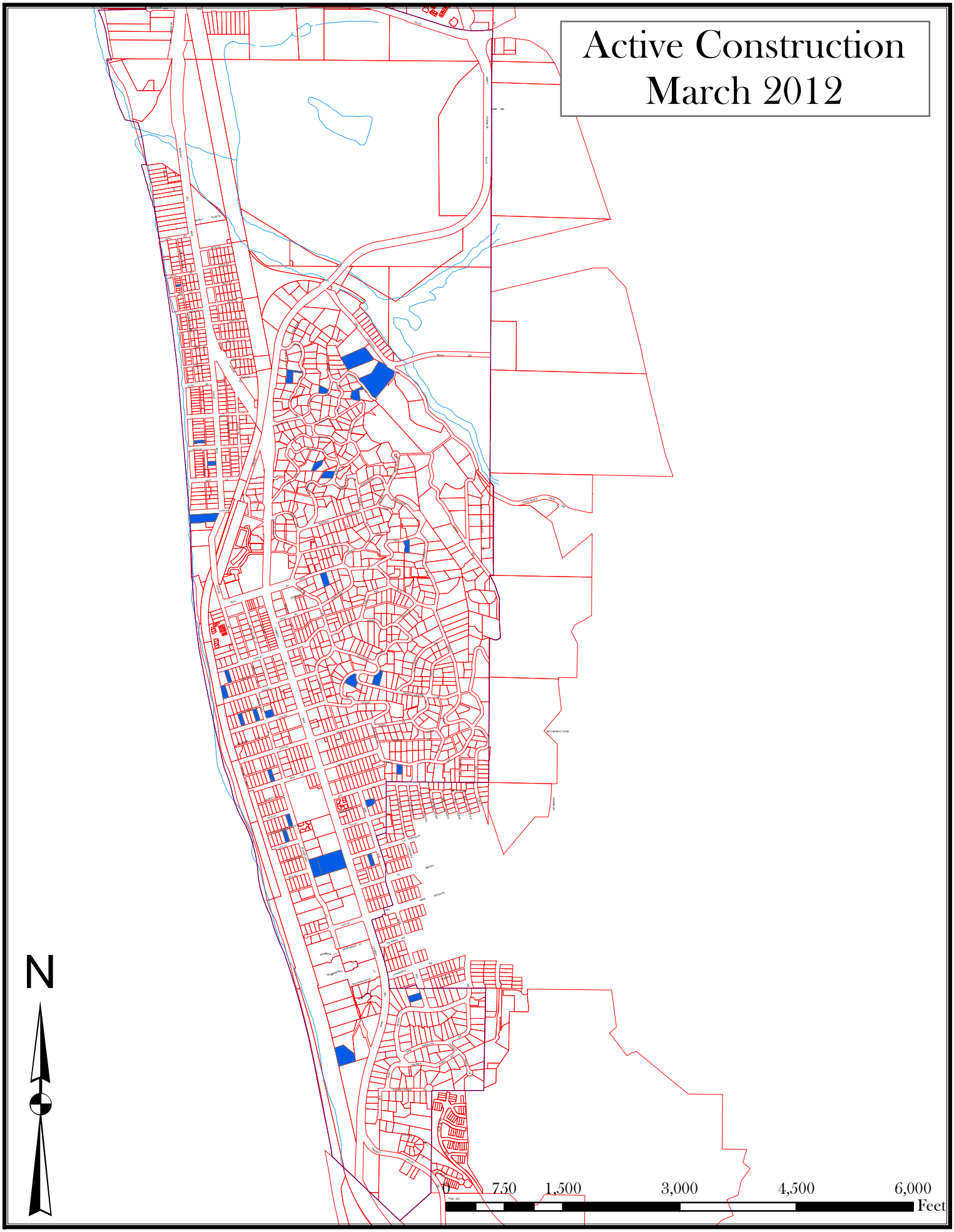
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Feet

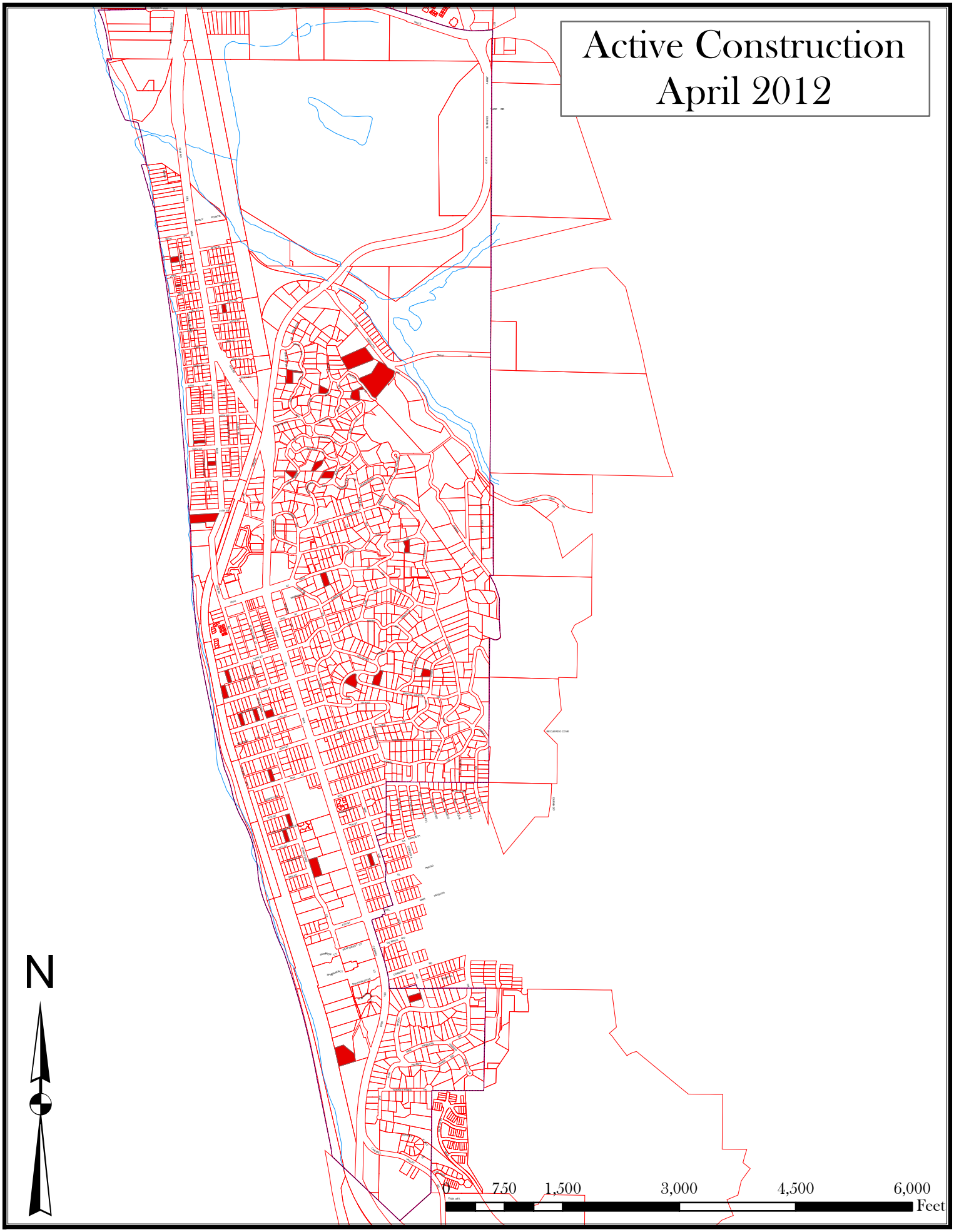
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Feet

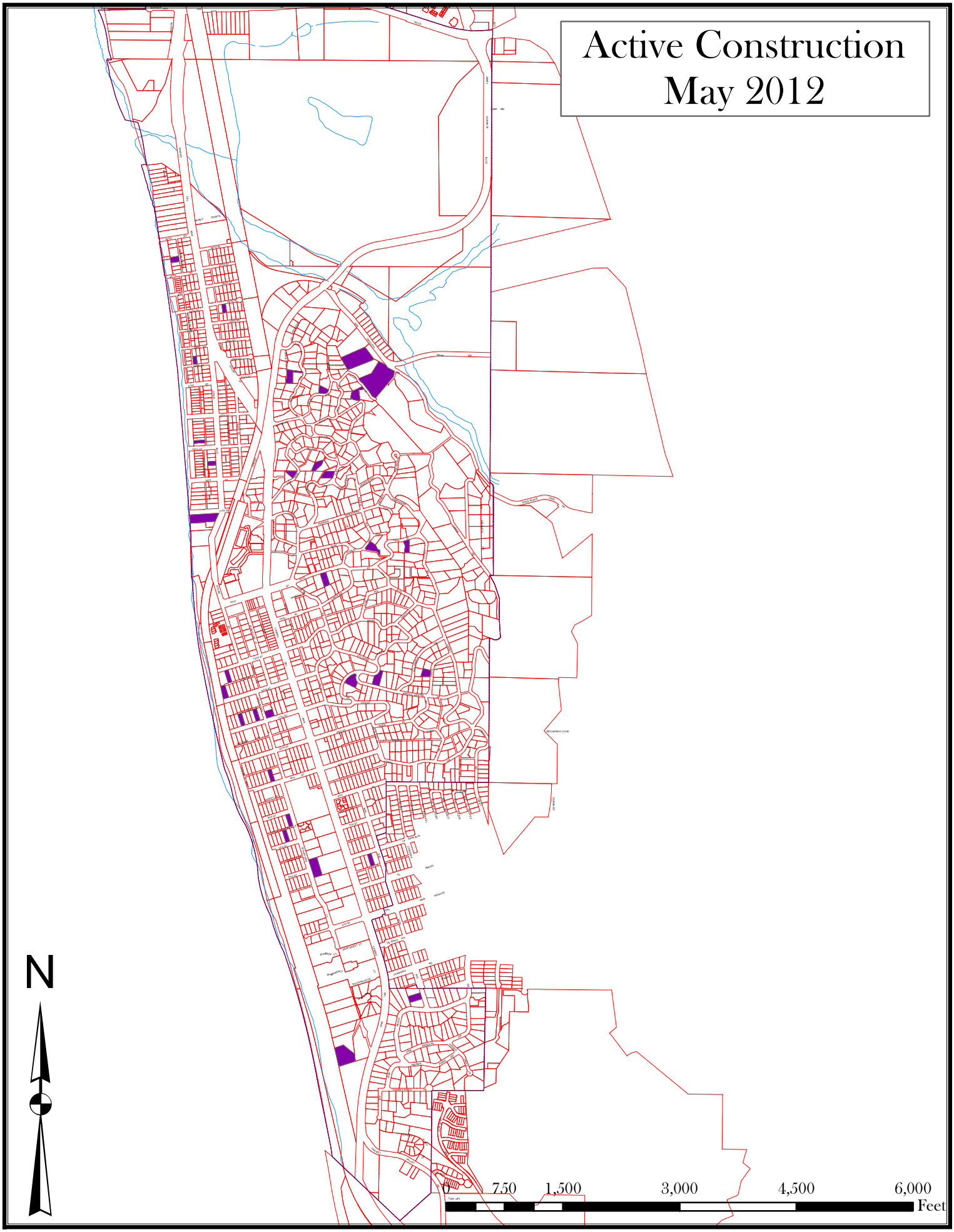
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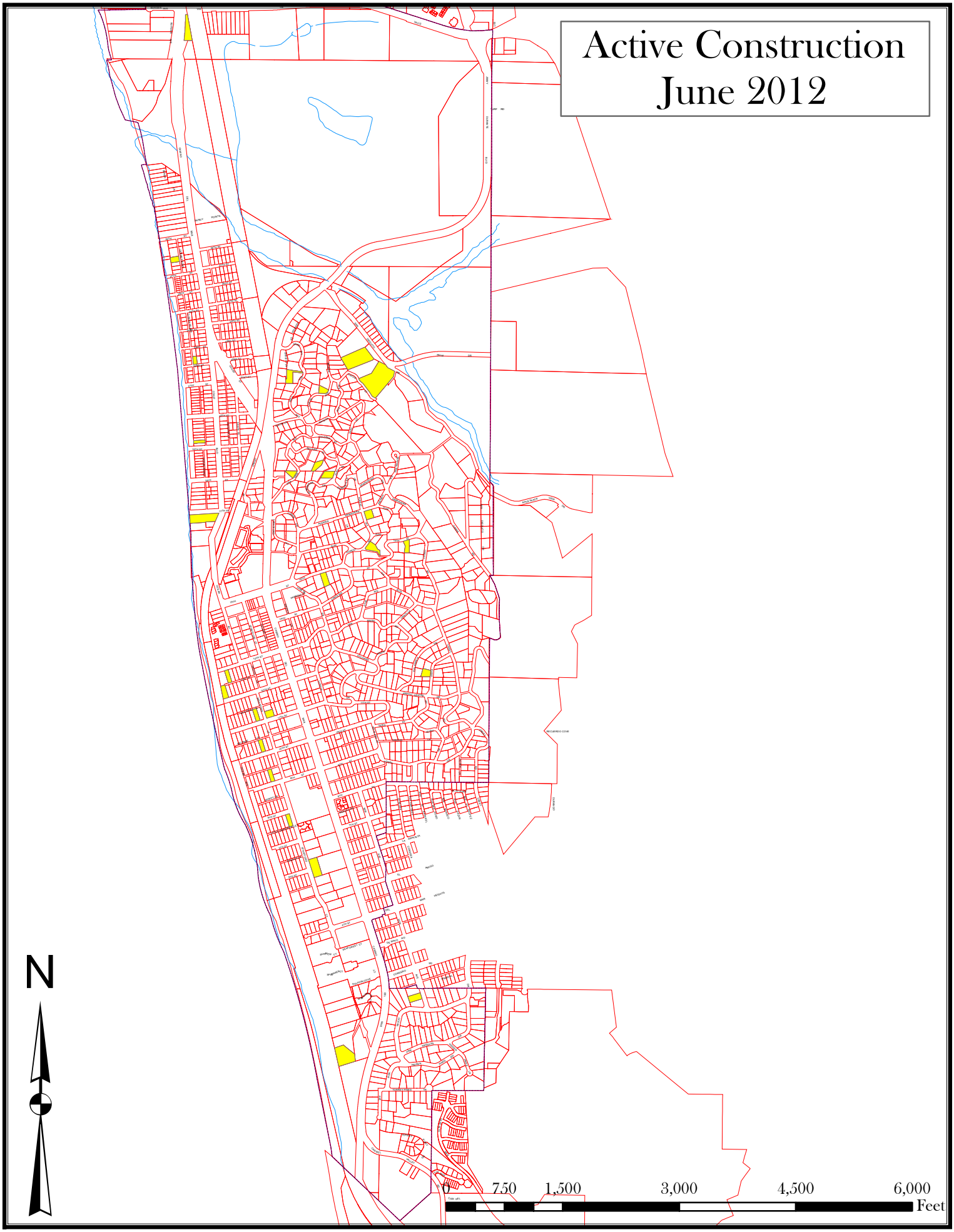
Active Construction
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N
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Appendix D
Construction Inspections Summary Table

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Appendix D - FY 2012 Construction Inspection Summary Table

Planning File #	Site Name	Street No.	Street Name	Hydrologic Unit	Description of Activity	Receiving Waterbody	303(d) Listed Waterbody	Start Date	End Date	Weeks Active (Wet)	Weeks Active (Dry)	No. Inspections (Wet)	No. Inspections (Dry)	Total Inspections
High and Medium Priority Contruction Projects														
No Planning File	21st Street Pump Station		21st Street & Court Street	San Dieguito	CIP - replace pump station	Pacific Ocean	No	1/4/2011	3/30/2012	26	14	16	2	18
DRB-09-04	Batchelder	100	Stratford Ct.	Los Peñasquitos	home remodel and grading	Pacific Ocean	No	7/1/2009	Active	30	22	17	3	20
DRB-09-09	Handzel	100	12th Street	San Dieguito	NSFR with basement	Pacific Ocean	No	10/18/2010	Active	30	22	17	4	21
DRB-08-27	Pacifica Stratford	615/617	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No	6/7/2008	Active	30	22	20	5	25
DRB-08-28	Pacifica Stratford	605/607	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No	6/7/2008	Active	30	22	20	5	25
DRB-08-29	Pacifica Stratford	555/557	Stratford Ct.	San Dieguito	new duplex	Pacific Ocean	No	6/7/2008	Active	30	22	20	5	25
No Planning File	N. Torrey Pines Bridge		N. Torrey Pines Road	Los Peñasquitos	CIP - bridge retrofit	Los Peñasquitos Lagoon	Bacteria, Sediment	12/2/2010	Active	30	22	31	12	43
Low Priority Contruction Projects														
No Planning File	17th Street Beach Safety Center	1700	Coast Blvd.	San Dieguito	CIP - replace lifeguard tower	Pacific Ocean	No	10/8/2011	6/20/2012	29	8	9	3	12
No Planning File	2012 Street and Drainage	Various	Camino del Mar	San Dieguito	CIP - street and sidewalk repair	Pacific Ocean	No	1/18/2012	5/7/2012	15	2	2	0	2
DRB-09-16	Assi	1997	Zapo Street	San Dieguito	NSFR	Pacific Ocean	No	1/15/2011	4/30/2012	30	13	0	1	1
DRB-11-01	Bacha	2104	Christy Lane	San Dieguito	home remodel	San Dieguito Lagoon	Bacteria	3/1/2012	Active	9	9	0	0	0
DRB-11-08	Baenziger	1511	Forest Way	San Dieguito	NSFR	Pacific Ocean	No	5/1/2012	Active	0	9	1	0	1
DRB-98-32 Mod	Bakker	335	La Amatista	San Dieguito	remodel and addition	Pacific Ocean	No	4/21/2005	5/31/2012	30	18	0	0	0
DRB-10-08	Bingham	150/152	11th Street	San Dieguito	NSFR and second unit	Pacific Ocean	No	4/1/2011	Active	30	22	1	0	1
12-068	Bloum	505	Avenida Primavera	San Dieguito	home remodel	Pacific Ocean	No	5/1/2012	Active	0	9	0	0	0
ADR-11-06	Brigantine Del Mar	3263	Camino del Mar	San Dieguito	commercial remodel	San Dieguito Lagoon	Bacteria	5/1/2012	Active	0	9	0	0	0
DRB-10-24	Campbell	334	Hidden Pines Rd.	Los Peñasquitos	home remodel	Pacific Ocean	No	6/1/2011	10/28/2011	4	13	0	1	1
ADR-11-07	Cassidy	2614	Ocean Front	San Dieguito	home remodel	San Dieguito Lagoon	Bacteria	5/1/2011	4/30/2012	30	13	0	0	0
DRB-10-20	Chloe Grey	627	15th Street	San Dieguito	home remodel	Pacific Ocean	No	8/3/2011	Active	30	18	1	1	2
DRB-10-13	Collins	139	18th Street	San Dieguito	home remodel	Pacific Ocean	No	12/1/2010	8/31/2011	0	9	0	0	0
12-022	Collins	154	9th Street	San Dieguito	home remodel	Pacific Ocean	No	3/1/2012	Active	9	9	0	0	0
DRB-08-20	Deal	157/159	8th Street	San Dieguito	NSFR with basement - 2 detached	Pacific Ocean	No	2/21/2011	Active	30	22	1	2	3
11-131	Doliva	1782	Sea View Ave	San Dieguito	home remodel	Pacific Ocean	No	7/27/2011	Active	30	18	0	0	0

Appendix D - FY 2012 Construction Inspection Summary Table

Planning File #	Site Name	Street No.	Street Name	Hydrologic Unit	Description of Activity	Receiving Waterbody	303(d) Listed Waterbody	Start Date	End Date	Weeks Active (Wet)	Weeks Active (Dry)	No. Inspections (Wet)	No. Inspections (Dry)	Total Inspections
DRB-10-04	Fermanian	2430	Ocean Front	San Dieguito	home remodel and new roof	San Dieguito Lagoon	Bacteria	10/15/2010	8/31/2011	0	9	0	0	0
12-035	Friedlander	1720	Zapo Street	San Dieguito	home remodel	Pacific Ocean	No	2/1/2012	Active	13	9	0	0	0
DRB-11-25	Garber	2211	Ocean Front	San Dieguito	home remodel	Pacific Ocean	No	5/1/2012	Active	0	9	0	0	0
DRB-11-16	Gayler	410	15th Street	San Dieguito	home remodel	Pacific Ocean	No	4/10/2012	Active	3	9	1	0	1
DRB-84-52	Gillies	2136	San Dieguito Dr.	San Dieguito	NSFR	San Dieguito Lagoon	Bacteria	12/14/1998	Active	30	22	0	0	0
DRB-08-43	Hardke	431	Van Dyke Ave.	San Dieguito	NSFR w/basement and pool	Pacific Ocean	No	5/26/2009	1/31/2012	19	13	0	0	0
DRB-11-13	Hayward	1912	Ocean Front	San Dieguito	home remodel	Pacific Ocean	No	1/28/2011	4/28/2012	30	13	0	1	1
DRB-04-15	Hilliard	1492	Crest Rd.	San Dieguito	site improvements	Pacific Ocean	No	4/2/2007	9/1/2011	0	9	0	0	0
DRB-10-19	Hotel Indigo	710	Camino del Mar	San Dieguito	hotel/commercial remodel	Pacific Ocean	No	9/1/2011	3/30/2012	26	5	0	0	0
DRB-11-09	Irish	150	10th Street	San Dieguito	NSFR	Pacific Ocean	No	5/1/2012	Active	0	9	0	0	0
DRB-09-07	Kenyon	463	15th Street	San Dieguito	NSFR w/basement	Pacific Ocean	No	1/4/2011	Active	30	22	2	0	2
DRB-08-03	Kirkpatrick	1101	Klish Way	San Dieguito	home remodel/addition	Pacific Ocean	No	8/29/2011	Active	30	13	2	0	2
DRB-05-24	Klipstein	415	Torrey Pointe Rd.	Los Peñasquitos	NSFR w/basement	Los Peñasquitos Lagoon	Sediment, Bacteria	8/22/2008	7/29/2011	0	4	0	0	0
DRB-10-21	Luddy	119	13th Street	San Dieguito	home remodel	Pacific Ocean	No	9/1/2011	Active	30	13	0	0	0
DRB-08-27	Mankwitz	420	Luzon Ave.	San Dieguito	NSFR	San Dieguito Lagoon	Bacteria	6/1/2011	Active	30	22	1	3	4
DRB-11-17	Mazur	2081	Gatun	San Dieguito	home remodel	San Dieguito Lagoon	Bacteria	11/1/2011	Active	26	9	0	0	0
DRB-04-13	McGuire	1105	Stratford Ct.	San Dieguito	home remodel	Pacific Ocean	No	6/1/2009	Active	30	22	0	0	0
DRB-11-24	Miller	505	Tewa Court	San Dieguito	home remodel	Pacific Ocean	No	5/10/2012	Active	0	8	0	1	1
DRB-10-11	Milligan	1382	Via Alta	San Dieguito	home remodel and landscape	Pacific Ocean	No	9/15/2010	7/29/2011	0	5	0	0	0
DRB-06-23	Oliphant	2020	Santa Fe Ave.	San Dieguito	NSFR	Pacific Ocean	No	6/1/2009	1/31/2012	17	13	0	0	0
DRB-08-12	Parker-O'Brien	116/118	11th Street	San Dieguito	NSFR	Pacific Ocean	No	4/15/2011	5/31/2012	30	18	1	1	2
DRB-11-20	Porter	428	10th Street	San Dieguito	home remodel	Pacific Ocean	No	5/4/2012	Active	0	8	0	1	1
DRB-10-07	Rehfeld	385	Belaire St.	San Dieguito	NSFR	Pacific Ocean	No	6/1/2011	Active	30	22	0	0	0
DRB-08-06	Reid	116	Nob Ave.	Los Peñasquitos	NSFR	Pacific Ocean	No	11/1/2010	Active	30	22	0	5	5

Appendix D - FY 2012 Construction Inspection Summary Table

Planning File #	Site Name	Street No.	Street Name	Hydrologic Unit	Description of Activity	Receiving Waterbody	303(d) Listed Waterbody	Start Date	End Date	Weeks Active (Wet)	Weeks Active (Dry)	No. Inspections (Wet)	No. Inspections (Dry)	Total Inspections
DRB-10-22	Rowe	538	Amphitheatre Dr.	San Dieguito	home remodel	Pacific Ocean	No	10/15/2010	4/28/2012	30	13	0	1	1
ADR-11-25	Todd	296	Ocean View	Los Peñasquitos	home remodel and roof	Pacific Ocean	No	7/1/2011	2/29/2012	22	13	0	0	0
11-170	Unknown	635	Hoska	San Dieguito	home remodel	Pacific Ocean	No	12/1/2011	3/15/2012	16	0	0	0	0
No Planning File	Unknown	1210	Camino del Mar	San Dieguito	parking lot, sidewalk	Pacific Ocean	No	5/1/2012	Active	0	9	0	4	4
DRB-09-14	Vint	140	7th Street	San Dieguito	NSFR with basement	Pacific Ocean	No	11/1/2010	4/30/2012	30	13	1	2	3
DRB-08-33	Wohlford-Kidd	1155	Cuchara Drive	San Dieguito	home remodel	Pacific Ocean	No	3/23/2010	4/30/2012	30	13	1	0	1

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Appendix E
Construction Brochure

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WATER QUALITY REGULATIONS FOR CONSTRUCTION SITES

Dear Contractor,

The City of Del Mar Clean Water Program is committed to protecting our most valuable natural resources — our lagoons and Pacific Ocean — from degradation caused by urban runoff. We believe that reducing pollution is critical to maintaining our community's way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution. It is up to you to implement appropriate Best Management Practices (BMPs) to minimize construction activity impacts. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

The City will be inspecting construction sites within its jurisdiction to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your site.

Together we have the ability to preserve and improve the quality of life in our community.

Sincerely,

The City of Del Mar Clean Water Program

City of Del Mar
858-755-9313

A POLLUTION PREVENTION GUIDE FOR THE CONSTRUCTION INDUSTRY

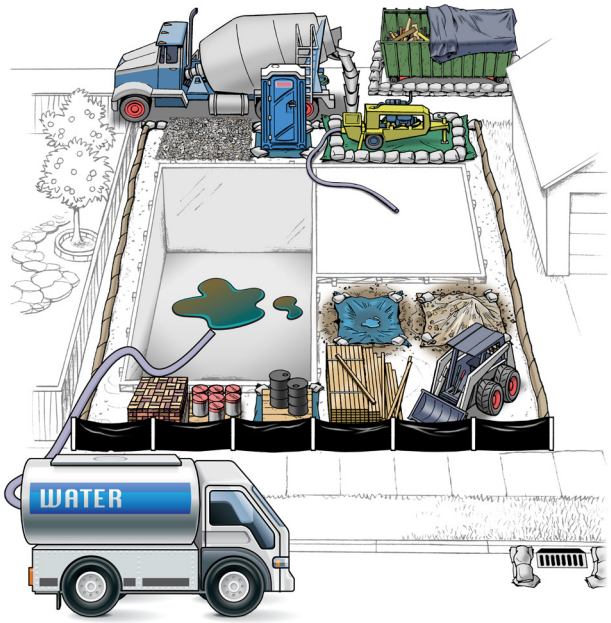

CITY OF DEL MAR CLEAN WATER PROGRAM

Only Rain in the Storm Drain

WATER QUALITY REGULATIONS FOR CONSTRUCTION SITES

In 1972, the U.S. Environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by the municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit. All construction sites over one acre are required to obtain coverage under this permit. For more information, please visit the State Water Resources Control Board's website at: http://www.swrcb.ca.gov/water_issues/programs/stormwater/constpermits.shtml

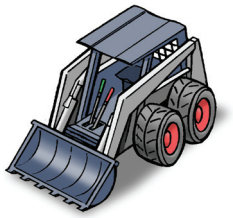

Construction sites can contribute pollutants such as sediment, metals, and chemicals, to our local creeks, rivers, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMPs) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding the City's BMP requirements.

The City of Del Mar has staff dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact the City's Clean Water Program for more information.

ENCROACHMENT PERMITTING

The City understands that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This encroachment permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from spilling onto public right-of-ways and entering local storm drains. For more information or to obtain a permit application contact the City's Planning Department.

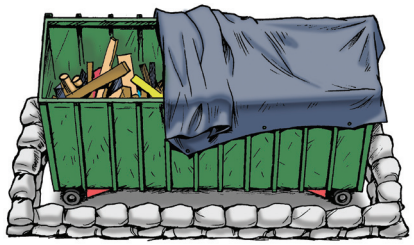

INSPECTION AND ENFORCEMENT PROGRAM

The City has established an inspection and enforcement program to ensure that all contractors operate in compliance with all appropriate storm water laws and other City requirements. City personnel will be performing unscheduled construction site inspections to confirm that BMPs and pollution prevention measures have been properly implemented at your site. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.

BEST MANAGEMENT PRACTICES

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lagoons, and ocean.

The City's Clean Water Program is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Implementing and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.

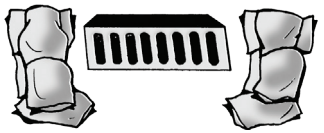

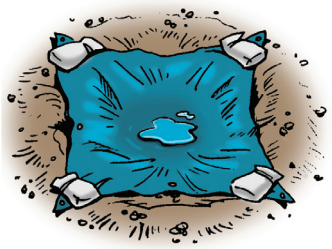

The following is a list of minimum BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Implement perimeter protection BMPs.**
5. **Implement an erosion control plan for wind and rain.**
6. **Regularly maintain all BMPs at project site.**

BEST MANAGEMENT PRACTICES

The City of Del Mar's municipal code chapter 11.30 (Stormwater Management & Discharge Control Ordinance) prohibits pollutant discharges from construction sites and activities. Pollutant discharges are prohibited from flowing into City streets and storm drains to protect local lagoons and the ocean.

The following Best Management Practices (BMPs) must be properly implemented at all construction sites in the City of Del Mar to protect storm drains and minimize pollution.

DUMPSTERS/PORT-A-POTTY

Always cover dumpsters with a rollback tarp or lid. Areas around dumpsters should be swept daily. Perimeter controls should also surround dumpsters and all Port-a-Potties. If dumpsters or Port-a-Potties are kept on the street, encroachment permits are required.

PERIMETER CONTROLS

Gravel bags, silt fences, and straw wattles are acceptable perimeter controls, and must be used to surround the entire site to control run-on and run-off. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Keep extra absorbent materials and/or a wet/dry vacuum on site to quickly pick up unintended spills. Sites must also be checked and maintained daily.

MATERIALS STORAGE

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

BUILDING MATERIALS/ STAGING AREAS

Construction materials must be stored on site at all times unless an encroachment permit has been obtained. Building materials should always be covered when not in use to prevent run-off caused by wind or rain. To apply for an encroachment permit, contact the City of Del Mar Planning Department.

BASEMENT/SUMP DE-WATERING

Water collected in basements or detention basins due to natural groundwater seepage or rain events must be allowed to evaporate or be pumped to trucks with holding tanks for offsite disposal. Pumping this water onto the street or an adjacent property is an illegal discharge prohibited by law.

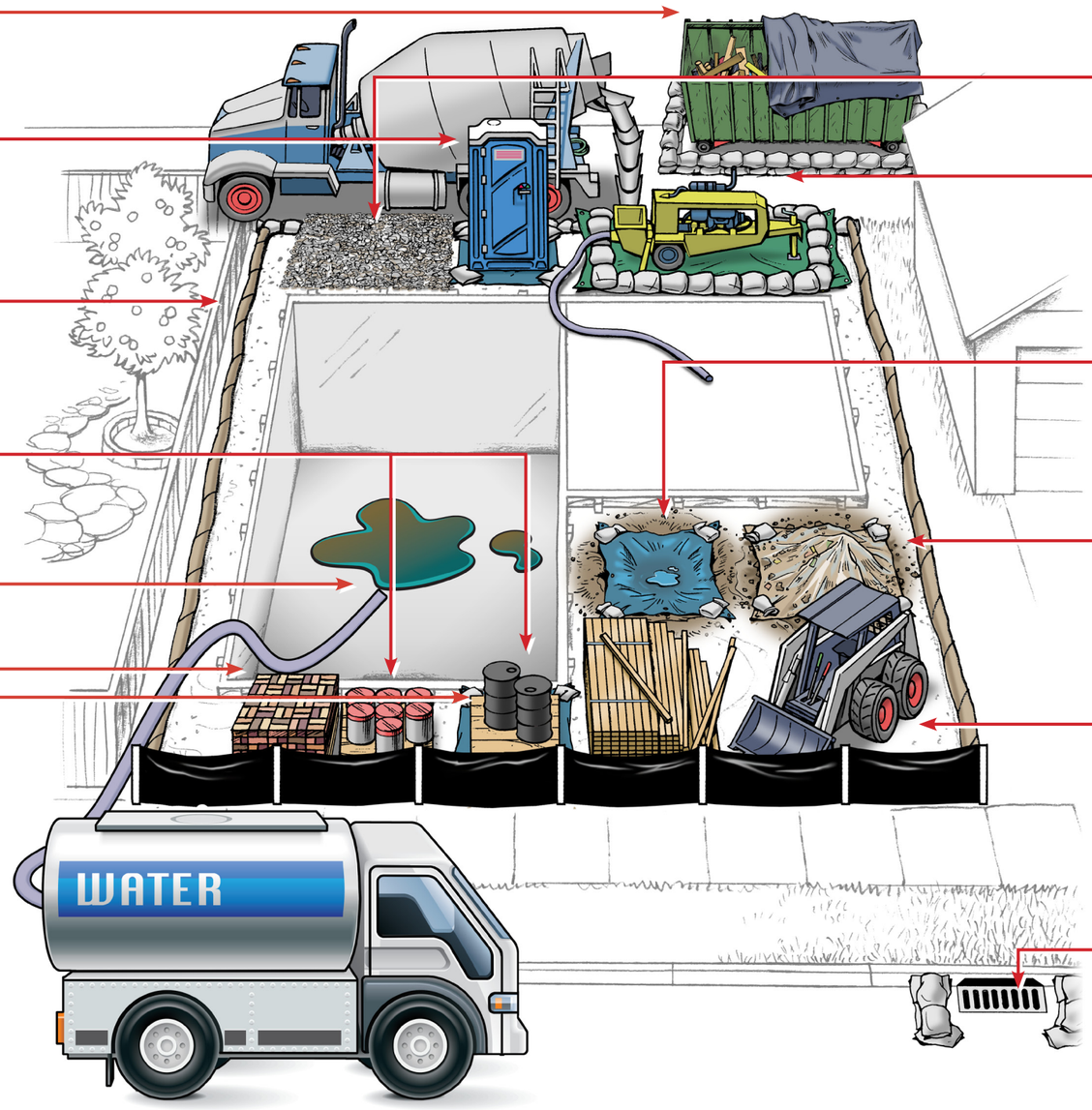

TRACKING CONTROLS

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking. Public roads must be swept to remove any dirt or materials tracked offsite.

CONCRETE TRUCKS/PUMPERS

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times, and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

WASHOUT AREA

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic sheet to collect and contain liquids and prevent run-off in nearby areas. The washout area must be checked and maintained daily to ensure compliance. Washout liquids must be disposed of properly. Washout areas should be adequately covered and protected during rain events.

DIRT AND GRADING

Mounds of dirt or gravel should be stored on site. These materials must also be covered each day with a tarp, visqueen, or other form of protection. Visqueen and/or tarps must be available and on site to cover 125% of exposed areas during the rainy season (October 1st – April 30th).

EARTHMOVING EQUIPMENT

All earthmoving equipment should be stored on site. Maintenance should also be conducted on the site, and tracks and trails left by equipment leading to and from the site should be cleaned up immediately.

STORM DRAINS

Storm drains must be protected at all times with perimeter controls, such as gravel bags or straw wattles. Sediment accumulation should be removed frequently.

If you have any questions, please contact the City's Clean Water Program at 858-755-9313.

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Appendix F
Municipal Inventory

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Facility Name	Contact Person	Phone Number	Priority	Street No.	Street Name	Zip Code	Description of Area/Activity	Potential Pollutants									Hydrologic Area	HA	Tributary to 303(d) Listed Waterbody	303(d) Waterbody Impairment	Site Potentially Generates 303(d) Impairment Pollutants*
								Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash					
11th Street Water Reservoir	Doug Blackstock	(858) 755-3294	Medium	562	11th St	92014	Potable water storage tank and equipment maintenance.	✓			✓	✓	✓				San Dieguito**	905.11	No	None	No
20th Street Lifeguard Station	Pat Vergne	(858) 755-1556	Medium		20th St and Coast Blvd	92014	Building. First Aid Care. Restroom Facilities. Building maintenance.	✓			✓		✓		✓	✓	San Dieguito**	905.11	No	None	No
21st St Sewer Lift Station	Doug Blackstock	(858) 755-3294	High	201	21st St	92014	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	✓	✓		✓	✓	✓				San Dieguito	905.11	Yes	Bacteria	Yes
25th Street Lifeguard Station	Pat Vergne	(858) 755-1556	High		25th St and Coast Blvd	92014	Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.	✓			✓		✓		✓	✓	San Dieguito**	905.11	No	None	No
7th St Sewer Lift Station	Doug Blackstock	(858) 755-3294	Medium	120	7th St	92014	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	✓	✓		✓	✓	✓				San Dieguito**	905.11	No	None	No
Caminito Park	Doug Blackstock	(858) 755-3294	High	1500	Camino Del Mar	92014	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	✓	✓		✓		✓	✓	✓	✓	San Dieguito**	905.11	No	None	No
City Hall	Doug Blackstock	(858) 755-3294	Non	1050	Camino Del Mar	92014	Building and landscape maintenance.				✓			✓		✓	San Dieguito**	905.11	No	None	No
City Hall Parking Lot	Doug Blackstock	(858) 755-3294	High	1050	Camino Del Mar	92014	Parking and landscaping.			✓		✓		✓		✓	San Dieguito**	905.11	No	None	No
Community Library	Doug Blackstock	(858) 755-3294	Non	1309	Camino Del Mar	92014	Building, parking lot, and landscape maintenance.			✓	✓	✓		✓		✓	San Dieguito**	905.11	No	None	No
Crest Water Reservoir	Doug Blackstock	(858) 755-3294	High	706	Crest Rd	92014	Potable water storage tank and equipment maintenance.	✓			✓	✓	✓				San Dieguito**	905.11	No	None	No
Del Mar Fire Station	Robert Burron	(858) 755-1522	Non	2220	Jimmy Durante Blvd	92014	Building and parking lot. Vehicle storage and cleaning. Hazardous waste materials storage.			✓		✓	✓		✓	✓	San Dieguito	905.11	Yes	Bacteria	No
Beach Safety Center	Pat Vergne	(858) 755-1556	High	1700	Coast Blvd	92014	Building. First Aid Care. Restroom Facilities. Building and landscape maintenance.	✓			✓		✓		✓	✓	San Dieguito**	905.11	No	None	No
Main Lifeguard Station Parking Lot	Doug Blackstock	(858) 755-3294	High	1700	Coast Blvd	92014	Parking and landscaping.			✓		✓		✓		✓	San Dieguito**	905.11	No	None	No
Minipark	Doug Blackstock	(858) 755-3294	High	1300	Maiden Ln	92014	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	✓	✓		✓		✓	✓	✓	✓	San Dieguito**	905.11	No	None	No
Powerhouse Community Center	Pat Vergne	(858) 755-1556	High	1630	Coast Blvd	92014	Special events, food prep, restrooms. Building and landscape maintenenace.	✓	✓		✓	✓	✓			✓	San Dieguito**	905.11	No	None	No
Powerhouse Park	Doug Blackstock	(858) 755-3294	High	1630	Coast Blvd	92014	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application. Restrooms and showers	✓	✓		✓		✓	✓	✓	✓	San Dieguito**	905.11	No	None	No
Public Works Yard	Doug Blackstock	(858) 755-3294	High	2240	Jimmy Durante Blvd	92014	Public Works Admin building, shops, parking lot, open and covered storage yards. Fueling station, storage, vehicle/equipment cleaning and repair. Temporary storage of trash, recycling and landscape materials. Hazardous waste materials storage.	✓	✓	✓	✓	✓	✓	✓	✓	✓	San Dieguito	905.11	Yes	Bacteria	Yes
Riverpath Del Mar	Doug Blackstock	(858) 755-3294	High	2240	Jimmy Durante Blvd	92014	Public park. Tree and landscape maintenance.	✓			✓		✓	✓	✓	✓	San Dieguito	905.11	Yes	Bacteria	Yes
San Dieguito Sewer Lift Station	Doug Blackstock	(858) 755-3294	High	2110	San Dieguito Dr	92014	Sanitary sewer pump station. Sewer spills, pump repairs and replacement.	✓	✓		✓	✓	✓				San Dieguito	905.11	Yes	Bacteria	Yes
Sea Cliff Park	Doug Blackstock	(858) 755-3294	High	1500	Coast Blvd	92014	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	✓	✓		✓		✓	✓	✓	✓	San Dieguito**	905.11	No	None	No
Seagrove Park	Doug Blackstock	(858) 755-3294	High	1500	Coast Blvd	92014	Public park. Turf, tree and landscape maintenance. Fertilization and pesticide application.	✓	✓		✓		✓	✓	✓	✓	San Dieguito**	905.11	No	None	No
Tennis Court Facilities	Doug Blackstock	(858) 755-3294	Non		21st St and Court St	92014	Tennis courts with parking and access.									✓	San Dieguito	905.11	Yes	Bacteria	No
Torrey Pines Water Reservoir	Doug Blackstock	(858) 755-3294	High	487	Pine Needles Dr	92014	Potable water storage tank and equipment maintenance.	✓			✓	✓	✓				Penasquitos**	906.10	No	None	No
Winston School Ball Field	Doug Blackstock	(858) 755-3294	Medium	215	9th St	92014	Ball field and parking.	✓	✓		✓	✓	✓	✓	✓	✓	San Dieguito**	905.1	No	None	No
Zuni Water Reservoir	Doug Blackstock	(858) 755-3294	High	627	Zuni Dr	92014	Potable water storage tank and equipment maintenance.	✓			✓	✓	✓				San Dieguito	905.11	Yes	Bacteria	Yes

* Identification of site/source that is a tributary to CWA Section 303(d) waterbody segment and potentially generates pollutants for which the waterbody segment is impaired.
** Drainage from the inventoried facility leads to the Pacific Ocean.

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Appendix G
Commercial/Industrial Property-Based Inventory

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Facility Name	Street No.	Street Name	Zip Code	SIC Code	Industrial/ Commerical	Principal Products/ Services	Potential Pollutants									Threat to Water Quality	Hydrologic Area	Tributary to 303(d) Listed Waterbody	303(d) Waterbody Impairment	Site Potentially Generates 303(d) Impairment Pollutants*	Industrial Permit	APN	GIS Mapping	
							Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash								Lat	Long
Del Mar German Car Service	**155**	**Carmel Valley Rd.**	**92014**	**7538**	**Commercial**	**Automotive Services**		✓	✓		✓			✓	✓	**High**	**906.10**	**Yes**	**Bacteria, Sediment**	**Yes**	**No**	**301-032-11**	**32.9393**	**117.259**
Old Del Mar Square	**201-211**	**15th Street**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Food Establishment, Retail**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-28, 29, 30**	**32.9591**	**117.266**
Rusty's Surfboards	*201*	*15th Street*	*92014*	*6512*	*Commercial*	*General Retail*									✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-012-28*	*32.95924*	*117.2661*
Del Mar Pizza, Inc.	*211*	*15th Street*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-012-30*	*32.95945*	*117.266*
Mixed Use Complex	**215**	**15th Street**	**92014**	**-**	**Commercial**	**Mixed Use**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-02**	**32.9592**	**117.266**
Sbicca American Bistro	*215*	*15th Street*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-012-02*	*32.95919*	*117.2658*
Office Complex	**221**	**15th Street**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-03**	**32.9592**	**117.266**
Del Mar Medical Arts	**317**	**14th Street**	**92014**	**8011**	**Commercial**	**Health Services**	✓								✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-020-02**	**32.9586**	**117.264**
Office Complex	**318**	**9th Street**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-221-23**	**32.9538**	**117.263**
Hotel Indigo	**710**	**Camino del Mar**	**92014**	**7011**	**Commercial**	**Hotel/Motel (Low-Rise)**	✓	✓		✓	✓	✓	✓	✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-200-35**	**32.9502**	**117.262**
Clarion Del Mar Inn	**720**	**Camino del Mar**	**92014**	**7011**	**Commercial**	**Hotel/Motel (Low-Rise)**	✓	✓		✓	✓	✓	✓	✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-200-21**	**32.9508**	**117.262**
Office Complex	**807**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-222-33**	**32.9527**	**117.262**
Office Complex	**832**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-200-24**	**32.953**	**117.263**
Office Complex	**853**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-222-31**	**32.9532**	**117.262**
Mixed Use Complex	**910**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-172-17**	**32.9536**	**117.263**
Office Complex	**915**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-221-34**	**32.9538**	**117.263**
Les Artistes Inn of Del Mar	**944**	**Camino del Mar**	**92014**	**7011**	**Commercial**	**Hotel**	✓	✓		✓	✓	✓	✓	✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-172-04**	**32.9539**	**117.264**
Canterbury Corner	**1011**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-410-29**	**32.9547**	**117.263**
Chinese Double Happiness	*1011*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-410-29*	*32.95468*	*117.2631*
Lemon Tree Corner	**1049**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-410-26**	**32.9553**	**117.263**
City Hall	**1050**	**Camino del Mar**	**92014**	**9111**	**Commercial**	**City Hall**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-093-02**	**32.955**	**117.264**
Del Mar Farmer's Market	*1050*	*Camino del Mar*	*92014*	*5411*	*Commercial*	*Farmer's Market*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-092-03*	*32.95505*	*117.2642*
Mixed Use Complex	**1101**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-401-10**	**32.9557**	**117.264**
Sushi Japone	*1101*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-401-10*	*32.95567*	*117.2635*
Mixed Use Complex	**1104**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-092-14**	**32.9555**	**117.264**

Facility Name	Street No.	Street Name	Zip Code	SIC Code	Industrial/ Commerical	Principal Products/ Services	Potential Pollutants									Threat to Water Quality	Hydrologic Area	Tributary to 303(d) Listed Waterbody	303(d) Waterbody Impairment	Site Potentially Generates 303(d) Impairment Pollutants*	Industrial Permit	APN	GIS Mapping	
							Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash								Lat	Long
Mixed Use Complex	**1105**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Retail**	✓	✓		✓	✓	✓	✓	✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-401-10**	**32.9558**	**117.264**
Del Mar Koi	*1105*	*Camino del Mar*	*92014*	*5999*	*Commercial*	*Animal and Bird Specialty Services*	✓	✓		✓	✓	✓	✓	✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-401-10*	*32.95567*	*117.2635*
Retail Complex	**1110**	**Camino del Mar**	**92014**	**5651**	**Commercial**	**General Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-092-13**	**32.9558**	**117.264**
Mixed Use Complex	**1125**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-401-03**	**32.956**	**117.264**
Retail Complex	**1130**	**Camino del Mar**	**92014**	**5651**	**Commercial**	**General Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-092-07**	**32.956**	**117.264**
Mixed Use Complex	**1135-1155**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Retail, Deli**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-401-15**	**32.9563**	**117.264**
Del Mar Liquor & Deli	*1149*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Grocery Store/Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	300-400-28	32.956333	117.26399
Mixed Use Complex	**1140**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Retail, Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-092-06**	**32.9561**	**117.264**
Café Secret	*1140*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-092-06*	*32.95612*	*117.2644*
Retail Complex	**1150**	**Camino del Mar**	**92014**	**5651**	**Commercial**	**General Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-092-16**	**32.9562**	**117.264**
Mixed Use Complex	**1201**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Food Establishment**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-075-06**	**32.9569**	**117.264**
Prep Kitchen	*1201*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-075-06*	*32.95688*	*117.2639*
Mixed Use Complex	**1202**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-074-06**	**32.9566**	**117.265**
Mixed Use Complex	**1212**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Food Establishment**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-074-07**	**32.9568**	**117.265**
Board & Brew	*1212*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-074-07*	*32.95678*	*117.2646*
The Curry Comb	*1212*	*Camino del Mar*	*92014*	*742*	*Commercial*	*Animal and Bird Specialty Services*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-074-06*	*32.95681*	*117.2644*
Mixed Use Complex	**1219**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-075-05**	**32.9571**	**117.264**
Office Complex	**1226**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-074-08**	**32.9569**	**117.265**
Mixed Use Complex	**1229-1231**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	***300-075-04***	**32.9573**	**117.264**
Seaside Yogurt	*1231*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-075-04*	*32.95719*	*117.2643*
Office Complex	**1234**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-074-09**	**32.9571**	**117.265**
Office Complex	**1237**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-075-09**	**32.9575**	**117.264**
Mixed Use Complex	**1247**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-075-01**	**32.9574**	**117.264**
Zel's Del Mar	*1247*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-075-01*	*32.95744*	*117.2642*
Camino Del Mar Building	**1302**	**Camino del Mar**	**92014**	**5651**	**Commercial**	**General Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-13**	**32.9576**	**117.265**

Facility Name	Street No.	Street Name	Zip Code	SIC Code	Industrial/ Commerical	Principal Products/ Services	Potential Pollutants									Threat to Water Quality	Hydrologic Area	Tributary to 303(d) Listed Waterbody	303(d) Waterbody Impairment	Site Potentially Generates 303(d) Impairment Pollutants*	Industrial Permit	APN	GIS Mapping	
							Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash								Lat	Long
Mixed Use Complex	**1307**	**Stratford Court**	**92014**	**-**	**Commercial**	**Office (Low-Rise), Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-12**	**32.9576**	**117.265**
Stratford Court Café	*1307*	*Stratford Court*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-012-12*	*32.95756*	*117.2653*
Retail Complex	**1310**	**Camino del Mar**	**92014**	**5651**	**Commercial**	**General Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-14**	**32.9577**	**117.265**
Retail Complex	**1312**	**Camino del Mar**	**92014**	**5651**	**Commercial**	**General Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-33**	**32.9578**	**117.265**
Office Complex	**1319**	**Stratford Ct.**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-11**	**32.9578**	**117.265**
Del Mar Medical Clinic	**1327-1349**	**Camino del Mar**	**92014**	**8011**	**Commercial**	**Health Services**	✓								✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-020-01, 03, 04**	**32.9582**	**117.264**
Mixed Use Complex	**1328**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Retail, Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-17**	**32.958**	**117.265**
Crepes & Corks Café	*1328*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-012-17*	*32.95799*	*117.2651*
Retail Complex	**1329**	**Stratford Ct.**	**92014**	**5651**	**Commercial**	**General Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-10**	**32.958**	**117.265**
Office Complex	**1330**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-18**	**32.9581**	**117.265**
Office Complex	**1340**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-19**	**32.9582**	**117.265**
Mixed Use Complex	**1342**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Retail, Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-20**	**32.9583**	**117.265**
En Fuego, Cantina & Grill	*1342*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-012-20*	*32.95827*	*117.2652*
La Tienda Wine Shop	*1342*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-012-20*	*32.95827*	*117.2652*
Wave Crest Resort	**1400**	**Ocean Avenue**	**92014**	**7011**	**Commercial**	**Hotel/Motel (Low-Rise)**	✓	✓		✓	✓	✓	✓	✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**Various**	**32.958**	**117.267**
Office Complex	**1401**	**Camino del Mar**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-030-04**	**32.9589**	**117.265**
Mixed Use Complex	**1404**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Retail, Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-24**	**32.9586**	**117.265**
Bully's North	*1404*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-012-24*	*32.95865*	*117.2653*
Retail Complex	**1412**	**Camino del Mar**	**92014**	**5651**	**Commercial**	**General Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-25**	**32.9587**	**117.265**
Retail Complex	**1414**	**Camino del Mar**	**92014**	**5651**	**Commercial**	**General Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-26**	**32.9588**	**117.265**
Retail Complex	**1424**	**Camino del Mar**	**92014**	**5651**	**Commercial**	**General Retail**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-31**	**32.959**	**117.265**
Mixed Use Complex	**1431**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Retail, Health Services**	✓								✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-030-83**	**32.9592**	**117.265**
Office Complex	**1431**	**Stratford Ct.**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-05**	**32.9589**	**117.266**
Mixed Use Complex	**1435**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Retail, Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-030-82**	**32.9595**	**117.265**
Bruegger's Bagels	*1435*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-030-82*	*32.95948*	*117.2649*

Facility Name	Street No.	Street Name	Zip Code	SIC Code	Industrial/ Commerical	Principal Products/ Services	Potential Pollutants									Threat to Water Quality	Hydrologic Area	Tributary to 303(d) Listed Waterbody	303(d) Waterbody Impairment	Site Potentially Generates 303(d) Impairment Pollutants*	Industrial Permit	APN	GIS Mapping	
							Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash								Lat	Long
Starbucks Coffee #526	*1435*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-030-82*	*32.95948*	*117.2649*
Mixed Use Complex	**1438-1454**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Retail, Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-012-04**	**32.9593**	**117.266**
Americana	*1454*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-012-04*	*32.95941*	*117.2605*
Jimmy O's	*225*	*15th Street*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*299-091-04*	*32.95949*	*117.2658*
L'Auberge Del Mar	**1540-1616**	**Camino del Mar**	**92014**	**-**	**Commercial**	**Resort, Food Establishment**	✓	✓		✓	✓	✓	✓	✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**299-310-08, 09**	**32.9612**	**117.266**
L'Auberge Del Mar	*1540*	*Camino del Mar*	*92014*	*7011*	*Commercial*	*Resort*	✓	✓		✓	✓	✓	✓	✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*299-310-09*	*32.96033*	*117.2659*
Kitchen 1540	*1540*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*299-310-09*	*32.96033*	*117.2659*
Del Mar Plaza	**1555**	**Camino del Mar**	**92014**	**7389**	**Commercial**	**Shopping Center**	✓	✓		✓	✓	✓	✓	✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**300-030-86**	**32.9605**	**117.265**
Del Mar Rendezvous	*1555*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-030-86*	*32.96068*	117.2651
Flavor Del Mar	*1555*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-030-86*	*32.96068*	117.2651
Harvest Ranch Market	*1555*	*Camino del Mar*	*92014*	*5431*	*Commercial*	*Grocery Store*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-030-86*	*32.96068*	117.2651
Il Fornaio Cucina Italiana/Enoteca del Fornaio	*1555*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-030-86*	*32.96068*	117.2651
Pacifica Del Mar/Pacifica Breeze	*1555*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-030-86*	*32.96068*	117.2651
Shimbashi Izakaya-Seasonal Japanese Tapas & Sake Bar	*1555*	*Camino del Mar*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-030-86*	*32.96068*	117.2651
Sunset Parking Services	*1555*	*Camino del Mar*	*92014*	*7521*	*Commercial*	*Automotive Services*		✓	✓		✓			✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*300-030-86*	*32.96068*	117.2651
Seagrove Parking	**1601**	**Coast Blvd.**	**92014**	**7521**	**Commercial**	**Automotive Services**		✓	✓		✓			✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**299-230-10**	**32.9617**	**117.267**
Jake's Del Mar	**1660**	**Coast Blvd.**	**92014**	**5812**	**Commercial**	**Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**299-230-03**	**32.9619**	**117.268**
Mixed Use Complex	**1670**	**Coast Blvd.**	**92014**	**-**	**Commercial**	**Food Establishment, Parking Lot**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**299-230-29**	**32.9622**	**117.268**
Del Mar Snack Shack	*1670*	*Coast Blvd.*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*299-230-29*	*32.96204*	*117.2681*
The Poseidon Restaurant	*1670*	*Coast Blvd.*	*92014*	*5812*	*Commercial*	*Food Establishment*	✓	✓		✓	✓	✓		✓	✓	*High*	*905.11***	*No*	*None*	*No*	*No*	*299-230-29*	*32.96204*	*117.0181*
Del Mar Motel on the Beach	**1702**	**Coast Blvd.**	**92014**	**7011**	**Commercial**	**Hotel**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11****	**No**	**None**	**No**	**No**	**299-232-08**	**32.9626**	**117.268**
Southfair Office Complex	**2010**	**Jimmy Durante Blvd.**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11**	**Yes**	**Bacteria**	**Yes**	**No**	**299-071-06**	**32.9696**	**117.265**
Office Complex	**2120**	**Jimmy Durante Blvd.**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11**	**Yes**	**Bacteria**	**Yes**	**No**	**299-100-27**	**32.97**	**117.265**
John C. Read General Contractors	**2126**	**Jimmy Durante Blvd.**	**92014**	**1521**	**Commercial**	**General Contractor**		✓			✓			✓	✓	**High**	**905.11**	**Yes**	**Bacteria**	**Yes**	**No**	**299-100-28**	**32.9704**	**117.264**
Mixed Use Complex	**2132**	**Jimmy Durante Blvd.**	**92014**	**-**	**Commercial**	**Retail, Animal Services**	✓	✓		✓	✓	✓	✓	✓	✓	**High**	**905.11**	**Yes**	**Bacteria**	**Yes**	**No**	**299-100-29**	**32.9702**	**117.264**

Facility Name	Street No.	Street Name	Zip Code	SIC Code	Industrial/ Commerical	Principal Products/ Services	Potential Pollutants									Threat to Water Quality	Hydrologic Area	Tributary to 303(d) Listed Waterbody	303(d) Waterbody Impairment	Site Potentially Generates 303(d) Impairment Pollutants*	Industrial Permit	APN	GIS Mapping	
							Bacteria	Gross Pollutants	Heavy Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash								Lat	Long
Animal and Bird Hospital of Del Mar (Freeflight)	*2132*	*Jimmy Durante Blvd.*	*92014*	*742*	*Commercial*	*Animal and Bird Specialty Services*	✓	✓		✓	✓	✓	✓	✓	✓	*High*	*905.11*	*Yes*	*Bacteria*	*Yes*	*No*	*299-100-29*	*32.97017*	*117.2641*
Office Complex	**2195**	**San Dieguito Dr.**	**92014**	**6512**	**Commercial**	**Office (Low-Rise)**									✓	**High**	**905.11**	**Yes**	**Bacteria**	**Yes**	**No**	**299-100-35**	**32.9696**	**117.262**
Mixed Use Complex	**2201**	**San Dieguito Dr.**	**92014**	**-**	**Industrial**	**Light Industry, General**		✓	✓		✓	✓		✓	✓	**High**	**905.11**	**Yes**	**Bacteria**	**No**	**No**	**299-100-34**	**32.9699**	**117.262**
Del Mar Automotive Services	*2201*	*San Dieguito Dr.*	*92014*	*7538*	*Commercial*	*Automotive Services*		✓	✓		✓			✓	✓	*High*	*905.11*	*Yes*	*Bacteria*	*No*	*No*	*299-100-34*	*32.96972*	*117.2618*
Del Mar Blueprint	*2201*	*San Dieguito Dr.*	*92014*	*2752*	*Commercial*	*Printing Services*									✓	*High*	*905.11*	*Yes*	*Bacteria*	*No*	*No*	*299-100-34*	*32.96972*	*117.2618*
Eucalyptus Stoneware	*2201*	*San Dieguito Dr.*	*92014*	*3269*	*Industrial*	*Pottery Manufacturing*			✓			✓		✓	✓	*High*	*905.11*	*Yes*	*Bacteria*	*No*	*Yes*	*299-100-34*	*32.96972*	*117.2618*
Rose Towing, Inc.	*2201*	*San Dieguito Dr.*	*92014*	*7549*	*Commercial*	*Automotive Services*		✓	✓		✓			✓	✓	*High*	*905.11*	*Yes*	*Bacteria*	*No*	*No*	*299-100-34*	*32.96972*	*117.2618*
Brigantine Del Mar	**3263**	**Camino del Mar**	**92014**	**5812**	**Commercial**	**Food Establishment**	✓	✓		✓	✓	✓		✓	✓	**High**	**905.11**	**Yes**	**Bacteria**	**No**	**No**	**300-030-86**	**32.9607**	**117.265**

Inventoried Commercial and Industrial Properties listed in **Bold**.
Inventoried business tenants for each property listed in *italics* .
* Identification of site/source that is a tributary to CWA Section 303(d) waterbody segment and potentially generates pollutants for which the waterbody segment is impaired.
** Drainage from the inventoried facility leads to the Pacific Ocean.

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Appendix H
Commercial/Industrial Patrol Protocol

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City of Del Mar Commercial/Industrial Patrolling Protocol

Purpose
Routinely monitor City businesses and commercial arterials for clean water violations per the Municipal Code section 11.30. Patrolling inspections are a proactive way the City can enforce compliance with the Municipal Code, discover and abate trouble areas/hotspots, and better educate commercial and industrial business owners and property managers regarding the City's clean water requirements.

Frequency
Patrols occur approximately monthly (12 patrols annually). Follow-up and enforcement for observed violations occurs on an as-needed basis.

Target
Businesses along the main arterial strip in the City, including all City restaurants, active construction sites, hotels and motels, City parks and facilities, and multi-family residences (apartments and condos). In addition to the inventoried commercial/industrial properties and businesses, there are 25 municipal parks and facilities and approximately 50 multi-family properties (apartments and condominiums) that are inspected during the patrols. A city map outlining properties and parcels inspected during the patrols is shown in **Figure 1**.

Location
Figure 1 outlines the parcels within the City routinely visited during the commercial and industrial patrols. Patrols are initiated in the following distinct areas:

- Camino del Mar from 9th Street to Sea View Ave
- 15th Street west of Camino del Mar
- Coast Blvd from 15th Street to 17th Street
- Jimmy Durante Blvd, south of the San Dieguito Lagoon
- San Dieguito Drive west of the Grand Avenue overlook
- Active construction sites within the patrol area
- Municipal Parks and Facilities, including:
    - City Hall
    - Public Works Building and Yard
    - Municipal Parks (5), Power House, and Tennis Court
    - City Reservoirs

Description
Clean Water Program personnel initiate patrols to inspect businesses within the City for clean water violations. Inspections of the businesses in the locations listed above focus on outdoor areas and activities, including trash dumpsters and grease bins, irrigation systems, washing activities, and discharges to City streets and storm drain system. Inspectors note any deficiency per the City's Municipal Code during the patrol. Contact is not initiated with the business owner or property manager unless an active IC/ID is observed, in which case all attempts are made to abate the illegal discharge.

Municipal areas are also included in the patrols. Patrolling inspections at these facilities focus on the presence of trash, animal wastes, and overall cleanliness of each site. All trash cans throughout the five (5) Municipal Parks in the City are inspected to ensure lids are tightly closed and all trash is contained. City parking lots and the Public Works Yard are inspected to confirm implementation of good housekeeping measures. If issues are noted at Municipal areas during

the inspections, Clean Water Personnel immediately follow-up with the responsible City departments in order to rectify any deficiencies.

Active construction sites along the patrol route are inspected for erosion and sediment control BMPs. Perimeters on the sites are inspected for adequate protection, stockpiles are ensured to be stabilized, and trash cans and dumpsters are inspected so that lids remain closed while not in use. If on-site, contractors are immediately notified of any deficiencies and are required to address the issues as soon as possible.

At businesses and facilities where no issues are noted, inspectors continue onto the next property or business and no further action is taken. Deficiencies observed during the patrol are logged in the City's database and letters are generated for the business owners or property managers, dependent on the business. These letters inform the owners of the particular deficiency observed at their site, the date the deficiency was observed, and the requirement that immediate action is necessary to bring the property or business into compliance. If a property is not included in the database during a particular patrol, no issue was observed during the patrolling inspection.

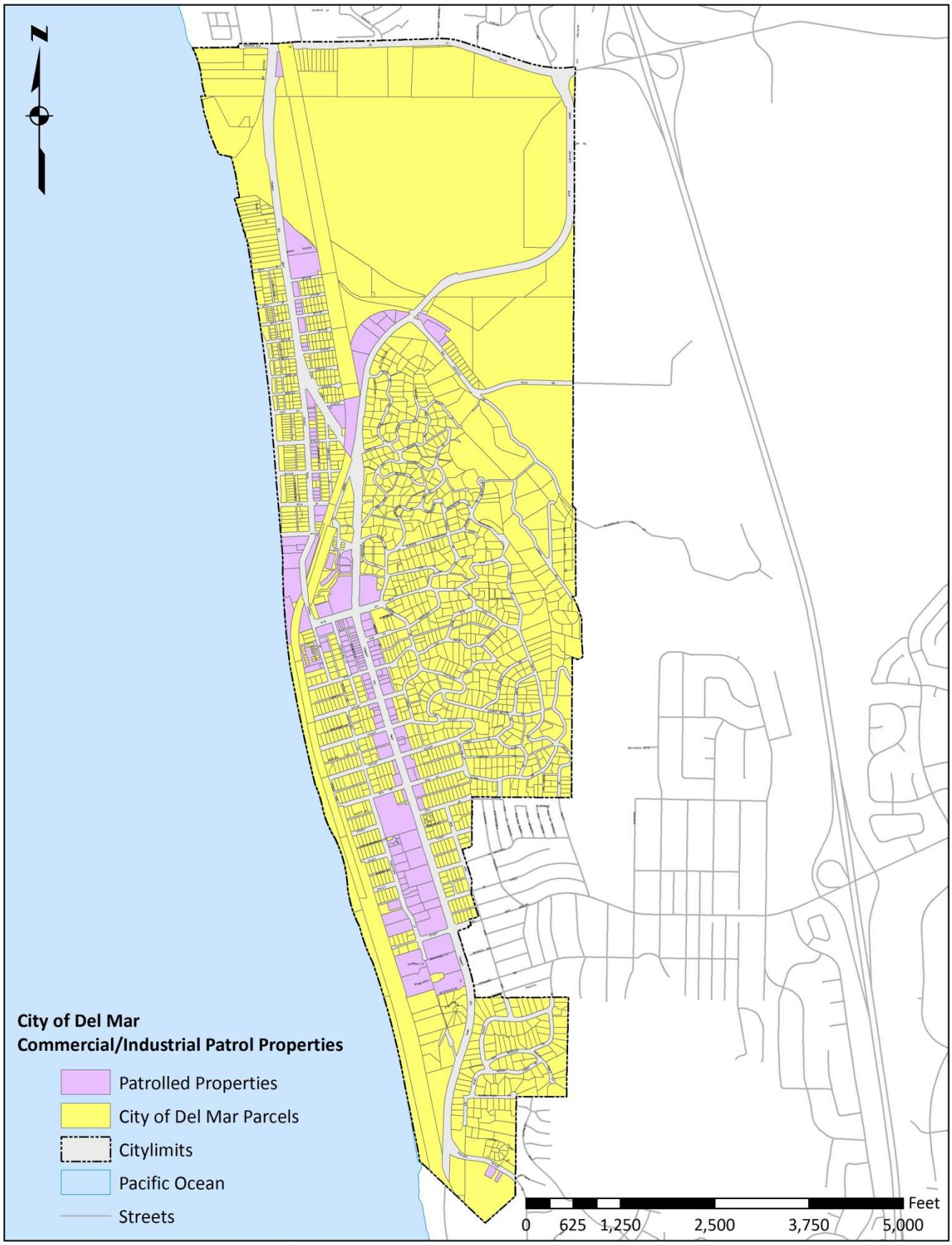

Figure 1. City of Del Mar Commercial and Industrial Patrolling Properties

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Appendix I
Commercial/Industrial Inspection Summary

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Appendix I - FY 2012 Commercial Industrial Patrol Inspection Summary

No.	Facility Name	Primary Services	Date Observed	Issue Observed													Letter Date	Case Closed	Comments
				Irrigation Runoff	Leaking Hose	Leaking Fountain	Broken Sprinkler	Uncontained Hosing	Dumpster Lid	Dumpster Overflow	Excessive Trash	Grease Lid Open	Grease Stains	Excessive Leaves, Sediment	Secondary Containment	MS4 Discharge			
1	Del Mar Koi	Animal Services	8/12/2011												✓		11/11/2011	✓	Fertilizer should be stored under cover
2	Del Mar Liquor & Deli	Food Establishment	8/12/2011		✓				✓								11/11/2011	✓	Leaky hose in front Dumpster lids open
3	En Fuego, Cantina & Grill	Food Establishment	8/12/2011									✓	✓				11/11/2011	✓	Grease stains next to dumpster
4	Jimmy O's	Food Establishment	8/12/2011	✓													11/11/2011	✓	Broken sprinkler head dripping next to front patio
5	Kitchen 1540/ L'Auberge Del Mar	Food Establishment	8/12/2011	✓													11/11/2011	✓	Sprinklers overwatering on 15th Street, correct timing
6	Prep Kitchen	Food Establishment	8/12/2011							✓		✓	✓				11/11/2011	✓	Grease tracking from kitchen door
7	Rose Towing, Inc.	Automotive Services	8/12/2011						✓								11/11/2011	✓	Dumpster lid open
8	Sbicca American Bistro	Food Establishment	8/12/2011	✓									✓				11/11/2011	✓	Grease tracking from kitchen door
9	Starbucks Coffee #526	Food Establishment	8/12/2011	✓													11/11/2011	✓	Stained runoof from trash area to drain in patio; Flower shop overwatering
10	Stratford Court Café	Food Establishment	8/12/2011						✓								11/11/2011	✓	Dumpster lid open
11	Del Mar Koi	Animal Services	9/16/2011												✓		11/11/2011	✓	Fertilizer should be stored under cover
12	Del Mar Liquor & Deli	Food Establishment	9/16/2011		✓												11/11/2011	✓	Leaky hose in front; Dumpster lids open
13	En Fuego, Cantina & Grill	Food Establishment	9/16/2011										✓				11/11/2011	✓	Grease stains next to dumpster; Grease tracking from kitchen door; Dumpster lids open
14	Sbicca American Bistro	Food Establishment	9/16/2011														11/11/2011	✓	Grease tracking from kitchen door; Parking lot at 13th Street excessive leaves/sediment
15	Starbucks Coffee #526	Food Establishment	9/16/2011										✓				11/11/2011	✓	Stained runoff from trash area flowing to drain
16	2120 Jimmy Durante Office Building	Offices	10/19/2011								✓						11/11/2011	✓	Clean up rubbish at back of property
17	Board & Brew	Food Establishment	10/19/2011												✓		11/11/2011	✓	Grease bin needs secondary containment
18	Del Mar Blue Print	Printing Services	10/19/2011						✓								11/11/2011	✓	Dumpster lids open
19	Del Mar Liquor & Deli	Food Establishment	10/19/2011						✓								11/11/2011	✓	Dumpster lid open
20	En Fuego, Cantina & Grill	Food Establishment	10/19/2011										✓				11/11/2011	✓	Grease stains next to dumpster; Grease tracking from kitchen door
21	Rose Towing, Inc.	Automotive Services	10/19/2011												✓		11/11/2011	✓	(3) 2 to 3-gallon gas cans need to be placed in secondary containment
22	Sbicca American Bistro	Food Establishment	10/19/2011						✓				✓				11/11/2011	✓	Grease stains next to dumpster; Grease tracking from kitchen door; Dumpster lids open
23	Southfair Office Building	Offices	10/19/2011						✓								11/11/2011	✓	Dumpster lids open
24	Starbucks Coffee #526	Food Establishment	10/19/2011										✓				11/11/2011	✓	Stained runoff from trash area flowing to drain on property
25	The Poseidon Restaurant	Food Establishment	10/19/2011										✓				11/11/2011	✓	Dumpster lids open - Gulls and other birds in dumpsters
26	Zel's Del Mar	Food Establishment	10/19/2011									✓			✓		11/11/2011	✓	Grease stains next to dumpster; Grease tracking from kitchen door; Grease bin needs secondary containment

No.	Facility Name	Primary Services	Date Observed	Issue Observed													Letter Date	Case Closed	Comments
				Irrigation Runoff	Leaking Hose	Leaking Fountain	Broken Sprinkler	Uncontained Hosing	Dumpster Lid	Dumpster Overflow	Excessive Trash	Grease Lid Open	Grease Stains	Excessive Leaves, Sediment	Secondary Containment	MS4 Discharge			
27	Board & Brew	Food Establishment	11/16/2011									✓					11/18/2011	✓	Grease bin needs secondary containment and lid needs to be secured
28	Del Mar Blue Print	Printing Services	11/16/2011						✓								11/18/2011	✓	Dumpster lids open
29	Del Mar Pizza, Inc.	Food Establishment	11/16/2011						✓								11/18/2011	✓	Dumpster lids open
30	En Fuego, Cantina & Grill	Food Establishment	11/16/2011						✓				✓				11/18/2011	✓	Dumpster lids open; Grease stains next to dumpster
31	Eucalyptus Stoneware	Stone and Pottery	11/16/2011						✓								11/18/2011	✓	Dumpster lids open
32	John C. Read Construction	Contractor	11/16/2011						✓								11/18/2011	✓	Dumpster lid open
33	ManeTain Salon	Retail Business	11/16/2011						✓								11/18/2011	✓	Dumpster lid open
34	Sbicca American Bistro	Food Establishment	11/16/2011									✓	✓		✓		11/18/2011	✓	Grease stains next to dumpster; Grease tracking from kitchen door
35	Southfair Office Building	Offices	11/16/2011						✓	✓							11/18/2011	✓	Dumpster lid open, one dumpster overflowing with rubbish
36	Starbucks Coffee #526	Food Establishment	11/16/2011													✓	11/18/2011	✓	Leakage from trash area into trench drain
37	The Poseidon Restaurant	Food Establishment	11/16/2011						✓								11/18/2011	✓	Dumpster lids open
38	240-244 9th Street Office Complex	Offices	12/15/2011						✓								12/15/2011	✓	Dumpster lids open
39	Sbicca American Bistro	Food Establishment	12/15/2011								✓						12/15/2011	✓	Trash in parking lot at 13th Street
40	Southfair Office Building	Offices	12/15/2011						✓	✓	✓						12/15/2011	✓	Dumpster lids open; Trash overflowing from one dumpster
41	The Poseidon Restaurant	Food Establishment	12/15/2011									✓	✓				12/15/2011	✓	Grease bin open and secondary containment full of fluid; Grease and fluid tracked within trash area
42	Bully's North	Food Establishment	1/11/2012						✓								1/13/2012	✓	Dumpster lid open under rear stairway
43	Canterbury Del Mar	Offices	1/11/2012						✓								1/13/2012	✓	Dumpster lid open
44	En Fuego, Cantina & Grill	Food Establishment	1/11/2012						✓								1/13/2012	✓	Dumpster lid open
45	Lease1201.com	Offices	1/11/2012						✓								1/13/2012	✓	Dumpster lid open
46	Rusty Surfboards	Retail Business	1/11/2012						✓								1/13/2012	✓	Dumpster lid open
47	Sbicca American Bistro	Food Establishment	1/11/2012								✓						1/13/2012	✓	Trash in parking lot at 13th Street
48	Southfair Office Building	Offices	1/11/2012						✓	✓							1/13/2012	✓	Dumpster lids open; Trash overflowing from one dumpster
49	Starbucks Coffee #526	Food Establishment	1/11/2012					✓								✓	1/13/2012	✓	Coffee runoff from trash area to stormdrain
50	The Poseidon Restaurant	Food Establishment	1/11/2012									✓					1/13/2012	✓	Grease bin open and secondary containment full of fluid; Grease and fluid tracked within trash area
51	Southfair Office Building	Offices	2/8/2012						✓	✓							2/14/2012	✓	Dumpster lids open; Trash overflowing from one dumpster
52	Board & Brew	Food Establishment	3/5/2012						✓	✓							3/6/2012	✓	Dumpster lids open, trash and rubbish on ground; Trash overflowing from one dumpster

No.	Facility Name	Primary Services	Date Observed	Issue Observed													Letter Date	Case Closed	Comments
				Irrigation Runoff	Leaking Hose	Leaking Fountain	Broken Sprinkler	Uncontained Hosing	Dumpster Lid	Dumpster Overflow	Excessive Trash	Grease Lid Open	Grease Stains	Excessive Leaves, Sediment	Secondary Containment	MS4 Discharge			
53	Del Mar Blue Print	Printing Services	3/5/2012						✓	✓							3/6/2012	✓	Dumpster lids open, some trash on ground; Dumpster overflowing
54	En Fuego, Cantina & Grill	Food Establishment	3/5/2012						✓	✓							3/6/2012	✓	Dumpster lids open, trash and rubbish on ground
55	Southfair Office Building	Offices	3/5/2012														3/6/2012	✓	Dumpster overflowing, rubbish stacked next to dumpster
56	Starbucks Coffee #526	Food Establishment	3/5/2012					✓								✓	3/6/2012	✓	Water discharging into to multiple drains in patio area; Evidence of uncontained hosing, discharge to MS4
57	Stratford Court Café	Food Establishment	3/5/2012						✓	✓							3/6/2012	✓	Dumpster lids open, trash and rubbish on ground
58	The Poseidon Restaurant	Food Establishment	3/5/2012									✓					3/6/2012	✓	Grease bin lid open
59	En Fuego, Cantina & Grill	Food Establishment	4/2/2012						✓	✓							4/6/2012	✓	Dumpster lids open; Trash overflowing from dumpster
60	Southfair Office Building	Offices	4/2/2012						✓								4/6/2012	✓	Two of the four dumpster lids were open
61	Starbucks Coffee #526	Food Establishment	4/2/2012					✓							✓	✓	4/6/2012	✓	Uncontained washing of trash area, leading to area drain; Potential discharge to City's MS4
62	The Poseiden Restaurant	Food Establishment	4/2/2012									✓	✓				4/6/2012	✓	Grease bin lid open; Grease stains at base of bin.
63	1307 Stratford Court	Multi-Family Residence	4/5/2012					✓								✓	4/6/2012	✓	Evidence of discharge to street from patio area drains
64	Del Mar Pizza, Inc.	Food Establishment	4/24/2012						✓								4/25/2012	✓	Dumpster lid open
65	Rusty Surfboards	Retail Business	4/24/2012						✓	✓							4/25/2012	✓	Dumpster lids open; Cardboard boxes piled up in trash area
66	Sbicca American Bistro	Food Establishment	4/24/2012							✓							4/25/2012	✓	Cardboard boxes on ground in area of dumpsters
67	Southfair Office Building	Offices	4/24/2012						✓								4/25/2012	✓	Three of four dumpsters have lids open
68	1130 Camino del Mar	Offices	5/21/2012							✓	✓						5/21/2012	✓	Trash overflowing from dumpster, excessive trash on ground
69	1943-1945 Coast Blvd.	Multi-Family Residence	5/21/2012		✓						✓						5/21/2012	✓	Runoff from washing unit located at the back of the building
70	1951-1953 Coast Blvd.	Multi-Family Residence	5/21/2012		✓												5/21/2012	✓	Drainage hose extending from hot tub on deck, remind owner hot tub water needs to be dechlorinated
71	218-228 12th Street	Offices	5/21/2012												✓		5/21/2012	✓	Paint cans left uncontained outside along walkway
72	Americana	Food Establishment	5/21/2012						✓								5/21/2012	✓	Dumpster lids open along back of the building
73	En Fuego, Cantina & Grill	Food Establishment	5/21/2012						✓								5/21/2012	✓	Dumpster lids open
74	Southfair Office Building	Offices	5/21/2012						✓	✓							5/21/2012	✓	Four dumpster lids open, overflowing
75	The Poseidon Restaurant	Food Establishment	5/21/2012									✓	✓				5/21/2012	✓	Grease bin lid is open; Absorbent and grease spots in trash area
			Totals	**5**	**5**	**1**	**1**	**5**	**37**	**15**	**7**	**11**	**15**	**1**	**9**	**6**			

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Appendix J
Mobile Business Inventory

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Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
ADT Security Services, Inc.	Alarm Service	3830 Calle Fortunada	San Diego	CA	92123	(561) 988-6269	Outside
Bay Alarm Company	Alarm Service	60 Berry Dr	Pacheco	CA	94553	(925) 935-1100	Outside
Devcon Security Services Of California	Alarm Service	5840 El Camino Real #115	Carlsbad	CA	92008	(954) 926-1800	Outside
DHF Inc.	Alarm Service	12315 Oak Knoll Rd 300	Poway	CA	92064	(858) 699-4379	Outside
Electrical Sys Inc Dba Knight Security	Alarm Service	2418 Auto Park Way	Escondido	CA	92029	(760) 745-3604	Outside
Ranch & Coast Security, Inc.	Alarm Service	9540 Waples St #D	San Diego	CA	92121	(858) 657-9100	Outside
U.S. Security Associate Inc.	Alarm Service	5893 Oberline Dr Ste 108	San Diego	CA	92121	(770) 625-1500	Outside
Pacific Ambulance, Inc.	Ambulance	5550 Oberlin Drive Suite A	San Diego	CA	92121	(858) 571-4894	Outside
Kimty Inc Dba Bumper Rescue	Auto Detailer	2920 Damon Ave #4	San Diego	CA	92109	(619) 286-7377	Outside
Polished Image Mobile Detailing	Auto Detailer	410 Sunrise Pl	Vista	CA	92084	(760) 724-4233	Outside
Pristine Auto Detailing	Auto Detailer	PO Box 103	Del Mar	CA	92014	(760) 822-6363	Outside
Zimms Detail	Auto Detailer	1420 Palomar Drive	San Marcos	CA	92069	(760) 717-2185	Outside
Ralph Walno	Carpentry	2540 Kirkland Avenue	Escondido	CA	92029	(760) 715-0350	Outside
Royal Industries, Inc.	Carpentry	1260 E Grand Avenue	Pomona	CA	91766	(909) 629-8565	Outside
ABO Catering Inc.	Catering	2286 Sunshine Mountain Road	San Marcos	CA	92069	(760) 535-5760	Outside
Afarand Corp. Dba Bearclaw Coffee	Catering	16061 Via De Las Palmas	Rancho Santa Fe	CA	92091	(858) 761-3361	Outside
Amir's Catering & Event Planning	Catering	2565 Abedul St	Carlsbad	CA	92009	(760) 929-0707	Outside
Authentic Flavors Catering	Catering	7004 Carroll Rd	San Diego	CA	92121	(858) 404-0606	Outside
Bar None Barbeque, Inc	Catering	7401 Princess View Dr Ste E	San Diego	CA	92120	(619) 285-0801	Outside
Bar Works Catering	Catering	8504 Commerce Ave	San Diego	CA	92121	(858) 566-6077	Outside
Behind The Scenes, Inc.	Catering	9888 Waples St	San Diego	CA	92121	(858) 638-1400	Outside
Bekker's West Coast Catering	Catering	7455 Mission Gorge Rd	San Diego	CA	92120	(619) 287-9027	Outside
Buckboard Catering	Catering	9265 Activity Rd 108	San Diego	CA	92126	(858) 748-1617	Outside
Bull Taco, Llc	Catering	2133 Edinburg Avenue	Cardiff By The Sea	CA	92007	(760) 505-2876	Outside
California Cuisine	Catering	109 W F Street	San Diego	CA	92101	(619) 543-0790	Outside
Cardiff Seaside Market	Catering	2087 San Elijo Avenue	Cardiff By The Sea	CA	92007	(760) 753-5445	Outside
Catering By Barry Layne, Inc.	Catering	113 East Grand Avenue	Escondido	CA	92029	(760) 212-7780	Outside
Continental Catering	Catering	8238 Parkway Dr	La Mesa	CA	91942	(619) 698-3500	Outside
Crown Point Catering, Inc.	Catering	4927 Voltaire St	San Diego	CA	92107	(619) 223-1211	Outside
David Tepper	Catering	2940 Lincoln Ave.	San Diego	CA	92104	(619) 282-1064	Outside
Dinners By David Inc.	Catering	9001 Towne Centre Drive	San Diego	CA	92122	(619) 518-3935	Outside
El Nopalito, Inc.	Catering	560 Santa Fe Dr	Encinitas	CA	92024	(760) 436-5775	Outside
Evergreen Cuisine, LLC	Catering	9950 Scripps Vista Way Unit #128	San Diego	CA	92131	(619) 917-2685	Outside
Feast On This Inc.	Catering	8395 Camino Santa Fe Ste D	San Diego	CA	92121	(858) 597-0740	Outside
Food Steps Inc. Porkyland	Catering	646 University Avenue	San Diego	CA	92103	(619) 233-5139	Outside
Forrealbarteneders	Catering	4603 Brighton Avenue	San Diego	CA	92107	(619) 251-4076	Outside
Four Seasons Foods	Catering	4230 Voltaire Ave	San Diego	CA	92107	(619) 221-0087	Outside
Fresh Fries	Catering	226 Grand Avenue #203	Long Beach	CA	90803	(323) 715-7446	Outside
Happy Tiers Bakery, Llc	Catering	4445 Clairemont Mesa Boulevard	San Diego	CA	92117	(619) 800-2253	Outside
Hospitality Inc.	Catering	9558 Camino Ruiz	San Diego	CA	92126	(619) 586-2121	Outside
I Love Tacos Catering	Catering	6187 University Avenue	San Diego	CA	92115	(619) 303-8567	Outside
Isaac's Bakery Del, Dba Isaac's Catering	Catering	2051 Palomar Airport Rd Ste 175	Carlsbad	CA	92011	(760) 931-0267	Outside
J.W. Strauss Llc	Catering	514 Via De La Valle Ste. 100	Solana Beach	CA	92075	(858) 792-9090	Outside
Katman Inc.	Catering	8575 Commerce Ave	San Diego	CA	92121	(858) 530-1885	Outside
Las Olas Inc.	Catering	2655 S Highway 101	Cardiff	CA	92007	(760) 942-1860	Outside
Major Events	Catering	6695 Wanpermere Drive	San Diego	CA	92120	(619) 823-7060	Outside
ME - Food Services	Catering	4126 Executive Drive	San Diego	CA	92115	(619) 254-4420	Outside
Metro Catering	Catering	6625 Top Gun St #101	San Diego	CA	92121	(858) 626-2800	Outside
Monsoon Investments	Catering	3960 5th Ave	San Diego	CA	92103	(619) 297-7777	Outside
Old Venice Restaurant	Catering	2910 Canon Street	San Diego	CA	92106		Outside
One Perfect Pear Catering	Catering	139 Swallow Ln	Oceanside	CA	92057	(760) 978-7420	Outside
Pacific Coast Grill Inc	Catering	143 S Cedros Ave Suite T	Solana Beach	CA	92075	(858) 794-4632	Outside
Paragon Hospitality Enterprises, Hunter Steakhouse	Catering	1221 Vista Way	Oceanside	CA	92054	(760) 433-2633	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
Peartrees Catering, Inc.	Catering	2243 Verus Street	San Diego	CA	92154	(619) 575-5500	Outside
Phil's B.B.Q.	Catering	3750 Sports Arena Blvd	San Diego	CA	92110	(619) 814-0050	Outside
Premier Food Services Management Group, Inc.	Catering	7966 Arjons Drive	San Diego	CA	92126	(858) 621-5151	Outside
Ranch Catering, Inc.	Catering	1935 Quivira Way	San Diego	CA	92109	(619) 398-4840	Outside
Rasta Taco	Catering						Outside
RBR Livingroom Inc.	Catering	5900 El Cajon Boulevard	San Diego	CA	92115	(619) 286-8434	Outside
Rotisserie Affair Catering	Catering	P O Box 927473	San Diego	CA	92192	(858) 578-8891	Outside
Sabor De Vida	Catering	1505 Fair Encinitas Drive	Encinitas	CA	92024	(760) 454-0432	Outside
Saffron	Catering	3731-B India St	San Diego	CA	92103	(619) 574-0048	Outside
San Diego Catering Concepts	Catering	570 Marina Pkwy	Chula Vista	CA	91910	(619) 223-1722	Outside
Slice Of Heaven Catering	Catering	3830 Oceanic Drive Ste 411	Oceanside	CA	92056	(760) 721-1054	Outside
Smokehouse Catering	Catering	1220 E Mission Road	San Marcos	CA	92069	(800) 737-3614	Outside
Stir Fresh	Catering	17120 Bernardo Center Dr	San Diego	CA	92128	(858) 385-0020	Outside
Sunstone Durante Lessee, Inc	Catering	15575 Jimmy Durante Blvd	Del Mar	CA	92014	(858) 792-5200	Outside
Tacos And Gorditas Para Sus Fiestas	Catering	2445 Otay Center Drive #112	San Diego	CA	92154	(619) 540-9877	Outside
Tacos El Gordo De Tijuana Bc, Inc.	Catering	1351 Third Ave	Chula Vista	CA	91911	(619) 424-7465	Outside
Taqueria El Rancho	Catering	8040 Orangewood Avenue	Stanton	CA	90680	(714) 893-8442	Outside
The Abbey Catering	Catering	3361 Sandrock Rd.	San Diego	CA	92103	(619) 471-5656	Outside
The Barrel Room	Catering	16765 Bernardo Center Drive Suite 1	San Diego	CA	92128	(858) 673-7512	Outside
The Flavor Chef	Catering	6753 Corintia St	Carlsbad	CA	92009	(760) 685-2433	Outside
The French Gourmet, Inc.	Catering	960 Turquoise St	San Diego	CA	92109	(858) 488-1725	Outside
The Wild Thyme Company	Catering	7163 Construction Ct Ste B	San Diego	CA	92121	(858) 527-0226	Outside
Toast	Catering	7000 Saranac Street #72	La Mesa	CA	91942	(858) 208-9422	Outside
Urban Solace	Catering	3823 30th Street	San Diego	CA	92104	(619) 295-6464	Outside
Waters Fine Catering	Catering	1105 W Morena Blvd	San Diego	CA	92110	(619) 276-8803	Outside
Yapos Home Catering	Catering	3084 Massasoit Ave	San Diego	CA	92117	(858) 663-9276	Outside
Your Chef Robert	Catering	728 Crest Rd	Del Mar	CA	92014	(858) 837-2736	Inside
Aks Landscape & Design, Inc.	Construction Services	1755 Alta Vista Drive	Vista	CA	92084	(760) 802-5677	Outside
Apex Construction	Construction Services	29536 Avenida Del Sol	Temecula	CA	92591	(951) 693-1969	Outside
Carroll Metal Works, Inc.	Construction Services	740 W 16th Street	National City	CA	91950	(619) 477-9125	Outside
Clark General Engineering	Construction Services	1355 Waterbury Court	San Marcos	CA	92078	(760) 473-1373	Outside
Contract Hospitality Installation Corporation	Construction Services	850 Enterprise Way	Fullerton	CA	92831	(714) 888-3200	Outside
GDC Construction, Inc.	Construction Services	1031 Silverado St	La Jolla	CA	92037	(858) 551-5222	Outside
Geogrid Retaining Wall Systems, Inc.	Construction Services	1295 Distribution Way	Vista	CA	92081	(760) 509-0079	Outside
HP Communications, Inc.	Construction Services	13341 Temescal Canyon Rd.	Corona	CA	92883	(951) 471-1919	Outside
Interwest Pacific, Ltd	Construction Services	990 S Highland Dr #212	Solana Beach	CA	92075	(858) 259-2062	Outside
James Chambers Construction	Construction Services	Po Box 1571	Solana Beach	CA	92075	(858) 806-2039	Outside
Jim Woodard Tile	Construction Services	225 Marcheta Street	Encinitas	CA	92024	(760) 522-3295	Outside
Marathon Construction Corporation	Construction Services	10108 Riverford Road	Lakeside	CA	92040	(619) 276-4401	Outside
Nelle Const Inc.	Construction Services	1102 Klish Way	Del Mar	CA	92014	(858) 481-2884	Inside
Orlando Masonry	Construction Services	656 Mar Vista Drive	Vista	CA	92081	(760) 519-8241	Outside
Pacific Drilling Co.	Construction Services	5220 Anna Ave. Ste A	San Diego	CA	92110	(619) 294-3682	Outside
Penhall Company	Construction Services	5775 Eastgate Drive	San Diego	CA	92121	(714) 772-6450	Outside
Rocky Mountain Plastering Inc.	Construction Services	3827 Hawk Street	San Diego	CA	92103	(619) 296-0816	Outside
Silva Ortiz	Construction Services	1859 Bacon Street	San Diego	CA	92107	(619) 501-4659	Outside
T.V.D. Inc	Construction Services	1447 Sommerset	Cardiff By The Sea	CA	92007	(619) 851-9773	Outside
Tom Nelson, General Contractor	Construction Services	236 24th St.	Del Mar	CA	92014	(858) 735-6857	Inside
Unique Concepts, Inc.	Construction Services	6390 Greenwich Drive Suite 240	San Diego	CA	92122	(858) 586-1045	Outside
Watershape Consulting Inc.	Construction Services	140 Lomas Santa Fe Drive Ste 202	Solana Beach	CA	92075-1252	(858) 720-7001	Outside
Westransco, Inc. Dba Road Inc.	Construction Services	1650 S Claudina Way Unit A	Anaheim	CA	92805	(714) 533-8787	Outside
Window Vision, Inc.	Construction Services	777 S Highway 101 Ste 100	Solana Beach	CA	92075	(858) 345-1076	Outside
Winstead & Sons Custom Builders	Construction Services	39886 Falcon Way	Murrieta	CA	92562	(951) 461-8467	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
Wurfl Construction	Construction Services	3413 Carleton St	San Diego	CA	92106	(858) 353-9755	Outside
A.R. Bardsley Construction	Contractor - General	PO Box 512	Jamul	CA	91935	(619) 669-6593	Outside
AAA Electrical & Communications Inc.	Contractor - General	25007 Anza Drive	Valencia	CA	91355	(818) 897-7800	Outside
Aemesco Inc. Dba Marsha Sewell & Assoc.	Contractor - General	631 5th Ave	San Diego	CA	92101	(619) 696-7575	Outside
Alliance Residential Builders Ii G. P., Inc	Contractor - General	1980 Kettner Boulevard	San Diego	CA	92101	(858) 876-9380	Outside
American Technologies Inc.	Contractor - General	8444 Miralani Dr	San Diego	CA	92126	(858) 530-2400	Outside
Apex Pacific, Inc.	Contractor - General	8911 Complex Dr Ste F	San Diego	CA	92123	(858) 496-0072	Outside
Armstrong Mahoney/Enterprises Inc.	Contractor - General	1531 Tennis Match Way	Encinitas	CA	92024	(760) 855-1123	Outside
Armstrong-Mchugh Corp	Contractor - General	2201 San Dieguito Dr	Del Mar	CA	92014	(858) 755-4917	Inside
Arrow Pipeline Repair Inc	Contractor - General	1330 Park Center Drive #101	Vista	CA	92081	(760) 476-9388	Outside
B. B. Concrete Construction Inc.	Contractor - General	734 E 7th Avenue	Escondido	CA	92025		Outside
B. A. Worthing, Inc	Contractor - General	P O Box 1041	Carlsbad	CA	92018	(760) 729-3965	Outside
Besemer Construction Inc	Contractor - General	5159 Del Mar Mesa Rd	San Diego	CA	92130	(858) 755-2987	Outside
Bowker Builders	Contractor - General	5285 Triple Grown	Bonsall	CA	92003	(760) 726-2434	Outside
Carrion Construction, Inc.	Contractor - General	3432 Fenelon Street	San Diego	CA	92106	(619) 523-0050	Outside
Casias Construction Inc	Contractor - General	13162 Hwy 8 Bus#116	El Cajon	CA	92021	(8582) 048-4770	Inside
Christopher Meier General Contractor	Contractor - General	5615 Alpine Boulevard	Alpine	CA	91901	(619) 602-9939	Outside
Construction Rhino Inc.	Contractor - General	9941 Possum Circle Lane	El Cajon	CA	92019	(619) 778-1110	Outside
Cornerstone Construction	Contractor - General	3734 Lake Ridge Rd	Fallbrook	CA	92028	(760) 518-8941	Outside
Crest Construction	Contractor - General	1146 Range View Road	Vista	CA	92084	(760) 455-7094	Outside
CRS Company	Contractor - General	1045 San Julian Drive	San Marcos	CA	92078	(760) 975-9698	Outside
Dana Construction	Contractor - General	315 First Street Ste U #53	Encinitas	CA	92021	(760) 807-3373	Outside
Del Mar Restoration	Contractor - General	P O Box 2646	Del Mar	CA	92014	(858) 793-3456	Inside
Don Hubbard Contracting	Contractor - General	1015-A Linda Vista Dr	San Marcos	CA	92078	(760) 736-3241	Outside
Drill Tech Drilling & Shoring, Inc.	Contractor - General	2200 Wymore Way	Antioch	CA	94509	(925) 978-2060	Outside
EC Constructors, Inc	Contractor - General	9834 River Street	Lakeside	CA	92040	(619) 440-7181	Outside
European Design	Contractor - General	P. O. Box 26484	San Diego	CA	92196	(858) 952-8638	Outside
FDR Construction Inc	Contractor - General	433 W 2nd Ave Ste 2106	Escondido	CA	92025	(760) 690-2500	Outside
Flatiron Electric Group, Inc.	Contractor - General	7911-A Pine Avenue	Chino	CA	91708	(714) 228-9361	Outside
Flatiron West, Inc	Contractor - General	1770 La Costa Meadows Dr	San Marcos	CA	92078	(760) 916-9100	Outside
Foshay Electric Co, Inc	Contractor - General	7676 Engineer Rd	San Diego	CA	92111	(858) 277-7676	Outside
Four By Four Construction	Contractor - General	1055 Torrey Pines Rd/Ste 201	La Jolla	CA	92037	(858) 456-0610	Outside
Galen Pavelko Inc.	Contractor - General	234 27th St	Del Mar	CA	92014	(858) 794-0096	Inside
Gonzalez Construction	Contractor - General	200 High Street	Lake Elsinore	CA	92530	(951) 490-7524	Outside
Graybird Construction Co., Inc.	Contractor - General	1470 Portofino Dr	Vista	CA	92081	(760) 803-1732	Outside
Hansen Construction Inc	Contractor - General	9633 Lamar Street	Spring Valley	CA	91977	(619) 465-7405	Outside
Hanson Aggregates Pacific	Contractor - General	Southwest, Inc. 9229 Harris Plant Rd	San Diego	CA	92163	(858) 277-5481	Outside
Harvey, Inc.	Contractor - General	8973 Complex Drive	San Diego	CA	92123	(858) 769-4000	Outside
Hidden Valley Backhoe & Trucking Inc.	Contractor - General	545 Clarence Lane	Escondido	CA	92029	(760) 802-7938	Outside
Hintz Construction	Contractor - General	2535 Navarra Dr B-8	Carlsbad	CA	92009	(760) 944-2987	Outside
Hoppe Construction	Contractor - General	1605 California Street	Oceanside	CA	92054	(760) 519-4021	Outside
Hulstine Builders Inc.	Contractor - General	7433 Altiva Place	Carlsbad	CA	92009	(619) 991-0037	Outside
I.C.E. Builders Inc.	Contractor - General	421 E Cerritos Ave	Anaheim	CA	92805	(714) 491-1317	Outside
J.M. Keystone, Inc	Contractor - General	2709 Via Orange Wy # A	Spring Valley	CA	91978	(619) 466-9876	Outside
J.W. Groswith Custom Building	Contractor - General	PO Box 1016	Del Mar	CA	92014	(858) 481-0740	Inside
JDH Construction Co. Inc. Dba Hanley Construction	Contractor - General	993 Lomas Santa Fe Ste-A	Solana Beach	CA	92075	(858) 481-6465	Outside
John C. Read Construction Co.	Contractor - General	2126 Jimmy Durante Blvd	Del Mar	CA	92014	(858) 453-2100	Inside
John Douglas Construction	Contractor - General	526 Stanley Avenue	Escondido	CA	92026	(619) 977-8954	Outside
Kitchell Contractors, Inc.	Contractor - General	853 Camino Del Mar Suite 200	Del Mar	CA	92014	(858) 947-5144	Inside
Kitchell Custom Homes, Inc.	Contractor - General	1707 E Highland Ave	Phoenix	CA	85016	(602) 222-5300	Outside
Knox Roofing Co	Contractor - General	359 San Dimas Ave	Oceanside	CA	92057	(760) 473-4545	Outside
Kyne Construction Inc	Contractor - General	9215 Briette Pl	El Cajon	CA	92021	(619) 749-2400	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
Lee Aust Construction Inc.	Contractor - General	7422 Girard Avenue	La Jolla	CA	92037	(858) 459-6655	Outside
M.L. Larson Construction, Inc.	Contractor - General	1689 Lawndale Road	El Cajon	CA	92019	(619) 590-1903	Outside
Maile Construction	Contractor - General	2348 La Costa Ave #216	Carlsbad	CA	92009	(760) 707-4543	Outside
Marco General Construction	Contractor - General	4822 1/2 Mc Kinley Ave	Los Angeles	CA	90011	(323) 719-5762	Outside
Market Spring Inc.	Contractor - General	1779 Seaview Ave	Del Mar	CA	92014	(858) 792-5797	Inside
Marzola Construction Co Inc	Contractor - General	17025 Industry Place	La Mirada	CA	90638	(714) 522-8909	Outside
Masco Contractor Services Of California, Inc.	Contractor - General	13000 Kirkham Way Suite 101	Poway	CA	92064	(386) 304-2222	Outside
Mc Cauley Builders	Contractor - General	2526 Meadowmist Ln	Olivenhain	CA	92024	(760) 436-5097	Outside
Mike Lloyd Excavating, Inc.	Contractor - General	PO Box 1994	Fallbrook	CA	92088	(760) 728-8661	Outside
Mulvey Custom Builders, Inc.	Contractor - General	2120 Jimmy Durante Blvd	Del Mar	CA	92014	(858) 756-0520	Inside
Murray Lampert Construction	Contractor - General	3545 Camino Del Rio Suite C	San Diego	CA	92108	(619) 285-9222	Outside
Ortiz Construction	Contractor - General	1029 Nolan Lane	Chula Vista	CA	91911	(619) 666-4523	Outside
Pacifica Contracting, Inc	Contractor - General	PO Box 90668	San Diego	CA	92169-2668	(858) 483-9988	Outside
Parker Construction	Contractor - General	3202 Via Arcilla	San Diego	CA	92111	(858) 278-7922	Outside
Paul Hock	Contractor - General	1125 Camino Del Mar Ste E	Del Mar	CA	92014	(858) 259-5102	Inside
Peter Madsen Builder, Inc.	Contractor - General	7618 Reposado Dr	Carlsbad	CA	92009	(760) 943-9766	Outside
Piperin Corporation	Contractor - General	1472 Golden Sunset Drive	San Marcos	CA	92078	(760) 510-6747	Outside
Premier Custom Builders	Contractor - General	3755 Dalbergia Street	San Diego	CA	92113	(619) 501-4183	Outside
R.D. Olson Construction Inc.	Contractor - General	2955 Main Street Third Floor	Irvine	CA	92614	(949) 474-2001	Outside
Reconstruction Experts	Contractor - General	2385 Camino Vida Roble Suite 102	Carlsbad	CA	92011	(760) 476-9606	Outside
Reese Building Services, Inc	Contractor - General	8677 Villa La Jolla Dr #1142	La Jolla	CA	92037	(619) 822-2010	Outside
Rens Masonry Inc	Contractor - General	PO Box 461210	Escondido	CA	92046	(760) 738-8827	Outside
RGB Group, Inc.	Contractor - General	2602 State Street	San Diego	CA	92103	(619) 293-3377	Outside
Richard Thaisz Construction Inc	Contractor - General	1403 Caminito Septimo	Cardiff	CA	92007	(760) 635-1640	Outside
Rivera Construction Inc.	Contractor - General	3221 Calle Vallarta	Carlsbad	CA	92009	(760) 633-3744	Outside
Ron Turner Construction	Contractor - General	6034 Gregory St	San Bernardino	CA	92407	(909) 910-7236	Outside
Rowe Construction Co, Inc.	Contractor - General	3236 Eureka Pl	Carlsbad	CA	92008	(760) 434-0377	Outside
San Diego Stucco, Inc.	Contractor - General	625 North Avenue	Vista	CA	92083	(619) 238-0455	Outside
SCW Contracting Corporation	Contractor - General	2525 N Old Highway 395	Fallbrook	CA	92028	(760) 728-1308	Outside
Shaw General Contractors	Contractor - General	10272 Waterridge Circle #233	San Diego	CA	92121	(858) 345-0835	Outside
So Cal Contracting, Inc.	Contractor - General	558 #2 Birch Street	Lake Elsinore	CA	92530	(951) 471-8663	Outside
Southland Paving, Inc.	Contractor - General	361 N Hale Avenue	Escondido	CA	92029	(760) 747-6895	Outside
Sweig General Contracting, Inc	Contractor - General	5328 Metro St	San Diego	CA	92110	(619) 325-6333	Outside
Synergy Electric- Marathon Construction	Contractor - General	10740 Kenney St. Suite 402	Santee	CA	92071	(619) 276-4401	Outside
Tog Consultants	Contractor - General	1155 Camino Del Mar 145	Del Mar	CA	92014	(858) 705-4445	Inside
Tony Parker General Builders	Contractor - General	14914 Eastvale Road	Poway	CA	92064	(858) 391-1430	Outside
Torrey Development Group	Contractor - General	624 Via De La Valle	Solana Beach	CA	92075	(619) 602-7475	Outside
Trident Development Groupe, Inc.	Contractor - General	367 Shoemaker Avenue	Solana Beach	CA	92075	(760) 801-7653	Outside
Us Building & Development, A Division	Contractor - General	1150 Camino Del Mar	Del Mar	CA	92014	(858) 350-0710	Inside
Venture Enterprises	Contractor - General	10120 Via Marmol	Escondido	CA	92026	(760) 489-8596	Outside
Viemeister Construction	Contractor - General	1607 Tennis Match Wy	Encinitas	CA	92024	(858) 204-7684	Outside
Wardell Builders, Inc.	Contractor - General	649 Valley Ave Ste A	Solana Beach	CA	92075-2429	(858) 793-4190	Outside
Western Foundations & Shoring, Inc.	Contractor - General	10875 Highway 67	Lakeside	CA	92040	(619) 561-3510	Outside
Whillock Contracting Inc	Contractor - General	346 Front St	El Cajon	CA	92020	(619) 579-0700	Outside
Whitcomb Construction Co. Inc	Contractor - General	7255 La Soldadera	Rancho Santa Fe	CA	92067	(858) 232-8301	Outside
Zeis Construction	Contractor - General	PO Box 226	Solana Beach	CA	92075	(858) 481-8003	Outside
A & A Glass & Mirror Co.	Contractor - Specialty	974 E Rancheros Road	San Marcos	CA	92069	(760) 744-1010	Outside
A & D Glass Inc.	Contractor - Specialty	1903 West Vista Way	Vista	CA	92083	(760) 758-1673	Outside
A & L Tile	Contractor - Specialty	847 Durward Street	Chula Vista	CA	91910	(619) 578-5922	Outside
A + B Sheet Metal	Contractor - Specialty	13420 Orange Blossom Lane	Poway	CA	92064	(619) 987-9058	Outside
A.O. Reed & Co., Inc.	Contractor - Specialty	4777 Ruffner St	San Diego	CA	92111	(858) 565-4131	Outside
AAAA Dba Drain Patrol	Contractor - Specialty	7764 Arjons Dr	San Diego	CA	92126	(858) 560-1137	Outside

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ABC Liovin Drilling, Inc.	Contractor - Specialty	1180 East Burnett Street	Signal Hill	CA	90755	(562) 981-8575	Outside
Abundant Sun Sustainable Solution	Contractor - Specialty	2136 San Dieguito Drive	Del Mar	CA	92014	(858) 755-3740	Inside
Accurate Comfort Systems Inc.	Contractor - Specialty	2750 S Santa Fe Ave	San Marcos	CA	92069	(760) 727-4152	Outside
Acralight International Skylights	Contractor - Specialty	1831 S Ritchey Street	Santa Ana	CA	92705	(714) 258-7022	Outside
Action Concrete Pumping	Contractor - Specialty	14311 Old Community Road	Poway	CA	92064	(858) 486-4336	Outside
ADG Overhead Doors Inc.	Contractor - Specialty	7933 Silverton Ave #716	San Diego	CA	92126	(858) 481-3123	Outside
Aelott Air Conditioning	Contractor - Specialty	812 W Washington Avenue	Escondido	CA	92025	(760) 746-1333	Outside
Air Plus Mechanical, Inc.	Contractor - Specialty	4203 Genesee	San Diego	CA	92117	(858) 505-8711	Outside
Alarms Unlimited/Custom Electronics	Contractor - Specialty	4584 Park Blvd	San Diego	CA	92116	(619) 297-4500	Outside
Alcal Specialty Contracting, Inc.	Contractor - Specialty	1232 Simpson Way Ste B	Escondido	CA	92029	(951) 231-6700	Outside
All Phase Development	Contractor - Specialty	P. O. Box 643	Imperial Beach	CA	91932	(619) 429-3538	Outside
All Star Water Heaters	Contractor - Specialty	30300 Pueuto Vallarta	Menifee	CA	92584	(951) 712-5115	Outside
Alliance Environmental Group, Inc.	Contractor - Specialty	8390 Juniper Creek Ln	San Diego	CA	92126	(619) 229-6135	Outside
Aloha Painting	Contractor - Specialty	3667 Via Bernardo	Oceanside	CA	92056	(760) 505-3282	Outside
Alpha Fire Protection	Contractor - Specialty	4203 Genesee Avenue #103-424	San Diego	CA	92117	(760) 727-6993	Outside
Alpine Plumbing & Backhoe Inc	Contractor - Specialty	2538 Alpine Blvd	Alpine	CA	91901	(619) 445-5288	Outside
Alr Nevada, Inc.	Contractor - Specialty	3516 Seagate Way #100	Oceanside	CA	92056	(760) 727-3247	Outside
Am Cabinets Inc.	Contractor - Specialty	239 East Gardena Boulevard	Gardena	CA	90248	(310) 532-1919	Outside
American Insulation, Inc.	Contractor - Specialty	8305 Miralani Dr	San Diego	CA	92126	(858) 527-0100	Outside
American Marble-Kammerer Ent	Contractor - Specialty	1280 N Melrose Dr	Vista	CA	92083	(760) 560-0550	Outside
American Residential Services	Contractor - Specialty	9895 Olson Dr Ste A	San Diego	CA	92121	(858) 677-5455	Outside
Anderson Drilling/Sja Inc	Contractor - Specialty	10303 Channel Road	Lakeside	CA	92040	(619) 443-3891	Outside
Andrew Electric	Contractor - Specialty	32110 Highway 94	Campo	CA	91906	(619) 445-8955	Outside
Ankeney Bros Painting, Inc	Contractor - Specialty	879 Starflower Rd	Encinitas	CA	92024	(760) 944-2930	Outside
Apache Asphalt & Seal Corp	Contractor - Specialty	989 Postal Way	Vista	CA	92083	(760) 598-8855	Outside
Apptek Coachella Inc	Contractor - Specialty	10685 Roselle St #200	San Diego	CA	92121	(858) 875-1850	Outside
Apw Construction, Inc Dba Ace Fence Company	Contractor - Specialty	727 N Glendora Ave	La Puente	CA	91744	(626) 333-0727	Outside
Aquatech Raingutters	Contractor - Specialty	4965 Brighton Ave	San Diego	CA	92107	(619) 248-9297	Outside
Arbor West Tree Surgeons, Inc.	Contractor - Specialty	8553 Avenida Costa Blanca	San Diego	CA	92154	(619) 661-5001	Outside
Archibald Inc. Dba Affordable Rain Gutters	Contractor - Specialty	1402 N Magnolia Ave	El Cajon	CA	92020	(619) 469-0400	Outside
ARS Of San Diego #8118	Contractor - Specialty	8949 Kenamar Dr 110	San Diego	CA	92121	(858) 805-0613	Outside
B & F Supply, Inc.	Contractor - Specialty	5601 Engineer Drive	Huntington Beach	CA	92649	(714) 894-5337	Outside
Baj Backflow & Plumbing	Contractor - Specialty	125 Willowside Terrace	Alpine	CA	91901	(619) 241-1990	Outside
Banker Insulation Of Ca, Inc	Contractor - Specialty	2357 Auto Park Way	Escondido	CA	92029	(760) 738-6980	Outside
Barbara Reed's Pro. Cleaning	Contractor - Specialty	13676 Cynthia Lane	Poway	CA	92064	(858) 748-6227	Outside
Barton Electric	Contractor - Specialty	4089 Helena St	Fallbrook	CA	92028	(760) 723-1651	Outside
Benchmark Landscape Inc	Contractor - Specialty	12575 Stowe Dr	Poway	CA	92064	(858) 513-7190	Outside
Besek Electric	Contractor - Specialty	525 F St.	Chula Vista	CA	91910	(619) 691-8748	Outside
Betz Concrete Inc.	Contractor - Specialty	737 W 4th Avenue	Escondido	CA	92025	(760) 737-0444	Outside
Beyer Heating & Air Conditioning	Contractor - Specialty	772 Jamacha Rd Pmb 348	El Cajon	CA	92019	(619) 579-1139	Outside
Bill Howe Plumbing, Inc	Contractor - Specialty	1364 Morena Blvd	San Diego	CA	92110	(619) 286-6348	Outside
Black Hawk Electric Co. Inc	Contractor - Specialty	298 Enterprise St. #C	Escondido	CA	92029	(619) 286-0360	Outside
Black Mountain Plumbing, Inc.	Contractor - Specialty	9909 Hibert St. # E	San Diego	CA	92131	(858) 536-4161	Outside
Blue Moon Pools, Inc.	Contractor - Specialty	8606 Argent Street H	Santee	CA	92071	(619) 258-7665	Outside
Bonner Enterprise Inc.	Contractor - Specialty	4757 Renex Place	San Diego	CA	92117	(858) 573-0165	Outside
Brewer Corp. Dba Brewer Crane & Rigging	Contractor - Specialty	12570 Highway 67	Lakeside	CA	92040	(619) 390-8252	Outside
Brian Cox Mechanincal, Inc.	Contractor - Specialty	12155 Kirkham Rd	Poway	CA	92064	(858) 679-5757	Outside
Burke Lighting Design, Inc.	Contractor - Specialty	4886 Monroe Avenue	San Diego	CA	92115	(619) 564-7600	Outside
Business Advisory Services	Contractor - Specialty	5355 Avenida Encinas #111	San Diego	CA	92130	(760) 930-6060	Outside
Buzcor Heating & Air	Contractor - Specialty	P.O. Box 891286	Temecula	CA	92589	(760) 224-2896	Outside
C & C Partnership Inc.	Contractor - Specialty	6661 Carthage St	San Diego	CA	92120	(619) 286-9202	Outside
C & M Stucco Specialist Inc.	Contractor - Specialty	475 Corporate Drive	Escondido	CA	92029	(760) 735-9783	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
Caliber Interiors, Inc.	Contractor - Specialty	23322 South Pointe Drive Suite B	Laguna Hills	CA	92653	(949) 206-1119	Outside
California Glass Enterprises, Inc	Contractor - Specialty	13220 Evening Creek Dr So. #106	San Diego	CA	92128	(858) 486-2500	Outside
California Sheet Metal Works Inc.	Contractor - Specialty	1020 Marshall St	El Cajon	CA	92020	(619) 562-7010	Outside
Cam Contractors, Inc.	Contractor - Specialty	938 S Andreasen Dr	Escondido	CA	92029	(760) 796-4085	Outside
Capitol Steel Fabricators, Inc.	Contractor - Specialty	3565 S Greenwood Avenue	Los Angeles	CA	90040	(323) 721-5460	Outside
Capo Valley Fireside	Contractor - Specialty	26401 Via De Anza	San Juan Capistrano	CA	92675	(949) 364-5118	Outside
Cardiff By The Sea Roofing	Contractor - Specialty	1914 Pariva Dr	Cardiff By The Sea	CA	92007	(760) 753-2622	Outside
Carmel Valley Pest Control	Contractor - Specialty	310 Via Vera Cruz #102	San Marcos	CA	92078	(858) 350-8838	Outside
Carpenter's Plumbing Inc.	Contractor - Specialty	722 Suzanne Ln	Escondido	CA	92026	(760) 745-0465	Outside
Casper's Concrete Cutting, Inc.	Contractor - Specialty	3825 Bancroft Dr	Spring Valley	CA	91977		Outside
Cast In Place Construction (CIP)	Contractor - Specialty	10911 Hole Avenue	Riverside	CA	92505	(951) 353-8247	Outside
Cell Crete Corporation	Contractor - Specialty	135 E Railroad Avenue	Monrovia	CA	91016	(626) 357-3000	Outside
Cement Cutting Inc.	Contractor - Specialty	3610 Hancock St	San Diego	CA	92110	(619) 296-0849	Outside
CHDS Inc Dba Curtis Drilling Co.	Contractor - Specialty	2625 S Santa Fe Avenue	San Marcos	CA	92069	(760) 727-7330	Outside
Chism Brothers Painting	Contractor - Specialty	7958 Convoy Court	San Diego	CA	92111	(858) 571-0676	Outside
CJ's Interiors, Inc.	Contractor - Specialty	8265 Commerical St #6	La Mesa	CA	91942	(619) 464-0042	Outside
Clean Cut Drywall	Contractor - Specialty	4751 Bancroft Street	San Diego	CA	92116	(619) 261-2726	Outside
Clear Sign & Design, Inc	Contractor - Specialty	170 Navajo Street	San Marcos	CA	92078	(760) 736-8111	Outside
Coast Line Electric	Contractor - Specialty	4251 10Th Ave	San Diego	CA	92103	(858) 456-1753	Outside
Coast Sign	Contractor - Specialty	1500 W Embassy	Anaheim	CA	92802	(714) 520-9144	Outside
Coastal Plumbing, Inc.	Contractor - Specialty	1228 Keystone Wy	Vista	CA	92081	(760) 720-2991	Outside
Collin Morris Construction	Contractor - Specialty	3110 Jarvis Street	San Diego	CA	92106	(619) 272-2848	Outside
Columbine Landscape, Inc.	Contractor - Specialty	2268 Buena Creek Rd	Vista	CA	92084	(760) 598-3600	Outside
Commercial Door Of Orange County, Inc.	Contractor - Specialty	1770 S Boyd Street	Santa Ana	CA	92705	(714) 258-1551	Outside
Coral Reef Contractors, Inc.	Contractor - Specialty	2907 Shelter Island Bld-105-342	San Diego	CA	92106	(951) 245-7971	Outside
Corrpro Companies Inc.	Contractor - Specialty	10260 Matern Place	Santa Fe Springs	CA	90670	(562) 944-1636	Outside
Co's Traffic Control, Inc.	Contractor - Specialty	2201 San Dieguito Drive	Del Mar	CA	92014	(858) 259-0300	Inside
Country Carpets	Contractor - Specialty	2201 San Dieguito Dr	Del Mar	CA	92014	(858) 316-6730	Inside
Countywide Mechanical Systems Inc	Contractor - Specialty	9330 Stevens Rd.	Santee	CA	92071	(619) 449-9900	Outside
Craig Peterson Plumbing	Contractor - Specialty	1649 Honeysuckle Ct	Encinitas	CA	92024	(760) 942-6160	Outside
Custom Hardwood Floors	Contractor - Specialty	3232 N Twin Oaks Valley Rd	San Marcos	CA	92069	(760) 744-6248	Outside
Custom Plastering, Inc.	Contractor - Specialty	2308 Denova Dr	Alpine	CA	91901	(619) 445-4216	Outside
Cut 'N Core	Contractor - Specialty	9194 Chesapeake Dr	San Diego	CA	92123	(619) 560-6627	Outside
D.S.M. Masonary, Concrete & Tile, Inc.	Contractor - Specialty	14467 Meridian Parkway Suite B	Riverside	CA	92518	(951) 776-4980	Outside
Damianos Services Inc	Contractor - Specialty	12933 Rancho Vista Ct	Valley Center	CA	92082	(760) 749-9757	Outside
Daniel F. Schaldach Inc. Dba D&S Construction Co.	Contractor - Specialty	1277 Pacific Oaks Place , Suite 100	Escondido	CA	92029	(760) 743-0339	Outside
Dan's Roofing, Inc	Contractor - Specialty	19011 Mermack Avenue	Lake Elsinore	CA	92532	(951) 471-0008	Outside
Daryl Griffis Acoustics, Inc.	Contractor - Specialty	4958 Naples St	San Diego	CA	92110	(619) 275-3060	Outside
Davey Tree Surgery	Contractor - Specialty	1500 N Mantua St	Kent	OH	44240-5193	(925) 443-1723	Outside
Davis Framing Inc	Contractor - Specialty	8103 Commercial St	La Mesa	CA	91942	(619) 463-2394	Outside
Davis Stone Inc	Contractor - Specialty	519 Venture St	Escondido	CA	92029	(760) 745-7881	Outside
DCS Plastering, Inc.	Contractor - Specialty	1755 Wilt Road	Fallbrook	CA	92028	(714) 241-7004	Outside
Del Mar Fabrication & Welding	Contractor - Specialty	1451 Simpson Way	Escondido	CA	92029	(760) 743-2266	Outside
Del Mar Glass, Inc.	Contractor - Specialty	2120 Jimmy Durante Blvd 116	Del Mar	CA	92014	(858) 755-7505	Inside
Del Mar Glazing And Construction	Contractor - Specialty	2126 Jimmy Durante Blvd. C	Del Mar	CA	92014	(858) 847-0163	Inside
Demdo Drywall Co., Inc.	Contractor - Specialty	419 S Marshall Avenue	El Cajon	CA	92020	(619) 590-0025	Outside
Dependable Plumbing	Contractor - Specialty	12120 Tech Center Dr Ste A	Poway	CA	92064	(858) 486-5111	Outside
Dominguez Drywall	Contractor - Specialty	566 Hilldale Circle	Vista	CA	92083	(760) 455-3946	Outside
Don Jose Interior Solutions Inc.	Contractor - Specialty	910 Cunard Street	San Diego	CA	92154	(619) 454-3886	Outside
Doo-Rite Construction	Contractor - Specialty	2430 Our Country Road	Escondido	CA	92029	(760) 294-2213	Outside
Draves Pipeline Incorporated	Contractor - Specialty	PO Box 1051	Bonsall	CA	92003	(760) 728-7094	Outside
Dunnington Inc	Contractor - Specialty	9883 Pacific Heights Blvd Ste E	San Diego	CA	92121	(858) 457-9100	Outside

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Dywidag Systems International Usa, Inc	Contractor - Specialty	2154 E South St	Long Beach	CA	90805	(562) 531-6161	Outside
Ehmcke Sheet Metal Corp	Contractor - Specialty	840 W 19th St	National City	CA	91950	(619) 477-6484	Outside
Ekedal Concrete, Inc.	Contractor - Specialty	7514 Girard Avenue Ste 1-242	La Jolla	CA	92037	(949) 729-8082	Outside
Elston Masonry, Inc.	Contractor - Specialty	1422 Santa Margarita Dr	Fallbrook	CA	92028	(760) 728-3593	Outside
Emilio & Sons Inc.	Contractor - Specialty	2255 Micro Place	Escondido	CA	92029	(760) 233-1112	Outside
Equity Builder, Inc.	Contractor - Specialty	8868 Clairemont Mesa Boulevard Ste A	San Diego	CA	92123	(858) 220-2859	Outside
Escondido Landscape Inc	Contractor - Specialty	116 Hannalei Dr	Vista	CA	92083	(760) 945-4321	Outside
Exact Framing	Contractor - Specialty	331 Engel Street	Escondido	CA	92029	(760) 745-9492	Outside
Expo Tile & Marble	Contractor - Specialty	2278 Del Mar Heights Rd	Del Mar	CA	92014	(858) 259-8453	Outside
Express Demolition & Hauling	Contractor - Specialty	1678 Country Club Drive	Escondido	CA	92029	(760) 489-6001	Outside
F & S Asphalt Seal And Stripe, Inc	Contractor - Specialty	2233 Gracey Ln	Fallbrook	CA	92028	(760) 723-3533	Outside
Farwest Insulation Contracting	Contractor - Specialty	1375 S Acacia Ave Ste A	Fullerton	CA	92831	(714) 520-5600	Outside
Ferandell Tennis Courts, Inc	Contractor - Specialty	2120 Jimmy Durante Blvd 102	Del Mar	CA	92014	(858) 350-3444	Inside
Fine Woodwork By Gary Gilbert	Contractor - Specialty	2325 Pio Pico Drive	Carlsbad	CA	92008	(760) 720-0965	Outside
First Class Drywall	Contractor - Specialty	1638 Gitano Street	Encinitas	CA	92024	(760) 436-5975	Outside
Fishel Company, The	Contractor - Specialty	666 Airport Rd	Oceanside	CA	92054	(760) 967-6930	Outside
Five Star Communciations	Contractor - Specialty	6910 A Mission Gorge Road	San Diego	CA	92120	(619) 640-8871	Outside
Fredricks Electric, Inc.	Contractor - Specialty	2211 Newcastle Ave	Cardiff	CA	92007	(760) 436-9172	Outside
Freidin Design And Construction	Contractor - Specialty	800 Grand Avenue C12	Carlsbad	CA	92008	(760) 730-3100	Outside
Frontier Fence Co	Contractor - Specialty	1314 W Mission Rd	Escondido	CA	92029	(760) 745-5609	Outside
Fry Specialty Company	Contractor - Specialty	10735 Prospect Avenue	Santee	CA	92071	(619) 562-8446	Outside
Fullerton Glass Company	Contractor - Specialty	601 Sally Place	Fullerton	CA	92831	(714) 879-5120	Outside
G. D. Heil, Inc.	Contractor - Specialty	1640 S Claudina Way	Anaheim	CA	92805	(714) 687-9100	Outside
GA Abell Dba Precision Electric Company	Contractor - Specialty	8137 Winter Gardens Blvd	Lakeside	CA	92040	(619) 390-2991	Outside
Gallant Electric Co.	Contractor - Specialty	1735 Ivy Rd	Oceanside	CA	92054	(760) 722-9016	Outside
Garcia Landscape Services	Contractor - Specialty	10236 Moorpark St	Spring Valley	CA	91978	(619) 670-6746	Outside
Gardner Pool Company, Inc	Contractor - Specialty	801 Gable Way	El Cajon	CA	92020	(619) 593-8880	Outside
General Coatings Corporation	Contractor - Specialty	6711 Nancy Ridge Dr	San Diego	CA	92121	(858) 587-1277	Outside
Genesis Innovations, Llc	Contractor - Specialty	4004 Medford Drive	Loveland	CO	80538	(970) 635-9315	Outside
George W. Weir Asphalt Construction,	Contractor - Specialty	610 Metcalf	Escondido	CA	92025	(760) 746-0232	Outside
Global Construction Services Inc.	Contractor - Specialty	3460 Marron Road Suite 103-471	Oceanside	CA	92056	(760) 659-4015	Outside
Golden Ray Services Inc.	Contractor - Specialty	2225 Guajome Lake Road	Vista	CA	92084	(760) 586-1254	Outside
Golden State Fence Company	Contractor - Specialty	870 N Main St	Riverside	CA	92501-1016	(909) 788-5620	Outside
Gordon E. Copeland, Inc.	Contractor - Specialty	443 Venture St	Escondido	CA	92029	(760) 747-3205	Outside
Green Paradise Company	Contractor - Specialty	910 Camino Del Mar Ste A	Del Mar	CA	92014	(858) 793-1809	Inside
Greenfield Fence, Inc.	Contractor - Specialty	33860 Zeiders Road	Menifee	CA	92584	(951) 699-0037	Outside
Greg Stein Tree Service	Contractor - Specialty	6947 Weller Street	San Diego	CA	92122	(858) 636-0903	Outside
Ground Service Technology	Contractor - Specialty	2280 Micro Place	Escondido	CA	92029	(760) 745-2010	Outside
GSC Concrete Construction, Inc.	Contractor - Specialty	1413 W Industrial Ave	Escondido	CA	92029	(760) 739-9177	Outside
H.A. Casillas Landscape	Contractor - Specialty	3498 Wallace Dr	Bonita	CA	91902	(619) 267-1343	Outside
Hanna Plumbing & Supply Co.	Contractor - Specialty	643 S Santa Fe Ave	Vista	CA	92083	(760) 726-2002	Outside
Hans R. Schlegel Landscaping, Inc.	Contractor - Specialty	2736 Garnet Avenue	San Diego	CA	92109	(858) 273-0740	Outside
Harber Companies	Contractor - Specialty	1880 E Riverview Drive	San Bernardino	CA	92408	(909) 478-1957	Outside
Hardwood Creations	Contractor - Specialty	800 Columbia Street Unit B	Brea	CA	92821	(714) 674-0527	Outside
Hawthorne Masonry	Contractor - Specialty	2760 Secret Lake Lane	Fallbrook	CA	92028	(760) 723-3441	Outside
Herman Weissker, Inc.	Contractor - Specialty	1645 Brown Avenue	Riverside	CA	92509		Outside
Hernandez Roofing, Inc.	Contractor - Specialty	P.O. Box 344	San Luis Rey	CA	92068	(760) 721-7417	Outside
Hess Contracting, Inc.	Contractor - Specialty	1024 Pine Dr	El Cajon	CA	92020	(619) 442-6333	Outside
Holmes Landscape Company	Contractor - Specialty	4616 North Ave	Oceanside	CA	92056	(760) 732-3379	Outside
Homestead Sheet Metal	Contractor - Specialty	9031 Memory Lane	Spring Valley	CA	91977	(619) 469-4373	Outside
Hourani Concrete	Contractor - Specialty	5014 E Mountain View Dr	San Diego	CA	92116	(858) 699-6920	Outside
Huntamer Inc. Dba Window Solutions	Contractor - Specialty	613 W Main St	El Cajon	CA	92020	(619) 258-0515	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
Industrial Skylights, Inc.	Contractor - Specialty	133 Newport Drive Ste C.	San Marcos	CA	92069	(760) 434-6001	Outside
Interior Solutions Inc.	Contractor - Specialty	2304 S Castle Harbour Place	Ontario	CA	91761	(909) 773-0844	Outside
Irriscape Construction Inc	Contractor - Specialty	20182 Carancho Road	Temecula	CA	92590	(591) 694-6936	Outside
J & J Muscarella Enterprise, Inc.	Contractor - Specialty	1718 Nilo Drive	Vista	CA	92081	(760) 726-7231	Inside
J & S Asphalt Paving	Contractor - Specialty	PO Box 600525	San Diego	CA	92160	(619) 528-0593	Outside
J. C. Plumbing Co.	Contractor - Specialty	PO Box 1141	Cardiff	CA	92007	(760) 942-2818	Outside
J.T. Wimsatt Contracting Co, Inc	Contractor - Specialty	28064 Avenue Stanford Unit B	Valencia	CA	91355	(661) 775-8090	Outside
Ja. Williams Masonry	Contractor - Specialty	542 Valley Drive	Vista	CA	92084	(858) 688-3353	Outside
Jackson & Blanc	Contractor - Specialty	7929 Arjons Dr	San Diego	CA	92126	(858) 831-7900	Outside
Jackson's Concrete Cutting	Contractor - Specialty	970 W Valley Parkway #658	Escondido	CA	92025	(760) 801-5221	Outside
Jamar Electric San Diego Inc.	Contractor - Specialty	9830 Prospect Ave. Ste. D	Santee	CA	92071	(619) 448-7770	Outside
Joe's Paving	Contractor - Specialty	P. O. Box 99	Valley Center	CA	92082	(760) 749-0519	Outside
John Gauagher - General Contractor	Contractor - Specialty	P. O. Box 688	Cardiff By The Sea	CA	92007	(619) 980-1696	Outside
John Smith Earthworks, Inc.	Contractor - Specialty	5216 Anna Ave	San Diego	CA	92110	(619) 276-0946	Outside
John Stevenson Plumbing & Mechanical	Contractor - Specialty	6351 Corte Del Abeto A-108	Carlsbad	CA	92011	(760) 918-0456	Outside
Johnson Controls Inc	Contractor - Specialty	12393 Slauson Ave	Whittier	CA	90606	(414) 524-2674	Outside
JWG Cabinet	Contractor - Specialty	2721 Plumeria Drive	Carlsbad	CA	92009	(760) 214-5383	Outside
K.H. Minton Painting	Contractor - Specialty	2518 Camino Lagarto St	Alpine	CA	91901	(619) 445-8148	Outside
Kacon, Inc.	Contractor - Specialty	P.O. Box 1630	El Centro	CA	92244	(619) 208-7748	Outside
Kau Wela Development	Contractor - Specialty	P.O. Box 2281	Del Mar	CA	92014	(760) 415-2281	Outside
Kevin Vint Masonry & Concrete	Contractor - Specialty	2201 San Dieguito Dr	Del Mar	CA	92014	(858) 481-7033	Inside
Kleinsmith Stair & Trim	Contractor - Specialty	9435 Wheatland's Court # H	Santee	CA	92071	(619) 562-3839	Outside
Kmp Plumbing	Contractor - Specialty	435 S Cedros Ave	Solana Beach	CA	92075	(858) 259-9300	Outside
L & G Cable Construction	Contractor - Specialty	2776 E Miraloma Ave	Anaheim	CA	92806	(714) 630-6174	Outside
L & C Tile	Contractor - Specialty	25135 N Center City Pkwy	Escondido	CA	92026	(760) 743-6516	Outside
L. C. Paving & Sealing, Inc.	Contractor - Specialty	996 Borden Road	San Marcos	CA	92069	(760) 752-1743	Outside
Lance Patterson Plastering	Contractor - Specialty	3164 Old Oaktree Ln	Escondido	CA	92026	(760) 741-5382	Outside
Leathem & Company	Contractor - Specialty	1524 Avenida De Las Adelsas	Encinitas	CA	92024	(858) 342-0966	Outside
Lekos Electric Inc.	Contractor - Specialty	1370 Pioneer Way	El Cajon	CA	92020	(619) 447-7661	Outside
Leonard's Carpet Service, Inc.	Contractor - Specialty	1121 N Red Gum Street	Anaheim	CA	92806	(714) 630-1930	Outside
Lighten Up Skylight	Contractor - Specialty	137 Harrison Street	Oceanside	CA	92057	(760) 941-8653	Outside
Logan Grapp Construction	Contractor - Specialty	2040 Oak Hill Drive	Escondido	CA	92027	(760) 741-2600	Outside
Lomack Service	Contractor - Specialty	2259 S Santa Fe Avenue	Vista	CA	92083	(760) 727-3607	Outside
M.C. Napoli	Contractor - Specialty	2460 Ivy Rd	Oceanside	CA	92054	(619) 818-2557	Outside
M.W. Reid Welding, Inc.	Contractor - Specialty	781 O'Connor St	El Cajon	CA	92020	(619) 401-5880	Outside
Macgray Electric Inc.	Contractor - Specialty	2718 Waterbury Way	Carlsbad	CA	92010	(760) 802-0140	Outside
Magnesite Specialties Inc.	Contractor - Specialty	8686 Production Ave Ste A	San Diego	CA	92121	(619) 578-4186	Outside
Malcolm Drilling Co., Inc.	Contractor - Specialty	4926 N Azusa Cyn Road	Irwindale	CA	91706	(626) 338-0035	Outside
Marina Landscape Inc.	Contractor - Specialty	1900 S Lewis Street	Anaheim	CA	92805	(714) 939-6600	Outside
Mariner Mechanical Dba Adroit Solar	Contractor - Specialty	1135 Garnet Ave Ste 13	San Diego	CA	92109	(858) 483-3568	Outside
Mark Stangl Construction, Inc	Contractor - Specialty	715 H Avenue	Coronado	CA	92118	(619) 250-2706	Outside
Max Glass & Mirror	Contractor - Specialty	593 Live Oak Drive	El Cajon	CA	92020	(619) 977-9594	Outside
Maxim Crane Works, L.P.	Contractor - Specialty	6232 Fairmount Ave	San Diego	CA	92120	(619) 563-7910	Outside
McBride Door & Hardware Inc	Contractor - Specialty	13811 Danielson St	Poway	CA	92064	(858) 842-4480	Outside
McKinley Equipment Corp	Contractor - Specialty	17611 Armstrong Ave	Irvine	CA	92614	(949) 261-9222	Outside
Meldier Tree Service	Contractor - Specialty	P. O. Box 1136	Vista	CA	92084	(760) 940-9502	Outside
MHS Heating & Air Conditioning, Inc.	Contractor - Specialty	525 N Andreasen Drive N	Escondido	CA	92029	(760) 744-9450	Outside
Mike And Mike Construction Inc	Contractor - Specialty	2603 Figueroa	San Diego	CA	92109	(858) 273-3150	Outside
Mike Carroll Plumbing, Inc.	Contractor - Specialty	1938 Willow Ridge Dr	Vista	CA	92081	(760) 714-6272	Outside
Mill Brothers Fine Woodworking, Inc.	Contractor - Specialty	9356 Wheatlands Rd Ste C	Santee	CA	92071	(619) 562-6944	Outside
Mission Iron Shop	Contractor - Specialty	2545 Progress Street	Vista	CA	92081	(760) 744-3740	Outside
Mission Pools Of Escondido Inc.	Contractor - Specialty	755 W Grand Ave	Escondido	CA	92025	(760) 743-2605	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
Mission Valley Roofing, Inc.	Contractor - Specialty	9908 Prospect Ave	Santee	CA	92071-3417	(619) 449-9744	Outside
Mota's Floorcovering, Inc.	Contractor - Specialty	11731 Sterling Avenue Unit G	Riverside	CA	92503	(951) 687-6682	Outside
Motivational Systems Inc	Contractor - Specialty	2200 Cleveland Ave	National City	CA	91950	(619) 474-8246	Outside
My Plumber San Diego Llc	Contractor - Specialty	7150 Convoy Ct	San Diego	CA	92111	(619) 667-5500	Outside
National Air Inc.	Contractor - Specialty	2053 Kurtz St	San Diego	CA	92110	(619) 299-2500	Outside
Neal Electric Inc.	Contractor - Specialty	13250 Kirkham Way	Poway	CA	92064	(858) 513-2525	Outside
Nevada Gypsum Floors, Inc.	Contractor - Specialty	3671 W Mcfadden Avenue	Santa Ana	CA	92704	(702) 871-3330	Outside
New Vision Drywall Inc.	Contractor - Specialty	4204 Jutland Drive A2	San Diego	CA	92117	(858) 490-8888	Outside
Nicholas Grant Corporation	Contractor - Specialty	12570 Highway 67	Lakeside	CA	92040	(619) 390-3900	Outside
North County Deck & Patio	Contractor - Specialty	448 W Citracado Parkway	Escondido	CA	92025	(760) 658-6249	Outside
Nwec Nevada Inc.	Contractor - Specialty	3516 Seagate Way #110	Oceanside	CA	92056	(760) 757-0187	Outside
OJ Insulation LP	Contractor - Specialty	600 S Vincent Ave	Azuza	CA	91702	(626) 812-6070	Outside
Omega Drywall Construction, Inc.	Contractor - Specialty	2078 Montiel Road	San Marcos	CA	92069	(760) 294-7764	Outside
Onteriors Residential, Inc.	Contractor - Specialty	3231-C Business Park Drive #314	Vista	CA	92081	(858) 455-1234	Outside
Pacific Backflow Co., Inc.	Contractor - Specialty	1690 Ord Wy	Oceanside	CA	92056	(760) 639-4000	Outside
Pacific Coast Steel	Contractor - Specialty	4805 Murphy Canyon Road	San Diego	CA	92123	(858) 737-7700	Outside
Pacific Grading & Erosion Control, Inc.	Contractor - Specialty	10541 A Prospect Ave	Santee	CA	92071	(619) 938-3514	Outside
Pacific Pebbles Inc, Dba Life Deck Coating Install	Contractor - Specialty	770 Gateway Center Drive	San Diego	CA	92102	(619) 262-8600	Outside
Pacific Rim Mechanical Contractors, Inc.	Contractor - Specialty	7655 Convoy Ct.	San Diego	CA	92111	(858) 974-6500	Outside
PAL General Engineering Inc	Contractor - Specialty	2615 Camino Del Rio South Ste 308	San Diego	CA	92108	(619) 677-3949	Outside
Palomar Specialists, Inc.	Contractor - Specialty	1608 Madrone Glen	Escondido	CA	92027	(760) 747-5080	Outside
Palomar Transit Mix Co.	Contractor - Specialty	849 W Washington Ave	Escondido	CA	92025	(760) 737-3486	Outside
Paradise Custom Pools, Inc.	Contractor - Specialty	P. O. Box 600035	San Diego	CA	92160	(619) 286-0009	Outside
Payco Specialties, Inc.	Contractor - Specialty	120 N 2Nd Avenue	Chula Vista	CA	91910	(619) 422-9204	Outside
Pellegrino Heating And Air Conditioning	Contractor - Specialty	11965 Lemon Crest Drive	Lakeside	CA	92040	(619) 390-4143	Outside
Pellegrino Stonecare	Contractor - Specialty	7965 Silverton Ave. #1302	San Diego	CA	92126	(858) 530-8185	Outside
Peter Van Gaale & Sons Construction	Contractor - Specialty	35375 Briggs Rd	Murrieta	CA	92563	(951) 677-8112	Outside
Peterson Brothers Construction Inc.	Contractor - Specialty	1560 W Lambert Rd.	Brea	CA	92821	(714) 278-0488	Outside
Pinnacle Security CA, LP	Contractor - Specialty	1290 S Sandhill Rd	Orem	UT	84058	(801) 437-0000	Outside
Power Plus Solutions Corp.	Contractor - Specialty	436 N Quince St.	Escondido	CA	92025	(760) 839-9436	Outside
Precision Tech Connect	Contractor - Specialty	1441 N Cuyamaca Street	El Cajon	CA	92020	(619) 588-0800	Outside
Primary Mechanical, Inc.	Contractor - Specialty	5345 Timken Street Ste I	La Mesa	CA	91942	(619) 698-7751	Outside
Prime Electrical Services	Contractor - Specialty	480 Enterprise St	San Marcos	CA	92078	(760) 471-6634	Outside
Pro Wall Lathe Plaster, Inc	Contractor - Specialty	360 S Spruce Street	Escondido	CA	92025	(760) 480-9001	Outside
Quality Reinforcing Inc.	Contractor - Specialty	13275 Gregg St	Poway	CA	92064	(858) 748-8400	Outside
R F Mckenna Construction	Contractor - Specialty	507 S Cedros Ave	Solana Beach	CA	92075	(858) 755-2290	Outside
R. Montanez Contracting Inc. Dba Dr. Demo	Contractor - Specialty	117 7Th Street #A	Chula Vista	CA	91911	(619) 571-4755	Outside
Rancho Santa Fe Roofing	Contractor - Specialty	2120 Jimmy Durante Blvd # 112	Del Mar	CA	92014	(858) 350-9992	Inside
Randall A Means Landscape	Contractor - Specialty	1540 Harbor Drive	Vista	CA	92081	(760) 936-3262	Outside
Randy Jackson Company	Contractor - Specialty	8969 Rose Avenue	Montclair	CA	91763	(909) 399-5000	Outside
REC Solar Inc.	Contractor - Specialty	6370 Nancy Ridge Drive #110	San Diego	CA	92121	(858) 550-9655	Outside
Reef Concrete Inc.	Contractor - Specialty	3646 Cheshire Ave	Carlsbad	CA	92010	(760) 613-3361	Outside
Remodeling California, Inc.	Contractor - Specialty	1707 Midvale	Los Angeles	CA	90024	(818) 266-8533	Outside
Rezko Development	Contractor - Specialty	8424 Colima Road	Whittier	CA	90602	(619) 665-5746	Outside
Richardson Steel. Inc.	Contractor - Specialty	9102 Harness St	Spring Valley	CA	91977	(619) 697-5892	Outside
Rifeco Elevators	Contractor - Specialty	8875 Costa Verdie Boulevard # 1603	San Diego	CA	92127	(619) 994-3794	Outside
RPG Enterprises	Contractor - Specialty	874 N Batavia Street	Orange	CA	92868	(714) 761-8002	Outside
RTD Construction, Inc.	Contractor - Specialty	2216 Soto St	San Diego	CA	92107	(619) 225-0240	Outside
Rwp Plumbing	Contractor - Specialty	9216 Birchcrest Blvd	Santee	CA	92071	(619) 719-3834	Outside
S.F. Electrical Services, Inc.	Contractor - Specialty	2337 Catalina Ave	Vista	CA	92084	(760) 724-3666	Outside
S.O.S. Rooter	Contractor - Specialty	3485 Pickwick St	San Diego	CA	92102	(619) 231-6670	Outside
Sampo Engineering, Inc.	Contractor - Specialty	1034 Second Street	Encinitas	CA	92024	(760) 436-0000	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
San Diego Fence Co., Inc.	Contractor - Specialty	7920 Engineer Rd	San Diego	CA	92111	(858) 279-8442	Outside
Santana Electric	Contractor - Specialty	PO Box 1231	El Cajon	CA	92022	(619) 252-1510	Outside
Schelect Inc. Dba Schmidt Electric	Contractor - Specialty	203 S Rancho Santa Fe Rd	Encinitas	CA	92024	(760) 753-3855	Outside
Schilling Paradise Corp.	Contractor - Specialty	697 Greenfield Drive	El Cajon	CA	92021	(619) 579-6500	Outside
Schreiber Framing, Inc.	Contractor - Specialty	8657 Harbison Canyon Rd	Alpine	CA	91901	(619) 722-1230	Outside
Scott Fence	Contractor - Specialty	1255 Distribution Way	Vista	CA	92081	(760) 598-0078	Outside
Seaport Electric Inc.	Contractor - Specialty	43185 Corte Almeria	Temecula	CA	92592	(951) 302-4500	Outside
Seaside Roofing	Contractor - Specialty	330 Barbara Ave	Solana Beach	CA	92075	(858) 481-4993	Outside
Serrano Family Flooring & Design	Contractor - Specialty	24116 Golden Mist Dr	Murrieta	CA	92562	(760) 716-6077	Outside
Servpro Of Del Mar	Contractor - Specialty	8525 Arjons Dr Suite A	San Diego	CA	92126	(858) 695-6242	Outside
Shamrock Paving Inc	Contractor - Specialty	15508 S Lakewood Blvd.	Bellflower	CA	90706	(562) 866-3396	Outside
Sharpland Design Coast Landscape	Contractor - Specialty	P.O. Box 1332	Vista	CA	92085	(760) 809-4343	Outside
Sheldon Site Utilities, Inc	Contractor - Specialty	13000 Danielson Street Suite G/H	Poway	CA	92064-8843	(858) 486-8004	Outside
Sherwood Mechanical, Inc.	Contractor - Specialty	6630 Top Gun St	San Diego	CA	92121	(858) 679-3000	Outside
Silver Carpet	Contractor - Specialty	119 Aberdeen Dr Ste 1	Cardiff By The Sea	CA	92007	(760) 632-1770	Outside
Simplexgrinnell	Contractor - Specialty	3568 Ruffin Road South	San Diego	CA	92123		Outside
Skyhook Metal Designs	Contractor - Specialty	4149 Cartagena Drive Ste B	San Diego	CA	92115	(619) 229-2169	Outside
Sneary Construction	Contractor - Specialty	1182 N Monte Vista Avenue #2	Upland	CA	91786	(909) 982-1833	Outside
So Cal Construction & Consulting Service Inc	Contractor - Specialty	1030 Knoll Park Ln	Fallbrook	CA	92028	(760) 723-8907	Outside
Solar City	Contractor - Specialty	3055 Clearview Way	San Mateo	CA	94402	(888) 765-2489	Outside
Solar West Electric	Contractor - Specialty	2640 Financial Court Suite D	San Diego	CA	92117	(619) 665-2224	Outside
South City Mechanical, Inc.	Contractor - Specialty	4014 Daves Way	San Diego	CA	92154	(619) 934-3498	Outside
South Coast Specialty Systems	Contractor - Specialty	7966 Arjons Dr Ste C	San Diego	CA	92126	(858) 673-7267	Outside
Southwest Signal Service	Contractor - Specialty	397 Raleigh Ave	El Cajon	CA	92020	(619) 442-3343	Outside
Specified Resistant Coatings	Contractor - Specialty	630 Faith Avenue	Cardiff By The Sea	CA	92007	(760) 942-8353	Outside
Spring Valley Insulation Contr	Contractor - Specialty	3151 Bancroft Dr	Spring Valley	CA	91977-2608	(619) 463-0266	Outside
Steele Roofing Inc.	Contractor - Specialty	227 Pawnee Street/ 101	San Marcos	CA	92078	(760) 744-3400	Outside
Stefan Merli Plastering Co. Inc.	Contractor - Specialty	1331 Distribution Way	Vista	CA	92081	(760) 597-2480	Outside
Sterling Corporate Custom Elevator	Contractor - Specialty	340 W 26Th St Ste I	National City	CA	91950	(619) 477-9654	Outside
Sundancer Pools N Spas	Contractor - Specialty	728 Inspiration Ln	Escondido	CA	92025	(760) 489-5850	Outside
Sundown Plumbing	Contractor - Specialty	6965 El Camino Real	Carlsbad	CA	92009	(760) 942-3696	Outside
Sutton Tree Service Inc	Contractor - Specialty	2236 S Santa Fe Ave	Vista	CA	92084	(760) 941-3992	Outside
Sylvester Roofing Co., Inc.	Contractor - Specialty	2593 Auto Parkway	Escondido	CA	92029	(760) 743-0048	Outside
T.N. Janitorial Services	Contractor - Specialty	1150 Camino Del Mar #D	Del Mar	CA	92014	(858) 792-7416	Inside
Tamarindo Corporation	Contractor - Specialty	701 Valley Drive	Vista	CA	92084	(760) 732-5842	Outside
The Brickman Group, Ltd	Contractor - Specialty	6218 Fairmount Ave	San Diego	CA	92120	(619) 281-8887	Outside
The Pool Doctor	Contractor - Specialty	PO Box 114	Bonsall	CA	92003	(760) 745-9069	Outside
Thyssen Elevator Corporation	Contractor - Specialty	5745 Kearney Villa Rd Ste B	San Diego	CA	92123	(858) 569-9091	Outside
TLC Plumbing Inc.	Contractor - Specialty	4569 Mission Gorge Place E	San Diego	CA	92120	(619) 667-0234	Outside
Todd Richards Tile	Contractor - Specialty	6632 W Lilac	Bonsall	CA	92003	(760) 945-1866	Outside
Tree Of Life Tree Service, Inc.	Contractor - Specialty	4591 Mt La Platta Pl	San Diego	CA	92117	(619) 560-6622	Outside
Tri City Fence Company, Inc.	Contractor - Specialty	825 W Washington St	Escondido	CA	92029	(760) 233-9890	Outside
Tri-City Drywall, Inc.	Contractor - Specialty	2867 Progress Place Suite #F	Escondido	CA	92029	(760) 796-7772	Outside
United Subcontractors Inc.	Contractor - Specialty	930 Armorlite Drive	San Marcos	CA	92069	(760) 736-4115	Outside
Urbach Roofing Inc	Contractor - Specialty	445 Production St	San Marcos	CA	92078	(760) 471-5065	Outside
US Iron Company	Contractor - Specialty	2740 S Santa Fe Avenue Suite 103	San Marcos	CA	92069	(760) 734-1524	Outside
V & H Perry, Inc.	Contractor - Specialty	205 W 35Th St #K	National City	CA	91950	(619) 472-2112	Outside
Valleycrest Landscape Maint	Contractor - Specialty	8500 Miramar Pl	San Diego	CA	92121	(858) 458-1900	Outside
Vanguard Fire Protection Inc	Contractor - Specialty	925 Poinsettia Avenue #11	Vista	CA	92081	(760) 727-8540	Outside
Vista Plumbing Inc	Contractor - Specialty	623 S Santa Fe #C	Vista	CA	92083	(760) 758-2345	Outside
VT West, Inc.	Contractor - Specialty	16222 Phoebe Avenue	La Mirada	CA	90638	(714) 521-2167	Outside
Walter Anderson	Contractor - Specialty	1150 N Marshall Ave	El Cajon	CA	92020	(619) 449-3852	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
Wanke, Industrial, Commerical, Residential	Contractor - Specialty	400 S Farrell Drive Suite B106	Palm Springs	CA	92262	(760) 327-8641	Outside
Watersedge Landscape, Inc.	Contractor - Specialty	4255 Ruffin Rd	San Diego	CA	92125	(760) 858-1112	Outside
West Coast Appliance Service, Inc.	Contractor - Specialty	1282 Fayette St	El Cajon	CA	92020	(619) 557-0446	Outside
West Coast Arborists, Inc.	Contractor - Specialty	8524 Commerce Avenue	San Diego	CA	92121	(800) 521-3714	Outside
West Coast Drywall & Paint	Contractor - Specialty	1610 W Linden Street	Riverside	CA	92507	(951) 778-3592	Outside
West Coast Electric Solutions Inc	Contractor - Specialty	5164 Conrad Ave	San Diego	CA	92117	(858) 565-7897	Outside
West Coast General Corp.	Contractor - Specialty	13700 Stowe Drive Suite 100	Poway	CA	92064	(619) 561-4200	Outside
Western Fire Protection, Inc	Contractor - Specialty	13630 Danielson St	Poway	CA	92064	(858) 513-4949	Outside
Western Pavers Inc.	Contractor - Specialty	1935 Friendship Drive Suite E	El Cajon	CA	92020	(800) 779-8191	Outside
Wichert Tile, Inc.	Contractor - Specialty	41901 Carleton Way	Temecula	CA	92591	(760) 703-0947	Outside
Wolfe Fabricators, Inc.	Contractor - Specialty	839 Kingsgate Drive	Corona	CA	92882	(951) 736-2060	Outside
Woodchuck Flooring Inc	Contractor - Specialty	7042 Convoy Ct	San Diego	CA	92111	(858) 279-4677	Outside
Alta Dena Certified Dairy Inc.	Delivery Services	17637 E Valley Blvd	City Of Industry	CA	91744	(818) 964-6401	Outside
American Fish & Seafood Co.	Delivery Services	625 Kohler St	Los Angeles	CA	90021	(213) 612-0353	Outside
Central Meat & Provision Co	Delivery Services	1603 National Ave	San Diego	CA	92113	(619) 239-1391	Outside
Circle Foods Llc	Delivery Services	8411 Siempre Viva Rd	San Diego	CA	92154	(619) 263-8000	Outside
Culligan	Delivery Services	7575 Carroll Rd	San Diego	CA	92121	(760) 729-1171	Outside
Diamond Environmental	Delivery Services	807 E Mission Rd	San Marcos	CA	92069	(760) 744-7191	Outside
DS Waters Of America, Inc.	Delivery Services	2615 Temple Heights Dr	Oceanside	CA	92056	(770) 933-1400	Outside
Farmers Bros. Co.	Delivery Services	20333 S Normandie Ave	Torrance	CA	90502	(610) 787-5200	Outside
Fresh Point/San Diego	Delivery Services	155 N Orange Ave	City Of Industry	CA	91744	(626) 855-1400	Outside
Hidalgo Flowers	Delivery Services	29920 Disney Ln	Vista	CA	92084	(760) 940-0414	Outside
Leong-Kuba Sea Products, Inc.	Delivery Services	6230 Marindustry Dr	San Diego	CA	92121	(858) 693-7561	Outside
Mission Linen Supply Inc	Delivery Services	2727 Industry	Oceanside	CA	92054	(760) 757-9099	Outside
Nestle Waters North America Inc.	Delivery Services	601 Potero Grande	Monterey Park	CA		(203) 531-4100	Outside
Probuild Company Llc Dba: Dixieline Lumber	Delivery Services	3250 Sports Arena Blvd	San Diego	CA	92110	(619) 224-4120	Outside
Robertson's Ready Mix, Ltd	Delivery Services	200 S Main Street Stu # 200	Corona	CA	92882	(951) 685-2200	Outside
San Diego Medical Services	Delivery Services	10405 San Diego Mission Ste200	San Diego	CA	92108	(619) 280-6060	Outside
Superior Ready Mix Concrete, L.P.	Delivery Services	1508 W Mission Rd	Escondido	CA	92029	(760) 745-0556	Outside
U. S. Foodservice, Inc.	Delivery Services	1201 Park Center Dr	Vista	CA	92081	(760) 599-6220	Outside
Alan Brint Electric	Electrician	643 Plumosa Avenue	Vista	CA	92081	(760) 727-6545	Outside
Apex Lighting & Electric Inc.	Electrician	1939 Friendship Dr	El Cajon	CA	92020	(619) 448-6400	Outside
Cacy Electric	Electrician	14398 Rios Canyon Road	El Cajon	CA	92021	(619) 938-2839	Outside
Cascade Electric	Electrician	2245 Enterprise Street #150	Escondido	CA	92029	(760) 871-2400	Outside
Collins Electric	Electrician	25090 Deutsch Drive	Temecula	CA	92590	(951) 506-3960	Outside
Darcher Inc. Dba Electrical Concepts	Electrician	947 Darwin Drive	Oceanside	CA	92056	(760) 224-7190	Outside
G. E. Electrical Service & Repair	Electrician	4668 Apple Hill Place	Carlsbad	CA	92010	(760) 419-5903	Outside
Highland Electric, Inc.	Electrician	706 W Bel Espirit Circle	San Marcos	CA	92069	(303) 378-6147	Outside
Lalley Construction	Electrician	927 Highland Dr.	Solana Beach	CA	92075	(858) 481-1462	Outside
Leucadia Electric, Inc.	Electrician	5355 Avenida Encinas Suite 104	Carlsbad	CA	92008	(760) 431-6708	Outside
Ponderosa Electric Inc.	Electrician	17155 Von Karman Avenue #101	Irvine	CA	92614	(949) 253-3100	Outside
R.J. Ogden Electric	Electrician	1308 Basswood Ave	Carlsbad	CA	92008	(760) 533-1833	Outside
RK Electric	Electrician	7950 Silverton Avenue Suite 126	San Diego	CA	92126	(619) 972-1882	Outside
Robert Stroud Electric Inc.	Electrician	1479 Ronald Lane	Vista	CA	92083	(760) 941-9431	Outside
Rowan Inc., Dba Rowan Electric	Electrician	2782 Loker Ave. West	Carlsbad	CA	92010	(760) 692-0700	Outside
Saturn Electric, Inc.	Electrician	7552 Trade Street	San Diego	CA	92121	(858) 271-4100	Outside
SM Christie Inc. Dba Christie Electric	Electrician	623 Valley Group Lane	Escondido	CA	92025	(760) 746-5349	Outside
Social Cities Electical, Inc.	Electrician	10965 Hartley Road Ste. N	Santee	CA	92071	(619) 449-9027	Outside
Solarium Engery	Electrician	4028 Gayle Street	San Diego	CA	92115	(619) 339-5775	Outside
Swinson Electric	Electrician	4885 Ronson Ct Ste L	San Diego	CA	92111	(858) 874-2920	Outside
System Electric	Electrician	17795 Sky Park Cirle #J	Irvine	CA	92614	(800) 862-2743	Outside
Wheyland Electric	Electrician	333 9th Street Del Mar	Carlsbad	CA	92008	(858) 663-5564	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
An Ideal World, Idw Inc.	Film/Movie Production	209 N Bush Street	Santa Ana	CA	92701	(714) 953-9501	Outside
Camera Control Inc	Film/Movie Production	3317 Ocean Park Blvd	Santa Monica	CA	90405	(310) 581-8343	Outside
High Impact Pictures Inc	Film/Movie Production	1891 Beverly Glen Dr	Santa Ana	CA	92705	(714) 508-9700	Outside
Twin Talk	Film/Movie Production	6255 Sunset Boulevard Ste 1600	Los Angeles	CA	90028		Outside
Wltdo LLC	Film/Movie Production	12924 Pierce Street	Pacoima	CA	91331	(800) 829-4495	Outside
Worldrace Productions Inc	Film/Movie Production	200 N Continental Blvd 2Nd Floor	El Segundo	CA	90245	(310) 775-8100	Outside
Asplundh Tree Expert Co	Gardening	2120 W Mission Road Suite R	Escondido	CA	92029	(858) 583-8776	Outside
Mariano's Landscaping	Gardening	3231 Madison St Apt B	Carlsbad	CA	92008	(760) 720-2867	Outside
Park Care	Gardening	2744 Auburn Avenue	Carlsbad	CA	92010	(760) 729-0890	Outside
Rancho Environmental Services, Inc.	Gardening	P O Box 3372	Vista	CA	92085	(760) 726-2405	Outside
Rigo's Garden Maintenance	Gardening	844 Stratford Drive	Encinitas	CA	92024	(760) 942-1358	Outside
Bela Bartanyi Home And Land Maintenance	Handyman	1321 Stratford Ct	Del Mar	CA	92014	(858) 259-5782	Outside
Fall's Fix All	Handyman	3655 Azure Lado Drive	Oceanside	CA	92056	(760) 497-2728	Outside
Fred Wendland	Handyman	550 Amphitheatre Drive	Del Mar	CA	92014	(858) 349-9102	Inside
JP Works	Handyman	45010 El Conquista Road	Aguanga	CA	92536	(951) 452-0582	Outside
Nunez	Handyman	12955 Rancho Vista Court	Valley Center	CA	92082	(760) 518-2306	Outside
Perez Service's	Handyman	541 W 15th #124	Escondido	CA	92026	(760) 579-2283	Outside
Adalberto Landscape	Landscaping	835 Del Riego Avenue	Encinitas	CA	92024	(760) 633-4561	Outside
Armando Villa	Landscaping	3113 Martin Avenue	San Diego	CA	92113	(760) 271-4743	Outside
Aztec Landscaping Inc.	Landscaping	7980 Lemon Grove Way	Lemon Grove	CA	91945	(619) 464-3303	Outside
Benitez Landscape	Landscaping	3350 Currant St	San Diego	CA	92111	(858) 688-2488	Outside
Bradley Landscape Dev. Inc.	Landscaping	607 N Vulcan Ave Ste B	Encinitas	CA	92024	(760) 436-0554	Outside
Carlsbad Lanscaping & Maintenance	Landscaping	3190 Roosevelt Street	Carlsbad	CA	92008	(760) 730-3764	Outside
Cross Construction, Inc.	Landscaping	1142 Mar Vista Drive	Vista	CA	92081	(760) 758-3639	Outside
Crossman Landscape Inc	Landscaping	9822 Prospect Ave	Santee	CA	92071	(619) 448-1223	Outside
Cypress Landscape	Landscaping	1948 Tecate Glen	Escondido	CA	92029	(760) 455-4279	Outside
Domingo Landscaping	Landscaping	1309 E Mission Ave.	Escondido	CA	92027	(760) 755-7483	Outside
Duran Maintenance	Landscaping	2231 Burroughs Street	San Diego	CA	92111	(858) 336-0487	Outside
Earthcare Design And Development	Landscaping	2790 Azalea Drive	San Diego	CA	92106	(619) 204-0049	Outside
Elpidio V. Castro	Landscaping	2274 Carol View Dr #116	Cardiff By The Sea	CA	92007	(760) 846-3148	Outside
Flores Landscape	Landscaping	3609 Grand Ave	San Marcos	CA	92078	(760) 271-4676	Outside
Green Leaf Tree Care, Inc	Landscaping	1011 Dearborn Dr	San Diego	CA	92154	(619) 575-1332	Outside
Green Rainbow Landscape	Landscaping	1336 Hedionda Ave	Vista	CA	92081	(760) 941-4134	Outside
Land Doctor Landscaping	Landscaping	3525 Del Mar Heights #225	San Diego	CA	92130	(760) 432-6000	Outside
Lifestyle Landscapes, Inc.	Landscaping	8588 Utica Avenue Suite 200	Rancho Cucamonga	CA	91730	(909) 476-9500	Outside
Mr. Scape, Inc.	Landscaping	3544 Citrus	Lemon Grove	CA	91945	(619) 660-9187	Outside
North Cities Landscape Maintenance	Landscaping	PO Box 3143	Rancho Santa Fe	CA	92067	(858) 259-6162	Outside
North San Diego Landscapes	Landscaping	2822 Turnbull	Oceanside	CA	92054	(760) 754-2733	Outside
One Tripp Tree Service Inc	Landscaping	3880 Begonia St	San Diego	CA	92121	(858) 571-3710	Outside
Patron Landscape Construction	Landscaping	632 E Shaver Street	San Jacinto	CA	92583	(951) 655-0572	Outside
Pinnacle Holdings Group Inc.	Landscaping	2200 S Fairview St	Santa Ana	CA	92704	(714) 434-7472	Outside
R.E. Johnson Inc. Dba Solana Mar Landscape	Landscaping	239 N Acacia Ave.	Solana Beach	CA	92075		Outside
Rubio Turf, Inc	Landscaping	10531 4S Commons Dr #465	San Diego	CA	92127	(877) 271-1697	Outside
San Diego Greencare Inc.	Landscaping	6549 Mission Gorge Rd # 336	San Diego	CA	92120-2306	(619) 421-7119	Outside
Schnetz Landscape Inc.	Landscaping	427 Venture St	Escondido	CA	92029	(760) 591-3453	Outside
Smart Water Landscape Concepts	Landscaping	952 Sugerloaf Drive	Escondido	CA	92026	(760) 532-3516	Outside
Stumpmasters Tree Service	Landscaping	13826 Little Pond Rd	Valley Center	CA	92082	(760) 749-5330	Outside
Sunset Lawn & Sprinklers	Landscaping	3233 Via Arcilla	San Diego	CA	92111	(858) 277-1855	Outside
Superscapers	Landscaping	3512 Las Vegas Drive	Oceanside	CA	92054	(760) 717-4175	Outside
Tony's Landscaping	Landscaping	9941 Lake Canyon Ct	Santee	CA	92071	(619) 854-3111	Outside
Torrey Pines Landscape Co., Inc	Landscaping	5560 Eastgate Mall	San Diego	CA	92121	(858) 454-1433	Outside
Trugreen Landcare #6241	Landscaping	770 Metcalf St	Escondido	CA	92025	(760) 747-1174	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
William Joyce Design	Landscaping	1404 Tyler Avenue	San Diego	CA	92103	(619) 574-0215	Outside
Accent Paintings Inc.	Painting	7934 La Capela Place	Carlsbad	CA	92009	(760) 635-1040	Outside
ADL Painting & Wallcovering, Inc.	Painting	11242 Evergreen Loop	Corona	CA	92883	(951) 603-3815	Outside
E. J. Michael Studio	Painting	2396 Beryl Street	San Diego	CA	92109	(760) 799-6730	Outside
Gabriel Ruiz Painting	Painting	1490 Green Ray Street	San Diego	CA	92154	(858) 525-4012	Outside
Greg Motter Painting	Painting	279 N Vulcan Ave	Encinitas	CA	92024	(760) 753-0854	Outside
J & C Painting Contractors	Painting	4151 Clairmont Drive	San Diego	CA	92117	(619) 840-7346	Outside
Mr. Faux's Finishes	Painting	6169 Thorn Street	San Diego	CA	92115	(619) 857-7937	Outside
Murray Painting Inc.	Painting	4901 Mt Ada Road #130	San Diego	CA	92111	(858) 273-2577	Outside
Nelson-Lyman Painting, Inc.	Painting	659 Union St	Encinitas	CA	92024	(858) 775-3624	Outside
Retes Waterproofing & Painting	Painting	1575 Oak Drive Apt. #N6	Vista	CA	92084	(760) 295-5889	Inside
Ron Weidner Quality Painting	Painting	10876 Angola Road Ca	San Diego	CA	92126	(858) 271-8148	Outside
Schmukle Painting, Inc	Painting	6084 Corte Del Cedro Ste 100	Carlsbad	CA	92009	(760) 753-1483	Outside
Sean's Painting	Painting	300 Carlsbad Village Dr Ste 108A-257	Carlsbad	CA	92008	(760) 613-1336	Outside
Specialized Painting Services	Painting	2737 Windmill View Rd	El Cajon	CA	92020	(619) 258-7234	Outside
Swiss Painting	Painting	10630 Hunters Glen Drive	San Diego	CA	92130	(858) 229-7456	Outside
T. West Painting	Painting	1513 Rubenstein Avenue	Cardiff By The Sea	CA	92007	(858) 414-3097	Outside
The Wright Touch	Painting	3425 Richmond St	San Diego	CA	92103	(619) 296-3662	Outside
West Coast Interiors, Inc.	Painting	1611 Seventh Street	Riverside	CA	92507	(951) 369-0670	Inside
Elise Zable Photography	Photography	342 10Th Street	Del Mar	CA	92014	(858) 461-1162	Inside
Jim Greene Productions	Photography	P O Box 2150	Del Mar	CA	92014		Inside
Little Bird Photography	Photography	288 Ocean View Ave	Del Mar	CA	92014	(858) 945-7677	Inside
Magallanes Photography	Photography	3131 Mira Mesa Avenue	Oceanside	CA	92056	(760) 630-9597	Outside
Schelling Photography	Photography	250 Ocean View Avenue	Del Mar	CA	92014	(415) 637-8355	Inside
The Living Studio (Doggy Dog Photo Llc)	Photography	1011 Camino Del Mar #100	Del Mar	CA	92014	(561) 400-6161	Inside
American Residential Services	Plumber	9895 Olson Dr 720	San Diego	CA	92121	(858) 642-4745	Outside
Backflow Services	Plumber	9420 Loren Drive	La Mesa	CA	91942	(619) 303-1561	Outside
Berck's Old Time Plumbing, Heating & Air	Plumber	38415 Innovation Ct Ste E	Murrieta	CA	92563	(877) 423-7257	Outside
Build Em Plumbing	Plumber	336 Lado De Loma Drive	Vista	CA	92083	(760) 805-1821	Outside
California Delta Mechanical, Inc.	Plumber	6052 E Baseline Rd #155	Mesa	AZ	85208	(480) 898-0007	Outside
D & E Plumbing, Inc.	Plumber	1023 W Briardale	Orange	CA	92865	(714) 974-4861	Outside
Demarco Plumbing & Drain Inc	Plumber	Po Box 18871	Lakeside	CA	92040	(619) 561-9960	Outside
Dynamic Plumbing Commercial, Inc.	Plumber	5920 Winterhaven Avenue	Riverside	CA	92504	(951) 343-1200	Outside
Fast Water Heater, Inc.	Plumber	275 N Marshall Ave.	El Cajon	CA	92020	(800) 454-8955	Outside
Fraser Plumbing	Plumber	1206 Florence Street	Imperial Beach	CA	91932	(619) 646-5167	Outside
Gregory D Caso Plumbing, Inc	Plumber	361 Engel Street	Escondido	CA	92029	(760) 839-0428	Outside
Haugen Plumbing, Inc.	Plumber	44861 Trotsdale Drive	Temecula	CA	92592	(951) 506-0242	Outside
Morey, Plumbing, Heating & Cooling, Inc.	Plumber	8170 Ronson Road Suite R	San Diego	CA	92111	(858) 505-4500	Outside
Myron Plumbing Inc.	Plumber	5218 Castle Hills Dr	San Diego	CA	92109	(858) 488-1522	Outside
Plotke Plumbing	Plumber	321 La Costa Avenue	Encinitas	CA	92024	(760) 632-0461	Outside
Quality Rooter And Plumbing, Inc.	Plumber	1015 Greenfield Dr Ste 8	El Cajon	CA	92021	(619) 438-3267	Outside
Ramona Pacific Plumbing Inc.	Plumber	1171 Ash Street	Ramona	CA	92065	(760) 518-8889	Outside
Roto Rooter	Plumber	2141 Industrial Court	Vista	CA	92081	(760) 598-4292	Outside
S. H. Smiley Plumbing, Inc.	Plumber	15478 Wyeport Road	Ramona	CA	92065	(760) 789-6361	Outside
Water Heater Only, Inc.	Plumber	970 E Main Street	Grass Valley	CA	95945	(530) 274-5800	Outside
Zallar Plumbing, Inc.	Plumber	10757 Oak Creek Dr	Lakeside	CA	92040	(619) 443-1009	Outside
Del Mar Beach Property, Llc	Rental - Equipment	1601 Coast Blvd.	Del Mar	CA	92014	(858) 259-0502	Inside
Del Mar Surf Station	Rental - Equipment	1565 Coast Blvd	Del Mar	CA	92014	(858) 704-1500	Inside
Marco Crane & Rigging Co.	Rental - Equipment	10168 Channel Rd	Lakeside	CA	92040	(619) 938-8081	Outside
National Construction Rentals	Rental - Equipment	15319 Chatsworth St	Mission Hills	CA	91345	(818) 221-6057	Outside
United Site Svcs Of Ca Inc	Rental - Equipment	4511 N Rowland Ave.	El Monte	CA	91731	(626) 442-7775	Outside
Advanced Backflow Preventer Svc	Repair Services	8260 Engineer Rd	San Diego	CA	92111	(858) 573-0842	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
Alessio Heating & Air Inc.	Repair Services	1924G Mission Rd	Escondido	CA	92029	(760) 489-2299	Outside
Hughes Heating & Air Conditioning	Repair Services	9316 Abraham Way	Santee	CA	92071	(619) 448-2656	Outside
Sherlock Heating & Air Conditioning, Inc	Repair Services	514 Hilo Way	Vista	CA	92081	(760) 295-5014	Outside
Southcoast Heating And Air	Repair Services	2373 La Mirada Drive	Vista	CA	92081	(760) 941-7000	Outside
Xerox Corp/C/O John Reifer	Repair Services	Xerox Square-040A/Tax Dept	Rochester	CA	14644	(585) 421-0272	Outside
Bob Piva Roofing	Roofing Company	1192 Industrial Ave	Escondido	CA	92029	(760) 745-4700	Outside
California Premier Roofscapes, Inc.	Roofing Company	460 Corporate Drive	Escondido	CA	92029	(760) 489-5800	Outside
Cosenza Roofing	Roofing Company	9260 Lamar Street	Spring Valley	CA	91977	(619) 465-0877	Outside
Elite Roofing & Construction	Roofing Company	4570 Van Nuys Boulevard #538	Sherman Oaks	CA	91403	(818) 782-3389	Outside
J.P. Witherow Roofing Co.	Roofing Company	10176 Riverford Rd	Lakeside	CA	92040	(619) 297-4701	Outside
JL Roofing	Roofing Company	2058 Pleasant Heights Drive	Vista	CA	92084	(760) 941-4571	Outside
Kevin Zehner Inc Dba Cal Tech Roofing	Roofing Company	602 Ridgeline Place	Solana Beach	CA	92075	(858) 481-4181	Outside
Knudsen Roofing, Inc.	Roofing Company	1657 Silvertree Lane	Escondido	CA	92027	(760) 747-1864	Outside
Martin Roofing Co. Inc.	Roofing Company	6608 Federal Blvd.	Lemon Grove	CA	91945	(619) 287-6860	Outside
Mike Webb Roofing Company	Roofing Company	6220 Marindustry Drive #B	San Diego	CA	92121	(858) 457-4110	Outside
Schott Roofing Inc.	Roofing Company	225 E Carmel St 1	San Marcos	CA	92078	(760) 744-6450	Outside
The Shower Pan Man, Inc	Roofing Company	1316-G N Melrose Dr	Vista	CA	92083	(760) 940-4126	Outside
Up On The Roof, Inc	Roofing Company	26769 Queen Ct	Murrieta	CA	92563	(951) 698-3797	Outside
Cannon Pacific Services Inc	Street Sweeping	285 Pawnee St Ste A	San Marcos	CA	92078	(760) 471-9003	Outside
Menehune Surf School Llc	Surf Camps	2216 Avendida De La Playa	La Jolla	CA	92037	(858) 663-7299	Outside
Rancho Del Mar Surf Camp	Surf Camps	PO Box 314	Del Mar	CA	92014	(619) 507-3588	Inside
Sol Surf Camp, Inc.	Surf Camps	22nd Street	Del Mar	CA	92014	(619) 889-0404	Inside
24/7 Solana Beach Cab	Taxi	13130 Rancho Penasquitos Boulvard #3	San Diego	CA	92129	(858) 668-6807	Outside
4S Cab	Taxi	16507 Dove Canyon Road #9103	San Diego	CA	92127	(858) 837-4466	Outside
5 Star	Taxi	1937 Dove Lane Suite 100	Carlsbad	CA	92009	(858) 876-8750	Outside
AAA North County Cab	Taxi	10094 Paseo Montril #617	San Diego	CA	92129	(858) 888-9191	Outside
AAA Taxi Cab Dba Carlsbad Taxi Cab	Taxi	6965 El Camino Real 105-217	Carlsbad	CA	92009	(760) 721-3333	Outside
All County Airport Cab	Taxi	10868 Sabre Hill Drive #266	San Diego	CA	92128	(858) 967-5344	Outside
ATA Taxi	Taxi	9175 Judicial Dr #6424	San Diego	CA	92122	(858) 530-0128	Outside
Big Mike's Taxi	Taxi	209 Delphinium	Encinitas	CA	92024	(760) 500-8411	Outside
Black Cab	Taxi	12757 Seabreeze Farms #9	San Diego	CA	92130	(858) 254-1252	Outside
Blue Coast Taxi	Taxi	1612 Valencia Ct.	Oceanside	CA	92054	(760) 274-7964	Outside
Coastal Cab	Taxi	1255 Cynthia Ln	Carlsbad	CA	92008	(760) 722-7472	Outside
Courtesy Cab Company	Taxi	1850 So. Santa Fe D	Vista	CA	92084	(760) 599-4221	Outside
Craig's Cab	Taxi	686 Rivertree Drive	Oceanside	CA	92058	(760) 722-2227	Outside
Dan Cab	Taxi	10978 W Ocean Air Dr #2115	San Diego	CA	92130	(858) 405-9436	Outside
Del Cab	Taxi	991 Lomas Santa Fe Ste C-240	Solana Beach	CA	92075	(760) 230-1235	Outside
Del Mar's Night Cab	Taxi	9155 Judicial Drive #5221	San Diego	CA	92122	(858) 829-6215	Outside
Freelance Cab	Taxi	15030 Avenida Montuosa #C	San Diego	CA	92129	(858) 668-6807	Outside
JC's Taxi Service	Taxi	919 W Brass Way	Encinitas	CA	92024	(760) 519-7583	Outside
Moonlight Cab	Taxi	2705 Worden Street	San Diego	CA	92110	(619) 609-8371	Outside
North County Coastal Cab	Taxi	16226 Avenido Venusta # C	San Diego	CA	92128	(858) 335-5923	Outside
Oceanside Trans Svcs, LLC	Taxi	624 Camelot Drive	Oceanside	CA	92054	(760) 722-4217	Outside
Rancho Bernardo Taxi	Taxi	16507 Dove Canyon Road #4202	San Diego	CA	92127	(858) 888-0090	Outside
Samber Inc. Dba Coach Cab	Taxi	1285 Distribution Way	Vista	CA	92081	(760) 727-4702	Outside
Santa Fe Cab	Taxi	1387 Serena Circle #3	Chula Vista	CA	91910	(858) 213-6333	Outside
So Cal Taxicab	Taxi	1564 Candor Street	Encinitas	CA	92024	(760) 822-8479	Outside
Solana Beach Cab	Taxi	5110 Clairemont Mesa Blvd #314	San Diego	CA	92117	(858) 531-7303	Outside
Solana Beach Taxi	Taxi	910 Intrepid Court	Del Mar	CA	92014	(858) 259-9898	Outside
Solana Beach Taxicab	Taxi	9505 Gold Coast Drive #56	San Diego	CA	92126	(858) 735-4742	Outside
SR Cab	Taxi	309 Solana Hills Dr #13	Solana Beach	CA	92075	(619) 878-0167	Outside
Sunbird	Taxi	3485 Kurtz St	San Diego	CA	92114	(619) 566-7019	Outside

Firm Name	Business Type	Firm Address	City	State	Zipcode	Phone Number	In/Out
Sunny Cab	Taxi	7991 Anders Circle	La Mesa	CA	91942	(619) 698-5735	Outside
Suzy's Taxi Cab	Taxi	2342 Grove Avenue	San Diego	CA	92154	(619) 800-4582	Outside
Swami's Cab	Taxi	6550 Ponto Dr #1	Carlsbad	CA	92011	(760) 908-7787	Outside
Taxi Cab N - County Services	Taxi	1114 Sycomor View Drive	Encinitas	CA	92024	(619) 251-8629	Outside
The Q Cab	Taxi	202 S Ditmar Street	Oceanside	CA	92054	(760) 712-6243	Outside
Tri-City Cab	Taxi	3133 Jefferson St. #2	Carlsbad	CA	92008	(760) 533-4448	Outside
Your Taxi	Taxi	808 Magnolia Ave	Carlsbad	CA	92008	(760) 402-6760	Outside
Rancho Del Oro Towing	Towing Services	6050 Avenida Encinas	Carlsbad	CA	92011	(760) 931-6665	Outside
Rose Towing, Inc.	Towing Services	2201 San Dieguito Dr	Del Mar	CA	92014	(858) 755-6426	Inside
Advanced Window Washing	Window Washing Service	1611 Calle Colorado	Vista	CA	92084	(760) 630-5113	Outside
Daniel Window Cleaning	Window Washing Service	9487 Stoyer Drive	Santee	CA	92071	(619) 322-4812	Outside
Green Flash Window Cleaning	Window Washing Service	1320 Ocean Avenue #A	Del Mar	CA	92014	(760) 450-6991	Inside
Heavenly Views Window Cleaning	Window Washing Service	460 Saxony Road	Encinitas	CA	92024	(760) 613-2792	Outside
Wolff Window Cleaning	Window Washing Service	2082 Sea Village Circle	Cardiff By The Sea	CA	92007	(760) 522-7624	Outside

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Appendix K
FY 2012 Revisions to 2008 JURMP

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Section 7
Industrial and Commercial Component

7.1 Introduction

The industrial and commercial JURMP program described in this section was developed pursuant to Section J.1.a (3)(f) of the Permit and contains the information required, as specified in Section D.3.b.

7.2 Industrial Sites / Sources Element

7.2.1 Background

The Industrial Component specifies best management practices for industrial areas and activities that occur within the City. These methods are industry and site specific and are described under Section 7.2.3. Industrial businesses are required to implement BMPs pursuant to the City's Stormwater Ordinance. The City, through an inspection program described under Section 7.2.4.2, will verify implementation of BMPs by industrial businesses. The City will enforce the implementation of these methods pursuant to the City's Stormwater Ordinance, DMMC 11.30.

The procedures listed in this industrial segment address the City's program as stated in Permit section D.3.b and the City's part to provide a general oversight of industrial facilities covered under the General Storm Water Industrial Permit (Order 97-03-DWQ) and any subsequent amendments/addendums. The City is not directly responsible for the industrial facility's compliance with the General Storm Water Industrial Permit, as this is an activity performed by the San Diego RWQCB, but it does inspect and require compliance with DMMC to protect stormwater quality and prevent urban runoff. Should any of the Industrial Permit requirements change, the requirements within this component will be updated accordingly to reflect a consistent compliance strategy, as appropriate.

7.2.2 Source Characterization

This section provides a completed and prioritized watershed-based inventory of all industrial sites/sources that could contribute a significant pollutant load to the MS4. At a minimum, this includes as applicable each of the sites / sources listed in permit section D.3.b.(1)(b) through (d) and J.1.a.(3)(f)i.
The Permit requires the City to develop, and update annually, a watershed-based inventory of all industrial sites within its jurisdiction that could contribute a significant pollutant load to the MS4 and the Clean Water Program Manager oversees this process. The inventory process conforms to guidelines in Permit. Following are the Statewide Industrial Permit guidelines that identify industrial businesses as priority sites/sources:

- Industrial facilities, as defined at 40CFR § 122.26(b)(14), including those subject to the General Storm Water Industrial Permit or other individual NPDES permit
- Facilities subject to SARA Title III
- Hazardous waste treatment, disposal, storage, and recovery facilities
- All other industrial sites/sources tributary to CWA Section 303(d) impaired water body segment, where the site/sources generates pollutants for which the water body segment is impaired. All other industrial sites/sources within or directly adjacent to or discharging

directly to coastal lagoons or other receiving waters within environmentally sensitive areas (as defined in Attachment C of the Order)

- All other industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4

The current inventory of priority industrial facilities is provided in Appendix 7-A. Based on the current inventory, the City contains two (2) businesses that are classified as industrial. One of these, the 22nd District Agricultural Association, is located within the City's limits but is a state entity under the jurisdiction of the San Diego RWQCB. Planning and development projects are not subject to the City's Community Plan requirements and instead are processed through the Coastal Commission and other State regulatory agencies as applicable. The priority inventory list is to be updated annually, although it is not anticipated that new entries will be added due to the City's limited industrial zoning.

The inventory is generated from businesses that hold City of Del Mar business licenses and qualify as outlined above. Based on Standard Industrial Classification (SIC) codes, priority industrial businesses are identified. Appendix 7-B provides a list of all industrial facility SIC codes and their categorizations used for this process. Additionally, the State Water Resources Control Board web site, http://www.swrcb.ca.gov/stormwtr/industrial.html, has a database available that provides a list of all Industrial Storm Water permittees in the state. The State's inventory has been compared to the City's inventory to verify completeness; no new facilities were added to the inventory in 2007-2008.

New entries to the inventory are added from information provided on a standard form required as part of the business license application process. New industrial facilities are also identified by the City's Planning Department through the development review and permitting process. A third method includes Building Department permitting. Periodically, the priority industrial inventory is cross-referenced with the Business License database to ensure the completeness of the inventory. This is also the process for removing closed industrial businesses from the inventory. It should be noted that Del Mar has very limited zoning for industrial land use and hence it is unlikely to have any new industrial facilities in the future.

Watersheds are assigned to businesses through one of two methods: 1) the location of the business is manually located on a map and the watershed is located; or 2) the business inventory record can be cross-referenced with a Geographical Information System (GIS)-based database to return the watershed of the business' location.

7.2.3 Best Management Practice Requirements

7.2.3.1 Updated BMP Requirements

This section includes a list and description of minimum BMPs to be implemented, or required to be implemented, for each industrial site/source, including pollution prevention [Permit sections D.3.b.(2) and J.1.a.(3)(f)ii.]

As required by the Permit, the City has designated a minimum set of BMPs for priority industrial sites or activities. These BMPs are described in the City's Industrial Urban Runoff BMP Requirements Manual (Appendix 7-C) and site-specific BMPs are included in the inventory in Appendix 7-A. Minimum BMPs required of priority industrial sites are of the non-structural source control nature, such as annual employee stormwater training, good housekeeping, and maintenance and operation of pollution source areas. As set forth in the City's Stormwater

Ordinance, each industrial site is required to implement the designated BMPs as specified in Appendix 7-C and listed in Appendix 7-A.

7.2.3.2 Additional Controls for Industrial Sites / Sources

This section describes any additional controls the City will implement or require implementation of for industrial sites tributary to CWA section 303(d) impaired water body segments where a industrial site generates pollutants for which the water body segment is impaired, or for industrial sites within, adjacent to, or discharging directly to coastal lagoons or other receiving waters within water quality sensitive areas including environmentally sensitive areas (Permit section D.3.b.(2)(e)).
In addition to the minimum BMPs listed in Appendices 7-A and 7-C, the City may require a specific industrial site to implement additional controls to protect a water quality sensitive area. Additional BMPs may include preparation of a spill prevention and response plan and/or treatment control (structural) BMPs. Such measures will be implemented on a site-specific basis. Currently, there are no industrial sites identified as contributing pollutants listed as 303(d) impairments to such receiving water bodies in the City of Del Mar. Updates to the inventory will be added if there are future changes in the 303(d) listings and/or the addition of new industrial facilities in the City.

7.2.4 Program Implementation

This section describes the steps to require and verify the implementation of designated BMPs for industrial sources (Permit sections D.3.b.(3), (5) and (6) and J.1.a.(3)(f)iii-xi). The detailed organization of this section reflects the specific processes used by the City, and may be further sub-divided according to need.

The following section details the different aspects of program implementation for priority industrial facilities. It should be noted that these procedures have been simplified, not intended to be less stringent than required in the Permit, but more practical to fit Del Mar's program since it is limited to only one industrial facility that is under the City's jurisdiction.

7.2.4.1 Education and Outreach

Education and outreach for priority facilities will be conducted by the City at the time of annual inspection. The same process would be conducted with any new priority industrial facilities. Education and outreach consist of on-site training of facility employees on an as-needed basis, as determined by inspection results and facility compliance.

7.2.4.2 Staff Training

City staff responsible for conducting facility stormwater inspections (i.e. code enforcement, Clean Water Program staff, etc.) should stay abreast of any training opportunities to ensure that they are current on the General Storm Water Industrial Permit requirements and any related changes to the General Storm Water Industrial Permit as well as any relevant RWQCB regulations. Updates can also be found on the SWRCB or RWQCB websites.

7.2.4.3 Monitoring

Monitoring is required of each priority industrial site per the General Storm Water Industrial Permit. Each industrial site operator must develop a written monitoring program for the site in

order to comply with the requirements of the General Storm Water Industrial Permit. The City will verify monitoring program implementation during the annual inspection and review the pollutant levels reported by the facility (in their annual report under the General Storm Water Industrial Permit) to verify BMP effectiveness and need for any additional BMPs. The following is a summary of the monitoring program required as part of the General Storm Water Industrial Permit:

Non-storm Water Discharge Visual Observations
Although not required as part of the Municipal Permit (Order No. R9-2007-0001) or by this JURMP section, non-storm water discharge visual observations are required as part of the General Storm Water Industrial Permit (Order 97-03-DWQ). The City will review and verify each facility operator's records as part of the annual inspection to identify any potential pollutant discharges to the MS4 or receiving waters. The facility is required by the Statewide Industrial Storm Water Permit to:

- Observe all drainage areas within their facilities for the presence of unauthorized non-storm water discharges.
- Observe the facility's authorized non-storm water discharges and their sources.
- Conduct visual observations on a quarterly schedule.
- Document the presence of any discolorations, stains, odors, floating materials, etc., as well as the source of any discharge.
- Maintain records of the visual observation dates, locations observed, observations, and response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges.
- To revise their Storm Water Pollution Prevention Plan (SWPPP) and/or monitoring program, as necessary.

Storm Water Discharge Visual Observations and Sampling
Similarly to non-stormwater visual observations, the General Storm Water Industrial Permit requires stormwater discharge visual observation and sampling. The records of these activities are a valuable tool for the City's inspectors and aids in evaluating BMP implementation and effectiveness. They may also assist the City in determining if additional BMPs are necessary to comply with the City's ordinances, the Permit, and this JURMP.

The following sections describe the general approach to be taken by industrial facilities to meet the stormwater discharge visual observation and sampling requirements in the General Storm Water Industrial Permit and are provided here as guidance to City inspectors and facility operators. The approach is based on the General Storm Water Industrial Permit (Order 97-03-DWQ) and may change with any amendments or revisions issued by the SWRCB.

Industrial site operators are required to visually observe stormwater discharges and collect stormwater samples from at least two storm events a year by the General Storm Water Industrial Permit. Operators attempt to visually observe stormwater discharges from every storm event. The required visual observations and sampling shall occur during the first hour of discharge and at all designated discharge locations. Sampling and visual observations of stored or contained stormwater shall occur at the time the stored or contained stormwater is released.

The samples shall be analyzed for:

- Any pollutant listed in effluent guidelines subcategories where applicable
- Any pollutant for which an effluent limit has been established in an existing General Industrial NPDES permit for the facility
- Total organic carbon (TOC) - Oil and grease (O&G) may be substituted for TOC
- Total suspended solids (TSS)
- pH
- Specific Conductance
- Toxic chemicals and other pollutants likely to be present in stormwater discharges in significant quantities
- Other parameters as required by the City, if applicable

Visual observations document the presence of any floating and suspended material, oil and grease, discolorations, turbidity, odor, and source of any pollutants. Records are to be maintained of observation dates, locations observed, observations, and response taken to reduce or prevent pollutants in stormwater discharges. In addition, operators with stormwater containment facilities are to conduct monthly inspections of their containment areas to detect leaks and ensure maintenance of adequate freeboard. Records are to be maintained of the inspection dates, observations, and any response taken to eliminate leaks and to maintain adequate freeboard.

Facility operators are to visually observe and collect samples of stormwater discharges from all drainage areas that represent the quality and quantity of the facility's stormwater discharges from the storm event. If the facility's stormwater discharges are commingled with run-on from surrounding areas, the facility operator should identify other visual observation and sample collection locations that have not been commingled by run-on and that represent the quality and quantity of the facility's stormwater discharges from the storm event. If visual observation and sample collection locations are difficult to observe or sample (e.g., sheet flow, submerged outfalls), facility operators are to identify and collect samples from other locations that represent the quality and quantity of the facility's stormwater discharges from the storm event. Facility operators that determine that the industrial activities and BMPs within two or more drainage areas are substantially identical may either collect samples from a reduced number of substantially identical drainage areas, or collect samples from each substantially identical drainage area and analyze a combined sample from each substantially identical drainage area. Facility operators must document such a determination in their reports.

A facility operator may conduct visual observations and collect samples more than one hour after discharge begins if the facility operator determines that the objectives will be better satisfied. The facility operator includes an explanation in their annual report of why the visual observations and sample collection was conducted after the first hour of discharge.

All sampling and sample preservation are to be taken in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a facility operator's own field instruments for measuring pH and conductivity) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in the City's Ordinance or in writing by the City. All metals shall be reported as total metals. With the exception of analysis conducted by facility operators,

all laboratory analyses shall be conducted at a laboratory accredited for such analyses by the State of California Department of Health Services. Facility operators may conduct their own sample analyses if the facility operator has sufficient capability (qualified employees, laboratory equipment, etc.) to adequately perform the test procedures.

Sampling and Analysis Exemptions and Reductions
Although sampling and analysis exemptions and reductions are available to industrial facilities conducting sampling under the General Storm Water Industrial Permit, the City does not have any authority to allow such exemptions and reductions, other than the option to participate in group monitoring programs (as described in the General Storm Water Industrial Permit). Therefore, sampling and analysis exemptions or reductions by the City are not available to priority industrial sites, and the above-described sampling program must be implemented at all priority industrial sites in the City, unless the operator participates in group monitoring under group monitoring programs approved by the State Water Resources Control Board. A facility operator that participates in group monitoring shall develop and implement a monitoring program in accordance with any group monitoring requirements.

Records
Records of all stormwater monitoring information and copies of all reports (including the Annual Reports) required by the General Storm Water Industrial Permit are required to be retained for a period of at least five (5) years. These records should be available for inspection by the City as part of its industrial inspection program and to verify compliance with BMP requirements listed in this JURMP. The records include:

- The date, place, and time of site inspections, sampling, visual observations, and/or measurements
- The individual(s) who performed the site inspections, sampling, visual observations, and or measurements
- Flow measurements or estimates (if taken)
- The date and approximate time of analyses
- The individual(s) who performed the analyses
- Analytical results, method detection limits, and the analytical techniques or methods used
- Quality assurance/quality control records and results
- Non-stormwater discharge inspections and visual observations and stormwater discharge visual observation records
- All calibration and maintenance records of on-site instruments used
- The records of any corrective actions and follow-up activities that resulted from the visual observations.

Annual Reporting
All priority industrial site operators submit to the State Water Resources Control Board an annual report by July 1 of each year, as required by the Statewide General Industrial Permit. City inspectors routinely verify that the annual report has been submitted to the SWRCB in compliance with the requirement.

7.2.5 Inspection of Industrial Sites

This section describes the City's program for inspections of industrial sites. This program was developed in accordance with part D.3.b.(3) of the Permit.

7.2.5.1 Inspection Frequency

Inspections of priority industrial sites, as defined in Permit section D.3.b.(3)(b),(c), and (d), will be conducted on approximately monthly basis ~~annually~~ either by Code Enforcement personnel or Clean Water Program staff (surpassing permit requirements of annual inspections). Since the City only has ~~two industrial facilities (Appendix 7-A, 2007 inventory),~~ one priority industrial business within its jurisdiction, and since limited industrial zoning minimizes the potential for new businesses, 100% of inventoried facilities will be inspected annually [the Permit requires that 50% of priority facilities be inspected the first reporting year (2008-2009), and 100% be inspected by the second year (2009-2010)]. Industrial businesses that demonstrate a higher frequency of violations or a greater threat to water quality may be subject to more frequent inspections by the Code Enforcement personnel or Clean Water Program staff. If the City is informed that the San Diego RWQCB has conducted an inspection of a site during a particular year, the City is not required to conduct an inspection for that year.

7.2.5.2 Inspection Procedures

A member of the Clean Water Program or qualified Code Enforcement staff will conduct patrolling inspections of the one (1) industrial facility within the City. Inspections will focus on the property and outdoor areas that are subject to urban runoff and have a high potential to be a source of pollutants.~~an annual inspection of the industrial facility listed in the priority inventory or any additional sites/sources determined to pose a high threat to water quality, as discussed in previous sections.~~ The City will also coordinate with the RWQCB for support in joint inspections of some industrial dischargers. Complete industrial facility inspection procedures are detailed in Appendix 7-D.

Upon inspection, the inspector must update the inventory based on the information obtained during the inspection and logged in the completed inspection form and make referrals, as needed, to the City's Clean Water Program Manager or other departments and agencies.

7.2.5.3 Referrals

The City is required to provide notification to the San Diego RWQCB of non-compliant sites including "non-filers" (industries are required to submit a notice of intent for coverage under the General Storm Water Industrial Permit if they meet the criteria) and any other industry that is determined to pose a threat to human or environmental health. Additionally, the County of San Diego Department of Environmental Health must be notified immediately if a discharge is posing a threat to human health.

If hazardous materials require clean up, the inspector may choose to contact the fire department or other licensed personnel to conduct or assist with the clean up, if the responsible party cannot adequately or safely perform the clean up. Abatement requirements will be the responsibility of the responsible party or facility owner. Other County or State agencies may need to be contacted regarding hazardous materials or spills based upon the inspection findings.

If a discharge occurred, to the MS4 or the receiving waters, the inspector may choose to request that water quality testing be conducted by the industrial facility operator, or appropriate City personnel to determine the extent of the pollutant levels.

If a non-hazardous spill or discharge entered a public facility such as the MS4 or sanitary sewer, the appropriate City personnel should be contacted, starting with the Public Works Department, to assist with the abatement and clean up, and to track and prevent any potential downstream impacts.

Additional details on spill management and the City's program can be found in Sections 9.3 and 9.5 of City's JURMP.

7.2.5.4 Filing

All records relating to a business should be stored or filed in the City's patrolling inspection database, as appropriate. All photos and other documentation collected during the inspections must be included with the inspection form and backed up onto the Clean Water Program network.~~priority industrial site/source file (electronic or hardcopy). Hard copies of inspection forms, copies of violations, and other notes should be filed as back up, as appropriate.~~

7.2.5.5 Follow Up Inspections

Inspectors will conduct follow-up inspections within a reasonable time to determine if corrective actions have been taken in accordance with the City's ordinances and minimum BMP requirements. A summary of the findings resulted out of the inspection (routine or follow-up) will be provided to the facility owner or manager through the use of the patrol follow-up letters, specifying the required action item(s) and timeline for compliance. Escalating enforcement steps, providing flexibility for the inspectors to establish appropriate compliance time frames on a case-by-case basis, should be used as needed to ensure compliance. In cases where the facility was deemed to be in compliance with Stormwater regulations, a compliance letter or form will summarize the inspection findings.

7.2.5.6 Third Party Inspections

Due to its size, staffing, and limited industrial land use zoning, it is unlikely that the City of Del Mar would implement a third party industrial inspection program. In the event that such a program would be implemented, the following items of the Permit would be included as part of the program in order to achieve compliance:

Third party inspections can satisfy up to 30% of the inspection requirements in section D.3.b(3)(d) of the Permit; the City of Del Mar would fulfill the remaining required inspections. To the extent that third party inspections are conducted to fulfill the requirements of section D.3.b(3)(d), the City of Del Mar will be responsible for the inspection of an additional site for every three sites inspected by a third party. The additional inspections may be conducted by the City of Del Mar or a third party inspector. The third party inspection program would include the following:

- A description of facility types proposed to be inspected by third parties, including SIC codes;
- A third party inspector certification program;
- The inspection requirements described in section D.3.b.(3)(a);
- Inspection form templates for third party inspector use;
- Photo documentation of potential storm water violations identified during the third party inspection;

- An annual audit of random, representative sites that were inspected by a third party;
- An annual audit of random, representative third party inspectors;
- Reporting to the City of identified significant potential violations within 24 hours of the third party inspection;
- Reporting to the City of all inspection findings within one week of the third party inspection being conducted; and
- Follow-up and/or enforcement actions for identified potential storm water violations within 2 business days of the inspection or potential violation report receipt.

The number of the inventoried priority industrial sites/source inspections will be tracked and all historical inspection information will be kept with a file for each facility.

7.2.5.7 Enforcement

A site is considered non-compliant when one or more violations of local ordinances, permits, plans, or the Permit are observed during an inspection.

If a violation and/or immediate threat to water quality are observed during an inspection, action should be taken to require the facility owner and/or operator to immediately cease the discharge. The threat to water quality shall be assessed by the inspector and a recommendation should be made to the City's Clean Water Program Manager in order to properly delegate and track enforcement.

The City is required to enforce its ordinances at all industrial sites. An enforcement action would typically occur as a result of an inspection or in response to a public or municipal staff reporting of a suspected illegal discharge or connection. The City employs several enforcement mechanisms and penalties to ensure compliance with its ordinances. The level of enforcement and associated penalties are typically issued at the discretion of the Clean Water Program Manager or the Code Enforcement officer with consideration of relevant circumstances regarding the violation.

The City Clean Water Program staff work in conjunction with City Code Enforcement staff to conduct industrial facility inspections. Enforcement actions resulting from violations can only issued by City personnel that have received their Peace Officer Standards & Training (P.O.S.T.) certificate. In the City of Del Mar, this would typically be the Code Enforcement Officer or a qualified member of the Clean Water Program.

For a complete description of administrative authorities and other legal enforcement actions, please refer to Section 2.2.2 of this JURMP. Enforcement applied to priority industrial sites for urban runoff-related violations is described below.

7.2.5.8 Reporting of Industrial Non-Filers

As part of each JURMP Annual Report, the City shall report a list of industrial sites, including the name, address, and SIC code, that may require coverage under the General Industrial Permit for which a Notice of Intent (NOI) has not been filed with the SWRCB to comply with Permit requirements in Section J.1.a.(3)(f).xi.

7.2.5.9 Owner/Operator Notifications

All industrial businesses active in the City and identified in the industrial priority source inventory will be notified annually about stormwater BMP requirements during the annual inspection. The City may provide additional general notification of BMP requirements and City Stormwater ordinances with the businesses' required annual business license renewal. Other notification and education activities are listed in Section 10, but are not extensive in Del Mar, since it is more feasible to work one-on-one with the single industrial facility located in the City.

7.2.6 Annual Reporting Requirements

For the Industrial Component Annual Reporting requirements, refer to Section J.3.a.(3).(d) of the Permit. The Annual report is required to include the following information:

i. Any updates to the industrial and commercial inventory.
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.

7.2.7 Industrial Sites / Sources Effectiveness Assessment

For the Industrial Component effectiveness assessment, like the others, refer to JURMP Section 13.0 which addresses the effectiveness assessment requirements listed in Permit sections I.1 and J.1.(3)(l).

7.2.8 Modifications

For the Industrial Component modifications, refer to JURMP Section 14.0 which addresses the identification of the location in the JURMP of any changes made to the JURMP in order to meet the requirements of Order No. R9-2007-0001.listed in Permit sections I.1 and J.1.(3)(l).

7.3 Stationary Commercial Sources Element

7.3.1 Background

The program described in this section contains the information required, as specified in Section D.3.b of the Permit, for stationary commercial businesses.

Stormwater pollution prevention involves the implementation of Best Management Practices (BMPs) to reduce or eliminate the introduction of pollutants into stormwater runoff at the source. The identification and elimination of sources of pollutants prevents them from coming in contact with stormwater runoff and washing off into receiving water bodies such as creeks, lakes, and ultimately, the ocean. Although BMPs can take many forms, including structural or mechanical means, source control BMPs are the most common type of pollution prevention method at commercial sites. Such BMPs are cost effective, easily implemented, and the most effective if

applied appropriately since they essentially prevent pollutants in stormwater runoff. For some larger facilities or specific priority (high threat to water quality) commercial sites, SWPPP may be necessary. The SWPPP provides the facility or multiple facilities (like a shopping mall or center) with a comprehensive document that outlines all the source control and treatment control BMPs implemented for all areas and activities. The SWPPP can also outline the obligations of the property owner(s) and tenant(s) to comply with the City's stormwater ordinances.

The Commercial Component specifies pollution prevention methods and BMPs for priority commercial businesses and activities that occur within the City. The selected BMPs are activity and site specific and are described under Section 7.3.4. Commercial businesses are required to implement these methods pursuant to the City's Stormwater Ordinance, DMMC 11.30. The City, through an inspection program described below, will verify implementation of pollution prevention methods by such commercial businesses and the City will enforce the implementation of these methods pursuant to the Stormwater Ordinance.

7.3.2 Source Characterization

This section provides a completed and prioritized watershed-based inventory of all stationary commercial sites/sources that could contribute a significant pollutant load to the MS4. At a minimum, this will include as applicable each of the stationary commercial sites / sources listed in Permit section D.3.b.(1)(a), (c), and (d).

The criteria for identification of priority commercial facilities are listed in Section D.3.b.(1) of the Permit. The City needs only to identify those commercial businesses that qualify as priority facilities under the following criteria in order to comply with this Section of the Permit. Those categories include:

1. Any business of the following type/activity:
    - Automobile repair, maintenance, fueling, or cleaning
    - Airplane repair, maintenance, fueling, or cleaning
    - Boat repair, maintenance, fueling, or cleaning
    - Equipment repair, maintenance, fueling, or cleaning
    - Automobile and other vehicle body repair or painting
    - Mobile automobile or other vehicle washing
    - Automobile (or other vehicle) parking lots and storage facilities
    - Retail or wholesale fueling
    - Pest control services
    - Eating or drinking establishments, including food markets
    - Mobile carpet, drape or furniture cleaning
    - Cement mixing or cutting
    - Masonry
    - Painting and Coating
    - Botanical or zoological gardens and exhibits
    - Landscaping
    - Nurseries and greenhouses
    - Golf courses, parks, and other recreational areas/facilities
    - Cemeteries
    - Pool and fountain cleaning
    - Marinas
    - Portable sanitary services

- Building material retailers and storage
- Animal facilities
- Power washing services

2. Any commercial site/source tributary to a CWA section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired.
3. Any commercial site/source within or directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas (as defined in Attachment C of the Permit)
4. Any commercial site/source that the City determines may contribute a significant pollutant load to the MS4

For the purposes of this commercial facility prioritization process, all other sites and sources not included in the commercial business categories shown above are designated as non-priority by default and need not be identified. Beginning in 2012, the City will begin the process of modifying the inventory to a property-based system, where all stationary commercial properties within the City are included. Those commercial businesses that qualify as priority facilities under Section D.3.b.(1) of the permit will also be included, where the inventory will specify the business tenants for each property.~~At the City's discretion, based on inspection results or reported activities involving illicit discharges, non-priority commercial facilities may be reclassified (at least temporarily) as priority until compliance is achieved and sustained.~~

7.3.2.1 Inventory Process Overview

The City is required by the Permit to identify and inventory its potential sources of pollution from commercial businesses to the MS4. The Clean Water Program Manager oversees the commercial facility inventory process. The City has developed an inventory of priority commercial properties and businesses within the City that is periodically revised to keep it current. The commercial business qualifies as a priority facility due to its type or activity as described in Section 7.3.1 above or because it is anticipated to generate and contribute pollutants to the MS4 and/or contributes runoff to a Water Quality Sensitive Area (WQSA) provided in Section 1, Figure 1.1-2, as defined by the City (Section 1.1.3). The inventory is generated and updated from a database of businesses that hold City of Del Mar business licenses and the inventory is populated by commercial facilities as outlined in Permit section D.3.b.(1)(a), (c), and (d).

Updates to the priority commercial facility inventory are provided on an annual basis, at a minimum. New entries to the inventory are recorded with information provided on a form required as part of the business license application process. The inventory is cross-referenced with the City's business license database to ensure a complete inventory; this is also the process for removing closed businesses from the inventory.

Watersheds are linked to priority commercial businesses through one of two methods: 1) the location of the business is manually located on a map and the watershed is identified; or 2) the commercial business inventory is cross-referenced with a GIS-based database to identify the watershed in which the business is located. The priority commercial business list also identifies any facilities which are tributary to a CWA Section 303(d) impaired water body segment so that additional Stormwater BMPs can be prescribed.

7.3.2.2 Existing Inventory

The current inventory of priority stationary commercial businesses is provided in Appendix 7-E. Based on the 2007 inventory, the City contains approximately 41 businesses that are classified as priority stationary commercial facilities and 6 mobile businesses. The stationary commercial inventory provides a watershed-based breakdown of the number of priority commercial businesses identified in the City. Currently, there are 40 stationary commercial businesses in the San Dieguito watershed and only 1 located within the Los Peñasquitos watershed.

In creating the current inventory, Standard Industrial Classification (SIC) codes were referenced to determine whether a commercial business qualified as one of the priority business types listed in Section 7.3.1. The potential inaccuracies associated with using SIC codes assigned by a business to determine their prioritization are acknowledged and compensated for as best as possible. As an example, inaccuracies may arise when a business is assigned an inaccurate SIC code or when an assigned SIC code applies to the business's primary activity but the business conducts additional activities that pose a higher threat to water quality. In order to avoid such inaccuracies, the City will use the supplemental activity and pollutant information provided during the application process for a business license or make the best professional judgment to make the call to conduct an inspection to verify the classification. The SIC codes and business activities can also be reviewed using the Business Type code and the Industrial Type code. These codes were developed to further describe a business. These codes can be useful to verify SIC codes and to further characterize a business. The threat priority of a business, as well as the accuracy of it's SIC code, can also be verified through mailers to business and also during inspections.

7.3.3 Updated BMP Requirements

This section includes a list and description of minimum BMPs that will be implemented, or required to be implemented, for each stationary commercial site / source, including pollution prevention (Permit sections D.3.b.(2) and J.1.a.(1)(f)(ii).

As required by the Permit, the City has designated a minimum set of BMPs for priority commercial sources as established by the California Stormwater Quality Association (CASQA); more information about these BMPs can be found at www.cabmphandbooks.com/industrial.asp. As set forth in the City's Stormwater Ordinance, each priority commercial site/source is required to implement the designated minimum BMP for each priority commercial facility as part of the inventory (Appendix 7-E). BMPs can also be site specific and guidance can be found on selection and implementation in the City's Commercial Urban Runoff BMP Requirements Manual, (Appendix 7-F).

7.3.3.1 Additional Controls for Stationary Commercial Sites / Sources

This section describes any additional controls the City implement or require implementation of BMPs for stationary commercial sites / sources tributary to CWA section 303(d) impaired water body segments (where a stationary commercial site / source generates pollutants for which the water body segment is impaired), or for stationary commercial sites / sources within, adjacent to, or discharging directly to coastal lagoons or other receiving waters within the City's water quality sensitive areas (Permit section D.3.b.(2)(e)).
In some cases, the City may deem necessary the implementation of additional BMPs to address a stationary commercial site/source that has been identified as part of the priority commercial facility inventory based on inspection results or illegal discharge activities detected through complaints, hotline calls, or as part of the illicit discharge detection and elimination program described in JURMP Section 9.

In addition to the minimum BMPs listed in Appendices 7-E, the City may require a specific priority commercial site/source to implement additional controls to protect a CWA 303(d) impaired water body segment or other WQSA. Additional BMPs may include preparation of a SWPPP, spill prevention & response plan, and/or Treatment Control (structural) BMPs. Such measures will be implemented on a site-specific basis.

7.3.4 Program Implementation

This section describes the City's program for inspections of priority commercial businesses as well as enforcement action and tracking of inspections as required under part D.3.b.(3) and J.1.a.(1)(f)iii-xiii and x-xi) of the Permit.

7.3.4.1 Education and Outreach

Education and outreach for priority stationary commercial facilities will be conducted by the City ~~at the time of annual inspection. The same process would be conducted~~ with any new priority commercial facilities. Business owners and property managers will be notified of Commercial BMP requirements through patrol inspection follow-up letters, known as Clean Water Reminders. City staff inform owners and operators of BMP deficiencies, potential impacts due to the deficiencies, and how the business or property can be brought into compliance. Education and outreach consist of on-site training of facility employees on an as-needed basis, as determined by inspection results and facility compliance~~. In Del Mar, the types or categories of stationary commercial facilities are limited to food establishments (restaurants, coffee shops etc.) which constitute the majority of the commercial inventory, a couple of automotive services, and a few other miscellaneous businesses. Education for the commercial component will focus on obtaining or producing materials for food establishments, preferably with other jurisdictions, and conducting one-on-one training as needed. In Del Mar, this has been proven to be the most effective education method.~~

Additional details on the City's JURMP Education Component can be found in Section 10.

7.3.4.2 Staff Training

City staff responsible for conducting facility stormwater inspections (i.e. code enforcement, Clean Water Program staff, etc.) is knowledgeable of all the requirements in the permit, inspection techniques, and BMP implementation strategies. Training will be determined as appropriate but may include attendance at meetings and conferences. Additional details on municipal staff training approaches can be found in the City's JURMP Education Component in Section 10.

7.3.4.3 Inspection Frequency

Inspections of priority commercial businesses, as defined in Permit section D.3.b.(3)(b) and D.3.b.(3)(c), will be conducted as deemed necessary either by the Clean Water Program Manager. In the first year of the implementation of City's JURMP, a minimum of 50% of the updated priority commercial facility inventory shall be inspected. The following year and thereafter, 100% of the inventoried priority facilities must be inspected annually. In both cases, mobile businesses identified in the inventory are excluded from this schedule and are addressed in Section 7.4 below. Beginning in FY 2012, the City will inspect 100% of the inventoried commercial properties and business approximately monthly. In addition to the inventory of priority commercial sites and sources, the City may also conduct inspections of any

non-priority commercial sites or sources due to a reported complaint or observation of non-stormwater discharge, pollutant discharge potential, or violation of the City's Stormwater Ordinance. In such cases, the facility will be added to the inventory of priority commercial facilities and re-evaluated annually for its inclusion in the list.

Commercial businesses that demonstrate a higher frequency of violations or a greater threat to water quality may be subject to more frequent inspections by the Code Enforcement personnel or Clean Water Program staff to verify compliance and BMP implementation.

7.3.4.4 Inspection Procedures

A member of the Clean Water Program or Code Enforcement staff will conduct annual formal inspections of commercial facilities listed in the priority commercial inventory (Appendix 7-E) as discussed in previous sections. Refer to Appendix 7-G for complete inspection procedures.

Upon completion of the inspection, the inspector must update the inventory information based on the data collected and make referrals, as needed, to the City's Clean Water Program Manager or other departments and agencies.

7.3.4.5 Referrals

If hazardous materials require clean up, the inspector may choose to contact the fire department or other licensed personnel to conduct or assist with the clean up, if the responsible party cannot adequately or safely perform the clean up. Abatement requirements will be the responsibility of the responsible party or facility owner. Other County or State agencies may need to be contacted regarding hazardous materials or spills based upon the inspection findings.

If a discharge occurred, to the MS4 or the receiving waters, the inspector may choose to request that water quality testing be conducted by the industrial facility operator, or appropriate City personnel to determine the extent of the pollutant levels.

If a non-hazardous spill or discharge entered a public facility such as the MS4 or sanitary sewer, the appropriate City personnel should be contacted, starting with the Public Works Department, to assist with the abatement and clean up, and to track and prevent any potential downstream impacts.

Additional details on spill management and the City's program can be found in Sections 9.3 and 9.5 of this JURMP.

7.3.4.6 Filing

All actions relating to a business should be recorded in the City's patrolling inspection database, as appropriate. All photos and other documentation collected during the inspections must be included with the inspection form and backed up onto the Clean Water Program network.~~priority commercial site/source electronic or hardcopy files, as appropriate. Hard copies of inspection forms, copies of violations, and other notes should be filed as back up.~~

7.3.4.7 Follow Up Inspections

Inspectors will conduct follow-up inspections within a reasonable timeframe to determine if corrective actions have been taken in accordance with the City's ordinances and minimum BMP requirements. Upon completion of any initial inspection, a summary of the findings of the inspection will be provided to the facility owner or manager through the use of the patrol letters specifying the required action item(s) and timeline for compliance. Follow-up inspections typically are conducted after a notice for compliance is made to verify the status of implementation. Escalating enforcement steps are implemented with some flexibility for the inspectors to establish appropriate compliance time frames on a case-by-case basis. In cases where the facility was deemed to be in compliance with Stormwater regulations, the compliance form or letter report will summarize the inspection findings.

7.3.4.8 Third Party Inspections

Due to the City's size, it is unlikely that the City of Del Mar would implement a third party commercial inspection program. In the event that such a program would be implemented, the following items of the Permit would be included as part of the program in order to achieve compliance:

Third party inspections can satisfy up to 30% of the inspection requirements in section D.3.b(3)(c) and D.3.b(3)(d) of the Permit; the City of Del Mar would fulfill the remaining required inspections. To the extent that third party inspections are conducted to fulfill the requirements of section D.3.b(3)(c), the City of Del Mar will be responsible for the inspection of an additional site for every three sites inspected by a third party. The additional inspections may be conducted by the City or a third party inspector. The third party inspection program would include the following:

- A description of facility types proposed to be inspected by third parties, including SIC codes;
- A third party inspector certification program;
- The inspection requirements described in section D.3.b.(3)(a);
- Inspection form templates for third party inspector use;
- Photo documentation of potential storm water violations identified during the third party inspection;
- An annual audit of random, representative sites that were inspected by a third party;
- An annual audit of random, representative third party inspectors;
- Reporting to the City of identified significant potential violations within 24 hours of the third party inspection;
- Reporting to the City of all inspection findings within one week of the third party inspection being conducted; and
- Follow-up and/or enforcement actions for identified potential storm water violations within 2 business days of the inspection or potential violation report receipt.

The number of the inventoried priority commercial sites/source inspections will be tracked and all historical inspection information will be kept with a file for each facility.

7.3.4.9 Enforcement

A site is considered non-compliant when one or more violations of local ordinances, permits, plans, or the Permit exist on the site.

If a violation and/or immediate threat to water quality are observed by the inspector, action should be taken to require the facility owner and/or operator to immediately cease the discharge. The threat to water quality shall be assessed by the inspector and a recommendation should be made to the City's Clean Water Program Manager in order to properly delegate and track enforcement.

The City is required to enforce its ordinances at all commercial sites. An enforcement action would typically occur as a result of an inspection or in response to public or municipal staff reporting of an illicit discharge or similar condition. The City employs several enforcement mechanisms and penalties to ensure the compliance with its ordinances. The levels of enforcement and associated penalties are typically issued at the discretion of the Clean Water Program Manager and/or Code Enforcement officer with consideration of relevant circumstances regarding the violation. The general process for applying enforcement to commercial sites for urban runoff-related violations is described below. A site is considered non-compliant when one or more violations of local ordinances, permits, plans, or the Permit are observed during an inspection.

For a complete description of administrative authorities and other legal enforcement actions, please refer to Section 2.2.2 of this JURMP.

The City Clean Water Program staff work in conjunction with City Code Enforcement staff to conduct Stormwater inspections. Enforcement actions resulting from violations can only issued by City personnel that have received their P.O.S.T. certificate. In the City of Del Mar, this would typically be the Code Enforcement Officer.

7.3.4.10 Owner/Operator Notifications

All commercial businesses active in the City and identified in the commercial priority source inventory will be notified annually about stormwater BMP requirements during the annual inspection. The City may provide additional general notification of BMP requirements and City Stormwater ordinances with the businesses' required annual business license renewal. Other notification and education activities are listed in Section 10.

7.3.5 Annual Reporting Requirements

For the Commercial Component Annual Reporting requirements, refer to Section J.3.a.(3).(d) of the Permit. The Annual report is required to include the following information:

i. Any updates to the industrial and commercial inventory.
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.

v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.

7.3.6 Stationary Commercial Sites / Sources Effectiveness Assessment

For the Commercial Component effectiveness assessment, like the others, refer to JURMP Section 13.0 which addresses the effectiveness assessment requirements listed in Permit sections I.1 and J.1.(3)(l).

7.3.7 Modifications

For the Commercial Component modifications, refer to JURMP Section 14.0 which addresses the identification of the location in the JURMP of any changes made to the JURMP in order to meet the requirements of Order No. R9-2007-0001 listed in Permit sections I.1 and J.1.(3)(l).

7.4 Mobile Business Sources Element

7.4.1 Background

A preliminary priority commercial source inventory is also included for mobile businesses that have obtained a business license with the City in 2007 (see Appendix 7-H). The City will use its business license database to annually update the list of those priority mobile businesses that pose a high threat to water quality. The City will also collaborate with the copermittees in the development of a regional strategy to educate, inspect, and regulate mobile businesses.

7.4.2 Source Characterization

This section provides a prioritized inventory of mobile sites / sources that have the potential to contribute pollutants to the MS4. At a minimum, this will include as applicable each of the mobile sites / sources listed in permit section D.3.b.(4)(a).
The criteria for identification of priority mobile commercial sources are the same as for the stationary commercial facilities discussed in Section 7.3.1 and listed in Section D.3.b.(1) of the Permit, as amended by the City of Del Mar based on local information and conditions. The City needs only to identify those mobile commercial businesses that qualify as priority sources under the following criteria in order to comply with this Section of the Permit:

I. Any business of the following type/activity:
   a. Automobile repair, maintenance, fueling, or cleaning
   b. Airplane repair, maintenance, fueling, or cleaning
   c. Boat repair, maintenance, fueling, or cleaning
   d. Equipment repair, maintenance, fueling, or cleaning
   e. Automobile and other vehicle body repair or painting
   f. Mobile automobile or other vehicle washing
   g. Retail or wholesale fueling
   h. Pest control services
   i. Eating or drinking establishments, including food markets
   j. Mobile carpet, drape or furniture cleaning
   k. Cement mixing or cutting
   l. Masonry
   m. Painting and Coating

n. Landscaping
o. Nurseries and greenhouses
p. Pool and fountain cleaning
q. Portable sanitary services
r. Animal services
s. Power washing services

II. Any mobile commercial source that the City determines may contribute a significant pollutant load to the MS4

For the purposes of the commercial facility prioritization process, all other mobile sources not included in the mobile commercial business inventory are designated as low priority by default and need not be identified (i.e. public notaries, accounting services, legal services, etc.).

7.4.3 Best Management Practice Requirements

7.4.3.1 Updated BMP Requirements

This section includes a list and description of minimum BMPs that will be implemented, or required to be implemented, for each mobile source, including pollution prevention (Permit sections D.3.b.(2) and J.1.a.(1)(f)ii).

The City has designated a minimum set of source control BMPs for the preliminary list of priority mobile commercial sources. As set forth in the City's Stormwater Ordinance, each mobile commercial source is required to implement the designated BMPs. Refer to Appendix 7-H for of the required minimum BMPs associated with each specific priority commercial sources identified in the inventory. The City has identified this as a preliminary list of mobile sources and businesses and also preliminary BMPs. The on-going efforts by the copermittees to develop a methodology to identify additional mobile businesses and determine the minimum BMPs will be taken into consideration by the City of Del Mar to update the inventory and minimum BMPs. The City of Del Mar will require the same BMPs that are selected as minimum BMPs across San Diego County so that a consistent educational program is set in place and the highest level of compliance can be obtained.

7.4.3.2 Additional Controls for Mobile Sources

This section describes any additional controls the City will implement or require implementation of for mobile sources tributary to CWA section 303(d) impaired water body segments (where a mobile source generates pollutants for which the water body segment is impaired), or for mobile sources within, adjacent to, or discharging directly to coastal lagoons or other receiving waters within water quality sensitive areas (Permit section D.3.b.(2)(e)).

The preliminary minimum BMP requirements discussed in Section 7.4.3.1 for mobile sources have been selected to provide water quality protection and to be appropriate for the nature of mobile businesses. There is the potential for occasionally conducting business adjacent to or discharging directly to 303(d) impaired water body segments. In addition to the minimum BMPs listed in Appendix 7-H, the City may require a specific priority mobile commercial site/source to implement additional controls to protect a CWA 303(d) impaired water body segment or other water quality sensitive area. Additional BMPs may include preparation of a spill prevention and response plan and/or Treatment Control (structural) BMPs. Such measures will be implemented on a case-by-case business.

7.4.4 Program Implementation

This section will describe the steps that will be taken to require and verify the implementation of designated BMPs for mobile sources (Permit sections D.3.b.(4)-(6) and J.1.a.(1)(f)iii, and ix-xi). As noted above, the mobile business compliance strategies are evolving and being coordinated at a regional level, and the program implementation steps described below will be revised as appropriate. The City of Del Mar has a very aggressive enforcement program aimed at reducing non-stormwater discharges from mobile business, especially landscaping services and vehicle washing and detailing, and will continue to implement the program at a jurisdictional level.

7.4.4.1 Education and Outreach

All mobile commercial businesses with a current business license with the City and identified in the mobile business priority source inventory will be notified annually about stormwater BMP requirements during the annual inspection or with their business license renewal, as appropriate. The City may provide additional general notification of BMP requirements and City Stormwater ordinances with the businesses' required annual business license renewal.

7.4.4.2 Inspection Frequency

Inspection of mobile businesses will be impromptu due to the nature of this business type. An unannounced inspection can be conducted anytime when a Code Enforcement officer or Clean Water Program staff observes a mobile business conducting activities within the City. If inspection record keeping indicates that a listed mobile business on the priority inventory (Appendix 7-H) has not been inspected within the year, the City may contact the mobile business owner/operator to schedule a visit with them when conducting business within the City.

7.4.4.3 Enforcement

Enforcement measures for mobile businesses will be conducted in the same manner as specified for stationary commercial businesses, as described in Section 2.2.2.

7.4.4.4 Referrals

Referrals to other agencies or City departments will be handled in the same manner as specified for stationary commercial businesses, as described in Section 7.3.4.3. Additional referral mechanisms may be implemented as part of the mobile business regional program.

7.4.4.5 Follow-Up Inspections

Inspectors will conduct follow-up inspections within a reasonable time to determine if corrective actions have been taken in accordance with the City's ordinances and minimum BMP requirements. Due to the nature of this type of business, the inspector will have to coordinate the follow up inspection with the business owner/operator in order to know the businesses' scheduled presence and location in the City. A summary of the inspection will be sent to the mobile business owner/operator, specifying the required action item(s) and timeline for compliance. Escalating enforcement steps provide flexibility for the inspectors to establish appropriate compliance time frames on a case-by-case basis. In cases where the mobile business was deemed to be in compliance with Stormwater regulations, an inspection letter or form will summarize the inspection findings in a compliance letter.

7.4.4.6 Third Party Inspections

Third party inspections, if necessary, will be conducted per the Permit as discussed earlier in Section 7.3.4.6 of this JURMP. However, it is unlikely that third party inspections will apply to mobile businesses in the City of Del Mar. There may be some coordination with other copermittees to verify BMP implementation and compliance in their jurisdictions as comparable to a follow-up inspection.

7.4.5 Mobile Sources Effectiveness Assessment

For the Mobile Sources Component effectiveness assessment, like the others, refer to JURMP Section 13.0 which addresses the effectiveness assessment requirements listed in Permit sections I.1 and J.1.(3)(l).

7.4.6 Annual Reporting Requirements

Though not currently required by the regulations of mobile businesses, the City is encouraged to meet the Annual Reporting requirements. The Annual report is required to include the following information:

i. Any updates to the mobile inventory.
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for mobile businesses.
iii. A description of efforts taken to notify owners/operators of mobile businesses of BMP requirements, including mobile businesses.
iv. Identification of the total number of mobile businesses inventoried and the total number inspected.
v. Justification and rationale for why the mobile businesses inspected were chosen for inspection.

7.4.7 Mobile Businesses Effectiveness Assessment

For the mobile businesses component effectiveness assessment, refer to JURMP Section 13.0 which addresses the effectiveness assessment requirements listed in Permit sections I.1 and J.1.(3)(l).

7.4.8 Modifications

For the mobile businesses Component modifications, refer to JURMP Section 14.0 which addresses the identification of the location in the JURMP of any changes made to the JURMP in order to meet the requirements of Order No. R9-2007-0001.listed in Permit sections I.1 and J.1.(3)(l).

APPENDICES

7-A Industrial Inventory
7-B Standard Industrial Classification (SIC) Code Reference Table
7-C Industrial BMP Manual
7-D Industrial Facility Inspection Procedures
7-E Commercial Inventory
7-F Commercial BMP Manual
7-G Commercial Facilities Inspection Procedures
7-H Preliminary Mobile Business Inventory

Appendix 7-D
Industrial Facility Inspection Procedures

City of Del Mar
Industrial facility patrolling inspection procedures

Step 1: Initiation

An inspection is initiated as a result of one of the following:

~~As part of the annual schedule for priority industrial sites/sources~~

- A public or municipal staff reporting of illicit/non-stormwater discharges or related investigation
- As a follow up to a previous inspection, violation, or citation
- In response to a referral by an inspector of a different program or agency
- As part of the City's patrolling property-based inspections, approximately once per month

Patrolling inspections are a proactive way the City can enforce compliance with the Municipal Code, discover and abate trouble areas/hotspots, and better educate commercial and industrial business owners and property managers regarding the City's clean water requirements. The inspectors will conduct a complete inspection of the business through the patrolling inspections, focusing on outdoor areas and not making contact with the owners/operators of the site unless necessary to eliminate an illegal discharge. ~~The inspectors will conduct a complete inspection of the business using the City Industrial Facility Inspection Long Form (see Appendix 7-D-1 at the end of this section) or by preparing an inspection letter with or without a photo report.~~ In cases of non-routine or follow-up inspections, the focus of the inspection should primarily be on any issue(s) that were identified during the initiation inspection.

Step 2: Pre-Inspection Preparation

Before visiting a facility, the inspector should access the existing industrial inventory facility folder and print out or copy an inspection form and any relevant information for the site, such as previous inspection records. The inspector should review the sheet to determine the site's primary industrial activity, the proximity to CWA 303(d) listed water body segments, the minimum BMPs that it should be implementing, and other relevant information. Any new 303(d) listings shall be addressed with additional BMPs, as appropriate, to ensure that the site does not contribute to the impairment of its 303(d) receiving water. The inspector should also note incomplete portions of the facility's industrial profile so as to attempt to complete the information during the inspection.

Step 3: The Site Visit

Approach to the Site

Before entering the facility grounds, the inspector should make note of the following:

- Nearby conveyances or water bodies.
- Visible discharge points along perimeter of the site.
- Outdoor areas of intensive commercial activity.
- The condition of outdoor trash storage and used oil/grease storage areas, if applicable
- Signs of recent additions or remodels.

Inspection Focus

Clean Water Program personnel initiate patrols to inspect businesses within the City for clean water violations. Inspections focus on outdoor areas and activities, including the following:

- Trash dumpsters and disposal area should be kept clean.
- Dumpster lids must be covered at all times when not in use.
- Grease bins must be covered and have secondary containment.
- Irrigation systems, landscaped areas must be properly maintained to prevent irrigation runoff.
- Buildup of leaves or sediment should be prevented
- BMPs on-site should be checked for proper maintenance and function.
- Discharges to City streets and storm drain system are strictly prohibited.

Inspectors note any deficiency per the City's Municipal Code during the patrol and photodocument the observations. Contact is not initiated with the business owner or property manager unless an active IC/ID is observed, in which case all attempts are made to abate the illegal discharge.

Step 4: Record Inspection Findings and Contact Responsible Parties

At businesses and facilities where no issues are noted, inspectors continue onto the next property or business and no further action is taken. Deficiencies observed during the patrol are logged in the City's database and letters are generated for the industrial business. These letters inform the owners of the following:

- The deficiency observed at their site during the inspection;
- Photos of the deficiency;
- The date the deficiency was observed;
- The requirement that immediate action is necessary to bring the property or business into compliance;
- How the owner/operator can contact the City for assistance in bring about site compliance.

Only inspections where issues are observed are logged into the City's database. If a property is not included in the database during a particular patrol, no issue was observed during the patrolling inspection.

Follow-up should occur within one week to ensure site has been brought into compliance.

~~***The Management Office***~~

~~After introductions, the inspector can obtain the following information from this initial contact with the facility operator:~~

- ~~Update of information for the industrial inventory, including changes in ownership or operations~~
- ~~Verification of SIC code and other facility descriptions~~
- ~~Clarification of observations noted before entering the facility, (i.e. any changes in activities, materials, or physical structures)~~
- ~~Other considerations, such as existing pollution prevention plans or an environmental~~

~~management system.~~

~~Facility Walk-through with Management or Facility Supervisor~~

- ~~A site map, if available, should be used to assess areas in which industrial activities and areas are exposed to precipitation, thereby increasing the risk of pollutants entering storm water. Attention should also be paid to run-on and runoff in these areas, as well as pollution prevention measures. From the walk-through, an inspector can assess the following:~~
- ~~Accuracy of site map, industrial activities, materials list, and any existing pollution prevention plan~~
- ~~Confirmation of additions or changes observed while approaching the facility~~
- ~~Evidence of illegal discharges (i.e. on-going leaks or recent spills or connections not authorized under an NPDES permit~~
- ~~Effectiveness of BMP implementation for each area or activity~~
- ~~Any new receiving water 303(d) listings which require additional BMPs, as appropriate, to ensure that the site does not contribute to the impairment of the receiving water.~~

~~The Inspection Form~~

- ~~During or at the conclusion of the inspector should complete the inspection form while on-site or prepare the necessary notes to complete a letter report to be sent at a later date. If the form is used, a signature on the form should be obtained by the responsible person, or designated responsible person, at the business.~~

Appendix 7-G
Commercial Facility Inspection Procedures

City of Del Mar
~~Priority stationary~~Stationary commercial facility patrolling inspection procedures

Step 1: Initiation

An inspection is initiated as a result of one of the following:

- ~~As part of the annual schedule for priority commercial sites/sources per Permit requirements~~
- A public or municipal staff reporting of illicit/non-stormwater discharges or related investigation
- As a follow up to a previous inspection, violation, or citation
- In response to a referral by an inspector of a different program or agency
- As part of the City's patrolling property-based inspections, approximately once per month

Patrolling inspections are a proactive way the City can enforce compliance with the Municipal Code, discover and abate trouble areas/hotspots, and better educate commercial and industrial business owners and property managers regarding the City's clean water requirements. The inspectors will conduct a complete inspection of the business through the patrolling inspections, focusing on outdoor areas and not making contact with the owners/operators of the site unless necessary to eliminate an illegal discharge. ~~The inspectors will conduct a complete inspection of the business using the City Commercial Facility Inspection Form (see Attachment 7-G-1) or a comparable form or letter report.~~ In cases of non-routine inspections, the focus of the inspection should be on any issue(s) that were identified during the activity that caused for the initiation of the inspection.

Step 2: Pre-Inspection Preparation

Before visiting a facility, the inspector should access the existing commercial inventory facility folder and print out or copy an inspection form and any relevant information for the site, such as previous inspection records. The inspector should review the sheet to determine the site's primary commercial activity, the proximity to CWA 303(d) listed water body segments, the minimum BMPs that it should be implementing, and other relevant information. Any new 303(d) listings shall be addressed with additional BMPs, as appropriate, to ensure that the site does not contribute to the impairment of its 303(d) receiving water.

Step 3: The Site Visit

Approach to the Site

Before entering the facility grounds, the inspector should make note of the following:

- Nearby conveyances or water bodies.
- Visible discharge points along perimeter of the site.
- Outdoor areas of intensive commercial activity.
- The condition of outdoor trash storage and used oil/grease storage areas, if applicable
- Signs of recent additions or remodels.

Inspection Focus

Clean Water Program personnel initiate patrols to inspect businesses within the City for clean water violations. Inspections focus on outdoor areas and activities, including the following:

- Trash dumpsters and disposal area should be kept clean.
- Dumpster lids must be covered at all times when not in use.
- Grease bins must be covered and have secondary containment.
- Irrigation systems, landscaped areas must be properly maintained to prevent irrigation runoff.
- Buildup of leaves or sediment should be prevented
- BMPs on-site should be checked for proper maintenance and function.
- Discharges to City streets and storm drain system are strictly prohibited.

Inspectors note any deficiency per the City's Municipal Code during the patrol and photodocument the observations. Contact is not initiated with the business owner or property manager unless an active IC/ID is observed, in which case all attempts are made to abate the illegal discharge.

Step 4: Record Inspection Findings and Contact Responsible Parties

At businesses and facilities where no issues are noted, inspectors continue onto the next property or business and no further action is taken. Deficiencies observed during the patrol are logged in the City's database and letters are generated for the commercial business. These letters inform the owners of the following:

- The deficiency observed at their site during the inspection;
- Photos of the deficiency;
- The date the deficiency was observed;
- The requirement that immediate action is necessary to bring the property or business into compliance;
- How the owner/operator can contact the City for assistance in bring about site compliance.

Only inspections where issues are observed are logged into the City's database. If a property is not included in the database during a particular patrol, no issue was observed during the patrolling inspection.

Follow-up should occur within one week to ensure site has been brought into compliance.

~~***The Management Office***~~

~~After introductions, the inspector can obtain the following information from this initial contact with the facility operator:~~

- ~~Update of information for the industrial inventory, including changes in ownership or operations~~
- ~~Verification of SIC code and other facility descriptions~~
- ~~Clarification of observations noted before entering the facility, (i.e. any changes in activities, materials, or physical structures)~~
- ~~Other considerations, such as existing pollution prevention plans or an environmental~~

~~management system.~~

~~Facility Walk-through with Management or Facility Supervisor~~

~~A site map, if available, should be used to access areas in which industrial activities and areas are exposed to precipitation, thereby increasing the risk of pollutants entering storm water. Attention should also be paid to run-on and runoff in these areas, as well as pollution prevention measures. From the walk-through, an inspector can assess the following:~~

- ~~Accuracy of site map, industrial activities, materials list, and any existing pollution prevention plan~~
- ~~Confirmation of additions or changes observed while approaching the facility~~
- ~~Evidence of illegal discharges (i.e. on-going leaks or recent spills or connections not authorized under an NPDES permit)~~
- ~~Effectiveness of BMP implementation for each area or activity~~
- ~~Any new receiving water 303(d) listings which require additional BMPs, as appropriate, to ensure that the site does not contribute to the impairment of its 303(d) receiving water.~~

~~The Inspection Form~~

~~Once the inspection is completed the inspector should complete the inspection form while on-site (see Attachment 7-G-1) or prepare the necessary notes to complete a letter report to be sent at a later date. In all cases, the inspector should collect the necessary information to revise the inventory, as necessary. A signature on the form should be obtained by the responsible person, or designated responsible person, at the business.~~

Section 9
Illicit Discharge Detection and Elimination Component

The City of Del Mar will implement the following Illicit Discharge Detection and Elimination program which meets the requirements of sections D.4.a and J.1(h) of the Permit to actively seek and eliminate illicit discharges.

9.1 Introduction

The City's program to actively seek and eliminate illicit discharges to the MS4 is comprised of several programs participated in and implemented by the City. In general, illicit discharges to the MS4 are any discharges not composed entirely of storm water (for example: storm water containing pollutant or non-stormwater discharges) unless they are authorized under an NPDES Permit or specifically permitted by the City (see Section 3, Non-Stormwater Discharges). For the most part, the programs that the City implements to detect and eliminate illicit discharges are part of the City's JURMP. Programs such as those that relate to the inspection and enforcement of municipal, industrial, commercial, residential, and construction activities all contribute to the identification of illicit discharges and their elimination. These programs are crucial components of an illicit discharge detection and elimination program because they are focused on the sources of illicit discharges. Often, when an illicit discharge is detected during one of these programs, it can be eliminated before it affects receiving water.

In a comprehensive approach to the problem of illicit discharges, the City also participates in and conducts programs to detect illicit discharge within the MS4 and at the receiving waters. The City participates in a regional receiving water monitoring program required by the Permit and detailed in the Copermittees' San Diego Region Receiving Waters Monitoring Program. The City will also participate in the MS4 Outfall Monitoring and Source Identification Monitoring programs implemented at the regional level and conduct a Dry Weather Monitoring program. Each of these programs is focused on the identification of non-storm water illicit discharges.

Also extremely important to the detection of illicit discharges are the municipal staff and public reporting hotlines. The programs are directly supported by a very informed and engaged public and city staff familiar with urban runoff discharges and they serve as the best source for the timely detection of illicit discharges.

Monitoring programs, inspections, public reporting and city staff reporting are good detectors of illicit discharges. However in some cases the sources of the discharges are not evident and, therefore, elimination can be difficult. The City implements investigational source identification procedures in conjunction with the monitoring and notification programs in order to track down the sources and eliminate the discharge.

In almost all cases of illicit discharges, elimination of the discharge requires some level of enforcement and/or abatement action. Specifications in the Del Mar Municipal Code grant the City the powers to enforce its regulations pertaining to illicit discharges. In addition, the Municipal Code provides the City the ability to require a responsible party to conduct abatement activities required to eliminate an illicit discharge or for the City to conduct those activities itself and recover the cost from the responsible party.

Of the greatest importance to the long-term elimination of illicit discharges in the City are those programs that it employs to prevent and avoid illicit discharges. City regulations and supporting

outreach materials prepared by the City prohibit illicit discharges and provide guidance to residences and businesses to avoid illicit discharge. Maintaining up-to-date measures to comply with the City's regulations and educating those that are regulated by the City will lead to compliance and reduce illicit discharges. The land development and redevelopment project planning and review program conducted by the City is another proactive program that the City implements to prevent and avoid illicit discharges. The program informs applicants of regulations and helps prevent illicit discharges in new projects through review and inspection during the planning and construction phases, respectively.

The programs conducted by the City as part of its illicit discharge detection and elimination effort are described in various sections within this document. The following sections discuss some of those programs that are not described within the other sections of this document.

9.2 Public Reporting of Illicit Discharges and Connections

As required by section D.4.h and J.1(h)ix of the Permit, the City will promote, publicize and facilitate the reporting of illicit dischargers or water quality impacts associated with discharges into or from MS4.

The City of Del Mar relies on the regional hotline, the local City departmental phone numbers, and the City's main number to receive storm water complaints from the public. The regional hotline is answered during business hours by County staff. Bilingual staff is available to handle calls by Spanish speakers. Callers with emergencies are notified to call other appropriate numbers such as those for the police and fire dispatcher, or the call is forwarded. Any calls to the County hotline for incidences in the City of Del Mar are forwarded to Del Mar Clean Water Program staff. Appendix 9-A is a Public Hotline Tracking Form and Mobilization Guide that will be used when calls are referred to and followed up by City staff.

Locally, Del Mar residents are encouraged to contact the City's main line to file complaints including storm water or illicit discharges. All City receptionists, including the receptionist for the City's main line, are trained to answer and forward illicit discharge or water quality related calls to the appropriate staff member using the Hotline Tracking Form and Mobilization Guide. Calls may also be received by other City departments including Public Works or Community Services.

The regional public hotline and local City department phone numbers are publicized in various periodicals, on various web sites (including City of Del Mar and County of San Diego websites), and at local community events and meetings where literature is distributed. Most urban runoff related handouts and educational materials include the hotline number. In addition, public education stresses the importance of reporting and describes the critical role that the public plays in the identification and elimination of urban runoff pollution related problems.

The number of reported hot line calls and a summary will be provided in the City's JURMP Annual Report as described in Section 9.6.

9.3 Spill Reporting, Response, and Prevention

As required by sections D.4.g and J.1(h)vii. of the Permit, the City of Del Mar will prevent, respond to, contain and clean up sewage and other spills that may discharge into its MS4 from any source. The following section describes the City's approach to spill prevention, notification

and response. Additional details regarding spill prevention and response can be found in Chapter 6, Municipal Component of the JURMP.

9.3.1 Spill Prevention

9.3.1.1 City Sanitary Sewers

The City's preventive and corrective sewer maintenance programs are conducted in accordance with the City's Sanitary Sewer Overflow Prevention Plan and consist of a variety of activities for the effective operation, maintenance, repair and replacement of sewer mains, manholes and pump stations. The plan provides for the routine monitoring, inspection, cleaning and related maintenance of the sanitary sewer collection system in order to reduce the potential of sanitary sewer overflows (SSO's) and other structural failures. Potential problems are noted and maintenance schedules adjusted accordingly. If necessary, repairs are initiated by City Public Works maintenance crews. Larger, more complex projects are referred for inclusion in the Capital Improvement Project process for planning, design and construction.

When system malfunctions do occur, such as SSO's, main stoppages, electrical outages, and mechanical breakdowns, the cause of the problem is investigated and analyzed to prevent its reoccurrence. Maintenance schedules are then adjusted as necessary. If appropriate, the infrastructure component is referred for repair or replacement by maintenance crews. As an additional educational measure, when a main stoppage occurs, the Public Works Department mails out a bright yellow postcard to all residents served by the sewer main. The yellow postcard explains the sanitary sewer problems that can occur from pouring grease into the sanitary sewer. This and other similar educational efforts will continue in the future.

A revised sewer main cleaning strategy was implemented several years ago, but more importantly, cleaning schedules are analyzed and adjusted for proper maintenance and operation of the system. However, based on the cause of the blockage different preventive measures are undertaken, for example, in 2006 the City implemented City root herbicide program to treat invasive roots in the sanitary sewer system and reduce the risk of overflows and stoppages. This type of measure and others may be used in the future to address specific problems in a timely manner.

9.3.1.2 Private Sewer Laterals and Septic Systems

The City requires that private sewer laterals and septic systems be designed and operate in accordance to industry standards. The City also requires the proper maintenance of these facilities in order to avoid spills, breakages, and failures. Refer to Section 8, Residential (Existing Development) Component, for other BMPs related to private laterals and septic systems.

The City responds to all sewer spills to assess the risk to human health and the environment, and requires private sewer lateral and septic system failures and spills to be contained and cleaned by the responsible party. Private lateral spills and septic system failures that discharge into the City's MS4 are logged and reported by the City. In the event that a private sewer lateral spill or septic system failure poses a risk or the discharge has entered the MS4 or the receiving waters, the City will initiate containment and clean-up procedures to minimize the impact.

9.3.1.3 Other Spills

The City prevents other spills containing or suspected to contain pollutants through the implementation of BMPs, secondary containment, and other mechanisms to prevent and avoid discharges to the receiving waters (through the MS4 or directly). Spills from private businesses and residents are reduced through required BMPs, education, and enforcement of relevant regulations for the storage and usage of hazardous materials. Other non-hazardous spills are investigated and enforcement action led by the Clean Water Program and Code Enforcement. Hazardous waste or materials spills are referred to Fire Department and/or the County's Hazardous Materials Response team.

9.3.2 Spill Notification

The City operates a notification hotline under its Public Works Department to receive notification of spills during business hours. After hours and on weekends, these calls are answered through the Del Mar Fire Dispatch. Sanitary sewer spills are immediately reported to the San Diego County Department of Environmental Health by Public Works staff.

9.3.3 Spill Response

Responses to sewer spills are conducted in accordance to the City's Sanitary Sewer Overflow Response Plan. The City has on-call Public Works duty personnel 24 hours a day, 7 days a week that respond upon notification through the dispatcher. The Public Works Director, Maintenance Supervisor and back up are notified immediately when a spill occurs. Implementation of the spill response plan will prevent entry of spills into the MS4 and contamination of receiving waters to the maximum extent practicable. If a sewage spill is discharging or has the potential to discharge into the City's MS4 from any source (including private laterals or failing septic tanks) Public Works staff immediately takes action to contain and clean up the spill. The Public Works Department SSO response plan and reporting procedures are summarized in a "quick reference" guide as shown in Appendix 9-B.

Responses to other spills are conducted by the Fire Department or qualified personnel in the Public Works Department, as appropriate to the situation.

9.4 Urban Runoff Monitoring

9.4.1 MS4 Outfall Monitoring

In accordance with Permit Sections D.4.c and J.1.(h)iii, and Section B.1 of Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, the Copermittees jointly developed a monitoring program to characterize pollutant discharges from MS4 outfalls in each watershed during wet and dry weather. The program includes a rationale and criteria for selection of outfalls to be monitored. The program also includes collection of samples for those pollutants causing or contributing to violations of water quality standards within the watershed. This monitoring program will be implemented within each watershed and will begin within the 2007-2008 monitoring year.

The monitoring design is based on a combination of both random and targeted sampling of MS4 outfalls that drain into receiving waters. Random sampling will be conducted to assess

countywide conditions of MS4 outfall water quality. Targeted sampling will be conducted to assess the relative contribution of particular MS4 outfalls. The targeted approach focuses monitoring efforts on those MS4 outfalls that are most likely to contribute to receiving water problems. Both random and targeted sampling will be implemented during wet and dry weather periods.

A detailed description of the MS4 Outfall Monitoring program that will be implemented by the Copermittees will be included when completed in July 2008 and placed in Appendix 9-C.

9.4.2 Source Identification Monitoring

In accordance with Permit sections D.4.c and J.1.(h)iii, and Section B.2 of Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, the Copermittees developed a monitoring program designed to identify sources of discharges of pollutants causing the priority water quality problems within each watershed. The monitoring program includes focused monitoring which moves upstream into each watershed as necessary to identify sources. The monitoring program uses source inventories and "Threat to Water Quality" analysis to guide monitoring efforts. This program will be implemented within each watershed and will begin no later than the 2008-2009 monitoring year.

The monitoring design is based on a combination of both specific activity sampling and targeted sampling of flows within MS4 conveyances. If adequate information already exists on pollutant sources within an MS4 drainage, sampling will focus on those sources or specific activities. However, if water quality problems are identified by other monitoring programs and insufficient information exists that indicate the specific sources of the problem; sampling will be conducted at these targeted locations.

A detailed description of the Source Identification Monitoring program that will be implemented by the Copermittees in July 2008 will be included in Appendix 9-D.

9.4.3 Dry Weather Field Screening and Analytical Monitoring

This section incorporates and describes the City's Dry Weather Field Screening and Analytical Monitoring Program to be conducted in accordance with the requirements of Permit sections D.4 and J.1.(3)(h)iii, and Section B.3 of Receiving Waters Monitoring and Reporting Program No. R9-2007-0001. At a minimum, the updated program includes the following:

- Selection of dry weather field screening and analytical monitoring stations
- A complete, updated MS4 map (including locations of the MS4, dry weather field screening and analytical monitoring sites, and watersheds; Permit sections D.4.b and J.1.(3)(h)ii))
- Dry weather field screening and analytical monitoring procedures

In accordance with the requirements of Permit sections D.4 and J.1.(3)(h)iii, and Section B.3 of Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, the City has updated its Dry Weather Field Screening and Analytical Monitoring Program. Dry weather monitoring program consists of (1) field observations; (2) field screening monitoring; and (3) analytical monitoring at selected stations. The program is designed to detect and eliminate illicit connections and illegal discharges to the MS4 using frequent, geographically widespread dry weather discharge monitoring and follow-up investigations.

The Dry Weather Field Screening and Analytical Laboratory Monitoring program consists of annual and other routine inspections of the City's MS4 at established dry weather monitoring stations. Annual inspections consist of visual observations at each station, field screening for a specific set of analytes at stations which have flowing or ponded water, and collecting water samples at 25 percent of the sites which have flowing or ponded water. Water samples are sent to a laboratory for analysis of an additional set of analytes. If any field screening or laboratory analysis result exceeds predetermined action levels follow-up testing will be conducted at that station within two business days. If follow-up sampling confirms the exceedance or if investigating personnel observes suspicious flow during the initial or follow-up site visit, Clean Water Program staff will conduct a source investigation.

The Dry Weather Monitoring Program is described in more detail in Appendix 9-E. The Appendix includes a list of the specific analytes which will be monitored and their respective action levels. The updated program will be implemented beginning May 1, 2008.

9.4.4 Coastal Storm Drain Monitoring

The Coastal Storm Drain Monitoring (CSDM) Program is designed and implemented as part of the Receiving Waters Monitoring Program, described in section II.A.6. of the Receiving Waters Monitoring and Reporting Program No. R9-2007-0001. Although this program is a component of the Receiving Water Monitoring Program, the results and frequent inspection of coastal storm drain outlets allow Clean Water Program staff frequent opportunity to inspect and observe a large portion of the City's MS4. The majority of the City's MS4 system drains directly to the Pacific Ocean. Therefore visiting and sampling all of the City's coastal storm drains on a monthly basis provides the City with frequent opportunity to detect illicit discharges. Any discharges suspected of containing harmful levels pollutants when observed during coastal monitoring will be investigated using the source investigation and follow-up procedures described in Section 9.5 of this JURMP.

The CSDM program consists of monthly inspections ~~of all the~~of selected coastal storm drains outfalls which discharge into the Pacific Ocean. Of the seven (7) coastal outfalls discharging directly to the Pacific Ocean, four (4) are monitored on a monthly basis. Three (3) outfalls are monitored on a bimonthly basis per the Municipal Permit's Sampling Frequency Reduction (SFRC) criteria, which allows for outfalls meeting strict indicator bacteria criteria to be monitored every other month. As of September 2012, this qualifies three outfalls under the SFRC criteria. Per the Permit, all outfalls will be reevaluated at the end of the CSDM program year for eligibility to participate under the SFRC. If samples from any of the three outfalls or receiving waters at the outfalls exceed the SFRC during routine monitoring, the outfall will return to being monitored on a monthly basis. Visual observations are documented during each site visit. If water is flowing from the storm drain at the time of inspection the investigator will collect paired storm drain and receiving water samples for laboratory analysis for the following bacteria analytes: Total Coliform, Fecal Coliform, and Enterococcus. Re-sampling is implemented at a site if both storm drain and receiving water samples exceed AB 411 or basin plan standards for any bacterial indicator or if the storm drain exceeds the 95th percentile observations of the previous year's data for any bacterial indicator.

If re-sampling exhibits continued exceedances of AB411 or Basin Plan standards in either the storm drain or receiving water, investigations of sources of bacterial contamination commence within one business day of receipt of analytical results. Investigations of source of bacterial contamination occur immediately if evidence of abnormally high flows, sewage releases, restaurant discharges, or similar evidence is observed.

The Coastal Monitoring Program is a regional program cooperatively implemented by all Copermittees that have storm drains which discharge into coastal waters. The CSDM program is described in detail in the Receiving Waters and Urban Runoff Monitoring document.

9.5 Follow-up and Enforcement

This section provides a description of the City's follow-up investigation and inspection procedures for dry weather monitoring results above the established regional action levels or other information which indicate potential for illicit discharges, illicit connections or other sources of non-storm water (Permit sections D.4.d and J.1(h)iv). This section also includes procedures for eliminating detected illicit discharges and connections, a description of enforcement mechanisms and how they are implemented (Permit sections D.4.d-f and J.1(h)v-vi).

9.5.1 Source Investigation

The City conducts source investigations when an illicit discharge is detected or suspected and the source of the illicit discharge is not readily identifiable. The purpose of source investigations is to locate the source of an illicit discharge so that all necessary measures to eliminate it can be implemented.

9.5.1.1 Initiation

Source investigations are initiated when appropriate information suggests a reasonable potential for the presence of an illicit discharge. Such instances may include the following:

- A public citizen or City staff reports the observation of a possible illicit discharge.
- Results from one of the Receiving Waters Monitoring programs indicate the possibility of an illicit discharge.
- Dry weather monitoring identifies pollutant levels that exceed the action level.
- Professional judgment by monitoring personnel determines that there is a reasonable potential for an illicit discharge to exist due to visual observations or measurements.

In accordance with section D.4.d.(2) of the Permit, if dry weather field screening or laboratory analytical results meet or exceed action criteria, the City will initiate source investigation within two business days of receipt of the monitoring results or provide a rationale for why the discharge does not pose a threat to water quality and does not need further investigation.

In some cases, just the existence of flows in a portion of the MS4 or the noticeable increase in dry weather flows at a certain location may trigger a source investigation. The City's monitoring personnel will use their judgment and experience in making such a decision based on site specific observations. Visually obvious illicit discharges (i.e. color, odor, or significant exceedances of field screening action levels) will be investigated immediately.

9.5.1.2 Source Investigation Procedures

The Dry Weather Monitoring personnel will typically conduct source investigations. In some cases a Code Enforcement officer or other City personnel may conduct a source investigation. When conducting a source investigation, the staff member should be equipped with the set of

equipment listed in the Dry Weather Monitoring Program Field Manual that is included as part of the Dry Weather Monitoring Program (Appendix 9-E).

Step 1 – Location of Observation: Source investigations begin at the location where the observations were made which initiated the investigation. If someone made the observations other than the person or persons conducting the investigation (the investigators) or if the observations were made more than several hours prior to the initiation of the source investigation, the source investigation should begin with a thorough visual inspection of the location. If flows exist, samples should be collected for field screening and laboratory analysis as deemed appropriate by the investigators. If the illicit discharge is still occurring and it poses a substantial threat to human health or the environment actions should be taken immediately by the City to prevent or minimize the discharge from entering the receiving waters.

Step 2 – Source Tracking Determination: While at the observation location, the investigator should consult various resources such as MS4, drainage basin, and land use maps to determine the characteristics of the tributary areas and upstream sources. In some instances, the investigator may be able to identify probable sources of the illicit discharge based on the expected activities of upstream sites or the results of previous investigations. If this is the case, the investigator may choose to go directly to these potential sources to investigate if they are the source of the illicit discharge.

If visits to potential sources do not reveal the cause of the illicit discharge, if potential sources are too numerous, or if potential sources cannot be identified while at the observation location, the investigator should track the discharge upstream through the MS4.

If the discharge has ceased it may be impossible to track the source. In these circumstances, the investigator should document that the discharge has ceased and cannot be tracked. A brief drive- or walk-through survey of the tributary area should be conducted and documented to verify that there is no obvious source. In some cases, although a discharge has ceased, the sources may still be identified by evidence of a discharge (wet pavement, discoloration, etc.) at the site or further upstream. For example, if a sediment laden discharge was reported, an upstream site may reveal signs of sediment discharge such as deposits along curbs or in inlets, signs of eroded slopes, or exposed soils lacking required BMPs.

Step 3 – Source Tracking: If source tracking is determined appropriate, the investigator should use MS4 maps, drainage basin maps and other resources to aid in the tracking. Any traceable characteristic of the illicit discharge (color, constituents, odor, quantity, etc.) should also be noted, as these will aid the investigator in making decisions during tracking and identifying sources. The City's strategy for source tracking is not necessarily to immediately find the discharge directly to its source, but instead, to follow the discharge upstream, thereby reducing the tributary area and potential sources. Once the set of possible sources has been reduced to a manageable set, the investigator may choose to end the source tracking and to continue the investigation by inspecting the various potential sources. However, if none of these can be identified as the source of the discharge, or if the investigator cannot identify any potential sources, tracking may be required to be conducted all the way up the drainage area.

In order to conduct source tracking, the investigator should work his or her way upstream along the main portion of the MS4, ruling out potential tributaries and narrowing the potential source area. When tributary pipes or inlets are encountered while working upstream along the MS4, the investigator should evaluate each for their potential to be the conveyor of the discharge. If the tributary pipe or inlet is dry and the discharge is still occurring along the mainline, it can

automatically be eliminated as the source. If the pipe or inlet is the source of the flow in the main portion of the MS4, then the tracking should continue along that pipe or inlet. If the main portion of the MS4 and the tributary pipe or inlet both contain flow, more detailed observations must be made.

The investigator may be able to rule out one of the conveyances based on simple visual observations and the characteristics of the illicit discharge. Field screening sampling of the flows from the two conveyances may also be appropriate depending on the constituents in the illicit discharge.

Tracking along underground MS4 conveyances is more difficult because observations can only be made at the locations of manholes, outlets, and inlets. The MS4 map will prove the most useful for these investigations, although the underground portions of the MS4 in Del Mar is very limited. Tracking upstream along an underground conveyance usually consists of periodic observations at manholes and other access locations along the MS4. If the map indicates the confluence of two MS4 conveyances, or if an unmapped confluence is suspected, if possible, the investigator should make observations at the point of confluence. Otherwise, the investigator should make observations at the nearest access point upstream along each conveyance. When tracking along underground conveyances, the investigator should be aware that illicit connection or unmapped confluences may exist between observation points that could be the source of the discharge. The investigator should check surrounding inlets if such an instance is suspected.

If the source cannot be located and an illicit connection is suspected, the investigator should check the surrounding area and consult appropriate City personnel or City records for evidence of infrastructure construction or other activities that might have involved the installation of an illicit connection.

In the case of chronic illicit discharges for which a source cannot be identified, the City may choose to conduct dye testing, smoke testing, video monitoring, and/or underground visual inspections using closed circuit televising techniques.

Once the source of a discharge has been identified, if the discharge is still occurring, it must be eliminated. Section 9.5.2 of this JURMP describes the discharge elimination process.

Step 4 – Damage Assessment: After the discharge has been terminated, the investigator or Code Enforcement personnel should travel downstream from the discharge to assess the impacts that the discharge caused to downstream resources. Additional remediation may be required of the responsible party if downstream impacts are detected. Monitoring may also be necessary to ensure recovery of downstream areas. Clean Water Program personnel or Code Enforcement may also want to consider the level of downstream impact caused by the illicit discharge, prior to deciding on which level of enforcement action is appropriate for the case.

Step 5 – Reporting and documentation: Thorough documentation of a source investigation will be conducted by the investigator. Documentation may include photographs, detailed notes on observations, discussions on decisions made, and other information relevant to the investigation. This information could be useful to future investigations, and possible future resolution of illicit discharges for which sources were unidentified. It is also important because this information supports any enforcement actions. Appendix 9-F is a Source Investigation Record Form which may aid in documenting the investigation. City staff will either use this form or an equivalent method when documenting a source investigation. All documentation and other information relevant to source investigations should be made available to Code

Enforcement once the source is identified, if a citation or other enforcement action is to be considered.

Notifications to the RWQCB shall be in accordance with Permit requirements in Attachment B, Section 5.e.(1) through (3) as quoted below:

"*Twenty-four hour reporting* [40 CFR Section 122.41(l)(6)]

(1) The Copermittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Copermittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Copermittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(2) The following shall be included as information, which must be reported within 24 hours under this paragraph:

i) Any unanticipated bypass that exceeds any effluent limitation in the Order (See 40 CFR 122.41(g)).

ii) Any upset which exceeds any effluent limitation in this Order.

(3) The Regional Board may waive the above-required written report under this provision on a case-by-case basis if the oral report has been received within 24 hours."

9.5.2 Discharge Elimination

As required by section D.4.e. of the Permit, depending on the type of illicit discharge detected, the City will eliminate the discharge as soon as possible after detection by means of various procedures. As described in detail below, elimination measures will include an escalating series of enforcement actions for those illicit discharges that are not a serious threat to public health or the environment. Illicit discharges that pose a serious threat to public health or the environment will be eliminated immediately.

If the owner or manager of the property where the discharge originates is present at the time of investigation or inspection, the investigator will make their best effort to get the owner or manager to immediately terminate the discharge. The actions required of the responsible party to eliminate the illicit discharge will vary depending on type of illicit discharge. Clean up or remediation actions may also be required of the responsible party.

If the owner or manager is unwilling to cooperate, the investigator should immediately contact Code Enforcement personnel who will issue a citation to the discharger and an order to make the necessary alterations to terminate and clean up the discharge. Depending on the egregiousness of the discharge, the investigator may opt to have the Code Enforcement officer issue a citation even if the responsible party cooperates and terminates the discharge.

Regardless of whether or not a citation is issued, detection of an illicit discharge or illegal connection will be formally followed up with a Notice of Violation. A Notice of Violation is a form

or letter that is used in the case of a violation of the City's Municipal Code. The City may also opt to issue a citation at the time the Notice of Violation is issued. By issuing these notices, the City requires the person responsible for the illicit discharge to conduct activities necessary to eliminate the illicit discharge at his or her own expense and prevent any further discharges from occurring in the future. The activities necessary for elimination and prevention will be described in the Notice. A deadline for correcting the infraction with the required activities will also be provided in the Notice.

A follow-up inspection may be conducted by City staff to ensure that abatement activities were successfully and adequately implemented. Follow-up investigations will be conducted by the City, if the City issued an order for a responsible party to cease and/or clean-up the discharge. In addition, if the source or activity causing the discharge is identified as possessing high potential for the occurrence of illicit discharges, periodic follow-up visits will be conducted to ensure that future discharges do not take place.

If the discharge poses a serious threat to public health or the environment, or the City determines that the individual responsible for the illicit discharge is incapable of performing such activities by the compliance date, or if the individual chooses not to perform the activities, the City may conduct the necessary activities and recover the resulting costs from the individual.

Illicit discharges that are the City's responsibility will be immediately eliminated by contacting the appropriate supervisor who oversees the activities that are causing in discharge. Action and communications will be documented through internal memorandums, emails, and work orders. Additional information regarding municipal facility storm water or urban runoff discharges can be found in Chapter 6 of this JURMP.

9.5.3 Enforce Ordinances

As required by section D.4.f. of the permit, the City will employ several enforcement mechanisms and penalties to ensure the compliance with its ordinances. The levels of enforcement and associated penalties are typically issued at the discretion of the Clean Water Program Manager and/or the Code Enforcement officer with consideration of relevant circumstances regarding the violation. The general process for applying enforcement to illicit discharge related violations is the same as that described in Section 2.2.2.1 of the JURMP.

9.6 Annual Reporting Requirements

The JURMP annual reports prepared by Del Mar for subsequent inclusion in the unified JURMP Annual Report will comply with the standard reporting requirements outlined Section J.3.a(3)(f) of the Permit. The City will be preparing a Dry Weather Field Screening and Analytical Monitoring Report that will address all the requirements pertaining to that program (as detailed in Appendix 9-E). The Illicit Discharge Detection and Elimination component includes additional reporting requirements. A summary of the reporting requirements for this component are provided below.

9.6.1 Dry Weather Monitoring and IDDE

- Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.

- Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted (within two business days) at sites where field testing or analytical action levels were exceeded, any City or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.
- Any dry weather field screening and analytical monitoring reports generated (by City or consultant), to be provided as an attachment to the annual report.
- A brief description of any other investigations and follow-up activities for illicit discharges and connections.
- The number and brief description of illicit discharges and connections identified.
- The number of illicit discharges and connections eliminated.

9.6.2 Spill Reporting

- Identification and description of all spills to the MS4 and response to the spills.
- A description of activities implemented to prevent sewage and other spills from entering the MS4.
- A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.

9.6.3 Hotline Reporting

- Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.
- A description of efforts to publicize and facilitate public reporting of illicit discharges.

9.6.4 Enforcement

- The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.

9.6.5 Notable Activities

- A description of notable activities conducted to manage illicit discharges and connections.

9.7 Illicit Discharge Detection and Elimination Component Effectiveness Assessment (Optional)

The City of Del Mar will assess the effectiveness if it's Illicit Discharge Detection and Elimination Program. The effectiveness assessment will be based on the established regional effectiveness

assessment guidelines. The assessment of all components of the City's JURMP, including the IDDE component, is discussed in Chapter 13 of this JURMP.

9.8 Program Review and Modification

After each annual assessment of the Illicit Discharge and Elimination Component's effectiveness, any proposed or required modifications to the program will be placed in this section and referred to in Chapter 14.

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JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
CITY OF DEL MAR – ANNUAL REPORT FORM
FY 2012-2013

I. COPERMITTEE INFORMATION

Copermittee Name: **City of Del Mar – Los Peñasquitos HU**

Copermittee Primary Contact Name: **Mikhail Ogawa**

Copermittee Primary Contact Information:
Address: **1050 Camino Del Mar**
City: **Del Mar** County: **San Diego** State: **CA** Zip: **92014**
Telephone: **(858) 755-9313** Fax: **(858) 755-2794** Email: **mikhail@mogawaeng.com**

II. LEGAL AUTHORITY

Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES	☒
	NO	☐

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE

Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒

Number of non-storm water discharges reported by the public	2
Number of non-storm water discharges detected by Copermittee staff or contractors	1
Number of non-storm water discharges investigated by the Copermittee	3
Number of sources of non-storm water discharges identified	3
Number of non-storm water discharges eliminated	3
Number of sources of illicit discharges or connections identified	1
Number of illicit discharges or connections eliminated	1
Number of enforcement actions issued	1
Number of escalated enforcement actions issued	0

V. DEVELOPMENT PLANNING PROGRAM

Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

Number of proposed development projects in review	9
Number of Priority Development Projects in review	0
Number of Priority Development Projects approved	0
Number of approved Priority Development Projects exempt from any BMP requirements	0
Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	0

Number of completed Priority Development Projects in inventory	0
Number of high priority Priority Development Project structural BMP inspections	0
Number of Priority Development Project structural BMP violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

FY 2012-2013

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

Number of construction sites in inventory	5
Number of active construction sites in inventory	4
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period	1
Number of construction site inspections	59
Number of construction site violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	1	1	0	12
Number of existing development inspections	12	12	0	144
Number of follow-up inspections	0	0	0	0
Number of violations	0	0	0	0
Number of enforcement actions issued	0	0	0	0
Number of escalated enforcement actions issued	0	0	0	0

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES ☐ NO[2] ☒

X. CERTIFICATION

I ☒ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	10/28/13 Date
Scott Huth Print Name	City Manager Title
858-755-9313 Telephone Number	shuth@ci.delmar.ca.us Email

[1] The City of Del Mar has selected to use the new JRMP Annual Report format (as allowed in Order No. R9-2013-0001), resulting in the "NO" response on the annual report form. However, implementation and compliance has been met under the Order No. R9-2007-0001. Ordinances and program components will be updated in accordance with Order R9-2013-0001 no later than June 2015.

[2] A fiscal analysis that complies with Order R9-2007-0001 has been attached. The City will be updating its tracking systems to perform and report fiscal analyses in compliance with Order R9-2013-0001 no later than June 2015.

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
CITY OF DEL MAR – ANNUAL REPORT FORM
FY 2012-2013

I. COPERMITTEE INFORMATION

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Copermittee Primary Contact Name: **Mikhail Ogawa**

Copermittee Primary Contact Information:
Address: **1050 Camino Del Mar**
City: **Del Mar** County: **San Diego** State: **CA** Zip: **92014**
Telephone: **(858) 755-9313** Fax: **(858) 755-2794** Email: **mikhail@mogawaeng.com**

II. LEGAL AUTHORITY

Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES	☒
	NO	☐

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE

Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒

Number of non-storm water discharges reported by the public	6
Number of non-storm water discharges detected by Copermittee staff or contractors	27
Number of non-storm water discharges investigated by the Copermittee	33
Number of sources of non-storm water discharges identified	33
Number of non-storm water discharges eliminated	33
Number of sources of illicit discharges or connections identified	22
Number of illicit discharges or connections eliminated	22
Number of enforcement actions issued	16
Number of escalated enforcement actions issued	1

V. DEVELOPMENT PLANNING PROGRAM

Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

Number of proposed development projects in review	80
Number of Priority Development Projects in review	3
Number of Priority Development Projects approved	1
Number of approved Priority Development Projects exempt from any BMP requirements	0
Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	2

Number of completed Priority Development Projects in inventory	2
Number of high priority Priority Development Project structural BMP inspections	2
Number of Priority Development Project structural BMP violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

FY 2012-2013

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

Number of construction sites in inventory	44
Number of active construction sites in inventory	19
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period	25
Number of construction site inspections	68
Number of construction site violations	2
Number of enforcement actions issued	2
Number of escalated enforcement actions issued	1

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	24	84	1	37
Number of existing development inspections	288	1,008	12	444
Number of follow-up inspections	0	0	0	0
Number of violations	0	76	0	6
Number of enforcement actions issued	0	76	0	6
Number of escalated enforcement actions issued	0	0	0	0

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

X. CERTIFICATION

I ☒ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	10/28/13 Date
Scott Huth Print Name	City Manager Title
858-755-9313 Telephone Number	shuth@ci.delmar.ca.us Email

[1] The City of Del Mar has selected to use the new JRMP Annual Report format (as allowed in Order No. R9-2013-0001), resulting in the "NO" response on the annual report form. However, implementation and compliance has been met under the Order No. R9-2007-0001. Ordinances and program components will be updated in accordance with Order R9-2013-0001 no later than June 2015.

[2] A fiscal analysis that complies with Order R9-2007-0001 has been attached. The City will be updating its tracking systems to perform and report fiscal analyses in compliance with Order R9-2013-0001 no later than June 2015.

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
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FY 2013-2014

I. COPERMITTEE INFORMATION

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Copermittee Primary Contact Name: Mikhail Ogawa

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Address: 1050 Camino Del Mar
City: Del Mar County: San Diego State: CA Zip: 92014
Telephone: (858) 755-9313 Fax: (858) 755-2794 Email: Mikhail@mogawaeng.com

II. LEGAL AUTHORITY

Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES	☒
	NO	☐

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE

Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒

Number of non-storm water discharges reported by the public	2
Number of non-storm water discharges detected by Copermittee staff or contractors	6
Number of non-storm water discharges investigated by the Copermittee	8
Number of sources of non-storm water discharges identified	8
Number of non-storm water discharges eliminated	8
Number of sources of illicit discharges or connections identified	7
Number of illicit discharges or connections eliminated	7
Number of enforcement actions issued	1
Number of escalated enforcement actions issued	1

V. DEVELOPMENT PLANNING PROGRAM

Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

Number of proposed development projects in review	3
Number of Priority Development Projects in review	2
Number of Priority Development Projects approved	1
Number of approved Priority Development Projects exempt from any BMP requirements	0
Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	0

Number of completed Priority Development Projects in inventory	0
Number of high priority Priority Development Project structural BMP inspections	0
Number of Priority Development Project structural BMP violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

FY 2013-2014

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

Number of construction sites in inventory	5
Number of active construction sites in inventory	2
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period	3
Number of construction site inspections	42
Number of construction site violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	1	1	0	12
Number of existing development inspections	11	11	0	132
Number of follow-up inspections	0	0	0	0
Number of violations	0	0	0	2
Number of enforcement actions issued	0	0	0	2
Number of escalated enforcement actions issued	0	0	0	0

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES ☐ NO[2] ☒

X. CERTIFICATION

I ☒ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	Date 10/8/2014
Scott Huth	City Manager
Print Name	Title
858-755-9313	Citymanager@delmar.ca.us
Telephone Number	Email

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[2] A fiscal analysis that complies with Order R9-2007-0001 has been attached. The City will be updating its tracking systems to perform and report fiscal analyses in compliance with Order R9-2013-0001 no later than June 2015.

1. FISCAL ANALYSIS

1.1 JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM IMPLEMENTATION

This section of the Jurisdictional Runoff Management Program (JRMP) Annual Report provides a fiscal analysis of the City's stormwater management programs. On May 8, 2013 the RWQCB adopted a revised Municipal Permit, Order No. R9-2013-0001, however, during this transitional period the City of Del Mar continued to develop its fiscal analysis according to Section G of the previous Municipal Permit, Order No. R9-2007-0001.

On January 29, 2009, the San Diego Municipal Copermittees adopted the "Standardized Fiscal Method and Format" which provides a model for the City of Del Mar and other Copermittees to perform the review and annual reporting as required in Order R9-2007-0001, Section G. This methodology and reporting format became effective in January 31, 2010. The "Standardized Fiscal Analysis Method and Format" (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k) and J.1.c(1)(d) of the Municipal Permit. The Fiscal Analysis Method document was submitted to the San Diego RWQCB on January 31, 2009, as Attachment 1 of the "Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009."

The City of Del Mar is utilizing the format and guidelines described in the Fiscal Analysis Method for this reporting period, FY 2013-2014.

1.1.1 Clean Water Program Budget

The City of Del Mar's Clean Water Program is a multi-departmental program, funded as an enterprise fund in the City's Annual Budget. Enterprise funds account for operations that are financed and operated in a manner similar to private businesses, with the costs of providing the services recovered largely through user fees. Fund 55 ("The Clean Water Fund"), is one of three (3) enterprise funds in the City's budget, and was added to the City's budget in Fiscal Year 2004 to account for the mandated costs of the City's responsibilities in order to comply with the Municipal Permit.

The City of Del Mar Operating and Capital Improvement Budgets for Fiscal Years 2013-2014 and 2014-2015were presented to the Del Mar City Council on June 3, 2013. The budget was formally adopted during the same meeting.

For the Fiscal Year 2013-2014 reporting period, the final amended budget for Fund 55 totaled $471,460. **Table 1-1** below provides a breakdown of program budget by major budget category for Fiscal Year 2013-2014.

Table 1-1: Budget Summary – Clean Water Fund 55

Fund Account		Adopted Budget Fiscal Year 2013-2014	Description/Comments
55-5530	Clean Water Planning	44,220	Active enforcement of Clean water regulations including project plan review, permitting, construction monitoring and plan review of BMPs.
55-5536	Clean Water Code Enforcement	23,000	Active in-field enforcement of clean water regulations, including response to resident complaints.
55-5539	Clean Water Program Management	242,500	All clean water program management and reporting activities, fees to agencies, and interaction with regional and watershed Copermittee groups.
55-5840	Public Works (General)	161,740	Provides for administration and general support for all clean water programs for property and facilities, including supervision of maintenance staff.
Total Clean Water Program Budget – Fund 55		**$471,460**	–

1.1.2 Fiscal Analysis Methods

The City of Del Mar used the format and guidelines included in the Fiscal Analysis Method for reporting purposes; however, given the City's financial accounting methods, a few modifications were necessary. These adjustments are described below.

1.1.3 Fiscal Analysis Results

The City's Fiscal Year 2013-2014 jurisdictional (JRMP), watershed and regional projected expenditures for the implementation of the Municipal Permit requirements are summarized in **Table 1-2** below.

Table 1-2: Fiscal Year 2013-2014 Expenditure Summary by Program Component

Component Description	Fiscal Year 2013-2014 Projected Expenditures
Jurisdictional Component	
Administration	43,158
Development Planning	88,554
Construction	17,866
Municipal (Including Non-Emergency Fire Flows)	137,670
Industrial and Commercial	48,000
Residential, Education, and Public Participation	13,800
IDDE	4,600
Jurisdictional Total	**$353,648**
Watershed Component	
San Dieguito Watershed	43,225
Los Peñasquitos Watershed	43,225
Watershed Total	**$86,450**
Regional Component	
Total Copermittee Cost Share for Del Mar	31,363
Total Costs	**$471,460**

1.1.4 JRMP Expenditures

The City of Del Mar used the expenditure categories detailed in the Fiscal Analysis Method for jurisdictional reporting. However, due to the implementation overlap of some of the City's municipal permit components; it is difficult to separate out individual component costs. As a result, the expenditures for residential, education, and public participation are reported as one expenditure category. Additionally, since the City does not explicitly track expenditures by permit component for its budgeting purposes, in many cases estimated percentages were utilized to allocate expenditures into the appropriate municipal permit component categories.

A total of $471,460 was projected to be expended in Fiscal Year 2013-2014 for the implementation of JRMP activities. An overview of the expenditures reflected in JRMP activity components is described below.

Administration
Activities identified in this component represent labor and non-labor expenditures for materials, supplies, equipment, or tools that are not otherwise incorporated into other expenditure categories, general administrative functions (e.g., program planning, budgeting, staff supervision), and program assessment and reporting.

Development Planning
Activities identified in this component represent labor and non-labor expenditures related to issuance or oversight of permits or of plans (e.g., permit counter support, plan checks, permit or application processing), project planning and engineering (e.g. project design specifications, capital improvement projects).

Construction
Activities identified in this component represent labor and non-labor expenditures related to construction site inspections and enforcement.

Municipal
Activities identified in this component represent labor and non-labor expenditures related to maintenance inspections of streets, roads, catch basins and inlets, open channels, and the MS4, municipal facility inspections, street and parking lot sweeping, catch basins and inlets, open channels, and MS4 cleaning, and municipal BMP implementation. Since the City of Del Mar conducts all fire-fighting training outside of the City, and no non-emergency fire-fighting flows occurred during the reporting period, the City does not currently track expenditures relating to non-emergency fire-fighting flows. Any costs associated with preparing for these flows are included in the municipal component.

Industrial and Commercial
Activities identified in this component represent labor and non-labor expenditures related to evaluation and enforcement of program requirements at industrial and commercial sites or sources (e.g. routine inspections and complaint investigations).

Residential, Education, and Public Participation
Activities identified in these components represent labor and non-labor expenditures related to investigation and enforcement of residential areas or activities, staffing outreach events, development and production of outreach materials, and any expenditures associated with waste collection and recycling (e.g. household hazardous waste, used oil).

Illicit Discharge Detection and Elimination
Activities identified in this component represent labor and non-labor expenditures related to the identification and elimination of illicit discharges or connections, enforcing the City of Del Mar's storm water ordinance, and any expenditures related to monitoring programs (e.g. dry weather monitoring, coastal storm drain monitoring, special investigations, field or sampling equipment, materials and supplies).

1.1.5 Watershed Expenditures

The City of Del Mar used the expenditure categories (administration, watershed activities, cost share contribution, and other) detailed in the Fiscal Analysis Method for watershed reporting. The watershed expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees included in the watershed(s).

A total of $86,450 was projected to be expended in Fiscal Year 2014 for the implementation of watershed activities which primarily included the development of Water Quality Improvement Plans for the San Dieguito and Los Peñasquitos Watersheds.

1.1.6 Regional Expenditures

The City of Del Mar utilized the expenditure categories (administration, cost share contribution, regional activities, and other) detailed in the Fiscal Analysis Method for regional reporting. The regional expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees in the region. A total of $31,363 was projected to be expended in Fiscal Year 2014 for the implementation of regional activities and coordination.

1.1.7 Funding Sources

To ensure adequate funding for the Clean Water Program, the City uses a combination of user fees and general fund monies.

The City of Del Mar City Council created and adopted a user fee, called the Clean Water Fund Service Charge to offset the costs of the program. Initially, the rate was adopted to collect $100,000 of the estimated $300,000 for the program, with an escalator to achieve full cost recovery by 2009. Mid-way through the five-year schedule, on July 24, 2006, the California Supreme Court published a decision in the case of Bighorn-Desert View Water Agency v. Verjil (2006) 39 Cal. 4th 205, which held that consumption-based rates such as water and sewer rates are subject to the notice and hearing requirements of California Constitution, Article XIIID, Section 6 (commonly known as "Proposition 218"). Therefore, on January 22, 2007, and February 5, 2007, the Del Mar City Council held public hearings to receive written protests to comply with Proposition 218. No majority protest was received, and the Council ratified the previously approved five-year rate schedule, including the City's Clean Water Service Charge. However, the adopted rate increases did not account for the actual increases in the costs associated program requirements.

As an additional measure to obtain voter approval of the five-year rate schedule for the City's Clean Water Service Charge, the Council directed staff on April 2, 2007, to start the process to perform a mail ballot election procedure. During the process of researching the mail ballot election procedures and the current rates, it became apparent that the process would immediately need to be repeated to set the Fiscal Year 2010 rates and charges, since the current five-year rate schedule was due to expire in June of 2009. Due to the additional costs incurred in complying with the new requirements of the 2007 Permit, increases to the Clean Water Service Charge were proposed, including an annual rate escalator. All monies appropriated as part of the Clean Water Service Charge are directly identified for the Clean Water Program, and pursuant to law, may not be used by the City for any other purpose.

During the Fiscal Year 2009 reporting period, in compliance with Proposition 218, both the majority protest hearing and mail ballot process were conducted for the proposed increases. Both the ratification of the existing rate structure (required by Proposition 218), and the new rates, including the rate escalator, passed by more than 62%. As a result of the passage of the Clean Water Service Charge, the City will continue to have a secure funding source for the Clean Water Program, outside of general fund monies.

Based on current water allocations for the City of Del Mar, the projected revenues from the Clean Water Service Fee will be $365,860 (page 51 of city budget) for Fiscal Year 2013-2014.

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
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II. LEGAL AUTHORITY

Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES	☒
	NO	☐

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE

Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒

Number of non-storm water discharges reported by the public	6
Number of non-storm water discharges detected by Copermittee staff or contractors	20
Number of non-storm water discharges investigated by the Copermittee	26
Number of sources of non-storm water discharges identified	26
Number of non-storm water discharges eliminated	26
Number of sources of illicit discharges or connections identified	14
Number of illicit discharges or connections eliminated	14
Number of enforcement actions issued	2
Number of escalated enforcement actions issued	0

V. DEVELOPMENT PLANNING PROGRAM

Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

Number of proposed development projects in review	33
Number of Priority Development Projects in review	2
Number of Priority Development Projects approved	0
Number of approved Priority Development Projects exempt from any BMP requirements	0
Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	0

Number of completed Priority Development Projects in inventory	2
Number of high priority Priority Development Project structural BMP inspections	2
Number of Priority Development Project structural BMP violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

FY 2013-2014

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

Number of construction sites in inventory	41
Number of active construction sites in inventory	21
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period	20
Number of construction site inspections	387
Number of construction site violations	2
Number of enforcement actions issued	2
Number of escalated enforcement actions issued	0

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	24	84	1	37
Number of existing development inspections	264	924	11	407
Number of follow-up inspections	0	0	0	0
Number of violations	1	51	0	3
Number of enforcement actions issued	1	51	0	3
Number of escalated enforcement actions issued	0	0	0	0

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES ☐ NO[2] ☒

X. CERTIFICATION

I ☒ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	Date: 10/8/2014
Scott Huth	City Manager
Print Name	Title
858-755-9313	Citymanager@delmar.ca.us
Telephone Number	Email

[1] The City of Del Mar has selected to use the new JRMP Annual Report format (as allowed in Order No. R9-2013-0001), resulting in the "No" response on the annual report form. However, implementation and compliance has been met under Order No. R9-2007-0001. Ordinances and program components will be updated in accordance with Order R9-2013-0001 no later than June 2015.

[2] A fiscal analysis that complies with Order R9-2007-0001 has been attached. The City will be updating its tracking systems to perform and report fiscal analyses in compliance with Order R9-2013-0001 no later than June 2015.

1. FISCAL ANALYSIS

1.1 JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM IMPLEMENTATION

This section of the Jurisdictional Runoff Management Program (JRMP) Annual Report provides a fiscal analysis of the City's stormwater management programs. On May 8, 2013 the RWQCB adopted a revised Municipal Permit, Order No. R9-2013-0001, however, during this transitional period the City of Del Mar continued to develop its fiscal analysis according to Section G of the previous Municipal Permit, Order No. R9-2007-0001.

On January 29, 2009, the San Diego Municipal Copermittees adopted the "Standardized Fiscal Method and Format" which provides a model for the City of Del Mar and other Copermittees to perform the review and annual reporting as required in Order R9-2007-0001, Section G. This methodology and reporting format became effective in January 31, 2010. The "Standardized Fiscal Analysis Method and Format" (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k) and J.1.c(1)(d) of the Municipal Permit. The Fiscal Analysis Method document was submitted to the San Diego RWQCB on January 31, 2009, as Attachment 1 of the "Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009."

The City of Del Mar is utilizing the format and guidelines described in the Fiscal Analysis Method for this reporting period, FY 2013-2014.

1.1.1 Clean Water Program Budget

The City of Del Mar's Clean Water Program is a multi-departmental program, funded as an enterprise fund in the City's Annual Budget. Enterprise funds account for operations that are financed and operated in a manner similar to private businesses, with the costs of providing the services recovered largely through user fees. Fund 55 ("The Clean Water Fund"), is one of three (3) enterprise funds in the City's budget, and was added to the City's budget in Fiscal Year 2004 to account for the mandated costs of the City's responsibilities in order to comply with the Municipal Permit.

The City of Del Mar Operating and Capital Improvement Budgets for Fiscal Years 2013-2014 and 2014-2015were presented to the Del Mar City Council on June 3, 2013. The budget was formally adopted during the same meeting.

For the Fiscal Year 2013-2014 reporting period, the final amended budget for Fund 55 totaled $471,460. **Table 1-1** below provides a breakdown of program budget by major budget category for Fiscal Year 2013-2014.

Table 1-1: Budget Summary – Clean Water Fund 55

Fund Account		Adopted Budget Fiscal Year 2013-2014	Description/Comments
55-5530	Clean Water Planning	44,220	Active enforcement of Clean water regulations including project plan review, permitting, construction monitoring and plan review of BMPs.
55-5536	Clean Water Code Enforcement	23,000	Active in-field enforcement of clean water regulations, including response to resident complaints.
55-5539	Clean Water Program Management	242,500	All clean water program management and reporting activities, fees to agencies, and interaction with regional and watershed Copermittee groups.
55-5840	Public Works (General)	161,740	Provides for administration and general support for all clean water programs for property and facilities, including supervision of maintenance staff.
Total Clean Water Program Budget – Fund 55		**$471,460**	–

1.1.2 Fiscal Analysis Methods

The City of Del Mar used the format and guidelines included in the Fiscal Analysis Method for reporting purposes; however, given the City's financial accounting methods, a few modifications were necessary. These adjustments are described below.

1.1.3 Fiscal Analysis Results

The City's Fiscal Year 2013-2014 jurisdictional (JRMP), watershed and regional projected expenditures for the implementation of the Municipal Permit requirements are summarized in **Table 1-2** below.

Table 1-2: Fiscal Year 2013-2014 Expenditure Summary by Program Component

Component Description	Fiscal Year 2013-2014 Projected Expenditures
Jurisdictional Component	
Administration	43,158
Development Planning	88,554
Construction	17,866
Municipal (Including Non-Emergency Fire Flows)	137,670
Industrial and Commercial	48,000
Residential, Education, and Public Participation	13,800
IDDE	4,600
Jurisdictional Total	**$353,648**
Watershed Component	
San Dieguito Watershed	43,225
Los Peñasquitos Watershed	43,225
Watershed Total	**$86,450**
Regional Component	
Total Copermittee Cost Share for Del Mar	31,363
Total Costs	**$471,460**

1.1.4 JRMP Expenditures

The City of Del Mar used the expenditure categories detailed in the Fiscal Analysis Method for jurisdictional reporting. However, due to the implementation overlap of some of the City's municipal permit components; it is difficult to separate out individual component costs. As a result, the expenditures for residential, education, and public participation are reported as one expenditure category. Additionally, since the City does not explicitly track expenditures by permit component for its budgeting purposes, in many cases estimated percentages were utilized to allocate expenditures into the appropriate municipal permit component categories.

A total of $471,460 was projected to be expended in Fiscal Year 2013-2014 for the implementation of JRMP activities. An overview of the expenditures reflected in JRMP activity components is described below.

Administration
Activities identified in this component represent labor and non-labor expenditures for materials, supplies, equipment, or tools that are not otherwise incorporated into other expenditure categories, general administrative functions (e.g., program planning, budgeting, staff supervision), and program assessment and reporting.

Development Planning
Activities identified in this component represent labor and non-labor expenditures related to issuance or oversight of permits or of plans (e.g., permit counter support, plan checks, permit or application processing), project planning and engineering (e.g. project design specifications, capital improvement projects).

Construction
Activities identified in this component represent labor and non-labor expenditures related to construction site inspections and enforcement.

Municipal
Activities identified in this component represent labor and non-labor expenditures related to maintenance inspections of streets, roads, catch basins and inlets, open channels, and the MS4, municipal facility inspections, street and parking lot sweeping, catch basins and inlets, open channels, and MS4 cleaning, and municipal BMP implementation. Since the City of Del Mar conducts all fire-fighting training outside of the City, and no non-emergency fire-fighting flows occurred during the reporting period, the City does not currently track expenditures relating to non-emergency fire-fighting flows. Any costs associated with preparing for these flows are included in the municipal component.

Industrial and Commercial
Activities identified in this component represent labor and non-labor expenditures related to evaluation and enforcement of program requirements at industrial and commercial sites or sources (e.g. routine inspections and complaint investigations).

Residential, Education, and Public Participation
Activities identified in these components represent labor and non-labor expenditures related to investigation and enforcement of residential areas or activities, staffing outreach events, development and production of outreach materials, and any expenditures associated with waste collection and recycling (e.g. household hazardous waste, used oil).

Illicit Discharge Detection and Elimination
Activities identified in this component represent labor and non-labor expenditures related to the identification and elimination of illicit discharges or connections, enforcing the City of Del Mar's storm water ordinance, and any expenditures related to monitoring programs (e.g. dry weather monitoring, coastal storm drain monitoring, special investigations, field or sampling equipment, materials and supplies).

1.1.5 Watershed Expenditures

The City of Del Mar used the expenditure categories (administration, watershed activities, cost share contribution, and other) detailed in the Fiscal Analysis Method for watershed reporting. The watershed expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees included in the watershed(s).

A total of $86,450 was projected to be expended in Fiscal Year 2014 for the implementation of watershed activities which primarily included the development of Water Quality Improvement Plans for the San Dieguito and Los Peñasquitos Watersheds.

1.1.6 Regional Expenditures

The City of Del Mar utilized the expenditure categories (administration, cost share contribution, regional activities, and other) detailed in the Fiscal Analysis Method for regional reporting. The regional expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees in the region. A total of $31,363 was projected to be expended in Fiscal Year 2014 for the implementation of regional activities and coordination.

1.1.7 Funding Sources

To ensure adequate funding for the Clean Water Program, the City uses a combination of user fees and general fund monies.

The City of Del Mar City Council created and adopted a user fee, called the Clean Water Fund Service Charge to offset the costs of the program. Initially, the rate was adopted to collect $100,000 of the estimated $300,000 for the program, with an escalator to achieve full cost recovery by 2009. Mid-way through the five-year schedule, on July 24, 2006, the California Supreme Court published a decision in the case of Bighorn-Desert View Water Agency v. Verjil (2006) 39 Cal. 4th 205, which held that consumption-based rates such as water and sewer rates are subject to the notice and hearing requirements of California Constitution, Article XIIID, Section 6 (commonly known as "Proposition 218"). Therefore, on January 22, 2007, and February 5, 2007, the Del Mar City Council held public hearings to receive written protests to comply with Proposition 218. No majority protest was received, and the Council ratified the previously approved five-year rate schedule, including the City's Clean Water Service Charge. However, the adopted rate increases did not account for the actual increases in the costs associated program requirements.

As an additional measure to obtain voter approval of the five-year rate schedule for the City's Clean Water Service Charge, the Council directed staff on April 2, 2007, to start the process to perform a mail ballot election procedure. During the process of researching the mail ballot election procedures and the current rates, it became apparent that the process would immediately need to be repeated to set the Fiscal Year 2010 rates and charges, since the current five-year rate schedule was due to expire in June of 2009. Due to the additional costs incurred in complying with the new requirements of the 2007 Permit, increases to the Clean Water Service Charge were proposed, including an annual rate escalator. All monies appropriated as part of the Clean Water Service Charge are directly identified for the Clean Water Program, and pursuant to law, may not be used by the City for any other purpose.

During the Fiscal Year 2009 reporting period, in compliance with Proposition 218, both the majority protest hearing and mail ballot process were conducted for the proposed increases. Both the ratification of the existing rate structure (required by Proposition 218), and the new rates, including the rate escalator, passed by more than 62%. As a result of the passage of the Clean Water Service Charge, the City will continue to have a secure funding source for the Clean Water Program, outside of general fund monies.

Based on current water allocations for the City of Del Mar, the projected revenues from the Clean Water Service Fee will be $365,860 (page 51 of city budget) for Fiscal Year 2013-2014.

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
CITY OF DEL MAR – ANNUAL REPORT FORM
FY 2014-2015

I. COPERMITTEE INFORMATION

Copermittee Name: City of Del Mar – Los Peñasquitos HU

Copermittee Primary Contact Name: Mikhail Ogawa

Copermittee Primary Contact Information:
Address: 1050 Camino Del Mar
City: Del Mar County: San Diego State: CA Zip: 92014
Telephone: (858) 755-9313 Fax: (858) 755-2794 Email: Mikhail@mogawaeng.com

II. LEGAL AUTHORITY

Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES[1]	☐
	NO	☒
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES	☒
	NO	☐

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE

Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒

Number of non-storm water discharges reported by the public	5
Number of non-storm water discharges detected by Copermittee staff or contractors	2
Number of non-storm water discharges investigated by the Copermittee	7
Number of sources of non-storm water discharges identified	7
Number of non-storm water discharges eliminated	7
Number of sources of illicit discharges or connections identified	3
Number of illicit discharges or connections eliminated	3
Number of enforcement actions issued	1
Number of escalated enforcement actions issued	0

V. DEVELOPMENT PLANNING PROGRAM

Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

Number of proposed development projects in review	8
Number of Priority Development Projects in review	0
Number of Priority Development Projects approved	0
Number of approved Priority Development Projects exempt from any BMP requirements	0
Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	1

Number of completed Priority Development Projects in inventory	1
Number of high priority Priority Development Project structural BMP inspections	0
Number of Priority Development Project structural BMP violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

FY 2014-2015

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

Number of construction sites in inventory	8
Number of active construction sites in inventory	3
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period	5
Number of construction site inspections	83
Number of construction site violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	1	1	0	12
Number of existing development inspections	11	11	0	132
Number of follow-up inspections	0	0	0	0
Number of violations	0	0	0	2
Number of enforcement actions issued	0	0	0	2
Number of escalated enforcement actions issued	0	0	0	0

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES ☐ NO[2] ☒

X. CERTIFICATION

I ☒ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	Date: 10/26/2015
Scott Huth Print Name	City Manager Title
858-755-9313 Telephone Number	Citymanager@delmar.ca.us Email

[1] The City of Del Mar has selected to use the new JRMP Annual Report format (as allowed in Order No. R9-2013-0001), resulting in the "No" response on the annual report form. However, implementation and compliance has been met under Order No. R9-2007-0001. Ordinances and program components were updated in accordance with Order R9-2013-0001 in June 2015.

[2] A fiscal analysis that complies with Order R9-2007-0001 has been attached. The City will perform and report fiscal analyses in compliance with Order R9-2013-0001 in FY 2015-2016.

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
CITY OF DEL MAR – ANNUAL REPORT FORM
FY 2014-2015

I. COPERMITTEE INFORMATION

Copermittee Name: **City of Del Mar – San Dieguito HU**

Copermittee Primary Contact Name: **Mikhail Ogawa**

Copermittee Primary Contact Information:
Address: **1050 Camino Del Mar**
City: **Del Mar** County: **San Diego** State: **CA** Zip: **92014**
Telephone: **(858) 755-9313** Fax: **(858) 755-2794** Email: **Mikhail@mogawaeng.com**

II. LEGAL AUTHORITY

Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES	☒
	NO	☐

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE

Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒

Number of non-storm water discharges reported by the public	22
Number of non-storm water discharges detected by Copermittee staff or contractors	28
Number of non-storm water discharges investigated by the Copermittee	50
Number of sources of non-storm water discharges identified	50
Number of non-storm water discharges eliminated	50
Number of sources of illicit discharges or connections identified	17
Number of illicit discharges or connections eliminated	17
Number of enforcement actions issued	7
Number of escalated enforcement actions issued	0

V. DEVELOPMENT PLANNING PROGRAM

Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES	☐
	NO[1]	☒
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES	☐
	NO[1]	☒
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

Number of proposed development projects in review	62
Number of Priority Development Projects in review	2
Number of Priority Development Projects approved	0
Number of approved Priority Development Projects exempt from any BMP requirements	0
Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	1

Number of completed Priority Development Projects in inventory	1
Number of high priority Priority Development Project structural BMP inspections	22
Number of Priority Development Project structural BMP violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

FY 2014-2015

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

Number of construction sites in inventory	48
Number of active construction sites in inventory	26
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period	22
Number of construction site inspections	500
Number of construction site violations	5
Number of enforcement actions issued	5
Number of escalated enforcement actions issued	0

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	24	82	0	37
Number of existing development inspections	264	902	0	407
Number of follow-up inspections	0	0	0	0
Number of violations	0	60	0	3
Number of enforcement actions issued	0	60	0	3
Number of escalated enforcement actions issued	0	0	0	0

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES ☐ NO[1] ☒

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES ☐ NO[2] ☒

X. CERTIFICATION

I ☒ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Scott M. Huth	10/26/2015
Signature	Date
Scott Huth	City Manager
Print Name	Title
858-755-9313	Citymanager@delmar.ca.us
Telephone Number	Email

[1] The City of Del Mar has selected to use the new JRMP Annual Report format (as allowed in Order No. R9-2013-0001), resulting in the "No" response on the annual report form. However, implementation and compliance has been met under Order No. R9-2007-0001. Ordinances and program components will be updated in accordance with Order R9-2013-0001 no later than June 2015.

[2] A fiscal analysis that complies with Order R9-2007-0001 has been attached. The City will perform and report fiscal analyses in compliance with Order R9-2013-0001 in FY 2015-2016.

1. Fiscal Analysis

1.1 Jurisdictional Runoff Management Program Implementation

This section of the Jurisdictional Runoff Management Program (JRMP) Annual Report provides a fiscal analysis of the City's stormwater management programs. On May 8, 2013 the RWQCB adopted a revised Municipal Permit, Order No. R9-2013-0001, however, during this transitional period the City of Del Mar continued to develop its fiscal analysis according to Section G of the previous Municipal Permit, Order No. R9-2007-0001.

On January 29, 2009, the San Diego Municipal Copermittees adopted the "Standardized Fiscal Method and Format" which provides a model for the City of Del Mar and other Copermittees to perform the review and annual reporting as required in Order R9-2007-0001, Section G. This methodology and reporting format became effective in January 31, 2010. The "Standardized Fiscal Analysis Method and Format" (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k) and J.1.c(1)(d) of the Municipal Permit. The Fiscal Analysis Method document was submitted to the San Diego RWQCB on January 31, 2009, as Attachment 1 of the "Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009."

The City of Del Mar is utilizing the format and guidelines described in the Fiscal Analysis Method for this reporting period, FY 2014-201.

1.1.1 Clean Water Program Budget

The City of Del Mar's Clean Water Program is a multi-departmental program, funded as an enterprise fund in the City's Annual Budget. Enterprise funds account for operations that are financed and operated in a manner similar to private businesses, with the costs of providing the services recovered largely through user fees. Fund 55 ("The Clean Water Fund"), is one of three (3) enterprise funds in the City's budget, and was added to the City's budget in Fiscal Year 2004 to account for the mandated costs of the City's responsibilities in order to comply with the Municipal Permit.

The City of Del Mar Operating and Capital Improvement Budgets for Fiscal Years 2013-2014 and 2014-2015 were presented to the Del Mar City Council on June 3, 2013. The budget was formally adopted during the same meeting.

For the Fiscal Year 2014-2015 reporting period, the final amended budget for Fund 55 totaled $474,570. **Table 1-1** below provides a breakdown of program budget by major budget category for Fiscal Year 2014-2015.

Table 1-1: Budget Summary – Clean Water Fund 55

Fund Account		Adopted Budget Fiscal Year 2014-2015	Description/Comments
55-5530	Clean Water Planning	45,150	Active enforcement of Clean water regulations including project plan review, permitting, construction monitoring and plan review of BMPs.
55-5536	Clean Water Code Enforcement	23,750	Active in-field enforcement of clean water regulations, including response to resident complaints.
55-5539	Clean Water Program Management	242,750	All clean water program management and reporting activities, fees to agencies, and interaction with regional and watershed Copermittee groups.
55-5840	Public Works (General)	162,920	Provides for administration and general support for all clean water programs for property and facilities, including supervision of maintenance staff.
Total Clean Water Program Budget – Fund 55		**$474,570**	–

1.1.2 Fiscal Analysis Methods

The City of Del Mar used the format and guidelines included in the Fiscal Analysis Method for reporting purposes; however, given the City's financial accounting methods, a few modifications were necessary. These adjustments are described below.

1.1.3 Fiscal Analysis Results

The City's Fiscal Year 2014-2015 jurisdictional (JRMP), watershed and regional projected expenditures for the implementation of the Municipal Permit requirements are summarized in **Table 1-2** below.

Table 1-2: Fiscal Year 2014-2015 Expenditure Summary by Program Component

Component Description	Fiscal Year 2014-2015 Projected Expenditures
Jurisdictional Component	
Administration	42,245
Development Planning	92,205
Construction	18,295
Municipal (Including Non-Emergency Fire Flows)	138,800
Industrial and Commercial	50,500
Residential, Education, and Public Participation	14,250
IDDE	4,750
Jurisdictional Total	**$361,045**
Watershed Component	
San Dieguito Watershed	44,250
Los Peñasquitos Watershed	44,250
Watershed Total	**$88,500**
Regional Component	
Total Copermittee Cost Share for Del Mar	25,025
Total Costs	**$474,570**

1.1.4 JRMP Expenditures

The City of Del Mar used the expenditure categories detailed in the Fiscal Analysis Method for jurisdictional reporting. However, due to the implementation overlap of some of the City's municipal permit components; it is difficult to separate out individual component costs. As a result, the expenditures for residential, education, and public participation are reported as one expenditure category. Additionally, since the City does not explicitly track expenditures by permit component for its budgeting purposes, in many cases estimated percentages were utilized to allocate expenditures into the appropriate municipal permit component categories.

A total of $474,570 was projected to be expended in Fiscal Year 2014-2015 for the implementation of JRMP activities. An overview of the expenditures reflected in JRMP activity components is described below.

Administration
Activities identified in this component represent labor and non-labor expenditures for materials, supplies, equipment, or tools that are not otherwise incorporated into other expenditure categories, general administrative functions (e.g., program planning, budgeting, staff supervision), and program assessment and reporting.

Development Planning
Activities identified in this component represent labor and non-labor expenditures related to issuance or oversight of permits or of plans (e.g., permit counter support, plan checks, permit or application processing), project planning and engineering (e.g. project design specifications, capital improvement projects).

Construction
Activities identified in this component represent labor and non-labor expenditures related to construction site inspections and enforcement.

Municipal
Activities identified in this component represent labor and non-labor expenditures related to maintenance inspections of streets, roads, catch basins and inlets, open channels, and the MS4, municipal facility inspections, street and parking lot sweeping, catch basins and inlets, open channels, and MS4 cleaning, and municipal BMP implementation. Since the City of Del Mar conducts all fire-fighting training outside of the City, and no non-emergency fire-fighting flows occurred during the reporting period, the City does not currently track expenditures relating to non-emergency fire-fighting flows. Any costs associated with preparing for these flows are included in the municipal component.

Industrial and Commercial
Activities identified in this component represent labor and non-labor expenditures related to evaluation and enforcement of program requirements at industrial and commercial sites or sources (e.g. routine inspections and complaint investigations).

Residential, Education, and Public Participation
Activities identified in these components represent labor and non-labor expenditures related to investigation and enforcement of residential areas or activities, staffing outreach events, development and production of outreach materials, and any expenditures associated with waste collection and recycling (e.g. household hazardous waste, used oil).

Illicit Discharge Detection and Elimination
Activities identified in this component represent labor and non-labor expenditures related to the identification and elimination of illicit discharges or connections, enforcing the City of Del Mar's storm water ordinance, and any expenditures related to monitoring programs (e.g. dry weather monitoring, coastal storm drain monitoring, special investigations, field or sampling equipment, materials and supplies).

1.1.5 Watershed Expenditures

The City of Del Mar used the expenditure categories (administration, watershed activities, cost share contribution, and other) detailed in the Fiscal Analysis Method for watershed reporting. The watershed expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees included in the watershed(s).

A total of $88,500 was projected to be expended in Fiscal Year 2015 for the implementation of watershed activities which primarily included the development of Water Quality Improvement Plans for the San Dieguito and Los Peñasquitos Watersheds.

1.1.6 Regional Expenditures

The City of Del Mar utilized the expenditure categories (administration, cost share contribution, regional activities, and other) detailed in the Fiscal Analysis Method for regional reporting. The regional expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees in the region. A total of $25,025 was projected to be expended in Fiscal Year 2015 for the implementation of regional activities and coordination.

1.1.7 Funding Sources

To ensure adequate funding for the Clean Water Program, the City uses a combination of user fees and general fund monies.

The City of Del Mar City Council created and adopted a user fee, called the Clean Water Fund Service Charge to offset the costs of the program. Initially, the rate was adopted to collect $100,000 of the estimated $300,000 for the program, with an escalator to achieve full cost recovery by 2009. Mid-way through the five-year schedule, on July 24, 2006, the California Supreme Court published a decision in the case of Bighorn-Desert View Water Agency v. Verjil (2006) 39 Cal. 4th 205, which held that consumption-based rates such as water and sewer rates are subject to the notice and hearing requirements of California Constitution, Article XIIID, Section 6 (commonly known as "Proposition 218"). Therefore, on January 22, 2007, and February 5, 2007, the Del Mar City Council held public hearings to receive written protests to comply with Proposition 218. No majority protest was received, and the Council ratified the previously approved five-year rate schedule, including the City's Clean Water Service Charge. However, the adopted rate increases did not account for the actual increases in the costs associated program requirements.

As an additional measure to obtain voter approval of the five-year rate schedule for the City's Clean Water Service Charge, the Council directed staff on April 2, 2007, to start the process to perform a mail ballot election procedure. During the process of researching the mail ballot election procedures and the current rates, it became apparent that the process would immediately need to be repeated to set the Fiscal Year 2010 rates and charges, since the current five-year rate schedule was due to expire in June of 2009. Due to the additional costs incurred in complying with the new requirements of the 2007 Permit, increases to the Clean Water Service Charge were proposed, including an annual rate escalator. All monies appropriated as part of the Clean Water Service Charge are directly identified for the Clean Water Program, and pursuant to law, may not be used by the City for any other purpose.

During the Fiscal Year 2009 reporting period, in compliance with Proposition 218, both the majority protest hearing and mail ballot process were conducted for the proposed increases. Both the ratification of the existing rate structure (required by Proposition 218), and the new rates, including the rate escalator, passed by more than 62%. As a result of the passage of the Clean Water Service Charge, the City will continue to have a secure funding source for the Clean Water Program, outside of general fund monies.

Based on current water allocations for the City of Del Mar, the projected revenues from the Clean Water Service Fee will be $376,640 (page 83 of city budget) for Fiscal Year 2014-2015.

City of Del Mar

TO	Scott Huth, City Manager
FROM	Mikhail Ogawa, Clean Water Manager
CC	Kathleen A. Garcia, Planning and Community Development Director
DATE	January 5, 2017
SUBJECT	**City of Del Mar FY 2016 Jurisdictional Runoff Management Plan (JRMP) Annual Report Forms**

Attached you will find the Fiscal Year 2016 JRMP Annual Report forms for the San Dieguito and Los Peñasquitos watersheds. All of the data collected by various departments within the City during FY 2016 have been separated by watershed per the reporting requirements. Please note that we have the back-up data to support the Annual Report forms on file in case of an audit by the Regional Water Quality Control Board (Regional Board) or data request.

The Clean Water Program asks for your review and signature for the JRMP Annual Report forms. These forms will need to be signed first to be incorporated into the Water Quality Improvement Plan (WQIP) Annual Report. Once the WQIP Annual Report is finalized, we will be requesting additional signatures for the certification. The Annual Report forms are due to the Regional Board as part of the Water Quality Improvement Plan Annual Reports no later than January 31, 2017.

Thank you for your time, and please let us know if you have any questions or comments on the updated forms or the new reporting process.

1050 Camino Del Mar, Del Mar, California 92014-2698. Telephone: (858) 755-9313.Fax: (858) 755-2794
www.delmar.ca.us

Commercial Property Issues and Violations Fiscal Year 2015-2016

During Fiscal Year 2015-2016, the Clean Water Program performed 11 Existing Development inspections. These inspections incorporated the patrol of 156 Municipal, Commercial, Industrial, and Residential (Multi-Family Residential) facilities or areas and yielded the observation of 61 issues at Commercial properties within the City of Del Mar. In addition to the 61 Commercial issues observed from Existing Development patrols, four (4) additional issues were identified at Commercial areas during the investigation of urban runoff reports. All 65 observations are listed below and detail the facility name, number of issues observed, and specific issues observed during patrols/investigations. All problems noted below were issued enforcement action by means of education letters. In addition, the facilities with bolded issues observed were provided with Notice of Violations and citations for severity of the issue or for repeat issues with no resolutions.

Facility Name	Number of Issues Observed	Issues Observed
En Fuego Cantina & Grill	9	Dumpster lids open Grease stains on concrete Trash overflowing from dumpster **Discharge/grease staining**
Del Mar Plaza	7	Dumpster lids open Observation or evidence offsite discharge to MS4 Excessive trash around property Grease bin lid open Irrigation runoff from property Secondary containment missing or inadequate Grease stains on concrete **Unauthorized discharge from fire system testing discharging into storm drain**
Canterbury Del Mar	5	Excessive trash around property Grease stains on concrete Dumpster lids open
1201 Camino del Mar (Mixed-Use Complex)	4	Excessive trash around property Dumpster lids open Trash overflowing from dumpster Grease stains on concrete
Rusty Surfboards	4	Dumpster lids open Excessive trash around property Leaking hose Uncontained hosing leading to runoff Secondary containment missing or inadequate Observation or evidence offsite discharge to MS4
Sbicca American Bistro	4	Trash overflowing from dumpster Excessive trash around property Dumpster lids open Evidence of power washing

Facility Name	Number of Issues Observed	Issues Observed
915 Camino del Mar (Office Complex)	3	Excessive build-up of leaves and/or sediment Observation or evidence offsite discharge to MS4 Trash overflowing from dumpster Excessive trash around property
Board & Brew	3	Grease stains on concrete Trash overflowing from dumpster
1110 Camino Del Mar (Mixed-Use Complex)	2	Secondary containment missing or inadequate Dumpster lids open
2002 Jimmy Durante Office Building (Office Complex)	2	Dumpster lids open Excessive trash around property
Charnholm (General Retail)	2	Leaking Hose Excessive trash around property
Zel's Del Mar	2	Grease stains on concrete
1202 Camino del Mar (Mixed-Use Complex)	1	Irrigation runoff from property
1226-1230 Camino Del Mar (Office Complex)	1	Leaking Hose
1302 Camino Del Mar (General Retail)	1	Irrigation runoff from property
1349 Camino Del Mar (Medical Office Complex)	1	Irrigation runoff from property Excessive build-up of leaves and/or sediment
1431 Camino Del Mar (Mixed-Use Complex)	1	Irrigation runoff from property
240-244 9th Street (Office Complex)	1	Irrigation runoff from property
319 12th street (General Retail)	1	Irrigation runoff from property
910 Camino Del Mar (Mixed-Use Complex)	1	Irrigation runoff from property
Bully's North	1	Observation or evidence offsite discharge to MS4
Café Secret	1	Power washing of sidewalk/patio area
Clarion Inn Del Mar	1	Unknown discharge from drainage source on property
Del Mar Automotive	1	Secondary containment missing or inadequate
Del Mar Pizza	1	Dumpster lids open
Eucalyptus Stoneware	1	Excessive trash around property
Southfair Office Building	1	Excessive trash around property
St. Peter's Episcopal Church	1	Sediment discharge
Stratford Square	1	Dumpster lids open
The Brigantine	1	Dumpster lids open Grease bin lid open

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
CITY OF DEL MAR – ANNUAL REPORT FORM
FY 2015-2016

I. COPERMITTEE INFORMATION

Copermittee Name: **City of Del Mar – San Dieguito WMA**

Copermittee Primary Contact Name: **Mikhail Ogawa**

Copermittee Primary Contact Information:
Address: **1050 Camino Del Mar**
City: **Del Mar** County: **San Diego** State: **CA** Zip: **92014**
Telephone: **(858) 755-9313** Fax: **(858) 755-2794** Email: **Mikhail@mogawaeng.com**

II. LEGAL AUTHORITY

Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES NO	☒ ☐
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES NO	☒ ☐

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE

Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES[1] NO	☒ ☐
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES NO	☒ ☐

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES[2] NO	☒ ☐

Number of non-storm water discharges reported by the public	18
Number of non-storm water discharges detected by Copermittee staff or contractors	22
Number of non-storm water discharges investigated by the Copermittee	40
Number of sources of non-storm water discharges identified	40
Number of non-storm water discharges eliminated	40
Number of sources of illicit discharges or connections identified	8
Number of illicit discharges or connections eliminated	8
Number of enforcement actions issued	6
Number of escalated enforcement actions issued	3

V. DEVELOPMENT PLANNING PROGRAM

Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES NO	☒ ☐
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES NO	☒ ☐
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES NO	☒ ☐

Number of proposed development projects in review	101
Number of Priority Development Projects in review	2
Number of Priority Development Projects approved	1
Number of approved Priority Development Projects exempt from any BMP requirements	1
Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	0

Number of completed Priority Development Projects in inventory	2
Number of high priority Priority Development Project structural BMP inspections	22
Number of Priority Development Project structural BMP violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

FY 2015-2016

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES ☒ NO ☐

Number of construction sites in inventory	52
Number of active construction sites in inventory	41
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period	11
Number of construction site inspections	408
Number of construction site violations	22
Number of enforcement actions issued	22
Number of escalated enforcement actions issued	1

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES ☒ NO ☐

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	24	81	0	37
Number of existing development inspections	264	891	0	407
Number of follow-up inspections	0	0	0	0
Number of violations	1	61	0	3
Number of enforcement actions issued	1	61	0	3
Number of escalated enforcement actions issued	0	2	0	0

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES ☒ NO ☐
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES ☒ NO ☐

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES ☒ NO ☐

X. CERTIFICATION

I ☒ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	Date 1/9/2017
Scott Huth Print Name	City Manager Title
858-755-9313 Telephone Number	SHUTH@DELMAR.CA.US Email

[1] The City of Del Mar was required to submit an updated JRMP with the WQIP and post it to the Regional Clearinghouse portal.
[2] The timeframe used for the Illicit Discharge Detection and Elimination component of this JRMP Annual Report matches the timeframe used in the WQIP Annual Report (10/1/15-9/30/16).

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
CITY OF DEL MAR – ANNUAL REPORT FORM
FY 2015-2016

I. COPERMITTEE INFORMATION

Copermittee Name: **City of Del Mar – Los Peñasquitos**

Copermittee Primary Contact Name: **Mikhail Ogawa**

Copermittee Primary Contact Information:
Address: **1050 Camino Del Mar**
City: **Del Mar** County: **San Diego** State: **CA** Zip: **92014**
Telephone: **(858) 755-9313** Fax: **(858) 755-2794** Email: **Mikhail@mogawaeng.com**

II. LEGAL AUTHORITY

Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES NO	☒ ☐
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES NO	☒ ☐

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE

Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES[1] NO	☒ ☐
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES NO	☒ ☐

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES[2] NO	☒ ☐

Number of non-storm water discharges reported by the public	3
Number of non-storm water discharges detected by Copermittee staff or contractors	2
Number of non-storm water discharges investigated by the Copermittee	5
Number of sources of non-storm water discharges identified	5
Number of non-storm water discharges eliminated	5
Number of sources of illicit discharges or connections identified	2
Number of illicit discharges or connections eliminated	2
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

V. DEVELOPMENT PLANNING PROGRAM

Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES NO	☒ ☐
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES NO	☒ ☐
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES NO	☒ ☐

Number of proposed development projects in review	11
Number of Priority Development Projects in review	0
Number of Priority Development Projects approved	0
Number of approved Priority Development Projects exempt from any BMP requirements	0
Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	0

Number of completed Priority Development Projects in inventory	1
Number of high priority Priority Development Project structural BMP inspections	11
Number of Priority Development Project structural BMP violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

FY 2015-2016

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES ☒ NO ☐

Number of construction sites in inventory	10
Number of active construction sites in inventory	6
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period	4
Number of construction site inspections	72
Number of construction site violations	4
Number of enforcement actions issued	4
Number of escalated enforcement actions issued	0

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES ☒ NO ☐

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	1	1	0	12
Number of existing development inspections	11	11	0	132
Number of follow-up inspections	0	0	0	0
Number of violations	0	0	0	4
Number of enforcement actions issued	0	0	0	4
Number of escalated enforcement actions issued	0	0	0	0

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES ☒ NO ☐
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES ☒ NO ☐

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES ☒ NO[2] ☐

X. CERTIFICATION

I ☒ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	Date 1/9/2017
Scott Huth	City Manager
Print Name	Title
858-755-9313	Citymanager@delmar.ca.us
Telephone Number	Email

[1] The City of Del Mar was required to submit an updated JRMP with the WQIP and post it to the Regional Clearinghouse portal.
[2] The timeframe used for the Illicit Discharge Detection and Elimination component of this JRMP Annual Report matches the timeframe used in the WQIP Annual Report (10/1/15-9/30/16).

1. FISCAL ANALYSIS

1.1 JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM IMPLEMENTATION

This section of the Jurisdictional Runoff Management Program (JRMP) Annual Report provides a fiscal analysis of the City's stormwater management programs. On May 8, 2013 the RWQCB adopted a revised Municipal Permit, Order No. R9-2013-0001, however, during this transitional period the City of Del Mar continued to develop its fiscal analysis according to Section G of the previous Municipal Permit, Order No. R9-2007-0001.

On January 29, 2009, the San Diego Municipal Copermittees adopted the "Standardized Fiscal Method and Format" which provides a model for the City of Del Mar and other Copermittees to perform the review and annual reporting as required in Order R9-2007-0001, Section G. This methodology and reporting format proved to be an effective model for reporting on City expenditures, and for consistency, the City of Del Mar will continue to use the format for this reporting period FY 2015-2016. The City, however, recognizes the additional elements required to be included in the fiscal analysis as specified in Order No. R9-2013-001 Section E.8, and has included those components in the year's report.

1.1.1 Clean Water Program Budget

The City of Del Mar's Clean Water Program is a multi-departmental program, funded as an enterprise fund in the City's Annual Budget. Enterprise funds account for operations that are financed and operated in a manner similar to private businesses, with the costs of providing the services recovered largely through user fees. Fund 55 ("The Clean Water Fund"), is one of three (3) enterprise funds in the City's budget, and was added to the City's budget in Fiscal Year 2004 to account for the mandated costs of the City's responsibilities in order to comply with the Municipal Permit. The budget for the City of Del Mar has the appropriate funds allocated to meet the requirements of Permit 2013-0001, including any development, implementation, and enforcement activities required.

The City of Del Mar Operating and Capital Improvement Budgets for Fiscal Years 2015-2016 and 2016-2017 were presented to the Del Mar City Council on June 1, 2015. The budget was formally adopted during the same meeting.

For the Fiscal Year 2015-2016 reporting period, the final amended budget for Fund 55 totaled $550,670. **Table 1-1** below provides a breakdown of program budget by major budget category for Fiscal Year 2015-2016.

Table 1-1: Budget Summary – Clean Water Fund 55

Fund Account		Adopted Budget Fiscal Year 2015-2016	Description/Comments
55-5530	Clean Water Planning	45,700	Active enforcement of clean water regulations including project plan review, permitting, construction monitoring and plan review of BMPs.
55-5536	Clean Water Code Enforcement	24,830	Active in-field enforcement of clean water regulations, including response to resident complaints.
55-5539	Clean Water Program Management	268,000	All clean water program management and reporting activities, fees to agencies, and interaction with regional and watershed Copermittee groups.
55-5840	Public Works (General)	212,140	Provides for administration and general support for all clean water programs for property and facilities, including supervision of maintenance staff.
Total Clean Water Program Budget – Fund 55		**$550,670**	–

1.1.2 Fiscal Analysis Methods

The City of Del Mar used the format and guidelines included in the Fiscal Analysis Method for reporting purposes; however, given the City's financial accounting methods, a few modifications were necessary. These adjustments are described below.

1.1.3 Fiscal Analysis Results

The City's Fiscal Year 2015-2016 jurisdictional, watershed, and regional projected expenditures for the implementation of the Municipal Permit requirements are summarized in **Table 1-2** below.

Table 1-2: Fiscal Year 2015-2016 Expenditure Summary by Program Component

Component Description	Fiscal Year 2015-2016 Projected Expenditures
Jurisdictional Component	
Administration	60,883
Development Planning	42,690
Construction	29,376
Municipal (Including Non-Emergency Fire Flows)	195,510
Industrial and Commercial	10,700
Residential, Education, and Public Participation	51,278
IDDE	37,066
Jurisdictional Total	**$427,503**
Watershed Component	
San Dieguito Watershed	47,975
Los Peñasquitos Watershed	37,275
Watershed Total	**$85,250**
Regional Component	
Total Copermittee Cost Share for Del Mar	37,918
Total Costs	**$550,670**

1.1.4 JRMP Expenditures

The City of Del Mar used the expenditure categories detailed in the Fiscal Analysis Method for jurisdictional reporting. However, due to the implementation overlap of some of the City's municipal permit components; it is difficult to separate out individual component costs. As a result, the expenditures for residential, education, and public participation are reported as one expenditure category. Additionally, since the City does not explicitly track expenditures by permit component for its budgeting purposes, in many cases estimated percentages were utilized to allocate expenditures into the appropriate municipal permit component categories.

A total of $550,670 was projected to be expended in Fiscal Year 2015-2016 for the implementation of JRMP activities. An overview of the expenditures reflected in JRMP activity component is described below.

Administration
Activities identified in this component represent labor and non-labor expenditures for materials, supplies, equipment, or tools that are not otherwise incorporated into other expenditure categories, general administrative functions (e.g., program planning, budgeting, staff supervision), and program assessment and reporting.

Development Planning
Activities identified in this component represent labor and non-labor expenditures related to issuance or oversight of permits or of plans (e.g., permit counter support, plan checks, permit or application processing), project planning and engineering (e.g. project design specifications, capital improvement projects).

Construction
Activities identified in this component represent labor and non-labor expenditures related to construction site inspections and enforcement.

Municipal
Activities identified in this component represent labor and non-labor expenditures related to maintenance inspections of streets, roads, catch basins and inlets, open channels, and the MS4, municipal facility inspections, street and parking lot sweeping, catch basins and inlets, open channels, and MS4 cleaning, and municipal BMP implementation. Since the City of Del Mar conducts all fire-fighting training outside of the City, and no non-emergency fire-fighting flows occurred during the reporting period, the City does not currently track expenditures relating to non-emergency fire-fighting flows. Any costs associated with preparing for these flows are included in the municipal component.

Industrial and Commercial
Activities identified in this component represent labor and non-labor expenditures related to evaluation and enforcement of program requirements at industrial and commercial sites or sources (e.g. routine inspections and complaint investigations).

Residential, Education, and Public Participation
Activities identified in these components represent labor and non-labor expenditures related to investigation and enforcement of residential areas or activities, staffing outreach events, development and production of outreach materials, and any expenditures associated with waste collection and recycling (e.g. household hazardous waste, used oil).

Illicit Discharge Detection and Elimination
Activities identified in this component represent labor and non-labor expenditures related to the identification and elimination of illicit discharges or connections, enforcing the City of Del Mar's storm water ordinance, and any expenditures related to monitoring programs (e.g. dry weather monitoring, coastal storm drain monitoring, special investigations, field or sampling equipment, materials and supplies).

1.1.5 Watershed Expenditures

The City of Del Mar used the expenditure categories (administration, watershed activities, cost share contribution, and other) detailed in the Fiscal Analysis Method for watershed reporting. The watershed expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees included in the watershed(s).

A total of $85,250 was projected to be expended in Fiscal Year 2015-2016 for the implementation of planned strategies for the San Dieguito and Los Peñasquitos Watersheds.

1.1.6 Regional Expenditures

The City of Del Mar utilized the expenditure categories (administration, cost share contribution, regional activities, and other) detailed in the Fiscal Analysis Method for regional reporting. The regional expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees in the region. A total of $37,918 was projected to be expended in Fiscal Year 2015-2016 for the implementation of regional activities and coordination.

1.1.7 Funding Sources

To ensure adequate funding for the Clean Water Program, the City uses a combination of user fees and general fund monies.

The City of Del Mar City Council created and adopted a user fee, called the Clean Water Fund Service Charge to offset the costs of the program. Initially, the rate was adopted to collect $100,000 of the estimated $300,000 for the program, with an escalator to achieve full cost recovery by 2009. Mid-way through the five-year schedule, on July 24, 2006, the California Supreme Court published a decision in the case of Bighorn-Desert View Water Agency v. Verjil (2006) 39 Cal. 4th 205, which held that consumption-based rates such as water and sewer rates are subject to the notice and hearing requirements of California Constitution, Article XIIID, Section 6 (commonly known as "Proposition 218"). Therefore, on January 22, 2007, and February 5, 2007, the Del Mar City Council held public hearings to receive written protests to comply with Proposition 218. No majority protest was received, and the Council ratified the previously approved five-year rate schedule, including the City's Clean Water Service Charge. However, the adopted rate increases did not account for the actual increases in the costs associated program requirements.

As an additional measure to obtain voter approval of the five-year rate schedule for the City's Clean Water Service Charge, the Council directed staff on April 2, 2007, to start the process to perform a mail ballot election procedure. During the process of researching the mail ballot election procedures and the current rates, it became apparent that the process would immediately need to be repeated to set the Fiscal Year 2010 rates and charges, since the current five-year rate schedule was due to expire in June of 2009. Due to the additional costs incurred in complying with the new requirements of the 2007 Permit, increases to the Clean Water Service Charge were proposed, including an annual rate escalator. All monies appropriated as part of the Clean Water Service Charge are directly identified for the Clean Water Program, and pursuant to law, may not be used by the City for any other purpose.

During the Fiscal Year 2009 reporting period, in compliance with Proposition 218, both the majority protest hearing and mail ballot process were conducted for the proposed increases. Both the ratification of the existing rate structure (required by Proposition 218), and the new rates, including the rate escalator, passed by more than 62%. As a result of the passage of the Clean Water Service Charge, the City will continue to have a secure funding source for the Clean Water Program, outside of general fund monies.

Based on current water allocations for the City of Del Mar, the projected revenues from the Clean Water Service Fee will be $482,700 (page 88 of city budget) for Fiscal Year 2015-2016.

City of Del Mar

STATEMENT OF CERTIFICATION

San Dieguito River Watershed Management Area Water Quality Improvement Plan
2016-2017 Annual Report

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (40 C.F.R. 122.22(d)).

Scott Huth
City Manager

23 January 2018
Date

1050 Camino Del Mar, Del Mar, California 92014-2698. Telephone: (858) 755-9313 Fax: (858) 755-2794
www.delmar.ca.us

City of Del Mar

STATEMENT OF CERTIFICATION

Los Peñasquitos Watershed Management Area Water Quality Improvement Plan
2016-2017 Annual Report

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (40 C.F.R. 122.22(d)).

Scott Huth
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www.delmar.ca.us

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
CITY OF DEL MAR – ANNUAL REPORT FORM
FY 2016-2017

I. COPERMITTEE INFORMATION

Copermittee Name: City of Del Mar – San Dieguito (PIN 219460)

Copermittee Primary Contact Name: Mikhail Ogawa

Copermittee Primary Contact Information:
Address: 1050 Camino Del Mar
City: Del Mar County: San Diego State: CA Zip: 92014
Telephone: (858) 755-9313 Fax: (858) 755-2794 Email: Mikhail@mogawaeng.com

II. LEGAL AUTHORITY

Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES	☒
	NO	☐

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE

Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES	☐
	NO	☒
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐

Number of non-storm water discharges reported by the public	18
Number of non-storm water discharges detected by Copermittee staff or contractors	37
Number of non-storm water discharges investigated by the Copermittee	55
Number of sources of non-storm water discharges identified	55
Number of non-storm water discharges eliminated	55
Number of sources of illicit discharges or connections identified	31
Number of illicit discharges or connections eliminated	31
Number of enforcement actions issued	22
Number of escalated enforcement actions issued	0

V. DEVELOPMENT PLANNING PROGRAM

Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES	☒
	NO	☐
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES	☒
	NO	☐

Number of proposed development projects in review	62
Number of Priority Development Projects in review	2
Number of Priority Development Projects approved	2
Number of approved Priority Development Projects exempt from any BMP requirements	0
Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	0

Number of completed Priority Development Projects in inventory	2
Number of high priority Priority Development Project structural BMP inspections	18
Number of Priority Development Project structural BMP violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

FY 2016-2017

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐

Number of construction sites in inventory	53
Number of active construction sites in inventory	38
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period	15
Number of construction site inspections	595
Number of construction site violations	35
Number of enforcement actions issued	35
Number of escalated enforcement actions issued	0

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	24	82	0	37
Number of existing development inspections	216	738	0	333
Number of follow-up inspections	0	0	0	0
Number of violations	0	63	0	6
Number of enforcement actions issued	0	63	0	6
Number of escalated enforcement actions issued	0	0	0	0

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES[1]	☒
	NO	☐

X. CERTIFICATION

I ☒ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	23 January 2018 Date
Scott Huth Print Name	City Manager Title
858-755-9313 Telephone Number	SHUTH@DELMAR.CA.US Email

[1] A fiscal analysis that complies with Order R9-2013-0001 has been attached.

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
CITY OF DEL MAR – ANNUAL REPORT FORM
FY 2016-2017

I. COPERMITTEE INFORMATION

Copermittee Name: City of Del Mar – Los Peñasquitos (PIN 219460)

Copermittee Primary Contact Name: Mikhail Ogawa

Copermittee Primary Contact Information:
Address: 1050 Camino Del Mar
City: Del Mar County: San Diego State: CA Zip: 92014
Telephone: (858) 755-9313 Fax: (858) 755-2794 Email: Mikhail@mogawaeng.com

II. LEGAL AUTHORITY

Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES	☒
	NO	☐

III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE

Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES	☐
	NO	☒
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES	☐
	NO	☐

IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐

Number of non-storm water discharges reported by the public	3
Number of non-storm water discharges detected by Copermittee staff or contractors	5
Number of non-storm water discharges investigated by the Copermittee	8
Number of sources of non-storm water discharges identified	8
Number of non-storm water discharges eliminated	8
Number of sources of illicit discharges or connections identified	5
Number of illicit discharges or connections eliminated	5
Number of enforcement actions issued	2
Number of escalated enforcement actions issued	0

V. DEVELOPMENT PLANNING PROGRAM

Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES	☒
	NO	☐
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES	☒
	NO	☐

Number of proposed development projects in review	3
Number of Priority Development Projects in review	0
Number of Priority Development Projects approved	0
Number of approved Priority Development Projects exempt from any BMP requirements	0
Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	0

Number of completed Priority Development Projects in inventory	1
Number of high priority Priority Development Project structural BMP inspections	9
Number of Priority Development Project structural BMP violations	0
Number of enforcement actions issued	0
Number of escalated enforcement actions issued	0

FY 2016-2017

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐

Number of construction sites in inventory	7
Number of active construction sites in inventory	2
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period	5
Number of construction site inspections	59
Number of construction site violations	2
Number of enforcement actions issued	2
Number of escalated enforcement actions issued	0

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐

	Municipal	Commercial	Industrial	Residential
Number of facilities or areas in inventory	1	1	0	12
Number of existing development inspections	9	9	0	108
Number of follow-up inspections	0	0	0	0
Number of violations	0	0	0	0
Number of enforcement actions issued	0	0	0	0
Number of escalated enforcement actions issued	0	0	0	0

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐
Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES	☒
	NO	☐

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES[1]	☒
	NO	☐

X. CERTIFICATION

I ☒ Principal Executive Officer ☐ Ranking Elected Official ☐ Duly Authorized Representative certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	23 January 2018 Date
Scott Huth Print Name	City Manager Title
858-755-9313 Telephone Number	SHUTH@DELMAR.CA.US Email

[1] A fiscal analysis that complies with Order R9-2013-0001 has been attached.

1. Fiscal Analysis

1.1 Jurisdictional Runoff Management Program Implementation

This section of the Jurisdictional Runoff Management Program (JRMP) Annual Report provides a fiscal analysis of the City's stormwater management programs.

The City of Del Mar used the format and guidelines provided in the "Standardized Fiscal Method and Format" adopted by the San Diego Municipal Copermittees in 2009 for reporting purposes; however, given the City's financial accounting methods, a few modifications were necessary. These adjustments are described in subsequent sections below. The City recognizes the elements required to be included in the fiscal analysis as specified in Order No. R9-2013-001 Section E.8, and has included those components in the year's report.

1.1.1 Clean Water Program Budget

The City of Del Mar's Clean Water Program is a multi-departmental program, funded as an enterprise fund in the City's Annual Budget. Enterprise funds account for operations that are financed and operated in a manner similar to private businesses, with the costs of providing the services recovered largely through user fees. Fund 55 ("The Clean Water Fund"), is one of three (3) enterprise funds in the City's budget, and was added to the City's budget in Fiscal Year 2004 to account for the mandated costs of the City's responsibilities in order to comply with the Municipal Permit. The budget for the City of Del Mar has the appropriate funds and necessary staff resources allocated to meet the requirements of Permit 2013-0001, including any development, implementation, and enforcement activities required.

The City of Del Mar Operating and Capital Improvement Budgets for Fiscal Years 2015-2016 and 2016-2017 were presented to the Del Mar City Council on June 1, 2015. The budget was formally adopted during the same meeting.

For the Fiscal Year 2016-2017 reporting period, the final amended budget for Fund 55 totaled $574,960. **Table 1-1** below provides a breakdown of program budget by major budget category for Fiscal Year 2016-2017.

Table 1-1: Budget Summary – Clean Water Fund 55

Fund Account		Adopted Budget Fiscal Year 2016-2017	Description/Comments
55-5530	Clean Water Planning	$47,570	Active enforcement of clean water regulations including project plan review, permitting, construction monitoring and plan review of BMPs.
55-5536	Clean Water Code Enforcement	$25,920	Active in-field enforcement of clean water regulations, including response to resident complaints.
55-5539	Clean Water Program Management	$284,250	All clean water program management and reporting activities, fees to agencies, and interaction with regional and watershed Copermittee groups.
55-5840	Public Works (General)	$217,220	Provides for administration and general support for all clean water programs for property and facilities, including supervision of maintenance staff.
Total Clean Water Program Budget – Fund 55		**$574,960**	–

1.1.2 Fiscal Analysis Results and Detailed Expenditures

The City's Fiscal Year 2016-2017 jurisdictional, watershed, and regional projected expenditures for the implementation of the Municipal Permit requirements are summarized in **Table 1-2** below.

The City of Del Mar utilized the expenditure categories (administration, watershed activities, cost share contribution, and other) detailed in the Fiscal Analysis Method for jurisdictional, watershed, and regional reporting. These expenditures are discussed in further detail in the following sections.

Table 1-2: Fiscal Year 2016-2017 Expenditure Summary by Program Component

Component Description	Fiscal Year 2016-2017 Projected Expenditures
Jurisdictional Component	
Administration	$63,383
Development Planning	$42,840
Construction	$29,744
Municipal (Including Non-Emergency Fire Flows)	$199,920
Industrial and Commercial	$10,850
Residential, Education, and Public Participation	$52,442
IDDE	$37,734
Jurisdictional Total	**$436,913**
Watershed Component	
San Dieguito Watershed	$49,975
Los Peñasquitos Watershed	$39,125
Watershed Total	**$89,100**
Regional Component	
Total Copermittee Cost Share for Del Mar	$47,078
Total Costs	**$573,090**

1.1.3 JRMP Expenditures

While the City of Del Mar used the expenditure categories detailed in the Fiscal Analysis Method, it is difficult to separate out individual component costs due to the implementation overlap of some of the City's municipal permit components. As a result, the expenditures for residential, education, and public participation are reported as one expenditure category. Additionally, since the City does not explicitly track expenditures by permit component for its budgeting purposes, in many cases estimated percentages were utilized to allocate expenditures into the appropriate municipal permit component categories.

A total of $436,913 was projected to be expended in Fiscal Year 2016-2017 for the implementation of JRMP activities. An overview of the expenditures reflected in JRMP activity component is described below.

Administration
Activities identified in this component represent labor and non-labor expenditures for materials, supplies, equipment, or tools that are not otherwise incorporated into other expenditure categories, general administrative functions (e.g., program planning, budgeting, staff supervision), and program assessment and reporting.

Development Planning
Activities identified in this component represent labor and non-labor expenditures related to issuance or oversight of permits or of plans (e.g., permit counter support, plan checks, permit or application processing), project planning and engineering (e.g. project design specifications, capital improvement projects).

Construction
Activities identified in this component represent labor and non-labor expenditures related to construction site inspections and enforcement.

Municipal
Activities identified in this component represent labor and non-labor expenditures related to maintenance inspections of streets, roads, catch basins and inlets, open channels, and the MS4, municipal facility inspections, street and parking lot sweeping, catch basins and inlets, open channels, and MS4 cleaning, and municipal BMP implementation. Since the City of Del Mar conducts all fire-fighting training outside of the City, and no non-emergency fire-fighting flows occurred during the reporting period, the City does not currently track expenditures relating to non-emergency fire-fighting flows. Any costs associated with preparing for these flows are included in the municipal component.

Industrial and Commercial
Activities identified in this component represent labor and non-labor expenditures related to evaluation and enforcement of program requirements at industrial and commercial sites or sources (e.g. routine inspections and complaint investigations).

Residential, Education, and Public Participation
Activities identified in these components represent labor and non-labor expenditures related to investigation and enforcement of residential areas or activities, staffing outreach events, development and production of outreach materials, and any expenditures associated with waste collection and recycling (e.g. household hazardous waste, used oil).

Illicit Discharge Detection and Elimination
Activities identified in this component represent labor and non-labor expenditures related to the identification and elimination of illicit discharges or connections, enforcing the City of Del Mar's storm water ordinance, and any expenditures related to monitoring programs (e.g. dry weather monitoring, coastal storm drain monitoring, special investigations, field or sampling equipment, materials and supplies).

1.1.4 Watershed Expenditures

The watershed expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees included in the watershed(s).

A total of $89,100 was projected to be expended in Fiscal Year 2016-2017 for the implementation of planned strategies for the San Dieguito and Los Peñasquitos Watersheds.

1.1.5 Regional Expenditures

The regional expenditures included in this report only capture City of Del Mar expenditures and do not account for any expenditure disbursed by other Copermittees in the region. A total of $47,078 was projected to be expended in Fiscal Year 2016-2017 for the implementation of regional activities and coordination.

1.1.6 Funding Sources

To ensure adequate funding for the Clean Water Program, the City uses a combination of user fees and general fund monies.

The City of Del Mar City Council created and adopted a user fee, called the Clean Water Fund Service Charge to offset the costs of the program. Initially, the rate was adopted to collect $100,000 of the estimated $300,000 for the program, with an escalator to achieve full cost recovery by 2009. Mid-way through the five-year schedule, on July 24, 2006, the California Supreme Court published a decision in the case of Bighorn-Desert View Water Agency v. Verjil (2006) 39 Cal. 4th 205, which held that consumption-based rates such as water and sewer rates are subject to the notice and hearing requirements of California Constitution, Article XIIID, Section 6 (commonly known as "Proposition 218"). Therefore, on January 22, 2007, and February 5, 2007, the Del Mar City Council held public hearings to receive written protests to comply with Proposition 218. No majority protest was received, and the Council ratified the previously approved five-year rate schedule, including the City's Clean Water Service Charge. However, the adopted rate increases did not account for the actual increases in the costs associated program requirements.

As an additional measure to obtain voter approval of the five-year rate schedule for the City's Clean Water Service Charge, the Council directed staff on April 2, 2007, to start the process to perform a mail ballot election procedure. During the process of researching the mail ballot election procedures and the current rates, it became apparent that the process would immediately need to be repeated to set the Fiscal Year 2010 rates and charges, since the current five-year rate schedule was due to expire in June of 2009. Due to the additional costs incurred in complying with the new requirements of the 2007 Permit, increases to the Clean Water Service Charge were proposed, including an annual rate escalator. All monies appropriated as part of the Clean Water Service Charge are directly identified for the Clean Water Program, and pursuant to law, may not be used by the City for any other purpose.

During the Fiscal Year 2009 reporting period, in compliance with Proposition 218, both the majority protest hearing and mail ballot process were conducted for the proposed increases. Both the ratification of the existing rate structure (required by Proposition 218), and the new rates, including the rate escalator, passed by more than 62%. As a result of the passage of the Clean Water Service Charge, the City will continue to have a secure funding source for the Clean Water Program, outside of general fund monies for future fiscal years.

Based on current water allocations for the City of Del Mar, the projected revenues from the Clean Water Service Fee will be $533,400 (page 88 of city budget) for Fiscal Year 2016-2017.

City of El Cajon
AS A COPERMITTEE OF THE
SAN DIEGO RIVER WATERSHED

JURISDICTIONAL URBAN RUNOFF
MANAGEMENT PROGRAM
ANNUAL REPORT
2006 – 2007

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Over-Irrigation Can Cause Storm Water Pollution (Spring 2007)
Pet Pollution Can Be a Serious Problem! (Fall 2006)
We All Need to Protect Our Watershed (Fall 2006)
Why It's Important to Keep Trash, Sediment and Debris Out of Our Storm Drains (Spring 2007)

Sewer Billing Inserts
Pet Pollution Can Be a Serious Problem! (Nov. – Dec. 2007)
A "How –To" Guide to Carwash Fundraisers
Sewage Spill Reference Guide

City of El Cajon Storm Water Residential Complaints
Door Hanger

4. Newsletter Articles
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Appendix G Identification of Management Measures Proven to be Ineffective in Reducing Urban Runoff Pollutants and Flow.

Appendix H Identification of Water Quality Improvements or Degradation.

Appendix I
1. JURMP Program Summary (PY6)
2. Contact List for El Cajon Storm Water Staff (PY6)

Appendix J Sewer Maintenance Footages

CERTIFICATION

"I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Kathi Henry — 1.24.08

Signature — Date

Kathi Henry, City Manager — (619) 441 1718

Printed Name, Title — Phone Number

EXECUTIVE SUMMARY

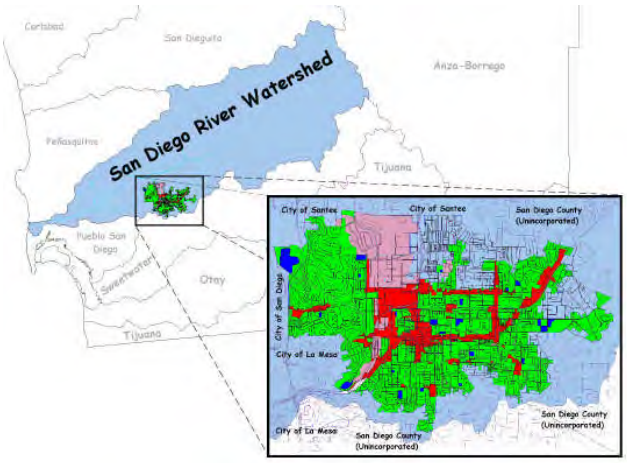

The City of El Cajon (City), located in east San Diego County, is the eastern-most incorporated City within the San Diego River Watershed (Watershed). With 14.48 square miles and nearly 97,000 citizens, the City plans with other regional jurisdictions and acts locally to maintain the health of the San Diego River Watershed. A healthy watershed means thriving environmental communities and a state of well being among its constituency. Maintaining watershed health is achieved through compliance with Federal Clean Water Act requirements as stated in the San Diego County Municipal Storm Water Permit, Order No. 2001-001, through water quality monitoring, biological assessments, and municipal vigilance to balance growing human demands with a healthy environment.

Permit Year 6 (PY6) is the sixth year in what portends to be a six-year permit cycle that started with jurisdictional planning and implementation, proceeded to local program assessment and continues to evolve into multi-jurisdictional and watershed actions. The City continued the Permit Year 5 focus by assessing program component effectiveness from Best Management Practices (BMP) implementation and determining how preventive measures affect watershed health from a local perspective. Many of the program's components have developed into BMP programs, whereby inspections can determine effectiveness of pollution reduction measures.

This Annual Report presents the City's efforts during the 2006-07 reporting period. Covered in this Report is the move toward adaptive management of the Jurisdictional Urban Runoff Management Program (JURMP) implementation and integration of general watershed principles for the San Diego River Watershed into local planning. The San Diego River Watershed Urban Runoff Management Plan (WURMP) and the City's JURMP are requirements of Storm Water Permit, Order No. 2001-001, but it is the responsibility of the City to balance these requirements and maintain a healthy watershed within its jurisdiction.

Critical for the rest of this permit cycle are Watershed adjustments to the City's Storm Water Pollution Prevention Program and deciding where best to place City efforts that will minimize or eliminate polluted runoff. Forrester Creek, the main storm drain channel in El Cajon, is a listed 303(d) waterbody with impairments for pH in the upper part (El Cajon and San Diego County) and for total dissolved solids (TDS) and fecal coliform in the lower portion within the City of Santee). El Cajon considers these three impairments to be the center of the Clean Water Act objective "to restore the Nations Waters" to a chemical balance able to support the State's Basin Plan designations for fishable and swimmable waters.

A *BMP to Pollutant Reduction Diagram* was developed to connect BMPs to pollutants that are targeted for reduction as a result of their listing as 303(d) pollutants in Forrester Creek. This diagram and discussion is provided in the Introduction.

This JURMP Annual Report for PY6 consists of 10 Sections, and is organized as follows:

- **Introduction**. Describes the purpose of this Annual Report, the overall vision of the City, goals and objectives of the Storm Water Pollution Prevention Program; the regional integration of Watershed Health; assessment of program effectiveness to guide future actions, and Forrester Creek-specific criterion that relate to San Diego River Watershed and River health.
- **Section F.1 Land Use Planning for New Development and Redevelopment Component.** Lists the planning actions reviewed and the role of storm water in re-defining new development designs and describes the ways of confirming that commitment to storm water becomes a design reality.
- **Section F.2 Construction Component.** Summarizes reviews of Erosion Control Plans, inspections of high priority sites, interactions with other City departments, and conditions during rainfall events.
- **Section F.3 Existing Development Component**
  - **a. Municipal Component.** Summarizes the activities for municipal facilities, the sanitary sewer program, capital improvement projects affecting storm water quality, and municipal staff training.
  - **b. Industrial Component**. Summarizes the activities conducted to assess the effectiveness of implemented industrial BMPs and better define the pollutants affecting storm water quality.
  - **c. Commercial Component** Summarizes the inspections, enforcements, and educational efforts to assess the effectiveness of implemented BMPs and better define the pollutants affecting storm water quality by business type.
  - **d. Residential Component** Summarizes the challenges with educating the public, interactions with citizens, educational efforts, and enforcement at the residential level.
- **Section F.4 Education Component.** Summarizes programs implemented by the City to educate municipal employees, developers and contractors, business owners, the general public, and other priority groups
- **Section F.5 Illicit Discharge Detection and Elimination Component** Summarizes the City's dry weather program that identifies illegal dumping and illicit connections to the storm drain system. This year an upstream/downstream analytical assessment was completed for dry weather.
- **Section F.6 Public Participation Component** Summarizes the outreach efforts coordinated on a regional level through the Outreach Workgroup.
- **Section F.7 Assessment of Jurisdictional URMP Effectiveness Component** Provides summary tables for the existing and development components indicating estimated and actual pollutant-containing material reductions at the source or from preventive measures.
- **Section F.8 Fiscal Analysis Component** Reviews and compares previous storm water expenditures while projecting future program funding requirements.

- **Conclusions and Recommendations**. Summarizes the conclusions stated from each component and makes overall program conclusions and provides recommendations for future permit years.

Appendices contain City-developed checklists, guidance documents, outreach materials, lists of priority businesses or sites, and presentations to City staff and the local community. Additionally, the Dry Weather Monitoring report is provided as an attachment.

The City achieved a number of important accomplishments during this reporting period, both in its role as a Copermittee, and through participation (and eventual leadership role) in the implementation of general watershed principles. Across the City, businesses and citizens, together, function within the JURMP and watershed to assist in identifying storm water issues and help prevent pollution from being discharged.

City Action Highlights include:

- Continue with a strong Enforcement program for City Ordinances 4686 (JURMP) and 4717 (Standard Urban Storm Water Management Program (SUSMP) requirements).
- As a City with little open space and a propensity for redevelopment, the City pursues common sense approaches to go beyond Permit compliance and achieve defensible, cost-effective storm water management practices for businesses and citizens through the SUSMP conditioning process.
- Continued implementation of a City-Wide Integrated Pesticide Management Program.
- The City continued an expanded scope of its Dry Weather Monitoring Program. Additional information along concrete lined areas focuses on business districts or municipal areas. In doing so, it has made substantial strides in detecting and eliminating discharges and characterizing receiving waters and other conveyance discharges within its jurisdiction.
- Conducted upstream/downstream dry weather analysis in Forrester Creek to quantify the amounts of pollutants discharged within the City's jurisdiction.
- Inspected 126 Automotive Repair and Maintenance Establishments for compliance with the City's Municipal Code and issued 8 warnings and 3 citations to commercial business for various violations of the City's storm water ordinance. The City conducted monthly inspections at all priority construction sites during the dry season and weekly inspections during the wet season.
- The City issued a total of 14 warnings and 7 citations for various violations of the City's storm water ordinances.
- Conducted inspections at 20 high priority construction sites. The inspections revealed several violations or compliance issues and the City issued 5 written warnings.
- Conducted inspections at 26 high priority industrial sites and issued 2 citations. The City also collected industrial storm water monitoring data from those industrial facilities subject to the State General Industrial Storm Water Permit and conducting the required annual storm water monitoring. The City intends to review the industrial storm water data to evaluate potential contributors to water quality problems.

- The City's inspection programs emphasized clean trash storage and disposal areas; power washing BMPs; and maintenance of sewer laterals in addition to the minimum required BMPs.
- The City's comprehensive street sweeping program swept 18,781 miles of streets and collected 3,459 cubic yards of materials from City streets. Sediment and silt account for 42% of the total, organic material accounted for 38%, trash accounted for 17% and the "Other" category accounted for 3%.
- Collected 1,654 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins.
- Actively participated in the Management Committee, Outreach Workgroup and WURMP Development Workgroup.
- Continued active participation with the East County Cities Workgroup.
- Continued its efforts to reach out to community members on a wide range of urban runoff and storm water quality topics through over 230,000 copies of articles, brochures, and mailers.
- Conducted over-the-counter assistance and provided personalized residential BMP information to homeowners for small additions and remodels, pools and retaining wall projects.

This reporting period is one of continued program assessment and focus of local actions to move toward a watershed protection program. This last year, the City continued to meet the new challenges of working within a watershed. The City continues in the role of the Lead Copermittee for the San Diego River Watershed. The City feels strongly that it has made significant strides looking within its jurisdictional boundaries as well as organizing inter-jurisdictional programs. Continuing improvement and refinement is the name of this storm water pollution prevention program as we continue to gather information and experience about how City activities affect the local receiving waters and the health of the San Diego River Watershed.

This Annual Report provides programmatic information and further steps in connecting activities to a significant movement for improving receiving water quality by the City of El Cajon. Over the last year, the City has continued its effort at linking municipal activities to receiving water quality. Additional connections to receiving water quality from the implementation of BMPs will follow as information is gathered and assessed using a Long-Term Assessment process over the next several years.

A table is also provided as part of Appendix I that summarizes the roles and responsibilities of the individual departments of the City in implementing the components of the Jurisdictional URMP. Additionally, a storm water contact list is provided to help facilitate communication within the City and for the public and outside agencies to contact the appropriate City staff.

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INTRODUCTION

With each Permit Year (PY), the City of El Cajon reviews, assesses, and progresses towards a watershed approach to protect surface waters from urban runoff pollution. A continued emphasis towards identifying sources of pollutants and minimizing specific 303(d) impacts to Forrester Creek is the focus of this 6th year in the Permit Cycle (Order No. 2001-001).

The typical steps for developing a pollution prevention and source control program are summarized below and discussed in more detail in Section F.7, Effectiveness Assessment.

1. **Identify the issue.** Define each issue.
2. **Identify and assess sources.** Sources are identified by prioritizing based on location and type of business.
3. **Determine available control strategies**. To identify possible control strategies for each source.
4. **Evaluate control strategies**. To determine which control strategies are most likely to achieve measurable results.
5. **Establish a goal.** A goal may be set at any point during the development process. The goal is the desired outcome.
6. **Implement program.** Part of program implementation is selection of an effectiveness measurement tool to assess the program.
7. **Evaluate effectiveness.** Based on the effectiveness measurement, determine what has been learned.
8. **Modify program.** The results of the effectiveness measurement will help to determine the future direction for the program.

Described in this Sixth Permit Year (PY6) Annual Report is the implementation and collected information for each Permit component. Sections F.1 through F.8 highlight component accomplishments, activities, or areas of achievement for Land Use for New Development and Redevelopment; Construction; Existing Municipal, Industrial, Commercial, and Residential Development; Education and Outreach; Education and Outreach; Illicit Discharge, Detention and Elimination; Public Participation, Assessment of Jurisdictional URMP Effectiveness; and Fiscal Analysis. Additionally, each Section contains San Diego Regional Water Quality Board (SDRWQCB) comments from the PY5 Annual Report, any proposed changes and refinements to the implementation of the City's Jurisdictional Urban Runoff Management Plan (JURMP), if required. The SDRWQCB comment letter is contained in Appendix A.

I.1 REGULATORY FRAMEWORK

Background

The City of El Cajon's (City) Jurisdictional Urban Runoff Management Plan (JURMP) was developed pursuant to Order No. 2001-001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758, the area-wide municipal separate storm sewer system (MS4) permit. The MS4 permit was established pursuant to Section 402(p) of the Federal Clean Water Act, which requires all point source discharges of pollutants into waters of the United States, including discharges from municipal separate storm sewer systems, to be regulated by a NPDES permit. On February 21, 2001 the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), adopted Order No. 2001-001, NPDES Permit No. CAS0108758 (Permit), to the City and 20 other Copermittees, for discharges of urban runoff from MS4s into the receiving waters within the SDRWQCB's jurisdiction.

The City is a participant and partner in the San Diego River Watershed along with the Cities of La Mesa, Poway, San Diego, Santee, and the County of San Diego. A watershed approach to storm water pollution provides the wider view of runoff impacts and requires jurisdictional approaches to include neighboring jurisdictions in future planning and reporting efforts.

The PYs are summarized as follows:

- PY1 - February 21, 2001 through June 30, 2002, a comprehensive JURMP was developed.
- PY2 - July 1, 2002 through June 30, 2003, the initial implementation and assessment of programs.
- PY3 – July 1, 2004 through June 30, 2005, reassessment of initial implementation with refinements and reimplementation, as necessary.
- PY4 – July 1, 2004 through June 30, 2005, implementation was taken to the next level of refinement based on performance.
- PY5 – July 1, 2005 through June 30, 2006, as the City's programs mature, the City focused on watershed issues, including pollution prevention and education and continued to refine and improve the City's programs.

Current and Future

- PY6 - July 1, 2006 through June 30, 2007, preparing for issuance of a new permit containing watershed/regional permit requirements supported and subsidized by jurisdictional efforts.

I.2.1 Water Courses and Receiving Waters

The definition of the City's Storm Drain System is broad enough to include streets, gutters, inlets, catch basins, channels (lined and unlined), creeks, and streams. Our storm drain system starts at a facility's property line to the public right-of-way. By making such a distinction, it is clear to maintenance and storm water crews when it is the responsibility of the City to clean spills or illegal dumping of materials. If such a discharge occurs on private property and the discharge enters the City storm drain system, the property and business owner/contractor is

contacted and educated on storm water requirements for their type of business. Property and business owners are charged for cost-recovery of City staff involvement.

The goal of PY6 and future program years will be a continuing focus on impairment of Forrester Creek with the ultimate goal of eliminating the impairment on Forrester Creek, and meeting the objective of the Clean Water Act to maintain and restore the chemical, physical, and biological integrity of the Nation's waters.

Table 2 lists the major storm water conveyance systems and describes the type of channel. Most conveyance systems are concrete-lined, making them easy to maintain, but present other types of challenges such as:

- Elevated pH (above 9)
- Shelter for homeless populations
- Trap for air blown trash and debris
- Easy target for illegal dumping

Table 2 – Storm Water Conveyance Systems

Water Courses	Type of Channel
Forrester Creek	• Open, concrete-lined trapezoidal channel • Underground culvert
Broadway Channel	• Open, concrete-lined channel • Underground culvert
Washington Channel	• Open, concrete-lined channel • Underground culvert
County Ditch	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel
Fanita Channel	• Underground culvert • Open, concrete-lined channel
Third Street Lateral	• Open, concrete-lined channel • Underground culvert
Fletcher Parkway Channel	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel

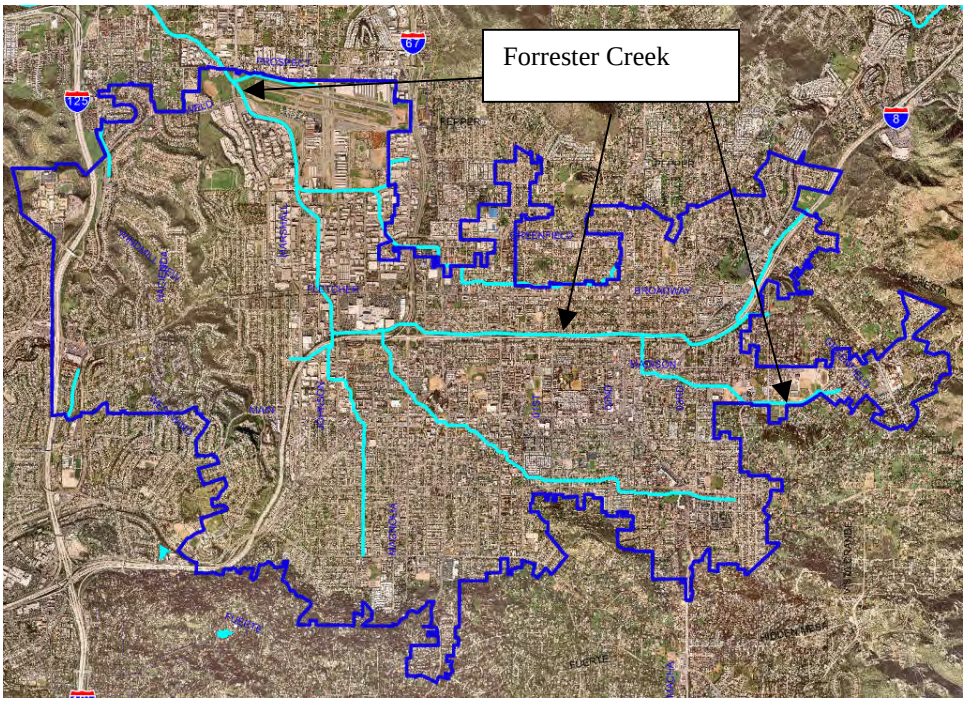

The picture to the left shows the City boundaries, Forrester Creek and the major channels within the City.

I.1.2 Approach and Changes to the Program

Approach

As the City becomes more experienced with its own programs and with what is working and what is not, the City modifies the implementation and management of its Storm Water Program. This Adaptive Management is a dynamic process of improving management activities incrementally, as decision makers learn from experience and better information and analytical tools become available. It involves checking progress made in achieving water quality goals, adjusting the management decisions accordingly, rechecking and readjusting – all the while incorporating new data and scientific knowledge. The City of El Cajon is planning on developing a Storm Drain Master plan in 2008. Once complete, the Storm Drain Master Plan will provide the City with additional tools to assess and achieve water quality objectives. Adjustments to goals and objectives are expected to occur due to unforeseen circumstances and an unpredictable future.

One approach the City continues to implement (through education and training) is to change pollution prevention from the conventional recycle, reduce and reuse, to measures that target pollution prevention at the pollutant source. For Storm Water Pollution Prevention, consideration is given both to flow reduction measures and pollution source controls. Where water acts as the primary conveyor of pollution, pollution prevention measures can reduce pollution impacts by preventing pollutants from entering the flow, or by controlling the flow. In the development of an effective pollution prevention or management strategy, it is critical to understand how water cycles through the air and soil to ensure that measures are selected and implemented in an appropriate manner.

Changes to the Storm Water Program

Program Year 6 (PY6), and continuing into the next permit cycle, will be a period of transition from purely jurisdictional to a jurisdictional watershed approach. A few of the modifications include:

- Promoting a Clean Community, Healthy Watershed;
- Maintaining Watershed and River Health in the San Diego River Watershed;
- Focusing on 303(d) pollutants to restore Forrester Creek water quality;
- Continuing to assess the potential for increased flow from New or Re-Development projects and reduce flow from the current flow of approximately 400 gallons per minute during the dry season (double last year's dry weather flow rate).
- Coordinating with the City of Santee for the trash and debris fence while the Forrester Creek Restoration project is under construction;
- Prioritizing activities in coordination with other East County Cities;
- Collecting information on upstream and downstream conditions to better assess areas (zones) where pollution is more probable or prevalent;
- Review of the analytical methods and a comparison to what information is actually needed to determine pollutant loads.

The City of El Cajon's Storm Water Pollution Prevention Program looks to pollution solutions in the form of Best Management Practices, proven procedures, or other new technologies. Table 1 (next page) lists the water quality and quantity issues in El Cajon and the possible solutions provided by the Jurisdictional Urban Runoff Management Plan (JURMP) components that comprise the Storm Water Pollution Prevention Program.

Table 1 – Storm Water Pollution Prevention Program Components

Water Quality or Quantity Issues	Pollution Solution
• Increased runoff (volume, frequency and duration) with impervious ground cover.	• Runoff control for flood and erosion protection (**New Development and Construction**) • Measures to maintain existing discharge rates. (**New Development/Redevelopment**)
• Increased base flows in streams due to changes in land use.	• Provide measures to maintain infiltration **(New Development/Redevelopment)** • Provide extended detention of runoff for low flows. (**New Development/Redevelopment**)
• Increased pollutant loadings with runoff.	• Provide measures to reduce pollutant sources, or remove pollutants, by settlement, absorption or filtration. (**Municipal, Industrial, Commercial, Residential Existing Development/Redevelopment**)
• Stream bed and bank changes due to erosion.	• Infiltration for control of runoff volume.(**New Development/Redevelopment**) • Rate of runoff control for erosion protection (**Construction/Redevelopment**)

Stronger move toward prevention of polluted discharges – distinguishing pollutant reduction from Pollution Prevention (recycle, reduce, reuse) activities, while connecting BMPs with the pollutant being reduced. A BMP to Pollutant Reduction Diagram is provided below and is the mainstay for the Existing and Development (including Construction) Components. This part of the transition occurred after Copermittees submitted a Framework for BMP Implementation in October 2003.

Inspection data collected under the original system designed by DMax Engineering was translated into BMP implementation results. The BMP implementation results data can be used to help prioritize follow-up actions, including inspections and education efforts in PY6.

BMP to Pollutant Reduction Diagram (See Following Page for Details)

Pollutant to BMP Table
BMPs target the reduction or elimination of a primary pollutant (sediment or fecal coliform) or pollutant group (oil & grease).

↓

Facilities and BMP Table
Individual Facilities are Required to Implement the Minimum BMPs

↓

Summarize Facility Types with Pollutant Reduced Table
Combines Table 1 and 2 to connect pollutant to (high priority) facility type, such as industrial, commercial/restaurants, municipal, residential area, or SUSMP/Parking Lot through the implementation of BMPs. Allows the calculation of percentages for implemented BMPs for high priority facilities.

↓

Transition to Effectiveness Assessment
Percentages between 80-100 overall implementation are used to calculate a quantity of pollutant(s) prevented from entering the storm drain system and thus reduction in pollutants ultimately discharged.
Reasonable Assumption: If inspection was impromptu, results observed on inspection day, in general, represent conditions at the facility for the entire year.
Calculations: Determine an *average* (typical for facility) discharge of the pollutant containing material.

The BMP to Pollutant Reduction Diagram demonstrates how BMPs are connected to pollutants that are connected to water quality. Our difficulty lies in quantifying those pollutant reductions with accurate and defensible results. In Section 11.0, estimates as well as empirical data are used to assess the effectiveness of the City's Storm Water Program by showing how much pollutant-containing materials were diverted toward a better disposal avenue.

I.2 COMMITMENT AND PARTICIPATION

The City of El Cajon is committed to promoting the concept and practice of preventing pollution at the source. Preventing pollution will prevent environmental problems. This saves the public and private sector from loss of resources and the costs to correct environmental damage. Urban runoff management requires the simultaneous pursuit of several objectives. The City is committed to:

- Enforcement of the Municipal Codes for Urban runoff (MC 13.10) and New or Site Re-Development (MC 16.100).
- Prevention of pollutant discharges into Forrester Creek as part of the San Diego River Watershed.
- Protection of water quality, aquatic species, and watershed ecosystems.
- Promotion of environmental quality and social well-being.

I.2.1 Jurisdictional Implementation

Pollution Prevention continues to be the focus of the City's JURMP and Storm Water Pollution Prevention Program for businesses and citizens. Compiled information on amounts of pollutants prevented from entering the storm drain system has a direct correlation to any decrease in pollutant loads from entering receiving waters. Pollutant amounts removed from streets, roadways and the storm drain system, or that have been recycled, have a direct correlation to water quality.

Land use consists of residential, commercial, industrial, municipal, and educational with recreational facilities. The City is at a "built-out" stage where most construction is redevelopment. Successful implementation of the City's Standard Urban Storm Water Management Program (SUSMP) supports the reduction in flow from a pollution prevention perspective. Development and redevelopment proposals that trigger the SUSMP requirements must submit plans consistent with reducing flow and impervious areas and must consider storm runoff treatment before the project will receive final City approval and proceeding to actual construction.

I.2.2 East County Teamwork

Beginning in PY2 and continuing through PY6, the East County Cities Workgroup gathered to discuss and tackle issues specifically afflicting the eastern part of San Diego County. Some of these East County challenges include:

- Tackling storm water issues from a "sand" perspective
- Highly transient populations

- Locally-focused City Management
- Boxed-in, built-out Development

I.2.3 Regional Teamwork

The City participated in regional efforts to promote storm water management practices and educate businesses and citizens to conduct business and daily lives with respect for water quality. When possible, the City attended or was an active participant in the following events.

- Project Clean Water Technical Advisory Groups
- Clean Water Summit
- Management Committee Meetings
- Outreach Workgroup
- Ed/TAC Committee
- Regional Residential Outreach Selection Committee/Workgroup
- Think Blue TV and Radio Spot Selection Committee ("Ants in Your Plants", and "Watershed Awareness")
- BMP Implementation Workgroup **
- East County Cities Workgroup (a.k.a., San Diego River Watershed Workgroup) **
- Monitoring Workgroup

** - Chaired Workgroup

I.3 WATERSHED AND RIVER HEALTH

As stated in the Clean Water Act, the objective is to maintain and restore the chemical, physical, and biological integrity of the Nation's waters. To address this objective, watershed and river health for the San Diego River can be described in terms of unique biophysical, socio-cultural, and economic characteristics. Biophysiochemical components are a watershed's elements and functions (its chemical, physical, and biological processes), while socio-cultural and economic components are the values and benefits provided by a functioning healthy watershed. The water quality aspect and stream flow (as hydrological patterns) of the biophysiochemical component list and the recreational/esthetic values of the socio-cultural and economic components are the only subjects directly addressed in Order No. 2001-001.

Biophysiochemical:

- Basin geomorphology
- Hydrological patterns (stream flow addressed in Order No. 2001-01)
- Water quality (addressed in Order No. 2001-01)
- Biotic community and habitat

Socio-Cultural and Economic:

- Breakdown and recycling of pollutants
- Regulation of storm water discharges
- Groundwater and aquifer recharge
- Recreational and esthetic values (addressed in the Basin Plan, but included in Order No. 2001-001 by reference)
- Habitat values (protected species, fisheries, *etc.*)

In general, the factors that determine ecosystem and watershed health are universal. A healthy watershed is one in which these components are maintained with thriving and balanced communities. An immutable characteristic of upper Forrester Creek is the concrete lining of this channel. In the 1960's, Forrester Creek was modified with a concrete channel in order to provide flood control for the expansion of the Interstate Highway easterly toward El Centro.

In a built-out urban area such as the City of El Cajon, defining and achieving creek, river and watershed health is complicated by a highly altered landscape (concrete channelization of Forrester Creek, highly urbanized, little open-space) and continued urban-infill and growth within and upstream of its jurisdiction. Nonetheless, the City has a vision and initially a broad goal for watershed and river health. The vision states the desired future for the city with respect to watersheds and waterways. The goal states that the City ultimately aims at maintaining watershed and river health for water quality and hydrological patterns, quantitatively and qualitatively.

Although it is unrealistic and infeasible to re-create the environmental conditions that existed before the City's development, it is prudent to consider predevelopment conditions when assessing the health of Forrester Creek and the San Diego River. Information about historical conditions is useful in understanding current watershed processes and functions that are essential to downstream watershed and river health. In fact, healthy downstream conditions may best be served by continual efforts by the City to reduce and eliminate pollutant discharges to Forrester Creek, to the maximum extent practicable.

I.4 WATERSHED PLANNING

The City recognizes the importance of watershed management as a guiding principle for its water quality management of the San Diego River Watershed. As required by Permit Section J, a Watershed Urban Runoff Management Plan (WURMP) was developed during PY2 and refined during subsequent permit years. As a member of the San Diego River Watershed, the City attended and participated in establishing the Watershed program for the San Diego River area.

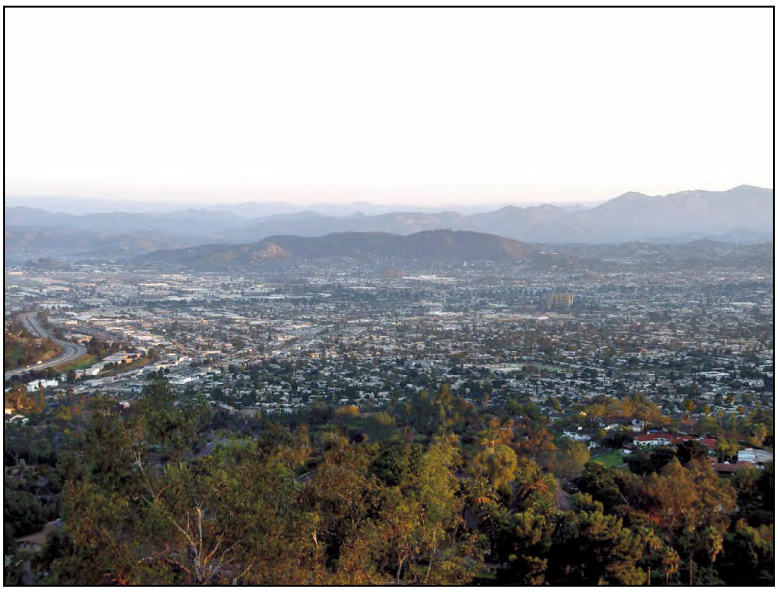

There is a learning curve to transitioning certain activities from a jurisdictional to a watershed approach.

The picture to the left shows El Cajon as part of the inland watershed area. Much has been discussed during this PY6 and an outline for the future watershed management is in place. The coming year will be one of implementation bringing new challenges to the storm water programs.

I.4.1 Water Quality and Stream Flow

Water quality has long since been the focus of many watershed programs. However, those programs and regulations have focused mostly on the chemical aspects of water quality, such as the concentrations of metals and organics, without considering how water quality is affected by the physical habitat in a stream or river. Water quality is greatly affected by the amount of large wood in the waterway, the river or stream's substrate (coarse gravel or fine sediment), the amount of native vegetation in floodplains and other aspects of physical habitat.

Physical habitat, in turn, is shaped in part by the larger forces of stream flow and hydrology. It has long been understood that the influence of stream flow, hydrology, physical habitat and water quality help determine which species are present within a watershed and the abundance, productivity and diversity of those species. For these reasons and others, the City defines its functional disposition in the watershed and river health as providing/conveying sustainable stream flow and hydrology and restoring and preserving water quality.

- **Stream Flow and Hydrology**: Maintain, or as necessary reduce, dry weather flow conditions using the Standard Urban Storm Water Management Plan to prevent an increase in runoff due to development and redevelopment projects, thereby protecting and improving watershed and stream health, channel function and public health and safety.
- **Water Quality:** Protect and improve surface water and groundwater quality and meet or surpass state and federal water quality standards and regulations.

Improving water quality within the City's jurisdiction will contribute to overall watershed health and will help keep the watershed as healthy as possible. John Muir said it best, "*When we try to pick out anything by itself, we find it hitched to everything else in the universe*".

I.5 GEOGRAPHICAL INFORMATION SYSTEM (GIS)

PY6 is the fourth year for using a Geographical Information System to present the location of El Cajon within the San Diego Watershed (See Figures following within this section). Base maps and information obtained from SanGIS provided the basic information to start layering jurisdictional and regional information. Deciding on the types of data and what needs to be shown are the biggest questions to answer.

In PY6 the City created a new full time GIS position to assist the Storm Water Program. The City is planning on implementing and developing an Enterprise GIS. To achieve this goal the City is currently dedicating more resources to a growing GIS staff and a new

server.

One of the main benefits of GIS is improved management of your organization and resources. A GIS can link data sets together by common location data, such as parcel numbers, which helps departments and agencies share their data. Storm Water staff identified the Business License database as information easily integrated into a GIS to show and list the parcels within 200 feet of the five (5) major El Cajon drainage channels. The saying, "better information leads to better decisions" is true for GIS. A GIS is not just an automated decision making system but a tool to query, analyze, and map data in support of the decision making process.

The GIS maps presented in this PY6 Annual Report are the first of many to help make a decision. Three maps follow this page showing:

- the San Diego Regional Watersheds
- the San Diego River Watershed with a focus on El Cajon
- the City of El Cajon showing Residential (green), Commercial (red), Industrial (pink), and School Districts (blue).

The information can be presented succinctly and clearly in the form of a map and accompanying report, allowing decision makers to focus on the real issues rather than trying to understand the data.

I.6 SIGNIFICANT ACCOMPLISHMENTS

The following significant accomplishments were completed and helped to maintain Watershed and River Health. Elimination of pollution is mainly due to routine scheduled municipal maintenance activities, municipal and commercial education efforts, outreach to the public and daily contact with citizens. The following is a summary of the major investments in reducing pollutant loads to receiving waters.

- Continued to implement and refine the Enforcement program for City Ordinances 4686 (JURMP) and 4717 (Standard Urban Storm Water Management Program (SUSMP) requirements). Streamlined enforcement activities with the inspection database to better coordinate and design correction actions.
- Continued to improve an inspection program for construction, commercial and industrial facilities based on Best Management Practices (BMP) implementation. Tracking BMP implementation and ensuring that all minimum required BMPs are installed and maintained properly helps ensure that pollutants are not discharges from those facilities. (List is continued following the three pages of GIS Maps).

Regional Watershed Map

SD River Watershed Map

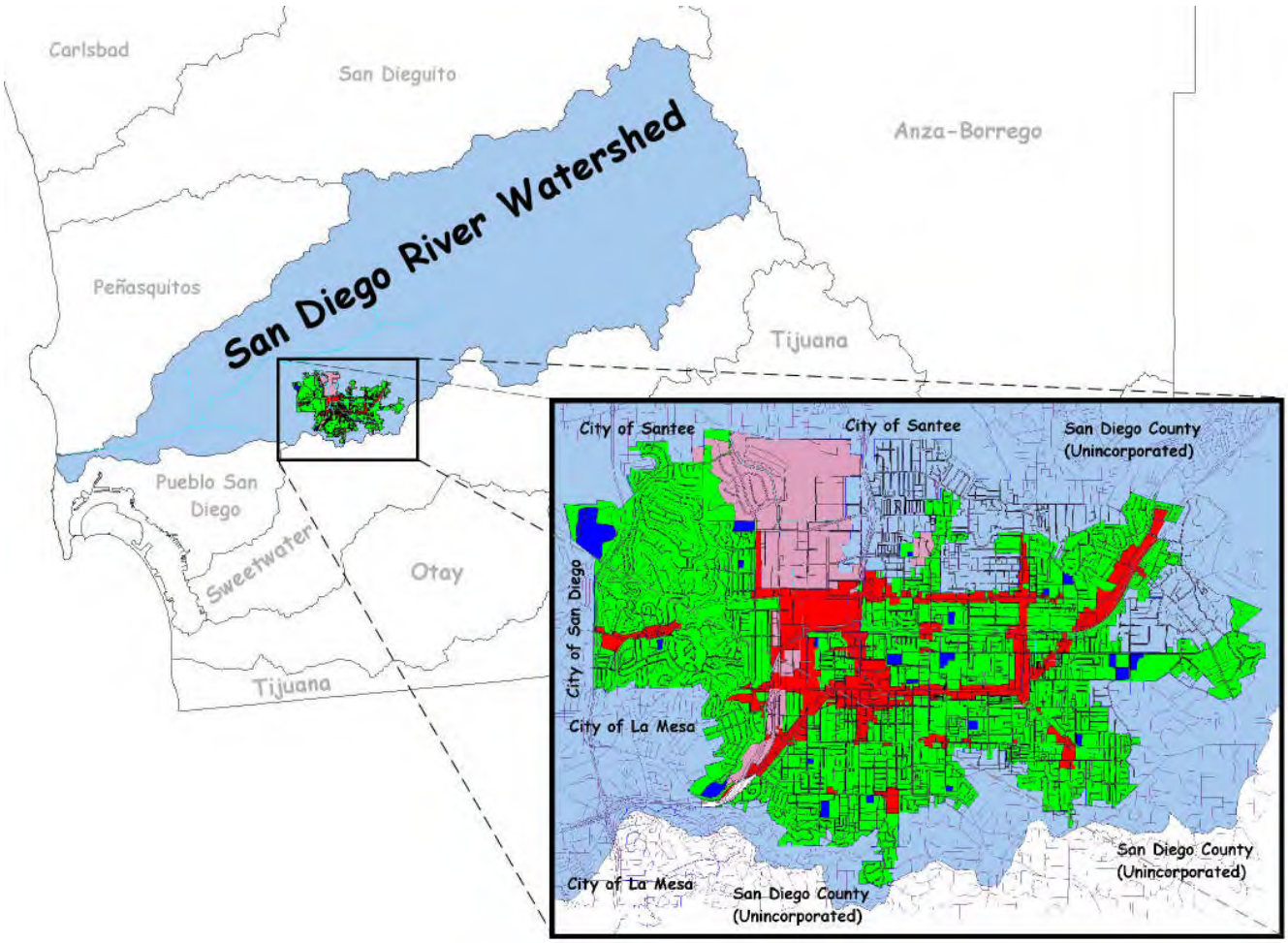

El Cajon GIS Map

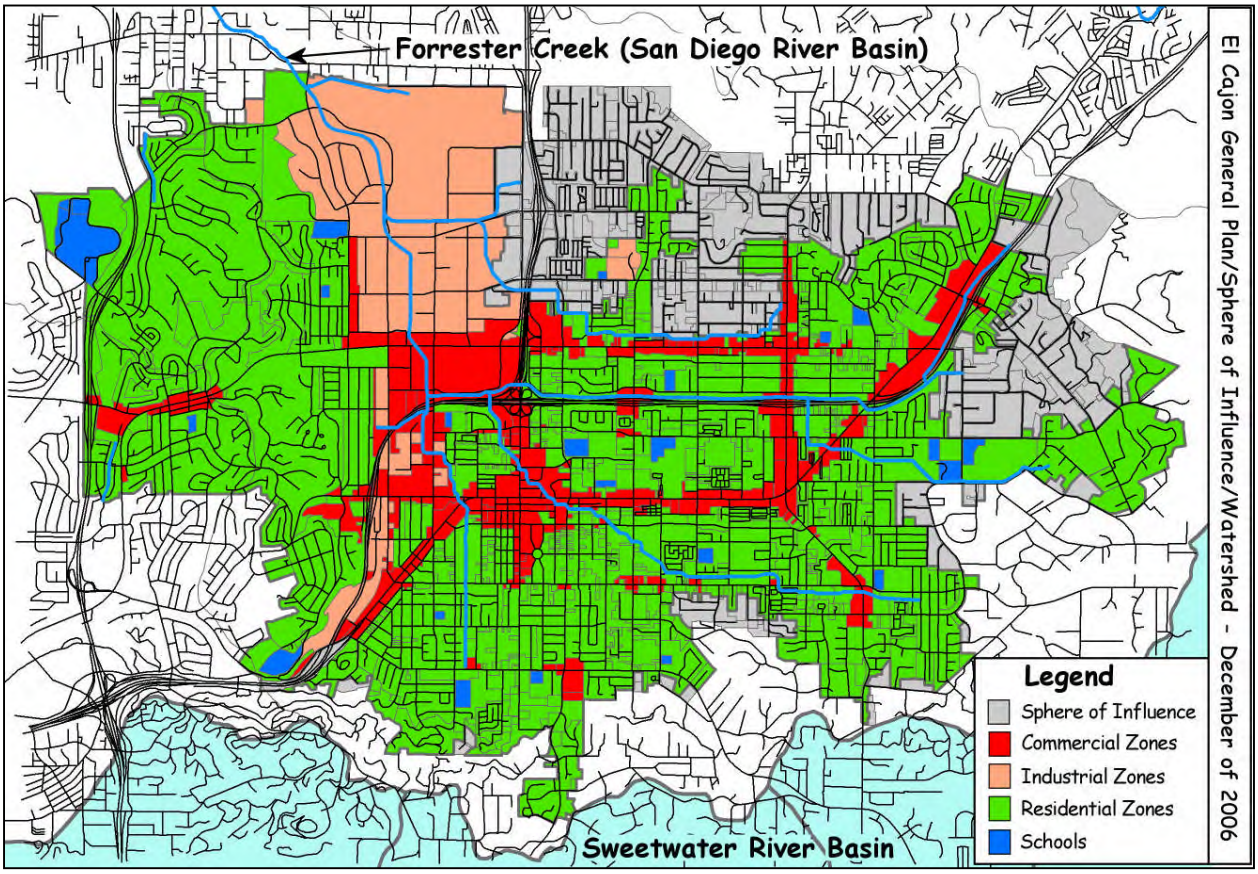

- Inspected and provided educational materials to well over 150 industrial and commercial businesses for compliance with the City's Municipal Code and the State's General Permits for construction and industrial activities.
- The City's comprehensive street sweeping program swept 18,781 miles of improved streets and collected 3,459 cubic yards of materials from City streets. About half (42%) of the material collected this year was sediment and silt. Many areas were swept twice per week.
- Collection of over 1,654 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins;
- The City formally trained 90 building, planning, middle management, and engineering staff on SUSMP requirements. Public Works staff completed before and after evaluations to assess the absorption of knowledge during retraining efforts
- Conducted joint training sessions with the City of Santee, City of Lemon Grove, and the County of San Diego to initiate a cooperative effort with neighboring jurisdictions.
- Reached out to community members on a wide range of urban runoff and storm water quality topics through nearly 230,000 copies of articles, brochures, mailers, and over-the-counter sources.

I.7 RWQCB Compliance Reviews and Inspections

During this reporting period, interaction between the City and RWQCB staff was mainly limited to written comments on PY5 Annual Report. Comments are addressed in the appropriate component section

I.8 Organization and Content of Annual Report

The Permit requires the submittal of an Annual Report to the SDRWQCB. This Annual Report covers the single permit year activities between July 1, 2006 and June 30, 2007. The Dry Weather Monitoring for 2007 was completed in June 2007, and the entire report is included with this PY6 Annual Report.

The PY6 Annual Report presents and discusses implementation of the City's JURMP with a look at trends, BMP implementation, and overall JURMP effectiveness. Organization of the PY6 Annual Report is as follows:

- Certification
- Executive Summary
- Introduction: Outlines the Permit, City responsibilities, and Annual Report.
- Section F.1 Land-Use Planning for New Development and Redevelopment Component
- Section F.2 Construction Component
- Section F.3 Existing Development Component
- Section F.4 Education Component
- Section F.5 Illicit Discharge Detection and Elimination Component
- Section F.6 Public Participation Component
- Section F.7 Assessment and Jurisdictional URMP Effectiveness Component
- Section F.8 Fiscal Analysis Component
- Conclusions and Recommendations

Charts, graphs, figures, and pictures are used to demonstrate the fulfillment of Permit and JURMP requirements or to highlight a special program accomplishment and event. Appendices provide additional information to validate activities or procedures.

Specific importance is placed on the assessment of JURMP implementation as this process is essential to determine if the City's program is reaching the Permit goal of improving receiving water quality. Some practices and structures (BMPs) listed in the JURMP to reduce or eliminate pollutants may prove to not be as effective as anticipated. An iterative process of BMP development, implementation, monitoring, and assessment focuses the JURMP such that JURMP programs are sufficiently comprehensive and effective to achieve Permit requirements and program objectives.

SECTION F.1 LAND USE PLANNING COMPONENT

1.1 ASSESSMENT OF GENERAL PLAN 2

1.2 MODIFICATION OF DEVELOPMENT 2

1.2.1 Development Project Approval Process 2

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SECTION F.1 LAND USE PLANNING FOR NEW DEVELOPMENT AND REDEVELOPMENT COMPONENT

Entering the sixth permit year (PY6) of Municipal Permit Order No. 2001-01, the City of El Cajon (City) developed a plan to minimize the short and long-term impact on receiving water quality from new development and redevelopment. The City completed the requirements of the plan which include the following four components:

1.1 Assessment of General Plan
1.2 Modification of Development (Project Approval Process)
1.3 Revision of Environmental Review Process
1.4 Conducted Education Efforts Focused on New Development and Redevelopment

1.1 ASSESSMENT OF GENERAL PLAN

The General Plan provides a jurisdictional framework for directing land use and development decisions within the City of El Cajon. Therefore, it is important that the General Plan include provisions to address water quality. The City incorporates elements into the General Plan that provide an adequate foundation for controlling land use and development in a manner consistent with water quality objectives required by the Municipal Permit Order No. 2001 (Permit).

On January 14, 2003, Resolution No. 10-03 was approved amending the General Plan and adding storm water runoff policies and objectives. The amendment is consistent with the City's Jurisdictional Urban Runoff Management Plan (JURMP) and provides policy and objectives dealing with storm water runoff to guide decision-making as mandated in the Permit. A copy of Resolution No 10-30 is included in Appendix A. A copy of the General Plan is shown on the following page.

1.2 MODIFICATION OF DEVELOPMENT

1.2.1 Development Project Approval Process

Development becomes a project once the applicant completes planning action forms that describe the type of development proposed. The planning action is routed to many departments including Storm Water. Consolidated comments from Public Works are attached directly to the project as a list of conditions to the proposed planning action. Conditions are then reviewed and accepted by City Council making them enforceable. The City does not issue building permits until all requirements addressing water quality are fulfilled.

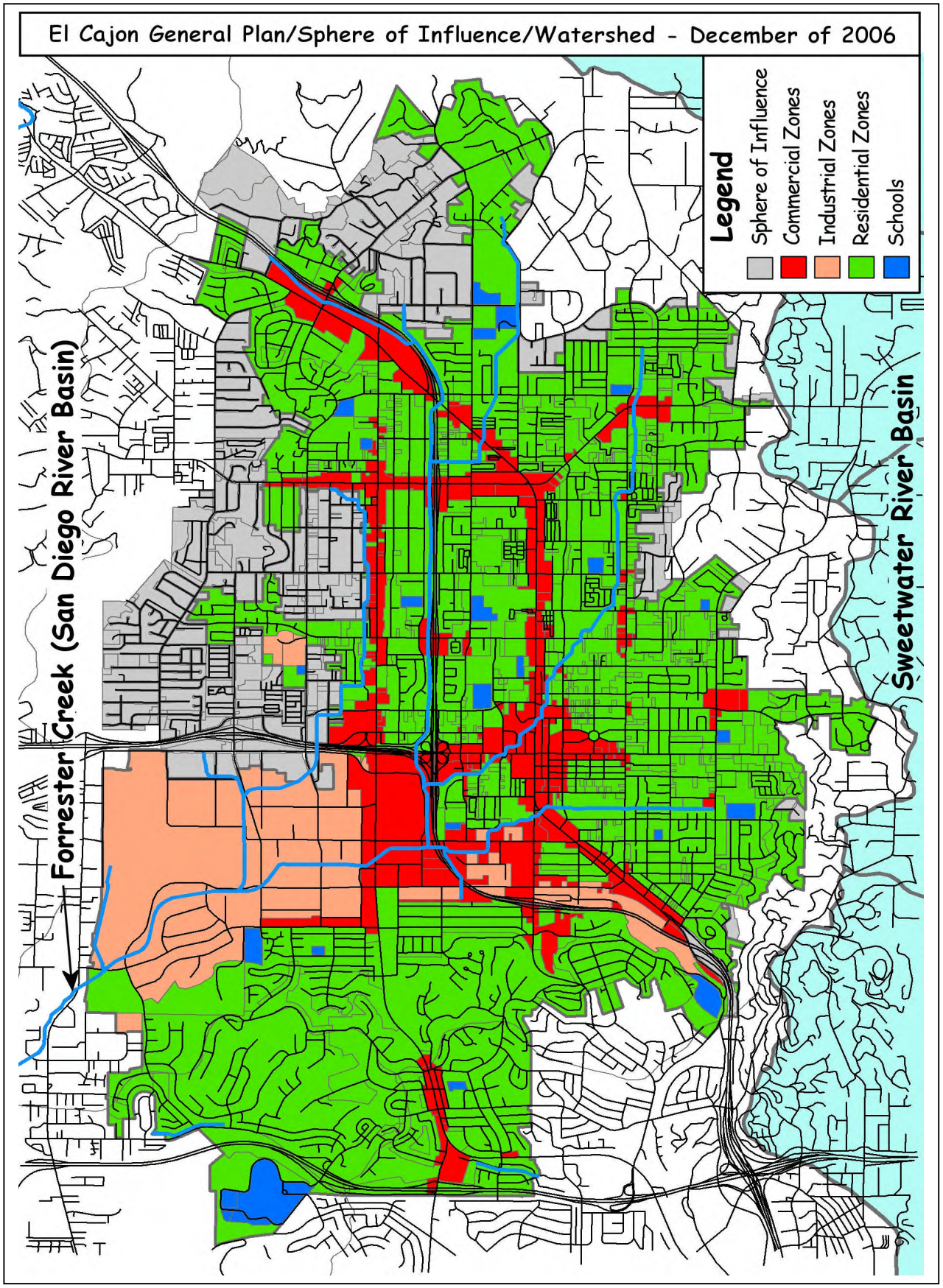
El Cajon General Plan/Sphere of Influence/Watershed - December of 2006
Forrester Creek (San Diego River Basin)
Sweetwater River Basin
Legend
Sphere of Influence
Commercial Zones
Industrial Zones
Residential Zones
Schools

7259

To protect our natural resource waterways, the City has continued Ordinance development and implementation to address water quantity and quality. New and Redevelopment projects are reviewed for applicable BMPs to attain:

- Reduction in paved areas
- Maximize infiltration
- Detain or retain flows to reduce the speed at which water discharges to natural areas, and Break Directly Connected Impervious Areas (DCIAs).
- Minimize potential pollutants from reaching the Municipal Separate Storm Sewer System (MS4) from grading and other construction activities by meeting the provision specified in Section F.2. of the Permit.
- Require Industrial applicants subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities to provide evidence of coverage under the General Industrial Permit.
- Require project proponents to provide proof ensuring ongoing long-term maintenance of structural post-construction BMPs.

1.2.2 Standard Urban Storm Water Mitigation Plan

The City participated with other Copermittees in developing a model Standard Urban Storm Water Mitigation Plan (SUSMP) that was submitted to the Regional Water Quality Control Board (RWQCB) in February 2002. Subsequently, Ordinance 4717 was adopted by the City of El Cajon on December 2002 to implement local SUSMP to reduce pollutants and runoff flows from all new development and significant redevelopment. The City of El Cajon Ordinance 4717 defines the enforceable Municipal Code 16.100 – 16.108 for New and Re-Development. Projects triggering the New and Re-Development SUSMP requirements are:

- Housing projects with greater than 10, but less than 99 units
- Housing projects with greater than 100 units
- Commercial developments greater than 100,000 square feet
- Automotive repair shops
- Restaurants
- Hillside developments greater than 5,000 square feet
- Environmental Sensitive Areas
- Parking lots 5,000 square feet or more or with 15 or more parking spaces potentially exposed to urban runoff
- Streets, roads, highways, and freeways greater than 5,000 square feet

Projects trigger the SUSMP requirements during the initiation of a planning action or environmental investigation brought on by the California Environmental Quality Act (CEQA). The Storm Water section of Public Works reviewed a total of 58 planning actions, 10 of which were categorized as high priority SUSMP projects. The City also carried over 18 SUSMP projects that are in varying degrees of development, design, or construction from previous years. Planning actions and New Development projects are tracked using a MS Excel spreadsheet.

An example Storm Water Mitigation Plan (SWMitP) that includes a list of SUSMP conditioning requirements are given to SUSMP priority projects at the earliest planning stage (please refer to Appendix

A for sample SWMitP). BMPs and the pollutants that are targeted for reduction or elimination to the maximum extent practicable (MEP) are listed in Table 1.

Table 1 – BMP to Pollutants for New and Re-Development Projects

BMP	Primary Pollutants	303(d) Pollutants
Site and Facility Design	Flow	
Site Design and Landscape Planning – SD10	Flow	
Efficient Irrigation – SD12	Nutrients	**TDS**
Storm Drain Signage – SD13	Trash Oil & Grease Toxics	
Pervious Pavements – SD20	Sediment Oil & Grease	
Trash Storage Areas – SD32	Trash Bacteria	
Vehicle Washing Areas – SD33	Metals Detergent	
Detention Basin - TC22	Sediment	
Vegetated Swale – TC30	Sediment Oil & Grease	
Bioretention – TC32	Sediment Oil & Grease Nutrients	**TDS**
Media Filter – TC40	Sediment Nutrients Metals Organics	**TDS**
Water Quality Inlet Filter – TC50	Sediment Trash	
Vortex Separator – MP50	Trash Sediment Oil & Grease	
Drain Inserts – MP52	Trash Sediment Oil & Grease	
Underground Concrete Retention - Proprietary	Flow	

SUSMP projects must identify pollutants of concern based on anticipated and potential pollutants generated from the proposed project and implement BMPs that target the reduction or elimination of the identified pollutants to the maximum extent practicable (MEP). Anticipated and potential pollutants generated by land use type are shown in Table 2.

Table 2 – Anticipated and Potential Pollutants Generated by Land Use Type

Priority Project Categories	Sediment	Nutrient	Heavy Metals	Org Cpds	Trash & Debris	ODS	Oil & Grease	Bacteria & Viruses	Pesticides
>10 SFR	X	X			X	X	X	X	X
100,000 sq ft Commercial	P	P		P	X	P	X	P	P
Automotive			X	X	X		X		
Restaurants					X	X	X	X	
Hillside Development	X	X			X	X	X		X
Parking Lots	P	P	X		X	P	X		P
New Streets > 5000 sq. ft.	X	P	X		X	P	X		P
> 5,000 sq ft Redevelopment	X	P	P	P	X	P	P	P	P
X- anticipated P – Potential		ODS – Oxygen Demanding Substances							

Once potential pollutants of concern are identified for the proposed SUSMP project BMPs must be selected from a list of required and project specific BMPs provided below in Table 3. All site design criteria are applied to every SUSMP project while source and treatment controls are dependent upon site location and type of pollutants.

	New Development (Including Re-Development)									
	Home Subdivisions >100	Home Subdivisions >10,<99	Commercial Development >100,000 sq ft	Automotive Repair Shops	Restaurants	Hillside Development > 5,000 sq ft	ESAs	Parking Lots > 15 spaces; > 5,000 sq ft	Street, road, highways, and freeway > 5,000 sq ft	Retail Gasoline Outlets
General Site Design (Apply All)										
Control Peak Runoff Rates	X	X	X	X	X	X	X	X	X	X
Minimize impervious Areas	X	X	X	X	X	X	X	X	X	X
Conserve Natural Areas	X	X	X	X	X	X	X	X	X	X
Protect/slopes/and channels	X	X	X	X	X	X	X	X	X	X
Minimize effective imperviousness	X	X	X	X	X	X	X	X	X	X
SOURCE CONTROLS (Apply all that are Applicable)										
Storm Drain Message and Signage*	X	X	X	X	X	X	X	X	X	X
Outdoor storage area design										
Trash Storage Area Design					X					X
Loading/unloading dock area design										
Repair/maintenance bay design				X						
Vehicle/Equipment/Accessory washing area design				X						
Fueling Area Design										X
Proof of Control Measure Maintenance				X	X					X
TREATMENT CONTROLS (Apply at least two)										
Inlet Filters**	X	X	X	X	X	X	X	X	X	X
Grass Strip Filter		X		X	X	X	X			X
Grass Swale Filter		X		X				X	X	
Detention/Infiltration Basin	X		X	X	X	X			X	
Porous Pavement Detention	X		X		X	X		X		
Porous Landscape Detention	X									
Infiltration Trench										
Media Filter										
Proprietary Controls						X				X
Other										

For PY6, six projects completed construction and included treatment control best management practices. Projects with SUSMP requirements that were completed and inspected in 2006-07 are listed in Table 4.

Table 4 – Application of SUSMP Structural BMPs for Completed Projects

	Detention Basin/Area	Inlet Filters	Grass/Landscap-ed strip or swale	Hydrodynamic Separator	Proof of Maintenance
Bostonia Development	X	X	X	NA	X
Industrial Complex – 2000 Gillespie Field	X	X	X	NA	X
Grossmont College Life-Safety Road	X	X	X	NA	X
Jerome's	NA	X	NA	NA	X
608-688 Sandra Lane	X	X	X	NA	X
Commercial Suites – 1174 Broadway	NA	X	X	NA	X
Our Lady of Grace Church	X	NA	NA	X	X
7th Day Adventisit Church	X	X	X	NA	X
Grossmont College Subdivision	NA	NA	X	X	X
Saint Madeleine Sophies Training Center	X	NA	X	NA	X
Jack-In-the-Box – 1700 E. Main Street	NA	X	X	NA	X
New York Bakery	NA	X	NA	NA	X

Table 5 – BMP Implementation Summary

BMP	Percent Implemented	Pollutant Prevented
Control Peak Runoff Rates	100	Flow
Minimize Impervious Areas	100	Flow
Conserve Natural Areas	100	Flow
Protect Slopes and Channels	100	Sediment
Minimize effective imperviousness	100	Flow
Storm Drain Message and Signage	90	Trash Oil & Grease
Trash Storage Areas	100	Trash Oil & Grease
Repair/Maintenance Bay Design	100	Oil & Grease
Proof of Maintenance	100	Trash Oil & Grease
Inlet Filter	83	Sediment Trash Oil & Grease
Grass Strip or Swale	75	Flow Sediment Oil & Grease Trash
Detention Basin/Area	60	Flow Sediment Oil & Grease Trash
Biofiltration Area	100	Flow Sediment Oil & Grease Nutrients (**TDS**)

Note on Table 5: Percentages of BMPs implemented, shown in Table 5, are based on the number of applicable sites. For example, if there were three hillside Development projects and all three-implemented slope stabilization, that would be all of the applicable projects. A 100% implementation equates to those applicable sites and not to all sites.

1.3 REVISED ENVIRONMENTAL REVIEW PROCESS

The City of El Cajon revised CEQA forms and checklists to include questions related to water quality issues. The City reviews all projects for CEQA, four projects completed the revised forms for PY 6. The forms are attached in Appendix A.

1.4 NEW DEVELOPMENT AND REDEVELOPMENT OUTREACH EFFORTS

Education efforts for disseminating information to planners, developers, and contractors on the JURMP requirements for new and significant redevelopment is provided through one-on-one and group discussions at the time of the various discretionary plan reviews and checks, during BMP development, and at time of obtaining the building permit. Topics include:

- Federal, state, local water quality laws and regulations
- Connection between land use decision and water quality goals
- New and Redevelopment requirements
- Water quality impacts from development (urbanization)
- Methods for minimizing impacts of development on water quality.
- Implementation of SUSMP requirements

1.5 REGULATORY COMMENTS

Meetings with planning are becoming more frequent to discuss new projects proposed in the City. Additional training for planning staff is proposed for PY7. A copy of the Regional Board's review is provided in Appendix A.

No regulatory comments were received for the Land Use Planning component of JURMP Annual Report 2005-2006.

SECTION F.2 CONSTRUCTION COMPONENT

SECTION F.2 CONSTRUCTION COMPONENT **2**

2.1 Prevention of Polluted Runoff **2**

2.2 Grading Ordinance **3**

2.3 Modification of Construction and Grading Approval Process **3**

2.4 Priority Construction Sites And Source Identification **3**

2.5 BMP Implementation and Requirements **4**

2.6 Inspection **8**

2.7 Enforcement **9**

2.8 Construction Outreach and Education **9**

2.9 Improvements and Regulatory Comments **10**

2.10 Inspection **11**

SECTION F.2 CONSTRUCTION COMPONENT

Park Avenue Subdivision During PY6

Construction in the City of El Cajon is a constant activity. Whether it is a 500 square foot remodeling project or a multi-single family residential subdivision, a minimum list of construction BMPs must be in place prior to any earth disturbance or material storage. With a City built out to its current borders, the City experiences re-development activities more so than new development. However, clearing currently developed lands and re-development is at the heart of this community's construction and revitalization efforts.

2.1 PREVENTION OF POLLUTED RUNOFF

The City uses the CalTrans Construction Site BMP Manual together with the California Best Management Practices (BMPs) Handbook as guidance for the application of appropriate BMPs. An emphasis on pollution prevention is the easiest and most convenient set of BMPs to implement and achieve the elimination of polluted discharges. The following prevention practices are part of the minimum set of BMPs for construction sites.

- Prevent sediment and other polluted runoff – Design a sediment basin to trap runoff for zero discharge, specifically for larger construction sites with enough room for sizing adequate basins.
- Prevent bacteria discharges – Place portable sanitary facility in secondary containment and secure to the ground or stable structure. Prevents tipping and loss of bacteria (fecal coliform) containing material.
- Prevent alkaline (greater than 10.0 pH) runoff – Require properly designed and installed Concrete Washout areas and encourage concrete contractor to haul away concrete waste. Concrete waste disposal should be at an offsite location with adequate control measures.

The City works closely, often one-on-one, with developers at the counter and field discussing ways to prevent pollution from entering the storm drain. The pollution prevention practices are required for any applicant looking for a building permit.

Copies of construction handouts provided by the building department and additional information given to developers, contractors, and homeowners at the time of erosion control plan submittal can be found in Appendix A .2.

2.2 GRADING ORDINANCE

In accordance with Section F.2.b of the Permit, the City grading ordinance was updated in 2002 to require implementation of BMPs and other measures during all construction activities. The City Municipal Code Title 13 Chapter 13.10 *Storm Water Management and Discharge Control*, Section 13.10.140; and Chapter 15.64, *Grading*, work together in addressing land disturbance, demolition, and construction activities for the elimination of sediment and other pollutants from discharging into the City's storm drain system.

2.3 MODIFICATION OF CONSTRUCTION AND GRADING APPROVAL PROCESS

Shortly after the grading ordinance was updated, the City assessed and modified the local construction and grading permit approval process to comply with Section F.2.c of the Permit. All construction projects are required to go through a storm water review process. Construction and grading projects are required to implement measures to ensure that pollutants from the construction site are reduced to the Maximum Extent Practicable (MEP) and will not cause or contribute to an exceedance of water quality objectives. The City does not allow clearing of vegetation matter or grading activities until all necessary environmental clearances, including water quality, are secured and a grading, drainage, and erosion/sediment control plan is prepared, reviewed and approved by the City. During the review process, the City ensures that all applicable grading and storm water ordinances are fully implemented as required per El Cajon City Code Title 13, Chapter 13.10, Section 13.10.140; grading ordinance Chapter 15.64 and Chapter 16.100. The City does not issue building permits until requirements addressing storm water and water quality have been fulfilled.

2.4 PRIORITY CONSTRUCTION SITES AND SOURCE IDENTIFICATION

Periodically the City reviews the list of high priority construction projects to update the list for close monitoring and inspection of construction activities and BMPs implementation for reducing or eliminating pollution from entering the City's storm drain system. High priority status is applied to projects that pose a potential threat to water quality or location. Priority is also given to SUSMP projects that are complete and need to have the storm water controls verified and the maintenance plans reviewed. Table 1 lists the selection of BMPs that must considered and the appropriate BMPs installed at all high priority projects. See Section 2.7 for any Enforcement Actions. In PY6 the City had 20 active high priority construction projects, including 18 SUSMP projects and 10 medium priority construction projects. Also in PY6 the City approved 101 low priority projects for construction.

2.5 BMP IMPLEMENTATION AND REQUIREMENTS

The City established minimum BMPs that must be implemented at all construction sites regardless of the water quality prioritization. The City developed a list of BMPs required at all construction sites. This list first appeared in the JURMP as Appendix C, but has been revised over the last five Permit Years. BMPs specifically prevent, remove, or eliminate a pollutants or group of pollutants from entering the storm drain system.

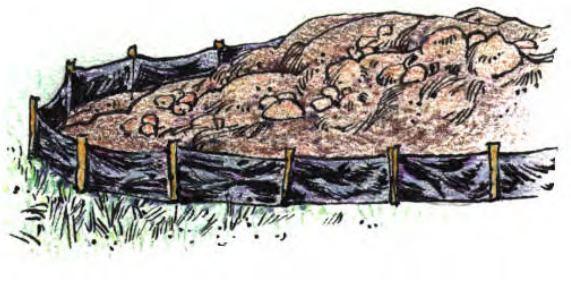

Table 1, below, lists the minimum required BMPs for construction sites, the primary pollutant eliminated and the potentially affected 303(d) pollutant. Eliminating pollutants meets the Clean Water Act and Permit objectives for maintaining the biological, physical, and chemical integrity of the State's waters, while a "no impact" condition meets the restoring requirement of the Clean Water Act objective. A first step toward connecting construction activities to water quality is shown in the following table.

The next step is to quantify how many sites are compliant with the minimum BMP requirements. Table 1 summarizes the minimum BMP requirements and the pollutants that each targets for prevention, removal or elimination. Table 2 lists the different types of construction projects and the minimum BMPs required for each category. Table 3 connects and quantifies the number sites compliant with the required BMPs. In Section F.7, the Effectiveness Assessment of the Construction Component will draw on this connection between BMP implemented and pollutant to determine if the program activities adequately reflect a move toward improving water quality or have little effect on water quality.

Table 1 – BMP to Pollutant

BMP	Application	PRIMARY POLLUTANT REMOVED	303(d) Pollutant Impact
Silt Fence (SC1)	Perimeter Control to remove sediment and debris in runoff	Sediment	-
Desiltation Basin (SC2)	Captures sediment runoff and eliminates sediment runoff	Sediment	-
Gravel Bag Barrier (SE6)	Perimeter Control for pavement to pavement. Removes sediment runoff	Sediment	-
Fiber Roll (SC5) or Coconut Fiber Blankets	Erosion Control for slopes to prevent sediment runoff	Sediment	-
Stabilized Construction Entrance (TC1)	Tracking control for imperviousness to pavement to prevent sediment tracking into streets	Sediment	-
Street Sweeping (SC7)	Tracking control for paved areas. Collects/removes sediment tracked onto pavement	Sediment	-

BMP	Application	PRIMARY POLLUTANT REMOVED	303(d) Pollutant Impact
Material Storage (WM1)	Material coverage and containment or pavement or impervious surfaces to eliminate polluted runoff	Stucco, paints, concrete	-
Solid Waste (WM5)	Trash/debris coverage and containment. Prevent trash runoff	Trash, debris*	-
Concrete Washout (WM8)	Containment and disposal of concrete washout. Prevents concrete runoff	Concrete-laden waters	pH
Sanitary Waste (WM9)	Containment of sanitary waste. Prevents bacteria runoff	Bacteria	Fecal coliform
Vehicle/Equip Management	Containment of petroleum fluids. Prevents oil & grease runoff	Oil & Grease	-

***** Pollutant being monitored by East County Cities
"-" Designates "no impact" on levels of 303(d) pollutants; supports Clean Water Act objective to maintain or restore water quality

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Implementation is measured through onsite inspections. Success of that implementation depends on stage of project at time of contact, materials presented, BMP selection and developer motivation to comply with construction requirements. The City provides a Storm Water Guideline to developers for Construction Projects. This simple, easy to use guide lists the construction BMPs to use for construction activities that would occur outdoors and potentially affect storm water quality.

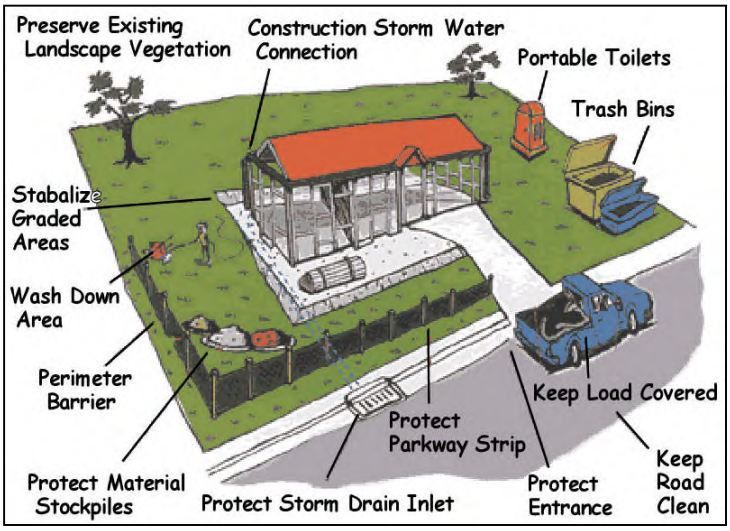

Associations, such as the Building Industry Association (BIA), have assisted in disseminating information to contractors and builders. Those construction personnel who do not belong to associations receive BMP information at the time of permit application or permit issuance. There is a noticeable difference between storm water savvy developers and those just starting their first storm water compliance experience. The City is working towards optimizing interactions at the Public Works counter. Landscaping as early as possible is emphasized regardless of season. This information is provided to contractors as permit issuance and during each scheduled inspection. BMPs must be appropriate for site-specific conditions. Installing BMPs for the sake of compliance is not complying with MEP.

There are four categories of construction projects:

1. Pools, remodels, and additions
2. Single Family Residences, Condo Conversions, and Subdivisions
3. Hillside Development
4. Commercial/Industrial

The minimum required BMPs per category of construction are shown in Table 2, on the next page.

The next steps complete the BMP cycle. By verifying during inspections that the BMP is:

a. Present as required – indicates changes in knowledge and awareness.
b. Implemented properly and functioning correctly – indicator of behavioral changes.

Printed materials are available at the Public Works Department making over-the-counter interactions into educational opportunities. A City BMP guide, edited summaries of application JURMP sections, and personalize service functions as the City's implementation tools. To prioritize effectiveness efforts, the City focuses on the prevention and elimination of the 303(d) pollutants to address the restoration requirement of the Clean Water Act and our Municipal Storm Water Permit. Overall Effectiveness of the Construction Component is provided in Section F.7.

Table 2 – Required BMPs for Construction Sites

Required Construction BMP	Construction Type			
	Pools, Remodels, Additions	SFR Subdivisions	Hillside Development	Commercial and Industrial
Silt Fence - SE1	X	X	X	X
Storm Drain Inlet Protection (+filter fabric) SE10	X	X	X	X
Sediment Basin or Trap SE 2 or 3		X		X
Check Dams - SE4			X	
Fiber Rolls - SE5			X	
Gravel Bags - SE6	X	X	X	
Street Sweeping SE7	X	X	X	X
Stabilized Construction Entrace - TC1	X	X	X	X
Dust Control - WE1	X	X	X	X
Scheduling - EC1	X	X	X	X
Velocity Dissipation Devices - EC10			X	
Preservation of Existing Vegetation - EC2		X	X	
Coconut Fiber Blankets - EC7			X	
Material Storage - WM1	X	X	X	X
Solid Waste Storage - WM5	X	X	X	X
Concrete Waste - WM8	X	X	X	X
Employee Training - City of El Cajon		X	X	X

X = Required; Implemented; and Verified

2.6 INSPECTION

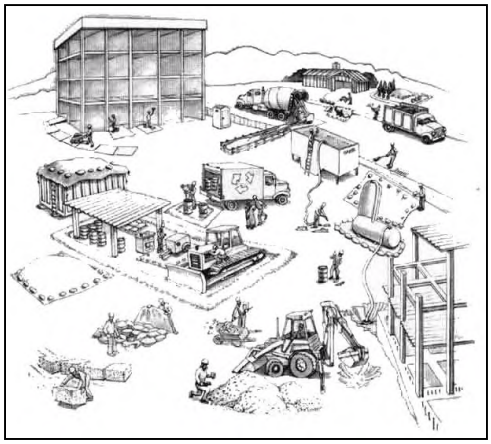

The City inspects all high priority projects monthly during the dry season and weekly during the wet season. Inspections are completed using the form provided in Appendix A.2. In PY6, the City had 20 high priority projects, all of which were fully or partly active construction sites during the permit year. SUSMP projects are now considered high priority construction projects and are inspected on the same schedule. All projects are inspected prior to completion of the projects to verify proper and complete installation of storm water controls and review any long-term maintenance plans. Eleven SUSMP projects were completed during PY6 and one abandoned. All projects designated other than high priority and/or SUSMP are inspected on an as-needed basis or in response to a complaint received from City staff or the general public. The City had 10 medium priority projects under construction and approved 101 low priority projects for construction.

Inspection of construction sites in PY6 verified that most construction sites implemented BMPs. Deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions and through enforcement actions. If corrective actions were needed, the construction site either completed the corrective action at the time of inspection or a follow-up visit was scheduled to verify the completion of corrective actions. When corrective actions are not completed in a timely manner, enforcement actions are issued. In PY6 the City had enforcement action related to construction inspections and follow-ups. Enforcement actions are further discussed in Section 2.7 and a list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3.

Table 4 – Capital Improvement Project Assessment

2006-2007 CIP CONSTRUCTION SITE INSPECTIONS

Site Inspections		Enforcement Actions	
Job Site	**Minimum BMP's in place**	**Warning(s)**	**Administrative Citation(s)**
Sidewalk Replacement (various locations)	Y	N	N
Street Resurfacing: -El Cajon Blvd. (Boulevard Pl. to W. Main St.) -Johnson Ave. (W. Main St. to El Cajon Blvd.) -Washington Ave. (Johnson Ave. to Avocado Ave.	Y	N	N
Street Resurfacing: -E. Main St. (W.D. Hall to Third St.	Y	N	N

2006-2007 CIP CONSTRUCTION SITE INSPECTIONS

Site Inspections		Enforcement Actions	
Job Site	**Minimum BMP's in place**	**Warning(s)**	**Administrative Citation(s)**
Sewer Pipe and CMP lining (various locations)	Y	N	N
Storm Drain Repairs: -Hillside Park	Y	N	N

Public Works inspectors on an as-needed basis inspect the CIP projects. This may be as frequently as weekly but generally no less than twice per month (when the inspectors are on the job for non-storm water related inspections) while the project is active.

2.7 ENFORCEMENT

In PY6 the City had 21enforcement actions pertaining to inspection follow ups or complaints received for construction activities, five of which resulted in a monetary administrative citation. The City conducted follow-up inspections for all enforcement actions to verify that proper and complete corrective actions were taken in a timely manner. Corrective actions are needed to fix or improve a BMP even though that BMP may be implemented as written.

Administrative Citations are issued for discharges to the City's storm drain system. Most construction sites implement the minimum BMPs and inspections verified that the BMPs were effective in reducing or eliminating discharges to the storm water conveyance system. A list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3.

Other non-compliance issues, except as described above, were not experienced during PY6, although some deficiencies were noted during construction inspections. Deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions and through citations. All violations and deficiencies were corrected in a timely manner.

None of the violations resulted in threats to the environment or human health and notification to the Regional Board was not required.

2.8 CONSTRUCTION OUTREACH AND EDUCATION

Education of construction contractors and developers is conducted primarily through the permitting and inspection processes. The City's building department has the first contact with contractors and developers when a building permit application is completed. The following steps are taken by Building Division and Public Works/Storm Water staff:

1. Building Permit Application

2. A Storm Water "Hold" is placed on the property
3. Developer or contractor is given a Storm Water handout
4. Discuss with developer or contractor, in detail, minimum BMPs and implementation requirements
5. Developer or contractor generates an Erosion Control Plan plus any additional storm water requirements as necessary.
6. Review Erosion Control Plan and any additional requirements, comment, direct developer or contractor to make changes prior to approval.
7. Inspect according to priority
8. Address Corrective Actions.

In PY6, the City reviewed and commented on 10 SUSMP projects, 28 Storm Water Mitigation Plans, 26 condominium conversion projects and 101 Erosion Control Plans for small projects. The City inspects all completed SUSMP projects to confirm proper installation of storm water controls and review the long-term maintenance plans. Copies of the Construction handouts and an example Erosion Control Plan Checklist for additions and remodels (small projects) are included in Appendix A.

Compliance is assessed through inspections by storm water staff or a City contractor. Inspections are completed on a scheduled frequency depending on the season. As mentioned above, during the rainy season high priority construction projects are inspected on a weekly basis.

2.9 IMPROVEMENTS AND REGULATORY COMMENTS

- Generating improvements increases program efficiencies by harvesting those BMPs that work and discarding those that do not.

Improvements

Improvements to the Construction Component include:

- Continue to focus inspection efforts on BMP implementation to facilitate Effectiveness Assessment.
- Continue to use BMP Implementation Inspection Checklist to list minimum required BMPs for construction
- Included SUSMP projects in the High Priority category.

- Inspected construction of SUSMP projects as High Priority construction.

BMP improvements are needed as follows:

- Inlet Protection - Add a layer of filter fabric, then gravel bags, secure with orange cones
- Road Work – Vacuum any water used; no filtering allowed
- Perimeter control – Use silt fence as primary perimeter control
- Hay bales are not to be used anywhere

Regulatory Comment

The following regulatory comments were received for the PY5 Construction component. The comment letter and response letter is contained in Appendix A

Comment:

6. The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections of construction sites. Follow-up activities are required by Permit section F.2.h; therefore they must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

Response:

The following paragraph is provided as an addendum to Section F.2.6 of the 2005-2006 Annual Report for the City of El Cajon.

2.10 INSPECTION

Inspection of construction sites in PY5 verified that most construction sites implemented BMPs. Deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions, and through enforcement actions. If corrective actions were needed, the construction site either completed the corrective action at the time of inspection or a follow-up visit was scheduled to verify the completion of corrective actions. When corrective actions are not completed in a timely manner, enforcement actions are issued. In PY5 the City had one enforcement action related to construction inspections and follow-ups. The table below provides information about this one enforcement action. Enforcement actions are further discussed in Section 2.7 and a list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3 of the Annual Report for PY5 and included as an attachment for this response.

	Date	Component	Street / Location	Complaint/ Observations	Referral / Complaint	City Action	Administrative Citation	Corrections Completed
1	05/30/06	Construction	1385 E. Main St.	Failure to implement BMPs at the construction site	PW Inspectors	Site inspection on 5/26/06. The contractor did not fully implement erosion control BMPs as required by erosion control plan and verbally requested on May 22, 2006. There was evidence of a discharge to the storm water conveyance system	PW 0344	Yes, BMPs were found properly implemented on subsequent inspections

SECTION F.3.a EXISTING DEVELOPMENT – MUNICIPAL COMPONENT

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SECTION F.3.A MUNICIPAL COMPONENT

3.a.1 MUNICIPAL FACILITY ACTIVITIES

As required by F.3.a. of the Municipal Permit, existing municipal facilities must prevent or reduce pollutants in urban runoff by implementing a City-designed program to address specific outdoor activities that have the potential to impact water quality. Municipal facilities include streets, public parking lots, flood control devices, parks/recreation, administration and other public buildings, maintenance and storage areas, police, and fire/safety stations. Activities at any one of these facilities may have the potential for discharging pollutants as urban runoff or during a rain event. The Municipal Component of the JURMP defines a comprehensive program to reduce the potential for polluted discharges through:

- Pollution Prevention activities,
- Best Management Practice (BMP) implementation,
- Storm Water Inspections, and
- Recycling

Homeless

Of specific note are the Homeless that are not only a social problem, but become an uncontrollable water quality problem. Homeless encampments exist in storm water channels because of easy access and good outdoor weather conditions nearly year round. Although prevalent in the storm drain channels, the homeless are difficult to detect in the underground storm drain system comprised of reinforced concrete boxes and even more difficult to permanently remove. Detection is conducted through weekly/monthly inspections of popular entry places and complaints to the Storm Water Complaint Hotline. Removal is accomplished through police enforcement and the homeless have an option for other housing with the City's new interim housing project. The City cleans all of its channels at least twice annually and encampments are removed at that time, however, the encampments are often re-established once the channel maintenance in that area is finished.

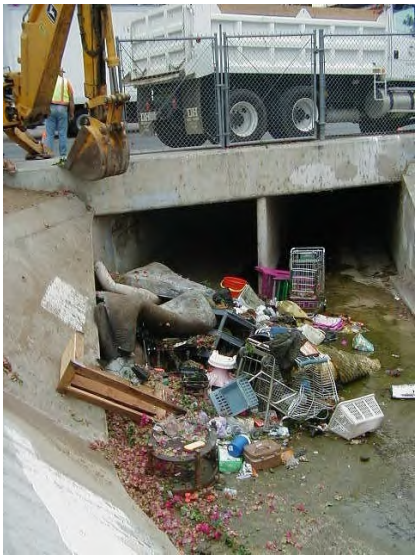

The photograph above emphasizes the enormous amount of materials associated with homeless encampments in the storm drain channel. Other than the visible pollutants of trash and debris, there are also the less collectable, non-visible pollutants from human waste.

The list of major pollutants associated with the homeless living in these underground flood control devices are:

- trash, (a monitored pollutant for East County)
- debris, and
- fecal coliform (a listed 303(d) pollutant for Forester Creek).

Our dry weather-monitoring program is designed to capture information on the homeless and track elevated levels of fecal coliform. During PY6, D-Max Engineering undertook an investigation of fecal coliform and other constituents in the El-Cajon-area watershed. Results of the investigation were inconclusive, but did provide great insight into tracking bacteria in dry weather runoff. Specifics can be found in Section F.5, Appendix A.5 and E of this Annual Report. The City will continue its efforts to reduce or eliminate the impacts caused by the homeless encampments within storm drain channels.

This past year, Storm Water staff and City Maintenance crews teamed with Community Police and Interim Housing (a joint venture between Hammon Properties and Shadow Mountain Church) to move inhabitants into temporary housing, followed by clean up of storm drain channels. For those homeless willing to improve their situation, the Interim Housing group provides a "Hand Up" rather than a hand out. Those who wish to continue living in the City's storm drain system are detained, but eventually find new living places on the street. A County-wide, long-term solution to the homeless is not yet definable for storm water.

3.a.1.1 Prevention of Polluted Runoff

Anytime pollution is prevented from entering the storm drain system, less pollution must be managed at end-of-pipe. The following prevention activities and corresponding BMPs are fully implemented at one or more of the many municipal facilities located within the City. As noted in Introductory Section, the focus of PY6 is continued BMP implementation such that prevention of polluted runoff is achieved to the Maximum Extent Practicable (MEP). The primary pollutants of concern for this prevention effort are the 303(d) impairments of Forester Creek that include pH, total dissolved solids (TDS) as nitrates; and fecal coliforms. The only impairment associated with the City or the upper section of Forester Creek is pH. Further discussion of pH origin and any corrective actions are presented at the end of this section. Trash and debris is a specific issue being tackled together with the City of Santee.

When pollution is prevented from entering the storm drain system, it is either collected or eliminated. Collection requires management of gathered wastes, while elimination is true prevention, but much more difficult to accomplish. The following municipal activities encompass collection and elimination activities.

1. Erosion and sediment control prevents soils and sediments from washing away during rain events. BMPs implemented for City Improvement Projects to control erosion and sediment during project activities are as follows:

- Preservation of existing vegetation
- Scheduling of projects
- Seeding and planting of native plants and trees that are draught resistant and do not contribute to discharges of vegetative matter to the City's MS4.
- Establish plant ground cover before removing erosion or sediment controls.

2. Roadway and street maintenance activities preserve these facilities for a longer, useful existence. Many maintenance activities keep pollutants from entering the storm drain system. Listed below are the maintenance activities with the gross amounts of pollutants collected. Pollution removed equates to preventing polluted runoff that could be transported in urban runoff or storm water discharges.

- Street sweeping and cleaning – Swept over 18,781 miles of curbed streets and removed 3,459 cubic yards of materials that were disposed as solid waste. There is a total of nearly 337 curb-miles of streets withinin the City with some areas swept on a more frequent basis. By collecting 3,459 cubic yards of trash, debris, and sediment, these pollutants did not enter the storm drain system and did not further impair Forrester Creek.
- Collected 36 cubic yards from spills and other miscellaneous operations
- Completed 52 special sweeps at the request of citizens or City staff, collecting 26 cubic yards of material. This is higher than the number of special sweeps conducted during PY5 (i.e., 47 special sweeps and 26 cubic yards).

3. Municipal vehicle maintenance facilities provide a valuable service in keeping the City's vehicles in top running condition. Maintenance activities conducted in a manner to keep pollutants from entering the storm drain system. Listed below are the activities and their designated areas.

- Conduct vehicle maintenance indoors or under canopies
- Area designated for washing vehicles is covered and wash water drains to an oil/water separator before discharging to the sanitary sewer
- Area designated for rinsing street sweepers directly discharges to the sanitary sewer
- Recycling motor fluids (oil and antifreeze), tires, batteries, and metal

4. Landscaping maintenance activities beautify our parks, recreation, and administration buildings. Pollution prevention maintenance activities include:

- Collection of grass clippings and discarded as solid waste
- Sweep or blow residual clippings onto turf areas
- Clean City-owned patio and plaza areas using a machine that contains the cleaning liquids.
- Aerate soil frequently to encourage rain penetration and infiltration
- Maintain an Integrated Pesticide Management (IPM) program

5. Maintenance Procedures for MS4s includes inspecting and maintaining MS4 by cleaning, removing sediment, debris and vegetation; repairing or replacing damaged and failing structures; and stenciling/posting signs at storm water inlets and conveyance systems. Approximately 1,654 cubic yards were collected during PY6. Maintenance crews responded to 36 requests by city staff and citizens to maintain the storm drain system. A work survey request (WSR) is completed for each of the requests and filed at the Maintenance Yard on Vernon Way.

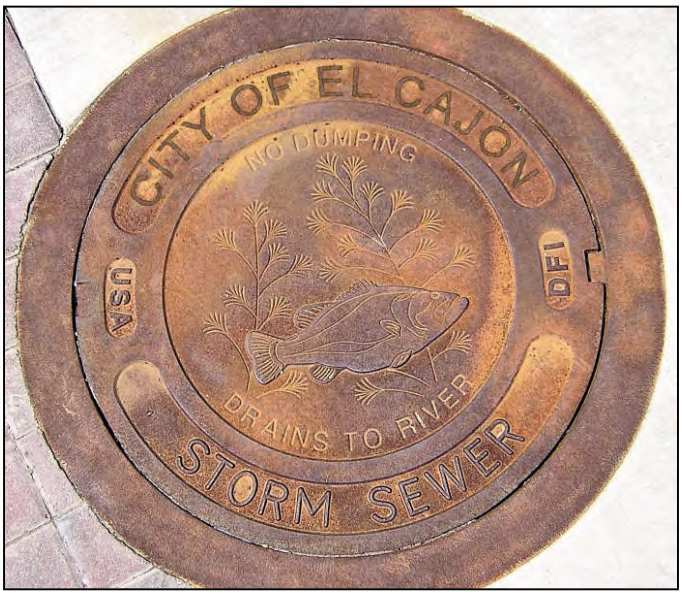

- Storm Drain Inlet/ Catch Basin cleaning
- Storm Drain system repair and maintenance

6. Building Maintenance activities at Municipal facilities prevent pollution by collecting debris, dirt, and organic materials before rain events transport this material to the storm drain system. Wash water is disposed into the sanitary sewer and dry methods are used to collect materials to dispose as solid waste. The following are completed on a weekly schedule:

- Sweep and clean parking lots
- Clean sidewalks
- Sweep and clean entry ways
- Control irrigation runoff and over-spray

7. A Sewer Maintenance program assists in preventing sanitary sewer spills and prevents sewage from entering the storm drain system using the following plans and BMPs:

- Identify and respond to overflow spills and leaks
- Contain and properly dispose of spilled sewage

- Repair damaged and leaking sewer lines
- Identify potential problem areas, such as sewer lines in isolated, hard-to-access canyons, for inclusion in annual Capital Improvement Projects
- TV inspection of sewer main lines
- Annual cleaning of main sewer lines
- Quarterly (3-month) cleaning of sewer siphons, trouble spots and problem manholes
- Quarterly (3-month) rodding and descaling of problem sewer lines

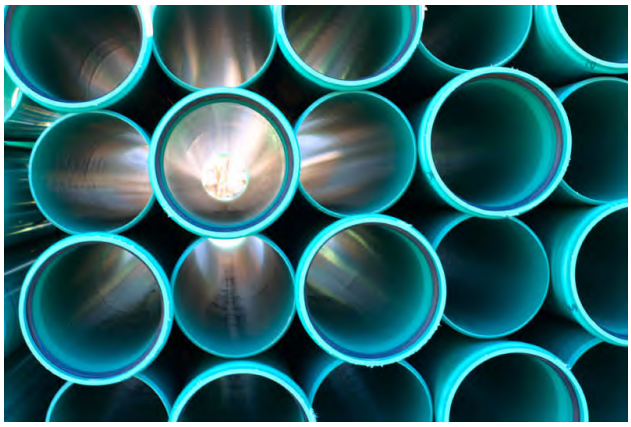

During PY6 the City cleaned 210 miles of sanitary sewer main line, while experiencing three public sanitary sewer overflows. Hence, 2,350 gallon of sewage reached the storm drain due to public sewer overflows. Of the 2,350 gallons reaching the storm drain, 2,050 gallons were recovered and returned to public sewer. The City also responded to six private lateral sewage spills and recovered 74 gallons of sewage. No sewage from private sewer spills with City response reached the storm drain.

3.a.1.2 Roads, Streets, Highways, & Bridges

The following are major City accomplishments during PY6 for roads, streets, highways, and bridges:

- Installed a permanent wash rack for street sweepers to allow more time for cleaning equipment.
- Implemented a strict preventive maintenance schedule for the new Elgin Crosswind street sweeper.
- Swept Downtown District twice per week.
- Swept non-Downtown Business and Commercial areas once per week
- Swept Residential areas and medians twice per month

City Maintenance crews collected a total of 3,459 cubic yards of material from street sweeping. Figures 1 and 2 show the distribution of material by type, cubic yard amounts, and percentages for materials. Total cubic yards of materials increased in PY6 due to continued use of the Elgin Crosswind street sweeper. The total volume of trash, silt and organic material increased, compared with PY5. Figure 2, below provides a summary chart for relative volumes and Figure 3 provides a comparison to amounts collected in previous years.

Figure 1

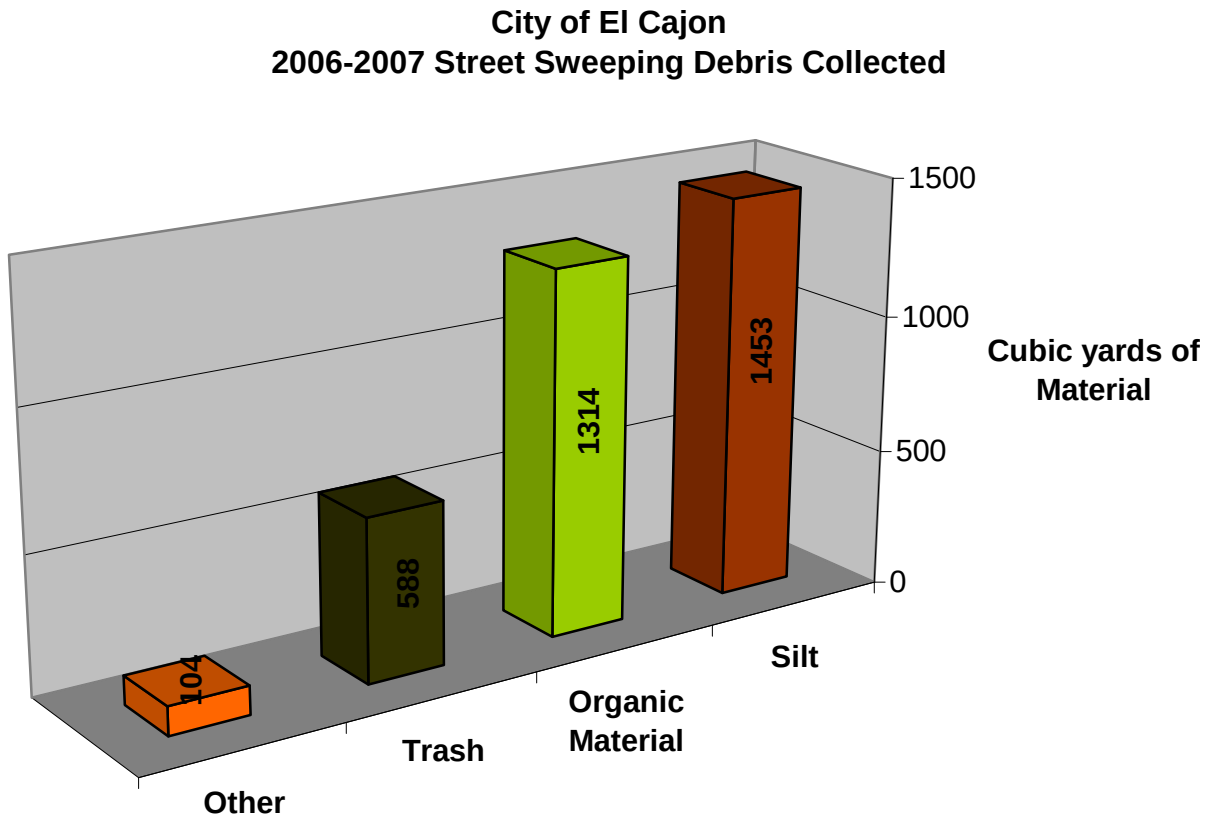

Comparing the percentages of materials collected in the streets with those from the channels, it is worth noting that about 10% more trash is found in the street than in channels. This difference may be due to the types of trash. The elimination of trash is best addressed at the source or generator. For the City of El Cajon, street trash is generated in highly commercialized areas such as restaurants, convenient stores, and department-like stores. During the next Permit Year, keeping the downtown area trash-free and street-clean will continue to be a major priority. These prevention efforts are a partnering effort with the El Cajon Community Development Corporation (ECCDC).

Currently, ECCDC hires the St. Madaline Sophies students to pick up trash and cigarette butts in the downtown area. During PY6, the ECCDC and storm water staff organized community functions to increase public awareness and improve downtown areas. “Lend a Hand” days were scheduled throughout PY6.

Figure 2

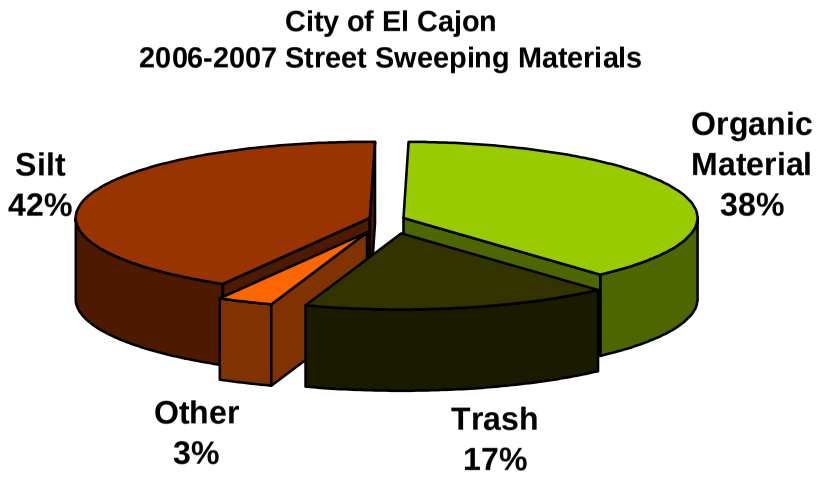

Figure 3

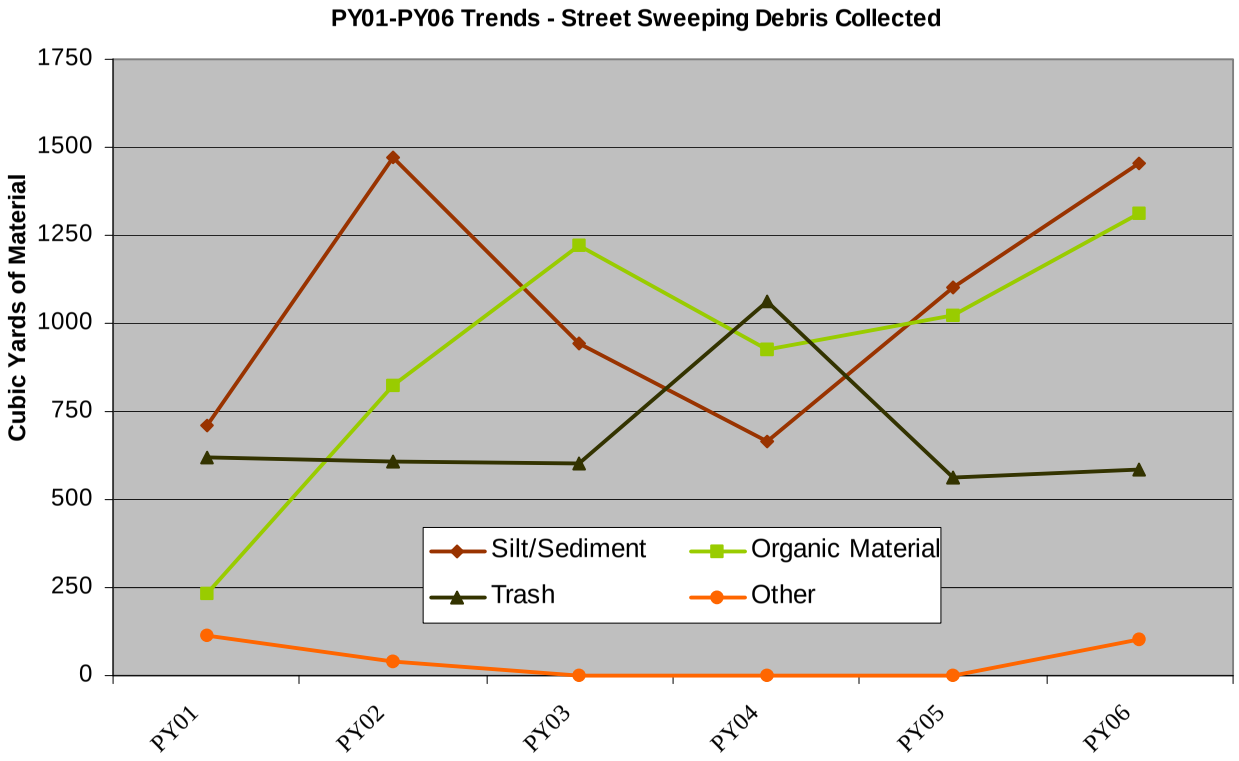

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3.a.1.3 MS4 Maintenance

The City's Municipal Separate Storm Sewer System (MS4) functions to collect and convey surface runoff. Maintenance of this system is necessary for continuous transport of rainwater to prevent flooding and to drain urban flows away from populated areas and prevent flooding.

Figure 4

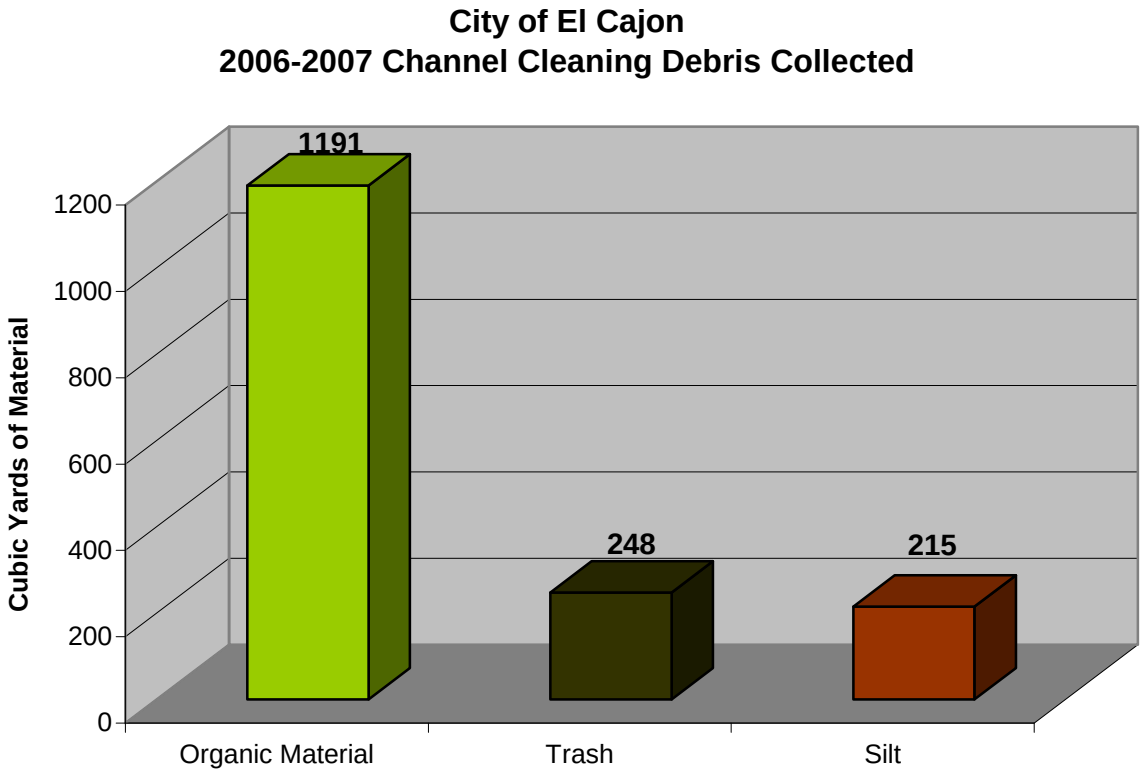

Work Service Requests (WSRs) document maintenance activities on the storm drain system. For PY6, 36 WSRs were completed for both emergency and non-emergency repairs/maintenance to the MS4. WSRs cover any type of needed maintenance and are available at the Municipal Maintenance Yard, located at 1050 Vernon Way, El Cajon.

The City's MS4 includes:

- Streets
- Gutters
- Storm Drain Inlets/ Catch Basins
- Underground pipes
- Culverts
- Rock-lined channels
- Concrete channels
- Unlined Creeks

Implementation of the JURMP Municipal Component in PY6 resulted in:

- Trash/debris removal from storm drain conveyance system (defined above) completed annually as specified in the JURMP. Total removed is 1,654 cubic yards. For types of pollutants removed see Figure 4.
- Met JURMP requirements by cleaning catch basins, culverts, and concrete channels once for PY6 in the major channels and once for the minor channels. The Conservation Corps completes the cleaning for Hunter's Run and Cypress Channel.
- Flow line vegetation maintenance completed one time during PY6 (tree maintenance along major channels and median maintenance).
- Cleaning of Homeless waste and trash completed two times during PY6.

As education and outreach efforts become effective, amounts of trash and debris removed from the MS4 should be reduced. As shown in Figure 3 above, quantities of trash, sediment and organics increased from the 05-06 period to the 06-07 period. The City does not have an explanation for this trend. Pollution prevention is the focus of the Municipal Component of the Storm Water Program, and a reduction in the amount of pollutants entering the storm drain system from City of El Cajon streets should be expected.

Interior of Sewer Main Televising Van

3.a.1.4 Sanitary Sewer System

Continuity and consistency describes the City annual cleaning and maintenance of the sanitary sewer system. Few conditions occur when crews needed redirection from the normal routine. The El Cajon sewage collection system, consisting of nearly 200 miles of municipally owned sewer mains, is a transportation-only utility with the sewage treated at the Metro Wastewater Treatment Plant in Point Loma, San Diego. El Cajon's outfall sewer main transports sewage from the City, Wintergardens Sewer District, and Padre Dam/Lakeside/Alpine Sewer District.

The City of El Cajon has an aggressive maintenance program to prevent sewer overflows. An important maintenance goal is to flush and maintain the entire system at least once every 18 months which requires the flushing of 148 miles of sewer main each year. For PY6, maintenance crews cleaned 210 miles of sewer line in 12 months. Difficult areas, where solids, grease accumulate or root intrusion is a problem, are on a more aggressive schedule of flushing and rodding every 3 months.

As part of the aggressive preventive maintenance program, the City televises sewer mains when:

- A new sewer tap is installed
- New difficult areas are suspected

- Determining the type of maintenance or repair needed

There were three public sewer overflows from City-owned sewers for PY6. Sewer system activities and discharges are reported annually to the San Diego Regional Water Quality Control Board. In April 2003, the City internally started tracking reported overflows from private sewer laterals, where homeowners or businesses require immediate system repair. Response to the private sewer overflow includes reimbursing the City for any storm drain cleanup costs due to the overflow into the public right-of-way.

New-Generation Sewer Vactor Truck

An indispensable tool in preventing sewer blockages and overflows

For PY6, six private sewer spills were reported or detected by municipal staff. Seventy-four gallons of sewage liquids were recovered and disposed of in the sanitary sewer. With private sewer spills, municipal crews estimate how long the spill was active and document an estimated number of unrecoverable gallons.

3.a.1.5 Corporate Yard

The City of El Cajon has one Corporate Yard located at 1050 Vernon Way. Four separate Public Works Divisions are located at this facility, as follows:

- Public Works Maintenance Division - coordinates maintenance for streets, storm drains, drainage channels and public sewers;
- Facility Maintenance Division – maintains City buildings and related facilities;
- Fleet Maintenance Division – maintains City vehicles, and
- City Parks Division – maintains City parks, median, landscapes and urban forest.

It takes coordination and collaboration for these crews to work in the public interest maintaining and improving the health, safety, convenience and quality of life for the City's citizens and visitors.

The Maintenance Division of Public Works

maintains the city's infrastructure. Fleet and Facilities Management is part of Administrative Services and maintains the City's buildings, vehicles and equipment. The Parks Department controls and maintains parks, recreational areas, and other City-owned landscaped areas.

Annual inspections of each area is completed and corrective actions discussed with Department Management. An annual inspection was completed during June of 2007. Improvements at the Corporate Yard include:

New Vacuum Technology in Street Sweeping

Cleaning the Elgin Crosswind Sweeper in the New City Wash-down Facility.

- Monthly visual inspections are conducted.
- Secondary containment has been implemented in all storage areas.
- Berms were constructed around the wash and waste discharge areas.
- Received training on storm water, dealing with the homeless, pesticide training, and managing hazardous materials.

The annual inspection of the Corporate Yard uncovered a few needed Corrective Actions as follows:

- Maintain recordkeeping for training and inspections as defined in the Corporate Yard SWPPP.
- Post procedures on use of Spill Kits.

The sample of the Checklist for Municipal Site Inspection is contained in Appendix A.

3.a.1.6 Municipal Airfield

Gillespie Field, located at 1720 Joe Crosson Drive, is the local airfield and governed by the San Diego County Airport Authority and the Federal Aviation Administration. The City of El Cajon inspects this facility for compliance with the Municipal Permit as well as the General Industrial Permit. Some of the new BMPs include:

Section F.3.a

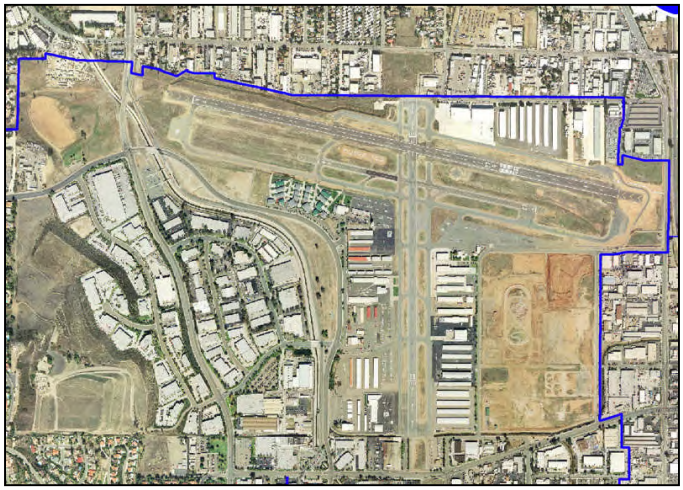

Gillespie Field - A County Airport Facility

- Wash racks with discharges hooked to the sanitary sewer. Use of manually adjusted shut-off valves eliminating flows to the sanitary sewer during rain events.
- Installation of a berm around the western fueling area and a flag valve to alert others of fueling operation and contain spills during aircraft fueling or tank filling.
- Spill kits placed throughout the airport.

3.a.1.7 Parks and Recreation

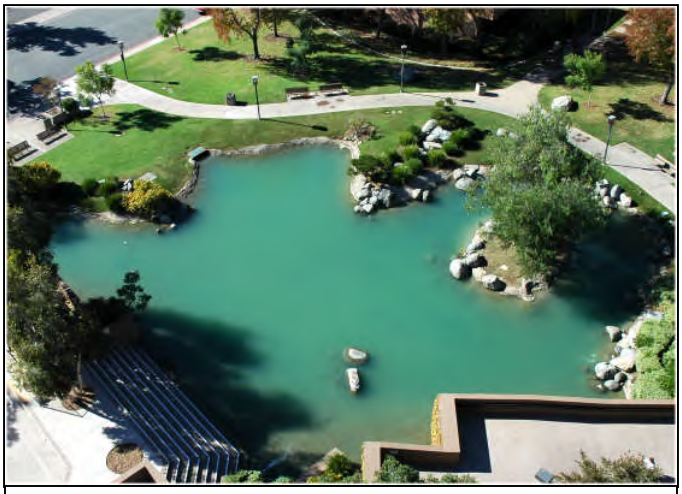

A City-Maintained Park Area Near City Hall

The Parks Division maintains, improves, protects, and develops the City's parks, landscaped median islands, public building grounds, and the urban forest for the benefit and enjoyment of the community. Maintenance of these nearly 120 acres is overseen by a well-trained, full-time staff that performs any necessary maintenance on a daily basis. Attractive public open spaces and well-maintained parks help to make El Cajon a better place to live, and encourages civic pride. Staff continually strives to promote a Cleaner Community through maintaining a Healthy Watershed while providing the community the highest quality and level of service possible.

Parks and Recreation areas prevent pollutants from entering the storm drain system, by implementing BMPs such as:

- Providing Pet Waste Bags at Dog Park located at Wells Park
- Blowing organic cuttings and sediment onto grass and disposing collected wastes properly
- Use of mop and buckets to clean up after special City events (Cajon Classic Car Show and Friday Concerts on the Green)
- Requiring Qualified Applicator Certificates and 20 hours of training for the safe and effective use of pesticides.
- Requiring Contractors that steam-clean or power-wash to capture, collect, and contain wash liquids, then dispose into the sanitary sewer.

3.a.2 MUNICIPAL BMPS

The City has developed a list of minimum BMPs for Municipal crews to use while maintaining the following categories of municipal-owned and managed facilities. Not counting streets, alleys, storm drain or sewer easements, there are 31 separate municipally maintained facilities within the City. Overall, the categories of Municipal facilities are as follows:

- Roads, Streets, Parking Facilities

- The Multiple Separate Storm Sewer System (MS4)
- Corporate Yard
- Municipal Buildings, Parks, Recreational Facilities, and Landscaping

Each minimum required BMP is connected in some way to a primary pollutant that is reduced or eliminated to the maximum extent practicable (MEP) when that BMP is implemented as written. Table 1 lists the Municipal BMPs that may be applied to municipal activities and areas, the primary pollutant(s) either reduced or eliminated and the 303(d) pollutant that may also be prevented. Not all BMPs listed in Table 1 are required for the 31 Municipally-operated areas.

Table 2 lists the four major municipal areas with their minimum required BMPs and whether they were implemented. An "X" for the BMP indicates the BMP is required.

Inspections complete the BMP cycle by:

- Confirming proper BMP Implementation (present as written in the California BMP Handbooks or by City of El Cajon Storm Water Staff)
- Verifying that the BMPs are maintained (during inspection) (See Table 2 in Section 3.a.2.1 for inspection results)

This Annual Report takes an important step in connecting activities, BMPs, and pollutant reduction to support the Assessment of JURMP Effectiveness contained in Section F.7. The connection is shown by the following diagram.

Table 1 BMPs to Pollutants for Municipal BMPs

BMP	Application	Primary Pollutant Reduced or Eliminated	303(d) Pollutant Reduced
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies	pH; TDS; Fecal Coliform
Spill Prevention Control and Cleanup – SC11	Addresses spills	Varies	pH; TDS; Fecal Coliform
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	Oil & Grease Metals	-
Loading/Unloading – SC30	Controls the loading and unloading of materials	Varies Trash	-
Liquid Container Storage – SC31	Controls discharges from outdoor liquid containers	Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials	Pesticides Fertilizers	-
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris	TDS
Parking Lot and Storage Maintenance – SC43	Addresses sweeping and general maintenance of parking lots	Trash/debris Sediment	-
Drainage System Maintenance – SC44	Requires routine cleaning of the storm drain system	Trash/debris Sediment	-
Employee Training	Requires employees be trained in specific topics	Trash/debris	-
Storm Drain System Signage	Requires signs at storm drains or receiving waters	Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance	Requires routine maintenance of the sewer lateral	Fecal Coliform	Fecal Coliform TDS
Over-watering of Landscape	Requires overspray and over watering to be eliminated	Nitrates	TDS

"-" indicates no impact, positive or negative, to the Forester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

3.a.2.1 Municipal Site BMP Implementation and Verification

As defined in the JURMP, five of the 31 Municipal-maintained areas are considered high priority due to their location, size, and/or potential to impact water quality. This includes the Civic Center-City Hall Plaza complex, Fire Station No. 9, Parks Storage Garage, Public Works Maintenance Division Office, and the Vehicle Maintenance Facility. These five are inspected annually. Annual inspections of high priority municipal areas are conducted to verify if the minimum required BMPs are implemented. An "X" under the minimum required BMP indicates the BMP is:

- A minimum Requirement
- Implemented per written or required specification
- Verified during inspection

Table 2 on the next page lists the minimum required BMPs and Municipal Functions.

Table 2: Required & Implemented BMPs for Municipally-Maintained Areas

MUNICIPALLY-MAINTAINED AREAS	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Non-Storm-Water Discharges - SC10	X	X	X	X
Spill Prev/Contl/ Clean - SC11	X	X	X	X
Vehicle & Equipment Fueling - SC20				
Vehicle & Equipment Cleaning - SC21			X	
Vehicle & Equipment Repair - SC22			X	
Loading /Unloading - SC30			X	X
Liquid Container Storage - SC31				X
Raw Materials Storage – SC32	X		X	
Equip Operations - SC33			X	
Waste Handling/ Disposal - SC34		X	X	X
Safer/Alternative Products - SC35			X	X
Contam/Erod Areas - SC40			X	X
Building/Grounds Maintenance - SC41			X	X

MUNICIPALLY-MAINTAINED AREAS	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Building Repair/ Construction - SC42				X
Parking/Storage Maintenance - SC43			X	X
Drainage System Maintenance - SC44	X	X	X	X
Employee Training - City of El Cajon	X	X	X	X
Storm Drain System Signage - City of El Cajon	X	X	X	X
Public Participation and Education			X	X
Street Sweeping - City of El Cajon	X		X	
Vegetation Controls - City of El Cajon				X
Preservation of Existing Vegetation - City of El Cajon				X
Seeding and Planting - City of El Cajon				X
Mulching - City of El Cajon				X
Over-water Activities - City of El Cajon				X

X = Minimum Requirements

3.a.2.2 Implementation Analysis and Further Assessment

Table 3 summarizes the implemented BMPs for the five high priority Municipal Facilities where formal inspection and BMP usage was verified. It is important to note that no illegal discharges or spills were reported for any of the 31 City-owned or maintained areas.

Table 3 Percent BMP Implemented

BMP	Percent Implemented	Pollutant Prevented
Non-SW Discharge	100	Various: **Fecal Coliform**
Spill Prevention/Control/Cleanup	100	Various
V&E Cleaning	100	Metals
V&E Repair	100	Oil & Grease
Loading/unloading	100	Various
Liquid Container Storage	100	Oil & Grease
Raw Materials Storage	100	Pesticides
Equipment Operations	100	Oil & Grease
Waste Handling/Disposal	100	Bacteria
Safer/Alternative Products	100	Pesticides
Contaminated/Erodible Areas	100	Sediment
Building/Grounds Maintenance	100	Trash, Debris
Building Repair/Construction	100	Metals
Parking/Storage Maintenance	100	Oil & Grease, Trash, Debris
Drainage System Maintenance	100	Sediment, Trash, Debris
Employee Training	100	All
Public Participation and Education	100	Trash, Debris
Street Sweeping	100	Sediment, Trash, Debris
Sewer System Maintenance	100	**Fecal Coliform**
Vegetation Controls	100	Sediment
Preservation of Existing Vegetation	100	Sediment
Sedding and Planting	100	Sediment
Mulching	100	Sediment
Over-watering Activities	97	**TDS (Nitrate)**

(Highlighted – 303(d) listed pollutants)

The City Hall complex has an ever-existing issue with irrigation over spray and broken sprinkler lines due to large public visitor population and the homeless. Problems are fixed immediately, although never eliminated

The above information is used in Section F.7 to support an Effectiveness Assessment of the Municipal Component and further define areas where improvements can be made.

3.a.3 PESTICIDE, HERBICIDE, AND FERTILIZER MANAGEMENT

3.a.3.1 Pesticide Regulatory Program – Integrated Pest Management

The City has adopted a Pesticide, Herbicide, and Fertilizer Management program as follows:

- Maintain a running inventory of pesticides, herbicides, and fertilizers,
- Implement a schedule for application of pesticides, herbicides, and fertilizers,
- Use an Integrated Pesticide Management (IPM) approach,
- Track use of pesticides, herbicides, and fertilizers,
- Train or license (Qualified Applicator Certificate) City personnel who apply pesticides, and
- Continuously train City personnel on BMPs.

The City maintains 120 acres, including landscaped medians, parkway trees, parks and public grounds and performs scheduled maintenance of all areas on a daily basis. Weed control is conducted along public streets and along storm water channels. Crews use concentrated pesticides and herbicides, both solid and liquid, as follows: Pre-emergent (Pre-E) at 206 pounds, 181 gallons; Post-Emergent at 1.5 lbs., 131 gallons (including Roundup); Contact Chemicals at 8 lbs., 235 gallons; and Pool Chemicals (chlorine and muriatic acid) at 201 lbs., 5,713 gallons.

Figure 6

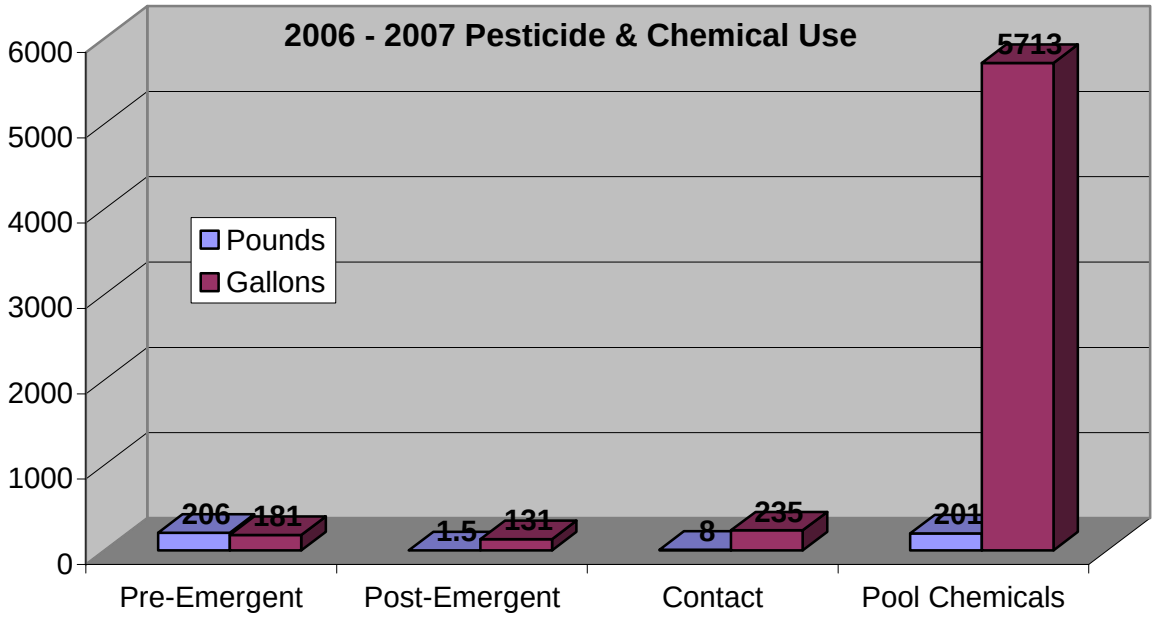

To maintain the City's Park and Recreation areas, 14,420 lbs. of fertilizer were used on turf and landscape. Fertilizer applications consisted of polymer coasted slow release fertilizer. All fertilizers are applied using professionally trained City personnel utilizing BMPs. Applications are documented with fertilizer use reports.

3.a.4 MUNICIPAL STAFF TRAINING, SPECIAL EVENTS AND NOTABLE ACTIONS

New hires for City municipal staff receive New Employee Orientation Training that includes a module on storm water quality issues and concerns. In PY6 all Public Works crewmembers attended storm water training sessions conducted during September and October of 2006. Additionally, all members of the El Cajon Police Department, Community Policing staff received storm water training in during April of 2007.

PUBLIC WORKS WEEK

Public Works Week emphasizes the importance of Street Maintenance, Sanitary Sewer and Storm Water system flushing, and other Emergency and Non-Emergency Services provided by Public Works Maintenance and Operations crews. Public Works Week highlights the equipment used to complete these tasks. In PY6, Public Works was celebrated during the week of May 20, 2007. The public was invited to view equipment and speak with Public Works crewmembers.

TRASH FENCE

The City of El Cajon is the first major jurisdiction within Forrester Creek watershed. Consequently, pollutants and trash that enter the storm drain system are carried downstream to the City of Santee where the Creek has not been improved. In response to the City of Santee's Forrester Creek Restoration Project, the City of El Cajon completed a bid and initial scouting for the placement of a trash and debris fence. The trash fence must be able to withstand forces from flows reaching 22 feet per second and hold heavier floating debris. Installation was accomplished in the fall of 2005 and the trash fence has been in service since. The picture to the right shows trash and debris captured by the fence during a rainfall event.

Forrester Creek Trash Fence

WEB PAGE

The City of El Cajon added new content to a Storm Water Web Page that is part of El Cajon, Municipal Web Site. The Hotline for the City and County plus reports, brochures, and guidance documents can be accessed from Portable Document Format files (PDF files) on the web site.

3.a.5 IMPROVEMENTS AND REGULATORY COMMENTS

The following are the major improvements completed for PY6.

- Developed a Request for Proposal (RFP) to install 42 additional storm drain inlet filters throughout areas in the City where trash and debris has been identified to be a problem. The installation of these filters will be completed by the beginning of permit year 2007-2008.
- Continued the improvement and functionality of the trash and debris fence for Forrester Creek, located upstream from Gillespie Field.
- Review Storm Water Program for Capital Improvement Projects.
- Began to implement GIS to assist with maintenance of storm drain systems.
- Continue to implement a program for monthly self-inspection of Municipal Facilities.
- Continue to conduct maintenance of the existing storm drain inlet filters.
- Development of specific environmental indicators for accurate measurement of Urban Runoff Program effectiveness.
- Establishment of defined measurements and actions to address watershed requirements and develop watershed management procedures.

The following comments and responses were made pertaining to PY5:

Regulatory Comments

Comment:

1. The Annual Report does not provide any updates to the inventory and prioritization of municipal areas and activities. An annual update of the prioritized inventory is required by Permit section F.3.a.2; therefore, all annual updates must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

Response:

A table entitled "Inventory of Municipal Facilities – City of El Cajon" was included in Appendix A.3.a. in the Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report 2005-06 listing a prioritized inventory table for municipal facilities. The table lists the following municipal facilities: High Priority = 4, Medium Priority = 6, Low Priority = 21. Please refer to attachments to this response for an additional copy of the municipal priority list.

Comment:

2. The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections for municipal areas and activities. Follow-up activities are required by Permit section F.3.a.7; therefore, all follow-up activities that were conducted as a result of inspections of municipal areas and activities must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

Response:

The City of El Cajon did not conduct any follow-up activities as a result of municipal facility inspections during 2005-2006.

Comment:

3. The Annual Report does not quantify the number and type of enforcement actions taken on municipal areas and activities. Enforcement of municipal areas and activities is required by Permit section F.3.a.7; therefore, all enforcement actions must be reported on per Permit section I.1.a. Please provide this information in your response to this letter and subsequent Annual Report submittals

Response:

No enforcement actions were taken on municipal facilities or related to municipal activities.

SECTION F.3.B EXISTING DEVELOPMENT – INDUSTRIAL COMPONENT

3.B.1 PREVENTION OF POLLUTED RUNOFF 2

3.B.2 SOURCE IDENTIFICATION 3

3.B.3 PRIORITY INDUSTRIAL SOURCES 3

3.B.4 BMP REQUIREMENTS AND IMPLEMENTATION 5

3.B.5 MONITORING OF INDUSTRIAL SITES 6

3.B.6 INSPECTION OF INDUSTRIAL SITES 6

3.B.7 COMPLIANCE AND ENFORCEMENT 8

3.B.8 IMPROVEMENTS AND REGULATORY COMMENTS 8

SECTION F.3.B INDUSTRIAL COMPONENT

The Industrial Component was revised at the end of PY3, adjusting the program to a Best Management Practices (BMP) implementation and verification task. Industrial inspections are the focus of the City's Industrial Component with the goal being to verify the presence of BMPs, proper implementation and maintenance and check that the facility has filed a Notice of Intent and has a Storm Water Pollution Prevention Plan pursuant to the General Industrial Permit, if required.

Proper implementation and maintenance of appropriate BMPs at industrial facilities will eliminate or reduce the discharge of pollutants from an Industrial site and prevent pollutants from entering the City's storm drain system. The City redesigned the inspection sheet to emphasize the use of BMPs for specific, potential pollutant producing activities. Industrial activities either have the potential to affect storm water runoff or have no direct or apparent affect. Industrial operations conducted in a manner that prevents the discharge of pollutants or pollutant contact with storm water should not have any impact on water quality. The City's focus is on identifying those industrial activities that have an actual or potential impact on water quality, requiring implementation of appropriate BMPs and periodic inspections of industrial facilities to verify compliance with City, state and federal water quality requirements.

Outdoor industrial activities have the greatest potential to impact receiving waters through outdoor storage, loading/unloading, fueling areas, vehicle/equipment maintenance, solid/hazardous waste storage, and parking lot runoff. A Storm Water Quality Inspection form to document routine, follow-up, and compliance inspections is provided in Appendix A.

3.B.1 PREVENTION OF POLLUTED RUNOFF

Pollution prevention for industrial facilities eliminates the management of pollution and reduces the amount of potential monitoring that is required under the General Industrial Permit. The City encourages industries to apply pollution prevention tactics, such as the BMPs listed in Table 1, below. Storm Water staff disseminate this information during inspections, letters, and enforcement actions. A copy of the Industrial Activity Fact Sheet is provided in Appendix A.

- Use smaller quantities of toxic materials or substitute less-toxic materials.
- Change production processes to reduce waste.
- Recycle wastes.
- Dispose of wastes properly

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
Spill Prevention, control, and cleanup	Prevents spills, controls spills	Varies	pH
Raw Material Storage	Prevents pollutants on outdoor material storage from discharging	Oil & Grease	_
Safer Alternative Products	Encourages use of less toxic materials	Pesticides Fertilizers	TDS
Employee Training	Prevents discharges	Varies	pH

3.B.2 SOURCE IDENTIFICATION

The City developed a watershed-based inventory of all industrial facilities within its jurisdiction that is updated each year. Industrial facilities, by Municipal Definition, are those facilities covered under the state General Industrial Storm Water Permit, listed by a specific Standard Industrial Classification (SIC) Code, or designated by the City as an industry. In previous years, the City identified 550 industrial facilities within its jurisdictional boundaries, 26 of those are currently identified as high priority facilities. The County has jurisdiction over 10 industrial facilities near and within Gillespie Field. Usually, County and City staff inspects airport facilities on an annual basis.

3.B.3 PRIORITY INDUSTRIAL SOURCES

The City has prioritized its industrial facilities. The City reviewed data on the 550 potential industrial facilities as indicated in Section F.3.b (3) of the permit by using information from the City business licenses, the County listing of businesses by Standard Industrial Codes, and information collected during field inspections over the past several years. Of the 550 identified industrial facilities, 26 are currently categorized as high priority according to the JURMP criteria. A table of high priority industrial and commercial sites is contained in Appendix A.

Each year, industrial sites are re-prioritized to get an accurate picture of the number and types of industrial sites within the City's jurisdiction Prioritization involves two steps: initially classifying a facility as being a high, medium or low priority threat based on site information; and subsequently confirming or reclassifying it based on field observations and additional information. The former step has been accomplished administratively using the data provided in the inventory of industrial sites. The latter step was completed following the initial inspection of each industrial facility.

Additionally, pollutants were listed with the activities associated with industrial outdoor activities to assist in the selection of the most appropriate BMPs. This initial connection of pollutants, BMPs, and activities will be used to correlate water quality with JURMP requirements in the Annual Report. Below, in Table 2, is the City's listing of activities with the potential pollutants.

Table 2 – BMPs to Pollutants for Industrial Facilities

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies depending on discharge	-
Spill Prevention Control and Cleanup – SC11	Addresses spills	Varies depending on spill	-
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	(Petroleum) Oil & Grease Metals	-
Loading/Unloading – SC30	Controls the loading and unloading of materials	Varies depending on the materials Trash	-
Liquid Container Storage – SC31	Controls discharges associated with outdoor liquid containers	(Petroleum) Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies depending on the waste material Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials for cleaning, disinfecting, or other functions	Pesticides Fertilizers	-
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris Sediment	TDS
Parking Lot and Storage Maintenance – SC43		Trash/debris Sediment	-
Drainage System Maintenance – SC44		Trash/debris Sediment	-
Employee Training		Trash/debris	-
Storm Drain System Signage		Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance		Fecal Coliform Debris	Fecal Coliform TDS
Over-watering of Landscape		Nitrates	TDS

"-" indicates no impact positive or negative to the Forrester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

3.B.4 BMP REQUIREMENTS AND IMPLEMENTATION

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of Permit Section F.3.b.(4), BMP Implementation. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility. An "X" indicates the BMP is: Required by the City of El Cajon as a minimum BMP – Level 1 (completed in PY1)

- by the Industrial facility – Level 2 (Provided BMP information during PY2)

The next steps include:

- Implementation as observed during the onsite inspection – Level 3 (Verified during PY3 thru PY6 inspections and follow-up inspections to be conducted in PY7 as needed.)
- Connection to a specific Primary pollutant and any 303(d) pollutants identified for Forrester Creek to support an Effectiveness Assessment – Level 4 (Completed in PY3, and continued thru PY6, below)

The City applied "A Framework for the Implementation of Best Management Practice (BMP) Programs at Commercial and Industrial Sites" to implement BMPs at industrial sites. BMP selection and application began at JURMP development with a minimum number of BMPs. These minimum requirements were incorporated into the industrial/commercial inspection checklist (Appendix A).

Table 3 – Required Industrial BMPs

Required Industrial BMPs	
Non-SW Discharges - SC10	X
Spill Prevention/Control/Cleanup - SC11	X
V&E Fueling - SC20	X
V&E Cleaning - SC21	X
V&E Rep - SC22	X
Loading/Unloading - SC30	X
Liquid Container Storage - SC31	
Raw Materials Storage - SC32	X
Equip Ops - SC33	
Waste Handling/Disposal - SC34	X
Safer/Alternative Prods - SC35	
Contam/Erod Areas - SC40	
Bldg/Grounds Maintenance - SC41	X
Bldg Rep/Construction – SC42	
Prkg/StorageMaint – SC43	X
Drainage Sys Maint - SC44	X
Employee Training - SWPPP	X
Storm Drain System Signage - Permit	
Private Sewer Lateral Maintenance - City of El Cajon	X
Over-water Landscape - City of El Cajon	X

3.B.5 MONITORING OF INDUSTRIAL SITES

As required in Section F.3.b (5) of the permit, monitoring is required at high priority industrial facilities. The City of El Cajon verifies and reviews facility's monitoring program and SWPPPs during the inspection process and in accordance to the City's JURMP. The table entitled "High Priority Industrial Facilities Inspected – 2006-2007" in Appendix A includes a column indicating the implementation of a monitoring program and when sampling events occurred at each facility.

3.B.6 INSPECTION OF INDUSTRIAL SITES

Normally, only high priority industrial sites are inspected annually. The first year of inspections was an exception where medium and high priority industrial site were inspected as a baseline for subsequent permit years. In PY6, twenty-seven high priority industrial sites were inspected.

Industries are aware of BMP requirements through the General Industrial Permit, Industry Associations (e.g. Industrial Environmental Association) and inspections or site visits. During inspections, BMPs are evaluated for appropriateness and completeness using observations and facility knowledge. The following industrial BMPs may be used at industrial facilities depending on the activity and associated pollutants. Those BMPs with an asterisk (*) are the BMPs :

- found to be most effective in preventing pollutants that contribute to the water quality of Forrester Creek (See Section F.7 for the Industrial Component Assessment Effectiveness),
- employed consistently throughout the County, and
- required by the City.

Table 4, below, shows the connection between the 303 (d) Forester Creek pollutant with the BMP that controls, minimizes, or eliminates the polluted discharge of that pollutant. Percentages summarize inspection results for the high priority industrial facilities.

Table 4 – BMP Implementation and Verification Summary (for High Priority Facilities)

BMP	Percent Implemented	Pollutant Prevented
Non-SW Discharge	68*	pH Metals Organics
Spill Prevention/Control/Cleanup	96*	pH Metals Organics
V&E Fueling	89*	Oil & Grease
V&E Cleaning	100*	Metals
V&E Repair	100*	Oil & Grease
Loading/unloading	95*	pH Organics
Liquid Container Storage*	85*	Oil & Grease
Raw Materials Storage	83*	Pesticides
Equipment Operations*	100	Oil & Grease
Waste Handling/Disposal	92*	pH Metals Organics
Safer/Alternative Products*	100	Pesticides
Contaminated/Erodible Areas*	100	Sediment
Building/Grounds Maintenance	100*	Trash, Debris
Building Repair/Construction*	100	Metals
Parking/Storage Maintenance	100*	Oil & Grease, Trash, Debris
Drainage System Maintenance	83*	Sediment, Trash, Debris
Employee Training	85*	pH Metals Organics
Storm Drain System Signage*	In progress	pH Metals Organics
Private Lateral Maintenance	In progress*	Fecal Coliform; TDS (303(d) listed pollutants)

***** - required (See Table 1)

Table 4 illustrates that industrial operations are fully implementing the minimum required BMPs. The entire BMP must be implemented at the time of inspection for compliance to count in the percentage. If corrective actions were required the BMP was not implemented as written. The percentages specifically show a significant improvement in the BMP implementation. Percent

implementation is carried into Section F.7, Assessment of JURMP Effectiveness for the Industrial Component.

3.B.7 COMPLIANCE AND ENFORCEMENT

As specified in the City Ordinance, the City is able to use various warnings and actions to correct a facility/activity and enforce the JURMP. For PY6, the City further coordinated and partnered with industry to implement and enforce the requirements of the JURMP and City Municipal Code. Enforcement generally is initiated with a verbal warning and followed up by a written warning. Enforcement using Administrative Citations was incorporated in May 2003. Appendix A lists criteria for issuing Citations and Appendix B shows the list of enforcement actions taken by the City in PY6.

The City did not have any non-compliant sites resulting from inspections during PY6 that posed a threat to human or environmental health. Where Corrective Actions were needed, facilities either completed the Corrective Action at the time of inspection or a follow-up visit was scheduled where completion of Corrective Actions were verified.

The City used various types of educational materials to distribute information and discuss the JURMP requirements with industrial facilities. Brochures were provided to business owners during face-to-face discussions, inspections or complaint referrals.

Written warnings are provided as well as verbal warnings to ensure there is written documentation.

3.B.8 IMPROVEMENTS AND REGULATORY COMMENTS

Suggested improvements from the PY5 Annual Report are incorporated into this PY6 Report. Additional effectiveness adjustments based on PY5 Effectiveness Assessment, field experiences and information gathered during PY6 are provided below:

- Provide educational materials for industrial facility employees at the time of inspections.
- Involve property owners with industrial facility corrective actions when the two are different entities.

The City of El Cajon received comments on the PY5 Jurisdictional Urban Runoff Management Program Annual Report, dated January 2007. The specific comment and the City's response are provided below.

Comment:

4. The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections of industrial facilities. Follow-up activities are required by Permit section F.3.b.6; therefore they must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

Response:

For PY6 a total of 27 High Priority Industrial sites were inspected. Follow up inspections were scheduled and conducted at the industrial facilities whenever corrections were required during annual inspections. The majority of corrections were related to the installation of secondary containment, the covering of liquid containers stored outdoors, and the installation of filters in lot storm drain inlets. All corrections were responded to and completed in a timely manner.

Comment:

5. The Annual Report does not include monitoring that was conducted at all high priority industrial facilities. Monitoring at all high priority industrial facilities is required by Permit section F.3.b.5; therefore it should be reported per Permit section I.1.a. The necessary information can be provided by confirming that the monitoring was conducted or by describing the monitoring that was conducted. Please provide this information in your response to this letter.

Response:

As required in section F.3.b (5) of the permit, monitoring is required at high priority industrial facilities. The table included in the JURMP Annual Report for permit year 2005-2006 entitled "High Priority Industrial Facilities Inspected – 2005-2006" in Appendix A includes a column indicating dates when monitoring was conducted at priority industrial facilities within the City. An updated table entitled "Industrial Inspections With Monitoring Data" is included as an attachment to this response.

SECTION F.3.C EXISTING DEVELOPMENT – COMMERCIAL COMPONENT

3.C.1	**PREVENTION OF POLLUTED RUNOFF**	**3**
3.C.2	**PRIORITY COMMERCIAL SOURCES**	**3**
3.C.3	**BMP REQUIREMENTS AND IMPLEMENTATION**	**4**
3.C.4	**INSPECTIONS OF COMMERCIAL FACILITIES**	**6**
3.C.5	**COMPLIANCE AND ENFORCEMENT**	**8**
3.C.6	**EDUCATION**	**9**
3.C.7	**IMPROVEMENTS AND REGULATORY COMMENTS**	**9**

SECTION F.3.C COMMERCIAL COMPONENT

Commercial facilities are those facilities that are designated by the County or by the City as a commercial facility with activities that may potentially affect the quality of receiving waters. In previous years, the City identified 621 commercial facilities within its jurisdictional boundaries, and has categorized different commercial types for education, inspection and follow-up as needed. For PY6 the City prioritized about 136 Automotive Repair and Service Facilities as high priority. A complete list of the Automotive Repair and Service Facilities that were inspected is included in Appendix B.

The City prioritized commercial facilities for PY6 and focused on Automotive Repair and Service Establishments due to their potential to discharge a variety of pollutants, including grease, wash water, and trash which may have an impact on Forester Creek. Results of these inspections were used to assess effectiveness of the Commercial Component (See Section F.7 of this Annual Report) and substantiate improvements for next year's program.

After the *Framework for BMP Implementation* was completed in October 2003, the Commercial Component was restructured into a BMP implementation program similar to other Existing Development (Municipal, Industrial, and Residential). Implementation, verified during onsite inspections, determines whether a BMP is either fully implemented or requires Corrective Action. A fully implemented BMP is counted towards preventing, eliminating, or reducing pollution discharged to the maximum extent practicable (MEP). By summing the number of BMPs implemented, the City is able to support an overall Effectiveness Assessment of the Commercial Component (See Section F.7).

To the left is a picture of the Downtown El Cajon, a highly commercialized area where a number of businesses were inspected last year for implementation of appropriate BMPs to keep their businesses clean and prevent pollution from entering the storm drain system. During PY6, the City focused on the implementation of BMPs at Automotive Repair and Service Establishments.

The City inspected a total of 136 Automotive Repair and Service Facilities. A Storm Water Quality Inspection form was used to document routine and follow-up inspections with their appropriate Corrective Actions. A copy of the inspection form is provided in Appendix A.

3.C.1 PREVENTION OF POLLUTED RUNOFF

Preventing pollution prevention at commercial facilities is at the center of the City's inspection and education efforts at commercial facilities. Prevention eliminates or reduces the management of pollution and ultimately leads to a cleaner, healthier watershed. Although Best Management Practices for Commercial Facilities are used as a primary mechanism for reducing commercial discharges of pollutants into regional MS4s, the educational effort to change the way businesses conduct business is the final objective. *A Framework for the Implementation of Best Management Practice (BMP) Programs at Commercial and Industrial* Sites is used to inspect commercial facilities and talk to businesses about their outdoor activities and storage practices.

Automotive Repair and Service Facilities were targeted for inspections during this PY since information on minimum required BMPs was disseminated in previous years. This year those businesses were held to a higher standard of BMP awareness and understanding.

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutants Prevented	Prevention of 303(d) pollutant
Spill Prevention, response, control, and cleanup	Prevents spills, controls spills	Oil & Grease pH	**pH**
Good housekeeping of outdoor activity areas	Prevents pollutants from entering the storm drain system.	Oil & Grease	**TDS**
Employee Training	Prevents discharges, spill response	Oil & Grease	**pH** **Fecal Coliform**
Private Sewer Lateral Maintenance	Preventive maintenance of sewer lateral prevents sewage overflows	Fecal Coliform Enterococcus Nitrates	**Fecal Coliform** **TDS**

3.C.2 PRIORITY COMMERCIAL SOURCES

A majority of the City's commercial sites can be categorized as shown in Table 2. Of specific concern are those businesses located near storm water channels. Activities from the commercial sites with the associated pollutants are shown in the following table.

Table 2 – Commercial BMPs to Specific Business Produced Pollutants

Business Type → **BMP ↓**	**Restaurants**	**Automotive Establishments**	**Retail Gasoline Outlets**	**Mobile Washing Businesses**
Non-Storm Water Discharges – SC10	Organics Trash	Oil & Grease Metals	Oil & Grease Metals	Oil & Grease, Metals
Spill Prevention Control and Cleanup – SC11	Trash Oil & Grease Organics/Bacteria	Trash Oil & Grease Metals	Trash Oil & Grease	**TDS** Metals
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22		Trash Oil & Grease Metals		Oil & Grease Metals **TDS**
Loading/Unloading – SC30	Organics/Bacteria Oil & Grease	Oil & Grease	Oil & Grease	
Liquid Container Storage – SC31		Oil & Grease		
Raw Material Storage – SC32		Oil & Grease		
Waste Handling and Disposal – SC34	Organics/Bacteria Oil & Grease Trash			Trash
Building and Grounds Maintenance	Organics/Bacteria Oil & Grease Trash	Trash	Trash	
Parking Lot and Storage Maintenance – SC43	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Drainage System Maintenance – SC44	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Employee Training	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Private Sewer Lateral Maintenance	Pathogens/**Fecal Coliform** **TDS**	**Fecal Coliform** **TDS**		
Over-Watering	**TDS**	**TDS**	**TDS**	

3.C.3 BMP REQUIREMENTS AND IMPLEMENTATION

In addition to the pollution prevention BMPs, the following BMPs are required at commercial facilities that are ranked as a high priority threat to water quality. Table 3 lists the required BMPs for Commercial facilities (all types) located with the City of El Cajon (next page).

Table 3

Required Commercial BMPs

		Non-SW Discharges - SC10	Spill Prev/Contl/Clean - SC11	V&E Fueling - SC20	V&E Cleaning - SC21	V&E Rep - SC22	Loading/Unloading - SC30	Liq Container Storage - SC31	Raw Matrls Storage - SC32	Equip Ops - SC33	Waste Handlng/Disp - SC34	Safer/Altern Prods - SC35	Contam/Erod Areas - SC40	Bldg/Grnds Maint - SC41	Bldg Rep/Constr - SC42	Prkg/StorageMaint - SC43	Drainage Sys Maint - SC44	Employee Training - City of El Cajon	Over-water Activities - City of El Cajon	Private Sewer Lateral Maintenance - City of El Cajon
COMMERCIAL	Automotive Sales and Services	X	X	X	X	X	X	X		X	X	X		X	X	X	X	X		X
COMMERCIAL	Eat/Drink Establishments	X	X				X	X			X			X	X	X	X	X	X	X
COMMERCIAL	Parking Lots/Storage Facilities	X	X										X			X	X	X		
COMMERCIAL	V&Equip Washing	X			X						X			X	X		X	X		X
COMMERCIAL	Retail Fueling	X	X	X			X	X			X			X	X	X	X	X		X
COMMERCIAL	Landscaping Service	X						X	X		X		X			X	X	X		X
COMMERCIAL	Pool/Fountain Cleaning	X	X				X	X			X							X		X
COMMERCIAL	Pest Services	X	X				X	X			X							X		X
COMMERCIAL	Equip Servicing	X			X					X	X			X	X	X	X	X		X
COMMERCIAL	V&E Body/Painting	X			X				X		X			X	X	X	X	X		X
COMMERCIAL	Trash Hauling Service	X	X				X			X	X							X		X
COMMERCIAL	Nurseries/Florists	X	X					X	X		X		X	X	X	X	X	X	X	X
COMMERCIAL	Vehicle/Equip/RV Servicing	X			X					X	X			X	X	X	X	X		X
COMMERCIAL	Airplane Servicing	X			X			X		X	X			X	X	X	X	X		X
COMMERCIAL	Masonry Services	X									X							X		X
COMMERCIAL	Painting/Coating Service	X						X			X	X		X	X	X	X	X		X
COMMERCIAL	Recylcing Services	X					X				X							X		X
COMMERCIAL	Fitness Facilities w/pool	X	X								X	X		X	X	X	X	X		X
COMMERCIAL	Windws/Bldg Clean	X	X								X	X						X		X
COMMERCIAL	Concrete Mix/Cut	X		X					X	X	X							X		X
COMMERCIAL	Paving Services	X									X							X		X
COMMERCIAL	Pet Boarding Serv										X	X		X	X	X	X	X		X
COMMERCIAL	RV/Camp Grounds	X	X								X						X	X	X	X

An effective combination of BMPs applied to the maximum extent practicable meets the City's BMP implementation requirements. Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of Permit Section F.3.c.(3), BMP Implementation. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility. The list of facilities inspected during PY6 is contained in Appendix A. The City applied "A Framework for the Implementation of Best Management Practice (BMP) Programs at Commercial and Industrial Sites" to implement BMPs at commercial sites. BMP selection and application began at JURMP development with a minimum number of BMPs. These minimum requirements were incorporated into the industrial/commercial inspection checklist (Appendix A)

Periodically, commercial sites are reprioritized to get an accurate picture of the number and type of commercial sites within the City's jurisdiction. Prioritization involves two steps: initially classifying a facility as being a high, medium or low priority threat based on site information; and subsequently confirming or reclassifying it based on field observations and additional information. The former step has been accomplished administratively using the data provided in the inventory of commercial sites. The latter step was completed following the initial inspection of each commercial facility.

Automotive Repair and Service Facility Inspections centered on BMP implementation for the following minimum required BMPs.

- Non-Storm Water Discharges
- Spill Prevention and Cleanup
- Vehicle and equipment fueling
- Vehicle and equipment washing
- Vehicle and equipment repair
- Loading/Unloading
- Liquid Container Storage
- Waste Handling/Disposal
- Building/Grounds Maintenance
- Building Repair/Construction
- Parking/Storage Maintenance
- Drainage System Maintenance
- Employee Training
- Private Sewer Lateral Maintenance
- Over Watering Minimization

3.C.4 INSPECTIONS OF COMMERCIAL FACILITIES

High priority commercial sites are inspected annually. The first year of inspections was an exception where high, medium, and low priority commercial sites were inspected as a baseline for subsequent permit years. Automotive Service Facilities were targeted this year and, as described above, Food Service Establishments were targeted last year. The City will be

evaluating the existing business license inventory to update the City's JURMP per Municipal Order R9-2007-0001. The City will determine and implement the inspection of commercial facilities in 2007-2008 based on the updated information.

Inspections include facility visit; evaluation of BMP implementation; recommendations of appropriate BMPS; and providing technical, educational and regulatory information. Inspection information was translated into BMP verification data as needed to more effectively assess the function of the Commercial Component and align it with the objectives of the Storm Water Pollution Prevention Program of improving water quality as well as follow the Clean Water Act objective of maintaining and restoring the chemical, physical, and biological integrity of Waters of the United States. New Inspection Forms list the minimum required BMPs to be verified. An example of an Inspection Form for Eating or Drinking Establishments is provided in Appendix A. A new Inspection Form will be generated for each type of commercial business, since their minimum required BMPs may be different as shown in Table 3, the minimum required BMPs for Commercial Facilities.

Table 4 shows five BMPs that were identified from the inspections to require a better implementation. These are:

Spill Prevention/Control/Cleanup; Grease Bin Container Storage; Waste Handling/Disposal; Good Housekeeping; and Training. The Table includes the list of Corrective Actions that were verified through follow-up inspections. Further assessment of effectiveness is discussed in Section F.7.

Table 4 – Typical Reasons for BMPs Corrective Actions

BMP	Reason for Corrective Action	Corrective Actions
Spill Prevention/Control/Cleanup	1. No spill kits or absorbent	1. Purchase Kitty Litter or other absorbent
Vehicle and Equipment Repair	1 Vehicle repairs conducted outside without cover.	1. Provide cover for outside vehicle repair area or conduct all repairs inside building.
Waste Handling/Disposal	1. Open lids on dumpsters 2. Litter/trash in dumpster enclosure	1. Keep lids closed 2. Keep dumpster enclosures clean
Good Housekeeping	1. Waste fluids and junk auto parts stored outside uncovered	1. Remove all waste fluids and junk auto parts in a timely manner

BMP	Reason for Corrective Action	Corrective Actions
Employee Training	1. No training conducted 2. No record of training that was conducted	1. Conduct employee training for storm water 2. Keep and maintain a training log

The City provided an informational guide sheet in the form of a storm water protection is in good hands housekeeping poster during the site inspection, provided by San Diego Regional Copermittees and the City of El Cajon Storm Water Protection Program- Best Management Practices For Automotive Facilities Green Wrench Handbook respectively; copies of these documents are attached in Appendix A.3c. Since mobile businesses are the most difficult to contact, City staff has been trained on presenting the material to businesses when they are identified during routine daily activities. Appendix A contains copies of information provided to Automotive Repair and Service Facilities during inspections. BMPs are evaluated for appropriateness using real-time evaluation during the commercial facilities inspections, complaints, referrals, or daily city "drive abouts". Education of the commercial business community is essential to meeting clean water goals.

3.C.5 COMPLIANCE AND ENFORCEMENT

As specified in the City Ordinance, the City is able to use various levels of enforcement actions to correct a facility/activity and enforce the JURMP. For PY6, the City used a combination of verbal/written warnings, Administrative Citations, and partnerships with businesses to implement and enforce the requirements of the JURMP.

A written warning followed each of the verbal warnings to commercial facilities describing the deficiency, any corrective actions, and the subsequent enforcement actions that could occur, if changes or modifications were not completed. Enforcement procedures requiring corrective actions were pursued at all commercial facilities.

Administrative Citations are issued when compliance must be ascertained. A database was designed to collect and track enforcement actions.

No enforcement actions were taken against Automotive Repair and Service Facility inspected in 06-07. Corrective actions were resolved within reasonable time after inspections and follow-ups. Enforcement actions may be issued as a result of the follow-up inspections to be conducted in 07-08.

The table below is a compilation of enforcement actions taken against ALL types of commercial activities. The entire listing of enforcement actions is contained in Appendix B.

Table 6 – Enforcement Actions

BMP Violated	Warnings	Monetary Citations	Actions
Non-SW Discharge	8	1	Changed behavior
Vehicle Cleaning	3	1	Changed behavior
Vehicle Repair	2	0	Stopped and Cleaned
Grounds Maintenance	4	0	Stopped Activity
Waste Handling	6	0	Stopped Activity
Over-Watering	1	0	Changed schedule
Private Lateral Maintenance	1	0	Cleaned and Maintained
Power Washing	3	1	Captured
TOTALs	31	3	

3.C.6 EDUCATION

The City used various types of educational materials to distribute information and discuss the JURMP requirements with commercial facilities. Brochures were provided to business owners during face-to-face discussions during inspections or complaint referrals. Informational material included good housekeeping, conducting cleaning using dry methods, over irrigation, power washing, and maintenance of sewer laterals.

3.C.7 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements from PY6 experience includes:

- Review dry weather monitoring and BMP implementation results to prioritize future commercial inspections.
- Develop a storm water packet of information for business license applicants and renewals.

No regulatory comments were received for the Commercial component of the PY5 Annual Report. The comment letter and response letter is contained in Appendix A.

SECTION F.3.D EXISTING DEVELOPMENT – RESIDENTIAL COMPONENT

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SECTION F.3.D RESIDENTIAL COMPONENT

Pollution prevention is the focus of the JURMP Residential Component to prevent pollutants from residential activities from entering the storm drain system. Education is the best approach to implementing this component of the JURMP as the goal is to change behavior and perceptions. The City is successful in implementing the collection of household wastes and promoting used oil recycling. Each pound of household waste and used oil collected equates to one pound less of waste/pollutants that could be disposed improperly and pollutants enter the storm drain system.

3.D.1 PREVENTION OF POLLUTED RUNOFF

Preventing pollution is easier and less costly than treating wastes at the end of the pipe. The following pollution prevention BMPs are sent to residents via brochures in sewer billings and during face-to-face contact when a complaint or referral is investigated.

- Conduct automobile repair and maintenance under cover or with drip pans; recycle oil.
- Divert automobile wash liquids to landscaping.
- Store unused automobiles under cover; use absorbent pads or drip pans for leakage.
- Maintain garden and yard using natural remedies and drought-tolerant plants.
- Use less toxic products for home care/maintenance.
- Dechlorinate swimming pool water before releasing.
- Dispose of pet waste in the trash.
- Don't use the street as your storage area for dirt, mulch, plants.
- The street is not a disposal for concrete washout, paint washout, or hosing off the driveway.

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutants Prevented	Prevention of 303(d) pollutant
Composting	Reduces the amount of waste in the trash	Organics	
Use of a Professional Car Wash	Eliminates dirty, soapy water from the storm drain	Metals Detergents	**TDS**
Organic gardening	Eliminates fertilizers and pesticides	Nutrients Pesticides	**TDS**
Take a bag when walking the dog.	Eliminates dog waste from the Public Right of Way	Fecal Coliform Enterococcus Nitrates	**Fecal Coliform** **TDS**

3.D.2 PRIORITY RESIDENTIAL SOURCES

Residential areas discharging directly to a major storm drain channel are the focus for pollution sources. Priority sources are directly related to 303(d) pollutants identified in Forrester Creek and the San Diego River. The following table connects sources with 303(d) pollutants. These same 303(d) pollutants are used in Section F.7, Program Assessment to estimate the potential amounts of pollutant eliminated through prevention, intervention, and other BMP implementation.

3.D.3 BMP REQUIREMENTS

In addition to the pollution prevention BMPs, above, the following are encouraged in residential areas. Home improvement projects can cause side affects, like mud flowing into the street (see photo to the left). However, with an effective combination of BMPs applied to the maximum extent practicable, simple home projects can meet the City's BMP implementation requirements without much effort or expense.

Table 2 connects the use of BMPs with the prevention, reduction, or elimination of pollutants.

Table 2 – BMP to Pollutants for Residential Areas

BMP	Application	Primary Pollutants	303(d) Pollutants
Automobile Repair & Maintenance	Use Drip Pans Recycle Oil	Oil & Grease	
Automobile Washing	Use Commercial Car Wash	Metals Detergents	**TDS**
Automobile Parking	Use Drip Pans	Oil & Grease	
Garden and Yard Care	Compost waste	Organic Material	**TDS**
Home Care and Maintenance	Use Household Hazardous Waste Programs	Metals Toxic Substances	
Pet Waste Disposal	Take a bag when walking the dog	Fecal Coliform	**Fecal Coliform**
Private Lateral Maintenance*	Clean lateral every few years	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**
RV Parking & Maintenance	Use a legal dump station	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**

Some changes in behavior are noticed, but the message is still very new to most citizens. The Clean Community; Healthy Watershed and Healthy Garden; Healthy Home (Integrated Pest Management) concepts will be continuing messages for subsequent permit years.

3.D.4 BMP IMPLEMENTATION

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of Permit Section F.3.d.(3), BMP Implementation. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility.

The list of minimum BMPs for residential areas tracks along with pollution prevention concepts. Education is the basis for changing behavior in the residential community. By changing how the residential community completes tasks around the home, benefits to water quality will be realized through wet weather monitoring. The major routes for educating the citizens and disseminating information is through newsletters, sewer billing inserts, and City "drive abouts" where information is delivered directly to target audiences.

The following BMPs are provided to citizens through one-on-one visits, newsletters, sewer billing inserts and citizen complaints/referrals. Copies of brochures, newsletter articles, and flyers are included in Appendix A.

- Automotive Repair
- Car Washing
- How You Can Prevent Pollution from Entering the Storm Drain System
- Pet Waste
- Mobile Detailer BMPs
- PowerWashing
- Clean up After Your Pets
- Lawn and Garden Care
- Keeping Our Environment Clean!
- Over-Irrigation Can Cause Storm Water Pollution
- Washing Your Car
- What's the Problem with Pet Waste
- Keeping Our Yards and Our Storm Water Clean
- Trash and Street Sweeping Update
- Trash in Our Strom Drains
- Maintaining your Private Sewer Lateral
- Everything that goes into Our Storm Drains…Ends up in the Ocean
- Why It's Important to Keep Trash, Sediment and Debris Out of Storm Drains
- Pool Maintenance BMPs
- Creating Community by Keeping Our Storm Water Clean

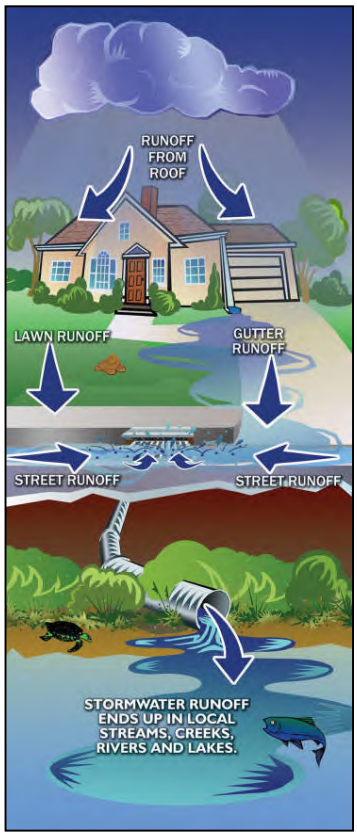

Table 5 - Required BMPs for Residential Areas

		Automobile Repair Maintenance	Automobile Washing	Automobile Parking	Garden & Yard Care	Home Care & Maintenance	Pet Waste Disposal	Private Lateral Maintenance	RV Parking & Maintenance
RESIDENTIAL	Vehicles & Equipment	X	X	X					X
	Home and Garden				X	X	X	X	
	Pets						X		
	Private Sewer Lateral					X		X	

Minimum required BMPs for the Residential Component are grouped into four (4) basic categories as shown in Table 5. It is only through consistent, simple messages, will the citizens start to implement the BMP identified for the activities around their homes.

An area where Storm Water staff are collaborating with the police department is RV Parking and Maintenance. Police Department staff assist Storm Water staff in locating areas where dumping is occurring. The resulting outreach effort should help East County residents to reduce the number of illegal dumping events within this region of the watershed.

As illustrated above, over-watering from many different homeowners' landscaping can have an impact on the landscaping and may result in a significant source of water in the street. What seems of little importance from one home combines with runoff from other homes forming small rivers that can move materials stored in the right-of-way or pollutants illegally discharged. Homeowners are encouraged to save water and money by adjusting sprinkler heads to reduce or eliminate overspray. When over-watering is discovered, an attempt is made to contact the responsible party. Door hangers are left with instructions when homeowners are not home. Staff schedule a return date to discuss the measures that can be taken by homeowners. When over-watering discharges decrease, there is a reduction of:

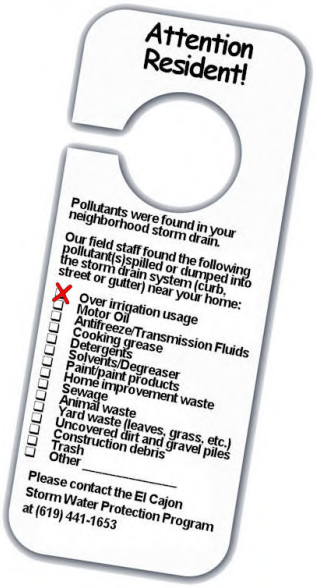

- the amount of water discharged to Forrester Creek
- the amount of pollutants transported to Forrester Creek during "No Rain" days

Improvement in decreasing over-watering will be measured by the amount of Forrester Creek flow leaving the City of El Cajon at the jurisdictional boundary to Santee. Flows measured during the dry weather program are an indication of daily flows. The PY6 dry weather flow into Santee was measured at 281 gallons per minute, as measured at Dry Weather Station No. 5. Overall flows have been on the decrease in all permit years since PY4, inclusive, and may indicate that outreach and education efforts that discourage over-irrigation are becoming effective. Additional flow measurements may be taken during the next annual cycle. The full Forrester Creek Study is contained in Appendix E.

3.d.4.1 Outreach to Residents

The City used various types of educational materials to distribute information and discuss the JURMP requirements with residents when responding to complaints or investigating a discharge. Brochures were provided to residents during face-to-face discussions concerning complaints and referrals. The City newsletter has included five articles concerning routine activities where receiving waters may be impacted by pollutants. The newsletter is freely available for residents

and industrial/commercial business owners on a semi-annual basis. Two such printings were completed in PY6 and covered the following activities for residents:

- Keeping Our Beaches Clean,
- Pet Pollution Can Be a Serious Problem
- Watershed Responsibility
- Over-Irrigation Can Be a Problem, and
- Trash and Homelessness in the Storm Drains

The City printed and distributed 38,000 copies, each, of the Spring and Fall newsletters with five articles in total contained in both newsletters. As a result, residents are becoming more aware. An indication of this awareness is the increase in the number of complaints and referrals from the private sector. As the public and municipal staff gains more knowledge and awareness of urban runoff, additional increases in complaints and referrals are expected. Education of staff and residents is productive.

Sewer billing storm water information inserts were also sent out three times during PY6. In addition, additional information was posted on our city's web site and on kiosks and bulletin boards around our city notifying citizen of El-Cajon-sponsored Events. The information specifically addresses processes or events where citizens can act in ways that would help prevent pollution of urban runoff. How an individual relates to the Storm Water Pollution Prevention Program determines the way that person will change his or her behavior. Continuing on this theme is essential before moving on to a watershed concept. The sewer billing inserts/public participation postings urge public participation in the following processes or events:

- Pet Pollution Can Be a Serious Problem
- Car Wash Fundraisers
- Sewer Spill Reference Guide
- Household Hazardous Waste, E-Waste and U-Waste Recycling Event of May 19, 2007
- Pollution Prevention Day Events of April 11 and May 16, 2007

3.d.4.2 Recycling and Waste Collection Services

Keeping household wastes out of the storm drain system requires the implementation of a coordinated pickup program with a licensed facility to handle the wastes according to appropriate State and Local regulations. The City uses Waste Management to schedule routine and requested pickups for household wastes. Figures 1, 2, 3, and 4 show the total amount of household wastes, the type of wastes collected, recycled materials from curbside pickup (commercial and residential) and total amount of waste collected. There was one Household Hazardous Waste, Electronic Waste and Universal Waste Collection Event where a total of 2,466 participants dropped off over 236,890 pounds of materials (Figure 1). Figure 2 shows the percentages of material types taken to the collection events.

A total of 93,720 tons of wastes were collected from residential and commercial areas (Figure 3). Although an amazing 35,000 tons of materials were recycled from the curbside recycling program (Figure 4), there is more that can be recycled.

Figure 1 – Household Hazardous Waste Collection

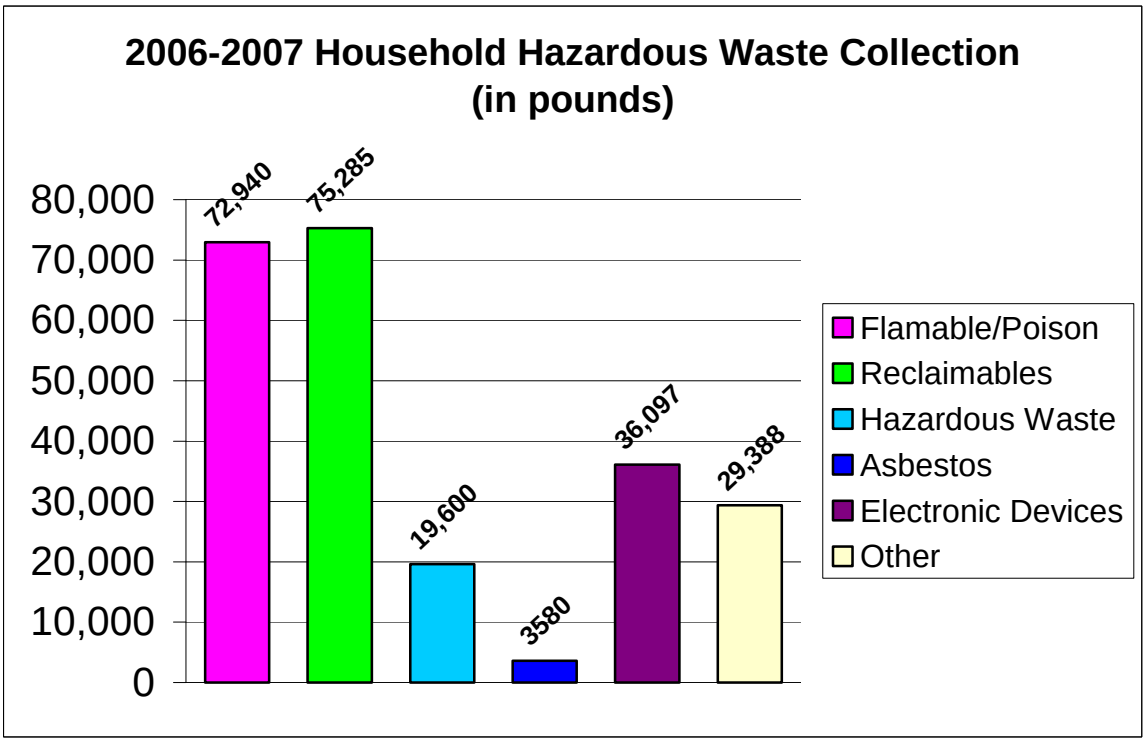

Figure 2 Percentages of HHW Type

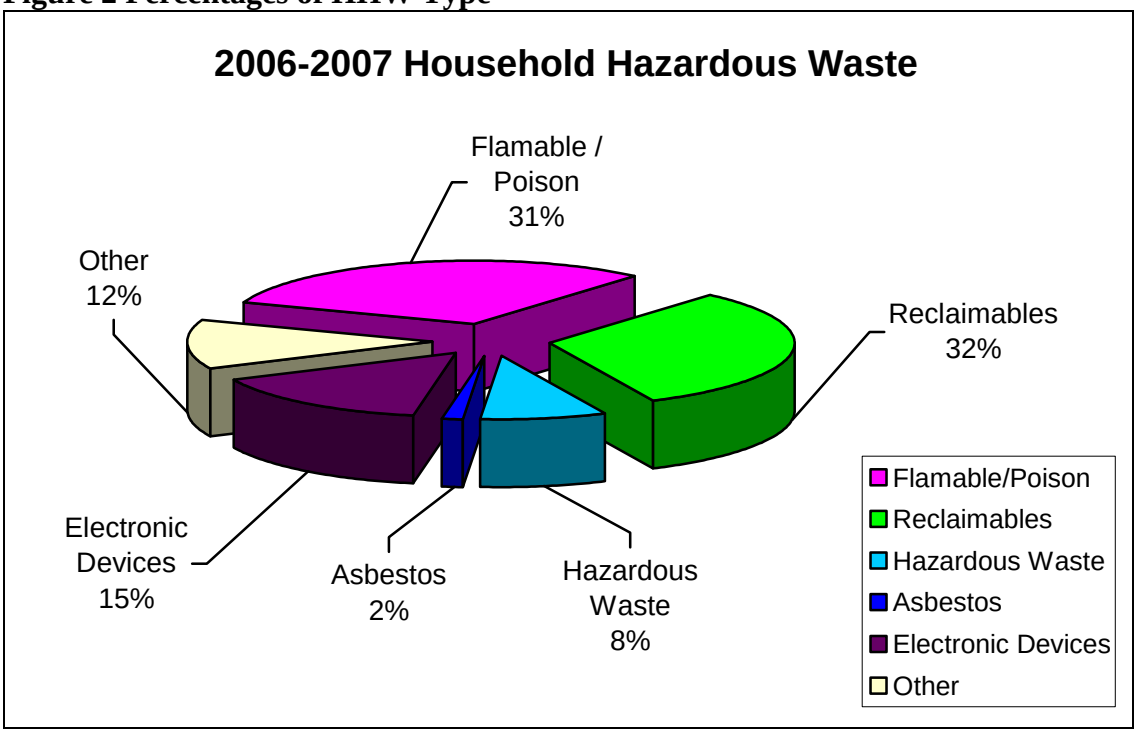

Figure 3

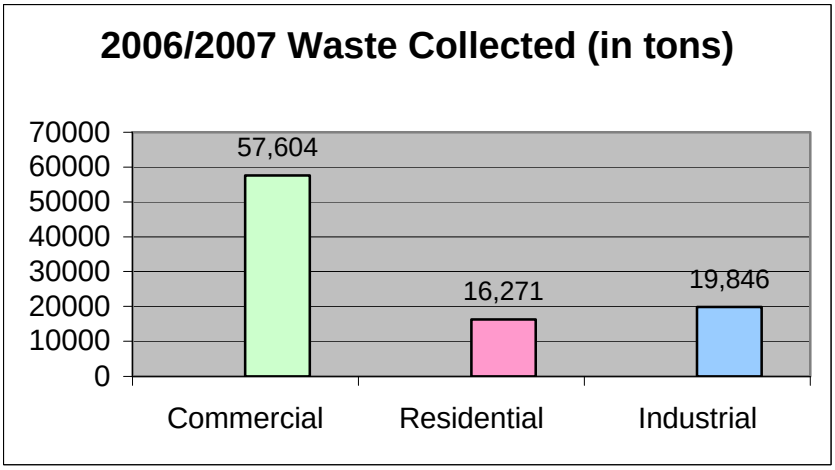

Figure 3 shows the amounts, in pounds, of waste collected for Commercial and Residential. Waste collected equates to pollutants not discharged to the storm drain system.

3.d.4.3 Opportunities for Community Involvement

The El Cajon Community Development Center (ECCDC) prints and circulates a newsletter to the downtown area businesses on a quarterly basis. Additionally, the ECCDC prints a Clean & Safe report that covers actions to keep the downtown area clean and safe. The downtown Clean Team works to keep the community clean and performs a daily litter removal, maintenance, and landscaping activities. Saint Madelines School provides the student workers who detail the downtown street and sidewalk areas by collecting cigarette butts, trash, and debris. Spills are reported directly to ECCDC for immediate removal and disposal.

Figure 4

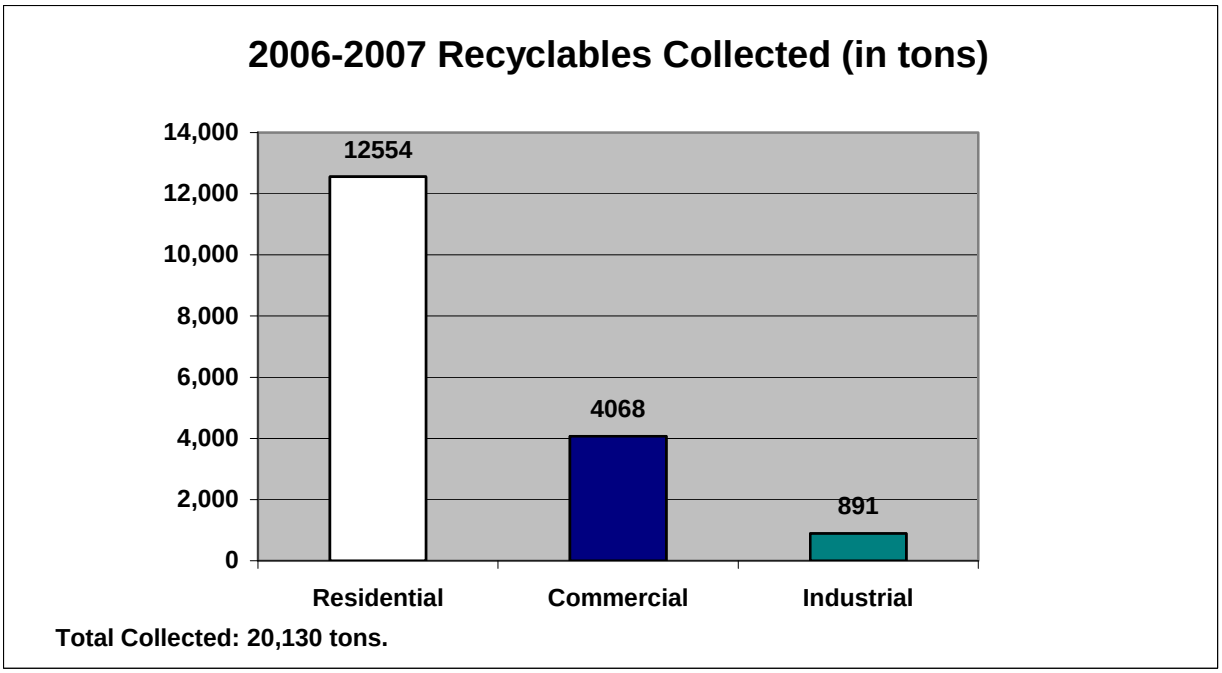

Recycling is a community effort. A total of 17,513 tons of recyclables (includes newspapers, glass, plastic, tin and aluminum) were collected through residential pickups in 2006-07. Figure 4 indicates the amounts, in pounds, of materials recycled through residential and commercial recycling efforts for 2006-07. Amounts recycled are not placed in landfills or available for discharge to the storm drain system.

3.D.5 COMPLIANCE AND ENFORCEMENT

The City has a variety of enforcement actions upon discovering a residential action that may potentially affect the quality of receiving waters. Verbal warnings (with written documentation), written warnings, orders to abate and correct, and monetary fines are in the legal authority of the City. There are two routes of discovering illegal residential activities. One is through complaint/referral process. Complaints are received through direct contact with City staff, through the City Manager's office and through the City's Website (via e-mail). The other is during scheduled City monitoring and observations of other routine City department activities.

Depending on whether an actual discharge has occurred or there is a potential to discharge, a written warning or Administrative Citation is issued. Corrective actions are verified and the resident re-contacted for any further questions.

3.d.5.1 Complaints Received

Complaints are received through the City's or County's Hotline number or funneled through the City Manager's office. Since the inception of the City's Enforcement Program, citizens take opportunities to inform municipal staff of their concerns during other routine activities. Investigations usually occur within 24 hours of complaint receipt with a follow-up phone call informing the complainant of the investigative results. Complaints were tracked using a simple table and software programs. A table in Appendix A.3d lists residential complaints tracked in PY6.

3.d.5.2 Investigation and Enforcement

Each complaint is investigated by Storm Water staff. Contact with the potential discharger is focused on stopping the polluting activity and educating the citizen about our storm drain system and water quality.

Table 6 – Enforcement Actions

BMP Violated	Written Warnings	Administrative Citations	Actions	Follow-up
Automobile Repair & Maintenance	0	0	No Action	None
Automobile Washing	0	0	No Action	None
Home Care and Maintenance	3	0	Stopped Activity	Completed
Private Lateral Maintenance	0	0	No Action	None
RV Parking and Maintenance	0	0	No Action	None
TOTAL	3	0		

Written warnings followed each verbal warning in the form of a letter requesting corrective action or enforcement by the Administrative Citation Form (See Appendix A.3b for Enforcement Criteria and Forms). Letters are used only when additional information and explanations are needed to get compliance from the potential discharger. A list of the enforcement actions issued to residents is included in Attachment D.

3.D.6 NOTABLE CITY ACTIONS

Pollution Prevention Days

The City of El Cajon hosted two "Pollution Prevention Days" events on April 11 and May 16, 2007 in downtown El Cajon. The events were scheduled to correspond with the "Cajon Classic Cruise" event, which attracts thousands of attendees each day. Of the thousands of people attending, hundreds of people approached our booth and received educational materials, flyers, and discussed issues related to the automotive-related event (e.g., tire recycling, waste management, fundraising car washes and a power washing).

Condominium Conversions

The next wave of residential communities is the conversion of apartment dwellings into Common Interest Developments or Condominiums. Restarting a small developed community is a perfect opportunity to introduce or reintroduce storm water protection activities at the development level. The following are required of condominium conversion projects

- A Storm Water Site Plan that includes a map of the current storm drain system and a list of the internal and external improvements proposed prior to sale. Control of materials, upgrades to the drainage system and treatment should be discussed.
- A Storm Water Maintenance Plan for Condominiums
- A Private Sewer Lateral Report, and
- Water Quality additions to the Covenants, Conditions, and Restrictions
-

3.D.7 IMPROVEMENTS AND REGULATORY COMMENTS

Throughout the year, the City adjusts JURMP Components based on experience and the need to correlate JURMP activities with water quality. As the Storm Water Pollution Prevention Program moves into a BMP implementation program and the reduction of pollutants discharged into the storm drain system, existing residential neighborhoods become a pivotal group to assist in making the water quality improvements a reality.

3.d.7.1 Improvements

Improvements for the Residential Component is more challenging as citizens view the storm water regulations as an infringement on individual rights. Choosing the correct approach and picking an area that is more beneficial to water quality takes thought and planning. Based on previous experience, the proposed actions for PY6 include:

- Continue partnering with the El Cajon Community Development Corporation in reaching out to the community
- Meet with new development Homeowner Associations to distribute storm water information
- Target apartment complexes for controlling trash and maintaining the Private Sewer Lateral.
- Follow up with condominium HOAs and apartment complex management companies to ensure that private satellite sewer systems are being maintained

3.d.7.2 Regulatory Comments

There were no regulatory comments received on the Residential Component of the JURMP for PY6.

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4.1.1 Education and Outreach Events 2
4.1.2 Jurisdictional Accomplishments 2
4.1.3 City Staff Training 2
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SECTION F.4 EDUCATION COMPONENT

4.1 EDUCATION AND OUTREACH

The goal of the education component is an informed and knowledgeable community. It is crucial to the success of a storm water management program for City staff and the community at large to have easy access to reliable and accurate storm water information. Without a shared, common knowledge base of local water quality and urban runoff information, it is difficult to obtain public support for local storm water quality programs. The storm water educational materials need to be detailed and comprehensive enough to support a shift in individual daily actions while allowing community groups to back specific water quality measures. As with all the other components of this storm water pollution prevention program, maintaining and restoring the chemical, physical and biological integrity of state waters is the ultimate outcome.

If reduction is the goal, then prevention is the theme for the Storm Water Pollution Prevention Program. The Education Component continues to emphasize the basics topics, such as:

- The difference between the sanitary sewer and the storm drain system; and
- The street and storm drainage system is not your garbage disposal system; and
- Making small changes individually, adds up to big changes in our rivers and at the beaches.

The other part of a successful storm water program is an involved and committed municipal staff that contacts the public about potentially damaging discharging activities. Storm Water staff diligently works to educate the citizens and businesses within the City jurisdiction on water quality and ways to prevent pollution from entering the storm drain system. The goals of the City's education and outreach program are to raise awareness of urban runoff and change the behavior of citizens and businesses. The progression of topics will lead to Watershed concepts as the basics in storm water are grasped by the general public.

4.1.1 Education and Outreach Events

Educating staff and the public is the best way to effect change in people's behavior. It is clear that there is broad-based public support for a cleaner and healthier environment. When people can connect with and learn more about our storm water program, our program earns the respect our citizens and community leaders for protecting our water quality. An effective "learn and earn" outreach program should be both regional and jurisdictional, since a pooled effort regionally is able to educate on a more impressive scale. Additionally, since we all live in a watershed, storm water pollution and the protection of receiving waters defy jurisdictional boundaries. As the San Diego River Watershed Copermittees move toward a Watershed-based approach to storm water management, education and outreach efforts will follow watershed strategies on a regional basis. As shown above, the City of El Cajon developed a Storm Water "Watershed" Logo to promote pollution prevention and protection of water quality.

4.1.2 Jurisdictional Accomplishments

Outreach accomplishments during PY6 include the following list of education and outreach efforts.

- "Pollution Prevention Days" – Two Wednesdays in April and May of 2007 (April 11 and May 16, 2007). The events carried the "National Pollution Prevention Week" (P2 Week) theme and were scheduled to correspond to peak attendance days for a local automotive-related event called the "Cajon Classic Cruise." Information relating to the event was also posted to the City of El Cajon Website. Both residents and business owners were encouraged to attend
- Continue to work with the El Cajon Community Development Corporation (ECCDC) to close and protect dumpsters, keep trash areas clean, and encourage good housekeeping habits in the downtown area
- Storm Water Education and Outreach Document Portfolios were prepared and issued to selected municipal staff with high probability of contact with citizens on storm water pollution prevention issues. This included staff tasked with commercial and industrial site inspections, construct site inspections, complaint investigations and SUSMP plan review. The use of the storm water information portfolio has allowed the storm water program to connect with citizens, staff and other interested parties in a new and detailed manner
- "Career Day" included a luncheon and a tour of our storm water section with a discussion of potential careers in "Storm Water"
- SUSMP Training

4.1.3 City Staff Training

City public works, park, and community police staff were trained to refresh the basic storm water topics of pollution prevention and use of BMPs. Planners and engineering staff were trained in low impact development training, more specific, the implementation of pervious surfaces. Additionally, other municipal staff was given the basics in storm water training including:

- What is a Watershed and what Watershed do we live in.
- Why is keeping our water clean important.
- The different types of pollutants and where these pollutants originate.
- The difference between the storm drain system and the sanitary sewer system.
- What can be done at work and at home to eliminate polluted runoff during rain events and all yearlong.

Municipal crews are given door hangers to use during their daily routine activities in the City. An example of a door hanger is provided in Appendix A.4. The door hanger alerts the resident to the potential discharge that exists on or near their property. Possible solutions and phone numbers for reporting discharges are provided.

4.1.4 Special Community Presentations

POLLUTION PREVENTION DAYS

The City of El Cajon hosted its "Pollution Prevention Days" event in April and May of 2007; a copy of the Proclamation is attached in Appendix A.4. Even though the City had two events this permit year, the Proclamation makes mention of the event on May. Many thousands of people attended each of the P2 Day events. The two Wednesday events included booths, educational information and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. The El Cajon Community Development Corporation (El Cajon CDC) also participated in our P2 Days event and distributed information on revitalizing and keeping our community clean.

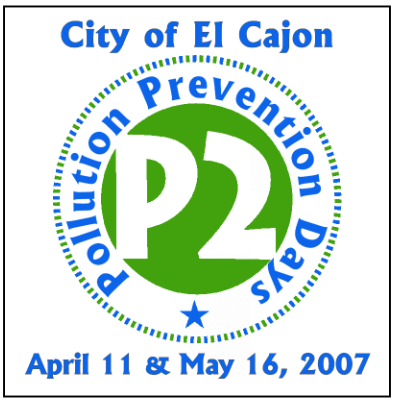

CAREER AWARENESS DAY EVENTS

On February 22, 2007, the City participated in the 26th Career Awareness Program, sponsored by the Business Education Committee of the San Diego East County Chamber of Commerce. Four to eight - 8th Grade students came to the Public Works Department and spent time with the City staff to learn about the various career options in the Department, including careers in the storm water arena. The students were given an introduction to our Geographic Information System, and the Watershed Model was used to demonstrate how pollutants can enter the storm drain.

The Career Awareness Day Event included a luncheon hosted by the City of El Cajon and the East County Chamber of Commerce at the Ronald Reagan Community Center at 195 East Douglas Avenue in El Cajon. All participants were eager to find out more about storm water

pollution prevention and left Career Awareness Day with knowledge about the San Diego River Watershed and possible careers in pollution prevention.

4.1.5 Regional- and Watershed-Related Outreach

The regional outreach workgroup focused its budget of $40,000 towards in-kind contribution to develop a Regional Residential Outreach Program that would address regional issues and would aid in a transition from a jurisdictional- to a watershed-related program approach. All Copermittees contribute funds towards the outreach workgroup to benefit a coordinated regional pollution prevention program. PY6 funds were used to develop a framework for the Regional Residential Outreach Program that would target audiences and provide information on barriers to and benefits of changes in behaviors. The City of El Cajon served on the committee during development of the RFP, and continues in PY6 as a member of the interagency Source Selection Committee for the Regional Outreach Program.

The events coordinated by the Outreach Workgroup included a watershed-related booth at the San Diego County Fair that displayed and provided information about watersheds.

4.1.6 Educational Materials Jurisdictional Distribution

The City developed brochures on the following subjects for distribution to the public:

- permit and ordinance requirements
- the difference between storm drains and sanitary sewers
- Pollution prevention strategies
- Car Washing. Including strategies for Car Wash Fundraisers
- Pet waste BMPs
- Equipment and vehicle maintenance and repair
- Maintenance of private sewer laterals.

The City printed 38,000 copies of two semiannual newsletters containing 5 articles and reaching potentially 190,000 different readers. Storm water logos assist the City in getting the attention of citizens and businesses. Logos are a way to make a lasting impression with citizens and businesses. Another logo used by the City is shown to the right.

Through the course of PY6, a number of contacts were made to the public using articles, newsletters, sewer bill inserts, brochures, mailers, radio and TV Ad's, and movie slides highlighted below. Copies of brochures, fliers, and newsletter articles are contained in Appendix A.4. The following table indicates the types and quantity of outreach impressions.

Table 5

Material Type	Number Distributed
Articles/Newsletters	190,000
Sewer bills	39,000
Brochures	460
Over-the-Counter	350
TOTAL	**229,810**

Commercial

Education of commercial facility owners and their employees occurs through the use of brochures oriented specifically to a type of activity. Written warnings are accompanied with a brochure on the activity as well as distribution of these brochures as outreach opportunities arise during business and construction site inspections, and complaint investigations. Approximately 385 brochures of various types were distributed as summarized below. More one-on-one distributions were completed this year as the City expanded its role in inspections, complaint investigations and the daily routines of residential communities. The following brochure topics were distributed during PY6.

- Vehicle and equipment washing and cleaning (35 copies)
- Vehicle and equipment operation, maintenance, and repairs (35 copies)
- Car Washing Guide (25 copies)
- What's Cookin Guide (25 copies)
- Green Wrench Guide (200 copies)
- Power Washing Guide (40 copies)
- Private Sewer Lateral maintenance (50 copies)
- Construction Best Management Practices (50 copies)

Industrial

Industrial facilities revise and refine their BMP requirements through the annual inspection process. The following are discussed and informational brochures are shared when necessary.

- Prevention of Non-Storm Water discharges
- Good Housekeeping Practices
- Vehicle and Equipment Washing, Repair, and Fueling
- Loading and Unloading of materials
- Solid and Hazardous Waste Management
- Spill Prevention and Response
- Building and grounds maintenance
- Parking Lot maintenance
- Storm drain system maintenance
- Private Sewer Lateral Maintenance

4.2 LEADERSHIP ACTIVITIES AND PARTNERSHIPS

The City's major roles for educating the community include:

- Continue in partnerships with the Cities of Santee and La Mesa as well as the County of San Diego in training staff on storm water management to incorporate storm water reviews at the beginning of the Planning level review.
- Maintain a relationship with the El Cajon Community Development Corporation and their Community Ambassadors and Clean Team. The Community Ambassadors are employees that develop connections with businesses and the community that will promote a cleaner and safer city. The Clean Team are students of St. Madelines Sophie school and are happy to assist in various community tasks. The Clean Team picks up cigarette butts along the sidewalk and gutter that the City's street sweeper cannot collect.
- Collaborated with the El Cajon Community Development Corporation to provide basic storm water rules to vendors at the Cajon Classic Cruise events.
- Conducted storm water training to El Cajon Community Development Corporation ambassadors.
- Established a collaborating relationship with "I Love a Clean San Diego" to conduct future storm drain stenciling, as needed. See Appendix A.4 correspondence establishing this relationship.

- Worked with the County of San Diego and other East County Cities to jointly-sponsor a household hazardous waste, electronic waste and universal waste recycling event in Alpine on May 19, 2007. See Appendix A.4 for the advertising flyer distributed with residential sewer bills.
- Worked on a Public Service Announcement committee that oversaw the production of the City of San Diego, Think Blue, "Ants In Your Plants," and "Watershed Awareness" television and radio spots. These two PSAs began airing on radio and television during the of 2006 and aired throughout PY6.
- Worked with the County of San Diego and others to oversee the preparation of a Regional Residential Outreach Program. Work on the development of this program is the focus of the 2006/2007 Copermittee Outreach Workgroup and will continue into the next reporting year.

4.3 MEASURING CHANGES IN KNOWLEDGE AND BEHAVIOR

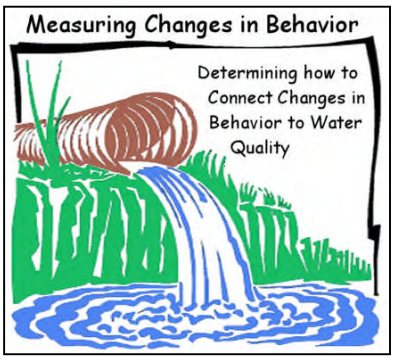

A basic measurement of increased knowledge is a test of that knowledge. The City's test is an increase in referrals and reports from municipal staff. The number of complaints and referrals from citizens, staff, and county hotline was equivalent to last year. The Regional Outreach Program funded by this year's Copermittee Outreach budget will develop a very detailed baseline of community awareness, and the barriers to and the benefits of changes in behavior.

4.4 IMPROVEMENTS AND REGULATORY COMMENTS

Changes to the City's Storm Water Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the activities in ways dictated by direct or indirect experience. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

4.4.1 Improvements

The following are proposed improvements for the next Permit Year (July 1, 2007 through June 30, 2008).

- Plan an expanded outreach effort during the El Cajon Fire Department Open House.
- Coordinate outreach and public participation activities for Public Works Week.
- Collaborate with East County Cities on municipal training and business-related workshops.

4.4.2 Regulatory Comments

No regulatory comments were received during PY6 for the City's Educational Component implementation.

SECTION F.5 **ILLICIT DISCHARGE, DETECTION, AND ELIMINATION COMPONENT**

5.1 ILLICIT DISCHARGE AND CONNECTIONS 2

5.2 DRY WEATHER ANALYTICAL MONITORING 2

5.3 INVESTIGATION/INSPECTION AND FOLLOW-UP 4

5.3.1 Dry Weather Analytical Monitoring Investigation 4

5.3.2 Complaint Investigations 5

5.4 ELIMINATION OF ILLICIT DISCHARGES AND CONNECTIONS 6

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5.6 PUBLIC REPORTING AND RESPONSE TO ILLICIT DISCHARGES AND CONNECTIONS 7

5.7 DISPOSAL OF USED OIL AND TOXIC MATERIALS 8

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5.9 IMPROVEMENTS AND REGULATORY COMMENTS 11

SECTION F.5 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

5.1 Illicit Discharge and Connections

The detection of illicit connections and illegal discharges (IC/IDs) is accomplished by using the following three mechanisms:

1. Conducting dry weather field screening and analytical monitoring mechanism.
2. Operating a public complaint hotline.
3. Inspecting local businesses, municipal facilities, and the MS4.

When an IC/ID is detected or reported, the City investigates, inspects and appropriately follow-ups in order to identify the source or sources of the discharge. Once identified, voluntary compliance and escalating enforcement actions are implemented to immediately eliminate the IC/ID.

5.2 Dry Weather Analytical Monitoring

The City has conducted a dry weather-monitoring program since 1993 and has increased the level of effort to determine the presence and types of pollution in the storm drain system. The Dry Weather program is an indication of urban runoff pollution, which is typically composed of irrigation runoff and other permitted non-storm water discharges. Dry weather monitoring is meant to identify areas where illegal discharges of consistent pollution (fertilizer runoff or sewer leaks) may be occurring or a single event (e.g. fecal coliform) exists. The Dry Weather program results are valuable in eliminating illegal discharges and illicit connections. Analyses were continued for dissolved oxygen, total dissolved solids and total organic carbon to assist with assessing pollutant levels that may impact 303(d) listings of Forrester Creek and the San Diego River.

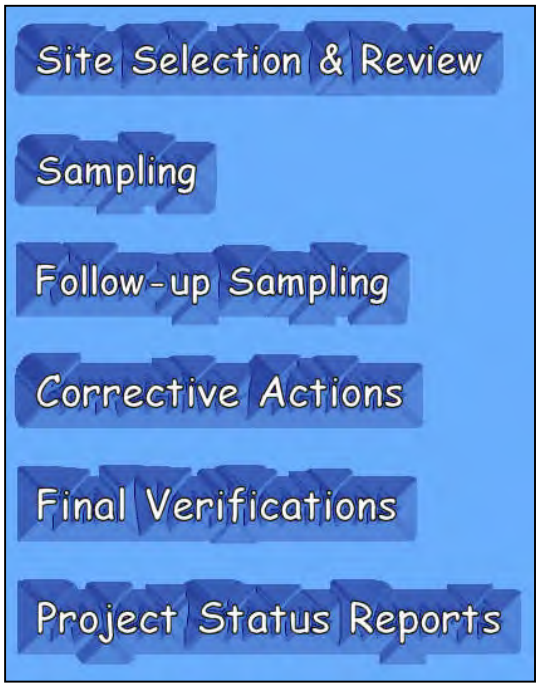

For PY6, 33 sites were visited, sampled for field parameters, and compared with previous years for any trends. Additional sites were added or changed depending on available flows, site conditions, and proximity to other sampling stations. The picture below shows a typical sampling location in an open channel. Laboratory analytical samples were collected at 10 sites (over 25% of the total collected) and sent to an offsite laboratory for further analysis. The following is a summary of the dry weather program results. The Dry Weather Field Screening and Analytical Monitoring Program Report is attached as Appendix A.5. Field Data sheets have been included where qualitative observations were made during each site visit.

Site 2 Looking Downstream Washington Channel, N. of I-8, between Magnolia Ave, and Johnson Ave., S. of Westfield Plaza **Photo 2-2**	

The following is a summary of the dry weather monitoring activities.

- 31 out of 33 sites had measurable flowing water with flow rates varying from less than one to 281 gallons per minute,
- pH measurement of 10.2 was the highest at Site 39 (follow up at 7.9, below the action level),
- Conductivity of 4030 micro-ohms per centimeter at Site 14,
- Ammonia detected above the action level of 1.0 mg/L at Site 14 (follow up at 0.2 mg/L, below the action level),
- Nitrate concentrations of 10.24 mg/l at Site 22 (follow-up at 10.12 mg/l), and 14.25 mg/l at Site 30 (follow-up at 11.07 mg/l) – Ongoing investigations,
- No detections of reactive phosphate at or above the action level,
- Surfactant concentration of 1.25 mg/l at Site 14 (follow-up at 0.63 mg/l, below action level),
- Algal growth at Site 8, 31, and 41,
- Coliform levels exceeded the action level at three sites - Investigated,
- Fecal Coliform exceeded the action level at one site - Investigated,

- Enterococcus exceeded the action level at one sites – Investigated, and
- Dissolved metals did not exceed California Toxics Rule.

5.3 INVESTIGATION/INSPECTION AND FOLLOW-UP

5.3.1 Dry Weather Analytical Monitoring Investigation

Field screening results were immediately compared to numeric action levels using best professional judgment. If a potential source was indicated, an investigation was initiated to determine the origination. Numeric exceedances of action levels that were not perceived as an immediate threat to water quality were re-sampled within 24 hours to confirm a continuing discharge. Field and laboratory analytical results were compared to numeric action levels and California Toxics Rule using Best Professional Judgment. Trash, debris, and algae were observed at a majority of the open channel sites.

Further investigations were conducted at the following sites:

- Nitrate detected at Sites 30 and 37 were investigated. Upstream data indicated the values originated at Site 37 and traveled to Site 30. Groundwater infiltrates into the corrugated steel pipe upstream of Site 37 from sections in the pipe that are damaged or degraded. The City is further investigating this area to identify the source of nitrates at this sampling location. For a more detailed explanation please refer to the response to comment for JURMP Annual Report PY-5, Section 5.9.

- Coliforms detected at Sites 8, 24, and 41 were investigated to locate potential sources. Petrifilm plates (tests for total coliforms) were used to quickly conduct field microbacterial analyses. Results were generally inconclusive in determining a source at any of the sites.

- Site 14 was investigated for three constituents. However, readings taken during the follow-up visit found that all the constituents were within acceptable ranges. Initial spikes in concentrations appeared to be transient.

As part of the follow-up actions, immediately after the 2007 Dry Weather Field Screening and Analytical Monitoring Report was completed, the City conducted the follow-up actions below:

- Provided educational materials to all city residents via the City's newsletter addressing pet pollution, over watering, and how to minimize urban runoff from residential areas.

- Removal of trash and debris from several open channels accumulated from homeless encampments, to target the elimination of litter and possibly fecal contamination.

The City is also conducting the following actions as recommended in the dry weather monitoring report:

- Provide educational materials addressing proper waste disposal and the impacts of littering to businesses and residences.
- Address the body shop located nearby Millar Avenue and remediate the discharge of surfactants.
- Consider periodic removal of algae and sediment build-up in the concrete channel at Site 8and Site 41. Consider periodic removal of algae at Site 32.

5.3.2 Complaint Investigations

The chart below lists the number of complaints and how the City managed them. A quick response is the key to determining validity and eliminating the discharge or connection. Complaints are received through the City's Storm Water Hotline, City's Storm Water Website, County referral, or observations of other City Departments.

Complaints are investigated usually within the day the information is received. Complaint listing is provided in Appendix B.1. The Complainant is contacted to discuss the details of their observation. Storm water staff schedules a meeting with the complainant if necessary. Table 2, below, shows the number of complaints received, investigated, found as valid, and eliminated. Validity depends on whether the discharge is occurring at the time of the investigation; thus the reason for investigating as soon as the complaint is received. If the preponderance of evidence can link the discharger with the discharge, a written warning was issued. In May 2003, the citation program was added to enforcement where dischargers to the storm drain system or owners of potential discharge conditions were issued Administrative Citations. See Appendix A.3b for Citation Program details.

Elimination of valid discharges meant a discharger was identified and the discharger had control over the discharge. In a number of cases, the discharge was valid (observed evidence), but a discharger was not found. The discharge was cleaned to the Maximum Extent Practicable and the location noted for further surveillance.

Table 2 Complaints and Referrals Addressed and Resolved

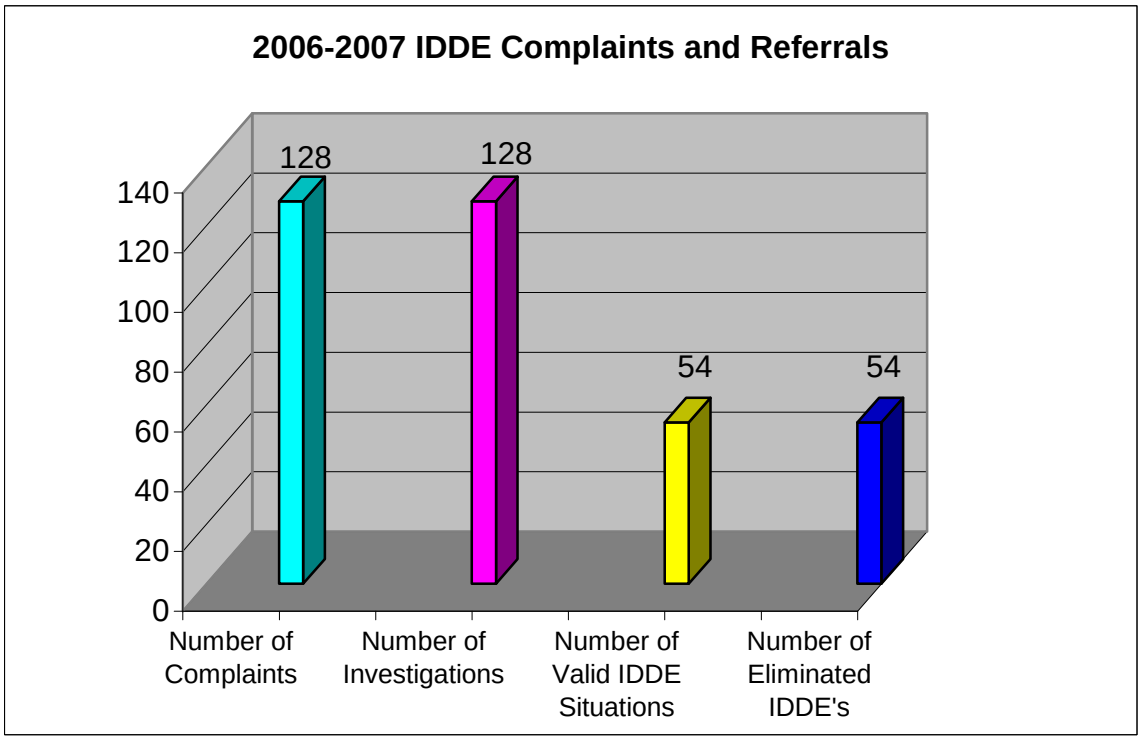

5.4 Elimination of Illicit Discharges and Connections

The City requires responsible party(ies) to take actions necessary and appropriate to disconnect, block, stop or divert drainage facilities and pipe connections that are determined to discharge pollutants to the municipal storm drain system. The City also requires responsible party(ies) to implement procedure to discontinue discharges, which are found to carry pollutant materials to the storm drain system. Procedures must consider the following actions for implementation:

- Disconnect all drainage pipe found to discharge illegal pollutants to the system.
- Plug sinks and drains, which are discharging illicit materials to the storm drain system.
- Divert illegal discharge to appropriate handling facility either sanitary sewer or on-site treatment methods. Contain and properly manage hazardous waste materials including proper storage and disposal methods.
- Eliminate source of discharge
- Remove pollutant materials from the site.
- Keep pollutant materials from coming in contact with discharge.
- Contain potential illegal discharges on site for treatment or proper disposal.

Illicit connections and illegal discharges which are not removed, eliminated or otherwise continue to discharge to the municipal storm drain system receive appropriate enforcement actions by the City.

5.5 ENFORCEMENT ORDINANCE

As specified in the City Ordinance, the City is able to use various warnings and actions to correct facility or residential activities. For PY6, the City mainly used coordination and partnerships to implement and enforce the requirements of the JURMP.

If enforcement was required, a written warning followed verbal warnings. A description of the deficiency, corrective actions, and what subsequent enforcement actions would occur, if immediate actions were not taken. Escalating violations result in monetary citations, three storm water staff are California Peace Officers able to issue Administrative Citations. Violators that receive monetary Administrative Citations are also responsible to pay fees that may have accrued from discharges to the storm drain system that require the intervention of City crews to clean or recover pollutants. Enforcement Criteria are provided in Appendix A.3b.

5.6 PUBLIC REPORTING AND RESPONSE TO ILLICIT DISCHARGES AND CONNECTIONS

The City provides information to the community on how to report illicit discharges and connections by including articles in sewer bills, semi-annual newsletters, bulletin boards around City facilities, and the City's Storm Water Protection Program's website. Citizens at the City are informed to notify sewer spills from private laterals or septic systems, to El Cajon Department of Public Works during business hours or the Police Department Communications Center 24-hour number. The Public Works Department or the Police Department 24-Hour Communications Center immediately informs the Public Works Maintenance Personnel who have the capability to respond 24-hours a day 7 days a week. The Public Works Maintenance Department is trained and has the tools and equipment to respond, contain and clean up sewage spills in accordance with the permit.

Significant spills are contained with temporary berms and by protecting storm drain inlet openings. Spills are cleaned-up using absorbent materials and properly disposed. The City implements remedial actions to cleanup debris of sewage origin and to sanitize the affected areas. Vacuum (Vactor) trucks recover all significant spills originating from sanitary sewer overflow and wash water for proper disposal. The City had 3 sewer overflows or spills from sewer mains and recovered 2,050 gallons of sewage. The City also responded to 6 reported sewer overflow spills originating from private property and recovered 74 gallons of sewage from these spills.

Significant spills of hazardous materials are contained from draining into the MS4 and cleaned by trained first responders and hazmat teams. The El Cajon Fire Department responded to emergencies, of which seven incidents involved potential hazardous materials but no spills or discharges into the storm drain system were found or reported.

5.7 DISPOSAL OF USED OIL AND TOXIC MATERIALS

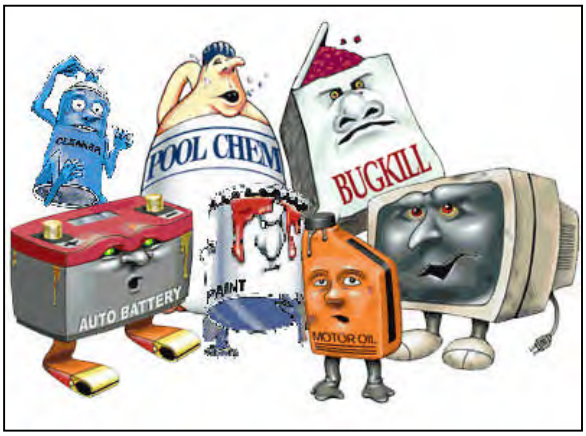

Keeping household wastes out of the storm drain system requires the implementation of a coordinated pickup program with a licensed facility to handle the wastes according to appropriate State and Local regulations. The City uses Waste Management to schedule routine and requested pickups for household wastes. Figures 3, 4, and 5 show the total amount of household wastes, the type of wastes collected from curbside pickup (commercial and residential) and total amount of waste collected. There were multiple Household Hazardous Waste collection days where 2,466 participants dropped off over 236,890 lbs of materials (Figure 3). Figure 4 shows the percentages of material types taken to the collection events.

A total of 93,721 tons of wastes were collected from residential, commercial, and industrial areas.

Figure 3 – Household Hazardous Waste Collection

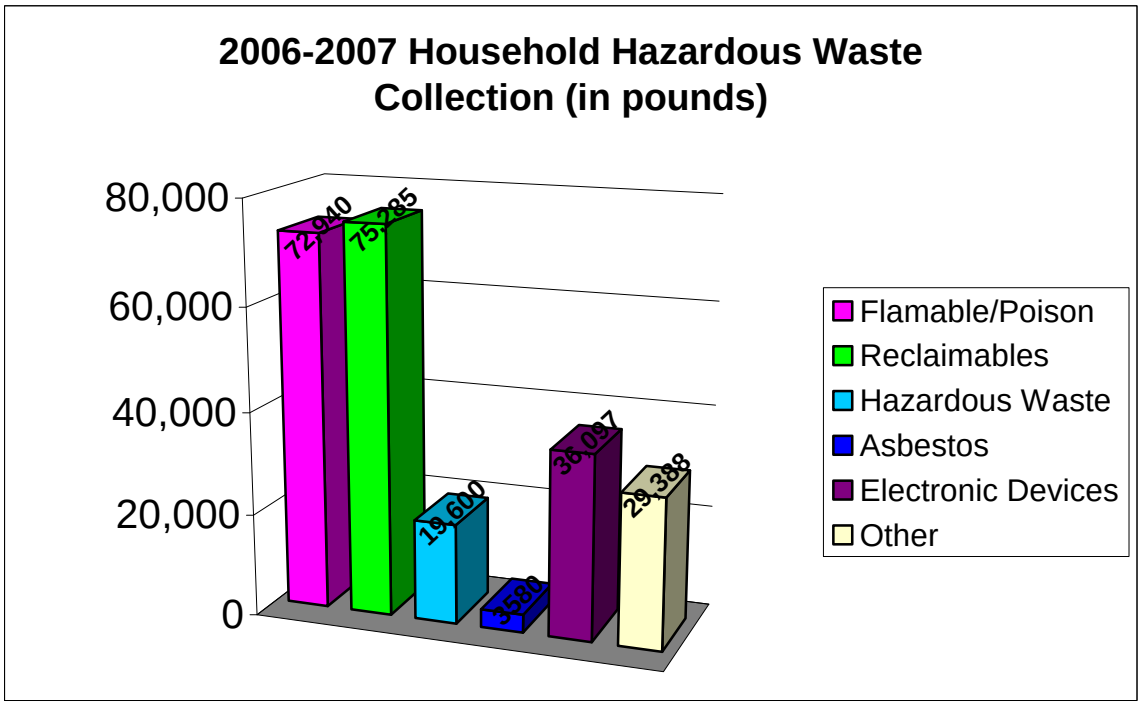

Figure 4 Percentages of HHW Type

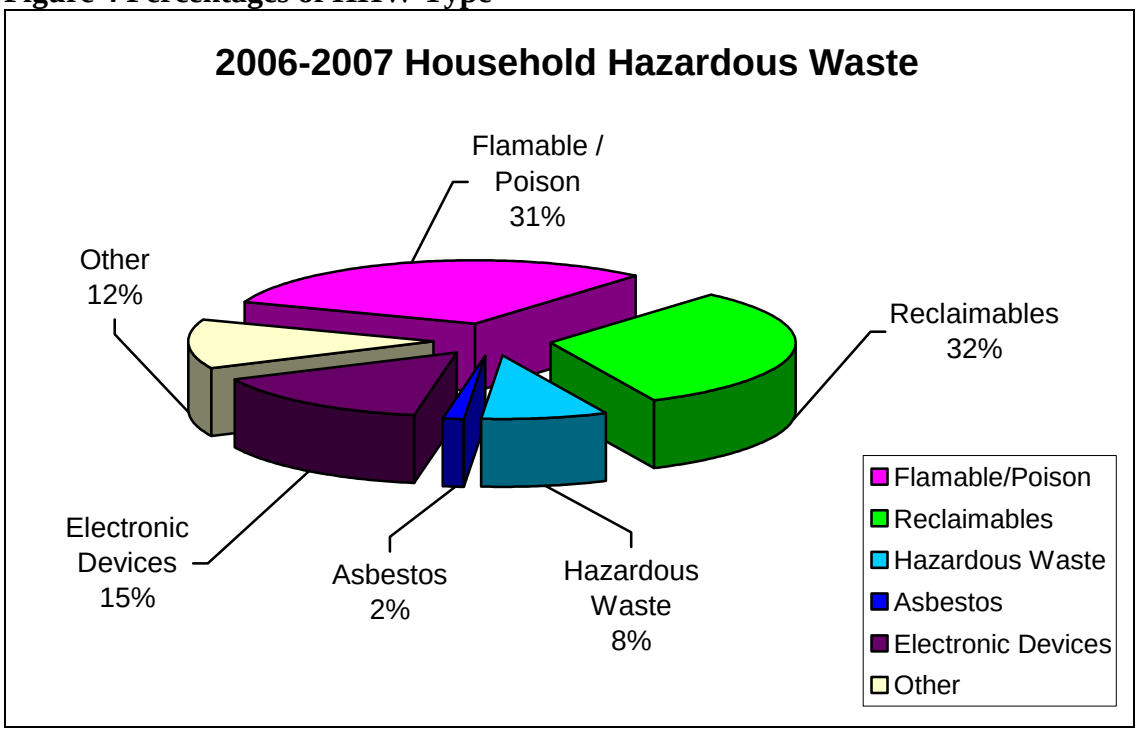

Figure 5

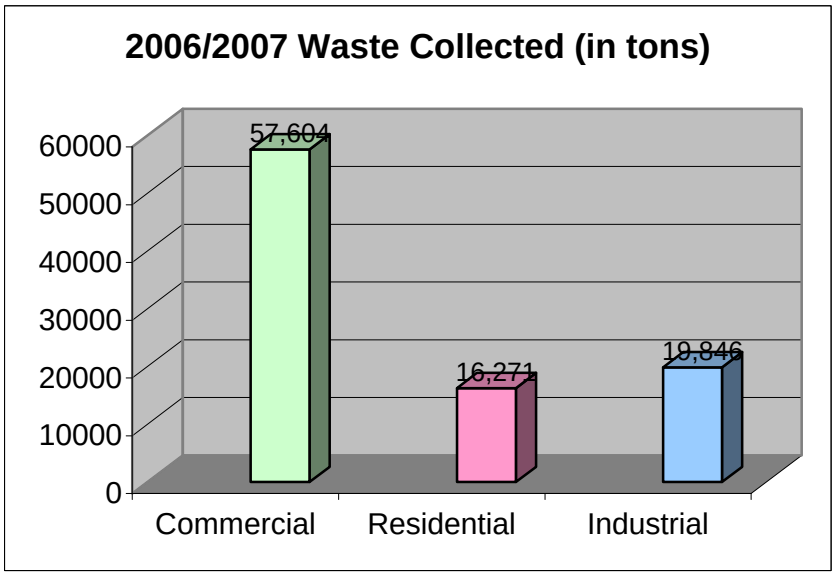

Figure 5 shows the amounts, in tons, of waste collected for commercial, residential, and industrial facilities. Waste collected equates to pollutants not discharged to the storm drain system.

In addition to Waste Management, there are approximately sixteen State Certified Used-Oil Collection Centers throughout the City and adjacent City boundaries where residents may recycle used oil.

5.8 PREVENT SEWER SPILLS AND LIMIT INFILTRATION FROM THE SANITARY SEWER

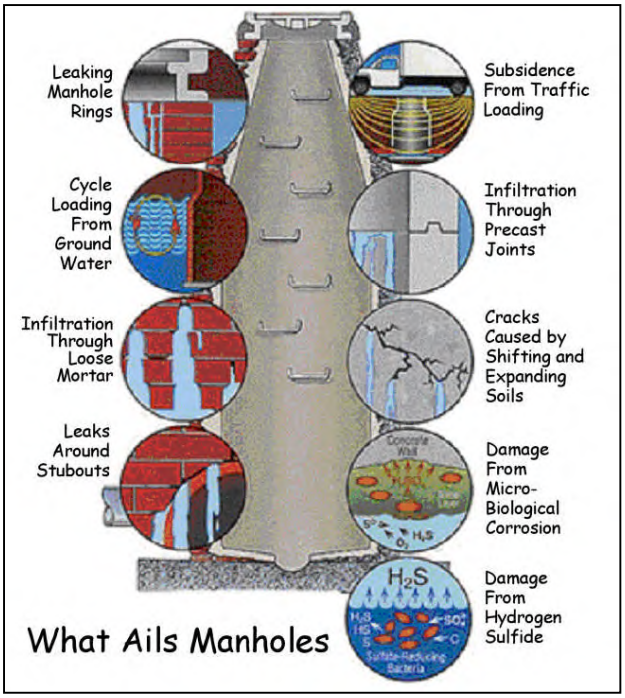

The City maintains full-time staff responsible for performing continuous maintenance activities on the sanitary sewer system. The City maintained approximately 210 miles of main sanitary sewer line. To prevent sewage spills and limit infiltration from sanitary sewer lines, the City has an aggressive program that:

- Televise designated areas for root infiltrations, protruding laterals, cracked pipes and other structural problems.
- Every 3 months investigate 59 problem manholes with

demonstrated root intrusion

- Every 3 months investigates designated flat flows in designated segments for roots, scale, food/oil/grease accumulation or other possible reasons for stoppages
- Every 3 months clean 14 sewer siphons and numerous other "trouble spot" areas

The City's goal is to have less than 5 reportable sewer main overflows per year, where a spill is any amount of sewage in the surface of the public right of way. For PY2, PY3, PY4, PY5, and PY 6 the City met that goal. The City had 3 overflows or spills from sewer mains and recovered 2,050 gallons of sewage during the spills during PY6. As indicated in section F.5.f of the Permit, in year PY6, the City also tracked sewage overflows from private laterals to indicate additional problem areas. The City responded to 6 reported private sewer spills and recovered 74 gallons of sewage before entering the storm drain system.

5.9 IMPROVEMENTS AND REGULATORY COMMENTS

The following are proposed improvements for the next Permit Year (July 1, 2007 through June 30, 2008).

- Implement dry weather sampling per the new Municipal Permit Order No. R9-2007-0001.
- Continue to coordinate and work with the City of Santee to address findings during dry weather monitoring to better correlate changes in water quality.
- Continue sampling for special investigations to assist locating and identifying problem areas.
- Redesign spreadsheet to track complaints and referrals by including columns for type of complaint (i.e. residential, commercial, industrial, etc.) and cumulative information from January 2003.

The following comments (and City responses) were received on the PY5 IDDE component:

Annual Report Section 8.0 (Illicit Discharge, Detection, and Elimination):
Comment:

7. The Annual Report states that the above-action level nitrate-nitrogen concentrations obtained at several monitoring sites were attributed to groundwater infiltration. In your response to this letter, please provide data supporting the statement that groudwater in the vicinity of the monitoring sites has elevated concentrations of nitrate-nitrogen.

Response:

During the dry weather field screening and analytical monitoring program for 2005-2006 two sites, monitoring locations 30 and 37, exceeded above action levels. Site 30 is a

manhole in front of the Boys and Girls Club on Madison Avenue, and Site 37 is a catch basin located on the east side of South Second Street, across from the mobile home community situated between E. Main street and Lexington Avenue. Site 30 is directly downstream of Site 37, and there are no significant connections along the extension of the pipe between both monitoring locations. An aerial image displaying sampling sites and locations is attached in the Appendix.

A follow-up investigation was conducted and photo-documented on November 9, 2007; the investigation consisted of taking water samples at both sampling sites and upstream for analysis of nitrates. Please refer to the Storm Drain Map – Page 26 and the photographs included in the Appendix as part of this response. The investigation mainly focused on finding potential sources of nitrate on the upstream pipe system, consisting of monitoring site 37 (Photo 1) that samples a sixty-six (66) inch corrugated steel pipe (CSP) (Photo 2). The 66-inch CSP extends eastward to Jamacha Road where it reaches a transitional structure at the western side of Jamacha Road. At this transitional structure two lines come together under Jamacha Road. The northeast branch extends up to Main Street via an arch steel pipe and was observed with minimal flow insufficient for sampling (Photo 8) and the eastern branch extends under Jamacha Road via a reinforced concrete box (RCB) (Photo 9). The RCB reaches another transitional structure at the eastern side of Jamacha road where again two lines come together; the eastern line consists of an arch corrugated steel pipe (Photo 10) that accepts water from a trapezoidal open channel, water flow was visible. The southeasterly line did not have sufficient flow to gather a water sample and based on previous dry weather monitoring results the reinforce concrete pipe (RCP) does not have a history of nitrate levels above action levels.

During the follow-up investigation, and to have access to the entire length of the pipeline upstream, City of El Cajon Public Works Maintenance Personnel entered the 66-inch CSP via the catch basin at sampling site 37 and collected a total of four (4) water samples for analyses. The samples were taken at site 37 and along the eastern length of the pipeline upstream. One sample was collected at sampling site 30. Photo-documentation developed during the investigation as well as an aerial image depicting the approximate sampling locations is provided in the Appendix. The results of the upstream investigation are summarized in the table below:

Sampling Site No.	Date	Time	Location	Description	Temp. ºC	pH	Conductivity mS/cm	Nitrate (Lab) NO3-N, mg/L
37	11/9/07	9:30	Second Street, next to mobile home community entrance between East Main Street and Lexington Avenue	Catch Basin	21	7.6	2.13	10.6
37_1	11/9/07	9:45	Underground lateral pipe, inside mobile homecommunity	Lateral pipe	20.7	7.3	1.98	10.6
37_2	11/9/07	10:40	Grossmont Union High School Adult Training School Parking lot	Catch Basin	21.5	7.2	2.06	12.0
37_3	11/9/07	12:00	East of Burger King Parking lot	Concrete Channel	18.6	10.2	1.17	0.09
30	11/9/07	13:20	Madison Avenue, between Roberta Avenueand Roselle Avenue, in front of the Boys and Girls Club.	Manhole	20.1	7.6	2.01	11.6

It was concluded after analyzing the monitoring results for the field investigation that the main source of flow and nitrates is potentially located within the segment of the pipe between Jamacha Road and the catch basin at the Grossmont Union High School Adult Training Center (Training Center). Furthermore, with no significant flows discharging into this segment of the pipe from the two laterals at the Training Center and from the curb inlet opening and arch pipe at Jamacha Road, the flows may potentially seep from outside the pipe via the corroded segments of the pipeline.

The City of El Cajon conducted subsequent field investigations and facility inspections of the Training Center and commercial center; both areas drain directly or indirectly to the segment of the pipe suspected to be the source of nitrates. The Training Center is composed of classrooms, offices and storage. The two clay pipes identified in Photos 4 and 6, discharge water from landscaped and parking areas at the Training Facility via catch basins. No significant flows were observed at the time of field inspections. No storage of any fertilizers was identified at the site. The commercial center north of the 66-inch pipe has various eating and drinking establishments as well as other types of commercial facilities that conduct business at indoor settings. The commercial center has some landscaped areas but do not appear to be large enough to be sources of high nitrates. Evidence of over irrigation or leaking valve(s) was noted during the field inspection and business owners were warned and asked to contact their landscape maintenance personnel to adjust and fix irrigation systems to prevent over spray and excessive runoff from landscaped areas. Follow-up inspections confirmed that a leaking valve had been fixed and the runoff from landscaped areas resolved. The City will continue to remain vigilant of the facilities that drain to the 66-inch pipe. At the time following the investigations, no conclusive evidence was gathered to indicate a clear

source point for nitrates. The City also explored the possibility of groudwater being the source of water seeping from outside the pipe.

To find if groudwater is indeed seeping into the 66-inch pipe, the City researched existing information on groudwater in the area. The City of El Cajon contacted the San Diego County Department of Environmental Health and Department of Site Assessment and Remediation to gather any existing data. Both of these entities were not able to provide direct information, but provided the City with advice on where to find groudwater data. County staff directed the City to research the State Water Resource Control Board (SWRCB) Program – GeoTracker. This program, available via the Internet, has underground storage sites identified with reports and analytical data.

Using GeoTracker the City identified twenty (20) sites that have or had monitoring wells around the vicinity of monitoring site 37. An exhaustive research of the sites and data demonstrated that many of the sites did not have groudwater information and a few sites only report on analytical data for compounds dealing with aromatic hydrocarbons and not nitrates. No production wells were identified around the vicinity to check for nitrate data. Only one site, within approximately 2 blocks away of site 37, at the northeast corner of East Main Street and Second Avenue has existing monitoring wells. The City contacted the business owner/manager about granting the City permission to collect groudwater samples to analyze for nitrates, the request was denied. The property manager mentioned that legal staff had to be involved to grant permission.

Historical groudwater depths range from 8 to 11 ft in depth around the vicinity of sampling site 37. The approximate invert elevation of the 66-inch pipe ranges from 6 ft to 7 ft in depth. The City is working with a consultant to collect groudwater samples via the drilling of hydropunch borings or to continue to pursue the collection of samples through existing monitoring wells around the vicinity. On January 14, 2008, the City contacted Ms. Christina Arias from the Regional Water Quality Control Board to explain timing constraints. As a result of the conversation, it was agreed that the City would submit the results of groudwater sampling shortly after groudwater samples can be collected, analyzed, and the data evaluated.

Comment:

8. The Annual Report does not adequately identify and describe all of the significant spills, which entered the MS during the reporting period. The date and receiving water of each significant spill are not included the Annual Report. The Annual Report should include this information per Permit sections I.1.a and I.1.b.a. In your response to this letter, please provide a more comprehensive description of significant spills that entered your MS4 including the date, location, size, cause, and receiving water.

Response:

The following table is provided as an addendum to paragraphs 2 and 3 of Section F.5.6 of the 2005-2006 Annual Report for the City of El Cajon:

Figure 2.a. Significant Spills 2005-2006

	Date	Complaint #	Complaint Address	Type of Spill	Size of Spill	Amount that entered MS4	Cause	Receiving Water
1	04/18/06		362 Marshall Avenue	Diesel Fuel	4 gallons	Less than 1 gallon	Diesel fuel leaking from bus into roadway, it did not reach storm drain inlets. Cause is unknown.	County Channel

SECTION F.6 **Public Participation Component**

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SECTION F.6 PUBLIC PARTICIPATION

Public participation is an essential element of a successful Urban Runoff Management Program, but is more highly effective as a Watershed Component. Due to the nature of participation by organizations such as "I Love a Clean San Diego", watershed concepts are more easily introduced to participants from the entire watershed and not just a small segment. Wherever Copermittees' efforts can be combined to produce better results, it is a winning situation for jurisdictions and the watershed.

Educational efforts set the stage for getting the public to get involved with scheduled Storm Water Pollution Prevention events or follow the minimum required BMPs at home or business. Since prevention is the best solution to pollution, the public fulfills participation requirements by:

- storm drain stenciling,
- reporting of discharge incidents using the City Manager's Office or the City and County hotline,
- collection of hazardous waste and recycling used oil , and
- take part in cleanup events

6.1 REGIONAL PARTICIPATION

On a regional basis, the City of El Cajon is the lead for the San Diego River Watershed Planning group and the Watershed committee. A grant funded the San Diego River Watershed Planning group where the stakeholders meet to discuss potential issues for the Watershed. A database of information is in progress for stakeholders to use during their planning efforts.

The City attends Project Clean Water meetings on the San Diego River Watershed to maintain contact with the stakeholders as well as participate in jurisdictional/local decision-making. The City of El Cajon also chairs watershed Copermittee meetings, which are opened to the public and in 2006-2007 The San Diego River Park Foundation and the San Diego River Conservancy had regular representation.

During permit year 2006-2007 the City of El Cajon contacted the I Love A Clean San Diego (ILACSD) organization and gave permission to staff and volunteers to apply the message "No Dumping . . . I Live Downstream" and a depiction of a dolphin or duck to the curb area directly adjacent to storm drain inlets within the City. A letter of permission is attached in Appendix C.

El Cajon was a supporting sponsor of the San Diego River Days 2007, an event celebrating the environmental and recreational importance of the San Diego River that occurred on May 19 and 20, 2007. The El Cajon Storm Water Program distributed 300 copies of the San Diego River Park Foundation flyer for the event as part of our outreach efforts during industrial, commercial

and construction inspections, at special events, and during complaint investigations. A copy of the San Diego River Days 2007 Flyer is attached as part of Exhibit A.

6.1.1 Regional and Local Storm Water Hotlines

The wastewater and sewage that drain from inside your house is treated and cleaned before it enters the ocean, but the storm drains in the street flow directly to the ocean, rivers, and lakes without any treatment. It is therefore very important that no one be allowed to dump waste of any kind onto street surfaces, drainage pipes and ditches, or into storm drains - they are only for rainwater.

The City and County have a Hotline used by the public to report potential illicit discharges and connections. The Hotline phone number is provided in informational brochures to residents and businesses and is posted on the City Website. Public participation is an essential part of an illicit discharge elimination program. Many illicit discharges are one-time occurrences that may not be observed by City staff. Concerned citizens can help stop illicit discharges by reporting them to the City. The following provides the details of those Hotlines.

- ✓ **City of El Cajon Storm Water Hotline, (619) 441-1653**

The City Storm Water Hotline provides access Monday through Friday 8 a.m. – 5 p.m. and complainants are directed to the appropriate staff person. The City's hotline currently provides information in English and Spanish.

The City continued updating its Storm Water Web Page to contain the most recent brochures and reports. Documents are retrieved and opened using Abode Acrobat to open the posted PDF files. The Storm Water Web Page is "Quick Linked" from the City of El Cajon Home Page with links to a list of documents and other important websites.

- ✓ **County Storm Water Hotline, 1-888-846-0800**

The County storm water hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides services in both English and Spanish and provides a voice mail message for 24-hour public access. Relevant complaints received through the County hotline are forwarded to the City Storm Water Protection Program.

6.2 IMPROVEMENT AND REGULATORY COMMENTS

Changes and improvements to the City's Storm Water Participation Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the participatory activities in ways dictated by direct or indirect experience. As the focus of the program shifts to multi-jurisdictional participation on a watershed level changes and improvements to the storm will be necessary. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

6.2.1 Improvements

The following are proposed improvements for the next Permit Year (July 1, 2007 through June 30, 2008).

- Focus the City's efforts on programs and activities that will have an impact on the watershed, its health, the 303(d) pollutants and their sources
- Participate in the El Cajon Fire Department Open House by including a Storm Water Program informational booth to inform and engage children on water quality issues.
- Coordinate the City's efforts with the other San Diego River copermittees (City of La Mesa, City of San Diego, City of Santee and County of San Diego).
- Watershed-wide educations efforts
- Pollutant specific brochures distributed throughout the watershed

6.2.2 Regulatory Comments

No regulatory comments were received during PY6 for the City's Educational Component implementation.

SECTION F.7 PROGRAM ASSESSMENT

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SECTION F.7 PROGRAM ASSESSMENT

This JURMP Annual Report marks the conclusion of the City's sixth reporting period under Order No. 2001-01 (July 2006 to June 2007). During this time, the City continued its program of BMP (compliance) implementation and started to develop a watershed-based program. Advancing a number of program components into a watershed program while maintaining a BMP-run program leads to an effectiveness assessment that is connected to pollutants and water quality.

Effectiveness is producing or capable of producing a desired effect. The desired effect, in the case of Storm Water Permit compliance, is the appropriate placing of an applicable BMP to minimize or eliminate the discharge of pollutants into the storm drain system.

Assessment of the JURMP is a year-round, permit-long, continuous process. Technological upgrades, program enhancements, process modifications, and procedure assessments affect daily tasks to make sure the City's Urban Runoff Management Program is providing procedures, guidance, and enforcement needed for improving receiving water quality.

7.1 ASSESSMENT PROCESS

Permit Sections F.7 and I.1.a require the City to identify and report on measures to assess the effectiveness of JURMP implementation. In particular, the Permit requires that Copermittees report on their program effectiveness on an annual basis and identify strategies for assessing long-term program effectiveness. JURMP effectiveness is the result of combining the efforts from BMP implementation and program activities from each component and determining how those efforts improve Water Quality. The following steps (with completed tasks listed as bullets) simplify the assessment process.

1. **Identify the issue.**
   - Identified primary pollutants of concern as the 303(d) listings for Forrester Creek;
   - Established an initial dry weather baseline for flow and contaminants.
2. **Identify and assess sources.**
   - Determined significance of sources by location, size, and pollutants.;

3. **Determine available control strategies by source**:
   - Defined the minimum BMPs required for the source and pollutant. Used BMPs as written by CASQA, Caltrans, or special procedures by the City of El Cajon;
   - Reviewed "most used" BMPs implemented throughout the County;
4. **Evaluate control strategies**.
   - Estimated the amount of pollutant-containing materials that was eliminated from discharging into the storm drain system.
5. **Establish a goal.**
   - Established the goal as meeting permit requirements to improve water quality (follow Clean Water Act objective to maintain and restore the chemical, physical, and biological integrity of the Nation's Waters)
6. **Implement program.**
   - Program is BMP-based in order to measure achievement of the goal;
   - Listed sources (target audiences) and BMPs (control strategy chosen);
   - Collected information during inspections to document the presence of BMPs.
7. **Evaluate effectiveness.** Based on the effectiveness measurement, what it has been learned from the program:
   - Goal achieved. When water quality values (from dry weather monitoring) were below action levels, estimations and calculations were not completed.
   - Listed highlights of each component.
   - Identified the changes needed to achieve better results in subsequent years.
8. **Modify program.** The results of the effectiveness measurement determines the future direction for the program with respect to:
   - BMPs;
   - Education;
   - Water Quality

Following the above process completes "plan – do – review" stages easily, without complications. Three types of assessment information are used in the assessment process. First, is the documenting of countywide activities, reported to the County of San Diego as Principal Permittee using Forms 11-1 through 11-8 as presented in Appendix A.7. The second set of information is the measurement of program results. The third set of information is the estimation of pollution-containing material reduction. All three informational sets contain measures to track short and long-term changes in program results and eventually improvements in water quality. Connections between BMP implementation and pollutants is provided in Tables 1 through 6 for 303(d) pollutants as they are produced in the Existing and New Development Components.

Similar to previous years, the guidance, *"A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs"* was used to establish clear relationships between activities; reduction in pollution-containing materials potentially discharged and changes in receiving water quality. To help demonstrate a solid relationship between program components and pollutants requires two changes:

1. Translating inspection data into BMP implementation (BMPs are placed to reduce, minimize, or eliminate a single or group of pollutants), and

2. Modifying *pollutants load reduction*s to *preventing pollutant-containing materials from entering the storm drain*. Prevention, in this case, may or may not equal improved water quality. Prevention equals 'improved water quality' only if the prevented discharge has been contributing to the pollutant load in the receiving water. If not, prevention serves to maintain current water quality. Pollutant load reductions cannot be clearly demonstrated until analytical measurements in Forester Creek are trackable and quantifiable.

Included within the regional long-term assessment framework, is the concept of a hierarchy of targeted outcomes. Six "levels" have been established, representing a gradation from activity-based to water quality based outcomes.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge / Awareness
Level 3: Behavioral Change / BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

Although it has proven difficult to connect water quality with quantities of pollutants collected, following the assessment through Level 4 with empirical data assists in identifying additional sources of pollution and areas where prevention is the best option. Some limited estimation is conducted, but only when there was an exceedance of an action level. For this assessment, Levels 2 and 3 have been combined as they are inextricably coupled with each other when a BMP implementation program is the core of the assessment. Only four major areas from existing development (Municipal, Industrial, Commercial, and Residential) and two from New Development (New/Re-development and Construction) are carried through the pyramid of outcomes to Level 4 Load Reductions.

7.1.1 Level 1

Level 1 is Compliance with Activity-Based Permit Requirements. Sections 1 through 10 of this PY6 Annual Report list activities, storm water controls, and when possible the quantity of pollutants collected and diverted from entering the storm drain system, viewed as a reduction in pollution-containing materials potentially available for discharge into the storm drain system. Existing and New Development (including Construction) are the areas where quantifiable amounts of pollutants are reported as collected and removed from entering the storm drain

system. By completing collection activities, the City maintains compliance with the Municipal Permit requirements.

7.1.2 Level 2

Changes in knowledge and awareness are mainly achieved through training, education, and other outreach efforts. Knowledge and awareness changes are most often indirectly qualified in observations, conversations, and presentations. The desired outcome is to have citizens, businesses, and City staff more familiar and comfortable with the City's storm water pollution prevention program. To assess this accomplishment, the City used number of complaints, workshop attendance, newsletters distributed, and referrals from other municipal departments as an indication of changes in knowledge and increased awareness about the storm drain system.

7.1.3 Level 3

Behavioral changes are ideally expressed in terms of BMP implementation. Although difficult to measure directly, inspection and site visits can verify the presence or degree at which BMPs are implemented. Complaints through the City and County Hotline as well as those received from the City Manager's office may also be used as an indication of where BMPs are missing or implemented improperly.

To satisfy reporting for Level 3, and move to the next level for the Existing Development, BMP implementation was verified for Municipal, Industrial and Commercial activities through inspections. Changing to a BMP Implementation Program for Existing, New Development, and Construction, makes it easy to determine percentages of facilities in compliance with minimum BMP requirements. Municipal crews view residential areas daily and storm water staff conducts "drive abouts", but BMP implementation is more difficult to determine. Behavioral changes by residents are expected to lag in progress as enforcement in this area depends on "catching" a discharge while in progress.

7.1.4 Level 4

The primary goal of BMP implementation is to reduce the loading of pollutants to urban and storm water discharges. Pollutant load estimation is the first direct characterization of water quality through JURMP activities. Regionally, San Diego River Watershed receiving water quality results are from the major outfall to the Pacific Ocean. In the future, Watershed monitoring at the jurisdictional lines will at least assign responsibility of pollutant loads, but will not determine a reduction in pollutants. The best approach is to make sure wet weather and dry weather results do not exceed action levels.

Level 4, pollutant load reductions, focused on pollutants associated with 303(d) listings in Forester Creek and the San Diego River under existing developments (Municipal, Industrial, Commercial, and Residential). Results of pollutant load reductions are estimated in Section 7.3, below.

7.2 ASSESSMENT IMPROVEMENTS

Improvements necessary to tables suggested in the "*A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs"* accommodate the move toward a BMP implementation – Pollutant reduction Storm Water Program. Refinements and rationale are as follows:

1. Use amounts of Pollution Prevented (Diverted) from entering the storm drain system to make an initial step toward connecting BMP Implementation with Water Quality results.

   Rationale: The Storm Water Permit commits to improving water quality through the application of procedures that eliminate, reduce, or minimize the discharge of pollutants (BMPs). Pollutant load information is not applicable to BMP implementation. Connecting BMPs to pollutants and currently available dry weather monitoring information provides the first glimpse of the positive effects from BMP implementation.

2. Use BMP implementation percentages from each Component to determine estimated reductions in discharges of pollutant-containing materials. Use empirical data when possible. Minimize the use of estimations as this leads to erroneous results.

   Rationale: To connect BMP implementation with pollutant reduction, percentages of BMPs implemented from each Component provide a number of facilities known to prevent pollutant-containing materials from entering the storm drain system by disposing the waste to an appropriate place. Collection of materials with disposal in the sanitary sewer, landfill, or in landscaped areas are examples of the diversion.

3. Use of Water Quality Data dictates whether estimates are useful and eliminates much of the estimation, as noted above.

   Rationale: Estimate the amounts of pollutant-containing materials only if the dry weather monitoring values are higher than the action level. Estimations with no basis are fictitious and serve no purpose. Therefore, if water quality data from dry weather monitoring are acceptable, the prevention mechanisms in place are adequate to maintain Water Quality as required by the Clean Water Act.

7.3 ASSESSMENT OF PROGRAM MEASURES

Basic assessment of program measures begins with City-based questions. First, starting with what is known, then shifting to what is wished to be learned, and finally what was learned. During the first step, the "what is known" are the measurements compiled from each of the JURMP components. Measurements such as the amount of material removed during street sweeping or cleaning of catch basins are direct measurements of pollution diverted from entering waterways. At sometime it may become appropriate to compare measurements to previous years, average measurements, or assess trends to assist with potential pollutant loads removed from a particular origin. Dry weather monitoring results are direct measurements of pollutants in urban runoff, but only partially address measurements of receiving water quality.

Sources, selected BMPs, measurements, and other indicators, identified in the previous Sections of this Annual Report for each of the Existing and New Development Components, report completed activities and achieved goals as required by Order No. 2001-01 and the City's JURMP. In summary, the City completed program implementation as designed in the JURMP and is incompliance with the activity-based permit requirements.

7.3.1 Direct Measures of Program Activities

For many years, the City tracked efforts from various collection agencies with four types of direct measures, as follows:

- Street Sweeping,
- MS4 Cleaning,
- Oil Recycling, and
- Household Hazardous Waste Collection

In general, the City tracks these measures because they provide an important indication of the types and amounts of materials and wastes that are diverted from the MS4 through various means. Street Sweeping and MS4 Cleaning directly removes materials from the pathway of rainwater and urban runoff. Oil Recycling re-routes used oil from illegal disposal to refineries where it is ultimately reused. The Household Hazardous Waste program collects wastes that may otherwise be improperly disposed, potentially to the MS4.

7.3.1.1 Street Sweeping

The Department of Public Works collected an estimated 3,459 cubic yards of debris during its street sweeping activities (18,781 miles of curbed streets). This year, the City's street sweeping efforts have been consistent with previous years. Were it not for these efforts, the debris collected would be swept away during rain events. Collection provides important long-term water quality benefits.

7.3.2.2 MS4 Cleaning

In PY6, all of the City's storm drains were cleaned by the Department of Public Works and California Conservation Corps, resulting in the removal and proper disposal of 1,654 cubic yards of material from the storm drain system. As a whole, the City's effort increased over last year's effort.

7.3.2.3 Recycling of Household/Commercial Waste and Oil Recycling

Recycling in El Cajon has good participation, but could always do better when the numbers are compared for recycled materials (118 tons) and waste (93,721 tons). Trends in waste collection will continue to be tracked .

Oil recycling is tracked by independent recyclers (e.g. Jiffy Lube) and Waste Management for curbside pickup of used oil. Waste Management provided their 303 state report which includes

recycling efforts. For PY6, Waste Management did not report any oil or oil products in their 303 report. However, Waste Management did recycle 58,500 pounds of oil base paint, 13,800 pounds of batteries and 57,385 pounds of latex paint.

7.3.2.4 Household Hazardous Waste Collection

Waste Management of El Cajon collects the Household hazard waste for the City's jurisdiction. In PY6 an estimated 236,890 pounds of waste household waste were collected as opposed to 201,640 pounds in collected in PY5, 198, 015 pounds in PY4, an estimated 277,000 pounds of household hazardous waste and recyclables were collected at 19 events in PY3, and PY2 reported 127,827 pounds of household hazardous waste and recyclables collected. As a whole, the City's effectiveness in collecting HHW from its residents has increased consistently and significantly over the years.

7.3.2 Indirect Measures

In most instances, changes to receiving water quality cannot be directly compared to collection activities. However, many indirect measures have value in tracking the effectiveness of specific program activities, and may have additional utility in assessing long-term water quality changes. Many of these measures are reported and discussed throughout this Annual Report. To track and evaluate the effectiveness of its program implementation over time, the City has compiled summary statistics for several of measures.

Indirect Measure		2006-2007
Complaints	Total Number received	128
	Number of Referrals from Other Departments	72
	Number of Enforcement Actions	54
Staff Training	City Staff Trained	86
Outreach	Outreach events conducted	3
	Number of Presentations	1
	Audience @ presentations	18

7.3.2.1 Complaints and Referrals

In this reporting period, the City received a higher number of complaints than last year from other City departments, citizen calls, and county referrals. The City and County hotlines are described in Section F.3.d (Existing Development – Residential). As previously discussed, this trend underscores the effectiveness of the City's outreach and staff training efforts. Compared to

previous years, it is believed that more of the City's citizens and staff were aware of storm water violations and understood what to do when water quality concerns were observed.

7.3.2.2 Staff Training

Levels of staff training during this reporting period were expanded to those of previous years. Although the City has made an important commitment to staff training under the current Permit (see JURMP Section F.4, Education), the consistency of these numbers also demonstrates the City's past commitment to training its staff. Training of staff with implementation responsibilities is not a new part of the City's storm water programs. However, the scope of these and other programs has significantly increased.

7.3.2.3 Outreach

This year, the City conducted a number of one-on-one discussions at the Public Works front counter with building and planning applicants and with commercial businesses and industrial facilities during inspections and complaints. Together, these increased face-to-face conversations demonstrate that the City is effectively implementing its outreach and education programs; details are provided in Section F.4 (Education).

7.3.3 Program Activities and Water Quality

Presenting a direct connection between pollutant load reduction and Storm Water Pollution Prevention Program activities continues to advance, but still is very much under development. Copermittees have created a Framework document containing the six (6) Levels of Assessment. The PY2 Annual Report addressed Levels 1 through 4. However, divination only generated numbers that could not be supported by calculation or program actions. For PY6, a slightly modified approach brings the assessment much closer to connecting activities with water quality. Amounts of pollutant-containing materials prevented from entering the storm drain system provides solid numbers while adding percentages of facilities known (through inspection) to be implementing minimum required BMPs and reduces the estimation factor.

7.4 LONG-TERM ASSESSMENT

The Annual Assessment indicates the City is meeting the requirements specified in their JURMP and collecting data associated with those program activities. At some point, a connection between activity completed and pollutant loading in receiving waters will become a reality.

A Long-Term Assessment must answer key questions to guide future activities and build into the current program, the additional reporting requirements in order to connect program activities with actual improvement in receiving water quality. The Long-Term Assessment should take place about every five years (permit renewal cycle) as changes to permits may change approaches and programs.

Program Activity	Annual Questions	Permit Questions (Every 5th year)
Water Quality Assessment	What are the high priority quality problems and where do they occur? What constituent(s) is(are) causing the problems?	What are the changes to discharge and receiving water quality in my Watershed?
Program Planning	What are the priority sources of pollutants? What BMPs are needed to control these pollutants? What are the targeted outcomes for the BMP Implementation? What are the projected Load Reductions from these implemented BMPs?	Are the current programs providing the information necessary to produce targeted outcomes?
Program Assessment	Were targeted outcomes achieved? What BMPs should be changed or should other BMPs added? Are costs associated with implementation feasible?	Is the cost worth the water quality changes?
Integrated Assessment	How well are the parts of the program working together? What other links can be made?	What other relationships between activities and water quality are evident?

Answers to the above questions come from further analysis of each existing component area. Tables of estimated pollutant loads removed are provided below. Areas where pollutant removal rates are high will be the areas to focus program efforts. Modifications to JURMP activities will be the result of this assessment.

Level 4 Pollutant Load Reductions are provided in the following four tables for existing development. Estimates of average load reduction per event was the most difficult to find support evidence. Using the best knowledge available, the magnitude of total pollutants reduced is the most powerful in assessing the degree of success for the City's storm water program.

LEVEL 4 Assessment

Each of the following tables provides an estimate (supported with empirical data) for the amount of pollutant-containing materials prevented from entering the MS4 due to the activities of the Storm Water Pollution Prevention Program implemented in the City of El Cajon. As there is only one receiving water body in El Cajon, Forester Creek impairments were used as the constituents of concern when estimating possible amounts of pollutant-containing material prevented or a reduction in the amount of pollutant that could have discharged into Forrester Creek. Only Existing Components were assessed through Level 4 as the most qualitative and

quantitative information is available in these areas. The following paragraphs discuss assumptions incorporated into calculating the amounts provided as "Total" for each Existing Component.

Trash was added to the assessment due to the Forester Creek Improvement Project in Santee. The City of El Cajon installed a trash and debris fence to capture trash from creek flows.

General Assumptions

There are a number of general assumptions within each table. Of most importance is the understanding that the amount (estimated or actual) removed or eliminated from discharging into the storm drain system is the amount of the material or liquid and does not equate to actual pollutant loads reduced. Secondly, the margin of error in these values is very high as most numbers were calculated using information available. Data quality is not necessarily a concern. This is an effort in determining where best to place education efforts and focus each program component.

Municipal

At 15 municipal maintained areas (parks, City Hall, schools), staff cleaned area of pet waste, three times per year. Collection at each area was approximately one pound of pet waste. Pet waste does not equate to one pound of bacteria.

The City maintained 100% of laterals at approximately 24 buildings. No sewer overflows were experienced at City facilities. Pounds were estimated using 10 pounds (no factual basis other than one gallon of water equals 8 pounds) equaling one gallon of sewage. Private laterals not cleaned annually may experience stoppage depending on usage and care. Approximate gallons potentially dischargeable is 2 gallons times 10 equals 20 pounds time 24 buildings equals 480 pounds. Error with this calculation is high.

Total dissolved solids from Municipal areas originate mainly from fertilizers applied by staff. There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation effort that reduces overspray. All activities reduce the amount of TDS available for discharge to the storm drain system.

Municipal activities do not use materials or generate waste that would increase pH and as such is listed as "not applicable".

Trash reduction at City facilities is a consistent effort with approximately 80 to 90% of the 400 City employees ensuring trash is placed in appropriate containers. One pound of trash per year per person is estimated. This amount may be estimated too high.

Total amounts of pollution prevented from entering the storm drain system do not equate to improved water quality; however, the amounts calculated are possible estimated high.

Industrial

At any one time there may be 80 to 100 industrial facilities conducting industrial activities within the City of El Cajon. It is estimated that 100% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during industrial inspections. If each facility is preventing one overflow of 5 gallons times 10 pounds, then 50 pounds times 80 facilities equals 4,000 pounds of bacteria- containing materials did not discharge to the storm drain system.

Total dissolved solids from Industrial areas originate mainly from fertilizers applied by contracted staff to landscaped areas (usually a very small area compared to the total industrial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation effort that reduces overspray. All activities reduce the amount of TDS available for discharge to the storm drain system.

Based on inspections and enforcement of the industrial community, pH-affecting substances are reduced from entering the storm drain system through the implementation of BMPs as required by the General Industrial Permit. Amounts estimated have no factual basis.

Trash reduction at Industrial facilities is based on industrial inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads, as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections and the two enforcement actions taken at industrial facilities during this Permit Year.

Commercial

There were at least 136 commercial facilities conducting activities with the high potential to discharge bacteria-containing liquids. Of those facilities, it is estimated that 50% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during commercial inspections. If each facility is preventing one overflow of 2 gallons times 10 pounds, then 20 pounds times 68 facilities equals 1,360 pounds of bacteria- containing materials that did not discharge to the storm drain system. This may be estimated high.

Enforcement of commercial Vehicle Repair Facilities resulted in 3 known discharges that did not reach the storm drain system. An extrapolated number of 30 was used since it is unknown how many overflows result in prevention of discharge. Responses to actual discharges are larger volumes increasing the pounds per event to 50.

Total dissolved solids from Commercial areas originate mainly from fertilizers applied by contracted staff or lease company personnel to landscaped areas (usually a very small area compared to the total commercial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation effort that reduces overspray. All activities reduce the amount of TDS available for discharge to the storm drain system.
Commercial activities observed during inspections do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.

Trash reduction at Commercial facilities is based on inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections.

Residential

Bacteria source reductions for dog owners, home owners, and Recreational Vehicles (RVs) is purely speculation, although the numbers of potential targets is accurate, based on circulated printed educational materials. However, enforcement actions indicate few reported sewage overflows from residential areas. Amounts calculated are estimated too high and should be adjusted with more factual information for next Permit Year.

Total Dissolved Solid and Trash reductions are also speculation based on information materials circulated throughout the City in the Spring and Fall newsletters. Amounts estimated are reasonable. Based on City observations, only a few neighborhoods have trash problems. These areas will be targeted in the next Permit Year.

* = Total amounts calculated appear reasonable with the exception of bacterial-containing materials. Factual information is not readily available for this element and estimations are high.

New Development

Only trash and TDS were addressed for New Development as a small-scale post-construction BMP data is not yet available. Speculations on the amount of trash are associated with post-construction BMPs provided, although no corroborating evidence could be found. Numbers calculated appear reasonable.

Construction

Most of the pollutant reductions at construction sites involve sediment. Based on the inspections completed, bacteria from Port-o-lets, pH from concrete washout, and trash rarely require a corrective action. Estimations of pollutant-containing material prevented are low and may be adjusted during PY6.

Pollutant Reduction Estimation Worksheets for Forrester Creek 303(d) Listed Pollutants (PY2006-2007)

Municipal Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted**	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Pet Waste	Maintenance	Pet Waste Bags picked up at Dog Park	Dog Area at City	100%	1	Empirical Data	HIGH	11.7 tons of pet waste	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Education	Sewer insert - Your Private Sewer Lateral	18 buildings	100%	18	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Enforcement	Non-Storm Water Discharge	3 sewage overflows	100%	3	Empirical Data	HIGH	2,050 gallons	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
TDS/Nitrates	Parks and Grassy Areas	Maintenance	Landscape Maintenance	20 grassy areas	100%	20	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (2.5 mg/L NO3)
Trash	Streets	Maintenance	Street Sweeping	18,781 miles	100%	18,781	Empirical Data	HIGH	3,459 Cubic Yards*	No Measurement at this time
	Channels	Maintenance	Channel Maintenance	8 major channels	100%	8	Empirical Data	HIGH	1,654 Cubic Yards*	No Measurement at this time
TOTAL									**5,113 Cubic Yards Trash ******	
* - Converted from cubic yards at 60lb/cubic yard				*** - Represents only two months of usage					**11.7 Tons of fecal coliform 2,050 gal fecal coliform******	
**- Correlation to Water Quality TBD				**** - Actual Results						

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Industrial Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP (Section F.3.b, Table 4)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Private Lateral	Inspection	Sewer insert - Your Private Sewer Lateral	26 high priority industrial facilities	TBD	TBD	In Progress	HIGH	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	26 high priority industrial facilities	100%	26	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash (not 303(d) listed, but monitored by East County)	Dumpster	Maintenance	Building/Grounds Maintenance	26 high priority industrial facilities	100%	26	Extrapolated Information	MEDIUM	(.1lb of trash) (26 facilities) (365 days) = 949 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	26 high priority industrial facilities	83%	22	Extrapolated Information	MEDIUM	(.05lb of trash) (22 facilities) (365 days) = 401 lb	No Measurement at this time
TOTAL									**1023 lb of trash *** **	
* - Diverted from the Storm Drain System			*** - Estimated Results							
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

.1lb Trash = 8 cups/paper @ .2 ounces each

Commercial Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted ***	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Private Lateral	Education	Private Lateral Maintenance	136	113	In Progress	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	136	109	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash	Dumpster	Maintenance	Building/Grounds Maintenance	136	68	Extrapolated Information	MEDIUM	(.1lb of trash) (63 facilities) (365 days) = 1,241 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	136	90	Extrapolated Information	MEDIUM	(.05lb of trash) (90 facilities) (365 days) = 1,642 lb	No Measurement at this time
								2,883 lb of trash ***	
TOTAL									
* - Diverted from the Storm Drain System			*** - Estimated Results						
**- Correlation to Water Quality TBD									

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Residential Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMPs Completed for Measurement**	**# of articles Distributed**	**% of Readers Implementing BMP (estimated)**	**# of Possible Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Sanitary Sewer	Education	Private Lateral Maintenance	38,000	0.1%	38	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
	Pets (Dogs & Cats)	Education	Pet Care	20,000 pet owners	10%	2,000	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS	Landscape Fertilizers	Education	Home/Garden Maintenance	38,000	0.5%	190	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
	Automobile	Education	Vehicle/Equip Cleaning	38,000	10%	3,800	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
pH	Concrete Washout	Education	Home Repair	38,000	5%	1,900	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7 pH)
TOTAL										

* - Diverted from Storm Drain System *** - Estimated Results

** - Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to WQ

New Development Component

ASSESSMENT LEVELS	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP (Section 6, Table 4)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
TDS	Landscape	Inspection	Bio-filtration Area	7	100% of applicable sites	7	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/l)
Trash	SW Inlets	Inspection	Inlet Filters	10	100% of applicable sites	10	Extrapolated	MEDIUM	(.1lb of trash) (10 facilities) (365 days) = 365 lb	No Measurement at this time
	Landscape	Inspection	Grassy Strip or Swale	7	100% of applicable sites	7	Extrapolated	MEDIUM	(.05lb of trash) (7 facilities) (365 days) = 128 lb	No Measurement at this time
	Paved Areas	Inspection	Detention Basin	6	100% of applicable sites	6	Extrapolated	MEDIUM	(.05lb of trash) (6 facilities) (365 days) = 110 lb	No Measurement at this time
	Dumpster	Inspection	WM5 - Solid Waste Management	2	100% of applicable sites	2	Extrapolated	MEDIUM	(.05lb of trash) (2 facilities) (365 days) = 37 lb	No Measurement at this time
TOTAL									**640 lbs of trash *** **	

* - Diverted from the Storm Drain System

*** - Estimated Results

**- Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Construction Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP (Section 7, Table 5)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Port-o-let	Inspection	WM9 - Sanitary Waste Management	20	100%	20	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
pH	Concrete Washout	Inspection	WM8 - Concrete Washout Management	20	100%	20	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7)
Trash	Dumpster	Inspection	WM5 - Solid Waste Management	20	100%	20	Extrapolated	MEDIUM	(.1lb of trash) (20 facilities) (180 days) = 360 lb	No Measurement at this time
TOTAL									**342 lbs of trash *****	

* - Diverted from the Storm Drain System *** - Estimated Results

**- Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

7.5 PROGRAM ASSESSMENT SUMMARY

Estimated Pollutant Load Tables indicate that Residential Areas have the greatest potential for pollutant removal activities. Nearly three to seven times higher than the other areas, the residential community has the largest potential for reducing pollutants from entering the City's receiving waters.

Each component has been addressed as follows for strengths and improvements. Effective is viewed as meeting the Municipal Permit implementation and reporting requirements. Summaries provided to the County are contained in Appendix A.7.

Component	Effective	Strength	Improvement
Municipal	Yes	Education (Training)	Continue to coordinate with East County Cities whenever possible.
Industrial	Yes	Assessment of BMP Implementation	Revise Inspection Form – BMP- based; condense; regional consistency.
Commercial	Yes	Assessment of BMP Implementation	Work with the El Cajon Community Development Center.
Residential	Yes*	Outreach and Education	Contact property owners directly.
New and ReDevelopment	Yes	Process	Continue to gather forces with other East County Cities whenever possible.
Construction	Yes	Inspections	Develop a special workshop for East County Developers.
Illegal Discharge Detection and Elimination	Yes	Monitoring	Increase frequency and monitoring points. Add jurisdictional wet weather sampling points at beginning and ending boundaries for pollutant loading allocations.
Education	Yes	Team Efforts	Continue efforts and team with East County Cities or Watershed whenever possible.
Public Participation	Yes	Team Efforts	Continue efforts to team with Region whenever possible.

* Face-to-face contact is effective but slow moving.

7.6 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements are discussed throughout the Program Assessment section and are summarized above. No regulatory comments were received during PY5 for the City's Assessment and Jurisdictional URMP Effectiveness component.

SECTION F.8 FISCAL ANALYSIS

8.1 PROJECTED FISCAL YEAR (FY) 07-08 EXPENDITURES 1

8.2 FUNDING SOURCES AND RESTRICTIONS 3

8.3 LONG-TERM FUNDING ISSUES AND STRATEGIES 3

8.4 IMPROVEMENTS AND REGULATORY COMMENTS 4

SECTION F.8 FISCAL ANALYSIS

A fiscal analysis of the JURMP provides a vital assessment of resources for the current and upcoming Permit Years. The analysis identifies adequate support and how resources are divided to support and fortify the JURMP and WURMP efforts. Fiscal years (FY) correlate with the same timeframe as permit years (PY). For PY3, the City Storm Water staff developed a sufficient budget that is separate from other Public Works activities and continues to be funded through the City's Sewer Fund. This funding source has been used since PY4 and will continue to be used for PY7.

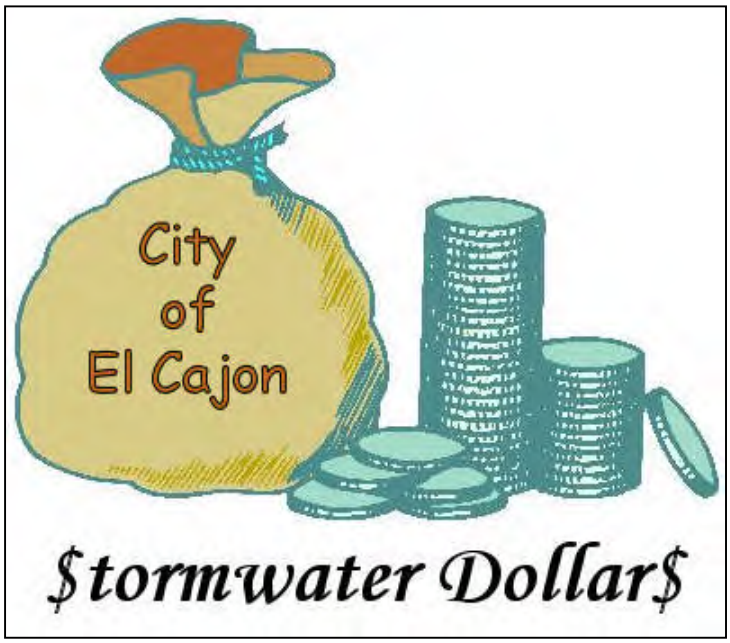

8.1 PROJECTED FISCAL YEAR (FY) 07-08 EXPENDITURES

The following table shows PY1, PY2, PY3, PY4, PY 5, and PY6 actual expenditures and the proposed PY6 budget for the City's Urban Runoff Management Program. Due to decreases in overall funding from the State of California, City department reduced budgets by 25% in PY2, but cost has increased steadily from PY3 through PY6 and increases are budgeted for PY7.

The City's NPDES Urban Runoff Management Program funding was sufficient to meet the JURMP requirements in PY6 and will be sufficient to meet requirements in PY7. The City met its projected goal of continuously implementing plans, procedures, and processes to implement the JURMP requirements and assess the effectiveness of programs that were implemented.

Item	PY1	PY2	PY3	PY4	PY5	PY6	Proposed PY7
Salaries (including benefits)	425,000	455,000	436,000	561,473	533,487	532,451	716,241
Professional and Technical Services	120,000*	0	61,000	60,000	56,600	413,000	405,000
Dry Weather Monitoring Program	26,000	24,000	31,000	35,000	53,000	83,000	150,000
Equipment/Capital Outlay	11,000	8,000	8,000	25,000	7,500	37,000	117,650

Item	PY1	PY2	PY3	PY4	PY5	PY6	Proposed PY7
Vehicles & Equipment	19,000	20,000	20,000	20,000	31,000	25,900	10,209
Supplies	4,000	11,750	11,700	12,000	13,000	9,700	9,700
Computer/GIS	9,000	0	0	80,000	85,000	53,500	90,000
TOTAL	**$644,000**	**$549,750**	**$631,700**	**767,000**	**1,052,000**	**1,589,939**	**1,653,289**

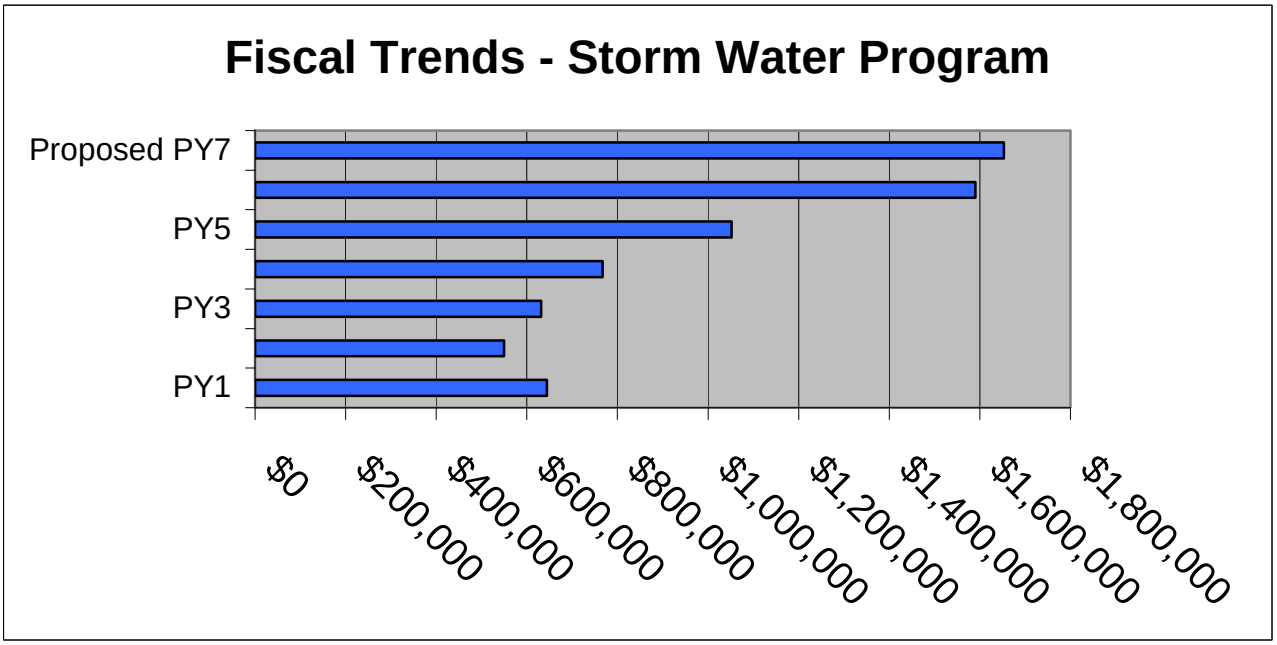

PY1 expended a higher amount of funds because of the Jurisdictional Urban Runoff Management Plan (JURMP) generation and creation of storm water municipal codes for enforcement. PY2 was the first year of implementation and programs written in the JURMP were tested in the field. Modifications to program components caused an increase in expenditures during PY3 and PY4 budget which contained some capital expenditures that were started in PY2 and PY3 such as a Geographical Information System dataset for map generation and a trash fence to collect trash and debris in Forrester Creek before discharging to Santee. From PY5 through PY7, spending has gradually increased to support a Geographical Information System.

Listed in the following table are Additional Services and Projects supporting JURMP Permit requirements from PY1 through PY7. The substantial rises of PY6 and PY7 budgets are mostly attributed to increases in CIP projects related to storm drain pipe replacement projects, development of wastewater and storm drain master plans.

Service/Project	**PY1**	**PY2**	**PY3**	**PY4**	**PY5**	**PY6**	**PY7**
Street Sweeping	268,000	313,000	319,000	368,930	420,739	430,374	454,600
Capital Improvements (Total) - Replace Drainage Pipe - Replace Sewer Pipe - Municipal Yard Improvements - Road/Drainage Improvements - Drainage and Wastewater Master Plans	1,000,000	1,300,000	1,700,000	1,136,770	1,076,122	1,573,732	3,440,000
TOTAL	**$1,268,000**	**$1,613,000**	**$2,019,000**	**$1,518,770**	**$1,496,861**	**$2,004,060**	**$3,894,600**

8.2 FUNDING SOURCES AND RESTRICTIONS

The budget for PY6 included a Storm Water Program Manager, 1 part-time senior engineering technician, 1 junior engineer, 1 GIS technician, 1 compliance officer, and 2-5 maintenance workers. For PY7 the program includes a Storm Water Program Manager, one full-time Storm Water Compliance Officer, one junior engineer, one part-time senior engineering technician, one GIS technician, one engineering intern, and public works maintenance staff. The City also has an open contract with two consultants to provide as-needed services to ensure the City meets its JURMP implementation requirements.

8.3 LONG-TERM FUNDING ISSUES AND STRATEGIES

Each year the City evaluates and prioritizes the areas in the City where improvements are needed. Many improvements assist the JURMP in protecting receiving water quality. This past year, multiple CIPs improved storm water quality by preventing pollutants from entering the storm drain system. They are as follows:

- Sewer main replacements and enlargements at various locations.
- Corrugated metal pipe repair and replacement in various locations.
- Storm drain repair and replacement in various locations.
- Drainage channel fencing improvements at various locations.

- Budgeting for the installation of storm drain inlet filters in various locations.

The following are proposed improvements for the next Permit Year (July 1, 2007 through June 30, 2008). The following table lists the major line items for the PY7 budget.

Item	Proposed Budget 2007/2008
City of El Cajon Urban Runoff Management Program	1,653,289
Street Sweeping	454,600
Capital Improvements	3,440,000
TOTAL	**$5,547,889**

In the long-term, funding will continue to be a question. The City is constantly challenged with doing more with less. For PY6, the City completed all inspections with existing staff.

8.4 IMPROVEMENTS AND REGULATORY COMMENTS

Working efficiently is the goal of the urban runoff program. Completing onsite inspections, tracking enforcement actions, and complaint/referral information allows the City to reduce the amount of time and paper to complete significant portions of the Municipal, Industrial, Commercial, and Land Use Planning JURMP Components.

For WURMP activities, the City will be coordinating with the other San Diego River Watershed Copermittees to complete outreach and education activities. Working together eliminates duplicative efforts and enhances the effect across a wider range of people and geographical area.

No regulatory comments were received during PY5 for the City's Fiscal Analysis.

CONCLUSIONS & RECOMMENDATIONS 2

1. Conclusions 2

2. Recommendations 5

CONCLUSIONS & RECOMMENDATIONS

To conclude PY6 and recommend changes for PY7, this Section focuses on the challenges overcome this last year that will help eliminate inaccuracy or uncertainty for subsequent permit years. To summarize, the City:

- Expanded the implementation of the BMP-based inspections to include Eating or Drinking Establishments. The City focused its efforts on ensuring full implementation of appropriate BMPs at all high priority commercial, industrial, construction and municipal facilities.
- Expanded the public education efforts by participating in expanded Career Day events, giving presentations, hosting Pollution Prevention Days events and providing information to the mass public through the City newsletter and utility bill inserts.
- Continued efforts towards a Watershed-based program by conducting the fourth upstream/downstream water quality assessment of Forrester Creek.
- Refined the City's ability to track complaints, inspections, violations, and enforcement actions for accuracy and completeness.
- Opened contract for on-call analytical testing services to conduct follow up responses to complaints, spills, and targeted investigations to identify potential pollutant source points.
- Hired consultant to assist with the review of storm water plans and requirements for proposed development and redevelopment projects.

1. CONCLUSIONS

A number of conclusions resulted from compiling the Annual Report information as follows:

The City is fulfilling the activity-based requirements of Order No. 2001-001. The actions taken by the City to comply with the Order's requirements are fully described in Sections F.2 through F.8 (particularly Section F.7) of this Annual Report. The City will continue to meet the activity-based compliance requirements in future program years.

The City's focus on BMP implementation at high priority commercial and industrial facilities and at construction sites will reduce or prevent discharges of pollutants from those activities and sites. Once the City can reasonably assure that those priority activities are not discharging pollutants, the City will be able to focus more effort on identifying and eliminating other (unknown, unidentified) sources of pollutants that continue to impact water quality.

The City's program must continue to move forward, from an emphasis on the activity-based compliance actions to water-quality-based activities that will help the City achieve the goal of reducing discharges of pollutants and restoring the quality of the receiving waters. These activities include collecting, evaluating and incorporating sufficient water quality data to set priorities, better identify problem areas, and to be able to demonstrate reductions in pollutants and improvements in water quality.

Effectively integrating jurisdictional into watershed programs will be a continued focus for the future. The Permit establishes important obligations at both jurisdictional and watershed levels. To accomplish this transition and integration, the City continues to meet with East County Cities Workgroup (San Diego River Watershed Jurisdictions) to provide some direction concerning inland urban runoff issues. Taking advantage of successes at other Cities strengthens individual and watershed programs.

The City must still address a number of unresolved data and information collection issues. Monitoring data are especially important to quantify pollutant loads within the jurisdiction of El Cajon. Additional dry weather monitoring stations are needed to better identify illegal discharge sources. The need for additional data and information must be carefully balanced with the costs of obtaining those items.

New Directions, New Challenges….

Permit Year 1 of Order 2001-01 set a baseline for the 14 components with the primary goal to reduce or eliminate pollutants from entering the City's storm drain system, which flows to Forrester Creek, the San Diego River, and ultimately the Pacific Ocean. Permit Year 2 implemented those 14 components that required inspection, monitoring, education, and enforcement. Permit Year 3 spent over 17,000 staff hours and over two million dollars ($2,000,000) in meeting permit requirements and JURMP goals. Permit Years 4 and 5 continued the BMP implementation verification inspection program initiated in PY3. Permit Year 4 focused on the Automotive Repair Industry, while PY 5 focused on the Restaurants and other businesses preparing and serving food.

Conclusions and Recommendations

The solid base of programs and procedures produced in PY1, continued in PY5 and PY6 with refinement supported by six years of experience in program implementation. An unending challenge is changing the behavior of the nearly 95,000 residents and 2,000 businesses and their views of urban runoff pollution. The City is predominantly a community of rental units, which identifies the population as more transient than the typical single-family residential population. This outreach and education challenge will be changing as more rental complexes turned into common living complexes with home ownership. The following table summaries the City's storm water management strategy based on the challenges presented during PY6.

Table 1 – Challenges and Associated Strategies/Actions

Challenge	Strategy Action
Implementing the 14 components simultaneously	1. Prioritize implementation to maximize use of personnel, supplies, equipment, and budget. 2. Develop budget for PY6 to add watershed outreach, efforts, public participation events, additional outreach materials, GIS data development, staff training, and treatment controls for trash and debris.
Adequate Staffing and Equipment	Train as many City staff in storm water pollution prevention and Best Management Practices.
Incorporate Storm Water Concepts and Requirements at the Planning Stage	Work closely with Community Developement staff to generate a Storm Water Information Packet to distribute to applicants.
Transition Jurisdictional Programs and activities into Watershed Activities.	1. Meet with WURMP Copermittees for implementation. 2. Explore strategies to fund watershed activities that go beyond the jurisdictional boundaries.
Tackle Inland City Issues	1. Coordinate with East County Cities on pollutant load reduction, training, and citizen educational efforts. 2. Develop East County City-specific materials.
Maintain Adequate Monitoring tasks	1. Review dry weather monitoring results. 2. Use GIS and the City's Business License database to focus on the most highly potentially pollution production areas.

Challenge	Strategy Action
	3. Develop a basic wet weather monitoring program that is comparable with other Copermittee programs.

From July 1, 2003 through June 30, 2007, the City tackled a new set of challenges while maintaining the current level of provided services. In review, it was better to put resources towards implementing productive processes and procedures, rather than completing a task in the name of compliance. The City continues to work toward reaching higher standards in future program years, while quantifying pollutant reductions from jurisdictional actions that may have a watershed impact.

2. RECOMMENDATIONS

Specific recommended improvements are listed at the end of each component. Below are some general improvements for the City's Urban Runoff Strategy.

- Maintain adequately trained staff to implement JURMP activities,
- Increase budget and effort in creating a comprehensive Geographical Information System for the Jurisdictional and Watershed Storm Water Program efforts.
- Increase budget for watershed training, East County City Cooperative efforts, and electronic tracking of program information,
- Coordinate through City departments a cohesive urban runoff management program,
- Generate a schedule of outreach events for the next Permit Year according to JURMP requirements,
- Design a comprehensive program to collect and organize information for the Annual Report,
- Add sample collection sites and frequency to the dry weather monitoring program, and
- Focus on outreach and education activities for the most effective approach to managing storm water pollution.
- Develop a storm drain master plan map displaying MS4 infrastructure.

APPENDIX A

16.100.040 Applicability of chapter.

The regulations set forth in this chapter shall apply to the development plan approval process for discretionary development applications, and prior to issuing development permits for ministerial projects. To allow flexibility in meeting the design standards set forth in this division, structural treatment control BMPs may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided certain conditions are met. All **new development and significant redevelopment** projects that fall into one of the following "**priority project**" categories are subject the requirements of this division, subject to the lawful prior approval provisions of the municipal permit. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project footprint is subject to the requirements of this division. These categories are:
A. Residential development of one hundred units or more;
B. Residential development of ten to ninety-nine units;
C. Commercial development greater than one hundred thousand square feet;
D. Automotive repair shops;
E. Restaurants;
F. Hillside development greater than five thousand square feet;
G. Projects discharging to receiving waters within environmentally sensitive areas;
H. Parking lots greater than five thousand square feet or with more than fifteen parking spaces and potentially exposed to urban runoff;
I. Streets, roads, highways, and freeways which would create a new paved surface that is five thousand square feet or greater.
(Ord. 4717 § 3 (part), 2002.)

Significant redevelopment" means development that would create or add at least five thousand square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to: the expansion of a building footprint; addition to or replacement of a structure; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and replacement of damaged pavement.

STORM WATER

MITIGATION PLAN

Permit No. PUD or TSM or BP

Name of Project

PROJECT ADDRESS
APN: 000-000-00

Prepared By

John Q. Engineer
Consultants, Inc.
195 E. Douglas Avenue
El Cajon, CA 92020

For

Developer, LLC
200 E. Main
El Cajon, CA 92020

Date

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ATTACHMENTS

A. Location Map
B. Project Map
C. BMP Map
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E. Hydrology Calculations/Copy of Hydrology Study

ATTENTION: DIRECTIONS ARE CONTAINED in BRACKETS [ ]

1.0 INTRODUCTION

A Storm Water Mitigation Plan (SWMitP) is required under the City of El Cajon Municipal Code 16.100 and Municipal Permit Order 2001-01. The purpose of this SWMitP is to address the water quantity and quality from the proposed project. Best Management Practices (BMPs) applied address long-term solutions to water quality. [Identify the source of the BMPs: Caltrans or CASQA or proprietary. Attach only proprietary BMPs. Provide specifications for all BMPs. Provide calculations and justifications for BMPs]. This SWMitP is also intended to ensure the effectiveness of the BMPs through proper maintenance that is based on long-term fiscal planning. The SWMitP is subject to revisions as needed by the engineer.

1.1 PROJECT DESCRIPTION

[Provide and discuss project location, topography, run-on and runoff issues, and unique conditions]
[Provide location map]

[Complete the following table for all applicable categories. Designations provided are highly recommended by the San Diego County Copermittees. There may also be others – provide explanation of pollutant sources]

TABLE 1-1 (Check all that apply)

Priority Project Categories	
>10 SFR	
>100,000 sq ft Commercial	
Automotive	
Restaurants	
Hillside Development > 5,000 sq ft	
Parking Lots > 5,000 sq ft or > 15 spaces	
Streets, roads, highways, freeways that create new paved surface > 5000 sq ft	

1.2 HYDROLOGIC UNIT CONTRIBUTION

Water Quantity

[The 100-year flood is the design storm used for calculating peak flows. Discuss the types of surfaces rain water that will flow over on the project and a general approach to minimizing impervious areas, directly connect impervious areas, retaining natural areas, and use of porous surfaces]

Water Quality

[Major channels/discharge points identified by the City are: Broadway Channel; Washington Channel, Third Street Lateral, County Ditch, and Fletcher Parkway which drain to Forester Creek AND Fanita Channel that directly discharge to the San Diego River. Both are 303(d) listed. The City considers the pollutants identified to be of concern for the entire length of the waterbodies. Discuss pollutants and how the project may affect water quality.]

2.0 WATER QUALITY ENVIRONMENT

Terms for Use in Calculations

% Impervious – the amount of square footage covered by pavement (concrete or asphalt, buildings, roofs, patios, and sidewalks. Includes future paved areas depending on size of lot such as proposed patio and RV parking.
Runoff Coefficient – calculate using % impervious and known soil type.
Time of Concentration – the amount of time for the first drop of water at the furthest point within a basin to travel to the discharge point without turning more than 45 degrees in a natural-lined conveyance.
Flow Length – the path water from the furthest point to discharge point without turning more than 45 degrees in a natural-lined conveyance.

2.1 PRE-CONSTRUCTION CONDITIONS AND FLOW

[Describe the pre-construction conditions such as: not paved, never developed, previously a gas station, etc.; grading requirements if applicable; how the site currently flows, direction of flow, the calculation used for flow.]

[Provide the total area and actual percent impervious for the project area.]

[Describe each parameter in the calculation and how the value used was chosen. Use runoff coefficients that reflect the true imperviousness of the project area and not the land use coefficients.]

[Use maps to indicate the parameter's location on the project site.]

[Calculate Q to the nearest 0.1 CFS.]

2.2 POST-CONSTRUCTION CONDITIONS AND FLOW

[Describe the post-construction conditions such as: paved, fully developed, development is a restaurant; final grading; how the site flows, direction of flow, the calculation used for flow.]

[Provide the percent impervious for the developed property.]

[Describe each parameter in the calculation and how the value used was chosen. Use runoff coefficients that reflect the true imperviousness of the project area and not the land use coefficients.]

[Use maps to indicate the above characteristics, detail schematics of post-construction BMPs (plan and cross-section views) and location of post-construction BMPs on the project site.]

[Summarize the affects of the project on the flow (increased, decreased, fully mitigated, etc.) and on downstream hydrology. Downstream assessments must address City of El Cajon discharge to the jurisdictional line at the City of Santee.]

[Compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rates, flow velocity, runoff volume, time of concentration, and retention volume (All calculations may be provided as Attachment E).]

[Calculate Q to the nearest 0.1 CFS.]

[Provide formulas, actual calculations, and a table with pre- and post-construction flows without the incorporation of any post-construction BMPs. Then add the post-construction BMP detainment flows.]

[Complete the following tables. At the minimum, provide justification of implementation and when not feasible for design and source controls.]

SUSMP FORM

SUSMP Development or Re-Development (Circle)

SUSMP Triggers (list all applicable categories): _____

Address: _____

Pre-Q: _____ Post – Q: _____

Maintenance Plan/Notes:_____

Apply all General Site Design and at least one of each control. (Please note that all of the following General Site Design and control items have to be considered and applied to the project. Explain what Best Management Practices (BMPs) were implemented to achieve

the General Site Design and controls or justify why the item was not feasible for this project).

[Provide reasoning for how any Design, Source, or Treatment Controls were applied]
[Provide Justifications for any Design, Source , or Treatment Controls not applied]

General Site Design	Applied	Justification
1. Control Peak runoff rates (Required)		
2. Minimize impervious areas (Required)		
3. Conserve Natural Areas (Required)		
4. Protect\slopes\and channels (Required)		
5. Minimize effective imperviousness (Required)		
6. Other		

Source Controls[1]	Applied	Justification
1. Storm drain message and signage (Required)		
2. Outdoor storage area design (Required)		
3. Trash storage area design Must be secured, bermed, and covered. (Required and in accordance with California Fire Code section 1103.2.2)		
4. Loading/unloading dock area design (Required)		
5. Repair/maintenance bay design (Required)		
6. Vehicle/Equipment/Accessory washing area (Required)		
7. Fueling area design (Required)		
8. Proof of control measure maintenance (Required)		
9. Other		

Treatment Controls (Require two controls, at a minimum) [1]	**Applied**	**Justification**
1. Inlet Filters[2]		
2. Grass strip filter		
3. Grass swale filter		
4. Extended detention basin		
5. Wet detention basin		
6. Constructed wetland		
7. Detention basin/sand filter		
8. Porous pavement detention		
9. Porous landscape detention		
10. Infiltration basin or trench		
11. Media filter		
12. Proprietary controls		
13. Other		

1. Proposed source and treatment controls need to be shown in the grading/drainage plan along with engineering details and/or specifications
2. Not to be used alone.

3.0 POLLUTANTS

3.1 POLLUTANTS GENERATED from AFTER CONSTRUCTION ACTIVITIES AND BMPs APPLIED TO MITIGATE

Terms

Activity – any action taking place outdoors or resultant liquid/solid is disposed outdoors.

Pollutants – sediment (dirt); metals (from dirt , paint, or chemicals); organic material (vegetation or food); grease; petroleum; sewage; detergents/soap; fertilizers; pesticides; trash/debris, and toxics (acids, corrosives).

Post-Construction BMPs – Design controls, Source controls, Treatment structures

Effectiveness – Based on manufacturer, industry; government; or other private studies. List Source.

TABLE 3-1 (Highlight Pollutants from Categories in Table 1-1)

Priority Project Categories	Sediment	Nutrient	Heavy Metals	Org Cpds	Trash & Debris	ODS	Oil & Grease	Bacteria & Viruses	Pesticides
>10 SFR	X	X			X	X	X	X	X
100,000 sq ft Commercial	P	P		P	X	P	X	P	P
Automotive			X	X	X		X		
Restaurants					X	X	X	X	
Hillside Development	X	X			X	X	X		X
Parking Lots	P	P	X		X	P	X		P
New Streets > 5000 sq. ft.	X	P	X		X	P	X		P
> 5,000 sq ft Redevelopment	X	P	P	P	X	P	P	P	P
X- anticipated P – Potential	ODS – Oxygen Demanding Substances								

TABLE 3-2 (Highlight the combination of BMPs for the Project that most effectively treats the Pollutants from Table 3-1) Efficiencies are in ()

Pollutants	**BMPS**
Sediment	Biofilters (Medium) Detention Basins (High) Infiltration Basins (High) Wet Ponds or Wetlands (High) Inlet Filters (Low) Filtration (High) Hydrodynamic Systems (Medium)

Nutrients	Biofilters (Low) Detention Basins (Medium) Infiltration Basins (Medium) Wet Ponds or Wetlands (Medium) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Medium)
Metals	Biofilters (Medium) Detention Basins (Medium) Infiltration Basins (Medium) Wet Ponds or Wetlands (High) Inlet Filters (Low) Filtration (High) Hydrodynamic Systems (Low)
Organic Compounds	Biofilters (Unknown) Detention Basins (Unknown) Infiltration Basins (Unknown) Wet Ponds or Wetlands (Medium) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Low)
Trash and Debris	Biofilters (Low) Detention Basins (High) Infiltration Basins (Unknown) Wet Ponds or Wetlands (High) Inlet Filters (Medium) Filtration (High) Hydrodynamic Systems (Medium)
Oxygen Depleting Substances	Biofilters (Low) Detention Basins (Medium Infiltration Basins (Medium) Wet Ponds or Wetlands (Medium) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Low)
Oil & Grease	Biofilters (Medium) Detention Basins (Medium) Infiltration Basins (Unknown) Wet Ponds or Wetlands (Unknown) Inlet Filters (Low) Filtration (High) Hydrodynamic Systems (Low)
Bacteria	Biofilters (Unknown) Detention Basins (Unknown)

	Infiltration Basins (High) Wet Ponds or Wetlands (High) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Low)
Pesticides	Biofilters (Unknown) Detention Basins (Unknown) Infiltration Basins (Unknown) Wet Ponds or Wetlands (Low) Inlet Filters (Low) Filtration (Unknown) Hydrodynamic Systems (Low)

4.0 CONSTRUCTION AND POST-CONSTRUCTION BMPS

4.1 CONSTRUCTION BMPS

[Provide a table with the **ALL** the activities, pollutants, and BMPs for construction activities. An example is provided below.]

EXAMPLE TABLE 4-1

ACTIVITY	POLLUTANTS	CONSTRUCTION BMP	EFFECTIVENESS
Entrance/Exit of Project Site	Sediment	TC-1	High (CASQA)
Pouring Concrete	Metals; pH	WM-8	High (CASQA)
Port-o-Let	Bacteria; Organics	WM-9 (Modified with secondary containment and strapped to a secure source to prevent tipping	High (CASQA)

4.2 POST-CONSTRUCTION BMPS

[Describe the soil type and characteristics of that soil type.]

[List the post-construction BMPs that will be used.]

[Identify the pollutants associated with each BMP.]

[Describe the effectiveness of the BMP or Treatment Train (multiple BMPs) with the pollutants.]

[Provide a Table with this information. An example is provided below]

EXAMPLE TABLE 4-2

ACTIVITY	POLLUTANTS	POST-CONSTRUCTION BMP	EFFECTIVENESS
Residential -Car Washing	ODS; Sediment	Source control - Capture, Contain, Collect	Low or High (EPA)
Commercial – Power washing sidewalks/driveways	Sediment; oil&grease; bacteria	Source control - Capture, Contain, Collect	Low or High (Regional Board)
Commercial – Car rinsing	Sediment; oil&grease; metals	Source control - Capture, Contain, Collect	Low or High (County of San Diego)
Residential/Commercial – Over watering/Over spray	Nutrients; pesticides	Source Control – IPM Treatment control – Infiltration basin	Low or High (Caltrans)
Residential/Commercial – Landscaping Maintenance	ODS; sediment	Source control - Sweeping	Low or High

5.0 TREATMENT BMPS

Treatment BMPs are designed to treat to the 85th percentile of the design storm.

[List the Treatment BMPs incorporated into the site design in a Table. Provide Efficiencies. Show on BMP map with engineering details.]
[Show calculations to verify the treatment to the 85th percentile.]

6.0 MAINTENANCE

6.1 CONSTRUCTION BMPs

Maintenance of construction BMPs starts at the time of soil disturbance and continues through the life of the project, until a 70% coverage of disturbed areas is established.
[Describe how maintenance of BMPs will be accomplished]

6.2 POST-CONSTRUCTION BMPs

Post-construction BMPs are to remain with the property and be maintained in perpetuity to the engineered functionality.

[Discuss financial responsibility of maintenance]

[Provide BMP Facilities Agreement to be recorded with Grant Deed.]

[Provide a table listing each post-construction BMP, the responsible party, frequency of maintenance, any special conditions, verification of maintenance, fiscal responsibility. An example table is provided below]

TABLE 6-1

POST-CONSTRUCTION BMP	Responsible Party	Maintenance Frequency	Verification of Maintenance	Fiscally Responsible Party	Special Conditions
Trash Enclosure (Source Control)	Business Owner or Property Owner or HOA	Weekly	Daily	Business Owner or Property Owner or HOA	Use Mop to clean
Engineered Vegetative Detention Area	Business Owner or Property Owner or HOA	Quarterly	Monthly	Business Owner or Property Owner or HOA	Mulch grass; Use little to no fertilizers or pesticides
Storm Water Filter Insert	Business Owner or Property Owner or HOA	At least Semi-Annually (October 1st and April 30th)	Quarterly	Business Owner or Property Owner or HOA	Keep Clean
3-stage Clarifier	Business Owner or Property Owner	Semi-Annually (October 1st and April 30th) Or Determined by use	Quarterly	Business Owner or Property Owner or HOA	Discharge to Sanitary sewer with wastewater permit or to storm drain with approved monitoring plan.

7.0 SUMMARY/CONCLUSIONS

[Summarize the site conditions and flow before and after construction; the use of post-construction BMPs and their maintenance; and the fiscal responsibility of post construction BMPs.]

[Provide a table with pre-construction peak flow, post-construction flow without BMPs, and post-construction flow with post-construction BMPs.]

CERTIFICATION

This Storm Water Mitigation Plan has been prepared under the direction of the following Registered Civil Engineer. The Registered Civil Engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

REGISTERED CIVIL ENGINEER
JOHN C. ENGINEER *DATE*

REGISTERED ENGINEER'S SEAL

ATTACHMENT A
LOCATION MAP

USE A LOCATION MAP THAT SHOWS SURROUNDING TOPOGRAPHY.

ATTACHMENT B
PROJECT MAP

USE A SITE MAP TO SHOW THE PLACEMENT OF THE PROJECT COMPONENTS WITH DRAINAGE ARROWS.

ATTACHMENT C
Post-Construction BMP MAP

INDICATE THE LOCATIONS OF SITE DESIGN, SOURCE AND TREATMENT CONTROL BMPS TO THE EXTENT POSSIBLE

PROVIDE ENGINEERING SPECIFICATIONS AND DETAILS (HEIGHT, WIDTH, DEPTH, CONFIGURATION, VOLUME, FLOW) OF THESE POST-CONSTRUCTION BMPS ON THE MAP

ATTACHMENT D
Post-Construction BMP DATASHEETS

PROVIDE THE DATASHEETS FOR EACH POST-CONSTRUCTION BMP USED TO MITIGATE FLOW OR TREAT RUNOFF.

ATTACHMENT E
Hydrology Calculations

PROVIDE HYDROLOGY CALCULATIONS OR A COPY OF THE HYDROLOGY STUDY.

COMPUTE RAINFALL RUNOFF CHARACTERISTICS FROM THE PROJECT AREA INCLUDING, AT A MINIMUM, PEAK FLOW RATES, FLOW VELOCITY, RUNOFF VOLUME, TIME OF CONCENTRATION, AND RETENTION VOLUME

NEW SUSMP PROJECTS IN PY6

	Planning Action or Building Permit Number	Date (First Submittal)	Street Number (X_Thru_Y)		Site Address/Name	Site Type	Project Name	SUSMP Trigger	BMPs Applied	Status of Implementation
1	JN 3142, CUP 1999	07/01/06	670	-	El Cajon Boulevard	New Car Dealership	New Car Dealership	>15 Parking Spaces	Vegetated Swales, Underground Detention Area	Plans under review
2	JN 3130, AM SP 428	08/04/06	1341	-	Main Street, E	General Commercial	California Suncoast Homes, Inc	>15 Parking spaces	Grassy Swale, Gravel Detention/Infiltration Basin, filter insert, trash enclosure	Under construction
3	BP2006-1336, JN 3131	08/11/06	1053	-	Loma Portal Dr.	New Single Family Residential	Principato Residence	Hillside Development	Vegetated swale, filtration/detention system, inlet filter.	Under construction
4	AM CUP 470	09/12/06	900	1000	Arnele Avenue	Commercial Automotive	Bob Baker Chevrolet/Subaru	>15 Parking spaces, Automotive Repair	Pending Review	Planning action comments
5	AM CUP 34, JN 3106	09/13/06	189	-	Roanoke	School	Cajon Valley Union School District	>15 Parking spaces	Grassy swales, storm drain inlet filters	Under construction
6	CUP 2038, JN 3135	12/29/06	335	355	Second Street, N	New Commercial	Taco Bell	Restaurant	Grassy swale, trash enclosure, and outlet filter	Under construction
7	JN 3073	01/22/07	1040	-	Bostonia	New Multi Family Dwelling	New Condominiums	>15 Parking Spaces	Pending Review	Not yet started
8	AM CUP 1866, JN 3189	02/20/07	1120	-	Broadway	Parking Lot	Penske Truck Leasing Company	>15 Parking Spaces	Underground Detention, Inlet filters, Trash Enclosure, Signage	Plans approved, no construction started
9	JN 2916	03/02/07	823	-	Ballantyne Street	New Subdivision	Ballantyne Glen	SFR >10 Units	Inlet filter, detention basin	Under construction
10	SDP 1453	03/02/07	855	863	Main Street, E	Retail Commercial Development	New Commercial	>15 Parking Spaces	Pending Review	Not yet started

SUSMP PROJECTS UNDER PLAN REVIEW IN PY6

2006-2007

	Planning Action or Building Permit Number	Date (First Submittal)	Street Number (X_Thru_Y)		Site Address/Name	Site Type	Project Name	SUSMP Trigger	BMPs Applied	Status of Implementation
1	JN 3142, CUP 1999	07/01/06	670	-	El Cajon Boulevard	New Car Dealership	New Car Dealership	>15 Parking Spaces	Vegetated Swales, Underground Detention Area	Plans under review
2	JN 3130, AM SP 428	08/04/06	1341	-	Main Street, E	General Commercial	California Suncoast Homes, Inc	>15 Parking spaces	Grassy Swale, Gravel Detention/Infiltration Basin, filter insert, trash enclosure	Under construction
3	BP2006-1336, JN 3131	08/11/06	1053	-	Loma Portal Dr.	New Single Family Residential	Principato Residence	Hillside Development	Vegetated swale, filtration/detention system, inlet filter.	Under construction
4	AM CUP 470	09/12/06	900	1000	Arnele Avenue	Commercial Automotive	Bob Baker Chevrolet/Subaru	>15 Parking spaces, Automotive Repair	Pending Review	Planning action comments
5	AM CUP 34, JN 3106	09/13/06	189	-	Roanoke	School	Cajon Valley Union School District	>15 Parking spaces	Grassy swales, storm drain inlet filters	Under construction
6	CUP 2038, JN 3135	12/29/06	335	355	Second Street, N	New Commercial	Taco Bell	Restaurant	Grassy swale, trash enclosure, and outlet filter	Under construction
7	JN 3073	01/22/07	1040	-	Bostonia	New Multi Family Dwelling	New Condominiums	>15 Parking Spaces	Pending Review	Not yet started
8	AM CUP 1866, JN 3189	02/20/07	1120	-	Broadway	Parking Lot	Penske Truck Leasing Company	>15 Parking Spaces	Underground Detention, Inlet filters, Trash Enclosure, Signage	Plans approved, no construction started
9	JN 2916	03/02/07	823	-	Ballantyne Street	New Subdivision	Ballantyne Glen	SFR >10 Units	Inlet filter, detention basin	Under construction
10	SDP 1453	03/02/07	855	863	Main Street, E	Retail Commercial Development	New Commercial	>15 Parking Spaces	Pending Review	Not yet started

SUSMP PROJECTS UNDER CONSTRUCTION 2006-2007

	Planning Action or Building Permit Number	Date (First Submittal)	Street Number (X_Thru_Y)		Site Address/Name	Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	SP 502, TSM 542, JN2911	06/10/04	2010	-	Madison Ave, E	New Subdivision	Rockhaven Ranch	Hillside Development	Extended detention basin, grassy swales
2	JN 2835	07/30/04	-	-	El Jardin Court	New Single Family Residence	El Jardin Court	Hillside Development	Filter inserts, signage, vegetated swale.
3	JN 2677	08/20/04	-	-	McNeil Ranch	New Subdivision	McNeil Ranch	SFR >10 Units	Detention basin, vegetated channel
4	JN 2884	08/20/04	1435	-	Washington Avenue, E	New Subdivision	Granite Hills Village	SFR >10 Units	Vegetated swale, two extended detention basin, storm drain inlet filters,signage
5	JN 2918	02/22/05	930	-	Jamacha Road	New Multi Family Homes	Jamacha Townhomes	>5,000 sq ft Development	Infiltration system, vegetated swale
6	JN 2994	04/07/05	656	-	Front Street	New Commercial Facility	Front Street Commercial Facility	>5,000 sq ft new parking	Filter inserts, underground detention basin
7	BP2006-1672, SDP 1129	07/29/05	1820	-	Joe Crosson Dr.	Industrial Zone	Hangar Additions	>5,000 sq ft Development	Inlet Filters, Trash Enclosures, Enclosed Wash Areas
8	AM SDP 307, BP2006-1044	02/13/06	1717	-	Main Street, E	Addition to existing equipment rental business	Rebel Rentals	Commericial - Automobile Repair	Inlet filter, covered trash enclosure, proper design of wash area.
9	SP 130, CUP 2024, JN3097	04/03/06	298	-	Fletcher Parkway	Commercial Facility	Home Depot	>100,000 sq. ft commercial dev't, Parking lot > 5000 sq ft	Storm drain inlet filters, hydro-dynamic separators, grassy strip next to Garden Center
10	JN 3022, TSM 605	05/04/06	-	-	Wisconsin Ave	New Residential	Wisconsin Cottages	>5,000 sf Impervious surface	Sand media filter, underground detention basin, inlet filter
11	JN 3130, AM SP 428	08/04/06	1341	-	Main Street, E	General Commercial	California Suncoast Homes, Inc	>15 Parking spaces	Grassy Swale, Gravel Detention/Infiltration Basin, filter insert, trash enclosure
12	BP2006-1336, JN 3131	08/11/06	1053	-	Loma Portal Dr.	New Single Family Residential	Principato Residence	Hillside Development	Vegetated swale, filtration/detention system, inlet filter.
13	AM CUP 34, JN 3106	09/13/06	189	-	Roanoke	School	Cajon Valley Union School District	>15 Parking spaces	Grassy swales, storm drain inlet filters
14	CUP 2038, JN 3135	12/29/06	335	355	Second Street, N	New Commercial	Taco Bell	Restaurant	Grassy swale, trash enclosure, and outlet filter
15	JN 2916	03/02/07	823	-	Ballantyne Street	New Subdivision	Ballantyne Glen	SFR >10 Units	Inlet filter, detention basin

SUSMP PROJECTS COMPLETED IN PY6

2006-2007

	Planning Action or Building Permit Number	Street Number (X_Thru_Y)		Site Address/Name	Site Type	Project Name	BMPs Applied	Status of Implementation	Construction Completed-Final SUSMP Field Inspection (Date)
1	JN 2853, TSM 513	1006	-	Bostonia	New Subdivision	Bostonia Development	Grassy Swales, underground detention	Complete	08/24/06
2	SDP 1410, JN 3000	2000	-	Gillespie Way	New Industrial Complex	Industrial Complex	Detention area in parking, grassy swale, signage, filter inserts	Complete	11/07/06
3	JN 2959	-	-	Grossmont College Drive	New road and parking lot	Grossmont College Life-Safety Road	Hydrodynamic separation system, detention area in parking lot	Complete	12/18/06
4	AM CUP 1093, JN 2861	333	-	Johnson Ave., N.	New Commercial	Jerome's	Inlet filters, roof drains to landscaping	Complete	01/23/07
5	BP2004-2649, JN 2812, TSM 501	2121	2123	Madison Ave, E	New Roadway	Sandra Lane (608-688)	Grass-lined channel, filter inserts	Complete	03/02/07
6	JN 2982, TSM 586	1174	-	Broadway	Commercial Facility	Commercial Suites	Inlet filter, trash enclosure	Complete	04/12/07
7	AM CUP 18, JN 2908	2766	-	Navajo Drive	Expansion of Parking lot and Playground	Our Lady of Grace Church	Hydrodynamic separation system, underground detention box	Complete	05/04/07
8	TPM 604, JN 2761, CUP1816	1628	1646	Madison Ave, E	New Church	7th Day Adventisit Church	Vegetated dention basin, storm drain inlet filters	Complete	05/04/07
9	JN 2878	-	-	Anjuli Court	New Subdivision	Grossmont College Subdivision	CDS Unit	Complete	05/14/07
10	JN 2935	2119	-	Madison Ave, E	New Commercial	Saint Madeleine Sophies Training Center	Biofilters, Detention Basin	Complete	06/27/07
11	JN 2930, CUP 1986	1700	-	Main Street, E	New Restaurant	Jack-In-the-Box	Grass swales, Inlet filter, signage	Complete	07/23/07
12	JN 3001, BP 2004-1746, CUP 1984	345	-	Main Street, E	New Bakery	New York Bakery	Roof filters	Complete	07/23/07

Project Name: _____

CITY OF EL CAJON SUSMP CHECKLIST

MS4: ☐ Forester Creek ☐ County Ditch Channel
☐ Broadway Channel ☐ Third Street Lateral
☐ Washington Channel ☐ Fletcher Parkway Lateral

City of El Cajon
STORMWATER
Protection Program

PROJECT INFORMATION

Project Name: _____ Public Private

Project Address: _____

Project Size: (acres) _____ Notice of Intent: Yes No

Completed a SWPPP: Yes No

SUSMP CATEGORY

Check all SUSMP categories that apply to the project

☐ Residential Development >100 units
☐ Residential Development > 10 units
☐ Commercial Development > 100,000 sq ft
☐ Automotive Repair
☐ Restaurants
☐ Hillside Development > 5,000 sq ft
☐ Parking Lots > 5,000 sq ft or > 15 spaces
☐ Streets, roads, highways, and freeways with >5,000 sq ft of new paved area
☐ Significant Redevelopment > 5,000 sq ft of paved area on an already developed site

IDENTIFY POLLUTANTS FROM THE PROJECT AREA

Check all that apply to the project

☐ Sediment (dirt; silt; clay)
☐ Nutrients (fertilizers, sewages)
☐ Metals (dirt, silt, clay, paints, liquid/solid chemicals)
☐ Organics (food, vegetation)
☐ Trash and Debris
☐ Oxygen Demand Substances (organic matter)
☐ Petroleum (oil, grease)
☐ Bacteria and Viruses (fecal coliform, pathogens)
☐ Pesticides/Herbicides
☐ Toxics (acids, corrosives, chemicals)

IDENTIFY RECEIVING WATERS AND THE POLLUTANT SOURCES

Does the project discharge directly to: ☐ San Diego River? or ☐ Forester Creek?

What are the primary sources contributing to SD River and Forester Creek impairments of:
TDS?_____ _____ _____

Fecal Coliform? _____ _____

Project Name: _____

pH?_____ _____

(SD River only) Oxygen Depleting Constituents? _____ _____

(SD River only) Chlorpyrifos and Diazinon? _____

(SD River only) Total and Dissolved Copper? _____

IDENTIFY CONDITIONS OF CONCERN

☐ Was a drainage study report prepared? Yes No

☐ Was a Storm Water Mitigation Plan prepared? Yes No

☐ Were the reports prepared by a registered Civil Engineer? Yes No Who?_____

☐ Are there field photographs? Yes No (Attached?)

☐ Are the following calculated according to actual % imperviousness for the 6-hour, 10-year and 100-year frequency storms?

- ☐ Peak flow rate (pre and post-construction)
- ☐ Flow velocity
- ☐ Runoff volume
- ☐ Time of concentration (minimum of 5 minutes as defined in the SD Hydrology Manual to calculate Intensity values)
- ☐ Retention volume

☐ Are conditions of concern adequately identified using:

Site Design?	Yes	No
Source Control?	Yes	No
Treatment Control?	Yes	No

ESTABLISH STORM WATER BMPS

☐ ***Site Design BMPs***

SUSMP Projects **must** consider, incorporate, and implement where determined applicable and feasible by City storm water staff. (Check all that were considered, incorporated, or implemented):

- ☐ Maintain Pre-Development Rainfall Runoff Conditions
  - ☐ Minimize project's impervious footprint
  - ☐ Conserve natural areas
  - ☐ Construct low traffic areas (walkways, trails, patios, parking lots, alleys, etc) of permeable surfaces
  - ☐ Construct streets, sidewalks, and parking lot aisles to minimum widths
  - ☐ Maximize canopy interception by preserving existing trees and shrubs
  - ☐ Preserve natural drainage systems
- ☐ Minimize Directly Connected Impervious Areas (DCIAs)
  - ☐ Drain rooftops into landscaping
  - ☐ Drain sidewalks, walkways, trails, and patios into landscaping
- ☐ Protect slopes and channels

Comments: _____

_____

Project Name: _____

☐ ***Source Control BMPs***

Does the project:

- ☐ Provide storm drain system stenciling and signage?
- ☐ Design outdoor material storage areas to reduce pollution introduction?
- ☐ Design trash storage areas to reduce pollution introduction (enclosed, covered, secured, and bermed)?
- ☐ Use efficient irrigations systems & landscape design (rain alert systems)?
- ☐ Incorporate requirements applicable to priority project categories such as:
  - ☐ Private Roads
  - ☐ Residential Driveways & Guest Parking
  - ☐ Dock Areas
  - ☐ Maintenance Bays
  - ☐ Vehicle Wash Areas
  - ☐ Outdoor Processing Areas
  - ☐ Equipment Wash Areas
  - ☐ Parking Areas
  - ☐ Roadways
  - ☐ Fueling Areas
  - ☐ Hillside Landscaping

☐ ***Treatment Control BMPs***

Check the treatment control(s) selected:

☐ Biofilters	☐ Detention Basin
☐ Infiltration basin/trench	☐ Filtration System
☐ Porous asphalt, concrete, other	☐ Hydrodynamic Separation System
☐ Filter Insert	☐ Sod-inlet Pre-treatment
☐ Grassy filter/swale	☐ Vegetated swale
☐ Proprietary Device	☐ Other: _____

☐ Do treatment controls effectively address primary pollutants of concern? Yes No

If No, describe corrective action: _____

_____

Verify the design of selected treatment controls:

☐ Was the control BMP designed for:	Volume	Flow
☐ Was the BMP design process described:	Yes	No
☐ Was the 85th percentile storm event used for design	Yes	No

If no, what design criteria was used: _____

☐ Was the BMP designed properly? If not, describe corrective actions: _____

_____

☐ Is the BMP(s) located near pollutant sources?	Yes	No
☐ Are there restrictions on use of infiltration BMPs?	Yes	No

Project Name: _____

Maintenance Requirements

☐ Was an O&M section attached? Yes No N/A

☐ Was a BMP Facilities Agreement signed by the property owner and filed with the Grant Deed? Yes No N/A

☐ Was a BMP Maintenance Agreement signed with the City to maintain BMPs located in the Right-of-Way? Yes No N/A

☐ Does this project require annual inspections and/or maintenance of BMPs by the City?

- Yes No N/A

☐ Was an access/easement agreement included? Yes No N/A

☐ Is there an HOA or other Common Interest planned for the project? Yes No N/A

☐ Were CC&Rs presented for review and acceptable? Yes No N/A

☐ Was a Storm Water Conveyance Maintenance Plan generated/received? Yes No N/A

Waiver of Structural Treatment BMP Requirements

☐ Was a waiver of infeasibility granted?

☐ Was the RWQCB notified?

Other Information

_____

_____

_____

Field Inspection

During BMP installation:

☐ Were the source control BMPs properly constructed in the field? ☐ Yes ☐ No

☐ Were the treatment control BMPs properly constructed in the field? ☐ Yes ☐ No

After project completion:

☐ Are all site design BMPs still in place? ☐ Yes ☐ No

☐ Are all source control BMPs still in place? ☐ Yes ☐ No

☐ Are treatment control BMPs still in place? ☐ Yes ☐ No

☐ Are all BMPs being maintained? ☐ Yes ☐ No

Construction Site Storm Water Requirements

The City's storm drain system is composed of the street, gutter, inlet, catch basin, ditches, streams, and concrete-lined channels.

1. Perimeter Controls (fiber roll; silt fence; gravel or sand bags) must be installed and kept in place throughout the project to prohibit the discharge of sediment and pollution from entering the storm drain system. If controls are moved to complete work, they must be replaced when work is completed or at end of day, whichever comes first.
2. Erosion Controls as required by an erosion and sediment control plan must be installed as designed.
3. Tracking of sediment and dirt must be cleaned up at the end of each working day.
4. Building Materials must be stored under cover at the end of each working day.
5. Spills must be reported to the site manager once they occur and cleaned up immediately. Spills that enter the City's storm drain system must be reported to the City Storm Water staff immediately.
6. Wash waters (including paint, dry wall mud, stucco, and other water-based materials) must be captured on site and contained, then disposed of in the appropriate place.
7. Port-o-lets must be secured and bermed.
8. Trash and debris shall be placed in appropriate containers during the workday with a final clean-up completed before leaving the site. If rain is predicted, wastes shall be covered.
9. Equipment shall be stored in a bermed area or with appropriate sized drip pans.
10. Equipment repair, servicing, or fueling must be completed undercover or within a bermed area for tasks completed within the workday. Spill kits must be within the bermed or repair areas.
11. Vehicle and equipment washing is prohibited.
12. The site will be secured at the end of each working day.
13. Report any destroyed controls to the site manager, immediately.

Under the City of El Cajon's Municipal Code §13.10.00, Storm Water Management and Discharge Control, it is illegal to discharge construction debris and materials, into the storm water conveyance system or any body of water.

Failure to prevent illegal discharges can result in fines of up to $10,000 a day per violation.

Under the law, contractors, the construction company, business owner, and property owner may receive a Citation for the same violation.

Storm Water Notes for Erosion Control Plans and Site Maps

EROSION AND SEDIMENT CONTROL NOTES FOR EROSION CONTROL PLANS

1. IN CASE EMERGENCY WORK IS REQUIRED, CONTACT _____ (Name) AT _____. (Telephone Number)

2. EROSION CONTROL MEASURES SHOWN ON PLANS SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE PUBLIC WORKS INSPECTOR.

3. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES IN WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER THROUGHOUT THE CONSTRUCTION PHASE OF THE PROJECT AND UNTIL PERMANENT GROUND COVER AND LANDSCAPING IS ESTABLISHED.

4. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEER DUE TO COMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY ARISE.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.

6. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.

7. ALL GRAVEL BAGS SHALL HAVE ¾ INCH MINIMUM AGGREGRATE.

ALL EROSION AND SEDIMENT CONTROL SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE CITY OF EL CAJON'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) AND SHALL INCLUDE THE FOLLOWING:

Dry Season (May 1 through September 30)

1. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads and slopes. Slopes less than 33.3% or 1:3 (vertical vs. horizontal) may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement.

2. Adequate perimeter protection BMPs must be installed and maintained.

3. Adequate sediment control BMPs must be installed and maintained.

4. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained

5. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and prevent sediment discharges must be stored on the site.

6. An approved "weather triggered" response plan is mandated for implementation in the event that a predicted storm event has a 50% chance of rain. The proponent must have the capacity to deploy the standby BMPs within 48 hours of the predicted storm event.

7. All slopes must be equipped with erosion prevention BMPs as soon as slopes are completed for any portion of the site.

8. Cleared or graded areas left exposed at any given time are limited to the amount of acreage that the project proponent can adequately protect prior to a predicted storm event.

Wet Season (October 1 through April 30)
In addition to the Dry Season Requirements:

1. Perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms.

2. Adequate erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a BMP fails, it must be repaired, improved or replaced with an acceptable alternate as soon as it is safe to do so.

3. The amount of exposed soil allowed at one time shall not exceed standby erosion and sediment control BMP capacity.

4. An incomplete disturbed area that is not being actively graded must be fully protected from erosion if left for 10 days or more.

STORMWATER RUNOFF MANAGEMENT NOTES

1. The owner and/or the owner's contractor shall be responsible to establish a plan to implement Best Management Practice to eliminate pollutant discharge to the public storm drain system. Such plan shall be submitted to and reviewed by the City Engineer prior to any soil disturbance, grading, clearing of vegetative matter, and/or construction on the site.

2. The plan shall provide that no sand, silt, or debris shall be allowed to enter the storm drain system including public streets.

3. The plan shall be in conformance with the City of El Cajon Standard Urban Storm Water Mitigation Plan Ordinance (SUSMP) and Jurisdictional Urban Runoff Management Program (JURMP). This ordinance requires the applicant to provide additional erosion control measures and perform future ongoing maintenance even after completion of the project to prevent, treat, or limit the amount of storm water runoff and pollution from the property.

4. The owner and/or the owner's contractor shall implement the plan and take remedial and preventive action immediately when pollutant discharge occurs and/or the City Engineer or the Building Division directs.

5. The above shall apply starting the 1st day of grading and/or construction and shall remain in effect until all grading and/or construction work has been completed.

The following note should be placed on all grading plans in excess of 1 acre:

6. A general construction activity storm water permit is required from the State Water Resources Control Board for this project. The State Water Resources Control Board has received and processed, on _____, our Notice Of Intent to comply with the terms of the general permit to discharge storm water associated with construction activity. Our WDID identification number is: _____.

City of El Cajon
Storm Water Quality Inspection for Construction Sites
BMP COMPLIANCE REPORT

You Are the Solution to Stormwater Pollution!

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Contractor Name: _____ Address: _____

Inspector Name & Phone #: _____ Date: _____/_____/_____Time: _____AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation **APN**: _____

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

Does Project Maintain a Stormwater Pollution Prevention Plan (SWPPP)? ❑ Yes ❑ No WDID: _____

Nearest Receiving Water(s): _____ Discharge Observed: ❑ Yes ❑ No _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

The Following List summarizes Minimum BMPs Required by the City of El Cajon Storm Water Ordinance (13.10) Additional BMPs May Be Required due to Site Conditions, Specific Activities, or by the Enforcement Official.

Minimum Construction Requirements	BMP Implemented?			Comments / Recommendations
	YES	NO	N/A	
Silt Fence – SE1				
Storm Drain Inlet Protection – SE10*+ filter fabric				
Sediment Basin – SE2				
Check Dams – SE4				
Fiber Rolls – SE5				
Gravel Bag Berm – SE6				
Street Sweeping/Vacuum – SE7				
Stabilized Construction Entrance – TC1				
Hydroseeding – EC4				
Geotexiles and Mats – EC7				
Material Delivery & Storage – WM1				
Stock Pile Management – WM3*				
Solid Waste Management – WM5*				
Concrete Waste Management – WM8				
Sanitary Waste Management – WM9				
Other*				
Other				

City of El Cajon
STORMWATER
Pollution Prevention Program

VIOLATIONS / REQUIRED CORRECTIVE ACTIONS

❑ Violation of Stormwater Ordinance: _____

❑ No Violations Have Been Noted; However BMP Implementation Is Required _____

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

200 E. Main Street, El Cajon California 92020 *TEL 619-441-1653 / FAX 619-579-5254*

Erosion Control Checklist (2006/2007) Minor Projects

$50.00 Fee (code 5513 650b)

Address: _____

		YES	NO
1.	North arrow and Scale?		
2.	Legend?		
3.	Storm Water Notes?		
4.	Emergency phone number?		
5.	Drainage arrows?		
6.	Minimum BMPs		
	a. Perimeter control (silt fence SC-1) or fiber rolls (SC-5)		
	b. Stabilized construction entrance (TC-1)		
	c. Street sweeping (SC-7)		
	d. Material storage (WM-1)		
	e. Concrete washout (WM-8)		
	f. Sanitary waste (WM-9)		
	g. Slope protection (coconut fiber blankets)		
	h. Solid Waste Storage (WM-5)		
7.	Address/Site location?		
8.	Erosion Control Plan heading?		
9.	Proposed and existing structures identified?		
10.	Property Boundaries?		
11.	Topography?		
12.	Placement of BMPs?		

Notes: _____

_____

_____

_____ _____

Reviewer Signature Date

H:\SPECIAL\NPDES\Annual Reports PY5 2005 to 2006\JURMP Report\Appendix A\2\Erosion Control Checklist_Small_Projects.doc

City of El Cajon
Storm Water Check List

Project Name:_____ **Job No.** _____

Location:_____

Engineer/Architect Name:_____ **Telephone:**_____

☐ **Plan Review Fee Amount $**_____ **Date Paid:**_____ **By:** _____

☐ **SWMP Fee Amount $** _____ **Date Paid:**_____ **By:** _____

☐ **SWPPP Fee Amount $** _____ **Date Paid:**_____ **By:** _____

☐ **Inspection Fee(s) $** _____ **Date Paid:**_____ **By:** _____

No.	Date Submitted	Erosion Control Plan	SWMP	SWPPP	Date Reviewed	Date Out
1.	_____	☐	☐	☐	_____	_____
2.	_____	☐	☐	☐	_____	_____
3.	_____	☐	☐	☐	_____	_____
4.	_____	☐	☐	☐	_____	_____
5.	_____	☐	☐	☐	_____	_____
6.	_____	☐	☐	☐	_____	_____

☐ **Erosion Control Plan Approval Date:**_____

☐ **SWMP Approval Date:**_____

☐ **SWPPP Approval Date:**_____

Erosion and Sediment Control Plan Review Checklist

Date Completed	Not Applicable	
		Vicinity Map
_____	_____	Major roadways, geographic features or landmarks.
_____	_____	Site perimeter.
_____	_____	Geographic features.
_____	_____	General topography.

Date Completed	Not Applicable	

Site Characteristics

_____	_____	North arrow, scale, and site boundary. Indicate the name of adjacent streets or roadway.
_____	_____	Location of existing drainage ways, channels, swales, creeks, streams on or near the site.
_____	_____	Location of storm drain inlets, outlets, catch basins – proposed, existing, on-site, and within 100 feet of site.
_____	_____	Location of existing and proposed buildings and paved areas.
_____	_____	Show and label existing and proposed improvements (streets, sidewalks, curb/gutter, utilities, etc)
_____	_____	The limits of the proposed disturbed area on the lot.
_____	_____	Approximate gradient and direction of slopes before grading operations.
_____	_____	Approximate gradient and direction of slopes after final grading operations.
_____	_____	Disturbed area outlined and labeled. All sediment control devices must be shown within the disturbed limits.
_____	_____	Overland runoff (sheet flow) coming onto the site from adjacent areas.
_____	_____	Delineation of pre and post development drainage areas, number of acres, and the direction of flow for each drainage area before and after development must be shown. Use separate plan sheets for clarity.

Erosion Control Practices

_____	_____	Location of temporary soil piles
		Note: soil storage pile should be placed behind a sediment fence, 10-foot (minimum) wide vegetative strip should be covered with a tarp, or placed more than 25 feet from any down slope road or drainage way.
_____	_____	Location of gravel access drive(s).
		Note: Gravel drive should have 3 to 6 inch aggregate stone laid at least 10 feet wide and 12 inches thick. Drives should extend from the roadway 50 feet or to the house foundation (whichever is less).
_____	_____	Location of sediment controls (filter fabric fence, straw bale fence or 10-foot wide vegetative strips) that will prevent eroded soil from leaving the site.
_____	_____	Location of sediment barriers around on-site storm drain inlets.
_____	_____	Location of diversions.
		Note: Concentrated flow (drainage ways, ditches, channels, brow ditches) shall be diverted (re-directed) around disturbed areas. Overland runoff (sheet flow) from adjacent areas greater than 10,000 sq. ft. shall also be diverted around disturbed areas.
_____	_____	Location of practices that will be applied to control erosion on steep slopes that have been disturbed at any time by clearing, grading, or landscaping - slopes more than five feet in height, more than two hundred fifty square feet in total area, and steeper than three to one (run-to-rise).
		Note: Unstabilized drainage ways, ditches, channels, diversions, and inlets shall be protected from erosion through use of such practices as in-channel fabric or straw bale barriers, erosion control mats, staked sod, and rock riprap. When used, a given in-channel barrier should not receive drainage from more than two acres of unpaved area, or one acre of paved area. In-channel practices should not be installed in perennial streams (streams with year-round flow.)

Date Completed	Not Applicable	
_____	_____	Show Erosion Control Plan heading and standard notes.
_____	_____	Label all sediment control devices.
_____	_____	Show Standard details for sediment control devices.
_____	_____	No sediment control devices are to be located where water will damage building foundations.
_____	_____	Detail drawings and specifications for structural practices – any structural practices used must be illustrated with detailed drawings containing all dimensions and specifications. (i.e. de-silting basins)
_____	_____	Location of other planned practices not already noted. (Material Storage WM-1, Concrete Washout WM-8, Sanitary Waste WM-9, Solid Waste Storage WM-5)
_____	_____	Temporary stabilization of disturbed areas.
_____	_____	Note: disturbed areas and soil piles left inactive for more than 10 days be stabilized by seeding (between April 1st and September 1st), or by other cover, such as tarping or mulching. Permanent stabilization of site by re-vegetation or other means as soon as possible (lawn establishment).
		Indicate re-vegetation method: Seed ___ Sod ___ Other_____ Expect date of permanent re-vegetation: Re-vegetation responsibility of Builder ___ Owner/Buyer Is temporary seeding or mulching planned if site not seeded by September 1st or sodded by October 1st ? Yes ___ No ___
_____	_____	Use of downspouts and/or sump pump outlet extensions to direct runoff away from structures and onto sod or pavement until vegetation is stable. Downspouts shall be permanently to grass areas.
_____	_____	Proper disposal of building material waste so that pollutants and debris are not carried off-site by wind or water.
_____	_____	Maintenance of erosion control practices during construction:
		Name:_____
		Title:_____ Phone & Fax:_____

- Sediment will be removed from behind sediment fences and barriers before it reaches a depth that is equal to half the barrier's height.
- Breaks and gaps in sediment fences and barriers will be repaired immediately.
- All sediment that moves off-site due to construction activity will be cleaned up before the end of the same workday.
- All sediment that moves off-site due to storm events will be cleaned up before the end of the next workday.
- Gravel access drives will be maintained throughout construction.
- All installed erosion control practices will be maintained until the disturbed areas they protect are stabilized.

CITY OF EL CAJON
Inventory of Construction Sites

High Priority Construction Sites

#	Site Address	Assessor's Parcel Number(s)	Approval Date
1	1700 MAIN ST., E.	5071201400	10/13/2006
2	239 SUNSHINE AVE., S.	4881611600	11/1/2006
3	WASHINGTON AVE., E.	5140215900	1/12/2007
4	2010 MADISON AVE., E.	5082400800	3/6/2007
5	PROMENADE SQUARE	4881500100-1300	3/20/2007
6	1053 LOMA PORTAL DR.	4824430300	4/11/2007
7	189 ROANOKE RD.	4881131800	4/23/2007
8	WISCONSIN AVE.	4871710900	6/12/2007
9	244-248 1ST ST., N.	4891301200&1300	8/2/2007
10	1341 MAIN ST., E.	4891806200	8/3/2007
11	1755 MAIN ST., E.	5072110100	8/29/2007
12	335 2ND ST., N.	4891807800	9/5/2007
13	BALLANTYNE ST.	4832409100	9/27/2007

MEDIUM PRIORITY CONSTRUCTION SITES

#	Site Address	Assessor's Parcel Number(s)	Approval Date
1	1465 MADISON AVE., E.	5111710700	11/8/2006
2	1424 GREENFIELD DR.	Not Available	12/15/2006
3	509 CLAYDELL AVE.	Not Available	1/12/2007
4	1985 GILLESPIE WAY	3872010200	3/6/2007
5	2171 FALMOUTH	4861430600	4/10/2007
6	ORANGE AVE., S.	4921710900	6/27/2007
7	613-615, 621 El CAJON BLVD.	489,531,060,017,001,000	7/13/2007
8	1157 PEACH AVE.	4841911200	7/26/2007

LOW PRIORITY CONSTRUCTION SITES

#	Site Address	Assessor's Parcel Number(s)	Approval Date
1	1326 NARANCA AVE.	4842633100	7/5/2006
2	594 FIRST ST., N	Not Available	7/6/2006
3	1068 FINCH ST.	Not Available	7/10/2006
4	1075 RENETTE AVE.	4922240100	7/10/2006
5	968 HACIENDA DR.	4812601300	7/16/2006
6	1023 BLACKBIRD ST.	Not Available	7/19/2006
7	521 MOLLISON AVE., S.	Not Available	7/19/2006
8	563 VISTA DEL ESCUELA	5122101400	7/19/2006
9	232 JOHNSON AVE., S.	4873021300	7/27/2006
10	1787 GALWAY PL.	4815003000	8/1/2006
11	2154 BROOKHURST DR.	5121303100	8/2/2006
12	1045 MAGNOLIA AVE., S.	Not Available	8/3/2006
13	1291 PEACH AVE.	Not Available	8/3/2006
14	1291 PEACH AVE.	Not Available	8/9/2006
15	1498 LILY AVE.	5074310100	8/15/2006
16	1039 WASHINGTON AVE., E.	Not Available	8/16/2006
17	1191 HACIENDA DR.	Not Available	8/23/2006
18	1290 NARANCA AVE.	Not Available	8/23/2006
19	537 ROBERTA AVE.	4891020500	8/29/2006
20	1633 SOUVENIR DR.	4315613200	8/30/2006
21	416 WESTWIND DR., N.	4861041100	9/5/2006
22	1600 HACIENDA DR.	3864000200	9/14/2006
23	500 SILVERY LN.	Not Available	9/20/2006
24	1599 LEXINGTON AVE., E.	5114510700	9/22/2006
25	762 PALOMAR AVE.	4924421500	9/22/2006
26	1111 LOSTINDA ST.	5144311100	9/25/2006
27	1558 NORRAN AVE.	5114441200	9/25/2006
28	2106 VALLEY MILL RD.	3865824200	9/25/2006

LOW TTWQ CONSTRUCTION SITES (CONTINUED)

#	Site Address	Assessor's Parcel Number(s)	Approval Date
29	2174 GREENFIELD DR.	5121903000	9/27/2006
30	1526 AJAY ST.	3865400800	10/2/2006
31	497 SKYWOOD DR.	4935020100	10/2/2006
32	591 LA SOMBRA DR.	4875902400	10/4/2006
33	1002 MERRITT DR.	Not Available	10/5/2006
34	1156 DEEM PL.	Not Available	10/16/2006
35	542 TYRONE ST.	4814902200	10/20/2006
36	1250 MARSHALL	Not Available	10/26/2006
37	322 ROANOKE RD.	Not Available	11/8/2006
38	1120 EMERALD AVE.	Not Available	11/13/2006
39	180 MINNESOTA AVE.	Not Available	11/16/2006
40	780 HAVERHILL RD.	Not Available	11/21/2006
41	491 SILVERY LN.	4861811100	11/27/2006
42	2215 NIELSEN ST.	3865503400	12/19/2006
43	769 LATISHA PL.	4843004000	12/21/2006
44	1370 HACIENDA DR.	3863701500	12/22/2006
45	1365 PEACH AVE.	4842627300	12/22/2006
46	1666 SOUVENIR DR.	Not Available	12/22/2006
47	2289 DRYDEN RD.	4861032800	1/4/2007
48	491 SILVERY LN.	4861811100	1/9/2007
49	836 LEMON AVE.	4920142400	1/12/2007
50	785 CAMELOT PKWY.	5083001200	1/24/2007
51	1603 BUCKEYE DR.	3883130500	1/30/2007
52	1494 GREENFIELD DR.	5074600400	1/30/2007
53	2367 VALLEY MILL RD.	Not Available	1/30/2007
54	1552 CHISWICK CT.	4862921400	2/2/2007
55	701 CUYUMACA ST., N.	4822112100	2/6/2007
56	511 MAGNOLIA AVE., S.	Not Available	2/9/2007
57	1335 PILLSBURY LN.	Not Available	2/9/2007

Low TTWQ Construction Sites (Continued)

#	Site Address	Assessor's Parcel Number(s)	Approval Date
58	1176 MIDWAY DR.	4913800400	2/13/2007
59	1084 WASHINGTON AVE., E.	4884001800	2/21/2007
60	677 LA SOMBRA DR.	4876000800	2/22/2007
61	1110 CHASE AVE.	Not Available	3/1/2007
62	2615 FERDINAND RD.	4860401700	3/1/2007
63	2184 WINDMILL VIEW	3864404000	3/2/2007
64	150 MADISON AVE., W.	Not Available	3/14/2007
65	1374 MELODY LN.	4891803400	3/14/2007
66	1073 LESLIE RD.	4923600500	3/15/2007
67	501 NOTHOMB ST.	Not Available	3/15/2007
68	126 SADDLEBROOK WAY	Not Available	3/16/2007
69	506 GRAPE ST.	4891232200	3/28/2007
70	348 THIRD ST., N.	5111942400	3/28/2007
71	479 WESTWIND DR., N.	4861821500	3/28/2007
72	2223 VIRGINIA CT.	4861320900	3/30/2007
73	1147 AUSTRALIA ST.	Not Available	4/2/2007
74	1690 GALWAY PL.	4815002000	4/11/2007
75	646 SANDRA LN.	5122600300	4/12/2007
76	564 SKYVIEW ST.	4925802100	4/13/2007
77	685 GARFIELD AVE.	4811501700	4/16/2007
78	1445 WHITSETT DR.	3866313200	4/23/2007
79	2353 FARRINGTON DR.	3866413400	4/25/2007
80	1561 KIMBERLY WOODS	4925530900	4/25/2007
81	1917 FERNBROOK	5122501600	4/26/2007
82	1761 CONO DR.	4970404200	5/3/2007
83	1201 ORANGE AVE., S.	Not Available	5/7/2007
84	854 TERRA LANE	5073410600	5/9/2007
85	1856 GALWAY PL.	4815001300&1400	5/10/2007
86	1532 WASHINGTON AVE., E.	5110400300	5/16/2007

LOW TTWQ CONSTRUCTION SITES (CONTINUED)

#	Site Address	Assessor's Parcel Number(s)	Approval Date
87	951 HARRY ST.	4932520500	5/18/2007
88	807 FIRST ST., N	Not Available	5/21/2007
89	819 FIRST ST., N	Not Available	5/21/2007
90	2434, 2456, 2478 FLETCHER PKWY	4813621400-1600	5/23/2007
91	620 ORANGE AVE., S.	4882812100	5/30/2007
92	978 ELLEN LN.	5142821600	6/5/2007
93	1555 MOLLISON AVE., N.	4830550200	6/5/2007
94	1468 E. LEXINGTON AVE.	5115201100	6/8/2007
95	1927 BELMORE CT.	3865104500	6/13/2007
96	513 WILLET ST.	4833710200	6/13/2007
97	953 SHARON WAY	4811404300	6/14/2007
98	904 MAIN ST., W.	4871219100	6/18/2007
99	1185 BLACKBIRD ST.	4820720200	6/22/2007
100	1371 HACIENDA DR.	3863801400	6/26/2007
101	1222 WASHINGTON AVE., E.	4893000100	6/27/2007
102	534 VAN HOUTEN AVE.	4875513200	7/2/2007
103	1133 HUB CT.	4913905300	7/3/2007
104	104 JOHNSON AVE., N.	4871227600	7/5/2007
105	1776 PEPPER VILLA DR.	3881711100	7/6/2007
106	598 SILVERY LN.	4861822100	7/9/2007
107	2699 DRYDEN RD.	4860220200	7/11/2007
108	1471 MAIN ST., E.	5110130300	7/17/2007
109	2076 FLYING HILLS LN.	3864501100	7/24/2007
110	807 1ST ST.	4841913700	7/25/2007
111	819 1ST ST.	4841910200	7/25/2007
112	1362 MAIN ST., E.	4891802600	7/27/2007
113	1937 HACIENDA DR.	3865720500	7/30/2007
114	627 JEFFERSON AVE.	4883100500	8/1/2007
115	1015 WASHINGTON AVE., E.	4931110300	8/1/2007

LOW TTWQ CONSTRUCTION SITES (CONTINUED)

#	Site Address	Assessor's Parcel Number(s)	Approval Date
116	1648 KIMBERLY WOODS	4925520200	8/2/2007
117	2230 NIELSEN ST.	3866422100	8/3/2007
118	1290 NARANCA AVE.	4842542700	8/10/2007
119	1552 CHISWICK CT.	4862921400	8/15/2007
120	2463 CHATHAM ST.	Not Available	8/17/2007
121	796 CAMELOT PKWY.	5083003300	8/20/2007
122	1928 HACIENDA DR.	3865722100	8/22/2007
123	152 2ND ST., N.	4891704300-4500	8/23/2007
124	1579 MARBERRY	2216805100	8/28/2007
125	1338 NARANCA AVE.	4842632700	8/28/2007
126	824 BALLANTYNE ST.	4832222000	8/29/2007
127	310 CUYAMACA ST., N.	4870511200	8/29/2007
128	1153 MADISON AVE., E.	Not Available	8/30/2007
129	2725 ANJULI CT.	4810524600	9/4/2007
130	646 SANDRA LN.	5122600300	9/4/2007
131	978 CUYAMACA ST., N.	4820930200	9/5/2007
132	398 EL CAJON BLVD.	4873121000	9/5/2007
133	489 MAIN ST., W.	4873312400	9/5/2007
134	1666 WHITSETT DR.	3864702000	9/5/2007
135	2146 WILLIS RD.	4814810300	9/5/2007
136	1946 ESTELA DR.	3865740400	9/10/2007
137	2159 VALLEY MILL RD.	3865823500	9/10/2007
138	1007 VICTOR ST.	4831250700	9/11/2007
139	2452 WINDMILL VIEW	3865001600	9/11/2007
140	2725 ANJULI CT.	4810524600	9/13/2007
141	473 SKYWOOD DR.	4935020700	9/13/2007
142	942 ALVEDA AVE.	5142610100	9/19/2007
143	737 GROSSMONT AVE.	4920110800	9/27/2007
144	225 GARFIELD AVE.	Not Avaliable	9/28/2007

LOW TTWQ CONSTRUCTION SITES (CONTINUED)

#	Site Address	Assessor's Parcel Number(s)	Approval Date
145	1441 MAGNOLIA AVE., S.	4933912400	9/28/2007
146	904 MAIN ST., W.	4871219100	9/28/2007

California Regional Water Quality Control Board

San Diego Region

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RECEIVED
OCT - 3 2007
CITY OF EL CAJON
ENGINEERING DIVISION

October 1, 2007

Sent Certified Mail: 7006 3450 0003 7392 7060

Kathi Henry
City Manager
City of El Cajon
200 E. Main St.
El Cajon, CA 92020

In reply refer to: SWU: 10-5005.02: CARIAS

Dear Ms. Henry:

SUBJECT: REVIEW OF JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM 2005-2006 ANNUAL REPORT FOR THE CITY OF EL CAJON, ORDER NO. 2001-01, NPDES NO. CAS0108758

The Regional Water Quality Control Board San Diego Region (Regional Board) has completed its review of the "City of El Cajon (City) Urban Runoff Management Plan Fiscal Year 2005-2006 Annual Report". This year the Regional Board focused on the following sections: Municipal, Industrial, Commercial, Land Use, Construction, Illicit Discharges Detection and Elimination, Education and Outreach, and Special Projects. Our comments include requests for additional information needed to fully assess program implementation and compliance during the reporting period. Some comments may also request information to help ensure program compliance for future reporting periods. Revisions and any responses to comments should be addressed in the Fiscal Year 2006 - 2007 Annual Report, which is due in January of 2008.

The following comments reveal significant instances of incomplete and/or unclear reporting, in the Annual Report, of required actions and activities by your agency. If required actions and activities actually did not occur during the reporting period, these deficiencies in your storm water program could be a basis for determining noncompliance with Order No. 2001-01, and would be subject to enforcement action by the Regional Board. All comments are numbered to provide you the ability to track responses.

COMMENTS ON THE CITY OF EL CAJON 2005-2006 ANNUAL REPORT:

Annual Report Section 2.0 (Municipal):

1. The Annual Report does not provide any updates to the inventory and prioritization of municipal areas and activities. An annual update of the prioritized inventory is required by Permit section F.3.a.2; therefore, all annual updates must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

2. The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections of municipal areas and activities. Follow-up activities are required by Permit section F.3.a.7; therefore, all follow-up activities that were conducted as a result of inspections of municipal areas and activities must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

3. The Annual Report does not quantify the number and type of enforcement actions taken on municipal areas and activities. Enforcement of requirements for municipal areas and activities is required by Permit section F.3.a.7; therefore, all enforcement actions must be reported per Permit section I.1.a. Please provide this information in your response to this letter and in subsequent Annual Report submittals.

Annual Report Section 3.0 (Industrial):

4. The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections of industrial facilities. Follow-up activities are required by Permit section F.3.b.6; therefore they must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

5. The Annual Report does not include monitoring that was conducted at all high priority industrial facilities. Monitoring at all high priority industrial facilities is required by Permit section F.3.b.5; therefore it should be reported per Permit section I.1.a. The necessary information can be provided by confirming that the monitoring was conducted or by describing the monitoring that was conducted. Please provide this information in your response to this letter.

Annual Report Section 7.0 (Construction):

6. The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections of construction sites. Follow-up activities are required by Permit section F.2.h; therefore they must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

Annual Report Section 8.0 (Illicit Discharge Detection and Elimination):

7. The Annual Report states that the above-action level nitrate-nitrogen concentrations obtained at several monitoring sites were attributed to groundwater infiltration. In your response to this letter, please provide data supporting the statement that

groundwater in the vicinity of the monitoring sites has elevated concentrations of nitrate-nitrogen.

8. The Annual Report does not adequately identify and describe all of the significant spills, which entered the MS4 during the reporting period. The date and receiving water of each significant spill are not included in the Annual Report. The Annual Report should include this information per Permit sections I.1.a and I.1.b.1. In your response to this letter, please provide a more comprehensive description of significant spills that entered your MS4 including the date, location, size, cause, and receiving water.

Annual Report Section 13.0 (Special Investigations):

9. The Annual Report does not include information on whether or not any special investigations were conducted, together with a summary of any data collected during any special investigation. Special investigations are required to be reported by Permit section I.1.e. Please describe all special investigations in your response to this letter and in subsequent Annual Report submittals.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence, please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

If you have any questions regarding this letter, please contact Christina Arias at (858) 627-3931 or email: CArias@waterboards.ca.gov.

Respectfully,

JOHN R. ODERMATT, P.G.
Senior Engineering Geologist

CC: Rob Turner
Director of Public Works
City of El Cajon
200 E. Main St.
El Cajon, CA 92020

January 31, 2008

Mr. John Robertus
California Regional Water Quality Control Board
Executive Office
9147 Sky Park Court, Suite 100
San Diego, CA 92123
Attention: Ms. Christina Arias

RE: SWU: 10-5005.02: CARIAS

The City of El Cajon received comments, dated October 1, 2007 on the fifth Jurisdictional Urban Runoff Management Program Annual Report (PY5). Provided below is the information specifically requested in comments from the Regional Water Quality Control Board on the Jurisdictional Urban Runoff Management Program Annual Report for the City of El Cajon.

COMMENTS ON THE CITY OF EL CAJON 2005-2006 ANNUAL REPORT:

Annual Report Section 2.0 (Municipal)
Comment:

1. The Annual Report does not provide any updates to the inventory and prioritization of municipal areas and activities. An annual update of the prioritized inventory is required by Permit section F.3.a.2; therefore, all annual updates must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

Response:

A table entitled "Inventory of Municipal Facilities – City of El Cajon" was included in Appendix A.3.a. in the Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report 2005-06 listing a prioritized inventory table for municipal facilities. The table lists the following municipal facilities: High Priority = 4, Medium Priority = 6, Low Priority = 21. Please refer to attachments to this response for an additional copy of the municipal priority list.

Comment:

2. The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections for municipal areas and activities. Follow-up activities are required by Permit section F.3.a.7; therefore, all follow-up activities that were conducted as a result of inspections of municipal areas and activities must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

Response:

The City of El Cajon did not conduct any follow-up activities as a result of municipal facility inspections during 2005-2006.

Comment:

3. The Annual Report does not quantify the number and type of enforcement actions taken on municipal areas and activities. Enforcement of municipal areas and activities is required by Permit section F.3.a.7; therefore, all enforcement actions must be reported on per Permit section I.1.a. Please provide this information in your response to this letter and subsequent Annual Report submittals

Response:

No enforcement actions were taken on municipal facilities or related to municipal activities.

<u>Annual Report Section 3.0 (Industrial)</u>

Comment:

4. The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections of industrial facilities. Follow-up activities are required by Permit section F.3.b.6; therefore they must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

Response:

For PY6 a total of 27 High Priority Industrial sites were inspected. Follow-up inspections were scheduled and conducted at the industrial facilities whenever corrections were required during annual inspections. The majority of corrections were related to the installation of secondary containment, the covering of liquid containers stored outdoors, and the installation of filters in lot storm drain inlets. All corrections were responded to and completed in a timely manner.

Comment:

5. The Annual Report does not include monitoring that was conducted at all high priority industrial facilities. Monitoring at all high priority industrial facilities is required by Permit section F.3.b.5; therefore it should be reported per Permit section I.1.a. The necessary information can be provided by confirming that the monitoring was conducted or by describing the monitoring that was conducted. Please provide this information in your response to this letter.

Response:

As required in section F.3.b (5) of the permit, monitoring is required at high priority industrial facilities. The table included in the JURMP Annual Report for permit year 2005-2006 entitled "High Priority Industrial Facilities Inspected – 2005-2006" in Appendix A includes a column indicating dates when monitoring was conducted at priority industrial facilities within the City. An updated table entitled "Industrial Inspections With Monitoring Data" is included as an attachment to this response.

Annual Report Section 7.0 (Construction):

Comment:

6. The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections of construction sites. Follow-up activities are required by Permit section F.2.h; therefore they must be reported per Permit section I.1.a. Please provide this information in your response to this letter.

Response:

The following paragraph is provided as an addendum to Section F.2.6 of the 2005-2006 Annual Report for the City of El Cajon.

2.6 INSPECTION

Inspection of construction sites in PY5 verified that most construction sites implemented BMPs. Deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions, and through enforcement actions. If corrective actions were needed, the construction site either completed the corrective action at the time of inspection or a follow-up visit was scheduled to verify the completion of corrective actions. When corrective actions are not completed in a timely manner, enforcement actions are issued. In PY5 the City had one enforcement action related to construction inspections and follow-ups. The table below provides information about this one enforcement action. Enforcement actions are further discussed in Section 2.7 and a list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3 of the Annual Report for PY5 and included as an attachment for this response.

	Date	Component	Street / Location	Complaint/ Observations	Referral / Complaint	City Action	Administrative Citation	Corrections Completed
1	05/30/06	Construction	1385 E. Main St.	Failure to implement BMPs at the construction site	PW Inspectors	Site inspection on 5/26/06. The contractor did not fully implement erosion control BMPs as required by erosion control plan and verbally requested on May 22, 2006. There was evidence of a discharge to the storm water conveyance system	PW 0344	Yes, BMPs were found properly implemented on subsequent inspections

<u>Annual Report Section 8.0 (Illicit Discharge, Detection, and Elimination):</u>

Comment:

7. The Annual Report states that the above-action level nitrate-nitrogen concentrations obtained at several monitoring sites were attributed to groundwater infiltration. In your response to this letter, please provide data supporting the statement that groudwater in the vicinity of the monitoring sites has elevated concentrations of nitrate-nitrogen.

Response:

During the dry weather field screening and analytical monitoring program for 2005-2006 two sites, monitoring locations 30 and 37, exceeded above action levels. Site 30 is a manhole in front of the Boys and Girls Club on Madison Avenue, and Site 37 is a catch basin located on the east side of South Second Street, across from the mobile home community situated between E. Main street and Lexington Avenue. Site 30 is directly downstream of Site 37, and there are no significant connections along the extension of the pipe between both monitoring locations. An aerial image displaying sampling sites and locations is attached in the Appendix.

A follow-up investigation was conducted and photo-documented on November 9, 2007; the investigation consisted of taking water samples at both sampling sites and upstream for analysis of nitrates. Please refer to the Storm Drain Map – Page 26 and the photographs included in the Appendix as part of this response. The investigation mainly focused on finding potential sources of nitrate on the upstream pipe system, consisting of monitoring site 37 (Photo 1) that samples a sixty-six (66) inch corrugated steel pipe (CSP) (Photo 2). The 66-inch CSP extends eastward to Jamacha Road where it reaches a transitional structure at the western side of Jamacha Road. At this transitional structure two lines come together under Jamacha Road. The northeast branch extends up to Main Street via an arch steel pipe and was observed with minimal flow insufficient for sampling (Photo 8) and the eastern branch extends under Jamacha Road via a reinforced concrete box (RCB) (Photo 9). The RCB reaches another transitional structure at the eastern side of Jamacha road where again two lines come together; the eastern line consists of an arch corrugated steel pipe (Photo 10) that accepts water from a trapezoidal open channel, water flow was visible. The southeasterly line did not have sufficient flow to gather a water sample and based on previous dry weather monitoring results the reinforce concrete pipe (RCP) does not have a history of nitrate levels above action levels.

During the follow-up investigation, and to have access to the entire length of the pipeline upstream, City of El Cajon Public Works Maintenance Personnel entered the 66-inch CSP via the catch basin at sampling site 37 and collected a total of four (4) water samples for analyses. The samples were taken at site 37 and along the eastern length of the pipeline upstream. One sample was collected at sampling site 30. Photo-documentation developed during the investigation as well as an aerial image depicting the approximate sampling locations is provided in the Appendix. The results of the upstream investigation are summarized in the table below:

Sampling Site No.	Date	Time	Location	Description	Temp.	pH	Conductivity	Nitrate (Lab)
					ºC		mS/cm	NO3-N, mg/L
37	11/9/07	9:30	Second Street, next to mobile home community entrance between East Main Street and Lexington Avenue	Catch Basin	21	7.6	2.13	10.6
37_1	11/9/07	9:45	Underground lateral pipe, inside mobile homecommunity	Lateral pipe	20.7	7.3	1.98	10.6
37_2	11/9/07	10:40	Grossmont Union High School Adult Training School Parking lot	Catch Basin	21.5	7.2	2.06	12.0
37_3	11/9/07	12:00	East of Burger King Parking lot	Concrete Channel	18.6	10.2	1.17	0.09
30	11/9/07	13:20	Madison Avenue, between Roberta Avenueand Roselle Avenue, in front of the Boys and Girls Club.	Manhole	20.1	7.6	2.01	11.6

It was concluded after analyzing the monitoring results for the field investigation that the main source of flow and nitrates is potentially located within the segment of the pipe between Jamacha Road and the catch basin at the Grossmont Union High School Adult Training Center (Training Center). Furthermore, with no significant flows discharging into this segment of the pipe from the two laterals at the Training Center and from the curb inlet opening and arch pipe at Jamacha Road, the flows may potentially seep from outside the pipe via the corroded segments of the pipeline.

The City of El Cajon conducted subsequent field investigations and facility inspections of the Training Center and commercial center; both areas drain directly or indirectly to the segment of the pipe suspected to be the source of nitrates. The Training Center is composed of classrooms, offices and storage. The two clay pipes identified in Photos 4 and 6, discharge water from landscaped and parking areas at the Training Facility via catch basins. No significant flows were observed at the time of field inspections. No storage of any fertilizers was identified at the site. The commercial center north of the 66-inch pipe has various eating and drinking establishments as well as other types of commercial facilities that conduct business at indoor settings. The commercial center has some landscaped areas but do not appear to be large enough to be sources of high nitrates. Evidence of over irrigation or leaking valve(s) was noted during the field

inspection and business owners were warned and asked to contact their landscape maintenance personnel to adjust and fix irrigation systems to prevent over spray and excessive runoff from landscaped areas. Follow-up inspections confirmed that a leaking valve had been fixed and the runoff from landscaped areas resolved. The City will continue to remain vigilant of the facilities that drain to the 66-inch pipe. At the time following the investigations, no conclusive evidence was gathered to indicate a clear source point for nitrates. The City also explored the possibility of groudwater being the source of water seeping from outside the pipe.

To find if groudwater is indeed seeping into the 66-inch pipe, the City researched existing information on groudwater in the area. The City of El Cajon contacted the San Diego County Department of Environmental Health and Department of Site Assessment and Remediation to gather any existing data. Both of these entities were not able to provide direct information, but provided the City with advice on where to find groudwater data. County staff directed the City to research the State Water Resource Control Board (SWRCB) Program – GeoTracker. This program, available via the Internet, has underground storage sites identified with reports and analytical data.

Using GeoTracker the City identified twenty (20) sites that have or had monitoring wells around the vicinity of monitoring site 37. An exhaustive research of the sites and data demonstrated that many of the sites did not have groudwater information and a few sites only report on analytical data for compounds dealing with aromatic hydrocarbons and not nitrates. No production wells were identified around the vicinity to check for nitrate data. Only one site, within approximately 2 blocks away of site 37, at the northeast corner of East Main Street and Second Avenue has existing monitoring wells. The City contacted the business owner/manager about granting the City permission to collect groudwater samples to analyze for nitrates, the request was denied. The property manager mentioned that legal staff had to be involved to grant permission.

Historical groudwater depths range from 8 to 11 ft in depth around the vicinity of sampling site 37. The approximate invert elevation of the 66-inch pipe ranges from 6 ft to 7 ft in depth. The City is working with a consultant to collect groudwater samples via the drilling of hydropunch borings or to continue to pursue the collection of samples through existing monitoring wells around the vicinity. On January 14, 2008, the City contacted Ms. Christina Arias from the Regional Water Quality Control Board to explain timing constraints. As a result of the conversation, it was agreed that the City would submit the results of groudwater sampling shortly after groudwater samples can be collected, analyzed, and the data evaluated.

Comment:

8. The Annual Report does not adequately identify and describe all of the significant spills, which entered the MS during the reporting period. The date and receiving water of each significant spill are not included the Annual Report. The Annual Report should include this information per Permit sections I.1.a and I.1.b.a. In your response to this letter, please provide a more comprehensive description of significant spills that entered your MS4 including the date, location, size, cause, and receiving water.

Response:

The following table is provided as an addendum to paragraphs 2 and 3 of Section F.5.6 of the 2005-2006 Annual Report for the City of El Cajon:

Figure 2.a. Significant Spills 2005-2006

	Date	Complaint #	Complaint Address	Type of Spill	Size of Spill	Amount that entered MS4	Cause	Receiving Water
1	04/18/06		362 Marshall Avenue	Diesel Fuel	4 gallons	Less than 1 gallon	Diesel fuel leaking from bus into roadway, it did not reach storm drain inlets. Cause is unknown.	County Channel

<u>Annual Report Section 13.0 (Special Investigations):</u>
Comment:

9. The Annual Report does not include information on whether or not any special investigations were conducted, together with a summary of any data collected during any special investigation. Special investigations are required to be reported by Permit sections I.1.e. Please describe all special investigations in your response to this letter and in subsequent Annual Report submittals.

Response:

Appendix E of Annual Report 2005-2006 includes a special study for Forrester Creek entitled, "Special Investigations – Forrester Creek Impact Study". The Forrester Creek Impact Study has been conducted every year since 2004 and consists of conducting upstream/downstream monitoring of dry weather constituents of concern for Forrester Creek. The purpose of this study is to investigate how water quality in Forrester Creek is affected as it flows through the City of El Cajon. As an amendment to the 2005-2006 Annual Report for the City of El Cajon the table of contents should read as follows for Appendix E.

Appendix E Special Investigations – Forrester Creek Impact Study

Summary:
The City of El Cajon continues to be committed to implementing their Jurisdictional Urban Runoff Management Plan and the Watershed Urban Runoff Management Plan for the San Diego River Watershed by educating the public and businesses about changing the way activities are performed outdoors. Pollution reduced at the sources requires little command and control. As a commitment to protecting receiving waters in the San Diego River Watershed, the City of El Cajon emphasizes pollution prevention measures to reduce pollutant loads and focus storm water management efforts.

Should you have any questions, please contact Mr. Michael Griffiths, Deputy Director of Public Works at (619) 441-1785.

Sincerely,

KATHI HENRY
City Manager
City of El Cajon

KH:RT:msg:jc

cc.: Storm Water Protection Program file

Attachments

CITY OF EL CAJON
INVENTORY OF MUNICIPAL FACILITIES

HIGH PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Civic Center, City Hall and Plaza	200 E. Main Street	Washington Channel
2.	Fire Station No. 9	1301 N. Marshall Avenue	Forester Creek
3.	Public Works Maintenance Division Office	1050 Vernon Way	Forester Creek
4.	Vehicle Maintenance Facility	1060 Vernon Way	Forester Creek

MEDIUM PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Animal Control	1275 N. Marshall Way	Forester Creek
2.	Fletcher Hills Park, Recreation Center and Pool	2345 Center Place	Fletcher
3.	Parks Office	154 Rea Avenue	Washington Channel
4.	Performing Arts Center	110 E. Main Street	Washington Channel
5.	Wells Park, Recreation Center and Maintenance	1153 E. Madison Avenue	Forester Creek
6.	Parks Storage Garage	148 Rea Avenue	Washington Channel

LOW PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Albert Van Zanten Park	1495 Greenfield Drive	Broadway Channel
2.	Bill Beck Park	Pierce Street and Wagner Drive	Broadway Channel
3.	Bostonia Park and Recreation Center	1049 Bostonia Street	Forester Creek/ Broadway Channel
4.	Cajon Valley Middle School Park	750 Park Avenue	Forester Creek/ County Ditch
5.	Community Policing Division	165 E. Park Avenue	Forester Creek
6.	El Cajon Community Center	195 E. Douglas Avenue	Forester Creek
7.	Fire Station No. 7	695 Tyrone Street	County Ditch
8.	Fire Station No. 8	842 N. Third Street	Forester Creek
9.	Fire Station Park	Tyrone Street and Westwind Drive	Forester Creek
10.	Fire Station/ Department Administration	100 E. Lexington Avenue	Forester Creek
11.	Hillside Park and Recreation Center	840 Buena Terrace	Fletcher Hills Parkway/ Fanita Channel Basin/ Forester Creek
12.	John F. Kennedy Park and Recreation Center	1675 E. Madison Avenue	County Ditch
13.	Judson Park	Magnolia Avenue and Park Avenue	Forester Creek
14.	Museum (Knox House)	280 N. Magnolia Avenue	Forester Creek
15.	Office	1034 Magnolia Avenue	Washington Channel
16.	Pistol Range	Gillespie Field	Washington Channel
17.	Police Department	100 Fletcher Parkway	North Forester Creek
18.	Police Department Detectives	1035 Pioneer Way	Forester Creek/ Broadway Channel
19.	Prescott Promenade Park	200 Block of Main Street	County Ditch
20.	Renette Park and Recreation Center	935 S. Emerald Avenue	County Ditch
21.	Tuttle Park	379 Chase Avenue	County Ditch

Industrial Inspections With Monitoring Data

Business Name:	Street Address:	Zip	Responsible Person(s):	Business Telephone #	ext:	JURMP Prioritization:	Area Sq. Ft.	JURMP Priority for 06-07	06-07 Inspection Required	Monitoring Data
Veolia Transportation Services (MTS)	1213 N JOHNSON AV	92020	Mike Chamney	(619) 279-6945		High Industrial		High Industrial	4/12/2007	New Business as of Jan 2007
PRECISION METAL PRODUCTS	850 W BRADLEY AVE	92020	Andrew Fisher	(619) 448-2711	110	High Industrial	200000	High Industrial	4/10/2007	11/02, 02/03, 01/05, 04/05, 10/05 11/06, 12/06 data
WASTE MANAGEMENT	1001 W BRADLEY AVE	92020	Phil Smith	(619) 596-5100		High Industrial	425600	High Industrial	5/17/2007	04/03 and 04/05 data
SOLO CUP CO [THE FONDA GROUP (DOPACO, INC.)]	1160 VERNON WAY	92020	Debbie Baudour	(619) 448-0333		High Industrial	200000	High Industrial	5/15/2007	02/04, 02/06 ,04/07 data
LAIDLAW TRANSIT SVCS INC	800 FESLER ST	92020	Chris Lunn	(619) 401-6208, 666-1243		High Industrial	130680	High Industrial	04/17/07	11/04 data, part of group ;12/07
DECCO CASTINGS INC	1596 PIONEER WY	92020	Kit Kesinger	619-444-9437	109	High Industrial	23500	High Industrial	4/23/2007	10/04, and 2/05, 11/06, 2/07 data
PACIFIC TRANS ENVIRONMENTAL SVCS	1452 N JOHNSON AVE	92020	Alfonso Rodriguez	619-441-1818		High Industrial	75000	High Industrial	4/16/2007	03/04, 10/04 and 1/05, 10/05, 2/06 , 12/07data
TORO AGRICULTURAL IRRIGATION	1588 N MARSHALL AVE	92020	Chris Stowell	619-562-2950	225	High Industrial	92000	High Industrial	5/5/2007	11/03, 12/03, 9/05, 11/05, 3/06, 1/07and 2/07 data
TRIUMPH COMPONENTS - SAN DIEGO INC	203 N JOHNSON AVE	92020	Bill Peet	619-440-2504	2026	High Industrial	57000	High Industrial	4/26/2007	02/04, 01/05, 02/05, 2/07 & 4/07 data
CERTIFIED METAL CRAFT INC	877 VERNON WY	92020	Mark Wiederker	(619) 593-3636		High Industrial	57000	High Industrial	6/6/2007	2/04,11/05 , 4/06, 11/06, 4/07 data
SOUTH BAY WELDING	761-781 O'CONNER ST	92020	John Singer	(619) 401-5880 ext.112, cell 572-6134, fax 401-2027	112	High Industrial	50000	High Industrial	4/25/2007	Entered program 12/05---- 12/06, 4/07 data
ALTURDYNE	660 STEELE ST.	92020	Wade Langworthy	(619) 440-5531		High Industrial		High Industrial	5/30/2007	2/04 , 10/04, 3/06, 4/06, 1/07 and 2/07 data
ALLIED CASTINGS INC	983 VERNON WY	92020	Khris Carmichael	619-258-5777		High Industrial	12900	High Industrial	5/1/2007	4/03, 1/06, 2/07 data
CHEM-TRONICS INC	1150 W BRADLEY AVE	92020	Randy Olms	619-448-2320	5062	High Industrial	851200	High Industrial	5/2/2007	12/02, 1/05, 4/05,2/06, 4/06, 2/07 & 4/07 data
ARTIMEX IRON CO, INC	315 Cypress Ln.	92020	Jose Padilla	(619)444-3155		High Industrial	76000	High Industrial	5/18/2007	10/05 , 3/05, 12/06 and 2/07 Data
(s) CAJON VALLEY UNION SCH DIST.	777 EAST PARK BLVD.	92022	Eric Kostamo	(619) 588-3625, cell 778-7793		High Industrial		High Industrial	5/8/2007	No, part of Group Monitoring, no monitoring in 04-05; 2/06 or 2007
EL CAJON AUTO WRECKERS	1416 PIONEER WY	92020	Hanna Mikkonen (Hank)	619-440-4601		High Industrial	20000	High Industrial	5/8/2007	10/04 data; 12/07 data
WINDOWMASTER PRODUCTS	1111 PIONEER WY	92020	Roy Hernandez	619-588-1144	185	High Industrial	350000	High Industrial	5/4/2007	11/01, 04/02, 11/03, 02/05, 03/06, 02/07 and 03/07 data
G MARBLE & GRANITE	1820 JOHN TOWERS #A	92020	Vince Guida, Jasper Giammarinaro	(619) 448-5929	13, 12	High Industrial	10000	High Industrial	5/10/2007	N
SENIOR FLEX KETEMA DIV	790 GREENFIELD DR	92021	Hank Bayles	(619) 441-5407, 588-3305		High Industrial	1149120	High Industrial	6/26/2007	03/06 data
DIXIELINE LUMBER CO.	1269 E. Main St.	92020	Cheryl Berman	619-224-4120		High Industrial	135000	High Industrial	5/11/2007	12/03, 12/04, no 05,12/06 and 1/07 data
CARPENTER SPECIAL PROD CORP	1717 N CUYAMACA ST	92020	Duane Holander	619-596-4325, cell 647-4834		High Industrial	148960	High Industrial	6/13/2006	11/03, 2/04 ,10/04; 12/06
CALIFORNIA METALS	297 S MARSHALL AVE	92020	Ken Jay, Josh Turzhin	(619) 444-2136, cell 572-3887		High Industrial	40000	High Industrial	5/22/2007	no monitoring in 04-05 rainy season; 1/07, 2/07

Enforcement Actions

2005-2006

	Date	Component	Business Name:	Mailing Address	Violation Address	Administrative Citation #	Written Written Warning Or Monetary Citation	BMP Violated	Corrective Actions	Follow-up and Corrections Complete
1	9/22/2005	Commercial	Panda Express	126540 Lakeshore Dr., Lakeside, CA 92040	190 Magnolia Ave.	PW 0236	Written Warning	Imminent threat of dischartge to storm drain system	terminate washing of hardscape operations, maintain storm drain inlet protection	
2	9/23/2005	Residential			1350 Lexington Ave., El Cajon	PW 0239	Written Warning	discharge of oil to storm drain from an automobile	terminate leaks from vehicle, clean up gutter	
3	9/14/2005	Commercial	Kaelin's Car Wash		1437 E. Main Street	PW 0249	Monetary Citation	Discharging wash water with pollutants into the street	Stop discharge immediately and clean up all pollutant residue	City crews were called to collect polluted water with Vactor truck and to clean up residue
4	9/13/2005	Residential	N/A		1500 (Block) of E. Main St	PW 0250	Written Warning	Vehicle leaking transmission fluid	stop vehicle from leaking into the street and clean affected area	Follo-up visit confirmed that the vehicle had been moved from street and absorbent material was used to clean stain
5	10/14/2005	Commercial	Villa Concrete Co.	1967 Rancho Winchester Lane, El Cajon, CA 92019	1575 Lily Avenue, EL, 92021	PW 0283	Written Warning	deisel fuel leaking into gutter	terminatre leaking fule, clean up waste fuel in the gutter, prevent further leaks	follow-up visit the next week confirmed termination of discharge and cleanup of waste
6	11/30/2005	Commercial	Rally's Hamburgers		1261 E. Main St	PW 0269	Written Warning	Power washing parking lot	Stop power washing immediately and collect polluted water. Use dry cleaning methods for future cleaning activities and other appropriate BMPs.	No discharges were visible after several weeks of unannounce site visits.
7	11/22/2005	Residential	self	649 Medford, El Cajon, CA, 92020	649 Medford	PW 0289	Written Warning	Illicit discharge of sewage to storm drain system, from a RV parked at residence	terminate discharge	follow-up visit next day confirmed termination of discharge
8	3/28/2006	Residential	N/A		101 W. Park Ave (Knott's Hotel)	PW 0292	Monetary Citation	RV dumping gray/black water into the parking lot	The illegal discharge was stopped immediately and the area sanitized	Follow-up investigations by the parking lot did not reveal presence of vehicle
9	5/30/2006	Commercial	N/A		1435 E. Main St	PW 0293	Written Warning	illegal discharge of food waste water into parking lot grate inlet and to the gutter via an under drain pipe	proper cleaning methods that are in compliance with storm water regulations, Managers were also instructed to sweep all food residue	Follow up investigations revealed that all residue was cleaned using dry methods
10	3/10/2006	Construction	N/A	9 Lake Helix Dr. La Mesa Ca 91941	1850 Avocado Blvd, El Cajon	PW 0305	Written Warning	Dirt stock pile---discharge of sediment form construction site due to poor and deteriorating BMPs	Repair and replace required BMPs	Corrections completed this date including check dams and repaired silt fencing. Photos taken
11	4/26/2006	Residential	N/A		1580 Chswick Ct	PW 0307	Written Warning	Dumping and maintaining a dirt pile in the gutter and street	Owner was instructed to remove the soil stock pile .	Follow-up inspection on 04/27/06, revealed the stock pile had not been removed escalating the verbal warning to a written warning.
12	5/3/2006	Construction		523 Edward St, El Cajon	2525-85 Lund St	PW 0308	Written Warning	Failure to implement erosion control plan BMPs and keeping an unapproved dirt pile with no BMPs		Pile removed
13	5/11/2006	Commercial	Applebee's	107 Fletcher pkwy	Same as Mailing Adddress	PW 0312	Monetary Citation	Power washing dumpster area and walkways with water discharging into stormwater conveyance		through 6/22/06 no repeat violation
14	4/18/2006	Residential	Decco Castings Inc	1596 Pioneer Way, El Cajon	Same as Mailing Adddress	PW 0325	Written Warning	Dirt stock pile dumpted and maintained in street with no BMP's within 150 ft. of a curb storm drain inlet.	Remove the dirt pile	Dirt pile removed on 4/28/06
15						PW 0316	Written Warning	Excessive water used to hose the area	proper dry cleaning methods that are in compliance with storm water	Complainant was contacted
16	8/1/2005	Construction	Cajon Valley High School	1006 Channel Road, Lakeside, CA 92040	East Madison, CajonValley High School	PW 0326	Written Warning	discharge of sediment form construction site due to poor BMPs	prevent tracking and dry sweep all sediment in public right of way	week that all vilations were corrected and
17	5/11/2006	Commercial	On the Border	103 Fletcher Pkwy El Cajon,	Same as Mailing Adddress	PW 0327	Monetary Citation	Illegal discharge from hot water heater replacement and food waste at dumpster enclosure.		through 6/22/06 no repeat violation
18	5/16/2006	Commercial			161 E Main St., El Cajon	PW 0329	Written Warning	Washing interior of vacant building out into rear alley leaving white residue. No BMP's in place	No further washing done Property owner advised workers on BMP requirements.	Same Day
19	5/16/2006	Commercial	Valley Transmission	1158 N. Second St	Same as Mailing Adddress	PW 0330	Written Warning	Old transmissions stacked along storm channel on ground with no BMP's in place		

Enforcement Actions

2005-2006

	Date	Component	Business Name:	Mailing Address	Violation Address	Administrative Citation #	Written Written Warning Or Monetary Citation	BMP Violated	Corrective Actions	Follow-up and Corrections Complete
20	6/22/2006	Commercial	Wienerschnitzel	299 N. Magnolia	Same as Mailing Adddress	PW 0340	Written Warning	Power washing lot and building with no BMPs implemented	Cease powerwashing activities unless waste water can be reclaimed	
21	5/23/2006	Construction	N/A		401 Ballantyne	PW 0343	Written Warning	Ponded water discharged to the gutter without BMPs	Worker was instructed to stop the discharge and to conduct alternative methods to discharge water implementing BMPs.	Follow up conducted later on the same day
22	5/30/2006	Construction	N/A		1385 E. Main St	PW 0344	Written Warning	Failure to implement BMPs at construction site with evidence of sediment discharge	The contractor was instructed to implement BMPs in accordance to the approved Erosion Control Plan	Subsequent site inspections reveal implementation of BMPs
23	5/30/2006	Residential	N/A	1924 Altozano	Same as Mailing Adddress	PW 0345	Written Warning	Resident power washes roof, discharging waste water to the gutter without any BMPs	Resident and contractor were instructed to stop the discharges into the storm drain system and clean up red residue	Follow up on May 31 revealed that the area had been cleaned up

E. SPECIAL INVESTIGATIONS – FORRESTER CREEK IMPACT STUDY

For the third year, the City conducted upstream/downstream monitoring of dry weather constituents of concern in Forrester Creek. The monitoring was conducted on June 13, 2006 to assess the relative amount of pollutants discharged within the jurisdictional boundaries of El Cajon into Forrester Creek. The upstream location is at the County boundary, specifically at Fourth Street at Rancho Cajon, east side of the street. Flow at the upstream sample was approximately 3 gallons per minute. During rain events, flow from Crest and other unincorporated County areas discharge directly into the City of El Cajon without treatment. To date, no analytical data have been collected for wet weather flows.

Table 1

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Nitrate (mg/L NO_3-N)
Upstream	6/13/06	3.0	27.9	8.0	1.85	1.66	6.25
Downstream*	6/13/06	421	27.9	8.7	2.06	2.58	5.0

Table 2

Site	Date	Total Hardness (mg/L$CaCO_3$)	Oil & Grease (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mlL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Coliform (MPN/100 mL)
Upstream	6/13/06	48	nd	300,000	3,000	8,000	1,090	300,000
Downstream*	6/13/06	60	nd	170,000	500	70	1,600	170,000

The following is a summary of the upstream/downstream results:

- No detections of metals
- Reactive phosphorous upstream was 0.03 mg/L, downstream was 0.03 mg/L
- Detections of ammonia upstream was 0.04 mg/L, downstream was 0.8 mg/l
- Detergents were detected at 0.25 mg/L upstream, and 0.25 mg/L downstream

Notable Results and Reasoning

Increase in flow to 421 gallons per minute from upstream to downstream

Concentrations of many constituents decrease from upstream to downstream; this includes nitrate, total coliform, fecal coliform, enterococcus, total alkalinity, and total organic carbon. Increase in the concentrations (from upstream to downstream) of pH, turbidity, conductivity, ammonia, dissolved oxygen, total hardness, TDS, and sulfates.

The City does not have an explanation for the increase in flows or the significant increase in dry weather flow contributions within City boundaries. The City will need to conduct further dry weather investigations to develop enough data to establish baseline conditions (for current channel configurations) and to develop priorities for more detailed investigations for pollutant and dry weather flow sources.

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

August 17, 2006
Project No. 200605W-2

Jaime Campos, P.E.
Acting Storm Water Program Manager
City of El Cajon
Department of Public Works
200 E. Main Street
El Cajon, CA 92020

AUG 2 1 2006
CITY OF EL CAJON
ENGINEERING DIVISION

Re: 2006 Forester Creek Impact Study
City of El Cajon, California

Dear Mr. Campos:

Enclosed please find our report for the City of El Cajon 2006 Forester Creek Impact Study. This project, also conducted in 2004 and 2005, is an additional study of the water quality in Forester Creek as it passes through El Cajon. The contents include field screening data, analytical laboratory test results, and analysis of the collected data.

It has been our pleasure working with the City of El Cajon on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

Forester Creek Impact Study

Forester Creek runs parallel to Interstate 8 as it enters the east side of the City of El Cajon (City). It then turns north after passing SR-67, flowing through the area around Gillespie Field before entering the City of Santee. Eventually, Forester Creek enters the San Diego River just east of the junction of SR-52 and SR-125, within the City of Santee.

The purpose of this study was to investigate how water quality in Forester Creek is affected as it flows through the City of El Cajon. To gauge this, one sample was collected from the creek near where it enters the City from the east (upstream), and another sample was taken where the creek exits the City in the north (downstream). Table 1 shows the locations of these two sites. This year, the creek was dry at the point where it enters the City of El Cajon. There was some flow observed just downstream of that point, where the upstream sample site was taken, but this flow was likely generated within the city at its southeastern limits. Water quality parameters in the upstream and downstream samples can be compared to see how the City itself contributes to pollutant loads. Also, it should be noted that the downstream location is the same as that used for dry weather Site 5. Therefore, the 2006 dry weather data from Site 5 was used in this study in order to alleviate the need to take an additional downstream sample and to minimize the costs of this study.

The same field and laboratory analyses employed during the standard dry weather program in El Cajon were conducted for the upstream and downstream samples. No constituents tested in the field at either of the two sites were measured above their respective dry weather action levels. The value for pH increased from 8.0 upstream to 8.7 downstream. While both values are within the acceptable range for pH (6.5 to 9.0), the higher downstream value is likely a result of the wide, shallow flow and significant amount of algal growth at that site. Typically, the pH increases during daylight hours in areas with those characteristics, as sunlight stimulates algal photosynthesis and carbon dioxide is removed from water. The ammonia concentration at the downstream site was higher than that at the upstream site: 0.4 mg/L and 0.8 mg/L, respectively.

As in 2005, levels of the three types of bacterial indicators evaluated were significantly lower at the downstream site than at the upstream site. Total coliform dropped from 300,000 MPN/100mL to 170,000 MPN/100 mL. Fecal coliform and enterococci were significantly lower at the downstream location than they were at the upstream site. Total Organic Carbon (TOC) was lower at the downstream site, while Total Dissolved Solids (TDS) was higher at the downstream site. Surfactants, oil and grease, and dissolved copper, cadmium, lead, and zinc were not detected by the laboratory at either location. Field analytical and laboratory data are presented in tables 2 and 3, respectively.

Additional laboratory analyses were conducted to analyze for the following total dissolved solids (TDS) components: total alkalinity, chloride, sulfate, calcium, potassium, magnesium, and sodium. The sample was first tested for TDS using the same procedure as in years past, and then the sample was passed through an additional filter with smaller pores. After additional filtration, which was conducted to remove any microparticles smaller than suspended solid particles but larger than most dissolved molecules, TDS was again tested to see if any microparticles were contributing to the original TDS value. TDS results are therefore given for both the standard TDS analysis of the sample water and for the TDS analysis of sample after additional filtration. The TDS components were all analyzed after the additional filtration step. This year, TDS was measured at 1,600 mg/L at the downstream site

and 1,090 at the upstream location. Potassium was not detected at either of the sites. Total alkalinity was higher upstream than downstream, dropping from 212 mg/L $CaCO_3$/L to 179 mg $CaCO_3$/L. The upstream and downstream levels of calcium were comparable, with the downstream level being only slightly higher than that measured upstream. Magnesium, sodium, chloride and sulfate were all present at higher concentrations downstream than upstream. The TDS component analysis data is presented in Table 4.

An obvious consideration when analyzing the results of this study is that Forester Creek has a flow of only a few gallons per minute (gpm) at the upstream site and a flow of several hundred gpm as it exits the City. As a result of this, a direct comparison of upstream and downstream constituent concentrations can be misleading. Since the TDS concentration is higher and the flow rate is higher at the downstream site, it seems that a fairly large volume of runoff with relatively high TDS levels continues to flow into Forester Creek within the boundaries of the City of El Cajon.

Neither this study nor the concurrent dry weather monitoring program, for which TDS component analyses were performed at a number of sites, specifically identifies one source of elevated TDS. The main TDS components, sulfate, chloride, sodium, calcium and total alkalinity, may leach into surface waters from naturally occurring mineral deposits in the ground. No point sources for TDS components have been observed within the City, and it is possible that elevated TDS levels are a result of natural background factors.

Table 1 Forester Creek Study Site Locations

Site ID	Location	Description	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
Upstream	Greenfield Ave. and 8 west onramp intersection, behind southeast corner of Exxon station at 1699 E Main St	Concrete Channel	Commercial	Residential	907	32.81170	-116.91791
Downstream	Adjacent to the Weld Blvd. Trolley Station, SE. of the Marshall Ave./Cuyamaca St. intersection	Concrete Channel	Commercial	Industrial	907	32.82669	-116.98224

Table 2 Field Analytical Data for Forester Creek Sites

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Detergent (mg/L MBAS)	Ammonia (mg/L NH_3-N)	Nitrate (mg/L NO_3-N)	Reactive-Phosphorus (mg/L PO_4-P)	Dissolved Oxygen (mg/L)
Upstream	6/13/06	3.0	27.9	8.0	1.85	1.66	0.25	0.4	6.25	0.03	8.33
Downstream*	6/13/05	421	27.9	8.7	2.06	2.58	0.25	0.8	5.0	0.03	10.66

Note: * "Downstream" is the same location as dry weather program Site 5. Because the same sampling event was used both for this study and the dry weather program, the attached data sheets and lab reports reference Site 5, not "Downstream."

Table 3 Laboratory Data for Forester Creek Sites

Site	Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO$_3$)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mlL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	6/13/06	nd	nd	48	nd	nd	nd	nd	300,000	3,000	8,000	1,090	11.4
Downstream*	6/13/06	nd	nd	60	nd	nd	nd	nd	170,000	500	70	1,600	9.52

Note: *"Downstream" is the same location as dry weather program Site 5. Because the same sampling event was used both for this study and the dry weather program, the attached data sheets and lab reports reference Site 5, not "Downstream."

Table 4 TDS Analysis for Forester Creek Sites

Site	Date	Original TDS (mg/L)	Post Filter TDS (mg/L)	Calcium (mg/L)	Potassium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Total Alkalinity (mg CaCO$_3$/L)	Chloride (mg/L)	Sulfate (mg/L)
Upstream	6/13/06	1,090	1,050	91.2	nd	53.5	236	217	212	335
Downstream	6/13/06	1,600	1,590	99.3	nd	92.4	395	179	470	464

City of El Cajon
Follow Up Investigation to Identify Source of Nitrates

A follow up monitoring investigation was conducted on November 9, 2007 to detect potential sources of nitrates at Monitoring Site 30 and 37. The photographs below document the investigation with the starting point at monitoring site 37 and continuing east (upstream) along the extension of the 66-inch corrugated steel pipe towards the reinforced concrete box under Jamacha Road. The investigation terminated east of Jamacha Road at the trapezoidal open channel.

Photo 1: Monitoring Site (Sample) # 37 – City of El Cajon's personnel preparing to be lowered into 66 inch corrugated steel pipe (CSP) to collect water samples. Samples were handled under the supervision of the consultant responsible for conducting the City's Dry Weather Monitoring Program. City of El Cajon Public Works Maintenance personnel facilitated testing by accessing confined spaces.

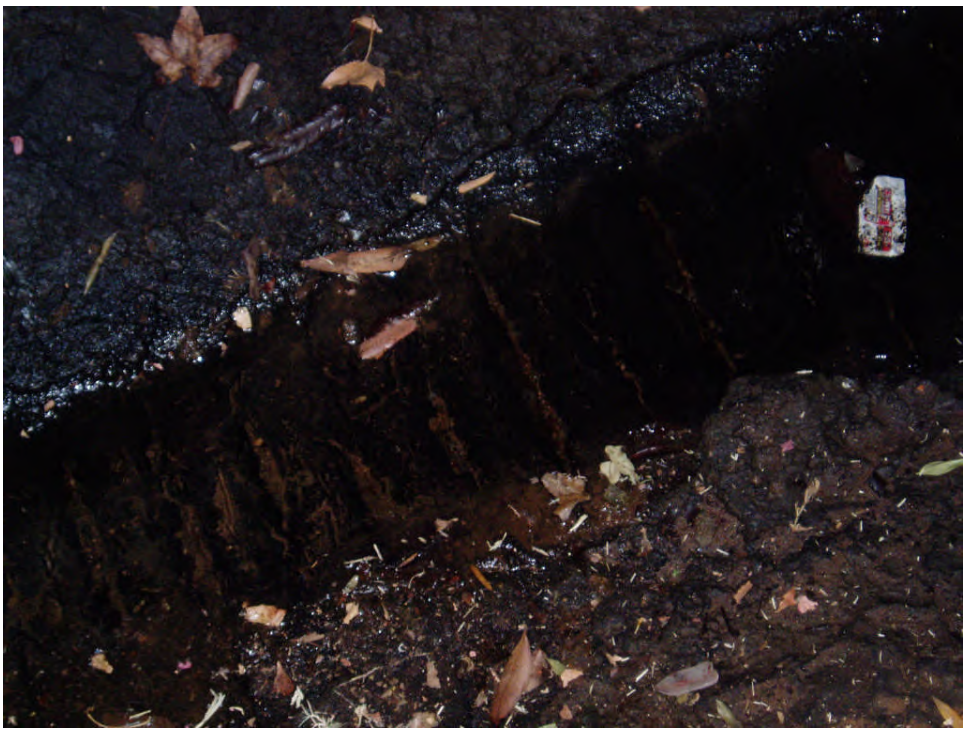

Photo 2: Photograph showing corroded invert elevation of the 66-inch CSP flow line. The pipe is in various forms of deterioration through out the extension of the pipe from monitoring site #37 to the western side of Jamacha Road. The deteriorated condition of the pipe may result in water seeping from outside the pipe.

Photo 3: (Sample 37-1) Lateral from professional offices at East Main Street. Minimal flow was observed at the time of the follow up investigation but the flow was sufficient to collect water sample.

Photo 4: Storm drain lateral from Grossmont Union High School District Work Training Facility lot. Minimal flow was observed at the time of investigation, the flow was not sufficient to collect water sample.

Photo 5: Catch basin at Grossmont Union High School District Work Training Facility. The catch basin drains directly to the 66" CSP. No flow was present at time of the investigation. (Sample 37-2) was collected from the 66" CSP below this catch basin grate.

Photo 6: Storm drain lateral from the Grossmont Union High School District Work Training Facility. Minimal flow was observed at the time of the investigation but not sufficient to gather water sample.

Photo 7: Curb inlet opening at the face of curb at Jamacha Road. No flow was visible during the investigation.

Photo 8: Arch steel pipe discharging water from north Jamacha Road. The pipe had minimal flow and insufficient to collect a water sample for analysis.

Photo 9: Reinforced concrete box (10 ft x 3.5 ft) extending east under Jamacha Road.

Photo 10: (Sample Site 37-3) transition between trapezoidal open channel and (72-inch x 44-inch) arch corrugated steel pipe. Photograph was taken looking westward, the corrugated pipe accepts flows from the open channel and continue to flow west (downstream) towards Jamacha Road and sampling site #37.

Photo 11: Trapezoidal open channel looking east of sampling site 37-3. Nitrate concentrations are below action levels on this channel.

SITE 30 & 37 UPSTREAM INVESTIGATION

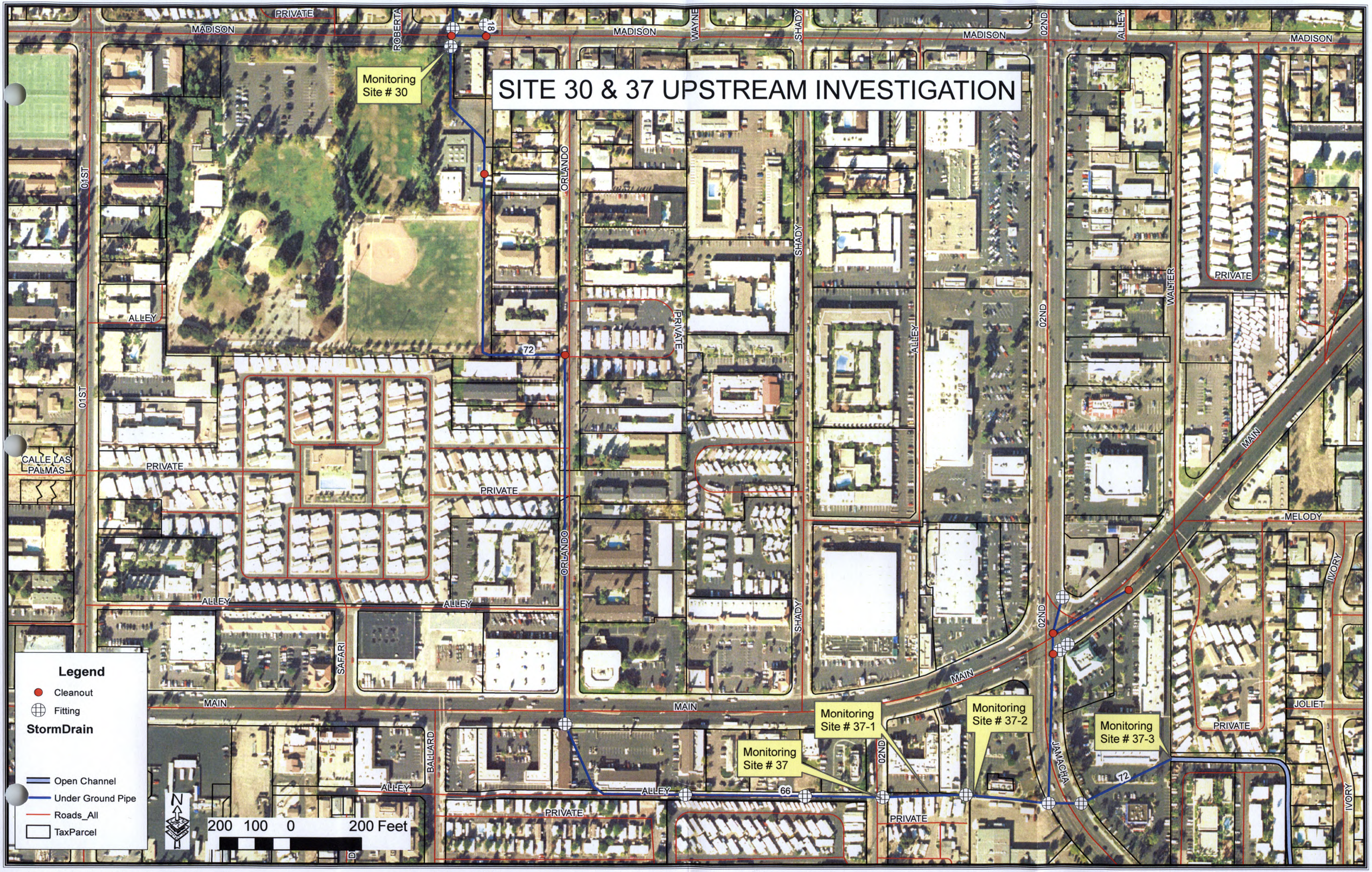

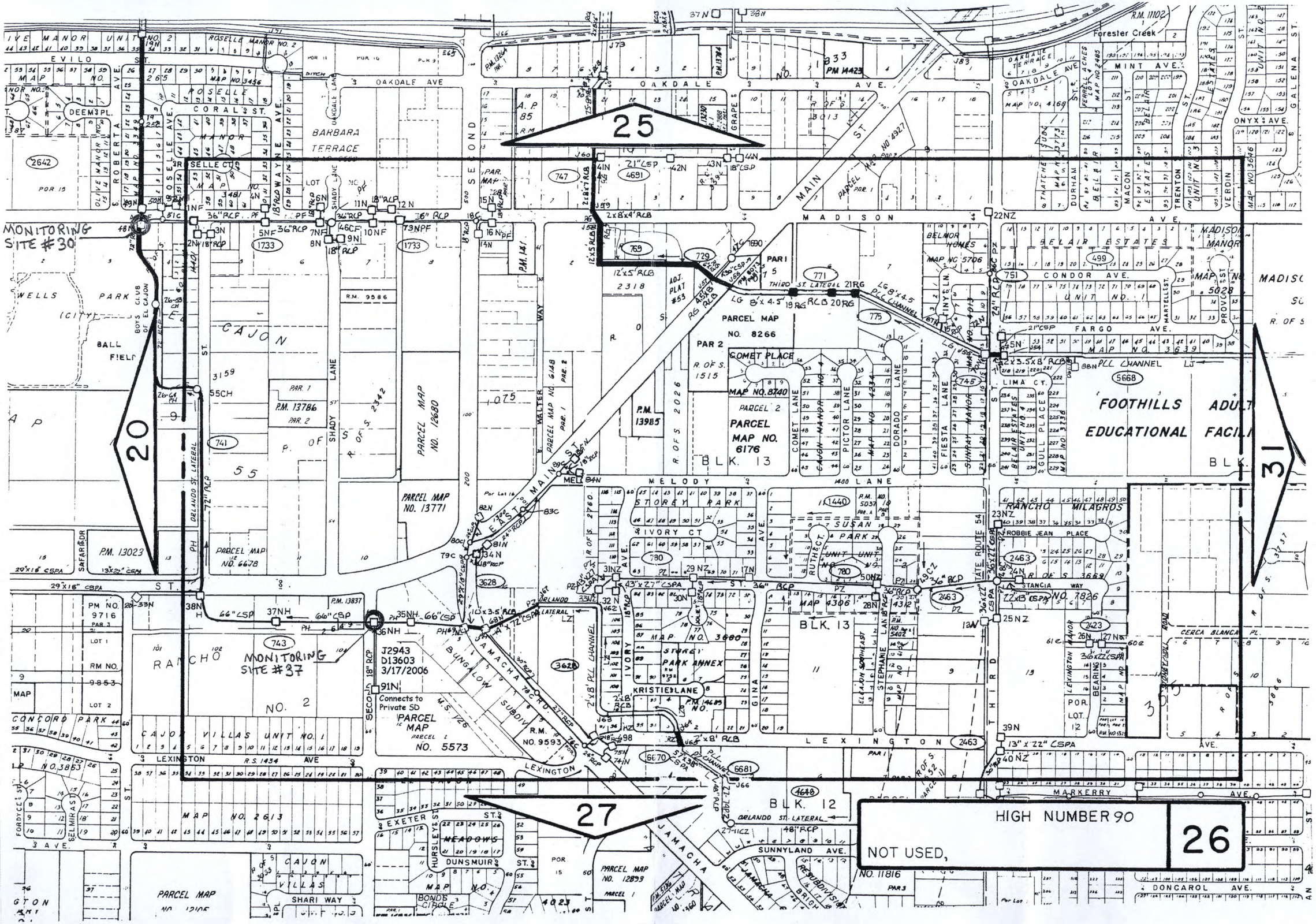
MONITORING SITE #30
MONITORING SITE #37
25
20
27
31
26
HIGH NUMBER 90
NOT USED,
OAKDALE AVE
MADISON AVE
MAIN ST
SECOND ST
THIRD ST
MELODY LANE
LEXINGTON AVE
MARKERRY AVE
SUNNYLAND AVE
DONCAROL AVE
FARGO AVE
MINT AVE
ONYX AVE
CAJON
BARBARA TERRACE
WELLS PARK
BALL FIELD
BOYS CLUB OF EL CAJON
FOOTHILLS EDUCATIONAL
RANCHO MILAGROS
RANCHO
STOREY PARK
SUSAN PARK
PARK ANNEX
KRISTIE LANE
COMET PLACE
CONCORD PARK
CAJON VILLAS UNIT NO. 1
CAJON VILLAS
PARCEL MAP NO. 8266
PARCEL MAP NO. 6176
PARCEL MAP NO. 13771
PARCEL MAP NO. 12680
PARCEL MAP NO. 6678
PARCEL MAP NO. 5573
PARCEL MAP NO. 12899
PARCEL MAP NO. 12105
BLK. 13
BLK. 12
Forester Creek
Connects to Private SD
J2943
D13603
3/17/2006

CITY OF EL CAJON
INVENTORY OF MUNICIPAL FACILITIES

HIGH PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Civic Center, City Hall and Plaza	200 E. Main Street	Washington Channel
2.	Fire Station No. 9	1301 N. Marshall Avenue	Forester Creek
3.	Public Works Maintenance Division Office	1050 Vernon Way	Forester Creek
4.	Vehicle Maintenance Facility	1060 Vernon Way	Forester Creek

MEDIUM PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Animal Control	1275 N. Marshall Way	Forester Creek
2.	Fletcher Hills Park, Recreation Center and Pool	2345 Center Place	Fletcher
3.	Parks Office	154 Rea Avenue	Washington Channel
4.	Performing Arts Center	110 E. Main Street	Washington Channel
5.	Wells Park, Recreation Center and Maintenance	1153 E. Madison Avenue	Forester Creek
6.	Parks Storage Garage	148 Rea Avenue	Washington Channel

LOW PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Albert Van Zanten Park	1495 Greenfield Drive	Broadway Channel
2.	Bill Beck Park	Pierce Street and Wagner Drive	Broadway Channel
3.	Bostonia Park and Recreation Center	1049 Bostonia Street	Forester Creek/ Broadway Channel
4.	Cajon Valley Middle School Park	750 Park Avenue	Forester Creek/ County Ditch
5.	Community Policing Division	165 E. Park Avenue	Forester Creek
6.	El Cajon Community Center	195 E. Douglas Avenue	Forester Creek
7.	Fire Station No. 7	695 Tyrone Street	County Ditch
8.	Fire Station No. 8	842 N. Third Street	Forester Creek
9.	Fire Station Park	Tyrone Street and Westwind Drive	Forester Creek
10.	Fire Station/ Department Administration	100 E. Lexington Avenue	Forester Creek
11.	Hillside Park and Recreation Center	840 Buena Terrace	Fletcher Hills Parkway/ Fanita Channel Basin/ Forester Creek
12.	John F. Kennedy Park and Recreation Center	1675 E. Madison Avenue	County Ditch
13.	Judson Park	Magnolia Avenue and Park Avenue	Forester Creek
14.	Museum (Knox House)	280 N. Magnolia Avenue	Forester Creek
15.	Office	1034 Magnolia Avenue	Washington Channel
16.	Pistol Range	Gillespie Field	Washington Channel
17.	Police Department	100 Fletcher Parkway	North Forester Creek
18.	Police Department Detectives	1035 Pioneer Way	Forester Creek/ Broadway Channel
19.	Prescott Promenade Park	200 Block of Main Street	County Ditch
20.	Renette Park and Recreation Center	935 S. Emerald Avenue	County Ditch
21.	Tuttle Park	379 Chase Avenue	County Ditch

6.0 LAND-USE PLANNING FOR NEW DEVELOPMENT AND REDEVELOPMENT COMPONENT

Permit section F.1 requires each Copermittee to develop a plan to minimize the short and long-term impacts on receiving water quality from new development and redevelopment. As part of this plan, four main components must be addressed:

1) Assessment of General Plan
   Each Copermittee must assess its General Plan, and modify if necessary, to include water quality and watershed protection principles and policies to direct land-use decisions and require implementation of consistent water quality protection measures for development projects.

2) Modify Development Project Approval Process
   Prior to project approval and issuance of local permits, each Copermittee must require each proposed project to implement measures to ensure that pollutants and runoff from the development will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of receiving water quality objectives. This process involves developing the following:

   - Development Project Requirements
   - Standard Urban Storm Water Mitigation Plans (SUSMPs)

3) Revise Environmental Review Process
   Each Copermittee must review the current environmental review processes to include requirements of evaluation of water quality effects and identification of appropriate mitigation measures.

4) Conduct Education Efforts Focused on New Development and Redevelopment
   Each Copermittee must implement and education program to educate its planning and development review staffs and external project proponents.

The City of El Cajon has completed the requirements listed above. Descriptions of each component are presented below.

6.1 Assessment of General Plan

The City of El Cajon General Plan includes several objectives and policies related to water quality preservation and drainage among its basic goals and objectives. Additional policies are proposed to supplement the existing objectives and policies.

The following proposed amendment is in draft form with the proposed language underlined and it could change as a result of the public hearing process needed to consider a General Plan amendment. An amendment of the General Plan will be considered as soon as possible.

Objective 8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible slow runoff and maximize on-site infiltration of runoff.

8-10.2. Implement pollution prevention methods supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into a municipal separate storm sewer system. (MS4)

8-10.3. Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. Encourage land acquisition of such areas.

8-10.4. Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. Require incorporation of structural and non-structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. Avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. Reduce pollutants associated with vehicles and increasing traffic resulting from development. Coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. Implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

6.2 Modification of Development Project Approval Process

6.2.1 Development Project Approval Process

The City of El Cajon Municipal Code (ECMC) requires all new development or modifications of existing development involving three or more multiple family units, office uses, retail uses or industrial uses to obtain a site development plan (SDP). Chapter 17.56 of the ECMC outlines the SDP process and its requirements, and is included in Appendix A.5.

Other uses are determined to be special and are required to obtain a conditional use permit (CUP). That process is included in Chapter 17.70 of the ECMC and is attached hereto.

These processes ensure compliance with all City standards, including those relating to water quality, by requiring design modifications and imposing specific conditions of approval and are both considered to be adequate and are not proposed to be amended.

RESOLUTION NO. 10–03

A RESOLUTION APPROVING GENERAL PLAN AMENDMENT 2002-04 TO ADD STORM WATER RUNOFF POLICIES AND OBJECTIVES TO GENERAL PLAN TEXT.

WHEREAS, the El Cajon City Council duly advertised and held a public hearing on January 14, 2003, to consider an item which had been set for General Plan consideration; and

WHEREAS, to facilitate understanding by the public, the City Council took tentative or preliminary votes on this item, which vote was not binding until the public hearing was completed; and

WHEREAS, the City Council duly considered all information presented, and listened to all persons who appeared before it to speak.

NOW, THEREFORE, BE IT RESOLVED that the El Cajon City Council hereby approves General Plan Amendment 2002-04 to add storm water policies to the General Plan text as indicated in Planning Commission Resolution No. 9734, on file in the office of the City Clerk, and made a part hereof by this reference.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at a Regular Joint City Council/Redevelopment Agency Meeting held this 14th day of January, 2003, by the following vote to wit:

AYES : Lewis, Kendrick, McClellan, Ramos, Santos
NOES : None
ABSENT : None
DISQUALIFY : None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

MARILYNN LINN, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Resolution No. 10-03 of the Resolutions of the City of El Cajon, California, as adopted by the City Council at the Regular Joint Meeting of the City Council/Redevelopment Agency on the 14th day of January, 2003.

for M Steele
Marilynn Linn, CMC, City Clerk

1/14/03 (103)

STAFF REPORT AND RECOMMENDATION
PLANNING COMMISSION MEETING
DECEMBER 9, 2002 - 7:00 PM

COUNCIL CHAMBER
200 E. MAIN STREET
EL CAJON, CA 92020

AGENDA ITEM #3

PUBLIC HEARING ON
GENERAL PLAN AMENDMENT 2002-04 – Planning Commission

Request to add storm water policies to General Plan text.

******** ******** ******** ********

STAFF RECOMMENDATION: RECOMMEND APPROVAL

******** ******** ******** ********

ENVIRONMENTAL IMPACT INFORMATION

The proposed project is exempt from environmental review in accordance with Section 15308 of CEQA Guidelines.

DISCUSSION

As part of the local implementation of the federal Clean Water Act, the County of San Diego and its 18 cities have obtained a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board. The NPDES permit addresses the handling of storm water runoff by the 18 cities, their residents and businesses. Part of the NPDES permit includes a Jurisdictional Urban Runoff Management Program (JURMP) (Note: there are lots of acronyms used in the storm water runoff dictionary).

Although most of the City's storm water and drainage implementation is carried out by the Department of Public Works, there is a requirement in the NPDES and the JURMP that the General Plan include policies and principles which address water quality and storm water runoff. An attempt to add these policies and

principles to the General Plan last year was withdrawn when it was determined to be premature (GPA 2001-01).

Goal 8 of the El Cajon General Plan says, "The livability of El Cajon will be maintained and enhanced through respect for the environment." There are a number of policies under this goal which address other environmental issues and concerns and this is where the staff believes the policy and objectives (principles) for storm water runoff should be located within the City's general plan text.

RECOMMENDATION

It is recommended that the Planning Commission recommend approval of General Plan Amendment 2002-04 to add storm water runoff policy and objectives to the text of the General Plan as follows and for the following reasons:

Add the following objective and policies to Goal 8.

"Objective 8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into a municipal separate storm sewer system. (MS4)

8-10.3. The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.

8-10.4. The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-

structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. The City will reduce pollutants associated with vehicles and increasing traffic resulting from development. The City will coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable."

Reasons for Recommendation

A. This amendment to the text of the City's general plan will add a policy and objectives addressing storm water runoff as required by the National Pollution Discharge Elimination System (NPDES) permit issued to the City.

B. This amendment will provide policy and objectives dealing with storm water runoff to guide decision-making in the city.

C. This amendment is consistent with the City's Jurisdictional Urban Runoff Management Program (JURMP).

Refer to staff for a resolution stating the decision of the Planning Commission.

JSG:co

EL CAJON GENERAL PLAN 2000

Text and Map adopted by
City Council Resolution No. 10-91
on January 8, 1991

Text and Map amended by
City Council Resolution No. 31-98
on February 10, 1998

January, 2001

OBJECTIVE

8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants off site and into a municipal separate storm sewer system. (MS4)

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8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and

sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. The City will reduce pollutants associated with vehicles and increasing traffic resulting from development. The City will coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

GOAL 9

A strong, competitive region-wide commercial base will be created and retained.

OBJECTIVE

9-1. Parkway Plaza and its immediate vicinity will be maintained as the City's regional shopping center.

POLICIES

9-1.1. Parkway Plaza shall be expanded from its original size and the number of major tenants and stores shall be increased.

9-1.2. The City shall continue to improve traffic circulation in the vicinity of Parkway Plaza.

9-1.3. The City shall cooperate with Parkway Plaza in the provision of parking facilities and may develop special

#7

Chapter 16.104
SITE DESIGN BMPS

Sections:

16.104.010 Site Design BMPs Objectives.
16.104.020 Maintaining Pre-Development Rainfall Runoff Characteristics.
16.104.030 Protection of Slopes and Channels.

16.104.010 Site Design BMPs Objectives.

A. Priority projects shall be designed so as to minimize, to the maximum extent practicable, the introduction of pollutants and conditions of concern that may result in significant impacts, generated from site runoff to the storm water conveyance system. Priority projects shall also control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat. Although not mandatory, priority projects can address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Mimicking a site's natural hydrologic regime can be pursued by:

- Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the storm water conveyance system, and minimizing clearing and grading.
- Providing runoff storage measures dispersed uniformly throughout a site's landscape with the use of a variety of detention, retention, and runoff practices.
- Implementing on-lot hydrologically functional landscape design and management practices.

B. Site design BMPs shall offer an innovative approach to urban storm water management, that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates storm water controls throughout the urban landscape.

16.104.020 Maintaining Pre-Development Rainfall Runoff Characteristics.

A. Priority projects shall control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. In addition, projects should control runoff discharge volumes and durations to the maximum extent practicable using the site design, source control, and treatment control requirements.

B. Design Concept 1: Minimize Project's Impervious Footprint & Conserve Natural Areas. The following site design options shall be considered and, incorporated and implemented where determined applicable and feasible by the Director of Public Works, during the site planning and approval process, consistent with applicable General Plan policies and other development regulations.

1. Minimize impervious footprint. This can be achieved in various ways, including, but not limited to increasing building density (number of stories above or below ground) and developing land use regulations seeking to limit impervious surfaces. Decreasing the project's footprint can substantially reduce the project's impacts to water quality and hydrologic conditions.

2. Conserve natural areas where feasible. This can be achieved by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition. The following list provides a guideline for determining the least sensitive portions of the site, in order of increasing sensitivity. Jurisdictions should also refer to their Multiple Species Conservation Plans or other biological regulations, as appropriate.

a. Areas devoid of vegetation, including previously graded areas and agricultural fields.

b. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands.

c. Areas of chamise or mixed chaparral, and non-native grasslands.

d. Areas containing coastal scrub communities.

e. All other upland communities.

f. Occupied habitat of sensitive species and all wetlands.

g. All areas necessary to maintain the viability of wildlife corridors. Within each of the previous categories, areas containing hillsides should be considered more sensitive than the same category without hillsides.

3. Construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials.

4. Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.

5. Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.

6. Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.

7. Use natural drainage systems to the maximum extent practicable.

8. Other site design options that are comparable, and equally effective.

Design Concept 2: Minimize Directly Connected Impervious Areas (DCIAs)

Priority projects shall consider, and incorporate and implement the following design characteristics, where determined applicable and feasible by the Director of Public Works.

1. Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.

2. Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.

3. Other design characteristics that are comparable and equally effective.

16.104.030 Protection of Slopes and Channels.

Project plans shall include storm water BMPs to decrease the potential for erosion of slopes and/or channels, consistent with local codes and ordinances and with the approval of all agencies with jurisdiction, e.g., the U.S. Army Corps of Engineers, the San Diego Regional Water Quality Control Board, and the California Department of Fish and Game. The following design principles shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

1. Convey runoff safely from the tops of slopes.

2. Vegetate slopes with native or drought tolerant vegetation.

3. Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.

4. Stabilize permanent channel crossings.

5. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.

6. Other design principles that are comparable and equally effective.

(Continued on Page 27)

Chapter 16.105

SOURCE CONTROL BMPS

Sections:

16.105.010	**Providing Storm Drain System Stenciling and Signage.**
16.105.020	**Designing Outdoor Material Storage Areas to Reduce Pollution Introduction.**
16.105.030	**Designing Trash Storage Areas to Reduce Pollution Introduction.**
16.105.040	**Using Efficient Irrigation Systems and Landscape Design.**
16.105.050	**Incorporate Requirements Applicable to Individual Priority Project Categories.**

16.105.010 Providing Storm Drain System Stenciling and Signage.

Storm drain stencils are highly visible source control messages, typically placed directly adjacent to storm drain inlets. The stencils contain a brief statement that prohibits the dumping of improper materials into the urban runoff conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. Priority projects shall include the following requirements in the project design.

A. Provide stenciling or labeling of all storm drain inlets and catch basins within the project area with prohibitive language (such as: "NO DUMPING – I LIVE IN <<name receiving water>>") and/or graphical icons to discourage illegal dumping.

B. Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

C. Maintain legibility of stencils and signs.

16.105.020 Designing Outdoor Material Storage Areas to Reduce Pollution Introduction.

Improper storage of materials outdoors may increase the potential for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the urban runoff conveyance system. Where the priority project plans include outdoor areas for storage of hazardous materials that may contribute pollutants to the urban runoff conveyance system, the following storm water BMPs are required:

ENVIRONMENTAL INFORMATION FORM
Part I - Initial Study
Filing Fee $400

Community Development Dept.
Planning Division
200 East Main Street
El Cajon CA 92020

The purpose of this form is to inform the City of the basic components of the proposed project so that the City may review the project pursuant to City Policies, Ordinances, and Guidelines; the California Environmental Quality Act; and the City's Rules and Procedures to Implement CEQA. It is important that the information requested in this application be provided in full.

The Initial Study is a requirement of the California Environmental Quality Act (CEQA) Guidelines and is used to determine whether further review of environmental factors of the project will be necessary, and, if so, whether a Negative Declaration (ND), Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR) will be the most appropriate document. Accuracy and completeness in the preparation of this study is essential. Incomplete materials will only result in a delay for the applicant, as the study will be rejected until properly developed.

INSTRUCTIONS: Please complete the following statement by filling in the designated blank spaces. Responses should be printed or typed so as to be legible. All appropriate spaces must be filled in and the required maps, photos, and plans submitted with this form. Additional information may be attached. The applicant should provide as much information as possible in this submittal to allow reviewers to have a thorough understanding of the project. Please submit this form and all support documents with the appropriate filing fee to the Community Development Department to begin the environmental review process. All maps/site plans shall be folded to 8½" by 11."

A. General Information

1. Name, address, telephone number, fax number and email of person to be contacted concerning this project:

2. Name, address of legal property owner as shown on tax statement:

3. Address of project and/or description of location:

4. Assessor's Parcel Number(s) of project site:

5. List each project application which accompanies this form:

6. Have any preliminary documents been prepared for this projects (e.g. soil report or traffic impact analysis)? If yes, please identify name and date prepared:

7. List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state or federal agencies (i.e., Corps of Engineers, CalTrans, Air Pollution Control District or LAFCO):

8. Existing zoning of project site:

9. Existing General Plan Designation:

10. Fully describe the nature and purpose of the proposed project including the ultimate use of the property:

B. Project Description

1. Site size in acres or square footage:

2. Highest and lowest elevations on site:

3. Number of floors of proposed construction:

4. Number of proposed off-street parking spaces provided:

5. Anticipated project schedule (timeline):

6. Is this project dependent on an existing or future project? If yes, please explain:

7. Anticipated future phases:

8. If residential, include the number of units, unit sizes, range of sale prices or rents, and gross density (units) acre:

9. If commercial and/or office, indicate the types, square footage of each type (i.e., office, sales area, restaurant), whether neighborhood, city or regionally oriented, and total square footage of building area:

10. If industrial, indicate type, estimated employment per shift, loading facilities, square footage of office area and total square footage of building area:

11. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, and total square footage of building:

C. Existing Conditions

1. Number and species of existing trees 6 inches or larger in diameter:

2. Number, size, and species of trees to be removed:

3. Describe any power lines, water, sewer or storm drain mains, pipelines or other transmission lines which are located on or adjacent to the property:

4. Name of creeks and natural or man-made drainage channels through or adjacent to the property:

5. Primary vehicle access to property comes from which street(s):

6. Are any easements known to traverse the site? If yes, explain the type and purpose:

7. Provide details on existing uses of the site. Are there existing structures on the site? If yes, describe use and whether they will be demolished or relocated; if residential, give the number of current occupants:

8. Indicate service provider for:

    a. Water

    b. Sewer

    c. Fire protection

    d. Police protection

9. Is any portion of the site within the 100-year/500-year floodplain?

10. Is the site within an Airport Land Use plan?

11. If yes, what airport plan(s) is it within and do restrictions affect the proposal?

12. Is the site located within two miles of Gillespie Field general aviation airport?

13. Is the site located within close proximity of a freeway?

14. Is the site listed on California EPA's Hazardous Site List?

D. Environmental Analysis

Are the following items applicable to the project or its effects? Discuss all items checked "yes" or "maybe" on next page or attach additional sheets as necessary.

YES	MAYBE	NO	
☐	☐	☐	a. Change in existing features of any streams, lakes or hills, or substantial alteration of ground contours.
☐	☐	☐	b. Change in scenic views or vistas from existing residential areas or public lands or roads.
☐	☐	☐	c. Change in character of general area of project.
☐	☐	☐	d. Produce or involve large amounts of solid waste or litter.
☐	☐	☐	e. Disrupt or adversely affect an historic, cultural or archaeological site.
☐	☐	☐	f. Change in dust, ash, smoke, fumes or odors in vicinity.
☐	☐	☐	g. Change in stream, surface water, wetlands or ground water quality or quantity, or alteration of existing drainage patterns.
☐	☐	☐	h. Increase in impervious surfaces and associated increase runoff.
☐	☐	☐	i. Alteration in existing drainage patterns, runoff flow rates or volumes.

☐	☐	☐	j. Increased erosion.
☐	☐	☐	k. Use or disposal of heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, or oxygen demanding substances.
☐	☐	☐	l. Potential to impact already sensitive conditions or environmentally sensitive areas.
☐	☐	☐	m. Substantial change in existing noise or vibration levels in the vicinity.
☐	☐	☐	n. Site on filled land or on slope of 10 percent or more.
☐	☐	☐	o. Use or disposal of potentially hazardous material such as toxic substances, flammables or explosives.
☐	☐	☐	p. Substantial change in demand for municipal services (police, fire, water, sewer, etc.).
☐	☐	☐	q. Substantial increase in fuel or energy consumption (electricity, oil, natural gas, etc.).
☐	☐	☐	r. Relationship to a larger project or series of projects.
☐	☐	☐	s. Potential impact to aquatic, wetland or riparian habitiat.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: Signature:

Section 711.4 of the Fish and Game Code, which became operative on January 1, 1991, authorizes the County Clerk to collect a filing fee of up to $1,275 for the review of environmental documents by the State Department of Fish and Game. Should the State Department of Fish and Game decide to review the environmental documents associated with this project, the project applicant will become liable for paying this fee.

The applicant certifies by his/her signature below that he/she has been informed of this information and is aware that a fee may be required by the County Clerk with the filing of the environmental documents associated with his/her project.

Failure to pay the required fee in a timely manner may result in the delay in the start of the project.

Date: Applicant's Signature:

Community Development Dept.
Planning Division
200 East Main Street
El Cajon CA 92020

ENVIRONMENTAL EVALUATION FORM
Initial Study Part 2

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☐
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☐
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☐
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☐
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	☐	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	☐	☐	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☐
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☐
ii) Strong seismic ground shaking?	☐	☐	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐
iv) Landslides?	☐	☐	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☐
VII. HAZARDS AND HAZARDOUS MATERIALS B Would the project:				
a) Create a significant hazard to the public or the environment through the routine	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☐
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☐
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☐
j) Inundation by seiche, tsunami, or	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
mudflow?				
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	☐	☐	☐	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☐
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☐
XI. NOISE B Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
project vicinity above levels existing without the project?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☐
Fire protection?	☐	☐	☐	☐
Police protection?	☐	☐	☐	☐
Schools?	☐	☐	☐	☐
	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Parks?				
Other public facilities?	☐	☐	☐	☐
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☐
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☐
e) Result in inadequate emergency access?	☐	☐	☐	☐
f) Result in inadequate parking capacity?	☐	☐	☐	☐
g) Conflict with adopted policies, plans, or programs supporting alternative	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
transportation (e.g., bus turnouts, bicycle racks)?				
XVI. UTILITIES AND SERVICE SYSTEMS B Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project=s projected demand in addition to the provider=s existing commitments?	☐	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project=s solid waste disposal needs?	☐	☐	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☐
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☐

13.10.140 Additional requirements for land disturbance activity.

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A. Permit issuance. No land owner or development project proponent shall receive any city grading, clearing, building or other land development permit required for land disturbance activity without first meeting the requirements of this chapter with respect to the portion of the development project and the land disturbance activity to which the permit at issue would apply.

B. Owners and operators both responsible and liable. Persons or entities performing land disturbance activity, including but not limited to construction activities, in the city, and the owners of land on which land disturbance activity is performed, are dischargers for purposes of this chapter; provided however that a local government or public authority is not a discharger as to activities conducted by others in public rights of way.

C. Storm water management plan. All applications to the city for a permit or approval associated with a land disturbance activity must be accompanied by a storm water management plan, on a form or in a format specified by the city. The storm water management plan shall specify the manner in which the discharger/applicant will implement the BMPs required by this chapter for the activity at issue, including but not limited to the applicable BMPs required by subsection D below.

D. Additional minimum BMPs for land disturbance activity. Whether a city permit or approval is required or not, and whether a storm water management plan is required to be submitted or not, all dischargers engaged in land disturbance activity shall implement BMPs as detailed in the Manual in the following additional areas if applicable to the project:

1. Erosion control on slopes;
2. Erosion control on flat areas, or BMPs to desilt runoff from flat areas;
3. Runoff velocity reduction;
4. Sediment control;
5. Offsite sediment tracking control;
6. Materials management;
7. Waste management;
8. Vehicle and equipment management;
9. Water conservation;

10. Structure construction and painting;
11. Paving operations;
12. Dewatering operations;
13. Planned construction operations;
14. Downstream erosion control;
15. Prevention of non-storm water discharges;
16. Protection of ground water.

E. Control to the maximum extent practicable. All dischargers engaged in land disturbance activity must install, implement and maintain those additional BMPs, if any, that are needed to prevent or reduce pollutant discharges in storm water from land disturbance to the MEP.

F. Notice of intent. Dischargers required to comply with the State Construction General Storm Water Permit shall maintain on site and make available for inspection on request by the city any state-issued Waste Discharge Identification Number (WDID) for the site, and a copy of the Notice of Intent (NOI) filed with the SWRCB pursuant to that permit.

G. Storm water pollution prevention plan. Dischargers required to prepare an SWPPP under the State General Construction Storm Water Permit must prepare the plan, implement the plan and maintain it at the site, readily available for review. Failure to comply with an applicable state-required SWPPP is a violation of this chapter.

H. Facility monitoring. Dischargers required to conduct monitoring under the State Construction General Storm Water Permit must conduct such monitoring in conformance with requirements specified by the state, retain records of such monitoring on site, and make such records available for inspection by an authorized enforcement official.

(Ord. 4686 § 17 (part), 2002.)

ORDINANCE NO. 4717

AN ORDINANCE REPEALING SECTION 13.10.030 OF CHAPTER 13.10 OF TITLE 13 OF THE EL CAJON MUNICIPAL CODE AND ADDING NEW SECTION 13.10.030 TO CHAPTER 13.10 OF TITLE 13 AND ADDING NEW CHAPTERS 16.100, 16.101, 16.102, 16.103, 16.104, 16.105, 16.106, 16.107 AND 16.108 TO TITLE 16 OF THE EL CAJON MUNICIPAL CODE REGARDING THE CITY OF EL CAJON STANDARD URBAN STORM WATER MITIGATION PLAN.

WHEREAS, the City of El Cajon, pursuant to its Water Quality Permit issued on February 21, 2001, is required to adopt certain implementation steps as mandated by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, one of the implementation steps requires the adoption of an Urban Storm Water Mitigation Plan based upon a pre-approved Model adopted on June 10, 2002, by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall be the Urban Storm Water Mitigation Plan adopted pursuant to the mandate of the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall allow for the adoption of resolutions and policies which shall implement the El Cajon Standard Urban Water Mitigation Plan not included in this Ordinance; and

WHEREAS, the adoption of this Ordinance, by the findings of the Regional Water Quality Control Board (San Diego Region), is exempt from the requirements of the California Environmental Quality Act; and

WHEREAS, the purpose of this Ordinance is to protect valuable water resources of the City of El Cajon and its surrounding environs from pollutants.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EL CAJON AS FOLLOWS:

Section 1: Section 13.10.030 of Chapter 13.10 of the El Cajon Municipal Code is repealed.

Section 2: Section 13.10.030 of Chapter 13.10 of the El Cajon Municipal Code is hereby added to read as follows:

(Continued on Page 2)

13.10.030. Definitions.

The following definitions shall be applicable when the following words or phrases are used hereafter in this chapter, including use in the City of El Cajon's Best Management Practices Manual, whether or not these words or phrases are capitalized.

"Attached residential development" means any development that provides 10 or more residential units that share an interior/exterior wall. This category includes, but is not limited to: dormitories, condominiums and apartments.

"Authorized enforcement official" means the city manager of the city of El Cajon or any designee of the city manager of the city of El Cajon who is responsible for enforcing the provisions of this chapter, including but not limited to, the directors, their management staff, and designees.

"Automotive repair shop" means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

"Best management practices" means schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters, or the storm water conveyance system. Best management practices also include, but are not limited to, treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage. Best management practices may include any type of pollution prevention and pollution control measure, approved by the city and consistent with Order No. 2001-01 that can help to achieve compliance with this chapter.

"BMPs" means best management practices.

"Channel" means a natural or improved watercourse with a definite bed and banks that conducts flowing water either continuously or intermittently.

"Commercial development" means any development on private land that is not exclusively heavy industrial or residential uses. The category includes, but is not limited to: mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses, hospitals, laboratories and other medical

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facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, automotive dealerships, commercial airfields, and other light industrial complexes.

"Commercial development greater than 100,000 square feet" means any commercial development with a project footprint of at least 100,000 square feet.

"Commercial discharger" means a discharger who operates a regulated commercial facility.

"Constructed wetland" means a vegetated area that has been deliberately modified to provide or enhance habitat, to provide water quality benefits, or to moderate water flow rates or velocities, that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

"City" means the city of El Cajon.

"Detached residential development" means any development that provides 10 or more freestanding residential units. This category includes, but is not limited to: detached homes, such as single-family homes and detached condominium.

"Developer" means a person who seeks or receives permits for, or who undertakes, land development activity.

"Development project proponent" means developer.

"Directly connected impervious area (DCIA)" means the area covered by a building, impermeable pavement, and/ or other impervious surfaces, which drains directly into the storm drain without first flowing across permeable vegetated land area (e.g., lawns).

"Directors" means the directors of community development and public works.

"Discharge" when used as a verb, means to allow pollutants to directly or indirectly enter storm water, or to allow storm water or non-storm water to directly or indirectly enter the storm water conveyance system or receiving waters, from an activity or operations which one owns or operates. When used as a noun, "discharge" means the pollutants, storm water and/or non-storm water that is discharged.

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"Discharger" means any person or entity engaged in activities or operations or owning facilities, which will or may result in pollutants entering storm water, the storm water conveyance system, or receiving waters; and the owners of real property on which such activities, operations or facilities are located; provided however that a local government or public authority is not a discharger as to activities conducted by others in public rights-of-way.

"Discharges directly to" means that storm water or non-storm water enters receiving waters from a facility or activity, without mixing with any storm water or non-storm water from another facility or activity prior to entering such receiving waters.

"Drainage easement" means a legal right granted by a landowner to a grantee allowing the use of private land for storm water management purposes.

"Environmentally sensitive areas" means areas that include, but are not limited to, all Clean Water Act 303(d) impaired water bodies ("303(d) water bodies"); areas designated as an "Area of Special Biological Significance" (ASBS) by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated as having a RARE beneficial use by the State Water Resources Control Board (*Water Quality Control Plan for the San Diego Basin* (1994) and amendments), or areas designated as preserves. The limits of Areas of Special Biological Significance are those defined in the *Water Quality Control Plan for the San Diego Basin* (1994 and amendments).

"ESA" means environmentally sensitive area.

"Hillside" means lands that have a natural gradient of 25 percent (4 feet of horizontal distance for every 1 foot of vertical distance) or greater and a minimum elevation differential of 50 feet, or a natural gradient of 200 percent (1 foot of horizontal distance for every 2 feet of vertical distance) or greater and a minimum elevation differential of 10 feet.

"Hillside development greater than 5,000 square feet" means any development that would create more than 5,000 square feet of impervious surfaces in hillsides with known erosive soil conditions.

"Household hazardous waste" means a household hazardous material that no longer has a use and is discarded or intended to be discarded. The term includes, but is not limited to, paint and paint-related materials; yard and garden products; household cleaners; used oil, motor vehicle fluids, batteries and oil filters; and household batteries.

"Hydrologic soil group" means the classification system for soil erodability

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set out in Soil Survey – San Diego Area, California (December 1973), issued by the U.S. Department of Agriculture Soil Conservation Service and U.S. Forest Service. In this system soils are categorized into four runoff potential groups. The groups range from "A" soils, which have high permeability and little runoff production, to "D" soils, which have low permeability rates and produce much more runoff.

"Illegal connection" means a pipe, facility, or other device connected to the storm water conveyance system or receiving waters, which has not been reviewed and authorized by the city; or a permitted/authorized pipe, facility, or other device, which conveys illegal discharges.

"Illegal discharge" means any discharge into storm water, the storm water conveyance system, or receiving waters that is prohibited by this chapter. This includes, but is not limited to, discharges of non-storm water that are not exempt discharges listed in Section 13.10.060, any discharge from an illegal connection, and any discharge that contains additional pollutants due to the absence of a required BMP or the failure of a BMP. Discharges that require a RWQCB permit that has not been issued or has not been acknowledged by the discharger to be applicable are illegal discharges. Discharges regulated under an applicable RWQCB or the storm water pollution prevention plan (SWPPP) are illegal discharges for purposes of this chapter unless compliance with all applicable permit and SWPPP conditions is maintained.

"Impaired water body" means a water body that is listed by the SWRCB as impaired by a particular pollutant or pollutants, pursuant to Section 303(d) of the Federal Clean Water Act. "303(d) listed water body" has the same meaning.

"Impervious cover or impervious surface" means constructed or modified surfaces that cannot effectively infiltrate rainfall. The term includes, but is not limited to, building rooftops, pavement, sidewalks, and driveways.

"Impervious surface area" means the ground area covered or sheltered by an impervious surface, measured in plan view (i.e., as if from directly above). For example, the impervious surface area for a pitched roof is equal to the ground area it shelters, rather than the surface area of the roof itself.

"Industrial activity" means manufacturing, processing, or raw materials storage at a commercial, industrial or municipal facility. The term includes, but is not limited to, such manufacturing, processing, or storage in or upon industrial plant yards or immediate access roads used or traveled by carriers of raw materials; manufacture of products, waste material, or by-product creation or storage; material handling; refuse storage or disposal; the application or disposal of processed wastewaters; storage and maintenance of material handling equipment; treatment, storage or disposal of residuals; outdoor shipping and receiving; activities in manufacturing buildings; storage of raw materials and intermediate and finished products; and the ownership, use or control of areas

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where significant industrial activity has taken place in the past and significant materials remain and are exposed to storm water. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product.

"Industrial discharger" means a discharger who operates a regulated industrial facility.

"Industrial storm water permit" means the State General Industrial Storm Water Permit.

"Infiltration" means the process of percolating storm water or non-storm water into the soil.

"Infiltration BMPs or infiltration facility" means any structural treatment BMP designed primarily to percolate water into the subsurface, such as an infiltration trench or infiltration basin. An infiltration facility may include filtering prior to or during infiltration. BMPs that infiltrate some water but which are designed primarily to retain water or to treat water, such as retention basins, constructed wetlands, or filtering swales are not infiltration facilities.

"Land development activity" means any activity or proposed activity that requires any of the permits or approvals listed in Section 13.10.040(F) of this chapter.

"Land disturbance activity" means any activity that moves soils or substantially alters the pre-existing vegetated or man-made cover of any land. This includes, but is not limited to, grading, digging, cutting, scraping, stockpiling or excavating of soil; placement of fill materials; paving, pavement removal, exterior construction; substantial removal of vegetation where soils are disturbed including, but not limited to, removal by clearing or grubbing; or any activity which bares soil or rock or involves streambed alterations or the diversion or piping of any watercourse. Land disturbance activity does not include routine maintenance to maintain original line and grade, hydraulic capacity, or the original purpose of the facility, nor does it include emergency construction activities (i.e., land disturbances) required to protect public health and safety.

"Land owner" means the holder of legal title to the land, and other persons or entities who exercise control over a land development project pursuant to rights granted in a purchase agreement, joint venture agreement, development agreement, or long-term lease.

"Maintenance of a BMP" means periodic action taken to maintain the as-designed performance of a BMP, and includes, but is not limited to, repairs to the BMP as necessary, and replacement of the BMP by an equally effective or more

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effective BMP at the end of its useful life.

"Manual" means the city's best management practices described in Appendix C of the city's jurisdictional urban runoff management program, adopted by resolution and hereinafter referred to as "Manual".

"Maximum extent practicable (MEP)" means the technology-based standard established by Congress in the Clean Water Act 402(p)(3)(B)(iii) that municipal dischargers of urban runoff must meet. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional lines of defense).

"Motor vehicle" means any automobile, car, truck, bus, motor home or other self-propelled vehicle used or suited to use for on-road transportation; and any similar vehicle modified for off-road use.

"Municipal facility" means a facility owned or operated by the city of El Cajon that is used for a governmental purpose. Facilities or municipally owned land that are leased or rented to others to generate municipal revenues are not municipal facilities. The commercial or industrial lessees of such facilities may, however, be subject to this chapter as commercial dischargers or industrial dischargers.

"New development" means land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces; and land subdivision.

"NPDES Permit" means a National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency, the SWRCB, or the RWQCB.

"NPDES Permit No. CAS 0108758" means RWQCB Order No. 2001-01, NPDES Permit No. CAS 0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District.

"Parking lot" means land area or facility for the temporary parking or storage of motor vehicles used personally, or for business or commerce.

"Pollutant" means any agent introduced to storm water or non-storm water through human activity that may cause or contribute to the degradation of water quality such that public health, the environment, or beneficial uses of waters may be affected. The term may include, but is not limited to, dredged soil, rock, sand, or silt (excluding sediment, silt, or substances in quantities which would enter

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storm water from a natural undeveloped watershed); solid waste, sewage, garbage, or medical waste; wrecked or discarded equipment; radioactive materials; industrial waste; fecal coliform, fecal streptococcus, and enterococcus bacteria and other pathogens that pose a threat to human health; volatile organic carbon, surfactants, oil and grease, petroleum hydrocarbons, total organic carbon, lead, copper, chromium, cadmium, silver, nickel, zinc, cyanides, phenols, and biocides; and any contaminant which can significantly degrade the quality of receiving waters by altering pH, total suspended or settleable solids, biochemical oxygen demand, chemical oxygen demand, nutrients, or temperature.

"Projects discharging to receiving waters within environmentally sensitive areas" means all development and significant redevelopment that would create 2,500 square feet of impervious surfaces or increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition, and either discharge urban runoff to a receiving water within an environmentally sensitive area (where any portion of the project footprint is located within 200 feet of the environmentally sensitive area), or discharge to a receiving water within an environmentally sensitive area without mixing with flows from adjacent lands (where the project footprint is located more than 200 feet from the environmentally sensitive area).

"Project footprint" means the limits of all grading and ground disturbance, including landscaping, associated with a project.

"Rainy season" means from October 1 through April 30.

"Receiving waters" means surface bodies of water, which directly or indirectly receive discharges from urban runoff conveyance systems, including naturally occurring wetlands, streams (perennial, intermittent, and ephemeral (exhibiting bed, bank, and ordinary high water mark)), creeks, rivers, reservoirs, lakes, lagoons, estuaries, harbors, bays and the Pacific Ocean. The City, by implementing policies, shall determine the definition for wetlands and the limits thereof for the purposes of this definition, provided the City definition is as protective as the Federal definition utilized by the United States Army Corps of Engineers and the United States Environmental Protection Agency. Constructed wetlands are not considered wetlands under this definition, unless the wetlands were constructed as mitigation for habitat loss. Other constructed BMPs are not considered receiving waters under this definition, unless the BMP was originally constructed in receiving waters.

BMPs constructed in "receiving waters" may be used to satisfy SUSMP requirements if but only if the City approves that use.

"Redevelopment" means any construction, alteration or improvement at an already developed site that will increase the total impervious surface area of that site, or that involves activities that could expose contaminants to rainfall.

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Redevelopment can include, but is not limited to, the expansion of building footprints, the addition or replacement of a structure, exterior construction and remodeling, replacement of existing impervious surfaces that are not part of a routine maintenance activity, and other activities that create additional impervious surface.

"Regulated commercial facility" means all non-residential facilities engaged in business or commerce, whether for profit or not-for-profit, or publicly or privately owned, except for regulated industrial facilities and municipal facilities; plus residences used for commercial repair, maintenance, cleaning, manufacturing, food preparation or painting activity if that activity has the potential to result in the discharge of non-storm water or the discharge of pollutants to storm water.

"Regulated industrial facility" means any facility subject to the State General Industrial Storm Water Permit; any other facility primarily engaged in manufacturing, processing, storage or handling of raw materials, processed bulk materials, or refuse; and any other facility with a total outdoor uncovered area of more than two acres that is used for an industrial activity. Municipal facilities are not regulated industrial facilities, unless they are subject to the State General Industrial Storm Water Permit.

"Residential development" means any development on private land that provides living accommodations for one or more persons. This category includes, but is not limited to: single-family homes, multi-family homes, condominiums, and apartments.

"Residential discharger" means, for an occupied residence, the occupants; and for a vacant residence, the owner and the manager of the residence.

"Restaurant" means, for the purposes of this Chapter, a stand-alone facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption.

"RWQCB" means the regional water quality control board for the San Diego region.

"Significant redevelopment" means development that would create or add at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to: the expansion of a building footprint; addition to or replacement of a structure; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing

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underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and replacement of damaged pavement.

"Site design BMP" means any project design feature that reduces the creation or severity of potential pollutant sources or reduces the alteration of the project site's natural flow regime. Redevelopment projects that are undertaken to remove pollutant sources (such as existing surface parking lots and other impervious surfaces) or to reduce the need for new roads and other impervious surfaces (as compared to conventional or low-density new development) by incorporating higher densities and/or mixed land uses into the project design, are also considered site design BMPs.

"Source control BMP (both structural and non-structural)" means land use or site planning practices, or structures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff. Examples include roof structures over trash or material storage areas, and berms around fuel dispensing areas.

"Standard urban storm water mitigation plan" means a plan designed to reduce pollutants and runoff flows from new development and significant redevelopment.

"State general construction storm water permit" means NPDES Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities, and any amendments thereto.

"State general industrial storm water permit" means NPDES Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities, and any amendments thereto.

"Stop work order" means an order issued which requires that specifically identified activity or all activity on a site be stopped.

"Storm water" means surface runoff and drainage associated with storm events.

"Storm water best management practice BMP)" means any schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, structural treatment BMPs, and other management practices to prevent or reduce to the maximum extent practicable the discharge of pollutants directly or indirectly to receiving waters. Storm Water BMPs also include treatment

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requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. This SUSMP groups storm water BMPs into the following categories: site design, source control, and treatment control (pollutant removal) BMPs.

"Storm water conveyance system" means private and public drainage facilities other than sanitary sewers within the city of El Cajon by which urban run-off may be conveyed to receiving waters, and includes, but is not limited to, roads, streets, constructed channels, aqueducts, storm drains, pipes, street gutters, inlets to storm drains, pipes, or catch basins.

"Storm water management" means the use of structural or non-structural BMPs that are designed to reduce urban run-off pollutant loads, discharge volumes, and/or peak discharge flow rates or velocities. When applied to the city or another municipality, storm water management also includes planning and programmatic measures.

"Storm water management plan" means a plan, submitted on a city form or in a city-specific format in connection with an application for a city permit or other city approval, identifying the measures that will be used for storm water and non-storm water management during the permitted activity.

"Storm water pollution prevention plan" means a document (other than a storm water management plan), which meets the requirements for a SWPPP set out in the State General Construction Storm Water Permit or the State General Industrial Storm Water Permit. A SWPPP submitted to the City must describe the BMPs to be implemented and other steps to be taken by the discharger to meet the requirements of this chapter.

"Storm water retrofit" means a storm water management BMP designed for an existing development site or activity that previously had either no storm water management BMPs in place or that relied on BMPs inadequate to meet the storm water management requirements of the site or activity.

"Streets, roads, alleys, highways, and freeways", for the purposes of this Chapter, means any project that is not part of a routine maintenance activity, and would create a new paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles and other vehicles. For the purposes of SUSMP requirements, Streets, Roads, Highways and Freeways do not include trenching and resurfacing associated with utility work; applying asphalt overlay to existing pavement; new sidewalk, pedestrian ramps, or bike lane construction on existing roads; and replacement of damaged pavement.

"Structural BMP" means a BMP that relies on either a physical condition, other than an entirely natural and undisturbed condition, or on a constructed or installed device to reduce or prevent pollutants in storm water discharges and

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authorized non-storm water discharges. Constructed or enhanced BMPs that depend on natural materials and processes (e.g., constructed drainage swales or buffers, or constructed wetlands) and that require period maintenance to function as designed, are structural BMPs.

"Structural post-construction BMP" means a structural BMP, other than a temporary construction-related BMP, put in place in connection with a land development or redevelopment project to prevent or reduce contamination in storm water or receiving waters, or to prevent or reduce erosion downstream from the project.

"SUSMP" means standard urban storm water mitigation plan.

"SWPPP" means storm water pollution prevention plan.

"SWRCB" means the State Water Resources Control Board.

"Treatment control (structural) BMP" means any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

"Tributary to an impaired water body" means a facility or activity is tributary to an impaired water body if urban runoff from that facility or activity enters: (1) the storm water conveyance system at a place and in a manner that will carry pollutants for which that water body is impaired in that discharge to the impaired water; (2) a flowing stream that will carry pollutants for which that water body is impaired in that discharge to the impaired water; or (3) an ephemeral stream that reaches the impaired water during storm events and that will carry pollutants for which that water body is impaired from the facility or activity to the impaired water body during such storm events.

"Urban run-off" means all flows in a storm water conveyance system in the city other than point source discharges in violation of a site-specific NPDES permit. Urban run-off includes, but is not limited to, storm water, exempt non-storm water discharges, and illicit discharges.

"Water main" means a potable or recycled water delivery line greater than or equal to four inches in diameter.

"Watercourse" means a permanent or intermittent stream or other body of water, either natural or improved, which gathers or carries surface water.

"Water qualify standards" are defined as the beneficial uses (e.g., swimming, fishing, municipal drinking water supply, etc.) of water and the water

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quality objectives adopted by the State or the United States Environmental Protection Agency to protect those uses.

"Waters of the United States" means water subject to the regulatory jurisdiction of the United States under the Federal Clean Water Act and applicable case law. In general, this includes "navigable" waters, waters tributary to "navigable" waters, and adjacent wetlands.

Section 3: Chapters 16.100, 16.101, 16.102, 16.103, 16.104, 16.105, 16.106, 16.107, 16.108 of the El Cajon Municipal Code are hereby added to read as follows:

Chapter 16.100

GENERAL PROVISIONS

Sections:

16.100.010	**Title.**
16.100.020	**Statutory Authority.**
16.100.030	**Purpose.**
16.100.040	**Applicability of Division.**
16.100.050	**Limited Exclusion.**

16.100.010 Title.

The ordinance codified in this chapter shall be known as the "standard urban storm water mitigation plan (SUSUMP) ordinance of the City of El Cajon."

16.100.020 Statutory Authority.

A. The municipal storm water National Pollutant Discharge Elimination System (NPDES) permit (Order No. 2001-01, NPDES No. CAS0108758, hereinafter referred to as "Municipal Permit") issued to San Diego County, the Port of San Diego, and 18 cities by the San Diego Regional Water Quality Control Board (Regional Board) on February 21, 2001, requires the development and implementation of a program addressing urban runoff pollution issues in development planning for public and private projects.

B. The requirement to implement a program for development planning is based on federal and state statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA"), and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The Municipal Permit requires the implementation of a Jurisdictional Urban Runoff Management Program (JURMP), which has been adopted by the City of El Cajon on February 12, 2002, as amended

16.100.030 Purpose.

A. The primary objectives of this division are to:

1. Ensure that discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards;

2. Effectively prohibit non-storm water discharges in urban runoff; and

3. Reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

B. The regulations of this division were developed to address post-construction urban runoff pollution from new development and redevelopment applications that fall under "priority project" categories. The goal of this division is to develop and implement practicable policies to ensure to the maximum extent practicable that development does not increase pollutant loads from a project site and considers urban runoff flow rates and velocities. This goal may be achieved through site-specific controls and/or drainage area-based or shared structural treatment controls.

16.100.040 Applicability of Chapter

The regulations set forth is this chapter shall apply to the development plan approval process for discretionary development applications, and prior to issuing development permits for ministerial projects. To allow flexibility in meeting the design standards set forth in this division, structural treatment control BMPs may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided

certain conditions are met. All new development and significant redevelopment projects that fall into one of the following "priority project" categories are subject the requirements of this division, subject to the lawful prior approval provisions of the Municipal Permit. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project footprint is subject to the requirements of this division. These categories are:

- Residential development of 100 units or more
- Residential development of 10 to 99 units
- Commercial development greater than 100,000 square feet
- Automotive repair shops
- Restaurants
- Hillside development greater than 5,000 square feet
- Projects discharging to receiving waters within Environmentally Sensitive Areas
- Parking Lots > 5,000 square feet or with > 15 parking spaces and potentially exposed to urban runoff
- Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater.

16.100.050 Limited Exclusion.

Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are subject to the requirements of this division if one or more of the criteria for the above categories are met.

16.100.60 Applicability of Chapter 13.10.

The provisions of Chapter 13.10 (Storm Water Management and Discharge Control), including the definitions and enforcement provisions, shall be applicable to this Chapter as though fully set forth herein.

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Chapter 16.101

ADMINISTRATION

Sections:

16.101.010	**Limitations.**
16.101.020	**Provisions for SUSUMP Requirements.**
16.101.030	**Implementation.**
16.101.040	**Site Design Storm Water Treatment Credits.**

16.101.010 Limitations

Where requirements of this division conflict with established local codes, (e.g., specific language of signage used on storm drain stenciling), the City Council may continue the local practice and modify this division to be consistent with the code, except that to the extent that the standards in this division are more stringent than those under local codes, such more stringent standards shall apply.

16.101.020 Provisions for SUSUMP Requirements

The requirements of this division shall be incorporated into the project design and shown on the plans prior to approval of discretionary permits. For projects requiring only ministerial permits, the requirements of this division shall be incorporated into the project design and shown on the plans prior to the issuance of any ministerial permits. City departments carrying out public projects that are not required to obtain permits shall be responsible for ensuring the requirements of this division are incorporated into the project design and shown on the plans prior to bidding for construction contracts, or equivalent. For public projects the requirements of this division must be incorporated into the project design and shown on the plans before allowing the project to commence.

16.101.030 Implementation

All priority projects shall implement one or a combination of storm water BMPs, including, 1) site design BMPs, 2) source control BMPs and, 3) structural treatment BMPs after the pollutants and conditions of concern have been identified. Storm water BMPs shall be considered and implemented where expressly required by this division and if not so required where determined applicable and feasible by the Director of Public Works. It is recommended that the U.S. Environmental Protection Agency's "Preliminary Data Summary of Urban Runoff Best Management Practices" (August 1999, EPA-821-R-99-012) be used as a guide. The storm water BMPs shall adhere to the requirements of this division, and

shall be correctly designed so as to remove pollutants to the maximum extent practicable. A flow chart summarizing the storm water BMP selection procedure is provided in Figure 1.

16.101.040 Site Design Storm Water Treatment Credits

Project proponents may develop and submit for public review and comment and City Council approval a regional Model Site Design Storm Water Treatment Credits program that allows reductions in the volume or flow of storm water that must be captured or treated on a project in return for the inclusion of specified project design features in the project. The Model Site Design Storm Water Treatment Credits program shall be deemed to be a part of this division following City Council approval. Any such model program shall specify the conditions under which project proponents can be credited for the use of site design features and low impact development techniques that can reduce the volume of storm water runoff, preserve natural areas, and minimize the pollutant loads generated and potentially discharged from the site. Any Site Design Storm Water Treatment Credits program implemented shall be consistent and compliant with this division and approved by the City Council.

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Figure 1. Storm Water BMP Selection Procedure Flow Chart

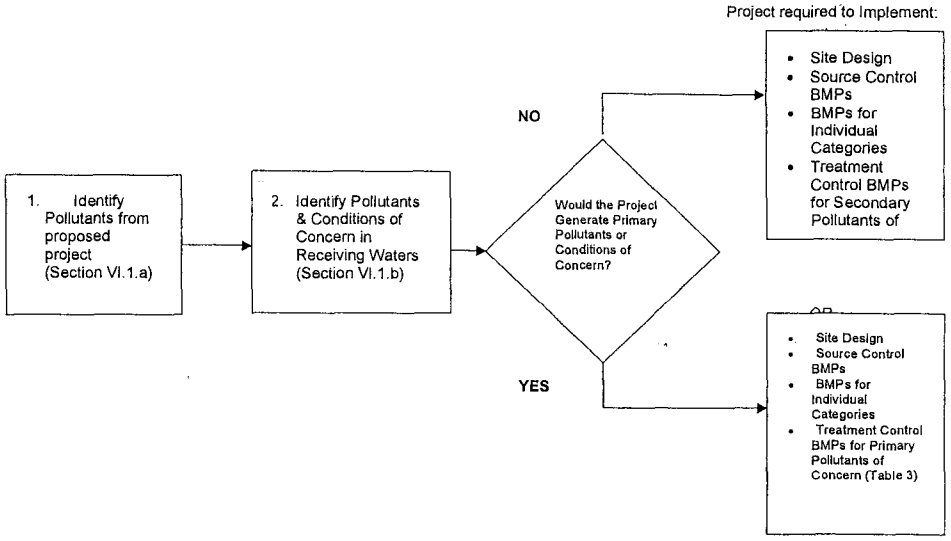

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Chapter 16.102

IDENTIFICATION OF POLLUTANTS AND CONDITIONS OF CONCERNS

Sections:

16.102.010 Identifying Pollutants and Conditions of Concern.
16.102.020 General Categories of Water Pollution.
16.102.030 Identifying Pollutants from the Project Area.
16.102.040 Identifying Pollutants of Concern.
16.102.050 Identifying Conditions of Concern.

16.102.010 Identifying Pollutants and Conditions of Concern.

A. Priority project proponents shall use this guidance to identify pollutants and conditions of concern, for which they need to mitigate or protect against. Site design and source control BMPs are required based on pollutants commonly associated with the proposed project type (see Table 2, "Standard Storm Water BMP Selection Matrix"). Treatment Control BMPs are also required for the project's expected pollutants of concern (see Table 3).

B. For private priority projects, the information shall be provided with the project application prior to being deemed complete.

C. For public priority projects, the information shall be provided by the Director of Public Works prior to bidding for construction contracts.

16.102.020 General Categories of Water Pollution

A. Sediments – Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

B. Nutrients – Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

C. Metals – Metals are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary source of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

D. Organic Compounds – Organic compounds are carbon-based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.

E. Trash & Debris – Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable

organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfides.

F. Oxygen-Demanding Substances – This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

G. Oil and Grease – Oil and grease are characterized as high-molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

H. Bacteria and Viruses – Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

I. Pesticides – Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

16.102.030 Identifying Pollutants from the Project Area.

Using Table 1, pollutants shall be identified that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

16.102.040 Identifying Pollutants of Concern.

A. Pollutants generated by the proposed priority project that exhibit one or more of the following characteristics are considered primary pollutants of concern:

- Current loadings or historical deposits of the pollutant are impairing the beneficial uses of a receiving water;
- Elevated levels of the pollutant are found in water or sediments of a receiving water and/or have the potential to be toxic to or bioaccumulate in organisms therein; and
- Inputs of the pollutant are at a level high enough to be considered potentially toxic.

B. To identify primary pollutants of concern in receiving waters, each priority project shall, at a minimum, do the following:

1. For each of the proposed projects discharge points, identify the receiving water(s) that each discharge point

proposes to discharge to, including hydrologic unit basin number(s), as identified in the most recent version of the *Water Quality Control Plan for the San Diego Basin*, prepared by the San Diego Regional Water Quality Control Board.

2. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies. List any and all pollutants for which the receiving waters are impaired.

3. Compare the list of pollutants for which the receiving waters are impaired with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing impairment of receiving waters shall be considered primary pollutants of concern.

For projects where no primary pollutants of concern exist, those pollutants identified through the use of Table 1 shall be considered secondary pollutants of concern.

16.102.050 Identifying Conditions of Concern.

Common impacts to the hydrologic regime resulting from development typically include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. These changes have the potential to permanently impact downstream channels and habitat integrity. A change to a priority project site's hydrologic regime would be considered a condition of concern if the change would impact downstream channels and habitat integrity. Because of these potential impacts, the following steps shall be followed by each priority project:

1. Evaluate the project's conditions of concern in a drainage study report prepared by a registered civil engineer in the State of California, with experience in fluvial geomorphology and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed.

2. As part of the drainage study, the civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of an altered flow regime.

3. The drainage study shall compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rate, flow velocity, runoff volume, time of concentration, and retention volume. These characteristics shall be developed for the two-year and 10-year frequency, Type I storm, of six-hour or 24-hour duration (whichever is the closer approximation of the site's time of concentration), during critical hydrologic conditions for soil and vegetative cover[1]. The drainage study shall report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions affecting downstream conditions of concern would be maintained by the proposed project, satisfactory to the Director of Public Works, by incorporating the site design, source control, and treatment control requirements identified in this division.

[1]. Design storms can be found at http://www.wrcc.dri.edu/pcpnfreq.html. Applicants may calculate the storm events using local rain data. In addition, isopluvial maps contained in the County of San Diego Hydrology Manual may be used to extrapolate rainfall data to areas where insufficient data exists. If isopluvial maps are used interpolations shall be linear.

Table 1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >100,000 ft²	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft²	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

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Chapter 16.103

ESTABLISHMENT OF STORM WATER BMPS

Sections:

16.103.010 Progression of Storm Water BMPs.
16.103.020 Requirements to Implement Storm Water BMPs.
16.103.030 Selection of Storm Water BMPs.
16.103.040 Storm Water BMPs for Projects Not Generating Pollutants.
16.103.050 Storm Water BMPs for Projects Generating Primary and Secondary Pollutants.
16.103.060 Alternative Storm Water BMPs.

16.103.010 Progression of Storm Water BMPs.

Site design BMPs reduce the need for source and/or treatment control BMPs, and source control BMPs may reduce the amount of treatment control BMPs needed. Throughout all the following sections, all priority projects shall consider, and incorporate and implement where expressly required by this division and if not so required where determined applicable and feasible by the Director of Public Works, storm water BMPs into the project design, in the following progression:

- Site Design BMPs
- Source Control BMPs
- Treatment Control BMPs

16.103.020 Requirements to Implement Storm Water BMPs.

At a minimum, priority projects must implement source control BMPs, and must implement treatment control BMPs unless a waiver is granted based on the infeasibility of all treatment control BMPs. BMPs must also achieve certain performance standards set out in the municipal permit section F.2.(b) (i to xiv). Selection of BMPs from the menus included in this division, using the rules set out in this division, must fulfill these requirements. In addition, runoff treated by site design or source control BMPs, such as rooftop runoff treated in landscaping, may be useful in reducing the quantity of runoff required to be treated in, "Treatment Control BMPs."

16.103.030 Selection of Storm Water BMPs.

Using the Treatment Control BMP Selection Matrix, each priority project shall select a structural treatment BMP by comparing the list of pollutants for which the downstream receiving waters are impaired (if any), with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing a Clean Water Act section 303(d) impairment of the receiving waters of the project shall be considered primary pollutants of concern. Priority projects that are anticipated to generate a primary pollutant of concern shall meet all applicable requirements of establishing stormwater BMPs, and shall select a single or combination of storm water BMPs from Table 3 which maximizes pollutant removal for the particular primary pollutant(s) of concern.

16.103.040 Storm Water BMPs for Projects Not Generating Pollutants.

Priority projects that are not anticipated to generate a pollutant for which the receiving water is Clean Water Act Section 303(d) impaired shall meet applicable standard requirements of establishing stormwater BMPs, and shall select a single or combination of storm water BMPs from Table 3 which are effective for pollutant removal of the identified secondary pollutants of concern, consistent with the "maximum extent practicable" standard defined in Attachment D of the Municipal Permit.

16.103.050 Storm Water BMPs for Projects Generating Primary and Secondary Pollutants.

Where a site generates both primary and secondary pollutants of concern, primary pollutants of concern receive priority for BMP selection. For such sites, selected BMPs must only maximize pollutant removal for the primary pollutants of concern. Where a site generates only secondary pollutants of concern, selected BMPs shall target the secondary pollutant of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 1), consistent with the maximum extent practicable standard defined in Attachment D of the Municipal Permit.

16.103.060 Alternative Storm Water BMPs.

Alternative storm water BMPs not identified in Table 3 may be approved at the discretion of the Director of Public Works, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 3.

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Table 2. Site Design and Source Control Storm Water BMP Selection Matrix.

Priority Project Category	*Site Design BMPs(1)*	*Source Control BMPs(2)*	*Requirements Applicable to Individual Priority Project Categories(3)*										
			a. Private Roads	b. Residential Driveways & Guest Parking	c. Dock Areas	d. Maintenance Bays	e. Vehicle Wash Areas	f. Outdoor Processing Areas	g. Equipment Wash Areas	h. Parking Areas	i. Roadways	j. Fueling Areas	k. Hillside Landscaping
Detached Residential Development	R	R	R	R									R
Attached Residential Development	R	R	R										
Commercial Development >100,000 ft^2	R	R			R	R	R	R					
Automotive Repair Shop	R	R			R	R	R		R			R	
Restaurants	R	R			R				R				
Hillside Development >5,000 ft^2	R	R	R										R
Parking Lots	R	R								R(4)			
Streets, Highways & Freeways	R	R									R		

R = Required; select BMPs as required from the applicable steps in Section VI.2.a & b, or equivalent as identified in Appendix A.
(1) Refer to Section VI.2.a.
(2) Refer to Section VI.2.b.
(3) Priority project categories must apply specific storm water BMP requirements, where applicable. Projects are subject to the requirements of all priority project categories that apply.
(4) Applies if the paved area totals >5,000 square feet or with >15 parking spaces and is potentially exposed to urban runoff.

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Table 3. Treatment Control BMP Selection Matrix

Pollutant of Concern	*Treatment Control BMP Categories*						
	Biofilters	Detention Basins	Infiltration Basins(1)	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separator Systems(2)
Sediment	M	H	H	H	L	H	M
Nutrients	L	M	M	M	L	M	L
Heavy Metals	M	M	M	H	L	H	L
Organic Compounds	U	U	U	U	L	M	L
Trash & Debris	L	H	U	U	M	H	M
Oxygen Demanding Substances	L	M	M	M	L	M	L
Bacteria	U	U	H	U	L	M	L
Oil & Grease	M	M	U	U	L	H	L
Pesticides	U	U	U	U	L	U	L

(1) Including trenches and porous pavement.
(2) Also known as hydrodynamic devices and baffle boxes.

L: Low removal efficiency
M: Medium removal efficiency
H: High removal efficiency
U: Unknown removal efficiency

Sources: *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (1993), *National Stormwater Best Management Practices Database* (2001), and *Guide for BMP Selection in Urban Developed Areas* (2001).

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Chapter 16.104
SITE DESIGN BMPS

Sections:

16.104.010 Site Design BMPs Objectives.
16.104.020 Maintaining Pre-Development Rainfall Runoff Characteristics.
16.104.030 Protection of Slopes and Channels.

16.104.010 Site Design BMPs Objectives.

A. Priority projects shall be designed so as to minimize, to the maximum extent practicable, the introduction of pollutants and conditions of concern that may result in significant impacts, generated from site runoff to the storm water conveyance system. Priority projects shall also control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat. Although not mandatory, priority projects can address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Mimicking a site's natural hydrologic regime can be pursued by:

- Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the storm water conveyance system, and minimizing clearing and grading.
- Providing runoff storage measures dispersed uniformly throughout a site's landscape with the use of a variety of detention, retention, and runoff practices.
- Implementing on-lot hydrologically functional landscape design and management practices.

B. Site design BMPs shall offer an innovative approach to urban storm water management, that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates storm water controls throughout the urban landscape.

16.104.020 Maintaining Pre-Development Rainfall Runoff Characteristics.

A. Priority projects shall control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. In addition, projects should control runoff discharge volumes and durations to the maximum extent practicable using the site design, source control, and treatment control requirements.

B. Design Concept 1: Minimize Project's Impervious Footprint & Conserve Natural Areas. The following site design options shall be considered and, incorporated and implemented where determined applicable and feasible by the Director of Public Works, during the site planning and approval process, consistent with applicable General Plan policies and other development regulations.

1. Minimize impervious footprint. This can be achieved in various ways, including, but not limited to increasing building density (number of stories above or below ground) and developing land use regulations seeking to limit impervious surfaces. Decreasing the project's footprint can substantially reduce the project's impacts to water quality and hydrologic conditions.

2. Conserve natural areas where feasible. This can be achieved by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition. The following list provides a guideline for determining the least sensitive portions of the site, in order of increasing sensitivity. Jurisdictions should also refer to their Multiple Species Conservation Plans or other biological regulations, as appropriate.

a. Areas devoid of vegetation, including previously graded areas and agricultural fields.
b. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands.
c. Areas of chamise or mixed chaparral, and non-native grasslands.
d. Areas containing coastal scrub communities.
e. All other upland communities.
f. Occupied habitat of sensitive species and all wetlands.
g. All areas necessary to maintain the viability of wildlife corridors. Within each of the previous categories, areas containing hillsides should be considered more sensitive than the same category without hillsides.

3. Construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials.

4. Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.

5. Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.

6. Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.

7. Use natural drainage systems to the maximum extent practicable.

8. Other site design options that are comparable, and equally effective.

Design Concept 2: Minimize Directly Connected Impervious Areas (DCIAs)

Priority projects shall consider, and incorporate and implement the following design characteristics, where determined applicable and feasible by the Director of Public Works.

1. Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.

2. Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.

3. Other design characteristics that are comparable and equally effective.

16.104.030 Protection of Slopes and Channels.

Project plans shall include storm water BMPs to decrease the potential for erosion of slopes and/or channels, consistent with local codes and ordinances and with the approval of all agencies with jurisdiction, e.g., the U.S. Army Corps of Engineers, the San Diego Regional Water Quality Control Board, and the California Department of Fish and Game. The following design principles shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

1. Convey runoff safely from the tops of slopes.

2. Vegetate slopes with native or drought tolerant vegetation.

3. Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.

4. Stabilize permanent channel crossings.

5. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.

6. Other design principles that are comparable and equally effective.

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Chapter 16.105

SOURCE CONTROL BMPS

Sections:

16.105.010 Providing Storm Drain System Stenciling and Signage.
16.105.020 Designing Outdoor Material Storage Areas to Reduce Pollution Introduction.
16.105.030 Designing Trash Storage Areas to Reduce Pollution Introduction.
16.105.040 Using Efficient Irrigation Systems and Landscape Design.
16.105.050 Incorporate Requirements Applicable to Individual Priority Project Categories.

16.105.010 Providing Storm Drain System Stenciling and Signage.

Storm drain stencils are highly visible source control messages, typically placed directly adjacent to storm drain inlets. The stencils contain a brief statement that prohibits the dumping of improper materials into the urban runoff conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. Priority projects shall include the following requirements in the project design.

A. Provide stenciling or labeling of all storm drain inlets and catch basins within the project area with prohibitive language (such as: "NO DUMPING – I LIVE IN <<name receiving water>>") and/or graphical icons to discourage illegal dumping.

B. Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

C. Maintain legibility of stencils and signs.

16.105.020 Designing Outdoor Material Storage Areas to Reduce Pollution Introduction.

Improper storage of materials outdoors may increase the potential for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the urban runoff conveyance system. Where the priority project plans include outdoor areas for storage of hazardous materials that may contribute pollutants to the urban runoff conveyance system, the following storm water BMPs are required:

A. Hazardous materials with the potential to contaminate urban runoff shall either be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

B. The storage area shall be paved and sufficiently impervious to contain leaks and spills.

C. The storage area shall have a roof or awning to minimize direct precipitation within the secondary containment area.

16.105.030 Designing Trash Storage Areas to Reduce Pollution Introduction.

All trash container areas shall meet the following requirements (limited exclusion: detached residential homes):

A. Paved with an impervious surface, designed not to allow run-on from adjoining areas, screened or walled to prevent off-site transport of trash; and

B. Provide attached lids on all trash containers that exclude rain, or roof or awning to minimize direct precipitation.

16.105.040 Using Efficient Irrigation Systems and Landscape Design.

Priority projects shall design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water conveyance system. (Limited exclusion: detached residential homes.) The following methods to reduce excessive irrigation runoff shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

A. Employing rain shutoff devices to prevent irrigation after precipitation.

B. Designing irrigation systems to each landscape area's specific water requirements.

C. Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.

D. Employing other comparable, equally effective, methods to reduce irrigation water runoff.

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16.105.050 Incorporate Requirements Applicable to Individual Priority Project Categories.

Where identified in Table 2, the following requirements shall be incorporated into applicable priority projects during the storm water BMP selection and design process. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for " g. Equipment Wash Areas and "h. Parking Areas" into the project design).

A. Private Roads- The design of private roadway drainage shall use at least one of the following:

1. Rural swale system: street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings;

2. Urban curb/swale system: street slopes to curb, periodic swale inlets drain to vegetated swale/biofilter;

3. Dual drainage system: First flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder, high flows connect directly to storm water conveyance system.

4. Other methods that are comparable and equally effective within the project.

B. Residential Driveways & Guest Parking. The design of driveways and private residential parking areas shall use one at least of the following features.

1. Design driveways with shared access, flared (single lane at street) or wheelstrips (paving only under tires); or, drain into landscaping prior to discharging to the storm water conveyance system.

2. Uncovered temporary or guest parking on private residential lots may be: paved with a permeable surface; or, designed to drain into landscaping prior to discharging to the storm water conveyance system.

3. Other features which are comparable and equally effective.

C. Dock Areas. Loading/unloading dock areas shall include the following:

1. Cover loading dock areas, or design drainage to preclude urban run-on and runoff.

2. Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

3. Other features which are comparable and equally effective.

D. Maintenance Bays. Maintenance bays shall include the following:

1. Repair/maintenance bays shall be indoors; or, designed to preclude urban run-on and runoff; and

2. Design a repair/maintenance bay drainage system to capture all wash water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit, or

3. Other features which are comparable and equally effective.

E. Vehicle Wash Areas. Priority projects that include areas for washing/steam cleaning of vehicles shall use the following:

1. Self-contained; or covered with a roof or overhang;

2. Equipped with a clarifier or other pretreatment facility;

3. Properly connected to a sanitary sewer.

4. Other features which are comparable and equally effective.

F. Outdoor Processing Areas. Outdoor process equipment operations, such as rock grinding or crushing, painting or coating, grinding or sanding, degreasing or parts cleaning, landfills, waste piles, and wastewater and solid waste treatment and disposal, and other operations determined to be a potential threat to water quality by the Copermittee shall adhere to the following requirements.

1. Cover or enclose areas that would be the most significant source of pollutants; or, slope the area toward a dead-end sump; or, discharge to the sanitary sewer system following appropriate treatment in accordance with conditions established by the applicable sewer agency.

2 Grade or berm area to prevent run-on from surrounding areas.

3. Installation of storm drains in areas of equipment repair is prohibited.

4. Other features which are comparable or equally effective.

G. Equipment Wash Areas. Outdoor equipment/accessory washing and steam cleaning activities at priority projects shall use the following:

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1. Be self-contained; or covered with a roof or overhang;

2. Be equipped with a clarifier, grease trap or other pretreatment facility, as appropriate;

3. Properly connected to a sanitary sewer.

4. Other features which are comparable or equally effective.

H. Parking Areas. To minimize the offsite transport of pollutants from parking areas, the following design concepts shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

1. Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design.

2. Overflow parking (parking stalls provided in excess of the City's minimum parking requirements) may be constructed with permeable paving.

3. Other design concepts that are comparable and equally effective.

I. Roadways. Priority roadway projects shall select treatment control BMPs following the treatment control selection procedure identified in this division entitled, "Establishing Storm Water BMPs."

J. Fueling Area. Non-retail fuel dispensing areas shall contain the following:

1. Overhanging roof structure or canopy. The cover's minimum dimensions must be equal to or greater than the area within the grade break. The cover must not drain onto the fuel dispensing area and the downspouts must be routed to prevent drainage across the fueling area. The fueling area shall drain to the project's treatment control BMP(s) prior to discharging to the storm water conveyance system.

2. Paved with Portland cement concrete (or equivalent smooth impervious surface). The use of asphalt concrete shall be prohibited.

3. Have an appropriate slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of urban runoff.

4. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.

K. Hillside Landscaping. Hillside areas that are disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, satisfactory to the Director of Public Works.

Chapter 16.106

TREATMENT CONTROL BMPS

Sections:

16.106.010 Treatment Control BMPs Objectives.
16.106.020 Design to Treatment Control BMPs Standards.
16.106.030 Volume Based BMPs.
16.106.040 Flow Based BMPs.
16.106.050 Limited Exclusions.
16.106.060 Locating BMPs Near Pollutant Sources.
16.106.070 Restrictions on Use of Infiltration BMPs.

16.106.010 Treatment Control BMPs Objectives.

A. Minimizing a development's detrimental effects on water quality can be most effectively achieved through the use of a combination of site design, source and treatment control storm water BMPs. Where projects have been designed to minimize, to the maximum extent practicable, the introduction of anticipated pollutants of concern that may result in significant impacts to the receiving waters through the implementation of site design and source control storm water BMPs, the development would still have the potential for pollutants of concern to enter the storm water conveyance system. Therefore, priority projects shall be designed to remove pollutants of concern from the storm water conveyance system to the maximum extent practicable through the incorporation and implementation of treatment control BMPs.

B. In meeting the requirements in this section, priority projects shall implement a single or combination of storm water BMPs that will remove anticipated pollutants of concern, as identified by the procedure of this division, in site runoff to the maximum extent practicable. Treatment control BMPs must be implemented unless a waiver is granted to the project by the Director of Public Works based on the infeasibility of any treatment control BMP.

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16.106.020 Design to Treatment Control BMPs Standards.

All priority projects shall design, construct and implement structural treatment control BMPs that meet the design standards of this section, unless specifically exempted by the limited exclusions. Structural treatment control BMPs required by this section shall be operational prior to the use of any dependent development, and shall be located and designed in accordance with the requirements of this division.

16.106.030 Structural Treatment Control Volume Based BMPs.

Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

- Volume of runoff produced from a 24-hour 85th percentile storm event, as determined from isoplovial maps contained in the County of San Diego Hydrology Manual. See County of San Diego's Isoplovial map at http://www..sdcounty.ca.gov/dpw/engineer/flood.htm; or
- Volume of runoff produced by the 85th percentile 24-hour runoff event, determined as the maximized capture urban runoff volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998)*; or
- The volume of annual runoff based on unit basin storage volume, to achieve 90 percent or more volume treatment by the method recommended in *California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (1993)*, or
- The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event. Where this option is used, storm events shall be identified by their separation from one another by at least six hours of no rain.

16.106.040 Structural Treatment Control Flow Based BMPs.

As an alternative to volume-based BMPs, structural treatment controls may be designed as flow based BMPs. Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

- The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour for each hour of a storm event; or
- The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two, for each hour of a storm event; or
- The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two, for each hour of a storm event.

16.106.050 Limited Exclusions.

A. Proposed restaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical sizing criteria requirements listed for structural treatment control volume based BMPs.

B. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed for structural treatment control volume based apply only to the addition, and not to the entire development.

16.106.060 Locating BMPs Near Pollutant Sources.

Structural treatment control storm water BMPs should be implemented close to pollutant sources to minimize costs and maximize pollutant removal prior to runoff entering receiving waters. Such BMPs may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following requirements:

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A. All structural treatment control BMPs shall be located so as to infiltrate, filter, and/or treat the required runoff volume or flow prior to its discharge to any receiving water body supporting beneficial uses;

B. Multiple post-construction structural treatment control BMPs for a single priority development project shall collectively be designed to comply with the design standards for structural treatment control volume based BMPs;

C. Shared storm water BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;

D. Interim storm water BMPs that provide equivalent or greater treatment than is required by structural treatment control volume based BMPs may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

16.106.070 Restrictions on Use of Infiltration BMPs.

At a minimum, use of structural treatment BMPs that are designed to primarily function as infiltration devices shall meet the following conditions[2]:

1. Urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants, such as sedimentation or filtration, prior to infiltration.
2. All dry weather flows shall be diverted from infiltration devices except for those non-storm water discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to

[2] These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

storm water conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and dechlorinated swimming pool discharges.

3. Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used.

4. The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet or as determined on an individual, site-specific basis by the Director of Public Works. Where groundwater does not support beneficial uses, this vertical distance criterion may be reduced, provided groundwater quality is maintained.

5. The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, and infiltration rate) that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses.

6. Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries; and other high threat to water quality land uses and activities as designated by the Director of Public Works.

7. The horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as determined on an individual, site-specific basis by the Director of Public Works.

(Continued on Page 32)

Chapter 16.107

PROVIDING PROOF OF ONGOING BMP MAINTENANCE

Sections:

16.107.010 Maintenance Mechanism to be in Place Before Acceptance.
16.107.020 Maintenance Mechanisms.
16.107.030 Verification Mechanisms.
16.107.040 Maintenance Requirements.

16.107.010 Maintenance Mechanism to be in Place Before Acceptance.

Structural BMPs shall not be considered "effective," and shall not be accepted as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. As part of project review, if a project proponent is required to include interim or permanent structural BMPs in project plans, and if the Director of Public Works does not provide a mechanism for BMP maintenance, the project proponent shall provide verification of maintenance requirements through such means as may be appropriate, at the discretion of the Director of Public Works, including, but not limited to covenants, legal agreements, maintenance agreements, and/or conditional use permits.

16.108.20 Maintenance Mechanisms.

A. Public equity maintenance. The City Council may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the BMP. Unless acceptable to the City

Council, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed, (e.g., through a trust fund, assessment district fees, bond, letter of credit or similar means). In addition, the City Council may seek protection from liability by appropriate releases and indemnities. The City Council shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The City Council shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions; and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the facilities. The City Council must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

B. Project proponent agreement to maintain storm water BMPs: The City Council may enter into a contract with the project proponent obliging the project proponent to maintain, repair and replace the storm water BMP as necessary into perpetuity. Security may be required.

C. Assessment districts: The City Council may approve an Assessment District or other funding mechanism created by the project proponent to provide funds for storm water BMP maintenance, repair and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.

D. Lease provisions: In those cases where the City holds title to the land in question, and the land is being leased to another party for private or public use, the City Council may assure storm water BMP maintenance, repair and replacement through conditions in the lease.

E. Conditional use permits: For discretionary projects only, the City Council may assure maintenance of storm water BMPs through the inclusion of maintenance conditions in the conditional use permit. Security may be required.

F. Alternative mechanisms: The City Council may accept alternative maintenance mechanisms if such mechanisms are as protective those listed above.

16.107.030 Verification Mechanisms.

For discretionary projects, the City approved method of storm water BMP maintenance shall be incorporated into the project's permit, and shall be consistent with permits issued by resource agencies, before City approval of discretionary permits. For projects requiring only ministerial permits, the approved method of storm water BMP maintenance shall be incorporated into the permit conditions before the issuance of any ministerial permits. In all instances, the project proponent shall provide proof of execution of an approved method of maintenance repair and replacement before the issuance of construction approvals. Public projects that are not required to obtain permits shall be responsible for ensuring that an approved method of storm water BMP maintenance repair and replacement is executed prior to the commencement of construction. For all properties, the verification mechanism will include the project proponent's signed statement, as part of the project application, accepting responsibility for all structural BMP maintenance, repair and replacement, until a City approved entity agrees to assume responsibility for structural BMP maintenance, repair and replacement.

16.108.40 Maintenance Requirements.

A. Operation & Maintenance (O&M) Plan: A copy of an Operation & Maintenance (O&M) plan, prepared by the project proponent satisfactory to the Director of Public Works shall be attached to the approved maintenance agreement, which describes the designated responsible party to manage the storm water BMP(s), employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities, copies of resource agency permits, and any other necessary activities. At a minimum, maintenance agreements shall require the inspection and servicing of all structural BMPs on an

annual basis. The project proponent maintenance entity shall complete and maintain O&M forms to document all maintenance requirements. Parties responsible for the O&M plan shall retain records for at least 5 years. These documents shall be made available to the City for inspection upon request at any time.

B. Access Easement/Agreement: As part of the maintenance mechanism selected above, it shall include a copy of an executed access easement that shall be binding on the land throughout the life of the project, until such time that the storm water BMP requiring access is replaced, satisfactory to the Director of Public Works.

Chapter 16.108

WAIVER OF STRUCTURAL TREATMENT BMP REQUIREMENTS

The requirement of implementing structural treatment BMPs may be waived if infeasibility can be established. A waiver of infeasibility shall be granted only when all available structural treatment BMPs have been considered and rejected as infeasible.

Waivers may only be granted from structural treatment BMP and structural treatment BMP sizing requirements. Priority development projects, whether or not granted a waiver may not cause or contribute to an exceedance of water quality objectives. Pollutants in runoff from projects granted a waiver must still be reduced to the maximum extent practicable.

(Continued on Page 34)

Section 4: Upon adoption of this Ordinance, Appendix "D" of El Cajon Resolution No. 176-02 is hereby superceded and repealed.

Section 5: This Ordinance is adopted pursuant to the authority granted to the City of El Cajon under San Diego Regional Water Quality Control Board Order No. 2001-01, as amended by State Water Resources Control Order WQ 2001-15. This Ordinance encompasses a state-mandated requirement thereunder.

Section 6: This ordinance shall be effective thirty (30) days following its passage and adoption.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at an Adjourned Regular Joint City Council/Redevelopment Agency Meeting held this 17th day of December 2002, by the following vote to wit:

AYES : Lewis, Kendrick, McClellan, Ramos, Santos
NOES : None
ABSENT : None
DISQUALIFY: None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

MARILYNN LINN, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Ordinance No. 4717 of the Ordinances of the City of El Cajon, California, as adopted by the City Council at the Adjourned Regular Joint Meeting of the City Council/Redevelopment Agency on the 17th day of December, 2002.

Marilynn Linn, CMC, City Clerk

Storm Water Plan 11 25 2002
12/3/02 – First Reading
12/17/02 – Second Reading

El Cajon Pollution Prevention Program

What is a Watershed?

Although "Watershed" is a new term to many people,. its definition is almost as simple as the well-known phrase "water runs downhill." The drain board that carries rinse water into your kitchen sink can be compared to a watershed. On the land, water that does not evaporate or soak into the soil usually drains into ditches, storm drains, streams, rivers, lakes or the ocean. The contiguous area of land from which the water drains to a common point is a watershed.

When you were a child, you probably had a favorite mud puddle where you liked to play. The part of the yard from which the water drained into the puddle was its watershed. Possibly a small stream ran by your house. It may have been dry most of the year or it may have flowed continuously. Water from a few acres drained into that little stream. Those few acres were its watershed. This small stream and others like it ran into a larger one. The land areas drained by the small steams made up the watershed of the larger stream into which they flood. Small watersheds make up the larger ones. The Mississippi River, for example, drains a watershed of about 1,243,000 square miles or approximately 41% of the 48 states comprising the contiguous United States. This large watershed is made up of thousands of smaller ones, including the Tennessee, Ohio, Arkansas and Missouri Rivers.

As shown on Figure 1, the 14.1 square mile area comprising the City of El Cajon lies entirely within the 440 square mile area drained by the San Diego River . Lakes within the San Diego River Watershed include Lakes Murray, Jennings, San Vincente, El Capitan and Cuyamaca. All waters draining within the San Diego River Watershed drain directly into the Pacific Ocean just north of Ocean Beach.

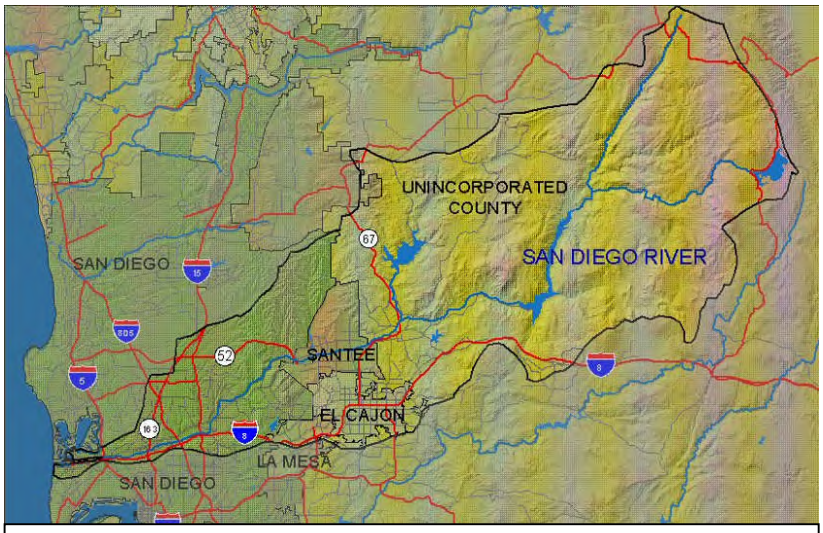

Figure 1 - San Diego River Watershed

The tributary of the San Diego River that drains the El Cajon Valley, called Forester Creek, is our local watershed. So, wherever you live, you are in a watershed. It can be just your own backyard, or an area drained by a system of storm drains, a small creek or by a large river.

You and the other people who live in the watershed are part of the watershed community. So are the animals, the birds, and the fish that live within the watershed. All depend on the watershed, and they, in turn, influence what happens there. What happens within your smaller part of the bigger watershed also affects the larger watershed downstream.

If water runs off the land too fast, it cuts gullies and carries off topsoil. This soil along with other debris the water carries into streams and lakes will pollute the water, ultimately resulting in beach

closures and other problems. As soil fills the lakes or reservoirs, the amount of water they can hold is reduced. Therefore the water supply for your town and your home may be reduced. Although erosion is a natural process, accelerated erosion degrades productivity of the land. Such sediment carried downstream by runaway water may greatly increase the cost of filtering and treating the water you get from the your faucet.

If too much water runs away too rapidly, it causes a flood that damages businesses, homes, roadways and utilities. Flooding may even take lives. When the storm drains, channels and streams become choked with sediment, the flood is more serious because the choked-up channels carry less water.

Storm water runoff can be slowed down or caused to infiltrate into the soil when Storm Water Best Management Practices (BMPs) and other flood- and pollution-prevention measures are put into use throughout the watershed. Some useful Storm Water BMPs are:

- ✓ An overall reduction of paved areas or other surfaces where rainwater cannot soak in.
- ✓ Diversion of drainage of storm water through permeable, “grassy” vegetated swales, either in naturally vegetated areas or developed areas with watershed-friendly landscaping
- ✓ Construction of large or small retention areas can hold back storm water runoff that would otherwise cause flood damage.
- ✓ Installation of irrigation systems that distribute water efficiently, waste less water and thus leave more water for other uses.

City of El Cajon
STORM WATER
Protection Program

If overall runoff can be reduced, urban runoff pollution will also be reduced, and the remaining water will go into streams, lakes, or underground storage to be used in other ways. Since any water filtered through the soil doesn't carry sediment that would clog streams and pollute water supplies, more water will be available to everyone, including wildlife.

El Cajon Storm Water Protection Program

Keep It Clean!

City of El Cajon
Storm Water
Protection Program

Storm Water Guidelines For Car Wash Fundraisers

Although car washing fundraisers are a popular means of raising money for worthwhile causes, there are important environmental issues that, if not properly managed, can negatively impact the aquatic environment and degrade local waterways. When conducting your fundraiser you should follow these guidelines in order to prevent the wash water from entering the storm drains where it flows without treatment of any kind to our streams, rivers and eventually into the ocean.

How does runoff from car wash fundraisers harm the environment?

During a car wash fundraiser, the soapy water used to wash the cars, combines with automotive fluids and residues from the engine, drive train and brakes, and the polluted water flows across the pavement and into nearby storm drains. Alone, one car wash fundraiser event may not create a significant adverse environmental impact. But, collectively, car wash fundraiser events can contribute significant amounts of badly polluted wash water to the storm drain system.

Before beginning your car wash fundraiser:

- ✓ Hold a meeting with all participants to explain the proper procedures that should be followed when conducting these activities.
- ✓ Remove all trash and debris from the car washing area.
- ✓ Use only soaps, cleaners or detergents labeled “non-toxic,” “phosphate free,” or “biodegradable.” The safest products for the environment are vegetable-based or citrus-based soaps.
- ✓ Do not use acid based wheel cleaners or engine degreasers.
- ✓ Select a washing site where the wash water can soak into grass, gravel, or be diverted to nearby landscaping. This will allow the wash water to filter through the vegetation and/or soil instead of flowing directly into a storm drain.
- ✓ If you select a site that drains into a street, block off the storm drain with sandbags and either divert the wash water to an area where the water can pool and evaporate throughout the day or arrange to dispose of the wash water down a sanitary sewer drain.

During the car wash fundraiser:

- ✓ Shake debris from car mats into a trash can or vacuum them. Do not shake dirt from car mats directly onto the ground.
- ✓ Use a bucket of soapy water to clean and re-soap rags or sponges throughout the wash rather than adding more soap directly to rags or sponges.
- ✓ Wring sponges and washrags into buckets, not the ground.
- ✓ Conserve water by using a spray nozzle with an automatic shut off and shutting off or kinking the hose when not in use.
- ✓ Always empty buckets into the sanitary sewer system (e.g., mop sinks or toilets).

After the car wash fundraiser:

- ✓ Remember to clean up and remove sand bags, if used. Have a volunteer walk the perimeter of the site to pick up trash and debris and dispose of it properly.
- ✓ Before you allow anything to go into the gutter or storm drain, stop and think. Storm drains do not go to the public sewer system; they flow directly into storm drains, channels and streams to the ocean.
- ✓ Remember that you are a **Valued Participant** in our City's **Pollution Solution**.

El Cajon Storm Water Protection Program

How You Can Prevent Storm Water Pollution

We can all make a big difference in stopping storm water pollution. Each year significant pollution is created due to careless work habits and lack of awareness about what pollutes our storm drain system. The Clean Water Act makes it illegal to allow any substance other than rainwater to enter the storm drain system. Doing so may lead to monetary fines or prosecution.

Pollution of our waterways will:

- make them unsafe for swimming and other recreational activities
- ruin their appearance
- kill plants and animals that live there

Storm drains should only drain rain.
The storm drain system collects rainwater from storms, and human-activity-related urban runoff from roofs, driveways, sidewalks and streets. All roadside gutters and drainage inlets lead to the storm drain system. And the storm drain water enters our streams, rivers, harbors and ocean. If you place waste near a roadside drainage inlet it will end up in the storm drain. Storm water is not treated – it will appear in the waterways in much the same condition as when you place it there. Remember, "Only Rain in the Drain!"

What pollutes our waterways?
Oil, grease, tar, silt, concrete cutting, cement wash water, water used in cleaning, paint, litter, cigarette butts, animal droppings, detergent and chemical cleaners are all pollutants. Remember that, just because a product is labeled as "biodegradable" does not mean it can be dumped into a storm drain. What can you or your business do to stop pollution?

You can stop pollution from getting into the storm drains by:

- ✓ not hosing waste away - instead sweep it up and dispose of it with your other trash.
- ✓ mopping up any spills immediately and not letting them flow into the storm drain system.
- ✓ making sure that driveways, sidewalks and gutters are clear of debris including leaves and grass clippings.
- ✓ making sure the contaminated water used for rinsing equipment such as paint brushes and containers does not flow into the storm drain system.
- ✓ putting litter in the trash bins - including cigarette butts.
- ✓ picking up all animal droppings.
- ✓ disposing of excess paint and chemicals in the hazardous waste area at landfills.
- ✓ washing your vehicles on the lawn or in a commercial car wash – this stops detergent, oils and grease from getting into the storm drain system.
- ✓ regularly servicing your vehicles - this stops leaking oil and other pollutants from getting into the storm drain system - it only takes one quart of oil to contaminate 250,000 gallons of water.

El Cajon Storm Water Protection Program

Major Causes of Urban Runoff Pollution

What day-to-day activities cause urban runoff pollution? Here are some of the biggest causes:

- **Using automobiles.** Particles in auto exhaust contain toxic organics and heavy metals. Dripping motor oil and wear from brake linings and tires deposit pollutants on streets and highways.
- **Maintaining vehicles.** Vehicle maintenance results in drips and spills of oil, coolant and other fluids. When performed outdoors, these fluids soak into asphalt and concrete pavements until they are washed away with the next storm. Water from washing vehicles outdoors carries pollutants directly to the nearest storm drain.
- **Allowing drainage from the shop floor to flow outside.** Allowing process or clean-up water to drain out onto the street is an often-seen practice that transports pollutants to the storm drain.
- **Cleaning tools or equipment outdoors.** Cleaning or rinsing containers, tools, floor mats or other items outdoors discharges pollutants such as chemicals, detergents, oils, etc.
- **Dumping wastes.** People looking for a "shortcut" to dispose of used oil, paint or other wastes dump them directly into storm drain inlets, causing pollution.
- **Landscaping and grounds maintenance.** Overuse, or indiscriminate use, of fertilizers and pesticides results in these materials running off landscaped areas into storm drains.
- **Allowing dumpster areas to become untidy.** Liquids that leak from dumpsters or garbage left outside the dumpster get washed away during a storm.
- **Building or remodeling facilities.** Disturbing soil and vegetation during construction greatly increases erosion; sediment is a pollutant. During construction, proper material handling and waste disposal is especially important because much of the work is performed in areas subject to rainfall.

Effects of Urban Runoff Pollution

What are the consequences of these activities? The most immediate effects can be seen: many creeks have an oily sheen near storm drain outfalls, litter is left behind by receding waters after a storm, layers of oil-and-grease-laden sediments accumulate, and dead animals are occasionally found on beaches.

But the most serious effects are more subtle. Some toxic substances affect critical life stages of certain organisms. Even if we do not usually see, or think about, these organisms (such as algae or mussels) they are part of the food supply for other plants and animals, including fish and birds. Pollutants in the aquatic environment disrupt the food chain. Some toxins bioaccumulate, which means organisms further up the food chain will concentrate the toxins in their tissues. This is why the State Health Department has recommended restrictions on human consumption of some species of fish and birds found in the Bay. Other effects of urban runoff pollution include contamination of water supply sources and loss of recreational activities such as fishing, swimming, and boating.

People can still stop storm water pollution because people cause it. By making small changes in the way we live and work, we can reduce the pollution we produce.

El Cajon Storm Water Protection Program

What is the El Cajon Storm Water Protection Program?

The City of El Cajon is involved in a program designed to ensure cleaner urban storm water runoff, thereby protecting our region's streams, rivers, beaches and the ocean. In that effort, we have entered into a partnership with nineteen other regional agencies in order to better:

- ✓ Educate and inform the public about urban runoff pollution
- ✓ Encourage public participation in community and clean-up events
- ✓ Work with industries and businesses to encourage pollution prevention
- ✓ Require construction activities to reduce soil erosion and water pollution
- ✓ Require developing projects to include pollution controls that will continue to operate after construction is complete

We also work within our own Municipal Departments and Divisions to ensure that our municipal maintenance and development projects are designed to reduce or eliminate pollution.

How is Our Program Funded?

Businesses and residents within the City of El Cajon fund the Storm Water Protection Program as part of our Wastewater Treatment Program. The Storm Water Protection Program also includes maintenance functions, like street sweeping and storm drain cleaning, to help keep our streams, rivers, beaches and ocean cleaner.

Debris in the Washington Channel

Why Are We Concerned About Urban Runoff?

Before the City of El Cajon area was developed, most rainfall fell onto natural areas and the water soaked into the ground. Over the last century, we've changed the landscape dramatically by adding roads, buildings and drainage pipes. Rainfall that once soaked into the ground now flows quickly along street gutters and into storm drains and drainage channel. These artificial rivers then discharge into our streams and rivers without treatment of any kind. Runoff from everyday urban and suburban activities also adds to this runoff. These activities include:

- ✓ Vehicle washing
- ✓ Landscape irrigation
- ✓ Cleaning around buildings, parking lots and streets

Along the way, the fast-moving urban runoff picks up pollutants such as pesticides, herbicides, fertilizers, eroded soil, and oil and grease from cars. These pollutants make their way into our streams and rivers where they pollute the water where they endanger the lives of both plants and animals. Eventually, this affects all of us, since we eat the fish and use the rivers, beaches and ocean for recreation. Some of us in the El Cajon area also drink treated river water.

How Can You Help?

There are many ways for El Cajon area residents, students, community groups and businesses to get involved in pollution prevention efforts. We need volunteers to help us get the word out. Take the first step by practicing pollution prevention in your own home or business. Then, join us in the many activities and events sponsored throughout the greater El Cajon area. Always remember, **"You Are the Pollution Solution."**

For More Information

Contact the El Cajon Storm Water Protection Program at (619) 441-1653, or visit our web site at www.ci.el-cajon.ca.us, and click on the Storm Water Information link.

El Cajon Storm Water Protection Program

Keeping Our Watershed Healthy

The health of a stream depends on the quality of the water that flows through it. To care for the stream, we must also care for all the land that drains to it. The name for the area or unit of land draining into a common stream or river is a *watershed*.

Everything in the watershed affects the water in the stream. Hazardous chemicals, automotive products, pesticides, herbicides, fertilizers, pet wastes, excessive soil erosion and air pollution all contribute to water pollution. These pollutants don't have to be dumped directly into the water to cause a problem. They can be washed from streets, lawns, roofs or outside storage areas by rainfall, eventually ending up in streams, rivers and the ocean.

The storm drain inlet or gutter in the street outside your home carries water into a network of storm drains that lead directly to the San Diego River or one of its tributary streams. Storm drains are completely separate from the sewer system, because sewer systems handle wastewater from your sinks, tubs and toilets. Storm drains do not go to a treatment plant but into our streams, rivers and ultimately the ocean.

Resulting impacts of water pollution can range from the obvious, such as oil floating on the water to the loss of wildlife due to habitat destruction that may go unnoticed.

Everyone in our community has a part in protecting our watershed and preventing water pollution. While the contribution of one home to water pollution may be small, the combined effect of an entire neighborhood can be substantial. Here are some suggestions that will help in keeping our watershed clean:

- ✓ Use chemical fertilizers and pesticides sparingly. When applied excessively, they can be washed into a nearby storm drain by your sprinklers or rain, thereby damaging aquatic life. Even lawn clippings contain these pollutants. Leave them on the lawn as natural fertilizer or compost them.
- ✓ Keep automobiles “drip-free” and in good operating condition. This helps keep oil and air pollution out of water sources. Wash cars at commercial car washes that drain to the sewage treatment plants instead of your driveway that drains to the storm drain system.
- ✓ Dispose of hazardous household wastes such as paints, solvents, used oil and cleaning products properly. The City of El Cajon contracts with Waste Management, Inc. to accept residential household hazardous waste for FREE on the second and fourth Saturday of each month and by APPOINTMENT ONLY. Residents can drop off no

more than 15 gallons or 125 pounds of household hazardous waste. Call (619) 596-5100 to schedule an appointment time.

The choice is ours. Do we want a watershed that keeps our steams, rivers, beaches and ocean healthy? Or do we want a watershed that struggles to survive?

Remember that, "**You are the Pollution Solution**." You play a very important role in keeping our streams, rivers, beaches and ocean clean. For more information, visit our web site at www.ci.el-cajon.ca.us and click on the "Storm Water Information" link.

Sewage Spill Reference Guide

Your Responsibilities as a Private Property Owner

How a Sewer System Works

A typical sanitary sewer system is constructed of a network of pipes, laterals and mains connecting to each building and transporting sewage to a wastewater treatment plant (see diagram to the right).

A property owner's sewer pipe is called a **sewer lateral** and connects to a larger city-maintained pipe called a sewer main typically located in the street.

As stated in the El Cajon Municipal Code, **sewer laterals are the responsibility of the property owner** and must be maintained by the property owner for the entire distance from the house to the sewer main.

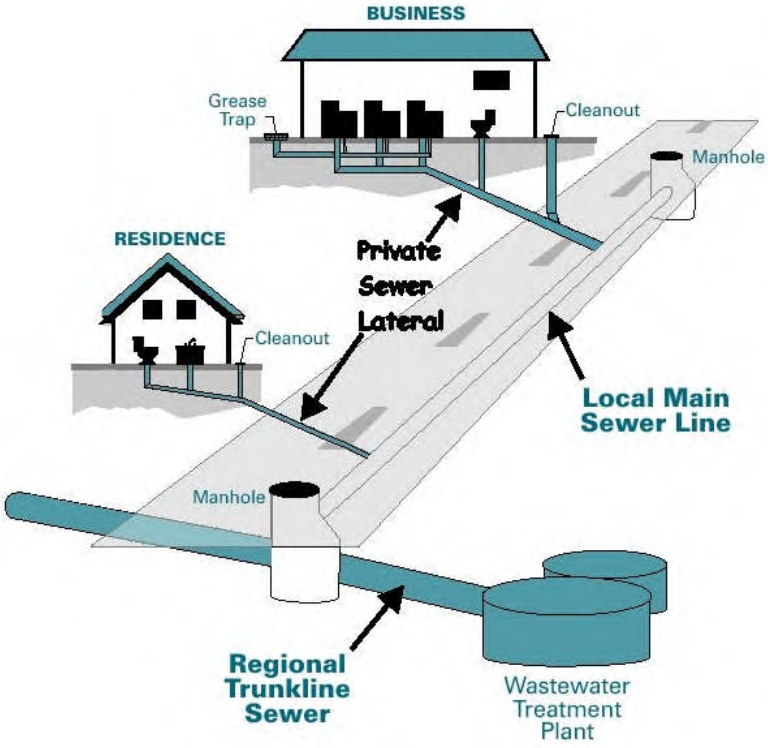

What is a Sewage Spill?

Sewage spills occur when the wastewater being transported via underground pipes overflows through a manhole, cleanout, or broken pipe. Sewage spills can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches.

Common Causes of Sewage Spills

Grease builds up inside and eventually blocks sewer pipes. Grease gets into the sewer from food establishments, household drains, as well as from poorly maintained commercial grease traps and interceptors. Grease is a common cause of sewer pipe blockages, especially in commercial and industrial areas.

Large objects such as paper towels, rags, disposable diapers or children's toys can contribute to a blockage.

Structural problems caused by tree roots in the lines, broken or cracked pipes, missing or broken cleanout caps, or undersized sewers can cause blockages. Blockages by roots are a common cause of blockages in residential areas.

Infiltration and inflow impacts pipe capacity and is caused when groundwater or rainwater enters the sewer system through pipe defects and illegal connections.

You Are Responsible for a Sewage Spill Caused by a Blockage or Break in Your Sewer Lines!

Time is of the essence in dealing with sewage spills. You are required to **immediately:**

- ✓ **Control and minimize the spill.** Keep spills contained on private property and out of gutter, storm drains and public waterways by shutting off or not using the water.
- ✓ **Use sandbags, dirt or plastic sheeting** to prevent sewage from entering the storm drain system.
- ✓ **Clear the sewer blockage.** Always wear gloves and wash your hands. It is recommended that a plumbing professional be called for clearing blockages and making necessary repairs.
- ✓ **Notify the El Cajon Department of Public Works** by calling (619) 441-1653 during business hours, or call the Police Department Communications Center 24-hour number at (619) 579-3311.

You May Be Liable

Allowing sewage from your home, business or property to discharge to a gutter or storm drain may subject you to penalties and/or out-of-pocket costs to reimburse our city for clean-up efforts and enforcement actions.

What To Look For

Sewage spills can be a very noticeable gushing of water from a manhole or a slow water leak that may take time to be noticed. Investigate suspicious looking wet areas. Look for:

- ✓ Drain backups inside the building.
- ✓ Wet ground and water leaking around manhole lids on to your street.
- ✓ Leaking water from cleanouts or outside drains.
- ✓ Unusual strong offensive odors from wet areas near sidewalks, external walls, or landscaped areas.
- ✓ Slow draining or clogged sinks and toilets

Be Cautious

Keep people and pets away form the affected area. Untreated sewage has high levels of disease-causing viruses and bacteria.

How You Can Prevent Sewage Spills Before They Happen

- ✓ Never put grease down garbage disposals, drains or toilets.
- ✓ Perform periodic cleaning to eliminate grease, debris and roots in your house plumbing and sewer lateral.
- ✓ Repair any structural problems in your sewer system and eliminate any rainwater infiltration or inflow into your plumbing system.
- ✓ Do not dispose of paper towels, or other large objects in toilets.

El Cajon Public Works Department, and the Citywide Storm Water Protection Program

Working Together to Cope with Sewer Backups

GENERAL INFORMATION

Sewer backups create stressful and emotional situations for any homeowner or renter. In some cases sewer backups may cause health and safety concerns as well as significant property loss. A proper response to a sewer backup can greatly minimize damage to your property, diminish the threat of illness and help keep our stream, rivers, lakes and beaches clean.

The City of El Cajon makes every effort to be responsive to a resident's needs and concerns when a sewer backup occurs. The City has a sewer crew whose sole duty is to inspect, clean and maintain sewers on a daily basis. Sewer maintenance personnel are available on a 7-day-a-week, 24-hour-a-day basis to minimize the possibility of sewer problems. Unfortunately, because a sewer is not a closed system, many things put into the sewer can clog the system. Large amounts of grease from restaurants and disposable (and cloth) diapers are two common items that cause problems. Other factors can cause backups as well, such as tree roots, which can grow into and obstruct the system, or a broken or collapsed pipe.

Although the City of El Cajon has adopted rules prohibiting the discharge of any substance likely to cause a sewer obstruction, and distributes educational materials to the public about the problems they cause, there is really no way we can absolutely prevent blockages from happening.

Many homeowners' insurance policies exclude damage resulting from sewer backups. However, some insurance companies do provide sewer backup coverage**. If you are concerned about the possibility of a sewer backup and want to insure that you are covered, the City urges you to check with your home insurer regarding the availability of sewer backup insurance**.

CONTACT INFORMATION

If you experience a sewer problem, please call the Department of Public Works at (619) 441-1653 during normal business hours (M–F, 8am to 5pm), or call (619) 579-3311 on non-business weekday hours or on Saturday, Sunday and Holidays. When you call, please state that you are reporting a sewer backup or overflow emergency, and be prepared to provide the details. Backed up sewer lines, line breaks, sewage odors and overflowing manholes are considered an emergency.

If the problem is in the sewer lateral, the homeowner or business is responsible for correcting the problem. The owner of the property is responsible for maintaining and cleaning the sewer lateral from the building (or home) to the City's sewer main, including the connection on the sewer main. Locating the lateral is also the responsibility of the property owner. The City of El Cajon Public Works and Community Development Departments have records showing the location sewer main and lateral lines through public improvement plans or filed plumbing permits. Plumbers may also have special locating equipment, which may be very helpful to your task.

If the problem is in the sewer lateral, whom do you call for help? You will need to call a plumber or a sewer/drain cleaning service. Check your Yellow Pages or Business White Pages. You will need to contact and hire your own plumbing service. The City of El Cajon cannot make a recommendation. And although promptly correcting the plumbing problem is of great importance, it may be in your best interests to obtain several estimates.

REMEMBER TO CALL THE DEPARTMENT OF PUBLIC WORKS FIRST before calling a plumber. We will check the sewer main and inform you of our findings. If the problem is not in the City main you will be advised to contact a plumber or a sewer/drain cleaning service.

LATERAL vs. MAIN

What is a Sewer Lateral? A sewer lateral is the pipeline between the City-maintained sewer main, usually located in the street, and the building the sewer lateral serves. As it is defined in the El Cajon Municipal Code, the sewer lateral is owned, maintained and repaired by the property owner, including any part of the sewer lateral, which extends into streets, alleys or other public easements.

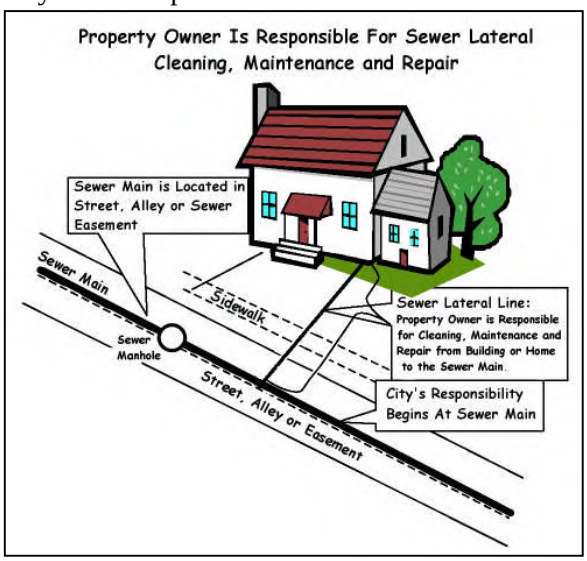

More often than not, the cause of a backup in your lateral is from items that the line is not meant to handle, such as kid's toys, underwear, towels, diapers, paper products (other than toilet paper), keys and even false teeth. To avoid flushing these items, remember to close the toilet lid. What you flush down your toilet may not affect you, but it might cause problems for your neighbors! Another possible cause would be roots in your lateral. The lateral is the responsibility of the owner of the property from the house to the sewer main.

WAYS TO PREVENT BACKUPS IN YOUR LATERAL AND IN THE CITY MAIN

The property owner can do many things to prevent his lateral from backing up. Remember too, that the very same things can help to prevent backups in the City main as well. If everyone would be careful about how they dispose of certain products, our systems would be a great deal more efficient, cause fewer backups, cost us all less money, and prevent a lot of misery. Here's a brief summary of some important sewer "Do's and Don'ts"

- ✓ **Grease:** Cooking oil should be poured into a heat-resistant container and properly disposed of in the trash after cooling to room temperature. Some people assume that washing grease down the drain with hot water is satisfactory. This grease goes down the drain, cools off, and solidifies either in the property owner's line, or in the main sewer. When this happens, the line constricts, and eventually clogs.
- ✓ **Paper Products:** Paper towels, disposable (and cloth) diapers, and feminine products cause a great deal of problems in the property owner's lateral as well as in City sewer mains. These products do not deteriorate quickly, as does bathroom tissue. They become lodged in portions of the lateral or main, eventually causing a sewer backups. These products should also be disposed of in the trash.
- ✓ **Roots:** Shrubs and trees, seeking moisture, will make their way into sewer line cracks. These roots can cause extensive damage. They may start out small, getting into a small crack in the pipe; but as the tree or shrub continues to grow, so does the root. After time, this causes your sewer line to break, which in turn allows debris to hang up in the line, thus causing a back up. One way to prevent roots from entering your line is to replace your line and tap with new plastic pipe. Another alternative is to be careful about planting shrubs or trees near your sewer line.
- ✓ **Sewer Odor:** Another concern that property owners have is that they can smell sewer odors inside their house or building. There are many ways to prevent this from occurring. Under each drain in your plumbing system, there is a loop of pipe called a "P-Trap". If there is water in this fitting, odors or gasses from the sewer cannot enter through the drain from either the property owner's lateral or

the City main. Periodically check to make sure that unused floor drains, sinks etc. have water in the "P-trap". Another way to prevent sewer odor is to ensure that the vents, which are located on your roof, are free from bird nests, leaves, or other debris. When these vents are clear, the sewer odors will escape through these vents.

- ✓ **Illegal Plumbing Connections:** Do not connect French drains, sump pumps and other flood control systems to your sanitary sewer. It is illegal, and debris and silt will clog your line. Consult a plumber to correct any illegal connections.
- ✓ **Needles:** Unfortunately, some people dispose of hypodermic needles in the sewer system. The presence of these needles in the wastewater collection system presents special and possible deadly problems for wastewater collection and wastewater treatment employees. **PLEASE DO NOT FLUSH NEEDLES.** The proper method of disposal is to re-cap the needle and put it into a "sharps container". This could be any rigid plastic container such as a bleach bottle. When it is full, tape the container securely, and call your local pharmacy for advice on proper disposal methods. **PLEASE DO NOT FLUSH THEM DOWN THE TOILET OR THROW THEM INTO THE TRASH!**
- ✓ **Install a Backwater Prevention Valve:** A backwater valve can prevent or greatly reduce the possibility of a sewer backup. A backwater valve is a fixture installed into a sewer line, and sometimes into a drain line, in the basement of your building to prevent sewer backflows. A properly installed and maintained backwater valve works on a one-way system, sewage can go out, but cannot come back in. Property owners are responsible for the installation and maintenance of backwater valves. The cost to install one is dependent upon the type of plumbing in your home and the difficulty of installation. A qualified plumber can assist you in determining your needs.

FREQUENTLY ASKED QUESTIONS

Q: What is the City's responsibility regarding private sewer laterals and private on-site sewer systems?

A: The property owner is fully responsible for maintaining adequate sewage flow to and through the sewer lateral and/or private on-site sewer system, from the property structure to and into the City-maintained sewer main. When failure or stoppage of a privately maintained sewer occurs, City crews will respond only to check the sewer main to verify that the main is open and sewage is flowing. If the sewer main is found to be clear, it is the responsibility of the property owner to call a licensed plumber or drain cleaning service to correct the problem. Verbal assistance and answers to questions can be received by calling the Department of Public Works at (619) 441-1653 during normal business hours (M-F 8am to 5pm), or (619) 579-3311 on other weekday hours, Saturdays, Sundays or Holidays.

Q: If I notice a foreign substance flowing into a storm drain inlet, whom should I call?

A: If you notice a foreign substance flowing into a storm drain inlet, please call the El Cajon Storm Water Protection Program at (619) 441-1653 to report the location, or call the 24-hour, 7-day-a-week San Diego Regional Storm Water Hotline at (888) 846-0800.

Q: What if my sewer backs up?

A: If you experience a sewer backup, call us at (619) 441-1653 during normal business hours (M-F 8am to 5pm), or (619) 579-3311 on other weekday hours, Saturdays, Sundays or Holidays. We will dispatch a maintenance crew to your address to determine if the stoppage is in the City main or your sewer lateral. If the City main is found to be clear, it is the responsibility of the property owner to call a plumber or sewer/drain cleaning service to correct the problem. The property owner is responsible for maintaining adequate flow to and through the sewer lateral from the property structure to and into the City sewer main. If the blockage is in the City main we will fix it as quickly as possible and keep you informed about what is being done.

Q: What about the mess?
A: A sewer backup can lead to disease, destruction of your valuables, damage to your house, and electrical malfunctions. Prompt cleanup of affected property can help minimize the inconvenience and damage.

After any sewer backup or overflow, you should immediately arrange for the cleanup of your property. Here are some useful things to remember:

- ✓ Take before-and-after photos of the affected areas
- ✓ Itemize any property losses
- ✓ Wet-vacuum or remove spillage
- ✓ Mop the floors and wipe walls with soap and disinfectant
- ✓ Flush out and disinfect plumbing fixtures
- ✓ Steam clean or remove carpet and drapes
- ✓ Repair or remove wallboard or wall covering
- ✓ Clean up appliances or ductwork

PRIVATE SEWER LATERAL and PRIVATE ON-SITE WASTEWATER SYSTEM

BEST MANAGEMENT PRACTICES (BMPs)

Private sewer laterals and privately maintained on-site wastewater systems, such as those owned and maintained by Homeowner Associations, carry untreated sewage containing numerous pollutants, including harmful bacteria and excessive nutrients. Improperly maintained private sewer laterals and on-site wastewater systems can break, clog, or malfunction, resulting in an overflow and discharge or raw sewage. Raw sewage poses an extremely high risk to the health of our streams, rivers, beaches and the oceans, as well as the health of members of our community.

Think before putting anything in the storm drain. Remember, the ocean starts at your front door.

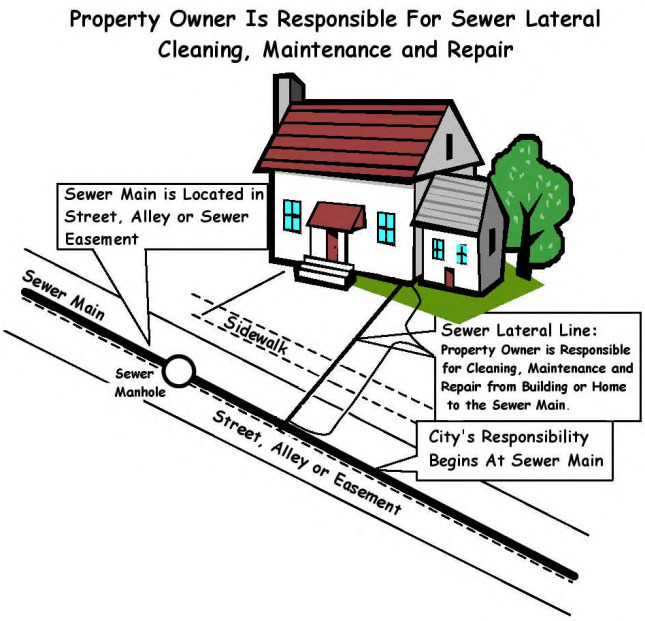

Required BMPs:

- ✓ Dispose of grease in trash, not in the sink drain. Blockages caused by grease in sewer lines cause the majority of sewer main and lateral overflows.
- ✓ Private sewer laterals shall be cleaned, maintained or replaced to prevent seepage and spills.
- ✓ On-site wastewater systems, whether private or connected to public sewer systems, shall be flushed, maintained, repaired or replaced to the maximum extend practicable (MEP) to prevent seepage and spills.
- ✓ Spills from private sewer laterals and on-site wastewater systems shall be contained and cleaned up in a manner that minimizes any release of pollutants to the Storm Water Conveyance System or Receiving Waters.
- ✓ Any release from a private sewer lateral or on-site wastewater system that enters the Storm Water Conveyance System or Receiving Waters shall be immediately reported to the City.
- ✓ Failed sewer laterals or on-site wastewater systems must be immediately repaired or replaced. Contact the City for information concerning permits and approval requirements.

This information sheet is distributed as part of the El Cajon Storm Water Protection Program
For more information call the City at (619) 441-1653 or visit our web site at:
www.ci.el-cajon.ca.us and click on the "Storm Water Information" link

Figure 1 – Household Hazardous Waste Collection - PY6

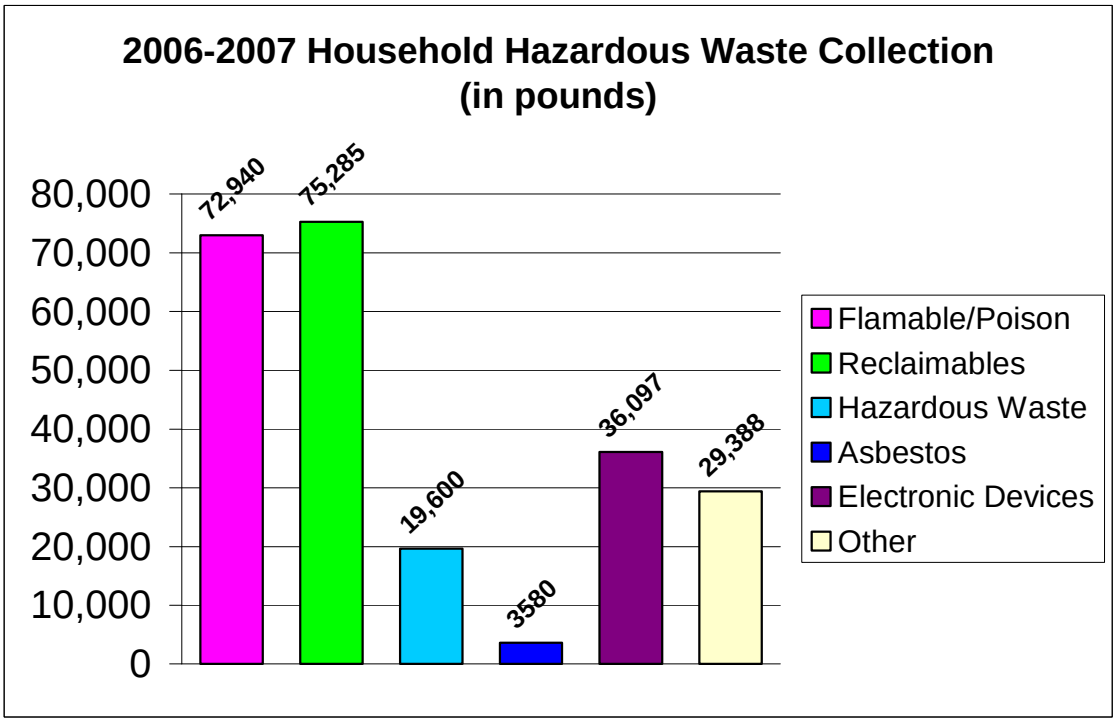

EAST COUNTY REGIONAL

Household Hazardous Waste, Electronic and Universal Waste Collection Event For East County Residents

SATURDAY, MAY 19, 2007

Bethel Christian Assembly
1929 Arnold Way, Alpine, CA 91901

Hours of Operation: 9 a.m. – 2 p.m.

PUT TOXIC WASTE IN ITS PLACE
It is illegal to abandon household hazardous waste!

This collection event is a community service funded by the California Integrated Waste Management Board

San Diego Regional Household Hazardous Waste Partnership

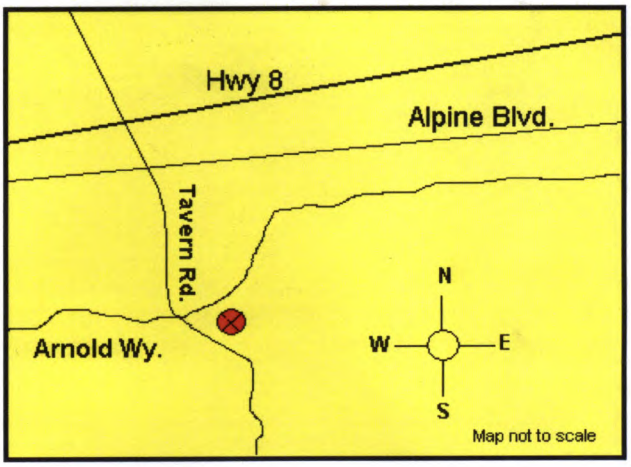

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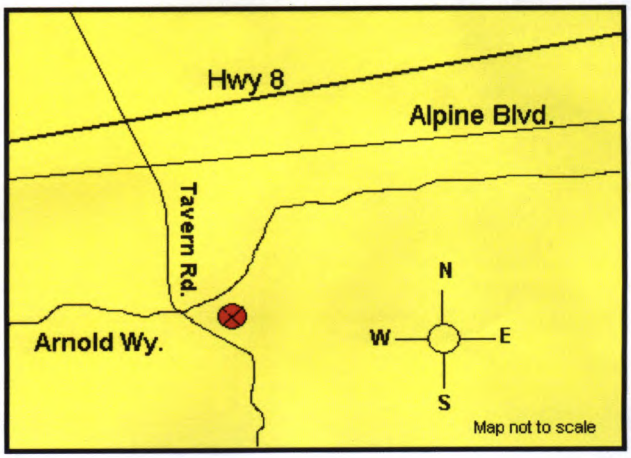

The City of El Cajon

California

PROCLAMATION

"POLLUTION PREVENTION DAYS"
May 16th and August 29th, 2007

WHEREAS, *storm water management services provided in our community are an integral part of our residents' everyday lives. The support of an understanding and informed citizenry is vital to the efficient operation of storm water management programs; and*

WHEREAS, *the health, safety and comfort of this community greatly depends on these services. The quality and effectiveness of these services, as well as their planning and implementation is vitally dependent upon the efforts and skill of storm water management staff; and*

WHEREAS, *the efficiency of the qualified and dedicated personnel who staff the storm water management division is materially influenced by the people's attitude and understanding of the importance of the work they perform.*

NOW, THEREFORE, *I, Mark Lewis, Mayor for the City of El Cajon, together with the City Council, do hereby proclaim the days of May 16th and August 29th, two thousand and seven to be "POLLUTION PREVENTION DAYS" in the City of El Cajon. We further call upon all residents and civic organizations to acquaint themselves with the issues involved in providing our services and to recognize the contributions which public works officials make every day to our health, safety, comfort, and quality of life.*

Signed this eighth day of May, two thousand and seven.

Mayor

Storm Wat
Protectio

NEW YORK BAKERY
EL CAJON!
CIVIC CENTER
PERFORMING
ARTS CENTER

CITY OF EL CAJON
POLLUTION PREVENTION WEEK

LIST OF ACTIVITIES AND EVENTS

Date	Activity/Event	Estimated Number of Participants
04/25/05	Tire Recycling Day	Approximately 26 participants and collected between 18-21 tires for recycling
04/26/05	Dumpster Demonstration	Approximately 12 participants
04/27/06	Fundraising Car Wash Demonstration	7 participants and contacted approximately 9 people
04/28/06	St. Madeline's Cleanup Demonstration	Approximately 11 participants
04/29/06	A-1 Power Washing Demonstration	Approximately 8 participants

Business License and Storm Water Programs

Goal: Use information collected and stored in the Business License database to support the Storm Water Program inspection and public outreach components and potentially increase revenues for the Business License Program.

Process:

1. Business License database is provided to the Storm Water group in a read-only format to gather business address; type of business; SIC code; number of employees. (Support Storm Water inspection component)

2. Storm Water staff match information to Storm Water inspection database. Generate a list of corrections for the Business License database. (Potentially increase revenue)

3. Storm Water staff use Business License information to confirm Business License Database information. (Potentially increase revenue and Support Storm Water inspection component)

4. Develop a Storm Water informational sheet for Business License applicants. The Business License staff would hand out the informational sheet at the time. (Supports Storm Water outreach component)

Edit Rights (fields):

When errors are discovered in the Business License database, corrections can be made by either:

1. Printing out the data the correct for use by Business License staff to make the appropriate changes.

OR

2. Grant limited edit rights to the Storm Water staff for certain fields (Business Name; Address Number; Street Prefix (N, S, E or W); Street Name; Suite Number; Zip Code; Contact Person's Name; Contact Person's Telephone Number; Description of Business SIC; and Business License No.).

CITY OF EL CAJON
INVENTORY OF MUNICIPAL FACILITIES

HIGH PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Civic Center, City Hall and Plaza	200 E. Main Street	Washington Channel
2.	Fire Station No. 9	1301 N. Marshall Avenue	Forester Creek
3.	Public Works Maintenance Division Office	1050 Vernon Way	Forester Creek
4.	Vehicle Maintenance Facility	1060 Vernon Way	Forester Creek

MEDIUM PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Animal Control	1275 N. Marshall Way	Forester Creek
2.	Fletcher Hills Park, Recreation Center and Pool	2345 Center Place	Fletcher
3.	Parks Office	154 Rea Avenue	Washington Channel
4.	Performing Arts Center	110 E. Main Street	Washington Channel
5.	Wells Park, Recreation Center and Maintenance	1153 E. Madison Avenue	Forester Creek
6.	Parks Storage Garage	148 Rea Avenue	Washington Channel

LOW PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Albert Van Zanten Park	1495 Greenfield Drive	Broadway Channel
2.	Bill Beck Park	Pierce Street and Wagner Drive	Broadway Channel
3.	Bostonia Park and Recreation Center	1049 Bostonia Street	Forester Creek/ Broadway Channel
4.	Cajon Valley Middle School Park	750 Park Avenue	Forester Creek/ County Ditch
5.	Community Policing Division	165 E. Park Avenue	Forester Creek
6.	El Cajon Community Center	195 E. Douglas Avenue	Forester Creek
7.	Fire Station No. 7	695 Tyrone Street	County Ditch
8.	Fire Station No. 8	842 N. Third Street	Forester Creek
9.	Fire Station Park	Tyrone Street and Westwind Drive	Forester Creek
10.	Fire Station/ Department Administration	100 E. Lexington Avenue	Forester Creek
11.	Hillside Park and Recreation Center	840 Buena Terrace	Fletcher Hills Parkway/ Fanita Channel Basin/ Forester Creek
12.	John F. Kennedy Park and Recreation Center	1675 E. Madison Avenue	County Ditch
13.	Judson Park	Magnolia Avenue and Park Avenue	Forester Creek
14.	Museum (Knox House)	280 N. Magnolia Avenue	Forester Creek
15.	Office	1034 Magnolia Avenue	Washington Channel
16.	Pistol Range	Gillespie Field	Washington Channel
17.	Police Department	100 Fletcher Parkway	North Forester Creek
18.	Police Department Detectives	1035 Pioneer Way	Forester Creek/ Broadway Channel
19.	Prescott Promenade Park	200 Block of Main Street	County Ditch
20.	Renette Park and Recreation Center	935 S. Emerald Avenue	County Ditch
21.	Tuttle Park	379 Chase Avenue	County Ditch

Storm Water Quality Checklist
For Municipal Facilities

Site Name:_____ Location:_____

Contact:_____

Date:_____ Type of Inspection: ☐ Routine Site Inspection

Weather Information: ☐ Prior to Forecast of Rain Event

Storm Start Date and Time:_____ Storm Duration:_____hours ☐ 24-hr Period During Extended Storm Event

Time Since Last Storm:_____hrs/days Rainfall:_____inches ☐ After Rain Event

Inspector Name and Title:_____

Inspector Signature:_____

Pollution Prevention BMPs	N/A	Yes	No	Comments / Corrective Action
Erosion and Sediment Control				
Is existing vegetation preserved?				
Are seeding and planting of native plants and trees considered?				
Are geotextiles and organic mats used for soil stabilization?				
Roadway and Bridge Maintenance				
Are streets swept and clean?				
Is street sweeping frequency adequate for the area?				
Municipal Vehicle Maintenance Facilities				
Are vehicles/equipment parked/stored in designated areas?				
Are vehicles and equipment regularly inspected for leaks and spills?				
Are detected leaks/spills contained and repaired as soon as possible?				
Landscaping Maintenance				
Are safer, alternative products used or considered?				
Is weather considered for landscaping activities?				
Are certified professionals used to handle, apply, and distribute pesticides, herbicides, and fertilizers?				
Is there an IPM used?				
Maintenance of MS4				
Is the mechanism for detecting and removing IC/ID situations implemented?				
Is the MS4 inspected, maintained, and repaired?				
Is a stenciling and sign program used to warn of effects of illegal dumping?				
Sewer Blockage Response				
Is there mechanism for identifying, containing, controlling, and repairing sewage leaks and spills?				
Is hazardous waste disposed of properly?				
Waste Management				
Is there a waste reduction program in place?				
Are wastes segregated for proper storage and disposal?				

Are dewatering activities controlled and managed appropriately?				
Is groundwater tested prior to disposal?				
Is the public educated and encouraged to participate in appropriate stormwater activities?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Housekeeping				
Is the area clear of visible trash/debris and impervious surfaces free of sediment?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are points of ingress/egress to public and private roads free from sediment, debris and mud from tracking?				
Are materials stored in their designated areas?				
Are dry methods used to clean?				
Employee Training				
Have employees been trained in basic stormwater management and BMP implementation?				
Visual Inspections				
Are visual inspections of the site conducted and documented on a regular basis?				
Are the discharge locations free of significant erosion or sediment transport?				
Improved Operation and Maintenance				
Are drainage control structures free of litter and debris?				
Waste Disposal and Recycling				
Are there designated areas for recycling of metal, tires, antifreeze, and used oil?				
Are waste containers covered?				
Are areas near or around waste containers free of leaks or spills?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are hazardous wastes stored and disposed appropriately? (in labeled, secondary containment; 55-gallon drums in a secured, designated area)				
Is secondary containment free of spills and rainwater?				
Preventive Maintenance				
Are there procedures for replacing used or worn materials or equipment prior to failure?				
Record Keeping				
Is there onsite storage of documented inspections, BMP evaluations, and audits?				
Is there onsite documentation of employee training?				
Is there an onsite SWPPP or other Pollution Control Document?				
Does the SWPPP adequately reflect the current site conditions and the construction operations? If not, explain required SWPPP revisions.				
Spill Prevention and Response				
Are there spill kits near outside stored materials, wastes, and recycling areas?				
Are spill response procedures clearly posted?				
Are employees trained in preventing spills?				

Material Inventory Procedures				
Are inventories of 30 days materials onsite?				
Material Storage Practices				
Are outside stored materials stored off the ground and covered or in appropriate containers? (Flammables stored in a flammables cabinet; antifreeze in double-walled container or in secondary containment)				
Visual evidence of spills, staining, or leaks from outside stored materials are not evident				
Storage Tanks				
Are outside above ground storage tanks double-walled or in secondary containment?				
Visual evidence of leaks or spills in the area are not visible				
Outside Storage				
Are materials stored outside under cover or in containers?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are outside material storage areas free of visual evidence of spills or runoff?				
Loading and Unloading				
Are loading and unloading areas free of litter and visual evidence of spills?				
Sediment and Erosion Control				
If sandbags are used, are they placed appropriately for the conditions?				
Are temporary soil stabilization measures installed and in working order?				
Is dust control necessary and implemented?				
Are soil stockpiles properly stored?				
Is inlet protection available for all operational storm drain inlets?				
Vehicle and Equipment Maintenance				
Is there a covered or inside area designated for vehicle and equipment maintenance?				
Are leaking vehicles stored inside or drip pans used for outside storage?				
Vehicle and Equipment Washing				
Is there a designated covered or inside area or commercial facility for washing vehicles and equipment?				
Park BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are grass clippings mulched or bagged for disposal?				
Are vegetation trimmings gathered and disposed as solid waste or recycled as mulch?				
Are sidewalks and parking lots cleaned using dry methods to collect and use as mulch or dispose as solid waste?				
Recreation BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Is pool water tested or treated for chlorine before discharge?				
Is pool filter backflush discharged to the sanitary sewer?				
Are pool chemicals stored inside and in appropriate				

containers?				
Non-Stormwater BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Non-Storm Water Management				
Is the site free of evidence of illegal connections and illicit discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
Other				
No other potential storm water pollution issues or concerns exist. If no, explain below.				

Explanations:_____

_____

_____

_____

_____

_____

_____

_____

Received by:_____ _____

Name (Print) **Date**

_____

Signature

	Business Name	Street Address	Zip	Responsible Person(s)	ext:	SIC Code	Principal Activity	Nearest Conveyances or Water Bodies
1	ALLIED CASTINGS INC	983 VERNON WY	92020	Khris Carmichael		3365	Metal Foundry	Forrester Creek
2	ALTURDYNE	660 STEELE ST.	92020	Wade Langworthy		3621	Build Generator Back-ups	Forrester Creek
3	ARTIMEX IRON CO, INC	315 Cypress Ln.	92020	Jose Padilla		3441	Structural Steel Fabrication	Broadway Channel
4	CAJON VALLEY UNION SCH DIST.	777 EAST PARK BLVD.	92022	Eric Kostamo		4151	School Bus Maintenance Facility	Washington Channel
5	CALIFORNIA COUNTER TOP	1340 HILL STREET	92020	Wayne Krammenacker		3089	Countertop Fabrication	County Ditch
6	CALIFORNIA METALS	297 S MARSHALL AVE	92020	Ken Jay, Josh Turzhin		5093	Metals Recycling	County Ditch
7	CALIFORNIA METALS	636 FRONT ST	92020	Josh Turchin		5093	Metals Recycling	County Ditch
8	CARPENTER SPECIAL PROD CORP	1717 N CUYAMACA ST	92020	Duane Holander		3499	Specialty Metal Fabrication	Forrester Creek
9	CERTIFIED METAL CRAFT INC	877 VERNON WY	92020	Wiederker		3398	Metal Heat Treatment	Forrester Creek
10	CHEM-TRONICS INC	1150 W BRADLEY AVE	92020	Randy Olms	5062	3724	Fabricate Metal Parts for Jet Engines	Forrester Creek
11	DECCO CASTINGS INC	1596 PIONEER WY	92020	Kit Kesinger	109	3365	Aluminum Foundry	Broadway Channel
12	DIXIELINE LUMBER CO.	1262 E. Main St.	92020	Cheryl Berman		2439	Structural Wood Manufacturing	Forrester Creek
13	EL CAJON (MAIN) United States Post Office	401 WEST LEXINGTON	92020	Maria Liss		4311	Postal Service	County Ditch
14	EL CAJON AUTO WRECKERS	1416 PIONEER WY	92020	Hanna Mikkonen		5015	Auto Dismantling	Forrester Creek
15	G MARBLE & GRANITE	1820 JOHN TOWERS #A	92020	Vince Guida	13, 12	3281	Granite Cutting & Fabrication	Forrester Creek
16	LAIDLAW TRANSIT SERVICES	1213 N JOHNSON AV	92020	Gary Sales		4173	Public Transportation-terminal & service facility	Forrester Creek
17	LAIDLAW TRANSIT SVCS INC	800 FESLER ST	92020	Gary Sales	205	4111	Local Transit Repair	Forrester Creek
18	PACIFIC TRANS ENVIRONMENTAL SVCS	1452 N JOHNSON AVE	92020	Alfonso Rodriguez		8744	Hazardous Waste Transport	Forrester Creek
19	PRECISION METAL PRODUCTS	850 W BRADLEY AVE	92020	Andrew Fisher	110	3462& 3463	Metal Manufacturing	Forrester Creek
20	SENIOR FLEX KETEMA DIV	790 GREENFIELD DR	92021	Hank Bayles		3724	Manufacture Engine Components	Broadway Channel
21	SOLO CUP CO (THE FONDA GROUP)	1160 VERNON WAY	92020	Debbie Baudour		2656	Paper Converting	Forrester Creek
22	SOUTH BAY WELDING	761-781 O'CONNER ST	92020	John Singer	112	3441	Welding (Steel Manufactruing & Fabrication)	Forrester Creek
23	TORO AGRICULTURAL IRRIGATION	1588 N MARSHALL AVE	92020	Chris Stowell	225	3084	Plastics, Pipe	Forrester Creek
24	TRIUMPH COMPONENTS - SAN DIEGO INC	203 N JOHNSON AVE	92020	Bill Peet	2026	3728	Aircraft Parts & Epuipment Manufacturing	County Ditch
25	WASTE MANAGEMENT	1001 W BRADLEY AVE	92020	Phil Smith		4212	Garbage Collection/Transportation, w/o disposal	Forrester Creek
26	WINDOWMASTER PRODUCTS	1111 PIONEER WY	92020	John Stettler	185	3231	Manufacture of Window Panes & Frames	Broadway Channel

STORM WATER ADMINISTRATIVE CITATION PROGRAM CRITERIA

1. Issue a Warning (followed by a letter, when possible)
   a. Whenever a discharge of pollutants is imminent or the potential exists, but the discharge has not yet entered the storm drain conveyance system (street, gutter, catch basin, etc.)
   b. Whenever a BMP is not effective for the pollutant or discharge and other BMP alternatives are available.
   c. Whenever a discharge origin cannot be determined through factual, investigative, or empirical evidence. Provide a cleanup schedule to be used as future enforcement.
   d. Small residential projects of less than 500 square feet of disturbed soil.
   e. An approved erosion and control plan has been issued and BMPs are partially implemented.
   f. Whenever activities are conducted in the right-of-way and no BMPs are implemented.
   g. Whenever a discharge of fully recoverable pollutants are discharged into the City's storm drain system (street and gutter only).

2. Issue a Citation
   a. Whenever there is a sewage overflow. (e.g. blockage; clean-out cap was removed to allow sewage to discharge into the street and storm drain).
   b. Whenever there is a discharge of unrecoverable pollutants into the storm drain conveyance system (street, gutter, catch basin, etc.)
   c. A Warning was previously issued (verbal or written).
   d. Any direct discharge into Forester Creek specifically any material which contains a 303(d) listed pollutant adopted by the State of California.(pH, TDS, and fecal coliform).
   e. An approved erosion and control plan has been issued and no BMPs are implemented.
   f. An egregious act of discharge (e.g. illegal dumping)

3. Issue a Penal Code Violation (PC374.3, 374.4, 374.7)
   a. When a First Citation was previously issued and this is a repeat violation.
   b. When the discharge is executed in the presence of any City Staff or after being told to cease operations. (waste, sewage, and litter discharges)
   c. Any direct discharge into Forester Creek, specifically material containing pollutants for which a 303(d) listing has been adopted by the State of California.(pH, TDS, and fecal coliform).

4. Issue a Stop Work Order
   a. For construction sites that received a warning and a first violation for discharging pollutants due to ineffective or proposed, but not yet implemented BMPs.
   b. A discharge of pollutants into the storm drain system, in addition to a citation, that requires immediate corrective action or mitigation.

5. Refer to Regional Board
   a. Repeated violations by a private citizen, property owner, or business for discharges to the storm drain system.
   b. A refusal to mitigate, remediate, or clean a spill or discharge of pollutants that will enter or have entered City MS4.

CITY OF EL CAJON **PW NO. ____**
PUBLIC WORKS DEPARTMENT - STORM WATER
200 EAST MAIN STREET, EL CAJON, CALIFORNIA 92020

ADMINISTRATIVE CITATION

☐ **WARNING** PLEASE NOTE THAT THE VIOLATION(S) LISTED BELOW MUST BE CORRECTED BY _____ OR A CITATION WILL BE ISSUED AS A CORRECTIVE MEASURE.

☐ **1st CITATION** ☐ **2nd CITATION** ☐ **3rd CITATION**

PAYMENT OF $ _____ IS DUE NO LATER THAN _____ (SEE REVERSE SIDE FOR PAYMENT INFORMATION). PAYMENT DOES NOT EXCUSE CORRECTION OF THE VIOLATION.

CORRECTION OF THE VIOLATION(S) INDICATED BELOW MUST BE COMPLETED BY: _____.
(DATE)

IF YOU FAIL TO CORRECT THE VIOLATION(S) BY THIS DATE, THE NEXT LEVEL OF CITATION MAY BE ISSUED.

PERSON CITED

_____

LAST NAME FIRST M.I. ☐ PROPERTY OWNER ☐ TENANT
☐ BUSINESS OWNER ☐ OTHER

_____

MAILING ADDRESS CITY/STATE ZIP CODE

_____

VIOLATION ADDRESS BUSINESS NAME ASSESSOR'S PARCEL NUMBER

CODE SECTION VIOLATED	DESCRIPTION OF VIOLATION

SEE ATTACHED FOR ADDITIONAL VIOLATIONS ☐

CORRECTION(S) REQUIRED

ISSUING OFFICER: _____ DATE ISSUED:_____
PHONE: _____

SIGNATURE OF PERSON CITED:_____
(SIGNING THIS CITATION ACKNOWLEDGES RECEIPT ONLY, AND IS NOT AN ADMISSION OF GUILT)

CITATION SERVED: ☐ IN PERSON TO:_____ ☐ POSTED ON PROPERTY
DATE: ☐ BY MAIL ☐ OTHER

SEE REVERSE SIDE FOR APPEAL RIGHTS AND OTHER IMPORTANT INFORMATION

WHITE - CITY
YELLOW - RESPONSIBLE PARTY

City of El Cajon
STORMWATER
Pollution Prevention Program

City of El Cajon
Storm Water Quality Inspection for Industrial/Commercial Facilities

Inspector Name_____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. Contact Information

Business Name_____

Street Address_____ Mailing Address_____

_____ _____

Responsible Person(s)_____

Business Telephone # (_____) _____ - _____ ext._____

After hours Telephone # (_____) _____ - _____ ext._____

B. Facility/Site Information

Principal activity:_____

Category: ☐ Industrial ☐ Commercial

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID#_____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☐ No

Does facility have a current business certificate? ☐ Yes ☐ No #_____ Exp._____

Property owner or management group: _____

C. Initial Observations

Nearest conveyances or water bodies: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate % impervious surface of this area_____%

Exposed areas of intensive outdoor activity: _____

Roof Run-off: ☐ Discharged to Street ☐ Directed to Landscape ☐ Other _____

Landscaped Areas: ☐ Yes ☐ No

Potential for Over-watering (scale of 1-10): _____

D. BMP Assessment

D.1 Pollution Prevention

BMPs	N/A	Yes	No	Comments
Is the parking area free of fresh leaks and old leaks/stains cleaned to MEP?				
Are spill kit materials readily available and clearly marked?				
Is pollution prevention a topic of the employee training?				
Are recycled products used at the site?				
Are there pollution prevention posters or other visual aides placed in a noticeable area for employees and patrons?				
Is there a pollution prevention plan or other such similar plan in place?				
Is there a water conservation policy for irrigation and business use?				
Is waste disposal a topic of the employee training?				
Is spill training conducted?				
Is there emergency training?				
Is there a voluntary inspection program?				
Is there a grease interceptor?				
Is there a preventive maintenance program for equipment?				

D.2 General

BMPs	N/A	Yes	No	Comments
Is the site free of litter and debris?				
Are discharge locations free of sediment and debris?				
Are parking lots, sidewalks and streets free of sediment and debris?				
Are roof downspouts directly away from areas of potential pollutants?				

D.3 Landscaping

BMPs	N/A	Yes	No	Comments
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				

D.4 Materials and Wastes

BMPs	N/A	Yes	No	Comments
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area enclosed and free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor material storage areas adequate (covered area with secondary containment)?				
Are outdoor storage containers properly labeled?				
Is there an accessible spill response kit?				
Are storage tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				

D.5 Equipment and Vehicles

BMPs	N/A	Yes	No	Comments
Are exposed parking areas free of significant spills and leaks?				
Are heavy equipment and vehicles stored in garages or under canopies?				
Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				
Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
Are biodegradable soaps used for cleaning activities?				

D.6 Construction

BMPs	N/A	Yes	No	Comments
Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				

D.7 Food Establishments

BMPs	N/A	Yes	No	Comments
Does facility have a grease trap or grease interceptor?				
Are deep fryer oil-recycling drums stored properly?				
Are storm drain inlets free of grease and other food debris?				

D.8 Non-Storm Water Management

BMPs	N/A	Yes	No	Comments
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				

D.9 Other

BMPs	N/A	Yes	No	Comments
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				

City of El Cajon Inspector

Business Owner or Designee

E. SWPPP Review

Does facility maintain a SWPPP: ☐ Yes ☐ No ☐ Not Applicable

SWPPP Component	Provided		Adequate		Comments
Site Map/Description	☐ Yes	☐ No	☐ Yes	☐ No	
Materials List	☐ Yes	☐ No	☐ Yes	☐ No	
Significant Spills/Leaks	☐ Yes	☐ No	☐ Yes	☐ No	
Pollution Prevention	☐ Yes	☐ No	☐ Yes	☐ No	
Industrial Activities	☐ Yes	☐ No	☐ Yes	☐ No	
Pollutant Sources/Risks	☐ Yes	☐ No	☐ Yes	☐ No	
Compliance Activity Schedule	☐ Yes	☐ No	☐ Yes	☐ No	
Employee Training	☐ Yes	☐ No	☐ Yes	☐ No	
Accessible to staff	☐ Yes	☐ No	☐ Yes	☐ No	
Existing BMPs	☐ Yes	☐ No	☐ Yes	☐ No	

Do monitoring results show that existing BMPs are effective in removing pollutants? ☐ Yes ☐ No

Attach a copy of the monitoring results summary. ☐ Done

Recommended changes_____

_____

City of El Cajon
STORMWATER
Pollution Prevention Program

City of El Cajon
Storm Water Quality Inspection Summary

Facility Name_____

Inspector Name_____ Date/Time_____

F. Recommended Corrective Action

Is corrective action needed? ☐ Yes ☐ No

If yes, describe below.

_____

_____

_____

_____

_____

_____

_____

_____

_____

Owner/operator has been notified of recommended corrective actions: ☐ Verbally ☐ Photocopy ☐ Fax

G. Violations

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described above.

☐ Violation of storm water ordinance or other applicable regulations were found.

Type of violation: ☐ Illegal discharge(s) of pollutants into the storm drain or receiving waters

Description_____

☐ Illegal connection(s) to the storm drain system

Location_____

☐ Littering

☐ Improper implementation of required BMPs

☐ Other_____

Specific action required to the correct violation described above:

_____

_____

_____

_____

_____

City of El Cajon
STORMWATER
Pollution Prevention Program

City of El Cajon Industrial and Commercial Inspections

1. INTRODUCE YOURSELF AND THE INSPECTION TEAM

2. SUMMARIZE THE EL CAJON STORM WATER PROGRAM
   - A. USE THE LOGO AS A FOCUS POINT EMPHASIZING PREVENTION
   - B. PERMIT ISSUED FEB. 21, 2001 COUNTY-WIDE TO 20 COPERMITTEES
   - C. BASICALLY PERMIT REQUIRES PROTECTION OF WATER QUALITY
   - D. INCLUDES ALL TRIBUTARIES TO MAJOR STREAMS, RIVERS, AND OCEAN
   - E. FORESTER CREEK IS THE CITY OF EL CAJON'S MAIN STREAM AND IS FURTHER PROTECTED FOR VARIOUS POLLUTANTS (BACTERIA, DISSOLVED POLLUTANTS, AND PH)
   - F. COMPLIANCE REQUIRES DILIGENCE BY CITY AND PARTNERSHIP WITH BUSINESSES AND CITIZENS
   - G. BUSINESS INSPECTIONS ARE A REQUIREMENT OF THE PERMIT
   - H. GOAL IS TO WORK TOGETHER TO MAKE THE PERMIT REQUIREMENTS WORK FOR ALL.
   - I. ENFORCEMENT (ALSO A REQUIREMENT) IS THE TOOL USED WHEN COLLABORATION DOESN'T WORK (DISCUSS ENFORCEMENT).
   - J. CITY ORDINANCE IS THE ENFORCEMENT TOOL
   - K. CITY FEES

3. SUMMARIZE THE INSPECTION PROCESS AS FOLLOWS:
   - A. ASK INITIAL QUESTIONS
   - B. WALK FACILITY BOUNDARY
   - C. REVIEW OUTSIDE ACTIVITIES
   - D. DISCUSS EXISTING OR MISSING BMPS
   - E. COMPLETE CHECKLIST
   - F. PRINT
   - G. DISCUSS FINDINGS AND CORRECTIVE ACTIONS
   - H. SIGN INSPECTION FORM
   - I. MAKE A COPY FOR CITY FILES
   - J. SCHEDULE ANY FOLLOW-UP VISITS
   - K. **THANK** THE FACILITY FOR THEIR COOPERATION

4. TOOLS TO USE DURING INSPECTION
   - A. LISTEN TO ALL ISSUES FROM THE FACILITY – SOME MAY HAVE MERIT.
   - B. OFFER EXPERIENCES AND MATERIALS OR PROCEDURES USED FROM OTHER SIMILAR BUSINESSES
   - C. BE FIRM WITH THE REQUIREMENTS
   - D. DO NOT RECOMMEND PRODUCTS

No Exposure" Conditional Exemption For Industrial Facilities

The proposed USEPA rules will establish a conditional exemption called a "No Exposure Exemption" for owners and operators of industrial facilities who can show that industrial materials, material handling operations and industrial processes, are not exposed to stormwater. Essentially, this exemption replaces the previous exemption for "light industry" which was remanded to USEPA from federal court to further define and substantiate the justification for such an exemption. A written certification will be required to be submitted to the permitting authority every three years on a form supplied by the authority. This potential conditional exemption applies to all industrial categories regardless of type, except construction sites and sources individually designated. The conditions for qualifying for the No Exposure Exemption will include the following:

1. Notification to the permitting authority at the beginning of each permit term;
2. Must allow the permitting authority or municipality to inspect the facility and to make the results of inspection public;
3. Upon request, submit a copy of the certification to the municipality in which the facility is located; and
4. Sign and certify the certification.

The permitting authority will still retain the legal authority to require the owner or operator of an industrial facility to apply for an individual or general NPDES permit if it determines that the discharge is, or may reasonably be, causing or contributing to a violation of a water quality standard, or is or may be interfering with the attainment or maintenance of a water quality standard, including a designated use.
In connection with the No Exposure Exemption being considered, USEPA is seeking comments on the issue of how to define "no exposure." Several important issues are listed for further review (but are not part of this proposed rule), including:

1. How to account for stormwater runoff from parking lots, roof tops, lawns and other non-industrial areas of an industrial facility;
2. Whether the construction of impervious surfaces, such as roofs to achieve no exposure that significantly increase stormwater runoff volume should be regulated to prevent adverse impacts to the receiving water simply due to increased quantity of flow;
3. Whether air emissions from roof vents or stacks should be considered in the evaluation of no exposure; and
4. Whether tight non-leaking drums, barrels or dumpsters are sufficient to quality for the no exposure exemption, or should there be a "potential to leak" evaluation included.

Fact Sheet

Storm Water Regulations and Industrial Activities

Background

In November 1990, the Environmental Protection Agency (EPA) adopted regulations requiring National Pollutant Discharge Elimination System (NPDES) permits for storm water discharges from certain industrial sites. In California, the State Water Resource Control Board and the nine Regional Water Quality Control Boards (RWQCB) are responsible for administering the storm water permit program. The following questions and answers are meant to give the reader an overview of the requirements and Best Management Practices required. Since the regulations are very complex, please contact your local/municipal staff for information specific to your situation.

Who needs a permit?

The EPA storm water regulations state that certain storm water discharges "associated with industrial activity" need permits. This definition is complex and sometimes confusing. In general, you may need an NPDES permit if:

- ☐ Your industry is listed by EPA; and
- ☐ Storm water from rain or snow melt leaves your site through a "point source" and reaches surface waters either directly or through storm drainage. A point source discharge refers to a natural or human-made conveyance of water through such things as pipes, culverts, ditches, catch basins, or any other type of channel.
- ☐ In addition, you may need a permit if you are involved in construction activities; including clearing, grading and excavation activities that disturb five or more acres of land.

What permits are required?

The RWQCBs oversee a series of permits to address the particular stormwater activities specified by EPA. Three of these permits applicable to industrial activities are:

- ☐ General Construction Permit for construction activities that disturb one or more acres
- ☐ General Industrial Permit for businesses that are involved in a list of activities specified by Standard Industrial Classification (SIC) Code; and
- ☐ Urban Runoff Permits for Phase I communities.

Industries may be regulated by all three permits depending on the location and the activities of the business.

What does a general permit require?

The two general permits have some similar basic requirements. You must:

- ☐ Submit a Notice of Intent and the appropriate fees to the RWQCB prior to initiation of the activities.
- ☐ Generate a Storm Water Pollution Prevention Plan (SWPPP) according to the RWQCB requirements addressing the potential for discharges and how to prevent or reduce their impacts to the environment using Best Management Practices. (http://www.swrcb.ca.gov)
- ☐ Monitor storm water by collecting a "grab" sample as specified in the permit.
- ☐ Strive to meet receiving water requirements when Total Maximum Daily Limits (TMDLs) are involved.
- ☐ Review and update your Storm Water Pollution Prevention Plan annually or when project activities change from the original plan.

What does a municipality's permit require of an industrial business?

- ☐ Comply with the applicable general permit(s) requirements.
- ☐ Review of the SWPPP for compliance with the municipality's urban runoff permit.
- ☐ Inspection of the facility for compliance with the municipality's urban runoff permit for implementation of applicable BMPs.
- ☐ Compliance with the municipality's urban runoff permit using applicable BMPs.

Regulated industries

Any industry within a municipality's jurisdiction will be required to comply with that jurisdiction's requirements.

What Best Management Practices are required?

In general, the following bullets are the Source Control BMPs required by municipalities in the San Diego County region. To assist in implementation, each BMP lists the industrial activities where the BMP is applicable and should be implemented.(See Note Below)

☐ Non-Storm Water Discharges

- Storing Hazardous Waste Outdoors
- Washing Vehicles and Equipment
- Fueling Vehicles and Equipment
- Repairing Vehicles and Equipment
- Planting Landscape
- Watering Landscape
- Maintaining Landscaped Areas
- Storing Materials Outdoors including Rood Storage
- Cleaning Windows and Buildings
- Parking Lot Maintenance
- Painting and Disposal of Paint Wash Liquids
- Recycling Area Maintenance
- Liquid Material Transfer
- Solid Material Transfer
- Spills of Petroleum or Other Oils
- Cleaning Outdoor Areas
- Power Wahsing Ourdoor Areas
- Loading Dock Maintenance
- Used Oil Recycling
- Cleaning of and Around Storm Drain Systems
- Fire Sprinkler System Repair and Maintenance

☐ Spill Prevention, Control, and Cleanup

- Storing Hazardous Waste Outdoors
- Washing Vehicles and Equipment
- Fueling Vehicles and Equipment
- Repairing Vehicles and Equipment
- Planting Landscape
- Watering Landscape
- Maintaining Landscaped Areas
- Storing Materials Outdoors including Rood Storage
- Cleaning Windows and Buildings
- Parking Lot Maintenance
- Painting and Disposal of Paint Wash Liquids
- Recycling Area Maintenance
- Liquid Material Transfer
- Solid Material Transfer
- Spills of Petroleum or Other Oils
- Cleaning Outdoor Areas
- Power Washing Outdoor Areas
- Loading Dock Maintenance
- Used Oil Recycling
- Cleaning of and Around Storm Drain Systems
- Fire Sprinkler System Repair and Maintenance

☐ Vehicle & Equipment Fueling

- Fueling Vehicle and Equipment
- Spills of Petroleum or Other Oils

☐ Vehicle & Equipment Repair
- Repairing Vehicles and Equipment
- Washing Vehicles and Equipment

☐ Outdoor Loading/Unloading
- Loading Dock Maintenance

☐ Outdoor Liquid Container Storage
- Storing Hazardous Waste Outdoors
- Maintaining Trash Enclosure Area
- Storing Materials Outdoors including roof storage
- Liquid Material Transfer

☐ Outdoor Equipment Operations
- Repairing Vehicles and Equipment

☐ Outdoor Storage of Raw Materials
- Planting Landscape
- Storing Materials Outdoors including Roof Storage
- Spills of Petroleum or Other Oils

☐ Waste Handling and Disposal
- Storing Hazardous Waste Outdoors
- Washing Vehicles and Equipment
- Fueling Vehicles and Equipment
- Repairing Vehicles and Equipment
- Planting Landscape
- Watering Landscape
- Maintaining Landscaped Areas
- Storing Materials Outdoors including Rood Storage
- Cleaning Windows and Buildings
- Parking Lot Maintenance
- Painting and Disposal of Paint Wash Liquids
- Recycling Area Maintenance
- Liquid Material Transfer
- Solid Material Transfer
- Spills of Petroleum or Other Oils
- Cleaning Outdoor Areas
- Power Washing Outdoor Areas
- Loading Dock Maintenance
- Used Oil Recycling
- Cleaning of and Around Storm Drain Systems
- Fire Sprinkler System Repair and Maintenance

☐ Building and Ground Maintenance
- Planting Landscape
- Maintaining Landscaped Areas
- Storing Materials Outdoors including Rood Storage
- Cleaning Windows and Buildings
- Parking Lot Maintenance
- Cleaning Outdoor Areas
- Power Washing Outdoor Areas
- Loading Dock Maintenance

Cleaning of and around Storm Drain Systems

☐ Parking/Storage Area Maintenance
Parking Lot Maintenance
Spills of Petroleum or Other Oils
Cleaning Outdoor Areas

☐ Drainage System Maintenance
Spills of Petroleum or Other Oils
Cleaning Outdoor Areas
Cleaning of and around Storm Drain Systems

NOTE: Implementation is based on feasibility, location, and special circumstances.

For Further Assistance

To obtain further information on storm water permits, please contact storm water program staff in your area or the RWQCB regional office nearest you. Locations and phone numbersfor the RWQCB can be found at http://www.swrcb.ca.gov/rwqcb9/.

BUSINESS NAME	STREET NO.	STREET NAME	Principal Activity	Result	Nearest Conveyances
SAN DIEGO AUTO GLASS & TINTING	310	ANZA	Automotive Repair	Closed	Washington Channel
TIPTON HONDA	889	ARNELE	Automotive Sales and Service	Full Inspection	Forrester Creek
A TO Z LEASING	889	ARNELE	Automotive Sales	Full Inspection	Forrester Creek
BOB BAKER CHEVROLET-EL CAJON	900	ARNELE	Automotive Sales and Service	Full Inspection	Forrester Creek
BOB BAKER LEXUS	1000	ARNELE	Automotive Sales and Service	Full Inspection	Forrester Creek
U S WHEEL REMANUFACTURING	1000	BRADLEY	Automotive Service	Full Inspection	Broadway Channel
A1 SMOG TEST	507	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
EAST COUNTY TIRE & BRAKE	616	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
EL CAJON SMOG TEST ONLY	720	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
NEW WEST #1019	898	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
SAATCHI & ASSOCIATES INC (Arco)	900	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
A-1 GLASS COMPANY	944	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
A Z AUTO SERVICE	953	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
J R PRODUCTS	982	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
SUPER STAR #2	1090	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
BROADWAY TIRE	1105	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
LOWEST PRICE AUTO GLASS	1110	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
IMPORTED CAR CARE	1117	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
SIDS AUTO BODY INC	1129	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
CAMPER & TRAILER OUTLET	1198	BROADWAY	Automotve Sales and Service	Full Inspection	Broadway Channel
R V DECORATORS	1204	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
BROADWAY SMOG TEST ONLY STATION	1214	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
ALLMAN FAMILY AUTO	1265	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
FOREIGN AUTO REPAIR	1265	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
E.C. TEST ONLY	1310	BROADWAY	Automotive Service	Closed	Broadway Channel
J C AUTO REPAIR	1310	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
SUN AUTO REPAIR	1310	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
EXPRESS AUTO REPAIR & TIRES	1316	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
SPECIALTY DIESEL	1316	BROADWAY	Automotive Service	Closed	Broadway Channel
ATLANTIC AUTO REPAIR	1318	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
EL CAJON MUFFLER & A/C	1370	BROADWAY	Automotive Service	Full Inspection	Broadway Channel
EL CAJON TOWING	327	CYPRESS	Automotive Service	Full Inspection	Broadway Channel

BUSINESS NAME	STREET NO.	STREET NAME	Principal Activity	Result	Nearest Conveyances
CANAL TRANSMISSIONS	1249	DENVER	Automotive Service	Full Inspection	Broadway Channel
R P M AUTO	270	DOUGLAS	Automotive Service	Closed	Washington Channel
FORTUNE MOTORS	453	DOUGLAS	Automotive Service	Closed	Washington Channel
J C MOTORCARS	471	DOUGLAS	Automotive Service	Closed	Washington Channel
AUTO WORLD (closed) now Wholesale Autos	110	EL CAJON	Automotive Service	Full Inspection	County Ditch
EL CAJON MITSUBISHI	247	EL CAJON	Automotive Sales and Service	Full Inspection	County Ditch
TOYOTA OF EL CAJON	300	EL CAJON	Automotive Sales and Service	Full Inspection	County Ditch
EL CAJON RADIATOR SHOP	580	EL CAJON	Automotive Service	Full Inspection	County Ditch
QWIK SMOG	580	EL CAJON	Automotive Service	Full Inspection	County Ditch
PERFECT PERFORMANCE AUTO CARE	595	EL CAJON	Automotive Service	Full Inspection	County Ditch
EL CAJON MAZDA KIA	720	EL CAJON	Automotive Sales and Service	Full Inspection	County Ditch
POES BODY SHOP	727	EL CAJON	Automotive Service	Closed	County Ditch
MUSTANG AUTO	727	EL CAJON	Automotive Sales and Service	Full Inspection	County Ditch
COLOSUS AUTO REBUILDERS	790	EL CAJON	Automotive Service	Full Inspection	County Ditch
J. C. AUTO DETAIL	790	EL CAJON	Automotive Service	Full Inspection	County Ditch
TRANSMISSIOIN SPECIALIST	790	EL CAJON	Automotive Service	Closed	County Ditch
ADVANCE AUTOBODY AND PAINT	790	EL CAJON	Automotive Service	Full Inspection	County Ditch
SIDS AUTO BODY INC	906	EL CAJON	Automotive Service	Full Inspection	County Ditch
LOW PRICE AUTO GLASS #22	1100	EL CAJON	Automotive Service	Full Inspection	County Ditch
FLETCHER HILLS AUTOMOTIVE & SMOG	1288	FESLER	Automotive Service	Full Inspection	Forrester Creek
ADVANCED BUMPER REPAIR	336	FIRST	Automotive Service	Closed	Forrester Creek
SEARS ROEBUCK & CO	575	FLETCHER	Automotive Service	Full Inspection	Fletcher Parkway Basin
OIL CHANGERS #503	906	FLETCHER	Automotive Service	Full Inspection	Fletcher Parkway Basin
LA MESA AUTO & TIRE CENTER	2210	FLETCHER	Automotive Service	Full Inspection	Fletcher Parkway Basin
76 SMOG TEST ONLY STATION	640	GARFIELD	Automotive Service	Full Inspection	Fletcher Parkway Basin
CHIEF AUTO GLASS	640	GARFIELD	Automotive Service	Full Inspection	Fletcher Parkway Basin
SCHLOSSNAGEL	1330	HILL	Automotive Service	Full Inspection	County Ditch

BUSINESS NAME	STREET NO.	STREET NAME	Principal Activity	Result	Nearest Conveyances
VALERO STATION #3738	785	JAMACHA	Automotive Service	Full Inspection	Washington Channel
CALIBER COLLISON CENTERS	332	JOHNSON	Automotive Service	Full Inspection	Forrester Creek
MYERS TRANSMISSION REPAIR INC (AAMCO)	355	JOHNSON	Automotive Service	Full Inspection	Forrester Creek
BUDGET CAR SALES/DAEWOO OF EL CAJON	400	JOHNSON	Automotive Service	Full Inspection	Forrester Creek
SATURN OF EL CAJON	541	JOHNSON	Automotive Sales and Service	Full Inspection	Forrester Creek
GREGS AUTOMOTIVE	572	JOHNSON	Automotive Service	Full Inspection	Forrester Creek
GREGS AUTOMOTIVE	572	JOHNSON	Automotive Service	Full Inspection	Forrester Creek
GREGS BRAKE & ALIGNMENT	576	JOHNSON	Automotive Service	Full Inspection	Forrester Creek
ANYTHING CORVETTE	584	JOHNSON	Automotive Service	Closed	Forrester Creek
BUGGY WORLD	584	JOHNSON	Automotive Service	Full Inspection	Forrester Creek
SUMMIT TRANSMISSIONS	588	JOHNSON	Automotive Service	Full Inspection	Forrester Creek
THE THREE AMIGOS AUTO REPAIR & SALES	605	LEXINGTON	Automotive Service	Full Inspection	Washington Channel
JORGE FLORES	1430	LEXINGTON	Automotive Service	Closed	Washington Channel
MOTOWORLD OF EL CAJON	315	MAGNOLIA	Automotive Sales and -Service	Full Inspection	Forrester Creek
SUZUKI OF EL CAJON	464	MAIN	Automotive Sales and -Service	Full Inspection	County Ditch
BEST AUTO WHOLESALER	476	MAIN	Automotive Service	Full Inspection	County Ditch
ARCO #9577	489	MAIN	Automotive Service	Full Inspection	County Ditch
VALLEY MUFFLER SHOP	533	MAIN	Automotive Service	Full Inspection	County Ditch
TRUST AUTO REPAIR	537	MAIN	Automotive Service	Full Inspection	County Ditch
AUTO GLASS OF EXCELLENCE	927	MAIN	Automotive Service	Closed	County Ditch
VICTORY AUTO SERVICE	935	MAIN	Automotive Service	Full Inspection	County Ditch
IMPORTED MOTOR CARS	939	MAIN	Automotive Service	Full Inspection	County Ditch
EARL SCHEIB OF CALIF INC #244	1002	MAIN	Automotive Service	Full Inspection	County Ditch
CLIFTON MERCEDES INDEPENDENT SALES/SERVICE	1033	MAIN	Automotive Service	Full Inspection	County Ditch
CLIFTON MERCEDES INDEPENDENT SALES/SERVICE	1033	MAIN	Automotive Service	Full Inspection	County Ditch
MOSSY NISSAN EL CAJON	1170	MAIN	Automotive Service	Full Inspection	County Ditch
MAIN ST AUTO	1189	MAIN	Automotive Service	Closed	Forrester Creek
AUTO REPAIR FOR LESS	1189	MAIN	Automotive Service	Full Inspection	Forrester Creek
PRECISION TUNE AUTO CARE	1191	MAIN	Automotive Service	Full Inspection	Forrester Creek
TRANS MASTERS TRANSMISSIONS	1191	MAIN	Automotive Service	Closed	Forrester Creek
BANNY HOM ENTERPRISES	1240	MAIN	Automotive Service	Full Inspection	Forrester Creek

BUSINESS NAME	STREET NO.	STREET NAME	Principal Activity	Result	Nearest Conveyances
EAST COUNTY AUTO CENTER	1375	MAIN	Automotive Service	Full Inspection	Forrester Creek
DE LA FUENTE CADILLAC	1385	MAIN	Automotive Sales and -Service	Full Inspection	Forrester Creek
SMOG PROS	1410	MAIN	Automotive Service	Full Inspection	Forrester Creek
DECKER AUTO SERVICE	1492	MAIN	Automotive Service	Full Inspection	Forrester Creek
EL CAJON FORD	1595	MAIN	Automotive Sales and -Service	Full Inspection	Forrester Creek
RILEY AUTOMOTIVE	1665	MAIN	Automotive Service	Full Inspection	Forrester Creek
NEW WEST #1018 EXXON	1699	MAIN	Automotive Service	Full Inspection	Forrester Creek
G&M OIL CO LLC #59	1701	MAIN	Automotive Service	Full Inspection	Forrester Creek
C&D TOWING SPECIALISTS	187	MARSHALL	Automotive Service	Full Inspection	Forrester Creek
BRAKE EXPRESS INC	227	MARSHALL	Automotive Service	Closed	Forrester Creek
EL CAJON AUTO CENTER INC	243	MARSHALL	Automotive Service	Full Inspection	Forrester Creek
UNDER CAR SPECIALTIES	251	MARSHALL	Automotive Service	Full Inspection	Forrester Creek
A&A SMOG TEST ONLY STATION	267	MARSHALL	Automotive Service	Full Inspection	Forrester Creek
E P SMOG #2	267	MARSHALL	Automotive Service	Closed	Forrester Creek
SAMS QUALITIY AUTO CARE	267	MARSHALL	Automotive Service	Full Inspection	Forrester Creek
HEARTLAND INDEPENDENT VOLVO	590	MARSHALL	Automotive Service	Full Inspection	Forrester Creek
CLASSIC TOWING	1101	MARSHALL	Automotive Service	Full Inspection	Forrester Creek
CHEVRON STATIONS INC #1472	696	MOLLISON	Automotive Service	Full Inspection	Forrester Creek
CHEVRON USA INC #92779	696	MOLLISON	Automotive Service	Full Inspection	Forrester Creek
RANCHO DEL ORO TOWING	1167	PALM	Automotive Service	Full Inspection	County Ditch
READY-TIME TOWING	270	PARK	Automotive Service	Closed	Washington Channel
MECH INCLINED TECHNICIANS	1112	PIONEER	Automotive Service	Full Inspection	Broadway Channel
FLETCHER HILLS TOWING	1357	PIONEER	Automotive Service	Full Inspection	Broadway Channel
CLANCYS TOWING	1385	PIONEER	Automotive Service	Full Inspection	Broadway Channel
MILLERS TOWING	1402	PIONEER	Automotive Service	Full Inspection	Broadway Channel
CUMMINS CAL PACIFIC, L.L.C.	485	RALEIGH	Automotive Service	Full Inspection	County Ditch
BOBS CAR CARE	678	RAYMOND	Automotive Service	Closed	Chase Lateral
EL CAJON AUTO ELECTRIC/TIRE	317	SECOND	Automotive Service	Full Inspection	Forrester Creek
J.D. SHAMOUN INC	500	SECOND	Automotive Service	Closed	Forrester Creek
EL CAJON 76 STATION	500	SECOND	Automotive Service	Full Inspection	Forrester Creek
JIFFY LUBE #495	539	SECOND	Automotive Service	Full Inspection	Forrester Creek
VALVOLINE INSTANT OIL CHANGE	610	SECOND	Automotive Service	Full Inspection	Forrester Creek
SMOG CENTERS OF CALIFORNIA, L.L.C.	710	SECOND	Automotive Service	Closed	Forrester Creek
APRO #20	710	SECOND	Automotive Service	Full Inspection	Forrester Creek

BUSINESS NAME	STREET NO.	STREET NAME	Principal Activity	Result	Nearest Conveyances
P M C STORES II ARCO GAS	725	SECOND	Automotive Service	Full Inspection	Forrester Creek
MIDAS MUFFLERS	777	SECOND	Automotive Service	Closed	Forrester Creek
TRICK TRUCK OF CA	797	SECOND	Automotive Service	Full Inspection	Forrester Creek
VALLEY AUTOMOTIVE	813	SECOND	Automotive Service	Full Inspection	Forrester Creek
RUN RITE AUTO SERVICE #3	830	SECOND	Automotive Service	Full Inspection	Forrester Creek
MURPHYS AUTO REPAIR	935	SECOND	Automotive Service	Full Inspection	Forrester Creek
TOP DOLLAR	1150	SECOND	Automotive Service	Full Inspection	Broadway Channel
VALLEY TRANSMISSION & AUTO	1158	SECOND	Automotive Service	Full Inspection	Broadway Channel
DEVORE AUTOMOTIVE	1253	SECOND	Automotive Service	Full Inspection	Broadway Channel
X-A-DENT	1421	SUNNYLAND	Automotive Service	Closed	Washington Channel
E. SWEETWOOD & SONS INC	151	SUNSHINE	Automotive Service	Full Inspection	Forrester Creek
AUTOBAHN	444	VERNON	Automotive Service	Full Inspection	Forrester Creek
ROADSTER CLASSICS	959	VERNON	Automotive Service	Closed	Forrester Creek
TEAM AUTOMOTIVE REPAIR	354	WALTER	Automotive Service	Full Inspection	Forrester Creek
VALLEY TRANSMISSION & AUTO	930	WASHINGTON	Automotive Service	Full Inspection	Washington Channel
WASHINGTON ARCO	1092	WASHINGTON	Automotive Service	Full Inspection	Washington Channel
PALHEGYI DESIGN	1900	WELD	Automotive Service	Closed	Forrester Creek

City of El Cajon

Storm Water Quality Inspection for Commercial Sites (Automotive Establishments)

BMP COMPLIANCE REPORT

You Are the Solution to Stormwater Pollution!

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Business Name: _____ Address: _____

Inspector Name & Phone #: _____ Date: _____/_____/_____Time: _____AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation **APN**: _____

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

Does Project Maintain a Stormwater Pollution Prevention Plan (SWPPP)? ❑ Yes ❑ No WDID: _____

Nearest Receiving Water(s): _____ Discharge Observed: ❑ Yes ❑ No _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

The Following List summarizes Minimum BMPs Required by the City of El Cajon Storm Water Ordinance (13.10) Additional BMPs May Be Required due to Site Conditions, Specific Activities, or by the Enforcement Official.

Minimum Construction Requirements	BMP Implemented?			Comments / Recommendations
	YES	NO	N/A	
Non-SW Discharges – SC10				
Spill Prevention/Control/Cleanup – SC11				
V&E-SC20				
V&E-SC21				
V&E-SC22				
Loading/Unloading – SC30				
Liquid Container Storage – SC31				
Waste Handling/Disposal – SC34				
Building/Grounds Maintenance – SC41				
Building Repair/Construction – SC42				
Parking/Storage Maintenance – SC43				
Drainage System Maintenance – SC44				
Employee Training – City of El Cajon				
Private Sewer Lateral Maintenance - City of El Cajon				
Over Watering Minimization - City of El Cajon				
Other*				

VIOLATIONS / REQUIRED CORRECTIVE ACTIONS

❑ Violation of Stormwater Ordinance: _____

❑ No Violations Have Been Noted; However BMP Implementation Is Required _____

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

200 E. Main Street, El Cajon California 92020 *TEL 619-441-1653 / FAX 619-579-5254*

The Green Wrench Guide

Stormwater Best Management Practices for the Automotive Industry

Definitions

Best Management Practices (BMPs):	Techniques or controls used to prevent or reduce the discharge of pollutants into stormwater, receiving waters, or the stormwater conveyance system.
Dry Cleaning Methods:	Methods of cleaning surfaces that minimizes the use of water. Examples include sweeping, vacuuming, and using hydrophobic mops and rags.
Illegal Connection:	An unauthorized pipe, facility, or other device connected to the storm drain system or receiving waters. Devices that convey pollutants may be illegal even if they were permitted at the time of installation.
Illegal Discharge:	The unauthorized discharge of pollutants or non-stormwater into the stormwater conveyance system or receiving waters.
Pollutants:	Anything that can cause or contribute to water quality degradation.
Pollution Prevention:	Practices that minimize or eliminate the generation of pollutants at the source.
Receiving Waters:	Any water bodies including the Pacific Ocean, lakes, streams, lagoons, rivers, reservoirs, and intermittent waters such as vernal pools and seasonal dry creeks.
Stormwater Conveyance System (storm drain system):	Any public or private drainage system (non-sewage) including streets, curbs, gutters, inlets, ditches, pipes, channels, culverts, streams, etc.

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Thank you to The City of San Francisco for the original Green Wrench Guide concept.

Background

What is Stormwater Pollution

When water flows over work areas, parking lots, streets, and other surfaces, it picks up pollutants and carries them into the storm drain system. This system is designed to prevent flooding by transporting water away from urban areas. Water and all the contaminants that it collects eventually flow without treatment through the storm drain system to our streams, lakes, and the ocean where we swim and fish. This polluted runoff harms inland freshwater wildlife and habitats, and in some cases causes, beach closures and makes our fish and shellfish unsafe to eat.

The Storm Drain System and the Sewer System are NOT Connected

In San Diego County, wastewater and surface runoff are discharged into two separate underground systems. Wastewater that is disposed to a toilet, sink, or a piped sewer drain flows into the sanitary sewer system where it is filtered and treated. Water runoff that leaves your business via driveways, sidewalks, parking lots, streets, gutters, storm drain inlets, drainage ditches, and concrete channels flows into a separate storm drain system. Anything that enters the storm drain system eventually flows untreated and unfiltered into our creeks, bays, lagoons – and ultimately the ocean. The things you do at work are directly connected to the health and safety of our citizens and the environment.

Your Responsibilities

As required by federal and state laws, the County of San Diego, the Unified Port District, and each of the 18 incorporated cities in the County have adopted local stormwater management ordinances to protect our water resources. *These ordinances prohibit the discharge of pollutants into the storm drain system.* Pollutants typically associated with automotive maintenance and repair activities include antifreeze, fuels, waste oils, solvents, and paints. Other pollutants commonly contributing to stormwater pollution include sediment, fertilizers, pesticides, and litter. As a business owner or operator, you are legally responsible for ensuring that these and any other potential stormwater pollutants are properly managed. To do so, you will need to select and use Best Management Practices that are specific to your business activities.

A storm drain outlet which flows unfiltered directly into a local stream.

Background

Best Management Practices (BMPs)

Best Management Practices, commonly called BMPs, are actions you can take to prevent pollutants from leaving your facility. In general, there are two main types of BMPs:

- **Source control BMPs** keep pollutants from entering runoff. Examples include preventive maintenance and routine sweeping.

- **Treatment control BMPs** remove pollutants from runoff before it reaches the storm drain system. Common examples are storm drain filters and oil / water separators.

Source control BMPs are often preferable because they are usually simpler and more cost-effective. One of the main types of source control BMPs is "pollution prevention". Pollution prevention methods (process changes, materials substitution, waste reduction) help to limit the amount of pollutants that are generated, thus eliminating the need to manage or remove them. Pollution prevention BMPs can help your business to run more efficiently and can save you money.

Using the BMPs described in this booklet will help you to satisfy regulatory requirements and to preserve and protect San Diego's waterways. Successfully meeting this challenge will require the active participation of all employees at your business. To assist your employees in understanding these requirements, please have them read and review this Green Wrench Guide. Also have your employees sign and date the training log included on pages 19 and 20 of this guide so that you will have a record of their training activities.

BMPs and Your Business

This guide is designed to help you think about ways to manage potential stormwater pollutants associated with your business activities. It provides information on minimum requirements, and includes suggested pollution prevention tips for the automotive industry. It is organized according to the following activity types:

- **Facility Audits**
- **Employee Training**
- **Spill Management and Reporting**
- **Vehicles and Equipment**
- **Good Housekeeping**
- **Hazardous Waste Recycling and Treatment**

This guide is not intended to address all regulatory requirements pertaining to your business. Local jurisdictions may have additional, more specific stormwater BMP requirements. Pages 17 and 18 of this guide list additional contact information where you can obtain more information on stormwater and other regulatory requirements.

Thank you for helping to keep the San Diego region a great place for people to live and visit!

Facility Audits

Conducting your own facility audit is the best way to make sure that you stay in compliance with stormwater requirements. This can also save you money by identifying process and procedural improvements (waste prevention, etc.) to make your business activities more efficient. Be sure to address the following key areas during your audits:

- **Illegal Connections** - Inspect your business for connections that may convey pollutants to the storm drain system or receiving waters. An illegal connection is an unauthorized pipe, facility, or other device connected to the storm drain system, and may be illegal even if it was permitted at the time of installation.

- **Inlet and Discharge Points** - Identify the location of storm drain inlets on or down-gradient of your business or property. Mark these locations on a facility map and keep it posted in a common work area. Ensure that employees are shown these areas during training sessions.

- **Review of Activities** - Identify and use specific BMPs for activities with the potential to cause spills or releases of pollutants (oil, grease, fuel, etc.). Use the BMPs presented here as a guide for compliance, but don't stop there. Continue to seek out other sources of BMP information through the internet, professional associations, industry publications, etc. – you can never know too much.

- **Documentation** - Document any corrective action taken after your audit. Documentation is your key to demonstrating compliance. Be sure to include revised business practices and procedures in your employee training.

Employee Training

An effective stormwater management training program promotes employee ownership of problems and solutions. Employees are more likely to respond to training when they understand the impact of their daily activities on water quality. By involving your employees, their feedback will help implement needed actions to reduce stormwater pollution.

- Train all employees on stormwater BMPs and pollution prevention. Maintain training records on site; record the date of each training session and include a sign-in list of those who attended. Perform refresher trainings on a regular basis.

- Post signs around your shop reminding employees of BMPs and pollution prevention tips. This will also help to create awareness for your customers.

- Train employees about the proper use, handling, and disposal of all hazardous materials. Make sure all employees have current licensing and certification for their specific job duties.

- Teach employees how to control, contain, and clean up spills. Demonstrate how to properly use spill response kits.

You can stay informed about current regulations by joining trade associations and subscribing to trade journals and magazines. At trade association meetings and workshops, you will have the opportunity to learn about new pollution control practices and to network with others in your industry. Being involved will help you share ideas with others and will keep your training program up to date.

Spill Management and Reporting

It is always best to prevent spills, but be ready when they occur. Keep spill kits readily available, preferably near work areas where spills are most likely to occur. Make sure all employees know where these materials are kept and how to properly use them to contain and immediately clean up spills. Whenever possible, use dry methods such as sweeping, vacuuming, mopping or absorbents (if absorbents are used, they may have to be disposed of as a hazardous waste). Spilled hazardous materials (antifreeze, gasoline, solvents, etc.) need to be managed as hazardous wastes. Make sure your employees are aware of any special requirements that apply to hazardous material disposal.

Use the following guidelines within 24 hours of occurrence for reporting spills:

- Report any spill or discharge that cannot be completely contained or cleaned up prior to entering the storm drain system. To report spills and discharges, call the Regional Stormwater Hotline at **(888) 846-0800**.

- If the spill involves hazardous substances, call the Department of Environmental Health (DEH), Hazardous Materials Division at **(619) 338-2284**.

Always call **911** if the spill presents an immediate threat to public health or the environment.

Vehicles and Equipment

This section describes core BMPs for vehicle fluid management, engine and parts cleaning, vehicle and equipment washing, and body repair and painting. No matter which of these activities you are doing, it is important to always protect storm drain inlets on or down-gradient of work areas. Cover inlets with plastic or other impermeable material to prevent the entry of spilled fluids or wash water. Tape or weigh down the edges to keep the protective material in place.

Vehicle Fluid Management

Antifreeze, waste oil, and used solvents are hazardous wastes and must be stored, managed, and disposed of in accordance with all local, state, and federal laws.

- Whenever possible, drain vehicle fluids indoors or within covered areas, and only over floors that are constructed of a non-porous material such as concrete. Asphalt and dirt floors are not acceptable because they absorb spilled or leaked fluids.

- Use drip pans, containers, or other methods of drip and spill containment.
- Take extra precautions to prevent spills while draining fluids from vehicles. Transfer waste fluids to a labeled waste storage container as soon as possible.
- Provide drip pans under stored vehicles and those with known leaks. Drain fluids from disabled or stored vehicles as soon as possible to prevent leaks and spills.

- Transfer any fluids from drip pans or collection devices to designated waste storage areas regularly.
- Store vehicle fluids in separate, sealed, and leak-proof containers.

Vehicle & Equipment Washing

- Never discharge wash water or rinse water to a storm drain system or receiving water. Wash vehicles and equipment in designated areas. Use wash racks whenever possible.
- Use a spray nozzle or rinse bucket to conserve water and minimize discharge water.
- Whenever possible, use biodegradable soaps.
- Consider the use of a wash water recycling system to minimize wastewater from car washing.
- Use an oil / water separator or similar treatment system to remove oil, grease, and solids when discharging to the sanitary sewer.
- Use a commercial car wash facility if you are not able to meet the minimum standards described in this guide.
- Contact your local sewer agency for discharge information to the sanitary sewer. Use of oil / water separators and wash water recycling systems may have special discharge requirements.

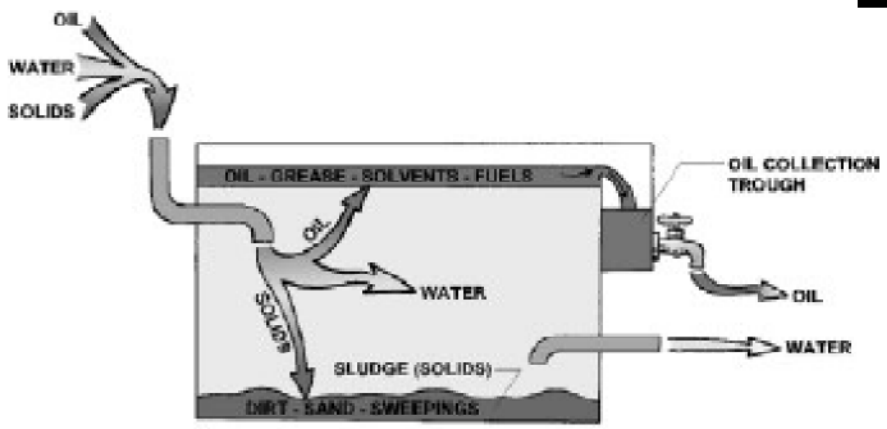

OIL/WATER SEPARATOR

An oil / water separator is designed specifically to remove petroleum products, and can also remove solids. As the mixture enters the separator, the vehicle fluids float to a collection trough and the water flows into the sewer system. Solids settle to the bottom of the separator. Bottom sludges are often contaminated with heavy metals and other pollutants and must be managed as a hazardous waste.

Engine and Parts Cleaning

- Designate specific areas in your service bays for parts cleaning. Do not wash or rinse parts outdoors.
- Use aqueous cleaning solutions instead of solvents whenever possible. Recycle used solutions through a licensed hazardous waste hauler.
- Avoid using hose-off degreasers; never allow runoff to enter the storm drain system. Instead, brush off loose debris and use damp rags to wipe down parts. Manage used rags through a rag service or as hazardous waste.
- Clean parts in self-contained sinks or drum units when working with solvents. Inspect part washing units daily for leaks and make repairs immediately.

- Allow parts to drain over the solvent sink or drum, rather than allowing the solvents to drip or spill onto the floor. Never discharge the rinse solution into the sewer system.

- Recycle wastewater from steam cleaning or pressure washing activities. Discharges of wash water into the storm drain system are prohibited.

Body Repair and Painting

- Conduct work indoors or under cover when possible. If this cannot be done, take other precautions to prevent discharges from work areas.

- Inspect damaged vehicles for fluid leaks and use drip pans where necessary.

- Regularly clean work areas using dry methods. Use a shop vacuum or sweep up dust and debris. Do not vacuum flammable liquids.

- Allow wet sanding debris to dry overnight on the shop floor and sweep or vacuum it the next day. Liquid must not be discharged to the storm drain system. Consider investing in sanders with an attached vacuum system to capture dust at the source.

- Conduct painting only in approved, enclosed areas equipped with vacuum hoods and filters.
- Minimize paint and thinner waste by carefully calculating paint needs based on surface area and by using the proper sprayer cup size.
- Collect water used to control over-spray or dust in the paint booth and recycle or dispose of it properly. Clean spray guns in a self-contained unit and recycle or properly dispose of the cleaning solution.
- Check with your local fire agency and the Air Pollution Control District for additional information and permit requirements for spray booths, coatings, and emissions.

Good Housekeeping

"Good Housekeeping" refers to the routine practices you can use to maintain a clean work environment, and to prevent pollutants from entering our waterways. These practices include the use of dry cleaning methods for floor and paved surfaces, waste management practices, and grounds maintenance.

Floors and Paved Surfaces

- Sweep or vacuum your shop floors frequently. Use mops instead of hosing down work areas.
- Consider using a three mop system as described below:

1. Remove any spilled oil using a hydrophobic (oil absorbing) mop and wring out oil into a bucket labeled "Oil Only". Add the waste oil from this bucket to your waste oil drum or tank where it can be recycled. Keep the oil mop and the "Oil Only" bucket readily available in the work area for any future oil spills.
2. If antifreeze is spilled, use a regular mop and wring out the antifreeze into a bucket labeled "Coolant Only". Recycle the spilled material with other used antifreeze. Use rags sparingly for small spills or to dry a work area. Use a rag service or manage the rags as a hazardous waste.

3. Use a regular mop and bucket with detergent as a final rinse and use water sparingly. Dispose of wash water to an oil / water separator or the sewer.

- Never pour mop water onto paved areas, such as parking lots, sidewalks, street gutters, or storm drains.
- Oil / water separators must be regularly inspected and cleaned.
- Do not hose down fuel-dispensing islands; use only dry clean-up methods. Absorbent used for fuel spills should be promptly swept up and disposed of as hazardous waste.

Material and Waste Management

- Materials and waste such as fuels, solvents, batteries, and oils must be stored off the ground and in areas where they will not be exposed to rain water.
- If possible, provide overhead coverage for all outside hazardous materials or waste storage areas. If overhead coverage is not available, then cover stored materials with an impervious material such as a plastic tarp.
- Store batteries indoors and place used batteries in plastic trays to contain any potential leaks. Recycle used batteries regularly.
- Sweep parking lots and areas around your facility regularly. Do not hose down these areas. Provide trash cans with lids in your parking lot to discourage littering.
- Keep trash storage and disposal areas clean and free of debris. Inspect trash storage areas weekly. Maintain dumpsters and other containers in good condition and keep them securely closed when not in use.

- Contact your local solid waste hauler for recycling options and containers.
- Post "No Dumping or Littering" signs around your property.

Rooftops and Landscaped Areas

- Clean the rooftops of your buildings at least once before the rainy season. Cover any materials that are stored on the roof to protect them from rainwater.
- Maintain landscaped areas so that dirt and sediment do not reach the sidewalk or street.
- Apply pesticides and fertilizers according to label instructions and do not apply prior to rain. Consider using less toxic alternatives to pesticides and fertilizers whenever possible.
- Recycle or dispose of green waste properly.
- Properly berm and cover soil stockpiles.
- Ensure that sprinkler heads are adjusted properly to prevent over-irrigation and water runoff.

Hazardous Waste Recycling and Treatment

Please call the County of San Diego, DEH Hazardous Materials Duty Specialist at **(619) 338-2231** for incompatible waste storage and on-site hazardous waste treatment requirements.

Recycling

- Reuse and recycle solvents, paints, oil filters, antifreeze, motor oil, batteries, water, and lubricants whenever possible.
- Segregate wastes – it saves money! Combining different types of hazardous wastes will limit your recycling options and can be dangerous. A licensed hazardous waste hauler can provide information on hazardous waste storage and disposal costs.
- Label waste barrels and drums in accordance with all local, state, and federal laws and regulations. This will also help to remind employees to separate wastes and to recycle.

On-Site Waste Treatment

- Consider self-contained, zero discharge treatment alternatives that incorporate wastewater recycling.
- Choose treatment systems that are effective, but easy to maintain and repair.
- Properly maintain and service all pre-treatment equipment, including oil / water separators.

How to Reach Us

Regional Stormwater Hotline

To report spills and discharges to the storm drain system, call **(888) 846-0800**.

General Information

For additional information regarding water quality in the San Diego region, please use the resources listed below.

(888) 846-0800 **www.projectcleanwater.org**

(888) THINK-BLue **www.thinkbluesd.com**

Local Stormwater Program Information

Stormwater and BMP requirements may vary by jurisdiction. Please contact your jurisdiction for questions or if you would like additional information. Updated phone numbers are posted on the www.projectcleanwater.org website.

Carlsbad . . . . . (760) 602-2799
Chula Vista . . . . . (619) 397-6111
Coronado . . . . . (619) 522-7380
County of San Diego
(Unincorporated Communities) . . . . . (888) 846-0800
Del Mar . . . . . (760) 753-1120
El Cajon . . . . . (619) 441-5580
Encinitas . . . . . (760) 633-2632
Escondido . . . . . (760) 839-6315
Imperial Beach . . . . . (619) 628-1369
La Mesa . . . . . (619) 667-1152
Lemon Grove . . . . . (619) 825-3810

National City	(619) 336-4389
Oceanside	(760) 435-5800
Poway	(858) 679-4228
San Diego	(619) 235-1000
San Diego Unified Port District	(619) 686-6254
San Marcos	(760) 752-7550
Santee	(619) 258-4100
Solana Beach	(858) 720-2400
Vista	(760) 726-1340

Other Agency Contacts

County of San Diego, Department of Environmental Health, Hazardous Materials Management Division:

To report hazardous materials and waste spills, call **(619) 338-2284**

To obtain general information on hazardous materials and waste requirements, call **(619) 338-2231**

Air Pollution Control District:

To obtain information on air emission requirements, call **(858) 650-4700**

Training Log

Have your employees sign and date this training log so that you will have a record of their training activities.

Employee Name	Date

Training Log

Employee Name	Date

project clean water

THINK BLUE

You're the solution to storm drain pollution.

Protecting our beaches, bays, and watersheds

How El Cajon Residents and Businesses Can Help Keep Our Beaches Clean!

Many things about our local storm drains won't be as easy to ignore anymore. Over the past several years, a number of San Diego County coastal cities have posted permanent signs warning the public to stay clear of storm drain outlets at about 20 separate San Diego area beaches. The reason: **Contaminated water** flowing onto beaches from storm drain outlets poses a serious health danger to unsuspecting beach goers.

The first of the pollution warning signs was posted in late November of 1996 during a press conference at Tourmaline Surf Park in Pacific Beach. Temporary beach closures have also been required at Tourmaline Surf Park as well as beaches at Windansea and Avenida de la Playa in La Jolla Shores. Since then, as additional storm water information has been gathered, dozens of coastal storm drain outlets along beaches have been posted with similar warnings, at locations from Oceanside to Imperial Beach.

Trash and Debris in Forrester Creek – January of 2006

Often, children are at the highest risk of exposure because they play in the moist, soft sand fed by storm drain outlets near our beaches. The polluted water at these sites may be clear, have no objectionable odor, and still be contaminated. Parents are unaware of these serious health conditions because there are no obvious danger signs.

Public officials have long known that our stream and river waters become polluted from runoff during storms, because they take water samples from our streams and ocean. But they did not find out until the mid- to late-1990s that the dry weather storm drain flows often exceed public health standards.

Water is considered unfit for human contact when total bacteria, or fecal coliform bacteria, an indicator of contamination from human or animal wastes, exceeds critical levels. Investigators from various local agencies have so far been unable to pinpoint any particular source or sources for the storm drain and beach contamination. Instead, it is suspected that the source may be of a more ordinary nature. For example: someone washing a load of diapers and improperly disposing of the dirty wash water into the storm drain. Or perhaps a neighbor or friend walking a dog and then not properly disposing of the pet droppings. Such occurrences can raise bacteria levels enormously. It is this understanding of how we affect our own world that makes public education on our environment so important.

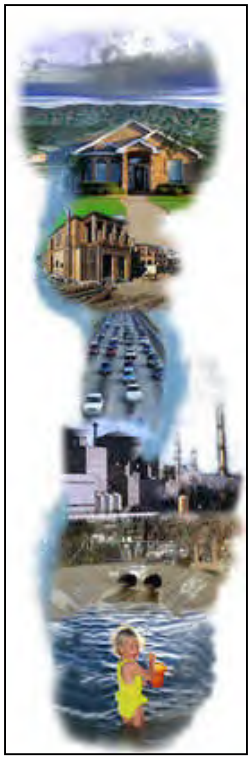

In the past, pollution investigators have traced storm water pollution to a variety of sources, ranging from people who illegally connected their sewage systems to storm drains, to recreational vehicle owners who dump holding tanks into our storm drains and streams. Anyone who observes illegal dumping into storm drains can assist investigators by calling the 24-hour Regional Storm Water Hotline at (888) 846-0800, or the City of El Cajon Storm Water Protection Program during business hours at 441-1653 to report the dumping event.

We all live in the same world, drink the same water, and breathe the same air. Because of this, people often wonder what they can do in their everyday lives to stop pollution. Below are some helpful hints on how you can help stop pollution and keep our beaches and storm water clean. **Remember, you are the Pollution Solution!**

Here Are Some Pollution Solutions!

In Your Home. . .

- ✓ Buy household cleaning products that are labeled "nontoxic."
- ✓ If you have to use toxic products, such as paint, solvents, and cleaners, use them carefully, according to directions provided on the container, and store them properly.
- ✓ Never put unwanted hazardous materials in the trash can. Instead, take them to local collection sites for safe disposal.

In your Yard and Garden. . .

- ✓ Read the labels of pesticides, herbicides, and fertilizers carefully. Use them sparingly and follow the directions on the container. Do not apply these substances if rain is forecast. Store all chemicals carefully in a safe place. Dispose of products that are no longer needed at a household hazardous materials collection location.
- ✓ Use a broom to clean up leaves, clippings, and litter from patios, sidewalks, and driveways. Do not use a hose because such cleaning will result in these materials ending up in the storm drain. Put litter and other debris in the trash can. Compost plant cuttings and leaves and reuse as a soil amendment in your garden.
- ✓ Collect and properly dispose of all wastes, including animal wastes, in your yard. Remember that you need to do this on a regular basis, and especially before the next rainfall washes the contaminants into the soil or storm drain.

Your Vehicle. . .

- ✓ Recycle used CRANKCASE OIL and ANTIFREEZE.
- ✓ Have your vehicle regularly inspected for leaks. Maintain it in good condition to reduce the chance of oil, antifreeze, and brake fluid leaking onto the street and into the storm drains.
- ✓ Help reduce exhaust emissions by keeping your vehicle properly tuned and in good working order. Carpooling also helps reduce emissions. Pollutants from engine exhaust contain many toxic chemicals that collect on streets, roofs, sidewalks, and parking lots. They are washed into the storm drains by rain, irrigation, and wash water.
- ✓ Use a shutoff nozzle on your hose when you wash your car. Use water and cleaners sparingly. Use biodegradable detergents or soaps instead of detergents containing phosphates whenever possible. Use a bucket and sponge to wash your vehicle. This reduces water runoff to the storm drains. Or better yet, take your vehicle to a Car Wash.

Join the Pollution Patrol. . .

- ✓ You can help control pollution by helping us find and educate those who are misusing our storm drains. We must all work together to keep our streams, rivers, reservoirs, bays, and beaches clean and pollution free for the creatures that live there, and for ourselves.
- ✓ Illegal Dumping: Call the El Cajon Storm Water Protection Program at 441-1653 or report the incident to the storm water link at www.ci.el-cajon.ca.us to report dumping of fuel and other hazardous substances in storm drains. Let's all work together to keep our community AND the beaches clean!

Pet Pollution Can Be a Serious Problem!

When John and Gloria pause for a minute on their daily dog walk, they leave behind in public places a surprising amount of bacteria-filled waste. It seems like such a small amount when you think it's just your dog out there, but it really does add up. Many people don't realize how important it is to take care of their pet waste so it stays out of our storm drains, streams, rivers, beaches and ocean.

The act of John and Gloria walking with their dog is a very common residential activity. Studies show that about half of all dog owners walk their dogs in public places, and about 40 percent of them fail to clean up after their pets.

In an community the size of El Cajon (about 100,000 people and 10,000 dogs), dogs generate about two and a half tons (5,000 pounds) of feces per day. That's nearly two million pounds a year. Since a significant percentage is not properly disposed, that's a lot of bacteria in our neighborhoods, storm drains and watershed. According to even the most conservative estimates, all this pet waste can cause serious environmental harm unless it is properly controlled.

Dog and cat waste left on the ground can be washed into our neighborhood storm drains, all of which drain directly into natural water bodies without treatment of any kind. There the waste contributes to all sorts of problems, such as sick children and mucky waterways choked with algae that suffocates fish and can sometimes be poisonous to humans.

The same bacteria that make pet waste dangerous to people in parks can make the water unsafe for swimming or drinking. Children and others can get sick if they dunk their heads or accidentally get a mouthful of polluted water. And when waste gets into shellfish beds, it can make clams and oysters unsafe to eat.

Dog Poetry

If taking care of number two
is number one to you,
then picking up your doggy doo
should matter lots to you.

So scoop the poop and bag it
and place it in the trash;
your doggy doo reflects on you,
It's what your puppy passed!

Children and others who play in yards or in parks where pets eliminate waste can pick up illnesses from disease-causing bacteria and parasites. These include diarrhea, fever, muscle aches, headaches, vomiting, roundworms and toxoplasmosis (a parasite carried by cats that can cause birth defects if a woman becomes infected during pregnancy). Other pets can get sick too.

How You Can Make A Difference And Keep Our Water Clean!

When walking with your pet, take a plastic bag or paper cup along and dispose of the waste properly by:

- ✓ Flushing pet waste down the toilet, or
- ✓ Putting pet waste in the household trash after securely wrapping it. (Never put pet waste in a landscape waste container or the compost bin), and
- ✓ Be aware of and follow the Storm Water Management Ordinance that governs pet waste cleanup. The Storm Water Management Ordinance states, *"Pet waste shall not be disposed to the storm water conveyance system or receiving waters."* Remember that, if not cleaned up and disposed of properly, pet waste will eventually find its way into the storm drain system.

Pet Waste Pledge Card

I Pledge to do my part to protect water quality in El Cajon by:

- ✓ Picking up after my pet
- ✓ Properly disposing of pet waste by flushing it down the toilet or disposing of it in the trash
- ✓ Encouraging others to do the same

_____ _____

Signed by Date

Do You Know How Many Dogs Live In El Cajon?

- Around 10,000 registered dogs reside in the City of El Cajon.
- These dogs create approximately 5,000 pounds of pet waste per day!
- Pets, as well as humans, can catch diseases through coming into contact with infected pet waste.

The number of pets in El Cajon is much greater than the number of wild animals that once lived here. If we kept just a few pets their waste might not be much of a problem. But we keep a lot of dogs and it is estimated that there are even more cats than dogs.

You wouldn't want to live in a city that lacked a public sewer system. With as many dogs living in the City of El Cajon, not cleaning up and properly disposing of pet waste can be a pollution problem. You can be an important part of the pollution solution.

Join the Storm Water Pollution Team. Report any violations or other problems you witness by contacting the El Cajon Storm Water Protection Team at (619) 441-1653 or calling the Regional 24-hour Storm Water Hotline at 1-888-846-0800. Information and articles are also available at the El Cajon Storm Water Website at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

We All Need to Protect Our Watershed

The health of a stream depends on the quality of the water that flows through it. To care for the stream, we must also care for all the land that drains to it—its *watershed*.

San Diego River - Downstream from El Cajon
You have an important role in its preservation!

Everything in the watershed affects the water in the stream. Hazardous chemicals, automotive products, pesticides, fertilizers, pet wastes, excessive soil erosion and air pollution all contribute to water pollution. These pollutants don't have to be dumped directly into the water to cause a problem. They are washed from streets, lawns, roofs and even out of the air by rainfall—eventually ending up in wetlands, streams and lakes.

The storm drain or gutter in the street outside your home carries water into a network of storm drains that lead directly to San Diego River. Storm drains are separate from the sewer system, because sewer systems handle wastewater from your sinks, tubs and toilets. Storm drains do not go to a treatment plant but into our streams, rivers and ultimately the ocean.

Resulting impacts of water pollution can range from the obvious, such as oil floating on the water to losses of wildlife due to habitat destruction that often goes unnoticed.

What You Can Do to Help

Everyone has a part in protecting our watershed and preventing water pollution. While the contribution of one home to water pollution may be small, the combined effect of an entire neighborhood or city can be substantial. Here are some suggestions we all can use to help keep our watershed clean:

- ✓ Use chemical fertilizers and pesticides sparingly. When applied excessively, they can be washed into a nearby storm drain by your sprinklers or rain-damaging aquatic life. Even lawn clippings contain these pollutants. Leave them on the lawn as natural fertilizer or compost them.

- ✓ Keep automobiles in good condition and drive as little as possible. This helps keep oil and air pollution out of water sources. Wash cars at commercial car washes that drain to the treatment plants instead of your driveway that drains to the creeks.

- ✓ Dispose of hazardous household wastes such as paints, solvents, used oil and cleaning products properly. The City of El Cajon contracts with Waste Management, Inc. to accept residential household hazardous waste for FREE on the second and fourth Saturday of each month and by APPOINTMENT ONLY. Residents can drop off no more than 15 gallons or 125 pounds of household hazardous waste. Call (619) 596-5100 to schedule an appointment time.

The choice is ours—do we want a watershed that keeps our steams, rivers, beaches and ocean healthy, or a watershed that struggles to survive? **Remember that you are the Pollution Solution!**

Why It's Important to Keep Trash, Sediment and Debris Out of Our Storm Drains

Each year, the City of El Cajon conducts twice-yearly cleanups of all city storm drain inlets and drainage channels to remove trash, sediment and debris. In addition to this the City has developed a comprehensive street sweeping program with a twice-a-week sweeping cycle for commercial areas, a once-a-week sweeping cycle for industrial areas, and a biweekly sweeping cycle for residential areas. The City adheres to this sweeping schedule except when weather or equipment availability makes adherence to the sweeping schedule impossible. During times when street sweeping is impossible, City staff conduct "Storm Water Patrols" to identify localities where more limited, localized cleanups can be accomplished. As a result of the effort, City crews collect several thousand cubic yards of trash, sediment and debris each year in our efforts to keep our streets and storm water systems clean.

So, Why Is All That Trash In The El Cajon Drainage Channels?

Yet, in spite of these efforts, trash and debris continues to collect in our drainage channels and storm drains in large amounts, polluting the water and creating an unsightly mess. The reasons behind this trash accumulation range from problems with the homeless living in the drainage channels to thoughtless littering by average citizens. The intent of this article is to address the problem of littering so that all El Cajon residents can understand the importance of not littering, and by doing so, become a part of our community's solution to storm water pollution.

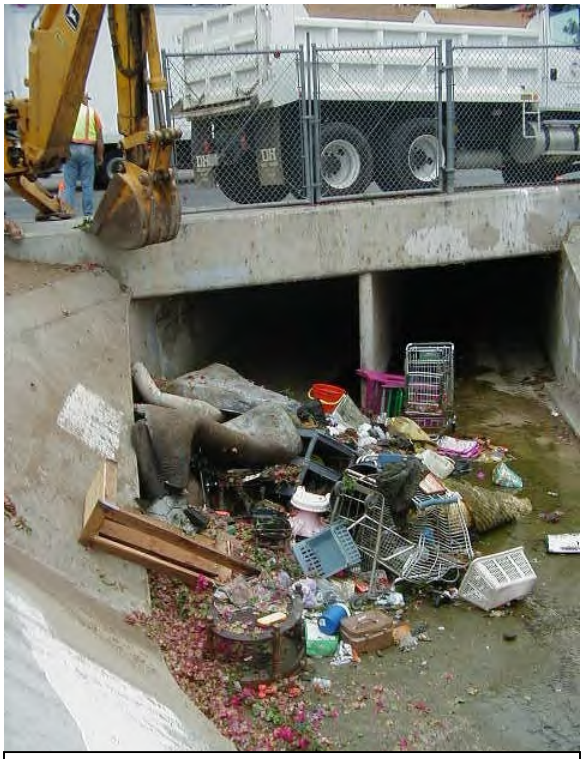

Trash in the Washington Channel

An analysis of the trash removed from City streets, storm drains and drainage channels reveals that a majority of the trash originates from sales at fast food restaurants, convenience stores, and take-out delicatessens. Well more than half of the trash removed consists of disposable beverage cups and food wrappers. Below are helpful hints for both business owners and customers to ensure that trash finds its was into trash trucks instead of finding its way into our streets, storm drains, drainage channels and ultimately the beaches.

What You Can Do As A Business Owner….

Contaminants from your facility can contribute to polluted runoff when floors and outside areas such as sidewalks, patios and parking lots are not maintained or cleaned properly. Make an effort to educate your customers by speaking to them about not littering, or by posting some signs.

Hints On Keeping Floors and All Outside Areas Clean:

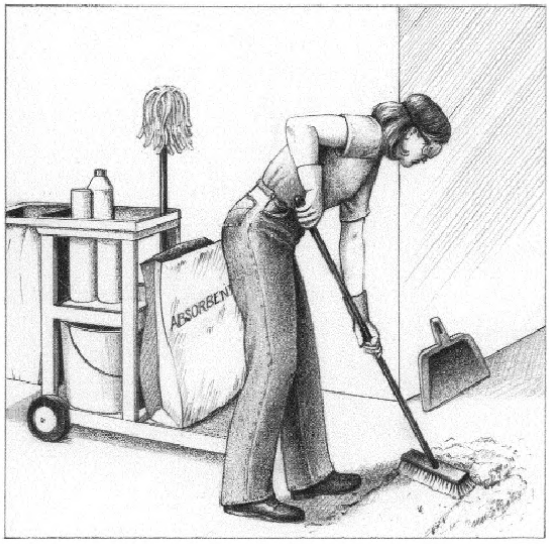

- Keep all outside areas (dumpsters, parking lots, etc.) free of trash and debris, and regularly clean them to prevent pollutant buildup.
- Use absorbent for liquid spills, then sweep or use a slightly wet mop to finish cleaning outside areas.
- Regularly inspect and clean out grease traps.
- Avoid spilling onto floors or other surfaces through good housekeeping.
- Control litter by sweeping and picking up trash on a regular basis.
- Never dispose of wash waters to the storm drain.
- Use "dry" cleaning methods (sweeping, vacuuming, etc.) on sidewalks and parking lots and dispose of waste properly.
- Use damp mop to clean floors, and contain the wash water for proper disposal (sewer, on-site treatment, etc.).
- Label all storm drain inlets "No Dumping".
- Clean up spills immediately to minimize safety hazards and deter spilling.
- Train all employees. Your success depends on an effective training program.

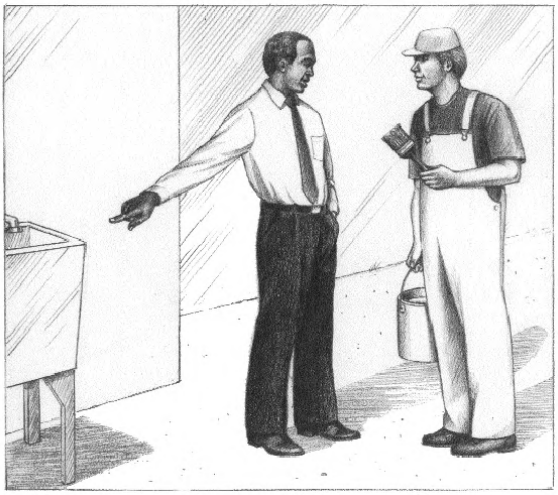

What Works In Parking Lots:

- Use dry cleaning methods to clean parking lot pavement – absorbents, brooms, or wire brushes.
- Clean up sediments and other solids from parking lots immediately to prevent them from blowing or washing away.
- Mechanically remove loose debris before washing the lot with water.
- Dispose of parking lot debris properly. To determine the proper disposal method, contact the facility that you expect to take the material to for disposal.
- Clean parking lots early in the day if heavy rains are forecast.
- Assign numbered parking spots for each driver or vehicle. This helps to identify leaking vehicles so they can be repaired.
- Pressure wash pavement only when necessary. Avoid the use of acids and other harsh cleaners.
- If pressure washing is used, wash with water only. Be aware that dissolved pollutants or cleaning products can travel through underlying soils and contaminate groundwater.

Keep The Trash inside Trash Bins or Trash Cans:

- Don't put liquids in trash bins or trash cans.
- Place trash bins or trash on concrete surfaces.
- Keep lids tightly closed to keep the rain out.
- Assign someone to regularly clean up the ground around trash bins.
- If a trash bin or trash can leaks, immediately repair or replace it.
- Make sure that storage containers are in good condition and lined with a material that will not deteriorate.
- Trash bins or trash cans stored outside should be watertight, rodent-proof, and protected from tampering.

What You Can Do As A Food Take-Out Customer:

- Make sure you collect and properly dispose or recycle all trash.
- Talk with business owners if you see trash disposal problems at a business, or call the El Cajon Pollution Prevention Program at (619) 441-1653.
- Speak with others about the importance of not littering.
- Participate in community-sponsored cleanups.

As a concerned citizen, you can be proud that you are part of the Solution to Storm Water Pollution and not part of the problem. Remember, "Only Rain in the Drain!"

For more information, contact the El Cajon Storm Water Protection Program at (619) 441-1653, or use your web browser to access our program at:

http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Over-Irrigation Can Cause Storm Water Pollution

Even though El Cajon receives about 13 inches of precipitation on an average year, storm water is a problem for the city and many of its residents. The sometimes short, intense rain storms can cause flooding and soil erosion. Runoff from parking lots, buildings and other impervious surfaces can cause water to pool up in the streets.

These are some of the more obvious problems because they are on the surface for all to see. But there are some much less obvious problems and these have to do with the pollutants carried by storm water.

Storm water drained from El Cajon's paved streets, parking lots, driveways buildings and construction sites discharges with little or no treatment to our storm drain system. This runoff can also pollute the ground water that eventually finds its way into our streams, rivers and beaches. It also dramatically increases storm drain maintenance costs.

The City's storm drains are intended to collect and convey only one thing: uncontaminated storm water. Anything that is spilled, dumped or deposited on a landscaped area or paved surface will be washed into the storm drain if it is not cleaned up before the next storm event. Over-irrigation of landscaped areas flushes pollutants, including herbicides, pesticides, fertilizers, bacteria and any other pollutants residing on vegetation or in soil, causing dry weather flows of polluted urban runoff.

Recent dry-weather testing of runoff in the northwesterly, downstream portion of Forrester Creek has yielded fecal bacteria counts that are unacceptably high. Fecal bacteria originate in the waste of warm-blooded animals. Follow-up investigations have not located a point source for the bacteria, and a probable explanation is that the high bacteria counts result from the flushing of bacteria-laden soil in landscaped and paved areas in typical neighborhoods around our city.

It is very difficult to keep paved surfaces entirely free of contaminants. Automobile traffic and wind do their parts to spread dust and debris. But we can easily do something about many human and pet activities that pollute storm water.

Rather than institute an expensive storm water treatment program, the El Cajon Storm Water Protection Program is asking for your help in keeping contaminants out of our storm water. If we all do our part, we can significantly reduce the storm water pollution loads to the river and ground water. Here's some tips on how you can help:

- ✓ Pick up all pet waste and either flush it down the toilet or place it in the trash
- ✓ Check your landscape irrigation to insure that you are not over-saturating the soil or causing irrigation runoff
- ✓ Read and follow all instruction when applying herbicides, pesticides and fertilizers
- ✓ Collect and compost or recycle all green waste. Remember, it contains the herbicides, pesticides and fertilizers you have applied to your landscape
- ✓ Be sure and collect all trash and debris around your yard before it can be washed or blown away

Simply stated, we need keep sediments, trash, debris and other contaminants off of paved surfaces and out of our storm drains. Remember, you are the Solution to Storm Water Pollution.

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City of El Cajon
Storm Water Protection Program

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A “How-To” Guide to Car Wash Fundraisers

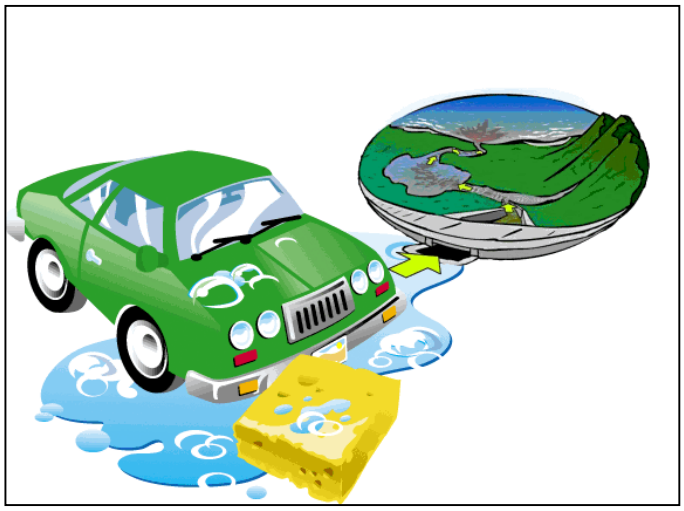

How can a car wash pollute our creeks?

A car wash is a great way to have fun while raising funds for your school or community group. However, did you know that when soapy water enters the storm drain system it flows directly to the nearest creek? Soap, even if it is biodegradable, is a pollutant that can be harmful to fish and other aquatic life that depend on clean water for their survival. In addition to soap, car wash water carries pollutants dislodged by the washing process, such as dirt, oil, and other toxic automotive fluids into our storm drains, creeks and rivers.

Is it possible to host a car wash that will not pollute our storm drains, creeks and rivers?

Yes, you just have to select a site where the wash water can be collected and disposed of to the sanitary sewer or soaked into a landscaped area without entering a storm drain. The City of El Cajon can help you determine if the site is appropriate and offer suggestions on how to dispose of the water.

How do I keep car wash water from entering the storm drain system?

There are several ways you can do this. Use your imagination and the ideas below to figure out what will work best.

- One way is to temporarily block off the storm drain, collect the water, and use a small sump pump to remove the water to either a vegetated area or into a clean out opening to the sanitary sewer.
- Wash the cars in a place where the natural drainage pattern will route wash water into a vegetated area such as a lawn or vacant lot. Be sure to have the owner’s permission if wash water is draining onto a neighboring property. You might be able to use sand bags, rolled towels, hoses, or other materials to divert the surface runoff to the vegetated area.

How do I seal off a storm drain?

Many parking lots have grated inlets placed in low areas. If the grate can be removed, remove it and place a sheet of heavy plastic over the inlet that extends beyond the edges. Replace the grate. Then put a heavy rubber mat or a lighter rubber mat with weights on it over the grate. Be sure to form a tight, waterproof seal that will keep all water out of the storm drain. If the grate cannot be removed place plastic sheeting and then rubber mats over the top of it. Rolled up towels can be placed around the edge of the mat to increase the “water tightness.”

Some parking lots drain through openings in the side of the curbs called curb inlets. These inlets can be sealed off with a sheet of heavy plastic topped with sand bags or other weights. Again, be sure the seal is tight before you start washing cars.

If the car wash site drains into the street and then into the storm drain, be aware that sealing storm drains in the street is not allowed. It can create a traffic hazard and also endanger those running the pump. You must use a storm drain inlet on private property and be sure that you have the owner's permission to work there.

Where do I get a sump pump?

Sump pumps are available at equipment rental stores for $15-$20 per day. (They are commonly used to remove water from basements or other low places where water collects.) Or perhaps someone in your group has a pump or a wet vacuum that can be used for the event.

Is any other equipment necessary?

You will need a hose to carry water from the pump to either the sanitary sewer clean out or the vegetated area. An extension cord will probably be needed along with a source of electricity. A broom may also be handy to sweep water towards the pump or to spread the water out so it will evaporate.

Does the pump need to be turned on all the time?

No. Some pumps will automatically turn on when the water level reaches a certain depth. Otherwise, someone has to be responsible to turn the pump on and off as water accumulates and is pumped away. A pump that is left running without water flowing through it to cool the motor can overheat and be damaged.

Once the car wash is over can soap residue harm creeks?

Yes. Rain can wash the soap into the storm drain system where it can then pollute creeks. Remember that biodegradable soap is harmful to fish and wildlife until it degrades. This process can take considerable time. It is a good idea at the end of the car wash, while the storm drain seals are still in place, to thoroughly rinse down the wash area and properly dispose of the rinse water.

This all sounds pretty complicated. How can I be sure that our car wash is set up properly?

The City of El Cajon Storm Water Program is available to answer your questions and even evaluate a site with you. We can offer suggestions and help you determine the best way to keep wash water out of the storm drain system. Call the El Cajon Storm Water Protection Program at (619) 441-1653 for assistance.

Sewage Spill Reference Guide
Your Responsibilities as a Private Property Owner

How a Sewer System Works

A typical sanitary sewer system is constructed of a network of pipes, laterals and mains connecting to each building and transporting sewage to a wastewater treatment plant (see diagram to the right).

A property owner's sewer pipe is called a **sewer lateral** and connects to a larger City-maintained pipe called a sewer main typically located in the street.

As stated in the El Cajon Municipal Code, **sewer laterals are the responsibility of the property owner** and must be maintained by the property owner for the entire distance from the house to the sewer main.

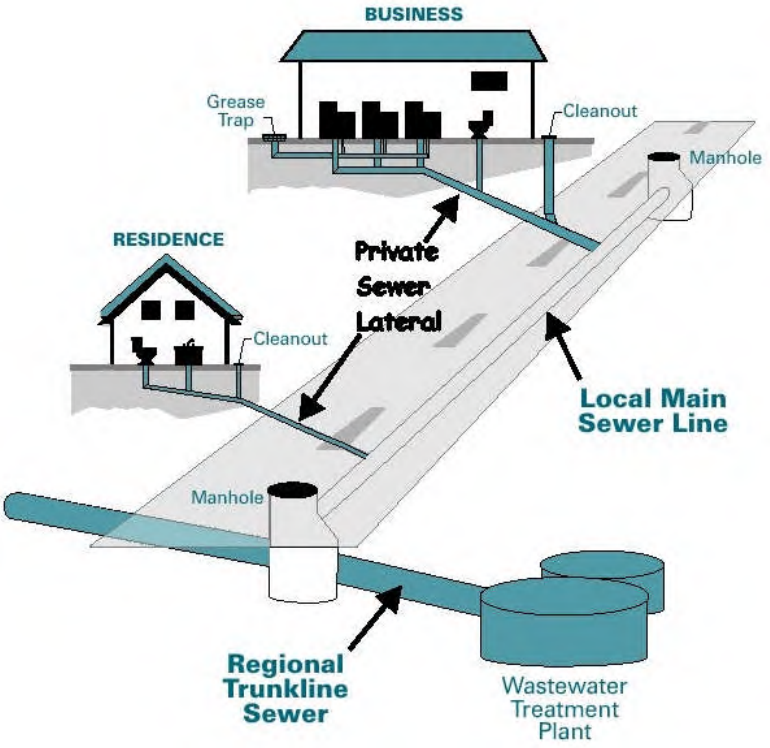

What is a Sewage Spill?

Sewage spills occur when the wastewater being transported via underground pipes overflows through a manhole, cleanout, or broken pipe. Sewage spills can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches.

Common Causes of Sewage Spills

Grease builds up inside and eventually blocks sewer pipes. Grease gets into the sewer from food establishments, household drains, as well as from poorly maintained commercial grease traps and interceptors. Grease is a common cause of sewer pipe blockages, especially in commercial and industrial areas.

Large objects such as paper towels, rags, disposable diapers or children's toys can contribute to a blockage.

Structural problems caused by tree roots in the lines, broken or cracked pipes, missing or broken cleanout caps, or undersized sewers can cause blockages. Blockages by roots are a common cause of blockages in residential areas.

Infiltration and inflow impacts pipe capacity and is caused when groundwater or rainwater enters the sewer system through pipe defects and illegal connections.

You Are Responsible for a Sewage Spill Caused by a Blockage or Break in Your Sewer Lines!

Time is of the essence in dealing with sewage spills. You are required to **immediately:**

- ✓ **Control and minimize the spill.** Keep spills contained on private property and out of gutter, storm drains and public waterways by shutting off or not using the water.

- ✓ **Use sandbags, dirt or plastic sheeting** to prevent sewage from entering the storm drain system.

- ✓ **Clear the sewer blockage.** Always wear gloves and wash your hands. It is recommended that a plumbing professional be called for clearing blockages and making necessary repairs.

- ✓ **Notify the El Cajon Department of Public Works** by calling (619) 441-1653 during non-holiday business hours (8am to 5pm, M-F), or call the Police Department Communications Center 24-hour number at (619) 579-3311. City forces can help in containing and capturing the sewer spill, but we need your telephoned notification. The City of El Cajon is currently required by California State Law to report any and all known sewage spills to a State-wide reporting system, regardless of whether they occur on private or public lands.

You May Be Liable

Allowing sewage from your home, business or property to discharge to a gutter or storm drain may subject you to penalties and/or out-of-pocket costs to reimburse our City for clean-up efforts and enforcement actions.

What To Look For

Sewage spills can be a very noticeable gushing of water from a manhole or a slow water leak that may take time to be noticed. Investigate suspicious looking wet areas. Look for:

- ✓ Drain backups inside the building.
- ✓ Wet ground and water leaking around manhole lids onto your street.
- ✓ Leaking water from cleanouts or outside drains.
- ✓ Unusual strong offensive odors from wet areas near sidewalks, external walls, or landscaped areas.
- ✓ Slow draining or clogged sinks and toilets

Be Cautious

Keep people and pets away from the affected area. Untreated sewage has high levels of disease-causing viruses and bacteria.

How You Can Prevent Sewage Spills Before They Happen

- ✓ Never put grease down garbage disposals, drains or toilets.
- ✓ Perform periodic cleaning to eliminate grease, debris and roots in your house plumbing and sewer lateral.
- ✓ Repair any structural problems in your sewer system and eliminate any rainwater infiltration or inflow into your plumbing system.
- ✓ Do not dispose of paper towels, or other large objects in toilets.

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
07/01/05		615 Stanley Court	DE in the curb-side extending along the frontage of several homes	Mrs. Ferris	Site visit and follow-up verbal warning was given to property owner - JC
07/15/05	05-396	186 Marsden Court	Excess irrigation water has resulted in slime/algae growing on the sidewalk and is slippery, a neighbor has fallen due to the condition of the sidewalk	Lindsey Rower	Site visit on 7/21/05, and follow-up verbal request was left for owner on answering machine, waiting for owner to contact the City to discuss resolution on 7/25 - JRP
08/11/05	received via website e-mail	End of Stephanie Lane and Lexington	Has had a puddle for weeks, appears that water is draining from an outlet hole near the Helix Water structure on Lexington. Concerned about West Nile virus and mosquitoes and wasted water.	Mrs. Kathy Woodland	Not storm water related. No followup necessary.
09/02/05	05-493	362 Mount Hills Place	Home over waters lawn for a long period of time allowing water to ran into the storm drains.	Paul Sather	Site visit and provided guidance and informational materials regarding proper watering and lawn care- JC
09/02/05		2250 Tampa	Concrete staining residue from driveway getting into the alley.		Resident, Jim Martin 226-6930, was instructed to clean residue using dry methods. Informational materials were also left on site - JC
09/13/05		1500 (Block) of E. Main Street	Motor and transmission fluids were released into the street and gutter. Water flowing through the gutter carried sediment and hydrocarbons into the storm drain system.	Steve Reilly, ECPD	Citation #0250 was issued for $100.00 for discharging motor and transmission fluids into the street and gutter - JC
09/22/05		438 Cuyamaca St	Homeowner is hosing down a deck at the rear of the house and the wash water discharges to the street through a curb outlet or pipe.	Public Works	A site visit did not locate evidence of a discharge.
09/23/05		1350 E. Lexington Avenue	Ford Taurus parked on face of curb is leaking transmission fluid. The owner of the vehicle was not found.	Anonymous	Written Warning #0239 was issued and area was photo-documented

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
10/03/05		1696 Arnheim	Complaint indicated that oil was poured on the face of curb	Anonymous	A site visit revealed motor oil in the face of curb in-front of 1696 Arnheim Court. The resident mentioned that one of their vehicles needs repair and is leaking motor oil. The resident left the vehicle in-front of the house while awaits the visit to the mechanic. The resident was instructed to clean the oil residue using dry methods and to place an oil pan under the vehicle.
10/10/05		2364 Rippey Court	Neighbor is grading his lot and is pushing the soil down the hillside and may be impacting endangered species - California coastal sage	WISHES TO REMAIN ANONYMOUS, Mrs. Hector, 2376 Rippey Court	Site visit, grading taking place at west end of lot on moderate to steep slopes. The owner does not have any permits or plans approved by the City. It looks like the grading is taking place on slopes greater than 2:1 and would require a grading and drainage plan and an erosion control plan. Requested the owner to go to Planning with a full description of the work and determine if the project meets the requirements for a grading and drainage plan and erosion control plan. Also requested the owner to visit the CASQA website and download the BMP sheets for erosion control BMPs for the site.
10/12/05		1686 Sandos Street	Complaint was received via telephone call from the City Manager's office regarding a resident washing/hosing his driveway repeatedly after repairing vehicles. Vehicle liquids were being washed from the driveway.	Anonymous	Upon arrival the resident of the home was finishing hosing activities. The resident was informed of storm water regulations and of alternative methods for cleaning that reduce the potential for pollutants draining into the storm drain system. Follow-up visits may be necessary.

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
10/13/05	05-557	1575 Lily Avenue	Operating business out of house; large 30-40 foot trucks parking on the street; dripping oil/vehicle fluids onto the street	R.J. Taylor	Oil/Diesel was dripping into the street. The owner of the equipment received a verbal warning on 11/05/03 linked to City Manager's Complaint # 03-478. Written warning PW No 0283 was issued and the site was photodocumented.
10/12/05		772 Lemon Avenue	Potential disturbance of soil/grading without the implementation of any BMPs		Contractor and home owner were contacted and informed that BMPs need to be in place before any further construction activities take place in site. A review of storm water files revealed that an Erosion Control Plan was in file.
10/17/05		649 Medford Avenue (647 was address provided, but address does not exist, 649 is closest and had an RV in driveway)	Complainant states that they observed resident at address discharging wastewater from a motorhome to the storm drain.	Anonymous	Site visit 10/17/05 after rain event. No evidence of wastewater discharge from motorhome. Recent rain washed streets fairly clean. Vehicles parked in street downstream from residence did trap leaves and other vegetative debris not nothing identifiable as being from a RV wastewater tank. No-one was home at time of site visit. Pictures were taken, located at H:/Special/NPDES/Complaints/Complaints PY05 06/649 Medford
10/21/05		855 East Lexington	Piles of debris in parking lot, not covered	Anonymous	Site visit at 5:15 pm, 10/21/05; demolition work has been taking place at this address, no evidence of a debris pile at the site. A large dump truck (with high side for hauling debris/trash) was at the site and was being loaded with demolition debris, no debris in the parking lot.

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
10/25/05	05-585	2232 Virginia Court	Neighbor is parking commercial cement truck on property, starts the truck at 0500 – 06090, washed cement hopper in driveway and hoses down street, cement residue present.	CONFIDNETIAL: Susan Gallant	Site visit on 10/25/05, saw a flat bed commercial truck in driveway (typical concrete pump truck), did not see a concrete pump rig. There was water in the gutter that discharges to a grassy swale that runs from the street toward the back of the house. Did not see any evidence of concrete or cement residue on the street. Inspector did not attempt to resident at this time. Additional followup visit will be done in a few days to check for a concrete pump rig. Several drive-by visits by 11/1/05 and have not seen a concrete pump rig at the location.
10/25/05	05-586	Ballard and East Lexington, 292 Ballard	Responded to Citizen's Complaint stating that a dump truck is parked late in the afternoon and leaks fluids onto the street.	Jim Stiger	Site visit on10/25/05, located parking area with oil stains on soil. Inspector returned later and saw a dump truck parked near the stained area and identified the driver. The driver lives across the street from the parking area and was aware of the leak and stated that the hydraulic ram was leaking and is scheduled to be fixed, but did not know when that would occur. Inspector requested that the driver scrape the soil with the stains and dispose of properly. Driver was identified as: Kelly Stramat, 292 Ballard Street The owner of the truck was identified as Wilkerson Trucking, Buddy Wilkerson, 619.454.4813.

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
11/22/05		649 Medford Avenue	sewage discharge from the RV in driveway, has a very strong odor	Anonymous, Al Thorik at 635 Medford	site visit on 11/22/05, a red hose was discharging liquid to the gutter, the hose smelled like raw sewage, the hose is connected to the RV parked in the driveway. Talked to RV owner, Michael Tompkins. Mr. Tompkins stated that he will eliminatge the discharge today (11/22/05). December 9, 2005 the RV has been removed from the site.
12/07/05	05-653	339 Southern Road	People living in motorhome inback yard draining sewage onto ground. Operating auto repair/sale business; oil/fluids draining into ground.	Melinda Heil	Site visit on 12/7/05. The RV is only used for temporary guest housing, usually family visiting from out of state. There are no utilities hooked up, no sewage discharge from the RV. The property owner has six vehicles stored on the property, does NOT conduct any vehicle repairs on the property. The owner has two trucks for sale, these are personal vehicles that are used on a daily basis.
12/07/05		1501 Avocado	Disturbing soil in private property without any BMPs in place.	Private Development Division	Field inspection and instruction to home residents about the need to install BMPs in all areas where soil disturbance occurred.
12/15/05		In front of Wells Park	Abandoned vehicle in front of Wells Park is leaking oil into the gutter and preventing the street sweeper from cleaning the curb.	Mike Mills	The truck was not parked in front of Wells Park by the time the field inspection was conducted on 12/15/05

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
12/15/05		1463 Marline Avenue	During the remodel of the house soil stock piles are left in the front of the residence.	Private Development Division	During a site visit to the site the contractor mentioned that he is going to use the soil for landscaping within the next week. He was informed that he needs to protect the stock pile if it remains in the same location longer than 10 days or if rain is announced in the forcast. He mentioned that he has emergency fiber rolls in case it rains.
12/15/05	05-672	801 Avocado	Throwing trash into storm drain system. Living in cars in back yard.	Barbara Bates	The site was visited and photodocumented on 12/15/05. The site visit revealed little trash in the earthen channel. A gentleman on site was informed of storm water regulations and the need to keep the channel clean by not throwing trash and debris in it. He mentioned that he had not seen anyone throw any trash in the channel and that the slight trash/debris scattered in the channel probably came from up stream. The complainant was contacted and informed of the outcome of the site visit.
01/20/06		537 Jeffrey Street	Oil waste released into the storm drain system	Dennis Davies	Citation #0295 was issued for $100.00 for discharging oil waste+H15 into the street and gutter - JC
01/24/06		698 Downer Avenue	Tile waste dumped in the gutter	Jean Teague	The residents were instructed to clean the white residue in the gutter using dry methods. The residents were also warned via a door hanger that discharging waste from construction activities into the public right of way is a violation of storm water regulations and that future violations will result in monetary citations.

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
01/25/06	06-23	339 Cuyamaca	Dog feces being thrown over the fence and a telephone pole is leaning.	James Mata	Public Works inspected the utility right of way, the City does have any jurisdiction in this right of way and there are no storm water conveyance systems in this area. The City is unable to take action on this complaint.
01/26/06	06-21	Jamacha Rd btw Gustavo and Granite Hills, west side of street	grading taking place with garden hose, muddy mess	Kay LeMenage	site visit on 1/27/06, grading is complete, no muddy mess
02/02/06			a neighbor, at 498 El Monte, blows his yard waste into the street and does not pick it up, after completing his yard work.	Dennis Brule	site visit on 2/2/06, noone was home, left a door hanger
02/07/06		1490 Naranca Avenue	White Chrysler Plymouth van CA Lic. Plate #2TRK150 leaking transmission fluids into the curb side.	Bill	Site visit confirmed that vehicle is leaking transmission fluid. The owner of the van was contacted and instructed to clean the residual oil using the dry methods. Absorbent material was used to clean the ponded oil, a follow up will be conducted. Allan Phillips was warned that future spills will result in monetary fines.
02/13/06	06-65	839-41 S. Anza St	Complaint of wash water being discharged into street and leaking pipe from house onto sidewalk, people living	Deanna Luna	Site visit on 2/13/06, no wash water discharge, noleaking drain from house ont sidewalk, no evidence of people living in
02/16/06		1141 Crosby St	Complaint of resident placing carpet in storm channel to block the flow of water. Ponded water was then pumped up into	Woody Wiyniger of Valley Transmission	Public Works Channel crew removed the pump, cut the hose at the fence and removed the trash and debris from the

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
03/07/06		883 Terrace Crest	Residential construction project producing large piles of dirt with no BMPs in place.	voice mail left at main number, no name or phone number	Site inspection on 3/7/06. Trenching project at this property has large dirt pile in front driveway. Pile has no cover or berm allowing sediment to flow onto common drive way. The flow travels directly into well vegetated lot at the end of the drive. Door tag was left. No violation.
03/15/06		1185 Peach	Detatched gas tank and an oil pan on ground under inoperable motorhome parked on the street in fron to the residence	Judy Jones	Site inspection on 3/15/06. Oil pan and gas tank removed from under motorhome. It's owner, Billie Estrque plans to move it by the weekend. No discharges observed
03/15/06		1415 Emerald	Abandoned property has large open containers of used motor oil. Complainant believes oil is from illicit auto repairs at 1416 Emerald.	Judy Jones	Site inspection on 3/15/06. Two large plastic containers of waste oil are outside locked gate. Full Dumpster present and new lock on gate. Contacted resident at 1416 Emerald, George Flores (438-9279) said he is not aware who dumped it but he would remove it befor the week-end.

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
03/16/06	06-119	1692 Whitsett Dr	People living in motorhome on side of property	James Maletic	Responded to a Citizen's Complaint stating that an RV is on the side of the residence, people are living in it, has power to it, the parking area is graded; did the resident get the appropriate permits? The site was visited on March 16, 2006. The site is a single family residence with RV parking on the side of the house. At the time of the visit, people were in the RV. The RV is parked on a flat parking area with gravel, approximately 50-60 feet long and 8-10 feet wide. There are not any storm water issues nor are there other Public Works issues. The inspector did not contact or communicate with the owner or occupants of the RV.
03/22/06		485 Hawthorn	Dirt pile from landscaping job in front yard. Sediment running into street	Anonymous	Responded to an anonymous complaint of dirt sediment from re-landscaping running
03/28/06		101 W. Park Avenue (Knott's Hotel)	RV dumping gray/black water into parking lot	Steve Reilly, ECPD	Officer Reilley witness Fredrick Gaeke Richards, the registered owner of the RV, releasing gray/black water from the vehicle. A bad smell emanated from the discharge residue upon arrival. Refer to Citation PW No. 0292 and photodocumentation for further information.
03/29/06		710 or 720 Cuyamaca St	Major auto repair with fluid containers on ground	Judy Jones	Inspected both addresses and found no auto repair activities or fluids
03/30/06		2286 Windmill View Dr	Complaint of grading in front yard with dirt pile in street.	Jim Griffin	Landscaping crew in process of cleaning the street and driveway. Door tag and card left at door.

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
03/30/06		1276 Pfeifer Lane	Soil piled in the public right of way without protection for approximately 3 weeks	Anonymous	Pile of dirt at curb edge from front yard re-landscaping. Card and brochure left at door
04/12/06		1322 Clarke Dr	Yard waste being discharged into street at gutter	Anonymous	Site inspection found Pine needles and various yard waste raked into the unimproved portion of the street. Contacted the resident, Jeramiah Smiley 440-0546. HE said he would remove it. Cb
04/11/06		200 S. Mollison Ave	Blackwater leaking from an old motorhome parked in the rear parking lot of the apartment complex.	Judy Jones	Located a white and yellow Dodge camper van in the rear lot Ca. Lic# 5NYC211. Strong odor and leak on ground near right rear of vehicle. No occupants present. Left card and advisory tag on windshield. Cb
04/25/06		1390 Naranca Ave	Washing fuel from driveway into the street	Rodney Peffer	Site inspection found clean driveway and water with oil residue at curb. No response at door, left doortag and card. Cb
04/26/06		1580 Chiswick Ct	Dumping and maintaining a dirt pile in the gutter and street	Anonymous	Site inspection found large pile of dirt in the street in front of residence. Advised owner, Jean Brittain to remove it. Reinspected 4/27/06, piled remained and written warning issued. The dirt was removed and the street swept on 4/28/06. Cb
05/05/06		200 S. Mollison Ave	Water dripping into back alley from apartment complex back chain link fence abbuting alley. A lot of water has been discharged for months.	Bill Murphy	Contacted manager of apartment complex, Nelson Noel, at (619) 493-6121 regarding the water drainage problem. Mr. Noel mentioned that he has a drip irrigation system and that he was going to check the lines for any leaks. cb

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
05/17/06		414 S. Lincoln St #7	Auto repair in street leaving fluids at curb.	Laurie Armstrong	Site inspection found no vehicle repair, red color fluid at curb in front of address. Absorbent used on fluid. Left storm water residential material at door. 5/19/06 Curb cleaned. Small amount of sand spread to remove residual fluid. CB
05/19/06		623 Herbert	Public Works crew cleaning the Allenwood Ditch reported resident dumpting dog waste into the open concrete storm channel.	Pat Jackson	5/19/06 Stormwater door tags left at properties on both sides of the channel. No dog waste observed. CB
05/23/06		237 Minnesota Avenue	resident has two truckloasds of soil stockpiled in the street, the pile was present during the rains of May 21 and a significant volume of soil was discharged through the gutter to the storm drain inlet.	Publi Works crews	The site was inspected on May 23, 2006, no-one was home, pictures were taken of the stockpile and a doorhanger left. An hour later, the inspector was able to contact the owner, explain the municipal code violations and direct her to hjave al of the soil removed and the street and gutter cleaned up; compliance deadline is Wednesday May 24, by 5:00 pm
05/26/06		1347 Coy Ct.	Neighbor's drain pipe drains into this property and crosses sidewalk and poses a slip hazard.	Anonymous	Site inspection on 5/26/06 found lawn and sidewalk wet. Appears to be from irrigation. No discharge into street. Door tag left at residence. Cb
05/30/06		1924 Altozano	Resident is power washing roof and discharging waste water to the guter without any controls	Tom Garvey	Resident contracted with a powerwash company to wash house and roof, the waste wash water discharged to the street gutter. The waste was polluted with red residue and other pollutatnts from the washing and discharged to a curb inlet and the storm water conveyance system. Inspector stopped the washing operation, requested a full cleanup of the waste and issued Citation # PW 0345

City of El Cajon
Storm Water Residential Complaints

Date	Complaint #	Complaint Address	Complaint	Referral / Complainant	City Action
05/31/06		876 S. 3RD St	Dirt from tree stump removal onto sidewalk and street. No BMP's implemented.	PW/ Inspectors	Site inspection found day laborers in process of removing a tree stump with dirt on sidewalk and into gutter and street. Advised crew to thoroughly clean street and
06/12/06		550 Raymond St	Dumping concrete wash water into the gutter.	Bob Hergo	Site inspection on 6/12/06 found gutter in front of complainants residence, 678 Raymond, clean. No discharge observed.
06/14/06		867 S. Lincoln	City staff concerned with large amount of dirt piles in front of proerty with no BMPs in place.	Donna Bernard	Contacted Patriot Plumbing contractor, Dennis ?, on site. Said sewer pipes being replaced in deep trench. Advised him of BMP requirements for stock piles. 6/15/06 Pile moved onto grass. Pile removed on 6/19/06.

The City of El Cajon

California

PROCLAMATION

"POLLUTION PREVENTION DAYS"
May 16th and August 29th, 2007

WHEREAS, *storm water management services provided in our community are an integral part of our residents' everyday lives. The support of an understanding and informed citizenry is vital to the efficient operation of storm water management programs; and*

WHEREAS, *the health, safety and comfort of this community greatly depends on these services. The quality and effectiveness of these services, as well as their planning and implementation is vitally dependent upon the efforts and skill of storm water management staff; and*

WHEREAS, *the efficiency of the qualified and dedicated personnel who staff the storm water management division is materially influenced by the people's attitude and understanding of the importance of the work they perform.*

NOW, THEREFORE, *I, Mark Lewis, Mayor for the City of El Cajon, together with the City Council, do hereby proclaim the days of May 16th and August 29th, two thousand and seven to be "POLLUTION PREVENTION DAYS" in the City of El Cajon. We further call upon all residents and civic organizations to acquaint themselves with the issues involved in providing our services and to recognize the contributions which public works officials make every day to our health, safety, comfort, and quality of life.*

Signed this eighth day of May, two thousand and seven.

Mayor

Storm Water Outreach Booth at Cajon Classic Cruise - April and May of 2007

Storm Water Outreach Booth (View from Above - April and May of 2007

THIS IS NOT A CITATION

HELP!

Pollutants were found in your neighborhood storm drain.

Our field staff found the following pollutant(s)spilled or dumped into the storm drain system (curb, street, gutter) near your home:

- ❑ Over irrigation usage
- ❑ Motor Oil
- ❑ Antifreeze/Transmission Fluids
- ❑ Cooking grease
- ❑ Detergents
- ❑ Solvents/Degreaser
- ❑ Paint/paint products
- ❑ Home improvement waste
- ❑ Sewage
- ❑ Animal waste
- ❑ Yard waste (leaves, grass, etc.)
- ❑ Uncovered dirt and gravel pile(s).
- ❑ Construction debris
- ❑ Trash
- ❑ Other

Be a Clean Water Leader

Storm water pollution is a problem that affects all of us. With a growing population of more than 95,000 residents and approximately 14 square miles of urbanized development, keeping our waters clean from pollutants has become increasingly difficult. With thousands of storm drain inlets, and nearly 100 miles of storm drain pipes and channels to clean and maintain, we need your help.

When it rains, water flows over across our yards and into our streets carrying pollutants into our storm drains. The problem is that storm drains are not connected to the wastewater sewer treatment plant. So, what's in the streets flows directly into our creeks, rivers and the ocean, without treatment.

Last year, too many of our beaches and bays were closed or posted as unsafe for swimming. As our City

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Leaders have said, “this is more than an inconvenience; it is a civic embarrassment.” **Discharging pollutants to the City's storm drain system is in violation of Title 13.24 of the El Cajon Municipal Code and violations can result in substantial fines.**

But, as a City resident, you can make a difference. By becoming a Clean Water Leader, both on the job and in your community, you can help make our stream, rivers and beaches free of pollution. When you're at home, share your knowledge with neighbors and family. As you drive to work, be aware of any illegal discharges. And, if you do see an illegal discharge, report it. In the City of El Cajon you can **call the City of El Cajon at (619) 441-1653, or the 24-hour Storm Water Hotline at (888) 846-0800**.

Whether at home or at work, by adopting some simple Best Management Practices (BMPs), you can stop pollutants from being generated and entering our storm drain system.

- ✓ Use dry clean-up methods for spills and outdoor cleaning. Vacuum, sweep, and use rags or dry absorbants. Properly remove and dispose of this material when the spill is absorbed.
- ✓ Properly label, store and dispose of hazardous wastes. Rake, sweep up, and place all debris (dust, litter, sediment, etc.) from your yard or near your property into a trashcan.
- ✓ Use a mop only when water is needed.

As you perform your daily activities be proactive. Assess the activity from a storm water pollution point-of-view and ask yourself; “does this activity, directly or indirectly, generate pollution?” And, “how can I get the job done and prevent debris from entering into the storm drain collection system?”

City of El Cajon

STORMWATER
Protection Program

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Whether at home or at work, by adopting some simple Best Management Practices (BMPs), you can stop pollutants from being generated and entering our storm drain system.

- ✓ Use dry clean-up methods for spills and outdoor cleaning. Vacuum, sweep, and use rags or dry absorbants. Properly remove and dispose of this material when the spill is absorbed.
- ✓ Properly label, store and dispose of hazardous wastes. Rake, sweep up, and place all debris (dust, litter, sediment, etc.) from your yard or near your property into a trashcan.
- ✓ Use a mop only when water is needed.

As you perform your daily activities be proactive. Assess the activity from a storm water pollution point-of-view and ask yourself; “does this activity, directly or indirectly, generate pollution?” And, “how can I get the job done and prevent debris from entering into the storm drain collection system?”

City of El Cajon

STORMWATER
Protection Program

RIVER DAYS 2007 SAN DIEGO

SATURDAY MAY 19th & SUNDAY MAY 20th

Free Family-Friendly Events from the Mountains to the Ocean along the 52-mile San Diego River.

Join us in celebrating the natural beauty of the San Diego River. Activities will include bike rides, clean-ups, nature and history walks, mountain hikes, neighborhood festivals & much more.

San Diego River Park Foundation
PO Box 80126
San Diego CA 92138-0126

non profit organization
u.s. postage
PAID
san diego, ca
permit #957

For more info, call 619-297-7380 or visit:
WWW.SANDIEGORIVER.ORG

Morgan Justice-Black
I Love A Clean San Diego
4891 Pacific Highway, Suite 115
San Diego, CA 92110

November 3, 2006

LETTER OF PERMISSION FOR I LOVE A CLEAN SAN DIEGO (ILACSD) TO STENCIL STORM DRAIN INLETS IN THE CITY OF EL CAJON

This letter gives permission to ILACSD staff and volunteers to apply the message "No Dumping…I Live Downstream" and a depiction of a dolphin or duck to the curb area directly adjacent to storm drain inlets within the City of El Cajon. Validity of this letter of permission is for two years from the date of this letter, unless otherwise notified.

We would like to thank I Love A Clean San Diego for their efforts in this important program, which will help the City of El Cajon in educating the public regarding storm water runoff and pollution prevention.

All storm drain stenciling activities should be coordinated with our Storm Water Program staff, the City Manager's Office and the Police Department to properly identify neighborhood within our city where inlets would benefit from being stenciled and to secure areas for volunteers to park cars and safely coordinate activities. City Storm Water staff can be contacted as described below.

Should you have any questions or require additional information, please contact Jaime Campos at (619) 441-5554, jcampos@ci.el-cajon.ca.us or Robert W. Griswold at (619) 441-1704, bgriswold@ci.el-cajon.ca.us

Approved by:

Jaime Campos

Jaime Campos
Storm Water Program Manager
City of El Cajon Storm Water Protection Program

City of El Cajon Storm Water Protection Program

Program Assessment Form
Land-Use Planning for New Development and Redevelopment Component (F.1.)

QUANTITATIVE ASSESSMENT: **1/31/08**

Activity	Quantity	Units	Comments
Number of projects subjected to SUSMP requirements	28	#	Include ministerial and discretionary projects

QUALITATIVE ASSESSMENT:

1. Describe the major accomplishments of your department's component over the past year.
(General Plan or ordinance revisions, procedure/approval process changes, SUSMP guidance material)

Continued to work with the Planning Department to established procedures and ensure that all projects submitted to the Planning Department are reviewed for SUSMP requirements. Inspected all projects that completed the SUSMP treatment requirements.

2. Summarize the educational and outreach activities the Planning Department has conducted over the past year to educate staff, community planning groups and the public on water quality principles.

Continued to conducted one-to-one training with City Planning and Building staff.

3. Summarize new activities or improvements to be implemented next year as a result of your self assessment.

Continued developing an in depth review process of condominium conversion projects to identify those that should be required to comply with SUSMP requirements.

4. Other comments.

Program Assessment Form **1/31/2008**
Construction Component (F.2.)

QUANTITATIVE ASSESSMENT:

Activity	Quantity	Units	Explanations (if needed)
Number of high priority construction sites identified	20	#	
Number of high priority construction sites targeted for inspection	20	#	
Number of high priority construction sites inspected	20	#	
Number of medium priority construction sites identified	10	#	
Number of medium priority construction sites targeted for inspection	10	#	
Number of medium priority construction sites inspected	10	#	
Number of low priority construction sites identified	101	#	
Number of low priority construction sites targeted for inspection	0	#	
Number of low priority construction sites inspected	24	#	
Total number of construction sites in compliance or on a compliance schedule	54	#	
Number of facilities referred to RWQCB for enforcement of State General Construction Permit	0	#	

QUALITATIVE ASSESSMENT:

1. Describe the major accomplishments of the Construction Component over the past year.
(Procedure changes, new requirements, ordinance revisions, guidance material developed/adopted)

Improved spreadsheet to keep a better inventory of construction projects in the City (i.e. high, medium, and low priority). City gave 21 enforcement actions noted at construction projects, (5) five of which were monetary citations.

2. Summarize the internal and external educational and outreach activities the Construction Component has conducted over the past year.

Conducted informal training while insepcting construction sites or during complaint investigations. The City also educates every proponent of projects about storm water over the front counter of the Public Works Department.

3. Summarize new activities or improvements to be implemented next year as a result of your self assessment.

Will continue to ensure implementation of minimum BMPs at priority construction sites to keep using the inventory spreadsheet to improve the construction inventory list.

4. Other comments.

Program Assessment Form **1/31/2008**
Existing Development - Municipal Component (F.3.a.)

QUANTITATIVE ASSESSMENT:

Activity	Quantity	Units	Comments
Number of high priority municipal facilties	**5**	#	
Number of high priority municipal facilities targeted for inspection	5	#	
Number of high priority municipal facilities inspected	5	#	
Number of medium and low priority municipal facilities inspected	0	#	
Quantity of material removed from MS4	1,654	cubic yards	direct measure; report in cubic yards.
Quantity of debris removed that could have enter MS4 (i.e. street sweeping, litter removal)	5,113	cubic yards	direct measure; report in cubic yards.

QUALITATIVE ASSESSMENT:

1. Describe the major accomplishments of the Municipal Component over the past year.

Completed a 100% cleaning of all City storm drains, open-channels and conveyances, including curb-inlet boxes.
Sweept 18,781 miles of curbed streets.
Cleaned 210 miles of sanitary sewers.

2. Summarize the educational and outreach activities the Municipal Department has conducted over the past year to educate staff on water quality principles.

Conducted training to Public Works Maintenance and Parks Maintenance Employees. Training sessions were also conducted for Public Works inspectors and police officers.

3. Summarize new activities or improvements to be implemented next year as a result of your self assessment.

Continue to conduct the removal of homeless encampments within the City's storm drain system

4. Other comments.

Continued to conducted monitoring and maintenance of the trash and debris fence

Program Assessment Form **1/31/2008**
Existing Development - Industrial Component (F.3.b.)

QUANTITATIVE ASSESSMENT:

Activity	Quantity	Units	Explanations (if needed)
Number of high priority facilities identified	26	#	
Number of high priority facilities targeted for inspection	26	#	
Number of high priority facilities inspected	26	#	
Number of medium and low priority industrial facilities inspected	0	#	
Number of facilities in compliance or on a compliance schedule	26	#	All high priority facilities were in compliance.
Number of facilities referred to RWQCB for enforcement of State General Industrial Permit	0	#	

QUALITATIVE ASSESSMENT:

1. Describe the major accomplishments of the Industrial Component over the past year.

Inspected all High Priority Industrials, verified Minimum Required BMP implementation at each site, obtained and reviewed monitoring data from all High Priority Industrials

2. Summarize the internal and external educational and outreach activities the Industrial Component has conducted over the past year.

Provided brochures and other information to industrial facilities during inspections or in response to complaints/referrals

3. Summarize new activities or improvements to be implemented next year as a result of your self assessment.

Through inspections, ensure that: 1) all high priority industrials facilities are implementing minimum BMPS; 2) identify and inspect new industial facilities; 3) conduct followups to previous years inspections as necessary; and 4) collect water quality data and tabulate for review and comparison to other water quality data to help establish priorities for future inspections, investigations source identification and planning actions

4. Other comments.

Future Action: compare Industrial facility wet weather monitoring data to municipal wet weather monitoring data to evaluate potential impacts of industrial storm water discharges to receiving waters during rainy season

Program Assessment Form **1/31/2008**
Existing Development - Commercial Component (F.3.c.)

QUANTITATIVE ASSESSMENT:

Activity	Quantity	Units	Explanations (if needed)
Number of high priority facilities inspected	136	#	
Number of medium and low priority commercial facilities inspected	0	#	
Number of facilities in compliance or on a compliance schedule	136	#	

QUALITATIVE ASSESSMENT:

1. Describe the major accomplishments of the Commercial Component over the past year.

1) Inspected Auto Repair and Service Facilities
2) Verified implementation of minimum BMPs

2. Summarize the internal and external educational and outreach activities the Commercial Component has conducted over the past year.

1) Provided Posters and Brochures to Vehicle Repair and Service facilities during inspections
2) Discussed water quality issues at facilities during investigations of complaint/referrals

3. Summarize new activities or improvements to be implemented next year as a result of your self assessment.

Focus on facilities that have failed to fully implement the minimum BMPs and conduct inspections based on new Municipal Permit R9-2007-0001

4. Other comments.

Program Assessment Form **1/31/2008**
Existing Development - Residential Component (F.3.d.)

QUANTITATIVE ASSESSMENT:

Activity	Quantity	Units	Comments
Quantity of HHW materials collected	236,890	Pounds	direct measure. Information can be obtained from the jurisdiction's Annual Report of Household Hazardous Waste Collection Information, as required by the California Integrated Waste Management Board on CIWMB Form 303 (see: http://www.ciwmb.ca.gov/HHW/Reporting/). Information on waste oil collected by Certified Used Oil Recycling Collection Centers throughout the jurisdiction may also be available directly from the Collection Centers, although their statutory reporting requirements are limited.

QUALITATIVE ASSESSMENT:

1. Describe the major accomplishments of the Residential Component over the past year.

Collection of 236,890 pounds of household wastes removed and disposed of properly.
An increase from last year.

2. Summarize the educational and outreach activities the Residential Component has conducted over the past year to educate staff, community groups and the residents on water quality principles.

Pollution Prevention Days, several throusand attendees

3. Summarize new activities or improvements to be implemented next year as a result of your self assessment.

Further refinement of the Residential BMP program
Take advantage of new opportunities to present or participate
in outreach events, conferences, training etc

4. Other comments.

Program Assessment Form **1/31/2008**
Education Component (F.4.)

QUANTITATIVE ASSESSMENT:

Activity	Quantity	Units	Explanation (if needed)
Number of storm water education/instructional materials/brochures distributed	190,000	#	Equals number of brochures printed (assuming # printed = # distributed).
Number of public employee training events regarding storm water principles	8	#	While # of employees trained might prove more informative, Permit Section I.1.b.(4) asks for "education efforts conducted."
Number of storm water-related instructional workshops / outreach events conducted	1	#	Equals number of events directed at the public-at-large, not public employees.

1. Describe the major accomplishments of the Education Component over the past year.

Distributed 38,000 copies of the City newsletter; Articles covered:
1) How El Cajon Residents and Businesses Can Help Keep Our Beaches Clean;
2) Over Irrigation Can Cause Storm Water Pollution;
3) Pet Pollution Can Be a Serious Problem;
4) We All need to Protect Our Watershed;
5) Why It's Important to Keep Trash, Sediment and Debris Out of Our Storm Drains

2. Summarize the storm water educational materials developed over the past year.

1) 190,000 Articles in city newsletter (five articles @ 38,000 copies each)
2) 39,000 Mailers in sewer invoices (three articles @ 13,000 copies each)

3. Summarize new activities or improvements to be implemented next year as a result of your self assessment.

Continue to focus on trash and debris management

4. Other comments.

Program Assessment Form **1/31/2008**
Illicit Discharge Detection and Elimination Component (F.5.)

QUANTITATIVE ASSESSMENT:

Activity	Quantity	Units	Comments
Number of dry weather sampling locations monitored	33	#	
Number of illicit connections eliminated or on a compliance schedule	0	#	none identified this year
Number of illegal discharges eliminated or on a compliance schedule	54	#	Number of illegal discharges eliminated, no discharges are on a compliance schedule.
Number of stormwater complaints / referrals received	128	#	

QUALITATIVE ASSESSMENT:

1. Describe the major accomplishments of the IC/ID Component over the past year.

1) Investigated 100% of complaints/referrals
2) Eliminated 100% of valid investigations
3) Three Sewage Spills from Publically owned lines
4) Six Sewage spills from Privately owned lines

2. Summarize the internal and external educational and outreach activities the IC/ID Component has conducted over the past year.

1) Face-to-face during complaint/referrals
2) Continual refresher training for Public Works,facilities, and parks maintenance staff as needed

3. Summarize new activities or improvements to be implemented next year as a result of your self assessment.

1) Increase dry weather monitoring and special study events to better identify sources
2) Coordinate volunteer cleanup events with the ECCDC
3) Continue focus on 303d list pollutants

4. Other comments.

Program Assessment Form **1/31/2008**
Public Participation Component (F.6.)

QUANTITATIVE ASSESSMENT:

Activity	Quantity	Units	Explanation (if needed)
Number of opportunities provided which enabled the public to participate	**3**	#	Career Day at office, Pollution Prevention Days, San Diego River Days 2007, National Pubic Works Week

QUALITATIVE ASSESSMENT:

1. Describe the major accomplishments of the Public Participation Component over the past year. Also, describe the mechanisms used for public participation.

Participated in Career Day, hosted Pollution Prevention Week and continued to participate in Regional and Watershed efforts to inform the Public of Storm Water and Watershed requirements. Published 5 articles with 38,000 distributed copies of the City newsletter potentially reaching 190,000 residents.

2. Summarize the internal and external educational and outreach activities the Public Participation Component has conducted over the past year.

Included 3 sewer bill inserts with 39,000 distributed copies
190,000 potential impressions from City Newletter Articles on Storm Water

3. Summarize new activities or improvements to be implemented next year as a result of your self assessment.

Continued focus on trash and debris from entering the storm drain system.
Provide storm water materials for all new and renewed business license applicants.

4. Other comments.

APPENDIX B

Reports of Illicit Discharges/Complaints 2006-2007

	Date	Complaint Classification	Complaint address	Complaint	Referral/Complaint	Telephone	City Action
1	07/05/06	Residential	1405 Sunnyland Ave	Resident complaint of concrete wash water being dumpted in gutter	Estaban Gomez	619-977-2735	Property owner contacted and advised to cease concrete washing and to clean gutter. Educational info. Supplied.
2	07/06/06	Commercial	767 Arnele	Hertz employees washing cars at rear of building	John Phillips		Site inspection found hose and shopvac at rear of building. Office manager contacted and advised to cease vehicle washing. Advised of BMPs and vehicle washing info.
3	07/07/06	Construction	1385 Main St E	Fountain cleaning water discharged to ground through construction area with no BMPs. Discharg enters unprotected channel entrance.	C. Bonner		Property owner contacted and issued a citation for discharge. Corrections made the next day
4	07/13/06	Commercial	1402 Pioneer Way	Landscape erosion possibly entering the storm drain	Eric Craig PL		Site inspection found no storm water issues.
5	07/13/06	Commercial	1754 Main St E	Washing cars behind the Magic Dry Cleaners allowing water to discharge into channel.	Julio Vidals	619-462-3500	Site ispection found no carwashing activty. A garden hose was outside rear building. Contacted the business owner who admitted to washing cars occasionally. He was advised to cease activity. Issued storm water information.
6	07/17/06	Residential	956 Wiggins St	Citizen complaint of a vehicle parked on the street in front of residence leaking a large amount of fluids.	Anonymous/ Phone		Site inspection found car parked in front of residence leaking large amount of fluid onto ground. Property owner was contacted and advised to clean pavement and place a drip pan under the vehicle.
7	07/17/06	Commercial	210 El Cajon Blvd	Employees at American Recycling washing lot, allowing water to enter street and other properties.	Firas ?	619-593-9898	Site inspection found evidence of recent lot washing. Employee contacted and advised to insruct owner to cease washing activity unless BMPs are implemented to prevent further discharges.
8	07/19/06	Construction	321-25 Van Houten Ave	Driveway and Handicap construction with no BMPs as required per erosion control plan.			Property owner contacted and advised to implement required BMPs. Gravel bags installed immediately to protect storm drain inlet at corner. Engineering dept. to follow up to completion of project.
9	07/19/06	Commercial	9349 Bond Ave	Regional Water Board checking status of business operations at Next Generation Gel Coat and Orion Custom Boats for their records.	Don Perrin	858-467-2969	Property found to be located in SD County.
10	07/24/06	Commercial	Fletcher Parkway	Referral from DMAX of significant overwatering in the planters in the north portion of the parking lot of Fletcher Hills Town and Country Plaza	Jaime Campos		7/24/06 Site inspection found a large amount of water standing in the parking lots and running freely at along the alley at the rear of the complex.

Reports of Illicit Discharges/Complaints 2006-2007

	Date	Complaint Classification	Complaint address	Complaint	Referral/Complaint	Telephone	City Action
11	08/01/06	Residential	1237 Mona Pl	Trash bins left in the street after pick up on Fridays	Gerald Fernandez	619-203-9363	Site inspection found two trash bins out in front of property no storm water concerns noted. The case was referred to zoning enforcement.
12	07/26/06	Construction	353 Park Ave	Hosing off parking lot at construction site with no BMPs in place to prevent discharge	Craig Bonner		Contractor advised to immediately cease lot washing activity unless proper BMPs are implemented. Written warning issued.
13	07/31/06	Residential	1957 Falmouth Dr	Citizen complaint of a vehicle parked on the street in front of residence leaking a large amount of fluids. Concerned due to minor rain event pollution potential.	Randy Fromm	619-838-7111	Site inspection found a black BMW parked on the street in front of residence with a metal pan under the engine. Oil stains found on the pavement on both sides of the street. Contacted resident and advised to relocate vehicle to driveway and put absobent material on stains.
14	08/02/06	Residential	1141 Naranca	PW crew working in concrete storm channel at rear of property found gray water discharge pipe from washing machine in rear yard extending into channel.	Pat Jackson		Contacted tenants, issued storm water educational materials and told to remove the pipe. Suggestion was made to relocate the pipe to a vegetated area of the rear yard.
15	08/03/06	Residential	684 Cuyamaca	Complaint of 3 large piles of dirt stored in the steet on Wagner St. The dirt is being moved into the rear yard.	Jim Uribe	619-447-0138	Inspected the site on Wagner and found a large pile of dirt in the street with no BMPs on place. Two tractors were moving the dirt to fill in a pool in the rear yard
16	08/07/06	Residential	1575 Lily	Operating a concrete cutting business out of the home; trucks parked on the street; washing concrete in street.	Julie Greeniaus	619-444-4720	Site inspection found small amount of concrete debris in street in front of house. No washing in progress. Contacted resident and issued verbal warning to cease all concrete cleaning activity in street. No Home business operation.
17	08/10/06	Construction	930 Jamacha	Contractor pumping ground water with sediment into street; inadequate BMPs allowing discharge into curb inlet.	C. Bonner		Contractor contacted on site advised to immediately cease ground water discharge and dry clean area of all sediment. Instructed to direct discharge to on site location.
18	08/11/06	Residential	138 Ruth Ct	Citizen complaint of janitorial service, home business, dumping chemicals into drainage grate at corner.	Cynthia Anderson	619-588-6039	Site inspection found no evidence of chemical discharge, contacted owner and issued residential/ mobile business educational material. Said he would also educate his staff.
19	08/15/06	Residential	868 Pearl Pl	Resident complaint that neighbor has drain pipe from camper in rear yard discharging into open concrete storm channel.	Swan Rotchforn	619-579-7288	Site inspection found black ABS pipe from rear yard extending into storm channel. Camp trailer in rear yard in close proximity to the pipe. Door tag left with instruction to contact City. Also referred to Zoning Enforcement.

	Date	Complaint Classification	Complaint address	Complaint	Referral/Complaint	Telephone	City Action
20	08/17/06	Commercial	1110 El Cajon Blvd	PW staff observed a discharge of vehicle wash water from the rear of 1100 El Cajon Blvd crossing the sidewalk and entering the street.	Don Perrin		Contacted the owner of Rent 4 Less Car Rental at 1110 El Cajon Bl.on site. HE admitted to washing cars behind the neighboring business. He was advised to cease all washing activity unless proper BMPs could be installed. He was issued stormwater and vehicle washing educatinal materials.
21	08/18/06	Commercial	1900 Weld Blvd	A discharge of a white substance, possibly concrete, from the neighboring property flowed onto county property.	Eric Nelson, Airport Eng.	596-4825 or 778-2002	A site inspection found that the discharge originated at RCD Suspension. The business owner said it was from drywall work. A written warning was issued to clean the area.
22	08/23/06	Commercial	1451 Johnson Ave	Discharge of sediment and concrete from ground plumbing work, No BMPs for dirt pile.	C. Bonner		Contacted on site plumbing contractor and told to immediately cease discharge, install BMPs for concrete wash and around base of dirt pile
23	08/25/06	Commercial	1261 E. Main St	Prior Citation for similar violations----Lot wash water allowed to discharge into stormwater conveyance, open grease bin and dumpster.	C. Bonner		Constacted manager advised to cease all lot washing unless water can be reclaimed or use dry method. Told to keep dumpster and grease bin closed
24	08/28/06	Residential	197 Lindell Ave	Complaint of tar pot being cleaned on the street and an open container of oil on the side of the house.	Steve Barker	619-440-7927	Met with complainant on site. No tar pot present. Only minor oil on pavement. No evidence of other discharges. Small oil container uncovered at right side of the driveway.
25	08/29/06	Residential	195 Marsden Ct	Stockpile of dirt from pool installation has no BMPs to prevent sediment discharge to street.	Paul Schlitt	619-527-3938	Contacted pool contractor on site and advised to install BMPs around the base of the dirt pile and cover if the pile is to remain.
26	08/31/06	Construction	333Wells Ave	Using hose to wash sediment from paved areas	C. Bonner		Contacted Priest Development staff and advised to cease using water to clean paved areas. A written warning was issued.
27	08/31/06	Residential	2364 Rippey St	Grading in back yard a 5ft drop and is a potential for erosion	Mrs. Hector	619-589-0284	Contacted property owner on site. Minor grading in sloped rear yard, pool work no potential for any discharge. Rear yard slopes to vegetated canyon.
28	09/01/06	Residential	2526 Carlow St	Extensive landscaping, washing silt and dirt into gutter and storm drain.	Ted Tanner	619-337-9721	Contacted property owner on site. No active but evidence of recent discharge of sediment in street. Owner advised to cease use of water to clean concrete surfaces. Issued residential educational materials.
29	09/05/06	Residential	1629 Greenfield Dr	Complaint that a resident has paved an area next to the roadway causing a change in the plow pattern.	Mr. C. W. McFarland	619-647-8483	Site inspection found no storm water issues. Complainant was advised.

Reports of Illicit Discharges/Complaints 2006-2007

	Date	Complaint Classification	Complaint address	Complaint	Referral/Complaint	Telephone	City Action
30	09/06/06	Construction	1543 Lexington E	Observed large piles of dirt and concrete in driveway from construction activity with no BMPs in place.	Craig Bonner		Contactedcontractor on site and advised ot either remove the piles or install BMPs for stock piles.
31	09/08/06	Residential	433 Avocado Blvd	PW staff observed a resident using a hose to wash debris from the parking lot with no BMPs in place to prevent a discharge.	Dave Garrett PW		Made on site contact with the resident. There was no active diacharge. She was given educational materials and advised to use a dry method to clean the lot.
32	09/08/06	Residential	605 Mollison S.	Public Works staff observed sewage overflowing in the parking lot and driveway and discharging into the street.	Bill Brockman PW		Public works crew contained flow and used vac to remove. Property management was contacted for plumbing service.
33	09/11/06	Commercial	1164 2ND St N	Observed an employee of Blue Meanie Records working on the irrigation system and allowing water to run into the street.	Craig Bonner		He was advised to re-adjust to sprinklers and shorten the running time. He complied.
34	09/13/06	Commercial	178 Main St E	Anonymous complaint of a discharge of water into the alley at the rear of the building.		619-672-8803	Site inspection found water to be from air conditioning condensate.
35	09/13/06	Commercial	148 Main St E	Observed discharge of wash water into alley at the rear of the business. Grease bin soiled with grease and open.	Craig Bonner		Contacted manager and advised to ceace all washing and to clean and close the grease bin.
36	09/15/06	Commercial	401 Main St W	Observed employee powerwashing the building and parking lot with no BMPs in place to prevent discharge to street.	Craig Bonner		Contacted employee and advised to cease power washing until proper BMPs are installed. Issued educational materials and suggested using a dry method to clean the lot.
37	09/20/06	Industrial	1050 Pioneer Way	White solution was accidentally released from Divix - #1 In Golf Accessories. The solution turned out to be a lubricant for machine shop equipment.	David Cammall (County of San Diego)	619-338-2489	Todd Jones - President of Divix (800) 221-3354 was contacted by County HazMat and the City of El Cajon and instructed to hire a certified HazMat Clean Up Company to clean up spill. Pacific Trans of San Diego cleaned all residue.
38	09/20/06	Residential	1511 Condor Ave	Washing machine water comes out of garage and drains into street.	John Talamantes	619-447-6065	Contacted owner on site. Washing machine drain repaired and new washer in place. Educational materials issued.
39	09/22/06	Construction	380 Ballantyne	Observed significant sediment tracking at construction site. No improved construction entrance or other BMPs.	Craig Bonner		Contacted contractor on site and advised to install proper construction entrance and sweep street of all sediment.

Reports of Illicit Discharges/Complaints 2006-2007

	Date	Complaint Classification	Complaint address	Complaint	Referral/Complaint	Telephone	City Action
40	09/28/06	Residential	1252 Marline Ave	Grading/ rennovation of front yard with large amount of dirt and sediment in driveway and street . Also appears to be recent building construction.	John Phillips PW		Site inspection found chain across driveway, no resopnse at either of three residences on site. Door tags left at each. Also referred to zoning enforcement for building permits. Owner contactede on site. Landscaping near complete. Advised to cease using water to clean sediment from paved areas. Residentioa educatinal materials issued.
41	09/29/06	Commercial	955 Main St W	Employees cutting tile using water with no BMPs in place.	Craig Bonner		Instructed employees to cease cutting activity until water can be reclaimed.
42	10/02/06	Residential	188 Lincoln So. #12	Resident at complex drained radiator fluid on the ground in prrking lot.	David Nuttal (Resident)	(619) 300-5133	Site inspection on 10-3-06 found no evidence of radiator discharge. Violation occurred prior week-end. No response at door. Left door tag
43	10/03/06	Residential	433 Orange Ave	Stucco company discharging water into street. No implementation of BMPs.	Craig Bonner		Contacted company employees and advised ot immediately cease all cutting activity until proper BMPs are installed. Storm water educational materials were issued.
44	10/04/06	Commercial	1050 Pioneer Way	Mobile auto detailing business discharging water on ground and into storm drain. No BMPs in plact to prevent the discharge.	Craig Bonner		Advised business owne to immediately cease discharge and discontinue operations unti proper BMPs are implemented.
45	10/04/06	Commercial	1050 Pioneer Way #G	Discharge of a lubricant into the storm drain system on 9/20/06. The pollutant was halted prior to entering the curb inlet.	David Cammall (County of San Diego)	(619) 338-2489	Site inspection found that Pacific trans was contracted to clean the spill. A new spill kit and secondary containment were in place. An administrative citation was issued for the discharge
46	10/05/06	Residential	11764 Avendia Marcella	Dumping motor oil on ground	Todd Burton/ Susan Holts	338-2038/ 660-0530	Address found to be in the County. Parties advised.
47	10/10/06	Commercial	1717 Main St W	Rebel Equiipment Rentals. No BMPs installed at concrete storm channel during retaining wall construction and lot resurfacing. Dirt and debris in channel.	PW staff		Contacted business manager and advised to install BMPs at concrete channel and clean all debris.
48	10/10/06	Residential	1385 Broadway	Resident observed washing a vehicle in the street with no BMPs in place.	Craig Bonner		Advised vehicle owner to cease washing activity and issued storm water educational materials
49	10/11/06	Commercial	875 El Cajon Blvd	Discharge of wash water to gutter from rinsing vehicles in the sales parking lot.	Duane Jackson		Cunningham BMW was provided with a written warning.
50	10/12/06	Commercial	Lexington E	Discharge of gunite from replastering a swimming pool at apartment complex.	Pat Jackson		Whaley Pool Construction crew manager was contacted a provided with a verbal warning to turn into an administrative citation if the gunite residue was not cleaned by 2:00 pm of the same day.

Reports of Illicit Discharges/Complaints 2006-2007

	Date	Complaint Classification	Complaint address	Complaint	Referral/Complaint	Telephone	City Action
51	10/24/06	Mobile/ Commercial	671 Mollison S.	Observed mobile auto detailing business discharging water on ground and into storm drain. No BMPs in plact to prevent the discharge.	Craig Bonner		Instructed owner and 2 employees to immediately cease all vehicle washing activity until proper BMPs are installed. Stormwater educational materials were issued.
52	10/25/06	Residential	746 Latisha Pl	Complaint of resident washing paint into street and gutter.			Site inspection found no response at door, paint residue in driveway and curb, water and residue pooled at corner of Naranca. Door tag/card left at door.
53	10/26/06	Commercial	541 Johnson Ave N.	Large amount of water from over irrigation entering the storm drain system.	Craig Bonner		Contacted the manager and advised to re-set timer to prevent discharge. Educational materials issued. Verbal warning given.
54	10/29/06	Commercial	1527 Main St E	Conducting continuing charity vehicle washing business	John Phillips PW		Advised Pastor to cease vehicle washing activity until proper BMPs are installed. Verbal warning issued.
55	10/30/06	Commercial	520 Second St N	Using hose to wash paved areas outside restaurant.	Craig Bonner		Manager contacted and advised to cease using water to clean paved areas. Advised to use dry method. Commercial educational materials issued.
56	11/01/06	Commercial	1068 Broadway	Horse manure dumped at rear of property against chain link fence bordering the concrete storm channel.	Ray Behling CD/ Building	# 1726/ 1752	Contacted property mgmt., Wooden barrier placed between manure and chainlink.
57	11/01/06	Residential	308 Compton	Paint scraped from building in complex. Fear it may be power washed into channel.	Charles Millard	447-7383	Inspected site and found painter picking up chipped paint. No power washing observed.
58	11/02/06	Commercial	176 Main St E	Waste grease dumped in rear alley behind Por Favor.	Gabriel ? (Por Favor Owner)		Inspected site finding waste grease spilled in middle of the alley. No Spill kit utilized after spill. No grease bin found at rear of Irish Pub. Absorbent material was applied. Both businesses were notified. Follow up to continue. Written Warning issued 11/17/06. Plans to install grease bin and spill kit. Advised to educated all staff.
59	11/14/06	Residential	1322 Naranca	Resident using soap and water to clean concrete and trash cans. Water discharged to street.	John Phillips PW		Resident contacted and instructed to cease washing activity and consider using dry method to clean paved areas and to clean trash cans over vegetated area. Storm water educational materials were issued.

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60	11/17/06	Residential	1038 Avocado Blvd	Interior renovation work with discharge of drywall dust/water into the gutter and street.	Craig Bonner		Contacted painting contractor on site. He said dry wall contractor was responsible for the discharge. The area was dry. He would help to clean the area using dry method and contact the drywall co. He was issued stormwater educatinal materials cor construction activities.
61	11/17/06	Residential	749 Ballard	Possible oil on ground from automotive work	Pete Morici	444--6237	Site inspection found no visible oil spill. Complainant stated that main concern is the number of cars being worked on. Referred to zoning enforcement.
62	11/20/06	Commercial	715 Main St E	Employee using power washing unit to clean lot discharg to street. no BMPs in place.	Craig Bonner		Contacted business owner and advised to cease activity until proper BMPs installed. Educational materials issued.
63	11/28/06	Commercial	444 Lexington W	PW complaint of pipe discharging gray water from property into concrete channel	Pat Jackson		Inspected site, pipe located, no discharge noted. Landscaper will advise manager to arrange full inspection.
64	11/28/06	Construction	1858 Avocado Blvd (El Jardin)	Owner/contractor failure to install required BMPs on erosion control plan prior to rain event.	Craig Bonner		Met with property owner on site to review plans, written warning issued to immediately install BMPs.
65	11/28/06	Construction	321 Lexington Ave	Contractor working in right of way with no BMPs in place to prevent sediment discharge	Don Perrin		Contacted contractor and advised to use dry method to clean sediment.
66	11/29/06	Residential	1425 Madison E	County referral -Resident of mobile home park complaining about draining pool water.	Donna Countryman	442-7032	Inspected site finding no discharge. Donna stated that neighboring property has an elevated pool that broke. Problem has been taken care of.
67	12/01/06	Municipal	Storm channel fencing behind China King Restaurant	Open fencing to storm channel and trash in the area	Jillian Hanson-Cox	Ext. # 1511	Inspected the site and referred to Traffic Operations.
68	12/04/06	Residential	730Waterloo Ave	Public works crew observed a discharge of wood debris into the concrete channel running along the south side of the property.	Pat Jackson		Contacted the property owner on site. Has been using water to clean the driveway all owing the water to discharge sirectly into the channel. She was advised to cease the activity and use a dry method to clean. Residential educational materials were issued.
69	12/12/06	Commercial	300 El Cajon Blvd	Discharge of vehicle wash water to street. No BMPs implemented.	Craig Bonner		Advised staff to immediately cease vehicle washing and either install proper BMPs or relocate the wash area.

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70	12/14/06	Commercial	965 Arnele Ave.	Employees dumping was water on the ground in the evenings.	Jim Griffin		Contacted employees and advised to cease all was water dumping and lot washing unless water can be reclaimed. Educational information issued.
71	12/14/06	Residential	2038 Willis Rd	Concrete wash discharged into the gutter.	Anonymous/ Phone		John Phillips responded to complaint, found concrete wash in gutter. No one on site info. Ledt on door. Site reinspected next day found discharge cleaned.
72	12/14/06	Residential	861 Bellaire Ct	Front yard soil bare for relandscaping. No BMPs in place to prevent soil discharge.	Craig Bonner		Contacted the property owner and advised to install BMPs around perimeter of front yard.
73	12/20/06	Residential	1768 Greenfield Ct	Tenant in rear unit pumping septic off property towards freeway.	Greg Harlan	447-3557	Inspected the rear yard area and along the on ramp barrier fence finding no evidence of septic discharge. Complainant later stated that problem has been corrected.
74	01/03/07	Commercial	407 Madison	Employee observed using a hose to clean the parking lot with no BMPs in place.	Craig Bonner		Contacted the business owner and advised to immediately cease using water to clean lot. Advised to use dry method. Educational materials issued.
75	01/05/07	Residential	1805 Jasmine	Resident dumped large pile of eucalyptus in the street.	Anonymous/ Phone		Leaves were removed prior to site inspection.
76	01/05/07	Residential	660 1St. (Unit #H)	PW crew reported that residents are dumping their wash maching water into the channel causing erosion of the dirt bank.	Pat Jackson		Contacted the tenant and property owner on site. No hose was visible in rear yard. Tenant advised to discharge wash water into sanitary sewer. Educational materials issued.
77	01/08/07	Residential	839 Anza St S.	Wash water drained onto the street in back easement.	Deanna Luna	403-1565	Site inspection found no discharge. This is a repeat complaint.
78	01/10/07	Commercial	635 El Cajon Blvd	Constant water running onto Franklin St.	Eric Diaz	444-1123	Contacted the business owner who stated that the continually running water is from condensate. He will clean the pavement of algae. Educatinal materials was issued.
79	01/11/07	Commercial	Marshall Ave Trolley stop	Employees using water to clean concrete areas. Threat of water entering curb inlet.	Mike McCoy	990-2541	MTS supervisor contacted on site. No discharge observed. BMPs in place to preven discharge to curb drain inlet. High perssure/low volume hose and blower used to clean.
80	01/17/07	Mobile	1000 Pioneer Ave	Conducting mobile detiling operations with no BMPs in place. No discharge to the storm water conveyance system was observed.	Craig Bonner		Issued stormwater educational materials and BMP suggestions to prevent a discharge.

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81	01/18/07	Mobile	1700 Main St E	Power washing paved areas of New Jack in the Box with no BMPs in place. Water discharged to street but not drain	Craig Bonner		Contractor obtained materials to reclaim water prior to City staff contact. Storm water educational materials relating to mobile businesses were issued.
82	01/24/07	Residential	1212 La Sambra Ct	PW street crew observed resident using water to clean drywall residue in driveway allowing discharge to storm drain inlet.	Eddie ?	729-4808 Cel #	Property owner contacted, told to cease all washing in front, advised to use dry method. Educational materials issued.
83	01/25/07	Commercial	830 2ND St N	PW staff member observed a discharge of brown foamy water into the street on Saturday 1-20-07.	John Phillips PW		Contacted the business owner, written warning issued. Educational materials issued. Conducted semi annual storm water inspection. No violations noted.
84	01/31/07	Commercial	511 Magnolia S.	Large piles of debris remain from structure fire.	Dan Pavao		Center representatives contacted, demo permit obtained with work to begin on 2-5-07. Complainant contacted.
85	02/06/07	Municipal	777 Park Ave	Fuel spill covered with absorbent material and not removed driveway and street.	John Phillips PW		Contacted CVS staff on site. They are allowing absorbent to work and will remove and discard properly.
86	02/06/07	Commercial	700 Avocado Blvd	Large stock piles of dirt on lot with no BMPs I place to prevent a discharge	Jaime Campos		Contacted supervisor of Remediation Systems Service on site. Advised to obtain and install cover and perimeter control for dirt and gravel stock piles.
87	02/08/07	Residential	625 Van Houten Ave	Anonymous complaint of sewage discharge at apartment complex.	Anonymous/ Phone		Contacted the maintenance staff on site. Sewer back up happened four days prior. Claimed that discharge did not reach the street. Area around sewer clean out in parking lot has been cleaned. Minor amount of paper debris remains. Storm water educational mateials issued.
88	29/2007	Residential	801Avocado	The City building inspector stated that the property owner was demolishing the residence with no BMPs in place to prevent a discharge from the large piles of debris on the site.	Dan Pavao / Bldg Insp		The contractor was contacted on site and advised to either remove the remaining debris or install BMPs to prevent any possible discharge. Storm water educational materials were issued.
89	02/14/07	Construction	360 Lexington W	Anonymous complaint that contractor was washing concrete into the gutter on Van Houten.	Anonymous/ Phone		Contacted the contractor on site. Concrete work in rear yard drained to curb drain. Minor discharge to gutter. He plans to temporarily plug drain and will clean all debris. Storm water educational materials were issued.
90	02/26/07	Commercial	1248 Main St E	City staff member observed waste grease covering the bin and the ground at the rear of the building.	Donna Bernard / PW		The grease bin was replaced prior to storm water inspection. The Manager was contacted on site and advised to clean the surrounding area using a dry method. A written warning was issued.

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	Date	Complaint Classification	Complaint address	Complaint	Referral/Complaint	Telephone	City Action
91	02/26/07	Commercial	425 Main St W	Business owner using a garden hose to clean the parking lot. Water was discharging to the street.	Craig Bonner		Contacted the owner on site and advosed to cease washing and use a dry method to clean the lot. Educational materials were issued.
92	02/27/07	Construction	Grossmont College Dr	Drain inlet filter is out of position and the gravel bags are gone.	Jim Griffin		Site inspection found the filter in place at inlet near intersection. No gravel bags around it. Inspector notified.
93	03/07/07	Construction	Broadway	Failure to install BMPs listed on Demolition plan.	Craig Bonner		Construction entrance and perimeter BMPs installed. Lot drain has been disconnected.
94	03/08/07	Commercial	333 Johnson	Failure to maintain BMPs	Craig Bonner		Contacted the store manager. He plans to redirect roof drains away from the concrete channel and to improve the area adjacent to it and to clean the inlet drain filters.
95	03/08/07	Commercial	116 Main ST E	Power washing front walkway	John Phillips		Contractor contacted on site and advised to cease washing. Storm water information issued.
96	03/12/07	Residential	780 Grossmont	Gray water draining from property ont to the street.	Nancy Davis	447-4469	The resident was contacted and advised to remove the drain pipe from the front of the property and relocte the gray water either to the sewer or a vegetated area..
97	03/20/07	Construction	225 Taft St	PW staff observed debris from a condo conversion project on top of and next to the concrete storm channel.	Pat Jackson		Contacted the project manager and advised to clean the area and cover all piles.
98	03/21/07	Residential	Mary st (Vacant Lot)	Import of large piles of dirt with no BMPs, grading or erosion plan.	Michael Griffiths		Site is fenced. Dirt piles are uncovered and well within the interior of the lot. Vegetation around the piles prevents any possibility of discharge. Main concern would be wind erosion.
99	03/21/07	Construction	700 Avocado Blvd	Contractor digging in right of way with no BMPs in place or on site.	Craig Bonner		Contractor was advised to immediately obtain and install BMPs for exposed dirt.
100	03/22/07	Construction	1147 Australia St	Retaining wall, new irrigation and grading on hillside with no BMPs.	Paul Caccamise	454-1440	The construction superintendant was contacted on site and informed that an erosion control plan was required for the work.
101	03/20/07	Commercial	1313 Second	CUP inspection found parts, vehicle and trash stored outside uncovered.	Craig Bonner		Advised owner to comply with CUP requirements. Remove all items stored outside.
102	03/22/07	Residential	739 Sandalwood	PW crew found pet waste thrown into storm channel at rear of property.	Pat Jackson		Contacted the property owner and advised dispose of pet waste properly. Educational material issued.

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103	03/22/07	Residential	1337 Naranca	Concrete grout dumed into the storm channel at the rear of property.	Pat Jackson		Property owner contacted. Minimal flow of concrete on channel face. Suggested to relocate work area away from channel.
104	03/28/07	Residential	907 Avocado	Neighbor's over irrigation running onto her property, street cleaning.	Dianna Kelly via e-mail	593-8085	Water from neighbor's irrigation pools at curb in front of residence. No violations observed.
105	04/16/07	Commercial	114 Madison E	Citizen noticed that water is continuously running behind the building and down the alley.	Henry Luss	200-8095	The discharge was found to be condensate from the air conditioning unit on the roof of the buiding.
106	04/24/07	Construction	509 Claydelle	Construction of single family dwelling with no BMPs in place.	Silver Pascua (Contractor)	733-9107 Cel #	Advised the contractor to immediately install BMPs
107	04/26/07	Construction	549 Graves Ave	Failure to maintain BMPs; discharge of sediment	Jaime Campos		Contractor issued first citation, instructed to implement BMPs
108	04/30/07	Residential	1319 Craigmont St	Washing concrete down the street. Residue found at storm drain inlet at Granite hills and Dorothy.	Robert Blaemers	579-7013	Contacted the property owner, told to clean street of all residue, First citation issued
109	05/01/07	Construction	737 Grossmont Ave	House re-building w/o a valid permit	Raul Herrera	905-8350 Cel #	Site inspection found no storm water issues observed.
110	05/08/07	Residential	1890 Calle del Conejo	Turtles being raised in rear yard algae filled pool. Water is being pumped into the storm channel at the rear of the property.	Bonnie Robertson	447-3006	Found vegetation in the concrete swale but no feces or algae. No current discharge noted. Viewed for complainats rear yard.
111	05/10/07	Municipal	500 Madison Av	Anonymous complaint of odor from storm drain inlet in school yard. Over irrigation.	Bob Griswold		Contacted the principal and viewed the yard in front of the outside eating area. No odor was noted. She was sdvised to clean the drain boxes and install filters. Over irrigation was obsered along the front planter with water entering the street.
112	05/11/07	Commercial	570 Second St	Discharge of red residue into the street.	Elizabeth Hensley	589-6222	Residude found at the curb from some prior discharge. Unknown source. Business staff instructed to report any abserved future sidcharges.
113	05/14/07	Residential	1114 Lexington E	PW staff member observed dirt piles in the street.	Drum Macomber		Contacted the landscaping contractor advised to install BMPs for stock piles in the street or remove them. Later cited for using waster to remove remaining sediment. Did not reach the drain inlet.
114	05/14/07	Residential	2689 Windmill View Rd	Discharge of plaster residue to sidewalk.	Mary Beth Meek	258-5828	Site inspection found a very small amount of white residue on the sidewalk at the edge of the lawn. There was no discharge to the street. Door tag left.

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115	05/15/07	Commercial	425 El Cajon Blvd	Using a hose to wash out the trash enclosure.	John Phillips		Inspection found no active discharge. The manager was issued storm water information and advised to use a dry method to clean the enclosure and the lot.
116	05/18/07	Commercial	677 Main St E	PW staff observed restaurant employee usind a garden hose to clean the paved areas at the front of the business.	John Phillips		Contacted the new store manager and advised to cease using water to clean lot and consider either sweeping or vacuuming. Educational materials were issued.
117	05/21/07	Commercial	557 Main St W	Paint residue being washed into the street	John Phillips		Contacted the business owner and finding no evidence of a recent discharge. Educational information was issued.
118	05/21/07	commercial	350 Cypress Ln	Mobile auto detailing business discharging water on ground and into storm drain. No BMPs in plact to prevent the discharge.	Craig Bonner		Directed business owner to cease all washing activity unless work can be done over a pervious area or proper BMPs are implemented
119	05/22/07	Commercial	650 Mollison N	Dumping wash water directly into the storm channel.	John Grisafi	688-3685	Contacted the manager and advised to cease all washing activity along the channel edge and to remove the hose and buckets. Educational materials were issued an a verbal warning given.
120	05/23/07	Residential	400 La Sambra Ct	Anonymous complaint of drywall residue being washed out into the street.	Anonymous/ Phone		Contacted the home owner and issued stormwater educational materials to both he and his contractor. There was no active discharge at the time. There was evidence of a past discharge of possibly concrete wash at the curb. None entered to storm drain inlet.
121	05/23/07	Residential	1575 Lily Ave	Contractor's vehicle leaking fluids on street in front of residence.	Ms. Sopp	442-4912	Site inspection found no vehicle parked in front of residence. Will conduct reinspection. Prior Complaint.
122	05/24/07	Residential	Third Ave and Broadway	Citizen's complaint that a company was power washing the complex with out any BMPs.	Ann Griffiths	749-9966	Site inspection found no power washing activity underway. Will contact the HOA to advise of reqirements.
123	05/24/07	Residential	862 Third Ave	Resident using garden hose to wash off the driveway and sidewaslk and allowing the water to enter the street.	Craig Bonner		Instructed the resident to cease using water to clean the paved areas and consider using a dry method. Education materials were issued.
124	05/24/07	Commercial	1275 Broadway	Using a hose to clean the paved area in front of the business.	Craig Bonner		Advised the owner to cease using water and consider sweeping or vacuuming. Educational materials issued.

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125	06/06/07	Commercial	607 Main St W	Vacant building being power washed with water discharging to the street.	John Phillips		Contractor and property owner contacted on site. Inadequate BMPs in place. Leaky valve allowing water to discharge to the street. Educational materials issued.
126	06/07/07	Residential	2367 Valley Mill rd	Dirt pile in street with no BMPs in place	Street Crew		Home owner was contacted. Given storm water information and told to clean the area.
127	06/22/07	Constuction	Main St E	Clearing lot with no BMPs in place to prevent a sediment dis charge	Craig Bonner		Contacted the grading contractor on site, told to cease removing weeds unless proper BMPs are installed
128	06/25/07	Construction	756 Magnolia E	Contractor using a water hose to clean sediment fom the front parking lot.	Craig Bonner		The contractor was told to immediately cease all use of water to clean paved areas. Advised him to install required BMPs.

	FACILITY NAME	ADDRESS	CONTACT	DATE
1	Heartland Training Facility	1301 Marshall Ave	Charlene Nagy	6/11/2007
2	Fleet Maintenance	1060 Vernon Way	Larry Mayfield	6/11/2007
3	Parks Dept. storage Yard/Maint.	1060 Vernon way	Mike Mills	6/11/2007
4	Public Works Maintenance Yard	1050 VernonWay	Pat Jackson	6/11/2007

	Business Name:	Street Address:	Zip	Responsible Person(s)	Principal Activity	SIC Code	Nearest conveyances or water bodies	Inspection Date	Monitoring Data Reviewed	Monitoring Data Received
1	ALLIED CASTINGS INC	983 VERNON WY	92020	Khris Carmichael	Metal Foundry	3599	Forester Creek	5/1/2007	Yes	4/03, 1/06, 2/07 data
2	ALTURDYNE	660 STEELE ST.	92020	Wade Langworthy	Build Generator Back-ups	3621	Forester Creek	5/30/2007	Yes	2/04 , 10/04, 3/06, 4/06, 1/07 and 2/07 data
3	ARTIMEX IRON CO, INC	315 Cypress Ln.	92020	Jose Padilla	Structural Steel Fabrication	3441	Broadway Channel	5/18/2007	Yes	10/05 , 3/05, 12/06 and 2/07 Data
4	CAJON VALLEY UNION SCH DIST.	777 EAST PARK BLVD	92022	Eric Kostamo	School Bus Maintenance Facility	4151	Forester Creek	5/8/2007	NO	No, part of Group Monitoring, no monitoring in 04-05; 2/06 or 2007
5	CALIFORNIA COUNTER TOP	1340 HILL STREET	92020	Jim Ward	Countertop Fabrication			6/7/2007	NO	New to program; data for 12/07/07 only
6	CALIFORNIA METALS	297 S MARSHALL AVE	92020	Ken Jay, Josh Turzhin	Metals Recycling	3599	County Ditch	5/22/2007	Yes	rainy season; 1/07, 2/07
7	CALIFORNIA METALS	636 FRONT ST	92020	Josh Turchin	Metals Recycling			5/22/2007	Yes	No monitoring in 04-05 rainy season; 1/07, 2/07
8	CARPENTER SPECIAL PROD CORP	1717 N CUYAMACA ST	92020	Duane Holander	Specialty Metal Fabrication	3999	North Forester Creek	6/13/2006	Yes	11/03, 2/04 ,10/04; 12/06
9	CERTIFIED METAL CRAFT INC	877 VERNON WY	92020	Wiederker	Metal Heat Treatment	3999	Forester Creek	6/6/2007	Yes	2/04,11/05 , 4/06, 11/06, 4/07 data
10	CHEM-TRONICS INC	1150 W BRADLEY AVE	92020	Randy Olms	Fabricate Metal Parts for Jet Engines	3999	Forester Creek	5/2/2007	Yes	12/02, 1/05, 4/05,2/06, 4/06, 2/07 & 4/07 data
11	DECCO CASTINGS INC	1596 PIONEER WY	92020	Kit Kesinger	Aluminum Foundry	3365	Broadway Channel	4/23/2007	Yes	10/04, and 2/05, 11/06, 2/07 data
12	DIXIELINE LUMBER CO.	1269 E. Main St.	92020	Cheryl Berman	Structural Wood Manufacturing		Forrester Creek	5/11/2007	Yes	12/03, 12/04, no 05,12/06 and 1/07 data
13	EL CAJON AUTO WRECKERS	1416 PIONEER WY	92020	Hanna Mikkonen (Hank)	Auto Dismantling	7539	Broadway Channel	5/8/2007	No	10/04 data; no data for 06-07
14	G MARBLE & GRANITE	1820 JOHN TOWERS #	92020	Vince Guida, Jasper Giammarinaro	Granite Cutting & Fabrication			5/10/2007	No	None
15	LAIDLAW TRANSIT SERVICES (**Closed**)	1213 N JOHNSON AV	92020	Gary Sales	Public Transportation-terminal & service facility	4212	Forester Creek	/12/07 (Closed	No	2/03 data, part of group, 10/04 data

#	Business Name	Street No.	Street Name	Principal Activity	Resullt	Nearest Conveyance
1	SAN DIEGO AUTO GLASS & TINTING	310	ANZA	(a) Auto Repair	Closed	
2	TIPTON HONDA	889	ARNELE	(a) Auto Repair	Full Inspection	Forrester Creek
3	A TO Z LEASING	889	ARNELE	(w).7 Other: Vehicle Dealers	Full Inspection	Forrester Creek
4	BOB BAKER CHEVROLET-EL CAJON	900	ARNELE	(a) Auto Repair	Full Inspection	Forrester Creek
5	BOB BAKER LEXUS	1000	ARNELE	(a) Auto Repair	Full Inspection	Forrester Creek
6	U S WHEEL REMANUFACTURING	1000	BRADLEY	(a) Auto Repair	Full Inspection	Forrester Creek
7	A1 SMOG TEST	507	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
8	EAST COUNTY TIRE & BRAKE	616	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
9	EL CAJON SMOG TEST ONLY	720	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
10	NEW WEST #1019	898	BROADWAY	(h) Retail or Wholesale Fueling	Full Inspection	Broadway Channel
11	SAATCHI & ASSOCIATES INC (Arco)	900	BROADWAY	(h) Retail or Wholesale Fueling	Full Inspection	Broadway Channel
12	A-1 GLASS COMPANY	944	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
13	A Z AUTO SERVICE	953	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
14	J R PRODUCTS	982	BROADWAY	(w).7 Other: Vehicle Dealers	Full Inspection	Broadway Channel
15	SUPER STAR #2	1090	BROADWAY	(h) Retail or Wholesale Fueling	Full Inspection	Broadway Channel
16	BROADWAY TIRE	1105	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
17	LOWEST PRICE AUTO GLASS	1110	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
18	IMPORTED CAR CARE	1117	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
19	SIDS AUTO BODY INC	1129	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
20	CAMPER & TRAILER OUTLET	1198	BROADWAY	(w).7 Other: Vehicle Dealers	Full Inspection	Broadway Channel
21	R V DECORATORS	1204	BROADWAY	(w).7 Other: Vehicle Dealers	Full Inspection	Broadway Channel
22	BROADWAY SMOG TEST ONLY STATION	1214	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
23	ALLMAN FAMILY AUTO	1265	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
24	FOREIGN AUTO REPAIR	1265	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel

#	Business Name	Street No.	Street Name	Principal Activity	Resullt	Nearest Conveyance
25	E.C. TEST ONLY	1310	BROADWAY	(a) Auto Repair	Closed	
26	J C AUTO REPAIR	1310	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
27	SUN AUTO REPAIR	1310	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
28	EXPRESS AUTO REPAIR & TIRES	1316	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
29	SPECIALTY DIESEL	1316	BROADWAY	(a) Auto Repair	Closed	
30	ATLANTIC AUTO REPAIR	1318	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
31	EL CAJON MUFFLER & A/C	1370	BROADWAY	(a) Auto Repair	Full Inspection	Broadway Channel
32	EL CAJON TOWING	327	CYPRESS	(a) Auto Repair	Full Inspection	Broadway Channel
33	CANAL TRANSMISSIONS	1249	DENVER	(a) Auto Repair	Full Inspection	Broadway Channel
34	R P M AUTO	270	DOUGLAS	(w).7 Other: Vehicle Dealers	Closed	
35	FORTUNE MOTORS	453	DOUGLAS	(w).7 Other: Vehicle Dealers	Closed	
36	J C MOTORCARS	471	DOUGLAS	(w).7 Other: Vehicle Dealers	Closed	
37	AUTO WORLD (clsoed) now Wholesale Autos	110	EL CAJON	(w).7 Other: Vehicle Dealers	Full Inspection	County Dtich
38	EL CAJON MITSUBISHI	247	EL CAJON	(a) Auto Repair	Full Inspection	County Dtich
39	TOYOTA OF EL CAJON	300	EL CAJON	(a) Auto Repair	Full Inspection	County Dtich
40	EL CAJON RADIATOR SHOP	580	EL CAJON	(a) Auto Repair	Full Inspection	County Dtich
41	QWIK SMOG	580	EL CAJON	(a) Auto Repair	Full Inspection	County Ditch
42	PERFECT PERFORMANCE AUTO CARE	595	EL CAJON	(a) Auto Repair	Full Inspection	County Ditch
43	EL CAJON MAZDA KIA	720	EL CAJON	(a) Auto Repair	Full Inspection	County Ditch
44	POES BODY SHOP	727	EL CAJON	(a) Auto Repair	Closed	
	MUSTANG AUTO	727	EL CAJON		Full Inspection	County Ditch
45	COLOSUS AUTO REBUILDERS	790	EL CAJON	(a) Auto Repair	Full Inspection	County Ditch
46	J. C. AUTO DETAIL	790	EL CAJON	(a) Auto Repair	Full Inspection	County Ditch
47	TRANSMISSIOIN SPECIALIST	790	EL CAJON	(a) Auto Repair	Closed	

#	Business Name	Street No.	Street Name	Principal Activity	Resullt	Nearest Conveyance
	ADVANCE AUTOBODY AND PAINT	790	EL CAJON	(a) Auto Repair	Full Inspection	County Ditch
48	SIDS AUTO BODY INC	906	EL CAJON	(a) Auto Repair	Full Inspection	County Ditch
49	LOW PRICE AUTO GLASS #22	1100	EL CAJON	(a) Auto Repair	Full Inspection	County Ditch
50	FLETCHER HILLS AUTOMOTIVE & SMOG	1288	FESLER	(a) Auto Repair	Full Inspection	Forrester Creek
51	ADVANCED BUMPER REPAIR	336	FIRST	(a) Auto Repair	Closed	
52	SEARS ROEBUCK & CO	575	FLETCHER	(a) Auto Repair	Full Inspection	Forrester Creek
53	OIL CHANGERS #503	906	FLETCHER	(a) Auto Repair	Full Inspection	Forrester Creek
54	LA MESA AUTO & TIRE CENTER	2210	FLETCHER	(a) Auto Repair	Full Inspection	Forrester Creek
55	76 SMOG TEST ONLY STATION	640	GARFIELD	(a) Auto Repair	Full Inspection	Forrester Creek
56	CHIEF AUTO GLASS	640	GARFIELD	(a) Auto Repair	Full Inspection	Forrester Creek
57	SCHLOSSNAGEL	1330	HILL	(a) Auto Repair	Full Inspection	County Ditch
58	VALERO STATION #3738	785	JAMACHA	(h) Retail or Wholesale Fueling	Full Inspection	Washington Channel
59	CALIBER COLLISON CENTERS	332	JOHNSON	(a) Auto Repair	Full Inspection	Forrester Creek
60	MYERS TRANSMISSION REPAIR INC (AAMCO)	355	JOHNSON	(a) Auto Repair	Full Inspection	Forrester Creek
61	BUDGET CAR SALES/DAEWOO OF EL CAJON	400	JOHNSON	(w).7 Other: Vehicle Dealers	Full Inspection	Forrester Creek
62	SATURN OF EL CAJON	541	JOHNSON	(a) Auto Repair	Full Inspection	Forrester Creek
63	GREGS AUTOMOTIVE	572	JOHNSON	(a) Auto Repair	Full Inspection	Forrester Creek
64	GREGS AUTOMOTIVE	572	JOHNSON	(w).7 Other: Vehicle Dealers	Full Inspection	Forrester Creek
65	GREGS BRAKE & ALIGNMENT	576	JOHNSON	(a) Auto Repair	Full Inspection	Forrester Creek
66	ANYTHING CORVETTE	584	JOHNSON	(a) Auto Repair	Closed	
66	BUGGY WORLD	584	JOHNSON	(a) Auto Repair	Full Inspection	Forrester Creek
67	SUMMIT TRANSMISSIONS	588	JOHNSON	(a) Auto Repair	Full Inspection	Forrester Creek
68	THE THREE AMIGOS AUTO REPAIR & SALES	605	LEXINGTON	(a) Auto Repair	Full Inspection	Washington Channel
69	JORGE FLORES	1430	LEXINGTON	(a) Auto Repair	Closed	
70	MOTOWORLD OF EL CAJON	315	MAGNOLIA	(w).7 Other: Vehicle Dealers	Full Inspection	Forrester Creek
71	SUZUKI OF EL CAJON	464	MAIN	(w).7 Other: Vehicle Dealers	Full Inspection	Washngton Channel

#	Business Name	Street No.	Street Name	Principal Activity	Resullt	Nearest Conveyance
72	BEST AUTO WHOLESALER	476	MAIN	(w).7 Other: Vehicle Dealers	Full Inspection	Washngton Channel
73	ARCO #9577	489	MAIN	(h) Retail or Wholesale Fueling	Full Inspection	Washngton Channel
74	VALLEY MUFFLER SHOP	533	MAIN	(a) Auto Repair	Full Inspection	Washngton Channel
75	TRUST AUTO REPAIR	537	MAIN	(a) Auto Repair	Full Inspection	Washngton Channel
76	AUTO GLASS OF EXCELLENCE	927	MAIN	(a) Auto Repair	Closed	
77	VICTORY AUTO SERVICE	935	MAIN	(a) Auto Repair	Full Inspection	Washington Channel
78	IMPORTED MOTOR CARS	939	MAIN	(a) Auto Repair	Full Inspection	Washington Channel
79	EARL SCHEIB OF CALIF INC #244	1002	MAIN	(a) Auto Repair	Full Inspection	Washington Channel
80	CLIFTON MERCEDES INDEPENDENT SALES/SERVICE	1033	MAIN	(a) Auto Repair	Full Inspection	Washington Channel
81	CLIFTON MERCEDES INDEPENDENT SALES/SERVICE	1033	MAIN	(a) Auto Repair	Full Inspection	Washington Channel
82	MOSSY NISSAN EL CAJON	1170	MAIN	(a) Auto Repair	Full Inspection	Washington Channel
83	MAIN ST AUTO	1189	MAIN	(a) Auto Repair	Closed	
	AUTO REPAIR FOR LESS	1189	MAIN	(a) Auto Repair	Full Inspection	Washington Channel
84	PRECISION TUNE AUTO CARE	1191	MAIN	(a) Auto Repair	Full Inspection	Washington Channel
85	TRANS MASTERS TRANSMISSIONS	1191	MAIN	(a) Auto Repair	Closed	
86	BANNY HOM ENTERPRISES	1240	MAIN	(a) Auto Repair	Full Inspection	County Ditch
87	EAST COUNTY AUTO CENTER	1375	MAIN	(w).7 Other: Vehicle Dealers	Full Inspection	Forrester Creek
88	DE LA FUENTE CADILLAC	1385	MAIN	(w).7 Other: Vehicle Dealers	Full Inspection	Forrester Creek
89	SMOG PROS	1410	MAIN	(h) Retail or Wholesale Fueling	Full Inspection	Forrester Creek
90	DECKER AUTO SERVICE	1492	MAIN	(a) Auto Repair	Full Inspection	Forrester Creek
91	EL CAJON FORD	1595	MAIN	(a) Auto Repair	Full Inspection	Washington Channel
92	RILEY AUTOMOTIVE	1665	MAIN	(a) Auto Repair	Full Inspection	Washington Channel
93	NEW WEST #1018 EXXON	1699	MAIN	(h) Retail or Wholesale Fueling	Full Inspection	Forrester Creek
94	G&M OIL CO LLC #59	1701	MAIN	(h) Retail or Wholesale Fueling	Full Inspection	Forrester Creek
95	C&D TOWING SPECIALISTS	187	MARSHALL	(a) Auto Repair	Full Inspection	Forrester Creek
96	BRAKE EXPRESS INC	227	MARSHALL	(a) Auto Repair	Closed	
97	EL CAJON AUTO CENTER INC	243	MARSHALL	(a) Auto Repair	Full Inspection	Forrester Creek
98	UNDER CAR SPECIALTIES	251	MARSHALL	(a) Auto Repair	Full Inspection	Forrester Creek

#	Business Name	Street No.	Street Name	Principal Activity	Resullt	Nearest Conveyance
99	A&A SMOG TEST ONLY STATION	267	MARSHALL	(a) Auto Repair	Full Inspection	Forrester Creek
100	E P SMOG #2	267	MARSHALL	(a) Auto Repair	Closed	
101	SAMS QUALITIY AUTO CARE	267	MARSHALL	(a) Auto Repair	Full Inspection	Forrester Creek
102	HEARTLAND INDEPENDENT VOLVO	590	MARSHALL	(a) Auto Repair	Full Inspection	County Ditch
103	CLASSIC TOWING	1101	MARSHALL	(a) Auto Repair	Full Inspection	Forrester Creek
104	CHEVRON STATIONS INC #1472	696	MOLLISON	(h) Retail or Wholesale Fueling	Full Inspection	Broadway Channel
106	RANCHO DEL ORO TOWING	1167	PALM	(a) Auto Repair	Full Inspection	County Ditch
107	READY-TIME TOWING	270	PARK	(a) Auto Repair	Closed	
108	MECH INCLINED TECHNICIANS	1112	PIONEER	(a) Auto Repair	Full Inspection	Forrester Creek
109	FLETCHER HILLS TOWING	1357	PIONEER	(a) Auto Repair	Full Inspection	Broadway Channel
110	CLANCYS TOWING	1385	PIONEER	(a) Auto Repair	Full Inspection	Forrester Creek
111	MILLERS TOWING	1402	PIONEER	(a) Auto Repair	Full Inspection	Broadway Channel
112	CUMMINS CAL PACIFIC, L.L.C.	485	RALEIGH	(a) Auto Repair	Full Inspection	Forrester Creek
113	BOBS CAR CARE	678	RAYMOND	(a) Auto Repair	Closed	
114	EL CAJON AUTO ELECTRIC/TIRE	317	SECOND	(a) Auto Repair	Full Inspection	Forrester Creek
115	J.D. SHAMOUN INC	500	SECOND	(a) Auto Repair	Closed	
	EL CAJON 76 STATION	500	SECOND	(a) Auto Repair	Full Inspection	Forrester Creek
116	JIFFY LUBE #495	539	SECOND	(a) Auto Repair	Full Inspection	Forrester Creek
117	VALVOLINE INSTANT OIL CHANGE	610	SECOND	(a) Auto Repair	Full Inspection	Forrester Creek
118	SMOG CENTERS OF CALIFORNIA, L.L.C.	710	SECOND	(a) Auto Repair	Closed	
119	APRO #20	710	SECOND	(h) Retail or Wholesale Fueling	Full Inspection	Forrester Creek
120	P M C STORES II ARCO GAS	725	SECOND	(h) Retail or Wholesale Fueling	Full Inspection	Forrester Creek
121	MIDAS MUFFLERS	777	SECOND	(a) Auto Repair	Closed	
122	TRICK TRUCK OF CA	797	SECOND	(a) Auto Repair	Full Inspection	Forrester Creek
123	VALLEY AUTOMOTIVE	813	SECOND	(a) Auto Repair	Full Inspection	Forrester Creek
124	RUN RITE AUTO SERVICE #3	830	SECOND	(a) Auto Repair	Full Inspection	Forrester Creek
125	MURPHYS AUTO REPAIR	935	SECOND	(a) Auto Repair	Full Inspection	Broadway Channel

#	Business Name	Street No.	Street Name	Principal Activity	Resullt	Nearest Conveyance
126	TOP DOLLAR	1150	SECOND	(w).7 Other: Vehicle Dealers	Full Inspection	Broadway Channel
127	VALLEY TRANSMISSION & AUTO	1158	SECOND	(a) Auto Repair	Full Inspection	Broadway Channel
128	DEVORE AUTOMOTIVE	1253	SECOND	(a) Auto Repair	Full Inspection	Broadway Channel
129	X-A-DENT	1421	SUNNYLAND	(a) Auto Repair	Closed	
130	E. SWEETWOOD & SONS INC	151	SUNSHINE	(a) Auto Repair	Full Inspection	Washington Channel
131	AUTOBAHN	444	VERNON	(a) Auto Repair	Full Inspection	Forrester Creek
132	ROADSTER CLASSICS	959	VERNON	(w).7 Other: Vehicle Dealers	Closed	
133	TEAM AUTOMOTIVE REPAIR	354	WALTER	(a) Auto Repair	Full Inspection	Washington Channel
134	VALLEY TRANSMISSION & AUTO	930	WASHINGTON	(a) Auto Repair	Full Inspection	Washington Channel
135	WASHINGTON ARCO	1092	WASHINGTON	(h) Retail or Wholesale Fueling	Full Inspection	Washington Channel
136	PALHEGYI DESIGN	1900	WELD	(a) Auto Repair	Closed	

High Priority Construction Inspections 2006-2007

	WD ID#	JN	Project Description	Address or Location	Parcel No.(s)	Priority	Receiving Waters
1	9 37C314898	2677	McNeil Ranch	Fourth St. & Granite Hills Dr.	5112404100-5600	SUSMP	Forester Creek
2		2727	Promenade Square	W. Main St. & S. Magnolia Ave.	4881521400-1700	SUSMP	County Ditch
3	9 37C332667	2761	Seventh Day Adventist Church	1628 E. Madison Ave.	5110901600-2400	SUSMP	Forester Creek
4	9 37C330299	2812	Sandra Ln.	2121-2123 E. Madison Ave.		SUSMP	Forester Creek
5	9 37C323514	2813	Park Ave 103 Units	Park Ave. & Ballantyne St.	4884200100-4215400	High	Forester Crk./Washington Ch.
6		2835	El Jardin Court	1824-1853 El Jardin Ct.	4970815200	SUSMP	County Ditch
7		2878	Grossmont College Subdivision	Anjuli Ct.	4810521900&2500	SUSMP	Fanita Channel
8		2884	Granite Hills Village	1435 E. Washington Ave.	5140215900	SUSMP	Washington Channel
9	9 37C334377	2908	Our Lady of Grace Church	2766 Navajo Rd.		SUSMP	Fletcher Parkway Basin
10		2911	Rockhaven Ranch	2010 E. Madison Ave.	5082400800	SUSMP	Forester Creek
11		2935	St. Madeline Sophie's	2119 E. Madison Ave.		SUSMP	Forester Creek
12		2948	De La Fuente Cadillac	1385 E. Main St.	5111711100-1600	SUSMP	Forester Creek
13		2964		1203 Naranca Ave.		High	Forester Creek
14		2982	Commercial Suites	1174 Broadway	4841840900	SUSMP	Broadway Channel
15		2994		656 Front St.	4876501400	SUSMP	County Ditch
16		2995	New Commercial	343 E. Main St.	4882312600	SUSMP	Washington Channel
17		3005	Broadway Animal Hospital	380 Broadway	4830903900	SUSMP	Broadway Channel
18		3022	Wisconsin Cottages	Wisconsin Ln.	4871710900	SUSMP	Washington Channel
19		3097	Home Depot	298 Fletcher Pkwy.		SUSMP	Forester Creek
20		3109	Fire Station #8	1470 E. Madison Ave.	5110143400	SUSMP	Forester Creek

	Business Name:	Street Address:	Zip	Responsible Person(s)	Principal Activity	SIC Code	Nearest conveyances or water bodies	Inspection Date	Monitoring Data Reviewed	Monitoring Data Received
16	LAIDLAW TRANSIT SVCS INC	800 FESLER ST	92020	Chris Lunn	Local Transit Repair	4111	Forester Creek	04/17/07	Yes	11/04 data, part of group ;1 2/06
17	PACIFIC TRANS ENVIRONMENTAL SVCS	1452 N JOHNSON AVE	92020	Alfonso Rodriguez	Hazardous Waste Transport	4953	Forester Creek	4/16/2007	Yes	03/04, 10/04 and 1/05, 10/05, 2/06 , 12/06data
18	PRECISION METAL PRODUCTS	850 W BRADLEY AVE	92020	Andrew Fisher	Metal Manufacturing	3599	Forester Creek	4/10/2007	Yes	04/05, 10/05 11/06, 12/06 data
19	SENIOR FLEX KETEMA DIV	790 GREENFIELD DR	92021	Hank Bayles	Manufacture Engine Components	3999	Broadway Channel	6/26/2007	Yes	03/06 data
20	SOLO CUP CO [THE FONDA GROUP (DOPACO, INC.)]	1160 VERNON WAY	92020	Debbie Baudour	Paper Converting	3999	Forester Creek	5/15/2007	Yes	02/04, 02/06 ,04/07 data
21	SOUTH BAY WELDING	761-781 O'CONNER ST	92020	John Singer	Welding (Steel Manufactruing & Fabrication)	3441	Forester Creek	4/25/2007	Yes	Entered program 12/05---12/06, 4/07 data
22	TORO AGRICULTURAL IRRIGATION	1588 N MARSHALL AV	92020	Chris Stowell	Plastics, Pipe	3999	Forester Creek	5/6/2007	Yes	11/05, 3/06, 1/07and 2/07 data
23	TRIUMPH COMPONENTS - SAN DIEGO INC	203 N JOHNSON AVE	92020	Bill Peet	Aircraft Parts & Epuipment Manufacturing	3999	County Ditch	4/26/2007	Yes	02/04, 01/05, 02/05, 2/07 & 4/07 data
24	VEOLALIA TRANSPORTATION SERV.	1213 N JOHNSON AV	92020	Mike Chamney	Public Transportation-terminal & service facility			4/12/2007	No	New Business as of Jan 2007
25	WASTE MANAGEMENT	1001 W BRADLEY AVE	92020	Phil Smith	Garbage Collection/Transportation, w/o disposal	4953	Forester Creek	5/17/2007	No	04/03 and 04/05 data; None for 06/07
26	WINDOWMASTER PRODUCTS	1111 PIONEER WY	92020	Roy Hernandez	Manufacture of Window Panes & Frames	3999	Broadway Channel	5/4/2007	Yes	11/01, 04/02, 11/03, 02/05, 03/06, 02/07 and 03/07 data

Enforcement Actions 2006-2007

	Citation Date	Component	Business Name	Mailing Address	Violation Address	Administrative Citation #	Written Warning or Monetary Citation	BMP Violated	Corrective Actions	Follow-up and Corrections Complete
1	07/07/06	Commercial	De L Fuente Cadillac	5440 Moorhouse Dr #4000, San Diego 92121	1385 E Main St	PW 0321	Monetary Citation	Failure to implement erosion control plan, no BMPs for sediment control, non-stormwater discharge into storm water conveyance	Instructed to implement BMPs per erosion control plan.	BMPs installed and maintained.
2	07/26/06	Construction		2102 Concours, El Cajon	535 Park Ave	PW 0319	Written Warning	Using garden hose to wash paved lot with no BMPs in place.	Immediately stopped using water to clean lot.	Contractor swept remaining areas of the lot.
3	08/08/06	Residential	Brundage Bone Concrete	1630 Pellesier Rd, Colton Ca. 92324	777 Oro St	PW 0331	Written Warning	Discharge of concrete wash water into street.	Discharge immediately halted and the street and gutter cleaned of all residue.	Same Day
4	08/18/06	Commercial	RCD Suspension	1900 Weld Blvd	Same	PW 0356	Written Warning	Business owner unaware that drywall contractor discharged residue onto ground allowing flow to enter neighboring property.	Business owner advised to clean all drywall residue using a dry method.	Appropriate aducational materials were issued to the owner.
5	08/25/06	Commercial	Rally's Hamburger	1261 Main St	Same	PW 0355	Monetary Citation	Failure of business manager to implement BMPs to prevent lot washing water from entering stormwater conveyance system. Also open grease bin and dumpster.	Advised to cease all lot washing and close dumpster and bin.	Hose removed from business. Will sweep lot in future. Containers remain closed.
6	08/31/06	Construction	Priest Development Corp.	333 Wells Ave	Same	PW 0416	Written Warning	Subcontractors using a large hose to wash sediment off paved area on Park Ave side of project. BMPs, gravel bag chevrons, were ineffective in preventing sediment from entering storm drain inlets.	Discharge immediately halted and the street and gutter cleaned of all residue.	BMPs installed and maintained properly.
7	09/21/06	Commercial	Por Favor Mexican Restaurant	148 Main St	Same	PW 0413	Written Warning	Discharge of wash water into alley, open and soiled grease bin.	Advised to cease all lot washing and close bin.	No further discharges. The owner purchased a shop vac.
8	09/29/06	Commercial	Priest Development Corp.	333 Wells Ave	Same	PW 0357	Monetary Citation	Discharge of sediment due to hose washing and broken irrigation line. No BMPs in place to prevent discharge	Immediately stopped using water to clean pavement. Irrigation line repaired	Additional sweeping of paved areas conducted.
9	10/04/06	Industrial	Divix	1050 Pioneer Way #G	Same	PW 0359	Monetary Citation	Discharge of lubricant into storm drain system.	Pipe draining lubricant repaired and moved to another location away from doorway.	Same Day
10	10/11/2006	Industrial	W & C Arban Inc.	1481 Wood Hill St., El Cajon	856 Fesler St.	PW 0358	Monetary Citation	Discharge of pollutants leaking from illegally occupied camp trailer on property. Zoning enforcement follow-up.	All fluids and hook-ups removed from the trailer.	Trailer later entirely removed from the property.
11	11/02/06	Commercial	Westfield Parkway	415 Parkway Plaza	Same	PW 0315	Written Warning	Washing trash containers and enclosure allowing water to enter lot drain.	Immediately stopped washing trash containers.	Containers now washed inside enclosure and waste discharged to sanitary sewer.
12	11/03/06	Commercial	Health Link Transportation	1068 Broadway	Same	PW 0415	Warning	Stockpile of horse manure discharging into storm channel.	Advised to remove a manure adjacent to the storm channel.	All manure removed and used for landscaping.

Enforcement Actions 2006-2007

	Citation Date	Component	Business Name	Mailing Address	Violation Address	Administrative Citation #	Written Warning or Monetary Citation	BMP Violated	Corrective Actions	Follow-up and Corrections Complete
13	11/17/06	Commercial	Irish Sports Grill	176 Main St	Same	PW 0337	Written Warning	Discharge of waste grease in rear alley. No spill prevention used.	Advised to obtain a grease bin and absorbent material.	Gerase bin on site with absorbent material.
14	11/28/06	Construction		1850 Avocado Ave	Same	PW 0314	Written Warning	Failure to implement erosion control plan, no BMPs for sediment control.	Asvised to install required BMPs.	BMPS installed and mantained.
15	12/12/06	Commercial	Toyota of El Cajon	300 El Cajon Blvd	Same	PW 0338	Written Warning	No BMPs inplace to prevent car wash water discharge.	Asvised to relocate vehicle wash area or reclaim the water.	An asphalt berm ws installed to prevent discharge.
16	01/25/07	Commercial	Run Rite Auto Service	830 Second St	Same	Pw 0365	Written Warning	PW staff member observed a discharge of brown foamy water into the street on Saturday 1-20-07.	Contacted the business owner, written warning issued. Educational materials issued. Conducted annual storm water inspection. No violations noted.	No further discharges observed.
17	02/26/07	Commercial	Country Waffles	1248 Main St	Same	PW 00077	Written Warning	City staff member observed waste grease covering the bin and the ground at the rear of the building.	The grease bin was replaced prior to storm water inspection. The Manager was contacted on site and advised to clean the surrounding area using a dry method.	Grease bin replaced.
18	04/06/07	Construction		11855 Fred Martin Ln, Lakeside 92040	1841 El Jardin Ct	PW 00085	Monetary Citation	Failure to maintatin BMPs per erosion control plan.	Advised owner to repair and maintain BMPs.	BMPs re-installed and maintained.
19	04/26/07	Construction	Petra Builders	549 Graves Ave	Same	PW 00079	Monetary Citation	Failure to maintain BMPs; discharge of sediment	Instructed to implement BMPs and remove all sediment using a dry method.	Same Day
20	04/30/07	Residential		1319 Craigmont St	Same	PW 00060	Written Warning	Washing concrete down the street. Residue found at storm drain inlet at Granite hills and Dorothy.	Contacted the property owner, told to clean street of all residue.	Same Day
21	05/14/07	Residential		1114 E. Lexington	Same	PW 00081	Written Warning	Large dirt piles in the street with no BMPs in place.	Contacted the landscaping contractor advised to install BMPs for stock piles in the street or remove them. Later cited for using waster to remove remaining sediment. Did not reach the drain inlet.	Area swept of remaining soil.

Education Efforts 2006-2007

Date	Location	Number Contacted	Description
22-Feb-07	City of El Cajon/S.D. East County Chamber of Commerce	3	Career Awareness Day
1-Nov-06	City of El Cajon	6	El Cajon Community Development Corporation
Apr-07	Various Locations Along San Diego River	100	River Day 2007 - San Diego

APPENDIX C

CITY OF EL CAJON
PUBLIC PARTICIPATION MECHANISMS
PY6 – 2006/2007

DATE	LOCATION	NUMBER CONTACTED	DESCRIPTION
4/11/07	City of El Cajon	1,500	Pollution Prevention Days
4/19/07 4/20/07	Greater San Diego River	300	San Diego River Days 2007
5/16/07	City of El Cajon	1,500	Pollution Prevention Days
5/22/07	City of El Cajon	25	National Public Works Week

APPENDIX D

Appendix D - Revisions to the JURMP

No revisions were made to the JURMP in PY6. The City of El Cajon is preparing to revise and update the entire JURMP to reflect changes in accordance to Municipal Order R9-2007-0001.

APPENDIX E

E. SPECIAL INVESTIGATIONS – FORRESTER CREEK IMPACT STUDY

For the fourth year, the City conducted upstream/downstream monitoring of dry weather constituents of concern in Forrester Creek. The monitoring was conducted on July 3, 2007 and August 2, 2007 to assess the relative amount of pollutants discharged within the jurisdictional boundaries of El Cajon into Forrester Creek. The upstream location is at the County boundary, specifically at Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of 1699 East Main Street. Flow at the upstream sample was approximately 2 gallons per minute. During rain events, flow from Crest and other unincorporated County areas discharge directly into the City of El Cajon without treatment. To date, no analytical data have been collected for wet weather flows.

Table 1

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Nitrate (mg/L NO_3-N)
Upstream	8/02/07	2.0	26.7	7.6	1.28	1.61	8.14
Downstream*	7/3/07	281	27.8	8.3	9.91	2.35	1.92

Table 2

Site	Date	Total Hardness (mg/L$CaCO_3$)	Oil & Grease (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mlL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	8/02/07	579	nd	2,200	500	270	1,150	5.2
Downstream*	7/3/07	649	nd	30,000	5,000	800	1,400	14.1

nd = not detected

The following is a summary of the upstream/downstream results:

- No detections of metals
- Reactive phosphorous upstream was 0.07 mg/L, downstream was 0.07 mg/L
- Detections of ammonia upstream was 0.1 mg/L, downstream was 0.3 mg/l
- Detergents were detected at 0.38 mg/L upstream, and 0.5 mg/L downstream

Notable Results and Reasoning

Increase in flow to 281 gallons per minute from upstream to downstream Concentrations of many constituents decrease from upstream to downstream; this includes nitrate, total organic carbon (TOC), total dissolved solids (TDS). Increase in the concentrations (from

upstream to downstream) of pH, turbidity, conductivity, ammonia, dissolved oxygen, total hardness, total coliforms, fecal coliforms, enterococcus, and surfactants.

The City does not have an explanation for the increase in flows or the significant increase in dry weather flow contributions within City boundaries. The City will need to continue to conduct further dry weather investigations to develop enough data to establish baseline conditions (for current channel configurations) and to develop priorities for more detailed investigations for pollutant and dry weather flow sources.

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

November 2, 2007
Project No. 200710W-1

Jaime Campos, P.E.
Storm Water Program Manager
City of El Cajon
Department of Public Works
200 E. Main Street
El Cajon, CA 92020

Re: 2007 Forester Creek Impact Study
City of El Cajon, California

Dear Mr. Campos:

Enclosed please find our report for the City of El Cajon 2007 Forester Creek Impact Study. This project, conducted since 2004, is an additional study of the water quality in Forester Creek as it passes through El Cajon. The contents include field screening data, analytical laboratory test results, and analysis of the collected data.

It has been our pleasure working with the City of El Cajon on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

Forester Creek Impact Study

Forester Creek runs parallel to Interstate 8 as it enters the east side of the City of El Cajon (City). It then turns north after passing SR-67, flowing through the area around Gillespie Field before entering the City of Santee. Eventually, Forester Creek enters the San Diego River just east of the junction of SR-52 and SR-125, within the City of Santee.

The purpose of this study was to investigate how water quality in Forester Creek is affected as it flows through the City of El Cajon. To gauge this, one sample was collected from the creek near where it enters the City from the east (upstream), and another sample was taken where the creek exits the City in the north (downstream). Table 1 shows the locations of these two sites. Water quality parameters in the upstream and downstream samples can be compared to see how the City itself contributes to pollutant loads. Also, it should be noted that the downstream location is the same as that used for dry weather Site 5. Therefore, the 2007 dry weather data from Site 5 was used in this study in order to alleviate the need to take an additional downstream sample and to minimize the costs of this study.

This year the upstream location was observed to be dry at the first few visits of the site. After a few weeks of monitoring a sample was collected. The same field and laboratory analyses employed during the standard dry weather program in El Cajon were conducted for the upstream and downstream samples. No constituents tested in the field at either of the two sites were measured above their respective dry weather action levels. The value for pH increased from 7.6 upstream to 8.3 downstream. While both values are within the acceptable range for pH (6.5 to 9.0), the higher downstream value is likely a result of the wide, shallow flow and significant amount of algal growth at that site. Typically, the pH increases during daylight hours in areas with those characteristics, as sunlight stimulates algal photosynthesis and carbon dioxide is removed from water. The ammonia concentration at the downstream site was higher than that at the upstream site: 0.3 mg/L and 0.1 mg/L, respectively.

In contrast with 2005 and 2006, levels of the three types of bacterial indicators evaluated were significantly higher at the downstream site than at the upstream site. Total coliform count rose from 2,200 MPN/100mL to 30,000 MPN/100 mL, but both numbers improved from last year. Fecal coliform and enterococci were significantly higher at the downstream location than they were at the upstream site and the downstream numbers are higher than in 2006. The level of Total Dissolved Solids (TDS) was slightly higher and the level of Total Organic Carbon (TOC) was significantly higher at the downstream site. Surfactants, oil and grease, and dissolved copper, cadmium, lead, and zinc were not detected by the laboratory at either location. Field analytical and laboratory data are presented in Table 2 and Table 3, respectively.

Similar to previous years, Forester Creek had a very small flow at the upstream site and much higher flow as it exits the City. As a result of this, a direct comparison of upstream and downstream constituent concentrations can be misleading. Nearly all the water and its constituents that flow in Forester Creek (where it runs through the City of El Cajon) actually originate within the City. Perhaps a more meaningful comparison would be, not between upstream and downstream sites, but rather between years at the same site.

In comparing the results of this year's analyses with previous years it is important to note that the upstream sampling location has changed over the four years of this project due to the variable nature of the flow coming into the City. When Forester Creek receives no water from outside the city limits the sampling location may be moved slightly downstream to the nearest

location with flowing or ponded water (see Table 4). The upstream site's field and laboratory analyses from 2004 to 2007 are found in Table 5 and Table 6, respectively. The results of this year's upstream analysis indicate that pre-existing bacterial counts in Forester Creek as it enters the City are much reduced from previous years (Table 6). However, the downstream fecal coliform counts were higher than in recent years (Table 8). The remaining results for the downstream site are relatively similar to previous years' field and laboratory analyses, as seen in Table 7 and Table 8.

Table 1 Forester Creek Study Site Locations

Site ID	Location	Description	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
Upstream	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Exxon station at 1699 East Main Street	Concrete Channel	Commercial	Residential	907	32.81185	-116.91795
Downstream*	Adjacent to the Weld Boulevard Trolley Station, southeast of the Marshall Avenue/Cuyamaca Street intersection	Concrete Channel	Commercial	Industrial	907	32.82665	-116.98226

Table 2 Field Analytical Data for Forester Creek Sites

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactant (mg/L MBAS)	Ammonia (mg/L NH_3-N)	Nitrate (mg/L NO_3-N)	Reactive-Phosphorus (mg/L PO_4-P)	Dissolved Oxygen (mg/L)
Upstream	8/02/07	2	26.7	7.6	1.28	1.61	0.38	0.1	8.14	0.07	7.66
Downstream*	7/3/07	281	27.8	8.3	9.91	2.35	0.5	0.3	1.92	0.07	10.40

Note: * "Downstream" is the same location as dry weather program Site 5. Because the same sampling event was used both for this study and the dry weather program, the attached data sheets and lab reports reference Site 5, not "Downstream."

Table 3 Laboratory Data for Forester Creek Sites

Site	Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/L$CaCO_3$)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	8/02/07	nd	nd	579	nd	nd	nd	nd	2,200	500	270	1,150	5.2
Downstream*	7/3/07	nd	nd	649	nd	nd	nd	nd	30,000	5000	800	1,400	14.1

nd = not detected

Note: * "Downstream" is the same location as dry weather program Site 5. Because the same sampling event was used both for this study and the dry weather program, the attached data sheets and lab reports reference Site 5, not "Downstream."

Table 4 Forester Creek Upstream Site Yearly Locations

Year	Upstream Sampling Location
2007	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Exxon station at 1699 East Main Street
2006	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Exxon station at 1699 East Main Street
2005	Fourth Street, north of Rancho Cajon Place, east side of the street
2004	Forester Creek at East Main Street and Oakdale Avenue

Table 5 Upstream Site Field Analytical Data From 2004-2007

Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia (mg/L)	Nitrate (mg/L)	Reactive-Phosphorus (mg/L)	Dissolved Oxygen (mg/L)
6/24/2004	26.5	22.5	8.4	8.28	1.72	0.13	0.1	1.3	nd	nt
6/9/2005	2	18.8	8.4	80	1.35	0.25	0.2	8.75	0.26	8.94
6/13/2006	3	27.9	8	1.85	1.66	0.25	0.4	6.25	0.03	8.33
8/2/2007	2	26.7	7.6	1.28	1.61	0.38	0.1	8.14	0.07	7.66
Maximum	26.5	27.9	8.4	80	1.72	0.38	0.4	8.75	0.26	8.94
Minimum	2	18.8	7.6	1.28	1.35	0.13	0.1	1.3	nd	7.66
Average	8.38	24	8.1	22.85	1.585	0.253	0.2	6.11	0.121	8.31
Median	2.5	24.6	8.2	5.065	1.635	0.25	0.15	7.195	0.098	8.33

Table 6 Upstream Site Laboratory Data From 2004-2007

Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
6/24/2004	nd	5	409	nd	nd	nd	nd	240,000	2100	500	1020	10.4
6/9/2005	nd	nd	960	nd	nd	nd	nd	900,000	16000	24,000	1810	86.1
6/13/2006	nd	nd	48	nd	nd	nd	nd	300,000	3,000	8,000	1,090	11.4
8/2/2007	nd	nd	579	nd	nd	nd	nd	2,200	500	270	1,150	5.2
Maximum	nd	5	960	nd	nd	nd	nd	900000	16000	24000	1810	86.1
Minimum	nd	nd	48	nd	nd	nd	nd	2200	500	270	1020	10.4
Average	*	3.13	499	*	*	*	*	360550	5400	8193	1267.5	35.97
Median	*	2.5	494	*	*	*	*	270000	2550	4250	1120	11.4

nd = not detected; nt = not tested; Red values were at or above the measured constituent's action level

Table 7 Downstream Site Field Analytical Data From 2002-2007

Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia (mg/L)	Nitrate (mg/L)	Reactive-Phosphorus (mg/L)	Dissolved Oxygen (mg/L)
8/22/2002	168	32	8.8	15.13	2.55	0.37	0.3	0.1	0.03	nt
8/14/2003	299	29	8.6	6.36	2.7	0.13	0.2	2	nd	11.1
6/24/2004	204	30	8.7	19.75	2.73	0.25	0.3	2.5	nd	nt
6/28/2004	244	20.6	8.3	4.74	2.32	0.38	0.3	1.25	0.03	7.51
6/9/2005	412	25.5	8.6	3.43	1.24	0.5	0.1	6.25	0.03	12.74
6/13/2006	421	27.9	8.7	2.06	2.58	0.25	0.8	5	0.03	10.66
7/3/2007	281	27.8	8.3	9.91	2.35	0.5	0.3	1.92	0.07	10.4
Maximum	421	32	8.8	19.75	2.73	0.5	0.8	6.25	0.07	12.74
Minimum	168	20.6	8.3	2.06	1.24	0.13	0.1	0.1	nd	7.51
Average	290	27.5	8.57	8.77	2.353	0.34	0.33	2.72	0.038	10.48
Median	281	27.9	8.6	6.36	2.55	0.37	0.3	2	0.03	10.66

nd = not detected; nt = not tested

Table 8 Downstream Site Laboratory Data From 2002-2007

Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
8/22/2002	nd	nd	549	nd	nd	nd	nd	30,000	17,000	300	nt	nt
8/14/2003	nd	nd	624	nd	0.01	nd	nd	8,000	2,300	800	1,490	10.6
6/24/2004	nd	4	536	nd	nd	nd	nd	35,000	1100	20	1,590	16.3
6/28/2004	nd	nd	699	nd	nd	nd	nd	130,000	800	340	1,900	10.9
6/9/2005	nd	nd	810	nd	nd	nd	nd	30,000	1,300	5,000	1,700	53.4
6/13/2006	nd	nd	60	nd	nd	nd	nd	170,000	500	70	1,600	9.52
7/3/2007	nd	nd	649	nd	nd	nd	nd	30,000	5000	800	1,400	14.1
Maximum	nd	4	810	nd	0.01	nd	nd	170000	17000	5000	1900	53.4
Minimum	nd	nd	60	nd	nd	nd	nd	8000	500	20	1400	9.52
Average	*	2.71	561	*	0.0036	*	*	61857	4000	1047	1613.3	19.14
Median	*	2.5	624	*	0.0025	*	*	30000	1300	340	1595	12.5

nd = not detected; nt = not tested; Red values were at or above the measured constituent's action level

EnviroMatrix Analytical, Inc.

11 July 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0707048

Project Name: El Cajon Dry Weather
Project Desc./#:200710W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/03/07 13:04. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 5	0707048-01	Water	07/03/07 09:30	07/03/07 13:04
Site 41	0707048-02	Water	07/03/07 10:50	07/03/07 13:04
Site 8	0707048-03	Water	07/03/07 11:45	07/03/07 13:04

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 5 (0707048-01) Water Sampled: 07/03/07 09:30 Received: 07/03/07 13:04									
Lead	ND	0.005	mg/l	1	7070515	07/05/07	07/05/07	EPA 6020	
Zinc	ND	0.020	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
Site 41 (0707048-02) Water Sampled: 07/03/07 10:50 Received: 07/03/07 13:04									
Zinc	ND	0.020	mg/l	1	7070515	07/05/07	07/05/07	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	**0.006**	0.005	"	"	"	"	"	"	
Site 8 (0707048-03) Water Sampled: 07/03/07 11:45 Received: 07/03/07 13:04									
Cadmium	ND	0.005	mg/l	1	7070515	07/05/07	07/05/07	EPA 6020	
Copper	**0.007**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 5 (0707048-01) Water Sampled: 07/03/07 09:30 Received: 07/03/07 13:04									
Chlorpyrifos	ND	0.05	ug/l	1	7070503	07/05/07	07/07/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*103 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*100 %*	*60-130*		"	"	"	"	
Site 41 (0707048-02) Water Sampled: 07/03/07 10:50 Received: 07/03/07 13:04									
Chlorpyrifos	ND	0.05	ug/l	1	7070503	07/05/07	07/07/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*103 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*98 %*	*60-130*		"	"	"	"	
Site 8 (0707048-03) Water Sampled: 07/03/07 11:45 Received: 07/03/07 13:04									
Chlorpyrifos	ND	0.05	ug/l	1	7070503	07/05/07	07/07/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*102 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*119 %*	*60-130*		"	"	"	"	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 5 (0707048-01) Water Sampled: 07/03/07 09:30 Received: 07/03/07 13:04									
Hardness (Total)	**649**	100	mg CaCO3/L	10	7070916	07/09/07	07/10/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7070925	07/04/07	07/04/07	SM5540 C	
Oil & Grease	ND	5	"	"	7070903	07/10/07	07/10/07	EPA 1664	
Total Dissolved Solids	**1400**	20	"	"	7070921	07/05/07	07/06/07	SM2540 C	
Total Organic Carbon	**14.1**	1.00	"	"	7070526	07/05/07	07/05/07	SM5310B	
Site 41 (0707048-02) Water Sampled: 07/03/07 10:50 Received: 07/03/07 13:04									
Hardness (Total)	**535**	100	mg CaCO3/L	10	7070916	07/09/07	07/10/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7070925	07/04/07	07/04/07	SM5540 C	
Oil & Grease	ND	5	"	"	7070903	07/10/07	07/10/07	EPA 1664	
Total Dissolved Solids	**1400**	20	"	"	7070921	07/05/07	07/06/07	SM2540 C	
Total Organic Carbon	**16.6**	1.00	"	"	7070526	07/05/07	07/05/07	SM5310B	
Site 8 (0707048-03) Water Sampled: 07/03/07 11:45 Received: 07/03/07 13:04									
Hardness (Total)	**896**	100	mg CaCO3/L	10	7070916	07/09/07	07/10/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7070925	07/04/07	07/04/07	SM5540 C	
Oil & Grease	ND	5	"	"	7070903	07/10/07	07/10/07	EPA 1664	
Total Dissolved Solids	**1780**	20	"	"	7070921	07/05/07	07/06/07	SM2540 C	
Total Organic Carbon	**16.5**	1.00	"	"	7070526	07/05/07	07/05/07	SM5310B	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 5 (0707048-01) Water Sampled: 07/03/07 09:30 Received: 07/03/07 13:04									
Total Coliforms	**30000**	2000	MPN/100 ml	1000	7070510	07/03/07	07/07/07	SM 9221 B, E	
Fecal Coliforms	**5000**	200	"	100	"	"	07/06/07	"	
Enterococcus	**800**	20	"	10	7070511	"	07/07/07	SM 9230 A, B	
Site 41 (0707048-02) Water Sampled: 07/03/07 10:50 Received: 07/03/07 13:04									
Total Coliforms	**80000**	2000	MPN/100 ml	1000	7070510	07/03/07	07/07/07	SM 9221 B, E	
Fecal Coliforms	**2300**	200	"	100	"	"	07/06/07	"	
Enterococcus	**500**	20	"	10	7070511	"	07/07/07	SM 9230 A, B	
Site 8 (0707048-03) Water Sampled: 07/03/07 11:45 Received: 07/03/07 13:04									
Total Coliforms	**500000**	2000	MPN/100 ml	1000	7070510	07/03/07	07/07/07	SM 9221 B, E	
Fecal Coliforms	>160000	200	"	100	"	"	07/06/07	"	
Fecal Coliforms	**>160000**	200	"	100	"	"	07/06/07	"	
Enterococcus	**8000**	200	"	"	7070511	"	07/07/07	SM 9230 A, B	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070515										
Blank (7070515-BLK1)				Prepared & Analyzed: 07/05/07						
Lead	ND	0.005	mg/l							
Copper	ND	0.005	"							
Zinc	ND	0.020	"							
Cadmium	ND	0.005	"							
LCS (7070515-BS1)				Prepared & Analyzed: 07/05/07						
Zinc	0.123	0.020	mg/l	0.100		123	75-125			
Cadmium	0.122	0.005	"	0.100		122	75-125			
Copper	0.107	0.005	"	0.100		107	75-125			
Lead	0.112	0.005	"	0.100		112	75-125			
LCS Dup (7070515-BSD1)				Prepared & Analyzed: 07/05/07						
Lead	0.123	0.005	mg/l	0.100		123	75-125	9	20	
Copper	0.114	0.005	"	0.100		114	75-125	6	20	
Cadmium	0.120	0.005	"	0.100		120	75-125	2	20	
Zinc	0.119	0.020	"	0.100		119	75-125	3	20	
Duplicate (7070515-DUP1)		**Source: 0707048-01**		Prepared & Analyzed: 07/05/07						
Copper	0.002	0.005	mg/l		0.002			0	20	
Zinc	ND	0.020	"		ND				20	
Cadmium	ND	0.005	"		ND				20	
Lead	ND	0.005	"		ND				20	
Matrix Spike (7070515-MS1)		**Source: 0707048-01**		Prepared & Analyzed: 07/05/07						
Cadmium	0.107	0.005	mg/l	0.100	ND	107	75-125			
Copper	0.100	0.005	"	0.100	0.002	98	75-125			
Zinc	0.110	0.020	"	0.100	ND	110	75-125			
Lead	0.110	0.005	"	0.100	ND	110	75-125			

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070515										
Matrix Spike Dup (7070515-MSD1)		**Source: 0707048-01**		Prepared & Analyzed: 07/05/07						
Copper	0.099	0.005	mg/l	0.100	0.002	97	75-125	1	20	
Zinc	0.110	0.020	"	0.100	ND	110	75-125	0	20	
Lead	0.118	0.005	"	0.100	ND	118	75-125	7	20	
Cadmium	0.105	0.005	"	0.100	ND	105	75-125	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070503										
Blank (7070503-BLK1)				Prepared: 07/05/07 Analyzed: 07/07/07						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.206*		"	*0.250*		*82*	*60-130*			
Surrogate: Tribuytlphosphate	*0.189*		"	*0.250*		*76*	*60-130*			
LCS (7070503-BS1)				Prepared: 07/05/07 Analyzed: 07/07/07						
Bolstar	0.40	0.10	ug/l	0.500		80	60-130			
Diazinon	0.47	0.05	"	0.500		94	60-130			
Ethoprop	0.48	0.05	"	0.500		96	60-130			
Mevinphos	0.50	0.25	"	0.500		100	60-130			
Methyl parathion	0.41	0.10	"	0.500		82	60-130			
Phorate	0.44	0.05	"	0.500		88	60-130			
Ronnel	0.43	0.25	"	0.500		86	60-130			
Trichlorinate	0.40	0.05	"	0.500		80	60-130			
Surrogate: Triphenyl phosphate	*0.224*		"	*0.250*		*90*	*60-130*			
Surrogate: Tribuytlphosphate	*0.227*		"	*0.250*		*91*	*60-130*			
LCS Dup (7070503-BSD1)				Prepared: 07/05/07 Analyzed: 07/07/07						
Bolstar	0.37	0.10	ug/l	0.500		74	60-130	8	30	
Diazinon	0.43	0.05	"	0.500		86	60-130	9	30	
Ethoprop	0.42	0.05	"	0.500		84	60-130	13	30	
Mevinphos	0.43	0.25	"	0.500		86	60-130	15	30	
Methyl parathion	0.41	0.10	"	0.500		82	60-130	0	30	
Phorate	0.40	0.05	"	0.500		80	60-130	10	30	
Ronnel	0.42	0.25	"	0.500		84	60-130	2	30	
Trichlorinate	0.43	0.05	"	0.500		86	60-130	7	30	
Surrogate: Triphenyl phosphate	*0.191*		"	*0.250*		*76*	*60-130*			
Surrogate: Tribuytlphosphate	*0.196*		"	*0.250*		*78*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070526										
Blank (7070526-BLK1)				Prepared & Analyzed: 07/05/07						
Total Organic Carbon	ND	1.00	mg/l							
LCS (7070526-BS1)				Prepared & Analyzed: 07/05/07						
Total Organic Carbon	25.2	1.00	mg/l	25.0		101	80-120			
LCS Dup (7070526-BSD1)				Prepared & Analyzed: 07/05/07						
Total Organic Carbon	24.8	1.00	mg/l	25.0		99	80-120	2	20	
Duplicate (7070526-DUP1)		**Source: 0707026-01**		Prepared & Analyzed: 07/05/07						
Total Organic Carbon	2.54	1.00	mg/l		2.33			9	20	
Matrix Spike (7070526-MS1)		**Source: 0707026-01**		Prepared & Analyzed: 07/05/07						
Total Organic Carbon	26.9	2.00	mg/l	25.0	2.33	98	80-120			
Matrix Spike Dup (7070526-MSD1)		**Source: 0707026-01**		Prepared & Analyzed: 07/05/07						
Total Organic Carbon	27.0	2.00	mg/l	25.0	2.33	99	80-120	0.4	20	
Batch 7070903										
Blank (7070903-BLK1)				Prepared & Analyzed: 07/09/07						
Oil & Grease	ND	5	mg/l							
LCS (7070903-BS1)				Prepared & Analyzed: 07/09/07						
Oil & Grease	76	5	mg/l	92.6		82	75-125			
LCS Dup (7070903-BSD1)				Prepared & Analyzed: 07/09/07						
Oil & Grease	73	5	mg/l	91.9		79	75-125	4	20	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070916										
Blank (7070916-BLK1)				Prepared: 07/09/07	Analyzed: 07/10/07					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7070916-DUP1)		**Source: 0707048-03**		Prepared: 07/09/07	Analyzed: 07/10/07					
Hardness (Total)	911	100	mg CaCO3/L		896			2	20	
Batch 7070921										
Duplicate (7070921-DUP1)		**Source: 0706473-01**		Prepared: 07/05/07	Analyzed: 07/06/07					
Total Dissolved Solids	1310	20	mg/l		1360			4	20	
Reference (7070921-SRM1)				Prepared: 07/05/07	Analyzed: 07/06/07					
Total Dissolved Solids	350	20	mg/l	359		97	91.6-108.4			
Batch 7070925										
Blank (7070925-BLK1)				Prepared & Analyzed: 07/04/07						
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7070925-BS1)				Prepared & Analyzed: 07/04/07						
Methylene Blue Active Substances	0.8	0.5	mg/l	1.00		80	80-120			
LCS Dup (7070925-BSD1)				Prepared & Analyzed: 07/04/07						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120	12	20	
Duplicate (7070925-DUP1)		**Source: 0707048-03**		Prepared & Analyzed: 07/04/07						
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0707048

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070925										
Matrix Spike (7070925-MS1)		**Source: 0707048-03**		Prepared & Analyzed: 07/04/07						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120			
Matrix Spike Dup (7070925-MSD1)		**Source: 0707048-03**		Prepared & Analyzed: 07/04/07						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00	ND	90	80-120	11	20	

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Notes and Definitions

A-06	>160000
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A • San Diego, CA 92123 • Phone (858) 560-7717 • Fax (858) 560-7763

EMA LOG #: 0707048

EMA DATE/TIME STAMP

Client: D-Max Engineering, Inc
Address: 7220 Trade St. Suite 119
San Diego, CA 92121
Attn: Arsalan Dadkhah Phone: 858) 586-6600
Sampled by: Fax: 858) 586-6644
Billing Address: SAME
Project: El Cajon Dry Weather 2007IOW-1 PO #:

REQUESTED ANALYSIS

EMA ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container(s) #	Container(s) Type*	418.1 (TRPH)	Oil & Grease 413.1___ 413.2___ 1664 X	TPH (8015B) Gas___ Diesel___	TPH-Extended 8015B___ ASTM D2887___	602 / 8021 BTXE___ MTBE___	601 / 8021 (Purgeable Halocarbons)	608 / 8081 (Pesticides)	608 / 8082 (PCB's)	624 / 8260 (Volatile Organics)	625 / 8270 (Semi Volatile Organics)	TTLC Metals (CAC Title 22)	STLC Metals (CAC Title 22)	TCLP (RCRA) Metals___ Organics___	Cd Cr Cu Pb Ni Ag Zn	pH EC TSS TDS	Total Hardness	Total Coliform	Fecal Coliform	Enterococcus	Dial Chlor (8141)	LABS	TDC
1	Site 5	7/3/07	09:30	Water	3/4	G/P		X												X	X	X	X	X	X	X	X	X
2	Site 41	~	10:50	~	~	~		X												X	X	X	X	X	X	X	X	X
3	Site 8	~	11:45	~	~	~		X												X	X	X	X	X	X	X	X	X
4																												
5																												
6																												
7																												
8																												
9																												
10																												

*Container Types: B=Brass Tube; V=VOA; G=Glass: P=Plastic; O=Other (list)

Tamper-Proof Seals Intact: Yes No N/A
Correct Containers: Yes No
Sample(s): Cold Ambient Warm
VOAs w/ZHS: Yes No N/A
All Samples Properly Preserved: Yes No N/A
Disposal: N/C (aqueous) *EMA (@$5.00/sample) Return Hold
Turnaround Time: 24 hr 48 hr 3 day 4 day 5 day Normal

Comments:
Project# 2007IOW-1
T=5°C

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	7/3/07 12:40	Signature:
Print: Manouchehr Dadkhah		Print: Jaes Peck
Company: D-Max Eng		Company: EMA
Signature:	7/3/07 13:04	Signature:
Print: Jaes Peck		Print: W. Lucero
Company: EMA		Company: EMA
Signature:		Signature:
Print:		Print:
Company:		Company:

*EMA reserves the right to return samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

EnviroMatrix Analytical, Inc.

17 August 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0708043

Project Name: El Cajon Dry Weather
Project Desc./#:200710W-1

Enclosed are the results of analyses for samples received by the laboratory on 08/02/07 13:09. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Forester Creek Upstream	0708043-01	Water	08/02/07 11:00	08/02/07 13:09

NOTE: TOC analysis was performed by a subcontract laboratory, results to follow in a separate report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Creek Upstream (0708043-01) Water Sampled: 08/02/07 11:00 Received: 08/02/07 13:09									
Zinc	ND	0.020	mg/l	1	7080606	08/06/07	08/06/07	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Creek Upstream (0708043-01) Water Sampled: 08/02/07 11:00 Received: 08/02/07 13:09									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7080613	08/06/07	08/10/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*141 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*86 %*	*60-130*		"	"	"	"	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Creek Upstream (0708043-01) Water Sampled: 08/02/07 11:00 Received: 08/02/07 13:09									
Hardness (Total)	**579**	100	mg CaCO3/L	10	7080604	08/06/07	08/07/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7080405	08/03/07	08/03/07	SM5540 C	
Oil & Grease	ND	5	"	"	7080913	08/09/07	08/09/07	EPA 1664	
Total Dissolved Solids	**1150**	20	"	"	7080619	08/06/07	08/06/07	SM2540 C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Creek Upstream (0708043-01) Water Sampled: 08/02/07 11:00 Received: 08/02/07 13:09									
Total Coliforms	**2200**	20	MPN/100 ml	10	7080307	08/02/07	08/06/07	SM 9221 B, E	
Fecal Coliforms	**500**	20	"	"	"	"	08/05/07	"	
Enterococcus	**270**	20	"	"	7080308	"	08/06/07	SM 9230 A, B	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080606										
Blank (7080606-BLK1)				Prepared & Analyzed: 08/06/07						
Cadmium	ND	0.005	mg/l							
Zinc	ND	0.020	"							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
LCS (7080606-BS1)				Prepared & Analyzed: 08/06/07						
Zinc	0.097	0.020	mg/l	0.100		97	75-125			
Cadmium	0.098	0.005	"	0.100		98	75-125			
Copper	0.091	0.005	"	0.100		91	75-125			
Lead	0.096	0.005	"	0.100		96	75-125			
LCS Dup (7080606-BSD1)				Prepared & Analyzed: 08/06/07						
Cadmium	0.097	0.005	mg/l	0.100		97	75-125	1	20	
Zinc	0.099	0.020	"	0.100		99	75-125	2	20	
Lead	0.096	0.005	"	0.100		96	75-125	0	20	
Copper	0.091	0.005	"	0.100		91	75-125	0	20	
Duplicate (7080606-DUP1)		**Source: 0708066-01**		Prepared & Analyzed: 08/06/07						
Cadmium	ND	0.005	mg/l		ND				20	
Zinc	0.014	0.020	"		0.013			7	20	
Lead	ND	0.005	"		ND				20	
Copper	0.003	0.005	"		0.003			0	20	
Matrix Spike (7080606-MS1)		**Source: 0708066-01**		Prepared & Analyzed: 08/06/07						
Lead	0.101	0.005	mg/l	0.100	ND	101	75-125			
Copper	0.092	0.005	"	0.100	0.003	89	75-125			
Cadmium	0.109	0.005	"	0.100	ND	109	75-125			
Zinc	0.118	0.020	"	0.100	0.013	105	75-125			

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080606										
Matrix Spike Dup (7080606-MSD1)		**Source: 0708066-01**		Prepared & Analyzed: 08/06/07						
Lead	0.098	0.005	mg/l	0.100	ND	98	75-125	3	20	
Zinc	0.119	0.020	"	0.100	0.013	106	75-125	0.8	20	
Copper	0.091	0.005	"	0.100	0.003	88	75-125	1	20	
Cadmium	0.107	0.005	"	0.100	ND	107	75-125	2	20	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080613										
Blank (7080613-BLK1)				Prepared: 08/06/07 Analyzed: 08/10/07						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.221*		"	*0.250*		*88*	*60-130*			
Surrogate: Tribuytlphosphate	*0.206*		"	*0.250*		*82*	*60-130*			
LCS (7080613-BS1)				Prepared: 08/06/07 Analyzed: 08/10/07						
Bolstar	0.47	0.10	ug/l	0.500		94	60-130			
Diazinon	0.53	0.05	"	0.500		106	60-130			
Ethoprop	0.51	0.05	"	0.500		102	60-130			
Mevinphos	0.36	0.25	"	0.500		72	60-130			
Methyl parathion	0.46	0.10	"	0.500		92	60-130			
Phorate	0.50	0.05	"	0.500		100	60-130			
Ronnel	0.51	0.25	"	0.500		102	60-130			
Trichlorinate	0.51	0.05	"	0.500		102	60-130			
Surrogate: Triphenyl phosphate	*0.216*		"	*0.250*		*86*	*60-130*			
Surrogate: Tribuytlphosphate	*0.195*		"	*0.250*		*78*	*60-130*			
LCS Dup (7080613-BSD1)				Prepared: 08/06/07 Analyzed: 08/10/07						
Bolstar	0.47	0.10	ug/l	0.500		94	60-130	0	30	
Diazinon	0.56	0.05	"	0.500		112	60-130	6	30	
Ethoprop	0.52	0.05	"	0.500		104	60-130	2	30	
Mevinphos	0.40	0.25	"	0.500		80	60-130	11	30	
Methyl parathion	0.49	0.10	"	0.500		98	60-130	6	30	
Phorate	0.53	0.05	"	0.500		106	60-130	6	30	
Ronnel	0.54	0.25	"	0.500		108	60-130	6	30	
Trichlorinate	0.53	0.05	"	0.500		106	60-130	4	30	
Surrogate: Triphenyl phosphate	*0.229*		"	*0.250*		*92*	*60-130*			
Surrogate: Tribuytlphosphate	*0.233*		"	*0.250*		*93*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080613										
Matrix Spike (7080613-MS1)		**Source: 0708047-02**		Prepared: 08/06/07	Analyzed: 08/10/07					
Bolstar	0.55	0.10	ug/l	0.500	ND	110	60-130			
Diazinon	0.57	0.05	"	0.500	ND	114	60-130			
Ethoprop	0.53	0.05	"	0.500	ND	106	60-130			
Mevinphos	0.58	0.25	"	0.500	ND	116	60-130			
Methyl parathion	0.59	0.10	"	0.500	ND	118	60-130			
Phorate	0.55	0.05	"	0.500	ND	110	60-130			
Ronnel	0.58	0.25	"	0.500	ND	116	60-130			
Trichlorinate	0.54	0.05	"	0.500	ND	108	60-130			
Surrogate: Triphenyl phosphate	*2.04*		*"*	*0.250*		*816*	*60-130*			*S-02, S-04*
Surrogate: Tribuytlphosphate	*0.261*		*"*	*0.250*		*104*	*60-130*			
Matrix Spike Dup (7080613-MSD1)		**Source: 0708047-02**		Prepared: 08/06/07	Analyzed: 08/10/07					
Bolstar	0.55	0.10	ug/l	0.500	ND	110	60-130	0	30	
Diazinon	0.55	0.05	"	0.500	ND	110	60-130	4	30	
Ethoprop	0.51	0.05	"	0.500	ND	102	60-130	4	30	
Mevinphos	0.54	0.25	"	0.500	ND	108	60-130	7	30	
Methyl parathion	0.58	0.10	"	0.500	ND	116	60-130	2	30	
Phorate	0.53	0.05	"	0.500	ND	106	60-130	4	30	
Ronnel	0.53	0.25	"	0.500	ND	106	60-130	9	30	
Trichlorinate	0.52	0.05	"	0.500	ND	104	60-130	4	30	
Surrogate: Triphenyl phosphate	*1.63*		*"*	*0.250*		*652*	*60-130*			*S-02, S-04*
Surrogate: Tribuytlphosphate	*0.221*		*"*	*0.250*		*88*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080405										
Blank (7080405-BLK1)				Prepared & Analyzed: 08/02/07						
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7080405-BS1)				Prepared & Analyzed: 08/02/07						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120			
LCS Dup (7080405-BSD1)				Prepared & Analyzed: 08/02/07						
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00		110	80-120	10	20	
Duplicate (7080405-DUP1)		**Source: 0708031-01**		Prepared & Analyzed: 08/02/07						
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7080405-MS1)		**Source: 0708031-01**		Prepared & Analyzed: 08/02/07						
Methylene Blue Active Substances	1.2	0.5	mg/l	1.00	ND	120	80-120			
Matrix Spike Dup (7080405-MSD1)		**Source: 0708031-01**		Prepared & Analyzed: 08/02/07						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00	ND	90	80-120	29	20	QR-08
Batch 7080604										
Blank (7080604-BLK1)				Prepared: 08/06/07 Analyzed: 08/07/07						
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7080604-DUP1)		**Source: 0708043-01**		Prepared: 08/06/07 Analyzed: 08/07/07						
Hardness (Total)	661	100	mg CaCO3/L		579			13	20	
Batch 7080619										
Blank (7080619-BLK1)				Prepared & Analyzed: 08/06/07						
Total Dissolved Solids	ND	20	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0708043

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7080619										
Duplicate (7080619-DUP1)		**Source: 0707482-05**		Prepared & Analyzed: 08/06/07						
Total Dissolved Solids	2000	20	mg/l		1990			0.5	20	
Duplicate (7080619-DUP2)		**Source: 0708004-02**		Prepared & Analyzed: 08/06/07						
Total Dissolved Solids	764	20	mg/l		777			2	20	
Reference (7080619-SRM1)				Prepared & Analyzed: 08/06/07						
Total Dissolved Solids	286	20	mg/l	285		100	89.1-110.9			
Reference (7080619-SRM2)				Prepared & Analyzed: 08/06/07						
Total Dissolved Solids	265	20	mg/l	285		93	89.1-110.9			
Batch 7080913										
Blank (7080913-BLK1)				Prepared & Analyzed: 08/09/07						
Oil & Grease	ND	5	mg/l							
LCS (7080913-BS1)				Prepared & Analyzed: 08/09/07						
Oil & Grease	90	5	mg/l	103		87	75-125			
LCS Dup (7080913-BSD1)				Prepared & Analyzed: 08/09/07						
Oil & Grease	89	5	mg/l	106		84	75-125	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
QR-08	The RPD between the MS and MSD did not meet the acceptance criteria, however both did have acceptable recoveries. Sample data not affected.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix *Analytical, Inc.*

page ____ of ____

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

EMA LOG #: 0708043

Client: D-Max Engineering, Inc.

Attn: Arsalan Dadkhah

Sampler(s):

Address: 7220 Trade st. Suite 119
San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: El Cajon Dry Weather

Project #: 200710W-1 PO#:

SAMPLE DETAILS / REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1	413.2	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel Ext ASTM D2887	624 / 8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	614 (Organophosphorus Pesticides) Dia/Chlor	TBT (Organotin Compounds)	pH Conductivity (EC) TSS TDS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	Cd Cr Cu Pb Ni Ag Zn	Coliform, Total (MTF) Fecal (MTF) Colilert, T+E.Coli	Enterococcus, MTF Idexx	Heterotrophic Plate Count (HPC)	MBAS	TOC	Total Hardness				Microbiology Notes
						X 1664									X TDS					X Dissolved										
01	Forester Cr. Upstream	8/2/07 11:00	Water	3/6 6/p	X								X		X					X	X	X		X	X	X				
02																														
03																														
04																														
05																														
06																														
07																														
08																														
09																														
10																														

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other ____

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day X day STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other ____

[1]Sample Disposal: By Laboratory [2]Return to client: P/U or Delivery Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Custody Seals Intact: Yes No N/A

COC/Labels Agree: Yes No N/A

Containers Properly Preserved: Yes No N/A

Temperature @ Receipt: 19°C

Sampled By: Client EMA Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: [signature]	8/2/07
Print: Manouchehr Dadkhah	Print: Joe Lanuc	13:09
Company: D-Max Eng.	Company: EMA	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

LABORATORY REPORT

Prepared For: EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jamey A. Cote

Project: 0708043

Sampled: 08/02/07
Received: 08/16/07
Issued: 08/17/07 08:24

NELAP #01108CA California ELAP#1197 CSDLAC #10256

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica.
This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

LABORATORY ID	CLIENT ID	MATRIX
IQH1594-01	Forester Creek Upstream	Water

Reviewed By:

Amy Windham

TestAmerica - Irvine, CA
Amy Windham
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jamey A. Cote

Project ID: 0708043
Report Number: IQH1594

Sampled: 08/02/07
Received: 08/16/07

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IQH1594-01 (Forester Creek Upstream - Water)								
Reporting Units: mg/l								
Total Organic Carbon	SM5310B	7H16136	1.0	**5.2**	1	8/16/2007	8/16/2007	

TestAmerica - Irvine, CA
Amy Windham
Project Manager

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue. Suite 100. Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jamey A. Cote

Project ID: 0708043
Report Number: IQH1594

Sampled: 08/02/07
Received: 08/16/07

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 7H16136 Extracted: 08/16/07										
Blank Analyzed: 08/16/2007 (7H16136-BLK1)										
Total Organic Carbon	ND	1.0	mg/l							
LCS Analyzed: 08/16/2007 (7H16136-BS1)										
Total Organic Carbon	10.7	1.0	mg/l	10.0		107	90-110			
Matrix Spike Analyzed: 08/16/2007 (7H16136-MS1)					**Source: IQH1599-01**					
Total Organic Carbon	8.30	1.0	mg/l	5.00	3.43	97	80-120			
Matrix Spike Dup Analyzed: 08/16/2007 (7H16136-MSD1)					**Source: IQH1599-01**					
Total Organic Carbon	8.31	1.0	mg/l	5.00	3.43	98	80-120	0	20	

TestAmerica - Irvine, CA
Amy Windham
Project Manager

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jamey A. Cote

Project ID: 0708043

Report Number: IQH1594

Sampled: 08/02/07
Received: 08/16/07

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference

stAmerica - Irvine, CA
Amy Windham
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue. Suite 100. Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jamey A. Cote

Project ID: 0708043
Report Number: IQH1594

Sampled: 08/02/07
Received: 08/16/07

Certification Summary

TestAmerica - Irvine, CA

Method	Matrix	Nelac	California
SM5310B	Water	X	

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica - Irvine, CA
Amy Windham
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0708043

400

IQH1594

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Test America-Irvine [S]
17461 Derian Avenue, Suite 100
Irvine, California 92614-5817
Phone :949-261-1022
Fax: 949-261-1228

PDF results to: jcote@enviromatrixinc.com

Due Fri 8/17/07

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: Forester Creek Upstream Water		**Sampled:08/02/07 11:00**		
TOC-Liquid by SM5310B	~~08/09/07 16:00~~	08/30/07 11:00		
Containers Supplied:				
125 ml amber - H2SO4 (E				

HE 8-16-07 1745

Released By	Date	Received By	Date
	8/16/07 11:38		8-16-07 11:38
	8-16-07 1715		8/16/07 17:15

3.7°C

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.

page ____ of ____

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

EMA LOG #: 0708073

Client: D-Max Engineering, Inc.

Attn: Arsalan Dadkhah

Sampler(s):

Address: 7220 Trade st. Suite 119
San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: El Cajon Dry Weather

Project #: 2007100-1 PO#:

SAMPLE DETAILS / REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1	413.2 X 1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel	624 / 8260 (VOC) Full BTXE MTBE Oxy Nap Ext ASTM D2887	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Dia/Chlor	TBT (Organotin Compounds)	pH Conductivity (EC) TSS X TDS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	Cd Cr Cu Pb Ni Ag Zn X Dissolved	Coliform, X Total (MTF) X Fecal (MTF) Coliert, T+E.Coli	Enterococcus, X MTF Idexx	Heterotrophic Plate Count (HPC)	MBAS	TOC	Total Hardness				Microbiology Notes / Sample #
01	Forester Cr Upstream	8/2/07	11:00	Water	3/6 G/P	X								X		X					X	X	X		X	X	X			
02																														
03																														
04																														
05																														
06																														
07																														
08																														
09																														
10																														

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other ____

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day X day STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other ____

[2]Sample Disposal: By Laboratory [2]Return to client: P/U or Delivery Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: 19°C
COC/Labels Agree: Yes No N/A
Sampled By: Client EMA Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature:	8/2/07
Print: Manouchehr Dadkhah	Print: Joe Lanuc	13:09
Company: D-Max Eng.	Company: EMA	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

APPENDIX F

2007-2008 ANNUAL BUDGET
DEPARTMENT EXPENDITURE WORKSHEET

Date: 5/21/07

Acct #	Account Title	FY04-05 Actual	FY05-06 Actual	FY06-07 Budget	FY06-07 Estimated	FY07-08 Proposed
650750						**WASTEWATER - NPDES**
7110	SALARIES	383,389	361,810	618,119	373,369	490,576
7120	OVERTIME	45	30	-	150	250
7130	VACATION/SICK CONVERSIONS	4,076	8,012	7,163	2,012	2,117
7140	FURLOUGH	(1,978)	-	-	-	-
7310	PERS (EMPLOYER)	87,380	107,269	167,758	105,801	147,572
7315	MEDICARE TAX	4,761	4,432	8,963	4,515	7,113
7320	SOCIAL SECURITY TAX	-	-	-	-	-
7325	CAFETERIA	33,250	33,819	68,888	37,436	54,210
7330	COMPENSATED ABSENCES	24,134	(5,594)	-	-	-
7335	WORKERS COMPENSATION	23,461	20,984	17,334	6,263	10,019
7340	LIFE INSURANCE	1,308	1,233	1,737	1,348	1,429
7345	LTD INSURANCE	1,235	1,118	2,556	1,168	2,214
7350	STD INSURANCE	412	372	856	389	741
7360	UNIFORM ALLOWANCE	-	-	-	-	-
TOTAL	**SALARY & BENEFITS**	**561,473**	**533,487**	**893,374**	**532,451**	**716,241**
8150	OFFICE SUPPLIES	1,689	699	1,700	1,300	1,700
8160	OPERATING SUPPLIES	4,330	4,400	8,000	8,000	8,000
8345	LEGAL SERVICES	-	-	3,000	-	3,000
8363	SYSTEM / COMPUTER ANALYST	-	-	50,000	20,000	40,000
8365	TEMPORARY SERVICES	-	-	-	-	50,000
8395	OTHER PROF/TECH SERVICES	104,590	81,339	413,000	200,000	555,000
8510	OVERHEAD REIMBURSEMENT	59,766	61,136	80,723	80,723	88,659
8511	FLEET/EQUIP REIMBURSEMENT	30,982	13,211	25,947	29,650	10,209
8520	VEHICLE REPLACEMNT CHARGE	-	-	16,741	16,741	-
8522	ADVERTISING	1,130	1,115	1,000	500	1,000
8528	COMMUNICATIONS	1,531	1,283	2,000	2,000	2,000
8560	PERMITS AND FEES	15,449	14,868	20,100	20,000	20,000
8570	PRINTING AND BINDING	2,290	3,935	10,000	8,000	11,500
8572	PROMOTIONS	-	129	10,000	10,000	10,000
8574	RENT EXPENSE	-	29	-	-	-
8586	SOFTWARE AGREEMENTS	921	623	3,500	36,523	14,830
8588	SUBSCRIPTIONS	-	-	-	-	-
8594	TRAINING/MEETINGS/SCHOOLS	158	872	3,500	1,500	3,500
TOTAL	**MAT'L, SVC & SUPPLIES**	**222,836**	**183,639**	**649,211**	**434,937**	**819,398**
9010	MINOR FURN&EQUIP <$10,000	-	-	-	-	-
9020	MINOR COMPUTERS <$10,000	-	6,235	14,000	14,000	-
9030	SOFTWARE	-	-	23,000	23,000	94,650
9035	FURN & EQUIP >$10,000	-	-	-	-	23,000
9040	VEHICLES	-	-	-	-	-
TOTAL	**CAPITAL OUTLAY**	**-**	**6,235**	**37,000**	**37,000**	**117,650**
	ACTIVITY TOTAL	**784,309**	**723,361**	**1,579,585**	**1,004,388**	**1,653,289**

ACTIVITY: PUBLIC WORKS NPDES COMPLIANCE **ACTIVITY NO: 650750**

Mission Statement:
The Public Works Department is a maintenance and engineering organization, and an integral part of the municipal government of the City of El Cajon. Dedicated to public service, we operate, maintain, repair and preserve the public assets, public buildings and parks and open lands owned by the residents of El Cajon. We do this to enhance the quality of life in El Cajon, facilitate commerce, and protect the safety of our residents and visitors.

Description:
Provide compliance with the Regional Water Quality Control Board s 2001-001 Municipal Permit. Major components include training of City personnel, inspection of commercial and industrial businesses, inspection of construction sites, public outreach, dry weather storm water testing, and conditioning of new development and redevelopment to comply with storm water regulations.

Prior Fiscal Year Highlights:
The goal of the Municipal Permit is to improve receiving water quality and determine the threat to human health and the environment using the maximum extent practicable controls. The Fifth Permit Year Annual Report listed the following major accomplishments:

Continued enforcement program for City Ordinances 4686 [Jurisdictional Urban Runoff Management Program (JURMP)] and 4717 [Standard Urban Storm Water Management Program (SUSMP)]. The City conducted 23 storm water related enforcement actions composed of written warnings and monetary citations.

Continued implementation of a City-Wide Integrated Pesticide Management Program.

Expanded the scope of its Dry Weather Monitoring Program with the preparation of a new Request for Proposal.

Conducted upstream/downstream dry weather analysis in Forrester Creek.

Inspected and provided educational materials to 255 industrial and commercial businesses.

Minimized sediment and trash in the storm drain system, using street sweeping to the maximum extent practicable. Collected 2,686 cubic yards of materials from 15,482 miles of streets swept.

Collected 1,813 cubic yards of materials from city inlets, culverts, concrete-lined channels, and catch basins.

Provided training for Community Police staff, Fire Department staff and Public Works Maintenance staff.

Conducted joint training sessions with the City of Santee and the County of San Diego.

Actively participated in the Regional Management Committee, Outreach Workgroup, WURMP development, and Regional Monitoring Workgroups.

Served as the lead copermittee to the San Diego River Watershed and developed and coordinated activities within the watershed.

Conducted Pollution Prevention (P2) Days at the El Cajon Classic Car Show to assist with Storm Water educational efforts.

ACTIVITY: PUBLIC WORKS NPDES COMPLIANCE **ACTIVITY NO: 650750**

Conducted inspections of 15 high priority construction sites, 26 high priority industrial facilities, 229 Food service establishments, and four municipal facilities.

Began implementation of Geographic Information System (GIS).

Reached out to community members on a wide range of urban runoff and storm water quality topics through 300,000 copies of articles, brochures, mailers, and over-the-counter sources.

Goals:

- Expand existing and add new programs as necessary to comply with the significantly increased oversight, inspection, tracking, monitoring and reporting requirements contained in the newly-adopted permit.
- Create and adopt new activities and program upgrades to comply with the new Municipal Permit.
- Continue to achieve compliance on construction sites.
- Work towards developing a GIS Enterprise System and Storm Water data layers.
- Maintain compliance with all requirements of the current Municipal Storm Water Permit through continued implementation of the Jurisdictional Urban Runoff Management Program (JURMP) and the Watershed Urban Runoff Management Program (WURMP).

The Major Program Goals for JURMP Component are:

Municipal Component

- Conduct training for all City Departments and employees.
- Conduct comprehensive inspections at all municipal facilities.
- Implement and document Best Management Practices (BMPs) - street sweeping, storm drain cleaning, sewer and road maintenance.
- Develop City-specific environmental indicators for accurate measurement of Urban Runoff Program effectiveness.
- Establish defined measurements and actions to address watershed requirements, and develop watershed management procedures.
- Conduct a comprehensive review and evaluation of the Storm Water web page. Create and post all outreach documents and information brochures to ensure easy availability to all interested parties. Establish a process to periodically review and update the web page with the latest information and news pertaining to storm water requirements, BMPs and important contact information.

Industrial and Commercial Component

- Inspect approximately 1,200 businesses and establish prioritization for future oversight.
- Conduct follow-up inspection for facilities not in compliance.
- Educate facility owners and personnel.
- Focus on specific commercial/industrial activities for pollutant discharges and waste collection and handling BMPs.
- Develop and implement procedures (with other jurisdictions) to identify, educate and inspect mobile businesses (auto detailers, power washers, etc).

Residential Component

- Expand the topics for educational and outreach materials for distribution to the public.
- Expand efforts to provide information brochures on BMPs used for yard care, auto repair, car washing, and pet waste.
- Investigate all storm water or spill complaints submitted to the City Manager from the public.
- Identify the actual or potential high priority water quality pollutant sources and develop source specific

ACTIVITY: PUBLIC WORKS NPDES COMPLIANCE **ACTIVITY NO: 650750**

activities to reduce or eliminate those pollutant sources.
- Implement two short-term and one long-term water quality activity to address the highest priority water quality problems**.**

Construction Component
- Provide increased oversight on all grading projects to ensure compliance with erosion control plans.
- Provide education and outreach to all developers on new municipal and state requirements.
- Implement and enforce strict sediment and erosion control measures on all grading sites.
- Report and document sites of non-compliance.

Illicit Discharge Detection and Elimination Component
- Conduct dry weather field screening and analytical monitoring.
- Conduct follow-up investigations.

Land Development Review
- Review project development for compliance with SUSMP ordinance and JURMP.
- Coordinate conditions of approval to ensure permit compliance.

The Major Program Goals for the WURMP Program are:
- Provide leadership in the San Diego River Watershed.
- Create a mechanism to share costs amongst all the copermittees within the San Diego River Watershed.
- Collaborate with other jurisdictions on watershed-wide education and outreach events.
- Conduct a comprehensive water quality assessment of Forrester Creek and the San Diego River in cooperation with the other jurisdictions.
- Identify the actual or potential high-priority water quality pollutant sources and develop source specific activities to reduce or eliminate those pollutant sources.
- Implement two short-term and one long-term water quality activity to address the highest priority water quality problems.

Financial Comments:
Salaries & Benefits: The decrease of □177,133 is primarily due to a reallocation of personnel costs to other programs.
Materials, Services and Supplies: The increase of □163,687 is primarily due to increased testing and updates to the San Diego River Watershed Management, Watershed Urban Runoff Management, and the Jurisdictional Urban Runoff Management Programs. A one-time cost of □50,000 has also been budgeted for data input for the Geographic Information System. These increases are offset by decreases in fleet/equipment maintenance and vehicle replacement.
Capital Outlay: GPS Survey equipment, ArcGIS Server 9.2, CAD software package, and Sungard Pentamation eCommunity PLUS Arcview GIS interface software

PUBLIC WORKS - NPDES COMPLIANCE **ACTIVITY NO: 650750**

EXPENDITURE SUMMARY	2004-2005 ACTUAL	2005-2006 ACTUAL	2006-2007 AMENDED BUDGET	2006-2007 EST. ACTUAL	2007-2008 AMENDED
SALARIES & BENEFITS	561,473	533,487	893,374	532,451	724,826
MAT'L, SVC & SUPPLIES	222,836	183,639	649,211	434,937	819,398
CAPITAL OUTLAY		6,235	37,000	37,000	117,650
OTHER FINANCING USES	-	-	-	-	-
TOTAL	784,309	723,361	1,579,585	1,004,388	1,661,874

DETAIL OF PERSONNEL SERVICES

JOB CLASSIFICATION	2004-2005 ACTUAL	2005-2006 ACTUAL	2006-2007 ACTUAL	2007-2008 APPROVED
City Engineer	0.15	0.15	0.00	0.00
Deputy Director of Public Works - Development	0.00	0.00	0.55	0.55
City Traffic Engineer	0.00	0.05	0.05	0.00
Principal Civil Engineer	0.65	0.10	0.00	0.00
Associate Engineer	0.00	0.50	1.10	1.20
Junior Civil Engineer	0.00	0.00	1.00	1.00
Technical Engineering Supervisor	1.00	1.05	0.00	0.10
Supervising Engineering Technician	0.00	0.00	0.10	0.00
Senior Management Analyst	0.00	0.15	0.15	0.15
Management Analyst	0.50	0.30	0.30	0.30
Administrative Secretary	0.00	0.00	0.20	0.20
Secretary	0.00	0.00	0.10	0.10
Senior Engineering Technician	0.25	0.35	0.65	0.65
Engineering Technician	2.00	2.00	0.70	0.70
Code Compliance Officer	0.00	0.00	1.00	1.00
Engineering Aide	1.00	1.00	0.00	0.00
Geographic Information Systems Technician	0.00	0.00	1.00	1.00
Public Works Equipment Operator	1.00	1.00	0.00	0.00
Public Works Maintenance Worker II / Trainee	2.00	2.00	2.00	0.00
Civil Engineering Intern	0.00	0.00	0.00	0.50
TOTAL	**8.55**	**8.65**	**8.90**	**7.45**

APPENDIX G

G. IDENTIFICATION OF INEFFECTIVE MEASURES

Permit Section I.1.g requires that the City identify in its JURMP Annual Report any management measures proven to be ineffective in reducing urban runoff pollutants and flow. During this report period, the City did identify a number of measures that are discussed in the improvement sections of each Component, but are summarized below.

1. Municipal
    a. Add in the inspection sheets a section that includes BMP Implementation.
2. Industrial
    a. High Priority ranking by proximity to a major drainage channel is the primary consideration.
    b. Continue to conduct inspections tracking BMP Implementation
3. Commercial
    a. High Priority ranking by proximity to a major drainage channel is the primary consideration.
    b. Continue to conduct inspections tracking BMP Implementation
4. Residential
    a. Residential Education may best be tackled by the East County Cities group.
5. New Development
    a. Few of the known Post-Construction (structural) BMPs can be designed into El Cajon development. Focus on putting more emphasis on implementing low impact development BMPs.
6. Construction
    a. Discontinue use of hay bales
    b. Discontinue use of gravel bags for perimeter control
7. Illicit Discharge Detection and Elimination
    a. Investigate bacterial detections when all three (coliform, fecal coliform, and enterococcus) detections exceed the action levels AND are in the ratios indicating a potential discharge.
    b. Investigate pH only when a significant change (greater than 3 pH units) is measured.
    c. Investigate nitrate detections rather than TDS.
8. Education
    a. Provide a booth with information regarding the City of El Cajon's Storm Water Program at the yearly Fire Department Open House Event.
    b. Education may best be tackled through the East County Cities group.
9. Public Participation
    a. Public Participation may best be tackled through a Watershed or Regional effort.
10. Program Assessment

a. At this time, address 303(d) pollutants, only
b. Address Levels 1 through 4 only if empirical data is available.
Estimate only if there is an exceedance of a 303(d) listed pollutant.

APPENDIX H

H. Identification of Water Quality Improvements or Degradation.

Water Quality

For PY6, an upstream and downstream monitoring was conducted in Forrester Creek during the dry weather monitoring. The upstream sample was collected at the City/County boundary. The downstream sample was collected near the Weld Street Trolley Station. Analytical results are discussed in Section F.5 and a copy of the report is attached in Appendix E. Wet weather monitoring in PY6 included three storm events. Pollutants of concern include the 303(d) listed pollutants for Forrester Creek as well as many of the dry weather constituents.

Additional Parameter Assessment

Conductivity values indicate the total concentration of ions in an aquatic system and the ability of water to conduct electricity. This parameter can be used to assess the mineral content of water or to help determine the presence of dissolved pollutants. Therefore, Total Dissolved Solids (TDS) is directly related to Conductivity as it measures the ionic composition of the receiving water body.

The TDS concentration in a body of water is affected by many different factors. A high concentration of dissolved ions is not, by itself, an indication that a stream is polluted or unhealthy. It is normal for natural streams to dissolve and accumulate high concentrations of ions from rock and soil formations. However, since Forrester Creek is mostly all lined with concrete with very few natural segments, the Conductivity/TDS values are a result of:

- Sediment at all sampling sites
- Evaporation in the channel, concentrating TDS
- Temperature increases in shallow low flows causing higher solubility
- Nitrates and phosphates slightly increase conductivity

Tracking Conductivity is similar to tracking TDS. The average Conductivity values over the last six years are shown in Figure 1. With the exception of 2005 and 2007, a general declining trend line in conductivity correlates to reducing TDS as an impact to Forrester Creek and a move toward restoration of Basin Plan water quality requirements.

Figure 1

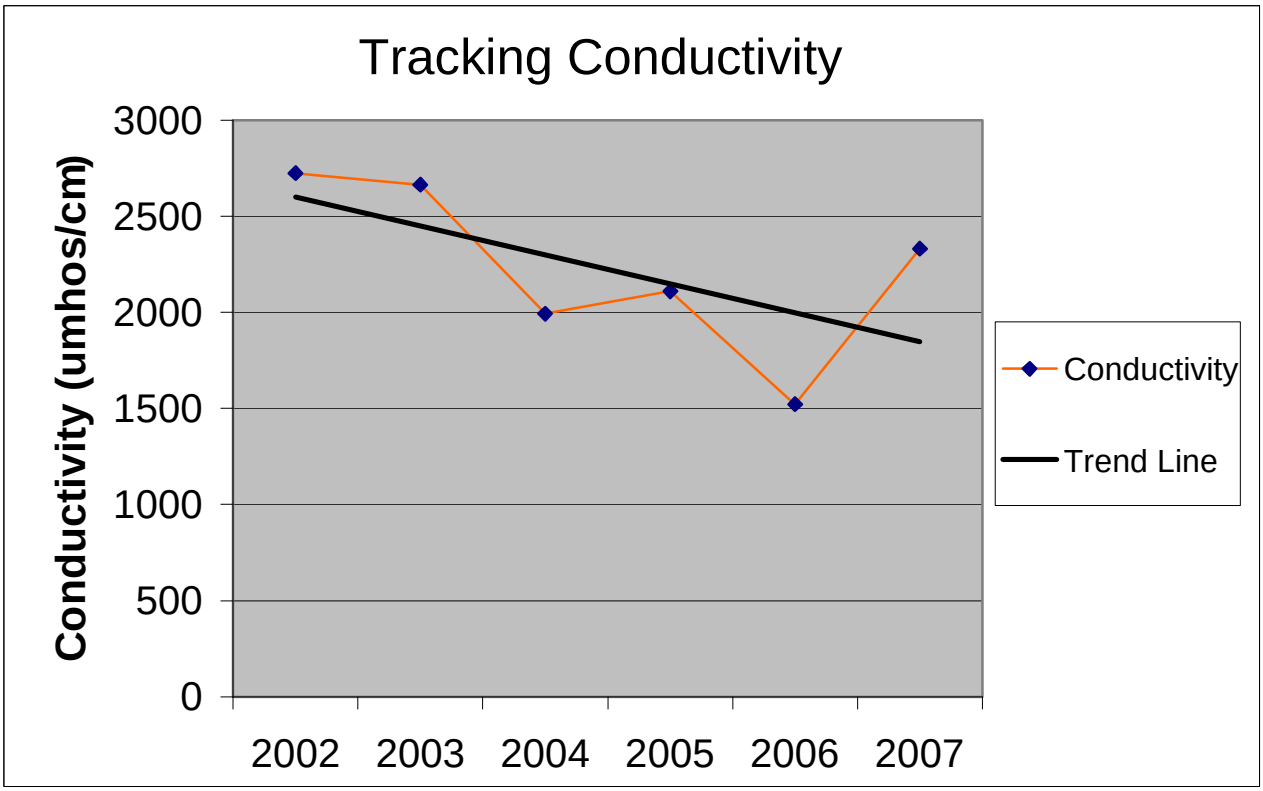
Tracking Conductivity
Conductivity (umhos/cm)
3000
2500
2000
1500
1000
500
0
2002
2003
2004
2005
2006
2007
Conductivity
Trend Line

APPENDIX I

JURMP Program Summary (PY6)

Order 2001-01 Sections	Program Element	Activities	Responsible Department(s)
	DISCHARGE PROHIBITIONS		
B.3.	Identify discharges not to be prohibited and BMPs required for treatment of discharges not prohibited	Examine the list of non-storm water discharges in B.2. of the Order and determine which discharges are a significant source of pollutants to waters of the US. For the discharges that will not be prohibited a BMP must be implemented to prevent or reduce pollutants to the MEP.	**Engineering**
B.5.	Examine field screening results to identify water quality problems resulting from non-prohibited water discharges, including follow-up problems	Establish an active dry weather analytical monitoring program to identify water quality problems from non-prohibited discharges. Follow-up investigations will be implemented to identify and control non-prohibited discharges.	**Public Works, Engineering**
	RECEIVING WATER LIMITATIONS		
C.2.a.	Notify SDRWQCB of discharges causing or contributing to an exceedence of water quality standards	Report in the annual report any discharges that are causing or contributing to an exceedance of an applicable water quality standard. The report must include existing BMPs and additional BMPs to be implemented to prevent or reduce pollutant discharges and BMP implementation schedule.	**Engineering**
	LEGAL AUTHORITY		
D.1.	Establish, maintain and enforce legal authority to control pollutant discharges	Review of Order 2001-01 and establishment of ordinances, statutes, permits etc to enforce the prohibitions and compliance requirements of the Order	**City Attorney**
D.2.	Establish, maintain and enforce legal authority to control pollutant discharges	Provide to SDRWQCB a statement certified by City Attorney that the City has adequate legal authority to implement and enforce each of the requirements contained in 40 CFR 122.26(d)(2)(I)(A-F) and Order 2001-01	**City Attorney**
	JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM		
	LAND USE PLANNING FOR NEW DEVELOPMENT AND REDEVELOPMENT		
F.1.a.	Assess General Plan	Include water quality and watershed protection principles and policies into the General Plan to direct land-use decisions and require implementation of consistent water quality protection measures for all development projects.	**Planning**
F.1.b.	Modify Development Project Approval Processes	Modification of process to ensure that pollutants and runoff from development will be reduced to the maximum extent practicable.	**Planning, Engineering**
F.1.b.(1)	Modify Development Project Requirements	Modify development project requirements (conditions of approval) to ensure pollutants and runoff from development are reduced to the maximum extent practicable and that receiving water quality objectives are not violated throughout the life of the project.	**Planning, Engineering**
F.1.b.(2)	Standard Urban Storm Water Mitigation Plans (SUSMPs) Model Development	Participation with other copermittees to collectively develop a model SUSMP	**Engineering**

JURMP Program Summary (PY6)

Order 2001-01 Sections	Program Element	Activities	Responsible Department(s)
F.1.b.(2)	SUSMP Adoption	Adopt a City SUSMP based upon the model SUSMP that meets the requirements in Order 2001-01, section F.1 .b.(2), including a) Priority Development Project Categories (e.g. restaurants, commercial developments 100,000 square feet or more), b) BMP Requirements, c) Numeric Sizing Criteria, d) Equivalent Numeric Sizing Criteria, e) Pollutants of Concern, f) Implementation Process, g) Restaurants Less than 5,000 square feet, h) Waiver Provision, i) Infiltration and Groundwater Protection	**Planning, Engineering**
F.1 .c.	Revise Environmental Review Processes	Review current environmental review process and make amendments to include water quality effects and identification of appropriate mitigation measures. See Order section F.1 .c. for example questions for checklists.	**Planning**
F.1.d.	Internal Education Efforts Focused on New Development and Redevelopment	Establish and maintain an education program to ensure that planning and development review staffs have an understanding of water quality laws and regulations applicable to development projects, connection between land-use decisions and water quality impacts, how impacts to receiving water quality can be minimized	**Planning, Engineering**
F.1.d.	External Education Efforts Focused on New Development and Redevelopment	Establish and maintain an education program to educate project applicants, developers, contractors, community planning groups and property owners of water quality laws and regulations applicable to development projects, connection between land-use decisions and water quality impacts, how impacts to receiving water quality can be minimized	**Planning, Engineering**
	CONSTRUCTION COMPONENT		
F.2.	*Existing Municipal Development*	*Implement a municipal component to prevent or reduce pollutants in runoff from municipal land use area and activities.*	
F.2.a.	Pollution Prevention	Implement pollution prevention methods and require their use by construction site owners, developers and contractors	**City**
F.2.b.	Grading Ordinance Update	Review and update grading ordinance, including pollution prevention, source control and structural treatment BMPs to be implemented during all construction activities	**Planning, Engineering**
F.2.c.	Modify Construction and Grading Approval Process	Modification of process to ensure that pollutants and runoff the development will be reduced to the maximum extent practicable, including modifying grading project requirements (conditions of approval)	**Planning, Engineering**
F.2.d.	Source Identification	Annually develop a watershed based inventory of all construction sites, integrated into GIS.	**Planning, Engineering**
F.2.e.	Threat to Water Quality Prioritization	Prioritize the above mentioned inventory based upon threat to water quality, see criteria in Order 2001-01.	**Planning, Engineering**
F.2.f.(1)	Establish BMPs	Designate a set of minimum BMPs for three classifications of water quality threat, high, medium, and low construction sites.	**Engineering**
F.2.f.(2)	BMP Implementation	Implement or require the implementation of the above mentioned minimum BMPs at each construction site.	**Planning, Engineering**

JURMP Program Summary (PY6)

Order 2001-01 Sections	Program Element	Activities	Responsible Department(s)
F.2.f.(4)	Special BMP Requirements	Implement or require the implementation of additional controls for sites tributary to a section 303(d) impaired water body, coastal lagoon or other environmentally sensitive areas	**Planning, Engineering**
F.2.g.(1)	Inspection of Construction Sites	Conduct construction site inspections for compliance with the City's ordinances, permits, and Order 2001-01. Inspections will include review of the site erosion control and BMP implementation plans.	**Engineering, Contract Services**
F.2.h.	Enforcement of Construction Sites	Enforce ordinances and permits at all construction sites.	**Code Enforcement**
F.2.i.	Reporting of Non-compliant Sites	Provide oral and written notification to SDRWQCB of non-compliant sites.	**Code Enforcement**
F.2.j.	Internal Education Focused on Construction Activities	Establish and maintain an education program to ensure that construction, building and grading review staffs and inspectors have an understanding of water quality laws and regulations applicable to construction and grading activities, connection between construction activities and water quality impacts, how erosion can be prevented, and how impacts to receiving water quality can be minimized.	**Planning, Engineering, Contract Services**
F.2.j.	External Education Focused on Construction Activities	Establish and maintain an education program to ensure that applicants, contractors, developers, and property owners have an understanding of water quality laws and regulations applicable to construction and grading activities, connection between construction activities and water quality impacts, how erosion can be prevented, and how impacts to receiving water quality can be minimized.	**Planning, Engineering**
	EXISTING DEVELOPMENT COMPONENT		
F.3.a.	*Existing Municipal Development*	*Implement a municipal component to prevent or reduce pollutants in runoff from municipal land use area and activities.*	
F.3.a.(1)	Pollution Prevention (Municipal)	Implementation of the pollution prevention methods by municipal personnel	**City**
F.3.a.(2)	Source Identification (Municipal)	Annually develop a watershed based inventory of all municipal land use areas and activities which generate pollutants, integrated into GIS.	**Planning, Engineering**
F.3.a.(3)	Threat to Water Quality Prioritization (Municipal)	Prioritize the above mentioned inventory based upon threat to water quality, see criteria in Order 2001-01.	**Engineering**
F.3.a.(4).a.	Establish BMPs	Designate a set of minimum BMPs for three classifications of water quality threat, high, medium, and low municipal sites.	**Engineering**
F.3.a.(4).b.	BMP Implementation	Implement or require the implementation of the above mentioned minimum BMPs at each municipal area or activity.	**Public Works, Fire, Community Services, Engineering**
F.3.a.(5)	Maintenance of Municipal Separate Storm Sewer System (Municipal)	Establish and implement a schedule of maintenance of all structural controls and for the municipal separate storm sewer system.	**Public Works**
F.3.a.(6)	Management of Pesticides, Herbicides and Fertilizers (Municipal)	Implement BMPs to reduce the contribution of pollutants associated with the application, storage and disposal of pesticides, herbicides and fertilizers from municipal areas and activities to MS4s.	**Contract Services**

JURMP Program Summary (PY6)

Order 2001-01 Sections	Program Element	Activities	Responsible Department(s)
F.3.a.(7)	Inspection of Municipal Areas and Activities (Municipal)	Inspect high priority municipal areas and activities annually.	**Public Works, Fire, Community Services, Engineering**
F.3.a.(8)	Enforcement of Municipal Areas and Activities	Enforcement of storm water ordinance for all municipal areas and activities.	**Public Works, Fire, Engineering, Community Services**
F.3.b.	*Existing Industrial Development*	*Implement an industrial component to prevent or reduce pollutants in runoff from municipal land use area and activities.*	
F.3.b.(1)	Pollution Prevention (Industrial)	Implementation of required industrial pollution prevention methods.	**City**
F.3.b.(2)	Source Identification (Industrial)	Annually develop a watershed based inventory of all industrial sites within the City which generate pollutants, integrated into GIS.	**Engineering, Finance**
F.3.b.(3)	Threat to Water Quality Prioritization (Industrial)	Prioritize the above mentioned inventory based upon threat to water quality, see criteria in Order 2001-01.	**Engineering**
F.3.b.(4)	Establish BMPs	Designate a set of minimum BMPs for three classifications of water quality threat, high, medium, and low industrial sites.	**Engineering**
F.3.b.(4)	BMP Implementation	Implement or require the implementation of the above mentioned minimum BMPs at each industrial site.	**Engineering**
F.3.b.(5)	Monitoring of Industrial Sites	Require industry to conduct a monitoring program from all high threat industrial site.	**Engineering**
F.3.b.(6)	Inspection of Industrial Sites	Conduct industrial site inspections for compliance with City's ordinances, permits and Order 2001-01.	**Engineering, Code Enforcement**
F.3.b.(7)	Enforcement of Industrial Sites	Enforcement of storm water ordinance for all industrial sites.	**Code Enforcement**
F.3.b.(8)	Reporting of Non-compliant Sites (Industrial)	Provide oral and written notification to SDRWQCB of non-compliant sites.	**Code Enforcement**
F.3.c.	*Existing Commercial Development*	*Implement a commercial component to prevent or reduce pollutants in runoff from commercial sites.*	
F.3.c.(1)	Pollution Prevention (Commercial)	Implementation of required commercial pollution prevention methods.	**City**
F.3.c.(2)	Source Identification (Commercial)	Annually develop a watershed based inventory of all commercial sites within the City which generate pollutants, integrated into GIS.	**Engineering, Finance**
F.3.c.(3)	Establish BMPs	Designate a set of minimum BMPs for three classifications of water quality threat, high, medium, and low commercial sites.	**Engineering**
F.3.c.(3)	BMP Implementation	Implement or require the implementation of the above mentioned minimum BMPs at each commercial site.	**Engineering**
F.3.c.(4)	Inspection of Commercial Sites and Sources	Conduct commercial site inspections for compliance with City's ordinances, permits and Order 2001-01.	**Code Enforcement, Contract Services**
F.3.c.(5)	Enforcement of Commercial Sites and Sources	Enforcement of storm water ordinance for all commercial sites.	**Code Enforcement**

JURMP Program Summary (PY6)

Order 2001-01 Sections	Program Element	Activities	Responsible Department(s)
F.3.d.	*Existing Residential Development*	*Implement a residential component to prevent or reduce pollutants in runoff from residential sites.*	
F.3.d.(1)	Pollution Prevention	Implementation of required residential pollution prevention methods.	**City**
F.3.d.(2)	Threat to Water Quality Prioritization (Residential)	Identify high priority residential areas and activities (e.g. automobile repair, auto washing, disposal of pet waste)	**Engineering**
F.3.d.(3)	Establish BMPs	Designate a set of minimum BMPs for high priority residential areas and activities.	**Engineering**
F.3.d.(3)	BMP Implementation	Implement or require the implementation of the above mentioned minimum BMPs at high priority residential areas and activities.	**Engineering**
F.3.d.(4)	Enforcement of Residential Areas and Activities	Enforce storm water ordinance for all residential areas and activities.	**Code Enforcement**
	EDUCATION COMPONENT		
F.4.	Education Component	Implement an education component using all media as appropriate to measurably increase the knowledge of the target communities regarding MS4s, impacts to receiving waters and potential BMP solutions for the target audience and to measurably change the behavior of target communities. The following target communities will be the focus of the education efforts: 1) Municipal departments and personnel, 2) Construction site owners and developers, 3) Industrial owners and operators, 4) Commercial owners and operators, 5) residential community, general public and school children, and 6) Quasi-Governmental Agencies/Districts.	**Planning, Engineering**
F.4.	Education Component	Assess target communities in the City and develop public education and outreach program to efficiently educate the target communities.	**Planning, Engineering**
F.4.	Education Component	Implement public education and outreach program (e.g. restaurant program, targeted informational brochures, informational signs, etc.)	**Planning, Engineering, Finance**
	ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT		
F.5.a.	Illicit Discharges and Connections	Establish a program to actively seek and eliminate illicit discharges and connections into the City's MS4.	**Public Works, Engineering**
F.5.b.	Dry Weather Analytical Monitoring	Conduct dry weather monitoring of MS4 outfalls to detect illicit discharges.	**Public Works, Engineering**
F.5.c.	Investigation/Inspection Follow-Up	Based upon dry weather monitoring results, investigate and inspect any potential illicit connections or other sources of non-storm water.	**Public Works, Engineering**
F.5.d.	Elimination of Illicit Discharges and Connections	Eliminate all illicit discharges, discharge sources and connections immediately upon detection.	**Public Works, Engineering, Code Enforcement**
F.5.e.	Enforce Ordinances	Implement and enforce ordinances, orders, or other legal authority to prevent and eliminate illicit discharges and connections to MS4.	**Code Enforcement**
F.5.f.	Prevent and Respond to Sewer Spills (Including from private laterals) and Other Spills	Prevent, respond to, contain and clean up all sewage and other spills that may discharge into the MS4 from any source.	**Public Works**

JURMP Program Summary (PY6)

Order 2001-01 Sections	Program Element	Activities	Responsible Department(s)
F.5.g.	Facilitate Public Reporting of Illicit Discharges and Connections -- Public Hotline	Promote, publicize and facilitate public reporting of illicit discharges or water quality impacts through developing and implementing a public hotline.	**Engineering, Contract Services**
F.5.h.	Facilitate Disposal of Used Oil and Toxic Materials	Facilitate the proper management and disposal of used oil, toxic materials and other household hazardous wastes. This component will include educational activities, public information activities and establishment of collection sites operated by the City or private entity.	**City Manager's Office**
F.5.i.	Limit Infiltration From Sanitary Sewer to MS4	Implement controls and measures to limit infiltration of seepage from municipal sanitary sewers to MS4s. This effort will include overall sanitary sewer and MS4 surveys and routine preventative maintenance of both.	**Public Works**
	PUBLIC PARTICIPATION COMPONENT		
F.6.	Establish Mechanism for Public Participation	Organize a stakeholders group that will participate in the implementation of the JURMP	**Planning, Engineering**
	ASSESSMENT OF JURISDICTIONAL URMP EFFECTIVENESS COMPONENT		
F.7.a.	Long-term Assessment Strategy	Develop a long-term assessment strategy for the JURMP to include effectiveness.	**Engineering**
F.7.b.	Assess JURMP Effectiveness	Use the strategy developed to assess the effectiveness of the JURMP.	**Engineering**
	FISCAL COMPONENT		
F.8.	Develop Funding Plan	Determine most appropriate funding options to pursue.	**Finance, Engineering**
F.8.	Conduct Fiscal Analysis of Urban Runoff Management Program in its Entirety	Analyze the expenditures necessary to accomplish the NPDES Program and identify sources of funds proposed to meet the program requirements.	**Finance, Engineering**
	Implement Effort to Secure Long-Term Funding	Once the most appropriate option is determined, develop and implement effort to insure successful implementation.	**Finance, Engineering**
	COPERMITTEE COLLABORATION		
N.1 .a.	Execute Formal Agreement Which Provides Management Structure for Meeting Order Requirments	Collaborate with copermittees to execute a Memorandum of Understanding or Joint Powers Authority	**City, Engineering**
N.1.b.	Develop Standardized Formats for All Required Reports of the Order	Collaborate with copermittees to establish a standardized format to submit reports for the order	**City, Engineering**
Attachment B	Develop Previous Monitoring and Future Recommendations Report	Collaborate with copermittees to develop a report summarizing all past wet weather monitoring results and make recommendations for future monitoring activities.	**City, Engineering**
Attachment B	Develop Receiving Waters Monitoring Program	Collaborate with copermittees to develop a receiving waters monitoring program.	**City, Engineering**
Attachment B	Implement Receiving Waters Monitoring Program	Collaborate with copermittees to implement a receiving waters monitoring program.	**City, Engineering**
Attachment E	Develop Dry Weather Analytical and Field Screening Monitoring Map and Procedures	Develop an MS4 map, select dry weather monitoring stations, and develop dry weather analytical monitoring procedures	**Public Works, Engineering**

JURMP Program Summary (PY6)

Order 2001-01 Sections	Program Element	Activities	Responsible Department(s)
Attachment E	Conduct Dry Weather Analytical and Field Screening Monitoring	Conduct monitoring as developed, including follow up monitoring	**Public Works, Engineering**

El Cajon Storm Water Program Contact List (PY6)

Department	Contact Name	E-mail Address	Phone Number	Fax Number	Example of Responsibilities
Public Works	Rob Turner	rturner@ci.el-cajon.ca.us	(619) 441-1781	(619) 579-5254	Overall URMP oversight
Engineering	Michael Griffiths	mgriffiths@ci.el-cajon.ca.us	(619) 441-1785	(619) 579-5254	Oversees Public Works, Land Development process. Coordinates Implementation of BMPs and provides SWPPP review and engineering conditions of approval.
Storm Water Manager	Jaime Campos	jcampos@ci.el-cajon.ca.us	(619) 441-5554	(619) 579-5254	Generally oversees the assessment process and facilitates updates and changes to the URMP.
Planning Department	Barbara Ramirez	bramirez@ci.el-cajon.ca.us	(619)441-1771		Implementation of the land use component and facilitation of public education in regards to new. development.
Finance	Joyce Nevarez	jnevarez@ci.el-cajon.ca.us	(619)441-1543		Identify and secure sources of funds for implementation of the URMP.
Code Enforcement	Craig Bonner	cbonner@ci.el-cajon.ca.us	(619) 441-1663	(619) 579-5254	Code enforcement activities, public outreach programs and education activities
Code Enforcement & Erosion Control Plan/ SUSMP Review	Blake Behringer	bbehringer@ci.el-cajon.ca.us	(619) 441-1666	(619) 579-5254	Code enforcement activities and review of Erosion Control and SUSMP Plans for City projects and Private Development Contracts
Public Outreach	Robert Griswold	bgriswold@ci.el-cajon.ca.us	(619) 441-1704	(619) 579-5254	Facilitate public outreach programs and education activities.

APPENDIX J

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 01	32	042		33	034		12/28/2006	300	FM		300
1 01	32	042		32	043		12/28/2006	305	FM		305
1 01	32	050		32	051		12/21/2006	400	FM		400
1 01	32	050		32	051		4/15/2007	383	JM	6	766
1 01	32	051		33	031		10/13/2006	325	JM	12	325
1 01	32	051		33	050		12/21/2006	247	FM		247
1 01	33	012		33	013		12/28/2006	166	FM		166
1 01	33	013		33	014		12/28/2006	285	FM		285
1 01	33	014		33	015		12/28/2006	288	FM		288
1 01	33	015		33	028		12/28/2006	296	FM		296
1 01	33	017		33	018		12/21/2006	79	FM		79
1 01	33	019		33	020		12/28/2006	157	FM		157
1 01	33	020		33	021		12/28/2006	39	FM		39
1 01	33	021		33	027		12/28/2006	400	FM		400
1 01	33	022		33	024		12/21/2006	270	FM		270
1 01	33	023		33	024		12/21/2006	203	FM		203
1 01	33	025		33	026		12/21/2006	259	FM		259
1 01	33	026		33	027		12/28/2006	277	FM		277
1 01	33	027		33	028		12/28/2006	260	FM		260
1 01	33	028		33	033		12/28/2006	15	FM		15
1 01	33	029		33	030		10/13/2006	200	JM	12	200
1 01	33	029		33	030		12/21/2006	200	FM		200
1 01	33	030		33	029		12/21/2006	327	FM		327
1 01	33	030		33	031		12/21/2006	230	FM		230
1 01	33	031		33	030		12/21/2006	130	FM		130
1 01	33	031		33	032		12/28/2006	255	FM		255
1 01	33	032		33	033		12/28/2006	260	FM		260
1 01	33	033		33	034		12/28/2006	250	FM		250
1 02	27	106		32	049		1/9/2007	276	FM		276
1 02	32	033		32	055		1/9/2007	112	FM		112
1 02	32	033		32	034		1/9/2007	242	FM		242
1 02	32	034		32	035		1/9/2007	236	FM		236
1 02	32	035		32	037		1/9/2007	237	FM		237
1 02	32	036		32	053	D	1/8/2007	57	FM		57
1 02	32	036		32	037		1/9/2007	302	FM		302
1 02	32	037		32	041		1/9/2007	254	FM		254
1 02	32	038		32	039		1/8/2007	151	FM		151
1 02	32	039		32	040		1/9/2007	259	FM		259
1 02	32	040		32	041		1/9/2007	61	FM		61
1 02	32	041		32	044		1/9/2007	257	FM		257
1 02	32	043		32	044		1/9/2007	298	FM		298
1 02	32	044		32	047		1/9/2007	261	FM		261
1 02	32	045		32	046		1/5/2007	290	FM		290
1 02	32	045		33	011		1/5/2007	292	FM		292
1 02	32	046		32	047		1/9/2007	292	FM		292
1 02	32	047		32	049		1/9/2007	262	FM		262
1 02	32	048		33	005		1/5/2007	344	FM		344
1 02	32	048		32	049		1/9/2007	345	FM		345
1 02	32	055		32	057		1/9/2007	174	FM		174

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 02	32	057		32	058		1/9/2007	218	FM		218
1 02	32	058		32	059	D	1/9/2007	13	FM		13
1 02	33	001	C	33	003		1/5/2007	95	FM		95
1 02	33	002		33	003		1/5/2007	112	FM		112
1 02	33	003		33	004		1/5/2007	136	FM		136
1 02	33	004		33	005		1/5/2007	238	FM		238
1 02	33	006		33	007		12/29/2006	93	FM		93
1 02	33	007		33	008		12/29/2006	152	FM		152
1 02	33	008		33	009		12/29/2006	294	FM		294
1 02	33	009		33	010		1/5/2007	345	FM		345
1 02	33	010		33	011		1/5/2007	294	FM		294
1 03	27	105		27	108		1/12/2007	306	FM		306
1 03	27	106		27	107		1/9/2007	340	FM		340
1 03	27	107		27	108		1/12/2007	253	FM		253
1 03	27	108		32	032		1/12/2007	268	FM		268
1 04	27	104		27	105		1/11/2007	317	FM		317
1 04	27	108		27	109		1/12/2007	314	FM		314
1 04	27	109		27	110		1/12/2007	302	FM		302
1 04	27	110		27	111		1/12/2007	295	FM		295
1 04	27	112		27	113		1/17/2007	297	FM		297
1 04	27	113		27	114		1/17/2007	140	FM		140
1 04	32	007		32	009		1/11/2007	174	FM		174
1 04	32	008		32	009		1/11/2007	113	FM		113
1 04	32	009		32	011		1/11/2007	193	FM		193
1 04	32	010		32	011		1/11/2007	336	FM		336
1 04	32	011		32	017		1/11/2007	260	FM		260
1 04	32	012		32	013		1/11/2007	250	FM		250
1 04	32	012		32	056	C	1/11/2007	100	FM		100
1 04	32	013		32	014		1/11/2007	296	FM		296
1 04	32	014		32	017		1/11/2007	200	FM		200
1 04	32	015		32	016		1/11/2007	206	FM		206
1 04	32	016		32	017		1/11/2007	208	FM		208
1 04	32	017		32	022		1/11/2007	255	FM		255
1 04	32	018		32	019		1/11/2007	347	FM		347
1 04	32	019		32	022		1/11/2007	303	FM		303
1 04	32	020		32	021		1/11/2007	240	FM		240
1 04	32	021		32	022		1/11/2007	240	FM		240
1 04	32	022		32	027		1/11/2007	270	FM		270
1 04	32	023		32	024		1/11/2007	194	FM		194
1 04	32	024		32	027		1/11/2007	346	FM		346
1 04	32	025		32	026		1/11/2007	195	FM		195
1 04	32	026		32	027		1/11/2007	350	FM		350
1 04	32	027		32	028		1/12/2007	182	FM		182
1 04	32	028		32	032		1/12/2007	85	FM		85
1 04	32	029		32	030		1/11/2007	320	FM		320
1 04	32	030		32	032		1/12/2007	304	FM		304
1 04	32	031		32	049		1/11/2007	338	FM		338
1 04	32	031		32	032		1/12/2007	350	FM		350
1 05	27	114		27	161		1/17/2007	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 05	27	114		27	115		1/25/2007	312	FM		312
1 06	27	090		27	091		1/10/2007	365	FM		365
1 06	27	090		27	178	D	1/10/2007	50	FM		50
1 06	27	091		27	092		1/10/2007	145	FM		145
1 06	27	091		28	035		1/10/2007	136	FM		136
1 06	27	093		27	094		1/25/2007	300	FM		300
1 06	27	093		28	053		1/25/2007	80	FM		80
1 06	27	094		27	095		1/25/2007	101	FM		101
1 06	27	095		27	100		1/25/2007	200	FM		200
1 06	28	027		28	028		1/10/2007	371	FM		371
1 06	28	028		28	029		1/10/2007	239	FM		239
1 06	28	029		28	031		1/10/2007	75	FM		75
1 06	28	030		28	031		1/10/2007	387	FM		387
1 06	28	031		28	032		1/10/2007	154	FM		154
1 06	28	032		28	034		1/10/2007	138	FM		138
1 06	28	033		28	034		1/10/2007	380	FM		380
1 06	28	034		28	035		1/10/2007	151	FM		151
1 06	28	036		28	037		1/9/2007	110	FM		110
1 06	28	036		28	068		1/9/2007	285	FM		285
1 06	28	037		28	038		1/9/2007	101	FM		101
1 06	28	038		28	044		1/9/2007	181	FM		181
1 06	28	044		28	052		1/9/2007	281	FM		281
1 06	28	045		28	046		1/8/2007	155	FM		155
1 06	28	046		28	049		1/8/2007	233	FM		233
1 06	28	047		28	048		1/8/2007	199	FM		199
1 06	28	048		28	049		1/8/2007	310	FM		310
1 06	28	049		28	050		1/8/2007	300	FM		300
1 06	28	050		28	051		1/8/2007	248	FM		248
1 06	28	051		28	052		1/9/2007	122	FM		122
1 06	28	052		28	053		1/25/2007	353	FM		353
1 06	28	068		28	069		1/9/2007	310	FM		310
1 06	28	069		28	070		1/9/2007	144	FM		144
1 06	28	070		28	071		1/9/2007	203	FM		203
1 06	28	071		28	072		1/9/2007	273	FM		273
1 06	28	072		28	073		1/9/2007	266	FM		266
1 07	27	097		27	189		1/10/2007	112	FM		112
1 07	27	098		27	099		1/10/2007	340	FM		340
1 07	27	098		27	189		1/10/2007	253	FM		253
1 07	27	099		27	100		1/25/2007	305	FM		305
1 07	27	100		27	101		1/25/2007	150	FM		150
1 07	27	101		27	102		1/25/2007	245	FM		245
1 07	27	102		27	103	M	1/25/2007	201	FM		201
1 07	27	183		28	182		1/10/2007	138	FM		138
1 07	27	183		27	184		1/10/2007	48	FM		48
1 07	27	184		27	185		1/10/2007	48	FM		48
1 07	27	185		27	186		1/10/2007	153	FM		153
1 07	27	185		27	187		1/10/2007	305	FM		305
1 07	27	187		27	188		1/10/2007	40	FM		40
1 07	27	188		27	189		1/10/2007	114	FM		114

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 07	28	054		28	055		12/21/2006	302	FM		302
1 07	28	055		28	056		12/21/2006	169	FM		169
1 07	28	056		28	059		12/21/2006	85	FM		85
1 07	28	058		28	059		12/21/2006	250	FM		250
1 07	28	059		28	060		12/21/2006	183	FM		183
1 07	28	060		28	061		12/21/2006	100	FM		100
1 07	28	061		28	063		1/8/2007	365	FM		365
1 07	28	062		28	063		1/8/2007	306	FM		306
1 07	28	063		28	064		1/8/2007	261	FM		261
1 07	28	064		28	180		1/10/2007	372	FM		372
1 07	28	180		28	181		1/10/2007	134	FM		134
1 07	28	181		28	182		1/10/2007	45	FM		45
1 09	27	103	M	27	115		1/25/2007	175	FM		175
1 09	27	115		27	116		1/25/2007	225	FM		225
1 09	27	116		27	118		1/25/2007	227	FM		227
1 09	27	117		27	118		1/25/2007	195	FM		195
1 09	27	118		27	119		1/25/2007	112	FM		112
1 10	27	119		27	120		1/25/2007	136	FM		136
1 10	27	120		27	121		1/25/2007	281	FM		281
1 10	27	121		27	122		1/25/2007	290	FM		290
1 10	27	122		27	126		1/25/2007	50	FM		50
1 10	27	126		27	138		1/25/2007	220	FM		220
1 10	27	127		27	128		1/23/2007	288	FM		288
1 10	27	128		27	129		1/23/2007	160	FM		160
1 10	27	129		27	133		1/23/2007	313	FM		313
1 10	27	130		27	131		1/23/2007	128	FM		128
1 10	27	130		27	179	C	1/23/2007	25	FM		25
1 10	27	131		27	132		1/23/2007	200	FM		200
1 10	27	132		27	133		1/23/2007	175	FM		175
1 10	27	133		27	134		1/24/2007	313	FM		313
1 10	27	134		27	136		1/24/2007	181	FM		181
1 10	27	135		27	136		1/24/2007	292	FM		292
1 10	27	136		27	137		1/24/2007	199	FM		199
1 10	27	137		27	138		1/25/2007	239	FM		239
1 10	27	138		27	171		1/25/2007	20	FM		20
1 10	27	139		27	171		1/25/2007	249	FM		249
1 10	27	139		27	140		1/26/2007	266	FM		266
1 11	26	152		27	140	M	1/26/2007	293	FM		293
1 12	26	042		26	099		7/7/2006	280	FM		280
1 12	26	042		26	098		1/18/2007	68	FM		68
1 12	26	090		26	091		1/18/2007	341	FM		341
1 12	26	090		31	034		1/18/2007	342	FM		342
1 12	26	091		26	094		1/18/2007	162	FM		162
1 12	26	092		26	093		1/18/2007	350	FM		350
1 12	26	093		26	094		1/18/2007	300	FM		300
1 12	26	094		26	095		1/18/2007	178	FM		178
1 12	26	095		26	096		1/18/2007	338	FM		338
1 12	26	096		26	137		7/7/2006	33	FM		33
1 12	26	096		27	170		1/18/2007	249	FM		249

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 12	26	097		26	098		1/18/2007	198	FM		198
1 12	26	097		26	137		1/18/2007	152	FM		152
1 12	26	099		26	100		1/19/2007	347	FM		347
1 12	26	100		26	101		1/19/2007	345	FM		345
1 12	26	101		26	102		1/19/2007	335	FM		335
1 12	26	137		26	185		1/18/2007	215	FM		215
1 12	26	185		26	186		1/18/2007	213	FM		213
1 12	27	141		27	142		1/18/2007	266	FM		266
1 12	27	141		32	002		1/18/2007	265	FM		265
1 12	27	142		27	143		1/18/2007	272	FM		272
1 12	27	143		27	160		1/18/2007	272	FM		272
1 12	27	144		27	145		1/17/2007	276	FM		276
1 12	27	144		32	005		1/17/2007	280	FM		280
1 12	27	145		27	147		1/17/2007	275	FM		275
1 12	27	146		27	147		1/17/2007	87	FM		87
1 12	27	147		27	150		1/17/2007	236	FM		236
1 12	27	148		27	149		1/17/2007	277	FM		277
1 12	27	148		32	004		1/17/2007	278	FM		278
1 12	27	149		27	150		1/17/2007	274	FM		274
1 12	27	150		27	153		1/17/2007	235	FM		235
1 12	27	151		27	152		1/17/2007	277	FM		277
1 12	27	151		32	003		1/17/2007	279	FM		279
1 12	27	152		27	153		1/17/2007	275	FM		275
1 12	27	153		27	156		1/17/2007	235	FM		235
1 12	27	154		27	155		1/17/2007	278	FM		278
1 12	27	155		27	156		1/17/2007	279	FM		279
1 12	27	156		27	159		1/17/2007	226	FM		226
1 12	27	157		27	158		1/17/2007	273	FM		273
1 12	27	158		27	159		1/17/2007	272	FM		272
1 12	27	159		27	160		1/18/2007	280	FM		280
1 12	27	160		27	170		1/18/2007	277	FM		277
1 12	27	161		27	166		1/18/2007	315	FM		315
1 12	27	162		27	163		1/17/2007	321	FM		321
1 12	27	162		32	006		1/17/2007	303	FM		303
1 12	27	163		27	164		1/17/2007	323	FM		323
1 12	27	164		27	165		1/17/2007	323	FM		323
1 12	27	165		27	166		1/18/2007	325	FM		325
1 12	27	166		27	167		1/18/2007	313	FM		313
1 12	27	167		27	168		1/18/2007	315	FM		315
1 12	27	168		27	169		1/18/2007	291	FM		291
1 12	27	169		27	170		1/18/2007	55	FM		55
1 12	32	001		32	002		1/17/2007	275	FM		275
1 13	26	102		26	150		1/23/2007	64	FM		64
1 13	26	103		26	104		1/19/2007	170	FM		170
1 13	26	104		26	105		1/19/2007	348	FM		348
1 13	26	105		26	108		1/19/2007	267	FM		267
1 13	26	106		26	107		1/19/2007	213	FM		213
1 13	26	107		26	108		1/19/2007	235	FM		235
1 13	26	108		26	110		1/22/2007	280	FM		280

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 13	26	109		26	110		1/22/2007	171	FM		171
1 13	26	110		26	113		1/22/2007	231	FM		231
1 13	26	111		26	112		1/22/2007	260	FM		260
1 13	26	112		26	113		1/22/2007	286	FM		286
1 13	26	113		26	116		1/22/2007	238	FM		238
1 13	26	114		26	115		1/22/2007	336	FM		336
1 13	26	115		26	116		1/22/2007	322	FM		322
1 13	26	116		26	119		1/22/2007	263	FM		263
1 13	26	117		26	118		1/22/2007	286	FM		286
1 13	26	118		26	119		1/22/2007	284	FM		284
1 13	26	119		26	123		1/22/2007	258	FM		258
1 13	26	120		26	121		1/22/2007	221	FM		221
1 13	26	121		26	122		1/22/2007	272	FM		272
1 13	26	122		26	123		1/11/2007	276	JM	12	276
1 13	26	122		26	123		1/22/2007	264	FM		264
1 13	26	123		26	124		1/22/2007	154	FM		154
1 13	26	124		26	125		1/22/2007	342	FM		342
1 13	26	124		26	138		1/23/2007	186	FM		186
1 13	26	125		26	126		1/22/2007	332	FM		332
1 13	26	126		26	129		1/23/2007	263	FM		263
1 13	26	127		26	128		1/23/2007	213	FM		213
1 13	26	128		26	129		1/23/2007	221	FM		221
1 13	26	129		26	145		1/23/2007	259	FM		259
1 13	26	130		26	131		1/22/2007	336	FM		336
1 13	26	131		26	133		1/22/2007	255	FM		255
1 13	26	132		26	133		1/22/2007	265	FM		265
1 13	26	133		26	184	C	1/22/2007	153	FM		153
1 13	26	133		26	134		1/23/2007	163	FM		163
1 13	26	134		26	136		1/23/2007	217	FM		217
1 13	26	135		26	136		1/23/2007	258	FM		258
1 13	26	136		26	141		1/23/2007	250	FM		250
1 13	26	138		26	141		1/23/2007	335	FM		335
1 13	26	139		26	140		1/23/2007	341	FM		341
1 13	26	140		26	141		1/23/2007	297	FM		297
1 13	26	141		26	143		1/23/2007	327	FM		327
1 13	26	142		26	143		1/23/2007	170	FM		170
1 13	26	143		26	144		1/23/2007	148	FM		148
1 13	26	144		26	145		1/23/2007	227	FM		227
1 13	26	145		26	146		1/23/2007	297	FM		297
1 13	26	145		26	183	C	1/23/2007	77	FM		77
1 13	26	146		26	149		1/23/2007	267	FM		267
1 13	26	147		26	148		1/23/2007	180	FM		180
1 13	26	148		26	149		1/23/2007	156	FM		156
1 13	26	149		26	150		1/23/2007	252	FM		252
1 14	26	150		26	153		1/26/2007	235	FM		235
1 14	26	152		26	153		1/26/2007	100	FM		100
1 14	26	153		26	154		1/26/2007	316	FM		316
1 14	26	154		26	155		1/26/2007	301	FM		301
1 14	26	155		26	166		1/26/2007	256	FM		256

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 14	26	156		26	157		1/26/2007	326	FM		326
1 14	26	157		26	158		1/26/2007	320	FM		320
1 14	26	158		26	159		1/26/2007	350	FM		350
1 14	26	159		26	160		1/26/2007	330	FM		330
1 14	26	160		26	161		1/26/2007	327	FM		327
1 14	26	161		26	162		1/26/2007	201	FM		201
1 14	26	162		26	163		1/26/2007	120	FM		120
1 14	26	163		26	164		1/26/2007	283	FM		283
1 14	26	164		26	165		1/26/2007	319	FM		319
1 14	26	165		26	166		1/26/2007	52	FM		52
1 14	26	166		26	167		1/26/2007	270	FM		270
1 14	26	167		26	174		1/26/2007	244	FM		244
1 15	26	151		26	189		3/2/2007	75	FM		75
1 15	26	151		26	190		3/2/2007	107	FM		107
1 15	26	168		26	169		3/2/2007	91	FM		91
1 15	26	168		26	187		3/2/2007	47	FM		47
1 15	26	169		26	170		3/2/2007	272	FM		272
1 15	26	170		26	171		3/5/2007	279	FM		279
1 15	26	171		27	022		3/5/2007	210	FM		210
1 15	26	187		26	188		3/2/2007	59	FM		59
1 15	26	188		26	189		3/2/2007	119	FM		119
1 15	27	001		27	005		2/22/2007	337	FM		337
1 15	27	002		27	003		2/22/2007	272	FM		272
1 15	27	003		27	004		2/22/2007	270	FM		270
1 15	27	004		27	005		2/22/2007	304	FM		304
1 15	27	005		27	009		2/22/2007	279	FM		279
1 15	27	006		27	007		2/22/2007	283	FM		283
1 15	27	007		27	008		2/22/2007	276	FM		276
1 15	27	008		27	009		2/22/2007	185	FM		185
1 15	27	009		27	013		2/22/2007	225	FM		225
1 15	27	010		27	011		2/22/2007	233	FM		233
1 15	27	010		27	177	D	2/22/2007	20	FM		20
1 15	27	011		27	012		2/22/2007	236	FM		236
1 15	27	012		27	013		2/22/2007	226	FM		226
1 15	27	013		27	014		2/22/2007	96	FM		96
1 15	27	014		27	015		2/22/2007	240	FM		240
1 15	27	015		27	017		2/22/2007	301	FM		301
1 15	27	016		27	017		2/22/2007	128	FM		128
1 15	27	017		27	018		2/26/2007	188	FM		188
1 15	27	018		27	021		2/26/2007	188	FM		188
1 15	27	019		27	020		2/26/2007	225	FM		225
1 15	27	020		27	021		2/26/2007	235	FM		235
1 15	27	021		27	023		3/5/2007	326	FM		326
1 15	27	022		27	023		3/5/2007	103	FM		103
1 15	27	023		27	034		3/5/2007	110	FM		110
1 15	27	024		27	025		2/26/2007	226	FM		226
1 15	27	025		27	027		2/26/2007	197	FM		197
1 15	27	026		27	027		2/26/2007	112	FM		112
1 15	27	027		27	028		2/26/2007	130	FM		130

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 15	27	028		27	032		2/26/2007	238	FM		238
1 15	27	029		27	030		2/26/2007	145	FM		145
1 15	27	030		27	031		2/26/2007	291	FM		291
1 15	27	031		27	032		2/26/2007	78	FM		78
1 15	27	032		27	033		2/26/2007	237	FM		237
1 15	27	033		27	034		3/5/2007	217	FM		217
1 15	27	034		27	035		3/5/2007	317	FM		317
1 15	27	035		27	040		3/5/2007	145	FM		145
1 15	27	036		27	037		2/26/2007	315	FM		315
1 15	27	037		27	039		2/26/2007	256	FM		256
1 15	27	038		27	039		2/26/2007	317	FM		317
1 15	27	039		27	040		3/5/2007	278	FM		278
1 15	27	040		27	041		3/5/2007	177	FM		177
1 16	20	010		20	011		3/6/2007	281	FM		281
1 16	20	010		21	112		3/6/2007	221	FM		221
1 16	20	010		26	181		3/6/2007	297	FM		297
1 16	21	106		21	108		3/1/2007	131	FM		131
1 16	21	107		21	108		3/1/2007	245	FM		245
1 16	21	107		27	044		3/1/2007	240	FM		240
1 16	21	108		21	109		3/1/2007	205	FM		205
1 16	21	109		21	110		3/1/2007	322	FM		322
1 16	21	110		21	113		3/5/2007	329	FM		329
1 16	21	111		21	113		3/5/2007	313	FM		313
1 16	21	111		27	041		3/5/2007	318	FM		318
1 16	21	112		21	113		3/5/2007	213	FM		213
1 16	21	113		21	115		3/5/2007	266	FM		266
1 16	21	114		21	115		3/5/2007	201	FM		201
1 16	21	115		21	116		3/6/2007	65	FM		65
1 16	21	116		21	119		3/6/2007	182	FM		182
1 16	21	117		21	118		3/6/2007	64	FM		64
1 16	21	118		21	119		3/6/2007	236	FM		236
1 16	21	119		21	120		3/6/2007	130	FM		130
1 16	26	178		26	179		3/5/2007	300	FM		300
1 16	26	179		26	180		3/5/2007	297	FM		297
1 16	26	180		26	181		3/5/2007	297	FM		297
1 16	27	042		27	043		3/1/2007	320	FM		320
1 16	27	043		27	044		3/1/2007	248	FM		248
1 17	27	053		27	054		1/29/2007	179	FM		179
1 17	27	054		27	055		1/29/2007	249	FM		249
1 17	27	054		28	007		1/29/2007	300	FM		300
1 17	27	055		27	075		2/12/2007	237	FM		237
1 17	27	056		27	057		5/2/2007	265	FM	3	1060
1 17	27	057		27	058		5/7/2007	302	FM	3	1208
1 17	27	058		27	059		5/7/2007	109	FM	3	436
1 17	27	059		27	060		5/7/2007	285	FM	3	1140
1 17	27	060		27	061		2/12/2007	291	FM		291
1 17	27	061		27	062		2/12/2007	282	FM		282
1 17	27	062		27	063		2/12/2007	188	FM		188
1 17	27	063		27	172		2/12/2007	138	FM		138

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 17	27	063		27	174		2/12/2007	380	FM		380
1 17	27	065		27	067		1/24/2007	265	FM		265
1 17	27	065		28	026		1/24/2007	239	FM		239
1 17	27	066		27	067		1/24/2007	190	FM		190
1 17	27	067		27	068		1/24/2007	80	FM		80
1 17	27	068		27	069		1/24/2007	50	FM		50
1 17	27	069		27	070		2/12/2007	396	FM		396
1 17	27	070		27	075		2/12/2007	115	FM		115
1 17	27	070		27	172		2/12/2007	138	FM		138
1 17	27	071		27	173		2/12/2007	70	FM		70
1 17	27	072		27	073		2/12/2007	285	FM		285
1 17	27	072		27	173		2/12/2007	219	FM		219
1 17	27	073		27	074		2/12/2007	283	FM		283
1 17	27	074		27	075		2/12/2007	335	FM		335
1 17	27	075		27	076		2/12/2007	155	FM		155
1 17	27	076		27	077		2/12/2007	345	FM		345
1 17	27	173		27	174		2/12/2007	70	FM		70
1 17	27	174		27	175	C	2/12/2007	137	FM		137
1 17	28	001		28	004		1/26/2007	87	FM		87
1 17	28	002		28	003		1/26/2007	247	FM		247
1 17	28	003		28	004		1/26/2007	309	FM		309
1 17	28	004		28	007		1/29/2007	189	FM		189
1 17	28	005		28	006		9/21/2006	320	JM	12	320
1 17	28	005		28	006		1/26/2007	292	FM		292
1 17	28	006		28	007		1/29/2007	320	FM		320
1 17	28	008		28	009		1/24/2007	158	FM		158
1 17	28	009		28	010		1/24/2007	167	FM		167
1 17	28	009		28	066		1/24/2007	59	FM		59
1 17	28	010		28	011		1/24/2007	228	FM		228
1 17	28	011		28	017		1/24/2007	229	FM		229
1 17	28	012		28	013		1/24/2007	284	FM		284
1 17	28	013		28	014		1/24/2007	314	FM		314
1 17	28	014		28	015		1/24/2007	167	FM		167
1 17	28	015		28	016		1/24/2007	289	FM		289
1 17	28	015		28	067	D	1/24/2007	118	FM		118
1 17	28	016		28	017		1/24/2007	291	FM		291
1 17	28	017		28	018		1/24/2007	145	FM		145
1 17	28	018		28	019		1/24/2007	292	FM		292
1 17	28	019		28	020		1/24/2007	250	FM		250
1 17	28	020		28	026		1/24/2007	163	FM		163
1 17	28	021		28	025		1/24/2007	275	FM		275
1 17	28	022		28	023		1/24/2007	268	FM		268
1 17	28	023		28	024		1/24/2007	261	FM		261
1 17	28	024		28	025		1/24/2007	85	FM		85
1 17	28	025		28	026		1/24/2007	260	FM		260
1 18	21	090		21	092		2/14/2007	317	FM		317
1 18	21	090		27	089		2/14/2007	262	FM		262
1 18	21	091		21	092		2/14/2007	192	FM		192
1 18	21	092		21	093		2/14/2007	330	FMA		330

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 18	21	093		21	094	M	2/14/2007	341	FM		341
1 18	27	045		27	046		2/12/2007	274	FM		274
1 18	27	045		27	115		2/12/2007	313	FM		313
1 18	27	046		27	047		2/12/2007	257	FM		257
1 18	27	047		27	048		2/12/2007	235	FM		235
1 18	27	048		27	052		2/14/2007	208	FM		208
1 18	27	052		27	078		2/14/2007	195	FM		195
1 18	27	077		27	078		2/14/2007	348	FM		348
1 18	27	078		27	079		2/14/2007	305	FM		305
1 18	27	079		27	080		2/14/2007	290	FM		290
1 18	27	080		27	082		2/14/2007	158	FM		158
1 18	27	081		27	082		2/14/2007	307	FM		307
1 18	27	082		27	083		2/14/2007	83	FM		83
1 18	27	083		27	085		2/14/2007	254	FM		254
1 18	27	084		27	085		2/14/2007	285	FM		285
1 18	27	085		27	086		2/14/2007	314	FM		314
1 18	27	086		27	087		2/14/2007	318	FM		318
1 18	27	087		27	089		2/14/2007	55	FM		55
1 18	27	088		27	089		2/14/2007	244	FM		244
1 19	21	060		21	143		2/14/2007	63	FM		63
1 19	21	094	M	21	096		2/14/2007	335	FM		335
1 19	21	095		21	096		2/14/2007	265	FM		265
1 19	21	095		21	143		2/14/2007	197	FM		197
1 19	21	096		21	097		3/1/2007	222	FM		222
1 19	21	097		21	103		3/1/2007	179	FM		179
1 19	21	098		21	100		3/1/2007	127	FM		127
1 19	21	099		21	100		3/1/2007	165	FM		165
1 19	21	100		21	102		3/1/2007	263	FM		263
1 19	21	101		21	102		3/1/2007	167	FM		167
1 19	21	102		21	103		3/1/2007	264	FM		264
1 19	21	103		21	104		3/2/2007	292	FM		292
1 19	21	104		21	105		3/2/2007	323	FM		323
1 20	20	016		20	017		3/6/2007	287	FM		287
1 20	20	017		20	018		3/6/2007	267	FM		267
1 20	20	018		20	020		3/6/2007	263	FM		263
1 20	20	019	P	20	020	P	5/9/2007	364	FM	3	1456
1 20	20	020		20	021		3/6/2007	105	FM		105
1 20	20	020		21	122		3/6/2007	222	FM		222
1 20	21	105		21	124		3/6/2007	326	FM		326
1 20	21	120	M	21	124		3/6/2007	300	FM		300
1 20	21	121		21	123		3/6/2007	291	FM		291
1 20	21	122		21	123		3/6/2007	46	FM		46
1 20	21	123		21	124		3/6/2007	261	FM		261
1 20	21	124		21	125		3/6/2007	280	FM		280
1 20	21	125		21	126		3/6/2007	280	FM		280
1 20	21	126		21	127		3/6/2007	280	FM		280
1 20	21	127		21	133		3/7/2007	275	FM		275
1 21	20	024		20	033		3/7/2007	183	FM		183
1 21	20	032		20	034		7/6/2006	202	FM		202

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 21	20	032		21	134		3/7/2007	323	FM		323
1 21	20	033		20	034		3/7/2007	250	FM		250
1 21	20	034		20	035	M	3/7/2007	120	FM		120
1 21	20	035	M	20	148		3/7/2007	27	FM		27
1 21	20	036		20	148		3/8/2007	300	FM		300
1 21	21	128		21	129		3/2/2007	233	FM		233
1 21	21	129		21	130	P	3/2/2007	235	FM		235
1 21	21	130	P	21	131	P	5/8/2007	162	FM	3	648
1 21	21	131	P	21	132		5/8/2007	299	FM	3	1196
1 21	21	132	P	21	141	P	5/8/2007	116	FM	3	464
1 21	21	133		21	134		3/7/2007	324	FM		324
1 21	21	133	P	21	141	P	5/8/2007	190	FM	3	760
1 23	21	060		21	061		2/20/2007	300	FM		300
1 23	21	061		21	070		2/20/2007	305	FM		305
1 23	21	062		21	063		2/15/2007	279	FM		279
1 23	21	062		22	080		2/15/2007	282	FM		282
1 23	21	063		21	064		2/15/2007	232	FM		232
1 23	21	064		21	066		2/15/2007	231	FM		231
1 23	21	065		21	066		2/15/2007	212	FM		212
1 23	21	065		22	079		2/15/2007	179	FM		179
1 23	21	066		21	067		2/15/2007	257	FM		257
1 23	21	067		21	068		2/15/2007	215	FM		215
1 23	21	068		21	140		2/15/2007	230	FM		230
1 23	21	069		21	070		2/15/2007	285	FM		285
1 23	21	069		21	140		2/15/2007	125	FM		125
1 23	21	070		21	071		2/20/2007	303	FM		303
1 23	21	071		21	072		2/20/2007	300	FM		300
1 23	21	072		21	083		2/20/2007	292	FM		292
1 23	21	089		22	077		2/15/2007	279	FM		279
1 23	22	054		22	055		2/15/2007	236	FM		236
1 23	22	055		22	056		2/15/2007	234	FM		234
1 23	22	056		22	057		2/15/2007	118	FM		118
1 23	22	057		22	060		2/15/2007	309	FM		309
1 23	22	057		22	093	D	2/15/2007	190	FM		190
1 23	22	058		22	059		2/15/2007	348	FM		348
1 23	22	059		22	060		2/15/2007	265	FM		265
1 23	22	060		22	062		2/15/2007	192	FM		192
1 23	22	061		22	062		2/15/2007	350	FM		350
1 23	22	062		22	069		2/15/2007	99	FM		99
1 23	22	063		22	064		2/15/2007	200	FM		200
1 23	22	064		22	065		2/15/2007	276	FM		276
1 23	22	065		22	066		2/15/2007	45	FM		45
1 23	22	066		22	067		2/15/2007	272	FM		272
1 23	22	067		22	068		2/15/2007	230	FM		230
1 23	22	068		22	069		2/15/2007	347	FM		347
1 23	22	069		22	070		2/15/2007	303	FM		303
1 23	22	070		22	071		2/15/2007	300	FM		300
1 23	22	071		22	072		2/15/2007	171	FM		171
1 23	22	072		22	073		2/15/2007	193	FM		193

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 23	22	073		22	074		2/15/2007	276	FM		276
1 23	22	074		22	075	S	2/15/2007	144	FM		144
1 23	22	075	S	22	076	S	5/1/2007	40	FM	3	160
1 23	22	076	S	22	078		2/15/2007	63	FM		63
1 23	22	078		22	079		2/15/2007	37	FM		37
1 23	22	080		22	095	D	2/15/2007	45	FM		45
1 24	21	073		21	074		2/20/2007	313	FM		313
1 24	21	074		21	075		2/20/2007	275	FM		275
1 24	21	075		21	076		2/21/2007	214	FM		214
1 24	21	076		21	079		2/21/2007	250	FM		250
1 24	21	076		22	053		2/21/2007	262	FM		262
1 24	21	077		21	078		2/21/2007	348	FM		348
1 24	21	078		21	079		2/21/2007	346	FM		346
1 24	21	079		21	080		2/21/2007	167	FM		167
1 24	21	080		21	081		2/21/2007	260	FM		260
1 24	21	081	P	21	082	P	5/8/2007	348	FM	3	1392
1 24	21	082		21	083		2/21/2007	300	FM		300
1 24	21	083		21	084		2/21/2007	253	FM		253
1 24	21	084		21	085		2/21/2007	252	FM		252
1 24	21	085		21	086		2/21/2007	310	FM		310
1 24	22	010		22	047		2/15/2007	40	FM		40
1 24	22	010		22	048		2/15/2007	110	FM		110
1 24	22	046		22	047		2/15/2007	275	FM		275
1 24	22	048		22	049		2/15/2007	272	FM		272
1 24	22	049		22	050		2/21/2007	234	FM		234
1 24	22	050		22	051		2/21/2007	300	FM		300
1 24	22	051		22	052		2/21/2007	255	FM		255
1 24	22	052		22	053		2/21/2007	232	FM		232
1 25	20	039		21	088		2/21/2007	317	FM		317
1 25	21	086		21	087		2/21/2007	289	FM		289
1 25	21	087		21	135		2/21/2007	230	FM		230
1 25	21	088		21	136		2/21/2007	22	FM		22
1 25	21	135	S	21	136	S	5/1/2007	46	FM	3	184
1 26	20	038		20	042		3/8/2007	287	FM		287
1 26	20	039	M	20	040		2/21/2007	300	FM		300
1 26	20	040		20	041		2/21/2007	300	FM		300
1 26	20	041		20	042		2/21/2007	300	FM		300
1 26	20	042		20	052		3/8/2007	75	FM		75
1 27	20	011		20	154		3/6/2007	118	FM		118
1 27	20	012		20	154		3/6/2007	162	FM		162
1 27	20	012		20	013		3/8/2007	284	FM		284
1 27	20	013		20	014		3/8/2007	337	FM		337
1 27	20	013		26	177		3/8/2007	338	FM		338
1 27	20	014		20	015		3/8/2007	333	FM		333
1 27	20	015		20	028		3/8/2007	334	FM		334
1 27	20	021		20	026		3/7/2007	211	FM		211
1 27	20	022		20	023		3/7/2007	225	FM		225
1 27	20	023		20	026		3/7/2007	305	FM		305
1 27	20	025		20	026		3/7/2007	298	FM		298

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
1 27	20	025		20	149		3/7/2007	182	FM		182
1 27	20	026		20	027		3/7/2007	114	FM		114
1 27	20	027		20	028		3/8/2007	325	FM		325
1 27	20	028		20	029		3/8/2007	273	FM		273
1 27	20	029		20	030		3/8/2007	286	FM		286
1 27	20	030		20	031		3/8/2007	281	FM		281
1 27	20	154		20	155		3/6/2007	266	FM		266
1 27	26	071		26	172		3/5/2007	250	FM		250
1 27	26	071		26	173		3/5/2007	36	FM		36
1 27	26	171		26	172		3/5/2007	282	FM		282
1 27	26	173		26	174		3/7/2007	289	FM		289
1 27	26	174		26	175		3/7/2007	239	FM		239
1 27	26	175		26	176		3/7/2007	339	FM		339
1 27	26	176		26	177		3/7/2007	350	FM		350
1 28	20	031		20	036		3/8/2007	282	FM		282
1 28	20	036		20	037		3/8/2007	283	FM		283
1 28	20	037		20	038		3/8/2007	287	FM		287
1 29	20	043		20	044		3/8/2007	333	FM		333
1 29	20	043		26	089		3/8/2007	372	FM		372
1 29	20	044		20	045		3/8/2007	332	FM		332
1 29	20	045		20	046		3/8/2007	331	FM		331
1 29	20	046		20	047		3/8/2007	335	FM		335
1 29	20	047		20	048		3/8/2007	323	FM		323
1 29	20	048		20	049		3/8/2007	328	FM		328
1 29	20	049		20	050		3/8/2007	330	FM		330
1 29	20	050		20	051		2/7/2007	322	JM	12	322
1 29	20	050		20	051		3/8/2007	329	FM		329
1 29	20	051		20	052		3/8/2007	331	FM		331
1 29	26	079		26	080		12/7/2006	100	FM		100
1 29	26	080		26	081		12/7/2006	262	FM		262
1 29	26	081		26	082		12/7/2006	359	FM		359
1 29	26	082		26	089		12/7/2006	201	FM		201
1 29	26	083		26	084		12/7/2006	296	FM		296
1 29	26	084		26	085		12/7/2006	234	FM		234
1 29	26	085		26	086		12/7/2006	168	FM		168
1 29	26	086		26	087		12/7/2006	170	FM		170
1 29	26	087		26	088		12/7/2006	288	FM		288
1 29	26	088		26	089		12/7/2006	318	FM		318
2 01	30	021		30	022		10/30/2006	185	FM		185
2 01	30	022		31	002		10/30/2006	326	FM		326
2 01	31	001		31	002		10/30/2006	190	FM		190
2 01	31	002		31	016		10/30/2006	211	FM		211
2 01	31	003		31	004		10/25/2006	338	FM		338
2 01	31	003		35	039		10/25/2006	250	FM		250
2 01	31	003		35	046		10/25/2006	78	FM		78
2 01	31	004		31	006		10/26/2006	151	FM		151
2 01	31	005		31	006		10/26/2006	294	FM		294
2 01	31	006		31	007		10/26/2006	172	FM		172
2 01	31	007		31	009		10/26/2006	175	FM		175

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
2 01	31	008		31	009		10/26/2006	300	FM		300
2 01	31	009		31	010		10/26/2006	125	FM		125
2 01	31	010		31	037		10/26/2006	140	FM		140
2 01	31	011		31	015		10/26/2006	230	FM		230
2 01	31	011		31	037		10/26/2006	215	FM		215
2 01	31	012		31	014		10/25/2006	82	FM		82
2 01	31	012		31	042		10/25/2006	110	FM		110
2 01	31	013		31	014		10/25/2006	203	FM		203
2 01	31	014		31	015		10/26/2006	200	FM		200
2 01	31	015		31	016		10/30/2006	205	FM		205
2 01	31	016		31	017		10/30/2006	282	FM		282
2 01	31	016		31	035		10/30/2006	300	FM		300
2 01	31	035		31	036		10/30/2006	297	FM		297
2 01	31	036		31	040		10/30/2006	200	FM		200
2 01	31	037		31	038		10/26/2006	190	FM		190
2 01	31	040		31	042		10/30/2006	407	FM		407
2 01	31	041		31	043		10/30/2006	164	FM		164
2 01	31	041		35	047		10/30/2006	31041	FM		31041
2 01	31	042		31	043		10/30/2006	114	FM		114
2 01	31	043		31	044		10/25/2006	173	FM		173
2 01	31	044		31	048		10/25/2006	165	FM		165
2 01	31	045		31	046		10/25/2006	300	FM		300
2 01	31	046		31	047		10/25/2006	350	FM		350
2 01	31	048		31	049		10/25/2006	276	FM		276
2 01	34	001		35	001		10/23/2006	315	FM		315
2 01	34	001		35	002		10/23/2006	250	FM		250
2 01	34	002		34	003		10/27/2006	300	FM		300
2 01	34	002		35	047		10/30/2006	290	FM		290
2 01	34	003		34	004		10/27/2006	300	FM		300
2 01	34	004		34	023		10/27/2006	300	FM		300
2 01	34	005		34	023		10/27/2006	300	FM		300
2 01	34	005		34	006		10/27/2006	72	FM		72
2 01	34	006		34	007		10/27/2006	70	FM		70
2 01	34	007		34	008		10/27/2006	125	FM		125
2 01	34	008		34	009		10/27/2006	181	FM		181
2 01	34	009		34	010		10/27/2006	133	FM		133
2 01	34	010		34	011		10/27/2006	160	FM		160
2 01	34	011		34	012		10/27/2006	161	FM		161
2 01	34	012		34	013		10/26/2006	161	FM		161
2 01	34	013		34	014		10/26/2006	86	FM		86
2 01	34	014		34	015		10/26/2006	54	FM		54
2 01	34	015		34	016		10/26/2006	81	FM		81
2 01	34	015		34	020		10/26/2006	158	FM		158
2 01	34	016		34	017		10/26/2006	215	FM		215
2 01	34	017		34	018		10/26/2006	155	FM		155
2 01	34	018		34	019		10/26/2006	147	FM		147
2 01	34	020		34	021		10/26/2006	207	FM		207
2 01	34	021		34	022		10/26/2006	156	FM		156
2 01	35	002		35	004		10/23/2006	275	FM		275

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
2 01	35	003		35	004		10/23/2006	176	FM		176
2 01	35	004		35	005		10/24/2006	230	FM		230
2 01	35	005		35	012		10/24/2006	350	FM		350
2 01	35	006		35	007		10/24/2006	352	FM		352
2 01	35	007		35	010		10/24/2006	345	FM		345
2 01	35	008		35	009		10/24/2006	317	FM		317
2 01	35	009		35	010		10/24/2006	300	FM		300
2 01	35	010		35	011		10/24/2006	174	FM		174
2 01	35	011		35	012		10/24/2006	222	FM		222
2 01	35	012		35	013		10/24/2006	323	FM		323
2 01	35	013		35	015		10/24/2006	210	FM		210
2 01	35	014		35	015		10/24/2006	310	FM		310
2 01	35	015		35	016		10/24/2006	124	FM		124
2 01	35	016		35	017		10/25/2006	320	FM		320
2 01	35	017		35	018		10/25/2006	320	FM		320
2 01	35	018		35	036		10/25/2006	320	FM		320
2 01	35	019		35	020		10/24/2006	230	FM		230
2 01	35	020		35	022		10/24/2006	235	FM		235
2 01	35	021		35	022		10/24/2006	340	FM		340
2 01	35	022		35	023		10/25/2006	225	FM		225
2 01	35	023		35	031		10/25/2006	125	FM		125
2 01	35	024		35	025		10/24/2006	297	FM		297
2 01	35	025		35	026		10/24/2006	303	FM		303
2 01	35	026		35	027		10/24/2006	187	FM		187
2 01	35	027		35	028		10/24/2006	300	FM		300
2 01	35	028		35	029		10/25/2006	225	FM		225
2 01	35	029		35	030		10/25/2006	203	FM		203
2 01	35	030		35	031		10/25/2006	159	FM		159
2 01	35	031		35	034		10/25/2006	110	FM		110
2 01	35	032		35	033		10/24/2006	350	FM		350
2 01	35	033		35	034		10/25/2006	340	FM		340
2 01	35	034		35	035		10/25/2006	270	FM		270
2 01	35	035		35	036		10/25/2006	275	FM		275
2 01	35	035		35	040		10/25/2006	40	FM		40
2 01	35	036		35	037		10/25/2006	125	FM		125
2 01	35	039		35	043		10/25/2006	125	FM		125
2 01	35	040		35	041		10/25/2006	118	FM		118
2 01	35	041		35	042		10/25/2006	349	FM		349
2 01	35	044		35	045	C	10/25/2006	162	FM		162
2 02	31	017		31	018		10/30/2006	217	FM		217
2 02	31	019		31	020		10/30/2006	265	FM		265
2 02	31	019		31	050		10/30/2006	142	FM		142
2 02	31	020		31	021		10/30/2006	235	FM		235
2 02	31	021		31	022		10/30/2006	295	FM		295
2 02	31	022		31	023		10/30/2006	352	FM		352
2 02	31	023		31	024		11/7/2006	352	FM		352
2 02	31	024		31	025		11/8/2006	350	FM		350
2 03	25	170		26	007		10/13/2006	175	JM	12	175
2 03	25	170		26	007		11/27/2006	180	FM		180

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
2 03	25	171		26	005		11/27/2006	315	FM		315
2 03	25	172		25	173		11/27/2006	119	FM		119
2 03	25	172		30	023		11/27/2006	350	FM		350
2 03	25	173		25	176		11/27/2006	213	FM		213
2 03	25	174		25	175		11/27/2006	200	FM		200
2 03	25	175		25	176		11/27/2006	200	FM		200
2 03	25	176		25	177		11/27/2006	125	FM		125
2 03	25	177		25	178		11/27/2006	188	FM		188
2 03	25	179		25	180		11/13/2006	173	FM		173
2 03	25	180		25	181		11/13/2006	197	FM		197
2 03	25	181		25	182		11/13/2006	230	FM		230
2 03	25	182		26	001		11/13/2006	202	FM		202
2 03	25	182		30	012		11/13/2006	360	FM		360
2 03	26	001		26	002		11/28/2006	300	FM		300
2 03	26	002		26	004		11/28/2006	260	FM		260
2 03	26	002		31	030		11/28/2006	230	FM		230
2 03	26	003		26	004		11/28/2006	249	FM		249
2 03	26	004		26	006		11/28/2006	300	FM		300
2 03	26	005		26	006		11/28/2006	300	FM		300
2 03	26	006		26	008		11/28/2006	290	FM		290
2 03	26	007		26	008		11/28/2006	300	FM		300
2 03	26	008		26	009		11/28/2006	200	FM		200
2 03	26	009		26	034		12/1/2006	200	FM		200
2 03	30	008		30	009		11/8/2006	323	FM		323
2 03	30	009		30	010		11/8/2006	251	FM		251
2 03	30	010		30	012		11/13/2006	236	FM		236
2 03	30	011		30	012		11/8/2006	240	FM		240
2 03	30	013		30	014		11/7/2006	323	FM		323
2 03	30	013		30	024	C	11/7/2006	50	FM		50
2 03	30	014		30	015		11/7/2006	295	FM		295
2 03	30	015		30	016		11/7/2006	353	FM		353
2 03	30	016		30	017		11/7/2006	325	FM		325
2 03	30	017		30	018		11/8/2006	303	FM		303
2 03	30	018		30	019		11/8/2006	269	FM		269
2 03	30	019		30	020		11/8/2006	255	FM		255
2 03	30	020		31	027		11/8/2006	255	FM		255
2 03	31	025		31	026		11/8/2006	441	FM		441
2 03	31	026		31	027		11/8/2006	126	FM		126
2 03	31	027		31	028		11/8/2006	151	FM		151
2 03	31	028		31	029		11/8/2006	335	FM		335
2 03	31	029		31	030		11/8/2006	228	FM		228
2 04	26	010		26	011		11/29/2006	253	FM		253
2 04	26	010		31	032		11/29/2006	267	FM		267
2 04	26	011		26	012		11/29/2006	259	FM		259
2 04	26	012		26	013		11/29/2006	236	FM		236
2 04	26	013		26	014		11/29/2006	86	FN		86
2 04	26	014		26	015		11/29/2006	185	FM		185
2 04	26	015		26	016		11/29/2006	177	FM		177
2 04	26	016		26	019		11/29/2006	242	FM		242

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
2 04	26	017		26	018		11/29/2006	184	FM		184
2 04	26	019		26	026		12/13/2006	273	FM		273
2 04	26	020		26	021		11/28/2006	178	FM		178
2 04	26	021		26	022		11/28/2006	138	FM		138
2 04	26	022		26	023		11/28/2006	306	FM		306
2 04	26	023		26	024		11/28/2006	300	FM		300
2 04	26	024		26	025		11/28/2006	300	FM		300
2 04	26	025		26	026		11/29/2006	273	FM		273
2 04	26	026		26	029		11/30/2006	238	FM		238
2 04	26	027		26	028		11/29/2006	164	FM		164
2 04	26	028		26	029		11/30/2006	226	FM		226
2 04	26	029		26	033		11/30/2006	20	FM		20
2 04	26	030		26	031		11/28/2006	245	FM		245
2 04	26	031		26	032		11/28/2006	300	FM		300
2 04	26	032		26	033		11/30/2006	287	FM		287
2 04	26	033		26	034		12/1/2006	303	FM		303
2 04	26	034		26	035		12/1/2006	214	FM		214
2 04	31	031		31	032		11/29/2006	300	FM		300
2 04	31	031		31	052		11/29/2006	69	FM		69
2 04	31	053		31	054			71	FM		71
2 04	31	054		31	055			54	FM		54
2 04	31	055		31	056			185	FM		185
2 04	31	056		31	057			250	FM		250
2 04	31	057		31	058			286	FM		286
2 04	31	058		31	059			232	FM		232
2 04	31	061		31	062	D		10	FM		10
2 05	25	158		25	159		12/1/2006	233	FM		233
2 05	25	159		25	160		12/1/2006	305	FM		305
2 05	25	160		26	040		12/1/2006	300	FM		300
2 05	25	161		25	168		12/1/2006	130	FM		130
2 05	25	162		25	163		11/30/2006	271	FM		271
2 05	25	163		25	166		11/30/2006	212	FM		212
2 05	25	164		25	166		11/30/2006	100	FM		100
2 05	25	165		25	166		11/30/2006	325	FM		325
2 05	25	166		25	167		11/30/2006	217	FM		217
2 05	25	167		25	168		12/1/2006	208	FM		208
2 05	25	168		25	169		12/1/2006	330	FM		330
2 05	25	169		26	038		12/1/2006	287	FM		287
2 05	26	035		26	036		12/1/2006	230	FM		230
2 05	26	036		26	037		12/1/2006	202	FM		202
2 05	26	037		26	039		12/1/2006	250	FM		250
2 05	26	038	P	26	039	P	5/2/2007	290	FM	3	1160
2 05	26	040		26	041		12/1/2006	290	FM		290
2 05	26	041		26	043		12/5/2006	200	FM		200
2 05	26	043		26	044		12/5/2006	338	FM		338
2 05	26	044		26	045		12/5/2006	338	FM		338
2 05	26	047		26	046		12/5/2006	10	FM		10
2 06	25	145		25	146		11/30/2006	245	FM		245
2 06	25	145		25	146		1/11/2007	256	JM	12	256

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
2 06	25	146		25	147		11/30/2006	246	FM		246
2 06	25	148		25	150		11/30/2006	234	FM		234
2 06	25	149		25	150		11/30/2006	299	FM		299
2 06	25	149		26	182		11/30/2006	259	FM		259
2 06	25	150		25	151		11/30/2006	339	FM		339
2 06	25	151		25	152	S	11/30/2006	307	FM		307
2 06	25	152	S	25	153	S	5/1/2007	45	FM	3	180
2 06	25	153	S	25	154		11/30/2006	328	FM		328
2 06	25	154		25	156		12/5/2006	332	FM		332
2 06	25	155		25	156		12/5/2006	136	FM		136
2 06	25	156		25	157		12/5/2006	340	FM		340
2 06	26	049		26	050		12/5/2006	296	FM		296
2 06	26	050		26	051		12/5/2006	285	FM		285
2 06	26	051		26	052		12/5/2006	312	FM		312
2 06	26	053		26	054		12/5/2006	300	FM		300
2 06	26	054		26	055		12/5/2006	363	FM		363
2 06	26	056		26	055		12/5/2006	248	FM		248
2 06	26	056		26	057		12/5/2006	340	FM		340
2 06	26	059		26	060	M	12/8/2006	363	FM		363
2 06	26	060		26	069	M	12/8/2006	319	FM		319
2 07	19	167		19	168		12/11/2006	211	FM		211
2 07	19	168		20	074		12/11/2006	250	FM		250
2 07	19	168		20	074		5/1/2007	270	JM	12	270
2 07	20	068		20	069		12/8/2006	280	FM		280
2 07	20	069		26	077		12/8/2006	194	FM		194
2 07	20	070		20	069		12/8/2006	258	FM		258
2 07	20	075		20	076		12/11/2006	284	FM		284
2 07	25	139		26	070		12/8/2006	345	FM		345
2 07	25	140	P	25	141	P	5/2/2007	203	FM	3	812
2 07	25	141	P	25	144	P	5/2/2007	178	FM	3	712
2 07	25	144	P	26	068	P	5/2/2007	323	FM	3	1292
2 07	26	061		26	062		12/7/2006	323	FM		323
2 07	26	062		26	063		12/7/2006	327	FM		327
2 07	26	063		26	064		12/7/2006	323	FM		323
2 07	26	064		26	065		12/7/2006	323	FM		323
2 07	26	065	P	26	069	P	5/2/2007	333	FM	3	1332
2 07	26	068	P	26	069	P	5/2/2007	180	FM	3	720
2 07	26	069		26	070		12/8/2006	287	FM		287
2 07	26	070		26	077		12/8/2006	350	FM		350
2 07	26	072		26	073		12/7/2006	322	FM		322
2 07	26	073		26	074		12/7/2006	318	FM		318
2 07	26	074		26	075		12/7/2006	316	FM		316
2 07	26	075		26	076		12/7/2006	325	FM		325
2 07	26	075		26	076		3/4/2007	330	JM	6	660
2 07	26	076		26	077		12/8/2006	320	FM		320
2 08	19	169		25	135		12/11/2006	192	FM		192
2 08	19	170	S	19	171	S	5/1/2007	11	FM	3	44
2 08	19	171	S	19	172	S	5/1/2007	35	FM	3	140
2 08	19	172	S	19	173	S	5/1/2007	9	FM	3	36

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
2 08	19	174		19	175		12/11/2006	172	FM		172
2 08	19	175		19	170	S	12/11/2006	30	FM		30
2 08	19	175		19	176		12/11/2006	351	FM		351
2 08	19	176	S	19	175		12/11/2006	117	FM		117
2 08	19	176		19	177		12/11/2006	193	FM		193
2 08	19	177		19	183		12/12/2006	350	FM		350
2 08	19	177		19	183		5/1/2007	350	JM	12	350
2 08	19	180		19	179		12/11/2006	150	FM		150
2 08	19	180		19	181		12/11/2006	79	FM		79
2 08	19	181		20	096		12/11/2006	260	FM		260
2 08	19	181		19	182		12/12/2006	296	FM		296
2 08	19	182		19	183		12/12/2006	98	FM		98
2 08	19	184		19	185		12/12/2006	240	FM		240
2 08	19	185		19	184		12/12/2006	130	FM		130
2 08	19	185		19	186		12/12/2006	238	FM		238
2 08	19	186		19	187		12/12/2006	200	FM		200
2 08	19	187		19	189		12/12/2006	7	FM		7
2 08	19	188		19	189		12/12/2006	317	FM		317
2 08	19	189		20	087		12/12/2006	241	FM		241
2 08	20	064		20	066		6/11/2007	107	FM		107
2 08	20	076		20	077		12/11/2006	259	FM		259
2 08	20	077		20	085		12/14/2006	301	FM		301
2 08	20	078		20	079		12/12/2006	275	FM		275
2 08	20	079		20	080		12/12/2006	261	FM		261
2 08	20	080		20	081		12/12/2006	51	FM		51
2 08	20	083		20	082		12/12/2006	267	FM		267
2 08	20	083		20	084		12/12/2006	281	FM		281
2 08	20	084		20	083		12/12/2006	276	FM		276
2 08	20	084		20	085		12/12/2006	300	FM		300
2 08	20	085		20	077		12/14/2006	249	FM		249
2 08	20	086		20	088		12/14/2006	226	FM		226
2 08	20	087		19	089		12/14/2006	254	FM		254
2 08	20	087		20	088		12/14/2006	221	FM		221
2 08	20	088		20	089		12/14/2006	298	FM		298
2 08	20	089		20	090		12/14/2006	308	FM		308
2 08	20	090		20	091		12/14/2006	244	FM		244
2 08	20	094		20	093		12/14/2006	248	FM		248
2 08	20	094		20	094		12/14/2006	240	FM		240
2 08	20	094		20	095		12/14/2006	292	FM		292
2 08	25	133		25	134		12/11/2006	119	FM		119
2 08	25	134		25	135		12/11/2006	305	FM		305
2 09	20	052		20	053		6/11/2007	236	FM		236
2 10	20	053		20	054		6/11/2007	228	FM		228
2 10	20	054		20	153		12/18/2006	14	FM		14
2 10	20	054		20	055	M	6/11/2007	238	FM		238
2 10	20	055	M	20	146		6/11/2007	98	FM		98
2 11	20	060		20	061		12/15/2006	414	FM		414
2 11	20	061		20	062		12/15/2006	185	FM		185
2 11	20	062		20	063		12/15/2006	323	FM		323

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
2 11	20	063		20	064		6/11/2007	224	FM		224
2 11	20	063		20	146		6/11/2007	236	FM		236
2 11	20	066		20	067		6/11/2007	139	FM		139
2 11	20	067		20	095		6/12/2007	247	FM		247
2 11	20	150		20	151		12/18/2006	512	FM		512
2 11	20	151		20	152		12/18/2006	400	FM		400
2 11	20	152		20	153		12/18/2006	419	FM		419
3E02	24	001		24	002		12/21/2006	137	FM		137
3E02	24	002		24	003		12/21/2006	253	FM		253
3E02	24	003		24	004		12/21/2006	307	FM		307
3E02	24	004		24	005		12/21/2006	296	FM		296
3E02	24	005		24	006		1/11/2007	315	FM		315
3E02	24	006		24	007		1/11/2007	179	FM		179
3E02	24	007		24	014		1/11/2007	181	FM		181
3E02	24	008		24	009		12/21/2006	99	FM		99
3E02	24	008		24	163	D	12/21/2006	80	FM		80
3E02	24	009		24	010		12/21/2006	196	FM		196
3E02	24	011		24	012		12/21/2006	297	FM		297
3E02	24	012		24	013		12/21/2006	288	FM		288
3E02	24	013		24	014		1/11/2007	290	FM		290
3E02	24	014		24	015		1/11/2007	180	FM		180
3E02	24	167		24	168		1/11/2007	522	FM		522
3E02	24	168		24	169		1/11/2007	544	FM		544
3E02	24	169		24	170		1/11/2007	421	FM		421
3E02	24	170		25	195		1/11/2007	468	FM		468
3E02	25	193		25	194		1/12/2007	304	FM		304
3E02	25	194		25	195		1/11/2007	324	FM		324
3E03	24	015		24	021		1/11/2007	180	FM		180
3E03	24	016		24	017		12/21/2006	296	FM		296
3E03	24	017		24	018		12/21/2006	289	FM		289
3E03	24	018		24	019		12/21/2006	275	FM		275
3E03	24	020		24	021		1/11/2007	300	FM		300
3E03	24	021		24	022		1/11/2007	185	FM		185
3E03	24	022		24	060		1/11/2007	200	FM		200
3E03	24	060		24	061		1/11/2007	331	FM		331
3E03	24	061		24	063		1/11/2007	334	FM		334
3E03	24	062		24	063		1/11/2007	140	FM		140
3E03	24	063		24	064		1/11/2007	303	FM		303
3E03	24	064		25	034		1/11/2007	320	FM		320
3E03	25	033		25	034		1/11/2007	193	FM		193
3E03	25	034		25	196		1/11/2007	0	FM		0
3E03	25	035		25	196		1/11/2007	352	FM		352
3E05	24	023		24	024		1/11/2007	293	FM		293
3E05	24	024		24	034		1/11/2007	252	FM		252
3E05	24	025		24	026		12/21/2006	107	FM		107
3E05	24	026		24	027		12/21/2006	209	FM		209
3E05	24	027		24	028		12/21/2006	310	FM		310
3E05	24	027		24	028		4/15/2007	324	JM	12	324
3E05	24	028		24	030		12/21/2006	235	FM		235

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
3E05	24	032		24	033		1/11/2007	148	FM		148
3E05	24	033		24	034		1/11/2007	65	FM		65
3E05	24	034		24	035		1/11/2007	300	FM		300
3E05	24	035		24	037		1/11/2007	141	FM		141
3E05	24	036		24	037		1/11/2007	206	FM		206
3E05	24	037		24	038		1/11/2007	220	FM		220
3E05	24	038		24	042		1/11/2007	56	FM		56
3E05	24	039		24	040		1/3/2007	24040	FM		24040
3E05	24	040		24	041		1/3/2007	250	FM		250
3E05	24	042		24	043		1/11/2007	160	FM		160
3E05	24	156		24	157		1/11/2007	177	JM	12	177
3E06	24	043		24	165		1/11/2007	160	FM		160
3E06	24	044		24	045		1/11/2007	300	FM		300
3E06	24	044		24	165		1/11/2007	139	FM		139
3E06	24	045		24	059		1/11/2007	300	FM		300
3E06	24	047		24	048		12/21/2006	165	FM		165
3E06	24	049		24	048		12/21/2006	155	FM		155
3E06	24	049		24	048		12/21/2006	84	FM		84
3E06	24	050		24	050		12/21/2006	77	FM		77
3E06	24	050		24	052		6/1/2007	193	JM	12	193
3E06	24	051		24	052		12/21/2006	186	FM		186
3E06	24	051		24	052		6/1/2007	185	JM	12	185
3E06	24	052		24	053		12/21/2006	77	FM		77
3E06	24	053		24	054		12/21/2006	76	FM		76
3E06	24	054		24	055		12/21/2006	188	FM		188
3E06	24	057		24	056		12/21/2006	193	FM		193
3E06	24	058		21	057		12/21/2006	195	FM		195
3E06	24	058		24	059		12/21/2006	195	FM		195
3E06	24	059		24	060		1/11/2007	307	FM		307
3E07	24	065		24	066		1/3/2007	129	FM		129
3E07	24	066		24	067		1/3/2007	317	FM		317
3E07	24	067		24	069		1/3/2007	325	FM		325
3E07	24	068		24	069		1/3/2007	115	FM		115
3E07	24	069		24	073		1/3/2007	258	FM		258
3E07	24	070		24	071		1/3/2007	197	FM		197
3E07	24	071		24	072		1/3/2007	280	FM		280
3E07	24	072		24	073		1/3/2007	278	FM		278
3E07	24	072		24	073		3/4/2007	300	JM	12	300
3E07	24	074		24	075		1/3/2007	278	FM		278
3E07	24	075		24	076		1/3/2007	232	FM		232
3E07	24	076		24	077		1/3/2007	152	FM		152
3E07	24	077		24	078		1/3/2007	169	FM		169
3E07	24	078		24	082		1/3/2007	156	FM		156
3E07	24	079		24	080		1/3/2007	321	FM		321
3E07	24	080		24	081		1/3/2007	327	FM		327
3E07	24	081		24	082		1/3/2007	182	FM		182
3E07	25	028		25	031		1/12/2007	287	FM		287
3E07	25	028		25	200		1/12/2007	100	FM		100
3E07	25	029		25	172		1/12/2007	277	FM		277

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
3E07	25	030		25	031		1/12/2007	322	FM		322
3E07	25	030		25	172		1/12/2007	54	FM		54
3E07	25	031		25	032		1/12/2007	341	FM		341
3E07	25	032		25	193		1/12/2007	308	FM		308
3E10	25	011		25	012		1/11/2007	273	FM		273
3E10	25	012		25	017		1/11/2007	279	FM		279
3E10	25	013		25	016		1/11/2007	135	FM		135
3E10	25	014		25	015		1/11/2007	262	FM		262
3E10	25	015		25	016		1/11/2007	262	FM		262
3E10	25	016		25	017		1/11/2007	200	FM		200
3E10	25	018		25	019		1/12/2007	250	FM		250
3E10	25	019		25	020		1/12/2007	311	FM		311
3E10	25	020		25	021		1/12/2007	50	FM		50
3E10	25	021		25	022		1/12/2007	349	FM		349
3E10	25	022		25	023		12/4/2006	349	JM	12	349
3E10	25	022		25	023		1/12/2007	349	FM		349
3E10	25	023		25	024		1/12/2007	329	FM		329
3E10	25	024		25	025		1/12/2007	332	FM		332
3E10	25	025		25	026		1/12/2007	347	FM		347
3E10	25	026	P	25	037	P	5/9/2007	344	FM	3	1376
3E11	19	001		19	002		1/25/2007	250	FM		250
3E11	19	001		25	010		1/25/2007	252	FM		252
3E11	19	002		19	003		1/25/2007	171	FM		171
3E11	19	003		19	004		1/25/2007	136	FM		136
3E11	19	004		19	005		1/25/2007	278	FM		278
3E11	25	001		25	002		1/11/2007	275	FM		275
3E11	25	002		25	003		1/11/2007	261	FM		261
3E11	25	003		25	187	D	1/11/2007	125	FM		125
3E11	25	003		25	006		1/25/2007	350	FM		350
3E11	25	005		25	006		1/25/2007	251	FM		251
3E11	25	006		25	007		1/25/2007	297	FM		297
3E11	25	007		25	010		1/25/2007	291	FM		291
3E11	25	008	S	25	009	S	5/1/2007	45	FM	3	180
3E11	25	009	S	25	010		1/25/2007	329	FM		329
3E12	25	037	P	25	038	P	5/9/2007	235	FM	3	940
3E12	25	038		25	039		5/1/2007	335	FM		335
3E12	25	039		25	040	M	1/16/2007	346	FM		346
3E13	19	013		25	041		1/16/2007	348	FM		348
3E13	25	040	M	25	041		1/16/2007	345	FM		345
3E14	19	013		19	014		1/16/2007	350	FM		350
3E14	19	014		19	015		1/16/2007	293	FM		293
3E14	19	015		19	016		1/16/2007	350	FM		350
3E14	19	016		19	017		1/16/2007	370	FM		370
3E14	19	017		19	018		1/16/2007	300	FM		300
3E14	19	018		19	019		1/16/2007	350	FM		350
3E14	19	019		19	020		1/16/2007	369	FM		369
3E14	19	020		19	021		1/16/2007	247	FM		247
3E14	19	021		19	022		1/16/2007	244	FM		244
3S01	29	035		29	040		6/28/2007	247	FM		247

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
3S01	29	035		36	026		6/28/2007	151	FM		151
3S01	29	036		29	039		6/25/2007	215	FM		215
3S01	29	036		36	014		6/25/2007	333	FM		333
3S01	29	037		29	038		6/25/2007	265	FM		265
3S01	29	038		29	039		6/25/2007	260	FM		260
3S01	29	039		29	040		6/28/2007	164	FM		164
3S01	29	040		29	108		6/28/2007	483	FM		483
3S01	29	041	C	29	046		6/28/2007	113	FM		113
3S01	29	042		29	049		6/28/2007	302	FM		302
3S01	29	042		29	108		6/28/2007	247	FM		247
3S01	29	043		29	045		6/28/2007	381	FM		381
3S01	29	043		36	027		6/28/2007	375	FM		375
3S01	29	044		29	045		6/28/2007	300	FM		300
3S01	29	045		29	046		6/28/2007	213	FM		213
3S01	29	046		29	047		6/28/2007	192	FM		192
3S01	29	047		29	048		6/28/2007	200	FM		200
3S01	29	048		29	049		6/28/2007	100	FM		100
3S01	29	049		29	056		6/29/2007	186	FM		186
3S01	29	050		29	051		6/29/2007	310	FM		310
3S01	29	050		36	005		6/29/2007	340	FM		340
3S01	29	051		29	052		6/29/2007	322	FM		322
3S01	29	052		29	053		6/29/2007	322	FM		322
3S01	29	053		29	054		6/29/2007	97	FM		97
3S01	29	054		29	055		6/29/2007	97	FM		97
3S01	29	055		29	056		6/29/2007	165	FM		165
3S01	29	056		29	057		6/29/2007	351	FM		351
3S01	29	057		29	058		6/29/2007	355	FM		355
3S01	29	058		29	069		7/5/2007	355	FM		355
3S01	29	103		36	022		6/19/2007	125	FM		125
3S01	36	001		36	003		6/29/2007	371	FM		371
3S01	36	002		36	003		6/29/2007	245	FM		245
3S01	36	003		36	004		6/29/2007	300	FM		300
3S01	36	004		36	029		6/29/2007	225	FM		225
3S01	36	004		36	005		6/29/2007	323	FM		323
3S01	36	006		36	007		6/25/2007	195	FM		195
3S01	36	007		36	008		6/25/2007	391	FM		391
3S01	36	008		36	011		6/25/2007	300	FM		300
3S01	36	008		36	031	C	6/25/2007	112	FM		112
3S01	36	009		36	010		6/25/2007	146	FM		146
3S01	36	010		36	011		6/25/2007	366	FM		366
3S01	36	011		36	013		6/25/2007	283	FM		283
3S01	36	012		36	013		6/25/2007	420	FM		420
3S01	36	013		36	014		6/25/2007	203	FM		203
3S01	36	015		36	016		6/19/2007	163	FM		163
3S01	36	016		36	017		6/19/2007	312	FM		312
3S01	36	017		36	018		6/28/2007	273	FM		273
3S01	36	018		36	028	C	6/28/2007	206	FM		206
3S01	36	018		36	040		6/28/2007	143	FM		143
3S01	36	019		36	025		6/28/2007	200	FM		200

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
3S01	36	019		36	040		6/28/2007	89	FM		89
3S01	36	020		36	021		6/19/2007	352	FM		352
3S01	36	020		36	030	D	6/19/2007	47	FM		47
3S01	36	021		36	022		6/19/2007	345	FM		345
3S01	36	022		36	039		6/19/2007	160	FM		160
3S01	36	025		36	032		6/28/2007	134	FM		134
3S01	36	026		36	032		6/28/2007	118	FM		118
3S01	36	032		36	033		6/28/2007	178	FM		178
3S01	36	033		36	034		6/19/2007	188	FM		188
3S01	36	034		36	035		6/19/2007	96	FM		96
3S01	36	035		36	036		6/19/2007	35	FM		35
3S01	36	036		36	037		6/19/2007	138	FM		138
3S01	36	037		36	038		6/19/2007	89	FM		89
3S01	36	038		36	039		6/19/2007	26	FM		26
3S02	29	059		29	060		6/29/2007	97	FM		97
3S02	29	060		29	061		6/29/2007	217	FM		217
3S02	29	061		29	062		7/2/2007	273	FM		273
3S02	29	062		29	063		7/2/2007	209	FM		209
3S02	29	063		29	064		7/2/2007	100	FM		100
3S02	29	064		29	065		7/2/2007	223	FM		223
3S02	29	065		29	066		7/2/2007	304	FM		304
3S02	29	066		29	067		7/2/2007	271	FM		271
3S02	29	067		29	068		7/2/2007	277	FM		277
3S03	24	093		24	094		7/5/2007	170	FM		170
3S03	24	148		24	150		7/2/2007	140	FM		140
3S03	24	149		24	150		7/2/2007	190	FM		190
3S03	24	150		29	001		7/2/2007	222	FM		222
3S03	24	151		29	105		7/3/2007	120	FM		120
3S03	24	152		24	153		7/3/2007	85	FM		85
3S03	24	153		24	154		7/3/2007	177	FM		177
3S03	24	154		29	023		7/3/2007	148	FM		148
3S03	24	155		29	024		7/5/2007	189	FM		189
3S03	29	001		29	005		7/2/2007	305	FM		305
3S03	29	002		29	003		7/2/2007	150	FM		150
3S03	29	003		29	004		7/2/2007	250	FM		250
3S03	29	004		29	005		7/2/2007	232	FM		232
3S03	29	005		29	007		6/1/2007	311	JM	12	311
3S03	29	005		29	007		7/3/2007	309	FM		309
3S03	29	006		29	007		7/3/2007	352	FM		352
3S03	29	006		29	105		7/3/2007	64	FM		64
3S03	29	007		29	008		7/3/2007	194	FM		194
3S03	29	008		29	009		7/3/2007	300	FM		300
3S03	29	009		29	011		7/3/2007	295	FM		295
3S03	29	010		29	011		7/3/2007	213	FM		213
3S03	29	011		29	021		7/3/2007	250	FM		250
3S03	29	012		29	013		7/3/2007	150	FM		150
3S03	29	013		29	014		7/3/2007	229	FM		229
3S03	29	014		29	015		7/3/2007	253	FM		253
3S03	29	015		29	021		7/3/2007	254	FM		254

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
3S03	29	016		29	017		7/2/2007	199	FM		199
3S03	29	017		29	018		7/2/2007	400	FM		400
3S03	29	018		29	019		7/2/2007	102	FM		102
3S03	29	019		29	020		7/2/2007	217	FM		217
3S03	29	020		29	021		7/3/2007	321	FM		321
3S03	29	021		29	027		7/5/2007	300	FM		300
3S03	29	022		29	023		2/12/2007	352	JM	12	352
3S03	29	022		29	023		7/3/2007	375	FM		375
3S03	29	023		29	024		7/5/2007	298	FM		298
3S03	29	024		29	025		7/5/2007	226	FM		226
3S03	29	025		29	026		7/5/2007	218	FM		218
3S03	29	026		29	027		7/5/2007	348	FM		348
3S03	29	027		29	033		7/5/2007	298	FM		298
3S03	29	028		29	029		7/6/2007	248	FM		248
3S03	29	029		29	032		7/6/2007	241	FM		241
3S03	29	030		29	031		7/5/2007	289	FM		289
3S03	29	031		29	032		7/5/2007	301	FM		301
3S03	29	032		29	033		7/5/2007	142	FM		142
3S03	29	033		29	106		7/6/2007	99	FM		99
3S03	29	034		29	069		7/5/2007	253	FM		253
3S03	29	034		29	106		7/6/2007	231	FM		231
3S04	29	069		29	070		7/9/2007	293	FM		293
3S04	29	070		29	071		7/9/2007	196	FM		196
3S04	29	071		29	107		7/9/2007	89	FM		89
3S04	29	072		29	073		7/9/2007	283	FM		283
3S04	29	072		29	107		7/9/2007	286	FM		286
3S04	29	073		30	001		7/9/2007	268	FM		268
3S04	30	001		30	002		7/9/2007	207	FM		207
3S05	29	074	C	29	075		6/18/2007	174	FM		174
3S05	29	075		29	083		6/18/2007	426	FM		426
3S05	29	076		29	077		6/1/2007	270	FM	3	1080
3S05	29	077		29	078		6/1/2007	177	FM	3	708
3S05	29	078		29	080		6/1/2007	193	FM	3	772
3S05	29	079		29	080		6/1/2007	208	FM		208
3S05	29	080		29	081		6/1/2007	73	FM	3	292
3S05	29	081		29	082		6/1/2007	224	FM	3	896
3S05	29	082		29	083		6/1/2007	299	FM		299
3S05	29	083		29	084		6/18/2007	258	FM		258
3S05	29	084		29	110		6/18/2007	187	FM		187
3S05	29	085		29	110		6/18/2007	223	FM		223
3S05	29	085		29	088		6/18/2007	134	FM		134
3S05	29	086	C	29	087		6/18/2007	123	FM		123
3S05	29	087		29	088		6/18/2007	302	FM		302
3S05	29	088		29	089		6/18/2007	266	FM		266
3S05	29	089		29	090		7/5/2007	351	FM		351
3S05	29	090		29	096		7/5/2007	410	FM		410
3S05	29	090		29	104	C	7/5/2007	107	FM		107
3S05	29	091		29	092		6/19/2007	292	FM		292
3S05	29	092		29	093		6/19/2007	99	FM		99

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
3S05	29	093		29	094		6/19/2007	156	FM		156
3S05	29	094		29	095		6/19/2007	28	FM		28
3S05	29	095		29	114	T	6/19/2007	44	FM		44
3S05	29	096		29	097		7/5/2007	237	FM		237
3S05	29	097		29	098		7/5/2007	242	FM		242
3S05	29	098		29	099		7/5/2007	345	FM		345
3S05	29	110		29	111		6/18/2007	33	FM		33
3S05	29	111		29	112		6/18/2007	67	FM		67
3S05	29	112		29	113		6/18/2007	183	FM		183
3S06	29	099		29	100		7/9/2007	361	FM		361
3S06	29	100		29	101		7/9/2007	366	FM		366
3S06	29	101		29	102		7/9/2007	346	FM		346
3S06	29	102		30	003		7/9/2007	356	FM		356
3S06	30	002	M	30	005		7/9/2007	175	FM		175
3S06	30	003		30	004		7/9/2007	379	FM		379
3S06	30	004		30	005		7/9/2007	160	FM		160
3S06	30	005		30	006		7/9/2007	150	FM		150
3S07	25	086	M	25	087		7/12/2007	166	FM		166
3S07	25	086	M	30	007		7/12/2007	220	FM		220
3S07	25	087		25	189		7/12/2007	134	FM		134
3S07	25	088		25	089		7/12/2007	300	FM		300
3S07	25	088		25	189		7/12/2007	290	FM		290
3S07	25	089		25	090		7/12/2007	301	FM		301
3S08	24	083		24	084		10/12/2006	240	JM	12	240
3S08	24	083		24	084		7/5/2007	233	FM		233
3S08	24	084		24	087		7/5/2007	315	FM		315
3S08	24	085		24	086		7/5/2007	278	FM		278
3S08	24	086		24	087		7/5/2007	100	FM		100
3S08	24	087		24	088		7/5/2007	315	FM		315
3S08	24	088		24	091		7/5/2007	300	FM		300
3S08	24	089		24	091		10/12/2006	257	JM	12	257
3S08	24	089		24	091		7/5/2007	360	FM		360
3S08	24	090		24	091		7/5/2007	176	FM		176
3S08	24	091		24	092		7/5/2007	300	FM		300
3S08	24	092		24	095		7/11/2007	105	FM		105
3S08	24	094		24	095		7/11/2007	145	FM		145
3S08	24	095		24	096		7/11/2007	290	FM		290
3S08	24	096		24	098		7/11/2007	210	FM		210
3S08	24	097		24	098		7/11/2007	300	FM		300
3S08	24	098		24	104		7/11/2007	200	FM		200
3S08	24	099		24	101		7/10/2007	255	FM		255
3S08	24	100		24	101		7/10/2007	158	FM		158
3S08	24	101		24	102		7/10/2007	74	FM		74
3S08	24	102		24	103		7/10/2007	195	FM		195
3S08	24	103		24	104		7/11/2007	150	FM		150
3S08	24	104		24	133		7/11/2007	300	FM		300
3S08	24	105		24	106		7/10/2007	260	FM		260
3S08	24	105		24	158	C	7/10/2007	117	FM		117
3S08	24	106		24	110		7/10/2007	185	FM		185

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
3S08	24	107		24	108		7/10/2007	301	FM		301
3S08	24	108		24	109		7/10/2007	95	FM		95
3S08	24	109		24	110		7/10/2007	125	FM		125
3S08	24	110		24	111		7/10/2007	195	FM		195
3S08	24	111		24	133		7/11/2007	145	FM		145
3S08	24	112		24	113		1/11/2007	115	JM	12	115
3S08	24	112		24	113		7/9/2007	130	FM		130
3S08	24	112		24	161	D	7/9/2007	12	FM		12
3S08	24	113		24	114		1/11/2007	355	JM	12	355
3S08	24	113		24	114		7/9/2007	353	FM		353
3S08	24	114		24	115		1/11/2007	199	JM	12	199
3S08	24	114		24	115		7/10/2007	162	FM		162
3S08	24	115		24	116		7/10/2007	141	FM		141
3S08	24	116		24	117		7/10/2007	156	FM		156
3S08	24	117		24	127		7/10/2007	219	FM		219
3S08	24	118		24	119		7/10/2007	155	FM		155
3S08	24	119		24	120		7/10/2007	76	FM		76
3S08	24	120		24	125		7/10/2007	144	FM		144
3S08	24	120		24	126		7/10/2007	30	FM		30
3S08	24	121		24	122		7/10/2007	151	FM		151
3S08	24	122		24	123		7/10/2007	158	FM		158
3S08	24	123		24	125		7/10/2007	169	FM		169
3S08	24	126		24	127		7/10/2007	170	FM		170
3S08	24	127		24	128		7/10/2007	162	FM		162
3S08	24	128		24	129		7/10/2007	286	FM		286
3S08	24	129		24	130		7/10/2007	281	FM		281
3S08	24	130		24	131		7/10/2007	220	FM		220
3S08	24	131		24	133		7/11/2007	110	FM		110
3S08	24	133		24	134		7/11/2007	235	FM		235
3S08	24	134		24	139		10/10/2006	110	FM		110
3S08	24	135		24	159	C	10/4/2006	77	FM		77
3S08	24	135		24	136		7/11/2007	106	FM		106
3S08	24	136		24	137		7/11/2007	219	FM		219
3S08	24	137		24	138		7/11/2007	200	FM		200
3S08	24	139		24	140		7/11/2007	91	FM		91
3S08	24	140		24	142		7/11/2007	109	FM		109
3S08	24	141		24	142		7/11/2007	250	FM		250
3S08	24	142		24	146		7/12/2007	195	FM		195
3S08	24	143		24	144		7/11/2007	200	FM		200
3S08	24	144		24	145		7/11/2007	219	FM		219
3S08	24	145		24	146		7/12/2007	145	FM		145
3S08	24	146		24	147		7/12/2007	300	FM		300
3S08	24	147		25	081		7/12/2007	250	FM		250
3S08	25	081		25	084		7/12/2007	257	FM		257
3S08	25	082		25	083		7/12/2007	245	FM		245
3S08	25	083		25	084		7/12/2007	263	FM		263
3S08	25	084		25	085		7/12/2007	195	FM		195
3S08	25	085		25	090		7/12/2007	202	FM		202
3S09	25	091		25	092		7/12/2007	275	FM		275

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
3S09	25	092		25	093		7/12/2007	297	FM		297
3S09	25	093		25	094		7/12/2007	330	FM		330
3S09	25	094		25	095		7/12/2007	296	FM		296
3S09	25	190		25	191		7/12/2007	520	FM		520
3S09	25	191		25	192		7/12/2007	550	FM		550
3S09	25	192		30	025		7/12/2007	452	FM		452
3S09	30	006		30	026		7/12/2007	100	FM		100
3S09	30	025		30	026		7/12/2007	42	FM		42
3S12	25	097		25	109		10/16/2006	300	FM		300
3S12	25	109		25	110		10/16/2006	331	FM		331
3S12	25	110		25	111		10/16/2006	300	FM		300
3S12	25	111		25	113		10/16/2006	298	FM		298
3S12	25	112		25	113		10/16/2006	250	FM		250
3S12	25	113		25	114		10/16/2006	300	FM		300
3S12	25	114		25	115		10/16/2006	287	FM		287
3S12	25	115		25	116		10/16/2006	304	FM		304
3S12	25	116		25	120		10/16/2006	333	FM		333
3S12	25	118		25	119		10/16/2006	141	FM		141
3S12	25	119		25	120		10/16/2006	207	FM		207
3S12	25	120		25	121		10/16/2006	224	FM		224
3S12	25	121		25	122		10/16/2006	230	FM		230
3S13	25	122		25	123		10/16/2006	229	FM		229
3S14	25	059		25	060		10/11/2006	301	FM		301
3S14	25	059		25	201		10/11/2006	15	FM		15
3S14	25	060		25	061		10/11/2006	325	FM		325
3S14	25	060		25	061		10/13/2006	303	JM	12	303
3S14	25	061		25	062		10/11/2006	201	FM		201
3S14	25	062		25	063		10/11/2006	200	FM		200
3S14	25	063		25	064		10/11/2006	254	FM		254
3S14	25	064	P	25	066	P	5/2/2007	243	FM	3	972
3S14	25	065	P	25	066	P	5/2/2007	137	FM	3	548
3S14	25	201		30	028		10/11/2006	322	FM		322
3S14	30	028		30	029		10/11/2006	300	FM		300
3S14	30	029		30	030		10/11/2006	258	FM		258
3S15	25	054		25	055		10/12/2006	331	FM		331
3S15	25	055		25	056		10/12/2006	332	FM		332
3S15	25	056		25	057		10/12/2006	333	FM		333
3S15	25	057		25	058		10/12/2006	252	FM		252
3S15	25	058		25	067	P	10/12/2006	252	FM		252
3S15	25	066	P	25	067	P	5/2/2007	75	FM	3	300
3S16	25	067	P	25	069	P	5/2/2007	247	FM	3	988
3S16	25	068		25	069	P	5/2/2007	168	FM	3	672
3S16	25	069	P	25	070	P	5/2/2007	45	FM	3	180
3S17	25	070	P	25	071		10/12/2006	352	FM		352
3S17	25	071		25	072		10/12/2006	208	FM		208
3S17	25	072		25	073		10/12/2006	126	FM		126
3S17	25	073		25	074		10/12/2006	348	FM		348
3S17	25	074		25	077		10/12/2006	300	FM		300
3S17	25	075		25	077		10/12/2006	169	FM		169

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
3S17	25	076		25	077		10/12/2006	314	FM		314
3S17	25	077		25	078		10/12/2006	337	FM		337
3S17	25	078		25	079		10/12/2006	326	FM		326
3S17	25	079		25	080	M	10/12/2006	340	FM		340
3S17	25	080	M	25	125		5/1/2007	327	FM	3	1308
3S18	19	054		19	055		10/17/2006	335	FM		335
3S18	19	054		25	132		10/17/2006	335	FM		335
3S18	19	055		19	056	M	10/17/2006	334	FM		334
3S18	25	123		25	125		10/16/2006	228	FM		228
3S18	25	124		25	125		10/16/2006	150	FM		150
3S18	25	125		25	126	S	5/1/2007	15	FM	3	60
3S18	25	126	S	25	127	S	5/1/2007	20	FM	3	80
3S18	25	127	S	25	128		10/17/2006	306	FM		306
3S18	25	128		25	129		10/17/2006	334	FM		334
3S18	25	129		25	130		10/17/2006	336	FM		336
3S18	25	130		25	132		10/17/2006	324	FM		324
3S18	25	131		25	132		10/17/2006	300	FM		300
3S19	19	043		19	047		10/20/2006	350	FM		350
3S19	19	044		19	045		10/17/2006	350	FM		350
3S19	19	044		25	047		10/17/2006	346	FM		346
3S19	19	045		19	046		10/17/2006	350	FM		350
3S19	19	046		19	047		10/20/2006	315	FM		315
3S19	19	047		19	048		10/20/2006	222	FM		222
3S19	19	048		19	052		10/20/2006	221	FM		221
3S19	19	049		19	050		10/20/2006	337	FM		337
3S19	19	049		25	053		10/20/2006	345	FM		345
3S19	19	050		19	051		10/20/2006	338	FM		338
3S19	19	051		19	052		10/20/2006	340	FM		340
3S19	19	052		19	053		10/20/2006	224	FM		224
3S19	25	042		25	043		10/16/2006	285	FM		285
3S19	25	043		25	044		10/16/2006	294	FM		294
3S19	25	044		25	045		10/17/2006	299	FM		299
3S19	25	045		25	047		10/17/2006	297	FM		297
3S19	25	046		25	047		10/17/2006	300	FM		300
3S19	25	048		25	049		10/20/2006	341	FM		341
3S19	25	049		25	050		10/20/2006	299	FM		299
3S19	25	050		25	051		10/20/2006	299	FM		299
3S19	25	051		25	053		10/20/2006	298	FM		298
3S19	25	052		25	053		10/20/2006	299	FM		299
3S20	19	053		19	058		10/20/2006	234	FM		234
3S20	19	056	M	19	058		10/20/2006	342	FM		342
3S20	19	057		19	058		10/20/2006	166	FM		166
3S20	19	058		19	061		10/20/2006	243	FM		243
3S20	19	059		19	060		10/20/2006	353	FM		353
3S20	19	060		19	061		10/20/2006	355	FM		355
3S20	19	061		19	063		10/20/2006	264	FM		264
3S20	19	063		19	064		10/20/2006	207	FM		207
3S20	19	064		19	065		10/20/2006	332	FM		332
3S20	19	065		19	066		10/20/2006	248	FM		248

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
3S20	19	066		19	068		10/20/2006	34	FM		34
3S20	19	067		19	068		10/20/2006	371	FM		371
3S20	19	067		19	068		1/11/2007	377	JM	12	377
3S20	19	068		19	069		10/20/2006	144	FM		144
3S20	19	069		19	072		10/20/2006	170	FM		170
3S20	19	070		19	071		10/23/2006	206	FM		206
3S20	19	071		19	072		10/20/2006	233	FM		233
3S20	19	073		19	074		10/24/2006	275	FM		275
3S21	19	023	M	19	197		6/12/2007	227	FM		227
3S21	19	023	M	20	095		6/12/2007	341	FM		341
3S22	19	024		19	025		6/13/2007	157	FM		157
3S22	19	024		19	197		6/13/2007	124	FM		124
3S22	19	025		19	038		6/13/2007	19	FM		19
3S22	19	026		19	028		10/24/2006	211	FM		211
3S22	19	027		19	028		10/24/2006	119	FM		119
3S22	19	028		19	029		10/24/2006	250	FM		250
3S22	19	029		19	031		10/24/2006	285	FM		285
3S22	19	029		20	097		10/24/2006	237	FM		237
3S22	19	030		19	031		10/24/2006	349	FM		349
3S22	19	031		19	196		10/24/2006	21	FM		21
3S22	19	032		19	033		10/24/2006	235	FM		235
3S22	19	032		20	098		10/24/2006	302	FM		302
3S22	19	033		19	036		10/24/2006	258	FM		258
3S22	19	033		19	196		10/24/2006	258	FM		258
3S22	19	034	C	19	035		10/24/2006	68	FM		68
3S22	19	035		19	036		10/24/2006	126	FM		126
3S22	19	036		19	037		10/24/2006	112	FM		112
3S22	19	037		19	038		10/24/2006	225	FM		225
3S22	19	038		19	039	S	6/13/2007	340	FM		340
3S22	19	039	S	19	040	S	5/1/2007	22	FM	3	88
3S22	19	040	S	19	041	S	5/1/2007	56	FM	3	224
3S23	19	042	S	19	074		6/13/2007	237	FM	3	948
3S23	19	074		19	075		6/13/2007	265	FM	3	1060
3S24	19	075		19	076		6/13/2007	300	FM		300
3S24	19	076		19	083		6/13/2007	265	FM		265
3S24	19	077		19	078		10/23/2006	302	FM		302
3S24	19	078		19	079		10/23/2006	302	FM		302
3S24	19	079		19	192		10/23/2006	250	FM		250
3S24	19	080		19	081		10/23/2006	300	FM		300
3S24	19	080		19	192		10/23/2006	54	FM		54
3S24	19	081		19	082		10/23/2006	200	FM		200
3S24	19	082		19	083		10/24/2006	355	FM		355
3S24	19	083		19	084		10/24/2006	40	FM		40
3S24	19	084		19	085		10/24/2006	350	FM		350
3S24	19	192		19	193		10/23/2006	228	FM		228
4N02	17	001		17	002		12/13/2006	260	FM		260
4N02	17	002		17	003		12/13/2006	220	FM		220
4N02	17	003		17	004		12/13/2006	215	FM		215
4N02	17	004		17	005		12/13/2006	223	FM		223

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
4N02	17	005		17	008		12/14/2006	260	FM		260
4N02	17	007		17	008		12/13/2006	250	FM		250
4N02	17	007		17	008		12/13/2006	263	FM		263
4N02	17	007		17	008		3/4/2007	280	JM	12	280
4N02	17	008		17	024		12/14/2006	280	FM		280
4N02	17	009		17	010		12/14/2006	210	FM		210
4N02	17	010		17	011		12/14/2006	250	FM		250
4N02	17	011		17	024		12/14/2006	291	FM		291
4N02	17	012		17	013		12/13/2006	98	FM		98
4N02	17	014		17	015		12/13/2006	165	FM		165
4N02	17	015		17	016		12/13/2006	228	FM		228
4N02	17	016		17	023		12/14/2006	266	FM		266
4N02	17	017		17	019		12/13/2006	231	FM		231
4N02	17	018		17	019		12/13/2006	264	FM		264
4N02	17	019		17	020		12/13/2006	193	FM		193
4N02	17	020		17	021		12/13/2006	320	FM		320
4N02	17	020		17	021		3/4/2007	339	JM	12	339
4N02	17	021		17	022		12/13/2006	206	FM		206
4N02	17	022		17	023		12/13/2006	205	FM		205
4N02	17	023		17	024		12/14/2006	260	FM		260
4N02	18	001		18	002		12/14/2006	150	FM		150
4N02	18	002		18	004		12/18/2006	323	FM		323
4N02	18	003		18	004		12/14/2006	150	FM		150
4N04	17	024		18	002		12/18/2006	157	FM		157
4N04	18	005		18	006		12/14/2006	220	FM		220
4N04	18	006		18	007		12/14/2006	327	FM		327
4N04	18	007		18	009		12/14/2006	100	FM		100
4N04	18	008		18	009		12/14/2006	181	FM		181
4N04	18	009		18	010		12/14/2006	129	FM		129
4N04	18	010		18	024		12/14/2006	140	FM		140
4N04	18	011		18	013		12/13/2006	160	FM		160
4N04	18	012		18	013		12/13/2006	173	FM		173
4N04	18	013		18	014		12/13/2006	100	FM		100
4N04	18	014		18	017		12/13/2006	254	FM		254
4N04	18	015		18	016		12/13/2006	116	FM		116
4N04	18	016		18	017		12/13/2006	163	FM		163
4N04	18	018		18	019		12/13/2006	299	FM		299
4N04	18	020		18	021		12/13/2006	60	FM		60
4N04	18	024		18	025		12/14/2006	172	FM		172
4N04	18	025		18	027		12/14/2006	195	FM		195
4N04	18	026		18	027		12/18/2006	326	FM		326
4N04	18	027		18	029		12/18/2006	279	FM		279
4N04	18	028		18	029		12/18/2006	248	FM		248
4N04	18	029		18	030		12/18/2006	250	FM		250
4N04	18	030		18	032		12/18/2006	261	FM		261
4N04	18	032		18	033		12/18/2006	203	FM		203
4N04	18	033		18	040		12/18/2006	207	FM		207
4N06	18	037	S	18	040	P	5/2/2007	314	FM	3	1256
4N06	18	037	S	18	053	S		100	FM	3	400

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
4N06	18	038		18	039		12/18/2006	300	FM		300
4N06	18	039		18	040		12/18/2006	200	FM		200
4N06	18	040		18	055		12/18/2006	234	FM		234
4N06	18	041		18	055		12/18/2006	62	FM		62
4N06	18	043		18	044		12/18/2006	284	FM		284
4N06	18	044		19	111		12/18/2006	300	FM		300
4N06	18	056		18	042		12/18/2006	172	FM		172
4N06	19	111		19	195		12/18/2006	223	FM		223
4N06	19	112		19	113		12/18/2006	287	FM		287
4N06	19	112		19	195		12/18/2006	70	FM		70
4N08	19	102		19	103		1/25/2007	245	FM		245
4N08	19	102		19	194	D	1/25/2007	317	FM		317
4N08	19	103		19	104		1/25/2007	225	FM		225
4N08	19	104		19	106		1/25/2007	233	FM		233
4N08	19	105		19	106		1/25/2007	250	FM		250
4N08	19	106		19	107		1/25/2007	147	FM		147
4N08	19	107		19	108		1/25/2007	172	FM		172
4N08	19	108		19	109		1/25/2007	30	FM		30
4N08	19	109		19	110		1/25/2007	233	FM		233
4N08	19	113		19	114		6/13/2007	300	FM		300
4N08	19	114		19	115		6/13/2007	320	FM		320
4N08	19	115		19	116		6/13/2007	360	FM		360
4N08	19	116		19	117		6/13/2007	320	FM		320
4N09	12	060	P	12	061	P	5/2/2007	332	FM	3	1328
4N09	12	061	P	12	062	P	5/2/2007	331	FM	3	1324
4N09	12	062	P	12	063	P	5/2/2007	95	FM	3	380
4N09	12	063	P	12	130		10/20/2006	10	FM		10
4N09	19	117		19	118		6/13/2007	310	FM		310
4N09	19	118		19	119		6/13/2007	320	FM		320
4S01	18	045		18	046		1/29/2007	337	FM		337
4S01	18	046		18	048		1/29/2007	262	FM		262
4S01	18	047		18	048		1/29/2007	70	FM		70
4S01	18	048		18	049		1/29/2007	310	FM		310
4S01	18	049		18	050		1/29/2007	330	FM		330
4S01	18	050		18	052		1/29/2007	312	FM		312
4S01	18	051		18	052		1/29/2007	89	FM		89
4S01	18	052		19	095		1/29/2007	250	FM		250
4S01	19	087		19	089		6/14/2007	275	FM		275
4S01	19	089		19	090		6/14/2007	290	FM		290
4S01	19	090		19	099		6/14/2007	225	FM		225
4S01	19	091		19	092		1/11/2007	347	JM	12	347
4S01	19	091		19	092		1/29/2007	333	FM		333
4S01	19	092		19	093		1/29/2007	281	FM		281
4S01	19	093		19	094		1/29/2007	225	FM		225
4S01	19	093		19	094		3/4/2007	242	JM	12	242
4S01	19	094		19	095		1/29/2007	313	FM		313
4S01	19	095		19	096	S	1/29/2007	195	FM		195
4S01	19	096	S	19	097	S	5/1/2007	66	FM	3	264
4S01	19	097	S	19	098	S	5/1/2007	185	FM	3	740

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
4S01	19	098	S	19	099	S	5/1/2007	206	FM	3	824
4S01	19	099		19	100	M	6/14/2007	100	FM		100
4S01	19	100	M	19	101		6/14/2007	310	FM		310
4S02	12	051		12	050		12/21/2006	241	FM		241
4S02	12	051		12	052		12/21/2006	150	FM		150
4S02	12	052		12	053		12/5/2006	150	FM		150
4S02	12	056		12	057		6/14/2007	325	FM		325
4S02	12	056		19	101		6/14/2007	350	FM		350
4S02	12	057		12	082		6/18/2007	305	FM		305
4S02	12	079	P	12	081	P	5/8/2007	347	FM	3	1388
4S02	12	081	P	12	082	P	5/8/2007	15	FM	3	60
4S02	19	120		19	121		1/29/2007	304	FM		304
4S02	19	121		19	123		1/29/2007	253	FM		253
4S02	19	122		19	123		1/29/2007	160	FM		160
4S02	19	123		19	124		1/29/2007	28	FM		28
4S02	19	124		19	127		1/29/2007	160	FM		160
4S02	19	125		19	126		1/29/2007	300	FM		300
4S02	19	126		19	127		1/29/2007	301	FM		301
4S02	19	127		19	129		1/31/2007	259	FM		259
4S02	19	128		19	129		1/31/2007	262	FM		262
4S02	19	129		19	130		1/31/2007	155	FM		155
4S02	19	130		19	132		1/31/2007	121	FM		121
4S02	19	131		19	132		1/31/2007	210	FM		210
4S02	19	132		19	133		1/31/2007	250	FM		250
4S02	19	133		19	139		1/31/2007	197	FM		197
4S02	19	134		19	135		1/31/2007	321	FM		321
4S02	19	135		19	136		1/31/2007	205	FM		205
4S02	19	136		19	137		1/31/2007	158	FM		158
4S02	19	137		19	138		1/31/2007	217	FM		217
4S02	19	138		19	139		1/31/2007	202	FM		202
4S02	19	139		19	141		1/31/2007	261	FM		261
4S02	19	140		19	141		1/31/2007	140	FM		140
4S02	19	140		19	141		3/4/2007	140	JM	12	140
4S02	19	142		19	143		1/31/2007	275	FM		275
4S02	19	143		19	144		1/31/2007	181	FM		181
4S02	19	144		19	145		1/31/2007	300	FM		300
4S02	19	145		19	146		2/2/2007	203	FM		203
4S02	19	146		19	148		1/31/2007	166	FM		166
4S02	19	147		19	148		1/31/2007	140	FM		140
4S02	19	148		19	149		1/31/2007	216	FM		216
4S02	19	149		19	150		1/31/2007	181	FM		181
4S03	12	064		12	069		2/8/2007	327	FM		327
4S03	12	064		13	192		2/8/2007	327	FM		327
4S03	12	065		12	066		2/8/2007	335	FM		335
4S03	12	065		13	195		2/8/2007	330	FM		330
4S03	12	066		12	067		2/8/2007	40	FM		40
4S03	12	067		12	068		2/8/2007	341	FM		341
4S03	12	068		12	069		2/8/2007	344	FM		344
4S03	13	189		13	192		2/8/2007	350	FM		350

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
4S03	13	189		13	202	D	2/8/2007	134	FM		134
4S03	13	190		13	191		2/8/2007	264	FM		264
4S03	13	191		13	192		2/8/2007	350	FM		350
4S03	13	195		20	007		2/8/2007	265	FM		265
4S03	19	151		19	153		2/5/2007	114	FM		114
4S03	19	151		19	153		3/4/2007	116	JM	12	116
4S03	19	152		19	153		2/5/2007	234	FM		234
4S03	19	152		20	100		2/5/2007	236	FM		236
4S03	19	153		19	155		2/5/2007	255	FM		255
4S03	19	154		19	155		2/5/2007	349	FM		349
4S03	19	155		19	158		2/5/2007	254	FM		254
4S03	19	156		19	157		2/5/2007	136	FM		136
4S03	19	157		19	158		2/5/2007	347	FM		347
4S03	19	158		19	160		2/5/2007	255	FM		255
4S03	19	159		19	160		2/5/2007	353	FM		353
4S03	19	160		19	163		2/5/2007	255	FM		255
4S03	19	161		19	162		2/5/2007	146	FM		146
4S03	19	162		19	163		2/5/2007	295	FM		295
4S03	19	163		19	164		2/5/2007	256	FM		256
4S03	19	164		19	165		2/7/2007	268	FM		268
4S03	19	165		20	007		2/7/2007	229	FM		229
4S03	20	001		20	002		2/7/2007	260	FM		260
4S03	20	002		20	003		2/7/2007	344	FM		344
4S03	20	003		20	004		2/7/2007	345	FM		345
4S03	20	004		20	005		2/7/2007	344	FM		344
4S03	20	005		20	006		2/7/2007	181	FM		181
4S03	20	006		20	007		2/7/2007	190	FM		190
4S04	12	069		12	072		11/3/2006	300	FM		300
4S04	12	070		12	071		2/20/2007	274	FM		274
4S04	12	071		12	072		2/20/2007	226	FM		226
4S04	12	072		12	073		2/20/2007	177	FM		177
4S04	12	073		12	074		2/20/2007	285	FM		285
4S04	12	074		12	077		2/20/2007	287	FM		287
4S04	12	075		12	076		2/20/2007	261	FM		261
4S04	12	076		12	077		2/20/2007	320	FM		320
4S04	12	077		12	143		2/20/2007	288	FM		288
4S04	12	078	M	12	143		8/28/2006	32	FM		32
4S04	12	078	M	12	081		5/8/2007	316	FM	3	1264
4S04	12	079	P	12	137	D	5/8/2007	150	FM	3	600
4S04	12	080	P	12	081	P	5/8/2007	400	FM	3	1600
4S04	12	082		12	089		6/18/2007	300	FM		300
4W01	13	169		13	170		3/9/2007	330	FM		330
4W01	13	169		20	112		3/9/2007	229	FM		229
4W01	13	170		13	171		3/9/2007	40	FM		40
4W01	13	171		13	208		3/9/2007	201	FM		201
4W01	13	172		13	174		3/9/2007	20	FM		20
4W01	13	172		13	208		3/9/2007	200	FM		200
4W01	13	173		13	210		3/9/2007	65	FM		65
4W01	13	174		13	175		3/9/2007	340	FM		340

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
4W01	13	174		13	210		3/9/2007	200	FM		200
4W01	13	175		13	176		3/12/2007	340	FM		340
4W01	13	176		13	177		3/12/2007	330	FM		330
4W01	13	177		13	181		3/12/2007	268	FM		268
4W01	20	101		20	102		3/9/2007	280	FM		280
4W01	20	102		20	103		3/9/2007	272	FM		272
4W01	20	103		20	104		3/9/2007	300	FM		300
4W01	20	104		20	107		3/9/2007	366	FM		366
4W01	20	105		20	106		3/9/2007	358	FM		358
4W01	20	106		20	107		3/9/2007	355	FM		355
4W01	20	107		20	110		3/9/2007	366	FM		366
4W01	20	108		20	109		3/9/2007	58	FM		58
4W01	20	109		20	110		3/9/2007	300	FM		300
4W01	20	110		20	112		3/9/2007	361	FM		361
4W01	20	111		20	112		3/9/2007	317	FM		317
4W02	12	091		12	092	M	3/12/2007	323	FM		323
4W02	12	091		13	188		3/12/2007	327	FM		327
4W02	12	092	M	12	093		3/12/2007	283	FM		283
4W02	12	127		13	186		3/12/2007	250	FM		250
4W02	13	178		13	213		3/12/2007	162	FM		162
4W02	13	178		13	193		3/12/2007	344	FM		344
4W02	13	179		13	180		3/12/2007	288	FM		288
4W02	13	179		13	213		3/12/2007	181	FM		181
4W02	13	180		13	181		3/12/2007	293	FM		293
4W02	13	181		13	182		3/12/2007	52	FM		52
4W02	13	182		13	183		3/12/2007	244	FM		244
4W02	13	183		13	188		3/12/2007	353	FM		353
4W02	13	184		13	188		3/12/2007	250	FM		250
4W02	13	184		13	203	D	3/12/2007	250	FM		250
4W02	13	185		13	186		3/12/2007	110	FM		110
4W02	13	186		13	187		3/12/2007	210	FM		210
4W02	13	187		13	188		3/12/2007	304	FM		304
4W03	12	093	P	12	094	P	5/9/2007	293	FM	3	1172
4W03	12	094	P	12	095	P	5/9/2007	224	FM	3	896
4W03	12	095	P	12	096		3/13/2007	235	FM		235
4W03	12	096		12	097		3/13/2007	257	FM		257
4W03	12	097		12	098		3/13/2007	320	FM		320
4W03	12	098		12	099		3/13/2007	320	FM		320
4W04	12	083		12	084		3/13/2007	250	FM		250
4W04	12	084		12	086		3/13/2007	200	FM		200
4W04	12	085		12	086		3/13/2007	36	FM		36
4W04	12	085		12	128	C	3/13/2007	157	FM		157
4W04	12	086		12	087		3/13/2007	200	FM		200
4W04	12	087		12	088		3/13/2007	320	FM		320
4W04	12	088		12	089		3/13/2007	200	FM		200
4W05	12	080	P	12	141	D	5/8/2007	10	FM	3	40
5 01	15	162		15	163		4/24/2007	298	FM		298
5 01	15	162		16	040		4/24/2007	290	FM		290
5 01	15	163		15	164		4/24/2007	332	FM		332

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 01	15	164		15	165		4/24/2007	70	FM		70
5 01	15	165		22	091		7/19/2006	100	FM		100
5 01	15	165		15	166		4/24/2007	301	FM		301
5 01	15	166		15	167		4/24/2007	296	FM		296
5 01	15	167		15	168		7/24/2006	74	FM		74
5 01	15	168		15	169		7/24/2006	241	FM		241
5 01	15	169		15	170		7/24/2006	246	FM		246
5 01	16	005		16	006		4/2/2007	350	FM		350
5 01	16	006		16	007		4/2/2007	351	FM		351
5 01	16	007		16	008		4/24/2007	83	FM		83
5 01	16	008		16	009		4/24/2007	200	FM		200
5 01	16	009		16	013		4/24/2007	200	FM		200
5 01	16	010		16	011		4/2/2007	225	FM		225
5 01	16	011		16	012		4/2/2007	83	FM		83
5 01	16	012		16	013		4/2/2007	201	FM		201
5 01	16	013		16	014		4/24/2007	327	FM		327
5 01	16	014		16	023		4/24/2007	299	FM		299
5 01	16	015		16	016		11/1/2006	216	JM	12	216
5 01	16	015		16	016		4/2/2007	220	FM		220
5 01	16	016		16	017		11/1/2006	87	JM	12	87
5 01	16	016		16	017		4/2/2007	90	FM		90
5 01	16	017		16	019		11/1/2006	323	JM	12	323
5 01	16	017		16	019		4/2/2007	319	FM		319
5 01	16	018		16	019		4/2/2007	252	FM		252
5 01	16	018		16	019		5/1/2007	247	JM	6	494
5 01	16	019		16	020		11/1/2006	145	JM	12	145
5 01	16	019		16	020		4/2/2007	145	FM		145
5 01	16	020		16	021		11/1/2006	276	JM	12	276
5 01	16	020		16	021		4/2/2007	275	FM		275
5 01	16	021		16	022		11/1/2006	128	JM	12	128
5 01	16	021		16	022		4/2/2007	134	FM		134
5 01	16	022		16	023		11/1/2006	195	JM	12	195
5 01	16	022		16	023		4/2/2007	194	FM		194
5 01	16	023		23	017		4/2/2007	148	FM		148
5 01	16	023		16	030		4/24/2007	240	FM		240
5 01	16	024		16	025		4/2/2007	265	FM		265
5 01	16	024		16	025		4/15/2007	295	JM	12	295
5 01	16	025		16	026		4/2/2007	293	FM		293
5 01	16	025		16	026		4/15/2007	310	JM	12	310
5 01	16	026		16	027		4/2/2007	150	FM		150
5 01	16	026		16	027		4/15/2007	126	JM	12	126
5 01	16	027		16	028		4/2/2007	150	FM		150
5 01	16	027		16	028		4/15/2007	64	JM	12	64
5 01	16	028		16	029		4/2/2007	122	FM		122
5 01	16	028		16	029		4/15/2007	118	JM	12	118
5 01	16	029		16	030		4/2/2007	125	FM		125
5 01	16	029		16	030		4/15/2007	145	JM	12	145
5 01	16	030		16	032		4/24/2007	343	FM		343
5 01	16	031		23	013		7/18/2006	200	FM		200

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 01	16	031		16	032		4/24/2007	50	FM		50
5 01	16	032		16	035		4/24/2007	343	FM		343
5 01	16	032		16	035		6/1/2007	354	JM	6	708
5 01	16	033		16	034		7/19/2006	139	FM		139
5 01	16	034		16	035		7/19/2006	102	FM		102
5 01	16	035		16	041	D	7/19/2006	97	FM		97
5 01	16	035		16	038		4/24/2007	146	FM		146
5 01	16	036		16	037		7/19/2006	113	FM		113
5 01	16	036		23	010		7/19/2006	202	FM		202
5 01	16	037		23	006		7/19/2006	160	FM		160
5 01	16	037		16	038		4/24/2007	50	FM		50
5 01	16	038		16	039		4/24/2007	241	FM		241
5 01	16	039		16	040		4/24/2007	198	FM		198
5 01	22	081		23	002		4/9/2007	140	FM		140
5 01	22	081		22	082		4/9/2007	123	FM		123
5 01	22	082		22	083		4/9/2007	175	FM		175
5 01	22	083		22	084		4/9/2007	110	FM		110
5 01	22	083		22	085		4/9/2007	115	FM		115
5 01	22	085		22	086		4/9/2007	115	FM		115
5 01	22	086		22	088		7/19/2006	43	FM		43
5 01	22	087		22	088		4/9/2007	165	FM		165
5 01	22	088		22	089		4/9/2007	190	FM		190
5 01	22	089		22	090		4/9/2007	186	FM		186
5 01	22	090		22	091		7/19/2006	121	FM		121
5 01	23	001		23	002		4/9/2007	102	FM		102
5 01	23	003		23	004		4/6/2007	84	FM		84
5 01	23	004		23	005		4/6/2007	256	FM		256
5 01	23	005		23	006		4/6/2007	152	FM		152
5 01	23	007		23	008		4/6/2007	194	FM		194
5 01	23	008		23	010		4/6/2007	303	FM		303
5 01	23	009		23	010		4/6/2007	367	FM		367
5 01	23	011		23	013		4/6/2007	160	FM		160
5 01	23	012		23	013		4/6/2007	185	FM		185
5 01	23	014	C	23	017		4/2/2007	134	FM		134
5 01	23	015		23	016		4/2/2007	250	FM		250
5 01	23	016		23	017		4/2/2007	303	FM		303
5 02	22	001		22	002		3/26/2007	267	FM		267
5 02	22	002		22	009		3/26/2007	350	FM		350
5 02	22	003		22	004		3/26/2007	342	FM		342
5 02	22	004		22	007		3/26/2007	122	FM		122
5 02	22	005		22	006		3/26/2007	133	FM		133
5 02	22	006		22	007		3/26/2007	290	FM		290
5 02	22	006		22	094	D	3/26/2007	105	FM		105
5 02	22	007		22	008		3/26/2007	161	FM		161
5 02	22	008		22	009		3/26/2007	262	FM		262
5 02	22	009		22	012		3/27/2007	337	FM		337
5 02	22	011		22	012		3/27/2007	244	FM		244
5 02	22	011		22	096		3/27/2007	82	FM		82
5 02	22	012		22	015		3/27/2007	303	FM		303

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 02	22	013		22	014		3/27/2007	245	FM		245
5 02	22	014		22	015		3/27/2007	307	FM		307
5 02	22	015		22	018		7/24/2006	200	FM		200
5 02	22	016		22	017		6/4/2007	344	FM		344
5 02	22	016		22	092	D	6/4/2007	54	FM		54
5 02	22	017		22	018		6/4/2007	60	FM		60
5 02	22	018		22	019		6/4/2007	252	FM		252
5 02	22	019		22	020		6/4/2007	278	FM		278
5 02	22	020		22	021		6/4/2007	280	FM		280
5 02	22	096		22	097		3/27/2007	170	FM		170
5 02	22	097		22	098		3/27/2007	40	FM		40
5 02	22	098		22	099		3/26/2007	124	FM		124
5 03	15	170		15	175		8/16/2006	254	FM		254
5 03	15	171		15	172		4/23/2007	300	FM		300
5 03	15	172		15	173		11/1/2006	305	JM	12	305
5 03	15	172		15	173		4/23/2007	300	FM		300
5 03	15	173		15	174		6/4/2007	127	FM		127
5 03	15	174		15	175		6/4/2007	327	FM		327
5 03	15	175		22	021		6/4/2007	150	FM		150
5 03	21	001		21	002		2/12/2007	335	JM	6	670
5 03	21	001		21	002		6/4/2007	360	FM		360
5 03	21	001		22	023		6/4/2007	360	FM		360
5 03	21	002		21	003		6/4/2007	308	FM		308
5 03	21	002		21	142		6/4/2007	310	FM		310
5 03	21	003		21	004		6/4/2007	310	FM		310
5 03	21	004		21	005		6/4/2007	320	FM		320
5 03	21	005		21	006		6/4/2007	335	FM		335
5 03	22	021		22	022		6/4/2007	350	FM		350
5 03	22	022		22	023		6/4/2007	350	FM		350
5 04	15	128		15	129		4/11/2007	180	FM		180
5 04	15	129		15	131		4/11/2007	200	FM		200
5 04	15	130		15	131		4/11/2007	175	FM		175
5 04	15	131		15	132		4/11/2007	90	FM		90
5 04	15	132		15	133		4/11/2007	300	FM		300
5 04	15	133		15	134		4/11/2007	330	FM		330
5 04	15	134		15	135		4/11/2007	300	FM		300
5 04	15	135		15	176		4/11/2007	299	FM		299
5 04	15	136		15	140		4/11/2007	300	FM		300
5 04	15	136		15	176		4/11/2007	14	FM		14
5 04	15	137		15	139		5/10/2007	150	FM		150
5 04	15	138		15	139		8/23/2006	215	FM		215
5 04	15	139		15	140		5/10/2007	195	FM		195
5 04	15	140		15	141		5/10/2007	130	FM		130
5 04	15	141		15	180		5/10/2007	141	FM		141
5 04	15	142		15	143		4/11/2007	305	FM		305
5 04	15	142		15	177		4/11/2007	341	FM		341
5 04	15	143		15	148		4/11/2007	350	FM		350
5 04	15	144		15	200	D	8/16/2006	100	FM		100
5 04	15	144		15	145		5/10/2007	300	FM		300

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 04	15	145	P	15	174	P	5/2/2007	326	FM	3	1304
5 04	15	145		15	147		5/10/2007	355	FM		355
5 04	15	146		15	147		8/24/2006	313	FM		313
5 04	15	147		15	148		5/10/2007	350	FM		350
5 04	15	148		15	180		5/10/2007	212	FM		212
5 04	15	148		15	149		6/6/2007	354	FM		354
5 04	15	149		15	150		6/6/2007	350	FM		350
5 04	15	150		15	151		6/6/2007	314	FM		314
5 04	15	177		15	178		4/11/2007	250	FM		250
5 04	15	178		15	179		4/11/2007	116	FM		116
5 04	15	179		15	210		4/11/2007	225	FM		225
5 05	14	138		14	139		5/10/2007	245	FM		245
5 05	14	138		15	153		5/10/2007	350	FM		350
5 05	14	139	P	14	140	P	5/7/2007	360	FM	3	1440
5 05	14	139	P	14	212	D	5/7/2007	120	FM	3	480
5 05	14	140		14	141		6/6/2007	285	FM		285
5 05	14	140		15	151		6/6/2007	342	FM		342
5 05	14	141		14	142		6/6/2007	22	FM		22
5 05	14	142		14	145		6/6/2007	298	FM		298
5 05	14	142		14	214	C	6/6/2007	301	FM		301
5 05	14	143		14	144		5/31/2007	308	FM		308
5 05	14	143		14	203	C	5/31/2007	293	FM		293
5 05	14	144		14	204		5/31/2007	284	FM		284
5 05	14	144		14	145		6/6/2007	360	FM		360
5 05	14	145		14	146	M	6/6/2007	332	FM		332
5 05	14	146	M	14	147		6/6/2007	354	FM		354
5 05	15	152		15	153		5/10/2007	351	FM		351
5 06	14	147		14	148		6/11/2007	178	FM		178
5 06	14	148		14	171		6/11/2007	175	FM		175
5 07	14	155		14	156		4/25/2007	219	FM		219
5 07	14	156		14	157		4/25/2007	304	FM		304
5 07	14	157		15	161		4/25/2007	300	FM		300
5 07	14	157		14	160		5/30/2007	277	FM		277
5 07	14	158		14	159		5/30/2007	286	FM		286
5 07	14	159		14	160		5/30/2007	291	FM		291
5 07	14	160		14	162		5/30/2007	160	FM		160
5 07	14	161		14	162		5/30/2007	343	FM		343
5 07	14	161		14	193	C	5/30/2007	314	FM		314
5 07	14	162		14	164		5/31/2007	340	FM		340
5 07	14	163		14	164		5/31/2007	339	FM		339
5 07	14	163		14	192	C	5/31/2007	214	FM		214
5 07	14	164		14	165		5/31/2007	165	FM		165
5 07	14	165		14	167		5/31/2007	320	FM		320
5 07	14	165		14	194		5/31/2007	343	FM		343
5 07	14	166		14	167		5/31/2007	300	FM		300
5 07	14	167		14	168		5/31/2007	28	FM		28
5 07	14	168		14	170		6/11/2007	314	FM		314
5 07	14	169		21	006		8/24/2006	322	FM		322
5 07	14	169		14	215		6/11/2007	161	FM		161

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 07	14	170		14	171		6/11/2007	370	FM		370
5 07	14	170		14	215		6/11/2007	184	FM		184
5 07	15	154		15	155		4/23/2007	210	FM		210
5 07	15	155		15	156		4/23/2007	270	FM		270
5 07	15	156		15	157		4/23/2007	145	FM		145
5 07	15	157		15	158		1/11/2007	220	JM	12	220
5 07	15	157		15	158		4/23/2007	130	FM		130
5 07	15	158		15	161		1/11/2007	265	JM	12	265
5 07	15	158		15	161		4/25/2007	225	FM		225
5 07	15	159		15	160		1/11/2007	268	JM	12	268
5 07	15	159		15	160		4/25/2007	291	FM		291
5 07	15	160		15	161		1/11/2007	273	JM	12	273
5 07	15	160		15	161		4/25/2007	280	FM		280
5 08	13	058		13	059		6/13/2007	20	FM		20
5 08	13	058		14	154		6/13/2007	200	FM		200
5 08	14	148		14	149		6/11/2007	350	FM		350
5 08	14	149		14	151		6/11/2007	304	FM		304
5 08	14	151		14	152		6/11/2007	300	FM		300
5 08	14	152		14	153		6/13/2007	300	FM		300
5 08	14	153		14	154		6/13/2007	300	FM		300
5 09	13	055		13	057		6/13/2007	175	FM		175
5 09	13	056		13	057		6/13/2007	210	FM		210
5 09	13	056		14	176		6/13/2007	250	FM		250
5 09	13	057		13	060		6/13/2007	223	FM		223
5 09	13	059		13	060		6/13/2007	119	FM		119
5 09	14	171		14	199		6/11/2007	240	FM		240
5 09	14	172		14	173		6/11/2007	280	FM		280
5 09	14	172		14	199		6/11/2007	248	FM		248
5 09	14	173		14	174		6/11/2007	203	FM		203
5 09	14	174		14	175		6/13/2007	204	FM		204
5 09	14	175		14	176		6/13/2007	284	FM		284
5 10	13	060		13	061		6/13/2007	327	FM		327
5 10	13	061		14	137		6/13/2007	392	FM		392
5 10	13	061		13	062		6/18/2007	199	FM		199
5 10	13	062		13	063		6/18/2007	189	FM		189
5 10	13	063		13	064		6/18/2007	186	FM		186
5 10	13	063		14	132		6/18/2007	387	FM		387
5 10	13	064		13	065		6/18/2007	232	FM		232
5 10	13	064		14	127		6/18/2007	383	FM		383
5 10	13	065		13	066		6/18/2007	200	FM		200
5 10	14	124		14	125		6/4/2007	525	FM		525
5 10	14	125		14	126		6/4/2007	390	FM		390
5 10	14	126		14	127		6/4/2007	350	FM		350
5 10	14	128		14	129		6/4/2007	182	FM		182
5 10	14	129		14	130		6/4/2007	293	FM		293
5 10	14	130		14	131		6/4/2007	362	FM		362
5 10	14	131		14	132		6/4/2007	357	FM		357
5 10	14	133		14	134		6/4/2007	182	FM		182
5 10	14	134		14	135		6/4/2007	293	FM		293

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 10	14	135		14	136		6/4/2007	380	FM		380
5 10	14	136		14	137		6/4/2007	407	FM		407
5 11	13	054	M	13	068		6/18/2007	100	FM		100
5 11	13	066		13	067		6/18/2007	325	FM		325
5 11	13	066		14	123		6/18/2007	383	FM		383
5 11	13	067		13	068		6/18/2007	100	FM		100
5 11	13	068		13	069		10/11/2006	250	FM		250
5 11	14	096		14	097		5/21/2007	161	FM		161
5 11	14	096		15	127		5/21/2007	317	FM		317
5 11	14	097		14	101		5/22/2007	21	FM		21
5 11	14	098		14	099		5/22/2007	95	FM		95
5 11	14	099		14	190	D	9/5/2006	30	FM		30
5 11	14	099		14	100		5/22/2007	106	FM		106
5 11	14	100		14	101		5/22/2007	257	FM		257
5 11	14	101		14	102		5/22/2007	330	FM		330
5 11	14	102		14	103		1/10/2007	332	JM	12	332
5 11	14	102		14	103		5/22/2007	330	FM		330
5 11	14	103		14	104		1/10/2007	334	JM	12	334
5 11	14	103		14	104		5/22/2007	328	FM		328
5 11	14	104		14	110		5/22/2007	36	FM		36
5 11	14	105		14	106		5/22/2007	307	FM		307
5 11	14	106		14	107		5/22/2007	307	FM		307
5 11	14	107		14	109		5/22/2007	285	FM		285
5 11	14	108		14	109	P	5/7/2007	133	FM	3	532
5 11	14	109	P	14	110	P	5/7/2007	322	FM	3	1288
5 11	14	110	P	14	112	P	5/7/2007	291	FM	3	1164
5 11	14	111	P	14	112	P	5/7/2007	300	FM	3	1200
5 11	14	112	P	14	113	P	5/7/2007	84	FM	3	336
5 11	14	113	P	14	114	P	5/7/2007	168	FM	3	672
5 11	14	114	P	14	118	P	5/7/2007	255	FM	3	1020
5 11	14	115		14	116		5/21/2007	309	FM		309
5 11	14	115		14	195	C	5/21/2007	192	FM		192
5 11	14	116		14	117	P	6/5/2007	415	FM		415
5 11	14	117	P	14	118	P	5/7/2007	135	FM	3	540
5 11	14	117	P	14	202	P	5/7/2007	55	FM	3	220
5 11	14	118	P	14	119		5/7/2007	330	FM	3	1320
5 11	14	119		14	120		6/5/2007	155	FM		155
5 11	14	120		14	121		6/5/2007	140	FM		140
5 11	14	121		14	216		6/5/2007	262	FM		262
5 11	14	122		14	123		9/7/2006	389	FM		389
5 11	14	122		14	216		9/7/2006	101	FM		101
5 11	15	125		15	126		5/21/2007	200	FM		200
5 11	15	125		15	209	D	5/21/2007	106	FM		106
5 11	15	126		15	127		5/21/2007	322	FM		322
5 12	15	022		15	028		3/22/2007	118	FM		118
5 12	15	022		16	004		3/22/2007	161	FM		161
5 12	15	023		15	024		3/22/2007	153	FM		153
5 12	15	023		16	002		3/22/2007	100	FM		100
5 12	15	024		15	025		3/22/2007	100	FM		100

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 12	15	025		15	026		3/22/2007	150	FM		150
5 12	15	026		15	027		9/14/2006	210	FM		210
5 12	15	027		15	028		3/22/2007	80	FM		80
5 12	15	028		15	029		3/22/2007	147	FM		147
5 12	15	029		15	030		3/22/2007	102	FM		102
5 12	15	030		15	031		9/14/2006	115	FM		115
5 12	15	031		15	037		3/22/2007	223	FM		223
5 12	15	032		15	033		3/22/2007	178	FM		178
5 12	15	033		15	034		3/22/2007	124	FM		124
5 12	15	034		15	035		3/22/2007	35	FM		35
5 12	15	035		15	036		3/22/2007	153	FM		153
5 12	15	036		15	037		3/22/2007	265	FM		265
5 12	15	037		15	038		3/22/2007	171	FM		171
5 12	15	038		15	041		3/22/2007	313	FM		313
5 12	15	039		15	040		9/15/2006	136	FM		136
5 12	15	040		15	041		3/22/2007	170	FM		170
5 12	15	040		15	041		6/1/2007	165	JM	12	165
5 12	15	041		15	042		3/22/2007	144	FM		144
5 12	15	042		15	046		3/22/2007	157	FM		157
5 12	15	043		15	044		3/22/2007	206	FM		206
5 12	15	044		15	045		3/22/2007	212	FM		212
5 12	15	045		15	046		3/22/2007	100	FM		100
5 12	15	046		15	047		3/22/2007	87	FM		87
5 12	15	047		15	048		3/22/2007	180	FM		180
5 12	15	047		15	048		6/1/2007	184	JM	12	184
5 12	15	048		15	049		3/22/2007	188	FM		188
5 12	15	049		15	050		3/22/2007	140	FM		140
5 12	15	050		15	052		9/18/2006	270	FM		270
5 12	15	050		15	052		6/1/2007	266	JM	6	532
5 12	15	051		15	052		10/12/2006	180	JM	12	180
5 12	15	051		15	052		3/22/2007	173	FM		173
5 12	15	051		15	197	C	3/22/2007	85	FM		85
5 12	15	052		15	070		10/12/2006	152	JM	12	152
5 12	15	052		15	070		3/22/2007	149	FM		149
5 12	15	053		15	054		3/22/2007	85	FM		85
5 12	15	054		15	205		3/22/2007	86	FM		86
5 12	15	055		15	061		3/4/2007	209	JM	12	209
5 12	15	055		15	061		3/22/2007	230	FM		230
5 12	15	055		15	205		3/22/2007	125	FM		125
5 12	15	056		15	057		3/22/2007	246	FM		246
5 12	15	057		15	059		3/22/2007	133	FM		133
5 12	15	058		15	059		3/22/2007	186	FM		186
5 12	15	059		15	204		3/22/2007	60	FM		60
5 12	15	060		15	061		3/4/2007	306	JM	12	306
5 12	15	060		15	061		3/22/2007	325	FM		325
5 12	15	060		15	204		3/22/2007	236	FM		236
5 12	15	061		15	067		9/18/2006	122	FM		122
5 12	15	062		15	063		3/22/2007	155	FM		155
5 12	15	063		15	064		3/22/2007	203	FM		203

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 12	15	064		15	065		3/22/2007	300	FM		300
5 12	15	065		15	066		9/18/2006	100	FM		100
5 12	15	066		15	067		9/18/2006	28	FM		28
5 12	15	067		15	068		3/22/2007	232	FM		232
5 12	15	068		15	069		3/22/2007	326	FM		326
5 12	15	068		15	198	C	3/22/2007	91	FM		91
5 12	15	069		15	070		9/18/2006	285	FM		285
5 12	15	069		15	202	D	9/18/2006	52	FM		52
5 12	15	070		15	075		3/22/2007	198	FM		198
5 12	15	071		15	201	D	9/15/2006		FM		
5 12	15	071		15	072		10/12/2006	234	JM	12	234
5 12	15	071		15	072		3/22/2007	240	FM		240
5 12	15	072		15	073		3/22/2007	312	FM		312
5 12	15	073		15	074		10/12/2006	284	JM	12	284
5 12	15	073		15	074		3/22/2007	274	FM		274
5 12	15	074		15	075		10/12/2006	243	JM	12	243
5 12	15	074		15	075		3/22/2007	232	FM		232
5 12	15	075		15	077		3/22/2007	246	FM		246
5 12	15	205		15	206		3/22/2007	90	FM		90
5 12	15	206		15	207		3/22/2007	120	FM		120
5 12	15	207		15	208		3/22/2007	115	FM		115
5 12	16	001		16	002		3/22/2007	100	FM		100
5 12	16	003		16	004		3/22/2007	188	FM		188
5 13	10	081		15	007		4/25/2007	357	FM		357
5 13	10	082		10	083		10/10/2006	160	JM	12	160
5 13	10	082		10	083		3/26/2007	158	FM		158
5 13	10	083		10	084		3/26/2007	50	FM		50
5 13	10	084		10	085		10/10/2006	194	JM	12	194
5 13	10	084		10	085		3/26/2007	200	FM		200
5 13	10	085		15	012		3/26/2007	130	FM		130
5 13	10	085		15	012		4/15/2007	123	JM	6	246
5 13	15	007		15	008		4/25/2007	346	FM		346
5 13	15	008		15	011		4/25/2007	235	FM		235
5 13	15	009		15	010		4/25/2007	353	FM		353
5 13	15	010		15	011		4/25/2007	353	FM		353
5 13	15	011		15	018		4/25/2007	217	FM		217
5 13	15	012		15	013		10/11/2006	167	JM	12	167
5 13	15	012		15	013		3/26/2007	163	FM		163
5 13	15	013		15	014		3/26/2007	172	FM		172
5 13	15	014		15	015		3/26/2007	235	FM		235
5 13	15	015		15	016		3/26/2007	350	FM		350
5 13	15	016		15	017		3/26/2007	225	FM		225
5 13	15	017		15	018		4/25/2007	240	FM		240
5 13	15	018		15	019		5/4/2007	204	FM		204
5 13	15	019		15	021		5/4/2007	205	FM		205
5 13	15	020		15	021		5/4/2007	269	FM		269
5 13	15	021		15	083		5/4/2007	180	FM		180
5 13	15	076		15	077		3/22/2007	300	FM		300
5 13	15	076	A	15	199	C	3/22/2007	270	FM		270

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 13	15	077		15	080		3/26/2007	308	FM		308
5 13	15	078		15	079		3/26/2007	329	FM		329
5 13	15	079		15	080		3/26/2007	214	FM		214
5 13	15	080		15	081		9/25/2006	229	FM		229
5 13	15	081		15	082		5/4/2007	215	FM		215
5 13	15	082		15	083		5/4/2007	48	FM		48
5 13	15	083		15	084		5/9/2007	150	FM		150
5 13	15	084		15	085		5/9/2007	150	FM		150
5 14	14	046		14	047		5/9/2007	300	FM		300
5 14	14	046		15	090		5/9/2007	300	FM		300
5 14	14	047		14	048	M	5/30/2007	287	FM		287
5 14	15	085		15	087		5/9/2007	250	FM		250
5 14	15	086		15	087		5/9/2007	145	FM		145
5 14	15	087		15	089		5/9/2007	250	FM		250
5 14	15	088		15	089		5/9/2007	145	FM		145
5 14	15	089		15	090		5/9/2007	202	FM		202
5 15	09	131		09	132		5/29/2007	316	FM		316
5 15	09	132		14	036		5/29/2007	320	FM		320
5 15	09	133		14	037		5/29/2007	390	FM		390
5 15	09	134		10	080		5/4/2007	300	FM		300
5 15	10	072		10	073		4/25/2007	89	FM		89
5 15	10	073		10	074		4/25/2007	199	FM		199
5 15	10	074		10	078		4/25/2007	299	FM		299
5 15	10	075		10	076		4/25/2007	315	FM		315
5 15	10	075		10	087	C	4/25/2007	62	FM		62
5 15	10	076		10	077		4/25/2007	254	FM		254
5 15	10	077		10	078		10/3/2006	87	FM		87
5 15	10	078		10	079		5/4/2007	180	FM		180
5 15	10	079		15	002		5/4/2007	335	FM		335
5 15	10	080		15	005		5/4/2007	312	FM		312
5 15	14	036		14	042		5/29/2007	153	FM		153
5 15	14	037		14	038		5/29/2007	276	FM		276
5 15	14	038		14	040		5/29/2007	290	FM		290
5 15	14	039		15	006		10/3/2006	300	FM		300
5 15	14	039		14	040		5/29/2007	300	FM		300
5 15	14	040		14	041		5/29/2007	325	FM		325
5 15	14	041		14	042		5/29/2007	310	FM		310
5 15	14	042		14	045		10/4/2006	327	FM		327
5 15	14	043		14	044		10/3/2006	290	FM		290
5 15	14	043		14	196	C	10/3/2006	40	FM		40
5 15	14	044		14	045		10/4/2006	364	FM		364
5 15	14	045		14	048	M	5/30/2007	333	FM		333
5 15	15	001		15	003		5/4/2007	250	FM		250
5 15	15	002		15	003		5/4/2007	187	FM		187
5 15	15	003		15	004		10/3/2006	51	FM		51
5 15	15	004		15	006		5/4/2007	250	FM		250
5 15	15	005		15	006		5/4/2007	383	FM		383
5 17	09	126		09	127		5/29/2007	330	FM		330
5 17	09	126		10	067		5/29/2007	370	FM		370

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 17	09	127		09	128		5/29/2007	330	FM		330
5 17	09	128		09	129		5/29/2007	335	FM		335
5 17	09	129		14	031		5/29/2007	395	FM		395
5 17	09	130		10	011		5/23/2007	275	FM		275
5 17	09	130		10	012		5/23/2007	325	FM		325
5 17	10	006		10	007		5/23/2007	80	FM		80
5 17	10	007		10	008		5/23/2007	150	FM		150
5 17	10	008		10	009		5/23/2007	197	FM		197
5 17	10	009		10	010		5/23/2007	330	FM		330
5 17	10	010		10	011		5/23/2007	250	FM		250
5 17	10	012		10	044		10/9/2006	175	FM		175
5 17	10	013		10	014		5/23/2007	150	FM		150
5 17	10	014		10	015		5/23/2007	200	FM		200
5 17	10	015		10	019		5/23/2007	200	FM		200
5 17	10	016		10	017		4/23/2007	165	FM		165
5 17	10	017		10	018		4/23/2007	110	FM		110
5 17	10	018		10	019		4/23/2007	50	FM		50
5 17	10	019		10	020		5/23/2007	380	FM		380
5 17	10	020		10	021		5/23/2007	240	FM		240
5 17	10	021		10	022		5/23/2007	450	FM		450
5 17	10	022		10	023		5/23/2007	50	FM		50
5 17	10	023		10	024		10/9/2006	75	FM		75
5 17	10	024		10	025		5/23/2007	165	FM		165
5 17	10	025		10	026		5/23/2007	60	FM		60
5 17	10	026		10	027		5/23/2007	100	FM		100
5 17	10	027		10	028		10/9/2006	200	FM		200
5 17	10	028		10	029		5/23/2007	60	FM		60
5 17	10	029		10	030		5/23/2007	80	FM		80
5 17	10	030		10	042		5/23/2007	100	FM		100
5 17	10	031	C	10	032		3/26/2007	102	FM		102
5 17	10	032		10	033		3/26/2007	358	FM		358
5 17	10	032		10	033		7/2/2007	400	JM	6	800
5 17	10	033		10	035		3/26/2007	120	FM		120
5 17	10	034		10	035		3/26/2007	50	FM		50
5 17	10	035		10	036		5/23/2007	250	FM		250
5 17	10	036		10	086		5/23/2007	170	FM		170
5 17	10	036		10	086		7/2/2007	180	JM	6	360
5 17	10	037		10	038		10/5/2006	97	FM		97
5 17	10	037		10	086		5/23/2007	97	FM		97
5 17	10	038		10	040		5/23/2007	317	FM		317
5 17	10	039		10	040		10/5/2006	100	FM		100
5 17	10	040		10	041		5/23/2007	140	FM		140
5 17	10	041		10	042		10/9/2006	600	FM		600
5 17	10	042		10	043		5/23/2007	165	FM		165
5 17	10	043		10	044		5/23/2007	135	FM		135
5 17	10	044		10	045		5/23/2007	300	FM		300
5 17	10	045		10	046		5/23/2007	281	FM		281
5 17	10	046		10	047		5/23/2007	351	FM		351
5 17	10	047		10	048		10/9/2006	175	FM		175

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 17	10	048		10	049		10/9/2006	92	FM		92
5 17	10	049		10	067		10/9/2006	150	FM		150
5 17	10	050		10	051		5/24/2007	243	FM		243
5 17	10	050		10	088	D	5/24/2007	207	FM		207
5 17	10	051		10	052		5/24/2007	230	FM		230
5 17	10	052		10	053		5/24/2007	241	FM		241
5 17	10	053		10	066		5/24/2007	217	FM		217
5 17	10	053		10	066		7/2/2007	207	JM	6	414
5 17	10	054	C	10	055		5/24/2007	44	FM		44
5 17	10	055		10	056		5/24/2007	294	FM		294
5 17	10	056		10	057		5/24/2007	355	FM		355
5 17	10	056		10	057		7/2/2007	384	JM	6	768
5 17	10	057		10	058		5/24/2007	177	FM		177
5 17	10	057		10	058		7/2/2007	179	JM	12	179
5 17	10	058		10	059		5/24/2007	73	FM		73
5 17	10	058		10	059		7/2/2007	73	JM	12	73
5 17	10	059		10	066		5/24/2007	431	FM		431
5 17	10	060		10	062		5/24/2007	270	FM		270
5 17	10	062		10	063		5/24/2007	300	FM		300
5 17	10	063		10	064		5/24/2007	300	FM		300
5 17	10	064		10	065		5/24/2007	233	FM		233
5 17	10	065		10	066		5/24/2007	62	FM		62
5 17	10	066		10	067		5/24/2007	350	FM		350
5 17	14	031		14	032		5/30/2007	362	FM		362
5 17	14	032		14	033		5/30/2007	109	FM		109
5 17	14	033		14	034		5/30/2007	350	FM		350
5 17	14	033		14	210		5/30/2007	360	FM		360
5 17	14	034		14	035		5/30/2007	100	FM		100
5 17	14	035		14	052		5/30/2007	331	FM		331
5 17	14	035		14	213		5/30/2007	256	FM		256
5 18	14	048	M	14	052		5/30/2007	300	FM		300
5 18	14	049		14	051		10/11/2006	200	FM		200
5 18	14	050		14	051		10/11/2006	120	FM		120
5 18	14	051		14	052		5/30/2007	135	FM		135
5 18	14	052		14	053		10/11/2006	350	FM		350
5 19	14	053		14	054		10/11/2006	360	FM		360
5 20	14	054		14	055		10/11/2006	330	FM		330
5 21	14	056		14	057		5/14/2007	323	FM		323
5 21	14	057		14	058		5/14/2007	285	FM		285
5 21	14	057		15	092		5/14/2007	317	FM		317
5 21	14	058		14	059		5/14/2007	330	FM		330
5 21	14	059		14	062		5/14/2007	333	FM		333
5 21	14	060		14	061		9/29/2006	130	FM		130
5 21	14	060		15	109		5/14/2007	134	FM		134
5 21	14	061		14	062		5/14/2007	253	FM		253
5 21	14	061		15	108		5/14/2007	252	FM		252
5 21	14	062		14	063		5/14/2007	175	FM		175
5 21	14	063		14	064		5/21/2007	264	FM		264
5 21	14	064		14	078		5/21/2007	347	FM		347

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 21	15	091		15	092		10/2/2006	372	FM		372
5 21	15	093		15	097		5/10/2007	345	FM		345
5 21	15	094		15	095		5/10/2007	280	FM		280
5 21	15	095		15	096		5/10/2007	300	FM		300
5 21	15	096		15	097		5/10/2007	294	FM		294
5 21	15	097		15	102		5/11/2007	272	FM		272
5 21	15	098		15	099		5/11/2007	295	FM		295
5 21	15	099		15	100		5/11/2007	327	FM		327
5 21	15	100		15	102		5/11/2007	278	FM		278
5 21	15	101		15	102		5/11/2007	193	FM		193
5 21	15	102		15	105		5/11/2007	267	FM		267
5 21	15	103		15	105		5/11/2007	280	FM		280
5 21	15	104		15	105		5/11/2007	195	FM		195
5 21	15	105		15	108		5/14/2007	269	FM		269
5 21	15	106		15	108		5/14/2007	280	FM		280
5 21	15	107		15	203	D	9/28/2006	136	FM		136
5 21	15	107		15	108		5/14/2007	193	FM		193
5 22	14	065		14	206	D	9/11/2006	13	FM		13
5 22	14	065		14	066		5/15/2007	291	FM		291
5 22	14	065		14	223			233	FM		233
5 22	14	066		14	067		9/11/2006	170	FM		170
5 22	14	066		15	124		5/15/2007	330	FM		330
5 22	14	067		14	068		5/17/2007	325	FM		325
5 22	14	068		14	077		5/17/2007	351	FM		351
5 22	14	069		14	070		5/17/2007	247	FM		247
5 22	14	070		14	071		5/17/2007	145	FM		145
5 22	14	071		14	073		5/17/2007	145	FM		145
5 22	14	072		14	073		5/17/2007	350	FM		350
5 22	14	073		14	075		5/17/2007	266	FM		266
5 22	14	074		14	075		5/17/2007	263	FM		263
5 22	14	075		14	076		10/10/2006	160	JM	12	160
5 22	14	075		14	076		5/17/2007	155	FM		155
5 22	14	076		14	077		10/10/2006	158	JM	12	158
5 22	14	076		14	077		5/17/2007	156	FM		156
5 22	14	077		14	201	S	5/21/2007	145	FM		145
5 22	14	200	S	14	201	S	5/1/2007	48	FM	3	192
5 22	15	110		15	111		5/10/2007	172	FM		172
5 22	15	111		15	112		5/10/2007	200	FM		200
5 22	15	112		15	115		5/10/2007	66	FM		66
5 22	15	113		15	114		5/10/2007	200	FM		200
5 22	15	114		15	115		5/10/2007	50	FM		50
5 22	15	115		15	116		9/11/2006	25	FM		25
5 22	15	116		15	117		5/15/2007	326	FM		326
5 22	15	117		15	118		3/4/2007	331	JM	12	331
5 22	15	117		15	118		5/15/2007	324	FM		324
5 22	15	118		15	123		5/15/2007	59	FM		59
5 22	15	119		15	120		5/15/2007	300	FM		300
5 22	15	120		15	122		5/15/2007	368	FM		368
5 22	15	122		15	123		5/15/2007	320	FM		320

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 22	15	123		15	124		5/15/2007	261	FM		261
5 23	14	078		14	200	S	10/2/2006	127	FM		127
5 23	14	078		14	082		5/21/2007	330	FM		330
5 24	14	079		14	217		5/21/2007	195	FM		195
5 24	14	080	S	14	081	S	5/1/2007	52	FM	3	208
5 24	14	080	S	14	082		5/21/2007	134	FM		134
5 24	14	081	S	14	217		5/21/2007	65	FM		65
5 24	14	082		14	087	P	5/8/2007	164	FM	3	656
5 25	14	083		14	084		5/21/2007	322	FM		322
5 25	14	084		14	086		5/21/2007	318	FM		318
5 25	14	085		14	086		5/21/2007	352	FM		352
5 25	14	085		14	208	D	5/21/2007	268	FM		268
5 25	14	086		14	087		5/22/2007	161	FM		161
5 25	14	087		14	089		5/22/2007	160	FM		160
5 25	14	088		14	197		5/22/2007	268	FM		268
5 25	14	088		14	089		5/22/2007	352	FM		352
5 25	14	088		14	197	C	6/1/2007	172	JM	12	172
5 25	14	088		14	089		6/1/2007	352	JM	12	352
5 25	14	089		14	198		5/22/2007	279	FM		279
5 26	14	055		14	090		10/11/2006	330	FM		330
5 26	14	089		14	090		10/11/2006	175	FM		175
5 26	14	090		14	091		6/18/2007	330	FM		330
5 26	14	091		14	092		6/18/2007	138	FM		138
5 26	14	092		14	093		6/18/2007	332	FM		332
5 26	14	093		14	094		6/18/2007	323	FM		323
5 26	14	094		14	095		6/18/2007	200	FM		200
5 27	13	053		14	095		6/18/2007	149	FM		149
5 27	13	053		13	054	M	6/18/2007	310	FM		310
5 28	21	007		21	033		6/6/2007	375	FM		375
5 28	21	015		22	038		3/28/2007	294	FM		294
5 28	21	015		21	016		3/28/2007	293	FM		293
5 28	21	016		21	017		3/28/2007	292	FM		292
5 28	21	017		21	143	D	3/28/2007	224	FM		224
5 28	21	017		21	020		4/6/2007	222	FM		222
5 28	21	018		22	036		3/28/2007	287	FM		287
5 28	21	018		21	019		4/6/2007	284	FM		284
5 28	21	019		21	020		4/6/2007	318	FM		318
5 28	21	020		21	021		4/6/2007	79	FM		79
5 28	21	021		21	022		4/6/2007	175	FM		175
5 28	21	022		21	023		4/6/2007	176	FM		176
5 28	21	023		21	024		6/6/2007	92	FM		92
5 28	21	024		21	027		6/6/2007	140	FM		140
5 28	21	025		21	026		6/6/2007	300	FM		300
5 28	21	026		21	027		6/6/2007	120	FM		120
5 28	21	027		21	033		6/6/2007	350	FM		350
5 28	21	028		22	033		3/28/2007	155	FM		155
5 28	21	028		21	029		3/28/2007	342	FM		342
5 28	21	029		21	030		3/28/2007	270	FM		270
5 28	21	030		21	031		3/28/2007	346	FM		346

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 28	21	031		21	032		3/28/2007	340	FM		340
5 28	21	032		21	033		6/6/2007	333	FM		333
5 28	21	033		21	034		6/19/2007	350	FM		350
5 28	21	034		21	035		6/19/2007	315	FM		315
5 28	21	035		21	038		6/19/2007	310	FM		310
5 28	21	036		21	144		6/19/2007	191	FM		191
5 28	21	037		21	038		6/19/2007	352	FM		352
5 28	21	037		21	144		6/19/2007	160	FM		160
5 28	21	038		21	039		6/19/2007	310	FM		310
5 28	21	039		21	040		6/19/2007	300	FM		300
5 28	22	024		22	025		3/27/2007	180	FM		180
5 28	22	025		22	026		3/27/2007	275	FM		275
5 28	22	026		22	027		3/27/2007	275	FM		275
5 28	22	027		22	031		3/27/2007	220	FM		220
5 28	22	028		22	029		3/27/2007	347	FM		347
5 28	22	029		22	031		3/27/2007	347	FM		347
5 28	22	030		22	031		3/27/2007	216	FM		216
5 28	22	031		22	033		3/28/2007	320	FM		320
5 28	22	032		22	033		3/28/2007	185	FM		185
5 28	22	034		22	035		3/28/2007	112	FM		112
5 28	22	035		22	036		3/28/2007	287	FM		287
5 28	22	037		22	038		3/28/2007	292	FM		292
5 29	21	044		21	045		8/9/2006	310	FM		310
5 29	21	044		22	045		4/6/2007	308	FM		308
5 29	21	045		21	046		8/9/2006	309	FM		309
5 29	21	046		21	047		8/9/2006	40	FM		40
5 29	21	047		21	048		8/9/2006	289	FM		289
5 29	21	048		21	052		6/6/2007	342	FM		342
5 29	21	049		21	050		6/6/2007	320	FM		320
5 29	21	050		21	051		6/6/2007	200	FM		200
5 29	21	051		21	052		6/6/2007	300	FM		300
5 29	21	052		21	053		6/18/2007	262	FM		262
5 29	21	053		21	054		6/18/2007	266	FM		266
5 29	21	054		21	145		6/19/2007	210	FM		210
5 29	21	055		21	057		6/19/2007	79	FM		79
5 29	21	055		21	145		6/19/2007	125	FM		125
5 29	21	056		21	057		6/19/2007	350	FM		350
5 29	21	057		21	058		6/19/2007	247	FM		247
5 29	21	058		21	059		6/19/2007	330	FM		330
5 29	22	039		22	040		4/6/2007	332	FM		332
5 29	22	040		22	041		4/6/2007	339	FM		339
5 29	22	041		22	042		4/6/2007	200	FM		200
5 29	22	042		22	100		4/6/2007	130	FM		130
5 29	22	043		22	100		4/6/2007	112	FM		112
5 29	22	043		22	101		4/6/2007	130	FM		130
5 29	22	044		22	045		4/6/2007	310	FM		310
5 29	22	044		22	101		4/6/2007	190	FM		190
5 31	20	134		21	059		6/19/2007	350	FM		350
5 31	20	134		20	135		6/19/2007	360	FM		360

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 31	20	135		20	136	M	6/19/2007	80	FM		80
5 31	20	136	M	21	043		6/19/2007	300	FM		300
5 31	21	041		21	042		6/19/2007	250	FM		250
5 31	21	042		21	043		6/19/2007	283	FM		283
5 33	20	136	M	20	137		6/19/2007	463	FM		463
5 33	20	137		21	040		6/19/2007	300	FM		300
5 33	20	137		20	138	P	6/25/2007	350	FM		350
5 33	20	138	P	20	139	P	5/9/2007	138	FM	3	552
5 34	20	139	P	20	140	P	5/9/2007	152	FM	3	608
5 35	20	141		21	014		8/17/2006	300	FM		300
5 35	20	141	M	20	142		8/21/2006	330	FM		330
5 35	21	006		21	007		6/6/2007	51	FM		51
5 35	21	007		21	009		8/17/2006	160	FM		160
5 35	21	008		21	009		8/17/2006	240	FM		240
5 35	21	009		21	010		8/17/2006	175	FM		175
5 35	21	010		21	011		8/17/2006	300	FM		300
5 35	21	011		21	012		8/17/2006	345	FM		345
5 35	21	012		21	137	C	8/17/2006	144	FM		144
5 35	21	012		21	013		8/17/2006	350	FM		350
5 35	21	013		21	014		8/17/2006	350	FM		350
5 36	13	088		20	143		8/29/2006	450	FM		450
5 36	13	196	P	20	144	P	5/9/2007	253	FM	3	1012
5 36	20	009	C	20	119		8/17/2006	140	FM		140
5 36	20	113		20	114		6/25/2007	252	FM		252
5 36	20	114		20	115		6/25/2007	300	FM		300
5 36	20	115		20	116		6/25/2007	300	FM		300
5 36	20	116		20	117		8/15/2006	274	FM		274
5 36	20	117		20	145	D	8/15/2006	142	FM		142
5 36	20	117		20	118		8/15/2006	400	FM		400
5 36	20	118		20	121		8/18/2006	369	FM		369
5 36	20	120		20	121		8/18/2006	310	FM		310
5 36	20	121		20	144		8/21/2006	106	FM		106
5 36	20	122		20	123		6/25/2007	350	FM		350
5 36	20	123		20	124		6/25/2007	400	FM		400
5 36	20	124		20	125		6/25/2007	150	FM		150
5 36	20	125		20	130		6/25/2007	125	FM		125
5 36	20	126		20	147		8/15/2006	70	FM		70
5 36	20	126		20	127		8/15/2006	250	FM		250
5 36	20	127		20	128		6/25/2007	226	FM		226
5 36	20	128		20	129		6/25/2007	250	FM		250
5 36	20	129		20	130		6/25/2007	150	FM		150
5 36	20	130		20	131		6/25/2007	178	FM		178
5 36	20	131		20	132		6/25/2007	125	FM		125
5 36	20	132		20	133		6/25/2007	277	FM		277
5 36	20	133		20	140	P	6/25/2007	433	FM		433
5 36	20	142	M	20	143		12/13/2006	196	FM		196
5 36	20	143		20	144		8/21/2006	220	FM		220
5 37	13	088		13	091		8/29/2006	33	FM		33
5 37	13	089		13	095		8/29/2006	290	FM		290

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 37	13	089		14	189		6/13/2007	325	FM		325
5 37	13	090		13	095		8/29/2006	100	FM		100
5 37	13	090	P	13	091	T	5/9/2007	315	FM	3	1260
5 37	13	091	T	13	092	T	5/9/2007	18	FM	3	72
5 37	13	093		13	094		8/30/2006	300	FM		300
5 37	13	093		14	182		6/13/2007	255	FM		255
5 37	13	094		13	096		8/30/2006	175	FM		175
5 37	13	096		13	097		8/30/2006	260	FM		260
5 37	13	097		13	098		8/30/2006	93	FM		93
5 37	13	098		13	099		10/12/2006	510	FM		510
5 37	13	099		13	100		10/12/2006	418	FM		418
5 37	13	100		13	106		10/12/2006	372	FM		372
5 37	14	177		14	178		6/11/2007	287	FM		287
5 37	14	178		14	179		6/11/2007	280	FM		280
5 37	14	179		14	180		6/11/2007	200	FM		200
5 37	14	180		14	181		6/11/2007	200	FM		200
5 37	14	181		14	182		6/13/2007	280	FM		280
5 37	14	183		14	184		6/13/2007	81	FM		81
5 37	14	184		14	185		6/13/2007	132	FM		132
5 37	14	184		14	219		6/13/2007	183	FM		183
5 37	14	185		14	186		6/13/2007	350	FM		350
5 37	14	186		14	187		6/13/2007	180	FM		180
5 37	14	187		14	211		6/13/2007	275	FM		275
5 37	14	187		14	188		6/13/2007	175	FM		175
5 37	14	188		14	189		6/13/2007	373	FM		373
5 37	14	219		14	220	D	8/29/2006	97	FM		97
5 37	14	219		14	221	D	8/29/2006	28	FM		28
5 38	13	084		13	106		10/12/2006	185	FM		185
5 38	13	101		13	103		10/12/2006	370	FM		370
5 38	13	103		13	105		10/12/2006	367	FM		367
5 38	13	105	P	13	106	P	5/9/2007	325	FM	3	1300
5 39	13	078		13	079		10/13/2006	222	FM		222
5 39	13	079		13	082		10/13/2006	181	FM		181
5 39	13	081		13	082		10/13/2006	25	FM		25
5 39	13	082		13	083		10/13/2006	348	FM		348
5 39	13	084		13	085		10/13/2006	460	FM		460
5 40	13	085		13	107		10/12/2006	180	FM		180
5 40	13	106		13	107		5/9/2007	460	FM	3	1840
5 40	13	107		13	108		5/9/2007	303	FM	3	1212
5 40	13	108	P	13	109	P	5/9/2007	179	FM	3	716
5 40	13	109		13	110		10/13/2006	30	FM		30
5 41	13	069		13	087		10/13/2006	350	FM		350
5 41	13	070		13	072		10/12/2006	184	FM		184
5 41	13	070		13	209	D	10/12/2006	50	FM		50
5 41	13	071		13	072	P	10/12/2006	439	FM		439
5 41	13	072	P	13	074		10/12/2006	387	FM		387
5 41	13	073		13	074		10/12/2006	405	FM		405
5 41	13	074		13	075		10/12/2006	185	FM		185
5 41	13	075		13	078		10/12/2006	10	FM		10

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 41	13	076		13	077		10/12/2006	385	FM		385
5 41	13	077		13	078		10/12/2006	32	FM		32
5 41	13	080		13	081		10/13/2006	408	FM		408
5 41	13	083		13	086		10/13/2006	27	FM		27
5 41	13	085		13	086		10/13/2006	361	FM		361
5 41	13	086		13	087		10/13/2006	200	FM		200
5 41	13	087		13	110		10/13/2006	100	FM		100
5 43	13	110		13	111		10/18/2006	300	FM		300
5 43	13	111		13	112		10/18/2006	48	FM		48
5 43	13	112		13	113		10/18/2006	58	FM		58
5 43	13	113		13	114		10/18/2006	150	FM		150
5 44	13	102		13	117		10/18/2006	200	FM		200
5 44	13	102		13	118		10/18/2006	250	FM		250
5 44	13	114		13	115		10/18/2006	188	FM		188
5 44	13	115		13	116		10/18/2006	234	FM		234
5 44	13	116		13	117		10/18/2006	72	FM		72
5 44	13	118		13	119		10/19/2006	600	FM		600
5 45	13	119		13	120		10/19/2006	600	FM		600
5 45	13	120		13	168		10/19/2006	332	FM		332
5 46	13	107		13	121		10/13/2006	157	FM		157
5 46	13	121		13	122		10/13/2006	137	FM		137
5 46	13	122		13	123		10/16/2006	362	FM		362
5 46	13	123		13	125		10/17/2006	163	FM		163
5 46	13	124		13	125		10/16/2006	300	FM		300
5 46	13	124		13	197	C	10/16/2006	120	FM		120
5 46	13	125		13	130		10/17/2006	300	FM		300
5 46	13	126		13	127		10/16/2006	305	FM		305
5 46	13	127		13	128		10/16/2006	305	FM		305
5 46	13	128		13	129		10/16/2006	275	FM		275
5 46	13	128		13	211		10/16/2006	360	FM		360
5 46	13	129		13	130		10/17/2006	283	FM		283
5 46	13	130		13	146		10/17/2006	326	FM		326
5 46	13	131		13	207	D	10/16/2006	45	FM		45
5 46	13	131	P	13	132	P	5/9/2007	300	FM	3	1200
5 46	13	132	P	13	133	P	5/9/2007	310	FM	3	1240
5 46	13	133		13	134		10/16/2006	128	FM		128
5 46	13	134		13	137		10/16/2006	22	FM		22
5 46	13	135		13	136		10/16/2006	286	FM		286
5 46	13	136		13	137		10/16/2006	288	FM		288
5 46	13	137		13	138		10/16/2006	241	FM		241
5 46	13	138		13	205		10/16/2006	105	FM		105
5 46	13	138		13	139		10/16/2006	295	FM		295
5 46	13	139		13	140		10/16/2006	150	FM		150
5 46	13	140		13	141		10/16/2006	95	FM		95
5 46	13	141		13	142		10/16/2006	100	FM		100
5 46	13	142		13	143		10/16/2006	240	FM		240
5 46	13	143		13	144		10/16/2006	223	FM		223
5 46	13	144		13	145		10/16/2006	336	FM		336
5 46	13	145		13	146		10/17/2006	333	FM		333

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 46	13	146		13	149		10/18/2006	141	FM		141
5 46	13	147		13	148		10/18/2006	305	FM		305
5 46	13	148		13	149		10/18/2006	295	FM		295
5 46	13	149		13	150		10/18/2006	288	FM		288
5 46	13	150		13	153		10/18/2006	122	FM		122
5 47	13	049		13	167	P	10/19/2006	9	FM		9
5 47	13	151		13	152		10/18/2006	304	FM		304
5 47	13	151		13	152		1/10/2007	302	JM	12	302
5 47	13	152		13	153		10/18/2006	300	FM		300
5 47	13	153		13	162		10/18/2006	186	FM		186
5 47	13	154		13	155		10/17/2006	180	FM		180
5 47	13	155		13	156		10/17/2006	214	FM		214
5 47	13	156		13	158		10/17/2006	300	FM		300
5 47	13	156		13	182		10/17/2006	47	FM		47
5 47	13	157		13	158		10/17/2006	265	FM		265
5 47	13	158		13	200	S	10/17/2006	253	FM		253
5 47	13	159	S	13	160		10/17/2006	160	FM		160
5 47	13	159	S	13	200	S	5/1/2007	44	FM	3	176
5 47	13	160		13	161		10/17/2006	280	FM		280
5 47	13	161		13	162		10/18/2006	277	FM		277
5 47	13	162		13	166		10/18/2006	306	FM		306
5 47	13	163		13	164		10/18/2006	302	FM		302
5 47	13	164		13	165		10/18/2006	288	FM		288
5 47	13	165		13	166		10/18/2006	136	FM		136
5 47	13	166	P	13	167	P	5/8/2007	346	FM	3	1384
5 47	13	167	P	13	168	P	5/8/2007	18	FM	3	72
5 48	12	038		13	168		10/19/2006	590	FM		590
5 49	12	032		12	033		10/19/2006	212	FM		212
5 49	12	032		12	142	C	10/19/2006	93	FM		93
5 49	12	033		12	034		10/19/2006	180	FM		180
5 49	12	034		12	037		10/19/2006	345	FM		345
5 49	12	035		12	036		10/19/2006	372	FM		372
5 49	12	036		12	037		10/19/2006	213	FM		213
5 49	12	037	P	12	039	P	5/8/2007	160	FM	3	640
5 49	12	038		12	039		10/19/2006	102	FM		102
5 49	12	039		12	040		10/19/2006	200	FM		200
5 49	12	040		12	041	S	10/19/2006	300	FM		300
5 49	12	041	S	12	042	S	5/1/2007	85	FM	3	340
5 49	12	042	S	12	108		10/19/2006	42	FM		42
5 49	12	043		12	044		10/19/2006	200	FM		200
5 49	12	043	S	12	108		10/19/2006	53	FM		53
5 50	12	045		12	129		10/20/2006	320	FM		320
5 50	12	045		12	046		10/20/2006	240	FM		240
5 50	12	046		12	047		10/20/2006	300	FM		300
5 50	12	047		12	048		10/20/2006	256	FM		256
5 50	12	048		12	049		10/20/2006	375	FM		375
5 51	12	049		12	113		10/23/2006	600	FM		600
5 52	12	089		12	090		6/18/2007	300	FM		300
5 53	12	090		12	099		6/18/2007	270	FM		270

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
5 53	12	099		12	144		6/18/2007	335	FM		335
5 53	12	100	P	12	101	P	5/1/2007	337	FM	3	1348
5 53	12	101	P	12	102	P	5/1/2007	325	FM	3	1300
5 53	12	102	P	12	103	P	5/1/2007	269	FM	3	1076
5 53	12	103	P	12	133	P	5/1/2007	300	FM	3	1200
5 53	12	104		12	144		6/18/2007	143	FM		143
5 53	12	104		12	106	M	6/18/2007	275	FM		275
5 53	12	105		12	134		10/20/2006	50	FM		50
5 53	12	106	M	12	107	M	6/18/2007	415	FM		415
5 53	12	132		12	133	P	10/20/2006	460	FM		460
5 53	12	133	P	12	134		10/20/2006	275	FM		275
5 53	12	134		12	135		10/20/2006	415	FM		415
5 55	12	107	M	12	111		6/18/2007	405	FM		405
5 55	12	110		12	111		5/2/2007	161	FM	3	644
5 55	12	110		12	140		5/2/2007	170	FM	3	680
5 55	12	111		12	121		10/23/2006	40	FM		40
5 55	12	111		12	112		10/23/2006	80	FM		80
5 55	12	112		12	113		10/23/2006	480	FM		480
5 55	12	113		12	114		10/23/2006	475	FM		475
5 55	12	121		12	135		10/20/2006	396	FM		396
5 55	12	130		12	131		10/20/2006	280	FM		280
5 55	12	131		12	132		10/20/2006	410	FM		410
6S01	08	060		08	061		2/22/2007	275	FM		275
6S01	08	061		08	063		2/22/2007	142	FM		142
6S01	08	062		08	063		2/22/2007	157	FM		157
6S01	08	063		08	064		2/22/2007	206	FM		206
6S01	08	063		08	064		3/4/2007	240	JM	6	480
6S01	08	064		08	065		2/22/2007	125	FM		125
6S01	08	064		08	065		3/4/2007	129	JM	12	129
6S01	08	066		08	067		2/26/2007	119	FM		119
6S01	08	067		08	068		2/26/2007	236	FM		236
6S01	08	068		09	008		2/26/2007	377	FM		377
6S01	08	068		09	008		3/4/2007	380	JM	12	380
6S01	08	069		08	070		2/22/2007	246	FM		246
6S01	08	070		09	004		2/22/2007	213	FM		213
6S01	08	071		08	072		2/22/2007	267	FM		267
6S01	08	072		09	001		2/6/2007	355	JM	12	355
6S01	08	072		09	001		2/22/2007	347	FM		347
6S01	09	001		09	002		2/22/2007	350	FM		350
6S01	09	002		09	003		2/6/2007	204	JM	12	204
6S01	09	002		09	003		2/22/2007	210	FM		210
6S01	09	003		09	005		2/22/2007	80	FM		80
6S01	09	004		09	005		2/6/2007	237	JM	12	237
6S01	09	004		09	005		2/22/2007	210	FM		210
6S01	09	005		09	006		2/22/2007	178	FM		178
6S01	09	006		09	007		2/26/2007	109	FM		109
6S01	09	007		09	009		2/26/2007	192	FM		192
6S01	09	008		09	009		2/26/2007	161	FM		161
6S01	09	009		09	010		2/26/2007	165	FM		165

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6S01	09	009		09	010		6/1/2007	165	JM	6	330
6S01	09	010		09	011		2/26/2007	190	FM		190
6S01	09	011		09	016		2/26/2007	300	FM		300
6S01	09	012		09	016		2/26/2007	194	FM		194
6S01	09	013		09	014		2/26/2007	340	FM		340
6S01	09	014		09	015		2/26/2007	267	FM		267
6S01	09	015		09	016		2/26/2007	300	FM		300
6S01	09	016		09	017		3/2/2007	345	FM		345
6S01	09	017		09	018		3/2/2007	350	FM		350
6S01	09	018		09	019		3/2/2007	249	FM		249
6S01	09	019		09	020		3/2/2007	300	FM		300
6S01	09	020		09	022		3/2/2007	250	FM		250
6S01	09	021		09	135	C	10/10/2006	200	JM	12	200
6S01	09	021		09	022		3/2/2007	245	FM		245
6S01	09	021		09	135	C	3/2/2007	190	FM		190
6S02	08	171		08	172		3/5/2007	160	FM		160
6S02	08	172		08	173		3/5/2007	129	FM		129
6S02	08	173		09	060		8/7/2006	199	JM	12	199
6S02	08	173		09	060		3/5/2007	182	FM		182
6S02	09	022		09	035		3/2/2007	50	FM		50
6S02	09	023		09	025		3/2/2007	170	FM		170
6S02	09	024		09	025		8/7/2006	191	JM	12	191
6S02	09	024		09	025		3/2/2007	190	FM		190
6S02	09	025		09	026		3/2/2007	100	FM		100
6S02	09	026		09	027		3/2/2007	256	FM		256
6S02	09	027		09	029		3/2/2007	310	FM		310
6S02	09	028		09	029		3/2/2007	200	FM		200
6S02	09	029		09	030		2/5/2007	304	JM	6	608
6S02	09	029		09	030		3/2/2007	310	FM		310
6S02	09	030		09	031		3/2/2007	260	FM		260
6S02	09	031		09	032		3/2/2007	217	FM		217
6S02	09	032		09	033		3/2/2007	220	FM		220
6S02	09	033		09	034		3/2/2007	250	FM		250
6S02	09	034		09	035		3/2/2007	343	FM		343
6S02	09	035		09	045		3/5/2007	212	FM		212
6S02	09	036		09	037		8/7/2006	200	JM	12	200
6S02	09	036		10	001		2/6/2007	265	JM	6	530
6S02	09	036		10	001		3/2/2007	260	FM		260
6S02	09	036		09	037		3/2/2007	200	FM		200
6S02	09	037		09	038		3/2/2007	89	FM		89
6S02	09	038		09	041		3/2/2007	330	FM		330
6S02	09	040		09	041		3/2/2007	85	FM		85
6S02	09	041		09	043		3/2/2007	180	FM		180
6S02	09	042		09	043		3/2/2007	100	FM		100
6S02	09	043		09	044		3/2/2007	140	FM		140
6S02	09	045		09	059		3/5/2007	150	FM		150
6S02	09	046		09	047		8/8/2006	121	JM	12	121
6S02	09	046		09	047		3/5/2007	116	FM		116
6S02	09	047		09	048		8/8/2006	106	JM	12	106

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6S02	09	047		09	048		3/5/2007	100	FM		100
6S02	09	048		09	049		3/5/2007	94	FM		94
6S02	09	049		09	050		8/8/2006	303	JM	12	303
6S02	09	049		09	050		3/5/2007	301	FM		301
6S02	09	050		09	052		3/5/2007	360	FM		360
6S02	09	051		09	052		3/5/2007	192	FM		192
6S02	09	052		09	053		3/5/2007	300	FM		300
6S02	09	053		09	054		3/5/2007	211	FM		211
6S02	09	054		09	055		8/8/2006	258	JM	12	258
6S02	09	054		09	055		3/5/2007	250	FM		250
6S02	09	055		09	056		3/5/2007	170	FM		170
6S02	09	056		09	057		3/5/2007	236	FM		236
6S02	09	057		09	058		8/8/2006	354	JM	12	354
6S02	09	057		09	058		3/5/2007	360	FM		360
6S02	09	058		09	059		3/5/2007	350	FM		350
6S02	09	059		09	073		3/5/2007	300	FM		300
6S02	09	060		09	061		8/8/2006	132	JM	12	132
6S02	09	060		09	061		3/5/2007	140	FM		140
6S02	09	061		09	062		2/7/2007	160	JM	6	320
6S02	09	061		09	062		3/5/2007	170	FM		170
6S02	09	062		09	063		2/7/2007	350	JM	6	700
6S02	09	062		09	063		3/5/2007	360	FM		360
6S02	09	063		09	064		8/8/2006	362	JM	12	362
6S02	09	063		09	064		3/5/2007	325	FM		325
6S02	09	064		09	065		8/8/2006	78	JM	12	78
6S02	09	064		09	065		3/5/2007	78	FM		78
6S02	09	065		09	066		8/8/2006	200	JM	12	200
6S02	09	065		09	066		3/5/2007	183	FM		183
6S02	09	066		09	068		2/5/2007	360	JM	6	720
6S02	09	066		09	068		3/5/2007	360	FM		360
6S02	09	067		09	068		3/5/2007	210	FM		210
6S02	09	067		09	136	C	3/5/2007	129	FM		129
6S02	09	068		09	069		3/5/2007	181	FM		181
6S02	09	069		09	070		8/8/2006	357	JM	12	357
6S02	09	069		09	070		3/5/2007	360	FM		360
6S02	09	070		09	071		8/8/2006	295	JM	12	295
6S02	09	070		09	071		3/5/2007	263	FM		263
6S02	09	071		09	072		3/5/2007	156	FM		156
6S02	09	072		09	073		8/8/2006	177	JM	12	177
6S02	09	072		09	073		3/5/2007	161	FM		161
6S03	09	083		09	084		3/15/2007	350	FM		350
6S04	09	084		09	085		3/15/2007	194	FM		194
6S04	09	085		09	086		3/15/2007	240	FM		240
6S04	09	097		09	096	M	12/21/2006	302	FM		302
6S05	09	086	M	09	087		3/15/2007	245	FM		245
6S05	09	087		09	088		3/15/2007	251	FM		251
6S05	09	088		09	089		3/15/2007	439	FM		439
6S06	09	090		09	091		3/15/2007	283	FM		283
6S06	09	091		09	092		3/15/2007	105	FM		105

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6S07	09	092		09	093		3/15/2007	337	FM		337
6S07	09	093		09	094		3/15/2007	326	FM		326
6S07	09	094		09	122		3/15/2007	332	FM		332
6S08	09	095		09	096		3/6/2007	253	FM		253
6S08	09	096		09	097		3/6/2007	269	FM		269
6S08	09	096		09	097		5/15/2007	272	JM	12	272
6S08	09	097		09	103		3/6/2007	141	FM		141
6S08	09	098		09	099		3/6/2007	135	FM		135
6S08	09	098		09	099		5/15/2007	135	JM	12	135
6S08	09	099		09	100		3/6/2007	240	FM		240
6S08	09	099		09	100		5/15/2007	250	JM	12	250
6S08	09	100		09	101		3/6/2007	170	FM		170
6S08	09	100		09	101		5/15/2007	91	JM	6	182
6S08	09	101		09	102		3/6/2007	185	FM		185
6S08	09	101		09	102		5/15/2007	154	JM	6	308
6S08	09	102		09	103		3/6/2007	212	FM		212
6S08	09	102		09	103		5/15/2007	215	JM	12	215
6S08	09	104		09	105		3/6/2007	210	FM		210
6S08	09	105		09	106		3/6/2007	203	FM		203
6S08	09	106		09	110		3/6/2007	200	FM		200
6S08	09	107		09	108		3/6/2007	276	FM		276
6S08	09	107		09	138	D	3/6/2007	3	FM		3
6S08	09	108		09	109		5/1/2007	277	JM	6	554
6S08	09	110		09	111		3/6/2007	47	FM		47
6S08	09	114		09	115		3/14/2007	300	FM		300
6S08	09	115		09	118		3/14/2007	173	FM		173
6S08	09	116		09	117		3/14/2007	200	FM		200
6S08	09	117		09	118		1/9/2007	299	JM	12	299
6S08	09	117		09	118		3/14/2007	300	FM		300
6S08	09	118		09	119		3/14/2007	300	FM		300
6S08	09	119		09	121		1/9/2007	336	JM	12	336
6S08	09	119		09	121		3/14/2007	334	FM		334
6S08	09	121		09	122		3/15/2007	340	FM		340
6S09	08	174		08	176		3/6/2007	312	FM		312
6S09	08	176		08	177		3/6/2007	200	FM		200
6S09	08	177		08	178		3/6/2007	47	FM		47
6S09	08	178		08	179		3/6/2007	50	FM		50
6S09	08	179		08	182		3/6/2007	120	FM		120
6S09	08	182		08	183		3/6/2007	200	FM		200
6S09	08	183		08	187		3/6/2007	153	FM		153
6S09	08	184		08	185		3/6/2007	281	FM		281
6S09	08	185		08	186		3/6/2007	269	FM		269
6S09	08	186		08	187		3/6/2007	300	FM		300
6S09	08	187		08	188		3/14/2007	400	FM		400
6S09	08	187		08	188		7/2/2007	400	JM	6	800
6S09	08	188		08	190		3/14/2007	234	FM		234
6S09	08	190		08	191		3/14/2007	266	FM		266
6S09	08	191		09	124		3/14/2007	325	FM		325
6S09	08	191		08	194		3/15/2007	241	FM		241

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6S09	08	192		08	193		3/15/2007	320	FM		320
6S09	08	193		08	194		3/15/2007	170	FM		170
6S09	08	194		08	195		3/15/2007	181	FM		181
6S09	08	195		09	123		3/15/2007	235	FM		235
6S11	08	195		13	001		3/14/2007	356	FM		356
6S11	13	001		13	002		3/14/2007	350	FM		350
6S11	13	001		14	006		3/14/2007	225	FM		225
6S11	13	002		13	003		3/14/2007	321	FM		321
6S11	13	003		13	212	C	3/14/2007	245	FM		245
6S11	13	003		13	007		3/20/2007	149	FM		149
6S12	09	122		14	005		3/14/2007	350	FM		350
6S12	13	003		13	010		7/5/2006	336	FM		336
6S12	13	006		13	007		3/20/2007	43	FM		43
6S12	13	007		13	011		3/20/2007	332	FM		332
6S12	13	008		13	009		3/14/2007	300	FM		300
6S12	13	008		14	008		3/14/2007	294	FM		294
6S12	13	009		13	010		7/5/2006	294	FM		294
6S12	13	010		13	014		3/15/2007	345	FM		345
6S12	13	010		13	011		3/20/2007	150	FM		150
6S12	13	011		13	015		3/20/2007	335	FM		335
6S12	13	012		13	013		3/15/2007	380	FM		380
6S12	13	012		14	013		3/15/2007	426	FM		426
6S12	13	013		13	014		3/15/2007	375	FM		375
6S12	13	014		13	015		3/20/2007	150	FM		150
6S12	13	014		13	018		3/20/2007	340	FM		340
6S12	13	015		13	031		3/20/2007	351	FM		351
6S12	14	001	C	14	002		7/3/2006	105	FM		105
6S12	14	002		14	003		3/14/2007	165	FM		165
6S12	14	003		14	004		3/14/2007	400	FM		400
6S12	14	004		14	005		3/14/2007	400	FM		400
6S12	14	005		14	006		7/5/2006	270	FM		270
6S12	14	005		14	007		3/14/2007	331	FM		331
6S12	14	007		14	008		3/14/2007	267	FM		267
6S12	14	007		14	218		3/14/2007	300	FM		300
6S12	14	007		14	013		3/15/2007	335	FM		335
6S12	14	009		14	010		3/14/2007	235	FM		235
6S12	14	009		14	191		3/14/2007	200	FM		200
6S12	14	010		14	011		3/14/2007	260	FM		260
6S12	14	011		14	012		3/15/2007	260	FM		260
6S12	14	012		14	013		12/29/2006	80	FM		80
6S12	14	209	D	14	218		7/5/2006	45	FM		45
6S13	13	016		14	030		3/20/2007	236	FM		236
6S13	13	016		13	017		3/20/2007	351	FM		351
6S13	13	017		13	018		3/20/2007	353	FM		353
6S13	13	018		13	031		3/20/2007	149	FM		149
6S13	13	019	C	14	029		3/19/2007	296	FM		296
6S13	13	019		13	020		3/19/2007	350	FM		350
6S13	13	020		13	053		3/19/2007		FM		
6S13	13	020		13	021		3/20/2007	260	FM		260

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6S13	13	021		13	022		3/20/2007	290	FM		290
6S13	13	022		13	023		3/20/2007	130	FM		130
6S13	13	027		13	204		3/21/2007	371	FM		371
6S13	13	027		13	028		3/21/2007	426	FM		426
6S13	13	028		13	029		7/6/2006	175	FM		175
6S13	13	029		13	030		3/21/2007	341	FM		341
6S13	13	030		13	031		3/21/2007	407	FM		407
6S13	13	031		13	032		3/21/2007	389	FM		389
6S13	13	032		13	033		3/21/2007	389	FM		389
6S13	13	033		13	038		3/21/2007	200	FM		200
6S13	14	015		14	017		3/19/2007	450	FM		450
6S13	14	017		14	020		3/19/2007	289	FM		289
6S13	14	018	C	14	019		3/19/2007	143	FM		143
6S13	14	019		14	020		3/19/2007	80	FM		80
6S13	14	020		14	021		3/19/2007	370	FM		370
6S13	14	021		14	028		3/19/2007	375	FM		375
6S13	14	025		14	026		3/19/2007	332	FM		332
6S13	14	026		14	027		3/19/2007	330	FM		330
6S13	14	027		14	028		3/19/2007	330	FM		330
6S13	14	028		14	029		3/19/2007	240	FM		240
6S14	13	034		13	198	C	3/16/2007	225	FM		225
6S14	13	034		13	035		3/16/2007	347	FM		347
6S14	13	035		13	036		3/16/2007	167	FM		167
6S14	13	036		13	037		3/21/2007	331	FM		331
6S14	13	037	M	13	038		3/21/2007	344	FM		344
6S14	13	038		13	039		3/21/2007	319	FM		319
6S14	13	039		13	040		3/21/2007	57	FM		57
6S14	13	040		13	048	M	3/21/2007	261	FM		261
6S15	08	196		08	197		3/16/2007	290	FM		290
6S15	08	197		08	198		3/16/2007	290	FM		290
6S15	08	198		08	199		3/16/2007	290	FM		290
6S15	08	199		08	200		3/16/2007	290	FM		290
6S15	08	200		13	041		3/16/2007	150	FM		150
6S15	13	041		13	042		3/19/2007	250	FM		250
6S15	13	042		13	043		3/19/2007	293	FM		293
6S15	13	043		13	046		3/19/2007	313	FM		313
6S15	13	044		13	045		3/19/2007	140	FM		140
6S15	13	045		13	046		3/19/2007	300	FM		300
6S15	13	047		13	048		3/21/2007	400	FM		400
6S16	12	012		12	013		3/19/2007	88	FM		88
6S16	12	013		12	014		3/19/2007	200	FM		200
6S16	12	017		12	018		3/21/2007	295	FM		295
6S16	12	018		12	019		7/10/2006	225	FM		225
6S16	12	018		13	052		3/21/2007	415	FM		415
6S16	12	019		12	020		7/10/2006	420	FM		420
6S16	12	020		12	021	S	7/10/2006	23	FM		23
6S16	12	021	S	12	022	S	5/1/2007	85	FM	3	340
6S16	13	048		13	052		3/21/2007	318	FM		318
6S16	13	049		13	050		10/19/2006	332	FM		332

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6S16	13	050		13	051		7/10/2006	325	FM		325
6S16	13	051		13	052		7/10/2006	300	FM		300
6S17	07	133		07	134		3/8/2007	280	FM		280
6S17	07	134		07	136		3/8/2007	320	FM		320
6S17	07	135		07	136		3/8/2007	345	FM		345
6S17	07	136		07	137		3/8/2007	157	FM		157
6S17	07	137		07	138		3/8/2007	390	FM		390
6S17	07	138		07	139		3/12/2007	272	FM		272
6S17	07	139		07	144		3/12/2007	193	FM		193
6S17	07	140		07	141		3/12/2007	220	FM		220
6S17	07	141		07	142		3/12/2007	330	FM		330
6S17	07	142		07	143		3/12/2007	300	FM		300
6S17	07	143		07	144		3/12/2007	165	FM		165
6S17	07	144		07	145		3/12/2007	270	FM		270
6S17	07	145		07	146		3/12/2007	250	FM		250
6S17	07	146		07	204	D	3/12/2007	89	FM		89
6S17	07	146		07	163		3/12/2007	300	FM		300
6S17	07	147		07	163		3/12/2007	260	FM		260
6S17	07	148		08	170		3/8/2007	360	FM		360
6S17	07	148		07	149		3/8/2007	173	FM		173
6S17	07	149		07	150		3/8/2007	265	FM		265
6S17	07	150		08	169		3/8/2007	200	FM		200
6S17	07	150		07	153		3/12/2007	347	FM		347
6S17	07	151		07	152		3/12/2007	185	FM		185
6S17	07	152		07	153		3/12/2007	230	FM		230
6S17	07	153		07	154		3/12/2007	200	FM		200
6S17	07	154		07	155		3/12/2007	145	FM		145
6S17	07	155		07	156		3/12/2007	145	FM		145
6S17	07	156		07	157		3/12/2007	250	FM		250
6S17	07	157		07	158		3/12/2007	190	FM		190
6S17	07	158		07	160		3/12/2007	290	FM		290
6S17	07	159		07	160		3/12/2007	259	FM		259
6S17	07	159		07	201	D	3/12/2007	56	FM		56
6S17	07	160		07	162		3/12/2007	290	FM		290
6S17	07	161		07	162		3/12/2007	260	FM		260
6S17	07	162		07	163		3/12/2007	310	FM		310
6S17	07	163		07	167		3/12/2007	360	FM		360
6S17	07	164		07	167		3/12/2007	351	FM		351
6S17	07	165		07	166		3/12/2007	260	FM		260
6S17	07	166		07	167		3/12/2007	350	FM		350
6S17	07	167		07	171		5/1/2007	305	JM	6	610
6S17	07	168		07	205		3/12/2007	42	FM		42
6S17	07	168		07	171		3/12/2007	300	FM		300
6S17	07	169		07	170		3/12/2007	300	FM		300
6S17	07	170		07	171		3/12/2007	310	FM		310
6S17	07	171		07	175		3/12/2007	300	FM		300
6S17	07	172		07	175		3/12/2007	360	FM		360
6S17	07	173		07	174		3/12/2007	310	FM		310
6S17	07	173		07	196	C	3/12/2007	144	FM		144

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6S17	07	173		07	174		5/1/2007	300	JM	12	300
6S17	07	174		07	175		3/12/2007	310	FM		310
6S17	07	174		07	175		5/1/2007	305	JM	12	305
6S17	07	176	P	07	177	P	5/2/2007	250	FM	3	1000
6S17	07	177	P	07	178		7/10/2006	242	FM		242
6S17	08	158		08	159		3/6/2007	150	FM		150
6S17	08	159		08	160		3/6/2007	110	FM		110
6S17	08	160		08	161		3/6/2007	342	FM		342
6S17	08	161		08	166		3/6/2007	160	FM		160
6S17	08	162		08	166		3/6/2007	250	FM		250
6S17	08	163		08	164		3/6/2007	302	FM		302
6S17	08	163		08	164		6/1/2007	301	JM	12	301
6S17	08	164		08	165		3/6/2007	150	FM		150
6S17	08	165		08	166		3/6/2007	160	FM		160
6S17	08	166		08	167		3/6/2007	245	FM		245
6S17	08	168		08	169		3/8/2007	185	FM		185
6S18	07	183		07	200	C	3/13/2007	183	FM		183
6S18	07	183		08	144		3/13/2007	300	FM		300
6S18	07	184		07	185		3/12/2007	300	FM		300
6S18	07	185		07	191		3/12/2007	220	FM		220
6S18	07	186		07	187		3/8/2007	220	FM		220
6S18	07	187		07	188		3/8/2007	330	FM		330
6S18	07	188		08	106		3/8/2007	385	FM		385
6S18	07	188		07	189		3/8/2007	200	FM		200
6S18	07	190		07	191		3/12/2007	165	FM		165
6S18	07	191		08	137		3/12/2007	71	FM		71
6S18	08	045		08	126		3/6/2007	105	FM		105
6S18	08	045		08	127		3/6/2007	200	FM		200
6S18	08	073		08	074		3/6/2007	250	FM		250
6S18	08	074		08	075		3/6/2007	322	FM		322
6S18	08	075		08	076		3/6/2007	127	FM		127
6S18	08	076		08	080		3/6/2007	150	FM		150
6S18	08	077		08	078		3/6/2007	127	FM		127
6S18	08	078		08	079		3/6/2007	150	FM		150
6S18	08	079		08	080		3/6/2007	175	FM		175
6S18	08	080		08	081		3/6/2007	120	FM		120
6S18	08	081		08	082		3/6/2007	100	FM		100
6S18	08	083		08	091		3/8/2007	150	FM		150
6S18	08	084		08	085		3/6/2007	300	FM		300
6S18	08	084		08	085		6/1/2007	296	JM	12	296
6S18	08	085		08	086		3/6/2007	340	FM		340
6S18	08	086		08	088		3/6/2007	320	FM		320
6S18	08	088		08	090		3/6/2007	115	FM		115
6S18	08	089		08	090		3/6/2007	180	FM		180
6S18	08	091		08	220		3/8/2007	123	FM		123
6S18	08	091		08	092		3/8/2007	275	FM		275
6S18	08	092		08	093		3/8/2007	240	FM		240
6S18	08	093		08	095		3/8/2007	190	FM		190
6S18	08	094		08	095		3/8/2007	360	FM		360

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6S18	08	095		08	096		3/8/2007	125	FM		125
6S18	08	097		08	103		3/8/2007	125	FM		125
6S18	08	098		08	099		3/8/2007	189	FM		189
6S18	08	099		08	100		3/8/2007	215	FM		215
6S18	08	100		08	101		3/8/2007	140	FM		140
6S18	08	101		08	102		3/8/2007	135	FM		135
6S18	08	102		08	103		3/8/2007	400	FM		400
6S18	08	103		08	104		3/8/2007	165	FM		165
6S18	08	104		08	105		3/8/2007	315	FM		315
6S18	08	105		08	106		3/8/2007	220	FM		220
6S18	08	107		08	108		2/22/2007	344	FM		344
6S18	08	108		08	109		2/22/2007	50	FM		50
6S18	08	109		08	110		2/22/2007	50	FM		50
6S18	08	111		08	112		2/22/2007	174	FM		174
6S18	08	112		08	113		2/22/2007	200	FM		200
6S18	08	113		08	114		2/22/2007	156	FM		156
6S18	08	114		08	115		2/22/2007	120	FM		120
6S18	08	118		08	119		2/22/2007	165	FM		165
6S18	08	120		08	121		3/14/2007	100	FM		100
6S18	08	121		08	126		3/6/2007	175	FM		175
6S18	08	122		08	123		2/22/2007	350	FM		350
6S18	08	123		08	124		2/22/2007	100	FM		100
6S18	08	124		08	125		2/22/2007	100	FM		100
6S18	08	127		08	128		3/6/2007	160	FM		160
6S18	08	128		08	129		3/6/2007	350	FM		350
6S18	08	129		08	130		3/6/2007	125	FM		125
6S18	08	130		08	131		3/12/2007	130	FM		130
6S18	08	131		08	132		3/12/2007	360	FM		360
6S18	08	132		08	133		3/12/2007	141	FM		141
6S18	08	133		08	134		3/12/2007	300	FM		300
6S18	08	134		08	189		3/12/2007	230	FM		230
6S18	08	135		08	189		3/12/2007	97	FM		97
6S18	08	135		08	136		3/12/2007	340	FM		340
6S18	08	136	P	08	138	P	3/12/2007	300	FM		300
6S18	08	137	P	08	138	P	3/12/2007	290	FM		290
6S18	08	138		08	145		3/13/2007	325	FM		325
6S18	08	139		08	140		3/13/2007	385	FM		385
6S18	08	140		08	141		3/13/2007	300	FM		300
6S18	08	141		08	142		3/13/2007	300	FM		300
6S18	08	142		08	143		3/13/2007	300	FM		300
6S18	08	143		08	145		3/13/2007	300	FM		300
6S18	08	144		08	145		3/13/2007	300	FM		300
6S18	08	145		08	152		3/13/2007	325	FM		325
6S19	08	146		08	147		3/13/2007	139	FM		139
6S19	08	147		08	148		3/13/2007	113	FM		113
6S19	08	148		08	149		3/13/2007	360	FM		360
6S19	08	149		08	150		3/13/2007	340	FM		340
6S19	08	150		08	151		3/13/2007	346	FM		346
6S19	08	151		08	152		3/13/2007	162	FM		162

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6S20	07	182		07	199	C	3/13/2007	150	FM		150
6S20	07	182		08	153		3/13/2007	290	FM		290
6S20	08	152		08	154		3/13/2007	170	FM		170
6S20	08	153		08	154		3/13/2007	230	FM		230
6S20	08	154		08	155		3/13/2007	245	FM		245
6S20	08	155		08	156		3/13/2007	450	FM		450
6S21	07	178		07	181		7/10/2006	300	FM		300
6S21	07	179		08	157		7/10/2006	325	FM		325
6S21	07	179		07	180		7/10/2006	300	FM		300
6S21	07	180		07	181		7/10/2006	302	FM		302
6S22	12	023		12	024		3/21/2007	111	FM		111
6S23	12	024		12	025		3/21/2007	375	FM		375
6S23	12	025		12	026		3/21/2007	351	FM		351
6S24	12	026		12	027		7/10/2006	256	FM		256
6S24	12	027		12	028		3/21/2007	240	FM		240
6S25	12	022	S	12	028		7/10/2006	158	FM		158
6S25	12	028		12	029		7/11/2006	456	FM		456
6S25	12	029		12	030	M	3/21/2007	450	FM		450
6S25	12	030	M	12	031		7/11/2006	380	FM		380
6W01	03	110		03	128	C	3/15/2007	250	FM		250
6W01	03	110		03	111		3/15/2007	272	FM		272
6W01	03	110		03	128	C	6/1/2007	250	JM	6	500
6W01	03	110		03	111		6/1/2007	272	JM	12	272
6W01	03	111		03	112		3/15/2007	317	FM		317
6W01	03	111		03	112		6/1/2007	315	JM	6	630
6W01	03	112		03	113		3/15/2007	297	FM		297
6W01	03	112		03	113		6/1/2007	300	JM	12	300
6W01	03	113		03	114		3/15/2007	243	FM		243
6W01	03	113		03	114		6/1/2007	243	JM	12	243
6W01	03	114		07	009		3/15/2007	382	FM		382
6W01	03	114		03	117		3/16/2007	264	FM		264
6W01	03	115		07	018		3/16/2007	200	FM		200
6W01	03	115		03	116		3/16/2007	140	FM		140
6W01	03	115		07	018		7/2/2007	152	JM	6	304
6W01	03	116		03	117		3/16/2007	145	FM		145
6W01	03	117		07	023		3/16/2007	368	FM		368
6W01	06	020		06	021		3/13/2007	294	FM		294
6W01	06	021		06	022		3/13/2007	107	FM		107
6W01	06	022		06	023		3/13/2007	130	FM		130
6W01	06	023		06	026		3/13/2007	324	FM		324
6W01	06	024		06	025		3/13/2007	300	FM		300
6W01	06	025		06	026		3/13/2007	281	FM		281
6W01	06	026		06	027		3/13/2007	229	FM		229
6W01	06	027		06	028		3/14/2007	326	FM		326
6W01	06	028		06	029		3/14/2007	168	FM		168
6W01	06	029		07	001		3/14/2007	160	FM		160
6W01	07	001		07	002		3/14/2007	220	FM		220
6W01	07	002		07	003		3/14/2007	345	FM		345
6W01	07	003		07	004		3/14/2007	344	FM		344

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6W01	07	004		07	005		3/14/2007	349	FM		349
6W01	07	005		07	006		3/14/2007	240	FM		240
6W01	07	006		07	007		3/14/2007	205	FM		205
6W01	07	007		07	008		3/14/2007	380	FM		380
6W01	07	008		07	009		3/14/2007	300	FM		300
6W01	07	010		07	013		11/9/2006	344	FM		344
6W01	07	014		07	015		3/16/2007	118	FM		118
6W01	07	015		07	016		3/16/2007	358	FM		358
6W01	07	016		07	017		3/16/2007	90	FM		90
6W01	07	016		07	017		7/2/2007	92	JM	6	184
6W01	07	017		07	018		3/16/2007	265	FM		265
6W01	07	017		07	018		7/2/2007	287	JM	6	574
6W02	07	023		07	024		3/16/2007	144	FM		144
6W02	07	024		07	036		3/16/2007	124	FM		124
6W02	07	025	C	07	026		3/15/2007	150	FM		150
6W02	07	026		07	029		3/15/2007	149	FM		149
6W02	07	027		07	028		3/15/2007	250	FM		250
6W02	07	028		07	029		3/15/2007	202	FM		202
6W02	07	029		07	034		3/15/2007	106	FM		106
6W02	07	030		07	031		3/15/2007	250	FM		250
6W02	07	031		07	032		3/15/2007	225	FM		225
6W02	07	032		07	033		3/15/2007	53	FM		53
6W02	07	033		07	034		3/15/2007	205	FM		205
6W02	07	034		07	035		3/15/2007	50	FM		50
6W02	07	035		07	036		3/15/2007	100	FM		100
6W02	07	036		07	037		3/15/2007	75	FM		75
6W02	07	037		07	038		3/19/2007	205	FM		205
6W02	07	038		07	060		3/19/2007	327	FM		327
6W02	07	039		07	040		3/14/2007	333	FM		333
6W02	07	040		07	041		3/14/2007	195	FM		195
6W02	07	041		07	042		3/14/2007	200	FM		200
6W02	07	042		07	043		3/14/2007	106	FM		106
6W02	07	043		07	044		3/14/2007	160	FM		160
6W02	07	044		07	045		3/14/2007	35	FM		35
6W02	07	045		07	046		3/14/2007	150	FM		150
6W02	07	046		07	047		3/14/2007	200	FM		200
6W02	07	047		07	048		3/14/2007	150	FM		150
6W02	07	048		07	049		3/14/2007	120	FM		120
6W02	07	049		07	054		3/14/2007	100	FM		100
6W02	07	050		07	051		3/15/2007	320	FM		320
6W02	07	051		07	053		3/15/2007	100	FM		100
6W02	07	052		07	053		3/15/2007	322	FM		322
6W02	07	053		07	054		3/15/2007	100	FM		100
6W02	07	054		07	055		3/15/2007	100	FM		100
6W02	07	055		07	058		3/15/2007	115	FM		115
6W02	07	056		07	057		3/16/2007	160	FM		160
6W02	07	057		07	058		3/16/2007	115	FM		115
6W02	07	058		07	059		3/4/2007	38	JM	6	76
6W02	07	058		07	059		3/16/2007	30	FM		30

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
6W02	07	059		07	060		3/4/2007	130	JM	6	260
6W02	07	059		07	060		3/19/2007	135	FM		135
6W02	07	060		07	061		3/19/2007	127	FM		127
6W02	07	061		07	062		3/19/2007	349	FM		349
6W02	07	062		07	063		3/19/2007	349	FM		349
6W02	07	063		07	064		3/19/2007	349	FM		349
6W02	07	064		07	065		3/19/2007	349	FM		349
6W02	07	065		07	066		3/19/2007	349	FM		349
6W02	07	066		07	067		3/19/2007	121	FM		121
6W02	07	067		07	068		3/19/2007	204	FM		204
6W02	12	123		12	124		4/4/2007	111	FM		111
6W03	07	068		07	069		3/19/2007	129	FM		129
6W03	07	069		07	070		3/19/2007	179	FM		179
6W03	07	070		07	071		3/19/2007	320	FM		320
6W03	07	071		07	072		3/19/2007	320	FM		320
6W03	07	072		07	073		3/19/2007	284	FM		284
6W03	07	073		07	076		3/19/2007	296	FM		296
6W03	07	074		07	075		3/19/2007	157	FM		157
6W03	07	075		07	076		3/19/2007	263	FM		263
6W03	07	076		07	077		3/19/2007	257	FM		257
6W03	07	077		07	078		3/19/2007	252	FM		252
6W03	07	078		07	079		3/19/2007	314	FM		314
6W03	07	079		07	080		3/20/2007	231	FM		231
6W03	07	080		07	081		3/20/2007	215	FM		215
6W04	07	081		12	004		3/20/2007	331	FM		331
6W04	12	004		12	009	P	3/20/2007	357	FM		357
6W04	12	009	P	12	010		3/20/2007	332	FM		332
6W05	12	005		12	138	D	3/20/2007	13	FM		13
6W05	12	005		12	006		3/20/2007	218	FM		218
6W05	12	006		12	007		3/20/2007	218	FM		218
6W05	12	007		12	008	P	3/20/2007	323	FM		323
6W05	12	008	P	12	009	P	5/1/2007	300	FM	3	1200
6W05	12	010		12	011		3/20/2007	150	FM		150
6W05	12	011		12	031		3/20/2007	275	FM		275
7E01	11	001	D	11	002		4/3/2007	350	FM		350
7E01	11	002		11	003		4/3/2007	350	FM		350
7E01	11	003		11	004		4/3/2007	246	FM		246
7E01	11	004		11	005		4/3/2007	304	FM		304
7E01	11	005		11	006		4/3/2007	20	FM		20
7E01	11	006		11	007		4/3/2007	300	FM		300
7E01	11	007		11	008		4/3/2007	125	FM		125
7E01	11	008		11	009		4/3/2007	250	FM		250
7E01	11	009		11	010		4/3/2007	255	FM		255
7E01	11	010		11	018		4/3/2007	280	FM		280
7E01	11	011		11	012		4/3/2007	395	FM		395
7E01	11	012		11	013		4/3/2007	351	FM		351
7E01	11	013		11	014		4/3/2007	309	FM		309
7E01	11	014		11	015		4/4/2007	262	FM		262
7E01	11	015		11	016		4/4/2007	213	FM		213

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
7E01	11	016		11	017		4/4/2007	343	FM		343
7E01	11	017		11	018		4/4/2007	308	FM		308
7E01	11	018		11	033		4/4/2007	337	FM		337
7E01	11	018		11	019		4/5/2007	350	FM		350
7E01	11	019		11	020		4/5/2007	350	FM		350
7E01	11	020		11	024		4/5/2007	350	FM		350
7E02	11	015		12	122		4/4/2007	400	FM		400
7E02	11	021		11	022		4/5/2007	312	FM		312
7E02	11	022		12	126		4/5/2007	183	FM		183
7E02	11	022		11	023		4/5/2007	350	FM		350
7E02	11	023		11	024		4/5/2007	275	FM		275
7E02	11	024		11	025		4/5/2007	275	FM		275
7E02	11	025		11	026		4/5/2007	353	FM		353
7E02	11	026		11	028		4/5/2007	70	FM		70
7E02	11	027		11	028		4/5/2007	360	FM		360
7E02	11	028		11	029		4/5/2007	262	FM		262
7E02	11	029		11	031		8/23/2006	200	FM		200
7E02	11	030		11	078		4/5/2007	212	FM		212
7E02	11	030		11	031		4/5/2007	335	FM		335
7E02	11	031		11	032	M	4/5/2007	133	FM		133
7E02	12	121		12	122		4/4/2007	260	FM		260
7E02	12	122		12	123		4/4/2007	350	FM		350
7E02	12	124		12	125		4/5/2007	310	FM		310
7E02	12	125		12	126		4/5/2007	365	FM		365
7E03	06	146		11	077		4/10/2007	150	FM		150
7E03	11	032	M	11	048		4/9/2007	347	FM		347
7E03	11	033		11	034		4/4/2007	345	FM		345
7E03	11	034		11	035		4/4/2007	335	FM		335
7E03	11	035		11	036		4/4/2007	335	FM		335
7E03	11	036		11	041		4/4/2007	300	FM		300
7E03	11	037		11	038		4/3/2007	254	FM		254
7E03	11	038		11	039		4/3/2007	300	FM		300
7E03	11	039		11	040		4/3/2007	275	FM		275
7E03	11	040		11	041		4/4/2007	242	FM		242
7E03	11	041		11	079		4/4/2007	29	FM		29
7E03	11	042		11	079		4/2/2007	350	FM		350
7E03	11	042		11	043		4/4/2007	325	FM		325
7E03	11	043		11	048		4/9/2007	300	FM		300
7E03	11	044		37	020		4/3/2007	359	FM		359
7E03	11	044		11	045		4/9/2007	337	FM		337
7E03	11	045		11	046		4/9/2007	410	FM		410
7E03	11	046		11	047		4/9/2007	250	FM		250
7E03	11	047		11	048		4/9/2007	100	FM		100
7E03	11	048		11	049		4/10/2007	335	FM		335
7E03	11	049		11	050		4/10/2007	330	FM		330
7E03	11	050		11	051	M	4/10/2007	320	FM		320
7E03	11	051	M	11	077		4/10/2007	335	FM		335
7E03	37	018		37	123	D	4/3/2007	350	FM		350
7E03	37	018		37	019		4/3/2007	408	FM		408

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
7E03	37	019		37	020		4/3/2007	331	FM		331
7E04	06	132		06	133		4/9/2007	300	FM		300
7E04	06	133		06	135		4/9/2007	360	FM		360
7E04	06	134		06	135		4/9/2007	330	FM		330
7E04	06	135		06	136		4/10/2007	330	FM		330
7E04	06	136		06	141		4/10/2007	180	FM		180
7E04	06	137		06	138		4/9/2007	210	FM		210
7E04	06	138		06	139		4/9/2007	359	FM		359
7E04	06	139		06	140		4/9/2007	365	FM		365
7E04	06	140		06	141		4/10/2007	365	FM		365
7E04	06	141		06	142		4/10/2007	370	FM		370
7E04	06	142		06	146		4/10/2007	330	FM		330
7E05	06	143		06	144		4/9/2007	250	FM		250
7E05	06	144		06	145		4/9/2007	273	FM		273
7E05	06	145		06	146		4/10/2007	103	FM		103
7N01	05	029		06	147			506	FM		506
7N02	05	041		05	042		4/17/2007	234	FM		234
7N02	05	042		05	043		4/17/2007	235	FM		235
7N02	05	042		05	138		4/17/2007	159	FM		159
7N02	05	043		05	044		4/17/2007	207	FM		207
7N02	05	044		05	045		4/17/2007	83	FM		83
7N02	05	045		05	046		4/17/2007	334	FM		334
7N02	05	046		05	054		4/17/2007	360	FM		360
7N02	05	047		05	048		4/17/2007	365	FM		365
7N02	05	048		05	049		4/17/2007	365	FM		365
7N02	05	049		05	050		4/17/2007	345	FM		345
7N02	05	050		05	051		4/17/2007	345	FM		345
7N02	05	051		05	052		4/17/2007	340	FM		340
7N02	05	052		05	053		4/17/2007	425	FM		425
7N02	05	053		05	054		4/17/2007	337	FM		337
7N02	05	054		05	055		4/17/2007	425	FM		425
7N02	05	055		05	067		4/17/2007	20	FM		20
7N02	05	056		05	064		4/17/2007	20	FM		20
7N02	05	056		05	067		4/17/2007	96	FM		96
7N02	05	132		05	133		4/17/2007	195	FM		195
7N02	05	133		05	134		4/17/2007	106	FM		106
7N02	05	134		05	135		4/17/2007	125	FM		125
7N02	05	135		05	136		4/17/2007	141	FM		141
7N02	05	136		05	137		4/17/2007	225	FM		225
7N02	05	137		05	138		4/17/2007	109	FM		109
7N03	05	064		05	140		4/17/2007	153	FM		153
7N04	05	058		05	112	C	4/10/2007	200	FM		200
7N04	05	058		37	004		4/10/2007	80	FM		80
7N04	05	058		05	059		4/12/2007	275	FM		275
7N04	05	059		05	060		4/12/2007	280	FM		280
7N04	05	060		05	061		4/12/2007	270	FM		270
7N04	05	061		05	062		4/12/2007	340	FM		340
7N04	05	062		05	067		9/1/2006	325	FM		325
7N04	05	063		37	025	D	4/12/2007	248	FM		248

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
7N04	05	063		05	065		4/12/2007	337	FM		337
7N04	05	065		05	066		4/12/2007	310	FM		310
7N04	05	065		37	001	D	4/12/2007	300	FM		300
7N04	05	066		05	067		9/29/2006	320	FM		320
7N04	05	067		37	017	M	4/12/2007	350	FM		350
7N04	05	067		05	068		4/12/2007	80	FM		80
7N04	05	068		05	069		4/12/2007	240	FM		240
7N04	05	069		05	157		4/12/2007	236	FM		236
7N04	05	069		05	070		4/17/2007	345	FM		345
7N04	05	070		05	071		4/19/2007	270	FM		270
7N04	05	071		05	072		4/17/2007	250	FM		250
7N04	05	072		05	073		4/17/2007	40	FM		40
7N04	05	155		05	156		4/12/2007	270	FM		270
7N04	05	156		05	157		4/12/2007	275	FM		275
7N04	37	002		37	003		4/10/2007	365	FM		365
7N04	37	003		37	004		4/10/2007	390	FM		390
7N04	37	005		37	006		4/10/2007	80	FM		80
7N04	37	005		37	022	D	4/10/2007	38	FM		38
7N04	37	006		37	007		4/10/2007	80	FM		80
7N04	37	007		37	013		4/10/2007	170	FM		170
7N04	37	008		37	021	D	4/10/2007	230	FM		230
7N04	37	008		37	009		4/10/2007	300	FM		300
7N04	37	009		37	010		4/10/2007	300	FM		300
7N04	37	010		37	011		4/10/2007	342	FM		342
7N04	37	011		37	012		8/25/2006	360	FM		360
7N04	37	012		37	013		4/10/2007	365	FM		365
7N04	37	013		37	014		4/10/2007	300	FM		300
7N04	37	013		37	028		4/10/2007	200	FM		200
7N04	37	014		37	015		4/10/2007	330	FM		330
7N04	37	015		37	016		4/10/2007	300	FM		300
7N04	37	016		37	017		4/12/2007	290	FM		290
7N04	37	026		37	027		8/25/2006	200	FM		200
7N04	37	027		37	028		4/10/2007	200	FM		200
7N05	05	158		05	159		4/18/2007	320	FM		320
7N05	05	159		05	160		4/18/2007	323	FM		323
7N05	05	160		05	161		4/18/2007	325	FM		325
7N05	05	161		05	162		4/18/2007	253	FM		253
7N05	05	162		05	163		4/18/2007	321	FM		321
7N05	05	163		05	164		4/18/2007	297	FM		297
7N06	05	077		05	078		4/18/2007	188	FM		188
7N06	05	078		05	079		4/18/2007	250	FM		250
7N06	05	079		05	088		4/18/2007	400	FM		400
7N06	05	088		05	089		4/18/2007	150	FM		150
7N06	05	089		05	090		4/18/2007	150	FM		150
7N06	05	089		05	091		4/18/2007	250	FM		250
7N08	01	110		01	111		4/19/2007	212	FM		212
7N08	01	111		01	112		4/19/2007	300	FM		300
7N08	01	112		01	113		4/19/2007	348	FM		348
7N08	01	113		05	013		8/29/2006	300	FM		300

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
7N08	01	113		01	116	D	4/19/2007	205	FM		205
7N08	05	001		05	002		4/19/2007	300	FM		300
7N08	05	002		05	005		4/19/2007	319	FM		319
7N08	05	003		05	004		4/19/2007	265	FM		265
7N08	05	004		05	005		4/19/2007	300	FM		300
7N08	05	005		05	006		4/19/2007	150	FM		150
7N08	05	006		05	007		4/19/2007	88	FM		88
7N08	05	007		05	010		4/19/2007	150	FM		150
7N08	05	008		05	009		4/19/2007	280	FM		280
7N08	05	009		05	010		5/17/2007	300	FM		300
7N08	05	010		05	011		5/17/2007	270	FM		270
7N08	05	011		05	012		4/19/2007	240	FM		240
7N08	05	012		05	013		4/19/2007	345	FM		345
7N08	05	013		05	015		4/19/2007	375	FM		375
7N08	05	014		05	015		4/19/2007	300	FM		300
7N08	05	015		05	017		4/19/2007	300	FM		300
7N08	05	016		05	017		4/19/2007	275	FM		275
7N08	05	017		05	019		4/19/2007	300	FM		300
7N08	05	018		05	019		4/19/2007	255	FM		255
7N08	05	019		05	020		4/19/2007	346	FM		346
7N08	05	020		05	022		4/19/2007	46	FM		46
7N08	05	021		05	022		4/19/2007	245	FM		245
7N08	05	022		05	152		4/19/2007	121	FM		121
7N08	05	023		05	152		4/19/2007	130	FM		130
7N08	05	023		05	024		4/24/2007	315	FM		315
7N08	05	024		05	151		4/24/2007	177	FM		177
7N08	05	024		05	153		4/24/2007	168	FM		168
7N08	05	025		05	026		4/24/2007	350	FM		350
7N08	05	025		05	153		4/24/2007	172	FM		172
7N08	05	026		05	120		4/24/2007	250	FM		250
7N08	05	026		05	027		4/24/2007	300	FM		300
7N08	05	027		05	028		4/24/2007	280	FM		280
7N08	05	028		05	093		4/24/2007	100	FM		100
7N08	05	114		05	115		4/24/2007	124	FM		124
7N08	05	114		05	122		4/24/2007	45	FM		45
7N08	05	115		05	116		4/24/2007	185	FM		185
7N08	05	116		05	117		4/24/2007	186	FM		186
7N08	05	117		05	118		4/24/2007	250	FM		250
7N08	05	118		05	119		4/24/2007	249	FM		249
7N08	05	119		05	120		4/24/2007	35	FM		35
7N08	05	121		05	123		4/23/2007	72	FM		72
7N08	05	121		05	147		4/23/2007	195	FM		195
7N08	05	122		05	123		4/23/2007	245	FM		245
7N08	05	123		05	124		4/23/2007	39	FM		39
7N08	05	124		05	125		4/23/2007	167	FM		167
7N08	05	125		05	126		4/20/2007	151	FM		151
7N08	05	126		05	127		4/20/2007	200	FM		200
7N08	05	127		05	128		4/20/2007	306	FM		306
7N08	05	128		05	129		4/20/2007	264	FM		264

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
7N08	05	128		05	146		4/20/2007	90	FM		90
7N08	05	129		05	130		4/20/2007	210	FM		210
7N08	05	130		05	131		4/20/2007	304	FM		304
7N08	05	141		05	142		4/20/2007	115	FM		115
7N08	05	141		05	154	D	4/20/2007	7	FM		7
7N08	05	142		05	143		4/20/2007	189	FM		189
7N08	05	143		05	144		4/20/2007	103	FM		103
7N08	05	144		05	145		4/20/2007	119	FM		119
7N08	05	145		05	146		4/20/2007	119	FM		119
7N08	05	147		05	148		4/23/2007	142	FM		142
7N08	05	148		05	149		4/23/2007	255	FM		255
7N08	05	149		05	150		4/23/2007	218	FM		218
7N08	05	150		05	151		4/23/2007	172	FM		172
7S01	05	095		05	096		3/20/2007	61	FM		61
7S01	05	096		05	098		3/20/2007	163	FM		163
7S01	05	097		05	098		3/20/2007	200	FM		200
7S01	05	098		06	037		3/20/2007	350	FM		350
7S01	06	030		06	031		3/20/2007	100	FM		100
7S01	06	031		06	032		12/4/2006	328	JM	12	328
7S01	06	031		06	032		3/20/2007	300	FM		300
7S01	06	032		06	033		3/20/2007	350	FM		350
7S01	06	033		06	034		3/20/2007	325	FM		325
7S01	06	034		06	035		3/20/2007	330	FM		330
7S01	06	035		06	036		3/21/2007	374	FM		374
7S01	06	036		06	040		3/21/2007	350	FM		350
7S01	06	037		06	038		3/20/2007	234	FM		234
7S01	06	038		06	039		3/20/2007	210	FM		210
7S01	06	039		06	040		3/21/2007	200	FM		200
7S01	06	040		06	041		3/21/2007	275	FM		275
7S01	06	041		06	042		3/21/2007	325	FM		325
7S01	06	042		06	043		3/21/2007	400	FM		400
7S01	06	043		06	044		3/21/2007	239	FM		239
7S01	06	044		06	045		3/21/2007	355	FM		355
7S01	06	045		06	046		3/21/2007	52	FM		52
7S01	06	046		06	047		3/21/2007	83	FM		83
7S01	06	047		06	059		3/22/2007	350	FM		350
7S01	06	048		06	050		3/21/2007	263	FM		263
7S01	06	049		06	050		3/21/2007	250	FM		250
7S01	06	050		06	051		3/22/2007	250	FM		250
7S01	06	051		06	052		3/22/2007	200	FM		200
7S01	06	051		06	150	C	3/22/2007	115	FM		115
7S01	06	052		06	054		3/22/2007	317	FM		317
7S01	06	053		06	054		3/22/2007	150	FM		150
7S01	06	054		06	055		3/22/2007	366	FM		366
7S01	06	055		06	056		3/22/2007	105	FM		105
7S01	06	056		06	057		3/22/2007	225	FM		225
7S01	06	057		06	058		3/22/2007	135	FM		135
7S01	06	058		06	059		3/22/2007	271	FM		271
7S01	06	058		06	151		3/22/2007	200	FM		200

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
7S01	06	059		06	060		3/22/2007	200	FM		200
7S01	06	060		06	067		3/22/2007	200	FM		200
7S01	06	061		06	062		3/22/2007	333	FM		333
7S01	06	062		06	063		3/22/2007	200	FM		200
7S01	06	063		06	064		3/22/2007	341	FM		341
7S01	06	064		06	065		3/22/2007	375	FM		375
7S01	06	065		06	066		3/22/2007	240	FM		240
7S01	06	066		06	067		3/22/2007	156	FM		156
7S01	06	067		06	068		3/22/2007	200	FM		200
7S01	06	068		06	072		3/22/2007	200	FM		200
7S01	06	069		06	070		3/22/2007	325	FM		325
7S01	06	070		06	071		3/22/2007	375	FM		375
7S01	06	071		06	072		3/22/2007	321	FM		321
7S01	06	072		06	074		3/22/2007	320	FM		320
7S01	06	073		06	074		3/22/2007	315	FM		315
7S01	06	074		06	076		3/22/2007	260	FM		260
7S01	06	075		06	076		3/22/2007	350	FM		350
7S01	06	076		06	077		3/28/2007	325	FM		325
7S01	06	077		06	078		3/28/2007	300	FM		300
7S01	06	078		06	079		1/9/2007	291	JM	12	291
7S01	06	078		06	079		3/28/2007	300	FM		300
7S01	06	079		06	121		3/28/2007	300	FM		300
7S02	06	080		06	084		3/26/2007	344	FM		344
7S02	06	081		06	082		3/26/2007	120	FM		120
7S02	06	082		06	083		3/26/2007	251	FM		251
7S02	06	083		06	084		3/26/2007	225	FM		225
7S02	06	084		06	085		3/26/2007	150	FM		150
7S02	06	085		06	092		3/26/2007	225	FM		225
7S02	06	086		06	087		3/26/2007	178	FM		178
7S02	06	087		06	088		3/26/2007	288	FM		288
7S02	06	088		06	089		3/26/2007	100	FM		100
7S02	06	089		06	092		3/26/2007	247	FM		247
7S02	06	090		06	091		3/26/2007	218	FM		218
7S02	06	091		06	092		3/26/2007	308	FM		308
7S02	06	092		06	097		3/26/2007	205	FM		205
7S02	06	093		06	094		3/26/2007	298	FM		298
7S02	06	094		06	097		3/26/2007	202	FM		202
7S02	06	095		06	096		3/26/2007	350	FM		350
7S02	06	095		07	115		3/26/2007	190	FM		190
7S02	06	096		06	097		3/26/2007	275	FM		275
7S02	06	097		06	098		3/26/2007	195	FM		195
7S02	06	098		06	101		3/26/2007	120	FM		120
7S02	06	099		06	100		3/26/2007	275	FM		275
7S02	06	100		06	101		3/26/2007	300	FM		300
7S02	06	101		06	102		3/26/2007	123	FM		123
7S02	06	102		06	106		3/26/2007	47	FM		47
7S02	06	103		06	104		3/26/2007	352	FM		352
7S02	06	104		06	106		3/26/2007	421	FM		421
7S02	06	105		07	193	C	3/26/2007	256	FM		256

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
7S02	06	105		06	106		3/26/2007	352	FM		352
7S02	06	106		06	111		3/27/2007	175	FM		175
7S02	06	107		06	108		3/26/2007	315	FM		315
7S02	06	108		06	109		3/26/2007	311	FM		311
7S02	06	109		06	111		3/27/2007	311	FM		311
7S02	06	110		07	114		3/26/2007	300	FM		300
7S02	06	110		06	111		3/27/2007	338	FM		338
7S02	06	111		06	113		3/27/2007	325	FM		325
7S02	06	112		06	113		3/27/2007	310	FM		310
7S02	06	112		07	113		3/27/2007	309	FM		309
7S02	06	113		06	115		3/27/2007	265	FM		265
7S02	06	114		06	115		3/27/2007	297	FM		297
7S02	06	114		07	096		3/27/2007	300	FM		300
7S02	06	115		06	117		3/27/2007	261	FM		261
7S02	06	116		07	093		3/27/2007	254	FM		254
7S02	06	116		06	117		3/27/2007	238	FM		238
7S02	06	117		06	119		3/27/2007	350	FM		350
7S02	06	118		07	091		3/27/2007	320	FM		320
7S02	06	118		06	119		3/27/2007	320	FM		320
7S02	06	119		06	120		3/27/2007	200	FM		200
7S02	06	120		06	121		3/27/2007	200	FM		200
7S02	07	088		07	089		3/27/2007	212	FM		212
7S02	07	089		07	090		3/27/2007	220	FM		220
7S02	07	090		07	091		8/10/2006	276	FM		276
7S02	07	090		07	194	C	3/27/2007	75	FM		75
7S02	07	092		07	093		3/27/2007	270	FM		270
7S02	07	094		07	095		3/27/2007	246	FM		246
7S02	07	095		07	096		3/27/2007	307	FM		307
7S02	07	097		07	098		3/23/2007	346	FM		346
7S02	07	098		07	099		3/23/2007	138	FM		138
7S02	07	099		07	100		7/4/2006	143	JM	6	286
7S02	07	099		07	100		3/23/2007	180	FM		180
7S02	07	100		07	101		7/4/2006	72	JM	6	144
7S02	07	100		07	101		3/23/2007	66	FM		66
7S02	07	101		07	102		7/4/2006	269	JM	6	538
7S02	07	101		07	102		3/23/2007	300	FM		300
7S02	07	102		07	103		3/23/2007	350	FM		350
7S02	07	103		07	105		3/23/2007	205	FM		205
7S02	07	104		07	105		3/23/2007	265	FM		265
7S02	07	105		07	107		3/23/2007	170	FM		170
7S02	07	106		07	107		3/23/2007	145	FM		145
7S02	07	107		07	108		3/23/2007	300	FM		300
7S02	07	108		07	109		3/23/2007	280	FM		280
7S02	07	109		07	110		3/23/2007	146	FM		146
7S02	07	109		07	195		3/23/2007	220	FM		220
7S02	07	110		07	112		3/23/2007	153	FM		153
7S02	07	111		07	112		3/23/2007	250	FM		250
7S02	07	112		07	113		3/27/2007	305	FM		305
7S03	06	121		06	123		3/28/2007	300	FM		300

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
7S03	06	122		06	123		3/28/2007	280	FM		280
7S03	06	123		06	124		3/28/2007	300	FM		300
7S03	06	124		06	125		3/28/2007	300	FM		300
7S03	06	125		06	128		3/28/2007	290	FM		290
7S04	06	126		07	087		3/28/2007	300	FM		300
7S04	06	126		06	127		3/28/2007	300	FM		300
7S04	06	127		06	128		3/28/2007	300	FM		300
7S04	06	128		06	129	M	8/16/2006	206	FM		206
7S04	06	129	M	06	130		8/16/2006	200	FM		200
7S04	07	082		07	083		3/28/2007	230	FM		230
7S04	07	083		07	084		3/28/2007	240	FM		240
7S04	07	084		07	085		3/28/2007	253	FM		253
7S04	07	085		07	086		3/28/2007	290	FM		290
7S04	07	086		07	087		3/28/2007	300	FM		300
7S05	06	130		11	070		4/2/2007	237	FM		237
7S05	06	131		06	153	D	3/29/2007	292	FM		292
7S05	06	131		11	068		4/2/2007	188	FM		188
7S05	11	067		11	072		4/2/2007	160	FM		160
7S05	11	068		11	069		4/2/2007	45	FM		45
7S05	11	069		11	070		4/2/2007	115	FM		115
7S05	11	070		11	071		4/2/2007	247	FM		247
7S05	11	071		11	072		4/2/2007	215	FM		215
7S06	11	052		11	053		3/29/2007	190	FM		190
7S06	11	053		11	054		3/29/2007	295	FM		295
7S06	11	053		12	003		3/29/2007	300	FM		300
7S06	11	054		11	058		3/29/2007	300	FM		300
7S06	11	055		11	056		3/29/2007	195	FM		195
7S06	11	056		11	057		3/29/2007	195	FM		195
7S06	11	057		11	058		3/29/2007	110	FM		110
7S06	11	058		11	059		4/2/2007	300	FM		300
7S06	11	059		11	072		4/2/2007	230	FM		230
7S06	12	001	C	12	002		3/29/2007	270	FM		270
7S06	12	002		12	003		3/29/2007	292	FM		292
7S07	12	114		12	120	M	3/29/2007	414	FM		414
7S07	12	115	P	12	116	P	5/1/2007	330	FM	3	1320
7S07	12	116	P	12	117	P	5/1/2007	300	FM	3	1200
7S07	12	117	P	12	120	M	5/1/2007	15	FM	3	60
7S07	12	118		12	119		3/29/2007	310	FM		310
7S07	12	119		12	120		8/16/2006	300	FM		300
7S08	11	060		12	120		3/29/2007	405	FM		405
7S08	11	060		11	062		3/29/2007	183	FM		183
7S08	11	061		11	080	D	3/29/2007	85	FM		85
7S08	11	061		11	062		3/29/2007	360	FM		360
7S08	11	062		11	063		3/29/2007	220	FM		220
7S09	11	063		11	064		3/29/2007	146	FM		146
7S09	11	064		11	065		3/29/2007	400	FM		400
7S09	11	065		11	066		3/29/2007	350	FM		350
7S09	11	066		11	081		3/29/2007	398	FM		398
7S09	11	067		11	082		4/2/2007	235	FM		235

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
7S09	11	081		11	082		4/2/2007	169	FM		169
7S10	11	072		11	073	M	4/2/2007	185	FM		185
7S10	11	073	M	11	074		4/2/2007	221	FM		221
7S10	11	076		11	077		4/2/2007	365	FM		365
A 01	04	070		08	056		11/28/2006	232	FM		232
A 01	07	019		07	020		10/27/2006	78	FM		78
A 01	07	019		07	020		7/2/2007	78	JM	6	156
A 01	07	020		08	033		7/3/2006	274	JM	6	548
A 01	07	020		08	033		10/27/2006	275	FM		275
A 01	07	116		07	117		10/26/2006	250	FM		250
A 01	07	117		07	118		10/26/2006	186	FM		186
A 01	07	118		07	121		10/26/2006	292	FM		292
A 01	07	118		07	121		12/4/2006	292	JM	12	292
A 01	07	119		07	120		10/26/2006	142	FM		142
A 01	07	120		07	121		10/26/2006	403	FM		403
A 01	07	120		07	121		12/4/2006	396	JM	12	396
A 01	07	121		07	206		10/26/2006	203	FM		203
A 01	07	122		07	123		10/26/2006	255	FM		255
A 01	07	123		07	124		10/26/2006	262	FM		262
A 01	07	124		07	125		10/26/2006	187	FM		187
A 01	07	125		07	206		10/26/2006	86	FM		86
A 01	07	127		07	128		10/30/2006	137	FM		137
A 01	07	128		07	129		10/30/2006	202	FM		202
A 01	07	129		07	130		10/30/2006	220	FM		220
A 01	07	130		07	131		10/30/2006	300	FM		300
A 01	07	131		07	132		10/30/2006	275	FM		275
A 01	07	132		08	016		10/30/2006	182	FM		182
A 01	08	003		08	203	C	11/28/2006	249	FM		249
A 01	08	003		08	008	P	11/28/2006	186	FM		186
A 01	08	004		08	201		10/25/2006	200	FM		200
A 01	08	004		08	005		10/25/2006	230	FM		230
A 01	08	004		08	201		3/4/2007	237	JM	12	237
A 01	08	004		08	005		3/4/2007	250	JM	6	500
A 01	08	005		08	202		10/25/2006	228	FM		228
A 01	08	005	P	08	006	P	3/4/2007	115	JM	6	230
A 01	08	005	P	08	006	P	5/8/2007	150	FM	3	600
A 01	08	006	P	08	007	P	3/4/2007	125	JM	6	250
A 01	08	006	P	08	007	P	5/8/2007	110	FM	3	440
A 01	08	007		08	008		3/4/2007	240	JM	6	480
A 01	08	007	P	08	008	P	5/8/2007	241	FM	3	964
A 01	08	008		08	027		11/28/2006	245	FM		245
A 01	08	009		08	011		10/25/2006	193	FM		193
A 01	08	009		08	204	C	10/25/2006	133	FM		133
A 01	08	009		08	204	C	3/4/2007	140	JM	6	280
A 01	08	010		08	205	C	10/25/2006	251	FM		251
A 01	08	010		08	011		10/25/2006	165	FM		165
A 01	08	010		08	205	C	3/4/2007	300	JM	12	300
A 01	08	010		08	011		3/4/2007	190	JM	12	190
A 01	08	011		08	012		10/25/2006	113	FM		113

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
A 01	08	012		08	013		10/25/2006	237	FM		237
A 01	08	013		08	221		10/25/2006	266	FM		266
A 01	08	014		08	015		10/25/2006	167	FM		167
A 01	08	014		08	221		10/25/2006	129	FM		129
A 01	08	016		08	017		10/30/2006	256	FM		256
A 01	08	017		08	018		10/30/2006	215	FM		215
A 01	08	018		08	019		10/30/2006	292	FM		292
A 01	08	019		08	020		10/30/2006	333	FM		333
A 01	08	027		08	224		11/28/2006	115	FM		115
A 01	08	028		08	224		11/28/2006	102	FM		102
A 01	08	028		08	031		11/28/2006	295	FM		295
A 01	08	029		08	030		11/28/2006	150	FM		150
A 01	08	030		08	031		11/1/2006	120	JM	12	120
A 01	08	030		08	031		11/28/2006	125	FM		125
A 01	08	031		08	032		11/28/2006	137	FM		137
A 01	08	033		08	034		10/27/2006	120	FM		120
A 01	08	034		08	035		10/27/2006	165	FM		165
A 01	08	035		08	036		10/27/2006	181	FM		181
A 01	08	036		08	040		10/27/2006	98	FM		98
A 01	08	037		08	038		10/27/2006	275	FM		275
A 01	08	037		08	207	C	10/27/2006	108	FM		108
A 01	08	038		08	039		10/27/2006	122	FM		122
A 01	08	039		08	040		10/27/2006	145	FM		145
A 01	08	040		08	041		10/27/2006	96	FM		96
A 01	08	041		08	042		10/27/2006	107	FM		107
A 01	08	042		08	043		4/15/2007	68	JM	6	136
A 01	08	043		08	048		10/10/2006	238	JM	12	238
A 01	08	043		08	048		12/21/2006	223	FM		223
A 01	08	046		08	225		7/27/2006	47	FM		47
A 01	08	046		08	047		10/27/2006	310	FM		310
A 01	08	047		08	049		10/27/2006	68	FM		68
A 01	08	048		08	049		10/27/2006	98	FM		98
A 01	08	050		08	051		12/4/2006	192	JM	12	192
A 01	08	051		08	214	D	11/28/2006	117	FM		117
A 01	08	051		08	215	C	11/28/2006	265	FM		265
A 01	08	051		08	052		11/28/2006	170	FM		170
A 01	08	051		08	215	C	6/1/2007	260	JM	6	520
A 01	08	052		08	053		11/28/2006	260	FM		260
A 01	08	053		08	054		11/28/2006	193	FM		193
A 01	08	054		08	055		11/28/2006	280	FM		280
A 01	08	055		08	056		11/28/2006	204	FM		204
A 01	08	056		08	221		11/28/2006	50	FM		50
A 01	08	208		08	221		11/28/2006	194	FM		194
A 01	08	208		08	227	D		15	FM		15
A 01	08	223		08	224		11/28/2006	103	FM		103
A 01	08	225		08	226		7/27/2006	153	FM		153
A 02	03	107	C	03	108		11/28/2006	239	FM		239
A 02	03	107	C	03	108		5/1/2007	239	JM	12	239
A 02	03	108		03	109		11/28/2006	186	FM		186

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
A 02	03	109		04	069		11/28/2006	184	FM		184
A 02	04	069		04	155		11/28/2006	90	FM		90
A 02	04	070		04	071		11/28/2006	290	FM		290
A 02	04	071		04	072		11/28/2006	296	FM		296
A 02	04	071		04	155		11/28/2006	62	FM		62
A 02	04	072		04	154		11/30/2006	232	FM		232
A 02	07	021		08	002		10/30/2006	301	FM		301
A 02	07	021		07	208		10/30/2006	176	FM		176
A 02	07	208		07	209		10/30/2006	255	FM		255
A 02	08	001		08	002		10/30/2006	101	FM		101
A 02	08	001		08	210		10/30/2006	276	FM		276
A 03	04	074	P	04	139	P	3/4/2007	120	JM	6	240
A 03	04	074	P	04	139	P	5/7/2007	260	FM	3	1040
A 03	04	075	P	04	139	P	3/4/2007	120	JM	6	240
A 03	04	075	P	04	139	P	5/7/2007	100	FM	3	400
A 03	04	075	P	04	077	P	5/7/2007	150	FM	3	600
A 03	04	076	P	04	147	C	5/7/2007	75	FM	3	300
A 03	04	076	P	04	077	P	5/7/2007	110	FM	3	440
A 03	04	077	P	04	078	P	5/7/2007	114	FM	3	456
A 03	04	078	P	04	081	P	5/7/2007	100	FM	3	400
A 03	04	081		04	082		7/2/2007	248	JM	6	496
A 04	03	089		04	082	C	12/21/2006	200	FM		200
A 04	04	082		04	124	C	7/2/2007	186	JM	6	372
A 05	02	070		02	071		11/8/2006	236	FM		236
A 05	02	071		02	072		11/8/2006	284	FM		284
A 05	02	072		03	034		11/8/2006	297	FM		297
A 05	03	034		03	037		11/9/2006	301	FM		301
A 05	03	035		07	013		11/9/2006	302	FM		302
A 05	03	035		03	036		11/9/2006	300	FM		300
A 05	03	036		03	037		11/9/2006	154	FM		154
A 05	03	037		03	038		11/13/2006	150	FM		150
A 05	03	038		03	039		11/13/2006	315	FM		315
A 05	03	039		03	041		11/13/2006	234	FM		234
A 05	03	040		03	041		11/13/2006	173	FM		173
A 05	03	041		03	049		11/13/2006	65	FM		65
A 05	03	042		03	130	C	11/8/2006	38	FM		38
A 05	03	042		03	043		11/8/2006	175	FM		175
A 05	03	043		03	044		11/8/2006	148	FM		148
A 05	03	044		03	045		7/2/2007	90	JM	6	180
A 05	03	047		03	048		11/13/2006	200	FM		200
A 05	03	048		03	049		11/13/2006	300	FM		300
A 05	03	049		03	050		11/13/2006	357	FM		357
A 05	03	050		03	051		11/13/2006	350	FM		350
A 05	03	051		03	053		11/13/2006	220	FM		220
A 05	03	052		03	053		11/13/2006	165	FM		165
A 05	03	055		03	059		11/13/2006	171	FM		171
A 05	03	056		03	057		11/9/2006	243	FM		243
A 05	03	057		03	058		11/13/2006	110	FM		110
A 05	03	058		03	138		11/13/2006	121	FM		121

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
A 05	03	059		03	060		11/13/2006	344	FM		344
A 05	03	059		03	060		5/1/2007	345	JM	12	345
A 05	03	060		03	061		11/13/2006	120	FM		120
A 05	03	062		03	063		11/13/2006	231	FM		231
A 05	03	062		03	063		4/15/2007	232	JM	12	232
A 05	03	063		03	064		11/13/2006	336	FM		336
A 05	03	066		03	067		11/20/2006	268	FM		268
A 05	03	066		03	136	C	11/20/2006	241	FM		241
A 05	03	067		03	068		11/20/2006	109	FM		109
A 05	03	068		03	071		11/20/2006	224	FM		224
A 05	03	069		03	070		11/20/2006	324	FM		324
A 05	03	070		03	071		11/20/2006	200	FM		200
A 05	03	071		03	072	M	11/20/2006	300	FM		300
A 05	03	072	M	03	086		11/20/2006	315	FM		315
A 06	03	073		03	131	C	11/6/2006	109	FM		109
A 06	03	073		03	074		11/6/2006	200	FM		200
A 06	03	074		03	075		11/6/2006	115	FM		115
A 06	03	075		03	076		11/6/2006	101	FM		101
A 06	03	076		03	077		11/6/2006	353	FM		353
A 06	03	077		03	132	C	11/6/2006	148	FM		148
A 06	03	077		03	082		11/8/2006	201	FM		201
A 06	03	078		03	079		11/6/2006	205	FM		205
A 06	03	079		03	080		11/6/2006	245	FM		245
A 06	03	080		03	081		11/6/2006	356	FM		356
A 06	03	081		03	082		11/8/2006	237	FM		237
A 06	03	082		03	083		11/8/2006	351	FM		351
A 06	03	083		03	084		11/8/2006	322	FM		322
A 06	03	084		03	085		11/8/2006	288	FM		288
A 06	03	085		03	086		11/20/2006	158	FM		158
A 07	03	089		04	082		7/2/2007	400	JM	6	800
A 07	03	091		03	103		3/4/2007	274	FM		274
A 07	03	091		03	103		3/4/2007	274	JM	6	548
A 07	03	092		03	093	C	11/30/2006	190	FM		190
A 07	03	092		03	102		11/30/2006	105	FM		105
A 07	03	094	C	03	097		12/21/2006	160	FM		160
A 07	03	094	C	03	097		2/5/2007	170	JM	6	340
A 07	03	095	C	03	096		11/8/2006	349	FM		349
A 07	03	096		03	097		11/8/2006	313	FM		313
A 07	03	097		03	098		11/8/2006	323	FM		323
A 07	03	098		03	133	D	11/8/2006	275	FM		275
A 07	03	098		03	100		11/8/2006	240	FM		240
A 07	03	099		03	137	C	11/28/2006	75	FM		75
A 07	03	099		03	100		11/28/2006	190	FM		190
A 07	03	100		03	101		11/28/2006	350	FM		350
A 07	03	101		03	129		11/28/2006	350	FM		350
A 07	03	101		03	102		11/30/2006	102	FM		102
A 07	04	066		04	067		11/20/2006	288	FM		288
A 07	04	067		04	068		11/20/2006	287	FM		287
A 07	04	068		04	144	C	11/20/2006	185	FM		185

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
A 08	03	001		03	003	C	11/3/2006	284	FM		284
A 08	03	002	C	03	003		10/9/2006	225	JM	12	225
A 08	03	002	C	03	003		11/3/2006	242	FM		242
A 08	03	003		03	004		10/9/2006	270	JM	12	270
A 08	03	004		03	006		11/3/2006	181	FM		181
A 08	03	005		03	006		11/3/2006	192	FM		192
A 08	03	006		03	008		11/3/2006	180	FM		180
A 08	03	007		03	008		10/9/2006	280	JM	12	280
A 08	03	007		03	008		11/3/2006	272	FM		272
A 08	03	008		03	009		10/9/2006	280	JM	12	280
A 08	03	008		03	009		11/3/2006	264	FM		264
A 08	03	009		03	019		11/6/2006	300	FM		300
A 08	03	009		03	019		4/15/2007	300	JM	6	600
A 08	03	010	C	03	011		11/3/2006	127	FM		127
A 08	03	011		03	016		11/3/2006	215	FM		215
A 08	03	011		03	134	C	11/3/2006	81	FM		81
A 08	03	012		03	016		11/3/2006	296	FM		296
A 08	03	012		03	135	C	11/3/2006	140	FM		140
A 08	03	013	C	03	014		10/9/2006	115	JM	12	115
A 08	03	013	C	03	014		11/3/2006	122	FM		122
A 08	03	014		03	015		11/3/2006	215	FM		215
A 08	03	015		03	016		11/3/2006	127	FM		127
A 08	03	016		03	017		11/3/2006	170	FM		170
A 08	03	017		03	018		11/3/2006	139	FM		139
A 08	03	018		03	019		2/5/2007	350	JM	6	700
A 08	03	019		03	139		11/6/2006	180	FM		180
A 08	03	019		03	020		11/6/2006	224	FM		224
A 08	03	020		03	021		11/6/2006	344	FM		344
A 08	03	021		03	022		11/6/2006	345	FM		345
A 08	03	022		03	023		11/6/2006	290	FM		290
A 08	03	023		03	028		11/6/2006	285	FM		285
A 08	03	025		03	026		11/28/2006	296	FM		296
A 08	03	026		03	028		11/28/2006	182	FM		182
A 08	03	027		03	028		11/28/2006	202	FM		202
A 08	03	028		03	029		12/4/2006	281	FM		281
A 08	03	029		03	033		12/4/2006	200	FM		200
A 08	03	030		03	031		12/4/2006	247	FM		247
A 08	03	031		03	032		12/4/2006	212	FM		212
A 08	03	032		03	033		12/4/2006	212	FM		212
A 09	03	033		04	032		12/4/2006	250	FM		250
A 09	03	105		04	032		2/5/2007	395	JM	6	790
A 09	03	105	P	04	032	P	5/7/2007	395	FM	3	1580
A 09	04	032		04	033		12/4/2006	282	FM		282
A 09	04	033		04	035		12/4/2006	285	FM		285
A 09	04	035		04	036	M	12/4/2006	400	FM		400
A 09	04	036	M	04	037		12/4/2006	131	FM		131
A 10	04	037		04	053		12/4/2006	230	FM		230
A 10	04	038		04	039		11/20/2006	160	FM		160
A 10	04	039		04	040		11/20/2006	286	FM		286

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
A 10	04	040		04	042		11/20/2006	209	FM		209
A 10	04	041		04	042		11/20/2006	160	FM		160
A 10	04	042		04	043		11/20/2006	163	FM		163
A 10	04	044		04	125	C	11/20/2006	220	FM		220
A 10	04	044		04	045		11/20/2006	334	FM		334
A 10	04	045		04	126	C	11/20/2006	150	FM		150
A 10	04	045		04	048		11/30/2006	280	FM		280
A 10	04	046		04	047		11/30/2006	323	FM		323
A 10	04	046		04	127	C	11/30/2006	142	FM		142
A 10	04	046		04	152		11/30/2006	295	FM		295
A 10	04	047		04	048		11/30/2006	289	FM		289
A 10	04	047		04	145	C	11/30/2006	240	FM		240
A 10	04	048		04	049		11/30/2006	345	FM		345
A 10	04	049		04	050		11/30/2006	207	FM		207
A 10	04	050		04	051		11/30/2006	261	FM		261
A 10	04	052		04	053		12/4/2006	77	FM		77
A 10	04	053		04	059		12/4/2006	298	FM		298
A 10	04	056		04	141	C	5/1/2007	237	JM	12	237
A 10	04	057		04	058		12/21/2006	357	FM		357
A 10	04	058		04	059		12/4/2006	153	FM		153
A 10	04	059		04	065		12/4/2006	359	FM		359
A 10	04	060		04	130	C	5/1/2007	205	JM	12	205
A 10	04	064		04	065		12/4/2006	152	FM		152
A 10	04	153		04	154		11/30/2006	64	FM		64
B 01	04	094	D	04	096		12/7/2006	276	FM		276
B 01	04	094		04	149	C	12/7/2006	190	FM		190
B 01	04	095		04	096		12/7/2006	124	FM		124
B 01	04	095		04	136	C	4/15/2007	212	JM	12	212
B 01	04	096		04	097		12/5/2006	200	FM		200
B 01	04	096		04	097		4/15/2007	253	JM	12	253
B 01	04	097		04	103		12/7/2006	300	FM		300
B 01	04	097		04	103		4/15/2007	317	JM	12	317
B 01	04	098	C	04	099		4/15/2007	283	JM	12	283
B 01	04	104		04	105		12/7/2006	165	FM		165
B 01	04	105		04	137	C	12/7/2006	130	FM		130
B 01	04	105		04	107		12/7/2006	50	FM		50
B 01	04	105		04	137	C	4/15/2007	155	JM	6	310
B 01	04	106	C	04	107		12/7/2006	221	FM		221
B 01	04	107		04	108		12/7/2006	280	FM		280
B 01	04	107		04	108		4/15/2007	283	JM	12	283
B 01	04	108		04	109		12/7/2006	100	FM		100
B 01	04	108		04	109		4/15/2007	41	JM	12	41
B 01	04	109		04	117		12/7/2006	275	FM		275
B 01	04	109		04	117		4/15/2007	289	JM	12	289
B 01	04	110		04	115		3/4/2007	312	JM	6	624
B 01	04	110		04	140		3/4/2007	338	JM	12	338
B 01	04	111		04	134		3/4/2007	300	JM	12	300
B 01	04	112		04	113		3/4/2007	350	JM	6	700
B 01	04	113		04	114		3/4/2007	232	JM	6	464

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
B 01	04	114		04	115		3/4/2007	290	JM	12	290
B 01	04	115		04	116		3/4/2007	132	JM	12	132
B 02	04	085		04	086		12/7/2006	287	FM		287
B 02	04	085		04	086		12/7/2006	350	FM		350
B 02	04	086		04	087		12/7/2006	346	FM		346
B 02	04	087		04	089		12/7/2006	144	FM		144
B 02	04	088		04	089		10/9/2006	265	JM	12	265
B 02	04	088		04	131	C	12/7/2006	39	FM		39
B 02	04	089		04	093		4/15/2007	265	JM	6	530
B 02	04	093		04	089		12/21/2006	246	FM		246
B 02	04	136		04	095	C	12/7/2006	101	FM		101
C 01	04	007		04	025		12/11/2006	150	FM		150
C 01	04	008		04	009		12/11/2006	277	FM		277
C 01	04	009		04	010		12/11/2006	217	FM		217
C 01	04	010		04	025		12/11/2006	203	FM		203
C 01	04	011		04	012		12/11/2006	185	FM		185
C 01	04	012		04	013		12/11/2006	157	FM		157
C 01	04	013		04	014		12/11/2006	65	FM		65
C 01	04	015		04	016		12/11/2006	162	FM		162
C 01	04	017		04	020		12/11/2006	138	FM		138
C 01	04	017		04	020		12/11/2006	289	FM		289
C 01	04	018		04	019		12/11/2006	236	FM		236
C 01	04	019		04	020		12/11/2006	130	FM		130
C 01	04	020		04	021		12/11/2006	86	FM		86
C 01	04	021		04	022		12/11/2006	221	FM		221
C 01	04	022		04	023		12/11/2006	289	FM		289
C 01	04	024		04	025		12/11/2006	129	FM		129
C 01	04	024		04	025		12/11/2006	133	FM		133
C 01	04	025		04	031		12/11/2006	262	FM		262
C 01	04	026		04	027		12/11/2006	302	FM		302
C 01	04	027		04	028		12/11/2006	297	FM		297
C 01	04	030		04	031		12/11/2006	211	FM		211
Z 01	02	011		02	012		4/30/2007	200	FM		200
Z 01	02	011		03	163		4/30/2007		FM		
Z 01	02	012		02	015		4/30/2007	200	FM		200
Z 01	02	013		03	127		4/30/2007	200	FM		200
Z 01	02	013		02	014		4/30/2007	300	FM		300
Z 01	02	014		02	015		4/30/2007	318	FM		318
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Z 01	02	016		02	017		4/30/2007	293	FM		293
Z 01	02	017		02	018		4/30/2007	150	FM		150
Z 01	02	018		02	036		4/30/2007	200	FM		200
Z 01	02	019		02	020		4/26/2007	124	FM		124
Z 01	02	020		02	021		4/26/2007	200	FM		200
Z 01	02	021		02	022		4/26/2007	200	FM		200
Z 01	02	022		02	023		4/26/2007	61	FM		61
Z 01	02	023		02	024		4/26/2007	127	FM		127
Z 01	02	024		02	026		4/26/2007	200	FM		200
Z 01	02	025		02	026		4/26/2007	175	FM		175

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
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Z 01	02	026		02	027		4/26/2007	200	FM		200
Z 01	02	027		02	029		4/26/2007	250	FM		250
Z 01	02	028		02	029		4/26/2007	220	FM		220
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Z 01	02	030		02	031		4/27/2007	250	FM		250
Z 01	02	031		02	032		4/27/2007	150	FM		150
Z 01	02	031		02	087	C	4/27/2007	75	FM		75
Z 01	02	032		02	033		4/27/2007	125	FM		125
Z 01	02	033	P	02	034		4/27/2007	100	FM		100
Z 01	02	034		02	035		4/27/2007	115	FM		115
Z 01	02	035		02	036		4/30/2007	150	FM		150
Z 01	02	036		02	045		4/30/2007	100	FM		100
Z 01	02	037		02	038		4/30/2007	228	FM		228
Z 01	02	038		02	040		4/30/2007	243	FM		243
Z 01	02	039		02	088	C	4/30/2007	96	FM		96
Z 01	02	039		02	040		4/30/2007	281	FM		281
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Z 01	02	045		02	046		4/30/2007	175	FM		175
Z 01	02	046		02	047		4/30/2007	337	FM		337
Z 01	02	047		02	048		4/30/2007	300	FM		300
Z 01	02	048		02	068		5/15/2007	300	FM		300
Z 01	02	049		02	050		5/14/2007	155	FM		155
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Z 01	02	051		02	053		5/14/2007	175	FM		175
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Z 01	02	062		02	063		5/14/2007	325	FM		325
Z 01	02	063		02	065		5/14/2007	205	FM		205
Z 01	02	064		02	065		5/14/2007	112	FM		112
Z 01	02	065		02	066		5/15/2007	350	FM		350
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Z 01	02	068		02	069		5/15/2007	344	FM		344
Z 01	03	126		03	127		4/30/2007	265	FM		265
Z 01	03	139		03	159		4/26/2007	149	FM		149

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
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Z 01	03	140		03	159		4/26/2007	156	FM		156
Z 01	03	140		03	142		4/26/2007	345	FM		345
Z 01	03	142		03	152		4/26/2007	161	FM		161
Z 01	03	142		03	143		4/26/2007	101	FM		101
Z 01	03	142		03	160		4/26/2007	206	FM		206
Z 01	03	143		03	144		4/26/2007	107	FM		107
Z 01	03	144		03	145		4/26/2007	106	FM		106
Z 01	03	145		03	146		4/26/2007	108	FM		108
Z 01	03	146		03	147		4/26/2007	119	FM		119
Z 01	03	147		03	148		4/26/2007	104	FM		104
Z 01	03	148		03	149		4/26/2007	106	FM		106
Z 01	03	149		03	150		4/26/2007	108	FM		108
Z 01	03	150		03	151		4/26/2007	208	FM		208
Z 01	03	152		03	153		4/26/2007	174	FM		174
Z 01	03	152		03	155		4/26/2007	136	FM		136
Z 01	03	153		03	154	C	4/26/2007	123	FM		123
Z 01	03	155		03	156	C	4/26/2007	136	FM		136
Z 01	03	157		03	158	D	4/26/2007	25	FM		25
Z 01	03	157		03	160		4/26/2007	120	FM		120
Z 01	03	157		03	161		4/26/2007	135	FM		135
Z 01	03	157		03	163		4/26/2007	105	FM		105
Z 02	01	004		02	069		5/15/2007	330	FM		330
Z 02	01	004		01	005		5/30/2007	60	FM		60
Z 02	01	005		01	027		5/30/2007	300	FM		300
Z 02	01	005		02	010		5/30/2007	200	FM		200
Z 02	01	006		05	109		5/16/2007	363	FM		363
Z 02	01	006		01	008		5/16/2007	359	FM		359
Z 02	01	007		01	008		5/16/2007	105	FM		105
Z 02	01	008		01	009		5/16/2007	150	FM		150
Z 02	01	009		01	011		9/8/2006	200	FM		200
Z 02	01	010		01	011		9/8/2006	211	FM		211
Z 02	01	010		05	103		5/17/2007	309	FM		309
Z 02	01	011		01	012		5/17/2007	200	FM		200
Z 02	01	012		01	013		5/17/2007	350	FM		350
Z 02	01	013		01	017		5/17/2007	425	FM		425
Z 02	01	014		05	111		5/25/2007	350	FM		350
Z 02	01	014		01	015		5/25/2007	332	FM		332
Z 02	01	015		01	016		5/25/2007	355	FM		355
Z 02	01	016		01	017		5/25/2007	175	FM		175
Z 02	01	017	P	01	018	P	5/1/2007	175	FM	3	700
Z 02	01	018		01	019		5/30/2007	320	FM		320
Z 02	01	019		01	023		5/30/2007	355	FM		355
Z 02	01	020		01	021		5/30/2007	353	FM		353
Z 02	01	020		02	084		5/30/2007	359	FM		359
Z 02	01	021		01	022		5/30/2007	245	FM		245
Z 02	01	022		01	023		5/30/2007	300	FM		300
Z 02	01	023		01	025		5/30/2007	298	FM		298
Z 02	01	023		02	083		5/30/2007	354	FM		354

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
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Z 02	01	024		01	025		5/30/2007	221	FM		221
Z 02	01	025		01	026		5/30/2007	133	FM		133
Z 02	01	026		01	027		5/30/2007	150	FM		150
Z 02	01	027		01	028		5/30/2007	242	FM		242
Z 02	01	028		01	040		5/30/2007	300	FM		300
Z 02	02	010		02	089		5/15/2007	325	FM		325
Z 02	02	073		02	074		5/21/2007	300	FM		300
Z 02	02	073		06	018		5/21/2007	314	FM		314
Z 02	02	074		02	075		5/21/2007	300	FM		300
Z 02	02	075		02	076		5/21/2007	300	FM		300
Z 02	02	076		02	077		5/21/2007	300	FM		300
Z 02	02	077		02	078		5/21/2007	300	FM		300
Z 02	02	079		02	080		5/25/2007	225	FM		225
Z 02	02	080		02	081		5/25/2007	200	FM		200
Z 02	02	081		02	082		5/25/2007	350	FM		350
Z 02	02	082		02	083		5/25/2007	353	FM		353
Z 02	02	084		06	004		5/30/2007	350	FM		350
Z 02	02	089		02	090		5/14/2007	70	FM		70
Z 02	02	090		02	091		5/14/2007	600	FM		600
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Z 02	05	099		05	100		5/17/2007	258	FM		258
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Z 02	05	101		05	102		5/17/2007	265	FM		265
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Z 02	05	105		05	106		5/16/2007	130	FM		130
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Z 02	05	108		05	109		5/16/2007	250	FM		250
Z 02	05	110		06	001		5/25/2007	330	FM		330
Z 02	05	110		05	111		5/25/2007	239	FM		239
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Z 02	06	003		06	004		5/30/2007	354	FM		354
Z 02	06	005		06	006		5/14/2007	350	FM		350
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Z 02	06	013		06	014		5/17/2007	301	FM		301
Z 02	06	014		06	017		5/18/2007	268	FM		268
Z 02	06	015		06	016		5/17/2007	343	FM		343

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
Z 02	06	015		06	149	C	5/17/2007	140	FM		140
Z 02	06	016		06	017		5/18/2007	289	FM		289
Z 02	06	017		06	017	C	9/19/2006	150	FM		150
Z 02	06	017		06	018		5/18/2007	295	FM		295
Z 03	01	029		01	030		5/31/2007	300	FM		300
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Z 03	01	031		01	032		5/31/2007	200	FM		200
Z 03	01	032		01	033		5/31/2007	353	FM		353
Z 03	01	033		01	034		5/31/2007	353	FM		353
Z 03	01	034		01	035		5/31/2007	348	FM		348
Z 03	01	035		01	038		5/31/2007	342	FM		342
Z 03	01	036		01	037		5/30/2007	350	FM		350
Z 03	01	036		01	114	C	5/30/2007	176	FM		176
Z 03	01	037		01	038		5/31/2007	272	FM		272
Z 03	01	038		01	039		5/31/2007	320	FM		320
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Z 04	01	044		01	067		6/5/2007	50	FM		50
Z 04	01	045		01	046		6/4/2007	88	FM		88
Z 04	01	046		01	047		6/4/2007	88	FM		88
Z 04	01	047		01	048		6/4/2007	233	FM		233
Z 04	01	048		01	049		6/4/2007	232	FM		232
Z 04	01	049		01	058		6/4/2007	225	FM		225
Z 04	01	050		01	051		6/4/2007	68	FM		68
Z 04	01	051		01	052		6/4/2007	99	FM		99
Z 04	01	052		01	053		6/4/2007	120	FM		120
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Z 04	01	056		01	057		6/4/2007	136	FM		136
Z 04	01	057		01	058		6/4/2007	155	FM		155
Z 04	01	058		01	060		6/4/2007	179	FM		179
Z 04	01	059		01	060		6/4/2007	140	FM		140
Z 04	01	060		01	064		6/4/2007	226	FM		226
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Z 04	01	062		01	063		6/4/2007	220	FM		220
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Z 04	01	064		01	065		6/4/2007	100	FM		100
Z 04	01	065		01	066		6/5/2007	75	FM		75
Z 04	01	066		01	067		6/5/2007	85	FM		85
Z 04	01	067		01	068		6/5/2007	401	FM		401
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Z 05	01	073	C	01	117		6/1/2007	15	FM		15
Z 05	01	074		01	117		6/1/2007	100	FM		100
Z 05	01	074		01	075		6/1/2007	150	FM		150
Z 05	01	075		01	076		6/1/2007	102	FM		102

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY6 Footage
Z 05	01	076		01	077		6/1/2007	95	FM		95
Z 05	01	077		01	078		6/1/2007	182	FM		182
Z 05	01	078		01	079		6/1/2007	180	FM		180
Z 05	01	079		01	080		6/1/2007	212	FM		212
Z 05	01	080		01	081		6/1/2007	216	FM		216
Z 05	01	081		01	084		6/4/2007	216	FM		216
Z 05	01	083		01	084		6/4/2007	169	FM		169
Z 05	01	084		01	085		6/4/2007	118	FM		118
Z 05	01	085		01	098		6/4/2007	224	FM		224
Z 05	01	086		01	087		5/31/2007	230	FM		230
Z 05	01	087		01	088		5/31/2007	297	FM		297
Z 05	01	088		01	089		5/31/2007	200	FM		200
Z 05	01	089		01	091		5/31/2007	100	FM		100
Z 05	01	090		01	091		5/31/2007	91	FM		91
Z 05	01	091		01	092		5/31/2007	256	FM		256
Z 05	01	092		01	093		5/31/2007	304	FM		304
Z 05	01	093		01	094		5/31/2007	232	FM		232
Z 05	01	094		01	095		5/31/2007	190	FM		190
Z 05	01	095		01	096		5/31/2007	152	FM		152
Z 05	01	096		01	097		5/31/2007	150	FM		150
Z 05	01	097		01	098		6/4/2007	28	FM		28
Z 05	01	098		01	099		6/4/2007	198	FM		198
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Z 06	01	101		01	102		6/5/2007	272	FM		272
Z 06	01	102		01	115		6/5/2007	52	FM		52
Z 06	01	103		01	115		6/5/2007	342	FM		342
Z 06	01	103		01	104		6/5/2007	374	FM		374
Z 06	01	104		01	105		6/5/2007	300	FM		300
Z 06	01	105		01	106		6/5/2007	306	FM		306
Z 06	01	106		01	107		6/5/2007	355	FM		355
Z 06	01	107		01	108		6/5/2007	344	FM		344
Z 06	01	108		01	109		6/6/2007	351	FM		351
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Z 06	39	009		39	010		6/6/2007	330	FM		330
Z 06	39	010		39	011		6/6/2007	365	FM		365
Z 06	39	011		39	012		6/6/2007	356	FM		356
									Total (Feet):		1,108,816
									Total (Miles):		210.00

City of El Cajon
AS A COPERMITTEE OF THE SAN DIEGO RIVER WATERSHED

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT 2007 – 2008

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Appendix D Sewer Maintenance Summary (PY1)

EXECUTIVE SUMMARY

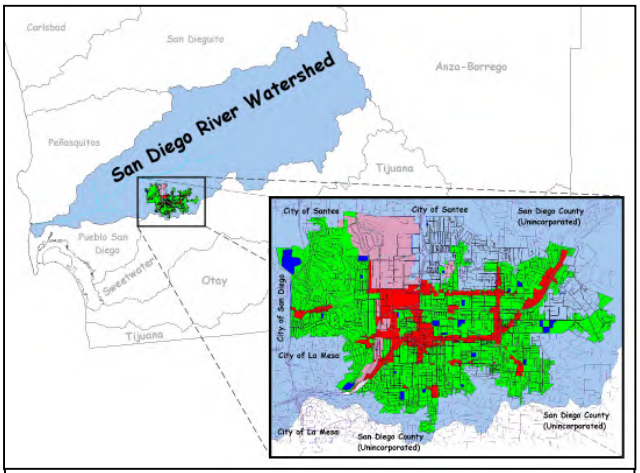

The City of El Cajon in the Context San Diego County and the San Diego River Watershed

The City of El Cajon (City), located in east San Diego County, is the eastern-most incorporated City within the San Diego River Watershed (Watershed). With 14.48 square miles and nearly 97,000 citizens, the City plans with other regional jurisdictions and acts locally to maintain the health of the San Diego River Watershed. A healthy watershed means thriving environmental communities and a state of well being among its constituency. Maintaining watershed health is achieved through compliance with Federal Clean Water Act requirements as stated in the San Diego County Municipal Storm Water Permit, Order No. R9-2007-0001, through water quality monitoring, biological assessments, and municipal vigilance to balance growing human demands with a healthy environment.

Permit Year 2007-2008 (PY 2007-08 and also PY1 of the new permit) is the year in which the San Diego Region Order No. R9-2007-0001 (new municipal permit) renewed Order No. 2001-001. The renewed municipal permit was adopted in January 24, 2007, and PY 2007-08 portends to be the first year in the new municipal permit's cycle. Efforts started with jurisdictional planning and implementation, proceeded to local program assessment and continues to evolve into multi-jurisdictional and watershed actions. The City is transitioning to the new municipal permit and continued the Permit Year 2006-07 focus of assessing program component effectiveness from Best Management Practices (BMP) implementation and determining how preventive measures affect watershed health from a local perspective. Many of the program's components have developed into BMP programs, whereby inspections can determine effectiveness of pollution reduction measures.

This Annual Report presents the City's efforts during the 2007-08 reporting period. Covered in this Report is the move toward adaptive management of the updated Jurisdictional Urban Runoff Management Program (JURMP) implementation and integration of general watershed principles for the San Diego River Watershed into local planning. Both the San Diego River Watershed Urban Runoff Management Plan (WURMP) and the City's JURMP were updated and submitted to the San Diego Regional Water Quality Control Board (RWQCB) on March 24, 2007, as required by the new municipal permit and extension. It is the responsibility of the City to balance jurisdictional and watershed requirements and maintain a healthy watershed within its jurisdiction.

Critical for the rest of the new permit cycle are Watershed adjustments to the City's Storm Water Pollution Prevention Program and deciding where best to place City efforts that will minimize or eliminate polluted runoff. Forrester Creek, the main tributary drainage channel in El Cajon, is a listed 303(d) waterbody with impairments for pH in the upper part (El Cajon and San Diego

County) and for total dissolved solids (TDS) and fecal coliform in the lower portion within the City of Santee). El Cajon considers these three impairments to be the center of the Clean Water Act objective "to restore the Nations Waters" to a chemical balance able to support the State's Basin Plan designations for fishable and swimmable waters.

A *BMP to Pollutant Reduction Diagram* was developed to connect BMPs to pollutants that are targeted for reduction as a result of their listing as 303(d) pollutants in Forrester Creek. This diagram and discussion is provided in the Introduction in Section 1.

This JURMP Annual Report for PY1 consists of 15 Sections, and is organized as follows:

Section 1 - Introduction. Describes the purpose of this Annual Report, the overall vision of the City, goals and objectives of the Storm Water Pollution Prevention Program; the regional integration of Watershed Health; assessment of program effectiveness to guide future actions, and Forrester Creek-specific criterion that relate to San Diego River Watershed and River health.

Section 2 - Development Planning Component. Lists the planning actions reviewed and the role of storm water in re-defining new development designs and describes the ways of confirming that commitment to storm water becomes a design reality.

Section 3 - Construction Component. Summarizes reviews of Erosion Control Plans, inspections of high priority sites, interactions with other City departments, and conditions during rainfall events.

Section 4 - Municipal Component. Summarizes the activities for municipal facilities, the sanitary sewer program, capital improvement projects affecting storm water quality, and municipal staff training.

Section 5 – Industrial and Commercial Component

- **Industrial Component**. Summarizes the activities conducted to assess the effectiveness of implemented industrial BMPs and better define the pollutants affecting storm water quality.
- **Commercial Component.** Summarizes the inspections, enforcements, and educational efforts to assess the effectiveness of implemented BMPs and better define the pollutants affecting storm water quality by business type.

Section 6 - Residential Component. Summarizes the challenges with educating the public, interactions with citizens, educational efforts, and enforcement at the residential level.

Section 7 - Illicit Discharge Detection and Elimination Component. Summarizes the City's dry weather program that identifies illegal dumping and illicit connections to the storm drain system. This year an upstream/downstream analytical assessment was completed for dry weather.

Section 8 - Education Component. Summarizes programs implemented by the City to educate municipal employees, developers and contractors, business owners, the general public, and other priority groups

Section 9 - Public Participation Component. Summarizes the outreach efforts coordinated on a regional level through the Outreach Workgroup.

Section 10 - Fiscal Analysis Component. Reviews and compares previous storm water expenditures while projecting future program funding requirements.

Section 11 - Effectiveness Assessment Component. Provides summary tables for the existing and development components indicating estimated and actual pollutant-containing material reductions at the source or from preventive measures.

Section 12 – Special Investigations. Summarizes any special investigations that may have been conducted during the current reporting period.

Section 13 – Non-Emergency Fire Fighting. Summarizes non-emergency fire-fighting activities/training conducted during the current reporting period.

Section 14 – JURMP Revisions. Summarizes any changes or revisions to the JURMP that may have occurred during the current reporting period.

Section 15 - Conclusions and Recommendations. Summarizes the conclusions stated from each component and makes overall program conclusions and provides recommendations for future permit years.

Appendices contain City-developed checklists, guidance documents, outreach materials, lists of priority businesses or sites, and presentations to City staff and the local community. Additionally, the Dry Weather Monitoring report is provided as an attachment.

The City achieved a number of important accomplishments during this reporting period, both in its role as a Copermittee, and through participation (and eventual leadership role) in the implementation of general watershed principles. Across the City, businesses and citizens, together, function within the JURMP and watershed to assist in identifying storm water issues and help prevent pollution from being discharged.

City Action Highlights include:

- Continue with a strong Enforcement program for City Ordinances 4686 (JURMP) and 4717 (Standard Urban Storm Water Management Program (SUSMP) requirements).
- As a City with little open space and a propensity for redevelopment, the City pursues common sense approaches to go beyond Permit compliance and achieve defensible, cost-effective storm water management practices for businesses and citizens through the SUSMP conditioning process.
- Continued implementation of a City-Wide Integrated Pesticide Management Program.
- The City continued an expanded scope of its Dry Weather Monitoring Program. Additional information along concrete lined areas focuses on business districts or municipal areas. In doing so, it has made substantial strides in detecting and eliminating discharges and characterizing receiving waters and other conveyance discharges within its jurisdiction.
- Conducted upstream/downstream dry weather analysis in Forrester Creek to quantify the amounts of pollutants discharged within the City's jurisdiction.

- Inspected 142 High Priority Commercial Establishments for compliance with the City's Municipal Code and issued 7 warnings and 2 citations to commercial business for various violations of the City's storm water ordinance. The City conducted monthly inspections at all priority construction sites during the dry season and weekly inspections during the wet season.
- The City issued a total of 15 warnings and 14 citations for various violations of the City's storm water ordinances.
- Conducted inspections at 18 high priority construction sites. The inspections revealed several violations or compliance issues and the City issued 6 written warnings.
- Conducted inspections at 69 high priority industrial sites. The City also collected industrial storm water monitoring data from those industrial facilities subject to the State General Industrial Storm Water Permit and conducting the required annual storm water monitoring. The City intends to review the industrial storm water data to evaluate potential contributors to water quality problems.
- The City's inspection programs emphasized clean trash storage and disposal areas; power washing BMPs; and maintenance of sewer laterals in addition to the minimum required BMPs.
- the City of El Cajon was presented the **Sewage Collection System of the Year Award** for collection systems under 250 miles in length by the California Water Environment Association (CWEA). The award represents professional acknowledgement of decades of superior maintenance of the El Cajon Municipal Sewer System by many City workers.

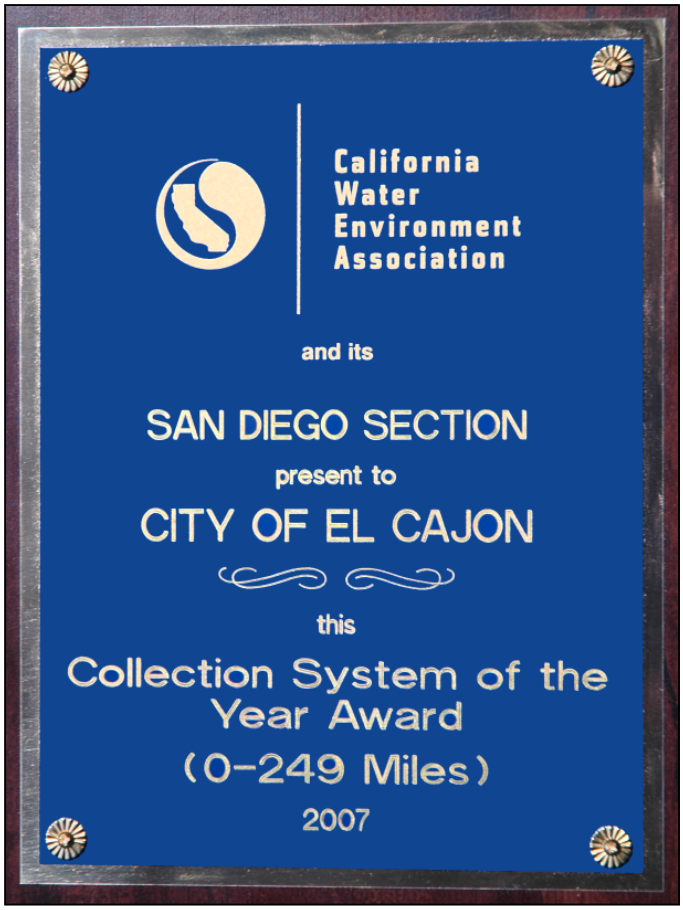

- The City's comprehensive street sweeping program swept 21,180 miles of streets and collected 3,483 cubic yards of materials from City streets. Sediment and silt account for 45% of the total, organic material accounted for 37%, trash accounted for 16% and the "Other" category accounted for 2%.
- Collected 1,720 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins.
- Actively participated in the Management Committee, Outreach Workgroup, Regional Monitoring Workgroup and WURMP

Development Workgroup.

- Continued active participation with the East County Cities Workgroup.
- Continued its efforts to reach out to community members on a wide range of urban runoff and storm water quality topics through approximately 209,000 copies of articles, brochures, and mailers.
- Conducted over-the-counter assistance and provided personalized residential BMP information to homeowners for small additions and remodels, pools and retaining wall projects.

This reporting period is one of continued program assessment and focus of local actions to move toward a watershed protection program. This last year, the City continued to meet the new challenges of working within a watershed. The City continues in the role of the Lead Copermittee for the San Diego River Watershed. The City feels strongly that it has made significant strides looking within its jurisdictional boundaries as well as organizing inter-jurisdictional programs. Continuing improvement and refinement is the name of this storm water pollution prevention program as we continue to gather information and experience about how City activities affect the local receiving waters and the health of the San Diego River Watershed.

This Annual Report provides programmatic information and further steps in connecting activities to a significant movement for improving receiving water quality by the City of El Cajon. Over the last year, the City has continued its effort at linking municipal activities to receiving water quality. Additional connections to receiving water quality from the implementation of BMPs will follow as information is gathered and assessed using a Long-Term Assessment process over the next several years.

A listing of storm water contact personnel is provided as part Appendix C to help facilitate communication within the City and for the public and outside agencies to contact the appropriate City staff.

CERTIFICATION

"I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Kathi Henry — 9.19.08

Signature — Date

Kathi Henry, City Manager — (619) 441 1718

Printed Name, Title — Phone Number

SECTION 1 INTRODUCTION

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SECTION 1 INTRODUCTION

Our Environment:
It's a Living Thing!

With each Permit Year (PY), the City of El Cajon reviews, assesses, and progresses towards a watershed approach to protect surface waters from urban runoff pollution. A continued emphasis towards identifying sources of pollutants and minimizing specific 303(d) impacts to Forrester Creek is the focus of this 1st year in the Permit Cycle (Order No. R9-2007-0001).

The typical steps for developing a pollution prevention and source control program are summarized below and discussed in more detail in Section 11, Effectiveness Assessment.

1. **Identify the issue.** Define each issue.
2. **Identify and assess sources.** Sources are identified by prioritizing based on location and type of business.
3. **Determine available control strategies**. To identify possible control strategies for each source.
4. **Evaluate control strategies**. To determine which control strategies are most likely to achieve measurable results.
5. **Establish a goal.** A goal may be set at any point during the development process. The goal is the desired outcome.
6. **Implement program.** Part of program implementation is selection of an effectiveness measurement tool to assess the program.
7. **Evaluate effectiveness.** Based on the effectiveness measurement, determine what has been learned.
8. **Modify program.** The results of the effectiveness measurement will help to determine the future direction for the program.

Described in this First Permit Year (PY1) Annual Report is the implementation and collected information for each Permit component. Sections 2 through 11 highlight component accomplishments, activities, or areas of achievement for Development and Planning; Construction; Municipal; Industrial and Commercial Development; and Residential Development; Education and Outreach; Illicit Discharge, Detection and Elimination; Public Participation, Effectiveness Assessment; and Fiscal Analysis.

1.1 REGULATORY FRAMEWORK

Background

The City of El Cajon's (City) Jurisdictional Urban Runoff Management Plan (JURMP) was developed pursuant to Order No. 2001-001, National Pollutant Discharge Elimination System

(NPDES) Permit No. CAS0108758, the area-wide municipal separate storm sewer system (MS4) permit. The MS4 permit was established pursuant to Section 402(p) of the Federal Clean Water Act, which requires all point source discharges of pollutants into waters of the United States, including discharges from municipal separate storm sewer systems, to be regulated by a NPDES permit. On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), adopted Order No. R9-2007-0001, NPDES Permit No. CAS0108758 (Permit), to the City and 20 other Copermittees, for discharges of urban runoff from MS4s into the receiving waters within the SDRWQCB's jurisdiction.

The City is a participant and partner in the San Diego River Watershed along with the Cities of La Mesa, Poway, San Diego, Santee, and the County of San Diego. A watershed approach to storm water pollution provides the wider view of runoff impacts and requires jurisdictional approaches to include neighboring jurisdictions in future planning and reporting efforts.

The PYs are summarized as follows:

- PY1 - February 21, 2001 through June 30, 2002, a comprehensive JURMP was developed.
- PY2 - July 1, 2002 through June 30, 2003, the initial implementation and assessment of programs.
- PY3 – July 1, 2004 through June 30, 2005, reassessment of initial implementation with refinements and reimplementation, as necessary.
- PY4 – July 1, 2004 through June 30, 2005, implementation was taken to the next level of refinement based on performance.
- PY5 – July 1, 2005 through June 30, 2006, as the City's programs mature, the City focused on watershed issues, including pollution prevention and education and continued to refine and improve the City's programs.
- PY6 - July 1, 2006 through June 30, 2007, preparing for issuance of a new permit containing watershed/regional permit requirements supported and subsidized by jurisdictional efforts.

<u>Current and Future</u>

- PY1 - July 1, 2007 through June 30, 2008, modifying and enhancing the storm water program to comply with the new Municipal Permit, R9-2007-001. New comprehensive JURMP prepared to create a detail framework of the program under the new permit.

1.1.1 Water Courses and Receiving Waters

The definition of the City's Storm Drain System is broad enough to include streets, gutters, inlets, catch basins, channels (lined and unlined), creeks, and streams. Our storm drain system starts at a facility's property line to the public right-of-way. By making such a distinction, it is clear to maintenance and storm water crews when it is the responsibility of the City to clean spills or illegal dumping of materials. If such a discharge occurs on private property and the discharge enters the City storm drain system, the property and business owner/contractor is contacted and educated on storm water requirements for their type of business. Property and business owners are charged for cost-recovery of City staff involvement.

The goal of PY1 and future program years will be a continuing focus on impairment of Forrester Creek with the ultimate goal of eliminating the impairment on Forrester Creek, and meeting the objective of the Clean Water Act to maintain and restore the chemical, physical, and biological integrity of the Nation's waters.

Table 2 lists the major storm water conveyance systems and describes the type of channel. Most conveyance systems are concrete-lined, making them easy to maintain, but present other types of challenges such as:

- Elevated pH (above 9)
- Shelter for homeless populations
- Trap for air blown trash and debris
- Easy target for illegal dumping

Table 2 – Storm Water Conveyance Systems

Water Courses	Type of Channel
Forrester Creek	• Open, concrete-lined trapezoidal channel • Underground culvert
Broadway Channel	• Open, concrete-lined channel • Underground culvert
Washington Channel	• Open, concrete-lined channel • Underground culvert
County Ditch	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel
Fanita Channel	• Underground culvert • Open, concrete-lined channel
Third Street Lateral	• Open, concrete-lined channel • Underground culvert
Fletcher Parkway Channel	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel

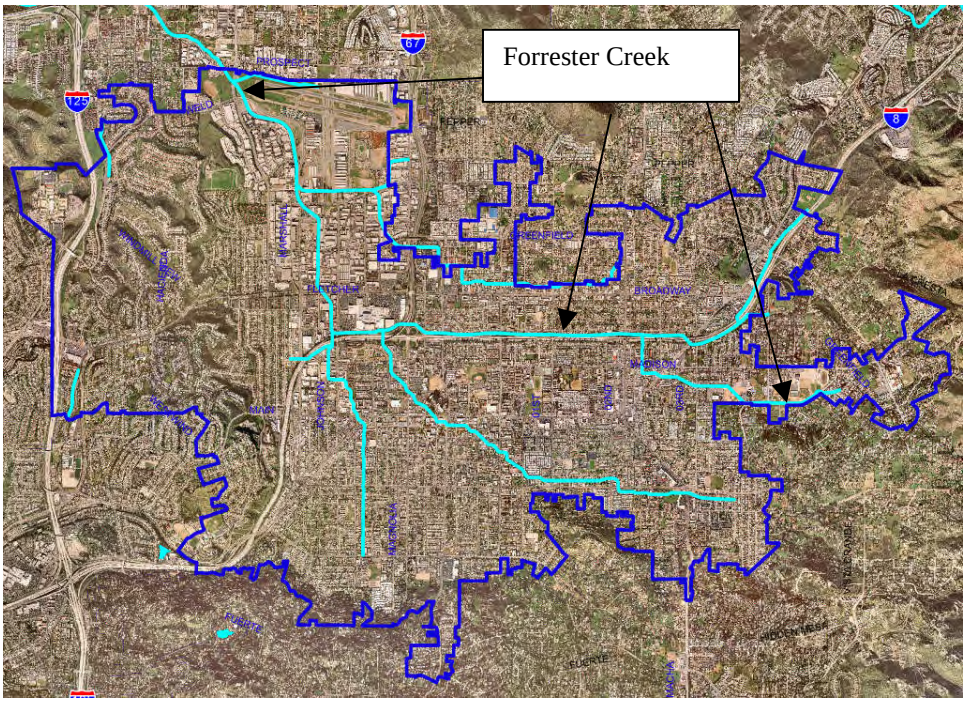

The picture to the left shows the City boundaries, Forrester Creek and the major channels within the City.

1.1.2 Approach and Changes to the Program

Approach

As the City becomes more experienced with its own programs and with what is working and what is not, the City modifies the implementation and management of its Storm Water Program. This Adaptive Management is a dynamic process of improving management activities incrementally, as decision makers learn from experience and better information and analytical tools become available. It involves checking progress made in achieving water quality goals, adjusting the management decisions accordingly, rechecking and readjusting – all the while incorporating new data and scientific knowledge. Beginning in early 2008, the City of El Cajon is developing a Storm Drain Master plan. Once complete, the Storm Drain Master Plan will provide the City with additional tools to assess and achieve water quality objectives. Adjustments to goals and objectives are expected to occur due to unforeseen circumstances and an unpredictable future.

One approach the City continues to implement (through education and training) is to change pollution prevention from the conventional recycle, reduce and reuse, to measures that target pollution prevention at the pollutant source. For Storm Water Pollution Prevention, consideration is given both to flow reduction measures and pollution source controls. Where water acts as the primary conveyor of pollution, pollution prevention measures can reduce pollution impacts by preventing pollutants from entering the flow, or by controlling the flow. In the development of an effective pollution prevention or management strategy, it is critical to understand how water cycles through the air and soil to ensure that measures are selected and implemented in an appropriate manner.

Changes to the Storm Water Program

Program Year 1 (PY1), and continuing into the next permit cycle, will be a continuing period of transition from purely jurisdictional to a jurisdictional/watershed approach. A few of the modifications include:

The San Diego River Flows Across Padre Dam

- Promoting a Clean Community, Healthy Watershed;
- Maintaining Watershed and River Health in the San Diego River Watershed;
- Focusing on 303(d) pollutants to restore Forrester Creek water quality;
- Continuing to assess the potential for increased flow from New or Re-Development projects and reduce flow from the current flow of approximately 234 gallons per minute during the dry season (double last year's dry weather flow rate).
- Coordinating with the City of Santee for the trash and debris fence while the Forrester Creek Restoration project is under construction;
- Prioritizing activities in coordination with other East County Cities;
- Collecting information on upstream and downstream conditions to better assess areas (zones) where pollution is more probable or prevalent;
- Review of the analytical methods and a comparison to what information is actually needed to determine pollutant loads.

The City of El Cajon's Storm Water Pollution Prevention Program looks to pollution solutions in the form of Best Management Practices, proven procedures, or other new technologies. Table 1 (next page) lists the water quality and quantity issues in El Cajon and the possible solutions provided by the Jurisdictional Urban Runoff Management Plan (JURMP) components that comprise the Storm Water Pollution Prevention Program.

Table 1 – Storm Water Pollution Prevention Program Components

Water Quality or Quantity Issues	Pollution Solution
• Increased runoff (volume, frequency and duration) with impervious ground cover.	• Runoff control for flood and erosion protection (**New Development and Construction**) • Measures to maintain existing discharge rates. (**New Development/Redevelopment**)
• Increased base flows in streams due to changes in land use.	• Provide measures to maintain infiltration **(New Development/Redevelopment)** • Provide extended detention of runoff for low flows. (**New Development/Redevelopment**)
• Increased pollutant loadings with runoff.	• Provide measures to reduce pollutant sources, or remove pollutants, by settlement, absorption or filtration. (**Municipal, Industrial, Commercial, Residential Existing Development/Redevelopment**)
• Stream bed and bank changes due to erosion.	• Infiltration for control of runoff volume.(**New Development/Redevelopment**) • Rate of runoff control for erosion protection (**Construction/Redevelopment**)

Stronger move toward prevention of polluted discharges – distinguishing pollutant reduction from Pollution Prevention (recycle, reduce, reuse) activities, while connecting BMPs with the pollutant being reduced. A BMP to Pollutant Reduction Diagram is provided below and is the mainstay for the Existing and Development (including Construction) Components. This part of the transition occurred after Copermittees submitted a Framework for BMP Implementation in October 2003.

Inspection data collected under the original system designed by DMax Engineering was translated into BMP implementation results. The BMP implementation results data can be used to help prioritize follow-up actions, including inspections and education efforts in PY1.

BMP to Pollutant Reduction Diagram (See Following Page for Details)

Pollutant to BMP Table
BMPs target the reduction or elimination of a primary pollutant (sediment or fecal coliform) or pollutant group (oil & grease).

↓

Facilities and BMP Table
Individual Facilities are Required to Implement the Minimum BMPs

↓

Summarize Facility Types with Pollutant Reduced Table
Combines Table 1 and 2 to connect pollutant to (high priority) facility type, such as industrial, commercial/restaurants, municipal, residential area, or SUSMP/Parking Lot through the implementation of BMPs. Allows the calculation of percentages for implemented BMPs for high priority facilities.

↓

Transition to Effectiveness Assessment
Percentages between 80-100 overall implementation are used to calculate a quantity of pollutant(s) prevented from entering the storm drain system and thus reduction in pollutants ultimately discharged.
Reasonable Assumption: If inspection was impromptu, results observed on inspection day, in general, represent conditions at the facility for the entire year.
Calculations: Determine an *average* (typical for facility) discharge of the pollutant containing material.

The BMP to Pollutant Reduction Diagram demonstrates how BMPs are connected to pollutants that are connected to water quality. Our difficulty lies in quantifying those pollutant reductions with accurate and defensible results. In Section 11.0, estimates as well as empirical data are used to assess the effectiveness of the City's Storm Water Program by showing how much pollutant-containing materials were diverted toward a better disposal avenue.

1.2 COMMITMENT AND PARTICIPATION

The City of El Cajon is committed to promoting the concept and practice of preventing pollution at the source. Preventing pollution will prevent environmental problems. This saves the public and private sector from loss of resources and the costs to correct environmental damage. Urban runoff management requires the simultaneous pursuit of several objectives. The City is committed to:

- Enforcement of the Municipal Codes for Urban runoff (ECMC 13.10) and New or Site Re-Development (ECMC 16.100).
- Prevention of pollutant discharges into Forrester Creek as part of the San Diego River Watershed.
- Protection of water quality, aquatic species, and watershed ecosystems.
- Promotion of environmental quality and social well-being.

1.2.1 Jurisdictional Implementation

Pollution Prevention continues to be the focus of the City's JURMP and Storm Water Pollution Prevention Program for businesses and citizens. Compiled information on amounts of pollutants prevented from entering the storm drain system has a direct correlation to any decrease in pollutant loads from entering receiving waters. Pollutant amounts removed from streets, roadways and the storm drain system, or that have been recycled, have a direct correlation to water quality.

Land use consists of residential, commercial, industrial, municipal, and educational with recreational facilities. The City is at a "built-out" stage where most construction is redevelopment. Successful implementation of the City's Standard Urban Storm Water Management Program (SUSMP) supports the reduction in flow from a pollution prevention perspective. Development and redevelopment proposals that trigger the SUSMP requirements must submit plans consistent with reducing flow and impervious areas and must consider storm runoff treatment before the project will receive final City approval and proceeding to actual construction.

1.2.2 East County Cities Teamwork

Beginning in PY2 and continuing through PY6 and PY 1 of the new Permit, the East County Cities Workgroup gathered to discuss and tackle issues specifically afflicting the eastern part of San Diego County. Some of these East County challenges include:

- Tackling storm water issues from a "sand" perspective
- Highly transient populations

- Locally-focused City Management
- Boxed-in, built-out Development

1.2.3 Regional Teamwork

The City participated in regional efforts to promote storm water management practices and educate businesses and citizens to conduct business and daily lives with respect for water quality. When possible, the City attended or was an active participant in the following events.

- Management Committee Meetings
- Outreach Workgroup
- Regional Residential Outreach Selection Committee and Workgroup
- BMP Implementation Workgroup **
- East County Cities Workgroup (a.k.a., San Diego River Watershed Workgroup) **
- Regional Monitoring Workgroup

** - Chaired Workgroup

1.3 WATERSHED AND RIVER HEALTH

As stated in the Clean Water Act, the objective is to maintain and restore the chemical, physical, and biological integrity of the Nation's waters. To address this objective, watershed and river health for the San Diego River can be described in terms of unique biophysical, socio-cultural, and economic characteristics. Biophysiochemical components are a watershed's elements and functions (its chemical, physical, and biological processes), while socio-cultural and economic components are the values and benefits provided by a functioning healthy watershed. The water quality aspect and stream flow (as hydrological patterns) of the biophysiochemical component list and the recreational/esthetic values of the socio-cultural and economic components are the only subjects directly addressed in our City's permit under Order No. R9-2007-0001.

Biophysiochemical:

- Basin geomorphology
- Hydrological patterns (stream flow addressed in Municipal Permit)
- Water quality (addressed in Municipal Permit)
- Biotic community and habitat

Socio-Cultural and Economic:

- Breakdown and recycling of pollutants
- Regulation of storm water discharges
- Groundwater and aquifer recharge
- Recreational and esthetic values (addressed in the Basin Plan, but included in Municipal Permit by reference)
- Habitat values (protected species, fisheries, etc.)

In general, the factors that determine ecosystem and watershed health are universal. A healthy watershed is one in which these components are maintained with thriving and balanced

communities. An immutable characteristic of upper Forrester Creek is the concrete lining of this channel. In the 1960's, Forrester Creek was modified with a concrete channel in order to provide flood control for the expansion of the Interstate Highway easterly toward El Centro.

In a built-out urban area such as the City of El Cajon, defining and achieving creek, river and watershed health is complicated by a highly altered landscape (concrete channelization of Forrester Creek, highly urbanized, little open-space) and continued urban-infill and growth within and upstream of its jurisdiction. Nonetheless, the City has a vision and initially a broad goal for watershed and river health. The vision states the desired future for the city with respect to watersheds and waterways. The goal states that the City ultimately aims at maintaining watershed and river health for water quality and hydrological patterns, quantitatively and qualitatively.

Although it is unrealistic and infeasible to re-create the environmental conditions that existed before the City's development, it is prudent to consider predevelopment conditions when assessing the health of Forrester Creek and the San Diego River. Information about historical conditions is useful in understanding current watershed processes and functions that are essential to downstream watershed and river health. In fact, healthy downstream conditions may best be served by continual efforts by the City to reduce and eliminate pollutant discharges to Forrester Creek, to the maximum extent practicable.

1.4 WATERSHED PLANNING

The City recognizes the importance of watershed management as a guiding principle for its water quality management of the San Diego River Watershed. As required by Permit Section J, a Watershed Urban Runoff Management Plan (WURMP) was developed during PY2 and refined during subsequent permit years. As a member of the San Diego River Watershed, the City attended and participated in establishing the Watershed program for the San Diego River area.

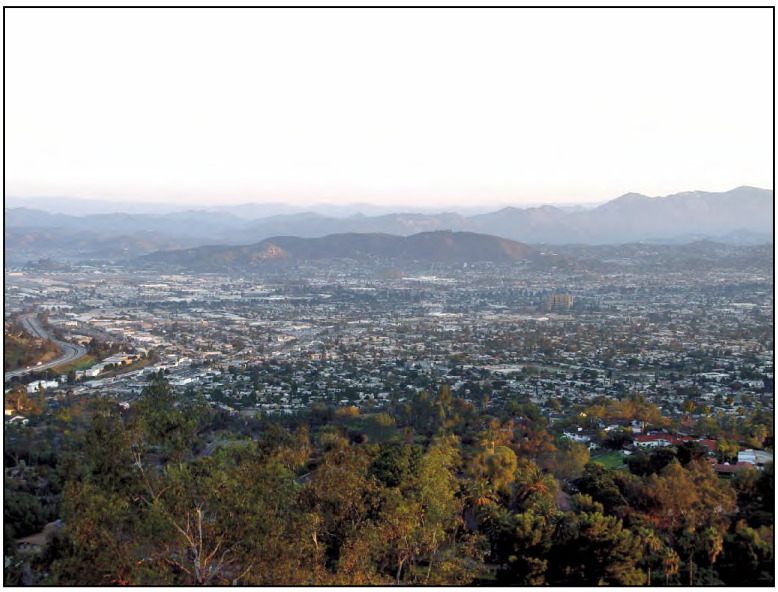

There is a learning curve to transitioning certain activities from a jurisdictional to a watershed approach.

The picture to the left shows El Cajon as part of the inland watershed area. Much has been discussed during this PY1 and an outline for the future watershed management is in place. The coming year will be one of implementation bringing new challenges to the storm water programs.

1.4.1 Water Quality and Stream Flow

Water quality has long since been the focus of many watershed programs. However, those programs and regulations have focused mostly on the chemical aspects of water quality, such as the concentrations of metals and organics, without considering how water quality is affected by the physical habitat in a stream or river. Water quality is greatly affected by the amount of large wood in the waterway, the river or stream's substrate (coarse gravel or fine sediment), the amount of native vegetation in floodplains and other aspects of physical habitat.

Physical habitat, in turn, is shaped in part by the larger forces of stream flow and hydrology. It has long been understood that the influence of stream flow, hydrology, physical habitat and water quality help determine which species are present within a watershed and the abundance, productivity and diversity of those species. For these reasons and others, the City defines its functional disposition in the watershed and river health as providing/conveying sustainable stream flow and hydrology and restoring and preserving water quality.

- **Stream Flow and Hydrology**: Maintain, or as necessary reduce, dry weather flow conditions using the Standard Urban Storm Water Management Plan to prevent an increase in runoff due to development and redevelopment projects, thereby protecting and improving watershed and stream health, channel function and public health and safety.
- **Water Quality:** Protect and improve surface water and groundwater quality and meet or surpass state and federal water quality standards and regulations.

Improving water quality within the City's jurisdiction will contribute to overall watershed health and will help keep the watershed as healthy as possible. John Muir said it best, "*When we try to pick out anything by itself, we find it hitched to everything else in the universe*".

1.5 GEOGRAPHICAL INFORMATION SYSTEM (GIS)

PY1 is the fifth year for using a Geographical Information System to present the location of El Cajon within the San Diego Watershed (See Figures following within this section). Base maps and information obtained from SanGIS provided the basic information to start layering jurisdictional and regional information. Deciding on the types of data and what needs to be shown are the biggest questions to answer.

In PY6 (2006/2007) the City created a new full-time GIS position to assist the Storm Water Program. The City is planning on implementing and developing an Enterprise GIS. To achieve this goal the City is currently dedicating more resources to a growing GIS staff and a new server.

One of the main benefits of GIS is improved management of your organization and resources. A GIS can link data sets together by common location data, such as parcel numbers, which helps departments and agencies share their data. Storm Water staff identified the Business License database as information easily integrated into a GIS to show and list the parcels within 200 feet of the five (5) major El Cajon drainage channels. The saying, "better information leads to better decisions" is true for GIS. A GIS is not just an automated decision making system but a tool to query, analyze, and map data in support of the decision making process.

The GIS maps presented in this PY1 Annual Report are used as tools by storm water staff to aid in the making of decisions that will be crucial to the direction of the Storm Water Program. Three maps follow this page showing:

- San Diego County Regional Watersheds
- San Diego River Watershed with a focus on El Cajon
- City of El Cajon showing Residential (green), Commercial (red), Industrial (pink), and School Districts (blue).

The information can be presented succinctly and clearly in the form of a map and accompanying report, allowing decision makers to focus on the real issues rather than trying to understand the data.

1.6 SIGNIFICANT ACCOMPLISHMENTS

The following significant accomplishments were completed and helped to maintain Watershed and River Health. Elimination of pollution is mainly due to routine scheduled municipal maintenance activities, municipal and commercial education efforts, outreach to the public and daily contact with citizens. The following is a summary of the major investments in reducing pollutant loads to receiving waters.

- Continued to implement and refine the Enforcement program for City Ordinances 4907 (JURMP) and 4908 (Standard Urban Storm Water Management Program (SUSMP) requirements). Streamlined enforcement activities with the inspection database to better coordinate and design correction actions.
- Continued to improve an inspection program for construction, commercial and industrial facilities based on Best Management Practices (BMP) implementation. Tracking BMP implementation and ensuring that all minimum required BMPs are installed and maintained properly helps ensure that pollutants are not discharges from those facilities. (List is continued following the three pages of GIS Maps).

Regional Watershed Map

SD River Watershed Map

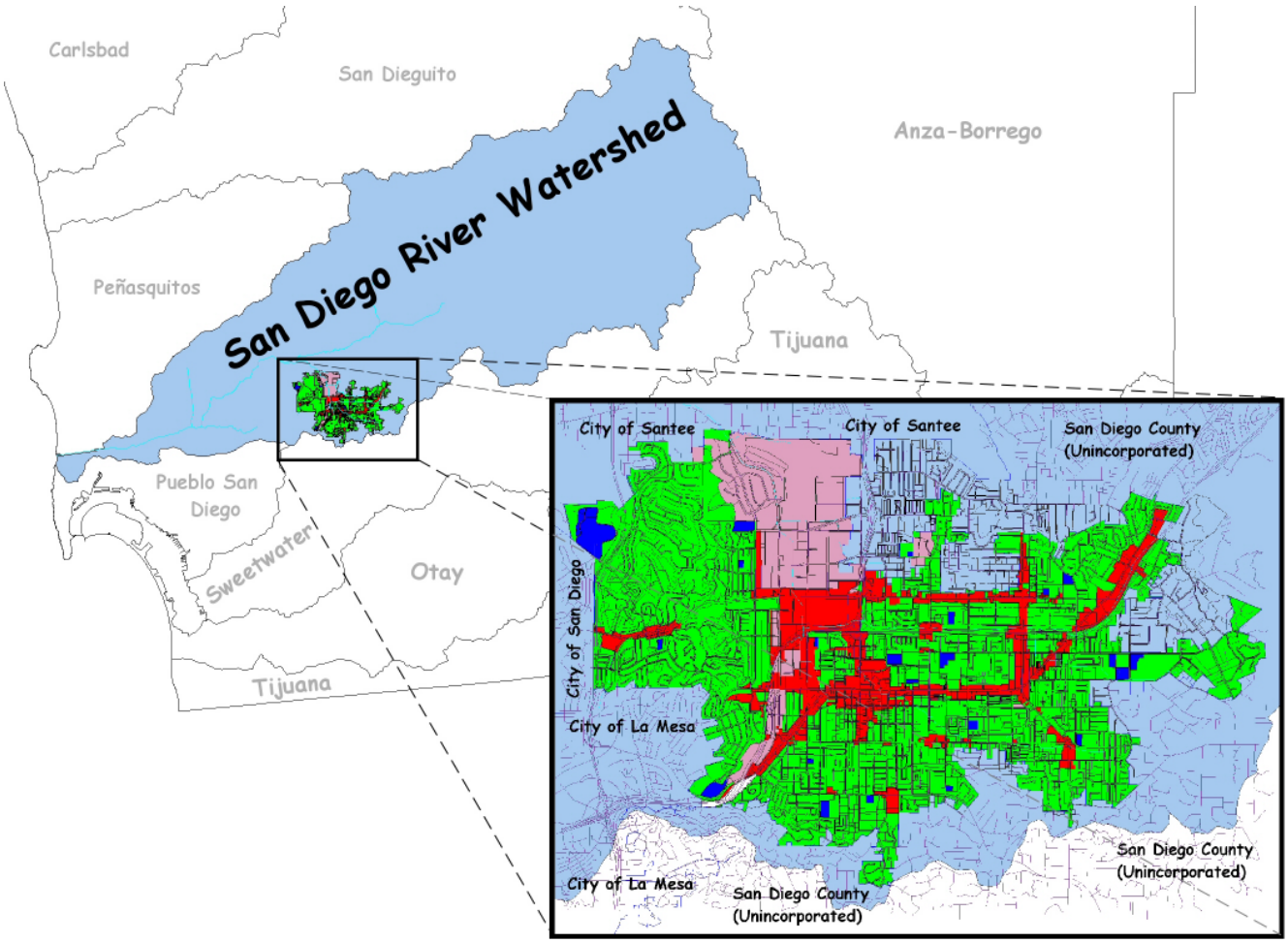

El Cajon GIS Map

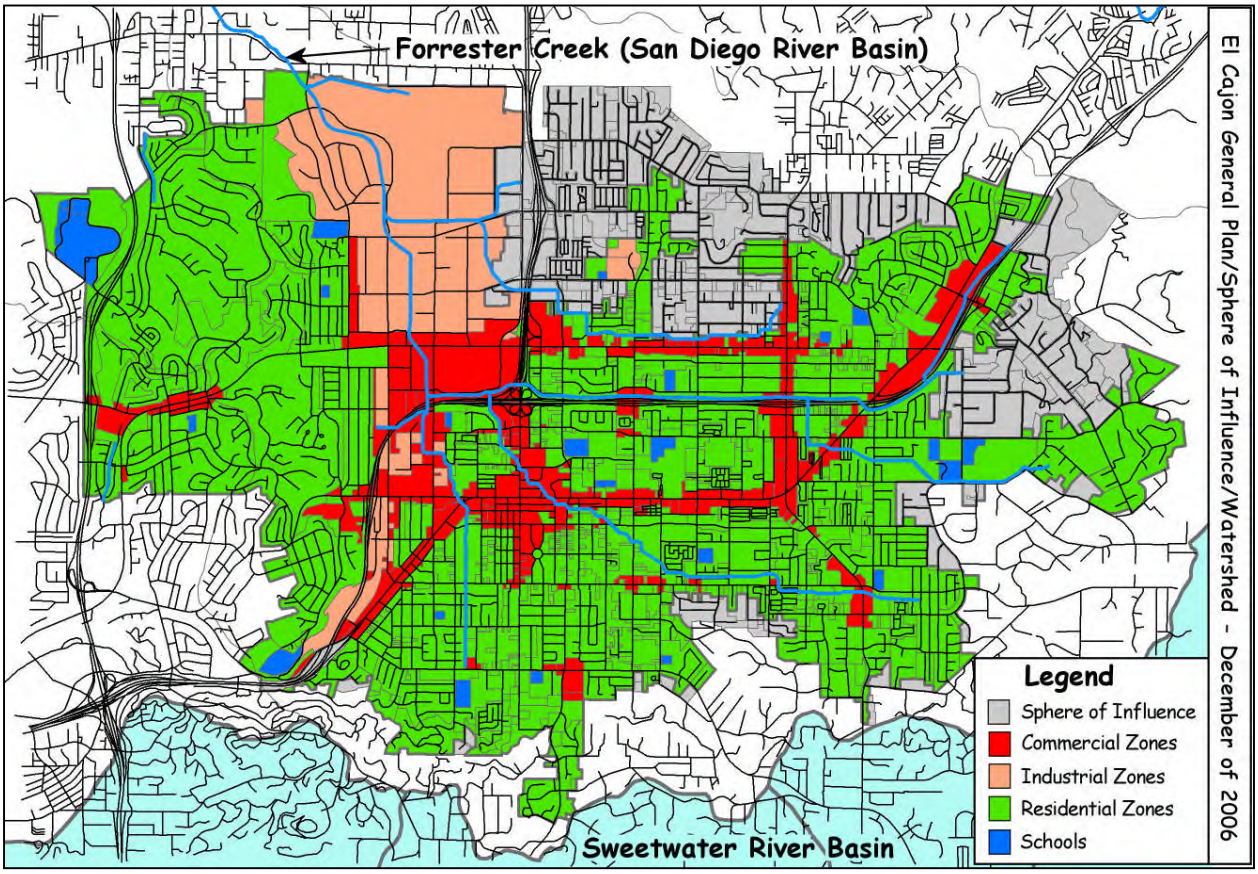

- Inspected and provided educational materials to well over 200 industrial and commercial businesses for compliance with the City's Municipal Code and the State's General Permits for construction and industrial activities.
- The City's comprehensive street sweeping program swept 21,180 miles of improved streets and collected 3,483 cubic yards of materials from City streets. About half (45%) of the material collected this year was sediment and silt. Many areas were swept twice per week.
- Collection of over 1,720 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins;
- The City formally trained 90 building, planning, middle management, and engineering staff on SUSMP requirements. Public Works staff completed before and after evaluations to assess the absorption of knowledge during retraining efforts
- Conducted joint training sessions with the City of Santee, City of Lemon Grove, and the County of San Diego to initiate a cooperative effort with neighboring jurisdictions.
- Reached out to community members on a wide range of urban runoff and storm water quality topics through approximately 209,000 copies of articles, brochures, mailers, and over-the-counter sources.

1.7 RWQCB Compliance Reviews and Inspections

During this reporting period, interaction between the City and RWQCB staff was mainly limited to written comments on PY5 (2005/2006) Annual Report. Comments have not yet been received for the PY6 (2006/2007) Annual Report.

1.8 Organization and Content of Annual Report

The Permit requires the submittal of an Annual Report to the SDRWQCB. This Annual Report covers the single permit year activities between July 1, 2007 and June 30, 2008. The Dry Weather Monitoring for 2007 was completed in June 2007, and the entire report is included with this PY1 Annual Report.

The PY1 Annual Report presents and discusses implementation of the City's JURMP with a look at trends, BMP implementation, and overall JURMP effectiveness. Organization of the PY1 Annual Report is as follows:

- Executive Summary and Report Certification
- Section 1 - Introduction
- Section 2 - Development Planning Component
- Section 3 - Construction Component
- Section 4 - Municipal Component
- Section 5 - Industrial and Commercial Component
- Section 6 - Residential Component
- Section 7 - Illicit Discharge Detection and Elimination Component
- Section 8 - Education Component
- Section 9 - Public Participation Component
- Section 10 - Fiscal Analysis Component
- Section 11 - Effectiveness Assessment Component
- Section 12 - Special Investigations
- Section 13 - Non-Emergency Fire Fighting
- Section 14 - JURMP Revisions
- Section 15 - Conclusions and Recommendations

Charts, graphs, figures, and pictures are used to demonstrate the fulfillment of Permit and JURMP requirements or to highlight a special program accomplishment and event. Appendices provide additional information to validate activities or procedures.

Specific importance is placed on the assessment of JURMP implementation as this process is essential to determine if the City's program is reaching the Permit goal of improving receiving water quality. Some practices and structures (BMPs) listed in the JURMP to reduce or eliminate pollutants may prove to not be as effective as anticipated. An iterative process of BMP development, implementation, monitoring, and assessment focuses the JURMP such that JURMP programs are sufficiently comprehensive and effective to achieve Permit requirements and program objectives.

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SECTION 2 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

Over the last few years the City of El Cajon (City) implemented procedures to minimized the short and long-term impact on receiving water quality from new development and redevelopment. Major steps were taken to accomplish this goal under Order No. 2001-001. The City completed the requirements of the plan which include the following four components:

1. Assessment of General Plan
2. Modification of Development (Project Approval Process)
3. Revision of Environmental Review Process
4. Conducted Education Efforts Focused on New Development and Redevelopment

During PY2007-08 the process continued to evolve to incorporate requirements under new Municipal Permit Order No. R9-2007-0001. The City adopted updated Ordinances to comply with new requirements.

2.2 ASSESSMENT OF GENERAL PLAN

The General Plan provides a jurisdictional framework for directing land use and development decisions within the City of El Cajon. Therefore, it is important that the General Plan include provisions to address water quality. The City incorporates elements into the General Plan that provide an adequate foundation for controlling land use and development in a manner consistent with water quality objectives required by the Municipal Permit Order No. 2007- 001 (Permit).

On January 14, 2003, Resolution No. 10-03 was approved amending the General Plan and adding storm water runoff policies and objectives. The amendment is consistent with the City's Jurisdictional Urban Runoff Management Plan (JURMP) and provides policy and objectives dealing with storm water runoff to guide decision-making as mandated in the Permit. A copy of Resolution No. 10-30 is included in Appendix A.2. A copy of the General Plan is shown on the following page.

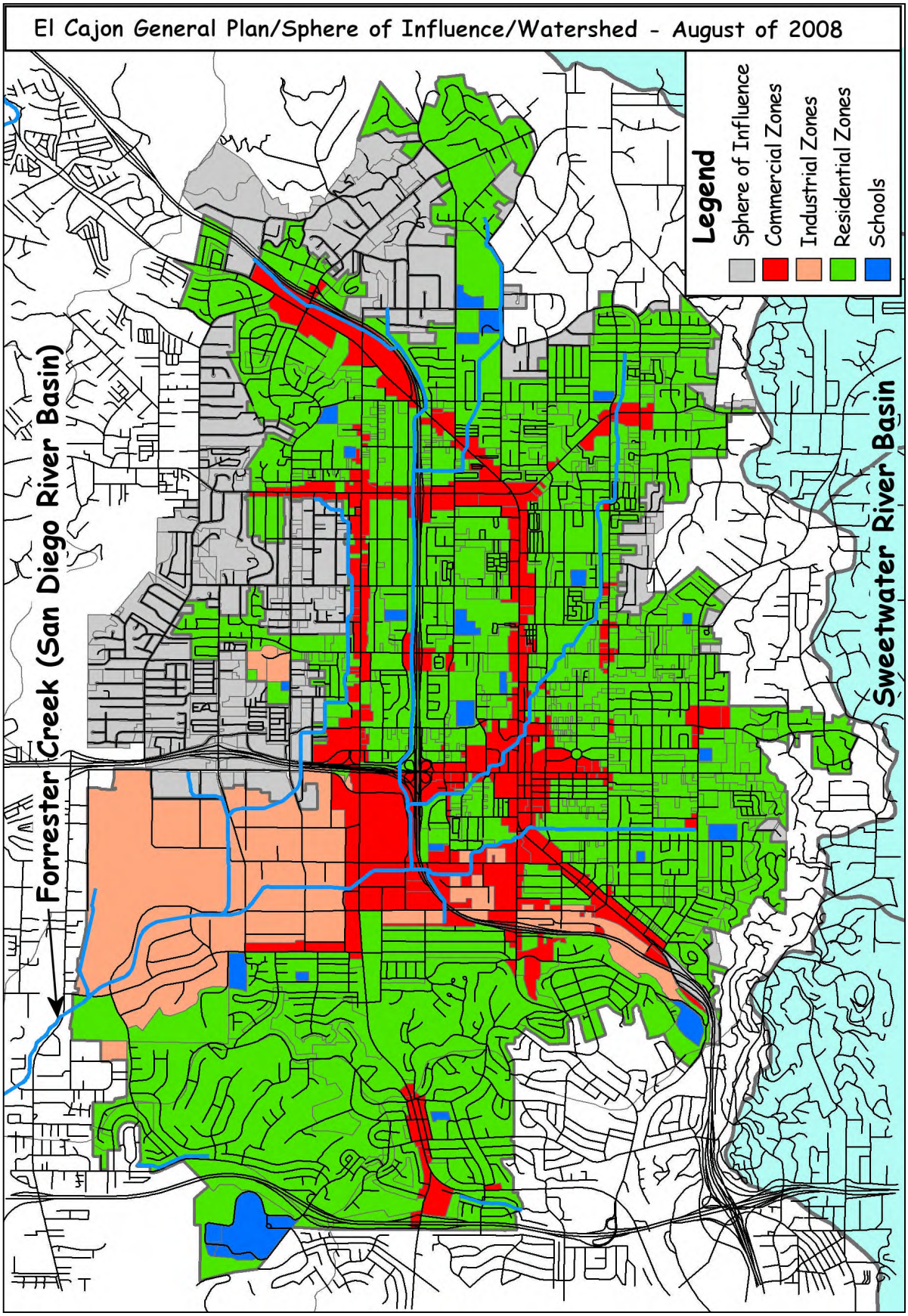
El Cajon General Plan/Sphere of Influence/Watershed - August of 2008
Legend
Sphere of Influence
Commercial Zones
Industrial Zones
Residential Zones
Schools
Forrester Creek (San Diego River Basin)
Sweetwater River Basin

2.3 MODIFICATION OF DEVELOPMENT

2.3.1 Development Project Approval Process

Development becomes a project once the applicant completes planning action forms that describe the type of development proposed. The planning action is routed to many departments including Storm Water. Consolidated comments from Public Works are attached directly to the project as a list of conditions to the proposed planning action. Conditions are then reviewed and accepted by City Council making them enforceable. The City does not issue building permits until all requirements addressing water quality are fulfilled. Similarly, the City does not grant a final occupancy certificate until all storm water requirements are completed.

To protect our natural resource waterways, the City has continued ordinance development and implementation to address water quantity and quality. New and Redevelopment projects are reviewed for applicable BMPs to attain:

- Reduction in paved areas
- Maximize infiltration
- Detain or retain flows to reduce the speed at which water discharges to natural areas, and break Directly Connected Impervious Areas (DCIAs).
- Minimize potential pollutants from reaching the Municipal Separate Storm Sewer System (MS4) from grading and other construction activities by meeting the provision specified in Section D.2 of the Permit.
- Require Industrial applicants subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities to provide evidence of coverage under the General Industrial Permit.
- Require project proponents to provide proof ensuring ongoing long-term maintenance of structural Treatment Control BMPs.

2.3.2 Standard Urban Storm Water Mitigation Plan

The City participated with other Copermittees in revising and updating the BMP requirements that were listed in the Model Standard Urban Storm Water Mitigation Plan (SUSMP) that was submitted to the Regional Water Quality Control Board (RWQCB) in February 2002. Consequently, the City revised and updated Ordinance 4717 adopted on December 2002 to implement local SUSMP to reduce pollutants and runoff flows from all new development and significant redevelopment. The City recently adopted Ordinance 4908, which defines the enforceable Municipal Code 16.60 for New and Re-Development pursuant to Program R9-2007-0001.

The City will also incorporate a Hydromodification Management Plan (HMP) into the City's Local SUSMP. As of the writing of this annual report, the HMP is being developed by a consultant and regional workgroup and the draft HMP is projected to be completed in January 2009. After receiving comments from the RQWCB on the draft HMP, the final HMP will be prepared. The final HMP will be added to the Local SUSMP after approval by the Regional Board. No priority projects in the City of El Cajon have met HMP criteria as of yet, no projects have disturbed more than fifty acres, and the City does not anticipate any projects that will in the future.

Projects triggering the New and Re-Development SUSMP requirements are:

- Housing projects with greater than 10 units
- Commercial developments greater than 1 acre
- Heavy Industry
- Automotive repair shops
- Restaurants
- Hillside developments greater than 5,000 square feet
- Environmental Sensitive Areas
- Parking lots 5,000 square feet or more or with 15 or more parking spaces potentially exposed to urban runoff
- Streets, roads, highways, and freeways greater than 5,000 square feet
- Retail Gas Outlets

Projects trigger the SUSMP requirements during the initiation of a planning action or environmental investigation brought on by the California Environmental Quality Act (CEQA). The Storm Water section of Public Works reviewed a total of 74 planning actions, 10 of which were categorized as high priority SUSMP projects (please refer to Appendix A.2 for a list). The City also carried over 9 SUSMP projects that are in varying degrees of development, design, or construction from previous years. Planning actions and New Development projects are tracked using a MS Excel spreadsheet.

An example Storm Water Mitigation Plan (SWMitP) that includes a list of SUSMP conditioning requirements are given to SUSMP priority projects at the earliest planning stage (please refer to Appendix A.2 for sample SWMitP). BMPs and the pollutants that are targeted for reduction or elimination to the maximum extent practicable (MEP) are listed in Table 1.

Table 1 – BMP to Pollutants for New and Re-Development Projects

BMP	Primary Pollutants	303(d) Pollutants
Site and Facility Design	Flow	
Site Design and Landscape Planning – SD-10	Flow	
Efficient Irrigation – SD-12	Nutrients	**TDS** **Nutrients**
Storm Drain Signage – SD-13	Trash Oil & Grease Toxics	
Pervious Pavements – SD-20	Sediment Oil & Grease	**TDS**
Trash Storage Areas – SD-32	Trash Bacteria	**Bacteria**
Vehicle Washing Areas – SD-33	Metals Detergent	**TDS**
Detention Basin - TC-22	Trash Sediment Metals Bacteria Oil & Grease Organics	**TDS** **Bacteria** **Nutrients** **ODS (Oxygen Demanding Substance)**
Vegetated Swale – TC-30	Sediment Metals Oil & Grease Organics	**TDS** **Nutrients** **ODS**
Bioretention – TC-32	Sediment Oil & Grease Nutrients Trash Metals Bacteria Organics	**TDS** **Nutrients** **Bacteria** **ODS**
Media Filter – TC-40	Sediment Trash Metals Bacteria Oil & Grease Organics	**TDS** **Bacteria** **ODS**
Water Quality Inlet Filter – TC-50	Oil & Grease Trash	
Vortex Separator – MP-51	Trash Sediment	
Drain Inserts – MP-52	Trash Oil & Grease	
Underground Concrete Retention - Proprietary	Flow	

SUSMP projects must identify pollutants of concern based on anticipated and potential pollutants generated from the proposed project and implement BMPs that target the reduction or elimination of the identified pollutants to the MEP. Anticipated and potential pollutants generated by land use type are shown in Table 2.

Table 2 – Anticipated and Potential Pollutants Generated by Land Use Type

Priority Project Categories	Sediment	Nutrients	Heavy Metals	Org Cpds	Trash & Debris	ODS	Oil & Grease	Bacteria & Viruses	Pesticides
>10 SFR	X	X			X	X	X	X	X
>1 acre Commercial	P	P		P	X	P	X	P	P
Heavy Industry	X		X	X	X	X	X		
Automotive			X	X	X		X		
Restaurants					X	X	X	X	
Hillside Development	X	X			X	X	X		X
Parking Lots >5000 sq. ft.; >15 stalls	P	P	X		X	P	X		P
New Streets > 5000 sq. ft.	X	P	X	X	X	P	X		P
Retail Gas Outlets			X	X	X	X	X		
> 5,000 sq ft Redevelopment	X	P	P	P	X	P	P	P	P
X- anticipated ODS – Oxygen Demanding Substances P – Potential									

Once potential pollutants of concern are identified for the proposed SUSMP project, BMPs must be selected from a list of required and project specific BMPs provided below in Table 3. All site design criteria are applied to every SUSMP project while source and treatment controls are dependent upon site location and type of pollutants.

Table 3 – Site Specific BMPs

	New Development (Including Re-Development)									
	Home Subdivisions >10 units	Heavy Industry >1 acre	Commercial Development >1 acre	Automotive Repair Shops	Restaurants	Hillside Development > 5,000 sq ft	ESAs	Parking Lots >15spaces; > 5,000 sq ft	Street, road, highways, and freeway >5,000 sq ft	Retail Gasoline Outlets
General Site Design (Apply All)										
Control Peak Runoff Rates	X	X	X	X	X	X	X	X	X	X
Minimize impervious Areas	X	X	X	X	X	X	X	X	X	X
Conserve Natural Areas	X	X	X	X	X	X	X	X	X	X
Protect/slopes/and channels	X	X	X	X	X	X	X	X	X	X
Minimize effective imperviousness	X	X	X	X	X	X	X	X	X	X
SOURCE CONTROLS (Apply all that are Applicable)										
Storm Drain Message and Signage*	X	X	X	X	X	X	X	X	X	X
Outdoor storage area design		X	X	X	X					X
Trash Storage Area Design		X	X	X	X					X
Loading/unloading dock area design		X	X							
Repair/maintenance bay design				X						
Vehicle/Equipment/Accessory washing area design				X						
Fueling Area Design										X
Proof of Control Measure Maintenance	X	X	X	X	X	X	X	X	X	X
TREATMENT CONTROLS (Apply at least two)										
Inlet Filters**	X	X	X	X	X	X	X	X	X	X
Grass Strip Filter	X	X	X	X	X	X	X	X	X	X
Grass Swale Filter	X			X		X	X	X	X	
Detention/Infiltration Basin	X		X	X	X	X			X	
Porous Pavement Detention	X		X		X	X		X		
Porous Landscape Detention	X	X	X		X			X	X	
Infiltration Trench	X		X				X	X		
Media Filter	X	X	X				X	X		
Proprietary Controls						X				X
Other										

For PY2007-08, seven (7) projects completed construction and included Treatment Control Best Management Practices. Projects with SUSMP requirements that were completed and inspected for BMP implementation in 2007-08 are listed in Table 4. For the current inventory of all sites with Treatment Control BMPs and BMP implementation infeasibility analyses please refer to Appendix A.2.

Table 4 – Application of SUSMP Structural BMPs for Completed Projects

	Detention Basin/Area	Inlet Filters	Landscaped/ pervious strip or swale	Infiltration basin/swale	Hydrodynamic Separator	Proof of Maintenance
298 Fletcher Pkwy.- Home Depot	NA	X	NA	X	X	X
Saddlebrook Way/Ct.- McNeil Ranch Subdivision	X	NA	X	NA	NA	X
1470 E. Madison Ave.- Fire Station #8	NA	NA	X	NA	NA	X
343 E. Main St. - New Commercial Building	NA	X	X	NA	NA	X
1401 E. Main St.- De La Fuente Cadillac	X	X	NA	NA	X	X
335 N. Second St - Taco Bell	NA	NA	X	NA	NA	X
Wisconsin Cottages Subdivision	X	X	X	X	NA	X

The Wisconsin Cottages project will be elaborated as an example of SUSMP BMP implementation. This project was a new subdivision consisting of seven single-family dwellings and a new private street. This project had two SUSMP triggers; the street was greater than 5000 square feet and the project was within 200 feet of a storm channel designated as an ESA. The structural BMPs that were implemented consisted of treatment and detention. The street flow was directed toward the southwest corner of the property where it would enter a 3’x3’x24’ sand media filter with a 4” perforated pipe at the bottom. This pipe then connected to a 36”x36” catch basin directly after the sand media filter. The catch basin had an open grate with a catch basin inlet filter that would treat any runoff that would pond on the sand media filter due to high-flow storms. This whole system then connected to an underground detention vault that was sized for a 10-year storm event. This vault then connected to an 18” RCP that connected to the channel. In the extreme southwest corner of the property was another 36”x36” catch basin, also with a catch basin inlet filter, that would capture any excess runoff that the aforementioned system could not contain.

2.3.3 Waiver Provisions

In the event that a Priority Project is unable to meet the treatment control BMP sizing requirements outlined in the City’s SUSMP, the City has the authority to issue a wavier. In order to receive a waiver for treatment control BMP sizing requirements, the project must prove that all available treatment control BMPs have been determined to be infeasible for the site. If a waiver of infeasibility is issued, the City will notify the RWQCB within five days of granting the wavier. The following information will be provided to the Regional Board:

- The name of the City employee granting the waiver
- The name of the developer receiving the waiver
- The location of the site

- The reason for granting the waiver
- A description of the BMPs required for the site

The City has never granted such a wavier to a Priority Project in the past and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may choose to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the projects' watershed.

Table 5 – BMP Implementation Summary

BMP	Percent Implemented	Pollutant Prevented
Control Peak Runoff Rates	100	Flow
Minimize Impervious Areas	100	Flow
Conserve Natural Areas	100	Flow
Protect Slopes and Channels	100	Sediment
Minimize effective imperviousness	100	Flow
Storm Drain Message and Signage	71	Trash Oil & Grease
Trash Storage Areas	100	Trash Oil & Grease
Repair/Maintenance Bay Design	100	Oil & Grease
Proof of Maintenance	100	Trash Oil & Grease
Inlet Filter(s)	100	Sediment Trash Oil & Grease
Grass Strip or Swale (Biofiltration)	71	Flow Sediment Oil & Grease Trash
Detention Basin/Area	67	Flow Sediment Oil & Grease Trash
Hydrodynamic Separation System	40	Trash Sediment Oil & Grease
Infiltration Strip/Area	29	Flow Sediment Oil & Grease Nutrients (**TDS**)

Note on Table 5: Percentages of BMPs implemented, shown in Table 5, are based on the number of applicable sites. For example, if there were three hillside Development projects and all three-implemented slope stabilization, that would be all of the applicable projects. A 100% implementation equates to those applicable sites and not to all sites.

2.4 REVISED ENVIRONMENTAL REVIEW PROCESS

The City of El Cajon revised CEQA forms and checklists to include questions related to water quality issues. The City reviews all projects for CEQA; one project completed the revised forms for PY2007-08. The forms are attached in Appendix A.2.

2.5 DEVELOPMENT PLANNING OUTREACH EFFORTS

Education efforts for disseminating information to planners, developers, and contractors on the JURMP requirements for new and significant redevelopment is provided through one-on-one and group discussions at the time of the various discretionary plan reviews and checks, during BMP development, and at time of obtaining the building permit. Topics include:

- Federal, state, local water quality laws and regulations
- Connection between land use decision and water quality goals
- New and Redevelopment requirements
- Water quality impacts from development (urbanization)
- Methods for minimizing impacts of development on water quality.
- Implementation of SUSMP requirements

2.6 REGULATORY COMMENTS

As of the writing of this report, no regulatory comments have been received for JURMP Annual Report 2006-07.

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SECTION 3 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

Construction in the City of El Cajon is a constant activity. Whether it is a 500 square foot remodeling project or a multi-single family residential subdivision, a minimum list of construction BMPs must be in place prior to any earth disturbance or material storage. With a City built out to its current borders, the City experiences re-development activities more so than new development. However, clearing currently developed lands and re-development is at the heart of this community's construction and revitalization efforts.

Park Avenue Subdivision During 2007-08

3.2 PREVENTION OF POLLUTED RUNOFF

The City uses the CalTrans Construction Site BMP Manual together with the California Best Management Practices (BMPs) Handbook as guidance for the application of appropriate BMPs. An emphasis on pollution prevention is the easiest and most convenient set of BMPs to implement and achieve the elimination of polluted discharges. The following prevention practices are part of the minimum set of BMPs for construction sites.

- Prevent sediment and other polluted runoff – Design a sediment basin to trap runoff for zero discharge, specifically for larger construction sites with enough room for sizing adequate basins.
- Prevent bacteria discharges – Place portable sanitary facility in secondary containment and secure to the ground or stable structure. Prevents tipping and loss of bacteria (fecal coliform) containing material.
- Prevent alkaline (greater than 10.0 pH) runoff – Require properly designed and installed Concrete Washout areas and encourage concrete contractor to haul away concrete waste. Concrete waste disposal should be at an offsite location with adequate control measures.

The City works closely, often one-on-one, with developers at the counter and field discussing ways to prevent pollution from entering the storm drain. The pollution prevention practices are required for any applicant looking for a building permit.

Copies of construction handouts provided by the building department and additional information given to developers, contractors, and homeowners at the time of Erosion Control Plan submittal can be found in Appendix A.3.

3.3 UPDATES TO ORDINANCES

In accordance with Section D.2.a of the Permit, the City Municipal Code Title 13 Chapter 13.10 *Storm Water Management and Discharge Control* was updated in 2008 to comply with the new grading requirements. The City Municipal Code Title 13 Chapter 13.10, Section 13.10.140; and Chapter 15.64, *Grading*, work together in addressing land disturbance, demolition, and construction activities for the elimination of sediment and other pollutants from discharging into the City's storm drain system.

3.4 MODIFICATION OF CONSTRUCTION AND GRADING APPROVAL PROCESS

Shortly after the Chapter 13.10 was updated, the City assessed and modified the local construction and grading permit approval process to comply with Section D.2.a of the Permit. All construction projects are required to go through a storm water review process. Construction and grading projects are required to implement measures to ensure that pollutants from the construction site are reduced to the Maximum Extent Practicable (MEP) and will not cause or contribute to an exceedance of water quality objectives. The City does not allow clearing of vegetation matter or grading activities until all necessary environmental clearances, including water quality, are secured and a grading, drainage, and erosion/sediment control plan is prepared, reviewed and approved by the City. During the review process, the City ensures that all applicable grading and storm water ordinances are fully implemented as required per El Cajon City Code Title 13, Chapter 13.10, Section 13.10.140; grading ordinance Chapter 15.64 and Chapter 16.60. The City does not issue Building Permits until requirements addressing storm water and water quality have been fulfilled.

3.5 PRIORITY CONSTRUCTION SITES AND SOURCE IDENTIFICATION

Periodically the City reviews the list of high priority construction projects to update the list for close monitoring and inspection of construction activities and BMPs implementation for reducing or eliminating pollution from entering the City's storm drain system. High priority status is applied to projects that pose a potential threat to water quality or location. Priority is also given to SUSMP projects that are complete and need to have the storm water controls verified and the maintenance plans reviewed. Table 1 lists the selection of BMPs that must considered and the appropriate BMPs installed at all high priority projects. See Section 3.8 for any Enforcement Actions. In PY1 the City had 15 medium priority construction projects and 18 active high priority construction projects, including 16 SUSMP projects. Also in PY1 the City approved 137 low priority projects for construction. A list of all active high priority construction sites is given in Appendix B.2. No project was required to have advanced treatment during construction as none were classified as an exceptional TTWQ.

3.6 BMP IMPLEMENTATION AND REQUIREMENTS

The City established minimum BMPs that must be implemented at all construction sites regardless of the water quality prioritization. The City developed a list of BMPs required at all construction sites. This list first appeared in the JURMP as Appendix C, but has recently been revised and updated to comply with Order R9-2007-0001. BMPs specifically prevent, remove, or eliminate a pollutants or group of pollutants from entering the storm drain system.

Table 1, below, lists the minimum required BMPs for construction sites, the primary pollutant eliminated and the potentially affected 303(d) pollutant. Eliminating pollutants meets the Clean Water Act and Permit objectives for maintaining the biological, physical, and chemical integrity of the State's waters, while a "no impact" condition meets the restoring requirement of the Clean Water Act objective.

A first step toward connecting construction activities to water quality is shown in the following table. The next step is to quantify how many sites are compliant with the minimum BMP requirements. Table 1 summarizes the minimum BMP requirements and the pollutants that each targets for prevention (including minimization of grading activities), removal or elimination. Table 2 lists the different types of construction projects and the minimum BMPs required for each category. Table 3 connects and quantifies the number sites compliant with the required BMPs. In Section 11, the Effectiveness Assessment of the Construction Component will draw on this connection between BMP implemented and pollutant to determine if the program activities adequately reflect a move toward improving water quality or have little effect on water quality.

Table 1 – BMP to Pollutant

BMP	Application	PRIMARY POLLUTANT REMOVED	303(d) Pollutant Impact
Silt Fence (SC-1)	Perimeter Control to remove sediment and debris in runoff	Sediment	TDS
Desiltation Basin (SC-2)	Captures sediment runoff and eliminates sediment runoff	Sediment	TDS
Gravel Bag Barrier (SC-6)	Perimeter Control for pavement to pavement. Removes sediment runoff	Sediment	TDS
Fiber Roll (SC-5) or Coconut Fiber Blankets	Erosion Control for slopes to prevent sediment runoff	Sediment	TDS
Stabilized Construction Entrance (TC-1)	Tracking control for imperviousness to pavement to prevent sediment tracking into streets	Sediment	TDS
Street Sweeping (SC-7)	Tracking control for paved areas. Collects/removes sediment tracked onto pavement	Sediment	TDS Phosphorus
Material Storage (WM-1)	Material coverage and containment or pavement or impervious surfaces to eliminate polluted runoff	Stucco, paints, concrete	pH TDS

BMP	Application	PRIMARY POLLUTANT REMOVED	303(d) Pollutant Impact
Solid Waste (WM-5)	Trash/debris coverage and containment. Prevent trash runoff	Trash, debris*	Bacteria Phosphorus
Concrete Washout (WM-8)	Containment and disposal of concrete washout. Prevents concrete runoff	Concrete-laden waters	pH TDS
Sanitary Waste (WM-9)	Containment of sanitary waste. Prevents bacteria runoff	Bacteria	Fecal coliform
Vehicle/Equip Management (NS-8, NS-9, NS-10)	Containment of petroleum fluids. Prevents oil & grease runoff	Oil & Grease	TDS

***** Pollutant being monitored by East County Cities
"-" Designates "no impact" on levels of 303(d) pollutants; supports Clean Water Act objective to maintain or restore water quality

---

Implementation is measured through onsite inspections. Success of that implementation depends on stage of project at time of contact, materials presented, BMP selection and developer motivation to comply with construction requirements. The City provides a Storm Water Guideline to developers for Construction Projects. This simple, easy to use guide lists the construction BMPs to use for construction activities that would occur outdoors and potentially affect storm water quality.

Associations, such as the Building Industry Association (BIA), have assisted in disseminating information to contractors and builders. Those construction personnel who do not belong to associations receive BMP information at the time of permit application or permit issuance. There is a noticeable difference between Storm Water savvy developers and those just starting their first storm water compliance experience. The City is working towards optimizing interactions at the Public Works counter. Landscaping as early as possible is emphasized regardless of season. This information is provided to contractors as permit issuance and during each scheduled inspection. BMPs must be appropriate for site-specific conditions. Installing BMPs for the sake of compliance is not complying with MEP.

There are four categories of construction projects:

1. Pools, remodels, and additions
2. Single Family Residences, Condo Conversions, and Subdivisions
3. Hillside Development
4. Commercial/Industrial

The minimum required BMPs per category of construction are shown in Table 2, on the next page.

The next steps complete the BMP cycle. By verifying during inspections that the BMP is:

a. Present as required – indicates changes in knowledge and awareness.
b. Implemented properly and functioning correctly – indicator of behavioral changes.

Printed materials are available at the Public Works Department making over-the-counter interactions into educational opportunities. A City BMP guide, edited summaries of application JURMP sections, and personalize service functions as the City's implementation tools. To prioritize effectiveness efforts, the City focuses on the prevention and elimination of the 303(d) pollutants to address the restoration requirement of the Clean Water Act and our Municipal Storm Water Permit. Overall Effectiveness of the Construction Component is provided in Section 11.

Table 2 – Required BMPs for Construction Sites

Required Construction BMP	Construction Type			
	Pools, Remodels, Additions	SFR Subdivisions	Hillside Development	Commercial and Industrial
Silt Fence - SC-1	X	X	X	X
Storm Drain Inlet Protection (+filter fabric) SC-10	X	X	X	X
Sediment Basin or Trap SC- 2 or 3		X	X	X
Check Dams - SC-4		X	X	X
Fiber Rolls - SC-5			X	
Gravel Bags - SC-6	X	X	X	X
Street Sweeping - SC-7	X	X	X	X
Stabilized Construction Entrance - TC-1	X	X	X	X
Dust Control - WE-1		X	X	X
Scheduling - SS-1	X	X	X	X
Velocity Dissipation Devices - SS-10			X	
Preservation of Existing Vegetation - SS-2		X	X	X
Coconut Fiber Blankets - SS-7			X	
Material Storage - WM-1	X	X	X	X
Solid Waste Storage - WM-5	X	X	X	X
Concrete Waste - WM-8	X	X	X	X
Employee Training - City of El Cajon		X	X	X

X = Required; Implemented; and Verified

3.7 INSPECTION

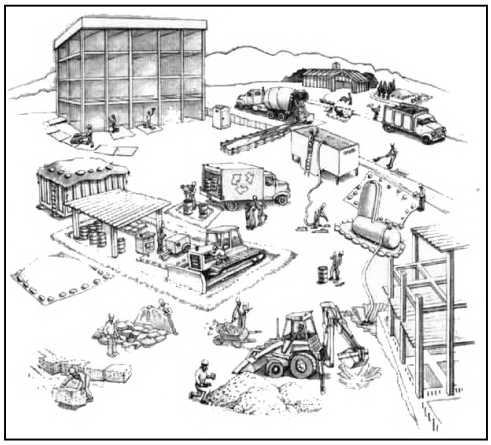

The City inspects all high priority projects monthly during the dry season and weekly during the wet season. Inspections are completed using the form provided in Appendix A.3. In PY1, the City had 19 high priority projects, all of which were fully or partly active construction sites during the permit year. SUSMP projects are now considered high priority construction projects and are inspected on the same schedule. All projects are inspected prior to completion of the projects to verify proper and complete installation of storm water controls and review any long-term maintenance plans. Six SUSMP projects were completed during PY1 and one abandoned. All projects designated medium priority are inspected monthly during the Wet Season, on an as-needed basis during the Dry Season and in response to a complaint received from City staff or the general public. All projects designated low priority are constantly inspected by the Building Department personnel for there own Building Code requirements. The Building Staff has also been trained by the Storm Water Department to recognize when to contact Storm Water personnel over improper construction BMPs. The City had 6 medium priority projects under construction and approved 137 low priority projects for construction in PY1.

Table 3 – Percent Implemented and Verified for High Priority Sites

BMP	Percent Implemented	Discharge during Rain	Corrective Action	Citation
Silt Fence	97	No	Yes	Yes
Storm Drain Inlet Protection	97	No	Yes	No
Sediment Basin	98	No	Yes	No
Check Dams	97	No	Yes	No
Fiber Rolls	98	No	Yes	No
Gravel Bag Berm	98	No	Yes	Yes
Street Sweeping/Vacuum	95	No	Yes	Yes
Stabilized Construction Entrance	97	No	Yes	Yes
Hydroseeding	76	No	Yes	No
Geotextiles and Mats	95	No	Yes	No
Material Delivery and Storage	96	No	Yes	No
Stockpile Management	91	No	Yes	No
Solid Waste Management	98	No	Yes	No
Concrete Waste Management	100	No	No	No
Sanitary Waste Management	99	No	Yes	No

Table 3, on the previous page, shows the percentages of minimum BMPs implemented at high priority constructions, verified through inspections. The percentages are calculated from the inspection reports. The percentage indicates the number of sites that implemented the required BMP at the time of inspection. A "Yes" under corrective action indicates that specific conditions noted during the inspection warranted actions by the contractor, such as maintenance or BMP improvements.

Inspection of construction sites in PY1 verified that most construction sites implemented BMPs. Deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions, and through enforcement actions. If corrective actions were needed, the construction site either completed the corrective action at the time of inspection or a follow-up visit was scheduled to verify the completion of corrective actions. When corrective actions are not completed in a timely manner, enforcement actions are issued. In PY1 the City had multiple enforcement actions related to construction inspections and follow-ups. Table 5 provides information about these enforcement actions. Enforcement actions are further discussed in Section 3.8 and a list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3.

Table 4 – Capital Improvement Project Assessment

2007-2008 CIP CONSTRUCTION SITE INSPECTIONS

Site Inspections		Enforcement Actions	
Job Site	**Minimum BMP's in place**	**Warning(s)**	**Administrative Citation(s)**
Street Resurfacing (#57):			
Adele St.			
Berrydale St.			
Burnet St.			
Flint St.			
Fourth St. (Granite Hills Dr. to Madison Ave.)			
Grape St. (I-8 to Broadway)			
Herbert St.			
Ivory Ave.			
Ivory Ct.			
Kristie Ln.			
Marline Ave.			
Melody Ln.			
Naranca Ave.			
Omaha Ct.			
Peach Ave.			
Pepper Villa Ct.			
Pepper Villa Dr. (Bradley Ave. to City Limit)			
Raymond St.			
Taft Ave. (Herbert St. to Pauline Ave.)			
Woodburn St.	Y	N	N

2007-2008 CIP CONSTRUCTION SITE INSPECTIONS

Site Inspections		Enforcement Actions	
Job Site	**Minimum BMP's in place**	**Warning(s)**	**Administrative Citation(s)**
Sidewalk Replacement (various locations)	Y	N	N
Downtown Streetscape Replacement	Y	Y	N
Wells Park Restroom	Y	N	N
Walway and General Concrete Improvements (various locations- Parks)	Y	N	N
Drainage Channel Fencing Improvements (various locations)	Y	N	N
Water Quality Improvements (storm drain inlet filters, various locations)	Y	N	N
Sewer Pipe and CMP lining (various locations)	Y	N	Y
CMP Storm Drain Replacement (various locations)	Y	N	N
Phase II Superblock Demolition	Y	N	N
Superblock Temporary Parking	Y	Y	Y
Major Drainage Channel Repair (various locations)	Y	N	N

Public Works inspectors inspect the CIP projects for Storm Water compliance on an as-needed basis. This may be as frequently as weekly, or even daily, but generally no less than twice per month (when the inspectors are on the job for non-storm water related inspections) while the project is active.

Table 5 – Construction Enforcement Actions

CONSTRUCTION ENFORCEMENT ACTIONS								
	Date	Business Name	#	Street / Location	Complaint/ Observations	City Action	Enforcement Action	Corrections Completed
1	08/23/07	One Stop Construction	247	N. First St.	Sub-contractor using water to clean pavement with water entering the street and drain.	Contractor advised to cease using water to clean paved areas. Told to use a dry method.	Monetary Citation	Yes
2	12/05/07	Education Center Annex	750	Main St	Contractor failed to install and maintain required BMPs	Written warning issued to the contractor. Advised to cease tracking sediment and sweep the street and sidewalk of all sediment.	Written Warning	Yes 12/13/07
3	12/07/07		528	Emerald Ave	Lot graded with no BMPs in place to prevent sediment discharge.	Left violation notice on door during site inspection. F/U required. 12/12/07 Met contractor on site, told to install construction entrance silt fencing at rear lot.	Verbal Warning	Yes 12/13/07
4	12/13/07	Ballantyne Glen		Ballantyne	Relocation of construction entrance causing significant tracking onto Cedar St., failure to implement BMPs listed on erosion control plan.	Met with the contractor on site, written warning issued with 24hrs to comply with erosion control plan. New construction entrance moved to Cedar.	Written Warning	Yes
5	12/19/07	ECO Construction	855	Portland	Power washing parking lot, and unprotected dirt stock piles on lot.	Contacted the contractor on sit. Told to cease using power washing equipment and use dry method to clean the lot. Verbal warning issued.	Verbal Warning	Yes
6	12/20/07		1338	Naranca Ave	Failure to comply with ECP, no BMPs installed, no response in a timely manner.	Property owner/ contractor told to immediately install BMPs maintain them.	Monetary Citation	Yes
7	01/04/08		360	First St	Regional Water Board checking condition of condo-conv. With concerns re: No BMPs on site and debris/piles piles.	Met with the contractor on site. He will bring site into compliance. Some gravel bags at rear to reduce run-off.	Verbal Warning	Required BMPs installed
8	01/04/08		642	Mollison	RWQCB found debris piles, uncovered bin, dirt in lot and two unprotected storm drain inlets.	Property owner contacted and said he would have corrections made by the end of the day.	Verbal Warning	Debris piles removed, inlets protected
9	01/04/08	BK Mechanical Systems	1719	Main St	PW staff saw contractor using water to clean sediment from paved areas.	Contacted the contractor to ld to cease and use a dry method to clean or install proper BMPs to prevent sediment discharge.	Verbal Warning	Yes
10	01/08/08		1338	Naranca St	Lot for new development built up altering drainage and causing flooding in complainants rear yard.	Building plans are active. Current enforcement action in progress for BMPs implementation. Complainant contacted 1/10/08	Monetary Citation	N/A

	Date	Business Name	#	Street / Location	Complaint/ Observations	City Action	Enforcement Action	Corrections Completed
11	01/09/08	Natural Environmental Landscaping	1185	Marline Ave	Landscaping contractor observed power washing the paved areas of this dev. proj.; discharge did not enter a drain inlet.	The contractor was told to cease using water to clean without BMPs. Suggested to use dry method.	Verbal Warning	Yes
12	01/16/08		1688	Main St	Co. Health Insp. Stated contractor in process of cleaning out building and using high pressure water to clean asbestos from interior with no BMPs at drain inlets. Minimal discharge to the storm water system.	Contractor instructed to cease using water to clean areas and to install fabric filters at all lot drains. No current discharge was observed.	Verbal Warning	Yes
13	02/27/08	Suncoast Homes	1341	Main St	Failure to maintain BMPs and sediment tracking.	Contacted the business owner and advised to cease sediment tracking and improve all BMPs.	Monetary Citation	Yes
14	03/10/08	Jacoba Sunshine LLC	921	Sunshine	Motorhome on site discharging to open sewer, No BMPs in place at this Condo Conv., evidence of recent discharge of sediment laden water in driveway.	The contractor, Wilson Pulido was contacted and agreed to meet on site.	Verbal Warning	BMPs installed
15	04/08/08	Caddy Shack rennovation	351	Main St	Building renovation, asphalt removed, stock piles, tracking with no BMPs in place.	Owner/contractor was contacted on site and told to install construction entrance and perimeter control.	Written Warning	Yes
16	04/17/08		1905	Marshall Ave	Sediment tracking and general BMP maintenance.	New asphalt surface. Inspector will notify job foreman to sweep all paved areas and conduct maintenance on perimeter BMPs.	Verbal Warning	Yes
17	04/21/08	Jacoba Heritage LLc	642	Mollison	Failure to maintain required BMPs at condo conversion	Contractor contacted on site and advised to maintain BMPs and dry clean all paved areas.	Written Warning	Yes
18	04/21/08	Jacoba Heritage LLc	360	First St	Failure to maintain BMPs at condo conversion.	Contractor advised on site to maintain all BMPs, remove all debris piles and sweep regularly.	Written Warning	Yes
19	05/05/08	Suncoast Homes	1341	Main St	Sediment tracking and general BMP maintenance on Melody Ln. side of property.	Contacted construction staff and advised to immediately clean all sediment and install proper BMPs.	Monetary Citation	Yes
20	06/06/08		198	Main St	Renovation debris at old Albertson's piled at rear of building with no BMPs in place to protect drain inlets.	Contacted site supervisor and advised to remove a surface debris and dust using dry method and to provide storm drain protection.	Verbal Warning	Yes

3.8 ENFORCEMENT

In PY1 the City had 20 enforcement actions pertaining to inspection follow-ups or complaints received for construction activities, 5 of which resulted in a monetary administrative citation. The City conducted follow-up inspections for all enforcement actions to verify that proper and complete corrective actions were taken in a timely manner. Corrective actions are needed to fix or improve a BMP even though that BMP may be implemented as written.

Administrative Citations are issued for discharges to the City's storm drain system. Most construction sites implement the minimum BMPs and inspections verified that the BMPs were effective in reducing or eliminating discharges to the storm water conveyance system. A list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3.

Other non-compliance issues, except as described above, were not experienced during PY1, although some deficiencies were noted during construction inspections. Deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions and through citations. All violations and deficiencies were corrected in a timely manner.

None of the violations resulted in threats to the environment or human health and notification to the Regional Board was not required.

3.9 CONSTRUCTION OUTREACH AND EDUCATION

Education of construction contractors and developers is conducted primarily through the permitting and inspection processes. The City's building department has the first contact with contractors and developers when a building permit application is completed. The following steps are taken by Building Division and Public Works/Storm Water staff:

1. Building Permit Application.
2. A Storm Water "Hold" is placed on the property.
3. Developer or contractor is given a Storm Water handout.
4. Discuss with developer or contractor, in detail, minimum BMPs and implementation requirements.
5. Developer or contractor generates an Erosion Control Plan plus any additional storm water requirements as necessary.
6. Review Erosion Control Plan and any additional requirements, comment, direct developer or contractor to make changes prior to approval.
7. Inspect according to priority.
8. Address Corrective Actions.

In PY1, the City reviewed and commented on 10 SUSMP projects, 17 Storm Water Mitigation Plans, 19 condominium conversion projects and 137 Erosion Control Plans for small projects. The City inspects all completed SUSMP projects to confirm proper installation of storm water controls and review the long-term maintenance plans. Copies of the Construction handouts and an example Erosion Control Plan Checklist for additions and remodels (small projects) are included in Appendix A.3.

Compliance is assessed through inspections by storm water staff or a City contractor. Inspections are completed on a scheduled frequency depending on the season. As mentioned above, during the rainy season high priority construction projects are inspected on a weekly basis.

3.10 IMPROVEMENTS AND REGULATORY COMMENTS

- Generating improvements increases program efficiencies by harvesting those BMPs that work and discarding those that do not.

Improvements

Improvements to the Construction Component include:

- Inlet Protection - Add a layer of filter fabric, then gravel bags, secure with orange cones
- Continue to focus inspection efforts on BMP implementation to facilitate Effectiveness Assessment.
- Continue to use BMP Implementation Inspection Checklist to list minimum required BMPs for construction
- Continue to include SUSMP projects in the High Priority category.
- Continue to inspect construction of SUSMP projects as High Priority construction.
- Perimeter control – Use silt fence as primary perimeter control
- Hay bales are not to be used anywhere

BMP improvements are needed as follows:

- Road Work – Vacuum any water used; no filtering allowed
- All Construction Entrances must have adequate aggregate size (Minimum 2-3”)

Regulatory Comment

As of the writing of this report no comments have been received for Annual Report PY2006-07.

SECTION 4 MUNICIPAL COMPONENT

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SECTION 4 MUNICIPAL COMPONENT

4.1 INTRODUCTION TO MUNICIPAL FACILITY ACTIVITIES

As required by Section 4 of the Municipal Permit, existing municipal facilities must prevent or reduce pollutants in urban runoff by implementing a City-designed program to address specific outdoor activities that have the potential to impact water quality. Municipal facilities include streets, public parking lots, flood control devices, parks/recreation, administration and other public buildings, maintenance and storage areas, police, and fire/safety stations. Activities at any one of these facilities may have the potential for discharging pollutants as urban runoff or during a rain event. The Municipal Component of the JURMP defines a comprehensive program to reduce the potential for polluted discharges through:

- Pollution Prevention activities,
- Best Management Practice (BMP) implementation,
- Storm Water Inspections, and
- Recycling

Homeless

Of specific note are the Homeless that are not only a social problem, but become an uncontrollable water quality problem. Homeless encampments exist in storm water channels because of easy access and good outdoor weather conditions nearly year round. Although prevalent in the storm drain channels, the homeless are difficult to detect in the underground storm drain system comprised of reinforced concrete boxes and even more difficult to permanently remove. Detection is conducted through weekly/monthly inspections of popular entry places and complaints to the Storm Water Complaint Hotline. Removal is accomplished through police enforcement and the homeless have an option for other housing with the City's new interim housing project. The City cleans all of its channels at least twice annually and encampments are removed at that time, however, the encampments are often re-established once the channel maintenance in that area is finished.

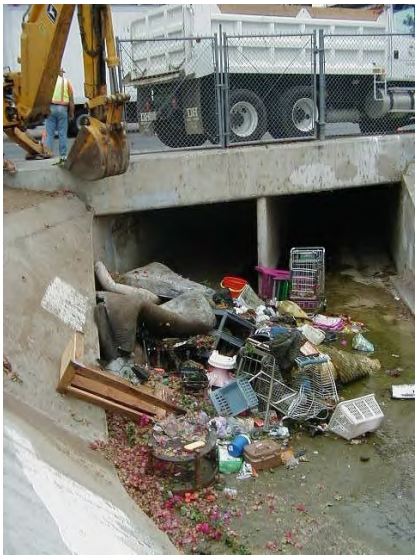

The photograph above emphasizes the enormous amount of materials associated with homeless encampments in the storm drain channel. Other than the visible pollutants of trash and debris, there are also the less collectable, non-visible pollutants from human waste.

The list of major pollutants associated with the homeless living in these underground flood control devices are:

- trash, (a monitored pollutant for East County)
- debris, and
- fecal coliform (a listed 303(d) pollutant for Forester Creek).

Our dry weather-monitoring program is designed to capture information on the homeless and track elevated levels of fecal coliform. During PY1, D-Max Engineering undertook an investigation of fecal coliform and other constituents in the El-Cajon-area watershed. Results of the investigation were inconclusive, but did provide great insight into tracking bacteria in dry weather runoff. Specifics can be found in Section 7 of the Annual Report and Appendix A.7 of this Annual Report. The City will continue its efforts to reduce or eliminate the impacts caused by the homeless encampments within storm drain channels.

As in past years, Storm Water staff and City Maintenance crews teamed with Community Police and Interim Housing (a joint venture between Hammon Properties and Shadow Mountain Church) to move inhabitants into temporary housing, followed by clean up of storm drain channels. For those homeless willing to improve their situation, the Interim Housing group provides a “Hand Up” rather than a hand out. Those who wish to continue living in the City’s storm drain system are detained, but eventually find new living places on the street. A County-wide, long-term solution to the homeless is not yet definable for storm water.

4.1.1 Prevention of Polluted Runoff

Anytime pollution is prevented from entering the storm drain system, less pollution must be managed at end-of-pipe. The following prevention activities and corresponding BMPs are fully implemented at one or more of the many municipal facilities located within the City. As noted in Introductory Section, the focus of PY1 is continued BMP implementation such that prevention of polluted runoff is achieved to the Maximum Extent Practicable (MEP). The primary pollutants of concern for this prevention effort are the 303(d) impairments of Forester Creek that include pH, total dissolved solids (TDS) as nitrates; and fecal coliforms. The only impairment associated with the City of El Cajon or the upper section of Forrester Creek is pH. Further discussion of pH origin and any corrective actions are presented at the end of this section. Trash and debris is a specific issue being addressed as part of a watershed effort with the City of Santee.

When pollution is prevented from entering the storm drain system, it is either collected or eliminated. Collection requires management of gathered wastes, while elimination is true prevention, but much more difficult to accomplish. The following municipal activities encompass collection and elimination activities.

1. Erosion and sediment control prevents soils and sediments from washing away during rain events. BMPs implemented for City Improvement Projects to control erosion and sediment during project activities are as follows:

- Preservation of existing vegetation
- Scheduling of projects
- Seeding and planting of native plants and trees that are draught resistant and do not contribute to discharges of vegetative matter to the City's MS4.
- Establish plant ground cover before removing erosion or sediment controls.

2. Roadway and street maintenance activities preserve these facilities for a longer, useful existence. Many maintenance activities keep pollutants from entering the storm drain system. Listed below are the maintenance activities with the gross amounts of pollutants collected. Pollution removed equates to preventing polluted runoff that could be transported in urban runoff or storm water discharges.

- Street sweeping and cleaning – Swept over 21,180 miles of curbed streets and removed 3,483 cubic yards of materials that were disposed as solid waste. There is a total of 337 curb-miles of streets and a total of 483 lane-miles withinin the City. As state in greater detail in the JURMP, some areas are swept on a more frequent basis. By collecting 3,483 cubic yards of trash, debris, and sediment, these pollutants did not enter the storm drain system and did not further impair Forrester Creek.
- Collected 39 cubic yards from spills and other miscellaneous operations
- Completed 58 special sweeps at the request of citizens or City staff, collecting 29 cubic yards of material. This is higher than the number of special sweeps conducted during PY6 (i.e., 52 special sweeps and 26 cubic yards).

3. Municipal vehicle maintenance facilities provide a valuable service in keeping the City's vehicles in top running condition. Maintenance activities are conducted in a manner to keep pollutants from entering the storm drain system. Listed below are the activities and their designated areas.

- Conduct vehicle maintenance indoors or under canopies
- Area designated for washing vehicles is covered and wash water drains to an oil/water separator before discharging to the sanitary sewer
- Area designated for rinsing street sweepers directly discharges to the sanitary sewer
- Recycling motor fluids (oil and antifreeze), tires, batteries, and metal

4. Landscaping maintenance activities beautify our parks, recreation, and administration buildings. Pollution prevention maintenance activities include:

- Collection of grass clippings and discarded as solid waste
- Sweep or blow residual clippings onto turf areas
- Clean City-owned patio and plaza areas using a machine that contains the cleaning liquids.
- Aerate soil frequently to encourage rain penetration and infiltration
- Maintain an Integrated Pesticide Management (IPM) program

5. Maintenance Procedures for MS4s includes inspecting and maintaining MS4 by cleaning, removing sediment, debris and vegetation; repairing or replacing damaged and failing structures; and stenciling/posting signs at storm water inlets and conveyance systems. Approximately 1,720 cubic yards were collected during PY1. Maintenance crews responded to 20 requests by city staff and citizens to maintain the storm drain system. A work survey request (WSR) is completed for each of the requests and filed at the Maintenance Yard on Vernon Way.

- Storm Drain Inlet/ Catch Basin cleaning
- Storm Drain system repair and maintenance

6. Building Maintenance activities at Municipal facilities prevent pollution by collecting debris, dirt, and organic materials before rain events transport this material to the storm drain system. Wash water is disposed into the sanitary sewer and dry methods are used to collect materials to dispose as solid waste. The following are completed on a weekly schedule:

- Sweep and clean parking lots
- Clean sidewalks
- Sweep and clean entry ways
- Control irrigation runoff and over-spray

7. A Sewer Maintenance program assists in preventing sanitary sewer spills and prevents sewage from entering the storm drain system using the following plans and BMPs:

- Identify and respond to overflow spills and leaks
- Contain and properly dispose of spilled sewage for public and private sewer overflows

- Repair damaged and leaking public sewer lines
- Identify potential problem areas, such as sewer lines in isolated, hard-to-access canyons, or sewer lines at end-of-life condition, for inclusion in annual Capital Improvement Projects
- TV inspection of sewer main lines
- Annual cleaning of main sewer lines
- Quarterly (3-month) cleaning of sewer siphons, trouble spots and problem manholes
- Quarterly (3-month) rodding and descaling of problem sewer lines

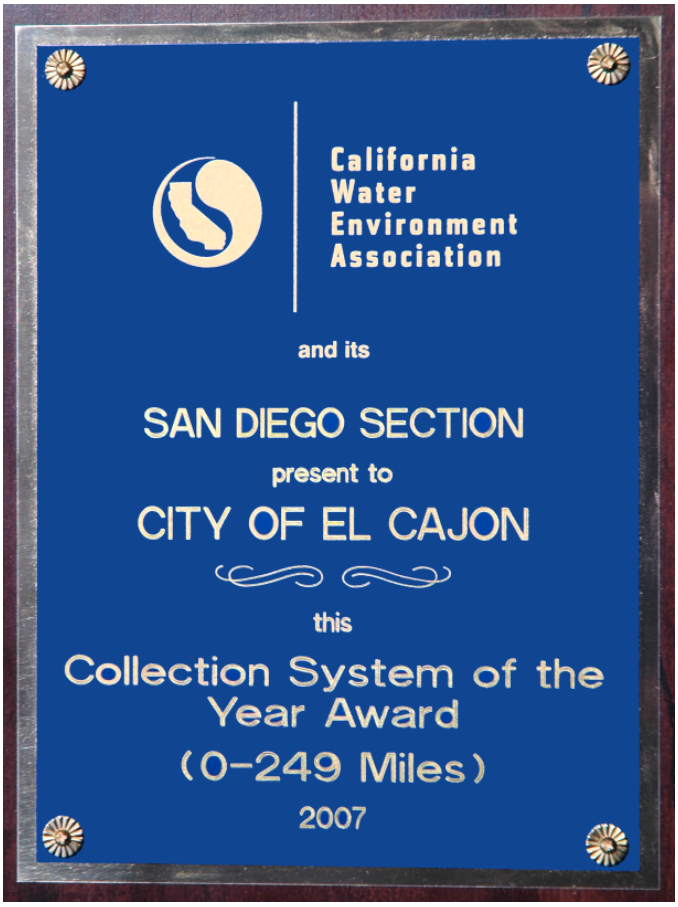

During PY1 the City cleaned 219.4 miles of sanitary sewer main line, while experiencing five public sanitary sewer overflows. As a result of these public sewer overflows, 80 gallon of sewage reached the storm drain. Of the 80 gallons reaching the storm drain, 30 gallons were recovered and returned to public sewer. The City also responded to 13 private lateral sewage spills and recovered 194 gallons of sewage. No sewage from private sewer spills with City response reached the storm drain.

During PY1, the City of El Cajon was presented the **Sewage Collection System of the Year** Award for collection systems under 250 miles in length by the **California Water Environment Association (CWEA)**. The award represents professional acknowledgement of decades of superior maintenance of the El Cajon Municipal Sewer System by many City workers.

4.1.2 Roads, Streets, Highways, & Bridges

The following are major City accomplishments during PY1 for roads, streets, highways, and bridges:

- Used the recently installed permanent wash rack for street sweepers to allow more time for cleaning equipment.
- Followed a strict preventive maintenance schedule for the new Elgin Crosswind street sweeper.
- Swept Downtown District twice per week.
- Swept non-Downtown Business and Commercial areas once per week
- Swept Residential areas and medians twice per month

City Maintenance crews collected a total of 3,483 cubic yards of material from street sweeping. Figures 1 and 2 show the distribution of material by type, cubic yard amounts, and percentages for materials. Total cubic yards of materials increased in PY1 due to continued use of the Elgin Crosswind street sweeper. The total volume of trash, silt and organic material increased, compared with PY6, although the increase was small. Figure 2, below provides a summary chart for relative volumes and Figure 3 provides a comparison to amounts collected in previous years.

Figure 1

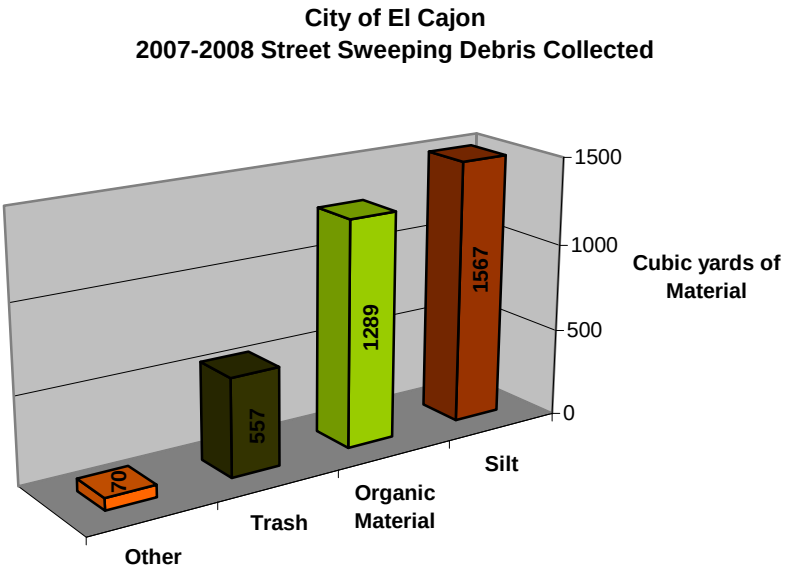

Comparing the percentages of materials collected in the streets with those from the channels, it is worth noting that about 250% more trash is collected in the street sweeping operations (557 cubic yards) than is recovered in channel cleaning operations (223 cubic yards). This difference may be due to the types of trash. The elimination of trash is best addressed at the source or generator. For the City of El Cajon, street trash is typically generated in highly commercialized areas that include restaurants, convenient stores, and department-like stores. Continuing as a major priority into the next Permit Year will be an ongoing effort to keep the downtown areas trash-free and street-clean. These prevention efforts are a partnering effort with the El Cajon Community Development Corporation (ECCDC) and businesses in the downtown area.

Currently, ECCDC hires the St. Madaline Sophies students to pick up trash and cigarette butts in the downtown area. During PY1, the ECCDC and storm water staff organized community functions to increase public awareness and improve downtown areas. “Lend a Hand” days were scheduled throughout PY1.

Figure 2

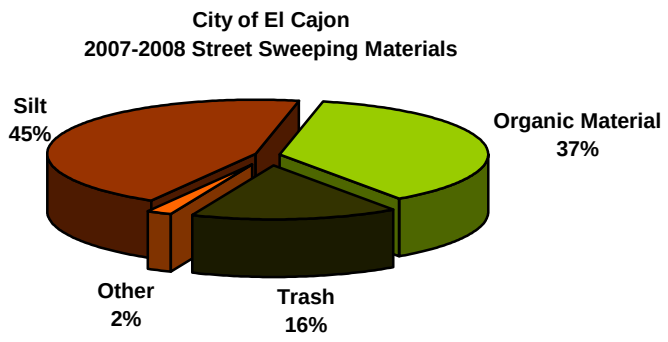

Figure 3

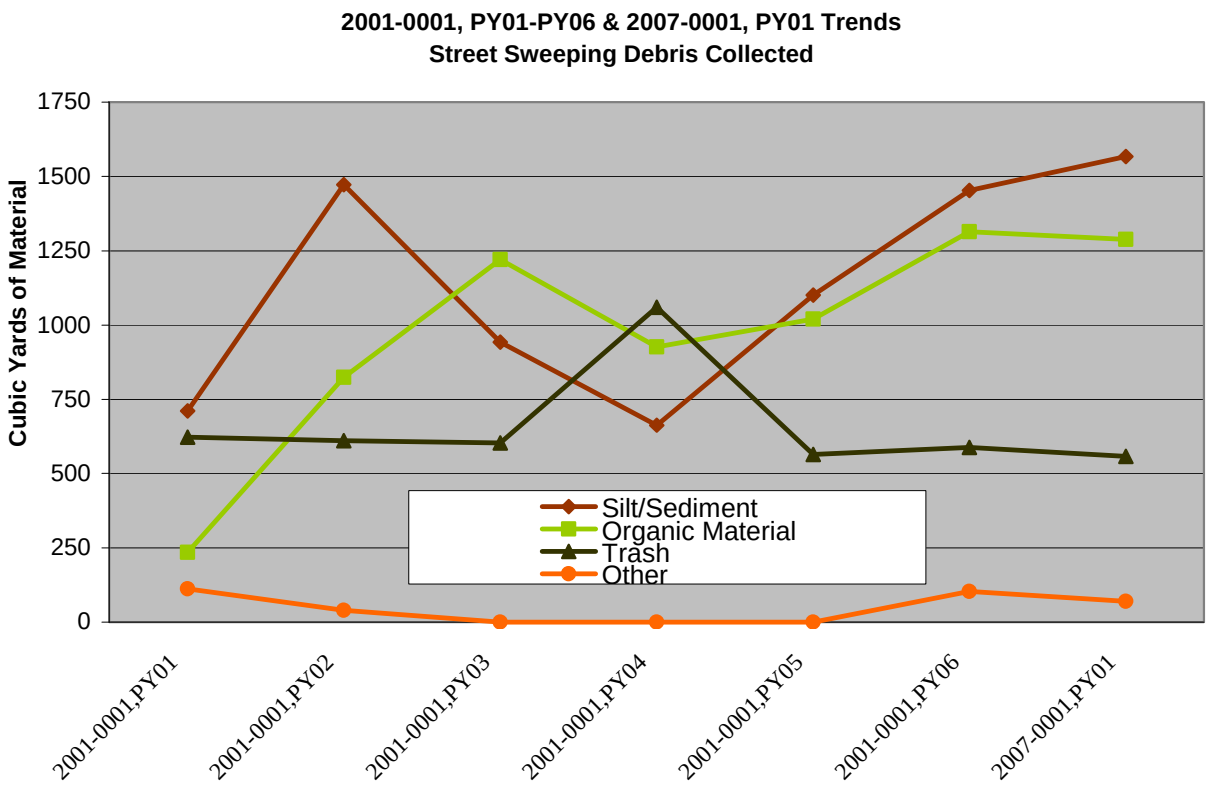

4.1.3 MS4 Maintenance

The City's Municipal Separate Storm Sewer System (MS4) functions to collect and convey surface runoff. Maintenance of this system is necessary for continuous transport of rainwater to prevent flooding and to drain urban flows away from populated areas and prevent flooding.

Figure 4

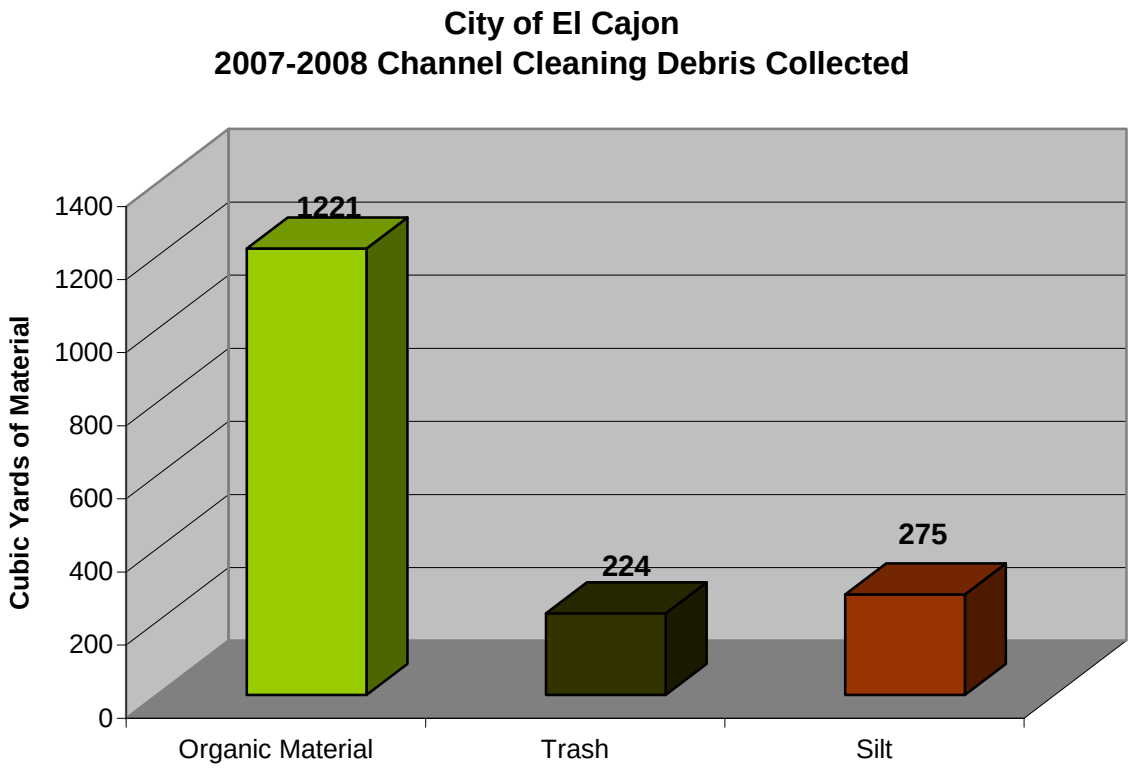

Work Service Requests (WSRs) document maintenance activities on the storm drain system. For PY1, 20 WSRs were completed for both emergency and non-emergency repairs/maintenance to the MS4. WSRs cover any type of needed maintenance and are available to all contacting our Municipal Maintenance Yard, located at 1050 Vernon Way, El Cajon.

The City's MS4 includes:

- Streets
- Gutters
- Storm Drain Inlets/ Catch Basins
- Underground pipes
- Culverts
- Rock-lined channels
- Concrete channels
- Unlined Creeks

Implementation of the JURMP Municipal Component in PY1 resulted in:

- Trash/debris removal from storm drain conveyance system (defined above) completed annually as specified in the JURMP. Total removed is 1,720 cubic yards. For types of pollutants removed see Figure 4.
- Maintained 51 storm drain inlet filters located in the public right of way.
- Met JURMP requirements by cleaning catch basins, culverts, and concrete channels once for PY1 in the major channels and once for the minor channels. The Conservation Corps completes the cleaning for Hunter's Run and Cypress Channel.
- Flow line vegetation maintenance completed one time during PY1 (tree maintenance along major channels and median maintenance).
- Cleaning of Homeless waste and trash completed two times during PY1.

As education and outreach efforts become increasingly effective, amounts of trash and debris removed from the MS4 should be reduced. As shown in Figure 3 above, quantities of trash, sediment and organics increased from the 06-07 period to the 07-08 period. The City does not have an explanation for this trend. Pollution prevention is the focus of the Municipal Component of the Storm Water Program, and a reduction in the amount of pollutants entering the storm drain system from City of El Cajon streets should be expected.

Interior of Sewer Main Televising Van

4.1.4 Sanitary Sewer System

Continuity and consistency describes the City annual cleaning and maintenance of the sanitary sewer system. Few conditions occur when crews needed redirection from the normal routine. The El Cajon sewage collection system, consisting of nearly 195 miles of municipally owned sewer mains, is a transportation-only utility with the sewage treated at the Metro Wastewater Treatment Plant in Point Loma, San Diego. El Cajon's outfall sewer main transports sewage from the City, Wintergardens Sewer District, and Padre Dam/Lakeside/Alpine Sewer District.

The City of El Cajon has an aggressive maintenance program to prevent sewer overflows. An important maintenance goal is to flush and maintain the entire system at least once every 18 months which requires the flushing of 148 miles of sewer main each year. For PY1, maintenance crews cleaned 219.4 miles of sewer line in 12 months. Difficult areas, where solids, grease accumulate or root intrusion is a problem, are on a more aggressive schedule of flushing and rodding every 3 months.

As part of the aggressive preventive maintenance program, the City televises sewer mains when:

- A new sewer tap is installed

- New difficult areas are suspected
- Determining the type of maintenance or repair needed

There were five public sewer overflows from City-owned sewers for PY1. Sewer system activities and discharges are reported annually to the San Diego Regional Water Quality Control Board and the California Integrated Water Quality System (CIWQS), among others. In April of 2003, the City internally started tracking reported overflows from private sewer laterals, where homeowners or businesses require immediate system repair. Response to the private sewer overflow includes reimbursing the City for any storm drain cleanup costs due to the overflow into the public right-of-way.

New-Generation Sewer Vactor Truck

An indispensable tool in preventing sewer blockages and overflows

For PY1, 13 private sewer spills were reported or detected by municipal staff. In all, 194 gallons of sewage liquids were recovered and disposed of in the sanitary sewer. With private sewer spills, municipal crews estimate how long the spill was active and document an estimated number of unrecoverable gallons.

4.1.5 Corporate Yard

The City of El Cajon has one Corporate Yard located at 1050 Vernon Way. Four separate Public Works Divisions are located at this facility, as follows:

- Public Works Maintenance Division - coordinates maintenance for streets, storm drains, drainage channels and public sewers;
- Facility Maintenance Division – maintains City buildings and related facilities;
- Fleet Maintenance Division – maintains City vehicles, and
- City Parks Division – maintains City parks, median, landscapes and urban forest.

It takes coordination and collaboration for these crews to work in the public interest maintaining and improving the health, safety, convenience and quality of life for the City's citizens and visitors.

The Maintenance Division of Public Works maintains the city's infrastructure. Fleet and Facilities Management is part of Administrative Services and maintains the City’s buildings, vehicles and equipment. The Parks Department controls and maintains parks, recreational areas, and other City-owned landscaped areas.

Annual inspections of each area is completed and corrective actions discussed with Department Management. An annual inspection was completed during June of 2008. Improvements at the Corporate Yard include:

New Vacuum Technology in Street Sweeping

Cleaning the Elgin Crosswind Sweeper in the New City Wash-down Facility.

- Monthly visual inspections are conducted.
- Secondary containment has been implemented in all storage areas.
- Berms were constructed around the wash and waste discharge areas.
- Employees received training on storm water, dealing with the homeless, pesticide training, and managing hazardous materials.

The annual inspection of the Corporate Yard uncovered a few needed Corrective Actions as follows:

- Maintain recordkeeping for training and inspections as defined in the Corporate Yard SWPPP.
- Post procedures on use of Spill Kits.

The sample of the Checklist for Municipal Site Inspection is contained in Appendix A.4.

4.1.6 Municipal Airfield

Gillespie Field, located at 1720 Joe Crosson Drive, is the local airfield and governed by the San Diego County Airport Authority and the Federal Aviation Administration. The City of El Cajon inspects this facility for compliance with the Municipal Permit as well as the General Industrial Permit. Some of the new BMPs include:

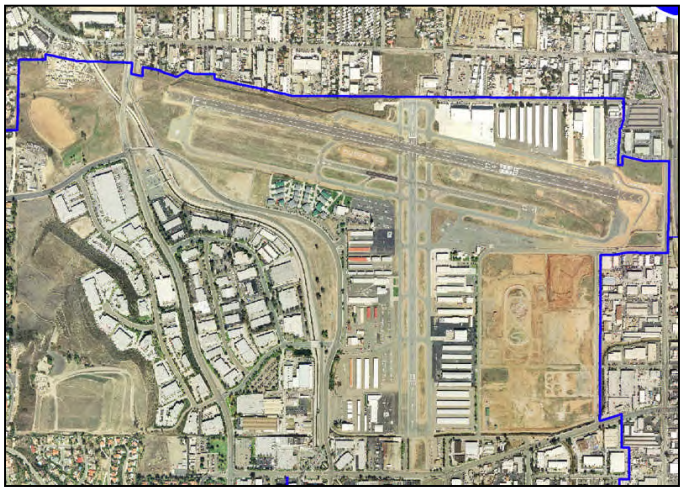

Gillespie Field - A County Airport Facility

- Wash racks with discharges hooked to the sanitary sewer. Use of manually adjusted shut-off valves eliminating flows to the sanitary sewer during rain events.

- Spill kits placed throughout the airport.

4.1.7 Parks and Recreation

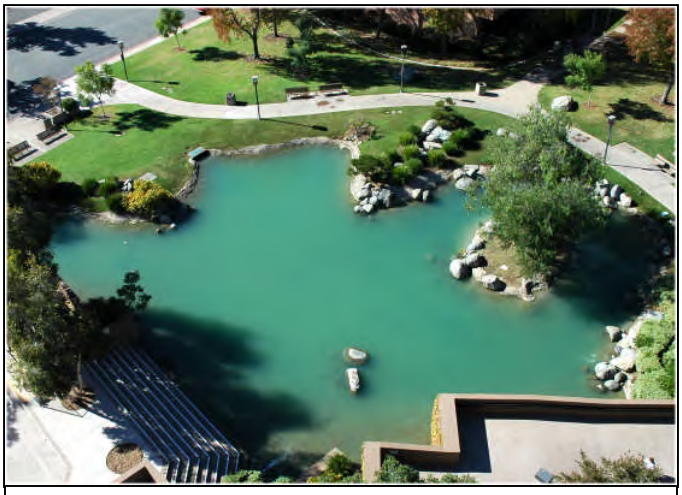

A City-Maintained Park Area Near City Hall

The Parks Division maintains, improves, protects, and develops the City's parks, landscaped median islands, public building grounds, and the urban forest for the benefit and enjoyment of the community. Maintenance of these nearly 120 acres is overseen by a well-trained, full-time staff that performs any necessary maintenance on a daily basis. Attractive public open spaces and well-maintained parks help to make El Cajon a better place to live, and encourages civic pride. Staff continually strives to promote a Cleaner Community through maintaining a Healthy Watershed while providing the community the highest quality and level of service possible.

Parks and Recreation areas prevent pollutants from entering the storm drain system, by implementing BMPs such as:

- Providing Pet Waste Bags at Dog Park located at Wells Park
- Blowing organic cuttings and sediment onto grass and disposing collected wastes properly
- Use of mop and buckets to clean up after special City events (Cajon Classic Car Show and Friday Concerts on the Green)
- Requiring Qualified Applicator Certificates and 20 hours of training for the safe and effective use of pesticides.
- Requiring Contractors that steam-clean or power-wash to capture, collect, and contain wash liquids, then dispose into the sanitary sewer.

4.2 MUNICIPAL BMPS

The City has developed a list of minimum BMPs for Municipal crews to use while maintaining the following categories of municipal-owned and managed facilities. Not counting streets, alleys, storm drain or sewer easements, there are 31 separate municipally maintained facilities within the City. Overall, the categories of Municipal facilities are as follows:

- Roads, Streets, Parking Facilities
- The Multiple Separate Storm Sewer System (MS4)
- Corporate Yard
- Municipal Buildings, Parks, Recreational Facilities, and Landscaping

Each minimum required BMP is connected in some way to a primary pollutant that is reduced or eliminated to the maximum extent practicable (MEP) when that BMP is implemented as written. Table 1 lists the Municipal BMPs that may be applied to municipal activities and areas, the primary pollutant(s) either reduced or eliminated and the 303(d) pollutant that may also be prevented. Not all BMPs listed in Table 1 are required for the 31 Municipally-operated areas.

Table 2 lists the four major municipal areas with their minimum required BMPs and whether they were implemented. An "X" for the BMP indicates the BMP is required.

Inspections complete the BMP cycle by:

- Confirming proper BMP Implementation (present as written in the California BMP Handbooks or by City of El Cajon Storm Water Staff)
- Verifying that the BMPs are maintained (during inspection) (See Table 2 in Section 4.2.1 for inspection results)

This Annual Report takes an important step in connecting activities, BMPs, and pollutant reduction to support the Assessment of JURMP Effectiveness contained in Section 11. The connection is shown by the following diagram.

Table 1 BMPs to Pollutants for Municipal BMPs

BMP	Application	Primary Pollutant Reduced or Eliminated	303(d) Pollutant Reduced
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies	pH; TDS; Fecal Coliform
Spill Prevention Control and Cleanup – SC11	Addresses spills	Varies	pH; TDS; Fecal Coliform
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	Oil & Grease Metals	-
Loading/Unloading – SC30	Controls the loading and unloading of materials	Varies Trash	-
Liquid Container Storage – SC31	Controls discharges from outdoor liquid containers	Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials	Pesticides Fertilizers	-
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris	TDS
Parking Lot and Storage Maintenance – SC43	Addresses sweeping and general maintenance of parking lots	Trash/debris Sediment	-
Drainage System Maintenance – SC44	Requires routine cleaning of the storm drain system	Trash/debris Sediment	-
Employee Training	Requires employees be trained in specific topics	Trash/debris	-
Storm Drain System Signage	Requires signs at storm drains or receiving waters	Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance	Requires routine maintenance of the sewer lateral	Fecal Coliform	Fecal Coliform TDS
Over-watering of Landscape	Requires overspray and over watering to be eliminated	Nitrates	TDS

"-" indicates no impact, positive or negative, to the Forester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

4.2.1 Municipal Site BMP Implementation and Verification

As defined in the JURMP, five of the 31 Municipal-maintained areas are considered high priority due to their location, size, and/or potential to impact water quality. This includes the Civic Center-City Hall Plaza complex, Fire Station No. 9, Parks Storage Garage, Public Works Maintenance Division Office, and the Vehicle Maintenance Facility. These five are inspected annually. Annual inspections of high priority municipal areas are conducted to verify if the minimum required BMPs are implemented. An "X" under the minimum required BMP indicates the BMP is:

- A minimum Requirement
- Implemented per written or required specification
- Verified during inspection

Table 2 on the next page lists the minimum required BMPs and Municipal Functions.

Table 2: Required & Implemented BMPs for Municipally-Maintained Areas

MUNICIPALLY-MAINTAINED AREAS	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Non-Storm-Water Discharges - SC10	X	X	X	X
Spill Prev/Contl/ Clean - SC11	X	X	X	X
Vehicle & Equipment Fueling - SC20				
Vehicle & Equipment Cleaning - SC21			X	
Vehicle & Equipment Repair - SC22			X	
Loading /Unloading - SC30			X	X
Liquid Container Storage - SC31				X
Raw Materials Storage – SC32	X		X	
Equip Operations - SC33			X	
Waste Handling/ Disposal - SC34		X	X	X
Safer/Alternative Products - SC35			X	X
Contam/Erod Areas - SC40			X	X
Building/Grounds Maintenance - SC41			X	X

MUNICIPALLY-MAINTAINED AREAS	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Building Repair/ Construction - SC42				X
Parking/Storage Maintenance - SC43			X	X
Drainage System Maintenance - SC44	X	X	X	X
Employee Training - City of El Cajon	X	X	X	X
Storm Drain System Signage - City of El Cajon	X	X	X	X
Public Participation and Education			X	X
Street Sweeping - City of El Cajon	X		X	
Vegetation Controls - City of El Cajon				X
Preservation of Existing Vegetation - City of El Cajon				X
Seeding and Planting - City of El Cajon				X
Mulching - City of El Cajon				X
Over-water Activities - City of El Cajon				X

X = Minimum Requirements

4.2.2 Implementation Analysis and Further Assessment

Table 3 summarizes the implemented BMPs for the five high priority Municipal Facilities where formal inspection and BMP usage was verified. It is important to note that no illegal discharges or spills were reported for any of the 31 City-owned or maintained areas.

Table 3 Percent BMP Implemented

BMP	Percent Implemented	Pollutant Prevented
Non-SW Discharge	100	Various: **Fecal Coliform**
Spill Prevention/Control/Cleanup	100	Various
V&E Cleaning	100	Metals
V&E Repair	100	Oil & Grease
Loading/unloading	100	Various
Liquid Container Storage	100	Oil & Grease
Raw Materials Storage	100	Pesticides
Equipment Operations	100	Oil & Grease
Waste Handling/Disposal	100	Bacteria
Safer/Alternative Products	100	Pesticides
Contaminated/Erodible Areas	100	Sediment
Building/Grounds Maintenance	100	Trash, Debris
Building Repair/Construction	100	Metals
Parking/Storage Maintenance	100	Oil & Grease, Trash, Debris
Drainage System Maintenance	100	Sediment, Trash, Debris
Employee Training	100	All
Public Participation and Education	100	Trash, Debris
Street Sweeping	100	Sediment, Trash, Debris
Sewer System Maintenance	100	**Fecal Coliform**
Vegetation Controls	100	Sediment
Preservation of Existing Vegetation	100	Sediment
Seeding and Planting	100	Sediment
Mulching	100	Sediment
Over-watering Activities	97	**TDS (Nitrate)**

(Highlighted – 303(d) listed pollutants)

The City Hall complex has an ever-existing issue with irrigation over spray and broken sprinkler lines due to large public visitor population and the homeless. Problems are fixed immediately, although never eliminated

The above information is used in Section 11 to support an Effectiveness Assessment of the Municipal Component and further define areas where improvements can be made.

4.3 PESTICIDE, HERBICIDE, AND FERTILIZER MANAGEMENT

4.3.1 Pesticide Regulatory Program – Integrated Pest Management

The City has adopted a Pesticide, Herbicide, and Fertilizer Management program as follows:

- Maintain a running inventory of pesticides, herbicides, and fertilizers,
- Implement a schedule for application of pesticides, herbicides, and fertilizers,
- Use an Integrated Pesticide Management (IPM) approach,
- Track use of pesticides, herbicides, and fertilizers,
- Train or license (Qualified Applicator Certificate) City personnel who apply pesticides, and
- Continuously train City personnel on BMPs.

The City maintains 120 acres, including landscaped medians, parkway trees, parks and public grounds and performs scheduled maintenance of all areas on a daily basis. Weed control is conducted along public streets and along storm water channels. Crews use concentrated pesticides and herbicides, both solid and liquid, as follows: Pre-emergent (Pre-E) at 96 pounds, 8 gallons; Post-Emergent at 1.5 lbs., 142 gallons (including Roundup); Contact Chemicals at 8 lbs., 28 gallons; and Pool Chemicals (chlorine and muriatic acid) at 183 lbs., 5,725 gallons.

Figure 6

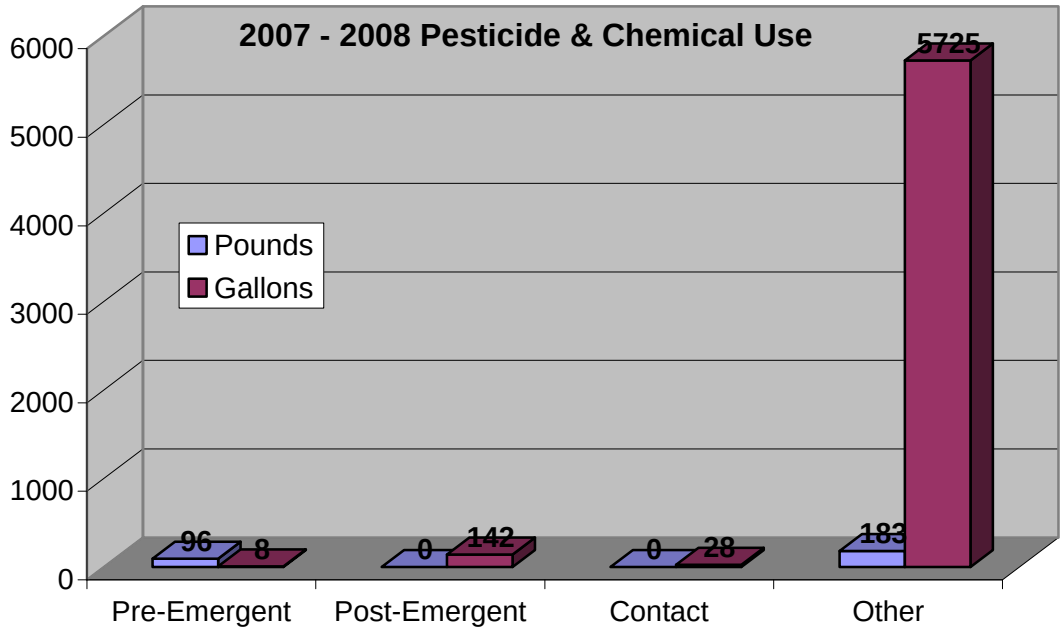

To maintain the City's Park and Recreation areas, 7,565 lbs. of fertilizer were used on turf and landscape. Fertilizer applications consisted of polymer coasted slow release fertilizer. All fertilizers are applied using professionally trained City personnel utilizing BMPs. Applications are documented with fertilizer use reports.

4.4 MUNICIPAL STAFF TRAINING, SPECIAL EVENTS AND NOTABLE ACTIONS

New hires for City municipal staff receive New Employee Orientation Training that includes a module on storm water quality issues and concerns. In PY1 all Public Works crewmembers attended storm water training sessions conducted during September and October of 2007. Additionally, all members of the El Cajon Police Department, Community Policing staff received storm water training in during April of 2008.

PUBLIC WORKS WEEK

Public Works Week emphasizes the importance of Street Maintenance, Sanitary Sewer and Storm Water system flushing, and other Emergency and Non-Emergency Services provided by Public Works Maintenance and Operations crews. Public Works Week highlights the equipment used to complete these tasks. In PY1, Public Works was celebrated during the week of May 18, 2008. The public, including students from nearby schools, were invited to view equipment and speak with Public Works crewmembers.

TRASH FENCE

The City of El Cajon is the first major jurisdiction within Forrester Creek watershed. Consequently, pollutants and trash that enter the storm drain system are carried downstream to the City of Santee where the Creek has not been improved. In response to the City of Santee's Forrester Creek Restoration Project, the City of El Cajon completed a bid and initial scouting for the placement of a trash and debris fence. The trash fence must be able to withstand forces from flows reaching 22 feet per second and hold heavier floating debris. Installation was accomplished in the fall of 2005 and the trash fence has been in service since. The picture to the right shows trash and debris captured by the fence during a rainfall event.

Forrester Creek Trash Fence

WEB PAGE

The City of El Cajon added new content to a Storm Water Web Page that is part of the El Cajon, Municipal Web Site. The Hotline for the City and County plus reports, brochures, and guidance documents can be accessed from Portable Document Format files (PDF files) on the web site.

4.5 IMPROVEMENTS AND REGULATORY COMMENTS

The following are the major improvements completed for PY1.

- Installed 42 additional storm drain inlet filters throughout areas in the City where trash and debris has been identified to be a problem. This is in addition to the 51 existing storm drain inlet filters installed in previous years.
- Continued the improvement and functionality of the trash and debris fence for Forrester Creek, located upstream from Gillespie Field.
- Reviewed Storm Water Program for Capital Improvement Projects.
- Continued implementation of GIS to assist with maintenance of storm drain systems and the sanitary sewer system.
- Continued training to implement a program for monthly self-inspection of Municipal Facilities.
- Continued to conduct maintenance of the existing storm drain inlet filters.
- Continued development of specific environmental indicators for accurate measurement of Urban Runoff Program effectiveness.
- Established defined measurements and actions to address watershed requirements and develop watershed management procedures.

There were no regulatory comments received for the Municipal Component of the JURMP for PY6.

SECTION 5 INDUSTRIAL & COMMERCIAL COMPONENT

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SECTION 5 INDUSTRIAL & COMMERCIAL COMPONENT

5.1 INTRODUCTION

Industrial

The Industrial Component was revised at the end of PY3, adjusting the program to a Best Management Practices (BMP) implementation and verification task. Industrial inspections are the focus of the City's Industrial Component with the goal being to verify the presence of BMPs, proper implementation and maintenance and check that the facility has filed a Notice of Intent and has a Storm Water Pollution Prevention Plan pursuant to the General Industrial Permit, if required.

Proper implementation and maintenance of appropriate BMPs at industrial facilities will eliminate or reduce the discharge of pollutants from an Industrial site and prevent pollutants from entering the City's storm drain system. The City redesigned the inspection sheet to emphasize the use of BMPs for specific, potential pollutant producing activities. Industrial activities either have the potential to affect storm water runoff or have no direct or apparent affect. Industrial operations conducted in a manner that prevents the discharge of pollutants or pollutant contact with storm water should not have any impact on water quality. The City's focus is on identifying those industrial activities that have an actual or potential impact on water quality, requiring implementation of appropriate BMPs and periodic inspections of industrial facilities to verify compliance with City, state and federal water quality requirements.

Outdoor industrial activities have the greatest potential to impact receiving waters through outdoor storage, loading/unloading, fueling areas, vehicle/equipment maintenance, solid/hazardous waste storage, and parking lot runoff. A Storm Water Quality Inspection form to document routine, follow-up, and compliance inspections is provided in Appendix A.

Commercial

Commercial facilities are those facilities that are designated by the County or by the City as a commercial facility with activities that may potentially affect the quality of receiving waters. In previous years, the City identified commercial facilities within its jurisdictional boundaries, and has categorized different commercial types for education, inspection and follow-up as

After the *Framework for BMP Implementation* was completed in October 2003, the Commercial Component was restructured into a BMP implementation program similar to other Existing Development (Municipal, Industrial, and Residential). Implementation, verified during onsite inspections, determines whether a BMP is either fully implemented or requires Corrective

Action. A fully implemented BMP is counted towards preventing, eliminating, or reducing pollution discharged to the maximum extent practicable (MEP).

5.2 STATIONARY IND. & COMMERCIAL SALES/SOURCES/EQUIPMENT

5.2.1 Background

In 2002, the City developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01. As part of this program, the City was required to conduct industrial and commercial storm water compliance inspections to assess the implementation of the minimum best management practices (BMP) required in the industrial and commercial section of the JURMP. On January 24, 2007, the updated Municipal Permit, Order No. R9-2007-0001 was adopted. This new Municipal Permit required each Copermittee, including the City, to update its JURMP document, including the industrial and commercial component, to comply with the new requirements.

The requirements of the new Municipal Permit went into effect in March 2008. The industrial and commercial component of the City's storm water program was conducted under the Order No. 2001-01 requirements for the first part of the 2007-2008 fiscal year and under the new Municipal Permit requirements for the latter part of the 2007-2008 fiscal year. Though the new Municipal Permit only required 50 percent of the high Treat to Water Quality (TTWQ) sites to be inspected during the first year of implementation, the City of El Cajon chose to inspect 100 percent of its inventoried high TTWQ industrial and commercial businesses. This helped the City meet an additional new Municipal Permit requirement that 20 percent of the total number of facilities on the City's inventory be inspected during the first year of program implementation. To meet the conditions of the previous permit, the City chose to inspect all industrial facilities that are covered or are known to require coverage under the General Industrial Permit (Industrial Permit). Additional details on how the City met the requirements listed above are included in Section 5.2.2 of this report.

City staff conducted inspections and also contracted a consultant to assist with routine inspections during the 2007-2008 reporting period. A total of 211 industrial and commercial facilities received site visits. A list with more detailed information of these site visits can be found in Appendix B.2.b of this report.

5.2.2 Source Characterization

The City's watershed-based inventory of all industrial and commercial facilities was reprioritized during the JURMP update in March 2008 and includes 1074 stationary commercial and industrial sites, of which 149 were recognized as being high TTWQ. Information was obtained from the City's business license listings and the California Department of Water Resources list of Permittees covered under the General Industrial Permit. The inventory will be updated annually through reviewing business license records for new businesses, performing routine

inspections and responding to reported incidents. All facilities selected for inspection in the City's JURMP document were visited or accounted for.

5.2.3 Best Management Practice Requirements

Pollution prevention for industrial and commercial facilities eliminates the management of pollution and reduces the management of pollution and ultimately leads to a cleaner, healthier watershed. Although Best Management Practices for Commercial Facilities are used as a primary mechanism for reducing commercial discharges of pollutants into regional MS4s, the educational effort to change the way businesses conduct business is the final objective. The City encourages industries to apply pollution prevention tactics, such as the BMPs listed in Table 1, below. Storm Water staff disseminate this information during inspections, letters, and enforcement actions. The following pollution prevention methods shall be considered and implemented to the MEP where applicable:

- Reduce quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
Spill Prevention, response, control, and cleanup	Prevents spills, controls spills	Oil & Grease pH	pH
Raw Material Storage	Prevents pollutants on outdoor material storage from discharging	Oil & Grease	_
Safer Alternative Products	Encourages use of less toxic materials	Pesticides Fertilizers	TDS
Good housekeeping of outdoor activity areas	Prevents pollutants from entering the storm drain	Oil & Grease	TDS

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
	system.		
Employee Training	Prevents discharges, spill response	Oil & Grease	pH Fecal Coliform
Private Sewer Lateral Maintenance	Preventive maintenance of sewer lateral prevents sewage overflows	Fecal Coliform Enterococcus Nitrates	Fecal Coliform TDS

5.2.4 Program Implementation

5.2.4.1 Priority Industrial-Commercial Sources

Industrial
Each year, industrial sites are re-prioritized to get an accurate picture of the number and types of industrial sites within the City's jurisdiction. Prioritization involves two steps: initially classifying a facility as being a high TTWQ based on site information; and subsequently confirming or reclassifying it based on field observations and additional information. The former step has been accomplished administratively using the data provided in the inventory of industrial sites. The latter step was completed following the initial inspection of each industrial facility.

Additionally, pollutants were listed with the activities associated with industrial outdoor activities to assist in the selection of the most appropriate BMPs. This initial connection of pollutants, BMPs, and activities will be used to correlate water quality with JURMP requirements in the Annual Report. Below, in Table 2, is the City's listing of activities with the potential pollutants.

Table 2 – BMPs to Pollutants for Industrial Facilities

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies depending on discharge	-
Spill Prevention Control and Cleanup – SC11	Addresses spills	Varies depending on spill	-
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	(Petroleum) Oil & Grease Metals	-
Loading/Unloading –	Controls the loading and	Varies depending on	-

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
SC30	unloading of materials	the materials Trash	
Liquid Container Storage – SC31	Controls discharges associated with outdoor liquid containers	(Petroleum) Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies depending on the waste material Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials for cleaning, disinfecting, or other functions	Pesticides Fertilizers	-
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris Sediment	TDS
Parking Lot and Storage Maintenance – SC43		Trash/debris Sediment	-
Drainage System Maintenance – SC44		Trash/debris Sediment	-
Employee Training		Trash/debris	-
Storm Drain System Signage		Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance		Fecal Coliform Debris	Fecal Coliform TDS
Over-watering of Landscape		Nitrates	TDS

"-" indicates no impact positive or negative to the Forrester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

Commercial

A majority of the City's commercial sites can be categorized as shown in Table 3. Of specific concern are those businesses located near storm water channels. Activities from the commercial sites with the associated pollutants are shown in the following table.

Table 3 – Commercial BMPs to Specific Business Produced Pollutants

Business Type → **BMP ▼**	**Restaurants**	**Automotive Establishments**	**Retail Gasoline Outlets**	**Mobile Washing Businesses**
Non-Storm Water Discharges – SC10	Organics Trash	Oil & Grease Metals	Oil & Grease Metals	Oil & Grease, Metals
Spill Prevention Control and Cleanup – SC11	Trash Oil & Grease Organics/Bacteria	Trash Oil & Grease Metals	Trash Oil & Grease	TDS Metals
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22		Trash Oil & Grease Metals		Oil & Grease Metals TDS
Loading/Unloading – SC30	Organics/Bacteria Oil & Grease	Oil & Grease	Oil & Grease	
Liquid Container Storage – SC31		Oil & Grease		
Raw Material Storage – SC32		Oil & Grease		
Waste Handling and Disposal – SC34	Organics/Bacteria Oil & Grease Trash			Trash
Building and Grounds Maintenance	Organics/Bacteria Oil & Grease Trash	Trash	Trash	
Parking Lot and Storage Maintenance – SC43	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Drainage System Maintenance – SC44	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Employee Training	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Private Sewer Lateral Maintenance	Pathogens/Fecal Coliform TDS	Fecal Coliform TDS		
Over-Watering	TDS	TDS	TDS	

5.2.4.2 Backgroud BMP Requirements and Implementation

Industrial

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of the Municipal Permit. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility. An "X" indicates the BMP is: Required by the City of El Cajon as a minimum BMP – Level 1 by the Industrial facility – Level 2 (Provided BMP information). These two levels were completed in previous permit years.

The next steps include:

- Implementation as observed during the onsite inspection – Level 3 (Verified in pervious permits years under permit 2001-001.)
- Connection to a specific Primary pollutant and any 303(d) pollutants identified for Forrester Creek to support an Effectiveness Assessment – Level 4 (Verified in pervious permits years under permit 2001-001.)

In past years the City applied "A Framework for the Implementation of Best Management Practice (BMP) Programs at Commercial and Industrial Sites" to implement BMPs at industrial sites. BMP selection and application began at JURMP development with a minimum number of BMPs. These minimum requirements were incorporated into the industrial/commercial inspection checklist.

Table 5 – Required Industrial BMPs

Required Industrial BMPs	
Non-SW Discharges - SC10	X
Spill Prevention/Control/Cleanup - SC11	X
V&E Fueling - SC20	X
V&E Cleaning - SC21	X
V&E Rep - SC22	X
Loading/Unloading - SC30	X
Liquid Container Storage - SC31	
Raw Materials Storage - SC32	X
Equip Ops - SC33	
Waste Handling/Disposal - SC34	X
Safer/Alternative Prods - SC35	
Contam/Erod Areas - SC40	
Bldg/Grounds Maintenance - SC41	X
Bldg Rep/Construction – SC42	
Prkg/StorageMaint – SC43	X
Drainage Sys Maint - SC44	X
Employee Training - SWPPP	X
Storm Drain System Signage - Permit	

Required Industrial BMPs	
Private Sewer Lateral Maintenance - City of El Cajon	X
Over-water Landscape - City of El Cajon	X

5.2.4.3 Updated BMP Requirements

Pollution prevention methods are cost-effective BMPs that eliminate or reduce the generation of pollutants at their sources. Industrial and commercial facilities produce a range of pollutants, both indoors and outdoors, that can threaten human and environmental health if washed into the storm drain system by way of urban runoff. Businesses can benefit from pollution prevention methods by reducing labor time associated with excess pollutant waste handling, thereby re-directing labor time more efficiently to production, as well as the accompanying costs of storage, disposal or treatment.

The following pollution prevention methods are considered and implemented to the MEP where applicable:

- Reduce quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct
- employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

In addition to the methods listed above, the City of El Cajon also reserves the authority to require a Storm Water Pollution Prevention Plan (SWPPP) for any Industrial or Commercial facility within its jurisdiction that discharges significant pollutants into receiving water bodies.
In addition to the pollution prevention BMPs described above, the City has also established minimum BMPs for all industrial and commercial sites. Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs, including structural and non-structural BMPs, are required of all facilities and are included in Appendix A.5 (General BMPs for Industrial/Commercial Facilities). Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs and Activity-Specific BMPs are required where applicable and are briefly listed below.

- **General BMPs**
  - Non-Structural BMPs
    Non-Structural BMPs aim to prevent pollutants from coming into contact with storm water or authorized non-storm water discharges. Many of these methods already exist as part of the standard operating procedures for a site:
    - Good housekeeping
    - Preventive maintenance
    - Material handling and storage of materials
    - Employee training
    - Solid waste (non-hazardous) handling and recycling
    - Record keeping
    - Self inspection/quality assurance
    - Spill response
  - Structural BMPs
    Structural BMPs consist of specialized equipment, structural components, or engineered technologies that can be used when non-structural BMPs are ineffective. Structural BMPs are site specific; therefore the facility operator needs to evaluate each proposed use. Proper installation and regular maintenance of structural BMPs are imperative to their effectiveness. Examples are as follows:
    - Overhead coverage of outdoor work areas or chemical storage.
    - Retention ponds, basins, or surface impoundments that confine storm water to the site.
    - Berms and concrete swales or channels that divert run-on and runoff away from pollutant sources.
    - Secondary containment structures.
    - Treatment controls, e.g., infiltration devices and oil/water separators, to reduce pollutants in storm water or authorized non-storm water discharges.

- **Activity-Specific BMPs**
  Appropriate BMPs will depend on the type of activities, pollutants, and potential source of pollutants. The BMP requirements for the following activities and areas are relatively common at industrial and commercial sites and required by the City.

  - Hazardous materials storage (incl. tanks)
  - Solid waste storage
  - Loading/unloading
  - Fueling
  - Wastewater treatment
  - Landscaping/ grounds keeping
  - Vehicle maintenance
  - Parking lots
  - Process water pre-treatment
  - Equipment storage
  - Washing of Equipment/Vehicles
  - Rooftops

5.2.4.4 Additional Controls for Ind. & Commercial Sites/Sources

Forrester Creek, which flows through the City, is 303(d) listed for fecal coliform, low dissolved oxygen, phosphorus, and TDS. The City has not identified any industrial or commercial facilities that are likely to be significant sources of fecal coliform or TDS. As a proactive measure, however, the City has assigned higher priorities to concrete and stone cutting businesses, as they may contribute to elevated TDS levels. Similarly, the City assigned higher priorities to animal-related businesses, which may be sources of fecal coliform if animal waste is not disposed of properly. The City also assigned higher priorities to commercial businesses associated with fertilizer use (i.e. nurseries, greenhouses, etc.) since low dissolved oxygen and elevated phosphorus levels are commonly associated improper fertilizer use and/or storage.
As mentioned in Section 1 of this document, the City has chosen to designate major channels within the City as ESAs. Major channels within the City are typically concrete, and hold no significant environmental value, however. The City has chosen to designate these areas as ESAs as a proactive measure to protect downstream water quality. During inspections of businesses that drain to 303(d) listed receiving waters or other ESAs, the City will conduct more detailed investigations into whether the businesses are potential sources of the pollutants of concern or may otherwise negatively impact the ESA. If a business is believed to be a significant source of key pollutants and the standard BMPs listed above are not adequate, the City will require additional BMPs so that discharges of the key pollutants of concern will be reduced to the MEP.

5.2.4.5 Sites Selected for Inspection

As previously mentioned, to meet the requirements of both the previous permit and the new Municipal Permit, the City decided to inspect all high TTWQ industrial and commercial facilities. The City also selected 62 additional sites to meet the Municipal Permit requirement that 20% of the City's inventory receive inspections during the first year of program implementation. Those additional sites were mainly chosen from the medium TTWQ inventory and were selected largely based on perceived potential for having relatively significant outdoor exposure. The overall TTWQ prioritization process is based on a number of factors including, but not limited to, history non-compliance with storm water regulations, whether or not the facility has significant outdoor exposure of storage or activities, distance to receiving water body, total area of the site, and whether the business is required to obtain coverage under the Industrial Permit. The TTWQ prioritization process is described in more detail in the City's JURMP document.

A total of 237 sites were selected for inspection. The City chose to conduct inspections of a number of facilities with General Industrial Permit (Industrial Permit) coverage, and the consultant inspected not all of the sites listed in the table below. A summary of the facilities visited by both the City and consultant is listed in Table 6, below, a detailed description of the inspections conducted are included in Appendix B.2.b of this report. The sites selected for inspection include at least 20% of the City's industrial and commercial inventory and at 100% of the City's high TTWQ industrial and commercial facilities.

Based on experience, the inspection process for industrial and commercial facilities is often more efficient when appointments are not scheduled. This allows inspectors to inspect neighboring businesses rather than driving longer distances from business to business to meet scheduled appointments; it also eliminates time spent on the phone scheduling. In general, scheduling is conducted for industrial facilities that have or are required to have Industrial Permit coverage so that the proper facility personnel can be present for the inspection and materials such as SWPPPs and monitoring plans are located and easily accessible for review when the inspector arrives.

Inspectors were able to visit 26 additional sites in the City. A total of 237 facilities received site visits during the 2007-2008-inspection program.

TABLE 6 - SUMMARY OF BUSINESSES SELECTED FOR INSPECTION

Facility Category	Initial List	Percentage of Total Inventory
High TTWQ Industrial	43	4%
High TTWQ Commercial	106	10%
Other sites initially selected for inspection	62	6%
Additional sites selected and visited after accounting for all initially selected sites	26	3%
Stationary Inventoried Sites Visited or Accounted For*	**237**	**23%**

* "Accounted For" means that the business was inspected, visited and found to not need an inspection, or found to not need an inspection when called to schedule a site visit.

5.2.4.6 Industrial Inspections

As detailed in the City's JURMP, a total of 69 industrial facilities were selected for inspection, 43 of which were designated as high TTWQ. The City inspected 24 of these industrial facilities. One of these facilities, Solo Cup Company, was listed under an additional name on the City's inventory, AJM Packaging Corporation; AJM Packaging Corporation was removed from the City's inventories. Of the remaining 45 industrial facilities selected for inspection, two facilities, Cajon Valley School District and Grossmont Union High School District, were not visited because each facility is subject to the new Phase II storm water permit regulations and is therefore not in the City's jurisdiction. The remaining 43 industrial facilities selected for inspections were visited. During the course of these inspections one facility was moved to the commercial inventory, 11 businesses were moved from the commercial inventory to the industrial inventory, and eight previously unassigned businesses were added to the industrial inventory. Therefore, a total of 61 industrial facilities received site visits. A breakdown of the industrial site visits is included below:

- 37 businesses received full inspections
- 14 businesses were found to have moved out of the City
- 7 were businesses located out of the City's jurisdiction
- 3 were found to be conducting activities for which they should not be included on the City's inventory

At each of the inspected sites, an inspection form was completed to document the result of the site visit, and that data was entered into the inspection database to ensure an accurate inventory. As part of the inspection process, the assigned SIC code(s) were assessed to determine if they appropriately described the businesses' activities and threats to water quality.

In addition to looking at general BMP implementation and SIC code(s), Industrial Permit compliance status was evaluated. There were several cases of Industrial Permit-related non-compliance noted during the 2007-2008 inspection program. Industrial Permit-related non-compliance noted at the industrial facilities is discussed below, and table in Appendix A.5 entitled "General Industrial Permit Compliance Status" summarizes all Industrial Permit-related non-compliance.

Seven businesses were found to require coverage under the Industrial Permit but had not yet filed a Notices of Intent (NOI):

> **Curb and Vent Mfg., Inc.**, **East County Metal Supply**, **Fatboy Fiberglass and Welding**, **G Marble and Granite Company**, **L&S Fabricators DBA Fabcom**, **Lite Stone Concrete**, and **Russo Tile and Marble Inc.**

These businesses were all directed to file an NOI and develop a SWPPP and monitoring program. The City will conduct follow up to assure compliance with these Industrial Permit requirements.

5.2.4.7 Commercial Inspections

As detailed in the City's JURMP, a total of 142 commercial facilities were selected for inspection. During the course of inspections, five businesses were moved from the commercial inventory to the industrial inventory, 11 businesses were moved from the industrial inventory to the commercial inventory, and 12 previously unassigned businesses were added to the commercial inventory. As previously mentioned, D-MAX conducted additional commercial inspections for the City and 19 commercial facilities not previously selected for inspection were visited. Therefore, 179 commercial facilities were visited by D-MAX. One of these sites, Pastuer Cafe, was visited on a number of occasions but was closed for remodeling. A breakdown of the remaining 178 site visits is included below:

- 123 businesses received full inspections
- 32 businesses were found to have moved from the City
- Seven businesses were found to be outside the City's jurisdiction
- Six businesses could not be contacted
- Five businesses were found to be conducting activities for which they should not be included on the City's inventory
- Three businesses were found to be mobile and no aspects of the business were available for inspection
- Two facilities were found to be duplicates of other facilities on the City's inventory

At each site that received a site visit, whether it was a full or partial inspection an inspection form was completed to document the result of the site visit. The Industrial and Commercial Database has been updated to reflect information obtained during the inspection program.

Assigned SIC code(s) were assessed to determine if they appropriately described the businesses' activity; and changes were made accordingly.

5.2.4.8 Compliance and Enforcement

The follow-up priority classification section on the inspection form was designed to classify the level of necessity to perform a follow-up inspection at the facility. "Priority 1" follow-ups are given to facilities for which an active illicit connection or illegal discharge was observed. In these cases City's storm water personnel immediately instructed discharger to stop the discharge and an administrative citation was issued. "Priority 2" follow-ups typically have serious BMP-related issues. "Priority 3" follow-ups are given to facilities for which relatively minor BMP-related issues were observed.

A total of 20 businesses, 2% of the facilities inspected, were found to be "Priority 1" or "Priority 2". Follow up inspections were scheduled and, whenever possible, investigations were conducted immediately.

As specified in the City Ordinance, the City is able to use various warnings and actions to correct a facility/activity and enforce the JURMP. For PY1, the City further coordinated and partnered with industry to implement and enforce the requirements of the JURMP and City Municipal Code. Enforcement generally is initiated with a verbal warning and followed up by a written warning. Enforcement using Administrative Citations was incorporated in May 2003. Appendix A.5 lists criteria for issuing Citations, document entitled "Storm Water Administrative Citation Program Criteria" and Appendix B.3 shows the list of enforcement actions taken by the City in PY2007-08.

5.2.4.9 Education

During inspections, business representatives were educated regarding storm water issues both through verbal interaction with the inspectors, and the distribution of printed storm water educational materials, when appropriate. In particular, the utilization of verbal interaction is extremely influential because it is individually tailored by the inspector to the specific issues and concerns of the facility and the facility representative. It prompts the facility representative to think about issues directly related to his or her daily actions as it applies to business activities. The inspector was able to provide information specific to the facility, which is beneficial to the facility representative due to the site-specific information. This information can help give the facility representative the proper tools to implement BMPs applicable to their business.

Printed educational materials were also distributed to businesses during inspections unless the facility representative declined to receive them. In addition to the educational materials distributed during inspections, the City sent a letter notifying each business selected for inspection of the upcoming inspection and instructing them that they were required to implement the corrective actions recommended by the inspector. Educational materials distributed included storm water posters specifically designed for automotive and restaurant activities. Also provided, when necessary, were NONA/NEC paperwork and NOI paperwork. Each have a separate cover sheet with instructions on how to file, and contacts in case any questions arise. A summary of the types and numbers of educational materials distributed is presented below. In some cases, educational material was not applicable to the business activity and was therefore not provided.

TABLE 7
EDUCATIONAL MATERIALS DISTRIBUTED

Educational Material	Number Distributed
Restaurant Poster	53
Automotive Poster	20
NOI handout	5
NONA/NEC Paperwork	2
Inspection Notification Letter	211

5.2.5 Stationary Ind. & Commercial Sites/Sources Effectiveness Assessment

5.2.5.1 Common BMP Implementation Deficiencies

Most BMP-related deficiencies observed during the inspection process were minor. Some of the more common issues include uncontained litter, debris, and sediment around the site and in the parking lot and dumpster area. Another common BMP deficiency included open dumpsters, which were often times due to the dumpster lids being pinned against the enclosure by the waste disposal company or dumpsters lacking lids. The most common issues for restaurants were poorly maintained dumpster and grease recycling areas.

5.2.5.2 SIC Code Changes

Changes of SIC code(s) were recommended for a total of 69 inspected facilities during the 2007-2008 inspection program. SIC codes are often assigned when a business applies for a business license, and sometimes can be incorrect due to insufficient information about specific business activities. Inspected businesses not included in the City's JURMP inventory were also assigned SIC code(s) to best reflect business activity. In many cases, changes in SIC code(s) were made to reflect changes in business activities. Appendix A.5 presents a table entitled "List of High Priority Industrial-Commercial Facilities" that lists these facilities.

5.2.5.3 BMP and Storm Water Knowledge Assessment

Each facility that received a full inspection was assigned a rating to reflect the level of BMP implementation noted at the site and a separate rating to reflect the facility manager/responsible party's level of storm water knowledge.

The knowledge assessment ratings were designed to gauge knowledge of storm water pollution prevention and implementation of effective BMPs; they were assigned based on how many of the following questions were answered correctly:

- *What is storm water?*
- *What is the difference between the storm drain system and the sanitary sewer system?*
- *Where does storm water flow?*
- *Is storm water treated prior to discharge?*
- *What are examples of pollutants?*
- *Is sediment a pollutant?*
- *Do you know what good house keeping or best management practices are?*
- *Do you know what NPDES is or means?*

Individuals who answered all of the aforementioned questions correctly and demonstrated an in-depth knowledge of storm water pollution prevention measures and the NPDES Storm Water Program were rated "Level 5". Individuals who answered four or more of the aforementioned questions correctly, and had a strong basic understanding of storm water pollution prevention but did not know or understand what the NPDES Storm Water Program was received a "Level 4" rating. A "Level 3" rating indicated an individual who answered three questions correctly, "Level 2" indicated one or two correctly answered questions, and a "Level 1" rating indicated that the individual was not able to answer any of the questions correctly.
At the conclusion of each inspection, the inspector evaluated his or her notes and corrective actions and assigned each facility a BMP assessment rating. The following provides a breakdown of how BMP assessment ratings were designated:

- "Level 5": All required general and activity specific BMPs had been implemented effectively. If available, monitoring results indicated that all constituents sampled were below established benchmarks.
- "Level 4": BMPs had been implemented effectively but the dumpster lid was observed open and/or oil stains were noted in the general parking lot not associated with the business' activities. If available, the monitoring data indicated that one or two constituents were slightly above the established benchmarks.
- "Level 3": BMPs had been implemented with the exception of two corrective actions noted, aside from dumpster lids being open or oil stains in the general parking lot. If available, monitoring data indicated that one constituent consistently exceeded the established benchmarks.
- "Level 2": Minimal BMP implementation was in place. Three or more corrective actions were noted, with the exception of dumpster lids being open or oil stains in the general parking lot. No illegal discharge or illicit connection was noted. If available, monitoring data showed concentrations of two or more constituents well above the established benchmarks.
- "Level 1": A violation of one or more of the City's Storm Water Ordinances (illegal discharge, illicit connection, failure to properly implement required BMPs) was noted. BMP implementation was poor.

Table 8, below, provides a statistical summary of BMP and knowledge assessments during the 2007-2008 inspection program. Figure 2, at the end of this report, shows the ESAs in the City as well as a distribution of BMP assessment scores assigned during the inspection program.

TABLE 8
STATISTICAL SUMMARY OF KNOWLEDGE AND BMP ASSESSMENT SCORES

Overall Program Scores	**Knowledge Assessment**	**BMP Assessment**
AVERAGE Rating	**2**	**3**
MEDIAN Rating	**1.5**	**3**
# of "Level 1" Ratings	80	20
# of "Level 2" Ratings	25	11
# of "Level 3" Ratings	34	81
# of "Level 4" Ratings	21	36
# of "Level 5" Ratings	0	12

Graphs 5-1 and 5-2 display relative score frequencies for BMP implementation and storm water knowledge from this inspection program. Graph 5-1 shows that the bulk of facilities inspected in 2007-2008 tend to have BMP scores distributed around the peak at 3, with the average BMP implementation score being 3. Graph 5-2 shows the average and median scores for the storm water knowledge assessment, 2 and 1.5, respectively, for the 2007-2008 year. The relative BMP implementation and knowledge score frequencies for each facility type, industrial and commercial, for 2007-2008 are displayed in Graphs 5-3 and 5-4, respectively. In future years, when more data is available, knowledge and BMP assessment scores may be analyzed to illustrate any trends in the data.

GRAPH 5-1
BMP IMPLEMENTATION SCORE FREQUENCY FOR 2007-2008

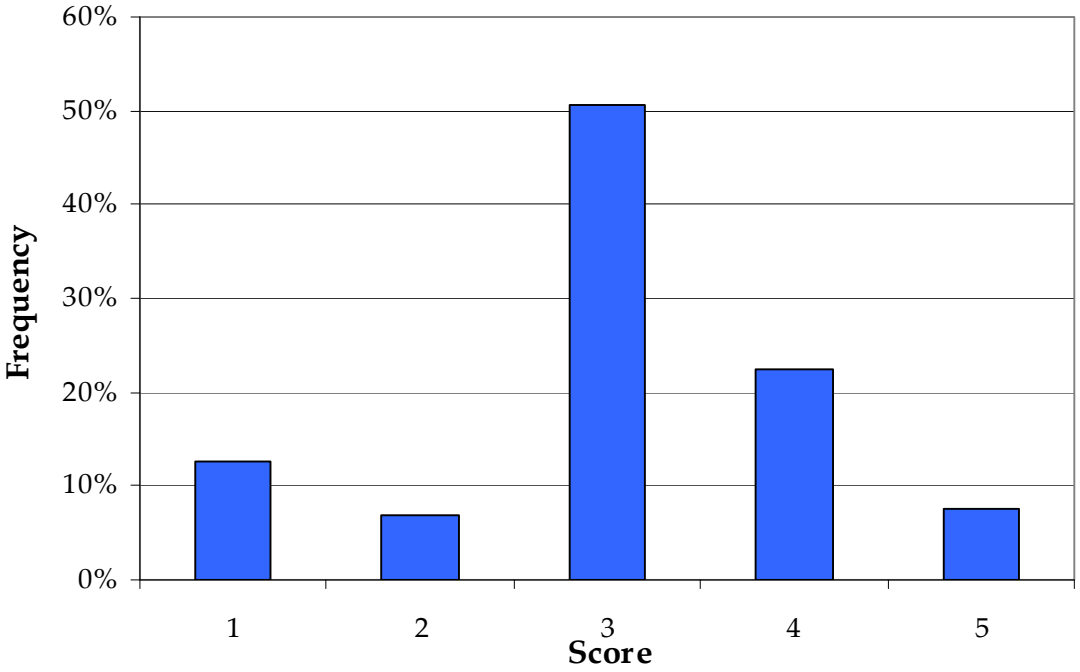

GRAPH 5-2
KNOWLEDGE ASSESSMENT SCORE FREQUENCY FOR 2007-2008

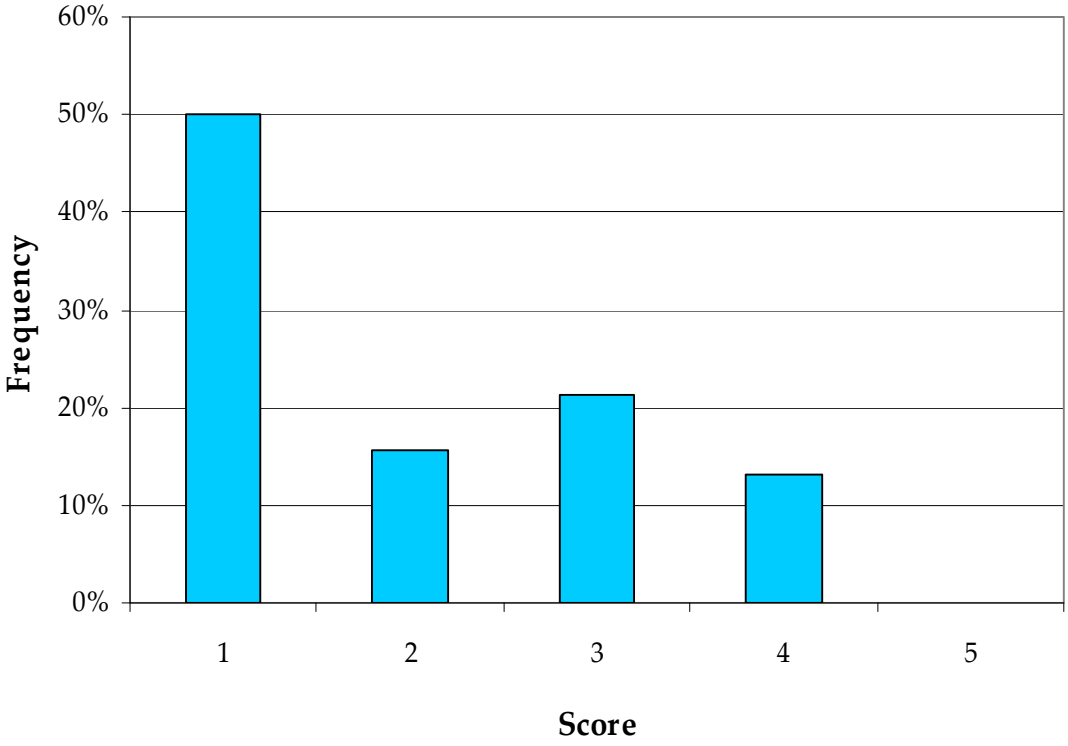

GRAPH 5-3
BREAKDOWN OF BMP ASSESSMENT SCORES BY FACILITY TYPE FOR 2007-2008

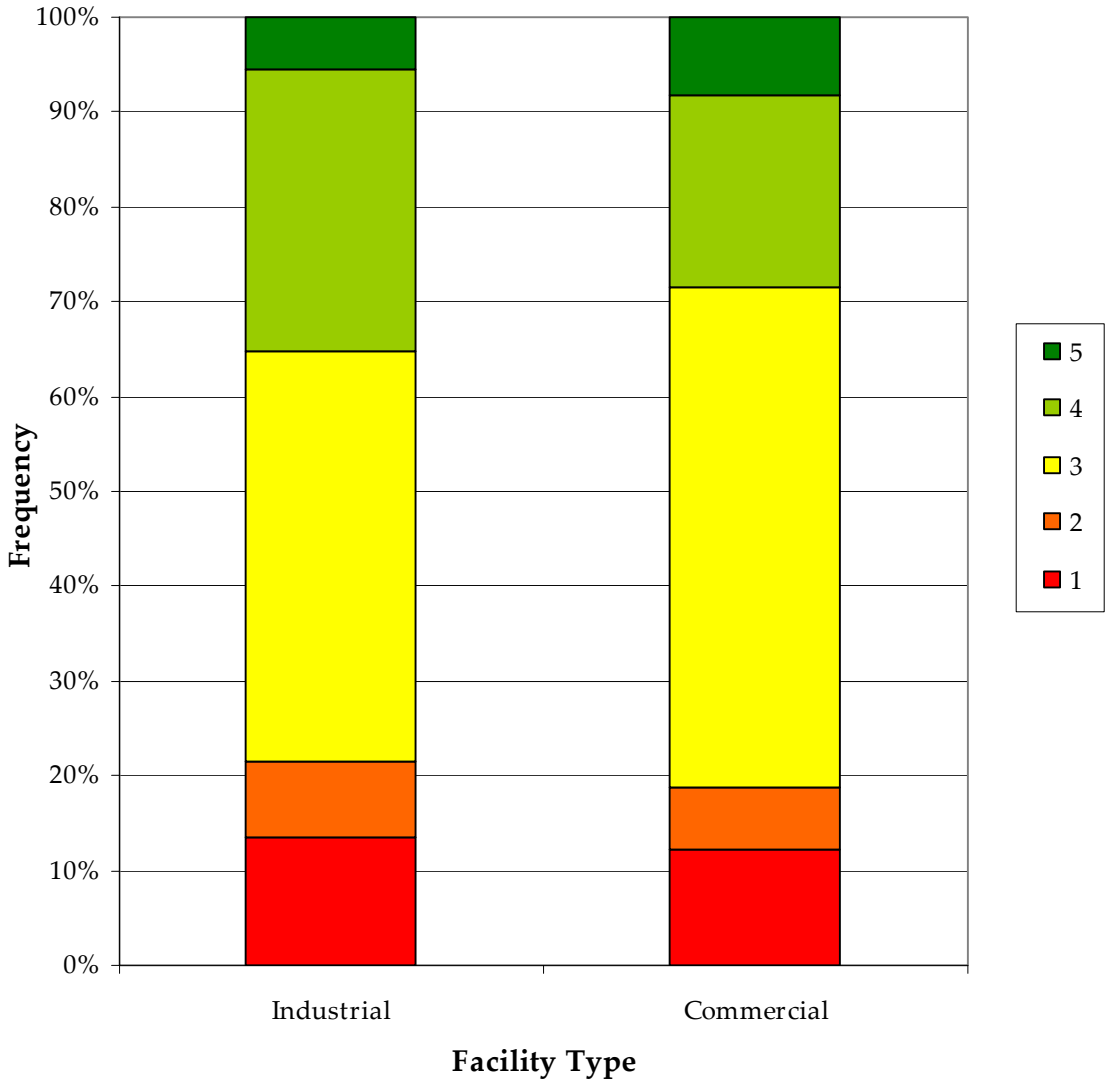

GRAPH 5-4
BREAKDOWN OF STORM WATER KNOWLEDGE ASSESSMENT SCORES BY FACILITY TYPE FOR 2007-2008

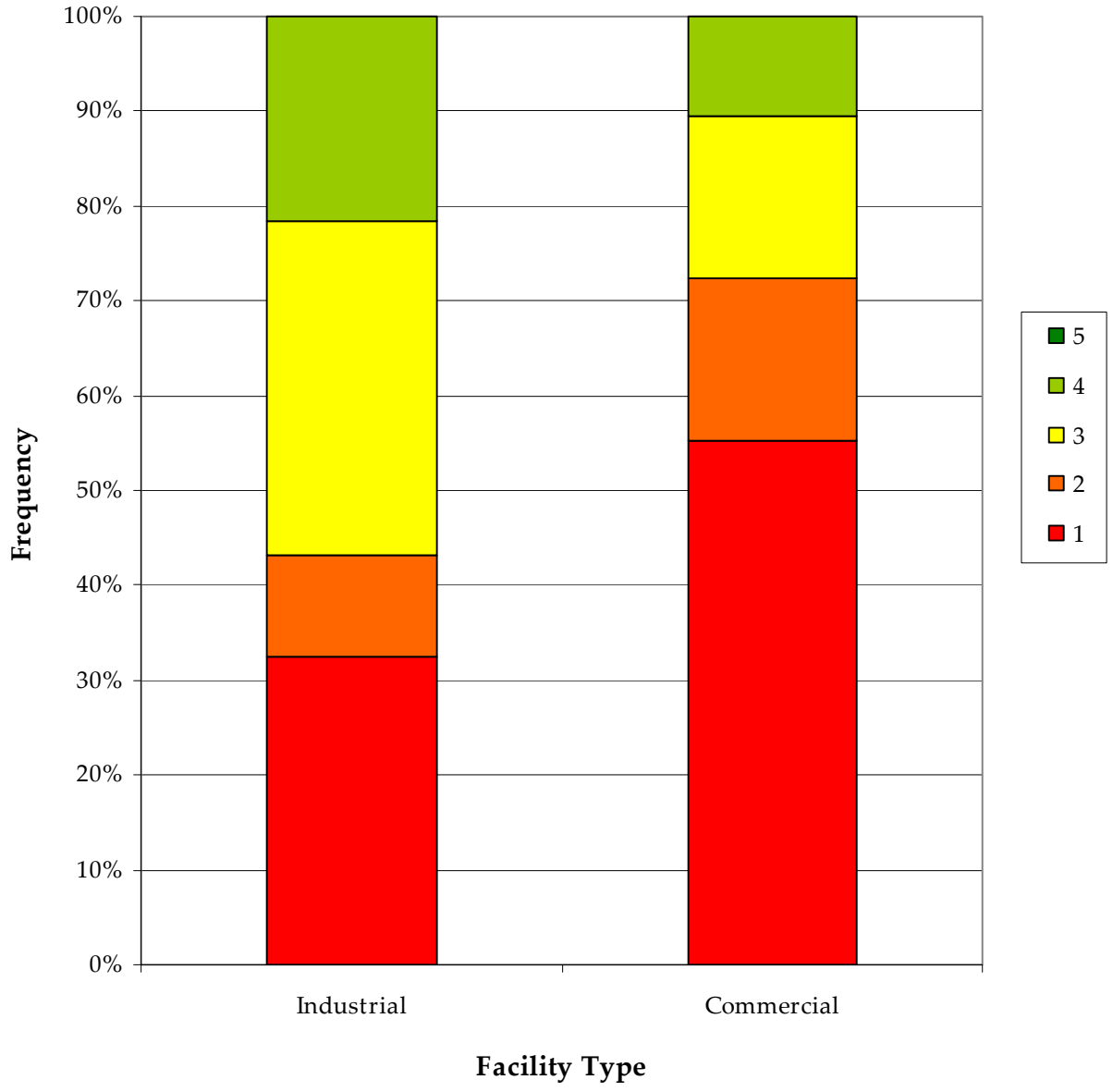

5.3 MOBILE SOURCES ELEMENT

5.3.1 Background

Illegal discharges tend to be the major area of concern with mobile businesses. Due to the nature of their activities, mobile businesses are regulated somewhat differently than other businesses. Mobile businesses can be difficult to identify because many do not have City business licenses. Additionally, new mobile businesses are started and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed above and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 Source Characterization

The mobile businesses known to operate within the City's jurisdiction are noted on the City's commercial inventory. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Pest control services
- Mobile carpet, drape or furniture cleaning
- Mobile construction trades
  - Painting and coating
  - Cement mixing or cutting
  - Masonry
  - Other contractors
- Landscaping
- Pool and fountain cleaning
- Power washing services

Because not all mobile businesses have obtained business licenses in the City or have a base of operations in the City, the City expects that a continual process of refining and updating its inventory will be needed. Sources for such inventory updates will include reported incidents, general observations by City staff, and available business licenses. The City intends to participate if and when a regional inventory and/or tracking system for mobile businesses is developed.

5.3.3 Best Management Practice Requirements

5.3.3.1 Updated BMP Requirements

All BMPs required for stationary sources; listed in Section 5.2.4.1, 5.2.4.2, and 5.2.4.3 of this report; are also required for mobile business where applicable. The most important BMPs for most mobile businesses typically involve non-Storm water discharge control and spill prevention, control, and cleanup.

5.3.3.2 Additional Controls for Mobile Sources

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. Aside from washing, cleaning, or other activities that may cause illegal discharges, mobile businesses are not likely to conduct activities that produce significant pollutant discharges. If in the future the City finds that even in the absence of illegal discharges the activities of mobile businesses are contributing pollutants of concern to a CWA section 303(d) impaired water body segments or are negatively impacting ESAs, additional controls will be required for those activities. Further, if the City has reason to believe that mobile businesses are generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more regularly visit those areas and/or take other actions to address the illegal discharges.

5.3.4 Education and Outreach

The City of El Cajon provides information and outreach regarding storm water quality to mobile business owners and operators. Businesses are given educational materials outlining pollution prevention methods and other BMPs related to their activities prior to issuance of a business license and during inspections. Inspectors also give recommendations to businesses, where appropriate. Because a specific element of the industrial and commercial program is being newly developed for this revised JURMP, it is anticipated that some mobile businesses are not aware of storm water requirements and that education will need to be a significant portion of the program. The educational program is described in more detail in Section 8 of this report.

5.3.4.1 Owner/ Operator Notifications

As indicated in the City of El Cajon updated JURMP, the City is working towards notifying the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three years of implementation of the updated JURMP.

5.3.4.2 Inter-Jurisdictional Cooperation

As of the writing of this report, an inter-jurisdictional program for the regulation of mobile businesses is under development but has not been finalized. It is likely that such a program will be developed and in place in the future, and the City plans to participate in that program. The program may include creation of a regional inventory of mobile businesses, standardization of BMP requirements across jurisdictions, sharing of enforcement action information, and/or the development and distribution of standardized educational materials.

5.3.4.3 Staff Training

Staff responsible for conducting storm water compliance inspections and enforcement of mobile sources is trained on inspection and enforcement procedures and BMP implementation as they relate to mobile businesses. City staff is also be encouraged to be vigilant for illegal discharges from mobile businesses when working in the City and to report businesses that are not in compliance to the storm water hotline.

5.3.4.4 Inspections

Mobile sites/sources are inspected by the City on as needed basis. The most common triggers for these inspections are anticipated to be receipts of incident reports and direct visual observations by City staff. The inspections will generally follow the same procedure as stationary facilities, described in Section 7.2.4.4 of the updated JURMP, although the main focus of most mobile business inspections will be on discharge control BMPs.

5.3.4.5 Enforcement

Most violations associated with mobile businesses have been historically attributed to illegal discharges. The City's enforcement approach to such discharges will require the discharge to be stopped and cleanup of discharged materials when applicable and feasible. Education is also provided to operators who are not aware of the City's storm water requirements. Businesses that do not possess the materials necessary to implement the required BMPs are required to demonstrate to the City that they have obtained such materials and can properly use them before the City allows such businesses to resume operations in the City. Mobile businesses that do not have City business licenses are required to obtain licenses. A detailed list of all enforcement actions taken by the City is included at Appendix B.3 of this report.

5.4 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements from PY1 experience includes:

- Review dry weather monitoring and BMP implementation results to prioritize future commercial inspections.

- Continue to stock several portfolios of storm water information for staff to distribute businesses during annual inspections and to provide the public during business license applicant requests for information on new applications or renewals.

No regulatory comments have been received for the Commercial and Industrial Component of the 2006/2007 Annual Report.

SECTION 6 RESIDENTIAL COMPONENT

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SECTION 6 RESIDENTIAL COMPONENT

INTRODUCTION

Pollution prevention is the focus of the JURMP Residential Component to prevent pollutants from residential activities from entering the storm drain system. Education is the best approach to implementing this component of the JURMP as the goal is to change behavior and perceptions. The City is successful in implementing the collection of household wastes and promoting used oil recycling. Each pound of household waste and used oil collected equates to one pound less of waste/pollutants that could be disposed improperly and pollutants enter the storm drain system.

6.1 PREVENTION OF POLLUTED RUNOFF

Preventing pollution is easier and less costly than treating wastes at the end of the pipe. The following pollution prevention BMPs are sent to residents via brochures in sewer billings and during face-to-face contact when a complaint or referral is investigated.

- Conduct automobile repair and maintenance under cover or with drip pans; recycle oil.
- Divert automobile wash liquids to landscaping.
- Store unused automobiles under cover; use absorbent pads or drip pans for leakage.
- Maintain garden and yard using natural remedies and drought-tolerant plants.
- Use less toxic products for home care/maintenance.
- Dechlorinate swimming pool water before releasing.
- Dispose of pet waste in the trash.
- Don't use the street as your storage area for dirt, mulch, landscaping plants.
- The street is not a disposal area for concrete or paint washout, or hosing off driveway.

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutants Prevented	Prevention of 303(d) pollutant
Composting	Reduces the amount of waste in the trash	Organics	
Use of a Professional Car Wash	Eliminates dirty, soapy water from the storm drain	Metals Detergents	**TDS**
Organic gardening	Eliminates fertilizers and pesticides	Nutrients Pesticides	**TDS**
Take a bag when walking the dog.	Eliminates dog waste from the Public Right of Way	Fecal Coliform Enterococcus Nitrates	**Fecal Coliform** **TDS**

6.2 PRIORITY RESIDENTIAL SOURCES

Residential areas discharging directly to a major storm drain channel are the focus for pollution sources. Priority sources are directly related to 303(d) pollutants identified in Forrester Creek and the San Diego River. The following table connects sources with 303(d) pollutants. These same 303(d) pollutants are used in Section 11, Program Effectiveness Assessment to estimate the potential amounts of pollutant eliminated through prevention, intervention, and other BMP implementation.

6.3 BMP REQUIREMENTS

In addition to the pollution prevention BMPs, above, the following are encouraged in residential areas. Home improvement projects can cause side affects, like mud flowing into the street (see picture to the right). However, with an effective combination of BMPs applied to the maximum extent practicable, simple home projects can meet the City's BMP implementation requirements without much effort or expense.

Table 2 connects the use of BMPs with the prevention, reduction, or elimination of pollutants.

Table 2 – BMP to Pollutants for Residential Areas

BMP	Application	Primary Pollutants	303(d) Pollutants
Automobile Repair & Maintenance	Use Drip Pans Recycle Oil	Oil & Grease	
Automobile Washing	Use Commercial Car Wash	Metals Detergents	**TDS**
Automobile Parking	Use Drip Pans	Oil & Grease	
Garden and Yard Care	Compost or recycle waste	Organic Material	**TDS**
Home Care and Maintenance	Use Household Hazardous Waste Programs	Metals Toxic Substances	
Pet Waste Disposal	Take a bag when walking the dog	Fecal Coliform	**Fecal Coliform**
Private Lateral Maintenance*	Clean lateral every few years	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**
RV Parking & Maintenance	Use a legal dump station	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**

Some changes in behavior are noticed, but although the message has been out there for several years, it is still new to many citizens. The Clean Community; Healthy Watershed, and Healthy Garden; Healthy Home (Integrated Pest Management) concepts will be continuing messages for subsequent permit years.

6.4 BMP IMPLEMENTATION

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of Permit Section 6.3, BMP Implementation. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility.

The list of minimum BMPs for residential areas tracks along with pollution prevention concepts. Understanding through education is the basis for changing behavior in the residential community. By changing the way the residential community completes tasks around the home, benefits to water quality will be realized through wet weather monitoring. The common major routes for educating the citizens and disseminating information is through newsletters, sewer billing inserts, and City "drive-abouts" where information is delivered directly to target audiences.

The following BMPs are provided to citizens through one-on-one visits, newsletters, sewer billing inserts and citizen complaints/referrals. Copies of brochures, newsletter articles, and flyers are included in Appendix A.6.

- Automotive Repair
- Car Washing
- How You Can Prevent Pollution from Entering the Storm Drain System
- Mobile Detailer BMPs
- PowerWashing
- Clean up After Your Pets
- Lawn and Garden Care
- Keeping Our Environment Clean!
- Over-Irrigation Can Cause Storm Water Pollution
- Washing Your Car
- What's the Problem with Pet Waste
- Keeping Our Yards and Our Storm Water Clean
- Trash and Street Sweeping Update
- Trash in Our Strom Drains
- Maintaining your Private Sewer Lateral
- Everything that goes into Our Storm Drains…Ends up in the Ocean
- Why It's Important to Keep Trash, Sediment and Debris Out of Storm Drains
- Pool Maintenance BMPs
- Creating Community by Keeping Our Storm Water Clean

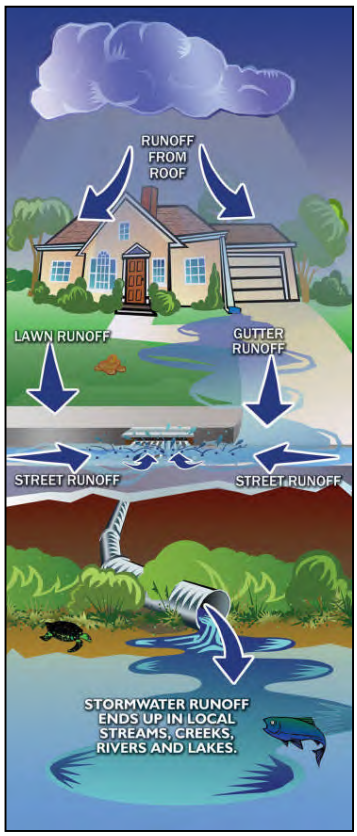

Table 5 - Required BMPs for Residential Areas

		Automobile Repair Maintenance	Automobile Washing	Automobile Parking	Garden & Yard Care	Home Care & Maintenance	Pet Waste Disposal	Private Lateral Maintenance	RV Parking & Maintenance
RESIDENTIAL	Vehicles & Equipment	X	X	X					X
	Home and Garden				X	X	X	X	
	Pets						X		
	Private Sewer Lateral					X		X	

Minimum required BMPs for the Residential Component are grouped into four (4) basic categories as shown in Table 5. It is only through consistent, simple messages, will the citizens start to implement the BMP identified for the activities around their homes.

An area where Storm Water staff are collaborating with the police department is RV Parking and Maintenance. Police Department staff assist Storm Water staff in locating areas where dumping is occurring. The resulting outreach effort should help East County residents to reduce the number of illegal dumping events within this region of the watershed.

As illustrated above, over-watering from many different homeowners' landscaping can have an impact on the landscaping and may result in a significant source of water in the street. What seems of little importance from one home combines with runoff from other homes forming small rivers that can move materials stored in the right-of-way or pollutants illegally discharged. Homeowners are encouraged to save water and money by adjusting sprinkler heads to reduce or eliminate overspray. When over-watering is discovered, an attempt is made to contact the responsible party. Door hangers are left with instructions when homeowners are not home. Staff schedule a return date to discuss the measures that can be taken by homeowners. When over-watering discharges decrease, there is a reduction of:

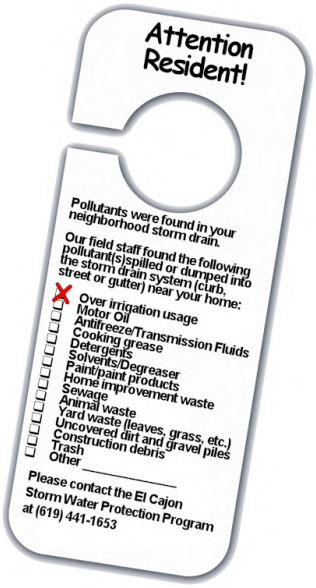

- the amount of water discharged to Forrester Creek
- the amount of pollutants transported to Forrester Creek during "No Rain" days

Improvement in decreasing over-watering will be measured by the amount of Forrester Creek flow leaving the City of El Cajon at the jurisdictional boundary to Santee. Flows measured during the dry weather program are an indication of daily flows. The PY2007-08 dry weather flow into Santee was measured at 234 gallons per minute, as measured at Dry Weather Station No. 5. Overall flows have been on the decrease in all permit years since PY2004-05, inclusive, and may indicate that outreach and education efforts that discourage over-irrigation are becoming effective. Additional flow measurements may be taken during the next annual cycle. The full Forrester Creek Study is contained in Appendix A.12.

6.4.1 Outreach to Residents

The City used various types of educational materials to distribute information and discuss the JURMP requirements with residents when responding to complaints or investigating a discharge. Brochures were provided to residents during face-to-face discussions concerning complaints and referrals. The City newsletter has included five articles concerning routine activities where receiving waters may be impacted by pollutants. The newsletter is freely available for residents

and industrial/commercial business owners on a semi-annual basis. Two such printings were completed in PY1 and covered the following activities for residents:

- Residential Repair, Restoration and Remodeling BMPs
- Pet Pollution Can Be a Serious Problem
- What Is Storm Water Runoff?
- Residential Solutions to Storm Water Pollution, and
- Auto Care, Pet Waste, and Parking Lot and Trash Storage Area BMPs

The City printed and distributed 38,000 copies, each, of the spring and fall newsletters with five articles in total contained in both newsletters. As a result, residents are becoming more aware. An indication of this awareness is the increase in the number of complaints and referrals from the private sector. As the public and municipal staff gains more knowledge and awareness of urban runoff, additional increases in complaints and referrals are expected. Education of staff and residents is productive.

6.4.2 Recycling and Waste Collection Services

Keeping household wastes out of the storm drain system requires the implementation of a coordinated pickup program with a licensed facility to handle the wastes according to appropriate State and Local regulations. The City uses Waste Management to schedule routine and requested pickups for household wastes. Figures 1, 2, 3, and 4 show the total amount of household wastes, the type of wastes collected, recycled materials from curbside pickup (commercial and residential) and total amount of waste collected. There was 24 Household Hazardous Waste, Electronic Waste and Universal Waste Collection Event where a total of 3,181 participants dropped off over 209,813 pounds of materials. A total of 268,923 pounds of household hazardous waste was collected (Figure 1). Figure 2 shows the percentages of material types taken to the collection events.

A total of 91,659 tons of wastes were collected from residential, commercial and industrial areas (Figure 3). A total of 13,205 tons of materials were recycled from the curbside-recycling program, this program only includes residential areas.

Figure 1 – Household Hazardous Waste Collection

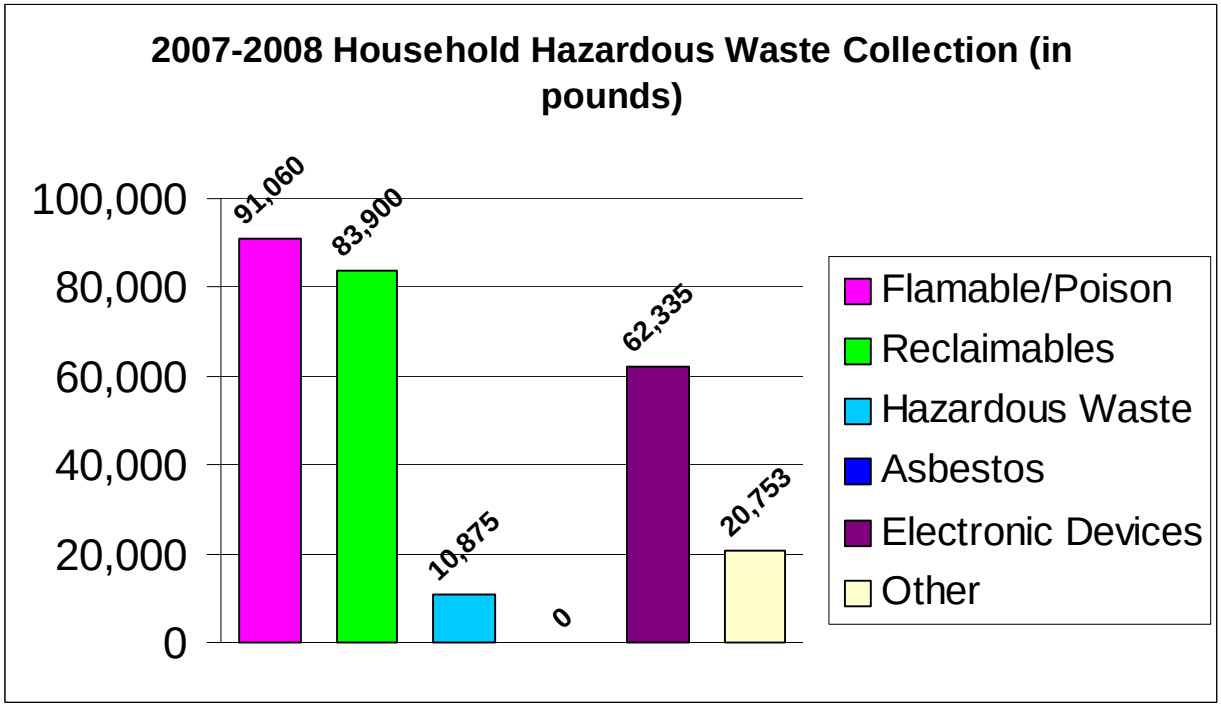

Figure 2 Percentages of HHW Type

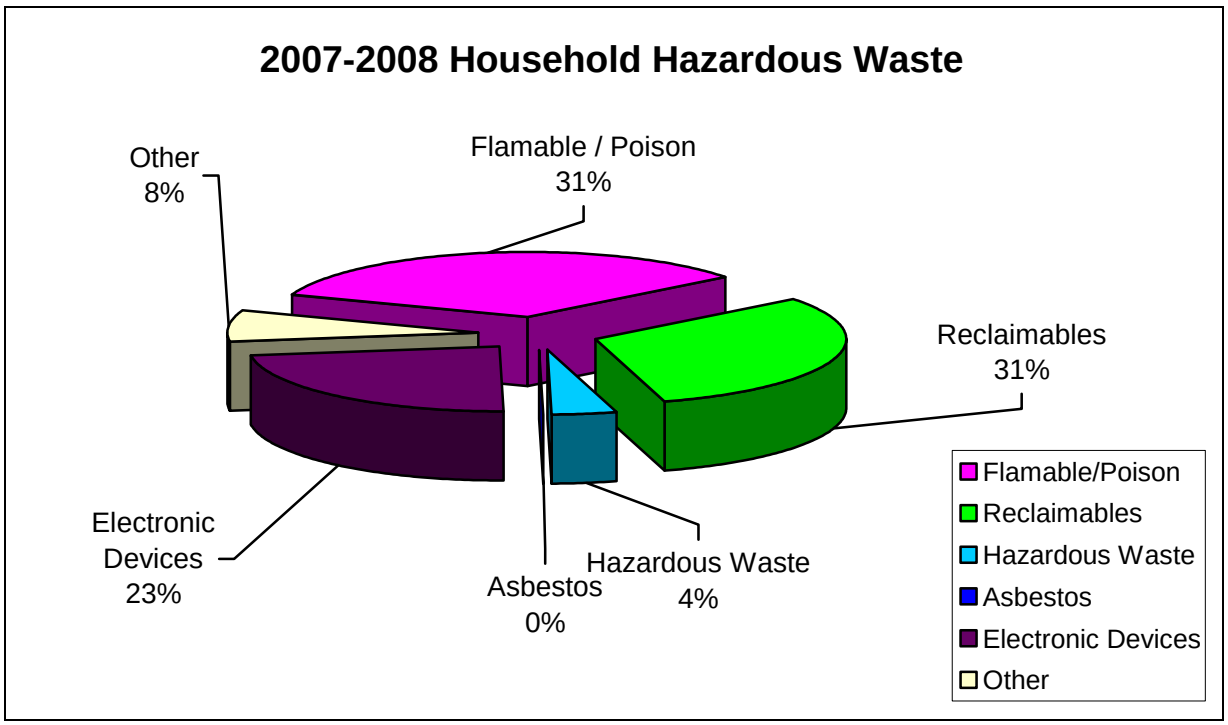

Figure 3

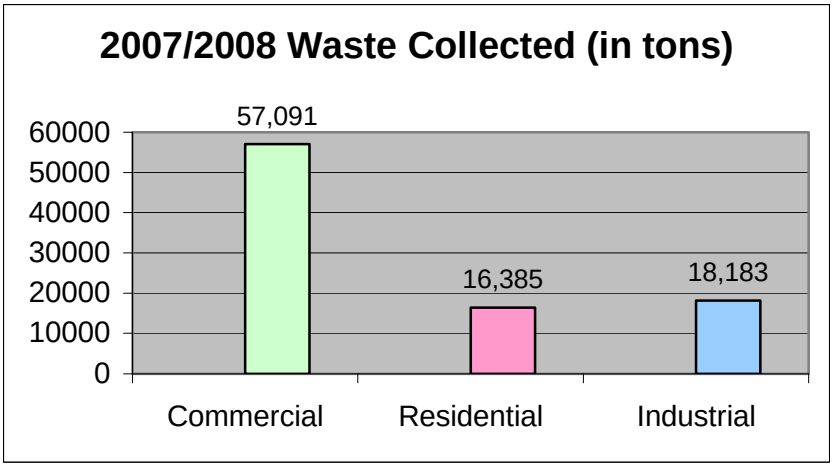

Figure 3 shows the amounts, in pounds, of waste collected for Commercial and Residential. Waste collected equates to pollutants not discharged to the storm drain system.

6.4.3 Opportunities for Community Involvement

The El Cajon Community Development Center (ECCDC) prints and circulates a newsletter to the downtown area businesses on a quarterly basis. Additionally, the ECCDC prints a Clean & Safe report that covers actions to keep the downtown area clean and safe. The downtown Clean Team works to keep the community clean and performs a daily litter removal, maintenance, and landscaping activities. Saint Madelines School provides the student workers who detail the downtown street and sidewalk areas by collecting cigarette butts, trash, and debris. Spills are reported directly to ECCDC for immediate removal and disposal.

Figure 4

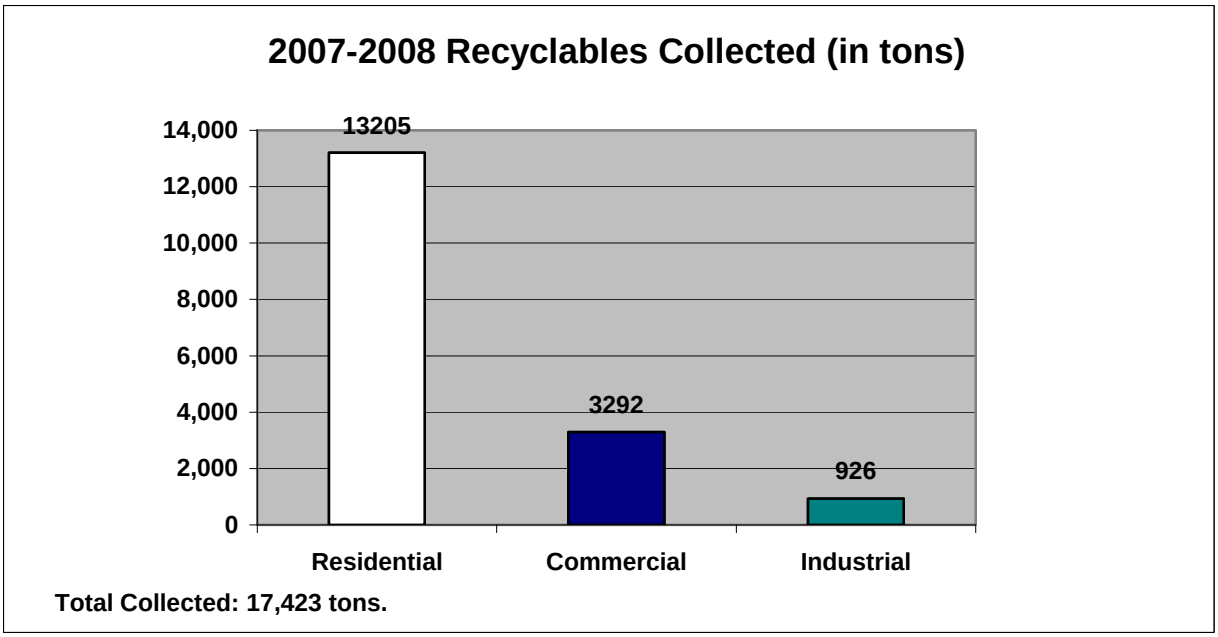

Recycling is a community effort. A total of 17,423 tons of recyclables (includes newspapers, glass, plastic, tin and aluminum) were collected through residential pickups in 2007-08. Figure 4 indicates the amounts, in tons, of materials recycled through residential, commercial, and industrial recycling efforts for 2007-08. Amounts recycled are not placed in landfills or available for discharge to the storm drain system.

6.5 COMPLIANCE AND ENFORCEMENT

The City has a variety of enforcement actions upon discovering a residential action that may potentially affect the quality of receiving waters. Verbal warnings (with written documentation), written warnings, orders to abate and correct, and monetary fines are in the legal authority of the City. There are two routes of discovering illegal residential activities. One is through complaint/referral process. Complaints are received through direct contact with City staff, through the City Manager's office and through the City's Website (via e-mail). The other is during scheduled City monitoring and observations of other routine City department activities.

Depending on whether an actual discharge has occurred or there is a potential to discharge, a written warning or Administrative Citation is issued. Corrective actions are verified and the resident re-contacted for any further questions.

6.5.1 Complaints Received

Complaints are received through the City's or County's Hotline number or funneled through the City Manager's office. Since the inception of the City's Enforcement Program, citizens take opportunities to inform municipal staff of their concerns during other routine activities. Investigations usually occur within 24 hours of complaint receipt with a follow-up phone call informing the complainant of the investigative results. Complaints were tracked using a simple table and software programs. A table in Appendix A.6 lists residential complaints tracked in PY1.

6.5.2 Investigation and Enforcement

Each complaint is investigated by Storm Water staff. Contact with the potential discharger is focused on stopping the polluting activity and educating the citizen about our storm drain system and water quality.

Table 6 – Enforcement Actions

BMP Violated	Written Warnings	Administrative Citations	Actions	Follow-up
Automobile Repair & Maintenance	0	0	No Action	None
Automobile Washing	0	0	No Action	None
Home Care and Maintenance	3	0	Stopped Activity	Completed
Private Lateral Maintenance	0	0	No Action	None
RV Parking and Maintenance	0	0	No Action	None
TOTAL	3	0		

Written warnings followed each verbal warning in the form of a letter requesting corrective action or enforcement by the Administrative Citation Form (See Appendix A.3b for Enforcement Criteria and Forms). Letters are used only when additional information and explanations are needed to get compliance from the potential discharger. A list of the enforcement actions issued to residents is included in Attachment D.

6.6 Notable City Actions

Pollution Prevention Days

The City of El Cajon hosted two "Pollution Prevention Days" events on June 4 and June 18, 2008 in downtown El Cajon. The events were scheduled to correspond with the "Cajon Classic Cruise" event, which attracts thousands of attendees each day. Of the thousands of people attending, hundreds of people approached our booth and received educational materials, flyers, and discussed issues related to the automotive-related event (e.g., tire recycling, waste management, fundraising car washes and power washing). See Appendix A.6 for

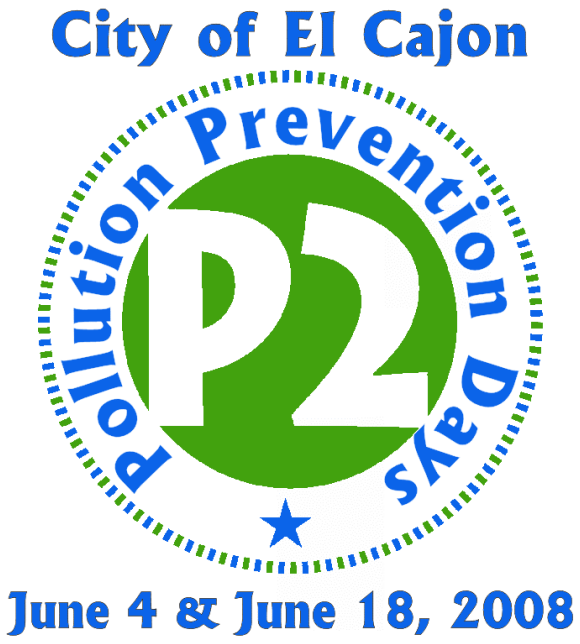

additional photographs of this event.

Condominium Conversions

The next wave of residential communities is the conversion of apartment dwellings into Common Interest Developments or Condominiums. Restarting a small developed community is a perfect opportunity to introduce or reintroduce storm water protection activities at the development level. The following are required of condominium conversion projects

- A Storm Water Site Plan that includes a map of the current storm drain system and a list of the internal and external improvements proposed prior to sale. Control of materials, upgrades to the drainage system and treatment should be discussed.
- A Storm Water Maintenance Plan for Condominiums
- A Private Sewer Lateral Report, and
- Water Quality additions to the Covenants, Conditions, and Restrictions

6.7 IMPROVEMENTS AND REGULATORY COMMENTS

Throughout the year, the City adjusts JURMP Components based on experience and the need to correlate JURMP activities with water quality. As the Storm Water Pollution Prevention Program moves into a BMP implementation program and the reduction of pollutants discharged into the storm drain system, existing residential neighborhoods become a pivotal group to assist in making the water quality improvements a reality.

6.7.1 Improvements

Improvements for the Residential Component is more challenging as citizens view the storm water regulations as an infringement on individual rights. Choosing the correct approach and picking an area that is more beneficial to water quality takes thought and planning. Based on previous experience, the proposed actions for PY1 include:

- Continue partnering with the El Cajon Community Development Corporation in reaching out to the community
- Meet with new development Homeowner Associations to distribute storm water information
- Target apartment complexes for controlling trash and maintaining the Private Sewer Lateral.
- Follow up with condominium HOAs and apartment complex management companies to ensure that private satellite sewer systems are being maintained

6.7.2 Regulatory Comments

There were no regulatory comments received for the Residential Component of the JURMP for PY6.

Place Holder

(Section 7 to be Submitted December 15, 2008)

SECTION 8 EDUCATION COMPONENT

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SECTION 8 EDUCATION COMPONENT

8.1 EDUCATION AND OUTREACH

The goal of the education component is an informed and knowledgeable community. It is crucial to the success of a storm water management program for City staff and the community at large to have easy access to reliable and accurate storm water information. Without a shared, common knowledge base of local water quality and urban runoff information, it is difficult to obtain public support for local storm water quality programs. The storm water educational materials need to be detailed and comprehensive enough to support a shift in individual daily actions while allowing community groups to back specific water quality measures. As with all the other components of this storm water pollution prevention program, maintaining and restoring the chemical, physical and biological integrity of state waters is the ultimate outcome.

If reduction is the goal, then prevention is the theme for the Storm Water Pollution Prevention Program. The Education Component continues to emphasize the basics topics, such as:

- The difference between the sanitary sewer and the storm drain system; and
- The street and storm drainage system is not your garbage disposal system; and
- Making small changes individually, adds up to big changes in our rivers and at the beaches.

The other part of a successful storm water program is an involved and committed municipal staff that contacts the public about potentially damaging discharging activities. Storm Water staff diligently works to educate the citizens and businesses within the City jurisdiction on water quality and ways to prevent pollution from entering the storm drain system. The goals of the City's education and outreach program are to raise awareness of urban runoff and change the behavior of citizens and businesses. The progression of topics will lead to Watershed concepts as the basics in storm water are grasped by the general public.

8.1.1 Education and Outreach Events

Educating staff and the public is the best way to effect change in people's behavior. It is clear that there is broad-based public support for a cleaner and healthier environment. When people can connect with and learn more about our storm water program, our program earns the respect our citizens and community leaders for protecting our water quality. An effective "learn and earn" outreach program should be both regional and jurisdictional, since a pooled effort regionally is able to educate on a more impressive scale. Additionally, since we all live in a watershed, storm water pollution and the protection of receiving waters defy jurisdictional boundaries. As the San Diego River Watershed Copermittees move toward a Watershed-based approach to storm water management, education and outreach efforts will follow watershed strategies on a regional basis. As shown above, the City of El Cajon developed a Storm Water "Watershed" Logo to promote pollution prevention and protection of water quality.

8.1.2 Jurisdictional Accomplishments

Outreach accomplishments during PY1 include the following list of education and outreach efforts.

- "Pollution Prevention Days" – Two Wednesdays in June of 2008 (June 4 and June 18, 2007). The events carried the "National Pollution Prevention Week" (P2 Week) theme and the events were scheduled to correspond to peak attendance days for a local automotive-related event called the "Cajon Classic Cruise." Information relating to the event was also posted to the City of El Cajon Website. Both residents and business owners were encouraged to attend
- Continue to work with the El Cajon Community Development Corporation (ECCDC) to close and protect dumpsters, keep trash areas clean, and encourage good housekeeping habits in the downtown area
- Storm Water Education and Outreach Document Portfolios were prepared and issued to selected municipal staff with high probability of contact with citizens on storm water pollution prevention issues. This included staff tasked with commercial and industrial site inspections, construct site inspections, complaint investigations and SUSMP plan review. The use of the storm water information portfolio has allowed the storm water program to connect with citizens, staff and other interested parties in a new and detailed manner
- "Fire Safety Open House" This day-long, Saturday event included booths, educational information and formal and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. It is estimated that approximately 3,000 visitors attended this event.
- SUSMP Training

8.1.3 City Staff Training

Municipal staff at the Public Works Department, City Hall, Fire Department, and the El Cajon Community Development Corporation Ambassador's staff were trained to refresh the basic

storm water topics of pollution prevention and use of BMPs. Planners and engineering staff were trained in low impact development training, more specific, the implementation of pervious surfaces. Additionally, other municipal staff was given the basics in storm water training including:

- What is a Watershed and what Watershed do we live in.
- Why is keeping our water clean important.
- The different types of pollutants and where these pollutants originate.
- The difference between the storm drain system and the sanitary sewer system.
- What can be done at work and at home to eliminate polluted runoff during rain events and all yearlong.

Municipal crews are given door hangers to use during their daily routine activities in the City. An example of a door hanger is provided in Appendix A.6. The door hanger alerts the resident to the potential discharge that exists on or near their property. Possible solutions and phone numbers for reporting discharges are provided.

8.1.4 Special Community Presentations

POLLUTION PREVENTION DAYS

The City of El Cajon hosted two "Pollution Prevention Days" events during June of 2008; a copy of the Proclamation is attached in Appendix A.8. Many thousands of people attended each of the P2 Day events. The two Wednesday events included booths, educational information and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. The El Cajon Community Development Corporation (El Cajon CDC) also participated in our P2 Days event and distributed information on revitalizing and keeping our community clean.

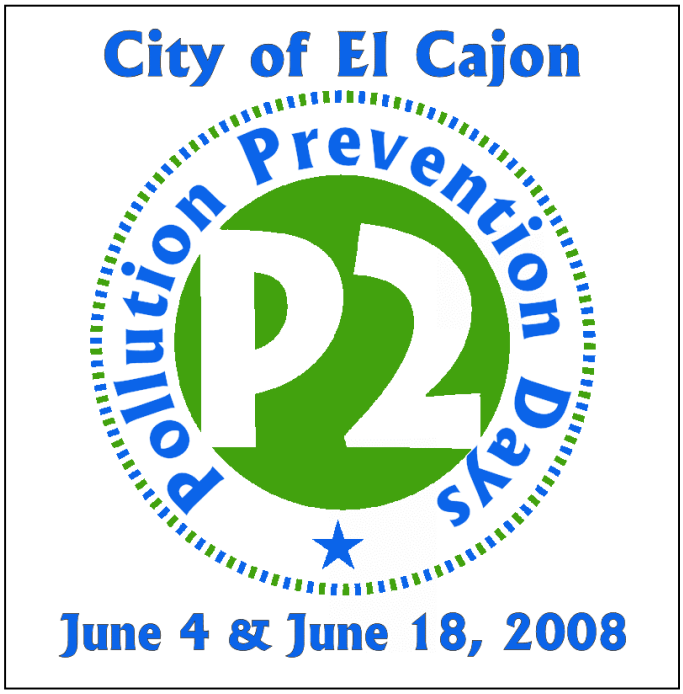

EL CAJON FIRE DEPARTMENT FIRE AND SAFETY OPEN HOUSE

On October 6, 2007, the City participated in the El Cajon Fire Department "Fire and Safety Open House." This day-long, Saturday event included booths, educational information and formal and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. It is estimated that approximately 3,000 visitors stopped by, many of them visiting the storm water booth as they passed through.

INDUSTRIAL FACILITY WORKSHOP – CITY OF CAJON AND INDUSTRIAL ENVIRONMENTAL ASSOCIATION (EIA)

The City of El Cajon participated in a training session sponsored by the EIA and the San Diego East County Economic Development Council on March 28, 2008. The session was designed to informed industrial facilities within the City of El Cajon's jurisdiction about changes that were made to the City's Storm Water Ordinance based on the new municipal permit. The main topics of discussion were new municipal permit requirements, inspections, and the implementation of storm water BMPs. Over 30 representatives of major industrial facilities attended the workshop. A copy of the agenda for the workshop is attached in Appendix A.8.

8.1.5 Regional- and Watershed-Related Outreach

The regional outreach workgroup focused its budget of $40,000 towards in-kind contribution to develop a Regional Residential Outreach Program that would address regional issues and would aid in a transition from a jurisdictional- to a watershed-related program approach. All Copermittees contribute funds towards the outreach workgroup to benefit a coordinated regional pollution prevention program. PY1 funds were used to develop a framework for the Regional Residential Outreach Program that would target audiences and provide information on barriers to, and benefits of changes in behaviors. The City of El Cajon served on the committee during development of the RFP, and continued in PY1 as a member of the interagency Committee developing the Regional Residential Outreach Program.

The events coordinated by the Outreach Workgroup and paid for by all Copermittees included a Storm-Water- and Watershed-related booth at the San Diego County Fair that displayed and provided information to those attending the San Diego County Fair.

8.1.6 Educational Materials Jurisdictional Distribution

The City developed brochures on the following subjects for distribution to the public:

- permit and ordinance requirements
- the difference between storm drains and sanitary sewers
- Pollution prevention strategies
- Car Washing. Including strategies for Car Wash Fundraisers
- Pet waste BMPs
- Equipment and vehicle maintenance and repair
- Maintenance of private sewer laterals.

The City printed 38,000 copies of two semiannual newsletters containing 5 articles and reaching potentially 190,000 different readers. A summary of the topics covered in the 5 articles is included in Section 6, Residential Component, of this report. Storm water logos assist the City in getting the attention of citizens and businesses. Logos are a way to make a lasting impression with citizens and businesses. One storm water logo used by the City is shown to the right.

The City of El Cajon also partnered with Waste Management to send 18,000 separate mailed brochures, titled "Water Pollution Prevention", to all customers in El Cajon. The brochure had information to help customers understand how their daily activities, including over-irrigation, can result in polluted urban runoff. A copy of this brochure is included in Appendix A.6.

Through the course of PY1, a number of contacts were made to the public using articles, newsletters, sewer bill inserts, brochures, mailers, radio and TV Ad's, and movie slides highlighted below. Copies of brochures, fliers, and newsletter articles are contained in Appendix A.6. The following table indicates the types and quantity of outreach impressions.

Table 5

Material Type	Number Distributed
Articles/Newsletters	190,000
Article with Waste Management	18,000
Brochures	480
Over-the-Counter	350
TOTAL	**208,830**

Commercial

Education of commercial facility owners and their employees occurs through the use of brochures oriented specifically to a type of activity. Written warnings are accompanied with a brochure on the activity as well as distribution of these brochures as outreach opportunities arise during business and construction site inspections, and complaint investigations. Approximately 385 brochures of various types were distributed as summarized below. More one-on-one distributions were completed this year as the City expanded its role in inspections, complaint

investigations and the daily routines of residential communities. The following brochure topics were distributed during PY1.

- Vehicle and equipment washing and cleaning (35 copies)
- Vehicle and equipment operation, maintenance, and repairs (35 copies)
- Car Washing Guide (25 copies)
- What's Cookin Guide (125 copies)
- Green Wrench Guide (120 copies)
- Power Washing Guide (40 copies)
- Private Sewer Lateral maintenance (50 copies)
- Construction Best Management Practices (50 copies)

Industrial

Industrial facilities revise and refine their BMP requirements through the annual inspection process. The following are discussed and informational brochures are shared when necessary.

- Prevention of Non-Storm Water discharges
- Good Housekeeping Practices
- Vehicle and Equipment Washing, Repair, and Fueling
- Loading and Unloading of materials
- Solid and Hazardous Waste Management
- Spill Prevention and Response
- Building and grounds maintenance
- Parking Lot maintenance
- Storm drain system maintenance
- Private Sewer Lateral Maintenance

8.2 LEADERSHIP ACTIVITIES AND PARTNERSHIPS

The City's major roles for educ ating the community include:

- Continue in partnerships with the Cities of Santee and La Mesa as well as the County of San Diego in training staff on storm water management to incorporate storm water reviews at the beginning of the Planning level review.
- Maintain a relationship with the El Cajon Community Development Corporation and their Community Ambassadors and Clean Team. The Community Ambassadors are employees that develop connections with businesses and the community that will promote a cleaner and safer city. The Clean Team are students of St. Madelines

Sophie school and are happy to assist in various community tasks. The Clean Team picks up cigarette butts along the sidewalk and gutter that the City's street sweeper cannot collect.

- Collaborated with the El Cajon Community Development Corporation to provide basic storm water rules to vendors at the Cajon Classic Cruise events.
- Conducted storm water training to El Cajon Community Development Corporation ambassadors.
- Established a collaborating relationship with "I Love a Clean San Diego" to conduct future storm drain stenciling, as needed
- Worked with the County of San Diego and others to oversee the preparation of a Regional Residential Outreach Program. Completion of work on the development of this program was a goal of the 2007/2008 Copermittee Outreach Workgroup. Implementation will continue into the next reporting year.

8.3 Measuring Changes in Knowledge and Behavior

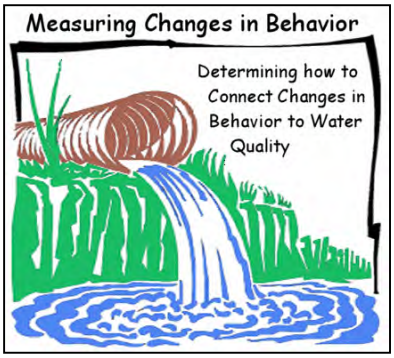

A basic measurement of increased knowledge is a test of that knowledge. The City's test is an increase in referrals and reports from municipal staff. The number of complaints and referrals from citizens, staff, and county hotline was equivalent to last year. The Regional Outreach Program funded by this year's Copermittee Outreach budget will develop a very detailed baseline of community awareness, and the barriers to and the benefits of changes in behavior.

8.4 Improvements and Regulatory Comments

Changes to the City's Storm Water Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the activities in ways dictated by direct or indirect experience. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

8.4.1 Improvements

The following are proposed improvements for the next Permit Year (July 1, 2007 through June 30, 2008).

- Coordinate expanded outreach and education effort the local public schools.
- Coordinate outreach and public participation activities for Public Works Week.
- Collaborate with East County Cities on municipal training and business-related workshops.
- Expand distribution of outreach materials in sewer bills.

8.4.2 Regulatory Comments

No regulatory comments have been received for the Education Component of the JURMP Annual Report for PY6.

SECTION 9 Public Participation Component

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9.2 Improvement and Regulatory Comments **3**
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SECTION 9 PUBLIC PARTICIPATION

INTRODUCTION

Public participation is an essential element of a successful Urban Runoff Management Program, but is more highly effective as a Watershed Component. Due to the nature of participation by organizations such as "I Love a Clean San Diego", watershed concepts are more easily introduced to participants from the entire watershed and not just a small segment of the population in one particular community. Wherever Copermittees' efforts can be combined to produce better results, it is a win/win situation for jurisdictions, the watershed and the communities they contain.

Educational efforts set the stage for getting the public involved with scheduled Storm Water Pollution Prevention events or interested in following the minimum required BMPs at home or business. Since prevention through familiarity and participation is the best solution to pollution, the public fulfills participation requirements by:

- Participating in storm drain stenciling,
- Reporting of discharge incidents using the City Manager's Office or the City and County hotline,
- Participating in events that collect or recycle hazardous waste and used oil , and
- Participating in local and regional cleanup events

9.1 REGIONAL PARTICIPATION

On a regional basis, the City of El Cajon is the lead for the San Diego River Watershed Planning Group and is a member of the Watershed Lead Committee. A grant funded the San Diego River Watershed Planning Group where the stakeholders meet to discuss potential issues for the Watershed. A database of information is in progress for stakeholders to use during their planning efforts.

The City attends Project Clean Water meetings on the San Diego River Watershed to maintain contact with the stakeholders as well as participate in jurisdictional/local decision-making. The City of El Cajon also chairs the San Diego River Watershed Copermittee meetings, which are also opened to the public. In 2007/2008 the San Diego River Park Foundation and the San Diego River Conservancy had regular representation.

As stated in last year's annual report, the City of El Cajon contacted the "I Love A Clean San Diego" (ILACSD) organization and gave permission to staff and volunteers to apply the message "No Dumping . . . I Live Downstream" and a depiction of a dolphin or duck to the curb area directly adjacent to storm drain inlets within the City. A letter of permission is attached in Appendix C.

9.1.1 Regional and Local Storm Water Hotlines

The wastewater and sewage that drain from inside your house is treated and cleaned before it enters the ocean, but the storm drains in the street flow directly to the ocean, rivers, and lakes without any treatment. It is therefore very important that no one be allowed to dump waste of any kind onto street surfaces, drainage pipes and ditches, or into storm drains - they are only for rainwater.

The City and County have a Hotline used by the public to report potential illicit discharges and connections. The Hotline phone number is provided in informational brochures to residents and businesses and is posted on the City Website. Public participation is an essential part of an illicit discharge elimination program. Many illicit discharges are one-time occurrences that may not be observed by City staff. Concerned citizens can help stop illicit discharges by reporting them to the City. The following provides the details of those Hotlines.

- ✓ **City of El Cajon Storm Water Hotline, (619) 441-1653**

The City Storm Water Hotline provides access Monday through Friday 8 a.m. – 5 p.m. and complainants are directed to the appropriate staff person. The City's hotline currently provides information in English and Spanish.

The City continued updating its Storm Water Web Page to contain the most recent brochures and reports. Documents are retrieved and opened using Abode Acrobat to open the posted PDF files. The Storm Water Web Page is "Quick Linked" from the City of El Cajon Home Page with links to a list of documents and other important websites.

- ✓ **County Storm Water Hotline, 1-888-846-0800**

The County storm water hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides services in both English and Spanish and a voice mail message for 24-hour public access. Relevant complaints received through the County hotline are forwarded to the City Storm Water Protection Program.

9.2 IMPROVEMENT AND REGULATORY COMMENTS

Changes and improvements to the City's Storm Water Participation Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the participatory activities in ways dictated by direct or indirect experience. As the focus of the program shifts to multi-jurisdictional participation on a watershed level, changes and improvements to the storm water program will be necessary. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

9.2.1 Improvements

The following are proposed improvements for the next Permit Year (July 1, 2008 through June 30, 2009).

- Focus the City's efforts on programs and activities that will have an impact on the watershed, its health, the 303(d) pollutants and their sources
- Participate in an expanded El Cajon Fire Department Open House by including a Storm Water Program informational booth and additional displays to inform and engage children on water quality issues.
- Coordinate the City's efforts with the other San Diego River Copermittees (City of La Mesa, City of San Diego, City of Santee and County of San Diego).
- Participate in additional Watershed-wide educations efforts
- Distribute pollutant-specific brochures throughout the watershed

9.2.2 Regulatory Comments

No regulatory comments have been received for the Public Participation Component of the JURMP Annual Report for PY1.

SECTION 10 FISCAL ANALYSIS

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SECTION 10 FISCAL ANALYSIS

INTRODUCTION

A fiscal analysis of the JURMP provides a vital assessment of resources for the current and upcoming Permit Years. The analysis identifies adequate support and how resources are divided to support and fortify the JURMP and WURMP efforts. Fiscal years (FY) correlate with the same timeframe as permit years (PY). For PY 2003-04, the City Storm Water staff developed a separate budget from other Public Works activities and sufficient to run the Storm Water Program. The Program continues to be adequately funded through the City's Sewer Fund. This funding source has been used since PY 2004-05 and will continue to be used for PY 2008-09.

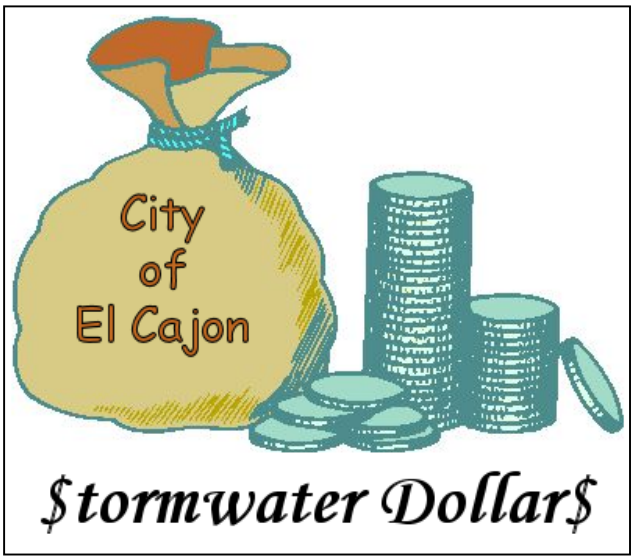

10.1 PROJECTED FISCAL YEAR 2008-09 EXPENDITURES

The following table shows actual expenditures from permit year 2001-02 through 2007-08 and the proposed 2008-09 budgets for the City's Urban Runoff Management Program.

Item	01-02	02-03	03-04	04-05	05-06	06-07	07-08	Proposed 08-09
Salaries (including benefits)	425,000	455,000	436,000	561,473	533,487	550,856	712,696	753,548
Professional and Technical Services	120,000	0	61,000	60,000	56,600	413,000	405,000	355,000
Dry Weather Monitoring Program	26,000	24,000	31,000	35,000	53,000	83,000	150,000	75,000
Equipment/Capital Outlay	11,000	8,000	8,000	25,000	7,500	37,000	117,650	0
Vehicles & Equipment	19,000	20,000	20,000	20,000	31,000	25,900	10,209	10,209
Supplies	4,000	11,750	11,700	12,000	13,000	9,700	9,700	12,900
Computer/GIS	9,000	0	0	80,000	85,000	53,500	90,000	75,000
TOTAL	**614,000**	**518,750**	**567,700**	**793,473**	**779,587**	**1,172,956**	**1,495,255**	**1,281,657**

Due to decreases in overall funding from the State of California, City department reduced budgets by 25% in PY 2002-03. Budgets increased steadily from 2003-04 through 2006-07 under Municipal Permit Order 2001-001. The increase in PY 2007-08 was a result of allocating resources in anticipation of fulfilling requirements for Municipal Permit R9-2007-001. The proposed budget for PY 2008-09 is slightly lower than the previous PY due to the completion of one-time requirements under the new permit.

The City's NPDES Urban Runoff Management Program funding was sufficient to meet the JURMP requirements in PY 2007-08 and will be sufficient to meet requirements in PY 2008-09. The City met its projected goal of continuously executing plans, procedures, and processes to implement JURMP requirements and assess the effectiveness of programs that were implemented.

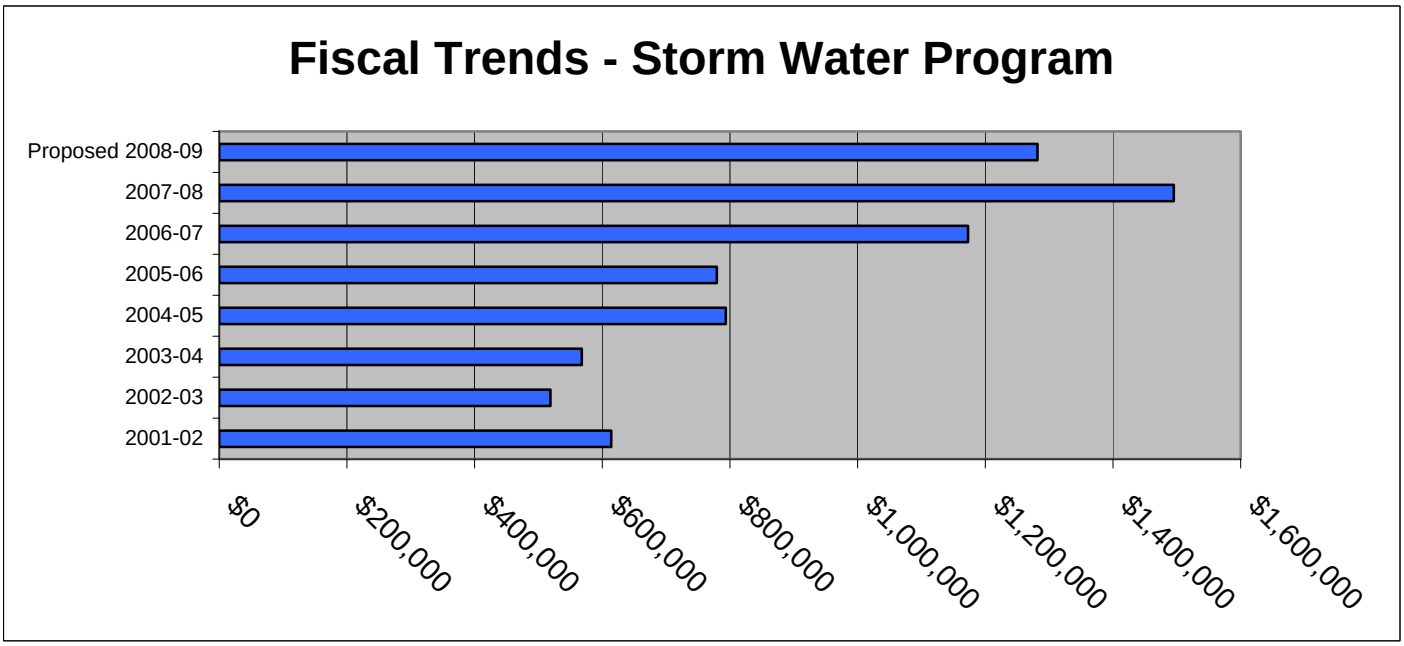

Higher amount of funds were spent during PY 2001-02 and PY 2007-08 because of the development and update of the Jurisdictional Urban Runoff Management Plan (JURMP), and the creation and update of storm water municipal codes for enforcement, all requirements of municipal permit 2001-001 and R9-2007-0001 respectively. PY 2002-03 was the first year of implementation under Municipal Permit 2001-001 and the programs written in the JURMP were tested in the field. Modifications to program components caused an increase in expenditures during PY 2003-04 and PY 2004-05 budget which contained some capital expenditures that were started in PY 2002-03 and PY 2003-04 such as a Geographical Information System dataset for map generation and a trash fence to collect trash and debris in Forrester Creek before discharging to Santee. From PY 2005-06 through PY 2007-08, spending gradually increased to support a Geographical Information System. Overall a general increasing trend of funds have been allocated from PY 2001-02 through PY 2008-09 to sustain a viable storm water program.

Listed in the following table are Additional Services and Projects supporting JURMP Permit requirements from PY 2001-02 through PY 2007-08. The substantial rises of PY 2006-07 and PY 2007-08 budgets are mostly attributed to increases in CIP projects related to storm drain pipe replacement projects, installation of water quality improvements, development of wastewater and storm drain master plans.

Service/Project	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Street Sweeping	268,000	313,000	319,000	368,930	420,739	450,385	458,500
Capital Improvements (Total) - Installation of Storm Drain Inlet Filters - Replace Drainage Pipe - Replace Sewer Pipe - Major Drainage Channel Repair - Road/Drainage Improvements - Drainage and Wastewater Master Plans	1,000,000	1,300,000	1,700,000	1,136,770	1,076,122	1,573,732	3,425,000
TOTAL	**$1,268,000**	**$1,613,000**	**$2,019,000**	**$1,518,770**	**$1,496,861**	**$2,024,117**	**$3,883,500**

10.2 FUNDING SOURCES AND RESTRICTIONS

The budget for PY 2007-08 included a Storm Water Program Manager, 1 part-time senior engineering technician, 1 junior engineer, 1 GIS technician, 1 compliance officer, and 2 maintenance workers. For PY7 the program includes a Storm Water Program Manager, one full-time Storm Water Compliance Officer, one junior engineer, one part-time senior engineering technician, one GIS technician, one part-time engineering intern, and public works maintenance staff. The City also has an open contract with two consultants to provide as-needed services to ensure the City meets its JURMP implementation requirements.

10.3 LONG-TERM FUNDING ISSUES AND STRATEGIES

Each year the City evaluates and prioritizes the areas in the City where improvements are needed. Many improvements assist the JURMP in protecting receiving water quality. This past

year, multiple CIPs improved storm water quality by preventing pollutants from entering the storm drain system. They are as follows:

- Sewer main replacements and enlargements at various locations.
- Installation of storm drain inlet filters at targeted source point locations.
- Corrugated metal pipe repair and replacement in various locations.
- Storm drain repair and replacement in various locations.
- Drainage channel fencing improvements at various locations.
- Major storm drain channel repair.

The following are proposed improvements budgeted for the next Permit Year (July 1, 2008 through June 30, 2009). The following table lists major line items for the PY 2008-09 budget.

Item	Proposed Budget 2008/2009
City of El Cajon Urban Runoff Management Program	1,281,657
Street Sweeping	462,785
Capital Improvements	4,565,000
TOTAL	**$6,309,442**

In the long-term, funding will continue to be a question. The City is constantly challenged with doing more with less after a continual decline in general fund budgets. For PY2007-08, the City completed all inspections with existing staff complemented by the assistance of a consultant to meet requirements under permit R9-2007-0001.

10.4 IMPROVEMENTS AND REGULATORY COMMENTS

Working efficiently is the goal of the jurisdiction urban runoff management program. Completing onsite inspections, tracking enforcement actions, and complaint/referral information allows the City to reduce the amount of time and paper to complete significant portions of the Municipal, Industrial, Commercial, and Land Use Planning JURMP Components.

For WURMP activities, the City will be coordinating with the other San Diego River Watershed Copermittees to complete watershed water quality activities and education activities. Working together eliminates duplicative efforts and enhances the effect across a wider range of people and geographical area.

No regulatory comments were received during PY2006-07 for the City's Fiscal Analysis.

SECTION 11 ASSESSMENT PROGRAM

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SECTION 11 PROGRAM ASSESSMENT

11.1 INTRODUCTION

The City began using the standardized program effectiveness assessment soon after it was developed by the Copermittees during the last permit cycle. The City also participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs. Due to a variety of complications on a regional level, that process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures.

Since the submittal of the JURMP in March 2008, no additional progress has been made on regionally standardized approaches to program effectiveness assessment. It is likely that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will revisit the issue of standardized assessment metrics and procedures in the near future. The City anticipates participating in the process of developing such regional standards and incorporating work products produced into its own local program effectiveness assessment system.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

The City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1 through Level 4 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Level 1

Level 1 is documenting activities. Sections 1 through 10 of this PY1 Annual Report list activities, storm water controls, and when possible the quantity of pollutants collected and diverted from entering the storm drain system, viewed as a reduction in pollution-containing materials potentially available for discharge into the storm drain system. Existing and New Development, Construction, and Illicit Discharge Illegal Connection are the areas where quantifiable amounts of pollutants are reported as collected and removed from entering the storm drain system. By completing collection activities, the City maintains compliance with the Municipal Permit requirements.

11.2.2 Level 2 and 3

See the tables 11-3 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

11.2.3 Level 4

The primary goal of BMP implementation is to reduce the loading of pollutants to urban and storm water discharges. Pollutant load estimation is the first direct characterization of water quality through JURMP activities. Regionally, San Diego River Watershed receiving water quality results are from the major outfall to the Pacific Ocean. In the future, Watershed monitoring at the jurisdictional lines will at least assign responsibility of pollutant loads, but will not determine a reduction in pollutants. The best approach is to make sure wet weather and dry weather results do not exceed action levels.

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed.

11.3 ASSESSMENT OF PROGRAM MEASURES

Basic assessment of program measures begins with City-based questions. First, starting with what is known, then shifting to what is wished to be learned, and finally what was learned. During the first step, the "what is known" are the measurements compiled from each of the JURMP components. Measurements such as the amount of material removed during street sweeping or cleaning of catch basins are direct measurements of pollution diverted from entering waterways. At sometime it may become appropriate to compare measurements to previous years, average measurements, or assess trends to assist with potential pollutant loads removed from a particular origin. Dry weather monitoring results are direct measurements of pollutants in urban runoff, but only partially address measurements of receiving water quality.

Sources, selected BMPs, measurements, and other indicators, identified in the previous Sections of this Annual Report for each of the Existing and New Development Components, report completed activities and achieved goals as required by Order No. R9-2007-0001 and the City's updated JURMP. In summary, the City completed program implementation as designed in the JURMP and is incompliance with the activity-based permit requirements.

11.3.1 Direct Measures of Program Activities

For many years, the City tracked efforts from various collection agencies with four types of direct measures, as follows:

- Street Sweeping,
- MS4 Cleaning,
- Oil Recycling, and
- Household Hazardous Waste Collection

In general, the City tracks these measures because they provide an important indication of the types and amounts of materials and wastes that are diverted from the MS4 through various means. Street Sweeping and MS4 Cleaning directly removes materials from the pathway of rainwater and urban runoff. Oil Recycling re-routes used oil from illegal disposal to refineries where it is ultimately reused. The Household Hazardous Waste program collects wastes that may otherwise be improperly disposed, potentially to the MS4.

a. Street Sweeping

The Department of Public Works collected an estimated 3,483 cubic yards of debris during its street sweeping activities (21,180 miles of curbed streets). This year, the City's street sweeping efforts have been consistent with previous years and slightly higher than PY2006-07. Were it not for these efforts, the debris collected would be swept away during rain events. Collection provides important long-term water quality benefits.

b. MS4 Cleaning

In PY2007-08, all of the City's storm drains were cleaned by the Department of Public Works and California Conservation Corps, resulting in the removal and proper disposal of 1,720 cubic yards of material from the storm drain system. As a whole, the City's effort increased over last year's effort.

c. Recycling of Household/Commercial Waste and Oil Recycling

Recycling in El Cajon has good participation, but could always do better when the numbers are compared for recycled materials (17,925 tons) and waste (91,660 tons). Trends in waste collection will continue to be tracked .

Oil recycling is tracked by independent recyclers (e.g. Jiffy Lube) and Waste Management for curbside pickup of used oil. Waste Management provided their 303 state report which includes recycling efforts. For PY2007-08, Waste Management did not report any oil or oil products in their 303 reports. However, Waste Management did recycle 70,010 pounds of oil base paint, 3,276 pounds of batteries, 72,400 pounds of latex paint, and 3,750 pounds of antifreeze.

d. Household Hazardous Waste Collection

Waste Management of El Cajon collects the Household hazard waste for the City's jurisdiction. In PY2007-08 an estimated 268,323 pounds of waste household waste were collected as opposed to 236,890 pounds collected in PY2006-07, 198, 015 pounds in PY2005-06, an estimated 277,000 pounds of household hazardous waste and recyclables were collected at 19 events in PY2004-05, and PY2003-04 reported 127,827 pounds of household hazardous waste and recyclables collected. As a whole, the City's effectiveness in collecting HHW from its residents has increased consistently and significantly over the years.

11.3.2 Indirect Measures

In most instances, changes to receiving water quality cannot be directly compared to collection activities. However, many indirect measures have value in tracking the effectiveness of specific program activities, and may have additional utility in assessing long-term water quality changes. Many of these measures are reported and discussed throughout this Annual Report. To track and evaluate the effectiveness of its program implementation over time, the City has compiled summary statistics for several of measures.

Table 11.1

Indirect Measure		2007-2008
Complaints	Total Number received	154
	Number of Referrals from Other Departments	62
	Number of Enforcement Actions	29
Staff Training	City Staff Trained	87
Outreach	Outreach events conducted	4
	Number of Presentations	1
	Audience @ presentations	30

a. Complaints and Referrals

In this reporting period, the City received a higher number of complaints than last year from other City departments, citizen calls, and county referrals. The City and County hotlines are described in Section F.3.d (Existing Development – Residential). As previously discussed, this trend underscores the effectiveness of the City's outreach and staff training efforts. Compared to previous years, it is believed that more of the City's citizens and staff were aware of storm water violations and understood what to do when water quality concerns were observed.

b. Staff Training

Levels of staff training during this reporting period were expanded to those of previous years. Although the City has made an important commitment to staff training under the previous and current Permit (see JURMP Section 8, Education), the consistency of these numbers also demonstrates the City's past commitment to training its staff. Training of staff with implementation responsibilities is not a new part of the City's storm water programs. However, the scope of these and other programs has significantly increased.

c. Outreach

This year, the City conducted a number of one-on-one discussions at the Public Works front counter with building and planning applicants and with commercial businesses and industrial facilities during inspections and complaints. Together, these increased face-to-face conversations demonstrate that the City is effectively implementing its outreach and education programs; details are provided in Section 8 (Education). The City also conducted training sessions targeting industrial facilities and private interest groups.

11.3.3 Program Activities and Water Quality

Presenting a direct connection between pollutant load reduction and Storm Water Pollution Prevention Program activities continues to advance, but still is very much under development. Copermittees have created a Framework document containing the six (6) Levels of Assessment. The PY2002-03 Annual Report addressed Levels 1 through 4. However, divination only generated numbers that could not be supported by calculation or program actions. For PY2007-08, a slightly modified approach brings the assessment much closer to connecting activities with water quality. Amounts of pollutant-containing materials prevented from entering the storm drain system provides solid numbers while adding percentages of facilities known (through inspection) to be implementing minimum required BMPs and reduces the estimation factor.

11.4 LONG-TERM ASSESSMENT

The Annual Assessment indicates the City is meeting the requirements specified in their JURMP and collecting data associated with those program activities. At some point, a connection between activity completed and pollutant loading in receiving waters will become a reality.

A Long-Term Assessment must answer key questions to guide future activities and build into the current program, the additional reporting requirements in order to connect program activities with actual improvement in receiving water quality. The Long-Term Assessment is conducted once every five years (permit renewal cycle) as changes to permits may change approaches and programs.

Table 11.2

Program Activity	Annual Questions	Permit Questions (Every 5th year)
Water Quality Assessment	What are the high priority quality problems and where do they occur? What constituent(s) is(are) causing the problems?	What are the changes to discharge and receiving water quality in my Watershed?
Program Planning	What are the priority sources of pollutants? What BMPs are needed to control	Are the current programs providing the information necessary to produce targeted

Program Activity	Annual Questions	Permit Questions (Every 5th year)
	these pollutants? What are the targeted outcomes for the BMP Implementation? What are the projected Load Reductions from these implemented BMPs?	outcomes?
Program Assessment	Were targeted outcomes achieved? What BMPs should be changed or should other BMPs added? Are costs associated with implementation feasible?	Is the cost worth the water quality changes?
Integrated Assessment	How well are the parts of the program working together? What other links can be made?	What other relationships between activities and water quality are evident?

Answers to the above questions come from further analysis of each existing component area. Tables of estimated pollutant loads removed are provided below. Areas where pollutant removal rates are high will be the areas to focus program efforts. Modifications to JURMP activities will be the result of this assessment.

Level 4 Pollutant Load Reductions are provided in the following four tables for existing development. Estimates of average load reduction per event was the most difficult to find support evidence. Using the best knowledge available, the magnitude of total pollutants reduced is the most powerful in assessing the degree of success for the City's storm water program.

LEVEL 4 Assessment

Each of the following tables provides an estimate (supported with empirical data) for the amount of pollutant-containing materials prevented from entering the MS4 due to the activities of the Storm Water Pollution Prevention Program implemented in the City of El Cajon. As there is only one receiving water body in El Cajon, Forester Creek impairments were used as the constituents of concern when estimating possible amounts of pollutant-containing material prevented or a reduction in the amount of pollutant that could have discharged into Forrester Creek. Only Existing Components were assessed through Level 4 as the most qualitative and quantitative information is available in these areas. The following paragraphs discuss assumptions incorporated into calculating the amounts provided as "Total" for each Existing Component.

Trash was added to the assessment due to the Forester Creek Improvement Project in Santee. The City of El Cajon installed a trash and debris fence in PY 2005-06 to capture trash from creek flows.

General Assumptions

There are a number of general assumptions within each table. Of most importance is the understanding that the amount (estimated or actual) removed or eliminated from discharging into the storm drain system is the amount of the material or liquid and does not equate to actual pollutant loads reduced. Secondly, the margin of error in these values is very high as most numbers were calculated using information available. Data quality is not necessarily a concern. This is an effort in determining where best to place education efforts and focus each program component.

Municipal

At 18 municipal maintained areas (parks, City Hall, schools), staff cleaned area of pet waste, three times per year. Collection at each area was approximately one pound of pet waste. Pet waste does not equate to one pound of bacteria.

The City maintained 100% of laterals at approximately 24 buildings. No sewer overflows were experienced at City facilities. Pounds were estimated using 10 pounds (no factual basis other than one gallon of water equals 8 pounds) equaling one gallon of sewage. Private laterals not cleaned annually may experience stoppage depending on usage and care. Approximate gallons potentially dischargeable is 2 gallons times 10 equals 20 pounds time 24 buildings equals 480 pounds. Error with this calculation is high.

Total dissolved solids from Municipal areas originate mainly from fertilizers applied by staff. There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation effort that reduces overspray. All activities reduce the amount of TDS available for discharge to the storm drain system.

Municipal activities do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.

Trash reduction at City facilities is a consistent effort with approximately 80 to 90% of the 400 City employees ensuring trash is placed in appropriate containers. One pound of trash per year per person is estimated. This amount may be estimated too high.

One park within the City, Wells Park, has an area designated as “Dog Park” where citizens can take their dogs to walk and bags to collect pet waste are provided for cleaning after their dogs. The Parks Department collected approximately 20.8 tons of pet waste during PY2007-08.

Total amounts of pollution prevented from entering the storm drain system do not equate to improved water quality; however, the amounts calculated are possible estimated high.

Industrial

At any one time there may be 80 to 100 industrial facilities conducting industrial activities within the City of El Cajon. It is estimated that 100% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during industrial inspections. If each facility is preventing one overflow of 5 gallons times 10 pounds, then 50

pounds times 80 facilities equals 4,000 pounds of bacteria- containing materials did not discharge to the storm drain system.

Total dissolved solids from Industrial areas originate mainly from fertilizers applied by contracted staff to landscaped areas (usually a very small area compared to the total industrial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation effort that reduces overspray. All activities reduce the amount of TDS available for discharge to the storm drain system.

Based on inspections and enforcement of the industrial community, pH-affecting substances are reduced from entering the storm drain system through the implementation of BMPs as required by the General Industrial Permit. Amounts estimated have no factual basis.

Trash reduction at Industrial facilities is based on industrial inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads, as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections and the two enforcement actions taken at industrial facilities during this Permit Year.

Commercial

There were at least 123 commercial facilities conducting activities with the high potential to discharge bacteria-containing liquids. Of those facilities, it is estimated that 50% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during commercial inspections. If each facility is preventing one overflow of 2 gallons times 10 pounds, then 20 pounds times 62 facilities equals 1,248 pounds of bacteria- containing materials that did not discharge to the storm drain system. This may be estimated high.

An extrapolated number of 30 was used since it is unknown how many overflows result in prevention of discharge. Responses to actual discharges are larger volumes increasing the pounds per event to 50.

Total dissolved solids from Commercial areas originate mainly from fertilizers applied by contracted staff or lease company personnel to landscaped areas (usually a very small area compared to the total commercial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation effort that reduces overspray. All activities reduce the amount of TDS available for discharge to the storm drain system.
Commercial activities observed during inspections do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.
Trash reduction at Commercial facilities is based on inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections.

Residential

Bacteria source reductions for dog owners, homeowners, and Recreational Vehicles (RVs) is purely speculation, although the numbers of potential targets is accurate, based on circulated printed educational materials. However, enforcement actions indicate few reported sewage overflows from residential areas. Amounts calculated are estimated too high and should be adjusted with more factual information in future Permit Years.

Total Dissolved Solid and Trash reductions are also speculation based on information materials circulated throughout the City in the Spring and Fall newsletters. Amounts estimated are reasonable. Based on City observations, only a few neighborhoods have trash problems. These areas will be targeted in the next Permit Year.

* = Total amounts calculated appear reasonable with the exception of bacterial-containing materials. Factual information is not readily available for this element and estimations are high.

New Development

Only trash and TDS were addressed for New Development as a small-scale post-construction BMP data is not yet available. Speculations on the amount of trash are associated with post-construction BMPs provided, although no corroborating evidence could be found. Numbers calculated appear reasonable.

Construction

Most of the pollutant reductions at construction sites involve sediment. Based on the inspections completed, bacteria from Port-o-lets, pH from concrete washout, and trash rarely require a corrective action. Estimations of pollutant-containing material prevented are low and may be adjusted.

Pollutant Reduction Estimation Worksheets for Forrester Creek 303(d) Listed Pollutants (PY2007-2008)

Table 11.3 – Municipal Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted**	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Pet Waste	Maintenance	Pet Waste Bags picked up at Dog Park	Dog Area at City	100%	1	Empirical Data	HIGH	20.8 tons of pet waste	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Education	Sewer insert - Your Private Sewer Lateral	18 buildings	100%	18	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Enforcement	Non-Storm Water Discharge	3 sewage overflows	100%	3	Empirical Data	HIGH	2,050 gallons	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
TDS/Nitrates	Parks and Grassy Areas	Maintenance	Landscape Maintenance	20 grassy areas	100%	20	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (2.5 mg/L NO3)
Trash	Streets	Maintenance	Street Sweeping	21,180 miles	100%	21,180	Empirical Data	HIGH	3,483 Cubic Yards*	No Measurement at this time
	Channels	Maintenance	Channel Maintenance	8 major channels	100%	8	Empirical Data	HIGH	1,720 Cubic Yards*	No Measurement at this time
TOTAL									**5,203 Cubic Yards Trash ******	
* - Converted from cubic yards at 60lb/cubic yard				*** - Represents only two months of usage					**20.8 Tons of fecal coliform 2,050 gal fecal coliform******	
**- Correlation to Water Quality TBD				**** - Actual Results						

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.4 – Industrial Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP (Section F.3.b, Table 4)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Private Lateral	Inspection	Sewer insert - Your Private Sewer Lateral	56 high priority industrial facilities	TBD	TBD	In Progress	HIGH	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	56 high priority industrial facilities	100%	56	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash (not 303(d) listed, but monitored by East County)	Dumpster	Maintenance	Building/Grounds Maintenance	56 high priority industrial facilities	100%	56	Extrapolated Information	MEDIUM	(.1lb of trash) (56 facilities) (365 days) = 2,044 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	56 high priority industrial facilities	83%	46	Extrapolated Information	MEDIUM	(.05lb of trash) (46 facilities) (365 days) = 840 lb	No Measurement at this time
TOTAL									**2,884 lb of trash *** **	
* - Diverted from the Storm Drain System *** - Estimated Results										
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

.1lb Trash = 8 cups/paper @ .2 ounces each

Table 11.5 – Commercial Component									
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted ***	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Private Lateral	Education	Private Lateral Maintenance	129	107	In Progress	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	129	103	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash	Dumpster	Maintenance	Building/Grounds Maintenance	129	65	Extrapolated Information	MEDIUM	(.1lb of trash) (65 facilities) (365 days) = 2,373 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	129	85	Extrapolated Information	MEDIUM	(.05lb of trash) (85 facilities) (365 days) = 1,551 lb	No Measurement at this time
								3,924 lb of trash ***	
TOTAL									
* - Diverted from the Storm Drain System			*** - Estimated Results						
**- Correlation to Water Quality TBD									

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.6 – Residential Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMPs Completed for Measurement**	**# of articles Distributed**	**% of Readers Implementing BMP (estimated)**	**# of Possible Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Sanitary Sewer	Education	Private Lateral Maintenance	38,000	0.1%	38	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
	Pets (Dogs & Cats)	Education	Pet Care	20,000 pet owners	10%	2,000	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS	Landscape Fertilizers	Education	Home/Garden Maintenance	38,000	0.5%	190	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
	Automobile	Education	Vehicle/Equip Cleaning	38,000	10%	3,800	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
pH	Concrete Washout	Education	Home Repair	38,000	5%	1,900	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7 pH)
TOTAL										

* - Diverted from Storm Drain System *** - Estimated Results

** - Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to WQ

Table 11.7 – New Development Component

ASSESSMENT LEVELS	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP (Section 6, Table 4)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
TDS	Landscape	Inspection	Bio-filtration Area	7	100% of applicable sites	7	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/l)
Trash	SW Inlets	Inspection	Inlet Filters	30	100% of applicable sites	30	Extrapolated	MEDIUM	(.1lb of trash) (30 facilities) (365 days) = 1,095 lb	No Measurement at this time
	Landscape	Inspection	Grassy Strip or Swale	13	100% of applicable sites	13	Extrapolated	MEDIUM	(.05lb of trash) (13 facilities) (365 days) = 237 lb	No Measurement at this time
	Paved Areas	Inspection	Detention Basin	9	100% of applicable sites	9	Extrapolated	MEDIUM	(.05lb of trash) (9 facilities) (365 days) = 164 lb	No Measurement at this time
	Dumpster	Inspection	WM5 - Solid Waste Management	2	100% of applicable sites	2	Extrapolated	MEDIUM	(.05lb of trash) (2 facilities) (365 days) = 37 lb	No Measurement at this time
TOTAL									**1,533 lbs of trash *****	

* - Diverted from the Storm Drain System

*** - Estimated Results

**- Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.8 – Construction Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP (Section 7, Table 5)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Port-o-let	Inspection	WM9 - Sanitary Waste Management	19	100%	19	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
pH	Concrete Washout	Inspection	WM8 - Concrete Washout Management	19	100%	19	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7)
Trash	Dumpster	Inspection	WM5 - Solid Waste Management	19	100%	19	Extrapolated	MEDIUM	(.1lb of trash) (19 facilities) (180 days) = 342 lb	No Measurement at this time
TOTAL									**342 lbs of trash *****	
* - Diverted from the Storm Drain System *** - Estimated Results										
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

11.5 PROGRAM ASSESSMENT SUMMARY

Estimated Pollutant Load Tables indicate that Residential Areas continue to have the greatest potential for pollutant removal activities. Nearly three to seven times higher than the other areas, the residential community has the largest potential for reducing pollutants from entering the City's receiving waters.

Each component has been addressed as follows for strengths and improvements. Effective is viewed as meeting the Municipal Permit implementation and reporting requirements.

Component	Effective	Strength	Improvement
Municipal	Yes	Education (Training)	Continue to coordinate with East County Cities whenever possible.
Industrial	Yes	Assessment of BMP Implementation	Revise Inspection Form – BMP- based; condense; regional consistency.
Commercial	Yes	Assessment of BMP Implementation	Continue to work with the El Cajon Community Development Center.
Residential	Yes*	Outreach and Education	Contact property owners directly.
New and ReDevelopment	Yes	Process	Implement new Permit requirements such as LID.
Construction	Yes	Inspections	Develop a special workshop for East County Developers.
Illegal Discharge Detection and Elimination	Yes	Monitoring	Increase frequency and monitoring points. Add jurisdictional wet weather sampling points at beginning and ending boundaries for pollutant loading allocations.
Education	Yes	Team Efforts	Continue efforts and team with East County Cities or Watershed whenever possible.
Public Participation	Yes	Team Efforts	Continue efforts to team with Region whenever possible.

* Face-to-face contact is effective but slow moving.

11.6 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements are discussed throughout the Program Assessment section and are summarized above. No regulatory comments were received during PY2007-08 for the City's Assessment and Jurisdictional URMP Effectiveness Component.

SECTION 12 SPECIAL INVESTIGATIONS

12.1 INVESTIGATION OF NITRATE-NITROGEN 1

12.2 FORRESTER CREEK IMPACT STUDY 5

SECTION 12 SPECIAL INVESTIGATIONS

12.1 INVESTIGATION OF NITRATE-NITROGEN

Special investigations were conducted in PY2007-08 to identify potential sources of nitrates in (2) two dry weather-monitoring locations. The purpose of the investigation was to evaluate the potential source of nitrate concentrations found to be above action levels during past dry weather monitoring events. The following comment and response is provided as background information.

The comment below was received for Annual Report PY2005-06 and the adjunct response was included in the IDDE Section of the JURMP Annual Report for PY2006-07:

Annual Report Section 8.0 (Illicit Discharge, Detection, and Elimination):
Comment:

7. The Annual Report states that the above-action level nitrate-nitrogen concentrations obtained at several monitoring sites were attributed to groundwater infiltration. In your response to this letter, please provide data supporting the statement that groundwater in the vicinity of the monitoring sites has elevated concentrations of nitrate-nitrogen.

Response:

During the dry weather field screening and analytical monitoring program for 2005-2006 two sites, monitoring locations 30 and 37, exceeded above action levels. Site 30 is a manhole in front of the Boys and Girls Club on Madison Avenue, and Site 37 is a catch basin located on the east side of South Second Street, across from the mobile home community situated between E. Main street and Lexington Avenue. Site 30 is directly downstream of Site 37, and there are no significant connections along the extension of the pipe between both monitoring locations. An aerial image displaying sampling sites and locations is attached in the Appendix.

A follow-up investigation was conducted and photo-documented on November 9, 2007; the investigation consisted of taking water samples at both sampling sites and upstream for analysis of nitrates. Please refer to the Storm Drain Map – Page 26 and the photographs included in the Appendix as part of this response. The investigation mainly focused on finding potential sources of nitrate on the upstream pipe system, consisting of monitoring site 37 (Photo 1) that samples a sixty-six (66) inch corrugated steel pipe (CSP) (Photo 2). The 66-inch CSP extends eastward to Jamacha Road where it reaches a transitional structure at the western side of Jamacha Road. At this transitional structure two lines come together under Jamacha Road. The northeast branch extends up to Main Street via an arch steel pipe and was observed with minimal flow insufficient for sampling (Photo 8) and the eastern branch extends under Jamacha Road via a reinforced concrete box (RCB) (Photo 9). The RCB reaches another transitional structure at the eastern side of Jamacha road where again two lines come together; the eastern line consists of an arch corrugated steel pipe (Photo 10) that accepts water from a trapezoidal open channel, water flow was visible. The southeasterly line did not have sufficient flow to gather a water sample and

based on previous dry weather monitoring results the reinforce concrete pipe (RCP) does not have a history of nitrate levels above action levels.

During the follow-up investigation, and to have access to the entire length of the pipeline upstream, City of El Cajon Public Works Maintenance Personnel entered the 66-inch CSP via the catch basin at sampling site 37 and collected a total of four (4) water samples for analyses. The samples were taken at site 37 and along the eastern length of the pipeline upstream. One sample was collected at sampling site 30. Photo-documentation developed during the investigation as well as an aerial image depicting the approximate sampling locations is provided in the Appendix A.12. The results of the upstream investigation are summarized in the table below:

Sampling Site No.	Date	Time	Location	Description	Temp. ºC	pH	Conductivity mS/cm	Nitrate (Lab) NO3-N, mg/L
37	11/9/07	9:30	Second Street, next to mobile home community entrance between East Main Street and Lexington Avenue	Catch Basin	21	7.6	2.13	10.6
37_1	11/9/07	9:45	Underground lateral pipe, inside mobile homecommunity	Lateral pipe	20.7	7.3	1.98	10.6
37_2	11/9/07	10:40	Grossmont Union High School Adult Training School Parking lot	Catch Basin	21.5	7.2	2.06	12.0
37_3	11/9/07	12:00	East of Burger King Parking lot	Concrete Channel	18.6	10.2	1.17	0.09
30	11/9/07	13:20	Madison Avenue, between Roberta Avenueand Roselle Avenue, in front of the Boys and Girls Club.	Manhole	20.1	7.6	2.01	11.6

It was concluded after analyzing the monitoring results for the field investigation that the main source of flow and nitrates is potentially located within the segment of the pipe between Jamacha Road and the catch basin at the Grossmont Union High School Adult Training Center (Training Center). Furthermore, with no significant flows discharging into this segment of the pipe from the two laterals at the Training Center and from the curb inlet opening and arch pipe at Jamacha Road, the flows may potentially seep from outside the pipe via the corroded segments of the pipeline.

The City of El Cajon conducted subsequent field investigations and facility inspections of the Training Center and commercial center; both areas drain directly or indirectly to the segment of the pipe suspected to be the source of nitrates. The Training Center is composed of classrooms, offices and storage. The two clay pipes identified in Photos 4 and 6, discharge water from landscaped and parking areas at the Training Facility via catch basins. No significant flows were

observed at the time of field inspections. No storage of any fertilizers was identified at the site. The commercial center north of the 66-inch pipe has various eating and drinking establishments as well as other types of commercial facilities that conduct business at indoor settings. The commercial center has some landscaped areas but do not appear to be large enough to be sources of high nitrates. Evidence of over irrigation or leaking valve(s) was noted during the field inspection and business owners were warned and asked to contact their landscape maintenance personnel to adjust and fix irrigation systems to prevent over spray and excessive runoff from landscaped areas. Follow-up inspections confirmed that a leaking valve had been fixed and the runoff from landscaped areas resolved. The City will continue to remain vigilant of the facilities that drain to the 66-inch pipe. At the time following the investigations, no conclusive evidence was gathered to indicate a clear source point for nitrates. The City also explored the possibility of groundwater being the source of water seeping from outside the pipe.

To find if groudwater is indeed seeping into the 66-inch pipe, the City researched existing information on groundwater in the area. The City of El Cajon contacted the San Diego County Department of Environmental Health and Department of Site Assessment and Remediation to gather any existing data. Both of these entities were not able to provide direct information, but provided the City with advice on where to find groundwater data. County staff directed the City to research the State Water Resource Control Board (SWRCB) Program – GeoTracker. This program, available via the Internet, has underground storage sites identified with reports and analytical data.

Using GeoTracker the City identified twenty (20) sites that have or had monitoring wells around the vicinity of monitoring site 37. An exhaustive research of the sites and data demonstrated that many of the sites did not have groundwater information and a few sites only report on analytical data for compounds dealing with aromatic hydrocarbons and not nitrates. No production wells were identified around the vicinity to check for nitrate data. Only one site, within approximately 2 blocks away of site 37, at the northeast corner of East Main Street and Second Avenue has existing monitoring wells. The City contacted the business owner/manager about granting the City permission to collect groundwater samples to analyze for nitrates, the request was denied. The property manager mentioned that legal staff had to be involved to grant permission.

Historical groundwater depths range from 8 to 11 ft in depth around the vicinity of sampling site 37. The approximate invert elevation of the 66-inch pipe ranges from 6 ft to 7 ft in depth. The City is working with a consultant to collect groundwater samples via the drilling of hydropunch borings or to continue to pursue the collection of samples through existing monitoring wells around the vicinity. On January 14, 2008, the City contacted Ms. Christina Arias from the Regional Water Quality Control Board to explain timing constraints. As a result of the conversation, it was agreed that the City would submit the results of groundwater sampling shortly after groundwater samples can be collected, analyzed, and the data evaluated.

Closure Response:
In July 2008, the City conducted groundwater sampling at two locations in the City. The purpose of the study was to evaluate the potential source of nitrate concentrations found to be above action levels during past dry weather monitoring events.

A brief summary of steps taken during this project is presented below:

- Contracted with D-Max Engineering, Inc. to provide assistance in conducting additional investigation.
- Prepared a drilling application and submitted it to the County of San Diego, Department of Environmental Health, and coordinated with DigAlert prior to drilling.
- D-Max Engineering, Inc. sub-contracted with Tri-County Drilling Inc. to excavate two boreholes in the vicinity of existing dry weather Site 37, where nitrate exceedances have consistently been detected over the years. One borehole was located on the unpaved portion of South Second Street south of Site 37. The other borehole was drilled inside the School District parking lot at Jamacha Road. The City coordinated with the School District to obtain permission for drilling on its property and City's easement.
- The borings were drilled down past 20 feet. The groundwater table was estimated at 9 to 10 feet deep, and hydropunch samples were collected and sent to EnviroMatrix to be analyzed for Nitrate, Total Nitrogen, Fecal and Total Coliform, Enterococcus, Total Dissolved Solids (TDS), and Total Phosphorous. The results are summarized in the table below. Refer to Appendix A.12 for report from D-Max Engineering, Inc. and laboratory reports.

Analyte	Reporting Limit	Site A	Site B	Units
Nitrate as N	0.05	17.4	16.7	mg/L
Nitrate/Nitrite as N	0.05	17.4	16.7	mg/L
Total Kjeldahl Nitrogen	0.5	ND	.5	mg/L
Total Nitrogen	0.5	17.4	17.2	mg/L
Phosphorus, Total	0.05	0.26	0.1	mg/L
Total Dissolved Solids	20	1,200	1,590	mg/L
Total Coliforms	2	2	230	MPN/100mL
Fecal Coliforms	2	2	230	MPN/100mL
Enterococcus	2	ND	ND	MPN/100mL

Notes: "ND" – Not detected at or above the reporting limit.
Red text indicates the result is above the Dry Weather Monitoring Program action level.

The Dry Weather Monitoring Program action level for nitrate is 10.0 mg/L. At both sites the results exceeded this action level, and groundwater elevations are high enough to influence the storm drain system. Previous investigations by the City have found seepage into the storm drainpipes in these areas as well; that seepage was found to have high levels of nitrate as well. Additionally, previous Dry Weather Monitoring Program upstream investigations have found that the storm drain system upstream of the area in which seepage has been noted either is dry or

has water with levels of nitrate well below the action level. These findings indicate that the high exceedance of nitrates at Site 37 is groundwater infiltration. Site 30 is located downstream of Site 37).

12.2 FORRESTER CREEK IMPACT STUDY

For the five years, the City conducted upstream/downstream monitoring of dry weather constituents of concern in Forrester Creek. The monitoring was conducted on August 11, 2008 to assess the relative amount of pollutants discharged within the jurisdictional boundaries of El Cajon into Forrester Creek. The upstream location is at the County boundary, specifically at Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of 1699 East Main Street. Flow at the upstream sample was approximately 3 gallons per minute. During rain events, flow from Crest and other unincorporated County areas discharge directly into the City of El Cajon without treatment. To date, no analytical data have been collected for wet weather flows.

Table 1

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Nitrate (mg/L NO_3-N)
Upstream	8/11/08	3.0	26.0	7.5	1.85	1.77	8.68
Downstream*	8/11/08	234	22.0	8.7	5.57	2.80	2.12

Table 2

Site	Date	Total Hardness (mg/L$CaCO_3$)	Oil & Grease (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mlL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	8/11/08	420	nd	1,300	1,300	1,300	1,670	11.9
Downstream*	8/11/08	480	nd	5,000	1,300	40	1,120	45.5

nd = not detected

The following is a summary of the upstream/downstream results:

- Nitrates were detected at 8.68 mg/L upstream, and 2.12 mg/L downstream
- Reactive phosphorous upstream was 0.07 mg/L, downstream was 0.03 mg/L
- Detections of ammonia upstream was 0.1 mg/L, downstream was 0.3 mg/L
- Surfactants were detected at 0.25 mg/L upstream, and 0.25 mg/L downstream

Notable Results and Reasoning

Increase in flow to 234 gallons per minute from upstream to downstream. Downstream flows have decreased for the past two years. Concentrations of many constituents decrease from upstream to downstream; this includes nitrate, reactive phosphorus, total dissolved solids (TDS), enterococcus. Increase in the concentrations (from upstream to downstream) of pH, turbidity, conductivity, ammonia, dissolved oxygen, total hardness, and total coliforms.

The City does not have an explanation for the increase in flows or the significant increase in dry weather flow contributions within City boundaries. The City will need to continue to conduct further dry weather investigations to develop enough data to establish baseline conditions (for current channel configurations) and to develop priorities for more detailed investigations for pollutant and dry weather flow sources.

SECTION 13 NON-EMERGENCY FIRE FIGHTING FLOWS

INTRODUCTION 1

13.1 BEST MANAGEMENT PRACTICES 1

13.2 EDUCATIONAL METHODS 2

13.3 IMPROVEMENTS AND REGULATORY COMMENTS 2

SECTION 13 NON-EMERGENCY FIRE FIGHTING

Introduction

Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. BMPs and educational methods will be used to reduce the discharge of pollutants to the MEP.

13.1 BEST MANAGEMENT PRACTICES

The City has already developed and implemented a program to reduce pollutants from non-emergency fire fighting flows, in accordance with Section B.3. of the Permit. BMPs will be implemented when conducting the following activities:

- Regular Maintenance of Fire and Emergency Vehicles and Equipment
- Training Exercises
- Facilities Maintenance
- Post-Emergency Rehabilitation of Response Equipment

These activities will be conducted in a way to either minimize or eliminate the discharge of pollutants to the MS4. Detailed descriptions of BMPs are given for each activity below:

Regular Maintenance of Fire and Emergency Vehicles and Equipment

- Vehicles and equipment will be cleaned where runoff will be directed either to the sanitary sewer system or to a drain with an oil/water separator system
- Vehicles and equipment will be cleaned where runoff will pond and evaporate and/or where runoff will filter through landscaped areas
- Used-oil, hydraulic fluids, and antifreeze will be stored in containers for recycling or will be disposed as hazardous waste
- Spill kits will be available to promptly cleanup and contain leaking or spilled vehicle fluids
- Use of soaps, cleaners, and detergents will be minimized, and general cleaning solutions will be disposed of into the sanitary sewer system
- Caustics, flammables, and solvents will be contained and disposed of properly as hazardous waste

Training Exercises

- Water used in training exercises will be directed to landscaped areas whenever possible, and runoff from the training exercises will not be allowed to discharge to the MS4.
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff that could contribute to non-storm water discharges

Facilities Maintenance

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways will be swept to remove debris. Debris will be placed in the trash. Interior

floors will be mopped as necessary, and the wastewater discharged into the sanitary sewer system or onto landscaped areas
- Landscaped areas will be maintained as required to reduce introduction of leaves and other landscape waste into the MS4
- Irrigation systems will be monitored and maintained as required to reduce irrigation water from going off-site
- Spills will be cleaned up using spill kits provided at the work site, and disposal of spilled material will be in accordance with applicable regulations
- Spills that require a cleanup beyond the ability of the on-site employees will be reported to the City Department of Public Works for assistance with appropriate resources
- Maintenance and repair of structures will be conducted using methods that do not contribute pollutants to the MS4
- General non-hazardous cleaning solutions will be disposed of in a utility sink that drains into the sanitary sewer system

Post-Emergency Rehabilitation of Response Equipment
Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency will be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. The use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified.

13.2 EDUCATIONAL METHODS

The Storm Water Division provided training to 34 Fire Department Personnel in PY2007-08. Details of the City's educational programs are provided in Section 8 of this document.

13.3 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements from PY1 experience includes:

- Implemented additional Municipal training to increase City employee knowledge of Best Management Practices to help ensure that non-emergency fire fighting activities to not add to polluted runoff.
- Expanded maintenance Best Management Practices for fire fighting equipment and facilities.

Regulatory comments are not applicable to this portion of the JURMP update. Non-Emergency Fire Fighting is a new component of the annual update.

SECTION 14 JURMP REVISIONS

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14.3	NON-STORM WATER DISCHARGES	1
14.4	DEVELOPMENT PLANNING COMPONENT	2
14.5	CONSTRUCTION COMPONENT	3
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SECTION 14 JURMP REVISIONS

14.1 INTRODUCTION

This section identifies the location in the JURMP of any changes made to the JURMP in order to meet the requirements of the new Municipal Permit.

Updated land use information and listings of ESAs based on more recent information have been provided in the introduction. The regulatory background discussion has been updated to provide information about the Municipal Permit.

14.2 ADMINISTRATIVE AND LEGAL PROCEDURES

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
Section 1	Section 2	Moved information on administrative and legal procedures to its own section	Separate section for this information has been included in the County's JURMP format
		Added information about the City's enforcement procedures	Provides information that can be referenced when discussing enforcement in other sections within the JURMP
		Added organization chart	Required by Municipal Permit

14.3 NON-STORM WATER DISCHARGES

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
1.5.1	3.2	Moved prohibited discharges information to new section	Required by Municipal Permit
1.5.2	3.3	Moved allowable discharges information to new section	Required by Municipal Permit
13.1	3.4.1	Moved non-emergency fire fighting BMP information to new section	Required by Municipal Permit

14.4 DEVELOPMENT PLANNING COMPONENT

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
Intro	4.1	Complete rewrite, added new goals of the component	Old intro not applicable to Municipal Permit
6.1	4.2	Added list of current water quality and watershed protection principles in the General Plan	Required by Municipal Permit
		Added additional land use planning implementation information	Required by Municipal Permit
6.2	4.4.3	Updated minimum requirements for all development projects	Required by Municipal Permit
		Added definition of "legal prior approval"	Provides clarification of what projects are subject to updated requirements
	4.2.4	Updated and moved discussion of the City's SUSMP	Old JURMP was outdated
	4.4.2	Added Description of the City's SUSMP and general requirements for all SUSMP projects	Required by Municipal Permit
	4.4.3	Added new BMP requirements for Priority Projects, including HMP requirements	Required by Municipal Permit
	4.4.4.4	Added table and description of planned updates for Model and Local SUSMP including HMP	Required by Municipal Permit
6.3	4.3	Updated description of the EIS checklist	Required by Municipal Permit
		Updated description of environmental review process to reflect current City procedure	Required by Municipal Permit
6.4	4.4.4.1	Updated outreach and staff training information	Not specifically required by Municipal Permit but is part of the City's implementation of the Development and Planning Component
-	4.4.4.3	Added criteria for granting of waivers for treatment control BMPs and option to development a mitigation program	Required by Municipal Permit
-	4.4.4.6	Added description of the new treatment control BMP maintenance tracking database	Required by Municipal Permit
-	4.4.4.6	Added treatment control BMP prioritization criteria	Required by Municipal Permit

Old JURMP Section	New JURMP Section	Change	Rationale for Change
-	Appendix B	Added prioritized inventory of development projects with approved treatment control BMPs	Required by Municipal Permit
-	4.4.4.5	Added inspection program for post-construction BMPs for SUSMP projects prior to occupancy of site	Required by Municipal Permit
-	4.4.4.7	Added annual inspection program for all projects with treatment control BMPs	Required by Municipal Permit
-	4.4.4.8	Added annual verification procedure for treatment control BMPs by responsible maintenance party	Required by Municipal Permit
-	4.4.4.9	Added enforcement measures for development projects	Required by Municipal Permit
-	4.6	Added effectiveness assessment	Required by Municipal Permit
-	4.7	Added program review and modification	Optional section presented in San Diego County's JURMP outline

14.5 CONSTRUCTION COMPONENT

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
Intro	5.1	Removed 10-step process and added a general introduction about the	Outdated; not required by Municipal Permit.
		Added general statement about the goals of the construction component	States goals of section.
7.1	-	Section removed	Section no longer required by Municipal Permit.
7.2	5.3	Added statement about updating City ordinances to comply with Municipal Permit	Required by Municipal Permit.
7.3	5.5.2	Added details regarding current review process and City departments involved	Old JURMP was vague, and specificity is required by Municipal Permit.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
7.4	Appendix B	Provided an updated site inventory	Required by Municipal Permit.
	5.2	Added requirement to update inventory at least once a month	
7.5	5.2.1.1	Updated TTWQ prioritization criteria	Now corresponds to the new inspection frequency requirements in Municipal Permit.
7.6	5.4.1 and Table 5-1	Updated minimum BMP requirements	Required by Municipal Permit.
		Reformatted listing of BMP requirements to better match Municipal Permit	
		Added pollution prevention concepts (formally section 7.1)	
	5.4.1.1	Updated seasonal BMP requirements	Allowed by Municipal Permit.
	5.4.2	Added additional controls for construction sites near sensitive water bodies	Required by Municipal Permit.
	5.4.3	Added maximum disturbed area limitations	Required by Municipal Permit.
	5.4.4	Added advanced treatment requirements	Required by Municipal Permit.
7.7	5.5.4	Updated minimum inspection frequencies	Required by Municipal Permit.
		Added tracking of inspections at each construction site	Required by Municipal Permit.
		Added language about implementing proper follow-up actions based on inspection findings	Required by Municipal Permit.
7.8	5.5.5	Added description of what actions will be performed by the City during inspections	Required by Municipal Permit.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
		Added requirement of inspectors having authority to implement immediate enforcement action	Required by Municipal Permit.
		Added description of escalating enforcement measures	Required by Municipal Permit.
7.9	5.5.8	Added reporting of high level enforcement actions to RWQCB	Required by Municipal Permit.
7.10	5.5.1	Added information regarding education and staff training and reference to education section of the JURMP	Required by Municipal Permit.
7.11	5.6	**NO MAJOR CHANGES**	-

14.6 MUNICIPAL COMPONENT

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
2.1	6.1.2	Discussion of pollution prevention measures and BMPs	Required by Municipal Permit
2.3	6.1.1	Updated source characterization, criteria, and prioritization	Required by Municipal Permit
2.2	6.2	Updated/added municipal fixed facilities	Required by Municipal Permit
	6.3	Updated/added description of roads, streets, highways, parking facilities	Required by Municipal Permit
	6.5	Updated/added sanitary sewer system	Required by Municipal Permit
-	6.6	Added mobile municipal activities, including power washing	Required by Municipal Permit
-	6.7	Added special events	Required by Municipal Permit
-	6.3.4	Added street sweeping prioritization	Required by Municipal Permit
-	6.4.2	Added information about the retrofitting of flood control	Required by Municipal Permit

Old JURMP Section	New JURMP Section	Change	Rationale for Change
		devices within the City	
-	6.5.4.1	Added controls and measures to prevent and eliminate seepage from sanitary sewers to MS4s	Required by Municipal Permit
-	6.7	Added controls and measures for special events	Required by Municipal Permit
2.4, Appendix C	6.1.2, Appendix C	Update to Minimum BMP requirements for all municipal areas and activities	Required by Municipal Permit
2.5	6.4	Updated MS4 maintenance and BMPs	Required by Municipal Permit
2.6	6.2.3.1	Updated management strategy for pesticides, herbicides, and fertilizers	Required by Municipal Permit
2.7	6.2.4	Updated inspection procedures and frequencies	Required by Municipal Permit

14.7 INDUSTRIAL AND COMMERCIAL COMPONENT

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
3, 4	7	Combined industrial and commercial sections into one section	Follows organization of the Municipal Permit and of the Copermittees' standard JURMP outline
4.2	7.2.2, 7.3.2	Added building material retailers and storage, animal facilities, food markets, and power washing to the list of inventoried commercial business categories	Requirement of the Municipal Permit
3.2, 4.2	7.2.2, Appendix B	Created a table for pollutants potentially generated by each category of site/source; added identification of whether the site/source is tributary to a Clean Water Act section 303(d) waterbody segment and generates pollutants for which the water body segment is impaired to the inventory tables	Requirement of the Municipal Permit

Old JURMP Section	New JURMP Section	Change	Rationale for Change
3.3, 4.2	7.2.2	Modified prioritization criteria for industrial and commercial	Municipal Permit allows for more flexibility; incorporation of knowledge from inspection experience provides more accurate prioritization
3.1, 4.1	7.2.3	Incorporated pollution prevention measures into the BMP section; removed the stand alone pollution prevention section.	Municipal Permit treats pollution prevention measures as a type of BMPs; this organization reduces potential for confusion based on trying to distinguish between what is a pollution prevention measure and what is a BMP
-	7.3	Added more specific description of BMPs to implemented for businesses (a) tributary to 303(d) listed water bodies and generating pollutants for which the water body is impaired and/or (b) within, directly adjacent to, or directly discharging to receiving waters within ESAs	Requirement of the Municipal Permit
3.5	N/A	Removed industrial monitoring component of the JURMP	Not required by the Municipal Permit
-	7.2.4	Added a commitment to notify businesses of updated BMP requirements within the first three years of program implementation	Requirement of the Municipal Permit
-	7.2.4	Added commitment to train City inspectors at least annually	Requirement of the Municipal Permit
3.6, 4.4	7.2.4	Inspection frequency requirements updated to 20 percent of inventoried sites in the first year first year and 25 percent in subsequent years, and 50 percent of high priority sites in the first year and 100 percent in subsequent years.	Requirement of the Municipal Permit
-	7.2.4	Added commitment to track the number of inspections during each reporting period to ensure the minimum inspection frequencies are achieved	Requirement of the Municipal Permit
3.6, 4.4	7.2.4, 7.3.4	Updated inspection procedure to match current status of program as implemented in the City	Requirement of the Municipal Permit, and City has modified its program based on lessons learned during the previous permit cycle

Old JURMP Section	New JURMP Section	Change	Rationale for Change
-	7.2.4, Appendix D	Added SWPPP review and monitoring review component to inspection form	Formally document review of SWPPP and monitoring results, actions which the Municipal Permit requires
-	7.2.4, Appendix B	Identified businesses that the City plans to inspect in 2007-2008	Requirement of the Municipal Permit
-	7.2.4	Added description of procedure to report industrial non-filers in JURMP Annual Reports	Requirement of the Municipal Permit
-	7.3	Added a new program element to regulate mobile businesses, including BMP requirements, education, inspections, and enforcement measures	Requirement of the Municipal Permit
-	7.3.2, Appendix B	Added a column to the inventories to identify which businesses are mobile	Requirement of the Municipal Permit
-	7.3.4	Added a description of potential regional collaboration effort related to mobile business regulation	Encouraged by the Municipal Permit and likely to be developed by Copermittees
-	7.4	Added reference to Effectiveness Assessment Section	Matches Copermittees' standard JURMP outline, clarifies location of effectiveness assessment discussion
-	7.5	Added place holder for future modifications to the JURMP	Matches Copermittees' standard JURMP outline, provides location for future updates to be recorded

14.8 RESIDENTIAL COMPONENT

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
-	8.2.1	Disposal of trash	Required by Municipal Permit
5.2.	8.2.2	High TTWQ areas updated	Required by Municipal Permit
5.1, 5.3	8.3	BMP section merged with Pollution Prevention methods, and updated	Required by Municipal Permit
5.3	8.3	Updated BMPs	Required by Municipal Permit
-	8.3.1	Added BMPs for disposal of trash	Required by Municipal Permit

Old JURMP Section	New JURMP Section	Change	Rationale for Change
-	8.3.2	Discussion of additional controls for areas tributary to 303(d) listed impaired waterbodies	Required by Municipal Permit
-	8.3.2	Implement BMPs in residential areas and for residential activities not considered a high threat.	Required by Municipal Permit
5.3.1	8.4.2	Updated Used Oil collection centers	State Certified Used Oil Recycling Centers Website
-	8.4.5	Regional Residential Education Program added	Required by Municipal Permit

14.9 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
8.6.1	9.3.1	Updated Sewer prevention and response plans to reflect changes in State Order	New State Order
-	9.3	Updated discussion of sewage spill response to include private laterals and failing septic systems	Required by Municipal Permit
8.8	9.3.4	Hazardous waste disposal section moved to Section 6 and 10	Consistency with Municipal Permit requirements
-	9.4.1	Added MS4 Outfall Monitoring section	Required by County standard format
-	9.4.2	Added Source Identification Monitoring	Required by County standard format
8.1.1	9.4.3	Revised locations for Dry Weather Monitoring Program sites	Based on past experience and to provide data to help address new requirements
8.1	9.4.3	Updated MS4 map	Required by Municipal Permit
-	9.4.3	Updated Dry Weather Monitoring Program procedures to include trash monitoring	Required by Municipal Permit
-	9.5.1	Dry weather monitoring criteria which exceed action levels will be screened in subsequent years	Required by Municipal Permit

Old JURMP Section	New JURMP Section	Change	Rationale for Change
-	9.5.1	Modified Dry Weather Monitoring follow-up investigation procedures to state that investigation must be initiated within two business days where dry weather results exceed action levels unless a rational can be provided	Required by Municipal Permit
8.9	1.3.1	Moved to discussion of controlling sanitary sewer system related infiltration to Section 6	Consistency with Municipal Permit requirements

14.10 EDUCATION COMPONENT

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
9.3.1	10.2.2	Updated municipal construction section	Required by Municipal Permit
13.2	10.2.4	Education of fire fighting staff	Required by Municipal Permit
-	10.3.5	Added discussions of educational programs targeting underserved audiences, high-risk behaviors, and allowable behaviors and discharges	Required by Municipal Permit
-	10.2, 10.3.1	Added discussion of education for LID BMP requirements	Required by Municipal Permit

14.11 PUBLIC PARTICIPATION COMPONENT

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
-	11.2	Added discussion of how public participation is encouraged in development and implementation of the JURMP	Required by Municipal Permit
10.1	11.2	Updated list of programs	Match most recent information

14.12 FISCAL ANALYSIS

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
12.1	-	Estimated implementation cost removed	No longer required by Municipal Permit
12.2	12.2.1	Updated financing mechanisms	Required by Municipal Permit
-	12.2.2	Added urban runoff programs	Required by Municipal Permit
-	12.2.3	Added current budget reporting information	Required by Municipal Permit
-	12.3	Added discussion of future fiscal analysis methods	Required by Municipal Permit

14.13 EFFECTIVENESS ASSESSMENT COMPONENT

This table identifies changes that have been made to the JURMP in this section.

Old JURMP Section	New JURMP Section	Change	Rationale for Change
11.1	13.1	Updated content to account for development of regionally accepted framework for effectiveness assessment	Update to most recent approach
-	13.2	Added discussion of assessments for overall program, individual program components, and significant activities for targeted outcome levels 1 through 6	Required by Municipal Permit
-	13.2	Added tables listing assessment metrics for significant activities for levels 1 through 6	Provide method for addressed Municipal Permit requirement

Section 15 Conclusions and Recommendations

Introduction 1

15.1 Conclusions 1

Table 1 – Challenges and Associated Strategies/Actions 3

15.2 Recommendations 4

SECTION 15 CONCLUSIONS & RECOMMENDATIONS

INTRODUCTION

To conclude PY1 and recommend changes for PY2, this Section focuses on the challenges overcome this last year that will help eliminate inaccuracy or uncertainty for subsequent permit years. To summarize, the City:

- Continued implementation of the BMP-based inspections by focusing efforts on ensuring full implementation of appropriate BMPs at all high priority commercial, industrial, construction and municipal facilities.
- Expanded the public education efforts by participating in the Fire Department/Safety Open House, giving presentations, hosting Pollution Prevention Days events and providing information to the mass public through the City newsletter.
- Continued efforts towards a Watershed-based program by conducting the fifth upstream/downstream water quality assessment of Forrester Creek.
- Refined the City's ability to track complaints, inspections, violations, and enforcement actions for accuracy and completeness.
- Opened contract for on-call analytical testing services to conduct follow-up responses to complaints, spills, and targeted investigations to identify potential pollutant source points.
- Hired consultant to assist with the review of storm water plans and requirements for proposed development and redevelopment projects.

15.1 CONCLUSIONS

A number of conclusions resulted from compiling the Annual Report information as follows:

The City is currently transitioning the activity-based requirements of Order No. 2001-001 to fulfill the requirements of Order No. R9-2007-001. The actions taken by the City to comply with these requirements are fully described in Sections 1 through 14 (particularly Section 11) of this Annual Report. The City will continue to meet the activity-based compliance requirements in future program years.

The City's focus on BMP implementation at high priority commercial and industrial facilities and at construction sites will reduce or prevent discharges of pollutants from those activities and sites. Once the City can reasonably assure that those priority activities are not discharging pollutants, the City will be able to focus more effort on identifying and eliminating other (unknown, unidentified) sources of pollutants that continue to impact water quality.

The City's program must continue to move forward, from an emphasis on the activity-based compliance actions to water-quality-based activities that will help the City achieve the goal of reducing discharges of pollutants and restoring the quality of the receiving waters. These activities include collecting, evaluating and incorporating sufficient water quality data to set priorities, better identify problem areas, and to be able to demonstrate reductions in pollutants and improvements in water quality.

Effectively integrating jurisdictional into watershed programs will be a continued focus for the future. The Permit establishes important obligations at both jurisdictional and watershed levels. To accomplish this transition and integration, the City continues to meet with East County Cities Workgroup (San Diego River Watershed Jurisdictions) to provide some direction concerning inland urban runoff issues. Taking advantage of successes at other Cities strengthens individual and watershed programs.

New Directions, New Challenges….

The City must still address a number of unresolved data and information collection issues. Monitoring data are especially important to quantify pollutant loads within the jurisdiction of El Cajon. Additional dry weather monitoring stations are needed to better identify illegal discharge sources. The need for additional data and information must be carefully balanced with the costs of obtaining those items.

Permit Year 1 of Order 2001-01(2001/2002) set a baseline for the 14 components with the primary goal to reduce or eliminate pollutants from entering the City's storm drain system, which flows to Forrester Creek, the San Diego River, and ultimately the Pacific Ocean. Permit Year 2 implemented those 14 components that required inspection, monitoring, education, and enforcement. Permit Year 3 spent over 17,000 staff hours and over two million dollars ($2,000,000) in meeting permit requirements and JURMP goals. Permit Years 4 and 5 continued the BMP implementation verification inspection program initiated in PY3. Permit Year 4 focused on the Automotive Repair Industry, while PY 5 focused on the Restaurants and other businesses preparing and serving food.

The solid base of protocols and procedures produced in 2001, continued into PY6 and into the current reporting period with refinement supported by seven years of experience in program implementation. An unending challenge is changing the behavior of the approximately 96,000 residents and 2,000 businesses and their views of urban runoff pollution. The City is predominantly a community of rental units, which identifies the population as more transient than the typical single-family residential population. This outreach and education challenge will be changing as more rental complexes turned into common living complexes with home

ownership. The following table summaries the City's storm water management strategy based on the challenges presented during the current reporting period, 2007/2008.

Table 1 – Challenges and Associated Strategies/Actions

Challenges	Strategies / Actions
Implementing the 14 components simultaneously	1. Prioritize implementation to maximize use of personnel, supplies, equipment, and budget. 2. Develop budget for PY1 to add watershed outreach, efforts, public participation events, additional outreach materials, GIS data development, staff training, and treatment controls for trash and debris.
Adequate Staffing and Equipment	Train as many City staff in storm water pollution prevention and Best Management Practices.
Incorporate Storm Water Concepts and Requirements at the Planning Stage	Work closely with Community Development staff to generate a Storm Water Information Packet to distribute to applicants.
Transition Jurisdictional Programs and activities into Watershed Activities.	1. Meet with WURMP Copermittees for implementation. 2. Explore strategies to fund watershed activities that go beyond the jurisdictional boundaries.
Tackle Inland City Issues	1. Coordinate with East County Cities on pollutant load reduction, training, and citizen educational efforts. 2. Develop East County City-specific materials.
Maintain Adequate Monitoring tasks	1. Review dry weather monitoring results. 2. Use GIS and the City's Business License database to focus on the most highly potentially pollution production areas. 3. Develop a basic wet weather monitoring program that is comparable with other Copermittee programs.

From July 1, 2003 through June 30, 2008, the City tackled a new set of challenges while maintaining the current level of provided services. In review, it was better to put resources towards implementing productive processes and procedures, rather than completing a task in the name of compliance. The City continues to brainstorm toward reaching higher standards in future program years, while quantifying pollutant reductions from jurisdictional actions that may have a watershed impact.

15.2 RECOMMENDATIONS

Specific recommended improvements are listed at the end of each component. Below are some general improvements for the City's Urban Runoff Strategy.

- Maintain adequately trained staff to implement JURMP activities,
- Increase budget and effort in creating a comprehensive Geographical Information System for the Jurisdictional and Watershed Storm Water Program efforts.
- Increase budget for watershed training, East County City Cooperative efforts, and electronic tracking of program information,
- Coordinate through City departments a cohesive urban runoff management program,
- Generate a schedule of outreach events for the next Permit Year according to JURMP requirements,
- Design a comprehensive program to collect and organize information for the Annual Report,
- Add sample collection sites and frequency to the dry weather monitoring program, and
- Focus on outreach and education activities for the most effective approach to managing storm water pollution.
- Develop a storm drain master plan map displaying MS4 infrastructure.

APPENDIX A

Appendix A.1
(No Content)

STORM WATER

MITIGATION PLAN

Permit No. PUD or TSM or BP

Name of Project

PROJECT ADDRESS
APN: 000-000-00

Prepared By

John Q. Engineer
Consultants, Inc.
195 E. Douglas Avenue
El Cajon, CA 92020

For

Developer, LLC
200 E. Main
El Cajon, CA 92020

Date

1.0 INTRODUCTION 4

1.1 PROJECT DESCRIPTION 4

TABLE 1-1 (Check all that apply) 4
Water Quantity 5
Water Quality 5
2.0 WATER QUALITY ENVIRONMENT 5

2.1 PRE-CONSTRUCTION CONDITIONS AND FLOW 5

2.2 POST-CONSTRUCTION CONDITIONS AND FLOW 6

SUSMP FORM 6

3.1 POLLUTANTS GENERATED from AFTER CONSTRUCTION ACTIVITIES AND BMPs APPLIED TO MITIGATE 10
Terms 10

TABLE 3-1 (Highlight Pollutants from Categories in Table 1-1) 10

TABLE 3-2 (Highlight the combination of BMPs for the Project that most effectively treats the Pollutants from Table 3-1) Efficiencies are in () 10
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ATTACHMENTS

A. Location Map
B. Project Map
C. Post-Construction BMP Map
D. BMP Datasheets for proprietary controls (only)
E. Hydrology Calculations/Copy of Hydrology Study

ATTENTION: DIRECTIONS ARE CONTAINED in BRACKETS [ ]

1.0 INTRODUCTION

A Storm Water Mitigation Plan (SWMitP) is required under the City of El Cajon Municipal Code 16.60 and Municipal Permit Order 2007-01. The purpose of this SWMitP is to address the water quantity and quality from the proposed project. Best Management Practices (BMPs) applied address long-term solutions to water quality. [Identify the source of the BMPs: Caltrans or CASQA or proprietary. Attach only proprietary BMPs. Provide specifications for all BMPs. Provide calculations and justifications for BMPs]. This SWMitP is also intended to ensure the effectiveness of the BMPs through proper maintenance that is based on long-term fiscal planning. The SWMitP is subject to revisions as needed by the engineer.

1.1 PROJECT DESCRIPTION

[Provide and discuss project location, topography, run-on and runoff issues, and unique conditions]
[Provide location map]

[Complete the following table for all applicable categories. Designations provided are highly recommended by the San Diego County Copermittees. There may also be others – provide explanation of pollutant sources]

TABLE 1-1 (Check all that apply)

Priority Project Categories	
>10 SFR	
>1 acre Commercial	
Automotive	
Restaurants	
Hillside Development > 5,000 sq ft	
Parking Lots > 5,000 sq ft or > 15 spaces	
Streets, roads, highways, freeways that create new paved surface > 5000 sq ft	
Retail Gas Outlets	

1.2 HYDROLOGIC UNIT CONTRIBUTION

Water Quantity

[The 10-year flood is the design storm used for calculating peak flows and the 100-year rain event is used to demonstrate flooding. Discuss the types of surfaces rain water that will flow over on the project and a general approach to minimizing impervious areas, directly connect impervious areas, retaining natural areas, and use of porous surfaces]

Water Quality

[Major channels/discharge points identified by the City are: Broadway Channel; Washington Channel, Third Street Lateral, County Ditch, and Fletcher Parkway which drain to Forester Creek AND Fanita Channel that directly discharge to the San Diego River. Both are 303(d) listed. The City considers the pollutants identified to be of concern for the entire length of the waterbodies. Discuss pollutants and how the project may affect water quality.]

2.0 WATER QUALITY ENVIRONMENT

Terms for Use in Calculations

% Impervious – the amount of square footage covered by pavement (concrete or asphalt, buildings, roofs, patios, and sidewalks. Includes future paved areas depending on size of lot such as proposed patio and RV parking.
Runoff Coefficient – calculate using % impervious and known soil type.
Time of Concentration – the amount of time for the first drop of water at the furthest point within a basin to travel to the discharge point without turning more than 45 degrees in a natural-lined conveyance.
Flow Length – the path water from the furthest point to discharge point without turning more than 45 degrees in a natural-lined conveyance.

2.1 PRE-CONSTRUCTION CONDITIONS AND FLOW

[Describe the pre-construction conditions such as: not paved, never developed, previously a gas station, etc.; grading requirements if applicable; how the site currently flows, direction of flow, the calculation used for flow.]

[Provide the total area and actual percent impervious for the project area.]

[Describe each parameter in the calculation and how the value used was chosen. Use runoff coefficients that reflect the true imperviousness of the project area and not the land use coefficients.]

[Use maps to indicate the parameter's location on the project site.]

[Calculate Q to the nearest 0.1 CFS.]

2.2 POST-CONSTRUCTION CONDITIONS AND FLOW

[Describe the post-construction conditions such as: paved, fully developed, development is a restaurant; final grading; how the site flows, direction of flow, the calculation used for flow.]

[Provide the percent impervious for the developed property.]

[Describe each parameter in the calculation and how the value used was chosen. Use runoff coefficients that reflect the true imperviousness of the project area and not the land use coefficients.]

[Use maps to indicate the above characteristics, detail schematics of post-construction BMPs (plan and cross-section views) and location of post-construction BMPs on the project site.]

[Summarize the affects of the project on the flow (increased, decreased, fully mitigated, etc.) and on downstream hydrology. Downstream assessments must address City of El Cajon discharge to the jurisdictional line at the City of Santee.]

[Compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rates, flow velocity, runoff volume, time of concentration, and retention volume (All calculations may be provided as Attachment E).]

[Calculate Q to the nearest 0.1 CFS.]

[Provide formulas, actual calculations, and a table with pre- and post-construction flows without the incorporation of any post-construction BMPs. Then add the post-construction BMP detainment flows.]

[Complete the following tables. At the minimum, provide justification of implementation and when not feasible for design and source controls.]

SUSMP FORM

SUSMP Development or Re-Development (Circle)

SUSMP Triggers (list all applicable categories): _____

Address: _____

Pre-Q: _____ Post – Q: _____

Maintenance Plan/Notes:_____

Apply all General Site Design and at least one of each control. (Please note that all of the following General Site Design and control items have to be considered and applied to the

project. Explain what Best Management Practices (BMPs) were implemented to achieve the General Site Design and controls or justify why the item was not feasible for this project).

[Provide reasoning for how any Design, Source, or Treatment Controls were applied]
[Provide Justifications for any Design, Source, or Treatment Controls not applied]

General Site Design	Applied	Justification
1. Control Peak runoff rates (Required)		
2. Minimize impervious areas (Required)		
3. Conserve Natural Areas (Required)		
4. Protect\slopes\and channels (Required)		
5. Minimize effective imperviousness (Required)		
6. Construct low traffic areas (walkways, trails, patios, parking lots, alleys, etc.) of permeable surfaces		
7. Maximize canopy interception by preserving existing trees and shrubs		
8. Preserve natural drainage systems		
9. Minimize Directly Connected Impervious Areas (DCIAs) [Drain rooftops, sidewalks, walkways, trails and patios to landscaping]		
10. Other		

Source Controls[1]	Applied	Justification
1. Storm drain message and signage (Required)		
2. Outdoor storage area design (Required)		
3. Trash storage area design Must be secured, bermed, and covered. (Required and in accordance with California Fire Code section 1103.2.2)		
4. Use efficient irrigation systems & landscape design		
5. Incorporate requirements of the applicable priority project category: a. Loading/unloading dock area design (Required) b. Repair/maintenance bay design (Required) c. Vehicle/Equipment/Accessory washing area (Required) d. Fueling area design (Required) e. Private Roads f. Residential Driveways & Guest Parking g. Outdoor Processing Areas h. Parking Areas i. Roadways j. Hillside Landscaping		
6. Proof of control measure maintenance (Required)		
7. Other		

Treatment Controls (Require two controls, at a minimum) [1]	**Applied**	**Justification**
1. Inlet Filters[2]		
2. Grass strip filter		
3. Grass swale filter		
4. Extended detention basin		
5. Wet detention basin		
6. Constructed wetland		
7. Sand filter		
8. Hydrodynamic Separator		
9. Infiltration basin or trench		
10. Media filter		
11. Proprietary controls		
12. Other		

1. Proposed source and treatment controls need to be shown in the grading/drainage plan along with engineering details and/or specifications
2. Not to be used alone.

3.0 POLLUTANTS

3.1 POLLUTANTS GENERATED from AFTER CONSTRUCTION ACTIVITIES AND BMPs APPLIED TO MITIGATE

Terms

Activity – any action taking place outdoors or resultant liquid/solid is disposed outdoors.

Pollutants – sediment (dirt); metals (from dirt , paint, or chemicals); organic material (vegetation or food); grease; petroleum; sewage; detergents/soap; fertilizers; pesticides; trash/debris, and toxics (acids, corrosives).

Post-Construction BMPs – Design controls, Source controls, Treatment structures

Effectiveness – Based on manufacturer, industry; government; or other private studies. List Source.

TABLE 3-1 (Highlight Pollutants from Categories in Table 1-1)

Priority Project Categories	Sediment	Nutrient	Heavy Metals	Org Cpds	Trash & Debris	ODS	Oil & Grease	Bacteria & Viruses	Pesticides
>10 SFR	X	X			X	X	X	X	X
>1 Acre Commercial	P	P		P	X	P	X	P	P
Automotive			X	X	X		X		
Restaurants					X	X	X	X	
Hillside Development	X	X			X	X	X		X
Parking Lots	P	P	X		X	P	X		P
New Streets > 5000 sq. ft.	X	P	X		X	P	X		P
> 5,000 sq ft Redevelopment	X	P	P	P	X	P	P	P	P
Retail Gas Outlet			X	X	X		X		
X- anticipated P – Potential			ODS – Oxygen Demanding Substances						

TABLE 3-2 (Highlight the combination of BMPs for the Project that most effectively treats the Pollutants from Table 3-1) Efficiencies are in ()

Pollutants	**BMPS**
Sediment	Biofilters (Medium) Detention Basins (High) Infiltration Basins (High) Wet Ponds or Wetlands (High) Inlet Filters (Low) Filtration (High) Hydrodynamic Systems (Medium)

Nutrients	Biofilters (Low) Detention Basins (Medium) Infiltration Basins (Medium) Wet Ponds or Wetlands (Medium) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Medium)
Metals	Biofilters (Medium) Detention Basins (Medium) Infiltration Basins (Medium) Wet Ponds or Wetlands (High) Inlet Filters (Low) Filtration (High) Hydrodynamic Systems (Low)
Organic Compounds	Biofilters (Unknown) Detention Basins (Unknown) Infiltration Basins (Unknown) Wet Ponds or Wetlands (Medium) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Low)
Trash and Debris	Biofilters (Low) Detention Basins (High) Infiltration Basins (Unknown) Wet Ponds or Wetlands (High) Inlet Filters (Medium) Filtration (High) Hydrodynamic Systems (Medium)
Oxygen Depleting Substances	Biofilters (Low) Detention Basins (Medium Infiltration Basins (Medium) Wet Ponds or Wetlands (Medium) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Low)
Oil & Grease	Biofilters (Medium) Detention Basins (Medium) Infiltration Basins (Unknown) Wet Ponds or Wetlands (Unknown) Inlet Filters (Low) Filtration (High) Hydrodynamic Systems (Low)
Bacteria	Biofilters (Unknown) Detention Basins (Unknown)

	Infiltration Basins (High) Wet Ponds or Wetlands (High) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Low)
Pesticides	Biofilters (Unknown) Detention Basins (Unknown) Infiltration Basins (Unknown) Wet Ponds or Wetlands (Low) Inlet Filters (Low) Filtration (Unknown) Hydrodynamic Systems (Low)

4.0 CONSTRUCTION AND POST-CONSTRUCTION BMPS

4.1 CONSTRUCTION BMPS

[Provide a table with the **ALL** the activities, pollutants, and BMPs for construction activities. An example is provided below.]

EXAMPLE TABLE 4-1

ACTIVITY	POLLUTANTS	CONSTRUCTION BMP	EFFECTIVENESS
Entrance/Exit of Project Site	Sediment	TC-1	High (CASQA)
Pouring Concrete	Metals; pH	WM-8	High (CASQA)
Port-o-Let	Bacteria; Organics	WM-9 (Modified with secondary containment and strapped to a secure source to prevent tipping	High (CASQA)

4.2 POST-CONSTRUCTION BMPS

[Describe the soil type and characteristics of that soil type.]

[List the post-construction BMPs that will be used.]

[Identify the pollutants associated with each BMP.]

[Describe the effectiveness of the BMP or Treatment Train (multiple BMPs) with the pollutants.]

[Provide a Table with this information. An example is provided below]

EXAMPLE TABLE 4-2

ACTIVITY	POLLUTANTS	POST-CONSTRUCTION BMP	EFFECTIVENESS
Residential -Car Washing	ODS; Sediment	Source control - Capture, Contain, Collect	Low or High (EPA)
Commercial – Power washing sidewalks/driveways	Sediment; oil&grease; bacteria	Source control - Capture, Contain, Collect	Low or High (Regional Board)
Commercial – Car rinsing	Sediment; oil&grease; metals	Source control - Capture, Contain, Collect	Low or High (County of San Diego)
Residential/Commercial – Over watering/Over spray	Nutrients; pesticides	Source Control – IPM Treatment control – Infiltration basin	Low or High (Caltrans)
Residential/Commercial – Landscaping Maintenance	ODS; sediment	Source control - Sweeping	Low or High

5.0 TREATMENT BMPS

Treatment BMPs are designed to treat to the 85th percentile of the design storm.

[List the Treatment BMPs incorporated into the site design in a Table. Provide Efficiencies. Show on BMP map with engineering details.]
[Show calculations to verify the treatment to the 85th percentile.]

6.0 LOW-IMPACT DEVELOPMENT (LID)

The project design must incorporate Low Impact Development (LID) Best Management Practices (BMPs) for compliance with the California Regional Water Quality Control Board (San Diego Region) Order No. R9-2007-0001. An electronic copy of the County of San Diego Low Impact Development Handbook can be found online at:

http://www.co.san-diego.ca.us/dplu/docs/LID-Handbook.pdf

7.0 MAINTENANCE

7.1 CONSTRUCTION BMPs

Maintenance of construction BMPs starts at the time of soil disturbance and continues through the life of the project, until a 70% coverage of disturbed areas is established.
[Describe how maintenance of BMPs will be accomplished]

7.2 POST-CONSTRUCTION BMPs

Post-construction BMPs are to remain with the property and be maintained in perpetuity to the engineered functionality.

[Discuss financial responsibility of maintenance]

[Provide BMP Facilities Agreement to be recorded with Grant Deed.]

[Provide a table listing each post-construction BMP, the responsible party, frequency of maintenance, any special conditions, verification of maintenance, fiscal responsibility. An example table is provided below]

TABLE 7-1

POST-CONSTRUCTION BMP	Responsible Party	Maintenance Frequency	Verification of Maintenance	Fiscally Responsible Party	Special Conditions
Trash Enclosure (Source Control)	Business Owner or Property Owner or HOA	Weekly	Daily	Business Owner or Property Owner or HOA	Use Mop to clean
Engineered Vegetative Detention Area	Business Owner or Property Owner or HOA	Quarterly	Monthly	Business Owner or Property Owner or HOA	Mulch grass; Use little to no fertilizers or pesticides
Storm Water Filter Insert	Business Owner or Property Owner or HOA	At least Semi-Annually (October 1st and April 30th)	Quarterly	Business Owner or Property Owner or HOA	Keep Clean
3-stage Clarifier	Business Owner or Property Owner	Semi-Annually (October 1st and April 30th) Or Determined by use	Quarterly	Business Owner or Property Owner or HOA	Discharge to Sanitary sewer with wastewater permit or to storm drain with approved monitoring plan.

8.0 SUMMARY/CONCLUSIONS

[Summarize the site conditions and flow before and after construction; the use of post-construction BMPs and their maintenance; and the fiscal responsibility of post construction BMPs.]

[Provide a table with pre-construction peak flow, post-construction flow without BMPs, and post-construction flow with post-construction BMPs.]

CERTIFICATION

This Storm Water Mitigation Plan has been prepared under the direction of the following Registered Civil Engineer. The Registered Civil Engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

REGISTERED CIVIL ENGINEER
JOHN C. ENGINEER *DATE*

REGISTERED ENGINEER'S SEAL

ATTACHMENT A
LOCATION MAP

USE A LOCATION MAP THAT SHOWS SURROUNDING TOPOGRAPHY.

ATTACHMENT B
PROJECT MAP

USE A SITE MAP TO SHOW THE PLACEMENT OF THE PROJECT COMPONENTS WITH DRAINAGE ARROWS.

ATTACHMENT C
Post-Construction BMP MAP

INDICATE THE LOCATIONS OF SITE DESIGN, SOURCE AND TREATMENT CONTROL BMPS TO THE EXTENT POSSIBLE

PROVIDE ENGINEERING SPECIFICATIONS AND DETAILS (HEIGHT, WIDTH, DEPTH, CONFIGURATION, VOLUME, FLOW) OF THESE POST-CONSTRUCTION BMPS ON THE MAP

ATTACHMENT D
Post-Construction BMP DATASHEETS

PROVIDE THE DATASHEETS FOR EACH POST-CONSTRUCTION BMP USED TO MITIGATE FLOW OR TREAT RUNOFF.

ATTACHMENT E
Hydrology Calculations

PROVIDE HYDROLOGY CALCULATIONS OR A COPY OF THE HYDROLOGY STUDY.

COMPUTE RAINFALL RUNOFF CHARACTERISTICS FROM THE PROJECT AREA INCLUDING, AT A MINIMUM, PEAK FLOW RATES, FLOW VELOCITY, RUNOFF VOLUME, TIME OF CONCENTRATION, AND RETENTION VOLUME

NEW SUSMP PROJECTS FOR 2007-2008

	Date (First Submittal)	Street Number (X Thru Y)		Direction	Street	Address Surname	Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	07/24/07	1905	1915	North	Marshall	Avenue	New Airport Hangars	Safari Aviation	>5,000 sq redevelopment	Inlet filters, larger SD pipe (48")
2	9/12/07	1523	1527	East	Main	Street	Commercial	R.V. Supercenter for Fabulous 7 Partners	>15 Parking Spaces	Pending Review
3	9/20/07	1273	1275	East	Main	Street	Commercial Buildings	Commercial Buildings	>15 Parking Spaces	Pending Review
4	10/15/07	777	797	North	Second	Street	New auto repair/ mechanic		New Auto Repair, Redevelopment > 5000 sq	
5	10/15/07	1539	-	East	Main	Street	Self-storage facility	Extra Space Storage	Commercial > 1 Acre	Pending Review
6	10/26/07	1101	-	South	Mollison	Avenue	New 6 Unit Development w/ Private Street	Sunset Estates	DW>5000 sf	Pending Review
7	10/30/07	1075		East	Washington	Avenue	27-unit subdivision	Rocky Hill Pointe	>10 units, >5000 sf road/p.lot	Pending Review
8	12/19/07	1001	-	West	Bradley	Avenue	New Construction Materials Recycling Facility	Waste Management	<200 ft from open channel	
9	1/17/08	801	-	-	Avocado	Avenue	New Subdivision	Habitat for Humanity Project 147	New Subdivision, 4 units	
10	02/29/08	915	975	North	Second	Street	Commercial NEC N. 2nd St. & Broadway	Walgreens	Commercial >1AC, >15 Parking Spaces	Detention structure, inlet filters, more pending further review

SUSMP PROJECTS UNDER REVIEW

2007-2008

	Site Address				Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	244	248	North	First St.	Subdivision	Calle Las Palmas	SFR >10 Units	Underground detention, Inlet filters, Trash Enclosure, Signage, Grassy Swale
2			-	Ballantyne St.	Subdivision	Valley Meadows	SFR >10 Units	Pending Review
3	823	841	-	Ballantyne St.	Subdivision	Ballantyne Glen	SFR >10 Units	Inlet filter, detention basin
4	1385	-	East	Main St.	Automotive Sales	De La Fuente Cadillac	Create >5,000 sq ft new parking with channel cover	Hydrodynamic separation system, inlet filters, underground detention box
5	1040	-	-	Bostonia St.	New Multi-Family Dwelling (6 units)	Bostonia Palms	>15 Parking Spaces	Pending Review
6	1341	-	East	Main St.	Commercial	California Suncoast Homes, Inc	>15 Parking Spaces	Grassy Swale, Gravel Detention/Infiltration Basin, filter insert, trash enclosure
7	335	355	North	Second St.	Restaurant	Taco Bell	New restaurant	Grassy swale, trash enclosure, and outlet filter
8	670	-	-	El Cajon Blvd.	Automotive Sales		>15 Parking Spaces	Underground detention, Hydrodynamic Separator, Signage
9	1120	-	-	Broadway	Rental Truck Lot	Penske Truck Leasing Company	>15 Parking Spaces	Underground Detention, Inlet filters, Trash Enclosure, Signage
10	1539	-	East	Main St.	Self-storage facility	Extra Space Storage	Commercial > 1 Acre	Underground Detention, Pervious swale, Inlet filters, Trash Enclosure, Signage
11	1905	1915	North	Marshall Ave.	Airplane hangar	Safari Aviation	>5,000 sq redevelopment	Inlet filters, larger SD pipe (48")
12	2020	-	North	Marshall Ave.	Airplane hangar	Airworld	>5,000 sq redevelopment	Vegetated swales
13	-	-	North	Magnolia Ave.	New Municipal Building, parking lot	El Cajon Public Safety Center	>5,000 sq redevelopment	Detention, Pervious swales, Sand filter, Hydrodynamic Separator, Signage
14	915	975	North	Second St.	Commercial	Walgreens	Commercial > 1 Acre	Underground detention, Inlet filters, Trash enclosure, Signage
15	1273	1275	East	Main St.	Commercial	La Valencia Plaza	>5,000 sq redevelopment	Hydrodynamic Separator, Signage
16	1001		West	Bradley Ave.	Transfer Center for Recyclables	Waste Management	5000sf redev't <200' from open channel	Underground detention, Pervious swales, Hydrodynamic Separator, Signage

Inventory of Post-Contruction Structural Treatment Control BMPs

	Street Number	Thru	N,E, S,W	Street Name	Street Surname	Site Type	Priority Trigger	Priority	Post-Construction BMPs Applied	BMP Infeasibility
1	2706	-	-	Anjuli	Court	New Subdivision	SFR >10 Units	SUSMP	CDS Unit	
2	823	-	-	Ballantyne	Street	New Subdivision	SFR >10 Units	SUSMP	Inlet filter, detention/desilting basin	
3	656	-	-	Ballard	Street	Condo-Conversion (15 units)	Condo-Conversion	Medium	Trash enclosure, trench drain, outlet filter	Existing development, Tenant Improvements
4	1001	-	West	Bradley	Avenue	Parking Lot (925 O'Connor St.)	>5,000 sq ft Development	SUSMP	grass swales, channel drains, inlet filters	
5	1032	-	-	Broadway	-	New Office Building	>5,000 Redevelopment	SUSMP	Swalegard inlet filter, grass buffer strip	
6	1090	-	-	Broadway	-	Gas Station (Re-Developed)	Gas Station	SUSMP	Grass filter strip, filter inserts	
7	1174	-	-	Broadway	-	Commercial Facility	Parking lot > 5000 sq ft	SUSMP	Inlet filter, trash enclosure	Site size constraints
8	350	-	East	Chase	Avenue	New Restaurant	New restaurant	SUSMP	Inlet filters, Detention Basin	
9	426	-	East	Chase	Avenue	Restaurant - take-out	Restaurant - take-out	SUSMP	Grease trap, grease bin	Structural BMPs already onsite
10	450	-	East	Chase	Avenue	Commercial	New Commercial >100,000 sf	High	Inlet Filters	Site size constraints, Constructed prior to R9-2007-0001 Permit
11	763	-	West	Chase	Avenue	New Subdivision	3 New single-family residences	High	Grassy swales, Curb outlet filters	
12	369	-	-	El Cajon	Boulevard	New show room addition	Parking lot > 5000 sq ft	SUSMP	trash enclosure, detention basins, inlet filters	
13	670	-	-	El Cajon	Boulevard	New Car Dealership	>15 Parking Spaces	SUSMP	Underground detention, Hydrodynamic Separator, Signage	
14	1380	-	-	El Cajon	Boulevard	Commercial Facility	>100,000 sq. ft commercial dev't, Parking > 5,000 sq ft	SUSMP	Underground detention system	
15	298	-	-	Fletcher	Parkway	Commercial Facility	>100,000 sq. ft commercial dev't, Parking > 5,000 sq ft	SUSMP	Inlet filters, 2 CDS Units, filtration strip next to Garden Center	
16	605	-	-	Fletcher	Parkway	New Commercial	New Commercial	SUSMP	Flogard catch basin insert	
17	2000	-	-	Gillespie	Way	New Industrial Complex	>5,000 sq ft Development	SUSMP	Detention area in parking, grassy swale, signage, filter inserts	
18	-	-	-	Granite Hills	Drive	New Subdivision	Subdivision>10 Units	SUSMP	Detention basin, vegetated channel	
19	549	-	-	Graves	Avenue	Condo-Conversion (25 units)	Condo-Conversion	Medium	Trash enclosure, inlet filter	Existing development, Tenant Improvements
20	-	-	-	Grossmont College	Drive	College Parking Lot	Parking lot > 5000 sq ft	SUSMP	Hydrodynamic separation system, detention area	
21	2062	2096	-	Ingamac Way	Avenue	New Subdivision	Hillside Development	SUSMP	Extended detention basin, grassy swales	
22	912	930	-	Jamacha	Road	New Multi Family Homes	>5,000 sq ft Development	SUSMP	Infiltration system, vegetated swale, storm drain inlet filters	
23	1780	1860	-	Joe Crosson	Drive	Additions to existing aircraft hangers	>5,000 sq ft Development	SUSMP	Inlet Filters, Trash Enclosures, Enclosed Wash Areas	Site size and usage constraints, airport
24	333	-	North	Johnson	Avenue	New Commercial	>5,000 sq ft Development, contiguous to channel	SUSMP	Inlet filters, roof drains to landscaping	Site size constraints, Constructed prior to R9-2007-0001 Permit
25	605	-	West	Lexington	Avenue	Commercial - Automotive Repair	>5,000 sq ft	SUSMP	gravel filter, rock energy dissipater, bio-detention basin	
26	1053	-	-	Loma Portal	Drive	New Single Family Residence	Hillside Development	SUSMP	Vegetated swale, filtration/detention system, inlet filter.	
27	1470	-	East	Madison	Avenue	Municipal Fire Station	>5,000 sq ft new parking	SUSMP	Trash enclosure, pervious concrete swale	
28	1628	1646	East	Madison	Avenue	New Church	Parking lot > 5000 sq ft	SUSMP	Vegetated detention basin, storm drain inlet filters	
29	2075	-	East	Madison	Avenue	New Commercial	>5,000 sq ft Development	SUSMP	Grass swales, filter inserts, underground detention area	
30	2119	-	East	Madison	Avenue	New Commercial	>5,000 sq ft new parking	SUSMP	Biofilters, Detention Basin	
31	2121	2123	East	Madison	Avenue	New Roadway	New Roadway	SUSMP	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	

Inventory of Post-Contruction Structural Treatment Control BMPs

	Street Number	Thru	N,E, S,W	Street Name	Street Surname	Site Type	Priority Trigger	Priority	Post-Construction BMPs Applied	BMP Infeasibility
32	245	-	East	Main	Street	New Restaurant	New restaurant	SUSMP	Roof filters	Site size constraints
33	343	-	East	Main	Street	New Commercial, Alley No. 25	< 200 ft from channel	SUSMP	Grassy swales, filter inserts	
34	1143	-	East	Main	Street	Residential	Subdivision >10 housing units	SUSMP	Biofilters for each new housing unit (perimeter)	
35	1341	-	East	Main	Street	General Commercial	>15 Parking spaces	SUSMP	Grassy Swale, Gravel Detention/Infiltration Basin, filter insert, trash enclosure	
36	1401	1409	East	Main	Street	Parking Lot, Channel Cover	>5,000 sq ft new parking	SUSMP	Hydrodynamic separation system, inlet filters, underground detention box	
37	1700	-	East	Main	Street	New Restaurant	New restaurant	SUSMP	Grass swales, Inlet filter, infiltration basin	
38	1717	-	East	Main	Street	Addition to equipment rental business	Commercial - Equipment Rental	SUSMP	Inlet filter, covered trash enclosure.	Site size constraints
39	1185	-	-	Marline	Avenue	3 New single-family residences	3 New SFRs	Medium	Grassy swales	
40	1905	1915	North	Marshall	Avenue	New Airport Hangars	>5,000 sq redevelopment	SUSMP	Inlet filters, larger SD pipe (48")	Site size and usage constraints, airport
41	756		South	Mollison	Avenue	Condo-Conversion	Condo-Conversion	Medium	Trench Drains and trash enclosure	Existing development, Tenant Improvements
42	2694	-	-	Navajo	Road	2 story office bldg.	>5,000 sq ft new parking	SUSMP	Inlet Filter	Site size constraints
43	2732	-	-	Navajo	Road	New Commercial	> 5000 sq ft	SUSMP	Flogard catch basin insert	Site size constraints
44	2766	-	-	Navajo	Road	Expansion of Parking and Playground	Parking lot > 5000 sq ft	SUSMP	Hydrodynamic separation system, underground detention box	
45	862	-	South	Orange	Avenue	Condo-Conversion	Condo-Conversion	Medium	Trench Drain Inlet Filter	Existing development, Tenant Improvements
46	189	-	-	Roanoke	Road	School	>15 Parking spaces	SUSMP	Grassy swales, storm drain inlet filters	
47	335	355	North	Second	Street	New Restaurant	New restaurant	SUSMP	Grassy swale, trash enclosure, and outlet filter	
48	1062	-	North	Second	Street	RV repair	unsure	SUSMP	Grass Filter Strip	
49	1190	-	North	Second	Street	Commercial - Restaurant	new restaurant	SUSMP	Grass Filter Strip	
50	901	921	-	Stoneys	Lane	Subdivision w/ private street (15 units)	SFR >10 Units, >5000sf new road	High	2 Inlet Filters	Constructed prior to R9-2001-0001 Permit
51	145	-	-	Taft	Avenue	Condo-Conversion (38 units)	Condo-Conversion, next to open channel	High	Trash enclosure, inlet filters, gravel infiltration basins	Existing development, Tenant Improvements
52	1501	-	East	Washington	Avenue	New Restaurant	New restaurant	SUSMP	Detention basin, signage, filter inserts	
53	1326	1350	-	Wendell Cutting	Court	New Subdivision w/ private street	10 SFR units	SUSMP	Grassy Swales, underground detention, curb-inlet filter on Broadway	
54	403	431	-	Wisconsin	Lane	New Subdivision	>5,000 sf Impervious surface (Private Street)	SUSMP	Sand media filter, underground detention basin, inlet filter	

Storm Water Requirements for Construction Sites

The City's storm drain system is composed of the street, gutter, inlet, catch basin, ditches, streams, and concrete-lined channels.

1. Perimeter Controls (fiber roll; silt fence; gravel or sand bags) must be installed and kept in place throughout the project to prohibit the discharge of sediment and pollution from entering the storm drain system. If controls are moved to complete work, they must be replaced when work is completed or at end of day, whichever comes first.
2. Erosion Controls as required by an erosion and sediment control plan must be installed as designed.
3. Tracking of sediment and dirt must be cleaned up at the end of each working day.
4. Building Materials must be stored under cover at the end of each working day.
5. Spills must be reported to the site manager once they occur and cleaned up immediately. Spills that enter the City's storm drain system must be reported to the City Storm Water staff immediately.
6. Wash waters (including paint, dry wall mud, stucco, and other water-based materials) must be captured on site and contained, then disposed of in the appropriate place.
7. Port-o-lets must be secured and bermed.
8. Trash and debris shall be placed in appropriate containers during the workday with a final clean-up completed before leaving the site. If rain is predicted, wastes shall be covered.
9. Equipment shall be stored in a bermed area or with appropriate sized drip pans.
10. Equipment repair, servicing, or fueling must be completed undercover or within a bermed area for tasks completed within the workday. Spill kits must be within the bermed or repair areas.
11. Vehicle and equipment washing is prohibited.
12. The site will be secured at the end of each working day.
13. Report any destroyed controls to the site manager, immediately.

Under the City of El Cajon's Municipal Code §13.10.00, Storm Water Management and Discharge Control, it is illegal to discharge construction debris and materials, into the storm water conveyance system or any body of water.

Failure to prevent illegal discharges can result in fines of up to $10,000 a day per violation.

Under the law, contractors, the construction company, business owner, and property owner may receive a Citation for the same violation.

EROSION AND SEDIMENT CONTROL NOTES
FOR EROSION CONTROL PLANS
(HIGH AND MEDIUM PRIORITY PROJECTS)

Add the following notes (both pages) to the Storm Water Erosion Control site plan and implement as a condition to the Erosion Control Plan:

1. In case emergency work is required, contact _____ at _____.
   (name)
   (telephone number)

2. Erosion control measures shown on plans shall not be moved or modified without the approval of the public works inspector.

3. The contractor shall maintain all erosion control devices in working order to the satisfaction of the city engineer throughout the construction phase of the project and until permanent ground cover and landscaping is established.

4. The contractor shall install additional erosion control measures as may be required by the City Engineer due to completed grading operations or unforeseen circumstances which may arise.

5. The contractor shall be responsible for and shall take necessary precautions to prevent public trespass onto areas where impounded waters create a hazardous condition.

6. Graded areas around the project perimeter must drain away from the face of slope at the conclusion of each working day.

7. All gravel bags shall have ¾ inch minimum aggregate (No burlap type bags allowed).

8. Existing streets shall be kept free of dirt and debris, and shall be maintained in good condition. Dust shall be controlled so that it is not a nuisance. The contractor shall be responsible for the repair of any street or property damaged, public or private, as a result of the work.

9. The plan shall provide that no sand, silt, or debris shall be allowed to enter the storm drain system including public streets.

10. The owner and/or the owner's contractor shall implement the plan and take remedial and preventive action immediately when pollutant discharge occurs and/or the City Engineer or the Building Division directs.

11. The above shall apply starting the 1st day of grading and/or construction and shall remain in effect until all grading and/or construction work has been completed.

ALL EROSION AND SEDIMENT CONTROL SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE CITY OF EL CAJON'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) AND SHALL INCLUDE THE FOLLOWING:

Dry Season (May 1 through September 30)

1. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads and slopes. Slopes less than 33.3% or 1:3 (vertical vs. horizontal) may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement.

2. Adequate perimeter protection BMPs must be installed and maintained.

3. Adequate sediment control BMPs must be installed and maintained.

4. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

5. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and prevent sediment discharges must be stored on the site.

6. An approved "weather triggered" response plan is mandated for implementation in the event that a predicted storm event has at least a 50% chance of rain. The proponent must have the capacity to deploy the standby BMPs within 48 hours of the predicted storm event.

7. All slopes must be equipped with erosion prevention BMPs as soon as slopes are completed for any portion of the site.

8. Cleared or graded areas left exposed at any given time are limited to the amount of acreage that the project proponent can adequately protect prior to a predicted storm event.

Wet Season (October 1 through April 30)

In addition to the Dry Season Requirements:

1. Perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms.

2. Adequate erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a BMP fails, it must be repaired, improved or replaced with an acceptable alternate as soon as it is safe to do so.

3. The amount of exposed soil allowed at one time shall not exceed standby erosion and sediment control BMP capacity.

4. An incomplete disturbed area that is not being actively graded must be fully protected from erosion if left for 10 days or more.

Project Name: _____

CITY OF EL CAJON SUSMP CHECKLIST

MS4: ☐ Forester Creek ☐ County Ditch Channel
☐ Broadway Channel ☐ Third Street Lateral
☐ Washington Channel ☐ Fletcher Parkway Lateral

City of El Cajon
STORMWATER
Protection Program

PROJECT INFORMATION

Project Name: _____ Public Private

Project Address: _____

Project Size: (acres) _____ Notice of Intent: Yes No

Completed a SWPPP: Yes No

SUSMP CATEGORY

Check all SUSMP categories that apply to the project

☐ Residential Development >100 units
☐ Residential Development > 10 units
☐ Commercial Development > 100,000 sq ft
☐ Automotive Repair
☐ Restaurants
☐ Hillside Development > 5,000 sq ft
☐ Parking Lots > 5,000 sq ft or > 15 spaces
☐ Streets, roads, highways, and freeways with >5,000 sq ft of new paved area
☐ Significant Redevelopment > 5,000 sq ft of paved area on an already developed site

IDENTIFY POLLUTANTS FROM THE PROJECT AREA

Check all that apply to the project

☐ Sediment (dirt; silt; clay)
☐ Nutrients (fertilizers, sewages)
☐ Metals (dirt, silt, clay, paints, liquid/solid chemicals)
☐ Organics (food, vegetation)
☐ Trash and Debris
☐ Oxygen Demand Substances (organic matter)
☐ Petroleum (oil, grease)
☐ Bacteria and Viruses (fecal coliform, pathogens)
☐ Pesticides/Herbicides
☐ Toxics (acids, corrosives, chemicals)

IDENTIFY RECEIVING WATERS AND THE POLLUTANT SOURCES

Does the project discharge directly to: ☐ San Diego River? or ☐ Forester Creek?

What are the primary sources contributing to SD River and Forester Creek impairments of:
TDS?_____ _____ _____

Fecal Coliform? _____ _____

Project Name: _____

pH?_____ _____

(SD River only) Oxygen Depleting Constituents? _____ _____

(SD River only) Chlorpyrifos and Diazinon? _____

(SD River only) Total and Dissolved Copper? _____

IDENTIFY CONDITIONS OF CONCERN

☐ Was a drainage study report prepared? Yes No

☐ Was a Storm Water Mitigation Plan prepared? Yes No

☐ Were the reports prepared by a registered Civil Engineer? Yes No Who?_____

☐ Are there field photographs? Yes No (Attached?)

☐ Are the following calculated according to actual % imperviousness for the 6-hour, 10-year and 100-year frequency storms?

- ☐ Peak flow rate (pre and post-construction)
- ☐ Flow velocity
- ☐ Runoff volume
- ☐ Time of concentration (minimum of 5 minutes as defined in the SD Hydrology Manual to calculate Intensity values)
- ☐ Retention volume

☐ Are conditions of concern adequately identified using:

Site Design?	Yes	No
Source Control?	Yes	No
Treatment Control?	Yes	No

ESTABLISH STORM WATER BMPS

☐ ***Site Design BMPs***

SUSMP Projects **must** consider, incorporate, and implement where determined applicable and feasible by City storm water staff. (Check all that were considered, incorporated, or implemented):

- ☐ Maintain Pre-Development Rainfall Runoff Conditions
  - ☐ Minimize project's impervious footprint
  - ☐ Conserve natural areas
  - ☐ Construct low traffic areas (walkways, trails, patios, parking lots, alleys, etc) of permeable surfaces
  - ☐ Construct streets, sidewalks, and parking lot aisles to minimum widths
  - ☐ Maximize canopy interception by preserving existing trees and shrubs
  - ☐ Preserve natural drainage systems
- ☐ Minimize Directly Connected Impervious Areas (DCIAs)
  - ☐ Drain rooftops into landscaping
  - ☐ Drain sidewalks, walkways, trails, and patios into landscaping
- ☐ Protect slopes and channels

Comments: _____

_____

Project Name: _____

☐ ***Source Control BMPs***

Does the project:

- ☐ Provide storm drain system stenciling and signage?
- ☐ Design outdoor material storage areas to reduce pollution introduction?
- ☐ Design trash storage areas to reduce pollution introduction (enclosed, covered, secured, and bermed)?
- ☐ Use efficient irrigations systems & landscape design (rain alert systems)?
- ☐ Incorporate requirements applicable to priority project categories such as:
  - ☐ Private Roads
  - ☐ Residential Driveways & Guest Parking
  - ☐ Dock Areas
  - ☐ Maintenance Bays
  - ☐ Vehicle Wash Areas
  - ☐ Outdoor Processing Areas
  - ☐ Equipment Wash Areas
  - ☐ Parking Areas
  - ☐ Roadways
  - ☐ Fueling Areas
  - ☐ Hillside Landscaping

☐ ***Treatment Control BMPs***

Check the treatment control(s) selected:

☐ Biofilters	☐ Detention Basin
☐ Infiltration basin/trench	☐ Filtration System
☐ Porous asphalt, concrete, other	☐ Hydrodynamic Separation System
☐ Filter Insert	☐ Sod-inlet Pre-treatment
☐ Grassy filter/swale	☐ Vegetated swale
☐ Proprietary Device	☐ Other: _____

☐ Do treatment controls effectively address primary pollutants of concern? Yes No

If No, describe corrective action: _____

_____

Verify the design of selected treatment controls:

☐ Was the control BMP designed for:	Volume	Flow
☐ Was the BMP design process described:	Yes	No
☐ Was the 85th percentile storm event used for design	Yes	No

If no, what design criteria was used: _____

☐ Was the BMP designed properly? If not, describe corrective actions: _____

_____

☐ Is the BMP(s) located near pollutant sources?	Yes	No
☐ Are there restrictions on use of infiltration BMPs?	Yes	No

Project Name: _____

Maintenance Requirements

☐ Was an O&M section attached? Yes No N/A

☐ Was a BMP Facilities Agreement signed by the property owner and filed with the Grant Deed? Yes No N/A

☐ Was a BMP Maintenance Agreement signed with the City to maintain BMPs located in the Right-of-Way? Yes No N/A

☐ Does this project require annual inspections and/or maintenance of BMPs by the City?

- Yes No N/A

☐ Was an access/easement agreement included? Yes No N/A

☐ Is there an HOA or other Common Interest planned for the project? Yes No N/A

☐ Were CC&Rs presented for review and acceptable? Yes No N/A

☐ Was a Storm Water Conveyance Maintenance Plan generated/received? Yes No N/A

Waiver of Structural Treatment BMP Requirements

☐ Was a waiver of infeasibility granted?

☐ Was the RWQCB notified?

Other Information

_____

_____

_____

Field Inspection

During BMP installation:

☐ Were the source control BMPs properly constructed in the field? ☐ Yes ☐ No

☐ Were the treatment control BMPs properly constructed in the field? ☐ Yes ☐ No

After project completion:

☐ Are all site design BMPs still in place? ☐ Yes ☐ No

☐ Are all source control BMPs still in place? ☐ Yes ☐ No

☐ Are treatment control BMPs still in place? ☐ Yes ☐ No

☐ Are all BMPs being maintained? ☐ Yes ☐ No

City of El Cajon
Storm Water Quality Inspection for Construction Sites
BMP COMPLIANCE REPORT

You Are the Solution to Stormwater Pollution!

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Contractor Name: _____ Address: _____

Inspector Name & Phone #: _____ Date: _____/_____/_____Time: _____AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation **APN**: _____

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

Does Project Maintain a Stormwater Pollution Prevention Plan (SWPPP)? ❑ Yes ❑ No WDID: _____

Nearest Receiving Water(s): _____ Discharge Observed: ❑ Yes ❑ No _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

The Following List summarizes Minimum BMPs Required by the City of El Cajon Storm Water Ordinance (13.10) Additional BMPs May Be Required due to Site Conditions, Specific Activities, or by the Enforcement Official.

Minimum Construction Requirements	BMP Implemented?			Comments / Recommendations
	YES	NO	N/A	
Silt Fence – SE1				
Storm Drain Inlet Protection – SE10*+ filter fabric				
Sediment Basin – SE2				
Check Dams – SE4				
Fiber Rolls – SE5				
Gravel Bag Berm – SE6				
Street Sweeping/Vacuum – SE7				
Stabilized Construction Entrance – TC1				
Hydroseeding – EC4				
Geotexiles and Mats – EC7				
Material Delivery & Storage – WM1				
Stock Pile Management – WM3*				
Solid Waste Management – WM5*				
Concrete Waste Management – WM8				
Sanitary Waste Management – WM9				
Other*				
Other				

City of El Cajon
STORMWATER
Pollution Prevention Program

VIOLATIONS / REQUIRED CORRECTIVE ACTIONS

❑ Violation of Stormwater Ordinance: _____

❑ No Violations Have Been Noted; However BMP Implementation Is Required _____

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

200 E. Main Street, El Cajon California 92020 *TEL 619-441-1653 / FAX 619-579-5254*

Erosion Control Checklist (2007/2008) Minor Projects

$50.00 Fee (Receipt code: 5513 650b; ComPlus codes: Demo 516, Minor 518, Medium 520)

Address: _____

APN: _____-_____-_____-_____ Permit # _____

Brief Project Description: _____

		YES	NO
1.	North arrow and Scale?		
2.	Legend?		
3.	Storm Water Notes?		
4.	Emergency phone number?		
5.	Drainage arrows?		
6.	Minimum BMPs		
	a. Perimeter control (silt fence SC-1) or gravel bags (SC-6)		
	b. Stabilized construction entrance (TC-1)		
	c. Street sweeping (SC-7)		
	d. Material storage (WM-1)		
	e. Concrete washout (WM-8)		
	f. Sanitary waste (WM-9)		
	g. Slope protection (coconut fiber blankets) or fiber rolls (SC-5)		
	h. Solid Waste Storage (WM-5)		
7.	Address/Site location?		
8.	Erosion Control Plan heading?		
9.	Proposed and existing structures identified?		
10.	Property Boundaries?		
11.	Topography?		
12.	Placement of BMPs?		

Notes: _____

_____

_____

_____ _____

Erosion Control Plan

City of El Cajon

GENERAL STORM WATER NOTES

A. ALL OPERATION WILL COMPLY WITH THE CITY'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PLAN (JURMP).

B. THE OWNER AND THE OWNER'S CONTRACTOR ARE RESPONSIBLE FOR POLLUTION PREVENTION PRACTICES TO PREVENT THE DISCHARGE OF SEDIMENT AND POLLUTANTS TO THE PUBLIC STORM DRAIN SYSTEM.

C. OWNER AND THE OWNER'S CONTRACTOR ARE RESPONSIBLE FOR THE PREVENTION OF EROSION CAUSED BY CLEARING OF VEGETATION, GRADING, DEMOLITION OR CONSTRUCTION.

D. SEDIMENT, POLLUTION AND EROSION CONTROL MEASURES WILL BE IMPLEMENTED STARTING THE FIRST DAY OF CLEARING, GRADING OR SOIL DISTURBANCE, OR CONSTRUCTION. THESE CONTROLS WILL REMAIN IN EFFECT UNTIL ALL RELEVANT OPERATIONS HAVE BEEN COMPLETED AND DISTURBED SOILS HAVE EITHER: 1) ESTABLISHED VEGETATION, OR 2) OTHER PERMANENT EROSION CONTROL AT 70% COMPLETION.

EROSION AND SEDIMENT CONTROL NOTES

1. IN CASE OF EMERGENCY, CONTACT: NAME:_____ PHONE:_____

2. THE CONTRACTOR WILL MAINTAIN ALL SEDIMENT AND EROSION CONTROL DEVICES IN GOOD WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER THROUGHOUT EVERY PHASE OF THE PROJECT.

3. THE CONTRACTOR WILL INSTALL ALL EROSION CONTROL MEASURE ADDITIONAL TO THOSE SPECIFIED BY THE APPROVED EROSION CONTROL PLAN IF REQUIRED TO DO SO BY THE CITY ENGINEER.

4. THE CONTRACTOR AND PROPERTY OWNER WILL PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.

5. GRADED AREAS AROUND THE PROJECT PERIMETER WILL DRAIN AWAY FROM THE FACE OF SLOPES AT THE END OF EACH WORKING DAY.

6. ALL GRAVEL BAGS SHALL HAVE ¾ INCH MINIMUM AGGREGATE.

Project Address _____

Project APN _____

Permit Number _____

Applicant Name _____

Applicant Address _____

Legend (Per Caltrans' Standards)

→	Direction of Flow
	Fiber Rolls (SC-5)
	Gravel Bags (SC-6)
—×—×—	Silt Fence (SC-1)
WM-1	Material Storage
WM-5	Solid Waste Management
WM-8	Concrete Waste Management

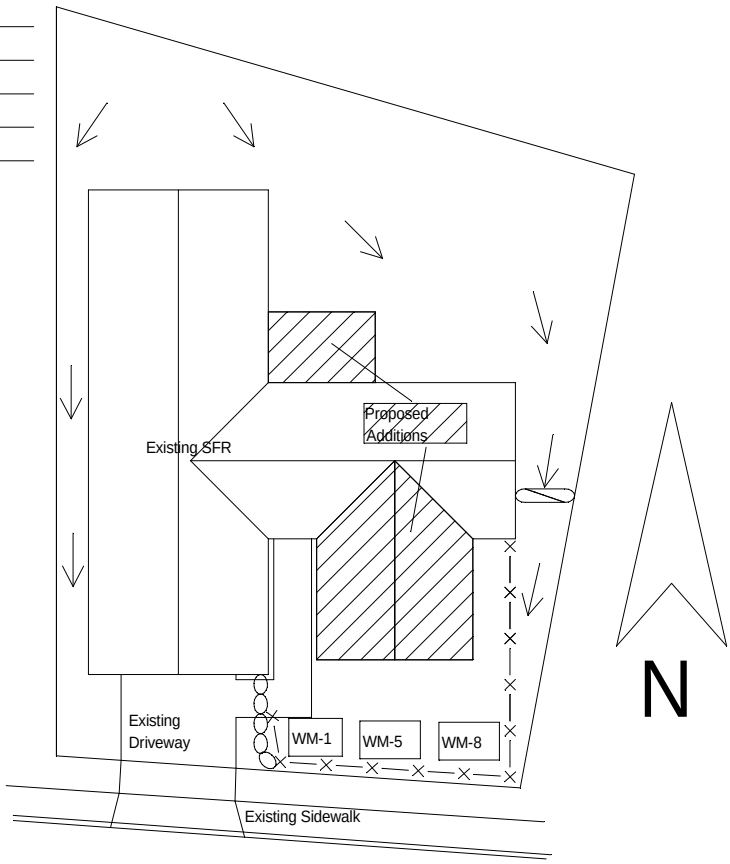

H: \SPECIAL \NPDES \Notes_n_Checklists \EROSION CONTROL PLANS - COMMENTS \ECP_Template

City of El Cajon
Storm Water Check List

Project Name:_____ **Job No.** _____

Location:_____

Engineer/Architect Name:_____ **Telephone:**_____

☐ **Plan Review Fee Amount $**_____ **Date Paid:**_____ **By:** _____

☐ **SWMP Fee Amount $** _____ **Date Paid:**_____ **By:** _____

☐ **SWPPP Fee Amount $** _____ **Date Paid:**_____ **By:** _____

☐ **Inspection Fee(s) $** _____ **Date Paid:**_____ **By:** _____

No.	Date Submitted	Erosion Control Plan	SWMP	SWPPP	Date Reviewed	Date Out
1.	_____	☐	☐	☐	_____	_____
2.	_____	☐	☐	☐	_____	_____
3.	_____	☐	☐	☐	_____	_____
4.	_____	☐	☐	☐	_____	_____
5.	_____	☐	☐	☐	_____	_____
6.	_____	☐	☐	☐	_____	_____

☐ **Erosion Control Plan Approval Date:**_____

☐ **SWMP Approval Date:**_____

☐ **SWPPP Approval Date:**_____

Erosion and Sediment Control Plan Review Checklist

Date Completed	Not Applicable	
		Vicinity Map
_____	_____	Major roadways, geographic features or landmarks.
_____	_____	Site perimeter.
_____	_____	Geographic features.
_____	_____	General topography.

Date Completed	Not Applicable	

Site Characteristics

_____	_____	North arrow, scale, and site boundary. Indicate the name of adjacent streets or roadway.
_____	_____	Location of existing drainage ways, channels, swales, creeks, streams on or near the site.
_____	_____	Location of storm drain inlets, outlets, catch basins – proposed, existing, on-site, and within 100 feet of site.
_____	_____	Location of existing and proposed buildings and paved areas.
_____	_____	Show and label existing and proposed improvements (streets, sidewalks, curb/gutter, utilities, etc)
_____	_____	The limits of the proposed disturbed area on the lot.
_____	_____	Approximate gradient and direction of slopes before grading operations.
_____	_____	Approximate gradient and direction of slopes after final grading operations.
_____	_____	Disturbed area outlined and labeled. All sediment control devices must be shown within the disturbed limits.
_____	_____	Overland runoff (sheet flow) coming onto the site from adjacent areas.
_____	_____	Delineation of pre and post development drainage areas, number of acres, and the direction of flow for each drainage area before and after development must be shown. Use separate plan sheets for clarity.

Erosion Control Practices

_____	_____	Location of temporary soil piles
		Note: soil storage pile should be placed behind a sediment fence, 10-foot (minimum) wide vegetative strip should be covered with a tarp, or placed more than 25 feet from any down slope road or drainage way.
_____	_____	Location of gravel access drive(s).
		Note: Gravel drive should have 3 to 6 inch aggregate stone laid at least 10 feet wide and 12 inches thick. Drives should extend from the roadway 50 feet or to the house foundation (whichever is less).
_____	_____	Location of sediment controls (filter fabric fence, straw bale fence or 10-foot wide vegetative strips) that will prevent eroded soil from leaving the site.
_____	_____	Location of sediment barriers around on-site storm drain inlets.
_____	_____	Location of diversions.
		Note: Concentrated flow (drainage ways, ditches, channels, brow ditches) shall be diverted (re-directed) around disturbed areas. Overland runoff (sheet flow) from adjacent areas greater than 10,000 sq. ft. shall also be diverted around disturbed areas.
_____	_____	Location of practices that will be applied to control erosion on steep slopes that have been disturbed at any time by clearing, grading, or landscaping - slopes more than five feet in height, more than two hundred fifty square feet in total area, and steeper than three to one (run-to-rise).
		Note: Unstabilized drainage ways, ditches, channels, diversions, and inlets shall be protected from erosion through use of such practices as in-channel fabric or straw bale barriers, erosion control mats, staked sod, and rock riprap. When used, a given in-channel barrier should not receive drainage from more than two acres of unpaved area, or one acre of paved area. In-channel practices should not be installed in perennial streams (streams with year-round flow.)

Date Completed	Not Applicable	
_____	_____	Show Erosion Control Plan heading and standard notes.
_____	_____	Label all sediment control devices.
_____	_____	Show Standard details for sediment control devices.
_____	_____	No sediment control devices are to be located where water will damage building foundations.
_____	_____	Detail drawings and specifications for structural practices – any structural practices used must be illustrated with detailed drawings containing all dimensions and specifications. (i.e. de-silting basins)
_____	_____	Location of other planned practices not already noted. (Material Storage WM-1, Concrete Washout WM-8, Sanitary Waste WM-9, Solid Waste Storage WM-5)
_____	_____	Temporary stabilization of disturbed areas.
_____	_____	Note: disturbed areas and soil piles left inactive for more than 10 days be stabilized by seeding (between April 1st and September 1st), or by other cover, such as tarping or mulching. Permanent stabilization of site by re-vegetation or other means as soon as possible (lawn establishment).
		Indicate re-vegetation method: Seed ___ Sod ___ Other_____ Expect date of permanent re-vegetation: Re-vegetation responsibility of Builder ___ Owner/Buyer Is temporary seeding or mulching planned if site not seeded by September 1st or sodded by October 1st ? Yes ___ No ___
_____	_____	Use of downspouts and/or sump pump outlet extensions to direct runoff away from structures and onto sod or pavement until vegetation is stable. Downspouts shall be permanently to grass areas.
_____	_____	Proper disposal of building material waste so that pollutants and debris are not carried off-site by wind or water.
_____	_____	Maintenance of erosion control practices during construction:
		Name:_____
		Title:_____ Phone & Fax:_____

- Sediment will be removed from behind sediment fences and barriers before it reaches a depth that is equal to half the barrier's height.
- Breaks and gaps in sediment fences and barriers will be repaired immediately.
- All sediment that moves off-site due to construction activity will be cleaned up before the end of the same workday.
- All sediment that moves off-site due to storm events will be cleaned up before the end of the next workday.
- Gravel access drives will be maintained throughout construction.
- All installed erosion control practices will be maintained until the disturbed areas they protect are stabilized.

Inventory of Contruction Sites
Low Priority Construction Sites

2007-2008

	Project Address					Assessor's Parcel Number	Approval Date
1	307	-		ALDWYCH	ROAD	4862101900	10/31/2007
2	849	-		ALVEDA	AVENUE	5142520800	11/2/2007
3	942	-		ALVEDA	AVENUE	5142610100	9/19/2007
4	2714			ANJULI	COURT	4810523300	6/12/2008
5	2725	-		ANJULI	COURT	4810524600	9/4/2007
6	2725	-		ANJULI	COURT	4810524600	9/13/2007
7	2736	-		ANJULI	COURT	4810523500	2/27/2008
8	1155	-		AUSTRALIA	STREET	4824420700	4/15/2008
9	1281	-		AUSTRALIA	STREET	4824411400	11/29/2007
10	824	-		BALLANTYNE	STREET	4832222000	8/29/2007
11				BALLANTYNE	STREET		3/28/2008
12	1193	-		BENJAMIN	PLACE	4926300400	3/21/2008
13	1769			BERRYDALE	STREET	3881611400	5/28/2008
14	1199	-		BOSTONIA	STREET	4841510700	11/2/2007
15	1298			BROADWAY		4842224500	6/18/2008
16	1943	-		BROOKHURST	DRIVE	5115001500	1/9/2008
17	734	-	EAST	CAMDEN	AVENUE	4882611500	10/17/2007
18	796	-		CAMELOT	PARKWAY	5083003300	8/20/2007
19	770			CATALPA		4832520400	5/2/2008
20	2197	-		CHARLES	WAY	4861420100	11/28/2007
21	2351			CHARLES	WAY	4861220200	4/25/2008
22	103	-	EAST	CHASE	AVENUE	4925001700	9/4/2007
23	404	-	EAST	CHASE	AVENUE	4934302100	4/10/2008
24	432	-	EAST	CHASE	AVENUE	4934302200	12/17/2007
25	922	-	EAST	CHASE	AVENUE	4932330900	1/31/2008
26	2463	-		CHATHAM	STREET	4860102400	8/17/2007
27	1552	-		CHISWICK	COURT	4862921400	8/15/2007
28	1174	-		CLOVERLEAF	DRIVE	5141810300	10/10/2007
29	1188			CORAL	STREET	4891111200	6/25/2008
30	1079			COSMO	AVENUE	5142730800	4/22/2008
31	370	-		CUYAMACA	STREET	4870521200	8/29/2007
32	531	-		CUYAMACA	STREET	4870210300	11/14/2007
33	978	-		CUYAMACA	STREET	4820930200	9/5/2007
34	341	-		DEWANE	DRIVE	4877002200	10/31/2007
35	480	-		DEWANE	DRIVE	4876703400	10/3/2007
36	518	-		DEWANE	DRIVE	4876703200	12/11/2007
37	2699	-		DRYDEN	ROAD	4860220200	7/11/2007
38	398	-		EL CAJON	BOULEVARD	4873121000	9/5/2007
39	583	-		EL CAJON	BOULEVARD	4875320300	2/5/2008
40	1946	-		ESTELA	DRIVE	3865740400	9/10/2007
41	1163			EUCALYPTUS	DRIVE	4922230700	5/27/2008
42	1515	-		FAYETTE	STREET	4821405600	3/26/2008
43	807	-	NORTH	FIRST	STREET	4841913700	7/25/2007
44	819	-	NORTH	FIRST	STREET	4841910200	7/25/2007
45	1252	-		FLAMINGO	AVENUE	4840431400	3/12/2008
46	2076	-		FLYING HILLS	LANE	3864501100	7/24/2007

Inventory of Contruction Sites
Low Priority Construction Sites

2007-2008

	Project Address					Assessor's Parcel Number	Approval Date
47	1957	-		FRIENDSHIP	DRIVE	7602323400	4/7/2008
48	1856	-		GALWAY	PLACE	4815001400	10/17/2007
49	225	-		GARFIELD	AVENUE	4860630100	9/28/2007
50	590	-		GRANITE	COVE	5110142800	4/16/2008
51	1398			GREENFIELD	DRIVE	5075502200	6/26/2008
52	1761			GREENFIELD	DRIVE	5073704500	6/3/2008
53	737	-		GROSSMONT	AVENUE	4920110800	9/27/2007
54	782	-		GROSSMONT	AVENUE	4926411400	4/2/2007
55	1928	-		HACIENDA	DRIVE	3865722100	8/22/2007
56	1937	-		HACIENDA	DRIVE	3865720500	7/30/2007
57	657			HAWTHORNE	AVENUE	4873720500	6/16/2008
58	1551	-		HERON	AVENUE	4824415000	12/13/2007
59	201	-		HORIZON HILLS	DRIVE	4972301700	12/3/2007
60	1133	-		HUB	COURT	4913905300	7/3/2007
61	785			JAMACHA	ROAD	5112802700	5/16/2008
62	1804	-		JASMINE	STREET	4004330100	3/3/2008
63	627	-		JEFFERSON	AVENUE	4883100500	8/1/2007
64	104	-	NORTH	JOHNSON	AVENUE	4871227600	7/5/2007
65	104	-	NORTH	JOHNSON	AVENUE	4871227600	3/12/2008
66	419	-	SOUTH	JOHNSON	AVENUE	4875412900	1/24/2008
67	551		SOUTH	JOHNSON	AVENUE	4875412800	5/27/2008
68	1394			JOLIET	STREET	5111311100	6/4/2008
69	1710			KADWELL	WAY	4004213800	6/5/2008
70	1648	-		KIMBERLY WOODS	DRIVE	4925520200	8/2/2007
71	677			LA SOMBRA	DRIVE	4876000800	6/12/2008
72	1648			LILY	AVENUE	5071502600	6/25/2008
73	835	-		LOQUAT	COURT	4920125400	4/2/2008
74	423		EAST	MADISON	AVENUE	4833540200	6/6/2008
75	1153	-	EAST	MADISON	AVENUE	4891406300	8/30/2007
76	756		SOUTH	MAGNOLIA	AVENUE	4921603300	6/9/2008
77	1441	-	SOUTH	MAGNOLIA	AVENUE	4933912400	9/28/2007
78	1273	1275	EAST	MAIN	STREET	4893900500	10/10/2007
79	1341	-	EAST	MAIN	STREET	4891806200	10/5/2007
80	1362	-	EAST	MAIN	STREET	4891802600	7/27/2007
81	1471	-	EAST	MAIN	STREET	5110130300	7/17/2007
82	1688	1690	EAST	MAIN	STREET	5072005800	1/3/2008
83	1701		EAST	MAIN	STREET	5072110500	6/18/2008
84	351		WEST	MAIN	STREET	48733101 &334-01	6/25/2008
85	489	-	WEST	MAIN	STREET	4873312400	9/5/2007
86	904	-	WEST	MAIN	STREET	4871219100	9/28/2007
87	1099		WEST	MAIN	STREET	4872812800	6/18/2008
88	1579	-		MARKERRY	AVENUE	2216805100	8/28/2007
89	826	-		MEDFORD	STREET	4810512700	11/13/2007
90	1165			MIDWAY	DRIVE	4913720400	6/5/2008
91	265	269		MILLAR	AVENUE	4872920200	11/15/2007
92	545	-	NORTH	MOLLISON	AVENUE	4833803700	1/16/2008

Inventory of Contruction Sites
Low Priority Construction Sites

2007-2008

	Project Address					Assessor's Parcel Number	Approval Date
93	696		NORTH	MOLLISON	AVENUE	4843211200	6/11/2008
94	1290	-		NARANCA	AVENUE	4842542700	8/10/2007
95	1338	-		NARANCA	AVENUE	4842632700	8/28/2007
96	2230	-		NIELSEN	STREET	3866422100	8/3/2007
97	1406	-		OAKDALE	AVENUE	5110122300	3/5/2008
98	1107			PEACH	AVENUE	4841910100	5/13/2008
99	1776	-		PEPPER VILLA	DRIVE	3881711100	7/6/2007
100	701		NORTH	PIERCE	STREET	4822131100	5/12/2008
101	1027	-		PRINCE	STREET	4890103100	10/17/2007
102	1027			RACHELLE	WAY	5083011000	5/6/2008
103	1206			RATHMOOR	STREET	4934604200	6/24/2008
104	203	-	EAST	RENETTE	AVENUE	4931310100	3/18/2008
105	2392	-		RIPPEY	COURT	3865902900	12/14/2007
106	537	-		ROBERTA	AVENUE	4891020500	4/28/2008
107	635	-		SANDRA	LANE	5122600700	3/4/2008
108	646	-		SANDRA	LANE	5122600300	9/4/2007
109	646	-		SANDRA	LANE	5122600300	10/11/2007
110	646	-		SANDRA	LANE	5122600300	8/9/2007
111	152	-	NORTH	SECOND	STREET	4891704300-4500	8/23/2007
112	601		NORTH	SECOND	STREET	4891223500	3/18/2008
113	710		NORTH	SECOND	STREET	4842542600	6/26/2008
114	816	-	NORTH	SECOND	STREET	4842525500	12/17/2007
115	449			SILVERY	LANE	4861811500	6/10/2008
116	598	-		SILVERY	LANE	4861822100	7/9/2007
117	462			SKYWOOD	DRIVE	4935021500	5/9/2008
118	473	-		SKYWOOD	DRIVE	4935020700	9/13/2007
119	1593	-		SOMA	PLACE	5070200800	3/14/2008
120	225	-		SOUTHERN	ROAD	4860620200	10/3/2007
121	327			TAFT	AVENUE	4882430600	5/12/2008
122	1087	-	NORTH	THIRD	STREET	5073011500	11/28/2007
123	1237	-	NORTH	THIRD	STREET	5074602700	9/28/2007
124	2159	-		VALLEY MILL	ROAD	3865823500	9/10/2007
125	534	-		VAN HOUTEN	AVENUE	4875513200	7/2/2007
126	518	-		VERDIN	STREET	5110630700	3/19/2008
127	1698	-		VIA ELISA	-	5070603400	11/8/2007
128	1007	-		VICTOR	STREET	4831250700	9/11/2007
129	1015	-	EAST	WASHINGTON	AVENUE	4931110300	8/1/2007
130	845	-		WATERLOO	AVENUE	5113740400	3/20/2008
131	2075	-		WEDGEMERE	ROAD	4861500600	4/28/2008
132	1513	-		WHITSETT	DRIVE	3865402200	12/6/2007
133	1666	-		WHITSETT	DRIVE	3864702000	9/5/2007
134	713	-		WICHITA	AVENUE	5113640400	10/18/2007
135	2146	-		WILLIS	ROAD	4814810300	9/5/2007
136	2452	-		WINDMILL	VIEW	3865001600	9/11/2007
137	2784	-		WINDMILL	VIEW	3865500200	9/17/2007

Inventory of Construction Sites
Medium Priority Construction Sites

2007-2008

	Project Address	Project Name	Project Name	Assessor's Parcel Number
1	1157 Peach Ave.	1157 Peach Ave.	Peach Avenue Subdivision	4841911200
2	1196 Brockton St.	1196 Brockton St.	Emerald Verde (968 Hacienda Dr.)	4925805100-5800
3	1338 Naranca Ave.	1338 Naranca Ave.	Naranca Avenue Subdivision	4842632700
4	2525 Lund St.	613-621 El Cajon Blvd.	Harley Davison	3863302400
5	613-621 El Cajon Blvd.	862 S. Orange Ave.	Orange Avenue Subdivision	48753106,17,18
6	862 S. Orange Ave.	Lund St.	Soil Restoration of Lot 1	4921710900

Inventory of Construction Sites
High Priority Construction Sites

2007-2008

	Project Address	Project Name	Assessor's Parcel Number
1	1053 Loma Portal Dr.	Principato Residence	4881131800
2	1341 E. Main St.	RV sales	4871710900
3	1415 Emerald Ave.	Tilling Way	4925805100&5800
4	1435 E. Washington Ave.	Granite Hills Village	5140215900
5	1470 E. Madison Ave.	Fire Station #8	4830903900
6	189-225 Roanoke Rd.	Cajon Valley Union School District	4824430300
7	2010 E. Madison Ave.	Rock Haven Ranch	5082400800
8	298 Fletcher Pkwy.	Home Depot	
9	335 N. 2nd St.	Taco Bell	4891807800
10	343 E. Main St.	Westlink Construction	4882312600
11	380 Broadway	Broadway Animal Hospital	4876501400
12	4th St. and Granite Hills Dr.	McNeil Ranch	5112404000 - 5600
13	656 Front Street	SC Valley Engineering	4832409100
14	670 El Cajon Blvd.	New Car Dealership	4874801500
15	823 Ballantyne St.	Ballantyne Glenn	5110143400
16	El Jardin Ct.	El Jardin Ct.	4970815200
17	Main St. and Magnolia Ave.	Downtown Redevelopment Project	
18	Park Ave. and Ballantyne St.	Park Ave 103 Units	4880400500
19	Resurfacing Job Number 57	Resurfacing Job Number 57	Not Available
20	W. Main St. and S. Magnolia Ave.	PROMENADE SQUARE TSM 494	4881521400-1700
21	Wisconsin Ln.	Wisconsin Cottages	4891806200

Industrial Inspections With Monitoring Data

Business Name:	Street Address:	Zip	Responsible Person(s):	Business Telephone #	ext:	JURMP Prioritization:	Area Sq. Ft.	JURMP Priority for 06-07	06-07 Inspection Required	Monitoring Data
Veolia Transportation Services (MTS)	1213 N JOHNSON AV	92020	Mike Chamney	(619) 279-6945		High Industrial		High Industrial	4/12/2007	New Business as of Jan 2007
PRECISION METAL PRODUCTS	850 W BRADLEY AVE	92020	Andrew Fisher	(619) 448-2711	110	High Industrial	200000	High Industrial	4/10/2007	11/02, 02/03, 01/05, 04/05, 10/05 11/06, 12/06 data
WASTE MANAGEMENT	1001 W BRADLEY AVE	92020	Phil Smith	(619) 596-5100		High Industrial	425600	High Industrial	5/17/2007	04/03 and 04/05 data
SOLO CUP CO [THE FONDA GROUP (DOPACO, INC.)]	1160 VERNON WAY	92020	Debbie Baudour	(619) 448-0333		High Industrial	200000	High Industrial	5/15/2007	02/04, 02/06 ,04/07 data
LAIDLAW TRANSIT SVCS INC	800 FESLER ST	92020	Chris Lunn	(619) 401-6208, 666-1243		High Industrial	130680	High Industrial	04/17/07	11/04 data, part of group ;12/07
DECCO CASTINGS INC	1596 PIONEER WY	92020	Kit Kesinger	619-444-9437	109	High Industrial	23500	High Industrial	4/23/2007	10/04, and 2/05, 11/06, 2/07 data
PACIFIC TRANS ENVIRONMENTAL SVCS	1452 N JOHNSON AVE	92020	Alfonso Rodriguez	619-441-1818		High Industrial	75000	High Industrial	4/16/2007	03/04, 10/04 and 1/05, 10/05, 2/06 , 12/07data
TORO AGRICULTURAL IRRIGATION	1588 N MARSHALL AVE	92020	Chris Stowell	619-562-2950	225	High Industrial	92000	High Industrial	5/5/2007	11/03, 12/03, 9/05, 11/05, 3/06, 1/07and 2/07 data
TRIUMPH COMPONENTS - SAN DIEGO INC	203 N JOHNSON AVE	92020	Bill Peet	619-440-2504	2026	High Industrial	57000	High Industrial	4/26/2007	02/04, 01/05, 02/05, 2/07 & 4/07 data
CERTIFIED METAL CRAFT INC	877 VERNON WY	92020	Mark Wiederker	(619) 593-3636		High Industrial	57000	High Industrial	6/6/2007	2/04,11/05 , 4/06, 11/06, 4/07 data
SOUTH BAY WELDING	761-781 O'CONNER ST	92020	John Singer	(619) 401-5880 ext.112, cell 572-6134, fax 401-2027	112	High Industrial	50000	High Industrial	4/25/2007	Entered program 12/05---- 12/06, 4/07 data
ALTURDYNE	660 STEELE ST.	92020	Wade Langworthy	(619) 440-5531		High Industrial		High Industrial	5/30/2007	2/04 , 10/04, 3/06, 4/06, 1/07 and 2/07 data
ALLIED CASTINGS INC	983 VERNON WY	92020	Khris Carmichael	619-258-5777		High Industrial	12900	High Industrial	5/1/2007	4/03, 1/06, 2/07 data
CHEM-TRONICS INC	1150 W BRADLEY AVE	92020	Randy Olms	619-448-2320	5062	High Industrial	851200	High Industrial	5/2/2007	12/02, 1/05, 4/05,2/06, 4/06, 2/07 & 4/07 data
ARTIMEX IRON CO, INC	315 Cypress Ln.	92020	Jose Padilla	(619)444-3155		High Industrial	76000	High Industrial	5/18/2007	10/05 , 3/05, 12/06 and 2/07 Data
(s) CAJON VALLEY UNION SCH DIST.	777 EAST PARK BLVD.	92022	Eric Kostamo	(619) 588-3625, cell 778-7793		High Industrial		High Industrial	5/8/2007	No, part of Group Monitoring, no monitoring in 04-05; 2/06 or 2007
EL CAJON AUTO WRECKERS	1416 PIONEER WY	92020	Hanna Mikkonen (Hank)	619-440-4601		High Industrial	20000	High Industrial	5/8/2007	10/04 data; 12/07 data
WINDOWMASTER PRODUCTS	1111 PIONEER WY	92020	Roy Hernandez	619-588-1144	185	High Industrial	350000	High Industrial	5/4/2007	11/01, 04/02, 11/03, 02/05, 03/06, 02/07 and 03/07 data
G MARBLE & GRANITE	1820 JOHN TOWERS #A	92020	Vince Guida, Jasper Giammarinaro	(619) 448-5929	13, 12	High Industrial	10000	High Industrial	5/10/2007	N
SENIOR FLEX KETEMA DIV	790 GREENFIELD DR	92021	Hank Bayles	(619) 441-5407, 588-3305		High Industrial	1149120	High Industrial	6/26/2007	03/06 data
DIXIELINE LUMBER CO.	1269 E. Main St.	92020	Cheryl Berman	619-224-4120		High Industrial	135000	High Industrial	5/11/2007	12/03, 12/04, no 05,12/06 and 1/07 data
CARPENTER SPECIAL PROD CORP	1717 N CUYAMACA ST	92020	Duane Holander	619-596-4325, cell 647-4834		High Industrial	148960	High Industrial	6/13/2006	11/03, 2/04 ,10/04; 12/06
CALIFORNIA METALS	297 S MARSHALL AVE	92020	Ken Jay, Josh Turzhin	(619) 444-2136, cell 572-3887		High Industrial	40000	High Industrial	5/22/2007	no monitoring in 04-05 rainy season; 1/07, 2/07

Enforcement Actions

2005-2006

	Date	Component	Business Name:	Mailing Address	Violation Address	Administrative Citation #	Written Written Warning Or Monetary Citation	BMP Violated	Corrective Actions	Follow-up and Corrections Complete
1	9/22/2005	Commercial	Panda Express	126540 Lakeshore Dr., Lakeside, CA 92040	190 Magnolia Ave.	PW 0236	Written Warning	Imminent threat of dischartge to storm drain system	terminate washing of hardscape operations, maintain storm drain inlet protection	
2	9/23/2005	Residential			1350 Lexington Ave., El Cajon	PW 0239	Written Warning	discharge of oil to storm drain from an automobile	terminate leaks from vehicle, clean up gutter	
3	9/14/2005	Commercial	Kaelin's Car Wash		1437 E. Main Street	PW 0249	Monetary Citation	Discharging wash water with pollutants into the street	Stop discharge immediately and clean up all pollutant residue	City crews were called to collect polluted water with Vactor truck and to clean up residue
4	9/13/2005	Residential	N/A		1500 (Block) of E. Main St	PW 0250	Written Warning	Vehicle leaking transmission fluid	stop vehicle from leaking into the street and clean affected area	Follo-up visit confirmed that the vehicle had been moved from street and absorbent material was used to clean stain
5	10/14/2005	Commercial	Villa Concrete Co.	1967 Rancho Winchester Lane, El Cajon, CA 92019	1575 Lily Avenue, EL, 92021	PW 0283	Written Warning	deisel fuel leaking into gutter	terminatre leaking fule, clean up waste fuel in the gutter, prevent further leaks	follow-up visit the next week confirmed termination of discharge and cleanup of waste
6	11/30/2005	Commercial	Rally's Hamburgers		1261 E. Main St	PW 0269	Written Warning	Power washing parking lot	Stop power washing immediately and collect polluted water. Use dry cleaning methods for future cleaning activities and other appropriate BMPs.	No discharges were visible after several weeks of unannounce site visits.
7	11/22/2005	Residential	self	649 Medford, El Cajon, CA, 92020	649 Medford	PW 0289	Written Warning	Illicit discharge of sewage to storm drain system, from a RV parked at residence	terminate discharge	follow-up visit next day confirmed termination of discharge
8	3/28/2006	Residential	N/A		101 W. Park Ave (Knott's Hotel)	PW 0292	Monetary Citation	RV dumping gray/black water into the parking lot	The illegal discharge was stopped immediately and the area sanitized	Follow-up investigations by the parking lot did not reveal presence of vehicle
9	5/30/2006	Commercial	N/A		1435 E. Main St	PW 0293	Written Warning	illegal discharge of food waste water into parking lot grate inlet and to the gutter via an under drain pipe	proper cleaning methods that are in compliance with storm water regulations, Managers were also instructed to sweep all food residue	Follow up investigations revealed that all residue was cleaned using dry methods
10	3/10/2006	Construction	N/A	9 Lake Helix Dr. La Mesa Ca 91941	1850 Avocado Blvd, El Cajon	PW 0305	Written Warning	Dirt stock pile---discharge of sediment form construction site due to poor and deteriorating BMPs	Repair and replace required BMPs	Corrections completed this date including check dams and repaired silt fencing. Photos taken
11	4/26/2006	Residential	N/A		1580 Chswick Ct	PW 0307	Written Warning	Dumping and maintaining a dirt pile in the gutter and street	Owner was instructed to remove the soil stock pile .	Follow-up inspection on 04/27/06, revealed the stock pile had not been removed escalating the verbal warning to a written warning.
12	5/3/2006	Construction		523 Edward St, El Cajon	2525-85 Lund St	PW 0308	Written Warning	Failure to implement erosion control plan BMPs and keeping an unapproved dirt pile with no BMPs		Pile removed
13	5/11/2006	Commercial	Applebee's	107 Fletcher pkwy	Same as Mailing Adddress	PW 0312	Monetary Citation	Power washing dumpster area and walkways with water discharging into stormwater conveyance		through 6/22/06 no repeat violation
14	4/18/2006	Residential	Decco Castings Inc	1596 Pioneer Way, El Cajon	Same as Mailing Adddress	PW 0325	Written Warning	Dirt stock pile dumpted and maintained in street with no BMP's within 150 ft. of a curb storm drain inlet.	Remove the dirt pile	Dirt pile removed on 4/28/06
15						PW 0316	Written Warning	Excessive water used to hose the area	proper dry cleaning methods that are in compliance with storm water	Complainant was contacted
16	8/1/2005	Construction	Cajon Valley High School	1006 Channel Road, Lakeside, CA 92040	East Madison, CajonValley High School	PW 0326	Written Warning	discharge of sediment form construction site due to poor BMPs	prevent tracking and dry sweep all sediment in public right of way	week that all vilations were corrected and
17	5/11/2006	Commercial	On the Border	103 Fletcher Pkwy El Cajon,	Same as Mailing Adddress	PW 0327	Monetary Citation	Illegal discharge from hot water heater replacement and food waste at dumpster enclosure.		through 6/22/06 no repeat violation
18	5/16/2006	Commercial			161 E Main St., El Cajon	PW 0329	Written Warning	Washing interior of vacant building out into rear alley leaving white residue. No BMP's in place	No further washing done Property owner advised workers on BMP requirements.	Same Day
19	5/16/2006	Commercial	Valley Transmission	1158 N. Second St	Same as Mailing Adddress	PW 0330	Written Warning	Old transmissions stacked along storm channel on ground with no BMP's in place		

Enforcement Actions

2005-2006

	Date	Component	Business Name:	Mailing Address	Violation Address	Administrative Citation #	Written Written Warning Or Monetary Citation	BMP Violated	Corrective Actions	Follow-up and Corrections Complete
20	6/22/2006	Commercial	Wienerschnitzel	299 N. Magnolia	Same as Mailing Adddress	PW 0340	Written Warning	Power washing lot and building with no BMPs implemented	Cease powerwashing activities unless waste water can be reclaimed	
21	5/23/2006	Construction	N/A		401 Ballantyne	PW 0343	Written Warning	Ponded water discharged to the gutter without BMPs	Worker was instructed to stop the discharge and to conduct alternative methods to discharge water implementing BMPs.	Follow up conducted later on the same day
22	5/30/2006	Construction	N/A		1385 E. Main St	PW 0344	Written Warning	Failure to implement BMPs at construction site with evidence of sediment discharge	The contractor was instructed to implement BMPs in accordance to the approved Erosion Control Plan	Subsequent site inspections reveal implementation of BMPs
23	5/30/2006	Residential	N/A	1924 Altozano	Same as Mailing Adddress	PW 0345	Written Warning	Resident power washes roof, discharging waste water to the gutter without any BMPs	Resident and contractor were instructed to stop the discharges into the storm drain system and clean up red residue	Follow up on May 31 revealed that the area had been cleaned up

E. SPECIAL INVESTIGATIONS – FORRESTER CREEK IMPACT STUDY

For the third year, the City conducted upstream/downstream monitoring of dry weather constituents of concern in Forrester Creek. The monitoring was conducted on June 13, 2006 to assess the relative amount of pollutants discharged within the jurisdictional boundaries of El Cajon into Forrester Creek. The upstream location is at the County boundary, specifically at Fourth Street at Rancho Cajon, east side of the street. Flow at the upstream sample was approximately 3 gallons per minute. During rain events, flow from Crest and other unincorporated County areas discharge directly into the City of El Cajon without treatment. To date, no analytical data have been collected for wet weather flows.

Table 1

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Nitrate (mg/L NO_3-N)
Upstream	6/13/06	3.0	27.9	8.0	1.85	1.66	6.25
Downstream*	6/13/06	421	27.9	8.7	2.06	2.58	5.0

Table 2

Site	Date	Total Hardness (mg/LCaCO$_3$)	Oil & Grease (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mlL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Coliform (MPN/100 mL)
Upstream	6/13/06	48	nd	300,000	3,000	8,000	1,090	300,000
Downstream*	6/13/06	60	nd	170,000	500	70	1,600	170,000

The following is a summary of the upstream/downstream results:

- No detections of metals
- Reactive phosphorous upstream was 0.03 mg/L, downstream was 0.03 mg/L
- Detections of ammonia upstream was 0.04 mg/L, downstream was 0.8 mg/l
- Detergents were detected at 0.25 mg/L upstream, and 0.25 mg/L downstream

<u>Notable Results and Reasoning</u>

Increase in flow to 421 gallons per minute from upstream to downstream

Concentrations of many constituents decrease from upstream to downstream; this includes nitrate, total coliform, fecal coliform, enterococcus, total alkalinity, and total organic carbon. Increase in the concentrations (from upstream to downstream) of pH, turbidity, conductivity, ammonia, dissolved oxygen, total hardness, TDS, and sulfates.

The City does not have an explanation for the increase in flows or the significant increase in dry weather flow contributions within City boundaries. The City will need to conduct further dry weather investigations to develop enough data to establish baseline conditions (for current channel configurations) and to develop priorities for more detailed investigations for pollutant and dry weather flow sources.

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

August 17, 2006
Project No. 200605W-2

Jaime Campos, P.E.
Acting Storm Water Program Manager
City of El Cajon
Department of Public Works
200 E. Main Street
El Cajon, CA 92020

AUG 2 1 2006
CITY OF EL CAJON
ENGINEERING DIVISION

Re: 2006 Forester Creek Impact Study
City of El Cajon, California

Dear Mr. Campos:

Enclosed please find our report for the City of El Cajon 2006 Forester Creek Impact Study. This project, also conducted in 2004 and 2005, is an additional study of the water quality in Forester Creek as it passes through El Cajon. The contents include field screening data, analytical laboratory test results, and analysis of the collected data.

It has been our pleasure working with the City of El Cajon on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

Forester Creek Impact Study

Forester Creek runs parallel to Interstate 8 as it enters the east side of the City of El Cajon (City). It then turns north after passing SR-67, flowing through the area around Gillespie Field before entering the City of Santee. Eventually, Forester Creek enters the San Diego River just east of the junction of SR-52 and SR-125, within the City of Santee.

The purpose of this study was to investigate how water quality in Forester Creek is affected as it flows through the City of El Cajon. To gauge this, one sample was collected from the creek near where it enters the City from the east (upstream), and another sample was taken where the creek exits the City in the north (downstream). Table 1 shows the locations of these two sites. This year, the creek was dry at the point where it enters the City of El Cajon. There was some flow observed just downstream of that point, where the upstream sample site was taken, but this flow was likely generated within the city at its southeastern limits. Water quality parameters in the upstream and downstream samples can be compared to see how the City itself contributes to pollutant loads. Also, it should be noted that the downstream location is the same as that used for dry weather Site 5. Therefore, the 2006 dry weather data from Site 5 was used in this study in order to alleviate the need to take an additional downstream sample and to minimize the costs of this study.

The same field and laboratory analyses employed during the standard dry weather program in El Cajon were conducted for the upstream and downstream samples. No constituents tested in the field at either of the two sites were measured above their respective dry weather action levels. The value for pH increased from 8.0 upstream to 8.7 downstream. While both values are within the acceptable range for pH (6.5 to 9.0), the higher downstream value is likely a result of the wide, shallow flow and significant amount of algal growth at that site. Typically, the pH increases during daylight hours in areas with those characteristics, as sunlight stimulates algal photosynthesis and carbon dioxide is removed from water. The ammonia concentration at the downstream site was higher than that at the upstream site: 0.4 mg/L and 0.8 mg/L, respectively.

As in 2005, levels of the three types of bacterial indicators evaluated were significantly lower at the downstream site than at the upstream site. Total coliform dropped from 300,000 MPN/100mL to 170,000 MPN/100 mL. Fecal coliform and enterococci were significantly lower at the downstream location than they were at the upstream site. Total Organic Carbon (TOC) was lower at the downstream site, while Total Dissolved Solids (TDS) was higher at the downstream site. Surfactants, oil and grease, and dissolved copper, cadmium, lead, and zinc were not detected by the laboratory at either location. Field analytical and laboratory data are presented in tables 2 and 3, respectively.

Additional laboratory analyses were conducted to analyze for the following total dissolved solids (TDS) components: total alkalinity, chloride, sulfate, calcium, potassium, magnesium, and sodium. The sample was first tested for TDS using the same procedure as in years past, and then the sample was passed through an additional filter with smaller pores. After additional filtration, which was conducted to remove any microparticles smaller than suspended solid particles but larger than most dissolved molecules, TDS was again tested to see if any microparticles were contributing to the original TDS value. TDS results are therefore given for both the standard TDS analysis of the sample water and for the TDS analysis of sample after additional filtration. The TDS components were all analyzed after the additional filtration step. This year, TDS was measured at 1,600 mg/L at the downstream site

and 1,090 at the upstream location. Potassium was not detected at either of the sites. Total alkalinity was higher upstream than downstream, dropping from 212 mg/L $CaCO_3$/L to 179 mg $CaCO_3$/L. The upstream and downstream levels of calcium were comparable, with the downstream level being only slightly higher than that measured upstream. Magnesium, sodium, chloride and sulfate were all present at higher concentrations downstream than upstream. The TDS component analysis data is presented in Table 4.

An obvious consideration when analyzing the results of this study is that Forester Creek has a flow of only a few gallons per minute (gpm) at the upstream site and a flow of several hundred gpm as it exits the City. As a result of this, a direct comparison of upstream and downstream constituent concentrations can be misleading. Since the TDS concentration is higher and the flow rate is higher at the downstream site, it seems that a fairly large volume of runoff with relatively high TDS levels continues to flow into Forester Creek within the boundaries of the City of El Cajon.

Neither this study nor the concurrent dry weather monitoring program, for which TDS component analyses were performed at a number of sites, specifically identifies one source of elevated TDS. The main TDS components, sulfate, chloride, sodium, calcium and total alkalinity, may leach into surface waters from naturally occurring mineral deposits in the ground. No point sources for TDS components have been observed within the City, and it is possible that elevated TDS levels are a result of natural background factors.

Table 1 Forester Creek Study Site Locations

Site ID	Location	Description	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
Upstream	Greenfield Ave. and 8 west onramp intersection, behind southeast corner of Exxon station at 1699 E Main St	Concrete Channel	Commercial	Residential	907	32.81170	-116.91791
Downstream	Adjacent to the Weld Blvd. Trolley Station, SE. of the Marshall Ave./Cuyamaca St. intersection	Concrete Channel	Commercial	Industrial	907	32.82669	-116.98224

Table 2 Field Analytical Data for Forester Creek Sites

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Detergent (mg/L MBAS)	Ammonia (mg/L NH_3-N)	Nitrate (mg/L NO_3-N)	Reactive-Phosphorus (mg/L PO_4-P)	Dissolved Oxygen (mg/L)
Upstream	6/13/06	3.0	27.9	8.0	1.85	1.66	0.25	0.4	6.25	0.03	8.33
Downstream*	6/13/05	421	27.9	8.7	2.06	2.58	0.25	0.8	5.0	0.03	10.66

Note: * "Downstream" is the same location as dry weather program Site 5. Because the same sampling event was used both for this study and the dry weather program, the attached data sheets and lab reports reference Site 5, not "Downstream."

Table 3 Laboratory Data for Forester Creek Sites

Site	Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO$_3$)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mlL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	6/13/06	nd	nd	48	nd	nd	nd	nd	300,000	3,000	8,000	1,090	11.4
Downstream*	6/13/06	nd	nd	60	nd	nd	nd	nd	170,000	500	70	1,600	9.52

Note: *"Downstream" is the same location as dry weather program Site 5. Because the same sampling event was used both for this study and the dry weather program, the attached data sheets and lab reports reference Site 5, not "Downstream."

Table 4 TDS Analysis for Forester Creek Sites

Site	Date	Original TDS (mg/L)	Post Filter TDS (mg/L)	Calcium (mg/L)	Potassium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Total Alkalinity (mg CaCO$_3$/L)	Chloride (mg/L)	Sulfate (mg/L)
Upstream	6/13/06	1,090	1,050	91.2	nd	53.5	236	217	212	335
Downstream	6/13/06	1,600	1,590	99.3	nd	92.4	395	179	470	464

City of El Cajon
Follow Up Investigation to Identify Source of Nitrates

A follow up monitoring investigation was conducted on November 9, 2007 to detect potential sources of nitrates at Monitoring Site 30 and 37. The photographs below document the investigation with the starting point at monitoring site 37 and continuing east (upstream) along the extension of the 66-inch corrugated steel pipe towards the reinforced concrete box under Jamacha Road. The investigation terminated east of Jamacha Road at the trapezoidal open channel.

Photo 1: Monitoring Site (Sample) # 37 – City of El Cajon's personnel preparing to be lowered into 66 inch corrugated steel pipe (CSP) to collect water samples. Samples were handled under the supervision of the consultant responsible for conducting the City's Dry Weather Monitoring Program. City of El Cajon Public Works Maintenance personnel facilitated testing by accessing confined spaces.

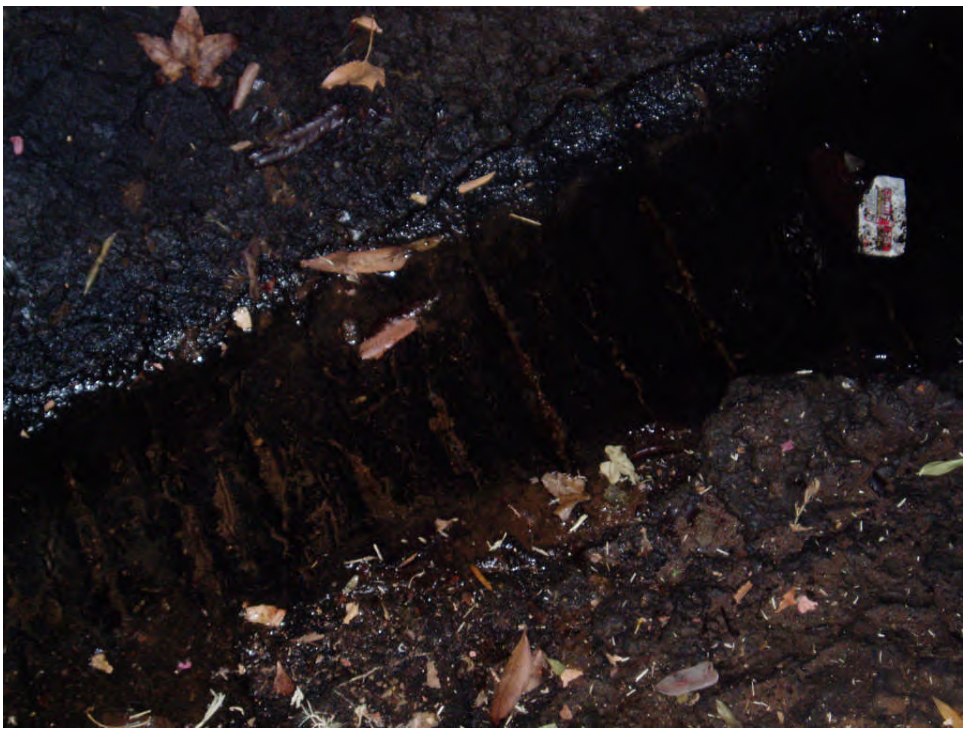

Photo 2: Photograph showing corroded invert elevation of the 66-inch CSP flow line. The pipe is in various forms of deterioration through out the extension of the pipe from monitoring site #37 to the western side of Jamacha Road. The deteriorated condition of the pipe may result in water seeping from outside the pipe.

Photo 3: (Sample 37-1) Lateral from professional offices at East Main Street. Minimal flow was observed at the time of the follow up investigation but the flow was sufficient to collect water sample.

Photo 4: Storm drain lateral from Grossmont Union High School District Work Training Facility lot. Minimal flow was observed at the time of investigation, the flow was not sufficient to collect water sample.

Photo 5: Catch basin at Grossmont Union High School District Work Training Facility. The catch basin drains directly to the 66" CSP. No flow was present at time of the investigation. (Sample 37-2) was collected from the 66" CSP below this catch basin grate.

Photo 6: Storm drain lateral from the Grossmont Union High School District Work Training Facility. Minimal flow was observed at the time of the investigation but not sufficient to gather water sample.

Photo 7: Curb inlet opening at the face of curb at Jamacha Road. No flow was visible during the investigation.

Photo 8: Arch steel pipe discharging water from north Jamacha Road. The pipe had minimal flow and insufficient to collect a water sample for analysis.

Photo 9: Reinforced concrete box (10 ft x 3.5 ft) extending east under Jamacha Road.

Photo 10: (Sample Site 37-3) transition between trapezoidal open channel and (72-inch x 44-inch) arch corrugated steel pipe. Photograph was taken looking westward, the corrugated pipe accepts flows from the open channel and continue to flow west (downstream) towards Jamacha Road and sampling site #37.

Photo 11: Trapezoidal open channel looking east of sampling site 37-3. Nitrate concentrations are below action levels on this channel.

SITE 30 & 37 UPSTREAM INVESTIGATION

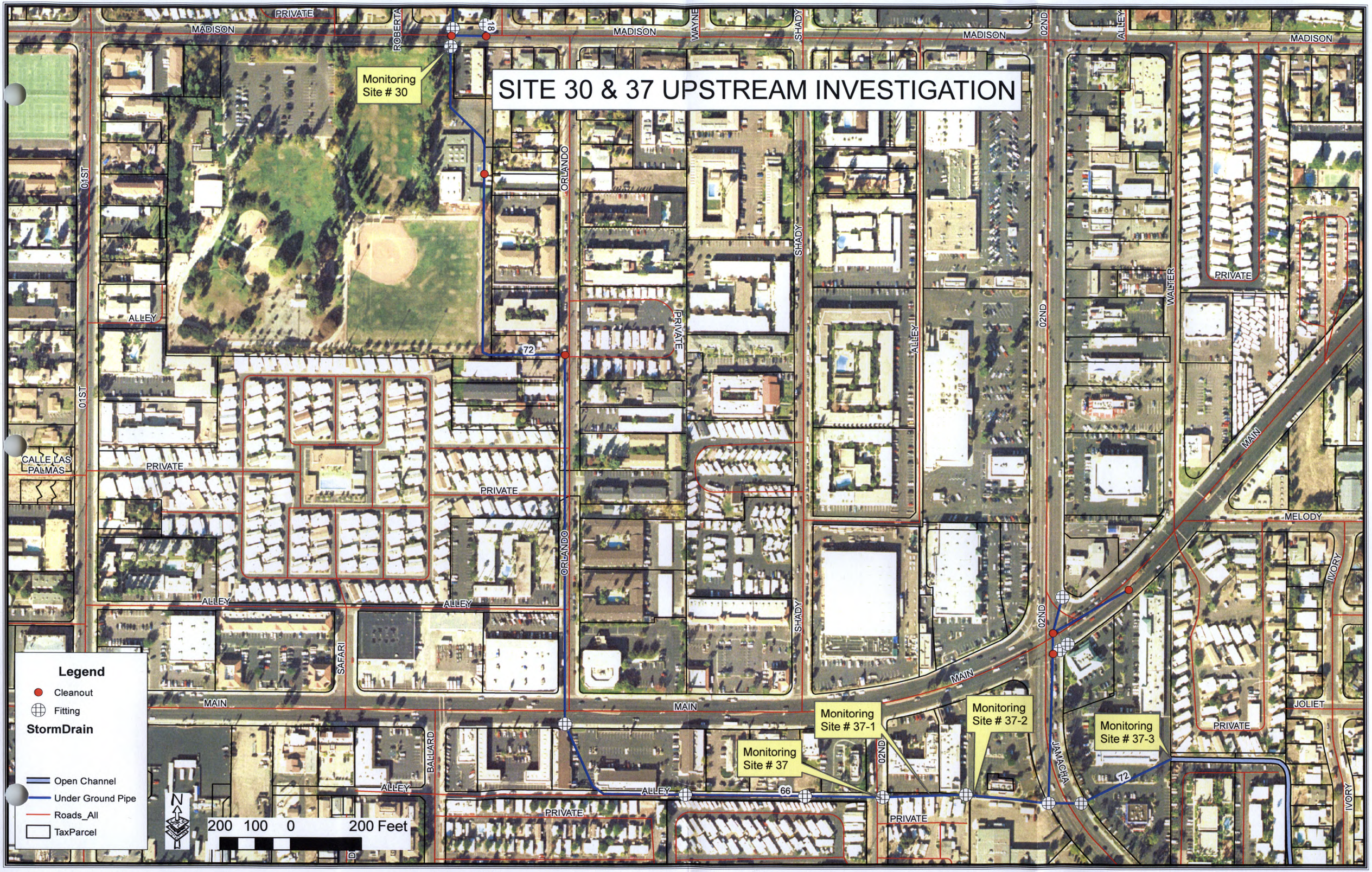

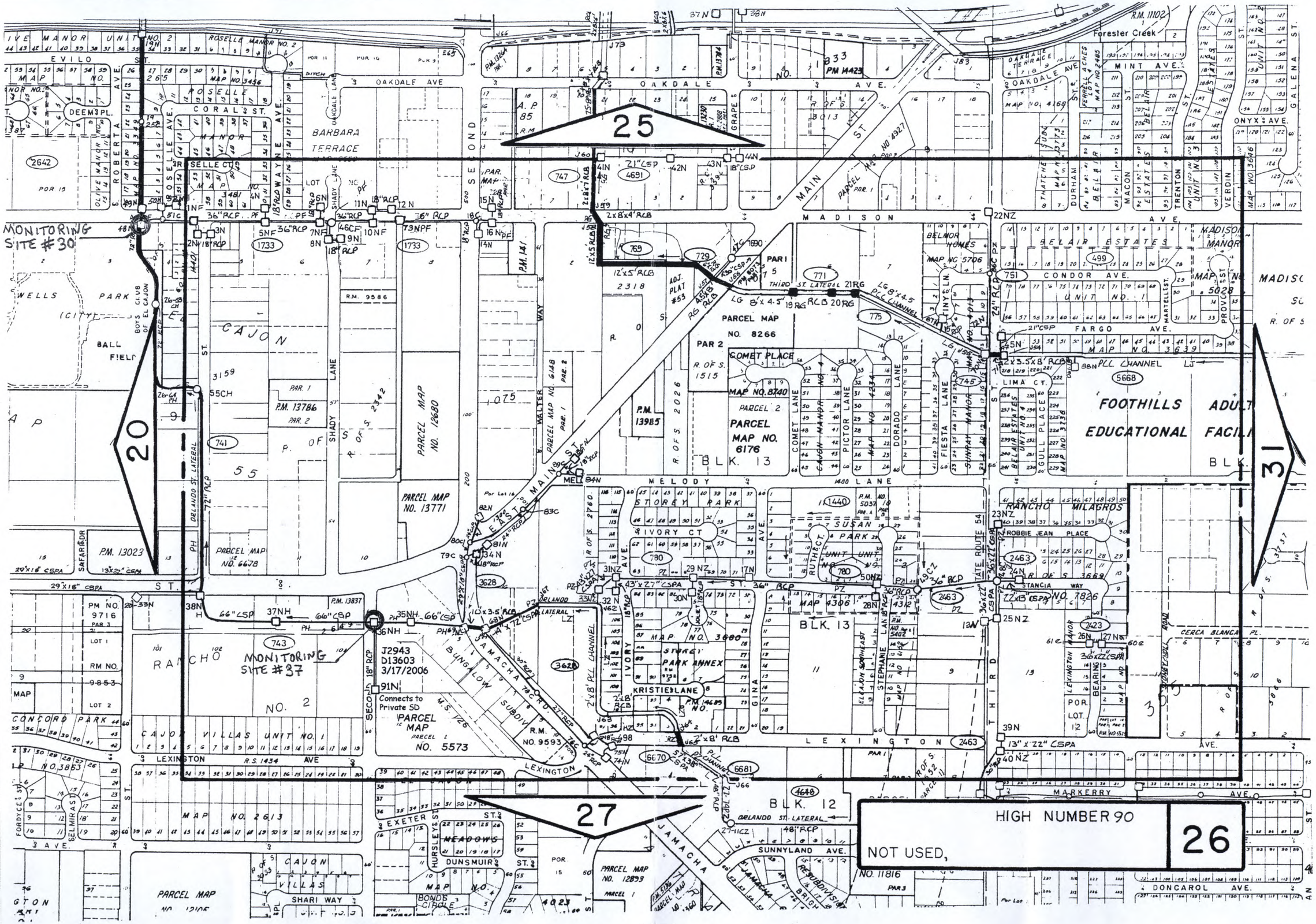
25
20
31
27
26
HIGH NUMBER 90
NOT USED,
MONITORING SITE #30
MONITORING SITE #37
OAKDALE AVE
MADISON AVE
MAIN ST
SECOND ST
THIRD ST
MELODY LANE
LEXINGTON AVE
MARKERRY AVE
SUNNYLAND AVE
DONCAROL AVE
FARGO AVE
CONDOR AVE
MINT AVE
ONYX AVE
CORAL ST
ROSELLE AVE
SHADY LANE
WALTER WAY
COMET LANE
PICTOR LANE
DORADO LANE
FIESTA LANE
GULL PLACE
LIMA CT
STANCIA WAY
ROBBIE JEAN PLACE
CERCA BLANCA PL
EXETER ST
DUNSMUIR
BONDS CIRCLE
SHARI WAY
ORLANDO ST. LATERAL
PCC CHANNEL
Forester Creek
BARBARA TERRACE
CAJON
WELLS PARK
BALL FIELD
BOYS CLUB OF EL CAJON
FOOTHILLS EDUCATIONAL
STOREY PARK
SUSAN PARK
PARK ANNEX
KRISTIE LANE
RANCHO MILAGROS
RANCHO
CAJON VILLAS UNIT NO. 1
CONCORD PARK
PARCEL MAP NO. 8266
PARCEL MAP NO. 6176
PARCEL MAP NO. 13771
PARCEL MAP NO. 12680
PARCEL MAP NO. 6678
PARCEL MAP NO. 5573
PARCEL MAP NO. 12899
PARCEL MAP NO. 11816
P.M. 13786
P.M. 13985
P.M. 13023
P.M. 13837
P.M. 14423
R.M. 9586
R.M. 9593
BLK. 13
BLK. 12
Connects to Private SD
J2943
D13603
3/17/2006

CITY OF EL CAJON
INVENTORY OF MUNICIPAL FACILITIES

HIGH PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Civic Center, City Hall and Plaza	200 E. Main Street	Washington Channel
2.	Fire Station No. 9	1301 N. Marshall Avenue	Forester Creek
3.	Public Works Maintenance Division Office	1050 Vernon Way	Forester Creek
4.	Vehicle Maintenance Facility	1060 Vernon Way	Forester Creek

MEDIUM PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Animal Control	1275 N. Marshall Way	Forester Creek
2.	Fletcher Hills Park, Recreation Center and Pool	2345 Center Place	Fletcher
3.	Parks Office	154 Rea Avenue	Washington Channel
4.	Performing Arts Center	110 E. Main Street	Washington Channel
5.	Wells Park, Recreation Center and Maintenance	1153 E. Madison Avenue	Forester Creek
6.	Parks Storage Garage	148 Rea Avenue	Washington Channel

LOW PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Albert Van Zanten Park	1495 Greenfield Drive	Broadway Channel
2.	Bill Beck Park	Pierce Street and Wagner Drive	Broadway Channel
3.	Bostonia Park and Recreation Center	1049 Bostonia Street	Forester Creek/ Broadway Channel
4.	Cajon Valley Middle School Park	750 Park Avenue	Forester Creek/ County Ditch
5.	Community Policing Division	165 E. Park Avenue	Forester Creek
6.	El Cajon Community Center	195 E. Douglas Avenue	Forester Creek
7.	Fire Station No. 7	695 Tyrone Street	County Ditch
8.	Fire Station No. 8	842 N. Third Street	Forester Creek
9.	Fire Station Park	Tyrone Street and Westwind Drive	Forester Creek
10.	Fire Station/ Department Administration	100 E. Lexington Avenue	Forester Creek
11.	Hillside Park and Recreation Center	840 Buena Terrace	Fletcher Hills Parkway/ Fanita Channel Basin/ Forester Creek
12.	John F. Kennedy Park and Recreation Center	1675 E. Madison Avenue	County Ditch
13.	Judson Park	Magnolia Avenue and Park Avenue	Forester Creek
14.	Museum (Knox House)	280 N. Magnolia Avenue	Forester Creek
15.	Office	1034 Magnolia Avenue	Washington Channel
16.	Pistol Range	Gillespie Field	Washington Channel
17.	Police Department	100 Fletcher Parkway	North Forester Creek
18.	Police Department Detectives	1035 Pioneer Way	Forester Creek/ Broadway Channel
19.	Prescott Promenade Park	200 Block of Main Street	County Ditch
20.	Renette Park and Recreation Center	935 S. Emerald Avenue	County Ditch
21.	Tuttle Park	379 Chase Avenue	County Ditch

6.0 LAND-USE PLANNING FOR NEW DEVELOPMENT AND REDEVELOPMENT COMPONENT

Permit section F.1 requires each Copermittee to develop a plan to minimize the short and long-term impacts on receiving water quality from new development and redevelopment. As part of this plan, four main components must be addressed:

1) Assessment of General Plan
   Each Copermittee must assess its General Plan, and modify if necessary, to include water quality and watershed protection principles and policies to direct land-use decisions and require implementation of consistent water quality protection measures for development projects.

2) Modify Development Project Approval Process
   Prior to project approval and issuance of local permits, each Copermittee must require each proposed project to implement measures to ensure that pollutants and runoff from the development will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of receiving water quality objectives. This process involves developing the following:

   - Development Project Requirements
   - Standard Urban Storm Water Mitigation Plans (SUSMPs)

3) Revise Environmental Review Process
   Each Copermittee must review the current environmental review processes to include requirements of evaluation of water quality effects and identification of appropriate mitigation measures.

4) Conduct Education Efforts Focused on New Development and Redevelopment
   Each Copermittee must implement and education program to educate its planning and development review staffs and external project proponents.

The City of El Cajon has completed the requirements listed above. Descriptions of each component are presented below.

6.1 Assessment of General Plan

The City of El Cajon General Plan includes several objectives and policies related to water quality preservation and drainage among its basic goals and objectives. Additional policies are proposed to supplement the existing objectives and policies.

The following proposed amendment is in draft form with the proposed language underlined and it could change as a result of the public hearing process needed to consider a General Plan amendment. An amendment of the General Plan will be considered as soon as possible.

Objective 8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible slow runoff and maximize on-site infiltration of runoff.

8-10.2. Implement pollution prevention methods supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into a municipal separate storm sewer system. (MS4)

8-10.3. Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. Encourage land acquisition of such areas.

8-10.4. Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. Require incorporation of structural and non-structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. Avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. Reduce pollutants associated with vehicles and increasing traffic resulting from development. Coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. Implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

6.2 Modification of Development Project Approval Process

6.2.1 Development Project Approval Process

The City of El Cajon Municipal Code (ECMC) requires all new development or modifications of existing development involving three or more multiple family units, office uses, retail uses or industrial uses to obtain a site development plan (SDP). Chapter 17.56 of the ECMC outlines the SDP process and its requirements, and is included in Appendix A.5.

Other uses are determined to be special and are required to obtain a conditional use permit (CUP). That process is included in Chapter 17.70 of the ECMC and is attached hereto.

These processes ensure compliance with all City standards, including those relating to water quality, by requiring design modifications and imposing specific conditions of approval and are both considered to be adequate and are not proposed to be amended.

RESOLUTION NO. 10–03

A RESOLUTION APPROVING GENERAL PLAN AMENDMENT 2002-04 TO ADD STORM WATER RUNOFF POLICIES AND OBJECTIVES TO GENERAL PLAN TEXT.

WHEREAS, the El Cajon City Council duly advertised and held a public hearing on January 14, 2003, to consider an item which had been set for General Plan consideration; and

WHEREAS, to facilitate understanding by the public, the City Council took tentative or preliminary votes on this item, which vote was not binding until the public hearing was completed; and

WHEREAS, the City Council duly considered all information presented, and listened to all persons who appeared before it to speak.

NOW, THEREFORE, BE IT RESOLVED that the El Cajon City Council hereby approves General Plan Amendment 2002-04 to add storm water policies to the General Plan text as indicated in Planning Commission Resolution No. 9734, on file in the office of the City Clerk, and made a part hereof by this reference.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at a Regular Joint City Council/Redevelopment Agency Meeting held this 14th day of January, 2003, by the following vote to wit:

AYES : Lewis, Kendrick, McClellan, Ramos, Santos
NOES : None
ABSENT : None
DISQUALIFY : None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

MARILYNN LINN, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Resolution No. 10-03 of the Resolutions of the City of El Cajon, California, as adopted by the City Council at the Regular Joint Meeting of the City Council/Redevelopment Agency on the 14th day of January, 2003.

for M Steele
Marilynn Linn, CMC, City Clerk

1/14/03 (103)

STAFF REPORT AND RECOMMENDATION
PLANNING COMMISSION MEETING
DECEMBER 9, 2002 - 7:00 PM

COUNCIL CHAMBER
200 E. MAIN STREET
EL CAJON, CA 92020

AGENDA ITEM #3

PUBLIC HEARING ON
GENERAL PLAN AMENDMENT 2002-04 – Planning Commission

Request to add storm water policies to General Plan text.

******** ******** ******** ********

STAFF RECOMMENDATION: RECOMMEND APPROVAL

******** ******** ******** ********

ENVIRONMENTAL IMPACT INFORMATION

The proposed project is exempt from environmental review in accordance with Section 15308 of CEQA Guidelines.

DISCUSSION

As part of the local implementation of the federal Clean Water Act, the County of San Diego and its 18 cities have obtained a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board. The NPDES permit addresses the handling of storm water runoff by the 18 cities, their residents and businesses. Part of the NPDES permit includes a Jurisdictional Urban Runoff Management Program (JURMP) (Note: there are lots of acronyms used in the storm water runoff dictionary).

Although most of the City's storm water and drainage implementation is carried out by the Department of Public Works, there is a requirement in the NPDES and the JURMP that the General Plan include policies and principles which address water quality and storm water runoff. An attempt to add these policies and

principles to the General Plan last year was withdrawn when it was determined to be premature (GPA 2001-01).

Goal 8 of the El Cajon General Plan says, "The livability of El Cajon will be maintained and enhanced through respect for the environment." There are a number of policies under this goal which address other environmental issues and concerns and this is where the staff believes the policy and objectives (principles) for storm water runoff should be located within the City's general plan text.

RECOMMENDATION

It is recommended that the Planning Commission recommend approval of General Plan Amendment 2002-04 to add storm water runoff policy and objectives to the text of the General Plan as follows and for the following reasons:

Add the following objective and policies to Goal 8.

"Objective 8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into a municipal separate storm sewer system. (MS4)

8-10.3. The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.

8-10.4. The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-

structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. The City will reduce pollutants associated with vehicles and increasing traffic resulting from development. The City will coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable."

Reasons for Recommendation

A. This amendment to the text of the City's general plan will add a policy and objectives addressing storm water runoff as required by the National Pollution Discharge Elimination System (NPDES) permit issued to the City.

B. This amendment will provide policy and objectives dealing with storm water runoff to guide decision-making in the city.

C. This amendment is consistent with the City's Jurisdictional Urban Runoff Management Program (JURMP).

Refer to staff for a resolution stating the decision of the Planning Commission.

JSG:co

EL CAJON GENERAL PLAN 2000

Text and Map adopted by
City Council Resolution No. 10-91
on January 8, 1991

Text and Map amended by
City Council Resolution No. 31-98
on February 10, 1998

January, 2001

OBJECTIVE

8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants off site and into a municipal separate storm sewer system. (MS4)

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8-10.4. The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and

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8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

GOAL 9

A strong, competitive region-wide commercial base will be created and retained.

OBJECTIVE

9-1. Parkway Plaza and its immediate vicinity will be maintained as the City's regional shopping center.

POLICIES

9-1.1. Parkway Plaza shall be expanded from its original size and the number of major tenants and stores shall be increased.

9-1.2. The City shall continue to improve traffic circulation in the vicinity of Parkway Plaza.

9-1.3. The City shall cooperate with Parkway Plaza in the provision of parking facilities and may develop special

ORDINANCE NO. 4908

AN ORDINANCE REPEALING CHAPTERS 16.100, 16.101, 16.102, 16.103, 16.104, 16.105, 16.106, 16.107 AND 16.108 OF TITLE 16 OF THE EL CAJON MUNICIPAL CODE AND ADDING A NEW CHAPTER 16.60 TO TITLE 16 OF THE EL CAJON MUNICIPAL CODE REGARDING THE CITY OF EL CAJON STANDARD URBAN STORM WATER MITIGATION PLAN.

WHEREAS, the City of El Cajon, pursuant to its Water Quality Permit issued on February 21, 2001, is required to adopt certain implementation steps as mandated by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, one of the implementation steps requires the adoption of an Urban Storm Water Mitigation Plan based upon a pre-approved Model adopted on June 10, 2002, by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall be the Urban Storm Water Mitigation Plan adopted pursuant to the mandate of the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall allow for the adoption of resolutions and policies which shall implement the El Cajon Standard Urban Water Mitigation Plan not included in this Ordinance; and

WHEREAS, the adoption of this Ordinance, by the findings of the Regional Water Quality Control Board (San Diego Region), is exempt from the requirements of the California Environmental Quality Act; and

WHEREAS, the purpose of this Ordinance is to protect valuable water resources of the City of El Cajon and its surrounding environs from pollutants.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EL CAJON AS FOLLOWS:

Section 1: Chapters 16.100, 16.101, 16.102, 16.103, 16.104, 16.105, 16.106, 16.107, and 16.108 of the El Cajon Municipal Code are hereby repealed.

Section 2: Chapter 16.60 is hereby added to the El Cajon Municipal Code to read as follows:

16.60.010 Title.

The ordinance codified in this chapter shall be known as the "standard urban storm water mitigation plan (SUSMP) ordinance of the city of El Cajon."

16.60.020 Statutory Authority.

A. The municipal storm water National Pollutant Discharge Elimination System (NPDES) permit (Order No. R9-2007-0001, NPDES No. CAS0108758, hereinafter referred to as "Municipal Permit") issued to San Diego County, San Diego County Regional Airport Authority, the Port of San Diego, and eighteen cities by the San Diego Regional Water Quality Control Board (Regional Board) on January 24, 2007, requires the development and implementation of a program addressing urban runoff pollution issues in development planning for public and private projects.

B. The requirement to implement a program for development planning is based on federal and state statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA"), and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The municipal permit requires the implementation of a Jurisdictional Urban Runoff Management Program (JURMP), which has been adopted by the city of El Cajon on February 12, 2002, as amended.

16.60.030 Purpose.

A. The primary objectives of this division are to:

1. Ensure that discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards;

2. Effectively prohibit non-storm water discharges in urban runoff; and

3. Reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

B. The regulations of this division were developed to address post-construction urban runoff pollution from new development and redevelopment applications that fall under "priority project" categories. The goal of this division is to develop and implement practicable policies to ensure to the maximum extent practicable that development does not increase pollutant loads from a project site and considers urban runoff flow rates, velocities and durations. This goal may be achieved through site-specific controls and/or drainage area-based or shared structural treatment controls.

16.60.040 Applicability of chapter.

The regulations set forth in this chapter shall apply to the development plan approval process for discretionary development applications, and prior to issuing development permits for ministerial projects. To allow flexibility in meeting the design

standards set forth in this division, structural treatment control BMPs may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided certain conditions are met. All new development and significant redevelopment projects that fall into one of the following "priority project" categories are subject the requirements of this division, subject to the lawful prior approval provisions of the municipal permit. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project footprint is subject to the requirements of this division. These categories are:

A. Residential development of ten (10) units or more;

B. Commercial development greater than one (1) acre;

C. Heavy industry industrial development greater than one (1) acre;

D. Automotive repair shops;

E. Restaurants;

F. Hillside development greater than 5,000 square feet;

G. Projects located within or directly adjacent to or directly discharging to receiving waters within environmentally sensitive areas that create 2,500 square feet or more of impervious surface or increase the area of imperviousness to ten percent (10%) or more of its naturally occurring conditions;

H. Projects having more than 2,500 square feet of impervious surface that discharge to receiving waters within or adjacent to environmentally sensitive areas;

I. Parking lots with 5,000 square feet or more of impervious surface, or with more than fifteen (15) parking spaces and potentially exposed to urban runoff;

J. Streets, roads, highways, and freeways, which would create a new paved surface that is 5,000 square feet or more of impervious surface; and

K. Retail gasoline outlets of 5,000 square feet or more in size, or having a projected average daily traffic ("ADT") count of at least 100 vehicles per day regardless of size.

16.60.050 Limited exclusion.

Trenching and resurfacing work associated with utility projects; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lanes on existing roads; and routine replacement of damaged pavement, such as pothole repair, are not considered priority projects. Parking lots,

buildings and other structures associated with utility projects are subject to the requirements of this division if one or more of the criteria for the above categories are met.

16.60.060 Applicability of chapter 13.10.

The provisions of Chapter 13.10 (Storm Water Management and Discharge Control), including the definitions and enforcement provisions, shall be applicable to this chapter as though fully set forth herein.

16.60.070 Administration – limitations.

Where requirements of this division conflict with established local codes, (e.g., specific language of signage used on storm drain stenciling), the city council may continue the local practice and modify this division to be consistent with the code, except that to the extent that the standards in this division are more stringent than those under local codes, such more stringent standards shall apply.

16.60.080 Administration – Provisions for SUSMP requirements.

The requirements of this division shall be incorporated into the project design and shown on the plans prior to approval of discretionary permits. For projects requiring only ministerial permits, the requirements of this division shall be incorporated into the project design and shown on the plans prior to the issuance of any ministerial permits. City departments carrying out public projects that are not required to obtain permits shall be responsible for ensuring the requirements of this division are incorporated into the project design and shown on the plans prior to bidding for construction contracts, or equivalent. For public projects the requirements of this division must be incorporated into the project design and shown on the plans before allowing the project to commence.

16.60.090 Administration – Implementation.

All priority projects shall implement one or a combination of storm water BMPs, including, (1) LID and site design BMPs, (2) source control BMPs and, (3) structural treatment BMPs after the pollutants and conditions of concern have been identified. Storm water BMPs shall be considered and implemented where expressly required by this division and if not so required where determined applicable and feasible by the Director of Public Works. The storm water BMPs shall adhere to the requirements of this division, and shall be correctly designed so as to remove pollutants to the maximum extent practicable. A flow chart summarizing the storm water BMP selection procedure is provided in Figure 1.

16.60.100 Administration – Site design storm water treatment credits.

Project proponents may develop and submit for public review and comment and city council approval a regional model site design storm water treatment credits program that allows reductions in the volume or flow of storm water that must be captured or treated on a project in return for the inclusion of specified project design features in the project. The model site design storm water treatment credits program shall be deemed to be a part of this division following city council approval. Any such model program shall specify the conditions under which project proponents can be credited for the use of site design features and low impact development techniques that can reduce the volume of storm water runoff, preserve natural areas, and minimize the pollutant loads generated and potentially discharged from the site. Any site design storm water treatment credits program implemented shall be consistent and compliant with this division and approved by the city council.

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Figure 1. Storm Water BMP Selection Procedure Flow Chart

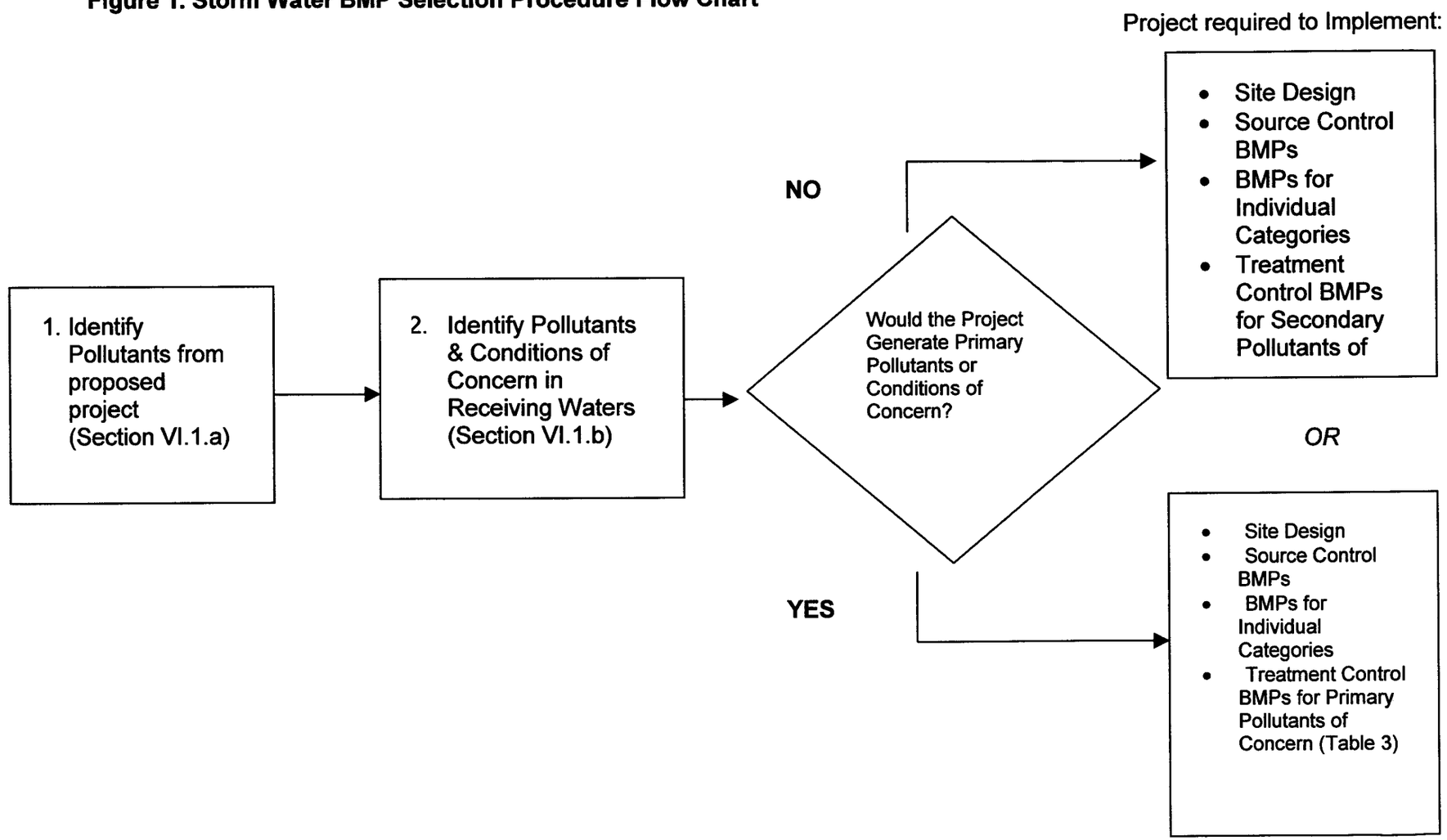

16.60.110 Identifying pollutants and conditions of concern.

A. Priority project proponents shall use this guidance to identify pollutants and conditions of concern, for which they need to mitigate or protect against. Site design and source control BMPs are required based on pollutants commonly associated with the proposed project type (see Table 2, "Standard Storm Water BMP Selection Matrix"). Treatment Control BMPs are also required for the project's expected pollutants of concern (see Table 3).

B. For private priority projects, the information shall be provided with the project application prior to being deemed complete.

C. For public priority projects, the information shall be provided by the Director of Public Works prior to bidding for construction contracts.

16.60.120 General categories of water pollution.

A. Sediments – Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

B. Nutrients – Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

C. Metals – Metals are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary source of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

D. Organic Compounds – Organic compounds are carbon-based. Commercially available or naturally occurring organic compounds are found in

pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.

E. Trash & Debris – Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfides.

F. Oxygen-Demanding Substances – This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

G. Oil and Grease – Oil and grease are characterized as high-molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

H. Bacteria and Viruses – Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

I. Pesticides – Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

16.60.130 Identifying pollutants from the project area.

Using Table 1, pollutants shall be identified that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

16.60.140 Identifying pollutants of concern.

A. Pollutants generated by the proposed priority project that exhibit one or more of the following characteristics are considered primary pollutants of concern:

- Current loadings or historical deposits of the pollutant are impairing the beneficial uses of a receiving water;
- Elevated levels of the pollutant are found in water or sediments of a receiving water and/or have the potential to be toxic to or bioaccumulate in organisms therein; and
- Inputs of the pollutant are at a level high enough to be considered potentially toxic.

B. To identify primary pollutants of concern in receiving waters, each priority project shall, at a minimum, do the following:

1. For each of the proposed projects discharge points, identify the receiving water(s) that each discharge point proposes to discharge to, including hydrologic unit basin number(s), as identified in the most recent version of the *Water Quality Control Plan for the San Diego Basin*, prepared by the San Diego Regional Water Quality Control Board;

2. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies. List any and all pollutants for which the receiving waters are impaired;

3. Compare the list of pollutants for which the receiving waters are impaired with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing impairment of receiving waters shall be considered primary pollutants of concern.

For projects where no primary pollutants of concern exist, those pollutants identified through the use of Table 1 shall be considered secondary pollutants of concern.

16.60.150 Identifying conditions of concern.

A. Common impacts to the hydrologic regime resulting from development typically include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. These changes have the potential to permanently impact downstream

channels and habitat integrity. A change to a priority project site's hydrologic regime would be considered a condition of concern if the change would impact downstream channels and habitat integrity. Because of these potential impacts, a director, or his or her designee, may require that the following steps be followed for priority projects that, in their judgment, may impact the hydrologic regime:

1. Evaluate the project's conditions of concern in a drainage study report prepared by a registered civil engineer in the State of California, with experience in fluvial geomorphology and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, wet season groundwater depth, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed;

2. As part of the drainage study, a qualified, licensed professional shall provide a report on proposed infiltration techniques (trenches, basins, dry wells, permeable pavements with underground reservoir for infiltration) regarding any potential adverse geotechnical concerns. Geotechnical conditions (such as slope stability, expansive soils, compressible soils, seepage, groundwater depth, and loss of foundation or pavement subgrade) should be addressed, and mitigation measures provided;

3. As part of the drainage study, the civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of an altered flow regime;

4. The drainage study shall compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rate, flow velocity, runoff volume, time of concentration, and retention volume. These characteristics shall be developed for the two-year and 10-year frequency, Type I storm, of six-hour or 24-hour duration (whichever is the closer approximation of the site's time of concentration), during critical hydrologic conditions for soil and vegetative cover[1]. The drainage study shall report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions affecting downstream conditions of concern would be maintained by the proposed project, satisfactory to the Director of Public Works, by incorporating the site design, source control, and treatment control requirements identified in this division.

B. For priority development projects that disturb ("PDP") fifty (50) acres or more:

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[1]. Design storms can be found at http://www.wrcc.dri.edu/pcpnfreq.html. Applicants may calculate the storm events using local rain data. In addition, isopluvial maps contained in the County of San Diego Hydrology Manual may be used to extrapolate rainfall data to areas where insufficient data exists. If isopluvial maps are used interpolations shall be linear.

1. PDP post project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations (interim hydromodification criteria) where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

2. PDPs disturbing fifty (50) acres or more shall implement hydrologic controls to manage post-project runoff flow rates and durations as required by the interim hydromodification criteria.

Table 1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >100,000 ft^2	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Heavy industry /industrial development	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft^2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

16.60.160 Progression of storm water BMPs.

Site design BMPs reduce the need for source and/or treatment control BMPs, and source control BMPs may reduce the amount of treatment control BMPs needed. Throughout all the following sections, all priority projects shall consider, and incorporate and implement where expressly required by this division and if not so required where determined applicable and feasible by the Director of Public Works, storm water BMPs into the project design, in the following progression:

- Site Design BMPs
- Source Control BMPs
- Treatment Control BMPs

16.60.170 Requirements to implement storm water BMPs.

Priority projects must implement LID site design BMPs and source control BMPs, and must also implement treatment control BMPs unless a waiver is granted based on the infeasibility of all treatment control BMPs. LID BMPs must meet the minimum requirements in section D.1.d.(4) of NPDES Permit No. CAS 0108758. BMPs must also achieve certain performance standards set out in section D.1.d. (5) and (6). Selection of BMPs from the menus included in this division, using the rules set out in this division, must fulfill these requirements. In addition, runoff treated by LID and site design or source control BMPs, such as rooftop runoff treated in landscaping, may be useful in reducing the quantity of runoff required to be treated in, "Treatment Control BMPs."

16.60.180 Selection of storm water BMPs.

Using the Treatment Control BMP Selection Matrix, each priority project shall select a structural treatment BMP by comparing the list of pollutants for which the downstream receiving waters are impaired (if any), with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing a Clean Water Act section 303(d) impairment of the receiving waters of the project shall be considered primary pollutants of concern. Priority projects that are anticipated to generate a primary pollutant of concern shall meet all applicable requirements of establishing stormwater BMPs, and shall select a single or combination of storm water BMPs from Table 3 which maximizes pollutant removal for the particular primary pollutant(s) of concern.

Alternatively, a project proponent may elect to implement a combination of LID BMPs that either disperse and infiltrate, or direct to bioretention facilities, the flows from all impervious areas on-site. These BMPs are presumed to provide maximum extent practicable treatment for all pollutants of concern; therefore no further documentation of the treatment BMP selection process is required.

16.60.190 Storm water BMPs for projects not generating pollutants.

Priority projects that are not anticipated to generate a pollutant for which the receiving water is Clean Water Act Section 303(d) impaired shall meet applicable standard requirements of establishing stormwater BMPs, and shall select a single or combination of storm water BMPs from Table 3 which are effective for pollutant removal of the identified secondary pollutants of concern, consistent with the "maximum extent practicable" standard defined in Attachment D of the Municipal Permit.

16.60.200 Storm water BMPs for projects generating primary and secondary pollutants.

Where a site generates both primary and secondary pollutants of concern, primary pollutants of concern receive priority for BMP selection. For such sites, selected BMPs must only maximize pollutant removal for the primary pollutants of concern. Where a site generates only secondary pollutants of concern, selected BMPs shall target the secondary pollutant of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 1), consistent with the maximum extent practicable standard defined in Attachment D of the Municipal Permit.

Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the city when a feasibility analysis has been conducted, which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible. Treatment control BMPs shall not be constructed within a receiving water.

16.60.210 Alternative storm water BMPs.

Alternative storm water BMPs not identified in Table 3 may be approved at the discretion of the Director of Public Works, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 3.

Table 2. Site Design and Source Control Storm Water BMP Selection Matrix.

Priority Project Category	*Site Design BMPs(1)*	*Source Control BMPs(2)*	*Requirements Applicable to Individual Priority Project Categories(3)*										
			a. Private Roads	b. Residential Driveways & Guest Parking	c. Dock Areas	d. Maintenance Bays	e. Vehicle Wash Areas	f. Outdoor Processing Areas	g. Equipment Wash Areas	h. Parking Areas	i. Roadways	j. Fueling Areas	k. Hillside Landscaping
Detached Residential Development	R	R	R	R									R
Attached Residential Development	R	R	R										
Commercial Development >100,000 ft^2	R	R			R	R	R	R					
Automotive Repair Shop	R	R			R	R	R		R			R	
Restaurants	R	R			R				R				
Hillside Development >5,000 ft^2	R	R	R										R
Parking Lots	R	R								R(4)			
Streets, Highways & Freeways	R	R									R		

R = Required; select BMPs as required from the applicable steps in Section VI.2.a & b, or equivalent as identified in Appendix A.
(1) Refer to Section VI.2.a.
(2) Refer to Section VI.2.b.
(3) Priority project categories must apply specific storm water BMP requirements, where applicable. Projects are subject to the requirements of all priority project categories that apply.
(4) Applies if the paved area totals >5,000 square feet or with >15 parking spaces and is potentially exposed to urban runoff.

Table 3. Treatment Control BMP Selection Matrix.

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	High-rate biofilters	High-rate media filters	Trash Racks & Hydro -dynamic Devices
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

Notes on Treatment Control BMP Categories

All rankings are relative. Ranking of all facilities assumes proper sizing, design, and periodic maintenance. Following are general descriptions of each category.

- **Bioretention Facilities** (infiltration planters, flow-through planters, bioretention areas, and bioretention swales). Facilities are designed to capture runoff and infiltrate slowly through soil media, which also supports vegetation. Bioretention facilities, except for flow-through planters, effectively promote infiltration into native soils. In clay soils, facilities may capture excess treated runoff in an underdrain piped to the municipal storm drain system. Typical criteria: an infiltration surface area at least 4% of tributary impervious area, 6-inch average depth of top reservoir, 18-inch soil layer, 12-inch to 18-inch gravel subsurface storage layer.

- **Settling Basins and Wetlands** (extended detention basins, "wet" basins, decorative or recreational lakes or water features also used for storm water treatment, constructed wetlands). Facilities are designed to capture a minimum water quality volume of 80% of total runoff and detain for a minimum of 48 hours. Some wetland designs have proven effective in removing nutrients, but performance varies.

- **Infiltration Facilities or Practices** (infiltration basins, infiltration trenches, dry wells, dispersal of runoff to landscape, pervious pavements). These facilities and landscape designs capture, retain, and infiltrate a minimum of 80% of runoff into the ground. Infiltration facilities are generally only feasible in permeable (Hydrologic Soil Group A or B) soils. Volume and area of infiltration facilities depends on soil permeability and safety factor used. Typical criteria: Infiltration facilities should have pretreatment to remove silt to prolong life of the facility. A 10-foot vertical separation from average seasonal groundwater depth is required. Dispersal to landscape may be accomplished in any soil type and generally requires a maximum 2:1 ratio impervious:pervious and concave topography to ensure the first 1 inch of rainfall is retained.

- **Media Filters** (sand filters). Filters designed to treat runoff produced by a rainfall of 0.2 inches per hour (or 2×85th percentile hourly rainfall intensity) by slow infiltration through sand or other media. Typical criteria: Surface loading rate not to exceed 5 inches/hour. Entire surface of the sand must be accessible for maintenance.

- **High Rate Biofilters** (tree wells, typically proprietary). Biofilters with specially designed media to rapidly filter runoff while removing some pollutants. Filterra® (proprietary version) recommends surface loading rates of up to 100 inches/hour.

- **High-rate Media Filters** (typically proprietary). Vaults with replaceable cartridge filters filled with inorganic media.

- **Drainage Inserts** have low effectiveness in removing pollutants that tend to associate with fine particles and have medium effectiveness in removing coarse sediment and trash. They are sometimes used to augment more effective treatment facilities and are sometimes used alone when more effective facilities have been deemed infeasible.

Notes on Pollutants of Concern:
In Table 3, Pollutants of Concern are grouped as gross pollutants, pollutants that tend to associate with fine particles, and pollutants that remain dissolved.

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

16.60.220 Low Impact Development (LID) and site design BMP

A. Priority projects shall be designed so as to minimize directly connected impervious surfaces and to promote infiltration using LID techniques. Priority projects shall, to the maximum extent practicable, minimize the introduction of pollutants and conditions of concern that may result in significant impacts, generated from site runoff to the storm water conveyance system. Priority projects shall also control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat. Priority projects can address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Mimicking a site's natural hydrologic regime can be pursued by:

- Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the storm water conveyance system, and minimizing clearing and grading.
- Providing runoff storage measures dispersed throughout a site's landscape with the use of bioretention facilities and detention, retention, and infiltration practices.

B. Site design BMPs shall offer an innovative approach to urban storm water management that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates storm water controls throughout the urban landscape. Examples of many of these methods may be found in the County of San Diego's LID Handbook, and its publications, *Start at the Source*, and *Low-Impact Development Design Strategies*, in the City of Portland, Oregon's *Stormwater Manual*, and in the Contra Costa (California) Clean Water Program's *Stormwater C.3 Guidebook*.

16.60.230 Maintaining pre-development rainfall runoff characteristics.

A. Priority projects shall control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. In addition, projects should control runoff discharge volumes and durations to the maximum extent practicable using the site design, source control, and treatment control requirements.

B. Design Concept 1: Minimize Project's Impervious Footprint & Conserve Natural Areas. The following site design options shall be considered and, incorporated and implemented where determined applicable and feasible by the Director of Public Works, during the site planning and approval process, consistent with applicable General Plan policies and other development regulations.

1. Minimize and disconnect impervious surfaces. This can be achieved in various ways, including, but not limited to increasing building density (number of stories above or below ground) and developing land use regulations seeking to limit impervious surfaces. Decreasing the project's footprint can substantially reduce the project's impacts to water quality and hydrologic conditions.

2. Conserve natural areas, soils, and vegetation where feasible. This can be achieved by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition. The following list provides a guideline for determining the least sensitive portions of the site, in order of increasing sensitivity. Jurisdictions should also refer to their Multiple Species Conservation Plans or other biological regulations, as appropriate.

a. Areas devoid of vegetation, including previously graded areas and agricultural fields.
b. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands.
c. Areas of chamise or mixed chaparral, and non-native grasslands.
d. Areas containing coastal scrub communities.
e. All other upland communities.
f. Occupied habitat of sensitive species and all wetlands.
g. All areas necessary to maintain the viability of wildlife

corridors. Within each of the previous categories, areas containing hillsides should be considered more sensitive than the same category without hillsides.

3. Construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, permeable asphalt, unit pavers, and granular materials.

4. Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.

5. Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.

6. Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.

7. Use natural drainage systems to the maximum extent practicable.

8. Other site design options that are comparable, and equally effective.

9. Minimize soil compaction.

C. Design Concept 2: Minimize Directly Connected Impervious Areas (DCIAs). Priority projects shall consider, and incorporate and implement the following design characteristics, where determined applicable and feasible by the Director of Public Works.

1. Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.

2. Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.

3. Other design characteristics that are comparable and equally effective.

16.60.240 Protection of slopes and channels.

Project plans shall include storm water BMPs to decrease the potential for erosion of slopes and/or channels, consistent with local codes and ordinances and with the approval of all agencies with jurisdiction, e.g., the U.S. Army Corps of Engineers, the San Diego Regional Water Quality Control Board, and the California Department of Fish and Game. The following design principles shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public

Works:

A. Minimize disturbances to natural drainages.

B. Convey runoff safely from the tops of slopes.

C. Vegetate slopes with native or drought tolerant vegetation.

D. Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.

E. Stabilize permanent channel crossings.

F. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.

G. Other design principles that are comparable and equally effective.

16.60.250 Providing storm drain system stenciling and signage.

Storm drain stencils are highly visible source control messages, typically placed directly adjacent to storm drain inlets. The stencils contain a brief statement that prohibits the dumping of improper materials into the urban runoff conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. Priority projects shall include the following requirements in the project design.

A. Provide stenciling or labeling of all storm drain inlets and catch basins within the project area with prohibitive language (such as: "NO DUMPING – I LIVE IN <<name receiving water>>") and/or graphical icons to discourage illegal dumping.

B. Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

C. Maintain legibility of stencils and signs.

16.60.260 Designing outdoor material storage areas to reduce pollution introduction.

Improper storage of materials outdoors may increase the potential for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the urban runoff conveyance system. Where the priority project plans include outdoor areas for storage of hazardous materials that may contribute pollutants to the urban runoff conveyance system, the following storm water BMPs are

required:

A. Hazardous materials with the potential to contaminate urban runoff shall either be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

B. The storage area shall be paved and sufficiently impervious to contain leaks and spills.

C. The storage area shall have a roof or awning to minimize direct precipitation within the secondary containment area.

16.60.270 Designing trash storage areas to reduce pollution introduction.

All trash container areas shall meet the following requirements (limited exclusion: detached residential homes):

A. Paved with an impervious surface, designed not to allow run-on from adjoining areas, screened or walled to prevent off-site transport of trash; and

B. Provide attached lids on all trash containers that exclude rain, or roof or awning to minimize direct precipitation.

16.60.280 Using efficient irrigation systems and landscape design.

Priority projects shall design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water conveyance system. (Limited exclusion: detached residential homes.) In compliance with the Water Conservation in Landscaping Act (California Government Code sections 65591, *et seq.*), the following methods to reduce excessive irrigation runoff shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

A. Employing rain shutoff devices to prevent irrigation after precipitation.

B. Designing irrigation systems to each landscape area's specific water requirements.

C. Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.

D. Employing other comparable, equally effective, methods to reduce irrigation water runoff.

16.60.300 Incorporate requirements applicable to individual priority project categories.

Where identified in Table 2, the following requirements shall be incorporated into applicable priority projects during the storm water BMP selection and design process. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for "g. Equipment Wash Areas" and "h. Parking Areas" into the project design).

A. Private Roads - The design of private roadway drainage shall use at least one of the following:

1. Rural swale system: street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings;

2. Urban curb/swale system: street slopes to curb, periodic swale inlets drain to vegetated swale/biofilter;

3. Dual drainage system: First flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder, high flows connect directly to storm water conveyance system;

4. Other methods, which are comparable and equally effective within the project.

B. Residential Driveways and Guest Parking. The design of driveways and private residential parking areas shall use at least one of the following features.

1. Design driveways with shared access, flared (single lane at street) or wheelstrips (paving only under tires); or, drain into landscaping prior to discharging to the storm water conveyance system;

2. Uncovered temporary or guest parking on private residential lots may be: paved with a permeable surface; or, designed to drain into landscaping prior to discharging to the storm water conveyance system;

3. Other features which are comparable and equally effective.

C. Dock Areas. Loading/unloading dock areas shall include the following:

1. Cover loading dock areas, or design drainage to preclude urban run-on and runoff;

2. Direct connections to storm drains from depressed loading docks (truck wells) are prohibited;

3. Other features which are comparable and equally effective.

D. Maintenance Bays. Maintenance bays shall include the following:

1. Repair/maintenance bays shall be indoors; or, designed to preclude urban run-on and runoff; and

2. Design a repair/maintenance bay drainage system to capture all wash water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit, or

3. Other features which are comparable and equally effective.

E. Vehicle Wash Areas. Priority projects that include areas for washing/steam cleaning of vehicles shall use the following:

1. Self-contained; or covered with a roof or overhang;

2. Equipped with a clarifier or other pretreatment facility;

3. Properly connected to a sanitary sewer;

4. Other features which are comparable and equally effective.

F. Outdoor Processing Areas. Outdoor process equipment operations, such as rock grinding or crushing, painting or coating, grinding or sanding, degreasing or parts cleaning, landfills, waste piles, and wastewater and solid waste treatment and disposal, and other operations determined to be a potential threat to water quality by the Copermittee shall adhere to the following requirements:

1. Cover or enclose areas that would be the most significant source of pollutants; or, slope the area toward a dead-end sump; or, discharge to the sanitary sewer system following appropriate treatment in accordance with conditions established by the applicable sewer agency;

2 Grade or berm area to prevent run-on from surrounding areas;

3. Installation of storm drains in areas of equipment repair is prohibited;

4. Other features which are comparable or equally effective.

G. Equipment Wash Areas. Outdoor equipment/accessory washing and steam cleaning activities at priority projects shall use the following:

1. Be self-contained; or covered with a roof or overhang;

2. Be equipped with a clarifier, grease trap or other pretreatment facility, as appropriate;

3. Properly connected to a sanitary sewer;

4. Other features which are comparable or equally effective.

H. Parking Areas. To minimize the offsite transport of pollutants from parking areas, the following design concepts shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

1. Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design;

2. Overflow parking (parking stalls provided in excess of the City's minimum parking requirements) should be constructed with permeable paving;

3. Other design concepts, which are comparable and equally effective.

I. Roadways. Priority roadway projects shall select treatment control BMPs following the treatment control selection procedure identified in this division entitled, "Establishing Storm Water BMPs."

J. Fueling Area. Non-retail fuel dispensing areas shall contain the following:

1. Overhanging roof structure or canopy. The cover's minimum dimensions must be equal to or greater than the area within the grade break. The cover must not drain onto the fuel dispensing area and the downspouts must be routed to prevent drainage across the fueling area. The fueling area shall drain to the project's treatment control BMP(s) prior to discharging to the storm water conveyance system;

2. Paved with Portland cement concrete (or equivalent smooth impervious surface). The use of asphalt concrete shall be prohibited;

3. Have an appropriate slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of urban runoff;

4. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.

K. Hillside Landscaping. Hillside areas that are disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, satisfactory to the Director of Public Works.

16.60.310 Treatment control BMP objectives.

A. Minimizing a development's detrimental effects on water quality can be most effectively achieved through the use of a combination of site design, source and treatment control storm water BMPs. Where projects have been designed to minimize,

to the maximum extent practicable, the introduction of anticipated pollutants of concern that may result in significant impacts to the receiving waters through the implementation of site design and source control storm water BMPs, the development would still have the potential for pollutants of concern to enter the storm water conveyance system. Therefore, priority projects shall be designed to remove pollutants of concern from the storm water conveyance system to the maximum extent practicable through the incorporation and implementation of treatment control BMPs.

B. In meeting the requirements in this section, priority projects shall implement a single or combination of storm water BMPs that will remove anticipated pollutants of concern, as identified by the procedure of this division, in site runoff to the maximum extent practicable. Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the Director of Public Works when a feasibility analysis has been conducted, which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible. Treatment control BMPs must be implemented unless a waiver is granted to the project by the Director of Public Works based on the infeasibility of any treatment control BMP.

16.60.320 Design to treatment control BMP standards.

All priority projects shall design, construct and implement structural treatment control BMPs that meet the design standards of this section, unless specifically exempted by the limited exclusions. Structural treatment control BMPs required by this section shall be operational prior to the use of any dependent development, and shall be located and designed in accordance with the requirements of this division.

16.60.330 Structural treatment control volume based BMPs.

Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

- Volume of runoff produced from a 24-hour 85th percentile storm event, as determined from isoplovial maps contained in the County of San Diego Hydrology Manual. See County of San Diego's Isoplovial map at http://www.sdcounty.ca.gov/dpw/engineer/flood.htm; or

- Volume of runoff produced by the 85th percentile 24-hour runoff event, determined as the maximized capture urban runoff volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998*); or

- The volume of annual runoff based on unit basin storage volume, to achieve 90 percent or more volume treatment by the method recommended in *California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (1993)*, or

- The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event. Where this option is used, storm events shall be identified by their separation from one another by at least six hours of no rain.

16.60.340 Structural treatment control flow based BMPs.

As an alternative to volume-based BMPs, structural treatment controls may be designed as flow based BMPs. Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

- The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour for each hour of a storm event; or

- The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two, for each hour of a storm event; or

- The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two, for each hour of a storm event.

16.60.350 Limited exclusions.

A. Proposed restaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical sizing criteria requirements listed for structural treatment control volume based BMPs.

B. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed for structural treatment control volume based apply only to the addition, and not to the entire development.

16.60.360 Locating BMPs near pollutant sources.

Structural treatment control storm water BMPs should be implemented close to pollutant sources to minimize costs and maximize pollutant removal prior to runoff entering receiving waters. Such BMPs may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following requirements:

A. All structural treatment control BMPs shall be located so as to infiltrate, filter, and/or treat the required runoff volume or flow prior to its discharge to any receiving water body supporting beneficial uses;

B. Multiple post-construction structural treatment control BMPs for a single priority development project shall collectively be designed to comply with the design standards for structural treatment control volume based BMPs;

C. Shared storm water BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;

D. Interim storm water BMPs that provide equivalent or greater treatment than is required by structural treatment control volume based BMPs may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

16.60.370 Restrictions on use of infiltration BMPs.

At a minimum, use of structural treatment BMPs that are designed to primarily function as infiltration devices shall meet the following conditions[2]:

A. Urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants, such as sedimentation or filtration, prior to infiltration;

B. All dry weather flows shall be diverted from infiltration devices except for those non-storm water discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to storm water conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and dechlorinated swimming pool discharges;

C. Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used;

D. The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet or as determined on an individual, site-specific basis by the Director of Public Works. Where groundwater does not support beneficial uses, this vertical distance criterion may be reduced, provided groundwater quality is maintained;

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[2]. These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

E. The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, and infiltration rate) that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses;

F. Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries; and other high threat to water quality land uses and activities as designated by the Director of Public Works;

G. The horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as determined on an individual, site-specific basis by the Director of Public Works.

16.60.380 Maintenance mechanism to be in place before acceptance.

Structural BMPs shall not be considered "effective," and shall not be accepted as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. As part of project review, if a project proponent is required to include interim or permanent structural BMPs in project plans, and if the Director of Public Works does not provide a mechanism for BMP maintenance, the project proponent shall provide verification of maintenance requirements through such means as may be appropriate, at the discretion of the Director of Public Works, including, but not limited to covenants, legal agreements, maintenance agreements, and/or conditional use permits.

16.60.390 Maintenance mechanisms.

Public equity maintenance. The City Council may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the BMP. Unless acceptable to the City Council, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed, (e.g., through a trust fund, assessment district fees, bond, letter of credit or similar means). In addition, the City Council may seek protection from liability by appropriate releases and indemnities. The City Council shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The City Council shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions; and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the

facilities. The City Council must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

A. Project proponent agreement to maintain storm water BMPs: The City Council may enter into a contract with the project proponent obliging the project proponent to maintain, repair and replace the storm water BMP as necessary into perpetuity. Security may be required.

B. Assessment districts: The City Council may approve an Assessment District or other funding mechanism created by the project proponent to provide funds for storm water BMP maintenance, repair and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.

C. Lease provisions: In those cases where the City holds title to the land in question, and the land is being leased to another party for private or public use, the City Council may assure storm water BMP maintenance, repair and replacement through conditions in the lease.

D. Conditional use permits: For discretionary projects only, the City Council may assure maintenance of storm water BMPs through the inclusion of maintenance conditions in the conditional use permit. Security may be required.

E. Alternative mechanisms: The City Council may accept alternative maintenance mechanisms if such mechanisms are as protective those listed above.

16.60.400 Verification mechanisms.

For discretionary projects, the City approved method of storm water BMP maintenance shall be incorporated into the project's permit, and shall be consistent with permits issued by resource agencies, before City approval of discretionary permits. For projects requiring only ministerial permits, the approved method of storm water BMP maintenance shall be incorporated into the permit conditions before the issuance of any ministerial permits. In all instances, the project proponent shall provide proof of execution of an approved method of maintenance repair and replacement before the issuance of construction approvals. Public projects that are not required to obtain permits shall be responsible for ensuring that an approved method of storm water BMP maintenance repair and replacement is executed prior to the commencement of construction. For all properties, the verification mechanism will include the project proponent's signed statement, as part of the project application, accepting responsibility for all structural BMP maintenance, repair and replacement, until a City approved entity agrees to assume responsibility for structural BMP maintenance, repair and replacement.

16.60.410 Maintenance requirements.

A. Operation & Maintenance (O&M) Plan: A copy of an Operation & Maintenance (O&M) plan, prepared by the project proponent satisfactory to the Director of Public Works shall be attached to the approved maintenance agreement, which describes the designated responsible party to manage the storm water BMP(s), employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities, copies of resource agency permits, and any other necessary activities. At a minimum, maintenance agreements shall require the inspection and servicing of all structural BMPs on an annual basis. The project proponent maintenance entity shall complete and maintain O&M forms to document all maintenance requirements. Parties responsible for the O&M plan shall retain records for at least 5 years. These documents shall be made available to the City for inspection upon request at any time.

B. Access Easement/Agreement: As part of the maintenance mechanism selected above, it shall include a copy of an executed access easement that shall be binding on the land throughout the life of the project, until such time that the storm water BMP requiring access is replaced, satisfactory to the Director of Public Works.

16.60.420 Waiver of structural treatment BMP requirements.

The requirement of implementing structural treatment BMPs may be waived if infeasibility can be established. A waiver of infeasibility shall be granted only when all available structural treatment BMPs have been considered and rejected as infeasible.

Waivers may only be granted from structural treatment BMP and structural treatment BMP sizing requirements. Priority development projects, whether or not granted a waiver may not cause or contribute to an exceedance of water quality objectives. Pollutants in runoff from projects granted a waiver must still be reduced to the maximum extent practicable.

Section 3: This Ordinance is adopted pursuant to the authority granted to the City of El Cajon under San Diego Regional Water Quality Control Board Order No. R9 2007-0001. This Ordinance encompasses a state-mandated requirement thereunder.

Section 4: This ordinance shall be effective thirty (30) days following its passage and adoption.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at a Regular Joint City Council/Redevelopment Agency Meeting held this 18th day of December, 2007, by the following vote to wit:

AYES	:	Lewis, Hanson-Cox, Kendrick, McClellan, Ramos
NOES	:	None
ABSENT	:	None
DISQUALIFY	:	None

Mark Lewis, Mayor of the City of El Cajon

ATTEST:

Kathie Rutledge, CMC, City Clerk

12/18/07 (Item 14.2)

ENVIRONMENTAL INFORMATION FORM
Part I - Initial Study
Filing Fee $400

Community Development Dept.
Planning Division
200 East Main Street
El Cajon CA 92020

The purpose of this form is to inform the City of the basic components of the proposed project so that the City may review the project pursuant to City Policies, Ordinances, and Guidelines; the California Environmental Quality Act; and the City's Rules and Procedures to Implement CEQA. It is important that the information requested in this application be provided in full.

The Initial Study is a requirement of the California Environmental Quality Act (CEQA) Guidelines and is used to determine whether further review of environmental factors of the project will be necessary, and, if so, whether a Negative Declaration (ND), Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR) will be the most appropriate document. Accuracy and completeness in the preparation of this study is essential. Incomplete materials will only result in a delay for the applicant, as the study will be rejected until properly developed.

INSTRUCTIONS: Please complete the following statement by filling in the designated blank spaces. Responses should be printed or typed so as to be legible. All appropriate spaces must be filled in and the required maps, photos, and plans submitted with this form. Additional information may be attached. The applicant should provide as much information as possible in this submittal to allow reviewers to have a thorough understanding of the project. Please submit this form and all support documents with the appropriate filing fee to the Community Development Department to begin the environmental review process. All maps/site plans shall be folded to 8½" by 11."

A. General Information

1. Name, address, telephone number, fax number and email of person to be contacted concerning this project:

2. Name, address of legal property owner as shown on tax statement:

3. Address of project and/or description of location:

4. Assessor's Parcel Number(s) of project site:

5. List each project application which accompanies this form:

6. Have any preliminary documents been prepared for this projects (e.g. soil report or traffic impact analysis)? If yes, please identify name and date prepared:

7. List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state or federal agencies (i.e., Corps of Engineers, CalTrans, Air Pollution Control District or LAFCO):

8. Existing zoning of project site:

9. Existing General Plan Designation:

10. Fully describe the nature and purpose of the proposed project including the ultimate use of the property:

B. Project Description

1. Site size in acres or square footage:

2. Highest and lowest elevations on site:

3. Number of floors of proposed construction:

4. Number of proposed off-street parking spaces provided:

5. Anticipated project schedule (timeline):

6. Is this project dependent on an existing or future project? If yes, please explain:

7. Anticipated future phases:

8. If residential, include the number of units, unit sizes, range of sale prices or rents, and gross density (units) acre:

9. If commercial and/or office, indicate the types, square footage of each type (i.e., office, sales area, restaurant), whether neighborhood, city or regionally oriented, and total square footage of building area:

10. If industrial, indicate type, estimated employment per shift, loading facilities, square footage of office area and total square footage of building area:

11. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, and total square footage of building:

C. Existing Conditions

1. Number and species of existing trees 6 inches or larger in diameter:

2. Number, size, and species of trees to be removed:

3. Describe any power lines, water, sewer or storm drain mains, pipelines or other transmission lines which are located on or adjacent to the property:

4. Name of creeks and natural or man-made drainage channels through or adjacent to the property:

5. Primary vehicle access to property comes from which street(s):

6. Are any easements known to traverse the site? If yes, explain the type and purpose:

7. Provide details on existing uses of the site. Are there existing structures on the site? If yes, describe use and whether they will be demolished or relocated; if residential, give the number of current occupants:

8. Indicate service provider for:

    a. Water

    b. Sewer

    c. Fire protection

    d. Police protection

9. Is any portion of the site within the 100-year/500-year floodplain?

10. Is the site within an Airport Land Use plan?

11. If yes, what airport plan(s) is it within and do restrictions affect the proposal?

12. Is the site located within two miles of Gillespie Field general aviation airport?

13. Is the site located within close proximity of a freeway?

14. Is the site listed on California EPA's Hazardous Site List?

D. Environmental Analysis

Are the following items applicable to the project or its effects? Discuss all items checked "yes" or "maybe" on next page or attach additional sheets as necessary.

YES	MAYBE	NO	
☐	☐	☐	a. Change in existing features of any streams, lakes or hills, or substantial alteration of ground contours.
☐	☐	☐	b. Change in scenic views or vistas from existing residential areas or public lands or roads.
☐	☐	☐	c. Change in character of general area of project.
☐	☐	☐	d. Produce or involve large amounts of solid waste or litter.
☐	☐	☐	e. Disrupt or adversely affect an historic, cultural or archaeological site.
☐	☐	☐	f. Change in dust, ash, smoke, fumes or odors in vicinity.
☐	☐	☐	g. Change in stream, surface water, wetlands or ground water quality or quantity, or alteration of existing drainage patterns.
☐	☐	☐	h. Increase in impervious surfaces and associated increase runoff.
☐	☐	☐	i. Alteration in existing drainage patterns, runoff flow rates or volumes.

☐	☐	☐	j. Increased erosion.
☐	☐	☐	k. Use or disposal of heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, or oxygen demanding substances.
☐	☐	☐	l. Potential to impact already sensitive conditions or environmentally sensitive areas.
☐	☐	☐	m. Substantial change in existing noise or vibration levels in the vicinity.
☐	☐	☐	n. Site on filled land or on slope of 10 percent or more.
☐	☐	☐	o. Use or disposal of potentially hazardous material such as toxic substances, flammables or explosives.
☐	☐	☐	p. Substantial change in demand for municipal services (police, fire, water, sewer, etc.).
☐	☐	☐	q. Substantial increase in fuel or energy consumption (electricity, oil, natural gas, etc.).
☐	☐	☐	r. Relationship to a larger project or series of projects.
☐	☐	☐	s. Potential impact to aquatic, wetland or riparian habitiat.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: Signature:

Section 711.4 of the Fish and Game Code, which became operative on January 1, 1991, authorizes the County Clerk to collect a filing fee of up to $1,275 for the review of environmental documents by the State Department of Fish and Game. Should the State Department of Fish and Game decide to review the environmental documents associated with this project, the project applicant will become liable for paying this fee.

The applicant certifies by his/her signature below that he/she has been informed of this information and is aware that a fee may be required by the County Clerk with the filing of the environmental documents associated with his/her project.

Failure to pay the required fee in a timely manner may result in the delay in the start of the project.

Date: Applicant's Signature:

Community Development Dept.
Planning Division
200 East Main Street
El Cajon CA 92020

ENVIRONMENTAL EVALUATION FORM
Initial Study Part 2

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☐
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☐
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☐
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☐
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	☐	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	☐	☐	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☐
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☐
ii) Strong seismic ground shaking?	☐	☐	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐
iv) Landslides?	☐	☐	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☐
VII. HAZARDS AND HAZARDOUS MATERIALS B Would the project:				
a) Create a significant hazard to the public or the environment through the routine	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☐
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☐
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☐
j) Inundation by seiche, tsunami, or	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
mudflow?				
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	☐	☐	☐	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☐
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☐
XI. NOISE B Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
project vicinity above levels existing without the project?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☐
Fire protection?	☐	☐	☐	☐
Police protection?	☐	☐	☐	☐
Schools?	☐	☐	☐	☐
	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Parks?				
Other public facilities?	☐	☐	☐	☐
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☐
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☐
e) Result in inadequate emergency access?	☐	☐	☐	☐
f) Result in inadequate parking capacity?	☐	☐	☐	☐
g) Conflict with adopted policies, plans, or programs supporting alternative	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
transportation (e.g., bus turnouts, bicycle racks)?				
XVI. UTILITIES AND SERVICE SYSTEMS B Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project=s projected demand in addition to the provider=s existing commitments?	☐	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project=s solid waste disposal needs?	☐	☐	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☐
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☐

El Cajon Pollution Prevention Program

What is a Watershed?

Although "Watershed" is a new term to many people,. its definition is almost as simple as the well-known phrase "water runs downhill." The drain board that carries rinse water into your kitchen sink can be compared to a watershed. On the land, water that does not evaporate or soak into the soil usually drains into ditches, storm drains, streams, rivers, lakes or the ocean. The contiguous area of land from which the water drains to a common point is a watershed.

When you were a child, you probably had a favorite mud puddle where you liked to play. The part of the yard from which the water drained into the puddle was its watershed. Possibly a small stream ran by your house. It may have been dry most of the year or it may have flowed continuously. Water from a few acres drained into that little stream. Those few acres were its watershed. This small stream and others like it ran into a larger one. The land areas drained by the small steams made up the watershed of the larger stream into which they flood. Small watersheds make up the larger ones. The Mississippi River, for example, drains a watershed of about 1,243,000 square miles or approximately 41% of the 48 states comprising the contiguous United States. This large watershed is made up of thousands of smaller ones, including the Tennessee, Ohio, Arkansas and Missouri Rivers.

As shown on Figure 1, the 14.1 square mile area comprising the City of El Cajon lies entirely within the 440 square mile area drained by the San Diego River . Lakes within the San Diego River Watershed include Lakes Murray, Jennings, San Vincente, El Capitan and Cuyamaca. All waters draining within the San Diego River Watershed drain directly into the Pacific Ocean just north of Ocean Beach.

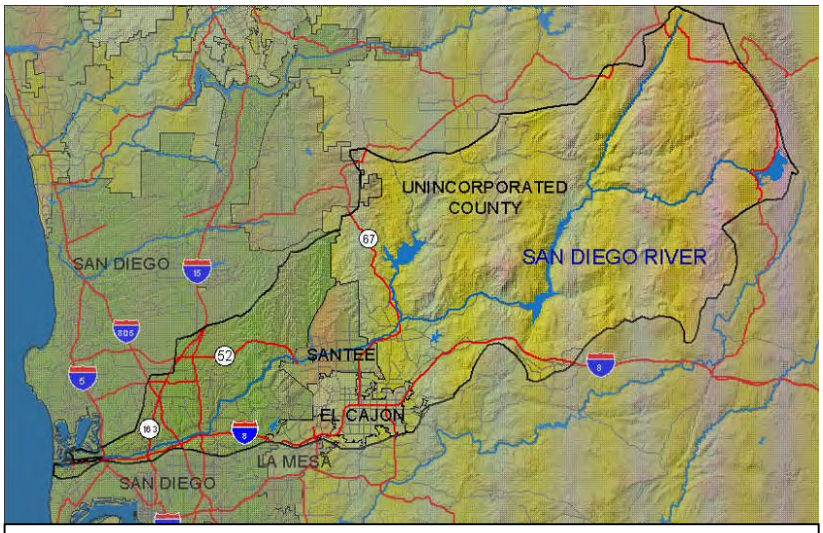

Figure 1 - San Diego River Watershed

The tributary of the San Diego River that drains the El Cajon Valley, called Forester Creek, is our local watershed. So, wherever you live, you are in a watershed. It can be just your own backyard, or an area drained by a system of storm drains, a small creek or by a large river.

You and the other people who live in the watershed are part of the watershed community. So are the animals, the birds, and the fish that live within the watershed. All depend on the watershed, and they, in turn, influence what happens there. What happens within your smaller part of the bigger watershed also affects the larger watershed downstream.

If water runs off the land too fast, it cuts gullies and carries off topsoil. This soil along with other debris the water carries into streams and lakes will pollute the water, ultimately resulting in beach

closures and other problems. As soil fills the lakes or reservoirs, the amount of water they can hold is reduced. Therefore the water supply for your town and your home may be reduced. Although erosion is a natural process, accelerated erosion degrades productivity of the land. Such sediment carried downstream by runaway water may greatly increase the cost of filtering and treating the water you get from the your faucet.

If too much water runs away too rapidly, it causes a flood that damages businesses, homes, roadways and utilities. Flooding may even take lives. When the storm drains, channels and streams become choked with sediment, the flood is more serious because the choked-up channels carry less water.

Storm water runoff can be slowed down or caused to infiltrate into the soil when Storm Water Best Management Practices (BMPs) and other flood- and pollution-prevention measures are put into use throughout the watershed. Some useful Storm Water BMPs are:

- ✓ An overall reduction of paved areas or other surfaces where rainwater cannot soak in.
- ✓ Diversion of drainage of storm water through permeable, “grassy” vegetated swales, either in naturally vegetated areas or developed areas with watershed-friendly landscaping
- ✓ Construction of large or small retention areas can hold back storm water runoff that would otherwise cause flood damage.
- ✓ Installation of irrigation systems that distribute water efficiently, waste less water and thus leave more water for other uses.

City of El Cajon
STORM WATER
Protection Program

If overall runoff can be reduced, urban runoff pollution will also be reduced, and the remaining water will go into streams, lakes, or underground storage to be used in other ways. Since any water filtered through the soil doesn't carry sediment that would clog streams and pollute water supplies, more water will be available to everyone, including wildlife.

El Cajon Storm Water Protection Program

Keep It Clean!

City of El Cajon
Storm Water
Protection Program

Storm Water Guidelines For Car Wash Fundraisers

Although car washing fundraisers are a popular means of raising money for worthwhile causes, there are important environmental issues that, if not properly managed, can negatively impact the aquatic environment and degrade local waterways. When conducting your fundraiser you should follow these guidelines in order to prevent the wash water from entering the storm drains where it flows without treatment of any kind to our streams, rivers and eventually into the ocean.

How does runoff from car wash fundraisers harm the environment?

During a car wash fundraiser, the soapy water used to wash the cars, combines with automotive fluids and residues from the engine, drive train and brakes, and the polluted water flows across the pavement and into nearby storm drains. Alone, one car wash fundraiser event may not create a significant adverse environmental impact. But, collectively, car wash fundraiser events can contribute significant amounts of badly polluted wash water to the storm drain system.

Before beginning your car wash fundraiser:

- ✓ Hold a meeting with all participants to explain the proper procedures that should be followed when conducting these activities.
- ✓ Remove all trash and debris from the car washing area.
- ✓ Use only soaps, cleaners or detergents labeled “non-toxic,” “phosphate free,” or “biodegradable.” The safest products for the environment are vegetable-based or citrus-based soaps.
- ✓ Do not use acid based wheel cleaners or engine degreasers.
- ✓ Select a washing site where the wash water can soak into grass, gravel, or be diverted to nearby landscaping. This will allow the wash water to filter through the vegetation and/or soil instead of flowing directly into a storm drain.
- ✓ If you select a site that drains into a street, block off the storm drain with sandbags and either divert the wash water to an area where the water can pool and evaporate throughout the day or arrange to dispose of the wash water down a sanitary sewer drain.

During the car wash fundraiser:

- ✓ Shake debris from car mats into a trash can or vacuum them. Do not shake dirt from car mats directly onto the ground.
- ✓ Use a bucket of soapy water to clean and re-soap rags or sponges throughout the wash rather than adding more soap directly to rags or sponges.
- ✓ Wring sponges and washrags into buckets, not the ground.
- ✓ Conserve water by using a spray nozzle with an automatic shut off and shutting off or kinking the hose when not in use.
- ✓ Always empty buckets into the sanitary sewer system (e.g., mop sinks or toilets).

After the car wash fundraiser:

- ✓ Remember to clean up and remove sand bags, if used. Have a volunteer walk the perimeter of the site to pick up trash and debris and dispose of it properly.
- ✓ Before you allow anything to go into the gutter or storm drain, stop and think. Storm drains do not go to the public sewer system; they flow directly into storm drains, channels and streams to the ocean.
- ✓ Remember that you are a **Valued Participant** in our City's **Pollution Solution**.

El Cajon Storm Water Protection Program

How You Can Prevent Storm Water Pollution

We can all make a big difference in stopping storm water pollution. Each year significant pollution is created due to careless work habits and lack of awareness about what pollutes our storm drain system. The Clean Water Act makes it illegal to allow any substance other than rainwater to enter the storm drain system. Doing so may lead to monetary fines or prosecution.

Pollution of our waterways will:

- make them unsafe for swimming and other recreational activities
- ruin their appearance
- kill plants and animals that live there

Storm drains should only drain rain.
The storm drain system collects rainwater from storms, and human-activity-related urban runoff from roofs, driveways, sidewalks and streets. All roadside gutters and drainage inlets lead to the storm drain system. And the storm drain water enters our streams, rivers, harbors and ocean. If you place waste near a roadside drainage inlet it will end up in the storm drain. Storm water is not treated – it will appear in the waterways in much the same condition as when you place it there. Remember, "Only Rain in the Drain!"

What pollutes our waterways?
Oil, grease, tar, silt, concrete cutting, cement wash water, water used in cleaning, paint, litter, cigarette butts, animal droppings, detergent and chemical cleaners are all pollutants. Remember that, just because a product is labeled as "biodegradable" does not mean it can be dumped into a storm drain. What can you or your business do to stop pollution?

You can stop pollution from getting into the storm drains by:

- ✓ not hosing waste away - instead sweep it up and dispose of it with your other trash.
- ✓ mopping up any spills immediately and not letting them flow into the storm drain system.
- ✓ making sure that driveways, sidewalks and gutters are clear of debris including leaves and grass clippings.
- ✓ making sure the contaminated water used for rinsing equipment such as paint brushes and containers does not flow into the storm drain system.
- ✓ putting litter in the trash bins - including cigarette butts.
- ✓ picking up all animal droppings.
- ✓ disposing of excess paint and chemicals in the hazardous waste area at landfills.
- ✓ washing your vehicles on the lawn or in a commercial car wash – this stops detergent, oils and grease from getting into the storm drain system.
- ✓ regularly servicing your vehicles - this stops leaking oil and other pollutants from getting into the storm drain system - it only takes one quart of oil to contaminate 250,000 gallons of water.

El Cajon Storm Water Protection Program

Major Causes of Urban Runoff Pollution

What day-to-day activities cause urban runoff pollution? Here are some of the biggest causes:

- **Using automobiles.** Particles in auto exhaust contain toxic organics and heavy metals. Dripping motor oil and wear from brake linings and tires deposit pollutants on streets and highways.
- **Maintaining vehicles.** Vehicle maintenance results in drips and spills of oil, coolant and other fluids. When performed outdoors, these fluids soak into asphalt and concrete pavements until they are washed away with the next storm. Water from washing vehicles outdoors carries pollutants directly to the nearest storm drain.
- **Allowing drainage from the shop floor to flow outside.** Allowing process or clean-up water to drain out onto the street is an often-seen practice that transports pollutants to the storm drain.
- **Cleaning tools or equipment outdoors.** Cleaning or rinsing containers, tools, floor mats or other items outdoors discharges pollutants such as chemicals, detergents, oils, etc.
- **Dumping wastes.** People looking for a "shortcut" to dispose of used oil, paint or other wastes dump them directly into storm drain inlets, causing pollution.
- **Landscaping and grounds maintenance.** Overuse, or indiscriminate use, of fertilizers and pesticides results in these materials running off landscaped areas into storm drains.
- **Allowing dumpster areas to become untidy.** Liquids that leak from dumpsters or garbage left outside the dumpster get washed away during a storm.
- **Building or remodeling facilities.** Disturbing soil and vegetation during construction greatly increases erosion; sediment is a pollutant. During construction, proper material handling and waste disposal is especially important because much of the work is performed in areas subject to rainfall.

Effects of Urban Runoff Pollution

What are the consequences of these activities? The most immediate effects can be seen: many creeks have an oily sheen near storm drain outfalls, litter is left behind by receding waters after a storm, layers of oil-and-grease-laden sediments accumulate, and dead animals are occasionally found on beaches.

But the most serious effects are more subtle. Some toxic substances affect critical life stages of certain organisms. Even if we do not usually see, or think about, these organisms (such as algae or mussels) they are part of the food supply for other plants and animals, including fish and birds. Pollutants in the aquatic environment disrupt the food chain. Some toxins bioaccumulate, which means organisms further up the food chain will concentrate the toxins in their tissues. This is why the State Health Department has recommended restrictions on human consumption of some species of fish and birds found in the Bay. Other effects of urban runoff pollution include contamination of water supply sources and loss of recreational activities such as fishing, swimming, and boating.

People can still stop storm water pollution because people cause it. By making small changes in the way we live and work, we can reduce the pollution we produce.

El Cajon Storm Water Protection Program

What is the El Cajon Storm Water Protection Program?

The City of El Cajon is involved in a program designed to ensure cleaner urban storm water runoff, thereby protecting our region's streams, rivers, beaches and the ocean. In that effort, we have entered into a partnership with nineteen other regional agencies in order to better:

- ✓ Educate and inform the public about urban runoff pollution
- ✓ Encourage public participation in community and clean-up events
- ✓ Work with industries and businesses to encourage pollution prevention
- ✓ Require construction activities to reduce soil erosion and water pollution
- ✓ Require developing projects to include pollution controls that will continue to operate after construction is complete

We also work within our own Municipal Departments and Divisions to ensure that our municipal maintenance and development projects are designed to reduce or eliminate pollution.

How is Our Program Funded?

Businesses and residents within the City of El Cajon fund the Storm Water Protection Program as part of our Wastewater Treatment Program. The Storm Water Protection Program also includes maintenance functions, like street sweeping and storm drain cleaning, to help keep our streams, rivers, beaches and ocean cleaner.

Debris in the Washington Channel

Why Are We Concerned About Urban Runoff?

Before the City of El Cajon area was developed, most rainfall fell onto natural areas and the water soaked into the ground. Over the last century, we've changed the landscape dramatically by adding roads, buildings and drainage pipes. Rainfall that once soaked into the ground now flows quickly along street gutters and into storm drains and drainage channel. These artificial rivers then discharge into our streams and rivers without treatment of any kind. Runoff from everyday urban and suburban activities also adds to this runoff. These activities include:

- ✓ Vehicle washing
- ✓ Landscape irrigation
- ✓ Cleaning around buildings, parking lots and streets

Along the way, the fast-moving urban runoff picks up pollutants such as pesticides, herbicides, fertilizers, eroded soil, and oil and grease from cars. These pollutants make their way into our streams and rivers where they pollute the water where they endanger the lives of both plants and animals. Eventually, this affects all of us, since we eat the fish and use the rivers, beaches and ocean for recreation. Some of us in the El Cajon area also drink treated river water.

How Can You Help?

There are many ways for El Cajon area residents, students, community groups and businesses to get involved in pollution prevention efforts. We need volunteers to help us get the word out. Take the first step by practicing pollution prevention in your own home or business. Then, join us in the many activities and events sponsored throughout the greater El Cajon area. Always remember, **"You Are the Pollution Solution."**

For More Information

Contact the El Cajon Storm Water Protection Program at (619) 441-1653, or visit our web site at www.ci.el-cajon.ca.us, and click on the Storm Water Information link.

El Cajon Storm Water Protection Program

Keeping Our Watershed Healthy

The health of a stream depends on the quality of the water that flows through it. To care for the stream, we must also care for all the land that drains to it. The name for the area or unit of land draining into a common stream or river is a *watershed*.

Everything in the watershed affects the water in the stream. Hazardous chemicals, automotive products, pesticides, herbicides, fertilizers, pet wastes, excessive soil erosion and air pollution all contribute to water pollution. These pollutants don't have to be dumped directly into the water to cause a problem. They can be washed from streets, lawns, roofs or outside storage areas by rainfall, eventually ending up in streams, rivers and the ocean.

The storm drain inlet or gutter in the street outside your home carries water into a network of storm drains that lead directly to the San Diego River or one of its tributary streams. Storm drains are completely separate from the sewer system, because sewer systems handle wastewater from your sinks, tubs and toilets. Storm drains do not go to a treatment plant but into our streams, rivers and ultimately the ocean.

Resulting impacts of water pollution can range from the obvious, such as oil floating on the water to the loss of wildlife due to habitat destruction that may go unnoticed.

Everyone in our community has a part in protecting our watershed and preventing water pollution. While the contribution of one home to water pollution may be small, the combined effect of an entire neighborhood can be substantial. Here are some suggestions that will help in keeping our watershed clean:

- ✓ Use chemical fertilizers and pesticides sparingly. When applied excessively, they can be washed into a nearby storm drain by your sprinklers or rain, thereby damaging aquatic life. Even lawn clippings contain these pollutants. Leave them on the lawn as natural fertilizer or compost them.
- ✓ Keep automobiles “drip-free” and in good operating condition. This helps keep oil and air pollution out of water sources. Wash cars at commercial car washes that drain to the sewage treatment plants instead of your driveway that drains to the storm drain system.
- ✓ Dispose of hazardous household wastes such as paints, solvents, used oil and cleaning products properly. The City of El Cajon contracts with Waste Management, Inc. to accept residential household hazardous waste for FREE on the second and fourth Saturday of each month and by APPOINTMENT ONLY. Residents can drop off no

more than 15 gallons or 125 pounds of household hazardous waste. Call (619) 596-5100 to schedule an appointment time.

The choice is ours. Do we want a watershed that keeps our steams, rivers, beaches and ocean healthy? Or do we want a watershed that struggles to survive?

Remember that, "**You are the Pollution Solution**." You play a very important role in keeping our streams, rivers, beaches and ocean clean. For more information, visit our web site at www.ci.el-cajon.ca.us and click on the "Storm Water Information" link.

Sewage Spill Reference Guide

Your Responsibilities as a Private Property Owner

How a Sewer System Works

A typical sanitary sewer system is constructed of a network of pipes, laterals and mains connecting to each building and transporting sewage to a wastewater treatment plant (see diagram to the right).

A property owner's sewer pipe is called a **sewer lateral** and connects to a larger city-maintained pipe called a sewer main typically located in the street.

As stated in the El Cajon Municipal Code, **sewer laterals are the responsibility of the property owner** and must be maintained by the property owner for the entire distance from the house to the sewer main.

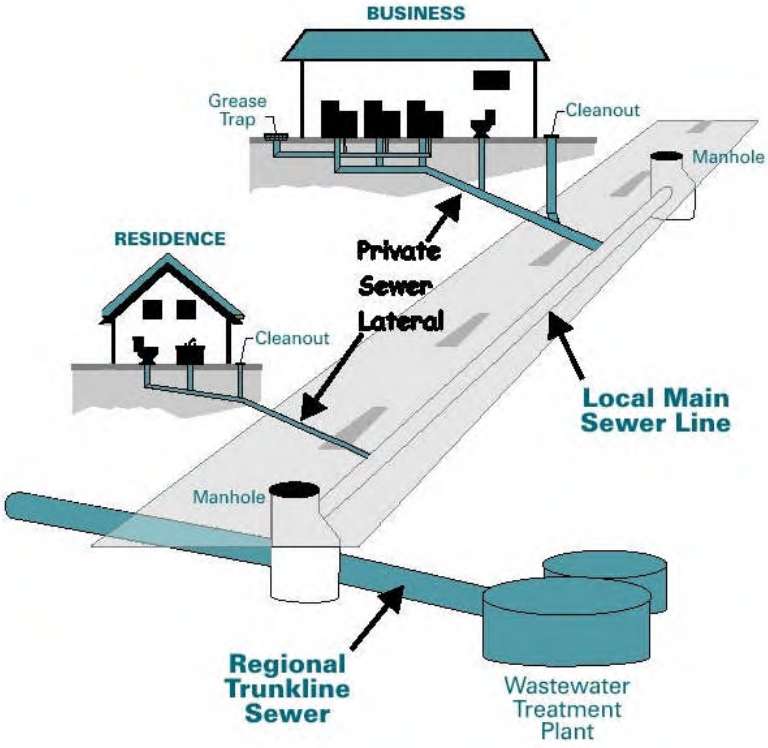

What is a Sewage Spill?

Sewage spills occur when the wastewater being transported via underground pipes overflows through a manhole, cleanout, or broken pipe. Sewage spills can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches.

Common Causes of Sewage Spills

Grease builds up inside and eventually blocks sewer pipes. Grease gets into the sewer from food establishments, household drains, as well as from poorly maintained commercial grease traps and interceptors. Grease is a common cause of sewer pipe blockages, especially in commercial and industrial areas.

Large objects such as paper towels, rags, disposable diapers or children's toys can contribute to a blockage.

Structural problems caused by tree roots in the lines, broken or cracked pipes, missing or broken cleanout caps, or undersized sewers can cause blockages. Blockages by roots are a common cause of blockages in residential areas.

Infiltration and inflow impacts pipe capacity and is caused when groundwater or rainwater enters the sewer system through pipe defects and illegal connections.

You Are Responsible for a Sewage Spill Caused by a Blockage or Break in Your Sewer Lines!

Time is of the essence in dealing with sewage spills. You are required to **immediately:**

- ✓ **Control and minimize the spill.** Keep spills contained on private property and out of gutter, storm drains and public waterways by shutting off or not using the water.
- ✓ **Use sandbags, dirt or plastic sheeting** to prevent sewage from entering the storm drain system.
- ✓ **Clear the sewer blockage.** Always wear gloves and wash your hands. It is recommended that a plumbing professional be called for clearing blockages and making necessary repairs.
- ✓ **Notify the El Cajon Department of Public Works** by calling (619) 441-1653 during business hours, or call the Police Department Communications Center 24-hour number at (619) 579-3311.

You May Be Liable

Allowing sewage from your home, business or property to discharge to a gutter or storm drain may subject you to penalties and/or out-of-pocket costs to reimburse our city for clean-up efforts and enforcement actions.

What To Look For

Sewage spills can be a very noticeable gushing of water from a manhole or a slow water leak that may take time to be noticed. Investigate suspicious looking wet areas. Look for:

- ✓ Drain backups inside the building.
- ✓ Wet ground and water leaking around manhole lids on to your street.
- ✓ Leaking water from cleanouts or outside drains.
- ✓ Unusual strong offensive odors from wet areas near sidewalks, external walls, or landscaped areas.
- ✓ Slow draining or clogged sinks and toilets

Be Cautious

Keep people and pets away form the affected area. Untreated sewage has high levels of disease-causing viruses and bacteria.

How You Can Prevent Sewage Spills Before They Happen

- ✓ Never put grease down garbage disposals, drains or toilets.
- ✓ Perform periodic cleaning to eliminate grease, debris and roots in your house plumbing and sewer lateral.
- ✓ Repair any structural problems in your sewer system and eliminate any rainwater infiltration or inflow into your plumbing system.
- ✓ Do not dispose of paper towels, or other large objects in toilets.

El Cajon Public Works Department, and the Citywide Storm Water Protection Program

Working Together to Cope with Sewer Backups

GENERAL INFORMATION

Sewer backups create stressful and emotional situations for any homeowner or renter. In some cases sewer backups may cause health and safety concerns as well as significant property loss. A proper response to a sewer backup can greatly minimize damage to your property, diminish the threat of illness and help keep our stream, rivers, lakes and beaches clean.

The City of El Cajon makes every effort to be responsive to a resident's needs and concerns when a sewer backup occurs. The City has a sewer crew whose sole duty is to inspect, clean and maintain sewers on a daily basis. Sewer maintenance personnel are available on a 7-day-a-week, 24-hour-a-day basis to minimize the possibility of sewer problems. Unfortunately, because a sewer is not a closed system, many things put into the sewer can clog the system. Large amounts of grease from restaurants and disposable (and cloth) diapers are two common items that cause problems. Other factors can cause backups as well, such as tree roots, which can grow into and obstruct the system, or a broken or collapsed pipe.

Although the City of El Cajon has adopted rules prohibiting the discharge of any substance likely to cause a sewer obstruction, and distributes educational materials to the public about the problems they cause, there is really no way we can absolutely prevent blockages from happening.

Many homeowners' insurance policies exclude damage resulting from sewer backups. However, some insurance companies do provide sewer backup coverage**. If you are concerned about the possibility of a sewer backup and want to insure that you are covered, the City urges you to check with your home insurer regarding the availability of sewer backup insurance**.

CONTACT INFORMATION

If you experience a sewer problem, please call the Department of Public Works at (619) 441-1653 during normal business hours (M–F, 8am to 5pm), or call (619) 579-3311 on non-business weekday hours or on Saturday, Sunday and Holidays. When you call, please state that you are reporting a sewer backup or overflow emergency, and be prepared to provide the details. Backed up sewer lines, line breaks, sewage odors and overflowing manholes are considered an emergency.

If the problem is in the sewer lateral, the homeowner or business is responsible for correcting the problem. The owner of the property is responsible for maintaining and cleaning the sewer lateral from the building (or home) to the City's sewer main, including the connection on the sewer main. Locating the lateral is also the responsibility of the property owner. The City of El Cajon Public Works and Community Development Departments have records showing the location sewer main and lateral lines through public improvement plans or filed plumbing permits. Plumbers may also have special locating equipment, which may be very helpful to your task.

If the problem is in the sewer lateral, whom do you call for help? You will need to call a plumber or a sewer/drain cleaning service. Check your Yellow Pages or Business White Pages. You will need to contact and hire your own plumbing service. The City of El Cajon cannot make a recommendation. And although promptly correcting the plumbing problem is of great importance, it may be in your best interests to obtain several estimates.

REMEMBER TO CALL THE DEPARTMENT OF PUBLIC WORKS FIRST before calling a plumber. We will check the sewer main and inform you of our findings. If the problem is not in the City main you will be advised to contact a plumber or a sewer/drain cleaning service.

LATERAL vs. MAIN

What is a Sewer Lateral? A sewer lateral is the pipeline between the City-maintained sewer main, usually located in the street, and the building the sewer lateral serves. As it is defined in the El Cajon Municipal Code, the sewer lateral is owned, maintained and repaired by the property owner, including any part of the sewer lateral, which extends into streets, alleys or other public easements.

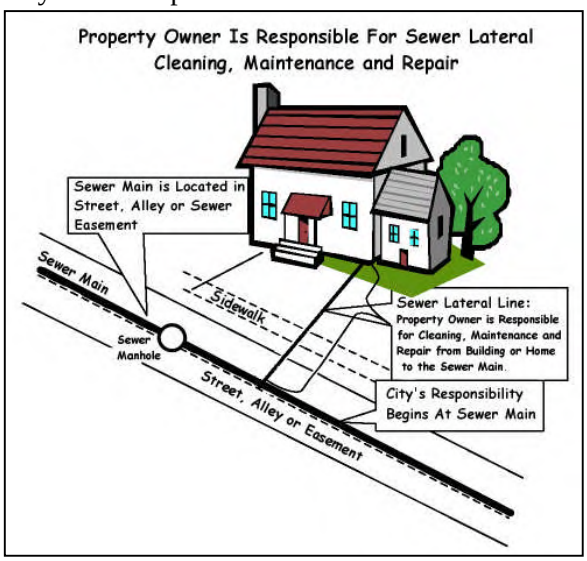

More often than not, the cause of a backup in your lateral is from items that the line is not meant to handle, such as kid's toys, underwear, towels, diapers, paper products (other than toilet paper), keys and even false teeth. To avoid flushing these items, remember to close the toilet lid. What you flush down your toilet may not affect you, but it might cause problems for your neighbors! Another possible cause would be roots in your lateral. The lateral is the responsibility of the owner of the property from the house to the sewer main.

WAYS TO PREVENT BACKUPS IN YOUR LATERAL AND IN THE CITY MAIN

The property owner can do many things to prevent his lateral from backing up. Remember too, that the very same things can help to prevent backups in the City main as well. If everyone would be careful about how they dispose of certain products, our systems would be a great deal more efficient, cause fewer backups, cost us all less money, and prevent a lot of misery. Here's a brief summary of some important sewer "Do's and Don'ts"

- ✓ **Grease:** Cooking oil should be poured into a heat-resistant container and properly disposed of in the trash after cooling to room temperature. Some people assume that washing grease down the drain with hot water is satisfactory. This grease goes down the drain, cools off, and solidifies either in the property owner's line, or in the main sewer. When this happens, the line constricts, and eventually clogs.
- ✓ **Paper Products:** Paper towels, disposable (and cloth) diapers, and feminine products cause a great deal of problems in the property owner's lateral as well as in City sewer mains. These products do not deteriorate quickly, as does bathroom tissue. They become lodged in portions of the lateral or main, eventually causing a sewer backups. These products should also be disposed of in the trash.
- ✓ **Roots:** Shrubs and trees, seeking moisture, will make their way into sewer line cracks. These roots can cause extensive damage. They may start out small, getting into a small crack in the pipe; but as the tree or shrub continues to grow, so does the root. After time, this causes your sewer line to break, which in turn allows debris to hang up in the line, thus causing a back up. One way to prevent roots from entering your line is to replace your line and tap with new plastic pipe. Another alternative is to be careful about planting shrubs or trees near your sewer line.
- ✓ **Sewer Odor:** Another concern that property owners have is that they can smell sewer odors inside their house or building. There are many ways to prevent this from occurring. Under each drain in your plumbing system, there is a loop of pipe called a "P-Trap". If there is water in this fitting, odors or gasses from the sewer cannot enter through the drain from either the property owner's lateral or

the City main. Periodically check to make sure that unused floor drains, sinks etc. have water in the "P-trap". Another way to prevent sewer odor is to ensure that the vents, which are located on your roof, are free from bird nests, leaves, or other debris. When these vents are clear, the sewer odors will escape through these vents.

- ✓ **Illegal Plumbing Connections:** Do not connect French drains, sump pumps and other flood control systems to your sanitary sewer. It is illegal, and debris and silt will clog your line. Consult a plumber to correct any illegal connections.
- ✓ **Needles:** Unfortunately, some people dispose of hypodermic needles in the sewer system. The presence of these needles in the wastewater collection system presents special and possible deadly problems for wastewater collection and wastewater treatment employees. **PLEASE DO NOT FLUSH NEEDLES.** The proper method of disposal is to re-cap the needle and put it into a "sharps container". This could be any rigid plastic container such as a bleach bottle. When it is full, tape the container securely, and call your local pharmacy for advice on proper disposal methods. **PLEASE DO NOT FLUSH THEM DOWN THE TOILET OR THROW THEM INTO THE TRASH!**
- ✓ **Install a Backwater Prevention Valve:** A backwater valve can prevent or greatly reduce the possibility of a sewer backup. A backwater valve is a fixture installed into a sewer line, and sometimes into a drain line, in the basement of your building to prevent sewer backflows. A properly installed and maintained backwater valve works on a one-way system, sewage can go out, but cannot come back in. Property owners are responsible for the installation and maintenance of backwater valves. The cost to install one is dependent upon the type of plumbing in your home and the difficulty of installation. A qualified plumber can assist you in determining your needs.

FREQUENTLY ASKED QUESTIONS

Q: What is the City's responsibility regarding private sewer laterals and private on-site sewer systems?

A: The property owner is fully responsible for maintaining adequate sewage flow to and through the sewer lateral and/or private on-site sewer system, from the property structure to and into the City-maintained sewer main. When failure or stoppage of a privately maintained sewer occurs, City crews will respond only to check the sewer main to verify that the main is open and sewage is flowing. If the sewer main is found to be clear, it is the responsibility of the property owner to call a licensed plumber or drain cleaning service to correct the problem. Verbal assistance and answers to questions can be received by calling the Department of Public Works at (619) 441-1653 during normal business hours (M-F 8am to 5pm), or (619) 579-3311 on other weekday hours, Saturdays, Sundays or Holidays.

Q: If I notice a foreign substance flowing into a storm drain inlet, whom should I call?

A: If you notice a foreign substance flowing into a storm drain inlet, please call the El Cajon Storm Water Protection Program at (619) 441-1653 to report the location, or call the 24-hour, 7-day-a-week San Diego Regional Storm Water Hotline at (888) 846-0800.

Q: What if my sewer backs up?

A: If you experience a sewer backup, call us at (619) 441-1653 during normal business hours (M-F 8am to 5pm), or (619) 579-3311 on other weekday hours, Saturdays, Sundays or Holidays. We will dispatch a maintenance crew to your address to determine if the stoppage is in the City main or your sewer lateral. If the City main is found to be clear, it is the responsibility of the property owner to call a plumber or sewer/drain cleaning service to correct the problem. The property owner is responsible for maintaining adequate flow to and through the sewer lateral from the property structure to and into the City sewer main. If the blockage is in the City main we will fix it as quickly as possible and keep you informed about what is being done.

Q: What about the mess?
A: A sewer backup can lead to disease, destruction of your valuables, damage to your house, and electrical malfunctions. Prompt cleanup of affected property can help minimize the inconvenience and damage.

After any sewer backup or overflow, you should immediately arrange for the cleanup of your property. Here are some useful things to remember:

- ✓ Take before-and-after photos of the affected areas
- ✓ Itemize any property losses
- ✓ Wet-vacuum or remove spillage
- ✓ Mop the floors and wipe walls with soap and disinfectant
- ✓ Flush out and disinfect plumbing fixtures
- ✓ Steam clean or remove carpet and drapes
- ✓ Repair or remove wallboard or wall covering
- ✓ Clean up appliances or ductwork

PRIVATE SEWER LATERAL and PRIVATE ON-SITE WASTEWATER SYSTEM

BEST MANAGEMENT PRACTICES (BMPs)

Private sewer laterals and privately maintained on-site wastewater systems, such as those owned and maintained by Homeowner Associations, carry untreated sewage containing numerous pollutants, including harmful bacteria and excessive nutrients. Improperly maintained private sewer laterals and on-site wastewater systems can break, clog, or malfunction, resulting in an overflow and discharge or raw sewage. Raw sewage poses an extremely high risk to the health of our streams, rivers, beaches and the oceans, as well as the health of members of our community.

Think before putting anything in the storm drain. Remember, the ocean starts at your front door.

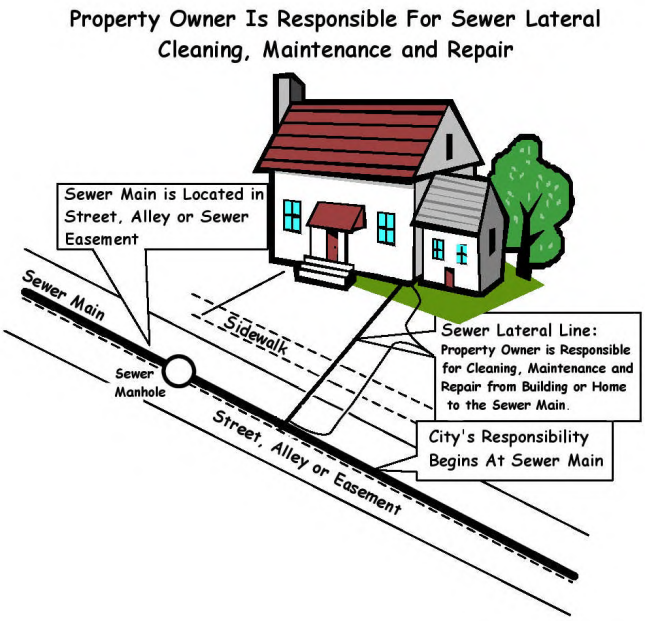

Required BMPs:

- ✓ Dispose of grease in trash, not in the sink drain. Blockages caused by grease in sewer lines cause the majority of sewer main and lateral overflows.
- ✓ Private sewer laterals shall be cleaned, maintained or replaced to prevent seepage and spills.
- ✓ On-site wastewater systems, whether private or connected to public sewer systems, shall be flushed, maintained, repaired or replaced to the maximum extend practicable (MEP) to prevent seepage and spills.
- ✓ Spills from private sewer laterals and on-site wastewater systems shall be contained and cleaned up in a manner that minimizes any release of pollutants to the Storm Water Conveyance System or Receiving Waters.
- ✓ Any release from a private sewer lateral or on-site wastewater system that enters the Storm Water Conveyance System or Receiving Waters shall be immediately reported to the City.
- ✓ Failed sewer laterals or on-site wastewater systems must be immediately repaired or replaced. Contact the City for information concerning permits and approval requirements.

This information sheet is distributed as part of the El Cajon Storm Water Protection Program
For more information call the City at (619) 441-1653 or visit our web site at:
www.ci.el-cajon.ca.us and click on the "Storm Water Information" link

CITY OF EL CAJON
POLLUTION PREVENTION WEEK

LIST OF ACTIVITIES AND EVENTS

Date	Activity/Event	Estimated Number of Participants
04/25/05	Tire Recycling Day	Approximately 26 participants and collected between 18-21 tires for recycling
04/26/05	Dumpster Demonstration	Approximately 12 participants
04/27/06	Fundraising Car Wash Demonstration	7 participants and contacted approximately 9 people
04/28/06	St. Madeline's Cleanup Demonstration	Approximately 11 participants
04/29/06	A-1 Power Washing Demonstration	Approximately 8 participants

Business License and Storm Water Programs

Goal: Use information collected and stored in the Business License database to support the Storm Water Program inspection and public outreach components and potentially increase revenues for the Business License Program.

Process:

1. Business License database is provided to the Storm Water group in a read-only format to gather business address; type of business; SIC code; number of employees. (Support Storm Water inspection component)

2. Storm Water staff match information to Storm Water inspection database. Generate a list of corrections for the Business License database. (Potentially increase revenue)

3. Storm Water staff use Business License information to confirm Business License Database information. (Potentially increase revenue and Support Storm Water inspection component)

4. Develop a Storm Water informational sheet for Business License applicants. The Business License staff would hand out the informational sheet at the time. (Supports Storm Water outreach component)

Edit Rights (fields):

When errors are discovered in the Business License database, corrections can be made by either:

1. Printing out the data the correct for use by Business License staff to make the appropriate changes.

OR

2. Grant limited edit rights to the Storm Water staff for certain fields (Business Name; Address Number; Street Prefix (N, S, E or W); Street Name; Suite Number; Zip Code; Contact Person's Name; Contact Person's Telephone Number; Description of Business SIC; and Business License No.).

CITY OF EL CAJON
INVENTORY OF MUNICIPAL FACILITIES

HIGH PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Civic Center, City Hall and Plaza	200 E. Main Street	Washington Channel
2.	Fire Station No. 9	1301 N. Marshall Avenue	Forester Creek
3.	Public Works Maintenance Division Office	1050 Vernon Way	Forester Creek
4.	Vehicle Maintenance Facility	1060 Vernon Way	Forester Creek

MEDIUM PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Animal Control	1275 N. Marshall Way	Forester Creek
2.	Fletcher Hills Park, Recreation Center and Pool	2345 Center Place	Fletcher
3.	Parks Office	154 Rea Avenue	Washington Channel
4.	Performing Arts Center	110 E. Main Street	Washington Channel
5.	Wells Park, Recreation Center and Maintenance	1153 E. Madison Avenue	Forester Creek
6.	Parks Storage Garage	148 Rea Avenue	Washington Channel

LOW PRIORITY MUNICIPAL FACILITIES

	Municipal Facility	Address	Drainage Basin
1.	Albert Van Zanten Park	1495 Greenfield Drive	Broadway Channel
2.	Bill Beck Park	Pierce Street and Wagner Drive	Broadway Channel
3.	Bostonia Park and Recreation Center	1049 Bostonia Street	Forester Creek/ Broadway Channel
4.	Cajon Valley Middle School Park	750 Park Avenue	Forester Creek/ County Ditch
5.	Community Policing Division	165 E. Park Avenue	Forester Creek
6.	El Cajon Community Center	195 E. Douglas Avenue	Forester Creek
7.	Fire Station No. 7	695 Tyrone Street	County Ditch
8.	Fire Station No. 8	842 N. Third Street	Forester Creek
9.	Fire Station Park	Tyrone Street and Westwind Drive	Forester Creek
10.	Fire Station/ Department Administration	100 E. Lexington Avenue	Forester Creek
11.	Hillside Park and Recreation Center	840 Buena Terrace	Fletcher Hills Parkway/ Fanita Channel Basin/ Forester Creek
12.	John F. Kennedy Park and Recreation Center	1675 E. Madison Avenue	County Ditch
13.	Judson Park	Magnolia Avenue and Park Avenue	Forester Creek
14.	Museum (Knox House)	280 N. Magnolia Avenue	Forester Creek
15.	Office	1034 Magnolia Avenue	Washington Channel
16.	Pistol Range	Gillespie Field	Washington Channel
17.	Police Department	100 Fletcher Parkway	North Forester Creek
18.	Police Department Detectives	1035 Pioneer Way	Forester Creek/ Broadway Channel
19.	Prescott Promenade Park	200 Block of Main Street	County Ditch
20.	Renette Park and Recreation Center	935 S. Emerald Avenue	County Ditch
21.	Tuttle Park	379 Chase Avenue	County Ditch

Storm Water Quality Checklist
For Municipal Facilities

Site Name:_____ Location:_____

Contact:_____

Date:_____ Type of Inspection: ☐ Routine Site Inspection

Weather Information: ☐ Prior to Forecast of Rain Event

Storm Start Date and Time:_____ Storm Duration:_____hours ☐ 24-hr Period During Extended Storm Event

Time Since Last Storm:_____hrs/days Rainfall:_____inches ☐ After Rain Event

Inspector Name and Title:_____

Inspector Signature:_____

Pollution Prevention BMPs	N/A	Yes	No	Comments / Corrective Action
Erosion and Sediment Control				
Is existing vegetation preserved?				
Are seeding and planting of native plants and trees considered?				
Are geotextiles and organic mats used for soil stabilization?				
Roadway and Bridge Maintenance				
Are streets swept and clean?				
Is street sweeping frequency adequate for the area?				
Municipal Vehicle Maintenance Facilities				
Are vehicles/equipment parked/stored in designated areas?				
Are vehicles and equipment regularly inspected for leaks and spills?				
Are detected leaks/spills contained and repaired as soon as possible?				
Landscaping Maintenance				
Are safer, alternative products used or considered?				
Is weather considered for landscaping activities?				
Are certified professionals used to handle, apply, and distribute pesticides, herbicides, and fertilizers?				
Is there an IPM used?				
Maintenance of MS4				
Is the mechanism for detecting and removing IC/ID situations implemented?				
Is the MS4 inspected, maintained, and repaired?				
Is a stenciling and sign program used to warn of effects of illegal dumping?				
Sewer Blockage Response				
Is there mechanism for identifying, containing, controlling, and repairing sewage leaks and spills?				
Is hazardous waste disposed of properly?				
Waste Management				
Is there a waste reduction program in place?				
Are wastes segregated for proper storage and disposal?				

Are dewatering activities controlled and managed appropriately?				
Is groundwater tested prior to disposal?				
Is the public educated and encouraged to participate in appropriate stormwater activities?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Housekeeping				
Is the area clear of visible trash/debris and impervious surfaces free of sediment?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are points of ingress/egress to public and private roads free from sediment, debris and mud from tracking?				
Are materials stored in their designated areas?				
Are dry methods used to clean?				
Employee Training				
Have employees been trained in basic stormwater management and BMP implementation?				
Visual Inspections				
Are visual inspections of the site conducted and documented on a regular basis?				
Are the discharge locations free of significant erosion or sediment transport?				
Improved Operation and Maintenance				
Are drainage control structures free of litter and debris?				
Waste Disposal and Recycling				
Are there designated areas for recycling of metal, tires, antifreeze, and used oil?				
Are waste containers covered?				
Are areas near or around waste containers free of leaks or spills?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are hazardous wastes stored and disposed appropriately? (in labeled, secondary containment; 55-gallon drums in a secured, designated area)				
Is secondary containment free of spills and rainwater?				
Preventive Maintenance				
Are there procedures for replacing used or worn materials or equipment prior to failure?				
Record Keeping				
Is there onsite storage of documented inspections, BMP evaluations, and audits?				
Is there onsite documentation of employee training?				
Is there an onsite SWPPP or other Pollution Control Document?				
Does the SWPPP adequately reflect the current site conditions and the construction operations? If not, explain required SWPPP revisions.				
Spill Prevention and Response				
Are there spill kits near outside stored materials, wastes, and recycling areas?				
Are spill response procedures clearly posted?				
Are employees trained in preventing spills?				

Material Inventory Procedures				
Are inventories of 30 days materials onsite?				
Material Storage Practices				
Are outside stored materials stored off the ground and covered or in appropriate containers? (Flammables stored in a flammables cabinet; antifreeze in double-walled container or in secondary containment)				
Visual evidence of spills, staining, or leaks from outside stored materials are not evident				
Storage Tanks				
Are outside above ground storage tanks double-walled or in secondary containment?				
Visual evidence of leaks or spills in the area are not visible				
Outside Storage				
Are materials stored outside under cover or in containers?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are outside material storage areas free of visual evidence of spills or runoff?				
Loading and Unloading				
Are loading and unloading areas free of litter and visual evidence of spills?				
Sediment and Erosion Control				
If sandbags are used, are they placed appropriately for the conditions?				
Are temporary soil stabilization measures installed and in working order?				
Is dust control necessary and implemented?				
Are soil stockpiles properly stored?				
Is inlet protection available for all operational storm drain inlets?				
Vehicle and Equipment Maintenance				
Is there a covered or inside area designated for vehicle and equipment maintenance?				
Are leaking vehicles stored inside or drip pans used for outside storage?				
Vehicle and Equipment Washing				
Is there a designated covered or inside area or commercial facility for washing vehicles and equipment?				
Park BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are grass clippings mulched or bagged for disposal?				
Are vegetation trimmings gathered and disposed as solid waste or recycled as mulch?				
Are sidewalks and parking lots cleaned using dry methods to collect and use as mulch or dispose as solid waste?				
Recreation BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Is pool water tested or treated for chlorine before discharge?				
Is pool filter backflush discharged to the sanitary sewer?				
Are pool chemicals stored inside and in appropriate				

containers?				
Non-Stormwater BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Non-Storm Water Management				
Is the site free of evidence of illegal connections and illicit discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
Other				
No other potential storm water pollution issues or concerns exist. If no, explain below.				

Explanations:_____

_____

_____

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_____

Received by:_____ _____

Name (Print) **Date**

_____

Signature

List of High Priority Industrial-Commercial Facilities

	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	IND_COM	SIC	CATEGORY	HSA	NOI_WDID
1	DAVES CUSTOM BOATS	1468 W MAGNOLIA AVE	Industrial, with NOI	HIGH	Industrial	3731	Boat Repair	907.13	9 37I014191
2	DIXIELINE LUMBER	1262 EAST MAIN STREET	Industrial, with NOI	HIGH	Industrial	5211	Building Materials	907.13	9 37I015248
3	CAJON VALLEY UNION SCH DIST.	777 EAST PARK BLVD	Industrial, with NOI	HIGH	Industrial	4151	Ground Transportation	907.13	9 37I003541
4	GROSSMONT UNION H.S. DISTRICT	1100 MURRAY DR	Industrial, with NOI	HIGH	Industrial	4151	Ground Transportation	907.13	9 37I002116
5	LAIDLAW TRANSIT SVCS INC	800 FESLER ST	Industrial, with NOI	HIGH	Industrial	4111	Ground Transportation	907.13	9 37I018333
6	LAIDLAW TRANSIT SERVICES (E Cnty Maintenance Facility)	1213 N JOHNSON AV	Industrial, with NOI	HIGH	Industrial	4212	Ground Transportation	907.13	9 37I020896
7	SAN DIEGO VAN & STORAGE	1426 FAYETTE ST	Industrial, with NOI	HIGH	Industrial	4214	Ground Transportation	907.13	9 37I012805
8	ALLIED CASTINGS INC	983 VERNON WAY	Industrial, with NOI	HIGH	Industrial	3271	Manufacturing, Concrete	907.13	9 37I004416
9	Robertsons El Cajon Plant	215 Cypress Ln	Industrial, with NOI	High	Industrial	3273	Manufacturing, Concrete	907.13	9 37I018203
10	Gear Vendors Inc	1717 W Magnolia Ave	Industrial, with NOI	High	Industrial	3714	Manufacturing, Equipment	907.13	9 37I019579
11	PRECISION METAL PRODUCTS, INC	850 W BRADLEY AVE	Industrial, with NOI	HIGH	Industrial	3599	Manufacturing, Equipment	907.13	9 37I021188
12	CALIFORNIA METALS	636 FRONT ST	Industrial, with NOI	HIGH	Industrial	3599	Manufacturing, Equipment	907.13	9 37I016696
13	CALIFORNIA METALS	297-333 S MARSHALL AVE	Industrial, with NOI	HIGH	Industrial	3599	Manufacturing, Equipment	907.13	9 37I012667
14	ALTURDYNE	660 STEELE ST	Industrial, with NOI	HIGH	Industrial	3621	Manufacturing, Equipment	907.13	9 37I005819
15	Mikes Metal Works Inc	1439 N Magnolia Ave Ste B	Industrial, with NOI	High	Industrial	3398	Manufacturing, Fabricated Metal	907.13	9 37I019752
16	SENIOR OPERATIONS, KETEMA DIVISION	790 GREENFIELD DR	Industrial, with NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	9 37I013103
17	WINDOWMASTER PRODUCTS	1111 PIONEER WAY	Industrial, with NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	9 37I018719
18	TORO AGRICULTURAL IRRIGATION	1588 N MARSHALL AVE	Industrial, with NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	9 37I013431
19	TRIUMPH FABRICATIONS - SAN DIEGO, INC	203 N JOHNSON AVE	Industrial, with NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	9 37I015532
20	CERTIFIED METAL CRAFT INC	877 VERNON WAY	Industrial, with NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	9 37I012286
21	VERIDIAM	1717 N CUYAMACA ST	Industrial, with NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	9 37I020299
22	A J M PACKAGING CORPORATION	1160 VERNON WAY	Industrial, with NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	9 37I010265
23	CHEM-TRONICS INC	1150 W BRADLEY AVE	Industrial, with NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	9 37I000277
24	Solo Cup Co	1160 Vernon Way	Industrial, with NOI	High	Industrial	2656	Manufacturing, Paper	907.13	9 37I018889
25	DECCO CASTINGS INC	1596 PIONEER WAY	Industrial, with NOI	HIGH	Industrial	3365	Manufacturing, Primary Metal	907.13	9 37I014542
26	Stoneworks	1177 Greenfield Dr	Industrial, with NOI	High	Industrial	3281	Manufacturing, Stone/Glass	907.13	9 37I019492
27	California Countertop Quartz & Granite	1340 Hill St	Industrial, with NOI	High	Industrial	3281	Manufacturing, Stone/Glass	907.13	9 37I021018
28	GMG Stone Inc	165 Denny Way	Industrial, with NOI	High	Industrial	3281	Manufacturing, Stone/Glass	907.13	9 37I019789
29	SOUTH BAY WELDING	781 O' CONNOR ST	Industrial, with NOI	HIGH	Industrial	3441	Manufacturing, Structural Steel	907.13	9 37I020014
30	ARTIMEX IRON CO.	315 CYPRESS LANE	Industrial, with NOI	HIGH	Industrial	1791	Other Contractor	907.13	9 37I018051
31	VENUS PRINTING	1183 E MAIN ST #D	Industrial, with NOI	HIGH	Industrial	2741	Printing	907.13	9 37I016302
32	EL CAJON AUTO WRECKERS	1416 PIONEER WAY	Industrial, with NOI	HIGH	Industrial	5015	Recycling	907.13	9 37I016302
33	WASTE MANAGEMENT	1001 W BRADLEY AVE	Industrial, with NOI	HIGH	Industrial	4953	Waste Management	907.13	9 37I012089
34	PACIFIC TRANS ENVIRONMENTAL SVC INC	1452 N JOHNSON AVE	Industrial, with NOI	HIGH	Industrial	4953	Waste Management	907.13	9 37I000506
35	JONNY INDUSTRIES	766 GABLE WY	Industrial, no NOI	HIGH	Industrial	2821	Manufacturing, Chemicals	907.13	
36	SAN DIEGO PRECAST CONCRETE, INC.	540 VERNON WAY	Industrial, no NOI	HIGH	Industrial	3271	Manufacturing, Concrete	907.13	
37	SUPER-KRETE INTERNATIONAL INC	1290 N JOHNSON AVE #101	Industrial, no NOI	HIGH	Industrial	3271	Manufacturing, Concrete	907.13	
38	CURB & VENT MFG., INC	1437 FAYETTE ST	Industrial, no NOI	HIGH	Industrial	3272	Manufacturing, Concrete	907.13	
39	THIRD STONE INC	1835 JOHN TOWERS AVE #D	Industrial, no NOI	HIGH	Industrial	3271	Manufacturing, Concrete	907.13	
40	ROBERTSON'S READY MIX	1770 GILLESPIE WAY	Industrial, no NOI	HIGH	Industrial	3273	Manufacturing, Concrete	907.13	
41	GARDNER POOL PLASTERING	801 GABLE WAY	Industrial, no NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	
42	STONE & TILE WORKS	406 S JOHNSON AVE	Industrial, no NOI	HIGH	Industrial	3253	Manufacturing, Stone/Glass	907.13	
43	RUSSO TILE & MARBLE INC	635 FRONT ST	Industrial, no NOI	HIGH	Industrial	3253	Manufacturing, Stone/Glass	907.13	
44	RICHARD VANDERHYDE	1814 GREENFIELD DRIVE	Industrial, no NOI	HIGH	Industrial	3441	Manufacturing, Structural Steel	907.13	
45	ORTIZ CORPORATION	S MAGNOLIA WATER LINE	Industrial, no NOI	HIGH	Industrial	2439	Manufacturing, Wood/Furniture	907.13	
46	U S AIRCONDITIONING DISTRIBUTORS, INC	1250 N MARSHALL AVE	Industrial, no NOI	HIGH	Industrial	4214	Ground Transportation	907.13	
47	EG&G KT AEROFAB	203 N JOHNSON AVENUE	Industrial, no NOI	HIGH	Industrial	3728	Manufacturing, Equipment	907.13	
48	AMERICAN METAL PROCESSING INC	390 FRONT ST	Industrial, no NOI	HIGH	Industrial	3599	Manufacturing, Equipment	907.13	
49	FATBOY FIBERGLASS & WELDING	675 FRONT ST	Industrial, no NOI	HIGH	Industrial	3599	Manufacturing, Equipment	907.13	
50	AMETEK ROTRON	474 RALEIGH AVE	Industrial, no NOI	HIGH	Industrial	3564	Manufacturing, Equipment	907.13	
51	TOP NOTCH MANUFACTURING INC	1488 PIONEER WAY #17	Industrial, no NOI	HIGH	Industrial	3449	Manufacturing, Fabricated Metal	907.13	
52	MIL SPEC METALLICS	755 VERNON WAY	Industrial, no NOI	HIGH	Industrial	3449	Manufacturing, Fabricated Metal	907.13	

	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	IND_COM	SIC	CATEGORY	HSA	NOI_WDID
53	PSM TRUCK EQUIPMENT	755 VERNON WAY	Industrial, no NOI	HIGH	Industrial	3449	Manufacturing, Fabricated Metal	907.13	
54	ALL STAR POLISHING & CHROMING INC	1365 N JOHNSON AVE #105	Industrial, no NOI	HIGH	Industrial	3471	Manufacturing, Fabricated Metal	907.13	
55	BRADDOCK HYDRAULIC SERVICES	412 FRONT ST	Industrial, no NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	
56	LAYFIELD PLASTICS INC	1166 FESLER ST #B	Industrial, no NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	
57	METAL ENGINEERING	390 FRONT ST	Industrial, no NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	
58	LITE STONE CONCRETE	1105 N MARSHALL AVE	Industrial, no NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	
59	SAN DIEGO MOBILE TRUCK & TRAILER SERVICE L.L.C.	125 S MARSHALL AVE	Industrial, no NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	
60	LEONARD ENGINEERING, INC	412 FRONT ST	Industrial, no NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	
61	FRANK HILL ASSOCIATES	474 RALEIGH AVE	Industrial, no NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	
62	A A EQUIPMENT	411 N MARSHALL AVE	Industrial, no NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	
63	RJ CABINETS	522 FRONT ST	Industrial, no NOI	HIGH	Industrial	3999	Manufacturing, Misc	907.13	
64	PACIFICA GLASS CO, INC	1946 JOHN TOWERS AVE	Industrial, no NOI	HIGH	Industrial	3231	Manufacturing, Stone/Glass	907.13	
65	BAY KITCHEN & BATH REMODELERS	500 FRONT ST	Industrial, no NOI	HIGH	Industrial	2434	Manufacturing, Wood/Furniture	907.13	
66	OLYMPIC CARPET & SUPPLIES	538 FRONT ST	Industrial, no NOI	HIGH	Industrial	4959	Waste Management	907.13	
67	CHIMNEYS-R-US	1227 N SECOND ST	Industrial, no NOI	HIGH	Industrial	4959	Waste Management	907.13	
68	C C S CLEANING SERVICES	205 CLAYDELLE AVE #204	Industrial, no NOI	HIGH	Industrial	4959	Waste Management	907.13	
69	C C S PAINTING SERVICES	205 CLAYDELLE AVE #204	Industrial, no NOI	HIGH	Industrial	4959	Waste Management	907.13	
70	CONSOLIDATED MOTORS	410 EL CAJON BLVD	Commercial	High	Commercial	5013	Auto Supplies	907.13	
71	R.T. TATLOCK CONCRETE CNST	1136 BROADWAY #6A	Commercial	High	Commercial	1771	Cement Mixing/Cutting	907.13	
72	NEW YORK GIANT PIZZA	356 N MAGNOLIA AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
73	MAMMA ROSAS PIZZA	1773 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
74	DOWNTOWN CAFE	182 E MAIN ST	Commercial	High	Commercial	5813	Eating/Drinking Establishments	907.13	
75	MANGIA BENE RISTORANTE	221 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
76	EL CAJON STEAKHOUSE L.P.	722 JAMACHA RD	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
77	PANDA RICE VIETNAMESE/CHINESE RESTAURANT	907 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
78	NAPOLI GIANT PIZZA	1175 N SECOND ST #101-102	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
79	MCDONALDS OF FLETCHER PARKWAY	886 FLETCHER PKWY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
80	VONS GROCERY COMPANY #2064	2800 FLETCHER PKWY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.11	
81	MARIETAS EAST	1746 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
82	ORCHID THAI RESTAURANT	762 N JOHNSON AVE #106	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
83	LOS PANCHOS TACO SHOP	1709 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
84	THORNTONS IRISH PUB & CHOP HOUSE	1221 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
85	LA CHINA	2852 FLETCHER PKWY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.11	
86	HARVEST RANCH #1	759 JAMACHA RD	Commercial	High	Commercial	5411	Eating/Drinking Establishments	907.13	
87	SIZZLER RESTAURANT	1030 FLETCHER PKWY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
88	SILVAS TACO SHOP	998 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
89	SERRANOS SUPER SALSA	795 ARNELE AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
90	MCDONALDS	1695 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
91	EL CAJON COURTHOUSE CAFE	250 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
92	ARBY'S RESTAURANT #1161	388 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
93	LOS PANCHOS MEXICAN & SEAFOOD	777 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
94	BONNYS CAFE	596 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
95	BOSTON MARKET #0735	706 FLETCHER PKWY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
96	BURGER KING 814	822 N JOHNSON AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
97	CALIFORNIA DELI WORKS	553-555 W MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
98	CHINA PANDA GARDEN RESTAURANT	1788 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
99	COCOS #1162	1025 FLETCHER PKWY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
100	COTIXAN TACO SHOP #3	762 N JOHNSON AVE #107	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
101	DOMINOS PIZZA #7704	936 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
102	DOMINOS PIZZA #7705	1104 E WASHINGTON AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
103	SUBWAY SANDWICHES AND SALAD	915 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
104	ROSENDOS	1408 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
105	K F C #Y450061	724 FLETCHER PKWY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
106	THE YOGURT MILL	935 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
107	EXECUTIVE FRIENDSHIP DELI	1935 FRIENDSHIP DR #A	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
108	THE LAWLESS PUB	176 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	

	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	IND_COM	SIC	CATEGORY	HSA	NOI_WDID
109	GILLESPIE FIELD CAFE & DELI	2015 N MARSHALL AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
110	GOLDEN BAGEL CAFE	2744 FLETCHER PKWY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.11	
111	JACK IN THE BOX #3064	1700 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
112	INTERNATIONAL HOUSE OF PANCAKES	1286 OAKDALE AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
113	IZZYS CAFE	1252 BROADWAY #A	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
114	TASTE OF ATHENS	1784 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
115	JAMACHA BAR & GRILLE	777 JAMACHA RD	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
116	JANETS CAFE #1	1696 GREENFIELD DR	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
117	DALLMANN CONFECTIONS INC	780 N SECOND ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
118	DRAGON INTERNATIONAL CHINESE FOOD	762 N JOHNSON AVE #106	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
119	EL CAJON INTERNATIONAL FOOD	502 E MAIN ST	Commercial	High	Commercial	5411	Eating/Drinking Establishments	907.13	
120	ALBERTSONS INC #6771	1608 BROADWAY	Commercial	High	Commercial	5411	Eating/Drinking Establishments	907.13	
121	WINDY CITY BEEF	2872 FLETCHER PKWY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.11	
122	RED BRICK PIZZA	190 N MAGNOLIA AVE #A	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
123	PANDA EXPRESS #1125	190 N MAGNOLIA AVE #C	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
124	ELEGANT BUFFET	1985 FRIENDSHIP DR #B	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
125	ABRE ENTERPRISES	616 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
126	CHRISTYS DONUTS	657 JAMACHA RD	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
127	ENTENMANNS OROWEAT OUTLET	916 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
128	CAL MEDJOOL DATES AND PRODUCE	564 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
129	RODEOS MEAT MARKET	927 BROADWAY	Commercial	High	Commercial	5411	Eating/Drinking Establishments	907.13	
130	PASTEUR CAFE	165 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
131	CRUMBS OF PARIS	586 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
132	MIKES DELI & MARKET	289 EL CAJON BLVD	Commercial	High	Commercial	5411	Eating/Drinking Establishments	907.13	
133	SUNSHINE CO	548 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
134	GARCIAS PUEBLA MERCADO	1365 E MAIN ST #A	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
135	PRO BODY WAREHOUSE	782 ARNELE AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
136	BABYLON INTERNATIONAL MARKET	524 E MAIN ST	Commercial	High	Commercial	5411	Eating/Drinking Establishments	907.13	
137	KING HOUSE	500 BROADWAY #D	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
138	KING OF PRODUCE	575 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
139	ALRAFDIEN RESTAURANT	474-482 W DOUGLAS AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
140	TROPICAL HAVANA	762 N JOHNSON AVE #103	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
141	BROADWAY FARMER MARKET	1039 BROADWAY	Commercial	High	Commercial	5411	Eating/Drinking Establishments	907.13	
142	MAGPIES COOKIES AND DESSERTS	1209 N SECOND ST #108	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
143	ROSANNAS GRILLED PANINI	780 N SECOND ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
144	DESIGN FOOD SYSTEMS	354 N MAGNOLIA AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
145	CARVEL ICE CREAM #3315	2864 FLETCHER PKWY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.11	
146	RITAS CATERING	1209 N SECOND ST #108	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
147	HACIENDA LA CASA BLANCA	700 N JOHNSON AVE #A	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
148	NEW YORK BAKERY INC	245 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
149	CUPIDS CATERING	1209 N SECOND ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
150	DOWNTOWN GRIND	200 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
151	BENS MARKET & PASTRY	544 BROADWAY	Commercial	High	Commercial	5411	Eating/Drinking Establishments	907.13	
152	TORTILLERIA SALSA MARKET	480 W CHASE AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
153	PHILIPPINES ON BROADWAY	1174 BROADWAY #101	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
154	RUBIOS FRESH MEXICAN GRILL #8	399 N MAGNOLIA AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
155	TOKYO JAPANESE FOOD & SUSHI	755 ARNELE AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
156	TOMMYS ITALIAN DELI	1190 N SECOND ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
157	ALI BABA RESTAURANT	421 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
158	VALERIOS MEXICAN FOOD	1267 N SECOND ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
159	VICTORIAS MEXICAN FOOD	677 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
160	WENDYS-#01	871 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
161	WENDYS-#11	686 JAMACHA RD	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
162	FRUITLAND AND DELI	1088 ESTES ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
163	MEJIA'S TACO SHOP	780 NORTH SECOND STREET	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
164	LUCKY DRAGON	342 N MAGNOLIA AVE	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	

	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	IND_COM	SIC	CATEGORY	HSA	NOI_WDID
165	SUBWAY SANDWICHES/SALADS	762 N JOHNSON AVE #108 -2	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
166	ADVANCED FLOORCOVERING INC	833 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
167	CC PALM COURT	830 BROADWAY	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
168	POULTRY PALACE & DELI	736 JAMACHA RD	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
169	DONUT AND CHINESE FOOD	338 EAST MAIN STREET	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
170	POR FAVOR INC	148 E MAIN ST	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
171	ROBERTOS TACO SHOP	1104 E WASHINGTON AVE #B	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
172	DENNY'S RESTAURANT	665 N MOLLISON	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
173	K.C.'S EXPRESS CHINESE FOOD AND DONUTS	388 MAIN STREET	Commercial	High	Commercial	5812	Eating/Drinking Establishments	907.13	
174	ARMSTRONG GARDEN CENTERS INC	1755 E MAIN ST	Commercial	High	Commercial	0181	Nurseries/Greenhouses	907.13	
175	PLANT HOUSE NURSERY	1163 N SECOND ST	Commercial	High	Commercial	0181	Nurseries/Greenhouses	907.13	
176	CHAMPION COLLISION & PAINT	187 N MARSHALL AVE	Commercial	High	Commercial	7532	Auto Paint/Body	907.13	
177	J&CP AUTOBODY & PAINT	259 N MARSHALL AV	Commercial	High	Commercial	7532	Auto Paint/Body	907.13	
178	ALL PRO BODY & PAINT	290 N MARSHALL	Commercial	High	Commercial	7532	Auto Paint/Body	907.13	
179	AUTO TECH	590 S MARSHALL AVE	Commercial	High	Commercial	7532	Auto Paint/Body	907.13	
180	GENES AUTO BODY	609 S MARSHALL AVE	Commercial	High	Commercial	7532	Auto Paint/Body	907.13	
181	DRAGON FIRE	283 N MARSHALL AVE	Commercial	High	Commercial	7539	Auto Repair	907.13	
182	AUTO GLASS OF EXCELLENCE	187 N MARSHALL AVE	Commercial	High	Commercial	7538	Auto Repair	907.13	
183	BRAKE GUYS AUTO CARE	227 N MARSHALL AVE	Commercial	High	Commercial	7539	Auto Repair	907.13	
184	EL CAJON AUTO CENTER INC	243 N MARSHALL AVE	Commercial	High	Commercial	7539	Auto Repair	907.13	
185	THE AUTO CENTER	243 N MARSHALL AV	Commercial	High	Commercial	7539	Auto Repair	907.13	
186	FAST WATER HEATER I, INC	275 N MARSHALL AVE	Commercial	High	Commercial	7539	Auto Repair	907.13	
187	SAMS QUALITY AUTO CARE	267 N MARSHALL AVE #B	Commercial	High	Commercial	7538	Auto Repair	907.13	
188	FAST TRUCK & EQUIPMENT	474 RALEIGH AVE	Commercial	High	Commercial	7549	Auto Repair	907.13	
189	ANYTHING CORVETTE	259 N MARSHALL AVE	Commercial	High	Commercial	7539	Auto Repair	907.13	
190	C&D TOWING SPECIALISTS	187 N MARSHALL AVE	Commercial	High	Commercial	7549	Auto Repair	907.13	
191	GOLDFIELD STAGE	501 FRONT ST	Commercial	High	Commercial	7538	Auto Repair	907.13	
192	CLASSIC TOWING	1101 N MARSHALL AVE	Commercial	High	Commercial	7549	Auto Repair	907.13	
193	UNDER CAR SPECIALTIES	251 N MARSHALL AVE	Commercial	High	Commercial	7539	Auto Repair	907.13	
194	THE HOME DEPOT #1848	298 FLETCHER PKWY	Commercial	High	Commercial	5211	Building Materials	907.13	
195	THOMAS BUILDING SUPPLY INC	137 S JOHNSON AVE	Commercial	High	Commercial	5211	Building Materials	907.13	
196	DAL-TILE S S C WEST, INC	270 N MARSHALL AVE	Commercial	High	Commercial	5211	Building Materials	907.13	
197	J&W REDWOOD EL CAJON INC	430 S MARSHALL AVE	Commercial	High	Commercial	5211	Building Materials	907.13	
198	FRAZEE PAINT WALLCOVERING	1154 E MAIN ST #108	Commercial	High	Commercial	5211	Building Materials	907.13	
199	HOME DEPOT STORE	965 ARNELE	Commercial	High	Commercial	5211	Building Materials	907.13	
200	THE HOME DEPOT #676	965 ARNELE AVE	Commercial	High	Commercial	5211	Building Materials	907.13	
201	MCKEEVER SPECIALTIES	1100 N MAGNOLIA AVE #F	Commercial	High	Commercial	5211	Building Materials	907.13	
202	BUILDERS MOULDING SUPPLY INC	1675 PIONEER WAY #A/B	Commercial	High	Commercial	5211	Building Materials	907.13	
203	BLACKINTON & ASSOC INC	380 FRONT ST	Commercial	High	Commercial	7699	Equipment Repair	907.13	
204	COUNTY GARDENER	1840 WELD BL	Commercial	High	Commercial	0782	Landscaping	907.13	
205	SIERRA PACIFIC LANDSCAPE	304 FRONT ST	Commercial	High	Commercial	1799	Landscaping	907.13	
206	G MARBLE AND GRANITE COMPANY	1820 JOHN TOWERS AVE #A	Commercial	High	Commercial	1741	Masonry	907.13	
207	SAN DIEGO HYDROPONICS & ORGANICS	1381 N CUYAMACA ST	Commercial	High	Commercial	5193	Nurseries/Greenhouses	907.13	
208	STARLER INC	1985 FRIENDSHIP DR #H	Commercial	High	Commercial	1521	Other Contractor	907.13	
209	WHILLOCK CONTRACTING INC	346 FRONT ST	Commercial	High	Commercial	1521	Other Contractor	907.13	
210	U S LAWNS OF SAN DIEGO INC	304 FRONT ST	Commercial	High	Commercial	1799	Other Contractor	907.13	
211	RG LATH AND PLASTER	338 EAST MAIN STREET	Commercial	High	Commercial	1742	Other Contractor	907.13	

STORM WATER ADMINISTRATIVE CITATION PROGRAM CRITERIA

1. Issue a Warning (followed by a letter, when possible)
   a. Whenever a discharge of pollutants is imminent or the potential exists, but the discharge has not yet entered the storm drain conveyance system (street, gutter, catch basin, etc.)
   b. Whenever a BMP is not effective for the pollutant or discharge and other BMP alternatives are available.
   c. Whenever a discharge origin cannot be determined through factual, investigative, or empirical evidence. Provide a cleanup schedule to be used as future enforcement.
   d. Small residential projects of less than 500 square feet of disturbed soil.
   e. An approved erosion and control plan has been issued and BMPs are partially implemented.
   f. Whenever activities are conducted in the right-of-way and no BMPs are implemented.
   g. Whenever a discharge of fully recoverable pollutants are discharged into the City's storm drain system (street and gutter only).

2. Issue a Citation
   a. Whenever there is a sewage overflow. (e.g. blockage; clean-out cap was removed to allow sewage to discharge into the street and storm drain).
   b. Whenever there is a discharge of unrecoverable pollutants into the storm drain conveyance system (street, gutter, catch basin, etc.)
   c. A Warning was previously issued (verbal or written).
   d. Any direct discharge into Forester Creek specifically any material which contains a 303(d) listed pollutant adopted by the State of California.(pH, TDS, and fecal coliform).
   e. An approved erosion and control plan has been issued and no BMPs are implemented.
   f. An egregious act of discharge (e.g. illegal dumping)

3. Issue a Penal Code Violation (PC374.3, 374.4, 374.7)
   a. When a First Citation was previously issued and this is a repeat violation.
   b. When the discharge is executed in the presence of any City Staff or after being told to cease operations. (waste, sewage, and litter discharges)
   c. Any direct discharge into Forester Creek, specifically material containing pollutants for which a 303(d) listing has been adopted by the State of California.(pH, TDS, and fecal coliform).

4. Issue a Stop Work Order
   a. For construction sites that received a warning and a first violation for discharging pollutants due to ineffective or proposed, but not yet implemented BMPs.
   b. A discharge of pollutants into the storm drain system, in addition to a citation, that requires immediate corrective action or mitigation.

5. Refer to Regional Board
   a. Repeated violations by a private citizen, property owner, or business for discharges to the storm drain system.
   b. A refusal to mitigate, remediate, or clean a spill or discharge of pollutants that will enter or have entered City MS4.

CITY OF EL CAJON

200 East Main Street
El Cajon, CA 92020

Citation No. 00075

☐ Building ☐ Planning
☐ Fire ☐ Public Works

ADMINISTRATIVE CITATION

☐ WARNING

☐ 1ST CITATION $100 per violation ☐ 2ND CITATION $200 per violation ☐ 3RD CITATION $500 per violation ☐ OTHER _____ $_____

PAYMENT OF $_____ IS DUE NO LATER THAN _____. (See reverse side for payment information.) PAYMENT DOES NOT EXCUSE CORRECTION OF THE VIOLATION.

CORRECTION OF THE VIOLATION(S) INDICATED BELOW MUST BE COMPLETED BY: _____ (Date)

IF YOU FAIL TO CORRECT THE VIOLATION(S) BY THIS DATE, THE NEXT LEVEL OF CITATION MAY BE ISSUED.

PERSON CITED

Last Name First M.I.

Mailing Address City / State Zip Code

Violation Address City

☐ Property Owner ☐ Tenant
☐ Business Owner ☐ Other

Business Name _____

Assessor's Parcel Number

Code Section Violated	Date of Violation	Description Of Violation

☐ See attached for additional violations

Correction(s) Required

Issuing Officer: _____ Phone: (619) _____ Date Issued: _____

Signature of Person Cited: _____
(Signing this citation acknowledges receipt only, and is not an admission of guilt)

Citation Served: ☐ In person to: _____ ☐ Posted on Property
☐ By Mail ☐ Other _____

SEE REVERSE SIDE FOR APPEAL RIGHTS AND OTHER IMPORTANT INFORMATION

WHITE – CITY YELLOW – RESPONSIBLE PARTY PINK – FINANCE

CITY OF EL CAJON

STORM WATER COMPLIANCE INSPECTION FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Inspected by D-MAX Engineering, Inc.

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

Result: ☐ Full Insp. ☐ Could not Contact ☐ Not Inventoried ☐ Moved, Vacant ☐ Refused ☐ Moved, Replaced by_____ ☐ Follow-up (i.e. not full) ☐ Out of Jurisdiction ☐ Duplicate of: _____ ☐ Mobile

A. CONTACT INFORMATION

Original

Business Name_____

_____

Street Address _____

_____

Responsible Person(s)_____

Title:_____

Business Telephone # (____) _____ -_____ext._____

Business Fax # (_____) _____ - _____

Changes

Business Name_____

_____

Street Address_____

☐ change _____

Responsible Person(s)_____

Business Telephone # (____) _____ -_____ext._____

Business Fax # (_____) _____ - _____

Home Based? ☐ Yes ☐ No Mobile Business? ☐ Yes ☐ No

Is this facility located in a multi-suite complex? ☐ Yes ☐ No

Facility personnel present:_____

B. FACILITY/SITE INFORMATION

Principal activity:_____

Assigned SIC code(s) _____ _____ _____ _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

Recommended change of SIC Code(s)?_____ _____ _____ _____

Existing SIC code(s) _____ _____ _____ _____

Status Update (if no longer active in City or does not need an inspection): ☐ Moved/Out of Business ☐ Duplicate ☐ Not Inventoried ☐ Out of Jurisdiction

Does facility have a current business certificate? ☐ Yes ☐ No #_____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐ Mandatory ☐ Conditional ☐ No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐ Yes ☐ No WDID: 9 37I0_____

Has facility filed a Notice Of Termination (NOT) for the WDID# listed above? ☐ Yes ☐ No Approval date:_____ month/yr

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a storm water monitoring program? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Approximate distance to receiving water body: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Discharge points: _____

_____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate % impervious surface of this area_____%

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP ASSESSMENT

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.1 General					
Keep site free of litter, debris, and sediment using dry methods					
Keep parking lots, sidewalks, and streets free of sediment and debris using dry methods					
Keep outdoor areas free of spills and leaks					
Collect water from pressure washing or hosing and dispose of appropriately					☐ Unknown Performed by:
Direct roof downspouts away from areas of potential pollutants					
D.2 Landscaping					
Properly manage pesticides/fertilizer; use IPM when feasible					☐ Unknown Landscaping Co:
Employ adequate erosion prevention measures (vegetation or physical stabilization)					
Minimize over watering/over-irrigation					
Properly store stockpiles to prevent material transport					
Properly store and dispose of green waste					☐ Unknown
D.3 Materials and Wastes					
Protect trash area from contact with storm water					
Keep trash area free of litter and debris, liquids, powders, sediment					
Adequately cover materials stored outside					
Prevent run-on from contacting materials stored outdoors					
Properly label outdoor storage containers					
Provide an accessible, functional spill response kit					
Equip liquid storage containers with secondary containment					
Keep secondary containment free of spills and rainwater					
Properly store and dispose of hazardous materials					
Keep loading and unloading areas, including drains, free of debris					
Dispose of water generated by processing activities appropriately					
Dispose of pool, spa, fountain, and filter backwash water properly					☐ Unknown Performed by:
Clean floor mats in locations that do not drain to storm drain system					

BMPs	No Corrections Required		**Corrections Required**		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.4 Equipment, Vehicles, and Outdoor Activities					
Conduct outdoor activities within contained areas (garage, under canopy, work shop)					
Use drip pans to collect leaks/spills					
Drain fluids from all non-operational vehicles stored outdoors					
Provide materials (berm, mat, etc.) to protect storm drain inlets from spills and leaks					
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4					
D.5 Other					
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff					
Keep grease bin and area surrounding grease bin free of grease stains/spills					
Keep storm drain inlets free of grease and other food debris					
Identify and eliminate illicit connections and illegal discharges					
Provide storm water training for appropriate employees					

D.6 ADDITIONAL REQUIRED ACTIONS

☐ Based on inspection findings, it appears likely that significant levels of _____ would be present in storm water discharges from this site. Take action to reduce the levels of _____ to the maximum extent practicable. Treatment control BMPs are likely necessary.

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax

Please refer to http://www.ci.el-cajon.ca.us/dept/works/stormwater.html for more information on BMP implementation options.

D.7 Additional Questions	**Comments/Results**
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐ Painting ☐ Sandblasting ☐ Fuel Distribution ☐ Dust dispersion or mineral processing ☐ Metal smelting ☐ Metal plating or anodizing ☐ Chemical production or mixing ☐ Large fuel burning device ☐ Incinerator
Does facility have a grease trap or grease interceptor?	☐ No ☐ Grease Trap ☐ Grease Interceptor ☐ Unknown
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A
What is the approximate percentage of the site that drains to the treatment control BMPs?	☐ N/A
Do major potential pollutant sources drain to treatment BMP(s)?	☐ All ☐ Some ☐ None ☐ N/A

If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	☐ NOI ☐ NONA/NEC ☐ Auto Poster ☐ Restaurant Poster

E. STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE*

☐ Non-compliance with the State Industrial Storm Water General Permit noted.

☐ In the future, under a new Industrial Permit, which has not yet been adopted, this facility may be able to qualify for exemption from Permit coverage based on no outdoor exposure.

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE*:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit—see Attachment 3 of the Industrial Permit (www.waterboards.ca.gov/stormwtr/industrial.html).

☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP)—see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required:

F. CORRECTIVE ACTION SUMMARY

☐ **Corrective Actions Required.** Please refer to sections D.1-D.6 and E of this form and, if applicable, the Food Establishment Storm Water BMP Assessment form (if applicable, it is attached).

☐ No Corrective Actions Required at this Time.

G. RECOMMENDED CITY ACTIONS**

Follow Up Inspection Priority: ☐ **Priority 1** ☐ **Priority 2** ☐ **Priority 3**

ASSESSMENT

Level of knowledge regarding stormwater issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

*Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

**Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

TABLE A-5

GENERAL INDUSTRIAL PERMIT COMPLIANCE STATUS

#	Business Name	Address	Subjectivity	Action To Correct Industrial Permit Violation				
				File NOI	Develop/ Implement a SWPPP	Develop/ Implement a Storm Water Monitoring Program	Complete NONA/NEC Exemption Forms	Specific Actions
1	CURB & VENT MFG., INC	1437 FAYETTE ST	Conditional	✔	✔	✔		
2	EAST COUNTY METAL SUPPLY	755 VERNON WAY	Conditional	✔	✔	✔		
3	FATBOY FIBERGLASS & WELDING	675 FRONT ST	Conditional	✔	✔	✔		
4	G MARBLE AND GRANITE COMPANY	1820 JOHN TOWERS AVE #A	Mandatory	✔	✔	✔		Facility personnel reported business is moving out of the city in the near future
5	L&S FABRICATORS DBA FABCOM	781 VERNON WAY	Conditional	✔	✔	✔		
6	LAYFIELD PLASTICS INC	1166 FESLER ST #B	Conditional				✔	Spoke with Don Perrin of the RLUQCB who reported that this business may still be eligible for NONA/NEC even if plastic sheeting is stored outdoors since the plastic sheeting is designed to cover water bodies (reservoirs).
7	LITE STONE CONCRETE	1105 N MARSHALL AVE	Mandatory	✔	✔	✔		

TABLE A-5

GENERAL INDUSTRIAL PERMIT COMPLIANCE STATUS

#	Business Name	Address	Subjectivity	Action To Correct Industrial Permit Violation				
				File NOI	Develop/ Implement a SWPPP	Develop/ Implement a Storm Water Monitoring Program	Complete NONA/NEC Exemption Forms	Specific Actions
8	MCKEEVER SPECIALTIES	1100 N MAGNOLIA AVE #F	Conditional				✔	Keep outdoor areas free of wood shavings and discontinue even occasional work and storage outdoors to maintain compliance with NONA/NEC.
9	RUSSO TILE & MARBLE INC	635 FRONT ST	Mandatory	✔	✔	✔		
10	SAN DIEGO VAN & STORAGE	1426 FAYETTE ST	Conditional		✔	✔		SWPPP and monitoring have reportedly been developed, but were not on site
11	THIRD STONE INC	1835 JOHN TOWERS AVE #D	Conditional				✔	
12	TOP NOTCH MANUFACTURING INC	1488 PIONEER WAY #17	Conditional				✔	

No Exposure" Conditional Exemption For Industrial Facilities

The proposed USEPA rules will establish a conditional exemption called a "No Exposure Exemption" for owners and operators of industrial facilities who can show that industrial materials, material handling operations and industrial processes, are not exposed to stormwater. Essentially, this exemption replaces the previous exemption for "light industry" which was remanded to USEPA from federal court to further define and substantiate the justification for such an exemption. A written certification will be required to be submitted to the permitting authority every three years on a form supplied by the authority. This potential conditional exemption applies to all industrial categories regardless of type, except construction sites and sources individually designated. The conditions for qualifying for the No Exposure Exemption will include the following:

1. Notification to the permitting authority at the beginning of each permit term;
2. Must allow the permitting authority or municipality to inspect the facility and to make the results of inspection public;
3. Upon request, submit a copy of the certification to the municipality in which the facility is located; and
4. Sign and certify the certification.

The permitting authority will still retain the legal authority to require the owner or operator of an industrial facility to apply for an individual or general NPDES permit if it determines that the discharge is, or may reasonably be, causing or contributing to a violation of a water quality standard, or is or may be interfering with the attainment or maintenance of a water quality standard, including a designated use.
In connection with the No Exposure Exemption being considered, USEPA is seeking comments on the issue of how to define "no exposure." Several important issues are listed for further review (but are not part of this proposed rule), including:

1. How to account for stormwater runoff from parking lots, roof tops, lawns and other non-industrial areas of an industrial facility;
2. Whether the construction of impervious surfaces, such as roofs to achieve no exposure that significantly increase stormwater runoff volume should be regulated to prevent adverse impacts to the receiving water simply due to increased quantity of flow;
3. Whether air emissions from roof vents or stacks should be considered in the evaluation of no exposure; and
4. Whether tight non-leaking drums, barrels or dumpsters are sufficient to quality for the no exposure exemption, or should there be a "potential to leak" evaluation included.

EL CAJON STORM WATER PROTECTION PROGRAM

FLOOR MATS, GREASE, OUTDOOR CLEANING, AND DUMPSTERS

In California, the storm water and sanitary sewer systems are separate. **They are *NOT* connected**. The sanitary sewer takes wastes from sinks, showers, and toilets to a treatment plant. The storm drain system collects polluted urban runoff and discharges without treatment, to creeks and rivers leading to ocean bays causing beach closures.

En California, el sistema de drenaje pluvial y el alcantarillado sanitario de aguas negras son independientes. **Estos sistemas *NO* están conectados**. El sistema de alcantarillado sanitario de aguas negras aleja desperdicios de fregaderos, regaderas, y escusados a una planta de tratamiento. El sistema de drenaje pluvial atrapa aguas pluviales contaminada por urbanización y fluye sin tratamiento alguno directamente a nuestros ríos, arroyos, bahías y mar provocando el cierre de playas.

CLEANING FLOOR MATS

Clean floor mats, filters and garbage cans in a mop sink, floor drain or proper outside area. **DO NOT** wash them in a parking lot, alley, sidewalk or street.

Limpie los tapetes de piso, los filtros y los botes de basura en un fregadero para trapeadores, desagüe de piso o en algún sitio apropiado afuera. **NO** los lave en los estacionamientos, callejones, veredas o en la calle.

RECYCLE GREASE & OIL

Recycle Grease & Oil. **DO NOT** pour it into sinks, floor drains, or onto a parking lot or street.

Recicle grasa y aceite. **NO** los arroje en lavaderos o desagües de piso ni en estacionamientos o calles.

DRY CLEANING METHOD

Use dry methods for spill cleanup (sweeping, cat litter, etc.) **DO NOT** hose down spills.

Use métodos secos para limpiar los derrames (escobas, aserrín, etc.). **NO** utilize mangueras para limpiar los derrames.

KEEP DUMPSTER AREA CLEAN

Keep dumpster area clean and lid closed. **DO NOT** fill it with liquid waste or hose it out.

Mantega el área alrededor del basurero limpia y la tapa del basurero cerrada. **NO** lo llene con desperdicios líquidos ni utilice la manguera.

WASHWATER DISPOSAL

Pour washwater into a janitorial or mop sink. **DO NOT** pour it out onto a parking lot, alley, sidewalk or street.

Arroje el agua empleada en la limpieza al fregadero para trapeadores. **NO** la arroje en los estacionamientos, callejones, veredas o en la calle.

It is illegal to purposefully or accidentally discharge pollution (anything other than rain water) into the streets, gutters, creeks, rivers, and ocean. To do so is in violation of El Cajon's Municipal Code 13.10 and the Federal Clean Water Act. Monetary fines and criminal charges may be issued.

Es contra la ley descargar contaminantes intencionalmente o accidentalmente (excepto agua de lluvias) a las calles, orillas de calle, arroyos, ríos, y océano. La descarga de contaminantes al sistema de drenaje pluvial es una violación del Código Municipal de la Ciudad de El Cajon (13.10) y de leyes Federales del "Clean Water Act". Multas y otras acciones legales podrían ser generadas en su contra.

ADOPT GOOD HOUSEKEEPING PRACTICES AND HELP KEEP OUR STREAMS, RIVERS, AND BEACHES CLEAN. FOR MORE INFORMATION, CALL **(619) 441-1653**.

ADOPTE PRACTICAS EFECTIVAS PARA EL MANEJO DE AGUAS PLUVIALES QUE REDUSCEN LA CONTAMINACIÓN Y AYUDE A MANTENER NUESTROS ARROYOS, RIOS, Y PLAYAS MÁS LIMPIOS. PARA MAYOR INFORMACIÓN LLAME AL **(619) 441-1653**.

STORM WATER PROTECTION IS IN GOOD HANDS...YOURS!

Operate a clean, dry shop. Sweep, mop or vacuum instead of hosing down garage floors or outdoor work areas.

Opere un negocio seco y limpio. Barra, trapée, o limpie con aspiradora en vez de regar con manguera los pisos de los garajes o las áreas de trabajo exteriores.

Prevent spills and leaks. Develop spill prevention and response procedures. Use drip pans and ground cloths under vehicles. Drain and recycle fluids from wrecked or leaking vehicles as soon as possible.

Prevenga los derrames y las goteras. Desarolle un plan para prevenir y responder a estos derrames. Use recipientes recolectores y trapos debajo de los vehiculos. Tire y recicle los fluidos de los vehiculos chocados o de los que tengan goteras tan pronto que sea posible.

Prevent wash water from entering storm drains. Use a commercial car wash facility for cleaning vehicles. It is illegal to allow car wash runoff from commercial vehicles to enter the storm drain.

Prevenga que la agua sucia entre en las alcantarillas. Use un negocio comercial del lavado de auto. Es ilegal permitir que la agua usada del lavado de vehiculos comerciales entre en las alcantarillas.

Protect outdoor work and storage areas. Cover equipment/ materials and work/ storage areas. Place bulk fluids in secondary containment.

Proteja las áreas de trabajo y almacenamiento exteriores. Cubra estas áreas y también los equipos y materiales. Ponga los fluidos de grandes cantidades en recipientes secundarios.

Clean parts in a self-contained sink/drum unit when working with solvents. Inspect parts-washing units daily for leaks and make necessary repairs immediately. Use aqueous cleaning solutions instead of solvents when possible. Recycle used solutions through a licensed hazardous waste hauler.

Limpie las piezas y los repuestos en una unidad de fregadero/ tambor cuando trabaje con solventes. Inspeccione las partes de la unidad de limpieza diariamente para detectar goteras y haga los arreglos necesarios inmediatamente. Use soluciones a base de agua en vez de los solventes cuando sea posible. Recicle las soluciones usadas por medio de una compañia con licencia para transportar deshechos peligrosos.

Dispose of waste properly. Recycle oil, oil filters and antifreeze. Never pour liquids down the gutter or storm drain.

Disponga de los deshechos correctamente. Recicle el aceite, los filtros de aceite y los anticongelantes. Nunca debe tirar liquidos en las alcantarillas o rejillas.

Storm water and the pollutants it carries flow directly into the nearest creek, river, lake or lagoon, eventually reaching the ocean. Do your part to help keep our waters clean for you, your family and our environment.

Las aguas pluviales llevan los contaminantes directamente a los arroyos, rios, lagos y lagunas, y finalmente se desembocan al océano. Haga su parte ayudando a mantener nuestras aguas para usted, su familia y el medio ambiente.

This poster is brought to you by the San Diego Regional Copermittees. To report complaints or for more information, call the Regional Stormwater Hotline at 1-888-846-0800.

Storm Water Pollution Prevention Program
THINK BLUE
You're the solution to storm drain pollution.
Protecting our beaches, bays, and waterways

project clean water

VOL. 2

The Green Wrench Guide

Stormwater Best Management Practices for the Automotive Industry

Definitions

Best Management Practices (BMPs):	Techniques or controls used to prevent or reduce the discharge of pollutants into stormwater, receiving waters, or the stormwater conveyance system.
Dry Cleaning Methods:	Methods of cleaning surfaces that minimizes the use of water. Examples include sweeping, vacuuming, and using hydrophobic mops and rags.
Illegal Connection:	An unauthorized pipe, facility, or other device connected to the storm drain system or receiving waters. Devices that convey pollutants may be illegal even if they were permitted at the time of installation.
Illegal Discharge:	The unauthorized discharge of pollutants or non-stormwater into the stormwater conveyance system or receiving waters.
Pollutants:	Anything that can cause or contribute to water quality degradation.
Pollution Prevention:	Practices that minimize or eliminate the generation of pollutants at the source.
Receiving Waters:	Any water bodies including the Pacific Ocean, lakes, streams, lagoons, rivers, reservoirs, and intermittent waters such as vernal pools and seasonal dry creeks.
Stormwater Conveyance System (storm drain system):	Any public or private drainage system (non-sewage) including streets, curbs, gutters, inlets, ditches, pipes, channels, culverts, streams, etc.

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Thank you to The City of San Francisco for the original Green Wrench Guide concept.

Background

What is Stormwater Pollution

When water flows over work areas, parking lots, streets, and other surfaces, it picks up pollutants and carries them into the storm drain system. This system is designed to prevent flooding by transporting water away from urban areas. Water and all the contaminants that it collects eventually flow without treatment through the storm drain system to our streams, lakes, and the ocean where we swim and fish. This polluted runoff harms inland freshwater wildlife and habitats, and in some cases causes, beach closures and makes our fish and shellfish unsafe to eat.

The Storm Drain System and the Sewer System are NOT Connected

In San Diego County, wastewater and surface runoff are discharged into two separate underground systems. Wastewater that is disposed to a toilet, sink, or a piped sewer drain flows into the sanitary sewer system where it is filtered and treated. Water runoff that leaves your business via driveways, sidewalks, parking lots, streets, gutters, storm drain inlets, drainage ditches, and concrete channels flows into a separate storm drain system. Anything that enters the storm drain system eventually flows untreated and unfiltered into our creeks, bays, lagoons – and ultimately the ocean. The things you do at work are directly connected to the health and safety of our citizens and the environment.

Your Responsibilities

As required by federal and state laws, the County of San Diego, the Unified Port District, and each of the 18 incorporated cities in the County have adopted local stormwater management ordinances to protect our water resources. *These ordinances prohibit the discharge of pollutants into the storm drain system.* Pollutants typically associated with automotive maintenance and repair activities include antifreeze, fuels, waste oils, solvents, and paints. Other pollutants commonly contributing to stormwater pollution include sediment, fertilizers, pesticides, and litter. As a business owner or operator, you are legally responsible for ensuring that these and any other potential stormwater pollutants are properly managed. To do so, you will need to select and use Best Management Practices that are specific to your business activities.

A storm drain outlet which flows unfiltered directly into a local stream.

Background

Best Management Practices (BMPs)

Best Management Practices, commonly called BMPs, are actions you can take to prevent pollutants from leaving your facility. In general, there are two main types of BMPs:

- **Source control BMPs** keep pollutants from entering runoff. Examples include preventive maintenance and routine sweeping.

- **Treatment control BMPs** remove pollutants from runoff before it reaches the storm drain system. Common examples are storm drain filters and oil / water separators.

Source control BMPs are often preferable because they are usually simpler and more cost-effective. One of the main types of source control BMPs is "pollution prevention". Pollution prevention methods (process changes, materials substitution, waste reduction) help to limit the amount of pollutants that are generated, thus eliminating the need to manage or remove them. Pollution prevention BMPs can help your business to run more efficiently and can save you money.

Using the BMPs described in this booklet will help you to satisfy regulatory requirements and to preserve and protect San Diego's waterways. Successfully meeting this challenge will require the active participation of all employees at your business. To assist your employees in understanding these requirements, please have them read and review this Green Wrench Guide. Also have your employees sign and date the training log included on pages 19 and 20 of this guide so that you will have a record of their training activities.

Background

BMPs and Your Business

This guide is designed to help you think about ways to manage potential stormwater pollutants associated with your business activities. It provides information on minimum requirements, and includes suggested pollution prevention tips for the automotive industry. It is organized according to the following activity types:

- **Facility Audits**
- **Employee Training**
- **Spill Management and Reporting**
- **Vehicles and Equipment**
- **Good Housekeeping**
- **Hazardous Waste Recycling and Treatment**

This guide is not intended to address all regulatory requirements pertaining to your business. Local jurisdictions may have additional, more specific stormwater BMP requirements. Pages 17 and 18 of this guide list additional contact information where you can obtain more information on stormwater and other regulatory requirements.

Thank you for helping to keep the San Diego region a great place for people to live and visit!

Facility Audits

Conducting your own facility audit is the best way to make sure that you stay in compliance with stormwater requirements. This can also save you money by identifying process and procedural improvements (waste prevention, etc.) to make your business activities more efficient. Be sure to address the following key areas during your audits:

- **Illegal Connections** - Inspect your business for connections that may convey pollutants to the storm drain system or receiving waters. An illegal connection is an unauthorized pipe, facility, or other device connected to the storm drain system, and may be illegal even if it was permitted at the time of installation.

- **Inlet and Discharge Points** - Identify the location of storm drain inlets on or down-gradient of your business or property. Mark these locations on a facility map and keep it posted in a common work area. Ensure that employees are shown these areas during training sessions.

- **Review of Activities** - Identify and use specific BMPs for activities with the potential to cause spills or releases of pollutants (oil, grease, fuel, etc.). Use the BMPs presented here as a guide for compliance, but don't stop there. Continue to seek out other sources of BMP information through the internet, professional associations, industry publications, etc. – you can never know too much.

- **Documentation** - Document any corrective action taken after your audit. Documentation is your key to demonstrating compliance. Be sure to include revised business practices and procedures in your employee training.

Employee Training

An effective stormwater management training program promotes employee ownership of problems and solutions. Employees are more likely to respond to training when they understand the impact of their daily activities on water quality. By involving your employees, their feedback will help implement needed actions to reduce stormwater pollution.

- Train all employees on stormwater BMPs and pollution prevention. Maintain training records on site; record the date of each training session and include a sign-in list of those who attended. Perform refresher trainings on a regular basis.

- Post signs around your shop reminding employees of BMPs and pollution prevention tips. This will also help to create awareness for your customers.

- Train employees about the proper use, handling, and disposal of all hazardous materials. Make sure all employees have current licensing and certification for their specific job duties.

- Teach employees how to control, contain, and clean up spills. Demonstrate how to properly use spill response kits.

You can stay informed about current regulations by joining trade associations and subscribing to trade journals and magazines. At trade association meetings and workshops, you will have the opportunity to learn about new pollution control practices and to network with others in your industry. Being involved will help you share ideas with others and will keep your training program up to date.

Spill Management and Reporting

It is always best to prevent spills, but be ready when they occur. Keep spill kits readily available, preferably near work areas where spills are most likely to occur. Make sure all employees know where these materials are kept and how to properly use them to contain and immediately clean up spills. Whenever possible, use dry methods such as sweeping, vacuuming, mopping or absorbents (if absorbents are used, they may have to be disposed of as a hazardous waste). Spilled hazardous materials (antifreeze, gasoline, solvents, etc.) need to be managed as hazardous wastes. Make sure your employees are aware of any special requirements that apply to hazardous material disposal.

Use the following guidelines within 24 hours of occurrence for reporting spills:

- Report any spill or discharge that cannot be completely contained or cleaned up prior to entering the storm drain system. To report spills and discharges, call the Regional Stormwater Hotline at **(888) 846-0800**.

- If the spill involves hazardous substances, call the Department of Environmental Health (DEH), Hazardous Materials Division at **(619) 338-2284**.

Always call **911** if the spill presents an immediate threat to public health or the environment.

Vehicles and Equipment

This section describes core BMPs for vehicle fluid management, engine and parts cleaning, vehicle and equipment washing, and body repair and painting. No matter which of these activities you are doing, it is important to always protect storm drain inlets on or down-gradient of work areas. Cover inlets with plastic or other impermeable material to prevent the entry of spilled fluids or wash water. Tape or weigh down the edges to keep the protective material in place.

Vehicle Fluid Management

Antifreeze, waste oil, and used solvents are hazardous wastes and must be stored, managed, and disposed of in accordance with all local, state, and federal laws.

- Whenever possible, drain vehicle fluids indoors or within covered areas, and only over floors that are constructed of a non-porous material such as concrete. Asphalt and dirt floors are not acceptable because they absorb spilled or leaked fluids.

- Use drip pans, containers, or other methods of drip and spill containment.
- Take extra precautions to prevent spills while draining fluids from vehicles. Transfer waste fluids to a labeled waste storage container as soon as possible.
- Provide drip pans under stored vehicles and those with known leaks. Drain fluids from disabled or stored vehicles as soon as possible to prevent leaks and spills.

- Transfer any fluids from drip pans or collection devices to designated waste storage areas regularly.
- Store vehicle fluids in separate, sealed, and leak-proof containers.

Vehicle & Equipment Washing

- Never discharge wash water or rinse water to a storm drain system or receiving water. Wash vehicles and equipment in designated areas. Use wash racks whenever possible.
- Use a spray nozzle or rinse bucket to conserve water and minimize discharge water.
- Whenever possible, use biodegradable soaps.
- Consider the use of a wash water recycling system to minimize wastewater from car washing.
- Use an oil / water separator or similar treatment system to remove oil, grease, and solids when discharging to the sanitary sewer.
- Use a commercial car wash facility if you are not able to meet the minimum standards described in this guide.
- Contact your local sewer agency for discharge information to the sanitary sewer. Use of oil / water separators and wash water recycling systems may have special discharge requirements.

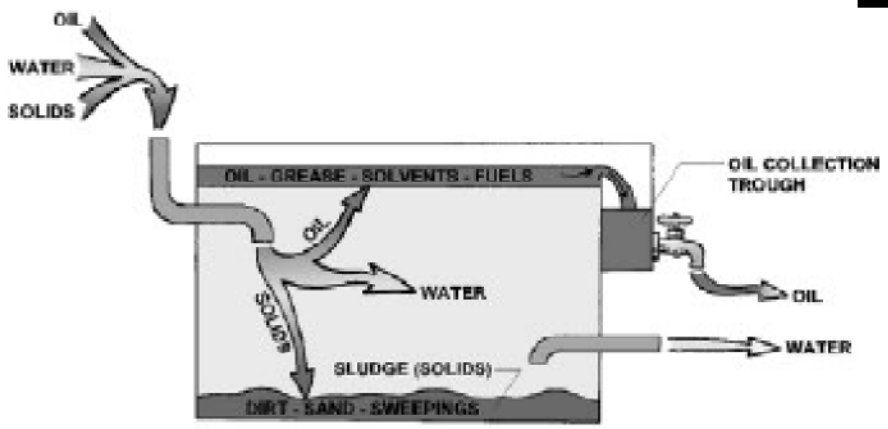

OIL/WATER SEPARATOR

An oil / water separator is designed specifically to remove petroleum products, and can also remove solids. As the mixture enters the separator, the vehicle fluids float to a collection trough and the water flows into the sewer system. Solids settle to the bottom of the separator. Bottom sludges are often contaminated with heavy metals and other pollutants and must be managed as a hazardous waste.

Engine and Parts Cleaning

- Designate specific areas in your service bays for parts cleaning. Do not wash or rinse parts outdoors.
- Use aqueous cleaning solutions instead of solvents whenever possible. Recycle used solutions through a licensed hazardous waste hauler.
- Avoid using hose-off degreasers; never allow runoff to enter the storm drain system. Instead, brush off loose debris and use damp rags to wipe down parts. Manage used rags through a rag service or as hazardous waste.
- Clean parts in self-contained sinks or drum units when working with solvents. Inspect part washing units daily for leaks and make repairs immediately.

- Allow parts to drain over the solvent sink or drum, rather than allowing the solvents to drip or spill onto the floor. Never discharge the rinse solution into the sewer system.

- Recycle wastewater from steam cleaning or pressure washing activities. Discharges of wash water into the storm drain system are prohibited.

Body Repair and Painting

- Conduct work indoors or under cover when possible. If this cannot be done, take other precautions to prevent discharges from work areas.

- Inspect damaged vehicles for fluid leaks and use drip pans where necessary.

- Regularly clean work areas using dry methods. Use a shop vacuum or sweep up dust and debris. Do not vacuum flammable liquids.

- Allow wet sanding debris to dry overnight on the shop floor and sweep or vacuum it the next day. Liquid must not be discharged to the storm drain system. Consider investing in sanders with an attached vacuum system to capture dust at the source.

- Conduct painting only in approved, enclosed areas equipped with vacuum hoods and filters.
- Minimize paint and thinner waste by carefully calculating paint needs based on surface area and by using the proper sprayer cup size.
- Collect water used to control over-spray or dust in the paint booth and recycle or dispose of it properly. Clean spray guns in a self-contained unit and recycle or properly dispose of the cleaning solution.
- Check with your local fire agency and the Air Pollution Control District for additional information and permit requirements for spray booths, coatings, and emissions.

Good Housekeeping

"Good Housekeeping" refers to the routine practices you can use to maintain a clean work environment, and to prevent pollutants from entering our waterways. These practices include the use of dry cleaning methods for floor and paved surfaces, waste management practices, and grounds maintenance.

Floors and Paved Surfaces

- Sweep or vacuum your shop floors frequently. Use mops instead of hosing down work areas.
- Consider using a three mop system as described below:

1. Remove any spilled oil using a hydrophobic (oil absorbing) mop and wring out oil into a bucket labeled "Oil Only". Add the waste oil from this bucket to your waste oil drum or tank where it can be recycled. Keep the oil mop and the "Oil Only" bucket readily available in the work area for any future oil spills.
2. If antifreeze is spilled, use a regular mop and wring out the antifreeze into a bucket labeled "Coolant Only". Recycle the spilled material with other used antifreeze. Use rags sparingly for small spills or to dry a work area. Use a rag service or manage the rags as a hazardous waste.

3. Use a regular mop and bucket with detergent as a final rinse and use water sparingly. Dispose of wash water to an oil / water separator or the sewer.

- Never pour mop water onto paved areas, such as parking lots, sidewalks, street gutters, or storm drains.
- Oil / water separators must be regularly inspected and cleaned.
- Do not hose down fuel-dispensing islands; use only dry clean-up methods. Absorbent used for fuel spills should be promptly swept up and disposed of as hazardous waste.

Material and Waste Management

- Materials and waste such as fuels, solvents, batteries, and oils must be stored off the ground and in areas where they will not be exposed to rain water.
- If possible, provide overhead coverage for all outside hazardous materials or waste storage areas. If overhead coverage is not available, then cover stored materials with an impervious material such as a plastic tarp.
- Store batteries indoors and place used batteries in plastic trays to contain any potential leaks. Recycle used batteries regularly.
- Sweep parking lots and areas around your facility regularly. Do not hose down these areas. Provide trash cans with lids in your parking lot to discourage littering.
- Keep trash storage and disposal areas clean and free of debris. Inspect trash storage areas weekly. Maintain dumpsters and other containers in good condition and keep them securely closed when not in use.

- Contact your local solid waste hauler for recycling options and containers.
- Post "No Dumping or Littering" signs around your property.

Rooftops and Landscaped Areas

- Clean the rooftops of your buildings at least once before the rainy season. Cover any materials that are stored on the roof to protect them from rainwater.
- Maintain landscaped areas so that dirt and sediment do not reach the sidewalk or street.
- Apply pesticides and fertilizers according to label instructions and do not apply prior to rain. Consider using less toxic alternatives to pesticides and fertilizers whenever possible.
- Recycle or dispose of green waste properly.
- Properly berm and cover soil stockpiles.
- Ensure that sprinkler heads are adjusted properly to prevent over-irrigation and water runoff.

Hazardous Waste Recycling and Treatment

Please call the County of San Diego, DEH Hazardous Materials Duty Specialist at **(619) 338-2231** for incompatible waste storage and on-site hazardous waste treatment requirements.

Recycling

- Reuse and recycle solvents, paints, oil filters, antifreeze, motor oil, batteries, water, and lubricants whenever possible.
- Segregate wastes – it saves money! Combining different types of hazardous wastes will limit your recycling options and can be dangerous. A licensed hazardous waste hauler can provide information on hazardous waste storage and disposal costs.
- Label waste barrels and drums in accordance with all local, state, and federal laws and regulations. This will also help to remind employees to separate wastes and to recycle.

On-Site Waste Treatment

- Consider self-contained, zero discharge treatment alternatives that incorporate wastewater recycling.
- Choose treatment systems that are effective, but easy to maintain and repair.
- Properly maintain and service all pre-treatment equipment, including oil / water separators.

How to Reach Us

Regional Stormwater Hotline

To report spills and discharges to the storm drain system, call **(888) 846-0800**.

General Information

For additional information regarding water quality in the San Diego region, please use the resources listed below.

(888) 846-0800 **www.projectcleanwater.org**

(888) THINK-BLue **www.thinkbluesd.com**

Local Stormwater Program Information

Stormwater and BMP requirements may vary by jurisdiction. Please contact your jurisdiction for questions or if you would like additional information. Updated phone numbers are posted on the www.projectcleanwater.org website.

Carlsbad . . . . . (760) 602-2799
Chula Vista . . . . . (619) 397-6111
Coronado . . . . . (619) 522-7380
County of San Diego
(Unincorporated Communities) . . . . . (888) 846-0800
Del Mar . . . . . (760) 753-1120
El Cajon . . . . . (619) 441-5580
Encinitas . . . . . (760) 633-2632
Escondido . . . . . (760) 839-6315
Imperial Beach . . . . . (619) 628-1369
La Mesa . . . . . (619) 667-1152
Lemon Grove . . . . . (619) 825-3810

National City	(619) 336-4389
Oceanside	(760) 435-5800
Poway	(858) 679-4228
San Diego	(619) 235-1000
San Diego Unified Port District	(619) 686-6254
San Marcos	(760) 752-7550
Santee	(619) 258-4100
Solana Beach	(858) 720-2400
Vista	(760) 726-1340

Other Agency Contacts

County of San Diego, Department of Environmental Health, Hazardous Materials Management Division:

To report hazardous materials and waste spills, call **(619) 338-2284**

To obtain general information on hazardous materials and waste requirements, call **(619) 338-2231**

Air Pollution Control District:

To obtain information on air emission requirements, call **(858) 650-4700**

Training Log

Have your employees sign and date this training log so that you will have a record of their training activities.

Employee Name	Date

Training Log

Employee Name	Date

project clean water

THINK BLUE

You're the solution to storm drain pollution.

Protecting our beaches, bays, and watersheds

El Cajon Storm Water Protection Program
Residential Repair, Restoration and Remodeling

Residential repair, restoration and remodeling is a difficult and stressful time for home owners. In spite of these disruptions, you want to do your part in keeping your home, yard, neighborhood and community clean and healthy. Here are some ways that you can accomplish this while keeping our storm drains, creeks, rivers and beaches clean. These environmentally-friendly practices are called Best Management Practices, or BMPs. Please pass these tips along to anyone doing repair, restoration or remodeling at your home or property.

Concrete and Masonry Construction - Fresh concrete and mortar application materials can wash or blow into the street, gutter, or storm drain, posing a hazard to fish, wildlife, and people. To avoid polluting:

- NEVER dispose of cement washout or concrete dust onto driveways, streets, gutters, or storm drains.
- NEVER wash excess material from bricklaying, patio, driveway or sidewalk construction into a street or storm drain. Sweep up and dispose of small amounts of excess dry concrete, grout, and mortar in the trash.
- Wash concrete or brick areas ONLY when the wash water can flow onto a dirt area without further runoff, or drain onto a surface which has been bermed so that the water and solids can be pumped off or vacuumed up for disposal.
- DON'T mix up more fresh concrete or mortar than you will need for a project.
- PROTECT dry materials from wind. Secure bags of concrete mix and mortar after they are open.
- Set up and operate small mixers on tarps or heavy plastic drop cloths.
- Protect applications of fresh concrete and mortar from rainfall until the material has dried

Indoor and Outdoor Painting - All paints and solvents contain chemicals that are harmful to fish and wildlife. It is especially important to prevent these chemicals from entering storm drains.

- Keep all liquid paint products away from the street, gutter, and storm drains. Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and should be disposed of properly. When thoroughly dry, used brushes, rags, drop cloths, and empty paints cans (lids off) may be disposed of as trash.
- Reuse paint thinner. Set used thinner aside in a closed jar to settle out paint particles. Then pour off clear liquid for future use.
- To dispose of the remaining paint sludge and any other household hazardous wastes that might result from your project, you can call Waste Management at (619) 596-5100 to

make an appointment. For additional options in disposing of residential waste including renting of waste dumpsters call at 1(800) DUMPSTER or (619) 596-5100

- Never put flammable products such as oil-based paint or thinner down any drain or into the garbage!

Paint Cleanup

- NEVER clean brushes or rinse paint containers into a street, gutter, or storm drain.
- For oil-based paints, paint out brushes as much as possible. Clean with thinner, filter, and reuse the thinner.
- For water based paints, paint out brushes as much as possible, then rinse in sink.

Paint Removal – Paint removal and the compounds used in its removal are hazardous wastes. You can call (619) 596-5100 to schedule an appointment for disposal.

- Chemical paint stripping residue, including saturated rags, chips and dust from paints containing lead or tributyl tin, are considered hazardous waste. Please collect all hazardous materials for proper disposal.
- When stripping or cleaning building exteriors with high-pressure water, use sandbags or berms, or seal the storm drain with plugs or rubber mats.

Construction - Sediment from excavation and other construction projects is the most common pollutant washed from work sites. Sediment entering the ocean through storm drains harms fish and other wildlife.

General Practices

- ALWAYS store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways.
- Keep all construction debris away from the street, gutter, and storm drain.
- Look for and clean up material that may have traveled away from your property after each days work.
- If you (or your contractor) keep a dumpster at your site, be sure it is securely covered with a lid or tarp when not in use.

Erosion Control

- Schedule grading and excavation projects during period when rain is not expected.
- Cover excavated material and stockpiles of asphalt, sand, etc., with plastic tarps.
- Prevent erosion by planting annual and perennial grasses. These will bind the soil, preventing erosion

Lumber - Cover chemically treated wood during rain events. This will prevent the chemicals from washing into storm drains.

Who Can You Contact? - For more information or to report illegal dumping you can contact the El Cajon Storm Water Protection Program at (619) 441-1653 or at www.ci.el-cajon.ca.us. Remember that through your efforts you are the Pollution Solution.

Our Environment:
It's a Living Thing!

El Cajon Storm Water Protection Program
Pet Pollution Can Be a Serious Problem!

When John and Gloria pause for a minute on their daily dog walk, they leave behind in public places a surprising amount of bacteria-filled waste. It seems like such a small amount when you think it's just your dog out there, but it really does add up. Many people don't realize how important it is to take care of their pet waste so it stays out of our storm drains, streams, rivers, beaches and ocean.

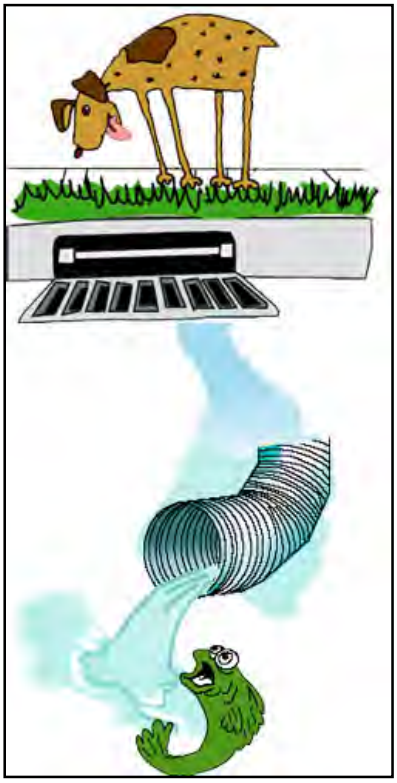

The act of John and Gloria walking with their dog is a very common residential activity. Studies show that about half of all dog owners walk their dogs in public places, and about 40 percent of them fail to clean up after their pets.

In a community the size of El Cajon (about 100,000 people and 10,000 dogs), dogs generate about two and a half tons (5,000 pounds) of feces per day. That's nearly two million pounds a year. Since a significant percentage is not properly disposed, that's a lot of bacteria in our neighborhoods, storm drains and watershed. According to even the most conservative estimates, all this pet waste can cause serious environmental harm unless it is properly controlled.

Dog and cat waste left on the ground can be washed into our neighborhood storm drains, all of which drain directly into natural water bodies without treatment of any kind. There the waste contributes to all sorts of problems, such as sick children and mucky waterways choked with algae that suffocates fish and can sometimes be poisonous to humans.

Dog Poetry

If taking care of number two
is number one to you,
then picking up your doggy doo
should matter lots to you.

So scoop the poop and bag it
and place it in the trash;
your doggy doo reflects on you,
It's what your puppy passed!

The same bacteria that make pet waste dangerous to people in parks can make the water unsafe for swimming or drinking. Children and others can get sick if they dunk their heads or accidentally get a mouthful of polluted water. And when waste gets into shellfish beds, it can make clams and oysters unsafe to eat.

Children and others who play in yards or in parks where pets eliminate waste can pick up illnesses from disease-causing bacteria and parasites. These include diarrhea, fever, muscle aches, headaches, vomiting, roundworms and toxoplasmosis (a parasite carried by cats that can cause birth defects if a woman becomes infected during pregnancy). Other pets can get sick too.

How You Can Make A Difference And Keep Our Water Clean!

When walking with your pet, take a plastic bag or paper cup along and dispose of the waste properly by:

- Flushing pet waste down the toilet, or
- Putting pet waste in the household trash after securely wrapping it. (Never put pet waste in a landscape waste container or the compost bin), and
- Be aware of and follow the Storm Water Management Ordinance that governs pet waste cleanup. The Storm Water Management Ordinance states, *"Pet waste shall not be disposed to the storm water conveyance system or receiving waters."* Remember that, if not cleaned up and disposed of properly, pet waste will eventually find its way into the storm drain system.

Pet Waste Pledge Card

I Pledge to do my part to protect water quality in El Cajon by:

- ✓ Picking up after my pet
- ✓ Properly disposing of pet waste by flushing it down the toilet or disposing of it in the trash
- ✓ Encouraging others to do the same

_____ _____

Signed by Date

Do You Know How Many Dogs Live In El Cajon?

- Around 10,000 registered dogs reside in the City of El Cajon.
- These dogs create approximately 5,000 pounds of pet waste per day!
- Pets, as well as humans, can catch diseases through coming into contact with infected pet waste.

The number of pets in El Cajon is much greater than the number of wild animals that once lived here. If we kept just a few pets their waste might not be much of a problem. However, we keep a lot of dogs and other pets and it is estimated that there are even more cats than dogs.

You wouldn't want to live in a city that lacked a public sewer system. With as many dogs living in the City of El Cajon, not cleaning up and properly disposing of pet waste can be a pollution problem. By cleaning up your pet waste and properly disposing of it, you can be an important part of the pollution solution. For more information or to report illegal dumping you can contact the El Cajon Storm Water Protection Program at (619) 441-1653 or at www.ci.el-cajon.ca.us.

El Cajon Storm Water Protection Program

What is Storm Water Runoff?

Storm water runoff occurs when precipitation from rain flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent storm water from naturally soaking into the ground.

Why is Storm Water Runoff a Problem?

Storm water can pick up debris, chemicals, dirt, and other pollutants. Polluted runoff then flows into a storm drain system, eventually reaching our creeks, rivers, ocean, and beaches without treatment of any kind. Consequently, anything entering a storm drain system is discharged into the natural environment of our creeks, rivers, ocean, and beaches that we use for swimming, fishing and other recreational activities without treatment of any kind. People, especially children, can be harmed if they come in contact with these pollutants.

The Effects of Pollution

- Polluted storm water runoff can have many adverse effects on plants, fish, animals, and people.
- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- Excessive nutrients can cause excessive growth of algae and other aquatic plants. When these plants die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.

- Bacteria and other pathogens can wash into creek, river and beach recreational areas and create health hazards.
- Debris, plastic bags, six-pack rings, bottles, cigarette butts and yard waste washed into our storm drains, creeks and rivers can cause flooding, dump debris on neighboring lands and choke, suffocate, or harm aquatic life.
- Household hazardous wastes such as pesticides, paint, and other auto fluids can poison aquatic life. Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.
- Polluted storm water affects stream water quality and availability of natural areas for recreational uses. This, in turn, can affect human health and vastly increase the cost of our Storm Water Program.

To report illegal dumping contact the El Cajon Storm Water Protection Program at (619) 441-1653 (Mon. through Fri., 8:00 am to 5:00 pm), call the 24-hour Storm Water Hotline at 1-888-846-0800, or visit our web site at the www.ci.el-cajon.ca.us and click on the Storm Water link.

El Cajon Storm Water Protection Program

Storm Water Pollution Solutions

Recycle or properly dispose of products that contain chemicals, such as pesticides, paint, solvents, used motor oil and other automotive fluids. Don't pour them onto the ground or into storm drains. El Cajon residents can arrange for disposal of household hazardous materials and E-waste. Please contact Waste Management Customer Service at 1(800) DUMPSTER or (619) 596-5100 for more information or to schedule an appointment.

Residential Landscaping

- Permeable Pavement – Concrete and asphalt don't allow water to soak into the ground. These surfaces rely on storm drains to divert unwanted water. Permeable pavement systems such as turf block or paving stones allow rainwater to soak through, decreasing storm water runoff.
- Rain Gardens and Grassy Swales - Specially designed areas with native plants can provide natural places for rainwater to collect and soak into the ground. Rain from the rooftops or paved areas can be diverted into these natural areas rather than into storm drains.
- Vegetated Filter Strips – Filter strips are areas of native grasses and plants created along roadways or streams. These areas trap the pollutants that storm water picks up as it flows across driveways and streets.
- Swimming Pools – You can dechlorinate your pool by adding a dechlorination chemical such as Thio-Trine or other product using 100% sodium thiosulfate. Dechlorinated means having less than one part per million of chlorine. You can obtain the dechlorination chemicals and test kit from your local swimming pool supply store. Please contact the El Cajon Storm Water Protection Program at (619) 441-1653 for specific discharge requirements.

Lawn Care

Excess fertilizers and pesticides applied to lawns and gardens can wash off and pollute streams. Green waste, such as yard clippings and leaves, should be prevented from entering storm drains because they contain nutrients as well as herbicides, pesticides or fertilizers applied to your yard.

- Don’t over-water your lawn. Consider using a soaker hose instead of a sprinkler.
- Use pesticides and fertilizers sparingly and be sure and follow label instructions.
- If you live in a planned community with common area landscaping, notify your property manager immediately if you notice broken irrigation heads or over-watering occurring.
- Compost or mulch yard waste. Don’t leave it in the street or sweep it into storm drains or waterways.
- Cover piles of dirt or mulch being used in landscaping projects.

El Cajon Storm Water Protection Program

Auto Care

Washing your car and degreasing auto parts at home can send detergents and other contaminants into the storm drain system. Because the runoff flows so quickly downstream, dumping automotive fluids and other pollutants into storm drains has the same result as dumping the materials directly into Forrester Creek or the San Diego River.

- Use a commercial car wash that treats or recycles its wastewater, or wash your car on your yard so the water soaks into the ground.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations.

Pet Waste

Pet Waste is a major source of bacteria and excess nutrients in our local waterways. Unless our community can learn to manage pet waste more effectively, our Storm Water Program will be faced with a very expensive, State-mandated bacteria and nutrient pollution prevention program in the near future. Here are some ways that everyday citizens can effectively eliminate the pet waste problem:

- Flushing pet waste down the toilet, or
- Putting pet waste in the household trash after securely wrapping it. (Never put pet waste in a landscape waste container or the compost bin), and
- Be aware and tell others that cleaning up after your pet is the law in El Cajon. If not cleaned up and disposed of properly, pet waste will eventually find its way into the storm drain system.

Parking Lots and Trash Storage Areas

Dirt, oil, and debris that collect in parking lots and paved areas can easily be washed into the storm drain system and eventually enter our local creeks, rivers and beach areas.

- Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains.

- Cover grease storage bins and dumpsters and keep them clean.
- Report any chemical spill to the local hazardous waste cleanup team, please call the County Hazardous Waste Division at (619) 338-2231, Monday through Friday, 8:00am to 5:00 pm, or call the 24-hour Storm Water Hotline listed at the end of this article. They'll know the best way to keep spills from harming the environment.
- When employees or contractors are pressure washing outside, make sure all soapy or dirty wash water is collected and disposed of inside the facility to the sanitary sewer so it will be treated.

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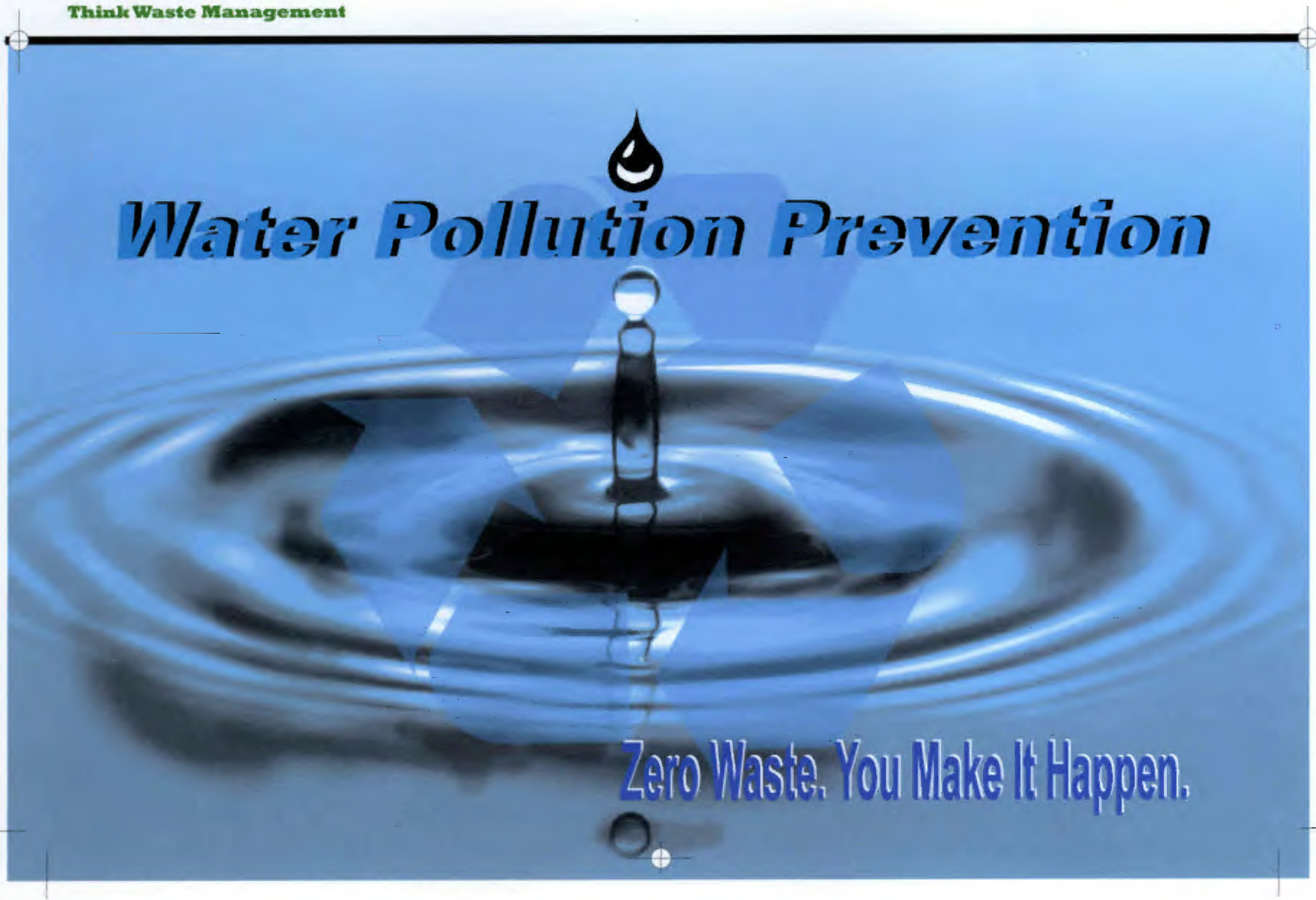

Water Pollution

Urban runoff is storm water and other sources such as irrigation sprinklers or hoses that are allowed to run too long. Water pollution can occur when runoff mixes and picks up pollutants as it travels over common surfaces (driveways, sidewalks, streets, and gutters) and then enters into the storm drains. Some of the most common pollutants consist of everyday household items generated from normal urban activities including: **litter, oil, dirt, yard trimmings, food, pet waste, debris, paint, and cleaning products**. This polluted runoff water can flow from the storm drains directly to our local creeks, lakes, and eventually to the ocean. The polluted water can have harmful effects on drinking water supplies, recreational use, and wildlife.

Storm Water Pollution Prevention

What is storm water?

Storm water is water that flows across the ground when it rains or snows. The water seeps into the ground or drains into what we call storm sewers, the drains you see at street corners or at low points on the sides of your streets. This water is called "storm water runoff" and is a concern not only in commercial and industrial sites, but neighborhoods as well, because of the pollutants it carries.

Storm water that does not seep into the ground drains into underground pipes and is eventually released into the ocean. Anything poured into a gutter or storm drain, such as used motor oil or antifreeze, flows directly into our water.

How can you help?

- Remember to recycle your used motor oil in a clean, sealed, plastic container, and properly dispose of other vehicle fluids such as antifreeze. Please call El Cajon's Solid Waste Hotline at (000) 000-0000 or Waste Management at (000) 000-0000 for questions regarding recycling used motor oil or proper disposal.
- Clean up after your pet. Pet waste left on the ground gets carried away by storm water, contributing harmful bacteria and parasites to our oceans.
- Sweep instead of hosing off pavement and washing pollutants into storm drains.
- Deliver paint, pesticides, batteries or solvents to your local Hazardous Waste drop off facilities.
- Keep trash bins covered and don't litter.
- Use yard trimmings as compost for fertilizer.

Water Conservation

How to Conserve Water

Now that you know how and what you recycle, you can learn how to conserve the valuable resources that we have available to us as El Cajon residents. Since we are so close to our beautiful beaches and ocean and water is so important, let's learn how to conserve it while keeping it free of pollutants!

- Water your lawn only when it needs it. Step on your grass. If it springs back, when you lift your foot, it doesn't need water. So set your sprinklers for more days in between watering. **Saves 750 to 1,500 gallons** per month. Better yet, especially in times of drought, water with a hose.
- Fix leaky faucets and plumbing joints. **Saves 20 gallons** per day for every leak stopped.
- Don't run the hose while washing your car. Use a bucket of water and a quick hose rinse at the end. **Saves 150 gallons** each time. For a two-car family that's **up to 1,200 gallons** a month. Install water-saving shower heads or flow restrictors. **Saves 500 to 800 gallons** per month.
- Run only full loads in the washing machine and dishwasher. **Saves 300 to 800 gallons** per month.
- Shorten your showers. Even a one or two minute reduction can **save up to 700 gallons** per month.
- Capture tap water. While you wait for hot water to come down the pipes, catch the flow in a watering can to use later on house plants or your garden. **Saves 200 to 300 gallons** per month.
- Check toilet for leaks. Put dye tablets or food coloring into the tank. If color appears in the bowl without flushing, there's a leak that should be repaired. **Saves 400 gallons** a month.
- Turn off the water while brushing your teeth. **Saves 3 gallons** each day.
- Turn off the water while shaving. Fill the bottom of the sink with a few inches of water to rinse your razor. **Saves 3 gallons** each day.

Made possible by a grant from the California Integrated Waste Management Board

City of El Cajon Storm Water Protection Program

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City of El Cajon
Storm Water Residential Complaints

2007-2008

Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
07/24/07	Residential		1162	N Cuyamaca St #2	Raw sewage running into the street.	PW crew contanined and cleaned the spill. The property owner was notified to clean the area and repair the system.	Yes	Monetary Citation	Yes
07/27/07	Residential		1046	Cajon Greens Dr.	Motor oil leaking from containers at the bed of a truck	Upon arrival at site the leak was contained by using a bucket and absorbent material on the affected area	Yes	Verbal Warning	Yes
08/03/07	Residential		888	Salina St	Tree roots clogging the sewer line in front yard. Tree belongs to the City.	Met with the property owner on site. Palm tree in ROW. No Discharge. Clean out is in garage.	No	Verbal Warning	N/A
08/06/07	Residential		341	Coachwood	Grading without a permit and no BMPs installed.	City attorney letter mailed. Cited for grading and stormwater violations. Met with P/O this date to take updated photos	No	Verbal Warning	N/A
08/10/07	Residential		638	Raymond St	Pool plaster residue washed into the street and gutter.	Residue found to be dry, left door tag with instructions to clean the street and gutter. Property owner responded and cleaned the gutter and driveway	Yes	Verbal Warning	Yes
08/14/07	Residential		1581	Washington	Tenants throwing trash into the storm channel.	Contacted the Apt. manager on site and advised to instruct tenants to cease dumping in channel. PW crew to clean galss and trash. Educational materials issued.	Yes	Verbal Warning	N/A
08/14/07	Residential		2171	Madison	Water from neighbor running onto her property	Site inspection found no water, property is in county. Complainant notified	No	Verbal Warning	N/A
08/24/07	Residential		?	Chatham at Garfield	Concrete residue in the street and gutter	Contacted the contractor to have the street and sidewalk cleaned of all concrete residue	Yes	Verbal Warning	Yes
08/27/07	Residential		494	Tyrone St	Large gully in rear yard caused by erosion over time.	Prior encroachment permit issued for work. Rear alope covered in plastic. No significant erosion noted. Rear slope covered in plastic and netting on front bank. Neighboring lot is bare soil	No	Verbal Warning	N/A
08/27/07	Residential		1811	Dehesa Rd	Resident complained that the drainage ditch in front of property is filled with debris	Site ispection found that the property is within the County. The complainant was advised.	No	Verbal Warning	N/A
08/31/07	Residential		1600	Meadow	A truck with a concrete pump attached to it is leaking oil on the street.	The truck/ trailer combination was located and found to be leaking oil into a metal pan under the pump. Storm water educational materials were left at the door. A voice mail message was left for the complainant	Yes	Verbal Warning	N/A
08/31/07	Residential		449	S Mollison Ave	Broken sprinkle head shoots water into the street and sidewalk daily.	Site inspection found no evidence of sprinkler break or discharge.	No	Verbal Warning	N/A
09/04/07	Residential		2697	Carlow St	Drainage flow into the culvert next to the driveway is cracking and lifting it	No flow was observed and it was determined that the uplifting of the driveway was most likely caused by roots from a nearby tree	No	Verbal Warning	N/A
09/04/07	Residential		302	Westwind Dr	Water flowing from property onto neighbors and into the street	Property owner was contacted is in process of repairing irrigation line	Yes	Verbal Warning	N/A
09/14/07	Residential		1043	S Sunshine Ave	Retaining wall built with no permit with dirt on sidewalk and in street.	Building dept to handle follow-up. No storm water issues.	No	Verbal Warning	N/A
09/14/07	Residential		1504	Luke Ln	Materials from constructed block wall being washed into the street	No discharge or debris was located.	No	Verbal Warning	N/A
09/27/07	Residential		846	S Johnson	Water form broken irrigation pipe flowing into the storm drain.	Pastor of the Christian Fellowship Church contacted. Irrigation shut off. Management company contacted to clean the street of mud	Yes	Verbal Warning	Yes

City of El Cajon
Storm Water Residential Complaints

2007-2008

Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
10/01/07	Residential		?	Pfeifer Ln	Debris from tree trimming left in an area where it could possibly enter the storm drain system	The contractor was contacted who immediately cleared the street and sidewalk. All debris later removed.	No	Verbal Warning	N/A
10/04/07	Residential		800	S Anza	Raw sewage running into the storm drain	PW staff found no sewage flow or residue in the area. A plumber had responded and also found nothing	Yes	Verbal Warning	N/A
10/16/07	Residential		215	Dorado Ln	Water from sand blasting work leaving the property	Site inspection found water contained on site. Blasting work forming a cloud that did not leave the property	No	Verbal Warning	N/A
10/11/07	Residential		1166	Dawnridge	Pool water draining off property.	Water infiltrates before entering the street. Water is dechlorinated	No	Verbal Warning	N/A
11/26/07	Residential	(Mobile Business) Voltar Inc.	2462	Nielsen St	Waste water from carpet cleaning business being dumped into the stormdrain	Site inspection found no active discharge. Educational info left at residence. Owner called stating that he would cease all dumping	No	Verbal Warning	N/A
12/05/07	Residential		1510	Orange Ave	Hazardous materials being dumped in the dirt behid a makeshift paint booth	Complaint contacted on 12/5/07 to verify the location of the paint booth.	No	Verbal Warning	N/A
12/05/07	Residential		1204	Cuyamaca	Sewer overfow into the street and storm drain inlet.	PW crew contanined and cleaned the spill in the ROW. The property owner cleaned the other areas and was cited.	Yes	Monetary Citation	Yes
12/10/07	Residential		2388	Rippey Ct	Significant grading out in the canyon at the rear of property.	Property owner removed native vegetation for a fire break and cut approx. 20ft trerrace into the rear slope. No storm water issues	No	Verbal Warning	N/A
12/10/07	Residential		2364	Rippey Ct	Significant grading out in the canyon to the west.	Property owner removed native vegetation and replacing with trees and iceplant. No stormwater issues.	No	Verbal Warning	N/A
12/13/07	Residential		510	Pierce St	sHose from under house draining into front yard. Smells like sewage.	PW crew (PJ) inspected the site, contacted the propery owner. The hose is draining foundation water. The complainant was notified of City's action	No	Verbal Warning	N/A
12/14/07	Residential		1060	Aster	Discharge of raw sewage to the storm water conveyance system	Contacted the tenant to clean the property and contacted the proptery manager	Yes	Monetary Citation	Yes
12/14/07	Residential		1496	Lemon Ave	Discharge of sewage into the storm drain system.	Contacted the property owners son who turned of the water. The PW crew cleaned and vac. The street and sidewalk	Yes	Monetary Citation	Yes
12/18/07	Residential		181	Rea Ave	Using water and soap to clean the rear parking lot	Maintenance employee contacted and told to cease and use dry method	Yes	Written Warning	Yes
01/02/08	Residential		1107	Washington	Sewer overfow into the street and storm drain inlet	Paved areas washed and vac. from the street by PW crew.	Yes	Verbal Warning	Yes
01/02/08	Residential		1014	Taft St	Discharging pool backwash into the street	Pool water discharge is exempt.	No	Verbal Warning	N/A
01/07/08	Residential			Fanita and Weld	Yellow substance flowing in concrete channel.	Moderate flow in channel from recent rainfall is clear. No yellow discharge noted. Juan Cobas, Santee eng. Insp. on site	No	Verbal Warning	N/A
01/14/08	Residential		2400	Nielsen St	Vehicle parked in the visitor's parking stall leaking oil that is flowing to the street	PW crew placed absorbent material on spill. None entered the street. Complainant was contacted and advised of the city's actions	No	Verbal Warning	N/A
01/14/08	Residential		760	Carlow Ct	Water from Katherine st collecting behind her house and pooling. Requests that a storm drain be installed	Advised the complainant that she could install a pump or other drain system. This is not a stormwater issue.	No	Verbal Warning	N/A
01/18/08	Residential		1640	Dumar	Resident is using water to clean the trash and debris from curb in front of house	No violations noted 1-22-08. Educational materials left at door.Complainant advised. Educational materials left at door	No	Verbal Warning	N/A

City of El Cajon
Storm Water Residential Complaints

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01/22/08	Residential		1641	Don Carol	Concrete poured in curb for RV approach blocking srormwate flow.	Concrete poured at curb to allow for off street RV parking. Case referred to PW street crew.	Yes	Verbal Warning	N/A
01/25/08	Residential		1212	Cuyamaca	Sewage overflow in fornt of complex. Minor amount entered to curb line. None entered the drain inlet	PW crew cleaned the area and removed discharge. Property owner was present and immediately took action to prevent further discharges.	Yes	Verbal Warning	Yes
01/28/08	Residential		406	Horizon Ln	Site inspection per City manager office. Vegetation found growing in concrete swale at rear of property. No stormwater violations observed.	No action taken. City managers office notified of findings.	No	Verbal Warning	N/A
01/30/08	Residential		744	Chase Ave	Broken sewer cap in driveway allowing discharge of sewage into the stormwater conveyance system crossing the sidewalk and entering the curb. None entered drain inlet.	PW crew washed and vac. Area. A plumber was present to fix the damaged cap. The propery owner was also contacted.	Yes	Verbal Warning	Yes
01/30/08	Residential		1448	Marline Ave	Hose draining water from the back to front yard. Water crosses the sidewalk and into the street causing algae. Complainant	Appears that a hose located in the right front yard used to drain foundation from recent heavy rains. 2/5/08 reinspected due to continued complaints regarding the discharge of soapy water from the pipe. Instructed the P/O	No	Verbal Warning	N/A
02/21/08	Residential		113	Stephanie Ln	Draining green pool water into the street.	Contacted to tenant. Pool near completely drained. No algae residue at curb. Advised to drain remaining into vegetated area on property. Storm water educational materials were issued. The complainant was advised of	No	Verbal Warning	N/A
03/05/08	Residential		637	Blackthorne Ave	Foamy substance flowing in front of neighbors house gutter and driveway	Discharge found to be ground water percolating through pavement.	No	Verbal Warning	N/A
03/10/08	Residential		826	Medford	Sewer overoverflow from root intrusion during plumbing work. Property owner contacted the City. Flow did not enter a drain inlet.	PW crew responded, prevented discharge to storm drain inlet and cleaned	Yes	Verbal Warning	Yes
03/11/08	Residential		1738	Via del Valle	Soil erosion in driveway flowing onto roadway surface	This property is within the County of SanDiego	No	Verbal Warning	N/A
03/12/08	Residential		615	Galena St	Residents throwing cigarette butts in the gutter.	Left a door tag and contacted the complainant. There was no evidence of cigarette butts in the street or curb in front of the complainants residence	No	Verbal Warning	N/A
03/17/08	Residential		1566	Berenda Ct	Pool construction co. had no BMPs in place for concrete work being done in the street	Contacted the contractor and advised to implement the necessary BMPs to prevent a discharge to the storm water conveyance system	Yes	Verbal Warning	Yes
03/21/08	Residential		975	Second St	Soil erosion and open sewer cap in front yard	Site inspection found non-vegetated front yard(preexisting) and no open sewer	No	Verbal Warning	N/A
03/13/08	Residential		1921	Powell Dr	Extensive grading in rear yard into the canyon. SW concerns	Site inspection found no significant grading	No	Verbal Warning	N/A
04/02/08	Residential		555	Trenton St	Automotive fluids and concrete wash in the gutter in front of residence.	Contacted the property owner and advised to discontinue any future discharges. (via phone) He said the discharge was from a neighbor. Educational material was left at the door	Yes	Verbal Warning	Yes

City of El Cajon
Storm Water Residential Complaints

2007-2008

Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
04/04/08	Residential		725	Wichita	White pipe extending into the concrete storm channel next to property. Odor of urine	Contacted the property owner. Pipe from under concrete walkway drain. Recent discharge from pipe evident. No urine odor noted. Said they will remove the pipe.	No	Verbal Warning	Yes
04/10/08	Residential		404	Anza St	Open sewer cap with evidence of recent discharge along N/W wall of rear building	Site inspection found clean out area cleaned.	No	Verbal Warning	Yes
04/14/08	Residential		1686	Granite Hills Dr	Multi vehicle accident causing big rig to crash into residential pool filling it with oil and diesel fuel.	PW crew placed absorbent in gutter. The pool completely contained the fuel spill. Hazmat on site. There was no discharge to the storm water drain during vehicle removal to pool clean up	Yes	Verbal Warning	N/A
04/15/08	Residential		2037	Hacienda Circ	Pool plaster residue washed into the street and gutter. No BMPs in place	Contacted the contractor and advised to cease discharge and clean gutter. Educational materials were issued.	Yes	Verbal Warning	Yes
04/22/08	Residential		1329	Naranca	Dirt and trash regularly dumped in the street.	Conducted a site inspection and found no evidence of dumping. Storm water educational materials were left at the door	No	Verbal Warning	N/A
04/24/08	Residential		1702	Hacienda Pl	Dog feces being thrown onto rear slope and onto street. Excess number of dogs	Left stormwater educational information at door and referred to zoning enforcement.	No	Verbal Warning	N/A
04/25/08	Residential		1468	Lexington	Dirt in the street from and unfinished City roadway job.	The job was found to be a residential curb sidewalk and street improvement. The engineering department is working with three property owners on completion of the work	No	Verbal Warning	N/A
05/01/08	Residential		760	Carlow Ct	Water from pool discharge flowing down hill and pooling on Katherine St.	Site inspection found pooled water on Katherine St below the property. Zoning enforcement found faulty irrigation system and is working with the property owner.	No	Verbal Warning	N/A
05/08/08	Residential		646	Sandra Ln	Resident landscaping caused sediment discharge to rear concrete swale	Property owner was and advised to remove sediment from swale and install BMPs or plant the rear slope.	Yes	Verbal Warning	Yes
05/08/08	Residential		660	Sandra Ln	Front yard soil bare for relandscaping. No BMPs in place to prevent soil discharge	Propert owner was contacted and advised to install new BMPs or plant the front yard to prevent future sediment discharge	Yes	Verbal Warning	Yes
05/14/08	Residential		160	Ruth Ct	Discharge of concrete coloring residue into the curb and storm drain inlet.	Contacted the contractor and advised to clean the street and curb of a all remaining sediment using a dry method.	Yes	Monetary Citation	Yes
05/15/08	Residential		2053	Wedgemere Rd	Grading, backfilling with no permits of BMPs.	This property is being used as an access to the neighboring rear yard for pool filling(dirt). No grading observed. No BMPs required. The contractor cleans dirt from the street daily	No	Verbal Warning	N/A
05/20/08	Residential		1185	Peach Ave	Sewage discharge from backed up lateral	SW contacted the tenant and advised to contact a plumber to repair the lateral and clean area	Yes	Verbal Warning	Yes
05/20/08	Residential		724	Downer Ave	Strong sewer smell close to te house	Met with the tenant on site. Found no strong sewer odor nor any evidence of a discharge	No	Verbal Warning	N/A
05/29/08	Residential		1953	Estela Dr	Concrete sediment washed into the gutter and storm drain	Contacted the property owner and advised to clean the curb af all sediment. Will meet with him in 7 days	Yes	Monetary Citation	Yes
06/06/08	Residential		520	Main St	SD waste water referral regarding leaking above ground sewer latral located behind Main Tap Tavern now under renovation	Gate prevented access to property, viewed surface pooling along west side of building from rear of tavern, zoning enforcement also notified for building/zoning violations.	Yes	Verbal Warning	

City of El Cajon
Storm Water Residential Complaints

2007-2008

Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
06/12/08	Residential		283	Meadow Crest Dr	A 3 " pipe at the base of a block wall in front of the property is discharging gray water onto the sidewalk and street.	Contacted the property owner's daughter and gave her storm water and gray water discharge information to relay to her parents. She was told that the discharge must be relocated to on site vegetation or into the septic sewer. The discharge turned out to be from a dechlorinated pool	Yes	Verbal Warning	Yes
06/19/08	Residential		922	Chase Ave	Gray water draining from property ont to the street.	Contacted the property owner on site. No discharge observed. Tennis shoes were rinsed off in driveway and water entered the street. Storm water educational	No	Verbal Warning	Yes
07/01/08	Residential		2584	Katherine St	Metal drain pipe on slope across street causing erosion when it	Referred to PW street crew to evaluate position and condition of the pipe.	No	Verbal Warning	N/A
07/01/08	Residential		1043	Sunshine	Strong smell of sewage coming from under the house and ground is wet.	Met with the complainant's mother(tenent). Found no odor or sewage. No discharges observed. Most likely pooled water under very old house from deteriorated cast	No	Verbal Warning	N/A
07/09/08	Residential		244	Shady Lane	Large amount of dust and dirt in the street from road resurfacing.	No discharge observed o site. Roadway resurfacing underway. The contractor was contacted and advised to sweep all debris from the street and sidewalk. Storm	No	Verbal Warning	N/A
07/10/08	Residential		712	Garfield Ave	Citizen phone complaint of a broken irrigation line at the property with water running into the street.	Contacted the resident and advised to cut the water to the irrigation and repair it. The work was done the same day.	Yes	Verbal Warning	Yes
07/21/08	Residential		283	Meadow Crest Dr	Repeat complaint of gray water being drained onto the sidewalk in front of the residence.	Site inspection found minor evidence of a discharge at base of brick wall in front of property. Will arrange full inspection with owner. Discharge found to be pool water	No	Verbal Warning	N/A
07/24/08	Residential		757	Pierce St	Citizen's phone complaint that irrigation system has been continuously running for two days and no response at the door.	Inspection found front yard irrigation overflowing into the street. No response at door. Water was turned off to the system. Card left at door. Owner responded later.	Yes	Verbal Warning	Yes
07/24/08	Residential		1045	Terrace Crest Dr	Citizen's phone complaint that a brown liquid was being discharged	No discharge noted in front of the residence or in street.	No	Verbal Warning	N/A
07/30/08	Residential		636	Medford	Discharge of blackwater from and occupied camper in rear yard onto neighboring church property and entering the storm drain.	Notified zoning enforcement. The property owner and the occupant of the camper were contacted on site. A discharge pipe connected to the camper ended at the rear block wall . All other utilities were also attached to the camper. The owner was told to immedialtely remove all utilities and cease all discharges. The pipe was removed and capped. He was also instruced to clean the	Yes	Verbal Warning	

The City of El Cajon

California

PROCLAMATION

"POLLUTION PREVENTION DAYS"
June 4th and June 18th, 2008

WHEREAS, *storm water management services provided in our community are an integral part of our residents' everyday lives. The support of an understanding and informed citizenry is vital to the efficient operation of storm water management programs; and*

WHEREAS, *the health, safety and comfort of this community greatly depends on these services. The quality and effectiveness of these services, as well as their planning and implementation is vitally dependent upon the efforts and skill of storm water management staff; and*

WHEREAS, *the efficiency of the qualified and dedicated personnel who staff the storm water management division is materially influenced by the people's attitude and understanding of the importance of the work they perform.*

NOW, THEREFORE, *I, Mark Lewis, Mayor for the City of El Cajon, together with the City Council, do hereby proclaim the days of June 4th and June 18th, two thousand and eight to be "POLLUTION PREVENTION DAYS" in the City of El Cajon. We further call upon all residents and civic organizations to acquaint themselves with the issues involved in providing our services and to recognize the contributions which public works officials make every day to our health, safety, comfort, and quality of life.*

Signed this twenty-seventh day of May, two thousand and eight.

Mark Lewis

Mayor

Pollution Prevention Days Photos – June 4 and 18, 2008

RECEIVED
MAR 17 2008
CITY OF EL CAJON
ENGINEERING DIVISION

INDUSTRIAL ENVIRONMENTAL ASSOCIATION
Leaders of Environmental Responsibility

San Diego East County Economic Development Council

Industrial Environmental Association
and the
East County Economic Development Council
invite you to a

"CITY OF EL CAJON CODE UPDATE WORKSHOP"

Date: *Friday, March 28, 2008*

Place: *Gillespie Field Business Park*
1870 Cordell Court, #202, El Cajon

Time: *7:30 a.m. Registration/Coffee and Muffins*
8:00 a.m. Program

Agenda: *City of El Cajon Stormwater Ordinance*
**Municipal Permit Requirements*
**Inspection Schedules for Industrial Facilities*
-Presented by Jaime Campos,
El Cajon Stormwater Program Manager

Stormwater Best Management Practices
-Presented by Jerome Jaminet, TRC Solutions

City of El Cajon Fire & Building Code Updates
**2007 International Fire Code*
**2007 Building Code*
-Presented by Dan Pavao,
Fire Marshall and Building Official

RSVP: *iea@iea.sdcoxmail.com or (619) 544-9684*
(Directions to Cordell Court Attached)

701 "B" Street • Suite 1040 • San Diego, CA 92101 • 619-544-9684 • FAX 619-544-9514

THIS IS NOT A CITATION

HELP!

Pollutants were found in your neighborhood storm drain.

Our field staff found the following pollutant(s)spilled or dumped into the storm drain system (curb, street, gutter) near your home:

- ❑ Over irrigation usage
- ❑ Motor Oil
- ❑ Antifreeze/Transmission Fluids
- ❑ Cooking grease
- ❑ Detergents
- ❑ Solvents/Degreaser
- ❑ Paint/paint products
- ❑ Home improvement waste
- ❑ Sewage
- ❑ Animal waste
- ❑ Yard waste (leaves, grass, etc.)
- ❑ Uncovered dirt and gravel pile(s).
- ❑ Construction debris
- ❑ Trash
- ❑ Other

Be a Clean Water Leader

Storm water pollution is a problem that affects all of us. With a growing population of more than 95,000 residents and approximately 14 square miles of urbanized development, keeping our waters clean from pollutants has become increasingly difficult. With thousands of storm drain inlets, and nearly 100 miles of storm drain pipes and channels to clean and maintain, we need your help.

When it rains, water flows over across our yards and into our streets carrying pollutants into our storm drains. The problem is that storm drains are not connected to the wastewater sewer treatment plant. So, what's in the streets flows directly into our creeks, rivers and the ocean, without treatment.

Last year, too many of our beaches and bays were closed or posted as unsafe for swimming. As our City

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Leaders have said, “this is more than an inconvenience; it is a civic embarrassment.” **Discharging pollutants to the City's storm drain system is in violation of Title 13.24 of the El Cajon Municipal Code and violations can result in substantial fines.**

But, as a City resident, you can make a difference. By becoming a Clean Water Leader, both on the job and in your community, you can help make our stream, rivers and beaches free of pollution. When you're at home, share your knowledge with neighbors and family. As you drive to work, be aware of any illegal discharges. And, if you do see an illegal discharge, report it. In the City of El Cajon you can **call the City of El Cajon at (619) 441-1653, or the 24-hour Storm Water Hotline at (888) 846-0800**.

Whether at home or at work, by adopting some simple Best Management Practices (BMPs), you can stop pollutants from being generated and entering our storm drain system.

- ✓ Use dry clean-up methods for spills and outdoor cleaning. Vacuum, sweep, and use rags or dry absorbants. Properly remove and dispose of this material when the spill is absorbed.
- ✓ Properly label, store and dispose of hazardous wastes. Rake, sweep up, and place all debris (dust, litter, sediment, etc.) from your yard or near your property into a trashcan.
- ✓ Use a mop only when water is needed.

As you perform your daily activities be proactive. Assess the activity from a storm water pollution point-of-view and ask yourself; “does this activity, directly or indirectly, generate pollution?” And, “how can I get the job done and prevent debris from entering into the storm drain collection system?”

City of El Cajon

STORMWATER
Protection Program

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City of El Cajon

STORMWATER
Protection Program

Appendix A.7
(No Content)

CITY OF EL CAJON
PUBLIC PARTICIPATION MECHANISMS
PY1 – 2007/2008

DATE	LOCATION	NUMBER CONTACTED	DESCRIPTION
6/4/08	City of El Cajon Main Street	350	Pollution Prevention at Classic Cruise
6/18/08	City of El Cajon Main Street	350	Pollution Prevention at Classic Cruise
10/06/07	City of El Cajon Fire Station	3,000	Fire Station Open House
5/22/07	City of El Cajon	20	National Public Works Week

CITY OF EL CAJON

PUBLIC WORKS DEPARTMENT

Natalie Roberts
I Love A Clean San Diego
4891 Pacific Highway, Suite 115
San Diego, CA 92110

December 21, 2007

LETTER OF PERMISSION FOR I LOVE A CLEAN SAN DIEGO (ILACSD) TO STENCIL STORM DRAIN INLETS IN THE CITY OF EL CAJON

This letter gives permission to ILACSD staff and volunteers to apply the message "No Dumping…I Live Downstream" and a depiction of a dolphin or duck to the curb area directly adjacent to storm drain inlets within the City of El Cajon. Validity of this letter of permission is for two years from the date of this letter, unless otherwise notified.

We strongly support and would like to thank I Love A Clean San Diego for their efforts in this important program, which will help the City of El Cajon in educating the public regarding storm water runoff and pollution prevention.

All storm water stenciling activities should be coordinated with our Storm Water Program staff, the City Manager's Office and the Police Department to properly identify neighborhoods within our city where inlets would benefit from being stenciled and to secure areas for volunteers to park cars and safely coordinate activities. City Storm Water staff can be contacted as described below.

Should you have any questions or require additional information, please contact Jaime Campos at (619) 441-5554, jcampos@ci.el-cajon.ca.us or Robert W. Griswold at (619) 441-1704, bgriswold@ci.el-cajon.ca.us.

Approved by:

Jaime Campos
Associate Civil Engineer
Storm Water Program Manager

200 E. MAIN STREET • EL CAJON, CA 92020-3996 • TEL: (619) 441-1653 • FAX: (619) 579-5254

Printed on recycled paper.

ACTIVITY: PUBLIC WORKS NPDES COMPLIANCE **ACTIVITY NO: 650750**

Mission Statement:
The Public Works Department is a maintenance and engineering organization, and an integral part of the municipal government of the City of El Cajon. Dedicated to public service, we operate, maintain, repair and preserve the public assets, public buildings and parks and open lands owned by the residents of El Cajon. We do this to enhance the quality of life in El Cajon, facilitate commerce, and protect the safety of our residents and visitors.

Description:
Provide compliance with the Regional Water Quality Control Board's R9-2007-001 Municipal Permit. Major components include training of City personnel and citizenry, inspection of commercial and industrial businesses, inspection of construction sites, public outreach, dry weather, storm water testing, and conditioning of new development and redevelopment to comply with storm water regulations. Serve as the lead San Diego River Watershed Permittee and assure the development and implementation of a Watershed Urban Runoff Management Plan (WURMP), as required by the Permit

Prior Fiscal Year Highlights:
The goal of the Permit is to improve receiving water quality and determine the threat to human health and the environment using the maximum extent practicable controls. The Sixth Permit Year Annual Report listed the following major accomplishments:

- Updated the City Ordinances for Storm Water Management and Discharge Control (Ord. 4686) and Standard Urban Storm Water Management Plan (SUSMP) (Ord. 4717) in accordance to the new Permit.
- Continued with a strong Enforcement program of City Ordinances 4686 and 4717 requirements.
- As a City with little open space and a propensity for redevelopment, the City pursues common sense approaches to go beyond Permit compliance and achieve defensible, cost effective storm water management practices for businesses and citizens through the SUSMP conditioning process.
- Continued implementation of a City-Wide Integrated Pesticide Management Program.
- The City continued an expanded scope of its Dry Weather Monitoring Program. Additional information along concrete lined areas focuses on business districts or municipal areas. In doing so, it has made substantial strides in detecting and eliminating discharges and characterizing receiving waters and other conveyance discharges within its jurisdiction.
- Conducted upstream/downstream dry weather analysis in Forrester Creek to quantify the amounts of pollutants discharged within the City's jurisdiction.
- Inspected 185 commercial and industrial facilities for compliance with the City's Municipal Code. The City conducted monthly inspections at all priority construction sites during the dry season and weekly inspections during the wet season.
- The City issued a total of 10 warnings and 12 citations for various violations of the City's storm water ordinances.
- Conducted inspections at 14 high priority construction sites.
- Conducted inspections at 26 high priority industrial sites and issued two citations. The City also collected industrial storm water monitoring data from those industrial facilities subject to the State General Industrial Storm Water Permit and conducting the required annual storm water monitoring. The City intends to review the industrial storm water data to evaluate potential contributors to water quality problems.
- The City's inspection programs emphasized clean trash storage and disposal areas; power washing, Best Management Practices (BMPs); and maintenance of sewer laterals in addition to the minimum required BMPs.
- The City's comprehensive street sweeping program swept 18,781 miles of streets and collected

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ACTIVITY: PUBLIC WORKS NPDES COMPLIANCE **ACTIVITY NO: 650750**

3,459 cubic yards of materials from City streets. Sediment and silt account for 42% of the total, organic material accounted for 38%, trash accounted for 17% and the "Other" category accounted for 3%.

- Collected 1,654 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins.
- Actively participated in the Management Committee, Outreach Workgroup, Regional Monitoring Workgroup, and WURMP Development Workgroup.
- Continued active participation with San Diego River Watershed Workgroup.
- Continued its efforts to reach out to community members on a wide range of urban runoff and storm water quality topics through over 200,000 copies of articles, brochures, and mailers.
- Conducted over-the-counter assistance and provided personalized residential BMP information to homeowners for small additions and remodels, pools and retaining wall projects.

Goals:

- Expand existing and add new programs as necessary to comply with the significantly increased oversight, inspection, tracking, monitoring and reporting requirements contained in the new municipal permit and updated Jurisdictional Urban Runoff Management Program (JURMP) document.
- Create and adopt new activities and program upgrades to comply with the new Municipal Permit and JURMP document.
- Continue to achieve compliance on construction sites and industrial and commercial facilities.
- Work towards developing a GIS Enterprise System and Storm Water data layers.
- Maintain compliance with all requirements of the current Permit through continued implementation of the JURMP and the WURMP.

Municipal Component

- Conduct training for all City employees.
- Conduct comprehensive inspections at all municipal facilities.
- Implement and document Best Management Practices (BMPs) - street sweeping, storm drain cleaning, sewer and road maintenance.
- Develop City-specific environmental indicators for accurate measurement of Urban Runoff Program effectiveness.
- Establish defined measurements and actions to address watershed requirements, and develop watershed management procedures.
- Conduct a comprehensive review and evaluation of the Storm Water web page. Create and post all outreach documents and information brochures to ensure easy availability to all interested parties. Establish a process to periodically review and update the web page with the latest information and news pertaining to storm water requirements, BMPs and important contact information.
- Develop an inspection program to assure that post-construction BMPs are being maintained.

Industrial and Commercial Component

- Inspect approximately 1,200 businesses and establish prioritization for future oversight.
- Conduct follow-up inspection for facilities not in compliance.
- Educate facility owners and personnel.
- Focus on specific commercial/industrial activities for pollutant discharges and waste collection and handling BMPs.
- Develop and implement procedures (with other jurisdictions) to identify, educate and inspect mobile businesses (auto detailers, power washers, etc).
- Inspect and verify that any existing post-construction BMPs at the sites are being maintained.

ACTIVITY: PUBLIC WORKS NPDES COMPLIANCE **ACTIVITY NO: 650750**

Residential Component

- Expand the topics for educational and outreach materials for distribution to the public.
- Expand efforts to provide information brochures on BMPs used for yard care, auto repair, car washing, and pet waste.
- Investigate all storm water or spill complaints submitted from the public.
- Identify the actual or potential high priority water quality pollutant sources and develop source specific activities to reduce or eliminate those pollutant sources.
- Implement two short-term and one long-term water quality activity to address the highest priority water quality problems.

Construction Component

- Provide increased oversight on all grading projects to ensure compliance with erosion control plans.
- Provide education and outreach to all developers on new municipal and state requirements.
- Implement and enforce strict sediment and erosion control measures on all grading sites.
- Report and document sites of non-compliance.

Illicit Discharge Detection and Elimination Component

- Conduct dry weather field screening and analytical monitoring.
- Conduct follow-up investigations.

Land Development Review

- Review project development for compliance with SUSMP ordinance and JURMP.
- Coordinate conditions of approval to ensure permit compliance.
- Re-evaluate and develop protocol for the submittal and approval process of projects incorporating storm water requirements.

WURMP Program

- Provide leadership in the San Diego River Watershed.
- Create a mechanism to share costs amongst all the copermittees within the San Diego River Watershed.
- Collaborate with other jurisdictions on watershed-wide education and outreach events.
- Identify the actual or potential high-priority water quality pollutant sources and develop source specific activities to reduce or eliminate those pollutant sources.
- Implement two short-term and one long-term water quality activity to address the highest priority water quality problems.
- Serve as liaisons between the San Diego River Watershed copermittees and the regional board, where appropriate.

Financial Comments:

The $28,722 increase in salaries and benefits is due to increased employee benefit costs including PERS retirement benefits and workers compensation.

The decrease of $234,491 in materials, services and supplies is primarily due to updates to the Watershed Urban Runoff Management, and the Jurisdictional Urban Runoff Management Plans. Additionally, there is a proposed decrease in the amount budgeted for dry weather testing. This testing is required during the summer months. During the 2007/08 fiscal year, two years of dry weather testing was completed. In fiscal year 2008/09 only one year of testing will be completed; therefore, the budget has been reduced.

PUBLIC WORKS - NPDES COMPLIANCE ACTIVITY NO: 650750

EXPENDITURE SUMMARY	2005-2006 ACTUAL	2006-2007 ACTUAL	2007-2008 AMENDED BUDGET	2007-2008 EST. ACTUAL	2008-2009 PROPOSED
SALARIES & BENEFITS	533,487	550,856	724,826	712,696	753,548
MAT'L, SVC & SUPPLIES	183,639	254,876	819,398	738,579	677,636
CAPITAL OUTLAY	6,235	29,953	121,451	-	-
OTHER FINANCING USES	-	-	-	-	-
TOTAL	723,361	835,685	1,665,675	1,451,275	1,431,184

DETAIL OF PERSONNEL SERVICES

JOB CLASSIFICATION	2005-2006 ACTUAL	2006-2007 ACTUAL	2007-2008 ACTUAL	2008-2009 PROPOSED
City Engineer	0.15	0.00	0.00	0.00
Deputy Director of Public Works	0.00	0.55	0.55	0.55
City Traffic Engineer	0.05	0.05	0.00	0.00
Principal Civil Engineer	0.10	0.00	0.00	0.00
Associate Engineer	0.50	1.10	1.20	1.20
Junior Civil Engineer	0.00	1.00	1.00	1.00
Technical Engineering Supervisor	1.05	0.00	0.10	0.00
Supervising Engineering Technician	0.00	0.10	0.00	0.10
Senior Management Analyst	0.15	0.15	0.15	0.15
Management Analyst	0.30	0.30	0.30	0.30
Administrative Secretary	0.00	0.20	0.20	0.20
Secretary	0.00	0.10	0.10	0.10
Senior Engineering Technician	0.35	0.65	0.65	0.65
Engineering Technician	2.00	0.70	0.70	0.50
Code Compliance Officer	0.00	1.00	1.00	1.00
Engineering Aide	1.00	0.00	0.00	0.10
Geographic Information Systems Technician	0.00	1.00	1.00	1.00
Public Works Equipment Operator	1.00	0.00	0.00	0.00
Public Works Maintenance Worker II / Trainee	2.00	2.00	0.00	0.00
Civil Engineering Intern	0.00	0.00	0.50	0.50
TOTAL	8.65	8.90	6.95	7.35

Activity: Public Works NPDES Compliance Activity #: 650750

ACCOUNT / LINE ITEM NUMBER	JUSTIFICATION FOR SUPPLIES AND SERVICES BRIEF STATEMENTS & ESTIMATED AMOUNTS USED IN CALCULATING TOTALS FOR EACH LINE ITEM	FY2007-08 AMOUNT	CHANGE REQUESTED	FY2008-09 REQUEST
8150	**OFFICE SUPPLIES**	**$1,700**	**$3,200**	**$4,900**
	a Toner cartridges for printing of public education and outreach materials	$1,700	$3,200	$4,900
8160	**OPERATING SUPPLIES**	**$8,000**	**$0**	**$8,000**
	a Various supplies needed for Pollution Prevention Days	$8,000	$0	$8,000
8345	**LEGAL SERVICES**	**$3,000**	**$0**	**$3,000**
	a City Attorney's Office charges	$3,000	$0	$3,000
8363	**SYSTEM / COMPUTER ANALYST**	**$40,000**	**-$15,000**	**$25,000**
	a GIS Consultant	$40,000	-$15,000	$25,000
8365	**TEMPORARY SERVICES**	**$50,000**	**$0**	**$50,000**
	a GIS Data Input	$50,000	$0	$50,000
8395	**OTHER/PROFESSIONAL/TECHNICAL SERVICES**	**$555,000**	**-$125,000**	**$430,000**
	a San Diego River Watershed Management and update Watershed Urban Runoff Management Program (recurs every five years)	$50,000	$0	$50,000
	b Industrial Commercial Inspections as required by the new 2007-01 permit and updated JURMP	$200,000	$0	$200,000
	d San Diego Regional Co-permittee Memorandum of Understanding Cost - increase due to combining of line item f and 8560 b and c	$70,000	$0	$70,000
	e Dry Weather Testing and Extended Dry Weather Testing - decrease due to combining of line item g and rebudgeting carry over work from 06/07, and expanded scope due to new permit requirements	$150,000	-$75,000	$75,000
	h As needed on-call engineering services for plan check for SUSMP, Erosion Control Plans and Drainage Studies	$30,000	$0	$30,000
	i Update of Jurisdictional Urban Runoff Management Program (recurs every five years)	$50,000	-$50,000	$0
	j Installation of bacteria treatment structural BMPs to conduct pilot study	$5,000	$0	$5,000
8510	**OVERHEAD REIMBURSEMENT**	**$88,659**	**-$6,953**	**$81,706**
	a Provided by Finance	$88,659	-$6,953	$81,706
8511	**FLEET/EQUIPMENT MAINTENANCE**	**$10,209**	**$1,891**	**$12,100**
	a Provided by Fleet Maintenance	$10,209	$1,891	$12,100
8522	**ADVERTISING**	**$1,000**	**$0**	**$1,000**
	a Advertising of Pollution Prevention Days	$1,000	$0	$1,000
8528	**COMMUNICATIONS**	**$2,000**	**$0**	**$2,000**
	a Telephone and cellular phone service	$2,000	$0	$2,000
8560	**PERMITS & FEES**	**$20,000**	**$0**	**$20,000**
	a State Water Resources Control Board Fee	$20,000	$0	$20,000
8570	**PRINTING & BINDING**	**$11,500**	**-$3,000**	**$8,500**
	a Utility bill inserts for Pollution Prevention Days	$2,200	$0	$2,200
	b Poster and Brochure printing for Pollution Prevention Days	$3,200	-$3,200	$0
	c Outreach (Reprints of various storm water outreach materials)	$2,200	$0	$2,200
	d City Newsletter Printing	$3,900	$200	$4,100

Activity: Public Works NPDES Compliance Activity #: 650750

ACCOUNT / LINE ITEM NUMBER	JUSTIFICATION FOR SUPPLIES AND SERVICES BRIEF STATEMENTS & ESTIMATED AMOUNTS USED IN CALCULATING TOTALS FOR EACH LINE ITEM	FY2007-08 AMOUNT	CHANGE REQUESTED	FY2008-09 REQUEST
8572	**PROMOTIONS**	**$10,000**	**$0**	**$10,000**
	a Promotional items for education and outreach efforts including Pollution Prevention Days	$10,000	$0	$10,000
8586	**SOFTWARE AGREEMENTS**	**$14,830**	**$3,100**	**$17,930**
	a Business License Database	$720	$0	$720
	b Miscellaneous Software Agreements	$2,300	$0	$2,300
	c ESRI Maintenance Agreement	$6,000	$3,000	$9,000
	d Permitting Software Maintenance Agreement	$3,000	$0	$3,000
	e Share of Community Plus Licenses	$2,810	$100	$2,910
8594	**TRAINING, MEETINGS, & SCHOOLS**	**$3,500**	**$0**	**$3,500**
	a Training for Division personnel	$3,500	$0	$3,500
	TOTAL MATERIALS, SUPPLIES, & SERVICES	**$819,398**	**-$141,762**	**$677,636**

FY 2008-2009 ANNUAL BUDGET
DEPARTMENT EXPENDITURE WORKSHEET

Acct #	Account Title	FY05-06 Actual	FY06-07 Actual	FY07-08 Budget	FY07-08 Estimated	FY08-09 Proposed
650750						WASTEWATER - NPDES
7110	SALARIES	361,810	382,366	490,576	472,582	493,514
7120	OVERTIME	30	83	250	408	250
7130	VACATION/SICK CONVERSIONS	8,012	4,866	2,117	5,601	6,000
7140	FURLOUGH	-	-	-	-	-
7170	STIPEND	-	-	6,500	6,500	-
7310	PERS (EMPLOYER)	107,269	109,674	147,572	145,705	156,722
7312	POST RETIREMENT BENEFITS	-	-	-	9,695	10,470
7315	MEDICARE TAX	4,432	4,753	7,113	6,204	7,156
7320	SOCIAL SECURITY TAX	-	-	-	-	-
7325	CAFETERIA	33,819	40,195	56,295	52,752	57,540
7330	COMPENSATED ABSENCES	(5,594)	86	-	-	-
7335	WORKERS COMPENSATION	20,984	6,051	10,019	9,468	17,569
7340	LIFE INSURANCE	1,233	1,196	1,429	1,636	1,858
7345	LTD INSURANCE	1,118	1,194	2,214	1,609	1,850
7350	STD INSURANCE	372	393	741	536	619
7360	UNIFORM ALLOWANCE	-	-	-	-	-
TOTAL	SALARY & BENEFITS	533,487	550,856	724,826	712,696	753,548
8150	OFFICE SUPPLIES	699	2,216	1,700	3,000	4,900
8160	OPERATING SUPPLIES	4,400	2,568	8,000	1,000	8,000
8345	LEGAL SERVICES	-	-	3,000	-	3,000
8363	SYSTEM / COMPUTER ANALYST	-	-	40,000	40,000	25,000
8365	TEMPORARY SERVICES	-	-	50,000	50,000	50,000
8395	OTHER PROF/TECH SERVICES	81,339	102,787	555,000	500,000	430,000
8510	OVERHEAD REIMBURSEMENT	61,136	80,723	88,659	88,659	81,706
8511	FLEET/EQUIP REIMBURSEMENT	13,211	14,477	10,209	8,540	12,100
8520	VEHICLE REPLACEMNT CHARGE	-	-	-	-	-
8522	ADVERTISING	1,115	-	1,000	50	1,000
8528	COMMUNICATIONS	1,283	1,772	2,000	2,000	2,000
8560	PERMITS AND FEES	14,868	14,826	20,000	20,000	20,000
8570	PRINTING AND BINDING	3,935	8,704	11,500	7,500	8,500
8572	PROMOTIONS	129	2,746	10,000	-	10,000
8574	RENT EXPENSE	29	-	-	-	-
8586	SOFTWARE AGREEMENTS	623	22,028	14,830	14,830	17,930
8588	SUBSCRIPTIONS	-	-	-	-	-
8594	TRAINING/MEETINGS/SCHOOLS	872	2,029	3,500	3,000	3,500
TOTAL	MAT'L, SVC & SUPPLIES	183,639	254,876	819,398	738,579	677,636
9010	MINOR FURN&EQUIP <$10,000	-	-	-	-	-
9020	MINOR COMPUTERS <$10,000	6,235	12,738	-	-	-
9030	SOFTWARE	-	17,216	98,451	-	-
9035	FURN & EQUIP >$10,000	-	-	23,000	-	-
9040	VEHICLES	-	-	-	-	-
TOTAL	CAPITAL OUTLAY	6,235	29,953	121,451	-	-
	ACTIVITY TOTAL	723,361	835,685	1,665,675	1,451,275	1,431,184

Appendix A.11
(No Content)

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

August 11, 2008
Project No. 200811W

Jaime Campos
City of El Cajon
Department of Public Works
200 East Main Street
El Cajon, California 92020

Re: Sampling and Analyses of Groundwater in the City of El Cajon

Dear Jaime,

Per your request, D-MAX Engineering conducted groundwater sampling at two locations in the City of El Cajon. The purpose of the study was to evaluate the sources of nitrate detected at some of the City's dry weather monitoring sites. .

A brief summary of steps taken during this project is presented below

- Prepared a drilling application and submitted it to the County of San Diego, Department of Environmental Health, and coordinated with Digalert prior to drilling.
- Contracted with Tri-County Drilling Inc. to excavate two boreholes in the vicinity of existing dry weather Site 37, where nitrate exceedances have consistently been detected over the years. One borehole was located on the unpaved portion of South Second Street south of Site 37. The other borehole was drilled inside the School District parking lot at Jamacha Road. The City coordinated with the School District to obtain permission for drilling on its property. See the attached map for details of the location.
- The borings were drilled down past 20 feet. The groundwater table was estimated at nine to 10 feet deep, and hydropunch samples were collected and sent to EnviroMatrix to be analyzed for Nitrate, Total Nitrogen, Fecal and Total Coliform, *Enterococcus*, Total Dissolved Solids (TDS), and Total Phosphorous. The results are summarized below, and laboratory reports are attached.

Analyte	Reporting Limit	Site A	Site B	Units
Nitrate as N	0.05	**17.4**	**16.7**	mg/L
Nitrate/Nitrite as N	0.05	17.4	16.7	mg/L
Total Kjeldahl Nitrogen	0.5	ND	0.5	mg/L
Total Nitrogen	0.5	17.4	17.2	mg/L
Phosphorus, Total	0.05	0.26	0.1	mg/L
Total Dissolved Solids	20	1,200	1,590	mg/L
Total Coliforms	2	2	230	MPN/100 mL
Fecal Coliforms	2	ND	ND	MPN/100 mL
Enterococcus	2	ND	ND	MPN/100 mL

Notes
"ND" – Not detected at or above the reporting limit
Red, bold text indicates the result is above the Dry Weather Monitoring Program action level.

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

The Dry Weather Monitoring Program action level for nitrate is 10.0 mg/L. At both sites the results exceeded this action level, and the height of the groundwater was high enough that it could influence the storm drain system. Previous investigations by the City have found seepage into the storm drain pipes in these areas as well; that seepage was found to have high levels of nitrate as well. Additionally, previous Dry Weather Monitoring Program upstream investigations have found that the storm drain system upstream of the area in which seepage has been noted either is dry or has water with levels of nitrate well below the action level. These findings indicate that the main source of the nitrate exceedances at dry weather Site 37 is infiltration of groundwater with high levels of nitrate.

Sincerely,
D-MAX Engineering, Inc.

Arsalan Dadkhah

Arsalan Dadkhah Ph.D., P.E.
Principal

Vicinity Map (Detail Area Shown in Red Box)

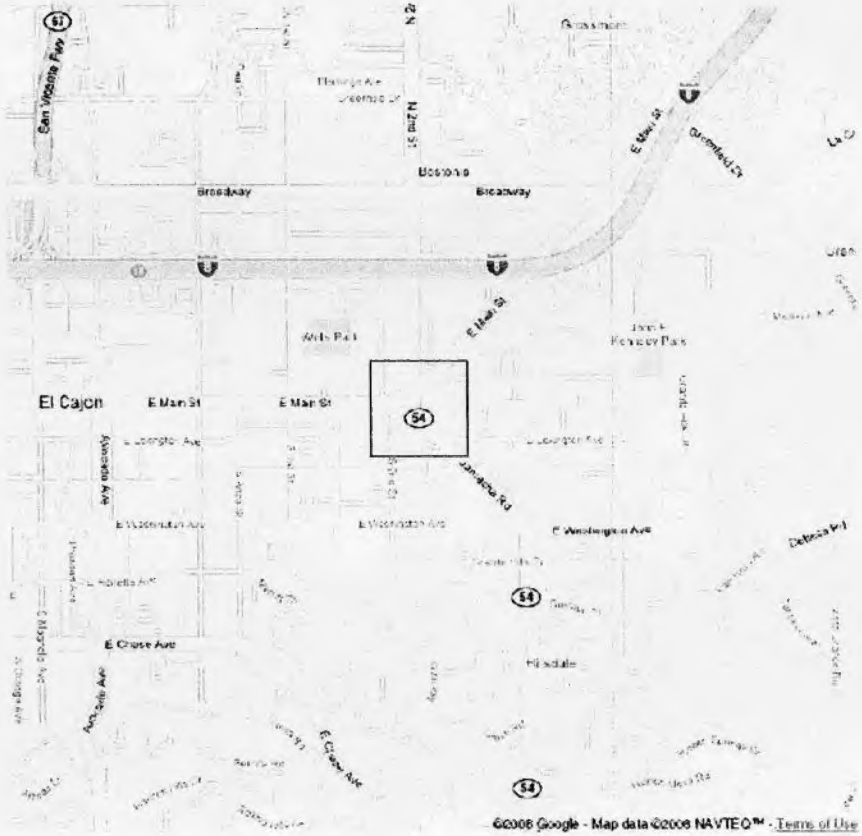

EnviroMatrix Analytical, Inc.

01 August 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807471

Project Name: El Cajon Ground Water Sampling

Enclosed are the results of analyses for samples received by the laboratory on 07/25/08 13:13. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Ground Water Sampling

EMA Log #: 0807471

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site A	0807471-01	Water	07/25/08 10:00	07/25/08 13:13

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Ground Water Sampling

EMA Log #: 0807471

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site A (0807471-01) Water	**Sampled: 07/25/08 10:00**	**Received: 07/25/08 13:13**							
Nitrate as N	**17.4**	5.00	mg/l	100	8072903	07/29/08	07/29/08	SM4500 NO3 E	W-02
Nitrate/Nitrite as N	**17.4**	5.00	"	"	"	"	"	"	
Total Kjeldahl Nitrogen	ND	0.5	"	1	8073002	07/30/08	07/30/08	SM4500 N C	
Total Nitrogen	**17.4**	0.5	"	"	8073017	07/30/08	07/30/08	Calculation	
Phosphorus, Total	**0.26**	0.05	"	"	8072907	07/29/08	07/29/08	SM4500 P B, E	
Total Dissolved Solids	**1200**	20	"	"	8072821	07/25/08	07/28/08	SM2540 C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Ground Water Sampling

EMA Log #: 0807471

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site A (0807471-01) Water Sampled: 07/25/08 10:00 Received: 07/25/08 13:13									
Total Coliforms	**2**	2	MPN/100 ml	1	8072607	07/25/08	07/29/08	SM 9221 B, E	
Fecal Coliforms	ND	2	"	"	"	"	07/28/08	"	
Enterococcus	ND	2	"	"	8072608	"	07/28/08	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Ground Water Sampling

EMA Log #: 0807471

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8072821										
Duplicate (8072821-DUP1)		**Source: 0807446-01**		Prepared: 07/25/08		Analyzed: 07/28/08				
Total Dissolved Solids	ND	20	mg/l		2				20	
Reference (8072821-SRM1)				Prepared: 07/25/08		Analyzed: 07/28/08				
Total Dissolved Solids	290	20	mg/l	315		92	7.62-112.3			
Batch 8072903										
Blank (8072903-BLK1)				Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	ND	0.05	mg/l							
Nitrate as N	ND	0.05	"							
LCS (8072903-BS1)				Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	0.56	0.05	mg/l	0.500		113	80-120			
Nitrate as N	0.56	0.05	"	0.500		113	80-120			
LCS Dup (8072903-BSD1)				Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	0.53	0.05	mg/l	0.500		107	80-120	5	20	
Nitrate as N	0.53	0.05	"	0.500		107	80-120	5	20	
Duplicate (8072903-DUP1)		**Source: 0807514-01**		Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	ND	0.05	mg/l		ND				20	
Nitrate as N	ND	0.05	"		ND				20	
Matrix Spike (8072903-MS1)		**Source: 0807514-01**		Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	0.48	0.05	mg/l	0.500	ND	95	80-120			
Nitrate as N	0.48	0.05	"	0.500	ND	95	80-120			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Ground Water Sampling

EMA Log #: 0807471

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8072903										
Matrix Spike Dup (8072903-MSD1)		**Source: 0807514-01**		Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	0.52	0.05	mg/l	0.500	ND	104	80-120	9	20	
Nitrate as N	0.52	0.05	"	0.500	ND	104	80-120	9	20	
Reference (8072903-SRM1)				Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	0.71	0.05	mg/l	0.688		103	8.81-109.0			
Nitrate as N	0.71	0.05	"	0.688		103	90.12-107.7			
Batch 8072907										
Blank (8072907-BLK1)				Prepared & Analyzed: 07/29/08						
Phosphorus, Total	ND	0.05	mg/l							
LCS (8072907-BS1)				Prepared & Analyzed: 07/29/08						
Phosphorus, Total	0.49	0.05	mg/l	0.500		97	80-120			
LCS Dup (8072907-BSD1)				Prepared & Analyzed: 07/29/08						
Phosphorus, Total	0.49	0.05	mg/l	0.500		98	80-120	1	20	
Duplicate (8072907-DUP1)		**Source: 0807506-01**		Prepared & Analyzed: 07/29/08						
Phosphorus, Total	0.16	0.05	mg/l		0.15			7	20	
Matrix Spike (8072907-MS1)		**Source: 0807506-01**		Prepared & Analyzed: 07/29/08						
Phosphorus, Total	0.74	0.05	mg/l	0.500	0.15	120	80-120			
Matrix Spike Dup (8072907-MSD1)		**Source: 0807506-01**		Prepared & Analyzed: 07/29/08						
Phosphorus, Total	0.68	0.05	mg/l	0.500	0.15	106	80-120	9	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Ground Water Sampling

EMA Log #: 0807471

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073002										
Blank (8073002-BLK1)				Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	ND	0.5	mg/l							
LCS (8073002-BS1)				Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	3.7	0.5	mg/l	4.10		90	80-120			
LCS Dup (8073002-BSD1)				Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	3.6	0.5	mg/l	4.10		89	80-120	2	20	
Duplicate (8073002-DUP1)		**Source: 0807471-01**		Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	ND	0.5	mg/l		ND				20	
Matrix Spike (8073002-MS1)		**Source: 0807471-01**		Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	3.5	0.5	mg/l	4.10	ND	85	80-120			
Matrix Spike Dup (8073002-MSD1)		**Source: 0807471-01**		Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	3.6	0.5	mg/l	4.10	ND	87	80-120	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

W-02	The sample for nitrate analysis was preserved with H2SO4 after the nitrite portion of the analysis was completed to extend the holding time for the sample. Nitrate results are corrected for the nitrite contribution per the method.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

JUL 25 '08 15:22

EMA LOG #: 0807471

Client: D-MAX Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Chris McCarthy
Address: 7220 Trade St. Suite 119
San Diego CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email: arsalan@dmaxinc.com
Billing Address: SAME
Project ID: El Cajon Ground Water Sampling ~~200815W Poway Soil Sampling~~
Project #: 200815W-2 PO# SF 7/28

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type
01	Site A	7/25/08 10:00 AM	W	4 P
02				
03				
04				
05				
06				
07				
08				
09				
10				

REQUESTED ANALYSIS

#	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☑TDS	☑Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Dissolved	Coliform, ☑Total (MTF) ☑Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☑MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Nitrogen	~~TDS~~	Total phosphorous				Microbiology Notes	Sample Comments
01										X	X					X	X		X		X				
02																									
03																									
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☑PDF ☐Excel ☐Geotracker EDF ☐Other_____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: ✓Yes No N/A
Containers Properly Preserved: ✓Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: 12°C
COC/Labels Agree: ✓Yes No N/A
Sampled By: ☑Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

	RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature	[signature]	[signature]	7/25/08 1:13 pm
Print	Chris McCarty	NELIDA	
Company	DMAX	EMA	
Signature			
Print			
Company			
Signature			
Print			
Company			

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

12°C w/ ice

EnviroMatrix Analytical, Inc.

04 August 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807488

Project Name: El Cajon Groundwater Sampling
Project Desc./#:200815W-2

Enclosed are the results of analyses for samples received by the laboratory on 07/28/08 08:23. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Groundwater Sampling

EMA Log #: 0807488

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site B	0807488-01	Water	07/28/08 07:30	07/28/08 08:23

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Groundwater Sampling

EMA Log #: 0807488

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site B (0807488-01) Water Sampled: 07/28/08 07:30 Received: 07/28/08 08:23									
Nitrate as N	**16.7**	5.00	mg/l	100	8072903	07/29/08	07/29/08	SM4500 NO3 E	
Nitrate/Nitrite as N	**16.7**	5.00	"	"	"	"	"	"	
Total Kjeldahl Nitrogen	**0.5**	0.5	"	1	8073002	07/30/08	07/30/08	SM4500 N C	
Total Nitrogen	**17.2**	0.5	"	"	8073017	07/30/08	07/30/08	Calculation	
Phosphorus, Total	**0.10**	0.05	"	"	8072907	07/29/08	07/29/08	SM4500 P B, E	
Total Dissolved Solids	**1590**	20	"	"	8073122	07/29/08	07/30/08	SM2540 C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Groundwater Sampling

EMA Log #: 0807488

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site B (0807488-01) Water Sampled: 07/28/08 07:30 Received: 07/28/08 08:23									
Total Coliforms	**230**	20	MPN/100 ml	10	8072920	07/28/08	08/01/08	SM 9221 B, E	
Fecal Coliforms	ND	20	"	"	"	"	07/31/08	"	
Enterococcus	ND	20	"	"	8072921	"	"	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Groundwater Sampling

EMA Log #: 0807488

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8072903										
Blank (8072903-BLK1)				Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	ND	0.05	mg/l							
Nitrate as N	ND	0.05	"							
LCS (8072903-BS1)				Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	0.56	0.05	mg/l	0.500		113	80-120			
Nitrate as N	0.56	0.05	"	0.500		113	80-120			
LCS Dup (8072903-BSD1)				Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	0.53	0.05	mg/l	0.500		107	80-120	5	20	
Nitrate as N	0.53	0.05	"	0.500		107	80-120	5	20	
Duplicate (8072903-DUP1)		**Source: 0807514-01**		Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	ND	0.05	mg/l		ND				20	
Nitrate as N	ND	0.05	"		ND				20	
Matrix Spike (8072903-MS1)		**Source: 0807514-01**		Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	0.48	0.05	mg/l	0.500	ND	95	80-120			
Nitrate as N	0.48	0.05	"	0.500	ND	95	80-120			
Matrix Spike Dup (8072903-MSD1)		**Source: 0807514-01**		Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	0.52	0.05	mg/l	0.500	ND	104	80-120	9	20	
Nitrate as N	0.52	0.05	"	0.500	ND	104	80-120	9	20	
Reference (8072903-SRM1)				Prepared & Analyzed: 07/29/08						
Nitrate/Nitrite as N	0.71	0.05	mg/l	0.688		103	8.81-109.0			
Nitrate as N	0.71	0.05	"	0.688		103	90.12-107.7			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Groundwater Sampling

EMA Log #: 0807488

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8072907										
Blank (8072907-BLK1)				Prepared & Analyzed: 07/29/08						
Phosphorus, Total	ND	0.05	mg/l							
LCS (8072907-BS1)				Prepared & Analyzed: 07/29/08						
Phosphorus, Total	0.49	0.05	mg/l	0.500		97	80-120			
LCS Dup (8072907-BSD1)				Prepared & Analyzed: 07/29/08						
Phosphorus, Total	0.49	0.05	mg/l	0.500		98	80-120	1	20	
Duplicate (8072907-DUP1)		**Source: 0807506-01**		Prepared & Analyzed: 07/29/08						
Phosphorus, Total	0.16	0.05	mg/l		0.15			7	20	
Matrix Spike (8072907-MS1)		**Source: 0807506-01**		Prepared & Analyzed: 07/29/08						
Phosphorus, Total	0.74	0.05	mg/l	0.500	0.15	120	80-120			
Matrix Spike Dup (8072907-MSD1)		**Source: 0807506-01**		Prepared & Analyzed: 07/29/08						
Phosphorus, Total	0.68	0.05	mg/l	0.500	0.15	106	80-120	9	20	
Batch 8073002										
Blank (8073002-BLK1)				Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	ND	0.5	mg/l							
LCS (8073002-BS1)				Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	3.7	0.5	mg/l	4.10		90	80-120			
LCS Dup (8073002-BSD1)				Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	3.6	0.5	mg/l	4.10		89	80-120	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Groundwater Sampling

EMA Log #: 0807488

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073002										
Duplicate (8073002-DUP1)		**Source: 0807471-01**		Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	ND	0.5	mg/l		ND				20	
Matrix Spike (8073002-MS1)		**Source: 0807471-01**		Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	3.5	0.5	mg/l	4.10	ND	85	80-120			
Matrix Spike Dup (8073002-MSD1)		**Source: 0807471-01**		Prepared & Analyzed: 07/30/08						
Total Kjeldahl Nitrogen	3.6	0.5	mg/l	4.10	ND	87	80-120	2	20	
Batch 8073122										
Blank (8073122-BLK1)				Prepared: 07/29/08 Analyzed: 07/30/08						
Total Dissolved Solids	ND	20	mg/l							
Duplicate (8073122-DUP1)		**Source: 0807514-02**		Prepared: 07/29/08 Analyzed: 07/30/08						
Total Dissolved Solids	8830	20	mg/l		8680			2	20	
Reference (8073122-SRM1)				Prepared: 07/29/08 Analyzed: 07/30/08						
Total Dissolved Solids	348	20	mg/l	315		110	7.62-112.3			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering Project Name: El Cajon Groundwater Sampling	**EMA Log #: 0807488**

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.

page____of____

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

EMA LOG #: 0807428

Client: D-MAX Engineering Inc

Attn: Arsalan Dadkhah

Sampler(s): CM

Address: 7220 Trade St Suite 119
San Diego, CA 92121

Phone: (858) 586-6600 Fax: 858-586-6644

Email: arsalan@dmaxinc.com

Billing Address: SAME

Project ID: 2081SW-2 El Cajon Groundwater Sampling

Project #: PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type
01	Site B	7/28/08 7:30	Water	4
02				
03				
04				
05				
06				
07				
08				
09				
10				

REQUESTED ANALYSIS

#	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☑TDS	☑Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Dissolved	Coliform, ☑Total (MTF) ☑Total (MTF) ☐Coliform,T+E.Coli	Enterococcus, ☑MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Nitrogen	Total Phosphorus					Microbiology Notes	Sample Comments
01										X	X					X	X		X	X						
02																										
03																										
04																										
05																										
06																										
07																										
08																										
09																										
10																										

JUL 28 '08 8:30

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)

[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other_____

[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A | Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A | Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A | Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:
PDF only
21°C on Ice

CHAIN OF CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature [signature]	Signature [signature]	7-28-08 8:23
Print Chris McCarty	Print Lavit Lulla	
Company D-MAX Eng. Inc	Company EMA	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

CITY OF EL CAJON
FORESTER CREEK IMPACT STUDY
2008

Submitted to:

City of El Cajon
Department of Public Works
200 E. Main Street
El Cajon, California 91932

Prepared by:

D-MAX Engineering, Inc.
7220 Trade Street, Suite 119
San Diego, CA 92121
Tel: (858) 586-6600
Fax: (858) 586-6644

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

September 25, 2008
Project No. 200832W

Jaime Campos, P.E.
Storm Water Program Manager
City of El Cajon
Department of Public Works
200 E. Main Street
El Cajon, CA 92020

Re: 2008 Forester Creek Impact Study
City of El Cajon, California

Dear Mr. Campos:

Enclosed please find our report for the City of El Cajon 2008 Forester Creek Impact Study. This project, conducted since 2004, is an additional study of the water quality in Forester Creek as it passes through El Cajon. The contents include field screening data, analytical laboratory test results, and analyses of the collected data.

It has been our pleasure working with the City of El Cajon on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering, Inc.

John Quenzer
Project Scientist

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

Forester Creek Impact Study

Forester Creek runs parallel to Interstate 8 as it enters the east side of the City of El Cajon (City). The creek then curves northward after passing SR-67, flowing through the area around Gillespie Field before entering the City of Santee. Eventually, Forester Creek enters the San Diego River just east of the junction of SR-52 and SR-125, within the City of Santee.

The 2006 303(d) list designates Forester Creek as an impaired water body for fecal coliform, pH, total dissolved solids (TDS), low dissolved oxygen, and phosphorus. Bacterial indicators, including fecal coliforms; TDS, low dissolved oxygen, phosphorus, and turbidity have been identified as high priority water quality problems for the entire San Diego River watershed in the most recent Watershed Urban Runoff Management Program (WURMP) document.

The intent of this study was to investigate how water quality in Forester Creek is affected as it flows through the City of El Cajon. In an effort to assess this, one sample was collected from the creek near where it enters the City from the east (upstream) and another sample was taken where the creek exits the City in the north (downstream). Coordinates and site descriptions for both locations are listed in Table 1. In order to prevent duplicate sampling and to minimize the costs of this study, Site 5 from the City's Dry Weather Monitoring Program was used as the downstream sample location. The upstream sampling location has changed over the five years of this project due to the variable nature of the flow coming into the City. When Forester Creek receives no water from outside the city limits, the sampling location may be moved slightly downstream to the nearest location with flowing or ponded water (see Table 4).

Water quality parameters in the upstream and downstream samples can be compared to assess changes in water quality as the creek flows through the City. A direct comparison of upstream and downstream constituent concentrations may be misleading, as the flow is generally much greater at the downstream end. Nearly all of the water in Forester Creek as it exists the City of El Cajon at the downstream site is generated within the City.

The same field and laboratory analyses employed during the standard Dry Weather Monitoring Program in El Cajon were conducted for the upstream and downstream samples. This year, the value for pH increased from 7.5 upstream to 8.7 downstream. While both values are within the acceptable range for pH (6.5 to 9.0), the higher downstream value is likely a result of the wide, shallow flow promoting algal growth in the channel. Typically, pH increases during daylight hours as sunlight stimulates algal photosynthesis, and carbon dioxide is removed from water. Measurements for the ammonia concentration, conductivity, and turbidity were also higher at the downstream end.

The level of Total Dissolved Solids (TDS) was slightly higher at the upstream end, while the level of Total Organic Carbon (TOC) was significantly higher at the downstream site. Oil and grease, diazinon, chlorpyrifos, and dissolved copper, cadmium, lead, and zinc were not detected by the laboratory at either location. Field analytical and laboratory data are summarized in Table 2 and Table 3, respectively.

Historical data for the upstream site is presented in tables 5 and 6, and historical data for the downstream site is presented in tables 7 and 8. The data in these tables have been compared to Dry Weather Monitoring Program action levels and Water Quality Objectives (WQO) where available. The action levels were developed regionally by the Copermittee Dry Weather Monitoring Sub-Workgroup, and the WQO have been compiled from the Basin Plan and a guidance document prepared by the Copermittee Regional Monitoring Workgroup. Note that the field test ammonia, nitrate, surfactants, and phosphate data was collected using test kits,

which have much larger associated error than laboratory tests. The data from the test kits is useful in determining if major exceedances have occurred, but it is of less value in reporting and assessing lower levels of the constituents.

Overall, TDS levels have been consistently high over the years, although lower numbers have been observed recently. Bacteria measurements are fairly variable but have been lower in recent years. Although Forester Creek is 303(d) listed for pH and low dissolved oxygen, no values outside the acceptable ranges for these constituents have been observed in the history of this study.

Table 1 Forester Creek Study Site Locations

Site ID	Location	Description	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
Upstream	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Exxon station at 1699 East Main Street	Concrete Channel	Commercial	Residential	907	32.81185	-116.91795
Downstream*	Adjacent to the Weld Boulevard Trolley Station, southeast of the Marshall Avenue/Cuyamaca Street intersection	Concrete Channel	Commercial	Industrial	907	32.82665	-116.98226

Table 2 Field Analytical Data for Forester Creek Sites

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia (mg/L NH_3-N)	Nitrate (mg/L NO_3-N)	Reactive-Phosphorus (mg/L PO_4-P)	Dissolved Oxygen (mg/L)
Upstream	8/11/08	3	26.0	7.5	1.85	1.77	0.25	0.1	8.68	0.07	6.74
Downstream*	8/11/08	234	32.0	8.7	5.57	2.80	0.25	0.3	2.12	0.03	9.64

Note: * "Downstream" is the same location as Dry Weather Monitoring Program Site 5. Because the same sampling event was used both for this study and the Dry Weather Monitoring Program, the attached data sheets and lab reports are labeled "Site 5", not "Downstream".

Table 3 Laboratory Data for Forester Creek Sites

Site	Date	Oil & Grease (mg/L)	Total Hardness (mg/L$CaCO_3$)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Diazinon	Chlorpyrifos	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	8/11/08	nd	420	nd	nd	nd	nd	nd	nd	1,300	1,300	1,300	1,670	11.9
Downstream*	8/11/08	nd	480	nd	nd	nd	nd	nd	nd	5,000	1,300	40	1,120	45.5

nd = not detected

Note: * "Downstream" is the same location as Dry Weather Monitoring Program Site 5. Because the same sampling event was used both for this study and the Dry Weather Monitoring Program, the attached data sheets and lab reports are labeled "Site 5", not "Downstream".

Table 4 Forester Creek Upstream Site Yearly Locations

Year	Upstream Sampling Location
2008	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Exxon station at 1699 East Main Stree
2007	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Exxon station at 1699 East Main Street
2006	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Exxon station at 1699 East Main Street
2005	Fourth Street, north of Rancho Cajon Place, east side of the street
2004	Forester Creek at East Main Street and Oakdale Avenue

Table 5 Upstream Site Field Analytical Data From 2004-2008

Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia N (mg/L)	Nitrate N (mg/L)	Ortho-phosphate P (mg/L)	Dissolved Oxygen (mg/L)
6/24/2004	26.5	22.5	8.4	8.28	1.72	0.13	0.1	1.3	nd	nt
6/9/2005	2	18.8	8.4	80	1.35	0.25	0.2	8.75	0.26	8.94
6/13/2006	3	27.9	8.0	1.85	1.66	0.25	0.4	6.25	0.03	8.33
8/2/2007	2	26.7	7.6	1.28	1.61	0.38	0.1	8.14	0.07	7.66
8/11/2008	3	26.0	7.5	1.85	1.77	0.25	0.1	8.68	0.07	6.74
Maximum	26.5	27.9	8.4	80	1.77	0.38	0.4	8.75	0.26	8.94
Minimum	2	18.8	7.5	1.28	1.35	0.13	0.1	1.3	nd	6.74
Average	7.3	24.4	8.0	18.7	1.62	0.25	0.2	6.62	0.11	7.92
Median	3	26.0	8.0	1.85	1.66	0.25	0.1	8.14	0.07	8.00
Ambient WQO	*	(narrative)	6.5 - 9.0	20	**	0.5	EPA Freshwater CMC ***	****	****	5.0
% Exceedance *(WQO)*	*	0	0	20	**	0	0	****	****	0
Dry Weather Action Level	*	BPJ	6.5 - 9.0	BPJ	BPJ	1.0	1.0	10	2	*
% Exceedance *(Dry Weather Action Level)*	*	0	0	20	0	0	0	0	0	*

nd = not detected; nt = not tested; EPA = Environmental Protection Agency; BPJ = Best Professional Judgment

Notes: * No established limit

** There is no clear WQO in the Basin Plan, but a comparison is not necessary since TDS has been measured directly. See the laboratory data tables for TDS results.

*** The criterion maximum concentration (salmonids absent), which varies based on pH, has been used because it applies to a one-hour maximum, and the ammonia level for this study was measured based on an instantaneous grab sample. See http://www.epa.gov/waterscience/criteria/ammonia.

**** Regional guidance suggests using the EPA's nutrient endpoint tool to determine the WQO. This tool requires more data than what has been collected within the scope of this study.

Table 6 Upstream Site Laboratory Data From 2004-2008

Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
6/24/2004	nd	5	409	nd	nd	nd	nd	240,000	2,100	500	1,020	10.4
6/9/2005	nd	nd	960	nd	nd	nd	nd	900,000	16,000	24,000	1,810	86.1
6/13/2006	nd	nd	48	nd	nd	nd	nd	300,000	3,000	8,000	1,090	11.4
8/2/2007	nd	nd	579	nd	nd	nd	nd	2,200	500	270	1,150	5.2
8/11/2008	nt	nd	420	nd	nd	nd	nd	1,300	1,300	1,300	1,670	11.9
Maximum	nd	5	960	nd	nd	nd	nd	900,000	16,000	24,000	1,810	86.1
Minimum	nd	nd	48	nd	nd	nd	nd	1,300	500	270	1,020	5.2
Average	*	*	483	*	*	*	*	288,700	4,580	6,814	1,348	25.0
Median	*	*	420	*	*	*	*	240,000	2,100	1,300	1,150	11.7
WQO	0.5	10	**	CTR CCC	CTR CCC	CTR CCC	CTR CCC	**	400	151	1,500***	**
% Exceedance *(WQO)*	0	0	**	0	0	0	0	**	100	100	40	**
Dry Weather Action Level	1.0	15	**	CTR CMC	CTR CMC	CTR CMC	CTR CMC	50,000	20,000	10,000	**	**
% Exceedance *(Dry Weather Action Level)*	0	0	**	0	0	0	0	60	0	20	**	**

nd = not detected; nt = not tested
CTR = California Toxics Rule, see http://www.epa.gov/ost/standards/ctr/toxic.pdf
CCC =Criterion Continuous Concentration
CMC = Criterion Maximum Concentration
Notes: * Statistical calculation not performed
** No established limit
*** The Basin Plan does not list a TDS WQO for hydrologic subarea (HAS) 907.13. This value is taken from HAS 907.12, the closest HSA to 907.13.

Table 7 Downstream Site Field Analytical Data From 2002-2008

Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia N (mg/L)	Nitrate N (mg/L)	Ortho-phosphate P (mg/L)	Dissolved Oxygen (mg/L)
8/22/2002	168	32	8.8	15.13	2.55	0.37	0.3	0.1	0.03	nt
8/14/2003	299	29	8.6	6.36	2.7	0.13	0.2	2	nd	11.1
6/24/2004	204	30	8.7	19.75	2.73	0.25	0.3	2.5	nd	nt
6/28/2004	244	20.6	8.3	4.74	2.32	0.38	0.3	1.25	0.03	7.51
6/9/2005	412	25.5	8.6	3.43	1.24	0.5	0.1	6.25	0.03	12.74
6/13/2006	421	27.9	8.7	2.06	2.58	0.25	0.8	5	0.03	10.66
7/3/2007	281	27.8	8.3	9.91	2.35	0.5	0.3	1.92	0.07	10.4
8/11/2008	234	32.0	8.7	5.57	2.80	0.25	0.3	2.12	0.03	9.64
Maximum	421	32.0	8.8	19.75	2.80	0.50	0.8	6.25	0.07	12.74
Minimum	168	20.6	8.3	2.06	1.24	0.13	0.1	0.1	nd	7.51
Average	283	28.1	8.6	8.37	2.41	0.33	0.3	2.64	0.04	10.34
Median	263	28.5	8.7	5.97	2.57	0.31	0.3	2.06	0.03	10.53
Ambient WQO		(narrative)	6.5 - 9.0	20	**	0.5	EPA Freshwater CMC ***	***	***	5.0
% Exceedance *(WQO)*		0	0	0	**	25	0	***	***	0
Dry Weather Action Level		BPJ	6.5 - 9.0	BPJ	BPJ	1.0	1.0	10	2	*
% Exceedance *(Dry Weather Action Level)*		0	0	0	0	0	0	0	0	*

nd = not detected; nt = not tested; EPA = Environmental Protection Agency; BPJ = Best Professional Judgment

Notes: * No established limit

** There is no clear WQO in the Basin Plan, but a comparison is not necessary since TDS has been measured directly. See the laboratory data tables for TDS results.

*** The criterion maximum concentration (salmonids absent), which varies based on pH, has been used because it applies to a one-hour maximum, and the ammonia level for this study was measured based on an instantaneous grab sample. See http://www.epa.gov/waterscience/criteria/ammonia.

**** Regional guidance suggests using the EPA's nutrient endpoint tool to determine the WQO. This tool requires more data than what has been collected within the scope of this study.

Table 8 Downstream Site Laboratory Data From 2002-2008

Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
8/22/2002	nd	nd	549	nd	nd	nd	nd	30,000	17,000	300	nt	nt
8/14/2003	nd	nd	624	nd	0.01	nd	nd	8,000	2,300	800	1,490	10.6
6/24/2004	nd	4	536	nd	nd	nd	nd	35,000	1,100	20	1,590	16.3
6/28/2004	nd	nd	699	nd	nd	nd	nd	130,000	800	340	1,900	10.9
6/9/2005	nd	nd	810	nd	nd	nd	nd	30,000	1,300	5,000	1,700	53.4
6/13/2006	nd	nd	60	nd	nd	nd	nd	170,000	500	70	1,600	9.52
7/3/2007	nd	nd	649	nd	nd	nd	nd	30,000	5,000	800	1,400	14.1
8/11/2008	nt	nd	480	nd	nd	nd	nd	5,000	1,300	40	1,120	45.5
Maximum	nd	4	810	nd	0.01	nd	nd	170,000	17,000	5,000	1,900	53.4
Minimum	nd	nd	60	nd	nd	nd	nd	5,000	500	20	1,120	9.52
Average	*	*	551	*	*	*	*	54,750	3,663	921	1,543	22.9
Median	*	*	587	*	*	*	*	30,000	1,300	320	1,590	14.1
WQO	0.5	10	**	CTR CCC	CTR CCC	CTR CCC	CTR CCC	**	400	151	1,500***	**
% Exceedance *(WQO)*	0	0	**	0	0	0	0	**	100	63	57	**
Dry Weather Action Level	1.0	15	**	CTR CMC	CTR CMC	CTR CMC	CTR CMC	50,000	20,000	10,000	**	**
% Exceedance *(Dry Weather Action Level)*	0	0	**	0	0	0	0	0	0	0	**	**

nd = not detected; nt = not tested
CTR = California Toxics Rule, see http://www.epa.gov/ost/standards/ctr/toxic.pdf
CCC =Criteria Continuous Concentration
CMC = Criteria Maximum Concentration
Notes: * Statistical calculation not performed
** No established limit
*** The Basin Plan does not list a WQO for hydrologic subarea (HAS) 907.13. This value is taken from HAS 907.12, the closest HSA to 907.13,

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	Forester Creek Upstream		Latitude	32.81185	Watershed	Hydrologic Unit	907.
Location	Greenfield Ave and I-8 West on ramp intersection, behind southeast corner of Exxon station @ 1699 E. Main		Longitude	-116.91795		Hydrologic Area	907.1
			TB Page	1252-B3		Hydrologic Subarea (Optional)	907.13
Date	8/11/08	Time 10:30	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 37, 38

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.0	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	38.4	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	7.5	TURB (NTU)	1.85	NO_3-N (mg/L)	8.68	Ortho-PO_4 -P (mg/L)	0.07
COND (mS/cm)	1.77	MBAS (mg/L)	0.25	Do (mg/L)	6.74		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☒ Receiving Water

Site ID	5 (Forester Creek Downstream)	Latitude	32.82665	Watershed	Hydrologic Unit	907.
Location	Forester Creek Channel adjacent to Weld Blvd. trolley station, southeast of Marshall Ave/Cuyamaca St. intersection @ Northern City limit.	Longitude	-116.98226		Hydrologic Area	907.1
		TB Page	1251-D1		Hydrologic Subarea (Optional)	907.13
Date	8/11/08	Time	11:40	Observer	JP/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other larvae

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 39, 40

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	32.0	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	9.4	Ortho-PO_4 (mg/L)	0.1
pH (pH units)	8.7	TURB (NTU)	5.57	NO_3-N (mg/L)	2.12	Ortho-PO_4-P (mg/L)	0.03
COND (mS/cm)	2.8	MBAS (mg/L)	0.25	Do (mg/L)	9.64		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	100	in
Depth	0.75	in
Velocity	10 / 10	ft/sec
Flow	234	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

EnviroMatrix Analytical, Inc.

19 August 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0808179

Project Name: El Cajon Dry Weather
Project Desc./#:200832W-1

Enclosed are the results of analyses for samples received by the laboratory on 08/11/08 13:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0808179

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Forester Cr. Upstream	0808179-01	Water	08/11/08 10:30	08/11/08 13:00
Site 5	0808179-02	Water	08/11/08 11:40	08/11/08 13:00

8246

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0808179

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0808179-01) Water Sampled: 08/11/08 10:30 Received: 08/11/08 13:00									
Cadmium	ND	0.005	mg/l	1	8081211	08/12/08	08/12/08	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	08/13/08	"	
Copper	ND	0.005	"	"	"	"	08/12/08	"	
Site 5 (0808179-02) Water Sampled: 08/11/08 11:40 Received: 08/11/08 13:00									
Zinc	ND	0.020	mg/l	1	8081211	08/12/08	08/13/08	EPA 6020	
Lead	ND	0.005	"	"	"	"	08/12/08	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

8247

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0808179

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0808179-01) Water Sampled: 08/11/08 10:30 Received: 08/11/08 13:00									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8081215	08/12/08	08/15/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*118 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*83 %*	*60-130*		"	"	"	"	
Site 5 (0808179-02) Water Sampled: 08/11/08 11:40 Received: 08/11/08 13:00									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8081215	08/12/08	08/15/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*115 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*88 %*	*60-130*		"	"	"	"	

8248

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0808179

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0808179-01) Water Sampled: 08/11/08 10:30 Received: 08/11/08 13:00									
Hardness (Total)	**420**	10	mg CaCO3/L	1	8081245	08/12/08	08/13/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	"	8081428	08/15/08	08/15/08	EPA 1664A	
Total Dissolved Solids	**1120**	20	"	"	8081214	08/12/08	08/14/08	SM2540 C	
Total Organic Carbon	**45.5**	2.00	"	2	8081113	08/12/08	08/12/08	SM5310B	
Site 5 (0808179-02) Water Sampled: 08/11/08 11:40 Received: 08/11/08 13:00									
Hardness (Total)	**480**	10	mg CaCO3/L	1	8081245	08/12/08	08/13/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	"	8081428	08/15/08	08/15/08	EPA 1664A	
Total Dissolved Solids	**1670**	20	"	"	8081214	08/12/08	08/14/08	SM2540 C	
Total Organic Carbon	**11.9**	1.00	"	"	8081113	08/12/08	08/12/08	SM5310B	

8249

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0808179

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0808179-01) Water Sampled: 08/11/08 10:30 Received: 08/11/08 13:00									
Total Coliforms	**1300**	20	MPN/100 ml	10	8081231	08/11/08	08/15/08	SM 9221 B, E	
Fecal Coliforms	**1300**	20	"	"	"	"	08/14/08	"	
Enterococcus	**1300**	20	"	"	8081232	"	08/15/08	SM 9230 A, B	
Site 5 (0808179-02) Water Sampled: 08/11/08 11:40 Received: 08/11/08 13:00									
Total Coliforms	**5000**	200	MPN/100 ml	100	8081231	08/11/08	08/15/08	SM 9221 B, E	
Fecal Coliforms	**1300**	20	"	10	"	"	08/14/08	"	
Enterococcus	**40**	20	"	"	8081232	"	08/15/08	SM 9230 A, B	

8250

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0808179

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8081211										
Blank (8081211-BLK1)				Prepared & Analyzed: 08/12/08						
Zinc	ND	0.020	mg/l							
Lead	ND	0.005	"							
Cadmium	ND	0.005	"							
Copper	ND	0.005	"							
LCS (8081211-BS1)				Prepared & Analyzed: 08/12/08						
Cadmium	0.094	0.005	mg/l	0.100		94	75-125			
Copper	0.107	0.005	"	0.100		107	75-125			
Lead	0.102	0.005	"	0.100		102	75-125			
Zinc	0.118	0.020	"	0.100		118	75-125			
LCS Dup (8081211-BSD1)				Prepared & Analyzed: 08/12/08						
Cadmium	0.094	0.005	mg/l	0.100		94	75-125	0.1	20	
Copper	0.106	0.005	"	0.100		106	75-125	1	20	
Lead	0.102	0.005	"	0.100		102	75-125	0.2	20	
Zinc	0.120	0.020	"	0.100		120	75-125	1	20	
Duplicate (8081211-DUP1)		**Source: 0808136-04**		Prepared & Analyzed: 08/12/08						
Cadmium	ND	0.005	mg/l		ND				20	
Zinc	ND	0.020	"		ND				20	
Lead	ND	0.005	"		ND				20	
Copper	ND	0.005	"		ND				20	
Matrix Spike (8081211-MS1)		**Source: 0808136-04**		Prepared & Analyzed: 08/12/08						
Cadmium	0.106	0.005	mg/l	0.100	ND	106	75-125			
Copper	0.106	0.005	"	0.100	ND	106	75-125			
Lead	0.124	0.005	"	0.100	ND	124	75-125			
Zinc	0.113	0.020	"	0.100	ND	113	75-125			

8251

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0808179

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8081211										
Matrix Spike Dup (8081211-MSD1)		**Source: 0808136-04**		Prepared: 08/12/08	Analyzed: 08/13/08					
Copper	0.106	0.005	mg/l	0.100	ND	106	75-125	0.5	20	
Lead	0.126	0.005	"	0.100	ND	126	75-125	1	20	QM-06
Cadmium	0.123	0.005	"	0.100	ND	123	75-125	15	20	
Zinc	0.109	0.020	"	0.100	ND	109	75-125	3	20	

8252

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0808179

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8081215										
Blank (8081215-BLK1)				Prepared: 08/12/08	Analyzed: 08/15/08					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.253*		*"*	*0.250*		*101*	*60-130*			
Surrogate: Tribuytlphosphate	*0.183*		*"*	*0.250*		*73*	*60-130*			
LCS (8081215-BS1)				Prepared: 08/12/08	Analyzed: 08/15/08					
Bolstar	0.40	0.10	ug/l	0.500		80	60-130			
Diazinon	0.38	0.05	"	0.500		76	60-130			
Ethoprop	0.38	0.05	"	0.500		76	60-130			
Mevinphos	0.37	0.25	"	0.500		75	60-130			
Methyl parathion	0.38	0.10	"	0.500		77	60-130			
Phorate	0.38	0.05	"	0.500		77	60-130			
Ronnel	0.42	0.25	"	0.500		84	60-130			
Trichlorinate	0.40	0.05	"	0.500		81	60-130			
Surrogate: Triphenyl phosphate	*0.243*		*"*	*0.250*		*97*	*60-130*			
Surrogate: Tribuytlphosphate	*0.265*		*"*	*0.250*		*106*	*60-130*			
LCS Dup (8081215-BSD1)				Prepared: 08/12/08	Analyzed: 08/15/08					
Bolstar	0.41	0.10	ug/l	0.500		82	60-130	2	30	
Diazinon	0.38	0.05	"	0.500		77	60-130	1	30	
Ethoprop	0.40	0.05	"	0.500		81	60-130	6	30	
Mevinphos	0.40	0.25	"	0.500		81	60-130	8	30	
Methyl parathion	0.39	0.10	"	0.500		77	60-130	1	30	
Phorate	0.39	0.05	"	0.500		78	60-130	2	30	
Ronnel	0.42	0.25	"	0.500		83	60-130	1	30	
Trichlorinate	0.41	0.05	"	0.500		82	60-130	1	30	
Surrogate: Triphenyl phosphate	*0.252*		*"*	*0.250*		*101*	*60-130*			
Surrogate: Tribuytlphosphate	*0.274*		*"*	*0.250*		*110*	*60-130*			

8253

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0808179

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8081113										
Blank (8081113-BLK1)				Prepared & Analyzed: 08/11/08						
Total Organic Carbon	ND	1.00	mg/l							
LCS (8081113-BS1)				Prepared & Analyzed: 08/11/08						
Total Organic Carbon	23.2	1.00	mg/l	25.0		93	80-120			
LCS Dup (8081113-BSD1)				Prepared & Analyzed: 08/11/08						
Total Organic Carbon	26.3	1.00	mg/l	25.0		105	80-120	12	20	
Duplicate (8081113-DUP1)		**Source: 0807548-01**		Prepared & Analyzed: 08/11/08						
Total Organic Carbon	1.11	1.00	mg/l		1.39			23	20	QR-04
Matrix Spike (8081113-MS1)		**Source: 0807548-01**		Prepared & Analyzed: 08/11/08						
Total Organic Carbon	24.3	1.00	mg/l	25.0	1.39	92	80-120			
Matrix Spike Dup (8081113-MSD1)		**Source: 0807548-01**		Prepared & Analyzed: 08/11/08						
Total Organic Carbon	25.9	1.00	mg/l	25.0	1.39	98	80-120	7	20	
Batch 8081214										
Blank (8081214-BLK1)				Prepared: 08/12/08 Analyzed: 08/14/08						
Total Dissolved Solids	ND	20	mg/l							
Duplicate (8081214-DUP1)		**Source: 0808188-01**		Prepared: 08/12/08 Analyzed: 08/14/08						
Total Dissolved Solids	38	20	mg/l		37			3	20	
Reference (8081214-SRM1)				Prepared: 08/12/08 Analyzed: 08/14/08						
Total Dissolved Solids	342	20	mg/l	315		109	7.62-112.3			

8254

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0808179

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8081245										
Blank (8081245-BLK1)				Prepared: 08/12/08	Analyzed: 08/13/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8081245-DUP1)		**Source: 0808179-02**		Prepared: 08/12/08	Analyzed: 08/13/08					
Hardness (Total)	493	10	mg CaCO3/L		480			3	20	
Batch 8081428										
Blank (8081428-BLK1)				Prepared & Analyzed: 08/14/08						
Oil & Grease	ND	5	mg/l							
LCS (8081428-BS1)				Prepared & Analyzed: 08/14/08						
Oil & Grease	31	5	mg/l	40.0		78	75-125			
LCS Dup (8081428-BSD1)				Prepared & Analyzed: 08/14/08						
Oil & Grease	32	5	mg/l	40.0		81	75-125	4	20	
Matrix Spike (8081428-MS1)		**Source: 0808128-02**		Prepared & Analyzed: 08/14/08						
Oil & Grease	37	5	mg/l	40.0	ND	92	0-200			

8255

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
QM-06	Due to noted non-homogeneity of the QC sample matrix, the MS/MSD did not provide reliable results for accuracy and precision. Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

8256

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page____of____

EMA LOG #: 0808174

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr
Address: 7220 Trade Street, Suite 119
San Diego, CA 92129
Phone (858) 586-6600 Fax (858) 586-6644
Email:
Billing Address: Same

Project ID: El Cajon Dry Weather
Project #: 200832W-1 PO#:

AUG 11 '08 13:00

SAMPLE DETAILS / REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 X1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(Organophosphorus Pesticides) 8141 Dia/Chlor	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS XTDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn X Dissolved	Coliform, X Total (MTF) X Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, X MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	TOC					Microbiology Notes: / Sample Comments:
01	Forester Cr. Upstream	8/11/08	10:30	Water	4G/4P	X							X		X					X	X	X		X	X					
02	Site 5	"	11:40	"	3G/4P	X							X		X					X	X	X		X	X					
03																														
04																														
05																														
06																														
07																														
08																														
09																														
10																														

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW) storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day X5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A	Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A	Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: [signature]	8/11/08
Print: Manouchehr Dadkhah	Print: Sean Flores	12:45
Company: D-Max Eng.	Company: EMA Inc.	
Signature: [signature]	Signature: [signature]	8/11/08
Print: Sean Flores	Print: Lucas Lucas	1300
Company: EMA Inc	Company: EMA	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T= 3°C

APPENDIX B

Reports of Illicit Discharges/Complaints

2007-2008

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
1	07/12/07	Commercial	Anything Corvette	259	Marshall Ave	Vehicle washing outside in parking lot with no BMPs in place. No water entered the storm drain.	Advised to cease all vehice washing outside.	Yes	Verbal Warning	Yes
2	07/12/07	Commercial	Vacant	1677	Marshall	Homeless encampment in channel, broken fencing. (Dedication)	Met with the property agent, Jason 840-2131, on site to view concerns. F/U found that the fencing belongs to P/O. Adjacent property is in county	No	Verbal Warning	N/A
3	07/16/07	Commercial	Valvoline Oil Changers	610	Second St N	Large used oil storage container stored outside with no containment.	Advised manager to remove or relocate the container where it is covered and contained.	No	Verbal Warning	
4	07/24/07	Residential		1162	N Cuyamaca St #2	Raw sewage running into the street.	PW crew contanined and cleaned the spill. The property owner was notified to clean the area and repair the system.	Yes	Monetary Citation	Yes
5	07/27/07	Residential		1046	Cajon Greens Dr.	Motor oil leaking from containers at the bed of a truck	Upon arrival at site the leak was contained by using a bucket and absorbent material on the affected area	Yes	Verbal Warning	Yes
6	08/03/07	Residential		888	Salina St	Tree roots clogging the sewer line in front yard. Tree belongs to the City.	Met with the property owner on site. Palm tree in ROW. No Discharge. Clean out is in garage.	No	Verbal Warning	N/A
7	08/06/07	Residential		341	Coachwood	Grading without a permit and no BMPs installed.	City attorney letter mailed. Cited for grading and stormwater violations. Met with P/O this date to take updated photos	No	Verbal Warning	N/A
8	08/09/07	Commercial	Gene Townsend Enterpises	609 & 655	Marshall S.	Drain pipe running off property into the apartment parking lot on Millard	Met with the business owner on site and advied to submit plans for the removal of rain water from the vehicle wash area and the rear of the property	Yes	Verbal Warning	
9	08/09/07	Commercial	Belaire Hotel	638	El Cajon Blvd	Employee using water hose to clean the parking lot. Water discharged to street but did not enter the storm drain	Contacted the motel manager to cease washing. Advised to use a dry method. Hose was removed and manager to educate all tenants.	Yes	Verbal Warning	Yes
10	08/10/07	Residential		638	Raymond St	Pool plaster residue washed into the street and gutter.	Residue found to be dry, left door tag with instructions to clean the street and gutter. Property owner responded and cleaned the gutter and driveway	Yes	Verbal Warning	Yes
11	08/14/07	Residential		1581	Washington	Tenants throwing trash into the storm channel.	Contacted the Apt. manager on site and advised to instruct tenants to cease dumping in channel. PW crew to clean galss and trash. Educational materials issued.	Yes	Verbal Warning	N/A
12	08/14/07	Residential		2171	Madison	Water from neighbor running onto her property	Site inspection found no water, property is in county. Complainant notified	No	Verbal Warning	N/A
13	08/17/07	Commercial	Panda Xpress	131	Broadway	Water from over irrigation running into the street	Contacted the proprty manager and advised oto reset to timer for shorter duration	Yes	Verbal Warning	Yes
14	08/22/07	Municipal		2691	Navajo Rd	Sewage spill at Fletcher Hills Town Plaza running into the street and storm drain	The City contractor responsible for the overflow was contacted and cited. PW crew responded and cleaned the area	Yes	Monetary Citation	Yes
15	08/23/07	Commercial	Wendy's Lot		Washington and Jamacha	Water from over irrigation running into the street	Inspection found no current discharge. Manager notified to adjust irrigation timer	No	Verbal Warning	N/A
16	08/23/07	Construction	One Stop Construction	247	First	Sub-contractor using water ot clean pavement with water entering the street and drain	Contractor advised to cease using water to clean paved areas. Told to use a dry method.	Yes	Monetary Citation	Yes
17	08/24/07	Residential		?	Chatham at Garfield	Concrete residue in the street and gutter	Contacted the contractor to have the street and sidewalk cleaned of all concrete residue	Yes	Verbal Warning	Yes
18	08/27/07	Residential		494	Tyrone St	Large gully in rear yard caused by erosion over time.	Prior encroachment permit issued for work. Rear alope covered in plastic. No significant erosion noted. Rear slope covered in plastic and netting on front bank. No visible signs of sediment in the street	No	Verbal Warning	N/A
19	08/27/07	Residential		1811	Dehesa Rd	Resident complained that the drainage ditch in front of property is filled with debris	Site ispection found that the property is within the County. The complainant was advised.	No	Verbal Warning	N/A

Reports of Illicit Discharges/Complaints

2007-2008

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
20	08/28/07	Commercial	SuperStar RGO	1090	Main St	Business owner powerwashing the canopy with no BMPs in place to prevent water from entering the storm drain system.	The owner was told to cease and use another method to clean or implement proper BMPs to prevent a discharge.	Yes	Verbal Warning	Yes
21	08/31/07	Residential		1600	Meadow	A truck with a concrete pump attached to it is leaking oil on the street.	The truck/ trailer combination was located and found to be leaking oil into a metal pan under the pump. Storm water educational materials were left at the door. A voice mail message was left for the complainant.	Yes	Verbal Warning	N/A
22	08/31/07	Residential		449	S Mollison Ave	Broken sprinkle head shoots water into the street and sidewalk daily.	Site inspection found no evidence of sprinkler break or discharge.	No	Verbal Warning	N/A
23	09/04/07	Residential		2697	Carlow St	Drainage flow into the culvert next to the driveway is cracking and lifting it.	No flow was observed and it was determined that the uplifting of the driveway was most likely caused by roots from a nearby tree.	No	Verbal Warning	N/A
24	09/04/07	Residential		302	Westwind Dr	Water flowing from property onto neighbors and into the street.	Property owner was contacted is in process of repairing irrigation line.	Yes	Verbal Warning	N/A
25	09/06/07	Commercial	Robertson's Redi Mix	295	Cypress Ln	A large container of liquid was dumped in front of the business.	Site inspection found no evidence of a discharge.	No	Verbal Warning	N/A
26	09/12/07	Industrial	Enviroserv	1440	Pioneer	Tan color fluid flowing in lot into the gutter.	Employees contacted and advised to clean the spill.	Yes	Verbal Warning	Yes
27	09/13/07	Commercial	?	544	Jamacha	Unknown chemical liquid flowing into the parking lot from one of the businesses.	Sump pump at rear of building discharges into the parking lot.	Yes	Verbal Warning	N/A
28	09/14/07	Residential		1043	S Sunshine Ave	Retaining wall built with no permit with dirt on sidewalk and in street.	Building dept to handle follow-up. No storm water issues.	No	Verbal Warning	N/A
29	09/14/07	Residential		1504	Luke Ln	Materials from constructed block wall being washed into the street.	No discharge or debris was located.	No	Verbal Warning	N/A
30	09/19/07	Commercial	Taco Bell		Madison and 2nd	Water from broken sprinkler head running into the street and storm drain.	Manager contacted. In process of repairing sprinkler and locking the system to prevent transient tampering.	Yes	Verbal Warning	Yes
31	09/19/07	Commercial	Rubio's Mex Rest.		Magnolia At Wells	Water from broken sprinkler head running into the street and storm drain.	Property management contacted to repair the irrigation and adjust the timing.	Yes	Verbal Warning	Yes
32	09/27/07	Residential		846	S Johnson	Water form broken irrigation pipe flowing into the storm drain.	Pastor of the Christian Fellowship Church contacted. Irrigation shut off. Management company contacted to clean the street of mud.	Yes	Verbal Warning	Yes
33	10/01/07	Residential		?	Pfeifer Ln	Debris from tree trimming left in an area where it could possibly enter the storm drain system.	The contractor was contacted who immediately cleared the street and sidewalk. All debris later removed.	No	Verbal Warning	N/A
34	10/04/07	Residential		800	S Anza	Raw sewage running into the storm drain.	PW staff found no sewage flow or residue in the area. A plumber had responded and also found nothing.	Yes	Verbal Warning	N/A
35	10/09/07	Commercial	Downtown Café	182	E Main St	Accumulation of cigarette butts in alley behind the business.	No stormwater issues; Parks dept will follow-up with cleaning.	No	Verbal Warning	N/A
36	10/16/07	Residential		215	Dorado Ln	Water from sand blasting work leaving the property.	Site inspection found water contained on site. Blasting work forming a cloud that did not leave the property.	No	Verbal Warning	N/A
37	10/11/07	Residential		1166	Dawnridge	Pool water draining off property.	Water infiltrates before entering the street. Water is dechlorinated.	No	Verbal Warning	N/A
38	10/23/07	Commercial	Jim Renner Auto Sales	1281	Greenfield Dr	Used auto parts and fluids dumped into the drainage ditch.	Contacted the business owner and advised to cease dumping and remove all junk parts.	Yes	Written Warning	
39	10/31/07	Commercial	New York Pizza	356	N Magnolia	Vegetable oil being dumped and entering the storm drain.	The business owner was contacted. The spill occurred 2 days prior and was immediately cleaned.	Yes	Verbal Warning	N/A

Reports of Illicit Discharges/Complaints

2007-2008

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
40	11/07/07	Industrial	Decco Castings Inc.	1596	Pioneer Way	12" Pipe from under asphalt discharging liquid	A follow-up investigation was conducted and no discharges or storm water violations were found at the time of the site visit. Kit Kesinger, Quality Project Manager for Decco Castings Inc., on site was contacted on Wednesday 11/07. Mr. Kesinger mentioned that a neighboring facility had initially complained that operations at facility were loud. Walking around the facility only one pipe was identified that discharges roof runoff into Bradley. This pipe accepts drainage from an adjacent facility (asphalt area) that appeared dry. Based on the results of the investigation, no subsequent follow ups are necessary until our next industrial facility inspection facilities scheduled for next	No	Verbal Warning	N/A
41	11/26/07	Commercial	Mossy Nissan	1170	Main	Water discharging from landscaped area next to sidewalk	Upon arrival it was noticed that area around the landscaped area was excavated and saturated with water. Helix Water Dist. Was working at the site trying to identify the source of the water leak	No	Verbal Warning	Yes
42	11/26/07	Residential	(Mobile Business) Voltar Inc.	2462	Nielsen St	Waste water from carpet cleaning business being dumped into the stormdrain	Site inspection found no active discharge. Educational info left at residence. Owner called stating that he would cease all dumping	No	Verbal Warning	N/A
43	11/28/07	Commercial	Park St Business Complex	101	Park St	Over irrigation from broken sprinkler head.	No active discharge noted. Property manager contacted and said they will repair damaged heads, complainant advised of actions	Yes	Verbal Warning	Yes
44	12/05/07	Residential		1510	Orange Ave	Hazardous materials being dumped in the dirt behid a makeshift paint booth	Complaint contacted on 12/5/07 to verify the location of the paint booth.	No	Verbal Warning	N/A
45	12/05/07	Construction	Education Center Annex	750	Main St	Contractor failed to install and maintain required BMPs	Written warning issued to the contractor. Advised to cease tracking sediment and sweep thestreet and sidewalk of all sediment	No	Written Warning	N/A
46	12/05/07	Residential		1204	Cuyamaca	Sewer overfow into the street and storm drain inlet.	PW crew contanined and cleaned the spill in the ROW. The property owner cleaned the other areas and was cited.	Yes	Monetary Citation	Yes
47	12/07/07	Construction		528	Emerald Ave	Lot raded with no BMPs in place to prevent sediment discharge.	Left violation notice on door during site inspection. F/U required 12/12/07 Met contractor on site, told to install construction entrance silt fencing at rear lot	No	Verbal Warning	N/A
48	12/10/07	Residential		2388	Rippey Ct	Significant grading out in the canyon at the rear of property.	Property owner removed native vegetation for a fire break and cut approx. 20ft trerrace into the rear slope. No storm water issues	No	Verbal Warning	N/A
49	12/10/07	Residential		2364	Rippey Ct	Significant grading out in the canyon to the west.	Property owner removed native vegetation and replacing with trees and iceplant. No stormwater issues.	No	Verbal Warning	N/A
50	12/13/07	Residential		510	Pierce St	sHose from under house draining into front yard. Smells like sewage.	PW crew (PJ) inspected the site, contacted the propery owner. The hose is draining foundation water. The complainant was notified of City's action	No	Verbal Warning	N/A
51	12/13/07	Construction	Ballantyne Glen		Ballantyne	Relocation of construction entrance causing significant tracking onto Cedar St., failure to implement BMPslisted on erosion control plan.	Met with the contractor on site, written warning issued with 24hrs to comply with erosion control plan. New construction entrance moved to Cedar.	Yes	Written Warning	N/A
52	12/14/07	Commercial	Toyota of El Cajon		El Cajon Blvd	Washing vehicles on lot with no BMPs I place to prevent a discharge of waste water	The manager was contacted and advised to immediately cease all washing until proper BMPs are in place.	Yes	Verbal Warning	Yes
53	12/14/07	Residential		1060	Aster	Discharge of raw sewage to the storm water conveyance system	Contacted the tenant to clean the property and contacted the proptery manager	Yes	Monetary Citation	Yes
54	12/14/07	Residential		1496	Lemon Ave	Discharge of sewage into the storm drain system.	Contacted the property owners son who turned of the water. The PW crew cleaned and vac. The street and sidewalk	Yes	Monetary Citation	Yes

Reports of Illicit Discharges/Complaints

2007-2008

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
55	12/18/07	Residential		181	Rea Ave	Using water and soap to clean the rear parking lot	Maintenance employee contacted and told to cease and use dry method	Yes	Written Warning	Yes
56	12/19/07	Construction	ECO Construction	855	Portland	Power washing parking lot, and unprotected dirt stock piles on lot.	Contacted the contractor on sit. Told to cease using power washing equipment and use dry method to clean the lot. Verbal warning issued	Yes	Verbal Warning	Yes
57	12/20/07	Construction		1338	Naranca Ave	Failure to comply with ECP, no BMPs installed, no response in a timely manner	Property owner/ contractor told to immediately install BMPs maintain them.	No	Monetary Citation	N/A
58	12/21/07	Commercial	Denny's Restaurant	665	Mollison	Large amount of waste grease clogging the sewer lateral.	Manager contacted and advised of the condition. There is no grease trap installed on site. Exterior of building is clean. Told hhim to have the general manager contact me.	No	Verbal Warning	N/A
59	01/02/08	Residential		1107	Washington	Sewer overfow into the street and storm drain inlet	Paved areas washed and vac. from the street by PW crew.	Yes	Verbal Warning	Yes
60	01/02/08	Residential		1014	Taft St	Discharging pool backwash into the street	Pool water discharge is exempt.	No	Verbal Warning	N/A
61	01/07/08	Residential			Fanita and Weld	Yellow substance flowing in concrete channel.	Moderate flow in channel from recent rainfall is clear. No yellow discharge noted. Juan Cobas, Santee eng. Insp. on site	No	Verbal Warning	N/A
62	01/04/08	Construction		360	First St	Regional Water Board checking condition of condo conv. With conserns re: No BMPs on site and debris/dirt piles	Met with the contractor on site. He will bring site into compliance. Some gravel bage at rear to reduce runn-off.	No	Verbal Warning	N/A
63	01/04/08	Construction		642	Mollison	RWQCB found debris piles, uncovered bin, dirt in lot and two unprotected storm drain inlets	Property owner contacted and said he would have corrections made by the end of the day.	No	Verbal Warning	N/A
64	01/04/08	Construction	BK Mechanical Systems	1719	Main St	PW staff saw contracor using water to clean sediment from paved areas	Contacted the contractor to ld to cease and use a dry method to clean or install proper BMPs to prevent sediment discharge	Yes	Verbal Warning	Yes
65	01/08/08	Construction		1338	Naranca St	Lot for new development built up altering drainage and causing flooding in complainants rear yard.	Building plans are active. Current enforcement action in progress for BMPs implementation. Complainant contacted 1/10/08	No	Monetary Citation	N/A
66	01/09/08	Construction	Natural Environmental Landscaping	1185	Marline Ave	Landscping contractor observed power washing the paved areas of this dev. proj.; discharge did not enter a drain inlet	The contractor was told to cease using water to clean without BMPs. Suggested to use dry method.	Yes	Verbal Warning	Yes
67	01/11/08	Commercial		1319	Broadway	Ground water being pumped onto the neighboring property (Post Office)	Met with the business owner and found pumps to remove pooled ground water from recent storm.	No	Verbal Warning	N/A
68	01/14/08	Residential		2400	Nielsen St	Vehicle parked in the visitor's parking stall leaking oil that is flowing to the street	PW crew placed absorbent material on spill. None entered the street. Complainant was contacted and advised of the city's actions	No	Verbal Warning	N/A
69	01/14/08	Residential		760	Carlow Ct	Water from Katherine st collecting behind her house and pooling. Requests that a storm drain be installed	Advised the complainant that she could install a pump or other drain system. This is not a stormwater issue.	No	Verbal Warning	N/A
70	01/16/08	Construction		1688	Main St	Co. Health Insp. Stated contractor in process of cleaning out building and using high pressure water to clean asbestos from interior with no BMPs at drain inlets. Minimal discharge to the stormwater	Contractor instructed to cease using water to clean areas and to install fabric filters at all lot drains. Nno current discharge was observed.	Yes	Verbal Warning	N/A
71	01/18/08	Residential		1640	Dumar	Resident is using water to clean the trash and debris from curb in front of house	No violations noted 1-22-08. Educational materials left at door.Complainant advised. Educational materials left at door	No	Verbal Warning	N/A

Reports of Illicit Discharges/Complaints

2007-2008

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
72	01/22/08	Residential		1641	Don Carol	Concrete poured in curb for RV approach blocking srormwate flow.	Concrete poured at curb to allow for off street RV parking. Case referred to PW street crew.	Yes	Verbal Warning	N/A
73	01/25/08	Residential		1212	Cuyamaca	Sewage overflow in fornt of complex. Minor amount entered to curb line. None entered the drain inlet.	PW crew cleaned the area and removed discharge. Property owner was present and immediately took action to prevent further discharges.	Yes	Verbal Warning	Yes
74	01/28/08	Residential		406	Horizon Ln	Site inspection per City manager office. Vegetation found growing in concrete swale at rear of property. No stormwater violations observed.	No action taken. City managers office notified of findings.	No	Verbal Warning	N/A
75	01/30/08	Residential		744	Chase Ave	Broken sewer cap in driveway allowing discharge of sewage into the stormwater conveyance system crossing the sidewalk and entering the curb. None entered drain inlet.	PW crew washed and vac. Area. A plumber was present to fix the damaged cap. The propery owner was also contacted.	Yes	Verbal Warning	Yes
76	01/30/08	Residential		1448	Marline Ave	Hose draining water from the back to front yard. Water crosses the sidewalk and into the street causing algae. Complainant	Appears that a hose located in the right front yard used to drain foundation from recent heavy rains. 2/5/08 reinspected due to continued complaints regarding the discharge of soapy water from the pipe. Instructed the P/O	No	Verbal Warning	N/A
77	01/31/08	Commercial		2700	Navajo Rd	Contractor using a power washer to clean the front building surface. No BMPS	The contractor was contacted and advised to install BMPs to prevent a discharge of the wash water. All work was halted	Yes	Verbal Warning	N/A
78	02/14/08	Commercial	Villa Embasadora Inn	1556	Main St.	Employee of business dumping wash bucket at edge of driveway allowing the water to enter the street	Contacted the assistant manager and advised her to cease all dumping I the driveway and instead dump into the planters.	Yes	Verbal Warning	Yes
79	02/21/08	Residential		113	Stephanie Ln	Draining green pool water into the street.	Contacted to tenant. Pool near completely drained. No algae residue at curb. Advised to drain remaining into vegetated area on property. Storm water educational materials were issued. The complainant was advised of	No	Verbal Warning	N/A
80	02/20/08	Commercial	Mustang Auto	727	El Cajon Blvd	Storm water run off through rear lot has heavy oil sheen.	New owner on site. Gravel filled trench ar rear driveway catches first rain. Nno evidence of significant discharge	No	Verbal Warning	N/A
81	02/27/08	Construction	Suncoast Homes	1341	Main St	Failure to maintain BMPs and sediment tracking	Contacted the business owner and advised to cease sediment tracking and improve all BMPs	Yes	Monetary Citation	Yes
82	03/04/08	Commercial	Precision Powertrain	1866	Frienship Dr # F	Employees using water to slean engine blocks at rear lot with water entering the street	Contacted the manager, found no current discharge, advised to cease all washing. Educational materials issued	No	Verbal Warning	N/A
83	03/05/08	Residential		637	Blackthorne Ave	Foamy substance flowing in front of neighbors house gutter and driveway	Discharge found to be ground water percolating through pavement.	No	Verbal Warning	N/A
84	03/10/08	Residential		826	Medford	Sewer overoverflow from root intrusion during plumbing work. Property owner contacted the City. Flow did not enter a drain inlet.	PW crew responded, prevented discharge to storm drain inlet and cleaned	Yes	Verbal Warning	Yes
85	03/10/08	Construction	Jacoba Sunshine LLC	921	Sunshine	Motorhome on site discharging to open sewer, No BMPs in place at this Condo Conv., evidence of recent discharge of sediment laden water in driveway.	The contractor, Wilson Pulido was contacted and agreed to meet on site.	Yes	Verbal Warning	Yes

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	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
86	03/11/08	Residential		1738	Via del Valle	Soil erosion in driveway flowing onto roadway surface	This property is within the County of SanDiego	No	Verbal Warning	N/A
87	03/12/08	Residential		615	Galena St	Residents throwing cigarette butts in the gutter.	Left a door tag and contacted the complainant. There was no evidence of cigarette butts in the street or curb in front of the complainants residence	No	Verbal Warning	N/A
88	03/12/08	Commercial	Army Navy Surplus	799	El Cajon Blvd	A sewer overflow in the rear lot was flowing across the alley. The discharge was green in color.	Contacted the complainant and the store manager. There was no discharge when toilet flushed. Discharge determined to be percolating ground water.	No	Verbal Warning	N/A
89	03/17/08	Residential		1566	Berenda Ct	Pool construction co. had no BMPs in place for concrete work being done in the street	Contacted the contractor and advised to implement the necessary BMPs to prevent a discharge to the storm water conveyance system	Yes	Verbal Warning	Yes
90	03/21/08	Residential		975	Second St	Soil erosion and open sewer cap in front yard	Site inspection found non-vegetated front yard(preexisting) and no open sewer	No	Verbal Warning	N/A
91	03/24/08	Commercial	KFC	555	Second St	Sewage spill entered the storm drain system.	Contated the store manager and advised conduct regular maintenance of the sewer system. A citation was issued	Yes	Monetary Citation	Yes
92	03/24/08	Commercial	Wholesale Auto	110	El Cajon Blvd	Power washing vehicles on sales lot with water entering the street and drain inlet in front of the business	Contacted the business owner and advised him to improve the asphalt berm along the south edge of the lot or to relocate the wash area.	Yes	Written Warning	Yes
93	03/25/08	commercial	Triumph Fabrications	203	Johnson Ave	Rain wate is collected in a blind sump in the pretreatment area and pumped to the parking lot	The sump drain inlet is protected with fiber filter and gravel bags. Industrial insp. Was on 3-6-08	No	Verbal Warning	N/A
94	03/27/08	Commercial	Schlossnagel Racing	1330	Park Ave	Discharge of water into alley from malfunctioning float valve on water storage container at rear of building	Contacted the business owner on site. Discharged repaired and plans to replace the valve. Written warning issued.	Yes	Written Warning	Yes
95	03/13/08	Residential		1921	Powell Dr	Extensive grading in rear yard into the canyon. SW concerns	Site inspection found no significant grading	No	Verbal Warning	N/A
96	03/31/08	Commercial	Food 4 Less	444	Broadway	Sewage overflow from grease trap.	Spill was recovered.	Yes	Verbal Warning	Yes
97	04/01/08	Commercial	Rock Auto Group	464	Main St	Employee allowing vehicle wash water to enter the street and storm drain inlet. High pressure/low volume in use	The business owner was contacted and advised to cease all washing until proper BMPs are installed or wash area relocated to enterior lot.	Yes	Verbal Warning	Yes
98	04/02/08	Residential		555	Trenton St	Automotive fluids and concrete wash in the gutter in front of residence.	Contacted the property owner and advised to discontinue any future discharges. (via phone) He said the discharge was from a neighbor. Educational material was left at the door	Yes	Verbal Warning	Yes
99	04/03/08	Commercial	Por Favor Restaurant	148	Main St	Discharge of wash water into the alley and sidewalks	A written warning was issued. The ower was advised to maintain BMPs to prevent future discharges	Yes	Written Warning	Yes
100	04/04/08	Residential		725	Wichita	White pipe extending into the concrete storm channel next to property. Odor of urine	Contacted the property owner. Pipe from under concrete walkway drain. Recent discharge from pipe evident. No urine odor noted. Said they will remove the pipe.	No	Verbal Warning	Yes
101	04/08/08	Construction	Caddy Shack (rennovation)	351	Main St	Building renovation, asphalt removed, stock piles, tracking with no BMPs in place	Owner/contractor was contacted on site and told to intall construction entrance and perimeter control.	No	Written Warning	N/A
102	04/08/08	Restaurant	Greek Town Restaurant	345	Main St	Restaurant employees are dumping wash water at the rear of the building	Contacted the business owner and advised to dump wash water into the sewer and store materials inside. Educational materials were issued	Yes	Verbal Warning	Yes
103	04/08/08	Restaurant	Colima's Mexican Food	339	Main St	Restaurant employees are dumping wash water at the rear of the building	Contacted the business owner and told to dump wash water and store all materials inside.	Yes	Verbal Warning	Yes
104	04/10/08	Residential		404	Anza St	Open sewer cap with evidence of recent discharge along N/W wall of rear building	Site inspection found clean out area cleaned.	No	Verbal Warning	Yes

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	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
105	04/11/08	Commercial		799	El Cajon Blvd	Clean out overflow discharged into alley, did not enter stor drain	PW crew responded and recovered the spill, approx. 3 gals	Yes	Verbal Warning	Yes
106	04/14/08	Residential		1686	Granite Hills Dr	Multi vehicle accident causing big rig to crash into residential pool filling it with oil and diesel fuel.	PW crew placed absorbent in gutter. The pool completely contained the fuel spill. Hazmat on site. There was no discharge to the storm water drain during vehicle removal	Yes	Verbal Warning	N/A
107	04/15/08	Residential		2037	Hacienda Circ	Pool plaster residue washed into the street and gutter. No BMPs in place	Contacted the contractor and advised to cease discharge and clean gutter. Educational materials were issued.	Yes	Verbal Warning	Yes
108	04/17/08	Construction		1905	Marshall Ave	Sediment tracking and general BMP maintenance.	New asphalt surface. Inspector will notify job forman to sweep all paved areas and conduct maintenance on perimeter BMPs	Yes	Verbal Warning	N/A
109	04/21/08	Construction	Jacoba Heritage LLc	642	Mollison	Failure to maintain required BMPs at condo conversion	Contractor contacted on site and advised to maintain BMPs and dry clean all paved areas	No	Written Warning	N/A
110	04/21/08	Construction	Jacoba Heritage LLc	360	First St	Failure to maintain BMPs at condo conversion	Contractor advised on site to maintain all BMPs, remove all debris piles and sweep regularly	No	Written Warning	N/A
111	04/22/08	Residential		1329	Naranca	Dirt and trash regularly dumped in the street.	Conducted a site inspection and found no evidence of dumping. Storm water educational materials were left at the door	No	Verbal Warning	N/A
112	04/24/08	Commercial	La Fiesta Bar	533	Main St	Employee using water and soap to clean the paved areas in front of the business	Contacted the employee and told to stop using water and use a dry method.	Yes	Verbal Warning	Yes
113	04/24/08	Commercial	Home Town Buffet	390	Main St	Employee using water to clean the trash enclosure and paved areas.	Contacted the store manager and instructed to cease using water to clean and use a dry method.	Yes	Written Warning	Yes
114	04/24/08	Residential		1702	Hacienda Pl	Dog feces being thrown onto rear slope and onto street. Excess number of dogs	Left stormwater educational information at door and referred to zoning enforcement.	No	Verbal Warning	N/A
115	04/25/08	Residential		1468	Lexington	Dirt in the street from and unfinished City roadway job.	The job was found to be a residential curb sidewalk and street improvement. The engineering department is working with three property owners on completion of the work	No	Verbal Warning	N/A
116	04/30/08	Commercial	Hacienda Casa Blanca	700	Johnson	Pipes from the building discharging directly into a storm drain inlet.	The manager was contacted and told to identify and disconnect all pipes discharging to the storm drain inlet. The washing machine has already been removed.	Yes	Verbal Warning	
117	05/01/08	Residential		760	Carlow Ct	Water from pool discharge flowing down hill and pooling on Katherine St.	Site inspection found pooled water on Katherine St below the property. Zoning enforcement found faulty irrigation system and is working with the property owner.	No	Verbal Warning	N/A
118	05/05/08	Construction	Suncoast Homes	1341	Main St	Sediment tracking and general BMP maintenance on Melody Ln side of property	Contacted construction staff and advised to immediately clean all sediment and install proper BMPs.	Yes	Monetary Citation	Yes
119	05/08/08	Residential		646	Sandra Ln	Resident landscaping caused sediment discharge to rear concrete swale	Property owner was and advised to remove sediment from swale and install BMPs or plant the rear slope.	Yes	Verbal Warning	Yes
120	05/08/08	Residential		660	Sandra Ln	Front yard soil bare for relandscaping. No BMPs in place to prevent soil discharge	Propert owner was contacted and advised to install new BMPs or plant the front yard to prevent future sediment discharge	Yes	Verbal Warning	Yes
121	05/08/08	Industrial	Advanced Finishing	1300	Johnson	RWQCB referral concerning the storing of liquids outside with no secondary containment	Contacted the business owner and advised to relocate liquids to covered and protected area.	No	Verbal Warning	N/A
122	05/12/08	Commercial	Wienerschnitzel	1281	Main St	Broken irrigation pipe causing discharge of pollutants into the storm drain inlet located in ther rear alley	Contacted the store manager and advised to repair the broken irrigation pipe.	Yes	Verbal Warning	Yes

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	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
123	05/14/08	Commercial	Home Depot (old location)	965	Arnele Ave.	Water from over irrigation flowing into the street and storm drain inlet.	Contacted a maintenance contractor on site and advised to reset the irrigation timer for a shorter time and to run at night	Yes	Verbal Warning	Yes
124	05/14/08	Residential		160	Ruth Ct	Discharge of concrete coloring residue into the curb and storm drain inlet.	Contacted the contractor and advised to clean the street and curb of a all remaining sediment using a dry method.	Yes	Monetary Citation	Yes
125	05/15/08	Residential		2053	Wedgemere Rd	Grading, backfilling with no permits of BMPs.	This property is being used as an access to the neighboring rear yard for pool filling(dirt). No grading observed. No BMPs required. The contractor cleans dirt from the street daily	No	Verbal Warning	N/A
126	05/15/08	Commercial	La Pita Restaurant	388	Main St	Power washing the rear of the building the evening of 5/14/08. No BMPs in place to prevent discharge from reaching the street.	Contacted the new business owner and advised to cease using water unless proper BMPs and implemented. Storm water educational materials were isued.	Yes	Verbal Warning	Yes
127	05/15/08	Commercial	Music Studios	336	Front St	Large amount of trash and debris inside trash enclosure	Referred to case to City zoning enforcement.	No	Verbal Warning	N/A
128	05/18/08	Municipal		700	Wichita Ave	Fencing along the drainage channel has been damaged by skateboarding youths	the complaint was refered to PW street crew.	No	Verbal Warning	N/A
129	05/19/08	Commercial	Hammurabi	401	Main St	Yellow liquid and grease found in driveway alond side the restaurant.	Contacted the business owner and advised to clean the concrete surface of all waste using a dry method, or be able to reclaim the water if it is used	Yes	Verbal Warning	Yes
130	05/20/08	Commercial	Travelodge	425	Main St	Employee using water to clean the parking lot wsith water	The manager was contacted and advised to use a dry method the clean the lot. Educational materials were issued	Yes	Verbal Warning	Yes
131	05/20/08	Residential		1185	Peach Ave	Sewage discharge from backed up lateral	SW contacted the tenant and advised to contact a plumber to repair the lateral and clean area	Yes	Verbal Warning	Yes
132	05/20/08	Residential		724	Downer Ave	Strong sewer smell close to te house	Met with the tenant on site. Found no strong sewer odor nor any evidence of a discharge	No	Verbal Warning	N/A
133	05/28/08	Commercial	County Collision and Autobody	153	Johnson	Vehicle wash water draining to the street.	Found no discharge. Spoke to the manager. Water was from accidental overflow in wash area. Issued storm water educational materials	No	Verbal Warning	N/A
134	05/29/08	Residential		1953	Estela Dr	Concrete sediment washed into the gutter and storm drain	Contacted the property owner and advised to clean the curb af all sediment. Will meet with him in 7 days	Yes	Monetary Citation	Yes
135	06/02/08	Commercial	CMN Transfer	1925	Gillespie Way	Employees of the business are draining used oil from a vehice with oil discharging to the storm drain	Employees were using absorbent material on spill. The spill was localized and did not enter the street or storm drain inlet.	Yes	Verbal Warning	Yes
136	06/06/08	Residential		520	Main St	SD waste water referral regarding leaking above ground sewer latral located behind Main Tap Tavern may under renovation	Gate prevented access to property, viewed surface pooling along west side of building from rear of tavern, zoning enforcement also notified for building/zoning violations.	Yes	Verbal Warning	
137	06/06/08	Construction		198	Main St	Rennovation debris at old Albertson's piled at rear of building with no BMPs in place to protect drain inlets	Contacted site supervisor and advised to remove a surface debris and dust using dry method and to provide storm drain protection.	No	Verbal Warning	N/A
138	06/12/08	Residential		283	Meadow Crest Dr	A 3 " pipe at the base of a block wall in front of the property is discharging gray water onto the sidewalk and street.	Contacted the property owner's daughter and gave her storm water and gray water discharge information to relay to her parents. She was told that the discharge must be relocated to on site vegetation or into the septic sewer. The discharge turned out to be from a dechlorinated pool	Yes	Verbal Warning	Yes

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	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
139	06/19/08	Residential		922	Chase Ave	Gray water draining from property ont to the street.	Contacted the property owner on site. No discharge observed. Tennis shoes were rinsed off in driveway and water entered the street. Storm water educational	No	Verbal Warning	Yes
140	07/01/08	Residential		2584	Katherine St	Metal drain pipe on slope across street causing erosion when it	Referred to PW street crew to evaluate position and condition of the pipe.	No	Verbal Warning	N/A
141	07/01/08	Residential		1043	Sunshine	Strong smell of sewage coming from under the house and ground is wet.	Met with the complainant's mother(tenent). Found no odor or sewage. No discharges observed. Most likely pooled water under very old house from deteriorated cast	No	Verbal Warning	N/A
142	07/02/08	Commercial	Sew Pros	393	Broadway	Power washing the parking lot with no BMPs to prevent water from discharging to the street and gutter.	Contacted the business owner in process of washing the lot. He was advised to immediately cease and use a dry method for any future cleaning. Storm water educational	Yes	Verbal Warning	Yes
143	07/03/08	Commercial	SD County Credit Union	312	Main St	Broken irrigation pipe causing discharge of pollutants into the storm drain inlet located in ther rear	Contacterd the office manager and advised to allert maintenance to repair the broken system. It was repaired the same day.	Yes	Verbal Warning	Yes
144	07/08/08	Commercial	Ultimate Champion of Tires	445	El Cajon Blvd	Water dumped and being swept into the street at tire change	Contacted the business owner who stated that before he opened, someone washed a vehicle and he swept the	No	Verbal Warning	Yes
145	07/09/08	Residential		244	Shady Lane	Large amount of dust and dirt in the street from road resurfacing.	No discharge observed o site. Roadway resurfacing underway. The contractor was contacted and advised to sweep all debris from the street and sidewalk. Storm	No	Verbal Warning	N/A
146	07/10/08	Residential		712	Garfield Ave	Citizen phone complaint of a broken irrigation line at the property with water running into the street.	Contacted the resident and advised to cut the water to the irrigation and repair it. The work was done the same day.	Yes	Verbal Warning	Yes
147	07/11/08	Commercial	Nails by Jacklyn	131	Magnolia	Employee using water to clean the building and paved area in front and side. No BMPs in place to prevent discharge to street and	Contacted the business owner and advised to cease all water use for cleaning and to use a dry method. Educational materials were issued.	Yes	Verbal Warning	Yes
148	07/17/08	Commercial	Por Favor Restaurant	148	Main St	Power washing outside patio allowing water to enter the alley	Contacted the manager and advised to cease all washing activity and use an dry method until proper BMPs can be	Yes	Verbal Warning	Yes
149	07/21/08	Commercial	PW Environmental	1015	Marshall	Carpet cleaning company discharged carpet cleaning	Employees were contacted on site. This is a monitoring well. Using peroxide to unclog the system. No discharge to	No	Verbal Warning	N/A
150	07/21/08	Residential		283	Meadow Crest Dr	Repeat complaint of gray water being drained onto the sidewalk in front of the residence.	Site inspection found minor evidence of a discharge at base of brick wall in front of property. Will arrange full inspection with owner. Discharge found to be pool water	No	Verbal Warning	N/A
151	07/24/08	Residential		757	Pierce St	Citizen's phone complaint that irrigation system has been continuously running for two days and no response at the door.	Inspection found front yard irrigation overflowing into the street. No response at door. Water was turned off to the system. Card left at door. Owner responded later.	Yes	Verbal Warning	Yes
152	07/24/08	Residential		1045	Terrace Crest Dr	Citizen's phone complaint that a brown liquid was being discharged	No discharge noted in front of the residence or in street.	No	Verbal Warning	N/A
153	07/28/08	Commercial	Sunburst Transportation	1722	Main St	Fuel transport employee discharged approx. 40 agllons of fuel in rear lot of the CHP office.	PW crew and fire dept. on site to prevent flow from reaching the storm drain system. Hazardous waste company on site to clean and remove discharge. All	Yes	Verbal Warning	Yes

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	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
154	07/30/08	Residential		636	Medford	Discharge of blackwater from and occupied camper in rear yard onto neighboring church property and entering the storm drain.	Notified zoning enforcement. The property owner and the occupant of the camper were contacted on site. A discharge pipe connected to the camper ended at the rear block wall . All other utilities were also attached to the camper. The owner was told to immedialtely remove all utilities and cease all discharges. The pipe was removed and capped. He was also instruced to clean the	Yes	Verbal Warning	

High Priority **Municipal Facilities Inspected** **2007-2008**

	FACILITY NAME	ADDRESS	CONTACT	DATE
1	Fleet Maintenance	1060 Vernon Way	Larry Mayfield	06/27/08
2	Parks Dept. storage Yard/Maint.	1060 Vernon way	Mike Mills	06/27/08
3	Public Works Maintenance Yard	1050 VernonWay	Pat Jackson	06/27/08
4	John F. Kennedy Park	1675 E. Madison	Mike Mills	05/28/08
5	Wells Park Rec./Maint./Police	1153 E. Madison	Mike Mills	05/28/08
6	Abert Van Zanten Park	1495 Greenfield Dr	Mike Mills	06/05/08
7	Hillside Park and Recreation Center	840 Buena Vista Terrace	Mike Mills	06/06/08
8	Fire Station Park	Tyron St at Westwind Dr	Mike Mills	06/06/08
9	Judson Park	Magnolia Ave at Park Ave	Mike Mills	06/09/08
10	Civic Center Plaza And City Hall	200 E Main St	Mike Mills	06/10/08
11	El Cajon Performing Arts Center	110 E Main St		06/10/08
12	Cajon Valley Middle School Park	750 Park Ave	Mike Mills	06/10/08
13	Renette Park and Recreation Center	935 Emerald Ave	Mike Mills	06/10/08
14	Fletcher Hills Park, Pool and Recreation Center	2345 Center Pl	Mike Mills	06/23/08
15	Tuttle Park	Pierce St at Wagner Dr	Mike Mills	06/23/08
16	Fire Station #9 and Training Facility	1301 N. Marshall Ave	Charlene Nagy	06/23/08
17	PresCott Promenade Park	200 Blk of E. Main St	Mike Mills	06/27/08
18	Bostonia Park and Recreation Center	1049 Bostonia St	Mike Mills	06/26/08
19	Ronald Regan Community Center	195 E. Douglas Ave	Mike Mills	06/27/08

	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	IND_COM	EXISTING STATUS	SIC	CATEGORY	HSA	NOI_WDID
1	DAVES CUSTOM BOATS	1468 W MAGNOLIA AVE	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3731	Boat Repair	907.13	9 37I014191
2	DIXIELINE LUMBER	1262 EAST MAIN STREET	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	5211	Building Materials	907.13	9 37I015248
3	CAJON VALLEY UNION SCH DIST.	777 EAST PARK BLVD	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	4151	Ground Transportation	907.13	9 37I003541
4	GROSSMONT UNION H.S. DISTRICT	1100 MURRAY DR	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	4151	Ground Transportation	907.13	9 37I002116
5	LAIDLAW TRANSIT SVCS INC	800 FESLER ST	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	4111	Ground Transportation	907.13	9 37I018333
6	LAIDLAW TRANSIT SERVICES (E Cnty Maintenance Facility)	1213 N JOHNSON AV	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	4212	Ground Transportation	907.13	9 37I020896
7	SAN DIEGO VAN & STORAGE	1426 FAYETTE ST	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	4214	Ground Transportation	907.13	9 37I012805
8	ALLIED CASTINGS INC	983 VERNON WAY	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3271	Manufacturing, Concrete	907.13	9 37I004416
9	Robertsons El Cajon Plant	215 Cypress Ln	Industrial, with NOI	High	Industrial	HIGH INDUSTRIAL	3273	Manufacturing, Concrete	907.13	9 37I018203
10	Gear Vendors Inc	1717 W Magnolia Ave	Industrial, with NOI	High	Industrial	HIGH INDUSTRIAL	3714	Manufacturing, Equipment	907.13	9 37I019579
11	PRECISION METAL PRODUCTS, INC	850 W BRADLEY AVE	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3599	Manufacturing, Equipment	907.13	9 37I021188
12	CALIFORNIA METALS	636 FRONT ST	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3599	Manufacturing, Equipment	907.13	9 37I016696
13	CALIFORNIA METALS	297-333 S MARSHALL AVE	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3599	Manufacturing, Equipment	907.13	9 37I012667
14	ALTURDYNE	660 STEELE ST	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3621	Manufacturing, Equipment	907.13	9 37I005819
15	Mikes Metal Works Inc	1439 N Magnolia Ave Ste B	Industrial, with NOI	High	Industrial	HIGH INDUSTRIAL	3398	Manufacturing, Fabricated Metal	907.13	9 37I019752
16	SENIOR OPERATIONS, KETEMA DIVISION	790 GREENFIELD DR	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3999	Manufacturing, Misc	907.13	9 37I013103
17	WINDOWMASTER PRODUCTS	1111 PIONEER WAY	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3999	Manufacturing, Misc	907.13	9 37I018719
18	TORO AGRICULTURAL IRRIGATION	1588 N MARSHALL AVE	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3999	Manufacturing, Misc	907.13	9 37I013431
19	TRIUMPH FABRICATIONS - SAN DIEGO, INC	203 N JOHNSON AVE	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3999	Manufacturing, Misc	907.13	9 37I015532
20	CERTIFIED METAL CRAFT INC	877 VERNON WAY	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3999	Manufacturing, Misc	907.13	9 37I012286
21	VERIDIAM	1717 N CUYAMACA ST	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3999	Manufacturing, Misc	907.13	9 37I020299
22	A J M PACKAGING CORPORATION	1160 VERNON WAY	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3999	Manufacturing, Misc	907.13	9 37I010265
23	CHEM-TRONICS INC	1150 W BRADLEY AVE	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3999	Manufacturing, Misc	907.13	9 37I000277
24	Solo Cup Co	1160 Vernon Way	Industrial, with NOI	High	Industrial	HIGH INDUSTRIAL	2656	Manufacturing, Paper	907.13	9 37I018889
25	DECCO CASTINGS INC	1596 PIONEER WAY	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3365	Manufacturing, Primary Metal	907.13	9 37I014542
26	Stoneworks	1177 Greenfield Dr	Industrial, with NOI	High	Industrial	HIGH INDUSTRIAL	3281	Manufacturing, Stone/Glass	907.13	9 37I019492
27	California Countertop Quartz & Granite	1340 Hill St	Industrial, with NOI	High	Industrial	HIGH INDUSTRIAL	3281	Manufacturing, Stone/Glass	907.13	9 37I021018
28	GMG Stone Inc	165 Denny Way	Industrial, with NOI	High	Industrial	HIGH INDUSTRIAL	3281	Manufacturing, Stone/Glass	907.13	9 37I019789
29	SOUTH BAY WELDING	781 O' CONNOR ST	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	3441	Manufacturing, Structural Steel	907.13	9 37I020014
30	ARTIMEX IRON CO.	315 CYPRESS LANE	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	1791	Other Contractor	907.13	9 37I018051
31	VENUS PRINTING	1183 E MAIN ST #D	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	2741	Printing	907.13	9 37I016302
32	EL CAJON AUTO WRECKERS	1416 PIONEER WAY	Industrial, with NOI	HIGH	Industrial	HIGH INDUSTRIAL	5015	Recycling	907.13	9 37I016302
33	WASTE MANAGEMENT	1001 W BRADLEY AVE	Industrial, with NOI	Medium	Industrial	Medium Industrial	4953	Waste Management	907.13	9 37I012089
34	PACIFIC TRANS ENVIRONMENTAL SVC INC	1452 N JOHNSON AVE	Industrial, with NOI	Medium	Industrial	Medium Industrial	4953	Waste Management	907.13	9 37I000506
35	JONNY INDUSTRIES	766 GABLE WY	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	2821	Manufacturing, Chemicals	907.13	
36	SAN DIEGO PRECAST CONCRETE, INC.	540 VERNON WAY	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	3271	Manufacturing, Concrete	907.13	
37	SUPER-KRETE INTERNATIONAL INC	1290 N JOHNSON AVE #101	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	3271	Manufacturing, Concrete	907.13	
38	CURB & VENT MFG., INC	1437 FAYETTE ST	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	3272	Manufacturing, Concrete	907.13	
39	THIRD STONE INC	1835 JOHN TOWERS AVE #D	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	3271	Manufacturing, Concrete	907.13	
40	ROBERTSON'S READY MIX	1770 GILLESPIE WAY	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	3273	Manufacturing, Concrete	907.13	
41	GARDNER POOL PLASTERING	801 GABLE WAY	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	3999	Manufacturing, Misc	907.13	
42	STONE & TILE WORKS	406 S JOHNSON AVE	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	3253	Manufacturing, Stone/Glass	907.13	
43	RUSSO TILE & MARBLE INC	635 FRONT ST	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	3253	Manufacturing, Stone/Glass	907.13	
44	RICHARD VANDERHYDE	1814 GREENFIELD DRIVE	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	3441	Manufacturing, Structural Steel	907.13	
45	ORTIZ CORPORATION	S MAGNOLIA WATER LINE	Industrial, no NOI	HIGH	Industrial	HIGH INDUSTRIAL	2439	Manufacturing, Wood/Furniture	907.13	
46	U S AIRCONDITIONING DISTRIBUTORS, INC	1250 N MARSHALL AVE	Industrial, no NOI	Medium	Industrial	Medium Industrial	4214	Ground Transportation	907.13	
47	EG&G KT AEROFAB	203 N JOHNSON AVENUE	Industrial, no NOI	Medium	Industrial	Medium Industrial	3728	Manufacturing, Equipment	907.13	
48	AMERICAN METAL PROCESSING INC	390 FRONT ST	Industrial, no NOI	Medium	Industrial	Medium Industrial	3599	Manufacturing, Equipment	907.13	
49	FATBOY FIBERGLASS & WELDING	675 FRONT ST	Industrial, no NOI	Medium	Industrial	Medium Industrial	3599	Manufacturing, Equipment	907.13	
50	AMETEK ROTRON	474 RALEIGH AVE	Industrial, no NOI	Medium	Industrial	Medium Industrial	3564	Manufacturing, Equipment	907.13	
51	TOP NOTCH MANUFACTURING INC	1488 PIONEER WAY #17	Industrial, no NOI	Medium	Industrial	Medium Industrial	3449	Manufacturing, Fabricated Metal	907.13	
52	MIL SPEC METALLICS	755 VERNON WAY	Industrial, no NOI	Medium	Industrial	Medium Industrial	3449	Manufacturing, Fabricated Metal	907.13	

	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	IND_COM	EXISTING STATUS	SIC	CATEGORY	HSA	NOI_WDID
53	PSM TRUCK EQUIPMENT	755 VERNON WAY	Industrial, no NOI	Medium	Industrial	Medium Industrial	3449	Manufacturing, Fabricated Metal	907.13	
54	ALL STAR POLISHING & CHROMING INC	1365 N JOHNSON AVE #105	Industrial, no NOI	Medium	Industrial	Medium Industrial	3471	Manufacturing, Fabricated Metal	907.13	
55	BRADDOCK HYDRAULIC SERVICES	412 FRONT ST	Industrial, no NOI	Medium	Industrial	Medium Industrial	3999	Manufacturing, Misc	907.13	
56	LAYFIELD PLASTICS INC	1166 FESLER ST #B	Industrial, no NOI	Medium	Industrial	Medium Industrial	3999	Manufacturing, Misc	907.13	
57	METAL ENGINEERING	390 FRONT ST	Industrial, no NOI	Medium	Industrial	Medium Industrial	3999	Manufacturing, Misc	907.13	
58	LITE STONE CONCRETE	1105 N MARSHALL AVE	Industrial, no NOI	Medium	Industrial	Medium Industrial	3999	Manufacturing, Misc	907.13	
59	SAN DIEGO MOBILE TRUCK & TRAILER SERVICE L.L.C.	125 S MARSHALL AVE	Industrial, no NOI	Medium	Industrial	Medium Industrial	3999	Manufacturing, Misc	907.13	
60	LEONARD ENGINEERING, INC	412 FRONT ST	Industrial, no NOI	Medium	Industrial	Medium Industrial	3999	Manufacturing, Misc	907.13	
61	FRANK HILL ASSOCIATES	474 RALEIGH AVE	Industrial, no NOI	Medium	Industrial	Medium Industrial	3999	Manufacturing, Misc	907.13	
62	A A EQUIPMENT	411 N MARSHALL AVE	Industrial, no NOI	Medium	Industrial	Medium Industrial	3999	Manufacturing, Misc	907.13	
63	RJ CABINETS	522 FRONT ST	Industrial, no NOI	Medium	Industrial	Medium Industrial	3999	Manufacturing, Misc	907.13	
64	PACIFICA GLASS CO, INC	1946 JOHN TOWERS AVE	Industrial, no NOI	Medium	Industrial	Medium Industrial	3231	Manufacturing, Stone/Glass	907.13	
65	BAY KITCHEN & BATH REMODELERS	500 FRONT ST	Industrial, no NOI	Medium	Industrial	Medium Industrial	2434	Manufacturing, Wood/Furniture	907.13	
66	OLYMPIC CARPET & SUPPLIES	538 FRONT ST	Industrial, no NOI	Medium	Industrial	Medium Industrial	4959	Waste Management	907.13	
67	CHIMNEYS-R-US	1227 N SECOND ST	Industrial, no NOI	Medium	Industrial	Medium Industrial	4959	Waste Management	907.13	
68	C C S CLEANING SERVICES	205 CLAYDELLE AVE #204	Industrial, no NOI	Medium	Industrial	Medium Industrial	4959	Waste Management	907.13	
69	C C S PAINTING SERVICES	205 CLAYDELLE AVE #204	Industrial, no NOI	Medium	Industrial	Medium Industrial	4959	Waste Management	907.13	
70	CONSOLIDATED MOTORS	410 EL CAJON BLVD	Commercial	High	Commercial	High Commercial	5013	Auto Supplies	907.13	
71	R.T. TATLOCK CONCRETE CNST	1136 BROADWAY #6A	Commercial	High	Commercial	High Commercial	1771	Cement Mixing/Cutting	907.13	
72	NEW YORK GIANT PIZZA	356 N MAGNOLIA AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
73	MAMMA ROSAS PIZZA	1773 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
74	DOWNTOWN CAFE	182 E MAIN ST	Commercial	High	Commercial	High Commercial	5813	Eating/Drinking Establishments	907.13	
75	MANGIA BENE RISTORANTE	221 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
76	EL CAJON STEAKHOUSE L.P.	722 JAMACHA RD	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
77	PANDA RICE VIETNAMESE/CHINESE RESTAURANT	907 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
78	NAPOLI GIANT PIZZA	1175 N SECOND ST #101-102	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
79	MCDONALDS OF FLETCHER PARKWAY	886 FLETCHER PKWY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
80	VONS GROCERY COMPANY #2064	2800 FLETCHER PKWY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.11	
81	MARIETAS EAST	1746 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
82	ORCHID THAI RESTAURANT	762 N JOHNSON AVE #106	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
83	LOS PANCHOS TACO SHOP	1709 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
84	THORNTONS IRISH PUB & CHOP HOUSE	1221 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
85	LA CHINA	2852 FLETCHER PKWY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.11	
86	HARVEST RANCH #1	759 JAMACHA RD	Commercial	High	Commercial	High Commercial	5411	Eating/Drinking Establishments	907.13	
87	SIZZLER RESTAURANT	1030 FLETCHER PKWY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
88	SILVAS TACO SHOP	998 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
89	SERRANOS SUPER SALSA	795 ARNELE AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
90	MCDONALDS	1695 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
91	EL CAJON COURTHOUSE CAFE	250 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
92	ARBY'S RESTAURANT #1161	388 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
93	LOS PANCHOS MEXICAN & SEAFOOD	777 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
94	BONNYS CAFE	596 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
95	BOSTON MARKET #0735	706 FLETCHER PKWY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
96	BURGER KING 814	822 N JOHNSON AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
97	CALIFORNIA DELI WORKS	553-555 W MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
98	CHINA PANDA GARDEN RESTAURANT	1788 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
99	COCOS #1162	1025 FLETCHER PKWY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
100	COTIXAN TACO SHOP #3	762 N JOHNSON AVE #107	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
101	DOMINOS PIZZA #7704	936 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
102	DOMINOS PIZZA #7705	1104 E WASHINGTON AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
103	SUBWAY SANDWICHES AND SALAD	915 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
104	ROSENDOS	1408 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
105	K F C #Y450061	724 FLETCHER PKWY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
106	THE YOGURT MILL	935 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
107	EXECUTIVE FRIENDSHIP DELI	1935 FRIENDSHIP DR #A	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
108	THE LAWLESS PUB	176 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
109	GILLESPIE FIELD CAFE & DELI	2015 N MARSHALL AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
110	GOLDEN BAGEL CAFE	2744 FLETCHER PKWY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.11	

	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	IND_COM	EXISTING STATUS	SIC	CATEGORY	HSA	NOI_WDID
111	JACK IN THE BOX #3064	1700 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
112	INTERNATIONAL HOUSE OF PANCAKES	1286 OAKDALE AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
113	IZZYS CAFE	1252 BROADWAY #A	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
114	TASTE OF ATHENS	1784 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
115	JAMACHA BAR & GRILLE	777 JAMACHA RD	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
116	JANETS CAFE #1	1696 GREENFIELD DR	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
117	DALLMANN CONFECTIONS INC	780 N SECOND ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
118	DRAGON INTERNATIONAL CHINESE FOOD	762 N JOHNSON AVE #106	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
119	EL CAJON INTERNATIONAL FOOD	502 E MAIN ST	Commercial	High	Commercial	High Commercial	5411	Eating/Drinking Establishments	907.13	
120	ALBERTSONS INC #6771	1608 BROADWAY	Commercial	High	Commercial	High Commercial	5411	Eating/Drinking Establishments	907.13	
121	WINDY CITY BEEF	2872 FLETCHER PKWY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.11	
122	RED BRICK PIZZA	190 N MAGNOLIA AVE #A	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
123	PANDA EXPRESS #1125	190 N MAGNOLIA AVE #C	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
124	ELEGANT BUFFET	1985 FRIENDSHIP DR #B	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
125	ABRE ENTERPRISES	616 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
126	CHRISTYS DONUTS	657 JAMACHA RD	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
127	ENTENMANNS OROWEAT OUTLET	916 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
128	CAL MEDJOOL DATES AND PRODUCE	564 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
129	RODEOS MEAT MARKET	927 BROADWAY	Commercial	High	Commercial	High Commercial	5411	Eating/Drinking Establishments	907.13	
130	PASTEUR CAFE	165 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
131	CRUMBS OF PARIS	586 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
132	MIKES DELI & MARKET	289 EL CAJON BLVD	Commercial	High	Commercial	High Commercial	5411	Eating/Drinking Establishments	907.13	
133	SUNSHINE CO	548 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
134	GARCIAS PUEBLA MERCADO	1365 E MAIN ST #A	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
135	PRO BODY WAREHOUSE	782 ARNELE AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
136	BABYLON INTERNATIONAL MARKET	524 E MAIN ST	Commercial	High	Commercial	High Commercial	5411	Eating/Drinking Establishments	907.13	
137	KING HOUSE	500 BROADWAY #D	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
138	KING OF PRODUCE	575 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
139	ALRAFDIEN RESTAURANT	474-482 W DOUGLAS AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
140	TROPICAL HAVANA	762 N JOHNSON AVE #103	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
141	BROADWAY FARMER MARKET	1039 BROADWAY	Commercial	High	Commercial	High Commercial	5411	Eating/Drinking Establishments	907.13	
142	MAGPIES COOKIES AND DESSERTS	1209 N SECOND ST #108	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
143	ROSANNAS GRILLED PANINI	780 N SECOND ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
144	DESIGN FOOD SYSTEMS	354 N MAGNOLIA AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
145	CARVEL ICE CREAM #3315	2864 FLETCHER PKWY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.11	
146	RITAS CATERING	1209 N SECOND ST #108	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
147	HACIENDA LA CASA BLANCA	700 N JOHNSON AVE #A	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
148	NEW YORK BAKERY INC	245 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
149	CUPIDS CATERING	1209 N SECOND ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
150	DOWNTOWN GRIND	200 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
151	BENS MARKET & PASTRY	544 BROADWAY	Commercial	High	Commercial	High Commercial	5411	Eating/Drinking Establishments	907.13	
152	TORTILLERIA SALSA MARKET	480 W CHASE AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
153	PHILIPPINES ON BROADWAY	1174 BROADWAY #101	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
154	RUBIOS FRESH MEXICAN GRILL #8	399 N MAGNOLIA AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
155	TOKYO JAPANESE FOOD & SUSHI	755 ARNELE AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
156	TOMMYS ITALIAN DELI	1190 N SECOND ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
157	ALI BABA RESTAURANT	421 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
158	VALERIOS MEXICAN FOOD	1267 N SECOND ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
159	VICTORIAS MEXICAN FOOD	677 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
160	WENDYS-#01	871 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
161	WENDYS-#11	686 JAMACHA RD	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
162	FRUITLAND AND DELI	1088 ESTES ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
163	MEJIA'S TACO SHOP	780 NORTH SECOND STREET	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
164	LUCKY DRAGON	342 N MAGNOLIA AVE	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
165	SUBWAY SANDWICHES/SALADS	762 N JOHNSON AVE #108 -2	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
166	ADVANCED FLOORCOVERING INC	833 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
167	CC PALM COURT	830 BROADWAY	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
168	POULTRY PALACE & DELI	736 JAMACHA RD	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	

	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	IND_COM	EXISTING STATUS	SIC	CATEGORY	HSA	NOI_WDID
169	DONUT AND CHINESE FOOD	338 EAST MAIN STREET	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
170	POR FAVOR INC	148 E MAIN ST	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
171	ROBERTOS TACO SHOP	1104 E WASHINGTON AVE #B	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
172	DENNY'S RESTAURANT	665 N MOLLISON	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
173	K.C.'S EXPRESS CHINESE FOOD AND DONUTS	388 MAIN STREET	Commercial	High	Commercial	High Commercial	5812	Eating/Drinking Establishments	907.13	
174	ARMSTRONG GARDEN CENTERS INC	1755 E MAIN ST	Commercial	High	Commercial	High Commercial	0181	Nurseries/Greenhouses	907.13	
175	PLANT HOUSE NURSERY	1163 N SECOND ST	Commercial	High	Commercial	High Commercial	0181	Nurseries/Greenhouses	907.13	
176	CHAMPION COLLISION & PAINT	187 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7532	Auto Paint/Body	907.13	
177	J&CP AUTOBODY & PAINT	259 N MARSHALL AV	Commercial	Medium	Commercial	Medium Commercial	7532	Auto Paint/Body	907.13	
178	ALL PRO BODY & PAINT	290 N MARSHALL	Commercial	Medium	Commercial	Medium Commercial	7532	Auto Paint/Body	907.13	
179	AUTO TECH	590 S MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7532	Auto Paint/Body	907.13	
180	GENES AUTO BODY	609 S MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7532	Auto Paint/Body	907.13	
181	DRAGON FIRE	283 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7539	Auto Repair	907.13	
182	AUTO GLASS OF EXCELLENCE	187 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7538	Auto Repair	907.13	
183	BRAKE GUYS AUTO CARE	227 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7539	Auto Repair	907.13	
184	EL CAJON AUTO CENTER INC	243 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7539	Auto Repair	907.13	
185	THE AUTO CENTER	243 N MARSHALL AV	Commercial	Medium	Commercial	Medium Commercial	7539	Auto Repair	907.13	
186	FAST WATER HEATER I, INC	275 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7539	Auto Repair	907.13	
187	SAMS QUALITY AUTO CARE	267 N MARSHALL AVE #B	Commercial	Medium	Commercial	Medium Commercial	7538	Auto Repair	907.13	
188	FAST TRUCK & EQUIPMENT	474 RALEIGH AVE	Commercial	Medium	Commercial	Medium Commercial	7549	Auto Repair	907.13	
189	ANYTHING CORVETTE	259 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7539	Auto Repair	907.13	
190	C&D TOWING SPECIALISTS	187 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7549	Auto Repair	907.13	
191	GOLDFIELD STAGE	501 FRONT ST	Commercial	Medium	Commercial	Medium Commercial	7538	Auto Repair	907.13	
192	CLASSIC TOWING	1101 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7549	Auto Repair	907.13	
193	UNDER CAR SPECIALTIES	251 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	7539	Auto Repair	907.13	
194	THE HOME DEPOT #1848	298 FLETCHER PKWY	Commercial	Medium	Commercial	Medium Commercial	5211	Building Materials	907.13	
195	THOMAS BUILDING SUPPLY INC	137 S JOHNSON AVE	Commercial	Medium	Commercial	Medium Commercial	5211	Building Materials	907.13	
196	DAL-TILE S S C WEST, INC	270 N MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	5211	Building Materials	907.13	
197	J&W REDWOOD EL CAJON INC	430 S MARSHALL AVE	Commercial	Medium	Commercial	Medium Commercial	5211	Building Materials	907.13	
198	FRAZEE PAINT WALLCOVERING	1154 E MAIN ST #108	Commercial	Medium	Commercial	Medium Commercial	5211	Building Materials	907.13	
199	HOME DEPOT STORE	965 ARNELE	Commercial	Medium	Commercial	Medium Commercial	5211	Building Materials	907.13	
200	THE HOME DEPOT #676	965 ARNELE AVE	Commercial	Medium	Commercial	Medium Commercial	5211	Building Materials	907.13	
201	MCKEEVER SPECIALTIES	1100 N MAGNOLIA AVE #F	Commercial	Medium	Commercial	Medium Commercial	5211	Building Materials	907.13	
202	BUILDERS MOULDING SUPPLY INC	1675 PIONEER WAY #A/B	Commercial	Medium	Commercial	Medium Commercial	5211	Building Materials	907.13	
203	BLACKINTON & ASSOC INC	380 FRONT ST	Commercial	Medium	Commercial	Medium Commercial	7699	Equipment Repair	907.13	
204	COUNTY GARDENER	1840 WELD BL	Commercial	Medium	Commercial	Medium Commercial	0782	Landscaping	907.13	
205	SIERRA PACIFIC LANDSCAPE	304 FRONT ST	Commercial	Medium	Commercial	Medium Commercial	1799	Landscaping	907.13	
206	G MARBLE AND GRANITE COMPANY	1820 JOHN TOWERS AVE #A	Commercial	Medium	Commercial	Medium Commercial	1741	Masonry	907.13	
207	SAN DIEGO HYDROPONICS & ORGANICS	1381 N CUYAMACA ST	Commercial	Medium	Commercial	Medium Commercial	5193	Nurseries/Greenhouses	907.13	
208	STARLER INC	1985 FRIENDSHIP DR #H	Commercial	Medium	Commercial	Medium Commercial	1521	Other Contractor	907.13	
209	WHILLOCK CONTRACTING INC	346 FRONT ST	Commercial	Medium		Duplicate	1521	Other Contractor	907.13	
210	U S LAWNS OF SAN DIEGO INC	304 FRONT ST	Commercial	Medium	Commercial	Medium Commercial	1799	Other Contractor	907.13	
211	RG LATH AND PLASTER	338 EAST MAIN STREET	Commercial	Medium	Commercial	Medium Commercial	1742	Other Contractor	907.13	

2007-2008 Priority Construction Inspections

Monthly During Dry Season
Weekly During Wet Season
October 1 to April 30

	WD ID#	Project Name	Address or Location	Site Type	Trigger	SUSMP
HIGH PRIORITY PROJECTS for Public Works Inspectors						
1		Promenade Square TSM 494	W. Main St. and S. Magnolia Ave.	Commercial	Commercial >100,000 sf	Yes
2	9 37C323514	Park Ave 103 Units	Park Ave. and Ballantyne St.	Subdivision	Subdivision >10 units	Yes
3		El Jardin Ct.	El Jardin Ct.	Subdivision	Hillside Development	Yes
4		Granite Hills Village	1435 E. Washington Ave.	Subdivision	Subdivision >10 units	Yes
5		Tilling Way	1415 Emerald Ave.	Subdivision	Subdivision <10 units	No
6		Rock Haven Ranch	2010 E. Madison Ave.	Subdivision	Hillside Development	Yes
7		Ballantyne Glenn	823 Ballantyne St.	Subdivision	Subdivision >10 units	Yes
8		SC Valley Engineering	656 Front Street	Industrial	Industrial >1 acre	Yes
9		Broadway Animal Hospital	380 Broadway	Commercial	Redevelopment >5,000 sf	Yes
10		Downtown Redevelopment Project	Main St. and Magnolia Ave.	Redevelopment	Redevelopment >5,000 sf	No
11		Cajon Valley Union School District	189-225 Roanoke Rd.	School	Redevelopment >5,000 sf	Yes
12		RV sales	1341 E. Main St.	Commercial	New Parking >15 spaces	Yes
13		Principato Residence	1053 Loma Portal Dr.	Single-Family Residence	Hillside Development	Yes
14		New Car Dealership	670 El Cajon Blvd.	Commercial, Automotive	New Parking >15 spaces	Yes
15		Wisconsin Cottages	Wisconsin Ln.	Subdivision	New Private Street >5,000 sf	Yes
16		Resurfacing Job Number 57	Various	Resurfacing	Redevelopment >5,000 sf	No
17		Fire Station #8	1470 E. Madison Ave.	Municipal Fire Station	New Parking >15 spaces	Yes
18	9 37C314898	McNeil Ranch	4th St. and Granite Hills Dr.	Subdivision	Subdivision >10 units	Yes
19		Home Depot	298 Fletcher Pkwy.	Commercial	Commercial >100,000 sf	Yes
20		Westlink Construction	343 E. Main St.	Restaurant	New Restaurant	Yes
21		Taco Bell	335 N. 2nd St.	Restaurant	New Restaurant	Yes

Enforcement Actions

2007-2008

	Citation Date	Component	Business Name	Mailing Address	Violation Street Number	Violation Street Name	Administrative Citation #	Written Warning or Monetary Citation	BMP Violated	Corrective Actions
1	8/22/2007	Commercial	Hydro Tech Inc	5440 Moorhouse Dr #4000, San Diego 92121	2691	Navajo	PW 00061	First Monetary Citation	Discharge of raw sewage directly into the storm water conveyance system.	Corrections made,fee paid
2	8/23/2007	Construction	One Stop Construction	2102 Concours, El Cajon	247	First St	PW 00087	Warning	Using hose to clean the paved areas.	Corrections made
3	8/23/2007	Residential		1630 Pellesier Rd, Colton Ca. 92324	341	Coachwood	PW 00068	Warning	No BMPs installed in rear yard for imported soil and materials on slope.	Corrections made
4	9/19/2007	Residential		1900 Weld Blvd	1162	Cuyamaca	PW 00086	First Monetary Citation	Sewage discharge from sewer overflow.	Corrections made, fee paid
5	10/25/2007	Commercial	Jim Renner Automotive	1261 Main St	1281	Greenfield Dr	PW 0619	Warning	Dumping used auto parts and fluids into the drainage ditch along the East side of the property.	Corrections made
6	12/5/2007	Residential		333 Wells Ave	1204	Cuyamaca St	PW 00070	First Monetary Citation	Sewage discharge from cleanout entered storm drain inlet.	Corrections made.
7	12/5/2007	Construction	School District	148 Main St	750	Main St	PW 00080	Warning	Failure to implement and maintain BMPs	Corrections made
8	12/13/2007	Construction	Ballantyne Glen	333 Wells Ave		Ballantyne	PW 00071	Warning	Failure to implement required BMPs, change of construction entrance location causing tracking.	Corrections made
9	12/14/2007	Residential		1050 Pioneer Way #G	1060	Aster Ave	PW 00088	First Monetary Citation	Discharge of raw sewage directly into the storm water conveyance system.	Corrections made, fee paid
10	12/18/2007	Commercial	Commercial Building	1481 Wood Hill St., El Cajon	181	Rea Rd	PW 0621	Warning	Using soap and water to clean the rear parking area. Water discharged to the gutter and drain inlet.	Discontinued discharge.
11	12/14/2007	Residential		415 Parkway Plaza	1496	Lemon Ave	PW 00072	First Monetary Citation	Sewage discharge into the storm drain system	Discontinued discharge. Fee Paid
12	12/20/2007	Construction		1068 Broadway	1338	Naranca Ave	PW 00074	First Monetary Citation	Failure to install and maintain BMPs as per ECP	BMPs installed improperly.

Enforcement Actions

2007-2008

	Citation Date	Component	Business Name	Mailing Address	Violation Street Number	Violation Street Name	Administrative Citation #	Written Warning or Monetary Citation	BMP Violated	Corrective Actions
13	2/14/2008	Residential		176 Main St	744	Chase	PW 00062	First Monetary Citation	a broken cleanout directly into the storm water conveyance system.	Broken cap needs replacing.
14	2/26/2008	Construction		1850 Avocado Ave	1157	Peach Ave	PW 0637	Warning	Sediment discharge into curb, entrance not maintained, sediment tracking	Corrected
15	2/26/2008	Construction	Shoreline Communities	300 El Cajon Blvd		Ballantyne	PW 0636	First Monetary Citation	Sediment discharge into curb, entrance not maintained, sediment tracking, no mitigation	Corrections made.
16	2/27/2008	Construction	California Suncoast Homes	830 Second St	1341	Main St	PW 0638	First Monetary Citation	Sediment discharge, failure to maintain entrance and other required BMPs	BMPs installed improperly.
17	3/12/2008	Construction	Jacoba Sunshine LLc	1248 Main St	921	Sunshine Ave	PW 0640	First Monetary Citation	Discharge of sediment and sewage, no BMPs installed at condo conversion	Corrections made
18	3/19/2008	Construction	Snyder Family Trust	11855 Fred Martin Ln, Lakeside 92040	1338	Naranca Ave	PW 0641	Second Monetary Citation	Failure to timely correct BMPs and maintain.	Corrections made
19	3/24/2008	Commercial	K F C	549 Graves Ave	555	Second St	PW 0642	First Monetary Citation	Discharge of sewage into the storm drain system.	Corrected
20	3/24/2008	Commercial	Wholesale Auto	1319 Craigmont St	110	El Cajon	PW 0643	Warning	Power washing vehicles on sales lot with water entering the street and drain inlet.	Corrected
21	3/27/2008	Commercial	Schlossnagel Racing	1114 E. Lexington	1330	Hill St (A)	PW 0648	Warning	Discharge of water into rear alley caused by broken float valve on water storage container in rear lot.	Corrected

APPENDIX C

El Cajon Storm Water Program Contact List (PY1)

Department	Contact Name	E-mail Address	Phone Number	Fax Number	Example of Responsibilities
Public Works	Rob Turner	rturner@ci.el-cajon.ca.us	(619) 441-1781	(619) 579-5254	Overall URMP oversight
Engineering	Michael Griffiths	mgriffiths@ci.el-cajon.ca.us	(619) 441-1785	(619) 579-5254	Oversees Public Works, Land Development process. Coordinates Implementation of BMPs and provides SWPPP review and engineering conditions of approval.
Storm Water Manager	Jaime Campos	jcampos@ci.el-cajon.ca.us	(619) 441-5554	(619) 579-5254	Generally oversees the assessment process and facilitates updates and changes to the URMP.
Planning Department	Barbara Ramirez	bramirez@ci.el-cajon.ca.us	(619)441-1771		Implementation of the land use component and facilitation of public education in regards to new. development.
Finance	Joyce Nevarez	jnevarez@ci.el-cajon.ca.us	(619)441-1543		Identify and secure sources of funds for implementation of the URMP.
Code Enforcement	Craig Bonner	cbonner@ci.el-cajon.ca.us	(619) 441-1663	(619) 579-5254	Code enforcement activities, public outreach programs and education activities
Code Enforcement & Erosion Control Plan/ SUSMP Review	Blake Behringer	bbehringer@ci.el-cajon.ca.us	(619) 441-1666	(619) 579-5254	Code enforcement activities and review of Erosion Control and SUSMP Plans for City projects and Private Development Contracts
Public Outreach	Robert Griswold	bgriswold@ci.el-cajon.ca.us	(619) 441-1704	(619) 579-5254	Facilitate public outreach programs and education activities.

APPENDIX D

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 01	32	042		32	043		9/12/2007	305	FM		305
1 01	32	050		32	051		4/1/2008	383	JM	6	766
1 01	32	051		33	031		10/30/2007	325	JM	12	325
1 01	33	029		33	030		10/30/2007	200	JM	12	200
1 02	27	106		32	049		9/18/2007	276	FM		276
1 02	32	033		32	055		9/11/2007	112	FM		112
1 02	32	033		32	034		9/11/2007	242	FM		242
1 02	32	034		32	035		9/11/2007	236	FM		236
1 02	32	035		32	037		9/11/2007	237	FM		237
1 02	32	036		32	037		9/11/2007	302	FM		302
1 02	32	036		32	053	D	9/11/2007	57	FM		57
1 02	32	037		32	041		9/11/2007	254	FM		254
1 02	32	038		32	039		9/11/2007	151	FM		151
1 02	32	039		32	040		9/11/2007	259	FM		259
1 02	32	040		32	041		9/11/2007	61	FM		61
1 02	32	041		32	044		9/12/2007	257	FM		257
1 02	32	043		32	044		9/12/2007	298	FM		298
1 02	32	044		32	047		9/12/2007	261	FM		261
1 02	32	045		32	046		9/7/2007	290	FM		290
1 02	32	045		33	011		9/7/2007	292	FM		292
1 02	32	046		32	047		9/12/2007	292	FM		292
1 02	32	047		32	049		9/12/2007	262	FM		262
1 02	32	048		33	005		9/10/2007	344	FM		344
1 02	32	048		32	049		9/12/2007	345	FM		345
1 02	32	055		32	057		9/11/2007	174	FM		174
1 02	32	057		32	058		9/11/2007	218	FM		218
1 02	32	058		32	059	D	9/11/2007	13	FM		13
1 02	33	001	C	33	003		9/10/2007	95	FM		95
1 02	33	002		33	003		9/10/2007	112	FM		112
1 02	33	003		33	004		9/10/2007	136	FM		136
1 02	33	004		33	005		9/10/2007	238	FM		238
1 02	33	006		33	007		9/7/2007	93	FM		93
1 02	33	007		33	008		9/7/2007	152	FM		152
1 02	33	008		33	009		9/7/2007	294	FM		294
1 02	33	009		33	010		9/7/2007	345	FM		345
1 02	33	010		33	011		9/7/2007	294	FM		294
1 03	27	105		27	108		9/13/2007	306	FM		306
1 03	27	106		27	107		9/13/2007	340	FM		340
1 03	27	107		27	108		9/13/2007	253	FM		253
1 03	27	108		32	032		9/13/2007	268	FM		268
1 04	27	104		27	105		9/13/2007	317	FM		317
1 04	27	108		27	109		9/18/2007	314	FM		314
1 04	27	109		27	110		9/18/2007	302	FM		302
1 04	27	110		27	111		9/18/2007	295	FM		295
1 04	27	111		27	113		9/18/2007	317	FM		317
1 04	27	112		27	113		9/18/2007	297	FM		297
1 04	27	113		27	114		9/18/2007	140	FM		140
1 04	32	007		32	009		9/12/2007	174	FM		174
1 04	32	008		32	009		9/12/2007	113	FM		113

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 04	32	009		32	011		9/13/2007	193	FM		193
1 04	32	010		32	011		9/13/2007	336	FM		336
1 04	32	011		32	017		9/13/2007	260	FM		260
1 04	32	012		32	013		9/12/2007	250	FM		250
1 04	32	012		32	056	C	9/12/2007	100	FM		100
1 04	32	013		32	014		9/12/2007	296	FM		296
1 04	32	014		32	017		9/13/2007	200	FM		200
1 04	32	015		32	016		9/13/2007	206	FM		206
1 04	32	016		32	017		9/13/2007	208	FM		208
1 04	32	017		32	022		9/13/2007	255	FM		255
1 04	32	018		32	019		9/13/2007	347	FM		347
1 04	32	019		32	022		9/13/2007	303	FM		303
1 04	32	020		32	021		9/13/2007	240	FM		240
1 04	32	021		32	022		9/13/2007	240	FM		240
1 04	32	022		32	027		9/13/2007	270	FM		270
1 04	32	023		32	024		9/13/2007	194	FM		194
1 04	32	024		32	027		9/13/2007	346	FM		346
1 04	32	025		32	026		9/13/2007	195	FM		195
1 04	32	026		32	027		9/13/2007	350	FM		350
1 04	32	027		32	028		9/13/2007	182	FM		182
1 04	32	028		32	032		9/13/2007	85	FM		85
1 04	32	029		32	030		9/13/2007	320	FM		320
1 04	32	030		32	032		9/13/2007	304	FM		304
1 04	32	031		32	032		9/13/2007	350	FM		350
1 04	32	031		32	049		9/13/2007	338	FM		338
1 05	27	114		27	161		9/18/2007	300	FM		300
1 05	27	114		27	115		10/11/2007	312	FM		312
1 06	27	090		27	091		9/11/2007	365	FM		365
1 06	27	090		27	178	D	9/11/2007	50	FM		50
1 06	27	091		27	092		9/11/2007	145	FM		145
1 06	27	091		28	035		9/11/2007	136	FM		136
1 06	27	092		27	094		10/10/2007	304	FM		304
1 06	27	093		28	053		10/10/2007	80	FM		80
1 06	27	093		27	094		10/11/2007	300	FM		300
1 06	27	094		27	095		10/11/2007	101	FM		101
1 06	27	095		27	100		10/11/2007	200	FM		200
1 06	28	027		28	028		9/10/2007	371	FM		371
1 06	28	028		28	029		9/10/2007	239	FM		239
1 06	28	029		28	031		9/10/2007	75	FM		75
1 06	28	030		28	031		9/10/2007	387	FM		387
1 06	28	031		28	032		9/10/2007	154	FM		154
1 06	28	032		28	034		9/10/2007	138	FM		138
1 06	28	033		28	034		9/10/2007	380	FM		380
1 06	28	034		28	035		9/11/2007	151	FM		151
1 06	28	036		28	037		9/21/2007	110	FM		110
1 06	28	036		28	068		9/21/2007	285	FM		285
1 06	28	037		28	038		9/21/2007	101	FM		101
1 06	28	038		28	044		9/21/2007	181	FM		181
1 06	28	044		28	052		10/10/2007	281	FM		281

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 06	28	045		28	046		9/10/2007	155	FM		155
1 06	28	046		28	049		9/10/2007	233	FM		233
1 06	28	047		28	048		9/10/2007	199	FM		199
1 06	28	048		28	049		9/10/2007	310	FM		310
1 06	28	049		28	050		9/10/2007	300	FM		300
1 06	28	050		28	051		9/10/2007	248	FM		248
1 06	28	051		28	052		10/10/2007	122	FM		122
1 06	28	052		28	053		10/10/2007	353	FM		353
1 06	28	068		28	069		9/21/2007	310	FM		310
1 06	28	069		28	070		9/21/2007	144	FM		144
1 06	28	070		28	071		9/21/2007	203	FM		203
1 06	28	071		28	072		9/21/2007	273	FM		273
1 06	28	072		28	073		9/21/2007	266	FM		266
1 07	27	097		27	189		9/18/2007	112	FM		112
1 07	27	098		27	099		9/18/2007	340	FM		340
1 07	27	098		27	189		9/18/2007	253	FM		253
1 07	27	099		27	100		9/18/2007	305	FM		305
1 07	27	100		27	101		10/11/2007	150	FM		150
1 07	27	101		27	102		10/11/2007	245	FM		245
1 07	27	102		27	103	M	10/11/2007	201	FM		201
1 07	27	183		28	182		9/11/2007	138	FM		138
1 07	27	183		27	184		9/11/2007	48	FM		48
1 07	27	184		27	185		9/11/2007	48	FM		48
1 07	27	185		27	186		9/11/2007	153	FM		153
1 07	27	185		27	187		9/11/2007	305	FM		305
1 07	27	187		27	188		9/11/2007	40	FM		40
1 07	27	188		27	189		9/18/2007	114	FM		114
1 07	28	054		28	055		9/10/2007	302	FM		302
1 07	28	055		28	056		9/10/2007	169	FM		169
1 07	28	056		28	059		9/10/2007	85	FM		85
1 07	28	057		28	058		9/10/2007	154	FM		154
1 07	28	058		28	059		9/10/2007	250	FM		250
1 07	28	059		28	060		9/10/2007	183	FM		183
1 07	28	060		28	061		9/10/2007	100	FM		100
1 07	28	061		28	063		9/10/2007	365	FM		365
1 07	28	062		28	063		9/10/2007	306	FM		306
1 07	28	063		28	064		9/10/2007	261	FM		261
1 07	28	064		28	180		9/11/2007	372	FM		372
1 07	28	180		28	181		9/11/2007	134	FM		134
1 07	28	181		28	182		9/11/2007	45	FM		45
1 09	27	103	M	27	115		10/11/2007	175	FM		175
1 09	27	115		27	116		10/11/2007	225	FM		225
1 09	27	116		27	118		10/11/2007	227	FM		227
1 09	27	117		27	118		10/11/2007	195	FM		195
1 09	27	118		27	119		10/12/2007	112	FM		112
1 10	27	119		27	120		10/12/2007	136	FM		136
1 10	27	120		27	121		10/12/2007	281	FM		281
1 10	27	121		27	122		10/15/2007	290	FM		290
1 10	27	122		27	126		10/15/2007	50	FM		50

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 10	27	126		27	138		10/15/2007	220	FM		220
1 10	27	127		27	128		9/19/2007	288	FM		288
1 10	27	128		27	129		9/19/2007	160	FM		160
1 10	27	129		27	133		9/19/2007	313	FM		313
1 10	27	130		27	131		9/18/2007	128	FM		128
1 10	27	130		27	179	C	9/18/2007	25	FM		25
1 10	27	131		27	132		9/18/2007	200	FM		200
1 10	27	132		27	133		9/18/2007	175	FM		175
1 10	27	133		27	134		9/19/2007	313	FM		313
1 10	27	134		27	136		9/19/2007	181	FM		181
1 10	27	135		27	136		9/19/2007	292	FM		292
1 10	27	136		27	137		9/21/2007	199	FM		199
1 10	27	137		27	138		10/15/2007	239	FM		239
1 10	27	138		27	171		10/15/2007	20	FM		20
1 10	27	139		27	140		10/15/2007	266	FM		266
1 10	27	139		27	171		10/15/2007	249	FM		249
1 11	26	152		27	140	M	10/15/2007	293	FM		293
1 12	26	042		26	098		10/19/2007	68	FM		68
1 12	26	042		26	099		10/19/2007	280	FM		280
1 12	26	090		31	034		10/16/2007	342	FM		342
1 12	26	090		26	091		10/18/2007	341	FM		341
1 12	26	092		26	093		10/18/2007	350	FM		350
1 12	26	093		26	094		10/18/2007	300	FM		300
1 12	26	094		26	095		10/18/2007	178	FM		178
1 12	26	095		26	096		10/18/2007	338	FM		338
1 12	26	096		26	137		10/18/2007	33	FM		33
1 12	26	096		27	170		10/18/2007	249	FM		249
1 12	26	097		26	098		10/18/2007	198	FM		198
1 12	26	097		26	137		10/18/2007	152	FM		152
1 12	26	099		26	100		10/19/2007	347	FM		347
1 12	26	100		26	101		10/19/2007	345	FM		345
1 12	26	101		26	102		10/19/2007	335	FM		335
1 12	26	137		26	185		10/18/2007	215	FM		215
1 12	26	185		26	186		10/18/2007	213	FM		213
1 12	27	141		27	142		9/17/2007	266	FM		266
1 12	27	141		32	002		9/17/2007	265	FM		265
1 12	27	142		27	143		9/17/2007	272	FM		272
1 12	27	143		27	160		9/17/2007	272	FM		272
1 12	27	144		27	145		9/17/2007	276	FM		276
1 12	27	144		32	005		9/17/2007	280	FM		280
1 12	27	145		27	147		9/17/2007	275	FM		275
1 12	27	146		27	147		9/17/2007	87	FM		87
1 12	27	147		27	150		9/17/2007	236	FM		236
1 12	27	148		27	149		9/17/2007	277	FM		277
1 12	27	148		32	004		9/17/2007	278	FM		278
1 12	27	149		27	150		9/17/2007	274	FM		274
1 12	27	150		27	153		9/17/2007	235	FM		235
1 12	27	151		27	152		9/17/2007	277	FM		277
1 12	27	151		32	003		9/17/2007	279	FM		279

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 12	27	152		27	153		9/17/2007	275	FM		275
1 12	27	153		27	156		9/17/2007	235	FM		235
1 12	27	154		27	155		9/17/2007	278	FM		278
1 12	27	155		27	156		9/17/2007	279	FM		279
1 12	27	156		27	159		9/17/2007	226	FM		226
1 12	27	157		27	158		9/17/2007	273	FM		273
1 12	27	158		27	159		9/17/2007	272	FM		272
1 12	27	159		27	160		9/17/2007	280	FM		280
1 12	27	160		27	170		9/18/2007	277	FM		277
1 12	27	161		27	166		9/18/2007	315	FM		315
1 12	27	162		27	163		9/17/2007	321	FM		321
1 12	27	162		32	006		9/17/2007	303	FM		303
1 12	27	163		27	164		9/17/2007	323	FM		323
1 12	27	164		27	165		9/17/2007	323	FM		323
1 12	27	165		27	166		9/18/2007	325	FM		325
1 12	27	166		27	167		9/18/2007	313	FM		313
1 12	27	167		27	168		9/18/2007	315	FM		315
1 12	27	168		27	169		9/18/2007	291	FM		291
1 12	27	169		27	170		9/18/2007	55	FM		55
1 12	31	033		31	034		10/16/2007	340	FM		340
1 12	32	001		32	002		9/17/2007	275	FM		275
1 13	26	102		26	150		10/19/2007	64	FM		64
1 13	26	103		26	104		9/27/2007	170	FM		170
1 13	26	104		26	105		9/27/2007	348	FM		348
1 13	26	105		26	108		9/27/2007	267	FM		267
1 13	26	106		26	107		9/27/2007	213	FM		213
1 13	26	107		26	108		9/27/2007	235	FM		235
1 13	26	108		26	110		9/27/2007	280	FM		280
1 13	26	109		26	110		9/27/2007	171	FM		171
1 13	26	110		26	113		9/27/2007	231	FM		231
1 13	26	111		26	112		9/27/2007	260	FM		260
1 13	26	112		26	113		9/27/2007	286	FM		286
1 13	26	113		26	116		9/27/2007	238	FM		238
1 13	26	114		26	115		9/27/2007	336	FM		336
1 13	26	115		26	116		9/27/2007	322	FM		322
1 13	26	116		26	119		10/15/2007	263	FM		263
1 13	26	117		26	118		10/15/2007	286	FM		286
1 13	26	118		26	119		10/15/2007	284	FM		284
1 13	26	119		26	123		10/15/2007	258	FM		258
1 13	26	120		26	121		10/15/2007	221	FM		221
1 13	26	121		26	122		10/15/2007	272	FM		272
1 13	26	122		26	123		10/15/2007	264	FM		264
1 13	26	122		26	123		1/1/2008	276	JM	12	276
1 13	26	123		26	124		10/15/2007	154	FM		154
1 13	26	124		26	138		9/26/2007	186	FM		186
1 13	26	124		26	125		10/15/2007	342	FM		342
1 13	26	125		26	126		10/16/2007	332	FM		332
1 13	26	126		26	129		10/16/2007	263	FM		263
1 13	26	127		26	128		10/16/2007	213	FM		213

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 13	26	128		26	129		10/16/2007	221	FM		221
1 13	26	129		26	145		10/16/2007	259	FM		259
1 13	26	130		26	131		9/26/2007	336	FM		336
1 13	26	131		26	133		9/26/2007	255	FM		255
1 13	26	132		26	133		9/26/2007	265	FM		265
1 13	26	133		26	134		9/26/2007	163	FM		163
1 13	26	133		26	184	C	9/26/2007	153	FM		153
1 13	26	134		26	136		9/26/2007	217	FM		217
1 13	26	135		26	136		9/26/2007	258	FM		258
1 13	26	136		26	141		9/26/2007	250	FM		250
1 13	26	138		26	141		9/26/2007	335	FM		335
1 13	26	139		26	140		9/26/2007	341	FM		341
1 13	26	140		26	141		9/26/2007	297	FM		297
1 13	26	141		26	143		9/27/2007	327	FM		327
1 13	26	142		26	143		9/27/2007	170	FM		170
1 13	26	143		26	144		9/27/2007	148	FM		148
1 13	26	144		26	145		10/16/2007	227	FM		227
1 13	26	145		26	146		10/16/2007	297	FM		297
1 13	26	145		26	183	C	10/16/2007	77	FM		77
1 13	26	146		26	149		10/16/2007	267	FM		267
1 13	26	147		26	148		10/16/2007	180	FM		180
1 13	26	148		26	149		10/16/2007	156	FM		156
1 13	26	149		26	150		10/19/2007	252	FM		252
1 14	26	154		26	155		12/5/2007	301	FM		301
1 14	26	155		26	166		12/5/2007	256	FM		256
1 14	26	164		26	165		12/5/2007	319	FM		319
1 14	26	165		26	166		12/5/2007	52	FM		52
1 14	26	166		26	167		12/5/2007	270	FM		270
1 14	26	167		26	174		12/5/2007	244	FM		244
1 15	26	151		26	189		11/8/2007	75	FM		75
1 15	26	151		26	190		11/8/2007	107	FM		107
1 15	26	168		26	169		11/8/2007	91	FM		91
1 15	26	168		26	187		11/8/2007	47	FM		47
1 15	26	169		26	170		11/8/2007	272	FM		272
1 15	26	170		26	171		11/8/2007	279	FM		279
1 15	26	171		27	022		11/9/2007	210	FM		210
1 15	26	187		26	188		11/8/2007	59	FM		59
1 15	26	188		26	189		11/8/2007	119	FM		119
1 15	27	001		27	005		11/6/2007	337	FM		337
1 15	27	002		27	003		11/6/2007	272	FM		272
1 15	27	003		27	004		11/6/2007	270	FM		270
1 15	27	004		27	005		11/6/2007	304	FM		304
1 15	27	005		27	009		11/7/2007	279	FM		279
1 15	27	006		27	007		11/6/2007	283	FM		283
1 15	27	007		27	008		11/6/2007	276	FM		276
1 15	27	008		27	009		11/7/2007	185	FM		185
1 15	27	009		27	013		11/7/2007	225	FM		225
1 15	27	010		27	011		11/7/2007	233	FM		233
1 15	27	010		27	177	D	11/7/2007	20	FM		20

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 15	27	011		27	012		11/7/2007	236	FM		236
1 15	27	012		27	013		11/7/2007	226	FM		226
1 15	27	013		27	014		11/7/2007	96	FM		96
1 15	27	014		27	015		11/7/2007	240	FM		240
1 15	27	015		27	017		11/7/2007	301	FM		301
1 15	27	016		27	017		11/7/2007	128	FM		128
1 15	27	017		27	018		11/9/2007	188	FM		188
1 15	27	018		27	021		11/9/2007	188	FM		188
1 15	27	019		27	020		11/9/2007	225	FM		225
1 15	27	020		27	021		11/9/2007	235	FM		235
1 15	27	021		27	023		11/9/2007	326	FM		326
1 15	27	022		27	023		11/9/2007	103	FM		103
1 15	27	023		27	034		11/13/2007	110	FM		110
1 15	27	024		27	025		11/8/2007	226	FM		226
1 15	27	025		27	027		11/8/2007	197	FM		197
1 15	27	026		27	027		11/8/2007	112	FM		112
1 15	27	027		27	028		11/8/2007	130	FM		130
1 15	27	028		27	032		11/8/2007	238	FM		238
1 15	27	029		27	030		11/8/2007	145	FM		145
1 15	27	030		27	031		11/8/2007	291	FM		291
1 15	27	031		27	032		11/8/2007	78	FM		78
1 15	27	032		27	033		11/9/2007	237	FM		237
1 15	27	033		27	034		11/9/2007	217	FM		217
1 15	27	035		27	040		11/13/2007	145	FM		145
1 15	27	036		27	037		11/13/2007	315	FM		315
1 15	27	037		27	039		11/13/2007	256	FM		256
1 15	27	038		27	039		11/13/2007	317	FM		317
1 15	27	039		27	040		11/13/2007	278	FM		278
1 15	27	040		27	041		11/13/2007	177	FM		177
1 16	20	010		20	011		11/20/2007	281	FM		281
1 16	20	010		21	112		11/20/2007	221	FM		221
1 16	20	010		26	181		11/20/2007	297	FM		297
1 16	21	106		21	108		11/14/2007	131	FM		131
1 16	21	107		21	108		11/14/2007	245	FM		245
1 16	21	107		27	044		11/14/2007	240	FM		240
1 16	21	110		21	109		11/14/2007	205	FM		205
1 16	21	110		21	113		11/14/2007	329	FM		329
1 16	21	111		21	113		11/14/2007	313	FM		313
1 16	21	111		27	041		11/14/2007	318	FM		318
1 16	21	112		21	113		11/14/2007	213	FM		213
1 16	21	113		21	115		11/16/2007	266	FM		266
1 16	21	114		21	115		11/16/2007	201	FM		201
1 16	21	115		21	116		11/16/2007	65	FM		65
1 16	21	116		21	119		11/16/2007	182	FM		182
1 16	21	117		21	118		11/16/2007	64	FM		64
1 16	21	118		21	119		11/16/2007	236	FM		236
1 16	21	119		21	120		11/16/2007	130	FM		130
1 16	26	178		26	179		11/20/2007	300	FM		300
1 16	26	179		26	180		11/20/2007	297	FM		297

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 16	26	180		26	181		11/20/2007	297	FM		297
1 16	27	042		27	043		11/14/2007	320	FM		320
1 16	27	043		27	044		11/14/2007	248	FM		248
1 17	27	053		27	054		10/30/2007	179	FM		179
1 17	27	054		27	055		10/30/2007	249	FM		249
1 17	27	054		28	007		10/30/2007	300	FM		300
1 17	27	055		27	075		11/6/2007	237	FM		237
1 17	27	056		27	057		5/12/2008	265	FM	3	1060
1 17	27	057		27	058		5/12/2008	302	FM	3	1208
1 17	27	058		27	059		5/12/2008	109	FM	3	436
1 17	27	059		27	060		5/12/2008	285	FM	3	1140
1 17	27	060		27	061		10/31/2007	291	FM		291
1 17	27	061		27	062		10/31/2007	282	FM		282
1 17	27	062		27	063		10/31/2007	188	FM		188
1 17	27	063		27	172		10/31/2007	138	FM		138
1 17	27	063		27	174		10/31/2007	380	FM		380
1 17	27	064		27	065		10/29/2007	95	FM		95
1 17	27	065		28	026		10/29/2007	239	FM		239
1 17	27	067		26	066		10/30/2007	265	FM		265
1 17	27	067		27	068		10/30/2007	80	FM		80
1 17	27	068		27	069		10/30/2007	50	FM		50
1 17	27	069		27	070		10/31/2007	396	FM		396
1 17	27	070		27	172		10/31/2007	138	FM		138
1 17	27	070		27	075		11/6/2007	115	FM		115
1 17	27	071		27	173		11/6/2007	70	FM		70
1 17	27	072		27	073		11/6/2007	285	FM		285
1 17	27	072		27	173		11/6/2007	219	FM		219
1 17	27	073		27	074		11/6/2007	283	FM		283
1 17	27	074		27	075		11/6/2007	335	FM		335
1 17	27	075		27	076		11/6/2007	155	FM		155
1 17	27	076		27	077		11/6/2007	345	FM		345
1 17	28	001		28	004		10/30/2007	87	FM		87
1 17	28	002		28	003		10/30/2007	247	FM		247
1 17	28	003		28	004		10/30/2007	309	FM		309
1 17	28	004		28	007		10/30/2007	189	FM		189
1 17	28	005		28	006		9/1/2007	320	JM	12	320
1 17	28	005		28	006		10/30/2007	292	FM		292
1 17	28	006		28	007		10/30/2007	320	FM		320
1 17	28	008		28	009		10/29/2007	158	FM		158
1 17	28	009		28	010		10/29/2007	167	FM		167
1 17	28	009		28	066		10/29/2007	59	FM		59
1 17	28	010		28	011		10/29/2007	228	FM		228
1 17	28	011		28	017		10/29/2007	229	FM		229
1 17	28	012		28	013		10/29/2007	284	FM		284
1 17	28	013		28	014		10/29/2007	314	FM		314
1 17	28	014		28	015		10/29/2007	167	FM		167
1 17	28	015		28	016		10/29/2007	289	FM		289
1 17	28	015		28	067	D	10/29/2007	118	FM		118
1 17	28	016		28	017		10/29/2007	291	FM		291

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 17	28	017		28	018		10/29/2007	145	FM		145
1 17	28	018		28	019		10/29/2007	292	FM		292
1 17	28	019		28	020		10/29/2007	250	FM		250
1 17	28	020		28	026		10/29/2007	163	FM		163
1 17	28	021		28	025		10/29/2007	275	FM		275
1 17	28	022		28	023		10/29/2007	268	FM		268
1 17	28	023		28	024		10/29/2007	261	FM		261
1 17	28	024		28	025		10/29/2007	85	FM		85
1 17	28	025		28	026		10/29/2007	260	FM		260
1 18	21	090		21	092		11/20/2007	317	FM		317
1 18	21	090		27	089		11/20/2007	262	FM		262
1 18	21	091		21	092		11/20/2007	192	FM		192
1 18	21	092		21	093		11/26/2007	330	FMA		330
1 18	21	093		21	094	M	11/26/2007	341	FM		341
1 18	27	045		27	046		11/16/2007	274	FM		274
1 18	27	045		27	115		11/16/2007	313	FM		313
1 18	27	046		27	047		11/16/2007	257	FM		257
1 18	27	047		27	048		11/16/2007	235	FM		235
1 18	27	048		27	052		11/16/2007	208	FM		208
1 18	27	052		27	078		11/16/2007	195	FM		195
1 18	27	077		27	078		11/16/2007	348	FM		348
1 18	27	078		27	079		11/16/2007	305	FM		305
1 18	27	079		27	080		11/16/2007	290	FM		290
1 18	27	080		27	082		11/20/2007	158	FM		158
1 18	27	081		27	082		11/20/2007	307	FM		307
1 18	27	082		27	083		11/20/2007	83	FM		83
1 18	27	083		27	085		11/20/2007	254	FM		254
1 18	27	084		27	085		11/20/2007	285	FM		285
1 18	27	085		27	086		11/20/2007	314	FM		314
1 18	27	086		27	087		11/20/2007	318	FM		318
1 18	27	087		27	089		11/20/2007	55	FM		55
1 18	27	088		27	089		11/20/2007	244	FM		244
1 19	21	060		21	143		11/26/2007	63	FM		63
1 19	21	094	M	21	096		11/26/2007	335	FM		335
1 19	21	095		21	096		11/26/2007	265	FM		265
1 19	21	096		21	097		11/26/2007	222	FM		222
1 19	21	097		21	103		11/26/2007	179	FM		179
1 19	21	098		21	100		11/15/2007	127	FM		127
1 19	21	099		21	100		11/15/2007	165	FM		165
1 19	21	100		21	102		11/15/2007	263	FM		263
1 19	21	101		21	102		11/15/2007	167	FM		167
1 19	21	102		21	103		11/26/2007	264	FM		264
1 19	21	103		21	104		11/26/2007	292	FM		292
1 19	21	104		21	105		11/26/2007	323	FM		323
1 20	20	016		20	017		11/21/2007	287	FM		287
1 20	20	017		20	018		11/21/2007	267	FM		267
1 20	20	018		20	020		11/21/2007	263	FM		263
1 20	20	019	P	20	020	P	5/12/2008	364	FM	3	1456
1 20	20	020		20	021		11/21/2007	105	FM		105

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 20	20	020		21	122		11/26/2007	222	FM		222
1 20	21	105		21	124		11/26/2007	326	FM		326
1 20	21	120	M	21	124		11/26/2007	300	FM		300
1 20	21	121		21	123		11/26/2007	291	FM		291
1 20	21	122		21	123		11/26/2007	46	FM		46
1 20	21	123		21	124		11/26/2007	261	FM		261
1 20	21	124		21	125		11/29/2007	280	FM		280
1 20	21	125		21	126		11/29/2007	280	FM		280
1 20	21	126		21	127		11/29/2007	280	FM		280
1 20	21	127		21	133		11/29/2007	275	FM		275
1 21	20	024		20	033		2/25/2008	183	FM		183
1 21	20	032		20	034		2/25/2008	202	FM		202
1 21	20	032		21	134		2/25/2008	323	FM		323
1 21	20	033		20	034		2/25/2008	280	FM		280
1 21	20	034		20	035	M	2/25/2008	120	FM		120
1 21	20	035	M	20	148		2/25/2008	27	FM		27
1 21	20	036		20	148		2/25/2008	300	FM		300
1 21	21	128		21	129		11/29/2007	233	FM		233
1 21	21	129		21	130	P	11/29/2007	235	FM		235
1 21	21	130	P	21	131	P	5/12/2008	162	FM	3	648
1 21	21	131	P	21	132		5/12/2008	299	FM	3	1196
1 21	21	132	P	21	141	P	5/12/2008	116	FM	3	464
1 21	21	133		21	134		2/25/2008	324	FM		324
1 21	21	133	P	21	141	P	5/12/2008	190	FM	3	760
1 23	21	060		21	061		12/4/2007	300	FM		300
1 23	21	061		21	070		12/4/2007	305	FM		305
1 23	21	062		21	063		11/28/2007	279	FM		279
1 23	21	062		22	080		11/28/2007	282	FM		282
1 23	21	063		21	064		12/4/2007	232	FM		232
1 23	21	064		21	066		12/4/2007	231	FM		231
1 23	21	065		21	066		12/4/2007	212	FM		212
1 23	21	065		22	079		12/4/2007	179	FM		179
1 23	21	066		21	067		12/4/2007	257	FM		257
1 23	21	067		21	068		12/4/2007	215	FM		215
1 23	21	068		21	140		12/4/2007	230	FM		230
1 23	21	069		21	070		12/4/2007	285	FM		285
1 23	21	069		21	140		12/4/2007	125	FM		125
1 23	21	070		21	071		12/4/2007	303	FM		303
1 23	21	071		21	072		12/4/2007	300	FM		300
1 23	21	072		21	083		12/4/2007	292	FM		292
1 23	21	089		22	077		11/28/2007	279	FM		279
1 23	22	054		22	055		11/27/2007	236	FM		236
1 23	22	055		22	056		11/27/2007	234	FM		234
1 23	22	056		22	057		11/27/2007	118	FM		118
1 23	22	057		22	060		11/27/2007	309	FM		309
1 23	22	057		22	093	D	11/27/2007	190	FM		190
1 23	22	058		22	059		11/27/2007	348	FM		348
1 23	22	059		22	060		11/27/2007	265	FM		265
1 23	22	061		22	062		11/27/2007	350	FM		350

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 23	22	062		22	069		11/27/2007	99	FM		99
1 23	22	063		22	064		11/27/2007	200	FM		200
1 23	22	064		22	065		11/27/2007	276	FM		276
1 23	22	065		22	066		11/27/2007	45	FM		45
1 23	22	066		22	067		11/27/2007	272	FM		272
1 23	22	067		22	068		11/27/2007	230	FM		230
1 23	22	068		22	069		11/27/2007	347	FM		347
1 23	22	069		22	070		11/27/2007	303	FM		303
1 23	22	070		22	071		11/27/2007	300	FM		300
1 23	22	071		22	072		11/28/2007	171	FM		171
1 23	22	072		22	073		11/28/2007	193	FM		193
1 23	22	073		22	074		11/28/2007	276	FM		276
1 23	22	074		22	075	S	11/28/2007	144	FM		144
1 23	22	075	S	22	076	S	5/5/2008	40	FM	3	160
1 23	22	076	S	22	078		12/4/2007	63	FM		63
1 23	22	077		22	078		12/4/2007	318	FM		318
1 23	22	078		22	079		12/4/2007	37	FM		37
1 24	21	073		21	074		11/28/2007	313	FM		313
1 24	21	074		21	075		11/28/2007	275	FM		275
1 24	21	075		21	076		11/28/2007	214	FM		214
1 24	21	076		21	079		11/28/2007	250	FM		250
1 24	21	076		22	053		11/28/2007	262	FM		262
1 24	21	077		21	078		11/28/2007	348	FM		348
1 24	21	078		21	079		11/28/2007	346	FM		346
1 24	21	079		21	080		11/28/2007	167	FM		167
1 24	21	080		21	081		11/28/2007	260	FM		260
1 24	21	081	P	21	082	P	5/13/2008	348	FM	3	1392
1 24	21	082		21	083		11/28/2007	300	FM		300
1 24	21	083		21	084		12/6/2007	253	FM		253
1 24	21	084		21	085		12/6/2007	252	FM		252
1 24	21	085		21	086		12/6/2007	310	FM		310
1 24	22	010		22	047		11/27/2007	40	FM		40
1 24	22	010		22	048		11/27/2007	110	FM		110
1 24	22	046		22	047		11/27/2007	275	FM		275
1 24	22	048		22	049		11/27/2007	272	FM		272
1 24	22	049		22	050		11/27/2007	234	FM		234
1 24	22	050		22	051		11/27/2007	300	FM		300
1 24	22	051		22	052		11/27/2007	255	FM		255
1 24	22	052		22	053		11/27/2007	232	FM		232
1 25	20	039		21	088		12/6/2007	317	FM		317
1 25	21	086		21	087		12/6/2007	289	FM		289
1 25	21	087		21	135		12/6/2007	230	FM		230
1 25	21	088		21	136		12/6/2007	22	FM		22
1 25	21	135	S	21	136	S	5/5/2008	46	FM	3	184
1 26	20	038		20	042		12/6/2007	287	FM		287
1 26	20	039	M	20	040		12/6/2007	300	FM		300
1 26	20	040		20	041		12/6/2007	300	FM		300
1 26	20	041		20	042		12/6/2007	300	FM		300
1 26	20	042		20	052		12/6/2007	75	FM		75

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
1 27	20	011		20	154		11/20/2007	118	FM		118
1 27	20	012		20	013		12/5/2007	284	FM		284
1 27	20	012		20	154		12/5/2007	162	FM		162
1 27	20	013		20	014		12/5/2007	337	FM		337
1 27	20	013		26	177		12/5/2007	338	FM		338
1 27	20	014		20	015		12/5/2007	333	FM		333
1 27	20	015		20	028		12/6/2007	334	FM		334
1 27	20	021		20	026		11/21/2007	211	FM		211
1 27	20	022		20	023		11/29/2007	225	FM		225
1 27	20	023		20	026		11/29/2007	305	FM		305
1 27	20	025		20	026		11/29/2007	298	FM		298
1 27	20	025		20	149		11/29/2007	182	FM		182
1 27	20	026		20	027		11/29/2007	114	FM		114
1 27	20	027		20	028		11/29/2007	325	FM		325
1 27	20	028		20	029		12/6/2007	273	FM		273
1 27	20	029		20	030		12/6/2007	286	FM		286
1 27	20	030		20	031		12/6/2007	281	FM		281
1 27	20	154		20	155		11/20/2007	266	FM		266
1 27	26	071		26	172		12/5/2007	250	FM		250
1 27	26	071		26	173		12/5/2007	36	FM		36
1 27	26	171		26	172		11/8/2007	282	FM		282
1 27	26	173		26	174		12/5/2007	289	FM		289
1 27	26	174		26	175		12/5/2007	239	FM		239
1 27	26	175		26	176		12/5/2007	339	FM		339
1 27	26	176		26	177		12/5/2007	350	FM		350
1 28	20	036		20	037		12/6/2007	283	FM		283
1 28	20	037		20	038		12/6/2007	287	FM		287
1 29	20	043		20	044		12/3/2007	333	FM		333
1 29	20	043		26	089		12/3/2007	372	FM		372
1 29	20	044		20	045		12/3/2007	332	FM		332
1 29	20	045		20	046		12/3/2007	331	FM		331
1 29	20	046		20	047		12/3/2007	335	FM		335
1 29	20	047		20	048		12/3/2007	323	FM		323
1 29	20	048		20	049		12/3/2007	328	FM		328
1 29	20	049		20	050		12/3/2007	330	FM		330
1 29	20	050		20	051		12/3/2007	329	FM		329
1 29	20	050		20	051		2/1/2008	322	JM	12	322
1 29	20	051		20	052		12/3/2007	331	FM		331
1 29	26	079		26	080		12/3/2007	100	FM		100
1 29	26	080		26	081		12/3/2007	262	FM		262
1 29	26	081		26	082		12/3/2007	359	FM		359
1 29	26	082		26	089		12/3/2007	201	FM		201
1 29	26	083		26	084		12/3/2007	296	FM		296
1 29	26	084		26	085		12/3/2007	234	FM		234
1 29	26	085		26	086		12/3/2007	168	FM		168
1 29	26	086		26	087		12/3/2007	170	FM		170
1 29	26	087		26	088		12/3/2007	288	FM		288
1 29	26	088		26	089		12/3/2007	318	FM		318
2 01	30	021		30	022		6/4/2008	185	FM		185

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
2 01	30	022		31	002		6/4/2008	326	FM		326
2 01	31	001		31	002		6/4/2008	190	FM		190
2 01	31	002		31	016		6/4/2008	211	FM		211
2 01	31	003		31	004		6/3/2008	338	FM		338
2 01	31	003		35	039		6/3/2008	250	FM		250
2 01	31	003		35	046		6/3/2008	78	FM		78
2 01	31	004		31	006		6/3/2008	151	FM		151
2 01	31	005		31	006		6/3/2008	294	FM		294
2 01	31	006		31	007		6/3/2008	172	FM		172
2 01	31	007		31	009		6/3/2008	175	FM		175
2 01	31	008		31	009		6/3/2008	300	FM		300
2 01	31	009		31	010		6/4/2008	125	FM		125
2 01	31	010		31	037		6/4/2008	140	FM		140
2 01	31	011		31	015		6/4/2008	230	FM		230
2 01	31	011		31	037		6/4/2008	215	FM		215
2 01	31	012		31	014		6/4/2008	82	FM		82
2 01	31	012		31	042		6/4/2008	110	FM		110
2 01	31	013		31	014		6/4/2008	203	FM		203
2 01	31	014		31	015		6/4/2008	200	FM		200
2 01	31	015		31	016		6/4/2008	205	FM		205
2 01	31	016		31	035		6/4/2008	300	FM		300
2 01	31	016		31	017		6/9/2008	282	FM		282
2 01	31	035		31	036		6/3/2008	297	FM		297
2 01	31	036		31	040		6/3/2008	200	FM		200
2 01	31	037		31	038		6/4/2008	190	FM		190
2 01	31	040		31	042		6/3/2008	407	FM		407
2 01	31	041		31	043		6/3/2008	164	FM		164
2 01	31	041		35	047		6/3/2008	31041	FM		31041
2 01	31	042		31	043		6/3/2008	114	FM		114
2 01	31	043		31	044		6/4/2008	173	FM		173
2 01	31	044		31	045		6/4/2008	202	FM		202
2 01	31	044		31	048		6/4/2008	165	FM		165
2 01	31	045		31	046		6/4/2008	300	FM		300
2 01	31	046		31	047		6/4/2008	350	FM		350
2 01	31	048		31	049		6/4/2008	276	FM		276
2 01	34	001		35	001		5/19/2008	315	FM		315
2 01	34	001		35	002		5/19/2008	250	FM		250
2 01	34	002		34	003		6/3/2008	300	FM		300
2 01	34	002		35	047		6/3/2008	290	FM		290
2 01	34	003		34	004		6/3/2008	300	FM		300
2 01	34	004		34	023		6/3/2008	300	FM		300
2 01	34	005		34	023		7/24/2007	300	FM		300
2 01	34	005		34	006		6/3/2008	72	FM		72
2 01	34	006		34	007		6/2/2008	70	FM		70
2 01	34	007		34	008		6/2/2008	125	FM		125
2 01	34	008		34	009		6/2/2008	181	FM		181
2 01	34	009		34	010		6/2/2008	133	FM		133
2 01	34	010		34	011		6/2/2008	160	FM		160
2 01	34	011		34	012		6/2/2008	161	FM		161

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
2 01	34	012		34	013		6/2/2008	161	FM		161
2 01	34	013		34	014		6/2/2008	86	FM		86
2 01	34	014		34	015		6/2/2008	54	FM		54
2 01	34	015		34	016		6/2/2008	81	FM		81
2 01	34	015		34	020		6/2/2008	158	FM		158
2 01	34	016		34	017		5/22/2008	215	FM		215
2 01	34	017		34	018		5/22/2008	155	FM		155
2 01	34	018		34	019		5/22/2008	147	FM		147
2 01	34	020		34	021		5/22/2008	207	FM		207
2 01	34	021		34	022		5/22/2008	156	FM		156
2 01	35	002		35	004		5/19/2008	275	FM		275
2 01	35	003		35	004		5/19/2008	176	FM		176
2 01	35	004		35	005		5/19/2008	230	FM		230
2 01	35	005		35	012		5/19/2008	350	FM		350
2 01	35	006		35	007		5/19/2008	352	FM		352
2 01	35	007		35	010		5/19/2008	345	FM		345
2 01	35	008		35	009		5/19/2008	317	FM		317
2 01	35	009		35	010		5/19/2008	300	FM		300
2 01	35	010		35	011		5/19/2008	174	FM		174
2 01	35	011		35	012		5/19/2008	222	FM		222
2 01	35	012		35	013		5/20/2008	323	FM		323
2 01	35	013		35	015		5/20/2008	210	FM		210
2 01	35	014		35	015		5/20/2008	310	FM		310
2 01	35	015		35	016		5/20/2008	124	FM		124
2 01	35	016		35	017		5/21/2008	320	FM		320
2 01	35	017		35	018		5/21/2008	320	FM		320
2 01	35	018		35	036		5/21/2008	320	FM		320
2 01	35	019		35	020		5/20/2008	230	FM		230
2 01	35	020		35	022		5/20/2008	235	FM		235
2 01	35	021		35	022		5/20/2008	340	FM		340
2 01	35	022		35	023		5/20/2008	225	FM		225
2 01	35	023		35	031		5/21/2008	125	FM		125
2 01	35	024		35	025		5/20/2008	297	FM		297
2 01	35	025		35	026		5/20/2008	303	FM		303
2 01	35	026		35	027		5/20/2008	187	FM		187
2 01	35	027		35	028		5/20/2008	35027	FM	33	35027
2 01	35	028		35	029		5/20/2008	225	FM		225
2 01	35	029		35	030		5/20/2008	203	FM		203
2 01	35	030		35	031		5/21/2008	159	FM		159
2 01	35	031		35	034		5/21/2008	110	FM		110
2 01	35	032		35	033		5/20/2008	350	FM		350
2 01	35	033		35	034		5/21/2008	340	FM		340
2 01	35	034		35	035		5/21/2008	270	FM		270
2 01	35	035		35	036		5/21/2008	275	FM		275
2 01	35	035		35	040		5/21/2008	40	FM		40
2 01	35	036		35	037		5/21/2008	125	FM		125
2 01	35	037		35	038		7/26/2007	250	FM		250
2 01	35	038		35	043		5/22/2008	125	FM		125
2 01	35	039		35	043		5/22/2008	125	FM		125

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
2 01	35	040		35	041		5/21/2008	118	FM		118
2 01	35	041		35	042		5/21/2008	349	FM		349
2 01	35	043		35	044		5/22/2008	133	FM		133
2 01	35	044		35	045	C	5/22/2008	162	FM		162
2 02	31	017		31	018		6/9/2008	217	FM		217
2 02	31	018		31	019		6/9/2008	223	FM		223
2 02	31	019		31	020		6/9/2008	265	FM		265
2 02	31	019		31	050		6/9/2008	142	FM		142
2 02	31	020		31	021		6/9/2008	235	FM		235
2 02	31	021		31	022		6/9/2008	295	FM		295
2 02	31	022		31	023		6/9/2008	352	FM		352
2 02	31	023		31	024		6/9/2008	352	FM		352
2 02	31	024		31	025		6/9/2008	350	FM		350
2 03	25	170		26	007		10/30/2007	175	JM	12	175
2 03	25	170		25	202		6/12/2008	204	FM		204
2 03	25	170		26	007		6/12/2008	180	FM		180
2 03	25	171		26	005		6/12/2008	315	FM		315
2 03	25	172		30	023		6/11/2008	350	FM		350
2 03	25	172		25	173		6/12/2008	119	FM		119
2 03	25	173		25	176		6/12/2008	213	FM		213
2 03	25	174		25	175		6/12/2008	200	FM		200
2 03	25	175		25	176		6/12/2008	200	FM		200
2 03	25	176		25	177		6/12/2008	125	FM		125
2 03	25	177		25	178		6/12/2008	188	FM		188
2 03	25	178		26	003		6/12/2008	190	FM		190
2 03	25	179		25	180		6/11/2008	173	FM		173
2 03	25	180		25	181		6/11/2008	197	FM		197
2 03	25	181		25	182		6/11/2008	230	FM		230
2 03	25	182		26	001		6/11/2008	202	FM		202
2 03	25	182		30	012		6/11/2008	360	FM		360
2 03	26	001		26	002		6/12/2008	300	FM		300
2 03	26	002		26	004		6/12/2008	260	FM		260
2 03	26	002		31	030		6/12/2008	230	FM		230
2 03	26	003		26	004		6/12/2008	249	FM		249
2 03	26	004		26	006		6/12/2008	300	FM		300
2 03	26	005		26	006		6/12/2008	300	FM		300
2 03	26	006		26	008		6/12/2008	290	FM		290
2 03	26	007		26	008		6/12/2008	300	FM		300
2 03	26	008		26	009		6/12/2008	200	FM		200
2 03	26	009		26	034		6/19/2008	200	FM		200
2 03	30	008		30	009		6/11/2008	323	FM		323
2 03	30	009		30	010		6/11/2008	251	FM		251
2 03	30	010		30	012		6/11/2008	236	FM		236
2 03	30	011		30	012		6/11/2008	240	FM		240
2 03	30	013		30	014		6/9/2008	323	FM		323
2 03	30	013		30	024	C	6/9/2008	50	FM		50
2 03	30	014		30	015		6/9/2008	295	FM		295
2 03	30	015		30	016		6/9/2008	353	FM		353
2 03	30	016		30	017		6/9/2008	325	FM		325

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
2 03	30	017		30	018		6/9/2008	303	FM		303
2 03	30	018		30	019		6/9/2008	269	FM		269
2 03	30	019		30	020		6/9/2008	255	FM		255
2 03	30	020		31	027		6/9/2008	255	FM		255
2 03	31	025		31	026		6/9/2008	441	FM		441
2 03	31	026		31	027		6/9/2008	126	FM		126
2 03	31	027		31	028		6/12/2008	151	FM		151
2 03	31	028		31	029		6/12/2008	335	FM		335
2 03	31	029		31	030		6/12/2008	228	FM		228
2 04	26	010		31	032		6/17/2008	267	FM		267
2 04	26	010		26	011		6/18/2008	253	FM		253
2 04	26	011		26	012		6/18/2008	259	FM		259
2 04	26	012		26	013		6/18/2008	236	FM		236
2 04	26	013		26	014		6/18/2008	86	FN		86
2 04	26	014		26	015		6/18/2008	185	FM		185
2 04	26	015		26	016		6/18/2008	177	FM		177
2 04	26	016		26	019		6/18/2008	242	FM		242
2 04	26	017		26	018		6/18/2008	184	FM		184
2 04	26	018		26	019		6/18/2008	182	FM		182
2 04	26	019		26	026		6/19/2008	273	FM		273
2 04	26	020		26	021		6/18/2008	178	FM		178
2 04	26	021		26	022		6/18/2008	138	FM		138
2 04	26	022		26	023		6/19/2008	306	FM		306
2 04	26	023		26	024		6/19/2008	300	FM		300
2 04	26	024		26	025		8/13/2007	300	FM		300
2 04	26	025		26	026		6/19/2008	273	FM		273
2 04	26	026		26	029		6/19/2008	238	FM		238
2 04	26	027		26	028		6/19/2008	164	FM		164
2 04	26	028		26	029		6/19/2008	226	FM		226
2 04	26	029		26	033		6/19/2008	20	FM		20
2 04	26	030		26	031		6/19/2008	245	FM		245
2 04	26	031		26	032		6/19/2008	300	FM		300
2 04	26	032		26	033		6/19/2008	287	FM		287
2 04	26	033		26	034		6/19/2008	303	FM		303
2 04	26	034		26	035		6/19/2008	214	FM		214
2 04	31	031		31	032		6/17/2008	300	FM		300
2 04	31	031		31	052		6/17/2008	69	FM		69
2 04	31	052		31	053		6/17/2008	81	FM		81
2 04	31	053		31	054		6/17/2008	71	FM		71
2 04	31	054		31	055		6/17/2008	54	FM		54
2 04	31	055		31	056		6/17/2008	185	FM		185
2 04	31	056		31	057		6/17/2008	250	FM		250
2 04	31	057		31	058		6/17/2008	286	FM		286
2 04	31	058		31	059		6/17/2008	232	FM		232
2 04	31	059		31	060		6/17/2008	232	FM		232
2 04	31	060		31	061		6/17/2008	229	FM		229
2 05	25	158		25	159		6/30/2008	233	FM		233
2 05	25	159		25	160		6/30/2008	305	FM		305
2 05	25	160		26	040		6/30/2008	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
2 05	25	161		25	168		6/23/2008	130	FM		130
2 05	25	162		25	163		6/23/2008	271	FM		271
2 05	25	163		25	166		6/23/2008	212	FM		212
2 05	25	164		25	166		6/23/2008	100	FM		100
2 05	25	165		25	166		6/23/2008	325	FM		325
2 05	25	166		25	167		8/14/2007	217	FM		217
2 05	25	167		25	168		6/23/2008	208	FM		208
2 05	25	168		25	169		6/24/2008	330	FM		330
2 05	25	169		26	038		6/24/2008	287	FM		287
2 05	26	035		26	036		6/19/2008	230	FM		230
2 05	26	036		26	037		6/24/2008	202	FM		202
2 05	26	037		26	039		6/24/2008	250	FM		250
2 05	26	038	P	26	039	P	5/12/2008	290	FM	3	1160
2 05	26	039		26	041		6/30/2008	162	FM		162
2 05	26	040		26	041		6/30/2008	290	FM		290
2 05	26	041		26	043		6/30/2008	200	FM		200
2 05	26	043		26	044		6/30/2008	338	FM		338
2 05	26	044		26	045		6/30/2008	338	FM		338
2 05	26	045		26	046		6/30/2008	10	FM		10
2 05	26	046		26	047		6/30/2008	310	FM		310
2 06	25	145		25	146		1/1/2008	256	JM	12	256
2 06	25	145		25	146		6/30/2008	245	FM		245
2 06	25	146		25	147		6/30/2008	246	FM		246
2 06	25	147		25	150		6/30/2008	248	FM		248
2 06	25	148		25	150		6/30/2008	234	FM		234
2 06	25	149		25	150		6/30/2008	299	FM		299
2 06	25	149		26	182		6/30/2008	259	FM		259
2 06	25	150		25	151		6/30/2008	339	FM		339
2 06	25	151		25	152	S	6/30/2008	307	FM		307
2 06	25	152	S	25	153	S	2/6/2008	45	FM	3	180
2 06	25	153	S	25	154		6/30/2008	328	FM		328
2 06	25	154		25	156		6/30/2008	332	FM		332
2 06	26	059		26	060	M	8/15/2007	363	FM		363
2 06	26	060		26	069	M	8/17/2007	319	FM		319
2 07	19	168		20	074		5/1/2008	270	JM	12	270
2 07	20	068		20	069		8/17/2007	280	FM		280
2 07	20	069		20	070		8/17/2007	126	FM		126
2 07	20	069		26	077		10/17/2007	194	FM		194
2 07	20	070		20	075		8/17/2007	143	FM		143
2 07	20	074		20	075		10/17/2007	256	FM		256
2 07	20	075		20	076		8/17/2007	284	FM		284
2 07	25	139		26	070		8/17/2007	345	FM		345
2 07	25	140	P	25	141	P	5/12/2008	203	FM	3	812
2 07	25	141	P	25	144	P	5/12/2008	178	FM	3	712
2 07	25	142		25	144		8/16/2007	149	FM		149
2 07	25	143		25	144		8/16/2007	100	FM		100
2 07	25	144	P	26	068	P	5/12/2008	323	FM	3	1292
2 07	26	061		26	062		8/16/2007	323	FM		323
2 07	26	062		26	063		8/16/2007	327	FM		327

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
2 07	26	063		26	064		8/16/2007	323	FM		323
2 07	26	064		26	065		8/16/2007	323	FM		323
2 07	26	065	P	26	069	P	5/12/2008	333	FM	3	1332
2 07	26	066		26	068		8/16/2007	151	FM		151
2 07	26	067		26	068		8/16/2007	112	FM		112
2 07	26	068	P	26	069	P	5/12/2008	180	FM	3	720
2 07	26	069		26	070		8/17/2007	287	FM		287
2 07	26	070		26	077		8/17/2007	350	FM		350
2 07	26	072		26	073		8/15/2007	322	FM		322
2 07	26	073		26	074		8/15/2007	318	FM		318
2 07	26	074		26	075		8/15/2007	316	FM		316
2 07	26	075		26	076		8/16/2007	325	FM		325
2 07	26	075		26	076		3/1/2008	330	JM	6	660
2 07	26	076		26	077		8/17/2007	320	FM		320
2 08	19	169		19	170	S	8/16/2007	30	FM		30
2 08	19	170	S	19	171	S	5/5/2008	11	FM	3	44
2 08	19	171	S	19	172	S	5/5/2008	35	FM	3	140
2 08	19	172	S	19	173	S	5/5/2008	9	FM	3	36
2 08	19	173	S	19	175		10/16/2007	117	FM		117
2 08	19	177		19	183		8/20/2007	350	FM		350
2 08	19	177		19	183		5/1/2008	350	JM	12	350
2 08	19	178		19	179		8/20/2007	153	FM		153
2 08	19	179		19	180		8/20/2007	200	FM		200
2 08	19	180		19	181		8/20/2007	79	FM		79
2 08	19	181		19	182		8/20/2007	296	FM		296
2 08	19	181		20	096		8/20/2007	260	FM		260
2 08	19	182		19	183		8/20/2007	98	FM		98
2 08	19	183		19	184		8/20/2007	130	FM		130
2 08	19	184		19	185		8/20/2007	240	FM		240
2 08	19	185		19	186		8/20/2007	238	FM		238
2 08	19	186		19	187		8/21/2007	200	FM		200
2 08	19	187		19	189		8/21/2007	7	FM		7
2 08	19	188		19	189		8/21/2007	317	FM		317
2 08	19	189		20	087		8/21/2007	241	FM		241
2 08	20	064		20	066		8/21/2007	107	FM		107
2 08	20	076		20	077		9/17/2007	259	FM		259
2 08	20	080		20	079		8/20/2007	301	FM		301
2 08	20	080		20	081		8/20/2007	51	FM		51
2 08	20	082		20	083		8/20/2007	299	FM		299
2 08	20	083		20	084		8/20/2007	281	FM		281
2 08	20	084		20	085		8/20/2007	300	FM		300
2 08	20	085		20	086		8/21/2007	249	FM		249
2 08	20	086		20	088		8/21/2007	226	FM		226
2 08	20	087		20	088		8/21/2007	221	FM		221
2 08	20	088		20	089		8/21/2007	298	FM		298
2 08	20	089		20	090		8/21/2007	308	FM		308
2 08	20	090		20	091		8/21/2007	244	FM		244
2 08	20	091		20	094		8/21/2007	256	FM		256
2 08	20	092		20	093		8/21/2007	248	FM		248

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
2 08	20	093		20	094		8/21/2007	240	FM		240
2 08	20	094		20	095		8/21/2007	292	FM		292
2 09	20	052		20	053		8/21/2007	236	FM		236
2 10	20	053		20	054		8/21/2007	228	FM		228
2 10	20	054		20	055	M	8/21/2007	238	FM		238
2 10	20	054		20	153		8/21/2007	14	FM		14
2 10	20	055	M	20	146		8/21/2007	98	FM		98
2 11	20	060		20	061		8/21/2007	414	FM		414
2 11	20	062		20	061		8/21/2007	185	FM		185
2 11	20	062		20	063		8/21/2007	323	FM		323
2 11	20	063		20	064		8/21/2007	224	FM		224
2 11	20	063		20	146		8/21/2007	236	FM		236
2 11	20	066		20	067		8/21/2007	139	FM		139
2 11	20	067		20	095		8/21/2007	247	FM		247
2 11	20	150		20	151		6/16/2008	512	FM		512
2 11	20	151		20	152		8/21/2007	400	FM		400
2 11	20	152		20	153		8/21/2007	419	FM		419
3E02	24	001		24	002		9/13/2007	137	FM		137
3E02	24	001		24	164	C	9/13/2007	187	FM		187
3E02	24	002		24	003		9/13/2007	253	FM		253
3E02	24	003		24	004		9/13/2007	307	FM		307
3E02	24	004		24	005		9/14/2007	296	FM		296
3E02	24	005		24	006		9/17/2007	315	FM		315
3E02	24	006		24	007		9/17/2007	179	FM		179
3E02	24	007		24	014		9/17/2007	181	FM		181
3E02	24	008		24	009		9/14/2007	99	FM		99
3E02	24	008		24	163	D	9/14/2007	80	FM		80
3E02	24	009		24	010		9/14/2007	196	FM		196
3E02	24	009		24	166	D	9/14/2007	167	FM		167
3E02	24	010		24	011		9/14/2007	282	FM		282
3E02	24	011		24	012		9/14/2007	297	FM		297
3E02	24	012		24	013		9/14/2007	288	FM		288
3E02	24	013		24	014		9/17/2007	290	FM		290
3E02	24	014		24	015		9/17/2007	180	FM		180
3E02	24	014		24	167		9/17/2007	47	FM		47
3E02	24	167		24	168		9/17/2007	522	FM		522
3E02	24	168		24	169		9/17/2007	544	FM		544
3E02	24	169		24	170		9/18/2007	421	FM		421
3E02	24	170		25	195		9/18/2007	468	FM		468
3E02	25	193		25	194		9/19/2007	304	FM		304
3E02	25	194		25	195		9/18/2007	324	FM		324
3E03	24	015		24	021		9/17/2007	180	FM		180
3E03	24	016		24	017		9/17/2007	296	FM		296
3E03	24	017		24	018		9/17/2007	289	FM		289
3E03	24	018		24	019		9/17/2007	275	FM		275
3E03	24	019		24	020		9/17/2007	287	FM		287
3E03	24	020		24	021		9/17/2007	300	FM		300
3E03	24	021		24	022		9/17/2007	185	FM		185
3E03	24	022		24	060		9/17/2007	200	FM		200

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3E03	24	060		24	061		9/17/2007	331	FM		331
3E03	24	061		24	063		9/17/2007	334	FM		334
3E03	24	062		24	063		9/17/2007	140	FM		140
3E03	24	063		24	064		9/18/2007	303	FM		303
3E03	24	064		25	034		9/18/2007	320	FM		320
3E03	25	033		25	034		9/18/2007	193	FM		193
3E03	25	034		25	196		9/18/2007	0	FM		0
3E03	25	035		25	196		9/18/2007	352	FM		352
3E03	25	035		25	036		9/18/2007	351	FM		351
3E05	24	023		24	024		9/10/2007	293	FM		293
3E05	24	023		24	146		9/10/2007	163	FM		163
3E05	24	024		24	034		9/10/2007	252	FM		252
3E05	24	025		24	026		9/10/2007	107	FM		107
3E05	24	026		24	027		9/10/2007	209	FM		209
3E05	24	027		24	028		9/10/2007	310	FM		310
3E05	24	027		24	028		4/1/2008	324	JM	12	324
3E05	24	028		24	030		9/10/2007	235	FM		235
3E05	24	030		24	031		9/10/2007	265	FM		265
3E05	24	031		24	032		9/10/2007	289	FM		289
3E05	24	032		24	033		9/10/2007	148	FM		148
3E05	24	033		24	034		9/10/2007	65	FM		65
3E05	24	034		24	035		9/10/2007	300	FM		300
3E05	24	035		24	037		9/10/2007	141	FM		141
3E05	24	036		24	037		9/10/2007	206	FM		206
3E05	24	037		24	038		9/10/2007	220	FM		220
3E05	24	038		24	042		9/10/2007	56	FM		56
3E05	24	039		24	040		9/10/2007	24040	FM		24040
3E05	24	040		24	041		9/10/2007	250	FM		250
3E05	24	041		24	042		9/10/2007	237	FM		237
3E05	24	041		24	162	D	9/10/2007	31	FM		31
3E05	24	042		24	043		9/10/2007	160	FM		160
3E05	24	156		24	157		9/10/2007	185	FM		185
3E05	24	156		24	160	D	9/10/2007	100	FM		100
3E05	24	156		24	157		1/1/2008	177	JM	12	177
3E06	24	043		24	165		9/10/2007	160	FM		160
3E06	24	044		24	165		9/10/2007	139	FM		139
3E06	24	044		24	045		9/13/2007	300	FM		300
3E06	24	045		24	059		9/13/2007	300	FM		300
3E06	24	046		24	049		9/11/2007	157	FM		157
3E06	24	047		24	048		9/11/2007	165	FM		165
3E06	24	048		24	049		9/11/2007	84	FM		84
3E06	24	049		24	050		9/11/2007	77	FM		77
3E06	24	050		24	052		9/11/2007	190	FM		190
3E06	24	050		24	052		6/1/2008	193	JM	12	193
3E06	24	051		24	052		9/11/2007	186	FM		186
3E06	24	051		24	052		6/1/2008	185	JM	12	185
3E06	24	052		24	053		9/11/2007	77	FM		77
3E06	24	053		24	054		9/11/2007	76	FM		76
3E06	24	054		24	055		9/11/2007	188	FM		188

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3E06	24	055		24	057		9/11/2007	193	FM		193
3E06	24	056		24	057		9/11/2007	300	FM		300
3E06	24	057		21	058		9/11/2007	195	FM		195
3E06	24	058		24	059		9/13/2007	195	FM		195
3E06	24	059		24	060		9/13/2007	307	FM		307
3E07	24	065		24	066		9/13/2007	129	FM		129
3E07	24	066		24	067		9/13/2007	317	FM		317
3E07	24	067		24	069		9/13/2007	325	FM		325
3E07	24	068		24	069		9/13/2007	115	FM		115
3E07	24	069		24	073		9/13/2007	258	FM		258
3E07	24	070		24	071		9/13/2007	197	FM		197
3E07	24	071		24	072		9/13/2007	280	FM		280
3E07	24	072		24	073		9/13/2007	278	FM		278
3E07	24	072		24	073		3/1/2008	300	JM	12	300
3E07	24	073		24	077		9/13/2007	266	FM		266
3E07	24	074		24	075		9/13/2007	278	FM		278
3E07	24	075		24	076		9/13/2007	232	FM		232
3E07	24	076		24	077		9/13/2007	152	FM		152
3E07	24	077		24	078		9/13/2007	169	FM		169
3E07	24	078		24	082		9/13/2007	156	FM		156
3E07	24	079		24	080		9/13/2007	321	FM		321
3E07	24	080		24	081		9/13/2007	327	FM		327
3E07	24	081		24	082		9/13/2007	182	FM		182
3E07	24	082		25	029		9/13/2007	169	FM		169
3E07	25	028		25	031		9/18/2007	287	FM		287
3E07	25	028		25	200		9/18/2007	100	FM		100
3E07	25	029		25	172		9/13/2007	277	FM		277
3E07	25	030		25	172		9/13/2007	54	FM		54
3E07	25	030		25	031		9/18/2007	322	FM		322
3E07	25	031		25	032		9/18/2007	341	FM		341
3E07	25	032		25	193		9/19/2007	308	FM		308
3E07	25	036		25	186		9/24/2007	20	FM		20
3E07	25	186		25	193		9/24/2007	35	FM		35
3E10	25	011		25	012		9/18/2007	273	FM		273
3E10	25	012		25	017		9/18/2007	279	FM		279
3E10	25	013		25	016		9/18/2007	135	FM		135
3E10	25	014		25	015		9/18/2007	262	FM		262
3E10	25	015		25	016		9/18/2007	262	FM		262
3E10	25	016		25	017		9/18/2007	200	FM		200
3E10	25	017		25	021		9/21/2007	50	FM		50
3E10	25	018		25	019		9/21/2007	250	FM		250
3E10	25	019		25	020		9/21/2007	311	FM		311
3E10	25	020		25	021		9/21/2007	50	FM		50
3E10	25	021		25	022		9/21/2007	349	FM		349
3E10	25	022		25	023		9/21/2007	349	FM		349
3E10	25	022		25	023		12/1/2007	349	JM	12	349
3E10	25	023		25	024		9/21/2007	329	FM		329
3E10	25	024		25	025		9/21/2007	332	FM		332
3E10	25	025		25	026		9/21/2007	347	FM		347

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3E10	25	026	P	25	037	P	5/1/2008	344	FM	3	1376
3E10	25	037		25	198	D	9/21/2007	27	FM		27
3E11	19	001		19	002		9/24/2007	250	FM		250
3E11	19	001		25	010		9/24/2007	252	FM		252
3E11	19	002		19	003		9/24/2007	171	FM		171
3E11	19	003		19	004		9/24/2007	136	FM		136
3E11	19	004		19	005		9/24/2007	278	FM		278
3E11	19	005		19	007		9/24/2007	163	FM		163
3E11	19	006		19	007		9/24/2007	341	FM		341
3E11	19	007		19	008		9/24/2007	10	FM		10
3E11	19	008		19	191		9/24/2007	477	FM		477
3E11	19	008		19	009		9/25/2007	482	FM		482
3E11	19	009		19	010		9/25/2007	486	FM		486
3E11	19	010		19	011		9/25/2007	479	FM		479
3E11	19	011		19	012		9/25/2007	549	FM		549
3E11	19	190		19	191		9/24/2007	469	FM		469
3E11	19	190		25	183		9/24/2007	427	FM		427
3E11	25	001		25	002		9/18/2007	275	FM		275
3E11	25	002		25	003		9/18/2007	261	FM		261
3E11	25	003		25	187	D	9/18/2007	125	FM		125
3E11	25	003		25	006		9/24/2007	350	FM		350
3E11	25	005		25	197		9/24/2007	306	FM		306
3E11	25	005		25	006		9/24/2007	251	FM		251
3E11	25	006		25	007		9/24/2007	297	FM		297
3E11	25	007		25	010		9/24/2007	291	FM		291
3E11	25	008	S	25	188	D	9/24/2007	200	FM		200
3E11	25	008	S	25	009	S	2/6/2008	45	FM	3	180
3E11	25	009	S	25	010		9/24/2007	329	FM		329
3E11	25	183		25	184		9/24/2007	310	FM		310
3E11	25	184		25	185		9/24/2007	441	FM		441
3E11	25	185		25	186		9/24/2007	434	FM		434
3E11	25	196	D	25	197		9/24/2007	75	FM		75
3E12	25	037	P	25	038	P	5/1/2008	235	FM	3	940
3E12	25	038		25	039		9/25/2007	335	FM		335
3E12	25	039		25	040	M	9/25/2007	346	FM		346
3E13	19	013		25	041		9/25/2007	348	FM		348
3E13	25	040	M	25	041		9/25/2007	345	FM		345
3E14	19	013		19	014		9/25/2007	350	FM		350
3E14	19	014		19	015		9/25/2007	293	FM		293
3E14	19	015		19	016		9/25/2007	350	FM		350
3E14	19	016		19	017		9/25/2007	370	FM		370
3E14	19	017		19	018		9/25/2007	300	FM		300
3E14	19	018		19	019		9/25/2007	350	FM		350
3E14	19	019		19	020		9/25/2007	369	FM		369
3E14	19	020		19	021		9/25/2007	247	FM		247
3E14	19	021		19	022		9/25/2007	244	FM		244
3S01	29	035		29	040		5/28/2008	247	FM		247
3S01	29	035		36	026		5/28/2008	151	FM		151
3S01	29	036		36	014		5/14/2008	333	FM		333

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3S01	29	036		29	039		5/15/2008	215	FM		215
3S01	29	037		29	109		5/15/2008	45	FM		45
3S01	29	037		29	038		5/15/2008	265	FM		265
3S01	29	038		29	039		5/15/2008	260	FM		260
3S01	29	039		29	040		5/15/2008	164	FM		164
3S01	29	040		29	108		5/28/2008	483	FM		483
3S01	29	041	C	29	046		5/15/2008	113	FM		113
3S01	29	042		29	049		5/28/2008	302	FM		302
3S01	29	042		29	108		5/28/2008	247	FM		247
3S01	29	043		29	045		5/15/2008	381	FM		381
3S01	29	043		36	027		5/15/2008	375	FM		375
3S01	29	044		29	045		5/15/2008	300	FM		300
3S01	29	045		29	046		5/15/2008	213	FM		213
3S01	29	046		29	047		5/15/2008	192	FM		192
3S01	29	047		29	048		5/15/2008	200	FM		200
3S01	29	048		29	049		5/15/2008	100	FM		100
3S01	29	049		29	056		5/28/2008	186	FM		186
3S01	29	050		29	051		5/28/2008	310	FM		310
3S01	29	050		36	005		5/28/2008	340	FM		340
3S01	29	051		29	052		5/28/2008	322	FM		322
3S01	29	052		29	053		5/28/2008	322	FM		322
3S01	29	053		29	054		5/28/2008	97	FM		97
3S01	29	054		29	055		5/28/2008	97	FM		97
3S01	29	055		29	056		5/28/2008	165	FM		165
3S01	29	056		29	057		5/29/2008	351	FM		351
3S01	29	057		29	058		5/29/2008	355	FM		355
3S01	29	058		29	069		5/29/2008	355	FM		355
3S01	29	103		36	022		5/13/2008	125	FM		125
3S01	36	001		36	003		5/14/2008	371	FM		371
3S01	36	002		36	003		5/14/2008	245	FM		245
3S01	36	003		36	004		5/14/2008	300	FM		300
3S01	36	004		36	029		5/28/2008	225	FM		225
3S01	36	004		36	005		5/28/2008	323	FM		323
3S01	36	006		36	007		5/14/2008	195	FM		195
3S01	36	007		36	008		5/14/2008	391	FM		391
3S01	36	008		36	011		5/14/2008	300	FM		300
3S01	36	009		36	010		5/14/2008	146	FM		146
3S01	36	010		36	011		5/14/2008	366	FM		366
3S01	36	011		36	013		5/14/2008	283	FM		283
3S01	36	012		36	013		5/14/2008	420	FM		420
3S01	36	013		36	014		5/14/2008	203	FM		203
3S01	36	015		36	016		5/13/2008	163	FM		163
3S01	36	016		36	017		5/13/2008	312	FM		312
3S01	36	017		36	018		5/13/2008	273	FM		273
3S01	36	018		36	028	C	5/28/2008	206	FM		206
3S01	36	018		36	040		5/28/2008	143	FM		143
3S01	36	019		36	025		5/28/2008	200	FM		200
3S01	36	019		36	040		5/28/2008	89	FM		89
3S01	36	020		36	021		5/13/2008	352	FM		352

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3S01	36	020		36	030	D	5/13/2008	47	FM		47
3S01	36	021		36	022		5/13/2008	345	FM		345
3S01	36	022		36	039		5/13/2008	160	FM		160
3S01	36	025		36	032		5/28/2008	134	FM		134
3S01	36	026		36	032		5/28/2008	118	FM		118
3S01	36	032		36	033		5/14/2008	178	FM		178
3S01	36	033		36	034		5/14/2008	188	FM		188
3S01	36	034		36	035		5/14/2008	96	FM		96
3S01	36	035		36	036		5/14/2008	35	FM		35
3S01	36	036		36	037		5/14/2008	138	FM		138
3S01	36	037		36	038		5/14/2008	89	FM		89
3S01	36	038		36	039		5/13/2008	26	FM		26
3S02	29	059		29	060		5/29/2008	97	FM		97
3S02	29	060		29	061		5/29/2008	217	FM		217
3S02	29	061		29	062		5/29/2008	273	FM		273
3S02	29	062		29	063		5/29/2008	209	FM		209
3S02	29	063		29	064		5/29/2008	100	FM		100
3S02	29	064		29	065		5/29/2008	223	FM		223
3S02	29	065		29	066		5/29/2008	304	FM		304
3S02	29	066		29	067		5/29/2008	271	FM		271
3S02	29	067		29	068		5/29/2008	277	FM		277
3S03	24	093		29	028		5/30/2008	250	FM		250
3S03	24	093		24	094		6/5/2008	170	FM		170
3S03	24	148		24	150		5/19/2008	140	FM		140
3S03	24	149		24	150		5/19/2008	190	FM		190
3S03	24	150		29	001		5/19/2008	222	FM		222
3S03	24	151		29	105		5/19/2008	120	FM		120
3S03	24	152		24	153		5/22/2008	85	FM		85
3S03	24	153		24	154		5/22/2008	177	FM		177
3S03	24	154		29	023		5/22/2008	148	FM		148
3S03	24	155		29	024		5/22/2008	189	FM		189
3S03	29	001		29	005		5/19/2008	305	FM		305
3S03	29	002		29	003		5/19/2008	150	FM		150
3S03	29	003		29	004		5/19/2008	250	FM		250
3S03	29	004		29	005		5/19/2008	232	FM		232
3S03	29	005		29	007		5/19/2008	309	FM		309
3S03	29	005		29	007		6/1/2008	311	JM	12	311
3S03	29	006		29	007		5/19/2008	352	FM		352
3S03	29	006		29	105		5/19/2008	64	FM		64
3S03	29	007		29	008		5/19/2008	194	FM		194
3S03	29	008		29	009		5/19/2008	300	FM		300
3S03	29	009		29	011		5/19/2008	295	FM		295
3S03	29	010		29	011		5/19/2008	213	FM		213
3S03	29	011		29	021		5/19/2008	250	FM		250
3S03	29	012		29	013		5/19/2008	150	FM		150
3S03	29	013		29	014		5/19/2008	229	FM		229
3S03	29	014		29	015		5/19/2008	253	FM		253
3S03	29	015		29	021		5/19/2008	254	FM		254
3S03	29	016		29	017		5/19/2008	199	FM		199

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3S03	29	017		29	018		5/19/2008	400	FM		400
3S03	29	018		29	019		5/19/2008	102	FM		102
3S03	29	019		29	020		5/19/2008	217	FM		217
3S03	29	020		29	021		5/19/2008	321	FM		321
3S03	29	021		29	027		5/27/2008	300	FM		300
3S03	29	022		29	023		2/1/2008	352	JM	12	352
3S03	29	022		29	023		5/22/2008	375	FM		375
3S03	29	023		29	024		5/22/2008	298	FM		298
3S03	29	024		29	025		5/22/2008	226	FM		226
3S03	29	025		29	026		5/22/2008	218	FM		218
3S03	29	026		29	027		5/22/2008	348	FM		348
3S03	29	027		29	033		5/27/2008	298	FM		298
3S03	29	028		29	029		5/30/2008	248	FM		248
3S03	29	029		29	032		5/30/2008	241	FM		241
3S03	29	030		29	031		5/23/2008	289	FM		289
3S03	29	031		29	032		5/23/2008	301	FM		301
3S03	29	032		29	033		5/30/2008	142	FM		142
3S03	29	033		29	106		5/30/2008	99	FM		99
3S03	29	034		29	069		5/30/2008	253	FM		253
3S03	29	034		29	106		5/30/2008	231	FM		231
3S03	29	068		29	069		5/29/2008	60	FM		60
3S04	29	069		29	070		5/30/2008	293	FM		293
3S04	29	070		29	071		5/30/2008	196	FM		196
3S04	29	071		29	107		7/9/2007	89	FM		89
3S04	29	072		29	073		5/30/2008	283	FM		283
3S04	29	072		29	107		5/30/2008	286	FM		286
3S04	29	073		30	001		5/30/2008	268	FM		268
3S04	30	001		30	002		6/2/2008	207	FM		207
3S05	29	074	C	29	075		5/16/2008	174	FM		174
3S05	29	075		29	083		5/16/2008	426	FM		426
3S05	29	076		29	077		5/16/2008	270	FM	3	1080
3S05	29	077		29	078		5/16/2008	177	FM	3	708
3S05	29	078		29	080		5/16/2008	193	FM	3	772
3S05	29	079		29	080		5/16/2008	208	FM		208
3S05	29	080		29	081		5/16/2008	73	FM	3	292
3S05	29	081		29	082		5/16/2008	224	FM	3	896
3S05	29	082		29	083		5/16/2008	299	FM		299
3S05	29	083		29	084		5/16/2008	258	FM		258
3S05	29	084		29	110		5/16/2008	187	FM		187
3S05	29	085		29	110		5/16/2008	223	FM		223
3S05	29	085		29	088		5/16/2008	134	FM		134
3S05	29	086	C	29	087		5/16/2008	123	FM		123
3S05	29	087		29	088		5/16/2008	302	FM		302
3S05	29	088		29	089		5/16/2008	266	FM		266
3S05	29	089		29	090		5/16/2008	351	FM		351
3S05	29	090		29	096		7/5/2007	410	FM		410
3S05	29	090		29	104	C	5/29/2008	107	FM		107
3S05	29	090		29	114	J	5/29/2008	180	FM		180
3S05	29	091		29	092		5/23/2008	292	FM		292

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3S05	29	092		29	093		5/23/2008	99	FM		99
3S05	29	093		29	094		5/23/2008	156	FM		156
3S05	29	094		29	095		5/23/2008	28	FM		28
3S05	29	095		29	114	T	5/23/2008	44	FM		44
3S05	29	096		29	097		5/29/2008	237	FM		237
3S05	29	096		29	114	T	5/29/2008	243	FM		243
3S05	29	097		29	098		5/29/2008	242	FM		242
3S05	29	098		29	099		5/29/2008	345	FM		345
3S05	29	110		29	111		5/16/2008	33	FM		33
3S05	29	111		29	112		5/16/2008	67	FM		67
3S05	29	112		29	113		5/16/2008	183	FM		183
3S06	29	099		29	100		5/30/2008	361	FM		361
3S06	29	100		29	101		5/30/2008	366	FM		366
3S06	29	101		29	102		5/30/2008	346	FM		346
3S06	29	102		30	003		5/30/2008	356	FM		356
3S06	30	002	M	30	005		6/2/2008	175	FM		175
3S06	30	003		30	004		5/30/2008	379	FM		379
3S06	30	004		30	005		6/2/2008	160	FM		160
3S06	30	005		30	006		6/2/2008	150	FM		150
3S07	25	086	M	25	087		6/6/2008	166	FM		166
3S07	25	086	M	30	007		6/6/2008	220	FM		220
3S07	25	087		25	189		6/6/2008	134	FM		134
3S07	25	088		25	089		6/6/2008	300	FM		300
3S07	25	088		25	189		6/6/2008	290	FM		290
3S07	25	089		25	090		6/6/2008	301	FM		301
3S08	24	083		24	084		10/29/2007	240	JM	12	240
3S08	24	083		24	084		5/22/2008	233	FM		233
3S08	24	084		24	087		5/22/2008	315	FM		315
3S08	24	085		24	086		5/22/2008	278	FM		278
3S08	24	086		24	087		5/22/2008	100	FM		100
3S08	24	087		24	088		5/22/2008	315	FM		315
3S08	24	088		24	091		5/22/2008	300	FM		300
3S08	24	089		24	091		10/29/2007	257	JM	12	257
3S08	24	089		24	091		5/22/2008	360	FM		360
3S08	24	090		24	091		5/22/2008	176	FM		176
3S08	24	091		24	092		5/22/2008	300	FM		300
3S08	24	092		24	095		6/5/2008	105	FM		105
3S08	24	094		24	095		6/5/2008	145	FM		145
3S08	24	095		24	096		6/5/2008	290	FM		290
3S08	24	096		24	098		6/5/2008	210	FM		210
3S08	24	097		24	098		5/27/2008	300	FM		300
3S08	24	098		24	104		6/5/2008	200	FM		200
3S08	24	099		24	101		5/27/2008	255	FM		255
3S08	24	100		24	101		5/27/2008	158	FM		158
3S08	24	101		24	102		5/27/2008	74	FM		74
3S08	24	102		24	103		5/27/2008	195	FM		195
3S08	24	103		24	104		5/27/2008	150	FM		150
3S08	24	104		24	133		6/5/2008	300	FM		300
3S08	24	105		24	106		5/27/2008	260	FM		260

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3S08	24	105		24	158	C	5/27/2008	117	FM		117
3S08	24	106		24	110		5/27/2008	185	FM		185
3S08	24	107		24	108		5/27/2008	301	FM		301
3S08	24	108		24	109		5/27/2008	95	FM		95
3S08	24	109		24	110		5/27/2008	125	FM		125
3S08	24	110		24	111		5/27/2008	195	FM		195
3S08	24	111		24	133		5/27/2008	145	FM		145
3S08	24	112		24	113		1/1/2008	115	JM	12	115
3S08	24	112		24	113		5/23/2008	130	FM		130
3S08	24	112		24	161	D	5/23/2008	12	FM		12
3S08	24	113		24	114		1/1/2008	355	JM	12	355
3S08	24	113		24	114		5/23/2008	353	FM		353
3S08	24	114		24	115		1/1/2008	199	JM	12	199
3S08	24	114		24	115		5/23/2008	162	FM		162
3S08	24	115		24	116		5/23/2008	141	FM		141
3S08	24	116		24	117		5/23/2008	156	FM		156
3S08	24	117		24	127		5/23/2008	219	FM		219
3S08	24	118		24	119		5/23/2008	155	FM		155
3S08	24	119		24	120		5/23/2008	76	FM		76
3S08	24	120		24	125		5/23/2008	144	FM		144
3S08	24	120		24	126		5/23/2008	30	FM		30
3S08	24	121		24	122		5/23/2008	151	FM		151
3S08	24	122		24	123		5/23/2008	158	FM		158
3S08	24	123		24	125		5/23/2008	169	FM		169
3S08	24	124	C	24	125		5/23/2008	140	FM		140
3S08	24	126		24	127		5/23/2008	170	FM		170
3S08	24	127		24	128		5/23/2008	162	FM		162
3S08	24	128		24	129		5/23/2008	286	FM		286
3S08	24	129		24	130		5/23/2008	281	FM		281
3S08	24	130		24	131		5/23/2008	220	FM		220
3S08	24	131		24	133		5/23/2008	110	FM		110
3S08	24	133		24	134		6/5/2008	235	FM		235
3S08	24	134		24	139		6/5/2008	110	FM		110
3S08	24	135		24	136		5/27/2008	106	FM		106
3S08	24	135		24	159	C	5/27/2008	77	FM		77
3S08	24	136		24	137		5/27/2008	219	FM		219
3S08	24	137		24	138		5/27/2008	200	FM		200
3S08	24	138		24	139		5/27/2008	228	FM		228
3S08	24	139		24	140		6/5/2008	91	FM		91
3S08	24	140		24	142		6/5/2008	109	FM		109
3S08	24	141		24	142		5/28/2008	250	FM		250
3S08	24	142		24	146		6/5/2008	195	FM		195
3S08	24	143		24	144		5/28/2008	200	FM		200
3S08	24	144		24	145		5/28/2008	219	FM		219
3S08	24	145		24	146		5/28/2008	145	FM		145
3S08	24	146		24	147		6/5/2008	300	FM		300
3S08	24	147		25	081		6/5/2008	250	FM		250
3S08	25	081		25	084		6/5/2008	257	FM		257
3S08	25	082		25	083		6/5/2008	245	FM		245

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3S08	25	083		25	084		6/5/2008	263	FM		263
3S08	25	084		25	085		6/6/2008	195	FM		195
3S08	25	085		25	090		6/6/2008	202	FM		202
3S09	25	090		25	190		6/6/2008	39	FM		39
3S09	25	091		25	092		6/6/2008	275	FM		275
3S09	25	092		25	093		6/6/2008	297	FM		297
3S09	25	093		25	094		6/6/2008	330	FM		330
3S09	25	094		25	095		6/6/2008	296	FM		296
3S09	25	095		25	096		6/6/2008	202	FM		202
3S09	25	095		25	190		6/6/2008	24	FM		24
3S09	25	096		25	097		6/6/2008	222	FM		222
3S09	25	097		25	098		6/6/2008	214	FM		214
3S09	25	098		25	100		6/6/2008	227	FM		227
3S09	25	099		25	100		6/6/2008	317	FM		317
3S09	25	100		25	101		6/9/2008	350	FM		350
3S09	25	190		25	191		6/6/2008	520	FM		520
3S09	25	191		25	192		6/6/2008	550	FM		550
3S09	25	192		30	025		6/6/2008	452	FM		452
3S09	30	006		30	026		6/2/2008	100	FM		100
3S09	30	025		30	026		6/6/2008	42	FM		42
3S11	25	101		25	102		6/9/2008	344	FM		344
3S11	25	102		25	103		6/9/2008	290	FM		290
3S11	25	103		25	105		6/9/2008	300	FM		300
3S11	25	104		25	105		6/9/2008	321	FM		321
3S11	25	105		25	106		6/9/2008	316	FM		316
3S11	25	106		25	107		6/9/2008	330	FM		330
3S11	25	107		25	199		6/10/2008	124	FM		124
3S11	25	108		25	199		6/10/2008	213	FM		213
3S11	25	108		25	122		6/10/2008	335	FM		335
3S12	25	097		25	109		6/9/2008	300	FM		300
3S12	25	109		25	110		6/9/2008	331	FM		331
3S12	25	110		25	111		6/9/2008	300	FM		300
3S12	25	111		25	113		6/9/2008	298	FM		298
3S12	25	112		25	113		6/9/2008	250	FM		250
3S12	25	113		25	114		6/9/2008	300	FM		300
3S12	25	114		25	115		6/9/2008	287	FM		287
3S12	25	115		25	116		6/9/2008	304	FM		304
3S12	25	116		25	120		6/9/2008	333	FM		333
3S12	25	117		25	119		6/10/2008	112	FM		112
3S12	25	118		25	119		6/10/2008	141	FM		141
3S12	25	119		25	120		6/10/2008	207	FM		207
3S12	25	120		25	121		6/10/2008	224	FM		224
3S12	25	121		25	122		6/10/2008	230	FM		230
3S13	25	122		25	123		6/10/2008	229	FM		229
3S14	25	059		25	060		6/2/2008	301	FM		301
3S14	25	059		25	201		6/2/2008	15	FM		15
3S14	25	060		25	061		10/29/2007	303	JM	12	303
3S14	25	060		25	061		6/2/2008	325	FM		325
3S14	25	061		25	062		6/2/2008	201	FM		201

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3S14	25	062		25	063		6/2/2008	200	FM		200
3S14	25	063		25	064		6/4/2008	254	FM		254
3S14	25	064	P	25	066	P	6/4/2008	243	FM	3	972
3S14	25	065	P	25	066	P	6/4/2008	137	FM	3	548
3S14	25	201		30	028		6/2/2008	322	FM		322
3S14	30	028		30	029		6/2/2008	300	FM		300
3S14	30	029		30	030		6/2/2008	258	FM		258
3S15	25	054		25	055		6/2/2008	331	FM		331
3S15	25	055		25	056		6/2/2008	332	FM		332
3S15	25	056		25	057		6/2/2008	333	FM		333
3S15	25	057		25	058		6/2/2008	252	FM		252
3S15	25	058		25	067	P	6/4/2008	252	FM		252
3S15	25	066	P	25	067	P	6/4/2008	75	FM	3	300
3S16	25	067	P	25	069	P	6/4/2008	247	FM	3	988
3S16	25	068		25	069	P	6/4/2008	168	FM	3	672
3S16	25	069	P	25	070	P	6/4/2008	45	FM	3	180
3S17	25	070	P	25	071		6/4/2008	352	FM		352
3S17	25	071		25	072		6/4/2008	208	FM		208
3S17	25	072		25	073		6/4/2008	126	FM		126
3S17	25	073		25	074		6/4/2008	348	FM		348
3S17	25	074		25	077		6/4/2008	300	FM		300
3S17	25	075		25	077		6/4/2008	169	FM		169
3S17	25	076		25	077		6/4/2008	314	FM		314
3S17	25	077		25	078		6/4/2008	337	FM		337
3S17	25	078		25	079		6/4/2008	326	FM		326
3S17	25	079		25	080	M	6/9/2008	340	FM		340
3S17	25	080	M	25	125		5/1/2008	327	FM	3	1308
3S18	19	054		19	055		6/11/2008	335	FM		335
3S18	19	054		25	132		6/11/2008	335	FM		335
3S18	19	055		19	056	M	6/11/2008	334	FM		334
3S18	25	123		25	125		6/10/2008	228	FM		228
3S18	25	124		25	125		6/10/2008	150	FM		150
3S18	25	125		25	126	S	5/5/2008	15	FM	3	60
3S18	25	126	S	25	127	S	5/5/2008	20	FM	3	80
3S18	25	127	S	25	128		6/11/2008	306	FM		306
3S18	25	128		25	129		6/11/2008	334	FM		334
3S18	25	129		25	130		6/11/2008	336	FM		336
3S18	25	130		25	132		6/11/2008	324	FM		324
3S18	25	131		25	132		6/11/2008	300	FM		300
3S19	19	043		19	047		6/12/2008	350	FM		350
3S19	19	044		19	045		6/10/2008	350	FM		350
3S19	19	044		25	047		6/10/2008	346	FM		346
3S19	19	045		19	046		6/10/2008	350	FM		350
3S19	19	046		19	047		6/10/2008	315	FM		315
3S19	19	047		19	048		6/12/2008	222	FM		222
3S19	19	048		19	052		6/12/2008	221	FM		221
3S19	19	049		19	050		6/11/2008	337	FM		337
3S19	19	049		25	053		6/11/2008	345	FM		345
3S19	19	050		19	051		6/11/2008	338	FM		338

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3S19	19	051		19	052		6/11/2008	340	FM		340
3S19	19	052		19	053		6/12/2008	224	FM		224
3S19	25	042		25	043		6/10/2008	285	FM		285
3S19	25	043		25	044		6/10/2008	294	FM		294
3S19	25	044		25	045		6/10/2008	299	FM		299
3S19	25	045		25	047		6/10/2008	297	FM		297
3S19	25	046		25	047		6/10/2008	300	FM		300
3S19	25	048		25	049		6/11/2008	341	FM		341
3S19	25	049		25	050		6/11/2008	299	FM		299
3S19	25	050		25	051		6/11/2008	299	FM		299
3S19	25	051		25	053		6/11/2008	298	FM		298
3S19	25	052		25	053		6/11/2008	299	FM		299
3S20	19	053		19	058		6/12/2008	234	FM		234
3S20	19	056	M	19	058		6/11/2008	342	FM		342
3S20	19	057		19	058		6/12/2008	166	FM		166
3S20	19	058		19	061		6/13/2008	243	FM		243
3S20	19	059		19	060		6/13/2008	353	FM		353
3S20	19	060		19	061		6/13/2008	355	FM		355
3S20	19	061		19	063		6/13/2008	264	FM		264
3S20	19	062	C	19	063		7/30/2007	81	FM		81
3S20	19	063		19	064		6/13/2008	207	FM		207
3S20	19	064		19	065		6/13/2008	332	FM		332
3S20	19	065		19	066		6/13/2008	248	FM		248
3S20	19	066		19	068		6/13/2008	34	FM		34
3S20	19	067		19	068		1/1/2008	377	JM	12	377
3S20	19	067		19	068		6/13/2008	371	FM		371
3S20	19	068		19	069		6/13/2008	144	FM		144
3S20	19	069		19	072		6/13/2008	170	FM		170
3S20	19	070		19	071		6/13/2008	206	FM		206
3S20	19	071		19	072		6/13/2008	233	FM		233
3S20	19	072		19	073		6/13/2008	95	FM		95
3S20	19	073		19	074		6/13/2008	275	FM		275
3S21	19	023	M	19	197		8/18/2007	227	FM		227
3S22	19	024		19	025		8/8/2007	157	FM		157
3S22	19	024		19	197		8/8/2007	124	FM		124
3S22	19	025		19	038		8/8/2007	19	FM		19
3S22	19	026		19	028		6/12/2008	211	FM		211
3S22	19	028		19	029		6/12/2008	250	FM		250
3S22	19	029		19	028		8/7/2007	119	FM		119
3S22	19	029		19	031		6/12/2008	285	FM		285
3S22	19	029		20	097		6/12/2008	237	FM		237
3S22	19	030		19	031		6/12/2008	349	FM		349
3S22	19	031		19	196		6/12/2008	21	FM		21
3S22	19	032		19	033		6/12/2008	235	FM		235
3S22	19	032		20	098		6/12/2008	302	FM		302
3S22	19	033		19	036		6/12/2008	258	FM		258
3S22	19	033		19	196		6/12/2008	258	FM		258
3S22	19	034	C	19	035		6/12/2008	68	FM		68
3S22	19	035		19	036		6/12/2008	126	FM		126

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
3S22	19	036		19	037		6/12/2008	112	FM		112
3S22	19	037		19	038		6/16/2008	225	FM		225
3S22	19	038		19	039	S	6/16/2008	340	FM		340
3S22	19	039	S	19	040	S	5/6/2008	22	FM	3	88
3S22	19	040	S	19	041	S	5/6/2008	56	FM	3	224
3S22	19	040	S	19	207		6/16/2008	350	FM		350
3S22	19	041	S	19	206		6/16/2008	350	FM		350
3S23	19	042	S	19	074		5/1/2008	237	FM	3	948
3S23	19	074		19	075		5/1/2008	265	FM	3	1060
3S24	19	075		19	076		6/13/2008	300	FM		300
3S24	19	076		19	083		8/8/2007	265	FM		265
3S24	19	077		19	078		6/12/2008	302	FM		302
3S24	19	078		19	079		6/12/2008	302	FM		302
3S24	19	079		19	192		6/12/2008	250	FM		250
3S24	19	080		19	081		6/12/2008	300	FM		300
3S24	19	080		19	192		6/12/2008	54	FM		54
3S24	19	081		19	082		6/12/2008	200	FM		200
3S24	19	082		19	083		6/13/2008	355	FM		355
3S24	19	083		19	084		6/13/2008	40	FM		40
3S24	19	084		19	085		6/13/2008	350	FM		350
3S24	19	192		19	193		6/12/2008	228	FM		228
4N02	17	020		17	021		3/1/2008	280	JM	12	280
4N06	18	037	S	18	040	P	5/1/2008	314	FM	3	1256
4N08	19	102		19	103		9/25/2007	245	FM		245
4N08	19	102		19	194	D	9/25/2007	317	FM		317
4N08	19	103		19	104		9/25/2007	225	FM		225
4N08	19	104		19	106		9/25/2007	233	FM		233
4N08	19	105		19	106		9/25/2007	250	FM		250
4N08	19	106		19	107		9/25/2007	147	FM		147
4N08	19	107		19	108		9/25/2007	172	FM		172
4N08	19	108		19	109		9/25/2007	30	FM		30
4N08	19	109		19	110		9/25/2007	233	FM		233
4N08	19	110		19	113		9/25/2007	253	FM		253
4N08	19	113		19	114		10/5/2007	300	FM		300
4N08	19	114		19	115		10/5/2007	320	FM		320
4N08	19	115		19	116		10/5/2007	360	FM		360
4N08	19	116		19	117		10/5/2007	320	FM		320
4N09	12	058		12	059		10/5/2007	275	FM		275
4N09	12	058		19	119		10/5/2007	310	FM		310
4N09	12	059		12	063		10/5/2007	310	FM		310
4N09	12	060	P	12	061	P	5/5/2008	332	FM	3	1328
4N09	12	061	P	12	062	P	5/5/2008	331	FM	3	1324
4N09	12	062	P	12	063	P	5/5/2008	95	FM	3	380
4N09	12	063	P	12	130		10/5/2007	10	FM		10
4N09	19	117		19	118		10/5/2007	310	FM		310
4N09	19	118		19	119		10/5/2007	320	FM		320
4S01	12	139		19	198		10/8/2007	440	FM		440
4S01	18	045		18	046		10/1/2007	337	FM		337
4S01	18	046		18	048		10/1/2007	262	FM		262

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
4S01	18	047		18	048		10/1/2007	70	FM		70
4S01	18	048		18	049		10/1/2007	310	FM		310
4S01	18	049		18	050		10/1/2007	330	FM		330
4S01	18	050		18	052		10/2/2007	312	FM		312
4S01	18	051		18	052		10/2/2007	89	FM		89
4S01	18	052		19	095		10/2/2007	250	FM		250
4S01	19	085		19	203		10/8/2007	23	FM		23
4S01	19	086	M	19	087		10/8/2007	223	FM		223
4S01	19	086	M	19	203		10/8/2007	300	FM		300
4S01	19	087		19	089		10/8/2007	275	FM		275
4S01	19	088		19	089		10/8/2007	362	FM		362
4S01	19	089		19	090		10/8/2007	290	FM		290
4S01	19	090		19	099		10/8/2007	225	FM		225
4S01	19	091		19	092		10/2/2007	333	FM		333
4S01	19	091		19	092		1/1/2008	347	JM	12	347
4S01	19	092		19	093		10/2/2007	281	FM		281
4S01	19	093		19	094		10/2/2007	225	FM		225
4S01	19	093		19	094		3/1/2008	242	JM	12	242
4S01	19	094		19	095		10/2/2007	313	FM		313
4S01	19	095		19	096	S	10/2/2007	195	FM		195
4S01	19	096	S	19	097	S	5/5/2008	66	FM	3	264
4S01	19	097	S	19	098	S	5/5/2008	185	FM	3	740
4S01	19	098	S	19	099	S	5/5/2008	206	FM	3	824
4S01	19	099		19	100	M	10/8/2007	100	FM		100
4S01	19	100	M	19	101		10/8/2007	310	FM		310
4S01	19	199		19	200		10/8/2007	425	FM		425
4S01	19	200		19	201		10/8/2007	435	FM		435
4S01	19	201		19	202		10/8/2007	425	FM		425
4S01	19	203		19	205		6/16/2008	504	FM		504
4S01	19	205		19	206		6/16/2008	478	FM		478
4S01	19	207		19	208		8/9/2007	132	FM		132
4S02	12	050		12	051		10/4/2007	241	FM		241
4S02	12	051		12	052		10/4/2007	150	FM		150
4S02	12	052		12	053		10/4/2007	150	FM		150
4S02	12	052		19	150		10/4/2007	272	FM		272
4S02	12	053		12	054		10/4/2007	300	FM		300
4S02	12	054		12	055		10/4/2007	320	FM		320
4S02	12	054		19	141		10/4/2007	257	FM		257
4S02	12	055		12	056		10/4/2007	330	FM		330
4S02	12	056		12	057		10/8/2007	325	FM		325
4S02	12	056		19	101		10/8/2007	350	FM		350
4S02	12	057		12	082		10/8/2007	305	FM		305
4S02	12	080	P	12	081	P	5/12/2008	400	FM	3	1600
4S02	12	081	P	12	082	P	5/12/2008	15	FM	3	60
4S02	12	130		12	139		10/8/2007	301	FM		301
4S02	19	120		19	121		10/1/2007	304	FM		304
4S02	19	121		19	123		10/1/2007	253	FM		253
4S02	19	122		19	123		10/1/2007	160	FM		160
4S02	19	123		19	124		10/1/2007	28	FM		28

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
4S02	19	124		19	127		10/1/2007	160	FM		160
4S02	19	125		19	126		10/1/2007	300	FM		300
4S02	19	126		19	127		10/1/2007	301	FM		301
4S02	19	127		19	129		10/1/2007	259	FM		259
4S02	19	128		19	129		10/1/2007	262	FM		262
4S02	19	129		19	130		10/1/2007	155	FM		155
4S02	19	130		19	132		10/1/2007	121	FM		121
4S02	19	131		19	132		10/1/2007	210	FM		210
4S02	19	132		19	133		10/1/2007	250	FM		250
4S02	19	133		19	139		10/1/2007	197	FM		197
4S02	19	134		19	135		10/1/2007	321	FM		321
4S02	19	135		19	136		10/1/2007	205	FM		205
4S02	19	136		19	137		10/1/2007	158	FM		158
4S02	19	137		19	138		10/1/2007	217	FM		217
4S02	19	138		19	139		10/1/2007	202	FM		202
4S02	19	139		19	141		10/1/2007	261	FM		261
4S02	19	140		19	141		10/1/2007	140	FM		140
4S02	19	140		19	141		3/1/2008	140	JM	12	140
4S02	19	142		19	143		9/26/2007	275	FM		275
4S02	19	143		19	144		9/26/2007	181	FM		181
4S02	19	144		19	145		9/26/2007	300	FM		300
4S02	19	145		19	146		9/26/2007	203	FM		203
4S02	19	146		19	148		9/26/2007	166	FM		166
4S02	19	147		19	148		9/26/2007	140	FM		140
4S02	19	148		19	149		10/1/2007	216	FM		216
4S02	19	149		19	150		10/1/2007	181	FM		181
4S02	19	198		19	199		10/8/2007	500	FM		500
4S03	12	064		12	069		10/3/2007	327	FM		327
4S03	12	064		13	192		10/3/2007	327	FM		327
4S03	12	065		12	066		10/3/2007	335	FM		335
4S03	12	065		13	195		10/3/2007	330	FM		330
4S03	12	066		12	067		10/3/2007	40	FM		40
4S03	12	067		12	068		10/3/2007	341	FM		341
4S03	12	068		12	069		10/3/2007	344	FM		344
4S03	13	189		13	202	D	10/3/2007	134	FM		134
4S03	13	189		13	214		10/3/2007	250	FM		250
4S03	13	190		13	191		10/3/2007	264	FM		264
4S03	13	191		13	192		10/3/2007	350	FM		350
4S03	13	192		13	214		10/3/2007	100	FM		100
4S03	13	193		13	194		10/3/2007	325	FM		325
4S03	13	193		13	201	D	10/3/2007	269	FM		269
4S03	13	194		13	195		10/3/2007	320	FM		320
4S03	13	195		20	007		9/26/2007	265	FM		265
4S03	19	151		19	153		9/26/2007	114	FM		114
4S03	19	151		19	153		3/1/2008	116	JM	12	116
4S03	19	152		19	153		9/26/2007	234	FM		234
4S03	19	152		20	100		9/26/2007	236	FM		236
4S03	19	153		19	155		9/26/2007	255	FM		255
4S03	19	154		19	155		9/26/2007	349	FM		349

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
4S03	19	155		19	158		9/26/2007	254	FM		254
4S03	19	156		19	157		9/26/2007	136	FM		136
4S03	19	157		19	158		9/26/2007	347	FM		347
4S03	19	158		19	160		9/26/2007	255	FM		255
4S03	19	159		19	160		9/26/2007	353	FM		353
4S03	19	160		19	163		9/26/2007	255	FM		255
4S03	19	161		19	162		9/26/2007	146	FM		146
4S03	19	162		19	163		9/26/2007	295	FM		295
4S03	19	163		19	164		9/26/2007	256	FM		256
4S03	19	164		19	165		9/26/2007	268	FM		268
4S03	19	165		20	007		9/26/2007	229	FM		229
4S03	20	001		20	002		9/26/2007	260	FM		260
4S03	20	003		20	004		9/26/2007	345	FM		345
4S03	20	004		20	005		9/26/2007	344	FM		344
4S03	20	005		20	006		9/26/2007	181	FM		181
4S03	20	006		20	007		9/26/2007	190	FM		190
4S04	12	069		12	072		6/13/2008	300	FM	3	1200
4S04	12	070		12	071		10/4/2007	274	FM		274
4S04	12	071		12	072		10/4/2007	226	FM		226
4S04	12	072		12	073		6/13/2008	177	FM	3	708
4S04	12	073		12	074		10/4/2007	285	FM		285
4S04	12	074		12	077		10/4/2007	287	FM		287
4S04	12	075		12	076		10/4/2007	261	FM		261
4S04	12	076		12	077		10/4/2007	320	FM		320
4S04	12	077		12	143		10/4/2007	288	FM		288
4S04	12	078	M	12	143		10/4/2007	32	FM		32
4S04	12	078	M	12	081		5/12/2008	316	FM	3	1264
4S04	12	079	P	12	081	P	5/12/2008	347	FM	3	1388
4S04	12	079	P	12	137	D	5/12/2008	150	FM	3	600
4S04	12	080	P	12	141	D	5/12/2008	10	FM	3	40
4W01	13	169		13	170		12/10/2007	330	FM		330
4W01	13	169		20	112		12/10/2007	229	FM		229
4W01	13	170		13	171		12/11/2007	40	FM		40
4W01	13	171		13	208		12/11/2007	201	FM		201
4W01	13	172		13	174		12/11/2007	20	FM		20
4W01	13	172		13	208		12/11/2007	200	FM		200
4W01	13	173		13	210		12/11/2007	65	FM		65
4W01	13	174		13	210		12/11/2007	200	FM		200
4W01	13	174		13	175		3/7/2008	340	FM		340
4W01	13	175		13	176		3/7/2008	340	FM		340
4W01	13	176		13	177		3/7/2008	330	FM		330
4W01	13	177		13	181		12/11/2007	268	FM		268
4W01	20	101		20	102		12/10/2007	280	FM		280
4W01	20	102		20	103		12/10/2007	272	FM		272
4W01	20	103		20	104		12/10/2007	300	FM		300
4W01	20	104		20	107		12/10/2007	366	FM		366
4W01	20	105		20	106		12/10/2007	358	FM		358
4W01	20	106		20	107		12/10/2007	355	FM		355
4W01	20	107		20	110		12/10/2007	366	FM		366

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
4W01	20	108		20	109		12/10/2007	58	FM		58
4W01	20	109		20	110		12/10/2007	300	FM		300
4W01	20	110		20	112		12/10/2007	361	FM		361
4W01	20	111		20	112		12/10/2007	317	FM		317
4W02	12	091		12	092	M	12/11/2007	323	FM		323
4W02	12	091		13	188		12/11/2007	327	FM		327
4W02	12	092	M	12	093		12/11/2007	283	FM		283
4W02	12	127		13	186		12/11/2007	250	FM		250
4W02	13	178		13	213		12/11/2007	162	FM		162
4W02	13	178		13	193		12/11/2007	344	FM		344
4W02	13	179		13	180		12/11/2007	288	FM		288
4W02	13	179		13	213		12/11/2007	181	FM		181
4W02	13	180		13	181		12/11/2007	293	FM		293
4W02	13	181		13	182		3/7/2008	52	FM		52
4W02	13	182		13	183		3/7/2008	244	FM		244
4W02	13	183		13	188		3/7/2008	353	FM		353
4W02	13	184		13	188		12/11/2007	250	FM		250
4W02	13	184		13	203	D	12/11/2007	250	FM		250
4W02	13	185		13	186		12/11/2007	110	FM		110
4W02	13	186		13	187		12/11/2007	210	FM		210
4W02	13	187		13	188		12/11/2007	304	FM		304
4W03	12	093	P	12	094	P	5/13/2008	293	FM	3	1172
4W03	12	094	P	12	095	P	5/13/2008	224	FM	3	896
4W03	12	095	P	12	096		12/12/2007	235	FM		235
4W03	12	096		12	097		12/12/2007	257	FM		257
4W03	12	097		12	098		12/12/2007	320	FM		320
4W03	12	098		12	099		4/10/2008	320	FM		320
4W04	12	083		12	084		12/11/2007	250	FM		250
4W04	12	084		12	086		12/11/2007	200	FM		200
4W04	12	085		12	086		12/11/2007	36	FM		36
4W04	12	085		12	128	C	12/11/2007	157	FM		157
4W04	12	086		12	087		12/12/2007	200	FM		200
4W04	12	087		12	088		12/12/2007	320	FM		320
4W04	12	088		12	089		12/12/2007	200	FM		200
5 01	15	162		15	163		1/30/2008	298	FM		298
5 01	15	162		16	040		1/30/2008	290	FM		290
5 01	15	163		15	164		1/30/2008	332	FM		332
5 01	15	164		15	165		1/30/2008	70	FM		70
5 01	15	165		22	091		1/8/2008	100	FM		100
5 01	15	165		15	166		1/30/2008	301	FM		301
5 01	15	166		15	167		1/30/2008	296	FM		296
5 01	15	167		15	168		1/31/2008	74	FM		74
5 01	15	168		15	169		1/31/2008	241	FM		241
5 01	15	169		15	170		1/31/2008	246	FM		246
5 01	16	005		16	006		12/17/2007	350	FM		350
5 01	16	006		16	007		12/17/2007	351	FM		351
5 01	16	007		16	008		12/17/2007	83	FM		83
5 01	16	008		16	009		1/30/2008	200	FM		200
5 01	16	009		16	013		1/30/2008	200	FM		200

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 01	16	010		16	011		12/17/2007	225	FM		225
5 01	16	011		16	012		12/17/2007	83	FM		83
5 01	16	012		16	013		1/30/2008	201	FM		201
5 01	16	013		16	014		1/30/2008	327	FM		327
5 01	16	014		16	023		1/30/2008	299	FM		299
5 01	16	015		16	016		11/1/2007	216	JMR	12	216
5 01	16	015		16	016		12/17/2007	220	FM		220
5 01	16	016		16	017		11/1/2007	87	JMR	12	87
5 01	16	016		16	017		12/17/2007	90	FM		90
5 01	16	017		16	019		11/1/2007	323	JMR	12	323
5 01	16	017		16	019		12/17/2007	319	FM		319
5 01	16	018		16	019		12/17/2007	252	FM		252
5 01	16	018		16	019		5/1/2008	247	JMR	6	494
5 01	16	019		16	020		11/1/2007	145	JMR	12	145
5 01	16	019		16	020		12/17/2007	145	FM		145
5 01	16	020		16	021		11/1/2007	276	JMR	12	276
5 01	16	020		16	021		12/17/2007	275	FM		275
5 01	16	021		16	022		11/1/2007	128	JMR	12	128
5 01	16	021		16	022		12/17/2007	134	FM		134
5 01	16	022		16	023		11/1/2007	195	JMR	12	195
5 01	16	022		16	023		12/17/2007	194	FM		194
5 01	16	023		23	017		1/8/2008	148	FM		148
5 01	16	023		16	030		1/30/2008	240	FM		240
5 01	16	024		16	025		12/17/2007	265	FM		265
5 01	16	024		16	025		4/1/2008	295	JM	12	295
5 01	16	025		16	026		12/17/2007	293	FM		293
5 01	16	025		16	026		4/1/2008	310	JM	12	310
5 01	16	026		16	027		12/17/2007	150	FM		150
5 01	16	026		16	027		4/1/2008	126	JM	12	126
5 01	16	027		16	028		12/17/2007	150	FM		150
5 01	16	027		16	028		4/1/2008	64	JM	12	64
5 01	16	028		16	029		12/17/2007	122	FM		122
5 01	16	028		16	029		4/1/2008	118	JM	12	118
5 01	16	029		16	030		12/17/2007	125	FM		125
5 01	16	029		16	030		4/1/2008	145	JM	12	145
5 01	16	030		16	032		1/30/2008	343	FM		343
5 01	16	031		16	032		12/18/2007	50	FM		50
5 01	16	031		23	013		12/18/2007	200	FM		200
5 01	16	032		16	035		1/30/2008	343	FM		343
5 01	16	032		16	035		6/1/2008	354	JM	6	708
5 01	16	033		16	034		1/8/2008	139	FM		139
5 01	16	034		16	035		1/8/2008	102	FM		102
5 01	16	035		16	041	D	1/8/2008	97	FM		97
5 01	16	035		16	038		1/30/2008	146	FM		146
5 01	16	036		16	037		12/18/2007	113	FM		113
5 01	16	036		23	010		12/18/2007	202	FM		202
5 01	16	037		16	038		12/18/2007	50	FM		50
5 01	16	037		23	006		12/18/2007	160	FM		160
5 01	16	038		16	039		1/30/2008	241	FM		241

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 01	16	039		16	040		1/30/2008	198	FM		198
5 01	22	081		23	002		12/18/2007	140	FM		140
5 01	22	081		22	082		12/18/2007	123	FM		123
5 01	22	082		22	083		12/20/2007	175	FM		175
5 01	22	083		22	084		12/20/2007	110	FM		110
5 01	22	083		22	085		12/20/2007	115	FM		115
5 01	22	085		22	086		12/20/2007	115	FM		115
5 01	22	086		22	088		12/20/2007	43	FM		43
5 01	22	087		22	088		12/20/2007	165	FM		165
5 01	22	088		22	089		12/20/2007	190	FM		190
5 01	22	089		22	090		12/20/2007	186	FM		186
5 01	22	090		22	091		1/8/2008	121	FM		121
5 01	23	001		23	002		12/18/2007	102	FM		102
5 01	23	003		23	004		12/18/2007	84	FM		84
5 01	23	004		23	005		12/18/2007	256	FM		256
5 01	23	005		23	006		12/18/2007	152	FM		152
5 01	23	007		23	008		12/18/2007	194	FM		194
5 01	23	008		23	010		12/18/2007	303	FM		303
5 01	23	009		23	010		12/18/2007	367	FM		367
5 01	23	011		23	013		12/18/2007	160	FM		160
5 01	23	012		23	013		12/18/2007	185	FM		185
5 01	23	014	C	23	017		1/8/2008	134	FM		134
5 01	23	015		23	016		1/8/2008	250	FM		250
5 01	23	016		23	017		1/8/2008	303	FM		303
5 02	22	001		22	002		12/14/2007	267	FM		267
5 02	22	002		22	009		12/14/2007	350	FM		350
5 02	22	003		22	004		12/14/2007	342	FM		342
5 02	22	004		22	007		12/14/2007	122	FM		122
5 02	22	005		22	006		12/14/2007	133	FM		133
5 02	22	006		22	007		12/14/2007	290	FM		290
5 02	22	007		22	008		12/14/2007	161	FM		161
5 02	22	008		22	009		12/14/2007	262	FM		262
5 02	22	009		22	012		12/14/2007	337	FM		337
5 02	22	011		22	012		12/14/2007	244	FM		244
5 02	22	011		22	096		12/14/2007	82	FM		82
5 02	22	012		22	015		12/14/2007	303	FM		303
5 02	22	013		22	014		12/14/2007	245	FM		245
5 02	22	014		22	015		12/14/2007	307	FM		307
5 02	22	015		22	018		2/29/2008	200	FM		200
5 02	22	016		22	017		2/29/2008	344	FM		344
5 02	22	016		22	092	D	2/29/2008	54	FM		54
5 02	22	017		22	018		2/29/2008	60	FM		60
5 02	22	018		22	019		2/29/2008	252	FM		252
5 02	22	019		22	020		2/29/2008	278	FM		278
5 02	22	020		22	021		2/29/2008	280	FM		280
5 02	22	096		22	097		12/14/2007	170	FM		170
5 02	22	097		22	098		12/14/2007	40	FM		40
5 02	22	098		22	099		12/14/2007	124	FM		124
5 03	15	170		15	175		1/31/2008	254	FM		254

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 03	15	171		15	172		12/14/2007	300	FM		300
5 03	15	172		15	173		11/1/2007	305	JMR	12	305
5 03	15	172		15	173		12/14/2007	300	FM		300
5 03	15	173		15	174		2/29/2008	127	FM		127
5 03	15	174		15	175		2/29/2008	327	FM		327
5 03	15	175		22	021		2/29/2008	150	FM		150
5 03	21	001		22	023		3/3/2008	360	FM		360
5 03	21	002		21	142		3/3/2008	360	FM		360
5 03	21	002		21	003		3/3/2008	308	FM		308
5 03	21	003		21	004		3/3/2008	310	FM		310
5 03	21	004		21	005		3/3/2008	320	FM		320
5 03	21	005		21	006		3/3/2008	335	FM		335
5 03	22	021		22	022		3/3/2008	350	FM		350
5 03	22	022		22	023		3/3/2008	350	FM		350
5 03	29	022		29	023		2/1/2008	335	JM	6	670
5 04	15	128		15	129		12/12/2007	180	FM		180
5 04	15	129		15	131		12/12/2007	200	FM		200
5 04	15	130		15	131		12/12/2007	175	FM		175
5 04	15	131		15	132		12/13/2007	90	FM		90
5 04	15	132		15	133		12/13/2007	300	FM		300
5 04	15	133		15	134		12/13/2007	330	FM		330
5 04	15	134		15	135		12/13/2007	300	FM		300
5 04	15	135		15	176		12/13/2007	299	FM		299
5 04	15	136		15	176		12/13/2007	14	FM		14
5 04	15	136		15	140		3/6/2008	300	FM		300
5 04	15	137		15	139		3/6/2008	150	FM		150
5 04	15	138		15	139		3/6/2008	215	FM		215
5 04	15	139		15	140		3/6/2008	195	FM		195
5 04	15	140		15	141		3/6/2008	130	FM		130
5 04	15	141		15	180		3/6/2008	141	FM		141
5 04	15	142		15	143		12/13/2007	305	FM		305
5 04	15	142		15	177		12/13/2007	341	FM		341
5 04	15	143		15	148		3/6/2008	350	FM		350
5 04	15	145		15	147		3/6/2008	355	FM		355
5 04	15	145	P	15	174	P	5/13/2008	326	FM	3	1304
5 04	15	146		15	147		3/6/2008	313	FM		313
5 04	15	147		15	148		3/6/2008	350	FM		350
5 04	15	148		15	180		3/6/2008	212	FM		212
5 04	15	148		15	149		3/24/2008	354	FM		354
5 04	15	149		15	150		3/24/2008	350	FM		350
5 04	15	150		15	151		3/24/2008	314	FM		314
5 04	15	177		15	178		12/13/2007	250	FM		250
5 04	15	178		15	179		12/13/2007	116	FM		116
5 04	15	179		15	210		12/13/2007	225	FM		225
5 05	14	138		14	139		2/1/2008	245	FM		245
5 05	14	138		15	153		2/1/2008	350	FM		350
5 05	14	139	P	14	140	P	5/13/2008	360	FM	3	1440
5 05	14	139	P	14	212	D	5/13/2008	120	FM	3	480
5 05	14	140		14	141		3/24/2008	285	FM		285

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 05	14	140		15	151		3/24/2008	342	FM		342
5 05	14	141		14	142		3/24/2008	22	FM		22
5 05	14	142		14	145		3/24/2008	298	FM		298
5 05	14	142		14	214	C	3/24/2008	301	FM		301
5 05	14	143		14	144		2/1/2008	308	FM		308
5 05	14	143		14	203	C	2/1/2008	293	FM		293
5 05	14	144		14	204		2/1/2008	284	FM		284
5 05	14	144		14	145		3/24/2008	360	FM		360
5 05	14	145		14	146	M	3/24/2008	332	FM		332
5 05	14	146	M	14	147		3/24/2008	354	FM		354
5 05	15	152		15	153		2/1/2008	351	FM		351
5 06	14	147		14	148		3/24/2008	178	FM		178
5 06	14	148		14	171		3/24/2008	175	FM		175
5 07	14	155		14	156		1/29/2008	219	FM		219
5 07	14	156		14	157		1/29/2008	304	FM		304
5 07	14	157		14	160		1/29/2008	277	FM		277
5 07	14	157		15	161		1/29/2008	300	FM		300
5 07	14	158		14	159		1/29/2008	286	FM		286
5 07	14	159		14	160		1/29/2008	291	FM		291
5 07	14	160		14	162		1/31/2008	160	FM		160
5 07	14	161		14	162		1/31/2008	343	FM		343
5 07	14	161		14	193	C	1/31/2008	314	FM		314
5 07	14	162		14	164		1/31/2008	340	FM		340
5 07	14	163		14	164		1/31/2008	339	FM		339
5 07	14	163		14	192	C	1/31/2008	214	FM		214
5 07	14	164		14	165		1/31/2008	165	FM		165
5 07	14	165		14	167		1/31/2008	320	FM		320
5 07	14	165		14	194		1/31/2008	343	FM		343
5 07	14	166		14	167		1/31/2008	300	FM		300
5 07	14	167		14	168		3/24/2008	28	FM		28
5 07	14	168		14	170		3/24/2008	314	FM		314
5 07	14	169		14	215		3/24/2008	161	FM		161
5 07	14	169		21	006		3/24/2008	322	FM		322
5 07	14	170		14	171		3/24/2008	370	FM		370
5 07	14	170		14	215		3/24/2008	184	FM		184
5 07	15	154		15	155		1/29/2008	210	FM		210
5 07	15	155		15	156		1/29/2008	270	FM		270
5 07	15	156		15	157		1/29/2008	145	FM		145
5 07	15	157		15	158		1/1/2008	220	JM	12	220
5 07	15	157		15	158		1/29/2008	130	FM		130
5 07	15	158		15	161		1/1/2008	265	JM	12	265
5 07	15	158		15	161		1/29/2008	225	FM		225
5 07	15	159		15	160		1/1/2008	268	JM	12	268
5 07	15	159		15	160		1/29/2008	291	FM		291
5 07	15	160		15	161		1/1/2008	273	JM	12	273
5 07	15	160		15	161		1/29/2008	280	FM		280
5 08	13	058		13	059		3/25/2008	20	FM		20
5 08	13	058		14	154		3/25/2008	200	FM		200
5 08	14	148		14	149		3/25/2008	350	FM		350

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 08	14	149		14	151		3/25/2008	304	FM		304
5 08	14	151		14	152		3/25/2008	300	FM		300
5 08	14	152		14	153		3/25/2008	300	FM		300
5 08	14	153		14	154		3/25/2008	300	FM		300
5 09	13	056		13	057		3/25/2008	210	FM		210
5 09	13	056		14	176		3/25/2008	250	FM		250
5 09	13	057		13	060		3/25/2008	223	FM		223
5 09	13	059		13	060		3/25/2008	119	FM		119
5 09	14	171		14	199		3/25/2008	240	FM		240
5 09	14	172		14	173		3/25/2008	280	FM		280
5 09	14	172		14	199		3/25/2008	248	FM		248
5 09	14	173		14	174		3/25/2008	203	FM		203
5 09	14	174		14	175		3/25/2008	204	FM		204
5 09	14	175		14	176		3/25/2008	284	FM		284
5 10	13	060		13	061		3/25/2008	327	FM		327
5 10	13	061		13	062		3/25/2008	199	FM		199
5 10	13	061		14	137		3/25/2008	392	FM		392
5 10	13	062		13	063		3/25/2008	189	FM		189
5 10	13	063		13	064		3/25/2008	186	FM		186
5 10	13	063		14	132		3/25/2008	387	FM		387
5 10	13	064		14	127		3/17/2008	383	FM		383
5 10	13	065		13	066		3/27/2008	200	FM		200
5 10	14	119		14	120		3/25/2008	155	FM		155
5 10	14	124		14	125		3/17/2008	525	FM		525
5 10	14	125		14	126		3/17/2008	390	FM		390
5 10	14	126		14	127		3/17/2008	350	FM		350
5 10	14	128		14	129		3/17/2008	182	FM		182
5 10	14	129		14	130		3/17/2008	293	FM		293
5 10	14	130		14	131		3/17/2008	362	FM		362
5 10	14	131		14	132		3/17/2008	357	FM		357
5 10	14	133		14	134		3/18/2008	182	FM		182
5 10	14	134		14	135		3/18/2008	293	FM		293
5 10	14	135		14	136		3/18/2008	380	FM		380
5 10	14	136		14	137		3/18/2008	407	FM		407
5 11	13	054	M	13	068		3/27/2008	100	FM		100
5 11	13	066		13	067		3/27/2008	325	FM		325
5 11	13	066		14	123		3/27/2008	383	FM		383
5 11	13	067		13	068		3/27/2008	100	FM		100
5 11	13	068		13	069		3/27/2008	250	FM		250
5 11	14	096		14	097		2/28/2008	161	FM		161
5 11	14	096		15	127		2/28/2008	317	FM		317
5 11	14	097		14	101		2/28/2008	21	FM		21
5 11	14	098		14	099		2/28/2008	95	FM		95
5 11	14	099		14	100		2/28/2008	106	FM		106
5 11	14	099		14	190	D	2/28/2008	30	FM		30
5 11	14	100		14	101		2/28/2008	257	FM		257
5 11	14	101		14	102		2/28/2008	330	FM		330
5 11	14	102		14	103		1/1/2008	332	JM	12	332
5 11	14	102		14	103		2/28/2008	330	FM		330

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 11	14	103		14	104		1/1/2008	334	JM	12	334
5 11	14	103		14	104		2/28/2008	328	FM		328
5 11	14	104		14	110		2/28/2008	36	FM		36
5 11	14	105		14	106		2/27/2008	307	FM		307
5 11	14	106		14	107		2/27/2008	307	FM		307
5 11	14	107		14	109		2/27/2008	285	FM		285
5 11	14	108		14	109	P	2/5/2008	133	FM	3	532
5 11	14	109	P	14	110	P	5/8/2008	322	FM	3	1288
5 11	14	110	P	14	112	P	5/8/2008	291	FM	3	1164
5 11	14	111	P	14	112	P	2/12/2008	300	FM	3	1200
5 11	14	112	P	14	113	P	5/8/2008	84	FM	3	336
5 11	14	113	P	14	114	P	5/8/2008	168	FM	3	672
5 11	14	114	P	14	118	P	5/8/2008	255	FM	3	1020
5 11	14	115		14	116		2/29/2008	309	FM		309
5 11	14	115		14	195	C	2/29/2008	192	FM		192
5 11	14	116		14	117	P	2/29/2008	415	FM		415
5 11	14	117	P	14	118	P	5/8/2008	135	FM	3	540
5 11	14	117	P	14	202	P	5/8/2008	55	FM	3	220
5 11	14	118	P	14	119		11/6/2007	330	FM	3	1320
5 11	14	120		14	121		3/25/2008	140	FM		140
5 11	14	121		14	216		3/25/2008	262	FM		262
5 11	14	122		14	123		3/25/2008	389	FM		389
5 11	14	122		14	216		3/25/2008	101	FM		101
5 11	15	125		15	126		2/28/2008	200	FM		200
5 11	15	125		15	209	D	2/28/2008	106	FM		106
5 11	15	126		15	127		2/28/2008	322	FM		322
5 12	15	022		15	028		1/10/2008	118	FM		118
5 12	15	022		16	004		1/10/2008	161	FM		161
5 12	15	023		15	024		1/8/2008	153	FM		153
5 12	15	023		16	002		1/8/2008	100	FM		100
5 12	15	024		15	025		1/8/2008	100	FM		100
5 12	15	025		15	026		1/10/2008	150	FM		150
5 12	15	026		15	027		1/10/2008	210	FM		210
5 12	15	027		15	028		1/10/2008	80	FM		80
5 12	15	028		15	029		1/10/2008	147	FM		147
5 12	15	029		15	030		1/10/2008	102	FM		102
5 12	15	030		15	031		1/10/2008	115	FM		115
5 12	15	031		15	037		1/11/2008	223	FM		223
5 12	15	032		15	033		1/11/2008	178	FM		178
5 12	15	033		15	034		1/11/2008	124	FM		124
5 12	15	034		15	035		1/11/2008	35	FM		35
5 12	15	035		15	036		1/11/2008	153	FM		153
5 12	15	036		15	037		1/11/2008	265	FM		265
5 12	15	037		15	038		1/11/2008	171	FM		171
5 12	15	038		15	041		1/11/2008	313	FM		313
5 12	15	039		15	040		1/11/2008	136	FM		136
5 12	15	040		15	041		1/11/2008	170	FM		170
5 12	15	040		15	041		6/1/2008	165	JM	12	165
5 12	15	041		15	042		1/11/2008	144	FM		144

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 12	15	042		15	046		1/11/2008	157	FM		157
5 12	15	043		15	044		1/11/2008	206	FM		206
5 12	15	044		15	045		1/11/2008	212	FM		212
5 12	15	045		15	046		1/11/2008	100	FM		100
5 12	15	046		15	047		1/11/2008	87	FM		87
5 12	15	047		15	048		1/11/2008	180	FM		180
5 12	15	047		15	048		6/1/2008	184	JM	12	184
5 12	15	048		15	049		1/11/2008	188	FM		188
5 12	15	049		15	050		1/11/2008	140	FM		140
5 12	15	050		15	052		1/14/2008	270	FM		270
5 12	15	050		15	052		6/1/2008	266	JM	6	532
5 12	15	051		15	052		10/9/2007	180	JM	12	180
5 12	15	051		15	052		1/14/2008	173	FM		173
5 12	15	051		15	197	C	1/14/2008	85	FM		85
5 12	15	052		15	070		10/9/2007	152	JM	12	152
5 12	15	052		15	070		1/14/2008	149	FM		149
5 12	15	053		15	054		1/14/2008	85	FM		85
5 12	15	054		15	205		1/14/2008	86	FM		86
5 12	15	055		15	061		1/14/2008	230	FM		230
5 12	15	055		15	205		1/14/2008	125	FM		125
5 12	15	055		15	061		3/1/2008	209	JM	12	209
5 12	15	056		15	057		1/11/2008	246	FM		246
5 12	15	057		15	059		1/11/2008	133	FM		133
5 12	15	058		15	059		1/11/2008	186	FM		186
5 12	15	059		15	204		1/14/2008	60	FM		60
5 12	15	060		15	061		1/14/2008	325	FM		325
5 12	15	060		15	204		1/14/2008	236	FM		236
5 12	15	061		15	067		1/14/2008	122	FM		122
5 12	15	062		15	063		1/8/2008	155	FM		155
5 12	15	063		15	064		1/8/2008	203	FM		203
5 12	15	064		15	065		1/8/2008	300	FM		300
5 12	15	065		15	066		1/8/2008	100	FM		100
5 12	15	066		15	067		1/14/2008	28	FM		28
5 12	15	067		15	068		1/14/2008	232	FM		232
5 12	15	068		15	069		1/14/2008	326	FM		326
5 12	15	068		15	198	C	1/14/2008	91	FM		91
5 12	15	069		15	070		1/14/2008	285	FM		285
5 12	15	069		15	202	D	3/7/2008	52	FM		52
5 12	15	070		15	075		1/14/2008	198	FM		198
5 12	15	071		15	072		10/10/2007	234	JM	12	234
5 12	15	071		15	072		1/14/2008	240	FM		240
5 12	15	071		15	201	D	1/14/2008		FM		
5 12	15	072		15	073		1/14/2008	312	FM		312
5 12	15	073		15	074		10/10/2007	284	JM	12	284
5 12	15	073		15	074		1/14/2008	274	FM		274
5 12	15	074		15	075		10/10/2007	243	JM	12	243
5 12	15	074		15	075		1/14/2008	232	FM		232
5 12	15	075		15	077		1/15/2008	246	FM		246
5 12	15	117		15	118		3/1/2008	306	JM	12	306

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 12	15	205		15	206		1/8/2008	90	FM		90
5 12	15	206		15	207		1/8/2008	120	FM		120
5 12	15	207		15	208		1/8/2008	115	FM		115
5 12	16	001		16	002		1/8/2008	100	FM		100
5 12	16	003		16	004		1/10/2008	188	FM		188
5 13	10	081		15	007		1/15/2008	357	FM		357
5 13	10	082		10	083		10/4/2007	160	JM	12	160
5 13	10	082		10	083		1/15/2008	158	FM		158
5 13	10	083		10	084		1/15/2008	50	FM		50
5 13	10	084		10	085		10/4/2007	194	JM	12	194
5 13	10	084		10	085		1/15/2008	200	FM		200
5 13	10	085		15	012		1/15/2008	130	FM		130
5 13	10	085		15	012		4/1/2008	123	JM	6	246
5 13	15	007		15	008		1/15/2008	346	FM		346
5 13	15	008		15	011		3/5/2008	235	FM		235
5 13	15	009		15	010		1/15/2008	353	FM		353
5 13	15	010		15	011		1/15/2008	353	FM		353
5 13	15	011		15	018		3/5/2008	217	FM		217
5 13	15	012		15	013		10/4/2007	167	JM	12	167
5 13	15	012		15	013		1/15/2008	163	FM		163
5 13	15	013		15	014		1/15/2008	172	FM		172
5 13	15	014		15	015		1/15/2008	235	FM		235
5 13	15	015		15	016		1/15/2008	350	FM		350
5 13	15	016		15	017		1/15/2008	225	FM		225
5 13	15	017		15	018		3/5/2008	240	FM		240
5 13	15	018		15	019		3/5/2008	204	FM		204
5 13	15	019		15	021		3/5/2008	205	FM		205
5 13	15	020		15	021		3/5/2008	269	FM		269
5 13	15	021		15	083		3/5/2008	180	FM		180
5 13	15	076		15	077		1/15/2008	300	FM		300
5 13	15	076	A	15	199	C	1/15/2008	270	FM		270
5 13	15	077		15	080		1/15/2008	308	FM		308
5 13	15	078		15	079		1/15/2008	329	FM		329
5 13	15	079		15	080		1/15/2008	214	FM		214
5 13	15	080		15	081		1/15/2008	229	FM		229
5 13	15	081		15	082		1/15/2008	215	FM		215
5 13	15	082		15	083		3/5/2008	48	FM		48
5 13	15	083		15	084		3/12/2008	150	FM		150
5 13	15	084		15	085		3/12/2008	150	FM		150
5 14	14	046		14	047		3/13/2008	300	FM		300
5 14	14	046		15	090		3/13/2008	300	FM		300
5 14	14	047		14	048	M	3/13/2008	287	FM		287
5 14	15	085		15	098		12/13/2007	60	FM		60
5 14	15	085		15	087		3/12/2008	250	FM		250
5 14	15	086		15	087		3/12/2008	145	FM		145
5 14	15	087		15	089		3/12/2008	250	FM		250
5 14	15	088		15	089		3/12/2008	145	FM		145
5 14	15	089		15	090		3/13/2008	202	FM		202
5 15	09	131		09	132		3/10/2008	316	FM		316

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 15	09	132		14	036		3/10/2008	320	FM		320
5 15	09	133		14	037		3/10/2008	390	FM		390
5 15	09	134		10	080		3/10/2008	300	FM		300
5 15	10	072		10	073		3/6/2008	89	FM		89
5 15	10	073		10	074		3/6/2008	199	FM		199
5 15	10	074		10	078		3/6/2008	299	FM		299
5 15	10	075		10	076		1/16/2008	315	FM		315
5 15	10	075		10	087	C	1/16/2008	62	FM		62
5 15	10	076		10	077		1/16/2008	254	FM		254
5 15	10	077		10	078		3/6/2008	87	FM		87
5 15	10	078		10	079		3/10/2008	180	FM		180
5 15	10	079		15	002		3/11/2008	335	FM		335
5 15	10	080		15	005		3/10/2008	312	FM		312
5 15	14	036		14	042		3/11/2008	153	FM		153
5 15	14	037		14	038		3/10/2008	276	FM		276
5 15	14	038		14	040		3/11/2008	290	FM		290
5 15	14	039		14	040		3/11/2008	300	FM		300
5 15	14	039		15	006		3/11/2008	300	FM		300
5 15	14	040		14	041		3/11/2008	325	FM		325
5 15	14	041		14	042		3/11/2008	310	FM		310
5 15	14	042		14	045		3/12/2008	327	FM		327
5 15	14	043		14	044		3/12/2008	290	FM		290
5 15	14	043		14	196	C	3/12/2008	40	FM		40
5 15	14	044		14	045		3/12/2008	364	FM		364
5 15	14	045		14	048	M	3/13/2008	333	FM		333
5 15	15	001		15	003		3/11/2008	250	FM		250
5 15	15	002		15	003		3/11/2008	187	FM		187
5 15	15	003		15	004		3/11/2008	51	FM		51
5 15	15	004		15	006		3/11/2008	250	FM		250
5 15	15	005		15	006		3/11/2008	383	FM		383
5 17	09	126		09	127		3/6/2008	330	FM		330
5 17	09	126		10	067		3/6/2008	370	FM		370
5 17	09	127		09	128		3/6/2008	330	FM		330
5 17	09	128		09	129		3/6/2008	335	FM		335
5 17	09	129		14	031		3/6/2008	395	FM		395
5 17	10	006		10	007		3/4/2008	80	FM		80
5 17	10	007		10	008		3/4/2008	150	FM		150
5 17	10	008		10	009		3/4/2008	197	FM		197
5 17	10	009		10	010		3/4/2008	330	FM		330
5 17	10	010		10	011		3/4/2008	250	FM		250
5 17	10	013		10	014		3/4/2008	150	FM		150
5 17	10	014		10	015		3/4/2008	200	FM		200
5 17	10	015		10	019		3/4/2008	200	FM		200
5 17	10	017		10	018		3/4/2008	110	FM		110
5 17	10	018		10	019		3/4/2008	50	FM		50
5 17	10	019		10	020		3/4/2008	380	FM		380
5 17	10	020		10	021		3/4/2008	240	FM		240
5 17	10	021		10	022		3/4/2008	450	FM		450
5 17	10	022		10	023		3/4/2008	50	FM		50

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 17	10	023		10	024		3/4/2008	75	FM		75
5 17	10	024		10	025		3/4/2008	165	FM		165
5 17	10	025		10	026		3/4/2008	60	FM		60
5 17	10	026		10	027		3/4/2008	100	FM		100
5 17	10	027		10	028		3/4/2008	200	FM		200
5 17	10	028		10	029		3/4/2008	60	FM		60
5 17	10	029		10	030		3/4/2008	80	FM		80
5 17	10	030		10	042		3/4/2008	100	FM		100
5 17	10	031	C	10	032		1/17/2008	102	FM		102
5 17	10	032		10	033		1/17/2008	358	FM		358
5 17	10	033		10	035		1/17/2008	120	FM		120
5 17	10	034		10	035		1/17/2008	50	FM		50
5 17	10	035		10	036		1/17/2008	250	FM		250
5 17	10	036		10	086		1/17/2008	170	FM		170
5 17	10	037		10	038		1/17/2008	97	FM		97
5 17	10	037		10	086		1/17/2008	97	FM		97
5 17	10	038		10	040		1/17/2008	317	FM		317
5 17	10	039		10	040		1/17/2008	100	FM		100
5 17	10	040		10	041		1/17/2008	140	FM		140
5 17	10	041		10	042		1/17/2008	600	FM		600
5 17	10	042		10	043		3/4/2008	165	FM		165
5 17	10	043		10	044		3/4/2008	135	FM		135
5 17	10	044		10	045		3/4/2008	300	FM		300
5 17	10	045		10	046		3/4/2008	281	FM		281
5 17	10	046		10	047		3/6/2008	351	FM		351
5 17	10	047		10	048		3/6/2008	175	FM		175
5 17	10	048		10	049		3/6/2008	92	FM		92
5 17	10	049		10	067		3/6/2008	150	FM		150
5 17	10	050		10	051		1/18/2008	243	FM		243
5 17	10	050		10	088	D	1/18/2008	207	FM		207
5 17	10	051		10	052		1/18/2008	230	FM		230
5 17	10	052		10	053		1/18/2008	241	FM		241
5 17	10	053		10	066		1/18/2008	217	FM		217
5 17	10	054	C	10	055		1/17/2008	44	FM		44
5 17	10	055		10	056		1/17/2008	294	FM		294
5 17	10	056		10	057		1/17/2008	355	FM		355
5 17	10	057		10	058		1/17/2008	177	FM		177
5 17	10	058		10	059		1/17/2008	73	FM		73
5 17	10	059		10	066		1/17/2008	431	FM		431
5 17	10	060		10	062		1/17/2008	270	FM		270
5 17	10	062		10	063		1/17/2008	300	FM		300
5 17	10	063		10	064		1/17/2008	300	FM		300
5 17	10	064		10	065		1/17/2008	233	FM		233
5 17	10	065		10	066		1/17/2008	62	FM		62
5 17	10	066		10	067		3/6/2008	350	FM		350
5 17	14	014		14	032		3/6/2008	110	FM		110
5 17	14	031		14	032		3/6/2008	362	FM		362
5 17	14	032		14	033		3/11/2008	109	FM		109
5 17	14	033		14	034		3/11/2008	350	FM		350

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 17	14	033		14	210		3/11/2008	360	FM		360
5 17	14	034		14	035		3/11/2008	100	FM		100
5 17	14	035		14	213		3/11/2008	256	FM		256
5 17	14	035		14	052		3/13/2008	331	FM		331
5 18	14	048	M	14	052		3/13/2008	300	FM		300
5 18	14	049		14	051		3/13/2008	200	FM		200
5 18	14	050		14	051		3/13/2008	120	FM		120
5 18	14	051		14	052		3/13/2008	135	FM		135
5 18	14	052		14	053		3/21/2008	350	FM		350
5 19	14	053		14	054		3/21/2008	360	FM		360
5 20	14	054		14	055		3/21/2008	330	FM		330
5 21	14	056		14	057		3/12/2008	323	FM		323
5 21	14	057		15	092		3/12/2008	317	FM		317
5 21	14	057		14	058		3/13/2008	285	FM		285
5 21	14	058		14	059		3/13/2008	330	FM		330
5 21	14	059		14	062		3/13/2008	333	FM		333
5 21	14	060		14	061		3/12/2008	130	FM		130
5 21	14	060		15	109		3/12/2008	134	FM		134
5 21	14	061		15	108		3/12/2008	252	FM		252
5 21	14	061		14	062		3/13/2008	253	FM		253
5 21	14	062		14	063		3/13/2008	175	FM		175
5 21	14	063		14	064		3/20/2008	264	FM		264
5 21	14	064		14	078		3/20/2008	347	FM		347
5 21	15	093		15	097		3/5/2008	345	FM		345
5 21	15	094		15	095		3/5/2008	280	FM		280
5 21	15	095		15	096		3/5/2008	300	FM		300
5 21	15	096		15	097		3/5/2008	294	FM		294
5 21	15	097		15	102		3/12/2008	272	FM		272
5 21	15	098		15	099		12/13/2007	295	FM		295
5 21	15	099		15	100		3/12/2008	327	FM		327
5 21	15	100		15	102		3/12/2008	278	FM		278
5 21	15	101		15	102		3/12/2008	193	FM		193
5 21	15	103		15	105		3/12/2008	280	FM		280
5 21	15	104		15	105		3/12/2008	195	FM		195
5 21	15	105		15	108		3/12/2008	269	FM		269
5 21	15	106		15	108		3/12/2008	280	FM		280
5 21	15	107		15	203	D	3/12/2008	136	FM		136
5 21	15	107		15	108		3/12/2008	193	FM		193
5 22	14	065		14	066		3/14/2008	291	FM		291
5 22	14	065		14	206	D	3/14/2008	13	FM		13
5 22	14	066		14	067		3/14/2008	170	FM		170
5 22	14	066		15	124		3/14/2008	330	FM		330
5 22	14	067		14	068		3/14/2008	325	FM		325
5 22	14	068		14	077		3/20/2008	351	FM		351
5 22	14	069		14	070		2/28/2008	247	FM		247
5 22	14	070		14	071		2/28/2008	145	FM		145
5 22	14	071		14	073		2/28/2008	145	FM		145
5 22	14	072		14	073		2/28/2008	350	FM		350
5 22	14	073		14	075		2/28/2008	266	FM		266

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 22	14	074		14	075		2/28/2008	263	FM		263
5 22	14	075		14	076		10/1/2007	160	JM	12	160
5 22	14	075		14	076		3/20/2008	155	FM		155
5 22	14	076		14	077		10/1/2007	158	JM	12	158
5 22	14	076		14	077		3/20/2008	156	FM		156
5 22	14	077		14	201	S	3/20/2008	145	FM		145
5 22	14	200	S	14	201	S	5/5/2008	48	FM	3	192
5 22	15	110		15	111		3/5/2008	172	FM		172
5 22	15	111		15	112		3/5/2008	200	FM		200
5 22	15	112		15	115		3/6/2008	66	FM		66
5 22	15	113		15	114		3/6/2008	200	FM		200
5 22	15	114		15	115		3/6/2008	50	FM		50
5 22	15	115		15	116		3/14/2008	25	FM		25
5 22	15	116		15	117		3/14/2008	326	FM		326
5 22	15	117		15	118		3/14/2008	324	FM		324
5 22	15	118		15	123		3/14/2008	59	FM		59
5 22	15	119		15	120		3/3/2008	300	FM		300
5 22	15	120		15	122		3/3/2008	368	FM		368
5 22	15	122		15	123		3/14/2008	320	FM		320
5 22	15	123		15	124		3/14/2008	261	FM		261
5 23	14	078		14	082		3/20/2008	330	FM		330
5 23	14	078		14	200	S	3/20/2008	127	FM		127
5 24	14	079		14	217		2/29/2008	195	FM		195
5 24	14	080	S	14	082		3/20/2008	134	FM		134
5 24	14	080	S	14	081	S	5/9/2008	52	FM	3	208
5 24	14	081	S	14	217		2/29/2008	65	FM		65
5 24	14	082		14	087	P	5/9/2008	164	FM	3	656
5 25	14	083		14	084		3/20/2008	322	FM		322
5 25	14	084		14	086		3/20/2008	318	FM		318
5 25	14	085		14	086		3/20/2008	352	FM		352
5 25	14	085		14	208	D	3/20/2008	268	FM		268
5 25	14	086		14	087		3/20/2008	161	FM		161
5 25	14	087		14	089		3/20/2008	160	FM		160
5 25	14	088		14	197		3/20/2008	268	FM		268
5 25	14	088		14	089		3/20/2008	352	FM		352
5 25	14	088		14	197	C	6/1/2008	172	JM	12	172
5 25	14	088		14	089		6/1/2008	352	JM	12	352
5 25	14	089		14	198		3/20/2008	279	FM		279
5 26	14	055		14	090		3/21/2008	330	FM		330
5 26	14	089		14	090		3/21/2008	175	FM		175
5 26	14	090		14	091		3/21/2008	330	FM		330
5 26	14	091		14	092		3/21/2008	138	FM		138
5 26	14	092		14	093		3/21/2008	332	FM		332
5 26	14	093		14	094		3/21/2008	323	FM		323
5 26	14	094		14	095		3/21/2008	200	FM		200
5 27	13	053		14	095		3/21/2008	149	FM		149
5 27	13	053		13	054	M	3/27/2008	310	FM		310
5 28	21	007		21	033		3/3/2008	375	FM		375
5 28	21	015		22	038		1/23/2008	294	FM		294

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 28	21	015		21	016		1/23/2008	293	FM		293
5 28	21	016		21	017		1/23/2008	292	FM		292
5 28	21	017		21	020		1/25/2008	222	FM		222
5 28	21	018		22	036		1/25/2008	287	FM		287
5 28	21	018		21	019		1/25/2008	284	FM		284
5 28	21	019		21	020		1/25/2008	318	FM		318
5 28	21	020		21	021		1/25/2008	79	FM		79
5 28	21	021		21	022		1/25/2008	175	FM		175
5 28	21	022		21	023		1/25/2008	176	FM		176
5 28	21	025		21	026		3/3/2008	300	FM		300
5 28	21	026		21	027		3/3/2008	120	FM		120
5 28	21	027		21	024		3/3/2008	92	FM		92
5 28	21	027		21	033		3/3/2008	350	FM		350
5 28	21	028		22	033		1/23/2008	155	FM		155
5 28	21	028		21	029		1/23/2008	342	FM		342
5 28	21	029		21	030		1/23/2008	270	FM		270
5 28	21	030		21	031		1/23/2008	346	FM		346
5 28	21	031		21	032		1/23/2008	340	FM		340
5 28	21	032		21	033		3/3/2008	333	FM		333
5 28	21	033		21	034		3/19/2008	350	FM		350
5 28	21	034		21	035		3/19/2008	315	FM		315
5 28	21	035		21	038		3/19/2008	310	FM		310
5 28	21	036		21	144		3/19/2008	191	FM		191
5 28	21	037		21	038		3/19/2008	352	FM		352
5 28	21	037		21	144		3/19/2008	160	FM		160
5 28	21	038		21	039		3/19/2008	310	FM		310
5 28	21	039		21	040		3/19/2008	300	FM		300
5 28	22	024		22	025		1/22/2008	180	FM		180
5 28	22	025		22	026		1/22/2008	275	FM		275
5 28	22	026		22	027		1/22/2008	275	FM		275
5 28	22	027		22	031		1/22/2008	220	FM		220
5 28	22	028		22	029		1/22/2008	347	FM		347
5 28	22	029		22	031		1/18/2008	347	FM		347
5 28	22	030		22	031		1/22/2008	216	FM		216
5 28	22	031		22	033		1/23/2008	320	FM		320
5 28	22	032		22	033		1/23/2008	185	FM		185
5 28	22	034		22	035		1/25/2008	112	FM		112
5 28	22	035		22	036		1/25/2008	287	FM		287
5 28	22	037		22	038		1/23/2008	292	FM		292
5 29	21	044		21	045		1/22/2008	310	FM		310
5 29	21	044		22	045		1/22/2008	308	FM		308
5 29	21	045		21	046		1/22/2008	309	FM		309
5 29	21	046		21	047		1/22/2008	40	FM		40
5 29	21	047		21	048		1/22/2008	289	FM		289
5 29	21	048		21	052		3/3/2008	342	FM		342
5 29	21	049		21	050		3/3/2008	320	FM		320
5 29	21	050		21	051		3/3/2008	200	FM		200
5 29	21	051		21	052		3/3/2008	300	FM		300
5 29	21	052		21	053		3/19/2008	262	FM		262

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 29	21	053		21	054		3/19/2008	266	FM		266
5 29	21	054		21	145		3/19/2008	210	FM		210
5 29	21	055		21	057		3/19/2008	79	FM		79
5 29	21	055		21	145		3/19/2008	125	FM		125
5 29	21	056		21	057		3/19/2008	350	FM		350
5 29	21	057		21	058		3/19/2008	247	FM		247
5 29	21	058		21	059		3/19/2008	330	FM		330
5 29	22	039		22	040		1/18/2008	332	FM		332
5 29	22	040		22	041		1/18/2008	339	FM		339
5 29	22	041		22	042		1/22/2008	200	FM		200
5 29	22	042		22	100		1/22/2008	130	FM		130
5 29	22	043		22	100		1/22/2008	112	FM		112
5 29	22	044		22	045		1/22/2008	310	FM		310
5 29	22	044		22	101		1/22/2008	190	FM		190
5 31	20	134		21	059		3/27/2008	350	FM		350
5 31	20	134		20	135		3/31/2008	360	FM		360
5 31	20	135		20	136	M	3/31/2008	80	FM		80
5 31	20	136	M	21	043		3/31/2008	300	FM		300
5 31	21	041		21	042		3/19/2008	250	FM		250
5 31	21	042		21	043		3/19/2008	283	FM		283
5 33	20	136	M	20	137		3/31/2008	463	FM		463
5 33	20	137		21	040		3/31/2008	300	FM		300
5 33	20	137		20	138	P	3/31/2008	350	FM		350
5 33	20	138	P	20	139	P	5/12/2008	138	FM	3	552
5 33	20	139	P	20	140	P	5/12/2008	152	FM	3	608
5 35	20	141		21	014		3/31/2008	300	FM		300
5 35	20	141	M	20	142		3/31/2008	330	FM		330
5 35	21	006		21	007		3/3/2008	51	FM		51
5 35	21	007		21	009		3/31/2008	160	FM		160
5 35	21	008		21	138	C	3/31/2008	55	FM		55
5 35	21	008		21	139	C	3/31/2008	84	FM		84
5 35	21	008		21	009		3/31/2008	240	FM		240
5 35	21	009		21	010		3/31/2008	175	FM		175
5 35	21	010		21	011		3/31/2008	300	FM		300
5 35	21	011		21	012		3/31/2008	345	FM		345
5 35	21	012		21	137	C	3/31/2008	144	FM		144
5 35	21	012		21	013		3/31/2008	350	FM		350
5 35	21	013		21	014		3/31/2008	350	FM		350
5 36	13	088		20	143		4/1/2008	450	FM		450
5 36	13	196	P	20	144	P	4/29/2008	253	FM	3	1012
5 36	20	009	C	20	119		3/28/2008	140	FM		140
5 36	20	113		20	114		3/28/2008	252	FM		252
5 36	20	114		20	115		3/28/2008	300	FM		300
5 36	20	115		20	116		3/28/2008	300	FM		300
5 36	20	116		20	117		3/28/2008	274	FM		274
5 36	20	117		20	145	D	3/28/2008	142	FM		142
5 36	20	117		20	118		3/28/2008	400	FM		400
5 36	20	118		20	121		3/28/2008	369	FM		369
5 36	20	119		20	120		3/28/2008	302	FM		302

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 36	20	120		20	121		3/28/2008	310	FM		310
5 36	20	121		20	144		2/19/2008	106	FM		106
5 36	20	122		20	123		3/28/2008	350	FM		350
5 36	20	123		20	124		3/28/2008	400	FM		400
5 36	20	124		20	125		3/28/2008	150	FM		150
5 36	20	125		20	130		3/28/2008	125	FM		125
5 36	20	126		20	147		3/27/2008	70	FM		70
5 36	20	126		20	127		3/27/2008	250	FM		250
5 36	20	127		20	128		3/28/2008	226	FM		226
5 36	20	128		20	129		3/28/2008	250	FM		250
5 36	20	129		20	130		3/28/2008	150	FM		150
5 36	20	130		20	131		3/28/2008	178	FM		178
5 36	20	131		20	132		3/28/2008	125	FM		125
5 36	20	132		20	133		3/31/2008	277	FM		277
5 36	20	133		20	140	P	3/31/2008	433	FM		433
5 36	20	140		20	143		6/13/2008	366	FM	3	1464
5 36	20	142	M	20	143		4/1/2008	196	FM	3	784
5 36	20	143		20	144		6/13/2008	220	FM	3	880
5 37	13	088		13	091		4/1/2008	33	FM		33
5 37	13	089		13	095		4/1/2008	260	FM		260
5 37	13	089		14	189		4/1/2008	325	FM		325
5 37	13	090		13	095		4/1/2008	290	FM		290
5 37	13	090	P	13	091	T	5/9/2008	315	FM	3	1260
5 37	13	091	T	13	092	T	5/9/2008	18	FM	3	72
5 37	13	092	T	13	098		4/1/2008	512	FM		512
5 37	13	093		14	182		3/18/2008	255	FM		255
5 37	13	093		13	094		4/1/2008	300	FM		300
5 37	13	094		13	096		4/1/2008	175	FM		175
5 37	13	096		13	097		4/1/2008	260	FM		260
5 37	13	097		13	098		4/1/2008	93	FM		93
5 37	13	098		13	099		4/1/2008	510	FM		510
5 37	13	099		13	100		4/1/2008	418	FM		418
5 37	13	100		13	106		4/3/2008	372	FM		372
5 37	14	177		14	178		3/18/2008	287	FM		287
5 37	14	178		14	179		3/18/2008	280	FM		280
5 37	14	179		14	180		3/18/2008	200	FM		200
5 37	14	180		14	181		3/18/2008	200	FM		200
5 37	14	181		14	182		3/18/2008	280	FM		280
5 37	14	183		14	184		3/18/2008	81	FM		81
5 37	14	184		14	185		3/18/2008	132	FM		132
5 37	14	184		14	219		3/18/2008	183	FM		183
5 37	14	185		14	186		3/18/2008	350	FM		350
5 37	14	186		14	187		3/18/2008	180	FM		180
5 37	14	187		14	211		3/19/2008	275	FM		275
5 37	14	187		14	188		3/19/2008	175	FM		175
5 37	14	188		14	189		3/19/2008	373	FM		373
5 37	14	219		14	220	D	3/18/2008	97	FM		97
5 37	14	219		14	221	D	3/18/2008	28	FM		28
5 38	13	084		13	106		4/3/2008	185	FM		185

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 38	13	101		13	133		4/3/2008	42	FM		42
5 38	13	101		13	103		4/3/2008	370	FM		370
5 38	13	103		13	105		4/3/2008	367	FM		367
5 38	13	105	P	13	106	P	5/7/2008	325	FM	3	1300
5 39	13	078		13	079		4/3/2008	222	FM		222
5 39	13	079		13	082		4/3/2008	181	FM		181
5 39	13	081		13	082		4/3/2008	25	FM		25
5 39	13	082		13	083		4/8/2008	348	FM		348
5 39	13	084		13	085		4/3/2008	460	FM		460
5 40	13	085		13	107		4/3/2008	180	FM		180
5 40	13	106		13	107		5/7/2008	460	FM	3	1840
5 40	13	107		13	108		5/7/2008	303	FM	3	1212
5 40	13	108	P	13	109	P	5/7/2008	179	FM	3	716
5 40	13	109		13	110		4/8/2008	30	FM		30
5 40	13	109		13	206	D	4/8/2008	100	FM		100
5 41	13	069		13	087		3/27/2008	350	FM		350
5 41	13	070		13	072		3/27/2008	184	FM		184
5 41	13	070		13	209	D	3/27/2008	50	FM		50
5 41	13	071		13	072	P	3/27/2008	439	FM		439
5 41	13	072	P	13	074		3/27/2008	387	FM		387
5 41	13	073		13	074		3/27/2008	405	FM		405
5 41	13	074		13	075		3/27/2008	185	FM		185
5 41	13	075		13	078		3/27/2008	10	FM		10
5 41	13	076		13	077		3/27/2008	385	FM		385
5 41	13	077		13	078		3/27/2008	32	FM		32
5 41	13	080		13	081		4/3/2008	408	FM		408
5 41	13	083		13	086		4/8/2008	27	FM		27
5 41	13	085		13	086		4/8/2008	361	FM		361
5 41	13	086		13	087		4/8/2008	200	FM		200
5 41	13	087		13	110		4/8/2008	100	FM		100
5 43	13	110		13	111		4/8/2008	300	FM		300
5 43	13	111		13	112		4/8/2008	48	FM		48
5 43	13	112		13	113		4/8/2008	58	FM		58
5 43	13	113		13	114		4/8/2008	150	FM		150
5 44	13	102		13	117		4/8/2008	200	FM		200
5 44	13	102		13	118		4/8/2008	250	FM		250
5 44	13	114		13	115		4/8/2008	188	FM		188
5 44	13	115		13	116		4/8/2008	234	FM		234
5 44	13	116		13	117		4/8/2008	72	FM		72
5 44	13	118		13	119		4/8/2008	600	FM		600
5 45	13	119		13	120		4/8/2008	600	FM		600
5 45	13	120		13	168		4/8/2008	332	FM		332
5 46	13	107		13	121		4/4/2008	157	FM		157
5 46	13	121		13	122		4/4/2008	137	FM		137
5 46	13	122		13	123		4/4/2008	362	FM		362
5 46	13	123		13	125		4/4/2008	163	FM		163
5 46	13	124		13	125		4/4/2008	300	FM		300
5 46	13	124		13	197	C	4/4/2008	120	FM		120
5 46	13	125		13	130		4/4/2008	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 46	13	126		13	127		4/4/2008	305	FM		305
5 46	13	127		13	128		4/4/2008	305	FM		305
5 46	13	128		13	129		4/4/2008	275	FM		275
5 46	13	128		13	211		4/4/2008	360	FM		360
5 46	13	129		13	130		4/4/2008	283	FM		283
5 46	13	130		13	146		4/7/2008	326	FM		326
5 46	13	131		13	207	D	4/3/2008	45	FM		45
5 46	13	131	P	13	132	P	5/7/2008	300	FM	3	1200
5 46	13	132	P	13	133	P	5/7/2008	310	FM	3	1240
5 46	13	133		13	134		4/3/2008	128	FM		128
5 46	13	134		13	137		4/3/2008	22	FM		22
5 46	13	135		13	136		4/3/2008	286	FM		286
5 46	13	136		13	137		4/3/2008	288	FM		288
5 46	13	137		13	138		4/4/2008	241	FM		241
5 46	13	138		13	205		4/4/2008	105	FM		105
5 46	13	138		13	139		4/4/2008	295	FM		295
5 46	13	139		13	140		4/7/2008	150	FM		150
5 46	13	140		13	141		4/7/2008	95	FM		95
5 46	13	141		13	142		4/7/2008	100	FM		100
5 46	13	142		13	143		4/7/2008	240	FM		240
5 46	13	143		13	144		4/7/2008	223	FM		223
5 46	13	144		13	145		4/7/2008	336	FM		336
5 46	13	145		13	146		4/7/2008	333	FM		333
5 46	13	146		13	149		4/7/2008	141	FM		141
5 46	13	147		13	148		4/7/2008	305	FM		305
5 46	13	148		13	149		4/7/2008	295	FM		295
5 46	13	149		13	150		4/7/2008	288	FM		288
5 46	13	150		13	153		4/7/2008	122	FM		122
5 47	13	151		13	152		1/1/2008	302	JM	12	302
5 47	13	151		13	152		4/7/2008	304	FM		304
5 47	13	152		13	153		4/7/2008	300	FM		300
5 47	13	153		13	162		4/7/2008	186	FM		186
5 47	13	154		13	155		4/4/2008	180	FM		180
5 47	13	155		13	156		4/4/2008	214	FM		214
5 47	13	156		13	158		4/7/2008	300	FM		300
5 47	13	157		13	158		4/7/2008	265	FM		265
5 47	13	158		13	200	S	4/7/2008	253	FM		253
5 47	13	159	S	13	215		4/7/2008	130	FM		130
5 47	13	159	S	13	200	S	5/9/2008	44	FM	3	176
5 47	13	160		13	161		4/7/2008	280	FM		280
5 47	13	160		13	215		4/7/2008	30	FM		30
5 47	13	161		13	162		4/7/2008	277	FM		277
5 47	13	162		13	166		4/8/2008	306	FM		306
5 47	13	163		13	164		4/8/2008	302	FM		302
5 47	13	164		13	165		4/8/2008	288	FM		288
5 47	13	165		13	166		4/8/2008	136	FM		136
5 47	13	166	P	13	167	P	5/5/2008	346	FM	3	1384
5 47	13	167	P	13	168	P	5/5/2008	18	FM	3	72
5 48	12	038		13	168		4/8/2008	590	FM		590

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
5 49	12	032		12	033		4/7/2008	212	FM		212
5 49	12	032		12	142	C	4/7/2008	93	FM		93
5 49	12	033		12	034		4/7/2008	180	FM		180
5 49	12	034		12	037		4/7/2008	345	FM		345
5 49	12	035		12	036		4/7/2008	372	FM		372
5 49	12	036		12	037		4/7/2008	213	FM		213
5 49	12	037	P	12	039	P	5/5/2008	160	FM	3	640
5 49	12	038		12	039		4/9/2008	102	FM		102
5 49	12	039		12	040		4/9/2008	200	FM		200
5 49	12	040		12	041	S	4/9/2008	300	FM		300
5 49	12	041	S	12	042	S	4/9/2008	85	FM	3	340
5 49	12	042	S	12	108		4/9/2008	42	FM		42
5 49	12	043		12	044		4/9/2008	200	FM		200
5 49	12	043	S	12	108		4/9/2008	53	FM		53
5 49	12	044		12	145		4/9/2008	127	FM		127
5 49	12	129		12	145		4/9/2008	153	FM		153
5 50	12	045		12	129		4/9/2008	320	FM		320
5 50	12	045		12	046		4/9/2008	240	FM		240
5 50	12	046		12	047		4/9/2008	300	FM		300
5 50	12	047		12	048		4/9/2008	256	FM		256
5 50	12	048		12	049		4/9/2008	375	FM		375
5 51	12	049		12	113		4/9/2008	600	FM		600
5 53	12	090		12	099		4/10/2008	270	FM		270
5 53	12	099		12	144		4/10/2008	335	FM		335
5 53	12	100	P	12	101	P	5/8/2008	337	FM	3	1348
5 53	12	101	P	12	102	P	5/8/2008	325	FM	3	1300
5 53	12	102	P	12	103	P	5/8/2008	269	FM	3	1076
5 53	12	103	P	12	133	P	5/8/2008	300	FM	3	1200
5 53	12	104		12	133	P	4/10/2008	420	FM		420
5 53	12	104		12	144		4/10/2008	143	FM		143
5 53	12	104		12	106	M	4/10/2008	275	FM		275
5 53	12	105		12	134		4/10/2008	50	FM		50
5 53	12	106	M	12	107	M	4/10/2008	415	FM		415
5 53	12	132		12	133	P	4/10/2008	460	FM		460
5 53	12	133	P	12	134		4/10/2008	275	FM		275
5 53	12	134		12	135		4/10/2008	415	FM		415
5 54	12	135		12	136		4/10/2008	405	FM		405
5 55	12	107	M	12	111		4/10/2008	405	FM		405
5 55	12	110		12	111		5/5/2008	161	FM	3	644
5 55	12	110		12	140		5/5/2008	170	FM	3	680
5 55	12	111		12	136		4/10/2008	40	FM		40
5 55	12	111		12	112		4/10/2008	80	FM		80
5 55	12	112		12	113		4/10/2008	480	FM		480
5 55	12	113		12	114		4/10/2008	475	FM		475
5 55	12	131		12	132		4/10/2008	410	FM		410
6S01	08	060		08	061		10/9/2007	275	FM		275
6S01	08	061		08	063		10/9/2007	142	FM		142
6S01	08	062		08	063		2/20/2008	157	FM		157
6S01	08	062		08	063		5/1/2008	157	JM	6	314

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6S01	08	063		08	064		10/9/2007	206	FM		206
6S01	08	063		08	064		3/1/2008	240	JM	6	480
6S01	08	064		08	065		10/9/2007	125	FM		125
6S01	08	064		08	065		3/1/2008	129	JM	12	129
6S01	08	065		08	066		10/9/2007	370	FM		370
6S01	08	066		08	067		10/9/2007	119	FM		119
6S01	08	067		08	068		10/9/2007	236	FM		236
6S01	08	068		09	008		10/9/2007	377	FM		377
6S01	08	068		09	008		3/1/2008	380	JM	12	380
6S01	08	069		08	070		10/9/2007	246	FM		246
6S01	08	070		09	004		10/9/2007	213	FM		213
6S01	08	071		08	072		10/9/2007	267	FM		267
6S01	08	072		09	001		10/9/2007	347	FM		347
6S01	08	072		09	001		2/1/2008	355	JM	12	355
6S01	09	001		09	002		10/9/2007	350	FM		350
6S01	09	002		09	003		10/9/2007	210	FM		210
6S01	09	002		09	003		2/1/2008	204	JM	12	204
6S01	09	003		09	005		10/9/2007	80	FM		80
6S01	09	004		09	005		10/9/2007	210	FM		210
6S01	09	004		09	005		2/1/2008	237	JM	12	237
6S01	09	005		09	006		10/9/2007	178	FM		178
6S01	09	006		09	007		10/9/2007	109	FM		109
6S01	09	007		09	009		10/9/2007	192	FM		192
6S01	09	008		09	009		10/10/2007	161	FM		161
6S01	09	009		09	010		10/10/2007	165	FM		165
6S01	09	009		09	010		6/1/2008	165	JM	6	330
6S01	09	010		09	011		10/10/2007	190	FM		190
6S01	09	011		09	016		10/10/2007	300	FM		300
6S01	09	012		09	016		10/10/2007	194	FM		194
6S01	09	013		09	014		10/10/2007	340	FM		340
6S01	09	014		09	015		10/10/2007	267	FM		267
6S01	09	015		09	016		10/10/2007	300	FM		300
6S01	09	016		09	017		10/10/2007	345	FM		345
6S01	09	017		09	018		10/10/2007	350	FM		350
6S01	09	018		09	019		10/10/2007	249	FM		249
6S01	09	019		09	020		10/10/2007	300	FM		300
6S01	09	020		09	022		10/10/2007	250	FM		250
6S01	09	021		09	135	C	10/1/2007	200	JM	12	200
6S01	09	021		09	022		10/10/2007	245	FM		245
6S01	09	021		09	135	C	10/10/2007	190	FM		190
6S02	08	171		08	172		10/15/2007	160	FM		160
6S02	08	172		08	173		10/15/2007	129	FM		129
6S02	08	173		09	060		8/1/2007	199	JM	12	199
6S02	08	173		09	060		10/15/2007	182	FM		182
6S02	09	022		09	035		10/11/2007	50	FM		50
6S02	09	023		09	025		10/11/2007	170	FM		170
6S02	09	024		09	025		8/1/2007	191	JM	12	191
6S02	09	024		09	025		10/11/2007	190	FM		190
6S02	09	025		09	026		10/11/2007	100	FM		100

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6S02	09	026		09	027		10/11/2007	256	FM		256
6S02	09	027		09	029		10/11/2007	310	FM		310
6S02	09	028		09	029		10/11/2007	200	FM		200
6S02	09	029		09	030		10/11/2007	310	FM		310
6S02	09	030		09	031		10/11/2007	260	FM		260
6S02	09	031		09	032		10/11/2007	217	FM		217
6S02	09	032		09	033		10/11/2007	220	FM		220
6S02	09	033		09	034		10/11/2007	250	FM		250
6S02	09	034		09	035		10/11/2007	343	FM		343
6S02	09	035		09	045		10/12/2007	212	FM		212
6S02	09	036		10	001		8/1/2007	265	JM	6	530
6S02	09	036		09	037		8/1/2007	200	JM	12	200
6S02	09	036		10	001		10/11/2007	260	FM		260
6S02	09	036		09	037		10/11/2007	200	FM		200
6S02	09	036		10	001		2/1/2008	304	JM	6	608
6S02	09	037		09	038		10/11/2007	89	FM		89
6S02	09	038		09	041		10/12/2007	330	FM		330
6S02	09	039		09	040		10/12/2007	200	FM		200
6S02	09	040		09	041		10/12/2007	85	FM		85
6S02	09	041		09	043		10/12/2007	180	FM		180
6S02	09	042		09	043		10/12/2007	100	FM		100
6S02	09	043		09	044		10/12/2007	140	FM		140
6S02	09	044		09	045		10/12/2007	200	FM		200
6S02	09	045		09	059		10/15/2007	150	FM		150
6S02	09	046		09	047		8/1/2007	121	JM	12	121
6S02	09	046		09	047		10/12/2007	116	FM		116
6S02	09	047		09	048		8/1/2007	106	JM	12	106
6S02	09	047		09	048		10/12/2007	100	FM		100
6S02	09	048		09	049		10/15/2007	94	FM		94
6S02	09	049		09	050		8/1/2007	303	JM	12	303
6S02	09	049		09	050		10/15/2007	301	FM		301
6S02	09	050		09	052		10/15/2007	360	FM		360
6S02	09	051		09	052		10/15/2007	192	FM		192
6S02	09	052		09	053		10/15/2007	300	FM		300
6S02	09	053		09	054		10/15/2007	211	FM		211
6S02	09	054		09	055		8/1/2007	258	JM	12	258
6S02	09	054		09	055		10/15/2007	250	FM		250
6S02	09	055		09	056		10/15/2007	170	FM		170
6S02	09	056		09	057		10/15/2007	236	FM		236
6S02	09	057		09	058		8/1/2007	354	JM	12	354
6S02	09	057		09	058		10/15/2007	360	FM		360
6S02	09	058		09	059		10/15/2007	350	FM		350
6S02	09	059		09	073		10/16/2007	300	FM		300
6S02	09	060		09	061		8/1/2007	132	JM	12	132
6S02	09	060		09	061		10/15/2007	140	FM		140
6S02	09	061		09	062		10/15/2007	170	FM		170
6S02	09	061		09	062		2/1/2008	160	JM	6	320
6S02	09	062		09	063		10/15/2007	360	FM		360
6S02	09	062		09	063		2/1/2008	350	JM	6	700

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6S02	09	063		09	064		8/1/2007	362	JM	12	362
6S02	09	063		09	064		10/15/2007	325	FM		325
6S02	09	064		09	065		8/1/2007	78	JM	12	78
6S02	09	064		09	065		10/15/2007	78	FM		78
6S02	09	065		09	066		8/1/2007	200	JM	12	200
6S02	09	065		09	066		10/15/2007	183	FM		183
6S02	09	066		09	068		10/16/2007	360	FM		360
6S02	09	066		09	068		2/1/2008	360	JM	6	720
6S02	09	067		09	068		10/16/2007	210	FM		210
6S02	09	067		09	136	C	10/16/2007	129	FM		129
6S02	09	068		09	069		10/16/2007	181	FM		181
6S02	09	069		09	070		8/1/2007	357	JM	12	357
6S02	09	069		09	070		10/16/2007	360	FM		360
6S02	09	070		09	071		8/1/2007	295	JM	12	295
6S02	09	070		09	071		10/16/2007	263	FM		263
6S02	09	071		09	072		10/16/2007	156	FM		156
6S02	09	072		09	073		8/1/2007	177	JM	12	177
6S02	09	072		09	073		10/16/2007	161	FM		161
6S02	09	073		09	074		10/16/2007	200	FM		200
6S03	09	074		09	075		10/18/2007	112	FM		112
6S03	09	075		09	079		10/18/2007	87	FM		87
6S03	09	076		09	077		10/18/2007	100	FM		100
6S03	09	077		09	078		10/18/2007	55	FM		55
6S03	09	078		09	079		10/18/2007	50	FM		50
6S03	09	079		09	080		10/18/2007	61	FM		61
6S03	09	080		09	081		10/18/2007	125	FM		125
6S03	09	081		09	082		10/18/2007	128	FM		128
6S03	09	082		09	083		10/18/2007	117	FM		117
6S03	09	083		09	084		12/17/2007	350	FM		350
6S04	09	084		09	085		12/17/2007	194	FM		194
6S04	09	085		09	086		12/17/2007	240	FM		240
6S05	09	086	M	09	087		12/17/2007	245	FM		245
6S05	09	087		09	088		12/17/2007	251	FM		251
6S05	09	088		09	089		12/17/2007	439	FM		439
6S06	09	089		09	090		12/17/2007	127	FM		127
6S06	09	090		09	091		12/17/2007	283	FM		283
6S06	09	093		09	092		12/17/2007	105	FM		105
6S07	09	093		09	094		12/17/2007	326	FM		326
6S07	09	094		09	122		12/17/2007	332	FM		332
6S08	09	095		09	096		10/22/2007	253	FM		253
6S08	09	096		09	097		10/22/2007	269	FM		269
6S08	09	096		09	097		5/1/2008	272	JM	12	272
6S08	09	097		09	103		10/23/2007	141	FM		141
6S08	09	098		09	099		10/22/2007	135	FM		135
6S08	09	098		09	099		5/1/2008	135	JM	12	135
6S08	09	099		09	100		10/22/2007	240	FM		240
6S08	09	099		09	100		5/1/2008	250	JM	12	250
6S08	09	100		09	101		12/4/2007	170	FM		170
6S08	09	100		09	101		5/1/2008	91	JM	6	182

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6S08	09	101		09	102		12/4/2007	185	FM		185
6S08	09	101		09	102		5/1/2008	154	JM	6	308
6S08	09	102		09	103		10/23/2007	212	FM		212
6S08	09	102		09	103		5/1/2008	215	JM	12	215
6S08	09	103		09	112		10/23/2007	250	FM		250
6S08	09	104		09	105		10/23/2007	210	FM		210
6S08	09	105		09	106		10/23/2007	203	FM		203
6S08	09	106		09	110		10/23/2007	200	FM		200
6S08	09	107		09	108		10/23/2007	276	FM		276
6S08	09	107		09	138	D	10/23/2007	3	FM		3
6S08	09	108		09	109		10/23/2007	275	FM		275
6S08	09	108		09	109		5/1/2008	277	JMR	6	554
6S08	09	109		09	110		10/23/2007	200	FM		200
6S08	09	110		09	111		10/23/2007	47	FM		47
6S08	09	111		09	112		10/23/2007	200	FM		200
6S08	09	112		09	113		10/23/2007	100	FM		100
6S08	09	113		09	114		12/14/2007	60	FM		60
6S08	09	114		09	115		12/14/2007	300	FM		300
6S08	09	115		09	118		12/14/2007	173	FM		173
6S08	09	116		09	117		12/14/2007	200	FM		200
6S08	09	117		09	118		12/14/2007	300	FM		300
6S08	09	117		09	118		1/1/2008	299	JM	12	299
6S08	09	118		09	119		12/14/2007	300	FM		300
6S08	09	119		09	121		12/14/2007	334	FM		334
6S08	09	119		09	121		1/1/2008	336	JM	12	336
6S08	09	121		09	122		12/17/2007	340	FM		340
6S08	09	122		09	123		12/17/2007	210	FM		210
6S09	08	174		08	176		12/13/2007	312	FM		312
6S09	08	175	C	08	176		12/13/2007	146	FM		146
6S09	08	176		08	177		12/13/2007	200	FM		200
6S09	08	177		08	178		12/13/2007	47	FM		47
6S09	08	178		08	179		12/13/2007	50	FM		50
6S09	08	179		08	182		12/13/2007	120	FM		120
6S09	08	180		08	181		12/13/2007	91	FM		91
6S09	08	181		08	182		12/13/2007	170	FM		170
6S09	08	182		08	183		12/13/2007	200	FM		200
6S09	08	183		08	187		12/13/2007	153	FM		153
6S09	08	184		09	125		12/13/2007	75	FM		75
6S09	08	184		08	185		12/13/2007	281	FM		281
6S09	08	185		08	186		12/13/2007	269	FM		269
6S09	08	186		08	187		12/13/2007	300	FM		300
6S09	08	187		08	188		12/13/2007	400	FM		400
6S09	08	188		08	190		12/14/2007	234	FM		234
6S09	08	190		08	191		12/14/2007	266	FM		266
6S09	08	191		09	124		12/14/2007	325	FM		325
6S09	08	191		08	194		12/17/2007	241	FM		241
6S09	08	192		08	193		12/17/2007	320	FM		320
6S09	08	193		08	194		12/17/2007	170	FM		170
6S09	08	194		08	195		12/17/2007	181	FM		181

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6S09	09	125		09	137		12/13/2007	25	FM		25
6S11	08	195		13	001		12/26/2007	356	FM		356
6S11	13	001		13	002		12/26/2007	350	FM		350
6S11	13	001		14	006		12/26/2007	225	FM		225
6S11	13	002		13	003		12/26/2007	321	FM		321
6S11	13	003		13	212	C	12/26/2007	245	FM		245
6S11	13	011		13	010		1/2/2008	149	FM		149
6S12	09	122		14	005		12/20/2007	350	FM		350
6S12	13	003		13	010		12/26/2007	336	FM		336
6S12	13	005		13	006		1/2/2008	133	FM		133
6S12	13	006		13	007		1/2/2008	43	FM		43
6S12	13	007		13	011		1/2/2008	332	FM		332
6S12	13	008		13	009		12/26/2007	300	FM		300
6S12	13	008		14	008		12/26/2007	294	FM		294
6S12	13	009		13	010		12/26/2007	294	FM		294
6S12	13	010		13	011		1/2/2008	150	FM		150
6S12	13	010		13	014		1/2/2008	345	FM		345
6S12	13	011		13	015		1/3/2008	335	FM		335
6S12	13	012		13	013		1/2/2008	380	FM		380
6S12	13	012		14	013		1/2/2008	426	FM		426
6S12	13	013		13	014		1/2/2008	375	FM		375
6S12	13	014		13	015		1/3/2008	150	FM		150
6S12	13	014		13	018		1/15/2008	340	FM		340
6S12	13	015		13	031		1/3/2008	351	FM		351
6S12	14	001	C	14	002		12/20/2007	105	FM		105
6S12	14	002		14	003		12/20/2007	165	FM		165
6S12	14	003		14	004		12/20/2007	400	FM		400
6S12	14	004		14	005		12/20/2007	400	FM		400
6S12	14	005		14	006		12/20/2007	270	FM		270
6S12	14	005		14	007		12/26/2007	331	FM		331
6S12	14	007		14	008		12/26/2007	267	FM		267
6S12	14	007		14	218		12/26/2007	300	FM		300
6S12	14	007		14	013		1/2/2008	335	FM		335
6S12	14	009		14	010		3/17/2008	235	FM		235
6S12	14	009		14	191		3/17/2008	200	FM		200
6S12	14	010		14	011		3/17/2008	260	FM		260
6S12	14	011		14	012		1/2/2008	260	FM		260
6S12	14	012		14	013		1/2/2008	80	FM		80
6S12	14	209	D	14	218		12/26/2007	45	FM		45
6S13	13	016		14	030		1/14/2008	236	FM		236
6S13	13	016		13	017		1/15/2008	351	FM		351
6S13	13	017		13	018		1/15/2008	353	FM		353
6S13	13	018		13	031		1/15/2008	149	FM		149
6S13	13	024		13	025		1/9/2008	84	FM		84
6S13	13	025		13	026		1/9/2008	84	FM		84
6S13	13	026		13	028		1/9/2008	35	FM		35
6S13	13	027		13	204		1/9/2008	371	FM		371
6S13	13	027		13	028		1/9/2008	426	FM		426
6S13	13	028		13	029		1/9/2008	175	FM		175

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6S13	13	029		13	030		1/9/2008	341	FM		341
6S13	13	030		13	031		1/9/2008	407	FM		407
6S13	13	031		13	032		1/15/2008	389	FM		389
6S13	13	032		13	033		1/15/2008	389	FM		389
6S13	13	033		13	038		1/15/2008	200	FM		200
6S13	14	014		14	015		3/17/2008	76	FM		76
6S13	14	015		14	017		5/15/2008	450	FM		450
6S13	14	016		14	017		5/15/2008	121	FM		121
6S13	14	017		14	020		5/15/2008	289	FM		289
6S13	14	018	C	14	019	C	5/15/2008	143	FM		143
6S13	14	019		14	020		5/15/2008	80	FM		80
6S13	14	020		14	021		5/15/2008	370	FM		370
6S13	14	021		14	028		5/15/2008	375	FM		375
6S13	14	022		14	023		12/28/2007	375	FM		375
6S13	14	023		14	024		12/28/2007	10	FM		10
6S13	14	025		14	026		1/4/2008	332	FM		332
6S13	14	026		14	027		1/4/2008	330	FM		330
6S13	14	027		14	028		1/4/2008	330	FM		330
6S13	14	028		14	029		1/4/2008	240	FM		240
6S14	13	034		13	198	C	1/9/2008	225	FM		225
6S14	13	034		13	035		1/9/2008	347	FM		347
6S14	13	035		13	036		1/9/2008	167	FM		167
6S14	13	036		13	037		1/14/2008	331	FM		331
6S14	13	037	M	13	038		1/15/2008	344	FM		344
6S14	13	038		13	039		1/15/2008	319	FM		319
6S14	13	039		13	040		1/15/2008	57	FM		57
6S14	13	040		13	048	M	1/15/2008	261	FM		261
6S15	08	196		08	197		1/3/2008	290	FM		290
6S15	08	197		08	198		1/3/2008	290	FM		290
6S15	08	198		08	199		1/3/2008	290	FM		290
6S15	08	199		08	200		1/9/2008	290	FM		290
6S15	08	200		13	041		1/9/2008	150	FM		150
6S15	13	041		13	042		1/9/2008	250	FM		250
6S15	13	042		13	043		1/9/2008	293	FM		293
6S15	13	043		13	046		1/10/2008	313	FM		313
6S15	13	044		13	045		1/9/2008	140	FM		140
6S15	13	045		13	046		1/10/2008	300	FM		300
6S15	13	046		13	047		1/10/2008	325	FM		325
6S15	13	047		13	048		1/15/2008	400	FM		400
6S16	12	012		12	013		1/10/2008	88	FM		88
6S16	12	013		12	014		1/10/2008	200	FM		200
6S16	12	014		12	015		1/10/2008	123	FM		123
6S16	12	015		12	016		2/15/2008	43	FM		43
6S16	12	016		12	017		2/15/2008	32	FM		32
6S16	12	017		12	018		2/15/2008	295	FM		295
6S16	12	018		12	019		1/15/2008	225	FM		225
6S16	12	018		13	052		1/15/2008	415	FM		415
6S16	12	019		12	020		1/15/2008	420	FM		420
6S16	12	020		12	021	S	1/16/2008	23	FM		23

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6S16	12	021	S	12	022	S	2/6/2008	85	FM	3	340
6S16	13	048		13	052		1/15/2008	318	FM		318
6S16	13	049		13	050		1/14/2008	332	FM		332
6S16	13	050		13	051		1/14/2008	325	FM		325
6S16	13	051		13	052		1/14/2008	300	FM		300
6S17	07	133		07	134		11/26/2007	280	FM		280
6S17	07	134		07	136		11/28/2007	320	FM		320
6S17	07	135		07	136		11/28/2007	345	FM		345
6S17	07	136		07	137		11/28/2007	157	FM		157
6S17	07	137		07	138		11/28/2007	390	FM		390
6S17	07	138		07	139		11/28/2007	272	FM		272
6S17	07	139		07	144		11/28/2007	193	FM		193
6S17	07	140		07	141		11/28/2007	220	FM		220
6S17	07	141		07	142		11/28/2007	330	FM		330
6S17	07	142		07	143		11/28/2007	300	FM		300
6S17	07	143		07	144		11/28/2007	165	FM		165
6S17	07	144		07	145		11/28/2007	270	FM		270
6S17	07	145		07	146		11/29/2007	250	FM		250
6S17	07	146		07	204	D	11/29/2007	89	FM		89
6S17	07	146		07	163		11/29/2007	300	FM		300
6S17	07	147		07	203	D	11/29/2007	59	FM		59
6S17	07	147		07	163		11/29/2007	260	FM		260
6S17	07	148		08	170		11/26/2007	360	FM		360
6S17	07	148		07	149		11/26/2007	173	FM		173
6S17	07	149		07	150		11/26/2007	265	FM		265
6S17	07	150		08	169		11/26/2007	200	FM		200
6S17	07	150		07	153		11/26/2007	347	FM		347
6S17	07	151		07	152		11/26/2007	185	FM		185
6S17	07	152		07	153		11/26/2007	230	FM		230
6S17	07	153		07	154		11/26/2007	200	FM		200
6S17	07	154		08	167		11/26/2007	350	FM		350
6S17	07	154		07	155		11/26/2007	145	FM		145
6S17	07	155		07	156		11/26/2007	145	FM		145
6S17	07	156		07	157		11/26/2007	250	FM		250
6S17	07	157		07	158		11/26/2007	190	FM		190
6S17	07	158		07	160		11/26/2007	290	FM		290
6S17	07	159		07	160		11/26/2007	259	FM		259
6S17	07	159		07	201	D	11/26/2007	56	FM		56
6S17	07	160		07	162		11/26/2007	290	FM		290
6S17	07	161		07	162		11/26/2007	260	FM		260
6S17	07	161		07	202	D	11/26/2007	59	FM		59
6S17	07	162		07	163		11/29/2007	310	FM		310
6S17	07	163		07	167		11/29/2007	360	FM		360
6S17	07	164		07	167		11/29/2007	351	FM		351
6S17	07	165		07	198	C	11/29/2007	175	FM		175
6S17	07	165		07	166		11/29/2007	260	FM		260
6S17	07	166		07	167		11/29/2007	350	FM		350
6S17	07	167		07	171		11/29/2007	300	FM		300
6S17	07	167		07	171		5/1/2008	305	JMR	6	610

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6S17	07	168		07	205		11/29/2007	42	FM		42
6S17	07	168		07	171		11/29/2007	300	FM		300
6S17	07	169		07	197	C	11/29/2007	160	FM		160
6S17	07	169		07	170		11/29/2007	300	FM		300
6S17	07	170		07	171		11/29/2007	310	FM		310
6S17	07	171		07	175		11/29/2007	300	FM		300
6S17	07	172		07	175		11/29/2007	360	FM		360
6S17	07	173		07	174		11/29/2007	310	FM		310
6S17	07	173		07	196	C	11/29/2007	144	FM		144
6S17	07	173		07	174		5/1/2008	300	JM	12	300
6S17	07	174		07	175		11/29/2007	310	FM		310
6S17	07	174		07	175		5/1/2008	305	JM	12	305
6S17	07	175		07	176	P	1/14/2008	300	FM		300
6S17	07	176	P	07	177	P	5/5/2008	250	FM	3	1000
6S17	07	177	P	07	178		1/14/2008	242	FM		242
6S17	08	158		08	159		11/20/2007	150	FM		150
6S17	08	159		08	160		11/20/2007	110	FM		110
6S17	08	161		08	166		11/20/2007	160	FM		160
6S17	08	162		08	166		11/20/2007	250	FM		250
6S17	08	163		08	164		10/31/2007	302	FM		302
6S17	08	163		08	164		6/1/2008	301	JM	12	301
6S17	08	164		08	165		10/31/2007	150	FM		150
6S17	08	165		08	166		11/20/2007	160	FM		160
6S17	08	166		08	161		11/20/2007	342	FM		342
6S17	08	166		08	167		11/20/2007	245	FM		245
6S17	08	168		08	169		11/26/2007	185	FM		185
6S18	07	183		07	200		12/3/2007	183	FM		183
6S18	07	183		08	144		12/3/2007	300	FM		300
6S18	07	184		07	192	C	12/3/2007	250	FM		250
6S18	07	184		07	185		12/3/2007	300	FM		300
6S18	07	185		07	191		12/3/2007	220	FM		220
6S18	07	186		07	187		11/21/2007	220	FM		220
6S18	07	187		07	188		11/21/2007	330	FM		330
6S18	07	188		08	106		11/21/2007	385	FM		385
6S18	07	188		07	189		11/21/2007	200	FM		200
6S18	07	189		07	190		11/21/2007	38	FM		38
6S18	07	190		07	191		12/3/2007	165	FM		165
6S18	07	191		08	137		12/3/2007	71	FM		71
6S18	08	045		08	126		10/30/2007	105	FM		105
6S18	08	045		08	127		10/30/2007	200	FM		200
6S18	08	073		08	074		11/21/2007	250	FM		250
6S18	08	074		08	075		11/21/2007	322	FM		322
6S18	08	075		08	076		11/21/2007	127	FM		127
6S18	08	076		08	080		11/21/2007	150	FM		150
6S18	08	078		08	077	C	11/21/2007	68	FM		68
6S18	08	078		08	079		11/21/2007	150	FM		150
6S18	08	079		08	080		11/21/2007	175	FM		175
6S18	08	080		08	081		11/21/2007	120	FM		120
6S18	08	081		08	082		11/21/2007	100	FM		100

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6S18	08	082		08	083		11/21/2007	100	FM		100
6S18	08	083		08	091		11/21/2007	150	FM		150
6S18	08	084		08	085		10/31/2007	300	FM		300
6S18	08	084		08	085		6/1/2008	296	JM	12	296
6S18	08	085		08	086		10/31/2007	340	FM		340
6S18	08	086		08	088		10/31/2007	320	FM		320
6S18	08	088		08	090		10/31/2007	115	FM		115
6S18	08	089		08	090		10/31/2007	180	FM		180
6S18	08	090		08	219		10/31/2007	135	FM		135
6S18	08	092		08	091		11/21/2007	123	FM		123
6S18	08	092		08	093		11/21/2007	240	FM		240
6S18	08	093		08	095		11/21/2007	190	FM		190
6S18	08	094		08	095		11/21/2007	360	FM		360
6S18	08	095		08	096		11/21/2007	125	FM		125
6S18	08	098		08	099		11/21/2007	189	FM		189
6S18	08	099		08	100		11/21/2007	215	FM		215
6S18	08	100		08	101		11/21/2007	140	FM		140
6S18	08	101		08	102		11/21/2007	135	FM		135
6S18	08	102		08	103		11/21/2007	400	FM		400
6S18	08	103		08	104		11/21/2007	165	FM		165
6S18	08	104		08	105		11/21/2007	315	FM		315
6S18	08	105		08	106		11/21/2007	220	FM		220
6S18	08	107		08	108		10/29/2007	344	FM		344
6S18	08	108		08	109		10/29/2007	50	FM		50
6S18	08	109		08	110		10/29/2007	50	FM		50
6S18	08	110		08	117		10/29/2007	200	FM		200
6S18	08	111		08	112		10/29/2007	174	FM		174
6S18	08	112		08	113		10/29/2007	200	FM		200
6S18	08	113		08	114		10/29/2007	156	FM		156
6S18	08	114		08	115		10/29/2007	120	FM		120
6S18	08	115		08	116		10/29/2007	70	FM		70
6S18	08	116		08	117		10/29/2007	100	FM		100
6S18	08	117		08	120		10/30/2007	315	FM		315
6S18	08	118		08	119		10/29/2007	165	FM		165
6S18	08	119		08	120		10/29/2007	175	FM		175
6S18	08	120		08	121		10/30/2007	100	FM		100
6S18	08	121		08	126		10/30/2007	175	FM		175
6S18	08	122		08	123		10/29/2007	350	FM		350
6S18	08	123		08	124		10/29/2007	100	FM		100
6S18	08	124		08	125		10/29/2007	100	FM		100
6S18	08	125		08	126		10/30/2007	75	FM		75
6S18	08	127		08	128		12/3/2007	160	FM		160
6S18	08	128		08	129		12/3/2007	350	FM		350
6S18	08	129		08	130		12/3/2007	125	FM		125
6S18	08	130		08	131		12/3/2007	130	FM		130
6S18	08	131		08	132		12/6/2007	360	FM		360
6S18	08	132		08	133		12/6/2007	141	FM		141
6S18	08	133		08	134		12/6/2007	300	FM		300
6S18	08	134		08	189		12/6/2007	230	FM		230

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6S18	08	135		08	189		12/6/2007	97	FM		97
6S18	08	135		08	136		12/6/2007	340	FM		340
6S18	08	137	P	08	138	P	12/6/2007	290	FM		290
6S18	08	138		08	145		12/10/2007	325	FM		325
6S18	08	139		08	140		12/6/2007	385	FM		385
6S18	08	140		08	141		12/10/2007	300	FM		300
6S18	08	141		08	142		12/10/2007	300	FM		300
6S18	08	142		08	143		12/10/2007	300	FM		300
6S18	08	143		08	145		12/10/2007	300	FM		300
6S18	08	144		08	145		12/10/2007	300	FM		300
6S18	08	145		08	152		12/10/2007	325	FM		325
6S19	08	146		08	217	C	12/10/2007	50	FM		50
6S19	08	146		08	147		12/10/2007	139	FM		139
6S19	08	147		08	148		12/10/2007	113	FM		113
6S19	08	148		08	149		12/10/2007	360	FM		360
6S19	08	149		08	150		12/10/2007	340	FM		340
6S19	08	150		08	151		12/10/2007	346	FM		346
6S19	08	151		08	152		12/10/2007	162	FM		162
6S20	07	182		07	199	C	12/3/2007	150	FM		150
6S20	07	182		08	153		12/3/2007	290	FM		290
6S20	08	152		08	154		12/10/2007	170	FM		170
6S20	08	153		08	154		12/10/2007	230	FM		230
6S20	08	154		08	155		12/10/2007	245	FM		245
6S20	08	155		08	156		1/14/2008	450	FM		450
6S20	08	156		08	157		1/14/2008	200	FM		200
6S21	07	178		07	181		1/14/2008	300	FM		300
6S21	07	178		12	023		1/14/2008	92	FM		92
6S21	07	179		08	157		1/14/2008	325	FM		325
6S21	07	179		07	180		1/14/2008	300	FM		300
6S21	07	180		07	181		1/14/2008	302	FM		302
6S22	12	023		12	024		1/14/2008	111	FM		111
6S23	12	024		12	025		1/14/2008	375	FM		375
6S23	12	025		12	026		1/14/2008	351	FM		351
6S24	12	026		12	027		1/14/2008	256	FM		256
6S24	12	027		12	028		1/14/2008	240	FM		240
6S25	12	022	S	12	028		1/16/2008	158	FM		158
6S25	12	028		12	029		1/16/2008	456	FM		456
6S25	12	029		12	030	M	1/16/2008	450	FM		450
6S25	12	030	M	12	031		1/16/2008	380	FM		380
6W01	03	110		03	128	C	2/20/2008	250	FM		250
6W01	03	110		03	111		2/20/2008	272	FM		272
6W01	03	110		03	128	C	6/1/2008	250	JM	6	500
6W01	03	110		03	111		6/1/2008	272	JM	12	272
6W01	03	111		03	112		2/20/2008	317	FM		317
6W01	03	111		03	112		6/1/2008	315	JM	6	630
6W01	03	112		03	113		2/20/2008	297	FM		297
6W01	03	112		03	113		6/1/2008	300	JM	12	300
6W01	03	113		03	114		2/25/2008	243	FM		243
6W01	03	113		03	114		6/1/2008	243	JM	12	243

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6W01	03	114		07	009		2/25/2008	382	FM		382
6W01	03	114		03	117		2/27/2008	264	FM		264
6W01	03	115		07	018		2/25/2008	200	FM		200
6W01	03	115		03	116		2/25/2008	140	FM		140
6W01	03	116		03	117		2/27/2008	145	FM		145
6W01	03	117		07	023		2/27/2008	368	FM		368
6W01	06	020		06	021		1/17/2008	294	FM		294
6W01	06	021		06	022		1/17/2008	107	FM		107
6W01	06	022		06	023		1/17/2008	130	FM		130
6W01	06	023		06	026		1/17/2008	324	FM		324
6W01	06	024		06	025		1/17/2008	300	FM		300
6W01	06	025		06	026		1/17/2008	281	FM		281
6W01	06	026		06	027		1/17/2008	229	FM		229
6W01	06	027		06	028		1/17/2008	326	FM		326
6W01	06	028		06	029		1/17/2008	168	FM		168
6W01	06	029		07	001		1/17/2008	160	FM		160
6W01	07	001		07	002		1/17/2008	220	FM		220
6W01	07	002		07	003		1/17/2008	345	FM		345
6W01	07	003		07	004		1/17/2008	344	FM		344
6W01	07	004		07	005		1/17/2008	349	FM		349
6W01	07	005		07	006		1/17/2008	240	FM		240
6W01	07	006		07	007		1/17/2008	205	FM		205
6W01	07	007		07	008		1/17/2008	380	FM		380
6W01	07	008		07	009		2/21/2008	300	FM		300
6W01	07	010		07	013		6/18/2008	344	FM		344
6W01	07	014		07	015		2/25/2008	118	FM		118
6W01	07	015		07	016		2/25/2008	358	FM		358
6W01	07	016		07	017		2/25/2008	90	FM		90
6W01	07	017		07	018		2/25/2008	265	FM		265
6W02	07	023		07	024		2/27/2008	144	FM		144
6W02	07	024		07	036		2/27/2008	124	FM		124
6W02	07	025	C	07	026		2/25/2008	150	FM		150
6W02	07	026		07	029		2/25/2008	149	FM		149
6W02	07	027		07	028		2/25/2008	250	FM		250
6W02	07	028		07	029		2/25/2008	202	FM		202
6W02	07	029		07	034		2/25/2008	106	FM		106
6W02	07	030		07	031		2/25/2008	250	FM		250
6W02	07	031		07	032		2/25/2008	225	FM		225
6W02	07	032		07	033		2/25/2008	53	FM		53
6W02	07	033		07	034		2/25/2008	205	FM		205
6W02	07	034		07	035		2/25/2008	50	FM		50
6W02	07	035		07	036		2/25/2008	100	FM		100
6W02	07	036		07	037		2/28/2008	75	FM		75
6W02	07	037		07	038		2/28/2008	205	FM		205
6W02	07	038		07	060		2/28/2008	327	FM		327
6W02	07	039		07	040		2/20/2008	333	FM		333
6W02	07	040		07	041		2/20/2008	195	FM		195
6W02	07	041		07	042		2/20/2008	200	FM		200
6W02	07	042		07	043		2/20/2008	106	FM		106

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
6W02	07	043		07	044		2/20/2008	160	FM		160
6W02	07	045		07	046		2/27/2008	150	FM		150
6W02	07	046		07	047		2/27/2008	200	FM		200
6W02	07	047		07	048		2/27/2008	150	FM		150
6W02	07	048		07	049		2/27/2008	120	FM		120
6W02	07	049		07	054		2/27/2008	100	FM		100
6W02	07	050		07	051		2/26/2008	320	FM		320
6W02	07	051		07	053		2/27/2008	100	FM		100
6W02	07	052		07	053		2/27/2008	322	FM		322
6W02	07	053		07	054		2/27/2008	100	FM		100
6W02	07	054		07	055		2/27/2008	100	FM		100
6W02	07	055		07	058		2/27/2008	115	FM		115
6W02	07	056		07	057		2/28/2008	160	FM		160
6W02	07	057		07	058		2/28/2008	115	FM		115
6W02	07	058		07	059		2/28/2008	30	FM		30
6W02	07	058		07	059		3/1/2008	38	JM	6	76
6W02	07	059		07	060		2/28/2008	135	FM		135
6W02	07	059		07	060		3/1/2008	130	JM	6	260
6W02	07	060		07	061		2/28/2008	127	FM		127
6W02	07	061		07	062		2/28/2008	7062	FM		7062
6W02	07	063		07	064		2/28/2008	349	FM		349
6W02	07	064		07	065		2/28/2008	349	FM		349
6W02	07	065		07	066		2/28/2008	349	FM		349
6W02	07	066		07	067		3/4/2008	121	FM		121
6W02	07	067		07	068		3/4/2008	204	FM		204
6W02	12	123		12	124		4/8/2008	111	FM		111
6W03	07	068		07	069		3/4/2008	129	FM		129
6W03	07	069		07	070		3/4/2008	179	FM		179
6W03	07	070		07	071		3/4/2008	320	FM		320
6W03	07	071		07	072		3/4/2008	320	FM		320
6W03	07	072		07	073		3/4/2008	284	FM		284
6W03	07	073		07	076		3/4/2008	296	FM		296
6W03	07	074		07	075		3/4/2008	157	FM		157
6W03	07	075		07	076		3/4/2008	263	FM		263
6W03	07	076		07	077		3/4/2008	257	FM		257
6W03	07	077		07	078		3/4/2008	252	FM		252
6W03	07	078		07	079		3/4/2008	314	FM		314
6W03	07	079		07	080		3/4/2008	231	FM		231
6W03	07	080		07	081		3/4/2008	215	FM		215
6W04	07	081		12	004		3/5/2008	331	FM		331
6W04	12	004		12	009	P	3/5/2008	357	FM		357
6W05	12	005		12	138	D	3/4/2008	13	FM		13
6W05	12	005		12	006		3/4/2008	218	FM		218
6W05	12	006		12	007		3/4/2008	218	FM		218
6W05	12	007		12	008	P	3/4/2008	323	FM		323
6W05	12	008	P	12	009	P	5/5/2008	300	FM	3	1200
6W05	12	010		12	011		3/5/2008	150	FM		150
6W05	12	011		12	031		3/5/2008	275	FM		275
7E01	11	001	D	11	002		4/1/2008	350	FM		350

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
7E01	11	002		11	003		4/1/2008	350	FM		350
7E01	11	003		11	004		4/1/2008	246	FM		246
7E01	11	004		11	005		4/1/2008	304	FM		304
7E01	11	005		11	006		4/1/2008	20	FM		20
7E01	11	006		11	007		4/1/2008	300	FM		300
7E01	11	008		11	009		4/1/2008	250	FM		250
7E01	11	009		11	010		4/1/2008	255	FM		255
7E01	11	010		11	018		4/1/2008	280	FM		280
7E01	11	012		11	083		4/1/2008	325	FM		325
7E01	11	013		11	083		4/1/2008	27	FM		27
7E01	11	013		11	014		4/1/2008	309	FM		309
7E01	11	014		11	015		4/2/2008	262	FM		262
7E01	11	015		11	016		4/2/2008	213	FM		213
7E01	11	016		11	017		4/2/2008	343	FM		343
7E01	11	017		11	018		4/2/2008	308	FM		308
7E01	11	018		11	033		4/2/2008	337	FM		337
7E01	11	018		11	019		4/8/2008	350	FM		350
7E01	11	019		11	020		4/8/2008	350	FM		350
7E01	11	020		11	024		4/8/2008	350	FM		350
7E02	11	015		12	122		4/2/2008	400	FM		400
7E02	11	021		11	022		4/9/2008	312	FM		312
7E02	11	022		12	126		4/9/2008	183	FM		183
7E02	11	022		11	023		4/9/2008	350	FM		350
7E02	11	023		11	024		4/9/2008	275	FM		275
7E02	11	025		11	026		4/9/2008	353	FM		353
7E02	11	026		11	028		4/9/2008	70	FM		70
7E02	11	027		11	028		4/9/2008	360	FM		360
7E02	11	028		11	029		4/10/2008	262	FM		262
7E02	11	029		11	031		4/10/2008	200	FM		200
7E02	11	030		11	078		4/10/2008	212	FM		212
7E02	11	030		11	031		4/10/2008	335	FM		335
7E02	11	031		11	032	M	4/10/2008	133	FM		133
7E02	12	121		12	122		4/2/2008	260	FM		260
7E02	12	122		12	123		4/8/2008	350	FM		350
7E02	12	124		12	125		4/8/2008	310	FM		310
7E02	12	125		12	126		4/9/2008	365	FM		365
7E03	06	146		11	077		4/8/2008	150	FM		150
7E03	11	032	M	11	048		4/10/2008	347	FM		347
7E03	11	033		11	034		4/2/2008	345	FM		345
7E03	11	034		11	035		4/2/2008	335	FM		335
7E03	11	035		11	036		4/2/2008	335	FM		335
7E03	11	036		11	041		4/2/2008	300	FM		300
7E03	11	037		11	038		4/2/2008	254	FM		254
7E03	11	038		11	039		4/2/2008	300	FM		300
7E03	11	039		11	040		4/2/2008	275	FM		275
7E03	11	040		11	041		4/2/2008	242	FM		242
7E03	11	041		11	079		4/2/2008	29	FM		29
7E03	11	042		11	079		4/2/2008	350	FM		350
7E03	11	042		11	043		4/2/2008	325	FM		325

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
7E03	11	043		11	048		4/10/2008	300	FM		300
7E03	11	044		37	020		4/2/2008	359	FM		359
7E03	11	044		11	045		4/3/2008	337	FM		337
7E03	11	045		11	046		4/8/2008	410	FM		410
7E03	11	046		11	047		4/8/2008	250	FM		250
7E03	11	047		11	048		4/10/2008	100	FM		100
7E03	11	048		11	049		4/10/2008	335	FM		335
7E03	11	049		11	050		4/10/2008	330	FM		330
7E03	11	050		11	051	M	4/10/2008	320	FM		320
7E03	11	051	M	11	077		4/10/2008	335	FM		335
7E03	37	018		37	123	D	4/2/2008	350	FM		350
7E03	37	018		37	019		4/2/2008	408	FM		408
7E03	37	019		37	020		4/2/2008	331	FM		331
7E04	06	132		06	133		4/3/2008	300	FM		300
7E04	06	133		06	135		4/3/2008	360	FM		360
7E04	06	134		06	135		4/3/2008	330	FM		330
7E04	06	135		06	136		4/3/2008	330	FM		330
7E04	06	136		06	141		4/3/2008	180	FM		180
7E04	06	137		06	138		4/3/2008	210	FM		210
7E04	06	138		06	139		4/3/2008	359	FM		359
7E04	06	139		06	140		4/3/2008	365	FM		365
7E04	06	140		06	141		4/3/2008	365	FM		365
7E04	06	141		06	142		4/8/2008	370	FM		370
7E04	06	142		06	146		4/8/2008	330	FM		330
7E05	06	143		06	144		4/8/2008	250	FM		250
7E05	06	144		06	145		4/8/2008	273	FM		273
7E05	06	145		06	146		4/8/2008	103	FM		103
7N02	05	040		05	044		4/28/2008	100	FM		100
7N02	05	041		05	042		4/28/2008	234	FM		234
7N02	05	042		05	043		4/28/2008	235	FM		235
7N02	05	042		05	138		4/28/2008	159	FM		159
7N02	05	043		05	044		4/28/2008	207	FM		207
7N02	05	044		05	045		4/28/2008	83	FM		83
7N02	05	045		05	046		4/28/2008	334	FM		334
7N02	05	046		05	054		4/28/2008	360	FM		360
7N02	05	047		05	048		4/24/2008	365	FM		365
7N02	05	048		05	049		4/24/2008	365	FM		365
7N02	05	049		05	050		4/24/2008	5050	FM		5050
7N02	05	051		05	052		4/24/2008	340	FM		340
7N02	05	052		05	053		4/28/2008	425	FM		425
7N02	05	053		05	054		4/28/2008	337	FM		337
7N02	05	054		05	055		4/28/2008	425	FM		425
7N02	05	055		05	067		4/28/2008	20	FM		20
7N02	05	132		05	133		4/28/2008	195	FM		195
7N02	05	133		05	134		4/28/2008	106	FM		106
7N02	05	134		05	135		4/28/2008	125	FM		125
7N02	05	135		05	136		4/28/2008	141	FM		141
7N02	05	136		05	137		4/28/2008	225	FM		225
7N02	05	137		05	138		4/28/2008	109	FM		109

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
7N04	05	058		05	112	C	4/17/2008	200	FM		200
7N04	05	058		37	004		4/17/2008	5112	FM		5112
7N04	05	058		05	059		4/17/2008	275	FM		275
7N04	05	059		05	060		4/17/2008	280	FM		280
7N04	05	060		05	061		4/17/2008	270	FM		270
7N04	05	061		05	062		4/17/2008	340	FM		340
7N04	05	062		05	067		4/17/2008	325	FM		325
7N04	05	063		05	065		4/16/2008	337	FM		337
7N04	05	065		37	001	D	4/16/2008	300	FM		300
7N04	05	065		05	066		4/17/2008	310	FM		310
7N04	05	066		05	067		4/17/2008	320	FM		320
7N04	05	067		37	017	M	4/17/2008	350	FM		350
7N04	05	067		05	068		4/17/2008	80	FM		80
7N04	05	068		05	069		4/17/2008	240	FM		240
7N04	05	069		05	070		4/17/2008	345	FM		345
7N04	05	069		05	157		4/17/2008	236	FM		236
7N04	05	155		05	156		4/17/2008	270	FM		270
7N04	05	156		05	157		4/17/2008	275	FM		275
7N04	37	002		37	024	D	4/17/2008	40	FM		40
7N04	37	002		37	003		4/17/2008	365	FM		365
7N04	37	003		37	004		4/17/2008	390	FM		390
7N04	37	005		37	006		4/16/2008	80	FM		80
7N04	37	005		37	022	D	4/16/2008	38	FM		38
7N04	37	006		37	007		4/16/2008	80	FM		80
7N04	37	007		37	013		4/16/2008	170	FM		170
7N04	37	008		37	021	D	4/16/2008	230	FM		230
7N04	37	008		37	009		4/16/2008	300	FM		300
7N04	37	009		37	010		4/16/2008	300	FM		300
7N04	37	010		37	011		4/16/2008	342	FM		342
7N04	37	011		37	012		4/16/2008	360	FM		360
7N04	37	012		37	013		4/16/2008	365	FM		365
7N04	37	013		37	014		4/16/2008	300	FM		300
7N04	37	013		37	028		4/16/2008	200	FM		200
7N04	37	014		37	015		4/16/2008	330	FM		330
7N04	37	015		37	016		4/16/2008	300	FM		300
7N04	37	016		37	017		4/16/2008	290	FM		290
7N04	37	026		37	027		4/16/2008	200	FM		200
7N04	37	027		37	028		4/16/2008	200	FM		200
7N05	05	158		05	159		4/30/2008	320	FM		320
7N05	05	159		05	160		4/30/2008	323	FM		323
7N05	05	160		05	161		4/30/2008	325	FM		325
7N05	05	161		05	162		4/30/2008	253	FM		253
7N05	05	162		05	163		4/30/2008	321	FM		321
7N05	05	163		05	164		4/30/2008	297	FM		297
7N06	05	077		05	078		4/28/2008	188	FM		188
7N06	05	078		05	079		4/28/2008	250	FM		250
7N06	05	079		05	088		4/28/2008	400	FM		400
7N06	05	088		05	089		4/28/2008	150	FM		150
7N08	01	111		01	112		4/21/2008	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
7N08	01	112		01	113		4/21/2008	348	FM		348
7N08	01	113		01	116	D	4/21/2008	205	FM		205
7N08	01	113		05	013		4/22/2008	300	FM		300
7N08	05	001		05	002		4/21/2008	300	FM		300
7N08	05	002		05	005		4/21/2008	319	FM		319
7N08	05	003		05	004		4/21/2008	265	FM		265
7N08	05	004		05	005		4/21/2008	300	FM		300
7N08	05	006		05	007		4/21/2008	88	FM		88
7N08	05	007		05	010		4/21/2008	150	FM		150
7N08	05	008		05	009		4/21/2008	280	FM		280
7N08	05	009		05	010		4/21/2008	300	FM		300
7N08	05	010		05	011		4/21/2008	270	FM		270
7N08	05	011		05	012		4/21/2008	240	FM		240
7N08	05	012		05	013		4/22/2008	345	FM		345
7N08	05	013		05	015		4/22/2008	375	FM		375
7N08	05	014		05	015		4/22/2008	300	FM		300
7N08	05	015		05	017		4/22/2008	300	FM		300
7N08	05	016		05	017		4/22/2008	275	FM		275
7N08	05	017		05	019		4/22/2008	300	FM		300
7N08	05	018		05	019		4/22/2008	255	FM		255
7N08	05	019		05	020		4/22/2008	346	FM		346
7N08	05	020		05	022		4/22/2008	46	FM		46
7N08	05	021		05	022		4/22/2008	245	FM		245
7N08	05	022		05	152		4/22/2008	121	FM		121
7N08	05	023		05	152		4/22/2008	130	FM		130
7N08	05	023		05	024		4/30/2008	315	FM		315
7N08	05	024		05	151		4/30/2008	177	FM		177
7N08	05	024		05	153		4/30/2008	168	FM		168
7N08	05	025		05	026		4/30/2008	350	FM		350
7N08	05	025		05	153		4/30/2008	172	FM		172
7N08	05	026		05	120		4/30/2008	250	FM		250
7N08	05	026		05	027		4/30/2008	300	FM		300
7N08	05	027		05	028		4/30/2008	280	FM		280
7N08	05	028		05	093		4/30/2008	100	FM		100
7N08	05	114		05	122		4/29/2008	45	FM		45
7N08	05	114		05	115		4/30/2008	124	FM		124
7N08	05	115		05	116		4/30/2008	185	FM		185
7N08	05	116		05	117		4/30/2008	186	FM		186
7N08	05	117		05	118		4/30/2008	250	FM		250
7N08	05	118		05	119		4/30/2008	249	FM		249
7N08	05	119		05	120		4/30/2008	35	FM		35
7N08	05	121		05	123		4/29/2008	72	FM		72
7N08	05	121		05	147		4/29/2008	195	FM		195
7N08	05	122		05	123		4/29/2008	245	FM		245
7N08	05	124		05	125		4/29/2008	167	FM		167
7N08	05	125		05	126		4/29/2008	151	FM		151
7N08	05	126		05	127		4/29/2008	200	FM		200
7N08	05	127		05	128		4/29/2008	306	FM		306
7N08	05	128		05	129		4/29/2008	264	FM		264

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
7N08	05	128		05	146		4/29/2008	90	FM		90
7N08	05	129		05	130		4/22/2008	210	FM		210
7N08	05	130		05	131		4/22/2008	304	FM		304
7N08	05	141		05	142		4/22/2008	115	FM		115
7N08	05	141		05	154	D	4/22/2008	7	FM		7
7N08	05	142		05	143		4/22/2008	189	FM		189
7N08	05	143		05	144		4/22/2008	103	FM		103
7N08	05	144		05	145		4/22/2008	119	FM		119
7N08	05	145		05	146		4/29/2008	119	FM		119
7N08	05	147		05	148		4/29/2008	142	FM		142
7N08	05	150		05	151		4/29/2008	172	FM		172
7S01	05	095		05	096		3/5/2008	61	FM		61
7S01	05	096		05	098		3/5/2008	163	FM		163
7S01	05	097		05	098		3/5/2008	200	FM		200
7S01	05	098		06	037		3/5/2008	350	FM		350
7S01	06	030		06	031		3/5/2008	100	FM		100
7S01	06	031		06	032		12/1/2007	328	JM	12	328
7S01	06	031		06	032		3/5/2008	300	FM		300
7S01	06	032		06	033		3/5/2008	350	FM		350
7S01	06	033		06	034		3/5/2008	325	FM		325
7S01	06	034		06	035		3/5/2008	330	FM		330
7S01	06	035		06	036		3/5/2008	374	FM		374
7S01	06	036		06	040		3/5/2008	350	FM		350
7S01	06	037		06	038		3/5/2008	234	FM		234
7S01	06	038		06	039		3/5/2008	210	FM		210
7S01	06	039		06	040		3/5/2008	200	FM		200
7S01	06	040		06	041		3/5/2008	275	FM		275
7S01	06	042		06	043		3/6/2008	6043	FM		6043
7S01	06	044		06	045		3/6/2008	355	FM		355
7S01	06	045		06	046		3/6/2008	52	FM		52
7S01	06	046		06	047		3/6/2008	83	FM		83
7S01	06	047		06	059		3/10/2008	350	FM		350
7S01	06	048		06	050		3/6/2008	263	FM		263
7S01	06	049		06	050		3/6/2008	250	FM		250
7S01	06	050		06	051		3/10/2008	250	FM		250
7S01	06	051		06	052		3/10/2008	200	FM		200
7S01	06	051		06	150	C	3/10/2008	115	FM		115
7S01	06	052		06	054		3/10/2008	317	FM		317
7S01	06	053		06	054		3/10/2008	150	FM		150
7S01	06	054		06	055		3/10/2008	366	FM		366
7S01	06	055		06	056		3/10/2008	105	FM		105
7S01	06	056		06	057		3/10/2008	225	FM		225
7S01	06	057		06	058		3/10/2008	135	FM		135
7S01	06	058		06	059		3/10/2008	271	FM		271
7S01	06	058		06	151		3/10/2008	200	FM		200
7S01	06	059		06	060		3/10/2008	200	FM		200
7S01	06	060		06	067		3/11/2008	200	FM		200
7S01	06	061		06	062		3/10/2008	333	FM		333
7S01	06	062		06	063		3/10/2008	200	FM		200

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
7S01	06	063		06	064		3/10/2008	341	FM		341
7S01	06	064		06	065		3/10/2008	375	FM		375
7S01	06	065		06	066		3/10/2008	240	FM		240
7S01	06	066		06	067		3/11/2008	156	FM		156
7S01	06	067		06	068		3/11/2008	200	FM		200
7S01	06	068		06	072		3/11/2008	200	FM		200
7S01	06	069		06	070		3/10/2008	325	FM		325
7S01	06	070		06	071		3/10/2008	375	FM		375
7S01	06	071		06	072		3/11/2008	321	FM		321
7S01	06	072		06	074		3/11/2008	320	FM		320
7S01	06	073		06	074		3/11/2008	315	FM		315
7S01	06	074		06	076		3/11/2008	260	FM		260
7S01	06	075		06	076		3/11/2008	350	FM		350
7S01	06	076		06	077		3/11/2008	325	FM		325
7S01	06	077		06	078		3/19/2008	300	FM		300
7S01	06	078		06	079		1/1/2008	291	JM	12	291
7S01	06	078		06	079		3/19/2008	300	FM		300
7S01	06	079		06	121		3/19/2008	300	FM		300
7S02	06	080		06	084		3/11/2008	344	FM		344
7S02	06	081		06	082		3/11/2008	120	FM		120
7S02	06	082		06	083		3/11/2008	251	FM		251
7S02	06	083		06	084		3/11/2008	225	FM		225
7S02	06	084		06	085		3/11/2008	150	FM		150
7S02	06	085		06	092		3/11/2008	225	FM		225
7S02	06	086		06	087		3/11/2008	178	FM		178
7S02	06	087		06	088		3/11/2008	288	FM		288
7S02	06	088		06	089		3/11/2008	100	FM		100
7S02	06	089		06	092		3/13/2008	247	FM		247
7S02	06	090		06	091		3/12/2008	218	FM		218
7S02	06	091		06	092		3/13/2008	308	FM		308
7S02	06	092		06	097		3/13/2008	205	FM		205
7S02	06	093		06	094		3/12/2008	298	FM		298
7S02	06	094		06	097		3/13/2008	202	FM		202
7S02	06	095		06	096		3/12/2008	350	FM		350
7S02	06	095		07	115		3/12/2008	190	FM		190
7S02	06	096		06	097		3/13/2008	275	FM		275
7S02	06	097		06	098		3/13/2008	195	FM		195
7S02	06	098		06	101		3/13/2008	120	FM		120
7S02	06	099		06	100		3/13/2008	275	FM		275
7S02	06	100		06	101		3/13/2008	300	FM		300
7S02	06	101		06	102		3/13/2008	123	FM		123
7S02	06	102		06	106		3/13/2008	47	FM		47
7S02	06	103		06	104		3/13/2008	352	FM		352
7S02	06	104		06	106		3/13/2008	421	FM		421
7S02	06	105		07	193	C	3/13/2008	256	FM		256
7S02	06	105		06	106		3/13/2008	352	FM		352
7S02	06	106		06	111		3/13/2008	175	FM		175
7S02	06	107		06	108		3/13/2008	315	FM		315
7S02	06	108		06	109		3/13/2008	311	FM		311

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
7S02	06	109		06	111		3/13/2008	311	FM		311
7S02	06	110		07	114		3/13/2008	300	FM		300
7S02	06	110		06	111		3/13/2008	338	FM		338
7S02	06	111		06	113		3/18/2008	325	FM		325
7S02	06	112		07	113		3/17/2008	309	FM		309
7S02	06	112		06	113		3/18/2008	310	FM		310
7S02	06	113		06	115		3/18/2008	265	FM		265
7S02	06	114		06	115		3/18/2008	297	FM		297
7S02	06	114		07	096		3/18/2008	7092	FM		7092
7S02	06	115		06	117		3/18/2008	261	FM		261
7S02	06	116		07	093		3/18/2008	254	FM		254
7S02	06	116		06	117		3/18/2008	238	FM		238
7S02	06	117		06	119		3/18/2008	350	FM		350
7S02	06	118		07	091		3/18/2008	320	FM		320
7S02	06	118		06	119		3/18/2008	320	FM		320
7S02	06	119		06	120		3/18/2008	200	FM		200
7S02	06	120		06	121		3/18/2008	200	FM		200
7S02	07	088		07	089		3/18/2008	212	FM		212
7S02	07	089		07	090		3/18/2008	220	FM		220
7S02	07	090		07	091		3/18/2008	276	FM		276
7S02	07	090		07	194	C	3/18/2008	75	FM		75
7S02	07	092		07	093		3/18/2008	270	FM		270
7S02	07	094		07	095		3/17/2008	246	FM		246
7S02	07	095		07	096		3/18/2008	307	FM		307
7S02	07	097		07	098		3/17/2008	346	FM		346
7S02	07	098		07	099		3/17/2008	138	FM		138
7S02	07	099		07	100		3/17/2008	180	FM		180
7S02	07	100		07	101		3/17/2008	66	FM		66
7S02	07	101		07	210		3/17/2008	59	FM		59
7S02	07	102		07	103		3/17/2008	350	FM		350
7S02	07	102		07	212		3/17/2008	165	FM		165
7S02	07	103		07	105		3/17/2008	205	FM		205
7S02	07	104		07	105		3/17/2008	265	FM		265
7S02	07	105		07	107		3/17/2008	170	FM		170
7S02	07	106		07	107		3/17/2008	145	FM		145
7S02	07	107		07	108		3/17/2008	300	FM		300
7S02	07	108		07	109		3/17/2008	280	FM		280
7S02	07	109		07	110		3/17/2008	146	FM		146
7S02	07	109		07	195		3/17/2008	220	FM		220
7S02	07	110		07	112		3/17/2008	153	FM		153
7S02	07	111		07	112		3/17/2008	250	FM		250
7S02	07	112		07	113		3/17/2008	305	FM		305
7S02	07	210		07	211		3/17/2008	91	FM		91
7S02	07	211		07	212		3/17/2008	20	FM		20
7S03	06	121		06	123		3/19/2008	300	FM		300
7S03	06	122		06	123		3/19/2008	280	FM		280
7S03	06	123		06	124		3/19/2008	300	FM		300
7S03	06	124		06	125		3/19/2008	300	FM		300
7S03	06	125		06	128		3/19/2008	290	FM		290

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
7S04	06	126		07	087		3/24/2008	300	FM		300
7S04	06	126		06	127		3/24/2008	300	FM		300
7S04	06	127		06	128		3/24/2008	300	FM		300
7S04	06	128		06	129	M	3/24/2008	206	FM		206
7S04	06	129	M	06	130		3/24/2008	200	FM		200
7S04	07	082		07	083		3/19/2008	230	FM		230
7S04	07	083		07	084		3/19/2008	240	FM		240
7S04	07	084		07	085		3/19/2008	253	FM		253
7S04	07	085		07	086		3/19/2008	290	FM		290
7S04	07	086		07	087		3/24/2008	300	FM		300
7S05	06	130		11	070		3/24/2008	237	FM		237
7S05	06	131		11	068		3/19/2008	188	FM		188
7S05	06	131		06	153	D	3/19/2008	292	FM		292
7S05	11	068		11	084		3/19/2008	75	FM		75
7S05	11	068		11	069		3/24/2008	45	FM		45
7S05	11	069		11	070		3/24/2008	115	FM		115
7S05	11	069		11	071		3/24/2008	250	FM		250
7S05	11	071		11	072		3/25/2008	215	FM		215
7S06	11	052		11	053		3/24/2008	190	FM		190
7S06	11	053		11	054		3/24/2008	295	FM		295
7S06	11	053		12	003		3/24/2008	300	FM		300
7S06	11	054		11	058		3/25/2008	300	FM		300
7S06	11	055		11	056		3/25/2008	195	FM		195
7S06	11	056		11	057		3/25/2008	195	FM		195
7S06	11	057		11	058		3/25/2008	110	FM		110
7S06	11	058		11	059		3/25/2008	300	FM		300
7S06	11	059		11	072		3/25/2008	230	FM		230
7S06	12	001	C	12	002		3/24/2008	270	FM		270
7S06	12	002		12	003		3/24/2008	292	FM		292
7S07	12	114		12	120	M	3/20/2008	414	FM		414
7S07	12	115	P	12	116	P	5/8/2008	330	FM	3	1320
7S07	12	116	P	12	117	P	5/8/2008	300	FM	3	1200
7S07	12	117	P	12	120	M	5/8/2008	15	FM	3	60
7S07	12	118		12	119		3/20/2008	310	FM		310
7S07	12	119		12	120		3/20/2008	300	FM		300
7S08	11	060		12	120		3/20/2008	405	FM		405
7S08	11	060		11	062		3/20/2008	183	FM		183
7S08	11	061		11	080	D	3/20/2008	85	FM		85
7S08	11	061		11	062		3/20/2008	360	FM		360
7S08	11	062		11	063		3/20/2008	220	FM		220
7S09	11	063		11	064		3/20/2008	146	FM		146
7S09	11	064		11	065		3/20/2008	400	FM		400
7S09	11	065		11	066		3/24/2008	350	FM		350
A 01	07	019		07	020		6/26/2008	78	FM		78
A 01	07	020		08	033		8/21/2007	275	FM		275
A 01	07	020		08	033		2/1/2008	274	JM	6	548
A 01	07	116		07	117		6/23/2008	250	FM		250
A 01	07	117		07	118		6/23/2008	186	FM		186
A 01	07	118		07	121		12/1/2007	292	JM	12	292

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
A 01	07	118		07	121		6/23/2008	292	FM		292
A 01	07	119		07	120		6/23/2008	142	FM		142
A 01	07	120		07	121		12/1/2007	396	JM	12	396
A 01	07	120		07	121		6/23/2008	403	FM		403
A 01	07	121		07	206		6/23/2008	203	FM		203
A 01	07	122		07	123		6/23/2008	255	FM		255
A 01	07	123		07	124		6/23/2008	262	FM		262
A 01	07	124		07	125		6/23/2008	187	FM		187
A 01	07	125		07	206		6/23/2008	86	FM		86
A 01	07	125		07	126		6/23/2008	41	FM		41
A 01	07	126		07	129		6/23/2008	217	FM		217
A 01	07	127		07	128		6/23/2008	137	FM		137
A 01	07	128		07	129		6/23/2008	202	FM		202
A 01	07	129		07	130		6/23/2008	220	FM		220
A 01	07	130		07	131		6/23/2008	300	FM		300
A 01	07	131		07	132		6/23/2008	275	FM		275
A 01	07	132		08	016		6/23/2008	182	FM		182
A 01	08	003		08	203	C	6/30/2008	249	FM		249
A 01	08	003		08	008	P	6/30/2008	186	FM		186
A 01	08	004		08	201		3/1/2008	237	JM	12	237
A 01	08	004		08	005		3/1/2008	250	JM	6	500
A 01	08	004		08	201		6/27/2008	200	FM		200
A 01	08	004		08	005		6/27/2008	230	FM		230
A 01	08	005	P	08	006	P	3/1/2008	115	JM	6	230
A 01	08	005		08	202		6/27/2008	228	FM		228
A 01	08	005	P	08	006	P	6/27/2008	150	FM	3	600
A 01	08	006	P	08	007	P	3/1/2008	125	JM	6	250
A 01	08	006	P	08	007	P	6/27/2008	110	FM	3	440
A 01	08	007		08	008		3/1/2008	240	JM	6	480
A 01	08	007	P	08	008	P	6/30/2008	241	FM	3	964
A 01	08	009		08	204	C	3/1/2008	140	JM	6	280
A 01	08	009		08	011		6/27/2008	193	FM		193
A 01	08	009		08	204	C	6/27/2008	133	FM		133
A 01	08	010		08	205	C	3/1/2008	300	JM	12	300
A 01	08	010		08	011		3/1/2008	190	JM	12	190
A 01	08	010		08	205	C	6/27/2008	251	FM		251
A 01	08	010		08	011		6/27/2008	165	FM		165
A 01	08	011		08	012		6/30/2008	113	FM		113
A 01	08	012		08	013		6/30/2008	237	FM		237
A 01	08	013		08	221		8/16/2007	266	FM		266
A 01	08	014		08	221		8/16/2007	129	FM		129
A 01	08	014		08	015		6/30/2008	167	FM		167
A 01	08	016		08	017		6/23/2008	256	FM		256
A 01	08	017		08	018		6/23/2008	215	FM		215
A 01	08	017		08	213	C	6/23/2008	95	FM		95
A 01	08	018		08	019		6/30/2008	292	FM		292
A 01	08	019		08	020		6/30/2008	333	FM		333
A 01	08	020		08	025		6/30/2008	113	FM		113
A 01	08	022		08	023		8/22/2007	100	FM		100

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
A 01	08	023		08	024		8/22/2007	200	FM		200
A 01	08	024		08	025		8/22/2007	250	FM		250
A 01	08	025		08	222		8/22/2007	88	FM		88
A 01	08	030		08	031		11/1/2007	120	JMR	12	120
A 01	08	033		08	034		6/26/2008	120	FM		120
A 01	08	034		08	218	C	6/26/2008	121	FM		121
A 01	08	034		08	035		6/26/2008	165	FM		165
A 01	08	035		08	036		6/26/2008	181	FM		181
A 01	08	036		08	040		6/26/2008	98	FM		98
A 01	08	037		08	207	C	8/21/2007	108	FM		108
A 01	08	037		08	038		6/26/2008	275	FM		275
A 01	08	038		08	039		6/26/2008	122	FM		122
A 01	08	039		08	040		6/26/2008	145	FM		145
A 01	08	040		08	041		6/26/2008	96	FM		96
A 01	08	041		08	042		6/26/2008	107	FM		107
A 01	08	042		08	043		4/1/2008	68	JM	6	136
A 01	08	042		08	043		6/26/2008	68	FM		68
A 01	08	043		08	048		10/31/2007	238	JM	12	238
A 01	08	043		08	048		6/26/2008	223	FM		223
A 01	08	046		08	047		6/26/2008	310	FM		310
A 01	08	046		08	225		6/26/2008	47	FM		47
A 01	08	047		08	049		6/26/2008	68	FM		68
A 01	08	048		08	049		6/26/2008	98	FM		98
A 01	08	049		08	050		6/26/2008	180	FM		180
A 01	08	050		08	051		12/1/2007	192	JM	12	192
A 01	08	050		08	051		6/26/2008	185	FM		185
A 01	08	051		08	215	C	8/14/2007	265	FM		265
A 01	08	051		08	215	C	6/1/2008	260	JM	6	520
A 01	08	225		08	226		6/26/2008	153	FM		153
A 02	03	107	C	03	108		5/1/2008	239	JM	12	239
A 02	03	108		07	022		6/26/2008	275	FM		275
A 02	07	021		08	002		6/26/2008	301	FM		301
A 02	07	021		07	022		6/26/2008	123	FM		123
A 02	07	021		07	208		6/26/2008	176	FM		176
A 02	07	208		07	209		6/26/2008	255	FM		255
A 02	08	001		08	002		6/26/2008	101	FM		101
A 02	08	001		08	210		6/26/2008	276	FM		276
A 03	03	106		04	080		10/3/2007	252	FM		252
A 03	04	074	P	04	139	P	3/1/2008	120	JM	6	240
A 03	04	075	P	04	139	P	3/1/2008	120	JM	6	240
A 03	04	075	P	04	139	P	5/5/2008	100	FM	3	400
A 03	04	075	P	04	077	P	5/5/2008	150	FM	3	600
A 03	04	076	P	04	147	C	5/5/2008	75	FM	3	300
A 03	04	076	P	04	077	P	5/5/2008	110	FM	3	440
A 03	04	076	P	04	156	C	5/5/2008	100	FM	3	400
A 03	04	077	P	04	078	P	5/5/2008	114	FM	3	456
A 03	04	078	P	04	081		5/13/2008	330	FM	3	1320
A 03	04	080		04	081		8/15/2007	114	FM		114
A 03	19	042	P	19	074	P	2/21/2008	100	FM	3	400

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
A 04	03	089		04	082	C	6/20/2008	200	FM		200
A 05	02	070		02	071		6/18/2008	236	FM		236
A 05	02	071		02	072		6/18/2008	284	FM		284
A 05	02	072		03	034		8/9/2007	297	FM		297
A 05	03	034		03	037		6/18/2008	301	FM		301
A 05	03	035		07	013		6/18/2008	302	FM		302
A 05	03	035		03	036		6/18/2008	300	FM		300
A 05	03	036		03	037		6/18/2008	154	FM		154
A 05	03	037		03	038		6/18/2008	150	FM		150
A 05	03	038		03	039		6/18/2008	315	FM		315
A 05	03	039		03	041		6/19/2008	234	FM		234
A 05	03	040		03	041		6/19/2008	173	FM		173
A 05	03	041		03	049		6/19/2008	65	FM		65
A 05	03	042		03	130	C	8/10/2007	38	FM		38
A 05	03	042		03	043		6/19/2008	175	FM		175
A 05	03	043		03	044		6/19/2008	148	FM		148
A 05	03	044		03	045		6/19/2008	150	FM		150
A 05	03	045		03	046		6/19/2008	250	FM		250
A 05	03	046		03	047		6/19/2008	300	FM		300
A 05	03	047		03	048		6/19/2008	200	FM		200
A 05	03	048		03	049		6/19/2008	300	FM		300
A 05	03	049		03	050		6/19/2008	357	FM		357
A 05	03	050		03	051		6/19/2008	350	FM		350
A 05	03	051		03	053		6/19/2008	220	FM		220
A 05	03	052		03	053		8/10/2007	165	FM		165
A 05	03	053		03	054		6/19/2008	32	FM		32
A 05	03	054		03	065		6/19/2008	20	FM		20
A 05	03	055		03	059		6/26/2008	171	FM		171
A 05	03	056		03	057		6/19/2008	243	FM		243
A 05	03	057		03	058		6/19/2008	110	FM		110
A 05	03	058		03	138		6/19/2008	121	FM		121
A 05	03	059		03	060		5/1/2008	345	JM	12	345
A 05	03	059		03	138		6/19/2008	100	FM		100
A 05	03	059		03	060		6/26/2008	344	FM		344
A 05	03	060		03	061		6/26/2008	120	FM		120
A 05	03	062		03	063		4/1/2008	232	JM	12	232
A 05	03	062		03	063		6/19/2008	231	FM		231
A 05	03	063		03	064		6/19/2008	336	FM		336
A 05	03	064		03	065		6/19/2008	14	FM		14
A 05	03	065		03	067		6/20/2008	100	FM		100
A 05	03	066		03	067		6/20/2008	268	FM		268
A 05	03	066		03	136	C	6/20/2008	241	FM		241
A 05	03	067		03	068		6/20/2008	109	FM		109
A 05	03	068		03	071		6/20/2008	224	FM		224
A 05	03	069		03	070		6/20/2008	324	FM		324
A 05	03	070		03	071		6/20/2008	200	FM		200
A 05	03	071		03	072	M	6/20/2008	300	FM		300
A 05	03	072	M	03	086		6/20/2008	315	FM		315
A 06	03	073		03	131	C	6/18/2008	109	FM		109

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
A 06	03	073		03	074		6/18/2008	200	FM		200
A 06	03	074		03	075		6/18/2008	115	FM		115
A 06	03	075		03	076		6/18/2008	101	FM		101
A 06	03	076		03	077		6/18/2008	353	FM		353
A 06	03	077		03	132	C	6/18/2008	148	FM		148
A 06	03	078		03	079		6/16/2008	205	FM		205
A 06	03	079		03	080		6/18/2008	245	FM		245
A 06	03	080		03	081		6/18/2008	356	FM		356
A 06	03	081		03	082		6/18/2008	237	FM		237
A 06	03	082		03	083		6/18/2008	351	FM		351
A 06	03	083		03	082		8/13/2007	201	FM		201
A 06	03	083		03	084		6/18/2008	322	FM		322
A 06	03	084		03	085		6/18/2008	288	FM		288
A 06	03	085		03	086		6/20/2008	158	FM		158
A 06	03	086		03	088		6/20/2008	237	FM		237
A 06	03	087		03	088		6/20/2008	5	FM		5
A 07	03	088		03	089		6/20/2008	250	FM		250
A 07	03	090		03	091		6/20/2008	260	FM		260
A 07	03	091		03	103		6/20/2008	274	FM		274
A 07	03	092		03	093	C	6/20/2008	190	FM		190
A 07	03	092		03	102		6/20/2008	105	FM		105
A 07	03	092		03	103		6/20/2008	213	FM		213
A 07	03	094	C	03	097		2/1/2008	170	JM	6	340
A 07	03	094	C	03	097		6/17/2008	160	FM		160
A 07	03	095	C	03	096		6/17/2008	349	FM		349
A 07	03	096		03	097		6/17/2008	313	FM		313
A 07	03	097		03	098		6/17/2008	323	FM		323
A 07	03	098		03	133	D	6/17/2008	275	FM		275
A 07	03	098		03	100		6/26/2008	240	FM		240
A 07	03	099		03	137	C	6/26/2008	75	FM		75
A 07	03	099		03	100		6/26/2008	190	FM		190
A 07	03	100		03	101		6/26/2008	350	FM		350
A 07	03	101		03	102		6/20/2008	102	FM		102
A 07	03	101		03	129		6/26/2008	350	FM		350
A 07	03	103		03	104		6/20/2008	325	FM		325
A 07	03	103		04	068		6/20/2008	235	FM		235
A 07	03	104		03	105		6/20/2008	325	FM		325
A 07	04	066		04	067		6/20/2008	288	FM		288
A 07	04	067		04	068		6/20/2008	287	FM		287
A 07	04	068		04	144	C	6/20/2008	185	FM		185
A 08	03	001		03	003	C	8/9/2007	284	FM		284
A 08	03	002	C	03	003		10/1/2007	225	JM	12	225
A 08	03	002	C	03	003		6/16/2008	242	FM		242
A 08	03	003		03	004		10/1/2007	270	JM	12	270
A 08	03	003		03	004		6/16/2008	271	FM		271
A 08	03	004		03	006		6/16/2008	181	FM		181
A 08	03	005		03	006		6/16/2008	192	FM		192
A 08	03	006		03	008		6/16/2008	180	FM		180
A 08	03	007		03	008		10/1/2007	280	JM	12	280

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
A 08	03	007		03	008		6/16/2008	272	FM		272
A 08	03	008		03	009		10/1/2007	280	JM	12	280
A 08	03	008		03	009		6/16/2008	264	FM		264
A 08	03	009		03	019		4/1/2008	300	JM	6	600
A 08	03	009		03	019		6/17/2008	300	FM		300
A 08	03	010	C	03	011		6/17/2008	127	FM		127
A 08	03	011		03	016		6/17/2008	215	FM		215
A 08	03	011		03	134	C	6/17/2008	81	FM		81
A 08	03	012		03	016		6/17/2008	296	FM		296
A 08	03	012		03	135	C	6/17/2008	140	FM		140
A 08	03	013	C	03	014		10/1/2007	115	JM	12	115
A 08	03	013	C	03	014		6/17/2008	122	FM		122
A 08	03	014		03	015		6/17/2008	215	FM		215
A 08	03	015		03	016		6/17/2008	127	FM		127
A 08	03	016		03	017		6/17/2008	170	FM		170
A 08	03	017		03	018		6/17/2008	139	FM		139
A 08	03	018		03	019		2/1/2008	350	JM	6	700
A 08	03	018		03	019		6/17/2008	350	FM		350
A 08	03	019		03	139		8/15/2007	180	FM		180
A 08	03	019		03	020		6/17/2008	224	FM		224
A 08	03	020		03	021		6/17/2008	344	FM		344
A 08	03	021		03	022		6/17/2008	345	FM		345
A 08	03	022		03	023		6/17/2008	290	FM		290
A 08	03	023		03	028		6/17/2008	285	FM		285
A 08	03	025		03	026		6/26/2008	296	FM		296
A 08	03	026		03	028		6/26/2008	182	FM		182
A 08	03	027		03	028		6/26/2008	202	FM		202
A 08	03	028		03	029		6/25/2008	281	FM		281
A 08	03	029		03	033		6/25/2008	200	FM		200
A 08	03	030		03	031		6/25/2008	247	FM		247
A 08	03	031		03	032		6/25/2008	212	FM		212
A 08	03	032		03	033		6/25/2008	212	FM		212
A 09	03	033		04	032		6/25/2008	250	FM		250
A 09	03	105	P	04	032	P	5/5/2008	395	FM	3	1580
A 09	04	032		04	033		6/25/2008	282	FM	3	1128
A 09	04	033		04	035		6/25/2008	285	FM	3	1140
A 09	04	035		04	036	M	6/25/2008	400	FM		400
A 09	04	036	M	04	037		12/6/2007	131	FM		131
A 10	04	037		04	053		12/6/2007	230	FM		230
A 10	04	038		04	039		6/25/2008	160	FM		160
A 10	04	039		04	040		6/25/2008	286	FM		286
A 10	04	040		04	042		6/25/2008	209	FM		209
A 10	04	041		04	042		6/25/2008	160	FM		160
A 10	04	044		04	125	C	6/25/2008	220	FM		220
A 10	04	044		04	045		6/25/2008	334	FM		334
A 10	04	045		04	126	C	6/25/2008	150	FM		150
A 10	04	053		04	059		12/6/2007	298	FM		298
A 10	04	056		04	141	C	5/1/2008	237	JM	12	237
A 10	04	059		04	065		12/6/2007	359	FM		359

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
A 10	04	060		04	130	C	5/1/2008	205	JM	12	205
B 01	04	095		04	136	C	4/1/2008	212	JM	12	212
B 01	04	096		04	097		4/1/2008	253	JM	12	253
B 01	04	097		04	103		4/1/2008	317	JM	12	317
B 01	04	105		04	137	C	10/1/2007	155	JM	6	310
B 01	04	105	C	04	137		4/1/2008	283	JM	6	566
B 01	04	107		04	108		4/1/2008	283	JM	12	283
B 01	04	108		04	109		4/1/2008	41	JM	12	41
B 01	04	109		04	117		4/1/2008	289	JM	12	289
B 01	04	110		04	115		3/1/2008	312	JM	6	624
B 01	04	110		04	140		3/1/2008	338	JM	12	338
B 01	04	111		04	134		3/1/2008	300	JM	12	300
B 01	04	112		04	113		3/1/2008	350	JM	6	700
B 01	04	113		04	114		3/1/2008	232	JM	6	464
B 01	04	114		04	115		3/1/2008	290	JM	12	290
B 01	04	115		04	116		3/1/2008	132	JM	12	132
B 02	04	088		04	089		10/1/2007	265	JM	12	265
B 02	04	089		04	093		4/1/2008	265	JM	6	530
Z 01	01	111		01	110		4/21/2008	200	FM		200
Z 01	02	011		02	012		4/21/2008	200	FM		200
Z 01	02	011		03	163		4/21/2008		FM		
Z 01	02	013		03	127		4/21/2008	200	FM		200
Z 01	02	013		02	014		4/21/2008	300	FM		300
Z 01	02	014		02	015		4/21/2008	318	FM		318
Z 01	02	015		02	016		4/22/2008	306	FM		306
Z 01	02	016		02	017		4/22/2008	293	FM		293
Z 01	02	017		02	018		4/22/2008	150	FM		150
Z 01	02	018		02	036		4/22/2008	200	FM		200
Z 01	02	019		02	020		4/17/2008	124	FM		124
Z 01	02	020		02	021		4/17/2008	200	FM		200
Z 01	02	021		02	022		4/17/2008	200	FM		200
Z 01	02	022		02	023		4/17/2008	61	FM		61
Z 01	02	023		02	024		4/17/2008	127	FM		127
Z 01	02	024		02	026		4/17/2008	200	FM		200
Z 01	02	025		02	026		4/17/2008	175	FM		175
Z 01	02	026		02	085	D	4/17/2008	100	FM		100
Z 01	02	026		02	027		4/17/2008	200	FM		200
Z 01	02	027		02	029		4/17/2008	250	FM		250
Z 01	02	028		02	029		4/17/2008	220	FM		220
Z 01	02	029		02	030		4/17/2008	250	FM		250
Z 01	02	030		02	031		4/17/2008	250	FM		250
Z 01	02	031		02	032		4/17/2008	150	FM		150
Z 01	02	031		02	087	C	4/17/2008	75	FM		75
Z 01	02	032		02	033		4/17/2008	125	FM		125
Z 01	02	033	P	02	034		4/17/2008	100	FM		100
Z 01	02	034		02	035		4/17/2008	115	FM		115
Z 01	02	035		02	036		4/17/2008	150	FM		150
Z 01	02	036		02	045		4/22/2008	100	FM		100
Z 01	02	037		02	038		4/22/2008	228	FM		228

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
Z 01	02	038		02	040		4/22/2008	243	FM		243
Z 01	02	039		02	088	C	4/22/2008	96	FM		96
Z 01	02	039		02	040		4/22/2008	281	FM		281
Z 01	02	040		02	041		4/22/2008	273	FM		273
Z 01	02	041		02	042		4/22/2008	318	FM		318
Z 01	02	042		02	043		4/22/2008	180	FM		180
Z 01	02	043		02	044		4/22/2008	400	FM		400
Z 01	02	044		02	045		4/22/2008	200	FM		200
Z 01	02	045		02	046		4/22/2008	175	FM		175
Z 01	02	046		02	047		4/22/2008	337	FM		337
Z 01	02	047		02	048		4/22/2008	300	FM		300
Z 01	02	048		02	068		4/28/2008	300	FM		300
Z 01	02	049		02	050		4/23/2008	155	FM		155
Z 01	02	049		06	019		4/23/2008	300	FM		300
Z 01	02	050		02	051		4/23/2008	200	FM		200
Z 01	02	051		02	053		4/23/2008	175	FM		175
Z 01	02	052		02	053		4/28/2008	65	FM		65
Z 01	02	053		02	054		4/28/2008	250	FM		250
Z 01	02	054		02	055		4/28/2008	219	FM		219
Z 01	02	055		02	058		4/28/2008	274	FM		274
Z 01	02	056		02	057		4/28/2008	200	FM		200
Z 01	02	057		02	058		4/28/2008	174	FM		174
Z 01	02	058		02	061		4/28/2008	267	FM		267
Z 01	02	059		02	060		4/28/2008	157	FM		157
Z 01	02	060		02	061		4/28/2008	200	FM		200
Z 01	02	061		02	062		4/28/2008	200	FM		200
Z 01	02	062		02	063		4/28/2008	325	FM		325
Z 01	02	063		02	065		4/28/2008	205	FM		205
Z 01	02	064		02	065		4/28/2008	112	FM		112
Z 01	02	065		02	066		4/28/2008	350	FM		350
Z 01	02	066		02	067		4/28/2008	100	FM		100
Z 01	02	067		02	068		4/28/2008	277	FM		277
Z 01	02	068		02	069		4/28/2008	344	FM		344
Z 01	03	126		03	127		4/21/2008	265	FM		265
Z 01	03	139		03	159		4/18/2008	149	FM		149
Z 01	03	140		03	141		4/18/2008	194	FM		194
Z 01	03	140		03	159		4/18/2008	156	FM		156
Z 01	03	140		03	142		4/21/2008	345	FM		345
Z 01	03	142		03	152		4/21/2008	161	FM		161
Z 01	03	142		03	143		4/21/2008	101	FM		101
Z 01	03	142		03	160		4/21/2008	206	FM		206
Z 01	03	143		03	144		4/21/2008	107	FM		107
Z 01	03	144		03	145		4/21/2008	106	FM		106
Z 01	03	146		03	147		4/21/2008	119	FM		119
Z 01	03	147		03	148		4/21/2008	104	FM		104
Z 01	03	148		03	149		4/21/2008	106	FM		106
Z 01	03	149		03	150		4/21/2008	108	FM		108
Z 01	03	150		03	151		4/21/2008	208	FM		208
Z 01	03	152		03	153		4/18/2008	174	FM		174

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
Z 01	03	152		03	155		4/18/2008	136	FM		136
Z 01	03	153		03	154	C	4/18/2008	123	FM		123
Z 01	03	155		03	156	C	4/18/2008	136	FM		136
Z 01	03	157		03	160		4/21/2008	120	FM		120
Z 01	03	157		03	161		4/21/2008	135	FM		135
Z 01	03	157		03	163		4/21/2008	105	FM		105
Z 01	03	161		03	162	D	4/18/2008		FM		
Z 01	03	162		03	164		4/18/2008	125	FM		125
Z 01	03	164		03	165		4/18/2008	325	FM		325
Z 02	01	004		01	005		4/28/2008	60	FM		60
Z 02	01	004		02	069		4/28/2008	330	FM		330
Z 02	01	005		01	027		4/29/2008	300	FM		300
Z 02	01	005		02	010		4/29/2008	200	FM		200
Z 02	01	006		05	109		4/16/2008	363	FM		363
Z 02	01	006		01	008		4/16/2008	359	FM		359
Z 02	01	007		01	008		4/16/2008	105	FM		105
Z 02	01	008		01	009		4/16/2008	150	FM		150
Z 02	01	009		01	011		4/16/2008	200	FM		200
Z 02	01	010		05	103		4/16/2008	309	FM		309
Z 02	01	010		01	011		4/16/2008	211	FM		211
Z 02	01	011		01	012		4/16/2008	200	FM		200
Z 02	01	012		01	013		4/16/2008	350	FM		350
Z 02	01	013		01	017		4/16/2008	425	FM		425
Z 02	01	014		05	111		4/25/2008	350	FM		350
Z 02	01	014		01	015		4/25/2008	332	FM		332
Z 02	01	015		01	016		4/25/2008	355	FM		355
Z 02	01	016		01	017		4/25/2008	175	FM		175
Z 02	01	017	P	01	018	P	5/1/2008	175	FM	3	700
Z 02	01	018		01	019		4/25/2008	320	FM		320
Z 02	01	019		01	023		4/25/2008	355	FM		355
Z 02	01	020		01	021		4/24/2008	353	FM		353
Z 02	01	020		02	084		4/24/2008	359	FM		359
Z 02	01	021		01	022		4/24/2008	245	FM		245
Z 02	01	022		01	023		4/24/2008	300	FM		300
Z 02	01	023		02	083		4/24/2008	354	FM		354
Z 02	01	023		01	025		4/25/2008	298	FM		298
Z 02	01	024		01	025		4/23/2008	221	FM		221
Z 02	01	024		02	078		4/23/2008	300	FM		300
Z 02	01	025		01	026		4/25/2008	133	FM		133
Z 02	01	026		01	027		4/25/2008	150	FM		150
Z 02	01	027		01	028		4/29/2008	242	FM		242
Z 02	01	028		01	040		4/29/2008	300	FM		300
Z 02	02	010		02	089		4/29/2008	325	FM		325
Z 02	02	073		02	074		4/23/2008	300	FM		300
Z 02	02	073		06	018		4/23/2008	314	FM		314
Z 02	02	074		02	075		4/23/2008	300	FM		300
Z 02	02	075		02	076		4/23/2008	300	FM		300
Z 02	02	076		02	077		4/23/2008	300	FM		300
Z 02	02	077		02	078		4/23/2008	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
Z 02	02	079		02	080		4/24/2008	225	FM		225
Z 02	02	080		02	081		4/24/2008	200	FM		200
Z 02	02	081		02	082		4/24/2008	350	FM		350
Z 02	02	082		02	083		4/24/2008	353	FM		353
Z 02	02	084		06	004		4/24/2008	350	FM		350
Z 02	02	089		02	090		4/29/2008	70	FM		70
Z 02	02	091		02	092		4/29/2008	250	FM		250
Z 02	02	092		02	093		4/29/2008	83	FM		83
Z 02	02	093		02	094		4/29/2008	110	FM		110
Z 02	02	094		02	095		4/29/2008	360	FM		360
Z 02	05	099		05	100		4/16/2008	258	FM		258
Z 02	05	100		05	101		4/16/2008	305	FM		305
Z 02	05	101		05	102		4/16/2008	265	FM		265
Z 02	05	102		05	103		4/16/2008	294	FM		294
Z 02	05	104		05	106		4/16/2008	298	FM		298
Z 02	05	105		05	106		4/16/2008	130	FM		130
Z 02	05	106		05	107		4/16/2008	350	FM		350
Z 02	05	107		05	108		4/16/2008	350	FM		350
Z 02	05	108		05	109		4/16/2008	250	FM		250
Z 02	05	110		06	001		4/25/2008	330	FM		330
Z 02	05	110		05	111		4/25/2008	239	FM		239
Z 02	06	002		06	003		4/24/2008	300	FM		300
Z 02	06	003		06	004		4/24/2008	354	FM		354
Z 02	06	006		06	152	C	4/23/2008	62	FM		62
Z 02	06	006		06	007		4/23/2008	45	FM		45
Z 02	06	007		06	008		4/23/2008	141	FM		141
Z 02	06	007		06	148	C	4/23/2008	175	FM		175
Z 02	06	008		06	009		4/23/2008	85	FM		85
Z 02	06	009		06	010		4/23/2008	275	FM		275
Z 02	06	010		06	011		4/23/2008	130	FM		130
Z 02	06	011		06	014		4/23/2008	247	FM		247
Z 02	06	012		06	013		4/23/2008	270	FM		270
Z 02	06	013		06	014		4/23/2008	301	FM		301
Z 02	06	014		06	017		4/23/2008	268	FM		268
Z 02	06	015		06	016		4/23/2008	343	FM		343
Z 02	06	015		06	149	C	4/23/2008	140	FM		140
Z 02	06	016		06	017		4/23/2008	289	FM		289
Z 02	06	017		06	018		4/23/2008	295	FM		295
Z 03	01	029		01	030		4/16/2008	300	FM		300
Z 03	01	030		01	039		4/16/2008	204	FM		204
Z 03	01	031		01	032		4/15/2008	200	FM		200
Z 03	01	032		01	033		4/15/2008	353	FM		353
Z 03	01	033		01	034		4/15/2008	353	FM		353
Z 03	01	034		01	035		4/15/2008	348	FM		348
Z 03	01	035		01	038		4/15/2008	342	FM		342
Z 03	01	036		01	037		4/15/2008	350	FM		350
Z 03	01	036		01	114	C	4/15/2008	176	FM		176
Z 03	01	037		01	038		4/15/2008	272	FM		272
Z 03	01	038		01	039		4/16/2008	320	FM		320

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
Z 03	01	039		01	040		4/16/2008	200	FM		200
Z 03	01	040		01	041		4/29/2008	375	FM		375
Z 03	01	041		01	042		4/29/2008	223	FM		223
Z 03	01	042		01	043		4/29/2008	267	FM		267
Z 03	01	043		01	044		4/29/2008	142	FM		142
Z 04	01	044		01	067		4/29/2008	50	FM		50
Z 04	01	045		01	046		4/15/2008	88	FM		88
Z 04	01	046		01	047		4/15/2008	88	FM		88
Z 04	01	047		01	048		4/15/2008	233	FM		233
Z 04	01	048		01	049		4/15/2008	232	FM		232
Z 04	01	049		01	058		4/15/2008	225	FM		225
Z 04	01	058		01	060		4/15/2008	179	FM		179
Z 04	01	059		01	060		4/15/2008	140	FM		140
Z 04	01	060		01	064		4/15/2008	226	FM		226
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Z 04	01	064		01	065		4/29/2008	100	FM		100
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Z 04	01	067		01	068		4/29/2008	401	FM		401
Z 05	01	072		01	075		4/14/2008	115	FM		115
Z 05	01	073	C	01	117		4/14/2008	15	FM		15
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Z 05	01	117		01	118	C	4/14/2008	140	FM		140
Z 06	01	068		01	069		4/29/2008	50	FM		50
Z 06	01	069		01	070		4/30/2008	360	FM		360

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY1 Footage
Z 06	01	070		01	071		4/30/2008	325	FM		325
Z 06	01	071		01	102		4/30/2008	325	FM		325
Z 06	01	100		01	101		4/30/2008	335	FM		335
Z 06	01	101		01	102		4/30/2008	272	FM		272
Z 06	01	102		01	115		4/30/2008	52	FM		52
Z 06	01	103		01	115		4/30/2008	342	FM		342
Z 06	01	103		01	104		4/30/2008	374	FM		374
Z 06	01	104		01	105		4/30/2008	300	FM		300
Z 06	01	105		01	106		4/30/2008	306	FM		306
Z 06	01	106		01	107		4/30/2008	355	FM		355
Z 06	01	107		01	108		4/30/2008	344	FM		344
Z 06	01	108		01	109		4/30/2008	351	FM		351
Z 06	39	008		39	009		4/30/2008	358	FM		358
Z 06	39	009		39	010		4/30/2008	330	FM		330
Z 06	39	010		39	011		4/30/2008	365	FM		365
Z 06	39	011		39	012		4/30/2008	356	FM		356
										Feet:	1,158,368
										Miles:	219.39

City of El Cajon
As a Copermittee of the San Diego River Watershed

Jurisdictional Urban Runoff Management Program Annual Report
2008 – 2009

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EXECUTIVE SUMMARY

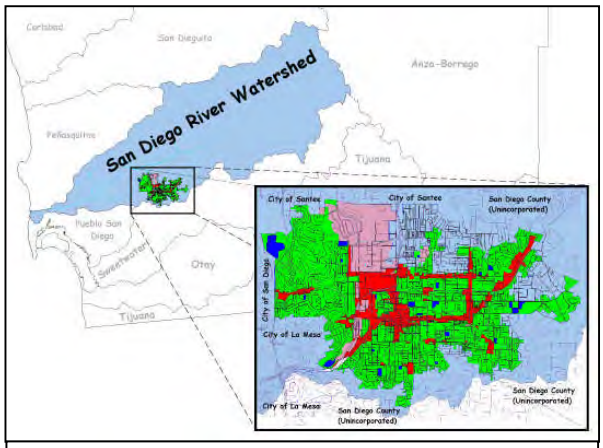

The City of El Cajon in the Context San Diego County and the San Diego River Watershed

The City of El Cajon (City), located in east San Diego County, is the eastern-most incorporated City within the San Diego River Watershed (Watershed). With 14.48 square miles and nearly 97,000 citizens, the City plans with other regional jurisdictions and acts locally to maintain the health of the San Diego River Watershed. A healthy watershed means thriving environmental communities and a state of well being among its constituency. Maintaining watershed health is achieved through compliance with Federal Clean Water Act requirements as stated in the San Diego County Municipal Storm Water Permit, Order No. R9-2007-0001, through water quality monitoring, biological assessments, and municipal vigilance to balance growing human demands with a healthy environment.

Permit Year 2008-2009 (PY 2008-09) marks Permit Year two (PY2) under the San Diego Region Order No. R9-2007-0001 (new municipal permit), which renewed Order No. 2001-001. The renewed municipal permit was adopted in January 24, 2007. Efforts started with jurisdictional planning and implementation, proceeded to local program assessment and continues to evolve into multi-jurisdictional and watershed actions. The City is transitioning to the new municipal permit and continued the Permit Year 2007-08 focus of assessing program component effectiveness from Best Management Practices (BMP) implementation and determining how preventive measures affect watershed health from a local perspective. Many of the program's components have developed into BMP programs, whereby inspections can determine effectiveness of pollution reduction measures.

This Annual Report presents the City's efforts during the 2008-09 reporting period. Covered in this Report is the move toward adaptive management of the updated Jurisdictional Urban Runoff Management Program (JURMP) implementation and integration of general watershed principles for the San Diego River Watershed into local planning. Both the San Diego River Watershed Urban Runoff Management Plan (WURMP) and the City's JURMP were updated and submitted to the San Diego Regional Water Quality Control Board (RWQCB) on March 24, 2007, as required by the new municipal permit and extension. It is the responsibility of the City to balance jurisdictional and watershed requirements and maintain a healthy watershed within its jurisdiction.

Critical for the rest of the new permit cycle are Watershed adjustments to the City's Storm Water Pollution Prevention Program and deciding where best to place City efforts that will minimize or eliminate polluted runoff. Forrester Creek, the main tributary drainage channel in El Cajon, is a listed 303(d) waterbody with impairments for pH in the upper part (El Cajon and San Diego County) and for total dissolved solids (TDS) and fecal coliform in the lower portion within the

City of Santee). El Cajon considers these three impairments to be the center of the Clean Water Act objective "to restore the Nations Waters" to a chemical balance able to support the State's Basin Plan designations for fishable and swimmable waters.

A *BMP to Pollutant Reduction Diagram* was developed to connect BMPs to pollutants that are targeted for reduction as a result of their listing as 303(d) pollutants in Forrester Creek. This diagram and discussion is provided in the Introduction in Section 1.

This JURMP Annual Report for PY2 consists of 15 Sections, and is organized as follows:

Section 1 - Introduction. Describes the purpose of this Annual Report, the overall vision of the City, goals and objectives of the Storm Water Pollution Prevention Program; the regional integration of Watershed Health; assessment of program effectiveness to guide future actions, and Forrester Creek-specific criterion that relate to San Diego River Watershed and River health.

Section 2 - Development Planning Component. Lists the planning actions reviewed and the role of storm water in re-defining new development designs and describes the ways of confirming that commitment to storm water becomes a design reality.

Section 3 - Construction Component. Summarizes reviews of Erosion Control Plans, inspections of high priority sites, interactions with other City departments, and conditions during rainfall events.

Section 4 - Municipal Component. Summarizes the activities for municipal facilities, the sanitary sewer program, capital improvement projects affecting storm water quality, and municipal staff training.

Section 5 – Industrial and Commercial Component

- **Industrial Component**. Summarizes the activities conducted to assess the effectiveness of implemented industrial BMPs and better define the pollutants affecting storm water quality.
- **Commercial Component.** Summarizes the inspections, enforcements, and educational efforts to assess the effectiveness of implemented BMPs and better define the pollutants affecting storm water quality by business type.

Section 6 - Residential Component. Summarizes the challenges with educating the public, interactions with citizens, educational efforts, and enforcement at the residential level.

Section 7 - Illicit Discharge Detection and Elimination Component. (This section will be part of a separate submittal due on December 15, 2009) Summarizes the City's dry weather program that identifies illegal dumping and illicit connections to the storm drain system. An upstream/downstream analytical assessment was completed for during the dry weather season.

Section 8 - Education Component. Summarizes programs implemented by the City to educate municipal employees, developers and contractors, business owners, the general public, and other priority groups

Section 9 - Public Participation Component. Summarizes the outreach efforts coordinated on a regional level through the Outreach Workgroup.

Section 10 - Fiscal Analysis Component. Reviews and compares previous storm water expenditures while projecting future program funding requirements.

Section 11 - Effectiveness Assessment Component. Provides summary tables for the existing and development components indicating estimated and actual pollutant-containing material reductions at the source or from preventive measures.

Section 12 – Special Investigations. Summarizes any special investigations that may have been conducted during the current reporting period.

Section 13 – Non-Emergency Fire Fighting. Summarizes non-emergency fire-fighting activities/training conducted during the current reporting period.

Section 14 – JURMP Revisions. Summarizes any changes or revisions to the JURMP that may have occurred during the current reporting period.

Section 15 - Conclusions and Recommendations. Summarizes the conclusions stated from each component and makes overall program conclusions and provides recommendations for future permit years.

Appendices contain City-developed checklists, guidance documents, outreach materials, lists of priority businesses or sites, and presentations to City staff and the local community. Additionally, the Dry Weather Monitoring report is provided as an attachment.

The City achieved a number of important accomplishments during this reporting period, both in its role as a Copermittee, and through participation (and eventual leadership role) in the implementation of general watershed principles. Across the City, businesses and citizens, together, function within the JURMP and watershed to assist in identifying storm water issues and help prevent pollution from being discharged.

City Action Highlights include:

- Continue with a strong Enforcement program for City Ordinances 4686 (JURMP) and 4717 (Standard Urban Storm Water Management Program (SUSMP) requirements).
- As a City with little open space and a propensity for redevelopment, the City pursues common sense approaches to go beyond Permit compliance and achieve defensible, cost-effective storm water management practices for businesses and citizens through the SUSMP conditioning process.
- Continued implementation of a City-Wide Integrated Pesticide Management Program.
- The City continued an expanded scope of its Dry Weather Monitoring Program. Additional information along concrete lined areas focuses on business districts or municipal areas. In doing so, it has made substantial strides in detecting and eliminating discharges and characterizing receiving waters and other conveyance discharges within its jurisdiction.
- Conducted upstream/downstream dry weather analysis in Forrester Creek to quantify the amounts of pollutants discharged within the City's jurisdiction.

- Inspected 628 High Treat to Water Quality (TTWQ) Commercial Facilities, Medium TTWQ Facilities, and Low TTWQ Facilities for compliance with the City's Municipal Code and issued 2 warnings and 4 citations to commercial business for various violations of the City's storm water ordinance.
- The City issued a total of 6 warnings and 17 citations for various violations of the City's storm water ordinances.
- Conducted inspections at 20 high priority construction sites. The City conducted monthly inspections at all high priority construction sites during the dry season and weekly inspections during the wet season. The inspections revealed several violations or compliance issues and the City issued 4 written warnings and 11 citations.
- Conducted inspections at 44 high priority industrial sites. The City also collected industrial storm water monitoring data from those industrial facilities subject to the State General Industrial Storm Water Permit and conducting the required annual storm water monitoring. The City intends to review the industrial storm water data to evaluate potential contributors to water quality problems.
- The City's inspection programs emphasized pollution prevention BMPs such as clean trash storage and disposal areas; power washing BMPs; and maintenance of sewer laterals in addition to the minimum required BMPs.
- The City's comprehensive street sweeping program swept 19,072 miles of streets and collected 3,188 cubic yards of materials from City streets. Sediment and silt account for 44% of the total, organic material accounted for 41%, and trash accounted for 15%.
- Collected 1,720 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins.
- Actively participated in the Management Committee, Regional Planning Workgroup, Outreach Workgroup, Regional Monitoring Workgroup, SUSMP/HMP Workgroup, Industrial/Commercial Workgroup and WURMP Leads Workgroup.
- Continued active participation with the San Diego River Watershed Workgroup.
- Continued efforts to reach out to community members on a wide range of urban runoff and storm water quality topics through approximately 305,000 copies of articles, brochures, and mailers.
- Conducted over-the-counter assistance and provided personalized residential BMP information to homeowners for small additions, remodels, pools and retaining wall projects.

This reporting period is one of continued program assessment and focus of local actions to move toward a watershed protection program. This last year, the City continued to meet the new challenges of working within a watershed. The City continues in the role of the Lead Copermittee for the San Diego River Watershed. The City feels strongly that it has made significant strides looking within its jurisdictional boundaries as well as organizing inter-jurisdictional programs. Continuing improvement and refinement is the name of this storm water pollution prevention program as we continue to gather information and experience about how City activities affect the local receiving waters and the health of the San Diego River Watershed.

This Annual Report provides programmatic information and further steps in connecting activities to a significant movement for improving receiving water quality by the City of El Cajon. Over the last year, the City has continued its effort at linking municipal activities to receiving water quality. Additional connections to receiving water quality from the implementation of BMPs will follow as information is gathered and assessed using a Long-Term Assessment process over the next several years.

A listing of storm water contact personnel is provided as part Appendix C to help facilitate communication within the City and for the public and outside agencies to contact the appropriate City staff.

CERTIFICATION

"I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature: Kathi Henry — Date: 9.23.09

Kathi Henry, City Manager
Printed Name, Title

(619) 441 1718
Phone Number

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SECTION 1 INTRODUCTION

With each Permit Year (PY), the City of El Cajon reviews, assesses, and progresses towards a watershed approach to protect surface waters from urban runoff pollution. A continued emphasis towards identifying sources of pollutants and minimizing specific 303(d) impacts to Forrester Creek is the focus of this second year in the Permit Cycle (Order No. R9-2007-0001).

The typical steps for developing a pollution prevention and source control program are summarized below and discussed in more detail in Section 11, Effectiveness Assessment.

1. **Identify the issue.** Define each issue.
2. **Identify and assess sources.** Sources are identified by prioritizing based on location and type of business.
3. **Determine available control strategies**. To identify possible control strategies for each source.
4. **Evaluate control strategies**. To determine which control strategies are most likely to achieve measurable results.
5. **Establish a goal.** A goal may be set at any point during the development process. The goal is the desired outcome.
6. **Implement program.** Part of program implementation is selection of an effectiveness measurement tool to assess the program.
7. **Evaluate effectiveness.** Based on the effectiveness measurement, determine what has been learned.
8. **Modify program.** The results of the effectiveness measurement will help to determine the future direction for the program.

Described in this Second Permit Year (PY2) Annual Report is the implementation and collected information for each Permit component. Sections 2 through 11 highlight component accomplishments, activities, or areas of achievement for Development and Planning; Construction; Municipal; Industrial and Commercial Development; and Residential Development; Education and Outreach; Illicit Discharge, Detection and Elimination; Public Participation, Effectiveness Assessment; and Fiscal Analysis.

1.1 REGULATORY FRAMEWORK

Background

The City of El Cajon's (City) Jurisdictional Urban Runoff Management Plan (JURMP) was developed pursuant to Order No. 2001-001, National Pollutant Discharge Elimination System

(NPDES) Permit No. CAS0108758, the area-wide municipal separate storm sewer system (MS4) permit. The MS4 permit was established pursuant to Section 402(p) of the Federal Clean Water Act, which requires all point source discharges of pollutants into waters of the United States, including discharges from municipal separate storm sewer systems, to be regulated by a NPDES permit. On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), adopted Order No. R9-2007-0001, NPDES Permit No. CAS0108758 (Permit), to the City and 20 other Copermittees, for discharges of urban runoff from MS4s into the receiving waters within the SDRWQCB's jurisdiction.

The City is a participant and partner in the San Diego River Watershed along with the Cities of La Mesa, San Diego, Santee, and the County of San Diego. A watershed approach to storm water pollution provides the wider view of runoff impacts and requires jurisdictional approaches to include neighboring jurisdictions in future planning and reporting efforts.

The PYs are summarized as follows:

- PY4 – July 1, 2004 through June 30, 2005, implementation was taken to the next level of refinement based on performance.
- PY5 – July 1, 2005 through June 30, 2006, as the City's programs mature, the City focused on watershed issues, including pollution prevention and education and continued to refine and improve the City's programs.
- PY6 - July 1, 2006 through June 30, 2007, preparing for issuance of a new permit containing watershed/regional permit requirements supported and subsidized by jurisdictional efforts.
- PY1 - July 1, 2007 through June 30, 2008, modifying and enhancing the storm water program to comply with the new Municipal Permit, R9-2007-001. New comprehensive JURMP prepared to create a detail framework of the program under the new permit.

<u>Current and Future</u>

- PY2 – July 1, 2008 through June 30, 2009, reassessment of initial JURMP implementation with refinements and reimplementation, as necessary.

1.1.1 Water Courses and Receiving Waters

The definition of the City's Storm Drain System is broad enough to include streets, gutters, inlets, catch basins, channels (lined and unlined), creeks, and streams. Our storm drain system starts at a facility's property line to the public right-of-way. By making such a distinction, it is clear to maintenance and storm water crews when it is the responsibility of the City to clean spills or illegal dumping of materials. If such a discharge occurs on private property and the discharge enters the City storm drain system, the property and business owner/contractor is contacted and educated on storm water requirements for their type of business. Property and business owners are charged for cost-recovery of City staff involvement.

The goal of PY2 and future program years will be a continuing focus on impairment of Forrester Creek with the ultimate goal of eliminating the impairment on Forrester Creek, and meeting the

objective of the Clean Water Act to maintain and restore the chemical, physical, and biological integrity of the Nation's waters.

Table 2 lists the major storm water conveyance systems and describes the type of channel. Most conveyance systems are concrete-lined, making them easy to maintain, but present other types of challenges such as:

- Elevated pH (above 9)
- Shelter for homeless populations
- Trap for air blown trash and debris
- Easy target for illegal dumping

Table 2 – Storm Water Conveyance Systems

Water Courses	Type of Channel
Forrester Creek	• Open, concrete-lined trapezoidal channel • Underground culvert
Broadway Channel	• Open, concrete-lined channel • Underground culvert
Washington Channel	• Open, concrete-lined channel • Underground culvert
County Ditch	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel
Fanita Channel	• Underground culvert • Open, concrete-lined channel
Third Street Lateral	• Open, concrete-lined channel • Underground culvert
Fletcher Parkway Channel	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel

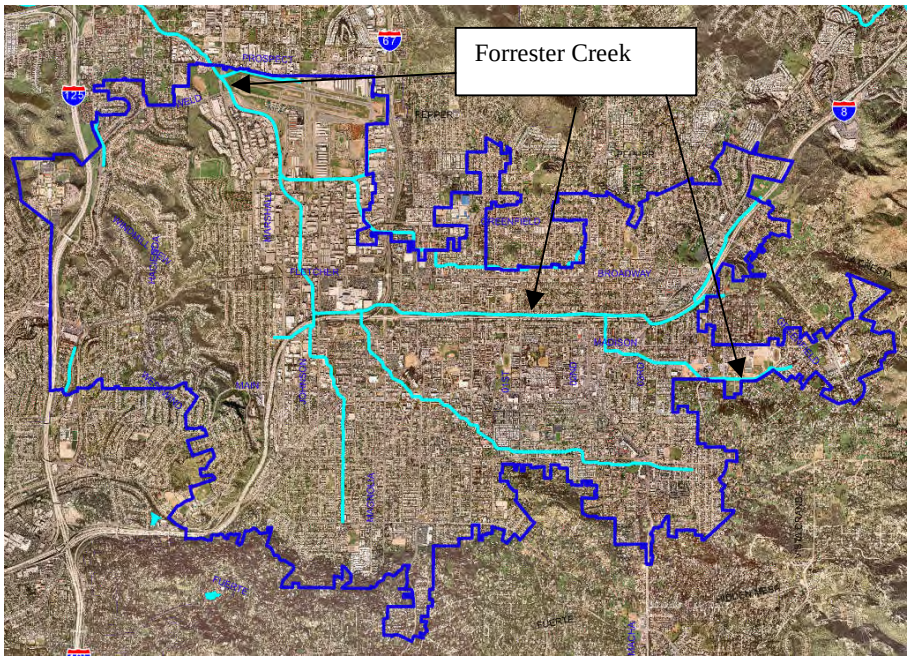

The picture to the left shows the City boundaries, Forrester Creek and the major channels within the City.

1.1.2 Approach and Changes to the Program

Approach

As the City becomes more experienced with its own programs and with what is working and what is not, the City modifies the implementation and management of its Storm Water Program. This Adaptive Management is a dynamic process of improving management activities incrementally, as decision makers learn from experience and better information and analytical tools become available. It involves checking progress made in achieving water quality goals, adjusting the management decisions accordingly, rechecking and readjusting – all the while incorporating new data and scientific knowledge. Beginning in early 2008 and continuing through PY2 (2008/2009), the City of El Cajon is developing a Storm Drain Master plan. Once complete, the Storm Drain Master Plan will provide the City with additional tools to assess and achieve water quality objectives. Adjustments to goals and objectives are expected to occur due to unforeseen circumstances and an unpredictable future.

One approach the City continues to implement (through education and training) is to change pollution prevention from the conventional recycle, reduce and reuse, to measures that target pollution prevention at the pollutant source. For Storm Water Pollution Prevention, consideration is given both to flow reduction measures and pollution source controls. Where water acts as the primary conveyor of pollution, pollution prevention measures can reduce pollution impacts by preventing pollutants from entering the flow, or by controlling the flow. In the development of an effective pollution prevention or management strategy, it is critical to understand how water cycles through the air and soil to ensure that measures are selected and implemented in an appropriate manner.

Changes to the Storm Water Program

Program Year 2 (PY2), and continuing into the next permit cycle, will be a continuing period of transition from purely jurisdictional to a jurisdictional/watershed approach. A few of the modifications include:

- Promoting a Clean Community, Healthy Watershed;
- Maintaining Watershed and River Health in the San Diego River Watershed;
- Focusing on 303(d) pollutants to restore Forrester Creek water quality;
- Continuing to assess the potential for increased flow from New or Re-Development projects and reduce flow from the current flow of approximately 108 gallons per minute during the dry season (one half last year's dry weather flow rate).

The San Diego River Flows Across Padre Dam

- Prioritizing activities in coordination with other East County Cities;
- Collecting information on upstream and downstream conditions to better assess areas (zones) where pollution is more probable or prevalent;
- Review of the analytical methods and a comparison to what information is actually needed to determine pollutant loads.

The City of El Cajon's Storm Water Pollution Prevention Program looks to pollution solutions in the form of Best Management Practices, proven procedures, or other new technologies. Table 1 (next page) lists the water quality and quantity issues in El Cajon and the possible solutions provided by the Jurisdictional Urban Runoff Management Plan (JURMP) components that comprise the Storm Water Pollution Prevention Program.

Table 1 – Storm Water Pollution Prevention Program Components

Water Quality or Quantity Issues	Pollution Solution
• Increased runoff (volume, frequency and duration) with impervious ground cover.	• Runoff control for flood and erosion protection (**New Development and Construction**) • Measures to maintain existing discharge rates. (**New Development/Redevelopment**)
• Increased base flows in streams due to changes in land use.	• Provide measures to maintain infiltration **(New Development/Redevelopment)** • Provide extended detention of runoff for low flows. (**New Development/Redevelopment**)
• Increased pollutant loadings with runoff.	• Provide measures to reduce pollutant sources, or remove pollutants, by settlement, absorption or filtration. (**Municipal, Industrial, Commercial, Residential Existing Development/Redevelopment**)
• Stream bed and bank changes due to erosion.	• Infiltration for control of runoff volume.(**New Development/Redevelopment**) • Rate of runoff control for erosion protection (**Construction/Redevelopment**)

Stronger move toward prevention of polluted discharges – distinguishing pollutant reduction from Pollution Prevention (recycle, reduce, reuse) activities, while connecting BMPs with the pollutant being reduced. A BMP to Pollutant Reduction Diagram is provided below and is the mainstay for the Existing and Development (including Construction) Components. This part of the transition occurred after Copermittees submitted a Framework for BMP Implementation in October 2003.

Inspection data collected under the original system designed by DMax Engineering was translated into BMP implementation results. The BMP implementation results data can be used to help prioritize follow-up actions, including inspections and education efforts in future program years.

BMP to Pollutant Reduction Diagram (See Following Page for Details)

Pollutant to BMP Table
BMPs target the reduction or elimination of a primary pollutant (sediment or fecal coliform) or pollutant group (oil & grease).

↓

Facilities and BMP Table
Individual Facilities are Required to Implement the Minimum BMPs

↓

Summarize Facility Types with Pollutant Reduced Table
Combines Table 1 and 2 to connect pollutant to (high priority) facility type, such as industrial, commercial/restaurants, municipal, residential area, or SUSMP/Parking Lot through the implementation of BMPs. Allows the calculation of percentages for implemented BMPs for high priority facilities.

↓

Transition to Effectiveness Assessment
Percentages between 80-100 overall implementation are used to calculate a quantity of pollutant(s) prevented from entering the storm drain system and thus reduction in pollutants ultimately discharged.
Reasonable Assumption: If inspection was impromptu, results observed on inspection day, in general, represent conditions at the facility for the entire year.
Calculations: Determine an *average* (typical for facility) discharge of the pollutant containing material.

The BMP to Pollutant Reduction Diagram demonstrates how BMPs are connected to pollutants that are connected to water quality. Our difficulty lies in quantifying those pollutant reductions with accurate and defensible results. In Section 11.0, estimates as well as empirical data are used to assess the effectiveness of the City's Storm Water Program by showing how much pollutant-containing materials were diverted toward a better disposal avenue.

1.2 COMMITMENT AND PARTICIPATION

The City of El Cajon is committed to promoting the concept and practice of preventing pollution at the source. Preventing pollution will prevent environmental problems. This saves the public and private sector from loss of resources and the costs to correct environmental damage. Urban runoff management requires the simultaneous pursuit of several objectives. The City is committed to:

- Enforcement of the Municipal Codes for Urban runoff (ECMC 13.10) and New or Site Re-Development (ECMC 16.100).
- Prevention of pollutant discharges into Forrester Creek as part of the San Diego River Watershed.
- Protection of water quality, aquatic species, and watershed ecosystems.
- Promotion of environmental quality and social well-being.

1.2.1 Jurisdictional Implementation

Pollution Prevention continues to be the focus of the City's JURMP and Storm Water Pollution Prevention Program for businesses and citizens. Compiled information on amounts of pollutants prevented from entering the storm drain system has a direct correlation to any decrease in pollutant loads from entering receiving waters. Pollutant amounts removed from streets, roadways and the storm drain system, or that have been recycled, have a direct correlation to water quality.

Land use consists of residential, commercial, industrial, municipal, and educational with recreational facilities. The City is at a "built-out" stage where most construction is redevelopment. Successful implementation of the City's Standard Urban Storm Water Management Program (SUSMP) supports the reduction in flow from a pollution prevention perspective. Development and redevelopment proposals that trigger the SUSMP requirements must submit plans consistent with reducing flow and impervious areas and must consider storm runoff treatment before the project will receive final City approval and proceeding to actual construction.

1.2.2 East County Cities Teamwork

Beginning in the Permit Year of 2002/2003 and continuing through this current Permit Year (PY2, 2008/2009), the East County Cities Workgroup gathered to discuss and tackle issues specifically affecting water quality issues in the East-County-Cities Area. Some of these "East County" challenges include:

- Tackling storm water issues from a "sand" perspective
- Highly transient populations
- Locally-focused City Management
- Boxed-in, built-out Development

1.2.3 Regional Teamwork

The City participated in regional efforts to promote storm water management practices and educate businesses and citizens to conduct business and daily lives with respect for water quality. When possible, the City attended or was an active participant in the following events.

- Management Committee Meetings
- Outreach Workgroup
- Residential Sources Workgroup
- East County Cities Workgroup (a.k.a., San Diego River Watershed Workgroup) **
- Regional Monitoring Workgroup
- Dry Weather Monitoring Workgroup

** - Chaired Workgroup

1.3 WATERSHED AND RIVER HEALTH

As stated in the Clean Water Act, the objective is to maintain and restore the chemical, physical, and biological integrity of the Nation's waters. To address this objective, watershed and river health for the San Diego River can be described in terms of unique biophysical, socio-cultural, and economic characteristics. Biophysiochemical components are a watershed's elements and functions (its chemical, physical, and biological processes), while socio-cultural and economic components are the values and benefits provided by a functioning healthy watershed. The water quality aspect and stream flow (as hydrological patterns) of the biophysiochemical component list and the recreational/esthetic values of the socio-cultural and economic components are the only subjects directly addressed in our City's permit under Order No. R9-2007-0001.

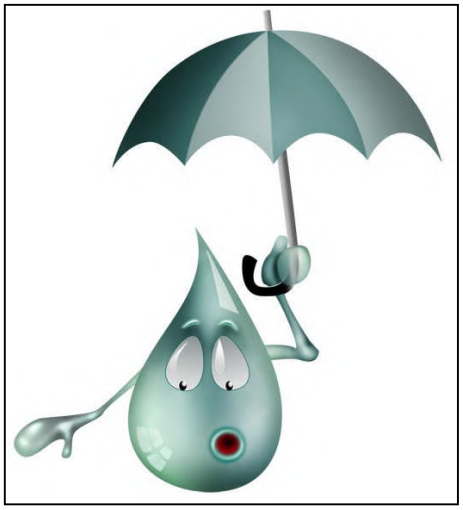

Biophysiochemical:

- Basin geomorphology
- Hydrological patterns (stream flow addressed in Municipal Permit)
- Water quality (addressed in Municipal Permit)
- Biotic community and habitat

Socio-Cultural and Economic:

- Breakdown and recycling of pollutants
- Regulation of storm water discharges
- Groundwater and aquifer recharge
- Recreational and esthetic values (addressed in the Basin Plan, but included in Municipal Permit by reference)
- Habitat values (protected species, fisheries, etc.)

In general, the factors that determine ecosystem and watershed health are universal. A healthy watershed is one in which these components are maintained with thriving and balanced communities. An immutable characteristic of upper Forrester Creek is the concrete lining of this channel. In the 1960's, Forrester Creek was modified with a concrete channel in order to provide flood control for the expansion of the Interstate Highway easterly toward El Centro.

In a built-out urban area such as the City of El Cajon, defining and achieving creek, river and watershed health is complicated by a highly altered landscape (concrete channelization of Forrester Creek, highly urbanized, little open-space) and continued urban-infill and growth within and upstream of its jurisdiction. Nonetheless, the City has a vision and initially a broad goal for watershed and river health. The vision states the desired future for the city with respect to watersheds and waterways. The goal states that the City ultimately aims at maintaining watershed and river health for water quality and hydrological patterns, quantitatively and qualitatively.

Although it is unrealistic and infeasible to re-create the environmental conditions that existed before the City's development, it is prudent to consider predevelopment conditions when assessing the health of Forrester Creek and the San Diego River. Information about historical conditions is useful in understanding current watershed processes and functions that are essential to downstream watershed and river health. In fact, healthy downstream conditions may best be served by continual efforts by the City to reduce and eliminate pollutant discharges to Forrester Creek, to the maximum extent practicable.

1.4 WATERSHED PLANNING

The City recognizes the importance of watershed management as a guiding principle for its water quality management of the San Diego River Watershed. As required by Permit Section J, a Watershed Urban Runoff Management Plan (WURMP) was developed during PY2 and refined during subsequent permit years. As a member of the San Diego River Watershed, the City attended and participated in establishing the Watershed program for the San Diego River area. There is a learning curve to transitioning certain activities from a jurisdictional to a watershed approach.

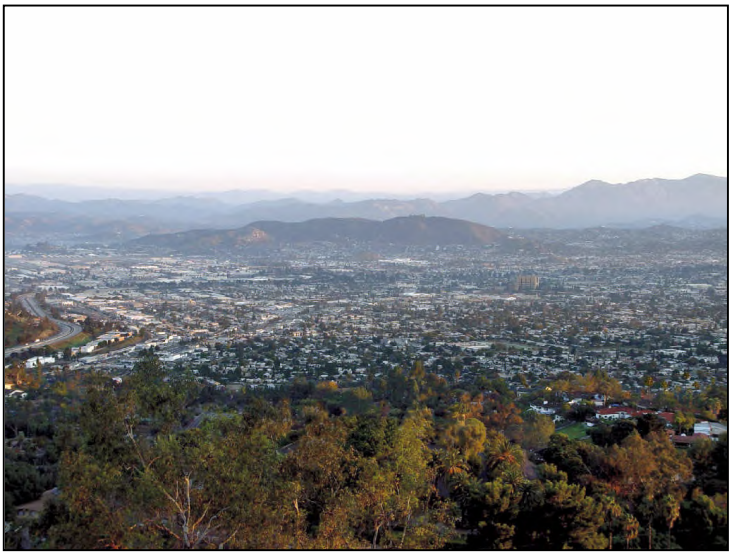

The picture to the right shows El Cajon as part of the inland watershed area. Much has been discussed during this permit year and an outline for the future watershed management is in place. The coming year will be one of implementation bringing new challenges to the storm water programs.

1.4.1 Water Quality and Stream Flow

Water quality has long since been the focus of many watershed programs. However, those programs and regulations have focused mostly on the chemical aspects of water quality, such as the concentrations of metals and organics, without considering how water quality is affected by the physical habitat in a stream or river. Water quality is greatly affected by the amount of large wood in the waterway, the river or stream's substrate (coarse gravel or fine sediment), the amount of native vegetation in floodplains and other aspects of physical habitat.

Physical habitat, in turn, is shaped in part by the larger forces of stream flow and hydrology. It has long been understood that the influence of stream flow, hydrology, physical habitat and water quality help determine which species are present within a watershed and the abundance, productivity and diversity of those species. For these reasons and others, the City defines its functional disposition in the watershed and river health as providing/conveying sustainable stream flow and hydrology and restoring and preserving water quality.

- **Stream Flow and Hydrology**: Maintain, or as necessary reduce, dry weather flow conditions using the Standard Urban Storm Water Management Plan to prevent an increase in runoff due to development and redevelopment projects, thereby protecting and improving watershed and stream health, channel function and public health and safety.
- **Water Quality:** Protect and improve surface water and groundwater quality and meet or surpass state and federal water quality standards and regulations.

Improving water quality within the City's jurisdiction will contribute to overall watershed health and will help keep the watershed as healthy as possible. John Muir said it best, "*When we try to pick out anything by itself, we find it hitched to everything else in the universe*".

1.5 GEOGRAPHICAL INFORMATION SYSTEM (GIS)

PY2 is the sixth year for using a Geographical Information System to present the location of El Cajon within the San Diego Watershed (See Figures following within this section). Base maps and information obtained from SanGIS provided the basic information to start layering jurisdictional and regional information. Deciding on the types of data and what needs to be shown are the biggest questions to answer.

In PY6 (2006/2007) the City created a new full-time GIS position to assist the Storm Water Program. The City is planning on implementing and developing an Enterprise GIS. To achieve this goal the City is currently dedicating more resources to a growing GIS staff and a new server.

One of the main benefits of GIS is improved management of your organization and resources. A GIS can link data sets together by common location data, such as parcel numbers, which helps departments and agencies share their data. Storm Water staff identified the Business License database as information easily integrated into a GIS to show and list the parcels within 200 feet of the five (5) major El Cajon drainage channels. The saying, "better information leads to better decisions" is true for GIS. A GIS is not just an automated decision making system but a tool to query, analyze, and map data in support of the decision making process.

The GIS maps presented in this PY2 Annual Report are used as tools by storm water staff to aid in the making of decisions that will be crucial to the direction of the Storm Water Program. Three maps follow this page showing:

- San Diego County Regional Watersheds
- San Diego River Watershed with a focus on El Cajon
- City of El Cajon showing Residential (green), Commercial (red), Industrial (pink), and School Districts (blue).

The information can be presented succinctly and clearly in the form of a map and accompanying report, allowing decision makers to focus on the real issues rather than trying to understand the data.

1.6 SIGNIFICANT ACCOMPLISHMENTS

The following significant accomplishments were completed and helped to maintain Watershed and River Health. Elimination of pollution is mainly due to routine scheduled municipal maintenance activities, municipal and commercial education efforts, outreach to the public and daily contact with citizens. The following is a summary of the major investments in reducing pollutant loads to receiving waters.

- Continued to implement and refine the Enforcement program for City Ordinances 4907 (JURMP) and 4908 (Standard Urban Storm Water Management Program (SUSMP) requirements). Streamlined enforcement activities with the inspection database to better coordinate and design correction actions.
- Continued to improve an inspection program for construction, commercial and industrial facilities based on Best Management Practices (BMP) implementation. Tracking BMP implementation and ensuring that all minimum required BMPs are installed and maintained properly helps ensure that pollutants are not discharges from those facilities. (List is continued following the three pages of GIS Maps).

Regional Watershed Map

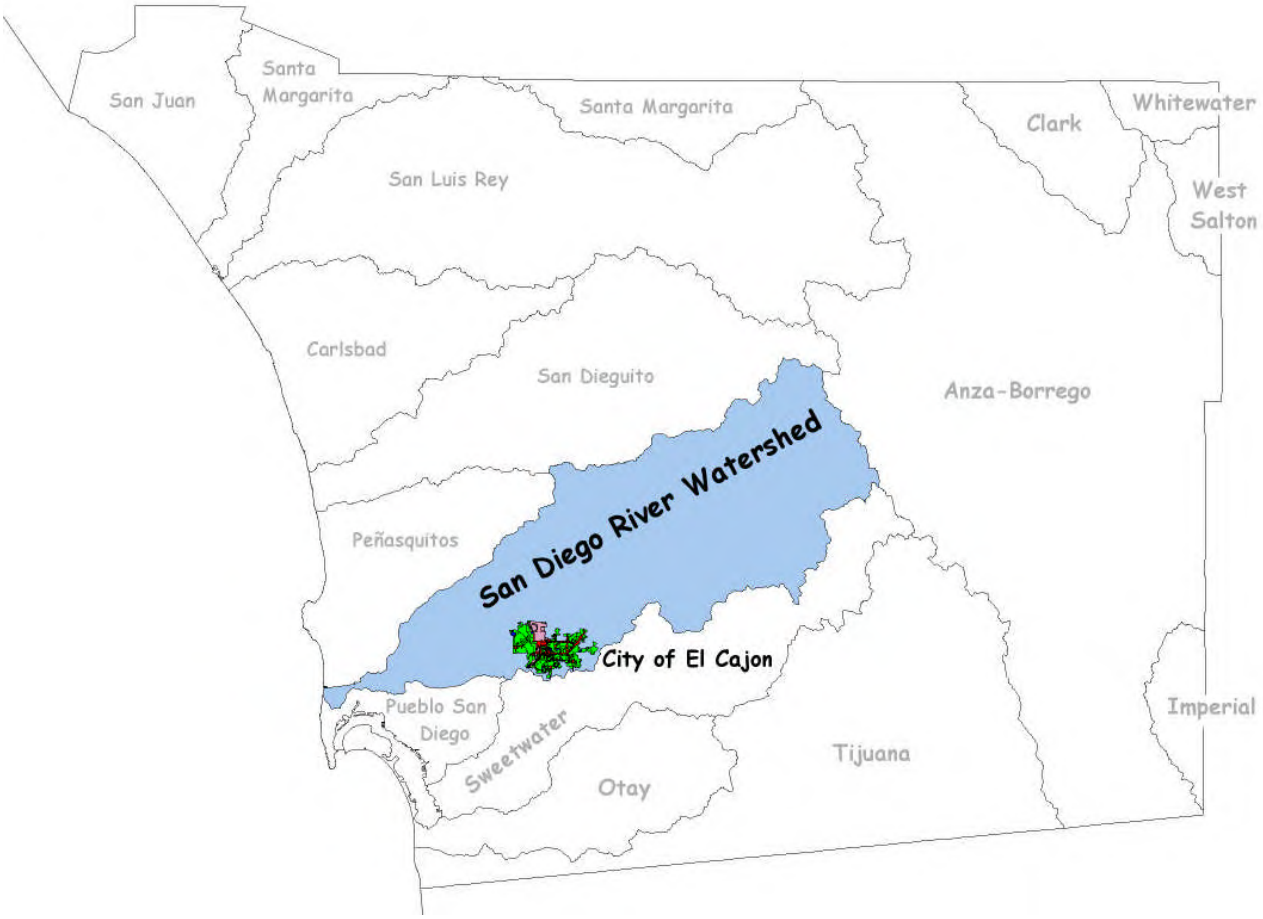

SD River Watershed Map

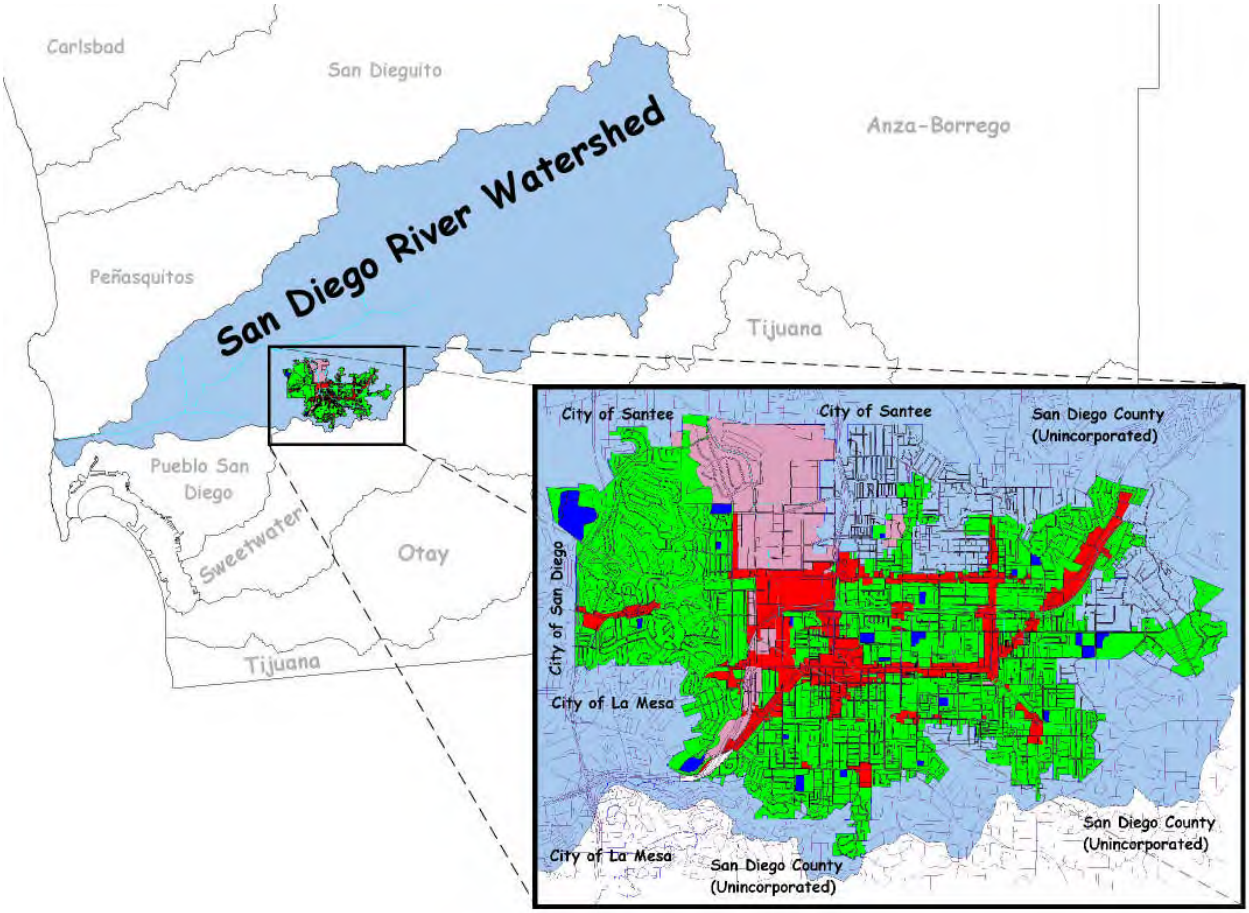

El Cajon GIS Map

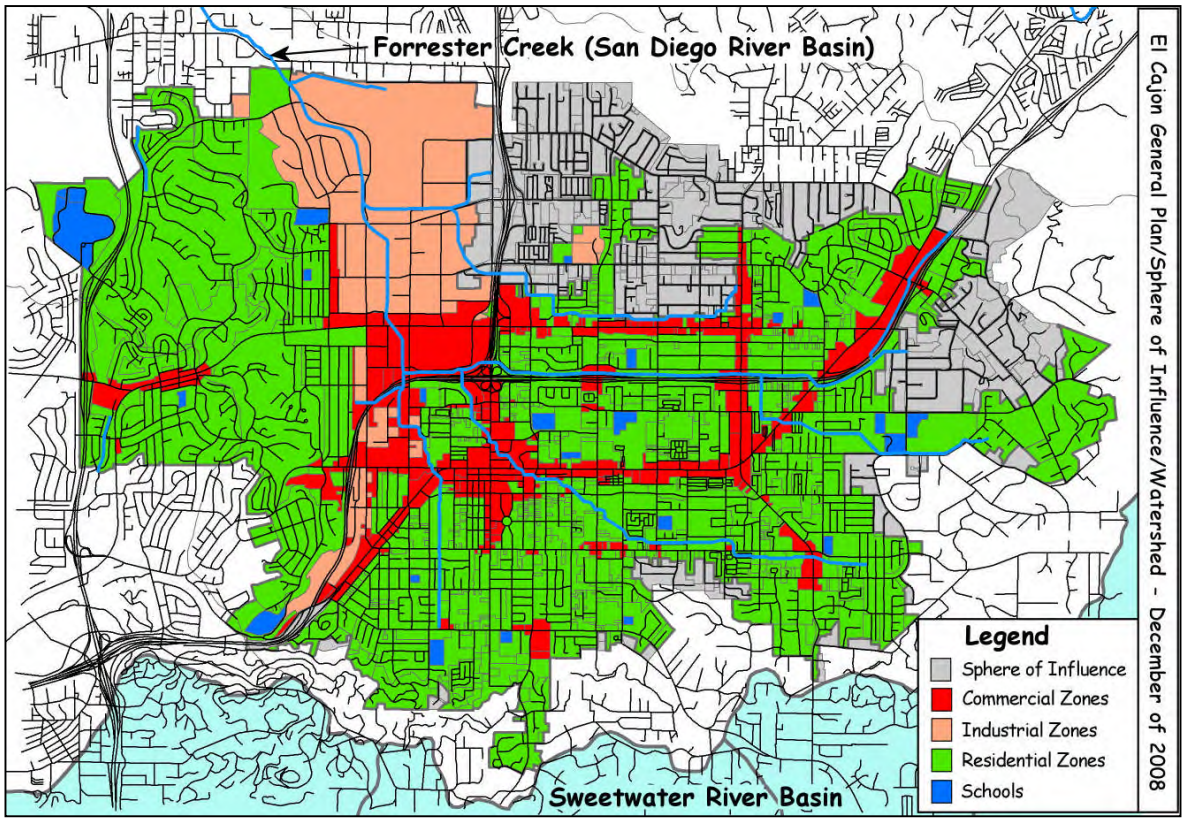

- Inspected and provided educational materials to well over 200 industrial and commercial businesses for compliance with the City's Municipal Code and the State's General Permits for construction and industrial activities.
- The City's comprehensive street sweeping program swept 19,072 miles of improved streets and collected 3,188 cubic yards of materials from City streets. About half (44%) of the material collected this year was sediment and silt. Many areas were swept twice per week.
- Collection of over 1,720 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins;
- The City formally trained 90 building, planning, middle management, and engineering staff on SUSMP requirements. Public Works staff completed before and after evaluations to assess the absorption of knowledge during retraining efforts
- Reached out to community members on a wide range of urban runoff and storm water quality topics through approximately 305,000 copies of articles, brochures, mailers, and over-the-counter sources.

1.7 RWQCB Compliance Reviews and Inspections

During this reporting period, the City and RWQCB staff met during March of 2009 to discuss the implementation of the new JURMP and to discuss comments on the PY1 (2007/2008) Annual Report. Formal comments for PY1 (2008/2009) Annual Report were received soon after and a Response to Comments sent to RWQCB staff on April 20, 2009.

1.8 Organization and Content of Annual Report

The Permit requires the submittal of an Annual Report to the SDRWQCB. This Annual Report covers the single permit year activities between July 1, 2008 and June 30, 2009. The Dry Weather Monitoring for 2009 will be submitted as a separate document on December 15, 2009.

The PY1 Annual Report presents and discusses implementation of the City's JURMP with a look at trends, BMP implementation, and overall JURMP effectiveness. Organization of the PY1 Annual Report is as follows:

- Executive Summary and Report Certification
- Section 1 - Introduction
- Section 2 - Development Planning Component
- Section 3 - Construction Component
- Section 4 - Municipal Component
- Section 5 - Industrial and Commercial Component
- Section 6 - Residential Component
- Section 7 - Illicit Discharge Detection and Elimination Component
- Section 8 - Education Component
- Section 9 - Public Participation Component
- Section 10 - Fiscal Analysis Component
- Section 11 - Effectiveness Assessment Component
- Section 12 - Special Investigations
- Section 13 - Non-Emergency Fire Fighting
- Section 14 - JURMP Revisions
- Section 15 - Conclusions and Recommendations

Charts, graphs, figures, and pictures are used to demonstrate the fulfillment of Permit and JURMP requirements or to highlight a special program accomplishment and event. Appendices provide additional information to validate activities or procedures.

Specific importance is placed on the assessment of JURMP implementation as this process is essential to determine if the City's program is reaching the Permit goal of improving receiving water quality. Some practices and structures (BMPs) listed in the JURMP to reduce or eliminate pollutants may prove to not be as effective as anticipated. An iterative process of BMP development, implementation, monitoring, and assessment focuses the JURMP such that JURMP programs are sufficiently comprehensive and effective to achieve Permit requirements and program objectives.

SECTION 2 DEVELOPMENT PLANNING COMPONENT

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SECTION 2 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

Over the last few years the City of El Cajon (City) implemented procedures to minimized the short and long-term impact on receiving water quality from new development and redevelopment. Major steps were taken to accomplish this goal under Order No. 2001-001. The City completed the requirements of the plan which include the following four components:

1. Assessment of General Plan
2. Modification of Development (Project Approval Process)
3. Revision of Environmental Review Process
4. Conducted Education Efforts Focused on New Development and Redevelopment

During PY2008-09 the process continued to evolve to incorporate requirements under new Municipal Permit Order No. R9-2007-0001 and Interim SUSMP requirements. The City adopted updated Ordinances in PY1 to comply with new requirements.

2.2 ASSESSMENT OF GENERAL PLAN

The General Plan provides a jurisdictional framework for directing land use and development decisions within the City of El Cajon. Therefore, it is important that the General Plan include provisions to address water quality. The City incorporates elements into the General Plan that provide an adequate foundation for controlling land use and development in a manner consistent with water quality objectives required by the Municipal Permit Order No. 2007- 001 (Permit).

On January 14, 2003, Resolution No. 10-03 was approved amending the General Plan and adding storm water runoff policies and objectives. The amendment is consistent with the City's Jurisdictional Urban Runoff Management Plan (JURMP) and provides policy and objectives dealing with storm water runoff to guide decision-making as mandated in the Permit. A copy of Resolution No. 10-30 is included in Appendix A.2. A copy of the General Plan is shown on the following page.

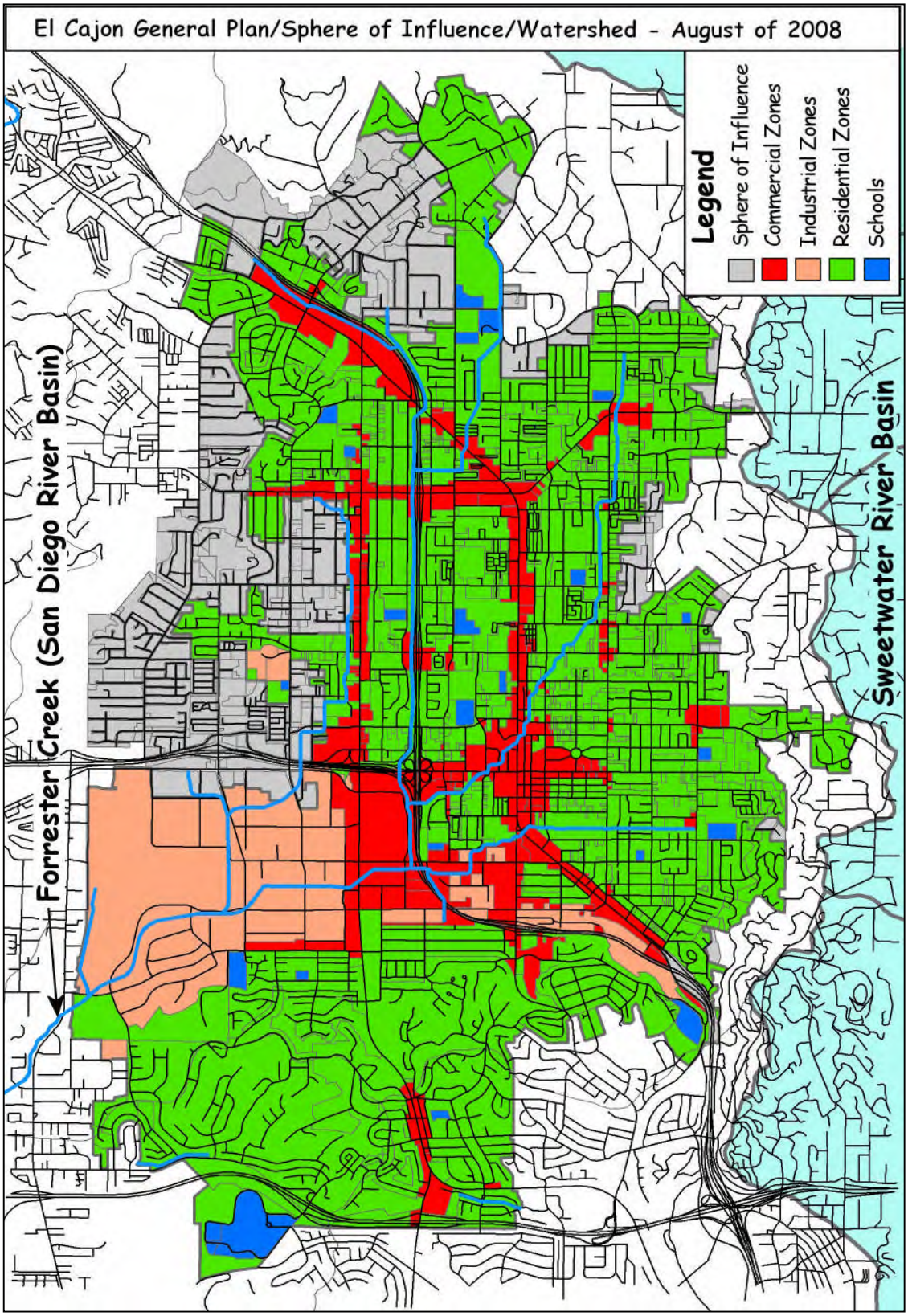
El Cajon General Plan/Sphere of Influence/Watershed - August of 2008
Legend
Sphere of Influence
Commercial Zones
Industrial Zones
Residential Zones
Schools
Forrester Creek (San Diego River Basin)
Sweetwater River Basin

8395

2.3 MODIFICATION OF DEVELOPMENT

2.3.1 Development Project Approval Process

Development becomes a project once the applicant completes planning action forms that describe the type of development proposed. The planning action is routed to many departments including Storm Water. Consolidated comments from Public Works are attached directly to the project as a list of conditions to the proposed planning action. Conditions are then reviewed and accepted by City Council making them enforceable. The City does not issue building permits until all requirements addressing water quality are fulfilled. Similarly, the City does not grant a final occupancy certificate until all storm water requirements are completed.

To protect our natural resource waterways, the City has continued ordinance development and implementation to address water quantity and quality. New and Redevelopment projects are reviewed for applicable BMPs to attain:

- Reduction in paved areas
- Maximize infiltration
- Detain or retain flows to reduce the speed at which water discharges to natural areas, and break Directly Connected Impervious Areas (DCIAs).
- Minimize potential pollutants from reaching the Municipal Separate Storm Sewer System (MS4) from grading and other construction activities by meeting the provision specified in Section D.2 of the Permit.
- Require Industrial applicants subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities to provide evidence of coverage under the General Industrial Permit.
- Require project proponents to provide proof ensuring ongoing long-term maintenance of structural Treatment Control BMPs.

2.3.2 Standard Urban Storm Water Mitigation Plan

The City participated with other Copermittees in revising and updating the BMP requirements that were listed in the Model Standard Urban Storm Water Mitigation Plan (SUSMP) that was submitted to the Regional Water Quality Control Board (RWQCB) in February 2002. Consequently, the City revised and updated Ordinance 4717 adopted on December 2002 to implement local SUSMP to reduce pollutants and runoff flows from all new development and significant redevelopment. The City recently adopted Ordinance 4908, which defines the enforceable Municipal Code 16.60 for New and Re-Development pursuant to Program R9-2007-0001.

The City will also incorporate a Hydromodification Management Plan (HMP) into the City's Local SUSMP. As of the writing of this annual report, the HMP is being developed by a consultant and regional workgroup and the draft HMP was submitted on January 24, 2009 with a revision submitted in May of 2009. After receiving comments from the RQWCB in June of 2009, the final HMP is being prepared along with the creation of an HMP Sizing Calculator. The final HMP will be added to the Local SUSMP after approval by the Regional Board. No

priority projects in the City of El Cajon have met HMP criteria as of yet, as no projects have disturbed more than fifty acres, and the City does not anticipate any projects that will in the future.

Projects triggering the New and Re-Development SUSMP requirements are:

- Housing projects with at least 10 units
- Commercial developments at least 1 acre in size
- Heavy Industry
- Automotive repair shops
- Restaurants
- Hillside developments that are 5,000 square feet or greater
- Developments within Environmental Sensitive Areas
- Parking lots 5,000 square feet or more or with 15 or more parking spaces potentially exposed to urban runoff
- Streets, roads, highways, and freeways with an area equal to or greater than 5,000 square feet
- Retail Gas Outlets

Projects trigger the SUSMP requirements during the initiation of a planning action or environmental investigation brought on by the California Environmental Quality Act (CEQA). The Storm Water section of Public Works reviewed a total of 49 planning actions, 13 of which were categorized as high priority SUSMP projects (please refer to Appendix A.2 for a list). The City also carried over 10 SUSMP projects that are in varying degrees of development, design, or construction from previous years. Planning actions and New Development projects are tracked using a MS Excel spreadsheet.

An example Storm Water Mitigation Plan (SWMitP) that includes a list of SUSMP conditioning requirements are given to SUSMP priority projects at the earliest planning stage (please refer to Appendix A.2 for sample SWMitP). BMPs and the pollutants that are targeted for reduction or elimination to the maximum extent practicable (MEP) are listed in Table 1.

Table 1 – BMP to Pollutants for New and Re-Development Projects

BMP	Primary Pollutants	303(d) Pollutants
Site and Facility Design	Flow	
Site Design and Landscape Planning – SD-10	Flow	
Efficient Irrigation – SD-12	Nutrients	**TDS** **Nutrients**
Storm Drain Signage – SD-13	Trash Oil & Grease Toxics	
Pervious Pavements – SD-20	Sediment Oil & Grease	**TDS**
Trash Storage Areas – SD-32	Trash Bacteria	**Bacteria**
Vehicle Washing Areas – SD-33	Metals Detergent	**TDS**
Detention Basin - TC-22	Trash Sediment Metals Bacteria Oil & Grease Organics	**TDS** **Bacteria** **Nutrients** **ODS (Oxygen Demanding Substance)**
Vegetated Swale – TC-30	Sediment Metals Oil & Grease Organics	**TDS** **Nutrients** **ODS**
Bioretention – TC-32	Sediment Oil & Grease Nutrients Trash Metals Bacteria Organics	**TDS** **Nutrients** **Bacteria** **ODS**
Media Filter – TC-40	Sediment Trash Metals Bacteria Oil & Grease Organics	**TDS** **Bacteria** **ODS**
Water Quality Inlet Filter – TC-50	Oil & Grease Trash	
Vortex Separator – MP-51	Trash Sediment	
Drain Inserts – MP-52	Trash Oil & Grease	
Underground Concrete Retention - Proprietary	Flow	

SUSMP projects must identify pollutants of concern based on anticipated and potential pollutants generated from the proposed project and implement BMPs that target the reduction or elimination of the identified pollutants to the MEP. Anticipated and potential pollutants generated by land use type are shown in Table 2.

Table 2 – Anticipated and Potential Pollutants Generated by Land Use Type

Priority Project Categories	Sediment	Nutrients	Heavy Metals	Org Cpds	Trash & Debris	ODS	Oil & Grease	Bacteria & Viruses	Pesticides
≥10 SFR	X	X			X	X	X	X	X
≥1 acre Commercial	P	P		P	X	P	X	P	P
Heavy Industry	X		X	X	X	X	X		
Automotive			X	X	X		X		
Restaurants					X	X	X	X	
Hillside Development	X	X			X	X	X		X
Parking Lots ≥5000 sq. ft.; ≥15 stalls	P	P	X		X	P	X		P
New Streets ≥ 5000 sq. ft.	X	P	X	X	X	P	X		P
Retail Gas Outlets			X	X	X	X	X		
≥ 5,000 sq ft Redevelopment	X	P	P	P	X	P	P	P	P
X- anticipated ODS – Oxygen Demanding Substances P – Potential									

Once potential pollutants of concern are identified for the proposed SUSMP project, BMPs must be selected from a list of required and project specific BMPs provided below in Table 3. All site design criteria are applied to every SUSMP project while source and treatment controls are dependent upon site location and type of pollutants.

Table 3 – Site Specific BMPs

	New Development (Including Re-Development)									
	Home Subdivisions ≥10 units	Heavy Industry ≥1 acre	Commercial Development ≥1 acre	Automotive Repair Shops	Restaurants	Hillside Development ≥ 5,000 sq ft	ESAs	Parking Lots ≥15spaces; ≥ 5,000 sq ft	Street, road, highways, and freeway ≥5,000 sq ft	Retail Gasoline Outlets
General Site Design (Apply All)										
Control Peak Runoff Rates	X	X	X	X	X	X	X	X	X	X
Minimize impervious Areas	X	X	X	X	X	X	X	X	X	X
Conserve Natural Areas	X	X	X	X	X	X	X	X	X	X
Protect/slopes/and channels	X	X	X	X	X	X	X	X	X	X
Minimize effective imperviousness	X	X	X	X	X	X	X	X	X	X
SOURCE CONTROLS (Apply all that are Applicable)										
Storm Drain Message and Signage*	X	X	X	X	X	X	X	X	X	X
Outdoor storage area design		X	X	X	X					X
Trash Storage Area Design		X	X	X	X					X
Loading/unloading dock area design		X	X							
Repair/maintenance bay design				X						
Vehicle/Equipment/Accessory washing area design				X						
Fueling Area Design										X
Proof of Control Measure Maintenance	X	X	X	X	X	X	X	X	X	X
TREATMENT CONTROLS (Apply at least two)										
Inlet Filters**	X	X	X	X	X	X	X	X	X	X
Grass Strip Filter	X	X	X	X	X	X	X	X	X	X
Grass Swale Filter	X			X		X	X	X	X	
Detention/Infiltration Basin	X		X	X	X	X			X	
Porous Pavement Detention	X		X		X	X		X		
Porous Landscape Detention	X	X	X		X			X	X	
Infiltration Trench	X		X				X	X		
Media Filter	X	X	X				X	X		
Proprietary Controls						X				X
Other										

For PY2008-09, three (3) projects completed construction and included Treatment Control Best Management Practices. Projects with SUSMP requirements that were completed and inspected for BMP implementation in 2008-09 are listed in Table 4. For the current inventory of all sites with Treatment Control BMPs and BMP implementation infeasibility analyses please refer to Appendix A.2.

Table 4 – Application of SUSMP Structural BMPs for Completed Projects

	Detention Basin/Area	Inlet Filters	Media Filter	Infiltration basin/swale	Hydrodynamic Separator	Proof of Maintenance
1053 Loma Portal Dr. Principato Residence	NA	X	NA	X	NA	X
670 El Cajon Blvd. New Car Dealership	X	NA	NA	NA	X	X
442-444 El Cajon Blvd. Performance Chopper	NA	NA	X	X	NA	X

The Performance Chopper project will be elaborated as an example of SUSMP BMP implementation. This project was an existing commercial property. The project had two SUSMP triggers; the parking reconstruction was greater than 5,000 square feet and the project was a new automotive servicing shop. The structural BMPs that were implemented consisted of treatment only, as the impervious footprint of the project remained the same. The property was connected to an alley on the lower side of the project and did not have a storm drain system in the vicinity, making it impossible to use a media filter system without a mechanical pump system. The parking lot flow was directed toward the north corner of the property where it would enter three 3'x3' sand media filters with 4" perforated pipes at the bottom. These pipes then connected to a 24"x24" catch basin directly after the sand media filters. The catch basin had a sump pump that discharges into a pervious, riprap swale. This swale also takes any higher flows that overtop the sand filter system. This whole system finally discharges through an opening in a wall to the contiguous alley.

2.3.3 Waiver Provisions

In the event that a Priority Project is unable to meet the treatment control BMP sizing requirements outlined in the City's SUSMP, the City has the authority to issue a wavier. In order to receive a waiver for treatment control BMP sizing requirements, the project must prove that all available treatment control BMPs have been determined to be infeasible for the site. If a waiver of infeasibility is issued, the City will notify the RWQCB within five days of granting the wavier. The following information will be provided to the Regional Board:

- The name of the City employee granting the waiver
- The name of the developer receiving the waiver
- The location of the site
- The reason for granting the waiver
- A description of the BMPs required for the site

The City has never granted such a wavier to a Priority Project in the past and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may choose to

develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the projects' watershed.

Table 5 – BMP Implementation Summary

BMP	Percent Implemented	Pollutant Prevented
Control Peak Runoff Rates	100	Flow
Minimize Impervious Areas	100	Flow
Conserve Natural Areas	100	Flow
Protect Slopes and Channels	100	Sediment
Minimize effective imperviousness	100	Flow
Storm Drain Message and Signage	67	Trash, Oil & Grease
Trash Storage Areas	100	Trash, Oil & Grease
Repair/Maintenance Bay Design	100	Oil & Grease
Proof of Maintenance	100	Trash, Oil & Grease
Inlet Filter(s)	100	Sediment, Trash, Oil & Grease
Grass Strip or Swale (Biofiltration)	67	Flow, Sediment, Oil & Grease, Trash
Detention Basin/Area	100	Flow, Sediment, Oil & Grease, Trash
Hydrodynamic Separation System	100	Trash, Sediment, Oil & Grease
Infiltration Strip/Area	67	Flow, Sediment, Oil & Grease, Nutrients (**TDS**)

Note on Table 5: Percentages of BMPs implemented, shown in Table 5, are based on the number of applicable sites. For example, if there were three hillside Development projects and all three-implemented slope stabilization, that would be all of the applicable projects. A 100% implementation equates to those applicable sites and not to all sites.

2.4 TREATMENT CONTROL BMP MAINTENANCE INSPECTIONS

All treatment control BMPs installed at priority development projects are regularly inspected by the City to ensure treatment controls are operating effectively and are being properly maintained. Inspection frequencies are based on the project's assigned TTWQ priority as determined by the criteria outlined in the City's 2007 JURMP. Table 6 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 6 – Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Inspection Frequency
High	Annually (prior to the start of the rainy season)
Medium	Every two years
Low	As needed

As required by the Municipal Permit, a minimum of 20% of the total number of projects with approved treatment controls and a maximum of twice the average number of projects with treatment control BMPs approved per year are inspected annually. Additionally, 50% of all medium priority sites with drainage inserts are inspected annually. Inspections include examination of all treatment control BMPs at the site to verify that each treatment control BMP is working, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings are documented by the inspector using the City of El Cajon Treatment Control BMP Inspection form in Appendix A.2. If any deficiencies in treatment control operation and maintenance are noted during the inspection, the responsible party is notified, and appropriate enforcement actions are taken to achieve compliance. The list of the sites inspected in PY2008-09 can be found in Appendix A.2. Inspection findings and follow-up actions for each development site with installed treatment controls are included in the City's treatment control BMP tracking database.

The City requires annual verification of proper maintenance of all priority development treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. The City mailed annual verification letters to the responsible party for each priority development site with treatment control BMPs in the City's electronic treatment control BMP inventory. The verification letter requires the responsible party to sign a statement verifying that the treatment control BMPs for which they are responsible are being properly maintained in accordance with the site's maintenance agreements. An example of the Annual Treatment Control BMP Maintenance Verification letter can be found in Appendix A.2. The annual maintenance verification of treatment controls by the responsible party for maintenance is unlike any previous program within the City. Because of this, the City anticipates having to closely re-evaluate its annual maintenance verification procedure in the coming years and modify the program where necessary.

2.5 REVISED ENVIRONMENTAL REVIEW PROCESS

The City of El Cajon revised CEQA forms and checklists to include questions related to water quality issues. The City reviews all projects for CEQA; four projects completed the revised forms for PY2008-09. The forms are attached in Appendix A.2.

2.6 DEVELOPMENT PLANNING OUTREACH EFFORTS

Education efforts for disseminating information to planners, developers, and contractors on the JURMP requirements for new and significant redevelopment is provided through one-on-one and group discussions at the time of the various discretionary plan reviews and checks, during BMP development, and at time of obtaining the building permit. Topics include:

- Federal, state, local water quality laws and regulations
- Connection between land use decision and water quality goals
- New and Redevelopment requirements
- Water quality impacts from development (urbanization)
- Methods for minimizing impacts of development on water quality.
- Implementation of SUSMP requirements

2.7 REGULATORY COMMENTS

As of the writing of this report, no regulatory comments have been received for JURMP Annual Report 2007-08.

SECTION 3 CONSTRUCTION COMPONENT

3.1	**Introduction**	**2**
3.2	**Prevention of Polluted Runoff**	**2**
3.3	**Updates to Ordinances**	**3**
3.4	**Modification of Construction and Grading Approval Process**	**3**
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SECTION 3 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

Construction in the City of El Cajon is a constant activity. Whether it is a 500 square foot remodeling project or a multi-single family residential subdivision, a minimum list of construction BMPs must be in place prior to any earth disturbance or material storage. With a City built out to its current borders, the City experiences re-development activities more so than new development. However, clearing currently developed lands and re-development is at the heart of this community's construction and revitalization efforts.

Park Avenue Subdivision

3.2 PREVENTION OF POLLUTED RUNOFF

The City uses the CalTrans Construction Site BMP Manual together with the California Storm Water Quality Association Best Management Practices (BMPs) Handbook as guidance for the application of appropriate BMPs. An emphasis on pollution prevention is the easiest and most convenient set of BMPs to implement and achieve the elimination of polluted discharges. The following prevention practices are part of the minimum set of BMPs for construction sites.

- Prevent sediment and other polluted runoff – Design a sediment basin to trap runoff for zero discharge, specifically for larger construction sites with enough room for sizing adequate basins.
- Prevent bacteria discharges – Place portable sanitary facility in secondary containment and secure to the ground or stable structure. Prevents tipping and loss of bacteria (fecal coliform) containing material.
- Prevent alkaline (greater than 10.0 pH) runoff – Require properly designed and installed Concrete Washout areas and encourage concrete contractor to haul away concrete waste. Concrete waste disposal should be at an offsite location with adequate control measures.

The City works closely, often one-on-one, with developers at the counter and field discussing ways to prevent pollution from entering the storm drain. The pollution prevention practices are required for any applicant looking for a building permit.

Copies of construction handouts provided by the building department and additional information given to developers, contractors, and homeowners at the time of Erosion Control Plan submittal can be found in Appendix A.3.

3.3 UPDATES TO ORDINANCES

In accordance with Section D.2.a of the Permit, the City Municipal Code Title 13 Chapter 13.10 *Storm Water Management and Discharge Control* was updated in 2008 to comply with the new grading requirements. The City Municipal Code Title 13 Chapter 13.10, Section 13.10.140; and Chapter 15.64, *Grading*, work together in addressing land disturbance, demolition, and construction activities for the elimination of sediment and other pollutants from discharging into the City's storm drain system.

3.4 MODIFICATION OF CONSTRUCTION AND GRADING APPROVAL PROCESS

Shortly after the Chapter 13.10 was updated, the City assessed and modified the local construction permit and grading approval process to comply with Section D.2.a of the Permit. All construction projects are required to go through a storm water review process. Construction and grading projects are required to implement measures to ensure that pollutants from the construction site are reduced to the Maximum Extent Practicable (MEP) and will not cause or contribute to an exceedance of water quality objectives. The City does not allow clearing of vegetation matter or grading activities until all necessary environmental clearances, including water quality, are secured and a grading, drainage, and erosion/sediment control plan is prepared, reviewed and approved by the City. During the review process, the City ensures that all applicable grading and storm water ordinances are fully implemented as required per El Cajon City Code Title 13, Chapter 13.10, Section 13.10.140; grading ordinance Chapter 15.64 and Chapter 16.60. The City does not issue Building Permits until requirements addressing storm water and water quality have been fulfilled.

3.5 PRIORITY CONSTRUCTION SITES AND SOURCE IDENTIFICATION

Periodically the City reviews the list of high priority construction projects to update the list for close monitoring and inspection of construction activities and BMPs implementation for reducing or eliminating pollution from entering the City's storm drain system. High priority status is applied to projects that pose a potential threat to water quality or location. Priority is also given to SUSMP projects that are complete and need to have the storm water controls verified and the maintenance plans reviewed. Table 1 lists the selection of BMPs that must considered and the appropriate BMPs installed at all high priority projects. See Section 3.8 for any Enforcement Actions. In PY2 the City had 2 medium priority construction projects and 13 active high priority construction projects, including 11 SUSMP projects. Also in PY2 the City approved 93 low priority projects for construction. A list of all active high priority construction sites is given in Appendix B.2.c. No project was required to have advanced treatment during construction as none were classified as an exceptional TTWQ.

3.6 BMP IMPLEMENTATION AND REQUIREMENTS

The City established minimum BMPs that must be implemented at all construction sites regardless of the water quality prioritization. The City developed a list of BMPs required at all construction sites. This list first appeared in the JURMP as Appendix C, but has recently been revised and updated to comply with Order R9-2007-0001. BMPs specifically prevent, remove, or eliminate a pollutants or group of pollutants from entering the storm drain system.

Table 1, below, lists the minimum required BMPs for construction sites, the primary pollutant eliminated and the potentially affected 303(d) pollutant. Eliminating pollutants meets the Clean Water Act and Permit objectives for maintaining the biological, physical, and chemical integrity of the State's waters, while a "no impact" condition meets the restoring requirement of the Clean Water Act objective.

A first step toward connecting construction activities to water quality is shown in the following table. The next step is to quantify how many sites are compliant with the minimum BMP requirements. Table 1 summarizes the minimum BMP requirements and the pollutants that each targets for prevention (including minimization of grading activities), removal or elimination. Table 2 lists the different types of construction projects and the minimum BMPs required for each category. Table 3 connects and quantifies the number sites compliant with the required BMPs. In Section 11, the Effectiveness Assessment of the Construction Component will draw on this connection between BMP implemented and pollutant to determine if the program activities adequately reflect a move toward improving water quality or have little effect on water quality.

Table 1 – BMP to Pollutant

BMP	Application	Primary Pollutant Removed	303(d) Pollutant Impact
Silt Fence (SC-1)	Perimeter Control to remove sediment and debris in runoff	Sediment	TDS
Desiltation Basin (SC-2)	Captures sediment runoff and eliminates sediment runoff	Sediment	TDS
Gravel Bag Barrier (SC-6)	Perimeter Control for pavement to pavement. Removes sediment runoff	Sediment	TDS
Fiber Roll (SC-5) or Coconut Fiber Blankets	Erosion Control for slopes to prevent sediment runoff	Sediment	TDS
Stabilized Construction Entrance (TC-1)	Tracking control for imperviousness to pavement to prevent sediment tracking into streets	Sediment	TDS
Street Sweeping (SC-7)	Tracking control for paved areas. Collects/removes sediment tracked onto pavement	Sediment	TDS Phosphorus
Material Storage (WM-1)	Material coverage and containment or pavement or impervious surfaces to eliminate polluted runoff	Stucco, paints, concrete	pH TDS

BMP	Application	Primary Pollutant Removed	303(d) Pollutant Impact
Solid Waste (WM-5)	Trash/debris coverage and containment. Prevent trash runoff	Trash, debris*	Bacteria Phosphorus
Concrete Washout (WM-8)	Containment and disposal of concrete washout. Prevents concrete runoff	Concrete-laden waters	pH TDS
Sanitary Waste (WM-9)	Containment of sanitary waste. Prevents bacteria runoff	Bacteria	Fecal coliform
Vehicle/Equip Management (NS-8, NS-9, NS-10)	Containment of petroleum fluids. Prevents oil & grease runoff	Oil & Grease	TDS

***** Pollutant being monitored by East County Cities
"-" Designates "no impact" on levels of 303(d) pollutants; supports Clean Water Act objective to maintain or restore water quality

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Implementation is measured through onsite inspections. Success of that implementation depends on stage of project at time of contact, materials presented, BMP selection, and developer motivation to comply with construction requirements. The City provides a Storm Water Guideline to developers for Construction Projects. This simple, easy to use guide lists the construction BMPs to use for construction activities that would occur outdoors and potentially affect storm water quality.

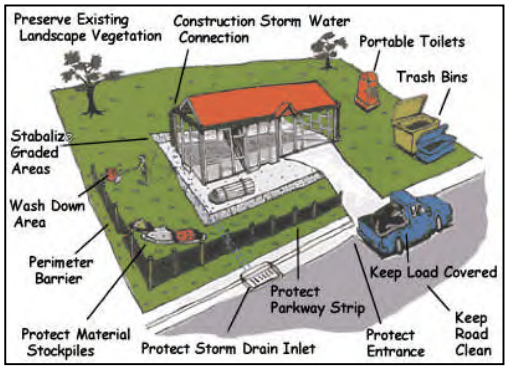

Associations, such as the Building Industry Association (BIA), have assisted in disseminating information to contractors and builders. Those construction personnel who do not belong to associations receive BMP information at the time of permit application or permit issuance. There is a noticeable difference between Storm Water savvy developers and those just starting their first storm water compliance experience. The City is working towards optimizing interactions at the Public Works counter. Landscaping as early as possible is emphasized regardless of season. This information is provided to contractors at permit issuance and during each scheduled inspection. BMPs must be appropriate for site-specific conditions. Installing BMPs for the sake of compliance is not complying with MEP.

There are four categories of construction projects:

1. Pools, remodels, and additions
2. Single Family Residences, Condo Conversions, and Subdivisions
3. Hillside Development
4. Commercial/Industrial

The minimum required BMPs per category of construction are shown in Table 2, on the next page.

The next steps complete the BMP cycle. By verifying during inspections that the BMP is:

a. Present as required – indicates changes in knowledge and awareness.
b. Implemented properly and functioning correctly – indicator of behavioral changes.

Printed materials are available at the Public Works Department making over-the-counter interactions into educational opportunities. A City BMP guide, edited summaries of application JURMP sections, and personalize service functions as the City's implementation tools. To prioritize effectiveness efforts, the City focuses on the prevention and elimination of the 303(d) pollutants to address the restoration requirement of the Clean Water Act and our Municipal Storm Water Permit. Overall Effectiveness of the Construction Component is provided in Section 11.

Table 2 – Required BMPs for Construction Sites

Required Construction BMP	Construction Type			
	Pools, Remodels, Additions	SFR Subdivisions	Hillside Development	Commercial and Industrial
Silt Fence - SC-1	X	X	X	X
Storm Drain Inlet Protection (+filter fabric) SC-10	X	X	X	X
Sediment Basin or Trap SC- 2 or 3		X	X	X
Check Dams - SC-4		X	X	X
Fiber Rolls - SC-5			X	
Gravel Bags - SC-6	X	X	X	X
Street Sweeping - SC-7	X	X	X	X
Stabilized Construction Entrance - TC-1	X	X	X	X
Dust Control - WE-1		X	X	X
Scheduling - SS-1	X	X	X	X
Velocity Dissipation Devices - SS-10			X	
Preservation of Existing Vegetation - SS-2		X	X	X
Coconut Fiber Blankets - SS-7			X	
Material Storage - WM-1	X	X	X	X
Solid Waste Storage - WM-5	X	X	X	X
Concrete Waste - WM-8	X	X	X	X
Employee Training - City of El Cajon		X	X	X

X = Required; Implemented; and Verified

3.7 INSPECTION

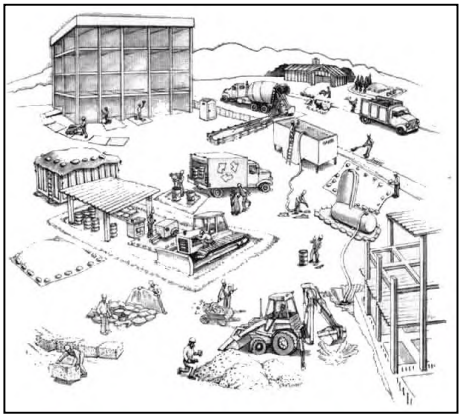

The City inspects all high priority projects monthly during the dry season and weekly during the wet season. Inspections are completed using the form provided in Appendix A.3. In PY2, the City had 20 high priority projects, all of which were fully or partly active construction sites during the permit year. SUSMP projects are considered high priority construction projects and are inspected on the same schedule. All projects are inspected prior to completion of the projects to verify proper and complete installation of storm water treatment controls and review any long-term maintenance plans. Two SUSMP projects were completed during PY2 and eight became or remained inactive.

All projects designated medium priority are inspected monthly during the Wet Season, on an as-needed basis during the Dry Season and in response to a complaint received from City staff or the general public. The City had 2 medium priority projects under construction during PY2. The City maintains a detail record for high and medium priority projects. A spreadsheet showing the period of time, in weeks, that each construction site was active within the rainy season and the number of inspections conducted during the rainy season and the dry season is attached in Appendix B.2. It is important to note that inspections in the spreadsheet account only for the inspections conducted by the Public Works Department; inspections conducted by other departments, such as Storm Water, are not included in the table.

In accordance to the Municipal Permit and the City's JURMP document, the City inspects low priority construction projects on an as needed basis. Building Department personnel constantly inspect all projects designated as low priority for there own Building Code requirements. For this reason, the Building Staff has been trained by the Storm Water Department to recognize when to contact Storm Water personnel due to improper construction BMPs. The City approved 93 low priority projects (consisting mostly of single family residential additions) for construction in PY2. During Permit Year 2008-09 the City continued to work toward creating a means of gathering more detailed information for low priority construction sites, including the period of time the site is active within the rainy and dry seasons.

It is important to note that only inspections that were documented are included in the spreadsheet mentioned above. Visual inspections, which did take place through out the permit year, are not tracked.

Table 3, on the following page, shows the percentages of minimum BMPs implemented at high priority constructions, verified through inspections. The percentages are calculated from the inspection reports. The percentage indicates the number of sites that implemented the required BMP at the time of inspection. A "Yes" under corrective action indicates that specific conditions noted during the inspection warranted actions by the contractor, such as maintenance or BMP improvements.

Table 3 – Percent Implemented and Verified for High Priority Sites

BMP	Percent Implemented	Discharge during Rain	Corrective Action	Citation
Silt Fence	87	No	Yes	Yes
Storm Drain Inlet Protection	83	No	Yes	Yes
Sediment Basin	69	No	Yes	No
Check Dams	55	No	Yes	Yes
Fiber Rolls	69	No	Yes	No
Gravel Bag Berm	79	No	Yes	Yes
Street Sweeping/Vacuum	86	No	Yes	No
Stabilized Construction Entrance	90	Yes	Yes	Yes
Hydroseeding	52	No	Yes	No
Geotextiles and Mats	25	No	Yes	No
Material Delivery and Storage	100	No	No	No
Stockpile Management	86	Yes	Yes	Yes
Solid Waste Management	100	No	No	No
Concrete Waste Management	97	No	Yes	Yes
Sanitary Waste Management	99	No	Yes	No

Inspection of construction sites in PY2 verified that most construction sites implemented BMPs. Unfortunately the statistics for this permit year are lower than usual. This is mostly due to the loss of funding for many of our high priority construction projects. The inability for our staff to locate anyone with responsible charge for projects that fell into receivership led to the extended periods of time where BMPs remained inadequate. However, no deficiency was left to cause an illicit discharge offsite to any water bodies. All other deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions, and through enforcement actions. If corrective actions were needed, the construction site either completed the corrective action at the time of inspection or a follow-up visit was scheduled to verify the completion of corrective actions. When corrective actions are not completed in a timely manner, enforcement actions are issued. In PY2 the City had multiple enforcement actions related to construction inspections and follow-ups. Table 5 provides information about these enforcement actions. Enforcement actions are further discussed in Section 3.8 and a list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3.

Table 4 – Capital Improvement Project Assessment

2008-2009 CIP CONSTRUCTION SITE INSPECTIONS

Site Inspections		Enforcement Actions	
Job Site	**Minimum BMP's in place**	**Warning(s)**	**Administrative Citation(s)**
PCC Channel Repairs (JN 2996, Various Locations)	Y	N	N
E. Washington Ave. Street Resurfacing (JN 3133, Avocado to City Limits)	Y	N	N
Sewer and Storm Drain Rehabilitation (JN 3175, Various Locations)	Y	N	N
Washington Channel Emergency Repair (JN 3256, Civic Center Way)	Y	N	N
Emergency Sewer Repair (JN 3258, Fletcher Pkwy.)	Y	N	N
Street Resurfacing (JN 3265, Various Locations)	Y	N	N

Public Works inspectors inspect the CIP projects for Storm Water compliance on an as-needed basis. This may be as frequently as weekly, or even daily, but generally no less than twice per month (when the inspectors are on the job for non-storm water related inspections) while the project is active.

3.8 ENFORCEMENT

In PY2 the City had 16 enforcement actions pertaining to inspection follow-ups or complaints received for construction activities, 10 of which resulted in a monetary administrative citation. The City conducted follow-up inspections for all enforcement actions to verify that proper and complete corrective actions were taken in a timely manner. Corrective actions are needed to fix or improve a BMP even though that BMP may be implemented as written.

Administrative Citations are issued for discharges to the City's storm drain system. Most construction sites implement the minimum BMPs and inspections verified that the BMPs were effective in reducing or eliminating discharges to the storm water conveyance system. A list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3. A specific list of the construction related enforcements is on the following pages as Table 5.

Other non-compliance issues, except as described above, were not experienced during PY2, although some deficiencies were noted during construction inspections. Deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions and through citations. All violations and deficiencies were corrected in a timely manner.

None of the violations resulted in threats to the environment or human health and notification to the Regional Board was not required.

Table 5 – Construction Enforcement Actions

	Date	Business Name	#	Street / Location	Complaint/ Observations	City Action	Enforcement Action	Corrections Completed
1	6/25/09	Starlett Construction Inc	965	Arnele Ave.	Discharge of concrete residue directly into the storm drain. No BMPs installed.	The on site supervisor for Toyota was contacted on site and issued a citation. He was directed to clean the curb line of any remaining residue.	First	Yes
2	7/31/08	Habitat For Humanity	801	Avocado Ave.	Inadequate construction entrance allowing tracking of sediment into the street.	Written warning issued to the contractor. Advised to cease tracking sediment and sweep the street and sidewalk of all sediment.	Warning	Yes
3	6/10/09	Habitat For Humanity	801	Avocado Ave.	Sediment tracking and failure to maintain a construction entrance	Contacted the site superintendent and issued a first citation for the violations	First	Yes
4	4/8/09	American Wrecking Inc.	1310	Broadway	Sediment tracking onto second St.	Contacted the site superintendent and advised to install proper entrance and to sweep all paved areas.	Verbal	Yes
5	9/29/08	Condo Conversion	360	North First St.	Failure to maintain BMPS, tracking sediment	Citation issued to contractor with instructions to install and maintain BMPs	First	Yes
6	6/19/09	Suncoast Homes	1341	East Main St.	Failure to maintain BMPs for all bare soil.	Contacted the business representative and advised to install and maintain the BMPs. Citation was issued	Third	Yes
7	1/7/09	San Diego Contracting, Inc.	1539	East Main St.	Contractor has failed to maintain a construction entrance allowing sediment tracking onto roadway	Superintendent and assist. Were contacted and advised to improve the entrance and daily sweep.	Verbal	No
8	10/10/08	Vacant	198	West Main St.	Water discharging from the west side of the building with no BMPs in place. Water appeared to have an oily sheen.	The contractor was contacted on site. Water found pool at curb on Sunshine Ave. Discharge had stopped. Agreed to drain any remaining into grass. No Oil found, however water had rust in it.	Verbal	Yes
9	4/3/09		132	Meadow Crest Dr.	Sediment tracking, failure to install and maintain the required BMPs.	Contacted the property owner/ contractor and advised to install and maintain the BMPs and to sweep all paved areas. Citation issued.	Warning	Yes
10	4/23/09		132	Meadow Crest Dr.	Failure to install and maintain minimum BMPs.	A citation was issued and posted on site for tracking and failure to maintain the required BMPs.	First	Yes

	Date	Business Name	#	Street / Location	Complaint/ Observations	City Action	Enforcement Action	Corrections Completed
11	10/3/08		560	South Mollison Ave.	Security motor home on site leaking sewage near lot drain inlet.	Contacted the security person on site and advised to correct the leak and discharge black water into sanitary sewer. Also instructed to install a filter in lot drain.	Verbal	Yes
12	9/29/08	Condo Conversion	642	South Mollison Ave.	Failure to maintain BMPs, Trash piles on site and no filters in lot drains.	Citation issued to contractor with instructions to install and maintain BMPs	First	Yes
13	11/5/08	Mike Snyder	1338	Naranca Ave	Failure to install construction entrance, silt fencing and maintain.	Corrected	Fourth	Yes
14	4/7/09	Countrywide Concrete Cutting	1189	Naranca Ave.	Employee sweeping water and sediment into the street and curb with no BMPs in place.	Contacted the business owner on site and advised to cease and reclaim all pollutants.	First	Yes
15	10/7/08		1338	Naranca Ave.	Sediment tracking and failure to maintain BMPs	Notified the property owner that a citation was being issued for the violations.	Third	Yes
16	8/21/08	Cajon Valley Union School Distr.	189	Roanoke Rd.	Sediment tracking, failure to maintain BMPs.	Corrected	Warning	Yes
17	12/16/08		189	Roanoke Rd.	Failure to provide adequate BMPs during a significant rain event. Failed construction entrance and uncovered soil piles causing a large amount of sediment discharge from the site.	Contacted the site superintendent to install drain protection and provide source protection.	First	Yes
18	9/29/08	Condo Conversion	921	Sunshine Ave.	Failure to maintain BMPs, debris piles and tracking.	Contractor instructed to install and maintain required BMPs.	Second	Yes

3.9 CONSTRUCTION OUTREACH AND EDUCATION

Education of construction contractors and developers is conducted primarily through the permitting and inspection processes. The City's building department has the first contact with contractors and developers when a building permit application is completed. The following steps are taken by Building Division and Public Works/Storm Water staff:

1. Building Permit Application.
2. A Storm Water "Hold" is placed on the property.
3. Developer or contractor is given a Storm Water handout.
4. Discuss with developer or contractor, in detail, minimum BMPs and implementation requirements.
5. Developer or contractor generates an Erosion Control Plan plus any additional storm water requirements as necessary.
6. Review Erosion Control Plan and any additional requirements, comment, direct developer or contractor to make changes prior to approval.
7. Inspect according to priority.
8. Address Corrective Actions.

In PY2, the City reviewed and commented on 12 SUSMP projects, 21 Storm Water Mitigation Plans, 7 condominium conversion projects and 93 Erosion Control Plans for small projects. The City inspects all completed SUSMP projects to confirm proper installation of storm water controls and review the long-term maintenance plans. Copies of the Construction handouts and an example Erosion Control Plan Checklist for additions and remodels (small projects) are included in Appendix A.3.

Compliance is assessed through inspections by storm water staff or a City contractor. Inspections are completed on a scheduled frequency depending on the season. As mentioned above, during the rainy season high priority construction projects are inspected on a weekly basis.

3.10 IMPROVEMENTS AND REGULATORY COMMENTS

- Generating improvements increases program efficiencies by harvesting those BMPs that work and discarding those that do not.

Improvements

Improvements to the Construction Component include:

- Road Work – Vacuum any water used; no filtering allowed
- All Construction Entrances must have adequate aggregate size (Minimum 2-3") or sufficient shaker-plate systems.
- Continue to focus inspection efforts on BMP implementation to facilitate Effectiveness Assessment.
- Continue to use BMP Implementation Inspection Checklist to list minimum required BMPs for construction.
- Continue to include SUSMP projects in the High Priority category.
- Continue to inspect construction of SUSMP projects as High Priority construction.
- Perimeter control – Use silt fence as primary perimeter control.

BMP improvements are needed as follows:

- The City is planning to conduct training sessions with our construction inspectors to make sure that reporting and compliance procedures are being followed appropriately.

Regulatory Comment

Provide information for Item J.2.b.VII "For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspection conducted during the dry season, and the total number of inspections conducted for all sites."

Response

The spreadsheet mentioned in Section 3.7 above was created for Permit Year 2008-09 in response to Item J.2.b.VII. A similar spreadsheet was provided to the Regional Board for Permit Year 2007-08 as part of the City's response letter.

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SECTION 4 MUNICIPAL COMPONENT

4.1 INTRODUCTION TO MUNICIPAL FACILITY ACTIVITIES

As required by Section 4 of the Municipal Permit, existing municipal facilities must prevent or reduce pollutants in urban runoff by implementing a City-designed program to address specific outdoor activities that have the potential to impact water quality. Municipal facilities include streets, public parking lots, flood control devices, parks/recreation, administration and other public buildings, maintenance and storage areas, police, and fire/safety stations. Activities at any one of these facilities may have the potential for discharging pollutants as urban runoff or during a rain event. The Municipal Component of the JURMP defines a comprehensive program to reduce the potential for polluted discharges through:

- Pollution Prevention activities,
- Best Management Practice (BMP) implementation,
- Storm Water Inspections, and
- Recycling

Homeless

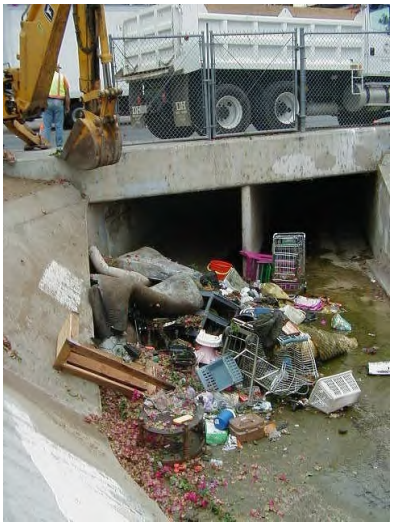

Of specific note are the Homeless that are not only a social problem, but become an uncontrollable water quality problem. Homeless encampments exist in storm water channels because of easy access and good outdoor weather conditions nearly year round. Although prevalent in the storm drain channels, the homeless are difficult to detect in the underground storm drain system comprised of reinforced concrete boxes and even more difficult to permanently remove. Detection is conducted through weekly/monthly inspections of popular entry places and complaints to the Storm Water Complaint Hotline. Removal is accomplished through police enforcement and the homeless have an option for other housing with the City's new interim housing project. The City cleans all of its channels at least twice annually and encampments are removed at that time, however, the encampments are often re-established once the channel maintenance in that area is finished.

The photograph above emphasizes the enormous amount of materials associated with homeless encampments in the storm drain channel. Other than the visible pollutants of trash and debris, there are also the less collectable, non-visible pollutants from human waste.

The list of major pollutants associated with the homeless living in these underground flood control devices are:

- trash, (a monitored pollutant for East County)
- debris, and
- fecal coliform (a listed 303(d) pollutant for Forester Creek).

Our dry weather-monitoring program is designed to capture information on the homeless and track elevated levels of fecal coliform. During PY2, D-Max Engineering undertook an investigation of fecal coliform and other constituents in the El-Cajon-area watershed. Results of the investigation were inconclusive, but did provide great insight into tracking bacteria in dry weather runoff. Specifics can be found in Section 7 of the Annual Report and Appendix A.7 of this Annual Report. The City will continue its efforts to reduce or eliminate the impacts caused by the homeless encampments within storm drain channels.

As in past years, Storm Water staff and City Maintenance crews teamed with Community Police and Interim Housing (a joint venture between Hammon Properties and Shadow Mountain Church) to move inhabitants into temporary housing, followed by clean up of storm drain channels. For those homeless willing to improve their situation, the Interim Housing group provides a "Hand Up" rather than a hand out. Those who wish to continue living in the City's storm drain system are detained, but eventually find new living places on the street. A County-wide, long-term solution to the homeless is not yet definable for storm water.

4.1.1 Prevention of Polluted Runoff

Anytime pollution is prevented from entering the storm drain system, less pollution must be managed at end-of-pipe. The following prevention activities and corresponding BMPs are fully implemented at one or more of the many municipal facilities located within the City. As noted in Introductory Section, the focus of PY2 is continued BMP implementation such that prevention of polluted runoff is achieved to the Maximum Extent Practicable (MEP). The primary pollutants of concern for this prevention effort are the 303(d) impairments of Forester Creek that include pH, total dissolved solids (TDS) as nitrates; and fecal coliforms. The only impairment associated with the City of El Cajon or the upper section of Forrester Creek is pH. Further discussion of pH origin and any corrective actions are presented at the end of this section. Trash and debris is a specific issue being addressed as part of a watershed effort with the City of Santee.

When pollution is prevented from entering the storm drain system, it is either collected or eliminated. Collection requires management of gathered wastes, while elimination is true prevention, but much more difficult to accomplish. The following municipal activities encompass collection and elimination activities.

1. Erosion and sediment control prevents soils and sediments from washing away during rain events. BMPs implemented for City Improvement Projects to control erosion and sediment during project activities are as follows:

- Preservation of existing vegetation
- Scheduling of projects
- Seeding and planting of native plants and trees that are draught resistant and do not contribute to discharges of vegetative matter to the City's MS4.
- Establish plant ground cover before removing erosion or sediment controls.

2. Roadway and street maintenance activities preserve these facilities for a longer, useful existence. Many maintenance activities keep pollutants from entering the storm drain system. Listed below are the maintenance activities with the gross amounts of pollutants collected. Pollution removed equates to preventing polluted runoff that could be transported in urban runoff or storm water discharges.

- Street sweeping and cleaning – Swept 19,030 miles of curbed streets and removed 3,463 cubic yards of materials that were disposed as solid waste. There is a total of 337 curb-miles of streets and a total of 483 lane-miles withinin the City. As stated in greater detail in the JURMP, some areas are swept on a more frequent basis. By collecting 3,463 cubic yards of trash, debris, and sediment, these pollutants did not enter the storm drain system and did not further impair Forrester Creek.
- Collected 52 cubic yards from spills and other miscellaneous operations
- Completed 58 special sweeps at the request of citizens or City staff, collecting 31 cubic yards of material. This is the same number of special sweeps, collecting slightly more material than collected during PY1 (i.e., 58 special sweeps and 29 cubic yards).

3. Municipal vehicle maintenance facilities provide a valuable service in keeping the City's vehicles in top running condition. Maintenance activities are conducted in a manner to keep pollutants from entering the storm drain system. Listed below are the activities and their designated areas.

- Conduct vehicle maintenance indoors or under canopies
- Area designated for washing vehicles is covered and wash water drains to an oil/water separator before discharging to the sanitary sewer
- Area designated for rinsing street sweepers directly discharges to the sanitary sewer
- Recycling motor fluids (oil and antifreeze), tires, batteries, and metal

4. Landscaping maintenance activities beautify our parks, recreation, and administration buildings. Pollution prevention maintenance activities include:

- Collection of grass clippings and discarded as solid waste
- Sweep or blow residual clippings onto turf areas
- Clean City-owned patio and plaza areas using a machine that contains the cleaning liquids.
- Aerate soil frequently to encourage rain penetration and infiltration
- Maintain an Integrated Pesticide Management (IPM) program

5. Maintenance Procedures for MS4s includes inspecting and maintaining MS4 by cleaning, removing sediment, debris and vegetation; repairing or replacing damaged and failing structures; and stenciling/posting signs at storm water inlets and conveyance systems. Approximately 1,720 cubic yards were collected during PY2. Maintenance crews responded to 71 requests by city staff and citizens to maintain the storm drain system. A work survey request (WSR) is completed for each of the requests and filed at the Maintenance Yard on Vernon Way.

- Storm Drain Inlet/ Catch Basin cleaning
- Storm Drain system repair and maintenance

6. Building Maintenance activities at Municipal facilities prevent pollution by collecting debris, dirt, and organic materials before rain events transport this material to the storm drain system. Wash water is disposed into the sanitary sewer and dry methods are used to collect materials to dispose as solid waste. The following are completed on a weekly schedule:

- Sweep and clean parking lots
- Clean sidewalks
- Sweep and clean entry ways
- Control irrigation runoff and over-spray

7. A Sewer Maintenance program assists in preventing sanitary sewer spills and prevents sewage from entering the storm drain system using the following plans and BMPs:

- Identify and respond to overflow spills and leaks
- Contain and properly dispose of spilled sewage for public and private sewer overflows

- Repair damaged and leaking public sewer lines
- Identify potential problem areas, such as sewer lines in isolated, hard-to-access canyons, or sewer lines at end-of-life condition, for inclusion in annual Capital Improvement Projects
- TV inspection of sewer main lines
- Annual cleaning of main sewer lines
- Quarterly (3-month) cleaning of sewer siphons, trouble spots and problem manholes
- Quarterly (3-month) rodding and descaling of problem sewer lines
- Cleaning and inspection of trunk and outfall sewer mains as part of the preventive and predictive program.

During PY2, the City cleaned 211.6 miles of sanitary sewer main line, while experiencing one public sanitary sewer overflow. As a result of this public sewer overflow, zero (0) gallon of sewage reached the storm drain. Of the 5 gallons involved in this spill, all 5 gallons were recovered and returned to public sewer. The City also responded to 9 private lateral sewage spills and recovered 166 gallons of sewage.

During PY1 (2007-2008), the City of El Cajon received the **Sewage Collection System of the Year Award** for collection systems under 250 miles in length by the **California Water Environment Association (CWEA)**. The award represents professional acknowledgement of decades of superior maintenance of the El Cajon Municipal Sewer System by many City workers. The City will continue to clean and maintain the Municipal Sewer to these standards.

4.1.2 Roads, Streets, Highways, & Bridges

The following are major City accomplishments during PY2 for roads, streets, highways, and bridges:

- Used the recently installed permanent wash rack for street sweepers to allow more time for cleaning equipment.
- Followed a strict preventive maintenance schedule for the new Elgin Crosswind street sweepers.
- Swept Downtown District twice per week.
- Swept non-Downtown Business and Commercial areas once per week
- Swept Residential areas and medians twice per month

Table 1 Summary of Street Sweeping Maintenance by Zone

Description	Silt (Yds)	Organic (Yds)	Trash (Yds)	Total (Yds)	Miles
Residential Streets	782	823	335	1940	9818
Residential Percentages	40.3%	42.4%	17.3%	100.0%	
Commercial Industrial Streets	623	470	155	1248	9254
Commercial Industrial Percentages	49.9%	37.7%	12.4%	100.0%	
Category Totals	1405	1293	490	3188	19072
Total Percentages	44.1%	40.6%	15.4%	100.0%	

City Maintenance crews collected a total of 3188 cubic yards of material from street sweeping. Figures 1 and 2 show the distribution of material by type, cubic yard amounts, and percentages for materials. Total cubic yards of materials decreased in PY2 although the City continues to increase the use of the Elgin Crosswind street sweepers. The total volume of trash, silt and organic material decreased, compared with PY1. Figure 2, below provides a summary chart for relative volumes and Figure 3 provides a comparison to amounts collected in previous years.

Figure 1

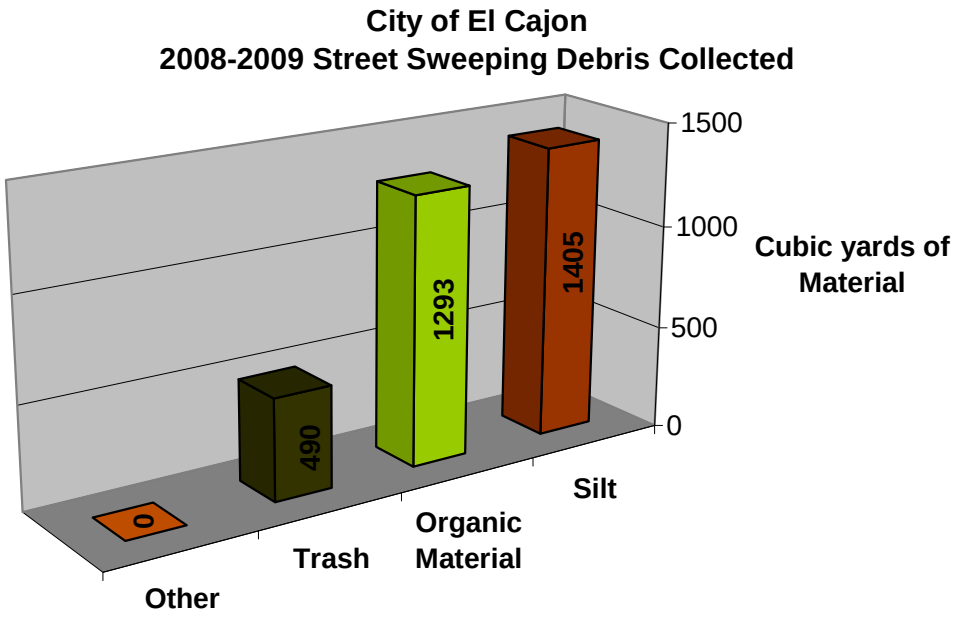

Comparing the percentages of materials collected in the streets with those from the channels, it is worth noting that about 250% more trash is collected in the street sweeping operations (490 cubic yards) than is recovered in channel cleaning operations (189 cubic yards). This difference may be due to the types of trash. The elimination of trash is best addressed at the source or

generator. For the City of El Cajon, street trash is typically generated in highly commercialized areas that include restaurants, convenient stores, and department-like stores. Continuing as a major priority into the next Permit Year will be an ongoing effort to keep the downtown areas trash-free and street-clean. These prevention efforts are a partnering effort with the El Cajon Community Development Corporation (ECCDC) and businesses in the downtown area.

Currently, ECCDC hires the St. Madaline Sophies students to pick up trash and cigarette butts in the downtown area. During PY2, the ECCDC and storm water staff organized community functions to increase public awareness and improve downtown areas. "Lend a Hand" days were scheduled throughout PY2.

Figure 2

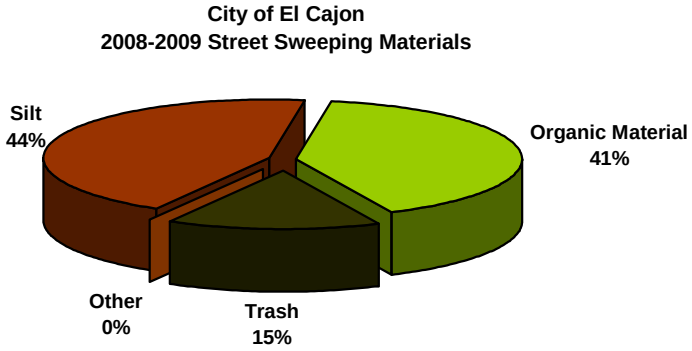

Figure 3

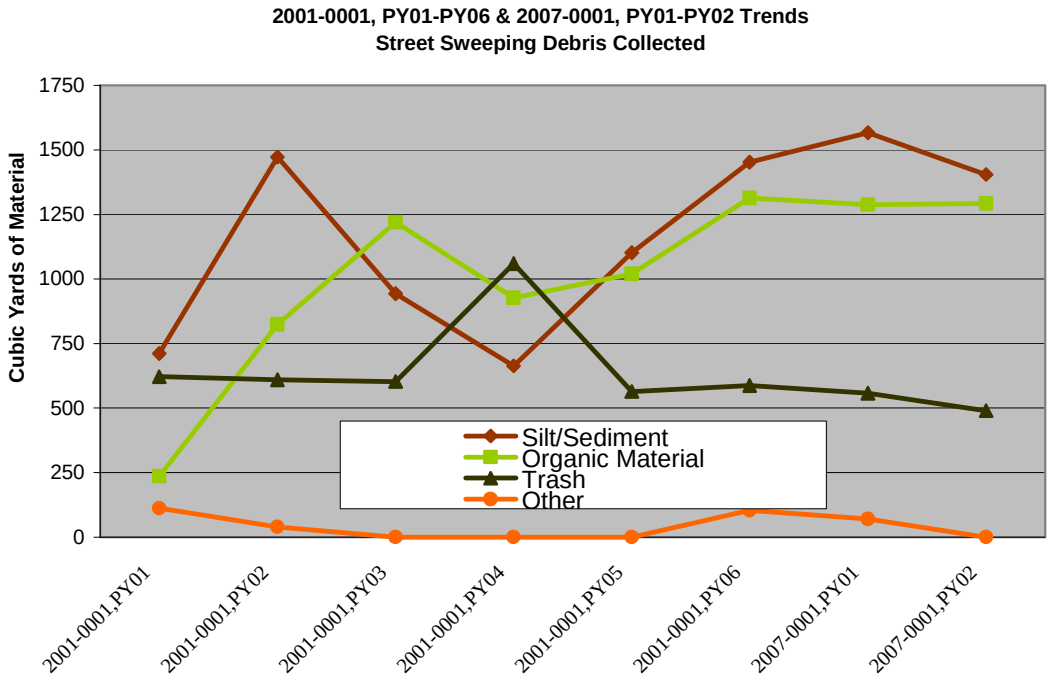

4.1.3 MS4 Maintenance

The City's Municipal Separate Storm Sewer System (MS4) is comprised of 53.0 miles of storm drains, inlets and catch basins, and 23.7 miles of open channels and culverts. The MS4 System functions to collect and convey surface runoff. Maintenance of this system is necessary for continuous transport of rainwater to prevent flooding and to drain urban flows away from populated areas and prevent flooding.

Figure 4

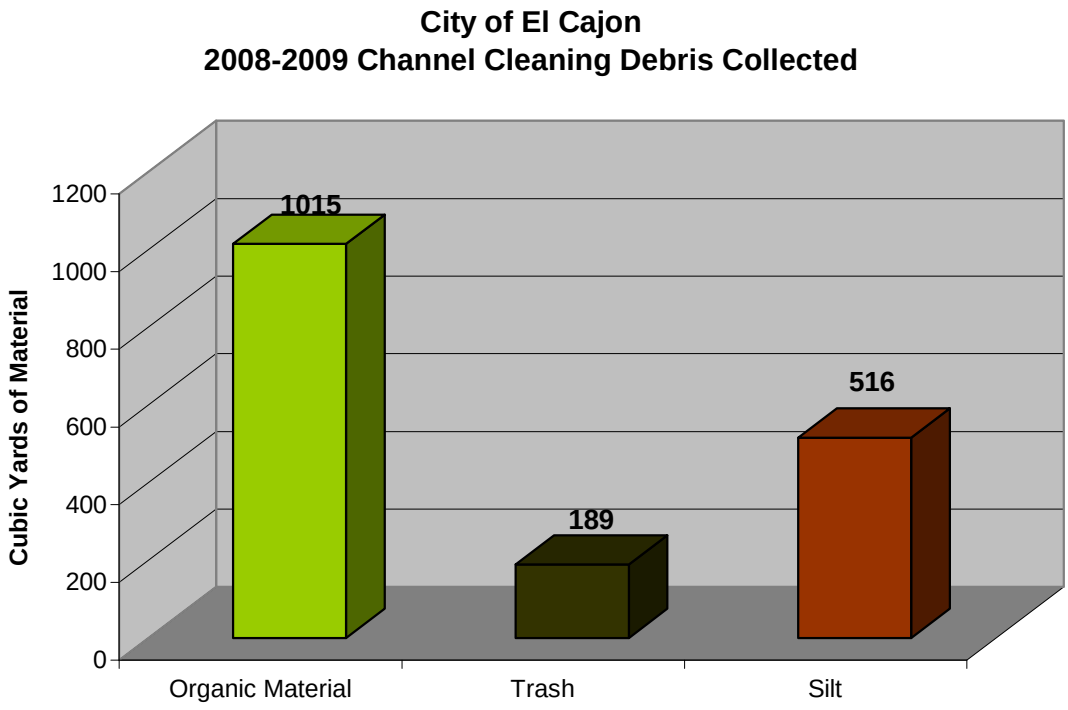

Work Service Requests (WSRs) document maintenance activities on the storm drain and open channel system. For PY2, 20 WSRs were completed for both emergency and non-emergency repairs/maintenance to the MS4. WSRs cover any type of needed maintenance and are available to all contacting our Municipal Maintenance Yard, located at 1050 Vernon Way, El Cajon.

The City's MS4 includes:

- Streets
- Gutters
- Storm Drain Inlets/ Catch Basins
- Underground pipes
- Culverts
- Rock-lined channels
- Concrete channels
- Unlined Creeks

City maintenance crews inspect all open channels once a month and perform a complete cleaning at least once each year. Storm drain inlets and pipes are inspected at least once each year and cleaned as necessary. Table 2 summarizes the number of miles of channels and culverts inspected, together with a separate summary for drain inlets and pipes.We

are in the process of converting from a years-old paper map inventory of the MS4, to a GIS-centric inventory. The GIS conversion is in a transition year where we are endeavoring to make our summary of MS4 inspection and cleaning more complete. Although we are currently maintaining our storm drain and channel system as directed in the Municipal Storm Water Permit, it is anticipated that future annual report will include additional detail in the MS4 maintenance summary as our maps become more complete. Implementation of the JURMP Municipal Component in PY2 resulted in:

- Trash/debris removal from storm drain conveyance system (defined above) completed annually as specified in the JURMP. Total removed is 1,720 cubic yards. For types of pollutants removed see Figure 4.
- Maintained 51 storm drain inlet filters located in the public right of way.
- Met JURMP requirements by cleaning catch basins, culverts, and concrete channels once for PY2 in the major channels and once for the minor channels. The Conservation Corps completes the cleaning for Hunter's Run and Cypress Channel.
- Flow line vegetation maintenance completed one time during PY2 (tree maintenance along major channels and median maintenance).
- Cleaning of Homeless waste and trash completed two times during PY2.

Table 2 Summary of MS4 Inspection and Cleaning Activities

Drainage Structure Type	Inspection Cycle	Number Miles Inspected	Number Miles Cleaned	Number Miles > 30% Full
Channel and Channel Culverts	once per month	283.97	23.66	0
Drainage Structure Type	**Inspection Cycle**	**Number Inlets Inspected**	**Number Inlets Cleaned**	**Number Inlets > 30% Full**
Storm Drain Inlets/Catch Basins	once annually	2719	566	0
Drainage Structure Type	**Inspection Cycle**	**Number Miles Inspected**	**Number Miles Cleaned**	**Number Miles > 30% Full**
Storm Drain Pipes	once annually	53.01	0.36	0

4.1.4 Sanitary Sewer System

Continuity and consistency describes the City annual cleaning and maintenance of the sanitary sewer system. Few conditions occur when crews needed redirection from the normal routine. The El Cajon sewage collection system, consisting of nearly 195 miles of municipally owned sewer mains, is a transportation-only utility with the sewage treated at the Metro Wastewater Treatment Plant in Point Loma, San Diego. El Cajon's outfall sewer main transports sewage from the City, Wintergardens Sewer District, and Padre Dam/Lakeside/Alpine Sewer District.

The City of El Cajon has an aggressive maintenance program to prevent sewer overflows. An important maintenance goal is to flush and maintain the entire system at least once every 18 months which requires the flushing of 148 miles of sewer main each year. For PY2, maintenance crews cleaned 207.2 miles of sewer line in 12 months. Cleaning and televising of

larger trunk and outfall sewer mains as part of a condition assessment accounted for 4.41 miles of additional main cleaning for a grand total of 211.61 miles for PY2. Difficult areas, where solids and grease accumulate, or root intrusion is a problem, are on a more aggressive schedule of flushing and rodding every 3 months. A Summary of Sewer Operations and Maintenance Procedures is included as Appendix D.1. A complete summary of scheduled Municipal Sewer System Maintenance is included as Appendix D.2.

New-Generation Sewer Vactor Truck

An indispensable tool in preventing sewer blockages and overflows

As part of the aggressive preventive maintenance program, the City televises sewer mains when:

- A new sewer tap is installed
- New difficult areas are suspected
- Determining the type of maintenance or repair needed

Interior of Sewer Main Televising Van

There was one public sewer overflows from City-owned sewers for PY2. Sewer system activities and discharges are reported annually to the San Diego Regional Water Quality Control Board and the California Integrated Water Quality System (CIWQS), among others. In April of 2003, the City internally started tracking reported overflows from private sewer laterals, where homeowners or businesses require immediate system repair. Response to the private sewer overflow includes reimbursing the City for any storm drain cleanup costs due to the overflow into the public right-of-way.

For PY2, 9 private sewer spills were reported or detected by municipal staff. In all, 166 gallons of sewage liquids were recovered and disposed of in the municipal sanitary sewer. With private sewer spills, municipal crews estimate how long the spill was active and document an estimated number of unrecoverable gallons.

4.1.5 Corporate Yard

The City of El Cajon has one Corporate Yard located at 1050 Vernon Way. Four separate Public Works Divisions are located at this facility, as follows:

- Public Works Maintenance Division - coordinates maintenance for streets, storm drains, drainage channels and public sewers;
- Facility Maintenance Division – maintains City buildings and related facilities;
- Fleet Maintenance Division – maintains City vehicles, and
- City Parks Division – maintains City parks, median, landscapes and urban forest.

It takes coordination and collaboration for these crews to work in the public interest maintaining and improving the health, safety, convenience and quality of life for the City's citizens and visitors.

The Maintenance Division of Public Works maintains the city's infrastructure. Fleet and Facilities Management is part of Administrative Services and maintains the City's buildings, vehicles and equipment. The Parks Department controls and maintains parks, recreational areas, and other City-owned landscaped areas.

Annual inspections of each area is completed and corrective actions discussed with Department Management. An annual inspection was completed during June of 2009. Improvements at the Corporate Yard include:

New Vacuum Technology in Street Sweeping

Cleaning the Elgin Crosswind Sweeper in the City Wash-down Facility.

- New (Additional) Street Sweeper Wash-Down Area is now in service.
- Monthly visual inspections are conducted.
- Secondary containment is in place at all storage areas.
- Berms are in place around the wash and waste discharge areas.
- Employees are trained on storm water issues, dealing with the homeless, pesticide training, and managing hazardous materials.

The annual inspection of the Corporate Yard uncovered a few needed Corrective Actions as follows:

- Maintain recordkeeping for training and inspections as defined in the Corporate Yard SWPPP.
- Post procedures on use of Spill Kits.

The sample of the Checklist for Municipal Site Inspection is contained in Appendix A.4.

4.1.6 Municipal Airfield

Gillespie Field, located at 1720 Joe Crosson Drive, is the local airfield and governed by the San Diego County Airport Authority and the Federal Aviation Administration. The City of El Cajon inspects this facility for compliance with the Municipal Permit as well as the General Industrial Permit. Some of the new BMPs include:

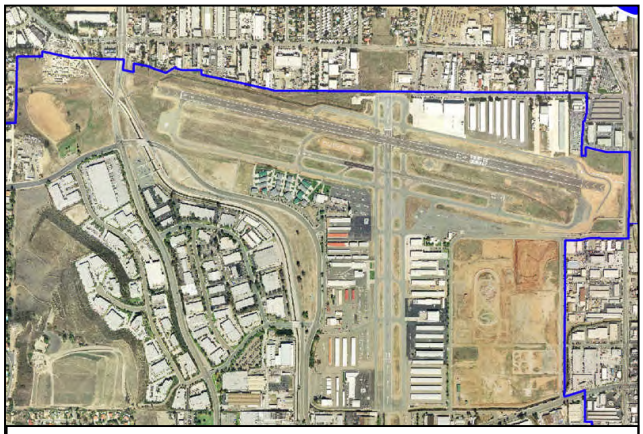

Gillespie Field - A County Airport Facility

- Wash racks with discharges hooked to the sanitary sewer. Use of manually adjusted shut-off valves eliminating flows to the sanitary sewer during rain events.
- Spill kits are in place throughout the airport.

4.1.7 Parks and Recreation

The Parks Division maintains, improves, protects, and develops the City's parks, landscaped median islands, public building grounds, and the urban forest for the benefit and enjoyment of the community. Maintenance of these nearly 120 acres is overseen by a well-trained, full-time staff that performs any necessary maintenance on a daily basis. Attractive public open spaces and well-maintained parks help to make El Cajon a better place to live, and encourages civic pride. Staff continually strives to promote a Cleaner Community through maintaining a Healthy Watershed while providing the community the highest quality and level of service possible.

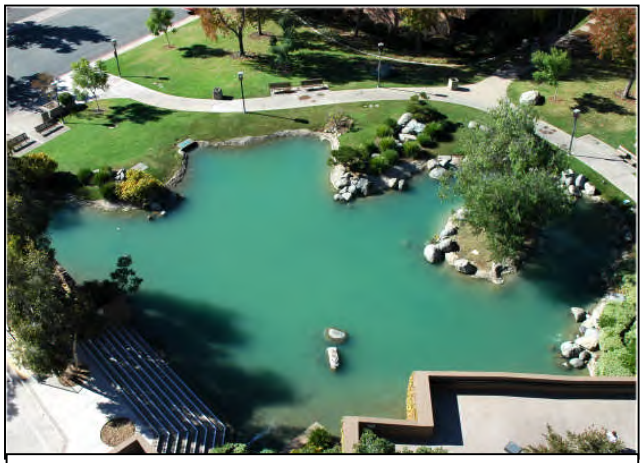

A City-Maintained Park Area Near City Hall

Parks and Recreation areas prevent pollutants from entering the storm drain system, by implementing BMPs such as:

- Providing Pet Waste Bags at Dog Park located at Wells Park
- Blowing organic cuttings and sediment onto grass and disposing collected wastes properly
- Use of mop and buckets to clean up after special City events (Cajon Classic Car Show and Friday Concerts on the Green)
- Requiring Qualified Applicator Certificates and 20 hours of training for the safe and effective use of pesticides.

- Requiring Contractors that steam-clean or power-wash to capture, collect, and contain wash liquids, then dispose into the sanitary sewer.

4.2 MUNICIPAL BMPS

The City has developed a list of minimum BMPs for Municipal crews to use while maintaining the following categories of municipal-owned and managed facilities. Not counting streets, alleys, storm drain or sewer easements, there are 31 separate municipally maintained facilities within the City. Overall, the categories of Municipal facilities are as follows:

- Roads, Streets, Parking Facilities
- The Multiple Separate Storm Sewer System (MS4)
- Corporate Yard
- Municipal Buildings, Parks, Recreational Facilities, and Landscaping

Each minimum required BMP is connected in some way to a primary pollutant that is reduced or eliminated to the maximum extent practicable (MEP) when that BMP is implemented as written. Table 3 lists the Municipal BMPs that may be applied to municipal activities and areas, the primary pollutant(s) either reduced or eliminated and the 303(d) pollutant that may also be prevented. Not all BMPs listed in Table 3 are required for the 31 Municipally-operated areas.

Table 4 lists the four major municipal areas with their minimum required BMPs and whether they were implemented. An “X” for the BMP indicates the BMP is required.

Inspections complete the BMP cycle by:

- Confirming proper BMP Implementation (present as written in the California BMP Handbooks or by City of El Cajon Storm Water Staff)
- Verifying that the BMPs are maintained (during inspection) (See Table 4 in Section 4.2.1 for inspection results)

This Annual Report takes an important step in connecting activities, BMPs, and pollutant reduction to support the Assessment of JURMP Effectiveness contained in Section 11. The connection is shown by the following diagram.

Table 3 BMPs to Pollutants for Municipal BMPs

BMP	Application	Primary Pollutant Reduced or Eliminated	303(d) Pollutant Reduced
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies	pH; TDS; Fecal Coliform
Spill Prevention Control and Cleanup – SC11	Addresses spills	Varies	pH; TDS; Fecal Coliform
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	Oil & Grease Metals	-
Loading/Unloading – SC30	Controls the loading and unloading of materials	Varies Trash	-
Liquid Container Storage – SC31	Controls discharges from outdoor liquid containers	Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials	Pesticides Fertilizers	-
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris	TDS
Parking Lot and Storage Maintenance – SC43	Addresses sweeping and general maintenance of parking lots	Trash/debris Sediment	-
Drainage System Maintenance – SC44	Requires routine cleaning of the storm drain system	Trash/debris Sediment	-
Employee Training	Requires employees be trained in specific topics	Trash/debris	-
Storm Drain System Signage	Requires signs at storm drains or receiving waters	Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance	Requires routine maintenance of the sewer lateral	Fecal Coliform	Fecal Coliform TDS
Over-watering of Landscape	Requires overspray and over watering to be eliminated	Nitrates	TDS

"-" indicates no impact, positive or negative, to the Forrester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

4.2.1 Municipal Site BMP Implementation and Verification

As defined in the JURMP, five of the 31 Municipal-maintained areas are considered high priority due to their location, size, and/or potential to impact water quality. This includes the Civic Center-City Hall Plaza complex, Fire Station No. 9, Parks Storage Garage, Public Works Maintenance Division Office, and the Vehicle Maintenance Facility. These five are inspected annually. Annual inspections of high priority municipal areas are conducted to verify if the minimum required BMPs are implemented. Table 4 lists the minimum required BMPs and Municipal Functions. An "X" under the minimum required BMP indicates the BMP is:

- A minimum Requirement
- Implemented per written or required specification
- Verified during inspection

Table 4: Required & Implemented BMPs for Municipally-Maintained Areas

MUNICIPALLY-MAINTAINED AREAS	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Non-Storm-Water Discharges - SC10	X	X	X	X
Spill Prev/Contl/ Clean - SC11	X	X	X	X
Vehicle & Equipment Fueling - SC20				
Vehicle & Equipment Cleaning - SC21			X	
Vehicle & Equipment Repair - SC22			X	
Loading /Unloading - SC30			X	X
Liquid Container Storage - SC31				X
Raw Materials Storage – SC32	X		X	
Equip Operations - SC33			X	

MUNICIPALLY-MAINTAINED AREAS	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Building Repair/ Construction - SC42				X
Parking/Storage Maintenance - SC43			X	X
Drainage System Maintenance - SC44	X	X	X	X
Employee Training - City of El Cajon	X	X	X	X
Storm Drain System Signage - City of El Cajon	X	X	X	X
Public Participation and Education			X	X
Street Sweeping - City of El Cajon	X		X	
Vegetation Controls - City of El Cajon				X
Preservation of Existing Vegetation - City of El Cajon				X

MUNICIPALLY-MAINTAINED AREAS				
Waste Handling/ Disposal - SC34		X	X	X
Safer/Alternative Products - SC35			X	X
Contam/Erod Areas - SC40			X	X
Building/Grounds Maintenance - SC41			X	X

MUNICIPALLY-MAINTAINED AREAS				
Seeding and Planting - City of El Cajon				X
Mulching - City of El Cajon				X
Over-water Activities - City of El Cajon				X

X = Minimum Requirements

4.2.2 Implementation Analysis and Further Assessment

Table 5 summarizes the implemented BMPs for the five high priority Municipal Facilities where formal inspection and BMP usage was verified. It is important to note that no illegal discharges or spills were reported for any of the 31 City-owned or maintained areas.

Table 5 Percent BMP Implemented

BMP	Percent Implemented	Pollutant Prevented
Non-SW Discharge	100	Various: Fecal Coliform
Spill Prevention/Control/Cleanup	100	Various
V&E Cleaning	100	Metals
V&E Repair	100	Oil & Grease
Loading/unloading	100	Various
Liquid Container Storage	100	Oil & Grease
Raw Materials Storage	100	Pesticides
Equipment Operations	100	Oil & Grease
Waste Handling/Disposal	100	Bacteria
Safer/Alternative Products	100	Pesticides
Contaminated/Erodible Areas	100	Sediment
Building/Grounds Maintenance	100	Trash, Debris
Building Repair/Construction	100	Metals
Parking/Storage Maintenance	100	Oil & Grease, Trash, Debris
Drainage System Maintenance	100	Sediment, Trash, Debris
Employee Training	100	All
Public Participation and Education	100	Trash, Debris
Street Sweeping	100	Sediment, Trash, Debris
Sewer System Maintenance	100	Fecal Coliform
Vegetation Controls	100	Sediment
Preservation of Existing Vegetation	100	Sediment
Seeding and Planting	100	Sediment
Mulching	100	Sediment
Over-watering Activities	97	TDS (Nitrate)

(Highlighted – 303(d) listed pollutants)

The City Hall complex has an ever-existing issue with irrigation over spray and broken sprinkler lines due to large public visitor population and the homeless. Problems are fixed immediately, although never eliminated

The above information is used in Section 11 to support an Effectiveness Assessment of the Municipal Component and further define areas where improvements can be made.

4.3 PESTICIDE, HERBICIDE, AND FERTILIZER MANAGEMENT

4.3.1 Pesticide Regulatory Program – Integrated Pest Management

The City has adopted a Pesticide, Herbicide, and Fertilizer Management program as follows:

- Maintain a running inventory of pesticides, herbicides, and fertilizers,
- Implement a schedule for application of pesticides, herbicides, and fertilizers,
- Use an Integrated Pesticide Management (IPM) approach,
- Track use of pesticides, herbicides, and fertilizers,
- Train or license (Qualified Applicator Certificate) City personnel who apply pesticides, and
- Continuously train City personnel on BMPs.

The City maintains 120 acres, including landscaped medians, parkway trees, parks and public grounds and performs scheduled maintenance of all areas on a daily basis. Weed control is conducted along public streets and along storm water channels. Crews use concentrated pesticides and herbicides, both solid and liquid, as follows: Pre-emergent (Pre-E) at 96 pounds, 8 gallons; Post-Emergent at 1.5 lbs., 142 gallons (including Roundup); Contact Chemicals at 8 lbs., 28 gallons; and Pool Chemicals (chlorine and muriatic acid) at 183 lbs., 5,725 gallons.

Figure 6

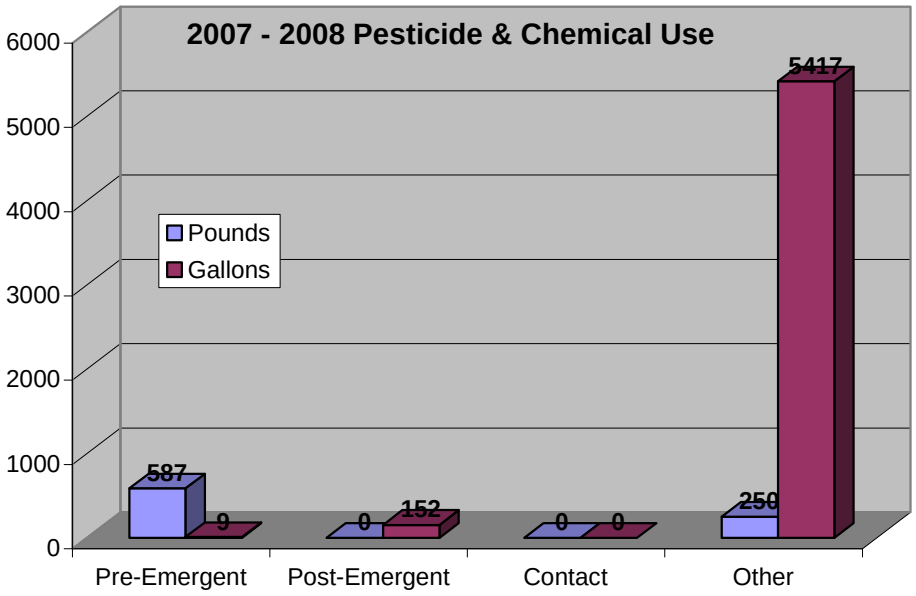

To maintain the City's Park and Recreation areas, 7,565 lbs. of fertilizer were used on turf and landscape. Fertilizer applications consisted of polymer coasted slow release fertilizer. All fertilizers are applied using professionally trained City personnel utilizing BMPs. Applications are documented with fertilizer use reports.

4.4 MUNICIPAL STAFF TRAINING, SPECIAL EVENTS AND NOTABLE ACTIONS

New hires for City municipal staff receive New Employee Orientation Training that includes a module on storm water quality issues and concerns. In PY2 all Public Works crewmembers attended storm water training sessions conducted during September and October of 2008. Additionally, all members of the El Cajon Police Department, Community Policing staff received storm water training in during April of 2009.

NATIONAL PUBLIC WORKS WEEK

Public Works Week emphasizes the importance of Street Maintenance, Sanitary Sewer and Storm Water system flushing, and other Emergency and Non-Emergency Services provided by Public Works Maintenance and Operations crews. Public Works

Week highlights the equipment used to complete these tasks. In PY2, Public Works was celebrated during the week of May 17, 2009. The public, including students from nearby schools, were invited to view equipment and speak with Public Works crewmembers.

TRASH FENCE

The City of El Cajon is the first major jurisdiction within Forrester Creek watershed. Consequently, pollutants and trash that enter the storm drain system are carried downstream to the City of Santee where the Creek has not been improved. In response to the City of Santee's Forrester Creek Restoration Project, the City of El Cajon completed a bid and initial scouting for the placement of a trash and debris fence. The trash fence must be able to withstand forces from flows reaching 22 feet per second and hold heavier floating debris. Installation was accomplished in the fall of 2005 and the trash fence has been in service since. The picture to the right shows trash and debris captured by the fence during a rainfall event.

Forrester Creek Trash Fence

WEB PAGE

The City of El Cajon added new content to a Storm Water Web Page that is part of the El Cajon, Municipal Web Site. The Hotline for the City and County plus reports, brochures, and guidance documents can be accessed from Portable Document Format files (PDF files) on the web site.

4.5 IMPROVEMENTS AND REGULATORY COMMENTS

The following are the major improvements completed for PY2.

- Installed 42 additional storm drain inlet filters throughout areas in the City where trash and debris has been identified to be a problem. This is in addition to the 51 existing storm drain inlet filters installed in previous years.
- Continued the improvement and functionality of the trash and debris fence for Forrester Creek, located upstream from Gillespie Field.
- Reviewed Storm Water Program for Capital Improvement Projects.
- Continued implementation of GIS to assist with maintenance of storm drain systems and the sanitary sewer system.
- Implemented a program for monthly self-inspection of Municipal Facilities and Operations.
- Continued to conduct maintenance of the existing storm drain inlet filters.
- Continued development of specific environmental indicators for accurate measurement of Urban Runoff Program effectiveness.
- Established defined measurements and actions to address watershed requirements and develop watershed management procedures.

The following regulatory comments were received for the Municipal Component of the JURMP for PY1.

Comment:

2. Provide information for Item J.3.c.IV "Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned."

Response:

During Permit Year 2007-08 the City of El Cajon identified a total of approximately 1,389 catch basins and inlets. The Public Works Maintenance Division inspected a total of 605 storm drain inlet boxes and catch basins. None of the inspected catch basins or inlets exceeded the cleaning criteria defined by the Municipal Permit as accumulated trash and debris exceeding 33% of the designed hydraulic capacity, hereafter referred as cleaning criteria, but all 605 catch basins and inlets were cleaned.

Comment:

3. Provide information for Item J.3.c.V "Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned."

Response:

During Permit Year 2007-08 the City of El Cajon identified approximately a distance of 24.6 miles of Municipal Separate Storm Sewer System (MS4). The City is currently developing a Storm Drain Master Plan and when completed, the total distance of the MS4 is expected to change. The City inspected 20.1 miles of the MS4 and did not find exceedances of the cleaning criteria but 18.8 miles of the inspected distance was cleaned.

In many instances, segments of the MS4 were inspected and maintained more than one time during Permit Year 2007-08. The segments inspected did not exceed the cleaning criteria but were cleaned to prevent exceedances. By taking a cumulative approach for all the repeated segments, the gross distance of the MS4 inspected and maintained increases to 62.4 miles and 61.1 miles respectively.

Comment:

4. Provide information for Item J.3.c.VI "Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned."

Response:

During Permit Year 2007-08 the City of El Cajon identified approximately a distance of 17.2 miles of open channels. The City inspected approximately a distance of 16.3 miles of open channels and did not find an exceedance of the cleaning criteria but cleaned the entire 16.3 miles of open channels inspected.

In many instances, segments of open channels were inspected and maintained more than one time during Permit Year 2007-08. The segments of open channels inspected did not exceed the cleaning criteria but were cleaned as a preventive measure. By taking a cumulative approach for all the repeated segments, the gross distance increases to 50.5 miles for both inspection and maintenance of open channels.

Comment:

5. Provide information for Item J.3.c.XVII "Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections."

Response:

In Permit Year 2007-08 a total of 19 municipal sites/facilities were identified for inspection and all 19 were inspected. With the exception of 4 facilities that required an additional follow up inspection, every site/facility was inspected one time during the Permit Year.

Comment:

6. Provide information for Item J.3.c.XVIII "A description of the general results of the inspections."

Response:

Municipal facility inspections were generally good. The inspections found that the majority of the sites were in full compliance. There were no major violations. However, several sites were noted for trash, vegetation debris, obstructed storm drain inlets, and irrigation over spray. The problems were fixed immediately.

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SECTION 5 INDUSTRIAL & COMMERCIAL COMPONENT

5.1 INTRODUCTION

Industrial

The Industrial Component continued on its track of evaluating the implementation of Best Management Practices (BMPs). The component was originally revised at the end of 2004, adjusting the program to a BMP implementation and verification task and continued with the revision of the JURMP in 2008. Industrial inspections are the focus of the City's Industrial Component with the goal to verify the presence, proper implementation, and maintenance of BMPs. During the inspections, the City also checks that facilities have filed a Notice of Intent and has a Storm Water Pollution Prevention Plan pursuant to the General Industrial Permit, if required.

Proper implementation and maintenance of appropriate BMPs at industrial facilities will eliminate or reduce the discharge of pollutants from an Industrial site and prevent pollutants from entering the City's storm drain system. The City redesigned the inspection sheet to emphasize the use of BMPs for specific, potential pollutant producing activities. Industrial activities either have the potential to affect storm water runoff or have no direct or apparent affect. Industrial operations conducted in a manner that prevents the discharge of pollutants or pollutant contact with storm water should not have any impact on water quality. The City's focus is on identifying those industrial activities that have an actual or potential impact on water quality, requiring implementation of appropriate BMPs and periodic inspections of industrial facilities to verify compliance with City, state and federal water quality requirements.

Outdoor industrial activities have the greatest potential to impact receiving waters through outdoor storage, loading/unloading, fueling areas, vehicle/equipment maintenance, solid/hazardous waste storage, and parking lot runoff. A Storm Water Quality Inspection Form for Industrial-Commercial Facilities to document routine, follow-up, and compliance inspections is provided in Appendix A.5.

Commercial

Commercial facilities are those facilities that are designated by the County or by the City as a commercial facility with activities that may potentially affect the quality of receiving waters. In previous years, the City identified commercial facilities within its jurisdictional boundaries, and has categorized different commercial types for education, inspection and follow-up as

After the *Framework for BMP Implementation* was completed in October 2003, the Commercial Component was restructured into a BMP implementation program similar to other Existing Development (Municipal, Industrial, and Residential). Implementation, verified during onsite inspections, determines whether a BMP is either fully implemented or requires Corrective Action. A fully implemented BMP is counted towards preventing, eliminating, or reducing pollution discharged to the maximum extent practicable (MEP).

5.2 STATIONARY IND. & COMMERCIAL SALES/SOURCES/EQUIPMENT

5.2.1 Background

In 2002, the City developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01. As part of this program, the City was required to conduct industrial and commercial storm water compliance inspections to assess the implementation of the minimum best management practices (BMPs) required in the industrial and commercial section of the JURMP. On January 24, 2007, the updated Municipal Permit, Order No. R9-2007-0001 was adopted. This new Municipal Permit required each Copermittee, including the City, to update its JURMP document, including the industrial and commercial component, to comply with the new requirements.

The requirements of the new Municipal Permit went into effect in March 2008. The new Municipal Permit required that all high Treat to Water Quality (TTWQ) sites be inspected after the year of implementation, the City of El Cajon chose to inspect all facilities in the commercial/industrial inventory designated as high TTWQ, as well as some medium and low TTWQ facilities. This helped the City meet an additional new Municipal Permit requirement that 25 percent of the total number of facilities on the City's inventory be inspected after the first year of program implementation. The City inspected all industrial facilities that are covered or are known to require coverage under the General Industrial Permit (Industrial Permit). Additional details on how the City met the requirements listed above are included in Section 5.2.2 of this report.

City staff prepared a Request for Proposal and contracted a consultant to assist with the required inspections for 2008-2009 reporting period. A total of 674 industrial and commercial facilities were selected to receive site visits, out of the 674 facilities 672 were inspected. Based on the site visits 544 facilities are listed in the updated facility list inventory composed of high, medium and low TTWQ. A detailed list of the facilities selected for inspections can be found in Appendix B.2.b of this report.

5.2.2 Source Characterization

The City's watershed-based inventory of all industrial and commercial facilities was reprioritized during the JURMP update in March 2008 and includes 1074 stationary commercial and industrial sites, of which 149 were recognized as being high TTWQ. Information was obtained from the City's business license listings and the California Department of Water Resources list

of Permittees covered under the General Industrial Permit. In PY 2008-09 the inventory for high TTWQ facilities increased to 233 as a result of business license record reviews and inspection results from PY2007-08. All 233 high TTWQ facilities and 439 medium and low TTWQ commercial and industrial facilities were inspected in PY 2008-09.

5.2.3 Best Management Practice Requirements

Pollution prevention for industrial and commercial facilities eliminates the management of pollution and ultimately leads to a cleaner, healthier watershed. Although Best Management Practices for Commercial Facilities are used as a primary mechanism for reducing commercial discharges of pollutants into regional MS4s, the educational effort to change the way businesses conduct business is the final objective. The City encourages industries to apply pollution prevention tactics, such as the BMPs listed in Table 1, below. Storm Water staff or city representatives disseminate this information during inspections, letters, and enforcement actions. The following pollution prevention methods shall be considered and implemented to the MEP where applicable:

- Reduce quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease the generation of wastewater
- Display pollution prevention methods prominently to remind or instruct employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
Spill Prevention, response, control, and cleanup	Prevents spills, controls spills	Oil & Grease pH	pH
Raw Material Storage	Prevents pollutants on outdoor material storage from discharging	Oil & Grease	_
Safer Alternative Products	Encourages use of less toxic materials	Pesticides Fertilizers	TDS
Good housekeeping of	Prevents pollutants from		TDS

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
outdoor activity areas	entering the storm drain system.	Oil & Grease	
Employee Training	Prevents discharges, spill response, over-watering	Oil & Grease Pesticides Fertilizers	pH Fecal Coliform TDS
Private Sewer Lateral Maintenance	Preventive maintenance of sewer lateral prevents sewage overflows	Fecal Coliform Enterococcus Nitrates	Fecal Coliform TDS

5.2.4 Program Implementation

5.2.4.1 Priority Industrial-Commercial Sources

Industrial
Each year, industrial sites are re-prioritized to get an accurate picture of the number and types of industrial sites within the City's jurisdiction. Prioritization involves two steps: initially classifying a facility as being a high TTWQ based on site information; and subsequently confirming or reclassifying it based on field observations and additional information. The former step has been accomplished administratively using the data provided in the inventory of industrial sites. The latter step was completed following inspection of each industrial facility.

Additionally, pollutants were listed with the activities associated with industrial outdoor activities to assist in the selection of the most appropriate BMPs. This initial connection of pollutants, BMPs, and activities will be used to correlate water quality with JURMP requirements in the Annual Report. Below, in Table 2, is the City's listing of activities with the potential pollutants.

Table 2 – BMPs to Pollutants for Industrial Facilities

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies depending on discharge	-
Spill Prevention Control and Cleanup – SC11	Addresses spills	Varies depending on spill	-
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	(Petroleum) Oil & Grease Metals	-
Loading/Unloading –	Controls the loading and	Varies depending on	-

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
SC30	unloading of materials	the materials Trash	
Liquid Container Storage – SC31	Controls discharges associated with outdoor liquid containers	(Petroleum) Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies depending on the waste material Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials for cleaning, disinfecting, or other functions	Pesticides Fertilizers	-
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris Sediment	TDS
Parking Lot and Storage Maintenance – SC43		Trash/debris Sediment	-
Drainage System Maintenance – SC44		Trash/debris Sediment	-
Employee Training		Trash/debris	-
Storm Drain System Signage		Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance		Fecal Coliform Debris	Fecal Coliform TDS
Over-watering of Landscape		Nitrates	TDS

"-" indicates no impact positive or negative to the Forrester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

Commercial

A majority of the City's commercial sites can be categorized as shown in Table 3. Of specific concern are those businesses located near storm water channels. Activities from the commercial sites with the associated pollutants are shown in the following table.

Table 3 – Commercial BMPs to Specific Business Produced Pollutants

Business Type → **BMP ↓**	**Restaurants**	**Automotive Establishments**	**Retail Gasoline Outlets**	**Mobile Washing Businesses**
Non-Storm Water Discharges – SC10	Organics Trash	Oil & Grease Metals	Oil & Grease Metals	Oil & Grease, Metals
Spill Prevention Control and Cleanup – SC11	Trash Oil & Grease Organics/Bacteria	Trash Oil & Grease Metals	Trash Oil & Grease	TDS Metals
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22		Trash Oil & Grease Metals		Oil & Grease Metals TDS
Loading/Unloading – SC30	Organics/Bacteria Oil & Grease	Oil & Grease	Oil & Grease	
Liquid Container Storage – SC31		Oil & Grease		
Raw Material Storage – SC32		Oil & Grease		
Waste Handling and Disposal – SC34	Organics/Bacteria Oil & Grease Trash			Trash
Building and Grounds Maintenance	Organics/Bacteria Oil & Grease Trash	Trash	Trash	
Parking Lot and Storage Maintenance – SC43	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Drainage System Maintenance – SC44	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Employee Training	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Private Sewer Lateral Maintenance	Pathogens/Fecal Coliform TDS	Fecal Coliform TDS		
Over-Watering	TDS	TDS	TDS	

5.2.4.2 Backgroud BMP Requirements and Implementation

Industrial

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of the Municipal Permit. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility. An "X" indicates the BMP is: Required by the City of El Cajon as a minimum BMP – Level 1 by the Industrial facility – Level 2 (Provided BMP information). These two levels were completed in previous permit years.

The next steps include:

- Implementation as observed during the onsite inspection – Level 3 (Verified in pervious permits years under permit 2001-001.)
- Connection to a specific Primary pollutant and any 303(d) pollutants identified for Forrester Creek to support an Effectiveness Assessment – Level 4 (Verified in pervious permits years under permit 2001-001.)

In past years the City applied "A Framework for the Implementation of Best Management Practice (BMP) Programs at Commercial and Industrial Sites" to implement BMPs at industrial sites. BMP selection and application began at JURMP development with a minimum number of BMPs. These minimum requirements were used to develop the industrial/commercial inspection checklist.

Table 5 – Required Industrial BMPs

Required Industrial BMPs	
Non-SW Discharges - SC10	X
Spill Prevention/Control/Cleanup - SC11	X
V&E Fueling - SC20	X
V&E Cleaning - SC21	X
V&E Rep - SC22	X
Loading/Unloading - SC30	X
Liquid Container Storage - SC31	
Raw Materials Storage - SC32	X
Equip Ops - SC33	
Waste Handling/Disposal - SC34	X
Safer/Alternative Prods - SC35	
Contam/Erod Areas - SC40	
Bldg/Grounds Maintenance - SC41	X
Bldg Rep/Construction – SC42	
Prkg/StorageMaint – SC43	X
Drainage Sys Maint - SC44	X
Employee Training - SWPPP	X
Storm Drain System Signage - Permit	

Required Industrial BMPs	
Private Sewer Lateral Maintenance - City of El Cajon	X
Over-water Landscape - City of El Cajon	X

5.2.4.3 Updated BMP Requirements

Pollution prevention methods are cost-effective BMPs that eliminate or reduce the generation of pollutants at their sources. Industrial and commercial facilities produce a range of pollutants, both indoors and outdoors, that can threaten human and environmental health if washed into the storm drain system by way of urban runoff. Businesses can benefit from pollution prevention methods by reducing labor time associated with excess pollutant waste handling, thereby re-directing labor time more efficiently to production, as well as the accompanying costs of storage, disposal or treatment.

The following pollution prevention methods are considered and implemented to the MEP where applicable:

- Reduce quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct
- employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

In addition to the methods listed above, the City of El Cajon also reserves the authority to require a Storm Water Pollution Prevention Plan (SWPPP) for any Industrial or Commercial facility within its jurisdiction that discharges significant pollutants into receiving water bodies.
In addition to the pollution prevention BMPs described above, the City has also established minimum BMPs for all industrial and commercial sites. Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs, including structural and non-structural BMPs, are required of all facilities and are included in Appendix A.5 (General BMPs for Industrial/Commercial Facilities). Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs and Activity-Specific BMPs are required where applicable and are briefly listed below.

- **General BMPs**
  - Non-Structural BMPs
    Non-Structural BMPs aim to prevent pollutants from coming into contact with storm water or authorized non-storm water discharges. Many of these methods already exist as part of the standard operating procedures for a site:
    - Good housekeeping
    - Preventive maintenance
    - Material handling and storage of materials
    - Employee training
    - Solid waste (non-hazardous) handling and recycling
    - Record keeping
    - Self inspection/quality assurance
    - Spill response
  - Structural BMPs
    Structural BMPs consist of specialized equipment, structural components, or engineered technologies that can be used when non-structural BMPs are ineffective. Structural BMPs are site specific; therefore the facility operator needs to evaluate each proposed use. Proper installation and regular maintenance of structural BMPs are imperative to their effectiveness. Examples are as follows:
    - Overhead coverage of outdoor work areas or chemical storage.
    - Retention ponds, basins, or surface impoundments that confine storm water to the site.
    - Berms and concrete swales or channels that divert run-on and runoff away from pollutant sources.
    - Secondary containment structures.
    - Treatment controls, e.g., infiltration devices and oil/water separators, to reduce pollutants in storm water or authorized non-storm water discharges.

- **Activity-Specific BMPs**
  Appropriate BMPs will depend on the type of activities, pollutants, and potential source of pollutants. The BMP requirements for the following activities and areas are relatively common at industrial and commercial sites and required by the City.

  - Hazardous materials storage (incl. tanks)
  - Solid waste storage
  - Loading/unloading
  - Fueling
  - Wastewater treatment
  - Landscaping/ grounds keeping
  - Vehicle maintenance
  - Parking lots
  - Process water pre-treatment
  - Equipment storage
  - Washing of Equipment/Vehicles
  - Rooftops

5.2.4.4 Additional Controls for Industrial & Commercial Sites/Sources

Forrester Creek, which flows through the City, is 303(d) listed for fecal coliform, low dissolved oxygen, phosphorus, and TDS. The City has not identified any industrial or commercial facilities that are likely to be significant sources of fecal coliform or TDS. As a proactive measure, however, the City has assigned higher priorities to concrete and stone cutting businesses, as they may contribute to elevated TDS levels. Similarly, the City assigned higher priorities to animal-related businesses, which may be sources of fecal coliform if animal waste is not disposed of properly. The City also assigned higher priorities to commercial businesses associated with fertilizer use (i.e. nurseries, greenhouses, etc.) since low dissolved oxygen and elevated phosphorus levels are commonly associated improper fertilizer use and/or storage.
As mentioned previously in this report, the City has chosen to designate major channels within the City as ESAs. Major channels within the City are typically concrete, and hold no significant environmental value, however. The City has chosen to designate these areas as ESAs as a proactive measure to protect downstream water quality. During inspections of businesses that drain to 303(d) listed receiving waters or other ESAs, the City will conduct more detailed investigations into whether the businesses are potential sources of the pollutants of concern or may otherwise negatively impact the ESA. If a business is believed to be a significant source of key pollutants and the standard BMPs listed above are not adequate, the City will require additional BMPs so that discharges of the key pollutants of concern will be reduced to the MEP.

5.2.4.5 Sites Selected for Inspection

To meet the requirements of the Municipal Permit, the City decided to inspect all 223 high TTWQ industrial and commercial facilities. The City also selected 441 additional sites to meet the Municipal Permit requirement that 25% of the City's inventory receive inspections during the second year of program implementation. Those additional sites were mainly chosen from the medium TTWQ, as well as some low TTWQ, inventory and were selected largely based on perceived potential for having relatively significant outdoor exposure. The overall TTWQ prioritization process is based on a number of factors including, but not limited to, history non-compliance with storm water regulations, whether or not the facility has significant outdoor exposure of storage or activities, distance to receiving water body, total area of the site, and whether the business is required to obtain coverage under the Industrial Permit. The TTWQ prioritization process is described in more detail in the City's JURMP document.

Out of the 674 sites selected for inspection, 672 were inspected. A summary of the total percentage of facilities inspected from the total inventory of 1074 facilities is listed in Table 6, below; a more detailed list of the facilities is included in Appendix B.2.b of this report. The sites selected for inspection include at least 25% of the City's industrial and commercial inventory and at 100% of the City's high TTWQ industrial and commercial facilities.

Based on experience, the inspection process for industrial and commercial facilities is often more efficient when appointments are not scheduled. This allows inspectors to inspect neighboring businesses rather than driving longer distances from business to business to meet scheduled appointments; it also eliminates time spent on the phone scheduling. In general, scheduling is conducted for industrial facilities that have or are required to have Industrial Permit coverage so

that the proper facility personnel can be present for the inspection and materials such as SWPPPs and monitoring plans are located and easily accessible for review when the inspector arrives.

Table 6 - Summary of inspected facilities

Facility Category	Inspected Facilities	Percentage of Total Inventory
High TTWQ Industrial	31	3%
High TTWQ Commercial	202	19%
Other sites initially selected for inspection	439	41%
Stationary Inventoried Sites Visited or Accounted For*	**672**	**63%**

* "Accounted For" means that the business was inspected, visited and found to not need an inspection, or found to not need an inspection when called to schedule a site visit.

5.2.4.6 Industrial Inspections and Implementation of BMPs

Industrial businesses were defined by 40 CFR §122.26(b) (14). Attachment 1 of the Industrial Permit lists those facilities whose principal activity is included under the Industrial Permit. All industrial facilities were assigned a high threat to water quality, consistent with the City's JURMP. Sites marked for the City to follow up on the initial inspection, and sites with a high TTWQ, including all industrial sites, require annual inspections. A breakdown of TTWQ ranks for industrial facilities is shown in Table 7. BMP implementation at industrial facilities is summarized in Table 8

- Approximately one half of the industrial facilities required a follow-up inspection to make sure BMPs had been implemented.
- A total of 25 out of 45 industrial facilities had submitted a Notice of Intent (NOI) under the Industrial Permit, had implemented stormwater monitoring programs, and maintained a Stormwater Pollution Prevention Plan (SWPPP).
- One business had a Notice of Termination (NOT).
- Two businesses obtained a Notice of Non-Applicability (NONA) or a No Exposure Certification (NEC).
- No IC/ID was observed.
- Fully implemented stormwater employee training was noted at 39 businesses.
- Out of the 813 applicable BMPs, 785 (96 percent) were fully or partially implemented.
- Only 3 percent of applicable BMPs were not implemented.

Table 7: Industrial Facilities

Threat	Number of Industrial Facilities
High TTWQ	44
Medium TTWQ	1
Low TTWQ	0

Table 8: Industrial Facility BMP Implementation

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.1 General	5	156	23	2	44
D.2 Landscaping	5	85	7	0	133
D.3 Materials and Wastes	13	285	84	12	204
D.4 Equipment, Vehicles, and Outdoor Activities	5	72	21	11	121
D.5 Other	5	50	2	3	170
TOTAL	**33**	**648**	**137**	**28**	**672**

(a) Individual BMPs in each BMP group are located in Section D of the City of El Cajon Commercial and Industrial Stormwater Compliance Inspection Form, (Please refer to Appendix A.5).

5.2.4.7 Commercial Inspections and Implementation of BMPs

Commercial businesses were defined as those businesses not subject to the Industrial Permit, and that do not perform activities meeting the definition of industrial activity under 40 CFR §122.26(b)(14). Per the Municipal Permit, 25 percent of sites inventoried shall be inspected annually. Commercial businesses requiring annual inspections were those with a high TTWQ and those that warranted a follow-up inspection. A breakdown of TTWQs for commercial facilities is presented in Table 9. BMP implementation at commercial facilities is summarized in Table 10.

- Annual inspections were found to be of need for 16 commercial facilities that did not require follow-up inspections.
- A total of 318 commercial business sites were assigned a medium to low TTWQ and did not require a follow-up inspection.
- A total of 100 businesses were recommended to increase their employee stormwater training, as little to no training was noted during the inspection. Increasing business education and emphasizing the importance of employee training may increase the effectiveness of pollution prevention practices and BMPs.
- No illicit connections were observed. However, five potential illegal discharges were noted.

- Over 50 percent of the eating establishments needed improved grease handling and/or storage.
- Approximately 58 percent of the facilities with significant outdoor activity needed improved cover for outdoor storage, including trash.
- Approximately 21 percent of the businesses needed improved spill prevention and response materials, including spill kits; 56 percent needed secondary containment for liquid storage.
- Out of the 7,751 applicable BMPs, 7,323 (94%) were fully or partially implemented.
- Only 5 percent of applicable BMPs were not implemented.

Table 9: Commercial Facilities

Threat	Number of Commercial Facilities
High TTWQ	50
Medium TTWQ	215
Low TTWQ	234

Table 10: Commercial Facility BMPs Implementation

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.1 General	5	1,791	112	44	523
D.2 Landscaping	5	845	36	7	1,582
D.3 Materials and Wastes	13	2,728	513	271	2,910
D.4 Equipment, Vehicles, and Outdoor Activities	5	501	65	39	1,865
D.5 Other	5	629	103	67	1,671
TOTAL	**33**	**6,494**	**829**	**428**	**8,551**

(a) Individual BMPs in each BMP group are located in Section D of the City of El Cajon Commercial and Industrial Stormwater Compliance Inspection Form, see Appendix A.5.

5.2.4.8 Compliance and Enforcement

The follow-up priority classification section on the inspection form was designed to classify the level of necessity to perform a follow-up inspection at the facility. “Priority 1” follow-ups are given to facilities for which an active illicit connection or illegal discharge was observed. In these cases City’s storm water personnel immediately instructed discharger to stop the discharge and an administrative citation was issued. “Priority 2” follow-ups typically have serious BMP-related issues. “Priority 3” follow-ups are given to facilities for which relatively minor BMP-related issues were observed.

A total of 19 businesses were found to be "Priority 1". Follow up inspections were scheduled and, whenever possible, investigations were conducted immediately.

As specified in the City Ordinance, the City is able to use various warnings and actions to correct a facility/activity and enforce the JURMP. For PY2, the City further coordinated and partnered with industry to implement and enforce the requirements of the JURMP and City Municipal Code. Enforcement generally is initiated with a verbal warning and followed up by a written warning. Enforcement using Administrative Citations was incorporated in May 2003. Appendix A.5 lists criteria for issuing Citations, document entitled "Storm Water Administrative Citation Program Criteria" and Appendix B.3 shows the list of enforcement actions taken by the City in PY2008-09.

5.2.4.9 Education

During inspections, business representatives were educated regarding storm water issues both through verbal interaction with the inspectors, and the distribution of printed storm water educational materials, when appropriate. In particular, the utilization of verbal interaction is extremely influential because it is individually tailored by the inspector to the specific issues and concerns of the facility and the facility representative. It prompts the facility representative to think about issues directly related to his or her daily actions as it applies to business activities. The inspector was able to provide information specific to the facility, which is beneficial to the facility representative due to the site-specific information. This information can help give the facility representative the proper tools to implement BMPs applicable to their business.

Printed educational materials were also distributed to businesses during inspections unless the facility representative declined to receive them. In addition to the educational materials distributed during inspections, the City drafted a letter notifying each business selected for inspection of the upcoming inspection and instructing them that they were required to implement the corrective actions recommended by the inspector. Educational materials distributed included storm water posters specifically designed for automotive and restaurant activities. Also provided, when necessary, were NONA/NEC paperwork and NOI paperwork. Each have a separate cover sheet with instructions on how to file, and contacts in case any questions arise. Samples of some of the educational materials distributed are included in Appendix A.5. In some cases, educational material was not applicable to the business activity and was therefore not provided.

5.2.5 Stationary Ind. & Commercial Sites/Sources Effectiveness Assessment

5.2.5.1 Common BMP Implementation Deficiencies

Most BMP-related deficiencies observed during the inspection process were minor. Some of the more common issues include uncontained litter, debris, and sediment around the site and in the parking lot and dumpster area. Another common BMP deficiency included open dumpsters, which were often times due to the dumpster lids being pinned against the enclosure by the waste disposal company or dumpsters lacking lids. The most common issues for restaurants were poorly maintained dumpster and grease recycling areas.

5.2.5.2 SIC Code Changes and Updated Inventory

Based on the SIC code corresponding with the current principal activity of the business, some inspections resulted in business category reclassifications. Assessment of whether the SIC code was considered industrial was based on SIC code of the Industrial Permit. Attachment 1 of the Industrial Permit lists SIC codes that require mandatory coverage under the Industrial Permit and SIC codes that require coverage under the Industrial Permit "conditionally", depending on potential outdoor exposure to stormwater. There are 147 businesses that required reclassification of their SIC codes; 10 were reclassified to an alternate business category and are listed below:

<u>Industrial Businesses Reclassified as Commercial</u>

- AA Equipment
- CCS Painting Services, now CCS Cleaning Services
- Dixieline Lumber
- Fatboy Fiberglass and Welding
- Olympic Carpet & Supplies
- San Diego Mobile Truck & Trailer Service
- U.S. Air Conditioning Distributors, Inc.

<u>Commercial Facilities Reclassified as Industrial</u>

- Hi-Tech Welding and Forming, Inc.
- Instrument Overhaul Service of San Diego, Inc.
- ITS Transmission Service, now Russell's Metal

A total of 51 industrial facilities were inspected out of the 674 total businesses listed. One industrial facility was vacant and one was a duplicate facility. Certain facilities categorized as industrial were revised to commercial based on the inspector's determination of the business's principal activity and appropriate SIC code. As a result, 45 industrial businesses were indentified on the City's list.

A total of 623 commercial facilities were initially inventoried to be inspected. A number of facilities were listed two or more times on the original list, often under different names. Many facilities were also vacant. The five businesses that refused inspection by the consultant,

MACTEC Engineering and Consulting, were subsequently inspected by the City. As a result, a total of 494 out of a possible 499 commercial businesses were inspected. Roy Wheeler Auto Repair was not inspected due to a recent stormwater compliance inspection by the City and their determination that the business is not within the City's jurisdiction. One facility (Bruce's Auto Repair, address listed as "Downtown El Cajon") did not exist. Certain facilities categorized as commercial were revised to be industrial based on the inspector's assessment of the business's principal activity and corresponding SIC code. The updated inventory list is located in Appendix A.5.

Table 11: Facility Inventory and Updated Numbers by Facility Category

Facility Category	Original Number of Facilities	Revised Number of Facilities
Industrial	51	45
Commercial	623	499
Total	674	544

5.3 MOBILE SOURCES ELEMENT

5.3.1 Background

Illegal discharges tend to be the major area of concern with mobile businesses. Due to the nature of their activities, mobile businesses are regulated somewhat differently than other businesses. Mobile businesses can be difficult to identify because many do not have City business licenses. Additionally, new mobile businesses are started and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed above and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option at this time.

5.3.2 Source Characterization

The mobile businesses known to operate within the City's jurisdiction are noted on the City's commercial inventory. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Pest control services
- Mobile carpet, drape or furniture cleaning
- Mobile construction trades
  - Painting and coating
  - Cement mixing or cutting
  - Masonry
  - Other contractors
- Landscaping
- Pool and fountain cleaning
- Power washing services

Because not all mobile businesses have obtained business licenses in the City or have a base of operations in the City, the City expects that a continual process of refining and updating its inventory will be needed. Sources for such inventory updates will include reported incidents, general observations by City staff, and available business licenses. The City participated in a regional effort to inventory and/or track mobile businesses. The Industrial/Commercial Regional Workgroup developed a regional database that include mobile businesses across Jurisdictions.

5.3.3 Best Management Practice Requirements

5.3.3.1 Updated BMP Requirements

All BMPs required for stationary sources; listed in Section 5.2.4.1, 5.2.4.2, and 5.2.4.3 of this report; are also required for mobile business where applicable. The most important BMPs for most mobile businesses typically involve non-Storm water discharge control and spill prevention, control, and cleanup.

5.3.3.2 Additional Controls for Mobile Sources

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. Aside from washing, cleaning, or other activities that may cause illegal discharges, mobile businesses are not likely to conduct activities that produce significant pollutant discharges. If in the future the City finds that even in the absence of illegal discharges the activities of mobile businesses are contributing pollutants of concern to a CWA section 303(d) impaired water body segments or are negatively impacting ESAs, additional controls will be required for those activities. Further, if the City has reason to believe that mobile businesses are generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more regularly visit those areas and/or take other actions to address the illegal discharges.

5.3.4 Education and Outreach

The City of El Cajon provides information and outreach regarding storm water quality to mobile business owners and operators. A business license is not issued to the mobile businesses listed under Section 5.3.2 until the new business proponent has the opportunity to talk to Storm Water personnel about pollution prevention and BMP implementation. Mobile businesses are also provided with educational materials outlining pollution prevention methods and other BMPs related to their activities prior to issuance of a business license and during inspections. Inspectors also give recommendations to businesses, where appropriate. Because a specific element of the industrial and commercial program is being newly developed it is anticipated that some mobile businesses are not aware of storm water requirements and that education will need to be a significant portion of the program. The educational program is described in more detail in Section 8 of this report.

5.3.4.1 Owner/ Operator Notifications

As indicated in the City of El Cajon updated JURMP, the City continues to work towards notifying the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three years of implementation of the updated JURMP.

5.3.4.2 Inter-Jurisdictional Cooperation

As of the writing of this report, an inter-jurisdictional program for the regulation of mobile businesses was completed during this Permit Year. The City of El Cajon was the Co-Chair in the regional effort to complete tasks under this regional workgroup. The program included the creation of a regional inventory of mobile businesses, standardization of BMP requirements across jurisdictions, and sharing of enforcement action information. Future tasks that remain to be completed are the development and distribution of standardized educational materials.

5.3.4.3 Staff Training

Staff responsible for conducting storm water compliance inspections and enforcement of mobile sources is trained on inspection and enforcement procedures and BMP implementation as they relate to mobile businesses. City staff is also encouraged to be vigilant for illegal discharges from mobile businesses when working in the City and to report businesses that are not in compliance to the storm water hotline.

5.3.4.4 Inspections

Mobile sites/sources are inspected by the City on as needed basis. The most common triggers for these inspections are anticipated to be receipts of incident reports and direct visual observations by City staff. The inspections generally follow the same procedure as stationary facilities, described in Section 7.2.4.4 of the updated JURMP, although the main focus of most mobile business inspections will be on discharge control BMPs.

5.3.4.5 Enforcement

Most violations associated with mobile businesses have been historically attributed to illegal discharges. The City's enforcement approach to such discharges will require the discharge to be stopped and cleanup of discharged materials when applicable and feasible. Education is also provided to operators who are not aware of the City's storm water requirements. Businesses that do not possess the materials necessary to implement the required BMPs are required to demonstrate to the City that they have obtained such materials and can properly use them before the City allows such businesses to resume operations in the City. Mobile businesses that do not have City business licenses are required to obtain licenses. A detailed list of all enforcement actions taken by the City is included at Appendix B.3 of this report.

5.4 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements to PY2 include:

- Make appropriate changes to the Industrial-Commercial Inspection Form.
- Continue to develop additional educational materials for distribution during inspections.

- Review dry weather monitoring and BMP implementation results to prioritize future commercial inspections.
- Continue to improve tracking of a continuously changing business inventory, both for stationary and mobile businesses.

No regulatory comments have been received for the Commercial and Industrial Component of the 2007/2008 Annual Report.

SECTION 6 RESIDENTIAL COMPONENT

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SECTION 6 RESIDENTIAL COMPONENT

INTRODUCTION

Pollution prevention is the focus of the JURMP Residential Component to prevent pollutants from residential activities from entering the storm drain system. Education is the best approach to implementing this component of the JURMP as the goal is to change behavior and perceptions. The City is successful in implementing the collection of household wastes and promoting used oil recycling. Each pound of household waste and used oil collected equates to one pound less of waste/pollutants that could be disposed improperly and enter the storm drain system.

6.1 PREVENTION OF POLLUTED RUNOFF

Preventing pollution is easier and less costly than treating wastes at the end of the pipe. The following pollution prevention BMP information is sent to residents via brochures in sewer billings and during face-to-face contact when a complaint or referral is investigated.

- Conduct automobile repair and maintenance under cover or with drip pans; recycle oil.
- Divert automobile wash liquids to landscaping.
- Store unused automobiles under cover; use absorbent pads or drip pans for leakage.
- Maintain garden and yard using natural remedies and drought-tolerant plants.
- Use less toxic products for home care/maintenance.
- Dechlorinate swimming pool water before releasing.
- Dispose of pet waste in the trash.
- Don't use the street as your storage area for dirt, mulch, landscaping plants.
- The street is not a disposal area for concrete or paint washout, or hosing off driveway.

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutants Prevented	Prevention of 303(d) pollutant
Composting	Reduces the amount of waste in the trash	Organics	
Use of a Professional Car Wash	Eliminates dirty, soapy water from the storm drain	Metals Detergents	**TDS**
Organic gardening	Eliminates fertilizers and pesticides	Nutrients Pesticides	**TDS**
Take a bag when walking the dog.	Eliminates dog waste from the Public Right of Way	Fecal Coliform Enterococcus Nitrates	**Fecal Coliform** **TDS**

6.2 PRIORITY RESIDENTIAL SOURCES

Residential areas discharging directly to a major storm drain channel are the focus for pollution sources. Priority sources are directly related to 303(d) pollutants identified in Forrester Creek and the San Diego River. The following table connects sources with 303(d) pollutants. These same 303(d) pollutants are used in Section 11, Program Effectiveness Assessment to estimate the potential amounts of pollutant eliminated through prevention, intervention, and other BMP implementation.

6.3 BMP REQUIREMENTS

In addition to the pollution prevention BMPs, above, the following are encouraged in residential areas. Home improvement projects can cause side affects, like mud flowing into the street (see picture to the right). However, with an effective combination of BMPs applied to the maximum extent practicable, simple home projects can meet the City's BMP implementation requirements without much effort or expense.

Table 2 connects the use of BMPs with the prevention, reduction, or elimination of pollutants.

Table 2 – BMP to Pollutants for Residential Areas

BMP	Application	Primary Pollutants	303(d) Pollutants
Automobile Repair & Maintenance	Use Drip Pans Recycle Oil	Oil & Grease	
Automobile Washing	Use Commercial Car Wash	Metals Detergents	**TDS**
Automobile Parking	Use Drip Pans	Oil & Grease	
Garden and Yard Care	Compost or recycle waste	Organic Material	**TDS**
Home Care and Maintenance	Use Household Hazardous Waste Programs	Metals Toxic Substances	
Pet Waste Disposal	Take a bag when walking the dog	Fecal Coliform	**Fecal Coliform**
Private Lateral Maintenance*	Clean lateral every few years	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**
RV Parking & Maintenance	Use a legal dump station	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**

Some changes in behavior are noticed, but although the message has been out there for several years, it is still new to many citizens. The Clean Community; Healthy Watershed, and Healthy Garden; Healthy Home (Integrated Pest Management) concepts will be continuing messages for subsequent permit years.

6.4 BMP IMPLEMENTATION

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of Permit Section 6.3, BMP Implementation. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility.

The list of minimum BMPs for residential areas tracks along with pollution prevention concepts. Understanding through education is the basis for changing behavior in the residential community. By changing the way the residential community completes tasks around the home, benefits to water quality will be realized through wet weather monitoring. The common major routes for educating the citizens and disseminating information is through newsletters, sewer billing inserts, and City "drive-abouts" where information is delivered directly to target audiences.

The following BMPs are provided to citizens through one-on-one visits, newsletters, sewer billing inserts and citizen complaints/referrals. Copies of brochures, newsletter articles, and flyers are included in Appendix A.6.

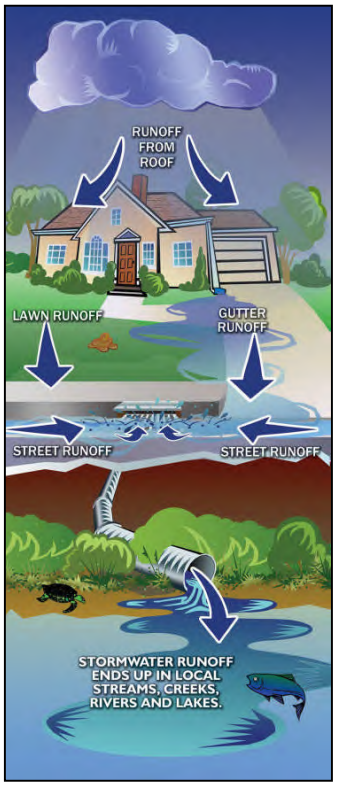

- Automotive Repair
- Car Washing
- How You Can Prevent Pollution from Entering the Storm Drain System
- Mobile Detailer BMPs
- PowerWashing
- Clean up After Your Pets
- Lawn and Garden Care
- Keeping Our Environment Clean!
- Over-Irrigation Can Cause Storm Water Pollution
- Washing Your Car
- What's the Problem with Pet Waste
- Keeping Our Yards and Our Storm Water Clean
- Trash and Street Sweeping Update
- Trash in Our Strom Drains
- Maintaining your Private Sewer Lateral
- Everything that goes into Our Storm Drains…Ends up in the Ocean
- Why It's Important to Keep Trash, Sediment and Debris Out of Storm Drains
- Pool Maintenance BMPs
- Creating Community by Keeping Our Storm Water Clean

Table 5 - Required BMPs for Residential Areas

		Automobile Repair Maintenance	Automobile Washing	Automobile Parking	Garden & Yard Care	Home Care & Maintenance	Pet Waste Disposal	Private Lateral Maintenance	RV Parking & Maintenance
RESIDENTIAL	Vehicles & Equipment	X	X	X					X
	Home and Garden				X	X	X	X	
	Pets						X		
	Private Sewer Lateral					X		X	

Minimum required BMPs for the Residential Component are grouped into four (4) basic categories as shown in Table 5. It is only through consistent, simple messages, will the citizens start to implement the BMP identified for the activities around their homes.

An area where Storm Water staff are collaborating with the police department is RV Parking and Maintenance. Police Department staff assist Storm Water staff in locating areas where dumping is occurring. The resulting outreach effort should help East County residents to reduce the number of illegal dumping events within this region of the watershed.

As illustrated above, over-watering from many different homeowners' landscaping can have an impact on the landscaping and may result in a significant source of water in the street. What seems of little importance from one home combines with runoff from other homes forming small rivers that can move materials stored in the right-of-way or pollutants illegally discharged. Homeowners are encouraged to save water and money by adjusting sprinkler heads to reduce or eliminate overspray. When over-watering is discovered, an attempt is made to contact the responsible party. Door hangers are left with instructions when homeowners are not home. Staff schedule a return date to discuss the measures that can be taken by homeowners. When over-watering discharges decrease, there is a reduction of:

- the amount of water discharged to Forrester Creek
- the amount of pollutants transported to Forrester Creek during "No Rain" days

Improvement in decreasing over-watering will be measured by the amount of Forrester Creek flow leaving the City of El Cajon at the jurisdictional boundary to Santee. Flows measured during the dry weather program are an indication of daily flows. The PY2008-09 dry weather flow into Santee was measured at 108 gallons per minute, as measured at Dry Weather Station No. 5. Overall flows have been on the decrease in all permit years since PY2004-05, inclusive, and may indicate that outreach and education efforts that discourage over-irrigation are becoming effective. Additional flow measurements may be taken during the next annual cycle. The full Forrester Creek Study is contained in Appendix A.12.

6.4.1 Outreach to Residents

The City used various types of educational materials to distribute information and discuss the JURMP requirements with residents when responding to complaints or investigating a discharge. Brochures were provided to residents during face-to-face discussions concerning complaints and referrals. The City newsletter has included five articles concerning routine activities where receiving waters may be impacted by pollutants. The newsletter is freely available for residents

and industrial/commercial business owners on a semi-annual basis. Two such printings were completed in PY2 and covered the following activities for residents:

- Sewer Ordinance Changes
- What You Can Do As A Business Owner To Keep Our Storm Drains Clean
- What You Can Do As A Food Take-Out Customer To Keep Our Storm Drains Clean
- Why Is All That Trash In The El Cajon Drainage Channels?
- Your City Works To Keep Trash Out Of The Storm Drains
- Over-Irrigation Can Cause Storm Water Pollution
- Parking Lot Best Management Practices
- What Is The Storm Water Program?

The City printed and distributed 38,000 copies, each, of the spring and fall newsletters with eight articles in total contained in both newsletters. Another article titled, "Flood Control on Patrol" was included on the front page of the El Cajon Gazette, a local newspaper with significant distribution numbers. As a result, residents are becoming more aware. An indication of this awareness is the increase in the number of complaints and referrals from the private sector. As the public and municipal staff gains more knowledge and awareness of urban runoff, additional increases in complaints and referrals are expected. Education of staff and residents is productive.

6.4.2 Recycling and Waste Collection Services

Keeping household wastes out of the storm drain system requires the implementation of a coordinated pickup program with a licensed facility to handle the wastes according to appropriate State and Local regulations. The City uses Waste Management to schedule routine and requested pickups for household wastes. Figures 1, 2, 3, and 4 show the total amount of household wastes, the type of wastes collected, recycled materials from curbside pickup (commercial and residential) and total amount of waste collected. There was 24 Household Hazardous Waste, Electronic Waste and Universal Waste Collection Event where a total of 3,259 participants dropped off over 246,081 pounds of materials. A total of 344,146 pounds of household hazardous waste was collected (Figure 1). Figure 2 shows the percentages of material types taken to the collection events. Waste Management collected a total of 83,243 tons of waste from residential, commercial and industrial areas (Figure 3). A total of 14,102 tons of materials were recycled from the curbside-recycling program, this program only includes residential areas.

The City of El Cajon works to promote and increase used oil collection through residential collections that include curbside pick-ups or encourages citizens to recycle used oil and filters. The City and Waste Management partnered for a second consecutive year to develop an advertisement that appeared in a local newspaper. A filter exchange program was advertised and offered a free oil filter to every citizen of El Cajon who took a used oil filter for recycling. A grand total of 21,196 gallons of used oil and 1,950 used oil filers were collected from within the City. A total of 105 gallons of used oil and 100 used oil filters were collected from residential areas. While a total of 21,091 gallons of used oil and 1,850 used oil filters were collected from certified collection centers located within the City of El Cajon's jurisdiction.

Figure 1 – Household Hazardous Waste Collection

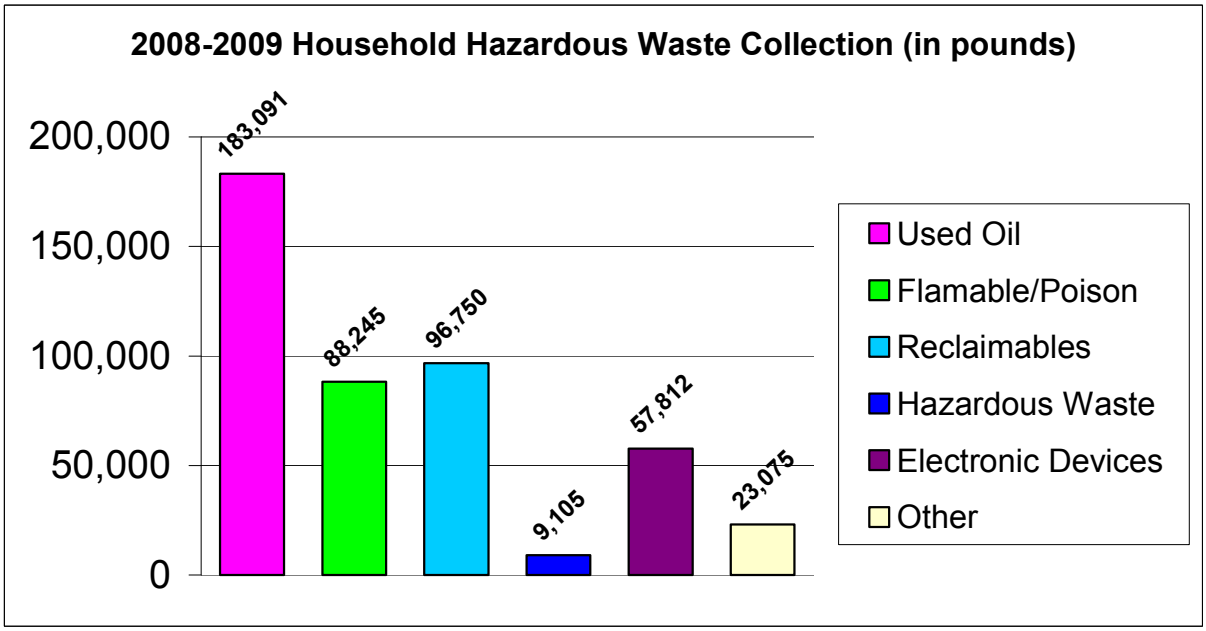

Figure 2 Percentages of HHW Type

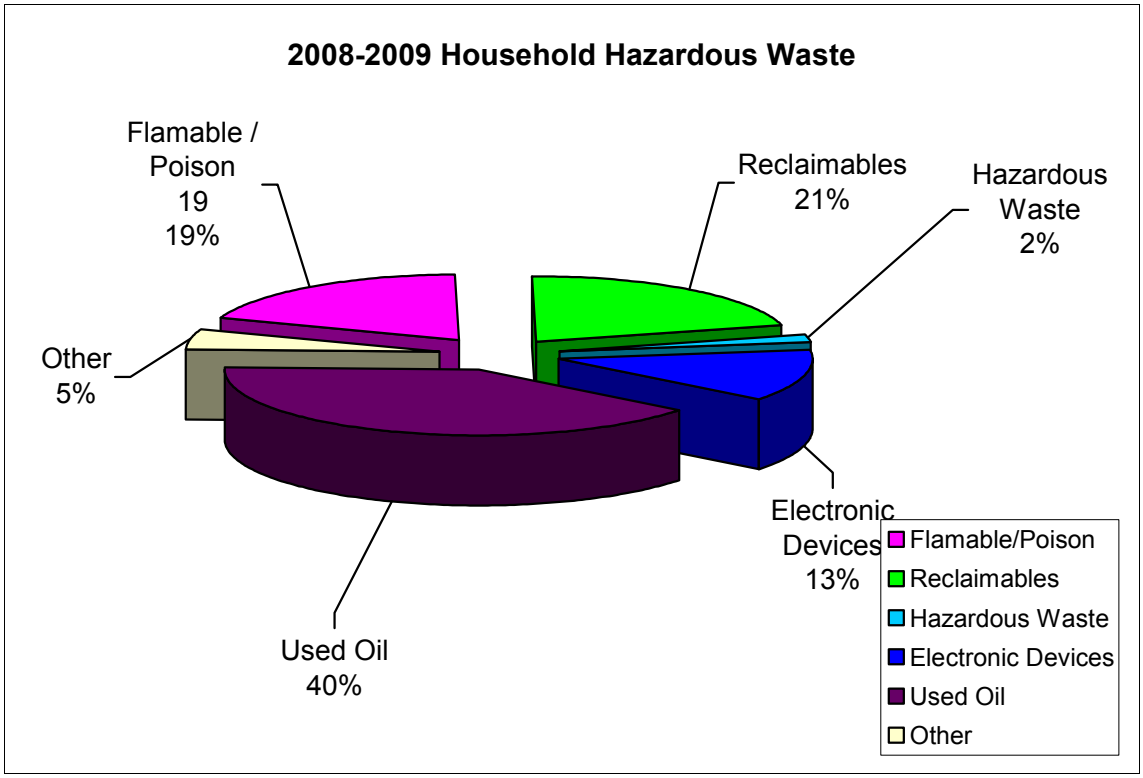

Figure 3

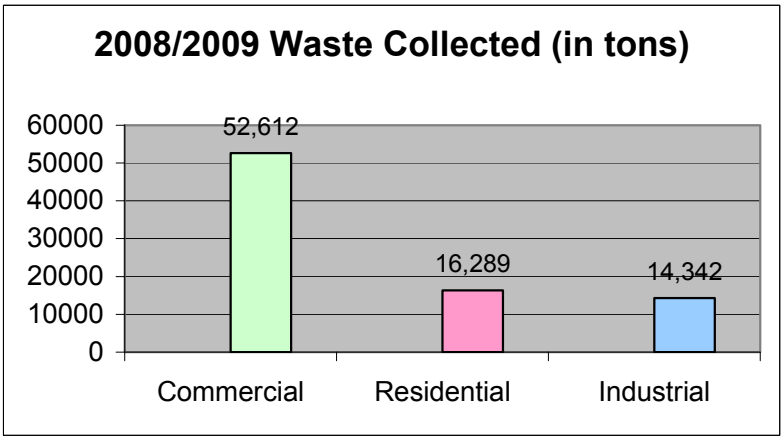

Figure 3 shows the amounts, in tons, of waste collected for Commercial and Residential. Waste collected equates to pollutants not discharged to the storm drain system.

6.4.3 Opportunities for Community Involvement

The El Cajon Community Development Center (ECCDC) prints and circulates a newsletter to the downtown area businesses on a quarterly basis. Additionally, the ECCDC prints a Clean & Safe report that covers actions to keep the downtown area clean and safe. The downtown Clean Team works to keep the community clean and performs daily litter removal, maintenance, and landscaping activities. Saint Madelines School provides the student workers who detail the downtown street and sidewalk areas by collecting cigarette butts, trash, and debris. Spills are reported directly to ECCDC for immediate removal and disposal.

Figure 4

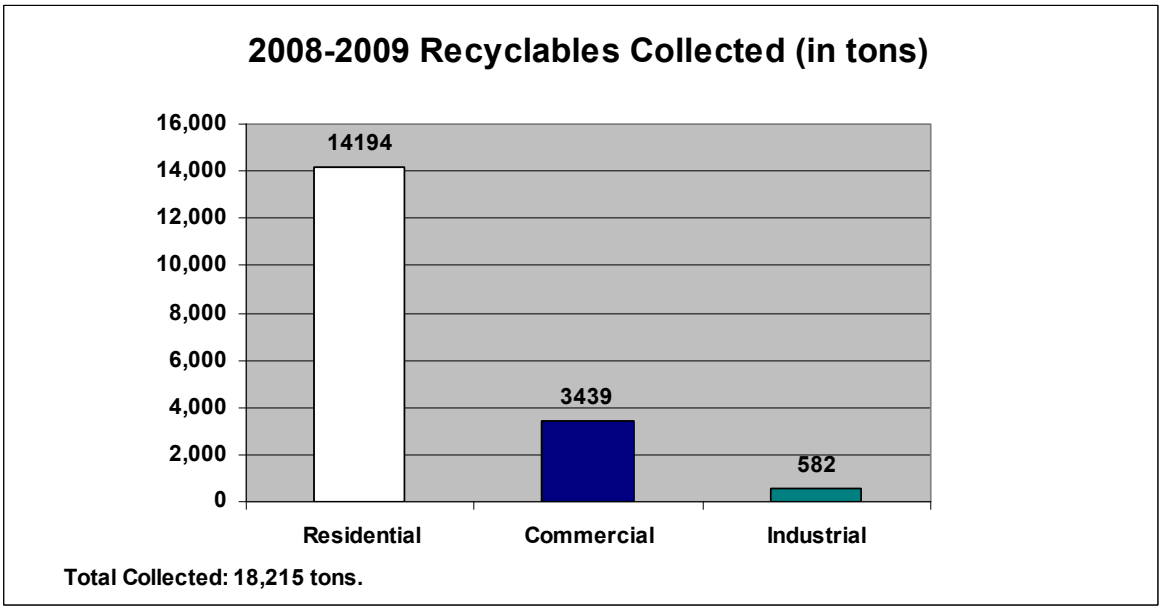

Recycling is a community effort. A total of 18,215 tons of recyclables (includes used oil, newspapers, glass, plastic, tin and aluminum) were collected through residential pickups or deliveries in 2008-09. Figure 4 indicates the amounts, in tons, of materials recycled through residential, commercial, and industrial recycling efforts for 2008-09. Amounts recycled are not placed in landfills or available for discharge to the storm drain system.

6.5 COMPLIANCE AND ENFORCEMENT

The City has a variety of enforcement actions upon discovering a residential action that may potentially affect the quality of receiving waters. Verbal warnings (with written documentation), written warnings, orders to abate and correct, and monetary fines are in the legal authority of the City. There are two routes of discovering illegal residential activities. One is through complaint/referral process. Complaints are received through direct contact with City staff, through the City Manager's office and through the City's Website (via e-mail). The other is during scheduled City monitoring and observations of other routine City department activities.

Depending on whether an actual discharge has occurred or there is a potential to discharge, a written warning or Administrative Citation is issued. Corrective actions are verified and the resident re-contacted for any further questions.

6.5.1 Complaints Received

Complaints are received through the City's or County's Hotline number or funneled through the City Manager's office. Since the inception of the City's Enforcement Program, citizens take opportunities to inform municipal staff of their concerns during other routine activities. Investigations usually occur within 24 hours of complaint receipt with a follow-up phone call informing the complainant of the investigative results. Complaints were tracked using a simple table and software programs. A table in Appendix A.6 lists residential complaints tracked in PY2.

6.5.2 Investigation and Enforcement

Each complaint is investigated by Storm Water staff. Contact with the potential discharger is focused on stopping the polluting activity and educating the citizen about our storm drain system and water quality.

Table 6 – Enforcement Actions

BMP Violated	Written Warnings	Administrative Citations	Actions	Follow-up
Automobile Repair & Maintenance	0	0	No Action	None
Automobile Washing	0	0	No Action	None
Home Care and Maintenance	3	0	Stopped Activity	Completed
Private Lateral Maintenance	0	0	No Action	None
RV Parking and Maintenance	0	0	No Action	None
TOTAL	3	0		

Written warnings followed each verbal warning in the form of a letter requesting corrective action or enforcement by the Administrative Citation Form (See Appendix A.3b for Enforcement Criteria and Forms). Letters are used only when additional information and explanations are needed to get compliance from the potential discharger. A list of the enforcement actions issued to residents is included in Attachment D.

6.6 NOTABLE CITY ACTIONS

Pollution Prevention Days

The City of El Cajon hosted two "Pollution Prevention Days" events on June 4 and June 18, 2008 in downtown El Cajon. The events were scheduled to correspond with the "Cajon Classic Cruise" event, which attracts thousands of attendees each day. Of the thousands of people attending, hundreds of people approached our booth and received educational materials, flyers, and discussed issues related to the automotive-related event (e.g., tire recycling, waste management, fundraising car

The crowds gather at the Pollution Prevention Days Event at the Cajon Classic Cruise.

washes and power washing). See Appendix A.6 for additional photographs of this event.

Condominium Conversions

The next wave of residential communities is the conversion of apartment dwellings into Common Interest Developments or Condominiums. Restarting a small developed community is a perfect opportunity to introduce or reintroduce storm water protection activities at the development level. The following are required of condominium conversion projects

- A Storm Water Site Plan that includes a map of the current storm drain system and a list of the internal and external improvements proposed prior to sale. Control of materials, upgrades to the drainage system and treatment should be discussed.
- A Storm Water Maintenance Plan for Condominiums
- A Private Sewer Lateral Report, and
- Water Quality additions to the Covenants, Conditions, and Restrictions

6.7 IMPROVEMENTS AND REGULATORY COMMENTS

Throughout the year, the City adjusts JURMP Components based on experience and the need to correlate JURMP activities with water quality. As the Storm Water Pollution Prevention Program continues the move into a BMP implementation program and the reduction of pollutants discharged into the storm drain system, existing residential neighborhoods become a pivotal group to assist in making the water quality improvements a reality.

6.7.1 Improvements

Improvements for the Residential Component is more challenging as citizens view the storm water regulations as an infringement on individual rights. Choosing the correct approach and picking an area that is more beneficial to water quality takes thought and planning. Based on previous experience, the proposed actions for PY2 include:

- Continue partnering with the El Cajon Community Development Corporation in reaching out to the community
- Meet with new development Homeowner Associations to distribute storm water information
- Target apartment complexes for controlling trash and maintaining the Private Sewer Lateral.
- Follow up with condominium HOAs and apartment complex management companies to ensure that private satellite sewer systems are being maintained

6.7.2 Regulatory Comments

The following regulatory comment was received for the Residential Component of the JURMP Annual Report for PY1.

Comment:

8. Provide a description of efforts implemented to facilitate proper management and disposal of used oil.

Response:

The following language is included as an addendum to Section 6.4.2 of the JURMP Annual Report for 2007-08.

The City of El Cajon works to promote and increase used oil collection through residential collections that include curbside or door-to-door pick-ups. The City and Waste Management partnered to develop a flyer encouraging recycling of used oil and oil filters, a voucher for a new oil filter was included as part of the flyer. The flyer was mailed to every residence in El Cajon; a copy of the flyer is included as an attachment to this response. An increase of 8% in curbside recycling is attributed to the added publicity. A total of 620 gallons of used oil were collected from residential areas in permit year 2007-08. A copy of the flyer is attached as part of this response letter.

Place Holder

(Section 7 to be Submitted December 15, 2009)

SECTION 8 EDUCATION COMPONENT

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SECTION 8 EDUCATION COMPONENT

8.1 EDUCATION AND OUTREACH

The goal of the education component is an informed and knowledgeable community. It is crucial to the success of a storm water management program for City staff and the community at large to have easy access to reliable and accurate storm water information. Without a shared, common knowledge base of local water quality and urban runoff information, it is difficult to obtain public support for local storm water quality programs. The storm water educational materials need to be detailed and comprehensive enough to support a shift in individual daily actions while allowing community groups to back specific water quality measures. As with all the other components of this storm water pollution prevention program, maintaining and restoring the chemical, physical and biological integrity of state waters is the ultimate outcome.

If reduction is the goal, then prevention is the theme for the Storm Water Pollution Prevention Program. The Education Component continues to emphasize the basics topics, such as:

- The difference between the sanitary sewer and the storm drain system; and
- The street and storm drainage system is not your garbage disposal system; and
- Making small changes individually, adds up to big changes in our rivers and at the beaches.

The other part of a successful storm water program is an involved and committed municipal staff that contacts the public about potentially damaging discharging activities. Storm Water staff diligently works to educate the citizens and businesses within the City jurisdiction on water quality and ways to prevent pollution from entering the storm drain system. The goals of the City's education and outreach program are to raise awareness of urban runoff and change the behavior of citizens and businesses. The progression of topics will lead to Watershed concepts as the basics in storm water are grasped by the general public.

8.1.1 Education and Outreach Events

Educating staff and the public is the best way to effect change in people's behavior. It is clear that there is broad-based public support for a cleaner and healthier environment. When people can connect with and learn more about our storm water program, our program earns the respect our citizens and community leaders for protecting our water quality. An effective "learn and earn" outreach program should be both regional and jurisdictional, since a pooled effort regionally is able to educate on a more impressive scale. Additionally, since we all live in a watershed, storm water pollution and the protection of receiving waters defy jurisdictional boundaries. As the San Diego River Watershed Copermittees move toward a Watershed-based approach to storm water management, education and outreach efforts will follow watershed strategies on a regional basis. As shown above, the City of El Cajon developed a Storm Water "Watershed" Logo to promote pollution prevention and protection of water quality.

8.1.2 Jurisdictional Accomplishments

Outreach accomplishments during P Y2 include the following list of education and outreach efforts.

- "Pollution Prevention Days" – Two Wednesdays in July and September of 2008 (July 9 and September 17, 2008). The events carried the "National Pollution Prevention Week" (P2 Week) theme and the events were scheduled to correspond to peak attendance days for a local automotive-related event called the "Cajon Classic Cruise." Information relating to the event was also posted to the City of El Cajon Website. Both residents and business owners were encouraged to attend
- Continue to work with the El Cajon Community Development Corporation (ECCDC) to close and protect dumpsters, keep trash areas clean, and encourage good housekeeping habits in the downtown area
- Storm Water Education and Outreach Document Portfolios were prepared and issued to selected municipal staff with high probability of contact with citizens on storm water pollution prevention issues. This included staff tasked with commercial and industrial site inspections, construct site inspections, complaint investigations and SUSMP plan review. The use of the storm water information portfolio has allowed the storm water program to connect with citizens, staff and other interested parties in a new and detailed manner
- "Fire Safety Open House" This day-long, Saturday event included booths, educational information and formal and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. It is estimated that approximately 3,000 visitors attended this event.
- SUSMP Training

8.1.3 City Staff Training

Municipal staff at the Public Works Department and the El Cajon Community Development Corporation Ambassador's staff were trained to refresh the basic storm water topics of pollution

prevention and use of BMPs. Planners and engineering staff were trained in topics regarding the updated interim SUSMP requirements. Continual training was also provided on low impact development (LID) topics. Additionally, other municipal staff was given the basics in storm water training including:

- What is a Watershed and what Watershed do we live in.
- Why is keeping our water clean important.
- The different types of pollutants and where these pollutants originate.
- The difference between the storm drain system and the sanitary sewer system.
- What can be done at work and at home to eliminate polluted runoff during rain events and all yearlong.

Municipal crews are given door hangers to use during their daily routine activities in the City. An example of a door hanger is provided in Appendix A.6. The door hanger alerts the resident to the potential discharge that exists on or near their property. Possible solutions and phone numbers for reporting discharges are provided.

8.1.4 Special Community Presentations

POLLUTION PREVENTION DAYS

The City of El Cajon hosted two "Pollution Prevention Days" (P2 Days) events on July 9, 2008 and September 17, 2008. Many thousands of people attended each of the P2 Day events. The two Wednesday events included booths, educational information and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. The El Cajon Community Development Corporation (El Cajon CDC) also participated in our P2 Days event and distributed information on revitalizing and keeping our community clean.

The crowds gather to enjoy the Pollution Prevention Days Event at the Cajon Classic Cruise.

EL CAJON FIRE DEPARTMENT FIRE AND SAFETY OPEN HOUSE

On October 4, 2008, the City participated in the El Cajon Fire Department "Fire and Safety Open House." This day-long, Saturday event included booths, educational information and formal and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. It is estimated that approximately 3,000 visitors stopped by, many of them visiting the storm water booth as they passed through.

PRESENTATION TO EIA (**I**NDUSTRIAL **E**NVIRONMENTAL **A**SSOCIATION)

The City of El Cajon participated in the 2009 EIA Luncheon on February 18, 2009, by providing a presentation to the group. The session centered on the topic of water quality as it pertained to industrial facilities. The presentation was designed to inform the EIA about the activities and goals of the Commercial/Industrial Workgroup and its benefit to the Industrial Communty. The main topics of discussion were new municipal permit requirements, inspections, and the implementation of storm water BMPs. Over 60 representatives of major industrial facilities attended the workshop. A copy of the presentation for the EIA Luncheon is attached in Appendix A.8.

PRESENTATIONS TO MIDDLE SCHOOL STUDENTS

The Storm Water program provided residential BMP information and promotional items to junior high school students from Cajon Valley Middle School and Bostonia Middle School. The two events took place on May 19th and 20th and were coordinated through the City's Recreation Department. A total of 53 students attended the presentations.

8.1.5 Regional- and Watershed-Related Outreach

The Residential Sources Workgroup focused its budget of $105,700 towards in-kind contribution to develop a Regional Residential Outreach Program that would address regional issues and would aid in a transition from a jurisdictional- to a watershed-related program approach. All Copermittees contribute funds towards the outreach workgroup to benefit a coordinated regional pollution prevention program. PY2 funds were used to develop and implement a framework for the Regional Residential Outreach Program that would target audiences and provide information on barriers to, and benefits of changes in behaviors. The City of El Cajon served on the committee during development of the RFP, and continued in PY2 as a member of the interagency Committee developing the Regional Residential Outreach Program.

The events coordinated by the Outreach Workgroup and paid for by all Copermittees included a Storm-Water- and Watershed-related booth at the San Diego County Fair that displayed and provided information to those attending the San Diego County Fair.

8.1.6 Educational Materials Jurisdictional Distribution

The City developed brochures on the following subjects for distribution to the public:

- permit and ordinance requirements
- the difference between storm drains and sanitary sewers
- Pollution prevention strategies
- Car Washing. Including strategies for Car Wash Fundraisers
- Pet waste BMPs
- Equipment and vehicle maintenance and repair
- Maintenance of private sewer laterals.

The City printed 38,000 copies of two semiannual newsletters containing 8 articles and reaching potentially 304,000 different readers. A summary of the topics covered in the 8 articles is included in Section 6, Residential Component, of this report. Storm water logos assist the City in getting the attention of citizens and businesses. Logos are a way to make a lasting impression with citizens and businesses. One storm water logo used by the City is shown to the right.

Through the course of PY2, a number of contacts were made to the public using articles, newsletters, sewer bill inserts, brochures, mailers, radio and TV Ad's. Copies of brochures, fliers, and newsletter articles are contained in Appendix A.6. The following table indicates the types and quantity of outreach impressions.

Table 5

Material Type	Number Distributed
Articles/Newsletters	304,000
Brochures	480
Over-the-Counter	350
TOTAL	**304,830**

Commercial

Education of commercial facility owners and their employees occurs through the use of brochures oriented specifically to a type of activity. Written warnings are accompanied with a brochure on the activity as well as distribution of these brochures as outreach opportunities arise during business and construction site inspections, and complaint investigations. Approximately 385 brochures of various types were distributed as summarized below. More one-on-one distributions were completed this year as the City expanded its role in inspections, complaint investigations and the daily routines of residential communities. The following brochure topics were distributed during PY2.

- Vehicle and equipment washing and cleaning (35 copies)
- Vehicle and equipment operation, maintenance, and repairs (35 copies)
- Car Washing Guide (25 copies)
- What's Cookin Guide (125 copies)
- Green Wrench Guide (120 copies)
- Power Washing Guide (40 copies)
- Private Sewer Lateral maintenance (50 copies)
- Construction Best Management Practices (50 copies)

Industrial

Industrial facilities revise and refine their BMP requirements through the annual inspection process. The following are discussed and informational brochures are shared when necessary.

- Prevention of Non-Storm Water discharges
- Good Housekeeping Practices
- Vehicle and Equipment Washing, Repair, and Fueling
- Loading and Unloading of materials
- Solid and Hazardous Waste Management
- Spill Prevention and Response
- Building and grounds maintenance
- Parking Lot maintenance
- Storm drain system maintenance
- Private Sewer Lateral Maintenance

8.2 LEADERSHIP ACTIVITIES AND PARTNERSHIPS

The City's major roles for educ ating the community include:

- Provided direction and information to the local East County Construction Council on matters dealing with proper implementation of construction BMPs and LID.
- Continue in partnerships with the Cities of Santee and La Mesa as well as the County of San Diego in training staff on storm water management to incorporate storm water reviews at the beginning of the Planning level review.

- Maintain a relationship with the El Cajon Community Development Corporation and their Community Ambassadors and Clean Team. The Community Ambassadors are employees that develop connections with businesses and the community that will promote a cleaner and safer city. The Clean Team are students of St. Madelines Sophie school and are happy to assist in various community tasks. The Clean Team picks up cigarette butts along the sidewalk and gutter that the City's street sweeper cannot collect.
- Collaborated with the El Cajon Community Development Corporation to provide basic storm water rules to vendors at the Cajon Classic Cruise events.
- Conducted storm water training to El Cajon Community Development Corporation ambassadors.
- Established a collaborating relationship with "I Love a Clean San Diego" to conduct future storm drain stenciling, as needed
- Worked with the County of San Diego and others to oversee the preparation of a Residential Sources Outreach Program. Implementation of this program was a goal of the 2008/2009 joint Copermittee Outreach Workgroup. Further implementation will continue into the next reporting year.

8.3 MEASURING CHANGES IN KNOWLEDGE AND BEHAVIOR

A basic measurement of increased knowledge is a test of that knowledge. The City's test is an increase in referrals and reports from municipal staff. The number of complaints and referrals from citizens, staff, and county hotline was equivalent to last year. The Regional Outreach Program funded by this year's Copermittee Outreach budget will develop a very detailed baseline of community awareness, and the barriers to and the benefits of changes in behavior.

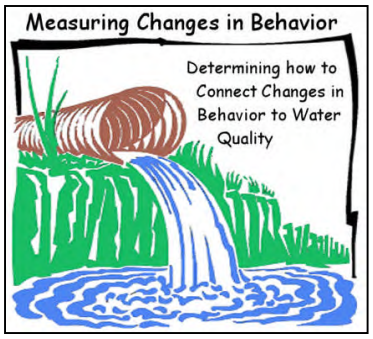

8.4 IMPROVEMENTS AND REGULATORY COMMENTS

Changes to the City's Storm Water Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the activities in ways dictated by direct or indirect experience. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

8.4.1 Improvements

The following are proposed improvements for the next Permit Year (July 1, 2009 through June 30, 2010).

- Continue to coordinate and expand outreach and education efforts to local public schools.
- Coordinate outreach and public participation activities for Public Works Week.
- Expand distribution of outreach materials in sewer bills.

8.4.2 Regulatory Comments

No regulatory comments have been received for the Education Component of the JURMP Annual Report for PY1.

SECTION 9 Public Participation Component

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SECTION 9 PUBLIC PARTICIPATION

INTRODUCTION

Public participation is an essential element of a successful Urban Runoff Management Program, but is more highly effective as a Watershed Component. Due to the nature of participation by organizations such as "I Love a Clean San Diego", watershed concepts are more easily introduced to participants from the entire watershed and not just a small segment of the population in one particular community. Wherever Copermittees' efforts can be combined to produce better results, it is a win/win situation for jurisdictions, the watershed and the communities they contain.

Educational efforts set the stage for getting the public involved with scheduled Storm Water Pollution Prevention events or interested in following the minimum required BMPs at home or business. Since prevention through familiarity and participation is the best solution to pollution, the public fulfills participation requirements by:

- Participating in storm drain stenciling,
- Reporting of discharge incidents using the City Manager's Office or the City and County hotline,
- Participating in events that collect or recycle hazardous waste and used oil , and
- Participating in local and regional cleanup events

9.1 REGIONAL PARTICIPATION

On a regional basis, the City of El Cajon is the lead for the San Diego River Watershed Planning Group and is a member of the Watershed Lead Committee. A grant funded the San Diego River Watershed Planning Group where the stakeholders meet to discuss potential issues for the Watershed. A database of information is in progress for stakeholders to use during their planning efforts.

The City attends Project Clean Water meetings on the San Diego River Watershed to maintain contact with the stakeholders as well as participate in jurisdictional/local decision-making. The City of El Cajon also chairs the San Diego River Watershed Copermittee meetings, which are also opened to the public. In 2007/2008 the San Diego River Park Foundation and the San Diego River Conservancy had regular representation.

The City of El Cajon gave permission to Grossmont-Cuyaca Community College District students that volunteered to stencil the message "No Dumping . . I Live Downstream" and a depiction of a fish and duck to the curb area adjacent to storm drain inlets within the City. The City provided the stencil for the students to use. Also as in previous years, the City gave permission to the "I Love A Clean San Diego" staff and volunteers to provide stenciling to curb areas directly adjacent to storm drain inlets at the City. Copies of the letters of permission are included in Appendix A.9.

9.1.1 Regional and Local Storm Water Hotlines

The wastewater and sewage that drain from inside your house is treated and cleaned before it enters the ocean, but the storm drains in the street flow directly to the ocean, rivers, and lakes without any treatment. It is therefore very important that no one be allowed to dump waste of any kind onto street surfaces, drainage pipes and ditches, or into storm drains - they are only for rainwater.

The City and County have a Hotline used by the public to report potential illicit discharges and connections. The Hotline phone number is provided in informational brochures to residents and businesses and is posted on the City Website. Public participation is an essential part of an illicit discharge elimination program. Many illicit discharges are one-time occurrences that may not be observed by City staff. Concerned citizens can help stop illicit discharges by reporting them to the City. The following provides the details of those Hotlines.

- ✓ **City of El Cajon Storm Water Hotline, (619) 441-1653**

The City Storm Water Hotline provides access Monday through Friday 8 a.m. – 5 p.m. and complainants are directed to the appropriate staff person. The City's hotline currently provides information in English and Spanish.

The City continued updating its Storm Water Web Page to contain the most recent brochures and reports. Documents are retrieved and opened using Abode Acrobat to open the posted PDF files. The Storm Water Web Page is "Quick Linked" from the City of El Cajon Home Page with links to a list of documents and other important websites.

- ✓ **County Storm Water Hotline, 1-888-846-0800**

The County storm water hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides services in both English and Spanish and a voice mail message for 24-hour public access. Relevant complaints received through the County hotline are forwarded to the City Storm Water Protection Program.

9.2 IMPROVEMENT AND REGULATORY COMMENTS

Changes and improvements to the City's Storm Water Participation Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the participatory activities in ways dictated by direct or indirect experience. As the focus of the program shifts to multi-jurisdictional participation on a watershed level, changes and improvements to the storm water program will be necessary. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

9.2.1 Improvements

The following are proposed improvements for the next Permit Year.

- Participate in additional Watershed-wide efforts.
- Focus the City's efforts on programs and activities that will have an impact on the watershed, its health, the 303(d) pollutants and their sources
- Participate in an expanded El Cajon Fire Department Open House by including a Storm Water Program informational booth and additional displays to inform and engage children on water quality issues.
- Coordinate the City's efforts with the other San Diego River Copermittees (City of La Mesa, City of San Diego, City of Santee and County of San Diego).

9.2.2 Regulatory Comments

No regulatory comments have been received for the Public Participation Component of the JURMP Annual Report for PY1.

SECTION 10 FISCAL ANALYSIS

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SECTION 10 FISCAL ANALYSIS

INTRODUCTION

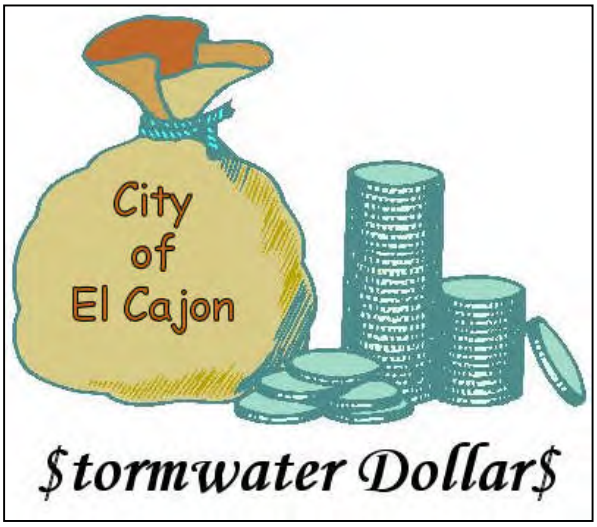

A fiscal analysis of the JURMP provides a vital assessment of resources for the current and upcoming Permit Years. The analysis identifies adequate support and how resources are divided to support and fortify the JURMP and WURMP efforts. Fiscal years (FY) correlate with the same timeframe as permit years (PY). Beginning with PY 2003-04, the City Storm Water staff developed a separate budget from other Public Works activities and sufficient to run the Storm Water Program. The Program continues to be adequately funded through the City's Sewer Fund. This funding source has been used since PY 2004-05 and will continue to be used for PY 2009-10.

10.1 PROJECTED FISCAL YEAR 2009-10 EXPENDITURES

The following table shows actual expenditures from permit year 2002-03 through 2008-09 and the proposed 2009-10 budgets for the City's Urban Runoff Management Program.

Item	02-03	03-04	04-05	05-06	06-07	07-08	Estimated Actual 08-09	Proposed 09-10
Salaries (including benefits)	331.243	451,246	561,473	533,487	550,856	722,809	711,098	746,218
Materials, Services and Supplies	276,357	111,598	222,836	183,639	254,876	397,292	623,821	734,272
Capital Outlay	26,799	7,040	0	6,235	29,953	73,593		
TOTAL	**634,399**	**569,884**	**784,309**	**723,361**	**835,685**	**1,193,644**	**1,334,919**	**1,480,490**

Due to decreases in overall funding from the State of California, City department reduced budgets by 25% in PY 2002-03. Budgets increased steadily from 2003-04 through 2006-07 under Municipal Permit Order 2001-001. The increase in PY 2007-08 was a result of allocating resources in anticipation of fulfilling requirements for Municipal Permit R9-2007-001 (new permit). The budget to maintain the Storm Water Program in compliance with the New Permit continued to increase in PY 2008-09 and the proposed budget for 2009-10 is higher than in previous permit years. A copy of the budget is located in Appendix A.10.

The City's NPDES Urban Runoff Management Program funding was sufficient to meet the JURMP requirements in PY 2008-09 and will be sufficient to meet requirements in PY 2009-10. The City met its projected goal of continuously executing plans, procedures, and processes to implement JURMP requirements and assess the effectiveness of programs that were implemented.

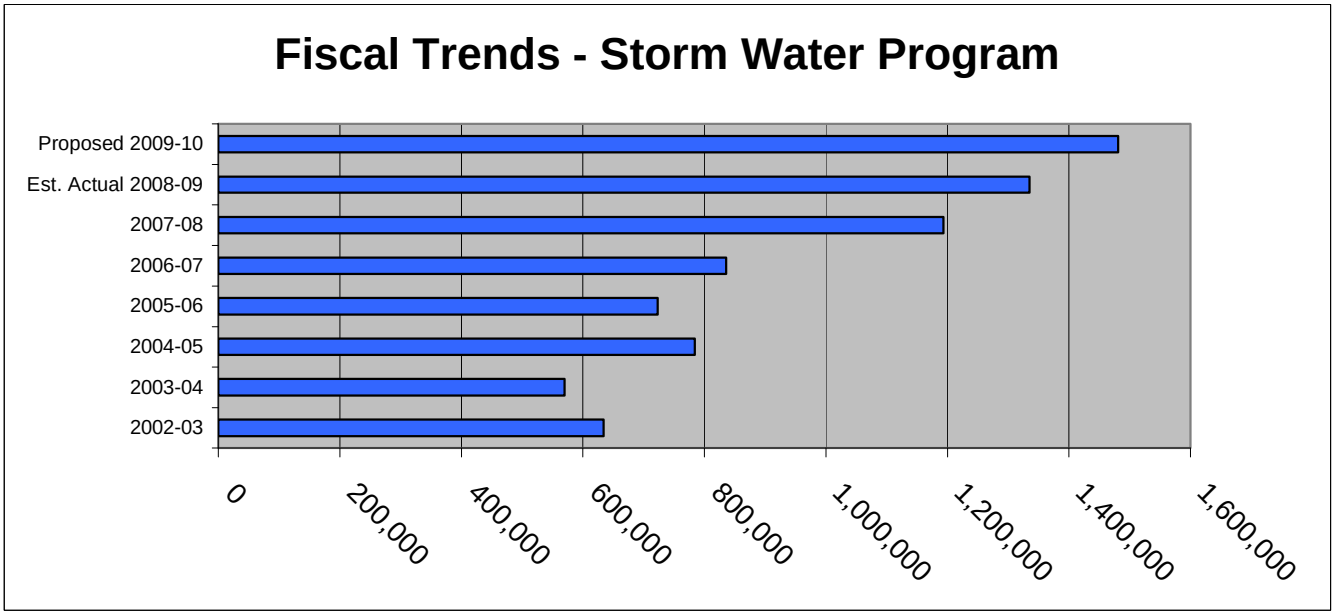

PY 2002-03 was the first full year of implementation under Municipal Permit 2001-001 and the different components of the program written in the JURMP were tested in the field. Expenditures in PY 2002-03 were higher than in PY 2003-04 due to initial tasks that needed to be completed to help "jump start" the Storm Water Program. These initial expenditures were completed in PY 2002-03 and were not budgeted for PY 2003-04. Modifications to the program were made that resulted in an increase in expenditures in PY 2004-05 and a slight decrease in PY 2005-06. The budget for PY 2004-05 contained some capital expenditures that were started in PY 2002-03 and PY 2003-04 such as a Geographical Information System dataset for map generation and a trash debris fence to collect trash and debris in Forrester Creek before discharging to Santee. From PY 2005-06 through PY 2008-09 there has been a steady increase in the budget to support the Storm Water Program. Overall a general increasing trend of funds have been allocated from PY 2002-03 through PY 2008-09 to sustain a viable storm water program.

Listed in the following table are Additional Services and Projects supporting JURMP Permit requirements from PY 2002-03 through PY 2008-09. The substantial rises of PY 2006-07 through PY 2008-09 budgets are mostly attributed to increases in CIP projects related to storm drain pipe replacement, open channel repair, installation of water quality improvements, development of wastewater and storm drain master plans.

Service/Project	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Street Sweeping	313,000	319,000	368,930	420,739	450,385	472,092	474,801
Capital Improvements (Total) - Installation of Storm Drain Inlet Filters - Replace Drainage Pipe - Replace Sewer Pipe - Major Drainage Channel Repair - Road/Drainage Improvements - Drainage and Wastewater Master Plans	1,300,000	1,700,000	1,136,770	1,076,122	1,573,732	3,425,000	4,044,000
TOTAL	**$1,613,000**	**$2,019,000**	**$1,518,770**	**$1,496,861**	**$2,024,117**	**$3,897,092**	**$4,518,801**

10.2 Funding Sources and Restrictions

The budget for PY 2008-09 included a Storm Water Program Manager, 1 part-time senior engineering technician, 1 junior engineer, 1 GIS technician, 1 compliance officer, and 1 part-time Engineering Intern. The personnel for PY2009-10 will remain unchanged with the same number and job classification as in the reporting year of this annual report. The City also has an open contract with two consultants to provide as-needed services to ensure the City meets its JURMP implementation requirements.

10.3 Long-Term Funding Issues and Strategies

Each year the City evaluates and prioritizes the areas in the City where improvements are needed. Many improvements assist the JURMP in protecting receiving water quality. This past year, multiple CIPs improved storm water quality by preventing pollutants from entering the storm drain system. Amongst these projects are the following:

- Sewer main replacements and enlargements at various locations.
- Storm drain system repair at the animal shelter.
- Drainage Master Plan.
- Corrugated metal pipe repair and replacement in various locations.
- Storm drain repair and replacement in various locations.
- Street sweeper cleanout station.
- Water quality improvements.
- Sewer inflow and infiltration study.

The following are proposed improvements budgeted for the next Permit Year (July 1, 2009 through June 30, 2010). The following table lists major line items for the PY 2009-10 budget.

Item	Proposed Budget 2009/2010
City of El Cajon Urban Runoff Management Program	1,480,490
Street Sweeping	497,836
Capital Improvements	4,855,418
TOTAL	**$6,833,744**

In the long-term, funding for the Storm Water Program will continue to be even a bigger question with necessary increases required to maintain permit compliance. The City is constantly challenged with doing more with less after a continual decline in general fund budgets. For PY2008-09, the City completed all inspections with existing staff heavily complemented by a consultant to assist in meeting requirements under permit R9-2007-0001.

10.4 IMPROVEMENTS AND REGULATORY COMMENTS

Working efficiently is the goal of the jurisdictional urban runoff management program. Completing onsite inspections, tracking enforcement actions, and complaint/referral information allows the City to reduce the amount of time and paper to complete significant portions of the Municipal, Industrial, Commercial, Construction, and Land Use Planning JURMP Components.

For WURMP activities, the City will be coordinating with the other San Diego River Watershed Copermittees to complete watershed water quality activities and education activities. Working together eliminates duplicative efforts and enhances the effect across a wider range of people and geographical area. The City manages a contract with a consultant to assist with Watershed activities.

No regulatory comments were received during PY2007-08 for the City's Fiscal Analysis.

SECTION 11 PROGRAM ASSESSMENT

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SECTION 11 PROGRAM ASSESSMENT

11.1 INTRODUCTION

The City began using the standardized program effectiveness assessment soon after it was developed by the Copermittees during the previous permit cycle. The City also participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs. Due to a variety of complications on a regional level, that process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures.

Since the submittal of the JURMP in March 2008, no significant progress has been made on regionally standardized approaches to program effectiveness assessment. It is likely that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will revisit the issue of standardized assessment metrics and procedures in the near future. The City anticipates participating in the process of developing such regional standards and incorporating work products produced into its own local program effectiveness assessment system.
Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

The City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1 through Level 4 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Level 1

Level 1 is documenting activities. Sections 1 through 10 of this PY2 Annual Report list activities, storm water controls, and when possible the quantity of pollutants collected and diverted from entering the storm drain system, viewed as a reduction in pollution-containing materials potentially available for discharge into the storm drain system. Existing and New Development, Construction, and Illicit Discharge Illegal Connection are the areas where quantifiable amounts of pollutants are reported as collected and removed from entering the storm drain system. By completing collection activities, the City maintains compliance with the Municipal Permit requirements.

11.2.2 Level 2 and 3

Refer to tables 11-3 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

11.2.3 Level 4

The primary goal of BMP implementation is to reduce the loading of pollutants to urban and storm water discharges. Pollutant load estimation is the first direct characterization of water quality through JURMP activities. Regionally, San Diego River Watershed receiving water quality results are from the major outfall to the Pacific Ocean. In the future, Watershed monitoring at the jurisdictional lines will at least assign responsibility of pollutant loads, but will not determine a reduction in pollutants. The best approach is to make sure wet weather and dry weather results do not exceed action levels.

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed.

11.3 ASSESSMENT OF PROGRAM MEASURES

Basic assessment of program measures begins with City-based questions. First, starting with what is known, then shifting to what is wished to be learned, and finally what was learned. During the first step, the "what is known" are the measurements compiled from each of the JURMP components. Measurements such as the amount of material removed during street sweeping or cleaning of catch basins are direct measurements of pollution diverted from entering waterways. At some point it may become appropriate to compare measurements to previous years, average measurements, or assess trends to assist with potential pollutant loads removed from a particular origin. Dry weather monitoring results are direct measurements of pollutants in urban runoff, but only partially address measurements of receiving water quality.

Sources, selected BMPs, measurements, and other indicators, identified in the previous Sections of this Annual Report for each of the Existing and New Development Components, report completed activities and achieved goals as required by Order No. R9-2007-0001 and the City's updated JURMP. In summary, the City completed program implementation as designed in the JURMP and is incompliance with the activity-based permit requirements.

11.3.1 Direct Measures of Program Activities

For many years, the City tracked efforts from various collection agencies with four types of direct measures, as follows:

- Street Sweeping,
- MS4 Cleaning/Maintenance,
- Oil Recycling, and
- Household Hazardous Waste Collection

In general, the City tracks these measures because they provide an important indication of the types and amounts of materials and wastes that are diverted from the MS4 through various means. Street Sweeping and MS4 Cleaning directly removes materials from the pathway of rainwater and urban runoff. Oil Recycling re-routes used oil from illegal disposal to refineries where it is ultimately reused. The Household Hazardous Waste program collects wastes that may otherwise be improperly disposed, potentially to the MS4.

a. Street Sweeping

The Department of Public Works collected an estimated 3,188 cubic yards of debris during its street sweeping activities (19,072 miles of curbed streets). This year, the City's street sweeping efforts have been consistent with previous years. Were it not for these efforts, the debris collected would otherwise be swept away during rain events. Collection provides important long-term water quality benefits.

b. MS4 Cleaning

In PY2008-09, all of the City's storm drains were cleaned by the Department of Public Works resulting in the removal and proper disposal of 1,720 cubic yards of material from the storm drain system. As a whole, the City's effort remained the same as last year.

c. Recycling of Household/Commercial Waste and Oil Recycling

Recycling in El Cajon has good participation, but could always do better when the numbers are compared for recycled materials (18,215 tons) and waste (83,243 tons). Trends in waste collection will continue to be tracked .

Oil recycling is tracked by independent recyclers that are certified collection centers (e.g. Jiffy Lube) and Waste Management for curbside pickup of used oil. A grand total of 21,196 gallons of used oil and 1,950 used oil filers were collected from within the City. A total of 105 gallons of used oil and 100 used oil filters were collected from residential areas. While a total of 21,091 gallons of used oil and 1,850 used oil filters were collected from certified collection centers located within the City of El Cajon's jurisdiction. Waste Management also recycled 18,123 tons of other recyclables (including newspapers, glass, plastic, tin, and aluminum).

d. Household Hazardous Waste Collection

Waste Management of El Cajon collects the Household hazard waste for the City's jurisdiction. In PY2008-09 an estimated 344,146 pounds of waste household waste were collected; as opposed to 268,323 pounds collected in PY2007-08; 236,890 pounds collected in PY2006-07; 198, 015 pounds in PY2005-06; and an estimated 277,000 pounds of household hazardous waste/recyclables were collected at 19 events in PY2004-05. As a whole, the City's effectiveness in collecting HHW from its residents has increased consistently and significantly over the years.

11.3.2 Indirect Measures

In most instances, changes to receiving water quality cannot be directly compared to collection activities. However, many indirect measures have value in tracking the effectiveness of specific program activities, and may have additional utility in assessing long-term water quality changes. Many of these measures are reported and discussed throughout this Annual Report. To track and evaluate the effectiveness of its program implementation over time, the City has compiled summary statistics for several of measures.

Table 11.1

Indirect Measure		2008-2009
Complaints	Total Number received	146
	Number of Referrals from Other Departments	77
	Number of Enforcement Actions	23
Staff Training	City Staff Trained	23
Outreach	Outreach events conducted	3
	Number of Presentations	3
	Audience @ presentations	120

a. Complaints and Referrals

In this reporting period, the City received a slightly lower number of complaints than last year from other City departments, citizen calls, and county referrals. The City and County hotlines are described in Section 6 (Residential Component). As previously discussed, this trend underscores the effectiveness of the City's outreach and staff training efforts. As in previous years, it is believed that more of the City's citizens and staff are aware of storm water violations and understood what to do when water quality concerns were observed.

b. Staff Training

Levels of staff training during this reporting period were expanded to those of previous years. Although the City has made an important commitment to staff training under the previous and current Permit (see JURMP Section 8, Education), the consistency of these numbers also demonstrates the City's past commitment to training its staff. Training of staff with implementation responsibilities is not a new part of the City's storm water programs. However, the scope and breadth of these and other programs has significantly increased.

c. Outreach

This year, the City conducted a number of one-on-one discussions at the Public Works front counter with building and planning applicants and with commercial businesses and industrial facilities during inspections and complaint follow-ups. Together, these increased face-to-face conversations demonstrate that the City is effectively implementing its outreach and education programs; details are provided in Section 8 (Education). The City also conducted training sessions targeting industrial facilities and private interest groups.

11.3.3 Program Activities and Water Quality

Presenting a direct connection between pollutant load reduction and Storm Water Pollution Prevention Program activities continues to move forward, but is very slow moving and is very much under development. Copermittees have created a Framework document containing the six (6) Levels of Assessment. The PY2002-03 Annual Report addressed Levels 1 through 4. However, forecasting only generates numbers that could not be supported by calculation or program actions. For PY2008-09, the City continued with the slightly modified approach used for PY2007-08 which brings the assessment much closer to connecting activities with water quality. Amounts of pollutant-containing materials prevented from entering the storm drain system provides solid numbers while adding percentages of facilities known (through inspection) to be implementing minimum required BMPs and reduces the estimation factor.

11.4 LONG-TERM ASSESSMENT

The Annual Assessment indicates the City is meeting the requirements specified in their JURMP and collecting data associated with those program activities. At some point, a connection between activity completed and pollutant load in receiving waters will become a reality.

A Long-Term Assessment must answer key questions to guide future activities and build into the current program, the additional reporting requirements in order to connect program activities with actual improvement in receiving water quality. The Long-Term Assessment is conducted once every five years (permit renewal cycle) as changes to permits may change approaches and programs.

Table 11.2

Program Activity	Annual Questions	Permit Questions (Every 5th year)
Water Quality Assessment	What are the high priority quality problems and where do they occur? What constituent(s) is(are) causing the problems?	What are the changes to discharge and receiving water quality in my Watershed?
Program Planning	What are the priority sources of pollutants?	Are the current programs providing the information

Program Activity	Annual Questions	Permit Questions (Every 5th year)
	What BMPs are needed to control these pollutants? What are the targeted outcomes for the BMP Implementation? What are the projected Load Reductions from these implemented BMPs?	necessary to produce targeted outcomes?
Program Assessment	Were targeted outcomes achieved? What BMPs should be changed or should other BMPs added? Are costs associated with implementation feasible?	Is the cost worth the water quality changes?
Integrated Assessment	How well are the parts of the program working together? What other links can be made?	What other relationships between activities and water quality are evident?

Answers to the above questions come from further analysis of each existing component area. Tables of estimated pollutant loads removed are provided below. Areas where pollutant removal rates are high will be the areas to focus program efforts. Modifications to JURMP activities will be the result of this assessment.

Level 4 Pollutant Load Reductions are provided in the following tables for existing development. Estimates of average load reduction per event was the most difficult to find support evidence. Using the best knowledge available, the magnitude of total pollutants reduced is the most powerful in assessing the degree of success for the City's storm water program.

LEVEL 4 Assessment

Each of the following tables provides an estimate (supported with empirical data) for the amount of pollutant-containing materials prevented from entering the MS4 due to the activities of the Storm Water Pollution Prevention Program implemented in the City of El Cajon. As there is only one receiving water body in El Cajon, Forester Creek impairments were used as the constituents of concern when estimating possible amounts of pollutant-containing material prevented or a reduction in the amount of pollutant that could have discharged into Forrester Creek. Only Existing Components were assessed through Level 4 as the most qualitative and quantitative information is available in these areas. The following paragraphs discuss assumptions incorporated into calculating the amounts provided as "Total" for each Existing Component.

Trash was added to the assessment due to the Forester Creek Improvement Project in Santee. The City of El Cajon installed a trash and debris fence in PY 2005-06 to capture trash from creek flows.

General Assumptions

There are a number of general assumptions within each table. Of most importance is the understanding that the amount (estimated or actual) removed or eliminated from discharging into the storm drain system is the amount of the material or liquid and does not equate to actual pollutant loads reduced. Secondly, the margin of error in these values is very high as most numbers were calculated using available information. Data quality is not necessarily a concern. This is an effort in determining where best to place education efforts and focus each program component.

Municipal

At 18 municipal maintained areas (parks, City Hall, recreation centers), staff cleaned area of pet waste, three times per year. Collection at each area was approximately one pound of pet waste. Pet waste does not equate to one pound of bacteria.

The City maintained 100% of laterals at approximately 24 buildings. No sewer overflows were experienced at City facilities. Pounds were estimated using 10 pounds (no factual basis other than one gallon of water equals 8 pounds) equaling one gallon of sewage. Private laterals not cleaned annually may experience stoppage depending on usage and care. Approximate gallons potentially dischargeable is 2 gallons times 10 equals 20 pounds time 24 buildings equals 480 pounds. The potential for error with this calculation is high.

Total dissolved solids from Municipal areas originate mainly from fertilizers applied by staff. There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation efforts that reduces overspray. All these activities reduce the amount of TDS available for discharge to the storm drain system.

Municipal activities do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.

Trash reduction at City facilities is a consistent effort with approximately 80 to 90% of the 400 City employees ensuring trash is placed in appropriate containers. One pound of trash per year per person is estimated. This amount may be estimated too high.

One park within the City, Wells Park, has an area designated as a “Dog Park” where citizens can take their dogs to walk and bags to collect pet waste are provided for cleaning after their dogs. The Parks Department collected approximately 40 tons of pet waste during PY2008-09.

The total calculated amounts of pollution prevented from entering the storm drain system are possibly estimated high and do not fully equate to improved water quality.

Industrial

There were 45 industrial facilities that were inspected that are conducting industrial activities within the City of El Cajon. It is estimated that 100% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during industrial inspections. If each facility is preventing one overflow of 5 gallons times 10 pounds,

then 50 pounds times 45 facilities equals 2,250 pounds of bacteria- containing materials did not discharge to the storm drain system.

Total dissolved solids from Industrial areas originate mainly from fertilizers applied by contracted staff to landscaped areas (usually a very small area compared to the total industrial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation effort that reduces overspray. All activities reduce the amount of TDS available for discharge to the storm drain system.

Based on inspections and enforcement of the industrial community, pH-affecting substances are reduced from entering the storm drain system through the implementation of BMPs as required by the General Industrial Permit. Amounts estimated have no factual basis.

Trash reduction at Industrial facilities is based on industrial inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads, as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections and the two enforcement actions taken at industrial facilities during this Permit Year.

Commercial

There were at least 178 commercial facilities conducting activities with the high potential to discharge bacteria-containing liquids, mainly eating and drinking establishments. Of those facilities, it is estimated that 50% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during commercial inspections. If each facility is preventing one overflow of 2 gallons times 10 pounds, then 20 pounds times 89 facilities equals 1,780 pounds of bacteria- containing materials that did not discharge to the storm drain system. This may be estimated high.

Total dissolved solids from 499 commercial facilities originate mainly from fertilizers applied by contracted staff or lease company personnel to landscaped areas (usually a very small area compared to the total area of the commercial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation efforts that reduce irrigation overspray. All these activities also reduce the amount of TDS available for discharge to the storm drain system. Commercial activities observed during inspections do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.

Trash reduction at Commercial facilities is based on inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads, as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections.

Residential

Bacteria source reductions for dog owners, homeowners, and Recreational Vehicles (RVs) is purely speculation, although the numbers of potential targets is accurate, based on circulated printed educational materials. Enforcement actions, however, indicate few reported sewage overflows from residential areas. Amounts calculated are estimated too high and should be adjusted with more factual information in future Permit Years.

Total Dissolved Solid and Trash reductions are also speculation based on information materials circulated throughout the City in the Spring and Fall newsletters. Amounts estimated are reasonable. Based on City observations, only a few neighborhoods have trash problems. These areas will continue to be targeted in future Permit Years.

* = Total amounts calculated appear reasonable with the exception of bacterial-containing materials. Factual information is not readily available for this element and estimations are high.

New Development

Only trash and TDS were assessed for New Development as a small-scale post-construction BMP data is not yet available. Speculations on the amount of trash are associated with post-construction BMPs provided, although no corroborating evidence could be found. Numbers calculated appear reasonable.

Construction

Most of the pollutant reductions at construction sites involve sediment. Based on the inspections completed, bacteria from Port-o-lets, pH from concrete washout, and trash rarely require a corrective action. Estimations of pollutant-containing material prevented are low and may be adjusted.

Pollutant Reduction Estimation Worksheets for Forrester Creek 303(d) Listed Pollutants (PY2008-2009)

Table 11.3 – Municipal Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted**	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Pet Waste	Maintenance	Pet Waste Bags picked up at Dog Park	Dog Area at City Park	100%	Entire Permit Year	Empirical Data	HIGH	40 tons of pet waste	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Education	Sewer insert - Your Private Sewer Lateral	18 buildings	100%	18	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Enforcement	Non-Storm Water Discharge	1 sewage overflow	100%	1	Empirical Data	HIGH	5 gallons	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
TDS/Nitrates	Parks and Grassy Areas	Maintenance	Landscape Maintenance	20 grassy areas	100%	20	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (2.5 mg/L NO3)
Trash	Streets	Maintenance	Street Sweeping	19,030 miles	100%	19,030	Empirical Data	HIGH	3,463 Cubic Yards*	No Measurement at this time
	Channels	Maintenance	Channel Maintenance	8 major channels	100%	8	Empirical Data	HIGH	1,720 Cubic Yards*	No Measurement at this time
TOTAL									**5,183 Cubic Yards Trash ******	
* - Converted from cubic yards at 60 lb/cubic yard				*** - Represents only two months of usage					**40 Tons of fecal coliform 5 gal fecal coliform******	
**- Correlation to Water Quality TBD				**** - Actual Results						

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.4 – Industrial Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Private Lateral	Inspection	Private Sewer Lateral	45 inspected industrial facilities	TBD	TBD	In Progress	HIGH	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	45 inspected industrial facilities	100%	45	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash (not 303(d) listed, but monitored by East County)	Dumpster	Maintenance	Building/Grounds Maintenance	45 high priority industrial facilities	100%	45	Extrapolated Information	MEDIUM	(.1lb of trash) (45 facilities) (365 days) = 1642.5 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	45 high priority industrial facilities	83%	37	Extrapolated Information	MEDIUM	(.05lb of trash) (37 facilities) (365 days) = 675.25 lb	No Measurement at this time
TOTAL									**2,884 lb of trash *** **	
* - Diverted from the Storm Drain System			*** - Estimated Results							
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

.1lb Trash = 8 cups/paper @ .2 ounces each

Table 11.5 – Commercial Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted ***	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Private Lateral	Education	Private Lateral Maintenance	178	178	In Progress	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	499	398	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash	Dumpster	Maintenance	Building/Grounds Maintenance	499	252	Extrapolated Information	MEDIUM	(.1lb of trash) (252 facilities) (365 days) = 9,198 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	499	329	Extrapolated Information	MEDIUM	(.05lb of trash) (329 facilities) (365 days) = 6,004 lb	No Measurement at this time
								15,202 lb of trash ***	
TOTAL									
* - Diverted from the Storm Drain System			*** - Estimated Results						
**- Correlation to Water Quality TBD									

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.6 – Residential Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMPs Completed for Measurement**	**# of articles Distributed**	**% of Readers Implementing BMP (estimated)**	**# of Possible Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Sanitary Sewer	Education	Private Lateral Maintenance	38,000	0.1%	38	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
	Pets (Dogs & Cats)	Education	Pet Care	20,000 pet owners	10%	2,000	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS	Landscape Fertilizers	Education	Home/Garden Maintenance	38,000	0.5%	190	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
	Automobile	Education	Vehicle/Equip Cleaning	38,000	10%	3,800	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
pH	Concrete Washout	Education	Home Repair	38,000	5%	1,900	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7 pH)
TOTAL										

* - Diverted from Storm Drain System *** - Estimated Results

** - Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to WQ

Table 11.7 – New Development Component

ASSESSMENT LEVELS	Level 1	Level 1	Level 1	Level 1	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources (Completed Projects)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
TDS	Landscape	Inspection	Bio-filtration Area	3	2	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/l)
Trash	SW Inlets	Inspection	Inlet Filters	3	2	Extrapolated	MEDIUM	(.1lb of trash) (2 facilities) (365 days) = 73 lb	No Measurement at this time
	Landscape	Inspection	Media Filter	3	1	Extrapolated	MEDIUM	(.05lb of trash) (1 facilities) (365 days) = 18 lb	No Measurement at this time
	Paved Areas	Inspection	Detention Basin	3	1	Extrapolated	MEDIUM	(.05lb of trash) (1 facilities) (365 days) = 18 lb	No Measurement at this time
	Dumpster	Inspection	WM5 - Solid Waste Management	2	2	Extrapolated	MEDIUM	(.05lb of trash) (2 facilities) (365 days) = 37 lb	No Measurement at this time
TOTAL								**146 lbs of trash *** **	

* - Diverted from the Storm Drain System

*** - Estimated Results

**- Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.8 – Construction Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP (Section 3, Table 3)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Port-o-let	Inspection	WM9 - Sanitary Waste Management	21	99%	20	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
pH	Concrete Washout	Inspection	WM8 - Concrete Washout Management	21	97%	20	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7)
Trash	Dumpster	Inspection	WM5 - Solid Waste Management	21	100%	21	Extrapolated	MEDIUM	(.1lb of trash) (21 facilities) (180 days) = 378 lb	No Measurement at this time
TOTAL									**378 lbs of trash *** **	
* - Diverted from the Storm Drain System *** - Estimated Results										
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

11.5 PROGRAM ASSESSMENT SUMMARY

Estimated Pollutant Load Tables indicate that Residential Areas continue to have the greatest potential for pollutant removal activities. Nearly three to seven times higher than the other areas, the residential community has the largest potential for reducing pollutants from entering the City's receiving waters.

Each component has been addressed as follows for strengths and improvements. Effective is viewed as meeting the Municipal Permit implementation and reporting requirements.

Component	Effective	Strength	Improvement
Municipal	Yes	Education (Training)	Continue to coordinate with other watershed Cities.
Industrial	Yes	Assessment of BMP Implementation	Revise Inspection Form and make changes accordingly.
Commercial	Yes	Assessment of BMP Implementation	Revise Inspection Form and make changes accordingly.
Residential	Yes*	Outreach and Education	Contact property owners directly by targeting specific problem areas. Conduct drive-abouts at problem Residential areas.
New and ReDevelopment	Yes	Process	Implement new Permit requirements such as LID and updated SUSMP.
Construction	Yes	Inspections	Continue to work with inactive sites to maintain BMPs in good condition when needed.
Illegal Discharge Detection and Elimination	Yes	Monitoring	Increase frequency of monitoring and monitoring points.
Education	Yes	Team Efforts	Target elementary and middle school children.
Public Participation	Yes	Team Efforts	Continue efforts to team with Region whenever possible.

* Face-to-face contact is effective but slow moving.

11.6 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements are discussed throughout the Program Assessment section and are summarized above. No regulatory comments were received during PY2008-09 for the City's Assessment and Jurisdictional URMP Effectiveness Component.

SECTION 12 SPECIAL INVESTIGATIONS

12.1 FORRESTER CREEK IMPACT STUDY 1

SECTION 12 SPECIAL INVESTIGATIONS

12.1 FORRESTER CREEK IMPACT STUDY

For the six years, the City has conducted upstream/downstream monitoring of dry weather constituents of concern in Forrester Creek. The monitoring was conducted on June 25, 2009 to assess the relative amount of pollutants discharged within the jurisdictional boundaries of El Cajon into Forrester Creek. The upstream location is at the County boundary, specifically at Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of 1699 East Main Street. Flow at the upstream sample was approximately two (2) gallons per minute. During rain events, flow from Crest and other unincorporated County areas discharge directly into the City of El Cajon without treatment. To date, no analytical data have been collected for wet weather flows.

Table 1

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Nitrate (mg/L NO_3-N)
Upstream	6/25/09	2	27.2	7.8	2.06	1.74	9.88
Downstream*	6/25/09	108	30.7	8.9	14.82	2.81	2.38

Table 2

Site	Date	Total Hardness (mg/L$CaCO_3$)	Oil & Grease (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mlL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	6/25/09	490	nd	14,000	1,300	3,000	1,080	3.5
Downstream*	6/25/09	616	nd	2,800	270	130	1,680	12

nd = not detected

The following is a summary of the upstream/downstream results:

- Nitrates were detected at 9.88 mg/L upstream, and 2.38 mg/L downstream
- Reactive phosphorous upstream was 0.07 mg/L, downstream was 0.08 mg/L
- Detections of ammonia upstream was 0.1 mg/L, downstream was 0.3 mg/L
- Surfactants were detected at 0.25 mg/L upstream, and 0.25 mg/L downstream

Notable Results and Reasoning

Increase in flow to 108 gallons per minute from upstream to downstream. Downstream flows have decreased for the past three years. Concentrations of many constituents decrease from upstream to downstream; this includes nitrate, total coliform, fecal coliform, and enterococcus. Increase in the concentrations (from upstream to downstream) of pH, turbidity, total dissolved solids (TDS), conductivity, ammonia, dissolved oxygen, total hardness, and reactive phosphorus.

The City does not have an explanation at this time for the increase in flows or the significant increase in dry weather flow contributions within City boundaries. The City will need to continue to conduct further dry weather investigations to develop enough data to establish baseline conditions (for current channel configurations) and to develop priorities for more detailed investigations for pollutant and dry weather flow sources.

SECTION 13 NON-EMERGENCY FIRE FIGHTING FLOWS

INTRODUCTION 1

13.1 BEST MANAGEMENT PRACTICES 1

13.2 EDUCATIONAL METHODS 2

13.3 IMPROVEMENTS AND REGULATORY COMMENTS 2

SECTION 13 NON-EMERGENCY FIRE FIGHTING

Introduction

Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. BMPs and educational methods will be used to reduce the discharge of pollutants to the MEP.

13.1 BEST MANAGEMENT PRACTICES

The City has already developed and implemented a program to reduce pollutants from non-emergency fire fighting flows, in accordance with Section B.3. of the Permit. BMPs will be implemented when conducting the following activities:

- Regular Maintenance of Fire and Emergency Vehicles and Equipment
- Training Exercises
- Facilities Maintenance
- Post-Emergency Rehabilitation of Response Equipment

These activities will be conducted in a way to either minimize or eliminate the discharge of pollutants to the MS4. Detailed descriptions of BMPs are given for each activity below:

Regular Maintenance of Fire and Emergency Vehicles and Equipment

- Vehicles and equipment will be cleaned where runoff will be directed either to the sanitary sewer system or to a drain with an oil/water separator system
- Vehicles and equipment will be cleaned where runoff will pond and evaporate and/or where runoff will filter through landscaped areas
- Used-oil, hydraulic fluids, and antifreeze will be stored in containers for recycling or will be disposed as hazardous waste
- Spill kits will be available to promptly cleanup and contain leaking or spilled vehicle fluids
- Use of soaps, cleaners, and detergents will be minimized, and general cleaning solutions will be disposed of into the sanitary sewer system
- Caustics, flammables, and solvents will be contained and disposed of properly as hazardous waste

Training Exercises

- Water used in training exercises will be directed to landscaped areas whenever possible, and runoff from the training exercises will not be allowed to discharge to the MS4.
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff that could contribute to non-storm water discharges

Facilities Maintenance

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways will be swept to remove debris. Debris will be placed in the trash. Interior

floors will be mopped as necessary, and the wastewater discharged into the sanitary sewer system or onto landscaped areas

- Landscaped areas will be maintained as required to reduce introduction of leaves and other landscape waste into the MS4
- Irrigation systems will be monitored and maintained as required to reduce irrigation water from going off-site
- Spills will be cleaned up using spill kits provided at the work site, and disposal of spilled material will be in accordance with applicable regulations
- Spills that require a cleanup beyond the ability of the on-site employees will be reported to the City Department of Public Works for assistance with appropriate resources
- Maintenance and repair of structures will be conducted using methods that do not contribute pollutants to the MS4
- General non-hazardous cleaning solutions will be disposed of in a utility sink that drains into the sanitary sewer system

Post-Emergency Rehabilitation of Response Equipment
Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency will be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. The use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified.

13.2 EDUCATIONAL METHODS

The Storm Water Division provided training to the Fire Department Personnel in PY2007-08 and for PY2008-09 the Storm Water group coordinated with the Fire Department on outreach materials on how to best conduct weed abatement prior to the fire season and remain in compliance with storm water regulations.

13.3 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements from PY3 experience includes:

- Continue to coordinate with the Fire Department on outreach materials.
- Expanded maintenance Best Management Practices for fire fighting equipment and facilities.

Regulatory comments are not applicable to this portion of the JURMP update. Non-Emergency Fire Fighting is a new component of the annual update.

SECTION 14 JURMP REVISIONS

14.1 INTRODUCTION 1

14.2 CONSTRUCTION COMPONENT 1

14.3 MUNICIPAL COMPONENT 1

14.4 RESIDENTIAL COMPONENT 2

SECTION 14 JURMP REVISIONS

14.1 INTRODUCTION

This section identifies the location in the JURMP of any changes made to the JURMP for PY 2008-09 in order to meet the requirements of the new Municipal Permit.

Updated land use information and listings of ESAs based on more recent information have been provided in the introduction. The regulatory background discussion has been updated to provide information about the Municipal Permit.

14.2 CONSTRUCTION COMPONENT

This table identifies changes that have been made to the JURMP in this section. Excerpts from the updated JURMP language can be found in Appendix A.3.

JURMP Section	Change	Rationale for Change
5.2.1.1 and Figure 5-1	Criteria for high Treat to Water Quality (TTWQ) changed from 50 acres to 1 acre.	Required under comments received from the RWQCB – 03/17/2009
5.2.1.1	Included the criterion of maximum disturbed area of 17 acres into the high TTWQ for construction sites.	Required under comments received from the RWQCB – 03/17/2009.
5.2.1.1	Included the criterion of exceptional TTWQ for construction site into the high TTWQ for construction sites	Required under comments received from the RWQCB – 03/17/2009.

14.3 MUNICIPAL COMPONENT

This table identifies changes that have been made to the JURMP in this section. Please refer to Appendix D, entitled "Chapter 5 – Operations and Maintenance", for sample language that will be included in the Municipal Section.

JURMP Section	Change	Rationale for Change
6.5	Information about the inspection frequencies and procedures for sanitary sewer.	Required under comments received by the RWQCB – 03/17/2009

14.4 RESIDENTIAL COMPONENT

This table identifies changes that have been made to the JURMP in this section. Excerpts from the updated JURMP language can be found in Appendix A.6.

New JURMP Section	Change	Rationale for Change
8.2.2	Description of steps to require and verify the implementation of BMPs for the high residential TTWQ areas	Required under comments received by the RWQCB – 03/17/2009

Section 15 Conclusions and Recommendations

Introduction **1**

15.1 Conclusions **1**

Table 1 – Challenges and Associated Strategies/Actions 3

15.2 Recommendations **4**

SECTION 15 CONCLUSIONS & RECOMMENDATIONS

INTRODUCTION

To conclude PY2 and recommend changes for PY3, this Section focuses on the challenges overcome this last year that will help eliminate inaccuracy or uncertainty for subsequent permit years. To summarize, the City:

- Continued implementation of the BMP-based inspections by focusing efforts on ensuring full implementation of appropriate BMPs at all high priority commercial, industrial, construction and municipal facilities.
- Expanded public education efforts by targeting junior high school student population by conducting presentations; and continued participation in the Fire Department/Safety Open House, hosting Pollution Prevention Days events, and providing information to the mass public through the City newsletter.
- Continued efforts towards a Watershed-based program by conducting the fifth upstream/downstream water quality assessment of Forrester Creek.
- Refined the City's ability to track complaints, inspections, violations, and enforcement actions for accuracy and completeness.
- Opened contract for on-call analytical testing services to conduct follow-up responses to complaints, spills, and targeted investigations to identify potential pollutant source points.
- Hired consultant to assist with the review of storm water plans and requirements for proposed development and redevelopment projects.

15.1 CONCLUSIONS

A number of conclusions resulted from compiling the Annual Report information as follows:

The City continues to transition the activity-based requirements of Order No. 2001-001 to fulfill the requirements of Order No. R9-2007-001. The actions taken by the City to comply with these requirements are fully described in Sections 1 through 14 (particularly Section 11) of this Annual Report. The City will continue to meet the activity-based compliance requirements in future program years.

The City's focus on BMP implementation at high priority commercial and industrial facilities and at construction sites will reduce or prevent discharges of pollutants from those activities and sites. Once the City can reasonably assure that those priority activities are not discharging pollutants, the City will be able to focus more effort on identifying and eliminating other (unknown, unidentified) sources of pollutants that continue to impact water quality.

The City's program must continue to move forward, from an emphasis on the activity-based compliance actions to water-quality-based activities that will help the City achieve the goal of reducing discharges of pollutants and restoring the quality of the receiving waters. These activities include collecting, evaluating and incorporating sufficient water quality data to set priorities, better identify problem areas, and to be able to demonstrate reductions in pollutants and improvements in water quality.

Effectively integrating jurisdictional into watershed programs will be a continued focus for the future. The Permit establishes important obligations at both jurisdictional and watershed levels. To accomplish this transition and integration, the City continues to meet with East County Cities Workgroup (San Diego River Watershed Jurisdictions) to provide some direction concerning inland urban runoff issues. Taking advantage of successes at other Cities strengthens individual and watershed programs.

New Directions, New Challenges….

The City must still address a number of unresolved data and information collection issues. Monitoring data are especially important to quantify pollutant loads within the jurisdiction of El Cajon. Additional dry weather monitoring stations are needed to better identify illegal discharge sources. The need for additional data and information must be carefully balanced with the costs of obtaining those items.

Permit Year 1 of Order 2001-01(2001/2002) set a baseline for the 14 components with the primary goal to reduce or eliminate pollutants from entering the City's storm drain system, which flows to Forrester Creek, the San Diego River, and ultimately the Pacific Ocean. Permit Year 2 implemented those 14 components that required inspection, monitoring, education, and enforcement. Permit Year 3 spent over 17,000 staff hours and over two million dollars ($2,000,000) in meeting permit requirements and JURMP goals. Permit Years 4 and 5 continued the BMP implementation verification inspection program initiated in PY3. Permit Year 4 focused on the Automotive Repair Industry, while PY 5 focused on the Restaurants and other businesses preparing and serving food.

The solid base of protocols and procedures produced in 2001, continued into PY1 of the new permit and into the current reporting period with refinement supported by eight years of experience in program implementation. An unending challenge is changing the behavior of the approximately 96,000 residents and 2,000 businesses and their views of urban runoff pollution. The City is predominantly a community of rental units, which identifies the population as more transient than the typical single-family residential population. This outreach and education challenge will be changing as more rental complexes turned into common living complexes with

home ownership. The following table summaries the City's storm water management strategy based on the challenges presented during the current reporting period, 2007/2008.

Table 1 – Challenges and Associated Strategies/Actions

Challenges	Strategies / Actions
Implementing the 14 components simultaneously	1. Prioritize implementation to maximize use of personnel, supplies, equipment, and budget. 2. Develop budget for PY3 to add watershed outreach, efforts, public participation events, additional outreach materials, GIS data development, staff training, and treatment controls for trash and debris.
Adequate Staffing and Equipment	Train as many City staff in storm water pollution prevention and Best Management Practices.
Incorporate Storm Water Concepts and Requirements at the Planning Stage	Work closely with Community Development staff to generate a Storm Water Information Packet to distribute to applicants.
Transition Jurisdictional Programs and activities into Watershed Activities.	1. Meet with WURMP Copermittees for implementation. 2. Explore strategies to fund watershed activities that go beyond the jurisdictional boundaries.
Tackle Inland City Issues	1. Coordinate with East County Cities on pollutant load reduction, training, and citizen educational efforts. 2. Develop East County City-specific materials.
Maintain Adequate Monitoring tasks	1. Review dry weather monitoring results. 2. Use GIS and the City's Business License database to focus on the most highly potentially pollution production areas. 3. Develop a basic wet weather monitoring program that is comparable with other Copermittee programs.

From July 1, 2003 through June 30, 2009, the City tackled a new set of challenges while maintaining the current level of provided services. In review, it was better to put resources towards implementing productive processes and procedures, rather than completing a task in the name of compliance. The City continues to brainstorm toward reaching higher standards in future program years, while quantifying pollutant reductions from jurisdictional actions that may have a watershed impact.

15.2 RECOMMENDATIONS

Specific recommended improvements are listed at the end of each component. Below are some general improvements for the City's Urban Runoff Strategy.

- Continue to maintain adequately trained staff to implement JURMP activities,
- Create a comprehensive Geographical Information System for the Jurisdictional and Watershed Storm Water Program efforts.
- Increase emphasis on watershed training, San Diego River Watershed Copermittee cooperative efforts, and electronic tracking of program information,
- Coordinate through City departments a cohesive urban runoff management program,
- Generate a schedule of outreach events for the next Permit Year according to JURMP requirements,
- Continue to develop a comprehensive program to collect and organize information for the Annual Report,
- Add sample collection sites and frequency to the dry weather monitoring program, and
  focus on outreach and education activities for the most effective approach to managing storm water pollution.
- Complete development of a storm drain master plan map inventorying MS4 infrastructure.

Appendix A.1
(No Content)

Appendix A.2

RESOLUTION NO. 10–03

A RESOLUTION APPROVING GENERAL PLAN AMENDMENT 2002-04 TO ADD STORM WATER RUNOFF POLICIES AND OBJECTIVES TO GENERAL PLAN TEXT.

WHEREAS, the El Cajon City Council duly advertised and held a public hearing on January 14, 2003, to consider an item which had been set for General Plan consideration; and

WHEREAS, to facilitate understanding by the public, the City Council took tentative or preliminary votes on this item, which vote was not binding until the public hearing was completed; and

WHEREAS, the City Council duly considered all information presented, and listened to all persons who appeared before it to speak.

NOW, THEREFORE, BE IT RESOLVED that the El Cajon City Council hereby approves General Plan Amendment 2002-04 to add storm water policies to the General Plan text as indicated in Planning Commission Resolution No. 9734, on file in the office of the City Clerk, and made a part hereof by this reference.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at a Regular Joint City Council/Redevelopment Agency Meeting held this 14th day of January, 2003, by the following vote to wit:

AYES : Lewis, Kendrick, McClellan, Ramos, Santos
NOES : None
ABSENT : None
DISQUALIFY : None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

MARILYNN LINN, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Resolution No. 10-03 of the Resolutions of the City of El Cajon, California, as adopted by the City Council at the Regular Joint Meeting of the City Council/Redevelopment Agency on the 14th day of January, 2003.

for M Steele
Marilynn Linn, CMC, City Clerk

1/14/03 (103)

STAFF REPORT AND RECOMMENDATION
PLANNING COMMISSION MEETING
DECEMBER 9, 2002 - 7:00 PM

COUNCIL CHAMBER
200 E. MAIN STREET
EL CAJON, CA 92020

AGENDA ITEM #3

PUBLIC HEARING ON
GENERAL PLAN AMENDMENT 2002-04 – Planning Commission

Request to add storm water policies to General Plan text.

******** ******** ******** ********

STAFF RECOMMENDATION: RECOMMEND APPROVAL

******** ******** ******** ********

ENVIRONMENTAL IMPACT INFORMATION

The proposed project is exempt from environmental review in accordance with Section 15308 of CEQA Guidelines.

DISCUSSION

As part of the local implementation of the federal Clean Water Act, the County of San Diego and its 18 cities have obtained a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board. The NPDES permit addresses the handling of storm water runoff by the 18 cities, their residents and businesses. Part of the NPDES permit includes a Jurisdictional Urban Runoff Management Program (JURMP) (Note: there are lots of acronyms used in the storm water runoff dictionary).

Although most of the City's storm water and drainage implementation is carried out by the Department of Public Works, there is a requirement in the NPDES and the JURMP that the General Plan include policies and principles which address water quality and storm water runoff. An attempt to add these policies and

principles to the General Plan last year was withdrawn when it was determined to be premature (GPA 2001-01).

Goal 8 of the El Cajon General Plan says, "The livability of El Cajon will be maintained and enhanced through respect for the environment." There are a number of policies under this goal which address other environmental issues and concerns and this is where the staff believes the policy and objectives (principles) for storm water runoff should be located within the City's general plan text.

RECOMMENDATION

It is recommended that the Planning Commission recommend approval of General Plan Amendment 2002-04 to add storm water runoff policy and objectives to the text of the General Plan as follows and for the following reasons:

Add the following objective and policies to Goal 8.

"Objective 8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into a municipal separate storm sewer system. (MS4)

8-10.3. The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.

8-10.4. The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-

structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. The City will reduce pollutants associated with vehicles and increasing traffic resulting from development. The City will coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable."

Reasons for Recommendation

A. This amendment to the text of the City's general plan will add a policy and objectives addressing storm water runoff as required by the National Pollution Discharge Elimination System (NPDES) permit issued to the City.

B. This amendment will provide policy and objectives dealing with storm water runoff to guide decision-making in the city.

C. This amendment is consistent with the City's Jurisdictional Urban Runoff Management Program (JURMP).

Refer to staff for a resolution stating the decision of the Planning Commission.

JSG:co

EL CAJON GENERAL PLAN 2000

Text and Map adopted by
City Council Resolution No. 10-91
on January 8, 1991

Text and Map amended by
City Council Resolution No. 31-98
on February 10, 1998

January, 2001

OBJECTIVE

8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants off site and into a municipal separate storm sewer system. (MS4)

8-10.3. The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.

8-10.4. The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and

sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. The City will reduce pollutants associated with vehicles and increasing traffic resulting from development. The City will coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

GOAL 9

A strong, competitive region-wide commercial base will be created and retained.

OBJECTIVE

9-1. Parkway Plaza and its immediate vicinity will be maintained as the City's regional shopping center.

POLICIES

9-1.1. Parkway Plaza shall be expanded from its original size and the number of major tenants and stores shall be increased.

9-1.2. The City shall continue to improve traffic circulation in the vicinity of Parkway Plaza.

9-1.3. The City shall cooperate with Parkway Plaza in the provision of parking facilities and may develop special

ORDINANCE NO. 4908

AN ORDINANCE REPEALING CHAPTERS 16.100, 16.101, 16.102, 16.103, 16.104, 16.105, 16.106, 16.107 AND 16.108 OF TITLE 16 OF THE EL CAJON MUNICIPAL CODE AND ADDING A NEW CHAPTER 16.60 TO TITLE 16 OF THE EL CAJON MUNICIPAL CODE REGARDING THE CITY OF EL CAJON STANDARD URBAN STORM WATER MITIGATION PLAN.

WHEREAS, the City of El Cajon, pursuant to its Water Quality Permit issued on February 21, 2001, is required to adopt certain implementation steps as mandated by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, one of the implementation steps requires the adoption of an Urban Storm Water Mitigation Plan based upon a pre-approved Model adopted on June 10, 2002, by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall be the Urban Storm Water Mitigation Plan adopted pursuant to the mandate of the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall allow for the adoption of resolutions and policies which shall implement the El Cajon Standard Urban Water Mitigation Plan not included in this Ordinance; and

WHEREAS, the adoption of this Ordinance, by the findings of the Regional Water Quality Control Board (San Diego Region), is exempt from the requirements of the California Environmental Quality Act; and

WHEREAS, the purpose of this Ordinance is to protect valuable water resources of the City of El Cajon and its surrounding environs from pollutants.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EL CAJON AS FOLLOWS:

Section 1: Chapters 16.100, 16.101, 16.102, 16.103, 16.104, 16.105, 16.106, 16.107, and 16.108 of the El Cajon Municipal Code are hereby repealed.

Section 2: Chapter 16.60 is hereby added to the El Cajon Municipal Code to read as follows:

16.60.010 Title.

The ordinance codified in this chapter shall be known as the "standard urban storm water mitigation plan (SUSMP) ordinance of the city of El Cajon."

16.60.020 Statutory Authority.

A. The municipal storm water National Pollutant Discharge Elimination System (NPDES) permit (Order No. R9-2007-0001, NPDES No. CAS0108758, hereinafter referred to as "Municipal Permit") issued to San Diego County, San Diego County Regional Airport Authority, the Port of San Diego, and eighteen cities by the San Diego Regional Water Quality Control Board (Regional Board) on January 24, 2007, requires the development and implementation of a program addressing urban runoff pollution issues in development planning for public and private projects.

B. The requirement to implement a program for development planning is based on federal and state statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA"), and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The municipal permit requires the implementation of a Jurisdictional Urban Runoff Management Program (JURMP), which has been adopted by the city of El Cajon on February 12, 2002, as amended.

16.60.030 Purpose.

A. The primary objectives of this division are to:

1. Ensure that discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards;

2. Effectively prohibit non-storm water discharges in urban runoff; and

3. Reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

B. The regulations of this division were developed to address post-construction urban runoff pollution from new development and redevelopment applications that fall under "priority project" categories. The goal of this division is to develop and implement practicable policies to ensure to the maximum extent practicable that development does not increase pollutant loads from a project site and considers urban runoff flow rates, velocities and durations. This goal may be achieved through site-specific controls and/or drainage area-based or shared structural treatment controls.

16.60.040 Applicability of chapter.

The regulations set forth in this chapter shall apply to the development plan approval process for discretionary development applications, and prior to issuing development permits for ministerial projects. To allow flexibility in meeting the design

standards set forth in this division, structural treatment control BMPs may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided certain conditions are met. All new development and significant redevelopment projects that fall into one of the following "priority project" categories are subject the requirements of this division, subject to the lawful prior approval provisions of the municipal permit. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project footprint is subject to the requirements of this division. These categories are:

A. Residential development of ten (10) units or more;

B. Commercial development greater than one (1) acre;

C. Heavy industry industrial development greater than one (1) acre;

D. Automotive repair shops;

E. Restaurants;

F. Hillside development greater than 5,000 square feet;

G. Projects located within or directly adjacent to or directly discharging to receiving waters within environmentally sensitive areas that create 2,500 square feet or more of impervious surface or increase the area of imperviousness to ten percent (10%) or more of its naturally occurring conditions;

H. Projects having more than 2,500 square feet of impervious surface that discharge to receiving waters within or adjacent to environmentally sensitive areas;

I. Parking lots with 5,000 square feet or more of impervious surface, or with more than fifteen (15) parking spaces and potentially exposed to urban runoff;

J. Streets, roads, highways, and freeways, which would create a new paved surface that is 5,000 square feet or more of impervious surface; and

K. Retail gasoline outlets of 5,000 square feet or more in size, or having a projected average daily traffic ("ADT") count of at least 100 vehicles per day regardless of size.

16.60.050 Limited exclusion.

Trenching and resurfacing work associated with utility projects; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lanes on existing roads; and routine replacement of damaged pavement, such as pothole repair, are not considered priority projects. Parking lots,

buildings and other structures associated with utility projects are subject to the requirements of this division if one or more of the criteria for the above categories are met.

16.60.060 Applicability of chapter 13.10.

The provisions of Chapter 13.10 (Storm Water Management and Discharge Control), including the definitions and enforcement provisions, shall be applicable to this chapter as though fully set forth herein.

16.60.070 Administration – limitations.

Where requirements of this division conflict with established local codes, (e.g., specific language of signage used on storm drain stenciling), the city council may continue the local practice and modify this division to be consistent with the code, except that to the extent that the standards in this division are more stringent than those under local codes, such more stringent standards shall apply.

16.60.080 Administration – Provisions for SUSMP requirements.

The requirements of this division shall be incorporated into the project design and shown on the plans prior to approval of discretionary permits. For projects requiring only ministerial permits, the requirements of this division shall be incorporated into the project design and shown on the plans prior to the issuance of any ministerial permits. City departments carrying out public projects that are not required to obtain permits shall be responsible for ensuring the requirements of this division are incorporated into the project design and shown on the plans prior to bidding for construction contracts, or equivalent. For public projects the requirements of this division must be incorporated into the project design and shown on the plans before allowing the project to commence.

16.60.090 Administration – Implementation.

All priority projects shall implement one or a combination of storm water BMPs, including, (1) LID and site design BMPs, (2) source control BMPs and, (3) structural treatment BMPs after the pollutants and conditions of concern have been identified. Storm water BMPs shall be considered and implemented where expressly required by this division and if not so required where determined applicable and feasible by the Director of Public Works. The storm water BMPs shall adhere to the requirements of this division, and shall be correctly designed so as to remove pollutants to the maximum extent practicable. A flow chart summarizing the storm water BMP selection procedure is provided in Figure 1.

16.60.100 Administration – Site design storm water treatment credits.

Project proponents may develop and submit for public review and comment and city council approval a regional model site design storm water treatment credits program that allows reductions in the volume or flow of storm water that must be captured or treated on a project in return for the inclusion of specified project design features in the project. The model site design storm water treatment credits program shall be deemed to be a part of this division following city council approval. Any such model program shall specify the conditions under which project proponents can be credited for the use of site design features and low impact development techniques that can reduce the volume of storm water runoff, preserve natural areas, and minimize the pollutant loads generated and potentially discharged from the site. Any site design storm water treatment credits program implemented shall be consistent and compliant with this division and approved by the city council.

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Figure 1. Storm Water BMP Selection Procedure Flow Chart

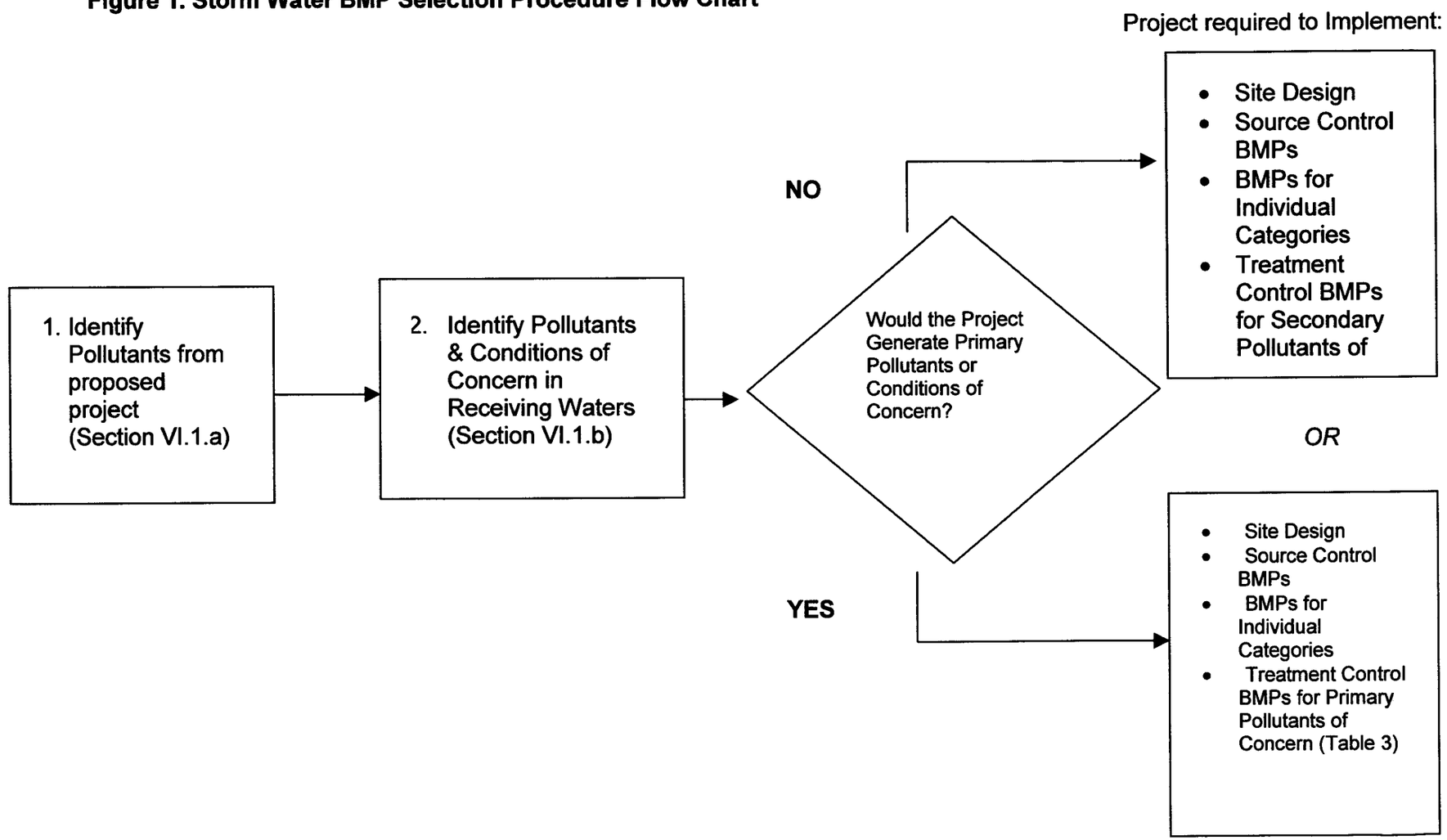

16.60.110 Identifying pollutants and conditions of concern.

A. Priority project proponents shall use this guidance to identify pollutants and conditions of concern, for which they need to mitigate or protect against. Site design and source control BMPs are required based on pollutants commonly associated with the proposed project type (see Table 2, "Standard Storm Water BMP Selection Matrix"). Treatment Control BMPs are also required for the project's expected pollutants of concern (see Table 3).

B. For private priority projects, the information shall be provided with the project application prior to being deemed complete.

C. For public priority projects, the information shall be provided by the Director of Public Works prior to bidding for construction contracts.

16.60.120 General categories of water pollution.

A. Sediments – Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

B. Nutrients – Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

C. Metals – Metals are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary source of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

D. Organic Compounds – Organic compounds are carbon-based. Commercially available or naturally occurring organic compounds are found in

pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.

E. Trash & Debris – Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfides.

F. Oxygen-Demanding Substances – This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

G. Oil and Grease – Oil and grease are characterized as high-molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

H. Bacteria and Viruses – Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

I. Pesticides – Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

16.60.130 Identifying pollutants from the project area.

Using Table 1, pollutants shall be identified that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

16.60.140 Identifying pollutants of concern.

A. Pollutants generated by the proposed priority project that exhibit one or more of the following characteristics are considered primary pollutants of concern:

- Current loadings or historical deposits of the pollutant are impairing the beneficial uses of a receiving water;
- Elevated levels of the pollutant are found in water or sediments of a receiving water and/or have the potential to be toxic to or bioaccumulate in organisms therein; and
- Inputs of the pollutant are at a level high enough to be considered potentially toxic.

B. To identify primary pollutants of concern in receiving waters, each priority project shall, at a minimum, do the following:

1. For each of the proposed projects discharge points, identify the receiving water(s) that each discharge point proposes to discharge to, including hydrologic unit basin number(s), as identified in the most recent version of the *Water Quality Control Plan for the San Diego Basin*, prepared by the San Diego Regional Water Quality Control Board;

2. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies. List any and all pollutants for which the receiving waters are impaired;

3. Compare the list of pollutants for which the receiving waters are impaired with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing impairment of receiving waters shall be considered primary pollutants of concern.

For projects where no primary pollutants of concern exist, those pollutants identified through the use of Table 1 shall be considered secondary pollutants of concern.

16.60.150 Identifying conditions of concern.

A. Common impacts to the hydrologic regime resulting from development typically include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. These changes have the potential to permanently impact downstream

channels and habitat integrity. A change to a priority project site's hydrologic regime would be considered a condition of concern if the change would impact downstream channels and habitat integrity. Because of these potential impacts, a director, or his or her designee, may require that the following steps be followed for priority projects that, in their judgment, may impact the hydrologic regime:

1. Evaluate the project's conditions of concern in a drainage study report prepared by a registered civil engineer in the State of California, with experience in fluvial geomorphology and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, wet season groundwater depth, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed;

2. As part of the drainage study, a qualified, licensed professional shall provide a report on proposed infiltration techniques (trenches, basins, dry wells, permeable pavements with underground reservoir for infiltration) regarding any potential adverse geotechnical concerns. Geotechnical conditions (such as slope stability, expansive soils, compressible soils, seepage, groundwater depth, and loss of foundation or pavement subgrade) should be addressed, and mitigation measures provided;

3. As part of the drainage study, the civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of an altered flow regime;

4. The drainage study shall compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rate, flow velocity, runoff volume, time of concentration, and retention volume. These characteristics shall be developed for the two-year and 10-year frequency, Type I storm, of six-hour or 24-hour duration (whichever is the closer approximation of the site's time of concentration), during critical hydrologic conditions for soil and vegetative cover[1]. The drainage study shall report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions affecting downstream conditions of concern would be maintained by the proposed project, satisfactory to the Director of Public Works, by incorporating the site design, source control, and treatment control requirements identified in this division.

B. For priority development projects that disturb ("PDP") fifty (50) acres or more:

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[1]. Design storms can be found at http://www.wrcc.dri.edu/pcpnfreq.html. Applicants may calculate the storm events using local rain data. In addition, isopluvial maps contained in the County of San Diego Hydrology Manual may be used to extrapolate rainfall data to areas where insufficient data exists. If isopluvial maps are used interpolations shall be linear.

1. PDP post project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations (interim hydromodification criteria) where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

2. PDPs disturbing fifty (50) acres or more shall implement hydrologic controls to manage post-project runoff flow rates and durations as required by the interim hydromodification criteria.

Table 1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >100,000 ft^2	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Heavy industry /industrial development	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft^2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

16.60.160 Progression of storm water BMPs.

Site design BMPs reduce the need for source and/or treatment control BMPs, and source control BMPs may reduce the amount of treatment control BMPs needed. Throughout all the following sections, all priority projects shall consider, and incorporate and implement where expressly required by this division and if not so required where determined applicable and feasible by the Director of Public Works, storm water BMPs into the project design, in the following progression:

- Site Design BMPs
- Source Control BMPs
- Treatment Control BMPs

16.60.170 Requirements to implement storm water BMPs.

Priority projects must implement LID site design BMPs and source control BMPs, and must also implement treatment control BMPs unless a waiver is granted based on the infeasibility of all treatment control BMPs. LID BMPs must meet the minimum requirements in section D.1.d.(4) of NPDES Permit No. CAS 0108758. BMPs must also achieve certain performance standards set out in section D.1.d. (5) and (6). Selection of BMPs from the menus included in this division, using the rules set out in this division, must fulfill these requirements. In addition, runoff treated by LID and site design or source control BMPs, such as rooftop runoff treated in landscaping, may be useful in reducing the quantity of runoff required to be treated in, "Treatment Control BMPs."

16.60.180 Selection of storm water BMPs.

Using the Treatment Control BMP Selection Matrix, each priority project shall select a structural treatment BMP by comparing the list of pollutants for which the downstream receiving waters are impaired (if any), with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing a Clean Water Act section 303(d) impairment of the receiving waters of the project shall be considered primary pollutants of concern. Priority projects that are anticipated to generate a primary pollutant of concern shall meet all applicable requirements of establishing stormwater BMPs, and shall select a single or combination of storm water BMPs from Table 3 which maximizes pollutant removal for the particular primary pollutant(s) of concern.

Alternatively, a project proponent may elect to implement a combination of LID BMPs that either disperse and infiltrate, or direct to bioretention facilities, the flows from all impervious areas on-site. These BMPs are presumed to provide maximum extent practicable treatment for all pollutants of concern; therefore no further documentation of the treatment BMP selection process is required.

16.60.190 Storm water BMPs for projects not generating pollutants.

Priority projects that are not anticipated to generate a pollutant for which the receiving water is Clean Water Act Section 303(d) impaired shall meet applicable standard requirements of establishing stormwater BMPs, and shall select a single or combination of storm water BMPs from Table 3 which are effective for pollutant removal of the identified secondary pollutants of concern, consistent with the "maximum extent practicable" standard defined in Attachment D of the Municipal Permit.

16.60.200 Storm water BMPs for projects generating primary and secondary pollutants.

Where a site generates both primary and secondary pollutants of concern, primary pollutants of concern receive priority for BMP selection. For such sites, selected BMPs must only maximize pollutant removal for the primary pollutants of concern. Where a site generates only secondary pollutants of concern, selected BMPs shall target the secondary pollutant of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 1), consistent with the maximum extent practicable standard defined in Attachment D of the Municipal Permit.

Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the city when a feasibility analysis has been conducted, which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible. Treatment control BMPs shall not be constructed within a receiving water.

16.60.210 Alternative storm water BMPs.

Alternative storm water BMPs not identified in Table 3 may be approved at the discretion of the Director of Public Works, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 3.

Table 2. Site Design and Source Control Storm Water BMP Selection Matrix.

Priority Project Category	*Site Design BMPs(1)*	*Source Control BMPs(2)*	*Requirements Applicable to Individual Priority Project Categories(3)*										
			a. Private Roads	b. Residential Driveways & Guest Parking	c. Dock Areas	d. Maintenance Bays	e. Vehicle Wash Areas	f. Outdoor Processing Areas	g. Equipment Wash Areas	h. Parking Areas	i. Roadways	j. Fueling Areas	k. Hillside Landscaping
Detached Residential Development	R	R	R	R									R
Attached Residential Development	R	R	R										
Commercial Development >100,000 ft^2	R	R			R	R	R	R					
Automotive Repair Shop	R	R			R	R	R		R			R	
Restaurants	R	R			R				R				
Hillside Development >5,000 ft^2	R	R	R										R
Parking Lots	R	R								R(4)			
Streets, Highways & Freeways	R	R									R		

R = Required; select BMPs as required from the applicable steps in Section VI.2.a & b, or equivalent as identified in Appendix A.
(1) Refer to Section VI.2.a.
(2) Refer to Section VI.2.b.
(3) Priority project categories must apply specific storm water BMP requirements, where applicable. Projects are subject to the requirements of all priority project categories that apply.
(4) Applies if the paved area totals >5,000 square feet or with >15 parking spaces and is potentially exposed to urban runoff.

Table 3. Treatment Control BMP Selection Matrix.

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	High-rate biofilters	High-rate media filters	Trash Racks & Hydro -dynamic Devices
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

Notes on Treatment Control BMP Categories

All rankings are relative. Ranking of all facilities assumes proper sizing, design, and periodic maintenance. Following are general descriptions of each category.

- **Bioretention Facilities** (infiltration planters, flow-through planters, bioretention areas, and bioretention swales). Facilities are designed to capture runoff and infiltrate slowly through soil media, which also supports vegetation. Bioretention facilities, except for flow-through planters, effectively promote infiltration into native soils. In clay soils, facilities may capture excess treated runoff in an underdrain piped to the municipal storm drain system. Typical criteria: an infiltration surface area at least 4% of tributary impervious area, 6-inch average depth of top reservoir, 18-inch soil layer, 12-inch to 18-inch gravel subsurface storage layer.

- **Settling Basins and Wetlands** (extended detention basins, "wet" basins, decorative or recreational lakes or water features also used for storm water treatment, constructed wetlands). Facilities are designed to capture a minimum water quality volume of 80% of total runoff and detain for a minimum of 48 hours. Some wetland designs have proven effective in removing nutrients, but performance varies.

- **Infiltration Facilities or Practices** (infiltration basins, infiltration trenches, dry wells, dispersal of runoff to landscape, pervious pavements). These facilities and landscape designs capture, retain, and infiltrate a minimum of 80% of runoff into the ground. Infiltration facilities are generally only feasible in permeable (Hydrologic Soil Group A or B) soils. Volume and area of infiltration facilities depends on soil permeability and safety factor used. Typical criteria: Infiltration facilities should have pretreatment to remove silt to prolong life of the facility. A 10-foot vertical separation from average seasonal groundwater depth is required. Dispersal to landscape may be accomplished in any soil type and generally requires a maximum 2:1 ratio impervious:pervious and concave topography to ensure the first 1 inch of rainfall is retained.

- **Media Filters** (sand filters). Filters designed to treat runoff produced by a rainfall of 0.2 inches per hour (or 2×85th percentile hourly rainfall intensity) by slow infiltration through sand or other media. Typical criteria: Surface loading rate not to exceed 5 inches/hour. Entire surface of the sand must be accessible for maintenance.

- **High Rate Biofilters** (tree wells, typically proprietary). Biofilters with specially designed media to rapidly filter runoff while removing some pollutants. Filterra® (proprietary version) recommends surface loading rates of up to 100 inches/hour.

- **High-rate Media Filters** (typically proprietary). Vaults with replaceable cartridge filters filled with inorganic media.

- **Drainage Inserts** have low effectiveness in removing pollutants that tend to associate with fine particles and have medium effectiveness in removing coarse sediment and trash. They are sometimes used to augment more effective treatment facilities and are sometimes used alone when more effective facilities have been deemed infeasible.

Notes on Pollutants of Concern:
In Table 3, Pollutants of Concern are grouped as gross pollutants, pollutants that tend to associate with fine particles, and pollutants that remain dissolved.

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

16.60.220 Low Impact Development (LID) and site design BMP

A. Priority projects shall be designed so as to minimize directly connected impervious surfaces and to promote infiltration using LID techniques. Priority projects shall, to the maximum extent practicable, minimize the introduction of pollutants and conditions of concern that may result in significant impacts, generated from site runoff to the storm water conveyance system. Priority projects shall also control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat. Priority projects can address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Mimicking a site's natural hydrologic regime can be pursued by:

- Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the storm water conveyance system, and minimizing clearing and grading.
- Providing runoff storage measures dispersed throughout a site's landscape with the use of bioretention facilities and detention, retention, and infiltration practices.

B. Site design BMPs shall offer an innovative approach to urban storm water management that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates storm water controls throughout the urban landscape. Examples of many of these methods may be found in the County of San Diego's LID Handbook, and its publications, *Start at the Source*, and *Low-Impact Development Design Strategies*, in the City of Portland, Oregon's *Stormwater Manual*, and in the Contra Costa (California) Clean Water Program's *Stormwater C.3 Guidebook*.

16.60.230 Maintaining pre-development rainfall runoff characteristics.

A. Priority projects shall control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. In addition, projects should control runoff discharge volumes and durations to the maximum extent practicable using the site design, source control, and treatment control requirements.

B. Design Concept 1: Minimize Project's Impervious Footprint & Conserve Natural Areas. The following site design options shall be considered and, incorporated and implemented where determined applicable and feasible by the Director of Public Works, during the site planning and approval process, consistent with applicable General Plan policies and other development regulations.

1. Minimize and disconnect impervious surfaces. This can be achieved in various ways, including, but not limited to increasing building density (number of stories above or below ground) and developing land use regulations seeking to limit impervious surfaces. Decreasing the project's footprint can substantially reduce the project's impacts to water quality and hydrologic conditions.

2. Conserve natural areas, soils, and vegetation where feasible. This can be achieved by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition. The following list provides a guideline for determining the least sensitive portions of the site, in order of increasing sensitivity. Jurisdictions should also refer to their Multiple Species Conservation Plans or other biological regulations, as appropriate.

a. Areas devoid of vegetation, including previously graded areas and agricultural fields.
b. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands.
c. Areas of chamise or mixed chaparral, and non-native grasslands.
d. Areas containing coastal scrub communities.
e. All other upland communities.
f. Occupied habitat of sensitive species and all wetlands.
g. All areas necessary to maintain the viability of wildlife

corridors. Within each of the previous categories, areas containing hillsides should be considered more sensitive than the same category without hillsides.

3. Construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, permeable asphalt, unit pavers, and granular materials.

4. Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.

5. Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.

6. Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.

7. Use natural drainage systems to the maximum extent practicable.

8. Other site design options that are comparable, and equally effective.

9. Minimize soil compaction.

C. Design Concept 2: Minimize Directly Connected Impervious Areas (DCIAs). Priority projects shall consider, and incorporate and implement the following design characteristics, where determined applicable and feasible by the Director of Public Works.

1. Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.

2. Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.

3. Other design characteristics that are comparable and equally effective.

16.60.240 Protection of slopes and channels.

Project plans shall include storm water BMPs to decrease the potential for erosion of slopes and/or channels, consistent with local codes and ordinances and with the approval of all agencies with jurisdiction, e.g., the U.S. Army Corps of Engineers, the San Diego Regional Water Quality Control Board, and the California Department of Fish and Game. The following design principles shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public

Works:

A. Minimize disturbances to natural drainages.

B. Convey runoff safely from the tops of slopes.

C. Vegetate slopes with native or drought tolerant vegetation.

D. Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.

E. Stabilize permanent channel crossings.

F. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.

G. Other design principles that are comparable and equally effective.

16.60.250 Providing storm drain system stenciling and signage.

Storm drain stencils are highly visible source control messages, typically placed directly adjacent to storm drain inlets. The stencils contain a brief statement that prohibits the dumping of improper materials into the urban runoff conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. Priority projects shall include the following requirements in the project design.

A. Provide stenciling or labeling of all storm drain inlets and catch basins within the project area with prohibitive language (such as: "NO DUMPING – I LIVE IN <<name receiving water>>") and/or graphical icons to discourage illegal dumping.

B. Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

C. Maintain legibility of stencils and signs.

16.60.260 Designing outdoor material storage areas to reduce pollution introduction.

Improper storage of materials outdoors may increase the potential for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the urban runoff conveyance system. Where the priority project plans include outdoor areas for storage of hazardous materials that may contribute pollutants to the urban runoff conveyance system, the following storm water BMPs are

required:

A. Hazardous materials with the potential to contaminate urban runoff shall either be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

B. The storage area shall be paved and sufficiently impervious to contain leaks and spills.

C. The storage area shall have a roof or awning to minimize direct precipitation within the secondary containment area.

16.60.270 Designing trash storage areas to reduce pollution introduction.

All trash container areas shall meet the following requirements (limited exclusion: detached residential homes):

A. Paved with an impervious surface, designed not to allow run-on from adjoining areas, screened or walled to prevent off-site transport of trash; and

B. Provide attached lids on all trash containers that exclude rain, or roof or awning to minimize direct precipitation.

16.60.280 Using efficient irrigation systems and landscape design.

Priority projects shall design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water conveyance system. (Limited exclusion: detached residential homes.) In compliance with the Water Conservation in Landscaping Act (California Government Code sections 65591, *et seq.*), the following methods to reduce excessive irrigation runoff shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

A. Employing rain shutoff devices to prevent irrigation after precipitation.

B. Designing irrigation systems to each landscape area's specific water requirements.

C. Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.

D. Employing other comparable, equally effective, methods to reduce irrigation water runoff.

16.60.300 Incorporate requirements applicable to individual priority project categories.

Where identified in Table 2, the following requirements shall be incorporated into applicable priority projects during the storm water BMP selection and design process. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for "g. Equipment Wash Areas" and "h. Parking Areas" into the project design).

A. Private Roads - The design of private roadway drainage shall use at least one of the following:

1. Rural swale system: street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings;

2. Urban curb/swale system: street slopes to curb, periodic swale inlets drain to vegetated swale/biofilter;

3. Dual drainage system: First flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder, high flows connect directly to storm water conveyance system;

4. Other methods, which are comparable and equally effective within the project.

B. Residential Driveways and Guest Parking. The design of driveways and private residential parking areas shall use at least one of the following features.

1. Design driveways with shared access, flared (single lane at street) or wheelstrips (paving only under tires); or, drain into landscaping prior to discharging to the storm water conveyance system;

2. Uncovered temporary or guest parking on private residential lots may be: paved with a permeable surface; or, designed to drain into landscaping prior to discharging to the storm water conveyance system;

3. Other features which are comparable and equally effective.

C. Dock Areas. Loading/unloading dock areas shall include the following:

1. Cover loading dock areas, or design drainage to preclude urban run-on and runoff;

2. Direct connections to storm drains from depressed loading docks (truck wells) are prohibited;

3. Other features which are comparable and equally effective.

D. Maintenance Bays. Maintenance bays shall include the following:

1. Repair/maintenance bays shall be indoors; or, designed to preclude urban run-on and runoff; and

2. Design a repair/maintenance bay drainage system to capture all wash water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit, or

3. Other features which are comparable and equally effective.

E. Vehicle Wash Areas. Priority projects that include areas for washing/steam cleaning of vehicles shall use the following:

1. Self-contained; or covered with a roof or overhang;

2. Equipped with a clarifier or other pretreatment facility;

3. Properly connected to a sanitary sewer;

4. Other features which are comparable and equally effective.

F. Outdoor Processing Areas. Outdoor process equipment operations, such as rock grinding or crushing, painting or coating, grinding or sanding, degreasing or parts cleaning, landfills, waste piles, and wastewater and solid waste treatment and disposal, and other operations determined to be a potential threat to water quality by the Copermittee shall adhere to the following requirements:

1. Cover or enclose areas that would be the most significant source of pollutants; or, slope the area toward a dead-end sump; or, discharge to the sanitary sewer system following appropriate treatment in accordance with conditions established by the applicable sewer agency;

2 Grade or berm area to prevent run-on from surrounding areas;

3. Installation of storm drains in areas of equipment repair is prohibited;

4. Other features which are comparable or equally effective.

G. Equipment Wash Areas. Outdoor equipment/accessory washing and steam cleaning activities at priority projects shall use the following:

1. Be self-contained; or covered with a roof or overhang;

2. Be equipped with a clarifier, grease trap or other pretreatment facility, as appropriate;

3. Properly connected to a sanitary sewer;

4. Other features which are comparable or equally effective.

H. Parking Areas. To minimize the offsite transport of pollutants from parking areas, the following design concepts shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

1. Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design;

2. Overflow parking (parking stalls provided in excess of the City's minimum parking requirements) should be constructed with permeable paving;

3. Other design concepts, which are comparable and equally effective.

I. Roadways. Priority roadway projects shall select treatment control BMPs following the treatment control selection procedure identified in this division entitled, "Establishing Storm Water BMPs."

J. Fueling Area. Non-retail fuel dispensing areas shall contain the following:

1. Overhanging roof structure or canopy. The cover's minimum dimensions must be equal to or greater than the area within the grade break. The cover must not drain onto the fuel dispensing area and the downspouts must be routed to prevent drainage across the fueling area. The fueling area shall drain to the project's treatment control BMP(s) prior to discharging to the storm water conveyance system;

2. Paved with Portland cement concrete (or equivalent smooth impervious surface). The use of asphalt concrete shall be prohibited;

3. Have an appropriate slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of urban runoff;

4. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.

K. Hillside Landscaping. Hillside areas that are disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, satisfactory to the Director of Public Works.

16.60.310 Treatment control BMP objectives.

A. Minimizing a development's detrimental effects on water quality can be most effectively achieved through the use of a combination of site design, source and treatment control storm water BMPs. Where projects have been designed to minimize,

to the maximum extent practicable, the introduction of anticipated pollutants of concern that may result in significant impacts to the receiving waters through the implementation of site design and source control storm water BMPs, the development would still have the potential for pollutants of concern to enter the storm water conveyance system. Therefore, priority projects shall be designed to remove pollutants of concern from the storm water conveyance system to the maximum extent practicable through the incorporation and implementation of treatment control BMPs.

B. In meeting the requirements in this section, priority projects shall implement a single or combination of storm water BMPs that will remove anticipated pollutants of concern, as identified by the procedure of this division, in site runoff to the maximum extent practicable. Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the Director of Public Works when a feasibility analysis has been conducted, which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible. Treatment control BMPs must be implemented unless a waiver is granted to the project by the Director of Public Works based on the infeasibility of any treatment control BMP.

16.60.320 Design to treatment control BMP standards.

All priority projects shall design, construct and implement structural treatment control BMPs that meet the design standards of this section, unless specifically exempted by the limited exclusions. Structural treatment control BMPs required by this section shall be operational prior to the use of any dependent development, and shall be located and designed in accordance with the requirements of this division.

16.60.330 Structural treatment control volume based BMPs.

Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

- Volume of runoff produced from a 24-hour 85th percentile storm event, as determined from isoplovial maps contained in the County of San Diego Hydrology Manual. See County of San Diego's Isoplovial map at http://www.sdcounty.ca.gov/dpw/engineer/flood.htm; or

- Volume of runoff produced by the 85th percentile 24-hour runoff event, determined as the maximized capture urban runoff volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998*); or

- The volume of annual runoff based on unit basin storage volume, to achieve 90 percent or more volume treatment by the method recommended in *California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (1993)*, or

- The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event. Where this option is used, storm events shall be identified by their separation from one another by at least six hours of no rain.

16.60.340 Structural treatment control flow based BMPs.

As an alternative to volume-based BMPs, structural treatment controls may be designed as flow based BMPs. Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

- The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour for each hour of a storm event; or

- The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two, for each hour of a storm event; or

- The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two, for each hour of a storm event.

16.60.350 Limited exclusions.

A. Proposed restaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical sizing criteria requirements listed for structural treatment control volume based BMPs.

B. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed for structural treatment control volume based apply only to the addition, and not to the entire development.

16.60.360 Locating BMPs near pollutant sources.

Structural treatment control storm water BMPs should be implemented close to pollutant sources to minimize costs and maximize pollutant removal prior to runoff entering receiving waters. Such BMPs may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following requirements:

A. All structural treatment control BMPs shall be located so as to infiltrate, filter, and/or treat the required runoff volume or flow prior to its discharge to any receiving water body supporting beneficial uses;

B. Multiple post-construction structural treatment control BMPs for a single priority development project shall collectively be designed to comply with the design standards for structural treatment control volume based BMPs;

C. Shared storm water BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;

D. Interim storm water BMPs that provide equivalent or greater treatment than is required by structural treatment control volume based BMPs may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

16.60.370 Restrictions on use of infiltration BMPs.

At a minimum, use of structural treatment BMPs that are designed to primarily function as infiltration devices shall meet the following conditions[2]:

A. Urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants, such as sedimentation or filtration, prior to infiltration;

B. All dry weather flows shall be diverted from infiltration devices except for those non-storm water discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to storm water conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and dechlorinated swimming pool discharges;

C. Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used;

D. The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet or as determined on an individual, site-specific basis by the Director of Public Works. Where groundwater does not support beneficial uses, this vertical distance criterion may be reduced, provided groundwater quality is maintained;

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[2]. These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

E. The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, and infiltration rate) that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses;

F. Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries; and other high threat to water quality land uses and activities as designated by the Director of Public Works;

G. The horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as determined on an individual, site-specific basis by the Director of Public Works.

16.60.380 Maintenance mechanism to be in place before acceptance.

Structural BMPs shall not be considered "effective," and shall not be accepted as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. As part of project review, if a project proponent is required to include interim or permanent structural BMPs in project plans, and if the Director of Public Works does not provide a mechanism for BMP maintenance, the project proponent shall provide verification of maintenance requirements through such means as may be appropriate, at the discretion of the Director of Public Works, including, but not limited to covenants, legal agreements, maintenance agreements, and/or conditional use permits.

16.60.390 Maintenance mechanisms.

Public equity maintenance. The City Council may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the BMP. Unless acceptable to the City Council, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed, (e.g., through a trust fund, assessment district fees, bond, letter of credit or similar means). In addition, the City Council may seek protection from liability by appropriate releases and indemnities. The City Council shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The City Council shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions; and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the

facilities. The City Council must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

A. Project proponent agreement to maintain storm water BMPs: The City Council may enter into a contract with the project proponent obliging the project proponent to maintain, repair and replace the storm water BMP as necessary into perpetuity. Security may be required.

B. Assessment districts: The City Council may approve an Assessment District or other funding mechanism created by the project proponent to provide funds for storm water BMP maintenance, repair and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.

C. Lease provisions: In those cases where the City holds title to the land in question, and the land is being leased to another party for private or public use, the City Council may assure storm water BMP maintenance, repair and replacement through conditions in the lease.

D. Conditional use permits: For discretionary projects only, the City Council may assure maintenance of storm water BMPs through the inclusion of maintenance conditions in the conditional use permit. Security may be required.

E. Alternative mechanisms: The City Council may accept alternative maintenance mechanisms if such mechanisms are as protective those listed above.

16.60.400 Verification mechanisms.

For discretionary projects, the City approved method of storm water BMP maintenance shall be incorporated into the project's permit, and shall be consistent with permits issued by resource agencies, before City approval of discretionary permits. For projects requiring only ministerial permits, the approved method of storm water BMP maintenance shall be incorporated into the permit conditions before the issuance of any ministerial permits. In all instances, the project proponent shall provide proof of execution of an approved method of maintenance repair and replacement before the issuance of construction approvals. Public projects that are not required to obtain permits shall be responsible for ensuring that an approved method of storm water BMP maintenance repair and replacement is executed prior to the commencement of construction. For all properties, the verification mechanism will include the project proponent's signed statement, as part of the project application, accepting responsibility for all structural BMP maintenance, repair and replacement, until a City approved entity agrees to assume responsibility for structural BMP maintenance, repair and replacement.

16.60.410 Maintenance requirements.

A. Operation & Maintenance (O&M) Plan: A copy of an Operation & Maintenance (O&M) plan, prepared by the project proponent satisfactory to the Director of Public Works shall be attached to the approved maintenance agreement, which describes the designated responsible party to manage the storm water BMP(s), employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities, copies of resource agency permits, and any other necessary activities. At a minimum, maintenance agreements shall require the inspection and servicing of all structural BMPs on an annual basis. The project proponent maintenance entity shall complete and maintain O&M forms to document all maintenance requirements. Parties responsible for the O&M plan shall retain records for at least 5 years. These documents shall be made available to the City for inspection upon request at any time.

B. Access Easement/Agreement: As part of the maintenance mechanism selected above, it shall include a copy of an executed access easement that shall be binding on the land throughout the life of the project, until such time that the storm water BMP requiring access is replaced, satisfactory to the Director of Public Works.

16.60.420 Waiver of structural treatment BMP requirements.

The requirement of implementing structural treatment BMPs may be waived if infeasibility can be established. A waiver of infeasibility shall be granted only when all available structural treatment BMPs have been considered and rejected as infeasible.

Waivers may only be granted from structural treatment BMP and structural treatment BMP sizing requirements. Priority development projects, whether or not granted a waiver may not cause or contribute to an exceedance of water quality objectives. Pollutants in runoff from projects granted a waiver must still be reduced to the maximum extent practicable.

Section 3: This Ordinance is adopted pursuant to the authority granted to the City of El Cajon under San Diego Regional Water Quality Control Board Order No. R9 2007-0001. This Ordinance encompasses a state-mandated requirement thereunder.

Section 4: This ordinance shall be effective thirty (30) days following its passage and adoption.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at a Regular Joint City Council/Redevelopment Agency Meeting held this 18th day of December, 2007, by the following vote to wit:

AYES	:	Lewis, Hanson-Cox, Kendrick, McClellan, Ramos
NOES	:	None
ABSENT	:	None
DISQUALIFY	:	None

Mark Lewis, Mayor of the City of El Cajon

ATTEST:

Kathie Rutledge, CMC, City Clerk

12/18/07 (Item 14.2)

STAFF REPORT AND RECOMMENDATION
PLANNING COMMISSION MEETING
DECEMBER 9, 2002 - 7:00 PM

COUNCIL CHAMBER
200 E. MAIN STREET
EL CAJON, CA 92020

AGENDA ITEM #3

PUBLIC HEARING ON
GENERAL PLAN AMENDMENT 2002-04 – Planning Commission

Request to add storm water policies to General Plan text.

******** ******** ******** ********

STAFF RECOMMENDATION: RECOMMEND APPROVAL

******** ******** ******** ********

ENVIRONMENTAL IMPACT INFORMATION

The proposed project is exempt from environmental review in accordance with Section 15308 of CEQA Guidelines.

DISCUSSION

As part of the local implementation of the federal Clean Water Act, the County of San Diego and its 18 cities have obtained a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board. The NPDES permit addresses the handling of storm water runoff by the 18 cities, their residents and businesses. Part of the NPDES permit includes a Jurisdictional Urban Runoff Management Program (JURMP) (Note: there are lots of acronyms used in the storm water runoff dictionary).

Although most of the City's storm water and drainage implementation is carried out by the Department of Public Works, there is a requirement in the NPDES and the JURMP that the General Plan include policies and principles which address water quality and storm water runoff. An attempt to add these policies and

principles to the General Plan last year was withdrawn when it was determined to be premature (GPA 2001-01).

Goal 8 of the El Cajon General Plan says, "The livability of El Cajon will be maintained and enhanced through respect for the environment." There are a number of policies under this goal which address other environmental issues and concerns and this is where the staff believes the policy and objectives (principles) for storm water runoff should be located within the City's general plan text.

RECOMMENDATION

It is recommended that the Planning Commission recommend approval of General Plan Amendment 2002-04 to add storm water runoff policy and objectives to the text of the General Plan as follows and for the following reasons:

Add the following objective and policies to Goal 8.

"Objective 8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into a municipal separate storm sewer system. (MS4)

8-10.3. The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.

8-10.4. The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-

structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. The City will reduce pollutants associated with vehicles and increasing traffic resulting from development. The City will coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable."

Reasons for Recommendation

A. This amendment to the text of the City's general plan will add a policy and objectives addressing storm water runoff as required by the National Pollution Discharge Elimination System (NPDES) permit issued to the City.

B. This amendment will provide policy and objectives dealing with storm water runoff to guide decision-making in the city.

C. This amendment is consistent with the City's Jurisdictional Urban Runoff Management Program (JURMP).

Refer to staff for a resolution stating the decision of the Planning Commission.

JSG:co

EL CAJON GENERAL PLAN 2000

Text and Map adopted by
City Council Resolution No. 10-91
on January 8, 1991

Text and Map amended by
City Council Resolution No. 31-98
on February 10, 1998

January, 2001

OBJECTIVE

8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants off site and into a municipal separate storm sewer system. (MS4)

8-10.3. The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.

8-10.4. The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and

sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

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8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

GOAL 9

A strong, competitive region-wide commercial base will be created and retained.

OBJECTIVE

9-1. Parkway Plaza and its immediate vicinity will be maintained as the City's regional shopping center.

POLICIES

9-1.1. Parkway Plaza shall be expanded from its original size and the number of major tenants and stores shall be increased.

9-1.2. The City shall continue to improve traffic circulation in the vicinity of Parkway Plaza.

9-1.3. The City shall cooperate with Parkway Plaza in the provision of parking facilities and may develop special

STORM WATER

MITIGATION PLAN

Permit No. PUD or TSM or BP

Name of Project

PROJECT ADDRESS
APN: 000-000-00

Prepared By

John Q. Engineer
Consultants, Inc.
195 E. Douglas Avenue
El Cajon, CA 92020

For

Developer, LLC
200 E. Main
El Cajon, CA 92020

Date

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A. Location Map
B. Project Map
C. Post-Construction BMP Map
D. BMP Datasheets for proprietary controls (only)
E. Hydrology Calculations/Copy of Hydrology Study

ATTENTION: DIRECTIONS ARE CONTAINED in BRACKETS [ ]

1.0 INTRODUCTION

A Storm Water Mitigation Plan (SWMitP) is required under the City of El Cajon Municipal Code 16.60 and Municipal Permit Order 2007-01. The purpose of this SWMitP is to address the water quantity and quality from the proposed project. Best Management Practices (BMPs) applied address long-term solutions to water quality. [Identify the source of the BMPs: Caltrans or CASQA or proprietary. Attach only proprietary BMPs. Provide specifications for all BMPs. Provide calculations and justifications for BMPs]. This SWMitP is also intended to ensure the effectiveness of the BMPs through proper maintenance that is based on long-term fiscal planning. The SWMitP is subject to revisions as needed by the engineer.

1.1 PROJECT DESCRIPTION

[Provide and discuss project location, topography, run-on and runoff issues, and unique conditions]
[Provide location map]

[Complete the following table for all applicable categories. Designations provided are highly recommended by the San Diego County Copermittees. There may also be others – provide explanation of pollutant sources]

TABLE 1-1 (Check all that apply)

Priority Project Categories	
>10 SFR	
>1 acre Commercial	
Automotive	
Restaurants	
Hillside Development > 5,000 sq ft	
Parking Lots > 5,000 sq ft or > 15 spaces	
Streets, roads, highways, freeways that create new paved surface > 5000 sq ft	
Retail Gas Outlets	

1.2 HYDROLOGIC UNIT CONTRIBUTION

Water Quantity

[The 10-year flood is the design storm used for calculating peak flows and the 100-year rain event is used to demonstrate flooding. Discuss the types of surfaces rain water that will flow over on the project and a general approach to minimizing impervious areas, directly connect impervious areas, retaining natural areas, and use of porous surfaces]

Water Quality

[Major channels/discharge points identified by the City are: Broadway Channel; Washington Channel, Third Street Lateral, County Ditch, and Fletcher Parkway which drain to Forester Creek AND Fanita Channel that directly discharge to the San Diego River. Both are 303(d) listed. The City considers the pollutants identified to be of concern for the entire length of the waterbodies. Discuss pollutants and how the project may affect water quality.]

2.0 WATER QUALITY ENVIRONMENT

Terms for Use in Calculations

% Impervious – the amount of square footage covered by pavement (concrete or asphalt, buildings, roofs, patios, and sidewalks. Includes future paved areas depending on size of lot such as proposed patio and RV parking.
Runoff Coefficient – calculate using % impervious and known soil type.
Time of Concentration – the amount of time for the first drop of water at the furthest point within a basin to travel to the discharge point without turning more than 45 degrees in a natural-lined conveyance.
Flow Length – the path water from the furthest point to discharge point without turning more than 45 degrees in a natural-lined conveyance.

2.1 PRE-CONSTRUCTION CONDITIONS AND FLOW

[Describe the pre-construction conditions such as: not paved, never developed, previously a gas station, etc.; grading requirements if applicable; how the site currently flows, direction of flow, the calculation used for flow.]

[Provide the total area and actual percent impervious for the project area.]

[Describe each parameter in the calculation and how the value used was chosen. Use runoff coefficients that reflect the true imperviousness of the project area and not the land use coefficients.]

[Use maps to indicate the parameter's location on the project site.]

[Calculate Q to the nearest 0.1 CFS.]

2.2 POST-CONSTRUCTION CONDITIONS AND FLOW

[Describe the post-construction conditions such as: paved, fully developed, development is a restaurant; final grading; how the site flows, direction of flow, the calculation used for flow.]

[Provide the percent impervious for the developed property.]

[Describe each parameter in the calculation and how the value used was chosen. Use runoff coefficients that reflect the true imperviousness of the project area and not the land use coefficients.]

[Use maps to indicate the above characteristics, detail schematics of post-construction BMPs (plan and cross-section views) and location of post-construction BMPs on the project site.]

[Summarize the affects of the project on the flow (increased, decreased, fully mitigated, etc.) and on downstream hydrology. Downstream assessments must address City of El Cajon discharge to the jurisdictional line at the City of Santee.]

[Compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rates, flow velocity, runoff volume, time of concentration, and retention volume (All calculations may be provided as Attachment E).]

[Calculate Q to the nearest 0.1 CFS.]

[Provide formulas, actual calculations, and a table with pre- and post-construction flows without the incorporation of any post-construction BMPs. Then add the post-construction BMP detainment flows.]

[Complete the following tables. At the minimum, provide justification of implementation and when not feasible for design and source controls.]

SUSMP FORM

SUSMP Development or Re-Development (Circle)

SUSMP Triggers (list all applicable categories): _____

Address: _____

Pre-Q: _____ Post – Q: _____

Maintenance Plan/Notes:_____

Apply all General Site Design and at least one of each control. (Please note that all of the following General Site Design and control items have to be considered and applied to the

project. Explain what Best Management Practices (BMPs) were implemented to achieve the General Site Design and controls or justify why the item was not feasible for this project).

[Provide reasoning for how any Design, Source, or Treatment Controls were applied]
[Provide Justifications for any Design, Source, or Treatment Controls not applied]

General Site Design	Applied	Justification
1. Control Peak runoff rates (Required)		
2. Minimize impervious areas (Required)		
3. Conserve Natural Areas (Required)		
4. Protect\slopes\and channels (Required)		
5. Minimize effective imperviousness (Required)		
6. Construct low traffic areas (walkways, trails, patios, parking lots, alleys, etc.) of permeable surfaces		
7. Maximize canopy interception by preserving existing trees and shrubs		
8. Preserve natural drainage systems		
9. Minimize Directly Connected Impervious Areas (DCIAs) [Drain rooftops, sidewalks, walkways, trails and patios to landscaping]		
10. Other		

Source Controls[1]	Applied	Justification
1. Storm drain message and signage (Required)		
2. Outdoor storage area design (Required)		
3. Trash storage area design Must be secured, bermed, and covered. (Required and in accordance with California Fire Code section 1103.2.2)		
4. Use efficient irrigation systems & landscape design		
5. Incorporate requirements of the applicable priority project category: a. Loading/unloading dock area design (Required) b. Repair/maintenance bay design (Required) c. Vehicle/Equipment/Accessory washing area (Required) d. Fueling area design (Required) e. Private Roads f. Residential Driveways & Guest Parking g. Outdoor Processing Areas h. Parking Areas i. Roadways j. Hillside Landscaping		
6. Proof of control measure maintenance (Required)		
7. Other		

Treatment Controls (Require two controls, at a minimum) [1]	**Applied**	**Justification**
1. Inlet Filters[2]		
2. Grass strip filter		
3. Grass swale filter		
4. Extended detention basin		
5. Wet detention basin		
6. Constructed wetland		
7. Sand filter		
8. Hydrodynamic Separator		
9. Infiltration basin or trench		
10. Media filter		
11. Proprietary controls		
12. Other		

1. Proposed source and treatment controls need to be shown in the grading/drainage plan along with engineering details and/or specifications
2. Not to be used alone.

3.0 POLLUTANTS

3.1 POLLUTANTS GENERATED from AFTER CONSTRUCTION ACTIVITIES AND BMPs APPLIED TO MITIGATE

Terms

Activity – any action taking place outdoors or resultant liquid/solid is disposed outdoors.

Pollutants – sediment (dirt); metals (from dirt , paint, or chemicals); organic material (vegetation or food); grease; petroleum; sewage; detergents/soap; fertilizers; pesticides; trash/debris, and toxics (acids, corrosives).

Post-Construction BMPs – Design controls, Source controls, Treatment structures

Effectiveness – Based on manufacturer, industry; government; or other private studies. List Source.

TABLE 3-1 (Highlight Pollutants from Categories in Table 1-1)

Priority Project Categories	Sediment	Nutrient	Heavy Metals	Org Cpds	Trash & Debris	ODS	Oil & Grease	Bacteria & Viruses	Pesticides
>10 SFR	X	X			X	X	X	X	X
>1 Acre Commercial	P	P		P	X	P	X	P	P
Automotive			X	X	X		X		
Restaurants					X	X	X	X	
Hillside Development	X	X			X	X	X		X
Parking Lots	P	P	X		X	P	X		P
New Streets > 5000 sq. ft.	X	P	X		X	P	X		P
> 5,000 sq ft Redevelopment	X	P	P	P	X	P	P	P	P
Retail Gas Outlet			X	X	X		X		
X- anticipated P – Potential			ODS – Oxygen Demanding Substances						

TABLE 3-2 (Highlight the combination of BMPs for the Project that most effectively treats the Pollutants from Table 3-1) Efficiencies are in ()

Pollutants	**BMPS**
Sediment	Biofilters (Medium) Detention Basins (High) Infiltration Basins (High) Wet Ponds or Wetlands (High) Inlet Filters (Low) Filtration (High) Hydrodynamic Systems (Medium)

Nutrients	Biofilters (Low) Detention Basins (Medium) Infiltration Basins (Medium) Wet Ponds or Wetlands (Medium) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Medium)
Metals	Biofilters (Medium) Detention Basins (Medium) Infiltration Basins (Medium) Wet Ponds or Wetlands (High) Inlet Filters (Low) Filtration (High) Hydrodynamic Systems (Low)
Organic Compounds	Biofilters (Unknown) Detention Basins (Unknown) Infiltration Basins (Unknown) Wet Ponds or Wetlands (Medium) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Low)
Trash and Debris	Biofilters (Low) Detention Basins (High) Infiltration Basins (Unknown) Wet Ponds or Wetlands (High) Inlet Filters (Medium) Filtration (High) Hydrodynamic Systems (Medium)
Oxygen Depleting Substances	Biofilters (Low) Detention Basins (Medium Infiltration Basins (Medium) Wet Ponds or Wetlands (Medium) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Low)
Oil & Grease	Biofilters (Medium) Detention Basins (Medium) Infiltration Basins (Unknown) Wet Ponds or Wetlands (Unknown) Inlet Filters (Low) Filtration (High) Hydrodynamic Systems (Low)
Bacteria	Biofilters (Unknown) Detention Basins (Unknown)

	Infiltration Basins (High) Wet Ponds or Wetlands (High) Inlet Filters (Low) Filtration (Medium) Hydrodynamic Systems (Low)
Pesticides	Biofilters (Unknown) Detention Basins (Unknown) Infiltration Basins (Unknown) Wet Ponds or Wetlands (Low) Inlet Filters (Low) Filtration (Unknown) Hydrodynamic Systems (Low)

4.0 CONSTRUCTION AND POST-CONSTRUCTION BMPS

4.1 CONSTRUCTION BMPS

[Provide a table with the **ALL** the activities, pollutants, and BMPs for construction activities. An example is provided below.]

EXAMPLE TABLE 4-1

ACTIVITY	POLLUTANTS	CONSTRUCTION BMP	EFFECTIVENESS
Entrance/Exit of Project Site	Sediment	TC-1	High (CASQA)
Pouring Concrete	Metals; pH	WM-8	High (CASQA)
Port-o-Let	Bacteria; Organics	WM-9 (Modified with secondary containment and strapped to a secure source to prevent tipping	High (CASQA)

4.2 POST-CONSTRUCTION BMPS

[Describe the soil type and characteristics of that soil type.]

[List the post-construction BMPs that will be used.]

[Identify the pollutants associated with each BMP.]

[Describe the effectiveness of the BMP or Treatment Train (multiple BMPs) with the pollutants.]

[Provide a Table with this information. An example is provided below]

EXAMPLE TABLE 4-2

ACTIVITY	POLLUTANTS	POST-CONSTRUCTION BMP	EFFECTIVENESS
Residential -Car Washing	ODS; Sediment	Source control - Capture, Contain, Collect	Low or High (EPA)
Commercial – Power washing sidewalks/driveways	Sediment; oil&grease; bacteria	Source control - Capture, Contain, Collect	Low or High (Regional Board)
Commercial – Car rinsing	Sediment; oil&grease; metals	Source control - Capture, Contain, Collect	Low or High (County of San Diego)
Residential/Commercial – Over watering/Over spray	Nutrients; pesticides	Source Control – IPM Treatment control – Infiltration basin	Low or High (Caltrans)
Residential/Commercial – Landscaping Maintenance	ODS; sediment	Source control - Sweeping	Low or High

5.0 TREATMENT BMPS

Treatment BMPs are designed to treat to the 85th percentile of the design storm.

[List the Treatment BMPs incorporated into the site design in a Table. Provide Efficiencies. Show on BMP map with engineering details.]
[Show calculations to verify the treatment to the 85th percentile.]

6.0 LOW-IMPACT DEVELOPMENT (LID)

The project design must incorporate Low Impact Development (LID) Best Management Practices (BMPs) for compliance with the California Regional Water Quality Control Board (San Diego Region) Order No. R9-2007-0001. An electronic copy of the County of San Diego Low Impact Development Handbook can be found online at:

http://www.co.san-diego.ca.us/dplu/docs/LID-Handbook.pdf

7.0 MAINTENANCE

7.1 CONSTRUCTION BMPs

Maintenance of construction BMPs starts at the time of soil disturbance and continues through the life of the project, until a 70% coverage of disturbed areas is established.
[Describe how maintenance of BMPs will be accomplished]

7.2 POST-CONSTRUCTION BMPs

Post-construction BMPs are to remain with the property and be maintained in perpetuity to the engineered functionality.

[Discuss financial responsibility of maintenance]

[Provide BMP Facilities Agreement to be recorded with Grant Deed.]

[Provide a table listing each post-construction BMP, the responsible party, frequency of maintenance, any special conditions, verification of maintenance, fiscal responsibility. An example table is provided below]

TABLE 7-1

POST-CONSTRUCTION BMP	Responsible Party	Maintenance Frequency	Verification of Maintenance	Fiscally Responsible Party	Special Conditions
Trash Enclosure (Source Control)	Business Owner or Property Owner or HOA	Weekly	Daily	Business Owner or Property Owner or HOA	Use Mop to clean
Engineered Vegetative Detention Area	Business Owner or Property Owner or HOA	Quarterly	Monthly	Business Owner or Property Owner or HOA	Mulch grass; Use little to no fertilizers or pesticides
Storm Water Filter Insert	Business Owner or Property Owner or HOA	At least Semi-Annually (October 1st and April 30th)	Quarterly	Business Owner or Property Owner or HOA	Keep Clean
3-stage Clarifier	Business Owner or Property Owner	Semi-Annually (October 1st and April 30th) Or Determined by use	Quarterly	Business Owner or Property Owner or HOA	Discharge to Sanitary sewer with wastewater permit or to storm drain with approved monitoring plan.

8.0 SUMMARY/CONCLUSIONS

[Summarize the site conditions and flow before and after construction; the use of post-construction BMPs and their maintenance; and the fiscal responsibility of post construction BMPs.]

[Provide a table with pre-construction peak flow, post-construction flow without BMPs, and post-construction flow with post-construction BMPs.]

CERTIFICATION

This Storm Water Mitigation Plan has been prepared under the direction of the following Registered Civil Engineer. The Registered Civil Engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

REGISTERED CIVIL ENGINEER
JOHN C. ENGINEER *DATE*

REGISTERED ENGINEER'S SEAL

ATTACHMENT A
LOCATION MAP

USE A LOCATION MAP THAT SHOWS SURROUNDING TOPOGRAPHY.

ATTACHMENT B
PROJECT MAP

USE A SITE MAP TO SHOW THE PLACEMENT OF THE PROJECT COMPONENTS WITH DRAINAGE ARROWS.

ATTACHMENT C
Post-Construction BMP MAP

INDICATE THE LOCATIONS OF SITE DESIGN, SOURCE AND TREATMENT CONTROL BMPS TO THE EXTENT POSSIBLE

PROVIDE ENGINEERING SPECIFICATIONS AND DETAILS (HEIGHT, WIDTH, DEPTH, CONFIGURATION, VOLUME, FLOW) OF THESE POST-CONSTRUCTION BMPS ON THE MAP

ATTACHMENT D
Post-Construction BMP DATASHEETS

PROVIDE THE DATASHEETS FOR EACH POST-CONSTRUCTION BMP USED TO MITIGATE FLOW OR TREAT RUNOFF.

ATTACHMENT E
Hydrology Calculations

PROVIDE HYDROLOGY CALCULATIONS OR A COPY OF THE HYDROLOGY STUDY.

COMPUTE RAINFALL RUNOFF CHARACTERISTICS FROM THE PROJECT AREA INCLUDING, AT A MINIMUM, PEAK FLOW RATES, FLOW VELOCITY, RUNOFF VOLUME, TIME OF CONCENTRATION, AND RETENTION VOLUME

NEW SUSMP PROJECTS FOR 2008-2009

	Date (First Submittal)	Street Number		Direction	Street	Address Surname	Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	11/25/2008	1090	-	West	Main	Street	RGO w/ carwash	Superstar Gas	RGO	Vegetated swales
2	12/18/2008	1273	1275	East	Main	Street	Commercial	La Valencia Plaza	Parking > 5000 sf	Pervious pavement, vegetated swale
3	10/10/2008	2525	2585		Lund	Street	Apartment Complex		Parking > 5000 sf	Pending submittal
4	7/1/2008	100	-		Civic Center	Way	Municipal building	El Cajon Public Safety Center	Redevelopment > 5000 sf	Vegetated swales, sand filters, inlet filters, roof filters, signage, covered trash enclosure
5	8/12/2008	965	-		Arnele	Avenue	Auto sales and service	Toyota of El Cajon	Auto sales and service >1 acre, <200 ft from open channel	Vegetated/bioretention swales, vegetated buffer strip; covered trash enclosure
6	8/12/2008	572	588	North	Johnson	Avenue	Used auto sales and service		Auto service	Pending submittal
7	10/20/2008	1136	1138		Broadway		Ambulance service		Auto service	Pending submittal
8	11/20/2008	442	444		El Cajon	Boulevard	Motorcycle service	Performance Choppers	Auto service	Pervious swale, media filter, covered trash enclosure
9	7/7/2008	875	-		El Cajon	Boulevard	Auto sales and service	Cunningham BMW	Parking > 5000 sf	Pending final review
10	1/8/2009	-	-	I-8	I-8 & Murray	Drive	Auto sales and service, commercial		Auto sales and service, commercial >1 acre, parking >5000 sf	Pending submittal
11	11/7/2008	-	-		Weld & Cuyamaca	Street	Industrial Park		>1 acre Industrial, ESA	Pervious swales, underground detention, covered trash enclosures
12	3/3/2009	1075	-	East	Washington	Avenue	Subdivision	Rocky Hill Pointe	>10 unit subdivision	Vegetated swales, detention
13	9/22/2008	1333	-	South	Magnolia	Avenue	Subdivision		>10 unit subdivision	Vegetated swales, detention

SUSMP PROJECTS UNDER REVIEW

2008-2009

	Site Address				Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	965			Arnele Ave.	Auto sales and service	Toyota of El Cajon	Auto service, Parking > 5000 sf	Vegetated/bioretention swales, vegetated buffer strip, covered trash enclosure
2	801			Avocado, Foundation Lane	Subdivision	Habitat for Humanity	Street >5000 sf, ESA	Riprap channel, vegetated swale
3				Ballantyne & Hart	Subdivision	Valley Meadows	Subdivision >10 units	Riprap channel, vegetated swales
4	1001		West	Bradley Ave.	Commercial	Waste Management Recycling Transfer Center	Redevelopment >5000, ESA	Vegetated swale, filtration
5	1306			Broadway	Commercial	Walgreens	Commercial> 1 acre	Detention, vegetated swale, inlet filters
6	442	444		El Cajon Blvd.	Auto sales and service	Performance Choppers	Auto service	Pervious swale, sand filter
7	875			El Cajon Blvd.	Auto sales and service	Cunningham BMW	Parking > 5000 sf	Pending Final Review
8				El Cajon Public Safety Center	Municipal	El Cajon Public Safety Center	Parking > 5000 sf	Vegetated swales, sand filters, inlet filters, roof filters, signage, covered trash enclosure
9	656			Front St.	Industrial		Parking > 5000 sf	Vegetated swales
10	1333		South	Magnolia Ave.	Subdivision		Subdivision >10 units	Vegetated swales, detention
11	861		East	Main St.	Commercial	Razuki Mall	Parking >5000 sf	Vegetated swale, covered trash enclosure
12	1273		East	Main St.	Commercial	La Valencia Plaza	Parking >5000 sf	Pervious pavement, vegetated swale
13	1285		East	Main St.	Auto sales and service	De La Fuente Cadillac	>5000 sf	Pending Final Review
14	1539		East	Main St.	Commercial	Extra Space Self Storage	Commercial> 1 acre, parking >5000 sf	Detention, vegetated swale
15	198		West	Main St.	Commercial	El Cajon Shopping Center	Parking >5000 sf	Vegetated swales
16	1090		West	Main St.	RGO w/ carwash	Star Gasoline	RGO w/ carwash	Vegetated swales
17			North	Marshall Ave.	Airport hangar	Airworld	>5000 development	Vegetated swales, inlet filter
18	1905		North	Marshall Ave.	Airport hangar	Safari	>5000 redevelopment	Inlet filters
19	1448			Peach Ave.	Church	New Life Church	Parking > 5000 sf	Pervious swales, sand filter
20	1075		East	Washington Ave.	Subdivision	Rocky Hill Pointe	subdivision >10 units	Detention, vegetated swales
21				Weld/Cuyamaca St.	Industrial		Industrial >1 acre	Detention, vegetated swales

Inventory of Priority Project Post-Contruction Structural Treatment Control BMPs

	Street Number	Thru	N,E, S,W	Street Name	Street Surname	Site Type	Priority Trigger	Project Priority	Post-Construction BMPs Applied	BMP Infeasibility	Priority of Treatment BMPs	Inspection Date
1	2706	-	-	Anjuli	Court	New Subdivision	SFR >10 Units	SUSMP	CDS Unit (in Public Right-of-Way: City Maintained)		Low	City Maintained
2	1001	-	West	Bradley	Avenue	Parking Lot (925 O'Connor St.)	>5,000 sq ft Development	SUSMP	grass swales, channel drains, inlet filters		High	6/26/09
3	1032	-	-	Broadway	-	New Office Building	>5,000 Redevelopment	SUSMP	Swalegard inlet filter, grass buffer strip		Medium	6/25/09
4	1090	-	-	Broadway	-	Gas Station (Re-Developed)	Gas Station	SUSMP	Grass filter strip, filter inserts		High	6/24/09
5	1174	-	-	Broadway	-	Commercial Facility	Parking lot > 5000 sq ft	SUSMP	Inlet filter, trash enclosure	Site size constraints	High	6/29/09
6	350	-	East	Chase	Avenue	New Restaurant	New restaurant	SUSMP	Inlet filters		High	6/30/09
7	426	-	East	Chase	Avenue	Restaurant - take-out	Restaurant - take-out	SUSMP	Grease trap, grease bin, inlet filters	Structural BMPs already onsite	High	6/26/09
8	450	-	East	Chase	Avenue	Commercial	New Commercial >100,000 sf	High	Inlet Filters	Site size constraints, Constructed prior to R9-2007-0001 Permit	Medium	-
9	763	-	West	Chase	Avenue	New Subdivision	4 New single-family residences (Anita Lee Way)	High	Grassy swales, Curb outlet filters		Medium	6/25/09
10	369	385	-	El Cajon	Boulevard	New show room addition	Parking lot > 5000 sq ft	SUSMP	trash enclosure, detention basins, inlet filters		Medium	6/30/09
11	670	-	-	El Cajon	Boulevard	New Car Dealership	>15 Parking Spaces	SUSMP	Underground detention, Hydrodynamic Separator, Signage		Low	6/29/09
12	1380	-	-	El Cajon	Boulevard	Commercial Facility	>100,000 sq. ft commercial dev't, Parking > 5,000 sq ft	SUSMP	Underground detention system		Low	6/30/09
13	298	-	-	Fletcher	Parkway	Commercial Facility	>100,000 sq. ft commercial dev't, Parking > 5,000 sq ft	SUSMP	Inlet filters, 2 CDS Hydrodynamic Separator Units, filtration strip next to Garden Center		Medium	6/11/09
14	605	-	-	Fletcher	Parkway	New Commercial	New Commercial	SUSMP	Flogard catch basin insert		High	6/25/09
15	2000	-	-	Gillespie	Way	New Industrial Complex	>5,000 sq ft Development	SUSMP	Detention area in parking, grassy swale, signage, filter inserts		Medium	6/23/09
16	-	-	-	Granite Hills	Drive	New Subdivision	Subdivision>10 Units	SUSMP	Detention basin, vegetated channel		Low	6/25/09
17	-	-	-	Grossmont College	Drive	College Parking Lot	Parking lot > 5000 sq ft	SUSMP	Hydrodynamic separation system, detention area		Low	-
18	912	930	-	Jamacha	Road	New Multi Family Homes	>5,000 sq ft Development	SUSMP	Infiltration system, vegetated swale, storm drain inlet filters		Medium	6/25/09
19	1780	1860	-	Joe Crosson	Drive	Additions to existing aircraft hangers	>5,000 sq ft Development	SUSMP	Inlet Filters, Trash Enclosures, Enclosed Wash Areas	Site size and usage constraints, Under County Airport Authority	Medium	County Maintained
20	333	-	North	Johnson	Avenue	New Commercial	>5,000 sq ft Development, contiguous to channel	SUSMP	Inlet filters, roof drains to landscaping	Site size constraints, Constructed prior to R9-2007-0001 Permit	High	6/29/09
21	605	-	West	Lexington	Avenue	Commercial - Automotive Repair	>5,000 sq ft	SUSMP	gravel filter, rock energy dissipater, bio-detention basin		Low	-
22	1053	-	-	Loma Portal	Drive	New Single Family Residence	Hillside Development	SUSMP	Vegetated swale, filtration/detention system, inlet filter.		Medium	Final Inspection 3/2/2009
23	1470	-	East	Madison	Avenue	Municipal Fire Station	>5,000 sq ft new parking	SUSMP	Trash enclosure, pervious concrete swale in (Municipal Building: City Maintained)		Low	City Maintained
24	1628	1646	East	Madison	Avenue	New Church	Parking lot > 5000 sq ft	SUSMP	Vegetated detention basin, storm drain inlet filters		Medium	6/30/09
25	2119	-	East	Madison	Avenue	New Commercial	>5,000 sq ft new parking	SUSMP	Biofilters, Detention Basin		Low	6/29/09
26	608			Sandra	Lane	New Subdivision	New Roadway (Sandra Lane)	SUSMP	grass-lined channel		Low	-
27	613			Sandra	Lane	New Subdivision	New Roadway (Sandra Lane)	SUSMP	detention basin		Low	-
28	622			Sandra	Lane	New Subdivision	New Roadway (Sandra Lane)	SUSMP	energy-dissipater		Low	-
29	635			Sandra	Lane	New Subdivision	New Roadway (Sandra Lane)	SUSMP	detention basin		Low	-
30	245	-	East	Main	Street	New Restaurant	New restaurant	SUSMP	Roof filters	Site size constraints	High	6/29/09

Inventory of Priority Project Post-Contruction Structural Treatment Control BMPs

	Street Number	Thru	N,E, S,W	Street Name	Street Surname	Site Type	Priority Trigger	Project Priority	Post-Construction BMPs Applied	BMP Infeasibility	Priority of Treatment BMPs	Inspection Date
31	343	-	East	Main	Street	New Commercial, Alley No. 25	< 200 ft from channel	SUSMP	Grassy swales, filter inserts		High	6/25/09
32	1143	-	East	Washington	Street	Residential	Subdivision >10 housing units	SUSMP	Biofilters for each new housing unit (perimeter)		Low	-
33	1401	1409	East	Main	Street	Parking Lot, Channel Cover (De La Fuente Cadillac)	>5,000 sq ft new parking	SUSMP	Hydrodynamic separation system, inlet filters, underground detention box		High	6/30/09
34	1700	-	East	Main	Street	New Restaurant	New restaurant	SUSMP	Grass swales, Inlet filter, infiltration basin		High	6/29/09
35	1717	-	East	Main	Street	Addition to equipment rental business	Commercial - Equipment Rental	SUSMP	Inlet filter, covered trash enclosure.	Site size constraints	High	6/24/09
36	1185	-	-	Marline	Avenue	3 New single-family residences	3 New SFRs	Medium	Grassy swales		Low	6/30/09
37	1905	1915	North	Marshall	Avenue	New Airport Hangars	>5,000 sq redevelopment	SUSMP	Inlet filters, larger SD pipe (48")	Site size and usage constraints, Under County Airport Authority	Medium	County Maintained
38	2694	-	-	Navajo	Road	2 story office bldg.	>5,000 sq ft new parking	SUSMP	Inlet Filter	Site size constraints	Medium	6/29/09
39	2732	-	-	Navajo	Road	New Commercial	> 5000 sq ft	SUSMP	Flogard catch basin insert	Site size constraints	Medium	6/26/09
40	2766	-	-	Navajo	Road	Expansion of Parking and Playground	Parking lot > 5000 sq ft	SUSMP	Hydrodynamic separation system, underground detention box		Medium	6/25/09
41	335	355	North	Second	Street	New Restaurant	New restaurant	SUSMP	Grassy swale, trash enclosure, and outlet filter		Medium	6/30/09
42	1062	-	North	Second	Street	RV repair	unsure	SUSMP	Grass Filter Strip		Low	6/25/09
43	1190	-	North	Second	Street	Commercial - Restaurant	new restaurant	SUSMP	Grass Filter Strip		Medium	6/29/09
44	901	921	-	Stoneys	Lane	Subdivision w/ private street (15 units)	SFR >10 Units, >5000sf new road	High	2 Inlet Filters	Constructed prior to R9-2001-0001 Permit	Medium	-
45	1501	-	East	Washington	Avenue	New Restaurant	New restaurant	SUSMP	Detention basin, signage, filter inserts		High	6/24/09
46	1326	1350	-	Wendell Cutting	Court	New Subdivision w/ private street	10 SFR units	SUSMP	Grassy Swales, underground detention, curb-inlet filter on Broadway		Medium	6/30/09
47	403	431	-	Wisconsin	Lane	New Subdivision	>5,000 sf Impervious surface (Private Street)	SUSMP	Sand media filter, underground detention basin, inlet filter		High	6/29/09

April 23, 2009

«Owner_Name__Company_Title»«Owner_Last_Name»
«Owner_Address_Street»
«Owner_Address_City», «Owner_Address_StateZip»

RE: Treatment Control BMP Maintenance Verification Form

Dear Property Owner(s):

According to City records, you are responsible for at least the «Treatment_Control_BMPs_Applied», which «Language», located at «Street_Number»«NE_SW» «Street_Name» «Street_Surname». Annual verification of effective operation and maintenance for all Treatment Control BMPs located at «Street_Number»«NE_SW» «Street_Name» «Street_Surname» was a condition of the permit to develop the site. Treatment Control BMPs are required to be maintained by the appropriate party as stated in the site's Storm Water Mitigation Plan and/or Operation and Maintenance Agreement. You are required by City of El Cajon Municipal Code 16.60.400 to provide proof that the Treatment Control BMP is in place and functioning properly. You are also required to verify the maintenance of the Treatment Control BMPs onsite by mailing the completed form back to the City no later than **May 25, 2009**. Failure to do so may result in a citation, which could carry monetary penalties. Please update any incorrect information.

The City is required to inspect sites with known Treatment Control BMPs annually as part of the maintenance verification process to comply with California Regional Water Quality Control Board, San Diego Region, Order No. R9-2007-0001. The inspections are scheduled to take place before July 1, 2009. Fees for these annual inspections will be assessed based upon the number of Treatment Control BMPs that must be inspected on each site.

Please visit the City's website at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html or contact me at 619-441-5554 for more information regarding the City's Storm Water Protection Program.

Please complete the table on the following page regarding the maintenance of all Treatment Control BMPs that you are responsible for at your site. Please be sure to list any BMPs present on your property that were not mentioned above to ensure that our records are complete. Once the form has been completed, a signed copy of the page must be submitted to the City of El Cajon Public Works Storm Water Department. An envelope has been included for your convenience. Thank you for your cooperation.

Sincerely,

_____

Jaime Campos
Storm Water Program Manager
Associate Civil Engineer
Jcampos@ci.el-cajon.ca.us

RE: Treatment Control Best Management Practices
Location: «Street_Number»«NE_SW» «Street_Name» «Street_Surname»
Owner: «Owner_Name__Company_Title»«Owner_Last_Name»
«Owner_Address_Street»
«Owner_Address_City», «Owner_Address_StateZip»

BMP Type	Onsite (Y/N)	Number Onsite	Date(s) Maintained
TC-10 Infiltration Trench			
TC-11 Infiltration Basin			
TC-12 Retention/Irrigation			
TC-20 Wet Ponds			
TC-21 Constructed Wetlands			
TC-22 Extended Detention Basin			
TC-30 Vegetated Swale			
TC-31 Vegetated Buffer Strip			
TC-32 Bioretention			
TC-40 Media Filter			
TC-50 Water Quality Inlet			
TC-60 Multiple Systems			
MP-20 Wetland			
MP-40 Media Filter			
MP-50 Wet Vault			
MP-51 Vortex Separator			
MP-52 Drain Inserts			
Other: _____			

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Responsible Party Date

Printed Name of Responsible Party Title

Daytime Phone Fax

Email

CITY OF EL CAJON
TREATMENT CONTROL BMP INSPECTION

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Inspector Name:_____ Date:_____ Time:_____

Inspection Type: ☐ Routine ☐ Follow-Up ☐ Complaint ☐ Other:_____

A. PROJECT INFORMATION

Project Name: _____ Project Type: ☐ Private ☐ Public

Street Address: _____ ZIP _____

Nearest Receiving Waterbody:_____ Responsible Party:_____

Assigned Project Priority: ☐ High ☐ Medium ☐ Low APN: _____

B. TREATMENT CONTROL BMP ASSESSMENT

Treatment Control BMP	Number Implemented	ROW or Site Only?	% Properly Maintained	Comments
Indicate the number of each Treatment Control BMP committed to in the project's SUSMP report in the "Number Proposed" box. Adequacy of the BMP should be discussed in the "Comments" column.				
TC-10 (Infiltration Trench)				
TC-11 (Infiltration Basin)				
TC-12 (Retention/Irrigation)				
TC-20 (Wet Ponds)				
TC-21 (Constructed Wetlands)				
TC-22 (Extended Detention Basin)				
TC-30 (Vegetated Swale)				
TC-31 (Vegetated Buffer Strip)				
TC-32 (Bioretention)				
TC-40 (Media Filter)				
TC-50 (Water Quality Inlet)				
MP-20 (Wetland)				
MP-40 (Media Filter)				
MP-50 (Wet Vault)				
MP-51 (Vortex Separator)				
MP-52 (Drain Insert)				
Other:				

C. VISUAL OBSERVATIONS:

_____

_____

_____

D. FOLLOW-UP AND ENFORCEMENT ACTIONS

Describe corrective actions needed:_____

_____

_____

Enforcement Action Taken: ☐ None ☐ Written Notice ☐ Administrative Action ☐ Other_____

Follow Up Required? ☐ Yes ☐ No

ENVIRONMENTAL INFORMATION FORM
Part I - Initial Study
Filing Fee $400

Community Development Dept.
Planning Division
200 East Main Street
El Cajon CA 92020

The purpose of this form is to inform the City of the basic components of the proposed project so that the City may review the project pursuant to City Policies, Ordinances, and Guidelines; the California Environmental Quality Act; and the City's Rules and Procedures to Implement CEQA. It is important that the information requested in this application be provided in full.

The Initial Study is a requirement of the California Environmental Quality Act (CEQA) Guidelines and is used to determine whether further review of environmental factors of the project will be necessary, and, if so, whether a Negative Declaration (ND), Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR) will be the most appropriate document. Accuracy and completeness in the preparation of this study is essential. Incomplete materials will only result in a delay for the applicant, as the study will be rejected until properly developed.

INSTRUCTIONS: Please complete the following statement by filling in the designated blank spaces. Responses should be printed or typed so as to be legible. All appropriate spaces must be filled in and the required maps, photos, and plans submitted with this form. Additional information may be attached. The applicant should provide as much information as possible in this submittal to allow reviewers to have a thorough understanding of the project. Please submit this form and all support documents with the appropriate filing fee to the Community Development Department to begin the environmental review process. All maps/site plans shall be folded to 8½" by 11."

A. General Information

1. Name, address, telephone number, fax number and email of person to be contacted concerning this project:

2. Name, address of legal property owner as shown on tax statement:

3. Address of project and/or description of location:

4. Assessor's Parcel Number(s) of project site:

5. List each project application which accompanies this form:

6. Have any preliminary documents been prepared for this projects (e.g. soil report or traffic impact analysis)? If yes, please identify name and date prepared:

7. List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state or federal agencies (i.e., Corps of Engineers, CalTrans, Air Pollution Control District or LAFCO):

8. Existing zoning of project site:

9. Existing General Plan Designation:

10. Fully describe the nature and purpose of the proposed project including the ultimate use of the property:

B. Project Description

1. Site size in acres or square footage:

2. Highest and lowest elevations on site:

3. Number of floors of proposed construction:

4. Number of proposed off-street parking spaces provided:

5. Anticipated project schedule (timeline):

6. Is this project dependent on an existing or future project? If yes, please explain:

7. Anticipated future phases:

8. If residential, include the number of units, unit sizes, range of sale prices or rents, and gross density (units) acre:

9. If commercial and/or office, indicate the types, square footage of each type (i.e., office, sales area, restaurant), whether neighborhood, city or regionally oriented, and total square footage of building area:

10. If industrial, indicate type, estimated employment per shift, loading facilities, square footage of office area and total square footage of building area:

11. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, and total square footage of building:

C. Existing Conditions

1. Number and species of existing trees 6 inches or larger in diameter:

2. Number, size, and species of trees to be removed:

3. Describe any power lines, water, sewer or storm drain mains, pipelines or other transmission lines which are located on or adjacent to the property:

4. Name of creeks and natural or man-made drainage channels through or adjacent to the property:

5. Primary vehicle access to property comes from which street(s):

6. Are any easements known to traverse the site? If yes, explain the type and purpose:

7. Provide details on existing uses of the site. Are there existing structures on the site? If yes, describe use and whether they will be demolished or relocated; if residential, give the number of current occupants:

8. Indicate service provider for:

    a. Water

    b. Sewer

    c. Fire protection

    d. Police protection

9. Is any portion of the site within the 100-year/500-year floodplain?

10. Is the site within an Airport Land Use plan?

11. If yes, what airport plan(s) is it within and do restrictions affect the proposal?

12. Is the site located within two miles of Gillespie Field general aviation airport?

13. Is the site located within close proximity of a freeway?

14. Is the site listed on California EPA's Hazardous Site List?

D. Environmental Analysis

Are the following items applicable to the project or its effects? Discuss all items checked "yes" or "maybe" on next page or attach additional sheets as necessary.

YES	MAYBE	NO	
☐	☐	☐	a. Change in existing features of any streams, lakes or hills, or substantial alteration of ground contours.
☐	☐	☐	b. Change in scenic views or vistas from existing residential areas or public lands or roads.
☐	☐	☐	c. Change in character of general area of project.
☐	☐	☐	d. Produce or involve large amounts of solid waste or litter.
☐	☐	☐	e. Disrupt or adversely affect an historic, cultural or archaeological site.
☐	☐	☐	f. Change in dust, ash, smoke, fumes or odors in vicinity.
☐	☐	☐	g. Change in stream, surface water, wetlands or ground water quality or quantity, or alteration of existing drainage patterns.
☐	☐	☐	h. Increase in impervious surfaces and associated increase runoff.
☐	☐	☐	i. Alteration in existing drainage patterns, runoff flow rates or volumes.

☐	☐	☐	j. Increased erosion.
☐	☐	☐	k. Use or disposal of heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, or oxygen demanding substances.
☐	☐	☐	l. Potential to impact already sensitive conditions or environmentally sensitive areas.
☐	☐	☐	m. Substantial change in existing noise or vibration levels in the vicinity.
☐	☐	☐	n. Site on filled land or on slope of 10 percent or more.
☐	☐	☐	o. Use or disposal of potentially hazardous material such as toxic substances, flammables or explosives.
☐	☐	☐	p. Substantial change in demand for municipal services (police, fire, water, sewer, etc.).
☐	☐	☐	q. Substantial increase in fuel or energy consumption (electricity, oil, natural gas, etc.).
☐	☐	☐	r. Relationship to a larger project or series of projects.
☐	☐	☐	s. Potential impact to aquatic, wetland or riparian habitiat.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: Signature:

Section 711.4 of the Fish and Game Code, which became operative on January 1, 1991, authorizes the County Clerk to collect a filing fee of up to $1,275 for the review of environmental documents by the State Department of Fish and Game. Should the State Department of Fish and Game decide to review the environmental documents associated with this project, the project applicant will become liable for paying this fee.

The applicant certifies by his/her signature below that he/she has been informed of this information and is aware that a fee may be required by the County Clerk with the filing of the environmental documents associated with his/her project.

Failure to pay the required fee in a timely manner may result in the delay in the start of the project.

Date: Applicant's Signature:

Community Development Dept.
Planning Division
200 East Main Street
El Cajon CA 92020

ENVIRONMENTAL EVALUATION FORM
Initial Study Part 2

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☐
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☐
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☐
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☐
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	☐	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	☐	☐	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☐
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☐
ii) Strong seismic ground shaking?	☐	☐	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐
iv) Landslides?	☐	☐	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☐
VII. HAZARDS AND HAZARDOUS MATERIALS B Would the project:				
a) Create a significant hazard to the public or the environment through the routine	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☐
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☐
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☐
j) Inundation by seiche, tsunami, or	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
mudflow?				
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	☐	☐	☐	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☐
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☐
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☐
XI. NOISE B Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
project vicinity above levels existing without the project?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☐
Fire protection?	☐	☐	☐	☐
Police protection?	☐	☐	☐	☐
Schools?	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Parks?				
Other public facilities?	☐	☐	☐	☐
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☐
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☐
e) Result in inadequate emergency access?	☐	☐	☐	☐
f) Result in inadequate parking capacity?	☐	☐	☐	☐
g) Conflict with adopted policies, plans, or programs supporting alternative	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
transportation (e.g., bus turnouts, bicycle racks)?				
XVI. UTILITIES AND SERVICE SYSTEMS B Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project=s projected demand in addition to the provider=s existing commitments?	☐	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project=s solid waste disposal needs?	☐	☐	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☐
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal	☐	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☐

Project Name: _____

CITY OF EL CAJON SUSMP CHECKLIST

City of El Cajon
STORMWATER
Protection Program

MS4: ☐ Forrester Creek ☐ County Ditch Channel
☐ Broadway Channel ☐ Third Street Lateral
☐ Washington Channel ☐ Fletcher Parkway Lateral

PROJECT INFORMATION

Project Name: _____ Public Private

Project Address: _____

Project APN: _____

Project Size: (acres) _____ Notice of Intent: Yes No

Completed a SWPPP: Yes No

SUSMP CATEGORY

Check all SUSMP categories that apply to the project

☐ Residential Development ≥ 100 units
☐ Residential Development ≥ 10 units
☐ Commercial Development ≥ 1 acre
☐ Automotive Repair
☐ Restaurants
☐ Hillside Development ≥ 5,000 sq ft
☐ Parking Lots ≥ 5,000 sq ft or ≥ 15 spaces
☐ Streets, roads, highways, and freeways with ≥ 5,000 sq ft of new paved area
☐ Significant Redevelopment ≥ 5,000 sq ft of paved area on an already developed site
☐ Retail Gas Outlet

IDENTIFY POLLUTANTS FROM THE PROJECT AREA

Check all that apply to the project

☐ Sediment (dirt; silt; clay)
☐ Nutrients (fertilizers, sewages)
☐ Metals (dirt, silt, clay, paints, liquid/solid chemicals)
☐ Organics (food, vegetation)
☐ Trash and Debris
☐ Oxygen Demand Substances (organic matter)
☐ Petroleum (oil, grease)
☐ Bacteria and Viruses (fecal coliform, pathogens)
☐ Pesticides/Herbicides
☐ Toxics (acids, corrosives, chemicals)

Project Name: _____

IDENTIFY RECEIVING WATERS AND THE POLLUTANT SOURCES

Does the project discharge directly to: ☐ San Diego River? or ☐ Forester Creek?

What are the primary sources contributing to SD River and Forester Creek impairments of:

TDS?_____ _____ _____

Fecal Coliform? _____ _____

pH?_____ _____

(SD River only) Oxygen Depleting Constituents? _____ _____

(SD River only) Chlorpyrifos and Diazinon? _____

(SD River only) Total and Dissolved Copper? _____

IDENTIFY CONDITIONS OF CONCERN

☐ Was a drainage study report prepared? Yes No

☐ Was a Storm Water Mitigation Plan prepared? Yes No

☐ Were the reports prepared by a registered Civil Engineer? Yes No Who?_____

☐ Are there field photographs? Yes No (Attached?)

☐ Are the following calculated according to actual % imperviousness for the 6-hour, 10-year and 100-year frequency storms?

- ☐ Peak flow rate (pre and post-construction)
- ☐ Flow velocity
- ☐ Runoff volume
- ☐ Time of concentration (minimum of 5 minutes as defined in the SD Hydrology Manual to calculate Intensity values)
- ☐ Retention volume

☐ Are conditions of concern adequately identified using:

Site Design?	Yes	No
Source Control?	Yes	No
Treatment Control?	Yes	No

ESTABLISH STORM WATER LOW-IMPACT DEVELOPMENT (LID) BMPS

☐ ***Site Design BMPs***

SUSMP Projects **must** consider, incorporate, and implement where determined applicable and feasible by City storm water staff. (Check all that were considered, incorporated, or implemented):

- ☐ Maintain Pre-Development Rainfall Runoff Conditions
  - ☐ Minimize project's impervious footprint
  - ☐ Conserve natural areas
  - ☐ Construct low traffic areas (walkways, trails, patios, parking lots, alleys, etc) of permeable surfaces
  - ☐ Construct streets, sidewalks, and parking lot aisles to minimum widths
  - ☐ Maximize canopy interception by preserving existing trees and shrubs

Project Name: _____

- ☐ Preserve natural drainage systems
- ☐ Minimize Directly Connected Impervious Areas (DCIAs)
  - ☐ Drain rooftops into landscaping
  - ☐ Drain sidewalks, walkways, trails, and patios into landscaping
- ☐ Protect slopes and channels

Comments: _____

_____

☐ ***Source Control BMPs***

Does the project:

- ☐ Provide storm drain system stenciling and signage?
- ☐ Design outdoor material storage areas to reduce pollution introduction?
- ☐ Design trash storage areas to reduce pollution introduction (enclosed, covered, secured, and bermed)?
- ☐ Use efficient irrigations systems & landscape design (rain alert systems)?
- ☐ Incorporate requirements applicable to priority project categories such as:
  - ☐ Private Roads
  - ☐ Residential Driveways & Guest Parking
  - ☐ Dock Areas
  - ☐ Maintenance Bays
  - ☐ Vehicle Wash Areas
  - ☐ Outdoor Processing Areas
  - ☐ Equipment Wash Areas
  - ☐ Parking Areas
  - ☐ Roadways
  - ☐ Fueling Areas
  - ☐ Hillside Landscaping

☐ ***Treatment Control BMPs***

Check the treatment control(s) selected:

☐ Biofilters	☐ Detention Basin
☐ Infiltration basin/trench	☐ Filtration System
☐ Porous asphalt, concrete, other	☐ Hydrodynamic Separation System
☐ Filter Insert	☐ Sod-inlet Pre-treatment
☐ Grassy filter/swale	☐ Vegetated swale
☐ Proprietary Device	☐ Other: _____

☐ Do treatment controls effectively address primary pollutants of concern? Yes No

If No, describe corrective action: _____

_____

Verify the design of selected treatment controls:

☐ Was the control BMP designed for:	Volume	Flow
☐ Was the BMP design process described:	Yes	No
☐ Was the 85th percentile storm event used for design	Yes	No

If no, what design criteria was used: _____

Project Name: _____

☐ Was the BMP designed properly? If not, describe corrective actions: _____

_____

☐ Is the BMP(s) located near pollutant sources? Yes No
☐ Are there restrictions on use of infiltration BMPs? Yes No

Maintenance Requirements

☐ Was an Operations & Maintenance section attached? Yes No N/A
☐ Was a BMP Facilities Agreement signed by the property owner and filed with the Grant Deed? Yes No N/A
☐ Was a BMP Maintenance Agreement signed with the City to maintain post-construction BMPs? Yes No N/A
☐ Does this project require annual inspections and/or maintenance of BMPs by the City? Yes No N/A
☐ Was an access/easement agreement included? Yes No N/A
☐ Is there an HOA or other Common Interest planned for the project? Yes No N/A
☐ Were CC&Rs presented for review and acceptable? Yes No N/A
☐ Was a Storm Water Conveyance Maintenance Plan generated/received? Yes No N/A

Waiver of Structural Treatment BMP Requirements

☐ Was a waiver of infeasibility granted?
☐ Was the RWQCB notified?

Other Information

_____

_____

_____

Field Inspection

During BMP installation:
☐ Were the source control BMPs properly constructed in the field? ☐ Yes ☐ No
☐ Were the treatment control BMPs properly constructed in the field? ☐ Yes ☐ No

After project completion:
☐ Are all site design BMPs still in place? ☐ Yes ☐ No
☐ Are all source control BMPs still in place? ☐ Yes ☐ No
☐ Are treatment control BMPs still in place? ☐ Yes ☐ No
☐ Are all BMPs being maintained? ☐ Yes ☐ No

Appendix A.3

Storm Water Requirements for Construction Sites

The City's storm drain system is composed of the street, gutter, inlet, catch basin, ditches, streams, and concrete-lined channels.

1. Perimeter Controls (fiber roll; silt fence; gravel or sand bags) must be installed and kept in place throughout the project to prohibit the discharge of sediment and pollution from entering the storm drain system. If controls are moved to complete work, they must be replaced when work is completed or at end of day, whichever comes first.
2. Erosion Controls as required by an erosion and sediment control plan must be installed as designed.
3. Tracking of sediment and dirt must be cleaned up at the end of each working day.
4. Building Materials must be stored under cover at the end of each working day.
5. Spills must be reported to the site manager once they occur and cleaned up immediately. Spills that enter the City's storm drain system must be reported to the City Storm Water staff immediately.
6. Wash waters (including paint, dry wall mud, stucco, and other water-based materials) must be captured on site and contained, then disposed of in the appropriate place.
7. Port-o-lets must be secured and bermed.
8. Trash and debris shall be placed in appropriate containers during the workday with a final clean-up completed before leaving the site. If rain is predicted, wastes shall be covered.
9. Equipment shall be stored in a bermed area or with appropriate sized drip pans.
10. Equipment repair, servicing, or fueling must be completed undercover or within a bermed area for tasks completed within the workday. Spill kits must be within the bermed or repair areas.
11. Vehicle and equipment washing is prohibited.
12. The site will be secured at the end of each working day.
13. Report any destroyed controls to the site manager, immediately.

Under the City of El Cajon's Municipal Code §13.10.00, Storm Water Management and Discharge Control, it is illegal to discharge construction debris and materials, into the storm water conveyance system or any body of water.

Failure to prevent illegal discharges can result in fines of up to $10,000 a day per violation.

Under the law, contractors, the construction company, business owner, and property owner may receive a Citation for the same violation.

EROSION AND SEDIMENT CONTROL NOTES
FOR EROSION CONTROL PLANS
(HIGH AND MEDIUM PRIORITY PROJECTS)

Add the following notes (both pages) to the Storm Water Erosion Control site plan and implement as a condition to the Erosion Control Plan:

1. In case emergency work is required, contact _____ at _____.
   (name)
   (telephone number)

2. Erosion control measures shown on plans shall not be moved or modified without the approval of the Public Works inspector.

3. The contractor shall maintain all erosion control devices in working order to the satisfaction of the City Engineer throughout the construction phase of the project and until permanent ground cover and landscaping is established.

4. The contractor shall install additional erosion control measures as may be required by the City Engineer due to completed grading operations or unforeseen circumstances which may arise.

5. The contractor shall be responsible for and shall take necessary precautions to prevent public trespass onto areas where impounded waters create a hazardous condition.

6. Graded areas around the project perimeter must drain away from the face of slope at the conclusion of each working day.

7. All gravel bags shall have ¾ inch minimum aggregate (No sandbags and no burlap type bags allowed).

8. Existing streets shall be kept free of dirt and debris, and shall be maintained in good condition. Dust shall be controlled so that it is not a nuisance. The contractor shall be responsible for the repair of any street or property damaged, public or private, as a result of the work.

9. The Plan shall provide that no sand, silt, or debris shall be allowed to enter the storm drain system including public streets.

10. The owner and/or the owner's contractor shall implement the Plan and take remedial and preventive action immediately when pollutant discharge occurs and/or the City Engineer or the Building Division directs.

11. The above shall apply starting the 1st day of grading and/or construction and shall remain in effect until all grading and/or construction work has been completed and 70% of the disturbed land has been stabilized by approved vegetation, mulch, gravel, etc.

ALL EROSION AND SEDIMENT CONTROL SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE CITY OF EL CAJON'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) AND SHALL INCLUDE THE FOLLOWING:

Dry Season (May 1 through September 30)

1. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads and slopes. Slopes less than 33.3% or 1:3 (vertical vs. horizontal) may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement.

2. Adequate perimeter protection BMPs must be installed and maintained.

3. Adequate sediment control BMPs must be installed and maintained.

4. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

5. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and prevent sediment discharges must be stored on the site.

6. An approved "weather triggered" response plan is mandated for implementation in the event that a predicted storm event has at least a 50% chance of rain. The proponent must have the capacity to deploy the standby BMPs within 48 hours of the predicted storm event.

7. All slopes must be equipped with erosion prevention BMPs as soon as slopes are completed for any portion of the site.

8. Cleared or graded areas left exposed at any given time are limited to the amount of acreage that the project proponent can adequately protect prior to a predicted storm event.

Wet Season (October 1 through April 30)

In addition to the Dry Season Requirements:

1. Perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms.

2. Adequate erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a BMP fails, it must be repaired, improved or replaced with an acceptable alternate as soon as it is safe to do so.

3. The amount of exposed soil allowed at one time shall not exceed standby erosion and sediment control BMP capacity.

4. An incomplete disturbed area that is not being actively graded must be fully protected from erosion if left for 10 days or more.

City of El Cajon

Storm Water Quality Inspection for Construction Sites

BMP COMPLIANCE REPORT

You Are the Solution to Stormwater Pollution!

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Site Name: _____ Address: _____

Contractor Name: _____ Job Number: _____

Inspector Name & Phone #: _____ Date: _____/_____/_____Time: _____AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation **APN**: _____

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

Does Project Maintain a Stormwater Pollution Prevention Plan (SWPPP)? ❑ Yes ❑ No WDID: _____

Nearest Receiving Water(s): _____ Discharge Observed: ❑ Yes ❑ No _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

The Following List summarizes Minimum BMPs Required by the City of El Cajon Storm Water Ordinance (13.10) Additional BMPs May Be Required due to Site Conditions, Specific Activities, or by the Enforcement Official.

Minimum Construction Requirements	BMP Implemented?			Comments / Recommendations
	YES	NO	N/A	
Silt Fence – SE1				
Storm Drain Inlet Protection – SE10*+ filter fabric				
Sediment Basin – SE2				
Check Dams – SE4				
Fiber Rolls – SE5				
Gravel Bag Berm – SE6				
Street Sweeping/Vacuum – SE7				
Stabilized Construction Entrance – TC1				
Hydroseeding – EC4				
Geotexiles and Mats – EC7				
Material Delivery & Storage – WM1				
Stock Pile Management – WM3*				
Solid Waste Management – WM5*				
Concrete Waste Management – WM8				
Sanitary Waste Management – WM9				
Other*				
Other				

VIOLATIONS / REQUIRED CORRECTIVE ACTIONS

❑ Violation of Stormwater Ordinance: _____

❑ No Violations Have Been Noted; However BMP Implementation Is Required _____

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

200 E. Main Street, El Cajon California 92020 *TEL 619-441-1653 / FAX 619-579-5254*

Erosion Control Checklist (2008/2009) Low/Medium Priority Projects

$50.00 Fee (Receipt code: 5513 650b; ComPlus codes: Demo 516, Minor 518, Medium (no G&D) 520)

Address: _____

APN: _____-_____-_____-____ Permit #: _____ Fee ID(s): _____ : $ _____

Brief Project Description: _____

		YES	NO
1.	North arrow and Scale?		
2.	Legend?		
3.	Storm Water Notes?		
4.	Emergency phone number?		
5.	Drainage arrows?		
6.	Minimum BMPs		
	a. Perimeter control (silt fence SC-1) or gravel bags (SC-6)		
	b. Stabilized construction entrance (TC-1)		
	c. Street sweeping (SC-7)		
	d. Material storage (WM-1)		
	e. Concrete washout (WM-8)		
	f. Sanitary waste (WM-9)		
	g. Slope protection (coconut fiber blankets) or fiber rolls (SC-5)		
	h. Solid Waste Storage (WM-5)		
7.	Address/Site location?		
8.	Erosion Control Plan heading?		
9.	Proposed and existing structures identified?		
10.	Property Boundaries?		
11.	Topography?		
12.	Placement of BMPs?		

Notes: _____

_____

_____

□ Fee(s) Entered into ComPlus

_____ _____/_____/_____

Reviewer Signature Date Reviewed □ Comments Entered into ComPlus

Erosion Control Plan

City of El Cajon

GENERAL STORM WATER NOTES

A. ALL OPERATION WILL COMPLY WITH THE CITY'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PLAN (JURMP).

B. THE OWNER AND THE OWNER'S CONTRACTOR ARE RESPONSIBLE FOR POLLUTION PREVENTION PRACTICES TO PREVENT THE DISCHARGE OF SEDIMENT AND POLLUTANTS TO THE PUBLIC STORM DRAIN SYSTEM.

C. OWNER AND THE OWNER'S CONTRACTOR ARE RESPONSIBLE FOR THE PREVENTION OF EROSION CAUSED BY CLEARING OF VEGETATION, GRADING, DEMOLITION OR CONSTRUCTION.

D. SEDIMENT, POLLUTION AND EROSION CONTROL MEASURES WILL BE IMPLEMENTED STARTING THE FIRST DAY OF CLEARING, GRADING OR SOIL DISTURBANCE, OR CONSTRUCTION. THESE CONTROLS WILL REMAIN IN EFFECT UNTIL ALL RELEVANT OPERATIONS HAVE BEEN COMPLETED AND DISTURBED SOILS HAVE EITHER: 1) ESTABLISHED VEGETATION, OR 2) OTHER PERMANENT EROSION CONTROL AT 70 % COMPLETION.

EROSION AND SEDIMENT CONTROL NOTES

1. IN CASE OF EMERGENCY, CONTACT: NAME:_____ PHONE:_____

2. THE CONTRACTOR WILL MAINTAIN ALL SEDIMENT AND EROSION CONTROL DEVICES IN GOOD WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER THROUGHOUT EVERY PHASE OF THE PROJECT.

3. THE CONTRACTOR WILL INSTALL ALL EROSION CONTROL MEASURE ADDITIONAL TO THOSE SPECIFIED BY THE APPROVED EROSION CONTROL PLAN IF REQUIRED TO DO SO BY THE CITY ENGINEER.

4. THE CONTRACTOR AND PROPERTY OWNER WILL PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.

5. GRADED AREAS AROUND THE PROJECT PERIMETER WILL DRAIN AWAY FROM THE FACE OF SLOPES AT THE END OF EACH WORKING DAY.

6. ALL GRAVEL BAGS SHALL HAVE ¾ INCH MINIMUM AGGREGATE (NO SANDBAGS AND NO BURLAP TYPE BAGS ALLOWED) .

Project Address _____
Project APN _____
Permit Number _____
Applicant Name _____
Applicant Address _____

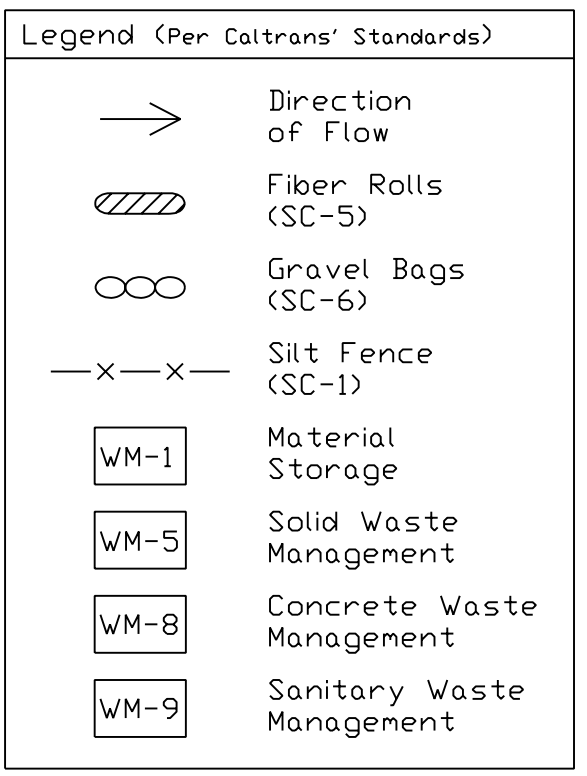

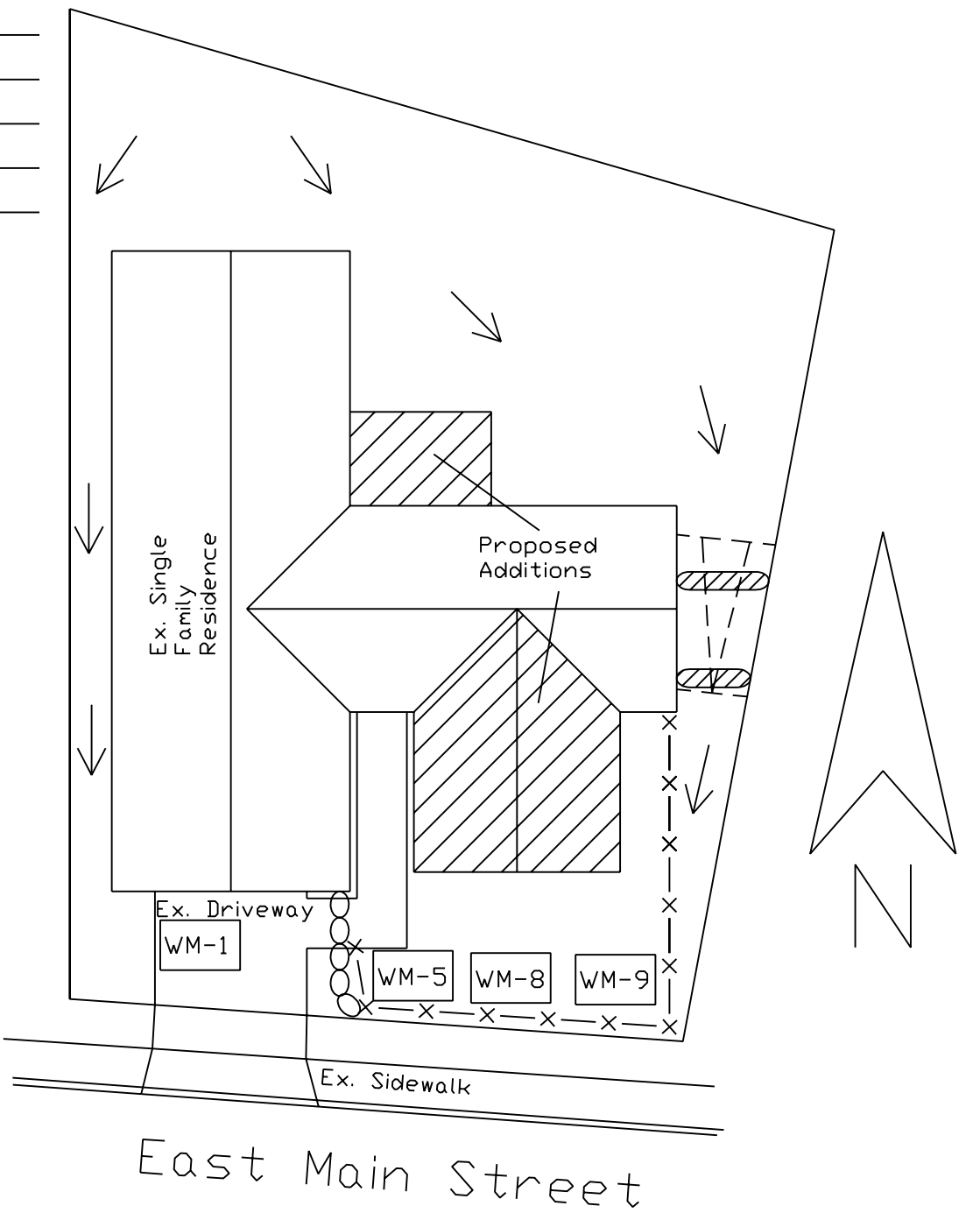

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City of El Cajon
Erosion and Sediment Control Plan Review Checklist

Date Completed	Not Applicable	
		Vicinity Map
_____	_____	Major roadways, geographic features or landmarks.
_____	_____	Site perimeter.
_____	_____	Geographic features.
_____	_____	General topography.
		Site Characteristics
_____	_____	North arrow, scale, and site boundary. Indicate the name of adjacent streets or roadway.
_____	_____	Location of existing drainage ways, channels, swales, creeks, streams on or near the site.
_____	_____	Location of storm drain inlets, outlets, catch basins – proposed, existing, on-site, and within 100 feet of site.
_____	_____	Location of existing and proposed buildings and paved areas.
_____	_____	Show and label existing and proposed improvements (streets, sidewalks, curb/gutter, utilities, etc)
_____	_____	The limits of the proposed disturbed area on the lot.
_____	_____	Approximate gradient and direction of slopes before grading operations.
_____	_____	Approximate gradient and direction of slopes after final grading operations.
_____	_____	Disturbed area outlined and labeled. All sediment control devices must be shown within the disturbed limits.
_____	_____	Overland runoff (sheet flow) coming onto the site from adjacent areas.
_____	_____	Delineation of pre and post development drainage areas, number of acres, and the direction of flow for each drainage area before and after development must be shown. Use separate plan sheets for clarity.
		Erosion Control Practices
_____	_____	Location of temporary soil piles
		Note: soil storage pile should be placed behind a sediment fence, 10-foot (minimum) wide vegetative strip should be covered with a tarp, or placed more than 25 feet from any down slope road or drainage way.
_____	_____	Location of gravel access drive(s).
		Note: Gravel drive should have 3 to 6 inch aggregate stone laid at least 10 feet wide and 12 inches thick. Drives should extend from the roadway 50 feet or to the house foundation (whichever is less).
_____	_____	Location of sediment controls (filter fabric fence, straw bale fence or 10-foot wide vegetative strips) that will prevent eroded soil from leaving the site.
_____	_____	Location of sediment barriers around on-site storm drain inlets.

Date Completed	Not Applicable	
_____	_____	Location of diversions. Note: Concentrated flow (drainage ways, ditches, channels, brow ditches) shall be diverted (re-directed) around disturbed areas. Overland runoff (sheet flow) from adjacent areas greater than 10,000 sq. ft. shall also be diverted around disturbed areas.
_____	_____	Location of practices that will be applied to control erosion on steep slopes that have been disturbed at any time by clearing, grading, or landscaping - slopes more than five feet in height, more than two hundred fifty square feet in total area, and steeper than three to one (run-to-rise). Note: Unstabilized drainage ways, ditches, channels, diversions, and inlets shall be protected from erosion through use of such practices as in-channel fabric or straw bale barriers, erosion control mats, staked sod, and rock riprap. When used, a given in-channel barrier should not receive drainage from more than two acres of unpaved area, or one acre of paved area. In-channel practices should not be installed in perennial streams (streams with year-round flow.)
_____	_____	Show Erosion Control Plan heading and standard notes.
_____	_____	Label all sediment control devices.
_____	_____	Show Standard details for sediment control devices.
_____	_____	No sediment control devices are to be located where water will damage building foundations.
_____	_____	Detail drawings and specifications for structural practices – any structural practices used must be illustrated with detailed drawings containing all dimensions and specifications. (i.e. de-silting basins)
_____	_____	Location of other planned practices not already noted. (Material Storage WM-1, Concrete Washout WM-8, Sanitary Waste WM-9, Solid Waste Storage WM-5)
_____	_____	Temporary stabilization of disturbed areas. Note: disturbed areas and soil piles left inactive for more than 10 days be stabilized by seeding (between April 1st and September 1st), or by other cover, such as tarping or mulching.
_____	_____	Permanent stabilization of site by re-vegetation or other means as soon as possible (lawn establishment). Indicate re-vegetation method: Seed ___ Sod ___ Other_____ Expect date of permanent re-vegetation: Re-vegetation responsibility of Builder ___ Owner/Buyer Is temporary seeding or mulching planned if site not seeded by September 1st or sodded by October 1st ? Yes ___ No ___
_____	_____	Use of downspouts and/or sump pump outlet extensions to direct runoff away from structures and onto sod or pavement until vegetation is stable. Downspouts shall be permanently to grass areas.
_____	_____	Proper disposal of building material waste so that pollutants and debris are not carried off-site by wind or water.
_____	_____	Maintenance of erosion control practices during construction: Name:_____ Title:_____ Phone & Fax:_____

- Sediment will be removed from behind sediment fences and barriers before it reaches a depth that is equal to half the barrier's height.
- Breaks and gaps in sediment fences and barriers will be repaired immediately.
- All sediment that moves off-site due to construction activity will be cleaned up before the end of the same workday.
- All sediment that moves off-site due to storm events will be cleaned up before the end of the next workday.
- Gravel access drives will be maintained throughout construction.
- All installed erosion control practices will be maintained until the disturbed areas they protect are stabilized.

PY2 (2008-2009) Inventory of
High and Medium Priority Construction Sites

High Priority Construction Sites			
	Project Address	**Project Name**	**Assessor's Parcel Number**
1	W. Main St. & S. Magnolia Ave.	Promenade Square	4881521400-1700
2	Park Ave. and Ballantyne St.	Park Avenue	4880400500
3	El Jardin Ct.	El Jardin Ct.	4970815200
4	1435 E. Washington Ave.	Granite Hills Village	5140215900
5	1415 Emerald Ave.	Tilling Way	4925805100&5800
6	2010 E. Madison Ave.	Rock Haven Ranch	5082400800
7	823 Ballantyne St.	Ballantyne Glenn	5110143400
8	656 Front Street	SC Valley Engineering	4832409100
9	380 Broadway	Broadway Animal Hospital	4876501400
10	Main St. and Magnolia Ave.	Downtown Redevelopment Project	Various
11	189-225 Roanoke Rd.	Cajon Valley Union School District	4824430300
12	1341 E. Main St.	Pre-Fabricated Home Sales	4871710900
13	1053 Loma Portal Dr.	Principato Residence	4824430300
14	670 El Cajon Blvd.	New Car Dealership	4874801500
15	1539 E. Main St.	Extra Space Storage	5073102000
16	1001 W. Bradley Ave.	Waste Management Transfer Center	4821310200&1600
17	Foundation Ln.	Habitat for Humanity Project	4930401800
18	442-444 El Cajon Blvd.	Performance Chopper	4875201300
19	198 W. Main St.	El Cajon Shopping Center	4871924700
20	965 Arnele Ave.	Toyota of El Cajon	4822502600

Medium Priority Construction Sites			
	Project Address	**Project Name**	**Assessor's Parcel Number**
1	1338 Naranca Ave.	Naranca Avenue	4842639400-9800
2	613-621 El Cajon Blvd.	Harley Davison	48753106,17,18

PY2 (2008-2009) Inventory of
Low Priority Construction Sites

	Project Address					Assessor's Parcel Number	Approval Date
1	2772	-		ANJULI	COURT	4810523900	9/25/2008
2	721	897		ARNELE	AVENUE	4822503800	10/20/2008
3	965	-		ARNELE	AVENUE	4822502600	3/3/2009
4	965	-		ARNELE	AVENUE	4822502600	4/28/2009
5	1059			AUSTRALIA	STREET	4824431300	2/18/2009
6	642	-		BLACKTHORNE	AVENUE	4873610300	2/11/2009
7	1352	-		BLUEBELL	WAY	4841510700	11/6/2008
8	1001		WEST	BRADLEY	AVENUE	4821310200, 0300, 0700, 1598	7/16/2008
9	1001	-	WEST	BRADLEY	AVENUE	4821310200, 0300, 0700, 1599	1/23/2009
10	1001	-	WEST	BRADLEY	AVENUE	4821310200, 0300, 0700, 1600	1/28/2009
11	895	-		BROADWAY	-	4842822500	3/12/2009
12	1149	-		BROADWAY	-	4841825100	8/20/2008
13	1502	-		BROADWAY	-	5073023000	9/30/2008
14	856	-		BROCKTON	STREET	4811101500	10/31/2008
15	522	-		CEDAR	STREET	4832512000	3/23/2009
16	661	-	WEST	CHASE	AVENUE	4924102500	8/27/2008
17	1880	-		CIRCO DEL CIELO	-	4972301400	2/4/2009
18	1544	-		CRESSY	COURT	3866011400	9/4/2008
19	1328	-	NORTH	CUYAMACA	STREET	4820321900	6/12/2009
20	396	-		CUYAMACA	STREET	4870521000	10/17/2008
21	1175	-		CUYAMACA	STREET	4823102300	9/5/2008
22	1268	-		DAWNRIDGE	AVENUE	4840410300	2/18/2009
23	1017	-		DENNSTEDT	COURT	4877600400	6/19/2009
24	1023	-		DENNSTEDT	COURT	4877600500	7/29/2008
25	1596			DONCAROL	AVENUE	5114710500	5/13/2009
26	445	-		EDWARD	STREET	4813910400	7/21/2008
27	442	444		EL CAJON	BOULEVARD	4875201200-1300	2/3/2009
28	670			EL CAJON	BOULEVARD	4874801500	7/14/2008
29	470	-		EL MONTE	ROAD	4870602200	4/15/2009
30	1091			ELLEN	LANE	5141807500	1/28/2009
31	2353	-		FARRINGTON	DRIVE	3866413400	12/30/2008
32	2382	-		FLETCHER	PARKWAY	4811506800	5/20/2009
33	-	-		FOUNDATION	LANE	4930401800	2/18/2009
34	143	-		GARFIELD	AVENUE	4860630600	10/8/2008
35	1190	-		GORSLINE	DRIVE	5075402700	5/12/2009
36	2385	-		GRAFTON	STREET	3866012100	6/4/2009
37	2100	-		GREENFIELD	DRIVE	5121400500	4/8/2009
38	968	-		HACIENDA	DRIVE	4812601300	11/26/2008
39	1371	-		HACIENDA	DRIVE	3863801400	7/29/2008
40	1419			HACIENDA	DRIVE	3863801000	7/11/2008
41	1954	-		HACIENDA	DRIVE	3865721700	1/28/2009
42	1346	-		HARDIN	DRIVE	4925111500	4/8/2009
43	1397			HARTMAN	DRIVE	4822020100	7/9/2008
44	530	-		HAWTHORNE	AVENUE	4874470600	11/19/2008
45	761	-		HAWTHORNE	AVENUE	4873820300	3/4/2009

PY2 (2008-2009) Inventory of
Low Priority Construction Sites

	Project Address					Assessor's Parcel Number	Approval Date
46	1664	-		HONEY HILL	ROAD	4824101800	4/30/2009
47	2085	-		INGAMAC	WAY	5082401800	5/7/2009
48	1820	-		JOE CROSSON	DRIVE	7602311300	1/14/2009
49	1416	-		LEMON	AVENUE	4926101600	6/15/2009
50	163	-		LINDELL	AVENUE	4922011000	6/24/2009
51	650			LIVE OAK	DRIVE	4873721200	7/29/2008
52	1537	-	EAST	MADISON	AVENUE	5111910700	5/7/2009
53	2119	-	EAST	MADISON	AVENUE	5122300300	8/20/2008
54	1458	-	SOUTH	MAGNOLIA	AVENUE	4926007000	7/29/2008
55	182	-	EAST	MAIN	STREET	4880832100	2/3/2009
56	1539	-	EAST	MAIN	STREET	5073102000	9/30/2008
57	1630	-	EAST	MAIN	STREET	5075700400	5/29/2009
58	1253	-	WEST	MAIN	STREET	4872504700	7/21/2008
59	1212	-		MARLINE	AVENUE	4842524100	10/10/2008
60	1835		NORTH	MARSHALL	AVENUE	3871900800	4/8/2009
61	132	-		MEADOW CREST	DRIVE	4815721300	10/14/2008
62	1896	-		MILFORD	PLACE	4814600300	4/14/2009
63	446	-		MILLAR	AVENUE	4874802400	9/9/2008
64	115	-	SOUTH	MOLLISON	AVENUE	4881331200	3/4/2009
65	758	-		MURRAY	DRIVE	4873921600	4/22/2009
66	758	-		MURRAY	DRIVE	4873921600	6/11/2009
67	777	-		MURRAY	DRIVE	4874100200	11/18/2008
68	1167	-		NARANCA	AVENUE	4890411500	10/9/2008
69	2332	-		NIELSEN	COURT	3866421200	3/11/2009
70	1376			OAKDALE	AVENUE	4891222700	6/23/2009
71	1560	-		OLIVE HILLS	DRIVE	5071430400	5/20/2009
72	721	-	EAST	PARK	AVENUE	4881131800	4/28/2009
73	396		NORTH	PIERCE	STREET	4870420700	5/14/2009
74	1580			PRIMROSE	DRIVE	4874420700	6/24/2009
75	399	-	EAST	RENETTE	AVENUE	4931311100	4/13/2009
76	320	-		RICHFIELD	AVENUE	4872921700	6/19/2009
77	581	-		RIMROCK	DRIVE	4814703400	6/15/2009
78	449	-		SILVERY	LANE	4861811500	2/4/2009
79	449	-		SILVERY	LANE	4861811500	4/29/2009
80	449	-		SILVERY	LANE	4861811500	6/24/2009
81	161	-		SOUTHERN	ROAD	4860620600	4/21/2009
82	664	-		SUN MEADOW	DRIVE	4925530500	8/20/2008
83	1448	-		SUNNYLAND	AVENUE	5112711100	7/9/2008
84	850	-		TAFT	AVENUE	4930810500	10/16/2008
85	1066			TERRACE	CREST	5143940300	7/17/2008
86	842		NORTH	THIRD	STREET	5072821700	4/29/2009
87	496	-	SOUTH	THIRD	STREET	5112809400	9/15/2008
88	250	-		TRAVELODGE	DRIVE	4872301600	5/29/2009
89	446	-		VAN HOUTEN	AVENUE	4875513300	1/29/2009
90	647	-		VAN HOUTEN	AVENUE	4875523500	1/22/2009
91	383	-	NORTH	WESTWIND	DRIVE	4861812200	5/21/2009
92	1398	-		WHITSETT	DRIVE	3686312600	10/3/2008
93	2002	-		WINDMILL VIEW	ROAD	3864410100	7/7/2008

5.0 CONSTRUCTION COMPONENT

5.1 INTRODUCTION

Construction and grading activities have the potential to impact neighboring water bodies due to the presence of disturbed soils and building materials. It is important that construction sites take appropriate measures to prevent potential pollutants from entering the storm drain system.

The purpose of the construction component section is to limit the negative impact that construction and grading activities can have on receiving water bodies. The following section provides details on how the City of El Cajon will meet the minimum requirements outlined in Section D.2 of the Municipal Permit to reduce the release of pollutants into the storm drain system to the MEP.

5.2 SOURCE CHARACTERIZATION

5.2.1 SITE INVENTORY

The City has compiled a watershed-based inventory of all public and private construction sites within its jurisdiction. The inventory includes details on each construction site, including project name, watershed location, and construction site priority, as determined by the process described in Section 5.2.1.1. The list of construction projects in the City's jurisdiction can be found in Appendix B.2.

5.2.1.1 CONSTRUCTION SITE PRIORITIZATION

All private and public construction sites within the City's jurisdiction are assigned a priority of high, medium, or low TTWQ. The new Municipal Permit has defined criteria for determining site inspection frequencies, but it does not explicitly require site prioritization. Since construction sites were previously prioritized to comply with the old Municipal Permit, though, the prioritization categories are being kept to maintain consistency. The criteria for prioritization have been updated to correspond with the new inspection frequencies required by the new Municipal Permit. Section 5.5.4.1 of this document discusses the new inspection frequencies for construction sites.

TTWQ Prioritization Criteria

Sites that meet any of the following criteria will be considered a **High** TTWQ:

- A site ~~50~~ 1 acre~~s~~ [JQ1]or more in size where grading will occur during the wet season. The City of El Cajon has adopted this standard as a proactive measure, as it is stricter than what the Municipal Permit requires. This criterion also includes all sites of at least 17 acres in size, which are subject to the City's maximum disturbed area requirements, as defined in Section 5.4.3 of this JURMP.

- A site subject to advanced treatment requirements due to presenting an exceptional threat to water quality, as defined in Section 5.4.4 of this JURMP.
- A Priority Project subject to SUSMP requirements.
- A site one acre or more and tributary to CWA section 303(d) water body segment impaired for sediment or within, directly adjacent to, or discharging directly to a receiving water within an ESA.
- A site that has been determined by the City or the RWQCB to pose a significant threat to water quality.

~~Sites greater than one acre but not meeting any of the above criteria, or s~~Sites less than one acre that pose some treat to water quality will be considered a **Medium** TTWQ.

Sites less than one acre and not considered to be a significant threat to water quality will be considered a **Low** TTWQ.

The City will consider the following factors when evaluating a construction site's threat to water quality:

- Soil Erosion Potential
- Site Slope
- Project Type
- Sensitivity of Receiving Water Bodies
- Proximity to Receiving Water Bodies
- Non-Storm Water Discharge Potential
- Past record of non-compliance at the construction site
- Other Site specific factors

Using the Water Quality Threat Prioritization Flow Chart presented in Figure 5-1 at the end of this section, each construction site was assigned a water quality threat priority of high, medium, or low. The prioritization flow chart specifically considers construction site factors such as soil erosion potential, site slope, sensitivity and proximity of receiving water bodies, and a site's subjectivity to SUSMP requirements. While not required by the Municipal Permit, the City assigns all Priority Project construction sites a high TTWQ priority. The City recognizes that there are other factors besides those included in the flow chart that can influence a construction site's TTWQ. Additional factors, such as non-storm water discharge potential, project type, and past record of non-compliance at the construction site can also influence a site's TTWQ, and the City will consider these factors when assigning construction site TTWQ as necessary. The City maintains the right to re-prioritize a construction site's assigned TTWQ if any of the prioritization factors change throughout the course of construction.

5.2.2 Inventory Updates

To ensure that the City's watershed-based inventory of construction sites is current and accurate, the inventory will be updated at least monthly. Updates to the inventory will include the addition of new construction projects, the removal of completed construction

projects, and re-prioritization of TTWQ designations for active construction sites as needed.

5.3 Ordinance Updates

Storm water compliance requirements for construction activities are included in the City's Storm Water Management and Discharge Control ordinances. As required by Section D.2.a of the Municipal Permit, all applicable City documents and ordinances have been amended as needed to ensure full compliance with the Municipal Permit. The updated City ordinances are included in Appendix A.

5.4 Best Management Practice Requirements

5.4.1 Updated BMP requirements

The City has developed a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement and maintain general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the MEP. The City uses the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual (2003) and the California Storm Water Quality Association (CASQA) Storm Water Best Management Practice Handbook for construction activity (2003) to guide construction proponents in the proper application of the City's minimum BMP requirements. A summary of the City's construction BMP requirements can be found in Appendix C.

Since the initial development of the JURMP in 2002, the City has refined its minimum BMP requirements to only include those BMPs the City found to be the most effective based on previous experience. Construction sites will be responsible for implementing additional BMPs beyond the minimum as necessary to control pollutant discharges to the City's MEP standard. Table 5-1 outlines the minimum construction BMPs required by the City along with the corresponding current Caltrans and CASQA BMP fact sheets, where applicable. BMPs without relevant fact sheets are discussed following the table.

Table 5-1
Minimum Required BMPs for Construction Sites

BMP Type	Minimum Required BMP(s)	Caltrans Fact Sheet	CASQA Fact Sheet
General Site Management			
Development Planning	Preservation of natural hydrologic features where feasible	-	-
	Preservation of riparian buffers and corridors where feasible	-	-
	Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction	-	-

BMP Type	Minimum Required BMP(s)	Caltrans Fact Sheet	CASQA Fact Sheet
	Minimization of exposure time of disturbed soil areas	**SS-1**	**EC-1**
	Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods to the extent feasible	**SS-1**	**EC-1**
Development Planning	Temporary stabilization and reseeding of disturbed soil areas as rapidly as feasible	**SS-1**	**EC-1**
	Employee and Subcontractor Training	**-**	**-**
Pollution Prevention	Vehicle and Equipment Management - Cleaning - Fueling - Maintenance	 **NS-8** **NS-9** **NS-10**	 **NS-8** **NS-9** **NS-10**
	Materials Management - Material Delivery and Storage - Stockpile Management	 **WM-1** **WM-3**	 **WM-1** **WM-3**
	Waste Management - Solid Waste - Concrete - Sanitary Waste	 **WM-5** **WM-8** **WM-9**	 **WM-5** **WM-8** **WM-9**
Erosion and Sediment Controls			
Erosion prevention	Physical Stabilization: - Preservation of existing vegetation - Coconut Fiber Blankets	 **SS-2** **SS-7**	 **EC-2** **EC-7**
	Site Drainage: - Energy Dissipater Outlet Protection	 **SS-10**	 **EC-10**
	Wind Erosion Control	**WE-1**	**WE-1**
	Permanent re-vegetation or landscaping as early as feasible	**SS-1**	**EC-1**
Sediment controls	Perimeter Protection: - Silt Fence - Gravel Bag Berm - Fiber Rolls	 **SC-1** **SC-6** **SC-5**	 **SE-1** **SE-6** **SE-5**
	Sediment Capture: - Sediment Basin - Sediment Trap - Storm Drain Inlet Protection	 **SC-2** **SC-3** **SC-10**	 **SE-2** **SE-3** **SE-10**
	Sediment Tracking: - Stabilized Construction Entrance - Street Sweeping	 **TC-1** **SC-7**	 **TC-1** **SE-7**

Minimization of areas cleared and graded for construction and preservation of natural hydrologic features and riparian buffers and corridors are concepts that are typically addressed during the development planning process. It is the responsibility of project proponents to propose effective means of protecting planned preservation areas during

construction. The Caltrans and CASQA fact sheets for Preservation of Existing Vegetation (SS-2 and EC-2 respectively) provide some useful information that can be applied to all proposed preservation areas.

All personnel working at a construction site, including subcontractors, are expected to be aware of BMPs for each individual site. While the City educates lead construction site project proponents about the City's requirements (see Section 5.5.1), it is the responsibility of project managers and site supervisors to communicate City requirements to all construction site personnel and subcontractors. Project foremen and other personnel who manage construction activities are also generally expected to stay updated on current BMPs for construction.

Prior to start of construction activities, project proponents are required to present the planned BMPs that meet the above minimum requirements to the City for compliance review. Section 5.5.2 provides a more detailed description of the construction and grading approval process. Projects may propose alternative BMPs in lieu of the minimum BMPs mentioned above provided the alternative BMPs are as effective as the minimum BMPs listed above, meet Municipal Permit requirements, and are approved prior to use by the City.

5.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement all minimum construction BMPs as necessary to prevent pollution discharges regardless of the season. To provide additional clarity for construction sites and to maintain a higher level of protection during the wet season, the City has established some season-specific guidelines for implementation of erosion and sediment control BMPs as described below:

Dry Season (May 1st through September 30th)

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained.
- Adequate sediment control BMPs must be installed and maintained.
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and prevent sediment discharges must be stored on the site.
- An approved "weather triggered" response plan is mandated for implementation in the event that a predicted storm event has a 50% chance of rain. The proponent must have the capacity to deploy the standby BMPs within 48 hours of the predicted storm event.

- All slopes must be equipped with erosion prevention BMPs as soon as slopes are completed for any portion of the site.
- All active slopes must be stabilized during rain events.
- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing (see Section 5.4.3).

Wet Season (October 1st through April 30th)

All dry season requirements are required in addition to the following:

- Perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms.
- Adequate erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a BMP fails, it must be repaired, improved or replaced with an acceptable alternate as soon as it is safe to do so.
- Standby erosion and sediment control BMPs must be able to protect all exposed soil areas. An incomplete disturbed area that is not being actively graded must be fully protected from erosion if left for 10 days or more.

5.4.2 Additional Controls for Construction Sites

The Municipal Permit requires implementation of additional controls for construction sites tributary to 303(d) listed water body segments impaired for sediment or within, adjacent to, or discharging directly to coastal lagoons or other receiving waters within ESAs. Additional requirements for such sites will be determined by the City as needed on a site-by-site basis. Additional controls may include required de-silting basins, increased inspection frequency, grading limitations, and/or stronger penalties for non-compliance. Currently, there are no water bodies 303(d) listed for sediment in or downstream of the City. The City has designated the major channels within the City as ESAs. As the channels designated as ESAs are mainly concrete conveyances, the main purpose of the ESA designation is to provide additional protection for Forester Creek rather than to protect the channels themselves. Since Forester Creek is not impaired for sediment or other constituents commonly found at construction sites, not all construction sites discharging to these ESAs will be required to implement additional controls. However, if a construction site within 200 feet of or discharging directly to any of channels designated as ESAs is found to have the potential to discharge pollutants for which Forester Creek is impaired, the City will require additional controls as necessary for these sites.

5.4.3 Maximum Disturbed Area for Erosion Controls

The City requires that temporary or permanent erosion controls be implemented at all construction sties prior to the disturbance of any soil up to a total of 17 acres. This 17

acre maximum is comparable to the current Caltrans soil disturbance limitation of 750,000 square feet. If the site is in compliance with applicable storm water regulations and has adequate control practices implemented to prevent storm water pollution, the City has the option to give the site written authorization to disturb beyond the 17 acre maximum. The City will require as necessary additional controls for construction sites allowed to disturb more than 17 acres, which could include additional BMPs, increased inspection frequency, and/or stronger penalties for non-compliance.

5.4.4 Advanced Treatment Methods

For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, should adequately control sediment discharges from the site. However, if it is determined that a site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, thus resulting in an exceptional TTWQ, advanced treatment will be required. A site is considered to be an exceptional TTWQ if it meets ALL of the following criteria:

- Is located within, adjacent to, or a portion of the site is within 200 feet of waters listed on the CWA Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation, <u>and</u> turbidity;
- Disturbance is greater than five acres, including all phases of the development;
- Disturbed slopes are steeper than 4:1 (horizontal: vertical) and higher than 10 feet that drain toward the 303(d) listed receiving water;
- Contains a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4.

Alternatively, applicants may perform a Revised Universal Soil Loss Equation (RUSLE) or Modified Universal Soil Loss Equation (MUSLE) analysis to prove to the City's satisfaction that advanced treatment is not required.

Treatment effluent water quality shall meet or exceed the water quality objectives for turbidity, and any other parameter deemed necessary by the City Engineer as listed in the Water Quality Control Plan for the San Diego Basin for Inland Surface Waters and Lagoons and Estuaries for the appropriate hydrologic unit.

For projects where advance treatment is required, the applicant must submit the design, operations and maintenance schedule, monitoring plan, and certification of training of staff to the satisfaction of the City.

5.5 Program Implementation

All construction sites are required to select, install, and maintain BMPs that meet or exceed the City's minimum BMP requirements listed in Section 5.4.1, in addition to complying with the City's dry and wet season requirements. Additionally, a construction site over one acre where grading will occur is subject to the NPDES General Construction Permit and is required to file an Notice of Intent (NOI) and develop a

Storm Water Pollution Prevention Plan (SWPPP). SWPPPs are required to include a list of BMPs that will be implemented during each phase of construction to reduce pollution discharges to the MEP. Construction sites are required to submit drainage, grading, and erosion control plans to the City for review, where applicable. While some projects might not require drainage and/or grading plans, all construction projects must submit erosion control plans. The City requires all structural construction BMPs to be shown on the site's erosion control plans, and the City has a list of notes (Appendix D) that must be included on the plans. All approved plans are required to be kept at the construction site at all times for review by City inspectors and the RWQCB.

5.5.1 Education and Staff Training

The City provides appropriate parties involved with construction activities with training and informational materials regarding storm water quality as applicable. These parties include but are not limited to City employees and project proponents, which can include contractors, subcontractors, developers, property owners, and superintendents. Education and training of the development community in El Cajon is typically done on a project-by-project basis during pre-construction meetings, interaction at the Public Works counter, and site inspections. Training of City staff is done continually using a variety of methods such as workshops and memorandums. For further detail regarding the City's construction educational program, please refer to Sections 10.2.2 and 10.3.1 of this document.

5.5.2 Construction and Grading Approval Process

The City has an established departmental review and approval process for local construction and grading plans. The City has evaluated its current approval process and has determined that its current program meets the requirements of the new Municipal Permit. Prior to issuing building permits and approving grading plans, City personnel verify that the proposed construction site intends to implement all required BMPs to reduce pollutant discharges to the City's MEP standard. All construction related documents are routed to the Public Works Department for review; Private Development reviews drainage and grading plans and the Storm Water section reviews erosion control plans. These two sections coordinate with each other during the review process to verify that all proposed BMPs are adequately shown on these documents. Also, since the City requires all Priority Projects to submit SWMitP plans at the same time as construction plans, the City can verify that all structural post-construction BMPs included in the SWMitP are adequately shown on the construction plans. The City also verifies that each construction site subject to the General Construction Permit has existing permit coverage and reviews the project's SWPPP to verify that the document is in compliance with all applicable requirements. In addition, the City requires cash securities in the form of bonds for all grading and non-grading projects to ensure all construction sites comply with construction requirements presented in this document.

5.5.3 Direct Implementation of BMPs

The City is required to implement the same minimum construction BMPs for CIP projects as private projects, and all public projects are subject to the same review process as private projects. All contractors involved with CIP projects are educated about storm water requirements through the same approach used for proponents involved in private development projects.

5.5.4 Inspection of Construction Sites

The City has an established inspection program to evaluate construction sites within the City's jurisdiction. Site inspections are performed by City or contract staff to evaluate compliance with minimum BMP requirements and applicable ordinances and permits.

Inspections will include the following:

- Where applicable, a check for proof of coverage under the General Construction Permit. Once coverage has been confirmed, this information is not checked during subsequent inspections.
- Assessment of the implementation of all required minimum BMPs and any additional controls required by the City.
- A check for proper maintenance of the applicable BMPs.
- Assessment of the effectiveness of required BMPs.
- Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff.
- Assessment of whether project proponents are making appropriate adjustments when BMP inefficiencies are found as a result of self or City conducted inspections.
- Education of project proponents on storm water pollution prevention as needed.

Inspection findings are documented on the Storm Water Quality Inspection for Construction Sites BMP Compliance Report form in Appendix D. All inspection findings are included in each construction site's file. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 5.5.5, will be taken.

5.5.4.1 Inspection Frequency

The criteria used to determine a construction site's TTWQ presented in Section 5.2.1.1 was developed to correspond to the inspection frequencies required by the new Municipal Permit. The following table presents the different TTWQ categories and their corresponding minimum inspection frequencies for the wet (October 1 through April 30) and dry (May 1 through September 30) seasons.

Table 5-2
Construction Site Inspection Frequency

Construction Site TTWQ	Wet Season Inspection Frequency	Dry Season Inspection Frequency
High	Every two weeks	As needed
Medium	Monthly	
Low	As Needed	

The City will reevaluate a construction site's TTWQ and subsequent inspection frequency on a regular basis, particularly when grading activities are being conducted during the wet season. The City maintains the right to inspect a site more often than the minimum frequencies outlined above where deemed necessary. The need for additional inspections can vary depending on site conditions, previous violations, history of developer or contractor past performance, and/or weather patterns. The number of inspections performed at each construction site will be tracked in an electronic spreadsheet to ensure all construction sites in the City's inventory are being inspected at the appropriate frequency.

5.5.5 Enforcement Measures for Construction Sites

The City will be responsible for enforcement of applicable local ordinances and permits at all construction sites in its jurisdiction. When violations are observed and documented during a site inspection, the City will implement appropriate enforcement measures based on the severity of the violation. Enforcement can range from verbal warnings to more severe enforcement such as stop work orders. Escalating enforcement measures will be used as necessary if proper corrective actions are not implemented during the allotted time frame.

The typical progressive enforcement steps that the City will implement include the following:

- Verbal warnings
- Written warnings
- Monetary administrative citations
- Enforcement of contracts (Municipal projects)
- Stop work orders
- Denial or revocation of permits
- Civil and/or criminal court actions

For more detailed descriptions of the above enforcement methods and their legal base, please refer to Section 2 of this document.

All inspection personnel have the direct authority or resources to take immediate enforcement actions when necessary. This facilitates quicker correction of inadequate implementation, reducing the risk of pollutants discharging from the site. City inspectors will conduct follow-up inspections where necessary to determine if corrective

actions have been taken to comply with City ordinances and minimum BMP requirements.

Since the City's construction storm water requirements have been in place for some time now, and the City works closely with all development projects prior to the commencement of construction activities, all construction sites are expected to be aware of the City's BMP requirements. Accordingly, education alone will rarely be used as an enforcement tool and a written warning will typically be the first enforcement step. The City uses corrective actions recorded on site inspection forms and administrative citations as its written warning enforcement tools. The time frame allowed for a site to comply with a written warning is typically one to seven days, based on the severity of the BMP violation. Written corrective actions are recorded on the construction site inspection form, and a copy of the inspection form is given to the responsible party at the site. Administrative citations have various levels; the first enforcement level consists of a non-monetary warning followed by levels of increasing monetary fines. Construction sites that do not correct violations in the given time frame will be issued a higher level citation as necessary. Stop work orders are typically issued at the beginning of construction if a site has started to disturb soil before the City has approved all of the project's submitted storm water documents. However, stop work orders may also be issued if sites are non responsive to monetary administrative citations or if rain is imminent and a BMP violation poses an immediate threat to water quality. The City expects corrective actions, administrative citations, and stop work orders to be effective at obtaining compliance from non-compliant sites as they have been in the past; however, if a construction site receives frequent stop work orders or does not respond to an issued stop work order, more severe actions, such as permit revocation or court actions, will be used as necessary. The City also may request enforcement assistance from the RWQCB.

5.5.6 RWQCB NOTIFICATION

In accordance with Section 5(e) of Attachment B of the Municipal Permit, the City will report any non-compliance associated with construction activity that may endanger human or environmental health. The available information will be reported to the RWQCB verbally within 24 hours of the City becoming aware of the threat. Within five days of the City first becoming aware of the threat, a written submission including the following information will be provided to the RWQCB:

- Description of the non-compliance and its cause
- Exact dates and times of non-compliance, or if the non-compliance has not been corrected by the time of the written submission, the anticipated time it is expected to continue
- Description of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance

Criteria listed below will be used as applicable to determine the human or environmental health threats of a non-compliance event, whether from storm water or non-storm water discharges:

- Estimated area of erosion caused by discharge
- Estimated pollutant load discharged from site
- Estimated volume of discharge
- Types of pollutants discharged, including if toxic materials were discharged
- Total suspended solids (TSS) concentration and turbidity of discharge
- Other materials discharged that pose a threat (concrete washout, sanitary washes, etc.)
- Sensitivity of the receiving water body, including if it is 303(d) listed for any of the pollutants in the discharge
- Proximity of site to sensitive habitat/endangered species
- Proximity of site to public water supply (well head, monitoring wells)
- How much, if any, of the discharge reached the receiving water body
- Beneficial uses for affected water bodies

In addition to notifying the RWQCB about threats to human health or environmental health, the City will provide the RWQCB with copies of all stop work notices and any other high level enforcement measures issued to construction sites in the City's jurisdiction within five working days.

5.6 Construction Activities Effectiveness Assessment

The effectiveness of the City's construction component will be assessed as required by Municipal Permit sections I.1 and J.1.(3)(I) and documented in the City's JURMP Annual Reports. Details on construction site violations are recorded when written warnings and stop work notices are issued, which allows the City to identify violation trends with respect to BMP implementation. Once these trends are identified, the City can focus efforts in these areas. Refer to Section 13 of this document for a detailed description of the City's effectiveness assessment procedure.

5.7 Program Review and Modification

Future modifications to the City's construction component to meet the requirements of the Municipal Permit will be documented as necessary. Section 14 includes a list of the major changes that have been made to the construction component of the City's JURMP.

FIGURE 5-1: WATER QUALITY THREAT PRIORITIZATION FLOW CHART (Construction Projects)

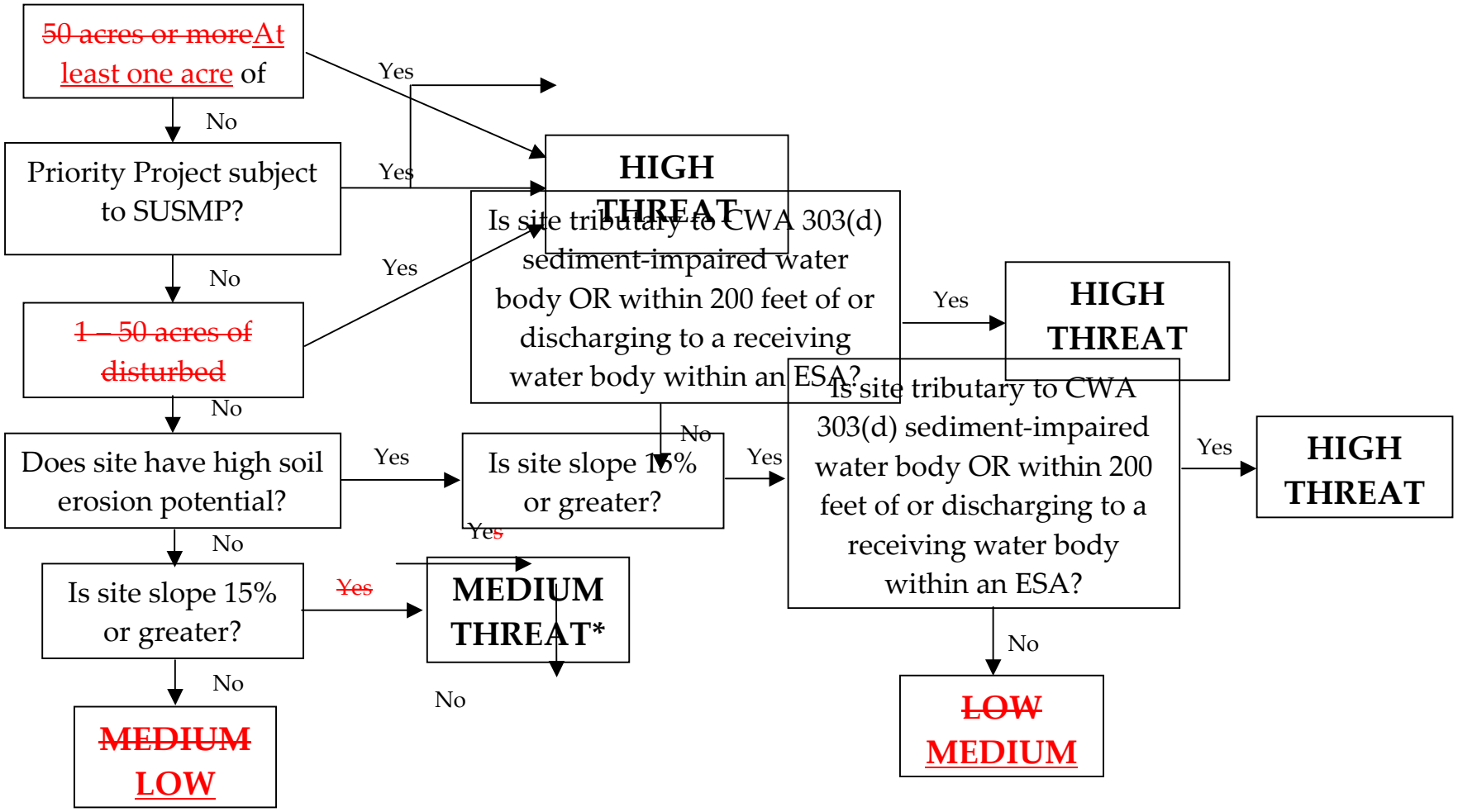

*Sites with a low or medium TTWQ can be given a higher threat prioritization based on additional factors, such as project type, non-storm water discharge potential, or if there is a history of non-compliance with storm water regulations at the site.

Appendix A.4

Business License and the Storm Water Program

Goal: Use information collected and stored in the Business License database to support the Storm Water Program inspection and public outreach components and potentially increase revenues for the Business License Program.

Process:

1. The Storm Water group has access to the Business License database.

2. The Finance Department provides the Storm Water group with a weekly or bi-weekly list of new businesses added to the Business License database.

3. Storm Water staff checks the business type information, SIC code, number of employees, and APNs for accuracy and adds needed information to the Business License database.

4. Storm Water staff may conduct site visits to new businesses when unsure about information that was provided.

5. The Storm Water section updates business inventories by appending new businesses that may present a high threat to water quality.

6. Develop a Storm Water informational sheet for Business License applicants. The Business License staff would hand out the informational sheet at the time. (Supports Storm Water outreach component)

City of El Cajon Municipal Facilities Inventory

No.	Facility Name	Facility Address	Facility Priority	Hydrologic Sub-Sub-Basin
1	Civic Center, City Hall and Plaza	200 E Main Street	High	Washington Channel
2	El Cajon Performing Arts Center	110 E Main Street	High	Washington Channel
3	Knox Hotel Museum (El Cajon Historical Society)	280 N Magnolia Avenue	Low	Washington Channel
4	Public Works Maintenance/Operations Office	1050 Vernon Way	High	Forrester Creek
5	Vehicle Maintenance Facility	1060 Vernon Way	High	Forrester Creek
6	Animal Control	1275 N Marshall Way	Medium	Forrester Creek
7	Community Policing Division	165 E Park Avenue	Low	Washington Channel
8	Resource Center, Community Social Services and Crisis House	1034 N Magnolia Avenue	Low	Broadway Channel
9	Pistol Range	100 Rueben Fleet Drive	Low	Forrester Creek
10	Police Department and Administration Center	100 Fletcher Parkway	Low	Broadway Channel
11	Police Department Detectives Offices	1035 Pioneer Way	Low	Forrester Creek
12	Fire Station No. 1 and Fire Department Administration	100 E Lexington Avenue	Low	Washington Channel
13	Fire Station No. 7	695 Tyrone Street	Low	Forrester Creek
14	Fire Station No. 8	842 N Third Street	Low	Forrester Creek
15	Fire Station No. 9	1301 N Marshall Avenue	High	Forrester Creek
16	Albert Van Zanten Park	1495 Greenfield Drive	High	Broadway Channel
17	Bill Beck Park	Pierce Street at Wagner Drive	High	Forrester Creek/County Ditch
18	Bostonia Recreation Center	1049 Bostonia Street	High	Forrester Creek
19	Bostonia Park	1049 Bostonia Street	Low	Forrester Creek
20	Cajon Valley Middle School Park	750 Park Avenue	High	Forrester Creek
21	Fire Station Park	Tyrone Street at Westwind Drive	High	Forrester Creek
22	Fletcher Hills Recreation Center and Pool	2345 Center Place	High	Mission San Diego/Alvarado Creek
23	Fletcher Hills Park	2345 Center Place	Low	Mission San Diego/Alvarado Creek
24	Hillside Recreation Center	840 Buena Terrace	High	Forrester Creek
25	Hillside Park	840 Buena Terrace	Low	Forrester Creek
26	Judson Park	Magnolia Avenue at Park Avenue	High	Washington Channel
27	John F. Kennedy Recreation Center	1675 E Madison Avenue	High	Forrester Creek
28	John F. Kennedy Park	1675 E Madison Avenue	Low	Forrester Creek
29	Prescott Promenade Park	200 Block of E Main Street	High	Washington Channel/County Ditch
30	Renette Recreation Center	935 Emerald Avenue	High	County Ditch
31	Renette Park	935 Emerald Avenue	Medium	County Ditch
32	Ronald Regan Community Center	195 E Douglas Avenue	High	County Ditch
33	Tuttle Park	379 W Chase Avenue	High	County Ditch
34	Wells Maintenance Facility and Recreation Center	1153 E Madison Avenue	High	Forrester Creek
35	Wells Park	1153 E Madison Avenue	Low	Forrester Creek

Storm Water Quality Checklist
For Municipal Facilities

Site Name:_____ Location:_____

Contact:_____

Date:_____ Type of Inspection: ☐ Routine Site Inspection

Weather Information: ☐ Prior to Forecast of Rain Event

Storm Start Date and Time:_____ Storm Duration:_____hours ☐ 24-hr Period During Extended Storm Event

Time Since Last Storm:_____hrs/days Rainfall:_____inches ☐ After Rain Event

Inspector Name and Title:_____

Inspector Signature:_____

Pollution Prevention BMPs	N/A	Yes	No	Comments / Corrective Action
Erosion and Sediment Control				
Is existing vegetation preserved?				
Are seeding and planting of native plants and trees considered?				
Are geotextiles and organic mats used for soil stabilization?				
Roadway and Bridge Maintenance				
Are streets swept and clean?				
Is street sweeping frequency adequate for the area?				
Municipal Vehicle Maintenance Facilities				
Are vehicles/equipment parked/stored in designated areas?				
Are vehicles and equipment regularly inspected for leaks and spills?				
Are detected leaks/spills contained and repaired as soon as possible?				
Landscaping Maintenance				
Are safer, alternative products used or considered?				
Is weather considered for landscaping activities?				
Are certified professionals used to handle, apply, and distribute pesticides, herbicides, and fertilizers?				
Is there an IPM used?				
Maintenance of MS4				
Is the mechanism for detecting and removing IC/ID situations implemented?				
Is the MS4 inspected, maintained, and repaired?				
Is a stenciling and sign program used to warn of effects of illegal dumping?				
Sewer Blockage Response				
Is there mechanism for identifying, containing, controlling, and repairing sewage leaks and spills?				
Is hazardous waste disposed of properly?				
Waste Management				
Is there a waste reduction program in place?				
Are wastes segregated for proper storage and disposal?				

Other Practices and Procedures				
Are dewatering activities controlled and managed appropriately?				
Is groundwater tested prior to disposal?				
Is the public educated and encouraged to participate in appropriate stormwater activities?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Housekeeping				
Is the area clear of visible trash/debris and impervious surfaces free of sediment?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are points of ingress/egress to public and private roads free from sediment, debris and mud from tracking?				
Are materials stored in their designated areas?				
Are dry methods used to clean?				
Employee Training				
Have employees been trained in basic stormwater management and BMP implementation?				
Visual Inspections				
Are visual inspections of the site conducted and documented on a regular basis?				
Are the discharge locations free of significant erosion or sediment transport?				
Improved Operation and Maintenance				
Are drainage control structures free of litter and debris?				
Waste Disposal and Recycling				
Are there designated areas for recycling of metal, tires, antifreeze, and used oil?				
Are waste containers covered?				
Are areas near or around waste containers free of leaks or spills?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are hazardous wastes stored and disposed appropriately? (in labeled, secondary containment; 55-gallon drums in a secured, designated area)				
Is secondary containment free of spills and rainwater?				
Preventive Maintenance				
Are there procedures for replacing used or worn materials or equipment prior to failure?				
Record Keeping				
Is there onsite storage of documented inspections, BMP evaluations, and audits?				
Is there onsite documentation of employee training?				
Is there an onsite SWPPP or other Pollution Control Document?				
Does the SWPPP adequately reflect the current site conditions and the construction operations? If not, explain required SWPPP revisions.				
Spill Prevention and Response				
Are there spill kits near outside stored materials, wastes, and recycling areas?				
Are spill response procedures clearly posted?				
Are employees trained in preventing spills?				

Material Inventory Procedures				
Are inventories of 30 days materials onsite?				
Material Storage Practices				
Are outside stored materials stored off the ground and covered or in appropriate containers? (Flammables stored in a flammables cabinet; antifreeze in double-walled container or in secondary containment)				
Visual evidence of spills, staining, or leaks from outside stored materials are not evident				
Storage Tanks				
Are outside above ground storage tanks double-walled or in secondary containment?				
Visual evidence of leaks or spills in the area are not visible				
Outside Storage				
Are materials stored outside under cover or in containers?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are outside material storage areas free of visual evidence of spills or runoff?				
Loading and Unloading				
Are loading and unloading areas free of litter and visual evidence of spills?				
Sediment and Erosion Control				
If sandbags are used, are they placed appropriately for the conditions?				
Are temporary soil stabilization measures installed and in working order?				
Is dust control necessary and implemented?				
Are soil stockpiles properly stored?				
Is inlet protection available for all operational storm drain inlets?				
Vehicle and Equipment Maintenance				
Is there a covered or inside area designated for vehicle and equipment maintenance?				
Are leaking vehicles stored inside or drip pans used for outside storage?				
Vehicle and Equipment Washing				
Is there a designated covered or inside area or commercial facility for washing vehicles and equipment?				
Park BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are grass clippings mulched or bagged for disposal?				
Are vegetation trimmings gathered and disposed as solid waste or recycled as mulch?				
Are sidewalks and parking lots cleaned using dry methods to collect and use as mulch or dispose as solid waste?				
Recreation BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Is pool water tested or treated for chlorine before discharge?				
Is pool filter backflush discharged to the sanitary sewer?				
Are pool chemicals stored inside and in appropriate				

containers?				
Non-Stormwater BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Non-Storm Water Management				
Is the site free of evidence of illegal connections and illicit discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
Other				
No other potential storm water pollution issues or concerns exist. If no, explain below.				

Explanations:_____

_____

_____

_____

_____

_____

_____

_____

Received by:_____ _____

Name (Print) **Date**

_____

Signature

Appendix A.5

City of El Cajon

Industrial and Commercial Storm Water Inspection Updated Facility Inventory

ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
1	AJM Packaging Corporation	1160 VERNON WAY	Industrial, conditional	HIGH	2656	Paper and Allied Products	15567
2	Alturdyne	660 STEELE ST	Industrial, conditional	HIGH	3621	Electronic and Other Electrical Equipment and Components, except computer	83334
3	Metal Engineering	390 FRONT ST	Industrial, conditional	HIGH	3599 3999	Industrial and Commercial Machinery and Computer Equipment	82404
4	Ametek	474 RALEIGH AVE	Industrial, conditional	HIGH	3564	Industrial and Commercial Machinery and Computer Equipment	85009
5	Certified Metal Craft, Inc.	877 VERNON WAY	Industrial, conditional	HIGH	3999	Miscellaneous Manufacturing Industries	83146
6	East County Powder Coating	1835 JOHN TOWERS AVE	Industrial, conditional	HIGH	3479	Fabricated Metal Products, except Machinery and Transportation Equipment	20906
7	Gardner Pool Plastering	801 GABLE WAY	Industrial, conditional	HIGH	1741 1429	Construction - Special Trade	84770
8	Hi Tech Welding and Forming	1990 FRIENDSHIP DR	Industrial, conditional	HIGH	3728	Transportation Equipment	90838
9	Jeldwen Windows and Doors	1111 PIONEER WAY	Industrial, conditional	HIGH	3999 3446 3231	Miscellaneous Manufacturing Industries	11525
10	Kitchen Crafters	500 FRONT ST	Industrial, conditional	HIGH	2434	Lumber and Wood Products, except furniture	90112
11	Layfield Environmental Systems, Geosynthetics, & Industrial Services	1166 FESLER ST	Industrial, conditional	HIGH	3999	Miscellaneous Manufacturing Industries	4174
12	Lite Stone Concrete	1105 N MARSHALL AVE	Industrial, conditional	HIGH	3281	Stone, Clay, Glass, and Concrete Products	30759
13	Mario Upholstery	1211 N 2ND ST	Industrial, conditional	HIGH	2512	Furniture and Fixtures	83760
14	Mil-Spec Metallics	755 VERNON WAY	Industrial, conditional	HIGH	5051 5014	Wholesale Trade; Durable Goods	15602
15	Pacifica Glass Co, Inc.	1946 JOHN TOWERS AVE	Industrial, conditional	HIGH	5231	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	15374
16	Russell's Metal Fab	549 RALEIGH AVE	Industrial, conditional	HIGH	3499	Fabricated Metal Products, except Machinery and Transportation Equipment	85240
17	Senior Aerospace	790 GREENFIELD DR	Industrial, conditional	HIGH	3999	Miscellaneous Manufacturing Industries	
18	Top Notch Commercial and Aerospace Manufacturing Inc.	1488 PIONEER WAY	Industrial, conditional	HIGH	3449	Fabricated Metal Products, except Machinery and Transportation Equipment	
19	Toro Agricultural Irrigation	1588 N MARSHALL AVE	Industrial, conditional	HIGH	3999	Miscellaneous Manufacturing Industries	85266
20	Venus Printing	1183 E MAIN ST	Industrial, conditional	HIGH	2759	Printing, Publishing, and Allied Industries	
21	Artimex Iron Co.	315 CYPRESS LANE	Industrial, mandatory	HIGH	3441	Fabricated Metal Products, except Machinery and Transportation Equipment	81875
22	Allied Castings, Inc.	983 VERNON WAY	Industrial, mandatory	HIGH	3363	Primary Metal Industries	81619
23	Cajon Valley Union School District Transportation	777 E PARK BLVD	Industrial, mandatory	HIGH	4151	Local and Suburban Transit and Interurban Highway Passenger Transportation	
24	California Countertop	1340 HILL ST	Industrial, mandatory	HIGH	3281	Stone, Clay, Glass, and Concrete Products	13966
25	California Metals & Electronics	636 FRONT ST	Industrial, mandatory	HIGH	5093	Wholesale Trade; Durable Goods	10671
26	California Metals and Electronics	297 S MARSHALL AVE	Industrial, mandatory	HIGH	3599	Industrial and Commercial Machinery and Computer Equipment	81530
27	Chem-Tronics, Inc.	1150 W BRADLEY AVE	Industrial, mandatory	HIGH	3724	Manufactures Metal Parts for et/Rocket Engines	82641
28	Decco Castings, Inc.	1596 PIONEER WAY	Industrial, mandatory	HIGH	3365	Primary Metal Industries	83737
29	Evergreen Environmental Services	412 FRONT ST	Industrial, mandatory	HIGH	5093 4789 4789	Wholesale Trade; Durable Goods	15903
30	First Transit	800 FESLER ST	Industrial, mandatory	HIGH	4111 7539	Local and Suburban Transit and Interurban Highway Passenger Transportation	16868
31	Grossmont Union High School District	1100 MURRAY DR	Industrial, mandatory	HIGH	4151 7539 5541	Local and Suburban Transit and Interurban Highway Passenger Transportation	
32	Pacific Trans Environmental Services, Inc.	1452 N JOHNSON AVE	Industrial, mandatory	HIGH	4953	Electric, Gas, and Sanitary Services	30915
33	Pluck A Buck El Cajon Auto Recycling	1416 PIONEER WAY	Industrial, mandatory	HIGH	5015	Wholesale Trade; Durable Goods	
34	Precision Metal Products	850 W BRADLEY AVE	Industrial, mandatory	HIGH	3462 3463 3398	Fabricated Metal Products, except Machinery and Transportation Equipment	15068
35	Russo Tile and Marble Inc.	635 FRONT ST	Industrial, mandatory	HIGH	3253	Stone, Clay, Glass, and Concrete Products	11158
36	San Diego Charter Connection Passenger Terminal	385 S MARSHALL AVE	Industrial, mandatory	HIGH	4141	Local and Suburban Transit and Interurban Highway Passenger Transportation	16100

City of El Cajon

Industrial and Commercial Storm Water Inspection Updated Facility Inventory

ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
37	San Diego Van and Storage	1426 FAYETTE ST	Industrial, mandatory	HIGH	4214	Motor Freight Transportation and Warehousing	81405
38	Solo Cup Co.	1160 VERNON WAY	Industrial, mandatory	HIGH	2656	Paper and Allied Products	
39	South Bay Welding	781 O'CONNER ST	Industrial, mandatory	HIGH	3441	Fabricated Metal Products, except Machinery and Transportation Equipment	
40	Super-Krete International Inc.	1290 N JOHNSON AVE	Industrial, mandatory	HIGH	3271	Stone, Clay, Glass, and Concrete Products	1420
41	Triumph	203 N JOHNSON AVE	Industrial, mandatory	HIGH	3728	Transportation Equipment	1158
42	Veolia Transportation Services, Inc.	1213 N JOHNSON AVE	Industrial, mandatory	HIGH	4212	Motor Freight Transportation and Warehousing	14691
43	Veridiam	1717 N CUYAMACA ST	Industrial, mandatory	HIGH	3317	Primary Metal Industries	
44	Waste Management Universal Refuse Removal	1001 W BRADLEY AVE	Industrial, mandatory	HIGH	4953	Electric, Gas, and Sanitary Services	85256
45	Arco AM/PM #640	593 N MOLLISON AVE	Commercial	HIGH	5541 5499	Automotive Dealers and Gasoline Service Stations	
46	Atlas Radiator	580 EL CAJON BLVD	Commercial	HIGH	7538	Automotive Repair Services, and Parking	84610
47	Ali Baba Restaurant	421 E MAIN ST	Commercial	HIGH	5812	Eating and Drinking Places	30819
48	American Scissor Lift, Inc.	400 N JOHNSON AVE	Commercial	HIGH	7359	Business Services	
49	Apro # 20	710 N 2ND ST	Commercial	HIGH	5541 5499	Automotive Dealers and Gasoline Service Stations	
50	Arco #6146	725 N 2ND ST	Commercial	HIGH	5541 5499	Automotive Dealers and Gasoline Service Stations	15762
51	Big Daddy's Oil	489 W MAIN ST	Commercial	HIGH	5541	Automotive Dealers and Gasoline Service Stations	15471
52	Big O Tires	844 N JOHNSON AVE	Commercial	HIGH	7534	Automotive Repair Services, and Parking	90129
53	California Park Models	746 N 2ND ST	Commercial	HIGH	5561	Automotive Dealers and Gasoline Service Stations	
54	Chevron Stations Inc. #1742	696 N MOLLISON AVE	Commercial	HIGH	5541 5499	Automotive Dealers and Gasoline Service Stations	
55	Circle J Liquor	1031 BROADWAY	Commercial	HIGH	5921	Miscellaneous Retail	
56	Cummins Cal Pacific	310 N JOHNSON AVE	Commercial	HIGH	7538	Automotive Repair Services, and Parking	21269
57	D3 Equipment	1475 PIONEER WAY	Commercial	HIGH	7359	Business Services	13867
58	De La Fuente Cadillac	1385 E MAIN ST	Commercial	HIGH	7538 5511	Automotive Repair Services, and Parking	83456
59	E&M Auto Parts	1647 E MAIN ST	Commercial	HIGH	5531	Automotive Dealers and Gasoline Service Stations	82134
60	East County Auto Collision	1375 E MAIN ST	Commercial	HIGH	7532	Automotive Repair Services, and Parking	30138
61	East County Tire and Brake	616 BROADWAY	Commercial	HIGH	7538	Automotive Repair Services, and Parking	81786
62	El Cajon Mitsubishi	247 EL CAJON BLVD	Commercial	HIGH	5511	Automotive Dealers and Gasoline Service Stations	12793
63	El Cajon Smog & Auto Repair	720 BROADWAY	Commercial	HIGH	7539	Automotive Repair Services, and Parking	14889
64	Fruitland and Deli	1088 ESTES ST	Commercial	HIGH	5812	Eating and Drinking Places	
65	Genos BBQ	291 W MAIN ST	Commercial	HIGH	5812	Eating and Drinking Places	14369
66	Golden State Aviation 160	1987 N MARSHALL AVE	Commercial	HIGH	5541	Automotive Dealers and Gasoline Service Stations	
67	Goodyear Certified Tire	790 N JOHNSON AVE	Commercial	HIGH	7538 5021	Automotive Repair Services, and Parking	30584
68	Heartland Coin Club	695 BALLANTYNE ST	Commercial	HIGH	7389	Business Services	
69	HIS Auto	279 EL CAJON BLVD	Commercial	HIGH	5521	Automotive Dealers and Gasoline Service Stations	17213
70	International House of Pancakes	1286 OAKDALE AVE	Commercial	HIGH	5812	Eating and Drinking Places	13465
71	Imported Car Care	1121 BROADWAY	Commercial	HIGH	7539	Automotive Repair Services, and Parking	
72	J.R. Products	982 BROADWAY	Commercial	HIGH	5599	Automotive Dealers and Gasoline Service Stations	84263
73	JC Auto Repair	1492 E MAIN ST	Commercial	HIGH	7538	Automotive Repair Services, and Parking	14812
74	Jerome's	333 N JOHNSON AVE	Commercial	HIGH	5021	Wholesale Trade; Durable Goods	82040
75	Kragen Auto Parts	790 N JOHNSON AVE	Commercial	HIGH	5531	Automotive Dealers and Gasoline Service Stations	
76	Miller's Towing	1402 PIONEER WAY	Commercial	HIGH	7549 5015	Automotive Repair Services, and Parking	12984
77	Name Unknown	1419 BROADWAY	Commercial	HIGH	7521	Automotive Repair Services, and Parking	
78	Outback Steakhouse	722 JAMACHA RD	Commercial	HIGH	5812 5813	Eating and Drinking Places	82191
79	Por Favor, Inc.	148 E MAIN ST	Commercial	HIGH	5812	Eating and Drinking Places	
80	Riley Automotive	1665 E MAIN ST	Commercial	HIGH	7538	Automotive Repair Services, and Parking	17209
81	Roberto's Taco Shop	1104 E WASHINGTON AVE	Commercial	HIGH	5812	Eating and Drinking Places	60978
82	Rock Auto Group	464 W MAIN ST	Commercial	HIGH	7538 5521	Automotive Repair Services, and Parking	15948
83	San Diego Rods and Customs	1575 PIONEER WAY	Commercial	HIGH	7549	Automotive Repair Services, and Parking	15077
84	Serranos Super Salsa	795 ARNELE AVE	Commercial	HIGH	5812	Eating and Drinking Places	83423

City of El Cajon

Industrial and Commercial Storm Water Inspection Updated Facility Inventory

ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
85	Sizzler Restaurant	1030 FLETCHER PKWY	Commercial	HIGH	5812	Eating and Drinking Places	90990
86	Super Star #2	1090 BROADWAY	Commercial	HIGH	5541	Automotive Dealers and Gasoline Service Stations	31391
87	Tommy's Italiano Deli	1190 N 2ND ST	Commercial	HIGH	5812	Eating and Drinking Places	81700
88	Top Dollar	1150 N 2ND ST	Commercial	HIGH	5511	Automotive Dealers and Gasoline Service Stations	
89	Toyota of El Cajon	300 EL CAJON BLVD	Commercial	HIGH	5511	Automotive Dealers and Gasoline Service Stations	80361
90	Trick Trucks Inc.	797 N 2ND ST	Commercial	HIGH	7538	Automotive Repair Services, and Parking	13456
91	Valero Station #3738	785 JAMACHA RD	Commercial	HIGH	5541	Automotive Dealers and Gasoline Service Stations	15875
92	Valley Muffler Shop	533 W MAIN ST	Commercial	HIGH	7533	Automotive Repair Services, and Parking	17145
93	Valley Transmission & Auto	1158 N 2ND ST	Commercial	HIGH	7537	Automotive Repair Services, and Parking	83272
94	Washington Arco	1092 E WASHINGTON AVE	Commercial	HIGH	5541 5499	Automotive Dealers and Gasoline Service Stations	11331
95	Arco Facility #9572	1484 E WASHINGTON AVE	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	15472
96	Arco/Smog Pros	1410 E MAIN ST	Commercial	Medium	5541 7549	Automotive Dealers and Gasoline Service Stations	81646
97	Armstrong Garden Centers, Inc.	1755 E MAIN ST	Commercial	Medium	181	Agricultural Production - Crops	89712
98	Atlantic Auto Repair	1318 BROADWAY	Commercial	Medium	7538	Automotive Repair Services, and Parking	83344
99	Auto Finance Specialists	385 EL CAJON BLVD	Commercial	Medium	7389	Business Services	
100	Auto Repair for Less	1189 E MAIN ST	Commercial	Medium	7538	Automotive Repair Services, and Parking	14249
101	Auto Tech	590 S MARSHALL AVE	Commercial	Medium	7532	Automotive Repair Services, and Parking	82364
102	Autohaus Stebel Inc.	885 E WASHINGTON AVE	Commercial	Medium	7538	Automotive Repair Services, and Parking	84942
103	Aztec Dining Services at Grossmont College	8800 GROSSMONT COLLEGE DR	Commercial	Medium	5812	Eating and Drinking Places	
104	A to Z Leasing	889 ARNELE AVE	Commercial	Medium	7389	Business Services	
105	A&A Smog Test Only Station	267 N MARSHALL AVE	Commercial	Medium	7549 7533	Automotive Repair Services, and Parking	17152
106	A-1 Glass Company	944 BROADWAY	Commercial	Medium	7536	Automotive Repair Services, and Parking	81176
107	AA Equipment	411 N MARSHALL AVE	Commercial	Medium	7699 5083 5599	Miscellaneous Repair Services	12615
108	Aamco Transmission	355 N JOHNSON AVE	Commercial	Medium	7537 7538	Automotive Repair Services, and Parking	16687
109	Al Archard, Inc.	661 EL CAJON BLVD	Commercial	Medium	7538	Automotive Repair Services, and Parking	85673
110	Al Rafdien Restaurant	474 W DOUGLAS AVE	Commercial	Medium	5812	Eating and Drinking Places	16991
111	Champion Collision and Paint/World Auto Body	187 N MARSHALL AVE	Commercial	Medium	7532	Automotive Repair Services, and Parking	2167
112	Inflatable Design Group	1080 W BRADLEY AVE	Commercial	Medium	7359	Business Services	12197
113	American Finance	410 EL CAJON BLVD	Commercial	Medium	5521	Automotive Dealers and Gasoline Service Stations	80276
114	Ami Sushi	755 ARNELE AVE	Commercial	Medium	5812	Eating and Drinking Places	
115	Applebees	107 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	16514
116	Arco	900 BROADWAY	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	15334
117	Banny Hom Enterprises	1240 W MAIN ST	Commercial	Medium	7538	Automotive Repair Services, and Parking	81693
118	Baskin Robbins #118	2396 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	1432
119	Beef n' Bun	2477 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	84341
120	Best Auto Wholesaler	476 W MAIN ST	Commercial	Medium	7532	Automotive Repair Services, and Parking	80853
121	BJs Equipment Rentals	1717 E MAIN ST	Commercial	Medium	7359	Business Services	16369
122	Bob Baker Chevrolet/Subaru	900 ARNELE AVE	Commercial	Medium	5511	Automotive Dealers and Gasoline Service Stations	81328
123	Bob Baker Lexus	1000 ARNELE AVE	Commercial	Medium	5511	Automotive Dealers and Gasoline Service Stations	81685
124	Body Beautiful Carwash, Inc.	690 EL CAJON BLVD	Commercial	Medium	7542	Automotive Repair Services, and Parking	81553
125	Bonny's Café	596 BROADWAY	Commercial	Medium	5812	Eating and Drinking Places	82908
126	Boomers	1155 GRAVES AVE	Commercial	Medium	7999	Amusement and Recreation Services	90328
127	Boston Market #0735	706 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	84652
128	Broadway Exxon #1019	898 BROADWAY	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	
129	Broadway Smog Test-Only Station	1214 BROADWAY	Commercial	Medium	7549	Automotive Repair Services, and Parking	11559
130	Builders Moulding Supply	1675 PIONEER WAY	Commercial	Medium	5211	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	
131	C&D Towing Specialists	187 N MARSHALL AVE	Commercial	Medium	7549	Automotive Repair Services, and Parking	1081
132	Caliber Collision Centers	332 N JOHNSON AVE	Commercial	Medium	7539	Automotive Repair Services, and Parking	10362

City of El Cajon

Industrial and Commercial Storm Water Inspection Updated Facility Inventory

ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
133	California Deli Works	553 W MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	
134	Canal Transmission	1249 DENVER LANE	Commercial	Medium	7537	Automotive Repair Services, and Parking	80398
135	Carl's Jr. Restaurant #483	520 N 2ND ST	Commercial	Medium	5812	Eating and Drinking Places	
136	Cartwright Termite And Pest Control	1376 BROADWAY	Commercial	Medium	7342	Business Services	82491
137	Chen's Golden Palace	530 N 2ND ST	Commercial	Medium	5812	Eating and Drinking Places	80847
138	Chevron Store #59	1701 E MAIN ST	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	30327
139	Chicago on a Bun	2872 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	16350
140	China Panda Garden Restaurant	1788 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	81126
141	Christy's Donuts	657 JAMACHA RD	Commercial	Medium	5812	Eating and Drinking Places	80482
142	Clancy's Towing	1385 PIONEER WAY	Commercial	Medium	7521	Automotive Repair Services, and Parking	81614
143	Classic Towing	1101 N MARSHALL AVE	Commercial	Medium	7521 7549	Automotive Repair Services, and Parking	84030
144	Clifton Mercedes Independent Sales/Service	1033 W MAIN ST	Commercial	Medium	7538	Automotive Repair Services, and Parking	12179
145	Coco's # 1162	1025 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	84486
146	Colimas Mexican Food	339 W MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	12872
147	Consolidated Motors	410 EL CAJON BLVD	Commercial	Medium	5521	Automotive Dealers and Gasoline Service Stations	80276
148	Cotixan Taco Shop #3	762 N JOHNSON AVE	Commercial	Medium	5812	Eating and Drinking Places	
149	Country Comfort Restaurant	1255 AVOCADO AVE	Commercial	Medium	5812	Eating and Drinking Places	20299
150	Country Waffles	1248 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	82978
151	County Collision Center Bodyshop	153 S JOHNSON AVE	Commercial	Medium	7532	Automotive Repair Services, and Parking	10139
152	County Wide Dealer Service	410 EL CAJON BLVD	Commercial	Medium	5521	Automotive Dealers and Gasoline Service Stations	80276
153	Crumbs of Paris	586 BROADWAY	Commercial	Medium	5812	Eating and Drinking Places	
154	Crystal Pool Service	1109 N 2ND ST	Commercial	Medium	7389	Business Services	82088
155	Cutting Edge Supply	1675 N JOHNSON AVE	Commercial	Medium	5013	Wholesale Trade; Durable Goods	12371
156	Dallmann Confections, Inc.	780 N 2ND ST	Commercial	Medium	5499	Food Stores	
157	Decker's Auto Service	930 E WASHINGTON AVE	Commercial	Medium	7538	Automotive Repair Services, and Parking	82485
158	Del Taco #1041	141 BROADWAY	Commercial	Medium	5812	Eating and Drinking Places	15313
159	Dennys Restaurant	665 N MOLLISON AVE	Commercial	Medium	5812	Eating and Drinking Places	85243
160	Denny's Restaurant #6227	2691 NAVAJO RD	Commercial	Medium	5812	Eating and Drinking Places	81196
161	Denny's Restaurant #7225	1202 W MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	20356
162	DeVore Automotive	1253 N 2ND ST	Commercial	Medium	7538	Automotive Repair Services, and Parking	13304
163	Discount Tires	1001 BROADWAY	Commercial	Medium	7534	Automotive Repair Services, and Parking	82127
164	Distinctive Carpet Care	681 S MOLLISON AVE	Commercial	Medium	7349	Business Services	85052
165	Dominos Pizza #7705	1104 E WASHINGTON AVE	Commercial	Medium	5812	Eating and Drinking Places	91125
166	Downtown Café	182 E MAIN ST	Commercial	Medium	5813 5812	Eating and Drinking Places	21036
167	Dragonfire San Diego	283 N MARSHALL AVE	Commercial	Medium	7539	Automotive Repair Services, and Parking	
168	E Z Corner Market	1107 E MAIN ST	Commercial	Medium	5921 5499	Miscellaneous Retail	83396
169	El 2 Palmas	220 E MADISON AVE	Commercial	Medium	5812	Eating and Drinking Places	430196
170	El Cajon Courthouse Cafe	250 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	85061
171	El Cajon Ford	1595 E MAIN ST	Commercial	Medium	5511 7538	Automotive Dealers and Gasoline Service Stations	81250
172	El Cajon Shish Kabob	811 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	15598
173	El Cajon Towing	327 CYPRESS LANE	Commercial	Medium	7549 7521	Automotive Repair Services, and Parking	81941
174	El Compadre Taco Shop	595 N 2ND ST	Commercial	Medium	5812	Eating and Drinking Places	90986
175	El Cotixan #1	538 N 2ND ST	Commercial	Medium	5812	Eating and Drinking Places	85226
176	El Jefecito II	293 EL CAJON BLVD	Commercial	Medium	5812	Eating and Drinking Places	
177	El Pollo Loco	1145 AVOCADO AVE	Commercial	Medium	5812	Eating and Drinking Places	
178	Elegant Buffet	1985 FRIENDSHIP DR	Commercial	Medium	5812	Eating and Drinking Places	10650
179	Executive Friendship Deli	1935 FRIENDSHIP DR	Commercial	Medium	5812	Eating and Drinking Places	
180	Express Auto Repair & Tires	1316 BROADWAY	Commercial	Medium	7538	Automotive Repair Services, and Parking	14680
181	Express Hand Car Wash	710 JAMACHA RD	Commercial	Medium	7542	Automotive Repair Services, and Parking	30533
182	Exxon Mobil	695 EL CAJON BLVD	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	

City of El Cajon

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ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
183	Exxon Mobil Oil Corp	1761 GREENFIELD DR	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	80686
184	Fast Water Heater, Inc.	275 N MARSHALL AVE	Commercial	Medium	1799	Construction - Special Trade	13844
185	Fiesta Nutrition	560 N 2ND ST	Commercial	Medium	5499	Food Stores	
186	Firestone Complete Auto Care #2254	435 N 2ND ST	Commercial	Medium	7539	Automotive Repair Services, and Parking	85127
187	Food 4 Less #394	444 BROADWAY	Commercial	Medium	5411 5812	Food Stores	81974
188	Foodland I.G.A.	1099 E MAIN ST	Commercial	Medium	5411	Food Stores	12434
189	Fruitland & Deli	109 JAMACHA RD	Commercial	Medium	5812	Eating and Drinking Places	96762
190	G&M Oil Co. #59	1701 E MAIN ST	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	30327
191	Garcia's Pueblo Mercado	1365 E MAIN ST	Commercial	Medium	5411 5399 5812	Food Stores	1015
192	Gene Townsend Auto Body & Paint	609 S MARSHALL AVE	Commercial	Medium	7532	Automotive Repair Services, and Parking	82922
193	Golden Bagel Cafe	2744 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	80845
194	Good Times RV	1338 E MAIN ST	Commercial	Medium	5561 7539 5599	Automotive Dealers and Gasoline Service Stations	11939
195	Greek Town Restaurant Buffet	345 W MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	16444
196	Hacienda La Casa Blanca	700 N JOHNSON AVE	Commercial	Medium	5812	Eating and Drinking Places	14977
197	Hammurabi Family Restaurant	401 W MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	15617
198	Happy Cow Car Wash	1055 N CUYAMACA ST	Commercial	Medium	7542	Automotive Repair Services, and Parking	
199	Harvest Ranch #1	759 JAMACHA RD	Commercial	Medium	5411 5812	Food Stores	1578
200	Home Depot	298 FLETCHER PKWY	Commercial	Medium	5211	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	84277
201	Hometown Buffet #722	390 W MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	82629
202	Jack In The box # 3050	350 E CHASE AVE	Commercial	Medium	5812	Eating and Drinking Places	
203	Jack In The Box #7	393 W MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	82781
204	Jack-in-the-Box #32	495 N 2ND ST	Commercial	Medium	5812	Eating and Drinking Places	82779
205	Jamacha Bar and Grill	777 JAMACHA RD	Commercial	Medium	5812	Eating and Drinking Places	14576
206	Janet's Cafe #1	1696 GREENFIELD DR	Commercial	Medium	5812	Eating and Drinking Places	16872
207	J's Grill	1183 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	16507
208	Kaelin's Market	1435 E MAIN ST	Commercial	Medium	5411	Food Stores	85510
209	Karina's Mexican Seafood	820 JAMACHA RD	Commercial	Medium	5812 5813	Eating and Drinking Places	12418
210	KFC #Y450061	724 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	21353
211	KIA of El Cajon	541 N JOHNSON AVE	Commercial	Medium	5511	Automotive Dealers and Gasoline Service Stations	83422
212	Kladis Painting	557 W MAIN ST	Commercial	Medium	1721	Construction - Special Trade	10687
213	KMY Motorsports	1935 FRIENDSHIP DR	Commercial	Medium	5571 7699	Automotive Dealers and Gasoline Service Stations	84381
214	Kragen Auto Supply #1270	485 BROADWAY	Commercial	Medium	5531	Automotive Dealers and Gasoline Service Stations	82788
215	La Hadas Mexican Food	558 JAMACHA RD	Commercial	Medium	5812	Eating and Drinking Places	81547
216	La Pita Café	388 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	
217	Los Chavos Mexican Food	1340 N 2ND ST	Commercial	Medium	5812	Eating and Drinking Places	14040
218	Los Mendoza Taco Shop	308 BALLANTYNE ST	Commercial	Medium	5812	Eating and Drinking Places	13585
219	Los Panchos Taco Shop	1709 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	84362
220	Los Ponchos Mexican & Seafood	777 BROADWAY	Commercial	Medium	5812	Eating and Drinking Places	15857
221	Ludington's RV	1131 BROADWAY	Commercial	Medium	5271	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	15634
222	Main St Valero and Car Wash	1699 E MAIN ST	Commercial	Medium	5541 7542	Automotive Dealers and Gasoline Service Stations	16701
223	Mamma Rosa Pizza	1773 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	83903
224	Mangia Bene Ristorante	221 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	30852
225	Marietas East	1746 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	82098
226	Mason's Saw and Lawn Mower Service Inc.	1209 BROADWAY	Commercial	Medium	7699 5599	Miscellaneous Repair Services	81596
227	McDonalds	886 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	85314
228	McKeever Inc.	1100 N MAGNOLIA AVE	Commercial	Medium	5211	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	14734

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ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
229	Autoland Inc. / Mission Federal Credit Union	826 JACKMAN ST	Commercial	Medium	6061 7514	Depository Institutions	
230	Motoworld	315 N MAGNOLIA AVE	Commercial	Medium	5561 5571	Automotive Dealers and Gasoline Service Stations	822012
231	Natural Env. Inc.	1162 N MARSHALL AVE	Commercial	Medium	781	Agricultural Services	30345
232	Ochoas Mexican Food	1051 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	11521
233	Oil Changer #503	906 FLETCHER PKWY	Commercial	Medium	7539	Automotive Repair Services, and Parking	84406
234	On the Border	101 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	20148
235	Ottavio's Cucina Italiana	101 JAMACHA RD	Commercial	Medium	5812	Eating and Drinking Places	83782
236	Pacific Car Co.	900 EL CAJON BLVD	Commercial	Medium	5511	Automotive Dealers and Gasoline Service Stations	20560
237	Pacific Production Plumbing	1584 PIONEER WAY	Commercial	Medium	1711	Construction - Special Trade	810290
238	Panchos Mexican Restaurant	2257 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	11166
239	Panda Express #1125	190 N MAGNOLIA AVE	Commercial	Medium	5812	Eating and Drinking Places	13231
240	Panda Rice Vietnamese/ Chinese Restaurant	907 BROADWAY	Commercial	Medium	5812	Eating and Drinking Places	16423
241	Parkway Bowl	1280 FLETCHER PKWY	Commercial	Medium	7999 5812 7933	Amusement and Recreation Services	85138
242	Los Rancheros	165 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	16983
243	Penske Truck Leasing Co. LP	1120 BROADWAY	Commercial	Medium	7513	Automotive Repair Services, and Parking	14491
244	Perfect Performance Autocare	595 EL CAJON BLVD	Commercial	Medium	7538	Automotive Repair Services, and Parking	14306
245	Perry's Cafe	475 N MAGNOLIA AVE	Commercial	Medium	5812	Eating and Drinking Places	20911
246	Philly Steak Subs	312 BALLANTYNE ST	Commercial	Medium	5812	Eating and Drinking Places	
247	Plant House Nursery	1163 N 2ND ST	Commercial	Medium	181	Agricultural Production - Crops	83193
248	Poncho's Taco Shop	1279 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	90310
249	Popeyes Chicken	110 JAMACHA RD	Commercial	Medium	5812	Eating and Drinking Places	16484
250	Precision Concepts Racing	1935 FRIENDSHIP DR	Commercial	Medium	7699	Miscellaneous Repair Services	
251	Quick Trip Fuel & Market	596 N MOLLISON AVE	Commercial	Medium	5541 7542 5499	Automotive Dealers and Gasoline Service Stations	11759
252	Quinsey Powersports	660 EL CAJON BLVD	Commercial	Medium	5561	Automotive Dealers and Gasoline Service Stations	
253	Rally's Hamburgers	1261 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	
254	Ram 99	407 EL CAJON BLVD	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	13401
255	Rancho Villas	2425 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	81597
256	Revco Gas	303 JAMACHA RD	Commercial	Medium	5499 5541	Food Stores	90211
257	Rick's RV Center	1546 E MAIN ST	Commercial	Medium	5561 7538 7532 5531	Automotive Dealers and Gasoline Service Stations	82164
258	Ricos Deli Expresso & Smoothie Bar	538 JAMACHA RD	Commercial	Medium	5812	Eating and Drinking Places	14522
259	Rita's Mexican Food Inc./ Rita's Catering	1291 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	15017
260	Rodeo's Meat Market	927 BROADWAY	Commercial	Medium	5411 5812	Food Stores	11047
261	Rod's Automotive	1313 N 2ND ST	Commercial	Medium	7538	Automotive Repair Services, and Parking	11179
262	Ron Ellis Enterprises, Inc.	427 EL CAJON BLVD	Commercial	Medium	1522	Building Construction - General Contractors and Operative Builders	82717
263	Rosendos Mexican Food	1408 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	14447
264	Rubios Mexican Grill #8	399 N MAGNOLIA AVE	Commercial	Medium	5812	Eating and Drinking Places	82185
265	Salsa Mexican Food	1255 AVOCADO AVE	Commercial	Medium	5812	Eating and Drinking Places	
266	Sam's Quality Auto Care	267 N MARSHALL AVE	Commercial	Medium	7538	Automotive Repair Services, and Parking	14782
267	San Diego Mobile Truck & Trailer Service, LLC.	125 S MARSHALL AVE	Commercial	Medium	7539	Automotive Repair Services, and Parking	15712
268	Santana Mexican Grill	411 BROADWAY	Commercial	Medium	5812	Eating and Drinking Places	
269	Save-A-Lot 3948	678 JAMACHA RD	Commercial	Medium	5411	Food Stores	82632
270	Sears	575 FLETCHER PKWY	Commercial	Medium	7539 5311	Automotive Repair Services, and Parking	83091
271	Shadow Mountain Ministries	2100 GREENFIELD DR	Commercial	Medium	5812	Eating and Drinking Places	
272	SID's Auto Body Inc.	1129 BROADWAY	Commercial	Medium	7532	Automotive Repair Services, and Parking	30233
273	Silva's Taco Shop	998 BROADWAY	Commercial	Medium	5812	Eating and Drinking Places	
274	Smart and Final Extra	1090 FLETCHER PKWY	Commercial	Medium	5411	Food Stores	84994
275	Sombreros Mexican Food, Inc.	1215 W MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	10899

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ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
276	Spot Free Rinse Car Wash	329 N 2ND ST	Commercial	Medium	7542	Automotive Repair Services, and Parking	
277	Spot Free Rinse Car Wash	1111 BROADWAY	Commercial	Medium	7542	Automotive Repair Services, and Parking	
278	Sprouts Farmer's Market	152 N 2ND ST	Commercial	Medium	5411	Food Stores	12551
279	Starbucks #8943	450 E CHASE AVE	Commercial	Medium	5812	Eating and Drinking Places	12805
280	Starbucks Coffee	2740 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	83254
281	Starbucks Coffee #6530	124 W MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	20106
282	Subway Sandwiches/Salads	762 N JOHNSON AVE	Commercial	Medium	5812	Eating and Drinking Places	
283	Sun Flexionics Café	790 GREENFIELD DR	Commercial	Medium	5812	Eating and Drinking Places	20067
284	Sunbelt Rentals Inc.	1114 N MAGNOLIA AVE	Commercial	Medium	7513	Automotive Repair Services, and Parking	15041
285	Super Star Stations	1110 E MAIN ST	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	30773
286	Taco Bell #16534	2827 NAVAJO RD	Commercial	Medium	5812	Eating and Drinking Places	16714
287	Taco Bell #3077	584 N MOLLISON AVE	Commercial	Medium	5812	Eating and Drinking Places	16715
288	Taste of Athens	1784 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	12707
289	Team Automotive Repair	354 WALTER WAY	Commercial	Medium	7538	Automotive Repair Services, and Parking	13405
290	Thai Time Restaurant	762 N JOHNSON AVE	Commercial	Medium	5812	Eating and Drinking Places	17186
291	The Auto Center	243 N MARSHALL AVE	Commercial	Medium	7538	Automotive Repair Services, and Parking	90915
292	The Barbecue Pit	2388 FLETCHER PKWY	Commercial	Medium	5812	Eating and Drinking Places	81929
293	The Three Amigos Auto Repair & Services	605 W LEXINGTON AVE	Commercial	Medium	7538	Automotive Repair Services, and Parking	
294	The Truck Stop	1175 BROADWAY	Commercial	Medium	5271	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	12684
295	Thornton's Irish Pub and Chop House	1221 BROADWAY	Commercial	Medium	5812 5813	Eating and Drinking Places	13767
296	Thrifty	700 AVOCADO AVE	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	17254
297	Thrify #9758	398 EL CAJON BLVD	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations	17256
298	Tipton Honda	889 ARNELE AVE	Commercial	Medium	5511	Automotive Dealers and Gasoline Service Stations	1062
299	Tom Parker Auto Gallery	414 EL CAJON BLVD	Commercial	Medium	5521	Automotive Dealers and Gasoline Service Stations	80276
300	Tortilleria Salsa Market	480 W CHASE AVE	Commercial	Medium	5148	Wholesale Trade; Nondurable goods	10352
301	Trust Auto Repair	537 W MAIN ST	Commercial	Medium	7538	Automotive Repair Services, and Parking	10176
302	Ultimate Champion of Tires	445 W MAIN ST	Commercial	Medium	5531	Automotive Dealers and Gasoline Service Stations	30215
303	Valerio's	1267 N 2ND ST	Commercial	Medium	5812	Eating and Drinking Places	2244
304	Valley Automotive	813 N 2ND ST	Commercial	Medium	7538	Automotive Repair Services, and Parking	20122
305	Victoria's Mexican Food	677 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	10045
306	Vons Grocery Company	2800 FLETCHER PKWY	Commercial	Medium	5411 5812	Food Stores	81811
307	Whillock Contracting, Inc.	346 FRONT ST	Commercial	Medium	1521	Building Construction - General Contractors and Operative Builders	83783
308	Wienerschnitzel	1281 E MAIN ST	Commercial	Medium	5812	Eating and Drinking Places	13782
309	William Transmission and Auto Repair	792 EL CAJON BLVD	Commercial	Medium	7537	Automotive Repair Services, and Parking	
310	Curb & Vent Manufacturing, Inc.	1437 FAYETTE ST	Industrial, conditional	Medium	3444 3446	Fabricated Metal Products, except Machinery and Transportation Equipment	12528
311	Arco AM/PM	1245 W MAIN ST	Commercial	Low	5541	Automotive Dealers and Gasoline Service Stations	20378
312	Auto d'Elegance	673 EL CAJON BLVD	Commercial	Low	5521	Automotive Dealers and Gasoline Service Stations	12875
313	Auto Wholesalers	1440 E MAIN ST	Commercial	Low	5013	Wholesale Trade; Durable Goods	90061
314	Auto Zone #5646	1795 E MAIN ST	Commercial	Low	5531	Automotive Dealers and Gasoline Service Stations	83218
315	Avocado Food Market	852 AVOCADO AVE	Commercial	Low	5411	Food Stores	
316	Babylon International Market	524 E MAIN ST	Commercial	Low	5411	Food Stores	15076
317	2nd Street Gas Depot	490 N 2ND ST	Commercial	Low	5541	Automotive Dealers and Gasoline Service Stations	82677
318	7 Eleven #34048	1021 W WASHINGTON AVE	Commercial	Low	5499	Food Stores	15767
319	7 Eleven at 0215	1479 E WASHINGTON AVE	Commercial	Low	5541	Automotive Dealers and Gasoline Service Stations	15728
320	7 Stars Auto Glass Inc.	1100 EL CAJON BLVD	Commercial	Low	7536	Automotive Repair Services, and Parking	16956
321	76 Smog Test Only Station	640 GARFIELD AVE	Commercial	Low	5013	Wholesale Trade; Durable Goods	10733
322	7-Eleven Store # 2131-25085C	895 BROADWAY	Commercial	Low	5499	Food Stores	30923

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ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
323	A 1 Smog Test	507 BROADWAY	Commercial	Low	7549	Automotive Repair Services, and Parking	13419
324	Advance Auto Center	790 EL CAJON BLVD	Commercial	Low	7538 7532	Automotive Repair Services, and Parking	
325	Advance Paint and Body	790 EL CAJON BLVD	Commercial	Low	7532	Automotive Repair Services, and Parking	
326	Advanced Color Coating	1375 N CUYAMACA ST	Commercial	Low	5531	Automotive Dealers and Gasoline Service Stations	80821
327	Advanced Electronic Solutions	1830 JOHN TOWERS AVE	Commercial	Low	1731	Construction - Special Trade	82996
328	Aircraft Storage Spaces	1840 JOE CROSSON DR	Commercial	Low	7699	Miscellaneous Repair Services	
329	Albertsons, Inc. #6771	1608 BROADWAY	Commercial	Low	5411	Food Stores	14037
330	Alia Insurance Services Inc.	720 EL CAJON BLVD	Commercial	Low	6411	Insurance Agents, Brokers, and Service	
331	Allman Family Auto	1265 BROADWAY	Commercial	Low	7539	Automotive Repair Services, and Parking	13421
332	AM/PM	201 BROADWAY	Commercial	Low	5541	Automotive Dealers and Gasoline Service Stations	83038
333	Amarc Enterprises	1339 BROADWAY	Commercial	Low	5199	Wholesale Trade; Nondurable goods	
334	Arby's Restaurant #231	325 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	16565
335	Arco #9562	978 N CUYAMACA ST	Commercial	Low	5541	Automotive Dealers and Gasoline Service Stations	
336	Baskin Robbins Ice Cream	328 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	83514
337	Beau's Distribution	380 VERNON WAY	Commercial	Low	7319	Business Services	16899
338	Ben's Market and Pastry	544 BROADWAY	Commercial	Low	5411 5461	Food Stores	16023
339	Best Nutrition & Market	147 JAMACHA RD	Commercial	Low	5499	Food Stores	17141
340	Big Frank's Café	163 JAMACHA RD	Commercial	Low	5812	Eating and Drinking Places	16599
341	British Heritage Motorsports	1437 PIONEER WAY	Commercial	Low	7538	Automotive Repair Services, and Parking	80052
342	Broadway Farmer's Market	1039 BROADWAY	Commercial	Low	5411	Food Stores	15444
343	Broadway Market	1309 BROADWAY	Commercial	Low	5411	Food Stores	11024
344	Burger King 814	822 N JOHNSON AVE	Commercial	Low	5812	Eating and Drinking Places	83164
345	BurgerKing #947	225 JAMACHA RD	Commercial	Low	5812	Eating and Drinking Places	80842
346	Camper and Trailer Outlet	1183 BROADWAY	Commercial	Low	5599	Automotive Dealers and Gasoline Service Stations	85162
347	Car Pro Inc.	1427 BROADWAY	Commercial	Low	7389	Business Services	30183
348	Car Quest	391 N 2ND ST	Commercial	Low	5531	Automotive Dealers and Gasoline Service Stations	82148
349	Carl's Junior # 89	624 FLETCHER PKWY	Commercial	Low	5812	Eating and Drinking Places	81489
350	Carson Trailer Inc.	1111 E MAIN ST	Commercial	Low	5561	Automotive Dealers and Gasoline Service Stations	10293
351	Catered Creations	1223 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	
352	CCS Cleaning Service	205 CLAYDELLE AVE	Commercial	Low	7349	Business Services	20807
353	Centric Transmission	1265 GREENFIELD DR	Commercial	Low	7537	Automotive Repair Services, and Parking	
354	Chappelle's Exhaust and Custom Shop	1433 PIONEER WAY	Commercial	Low	7532 7533	Automotive Repair Services, and Parking	14984
355	China Diamond Restaurant	1265 AVOCADO AVE	Commercial	Low	5812	Eating and Drinking Places	16441
356	CLASSIC AUTO SALES	966 E MAIN ST	Commercial	Low	5511	Automotive Dealers and Gasoline Service Stations	83767
357	Coco's #884	1324 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	82754
358	Cottonman Transmission	1286 FESLER ST	Commercial	Low	7537	Automotive Repair Services, and Parking	30964
359	County Motor Parts Co., Inc./Napa Auto and Truck Parts	1597 N JOHNSON AVE	Commercial	Low	5531	Automotive Dealers and Gasoline Service Stations	83468
360	Crystal Clean Car Wash	111 S FIRST ST	Commercial	Low	7542	Automotive Repair Services, and Parking	12841
361	Cunningham BMW	720 EL CAJON BLVD	Commercial	Low	5511	Automotive Dealers and Gasoline Service Stations	16286
362	CVS Pharmacy	790 JAMACHA RD	Commercial	Low	5912	Miscellaneous Retail	81316
363	Dal-Tile SSC West, Inc.	270 N MARSHALL AVE	Commercial	Low	5211	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	85329
364	David A. Howe M.D.	505 N MOLLISON AVE	Commercial	Low	8011	Health Services	90046
365	Discount Auto Pawn	715 E MAIN ST	Commercial	Low	7521	Automotive Repair Services, and Parking	
366	Dixieline	1262 E MAIN ST	Commercial	Low	5211	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	11019
367	Dominos Pizza #7704	936 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	
368	Dubai Restaurant	123 JAMACHA RD	Commercial	Low	5812	Eating and Drinking Places	16803
369	Duraid Hermez Detail	816 N 2ND ST	Commercial	Low	7549	Automotive Repair Services, and Parking	
370	Dutch Touch Tattooing & Piercing	363 N 2ND ST	Commercial	Low	8999	Services, Not Elsewhere Classified	1026

City of El Cajon

Industrial and Commercial Storm Water Inspection Updated Facility Inventory

ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
371	Earl Scheib	1002 W MAIN ST	Commercial	Low	7532	Automotive Repair Services, and Parking	82555
372	East Valley Classic Car Wash	760 E MAIN ST	Commercial	Low	7542	Automotive Repair Services, and Parking	
373	El Cajon Arco AM-PM	404 E CHASE AVE	Commercial	Low	5541	Automotive Dealers and Gasoline Service Stations	1899
374	El Cajon Auto Electric	317 N 2ND ST	Commercial	Low	7539	Automotive Repair Services, and Parking	84789
375	El Cajon Auto Trim Shop	645 W LEXINGTON AVE	Commercial	Low	7532	Automotive Repair Services, and Parking	84136
376	El Cajon Flying Service (lessor)	1825 N MARSHALL AVE	Commercial	Low	7699	Miscellaneous Repair Services	82368
377	El Cajon Harley Davidson	621 EL CAJON BLVD	Commercial	Low	5571	Automotive Dealers and Gasoline Service Stations	20234
378	El Cajon Hearing Aid Center	761 ARNELE AVE	Commercial	Low	7699	Miscellaneous Repair Services	82144
379	El Cajon International Food	502 E MAIN ST	Commercial	Low	5411	Food Stores	20039
380	El Cajon Meat Market	575 E MAIN ST	Commercial	Low	5421	Food Stores	16619
381	El Cajon Moving Center	1186 E MAIN ST	Commercial	Low	7513	Automotive Repair Services, and Parking	84153
382	El Cajon Muffler and Air Conditioning	1370 BROADWAY	Commercial	Low	7533	Automotive Repair Services, and Parking	
383	El Cajon Nutrition Center	325 VAN HOUTEN AVE	Commercial	Low	5499	Food Stores	20372
384	Elmer Sweetwood & Sons, Inc	151 S SUNSHINE AVE	Commercial	Low	7538	Automotive Repair Services, and Parking	81708
385	Entenmann's Orowheat Outlet	916 BROADWAY	Commercial	Low	5461	Food Stores	1453
386	Enterprise Car Sales	850 EL CAJON BLVD	Commercial	Low	5511	Automotive Dealers and Gasoline Service Stations	83209
387	Enterprise Rent-A-Car #3247	451 N MAGNOLIA AVE	Commercial	Low	7513	Automotive Repair Services, and Parking	83792
388	Estrada's Mexican Food	569 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	11562
389	Exalt Customs	350 COOGAN WAY	Commercial	Low	7532	Automotive Repair Services, and Parking	15731
390	Executive Gourment Catering/Aloha Catering	1321 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	
391	Fatboy Fiberglass and Welding	675 FRONT ST	Commercial	Low	7699	Miscellaneous Repair Services	20334
392	Finest Donuts	526 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	82724
393	Fletcher Hills Automotive and Smog	1288 FESLER ST	Commercial	Low	7538	Automotive Repair Services, and Parking	30964
394	Fletcher Hills KWIK stop	2410 FLETCHER PKWY	Commercial	Low	5541 7539	Automotive Dealers and Gasoline Service Stations	20962
395	Flour Power Custom Cakery	2382 FLETCHER PKWY	Commercial	Low	5812	Eating and Drinking Places	84463
396	Francos Pizza	574 JAMACHA RD	Commercial	Low	5812	Eating and Drinking Places	12742
397	Frazee Paint	1154 E MAIN ST	Commercial	Low	5231	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	
398	G&M Oil #95	1099 W MAIN ST	Commercial	Low	5541	Automotive Dealers and Gasoline Service Stations	2178
399	G&M Oil Co. #94	1298 BROADWAY	Commercial	Low	5541 5499	Automotive Dealers and Gasoline Service Stations	30326
400	George's Lawn Equipment	747 E MAIN ST	Commercial	Low	7699	Miscellaneous Repair Services	82157
401	Gillespie Field Cafe & Deli	2015 N MARSHALL AVE	Commercial	Low	5812	Eating and Drinking Places	30599
402	Golden State Gasoline	181 N 2ND ST	Commercial	Low	5499 5541	Food Stores	83535
403	Greek Style Chicken, Inc.	955 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	30329
404	Greenscape	333 W LEXINGTON AVE	Commercial	Low	782	Agricultural Services	
405	Hamann Companies	1000 PIONEER WAY	Commercial	Low	1541	Building Construction - General Contractors and Operative Builders	82500
406	Hollywood Motors	1423 BROADWAY	Commercial	Low	5511	Automotive Dealers and Gasoline Service Stations	
407	Hot Blend Coffee	250 S MARSHALL AVE	Commercial	Low	5812	Eating and Drinking Places	12376
408	Imported Motor Cars	939 W MAIN ST	Commercial	Low	7539	Automotive Repair Services, and Parking	11695
409	Instrument Overhaul Service of San Diego, Inc.	1981 N MARSHALL AVE	Commercial	Low	7699	Miscellaneous Repair Services	81656
410	Intellicept	1444 PIONEER WAY	Commercial	Low	5099	Wholesale Trade; Durable Goods	11150
411	Italian Pizza Restaurant	1438 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	
412	Izzy's Cafe, Inc.	1252 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	83855
413	J&W Lumber	430 S MARSHALL AVE	Commercial	Low	5211	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	81690
414	J. C. Auto Detail	790 EL CAJON BLVD	Commercial	Low	7549	Automotive Repair Services, and Parking	
415	Jack in the Box #3064	1700 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	14505
416	Jack in the Box #54	2733 NAVAJO RD	Commercial	Low	5812	Eating and Drinking Places	

City of El Cajon

Industrial and Commercial Storm Water Inspection Updated Facility Inventory

ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
417	Jack-in-the-Box #78	170 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	82782
418	Jibe Studios	2333 FLETCHER PKWY	Commercial	Low	7911	Amusement and Recreation Services	14785
419	Jiffy Lube Store #495	539 N 2ND ST	Commercial	Low	7539	Automotive Repair Services, and Parking	11626
420	Jim Renner Auto Sales	1281 GREENFIELD DR	Commercial	Low	5521 7539	Automotive Dealers and Gasoline Service Stations	
421	Jump 4 Joy	1177 N 2ND ST	Commercial	Low	7359	Business Services	13577
422	KFC	555 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	21354
423	King House	500 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	15800
424	Kragen Auto Parts #1173	101 S MOLLISON AVE	Commercial	Low	5531	Automotive Dealers and Gasoline Service Stations	
425	L&L Hawaiian BBQ	356 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	15288
426	La China	2852 FLETCHER PKWY	Commercial	Low	5812	Eating and Drinking Places	30164
427	La Mesa Auto & Tire Center	2210 FLETCHER PKWY	Commercial	Low	7539	Automotive Repair Services, and Parking	11355
428	Legacy Cars	920 EL CAJON BLVD	Commercial	Low	5511	Automotive Dealers and Gasoline Service Stations	13589
429	Little Caesars Pizza	1299 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	12626
430	Loftis Motorsports	1189 E MAIN ST	Commercial	Low	7538	Automotive Repair Services, and Parking	
431	Long John Silvers	270 FLETCHER PKWY	Commercial	Low	5812	Eating and Drinking Places	13362
432	LW Blackinton, Inc.	380 FRONT ST	Commercial	Low	7699	Miscellaneous Repair Services	83389
433	Lynn's Locksmith Service	1380 E MAIN ST	Commercial	Low	7299 7699	Personal Services	83233
434	M&N Auto Services & Sales	344 WALTER WAY	Commercial	Low	7538 5511	Automotive Repair Services, and Parking	11334
435	Main Street Car Wash	1437 E MAIN ST	Commercial	Low	7542	Automotive Repair Services, and Parking	13842
436	Marechiaro Pizza House	854 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	82175
437	Master's Cut	790 N 2ND ST	Commercial	Low	7241	Personal Services	
438	Maya's Deli	450 FLETCHER PKWY	Commercial	Low	5812	Eating and Drinking Places	14406
439	McDonalds	281 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	82034
440	McDonald's	1695 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	31339
441	Mike's Deli and Market	289 EL CAJON BLVD	Commercial	Low	5411	Food Stores	
442	Money Tree	303 N 2ND ST	Commercial	Low	6163	Nondepository Credit Institutions	85639
443	Mopars by Jack	1429 PIONEER WAY	Commercial	Low	7549	Automotive Repair Services, and Parking	15003
444	Mor Furniture for Less/TRS Home Furnishings	880 ARNELE AVE	Commercial	Low	2392	Apparel and Other Finished Products Made From Fabrics and Similar Material	30192
445	Mossy Nissan	1170 W MAIN ST	Commercial	Low	5511 7538	Automotive Dealers and Gasoline Service Stations	81826
446	Motor Sports Co.	775 EL CAJON BLVD	Commercial	Low	5521	Automotive Dealers and Gasoline Service Stations	
447	Mustang Auto and Classic Cars	727 EL CAJON BLVD	Commercial	Low	7538 5511	Automotive Repair Services, and Parking	15799
448	Name Unknown	1435 PIONEER WAY	Commercial	Low	7699	Miscellaneous Repair Services	
449	New Battery Starter Shop	1056 E MAIN ST	Commercial	Low	5531	Automotive Dealers and Gasoline Service Stations	11209
450	New York Bakery, Inc.	245 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	14814
451	New York Giant Pizza	356 N MAGNOLIA AVE	Commercial	Low	5812	Eating and Drinking Places	14462
452	Nita's Deli and Bakery	1444 PIONEER WAY	Commercial	Low	5812	Eating and Drinking Places	84950
453	North Park Produce	432 E CHASE AVE	Commercial	Low	5411	Food Stores	15637
454	Off Road Warehouse ORW	425 N MARSHALL AVE	Commercial	Low	5561 7531	Automotive Dealers and Gasoline Service Stations	81544
455	Olympic Carpet Cleaning Supplies	538 FRONT ST	Commercial	Low	4959	Electric, Gas, and Sanitary Services	12604
456	Pacific Refrigeration, Inc., A/c Service Co.	1440 BROADWAY	Commercial	Low	7538 7623	Automotive Repair Services, and Parking	81649
457	Pal of Mine Auto Sales	151 S SUNSHINE AVE	Commercial	Low	5511	Automotive Dealers and Gasoline Service Stations	
458	Panda Express #715	131 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	20819
459	Panda Valley Mandarin Cuisine	1142 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	10672
460	Papa John's Pizza #1597	1201 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	13693
461	Papas Pizza	111 W WASHINGTON AVE	Commercial	Low	5812	Eating and Drinking Places	13765
462	Pep Boys Auto #813	201 JAMACHA RD	Commercial	Low	5531	Automotive Dealers and Gasoline Service Stations	
463	Pernicano's	1588 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	84144
464	Personal Touch Dining Inc.	859 JAMACHA RD	Commercial	Low	5812	Eating and Drinking Places	84883
465	Pizza Hut	306 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	1290

City of El Cajon

Industrial and Commercial Storm Water Inspection Updated Facility Inventory

ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
466	Pizza Hut #315029	1255 AVOCADO AVE	Commercial	Low	5812	Eating and Drinking Places	11701
467	Pizza Xpress	1270 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	15243
468	Poes Auto Body	727 EL CAJON BLVD	Commercial	Low	7532	Automotive Repair Services, and Parking	
469	Powder Pros, Inc.	945 INDUSTRIAL PL	Commercial	Low	7532	Automotive Repair Services, and Parking	15554
470	Precision Tune Auto Care	1191 E MAIN ST	Commercial	Low	7538	Automotive Repair Services, and Parking	80034
471	Pro Body Warehouse	782 ARNELE AVE	Commercial	Low	5499	Food Stores	16735
472	Pupuseria Salvadorena and Mexican Food	1207 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	12862
473	Quizno's Classic Subs	124 W MAIN ST	Commercial	Low	5812	Eating and Drinking Places	11462
474	Ralph's Grocery Co # 102	300 N 2ND ST	Commercial	Low	5411	Food Stores	81975
475	Rancho del Oro Towing	1167 W PALM AVE	Commercial	Low	7549	Automotive Repair Services, and Parking	20925
476	Rent-A-Center #01055	1047 E MAIN ST	Commercial	Low	7359 5719	Business Services	
477	Ribbit Pest Control, Inc.	435 W DOUGLAS AVE	Commercial	Low	7342	Business Services	20390
478	Rice RV	1035 E MAIN ST	Commercial	Low	5561	Automotive Dealers and Gasoline Service Stations	15246
479	Rock Auto Group	790 EL CAJON BLVD	Commercial	Low	5511	Automotive Dealers and Gasoline Service Stations	
480	Romeo's Car Wash	195 N 2ND ST	Commercial	Low	7542	Automotive Repair Services, and Parking	81231
481	Royal Palace Restaurant and Banquet Hall	1340 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	12077
482	RP Racing	1259 BROADWAY	Commercial	Low	5013 7539	Wholesale Trade; Durable Goods	330435
483	Run Rite Auto Service	830 N 2ND ST	Commercial	Low	7538	Automotive Repair Services, and Parking	15487
484	San Diego Co. Fleet Service	1840 WELD BLVD	Commercial	Low	7539	Automotive Repair Services, and Parking	
485	Sears Holding Company	1406 N JOHNSON AVE	Commercial	Low	5083	Wholesale Trade; Durable Goods	30420
486	Sew Pros Sewing and Vacuum Center	393 BROADWAY	Commercial	Low	7699 5949 5999	Miscellaneous Repair Services	82472
487	Shakira Pastry	1183 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	13627
488	Shamrock Racing Inc.	2030 GILLESPIE WAY	Commercial	Low	7538	Automotive Repair Services, and Parking	
489	Shell	515 N MAGNOLIA AVE	Commercial	Low	5541	Automotive Dealers and Gasoline Service Stations	14363
490	Shell	601 N 2ND ST	Commercial	Low	5541 5499	Automotive Dealers and Gasoline Service Stations	15200
491	Sid's Autobody	910 EL CAJON BLVD	Commercial	Low	7532	Automotive Repair Services, and Parking	12027
492	Sierra Pacific Landscape	304 FRONT ST	Commercial	Low	1799	Construction - Special Trade	11238
493	SKS Inc.	610 N 2ND ST	Commercial	Low	5541	Automotive Dealers and Gasoline Service Stations	
494	Solid Rock Café	2100 GREENFIELD DR	Commercial	Low	5812	Eating and Drinking Places	
495	Sombrero Mexican Food	1501 W WASHINGTON AVE	Commercial	Low	5812	Eating and Drinking Places	12906
496	Speedy TV	1257 BROADWAY	Commercial	Low	7622	Miscellaneous Repair Services	83286
497	Spinali's Auto	919 EL CAJON BLVD	Commercial	Low	5511	Automotive Dealers and Gasoline Service Stations	16531
498	Starbucks Coffee #3417	903 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	11273
499	Starbucks Coffee #9863	745 JAMACHA RD	Commercial	Low	5812	Eating and Drinking Places	12606
500	Stephanie Emerson Catering	144 S ORANGE AVE	Commercial	Low	5812	Eating and Drinking Places	
501	Stetts Iron Horse Ranch	453 EL CAJON BLVD	Commercial	Low	5571	Automotive Dealers and Gasoline Service Stations	80094
502	Stuart Anderson's Black Angus Restaurant	1000 GRAVES AVE	Commercial	Low	5812	Eating and Drinking Places	17185
503	Subway	341 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	82741
504	Subway Sandwiches #4445	1175 AVOCADO AVE	Commercial	Low	5812	Eating and Drinking Places	
505	Subway Sandwiches and Salad	915 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	10834
506	Sun Auto Repair	1310 BROADWAY	Commercial	Low	7539	Automotive Repair Services, and Parking	85568
507	Sunshine Co	548 BROADWAY	Commercial	Low	7349	Business Services	
508	Superior Car Wash	816 N 2ND ST	Commercial	Low	7542	Automotive Repair Services, and Parking	14392
509	Superstar 3	1090 W MAIN ST	Commercial	Low	5541	Automotive Dealers and Gasoline Service Stations	
510	Taco Bell #23723	335 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	16713
511	Tasty Pizza	1109 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	15553
512	The Cajon Pass Deli	1195 N CUYAMACA ST	Commercial	Low	5812	Eating and Drinking Places	20413
513	The Grinder	1300 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	81406

City of El Cajon

Industrial and Commercial Storm Water Inspection Updated Facility Inventory

ID	BusinessName	Address	Facility Type	TTWQ	SIC	PrimarySICCategory	BusCertNum
514	The Lawless Pub	176 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	15358
515	The Pancake House	1000 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	84925
516	The Vons Co., Inc. #3044	1201 AVOCADO AVE	Commercial	Low	5411	Food Stores	81812
517	The Yogurt Mill	935 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	81472
518	Thomas Building Supply	137 S JOHNSON AVE	Commercial	Low	5211	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	81857
519	Tocumbo	1183 E MAIN ST	Commercial	Low	5812	Eating and Drinking Places	
520	Trepco West Grocery Depot	333 WALTER WAY	Commercial	Low	5141	Wholesale Trade; Nondurable goods	85907
521	Tres Hermanos Taco Shop	115 W WASHINGTON AVE	Commercial	Low	5812	Eating and Drinking Places	
522	Trinity Heart Medical Supply	1331 BROADWAY	Commercial	Low	5047	Wholesale Trade; Durable Goods	15768
523	Triton Imaging	290 N MARSHALL AVE	Commercial	Low	2759	Printing, Publishing, and Allied Industries	
524	Tropifruit & Deli	1263 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	31392
525	Tropifruit & Deli	762 N JOHNSON AVE	Commercial	Low	5812	Eating and Drinking Places	15920
526	Truck and SUV Superstore, Inc	327 EL CAJON BLVD	Commercial	Low	5521	Automotive Dealers and Gasoline Service Stations	20008
527	Tyler's Taste of Texas	576 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	30605
528	US Air Conditioning	1250 N MARSHALL AVE	Commercial	Low	5075	Wholesale Trade; Durable Goods	14862
529	US Lawn	304 FRONT ST	Commercial	Low	1799	Construction - Special Trade	11238
530	Valvoline Instant Oil Change	610 N 2ND ST	Commercial	Low	7539	Automotive Repair Services, and Parking	83899
531	Victory Auto Service	935 W MAIN ST	Commercial	Low	7538	Automotive Repair Services, and Parking	13440
532	Villas Mexican Food #1	798 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	16575
533	Vina & Co.	1444 PIONEER WAY	Commercial	Low	5499	Food Stores	
534	Vons #2367	950 N 2ND ST	Commercial	Low	5411 5812	Food Stores	81810
535	Walgreens	215 N 2ND ST	Commercial	Low	5912	Miscellaneous Retail	10171
536	Washington Market	121 W WASHINGTON AVE	Commercial	Low	5411	Food Stores	81543
537	Wendy's #01	871 BROADWAY	Commercial	Low	5812	Eating and Drinking Places	83405
538	Wendy's #11	686 JAMACHA RD	Commercial	Low	5812	Eating and Drinking Places	83406
539	Western Exterminator Co	1320 HILL ST	Commercial	Low	7342	Business Services	83845
540	Wild Orchid Florist	908 E WASHINGTON AVE	Commercial	Low	5992	Miscellaneous Retail	83796
541	William Kelly & Sons	1044 PIONEER WAY	Commercial	Low	1711	Construction - Special Trade	12857
542	Wings N Things/Wing N It, Inc.	528 N 2ND ST	Commercial	Low	5812	Eating and Drinking Places	83025
543	Wrangler Family BBQ Pit	901 EL CAJON BLVD	Commercial	Low	5812	Eating and Drinking Places	30260
544	WS Auto Sales, Inc.	775 EL CAJON BLVD	Commercial	Low	5521	Automotive Dealers and Gasoline Service Stations	15601

STORM WATER ADMINISTRATIVE CITATION PROGRAM CRITERIA

1. Issue a Warning (followed by a letter, when possible)
   a. Whenever a discharge of pollutants is imminent or the potential exists, but the discharge has not yet entered the storm drain conveyance system (street, gutter, catch basin, etc.)
   b. Whenever a BMP is not effective for the pollutant or discharge and other BMP alternatives are available.
   c. Whenever a discharge origin cannot be determined through factual, investigative, or empirical evidence. Provide a cleanup schedule to be used as future enforcement.
   d. Small residential projects of less than 500 square feet of disturbed soil.
   e. An approved erosion and control plan has been issued and BMPs are partially implemented.
   f. Whenever activities are conducted in the right-of-way and no BMPs are implemented.
   g. Whenever a discharge of fully recoverable pollutants are discharged into the City's storm drain system (street and gutter only).

2. Issue a Citation
   a. Whenever there is a sewage overflow. (e.g. blockage; clean-out cap was removed to allow sewage to discharge into the street and storm drain).
   b. Whenever there is a discharge of unrecoverable pollutants into the storm drain conveyance system (street, gutter, catch basin, etc.)
   c. A Warning was previously issued (verbal or written).
   d. Any direct discharge into Forester Creek specifically any material which contains a 303(d) listed pollutant adopted by the State of California.(pH, TDS, and fecal coliform).
   e. An approved erosion and control plan has been issued and no BMPs are implemented.
   f. An egregious act of discharge (e.g. illegal dumping)

3. Issue a Penal Code Violation (PC374.3, 374.4, 374.7)
   a. When a First Citation was previously issued and this is a repeat violation.
   b. When the discharge is executed in the presence of any City Staff or after being told to cease operations. (waste, sewage, and litter discharges)
   c. Any direct discharge into Forester Creek, specifically material containing pollutants for which a 303(d) listing has been adopted by the State of California.(pH, TDS, and fecal coliform).

4. Issue a Stop Work Order
   a. For construction sites that received a warning and a first violation for discharging pollutants due to ineffective or proposed, but not yet implemented BMPs.
   b. A discharge of pollutants into the storm drain system, in addition to a citation, that requires immediate corrective action or mitigation.

5. Refer to Regional Board
   a. Repeated violations by a private citizen, property owner, or business for discharges to the storm drain system.
   b. A refusal to mitigate, remediate, or clean a spill or discharge of pollutants that will enter or have entered City MS4.

CITY OF EL CAJON

200 East Main Street
El Cajon, CA 92020

Citation No. 00075

☐ Building ☐ Planning
☐ Fire ☐ Public Works

ADMINISTRATIVE CITATION

☐ WARNING

☐ 1ST CITATION $100 per violation ☐ 2ND CITATION $200 per violation ☐ 3RD CITATION $500 per violation ☐ OTHER $_____

PAYMENT OF $_____ IS DUE NO LATER THAN _____. (See reverse side for payment information.) PAYMENT DOES NOT EXCUSE CORRECTION OF THE VIOLATION.

CORRECTION OF THE VIOLATION(S) INDICATED BELOW MUST BE COMPLETED BY: _____ (Date)

IF YOU FAIL TO CORRECT THE VIOLATION(S) BY THIS DATE, THE NEXT LEVEL OF CITATION MAY BE ISSUED.

PERSON CITED

Last Name First M.I.

Mailing Address City / State Zip Code

Violation Address City

☐ Property Owner ☐ Tenant
☐ Business Owner ☐ Other

Business Name _____

Assessor's Parcel Number

Code Section Violated	Date of Violation	Description Of Violation

☐ See attached for additional violations

Correction(s) Required

Issuing Officer: _____ Phone: (619) _____ Date Issued: _____

Signature of Person Cited: _____
(Signing this citation acknowledges receipt only, and is not an admission of guilt)

Citation Served: ☐ In person to: _____ ☐ Posted on Property
☐ By Mail ☐ Other _____

SEE REVERSE SIDE FOR APPEAL RIGHTS AND OTHER IMPORTANT INFORMATION

WHITE – CITY YELLOW – RESPONSIBLE PARTY PINK – FINANCE

CITY OF EL CAJON

STORM WATER COMPLIANCE INSPECTION FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

Result: ☐ Full Insp. ☐ Could not Contact ☐ Not Inventoried ☐ Moved, Vacant ☐ Refused ☐ Moved, Replaced by_____ ☐ Follow-up (i.e. not full) ☐ Out of Jurisdiction ☐ Duplicate of: _____ ☐ Mobile

A. CONTACT INFORMATION

Original

Business Name_____

_____

Street Address _____

_____

Responsible Person(s)_____

Title:_____

Business Telephone # (____) _____ -_____ext._____

Business Fax # (_____) _____ - _____

Changes

Business Name_____

_____

Street Address_____

☐ change _____

Responsible Person(s)_____

Business Telephone # (____) _____ -_____ext._____

Business Fax # (_____) _____ - _____

Home Based? ☐ Yes ☐ No Mobile Business? ☐ Yes ☐ No

Is this facility located in a multi-suite complex? ☐ Yes ☐ No

Facility personnel present:_____

B. FACILITY/SITE INFORMATION

Principal activity:_____

Assigned SIC code(s) _____ _____ _____ _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

Recommended change of SIC Code(s)?_____ _____ _____ _____

Recommended Treat to Water Quality? High ☐ Medium ☐ Low ☐

Existing SIC code(s) _____ _____ _____ _____

Status Update (if no longer active in City or does not need an inspection): ☐ Moved/Out of Business ☐ Duplicate ☐ Not Inventoried ☐ Out of Jurisdiction

Does facility have a current business certificate? ☐ Yes ☐ No #_____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐ Mandatory ☐ Conditional ☐ No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐ Yes ☐ No WDID: 9 37I0_____

Has facility filed a Notice Of Termination (NOT) for the WDID# listed above? ☐ Yes ☐ No Approval date:_____ month/yr

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a storm water monitoring program? ☐ Yes ☐ No Does

C. INITIAL OBSERVATIONS

Approximate distance to receiving water body: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Discharge points: _____

_____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate % impervious surface of this area_____%

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP ASSESSMENT

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.1 General					
Keep site free of litter, debris, and sediment using dry methods					
Keep parking lots, sidewalks, and streets free of sediment and debris using dry methods					
Keep outdoor areas free of spills and leaks					
Collect water from pressure washing or hosing and dispose of appropriately					☐ Unknown Performed by:
Direct roof downspouts away from areas of potential pollutants					
D.2 Landscaping					
Properly manage pesticides/fertilizer; use IPM when feasible					☐ Unknown Landscaping Co:
Employ adequate erosion prevention measures (vegetation or physical stabilization)					
Minimize over watering/over-irrigation					
Properly store stockpiles to prevent material transport					
Properly store and dispose of green waste					☐ Unknown
D.3 Materials and Wastes					
Protect trash area from contact with storm water					
Keep trash area free of litter and debris, liquids, powders, sediment					
Adequately cover materials stored outside					
Prevent run-on from contacting materials stored outdoors					
Properly label outdoor storage containers					
Provide an accessible, functional spill response kit					
Equip liquid storage containers with secondary containment					
Keep secondary containment free of spills and rainwater					
Properly store and dispose of hazardous materials					
Keep loading and unloading areas, including drains, free of debris					
Dispose of water generated by processing activities appropriately					
Dispose of pool, spa, fountain, and filter backwash water properly					☐ Unknown Performed by:
Clean floor mats in locations that do not drain to storm drain system					

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.4 Equipment, Vehicles, and Outdoor Activities					
Conduct outdoor activities within contained areas (garage, under canopy, work shop)					
Use drip pans to collect leaks/spills					
Drain fluids from all non-operational vehicles stored outdoors					
Provide materials (berm, mat, etc.) to protect storm drain inlets from spills and leaks					
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4					
D.5 Other					
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff					
Keep grease bin and area surrounding grease bin free of grease stains/spills					
Keep storm drain inlets free of grease and other food debris					
Identify and eliminate illicit connections and illegal discharges					
Provide storm water training for appropriate employees					

D.6 ADDITIONAL REQUIRED ACTIONS

☐ Based on inspection findings, it appears likely that significant levels of _____ would be present in storm water discharges from this site. Take action to reduce the levels of _____ to the maximum extent practicable. Treatment control BMPs are likely necessary.

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax

Please refer to http://www.ci.el-cajon.ca.us/dept/works/stormwater.html for more information on BMP implementation options.

D.7 Additional Questions	Comments/Results
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐ Painting ☐ Sandblasting ☐ Fuel Distribution ☐ Dust dispersion or mineral processing ☐ Metal smelting ☐ Metal plating or anodizing ☐ Chemical production or mixing ☐ Large fuel burning device ☐ Incinerator
Does facility have a grease trap or grease interceptor?	☐ No ☐ Grease Trap ☐ Grease Interceptor ☐ Unknown
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A
What is the approximate percentage of the site that drains to the treatment control BMPs?	☐ N/A

Do major potential pollutant sources drain to treatment BMP(s)?	☐ All ☐ Some ☐ None ☐ N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	☐ NOI ☐ NONA/NEC ☐ Auto Poster ☐ Restaurant Poster

E. STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE*

☐ Non-compliance with the State Industrial Storm Water General Permit noted.

☐ In the future, under a new Industrial Permit, which has not yet been adopted, this facility may be able to qualify for exemption from Permit coverage based on no outdoor exposure.

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE*:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit—see Attachment 3 of the Industrial Permit (www.waterboards.ca.gov/stormwtr/industrial.html).

☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP)—see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required:

F. CORRECTIVE ACTION SUMMARY

☐ **Corrective Actions Required.** Please refer to sections D.1-D.6 and E of this form and, if applicable, the Food Establishment Storm Water BMP Assessment form (if applicable, it is attached).

☐ No Corrective Actions Required at this Time.

G. RECOMMENDED CITY ACTIONS**

Follow Up Inspection Priority: ☐ **Priority 1** ☐ **Priority 2** ☐ **Priority 3**

ASSESSMENT

Level of knowledge regarding stormwater issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

*Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

**Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

City of El Cajon
Storm Water Quality Inspection for Commercial Sites (Eating Establishments)

You Are the Solution to Stormwater Pollution!
Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Restaurant Name: _____ Address: _____

Inspector Name & Phone #: _____ Date: _____/_____/_____Time: _____AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

.

The Following Additional BMPs Shall be Verified	BMP Implemented? YES	NO	N/A	Comments / Recommendations
Is a spill kit situated adjacent to grease storage areas?				
Does the facility use a commercial dishwasher				
Does Facility Have Grease Interceptor(s)?				
Does facility have grease traps on all fixtures in-lieu of single interceptor?				
Does facility have garbage disposal?				
Does facility use drain screens on all fixtures?				
Are suitable containers (spill proof) found for grease transfer and storage?				
Are records for grease pick-up and removal manifests/logs available?				
Is the facility displaying the City of El Cajon BMP placard?				
Are training materials and logs available?				
Other				
Other				
Other				

VIOLATIONS / REQUIRED CORRECTIVE ACTIONS

❑ Violation of Stormwater Ordinance: _____

❑ No Violations Have Been Noted; However BMP Implementation Is Required _____

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

200 E. Main Street, El Cajon California 92020 *TEL 619-441-1653 / FAX 619-579-5254*

City of El Cajon
STORMWATER
Pollution Prevention Program

"No Exposure" Conditional Exemption For Industrial Facilities

The proposed USEPA rules will establish a conditional exemption called a "No Exposure Exemption" for owners and operators of industrial facilities who can show that industrial materials, material handling operations and industrial processes, are not exposed to stormwater. Essentially, this exemption replaces the previous exemption for "light industry" which was remanded to USEPA from federal court to further define and substantiate the justification for such an exemption. A written certification will be required to be submitted to the permitting authority every three years on a form supplied by the authority. This potential conditional exemption applies to all industrial categories regardless of type, except construction sites and sources individually designated. The conditions for qualifying for the No Exposure Exemption will include the following:

1. Notification to the permitting authority at the beginning of each permit term;
2. Must allow the permitting authority or municipality to inspect the facility and to make the results of inspection public;
3. Upon request, submit a copy of the certification to the municipality in which the facility is located; and
4. Sign and certify the certification.

The permitting authority will still retain the legal authority to require the owner or operator of an industrial facility to apply for an individual or general NPDES permit if it determines that the discharge is, or may reasonably be, causing or contributing to a violation of a water quality standard, or is or may be interfering with the attainment or maintenance of a water quality standard, including a designated use.
In connection with the No Exposure Exemption being considered, USEPA is seeking comments on the issue of how to define "no exposure." Several important issues are listed for further review (but are not part of this proposed rule), including:

1. How to account for stormwater runoff from parking lots, roof tops, lawns and other non-industrial areas of an industrial facility;
2. Whether the construction of impervious surfaces, such as roofs to achieve no exposure that significantly increase stormwater runoff volume should be regulated to prevent adverse impacts to the receiving water simply due to increased quantity of flow;
3. Whether air emissions from roof vents or stacks should be considered in the evaluation of no exposure; and
4. Whether tight non-leaking drums, barrels or dumpsters are sufficient to quality for the no exposure exemption, or should there be a "potential to leak" evaluation included.

EL CAJON STORM WATER PROTECTION PROGRAM

FLOOR MATS, GREASE, OUTDOOR CLEANING, AND DUMPSTERS

In California, the storm water and sanitary sewer systems are separate. **They are *NOT* connected**. The sanitary sewer takes wastes from sinks, showers, and toilets to a treatment plant. The storm drain system collects polluted urban runoff and discharges without treatment, to creeks and rivers leading to ocean bays causing beach closures.

En California, el sistema de drenaje pluvial y el alcantarillado sanitario de aguas negras son independientes. **Estos sistemas *NO* están conectados**. El sistema de alcantarillado sanitario de aguas negras aleja desperdicios de fregaderos, regaderas, y escusados a una planta de tratamiento. El sistema de drenaje pluvial atrapa aguas pluviales contaminada por urbanización y fluye sin tratamiento alguno directamente a nuestros ríos, arroyos, bahías y mar provocando el cierre de playas.

CLEANING FLOOR MATS

Clean floor mats, filters and garbage cans in a mop sink, floor drain or proper outside area. **DO NOT** wash them in a parking lot, alley, sidewalk or street.

Limpie los tapetes de piso, los filtros y los botes de basura en un fregadero para trapeadores, desagüe de piso o en algún sitio apropiado afuera. **NO** los lave en los estacionamientos, callejones, veredas o en la calle.

RECYCLE GREASE & OIL

Recycle Grease & Oil. **DO NOT** pour it into sinks, floor drains, or onto a parking lot or street.

Recicle grasa y aceite. **NO** los arroje en lavaderos o desagües de piso ni en estacionamientos o calles.

DRY CLEANING METHOD

Use dry methods for spill cleanup (sweeping, cat litter, etc.) **DO NOT** hose down spills.

Use métodos secos para limpiar los derrames (escobas, aserrín, etc.). **NO** utilize mangueras para limpiar los derrames.

KEEP DUMPSTER AREA CLEAN

Keep dumpster area clean and lid closed. **DO NOT** fill it with liquid waste or hose it out.

Mantega el área alrededor del basurero limpia y la tapa del basurero cerrada. **NO** lo llene con desperdicios líquidos ni utilice la manguera.

WASHWATER DISPOSAL

Pour washwater into a janitorial or mop sink. **DO NOT** pour it out onto a parking lot, alley, sidewalk or street.

Arroje el agua empleada en la limpieza al fregadero para trapeadores. **NO** la arroje en los estacionamientos, callejones, veredas o en la calle.

It is illegal to purposefully or accidentally discharge pollution (anything other than rain water) into the streets, gutters, creeks, rivers, and ocean. To do so is in violation of El Cajon's Municipal Code 13.10 and the Federal Clean Water Act. Monetary fines and criminal charges may be issued.

Es contra la ley descargar contaminantes intencionalmente o accidentalmente (excepto agua de lluvias) a las calles, orillas de calle, arroyos, ríos, y océano. La descarga de contaminantes al sistema de drenaje pluvial es una violación del Código Municipal de la Ciudad de El Cajon (13.10) y de leyes Federales del "Clean Water Act". Multas y otras acciones legales podrían ser generadas en su contra.

ADOPT GOOD HOUSEKEEPING PRACTICES AND HELP KEEP OUR STREAMS, RIVERS, AND BEACHES CLEAN. FOR MORE INFORMATION, CALL **(619) 441-1653**.

ADOPTE PRACTICAS EFECTIVAS PARA EL MANEJO DE AGUAS PLUVIALES QUE REDUSCEN LA CONTAMINACIÓN Y AYUDE A MANTENER NUESTROS ARROYOS, RIOS, Y PLAYAS MÁS LIMPIOS. PARA MAYOR INFORMACIÓN LLAME AL **(619) 441-1653**.

STORM WATER PROTECTION IS IN GOOD HANDS...YOURS!

Operate a clean, dry shop. Sweep, mop or vacuum instead of hosing down garage floors or outdoor work areas.

Opere un negocio seco y limpio. Barra, trapée, o limpie con aspiradora en vez de regar con manguera los pisos de los garajes o las áreas de trabajo exteriores.

Prevent spills and leaks. Develop spill prevention and response procedures. Use drip pans and ground cloths under vehicles. Drain and recycle fluids from wrecked or leaking vehicles as soon as possible.

Prevenga los derrames y las goteras. Desarolle un plan para prevenir y responder a estos derrames. Use recipientes recolectores y trapos debajo de los vehiculos. Tire y recicle los fluidos de los vehiculos chocados o de los que tengan goteras tan pronto que sea posible.

Prevent wash water from entering storm drains. Use a commercial car wash facility for cleaning vehicles. It is illegal to allow car wash runoff from commercial vehicles to enter the storm drain.

Prevenga que la agua sucia entre en las alcantarillas. Use un negocio comercial del lavado de auto. Es ilegal permitir que la agua usada del lavado de vehiculos comerciales entre en las alcantarillas.

Protect outdoor work and storage areas. Cover equipment/ materials and work/ storage areas. Place bulk fluids in secondary containment.

Proteja las áreas de trabajo y almacenamiento exteriores. Cubra estas áreas y también los equipos y materiales. Ponga los fluidos de grandes cantidades en recipientes secundarios.

Clean parts in a self-contained sink/drum unit when working with solvents. Inspect parts-washing units daily for leaks and make necessary repairs immediately. Use aqueous cleaning solutions instead of solvents when possible. Recycle used solutions through a licensed hazardous waste hauler.

Limpie las piezas y los repuestos en una unidad de fregadero/ tambor cuando trabaje con solventes. Inspeccione las partes de la unidad de limpieza diariamente para detectar goteras y haga los arreglos necesarios inmediatamente. Use soluciones a base de agua en vez de los solventes cuando sea posible. Recicle las soluciones usadas por medio de una compañia con licencia para transportar deshechos peligrosos.

Dispose of waste properly. Recycle oil, oil filters and antifreeze. Never pour liquids down the gutter or storm drain.

Disponga de los deshechos correctamente. Recicle el aceite, los filtros de aceite y los anticongelantes. Nunca debe tirar liquidos en las alcantarillas o rejillas.

Storm water and the pollutants it carries flow directly into the nearest creek, river, lake or lagoon, eventually reaching the ocean. Do your part to help keep our waters clean for you, your family and our environment.

Las aguas pluviales llevan los contaminantes directamente a los arroyos, rios, lagos y lagunas, y finalmente se desembocan al océano. Haga su parte ayudando a mantener nuestras aguas para usted, su familia y el medio ambiente.

This poster is brought to you by the San Diego Regional Copermittees. To report complaints or for more information, call the Regional Stormwater Hotline at 1-888-846-0800.

Storm Water Pollution Prevention Program
THINK BLUE
You're the solution to storm drain pollution.
Protecting our beaches, bays, and waterways

project clean water

VOL. 2

GENERAL BEST MANAGEMENT PRACTICES FOR INDUSTRIAL AND COMMERCIAL FACILITIES

In accordance with Section D.3.b of the Municipal Permit, the City of El Cajon developed an inventory of general best management practices that may be selected where appropriate for implementation at all industrial facilities and high priority commercial facilities of the Jurisdictional URMP and revisions. General BMPs emphasize *non-structural* BMPs as an initial step toward low-cost, feasible implementation. In addition to general BMPs, high priority industrial and commercial facilities are also required to implement applicable activity-specific BMPs listed in the City's Updated JURMP document (Appendix C.3.2 and C.3.3). General BMPs are listed below in three tables:

TABLE OF CONTENTS PAGE

TABLE 1. GOOD HOUSEKEEPING BMPS 1
TABLE 2. MATERIALS HANDLING BMPS 3
TABLE 3. EQUIPMENT MAINTENANCE BMPS 7

In addition to the information provided within this section, more specific BMP information can be obtained from the Caltrans Storm Water Quality Handbooks (2003) and the California Storm Water Best Management Practice Handbook for Industrial/Commercial Facilities (2003).

TABLE 1. GOOD HOUSEKEEPING BMPS

BMP Name	Purpose	Description
Routinely Report Any Observed Non-Storm Water Discharges	Prevent improper handling and disposal of significant materials that may be spilled or deposited into the storm drain system	Develop adequate routine reporting procedures so personnel can identify an act of illegal dumping or suspicious non-storm water discharges; Post signs with information regarding appropriate reporting procedures
Perform Regular Cleaning	Eliminate the accumulation of pollutants (dirt, surplus materials, spilled or dropped substances, litter, and debris) that collect in areas that can discharge runoff to storm water. Such areas include maintenance shops, manufacturing facilities, metal fabrication shops, mechanic garages, loading docks, and storage areas	Maintain regular sweeping and cleaning schedules; Keep work areas dust free and orderly; Keep floors and ground surfaces dry using brooms, shovels, vacuum cleaners; Collect and dispose of garbage regularly
Avoid Hosing Down the Site	Eliminate contaminated runoff generated by "wet" cleaning or hosing down of outdoor paved areas such as work stations, loading/unloading sites, maintenance shops, storage areas, and any areas that may contribute pollutants to storm water	Dry methods of cleaning include sweeping, using damp rags or mops and vacuums; If hosing is necessary the downstream storm drain should be permanently or temporarily modified with a plug such as a rubber mat, filters, absorbent blankets or bermed with sandbags.
Perform Regular Pavement Sweeping	Prevent trash, litter, and particulate matter from accumulating on paved surfaces and reduce the potential for these materials to wash into storm drains during storm events	The frequency of regular dry sweeping should be scheduled according to the quantity, toxicity and usage of materials, proximity to source area, evidence of exposure to storm system, probability of exposure, and sensitivity of receiving water
Place Trash Receptacles in Appropriate Locations	Promote the proper placement, handling, and disposal of waste materials to reduce spillage and accumulation in outdoor areas that are exposed to storm water runoff	Place trash receptacles in accessible locations and in sufficient numbers; Train personnel as to the location of trash receptacles and waste handling areas
Train Employees to Properly Dispose of Wastes	Keep employees and personnel informed and aware of the most recent BMPs regarding waste management	New employees should be trained regarding proper waste handling such as warnings about pouring deposit wastes into the storm drain, reporting observed discharges, and recycling procedures; All employees should be trained annually
Permanently Seal Floor Drains that Discharge to the Storm Drain System	Eliminate connections that act as a pathway for spilled or leaked pollutant materials to enter the storm drain system	Interior floor drains should be permanently sealed (whenever safe for structural integrity) to prevent accidental illegal dumping of contaminants into the storm drain system
Confirm that No Industrial Sinks are Connected to the Storm Drain	Eliminate direct connections that can introduce pollutants to the storm drain system	Sinks in industrial areas should be connected to the sanitary sewer system or appropriate disposal locations; Review and inspect "As-built" piping diagrams and building or site plans to verify that sinks are not connected to any storm drain
Store Waste and Recycling Materials in Proper Containers	Protect waste and recycling materials from exposure to wind, weather elements and scavengers that can transport pollutants to storm water	Dry waste such as light scrap metal, floor sweepings, metal chips and paper that can be affected by wind should be kept in sealed containers; Keep dumpsters closed; Seal recycling drums; Label containers, keep them readily accessible and empty containers regularly

BMP Name	Purpose	Description
Control Roof Downspout Discharge	Where possible, divert runoff collected on roofs, canopies and other coverings from discharging into areas of potential pollutant use or storage	Downspouts should be directed to avoid critical areas such as fueling, fabrications, lead tool, and dye storage of hazardous waste storage areas
Minimize Storm Water Run-On from Adjacent Facilities and Properties	If possible, divert run-on generated by neighboring facilities or adjacent properties before it can enter the site grounds. This should be done in such a manner as to prevent flooding of adjacent property.	Berming, diversion ditches, and dikes can direct flow away from the site; Vegetated strips, grass swales, or infiltration basins and trenches can impede slow incoming flow
Conduct Refresher Courses in Operating and Safety Procedures	Reduce spills and accidents that may cause significant materials to contaminate the storm drain system	Personnel should be required to have training and refresher courses to learn new procedures and policies regarding equipment operation and review correct operating and safety procedures
Designate Special Areas for Draining or Replacing Fluids	Eliminate improper handling and disposal of waste and reduce accidental spillage of significant materials in an unprotected area	Motor oil, coolants, and other potential pollutant fluids should be drained and replaced at specific areas designated for this activity
Drain All Fluids From Stored or Salvaged Vehicles and Equipment	Eliminate the potential for spillage such as oil, antifreeze, and hydraulic fluid from vehicles and equipment under long-term storage	All oil and other fluids should be drained from vehicles being stored long-term or salvaged and the oil should be collected and recycled; Post signs on drained vehicles
Completely Drain Oil Filters before Disposal	Reduce potential for contamination of storm water due to spills and leaks from used oil filters	All filters should be completely drained into collection drums for recycling and disposal of used oil; Post signs stating requirements to completely drain filters before disposal
Wash Equipment and Vehicles in Designated Areas	Contain runoff that may carry detergents, oil, and/or grease from vehicle washing and eliminate potential for contact of polluted water with the storm drain system	Facilities should have designated, bermed wash areas that contain wash water and drain to the sanitary sewer, a sump, or to a filter
Discharge Wash Water to a Sanitary Sewer	Eliminate runoff generated by cleaning of vehicles, equipment, and floors from entering the storm drain	All washing should occur in designated contained areas and wash water should be discharged to a sanitary sewer, collected in dead-end sump tanks and transported to a treatment facility or filtered
Reduce the Amount of Liquid Cleaning Agents Used	Reduce potential for pollution from cleaning agents such as soaps and detergents used in any maintenance operations including vehicle, equipment, aircraft or ship cleaning, metal work, and painting practices	Use products other than liquid cleaning agents to the maximum extent practicable (MEP); Substitute cleaning methods such as wire brush scraping or using a bake oven
Substitute Non-Toxic or Less-Toxic Cleaning Solvents	Minimize exposure of organic solvents used for cleaning equipment and parts to storm water discharge	Substitute non-toxic or less-toxic cleaning agents; Use non-caustic detergents, water-based degreasers, non-chlorinated solvents and phosphate-free detergents; Manage cleaning materials properly

TABLE 2. MATERIALS HANDLING BMPS

BMP Name	Purpose	Description
Use Solvents Efficiently	Reduce potential for spills and leaks of cleaning solvents in repair and maintenance operations	Reuse solvents and use sparingly; Pre-soak parts in "dirty" solvent before placing in fresh solvent to reduce the volume of solvent used
Use Outside Contractor for Handling Used Solvents and Other Significant Materials	Prevent improper storage, handling, and disposal of solvents, oils, paint thinners, and other toxic chemicals to reduce potential for spills and contamination of storm water	Use private contractors such as Safety Kleen to handle the disposal and replenishing of toxic chemicals
Protect Storage Containers from Being Damaged by Vehicles	Prevent vehicle impact damage to storage containers such as ruptures and cracks that may lead to significant spills and leaks	Install bollards or traffic barriers, fences and curbs to protect containers stored in locations accessible to vehicles
Centralize Liquid Solvent Cleaning to One Location	Promote conservative use of liquid solvents in designated contained areas to reduce the potential for spills, illegal dumping, and improper use of the solvent	Promote cleaning of parts using "dry" methods; if liquid solvents are necessary, clean in central locations to reduce the number of personnel using solvents and promote proper use and disposal; ensure that cleaning locations are properly operated and maintained
Properly Store Containers	Prevent exposure of significant materials or potential pollutants stored in outdoor containers to storm water	Proper storage includes: provide 3 feet of aisle space to provide access for inspections, store drums and bags away from traffic routes, stack containers according to manufacturers instructions, store liquid containers in bermed area
Use Overpack Containers or Containment Pallets to Store 55-Gallon Drums Outside of Storage Areas	Contain and prevent chemical, oil, solvent, or liquid leaks from 55-gallon drums to prevent contamination of storm water	Overpack containers and spill prevention or containment pallets are secondary containers, generally constructed of plastic; Secondary containment should be adequate to hold the contents of the storage barrels should they break or leak
Provide Roof to Cover Source Area	Prevent contact of storm water rainfall with significant materials in critical areas	Construct a roof, canopy, or effective covering for critical areas such as fuel transfer, loading/unloading, mechanical shops, metal fabrication and hazardous material storage areas
Pave Bermed Areas	Prevent infiltration of spilled material into the soil and subsequent transmission to the storm drain system	Critical areas designated for material handling and storage, equipment repair, and maintenance operations should be paved with impervious material such as concrete, asphalt, clay or plastic and curbed by berms and dikes
Repair Leaky Roofs	Keep storm water from leaking into covered areas where hazardous substances, parts equipment, vehicles and materials are stored	Repair leaky roofs as required for each building, move stored equipment and materials to another covered area, train personnel to notify supervisors when leaks are observed

BMP Name	Purpose	Description
Recycle	Reduce the amount of hazardous and non-hazardous waste material such as solvents, oil, scrap metals, wash water and absorbent materials used at the site and prevent exposure of significant materials to storm water activity	Recycling collections should be conducted weekly and more frequent pickups may be established based on quantity, toxicity, probability of exposure of materials to storm water, length of storage time, evidence of exposure, and sensitivity of receiving waters
Control Spills	Reduce potential for spills and implement proper containment in the event of a spill or leak to prevent the contamination of storm water runoff	Material Safety Data Sheets (MSDS) should be followed for handling, storage and cleanup of significant materials; For small spills, use absorbents such as sand, straw, or sawdust; For larger spills, use spill kits, boom, and other response supplies
Label all Drums, Cans, Containers, Tanks, and Valves	Reduce the potential for misuse or spillage of stored materials; Ensure that appropriate procedures, equipment and storage containers are used to prevent spills and ensure that in the event of a spill the material is properly identified and the appropriate response is implemented	All containers should be labeled according to its contents (solvent, gasoline) hazardous substances should be labeled regarding the potential hazard (corrosive, radioactive, flammable, explosive, poisonous); Department of Transportation (DOT)labeling requires that labels be prominently displayed on transported hazardous and toxic materials
Construct Berms or Dikes Around Critical Areas	Provide secondary containment for critical areas such as material handling and storage, equipment repair and maintenance areas to divert spills and leaks away from the storm drain system	A raised berm or dike should be placed around all critical areas or source areas with a high potential for release of pollutants
Use "Doghouse" Design for Outdoor Storage of Small Liquid Containers	Reduce the potential for pollution from small containers of liquid materials (paints, solvents, antifreeze, and oil) stored outdoors	Store small containers, cans, and pails carrying toxic contents inside buildings or in a "doghouse"; A doghouse design consists of a two walled shed with a peaked roof to divert rainfall and flooring equipped with spill prevention pallets
Do Not Store Used Parts or Containers Directly on the Ground	Prevent potential contamination from used parts covered in oil and grease, leaks in 55-gallon drums and flammable storage lockers by limiting direct contact of these stored materials with ground surfaces	Store used parts, storage drums and flammable materials indoors; store small parts in sealed containers, place drums on pallets; Use waterproof tarpaulins to protect ground surface and to cover stored materials
Store Batteries in a Secondary Container	Prevent contamination such as battery acid and caustic material from batteries into runoff	Store lead-acid batteries and charging units on pallets, in a bermed area under a canopy or awning; Used and cracked batteries should be stored in sealed containers
Keep Open Flames away from Flammable Material	Prevent accidents and ensure safety of personnel and staff as well as prevent polluted or toxic ash, rubbish, and debris generated by accidents, explosions, fires, and other chemical reactions from entering the storm drain	Open flames and smoking are prohibited within 50 feet of flammable materials (including paints); Use spark-proof tools when closer than 50 feet and post warning signs in areas where flammable materials are stored
Use Door Skirt or Seal	Contain spills of toxic or potential pollutant materials during loading and unloading activities and prevent contact of leaking material with ground surface runoff	Retrofit doorways used for loading with rubber or plastic door skirts; The door skirt acts as a strip barrier that encloses and seals the open end of the trailer with the open door of the loading dock during loading and unloading operations

BMP Name	Purpose	Description
Employ Proper Handling Procedures to Transport Materials and Waste	Prevent damage such as fractures or ruptures (which can create leaks and spills) during transport of drums, containers and storage boxes carrying potential pollutants	Drums should be moved using a barrel cart or by placing the drum on a pallet and moving by forklift; A minimum of two persons should assist the forklift operator in transferring a drum to or from a pallet; Metallic strapping should be used to secure stacked drums
Control Dust and Particulates	Prevent pollution of storm water from indoor and outdoor industrial processes such as metal finishing, painting, sanding, grinding, sawing, milling, sandblasting, welding, and cement manufacturing that generate significant quantities of dust and particulates	Control the emission of dust particles generated by industrial processes by using filters, baghouses, electrostatic precipitators, cyclone concentrators, waterwalls, and other measures
Store Liquids and Significant Materials within a Building or Covered Area	Prevent leaks and spills of significant materials stored, handled, or transported outside, to minimize contamination of storm water	Store significant materials within an enclosed building or covered area on an impervious surface such as concrete to MEP; Direct contaminated runoff to a storm water treatment facility or containment; Clean spills and leaks
Recycle Pressure Wash Solvents	Eliminate discharge of waste water containing dirt, oils, grease, and paint from pressure wash systems to the storm drain	Pressure wash wastes should be recycled using a closed loop system or "zero-discharge system"; Train personnel on proper usage of pressure wash systems
Provide Overfill Protection	Prevent overflows that may occur during regular fueling operations or transfer of fuels and toxic liquids to vehicles, equipment, aircraft, and ships from exposure to storm water	Retrofit existing and new tanks with overfill prevention equipment such as automatic shut off valves, restricted flow devices, or alarms that indicate when the tank is almost full, and install secondary containment
Monitor Major Fueling Operations	Prevent accidental overflows containing fuels and toxic liquids during high-volume transfers (such as for fuel tankers) that may contaminate storm water	Implement a policy mandating second party monitoring of fuel operations; Monitor high-volume transfers; Train personnel for appropriate emergency spill response actions
Provide Absorbent Booms in Unbermed Fueling Areas	Contain accidental spills and leaks during fuel transfer operations and prevent contamination of runoff	Portable absorbent booms should be stored and readily available at fueling areas; These booms should be used to contain spills and leaks or spills
Eliminate Topping Off Tanks	Eliminate fuel spills from overfilling tanks and prevent contact of fuels with ground surface and storm runoff	Develop a policy to discourage "topping off" fuel tanks; Post warning signs stating explicit penalties
Install Leak Detection System	Detect leaks from underground storage tanks (USTs) that may leak fuel or toxic liquids and contaminate the soil or groundwater	Install leak detection systems such as automatic gauging, vapor monitoring, groundwater monitoring wells and interstitial monitoring; Keep a close inventory on all fuel transfers in and out
Designate Areas for Fueling from Mobile Fuel Tankers	Contain accidental spills and leaks from mobile fuel tankers (MFTs) to designated areas	Minimize the use of MFTs and perform fuel operations in designated areas particularly when a large number of vehicles are in use
Restrict Access to Storage Tanks	Prevent toxic discharges from storage tanks to the ground due to unauthorized handling and vandalism	Restrict access to tanks and valves to authorized personnel and properly trained employees; Supply a locked gate and fence the area around tanks

BMP Name	Purpose	Description
Divert Drainage to a Low-Flow Sump	Treat contaminated flows that drain directly into the storm drain system	Use structural controls such as a low-flow sump, oil/water separator, wet pond or infiltration basin so that spilled material is not discharged into the rest of the storm drain system

TABLE 3. EQUIPMENT MAINTENANCE BMPS

BMP Name	Purpose	Description
Restrict Access to Area and Equipment	Reduce pollutants in storm water runoff caused by the release of significant materials due to vandalism of vehicles and facility property, or unauthorized trespassing	Vehicle, equipment and storage areas should be fenced, gated and access restricted to authorized personnel; Fences and gates should be properly maintained and additional measures such as lighting of the area, security guards and alarms should be used appropriately
Keep Equipment and Vehicles Clean	Reduce oil and grease from leaky vehicles and equipment; These pollutants may accumulate on impervious runoff areas and can be washed into the storm drain	Regularly clean and maintain vehicles and equipment using dry methods; Centralize liquid solvent cleaning to one location and wash vehicles in designated areas
Maintain Equipment in Good Condition	Prevent spills and leaks due to corrosion, loose fittings, poor welding, and improper poorly fitted gaskets on vehicles and equipment	Equipment should be kept in good working condition and inspected regularly for fluid leaks; equipment that is leaking or in poor working condition should be repaired or replaced
Implement Qualifying Tests for Equipment and Vehicle Operators	Prevent accidents due to employee misuse or unfamiliarity with operating procedures that may result in leaks or spills that expose significant materials to storm water	Implement qualifying tests for personnel operating equipment or vehicles; Train personnel in safe operating procedures and basic maintenance and spill response procedures associated with particular equipment and vehicle operation
Dispose of Obsolete Equipment, Inoperable Vehicles, and Surplus Materials	Reduce the likelihood of storm water pollution due to oil and lubricant spills from leaky engine parts in obsolete equipment, inoperable vehicles and surplus materials stored on-site.	Perform proper off-site disposing and recycling of old parts, equipment, and surplus materials based on implementer's judgments of facility operations and conditions
Check Vehicles and Equipment for Leaks	Prevent contamination of storm water due to fluids from leaky engine parts on stored vehicles, aircraft or equipment	Stored or salvaged vehicles and equipment at the site must be inspected for oil and fluid leaks; Use drip pans to catch leaks and clean stains using "dry" methods
Park Vehicles or Equipment Indoors or under a Roof	Eliminate or reduce exposure of pollutants like oil and grease leaking from parked vehicles and equipment to storm water	Park and store vehicles and equipment indoors and under a roof, canopy, or other covering when available
Park Vehicles on an Impervious Surface	Prevent soil contamination and contamination of runoff; Prevent infiltration of spilled pollutants on ground surfaces into soil	Vehicles should be parked on an impervious surface such as concrete and asphalt that cannot be readily penetrated by rainfall
Use Drip Pans under Leaking Equipment	Contain fluids that may leak from equipment such as pumps, air conditioners, and boilers until equipment can be properly repaired or replaced	Drip pans should be placed under leaking equipment to collect any leaking fluid as a temporary BMP until the equipment is repaired or replaced
Perform Equipment Maintenance at Designated Areas	Contain oil, grease, engine coolant, and any pollutants generated by routine maintenance activities of small equipment such as sandblasters and sprayers and large equipment such as construction equipment, tanks, aircraft, and boats	Maintenance of equipment should only be performed in specific predetermined areas such as hangars, shops, garages, or dry docks; all employees and personnel should be trained and informed as to the location of these areas and appropriate BMPs to reduce and contain pollutants

BMP Name	Purpose	Description
Designate Areas for Washing Non-Vehicular Air Filters and Other Greasy Equipment	Contain oil and grease waste generated during cleaning and maintenance of mess hall cooking grills, air filters, and facilities where significant grease and soot can accumulate	Greasy equipment should be cleaned and maintained in designated areas where wash water and grease are contained and diverted to a sump or discharged to the sanitary sewer
Conduct Maintenance within Building or Covered Area	Prevent deposits and stains from oil, grease, or solvents spilled or leaked during maintenance activities from contacting storm water	Conduct maintenance of equipment and vehicles within an enclosed building or covered area such as hangars, garages, and shops; Clean all spills and leaks immediately using rags or dry absorbents

Appendix A.6

Proposed Changes to the Sewer Ordinance

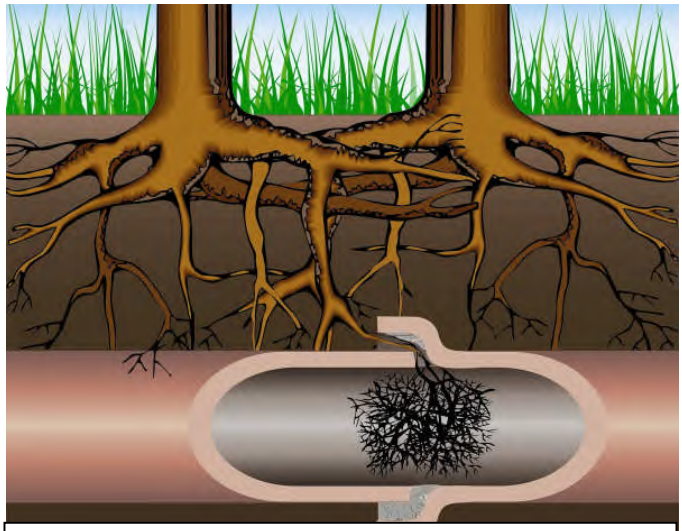

A sewer line showing root intrusion along a pipe joint.

The City of El Cajon is considering the adoption of a new Sewer Ordinance requiring periodic inspection and maintenance of private sewer systems and sewer laterals. The Ordinance changes will also include new requirements for Food Establishments and other facilities requiring the installation of a grease trap.

The Sewer Ordinance changes are necessary due to new requirements in California State Law regarding wastewater collection systems. These new requirements are meant to prevent sewer overflows, which can create health hazards and pollute waterways and the ocean. The program is essentially an effort to heighten public awareness of common problems resulting in sewer overflows. Owners will be required to maintain their laterals in a functional condition through routine cleaning or by repairing or replacing their pipes. Property owners may be sent a notice and made aware of deficiencies in their sewer laterals or private sewer systems, if observed during maintenance of the public sewer main lines. A video inspection will also be required as part of a major home or business remodeling project, the sale of a home, and every ten years for commonly owned properties, such as shopping centers, condominiums and apartments. The City will develop a list of "Participating Plumbing Companies" that property owners may call to have their lateral video inspected and the condition of their sewer lateral line evaluated. The list will be made available on the El Cajon website. However, a property owner may choose to use any licensed, qualified plumbing company they prefer.

The proper maintenance of a private sewer lateral is important because your line can clog with roots, grease or debris and can cause a backup inside your property or a spill from the line. A sewage spill can cause damage to your property that is expensive to fix. In addition, a spill may cause public and/or environmental health concerns.

Preventative Measures You Can Take To Practice Good "Sewer Lateral Hygiene"

- Periodically have your sewer lateral video inspected and cleaned.
- Repair or replace deteriorated or damaged lateral pipes as soon as possible.
- Do not plant trees or large shrubs above sewer lateral lines.
- Never pour grease down a drain. Let it cool down and dispose of in the trash.
- Scrape food off your dishes into the trash before rinsing off into the sink.

Problems to Look for:

- Drain back ups inside your house or business.
- Wet or soggy ground in your yard.
- Water leaking from cleanouts or outside drains.
- Unusual odors or sewage smells in or around your home or business.

For more information about the City's Sewer Overflow Prevention Program please call us at (619) 441-1653.

What You Can Do As A Business Owner to Keep Our Storm Drains Clean….

Contaminants from your facility can contribute to polluted runoff when floors and outside areas such as sidewalks, patios and parking lots are not maintained or cleaned properly. Make an effort to educate your customers by speaking to them about not littering, or by posting some signs.

Hints On Keeping Floors and All Outside Areas Clean:

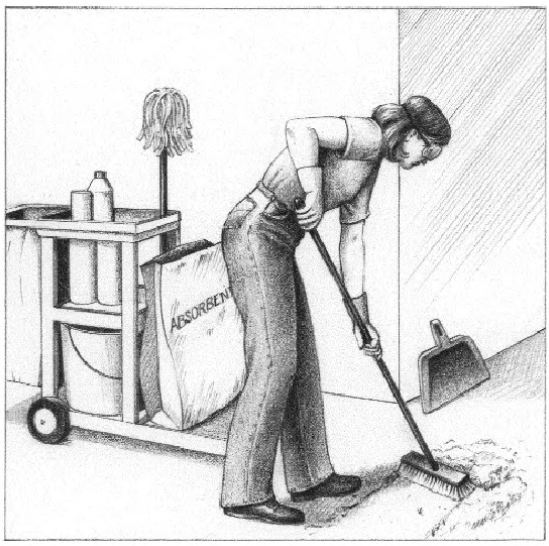

- Keep all outside areas (dumpsters, parking lots, etc.) free of trash and debris, and regularly clean them to prevent pollutant buildup.
- Use absorbent for liquid spills, then sweep or use a slightly wet mop to finish cleaning outside areas.
- Regularly inspect and clean out grease traps.
- Avoid spilling onto floors or other surfaces through good housekeeping.
- Control litter by sweeping and picking up trash on a regular basis.
- Never dispose of wash waters to the storm drain.
- Use "dry" cleaning methods (sweeping, vacuuming, etc.) on sidewalks and parking lots and dispose of waste properly.
- Use damp mop to clean floors, and contain the wash water for proper disposal (sewer, on-site treatment, etc.).
- Label all storm drain inlets "No Dumping".
- Clean up spills immediately to minimize safety hazards and deter spilling.
- Train all employees. Your success depends on an effective training program.

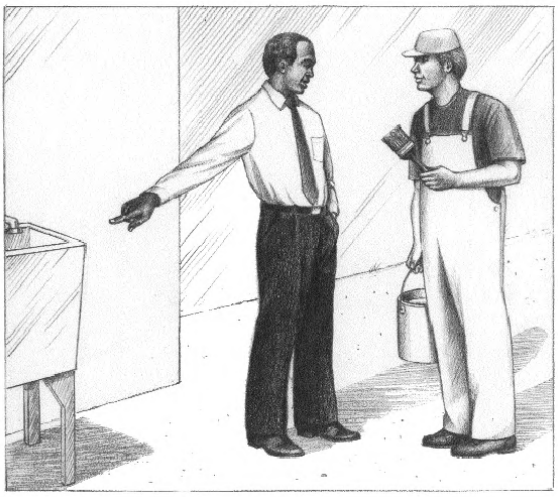

What Works In Parking Lots:

- Use dry cleaning methods to clean parking lot pavement – absorbents, brooms, or wire brushes.
- Clean up sediments and other solids from parking lots immediately to prevent them from blowing or washing away.
- Mechanically remove loose debris before washing the lot with water.
- Dispose of parking lot debris properly. To determine the proper disposal method, contact the facility that you expect to take the material to for disposal.
- Clean parking lots early in the day if heavy rains are forecast.

- Assign numbered parking spots for each driver or vehicle. This helps to identify leaking vehicles so they can be repaired.
- Pressure wash pavement only when necessary. Avoid the use of acids and other harsh cleaners.
- If pressure washing is used, wash with water only. Be aware that dissolved pollutants or cleaning products can travel through underlying soils and contaminate groundwater.

Keep The Trash inside Trash Bins or Trash Cans:

- Don’t put liquids in trash bins or trash cans.
- Place trash bins or trash on concrete surfaces.
- Keep lids tightly closed to keep the rain out.
- Assign someone to regularly clean up the ground around trash bins.
- If a trash bin or trash can leaks, immediately repair or replace it.
- Make sure that storage containers are in good condition and lined with a material that will not deteriorate.
- Trash bins or trash cans stored outside should be watertight, rodent-proof, and protected from tampering.

What You Can Do As A Food Take-Out Customer to Keep Our Storm Drains Clean

- Make sure you collect and properly dispose or recycle all trash.
- Talk with business owners if you see trash disposal problems at a business, or call the El Cajon Pollution Prevention Program at (619) 441-1653.
- Speak with others about the importance of not littering.
- Participate in community-sponsored cleanups.

As a concerned citizen, you can be proud that you are part of the **Solution to Storm Water Pollution** and not part of the problem. Remember, "Only Rain in the Drain!"

For more information, contact the El Cajon Storm Water Protection Program at (619) 441-1653, or use your web browser to access our program at:

http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Why Is All That Trash In The El Cajon Drainage Channels?

The City of El Cajon puts considerable effort in keeping our streets and storm drains clean. Yet, in spite of these efforts, trash and debris continues to collect in our drainage channels and storm drains in large amounts, polluting the water and creating an unsightly mess. The reasons behind this trash accumulation range from problems with the homeless living in the drainage channels to thoughtless littering by average citizens. The intent of this article is to address the problem of littering so that all El Cajon residents can understand the importance of not littering, and by doing so, become a part of our community's solution to storm water pollution.

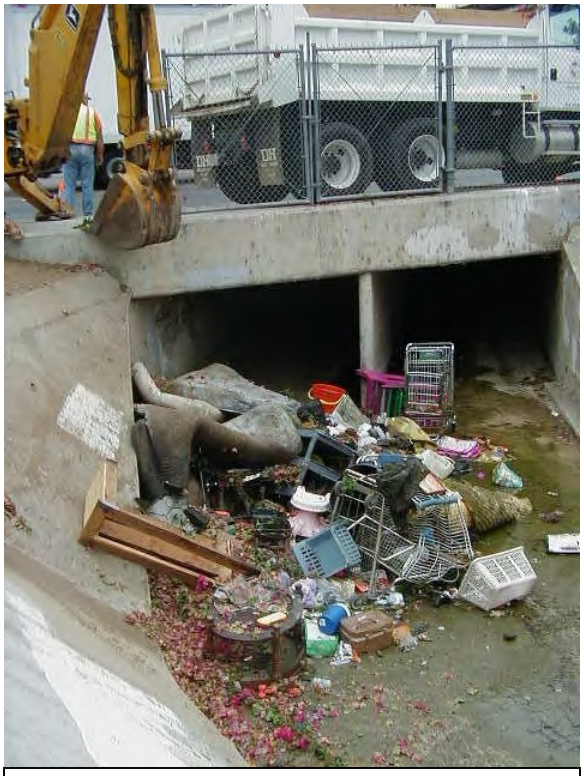

Trash in the Washington Channel

An analysis of the trash removed from City streets, storm drains and drainage channels reveals that a majority of the trash originates from sales at fast food restaurants, convenience stores, and take-out delicatessens. Well more than half of the trash removed consists of disposable beverage cups and food wrappers. The following articles include helpful hints for both business owners and customers to ensure that trash finds its was into trash trucks instead of finding its way into our streets, storm drains, drainage channels and ultimately the beaches.

Your City Works to Keep Trash Out of the Storm Drains

Each year, the City of El Cajon conducts twice-yearly cleanups of all city storm drain inlets and drainage channels to remove trash, sediment and debris. In addition to this the City has developed a comprehensive street sweeping program with a twice-a-week sweeping cycle for commercial areas, a once-a-week sweeping cycle for industrial areas, and a twice-a-month sweeping cycle for residential areas. The City adheres to this sweeping schedule except when weather or equipment availability makes adherence to the sweeping schedule impossible. During times when street sweeping is impossible, City staff conduct "Storm Water Patrols" to identify localities where more limited, localized cleanups can be accomplished. As a result of the effort, City crews collect several thousand cubic yards of trash, sediment and debris each year in our efforts to keep our streets and storm water systems clean.

Over-Irrigation Can Cause Storm Water Pollution

Even though El Cajon receives about 13 inches of precipitation during an average year, storm water is a problem for the city and many of its residents. The sometimes short, intense rainstorms can cause flooding and soil erosion. Runoff from parking lots, buildings and other impervious surfaces can cause water to pool up in the streets.

Storm water drained from El Cajon's paved streets, parking lots, driveways buildings and construction sites discharges with little or no treatment to our storm drain system. This runoff can also pollute the ground water that eventually finds its way into our streams, rivers and beaches. It also dramatically increases storm drain maintenance costs.

The City's storm drains are intended to collect and convey only one thing: uncontaminated storm water. Anything that is spilled dumped or deposited on a landscaped area or paved surface will be washed into the storm drain if it is not cleaned up before the next storm event. Over-irrigation of landscaped areas flushes pollutants, including herbicides, pesticides, fertilizers, bacteria and any other pollutants residing on vegetation or in soil, causing dry weather flows of polluted urban runoff.

Recent dry-weather testing of runoff in the northwesterly, downstream portion of Forrester Creek has yielded fecal bacteria counts that are unacceptably high. Fecal bacteria originate in the waste of warm-blooded animals. Follow-up investigations have not located a point source for the bacteria, and a probable explanation is that the high bacteria counts result from the flushing of bacteria-laden soil in landscaped and paved areas in typical neighborhoods around our city.

Rather than institute an expensive storm water treatment program, the El Cajon Storm Water Protection Program is asking for your help in keeping contaminants out of our storm water. If we all do our part, we can significantly reduce the storm water pollution loads to the river and ground water. Here's some tips on how you can help:

- ✓ Pick up all pet waste and either flush it down the toilet or place it in the trash
- ✓ Check your landscape irrigation to insure that you are not over-saturating the soil or causing irrigation runoff

- ✓ Read and follow all instruction when applying herbicides, pesticides and fertilizers
- ✓ Collect and compost or recycle all green waste. Remember, it contains the herbicides, pesticides and fertilizers you have applied to your landscape
- ✓ Be sure and collect all trash and debris around your yard before it can be washed or blown away

The San Diego River Watershed

It's a Living Thing!

Remember, you are the Solution to Storm Water Pollution.

For more information, contact the El Cajon Storm Water Protection Program at (619) 441-1653, or use your web browser to access our program at:

http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Parking Lot Best Management Practices

Follow these BMPs to control pollutant discharges. The objectives are: 1) to keep pollutants from contacting rain, and 2) to keep pollutants from being dumped or poured into the storm drains. The goal is "only rain in the storm drain."

- ✓ Sweep parking lots frequently: at least weekly, daily is preferable. Small areas can be swept with a broom, whereas larger areas may need a vacuum truck or mechanical sweeper. Dispose of sweepings properly.
- ✓ Post signs to control litter and prevent patrons from working with automobile fluids in your parking lot (changing oil, adding transmission fluid, etc.). You could be liable for their mess on your property!
- ✓ Use absorbent material to clean up automotive fluids on the parking lot, and dispose of absorbent material properly.*
- ✓ Pick up litter daily; dispose of debris in the garbage.
- ✓ Keep dumpster areas free of litter and lids closed.
- ✓ Wash water from all cleaning operations must be discharged to the sanitary sewer.
- ✓ If cleaning with water and detergent is needed, use a mobile washing unit that is self-contained; do not allow the wash water (whether or not it is soapy) to discharge to the storm drain system.
- ✓ If using a self-contained mobile cleaner is not feasible, collect the wash water and dispose in indoor sinks or drains for discharge to the sanitary sewer. Contact your local wastewater treatment agency for approval.
- ✓ Stencil storm drain inlets with "No Dumping, Drains to Ocean" message.

*Hazardous Materials must comply with hazardous materials storage and disposal requirements. Contact the storm water program by calling (619) 441-1653 or clicking: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html for more information.

What Is the El Cajon Storm Water Protection Program?

In response to recent changes in Federal and State water quality regulations and requirements, El Cajon has joined forces with other municipalities and local agencies in San Diego County to form a countywide clean water program with a coordinated public outreach and education program.

The goal of El Cajon's Storm Water Protection Program is to prevent discharges of pollutants to municipal storm drain systems, including local creeks, rivers and the ocean. Public outreach and educational materials are distributed describing and encouraging the use of Best Management Practices to effectively eliminate illegal discharges and connections. Best Management Practices (BMPs) are methods and practices such as good housekeeping, spill prevention, or treatment measures to prevent or minimize pollutant discharges to municipal storm drain systems.

The El Cajon Storm Drain System was built to collect and transport rain to prevent flooding in urban areas. Anything that flows or is discharged into the storm drain system goes directly into local creeks and ultimately the ocean without any treatment of any kind. The Sanitary Sewer System collects and transports sanitary wastes from interior building plumbing systems to the wastewater treatment plant where the wastewater is treated.

Illegal Discharges or Illicit Connections discharge non-storm water to municipal storm drain systems and contribute to water pollution. Urban Runoff is rain and any other water that passes through and out of developed areas (streets, parking lots, roof tops, etc.) into the storm drain system and eventually to creeks, rivers and the ocean.

Keeping pollutants out of our storm drain system protects our local creeks, rivers and the ocean. Materials swept, blown, or washed into the storm drains end up in these open waters where they degrade water quality and harm aquatic life. The discharge of wastewater to the storm drains is illegal.

In addition to reviewing our own municipal practices, El Cajon has instituted a business education campaign and inspection program. Inspectors work with contractors and businesses to identify and control potential discharge of pollutants to the storm drain system. Property and business owners are responsible for their contractors' practices.

Owners and operators of parking lots can apply common sense practices to minimize or eliminate their contribution to storm water pollution. Some such practices are identified in the article titled, "Parking Lot Best Management Practices." Storm water runoff from parking lots can contribute significantly to urban runoff pollution. Automotive fluids, food wastes, grease, pesticides, litter, and landscape wastes are only some of the pollutants that get into the storm drain system.

If you need additional information concerning storm water pollution please contact the storm water program by calling (619) 441-1653 or clicking:
http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

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Water conservation gardens

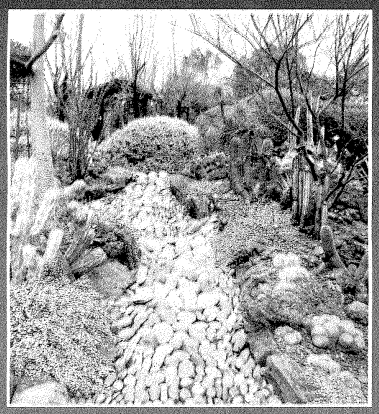

The Water Conservation Garden has nearly five acres of displays that showcase water conservation through a series of beautiful themed garden displays. See page 2 for more information. Photo by Diana Saenger

What's new in autos?

See Dave Stall's column on the new Columbia Electric Trucks on page 12.

What's new in theaters?

Read about 'The International' and 'Friday the 13th' by Diana Saenger and Michael Black in the Class Act Entertainment section

Flood control on patrol

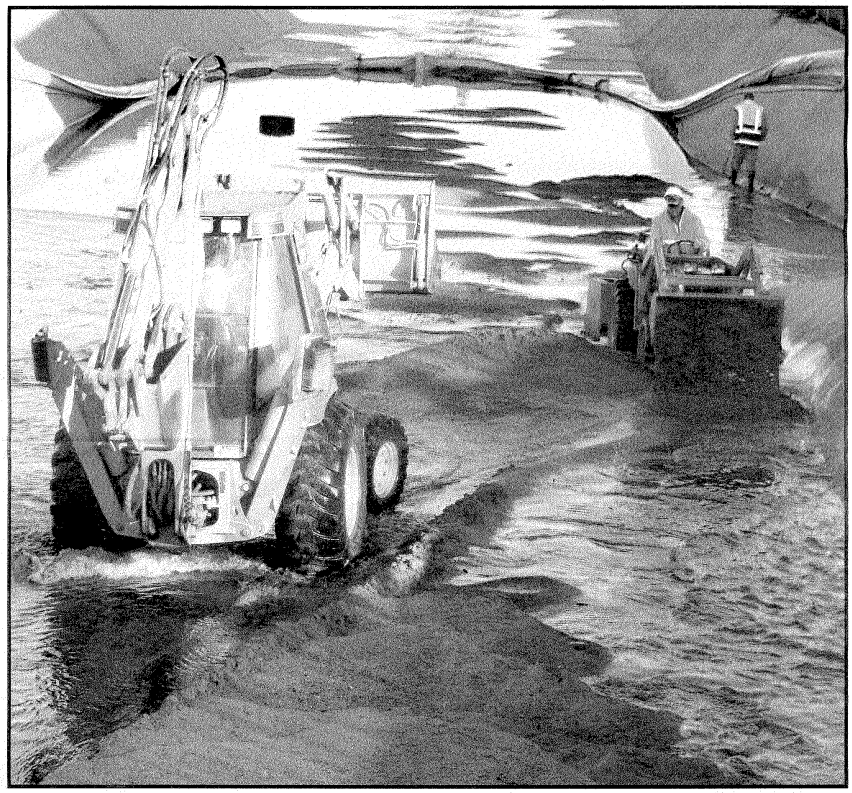

The El Cajon Flood Control Crew is shown cleaning up storm water debris that had been caught in a special trap, or sea curtain, following the heavy rains. Photo by Monica Zech

by Monica Zech

Many people think the greatest threats to our streams, rivers, and beaches come from businesses or industries that might pollute as part of doing business, however, the true source of much of our water pollution originates in residential areas where rains and irrigation wash the pollutants into storm drains. Fortunately, Flood Control Crews work daily to keep most of these pollutants from getting past East County and eventually to the beaches.

Members of the Flood Control Crew work in the Public Works Wastewater Division, in the City of El Cajon, and begin their work very early in morning, while most are still in bed.

The Flood Control Crew of El Cajon consists of John Gigliotti, Eddie Bowsman, John Wilson and Ted George. They clean the sea curtain after every storm event. It's great to know the Flood Control Crew is there to play an important role in reducing the amount of pollution dumped into the flood control channels as part of the many City services.

In fact, the importance and necessity of the Flood Control Crew was emphasized this past year, after the heavy rains, when over 1,720 cubic yards of silt, leaves, branches, weeds, trash, and organic material were collected. That's enough debris to fill 172 large dump trucks.

As residents of the community, we also play a vital role in reclaiming and preserving our streams, rivers, and beaches for wildlife, recreation, drinking water, and overall quality of life. We must all strive to do our part in helping out the Flood Control Crew by trying to prevent common pollutants from entering the storm drains.

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City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Direction	Street/Location	Complaint origin	Complaint/ Observations	City Action	Valid Discharge	Was IC/ID Eliminated
1	07/01/08	Residential		2584		Katherine St	Metal drain pipe on slope across street causing erosion when it rains.	Referred to PW street crew to evaluate position and condition of the pipe.	Referred to PW street crew to evaluate position and condition of the pipe.	No	N/A
2	07/01/08	Residential		1043	S	Sunshine	Strong smell of sewage coming from under the house and ground is wet.	Met with the complainant's mother(tenent). Found no odor or sewage. No discharges observed. Most likely pooled water under very old house from deteriorated cast iron pipes. Advised to contact a plumbing service.	Met with the complainant's mother(tenent). Found no odor or sewage. No discharges observed. Most likely pooled water under very old house from deteriorated cast iron pipes. Advised to contact a plumbing service.	No	N/A
3	07/09/08	Residential		244		Shady Lane	Large amount of dust and dirt in the street from road resurfacing.	No discharge observed on site. Roadway resurfacing underway. The contractor was contacted and advised to sweep all debris from the street and sidewalk. Storm water educational materials were issued.	No discharge observed on site. Roadway resurfacing underway. The contractor was contacted and advised to sweep all debris from the street and sidewalk. Storm water educational materials were issued.	Yes	N/A
4	07/10/08	Residential		712		Garfield Ave	Citizen phone complaint of a broken irrigation line at the property with water running into the street.	Contacted the resident and advised to cut the water to the irrigation and repair it. The work was done the same day.	Contacted the resident and advised to cut the water to the irrigation and repair it. The work was done the same day.	Yes	Yes
5	07/17/08	Residential		1311		Chase Ave	Grey water being released and flowing onto Chase Ave.	No evidence of a grey water discharge. Outside city limit.	No evidence of a grey water discharge. Outside city limit.	No	N/A
6	07/21/08	Residential		283		Meadow Crest Dr	Repeat complaint of gray water being drained onto the sidewalk in front of the residence.	Site inspection found minor evidence of a discharge at base of brick wall in front of property. Will arrange full inspection with owner. Discharge found to be pool water over splash into patio drain at rear of house.	Site inspection found minor evidence of a discharge at base of brick wall in front of property. Will arrange full inspection with owner. Discharge found to be pool water over splash into patio drain at rear of house.	Yes	N/A
7	07/24/08	Residential		757		Pierce St	Citizen's phone complaint that irrigation system has been continuously running for two days and no response at the door.	Inspection found front yard irrigation overflowing into the street. No response at door. Water was turned off to the system. Card left at door. Owner responded later.	Inspection found front yard irrigation overflowing into the street. No response at door. Water was turned off to the system. Card left at door. Owner responded later.	Yes	Yes
8	07/24/08	Residential		1045		Terrace Crest Dr	Citizen's phone complaint that a brown liquid was being discharged into the gutter.	No discharge noted in front of the residence or in street.	No discharge noted in front of the residence or in street.	No	N/A

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Direction	Street/Location	Complaint origin	Complaint/ Observations	City Action	Valid Discharge	Was IC/ID Eliminated
9	07/30/08	Residential		636		Medford	Discharge of blackwater from and occupied camper in rear yard onto neighboring church property and entering the storm drain.	Notified zoning enforcement. The property owner and the occupant of the camper were contacted on site. A discharge pipe connected to the camper ended at the rear block wall . All other utilities were also attached to the camper. The owner was told to immedialtely remove all utilities and cease all discharges. The pipe was removed and capped. He was also instruced to clean the surrounding soil.	Notified zoning enforcement. The property owner and the occupant of the camper were contacted on site. A discharge pipe connected to the camper ended at the rear block wall . All other utilities were also attached to the camper. The owner was told to immedialtely remove all utilities and cease all discharges. The pipe was removed and capped. He was also instruced to clean the surrounding soil.	Yes	Yes
10	08/05/08	Residential		129		Gina Ave	Someone at the residence dumping paint in the storm drain.	Storm water contacted the property owner on site. She accidentally spilled red paint I the driveway and used wate to clean it . The flow entered the gurb flowing north. None entered a drain inlet. She was advised to cease all use of water to clean paved areas and was given storm water educatinal materials.	Storm water contacted the property owner on site. She accidentally spilled red paint I the driveway and used wate to clean it . The flow entered the gurb flowing north. None entered a drain inlet. She was advised to cease all use of water to clean paved areas and was given storm water educatinal materials.	Yes	Yes
11	08/04/08	Residential		1460		Whitsett	Drainage problem of unknown origin pooling in rear yard.	Met with the property owner on site and viewed rear yard pooling. Unable to determine source. No threat of discharge to street.	Met with the property owner on site and viewed rear yard pooling. Unable to determine source. No threat of discharge to street.	No	N/A
12	08/14/08	Residential		1890		Calle del Conejo	Neighbor discharging into rear swale from two hoses.	Located two hoses from the pool area placed in concrete swale. Advised tenant to remove. No discharge noted.	Located two hoses from the pool area placed in concrete swale. Advised tenant to remove. No discharge noted.	Yes	Yes
13	08/20/08	Residential		2680		Dryden	Water from over irrigation pooling in the street causing breeding of mosquitos.	Site inspection found no pooling. PW crew advied complainant to also contact vector control.	Site inspection found no pooling. PW crew advied complainant to also contact vector control.	No	N/A
14	08/21/08	Residential		2387		Rippey Ct	City property. Follow up on grading violations, interviews with neighbors. With John Phillips	Site inspection with John Phillips.	Site inspection with John Phillips.	Yes	N/A
15	08/21/08	Residential		1532	E	Washington	Green slime being washed into the gutter.	A site inspection found no current discharge. The discharge point was found to be from a rear patio drain. Water from the swimming pool caused the complaint. Storm water educational materials were issued to both parties.	A site inspection found no current discharge. The discharge point was found to be from a rear patio drain. Water from the swimming pool caused the complaint. Storm water educational materials were issued to both parties.	No	N/A

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Direction	Street/Location	Complaint origin	Complaint/ Observations	City Action	Valid Discharge	Was IC/ID Eliminated
16	08/22/08	Residential		802		Denise St	Neighbor is discharging diatomaceous earth with pool draining. Residue in curb.	Contacted the property owner who was told to clean all residue from the curb and cease discharging D.E. with pool water.	Contacted the property owner who was told to clean all residue from the curb and cease discharging D.E. with pool water.	Yes	Yes
17	08/25/08	Residential		143		Garfield Ave	Auto body repair in driveway and dumping waste in channel.	Contacted the property owner and tenant. Advised to cease all dumping and remove any residue from channel. Zoning enforcement also addressing the illegal business.	Contacted the property owner and tenant. Advised to cease all dumping and remove any residue from channel. Zoning enforcement also addressing the illegal business.	Yes	Yes
18	08/28/08	Residential		674		Palomar	Neighbor washing paint into the gutter.	Discharge located in curb line in front of residence also found hose and nozzel in front yard with white paint residue on it. No response at door. Storm water educational materials left at door.	Discharge located in curb line in front of residence also found hose and nozzel in front yard with white paint residue on it. No response at door. Storm water educational materials left at door.	Yes	Yes
19	08/28/08	Residential		880		Grossmont	Sewage overflow from blocked lateral.	Contacted the property owner to repair and clean. PW crew also cleaned the City's lateral section with no remedy.	Contacted the property owner to repair and clean. PW crew also cleaned the City's lateral section with no remedy.	Yes	Yes
20	09/04/08	Residential		525		Camden	Complaint of over irrigation causing pooling of water in the roadway.	Contacted the apartment manager and requested that the irrigation be adjusted.	Contacted the apartment manager and requested that the irrigation be adjusted.	No	N/A
21	09/09/08	Residential		440		Van Houten Ave	Discharge from sewer lateral into the drainage channel.	Property management contacted to repair sewer lateral an clean the area.	Property management contacted to repair sewer lateral an clean the area.	Yes	Yes
22	09/10/08	Residential		1135		Washington Hts	Vehicle oil spilled on roadway.	No lio found on roadway. Old staining in dirt area next to the road may be oil. No actions taken.	No lio found on roadway. Old staining in dirt area next to the road may be oil. No actions taken.	No	N/A
23	09/18/08	Residential		1433		Granite Hills Dr	Concrete work with no BMPs	Site inspection found no notable violations.	Site inspection found no notable violations.	No	N/A
24	10/08/08	Residential		1301		Groveland	Large amount of water flowing through concrete swale at rear of property and into the street.	Met with Helix water agent on site flushing line upstream. Work was halted and will clean area of all debris and place drain filters. Complainant must remove all construction over the swale.	Met with Helix water agent on site flushing line upstream. Work was halted and will clean area of all debris and place drain filters. Complainant must remove all construction over the swale.	Yes	Yes
25	10/10/08	Residential		236		Chambers Ave	Using water to clean the sidewalk and street in front of residence	Contacted the property owner on site and told to cease using water. Absorbent material was applied to the flow in the curb. The owner used a shop vac to remove the pooled liquid and disposed of it in the sewer.	Contacted the property owner on site and told to cease using water. Absorbent material was applied to the flow in the curb. The owner used a shop vac to remove the pooled liquid and disposed of it in the sewer.	Yes	Yes

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Direction	Street/Location	Complaint origin	Complaint/ Observations	City Action	Valid Discharge	Was IC/ID Eliminated
26	10/21/08	Residential		533		Jamacha	residen pouring fuel and oil in gutter.	Found no fuel or oil discharge. Property owner was drying dyed materials on top of trash cans which then drained to sidewalk carrying sediment. She was told to relocate materials and improve s/w corner of front yard to prevent any future discharge of sediment.	Found no fuel or oil discharge. Property owner was drying dyed materials on top of trash cans which then drained to sidewalk carrying sediment. She was told to relocate materials and improve s/w corner of front yard to prevent any future discharge of sediment.	yes	Yes
27	11/07/08	Residential		1398		Whitsett Dr	Grading in rear yard with no BMPs in place. Doubts resident has grading permit.	Contacted the son of property owner and advised to install BMPs and contact city regarding grading plan submittal.	Contacted the son of property owner and advised to install BMPs and contact city regarding grading plan submittal.	Yes	N/A
28	11/12/08	Residential		1697	E	Lexington	Motorhome dumping raw sewage onto the street.	No evidence of raw sewage discharge.	No evidence of raw sewage discharge.	No	N/A
29	11/25/08	Residential		777		Murray Dr	Complained of mud tracked in front of his residence.	Site inspection found minor sediment tracking for rear of neighboring property.	Site inspection found minor sediment tracking for rear of neighboring property.	No	N/A
30	12/02/08	Residential		797		Lemon Ave	Curb cut to make driveway.	Site inspection found what appears to be an existing cut with no paved driveway leading to a converted garage. No storm water issues noted	Site inspection found what appears to be an existing cut with no paved driveway leading to a converted garage. No storm water issues noted	No	N/A
31	12/12/08	Residential		2721		Katherine St	Heavy rain causes flooding due to clogged storm drains.	City crew responded and found that the drains in front of residence are not city maintained. Flood signs posted.	City crew responded and found that the drains in front of residence are not city maintained. Flood signs posted.	Yes	N/A
32	12/16/08	Residential		1772		Vista Del Valle	Sediment discharging to concrete swale from garage construction. Heavy Rain	Inspected the site with Pat Jackson. Made contact with the complainant and responsible party. Found one edge of garage footing washed out in heavy rain. Has gravel bags on site and deployed.	Inspected the site with Pat Jackson. Made contact with the complainant and responsible party. Found one edge of garage footing washed out in heavy rain. Has gravel bags on site and deployed.	Yes	Yes
33	12/23/08	Residential		2310		Orchard Ave	Sediment flowing into concrete swale during heavy rain.	Inspected the site with Pat J. finding erosion sediment from undeveloped county, non point source, flowing into city maintained drainage channel.	Inspected the site with Pat J. finding erosion sediment from undeveloped county, non point source, flowing into city maintained drainage channel.	yes	N/A
34	01/06/09	Residential		733		Wichita Ave	Tires and wheels dumped at the storm channel overcrossing	Tires were removed prior to any enforcement.	Tires were removed prior to any enforcement.	No	N/A
35	01/07/09	Residential		386		Renette Ave	the complainant stated that a vehicle turned around in her driveway leaving a large trail of oil in the street.	Absorbent material was applied and the PW streetr crew was notified to complete the cleanup	Absorbent material was applied and the PW streetr crew was notified to complete the cleanup	Yes	Yes

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Direction	Street/Location	Complaint origin	Complaint/ Observations	City Action	Valid Discharge	Was IC/ID Eliminated
36	01/09/09	Residential		1452		Green field Dr	Private lateral overflow to gutter.	PW crew prevented the discharge from entering the storm drain inlet. Ther property owner was notified and a plumber responded and made repairs.	PW crew prevented the discharge from entering the storm drain inlet. Ther property owner was notified and a plumber responded and made repairs.	Yes	Yes
37	01/15/09	Residential				Greenfield At Groveland Ter.	Large volume of water running down Greenfield at Tangerine St. and into the storm drain at Secon St.	Site inspection found water from a pool discharge entering Greenfield from undrer sidewalk drain. No odor of chlorine. Complainant advised.	Site inspection found water from a pool discharge entering Greenfield from undrer sidewalk drain. No odor of chlorine. Complainant advised.	Yes	N/A
38	01/21/09	Residential		421	S	Mollison	Private lateral spill at apartment complex. 5 Days old	Contacted the property management Co and the resident. To follow up. Plumbing service cleaned the area.	Contacted the property management Co and the resident. To follow up. Plumbing service cleaned the area.	Yes	Yes
39	02/02/09	Residential	Ballantyne Terrace Apartments	444		Ballantyne	Over flow from private sewer lateral in driveway entering the street and storm drain inlet.	Property manager notified to call plumber. PW crew responded.	Property manager notified to call plumber. PW crew responded.	Yes	Yes
40	02/09/09	Residential		1565		Soma Pl	Water discharge from unknown sounce every morning at 9:30	Site inspection found no evidence of water discharge in the area.	Site inspection found no evidence of water discharge in the area.	No	N/A
41	02/10/09	Residential		1628		Hacienda	Diesel fuel spill on street in front of residence.	Found no evidence of a fuel spill.	Found no evidence of a fuel spill.	Yes	N/A
42	02/11/09	Residential		1163		Peach Ave	Flooding in rear yard during heavy rain. Water draining through base of block wall from neighbor.	Evidence of pooled water in rear yard. Property is low spot of area. This is a civil matter.	Evidence of pooled water in rear yard. Property is low spot of area. This is a civil matter.	No	N/A
43	02/16/09	Residential		1321		Greenfield Dr	Patio and parking lot at condo complex flooded during heavy rain. Drains not moving water.	The complainant was instructed to contact the property management to have the interior drains cleaned. There are no city storm drains involved.	The complainant was instructed to contact the property management to have the interior drains cleaned. There are no city storm drains involved.	No	N/A
44	03/02/09	Residential		1600		Meadow Rd	Cement mixer parked on the street leaking oil with no drip pan under it.	A site inspection found a drip pan under the cement mixer parked on Zephyr St.	A site inspection found a drip pan under the cement mixer parked on Zephyr St.	Yes	N/A
45	03/09/09	Residential		1139		Naranca	Automotive fluid dumped at rear yard into the concrete channel.	The property owner was contacted nd advised to cease any further dumping into the channel. A meeting with the owner is scheduled to gather more info at the site.	The property owner was contacted nd advised to cease any further dumping into the channel. A meeting with the owner is scheduled to gather more info at the site.	Yes	Yes

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Direction	Street/Location	Complaint origin	Complaint/ Observations	City Action	Valid Discharge	Was IC/ID Eliminated
46	03/17/09	Residential	El Cajon Senior Towers	180		Ballantyne	Private lateral over flow into the street and storm drain.	Pw crew responded and recovered a portion of the spill. A portion did reach the storm drin inlet. A plumbing service responded immediately.	Pw crew responded and recovered a portion of the spill. A portion did reach the storm drin inlet. A plumbing service responded immediately.	Yes	Yes
47	04/13/09	Residential		592		Ballantyne	Neighbor dumping concrete wash wate into the gutter from hi back yard.	Contacted the property owner and instructed to dry clean all paved areas. There was concrete residue in the curb line. Storm water educational materials were issued	Contacted the property owner and instructed to dry clean all paved areas. There was concrete residue in the curb line. Storm water educational materials were issued	Yes	Yes
48	04/27/09	Residential		1001		Avocado Ave	Neighbor's gray water flows onto her property. None leaves the property.	Spoke to the complainant and explained that it is a neighbor dispute and not a storm water issue. Advised to contact to zoning enforcement for other concerns.	Spoke to the complainant and explained that it is a neighbor dispute and not a storm water issue. Advised to contact to zoning enforcement for other concerns.	No	N/A
49	05/01/09	Residential		1328		Cuyamaca	Soil piles in front of property from building rennovation with no BMPs in place	Contacted the site superintendent and advised to install perimeter controls and soil cover. No discharge observed. Storm wAter Educational materials were issued.	Contacted the site superintendent and advised to install perimeter controls and soil cover. No discharge observed. Storm wAter Educational materials were issued.	Yes	N/A
50	05/06/09	Residential		683	E	Washington	Apartment lot resurfacing with sediment being tracked onto Washington.	Contacted the apartment manager and instructed him to sweep the paved areas at the end of the day..	Contacted the apartment manager and instructed him to sweep the paved areas at the end of the day..	yes	N/A
51	05/18/09	Residential		1055	S	Mollison	Water is overflowing into the parking lot and into the street.	Site inspection found the discharge was from a dechlorinate spa.	Site inspection found the discharge was from a dechlorinate spa.	No	N/A
52	05/20/09	Residential		959		Naranca Ave	Dog feces being throwm into the concrete channel at the rear of the property.	Contacted the propety owner and advised to cease all dumping into the channel. Educational materials were issued.	Contacted the propety owner and advised to cease all dumping into the channel. Educational materials were issued.	Yes	Yes
53	05/22/09	Residential		922	E	Chase Ave	Neighbor occasionally dsicharges wash water to the street.	site inspedtion found no evidence of a discharge. Storm water educational materials were left at gate.	site inspedtion found no evidence of a discharge. Storm water educational materials were left at gate.	Yes	N/A
54	05/22/09	Residential		2877		Catarac Ct	Resident discharging paint washout to street and storm drain inlet.	Site inspedtion found white paint residue in street and curb in front on residence and leading to drain inlet. Property owner ws contacted and advised to cease all paint washing and to clean the curb area of all residue.	Site inspedtion found white paint residue in street and curb in front on residence and leading to drain inlet. Property owner ws contacted and advised to cease all paint washing and to clean the curb area of all residue.	Yes	Yes

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Direction	Street/Location	Complaint origin	Complaint/ Observations	City Action	Valid Discharge	Was IC/ID Eliminated
55	05/26/09	Residential		1200	N	Mollison	Private lateral overflow to street at this multi unit complex. No onsite manager available. Discharge observed by street crew did not enter the storm drain inlet,	PW crew responded and reclaimed the discharge. Plumbing service was on site to repair the line.	PW crew responded and reclaimed the discharge. Plumbing service was on site to repair the line.	Yes	Yes
56	06/17/09	Residential		803		Lauree St	Resident is throwing dog feces into the concrete channel at the rear of property	There were several small dogs at this address. A door tag was left. The owner responded and said it would not happen again. She would talk to her son.	There were several small dogs at this address. A door tag was left. The owner responded and said it would not happen again. She would talk to her son.	Yes	Yes
57	06/22/09	Residential		391		Garfield Ave	Raw sewage in rear yard of this residence	Site inspection found no response or evidence of a violation. Educatinal material were left.	Site inspection found no response or evidence of a violation. Educatinal material were left.	No	N/A
58	06/29/09	Residential		979		Amistad	Drainage system at the rear of the property clogged with weeds.	Referred the complaint to the PW street crew.	Referred the complaint to the PW street crew.	No	N/A

THIS IS NOT A CITATION

HELP!

Pollutants were found in your neighborhood storm drain.

Our field staff found the following pollutant(s)spilled or dumped into the storm drain system (curb, street, gutter) near your home:

- ❑ Over irrigation usage
- ❑ Motor Oil
- ❑ Antifreeze/Transmission Fluids
- ❑ Cooking grease
- ❑ Detergents
- ❑ Solvents/Degreaser
- ❑ Paint/paint products
- ❑ Home improvement waste
- ❑ Sewage
- ❑ Animal waste
- ❑ Yard waste (leaves, grass, etc.)
- ❑ Uncovered dirt and gravel pile(s).
- ❑ Construction debris
- ❑ Trash
- ❑ Other

Be a Clean Water Leader

Storm water pollution is a problem that affects all of us. With a growing population of more than 95,000 residents and approximately 14 square miles of urbanized development, keeping our waters clean from pollutants has become increasingly difficult. With thousands of storm drain inlets, and nearly 100 miles of storm drain pipes and channels to clean and maintain, we need your help.

When it rains, water flows over across our yards and into our streets carrying pollutants into our storm drains. The problem is that storm drains are not connected to the wastewater sewer treatment plant. So, what's in the streets flows directly into our creeks, rivers and the ocean, without treatment.

Last year, too many of our beaches and bays were closed or posted as unsafe for swimming. As our City

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Leaders have said, “this is more than an inconvenience; it is a civic embarrassment.” **Discharging pollutants to the City's storm drain system is in violation of Title 13.24 of the El Cajon Municipal Code and violations can result in substantial fines.**

But, as a City resident, you can make a difference. By becoming a Clean Water Leader, both on the job and in your community, you can help make our stream, rivers and beaches free of pollution. When you're at home, share your knowledge with neighbors and family. As you drive to work, be aware of any illegal discharges. And, if you do see an illegal discharge, report it. In the City of El Cajon you can **call the City of El Cajon at (619) 441-1653, or the 24-hour Storm Water Hotline at (888) 846-0800**.

Whether at home or at work, by adopting some simple Best Management Practices (BMPs), you can stop pollutants from being generated and entering our storm drain system.

- ✓ Use dry clean-up methods for spills and outdoor cleaning. Vacuum, sweep, and use rags or dry absorbants. Properly remove and dispose of this material when the spill is absorbed.
- ✓ Properly label, store and dispose of hazardous wastes. Rake, sweep up, and place all debris (dust, litter, sediment, etc.) from your yard or near your property into a trashcan.
- ✓ Use a mop only when water is needed.

As you perform your daily activities be proactive. Assess the activity from a storm water pollution point-of-view and ask yourself; “does this activity, directly or indirectly, generate pollution?” And, “how can I get the job done and prevent debris from entering into the storm drain collection system?”

City of El Cajon

STORMWATER
Protection Program

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City of El Cajon

STORMWATER
Protection Program

Pollution Prevention Days at the El Cajon Classic Cruise

8.0 RESIDENTIAL

8.1 INTRODUCTION

A total of 44 percent of the City's 9,274 acres is designated as either multi- or single-family residential. Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the water quality of receiving waters. The City has developed a program that aims to reduce pollutant runoff from residential areas and activities to the MEP.

8.2 SOURCE CHARACTERIZATION

The City of El Cajon has designated high TTWQ residential areas within the City and has also designated a number of high TTWQ residential activities. To reduce pollutant generation from these high TTWQ areas and activities, the City has designated specific BMPs, which are discussed later in this section.

8.2.1 HIGH TTWQ ACTIVITIES

Automobile Repair, Maintenance, Washing, and Parking
Residents sometimes conduct vehicle repair and maintenance outside in areas where possible spills (e.g., used oil, transmission fluid, etc.) have the potential to be transported to the MS4. Residential car washing can result in the release of detergents and debris washed from the vehicle, including heavy metals from brake systems, to the MS4. Additionally, poorly maintained vehicles parked outside may leak pollutants onto driveways and streets, which have the potential to be carried to receiving water bodies in storm water runoff.

Home and Garden Care Activities and Product Use, including Disposal
Home and garden products (e.g., paint, fertilizers, and pesticides) can contribute to storm water pollution if they are not used or stored properly. Excessive irrigation can potentially introduce polluted runoff into the storm drain system. When over-irrigation is discovered, an attempt is made to contact the responsible party. Educational door hangers are left at the residence when homeowners are not home. City personnel schedule a return date to discuss the measures that can be taken by homeowners to prevent over-irrigation.

Green waste from gardening may contain chemicals, such as fertilizers, that may be washed into surface waters and reduce available oxygen for other organisms. If proper BMPs are not implemented during home improvement projects, sediment and debris may be discharged to the storm drain. With an effective combination of BMPs applied to the MEP, simple home projects can meet the City's BMP implementation requirements without much effort or expense.

Disposal of Trash and Pet Waste
Illegal dumping and littering are not only aesthetic concerns; they can also be sources of pollutants to the MS4. Storm water personnel collaborate with the police department regarding residential RV parking and maintenance. El Cajon is home to the only legal dump station in East County. The service station located at West Main Street and Marshall, operates a dump station for RV waste. Advertising this station to all East County residents may reduce the amount of illegal dumping activity within this region of the watershed.

Improper pet waste disposal in residential and public areas can be a source of bacteria and pathogens. Animal waste left on neighborhood lawns and sidewalks and in other public areas may eventually be washed onto streets and carried to receiving water bodies through the City's MS4. If not disposed of properly, HHW (e.g., paints, cleaning products, etc.) may also carry the potential to contribute pollutants to the City's MS4.

8.2.2 High Threat To Water Quality Areas

High TTWQ areas were designated by considering the relative prevalence of high TTWQ activities mentioned above, Dry Weather Monitoring Program results, the frequency and location of reported violations, the findings of inspections and other investigations, and the following criteria as defined in the Municipal Permit:

- Any residential area tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired
- Any residential area within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA

The following 303(d)/ESA area, which is also shown in Map 2 of this document, is located in the City:

- Forester Creek

As previously mentioned, the City has designated all major channels within the City as ESAs. All residential areas within 200 feet of a major channel or directly discharging to or within 200 feet of the 303(d) area listed above were considered high TTWQ. The City has also identified the following high TTWQ areas based on Dry Weather Monitoring Program findings:

Fanita Channel Basin, Fanita Drive and Weld Boulevard
The residential area surrounding Fanita Drive and Weld Boulevard has been monitored in the past as part of the Dry Weather Monitoring Program. Residential activities such as incorrect disposal of green waste and over irrigation may are thought to have contributed to increased levels of bacteria.

Fletcher Parkway Basin, Fletcher Parkway and Chatham Street
Past Dry Weather Monitoring Program results have indicated that over irrigation and incorrect disposal of green waste and trash in the residential area around Fletcher Parkway and Chatham Street may be a source of bacteria.

High TTWQ areas will be inspected to verify that BMPs are properly implemented, as stated below in Section 8.3.1. The inspections will take place in the form of drive-abouts and observations will be recorded accordingly.

8.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

8.3.1 UPDATED BMP REQUIREMENTS

The City of El Cajon continues to encourage the implementation of pollution prevention measures and encourage or require the implementation of BMPs for residential areas and activities, including areas and activities that have been designated high TTWQ and areas and activities that have not been designated high TTWQ. If particular BMPs are not feasible for any specific site or source, the City requires implementation of other equivalent BMPs. Education and outreach aimed at residents helps facilitate the implementation of BMPs, including pollution prevention methods. A detailed discussion of the City's education program can be found later in this section and in Section 10 of this JURMP document.

Residents are encouraged, and in some cases required, to use BMPs, including pollution prevention techniques when performing high TTWQ activities. The following table summarizes the BMP requirements by grouping them into four basic categories. The City has adopted this approach to simplify the message communicated to residents, which should promote better understanding of what is required.

TABLE 8-1
BMPS FOR RESIDENTIAL AREAS AND ACTIVITIES

BMP Group	Automobile Repair & Maintenance	Automobile Washing	Automobile Parking	RV Parking & Maintenance	Garden & Yard Care	Home Care & Maintenance	Pet Waste Disposal	Trash Disposal	Private Lateral Maintenance
Vehicles & Equipment	X	X	X	X					
Home and Garden					X	X	X	X	X
Pets							X		
Private Sewer Lateral						X			X

The following bulleted lists provide additional details about the BMPs requirements summarized in Table 8-1 above.

- **Automobile Repair and Maintenance**
  - The following BMPs are required

        - Prevent leaks and spills from contacting urban runoff by using the following BMPs or their equivalent:
            - Use drip pans, plastic sheeting, or other materials to contain spills
            - Work indoors or under shelter
            - If working outdoors, do not conduct maintenance during rain events
            - Clean up leaks and spills when they occur
            - Clean tools and parts only in contained areas
        - Properly manage and dispose of automotive wastes and materials by using the following BMPs or their equivalent:
            - Properly and lawfully dispose of all wastes
            - Recycle or properly dispose of oil and antifreeze
            - Store materials and wastes indoors or under cover
            - Use secure and watertight containers when storing materials and wastes outside
    - Residents are encouraged to
        - Use routine preventive maintenance practices to prevent vehicle leaks and spills from entering urban runoff
        - Reduce vehicle use by
            - Changing driving habits
            - Carpooling
            - Increasing use of public transportation
            - Biking or walking for short trips
        - Make timely vehicle inspections and repairs
        - Use commercial repair and maintenance facilities to avoid the potential for pollution in residential areas.
- **Automobile Washing**
    - Residents are encouraged to do all of the following BMPs, except where specifically noted to be "required":
        - Use preventive practices to keep vehicles clean (park in garage, under cover, etc.)
        - Reduce volume of wash water
            - Dry cleaning methods to avoid the generation of wash and rinse water
            - Turn off the water when not in use or to use a controllable spray nozzle
            - Contain, capture, or divert wash water from the conveyance system
            - Wash vehicles over pervious surfaces such as lawns or gravel areas
            - Establish neighborhood wash areas where wash water and contaminants can be properly managed

        - Properly manage materials and wastes
            - Use minimal amounts of soap, detergents, and other cleaners when washing vehicles
            - Residents are required to properly dispose of soapy water or bucket rinse water into the sanitary sewer or soak into the lawn
            - Launder rags and towels or dispose of them in the trash
            - Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing. For example, grease or brake dust can be removed using towels.
        - Use commercial wash facilities to avoid the potential for pollution in residential neighborhoods (this may be discussed with residents, for example, during a complaint investigation)
- **Automobile Parking**
    - Residents are encouraged to do all of the following BMPs, except where specifically noted to be "required":
        - Minimize leaks and spills in driveways and parking areas by repairing oil, water, and fuel leaks in vehicles
        - Proper design and construction of parking areas in residences during major redevelopment is required. Further details are given in the Development Planning Component (Section 4 of this document).
        - Clean parking areas using dry methods, particularly where sediments and/or debris has accumulated.
- **Recreational Vehicle Parking and Maintenance**
    - Wastes from recreational vehicles (RV) are required to be disposed of properly. A dump station is located at the service station at West Main Street and Marshall Avenue in the City. This is the only dump station in East County.
- **Garden Care Activities and Product Use**
    - Residents are encouraged to do all of the following BMPs, except where specifically noted to be "required":
        - Leaks and Spills
            - Residents are required to immediately clean up spills of gardening chemicals, fertilizers, and soils.
            - Return spilled materials to the container for future use or to properly dispose if them
        - Materials and Waste Management
            - Use safe substitutes and alternative methods for garden use including
                - Integrated Pest Management (IPM) techniques

        - Use of native plants and drought-tolerant species to reduce water use and the amount of green waste produced
        - Planting techniques to attract beneficial insects
        - Use of biological controls
        - Composting, vermiculture, and yard waste recycling
    - Employ practical purchasing for pesticides and fertilizers:
        - Use minimal amounts of pesticides and fertilizers, to help prevent unnecessary pollutant runoff to the MS4
        - Always read label instructions and follow the instructions for garden care products
    - Conserve water through the use of xeriscape gardening, drip irrigation, soaker hoses, and micro-spray systems
    - Repair or adjust irrigation systems that allow excessive runoff
    - Prevent erosion by planting and mulching hillsides and slopes
    - Store lawn care products in closed, labeled containers and in covered areas
    - Avoid using pesticides, fertilizers, and other materials during windy or rainy days
    - Effectively cover stockpiles of soil, compost or fertilizers with plastic tarps or equivalent methods to prevent dispersal by wind or rain
    - Use dry sweeping techniques for clean up
    - Recycle lawn clippings and greenery waste through local programs
    - Refrain from hosing off paved surfaces to the street or gutter
    - Residents are required to properly dispose of HHW. The City maintains a HHW disposal facility, which is described later in this section. Residents are prohibited from disposing of any hazardous waste into the trash, landfill, or storm drain system
- **Home Care and Maintenance**
    - Residents are encouraged to use proper techniques for spill cleanup and waste disposal.
- **Home Care and Maintenance**
    - The following BMPs are required
        - Leaks and Spills
            - Clean up hazardous materials spills immediately

        - Discharges and HHW
            - Do not dispose wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter, or storm drain
            - Ensure swimming pool water is clear, de-chlorinated, and free of chemicals, sediments, or other pollutants before discharging to the storm drain
            - Do not wash pool filters where discharges may enter storm drainage systems
            - Properly dispose of unwanted HHW
    - Residents are encouraged to implement the following BMPs:
        - Leaks and Spills
            - Use proper techniques for spill cleanup and waste disposal
        - Materials and Waste Management
            - Use practical purchasing for home cleaning and maintenance products to reduce waste. For example, purchase only what is needed for specific projects.
            - Use safe substitutes for home cleaning and maintenance
            - Read and abide by product label instructions
            - Use water based paints
            - Store HHW in closed labeled containers in a covered area
            - Recycle latex paint through community programs
            - Recycle unused, unwanted products
            - Recycle unwanted appliances and household equipment
- **Pet Waste Disposal**
    - Waste Management/ Disposal
        - Pet owners are required to clean up after their pets in the public right of way and on private property not belonging to them. Pet waste bags are supplied at various parks in the City to facilitate this activity, and many Home Owners' Associations (HOA) provide pet waste bags and have posted signs to encourage proper waste disposal.
        - Residents are required to dispose of pet waste to the toilet trash, or other acceptable means
        - Residents are encouraged to clean up pet waste on their private property if pets are allowed to defecate outside
    - Pet Management
        - Residents are prohibited from allowing their pets to run free in residential neighborhoods
- **Disposal of Trash**
    - The following activities are prohibited:
        - Littering
        - Dumping trash, including large appliances, furniture, hazardous waste, and other unwanted items, into the MS4

- The following BMPs are encouraged:
    - Dispose of trash in provided trash cans or shared dumpsters and to ensure trash bags are not leaking prior to disposal
    - Recycle waste products where possible
    - Compost food scraps and green waste where possible
    - Pick up, sweep up, and mop up trash and spills surrounding the trash can/dumpster, using minimal water and cleaning products, if necessary. No discharge to the MS4 is allowable during this process.
    - Keep trash can and/or dumpster lids closed

- **Private Lateral Maintenance**
    - Residents are required to maintain private sewer laterals and septic tanks to prevent blockages or other maintenance issues that could result in SSOs.
    - Residents are encouraged to reduce the amount of grease discharged to the sewer system to help prevent blockages and restrictions in downstream pipes.
    - Residents are required to report any sewage spills from private laterals or leaking septic tanks to the City.

8.3.2 Additional Controls for Residential Areas and Activities Discharging or Tributary to ESAs

The City uses additional measures in certain residential areas where BMP implementation is regarded as especially important. These include residential areas and activities that are known to directly discharge to or are a tributary to an ESA. While conducting dry weather monitoring activities in and around residential areas, City personnel check for IC/IDs, non-storm water discharges, and high TTWQ activities that may be contributing pollutants to the City's MS4. The City's Code Compliance officers, engineering inspectors, and Public Works personnel have also been trained to check for IC/IDs while conducting their routine activities within the City. The City has educational materials on a variety of topics that can be given out to residents depending on the problem that is observed (e.g., residential vehicle washing, littering, vehicle maintenance, etc.). Discharges from residential areas and activities that pose significant threat to ESAs are controlled with the City's public nuisance abatement laws.

8.4 Program Implementation

The residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted, so that pollutants associated with residential activities and areas are minimized to the MEP. The residential program also has an education component, described in the following sections, so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities. The City uses

enforcement mechanisms when necessary to address particularly problematic individuals, activities, and areas.

8.4.1 OUTREACH AND TRAINING

The most efficient way to encourage pollution prevention and BMP implementation and to restrict polluting practices is to educate residents on how to carry out their daily activities in ways that have the smallest potential to discharge pollutants to the MS4.

The major routes for educating the citizens and disseminating information is through newsletters, sewer billing inserts, and City "drive by inspections" where information is delivered directly to target audiences. The City provides the following educational information and training to residents, when appropriate:

- Distribution of educational brochures that target a variety of residential activities (by mail and available at the Public Works and Community Development Services counter)
- Quarterly newsletter
- Distribution of door hangers (during City "drive by inspections")
- Articles in various publications
- Sewer bill inserts advertising Electronic Waste Recycling Event, Pollution Prevention Days Events, and other events in the City
- Mailers
- Radio and TV advertisements
- Movie slides
- Kiosks around City Hall
- Booths at public events
- Cleanups and trash collection walks

Further details can be found in the Education and Public Participation sections (Section 10 and Section 11 of this document, respectively).

8.4.2 USED OIL AND WASTE COLLECTION SERVICES

The City facilitates the proper management and disposal of used oil, toxic materials, and all other HHW. Residents are educated about the disposal of such waste through the City's educational program, which is discussed in Section 10. Residents may take used oil to the following facilities in the City for disposal:

AutoZone #3365	AutoZone #5646	Crest Auto Repair
1080 E. Main St.	1795 E. Main St.	128 La Cresta Rd
El Cajon , CA 92021	El Cajon, CA 92021	El Cajon, CA 92021
(619) 441-1888	(619) 442-0471	(619) 588-8703
CIWMB#: 37-C-06741	CIWMB#: 37-C-04742	CIWMB#: 37-C-05065

EZ Lube Inc - #24
2658 Jamacha Rd
El Cajon, CA 92019
(619) 660-7732
CIWMB#: 37-C-04114

Firestone Store #2254
435 N 2nd St
El Cajon, CA 92021
(619) 440-2626
CIWMB#: 37-C-01197

Jiffy Lube #495
539 N 2nd St
El Cajon, CA 92021
(619) 441-0110
CIWMB#: 37-C-04250

Budget Car Sales
400 N Johnson Ave
El Cajon, CA 92020
(619) 588-3611
CIWMB#: 37-C-07852

Kragen Auto Parts #1173
101 S Mollison
El Cajon, CA 92020
(619) 579-3267
CIWMB#: 37-C-02606

Kragen Auto Parts #1270
485 Broadway
El Cajon, CA 92021
(619) 447-7431
CIWMB#: 37-C-02616

Mazda El Cajon
720 El Cajon Blvd
El Cajon , CA 92020
(619) 442-7050
CIWMB#: 37-C-07616

Oil Changer #503
906 Fletcher Pkwy
El Cajon, CA 92020
(619) 442-3900
CIWMB#: 37-C-00729

Pep Boys #813
201 Jamacha Rd
El Cajon, CA 92019
(619) 590-0084
CIWMB#: 37-C-03442

Jiffy Lube #3004
1621 N. Magnolia
El Cajon , CA 92020
(619) 723-1057
CIWMB#: 37-C-07374

Certified Tire & Service Centers Inc.
790 N. Johnson Ave.
El Cajon , CA 92020
(619) 440-3831
CIWMB#: 37-C-06674

Universal Refuse & Recycling
1001 W Bradley Ave
El Cajon, CA 92020
(619) 596-5123
CIWMB#: 37-C-03200

Valvoline Instant Oil Change
610 N 2nd St
El Cajon, CA 92021
(619) 447-2844
CIWMB#: 37-C-00806

Valvoline Instant Oil Change
2926 Jamacha Road
El Cajon , CA 92019
(858) 273-8539
CIWMB#: 37-C-06609

Each center accepts up to 20 gallons of uncontaminated used motor oil, in containers no larger than 5 gallons each, per person, per day. Certified centers accept used motor oil at no charge and offer a recycling incentive of 16 cents per gallon.

Residents of El Cajon can dispose of HHW at a permanent collection facility operated by Waste Management of San Diego:

Waste Management, Inc.
End of Oconner Street
El Cajon, CA

The facility accepts leftover paint, auto fluids, drain opener, or any unused products containing toxic chemicals upon appointment, by calling (619) 596-5100. On the second and fourth Saturday of each month residents can drop off no more than 15 gallons or 125 pounds of HHW. There is no direct fee to residents of El Cajon and proof of residency is required. Free door-to-door collection services are available to citizens 65 or older, or

households possessing a registered handicap placard. More information can be obtained by calling (619) 596-5100. Residents may dispose of large appliances or furniture by calling Waste Management, Inc. at (619) 596-5107 and schedule a free bulk item pick up.

The City continues to work with the County of San Diego and other East County cities to co-sponsor electronic waste recycling events at Santana High School and Helix High School. Informational sewer inserts urged public participation in such events. Further details can be obtained by calling (877) R-1-EARTH.

8.4.3 HOTLINES AND WEBSITES

The City encourages public reporting of illicit discharges and illegal dumping through the City's Storm Water hotline:

(619) 441-1653

Further information can be gained by contacting the City at:

Public Works Department (619) 441-1653

Information can also be accessed via the City's website, and complaints can be reported via email:

http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Additionally, the storm water hotline is also printed on educational materials discussed distributed by the City.

8.4.4 METHODS EVALUATION AND ENFORCEMENT

The following mechanisms are used by the City to determine areas where enforcement actions may be necessary, where appropriate:

- Public reporting hotline
- Analysis of dry weather monitoring results
- Observations from City maintenance personnel

There are two routes of discovering illegal residential activities. One is through complaint/referral process. Complaints may be received through direct contact with City staff, through calls to the City's storm water hotline, or through the City's website (via e-mail). The other route is observations during scheduled City monitoring and routine City activities such as MS4 maintenance. Additional, focused investigations of areas upstream of exceedances detected during the Dry Weather Monitoring Program and complaint response investigations provide further information about potential problem areas. The City believes that the combination of monitoring, public reporting, direct observations by City staff who are routinely in the field, and targeted additional investigations where necessary provide sufficient oversight of residential areas and activities.

Depending on whether an actual discharge has occurred or there is a potential for discharge, a written warning or Administrative Citation is issued. Corrective actions are verified and the resident is contacted again to ensure that they do not have any further questions. Further details of these enforcement mechanisms can be found in Section 9 of this document.

The City's current programs are believed to be effective in bringing about BMP implementation. As the program continues to develop during the five year Municipal Permit cycle, the City continues to evaluate the methods it uses to encourage improved pollution prevention practices and the implementation of BMPs in its JURMP Annual Reports.

Violations are investigated by City personnel with enforcement authority within a reasonable timeframe. Violations are documented, and, depending on the nature and severity of the violation, enforcement may consist of any of the following:

- Verbal warnings
- Written warnings
- Orders to abate or correct
- Monetary fines

Details of these procedures are included in Section 2 of this document.

8.4.5 Regional Residential Education Program

The City will collaborate with other Copermittees to develop and implement the Regional Residential Education Program required in Section D.3.c.(5) and Section F.1 of the Municipal Permit. The program will include the following components:

- Pollutant-specific education that focuses educational efforts on bacteria, nutrients, sediment, pesticides, and trash. If a different pollutant is determined to be more critical for the education program, the pollutant can be substituted for one of these pollutants.
- Education efforts focused on the specific residential sources of the pollutants listed in Section F.1.a of the Municipal Permit

8.5 Residential Component Effectiveness Assessment

The effectiveness of the residential component will be assessed and documented for review by the RWQCB. Details of the assessment procedure can be found in Section 13 of this document.

8.6 Program Review and Modification

Section 14 identifies the locations in the JURMP where significant changes were made to meet the requirements of the Municipal Permit. Any future changes to the City's residential program will be discussed in JURMP Annual Reports.

Appendix A.7
(No Content)

Appendix A.8

IEA Luncheon

Municipal Storm Water Permit Workgroup

Karen Holman – San Diego Unified Port District
Jaime Campos – City of El Cajon

San Diego Regional Industrial /Commercial Sources Workgroup

Municipal Regulatory Overview

FEDERAL

Clean Water Act (*1972*)

STATE

Porter Cologne Act

LOCAL

San Diego Municipal Stormwater Permit – R9-2007-0001 (Municipal Permit)

Industrial Regulatory Driver

FEDERAL

Clean Water Act *(1972)*

STATE

State Water Resources Control Board – Water Quality Order No. 97-03-DWQ (General Industrial Permit)

Development of S.D. Regional Industrial/Commercial Workgroup

The S.D. Regional Industrial/Commercial Workgroup (IC Workgroup) was established as part of the updated Copermittee Memorandum of Understanding (MOU), entered into agreement by the twenty-one Municipal Copermittees in the S.D. Region, as required by the Municipal Permit.

- One of the responsibilities of the IC Workgroup is to develop, annually review, and update as necessary recommended regional standards and approaches for management of industrial and commercial sources and activities.

Regionalize Efforts

The IC Workgroup is attempting, whenever possible, to provide a level of consistency across the region while maintaining compliance with the Municipal Permit. A few of the items that have been identified are the following:

- Education intended for industrial/commercial facilities;
- Collection of information that will assist in the development of watershed industrial/commercial facility inventories;
- Collection of similar data to help assess improvement in water quality;
- Coordination in developing and implementing mobile business programs to include sharing of mobile business inventories, BMP requirements, education, and other information;
- Development of a mechanism to improve cross-jurisdictional information.

How is Standardization Going to Be Accomplished?

The IC Workgroup is planning to review existing standards and procedures and make recommendations when current standards are found not to be effective. Some of these standards and procedures are the following:

- Inspection standards that can be implemented by all Copermittees;
- Integration of watershed assessments for inventories;
- Implementation of BMPs.

What Potential Changes to Expect

1. Implementation of additional or more effective BMPs.

2. The Permit combines inspection requirements for industrial and commercial facilities, resulting in the need to conduct updated watershed inventories of all industrial and commercial facilities – new facilities may be part of the inventory.

3. Per the permit criteria and based on the inventory of facilities, by the second permit year Copermittees are required to inspect all facilities that have been identified to pose a high threat to water quality – this may result in more inspections than in the previous permit year.

4. Sharing of mobile business inventories amongst the Copermittees may result in business having to acquire business licenses at every Jurisdiction in which it conducts business

Thank you
Questions?
S.D. Regional Industrial/Commercial Sources Workgroup

Appendix A.9

CITY OF EL CAJON
PUBLIC PARTICIPATION MECHANISMS
PY2 – 2008/2009

DATE	LOCATION	NUMBER CONTACTED	DESCRIPTION
7/9/08	City of El Cajon Main Street	300	Pollution Prevention at Classic Cruise
9/17/08	City of El Cajon Main Street	300	Pollution Prevention at Classic Cruise
10/4/07	City of El Cajon Fire Station	3,000	Fire Station Open House
11/18/08	Various Locations Through out the City	7	Grossmont-Cuyamaca Community College District

CITY OF EL CAJON

www.ci.el-cajon.ca.us

PUBLIC WORKS DEPARTMENT

November 18, 2008

LETTER OF PERMISSION TO STENCIL STORM DRAIN INLETS IN THE CITY OF EL CAJON

This letter gives permission to Ashley Peterson other Grossmont-Cuyamaca Community College District volunteers to apply the message "No Dumping…I Live Downstream" and a depiction of a dolphin or duck to the curb area directly adjacent to storm drain inlets within the City of El Cajon. Validity of this letter of permission is for one week after the date of this letter.

We would like to thank you for your efforts in this important endeavor, which will help the City of El Cajon in educating the public regarding storm water runoff and pollution prevention.

All storm drain stenciling activities should be coordinated with our Storm Water Program staff, the City Manager's Office and the Police Department to properly identify neighborhood within our city where inlets would benefit from being stenciled and to secure areas for volunteers to park cars and safely coordinate activities. City Storm Water staff can be contacted as described below.

Should you have any questions or require additional information, please contact Jaime Campos at (619) 441-5554, jcampos@ci.el-cajon.ca.us

Approved by:

Jaime Campos

Jaime Campos
Storm Water Program Manager
City of El Cajon Storm Water Protection Program

200 CIVIC CENTER WAY • EL CAJON, CA 92020-3916 • TEL: (619) 441-1653 • FAX: (619) 579-5254

Printed on recycled paper.

CITY OF EL CAJON

PUBLIC WORKS DEPARTMENT

Natalie Roberts
I Love A Clean San Diego
4891 Pacific Highway, Suite 115
San Diego, CA 92110

December 21, 2007

LETTER OF PERMISSION FOR I LOVE A CLEAN SAN DIEGO (ILACSD) TO STENCIL STORM DRAIN INLETS IN THE CITY OF EL CAJON

This letter gives permission to ILACSD staff and volunteers to apply the message "No Dumping…I Live Downstream" and a depiction of a dolphin or duck to the curb area directly adjacent to storm drain inlets within the City of El Cajon. Validity of this letter of permission is for two years from the date of this letter, unless otherwise notified.

We strongly support and would like to thank I Love A Clean San Diego for their efforts in this important program, which will help the City of El Cajon in educating the public regarding storm water runoff and pollution prevention.

All storm water stenciling activities should be coordinated with our Storm Water Program staff, the City Manager's Office and the Police Department to properly identify neighborhoods within our city where inlets would benefit from being stenciled and to secure areas for volunteers to park cars and safely coordinate activities. City Storm Water staff can be contacted as described below.

Should you have any questions or require additional information, please contact Jaime Campos at (619) 441-5554, jcampos@ci.el-cajon.ca.us or Robert W. Griswold at (619) 441-1704, bgriswold@ci.el-cajon.ca.us.

Approved by:

Jaime Campos
Associate Civil Engineer
Storm Water Program Manager

City of El Cajon Storm Water Protection Program

200 E. MAIN STREET • EL CAJON, CA 92020-3996 • TEL: (619) 441-1653 • FAX: (619) 579-5254

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Appendix A.10

PUBLIC WORKS - NPDES COMPLIANCE

ACTIVITY NO: 650750

EXPENDITURE SUMMARY	2006-2007 ACTUAL	2007-2008 ACTUAL	2008-2009 AMENDED BUDGET	2008-2009 EST. ACTUAL	2009-2010 PROPOSED
SALARIES & BENEFITS	550,856	722,809	753,548	711,098	848,985
MAT'L, SVC & SUPPLIES	254,876	397,242	677,636	513,821	734,272
CAPITAL OUTLAY	29,953	73,593		-	-
OTHER FINANCING USES	-	-	-	-	-
TOTAL	835,685	1,193,644	1,431,184	1,224,919	1,583,257

DETAIL OF PERSONNEL SERVICES

JOB CLASSIFICATION	2006-2007 ACTUAL	2007-2008 ACTUAL	2008-2009 ACTUAL	2009-2010 PROPOSED
Deputy Director of Public Works	0.55	0.55	0.55	0.55
City Traffic Engineer	0.05	0.00	0.00	0.00
Associate Engineer	1.10	1.20	1.20	1.20
Assistant Civil Engineer	1.00	1.00	1.00	1.00
Supervising Engineering Technician	0.10	0.00	0.10	0.10
Senior Management Analyst	0.15	0.15	0.15	0.15
Management Analyst/GIS Analyst	0.30	0.30	0.30	1.00
Administrative Secretary	0.20	0.20	0.20	0.20
Secretary	0.10	0.10	0.10	0.15
Senior Engineering Technician	0.65	0.65	0.65	0.65
Engineering Technician	0.70	0.70	0.50	0.60
Code Compliance Officer	1.00	1.00	1.00	1.00
Engineering Aide	0.00	0.00	0.10	0.00
Geographic Information Systems Technician	1.00	1.00	1.00	1.00
Public Works Maintenance Worker II / Trainee	2.00	0.00	0.00	0.00
Civil Engineering Intern	0.00	0.50	0.50	0.50
TOTAL	**8.90**	**6.85**	**6.85**	**8.10**

Activity: **Public Works NPDES Compliance** **Activity #:** **650750**

ACCOUNT / LINE ITEM NUMBER	JUSTIFICATION FOR SUPPLIES AND SERVICES BRIEF STATEMENTS & ESTIMATED AMOUNTS USED IN CALCULATING TOTALS FOR EACH LINE ITEM	FY2008-09 AMOUNT	CHANGE REQUESTED	FY2009-10 REQUEST
8150	**OFFICE SUPPLIES**	**$4,900**	**$0**	**$4,900**
	a Toner cartridges for printing of public education and outreach materials	$4,900	$0	$4,900
8160	**OPERATING SUPPLIES**	**$8,000**	**-$3,000**	**$5,000**
	a Various supplies needed for Pollution Prevention Days - decrease due to usage	$8,000	-$3,000	$5,000
8345	**LEGAL SERVICES**	**$3,000**	**$4,500**	**$7,500**
	a City Attorney's Office charges increase of $4,500 due to pending litigation on unfunded mandates	$3,000	$4,500	$7,500
8363	**SYSTEM / COMPUTER ANALYST**	**$25,000**	**$30,000**	**$55,000**
	a GIS Consultant - increase of $25,000 due to combining of lines items with an overall decrease of $25,000	$25,000	$25,000	$50,000
	b eCommunity Plus special programming for low priority construction project reporting		$5,000	$5,000
8365	**TEMPORARY SERVICES**	**$50,000**	**-$50,000**	**$0**
	a GIS Data Input - decrease due to combining of line items with 8363 a	$50,000	-$50,000	$0
8395	**OTHER/PROFESSIONAL/TECHNICAL SERVICES**	**$428,641**	**$11,359**	**$440,000**
	a San Diego River Watershed Management and update Watershed Urban Runoff Management Program Implementation - shared cost with Watershed copermitees.	$50,000	$50,000	$100,000
	b Industrial Commercial Inspections as required by the new 2007-01 permit and updated JURMP	$200,000	-$50,000	$150,000
	c San Diego Regional Co-permittee Memorandum of Understanding Cost	$70,000	$10,000	$80,000
	d Dry Weather Testing and Extended Dry Weather Testing	$75,000	$0	$75,000
	e As needed on-call engineering services for plan check for SUSMP, Erosion Control Plans and Drainage Studies	$28,641	$1,359	$30,000
	f Update of Jurisdictional Urban Runoff Management Program (recurs every five years)	$0	$0	$0
	g Installation of bacteria treatment structural BMPs to conduct pilot study - pilot program replaced by line item h	$5,000	-$5,000	$0
	h Water Quality Grant Writing services for request of State funds for Water Quality Monitoring, Water Quality Improvement Projects and Watershed Protection in Forrester Creek	$0	$5,000	$5,000
8510	**OVERHEAD REIMBURSEMENT**	**$81,706**	**$47,151**	**$128,857**
	a Provided by Finance	$81,706	$47,151	$128,857
8511	**FLEET/EQUIPMENT MAINTENANCE**	**$12,100**	**$13,980**	**$26,080**
	a Provided by Fleet Maintenance	$12,100	$13,980	$26,080
8522	**ADVERTISING**	**$1,000**	**$0**	**$1,000**
	a Advertising of Pollution Prevention Days	$1,000	$0	$1,000
8528	**COMMUNICATIONS**	**$2,000**	**$0**	**$2,000**
	a Telephone and cellular phone service	$2,000	$0	$2,000

Activity: **Public Works NPDES Compliance** **Activity #:** **650750**

ACCOUNT / LINE ITEM NUMBER	JUSTIFICATION FOR SUPPLIES AND SERVICES BRIEF STATEMENTS & ESTIMATED AMOUNTS USED IN CALCULATING TOTALS FOR EACH LINE ITEM	FY2008-09 AMOUNT	CHANGE REQUESTED	FY2009-10 REQUEST
8530	**CONTRIBUTIONS**	**$0**	**$500**	**$500**
	a Contribution to the San Diego River Coalition		$500	$500
8560	**PERMITS & FEES**	**$20,000**	**$0**	**$20,000**
	a State Water Resources Control Board Fee	$20,000	$0	$20,000
8570	**PRINTING & BINDING**	**$8,500**	**$0**	**$8,500**
	a Utility bill inserts for Pollution Prevention Days	$2,200	$0	$2,200
	b Poster and Brochure printing for Pollution Prevention Days	$0	$0	$0
	c Outreach (Reprints of various storm water outreach materials)	$2,200	$0	$2,200
	d City Newsletter Printing	$4,100	$0	$4,100
8572	**PROMOTIONS**	**$10,000**	**$0**	**$10,000**
	a Promotional items for education and outreach efforts including Pollution Prevention Days	$10,000	$0	$10,000
8576	**REPAIRS & MAINTENANCE**	**$1,359**	**$2,000**	**$3,359**
	a Copier and typewriter maintenance	$1,359	$2,000	$3,359
8586	**SOFTWARE AGREEMENTS**	**$17,930**	**$146**	**$18,076**
	a Business License Database	$720	$0	$720
	b Miscellaneous Software Agreements	$2,300	$0	$2,300
	c ESRI Maintenance Agreement	$9,000	$0	$9,000
	d Permitting Software Maintenance Agreement	$3,000	$0	$3,000
	e Share of Community Plus Licenses - increase of $146 due to rate increase	$2,910	$146	$3,056
8594	**TRAINING, MEETINGS, & SCHOOLS**	**$3,500**	**$0**	**$3,500**
	a Training for Division personnel	$3,500	$0	$3,500
	TOTAL MATERIALS, SUPPLIES, & SERVICES	**$677,636**	**$56,636**	**$734,272**

FY 2009-2010 ANNUAL BUDGET
DEPARTMENT EXPENDITURE WORKSHEET

Acct #	Account Title	FY06-07 Actual	FY07-08 Actual	FY08-09 Budgeted	FY08-09 Estimated	FY09-10 Requested
650750						WASTEWATER - NPDES
7110	SALARIES	382,366	474,486	493,514	468,442	557,716
7120	OVERTIME	83	418	250	2,000	500
7130	VACATION/SICK CONVERSIONS	4,866	3,962	6,000	4,527	4,229
7140	FURLOUGH	-	-	-	-	-
7170	STIPEND	-	6,500	-	-	-
7310	PERS (EMPLOYER)	109,674	146,812	156,722	148,776	177,026
7312	POST RETIREMENT BENEFITS	-	9,697	10,470	10,693	11,064
7315	MEDICARE TAX	4,753	6,254	7,156	6,379	8,087
7320	SOCIAL SECURITY TAX	-	-	-	-	-
7325	CAFETERIA	40,195	53,323	57,540	53,710	63,840
7330	COMPENSATED ABSENCES	86	9,445	-	-	-
7335	WORKERS COMPENSATION	6,051	7,808	17,569	12,813	21,068
7340	LIFE INSURANCE	1,196	1,884	1,858	1,688	2,462
7345	LTD INSURANCE	1,194	1,666	1,850	1,552	2,243
7350	STD INSURANCE	393	555	619	518	750
7360	UNIFORM ALLOWANCE	-	-	-	-	-
TOTAL	SALARY & BENEFITS	550,856	722,809	753,548	711,098	848,985
8150	OFFICE SUPPLIES	2,216	2,693	4,900	4,900	4,900
8160	OPERATING SUPPLIES	2,568	2,453	8,000	4,500	5,000
8345	LEGAL SERVICES	-	-	3,000	7,500	7,500
8363	SYSTEM / COMPUTER ANALYST	-	17,550	25,000	-	55,000
8365	TEMPORARY SERVICES	-	-	50,000	25,000	-
8395	OTHER PROF/TECH SERVICES	102,787	229,284	428,641	305,000	440,000
8510	OVERHEAD REIMBURSEMENT	80,723	88,659	81,706	81,706	128,857
8511	FLEET/EQUIP REIMBURSEMENT	14,477	7,204	12,100	24,736	26,080
8520	VEHICLE REPLACEMNT CHARGE	-	-	-	-	-
8522	ADVERTISING	-	-	1,000	250	1,000
8528	COMMUNICATIONS	1,772	1,435	2,000	1,000	2,000
8530	CONTRIBUTIONS	-	-	-	-	500
8560	PERMITS AND FEES	14,826	17,930	20,000	17,999	20,000
8570	PRINTING AND BINDING	8,704	5,192	8,500	12,000	8,500
8572	PROMOTIONS	2,746	10,002	10,000	7,000	10,000
8574	RENT EXPENSE	-	-	-	-	-
8576	REPAIRS AND MAINTENANCE	-	-	1,359	3,300	3,359
8586	SOFTWARE AGREEMENTS	22,028	9,924	17,930	17,930	18,076
8588	SUBSCRIPTIONS	-	-	-	-	-
8594	TRAINING/MEETINGS/SCHOOLS	2,029	4,916	3,500	1,000	3,500
TOTAL	MAT'L, SVC & SUPPLIES	254,876	397,242	677,636	513,821	734,272
9010	MINOR FURN&EQUIP <$10,000	-	7,065	-	-	-
9020	MINOR COMPUTERS <$10,000	12,738	7,859	-	-	-
9030	SOFTWARE	17,216	39,055	-	-	-
9035	FURN & EQUIP >$10,000	-	19,615	-	-	-
9040	VEHICLES	-	-	-	-	-
TOTAL	CAPITAL OUTLAY	29,953	73,593	-	-	-
	ACTIVITY TOTAL	835,685	1,193,644	1,431,184	1,224,919	1,583,257

Appendix A.11
(No Content)

Appendix A.12

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

August 20, 2009
Project No. 200928W-4

Jaime Campos, P.E.
Storm Water Program Manager
City of El Cajon
Department of Public Works
200 Civic Center Way
El Cajon, CA 92020-3916

Re: 2009 Forester Creek Impact Study
City of El Cajon, California

Dear Mr. Campos:

Enclosed please find our report for the City of El Cajon 2009 Forester Creek Impact Study. This project, conducted since 2004, is an additional study of the water quality in Forester Creek as it passes through El Cajon. The contents include field screening data, analytical laboratory test results, and analyses of the collected data. Copies of field data sheets and laboratory reports are attached.

It has been our pleasure working with the City of El Cajon on this project. If you have any questions regarding this report, please contact me at (858) 586-6600.

Sincerely,
D-MAX Engineering, Inc.

John Quenzer
Project Scientist

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

2009 CITY OF EL CAJON
FORESTER CREEK IMPACT STUDY

Forester Creek enters the City of El Cajon (City) from the east, running parallel to Interstate 8. After passing SR-67, the creek curves northward through the area around Gillespie Field before flowing into the City of Santee. Forester Creek eventually flows to the San Diego River just east of the junction of SR-52 and SR-125.

Constituents of Concern

The 2006 303(d) identified Forester Creek as an impaired water body for the following constituents:

- Fecal coliforms
- pH
- Total dissolved solids (TDS)
- Low dissolved oxygen
- Phosphorus

Additionally, the most recent San Diego River Watershed Urban Runoff Management Program (WURMP) document identified the following constituents of concern for the watershed as a whole:

- Bacterial indicators
- TDS
- Low dissolved oxygen
- Phosphorus
- Turbidity

Site Selection

This goal of the Forester Creek Impact Study is to evaluate water quality changes in the creek as it flows through the City of El Cajon. To do so, one sample was collected from the creek near at its entrance to the City from the east (upstream) and another sample was taken where the creek exits the City in the north (downstream). Coordinates and site descriptions for both locations are listed in Table 1. To prevent duplicate sampling and to minimize the costs of this study, Site 5 from the City's Dry Weather Monitoring Program and MS4 Outfall Monitoring Program was used as the downstream sample location. The upstream sampling location has been moved twice since 2002 due to the variable nature of the flow coming into the City. When Forester Creek receives no water from outside the city limits, the sampling location may be moved slightly downstream to the nearest location with flowing or ponded water. Table 4 lists the previous upstream sampling locations.

The same field and laboratory methods used during the City's Dry Weather Monitoring Program were used during the Forester Creek Impact Study. Samples were analyzed in the field for the following parameters:

- Temperature
- pH
- Turbidity
- Conductivity

- Surfactants
- Ammonia-nitrogen (ammonia-N)
- Nitrate-nitrogen (nitrate-N)
- Orthophosphate-phosphorus (orthophosphate-P)
- Dissolved oxygen

Samples were collected and submitted to EnviroMatrix Analytical, Inc, a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Oil and grease
- Total hardness
- Dissolved cadmium
- Dissolved copper
- Dissolved lead
- Dissolved zinc
- Diazinon
- Chlorpyrifos
- Total coliform bacteria
- Fecal coliform bacteria
- *Enterococcus* bacteria
- Total dissolved solids (TDS)
- Total organic carbon (TOC)

Results and Analysis

To assess changes in water quality as the creek flows through the City, a comparison is made of constituent measurements at the upstream and downstream locations. A direct comparison of upstream and downstream constituent concentrations may be misleading, since flow is greater at the downstream end. In 2009, the flow was measured at 2 gpm at the upstream site and 108 gpm downstream, indicating that nearly all of the water in Forester Creek at the downstream location has been generated within City limits. However, the downstream flow rate is the lowest recorded in the history of the program and is about 40 percent of the average flow rate recorded over the previous eight years. The decrease is likely due to increased water conservation activities in the area and to 2008 and 2009 being relatively dry years, which likely reduced base flow.

In 2009, temperature was measured at 27.2°C upstream and 30.7°C downstream. The value for pH increased from 7.8 upstream to 8.9 downstream. The higher downstream value is likely a result of increased temperature and photosynthesis in the wide, shallow channel. Typically, pH increases as sunlight stimulates algal photosynthesis, and carbon dioxide, which when dissolved in water lowers the pH, is removed from water. Also, as temperature increases, carbon dioxide is less soluble in water, further increasing pH.

Measurements for the turbidity, conductivity, ammonia-nitrogen, and dissolved oxygen were higher at the downstream end. Surfactants were measured to be 0.25 mg/L at both sampling locations, and nitrate-nitrogen decreased from 9.88 mg/L upstream to 2.38 mg/L downstream.

For laboratory constituents, total hardness, copper, TDS, and TOC were greater at the downstream site. Measurements of total coliforms, fecal coliforms, and Enterococci were lower downstream. Oil and grease, diazinon, chlorpyrifos, cadmium, lead, and zinc were

not detected at either location. Field screening results are presented in Table 2, and laboratory analytical data is presented in Table 3.

Historical data for the upstream site is presented in tables 5 and 6, and historical data for the downstream site is presented in tables 7 and 8. The data in these tables have been compared to Dry Weather Monitoring Program action levels and Water Quality Objectives (WQO) where available. The action levels were developed regionally by the Copermittee Dry Weather Monitoring Sub-Workgroup, and the WQO have been compiled from the Basin Plan and a guidance document prepared by the Copermittee Regional Monitoring Workgroup. Note that the field test ammonia-nitrogen, nitrate-nitrogen, surfactants, and orthophosphate-phosphorus data was collected using test kits, which have much larger associated uncertainty than laboratory tests. These field test kits are useful in detecting major exceedances but are inherently less precise than laboratory analytical tests.

On average over the years, flow has been substantially larger downstream than the upstream sampling point. The large decrease in the downstream flow rate in 2009 relative to previous years indicates that even though pollutant concentrations in 2009 were not substantially different from levels recorded in recent years, the pollutant load leaving the City was much lower. Measurements of pH, ammonia-nitrogen, dissolved oxygen, TDS, and TOC have been slightly higher downstream. Conversely, nitrate-nitrogen, orthophosphate-phosphorus, and bacteria levels have generally been higher at the upstream site.

Table 1
2009 Site Locations

Site	Location	Description	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
Upstream	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Exxon station at 1699 East Main Street	Concrete Channel	Commercial	Residential	907.13	32.81185	-116.91795
Downstream	Adjacent to the Weld Boulevard Trolley Station, southeast of the Marshall Avenue/Cuyamaca Street intersection	Concrete Channel	Commercial	Industrial	907.13	32.82665	-116.98226

Table 2
2009 Field Screening Results

Site	Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Dissolved Oxygen (mg/L)
Upstream	6/25/2009	2	27.2	7.8	2.06	1.74	0.25	0.128	9.88	0.07 [1]	6.48
Downstream	6/25/2009	108	30.7	8.9	14.82	2.81	0.25	0.301	2.38	0.08 [1,2]	8.25

Note:
[1] Value is below the practical detection limit and therefore has more uncertainty associated with the result.
[2] Laboratory analysis for total phosphorus was completed for the downstream site as part of the City's MS4 Outfall Monitoring Program. Since orthophosphate-P is usually a major component of total phosphorus, the total phosphorus level is usually slightly higher than the orthophosphate-P level. The lab total phosphorus result was 0.10 mg/L, indicating that the field orthophosphate-P was fairly accurate.

Table 3
2009 Laboratory Analytical Results

Site	Date	Oil & Grease (mg/L)	Total Hardness (mg/L$CaCO_3$)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Diazinon	Chlorpyrifos	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	6/25/2009	nd	490	nd	0.002	nd	nd	nd	nd	14,000	1,300	3,000	1,080	3.5
Downstream	6/25/2009	nd	616	nd	0.003	nd	nd	nd	nd	2,800	270	130	1,680	12

Note: nd = not detected

Table 4
Forester Creek Upstream Site Yearly Locations

Year	Upstream Sampling Location
2006-2009	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Exxon station at 1699 East Main Street
2005	Fourth Street, north of Rancho Cajon Place, east side of the street
2004	Forester Creek at East Main Street and Oakdale Avenue

Table 5
Upstream Site 2004-2009 Field Screening Data

Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Dissolved Oxygen (mg/L)
6/24/2004	26.5	22.5	8.4	8.28	1.72	0.13	0.1	1.30	nd[1]	na
6/9/2005	2	18.8	8.4	80	1.35	0.25	0.2	8.75	0.26	8.94
6/13/2006	3	27.9	8.0	1.85	1.66	0.25	0.4	6.25	0.03	8.33
8/2/2007	2	26.7	7.6	1.28	1.61	0.38	0.1	8.14	0.07	7.66
8/11/2008	3	26.0	7.5	1.85	1.77	0.25	0.1	8.68	0.07	6.74
6/25/2009	2	27.2	7.8	2.06	1.74	0.25	0.1	9.88	0.07	6.48
Maximum	27	27.9	8.4	80	1.77	0.38	0.4	9.88	0.26	8.94
Minimum	2	18.8	7.5	1.28	1.35	0.13	0.1	1.30	nd	6.48
Average	6	24.9	8.0	15.89	1.64	0.25	0.2	7.17	0.08	7.63
Median	3	26.4	7.9	1.96	1.69	0.25	0.1	8.41	0.07	7.66
Ambient WQO	*	**(narrative)**	**<6.5, >9.0**	**20**	**	**0.5**	**EPA Freshwater CMC*** **	****	****	**<5.0**
% Exceedance *(WQO)*	*	0	0	17	**	0	0	****	****	0
Dry Weather Action Level	*	**BPJ**	**<6.5, >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10**	**2**	*
% Exceedance *(Dry Weather Action Level)*	*	0	0	17	0	0	0	0	0	*

Notes:

nd = not detected
na = not analyzed
EPA = Environmental Protection Agency
BPJ = Best Professional Judgment

[1] Half the value of the detection limit value was used in statistical calculations for the not detected constituent.

* No established limit

** There is no clear WQO in the Basin Plan, but a comparison is not necessary since TDS has been measured directly. See the laboratory data tables for TDS results.

*** The criterion maximum concentration (salmonids absent), which varies based on pH, has been used because it applies to a one-hour maximum, and the ammonia level for this study was measured based on an instantaneous grab sample. See http://www.epa.gov/waterscience/criteria/ammonia.

**** Regional guidance suggests using the EPA's nutrient endpoint tool to determine the WQO. This tool requires more data than what has been collected within the scope of this study.

Table 6
Upstream Site 2004-2009 Laboratory Analytical Data[1]

Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
6/24/2004	nd	5	409	nd	nd	nd	nd	240,000	2,100	500	1,020	10.4
6/9/2005	nd	nd	960	nd	nd	nd	nd	900,000	16,000	24,000	1,810	86.1
6/13/2006	nd	nd	48	nd	nd	nd	nd	300,000	3,000	8,000	1,090	11.4
8/2/2007	nd	nd	579	nd	nd	nd	nd	2,200	500	270	1,150	5.2
8/11/2008	na	nd	420	nd	nd	nd	nd	1,300	1,300	1,300	1,670	11.9
6/25/2009	na	nd	490	nd	0.002	nd	nd	14,000	1,300	3,000	1,080	3.5
Maximum	nd	5	960	nd	0.002	nd	nd	900,000	16,000	24,000	1,810	86.1
Minimum	nd	nd	48	nd	nd	nd	nd	1,300	500	270	1,020	3.5
Average	*	*	484	*	*	*	*	242,917	4,033	6,178	1,303	21.4
Median	*	*	455	*	*	*	*	127,000	1,700	2,150	1,120	10.9
WQO	0.5	10	**	CTR CCC	CTR CCC	CTR CCC	CTR CCC	**	400	151	1,500***	**
% Exceedance *(WQO)*	0	0	**	0	0	0	0	**	100	100	33	**
Dry Weather Action Level	1.0	15	**	CTR CMC	CTR CMC	CTR CMC	CTR CMC	50,000	20,000	10,000	**	**
% Exceedance *(Dry Weather Action Level)*	0	0	**	0	0	0	0	50	0	17	**	**

Notes:

nd = not detected
na = not analyzed
CCC =Criterion Continuous Concentration
CMC = Criterion Maximum Concentration
CTR = California Toxics Rule, see http://www.epa.gov/ost/standards/ctr/toxic.pdf

[1] Diazinon and chlorpyrifos have not been detected in the history of this program and have been omitted from this table.
* Statistical calculation not performed
** No established limit
*** The Basin Plan does not list a TDS WQO for hydrologic subarea (HAS) 907.13. This value is taken from HAS 907.12, the closest HSA to 907.13.

Table 7
Downstream Site 2002-2009 Field Screening Data

Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate-P (mg/L)	Dissolved Oxygen (mg/L)
8/22/2002	168	32	8.8	15.13	2.55	0.37	0.3	0.1	0.03	na
8/14/2003	299	29	8.6	6.36	2.7	0.13	0.2	2	nd[1]	11.1
6/24/2004	204	30	8.7	19.75	2.73	0.25	0.3	2.5	nd[1]	na
6/28/2004	244	20.6	8.3	4.74	2.32	0.38	0.3	1.25	0.03	7.51
6/9/2005	412	25.5	8.6	3.43	1.24	0.50	0.1	6.25	0.03	12.74
6/13/2006	421	27.9	8.7	2.06	2.58	0.25	0.8	5	0.03	10.66
7/3/2007	281	27.8	8.3	9.91	2.35	0.50	0.3	1.92	0.07	10.4
8/11/2008	234	32.0	8.7	5.57	2.80	0.25	0.3	2.12	0.03	9.64
6/25/2009	108	30.7	8.9	14.82	2.81	0.25	0.3	2.38	0.08	8.25
Maximum	421	32.0	8.9	19.75	2.81	0.50	0.8	6.25	0.08	12.74
Minimum	108	20.6	8.3	2.06	1.24	0.13	0.1	0.10	nd	7.51
Average	263	28.4	8.6	9.09	2.45	0.32	0.3	2.61	0.03	10.04
Median	244	29.0	8.7	6.36	2.58	0.25	0.3	2.12	0.03	10.40
Ambient WQO	*	**(narrative)**	**<6.5, >9.0**	**20**	**	**0.5**	**EPA Freshwater CMC*** **	****	****	**<5.0**
% Exceedance *(WQO)*	*	0	0	0	**	22	0	****	****	0
Dry Weather Action Level	*	**BPJ**	**<6.5, >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10**	**2**	*
% Exceedance *(Dry Weather Action Level)*	*	0	0	0	0	0	0	0	0	*

Notes:
nd = not detected; na = not analyzed; EPA = Environmental Protection Agency; BPJ = Best Professional Judgment
[1] Half the value of the detection or reporting limit value was used in statistical calculations for the not detected constituent.
* No established limit
** There is no clear WQO in the Basin Plan, but a comparison is not necessary since TDS has been measured directly. See the laboratory data tables for TDS results.
*** The criterion maximum concentration (salmonids absent), which varies based on pH, has been used because it applies to a one-hour maximum, and the ammonia level for this study was measured based on an instantaneous grab sample. See http://www.epa.gov/waterscience/criteria/ammonia.
**** Regional guidance suggests using the EPA's nutrient endpoint tool to determine the WQO. This tool requires more data than what has been collected within the scope of this study.

Table 8
Downstream Site 2002-2009 Laboratory Analytical Data[1]

Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
8/22/2002	nd	nd	549	nd	nd	nd	nd	30,000	17,000	300	na	na
8/14/2003	nd	nd	624	nd	0.01	nd	nd	8,000	2,300	800	1,490	10.6
6/24/2004	nd	4	536	nd	nd	nd	nd	35,000	1,100	20	1,590	16.3
6/28/2004	nd	nd	699	nd	nd	nd	nd	130,000	800	340	1,900	10.9
6/9/2005	nd	nd	810	nd	nd	nd	nd	30,000	1,300	5,000	1,700	53.4
6/13/2006	nd	nd	60	nd	nd	nd	nd	170,000	500	70	1,600	9.52
7/3/2007	nd	nd	649	nd	nd	nd	nd	30,000	5,000	800	1,400	14.1
8/11/2008	na	nd	480	nd	nd	nd	nd	5,000	1,300	40	1,120	45.5
6/25/2009	na	nd	616	nd	0.003	nd	nd	2,800	270	130	1,680	12
Maximum	nd	4	810	nd	0.01	nd	nd	170,000	17,000	5,000	1,900	53.4
Minimum	nd	nd	60	nd	nd	nd	nd	2,800	270	20	1,120	9.52
Average	*	*	558	*	*	*	*	48,978	3,286	833	1,560	21.54
Median	*	*	616	*	*	*	*	30,000	1,300	300	1,595	13.05
WQO	**0.5**	**10**	**	**CTR CCC**	**CTR CCC**	**CTR CCC**	**CTR CCC**	**	**400**	**151**	**1,500*** **	**
% Exceedance *(WQO)*	0	0	**	0	0	0	0	**	89	66	63	**
Dry Weather Action Level	**1.0**	**15**	**	**CTR CMC**	**CTR CMC**	**CTR CMC**	**CTR CMC**	**50,000**	**20,000**	**10,000**	**	**
% Exceedance *(Dry Weather Action Level)*	0	0	**	0	0	0	0	22	0	0	**	**

Notes:
nd = not detected; na = not analyzed
CCC =Criteria Continuous Concentration
CMC = Criteria Maximum Concentration
CTR = California Toxics Rule, see http://www.epa.gov/ost/standards/ctr/toxic.pdf
[1] Diazinon and chlorpyrifos have not been detected in the history of this program and have been omitted from this table.
* Statistical calculation not performed
** No established limit
*** The Basin Plan does not list a WQO for hydrologic subarea (HAS) 907.13. This value is taken from HAS 907.12, the closest HSA to 907.13.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	Forrester Creek - upstream		Latitude	32.81185	Watershed	Hydrologic Unit	907
Location	Greenfield and I-8 west onramp intersection behind southeast corner of Exxon station at 1699 E. Main St		Longitude	-116.91795		Hydrologic Area	907.1
			TB Page	1252 B3		Hydrologic Subarea (Optional)	907.13
Date	6/25/09	Time 14:45	Observer	MP, DK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 13-14

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.2	NH_3-N (mg/L)	0.128	NO_3 (mg/L)	43.70	Ortho-PO_4 (mg/L)	0.214
pH (pH units)	7.8	TURB (NTU)	2.06	NO_3-N (mg/L)	9.88	Ortho-PO_4-P (mg/L)	0.070
COND (mS/cm)	1.734	MBAS (mg/L)	0.25	Others DO	6.48		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash: paper, cups, food wrappers

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	5		Latitude	32.~~81165~~ 82665	Watershed	Hydrologic Unit	907
Location	Adjacent to the Weld Blvd. Trolley Station, SE of the Marshall Ave. / Cuyamaca St. intersection		Longitude	-116.98226		Hydrologic Area	907.1
			TB Page	1251-D1		Hydrologic Subarea (Optional)	907.13
Date	6/25/09	Time 16:00	Observer	DK, MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 15, 6

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	30.7	NH_3-N (mg/L)	0.301	NO_3 (mg/L)	~~0.301~~ 10.61	Ortho-PO_4 (mg/L)	0.234
pH (pH units)	8.9	TURB (NTU)	14.82	NO_3-N (mg/L)	2.375	Ortho-PO_4-P (mg/L)	0.076
COND (mS/cm)	2.31	MBAS (mg/L)	0.25	Others 50	8.25		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	30	in
Depth	0.5	in
Velocity	10/10	ft/sec
Flow	108	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Algae, Snails observed. Trash: paper, plastic bottles

EnviroMatrix Analytical, Inc.

06 July 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906760

Project Name: El Cajon Dry Weather
Project Desc./#:200928W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/25/09 17:05. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Forester Cr. Upstream	0906760-01	Water	06/25/09 14:45	06/25/09 17:05
Site 5	0906760-02	Water	06/25/09 16:00	06/25/09 17:05

NOTE: The TOC analyses were performed by a subcontract laboratory, results to follow in a separate report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0906760-01) Water Sampled: 06/25/09 14:45 Received: 06/25/09 17:05									
Cadmium	ND	0.001	mg/l	1	9062701	06/27/09	06/27/09	EPA 200.8	
Copper	**0.002**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Site 5 (0906760-02) Water Sampled: 06/25/09 16:00 Received: 06/25/09 17:05									
Cadmium	ND	0.001	mg/l	1	9062701	06/27/09	06/27/09	EPA 200.8	
Copper	**0.003**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0906760-01) Water Sampled: 06/25/09 14:45 Received: 06/25/09 17:05									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9063040	06/30/09	07/01/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*104 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*104 %*	*60-130*		"	"	"	"	
Site 5 (0906760-02) Water Sampled: 06/25/09 16:00 Received: 06/25/09 17:05									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9063040	06/30/09	07/01/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*124 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*116 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0906760-01) Water Sampled: 06/25/09 14:45 Received: 06/25/09 17:05									
Hardness (Total)	**490**	100	mg CaCO3/L	10	9063049	06/30/09	07/01/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9062610	06/26/09	06/26/09	EPA 1664A	
Site 5 (0906760-02) Water Sampled: 06/25/09 16:00 Received: 06/25/09 17:05									
Hardness (Total)	**616**	100	mg CaCO3/L	10	9063049	06/30/09	07/01/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9062610	06/26/09	06/26/09	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0906760-01) Water Sampled: 06/25/09 14:45 Received: 06/25/09 17:05									
Total Coliforms	**14000**	200	MPN/100 ml	100	9063009	06/25/09	06/29/09	SM 9221 B, E	
Fecal Coliforms	**1300**	20	"	10	"	"	06/28/09	"	
Enterococcus	**3000**	20	"	"	9063010	"	06/29/09	SM 9230 A, B	
Site 5 (0906760-02) Water Sampled: 06/25/09 16:00 Received: 06/25/09 17:05									
Total Coliforms	**2800**	20	MPN/100 ml	10	9063009	06/25/09	06/29/09	SM 9221 B, E	
Fecal Coliforms	**270**	20	"	"	"	"	06/28/09	"	
Enterococcus	**130**	20	"	"	9063010	"	06/29/09	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062701										
Blank (9062701-BLK1)				Prepared & Analyzed: 06/27/09						
Copper	ND	0.001	mg/l							
Cadmium	ND	0.001	"							
Zinc	ND	0.020	"							
Lead	ND	0.001	"							
LCS (9062701-BS1)				Prepared & Analyzed: 06/27/09						
Lead	0.051	0.001	mg/l	0.0500		103	75-125			
Zinc	0.052	0.020	"	0.0500		103	85-115			
Copper	0.051	0.001	"	0.0500		103	85-115			
Cadmium	0.052	0.001	"	0.0500		105	85-115			
LCS Dup (9062701-BSD1)				Prepared & Analyzed: 06/27/09						
Zinc	0.052	0.020	mg/l	0.0500		105	85-115	1	20	
Cadmium	0.053	0.001	"	0.0500		106	85-115	2	20	
Lead	0.051	0.001	"	0.0500		102	75-125	0.9	20	
Copper	0.052	0.001	"	0.0500		104	85-115	0.9	20	
Duplicate (9062701-DUP1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Zinc	ND	0.020	mg/l		ND				20	
Lead	ND	0.001	"		ND				20	
Copper	ND	0.001	"		ND				20	
Cadmium	ND	0.001	"		ND				20	
Matrix Spike (9062701-MS1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Lead	0.047	0.001	mg/l	0.0500	ND	94	75-125			
Copper	0.048	0.001	"	0.0500	ND	96	70-130			
Zinc	0.048	0.020	"	0.0500	ND	96	70-130			
Cadmium	0.049	0.001	"	0.0500	ND	98	70-130			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062701										
Matrix Spike Dup (9062701-MSD1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Zinc	0.049	0.020	mg/l	0.0500	ND	98	70-130	2	20	
Lead	0.049	0.001	"	0.0500	ND	97	75-125	4	20	
Cadmium	0.050	0.001	"	0.0500	ND	100	70-130	2	20	
Copper	0.048	0.001	"	0.0500	ND	97	70-130	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9063040										
Blank (9063040-BLK1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.240*		"	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.250*		"	*0.250*		*100*	*60-130*			
LCS (9063040-BS1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Bolstar	0.43	0.10	ug/l	0.500		86	60-130			
Diazinon	0.33	0.05	"	0.500		66	60-130			
Ethoprop	0.49	0.05	"	0.500		98	60-130			
Mevinphos	0.43	0.25	"	0.500		86	60-130			
Methyl parathion	0.45	0.10	"	0.500		90	60-130			
Phorate	0.45	0.05	"	0.500		90	60-130			
onnel	0.52	0.25	"	0.500		104	60-130			
Trichlorinate	0.47	0.05	"	0.500		94	60-130			
Surrogate: Triphenyl phosphate	*0.260*		"	*0.250*		*104*	*60-130*			
Surrogate: Tribuytlphosphate	*0.280*		"	*0.250*		*112*	*60-130*			
LCS Dup (9063040-BSD1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Bolstar	0.32	0.10	ug/l	0.500		64	60-130	29	30	
Diazinon	0.35	0.05	"	0.500		70	60-130	6	30	
Ethoprop	0.48	0.05	"	0.500		96	60-130	2	30	
Mevinphos	0.43	0.25	"	0.500		86	60-130	0	30	
Methyl parathion	0.42	0.10	"	0.500		84	60-130	7	30	
Phorate	0.45	0.05	"	0.500		90	60-130	0	30	
Ronnel	0.47	0.25	"	0.500		94	60-130	10	30	
Trichlorinate	0.42	0.05	"	0.500		84	60-130	11	30	
Surrogate: Triphenyl phosphate	*0.280*		"	*0.250*		*112*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*		"	*0.250*		*108*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062610										
Blank (9062610-BLK1)				Prepared & Analyzed: 06/26/09						
Oil & Grease	ND	5	mg/l							
LCS (9062610-BS1)				Prepared & Analyzed: 06/26/09						
Oil & Grease	33	5	mg/l	40.0		84	78-114			
LCS Dup (9062610-BSD1)				Prepared & Analyzed: 06/26/09						
Oil & Grease	33	5	mg/l	40.0		82	78-114	1	20	
Batch 9063049										
Blank (9063049-BLK1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9063049-DUP1)		**Source: 0906758-02**		Prepared: 06/30/09 Analyzed: 07/01/09						
Hardness (Total)	275	10	mg CaCO3/L		271			1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.

page____of____

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

EMA LOG #: 0906760

Client: D-Max Engineering, Inc.

Attn: Arsalan Dadkhah

Sampler(s): Manouchehr / David

Address: 7220 Trade street, Suite 119
San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: Elcajon 1154 Monitoring

Project #: 200928W-3 PO#:

SAMPLE DETAILS

REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) X TSS X TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn X Dissolved	Coliform X Total (MTF) X Fecal (MTF) ☐Colilert, T+E.Coli	Enterococcus, X MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Toc	Total Hardness	Total Nitrogen-N	Total Phosphorus P	TDS	Microbiology Notes: / Sample Comments:
01	Forester Cr. Upptream	6/25/09	14:45	water	G/p 4/4	X							X						X	X	X			X	X		X	
02	site 5	"	16:00	"	" 4/5	X							X		X				X	X	X			X	X	X	X	
03																												
04																												
05																												
06																												
07																												
08																												
09																												
10																												

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☐STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other_____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature:	6/25/09
Print: Manouchehr Dadkhah	Print: Seem Flory	17:05
Company: D-Max Eng	Company: EMA Inc.	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

Tu Bi on ian

09 July 2009

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0906760

Project Name: El Cajon MS4 Monitoring
Project Number: 200928W-3

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- TOC-Liquid by SM5310B

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

4340 Viewridge Avenue, Suite A • San Diego, California 92123 • (858) 560-7717 • Fax (858) 560-7763
Analytical Chemistry Laboratory

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

LABORATORY REPORT

Prepared For: EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jennifer Beyer

Project: 0906760

Sampled: 06/25/09
Received: 06/26/09
Issued: 07/08/09 16:17

NELAP #01108CA California ELAP#2706 CSDLAC #10256 AZ #AZ0671 NV #CA01531

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

LABORATORY ID	CLIENT ID	MATRIX
ISF2750-01	0906760-01	Water
ISF2750-02	0906760-02	Water

Reviewed By:

TestAmerica Irvine

D.J. Watson
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jennifer Beyer

Project ID: 0906760

Report Number: ISF2750

Sampled: 06/25/09
Received: 06/26/09

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISF2750-01 (0906760-01 - Water)								
Reporting Units: mg/l								
Total Organic Carbon	SM5310B	9F29005	1.0	**3.5**	1	6/29/2009	6/29/2009	
Sample ID: ISF2750-02 (0906760-02 - Water)								
Reporting Units: mg/l								
Total Organic Carbon	SM5310B	9F29005	1.0	**12**	1	6/29/2009	6/29/2009	

TestAmerica Irvine

D.J. Watson
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jennifer Beyer

Project ID: 0906760
Report Number: ISF2750

Sampled: 06/25/09
Received: 06/26/09

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9F29005 Extracted: 06/29/09										
Blank Analyzed: 06/29/2009 (9F29005-BLK1)										
Total Organic Carbon	ND	1.0	mg/l							
LCS Analyzed: 06/29/2009 (9F29005-BS1)										
Total Organic Carbon	10.3	1.0	mg/l	10.0		103	90-110			
Matrix Spike Analyzed: 06/29/2009 (9F29005-MS1)					**Source: ISF2778-01**					
Total Organic Carbon	9.14	1.0	mg/l	5.00	4.58	91	80-120			
Matrix Spike Dup Analyzed: 06/29/2009 (9F29005-MSD1)					**Source: ISF2778-01**					
Total Organic Carbon	9.38	1.0	mg/l	5.00	4.58	96	80-120	3	20	

TestAmerica Irvine

D.J. Watson
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jennifer Beyer

Project ID: 0906760

Report Number: ISF2750

Sampled: 06/25/09
Received: 06/26/09

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference

TestAmerica Irvine

D.J. Watson
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax (949) 260-3297

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jennifer Beyer

Project ID: 0906760

Report Number: ISF2750

Sampled: 06/25/09
Received: 06/26/09

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
SM5310B	Water	X	X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Irvine

D.J. Watson
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0906760

ISF2750

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Test America-Irvine [S]
17461 Derian Avenue, Suite 100
Irvine, California 92614-5817
Phone :949-261-1022
Fax: 949-261-1228

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0906760-01	**Water**	**Sampled:06/25/09 14:45**	[redacted]	
TOC-Liquid by SM5310B	~~07/06/09 16:00~~	07/23/09 14:45		
Containers Supplied:				
Voa Vial - HCl (C)	Voa Vial - HCl (D)			
Sample ID: 0906760-02	**Water**	**Sampled:06/25/09 16:00**	[redacted]	
TOC-Liquid by SM5310B	~~07/06/09 16:00~~	07/23/09 16:00		
Containers Supplied:				
Voa Vial - HCl (C)	Voa Vial - HCl (D)			

Send report to jbeyer@enviromatrixinc.com, flick@enviromatrixinc.com, and reports@enviromatrixinc.com

Released By	Date	Received By	Date
	6/26/09 11:08	Adrian Figueroa TA.	6-26-09 11:08
Adrian Figueroa TA.	6-26-09 17:58		6/26/09 17:58
Released By	Date	Received By	Date

001

3.4

CHAIN-OF-CUSTODY FORM

EnviroMatrix **EMA** *Analytical, Inc.*

page____of____

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

EMA LOG #: 0906760

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / David
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same
Project ID: Elcajon 1754 Monitoring
Project #: 200928W-3 PO#:

SAMPLE DETAILS / REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) X TSS X TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Zn) (Pb) (Cu) Ni Ag ☐Dissolved	Coliform: X Total (MTF) X Fecal (MTF) ☐Colilert,T=E.Coli	Enterococcus, X MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Toc	Total Hardness	Total Nitrogen-N	Total Phosphorus P	TDS	Sample Comments:
01	Forester Cr. Upstream	6/25/09	14:45	water	G/p 4/4	X							X							X	X	X		X	X		X		
02	site 5	"	16:00	"	" 4/5	X							X		X					X	X	X		X	X	X	X		
03																													
04																													
05																													
06																													
07																													
08																													
09																													
10																													

Microbiology Notes:

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A — Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A — Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A — Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature:	6/25/09
Print: Manouchehr Dadkhah	Print: Seem Flory	17:05
Company: D-Max Eng.	Company: EMA Inc.	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

Tubidum

El Cajon Dry Weather and MS4 Monitoring Laboratory Reports

Date	Site	Dry Weather Report	MS4 Monitoring Report
—	Site 2	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
6/25/09	Site 5	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
—	Site 41	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
—	Site 101	(none)	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
6/25/09	Forrester Creek Upstream (FC-Upstream)	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	(None)

Highlighting denotes a test that is performed once but reported in both MS4 and Dry Weather reports.

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0906760

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Test America-Irvine [S]
17461 Derian Avenue, Suite 100
Irvine, California 92614-5817
Phone :949-261-1022
Fax: 949-261-1228

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0906760-01	**Water**	**Sampled:06/25/09 14:45**	[redacted]	
TOC-Liquid by SM5310B	~~07/06/09 16:00~~	07/23/09 14:45		
Containers Supplied:				
Voa Vial - HCl (C)	Voa Vial - HCl (D)			
Sample ID: 0906760-02	**Water**	**Sampled:06/25/09 16:00**	[redacted]	
TOC-Liquid by SM5310B	~~07/06/09 16:00~~	07/23/09 16:00		
Containers Supplied:				
Voa Vial - HCl (C)	Voa Vial - HCl (D)			

Send report to jbeyer@enviromatrixinc.com, lkick@enviromatrixinc.com, and reports@enviromatrixinc.com

Released By	Date	Received By	Date
	6/26/09 11:08	Adrian Figueroa TA.	6-26-09 11:08

EnviroMatrix Analytical, Inc.

06 July 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906760

Project Name: El Cajon MS4 Monitoring
Project Desc./#:200928W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/25/09 17:05. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 0906760

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Forester Cr. Upstream	0906760-01	Water	06/25/09 14:45	06/25/09 17:05
Site 5	0906760-02	Water	06/25/09 16:00	06/25/09 17:05

NOTE: The TOC analyses were performed by a subcontract laboratory, results to follow in a separate report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 0906760

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0906760-01) Water Sampled: 06/25/09 14:45 Received: 06/25/09 17:05									
Total Dissolved Solids	**1080**	20.0	mg/l	1	9063005	06/30/09	07/01/09	SM2540 C	
Site 5 (0906760-02) Water Sampled: 06/25/09 16:00 Received: 06/25/09 17:05									
Nitrate/Nitrite as N	**4.46**	0.50	mg/l	10	9063003	06/30/09	06/30/09	SM4500 NO3 E	
Total Kjeldahl Nitrogen	**2.6**	0.5	"	1	9063002	06/30/09	06/30/09	SM4500 N C	
Total Nitrogen	**7.1**	0.5	"	"	9063047	06/30/09	06/30/09	Calculation	
Phosphorus, Total	**0.10**	0.05	"	"	9070606	07/06/09	07/06/09	SM4500 P B, E	
Total Dissolved Solids	**1680**	20.0	"	"	9063005	06/30/09	07/01/09	SM2540 C	
Total Suspended Solids	**30.0**	20.0	"	"	9063004	06/30/09	07/01/09	SM2540 D	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 0906760

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0906760-01) Water Sampled: 06/25/09 14:45 Received: 06/25/09 17:05									
Total Coliforms	**14000**	200	MPN/100 ml	100	9063009	06/25/09	06/29/09	SM 9221 B, E	
Fecal Coliforms	**1300**	20	"	10	"	"	06/28/09	"	
Enterococcus	**3000**	20	"	"	9063010	"	06/29/09	SM 9230 A, B	
Site 5 (0906760-02) Water Sampled: 06/25/09 16:00 Received: 06/25/09 17:05									
Total Coliforms	**2800**	20	MPN/100 ml	10	9063009	06/25/09	06/29/09	SM 9221 B, E	
Fecal Coliforms	**270**	20	"	"	"	"	06/28/09	"	
Enterococcus	**130**	20	"	"	9063010	"	06/29/09	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 0906760

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9063002										
Blank (9063002-BLK1)				Prepared & Analyzed: 06/30/09						
Total Kjeldahl Nitrogen	ND	0.5	mg/l							
LCS (9063002-BS1)				Prepared & Analyzed: 06/30/09						
Total Kjeldahl Nitrogen	4.6	0.5	mg/l	4.10		113	80-120			
LCS Dup (9063002-BSD1)				Prepared & Analyzed: 06/30/09						
Total Kjeldahl Nitrogen	3.8	0.5	mg/l	4.10		92	80-120	20	20	
Duplicate (9063002-DUP1)		**Source: 0906757-01**		Prepared & Analyzed: 06/30/09						
Total Kjeldahl Nitrogen	3.9	0.5	mg/l		3.3			17	20	
Matrix Spike (9063002-MS1)		**Source: 0906757-01**		Prepared & Analyzed: 06/30/09						
Total Kjeldahl Nitrogen	5.6	0.5	mg/l	4.10	3.3	57	80-120			QM-05
Matrix Spike Dup (9063002-MSD1)		**Source: 0906757-01**		Prepared & Analyzed: 06/30/09						
Total Kjeldahl Nitrogen	6.7	0.5	mg/l	4.10	3.3	85	80-120	18	20	
Batch 9063003										
Blank (9063003-BLK1)				Prepared & Analyzed: 06/30/09						
Nitrate/Nitrite as N	ND	0.05	mg/l							
LCS (9063003-BS1)				Prepared & Analyzed: 06/30/09						
Nitrate/Nitrite as N	0.51	0.05	mg/l	0.500		102	80-120			
LCS Dup (9063003-BSD1)				Prepared & Analyzed: 06/30/09						
Nitrate/Nitrite as N	0.52	0.05	mg/l	0.500		105	80-120	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 0906760

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9063003										
Duplicate (9063003-DUP1)		**Source: 0906819-01**		Prepared & Analyzed: 06/30/09						
Nitrate/Nitrite as N	0.37	0.05	mg/l		0.36			3	20	
Matrix Spike (9063003-MS1)		**Source: 0906819-01**		Prepared & Analyzed: 06/30/09						
Nitrate/Nitrite as N	0.93	0.05	mg/l	0.500	0.36	115	80-120			
Matrix Spike Dup (9063003-MSD1)		**Source: 0906819-01**		Prepared & Analyzed: 06/30/09						
Nitrate/Nitrite as N	0.89	0.05	mg/l	0.500	0.36	106	80-120	5	20	
Reference (9063003-SRM1)				Prepared & Analyzed: 06/30/09						
Nitrate/Nitrite as N	0.73	0.05	mg/l	0.688		106	8.81-109.0			
Batch 9063004										
Blank (9063004-BLK1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Total Suspended Solids	ND	20.0	mg/l							
Duplicate (9063004-DUP1)		**Source: 0906751-03**		Prepared: 06/30/09 Analyzed: 07/01/09						
Total Suspended Solids	ND	20.0	mg/l		ND				20	
Reference (9063004-SRM1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Total Suspended Solids	43.6	20.0	mg/l	41.9		104	4.94-113.1			
Batch 9063005										
Blank (9063005-BLK1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Total Dissolved Solids	ND	20.0	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 0906760

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9063005										
Duplicate (9063005-DUP1)		**Source: 0906751-03**		Prepared: 06/30/09 Analyzed: 07/01/09						
Total Dissolved Solids	1290	20.0	mg/l		1130			13	20	
Reference (9063005-SRM1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Total Dissolved Solids	189	20.0	mg/l	178		106	7.08-112.9			
Batch 9070606										
Blank (9070606-BLK1)				Prepared & Analyzed: 07/06/09						
Phosphorus, Total	ND	0.05	mg/l							
LCS (9070606-BS1)				Prepared & Analyzed: 07/06/09						
Phosphorus, Total	0.48	0.05	mg/l	0.500		96	80-120			
LCS Dup (9070606-BSD1)				Prepared & Analyzed: 07/06/09						
Phosphorus, Total	0.50	0.05	mg/l	0.500		99	80-120	3	20	
Duplicate (9070606-DUP1)		**Source: 0906760-02**		Prepared & Analyzed: 07/06/09						
Phosphorus, Total	0.11	0.05	mg/l		0.10			9	20	
Matrix Spike (9070606-MS1)		**Source: 0906760-02**		Prepared & Analyzed: 07/06/09						
Phosphorus, Total	0.59	0.05	mg/l	0.500	0.10	99	80-120			
Matrix Spike Dup (9070606-MSD1)		**Source: 0906760-02**		Prepared & Analyzed: 07/06/09						
Phosphorus, Total	0.56	0.05	mg/l	0.500	0.10	93	80-120	5	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering Project Name: El Cajon MS4 Monitoring	**EMA Log #: 0906760**

Notes and Definitions

QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.

page ____ of ____

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

EMA LOG #: 0906760

Client: D-MAX Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / David
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: Elcajon 1754 Monitoring
Project #: 200928W-3 PO#:

SAMPLE DETAILS

REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☒TSS ☒TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cu Pb Ni Ag Zn ☒Dissolved	Coliform, ☒Total (MTF) ☒Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☒MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Toc	Total Hardness	Total Nitrogen-N	Total Phosphorus P	TDS	Microbiology Notes: / Sample Comments:
01	Forester Cr. Upptream	6/25/09	14:45	water	G/p 4/4	X							X						X	X	X		X	X		X		
02	site 5	"	16:00	"	" 4/5	X							X		X				X	X	X		X	X	X	X		
03																												
04																												
05																												
06																												
07																												
08																												
09																												
10																												

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☐STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature:	6/25/09
Print: Manouchehr Dadkhah	Print: Seam Flory	17:05
Company: D-MAX Eng.	Company: EMA Inc.	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T. Bi on in

Appendix B.1

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
1	07/01/08	Residential		2584	Katherine St	Metal drain pipe on slope across street causing erosion when it rains.	Referred to PW street crew to evaluate position and condition of the pipe.	No		N/A
2	07/01/08	Residential		1043	Sunshine	Strong smell of sewage coming from under the house and ground is wet.	Met with the complainant's mother(tenent). Found no odor or sewage. No discharges observed. Most likely pooled water under very old house from deteriorated cast iron pipes. Advised to contact a plumbing service.	No		N/A
3	07/02/08	Commercial	Sew Pros	393	Broadway	Power washing the parking lot with no BMPs to prevent water from discharging to the street and gutter.	Contacted the business owner in process of washing the lot. He was advised to immediately cease and use a dry method for any future cleaning. Storm water educational materials were issued.	Yes		Yes
4	07/03/08	Commercial	SD County Credit Union	312	Main St	Broken irrigation pipe causing discharge of pollutants into the storm drain inlet located in ther rear alley.	Contacterd the office manager and advised to allert maintenance to repair the broken system. It was repaired the same day.	Yes		Yes
5	07/08/08	Commercial	Ultimate Champion of Tires	445	El Cajon Blvd	Water dumped and being swept into the street at tire change business behind AM/PM.	Contacted the business owner who stated that before he opened, someone washed a vehicle and he swept the water into the street.	No		Yes
6	07/09/08	Residential		244	Shady Lane	Large amount of dust and dirt in the street from road resurfacing.	No discharge observed on site. Roadway resurfacing underway. The contractor was contacted and advised to sweep all debris from the street and sidewalk. Storm water educational materials were issued.	Yes		N/A
7	07/10/08	Residential		712	Garfield Ave	Citizen phone complaint of a broken irrigation line at the property with water running into the street.	Contacted the resident and advised to cut the water to the irrigation and repair it. The work was done the same day.	Yes	Verbal Warning	Yes
8	07/11/08	Commercial	Nails by Jacklyn	131	Magnolia	Employee using water to clean the building and paved area in front and side. No BMPs in place to prevent discharge to street and storm drain inlet.	Contacted the business owner and advised to cease all water use for cleaning and to use a dry method. Educational materials were issued.	Yes		Yes
9	07/14/08	Commercial	Wrangler Bar B Que	901	El Cajon Blvd	Grease discharged from the restaurant's waste grease bin.	Site inspection found the spill being cleanes by pressure wash company with proper BMPs implemented. Business owner stated waste container leaked and will be replaced. Discharge was confined to parking lot.	Yes		Yes
10	07/17/08	Residential		1311	Chase Ave	Grey water being released and flowing onto Chase Ave.	No evidence of a grey water discharge. Outside city limit.	No		N/A
11	07/17/08	Commercial	Por Favor Restaurant	148	Main St	Power washing outside patio allowing water to enter the alley behind the business.	Contacted the manager and advised to cease all washing activity and use an dry method until proper BMPs can be installed.	Yes	Monetary Citation	Yes
12	07/21/08	Commercial	PW Environmental	1015	Marshall	Carpet cleaning company discharged carpet cleaning wastewater to the storm drain.	Employees were contacted on site. This is a monitoring well. Using peroxide to unclog the system. No discharge to the storm water system.	No		N/A
13	07/21/08	Residential		283	Meadow Crest Dr	Repeat complaint of gray water being drained onto the sidewalk in front of the residence.	Site inspection found minor evidence of a discharge at base of brick wall in front of property. Will arrange full inspection with owner. Discharge found to be pool water over splash into patio drain at rear of house.	Yes		N/A

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
14	07/24/08	Residential		757	Pierce St	Citizen's phone complaint that irrigation system has been continuously running for two days and no response at the door.	Inspection found front yard irrigation overflowing into the street. No response at door. Water was turned off to the system. Card left at door. Owner responded later.	Yes		Yes
15	07/24/08	Residential		1045	Terrace Crest Dr	Citizen's phone complaint that a brown liquid was being discharged into the gutter.	No discharge noted in front of the residence or in street.	No		N/A
16	07/28/08	Commercial	Country Hills Health Care	1580	Broadway	Water from over irrigation flowing into the street and storm drain inlet.	Contacted the manager and advised that there may be a broken irrigation line. Porperty maintenance to research problem.	Yes	Written Warning	N/A
17	07/28/08	Commercial	Sunburst Transportation	1722	Main St	Fuel transport employee discharged approx. 40 agllons of fuel in rear lot of the CHP office.	PW crew and fire dept. on site to prevent flow from reaching the storm drain system. Hazardous waste company on site to clean and remove discharge. All contained on site.	Yes		Yes
18	07/30/08	Residential		636	Medford	Discharge of blackwater from and occupied camper in rear yard onto neighboring church property and entering the storm drain.	Notified zoning enforcement. The property owner and the occupant of the camper were contacted on site. A discharge pipe connected to the camper ended at the rear block wall . All other utilities were also attached to the camper. The owner was told to immedialtely remove all utilities and cease all discharges. The pipe was removed and capped. He was also instruced to clean the surrounding soil.	Yes		Yes
19	07/31/08	Construction	Habitat For Humanity	801	Avocado Ave	Inadequate construction entrance allowing tracking of sedimet into the street.	Written warning issued to the contractor. Advised to cease tracking sediment and sweep thestreet and sidewalk of all sediment.	Yes	Written Warning	Yes
20	08/05/08	Residential		129	Gina Ave	Someone at the residence dumping paint in the storm drain.	Storm water contacted the property owner on site. She accidentally spilled red paint I the driveway and used wate to clean it . The flow entered the gurb flowing north. None entered a drain inlet. She was advised to cease all use of water to clean paved areas and was given storm water educatinal materials.	Yes		Yes
21	08/04/08	Commercial	Yogurt Mill	935	Broadway	Waste yogurt on ground around the area.	Contacted the manager of the Yogurt Mill regarding housekeeping and power washing of the lot.	Yes	Verbal Warning	N/A
22	08/04/08	Residential		1460	Whitsett	Drainage problem of unknown origin pooling in rear yard.	Met with the property owner on site and viewed rear yard pooling. Unable to determine source. No threat of discharge to street.	No	N/A	N/A
23	08/08/08	Commercial	Fletcher Hills Kwik Stop	2410	Fletcher Parkway	Service station employee using water and soap to clean the lot with no BMPs in place. Polluted water enterd the street and storm drain inlet.	Coontacted the business owner and advised to use a dry method to clean all paved areas.	Yes	Verbal	Yes
24	08/12/08	Commercial	Balboa Ambulance	1138	Broadway	Business operating with no business lic., next to channel with vehicle maintenance.	Contacted the operations manager and advised to conduct vehicle maintenance and washing off site and to obtain a valid city license.	Yes	Verbal	N/A
25	08/13/08	Commercial	Vacant Business	701	Johnson	Contractor observed using power washer to clean the exterior of the building with no BMPs in place. Discharge entered the street but no inlet.	Contacted the contractor and advised to cease using water to clean. Storm water educational materials were issued.	Yes	Verbal	Yes

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
26	08/14/08	Residential		1890	Calle del Conejo	Neighbor discharging into rear swale from two hoses.	Located two hoses from the pool area placed in concrete swale. Advised tenant to remove. No discharge noted.	Yes	Verbal	Yes
27	08/20/08	Residential		2680	Dryden	Water from over irrigation pooling in the street causing breeding of mosquitos.	Site inspection found no pooling. PW crew adviced complainant to also contact vector control.	No	N/A	N/A
28	08/21/08	Residential		2387	Rippey Ct	City property. Follow up on grading violations, interviews with neighbors. With John Phillips	Site inspection with John Phillips.	Yes	Verbal	N/A
29	08/21/08	Residential		1532	Washington	Green slime being washed into the gutter.	A site inspection found no current discharge. The discharge point was found to be from a rear patio drain. Water from the swimming pool caused the complaint. Storm water educational materials were issued to both parties.	No	N/A	N/A
30	08/22/08	Commercial	Foothills Adult Education Cntr.	1550	Melody Ln	Observed parking lot resurfacing and landscaping work along concrete channel edge with no BMPs to protect it.	Contacted the contractor on site an advised to remove soil piles near the channel. Found no discharge to the channel.	Yes	Verbal	N/A
31	08/22/08	Residential		802	Denise St	Neighbor is discharging diatomaceous earth with pool draining. Residue in curb.	Contacted the property owner who was told to clean all residue from the curb and cease discharging D.E. with pool water.	Yes.	Verbal	Yes
32	08/25/08	Residential		143	Garfield Ave	Auto body repair in driveway and dumping waste in channel.	Contacted the property owner and tenant. Advised to cease all dumping and remove any residue from channel. Zoning enforcement also addressing the illegal business.	Yes	Verbal	Yes
33	08/26/08	Commercial	Vacant Business	2320	Fletcher Parkway	Construction demolition debris an larking lot in front of the business. Evidence of prior sediment discharge.	Contacted the contractor on site and advised to use a dry method to clean all paved areas. Storm water educational materials were issued.	Yes, all residue removed from street and gutter.	Verbal	Yes
34	08/28/08	Residential		674	Palomar	Neighbor washing paint into the gutter.	Discharge located in curb line in front of residence also found hose and nozzel in front yard with white paint residue on it. No response at door. Storm water educational materials left at door.	Yes	Verbal	Yes
35	08/28/08	Residential		880	Grossmont	Sewage overflow from blocked lateral.	Contacted the property owner to repair and clean. PW crew also cleaned the City's lateral section with no remedy.	Yes	Verbal	Yes
36	09/04/08	Residential		525	Camden	Complaint of over irrigation causing pooling of water in the roadway.	Contacted the apartment manager and requested that the irrigation be adjusted.	Yes	Verbal	N/A
37	09/09/08	Residential		440	Van Houten Ave	Discharge from sewer lateral into the drainage channel.	Property management contacted to repair sewer lateral an clean the area.	Yes	Monetary Citation	Yes
38	09/10/08	Residential		1135	Washington Hts	Vehicle oil spilled on roadway.	No oil found on roadway. Old staining in dirt area next to the road may be oil. No actions taken.	No	N/A	N/A
39	09/10/08	Commercial	ECP Powder Coating	1835	John Towers	Industrial Waste Water program noted that chemicals in 55 gal drums are stored outside without secondary containment.	Contacted the business owner who stated that he had not yet removed items or provided secondary containment. He was given two weeks	Yes	Verbal	Yes

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
40	09/12/08	Commercial	Cajon Ford Storage Lot	1025	Main St	Ford employees were observed using a water to clean the paved areas with water discharging to the street.	The employees were told to cease using water and swep remaining debris.	Yes	Verbal	Yes
41	09/12/08	Commercial	Ability Bail Bonds	570	El Cajon Blvd	Employee seen using water to clean the parking lot and sidewalk with no BMPs. Water discharged to the street.	Contacted the business manage and advised to cease using water and consider sweeping and spot cleaning of the sidewalk area.	Yes	Verbal	Yes
42	09/15/08	Commercial	Rock Auto Group	670	El Cajon Blvd	Employees using water to clean the lot and sidewalk areas.	Contacted the manager and advised to cease using water and use dry method	Yes	Verbal	Yes
43	09/15/08	Commercial	Grossmont College	8800	Grossmont College Dr	Padre Dam employee noted a potential illegal connection to the storm drain system near the athletic field. Complainant detected sewage odor at inlet.	Made contact with Padre Dam and College Operations staff. No odor noted. Santee notified of potential illegal connection. A storm drain inlet may be connected to the sewer line.	Yes	N/A	N/A
44	09/18/08	Residential		1433	Granite Hills Dr	Concrete work with no BMPs	Site inspection found no notable violations.	No	N/A	N/A
45	09/23/08	Commercial	Royal Palace Restaurant	1340	Broadway	Paving company employee power washing the parking lot	Water did not enter the street. Contacted the business manager and advised to cease using water to clean.. Sweep or vac.	Yes	Verbal	N/A
46	09/26/08	Mobile Business	The Detail Shop	315	Magnolia Ave	Mobile auto detailing business discharging water on ground. No BMPs in place to prevent the discharge from entering the street.	Contacted the mobile business owner and advised to cease business operations until proper BMPs are utilized.	Yes	Verbal	Yes
47	09/29/08	Construction	Condo Conversion	360	First St	Failure to maintain BMPS, tracking sediment	Citation issued to contractor with instructions to install and maintain BMPs	Yes	Monetary Citation	Yes
48	09/29/08	Construction	Condo Conversion	642	Mollison	Failure to maintain BMPs, Trash piles on site and no filters in lot drains.	Citation issued to contractor with instructions to install and maintain BMPs	Yes	Monetary Citation	Yes
49	09/29/08	Construction	Condo Conversion	927	Sunshine	Failure to maintain BMPs, debris piles and tracking.	Contractor instucted to install and maintain required BMPs.	Yes	Monetary Citation	Yes
50	10/03/08	Construction		560	Mollison	Security motorhome on site leaking sewage near lot drain inlet.	Contacted the security person on site and advised to correct the leak and discharge black water into sanitary sewer. Also instructed to install a filter in lot drain.	Yes	Verbal	Yes
51	10/07/08	Construction		1338	Naranca Ave	Sediment tracking and failure to maintain BMPs	Notified the property owner that a citation was being issued for the violations.	Yes	Monetary Citation	Yes
52	10/08/08	Municipal		(near) 1530	Avocado	Sewage overflow from manhole cover in the middle of the street.	City crew notified and responded with vac truck. Approx. 5gals discharged with none entering the storm drain inlet at Horizon.	Yes	N/A	Yes
53	10/08/08	Residential		1301	Groveland	Large amount of water flowing through concrete swale at rear of property and into the street.	Met with Helix water agent on site flushing line upstream. Work was halted and will clean area of all debris and place drain filters. Complainant must remove all construction over the swale.	Yes	N/A	Yes
54	10/10/08	Commercial	Food Land Market	1099	E Main St	Discharge of liquid pollutant a the rear of the store.	Met PW staff on site finding discharge of water near dumpster and water dumped by flower vendor. Also dirty grease bin and waste on ground under it.	Yes	Verbal	Yes
55	10/10/08	Construction	Vacant	198	Main St	Water discharging from the west side of the building with no BMPs in place. Water appeared to have an oily sheen.	The contractor was contacted on site. Water found pool at curb on Sunshine Ave. Discharge had stopped. Agreed to drain any remaining ito grass. No Oil found however water had rust in it.	Yes	Verbal	Yes

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
56	10/10/08	Residential		236	Chambers Ave	Using water to clean the sidewalk and street in front of residence	Contacted the property owner on site and told to cease using water. Absorbent material was applied to the flow in the curb. The owner used a shop vac to remove the pooled liquid and disposed of it in the sewer.	Yes	Verbal	Yes
57	10/17/08	Commercial	La Z Boy	888	Johnson	Water from severe over irrigation flowing into street and storm drain inlet.	Water collecting pollutants. Sontacted the business manager and the landscaping company to readjust the system	Yes	Verbal	Yes
58	10/21/08	Residential		533	Jamacha	residen pouring fuel and oil in gutter.	Found no fuel or oil discharge. Property owner was drying dyed materials on top of trash cans which then drained to sidewalk carrying sediment. She was told to relocate materials and improve s/w corner of front yard to prevent any future discharge of sediment.	yes	Verbal	Yes
59	10/28/08	Commercial	Jack in the Box	393	Main St	Employees dumping wash water in the driveway	Contacted the store employees to cease dumping of a liqids outside.	Yes	Verbal	Yes
60	11/04/08	Commercial	Archer Automotive	661	El Cajon Blvd	Employees were observed power washing the exterior of the building and lot. Polluted water flowed across the lot and into the street.	The business owner was contacted and advised to cease all washing until proper BMPs are installed. A dry method was sugessted.	Yes	Verbal	Yes
61	11/07/08	Residential		1398	Whitsett Dr	Grading in rear yard with no BMPs in place. Doubts resident has grading permit.	Contacted the son of property owner and advised to install BMPs and contact city regarding grading plan submittal.	Yes	Verbal	N/A
62	11/12/08	Residential		1697	Lexington	Motorhome dumping raw sewage onto the street.	No evidence of raw sewage discharge.	No	N/A	N/A
63	11/17/08	Commercial	Sam's Quality Auto	267	Marshall Ave	Patron spilled a alrge amount of fuel on pavement and no one cleaned it up.	No evidence of a fuel spill noted. Found past discharge and staining from dumpster into drain inlet. Contacted the business owner to clean the area using a dry method.	Yes	Verbal	N/A
64	11/20/08	Commercial	Gas Depot	490	Second	Fuel discharging to ground and no one cleaning it.	Site inspection found no evidence of discharge	No	N/A	N/A
65	11/21/08	Commercial	Vacant	435	Main St	Drywall residue discharge from building rennovation entered the street and storm drain inlet.	contacted the property owner and advised to cease using water in lot unless BMPs are istalled to prevent a discharge. Residue was immediately cleaned.	Yes	Verbal	Yes
66	11/25/08	Residential		777	Murray Dr	Complained of mud tracked in front of his residence.	Site inspection found minor sediment tracking for rear of neighboring property.	Yes	N/A	N/A
67	12/01/08	Municipal		1678	Vista Del Valle	Storm drain inlet on disputed through road (Lisbon) overwhelmed by stormwater and sediment.	Research found road belongs to City of El Cajon. Repairs made and drains cleared. Sediment discharge is from county property. County notified.	Yes	N/A	Yes
68	12/01/08	Commercial	Vacant	1164	Second St	People living in a motorhome at rear of property dumping blackwater on the ground.	Contacted the business owner and advised to cease any discharges from the motorhome.	Yes	Verbal	N/A
69	12/02/08	Residential		797	Lemon Ave	Curb cut to make driveway.	Site inspection found what appears to be an existing cut with no paved driveway leading to a converted garage. No storm water issues noted	No	N/A	N/A
70	12/05/08	Mobile	La Fata Mobile Detailing	1664	Goldstone	Mobile business operating at residence with no BMPs in place. Discharge did not enter the drain inlet.	Contacted the business owner and advised to cease washing activity unless water can be retained and removed. A Shop Vac was employed.	Yes	Verbal	Yes

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
71	12/05/08	Municipal			Dillman At Markberry	Drain inlet needs a filter.	PW street crew notified. No evidence of illicit discharge.	No	N/A	N/A
72	12/12/08	Residential		2721	Katherine St	Heavy rain causes flooding due to clogged storm drains.	City crew responded and found that the drains in front of residence are not city maintained. Flood signs posted.	No	N/A	N/A
73	12/16/08	Residential		1772	Vista Del Valle	Sediment discharging to concrete swale from garage construction. Heavy Rain	Inspected the site with Pat Jackson. Made contact with the complainant and responsible party. Found one edge of garage footing washed out in heavy rain. Has gravel bags on site and deployed.	Yes	Verbal	Yes
74	12/16/08	Construction		189	Roanoke	Failure to provide adequate BMPs during a significant rain event. Failed construction entrance and uncovered soil piles causing a large amount of sediment discharge from the site.	Contacted the site superintendent to install drain protection and provide source protection.	Yes	Monetary Citation	Yes
75	12/23/08	Residential		2310	Orchard Ave	Sediment flowing into concrete swale during heavy rain.	Inspected the site with Pat J. finding erosion sediment from undeveloped county, non point source, flowing into city maintained drainage channel.	No	N/A	N/A
76	01/06/09	Residential		733	Wichita Ave	Tires and wheels dumped at the storm channel overcrossing	Tires were removed prior to any enforcement.	No	N/A	N/A
77	01/07/09	Construction	San Diego Contracting Inc	1539	Main St	Contractor has failed to maintain a construction entrance allowing sediment tracking onto roadway	Superintendent and assis. Were contacted and advised to improve the entrance and daily sweep.	No	Verbal	N/A
78	01/07/09	Residential		386	Renette Ave	the complainant stated that a vehicle turned around in her driveway leaving a large trail of oil in the street.	Absorbent material was applied and the PW streetr crew was notified to complete the cleanup	Yes	N/A	Yes
79	01/09/09	Residential		1452	Green field Dr	Private lateral overflow to gutter.	PW crew prevented the discharge from entering the storm drain inlet. Ther property owner was notified and a plumber responded and made repairs.	Yes	Verbal	Yes
80	01/12/09	Commercial	Wendy's	871	Broadway	Employee using water to clean the pavement and dumpster area.	Contacted the manager and told cease all use of water and to use dry method to clean outside areas. Storm water educational materials were issued.	Yes	Verbal	Yes
81	01/12/09	Commercial	Mustang Auto	727	El Cajon Blvd	Oil trap at the back of the shop is full and discharges oil during rain events.	Contacted the business owner and instructed him to change the gravel in the pit and clean the lot using a dry method or steam clean and remove the waste.		Verbal	N/A
82	01/13/09	Commercial	Westfielp Plaza	415	Parkway Plaza	Strong chemical odor noted in storm drain system originating from the mall service area at the north side of the building	Contacted the general manager and advised to cease all discharges and clean the area around the drain using a dry method.	Yes	Monetary Citation	Yes
83	01/15/09	Residential			Greenfield At Groveland Ter.	Large volume of water running down Greenfield at Tangerine St. and into the storm drain at Secon St.	Site inspection found water from a pool discharge entering Greenfield from undrer sidewalk drain. No odor of chlorine. Complainant advised.	No	N/A	N/A
84	01/21/09	Residential		421	Mollison	Private lateral spill at apartment complex. 5 Days old	Contacted the property management Co and the resident. To follow up. Plumbing service cleaned the area.	Yes	Verbal	Yes

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
85	01/26/09	Commercial	IQ Billiards	136	Main St	Water from leaking water valve crossing sidewalk and into the street.	Contacted the business owner and advised to repair the leak.	Yes	Verbal	N/A
86	01/29/09	Commercial	Walgreens	215	Second St	Water from ovrirrigation or broken line enter the street and drain inlet.	The Store manager was contacted and told to repair the irrigation lines and adjust the timer	Yes	Verbal	Yes
87	01/29/09	Commercial	Romeo's Car Wash	195	Second St	Water from vehicle washing activity flowing across the sidewalk and entering the street.	the business owner was contacted and agreed to arrange for a full site inspection.	Pending	Verbal	Pending
88	02/02/09	Residential	Ballantyne Terrace Apartments	444	Ballantyne	Over flow from private sewer lateral in driveway entering the street and storm drain inlet.	Property manager notified to call plumber. PW crew responded.	Yes	Monetary Citation	Yes
89	02/04/09	Commercial	Evergreen Environmental Serv.	412	Front St	Complaint of erosion at driveway from overflowing storm drain.	The erosion was a prior event and the driveway is now soncreted. The storm drain cover in question was in place no evidence of overflow from recent rain.	No	N/A	N/A
90	02/04/09	Commercial	Victoria's Mexican Food	677	Main St	Dirty and open grease bin located in rear parking lot.	Contacted the manager and instructed to clean or replace the grease bin and clean the surrounding area.	Yes	Verbal	N/A
91	02/05/09	Municipal		550	Fesler	Motorhome parked on the street leaking from waste discharge valve.	Street crew notified to clean area after vehicle removed.	Yes	N/A	Yes
92	02/09/09	Residential		1565	Soma Pl	Water discharge from unknown sounce every morning at 9:30	Site inspection found no evidence of water discharge in the area.	No	N/A	N/A
93	02/09/09	Commercial	Kaelin's Market	1435	Main St	Private lateral overflow to gutter and storm drain inlet during a heavy rain event.	The store manager was contacted and told to cease all water use and contact a plumbing service to repair the line.	Yes	Monetary Citation	Yes
94	02/10/09	Residential		1628	Hacienda	Diesel fuel spill on street in front of residence.	Found no evidence of a fuel spill.	No	N/A	N/A
95	02/11/09	Residential		1163	Peach Ave	Flooding in rear yard during heavy rain. Water draining through base of block wall from neighbor.	Evidence of pooled water in rear yard. Property is low spot of area. This is a civil matter.	No	N/A	N/A
96	02/16/09	Residential		1321	Greenfield Dr	Patio and parking lot at condo complex flooded during heavy rain. Drains not moving water.	The complainant was instructed to contact the property management to have the interior drains cleaned. There are no city storm drains involved.	No	N/A	N/A
97	02/20/09	Commercial	Pat and Oscars	375	Parkway Plaza	Two grease waste containers and the chainlink enclosure covered in grease.	Manager was contacted during prior mall enforcementon 1-13-09 and told to clean the grease bins and the enclosure. No efforts were made and a written warning was issued.	Yes	Written Warning	Yes
98	02/27/09	Commercial	Mobile Food truck	?	John Towers	A food truck was dumping grease into a storm drain inlet.	Was not able to locat a food truck in the area on several visits.	Yes	N/A	N/A
99	03/02/09	Residential		1600	Meadow Rd	Cement mixer parked on the street leaking oil with no drip pan under it.	A site inspection found a drip pan under the cement mixer parked on Zephyr St.	Yes	N/A	N/A
100	03/05/09	Commercial	Carl's Jr.	624	Fletcher Parkway	Water from over irrigation crossing the parking lot and entering the storm drain inlet .	The store manager was contacted and advised to cease watering. The landscaper turned off the water immediately.	Yes	Written Warning	Yes
101	03/09/09	Residential		1139	Naranca	Automotive fluid dumped at rear yard into the concrete channel.	The property owner was contacted nd advised to cease any further dumping into the channel. A meeting with the owner is scheduled to gather more info at the site.	Yes	Verbal	Yes

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
102	03/11/09	Commercial	Olaf Wieghorst Museum	133	Rea Ave	Concrete wash discharged into the alley.	Contacted the museum board mamber and advised to clean the alley and cease any further discharges. Storm water educational materials were issued.	Yes	Verbal	Yes
103	03/11/09	Commercial	El Cajon Meat Market	575	El Cajon Blvd	Employees using water to clean the paved lot areas with no BMPs in place to prevent polluted water from entering the street.	the dstore manager was contacted and advised to cease all use of water to clean. He was given educational materials.	Yes	Verbal	Yes
104	03/16/09	Commercial	99 Cent Store	733	Main St	Power wash employee using water to clean graffiti off glass with no BMPs in place to prevent a discharge to street.	Contacted the employee and told to stop using water and use a dry method or implement the proper BMPs.	Yes	Verbal	Yes
105	03/17/09	Residential	El Cajon Senior Towers	180	Ballantyne	Private lateral over flow into the street and storm drain.	Pw crew responded and recovered a portion of the spill. A portion did reach the storm drin inlet. A plumbing service responded immediately.	Yes	Monetary Citation	Yes
106	03/27/09	Commercial	Jack in the Box	393	Main St	Employee using wate to clean the paved areas. Possible broken irrigation pipe.	Contacted the store manager and advised to cease using water to clean pavement and repair the irrigation system. Torm wte educational materials were issued.	Yes	Verbal	Yes
107	03/30/09	Commercial	El Cajon Auto Recycling	1466	Pioneer Ave	Vehicle crushing activity causing soil contamination. Lot area is bare soil, tracking onto Steele St.	Contacted the business manager and advised to install stable entrance at Steele st and to sweep areas regularly, also instructed them to disgrard of all vehicle fluids properly. (not on ground)	Yes	Verbal	Yes
108	04/01/09	Commercial	Food 4 Less	444	Broadway	Private lateral spill due to grease blockage.	City crew responded and contained the spill. The blockage was cleared and the area cleaned.	Yes	Verbal	Yes
109	04/03/09	Construction		132	Meadow Crest Dr	Sediment tracking, failure to install and maintain the required BMPs.	Contacted the property owner/ contractor and advised to install and maintain the BMPs and to sweep all paved areas. Citation issued.	Yes	Written Warning	Yes
110	04/07/09	Construction	Countrywide Concrete Cutting	1138	Naranca Ave	Employee sweeping water and sediment into the street and curb with no BMPs in place.	Contacted the business owner on site and advised to cease and reclaim all pollutants.	Yes	Monetary Citation	Yes
111	04/08/09	Commercial	El Cajon Town and Country Plaza	330	Second St	Private lateral overflow into the alley behind the businesses.	Street crew responded and prevented the discharge from entering the stprm drain inlet.	Yes	Verbal	Yes
112	04/08/09	Construction	American Wrecking Inc.	1310	Broadway	Sediment tracking onto second St.	Contacted the site superintendent and advised to install proper entrance and to sweep all paved areas.	Yes	Verbal	Yes
113	04/13/09	Residential		592	Ballantyne	Neighbor dumping concrete wash wate into the gutter from hi back yard.	Contacted the property owner and instructed to dry clean all paved areas. There was concrete residue in the curb line. Storm water educational materials were issued	Yes	Verbal	Yes
114	04/16/09	Commercial	Rico's Expresso/Smoothies	532	Jamacha	Vehicle washing being done at the rear of the business with no BMPs in place.	Contacted the business owner and advised to cease all vehicle washing and to use a dry method to clean all paved areas.	Yes	Verbal	Yes
115	04/17/09	Mobile	Mobile Auto Detailing and Car Wash	172	Renette Ave	Santee requested information on this Mobile business. Violation was in Santee	Review found a valid business licence in El Cajon.	No	N/A	N/A
116	04/20/09	Commercial	El Cajon Town and Country Plaza	330	Second St	Private lateral overflow entered the storm drain inlet at the north end of the alley behind businesses.	The crew contactred a plumbing service and later contacted the property management company. A portion of the discharge was reclaimed. A citation was issued with notice to video and provide maintenance plan.	Yes	Monetary Citation	Yes

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
117	04/21/09	Commercial	Miller Towing	1416	Pioneer Way	Business is disassembling cars without raining them first.	Contacted the business manager and advised on site. No discharge was found. Ther was sediment tracking onto Steele St. throught the back gate. They are in the process of paving the entire lot and are aware of storm water requirements.	Yes	Verbal	Yes
118	04/23/09	Construction		132	Meadow Crest Dr	Failure to install and maintain minimum BMPs.	A citation was issued and posted on site for tracking and failure to maintain the required BMPs.	Yes	Monetary Citation	N/A
119	04/27/09	Commercial	Von's Store	1201	Avocado Ave	Storm Drain ditch behind store needs cleaning and illegal dumping.	No evidence of dumping, concrete drainage swale is clean. Stor manager notified of complaint and issued storm water educational materials.	No	N/A	N/A
120	04/27/09	Residential		1001	Avocado Ave	Neighbor's gray water flows onto her property. None leaves the property.	Spoke to the complainant and explained that it is a neighbor dispute and not a storm water issue. Advised to contact to zoning enforcement for other concerns.	Yes	N/A	N/A
121	05/01/09	Residential		1328	Cuyamaca	Soil piles in front of property from building rennovation with no BMPs in place	Contacted the site superintendent and advised to install perimeter controls and soil cover. No discharge observed. Storm wAter Educational materials were issued.	Yes	Verbal	N/A
122	05/04/09	Commercial	24 Hour Power Inc.	1177	Johnson	Business storing bare metal outdoors creating rust run off.	Contacted the business owner. Site has items stored outdoors under tarps. No evidence of rust runoff.	No	N/A	N/A
123	05/05/09	Commercial	Angel's Nails	131	Magnolia	Employee of the business discharging wash water into the storm drainage system.	The store owner was contacted and advised to cease all wash water discharge. She was given storm water educational materials.	Yes	Written Warning	Yes
124	05/05/09	Mobile	La Fata Mobile Detailing	950	Second St	Mobile vehicle washing business conducting business without proper BMPs I place. No business license in possession. No discharge to street or storm drain.	Advised the business owner to cease any further vehicle washing without BMPs and to obtain a business license and maintain in the vehicle.	Yes	Verbal	Yes
125	05/06/09	Residential		683	Washington	Apartment lot resurfacing with sediment being tracked onto Washington.	Contacted the apartment manager and instructed him to sweep the paved areas at the end of the day..	Yes	Verbal	N/A
126	05/06/09	Mobile	Veyda's Mobile Detailing	700	Johnson	Observed owner washing cars at this commercial facility with no BMPs in place.	Contacted the business owner and advised to cease all washing activity until proper BMPs are implemented.	Yes	Verbal	Yes
127	05/14/09	Mobile	My Personal Detailer		Main St	This mobile business owner was washing vehicles in a commercial parking lot with out BMPS in place to reclaim the wash water and properly dispose of it.	the business owner ws contactee and advised to use the BMPs he had on his vehicle to relaim the wash water. He was given storm water educational materials.	Yes	Verbal	Yes
128	05/18/09	Residential		1055	Mollison	Water is overflowing into the parking lot and into the street.	Site inspection found the discharge was from a dechlorinate spa.	No	N/A	N/A
129	05/18/09	Commercial	KFC	724	Fletcher Parkway	Restaurant employees releasing wash water into the storm drainage system.	The store manager was contacted on site. She said residue from a grease spill days before was being cleaned and some of the water got to the street. None entered the storm drain inlet. There is an under curb drain in front of the store.	Yes	Verbal	Yes

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
130	05/20/09	Commercial	Estrada's Taco Shop	569	Second St	Water and food debris found in curb line regularly by street sweeper.	The business owner was contacted and said that the homeless use the water spigot in fornt of the store and leave it on before he gets there in the morning. It wass suggested that he removed the handle. There was no discharge or food found.	Yes	Verbal	Yes
131	05/20/09	Residential		959	Naranca Ave	Dog feces being throwm into the concrete channel at the rear of the property.	Contacted the propety owner and advised to cease all dumping into the channel. Educational materials were issued.	Yes	Verbal	Yes
132	05/21/09	Commercial	Arrieta Construction, Inc.	1215	Marshall Ave	A large amount ow water was seen flowing under a fence and out of the rear storage and parking lot of the business into the street and drain inlet on Vernon St.	The Busienss owner was contacted on site. An employee was fill a water truck and it overflowed. The water crossed the lot into a clarifier and then discharged to the street. Corrections were made immediately.	Yes	Verbal	Yes
133	05/22/09	Residential		922	Chase Ave	Neighbor occasionally dsicharges wash water to the street.	site inspedtion found no evidence of a discharge. Storm water educational materials were left at gate.	Yes	N/A	N/A
134	05/22/09	Residential		2877	Catarac Ct	Resident discharging paint washout to street and storm drain inlet.	Site inspedtion found white paint residue in street and curb in front on residence and leading to drain inlet. Property owner ws contacted and advised to cease all paint washing and to clean the curb area of all residue.	Yes	Verbal	Yes
135	05/26/09	Residential		1200	Mollison	Private lateral overflow to street at this multi unit complex. No onsite manager available. Discharge observed by street crew did not enter the storm drain inlet,	PW crew responded and reclaimed the discharge. Plumbing service was on site to repair the line.	Yes	Verbal	Yes
136	05/28/09	Municipal	SDG&E		Broadway at Third Ave	Sediment was bing washed into the storm drain from construction site.	The on site supervisor and the city inspector were notified. Workers struck an unmarked water line in the right of way. A large amount of water discharged with sediment to the storm drain system. BMPs were not able to contain the diacharge. Corrections were made. There was no discharge at the time of the storm water inspection.	Yes	Verbal	Yes
137	06/02/09	Commercial	Meat Market	575	Main St	Lot washing with no BMPs in place causing a discharge to the alley.	Contacted the store owner and advised to cease using water to clean the paved areas. Storm water educational materials were issued.	Yes	Verbal	Yes
138	06/10/09	Construction	Habitat For Humanity	801	Avocado	Sediment tracking and failure to maintain a construction entrance	Contacted the site superintendent and issued a first citation for the violations	Yes	Monetary Citation	Yes
139	06/14/09	Commercial	Union Bank	580	Second St	Pressure washing company conducting business without any BMPS in place.	Contacted the contractor and the bank manager and advised to cease all future washing until proper BMPs are used to prevent a discharge.	Yes	Verbal	Yes
140	06/17/09	Residential		803	Lauree St	Resident is throwing dog feces into the concrete channel at the rear of property	There were several small dogs at this address. A door tag was left. The owner responded and said it would not happen again. She would talk to her son.	Yes	Verbal	Yes
141	06/18/09	Industrial	Luth and Turley	1350	Hill St	A 55 gal drom at the rear of the business in starting to leak unknown substance.	Contacted the business owner and advised to contact Hazmat and remove the container.	Yes	Verbal	Yes
142	06/19/09	Construction	Suncoast Homes	1341	Main St	Failure to maintain BMPs for all bare soil.	Contacted the business representative and advised to install and maintain the BMPs . Citation was issued	Yes	Monetary Citation	N/A

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
143	06/22/09	Residential		391	Garfield Ave	Raw sewage in rear yard of this residence	Site inspection found no response or evidence of a violation. Educatinal material were left.	No	N/A	N/A
144	06/23/09	Commercial	Granite Hill High School	1719	Madison	Construction at school yard recreation area needs a construction entrance. Tracking	Contacted the onsite construction supervisor and advised to install BMPs and to sweep all paved areas.	Yes	Verbal	Yes
145	06/25/09	Construction	Starlett Construction Inc	965	Arnelle St	Discharge of concrete residue directly into the storm drain. No BMPs installed.	The on site supervisor for Toyota was contacted on site and issued a citation. He was directed to clean the curb line of any remaining residue.	Yes	Monetary Citation	Yes
146	06/29/09	Residential		979	Amistad	Drainage system at the rear of the property clogged with weeds.	Referred the complaint to the PW street crew.	No	N/A	N/A

Appendix B.2

High Priority **Municipal Facilities Inspected** **2008-2009**

	FACILITY NAME	ADDRESS	CONTACT	DATE
1	Fleet Maintenance	1060 Vernon Way	Chris Prysmyk	05/19/09
2	Parks Dept. storage Yard/Maint.	1060 Vernon way	Mike Mills	05/19/09
3	Public Works Maintenance Yard	1050 VernonWay	Pat Jackson	05/19/09
4	John F. Kennedy Park	1675 E. Madison	Mike Mills	06/19/09
5	Wells Park Rec./Maint./Police	1153 E. Madison	Mike Mills	06/19/09
6	Abert Van Zanten Park	1495 Greenfield Dr	Mike Mills	04/14/09
7	Hillside Park and Recreation Center	840 Buena Vista Terrace	Mike Mills	06/11/09
8	Fire Station Park	Tyron St at Westwind Dr	Mike Mills	05/15/09
9	Judson Park	Magnolia Ave at Park Ave	Mike Mills	05/22/09
10	Civic Center Plaza And City Hall	200 E Main St	Mike Mills	05/12/09
11	El Cajon Performing Arts Center	110 E Main St	Chris Prysmyk	05/12/09
12	Cajon Valley Middle School Park	750 Park Ave	Mike Mills	04/14/09
13	Renette Park and Recreation Center	935 Emerald Ave	Mike Mills	06/19/09
14	Fletcher Hills Park, Pool and Recreation Center	2345 Center Pl	Mike Mills	06/19/09
15	Tuttle Park	Pierce St at Wagner Dr	Mike Mills	06/19/09
16	Fire Station #9 and Training Facility	1301 N. Marshall Ave	Charlene Nagy	05/19/09
17	PresCott Promenade Park	200 Blk of E. Main St	Mike Mills	05/27/09
18	Bostonia Park and Recreation Center	1049 Bostonia St	Mike Mills	05/08/09
19	Ronald Regan Community Center	195 E. Douglas Ave	Mike Mills	05/27/09

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
1	CHEM-TRONICS INC	1150 W BRADLEY AVE	Industrial, with NOI	HIGH	3999	Manufacturing, Misc	907.13	9 37I000277
2	DIXIELINE LUMBER	1262 EAST MAIN STREET	Industrial, with NOI	HIGH	5211	Building Materials	907.13	9 37I015248
3	PACIFIC TRANS ENVIRONMENTAL SVC INC	1452 N JOHNSON AVE	Industrial, with NOI	Medium	4953	Waste Management	907.13	9 37I000506
4	WASTE MANAGEMENT	1001 W BRADLEY AVE	Industrial, with NOI	Medium	4953	Waste Management	907.13	9 37I012089
5	EL CAJON AUTO WRECKERS	1416 PIONEER WAY	Industrial, with NOI	HIGH	5015	Recycling	907.13	9 37I016302
6	VENUS PRINTING	1183 E MAIN ST #D	Industrial, with NOI	HIGH	2741	Printing	907.13	9 37I016302
7	ARTIMEX IRON CO.	315 CYPRESS LANE	Industrial, with NOI	HIGH	1791	Other Contractor	907.13	9 37I018051
8	SOUTH BAY WELDING	781 O' CONNOR ST	Industrial, with NOI	HIGH	3441	Manufacturing, Structural Steel	907.13	9 37I020014
9	California Countertop Quartz & Granite	1340 Hill St	Industrial, with NOI	High	3281	Manufacturing, Stone/Glass	907.13	9 37I021018
10	Solo Cup Co	1160 Vernon Way	Industrial, with NOI	High	2656	Manufacturing, Paper	907.13	9 37I018889
11	A J M PACKAGING CORPORATION	1160 VERNON WAY	Industrial, with NOI	HIGH	3999	Manufacturing, Misc	907.13	9 37I010265
12	VERIDIAM	1717 N CUYAMACA ST	Industrial, with NOI	HIGH	3999	Manufacturing, Misc	907.13	9 37I020299
13	CERTIFIED METAL CRAFT INC	877 VERNON WAY	Industrial, with NOI	HIGH	3999	Manufacturing, Misc	907.13	9 37I012286
14	TRIUMPH FABRICATIONS - SAN DIEGO, INC	203 N JOHNSON AVE	Industrial, with NOI	HIGH	3999	Manufacturing, Misc	907.13	9 37I015532
15	LAIDLAW TRANSIT SERVICES (E Cnty Maintenance Facility)	1213 N JOHNSON AV	Industrial, with NOI	HIGH	4212	Ground Transportation	907.13	9 37I020896
16	CAJON VALLEY UNION SCH DIST.	777 EAST PARK BLVD	Industrial, with NOI	HIGH	4151	Ground Transportation	907.13	9 37I003541
17	DECCO CASTINGS INC	1596 PIONEER WAY	Industrial, with NOI	HIGH	3365	Manufacturing, Primary Metal	907.13	9 37I014542
18	LAIDLAW TRANSIT SVCS INC	800 FESLER ST	Industrial, with NOI	HIGH	4111	Ground Transportation	907.13	9 37I018333
19	TORO AGRICULTURAL IRRIGATION	1588 N MARSHALL AVE	Industrial, with NOI	HIGH	3999	Manufacturing, Misc	907.13	9 37I013431
20	SAN DIEGO VAN & STORAGE	1426 FAYETTE ST	Industrial, with NOI	HIGH	4214	Ground Transportation	907.13	9 37I012805
21	ALLIED CASTINGS INC	983 VERNON WAY	Industrial, with NOI	HIGH	3271	Manufacturing, Concrete	907.13	9 37I004416
22	PRECISION METAL PRODUCTS, INC	850 W BRADLEY AVE	Industrial, with NOI	HIGH	3599	Manufacturing, Equipment	907.13	9 37I021188
23	CALIFORNIA METALS	297-333 S MARSHALL AVE	Industrial, with NOI	HIGH	3599	Manufacturing, Equipment	907.13	9 37I012667
24	ALTURDYNE	660 STEELE ST	Industrial, with NOI	HIGH	3621	Manufacturing, Equipment	907.13	9 37I005819
25	SENIOR OPERATIONS, KETEMA DIVISION	790 GREENFIELD DR	Industrial, with NOI	HIGH	3999	Manufacturing, Misc	907.13	9 37I013103
26	WINDOWMASTER PRODUCTS	1111 PIONEER WAY	Industrial, with NOI	HIGH	3999	Manufacturing, Misc	907.13	9 37I018719
27	CALIFORNIA METALS	636 FRONT ST	Industrial, with NOI	HIGH	3599	Manufacturing, Equipment	907.13	9 37I016696
28	GROSSMONT UNION H.S. DISTRICT	1100 MURRAY DR	Industrial, with NOI	HIGH	4151	Ground Transportation	907.13	9 37I002116
29	C C S PAINTING SERVICES	205 CLAYDELLE AVE #204	Industrial, no NOI	Medium	4959	Waste Management	907.13	
30	LAYFIELD PLASTICS INC	1166 FESLER ST #B	Industrial, no NOI	Medium	3999	Manufacturing, Misc	907.13	
31	LITE STONE CONCRETE	1105 N MARSHALL AVE	Industrial, no NOI	Medium	3999	Manufacturing, Misc	907.13	
32	SAN DIEGO MOBILE TRUCK & TRAILER SERVICE L.L.C.	125 S MARSHALL AVE	Industrial, no NOI	Medium	3999	Manufacturing, Misc	907.13	
33	LEONARD ENGINEERING, INC	412 FRONT ST	Industrial, no NOI	Medium	3999	Manufacturing, Misc	907.13	
34	A A EQUIPMENT	411 N MARSHALL AVE	Industrial, no NOI	Medium	3999	Manufacturing, Misc	907.13	
35	PACIFICA GLASS CO, INC	1946 JOHN TOWERS AVE	Industrial, no NOI	Medium	3231	Manufacturing, Stone/Glass	907.13	
36	OLYMPIC CARPET & SUPPLIES	538 FRONT ST	Industrial, no NOI	Medium	4959	Waste Management	907.13	
37	PSM TRUCK EQUIPMENT	755 VERNON WAY	Industrial, no NOI	Medium	3449	Manufacturing, Fabricated Metal	907.13	
38	MIL SPEC METALLICS	755 VERNON WAY	Industrial, no NOI	Medium	3449	Manufacturing, Fabricated Metal	907.13	
39	BAY KITCHEN & BATH REMODELERS	500 FRONT ST	Industrial, no NOI	Medium	2434	Manufacturing, Wood/Furniture	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
40	RUSSO TILE & MARBLE INC	635 FRONT ST	Industrial, no NOI	HIGH	3253	Manufacturing, Stone/Glass	907.13	
41	TOP NOTCH MANUFACTURING INC	1488 PIONEER WAY #17	Industrial, no NOI	Medium	3449	Manufacturing, Fabricated Metal	907.13	
42	METAL ENGINEERING	390 FRONT ST	Industrial, no NOI	Medium	3999	Manufacturing, Misc	907.13	
43	CURB & VENT MFG., INC	1437 FAYETTE ST	Industrial, no NOI	HIGH	3272	Manufacturing, Concrete	907.13	
44	GARDNER POOL PLASTERING	801 GABLE WAY	Industrial, no NOI	HIGH	3999	Manufacturing, Misc	907.13	
45	U S AIRCONDITIONING DISTRIBUTORS, INC	1250 N MARSHALL AVE	Industrial, no NOI	Medium	4214	Ground Transportation	907.13	
46	EG&G KT AEROFAB	203 N JOHNSON AVENUE	Industrial, no NOI	Medium	3728	Manufacturing, Equipment	907.13	
47	AMERICAN METAL PROCESSING INC	390 FRONT ST	Industrial, no NOI	Medium	3599	Manufacturing, Equipment	907.13	
48	FATBOY FIBERGLASS & WELDING	675 FRONT ST	Industrial, no NOI	Medium	3599	Manufacturing, Equipment	907.13	
49	AMETEK ROTRON	474 RALEIGH AVE	Industrial, no NOI	Medium	3564	Manufacturing, Equipment	907.13	
50	SUPER-KRETE INTERNATIONAL INC	1290 N JOHNSON AVE #101	Industrial, no NOI	HIGH	3271	Manufacturing, Concrete	907.13	
51	THIRD STONE INC	1835 JOHN TOWERS AVE #D	Industrial, no NOI	HIGH	3271	Manufacturing, Concrete	907.13	
52	COCOS #1162	1025 FLETCHER PKWY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
53	LA PITA CAFE	388 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
54	SILVAS TACO SHOP	998 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
55	SERRANOS SUPER SALSA	795 ARNELE AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
56	MCDONALDS	1695 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
57	EL CAJON COURTHOUSE CAFE	250 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
58	LOS PANCHOS MEXICAN & SEAFOOD	777 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
59	BONNYS CAFE	596 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
60	BOSTON MARKET #0735	706 FLETCHER PKWY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
61	BURGER KING 814	822 N JOHNSON AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
62	SIZZLER RESTAURANT	1030 FLETCHER PKWY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
63	CHINA PANDA GARDEN RESTAURANT	1788 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
64	VONS GROCERY COMPANY #2064	2800 FLETCHER PKWY	Commercial	High	5812	Eating/Drinking Establishments	907.11	
65	COTIXAN TACO SHOP #3	762 N JOHNSON AVE #107	Commercial	High	5812	Eating/Drinking Establishments	907.13	
66	CALIFORNIA DELI WORKS	553-555 W MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
67	EL CAJON STEAKHOUSE L.P.	722 JAMACHA RD	Commercial	High	5812	Eating/Drinking Establishments	907.13	
68	SUBWAY SANDWICHES AND SALAD	915 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
69	DOMINOS PIZZA #7705	1104 E WASHINGTON AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
70	CONSOLIDATED MOTORS	410 EL CAJON BLVD	Commercial	High	5013	Auto Supplies	907.13	
71	NEW YORK GIANT PIZZA	356 N MAGNOLIA AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
72	MAMMA ROSAS PIZZA	1773 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
73	ORCHID THAI RESTAURANT	762 N JOHNSON AVE #106	Commercial	High	5812	Eating/Drinking Establishments	907.13	
74	MANGIA BENE RISTORANTE	221 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
75	HARVEST RANCH #1	759 JAMACHA RD	Commercial	High	5411	Eating/Drinking Establishments	907.13	
76	PANDA RICE VIETNAMESE/CHINESE RESTAURANT	907 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
77	MCDONALDS OF FLETCHER PARKWAY	886 FLETCHER PKWY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
78	MARIETAS EAST	1746 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
79	LOS PANCHOS TACO SHOP	1709 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
80	THORNTONS IRISH PUB & CHOP HOUSE	1221 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
81	LA CHINA	2852 FLETCHER PKWY	Commercial	High	5812	Eating/Drinking Establishments	907.11	
82	DOWNTOWN CAFE	182 E MAIN ST	Commercial	High	5813	Eating/Drinking Establishments	907.13	
83	SUBWAY SANDWICHES/SALADS	762 N JOHNSON AVE #108 -2	Commercial	High	5812	Eating/Drinking Establishments	907.13	
84	AUTO TECH	590 S MARSHALL AVE	Commercial	Medium	7532	Auto Paint/Body	907.13	
85	CHAMPION COLLISION & PAINT	187 N MARSHALL AVE	Commercial	Medium	7532	Auto Paint/Body	907.13	
86	PLANT HOUSE NURSERY	1163 N SECOND ST	Commercial	High	181	Nurseries/Greenhouses	907.13	
87	ARMSTRONG GARDEN CENTERS INC	1755 E MAIN ST	Commercial	High	181	Nurseries/Greenhouses	907.13	
88	DENNY'S RESTAURANT	665 N MOLLISON	Commercial	High	5812	Eating/Drinking Establishments	907.13	
89	ROBERTOS TACO SHOP	1104 E WASHINGTON AVE #B	Commercial	High	5812	Eating/Drinking Establishments	907.13	
90	POR FAVOR INC	148 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
91	TOKYO JAPANESE FOOD & SUSHI	755 ARNELE AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
92	ADVANCED FLOORCOVERING INC	833 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
93	EL CAJON AUTO CENTER INC	243 N MARSHALL AVE	Commercial	Medium	7539	Auto Repair	907.13	
94	LUCKY DRAGON	342 N MAGNOLIA AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
95	FRUITLAND AND DELI	1088 ESTES ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
96	WENDYS-#11	686 JAMACHA RD	Commercial	High	5812	Eating/Drinking Establishments	907.13	
97	WENDYS-#01	871 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
98	VICTORIAS MEXICAN FOOD	677 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
99	VALERIOS MEXICAN FOOD	1267 N SECOND ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
100	ALI BABA RESTAURANT	421 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
101	DOMINOS PIZZA #7704	936 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
102	POULTRY PALACE & DELI	736 JAMACHA RD	Commercial	High	5812	Eating/Drinking Establishments	907.13	
103	THOMAS BUILDING SUPPLY INC	137 S JOHNSON AVE	Commercial	Medium	5211	Building Materials	907.13	
104	WHILLOCK CONTRACTING INC	346 FRONT ST	Commercial	Medium	1521	Other Contractor	907.13	
105	G MARBLE AND GRANITE COMPANY	1820 JOHN TOWERS AVE #A	Commercial	Medium	1741	Masonry	907.13	
106	SIERRA PACIFIC LANDSCAPE	304 FRONT ST	Commercial	Medium	1799	Landscaping	907.13	
107	BLACKINTON & ASSOC INC	380 FRONT ST	Commercial	Medium	7699	Equipment Repair	907.13	
108	BUILDERS MOULDING SUPPLY INC	1675 PIONEER WAY #A/B	Commercial	Medium	5211	Building Materials	907.13	
109	MCKEEVER SPECIALTIES	1100 N MAGNOLIA AVE #F	Commercial	Medium	5211	Building Materials	907.13	
110	THE HOME DEPOT #676	965 ARNELE AVE	Commercial	Medium	5211	Building Materials	907.13	
111	FRAZEE PAINT WALLCOVERING	1154 E MAIN ST #108	Commercial	Medium	5211	Building Materials	907.13	
112	GENES AUTO BODY	609 S MARSHALL AVE	Commercial	Medium	7532	Auto Paint/Body	907.13	
113	DAL-TILE S S C WEST, INC	270 N MARSHALL AVE	Commercial	Medium	5211	Building Materials	907.13	
114	DRAGON FIRE	283 N MARSHALL AVE	Commercial	Medium	7539	Auto Repair	907.13	
115	THE HOME DEPOT #1848	298 FLETCHER PKWY	Commercial	Medium	5211	Building Materials	907.13	
116	CLASSIC TOWING	1101 N MARSHALL AVE	Commercial	Medium	7549	Auto Repair	907.13	
117	C&D TOWING SPECIALISTS	187 N MARSHALL AVE	Commercial	Medium	7549	Auto Repair	907.13	
118	ANYTHING CORVETTE	259 N MARSHALL AVE	Commercial	Medium	7539	Auto Repair	907.13	
119	SAMS QUALITY AUTO CARE	267 N MARSHALL AVE #B	Commercial	Medium	7538	Auto Repair	907.13	
120	FAST WATER HEATER I, INC	275 N MARSHALL AVE	Commercial	Medium	7539	Auto Repair	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
121	THE AUTO CENTER	243 N MARSHALL AV	Commercial	Medium	7539	Auto Repair	907.13	
122	RUBIOS FRESH MEXICAN GRILL #8	399 N MAGNOLIA AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
123	J&W REDWOOD EL CAJON INC	430 S MARSHALL AVE	Commercial	Medium	5211	Building Materials	907.13	
124	INTERNATIONAL HOUSE OF PANCAKES	1286 OAKDALE AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
125	RED BRICK PIZZA	190 N MAGNOLIA AVE #A	Commercial	High	5812	Eating/Drinking Establishments	907.13	
126	WINDY CITY BEEF	2872 FLETCHER PKWY	Commercial	High	5812	Eating/Drinking Establishments	907.11	
127	ALBERTSONS INC #6771	1608 BROADWAY	Commercial	High	5411	Eating/Drinking Establishments	907.13	
128	EL CAJON INTERNATIONAL FOOD	502 E MAIN ST	Commercial	High	5411	Eating/Drinking Establishments	907.13	
129	DALLMANN CONFECTIONS INC	780 N SECOND ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
130	JANETS CAFE #1	1696 GREENFIELD DR	Commercial	High	5812	Eating/Drinking Establishments	907.13	
131	JAMACHA BAR & GRILLE	777 JAMACHA RD	Commercial	High	5812	Eating/Drinking Establishments	907.13	
132	TOMMYS ITALIAN DELI	1190 N SECOND ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
133	IZZYS CAFE	1252 BROADWAY #A	Commercial	High	5812	Eating/Drinking Establishments	907.13	
134	CHRISTYS DONUTS	657 JAMACHA RD	Commercial	High	5812	Eating/Drinking Establishments	907.13	
135	JACK IN THE BOX #3064	1700 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
136	GOLDEN BAGEL CAFE	2744 FLETCHER PKWY	Commercial	High	5812	Eating/Drinking Establishments	907.11	
137	GILLESPIE FIELD CAFE & DELI	2015 N MARSHALL AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
138	THE LAWLESS PUB	176 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
139	EXECUTIVE FRIENDSHIP DELI	1935 FRIENDSHIP DR #A	Commercial	High	5812	Eating/Drinking Establishments	907.13	
140	THE YOGURT MILL	935 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
141	K F C #Y450061	724 FLETCHER PKWY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
142	ROSENDOS	1408 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
143	TASTE OF ATHENS	1784 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
144	PRO BODY WAREHOUSE	782 ARNELE AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
145	PHILIPPINES ON BROADWAY	1174 BROADWAY #101	Commercial	High	5812	Eating/Drinking Establishments	907.13	
146	TORTILLERIA SALSA MARKET	480 W CHASE AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
147	BENS MARKET & PASTRY	544 BROADWAY	Commercial	High	5411	Eating/Drinking Establishments	907.13	
148	NEW YORK BAKERY INC	245 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
149	HACIENDA LA CASA BLANCA	700 N JOHNSON AVE #A	Commercial	High	5812	Eating/Drinking Establishments	907.13	
150	BROADWAY FARMER MARKET	1039 BROADWAY	Commercial	High	5411	Eating/Drinking Establishments	907.13	
151	TROPICAL HAVANA	762 N JOHNSON AVE #103	Commercial	High	5812	Eating/Drinking Establishments	907.13	
152	ALRAFDIEN RESTAURANT	474-482 W DOUGLAS AVE	Commercial	High	5812	Eating/Drinking Establishments	907.13	
153	PANDA EXPRESS #1125	190 N MAGNOLIA AVE #C	Commercial	High	5812	Eating/Drinking Establishments	907.13	
154	BABYLON INTERNATIONAL MARKET	524 E MAIN ST	Commercial	High	5411	Eating/Drinking Establishments	907.13	
155	ELEGANT BUFFET	1985 FRIENDSHIP DR #B	Commercial	High	5812	Eating/Drinking Establishments	907.13	
156	GARCIAS PUEBLA MERCADO	1365 E MAIN ST #A	Commercial	High	5812	Eating/Drinking Establishments	907.13	
157	SUNSHINE CO	548 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
158	MIKES DELI & MARKET	289 EL CAJON BLVD	Commercial	High	5411	Eating/Drinking Establishments	907.13	
159	CRUMBS OF PARIS	586 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
160	PASTEUR CAFE	165 E MAIN ST	Commercial	High	5812	Eating/Drinking Establishments	907.13	
161	RODEOS MEAT MARKET	927 BROADWAY	Commercial	High	5411	Eating/Drinking Establishments	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
162	ENTENMANNS OROWEAT OUTLET	916 BROADWAY	Commercial	High	5812	Eating/Drinking Establishments	907.13	
163	U S LAWNS OF SAN DIEGO INC	304 FRONT ST	Commercial	Medium	1799	Other Contractor	907.13	
164	KING HOUSE	500 BROADWAY #D	Commercial	High	5812	Eating/Drinking Establishments	907.13	
165	THE THREE AMIGOS AUTO REPAIR & SALES	605 W LEXINGTON AVE	Commercial	HIGH	7538	AUTO REPAIR	907.13	
166	WINSTON TIRES #295	790 N JOHNSON AV	Commercial	HIGH	7538	AUTO REPAIR	907.13	
167	VALLEY MUFFLER SHOP	533 W MAIN ST	Commercial	HIGH	7539	AUTO REPAIR	907.13	
168	VALLEY TRANSMISSION & AUTO	1158 N SECOND ST -2	Commercial	HIGH	7537	AUTO REPAIR	907.13	
169	TRUST AUTO REPAIR	537 W MAIN ST	Commercial	HIGH	7538	AUTO REPAIR	907.13	
170	AAMCO TRANSMISSION	355 N JOHNSON AV	Commercial	HIGH	7539	AUTO REPAIR	907.13	
171	A Z AUTO SERVICE	953 BROADWAY	Commercial	HIGH	7539	AUTO REPAIR	907.13	
172	SMOG CENTERS OF CALIFORNIA, L.L.C.	710 N SECOND ST	Commercial	HIGH	7538	AUTO REPAIR	907.13	
173	CUMMINS CAL PACIFIC L.L.C.	310 N JOHNSON AVE	Commercial	HIGH	7538	AUTO REPAIR	907.13	
174	A-1 GLASS COMPANY	944 BROADWAY	Commercial	HIGH	7536	AUTO REPAIR	907.13	
175	CALIBER COLLISON CENTERS	332 N JOHNSON AVE	Commercial	HIGH	7539	AUTO REPAIR	907.13	
176	SIDS AUTO BODY INC	1129 BROADWAY	Commercial	HIGH	7538	AUTO REPAIR	907.13	
177	DEVORE AUTOMOTIVE	1253 N SECOND ST	Commercial	HIGH	7538	AUTO REPAIR	907.13	
178	OIL CHANGERS #503	906 FLETCHER PKWY	Commercial	HIGH	7539	AUTO REPAIR	907.13	
179	ITS TRANSMISSION SERVICE	549 RALEIGH AV	Commercial	HIGH	7538	AUTO REPAIR	907.13	
180	EL CAJON TOWING	327 CYPRESS LN	Commercial	HIGH	7549	AUTO REPAIR	907.13	
181	EL CAJON SMOG AND AUTO REPAIR	720 BROADWAY	Commercial	HIGH	7539	AUTO REPAIR	907.13	
182	BROADWAY SMOG TEST ONLY STATION	1214 BROADWAY	Commercial	HIGH	7539	AUTO REPAIR	907.13	
183	EAST COUNTY TIRE & BRAKE	616 BROADWAY	Commercial	HIGH	7539	AUTO REPAIR	907.13	
184	RILEY AUTOMOTIVE	1665 E MAIN ST	Commercial	HIGH	7539	AUTO REPAIR	907.13	
185	BROADWAY TIRE	1105 BROADWAY	Commercial	HIGH	7538	AUTO REPAIR	907.13	
186	IMPORTED CAR CARE	1121 BROADWAY	Commercial	HIGH	7539	AUTO REPAIR	907.13	
187	DECKER AUTO SERVICE	1492 E MAIN ST	Commercial	HIGH	7539	AUTO REPAIR	907.13	
188	ITS TRANSMISSION SVC	549 RALEIGH AVE	Commercial	HIGH	7537	AUTO REPAIR	907.13	
189	MYERS TRANSMISSION REPAIR INC	355 N JOHNSON AVE	Commercial	HIGH	7539	AUTO REPAIR	907.13	
190	TOYOTA OF EL CAJON	623 W MAIN ST	Commercial	HIGH	5013	AUTO SUPPLIES	907.13	
191	TIRE STOP	405 N MAGNOLIA AVE	Commercial	HIGH	5531	AUTO SUPPLIES	907.13	
192	AUTOZONE #5646	1795 E MAIN ST	Commercial	HIGH	5531	AUTO SUPPLIES	907.13	
193	SOUTHERN AUTO SUPPLY INC	221 N MAGNOLIA AVE	Commercial	HIGH	5531	AUTO SUPPLIES	907.13	
194	ULTIMATE CHAMPION OF TIRES	445 W MAIN ST	Commercial	HIGH	5531	AUTO SUPPLIES	907.13	
195	HI TECH CUSTOMS INC	1575 PIONEER WAY	Commercial	HIGH	5013	AUTO SUPPLIES	907.13	
196	BIG O TIRES	844 N JOHNSON AVE	Commercial	HIGH	5531	AUTO SUPPLIES	907.13	
197	CUTTING EDGE SUPPLY	1675 N JOHNSON AVE	Commercial	HIGH	5013	AUTO SUPPLIES	907.13	
198	SOUTHERN AUTO SUPPLY INC	215 N MAGNOLIA AVE	Commercial	HIGH	5531	AUTO SUPPLIES	907.13	
199	E&M AUTO PARTS	1647 E MAIN ST	Commercial	HIGH	5531	AUTO SUPPLIES	907.13	
200	SO CALIF DISCOUNT TIRE CO INC	1001 BROADWAY	Commercial	HIGH	5531	AUTO SUPPLIES	907.13	
201	TRANS AMERICAN AUTO PARTS	542 N JOHNSON AVE	Commercial	HIGH	5531	AUTO SUPPLIES	907.13	
202	OSCAR'S TIRES-WHEELS	445 W MAIN ST	Commercial	HIGH	5531	AUTO SUPPLIES	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
203	POPEYES CHICKEN	110 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
204	COUNTRY WAFFLES	1248 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
205	COCOS #884	1324 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
206	OTTAVIOS ITALIAN RESTAURANT	101 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
207	ON THE BORDER	101 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
208	COTIXAN MEXICAN RESTAURANT	538 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
209	COUNTRY COMFORT RESTAURANT	1255 AVOCADO AVE #105	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
210	THREE AMIGOS TACO SHOP	220 E MADISON AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
211	DENNYS RESTAURANT #7225	1202 W MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
212	DENNYS RESTAURANT #6227	2691 NAVAJO RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
213	SINFUL CREATIONS	1321 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
214	JACK IN THE BOX #78	170 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
215	FRANCOS PIZZA	574 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
216	JACK IN THE BOX #7	393 W MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
217	JACK IN THE BOX #54	2733 NAVAJO RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
218	BASKIN-ROBBINS #118	2396 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
219	JACK IN THE BOX #32	495 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
220	BURGER KING #947	225 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
221	CHEN'S GOLDEN PALACE	530 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
222	BASKIN-ROBBINS ICE CREAM	328 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
223	THE CAJON PASS DELI	1195 N CUYAMACA ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
224	BEEF N BUN	2477 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
225	HUNGRY HOWIES PIZZA	123 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
226	HOMETOWN BUFFET INC #722	390 W MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
227	GENOS BBQ	291 W MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
228	LOS MENDOZA TACO SHOP MEXICAN FOOD	308 BALLANTYNE ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
229	TACO BELL #23723	335 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
230	HAMORABY FAMILY RESTAURANT	401 W MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
231	ITALIA PIZZA	1438 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
232	7-ELEVEN #34048	1021 W WASHINGTON AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
233	ALBERTS MEXICAN FOOD	115 W WASHINGTON AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
234	NITAS DELI	1444 PIONEER WAY #6	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
235	APPLEBEES NEIGHBORHOOD GRILL/BAR	107 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
236	GREEK TOWN RESTAURANT BUFFET	345 W MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
237	ARBYS RESTAURANT #231	325 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
238	EL CAJON SHISH KABAB	811 E MAIN ST #G	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
239	FOSTERS FREEZE #89	315 EL CAJON BLVD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
240	EL COMPADRE TACO SHOP	595 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
241	CAFE' MI AMORE	363 N SECOND ST #F	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
242	K F C #Y450087	555 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
243	GREEK STYLE CHICKEN INC	955 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
244	CATERED CREATIONS	1223 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
245	CARLS JR RESTAURANT #483	520 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
246	CARLS JR #89	624 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
247	PUPUSERIA SALVADORENA	1207 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
248	INTELLLICEPT	1444 PIONEER WAY #13	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
249	OCHOAS MEXICAN FOOD	1051 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
250	CHINA DIAMOND RESTAURANT	1265 AVOCADO AVE #108	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
251	PIZZA HUT #315029	1255 AVOCADO AVE #101	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
252	PHILY STEAK SUBS	312 BALLANTYNE ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
253	ESTRADAS MEXICAN FOOD	569 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
254	QUIZNOS CLASSIC SUBS OF EL CAJON	124 W MAIN ST #110	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
255	STARBUCKS COFFEE #3417	903 BROADWAY	Commercial	HIGH	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
256	COLIMAS MEXICAN FOOD	339 W MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
257	SUN FLEXIONICS CAFE	790 GREENFIELD DR	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
258	A M A R C ENTERPRISES, INC	1339 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
259	20/20 SERVICES	215 N 2ND STREET	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
260	TREPCO WESTS GROCERY CLUB	333 WALTER WAY	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
261	SHADOW MOUNTAIN MINISTRIES	2100 GREENFIELD DRIVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
262	CHENS GOLDEN PALACE	530 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
263	THE GRINDER	1300 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
264	AZTEC DINING SERVICES AT GROSSMONT	8800 GROSSMONT COLLEGE DR	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.12	
265	TOCUMBO	1183 E MAIN ST #B	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
266	FOODLAND I.G.A.	1099 E MAIN ST	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
267	TIJUANA TACO SHOP	798 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
268	GOLDEN DONUT	1183 E MAIN ST #A	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
269	MAYAS GOURMET DELI/HAPPY CATERING	450 FLETCHER PKWY #114	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
270	SOLID ROCK CAFES	2100 GREENFIELD DR	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
271	TYLERS TASTE OF TEXAS	576 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
272	WIENERSCHNITZEL	1281 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
273	WINGS N THINGS-WING N IT, INC	528 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
274	JERRYS GOURMET JERKY, INC	461-463 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
275	PAPAS PIZZA	111 W WASHINGTON AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
276	SHAKIRA PASTRY	1183 E MAIN ST #1-A	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
277	EL POLLO LOCO	1145 AVOCADO AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
278	SEASONAL ADVENTURES	1050 E MAIN ST	Commercial	MEDIUM	5431	EATING/DRINKING ESTABLISHMENTS	907.13	
279	BROADWAY MARKET	1309 BROADWAY	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
280	EL CAJON NUTRITION CENTER	325 VAN HOUTEN AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
281	PANDA EXPRESS #715	131 BROADWAY SUITE #1	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
282	WALEEDS MEDITERRANEAN	463 N MAGNOLIA AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
283	STARBUCKS COFFEE #9863	745 JAMACHA RD	Commercial	HIGH	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
284	CIRCLE J LIQUOR	1031 BROADWAY	Commercial	HIGH	5411	EATING/DRINKING ESTABLISHMENTS	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
285	PONCHO'S MEXICAN RESTAURANT	2257 FLETCHER PARKWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
286	JACK IN THE BOX #3050	250 E CHASE AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
287	TROPIFRUIT & DELI	1263 BROADWAY #B	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
288	FLOUR POWER CUSTOM CAKERY, INC	2382 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
289	KARINAA MEXICAN SEAFOOD	820 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
290	SPROUTS FARMERS MARKET	152 N SECOND ST	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
291	SOMBRERO MEXICAN FOOD	1501 W WASHINGTON AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
292	WASHINGTON MARKET	121 W WASHINGTON AVE	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
293	AVOCADO FOOD MARKET	852 AVOCADO AVE	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
294	KAELINS MARKET	1435 E MAIN ST	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
295	VONS #2367	950 N SECOND ST	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
296	SMART AND FINAL #398	1090 FLETCHER PKWY	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
297	THE VONS CO INC #3044	1201 AVOCADO AVE	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
298	BLIMPIE SUBS & SALADS	605 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
299	RALPHS GROCERY CO #102	300 N SECOND ST	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
300	DONUT STAR	2383 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
301	SAVE-A-LOT #948	678 JAMACHA RD	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
302	FINEST DONUTS	526 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
303	E Z CORNER MARKET	1107 E MAIN ST	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
304	FIESTA NUTRITION STORE	560 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
305	SUNFOOD NUTRITION	1567 N CUYAMACA ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
306	STARBUCKS COFFEE #8943	450 E CHASE AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
307	EXECUTIVE GOURMET CATERING/ALOHA CATERING	1321 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
308	THE PANCAKE HOUSE	1000 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
309	FOOD 4 LESS #394	444 BROADWAY	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
310	ALBERTSON'S	198 WEST MAIN STREET	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
311	PERNICANOS PIZZA HOUSE	1588 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
312	PERRYS CAFE	475 N MAGNOLIA AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
313	VINA & CO	1444 PIONEER WAY #11	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
314	PERSONAL TOUCH DINING	867 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
315	LITTLE CAESARS PIZZA	1299 E MAIN ST #102	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
316	RANCHO VILLAS	2425 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
317	JACK IN THE BOX	350 E CHASE AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
318	PAPA JOHNS PIZZA #1597	1201 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
319	PONCHOS TACO SHOP	1279 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
320	PANCHOS MEXICAN RESTAURANT	2257 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
321	ORTIZ MEXICAN FOOD	596 N MOLLISON AVE #101	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
322	QUIZNOS 3092	1291 E MAIN ST #106`	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
323	RALLYS HAMBURGERS	1261 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
324	PIZZA HUT	306 BROADWAY -3	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
325	LANDING STRIP DELI	1860 JOE CROSSON DR #F	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
326	DEL TACO #1041	141 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
327	MONTANAS SAVORIES AND SWEETS	1331 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
328	LAS HADAS MEXICAN FOOD	558 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
329	PIZZA XPRESS	1270 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
330	LONG JOHN SILVERS	270 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
331	LOS CHAVOS MEXICAN FOOD	1340 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
332	HOT BLEND COFFEE	250 S MARSHALL AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
333	PAPA'S PIZZA #4	119 W WASHINGTON AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
334	MARECHIARO PIZZA HOUSE	854 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
335	TASTY PIZZA	1109 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
336	MCDONALDS	281 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
337	NORTH PARK PRODUCE	432 E CHASE AVE	Commercial	MEDIUM	5411	EATING/DRINKING ESTABLISHMENTS	907.13	
338	EL RANCHERO TACO FACTORY	790-798 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
339	PANDA VALLEY CHINESE RESTAURANT	1142 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
340	ROYAL PALACE RESTAURANT	1340 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
341	EL JEFECITO II	293 EL CAJON BLVD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
342	STARBUCKS COFFEE #6530	124 W MAIN ST #100	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
343	STUART ANDERSONS BLACK ANGUS RESTAURANT	1000 GRAVES AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
344	PISAS PLACE	109 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
345	SUBWAY SANDWICHES #4445	1175 AVOCADO AVE #106	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
346	SOMBRERO MEXICAN FOOD INC	1215 W MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
347	ALM TRANSPORTATION SERVICES INC	1860 JOE CROSSON DR #D	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
348	KIPS CAFE	382 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
349	TACO BELL #16534	2827 NAVAJO RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
350	TACO BELL #3077	584 N MOLLISON AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
351	THE BARBECUE PIT	2388 FLETCHER PKWY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
352	WRANGLER FAMILY BBQ PIT	901 EL CAJON BLVD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
353	THE BARBECUE PIT	901 EL CAJON BLVD -2	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
354	SUBWAY SANDWICHES/SALADS	341 N SECOND ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
355	COFFEE 911	1297 E MAIN ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
356	RICOS DELI EXPRESSO & SMOOTHIE BAR	538 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
357	STARBUCKS COFFEE #589	2740 FLETCHER PKWY	Commercial	HIGH	5812	EATING/DRINKING ESTABLISHMENTS	907.11	
358	RITAS MEXICAN FOOD INC/RITAS CATERING	1291 E MAIN ST #108	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
359	REDBOX AUTOMATED RETAIL, L.L.C.	790 JAMACHA RD	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
360	HAPPY COW CAR WASH	1055 N CUYAMACA ST	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
361	SALSA MEXICAN FOOD	1255 AVOCADO AVE #103	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
362	STEPHANIE EMERSON CATERING	144 S ORANGE AVE	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
363	SANTANA MEXICAN GRILL INC	411 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
364	L&L HAWAIIAN BARBECUE	356 BROADWAY	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
365	BIG FRANKS CAFE INC	163 JAMACHA RD #131	Commercial	MEDIUM	5812	EATING/DRINKING ESTABLISHMENTS	907.13	
366	EL CAJON HEARING AID CENTER	761 ARNELE AVE	Commercial	HIGH	7699	EQUIPMENT REPAIR	907.13	
367	INSTRUMENT OVERHAUL SVC OF S D INC	1981 N MARSHALL AVE	Commercial	HIGH	7699	EQUIPMENT REPAIR	907.13	
368	LYNNS LOCKSMITH SERVICE	1380 E MAIN ST	Commercial	HIGH	7699	EQUIPMENT REPAIR	907.13	
369	MARIO UPHOLSTERY	1211 N SECOND ST #104	Commercial	HIGH	7699	EQUIPMENT REPAIR	907.13	
370	MASONS SAW AND LAWNMOWER SERVICE, INC	1209 BROADWAY	Commercial	HIGH	7699	EQUIPMENT REPAIR	907.13	
371	AIREPAIR	2075 N MARSHALL AVE	Commercial	HIGH	7699	EQUIPMENT REPAIR	907.13	
372	BLUE MAX AVIATION SERVICE	1825 N MARSHALL AVE	Commercial	HIGH	7699	EQUIPMENT REPAIR	907.13	
373	PRECISION CONCEPTS	1935 FRIENDSHIP DR #F	Commercial	HIGH	7699	EQUIPMENT REPAIR	907.13	
374	2ND ST GAS AND MINI	725 N SECOND ST	Commercial	HIGH	5541	FUELING	907.13	
375	BIG DADDYS OIL 14, INC	489 W MAIN ST	Commercial	HIGH	5541	FUELING	907.13	
376	APRO #20	710 N SECOND ST	Commercial	HIGH	5541	FUELING	907.13	
377	GOLDEN STATE AVIATION 160	1987 N MARSHALL AV #108	Commercial	HIGH	5541	FUELING	907.13	
378	VALERO STATION #3738	785 JAMACHA RD	Commercial	HIGH	5541	FUELING	907.13	
379	7 ELEVEN AT0215	1479 E WASHINGTON AVE	Commercial	HIGH	5541	FUELING	907.13	
380	7-ELEVEN STORE #2131-25085C	895 BROADWAY	Commercial	HIGH	5541	FUELING	907.13	
381	ARCO #6146	725 N 2ND ST	Commercial	HIGH	5541	FUELING	907.13	
382	ON BROADWAY GAS	900 BROADWAY	Commercial	HIGH	5541	FUELING	907.13	
383	CHEVRON STORE #59	1701 EAST MAIN STREET	Commercial	HIGH	5541	FUELING	907.13	
384	G&M OIL CO LLC #59	1701 E MAIN ST	Commercial	HIGH	5541	FUELING	907.13	
385	SUPER STAR #2	1090 BROADWAY	Commercial	HIGH	5541	FUELING	907.13	
386	ARCO STATION A#9533	1092 E WASHINGTON AV	Commercial	HIGH	5541	FUELING	907.13	
387	BOB'S TEXACO SERVICE	1492 E MAIN ST	Commercial	HIGH	5541	FUELING	907.13	
388	BROADWAY EXXON #1019	898 BROADWAY	Commercial	HIGH	5541	FUELING	907.13	
389	CHEVRON #90106	752 N JOHNSON AV	Commercial	HIGH	5541	FUELING	907.13	
390	EAST MAIN EXXON	1699 E MAIN ST	Commercial	HIGH	5541	FUELING	907.13	
391	ARCO FACILITY #9572	1484 E WASHINGTON AV	Commercial	HIGH	5541	FUELING	907.13	
392	SMOG PROS	1410 E MAIN ST	Commercial	HIGH	5541	FUELING	907.13	
393	CHEVRON STATIONS INC #1742	696 N MOLLISON AVE	Commercial	HIGH	5541	FUELING	907.13	
394	ULTRAMAR STATION 1-738	785 JAMACHA RD -2	Commercial	HIGH	5541	FUELING	907.13	
395	BIG DADDYS OIL 14, INC	1484 E WASHINGTON AVE	Commercial	HIGH	5541	FUELING	907.13	
396	NEW WEST #1019	898 BROADWAY	Commercial	HIGH	5541	FUELING	907.13	
397	ARCO/SMOG PROS	1410 EAST MAIN STREET	Commercial	HIGH	5541	FUELING	907.13	
398	WASHINGTON ARCO	1092 E WASHINGTON AVE	Commercial	HIGH	5541	FUELING	907.13	
399	CHEVRON USA INC #92779	696 N MOLLISON AVE	Commercial	HIGH	5541	FUELING	907.13	
400	NEW WEST #1018	1699 E MAIN ST	Commercial	HIGH	5541	FUELING	907.13	
401	GREENSCAPE	333 W LEXINGTON AVE	Commercial	MEDIUM	782	LANDSCAPING	907.13	
402	GEORGES LAWN EQUIPMENT	747 E MAIN ST	Commercial	MEDIUM	782	LANDSCAPING	907.13	
403	KLADIS PAINTING INC	557 W MAIN ST	Commercial	HIGH	1721	PAINTING/COATING	907.13	
404	LOUIS/WHEELER AUTO SALES	279 EL CAJON BLVD	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
405	THERMO KING OF SAN DIEGO	310 N JOHNSON AVE	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
406	THE TRUCK STOP	1175 BROADWAY	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
407	EAST COUNTY AUTO CENTER/EAST COUNTY AUTO COLLISION	1375 E MAIN ST	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
408	K M Y MOTORSPORTS	1935 FRIENDSHIP DR #F	Commercial	HIGH	5571	VEHICLE DEALERS	907.13	
409	JOHN S ZAZAS ENTERPRISES LEASING	1149 BROADWAY	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
410	SATURN OF EL CAJON	541 N JOHNSON AVE	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
411	A TO Z LEASING	889 ARNELE AVE	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
412	J R PRODUCTS	982 BROADWAY	Commercial	HIGH	5599	VEHICLE DEALERS	907.13	
413	WHOLESALE AUTOS	110 EL CAJON BLVD	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
414	MOTOWORLD OF EL CAJON	315 N MAGNOLIA AVE	Commercial	HIGH	5571	VEHICLE DEALERS	907.13	
415	SUZUKI OF EL CAJON	464 W MAIN ST	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
416	BUDGET CAR SALES/DAEWOO OF EL CAJON	400 N JOHNSON AVE	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
417	DE LA FUENTE CADILLAC	1385 E MAIN ST	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
418	LUDINGTON R V	1131 BROADWAY	Commercial	HIGH	5561	VEHICLE DEALERS	907.13	
419	CALIFORNIA PARK MODELS	746 N SECOND ST #A	Commercial	HIGH	5561	VEHICLE DEALERS	907.13	
420	TOP DOLLAR #1	1150 N SECOND ST	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
421	EL CAJON MITSUBISHI	247 EL CAJON BLVD	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
422	BEST AUTO WHOLESALER	476 W MAIN ST	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
423	CAMPER & TRAILER OUTLET	1183 BROADWAY	Commercial	HIGH	5599	VEHICLE DEALERS	907.13	
424	AUTOLAND INC	826 JACKMAN ST	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
425	BUGGY WORLD	584 N JOHNSON AVE	Commercial	HIGH	5599	VEHICLE DEALERS	907.13	
426	TOYOTA OF EL CAJON	588 N JOHNSON AVE	Commercial	HIGH	5511	VEHICLE DEALERS	907.13	
427	WORLD TERMINAL PARKING INC	1111 BROADWAY	Commercial	HIGH	7542	VEHICLE WASHING	907.13	
428	EXPRESS HAND CAR WASH	710 JAMACHA RD	Commercial	HIGH	7542	VEHICLE WASHING	907.13	
429	REBEL RENTS INC	1717 E MAIN ST	Commercial	HIGH	7359	VEHICLE/EQUIPMENT RENTAL	907.13	
430	T R S HOME FURNISHINGS	880 ARNELE AVE	Commercial	HIGH	7359	VEHICLE/EQUIPMENT RENTAL	907.13	
431	JUMP 4 JOY	1177 N SECOND ST #101	Commercial	HIGH	7359	VEHICLE/EQUIPMENT RENTAL	907.13	
432	SUNBELT RENTALS, INC	1114 N MAGNOLIA AVE	Commercial	HIGH	7359	VEHICLE/EQUIPMENT RENTAL	907.13	
433	ALWAYS BOUNCIN	1080 W BRADLEY AVE #B	Commercial	HIGH	7359	VEHICLE/EQUIPMENT RENTAL	907.13	
434	PENSKE TRUCK LEASING CO LP	1120 BROADWAY	Commercial	HIGH	7359	VEHICLE/EQUIPMENT RENTAL	907.13	
435	JEROME'S	333 N JOHNSON AVENUE	Commercial	HIGH	5021	WHOLESALE/STORAGE/WAREHOUSING	907.13	
436	SUPER STARS	1313 N SECOND ST	Commercial	MEDIUM	7532	AUTO PAINT/BODY	907.13	
437	EXALT CUSTOMS	350 COOGAN WAY	Commercial	LOW	7532	AUTO PAINT/BODY	907.13	
438	J. C. AUTO DETAIL	790 EL CAJON BLVD	Commercial	LOW	7532	AUTO PAINT/BODY	907.13	
439	COUNTY COLLISION CENTER	153 S JOHNSON AVE	Commercial	LOW	7532	AUTO PAINT/BODY	907.13	
440	FLEET PAINTING	945 INDUSTRIAL PL	Commercial	LOW	7532	AUTO PAINT/BODY	907.13	
441	SIDS AUTO BODY INC	910 EL CAJON BLVD	Commercial	LOW	7532	AUTO PAINT/BODY	907.13	
442	DURAID HERMEZ DETAIL	816 N SECOND ST	Commercial	LOW	7532	AUTO PAINT/BODY	907.13	
443	FLETCHER HILLS AUTOMOTIVE & SMOG	1288 FESLER ST	Commercial	LOW	7538	AUTO REPAIR	907.13	
444	AMERICAN TIRE & SERVICE CO	435 N 2ND ST	Commercial	LOW	7539	AUTO REPAIR	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
445	ACCURATE AUTOMOTIVE & MUFFLER	1265 GREENFIELD DR #E	Commercial	LOW	7538	AUTO REPAIR	907.13	
446	COTTMAN TRANSMISSIONS	1286 FESLER ST	Commercial	LOW	7537	AUTO REPAIR	907.13	
447	SWEETWOOD & SONS INC	151 S SUNSHINE AV	Commercial	LOW	7539	AUTO REPAIR	907.13	
448	ADVANTAGE AUTOMOTIVE	1281 GREENFIELD DR #A	Commercial	LOW	7539	AUTO REPAIR	907.13	
449	UNOCAL SERV STATION#5059-30790	500 N 2ND ST	Commercial	LOW	7538	AUTO REPAIR	907.13	
450	COUNTY OF SD- FLEET SERVICE	1840 WELD BL	Commercial	LOW	7539	AUTO REPAIR	907.13	
451	CLANCYS TOWING	1385 PIONEER WAY	Commercial	LOW	7549	AUTO REPAIR	907.13	
452	ROCK AUTO GROUP	790 EL CAJON BLVD	Commercial	LOW	7539	AUTO REPAIR	907.13	
453	EL CAJON AUTO ELCTR/TIRE	317 N SECOND ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
454	DEANS AUTOMOTIVE	1318 BROADWAY	Commercial	LOW	7538	AUTO REPAIR	907.13	
455	E. SWEETWOOD & SONS INC	151 S SUNSHINE AVE	Commercial	LOW	7538	AUTO REPAIR	907.13	
456	EARL SCHEIB OF CALIF INC #244	1002 W MAIN ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
457	CONWAY AUTO REPAIR	1310 BROADWAY #104	Commercial	LOW	7539	AUTO REPAIR	907.13	
458	KOREY'S AUTO REPAIR	303 N 2ND ST	Commercial	LOW	7538	AUTO REPAIR	907.13	
459	A/C REFRIGERATION SUPPLY	1440 BROADWAY	Commercial	LOW	7538	AUTO REPAIR	907.13	
460	EL CAJON MUFFLER & A/C	1370 BROADWAY	Commercial	LOW	7538	AUTO REPAIR	907.13	
461	EXXON MOBIL OIL CORP	1761 GREENFIELD DR	Commercial	LOW	7538	AUTO REPAIR	907.13	
462	VALVOLINE INSTANT OIL CHANGE	610 2ND ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
463	CHAPPELLES	1433 PIONEER WAY	Commercial	LOW	7538	AUTO REPAIR	907.13	
464	POES BODY SHOP	727 EL CAJON BLVD	Commercial	LOW	7538	AUTO REPAIR	907.13	
465	PRECISION TUNE AUTO CARE	1191 E MAIN ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
466	SAN DIEGO EXPRESS LIMOUSINE SERVICE	830 N SECOND ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
467	BRUCES AUTO REPAIR	DOWNTOWN EL CAJON	Commercial	LOW	7539	AUTO REPAIR	907.13	
468	TRICK TRUCK OF CA	797 N SECOND ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
469	AUTO REPAIR FOR LESS	1189 E MAIN ST #101	Commercial	LOW	7538	AUTO REPAIR	907.13	
470	ATLAS RADIATOR SHOP	615 EL CAJON BLVD	Commercial	LOW	7539	AUTO REPAIR	907.13	
471	WILLIAM TRANSMISSION & AUTO REPAIR	792 EL CAJON BLVD	Commercial	LOW	7538	AUTO REPAIR	907.13	
472	ATLANTIC AUTO REPAIR	1318 BROADWAY	Commercial	LOW	7539	AUTO REPAIR	907.13	
473	COLOSSUS AUTO CENTER	790 EL CAJON BLVD	Commercial	LOW	7538	AUTO REPAIR	907.13	
474	VICTORY AUTO SERVICE	935 W MAIN ST	Commercial	LOW	7538	AUTO REPAIR	907.13	
475	PERFECT PERFORMANCE AUTO CARE	595 EL CAJON BLVD	Commercial	LOW	7539	AUTO REPAIR	907.13	
476	ADVANCE PAINT AND BODY	790 EL CAJON BLVD	Commercial	LOW	7538	AUTO REPAIR	907.13	
477	E AND S AUTOMOTIVE	1189 E MAIN ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
478	MAGIC PAYLESS TOWING INC	1402 PIONEER WY	Commercial	LOW	7549	AUTO REPAIR	907.13	
479	ORAMS AUTO ELECTRIC	1033 W MAIN ST #A	Commercial	LOW	7539	AUTO REPAIR	907.13	
480	RUN RITE AUTO SERVICE #3	830 N SECOND ST #B	Commercial	LOW	7538	AUTO REPAIR	907.13	
481	LOW PRICE AUTO GLASS #22	1100 EL CAJON BLVD	Commercial	LOW	7536	AUTO REPAIR	907.13	
482	CHIEF AUTO GLASS	640 GARFIELD AVE	Commercial	LOW	7539	AUTO REPAIR	907.11	
483	LA MESA AUTO & TIRE CENTER	2210 FLETCHER PKWY	Commercial	LOW	7539	AUTO REPAIR	907.11	
484	SWEETWOOD AND SON AUTO REPAIR	115 S SUNSHINE	Commercial	LOW	7539	AUTO REPAIR	907.13	
485	RANCHO DEL ORO TOWING	1167 W PALM AVE	Commercial	LOW	7549	AUTO REPAIR	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
486	SEARS ROEBUCK & CO	1406 N JOHNSON AVE	Commercial	LOW	7549	AUTO REPAIR	907.13	
487	MURPHYS AUTO REPAIR	935 N SECOND ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
488	SUN AUTO REPAIR	1310 BROADWAY #101-102	Commercial	LOW	7539	AUTO REPAIR	907.13	
489	J AND J AUTO SERVICE	1313 N SECOND ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
490	VALLEY TRANSMISSION & AUTO	930 E WASHINGTON AVE -2	Commercial	LOW	7537	AUTO REPAIR	907.13	
491	CANAL TRANSMISSIONS	1249 DENVER LN	Commercial	LOW	7537	AUTO REPAIR	907.13	
492	JIFFY LUBE #495	539 N SECOND ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
493	ATLAS RADIATOR	580 EL CAJON BLVD	Commercial	LOW	7538	AUTO REPAIR	907.13	
494	BANNY HOM ENTERPRISES	1240 W MAIN ST	Commercial	LOW	7549	AUTO REPAIR	907.13	
495	VALLEY AUTOMOTIVE	813 N SECOND ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
496	USA AUTO REPAIR & SALES	1313 N SECOND ST	Commercial	LOW	7538	AUTO REPAIR	907.13	
497	MILLERS TOWING	1402 PIONEER WAY	Commercial	LOW	7549	AUTO REPAIR	907.13	
498	A1 SMOG TEST	507 BROADWAY	Commercial	LOW	7539	AUTO REPAIR	907.13	
499	SAN DIEGO COUNTY TOWING INC	1402 PIONEER WY	Commercial	LOW	7549	AUTO REPAIR	907.13	
500	IMPORTED MOTOR CARS	939 W MAIN ST	Commercial	LOW	7539	AUTO REPAIR	907.13	
501	EXPRESS AUTO REPAIR AND TIRES	1316 BROADWAY	Commercial	LOW	7539	AUTO REPAIR	907.13	
502	CLIFTON MERCEDES INDEPENDENT SALES/SERVICE	1033 W MAIN ST	Commercial	LOW	7538	AUTO REPAIR	907.13	
503	RAM 99	407 EL CAJON BLVD	Commercial	LOW	7549	AUTO REPAIR	907.13	
504	TEAM AUTOMOTIVE REPAIR	354 WALTER WAY	Commercial	LOW	7538	AUTO REPAIR	907.13	
505	ALLMAN FAMILY AUTO	1265 BROADWAY	Commercial	LOW	7539	AUTO REPAIR	907.13	
506	SHAMROCK RACING, INC	2030 GILLESPIE WAY #102	Commercial	LOW	7538	AUTO REPAIR	907.13	
507	GLENVIEW TOWING	1167 W PALM AVE	Commercial	LOW	7549	AUTO REPAIR	907.13	
508	KRAGEN AUTO SUPPLY #1270	485 BROADWAY	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
509	WORLDWIDE AUTO PARTS	391 N SECOND ST	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
510	FIRESTONE COMPLETE AUTO CARE 2254	435 N SECOND ST	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
511	FOREIGN AUTO SUPPLY	1302 BROADWAY	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
512	OFF ROAD WAREHOUSE	425 N MARSHALL AVE	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
513	MARSHAL TIRE	259 N MARSHALL AVE	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
514	NEW BATTERY STARTER SHOP	1056 E MAIN ST	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
515	THE PEP BOYS #813	201 JAMACHA RD	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
516	GLEN'S RACING TIRES	1889 WING AVE	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
517	KRAGEN AUTO PARTS #1173	101 S MOLLISON AVE	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
518	PEP BOYS #813	201 JAMACHA RD	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
519	KRAGEN AUTO PARTS	790 JOHNSON AV	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
520	PARTS PLUS AUTO	1302 BROADWAY	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
521	TIPTON HONDA	889 ARNELE AVE	Commercial	LOW	5013	AUTO SUPPLIES	907.13	
522	AL ARCHARD INC	661 EL CAJON BLVD	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
523	PAL OF MINE AUTO SALES	151 S SUNSHINE AVE #B	Commercial	LOW	5013	AUTO SUPPLIES	907.13	
524	MOTOR SPORTS CO	775 EL CAJON BLVD	Commercial	LOW	5013	AUTO SUPPLIES	907.13	
525	AUTO WHOLESALERS	1440-1446 E MAIN ST	Commercial	LOW	5013	AUTO SUPPLIES	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
526	A&A SMOG TEST ONLY STATION	267 N MARSHALL AVE #A	Commercial	LOW	5013	AUTO SUPPLIES	907.13	
527	ADVANCED COLOR COATINGS	1375 N CUYAMACA ST	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
528	THE PRICE IS RIGHT NOW	624 EL CAJON BLVD #A	Commercial	LOW	5013	AUTO SUPPLIES	907.13	
529	ALLOY STUDIOS	380 VERNON WAY #G	Commercial	LOW	5013	AUTO SUPPLIES	907.13	
530	76 SMOG TEST ONLY STATION	640 GARFIELD AVE	Commercial	LOW	5013	AUTO SUPPLIES	907.11	
531	C K AUTO SALES	1419 BROADWAY	Commercial	LOW	5013	AUTO SUPPLIES	907.13	
532	AUTO WAREHOUSE CENTER	790 EL CAJON BLVD	Commercial	LOW	5013	AUTO SUPPLIES	907.13	
533	PACIFIC CAR CO	900 EL CAJON BLVD	Commercial	LOW	5013	AUTO SUPPLIES	907.13	
534	COUNTY MOTOR PARTS CO INC	1597 N JOHNSON AVE	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
535	NAPA AUTO AND TRUCKS PARTS	1597 BRADLEY	Commercial	LOW	5531	AUTO SUPPLIES	907.13	
536	MOPARS BY JACK	1429 PIONEER WAY	Commercial	LOW	5013	AUTO SUPPLIES	907.13	
537	HUISH FAMILY FUN CENTERS INC	1155 GRAVES AV	Commercial	LOW	7999	ENTERTAINMENT	907.13	
538	BOOMERS	1155 GRAVES AVENUE	Commercial	LOW	7999	ENTERTAINMENT	907.13	
539	PARKWAY BOWL	1280 FLETCHER PKWY	Commercial	LOW	7999	ENTERTAINMENT	907.13	
540	SPEEDY T V	1257 BROADWAY	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
541	HI-TECH WELDING AND FORMING, INC	1990 FRIENDSHIP DR	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
542	HERITAGE MOTORSPORTS	1437 PIONEER WAY	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
543	E&L FORKLIFT SERVICE	1435 PIONEER WAY	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
544	RICKS R V CENTERS	1546 E MAIN ST	Commercial	LOW	7692	EQUIPMENT REPAIR	907.13	
545	ROY WHEELER AUTO REPAIR	797 GREENFIELD DR #1	Commercial	LOW	7692	EQUIPMENT REPAIR	907.13	
546	TAG'S VCR & CAMCORDER RPR	908 E WASHINGTON AVE	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
547	TIME SERVICE INC	575 FLETCHER PKWY	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
548	CENTERLINE AIRCRAFT	1860 JOE CROSSON DR #B	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
549	JIBE STUDIOS	2333 FLETCHER PKWY	Commercial	LOW	7699	EQUIPMENT REPAIR	907.11	
550	SEW PROS SEW & VAC CENTER	393 BROADWAY	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
551	BEST NUTRITION	147 JAMACHA RD	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
552	AIREPAIR	1860 JOE CROSSON DR K	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
553	AIRCRAFT MAINTENANCE SERVICE	1780 JOE CROSSON DR A	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
554	GOLDEN EARTH DISTRIBUTORS	1331 N CUYAMACA ST #G	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
555	AIRCRAFT STORAGE SPACES	1840 JOE CROSSON DR	Commercial	LOW	7699	EQUIPMENT REPAIR	907.13	
556	NEW WEST #1017	695 EL CAJON BLVD	Commercial	LOW	5541	FUELING	907.13	
557	GASNACK	201 BROADWAY	Commercial	LOW	5541	FUELING	907.13	
558	FLETCHER HILLS UNION 76	2410 FLETCHER PKWY	Commercial	LOW	5541	FUELING	907.11	
559	ARCO A.M./P.M. #640	593 N MOLLISON AVE	Commercial	LOW	5541	FUELING	907.13	
560	SEARS ROEBCK & CO	575 FLETCHER PKWY	Commercial	LOW	5541	FUELING	907.13	
561	GAS DEPOT	490 N 2ND ST	Commercial	LOW	5541	FUELING	907.13	
562	QUICK TRIP FUEL & MARKET	596 N MOLLISON AVE	Commercial	LOW	5541	FUELING	907.13	
563	G&M OIL COMPANY LLC #94	1298 BROADWAY	Commercial	LOW	5541	FUELING	907.13	
564	SHELL	601 N SECOND ST	Commercial	LOW	5541	FUELING	907.13	
565	AM/PM MINI MARKET #5176	1245 W MAIN ST	Commercial	LOW	5541	FUELING	907.13	
566	ARCO AM/PM	1245 W MAIN ST	Commercial	LOW	5541	FUELING	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
567	SUPER STAR STATIONS	1110 E MAIN ST	Commercial	LOW	5541	FUELING	907.13	
568	ARCO #9532	700 AVOCADO AVE	Commercial	LOW	5541	FUELING	907.13	
569	ARCO #9562	978 N CUYAMACA ST	Commercial	LOW	5541	FUELING	907.13	
570	ARCO PRODUCTS #1677	404 E CHASE AV	Commercial	LOW	5541	FUELING	907.13	
571	ARCO FACILITY #9758	398 EL CAJON BLVD	Commercial	LOW	5541	FUELING	907.13	
572	EXXON 1017	695 EL CAJON BLVD	Commercial	LOW	5541	FUELING	907.13	
573	GREENFIELD MOBIL	1761 GREENFIELD DR	Commercial	LOW	5541	FUELING	907.13	
574	EL CAJON ARCO AM-PM	404 E CHASE AVE	Commercial	LOW	5541	FUELING	907.13	
575	PSI #9758	398 EL CAJON BLVD	Commercial	LOW	5541	FUELING	907.13	
576	GOLDEN STATE GASOLINE	181 N SECOND ST	Commercial	LOW	5541	FUELING	907.13	
577	SUPER STAR #3	1090 W MAIN ST	Commercial	LOW	5541	FUELING	907.13	
578	ARCO #9758	398 EL CAJON BLVD	Commercial	LOW	5541	FUELING	907.13	
579	G&M OIL #95	1099 W MAIN ST	Commercial	LOW	5541	FUELING	907.13	
580	PSI #9532	700 AVOCADO AVE	Commercial	LOW	5541	FUELING	907.13	
581	2ND STREET GAS DEPOT	490 N SECOND ST	Commercial	LOW	5541	FUELING	907.13	
582	76 STATION	2410 FLETCHER PARKWAY	Commercial	LOW	5541	FUELING	907.11	
583	UNOCAL/SERV STA #306254247	2410 FLETCHER PY	Commercial	LOW	5541	FUELING	907.11	
584	SKS INC	610 N 2ND ST	Commercial	LOW	5541	FUELING	907.13	
585	EL CAJON 76	500 N SECOND ST	Commercial	LOW	5541	FUELING	907.13	
586	MAIN STREET MOBIL	1215 W MAIN ST	Commercial	LOW	5541	FUELING	907.13	
587	REVCO GAS	303 JAMACHA RD	Commercial	LOW	5541	FUELING	907.13	
588	SHELL	515 N MAGNOLIA AVE	Commercial	LOW	5541	FUELING	907.13	
589	ADVANCED ELECTRONIC SOLUTIONS	1830 JOHN TOWERS AVE	Commercial	LOW	1711	OTHER CONTRACTOR	907.13	
590	WILLIAM KELLY & SONS CALIFORNIA INC	1044 PIONEER WAY #D	Commercial	LOW	1711	OTHER CONTRACTOR	907.13	
591	NATURAL ENVIRONMENTAL INC	1162 N MARSHALL AVE	Commercial	LOW	1799	OTHER CONTRACTOR	907.13	
592	PACIFIC PRODUCTION PLUMBING	1584 PIONEER WAY	Commercial	LOW	1711	OTHER CONTRACTOR	907.13	
593	HAMANN CONSTRUCTION	1000 PIONEER WAY	Commercial	LOW	1521	OTHER CONTRACTOR	907.13	
594	DALEY GENERAL ENGINEERING CONTRACTORS	870 GROSSMONT AVENUE	Commercial	LOW	1799	OTHER CONTRACTOR	907.13	
595	C&R ROOFING	766 GABLE WAY	Commercial	LOW	1761	OTHER CONTRACTOR	907.13	
596	PACIFIC REFRIGERATION INC	1440 BROADWAY	Commercial	LOW	1711	OTHER CONTRACTOR	907.13	
597	RON ELLIS ENTERPRISES INC	427 EL CAJON BLVD	Commercial	LOW	1721	PAINTING/COATING	907.13	
598	GARY SEITRICH	715 E MAIN ST	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
599	AUTOHAUS STEBEL INC	885 E WASHINGTON AVE	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
600	VALLEY TRAILER SUPPLY - RICKS RV	1546 E MAIN ST	Commercial	LOW	5599	VEHICLE DEALERS	907.13	
601	WILLIAM HUSKEY ACCOUNTING	385 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
602	GOOD TIMES R V	1338 E MAIN ST	Commercial	LOW	5599	VEHICLE DEALERS	907.13	
603	BAJA TRUCK AND AUTO IMPORTS	1403 BROADWAY	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
604	AUTO FINANCE SPECIALISTS	385 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
605	BOB BAKER LEXUS	1000 ARNELE AVE	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
606	R P RACING	1259 BROADWAY	Commercial	LOW	5599	VEHICLE DEALERS	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
607	MCCLELLAN VEHICLE SALES, INC	919 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
608	TOM PARKER AUTO GALLERY	414 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
609	STETTS IRON HORSE RANCH	453 EL CAJON BLVD	Commercial	LOW	5571	VEHICLE DEALERS	907.13	
610	CUNNINGHAM B M W	855 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
611	INDIAN MOTORCYCLE EL CAJON INC	385 S MARSHALL AVE	Commercial	LOW	5571	VEHICLE DEALERS	907.13	
612	ROCK AUTOMOTIVE GROUP	624 EL CAJON BLVD #A	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
613	EL CAJON MOTORCYCLES, L.L.C.	621 EL CAJON BLVD	Commercial	LOW	5571	VEHICLE DEALERS	907.13	
614	CARS FOR YOU	350 FLETCHER PKWY	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
615	HOLLYWOOD MOTORS	1423 BROADWAY	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
616	QUINSEY POWERSPORTS EL CAJON	660 EL CAJON BLVD	Commercial	LOW	5571	VEHICLE DEALERS	907.13	
617	EL CAJON CYCLE	685 EL CAJON BLVD -1	Commercial	LOW	5571	VEHICLE DEALERS	907.13	
618	MOSSY NISSAN EL CAJON	1170 W MAIN ST	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
619	CAR PRO, INC	1427 BROADWAY	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
620	LEGACY CARS	920 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
621	AMERICAN AUTO SALES	1100 EL CAJON BLVD	Commercial	LOW	5521	VEHICLE DEALERS	907.13	
622	CLASSIC AUTO SALES	966 E MAIN ST	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
623	EL CAJON KIA	720 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
624	TRUCK AND SUV SUPERSTORE INC.	327 EL CAJON BLVD	Commercial	LOW	5599	VEHICLE DEALERS	907.13	
625	AUTO DELEGANCE	673 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
626	EL CAJON FORD	1595 E MAIN ST	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
627	CUNNINGHAM BMW	875 N EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
628	CLASSIC BOAT SHOP	1461 PIONEER WY	Commercial	LOW	5551	VEHICLE DEALERS	907.13	
629	R V SUPERCENTER	1111 E MAIN ST	Commercial	LOW	5561	VEHICLE DEALERS	907.13	
630	M&N AUTO SERVICE & SALES	344 WALTER WAY	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
631	AMERICAN FINANCE	410 EL CAJON BLVD	Commercial	LOW	5521	VEHICLE DEALERS	907.13	
632	EAST COUNTY MOTO CROSS	685 EL CAJON BLVD	Commercial	LOW	5571	VEHICLE DEALERS	907.13	
633	COUNTYWIDE DEALERS SERVICE	410 EL CAJON BLVD	Commercial	LOW	5521	VEHICLE DEALERS	907.13	
634	WS AUTO SALES	775 EL CAJON BLVD	Commercial	LOW	5599	VEHICLE DEALERS	907.13	
635	DISCOUNT TRAILER & R V	1440-1446 E MAIN ST	Commercial	LOW	5521	VEHICLE DEALERS	907.13	
636	RICE RV	1035 E MAIN ST	Commercial	LOW	5561	VEHICLE DEALERS	907.13	
637	HYAT SALES	1261 BROADWAY	Commercial	LOW	5571	VEHICLE DEALERS	907.13	
638	BABES AUTO SALES	1419 BROADWAY	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
639	ALIA INSURANCE SERVICES, INC	720 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
640	BOB BAKER CHEVROLET-EL CAJON	900 ARNELE AVE	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
641	SAN DIEGO TOWABLES, L.L.C.	1111 E MAIN ST	Commercial	LOW	5561	VEHICLE DEALERS	907.13	
642	ENTERPRISES CAR SALES	850 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
643	MUSTANG AUTO AND CLASSIC CARS	727 EL CAJON BLVD	Commercial	LOW	5511	VEHICLE DEALERS	907.13	
644	BOLGER CLASSIC BOATS	1437 PIONEER WY	Commercial	LOW	5551	VEHICLE DEALERS	907.13	
645	DOUBLE-D R.V. INC	985 E MAIN ST	Commercial	LOW	5561	VEHICLE DEALERS	907.13	
646	FLETCHER HILLS CAR WASH	1055 CUYAMACA	Commercial	LOW	7542	VEHICLE WASHING	907.13	
647	CRYSTAL CLEAN CAR WASH	111 S FIRST ST	Commercial	LOW	7542	VEHICLE WASHING	907.13	

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY	HSA	NOI_WDID
648	NEW PRIDE CAR WASH	816 N 2ND ST	Commercial	LOW	7542	VEHICLE WASHING	907.13	
649	EL CAJON AUTO TRIM SHOP	645 W LEXINGTON AVE	Commercial	LOW	7542	VEHICLE WASHING	907.13	
650	BODY BEAUTIFUL CAR WASH INC	690 EL CAJON BLVD	Commercial	LOW	7542	VEHICLE WASHING	907.13	
651	WORLD TERMINAL PARKING INC	329 N SECOND ST	Commercial	LOW	7542	VEHICLE WASHING	907.13	
652	MAIN STREET CAR WASH	1437 E MAIN ST	Commercial	LOW	7542	VEHICLE WASHING	907.13	
653	EAST VALLEY CLASSIC CAR WASH	760 E MAIN ST	Commercial	LOW	7542	VEHICLE WASHING	907.13	
654	ROMEOS CAR WASH	195 N SECOND ST	Commercial	LOW	7542	VEHICLE WASHING	907.13	
655	SUPERIOR CAR WASH	816 N SECOND ST	Commercial	LOW	7542	VEHICLE WASHING	907.13	
656	AUTOSALON: AUTOMOBILE SERVICE	275 DOUGLAS	Commercial	LOW	7542	VEHICLE WASHING	907.13	
657	WATERSPORTS SPECIALTIES	290 N MARSHALL AV	Commercial	LOW	7359	VEHICLE/EQUIPMENT RENTAL	907.13	
658	ENTERPRISE RENT-A-CAR #3247	451 N MAGNOLIA AVE	Commercial	LOW	7513	VEHICLE/EQUIPMENT RENTAL	907.13	
659	ENTERPRISE RENT-A-CAR	300 EL CAJON BLVD	Commercial	LOW	7513	VEHICLE/EQUIPMENT RENTAL	907.13	
660	D3 EQUIPMENT	1475 PIONEER WAY	Commercial	LOW	7359	VEHICLE/EQUIPMENT RENTAL	907.13	
661	EL CAJON MOVING CENTER	1186 E MAIN ST	Commercial	LOW	7513	VEHICLE/EQUIPMENT RENTAL	907.13	
662	RENTAL SERVICE CORPORATION	220 N JOHNSON AVE	Commercial	LOW	7359	VEHICLE/EQUIPMENT RENTAL	907.13	
663	RENT-A-CENTER INC #01055	1047 E MAIN ST	Commercial	LOW	7359	VEHICLE/EQUIPMENT RENTAL	907.13	
664	PRIME EQUIPMENT	220 N JOHNSON AV	Commercial	LOW	7353	VEHICLE/EQUIPMENT RENTAL	907.13	
665	DISTINCTIVE CARPET CARE	681 S MOLLISON AVE #B	Commercial	MEDIUM	7217	CARPET/FURNITURE CLEANING	907.13	
666	WESTERN EXTERMINATOR CO	1320 HILL ST	Commercial	MEDIUM	7342	PEST CONTROL	907.13	
667	RIBBIT PEST CONTROL INC	435 W DOUGLAS AVE	Commercial	HIGH	7342	PEST CONTROL	907.13	
668	CARTWRIGHT TERMITE/PEST CONTROL	1376 BROADWAY	Commercial	MEDIUM	7342	PEST CONTROL	907.13	
669	DAVID A HOWE M. D.	505 N MOLLISON AVE #103	Commercial	MEDIUM	7342	PEST CONTROL	907.13	
670	AGRICULTURAL PEST CONTROL	575 E MAIN ST #B	Commercial	MEDIUM	7342	PEST CONTROL	907.13	
671	T A P ENTERPRISES	695 BALLANTYNE ST	Commercial	HIGH	7389	POOL/FOUNTAIN CLEANING	907.13	
672	HEARTLAND COIN CLUB	695 BALLANTYNE ST	Commercial	HIGH	7389	POOL/FOUNTAIN CLEANING	907.13	
673	CRYSTAL POOL SERVICE	1109 N SECOND ST	Commercial	MEDIUM	7389	POOL/FOUNTAIN CLEANING	907.13	
674	ADVANCED POWER WASHING	1701 E MAIN STREET	Commercial	MEDIUM		7349		

City of El Cajon
Inspections Conducted at Construction Sites Permit Year 2008-09

	Description	Address or Location	WD ID#	SUSMP	Trigger	Priority	Site Size (acres) (*=disturbed area <1 acre)	Tributary to ESA	Assessor's Parcel Number	Wet Season Inspection Totals	Wet Season Weeks Active	Wet Season Weeks Inactive	Dry Season Inspection Totals	Dry Season Weeks Active Total	Dry Weeks Season Inactive Total	08-'09 Year Inspection Totals	08-'09 Year Weeks Active Totals	08-'09 Year Weeks Inactive Totals
1	Promenade Square	W. Main St. and S. Magnolia Ave.		Yes	Commercial >100,000 sf	High	2.21	No	4881521400-1700	**9**	**31**	**0**	**6**	**21**	**0**	**15**	**52**	**0**
2	Park Avenue	Park Ave. and Ballantyne St.	9 37C323514	Yes	>10 Unit Subdivision	High	5.85	No	4880400500	**5**	**0**	**31**	**4**	**0**	**21**	**9**	**0**	**52**
3	El Jardin Ct.	El Jardin Ct.		Yes	Street >5,000 sf	High	1.71	No	4970815200	**3**	**0**	**31**	**3**	**0**	**21**	**6**	**0**	**52**
4	Granite Hills Village	1435 E. Washington Ave.	9 37C343675	Yes	>10 Unit Subdivision	High	6.40	Yes	5140215900	**8**	**0**	**31**	**2**	**6**	**15**	**10**	**6**	**46**
5	Tilling Way	1415 Emerald Ave.		No	N/A	High	1.12	No	4925805100&5800	**5**	**0**	**31**	**2**	**0**	**21**	**7**	**0**	**52**
6	Rock Haven Ranch	2010 E. Madison Ave.	9 37C331322	Yes	Hillside Development >5,000 sf, Street >5,000 sf	High	4.93	No	5082400800	**8**	**23**	**8**	**8**	**13**	**8**	**16**	**36**	**16**
7	Ballantyne Glenn	823 Ballantyne St.	9 37C347110	Yes	>10 Unit Subdivision	High	2.60	No	5110143400	**4**	**0**	**31**	**3**	**0**	**21**	**7**	**0**	**52**
8	SC Valley Engineering	656 Front Street		Yes	Industrial >1 acre	High	0.85	No	4832409100	**5**	**0**	**31**	**2**	**0**	**21**	**7**	**0**	**52**
9	Broadway Animal Hospital	380 Broadway		Yes	Parking Redevelopment >5,000 sf	High	1.25	No	4876501400	**2**	**0**	**31**	**0**	**0**	**21**	**2**	**0**	**52**
10	Downtown Redevelopment Project	Main St. and Magnolia Ave.		No	N/A	High	4.42	Yes	Various	**12**	**11**	**20**	**13**	**13**	**8**	**25**	**24**	**28**
11	Cajon Valley Union School District	189-225 Roanoke Rd.	9 37C344648	Yes	Parking Redevelopment >5,000 sf	High	13.59	No	4824430300	**18**	**31**	**0**	**7**	**21**	**0**	**25**	**52**	**0**
12	Pre-Fabricated Home Sales	1341 E. Main St.		No	Redevelopment >5,000 sf	High	0.82	No	4871710900	**11**	**31**	**0**	**4**	**21**	**0**	**15**	**52**	**0**
13	Principato Residence	1053 Loma Portal Dr.		Yes	Hillside Development >5,000 sf	High	0.43	No	4824430300	**7**	**22**	**9**	**2**	**13**	**8**	**9**	**35**	**17**
14	New Car Dealership	670 El Cajon Blvd.		Yes	Automotive, Parking >5,000 sf	High	0.67	No	4874801500	**0**	**0**	**31**	**2**	**11**	**10**	**2**	**11**	**41**
15	Extra Space Storage	1539 E. Main St.	9 37C352869	Yes	Commercial >1 acre	High	1.13	No	5073102000	**10**	**26**	**5**	**3**	**8**	**13**	**13**	**34**	**18**
16	Waste Management Transfer Center	1001 W. Bradley Ave.		Yes	Redevelopment >5,000 sf, ESA	High	6.00*	Yes	4821310200&1600	**7**	**26**	**5**	**4**	**8**	**13**	**11**	**34**	**18**
17	Habitat for Humanity Project	Foundation Ln.		Yes	Street >5,000 sf, ESA	High	0.60	No	4930401800	**3**	**9**	**20**	**4**	**8**	**13**	**7**	**17**	**33**
18	Performance Chopper	442-444 El Cajon Blvd.		Yes	Auto (motorcycle) service, Parking >5,000 sf	High	0.22	No	4875201300	**3**	**8**	**23**	**1**	**2**	**19**	**4**	**10**	**42**
19	El Cajon Shopping Center	198 W. Main St.	9 37C354393	Yes	Parking Redevelopment >5,000 sf	High	6.20*	No	4871924700	**0**	**0**	**31**	**2**	**8**	**13**	**2**	**8**	**44**
20	Toyota of El Cajon	965 Arnele Ave.	9 37C354905	Yes	Parking Redevelopment >5,000 sf, Automotive Repair	High	9.89	No	4822502600	**0**	**0**	**31**	**2**	**2**	**19**	**2**	**2**	**50**
									TOTALS =	**120**	**218**	**400**	**74**	**155**	**265**	**194**	**373**	**665**
1	Naranca Avenue	1338 Naranca Ave.		No	N/A	Medium	0.44	Yes	4842639400-9800	**13**	**29**	**2**	**0**	**13**	**8**	**13**	**42**	**10**
2	Harley Davison	613-621 El Cajon Blvd.		No	N/A	Medium	0.70	No	48753106,17,18	**2**	**18**	**13**	**0**	**13**	**8**	**2**	**31**	**21**
									TOTALS =	**15**	**47**	**15**	**0**	**26**	**16**	**15**	**73**	**31**
									GRAND TOTALS =	**135**	**265**	**415**	**74**	**181**	**281**	**209**	**446**	**696**

Appendix B.3

Enforcement Actions

2008-2009

	Citation Date	Person Cited	Business Name	Address Number	Street Name	Direction	Citation Number	Warning or Fee	Component	Violations	Disposition
1	7/23/2008	Ken Kosman	Habitat for Humanity	801	Avocado		PW 0651	Warning	Construction	Sediment tracking, failure to maintain BMPs. Inadequate construction entrance	Corrected
2	8/1/2008	Gabriel Madrugo	Por Favor Mexican Restaurant	148	Main St	W	PW 0654	First	Commercial	Patio wash water discharging to the rear alley.	Corrected
3	8/21/2008	John Christensen	Cajon Valley Union School Distr.	189	Roanoke		PW 0647	Warning	Construction	Sediment tracking, failure to maintain BMPs.	Corrected
4	10/3/2008	Wilson Pulido	Jacoba Sunshine LLc	642	Mollison	S	PW 0657	First	Construction	Failure to maintain reqired BMPs at condo conversion	Corrected
5	10/3/2008	Wilson Pulido	Jacoba Sunshine LLc	360	First St	N	PW 00069	First	Construction	Sediment tracking, debris piles not protected and failure to maintain BMPs.	Corrected
6	10/3/2008	Wilson Pulido	Jacoba Sunshine LLc	921	Sunshine	S	PW 0646	Second	Construction	Sediment tracking and failure to install and maintain BMPs	Corrected
7	10/7/2008	Mike Snyder		1338	Naranca Ave		PW 0659	Third	Construction	Sediment tracking, failure to maintain BMPs	Corrected
8	11/5/2008	Mike Snyder		1338	Naranca Ave		PW 0660	Fourth	Construction	Failure to install construction entrance, silt fencing and maintain.	Corrected
9	12/16/2008	John Christensen	Cajon Valley Union School Distr.	189	Roanoke		PW 0652	First	Construction	Sediment discharge suring rain event. Construction entrance, soil piles and silt fencing needed.	Corrected
10	1/13/2009	Mark Canfield	San Diego Contracting Inc	1539	Main St	E	PW 0653	Warning	Construction	Failure to maintan a construction entrance, sediment tracking.	Corrected
11	1/14/2009	Michael Cavender	Westfield Parkway	415	Parkway Plaza		PW 0655	First	Commercial	Illegal discharge of degreaser directly into the storm drain system at tnorth side service bay	Corrected
12	2/2/2009	Randy Lindquist	Radelow/ G Hins Property Mgt	444	Ballantyne		PW 0631	First	Residential	Illegal discharge of private lateral into the storm drain system	Corrected
13	2/12/2009	Terry Nafso	Kaelin's Market	1435	Main St	E	PW 0635	First	Commercial	Private lateral discharge to street and storm drain inlet.	Corrected
14	2/26/2009	Mario Val	Pat and Oscars	375	Parkway Plaza		PW 0633	Warning	Commercial	Maintaining dirty grease bins and enclosure.	Corrected
15	3/23/2009	Jim Roe	El Cajon Senior Tower Apartments	180	Ballantyne		PW 0678	First	Residential	Private lateral discharge to street and storm drain inlet.	Corrected
16	4/3/2009	Tyler Carson		132	Meadow Crest		PW 0679	Warning	Construction	Sediment tracking, failure to install and maintain BMPs	Corrected
17	4/7/2009	Michael Elliott	Countrywide Concrete Cutting Inc.	1189	Naranca Ave		PW 0680	First	Construction	Discharge of pollutants (sediment) into the storm water conveyance system.	Corrected

Enforcement Actions

2008-2009

	Citation Date	Person Cited	Business Name	Address Number	Street Name	Direction	Citation Number	Warning or Fee	Component	Violations	Disposition
18	4/23/2009	Bobby Israel	New Mark Merrill	330-400	Second St	N	PW 0681	First	Commercial	Private lateral discharge to alley and storm drain inlet.	Corrected
19	4/27/2009	Tyler Carson		132	Meadow Crest		PW 0682	First	Construction	Tracking onto roadway, failure to istall and maintain minimum BMPs.	Corrected
20	5/6/2009	Kevin Ngyen	Angel's Nails	131	Magnolia	N	PW 0683	Warning	Commercial	Discharge of wash water into the storm drainage system.	Corrected
21	6/10/2009	Paul Stangelang	Habitat for Humanity	801	Avocado		PW 0662	First	Construction	Sediment tracking onto roadway and failure to maintain entrance.	Corrected
22	9/19/2009	Richard Love	Suncoast Homes	1342	Main St		PW 0664	Third	Construction	Filure to install and maintain Silt fencing/ BMPs	Corrected
23	6/25/2009	Will House	Starrett Construction Inc.	965	Arnele Ave		PW 0666	First	Construction	Discharge of concrete wash into the storm water conveyance system and drain inlet. No BMPs installed.	Corrected

Appendix B.4
(No Content)

Appendix C.1

El Cajon Storm Water Program Contact List (PY2)

Department	Contact Name	E-mail Address	Phone Number	Fax Number	Example of Responsibilities
Public Works	Rob Turner	rturner@ci.el-cajon.ca.us	(619) 441-1781	(619) 579-5254	Overall URMP oversight
Engineering	Michael Griffiths	mgriffiths@ci.el-cajon.ca.us	(619) 441-1785	(619) 579-5254	Oversees Public Works, Land Development process. Coordinates Implementation of BMPs and provides SWPPP review and engineering conditions of approval.
Storm Water Manager	Jaime Campos	jcampos@ci.el-cajon.ca.us	(619) 441-5554	(619) 579-5254	Generally oversees the assessment process and facilitates updates and changes to the URMP.
Planning Department	Barbara Ramirez	bramirez@ci.el-cajon.ca.us	(619)441-1771		Implementation of the land use component and facilitation of public education in regards to new. development.
Finance	Joyce Nevarez	jnevarez@ci.el-cajon.ca.us	(619)441-1543		Identify and secure sources of funds for implementation of the URMP.
Code Enforcement	Craig Bonner	cbonner@ci.el-cajon.ca.us	(619) 441-1663	(619) 579-5254	Code enforcement activities, public outreach programs and education activities
Code Enforcement & Erosion Control Plan/ SUSMP Review	Blake Behringer	bbehringer@ci.el-cajon.ca.us	(619) 441-1666	(619) 579-5254	Code enforcement activities and review of Erosion Control and SUSMP Plans for City projects and Private Development Contracts
Public Outreach	Robert Griswold	bgriswold@ci.el-cajon.ca.us	(619) 441-1704	(619) 579-5254	Facilitate public outreach programs and education activities.

Appendix C.2
(No Content)

Appendix D.1

CHAPTER 5 - -OPERATIONS AND MAINTENANCE

SECTION CONTENTS PAGE NO.

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5.
OPERATIONS AND MAINTENANCE

The City shall properly manage, operate and maintain all parts of the sanitary sewer system owned or operated by the City and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills and abilities.

The SSMP must include those elements listed below that are appropriate and applicable to the enrollee's system:

(A) Maintain an up-to-date map of the sanitary sewer system showing all gravity line segments and manholes, and applicable stormwater conveyance facilities,

(B) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) Program should have a system to document scheduled and conducted activities, such as work orders,

(C) Develop a rehab and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;

(D) Provide training for staff on a regular basis in sanitary sewer system operations and maintenance, require contractors to be appropriately trained; and

(E) Provide equipment and replacement part inventories including identification of critical replacement parts.

5.1 Mapping

The requirement for this section is to maintain an up-to-date map of the collection system showing all gravity line segments and manholes, and storm water conveyance facilities.

5.1.1 Compliance Summary

As part of the City's Sewer System Master Plan Updated in 2008, the City's consultant prepared a new GIS atlas book of the City's collection system integrating basin, parcel and address layers. The new book is in distribution with a set protocol for noting inaccuracies and changes. Books will be collected once annually and updates will include any new or reconstructed facilities as well as corrections to older data. The protocol for book distribution and periodic collection along with standardized notations to be used by field and office personnel to note pending revisions to the GIS model, is:

1. How many sewer books to be distributed?

   A. Three City Hall copies: front counter, Private Development, extra copy

   B. Seven Maintenance/Operation copies: **DM, MS, AND 5** maintenance positions/vehicles

2. All books to be numbered and assigned a unique number to each user.

   It's most important to have an audit trail to demonstrate to the Regional Board that all people that meet and deal with the public and are involved in the SSOPP and SSORP have the most up-to-date information possible. This issue will be addressed in the next Storm Water Program audit.

3. No unauthorized reproductions. If someone needs a book, that person needs to order one from the GIS Administrator. All changes made to the master document are to be coordinated with the GIS Administrator.

4. All notations and corrections are to be noted in numbered books only. Maintenance crews will provide their comments to the maintenance supervisor who will keep a running record of field changes in his book. Senior Engineering Tech will make notations from processed as-builts on the master book and on the GIS sewer layer as CIP or private development projects are completed. Books will be collected, updated and redistributed periodically. New map books will be provided to all parties at the beginning of the system maintenance cycle or on an annual basis.

5. The GIS Administrator **(ET)** will keep a log of users and book numbers; establish frequency of updating, procedures for editing books, printing and redistributing sewer books.

6. Each book shall have a title page showing the book number and the date of publication. Inclusion of revised pages, per comment No. 6, will be hand-written on the title page of each book. **ET** will also develop a legend to illustrate how to record changes to the system or annotation.

7. Counter Book No. 1 will be the master copy to track comments and changes noted by counter personnel. **ET** will place the revised pages in Counter Book No. 1 so that it will be an up-to-date living document. Minor revisions may be distributed to Maintenance/Operations if significant projects are completed during

the system maintenance cycle or significant corrections are made. Minor revision pages will be stapled over the older pages in the sewer map books.

The City has no pump stations, force mains or valves to maintain so the collection system reflects gravity flow facilities only including 14 gravity siphons throughout the City. Future enhancements to the sewer atlas will be to integrate scans of as-built plans and CCTV inspection video as attributes to each pipeline segment. GIS users can assess as-built construction data and pipeline conditions on the fly. In 2009, the City will be completing a master plan for MS4 facilities including a new GIS based storm drain atlas book similar to the sewer atlas. Once this task is completed, the sewer atlas book will have a new layer reflecting location of all drainage structures. This will replace the paper map storm drain atlas book currently used by the City in conjunction with the new sewer atlas.

5.1.1 Compliance Documents

The documents supporting compliance with the requirements for mapping are as follows:

- The GIS based sewer atlas book is contained in Vol. 2, Appendix 5-1.
- The existing storm drain atlas book is in Vol. 2, Appendix 5-2.

5.1.2 Roles and Responsibilities

The roles and responsibilities of staff supporting compliance with the mapping requirement of the Operations and Maintenance Program are as follows:

Engineering and maintenance staffs are allowed to make notations in the various numbered atlas books distributed to personnel for that purpose. Notations are made according to the standards and procedures noted above and developed for that purpose.

The only individual allowed to make changes to the GIS database is the City's GIS Administrator, who will collect the books annually to record the noted changes received from staff. New books with revision dates will be re-distributed.

5.2 City of El Cajon Sewer Collection System

Preventive Maintenance Program (PMP)

5.2.1 Introduction

A City Maintenance Program consists of the O&M practices the City utilizes to maintain all of its facilities including routine line cleaning and inspection (CCTV and visual), and hot spot or trouble spot identification and maintenance. The maintenance program also describes how complaints, service calls and alarm conditions are responded to. Additionally, the maintenance program should have a means of scheduling and tracking

maintenance needs and activities as well as evaluating the effectiveness of the maintenance performed.

Background

This Preventive Maintenance Program (PMP) document is submitted as required by the Regional Water Quality Control Board's (RWQCB) Waste Discharge Requirements (WDR) Order R9-2006-0003, Page 11 of 20, Section (IV) Operation and Maintenance Program, Part (b).

The City of El Cajon Preventive Maintenance Program (PMP) covers the assets we manage in our sanitary sewer system and is one component of our overall Sewer System Management Plan (SSMP). The PMP is based on an approach that combines preventive, predictive and corrective maintenance strategies and established best management practices.

Overview

The City of El Cajon manages roughly 200 miles of gravity sewer system comprising of manhole structures and their connecting pipeline segments. As of January 2009, we operate and maintain 14 inverted sewer siphons as part of the overall pipeline system. Our Engineering Department is currently engaged in a sewer mapping project and the exact mileage numbers may change, as data is refined.

The City of El Cajon does not own or maintain any portion of the sewer laterals (upper or lower laterals) that drain each privately owned parcel or property up to the point of connection to the local sewer; therefore, they are not a part of this plan nor are they catalogued.

We use both staff and/or contractors to perform the planned maintenance tasks at scheduled frequencies as part of our Preventive, Predictive and Corrective Program. Frequencies are established based on experience and attribute information to minimize risk of blockages or equipment failures that could possibly lead to a sanitary sewer overflow (SSO).

5.2.2 Compliance Summary

Preventive and Predictive Maintenance Program

Maintenance classified as preventive is proactive and is defined by a programmed, systematic approach to maintenance activities. This type of maintenance results in improved system performance, except in the case where major chronic problems are the result of design and/or construction flaws that cannot be completely corrected by O&M activities. Proactive maintenance is performed on a periodic (preventive) basis or an as needed (predictive) basis. Preventive maintenance can be scheduled on the basis of specific criteria such as known problem areas (e.g., a siphon that often gets clogged, a low point that is often first to overflow in a storm event, or even an area prone to blockages), equipment operating time since the last maintenance was performed, or passage of a certain amount of time (calendar period).

Preventive Maintenance (PM) Tasks

We have developed and continue to develop asset-specific maintenance tasks for the care of each asset throughout its life cycle.

Major PM task groupings are:

- Sewer inspection and condition assessment (performed concurrently with maintenance activities)
- Sewer cleaning, including flushing and rodding maintenance
- Siphon and trouble spot maintenance
- Problem manhole inspection and maintenance

PM Frequencies

As described above, the frequencies for preventive maintenance tasks are assigned to each asset or group of assets, as follows:

Table 5-1: – "Summary of Sewer Maintenance System Preventive Tasks"

Document Name	Maintenance Type	Length of Maintenance Cycle	Remarks
System Flushing and Routine Maintenance Task	Flushing	Goal to complete system cycle within 18 months	Not explicitly scheduled unless needed. Complete system cycle usually completed in 12 months
Siphons and Trouble Spots Task	Flushing, Descaling, Degreasing	3-month cycle	Issued quarterly in February, May, August and November
Monthly Rodding Task	Rodding	6- or 12-month cycle	Issued each month
Problem Manholes with Roots Task	Rodding and Debris Removal	3-month cycle	Mostly problem manholes with roots. Issued quarterly in February, May, August and November
Delinquent Rodding List	Follow-up to Scheduled Rodding	N/A	Issued each month. Used to correct errors in performed maintenance and data entry.

System Flushing and Routine Maintenance Task

Prior to the acquisition of modern high pressure cleaning equipment in the late 1970's, much of the City's sewer system had never been inspected or cleaned and the City experienced numerous complaints along with over 100 stoppages per year. A stoppage is a clogged sewer line, which can cause backups and odors and can possibly result in flooded homes and other property damage. The current on-going City preventive maintenance program has reduced complaints and stoppage incidences to less than five per year on average.

The City sewer flushing crew (equipment operator and maintenance worker) services the sewer mains in an upstream-to-downstream, basin-by-basin sequence. A flushing log is updated daily allowing the CMMS to track which mains have been serviced and how many feet have been cleaned and flushed each day. Although the goal is to completely flush all targeted sewer mains every 18 months, one complete cycle of cleaning and flushing is typically completed within 12 months. Upon completion of the flushing and cleaning cycle a new cycle of flushing and cleaning is immediately initiated. Total servicing mileage for July 1, 2007 through June 30, 2008 was approximately 219 miles in a collection system totaling 195 miles in length.

Sewer Root Removal Program

Another maintenance effort involves the removal of tree roots from sanitary sewers. Tree roots can be a real menace, damaging sewers and causing sewers to plug. Tree roots seek the moisture and nutrients offered by leaky pipe joints usually found in the older and sometimes cracked or broken sewer pipes. Current root removal methods are limited to mechanical rodding with several styles of rotating bits, which may prove ineffective in dense root areas. Our City is investigating the control of roots through the

application of mild herbicidal foam, applied from within the sanitary sewer, which kills the roots in a confined area, within and around, the sanitary sewer while not harming the tree. This herbicidal method is approved by the EPA as an acceptable root control best management practice, and does not interfere with the wastewater treatment processes.

The City maintains a list of problem sewer main segments with roots called the "Monthly Rodding Task" and services each segment on a three, six or twelve-month schedule. The City also maintains a list of "Problem Manholes With Roots" and services these manholes on a three-month schedule during February, May, August and November. The mechanical rodding crew consists of a truck-mounted continuous mechanical rodder, an equipment operator and a maintenance worker.

Sewer Trouble Spot and Siphon Program

As summarized in Section "PM Frequencies" above, the City maintains a list of sewer main segments with known flow problems, including City siphon segments, and cleans and flushes these segments on a three-month schedule. Our City is currently moving to install high and low-level flow alarms in our sanitary sewer siphons that will notify the City through text messaging and email in the event of a high or low-level flow event at one of the siphons.

Predictive Maintenance Tasks

Predictive Maintenance **(PD)** tasks (a subset of **PM**) are inspection and condition-assessment type tasks. These are performed to determine if the planned preventive maintenance task should be done as scheduled or rescheduled to a forward date if preventive maintenance, rehabilitation or replacement is not needed. Predictive Maintenance tasks are therefore performed based on asset condition and need rather than a strict time interval when maintenance may not be required. Predictive Maintenance tasks include but are not limited to the following:

- Closed Circuit TV (CCTV) video inspection of piping
- Visual inspection of the manhole structures and their flow channels
- Trending of flow monitoring data
- Inspection of inverted siphons during preventive maintenance
- Ground surface inspection of rights-of-way and easements over the gravity sewers.
- Odor and corrosion assessment and monitoring programs
- CCTV Sewer Inspections

One of the critical components of the predictive maintenance program involves internal inspection of sanitary sewers using a TV camera. A sealed TV camera is mounted on a device similar to a small-wheeled sled, which is guided through the sanitary sewer. As the T.V. camera is pulled through the sanitary sewer and viewed by inspection personnel above ground, sewer defects are recorded for future reference and repair. A

computerized ranking system analyzes the defects found in many individual sewer line segments and systematically prioritizes repairs for City sewer main repair crews.

Along with finding sewer system deficiencies and prioritizing maintenance activities, the T.V. crew is also responsible for inspecting all newly constructed sanitary sewers before they are put into service.

The Predictive Maintenance program will continue to develop as technology expands.

Corrective Maintenance Tasks

Corrective maintenance (CM) tasks are performed in response to a failure of an asset, component or part, or a critical utility outage. Low-risk items, such as light bulbs, pressure gauges, sensors, and small non-critical valves, are planned for run-to-failure, and as such, are not part of the PM Program. These items are replaced when they fail. When managed assets critical to the process fail they are scheduled for CM on an urgent or routine basis on a priority schedule. Some of these repairs may be capitalized as a follow-up activity depending on asset cost and life expectancy. These types of CM repairs include but are not limited to:

- Emergency cleaning to eliminate a pipe blockage
- Spot repair or replacement of a failed pipe
- Replacing a rattling or failed manhole cover
- Repairing damage caused by construction or failure of another utility (e.g., water or gas main breakage)
- Respond to, investigate and mitigate customer complaints and sewer overflows
- Repair of earthquake damage
- Repair after vandalism
- Staff documents CM tasks on paper at the time of the event. The event may be documented in the CMMS database, if appropriate.

CCTV or other failure analysis may also be done by staff as a CM task after a problem occurs in an effort to diagnose the cause of the problem and recommend changes, if indicated.

Findings may lead to a spot repair of the pipe, root cutting, re-cleaning for grease, or debris removal on a periodic preventive basis, or scheduling a manhole-to-manhole pipe replacement or rehabilitation in an urgent or lower priority planned manner. Major replacement or rehabilitation may be capitalized outside of the annual operating budget.

5.2.3 Compliance Documents

Hardcopy data files and paper records not recorded in our Computerized Maintenance Management System (CMMS) are available for review and audit. Standard Operating Procedures (SOPs) and Standard Maintenance Procedures (SMPs) ensure consistency. These are available for some maintenance tasks and are continuing to be developed for others. Mobile assets such as service trucks, generators, and other equipment are not covered by this PMP but are covered by plans developed by the maintenance program of our Public Works Department.

Sewer Asset Inventory and Attribute Data

Capital assets, minor components and their parts are catalogued in our paper records or the CMMS. Source or attribute data for each of these items is obtained from record drawings, sewer maps, plans and specifications and/or supplier data. Levels of care for each item are described in the tasks and frequencies information as catalogued in the CMMS or, in the interim, on lists, spreadsheets or annotated maps until the full CMMS implementation is completed.

Documents prepared through queries of the CMMS supporting the preventive maintenance servicing task of the sewer asset are summarized more completely in Table 1: "Summary of Sewer Maintenance System Preventive Tasks" in the Compliance Summary Section. A short summary of compliance documents is as follows:

- Sewer map layer in El Cajon Geographic Information System (GIS). The map contains special information that is used in developing maps used in operations & maintenance and spill response, Vol. 2, Appendix 5-1.

- El Cajon Sewer Maintenance System (CMMS), Vol. 2, Appendix 5-3. Used to track preventative maintenance and prepare work orders from monthly maintenance. It is anticipated that the CMMS will be integrated with the GIS in the near future. Monthly and quarterly work orders are prepared as follows:
- Flushing Report (monthly), 2008, Vol. 2, Appendix 5-4
- Mechanical rodding maintenance (monthly), 2008, Vol. 2, Appendix 5-5
- Delinquent mechanical rodding maintenance (monthly), Vol. 2, Appendix 5-6
- Siphon and Trouble Spot maintenance (quarterly), Vol. 2, Appendix 5-7
- Problem manhole maintenance (quarterly), Vol. 2, Appendix 5-8

5.2.4 Roles and Responsibilities

The staff positions and their responsibilities for the City's Preventive Maintenance Program are as follows:

The Preventive Maintenance Program is staffed by the following positions

- Deputy Director, **(DM)** (1)
- Public Works Supervisor **(MS)** (1)
- Equipment Operator, **(EO)** (2)
- Maintenance Worker, **(MW)** (2)
- Maintenance Crew Leader **(MCL)** (1)
- Associate Engineer **(AE)** (1)
- Senior Technician **(ET)** (1)
- Storm Water Code Enforcement Officer **(CEO)** (1)

Staff time budgeted for the Preventive Maintenance Program is summarized in the following table:

Table 2 – Staffing Time for Various Sewer Preventive Maintenance Tasks

Task (Top/Right) -→ Position (Left/Down)	Sewer Flushing	Sewer Roding	Sewer CCTV	SSO Response	Program Support	Position Totals
Equipment Operator	2.00	0.50	0.50	0.20		3.20
Maintenance Worker	2.00	0.50	0.50	0.20		3.20
Maintenance Crew Leader			0.50	0.50		1.00
Public Works Supervisor	0.20	0.20	0.20	0.20	0.20	1.00
Deputy Director					0.25	0.25
Associate Engineer			0.15		0.25	0.40
Senior Technician			0.10	0.25	0.50	0.85
Storm Water Code Compliance				0.10		0.10
Task Totals	4.20	1.20	1.95	1.45	1.20	10.00

The Equipment Operators and Maintenance Workers perform the day-to-day work summarized by tasks in Table 1: "Summary of Sewer Maintenance System Preventive Tasks" in the Compliance Summary Section.

Monitoring, Measurement and Program Modifications

Findings related to scheduled or non-scheduled tasks and work order tracking will continue to be evaluated by staff to improve reliability and system performance. In assessing the success of the PMP, changes in frequency or task activities, spare parts or recommended stock levels will be reviewed by the Maintenance Supervisor and

approved by the Deputy Director. Database changes and/or new instructions to contractors will follow.

Items recommended for rehabilitation or replacement through our Capital Improvement Program (CIP) will be sent by Deputy Director **(DM)** to the **AE** for funding and planning by the Division or forwarded to our Engineering Department for action in the agency wide CIP.

Our goal is to have a staff-driven process for improving our PMP. This process may be further explained and refined, as deemed necessary, in future revisions to our SSMP.

5.3 Rehabilitation and Replacement Plan

The Order requires the City to develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes and a system for ranking the condition of sewer pipes and scheduling rehabilitation. The rehabilitation and replacement plan should include a capital improvement plan (CIP) that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short-term and long-term plans plus a schedule for developing the funds needed for the capital improvement plan

5.3.1 Compliance Summary

In 2008, the City embarked on a system-wide cleaning and CCTV inspection program to survey the entire system over a 5-year period. Phase 1-2008 was performed by an outside contractor, National Plant Services, and included 52,000 feet of pipeline, 18" through 42" diameter pipelines representing 10 miles and 84 manholes including the City's sewer interceptor and trunk system from Main Street to Mission Gorge Road.

This portion of the system was last cleaned 25 years ago and several problem pipe segments were identified for annual cleaning and inspection. Others were identified and earmarked for repairs and will be included in the next annual CIP for rehabilitation. Interestingly, the manholes were found to be in very good condition in spite of their age suggesting that the City does not have a manhole corrosion problem.

The inspection contractor utilized NASSCO's pipe condition assessment codes (PCAP) for condition assessment and provided the City a complete database for entry into the City's planned CMMS (DBA Master Series) computerized maintenance system. The completed work represented a move by the City to inspect and clean every pipe segment in the City by the end of the 2013 fiscal year and rank each pipe for rehabilitation by a priority assignment generated by the CMMS system. When completed the City will have cleaned and inspected over 200 miles of pipeline and 4,800 manholes.

Video of each segment inspected will be characterized for defects and ranked by priority and included in the rehabilitation portion of the CIP. The City plans to spend one-half

million dollars each year for the next ten (10) years to systematically rehab all at-risk pipe segments and manholes.

The City also plans to spend 1.4 million dollars over the next four years to inspect and code each pipe segment and manhole in the City (Phases 2 through 5) using the pipe condition assessment process to identify and prioritize the system for rehabilitation if needed.

In 2009, the City plans to purchase a computerized maintenance management system (CMMS) to management the CCTV inspection database containing pipe condition assessment codes for prioritizing pipe rehabilitation. Using the data gathered, the City will include on a priority basis a portion of the most compromised pipe segments for repair or rehab utilizing a $500,000 dollar annual allowance in the CIP. Over the next ten (10) years the City will inspect, clean, code and prioritize the entire system for rehab if needed.

Also in 2009, the City will pass a new ordinance requiring the periodic inspection and repair of all private laterals and private collection systems. Single-family residential properties will be exempted unless a spill occurs or evidence of a problem exists during the City's systematic inspection of the public portion of the system.

Funding for the inspection and rehab effort will come from allocated funds from the City's wastewater enterprise fund. Rates for the fund will be examined for adjustment in the future.

5.3.2 Compliance Documents

The documents supporting compliance with the rehabilitation and replacement plan requirements are as follows:

- Phase 1- 2007 CCTV Inspection Report, on file in the Office of Public Works
- Phase 2-2008 CCTV Inspection Report, on file in the Office of Public Works
- Asset Management System -Pipe Rehab and Maintenance Management System, Vol. 2, Appendix 5-3
- 5-Year CIP Pipe Rehab and Lining and Replacement Plan, Vol. 2, Appendix 5-9
- NASSCO's Pipe Condition Assessment Program (PCAP), Vol. 2, Appendix 5-10
- Engineering/Construction and Maintenance Staff Organization Chart, Vol. 2, Appendix 3-1

5.3.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with the rehabilitation and replacement plan requirements are as follows:

Deputy Director of Public Works (DE) supervises the engineering staff responsible for planning and executing pipeline assessment and the 5-year CIP for rehabilitation and replacement (Design & Construction).

Associate Engineer-Chairman and Project Manger (AE) is responsible for organizing and managing the preparation of the Management Plan (SSMP), directing the pipeline condition assessment program, design and preparation of construction contract documents for both CCTV inspection, rehab and replacement, also new construction for both existing and future pipeline deficiencies.

Deputy Director of Public Works (DM) is responsible for directing and managing the maintenance staff in charge of routine, preventative maintenance, assessing the need for engineering solutions to solve maintenance issues and limited pipeline CCTV inspections.

Maintenance Supervisor (MS) is responsible for planning, scheduling CCTV assessments, maintaining equipment, training and supervising maintenance staff.

Maintenance Crew Leader (MCL) is responsible for operation of the City's CCTV van, cataloging video files, assessing pipe conditions and data basing Wincan PCAP codes.

5.4 Training Program

The City is required to provide training on a regular basis for staff in sanitary sewer system operations and maintenance and to require contractors to be appropriately trained.

5.4.1 Compliance Summary

The City of El Cajon has endorsed the certification program for collection system maintenance workers as prescribed by the California Water Environment Association. It is the goal of this plan that maintenance supervisors and maintenance workers will collectively be certified to their respective level of experience and education, Collection Systems Workers Grades 1, 2, 3 & 4 as prescribed by the California Water Environment Association (CWEA). The certification program assures that each worker has demonstrated the skill and knowledge necessary to work at the prescribe levels of competence.

Ethics in the workplace and in the daily work activities is an essential requirement of maintenance workers that maintain the City's collection system and are certified by the CWEA. Each worker and supervisor is expected to adhere to the Code of Ethics as set forth by the CWEA and provide assurance to the public that the health and welfare of the community is a primary concern of the maintenance staff.

All maintenance workers are required to receive training in the Traffic Control safety practices through the Southern California Chapter of the "American Public Works Association. The "WATCH Manual" (Work Area Traffic Control Handbook) is required reading for all maintenance workers in a work crew lead position. Each crew leader must demonstrate skills using the manuals guidelines for work area traffic control safety.

Each maintenance worker, regardless of rank, is required to take a course in confined space entry and pass certification for safe entries into confined areas that could contain hazardous air.

Maintenance workers that perform video inspection of pipelines must perform the pipeline condition assessment using standardized Pipeline Condition Assessment Codes (PACP) as trained and certified by the National Association of Sewer Serving Companies (NASSCO). NASSCO conducts periodic 2-day training courses for workers seeking certification in the pipeline condition assessment technology.

The City of El Cajon requires any contractor performing inspection or maintenance on the collection system to have its workers properly trained and certified in the area of application. All inspection work is performed using NASSCO PACP pipe assessment codes that are unitized with the City's computerized maintenance management system (CMMS).

All cleaning work performed by contractors using "Rodders" or "Vactors" are required to have individual personnel and supervisors trained and certified in collections system maintenance as prescribed by the CWEA and be trained in confined space entry.

5.4.2 Compliance Documents

The following documents demonstrate the type of training provided to staff and the training requirements required of contractors:

- Training records for each collections system maintenance worker employed by the City are collected and maintained at the field operations office for the Department of Public Works with duplicate files kept at the City's Department of Human Resources. Certification records are maintained respectively by CWEA and NASSCO and a master list of certified workers are listed on-line respectively at each organization's web site. Copies of certifications are filed in the Department of Human Resources.

- Contract administrators in the Department of Public Works prepare specifications and Special Provisions for each maintenance contract issued to perform work on the collections system. Standardized specifications relating to training requirements are contained in Volume 2, Appendix 5-115 Year CIP Pipe Rehab and Lining and Replacement Plan, Vol. 2, Appendix 5-9.

5.4.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with the staff and contractor training requirements are as follows:

The Deputy Director of Public Works-Maintenance (DM)

Manages the maintenance activities for the Department of Public Works. The collection system maintenance team working under the direction of the Deputy Director is supervised by the Public Works Supervisor **(MS)** who manages the day-to-day activities of the maintenance crew, including schedule maintenance, overflow response, overflow cleanup and CCTV inspection of pipelines. The maintenance supervisor directs all training, including scheduling, oversight and maintenance of training records. A training log is maintained at the operations office. An annual training budget is prepared and

approved each year to satisfy the training requirements of the department. Training for maintenance workers and supervisors for Wastewater Collection Systems workers are planned to begin 2009 with the maintenance supervisors first. Training for pipe condition assessment is also planned for 2009. Training of all staff will be a function of the budget and may span several years.

The Deputy Director of Public Works-Engineering (DE)

Administers the engineering and construction department that includes the preparation of all contract documents for CCTV inspection activities, rehab and replacement of pipelines. On a project-by-project basis assigns a staff level Associate Engineer as project manager to prepare the contract documents which include standard special provisions setting forth the training qualifications for employees employed by the contractor. Each contractor performing maintenance or inspection for the City must provide training documentation to demonstrate competence for any employee working on the collections system prior to beginning work.

5.5 Equipment and Parts Inventories

Each City is required to provide equipment and replacement part inventories, including identification of critical replacement parts for the operation and maintenance of its sewer collection system.

5.5.1 Compliance Summary

The City in the past has maintained an inventory of equipment for asset management purposes and to plan for life cycling and replacement of equipment needed to maintain the sewer system. In 2008, the City started compiling an inventory of all spare parts including a list of critical parts needed for equipment to be utilized for emergency situations.

The compiled list will be used to input onto the new CMMS maintenance management system to be implemented in 2009. The list will become an integral part of the asset and maintenance management activities including an annual audit of parts and equipment used to facilitate the sewer maintenance program.

The City also has a mutual aide agreement with all other Cities in the Metro system including its immediate neighbors, Santee, La Mesa Padre Dam, and the City and County of San Diego. Among other sharing responsibilities and compensation schedules, the agreement provides for sharing of spare parts and equipment should individual inventories fall short.

5.5.2 Compliance Documents

The documents supporting compliance with the requirement to maintain an inventory of equipment and parts including identification of critical parts are as follows:

- Equipment and parts inventory (12-19-2008), Vol. 2, Appendix 5-12
- Sewer maintenance list of critical parts- 2008, Vol. 2, Appendix 5-13

5.5.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with maintaining an inventory of equipment and parts including critical parts are as follows:

The Deputy Director of Public Works-Maintenance (DM)

Manages the maintenance activities for the Department of Public Works. The collection system maintenance team working under the direction of the Deputy Director is supervised by the Maintenance Supervisor **(MS)** who manages the day-to-day activities of the maintenance crew including schedule maintenance, overflow response, overflow cleanup and CCTV inspection of pipelines.

Maintenance Supervisor (MS)

Responsible for work orders for equipment maintenance, offering parts, providing tracking data to the Administrative Secretary or crew leader for entry into the asset management system.

Administrative Secretary

Responsible for data entry tracking equipment and parts numbers through an inventory control tool within the asset management system

Appendix D.2

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 01	32	042		32	043		7/28/2008	305	FM		305
1 01	32	042		33	034		7/28/2008	300	FM		300
1 01	32	050		32	051		7/28/2008	400	FM		400
1 01	32	050		32	051		4/1/2009	383	JM	6	766
1 01	32	051		33	031		10/1/2008	325	JM	12	325
1 01	32	051		33	031		7/28/2008	318	FM		318
1 01	33	012		33	013		7/28/2008	166	FM		166
1 01	33	013		33	014		7/28/2008	285	FM		285
1 01	33	014		33	015		7/28/2008	288	FM		288
1 01	33	015		33	028		7/28/2008	296	FM		296
1 01	33	016		33	017		7/28/2008	130	FM		130
1 01	33	017		33	018		7/28/2008	79	FM		79
1 01	33	018		33	020		7/28/2008	357	FM		357
1 01	33	019		33	020		7/28/2008	157	FM		157
1 01	33	020		33	021		7/28/2008	39	FM		39
1 01	33	021		33	027		7/28/2008	400	FM		400
1 01	33	022		33	024		7/28/2008	270	FM		270
1 01	33	023		33	024		7/28/2008	203	FM		203
1 01	33	024		33	026		7/28/2008	247	FM		247
1 01	33	025		33	026		7/28/2008	259	FM		259
1 01	33	026		33	027		7/28/2008	277	FM		277
1 01	33	027		33	028		7/28/2008	260	FM		260
1 01	33	029		33	030		7/28/2008	200	FM		200
1 01	33	029		33	030		10/1/2008	200	JM	12	200
1 01	33	030		33	031		7/28/2008	230	FM		230
1 01	33	031		33	032		7/28/2008	255	FM		255
1 01	33	032		33	033		7/28/2008	260	FM		260
1 01	33	033		33	034		7/28/2008	250	FM		250
1 02	27	106		32	049		7/29/2008	276	FM		276
1 02	32	033		32	034		7/29/2008	242	FM		242
1 02	32	033		32	055		7/29/2008	112	FM		112
1 02	32	034		32	035		7/29/2008	236	FM		236
1 02	32	035		32	037		7/29/2008	237	FM		237
1 02	32	036		32	037		7/29/2008	302	FM		302
1 02	32	036		32	053	D	7/29/2008	57	FM		57
1 02	32	037		32	041		7/29/2008	254	FM		254
1 02	32	038		32	039		7/29/2008	151	FM		151
1 02	32	039		32	040		7/29/2008	259	FM		259
1 02	32	040		32	041		7/29/2008	61	FM		61
1 02	32	041		32	044		7/29/2008	257	FM		257
1 02	32	043		32	044		7/28/2008	298	FM		298
1 02	32	044		32	047		7/29/2008	261	FM		261
1 02	32	045		33	011		7/29/2008	292	FM		292
1 02	32	045		32	046		7/29/2008	290	FM		290
1 02	32	046		32	047		7/29/2008	292	FM		292
1 02	32	047		32	049		7/29/2008	262	FM		262
1 02	32	048		32	049		7/29/2008	345	FM		345
1 02	32	048		33	005		7/29/2008	344	FM		344
1 02	32	055		32	057		7/29/2008	174	FM		174
1 02	32	057		32	058		7/29/2008	218	FM		218

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 02	32	058		32	059	D	7/29/2008	13	FM		13
1 02	33	001	C	33	003		7/29/2008	95	FM		95
1 02	33	002		33	003		7/29/2008	112	FM		112
1 02	33	003		33	004		7/29/2008	136	FM		136
1 02	33	004		33	005		7/29/2008	238	FM		238
1 02	33	006		33	007		7/29/2008	93	FM		93
1 02	33	007		33	008		7/29/2008	152	FM		152
1 02	33	008		33	009		7/29/2008	294	FM		294
1 02	33	009		33	010		7/29/2008	345	FM		345
1 02	33	010		33	011		7/29/2008	294	FM		294
1 03	27	105		27	108		8/19/2008	306	FM		306
1 03	27	106		27	107		8/19/2008	340	FM		340
1 03	27	107		27	108		8/19/2008	253	FM		253
1 03	27	108		32	032		8/19/2008	268	FM		268
1 04	27	104		27	105		8/19/2008	317	FM		317
1 04	27	108		27	109		8/19/2008	314	FM		314
1 04	27	109		27	110		8/19/2008	302	FM		302
1 04	27	110		27	111		8/19/2008	295	FM		295
1 04	27	111		27	113		8/19/2008	317	FM		317
1 04	27	112		27	113		8/25/2008	297	FM		297
1 04	27	113		27	114		8/25/2008	140	FM		140
1 04	32	007		32	009		8/18/2008	174	FM		174
1 04	32	008		32	009		8/18/2008	113	FM		113
1 04	32	009		32	011		8/18/2008	193	FM		193
1 04	32	010		32	011		8/18/2008	336	FM		336
1 04	32	011		32	017		8/18/2008	260	FM		260
1 04	32	012		32	013		8/18/2008	250	FM		250
1 04	32	012		32	056	C	8/18/2008	100	FM		100
1 04	32	013		32	014		8/18/2008	296	FM		296
1 04	32	014		32	017		8/18/2008	200	FM		200
1 04	32	015		32	016		8/18/2008	206	FM		206
1 04	32	016		32	017		8/18/2008	208	FM		208
1 04	32	017		32	022		8/18/2008	255	FM		255
1 04	32	018		32	019		8/18/2008	347	FM		347
1 04	32	019		32	022		8/18/2008	303	FM		303
1 04	32	020		32	021		8/18/2008	240	FM		240
1 04	32	021		32	022		8/18/2008	240	FM		240
1 04	32	022		32	027		8/18/2008	270	FM		270
1 04	32	023		32	024		8/18/2008	194	FM		194
1 04	32	024		32	027		8/18/2008	346	FM		346
1 04	32	025		32	026		8/18/2008	195	FM		195
1 04	32	026		32	027		8/18/2008	350	FM		350
1 04	32	027		32	028		8/18/2008	182	FM		182
1 04	32	028		32	032		8/18/2008	85	FM		85
1 04	32	029		32	030		8/18/2008	320	FM		320
1 04	32	030		32	032		8/18/2008	304	FM		304
1 04	32	031		32	032		8/18/2008	350	FM		350
1 04	32	031		32	049		8/18/2008	338	FM		338
1 05	27	114		27	115		9/2/2008	312	FM		312
1 05	27	114		27	161		8/25/2008	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 06	27	090		27	091		7/25/2008	365	FM		365
1 06	27	090		27	178	D	7/25/2008	50	FM		50
1 06	27	091		27	092		7/25/2008	145	FM		145
1 06	27	091		28	035		7/25/2008	136	FM		136
1 06	27	092		27	094		7/25/2008	304	FM		304
1 06	27	093		27	094		9/5/2008	300	FM		300
1 06	27	093		28	053		9/5/2008	80	FM		80
1 06	27	094		27	095		9/5/2008	101	FM		101
1 06	27	095		27	100		9/5/2008	200	FM		200
1 06	28	027		28	028		7/25/2008	371	FM		371
1 06	28	028		28	029		7/25/2008	239	FM		239
1 06	28	029		28	031		7/25/2008	75	FM		75
1 06	28	030		28	031		7/25/2008	387	FM		387
1 06	28	031		28	032		7/25/2008	154	FM		154
1 06	28	032		28	034		7/25/2008	138	FM		138
1 06	28	033		28	034		7/25/2008	380	FM		380
1 06	28	034		28	035		7/25/2008	151	FM		151
1 06	28	036		28	068		9/5/2008	285	FM		285
1 06	28	036		28	037		9/5/2008	110	FM		110
1 06	28	037		28	038		9/5/2008	101	FM		101
1 06	28	038		28	044		9/5/2008	181	FM		181
1 06	28	044		28	052		9/5/2008	281	FM		281
1 06	28	045		28	046		8/21/2008	155	FM		155
1 06	28	046		28	049		8/21/2008	233	FM		233
1 06	28	047		28	048		8/21/2008	199	FM		199
1 06	28	048		28	049		8/21/2008	310	FM		310
1 06	28	049		28	050		8/22/2008	300	FM		300
1 06	28	050		28	051		8/22/2008	248	FM		248
1 06	28	051		28	052		8/22/2008	122	FM		122
1 06	28	052		28	053		9/5/2008	353	FM		353
1 06	28	068		28	069		9/5/2008	310	FM		310
1 06	28	069		28	070		9/5/2008	144	FM		144
1 06	28	070		28	071		9/5/2008	203	FM		203
1 06	28	071		28	072		9/5/2008	273	FM		273
1 06	28	072		28	073		9/5/2008	266	FM		266
1 07	27	097		27	189		8/25/2008	112	FM		112
1 07	27	098		27	099		8/25/2008	340	FM		340
1 07	27	098		27	189		8/25/2008	253	FM		253
1 07	27	099		27	100		8/25/2008	305	FM		305
1 07	27	100		27	101		9/5/2008	150	FM		150
1 07	27	101		27	102		9/5/2008	245	FM		245
1 07	27	102		27	103	M	9/5/2008	201	FM		201
1 07	27	180		28	064		8/22/2008	372	FM		372
1 07	27	180		27	181		8/22/2008	134	FM		134
1 07	27	181		27	182		8/22/2008	45	FM		45
1 07	27	182		27	183		8/22/2008	138	FM		138
1 07	27	183		27	184		8/22/2008	48	FM		48
1 07	27	184		27	185		8/22/2008	48	FM		48
1 07	27	185		27	187		8/22/2008	305	FM		305
1 07	27	185		27	186		8/22/2008	153	FM		153

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 07	27	187		27	188		8/25/2008	40	FM		40
1 07	28	054		28	055		7/25/2008	302	FM		302
1 07	28	055		28	056		7/25/2008	169	FM		169
1 07	28	056		28	059		7/25/2008	85	FM		85
1 07	28	057		28	058		7/25/2008	154	FM		154
1 07	28	058		28	059		7/25/2008	250	FM		250
1 07	28	059		28	060		7/25/2008	183	FM		183
1 07	28	060		28	061		8/21/2008	100	FM		100
1 07	28	061		28	063		8/21/2008	365	FM		365
1 07	28	062		28	063		8/21/2008	306	FM		306
1 07	28	063		28	064		8/21/2008	261	FM		261
1 09	27	103	M	27	115		9/5/2008	175	FM		175
1 09	27	115		27	116		9/5/2008	225	FM		225
1 09	27	116		27	118		9/5/2008	227	FM		227
1 09	27	117		27	118		9/5/2008	195	FM		195
1 09	27	118		27	119		9/5/2008	112	FM		112
1 10	27	119		27	120		9/5/2008	136	FM		136
1 10	27	120		27	121		9/5/2008	281	FM		281
1 10	27	121		27	122		9/5/2008	290	FM		290
1 10	27	122		27	126		9/5/2008	50	FM		50
1 10	27	126		27	138		9/5/2008	220	FM		220
1 10	27	127		27	128		7/31/2008	288	FM		288
1 10	27	128		27	129		7/31/2008	160	FM		160
1 10	27	129		27	133		7/31/2008	313	FM		313
1 10	27	130		27	131		7/31/2008	128	FM		128
1 10	27	130		27	179	C	7/31/2008	25	FM		25
1 10	27	131		27	132		7/31/2008	200	FM		200
1 10	27	132		27	133		7/31/2008	175	FM		175
1 10	27	133		27	134		7/31/2008	313	FM		313
1 10	27	135		27	136		8/29/2008	292	FM		292
1 10	27	136		27	137		8/29/2008	199	FM		199
1 10	27	137		27	138		8/29/2008	239	FM		239
1 10	27	138		27	171		9/5/2008	20	FM		20
1 10	27	139		27	140		9/5/2008	266	FM		266
1 10	27	139		27	171		9/5/2008	249	FM		249
1 11	26	152		27	140	M	9/5/2008	293	FM		293
1 12	26	042		26	099		8/26/2008	280	FM		280
1 12	26	042		26	098		8/26/2008	68	FM		68
1 12	26	090		26	091		8/7/2008	341	FM		341
1 12	26	091		26	094		8/7/2008	162	FM		162
1 12	26	092		26	093		8/7/2008	350	FM		350
1 12	26	093		26	094		8/7/2008	300	FM		300
1 12	26	094		26	095		8/7/2008	178	FM		178
1 12	26	095		26	096		8/7/2008	338	FM		338
1 12	26	096		27	170		8/25/2008	249	FM		249
1 12	26	097		26	098		8/26/2008	198	FM		198
1 12	26	097		26	137		8/26/2008	152	FM		152
1 12	26	099		26	100		8/26/2008	347	FM		347
1 12	26	100		26	101		8/26/2008	345	FM		345
1 12	26	101		26	102		8/26/2008	335	FM		335

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 12	26	137		26	185		8/26/2008	215	FM		215
1 12	26	185		26	186		8/26/2008	213	FM		213
1 12	27	141		27	142		7/30/2008	266	FM		266
1 12	27	141		32	002		7/30/2008	265	FM		265
1 12	27	142		27	143		7/30/2008	272	FM		272
1 12	27	143		27	160		7/30/2008	272	FM		272
1 12	27	144		32	005		7/30/2008	280	FM		280
1 12	27	144		27	145		7/30/2008	276	FM		276
1 12	27	145		27	147		7/30/2008	275	FM		275
1 12	27	146		27	147		7/30/2008	87	FM		87
1 12	27	147		27	150		7/30/2008	236	FM		236
1 12	27	148		32	004		7/30/2008	278	FM		278
1 12	27	148		27	149		7/30/2008	277	FM		277
1 12	27	149		27	150		7/30/2008	274	FM		274
1 12	27	150		27	153		7/30/2008	235	FM		235
1 12	27	151		32	003		7/30/2008	279	FM		279
1 12	27	151		27	152		7/30/2008	277	FM		277
1 12	27	152		27	153		7/30/2008	275	FM		275
1 12	27	153		27	156		7/30/2008	235	FM		235
1 12	27	154		27	155		7/30/2008	278	FM		278
1 12	27	155		27	156		7/30/2008	279	FM		279
1 12	27	156		27	159		7/30/2008	226	FM		226
1 12	27	157		27	158		7/30/2008	273	FM		273
1 12	27	158		27	159		7/30/2008	272	FM		272
1 12	27	159		27	160		7/30/2008	280	FM		280
1 12	27	160		27	170		8/25/2008	277	FM		277
1 12	27	161		27	166		8/25/2008	315	FM		315
1 12	27	162		27	163		7/29/2008	321	FM		321
1 12	27	162		32	006		7/29/2008	303	FM		303
1 12	27	163		27	164		7/29/2008	323	FM		323
1 12	27	164		27	165		7/29/2008	323	FM		323
1 12	27	165		27	166		8/25/2008	325	FM		325
1 12	27	166		27	167		8/25/2008	313	FM		313
1 12	27	167		27	168		8/25/2008	315	FM		315
1 12	27	168		27	169		8/25/2008	291	FM		291
1 12	27	169		27	170		8/25/2008	55	FM		55
1 12	31	033		31	034		8/7/2008	340	FM		340
1 12	32	001		32	002		7/30/2008	275	FM		275
1 13	26	102		26	150		8/26/2008	64	FM		64
1 13	26	103		26	104		8/6/2008	170	FM		170
1 13	26	104		26	105		8/6/2008	348	FM		348
1 13	26	105		26	108		8/6/2008	267	FM		267
1 13	26	106		26	107		8/6/2008	213	FM		213
1 13	26	107		26	108		8/6/2008	235	FM		235
1 13	26	108		26	110		8/6/2008	280	FM		280
1 13	26	109		26	110		8/6/2008	171	FM		171
1 13	26	110		26	113		8/6/2008	231	FM		231
1 13	26	111		26	112		8/6/2008	260	FM		260
1 13	26	112		26	113		8/6/2008	286	FM		286
1 13	26	113		26	116		8/6/2008	238	FM		238

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 13	26	114		26	115		8/6/2008	336	FM		336
1 13	26	115		26	116		8/6/2008	322	FM		322
1 13	26	116		26	119		8/6/2008	263	FM		263
1 13	26	117		26	118		8/6/2008	286	FM		286
1 13	26	118		26	119		8/6/2008	284	FM		284
1 13	26	119		26	123		8/6/2008	258	FM		258
1 13	26	120		26	121		8/6/2008	221	FM		221
1 13	26	121		26	122		8/6/2008	272	FM		272
1 13	26	122		26	123		1/1/2009	276	JM	12	276
1 13	26	122		26	123		8/6/2008	264	FM		264
1 13	26	123		26	124		8/6/2008	154	FM		154
1 13	26	124		26	125		8/6/2008	342	FM		342
1 13	26	124		26	138		8/6/2008	186	FM		186
1 13	26	125		26	126		8/6/2008	332	FM		332
1 13	26	126		26	129		8/6/2008	263	FM		263
1 13	26	127		26	128		8/6/2008	213	FM		213
1 13	26	128		26	129		8/6/2008	221	FM		221
1 13	26	129		26	145		8/6/2008	259	FM		259
1 13	26	130		26	131		8/6/2008	336	FM		336
1 13	26	131		26	133		8/6/2008	255	FM		255
1 13	26	132		26	133		8/6/2008	265	FM		265
1 13	26	133		26	134		8/6/2008	163	FM		163
1 13	26	133		26	184	C	8/6/2008	153	FM		153
1 13	26	134		26	136		8/6/2008	217	FM		217
1 13	26	135		26	136		8/6/2008	258	FM		258
1 13	26	136		26	141		8/6/2008	250	FM		250
1 13	26	138		26	141		8/6/2008	335	FM		335
1 13	26	139		26	140		8/6/2008	341	FM		341
1 13	26	140		26	141		8/6/2008	297	FM		297
1 13	26	141		26	143		8/6/2008	327	FM		327
1 13	26	142		26	143		8/6/2008	170	FM		170
1 13	26	143		26	144		8/6/2008	148	FM		148
1 13	26	144		26	145		8/6/2008	227	FM		227
1 13	26	145		26	146		8/26/2008	297	FM		297
1 13	26	145		26	183	C	8/6/2008	77	FM		77
1 13	26	146		26	149		8/26/2008	267	FM		267
1 13	26	147		26	148		8/26/2008	180	FM		180
1 13	26	148		26	149		8/26/2008	156	FM		156
1 13	26	149		26	150		8/26/2008	252	FM		252
1 14	26	150		26	153		8/26/2008	235	FM		235
1 14	26	152		26	153		9/5/2008	100	FM		100
1 14	26	153		26	154		9/5/2008	316	FM		316
1 14	26	154		26	155		9/5/2008	301	FM		301
1 14	26	155		26	166		9/5/2008	256	FM		256
1 14	26	156		26	157		8/7/2008	326	FM		326
1 14	26	157		26	158		8/7/2008	320	FM		320
1 14	26	158		26	159		8/7/2008	350	FM		350
1 14	26	159		26	160		8/7/2008	330	FM		330
1 14	26	160		26	161		8/7/2008	327	FM		327
1 14	26	161		26	162		8/7/2008	201	FM		201

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 14	26	162		26	163		8/7/2008	120	FM		120
1 14	26	163		26	164		8/7/2008	283	FM		283
1 14	26	164		26	165		9/5/2008	319	FM		319
1 14	26	165		26	166		9/5/2008	52	FM		52
1 14	26	166		26	167		9/5/2008	270	FM		270
1 14	26	167		26	174		9/8/2008	244	FM		244
1 15	26	151		26	190		8/27/2008	107	FM		107
1 15	26	151		26	189		8/27/2008	75	FM		75
1 15	26	168		26	169		8/27/2008	91	FM		91
1 15	26	168		26	187		8/27/2008	47	FM		47
1 15	26	169		26	170		8/27/2008	272	FM		272
1 15	26	170		26	171		8/27/2008	279	FM		279
1 15	26	171		27	022		8/27/2008	210	FM		210
1 15	26	187		26	188		8/27/2008	59	FM		59
1 15	26	188		26	189		8/27/2008	119	FM		119
1 15	27	001		27	005		8/26/2008	337	FM		337
1 15	27	002		27	003		8/26/2008	272	FM		272
1 15	27	003		27	004		8/26/2008	270	FM		270
1 15	27	004		27	005		8/26/2008	304	FM		304
1 15	27	005		27	009		8/26/2008	279	FM		279
1 15	27	006		27	007		8/26/2008	283	FM		283
1 15	27	007		27	008		8/26/2008	276	FM		276
1 15	27	008		27	009		8/26/2008	185	FM		185
1 15	27	009		27	013		8/26/2008	225	FM		225
1 15	27	010		27	011		8/26/2008	233	FM		233
1 15	27	010		27	177	D	8/26/2008	20	FM		20
1 15	27	011		27	012		8/26/2008	236	FM		236
1 15	27	012		27	013		8/26/2008	226	FM		226
1 15	27	013		27	014		8/26/2008	96	FM		96
1 15	27	014		27	015		8/27/2008	240	FM		240
1 15	27	015		27	017		8/27/2008	301	FM		301
1 15	27	016		27	017		8/27/2008	128	FM		128
1 15	27	017		27	018		8/27/2008	188	FM		188
1 15	27	018		27	021		8/27/2008	188	FM		188
1 15	27	019		27	020		8/27/2008	225	FM		225
1 15	27	020		27	021		8/27/2008	235	FM		235
1 15	27	021		27	023		8/27/2008	326	FM		326
1 15	27	022		27	023		8/27/2008	103	FM		103
1 15	27	023		27	034		8/27/2008	110	FM		110
1 15	27	024		27	025		8/27/2008	226	FM		226
1 15	27	025		27	027		8/27/2008	197	FM		197
1 15	27	026		27	027		8/27/2008	112	FM		112
1 15	27	027		27	028		8/27/2008	130	FM		130
1 15	27	028		27	032		8/27/2008	238	FM		238
1 15	27	029		27	030		8/27/2008	145	FM		145
1 15	27	030		27	031		8/27/2008	291	FM		291
1 15	27	031		27	032		8/27/2008	78	FM		78
1 15	27	032		27	033		8/27/2008	237	FM		237
1 15	27	033		27	034		8/27/2008	217	FM		217
1 15	27	034		27	035		8/27/2008	317	FM		317

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 15	27	035		27	040		8/28/2008	145	FM		145
1 15	27	036		27	037		8/27/2008	315	FM		315
1 15	27	037		27	039		8/27/2008	256	FM		256
1 15	27	038		27	039		8/27/2008	317	FM		317
1 15	27	039		27	040		8/28/2008	278	FM		278
1 15	27	040		27	041		8/28/2008	177	FM		177
1 16	20	010		26	181		8/28/2008	297	FM		297
1 16	20	010		20	011		8/28/2008	281	FM		281
1 16	20	010		21	112		8/28/2008	221	FM		221
1 16	21	106		21	108		8/28/2008	131	FM		131
1 16	21	107		21	108		8/28/2008	245	FM		245
1 16	21	107		27	044		8/28/2008	240	FM		240
1 16	21	108		21	109		8/28/2008	205	FM		205
1 16	21	109		21	110		8/28/2008	322	FM		322
1 16	21	110		21	113		8/28/2008	329	FM		329
1 16	21	111		27	041		8/28/2008	318	FM		318
1 16	21	111		21	113		8/28/2008	313	FM		313
1 16	21	112		21	113		8/28/2008	213	FM		213
1 16	21	113		21	115		9/2/2008	266	FM		266
1 16	21	114		21	115		9/2/2008	201	FM		201
1 16	21	115		21	116		9/2/2008	65	FM		65
1 16	21	116		21	119		9/2/2008	182	FM		182
1 16	21	117		21	118		9/2/2008	64	FM		64
1 16	21	118		21	119		9/2/2008	236	FM		236
1 16	26	178		26	179		8/28/2008	300	FM		300
1 16	26	179		26	180		8/28/2008	297	FM		297
1 16	26	180		26	181		8/28/2008	297	FM		297
1 16	27	042		27	043		8/28/2008	320	FM		320
1 16	27	043		27	044		8/28/2008	248	FM		248
1 17	27	053		27	054		7/25/2008	179	FM		179
1 17	27	054		28	007		7/25/2008	300	FM		300
1 17	27	054		27	055		7/25/2008	249	FM		249
1 17	27	055		27	075		7/31/2008	237	FM		237
1 17	27	056		27	057		5/7/2009	265	FM	3	1060
1 17	27	057		27	058		5/7/2009	302	FM	3	1208
1 17	27	058		27	059		5/7/2009	109	FM	3	436
1 17	27	059		27	060		5/7/2009	315	FM	3	1260
1 17	27	060		27	061		7/31/2008	291	FM		291
1 17	27	061		27	062		7/31/2008	282	FM		282
1 17	27	062		27	063		7/31/2008	188	FM		188
1 17	27	063		27	174		7/31/2008	380	FM		380
1 17	27	063		27	172		7/31/2008	138	FM		138
1 17	27	064		27	065		7/24/2008	95	FM		95
1 17	27	065		28	026		7/24/2008	239	FM		239
1 17	27	066		27	067		7/24/2008	190	FM		190
1 17	27	067		27	068		7/24/2008	80	FM		80
1 17	27	068		27	069		7/24/2008	50	FM		50
1 17	27	069		27	070		7/31/2008	396	FM		396
1 17	27	070		27	172		7/31/2008	138	FM		138
1 17	27	070		27	075		7/31/2008	115	FM		115

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 17	27	071		27	173		7/31/2008	70	FM		70
1 17	27	072		27	073		7/31/2008	285	FM		285
1 17	27	072		27	173		7/31/2008	219	FM		219
1 17	27	073		27	074		7/31/2008	283	FM		283
1 17	27	074		27	075		7/31/2008	335	FM		335
1 17	27	075		27	076		7/31/2008	155	FM		155
1 17	27	076		27	077		9/2/2008	345	FM		345
1 17	27	173		27	174		7/31/2008	70	FM		70
1 17	27	174		27	175	C	7/31/2008	137	FM		137
1 17	28	001		28	004		7/24/2008	87	FM		87
1 17	28	002		28	003		7/24/2008	247	FM		247
1 17	28	003		28	004		7/24/2008	309	FM		309
1 17	28	004		28	007		7/24/2008	189	FM		189
1 17	28	005		28	006		10/1/2008	320	JM	12	320
1 17	28	005		28	006		7/24/2008	292	FM		292
1 17	28	006		28	007		7/24/2008	320	FM		320
1 17	28	008		28	009		7/24/2008	158	FM		158
1 17	28	009		28	010		7/24/2008	167	FM		167
1 17	28	009		28	066		7/24/2008	59	FM		59
1 17	28	010		28	011		7/24/2008	228	FM		228
1 17	28	011		28	017		7/24/2008	229	FM		229
1 17	28	012		28	013		7/24/2008	284	FM		284
1 17	28	013		28	014		7/24/2008	314	FM		314
1 17	28	014		28	015		7/24/2008	167	FM		167
1 17	28	015		28	016		7/24/2008	289	FM		289
1 17	28	015		28	067	D	7/24/2008	118	FM		118
1 17	28	016		28	017		7/24/2008	291	FM		291
1 17	28	017		28	018		7/24/2008	145	FM		145
1 17	28	018		28	019		7/24/2008	292	FM		292
1 17	28	019		28	020		7/24/2008	250	FM		250
1 17	28	020		28	026		7/24/2008	163	FM		163
1 17	28	021		28	025		7/24/2008	275	FM		275
1 17	28	022		28	023		7/24/2008	268	FM		268
1 17	28	023		28	024		7/24/2008	261	FM		261
1 17	28	024		28	025		7/24/2008	85	FM		85
1 17	28	025		28	026		7/24/2008	260	FM		260
1 18	21	090		21	092		9/3/2008	317	FM		317
1 18	21	090		27	089		9/3/2008	262	FM		262
1 18	21	092		21	093		9/3/2008	330	FMA		330
1 18	21	093		21	094	M	9/3/2008	341	FM		341
1 18	27	045		27	115		9/2/2008	313	FM		313
1 18	27	045		27	046		9/2/2008	274	FM		274
1 18	27	046		27	047		9/2/2008	257	FM		257
1 18	27	047		27	048		9/2/2008	235	FM		235
1 18	27	048		27	052		9/2/2008	208	FM		208
1 18	27	052		27	078		9/2/2008	195	FM		195
1 18	27	077		27	078		9/2/2008	348	FM		348
1 18	27	079		27	080		9/2/2008	290	FM		290
1 18	27	080		27	082		9/2/2008	158	FM		158
1 18	27	081		27	082		9/2/2008	307	FM		307

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 18	27	082		27	083		9/2/2008	83	FM		83
1 18	27	083		27	085		9/2/2008	254	FM		254
1 18	27	084		27	085		9/2/2008	285	FM		285
1 18	27	085		27	086		9/2/2008	314	FM		314
1 18	27	086		27	087		9/2/2008	318	FM		318
1 18	27	087		27	089		9/2/2008	55	FM		55
1 18	27	088		27	089		9/2/2008	244	FM		244
1 19	21	060		21	146		9/3/2008	63	FM		63
1 19	21	094	M	21	096		9/3/2008	335	FM		335
1 19	21	095		21	096		9/3/2008	265	FM		265
1 19	21	095		21	146		9/3/2008	197	FM		197
1 19	21	096		21	097		9/3/2008	222	FM		222
1 19	21	097		21	103		9/3/2008	179	FM		179
1 19	21	098		21	100		8/29/2008	127	FM		127
1 19	21	099		21	100		8/29/2008	165	FM		165
1 19	21	100		21	102		8/29/2008	263	FM		263
1 19	21	101		21	102		8/29/2008	167	FM		167
1 19	21	102		21	103		8/29/2008	264	FM		264
1 19	21	103		21	104		9/3/2008	292	FM		292
1 19	21	104		21	105		9/3/2008	323	FM		323
1 20	20	016		20	017		9/3/2008	287	FM		287
1 20	20	017		20	018		9/3/2008	267	FM		267
1 20	20	018		20	020		9/3/2008	263	FM		263
1 20	20	019	P	20	020	P	5/12/2009	364	FM	3	1456
1 20	20	020		21	122		9/3/2008	222	FM		222
1 20	20	020		20	021		9/3/2008	105	FM		105
1 20	21	105		21	124		9/3/2008	326	FM		326
1 20	21	120	M	21	124		9/3/2008	300	FM		300
1 20	21	121		21	123		9/3/2008	291	FM		291
1 20	21	122		21	123		9/3/2008	46	FM		46
1 20	21	123		21	124		9/3/2008	261	FM		261
1 20	21	124		21	125		9/3/2008	280	FM		280
1 20	21	125		21	126		9/3/2008	280	FM		280
1 20	21	126		21	127		9/3/2008	280	FM		280
1 20	21	127		21	133		9/3/2008	275	FM		275
1 21	20	024		20	033		8/29/2008	183	FM		183
1 21	20	032		21	134		9/8/2008	323	FM		323
1 21	20	032		20	034		9/8/2008	202	FM		202
1 21	20	033		20	034		8/29/2008	280	FM		280
1 21	20	034		20	035	M	9/8/2008	120	FM		120
1 21	20	035	M	20	148		9/8/2008	27	FM		27
1 21	20	036		20	148		9/8/2008	300	FM		300
1 21	21	128		21	129		9/3/2008	233	FM		233
1 21	21	129		21	130	P	9/3/2008	235	FM		235
1 21	21	130	P	21	131	P	5/11/2009	162	FM	3	648
1 21	21	131	P	21	132		5/11/2009	299	FM	3	1196
1 21	21	132	P	21	141	P	5/11/2009	116	FM	3	464
1 21	21	133		21	134		9/8/2008	324	FM		324
1 21	21	133	P	21	141	P	5/13/2009	190	FM	3	760
1 23	21	060		21	061		9/3/2008	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 23	21	061		21	070		9/3/2008	305	FM		305
1 23	21	062		22	080		8/15/2008	282	FM		282
1 23	21	062		21	063		8/15/2008	279	FM		279
1 23	21	063		21	064		8/15/2008	232	FM		232
1 23	21	064		21	066		8/15/2008	231	FM		231
1 23	21	065		21	066		8/29/2008	212	FM		212
1 23	21	065		22	079		8/15/2008	179	FM		179
1 23	21	066		21	067		8/29/2008	257	FM		257
1 23	21	067		21	068		8/29/2008	215	FM		215
1 23	21	068		21	140		8/29/2008	230	FM		230
1 23	21	069		21	070		8/29/2008	285	FM		285
1 23	21	069		21	140		8/29/2008	125	FM		125
1 23	21	070		21	071		9/10/2008	303	FM		303
1 23	21	071		21	072		9/10/2008	300	FM		300
1 23	21	072		21	083		9/10/2008	292	FM		292
1 23	21	089		22	077		8/15/2008	279	FM		279
1 23	22	054		22	055		8/13/2008	236	FM		236
1 23	22	055		22	056		8/13/2008	234	FM		234
1 23	22	056		22	057		8/13/2008	118	FM		118
1 23	22	057		22	060		8/13/2008	309	FM		309
1 23	22	057		22	093	D	8/13/2008	190	FM		190
1 23	22	058		22	059		8/13/2008	348	FM		348
1 23	22	059		22	060		8/13/2008	265	FM		265
1 23	22	060		22	062		8/13/2008	192	FM		192
1 23	22	061		22	062		8/13/2008	350	FM		350
1 23	22	062		22	069		8/13/2008	99	FM		99
1 23	22	063		22	064		8/13/2008	200	FM		200
1 23	22	064		22	065		8/13/2008	276	FM		276
1 23	22	065		22	066		8/13/2008	45	FM		45
1 23	22	066		22	067		8/13/2008	272	FM		272
1 23	22	067		22	068		8/13/2008	230	FM		230
1 23	22	068		22	069		8/13/2008	347	FM		347
1 23	22	069		22	070		8/13/2008	303	FM		303
1 23	22	070		22	071		8/13/2008	300	FM		300
1 23	22	071		22	072		8/15/2008	171	FM		171
1 23	22	072		22	073		8/15/2008	193	FM		193
1 23	22	073		22	074		8/15/2008	276	FM		276
1 23	22	075	S	22	076	S	5/5/2009	40	FM	3	160
1 23	22	076	S	22	078		8/15/2008	63	FM		63
1 23	22	077		22	078		8/15/2008	318	FM		318
1 23	22	078		22	079		8/15/2008	37	FM		37
1 23	22	080		22	095	D	8/15/2008	45	FM		45
1 24	21	073		21	074		8/29/2008	313	FM		313
1 24	21	074		21	075		8/29/2008	275	FM		275
1 24	21	075		21	076		8/29/2008	214	FM		214
1 24	21	076		22	053		9/9/2008	262	FM		262
1 24	21	076		21	079		9/9/2008	250	FM		250
1 24	21	077		21	078		8/29/2008	348	FM		348
1 24	21	078		21	079		8/29/2008	346	FM		346
1 24	21	079		21	080		9/9/2008	167	FM		167

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 24	21	080		21	081		9/9/2008	260	FM		260
1 24	21	081	P	21	082	P	5/13/2009	348	FM	3	1392
1 24	21	082		21	083		9/10/2008	300	FM		300
1 24	21	083		21	084		9/10/2008	253	FM		253
1 24	21	084		21	085		9/10/2008	252	FM		252
1 24	22	010		22	048		9/9/2008	110	FM		110
1 24	22	010		22	047		9/9/2008	40	FM		40
1 24	22	046		22	047		9/9/2008	275	FM		275
1 24	22	048		22	049		9/9/2008	272	FM		272
1 24	22	049		22	050		9/9/2008	234	FM		234
1 24	22	050		22	051		9/9/2008	300	FM		300
1 24	22	051		22	052		9/9/2008	255	FM		255
1 24	22	052		22	053		9/9/2008	232	FM		232
1 25	20	039		21	088		9/10/2008	317	FM		317
1 25	21	086		21	087		9/10/2008	289	FM		289
1 25	21	087		21	135		9/10/2008	230	FM		230
1 25	21	088		21	136		9/10/2008	22	FM		22
1 25	21	135	S	21	136	S	5/5/2009	46	FM	3	184
1 26	20	038		20	042		9/10/2008	287	FM		287
1 26	20	039	M	20	040		9/10/2008	300	FM		300
1 26	20	040		20	041		9/10/2008	300	FM		300
1 26	20	041		20	042		9/10/2008	300	FM		300
1 27	20	011		20	154		8/28/2008	118	FM		118
1 27	20	012		20	013		9/8/2008	284	FM		284
1 27	20	012		20	154		9/8/2008	162	FM		162
1 27	20	013		26	177		9/8/2008	338	FM		338
1 27	20	013		20	014		9/8/2008	337	FM		337
1 27	20	014		20	015		9/8/2008	333	FM		333
1 27	20	015		20	028		9/8/2008	334	FM		334
1 27	20	021		20	026		9/3/2008	211	FM		211
1 27	20	022		20	023		8/29/2008	225	FM		225
1 27	20	023		20	026		8/29/2008	305	FM		305
1 27	20	025		20	026		8/29/2008	298	FM		298
1 27	20	025		20	149		8/29/2008	182	FM		182
1 27	20	026		20	027		9/8/2008	114	FM		114
1 27	20	027		20	028		9/8/2008	325	FM		325
1 27	20	028		20	029		9/8/2008	273	FM		273
1 27	20	029		20	030		9/8/2008	286	FM		286
1 27	20	030		20	031		9/8/2008	281	FM		281
1 27	20	154		20	155		9/8/2008	266	FM		266
1 27	26	071		26	172		8/27/2008	250	FM		250
1 27	26	071		26	173		9/8/2008	36	FM		36
1 27	26	171		26	172		8/27/2008	282	FM		282
1 27	26	173		26	174		9/8/2008	289	FM		289
1 27	26	174		26	175		9/8/2008	239	FM		239
1 27	26	175		26	176		9/8/2008	339	FM		339
1 27	26	176		26	177		9/8/2008	350	FM		350
1 28	20	036		20	037		9/10/2008	283	FM		283
1 28	20	037		20	038		9/10/2008	287	FM		287
1 29	20	043		26	089		9/11/2008	372	FM		372

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
1 29	20	043		20	044		9/11/2008	333	FM		333
1 29	20	044		20	045		9/11/2008	332	FM		332
1 29	20	045		20	046		9/11/2008	331	FM		331
1 29	20	046		20	047		9/11/2008	335	FM		335
1 29	20	047		20	048		9/12/2008	323	FM		323
1 29	20	048		20	049		9/12/2008	328	FM		328
1 29	20	049		20	050		9/12/2008	330	FM		330
1 29	20	050		20	051		9/12/2008	329	FM		329
1 29	20	050		20	051		2/1/2009	322	JM	12	322
1 29	20	051		20	052		9/12/2008	331	FM		331
1 29	26	079		26	080		9/10/2008	100	FM		100
1 29	26	080		26	081		9/10/2008	262	FM		262
1 29	26	081		26	082		9/11/2008	359	FM		359
1 29	26	082		26	089		9/11/2008	201	FM		201
1 29	26	083		26	084		9/10/2008	296	FM		296
1 29	26	084		26	085		9/10/2008	234	FM		234
1 29	26	085		26	086		9/10/2008	168	FM		168
1 29	26	086		26	087		9/10/2008	170	FM		170
1 29	26	087		26	088		9/10/2008	288	FM		288
1 29	26	088		26	089		9/10/2008	318	FM		318
2 01	30	021		30	022		1/28/2009	185	FM		185
2 01	30	022		31	002		1/28/2009	326	FM		326
2 01	31	001		31	002		1/28/2009	190	FM		190
2 01	31	002		31	016		1/28/2009	211	FM		211
2 01	31	003		31	004		1/25/2009	338	FM		338
2 01	31	003		35	039		1/25/2009	250	FM		250
2 01	31	003		35	046		1/25/2009	78	FM		78
2 01	31	004		31	006		1/25/2009	151	FM		151
2 01	31	005		31	006		1/25/2009	294	FM		294
2 01	31	006		31	007		1/25/2009	172	FM		172
2 01	31	007		31	009		1/25/2009	175	FM		175
2 01	31	008		31	009		1/25/2009	300	FM		300
2 01	31	009		31	010		1/25/2009	125	FM		125
2 01	31	010		31	037		1/25/2009	140	FM		140
2 01	31	011		31	015		1/28/2009	230	FM		230
2 01	31	011		31	037		1/25/2009	215	FM		215
2 01	31	012		31	042		1/28/2009	110	FM		110
2 01	31	012		31	014		1/28/2009	82	FM		82
2 01	31	013		31	014		1/28/2009	203	FM		203
2 01	31	014		31	015		1/28/2009	200	FM		200
2 01	31	015		31	016		1/28/2009	205	FM		205
2 01	31	016		31	035		1/28/2009	300	FM		300
2 01	31	016		31	017		1/28/2009	282	FM		282
2 01	31	035		31	036		1/28/2009	297	FM		297
2 01	31	036		31	040		1/28/2009	200	FM		200
2 01	31	037		31	038		1/25/2009	190	FM		190
2 01	31	040		31	042		1/28/2009	407	FM		407
2 01	31	041		35	047		1/27/2009	200	FM		200
2 01	31	041		31	043		1/28/2009	164	FM		164
2 01	31	042		31	043		1/28/2009	114	FM		114

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
2 01	31	043		31	044		1/25/2009	173	FM		173
2 01	31	044		31	045		1/25/2009	202	FM		202
2 01	31	045		31	046		1/25/2009	300	FM		300
2 01	31	046		31	047		1/25/2009	350	FM		350
2 01	31	048		31	049		1/25/2009	276	FM		276
2 01	34	001		35	001		1/21/2009	315	FM		315
2 01	34	001		35	002		1/21/2009	250	FM		250
2 01	34	002		34	003		1/27/2009	300	FM		300
2 01	34	002		35	047		1/27/2009	290	FM		290
2 01	34	003		34	004		1/27/2009	300	FM		300
2 01	34	004		34	033		1/27/2009	250	FM		250
2 01	34	005		34	023		1/27/2009	300	FM		300
2 01	34	005		34	006		1/27/2009	72	FM		72
2 01	34	006		34	007		1/27/2009	70	FM		70
2 01	34	007		34	008		1/27/2009	125	FM		125
2 01	34	008		34	009		1/27/2009	181	FM		181
2 01	34	009		34	010		1/27/2009	133	FM		133
2 01	34	010		34	011		1/27/2009	160	FM		160
2 01	34	011		34	012		1/27/2009	161	FM		161
2 01	34	012		34	013		1/27/2009	161	FM		161
2 01	34	013		34	014		1/27/2009	86	FM		86
2 01	34	014		34	015		1/27/2009	54	FM		54
2 01	34	015		34	020		1/27/2009	158	FM		158
2 01	34	015		34	016		1/27/2009	81	FM		81
2 01	34	016		34	017		1/27/2009	215	FM		215
2 01	34	017		34	018		1/27/2009	155	FM		155
2 01	34	018		34	019		1/27/2009	147	FM		147
2 01	34	020		34	021		1/27/2009	207	FM		207
2 01	34	021		34	022		1/27/2009	156	FM		156
2 01	34	023		34	033		1/27/2009	50	FM		50
2 01	35	002		35	004		1/21/2009	275	FM		275
2 01	35	003		35	004		1/21/2009	176	FM		176
2 01	35	004		35	005		1/21/2009	230	FM		230
2 01	35	005		35	012		1/21/2009	350	FM		350
2 01	35	006		35	007		1/21/2009	352	FM		352
2 01	35	007		35	010		1/21/2009	345	FM		345
2 01	35	008		35	009		1/21/2009	317	FM		317
2 01	35	009		35	010		1/21/2009	300	FM		300
2 01	35	010		35	011		1/21/2009	174	FM		174
2 01	35	011		35	012		1/21/2009	222	FM		222
2 01	35	012		35	013		1/21/2009	323	FM		323
2 01	35	013		35	015		1/21/2009	210	FM		210
2 01	35	014		35	015		1/22/2009	310	FM		310
2 01	35	015		35	016		1/22/2009	124	FM		124
2 01	35	016		35	017		1/25/2009	320	FM		320
2 01	35	017		35	018		1/25/2009	320	FM		320
2 01	35	018		35	036		1/25/2009	320	FM		320
2 01	35	019		35	020		1/22/2009	230	FM		230
2 01	35	020		35	022		1/22/2009	235	FM		235
2 01	35	021		35	022		1/22/2009	340	FM		340

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
2 01	35	022		35	023		1/22/2009	225	FM		225
2 01	35	023		35	031		1/22/2009	125	FM		125
2 01	35	025		35	026		1/22/2009	303	FM		303
2 01	35	026		35	027		1/22/2009	187	FM		187
2 01	35	027		35	028		1/22/2009	335	FM	33	335
2 01	35	028		35	029		1/22/2009	225	FM		225
2 01	35	029		35	030		1/22/2009	150	FM		150
2 01	35	030		35	031		1/22/2009	159	FM		159
2 01	35	031		35	034		1/25/2009	110	FM		110
2 01	35	032		35	033		1/22/2009	350	FM		350
2 01	35	033		35	034		1/22/2009	340	FM		340
2 01	35	034		35	035		1/25/2009	270	FM		270
2 01	35	035		35	036		1/25/2009	275	FM		275
2 01	35	035		35	040		1/25/2009	40	FM		40
2 01	35	036		35	037		1/25/2009	125	FM		125
2 01	35	037		35	038		1/25/2009	250	FM		250
2 01	35	038		35	043		1/25/2009	125	FM		125
2 01	35	039		35	043		1/25/2009	125	FM		125
2 01	35	040		35	041		1/25/2009	118	FM		118
2 01	35	041		35	042		1/25/2009	349	FM		349
2 01	35	043		35	044		1/25/2009	133	FM		133
2 01	35	044		35	045	C	1/25/2009	162	FM		162
2 02	31	017		31	018		1/28/2009	217	FM		217
2 02	31	018		31	019		1/29/2009	223	FM		223
2 02	31	019		31	020		1/29/2009	265	FM		265
2 02	31	019		31	050		1/29/2009	142	FM		142
2 02	31	020		31	021		1/29/2009	235	FM		235
2 02	31	021		31	022		1/29/2009	295	FM		295
2 02	31	022		31	023		1/29/2009	352	FM		352
2 02	31	023		31	024		1/29/2009	352	FM		352
2 02	31	024		31	025		1/29/2009	350	FM		350
2 03	25	170		25	202		1/30/2009	204	FM		204
2 03	25	170		26	007		1/30/2009	180	FM		180
2 03	25	170		26	007		10/1/2008	175	JM	12	175
2 03	25	171		26	005		1/29/2009	315	FM		315
2 03	25	172		30	023		1/29/2009	350	FM		350
2 03	25	172		25	173		1/29/2009	119	FM		119
2 03	25	173		25	176		1/29/2009	213	FM		213
2 03	25	174		25	175		1/29/2009	200	FM		200
2 03	25	175		25	176		1/29/2009	200	FM		200
2 03	25	176		25	177		1/29/2009	125	FM		125
2 03	25	177		25	178		1/29/2009	188	FM		188
2 03	25	178		26	003		1/29/2009	190	FM		190
2 03	25	179		25	180		1/29/2009	173	FM		173
2 03	25	180		25	181		1/29/2009	197	FM		197
2 03	25	181		25	182		1/29/2009	230	FM		230
2 03	25	182		30	012		1/29/2009	360	FM		360
2 03	25	182		26	001		1/29/2009	202	FM		202
2 03	26	001		26	002		1/29/2009	300	FM		300
2 03	26	002		26	004		1/29/2009	260	FM		260

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
2 03	26	002		31	030		1/29/2009	230	FM		230
2 03	26	003		26	004		1/29/2009	249	FM		249
2 03	26	004		26	006		1/29/2009	300	FM		300
2 03	26	005		26	006		1/29/2009	300	FM		300
2 03	26	006		26	008		2/19/2009	290	FM		290
2 03	26	007		26	008		2/19/2009	300	FM		300
2 03	26	008		26	009		2/19/2009	200	FM		200
2 03	26	009		26	034		2/19/2009	200	FM		200
2 03	30	008		30	009		1/28/2009	323	FM		323
2 03	30	009		30	010		1/28/2009	251	FM		251
2 03	30	010		30	012		1/28/2009	236	FM		236
2 03	30	011		30	012		1/28/2009	240	FM		240
2 03	30	013		30	014		1/28/2009	323	FM		323
2 03	30	013		30	024	C	1/28/2009	50	FM		50
2 03	30	014		30	015		1/28/2009	295	FM		295
2 03	30	015		30	016		1/28/2009	353	FM		353
2 03	30	016		30	017		1/28/2009	325	FM		325
2 03	30	017		30	018		1/28/2009	303	FM		303
2 03	30	018		30	019		1/28/2009	269	FM		269
2 03	30	019		30	020		1/28/2009	255	FM		255
2 03	30	020		31	027		1/29/2009	255	FM		255
2 03	31	025		31	026		1/29/2009	441	FM		441
2 03	31	026		31	027		1/29/2009	126	FM		126
2 03	31	027		31	028		1/29/2009	151	FM		151
2 03	31	028		31	029		1/29/2009	335	FM		335
2 03	31	029		31	030		1/29/2009	228	FM		228
2 04	26	010		31	032		2/18/2009	267	FM		267
2 04	26	010		26	011		2/18/2009	253	FM		253
2 04	26	011		26	012		2/18/2009	259	FM		259
2 04	26	012		26	013		2/18/2009	236	FM		236
2 04	26	013		26	014		2/18/2009	86	FN		86
2 04	26	014		26	015		2/18/2009	185	FM		185
2 04	26	015		26	016		2/18/2009	177	FM		177
2 04	26	017		26	018		2/19/2009	184	FM		184
2 04	26	018		26	019		2/19/2009	182	FM		182
2 04	26	019		26	026		2/19/2009	273	FM		273
2 04	26	020		26	021		1/30/2009	178	FM		178
2 04	26	021		26	022		1/30/2009	138	FM		138
2 04	26	022		26	023		1/30/2009	306	FM		306
2 04	26	023		26	024		1/30/2009	300	FM		300
2 04	26	024		26	025		1/30/2009	300	FM		300
2 04	26	025		26	026		2/19/2009	273	FM		273
2 04	26	026		26	029		2/19/2009	238	FM		238
2 04	26	027		26	028		1/30/2009	164	FM		164
2 04	26	028		26	029		2/19/2009	226	FM		226
2 04	26	029		26	033		2/19/2009	20	FM		20
2 04	26	030		26	031		1/30/2009	245	FM		245
2 04	26	031		26	032		1/30/2009	300	FM		300
2 04	26	032		26	033		2/19/2009	287	FM		287
2 04	26	033		26	034		2/19/2009	303	FM		303

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
2 04	26	034		26	035		2/23/2009	214	FM		214
2 04	31	031		31	032		2/18/2009	300	FM		300
2 04	31	031		31	052		2/18/2009	69	FM		69
2 04	31	052		31	053		2/18/2009	81	FM		81
2 04	31	053		31	054		2/17/2009	71	FM		71
2 04	31	054		31	055		2/17/2009	54	FM		54
2 04	31	055		31	056		2/17/2009	185	FM		185
2 04	31	056		31	057		2/17/2009	250	FM		250
2 04	31	057		31	058		2/17/2009	286	FM		286
2 04	31	058		31	059		2/17/2009	232	FM		232
2 04	31	059		31	060		2/17/2009	232	FM		232
2 04	31	060		31	061		2/17/2009	229	FM		229
2 04	31	061		31	062	D	2/17/2009	10	FM		10
2 05	25	158		25	159		2/23/2009	233	FM		233
2 05	25	159		25	160		2/23/2009	305	FM		305
2 05	25	160		26	040		2/23/2009	300	FM		300
2 05	25	161		25	168		2/23/2009	130	FM		130
2 05	25	162		25	163		2/23/2009	271	FM		271
2 05	25	163		25	166		2/23/2009	212	FM		212
2 05	25	164		25	166		2/23/2009	100	FM		100
2 05	25	166		25	167		2/23/2009	217	FM		217
2 05	25	167		25	168		2/23/2009	208	FM		208
2 05	25	168		25	169		2/23/2009	330	FM		330
2 05	25	169		26	038		2/23/2009	287	FM		287
2 05	26	035		26	036		2/23/2009	230	FM		230
2 05	26	036		26	037		2/23/2009	202	FM		202
2 05	26	037		26	039		2/23/2009	250	FM		250
2 05	26	038	P	26	039	P	5/11/2009	290	FM	3	1160
2 05	26	039		26	041		2/24/2009	162	FM		162
2 05	26	040		26	041		2/24/2009	290	FM		290
2 05	26	041		26	043		2/24/2009	200	FM		200
2 05	26	043		26	044		2/24/2009	338	FM		338
2 05	26	044		26	045		2/24/2009	338	FM		338
2 05	26	045		26	046		2/24/2009	10	FM		10
2 05	26	047		26	059		2/26/2009	315	FM		315
2 06	25	145		25	146		1/1/2009	256	JM	12	256
2 06	25	145		25	146		2/2/2009	245	FM		245
2 06	25	146		25	147		2/2/2009	246	FM		246
2 06	25	147		25	150		2/2/2009	248	FM		248
2 06	25	148		25	150		2/2/2009	234	FM		234
2 06	25	149		25	150		2/2/2009	299	FM		299
2 06	25	149		26	182		2/2/2009	259	FM		259
2 06	25	150		25	151		2/25/2009	339	FM		339
2 06	25	151		25	152	S	2/25/2009	307	FM		307
2 06	25	152	S	25	153	S	5/5/2009	45	FM	3	180
2 06	25	153	S	25	154		2/25/2009	328	FM		328
2 06	25	154		25	156		2/26/2009	332	FM		332
2 06	25	155		25	156		2/26/2009	136	FM		136
2 06	25	156		25	157		2/26/2009	340	FM		340
2 06	25	157		26	059		2/26/2009	310	FM		310

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
2 06	26	048		26	055		7/8/2008	248	FM		248
2 06	26	049		26	050		2/24/2009	296	FM		296
2 06	26	050		26	051		2/24/2009	285	FM		285
2 06	26	051		26	052		2/24/2009	312	FM		312
2 06	26	052		26	053		2/24/2009	301	FM		301
2 06	26	053		26	054		2/24/2009	300	FM		300
2 06	26	054		26	055		2/26/2009	363	FM		363
2 06	26	055		26	056		2/26/2009	348	FM		348
2 06	26	056		26	057		2/26/2009	340	FM		340
2 06	26	057		26	058		2/26/2009	342	FM		342
2 06	26	058		26	059		2/26/2009	410	FM		410
2 06	26	059		26	060	M	2/26/2009	363	FM		363
2 06	26	060		26	069	M	2/26/2009	319	FM		319
2 07	19	166		20	068		2/25/2009	273	FM		273
2 07	19	166		25	137		2/25/2009	190	FM		190
2 07	19	167		19	168		2/25/2009	211	FM		211
2 07	19	168		20	074		5/1/2009	270	JM	12	270
2 07	19	168		20	074		2/25/2009	250	FM		250
2 07	20	068		20	069		3/2/2009	280	FM		280
2 07	20	068		26	078		2/25/2009	245	FM		245
2 07	20	069		26	077		3/2/2009	194	FM		194
2 07	20	069		20	070		3/2/2009	126	FM		126
2 07	20	070		20	075		7/11/2008	143	FM		143
2 07	20	074		20	075		3/2/2009	256	FM		256
2 07	20	075		20	076		3/2/2009	284	FM		284
2 07	25	136		25	137		2/25/2009	229	FM		229
2 07	25	138		25	139		2/25/2009	306	FM		306
2 07	25	139		26	070		2/26/2009	345	FM		345
2 07	25	140	P	25	141	P	5/7/2009	203	FM	3	812
2 07	25	141	P	25	144	P	5/7/2009	178	FM	3	712
2 07	25	142		25	144		2/18/2009	149	FM		149
2 07	25	143		25	144		2/18/2009	100	FM		100
2 07	25	144	P	26	068	P	5/7/2009	323	FM	3	1292
2 07	26	061		26	062		2/25/2009	323	FM		323
2 07	26	062		26	063		2/25/2009	327	FM		327
2 07	26	063		26	064		2/25/2009	323	FM		323
2 07	26	064		26	065		2/25/2009	323	FM		323
2 07	26	065	P	26	069	P	5/7/2009	333	FM	3	1332
2 07	26	066		26	068		2/25/2009	151	FM		151
2 07	26	067		26	068		2/25/2009	112	FM		112
2 07	26	068	P	26	069	P	5/7/2009	180	FM	3	720
2 07	26	069		26	070		2/26/2009	287	FM		287
2 07	26	070		26	077		2/26/2009	350	FM		350
2 07	26	072		26	073		2/26/2009	322	FM		322
2 07	26	073		26	074		2/26/2009	318	FM		318
2 07	26	074		26	075		2/26/2009	316	FM		316
2 07	26	075		26	076		4/1/2009	330	JM	6	660
2 07	26	075		26	076		2/26/2009	325	FM		325
2 07	26	076		26	077		2/26/2009	320	FM		320
2 08	19	169		25	135		2/25/2009	192	FM		192

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
2 08	19	169		19	170	S	2/25/2009	30	FM		30
2 08	19	170	S	19	171	S	5/5/2009	11	FM	3	44
2 08	19	171	S	19	172	S	5/5/2009	35	FM	3	140
2 08	19	172	S	19	173	S	5/5/2009	9	FM	3	36
2 08	19	173	S	19	175		2/25/2009	117	FM		117
2 08	19	174		19	175		2/25/2009	172	FM		172
2 08	19	175		19	176		2/25/2009	351	FM		351
2 08	19	176		19	177		2/25/2009	193	FM		193
2 08	19	177		19	183		3/2/2009	350	FM		350
2 08	19	177		19	183		5/1/2009	350	JM	12	350
2 08	19	178		19	179		3/2/2009	153	FM		153
2 08	19	179		19	180		3/2/2009	200	FM		200
2 08	19	180		19	181		3/2/2009	79	FM		79
2 08	19	181		19	182		3/2/2009	296	FM		296
2 08	19	181		20	096		3/2/2009	260	FM		260
2 08	19	182		19	183		3/2/2009	98	FM		98
2 08	19	183		19	184		3/2/2009	130	FM		130
2 08	19	184		19	185		3/3/2009	240	FM		240
2 08	19	185		19	186		3/3/2009	238	FM		238
2 08	19	186		19	187		3/3/2009	200	FM		200
2 08	19	187		19	189		3/3/2009	7	FM		7
2 08	19	188		19	189		3/3/2009	317	FM		317
2 08	19	189		20	087		3/3/2009	241	FM		241
2 08	20	064		20	066		3/4/2009	107	FM		107
2 08	20	076		20	077		3/2/2009	259	FM		259
2 08	20	077		20	085		3/2/2009	301	FM		301
2 08	20	078		20	079		3/2/2009	275	FM		275
2 08	20	079		20	080		3/2/2009	261	FM		261
2 08	20	080		20	081		3/2/2009	51	FM		51
2 08	20	081		20	082		3/2/2009	267	FM		267
2 08	20	082		20	083		3/2/2009	299	FM		299
2 08	20	083		20	084		3/2/2009	281	FM		281
2 08	20	084		20	085		3/2/2009	300	FM		300
2 08	20	085		20	086		3/3/2009	249	FM		249
2 08	20	086		20	088		3/3/2009	226	FM		226
2 08	20	087		20	088		3/3/2009	221	FM		221
2 08	20	088		20	089		3/4/2009	298	FM		298
2 08	20	089		20	090		3/4/2009	308	FM		308
2 08	20	090		20	091		3/4/2009	244	FM		244
2 08	20	091		20	094		3/4/2009	256	FM		256
2 08	20	092		20	093		3/4/2009	248	FM		248
2 08	20	093		20	094		3/4/2009	240	FM		240
2 08	20	094		20	095		3/4/2009	292	FM		292
2 08	25	133		25	134		2/25/2009	119	FM		119
2 08	25	134		25	135		2/25/2009	305	FM		305
2 09	20	052		20	053		3/4/2009	236	FM		236
2 10	20	053		20	054		3/4/2009	228	FM		228
2 10	20	054		20	055	M	3/4/2009	238	FM		238
2 10	20	054		20	153		3/4/2009	14	FM		14
2 10	20	055	M	20	146		3/4/2009	98	FM		98

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
2 11	20	060		20	061		3/4/2009	414	FM		414
2 11	20	061		20	062		3/4/2009	185	FM		185
2 11	20	062		20	063		3/4/2009	323	FM		323
2 11	20	063		20	146		3/4/2009	236	FM		236
2 11	20	063		20	064		3/4/2009	224	FM		224
2 11	20	066		20	067		3/4/2009	139	FM		139
2 11	20	067		20	095		3/4/2009	247	FM		247
2 11	20	150		20	151		7/18/2008	512	FM		512
2 11	20	151		20	152		3/4/2009	400	FM		400
2 11	20	152		20	153		3/4/2009	419	FM		419
3E02	24	001		24	164	C	3/11/2009	187	FM		187
3E02	24	001		24	002		3/11/2009	137	FM		137
3E02	24	002		24	003		3/11/2009	253	FM		253
3E02	24	003		24	004		3/11/2009	307	FM		307
3E02	24	004		24	005		3/11/2009	296	FM		296
3E02	24	005		24	006		3/17/2009	315	FM		315
3E02	24	006		24	007		3/17/2009	179	FM		179
3E02	24	007		24	014		3/17/2009	181	FM		181
3E02	24	008		24	009		3/11/2009	99	FM		99
3E02	24	008		24	163	D	3/11/2009	80	FM		80
3E02	24	009		24	010		3/11/2009	196	FM		196
3E02	24	009		24	166	D	3/11/2009	167	FM		167
3E02	24	010		24	011		7/30/2008	282	FM		282
3E02	24	011		24	012		7/30/2008	297	FM		297
3E02	24	012		24	013		7/30/2008	288	FM		288
3E02	24	013		24	014		3/17/2009	290	FM		290
3E02	24	014		24	167		3/17/2009	47	FM		47
3E02	24	015		24	172	D	3/17/2009	180	FM		180
3E02	24	167		24	168		3/17/2009	522	FM		522
3E02	24	168		24	169		3/25/2009	544	FM		544
3E02	24	169		24	170		3/25/2009	421	FM		421
3E02	24	170		25	195		3/25/2009	468	FM		468
3E02	25	193		25	194		3/25/2009	304	FM		304
3E02	25	194		25	195		3/25/2009	324	FM		324
3E03	24	015		24	021		3/17/2009	180	FM		180
3E03	24	016		24	017		3/13/2009	315	FM		315
3E03	24	017		24	018		3/13/2009	289	FM		289
3E03	24	018		24	019		3/13/2009	275	FM		275
3E03	24	019		24	020		3/13/2009	287	FM		287
3E03	24	020		24	021		3/23/2009	300	FM		300
3E03	24	021		24	022		3/23/2009	185	FM		185
3E03	24	022		24	060		3/24/2009	200	FM		200
3E03	24	060		24	061		3/24/2009	331	FM		331
3E03	24	061		24	063		3/24/2009	334	FM		334
3E03	24	062		24	063		3/24/2009	140	FM		140
3E03	24	063		24	064		3/24/2009	303	FM		303
3E03	24	064		25	034		3/24/2009	320	FM		320
3E03	25	033		25	034		3/24/2009	193	FM		193
3E03	25	034		25	203		3/24/2009	40	FM		40
3E03	25	035		25	203		3/24/2009	352	FM		352

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3E03	25	035		25	036		3/24/2009	351	FM		351
3E05	24	023		24	024		3/16/2009	293	FM		293
3E05	24	023		24	146		3/16/2009	163	FM		163
3E05	24	024		24	034		3/16/2009	252	FM		252
3E05	24	025		24	026		3/16/2009	107	FM		107
3E05	24	026		24	027		3/16/2009	209	FM		209
3E05	24	027		24	028		4/1/2009	324	JM	12	324
3E05	24	027		24	028		3/16/2009	310	FM		310
3E05	24	028		24	030		3/16/2009	235	FM		235
3E05	24	030		24	031		3/16/2009	265	FM		265
3E05	24	031		24	032		3/16/2009	289	FM		289
3E05	24	032		24	033		3/16/2009	148	FM		148
3E05	24	033		24	034		3/16/2009	65	FM		65
3E05	24	034		24	035		3/16/2009	300	FM		300
3E05	24	035		24	037		3/16/2009	141	FM		141
3E05	24	036		24	037		3/16/2009	206	FM		206
3E05	24	037		24	038		3/16/2009	220	FM		220
3E05	24	038		24	042		3/16/2009	56	FM		56
3E05	24	039		24	040		3/16/2009	180	FM		180
3E05	24	040		24	041		3/16/2009	250	FM		250
3E05	24	041		24	042		3/16/2009	237	FM		237
3E05	24	041		24	162	D	3/16/2009	31	FM		31
3E05	24	042		24	043		3/16/2009	160	FM		160
3E05	24	156		24	157		3/16/2009	185	FM		185
3E05	24	156		24	157		1/1/2009	177	JM	12	177
3E05	24	156		24	160	D	3/16/2009	100	FM		100
3E06	24	043		24	165		3/16/2009	160	FM		160
3E06	24	044		24	045		3/17/2009	300	FM		300
3E06	24	044		24	165		3/16/2009	139	FM		139
3E06	24	045		24	059		3/17/2009	300	FM		300
3E06	24	046		24	049		3/13/2009	157	FM		157
3E06	24	047		24	048		3/13/2009	165	FM		165
3E06	24	048		24	049		3/13/2009	155	FM		155
3E06	24	049		24	050		3/13/2009	77	FM		77
3E06	24	050		24	052		6/1/2008	193	JM	12	193
3E06	24	050		24	052		3/13/2009	190	FM		190
3E06	24	051		24	052		3/13/2009	186	FM		186
3E06	24	051		24	052		6/1/2008	185	JM	12	185
3E06	24	052		24	053		3/13/2009	77	FM		77
3E06	24	053		24	054		3/13/2009	76	FM		76
3E06	24	054		24	055		3/13/2009	188	FM		188
3E06	24	055		24	057		3/13/2009	193	FM		193
3E06	24	056		24	057		3/13/2009	300	FM		300
3E06	24	057		24	058		3/17/2009	195	FM		195
3E06	24	058		24	059		3/17/2009	195	FM		195
3E06	24	059		24	060		3/24/2009	307	FM		307
3E07	24	065		24	066		3/6/2009	129	FM		129
3E07	24	066		24	067		3/6/2009	317	FM		317
3E07	24	067		24	069		3/6/2009	325	FM		325
3E07	24	068		24	069		3/6/2009	115	FM		115

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3E07	24	069		24	073		3/6/2009	258	FM		258
3E07	24	070		24	071		3/6/2009	197	FM		197
3E07	24	071		24	072		3/6/2009	280	FM		280
3E07	24	072		24	073		3/1/2009	300	JM	12	300
3E07	24	072		24	073		3/6/2009	278	FM		278
3E07	24	073		24	077		3/11/2009	266	FM		266
3E07	24	074		24	075		3/11/2009	278	FM		278
3E07	24	075		24	171		3/11/2009	190	FM		190
3E07	24	076		24	077		3/11/2009	152	FM		152
3E07	24	076		24	171		3/11/2009	42	FM		42
3E07	24	077		24	078		3/11/2009	169	FM		169
3E07	24	078		24	082		3/11/2009	156	FM		156
3E07	24	079		24	080		3/6/2009	321	FM		321
3E07	24	080		24	081		3/11/2009	327	FM		327
3E07	24	081		24	082		3/11/2009	182	FM		182
3E07	24	082		25	029		3/11/2009	169	FM		169
3E07	25	028		25	031		3/25/2009	287	FM		287
3E07	25	028		25	200		3/25/2009	100	FM		100
3E07	25	029		25	172		3/11/2009	277	FM		277
3E07	25	030		25	031		3/25/2009	322	FM		322
3E07	25	030		25	172		3/11/2009	54	FM		54
3E07	25	031		25	032		3/25/2009	341	FM		341
3E07	25	032		25	193		3/25/2009	308	FM		308
3E07	25	036		25	197	D	3/24/2009	27	FM		27
3E07	25	036		25	186		3/24/2009	20	FM		20
3E07	25	186		25	193		3/25/2009	35	FM		35
3E10	25	011		25	205		3/31/2009	130	FM		130
3E10	25	012		25	017		3/31/2009	279	FM		279
3E10	25	012		25	205		3/31/2009	130	FM		130
3E10	25	013		25	016		3/31/2009	135	FM		135
3E10	25	014		25	015		3/31/2009	262	FM		262
3E10	25	015		25	016		3/31/2009	262	FM		262
3E10	25	016		25	017		3/31/2009	200	FM		200
3E10	25	017		25	021		8/11/2008	50	FM		50
3E10	25	018		25	019		3/31/2009	250	FM		250
3E10	25	019		25	020		3/31/2009	311	FM		311
3E10	25	020		25	021		3/31/2009	50	FM		50
3E10	25	021		25	022		4/3/2009	349	FM		349
3E10	25	022		25	023		4/3/2009	349	FM		349
3E10	25	022		25	023		12/1/2008	349	JM	12	349
3E10	25	023		25	024		4/3/2009	329	FM		329
3E10	25	024		25	025		4/3/2009	332	FM		332
3E10	25	025		25	026		4/3/2009	347	FM		347
3E10	25	026	P	25	037	P	5/11/2009	344	FM	3	1376
3E11	19	001		25	010		4/22/2009	252	FM		252
3E11	19	001		19	210		8/25/2008	62	FM		62
3E11	19	002		19	210		4/22/2009	188	FM		188
3E11	19	002		19	003		4/22/2009	171	FM		171
3E11	19	003		19	004		4/22/2009	136	FM		136
3E11	19	004		19	005		4/22/2009	278	FM		278

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3E11	19	005		19	007		4/22/2009	163	FM		163
3E11	19	006		19	007		4/22/2009	341	FM		341
3E11	19	007		19	008		4/22/2009	10	FM		10
3E11	19	008		19	009		4/23/2009	482	FM		482
3E11	19	008		19	191		4/23/2009	477	FM		477
3E11	19	009		19	010		4/23/2009	486	FM		486
3E11	19	010		19	011		4/23/2009	479	FM		479
3E11	19	011		19	012		4/23/2009	549	FM		549
3E11	19	012		19	022		4/23/2009	28	FM		28
3E11	19	190		19	191		4/23/2009	469	FM		469
3E11	19	190		25	183		4/23/2009	427	FM		427
3E11	25	001		25	002		4/6/2009	275	FM		275
3E11	25	002		25	003		4/6/2009	261	FM		261
3E11	25	003		25	006		4/22/2009	350	FM		350
3E11	25	003		25	187	D	4/6/2009	125	FM		125
3E11	25	005		25	204		4/22/2009	306	FM		306
3E11	25	005		25	006		4/22/2009	251	FM		251
3E11	25	006		25	007		4/22/2009	297	FM		297
3E11	25	007		25	010		4/22/2009	291	FM		291
3E11	25	008	S	25	188	D	4/22/2009	200	FM		200
3E11	25	008	S	25	009	S	5/5/2009	45	FM	3	180
3E11	25	009	S	25	010		4/22/2009	329	FM		329
3E11	25	183		25	184		4/23/2009	310	FM		310
3E11	25	184		25	185		4/23/2009	441	FM		441
3E11	25	185		25	186		4/23/2009	434	FM		434
3E11	25	196	D	25	204		4/22/2009	75	FM		75
3E12	25	037	P	25	038	P	5/11/2009	235	FM	3	940
3E12	25	038		25	039		4/6/2009	335	FM		335
3E12	25	039		25	040	M	4/6/2009	346	FM		346
3E13	19	013		25	041		4/6/2009	348	FM		348
3E13	25	040	M	25	041		4/6/2009	345	FM		345
3E14	19	013		19	014		4/6/2009	350	FM		350
3E14	19	014		19	015		4/6/2009	293	FM		293
3E14	19	015		19	016		4/6/2009	350	FM		350
3E14	19	016		19	017		4/6/2009	370	FM		370
3E14	19	017		19	018		4/6/2009	300	FM		300
3E14	19	018		19	019		4/6/2009	350	FM		350
3E14	19	019		19	020		4/6/2009	369	FM		369
3E14	19	020		19	021		4/23/2009	247	FM		247
3E14	19	021		19	022		4/23/2009	244	FM		244
3S01	29	035		29	040		12/18/2008	247	FM		247
3S01	29	035		36	026		12/11/2008	151	FM		151
3S01	29	036		36	014		12/18/2008	333	FM		333
3S01	29	036		29	039		12/18/2008	215	FM		215
3S01	29	037		29	038		12/18/2008	265	FM		265
3S01	29	037		29	109		12/18/2008	45	FM		45
3S01	29	038		29	039		12/18/2008	260	FM		260
3S01	29	039		29	040		12/18/2008	164	FM		164
3S01	29	040		29	108		12/18/2008	483	FM		483
3S01	29	041	C	29	046		12/18/2008	113	FM		113

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3S01	29	042		29	049		12/18/2008	302	FM		302
3S01	29	042		29	108		12/18/2008	247	FM		247
3S01	29	043		29	045		12/18/2008	381	FM		381
3S01	29	043		36	027		12/18/2008	375	FM		375
3S01	29	044		29	045		12/18/2008	300	FM		300
3S01	29	045		29	046		12/18/2008	213	FM		213
3S01	29	046		29	047		12/18/2008	192	FM		192
3S01	29	047		29	048		12/18/2008	200	FM		200
3S01	29	048		29	049		12/18/2008	100	FM		100
3S01	29	050		36	005		12/22/2008	340	FM		340
3S01	29	050		29	051		12/22/2008	310	FM		310
3S01	29	051		29	052		12/22/2008	322	FM		322
3S01	29	052		29	053		12/22/2008	322	FM		322
3S01	29	053		29	054		12/22/2008	97	FM		97
3S01	29	054		29	055		12/22/2008	97	FM		97
3S01	29	055		29	056		12/22/2008	165	FM		165
3S01	29	056		29	057		12/22/2008	351	FM		351
3S01	29	057		29	058		12/22/2008	355	FM		355
3S01	29	058		29	069		12/22/2008	355	FM		355
3S01	29	103		36	022		12/10/2008	125	FM		125
3S01	36	001		36	003		12/22/2008	371	FM		371
3S01	36	002		36	003		12/22/2008	245	FM		245
3S01	36	003		36	004		12/22/2008	300	FM		300
3S01	36	004		36	005		12/22/2008	323	FM		323
3S01	36	004		36	029		12/22/2008	225	FM		225
3S01	36	006		36	007		12/11/2008	195	FM		195
3S01	36	007		36	008		12/11/2008	391	FM		391
3S01	36	008		36	011		12/11/2008	300	FM		300
3S01	36	009		36	010		12/11/2008	146	FM		146
3S01	36	010		36	011		12/11/2008	366	FM		366
3S01	36	011		36	013		12/11/2008	283	FM		283
3S01	36	012		36	013		12/11/2008	420	FM		420
3S01	36	013		36	014		12/18/2008	203	FM		203
3S01	36	015		36	016		12/10/2008	163	FM		163
3S01	36	016		36	017		12/10/2008	312	FM		312
3S01	36	017		36	018		12/11/2008	273	FM		273
3S01	36	018		36	028	C	12/11/2008	206	FM		206
3S01	36	018		36	040		12/11/2008	143	FM		143
3S01	36	019		36	025		12/11/2008	200	FM		200
3S01	36	019		36	040		12/11/2008	89	FM		89
3S01	36	020		36	021		12/10/2008	352	FM		352
3S01	36	020		36	030	D	12/10/2008	47	FM		47
3S01	36	021		36	022		12/10/2008	345	FM		345
3S01	36	022		36	039		12/10/2008	160	FM		160
3S01	36	025		36	032		12/11/2008	134	FM		134
3S01	36	026		36	032		12/11/2008	118	FM		118
3S01	36	032		36	033		12/11/2008	178	FM		178
3S01	36	033		36	034		12/11/2008	188	FM		188
3S01	36	034		36	035		12/11/2008	96	FM		96
3S01	36	035		36	036		12/11/2008	35	FM		35

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3S01	36	036		36	037		12/11/2008	138	FM		138
3S01	36	037		36	038		12/11/2008	89	FM		89
3S01	36	038		36	039		12/10/2008	26	FM		26
3S02	29	059		29	060		12/29/2008	97	FM		97
3S02	29	060		29	061		12/29/2008	217	FM		217
3S02	29	061		29	062		12/29/2008	273	FM		273
3S02	29	062		29	063		12/29/2008	209	FM		209
3S02	29	063		29	064		12/29/2008	100	FM		100
3S02	29	064		29	065		12/29/2008	223	FM		223
3S02	29	065		29	066		12/29/2008	304	FM		304
3S02	29	066		29	067		12/29/2008	271	FM		271
3S02	29	067		29	068		12/29/2008	277	FM		277
3S03	24	093		29	028		1/4/2009	250	FM		250
3S03	24	093		24	094		1/13/2009	170	FM		170
3S03	24	148		24	150		12/29/2008	140	FM		140
3S03	24	149		24	150		12/29/2008	190	FM		190
3S03	24	150		29	001		12/29/2008	222	FM		222
3S03	24	151		29	105		12/29/2008	120	FM		120
3S03	24	152		24	153		12/30/2008	85	FM		85
3S03	24	153		24	154		12/30/2008	177	FM		177
3S03	24	154		29	023		12/30/2008	148	FM		148
3S03	24	155		29	024		12/30/2008	189	FM		189
3S03	29	001		29	005		12/29/2008	305	FM		305
3S03	29	002		29	003		12/29/2008	150	FM		150
3S03	29	003		29	004		12/29/2008	250	FM		250
3S03	29	004		29	005		12/29/2008	232	FM		232
3S03	29	005		29	007		6/1/2008	311	JM	12	311
3S03	29	005		29	007		12/29/2008	309	FM		309
3S03	29	006		29	007		12/29/2008	352	FM		352
3S03	29	006		29	105		12/29/2008	64	FM		64
3S03	29	007		29	008		12/29/2008	194	FM		194
3S03	29	008		29	009		12/29/2008	300	FM		300
3S03	29	009		29	011		12/29/2008	295	FM		295
3S03	29	010		29	011		12/29/2008	213	FM		213
3S03	29	011		29	021		12/30/2008	250	FM		250
3S03	29	012		29	013		12/30/2008	150	FM		150
3S03	29	013		29	014		12/30/2008	229	FM		229
3S03	29	014		29	015		12/30/2008	253	FM		253
3S03	29	015		29	021		12/30/2008	254	FM		254
3S03	29	016		29	017		12/29/2008	199	FM		199
3S03	29	017		29	018		12/29/2008	400	FM		400
3S03	29	018		29	019		12/29/2008	102	FM		102
3S03	29	019		29	020		12/29/2008	217	FM		217
3S03	29	020		29	021		12/30/2008	321	FM		321
3S03	29	021		29	027		12/29/2008	300	FM		300
3S03	29	022		29	023		12/30/2008	375	FM		375
3S03	29	022		29	023		8/1/2008	352	JM	12	352
3S03	29	023		29	024		12/30/2008	298	FM		298
3S03	29	024		29	025		12/29/2008	226	FM		226
3S03	29	025		29	026		12/29/2008	218	FM		218

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3S03	29	026		29	027		12/29/2008	348	FM		348
3S03	29	027		29	033		1/14/2009	298	FM		298
3S03	29	028		29	029		1/14/2009	248	FM		248
3S03	29	029		29	032		1/14/2009	241	FM		241
3S03	29	030		29	031		1/14/2009	289	FM		289
3S03	29	031		29	032		1/14/2009	301	FM		301
3S03	29	032		29	033		1/14/2009	142	FM		142
3S03	29	033		29	106		1/14/2009	99	FM		99
3S03	29	034		29	069		1/14/2009	253	FM		253
3S03	29	034		29	106		1/14/2009	231	FM		231
3S03	29	068		29	069		12/29/2008	60	FM		60
3S04	29	069		29	070		1/16/2009	293	FM		293
3S04	29	070		29	071		1/16/2009	196	FM		196
3S04	29	071		29	107		1/16/2009	89	FM		89
3S04	29	072		29	107		1/16/2009	286	FM		286
3S04	29	072		29	073		1/16/2009	283	FM		283
3S04	29	073		30	001		1/16/2009	268	FM		268
3S04	30	001		30	002		1/16/2009	207	FM		207
3S05	29	074	C	29	075		12/26/2008	174	FM		174
3S05	29	075		29	083		12/26/2008	426	FM		426
3S05	29	076		29	077		5/7/2009	270	FM	3	1080
3S05	29	077		29	078		5/7/2009	177	FM	3	708
3S05	29	078		29	080		5/7/2009	193	FM	3	772
3S05	29	079		29	080		12/26/2008	208	FM		208
3S05	29	080		29	081		5/7/2009	73	FM	3	292
3S05	29	081		29	082		5/7/2009	224	FM	3	896
3S05	29	082		29	083		12/26/2008	299	FM		299
3S05	29	083		29	084		12/26/2008	258	FM		258
3S05	29	084		29	110		12/26/2008	187	FM		187
3S05	29	085		29	110		12/26/2008	223	FM		223
3S05	29	085		29	088		12/26/2008	134	FM		134
3S05	29	086	C	29	087		12/26/2008	123	FM		123
3S05	29	087		29	088		12/26/2008	302	FM		302
3S05	29	088		29	089		12/26/2008	266	FM		266
3S05	29	089		29	090		12/26/2008	351	FM		351
3S05	29	090		29	096		12/23/2008	410	FM		410
3S05	29	090		29	114	J	12/23/2008	180	FM		180
3S05	29	090		29	104	C	12/26/2008	107	FM		107
3S05	29	091		29	092		12/26/2008	292	FM		292
3S05	29	092		29	093		12/26/2008	99	FM		99
3S05	29	093		29	094		12/23/2008	156	FM		156
3S05	29	094		29	095		12/23/2008	28	FM		28
3S05	29	095		29	114	T	12/23/2008	44	FM		44
3S05	29	096		29	114	T	12/23/2008	243	FM		243
3S05	29	096		29	097		12/23/2008	237	FM		237
3S05	29	097		29	098		12/23/2008	242	FM		242
3S05	29	098		29	099		12/23/2008	345	FM		345
3S05	29	110		29	111		12/26/2008	33	FM		33
3S05	29	111		29	112		12/26/2008	67	FM		67
3S05	29	112		29	113		12/26/2008	183	FM		183

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3S06	29	099		29	100		1/16/2009	361	FM		361
3S06	29	100		29	101		1/16/2009	366	FM		366
3S06	29	101		29	102		1/16/2009	346	FM		346
3S06	29	102		30	003		1/16/2009	356	FM		356
3S06	30	002	M	30	005		1/16/2009	175	FM		175
3S06	30	003		30	004		1/16/2009	379	FM		379
3S06	30	004		30	005		1/16/2009	160	FM		160
3S06	30	005		30	006		1/16/2009	150	FM		150
3S07	25	086	M	30	007		1/21/2009	220	FM		220
3S07	25	086	M	25	087		1/21/2009	166	FM		166
3S07	25	087		25	189		1/21/2009	134	FM		134
3S07	25	088		25	089		1/21/2009	300	FM		300
3S07	25	088		25	189		1/21/2009	290	FM		290
3S07	25	089		25	090		1/21/2009	301	FM		301
3S07	30	007		30	027	D	1/21/2009	50	FM		50
3S08	24	083		24	084		10/1/2008	240	JM	12	240
3S08	24	083		24	084		1/2/2009	233	FM		233
3S08	24	084		24	087		1/2/2009	315	FM		315
3S08	24	085		24	086		1/2/2009	278	FM		278
3S08	24	086		24	087		1/2/2009	100	FM		100
3S08	24	087		24	088		1/7/2009	315	FM		315
3S08	24	088		24	091		1/7/2009	300	FM		300
3S08	24	089		24	091		1/7/2009	360	FM		360
3S08	24	089		24	091		10/1/2008	257	JM	12	257
3S08	24	090		24	091		1/7/2009	176	FM		176
3S08	24	091		24	092		1/7/2009	300	FM		300
3S08	24	092		24	095		1/13/2009	105	FM		105
3S08	24	094		24	095		1/13/2009	145	FM		145
3S08	24	095		24	096		1/13/2009	290	FM		290
3S08	24	096		24	098		1/13/2009	210	FM		210
3S08	24	098		24	104		1/13/2009	200	FM		200
3S08	24	099		24	101		1/12/2009	255	FM		255
3S08	24	100		24	101		1/12/2009	158	FM		158
3S08	24	101		24	102		1/12/2009	74	FM		74
3S08	24	102		24	103		1/12/2009	195	FM		195
3S08	24	103		24	104		1/13/2009	150	FM		150
3S08	24	104		24	133		1/13/2009	300	FM		300
3S08	24	105		24	106		1/13/2009	260	FM		260
3S08	24	105		24	158	C	1/13/2009	117	FM		117
3S08	24	106		24	110		1/13/2009	185	FM		185
3S08	24	107		24	108		1/13/2009	301	FM		301
3S08	24	108		24	109		1/13/2009	95	FM		95
3S08	24	109		24	110		1/13/2009	125	FM		125
3S08	24	110		24	111		1/13/2009	195	FM		195
3S08	24	111		24	133		1/13/2009	145	FM		145
3S08	24	112		24	113		1/7/2009	130	FM		130
3S08	24	112		24	113		1/1/2009	115	JM	12	115
3S08	24	112		24	161	D	1/7/2009	12	FM		12
3S08	24	113		24	114		1/1/2009	355	JM	12	355
3S08	24	113		24	114		1/7/2009	353	FM		353

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3S08	24	114		24	115		1/1/2009	199	JM	12	199
3S08	24	114		24	115		1/7/2009	162	FM		162
3S08	24	115		24	116		1/7/2009	141	FM		141
3S08	24	116		24	117		1/7/2009	156	FM		156
3S08	24	117		24	127		1/12/2009	219	FM		219
3S08	24	118		24	119		1/12/2009	155	FM		155
3S08	24	120		24	125		1/12/2009	144	FM		144
3S08	24	120		24	126		1/12/2009	30	FM		30
3S08	24	121		24	122		1/8/2009	151	FM		151
3S08	24	122		24	123		1/8/2009	158	FM		158
3S08	24	123		24	125		1/8/2009	169	FM		169
3S08	24	124	C	24	125		1/12/2009	140	FM		140
3S08	24	126		24	127		1/12/2009	170	FM		170
3S08	24	127		24	128		1/12/2009	162	FM		162
3S08	24	128		24	129		1/12/2009	286	FM		286
3S08	24	129		24	130		1/12/2009	281	FM		281
3S08	24	130		24	131		1/12/2009	220	FM		220
3S08	24	131		24	133		1/13/2009	110	FM		110
3S08	24	133		24	134		1/13/2009	235	FM		235
3S08	24	134		24	139		1/13/2009	110	FM		110
3S08	24	135		24	136		1/13/2009	106	FM		106
3S08	24	135		24	159	C	1/13/2009	77	FM		77
3S08	24	136		24	137		1/13/2009	219	FM		219
3S08	24	137		24	138		1/13/2009	200	FM		200
3S08	24	138		24	139		1/13/2009	228	FM		228
3S08	24	139		24	140		1/14/2009	91	FM		91
3S08	24	140		24	142		1/14/2009	109	FM		109
3S08	24	141		24	142		1/14/2009	250	FM		250
3S08	24	142		24	146		1/14/2009	195	FM		195
3S08	24	143		24	144		1/13/2009	200	FM		200
3S08	24	144		24	145		1/13/2009	219	FM		219
3S08	24	145		24	146		1/14/2009	145	FM		145
3S08	24	146		24	147		1/14/2009	300	FM		300
3S08	24	147		25	081		1/14/2009	250	FM		250
3S08	25	081		25	084		1/14/2009	257	FM		257
3S08	25	082		25	083		1/14/2009	245	FM		245
3S08	25	083		25	084		1/14/2009	263	FM		263
3S08	25	084		25	085		1/14/2009	195	FM		195
3S08	25	085		25	090		1/14/2009	202	FM		202
3S09	25	090		25	190		1/26/2009	39	FM		39
3S09	25	091		25	092		1/23/2009	275	FM		275
3S09	25	092		25	093		1/23/2009	297	FM		297
3S09	25	093		25	094		1/23/2009	330	FM		330
3S09	25	094		25	095		1/23/2009	296	FM		296
3S09	25	095		25	096		1/26/2009	202	FM		202
3S09	25	095		25	190		1/26/2009	24	FM		24
3S09	25	096		25	097		1/26/2009	222	FM		222
3S09	25	097		25	098		1/26/2009	214	FM		214
3S09	25	098		25	100		1/26/2009	227	FM		227
3S09	25	099		25	100		1/26/2009	317	FM		317

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3S09	25	100		25	101		1/26/2009	350	FM		350
3S09	25	190		25	191		1/21/2009	520	FM		520
3S09	25	191		25	192		1/21/2009	550	FM		550
3S09	25	192		30	025		1/21/2009	452	FM		452
3S09	30	006		30	026		1/16/2009	100	FM		100
3S09	30	025		30	026		1/21/2009	42	FM		42
3S11	25	101		25	102		1/26/2009	344	FM		344
3S11	25	102		25	103		1/26/2009	290	FM		290
3S11	25	103		25	105		1/26/2009	300	FM		300
3S11	25	104		25	105		1/26/2009	321	FM		321
3S11	25	105		25	106		1/26/2009	316	FM		316
3S11	25	106		25	107		1/26/2009	330	FM		330
3S11	25	107		25	199		1/26/2009	124	FM		124
3S11	25	108		25	122		1/29/2009	335	FM		335
3S11	25	108		25	199		1/26/2009	213	FM		213
3S12	25	097		25	109		1/21/2009	300	FM		300
3S12	25	109		25	110		1/21/2009	331	FM		331
3S12	25	110		25	111		1/21/2009	300	FM		300
3S12	25	111		25	113		1/21/2009	298	FM		298
3S12	25	112		25	113		1/21/2009	250	FM		250
3S12	25	113		25	114		1/21/2009	300	FM		300
3S12	25	114		25	115		1/21/2009	287	FM		287
3S12	25	115		25	116		1/21/2009	304	FM		304
3S12	25	116		25	120		1/29/2009	333	FM		333
3S12	25	117		25	119		1/29/2009	300	FM		300
3S12	25	118		25	119		1/29/2009	141	FM		141
3S12	25	119		25	120		1/29/2009	207	FM		207
3S12	25	120		25	121		1/29/2009	224	FM		224
3S12	25	121		25	122		1/29/2009	230	FM		230
3S13	25	122		25	123		1/29/2009	229	FM		229
3S14	25	059		25	060		1/20/2009	301	FM		301
3S14	25	059		25	201		1/20/2009	15	FM		15
3S14	25	060		25	061		1/20/2009	325	FM		325
3S14	25	060		25	061		10/1/2008	303	JM	12	303
3S14	25	061		25	062		1/20/2009	201	FM		201
3S14	25	062		25	063		1/20/2009	200	FM		200
3S14	25	063		25	064		1/20/2009	254	FM		254
3S14	25	064	P	25	066	P	5/11/2009	243	FM	3	972
3S14	25	065	P	25	066	P	5/11/2009	137	FM	3	548
3S14	25	201		30	028		1/20/2009	322	FM		322
3S14	30	028		30	029		1/20/2009	300	FM		300
3S14	30	029		30	030		1/20/2009	258	FM		258
3S15	25	054		25	055		1/20/2009	331	FM		331
3S15	25	055		25	056		1/20/2009	332	FM		332
3S15	25	056		25	057		1/20/2009	333	FM		333
3S15	25	057		25	058		1/20/2009	252	FM		252
3S15	25	058		25	067	P	1/20/2009	252	FM		252
3S15	25	066	P	25	067	P	5/11/2009	75	FM	3	300
3S16	25	067	P	25	069	P	5/11/2009	247	FM	3	988
3S16	25	068		25	069	P	5/11/2009	168	FM	3	672

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3S16	25	069	P	25	070	P	5/11/2009	45	FM	3	180
3S17	25	070	P	25	071		1/20/2009	352	FM		352
3S17	25	071		25	072		1/20/2009	208	FM		208
3S17	25	072		25	073		1/20/2009	126	FM		126
3S17	25	073		25	074		1/20/2009	348	FM		348
3S17	25	074		25	077		1/20/2009	300	FM		300
3S17	25	075		25	077		1/20/2009	169	FM		169
3S17	25	076		25	077		1/20/2009	314	FM		314
3S17	25	077		25	078		1/20/2009	337	FM		337
3S17	25	078		25	079		1/20/2009	326	FM		326
3S17	25	079		25	080	M	1/20/2009	340	FM		340
3S17	25	080	M	25	125		5/5/2009	327	FM	3	1308
3S18	19	054		19	055		1/20/2009	335	FM		335
3S18	25	123		25	125		1/29/2009	228	FM		228
3S18	25	124		25	125		1/29/2009	150	FM		150
3S18	25	125		25	126	S	5/5/2009	15	FM	3	60
3S18	25	126	S	25	127	S	5/5/2009	20	FM	3	80
3S18	25	127	S	25	128		1/29/2009	306	FM		306
3S18	25	128		25	129		1/29/2009	334	FM		334
3S18	25	129		25	130		1/29/2009	336	FM		336
3S18	25	130		25	132		1/29/2009	324	FM		324
3S18	25	131		25	132		1/29/2009	300	FM		300
3S19	19	043		19	047		1/28/2009	350	FM		350
3S19	19	044		19	045		1/21/2009	350	FM		350
3S19	19	044		25	047		1/21/2009	346	FM		346
3S19	19	045		19	046		1/22/2009	350	FM		350
3S19	19	046		19	047		1/28/2009	315	FM		315
3S19	19	047		19	048		1/28/2009	222	FM		222
3S19	19	048		19	052		1/28/2009	221	FM		221
3S19	19	049		25	053		1/26/2009	345	FM		345
3S19	19	049		19	050		1/26/2009	337	FM		337
3S19	19	050		19	051		1/26/2009	338	FM		338
3S19	19	051		19	052		1/28/2009	340	FM		340
3S19	19	052		19	053		1/20/2009	224	FM		224
3S19	25	042		25	043		1/21/2009	285	FM		285
3S19	25	043		25	044		1/21/2009	294	FM		294
3S19	25	044		25	045		1/21/2009	299	FM		299
3S19	25	045		25	047		1/21/2009	297	FM		297
3S19	25	046		25	047		1/21/2009	300	FM		300
3S19	25	048		25	049		1/22/2009	341	FM		341
3S19	25	049		25	050		1/22/2009	299	FM		299
3S19	25	050		25	051		1/22/2009	299	FM		299
3S19	25	051		25	053		1/22/2009	298	FM		298
3S19	25	052		25	053		1/22/2009	299	FM		299
3S20	19	053		19	058		1/30/2009	0	FM		0
3S20	19	056	M	19	058		1/20/2009	342	FM		342
3S20	19	057		19	058		1/20/2009	166	FM		166
3S20	19	058		19	061		1/30/2009	243	FM		243
3S20	19	059		19	060		1/30/2009	353	FM		353
3S20	19	060		19	061		1/30/2009	355	FM		355

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
3S20	19	061		19	063		2/13/2009	264	FM		264
3S20	19	063		19	064		2/13/2009	207	FM		207
3S20	19	064		19	065		2/13/2009	332	FM		332
3S20	19	065		19	066		2/13/2009	248	FM		248
3S20	19	066		19	068		2/13/2009	34	FM		34
3S20	19	067		19	068		1/1/2009	377	JM	12	377
3S20	19	067		19	068		2/13/2009	371	FM		371
3S20	19	069		19	072		2/17/2009	170	FM		170
3S20	19	070		19	071		2/13/2009	206	FM		206
3S20	19	071		19	072		2/17/2009	233	FM		233
3S20	19	072		19	073		2/17/2009	95	FM		95
3S20	19	073		19	074		2/17/2009	275	FM		275
3S21	19	023	M	20	095		2/23/2009	341	FM		341
3S21	19	023	M	19	197		2/23/2009	227	FM		227
3S22	19	024		19	025		2/23/2009	157	FM		157
3S22	19	024		19	197		2/23/2009	124	FM		124
3S22	19	025		19	038		2/23/2009	19	FM		19
3S22	19	026		19	028		1/28/2009	211	FM		211
3S22	19	027		19	028		1/28/2009	119	FM		119
3S22	19	028		19	029		1/28/2009	250	FM		250
3S22	19	029		19	031		1/28/2009	285	FM		285
3S22	19	029		20	097		1/28/2009	237	FM		237
3S22	19	030		19	031		1/28/2009	349	FM		349
3S22	19	032		20	098		1/28/2009	302	FM		302
3S22	19	032		19	033		1/28/2009	235	FM		235
3S22	19	033		19	036		1/28/2009	258	FM		258
3S22	19	033		19	196		1/28/2009	258	FM		258
3S22	19	034	C	19	035		1/28/2009	68	FM		68
3S22	19	035		19	036		1/28/2009	126	FM		126
3S22	19	036		19	037		1/28/2009	112	FM		112
3S22	19	037		19	038		2/23/2009	225	FM		225
3S22	19	038		19	039	S	2/25/2009	340	FM		340
3S22	19	039	S	19	040	S	5/6/2009	22	FM	3	88
3S22	19	040	S	19	207		2/25/2009	350	FM		350
3S22	19	040	S	19	041	S	5/6/2009	56	FM	3	224
3S22	19	041	S	19	206		2/25/2009	350	FM		350
3S23	19	042	S	19	074		5/6/2009	237	FM	3	948
3S23	19	074		19	075		5/6/2009	265	FM	3	1060
3S24	19	075		19	076		2/23/2009	300	FM		300
3S24	19	076		19	083		2/23/2009	265	FM		265
3S24	19	077		19	078		2/17/2009	302	FM		302
3S24	19	078		19	079		2/17/2009	302	FM		302
3S24	19	079		19	192		2/17/2009	250	FM		250
3S24	19	080		19	081		2/17/2009	300	FM		300
3S24	19	080		19	192		2/17/2009	54	FM		54
3S24	19	081		19	082		2/17/2009	200	FM		200
3S24	19	082		19	083		2/23/2009	355	FM		355
3S24	19	083		19	084		2/23/2009	40	FM		40
3S24	19	084		19	085		2/23/2009	350	FM		350
3S24	19	192		19	193		2/17/2009	228	FM		228

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
4N02	17	001		17	002		7/16/2008	260	FM		260
4N02	17	002		17	003		7/16/2008	220	FM		220
4N02	17	003		17	004		7/16/2008	215	FM		215
4N02	17	004		17	005		7/16/2008	223	FM		223
4N02	17	005		17	008		7/16/2008	260	FM		260
4N02	17	007		17	008		7/16/2008	250	FM		250
4N02	17	008		17	024		7/16/2008	280	FM		280
4N02	17	009		17	010		7/16/2008	210	FM		210
4N02	17	010		17	011		7/16/2008	250	FM		250
4N02	17	011		17	024		7/16/2008	291	FM		291
4N02	17	012		17	013		7/15/2008	98	FM		98
4N02	17	013		17	014		7/15/2008	177	FM		177
4N02	17	014		17	015		7/15/2008	165	FM		165
4N02	17	015		17	016		7/15/2008	228	FM		228
4N02	17	016		17	023		7/15/2008	266	FM		266
4N02	17	017		17	019		7/15/2008	231	FM		231
4N02	17	018		17	019		7/15/2008	264	FM		264
4N02	17	019		17	020		7/15/2008	193	FM		193
4N02	17	020		17	021		3/4/2007	339	JM	12	339
4N02	17	020		17	021		7/15/2008	320	FM		320
4N02	17	020		17	021		3/1/2009	280	JM	12	280
4N02	17	021		17	022		7/15/2008	206	FM		206
4N02	17	022		17	023		7/15/2008	205	FM		205
4N02	17	023		17	024		7/15/2008	260	FM		260
4N02	17	024		18	002		7/17/2008	340	FM		340
4N02	18	001		18	002		7/17/2008	150	FM		150
4N02	18	002		18	004		7/17/2008	323	FM		323
4N02	18	003		18	004		7/17/2008	150	FM		150
4N02	18	004		18	027		7/17/2008	294	FM		294
4N04	18	005		18	006		7/17/2008	220	FM		220
4N04	18	005		18	054	D	7/17/2008	77	FM		77
4N04	18	006		18	007		7/17/2008	327	FM		327
4N04	18	007		18	009		7/17/2008	100	FM		100
4N04	18	008		18	009		7/17/2008	181	FM		181
4N04	18	009		18	010		7/17/2008	129	FM		129
4N04	18	010		18	024		7/17/2008	140	FM		140
4N04	18	011		18	013		7/16/2008	160	FM		160
4N04	18	012		18	013		7/16/2008	173	FM		173
4N04	18	013		18	014		7/16/2008	100	FM		100
4N04	18	014		18	017		7/16/2008	254	FM		254
4N04	18	015		18	016		7/16/2008	116	FM		116
4N04	18	016		18	017		7/16/2008	163	FM		163
4N04	18	017		18	018		7/6/2008	301	FM		301
4N04	18	018		18	019		7/16/2008	299	FM		299
4N04	18	019		18	021		7/17/2008	175	FM		175
4N04	18	020		18	021		7/17/2008	60	FM		60
4N04	18	021		18	022		7/17/2008	270	FM		270
4N04	18	022		18	023		7/17/2008	50	FM		50
4N04	18	023		18	024		7/17/2008	175	FM		175
4N04	18	024		18	025		7/17/2008	172	FM		172

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
4N04	18	025		18	027		7/17/2008	195	FM		195
4N04	18	026		18	027		7/17/2008	326	FM		326
4N04	18	027		18	029		7/17/2008	279	FM		279
4N04	18	028		18	029		7/17/2008	248	FM		248
4N04	18	029		18	030		7/17/2008	250	FM		250
4N04	18	030		18	032		7/17/2008	261	FM		261
4N04	18	031		18	032		7/17/2008	160	FM		160
4N04	18	032		18	033		7/17/2008	203	FM		203
4N04	18	033		18	040		7/18/2008	207	FM		207
4N06	18	036		18	037		7/18/2008	313	FM		313
4N06	18	037	S	18	040	P	5/5/2009	314	FM	3	1256
4N06	18	037	S	18	053	S	8/1/2008	100	FM	3	400
4N06	18	038		18	039		7/18/2008	300	FM		300
4N06	18	039		18	040		7/18/2008	200	FM		200
4N06	18	040		18	055		7/18/2008	234	FM		234
4N06	18	041		18	056		7/18/2008	172	FM		172
4N06	18	041		18	055		7/18/2008	62	FM		62
4N06	18	042		18	043		7/18/2008	294	FM		294
4N06	18	042		18	056		7/18/2008	113	FM		113
4N06	18	043		18	044		7/18/2008	284	FM		284
4N06	18	044		19	111		7/18/2008	300	FM		300
4N06	19	111		19	195		7/18/2008	223	FM		223
4N06	19	112		19	209		7/18/2008	287	FM		287
4N06	19	112		19	195		7/18/2008	70	FM		70
4N08	19	102		19	194	D	7/21/2008	317	FM		317
4N08	19	102		19	103		7/21/2008	245	FM		245
4N08	19	103		19	104		7/21/2008	225	FM		225
4N08	19	105		19	106		7/21/2008	250	FM		250
4N08	19	106		19	107		7/21/2008	147	FM		147
4N08	19	107		19	108		7/21/2008	172	FM		172
4N08	19	108		19	109		7/21/2008	30	FM		30
4N08	19	109		19	110		7/21/2008	233	FM		233
4N08	19	110		19	113		7/21/2008	253	FM		253
4N08	19	113		19	114		7/21/2008	300	FM		300
4N08	19	114		19	115		7/21/2008	320	FM		320
4N08	19	115		19	116		7/21/2008	360	FM		360
4N08	19	116		19	117		7/21/2008	320	FM		320
4N09	12	058		19	119		7/21/2008	310	FM		310
4N09	12	058		12	059		7/21/2008	275	FM		275
4N09	12	059		12	063		7/21/2008	310	FM		310
4N09	12	060	P	12	061	P	5/14/2009	332	FM	3	1328
4N09	12	061	P	12	062	P	5/14/2009	331	FM	3	1324
4N09	12	062	P	12	063	P	5/14/2009	95	FM	3	380
4N09	19	117		19	118		7/21/2008	310	FM		310
4N09	19	118		19	119		7/21/2008	320	FM		320
4S01	18	045		18	046		5/18/2009	337	FM		337
4S01	18	046		18	048		5/18/2009	262	FM		262
4S01	18	047		18	048		5/18/2009	70	FM		70
4S01	18	048		18	049		5/18/2009	310	FM		310
4S01	18	049		18	050		5/18/2009	330	FM		330

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
4S01	18	050		18	052		5/18/2009	312	FM		312
4S01	18	051		18	052		5/18/2009	89	FM		89
4S01	18	052		19	095		5/18/2009	250	FM		250
4S01	19	022		19	085		4/23/2009	44	FM		44
4S01	19	085		19	086		9/5/2008	260	FM		260
4S01	19	085		19	203		4/23/2009	23	FM		23
4S01	19	086	M	19	087		9/5/2008	223	FM		223
4S01	19	087		19	089		9/5/2008	275	FM		275
4S01	19	088		19	089		9/5/2008	362	FM		362
4S01	19	089		19	090		9/9/2008	290	FM		290
4S01	19	090		19	099		9/9/2008	225	FM		225
4S01	19	091		19	092		1/1/2009	347	JM	12	347
4S01	19	091		19	092		5/18/2009	333	FM		333
4S01	19	092		19	093		5/18/2009	281	FM		281
4S01	19	093		19	094		3/1/2009	242	JM	12	242
4S01	19	093		19	094		5/18/2009	225	FM		225
4S01	19	094		19	095		5/18/2009	313	FM		313
4S01	19	095		19	096	S	5/18/2009	195	FM		195
4S01	19	096	S	19	097	S	5/18/2009	66	FM	3	264
4S01	19	097	S	19	098	S	2/2/2009	185	FM	3	740
4S01	19	098	S	19	099	S	2/2/2009	206	FM	3	824
4S01	19	099		19	100	M	9/9/2008	100	FM		100
4S01	19	100	M	19	101		9/9/2008	310	FM		310
4S01	19	199		19	200		9/5/2008	425	FM		425
4S01	19	200		19	201		9/5/2008	435	FM		435
4S01	19	201		19	202		9/5/2008	425	FM		425
4S01	19	202		19	203		9/5/2008	32	FM		32
4S01	19	203		19	205		2/25/2009	504	FM		504
4S01	19	205		19	206		2/25/2009	478	FM		478
4S01	19	207		19	208		2/25/2009	132	FM		132
4S01	19	208		20	150		2/25/2009	116	FM		116
4S02	12	054		12	149		4/28/2009	206	FM		206
4S02	12	055		12	056		9/4/2008	330	FM		330
4S02	12	055		12	149		4/28/2009	144	FM		144
4S02	12	056		19	101		9/9/2008	350	FM		350
4S02	12	056		12	057		9/9/2008	325	FM		325
4S02	12	057		12	082		9/9/2008	305	FM		305
4S02	12	080	P	12	081	P	2/3/2009	400	FM	3	1600
4S02	12	081	P	12	082	P	2/3/2009	15	FM	3	60
4S02	19	120		19	121		4/7/2009	304	FM		304
4S02	19	121		19	123		4/7/2009	253	FM		253
4S02	19	122		19	123		4/7/2009	160	FM		160
4S02	19	123		19	124		4/7/2009	28	FM		28
4S02	19	124		19	127		4/7/2009	160	FM		160
4S02	19	125		19	126		4/7/2009	300	FM		300
4S02	19	126		19	127		4/7/2009	301	FM		301
4S02	19	127		19	129		4/7/2009	259	FM		259
4S02	19	128		19	129		4/7/2009	262	FM		262
4S02	19	129		19	130		4/7/2009	155	FM		155
4S02	19	130		19	132		4/7/2009	121	FM		121

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
4S02	19	131		19	132		4/7/2009	210	FM		210
4S02	19	132		19	133		4/7/2009	250	FM		250
4S02	19	133		19	139		4/7/2009	197	FM		197
4S02	19	134		19	135		4/7/2009	321	FM		321
4S02	19	135		19	136		4/7/2009	205	FM		205
4S02	19	136		19	137		4/7/2009	158	FM		158
4S02	19	137		19	138		4/7/2009	217	FM		217
4S02	19	138		19	139		4/7/2009	202	FM		202
4S02	19	139		19	141		4/7/2009	261	FM		261
4S02	19	140		19	141		4/7/2009	140	FM		140
4S02	19	140		19	141		3/1/2009	140	JM	12	140
4S02	19	142		19	143		4/7/2009	275	FM		275
4S02	19	143		19	144		4/7/2009	181	FM		181
4S02	19	144		19	145		4/7/2009	300	FM		300
4S02	19	145		19	146		4/7/2009	203	FM		203
4S02	19	146		19	148		4/7/2009	166	FM		166
4S02	19	147		19	148		4/7/2009	140	FM		140
4S03	12	064		12	069		4/30/2009	327	FM		327
4S03	12	064		13	192		4/30/2009	327	FM		327
4S03	12	065		12	066		4/29/2009	335	FM		335
4S03	12	065		13	195		4/29/2009	330	FM		330
4S03	12	066		12	067		4/29/2009	40	FM		40
4S03	12	067		12	068		4/29/2009	341	FM		341
4S03	12	068		12	069		4/30/2009	344	FM		344
4S03	13	189		13	214		4/29/2009	250	FM		250
4S03	13	189		13	202	D	4/29/2009	134	FM		134
4S03	13	190		13	191		4/29/2009	264	FM		264
4S03	13	191		13	192		4/29/2009	350	FM		350
4S03	13	192		13	214		4/29/2009	100	FM		100
4S03	13	193		20	156		4/29/2009	230	FM		230
4S03	13	193		13	194		4/29/2009	325	FM		325
4S03	13	193		13	201	D	4/29/2009	269	FM		269
4S03	13	194		13	195		4/29/2009	320	FM		320
4S03	13	195		20	007		4/29/2009	265	FM		265
4S03	19	151		19	153		3/1/2009	116	JM	12	116
4S03	19	151		19	153		3/25/2009	114	FM		114
4S03	19	152		20	100		3/17/2009	236	FM		236
4S03	19	152		19	153		3/25/2009	234	FM		234
4S03	19	153		19	155		3/25/2009	255	FM		255
4S03	19	154		19	155		3/25/2009	349	FM		349
4S03	19	155		19	158		3/25/2009	254	FM		254
4S03	19	156		19	157		3/25/2009	136	FM		136
4S03	19	157		19	158		3/25/2009	347	FM		347
4S03	19	158		19	160		4/24/2009	255	FM		255
4S03	19	159		19	160		4/24/2009	353	FM		353
4S03	19	160		19	163		4/24/2009	255	FM		255
4S03	19	161		19	162		4/24/2009	146	FM		146
4S03	19	162		19	163		4/24/2009	295	FM		295
4S03	19	163		19	164		4/24/2009	256	FM		256
4S03	19	164		19	165		4/24/2009	268	FM		268

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
4S03	19	165		20	007		4/29/2009	229	FM		229
4S03	20	001		20	002		4/29/2009	260	FM		260
4S03	20	002		20	003		4/29/2009	344	FM		344
4S03	20	003		20	004		4/29/2009	345	FM		345
4S03	20	004		20	005		4/29/2009	344	FM		344
4S03	20	005		20	006		4/29/2009	181	FM		181
4S03	20	006		20	007		4/29/2009	190	FM		190
4S04	12	069		12	072		4/30/2009	300	FM	3	1200
4S04	12	070		12	071		4/30/2009	274	FM		274
4S04	12	071		12	072		4/30/2009	226	FM		226
4S04	12	072		12	073		4/30/2009	177	FM	3	708
4S04	12	073		12	074		8/29/2008	285	FM		285
4S04	12	074		12	077		5/18/2009	287	FM		287
4S04	12	075		12	076		5/18/2009	261	FM		261
4S04	12	076		12	077		5/18/2009	320	FM		320
4S04	12	077		12	143		8/29/2008	288	FM		288
4S04	12	077		12	148		8/29/2008	287	FM		287
4S04	12	078	M	12	081		2/3/2009	316	FM	3	1264
4S04	12	078	M	12	143		8/29/2008	32	FM		32
4S04	12	079	P	12	081	P	2/3/2009	347	FM	3	1388
4S04	12	079	P	12	137	D	2/3/2009	150	FM	3	600
4S04	12	080	P	12	141	D	2/3/2009	10	FM	3	40
4S04	12	082		12	089		9/9/2008	300	FM		300
4W01	13	169		13	170		9/15/2008	330	FM		330
4W01	13	169		20	112		9/15/2008	229	FM		229
4W01	13	170		13	171		9/15/2008	40	FM		40
4W01	13	171		13	208		9/15/2008	201	FM		201
4W01	13	172		13	208		9/15/2008	200	FM		200
4W01	13	172		13	174		9/15/2008	20	FM		20
4W01	13	173		13	210		9/15/2008	65	FM		65
4W01	13	174		13	175		9/16/2008	340	FM		340
4W01	13	174		13	210		9/16/2008	200	FM		200
4W01	13	175		13	176		9/16/2008	340	FM		340
4W01	13	176		13	177		9/16/2008	330	FM		330
4W01	13	177		13	181		9/16/2008	268	FM		268
4W01	20	101		20	102		9/15/2008	280	FM		280
4W01	20	102		20	103		9/15/2008	272	FM		272
4W01	20	104		20	107		9/15/2008	366	FM		366
4W01	20	105		20	106		9/15/2008	358	FM		358
4W01	20	106		20	107		9/15/2008	355	FM		355
4W01	20	107		20	110		9/15/2008	366	FM		366
4W01	20	108		20	109		9/15/2008	58	FM		58
4W01	20	109		20	110		9/15/2008	300	FM		300
4W01	20	110		20	112		9/15/2008	361	FM		361
4W01	20	111		20	112		9/15/2008	317	FM		317
4W02	12	091		13	188		9/16/2008	327	FM		327
4W02	12	091		12	092	M	9/16/2008	323	FM		323
4W02	12	092	M	12	093		9/16/2008	283	FM		283
4W02	12	127		13	186		9/16/2008	250	FM		250
4W02	13	178		13	193		9/16/2008	344	FM		344

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
4W02	13	178		13	213		9/16/2008	162	FM		162
4W02	13	179		13	180		9/16/2008	288	FM		288
4W02	13	179		13	213		9/16/2008	181	FM		181
4W02	13	180		13	181		9/16/2008	293	FM		293
4W02	13	181		13	182		9/16/2008	52	FM		52
4W02	13	182		13	183		9/16/2008	244	FM		244
4W02	13	183		13	188		9/16/2008	353	FM		353
4W02	13	184		13	188		9/16/2008	250	FM		250
4W02	13	184		13	203	D	9/16/2008	250	FM		250
4W02	13	185		13	186		9/16/2008	110	FM		110
4W02	13	186		13	187		9/16/2008	210	FM		210
4W02	13	187		13	188		9/16/2008	304	FM		304
4W03	12	093	P	12	094	P	5/12/2009	293	FM	3	1172
4W03	12	094	P	12	095	P	5/12/2009	224	FM	3	896
4W03	12	095	P	12	096		9/16/2008	235	FM		235
4W03	12	096		12	097		9/17/2008	257	FM		257
4W03	12	097		12	098		9/17/2008	320	FM		320
4W03	12	098		12	099		11/20/2008	320	FM		320
4W04	12	083		12	084		9/17/2008	250	FM		250
4W04	12	084		12	086		9/17/2008	200	FM		200
4W04	12	085		12	128	C	9/17/2008	157	FM		157
4W04	12	085		12	086		9/17/2008	36	FM		36
4W04	12	086		12	087		9/17/2008	200	FM		200
4W04	12	087		12	088		9/17/2008	320	FM		320
4W04	12	088		12	089		9/17/2008	200	FM		200
5 01	15	162		15	163		10/22/2008	298	FM		298
5 01	15	162		16	040		10/22/2008	290	FM		290
5 01	15	163		15	164		10/22/2008	332	FM		332
5 01	15	164		15	165		10/22/2008	70	FM		70
5 01	15	165		15	166		10/22/2008	301	FM		301
5 01	15	165		22	091		10/9/2008	100	FM		100
5 01	15	166		15	167		10/22/2008	296	FM		296
5 01	15	167		15	168		10/29/2008	74	FM		74
5 01	15	168		15	169		10/29/2008	241	FM		241
5 01	15	169		15	170		10/29/2008	246	FM		246
5 01	16	005		16	006		10/6/2008	350	FM		350
5 01	16	006		16	007		10/6/2008	351	FM		351
5 01	16	007		16	008		10/6/2008	83	FM		83
5 01	16	008		16	009		10/22/2008	200	FM		200
5 01	16	009		16	013		10/22/2008	200	FM		200
5 01	16	010		16	011		10/6/2008	225	FM		225
5 01	16	011		16	012		10/6/2008	83	FM		83
5 01	16	012		16	013		10/6/2008	201	FM		201
5 01	16	013		16	014		10/22/2008	327	FM		327
5 01	16	014		16	023		10/22/2008	299	FM		299
5 01	16	015		16	016		10/6/2008	220	FM		220
5 01	16	015		16	016		11/1/2008	216	JMR	12	216
5 01	16	016		16	017		10/6/2008	90	FM		90
5 01	16	016		16	017		11/1/2008	87	JMR	12	87
5 01	16	017		16	019		11/1/2008	323	JMR	12	323

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 01	16	017		16	019		10/6/2008	319	FM		319
5 01	16	018		16	019		10/6/2008	252	FM		252
5 01	16	018		16	019		5/1/2009	247	JMR	6	494
5 01	16	019		16	020		10/6/2008	145	FM		145
5 01	16	019		16	020		11/1/2008	145	JMR	12	145
5 01	16	020		16	021		11/1/2008	276	JMR	12	276
5 01	16	020		16	021		10/6/2008	275	FM		275
5 01	16	021		16	022		10/6/2008	134	FM		134
5 01	16	021		16	022		11/1/2008	128	JMR	12	128
5 01	16	022		16	023		11/1/2008	195	JMR	12	195
5 01	16	022		16	023		10/6/2008	194	FM		194
5 01	16	023		16	030		10/22/2008	240	FM		240
5 01	16	024		16	025		4/1/2009	295	JM	12	295
5 01	16	024		16	025		10/6/2008	265	FM		265
5 01	16	025		16	026		4/1/2009	310	JM	12	310
5 01	16	025		16	026		10/6/2008	293	FM		293
5 01	16	026		16	027		10/6/2008	150	FM		150
5 01	16	026		16	027		4/1/2009	126	JM	12	126
5 01	16	027		16	028		10/6/2008	150	FM		150
5 01	16	027		16	028		4/1/2009	64	JM	12	64
5 01	16	028		16	029		10/6/2008	122	FM		122
5 01	16	028		16	029		4/1/2009	118	JM	12	118
5 01	16	029		16	030		4/1/2009	145	JM	12	145
5 01	16	029		16	030		10/6/2008	125	FM		125
5 01	16	030		16	032		10/22/2008	343	FM		343
5 01	16	031		23	013		10/9/2008	200	FM		200
5 01	16	031		16	032		10/9/2008	50	FM		50
5 01	16	032		16	035		12/1/2008	354	JM	6	708
5 01	16	032		16	035		10/22/2008	343	FM		343
5 01	16	033		16	034		10/9/2008	139	FM		139
5 01	16	034		16	035		10/9/2008	102	FM		102
5 01	16	035		16	038		10/22/2008	146	FM		146
5 01	16	035		16	041	D	10/9/2008	97	FM		97
5 01	16	036		23	010		10/9/2008	202	FM		202
5 01	16	036		16	037		10/9/2008	113	FM		113
5 01	16	037		23	006		10/22/2008	160	FM		160
5 01	16	037		16	038		10/22/2008	50	FM		50
5 01	16	038		16	039		10/22/2008	241	FM		241
5 01	16	039		16	040		10/22/2008	198	FM		198
5 01	22	081		23	002		10/9/2008	140	FM		140
5 01	22	081		22	082		10/9/2008	123	FM		123
5 01	22	082		22	083		10/9/2008	175	FM		175
5 01	22	083		22	085		10/9/2008	115	FM		115
5 01	22	083		22	084		10/9/2008	110	FM		110
5 01	22	085		22	086		10/9/2008	115	FM		115
5 01	22	087		22	088		10/9/2008	165	FM		165
5 01	22	088		22	089		10/9/2008	190	FM		190
5 01	22	089		22	090		10/9/2008	186	FM		186
5 01	22	090		22	091		10/9/2008	121	FM		121
5 01	23	001		23	002		10/9/2008	102	FM		102

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 01	23	003		23	004		10/9/2008	84	FM		84
5 01	23	004		23	005		10/9/2008	256	FM		256
5 01	23	005		23	006		10/9/2008	152	FM		152
5 01	23	007		23	008		10/9/2008	194	FM		194
5 01	23	008		23	010		10/9/2008	303	FM		303
5 01	23	009		23	010		10/9/2008	367	FM		367
5 01	23	011		23	013		10/9/2008	160	FM		160
5 01	23	012		23	013		10/9/2008	185	FM		185
5 01	23	014	C	23	017		10/9/2008	134	FM		134
5 01	23	015		23	016		10/9/2008	250	FM		250
5 01	23	016		23	017		10/9/2008	303	FM		303
5 02	22	001		22	002		9/22/2008	267	FM		267
5 02	22	002		22	009		9/22/2008	350	FM		350
5 02	22	003		22	004		9/22/2008	342	FM		342
5 02	22	004		22	007		9/22/2008	122	FM		122
5 02	22	005		22	006		9/22/2008	133	FM		133
5 02	22	006		22	007		9/22/2008	290	FM		290
5 02	22	006		22	094	D	9/22/2008	105	FM		105
5 02	22	007		22	008		9/22/2008	161	FM		161
5 02	22	008		22	009		9/22/2008	262	FM		262
5 02	22	009		22	012		9/22/2008	337	FM		337
5 02	22	011		22	012		9/22/2008	244	FM		244
5 02	22	011		22	096		9/22/2008	82	FM		82
5 02	22	012		22	015		9/23/2008	303	FM		303
5 02	22	013		22	014		9/23/2008	245	FM		245
5 02	22	014		22	015		9/23/2008	307	FM		307
5 02	22	015		22	018		9/23/2008	200	FM		200
5 02	22	016		22	017		10/29/2008	344	FM		344
5 02	22	016		22	092	D	10/29/2008	54	FM		54
5 02	22	017		22	018		10/29/2008	60	FM		60
5 02	22	018		22	019		10/29/2008	252	FM		252
5 02	22	019		22	020		10/29/2008	278	FM		278
5 02	22	020		22	021		10/29/2008	280	FM		280
5 02	22	096		22	097		9/22/2008	170	FM		170
5 02	22	097		22	098		9/22/2008	40	FM		40
5 02	22	098		22	099		9/22/2008	124	FM		124
5 03	14	158		21	002		10/31/2008	170	FM		170
5 03	15	170		15	175		10/29/2008	254	FM		254
5 03	15	171		15	172		9/22/2008	300	FM		300
5 03	15	172		15	173		11/1/2008	305	JMR	12	305
5 03	15	172		15	173		9/22/2008	300	FM		300
5 03	15	173		15	174		10/29/2008	127	FM		127
5 03	15	174		15	175		10/29/2008	327	FM		327
5 03	15	175		22	021		10/29/2008	150	FM		150
5 03	21	001		22	023		10/31/2008	360	FM		360
5 03	21	001		21	002		10/31/2008	331	FM		331
5 03	21	002		21	142		10/31/2008	360	FM		360
5 03	21	002		21	003		10/31/2008	308	FM		308
5 03	21	003		21	004		10/31/2008	310	FM		310
5 03	21	004		21	005		10/31/2008	320	FM		320

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 03	21	005		21	006		10/31/2008	335	FM		335
5 03	22	021		22	022		10/31/2008	350	FM		350
5 04	15	128		15	129		9/19/2008	180	FM		180
5 04	15	129		15	131		9/19/2008	200	FM		200
5 04	15	130		15	131		9/19/2008	175	FM		175
5 04	15	131		15	132		9/19/2008	90	FM		90
5 04	15	132		15	133		9/19/2008	300	FM		300
5 04	15	133		15	134		9/19/2008	330	FM		330
5 04	15	134		15	135		9/19/2008	300	FM		300
5 04	15	135		15	176		9/19/2008	299	FM		299
5 04	15	136		15	140		9/19/2008	300	FM		300
5 04	15	136		15	176		9/19/2008	14	FM		14
5 04	15	137		15	139		10/20/2008	150	FM		150
5 04	15	138		15	139		10/20/2008	215	FM		215
5 04	15	139		15	140		10/20/2008	195	FM		195
5 04	15	140		15	141		10/20/2008	130	FM		130
5 04	15	141		15	180		10/20/2008	141	FM		141
5 04	15	142		15	177		9/22/2008	341	FM		341
5 04	15	142		15	143		10/20/2008	305	FM		305
5 04	15	143		15	148		10/20/2008	350	FM		350
5 04	15	144		15	145		10/20/2008	300	FM		300
5 04	15	144		15	200	D	10/20/2008	100	FM		100
5 04	15	145		15	147		10/20/2008	355	FM		355
5 04	15	145	P	15	174	P	5/13/2009	326	FM	3	1304
5 04	15	146		15	147		10/20/2008	313	FM		313
5 04	15	147		15	148		10/20/2008	350	FM		350
5 04	15	148		15	149		10/30/2008	354	FM		354
5 04	15	148		15	180		10/20/2008	212	FM		212
5 04	15	149		15	150		10/30/2008	350	FM		350
5 04	15	150		15	151		10/30/2008	314	FM		314
5 04	15	177		15	178		9/22/2008	250	FM		250
5 04	15	178		15	179		9/22/2008	116	FM		116
5 04	15	179		15	210		9/22/2008	225	FM		225
5 05	14	138		15	153		10/2/2008	350	FM		350
5 05	14	138		14	139		10/2/2008	245	FM		245
5 05	14	139	P	14	140	P	5/13/2009	360	FM	3	1440
5 05	14	139	P	14	212	D	5/13/2009	120	FM	3	480
5 05	14	140		15	151		10/30/2008	342	FM		342
5 05	14	140		14	141		10/30/2008	285	FM		285
5 05	14	141		14	142		10/30/2008	22	FM		22
5 05	14	142		14	214	C	10/30/2008	301	FM		301
5 05	14	142		14	145		10/30/2008	298	FM		298
5 05	14	143		14	144		10/2/2008	308	FM		308
5 05	14	143		14	203	C	10/2/2008	293	FM		293
5 05	14	144		14	204		10/30/2008	284	FM		284
5 05	14	144		14	145		10/30/2008	3	FM		3
5 05	14	145		14	146	M	10/30/2008	332	FM		332
5 05	15	152		15	153		10/2/2008	351	FM		351
5 06	14	147		14	148		11/3/2008	178	FM		178
5 06	14	148		14	171		11/3/2008	175	FM		175

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 07	14	155		14	156		10/2/2008	219	FM		219
5 07	14	157		15	161		10/2/2008	300	FM		300
5 07	14	157		14	160		10/2/2008	277	FM		277
5 07	14	158		14	159		10/31/2008	286	FM		286
5 07	14	159		14	160		10/31/2008	291	FM		291
5 07	14	160		14	162		10/31/2008	160	FM		160
5 07	14	161		14	162		10/31/2008	343	FM		343
5 07	14	161		14	193	C	10/31/2008	314	FM		314
5 07	14	162		14	164		11/3/2008	340	FM		340
5 07	14	163		14	164		11/3/2008	339	FM		339
5 07	14	163		14	192	C	11/3/2008	214	FM		214
5 07	14	164		14	165		11/3/2008	165	FM		165
5 07	14	165		14	194		11/3/2008	343	FM		343
5 07	14	165		14	167		11/3/2008	320	FM		320
5 07	14	166		14	167		11/3/2008	300	FM		300
5 07	14	167		14	168		11/3/2008	28	FM		28
5 07	14	168		14	170		11/3/2008	314	FM		314
5 07	14	169		21	006		11/3/2008	322	FM		322
5 07	14	169		14	215		11/3/2008	161	FM		161
5 07	14	170		14	171		11/3/2008	370	FM		370
5 07	14	170		14	215		11/3/2008	184	FM		184
5 07	15	154		15	155		10/2/2008	210	FM		210
5 07	15	155		15	156		10/2/2008	270	FM		270
5 07	15	156		15	157		10/2/2008	145	FM		145
5 07	15	157		15	158		1/1/2009	220	JM	12	220
5 07	15	157		15	158		10/2/2008	130	FM		130
5 07	15	158		15	161		1/1/2009	265	JM	12	265
5 07	15	158		15	161		10/2/2008	225	FM		225
5 07	15	159		15	160		10/2/2008	291	FM		291
5 07	15	159		15	160		1/1/2009	268	JM	12	268
5 07	15	160		15	161		10/2/2008	280	FM		280
5 07	15	160		15	161		1/1/2009	273	JM	12	273
5 08	13	058		14	154		11/6/2008	200	FM		200
5 08	13	058		13	059		11/7/2008	20	FM		20
5 08	14	148		14	149		11/5/2008	350	FM		350
5 08	14	149		14	151		11/5/2008	304	FM		304
5 08	14	151		14	152		11/6/2008	300	FM		300
5 08	14	152		14	153		11/6/2008	300	FM		300
5 08	14	153		14	154		11/6/2008	300	FM		300
5 09	13	055		13	057		11/5/2008	175	FM		175
5 09	13	056		14	176		11/5/2008	250	FM		250
5 09	13	056		13	057		11/5/2008	210	FM		210
5 09	13	059		13	060		11/7/2008	119	FM		119
5 09	14	172		14	173		11/5/2008	280	FM		280
5 09	14	172		14	199		11/5/2008	248	FM		248
5 09	14	173		14	174		11/5/2008	203	FM		203
5 09	14	174		14	175		11/5/2008	204	FM		204
5 09	14	175		14	176		11/5/2008	284	FM		284
5 10	13	060		13	061		11/7/2008	327	FM		327
5 10	13	061		14	137		11/7/2008	392	FM		392

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 10	13	061		13	062		11/7/2008	199	FM		199
5 10	13	062		13	063		11/7/2008	189	FM		189
5 10	13	063		13	064		11/7/2008	186	FM		186
5 10	13	064		14	127		11/7/2008	383	FM		383
5 10	13	064		13	065		11/7/2008	226	FM		226
5 10	13	065		13	066		11/7/2008	200	FM		200
5 10	14	119		14	120		11/5/2008	155	FM		155
5 10	14	124		14	125		10/6/2008	525	FM		525
5 10	14	125		14	126		10/6/2008	390	FM		390
5 10	14	126		14	127		10/6/2008	350	FM		350
5 10	14	128		14	129		10/6/2008	182	FM		182
5 10	14	129		14	130		10/6/2008	293	FM		293
5 10	14	130		14	131		10/6/2008	362	FM		362
5 10	14	131		14	132		10/6/2008	357	FM		357
5 10	14	133		14	134		10/3/2008	182	FM		182
5 10	14	134		14	135		10/3/2008	293	FM		293
5 10	14	135		14	136		10/3/2008	380	FM		380
5 10	14	136		14	137		10/3/2008	407	FM		407
5 11	13	054	M	13	068		11/7/2008	100	FM		100
5 11	13	066		14	123		11/7/2008	383	FM		383
5 11	13	066		13	067		11/7/2008	325	FM		325
5 11	13	067		13	068		11/7/2008	100	FM		100
5 11	13	068		13	069		11/14/2008	250	FM		250
5 11	14	096		15	127		10/20/2008	317	FM		317
5 11	14	096		14	097		10/20/2008	161	FM		161
5 11	14	097		14	101		10/20/2008	21	FM		21
5 11	14	098		14	099		10/20/2008	95	FM		95
5 11	14	099		14	100		10/20/2008	106	FM		106
5 11	14	099		14	190	D	10/20/2008	30	FM		30
5 11	14	100		14	101		10/20/2008	257	FM		257
5 11	14	101		14	102		10/20/2008	330	FM		330
5 11	14	102		14	103		1/1/2009	332	JM	12	332
5 11	14	102		14	103		10/20/2008	330	FM		330
5 11	14	103		14	104		1/1/2009	334	JM	12	334
5 11	14	103		14	104		10/20/2008	328	FM		328
5 11	14	104		14	110		10/20/2008	36	FM		36
5 11	14	105		14	106		10/20/2008	307	FM		307
5 11	14	106		14	107		10/20/2008	307	FM		307
5 11	14	107		14	109		10/20/2008	285	FM		285
5 11	14	108		14	109	P	5/13/2009	133	FM	3	532
5 11	14	109	P	14	110	P	5/13/2009	322	FM	3	1288
5 11	14	110	P	14	112	P	5/13/2009	291	FM	3	1164
5 11	14	111	P	14	112	P	5/13/2009	300	FM	3	1200
5 11	14	112	P	14	113	P	5/13/2009	84	FM	3	336
5 11	14	113	P	14	114	P	5/13/2009	168	FM	3	672
5 11	14	114	P	14	118	P	5/13/2009	255	FM	3	1020
5 11	14	115		14	116		10/23/2008	309	FM		309
5 11	14	115		14	195	C	10/23/2008	192	FM		192
5 11	14	116		14	117	P	10/23/2008	415	FM		415
5 11	14	117	P	14	118	P	5/13/2009	135	FM	3	540

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 11	14	117	P	14	202	P	5/13/2009	55	FM	3	220
5 11	14	118	P	14	119		5/13/2009	330	FM	3	1320
5 11	14	120		14	121		11/5/2008	140	FM		140
5 11	14	122		14	123		11/5/2008	389	FM		389
5 11	15	125		15	126		10/20/2008	200	FM		200
5 11	15	125		15	209	D	10/20/2008	106	FM		106
5 11	15	126		15	127		10/20/2008	322	FM		322
5 12	15	022		16	004		9/18/2008	161	FM		161
5 12	15	022		15	028		9/18/2008	118	FM		118
5 12	15	023		15	024		9/18/2008	153	FM		153
5 12	15	023		16	002		9/18/2008	100	FM		100
5 12	15	024		15	025		9/18/2008	100	FM		100
5 12	15	025		15	026		9/18/2008	150	FM		150
5 12	15	026		15	027		9/18/2008	210	FM		210
5 12	15	027		15	028		9/18/2008	80	FM		80
5 12	15	028		15	029		9/18/2008	147	FM		147
5 12	15	029		15	030		9/18/2008	102	FM		102
5 12	15	030		15	031		9/18/2008	115	FM		115
5 12	15	031		15	037		9/18/2008	223	FM		223
5 12	15	032		15	033		9/18/2008	178	FM		178
5 12	15	033		15	034		9/18/2008	124	FM		124
5 12	15	034		15	035		9/18/2008	35	FM		35
5 12	15	035		15	036		9/18/2008	153	FM		153
5 12	15	036		15	037		9/18/2008	265	FM		265
5 12	15	037		15	038		9/18/2008	171	FM		171
5 12	15	038		15	041		9/18/2008	313	FM		313
5 12	15	039		15	040		9/18/2008	136	FM		136
5 12	15	040		15	041		9/18/2008	170	FM		170
5 12	15	040		15	041		6/1/2008	165	JM	12	165
5 12	15	041		15	042		9/18/2008	144	FM		144
5 12	15	042		15	046		9/18/2008	157	FM		157
5 12	15	043		15	044		9/18/2008	206	FM		206
5 12	15	044		15	045		9/18/2008	212	FM		212
5 12	15	045		15	046		9/18/2008	100	FM		100
5 12	15	046		15	047		9/18/2008	87	FM		87
5 12	15	047		15	048		6/1/2008	184	JM	12	184
5 12	15	047		15	048		9/18/2008	180	FM		180
5 12	15	048		15	049		9/18/2008	188	FM		188
5 12	15	049		15	050		9/18/2008	140	FM		140
5 12	15	050		15	052		9/24/2008	270	FM		270
5 12	15	050		15	052		12/1/2008	266	JM	6	532
5 12	15	051		15	052		10/1/2008	180	JM	12	180
5 12	15	051		15	052		9/24/2008	173	FM		173
5 12	15	051		15	197	C	9/24/2008	85	FM		85
5 12	15	052		15	070		10/1/2008	152	JM	12	152
5 12	15	052		15	070		9/24/2008	149	FM		149
5 12	15	053		15	054		9/23/2008	85	FM		85
5 12	15	054		15	205		9/23/2008	86	FM		86
5 12	15	055		15	061		9/23/2008	230	FM		230
5 12	15	055		15	061		3/1/2009	209	JM	12	209

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 12	15	055		15	205		9/23/2008	125	FM		125
5 12	15	056		15	057		9/23/2008	246	FM		246
5 12	15	057		15	059		9/23/2008	133	FM		133
5 12	15	058		15	059		9/23/2008	186	FM		186
5 12	15	059		15	204		9/23/2008	60	FM		60
5 12	15	060		15	061		9/23/2008	325	FM		325
5 12	15	060		15	204		9/23/2008	236	FM		236
5 12	15	061		15	067		9/23/2008	122	FM		122
5 12	15	062		15	063		9/23/2008	155	FM		155
5 12	15	063		15	064		9/23/2008	203	FM		203
5 12	15	064		15	065		9/23/2008	300	FM		300
5 12	15	065		15	066		9/23/2008	100	FM		100
5 12	15	067		15	068		9/24/2008	232	FM		232
5 12	15	068		15	069		9/24/2008	326	FM		326
5 12	15	068		15	198	C	9/24/2008	91	FM		91
5 12	15	069		15	070		9/24/2008	285	FM		285
5 12	15	069		15	202	D	9/24/2008	52	FM		52
5 12	15	070		15	075		9/24/2008	198	FM		198
5 12	15	071		15	072		9/24/2008	240	FM		240
5 12	15	071		15	072		10/1/2008	234	JM	12	234
5 12	15	071		15	201	D	9/24/2008	60	FM		60
5 12	15	072		15	073		9/24/2008	312	FM		312
5 12	15	073		15	074		10/1/2008	284	JM	12	284
5 12	15	073		15	074		9/24/2008	274	FM		274
5 12	15	074		15	075		10/1/2008	243	JM	12	243
5 12	15	074		15	075		9/24/2008	232	FM		232
5 12	15	075		15	077		9/24/2008	246	FM		246
5 12	15	117		15	118		3/1/2009	306	JM	12	306
5 12	15	205		15	206		9/23/2008	90	FM		90
5 12	15	206		15	207		9/23/2008	120	FM		120
5 12	15	207		15	208		9/23/2008	115	FM		115
5 12	16	001		16	002		9/18/2008	100	FM		100
5 12	16	003		16	004		9/18/2008	188	FM		188
5 13	10	081		15	007		9/25/2008	357	FM		357
5 13	10	082		10	083		10/1/2008	160	JM	12	160
5 13	10	082		10	083		9/25/2008	158	FM		158
5 13	10	083		10	084		9/25/2008	50	FM		50
5 13	10	084		10	085		9/25/2008	200	FM		200
5 13	10	084		10	085		10/1/2008	194	JM	12	194
5 13	10	085		15	012		9/25/2008	130	FM		130
5 13	10	085		15	012		4/1/2009	123	JM	6	246
5 13	15	007		15	008		9/25/2008	346	FM		346
5 13	15	008		15	011		10/15/2008	235	FM		235
5 13	15	009		15	010		9/25/2008	353	FM		353
5 13	15	010		15	011		9/25/2008	353	FM		353
5 13	15	011		15	018		10/15/2008	217	FM		217
5 13	15	012		15	013		10/1/2008	167	JM	12	167
5 13	15	012		15	013		9/25/2008	163	FM		163
5 13	15	013		15	014		9/25/2008	172	FM		172
5 13	15	014		15	015		9/25/2008	235	FM		235

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 13	15	015		15	016		9/25/2008	350	FM		350
5 13	15	016		15	017		9/25/2008	225	FM		225
5 13	15	017		15	018		9/25/2008	240	FM		240
5 13	15	018		15	019		10/15/2008	204	FM		204
5 13	15	019		15	021		10/15/2008	205	FM		205
5 13	15	020		15	021		10/15/2008	269	FM		269
5 13	15	021		15	083		10/15/2008	180	FM		180
5 13	15	076		15	077		9/24/2008	300	FM		300
5 13	15	076	A	15	199	C	9/24/2008	270	FM		270
5 13	15	077		15	080		9/24/2008	308	FM		308
5 13	15	078		15	079		9/24/2008	329	FM		329
5 13	15	079		15	080		9/24/2008	214	FM		214
5 13	15	080		15	081		10/15/2008	229	FM		229
5 13	15	081		15	082		10/15/2008	215	FM		215
5 13	15	082		15	083		10/15/2008	48	FM		48
5 13	15	083		15	084		10/15/2008	150	FM		150
5 13	15	084		15	085		10/15/2008	150	FM		150
5 14	14	046		14	047		10/15/2008	300	FM		300
5 14	14	046		15	090		10/15/2008	300	FM		300
5 14	14	047		14	048	M	10/15/2008	287	FM		287
5 14	15	085		15	087		10/15/2008	250	FM		250
5 14	15	085		15	098		10/15/2008	60	FM		60
5 14	15	086		15	087		10/15/2008	145	FM		145
5 14	15	087		15	089		10/15/2008	250	FM		250
5 14	15	088		15	089		10/15/2008	145	FM		145
5 14	15	089		15	090		10/15/2008	202	FM		202
5 15	09	131		09	132		10/1/2008	316	FM		316
5 15	09	132		14	036		10/1/2008	320	FM		320
5 15	09	133		14	037		9/26/2008	390	FM		390
5 15	09	134		10	080		9/26/2008	300	FM		300
5 15	10	072		10	073		9/29/2008	89	FM		89
5 15	10	073		10	074		9/29/2008	199	FM		199
5 15	10	074		10	078		9/29/2008	299	FM		299
5 15	10	075		10	076		9/25/2008	315	FM		315
5 15	10	075		10	087	C	9/25/2008	62	FM		62
5 15	10	076		10	077		9/25/2008	254	FM		254
5 15	10	077		10	078		9/29/2008	87	FM		87
5 15	10	078		10	079		9/29/2008	180	FM		180
5 15	10	079		15	002		9/29/2008	335	FM		335
5 15	10	080		15	005		9/26/2008	312	FM		312
5 15	14	036		14	042		10/1/2008	153	FM		153
5 15	14	037		14	038		9/26/2008	276	FM		276
5 15	14	038		14	040		9/26/2008	290	FM		290
5 15	14	039		14	040		9/29/2008	300	FM		300
5 15	14	039		15	006		9/29/2008	300	FM		300
5 15	14	040		14	041		10/1/2008	325	FM		325
5 15	14	041		14	042		10/1/2008	310	FM		310
5 15	14	042		14	045		10/1/2008	327	FM		327
5 15	14	043		14	044		10/1/2008	290	FM		290
5 15	14	043		14	196	C	10/1/2008	40	FM		40

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 15	14	044		14	045		10/1/2008	364	FM		364
5 15	14	045		14	048	M	10/15/2008	333	FM		333
5 15	15	001		15	003		9/29/2008	250	FM		250
5 15	15	002		15	003		9/29/2008	187	FM		187
5 15	15	003		15	004		9/29/2008	51	FM		51
5 15	15	004		15	006		9/29/2008	250	FM		250
5 15	15	005		15	006		9/26/2008	383	FM		383
5 17	09	126		10	067		10/13/2008	400	FM		400
5 17	09	127		09	128		10/13/2008	330	FM		330
5 17	09	128		09	129		10/13/2008	335	FM		335
5 17	09	129		14	031		10/13/2008	340	FM		340
5 17	09	130		10	012		10/1/2008	325	FM		325
5 17	09	130		10	011		10/1/2008	275	FM		275
5 17	10	006		10	007		10/1/2008	80	FM		80
5 17	10	007		10	008		10/1/2008	150	FM		150
5 17	10	008		10	009		10/1/2008	197	FM		197
5 17	10	009		10	010		10/1/2008	330	FM		330
5 17	10	010		10	011		10/1/2008	250	FM		250
5 17	10	012		10	044		10/1/2008	175	FM		175
5 17	10	013		10	014		9/30/2008	150	FM		150
5 17	10	014		10	015		9/30/2008	200	FM		200
5 17	10	015		10	019		9/30/2008	200	FM		200
5 17	10	016		10	017		9/26/2008	165	FM		165
5 17	10	017		10	018		9/26/2008	110	FM		110
5 17	10	018		10	019		9/26/2008	50	FM		50
5 17	10	019		10	020		9/30/2008	380	FM		380
5 17	10	020		10	021		9/30/2008	240	FM		240
5 17	10	021		10	022		9/30/2008	450	FM		450
5 17	10	022		10	023		9/30/2008	50	FM		50
5 17	10	023		10	024		9/30/2008	75	FM		75
5 17	10	024		10	025		10/1/2008	165	FM		165
5 17	10	025		10	026		10/1/2008	60	FM		60
5 17	10	026		10	027		10/1/2008	100	FM		100
5 17	10	027		10	028		10/1/2008	200	FM		200
5 17	10	028		10	029		10/1/2008	60	FM		60
5 17	10	029		10	030		10/1/2008	80	FM		80
5 17	10	030		10	042		10/13/2008	100	FM		100
5 17	10	031	C	10	032		9/29/2008	102	FM		102
5 17	10	032		10	033		1/1/2009	400	JM	6	800
5 17	10	032		10	033		9/29/2008	358	FM		358
5 17	10	033		10	035		9/29/2008	120	FM		120
5 17	10	034		10	035		9/29/2008	50	FM		50
5 17	10	035		10	036		9/29/2008	250	FM		250
5 17	10	036		10	086		1/1/2009	180	JM	6	360
5 17	10	036		10	086		9/29/2008	170	FM		170
5 17	10	037		10	038		9/29/2008	97	FM		97
5 17	10	037		10	086		9/29/2008	97	FM		97
5 17	10	038		10	040		9/29/2008	317	FM		317
5 17	10	039		10	040		9/29/2008	100	FM		100
5 17	10	040		10	041		9/29/2008	140	FM		140

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 17	10	041		10	042		10/13/2008	600	FM		600
5 17	10	042		10	043		10/13/2008	165	FM		165
5 17	10	043		10	044		10/13/2008	135	FM		135
5 17	10	044		10	045		10/13/2008	300	FM		300
5 17	10	045		10	046		10/13/2008	281	FM		281
5 17	10	046		10	047		10/13/2008	351	FM		351
5 17	10	047		10	048		10/13/2008	175	FM		175
5 17	10	048		10	049		10/13/2008	92	FM		92
5 17	10	049		10	067		10/13/2008	150	FM		150
5 17	10	050		10	051		9/29/2008	243	FM		243
5 17	10	050		10	088	D	9/29/2008	207	FM		207
5 17	10	051		10	052		9/29/2008	230	FM		230
5 17	10	052		10	053		9/30/2008	241	FM		241
5 17	10	053		10	066		9/30/2008	217	FM		217
5 17	10	053		10	066		1/1/2009	207	JM	6	414
5 17	10	054	C	10	055		9/30/2008	44	FM		44
5 17	10	055		10	056		9/30/2008	294	FM		294
5 17	10	056		10	057		1/1/2009	384	JM	6	768
5 17	10	056		10	057		9/30/2008	355	FM		355
5 17	10	057		10	058		7/1/2008	179	JM	12	179
5 17	10	057		10	058		9/30/2008	177	FM		177
5 17	10	058		10	059		9/30/2008	73	FM		73
5 17	10	058		10	059		7/1/2008	73	JM	12	73
5 17	10	059		10	066		9/30/2008	431	FM		431
5 17	10	060		10	062		8/25/2008	270	FM		270
5 17	10	062		10	063		8/25/2008	300	FM		300
5 17	10	063		10	064		8/25/2008	300	FM		300
5 17	10	064		10	065		9/30/2008	233	FM		233
5 17	10	065		10	066		9/30/2008	62	FM		62
5 17	10	066		10	067		10/13/2008	350	FM		350
5 17	14	014		14	032		10/30/2008	110	FM		110
5 17	14	031		14	032		10/13/2008	362	FM		362
5 17	14	032		14	033		10/16/2008	109	FM		109
5 17	14	033		14	210		10/16/2008	360	FM		360
5 17	14	033		14	034		10/16/2008	350	FM		350
5 17	14	034		14	035		10/16/2008	100	FM		100
5 17	14	035		14	052		10/16/2008	331	FM		331
5 17	14	035		14	213		10/16/2008	256	FM		256
5 18	14	048	M	14	052		10/16/2008	300	FM		300
5 18	14	049		14	051		10/16/2008	200	FM		200
5 18	14	051		14	052		10/16/2008	135	FM		135
5 18	14	052		14	053		10/16/2008	350	FM		350
5 19	14	053		14	054		10/17/2008	360	FM		360
5 20	14	054		14	055		10/27/2008	330	FM		330
5 21	14	056		14	057		10/17/2008	323	FM		323
5 21	14	057		15	092		10/17/2008	317	FM		317
5 21	14	057		14	058		10/17/2008	285	FM		285
5 21	14	058		14	059		10/17/2008	330	FM		330
5 21	14	059		14	062		10/17/2008	333	FM		333
5 21	14	060		15	109		10/17/2008	134	FM		134

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 21	14	060		14	061		10/17/2008	130	FM		130
5 21	14	061		14	062		10/17/2008	253	FM		253
5 21	14	061		15	108		10/17/2008	252	FM		252
5 21	14	062		14	063		10/17/2008	175	FM		175
5 21	14	063		14	064		10/17/2008	264	FM		264
5 21	14	064		14	078		10/23/2008	347	FM		347
5 21	15	091		15	092		10/17/2008	372	FM		372
5 21	15	093		15	097		10/16/2008	345	FM		345
5 21	15	094		15	095		10/16/2008	280	FM		280
5 21	15	095		15	096		10/16/2008	300	FM		300
5 21	15	096		15	097		10/16/2008	294	FM		294
5 21	15	097		15	102		10/16/2008	272	FM		272
5 21	15	098		15	099		10/15/2008	295	FM		295
5 21	15	099		15	100		10/16/2008	327	FM		327
5 21	15	100		15	102		10/16/2008	278	FM		278
5 21	15	101		15	102		10/16/2008	193	FM		193
5 21	15	102		15	105		10/16/2008	267	FM		267
5 21	15	103		15	105		10/16/2008	280	FM		280
5 21	15	104		15	105		10/16/2008	195	FM		195
5 21	15	105		15	108		10/17/2008	269	FM		269
5 21	15	106		15	108		10/17/2008	280	FM		280
5 21	15	107		15	108		10/17/2008	193	FM		193
5 21	15	107		15	203	D	10/17/2008	136	FM		136
5 22	14	065		14	066		10/20/2008	291	FM		291
5 22	14	066		15	124		10/20/2008	330	FM		330
5 22	14	066		14	067		10/23/2008	170	FM		170
5 22	14	067		14	068		10/23/2008	325	FM		325
5 22	14	068		14	077		10/23/2008	351	FM		351
5 22	14	069		14	070		10/23/2008	247	FM		247
5 22	14	071		14	073		10/23/2008	145	FM		145
5 22	14	072		14	073		10/23/2008	350	FM		350
5 22	14	073		14	075		10/23/2008	266	FM		266
5 22	14	075		14	076		10/1/2008	160	JM	12	160
5 22	14	075		14	076		10/23/2008	155	FM		155
5 22	14	076		14	077		10/1/2008	158	JM	12	158
5 22	14	076		14	077		10/23/2008	156	FM		156
5 22	14	077		14	201	S	10/23/2008	145	FM		145
5 22	14	200	S	14	201	S	5/4/2009	48	FM	3	192
5 22	15	110		15	111		10/20/2008	172	FM		172
5 22	15	111		15	112		10/20/2008	200	FM		200
5 22	15	112		15	115		10/20/2008	66	FM		66
5 22	15	113		15	114		10/20/2008	200	FM		200
5 22	15	114		15	115		10/20/2008	50	FM		50
5 22	15	115		15	116		10/20/2008	25	FM		25
5 22	15	116		15	117		10/20/2008	326	FM		326
5 22	15	117		15	118		3/4/2007	331	JM	12	331
5 22	15	117		15	118		10/20/2008	324	FM		324
5 22	15	118		15	123		10/20/2008	59	FM		59
5 22	15	119		15	120		10/20/2008	300	FM		300
5 22	15	120		15	122		10/20/2008	368	FM		368

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 22	15	122		15	123		10/20/2008	320	FM		320
5 22	15	123		15	124		10/20/2008	261	FM		261
5 23	14	078		14	082		10/23/2008	330	FM		330
5 24	14	079		14	217		10/23/2008	195	FM		195
5 24	14	080	S	14	081	S	5/4/2009	52	FM	3	208
5 24	14	081	S	14	217		10/23/2008	65	FM		65
5 24	14	082		14	087	P	5/13/2009	164	FM	3	656
5 25	14	083		14	084		10/24/2008	322	FM		322
5 25	14	084		14	086		10/24/2008	318	FM		318
5 25	14	085		14	208	D	10/24/2008	268	FM		268
5 25	14	086		14	087		10/24/2008	161	FM		161
5 25	14	087		14	089		10/24/2008	160	FM		160
5 25	14	088		14	089		10/24/2008	352	FM		352
5 25	14	088		14	089		6/1/2008	352	JM	12	352
5 25	14	088		14	197		10/24/2008	268	FM		268
5 25	14	088		14	197	C	6/1/2008	172	JM	12	172
5 25	14	089		14	198		10/24/2008	279	FM		279
5 26	14	055		14	090		10/27/2008	330	FM		330
5 26	14	089		14	090		10/24/2008	175	FM		175
5 26	14	090		14	091		10/27/2008	330	FM		330
5 26	14	091		14	092		10/27/2008	138	FM		138
5 26	14	092		14	093		10/27/2008	332	FM		332
5 26	14	092		14	222		10/27/2008	195	FM		195
5 26	14	093		14	094		10/27/2008	323	FM		323
5 26	14	094		14	095		11/5/2008	200	FM		200
5 27	13	053		13	054	M	11/7/2008	310	FM		310
5 27	13	053		14	095		11/5/2008	149	FM		149
5 28	21	007		21	033		11/6/2008	375	FM		375
5 28	21	015		22	038		10/14/2008	294	FM		294
5 28	21	015		21	016		10/14/2008	293	FM		293
5 28	21	016		21	017		10/14/2008	292	FM		292
5 28	21	017		21	143	D	10/14/2008	224	FM		224
5 28	21	017		21	020		10/14/2008	222	FM		222
5 28	21	018		22	036		10/14/2008	287	FM		287
5 28	21	018		21	019		10/14/2008	284	FM		284
5 28	21	019		21	020		10/14/2008	318	FM		318
5 28	21	020		21	021		10/14/2008	79	FM		79
5 28	21	021		21	022		10/14/2008	175	FM		175
5 28	21	022		21	023		10/14/2008	176	FM		176
5 28	21	023		21	024		11/6/2008	92	FM		92
5 28	21	024		21	027		11/6/2008	140	FM		140
5 28	21	025		21	026		11/6/2008	300	FM		300
5 28	21	026		21	027		11/6/2008	120	FM		120
5 28	21	027		21	033		11/6/2008	350	FM		350
5 28	21	028		21	029		10/14/2008	342	FM		342
5 28	21	028		22	033		10/14/2008	155	FM		155
5 28	21	029		21	030		10/14/2008	270	FM		270
5 28	21	030		21	031		10/14/2008	346	FM		346
5 28	21	031		21	032		10/14/2008	340	FM		340
5 28	21	032		21	033		11/6/2008	333	FM		333

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 28	21	033		21	034		11/6/2008	350	FM		350
5 28	21	034		21	035		11/6/2008	315	FM		315
5 28	21	035		21	038		11/6/2008	310	FM		310
5 28	21	036		21	144		10/29/2008	191	FM		191
5 28	21	037		21	038		11/6/2008	352	FM		352
5 28	21	037		21	144		10/29/2008	160	FM		160
5 28	21	038		21	039		11/6/2008	310	FM		310
5 28	21	039		21	040		11/6/2008	300	FM		300
5 28	22	024		22	025		10/14/2008	180	FM		180
5 28	22	025		22	026		10/14/2008	275	FM		275
5 28	22	026		22	027		10/14/2008	275	FM		275
5 28	22	027		22	031		10/14/2008	220	FM		220
5 28	22	028		22	029		10/14/2008	347	FM		347
5 28	22	029		22	031		10/14/2008	347	FM		347
5 28	22	030		22	031		10/14/2008	216	FM		216
5 28	22	031		22	033		10/14/2008	320	FM		320
5 28	22	032		22	033		10/14/2008	185	FM		185
5 28	22	034		22	035		10/14/2008	112	FM		112
5 28	22	035		22	036		10/14/2008	287	FM		287
5 28	22	037		22	038		10/14/2008	292	FM		292
5 29	21	044		21	045		10/10/2008	310	FM		310
5 29	21	044		22	045		10/10/2008	308	FM		308
5 29	21	045		21	046		10/10/2008	309	FM		309
5 29	21	046		21	047		10/10/2008	40	FM		40
5 29	21	047		21	048		10/10/2008	289	FM		289
5 29	21	048		21	052		10/28/2008	342	FM		342
5 29	21	049		21	050		10/28/2008	320	FM		320
5 29	21	050		21	051		10/28/2008	200	FM		200
5 29	21	051		21	052		10/28/2008	300	FM		300
5 29	21	052		21	053		10/28/2008	262	FM		262
5 29	21	053		21	054		10/28/2008	266	FM		266
5 29	21	054		21	145		10/28/2008	210	FM		210
5 29	21	055		21	145		10/28/2008	125	FM		125
5 29	21	055		21	057		10/28/2008	79	FM		79
5 29	21	056		21	057		10/28/2008	350	FM		350
5 29	21	057		21	058		10/28/2008	247	FM		247
5 29	21	058		21	059		10/28/2008	330	FM		330
5 29	22	039		22	040		10/10/2008	332	FM		332
5 29	22	040		22	041		10/10/2008	339	FM		339
5 29	22	041		22	042		10/10/2008	200	FM		200
5 29	22	042		22	100		10/10/2008	130	FM		130
5 29	22	043		22	101		10/10/2008	130	FM		130
5 29	22	043		22	100		10/10/2008	112	FM		112
5 29	22	044		22	045		10/10/2008	310	FM		310
5 29	22	044		22	101		10/10/2008	190	FM		190
5 31	20	134		20	135		10/29/2008	360	FM		360
5 31	20	134		21	059		10/28/2008	350	FM		350
5 31	20	135		20	136	M	10/29/2008	80	FM		80
5 31	20	136	M	21	043		10/29/2008	300	FM		300
5 31	21	041		21	042		10/29/2008	250	FM		250

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 31	21	042		21	043		10/29/2008	283	FM		283
5 33	20	136	M	20	137		11/10/2008	463	FM		463
5 33	20	137		20	138	P	11/10/2008	350	FM		350
5 33	20	137		21	040		11/10/2008	300	FM		300
5 33	20	138	P	20	139	P	5/12/2009	138	FM	3	552
5 33	20	139	P	20	140	P	5/12/2009	152	FM	3	608
5 35	20	141	M	20	142		11/10/2008	330	FM		330
5 35	20	141		21	014		11/10/2008	300	FM		300
5 35	21	006		21	007		11/6/2008	51	FM		51
5 35	21	007		21	009		11/10/2008	160	FM		160
5 35	21	008		21	009		11/10/2008	240	FM		240
5 35	21	008		21	139	C	11/10/2008	84	FM		84
5 35	21	008		21	138	C	11/10/2008	55	FM		55
5 35	21	009		21	010		11/10/2008	175	FM		175
5 35	21	010		21	011		11/10/2008	300	FM		300
5 35	21	011		21	012		11/10/2008	345	FM		345
5 35	21	012		21	013		11/10/2008	350	FM		350
5 35	21	012		21	137	C	11/10/2008	144	FM		144
5 35	21	013		21	014		11/10/2008	350	FM		350
5 36	13	088		20	143		11/12/2008	450	FM		450
5 36	13	196	P	20	144	P	5/12/2009	253	FM	3	1012
5 36	20	009	C	20	119		11/12/2008	140	FM		140
5 36	20	113		20	114		11/12/2008	252	FM		252
5 36	20	114		20	115		11/12/2008	300	FM		300
5 36	20	115		20	116		11/12/2008	300	FM		300
5 36	20	116		20	117		11/12/2008	274	FM		274
5 36	20	117		20	118		11/12/2008	400	FM		400
5 36	20	117		20	145	D	11/12/2008	142	FM		142
5 36	20	118		20	121		11/12/2008	369	FM		369
5 36	20	119		20	120		11/12/2008	302	FM		302
5 36	20	120		20	121		11/12/2008	310	FM		310
5 36	20	121		20	144		11/12/2008	106	FM		106
5 36	20	122		20	123		10/29/2008	350	FM		350
5 36	20	123		20	124		10/29/2008	400	FM		400
5 36	20	124		20	125		10/29/2008	150	FM		150
5 36	20	125		20	130		10/29/2008	125	FM		125
5 36	20	126		20	127		10/29/2008	250	FM		250
5 36	20	126		20	147		10/29/2008	70	FM		70
5 36	20	127		20	128		10/29/2008	226	FM		226
5 36	20	128		20	129		10/29/2008	250	FM		250
5 36	20	129		20	130		10/29/2008	150	FM		150
5 36	20	130		20	131		11/10/2008	178	FM		178
5 36	20	131		20	132		11/10/2008	125	FM		125
5 36	20	132		20	133		11/10/2008	277	FM		277
5 36	20	133		20	140	P	11/10/2008	433	FM		433
5 36	20	140		20	143		5/12/2009	366	FM	3	1464
5 36	20	142	M	20	143		5/12/2009	196	FM	3	784
5 36	20	143		20	144		5/12/2009	220	FM	3	880
5 37	13	088		13	091		11/12/2008	33	FM		33
5 37	13	089		14	189		10/27/2008	325	FM		325

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 37	13	089		13	095		11/12/2008	260	FM		260
5 37	13	090	P	13	091	T	5/12/2009	315	FM	3	1260
5 37	13	090		13	095		11/12/2008	290	FM		290
5 37	13	091	T	13	092	T	5/12/2009	18	FM	3	72
5 37	13	093		13	094		11/13/2008	300	FM		300
5 37	13	093		14	182		10/3/2008	255	FM		255
5 37	13	094		13	096		11/13/2008	175	FM		175
5 37	13	096		13	097		11/13/2008	260	FM		260
5 37	13	097		13	098		11/13/2008	93	FM		93
5 37	13	098		13	099		11/13/2008	510	FM		510
5 37	13	099		13	100		11/13/2008	418	FM		418
5 37	13	100		13	106		11/13/2008	372	FM		372
5 37	14	177		14	178		10/3/2008	287	FM		287
5 37	14	178		14	179		10/3/2008	280	FM		280
5 37	14	179		14	180		10/3/2008	200	FM		200
5 37	14	180		14	181		10/3/2008	200	FM		200
5 37	14	181		14	182		10/3/2008	280	FM		280
5 37	14	183		14	184		10/27/2008	81	FM		81
5 37	14	184		14	219		10/27/2008	183	FM		183
5 37	14	184		14	185		10/27/2008	132	FM		132
5 37	14	185		14	186		10/27/2008	350	FM		350
5 37	14	186		14	187		10/27/2008	180	FM		180
5 37	14	187		14	211		10/27/2008	275	FM		275
5 37	14	187		14	188		10/27/2008	175	FM		175
5 37	14	188		14	189		10/27/2008	373	FM		373
5 37	14	219		14	220	D	10/27/2008	97	FM		97
5 37	14	219		14	221	D	10/27/2008	28	FM		28
5 38	13	084		13	106		11/13/2008	185	FM		185
5 38	13	101		13	103		11/13/2008	370	FM		370
5 38	13	101		13	133		11/13/2008	42	FM		42
5 38	13	103		13	105		11/13/2008	367	FM		367
5 38	13	105	P	13	106	P	5/13/2009	325	FM	3	1300
5 39	13	078		13	079		11/14/2008	222	FM		222
5 39	13	079		13	082		11/14/2008	181	FM		181
5 39	13	081		13	082		11/14/2008	25	FM		25
5 39	13	082		13	083		11/14/2008	348	FM		348
5 39	13	084		13	085		11/14/2008	460	FM		460
5 40	13	024		13	110		11/13/2008	60	FM		60
5 40	13	085		13	107		11/13/2008	180	FM		180
5 40	13	106		13	107		5/13/2009	460	FM	3	1840
5 40	13	107		13	108		5/13/2009	303	FM	3	1212
5 40	13	108	P	13	109	P	5/13/2009	179	FM	3	716
5 40	13	109		13	110		2/13/2009	30	FM		30
5 41	13	069		13	087		11/14/2008	350	FM		350
5 41	13	070		13	072		11/13/2008	184	FM		184
5 41	13	070		13	209	D	11/13/2008	50	FM		50
5 41	13	071		13	072	P	11/13/2008	439	FM		439
5 41	13	072	P	13	074		11/13/2008	387	FM		387
5 41	13	073		13	074		11/13/2008	405	FM		405
5 41	13	074		13	075		11/13/2008	185	FM		185

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 41	13	075		13	078		11/13/2008	10	FM		10
5 41	13	076		13	077		11/13/2008	385	FM		385
5 41	13	077		13	078		11/13/2008	32	FM		32
5 41	13	080		13	081		11/14/2008	408	FM		408
5 41	13	083		13	086		11/14/2008	27	FM		27
5 41	13	085		13	086		11/14/2008	361	FM		361
5 41	13	086		13	087		11/14/2008	200	FM		200
5 41	13	087		13	110		11/14/2008	100	FM		100
5 43	13	110		13	111		11/14/2008	300	FM		300
5 43	13	111		13	112		11/14/2008	48	FM		48
5 43	13	112		13	113		11/14/2008	58	FM		58
5 43	13	113		13	114		11/14/2008	150	FM		150
5 44	13	102		13	117		11/14/2008	200	FM		200
5 44	13	114		13	115		11/14/2008	188	FM		188
5 44	13	115		13	116		11/14/2008	234	FM		234
5 44	13	116		13	117		11/14/2008	72	FM		72
5 44	13	118		13	119		11/19/2008	600	FM		600
5 45	13	119		13	120		11/19/2008	600	FM		600
5 45	13	120		13	168		11/19/2008	332	FM		332
5 46	13	107		13	121		11/13/2008	157	FM		157
5 46	13	121		13	122		11/17/2008	137	FM		137
5 46	13	122		13	123		11/17/2008	362	FM		362
5 46	13	123		13	125		11/17/2008	163	FM		163
5 46	13	124		13	125		11/17/2008	300	FM		300
5 46	13	124		13	197	C	11/17/2008	120	FM		120
5 46	13	125		13	130		11/18/2008	300	FM		300
5 46	13	126		13	127		11/17/2008	305	FM		305
5 46	13	127		13	128		11/17/2008	305	FM		305
5 46	13	128		13	211		11/17/2008	360	FM		360
5 46	13	128		13	129		11/18/2008	275	FM		275
5 46	13	129		13	130		11/18/2008	283	FM		283
5 46	13	130		13	146		11/18/2008	326	FM		326
5 46	13	131	P	13	132	P	5/12/2009	300	FM	3	1200
5 46	13	131		13	207	D	11/17/2008	45	FM		45
5 46	13	132	P	13	133	P	5/12/2009	310	FM	3	1240
5 46	13	133		13	134		11/17/2008	128	FM		128
5 46	13	134		13	137		11/17/2008	22	FM		22
5 46	13	135		13	136		11/17/2008	286	FM		286
5 46	13	136		13	137		11/17/2008	288	FM		288
5 46	13	137		13	138		11/17/2008	241	FM		241
5 46	13	138		13	139		11/17/2008	295	FM		295
5 46	13	138		13	205		11/17/2008	105	FM		105
5 46	13	139		13	140		11/18/2008	150	FM		150
5 46	13	140		13	141		11/18/2008	95	FM		95
5 46	13	141		13	142		11/18/2008	100	FM		100
5 46	13	142		13	143		11/18/2008	240	FM		240
5 46	13	143		13	144		11/18/2008	223	FM		223
5 46	13	144		13	145		11/18/2008	336	FM		336
5 46	13	145		13	146		11/18/2008	333	FM		333
5 46	13	146		13	149		11/18/2008	141	FM		141

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 46	13	147		13	148		11/18/2008	305	FM		305
5 46	13	148		13	149		11/18/2008	295	FM		295
5 46	13	149		13	150		11/18/2008	288	FM		288
5 46	13	150		13	153		11/18/2008	122	FM		122
5 47	13	049		13	167	P	11/17/2008	9	FM		9
5 47	13	151		13	152		11/18/2008	304	FM		304
5 47	13	151		13	152		1/1/2009	302	JM	12	302
5 47	13	152		13	153		11/18/2008	300	FM		300
5 47	13	153		13	162		11/19/2008	186	FM		186
5 47	13	154		13	155		11/19/2008	180	FM		180
5 47	13	155		13	156		11/19/2008	214	FM		214
5 47	13	156		13	158		11/19/2008	300	FM		300
5 47	13	157		13	158		11/19/2008	265	FM		265
5 47	13	158		13	200	S	11/19/2008	253	FM		253
5 47	13	159	S	13	215		11/19/2008	130	FM		130
5 47	13	159	S	13	200	S	5/4/2009	44	FM	3	176
5 47	13	160		13	161		11/19/2008	280	FM		280
5 47	13	160		13	215		11/19/2008	30	FM		30
5 47	13	161		13	162		11/19/2008	277	FM		277
5 47	13	162		13	166		11/19/2008	306	FM		306
5 47	13	163		13	164		11/18/2008	302	FM		302
5 47	13	164		13	165		11/18/2008	288	FM		288
5 47	13	166	P	13	167	P	5/6/2009	346	FM	3	1384
5 47	13	167	P	13	168	P	5/6/2009	18	FM	3	72
5 48	12	038		13	168		11/19/2008	590	FM		590
5 49	12	032		12	033		11/18/2008	212	FM		212
5 49	12	032		12	142	C	11/18/2008	93	FM		93
5 49	12	033		12	034		11/18/2008	180	FM		180
5 49	12	034		12	037		11/18/2008	345	FM		345
5 49	12	035		12	036		11/18/2008	372	FM		372
5 49	12	036		12	037		11/18/2008	213	FM		213
5 49	12	037	P	12	039	P	5/6/2009	160	FM	3	640
5 49	12	038		12	039		11/19/2008	102	FM		102
5 49	12	039		12	040		11/19/2008	230	FM		230
5 49	12	041	S	12	042	S	5/5/2009	85	FM	3	340
5 49	12	042	S	12	108		11/20/2008	42	FM		42
5 49	12	043		12	044		11/20/2008	200	FM		200
5 49	12	043	S	12	108		11/20/2008	53	FM		53
5 49	12	044		12	145		11/20/2008	127	FM		127
5 49	12	129		12	145		11/20/2008	153	FM		153
5 50	12	045		12	129		11/20/2008	320	FM		320
5 50	12	045		12	046		11/20/2008	240	FM		240
5 50	12	046		12	047		11/20/2008	300	FM		300
5 50	12	047		12	048		11/20/2008	256	FM		256
5 50	12	048		12	049		11/20/2008	375	FM		375
5 51	12	049		12	113		11/20/2008	600	FM		600
5 52	12	089		12	090		9/9/2008	300	FM		300
5 53	12	090		12	099		11/20/2008	270	FM		270
5 53	12	099		12	144		11/20/2008	335	FM		335
5 53	12	100	P	12	101	P	5/15/2009	337	FM	3	1348

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
5 53	12	101	P	12	102	P	5/15/2009	325	FM	3	1300
5 53	12	102	P	12	103	P	5/15/2009	269	FM	3	1076
5 53	12	103	P	12	133	P	5/15/2009	300	FM	3	1200
5 53	12	104		12	106	M	11/20/2008	275	FM		275
5 53	12	104		12	144		11/20/2008	143	FM		143
5 53	12	105		12	134		11/20/2008	50	FM		50
5 53	12	106	M	12	107	M	11/20/2008	415	FM		415
5 53	12	132		12	133	P	11/20/2008	460	FM		460
5 53	12	133	P	12	134		11/20/2008	275	FM		275
5 53	12	134		12	135		11/20/2008	415	FM		415
5 54	12	135		12	136		11/20/2008	405	FM		405
5 55	12	110		12	140		5/14/2009	170	FM	3	680
5 55	12	110		12	111		5/14/2009	161	FM	3	644
5 55	12	111		12	112		11/20/2008	80	FM		80
5 55	12	111		12	136		11/20/2008	40	FM		40
5 55	12	112		12	113		11/20/2008	480	FM		480
5 55	12	113		12	114		11/20/2008	475	FM		475
5 55	12	131		12	132		11/20/2008	410	FM		410
6S01	08	060		08	061		9/24/2008	275	FM		275
6S01	08	061		08	063		9/24/2008	142	FM		142
6S01	08	062		08	063		9/24/2008	157	FM		157
6S01	08	062		08	063		5/1/2009	157	JM	6	314
6S01	08	063		08	064		4/1/2009	240	JM	6	480
6S01	08	063		08	064		9/24/2008	206	FM		206
6S01	08	064		08	065		3/1/2009	129	JM	12	129
6S01	08	064		08	065		9/24/2008	125	FM		125
6S01	08	065		08	066		9/24/2008	370	FM		370
6S01	08	066		08	067		9/24/2008	119	FM		119
6S01	08	067		08	068		9/24/2008	236	FM		236
6S01	08	068		09	008		3/1/2009	380	JM	12	380
6S01	08	068		09	008		9/24/2008	377	FM		377
6S01	08	069		08	070		9/12/2008	246	FM		246
6S01	08	070		09	004		9/12/2008	213	FM		213
6S01	08	071		08	072		9/10/2008	267	FM		267
6S01	08	072		09	001		2/1/2009	355	JM	12	355
6S01	08	072		09	001		9/12/2008	347	FM		347
6S01	09	001		09	002		9/12/2008	350	FM		350
6S01	09	002		09	003		9/12/2008	210	FM		210
6S01	09	002		09	003		2/1/2009	204	JM	12	204
6S01	09	003		09	005		9/12/2008	80	FM		80
6S01	09	004		09	005		2/1/2009	237	JM	12	237
6S01	09	004		09	005		9/12/2008	210	FM		210
6S01	09	005		09	006		9/12/2008	178	FM		178
6S01	09	006		09	007		9/12/2008	109	FM		109
6S01	09	007		09	009		9/12/2008	192	FM		192
6S01	09	008		09	009		9/24/2008	161	FM		161
6S01	09	009		09	010		9/24/2008	165	FM		165
6S01	09	009		09	010		12/1/2008	165	JM	6	330
6S01	09	010		09	011		9/24/2008	190	FM		190
6S01	09	011		09	016		9/24/2008	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6S01	09	012		09	016		9/24/2008	194	FM		194
6S01	09	013		09	014		9/24/2008	340	FM		340
6S01	09	014		09	015		9/24/2008	267	FM		267
6S01	09	015		09	016		9/24/2008	300	FM		300
6S01	09	016		09	017		9/24/2008	345	FM		345
6S01	09	017		09	018		9/24/2008	350	FM		350
6S01	09	018		09	019		9/24/2008	249	FM		249
6S01	09	019		09	020		9/24/2008	300	FM		300
6S01	09	020		09	022		9/24/2008	250	FM		250
6S01	09	021		09	022		9/24/2008	245	FM		245
6S01	09	021		09	135	C	10/1/2008	200	JM	12	200
6S01	09	021		09	135	C	9/24/2008	190	FM		190
6S02	08	171		08	172		10/1/2008	160	FM		160
6S02	08	172		08	173		10/1/2008	129	FM		129
6S02	08	173		09	060		8/1/2008	199	JM	12	199
6S02	08	173		09	060		10/1/2008	182	FM		182
6S02	09	022		09	035		9/24/2008	50	FM		50
6S02	09	023		09	025		9/24/2008	170	FM		170
6S02	09	024		09	025		8/1/2008	191	JM	12	191
6S02	09	024		09	025		9/24/2008	190	FM		190
6S02	09	025		09	026		9/24/2008	100	FM		100
6S02	09	026		09	027		9/24/2008	256	FM		256
6S02	09	027		09	029		9/24/2008	310	FM		310
6S02	09	028		09	029		9/24/2008	200	FM		200
6S02	09	029		09	030		9/24/2008	310	FM		310
6S02	09	030		09	031		9/24/2008	260	FM		260
6S02	09	031		09	032		9/24/2008	217	FM		217
6S02	09	032		09	033		9/24/2008	220	FM		220
6S02	09	033		09	034		9/24/2008	250	FM		250
6S02	09	034		09	035		9/24/2008	343	FM		343
6S02	09	035		09	045		9/24/2008	212	FM		212
6S02	09	036		10	001		2/1/2009	304	JM	6	608
6S02	09	036		10	001		8/1/2007	265	JM	6	530
6S02	09	036		10	001		9/26/2008	260	FM		260
6S02	09	036		09	037		9/26/2008	200	FM		200
6S02	09	036		09	037		8/1/2008	200	JM	12	200
6S02	09	037		09	038		9/26/2008	89	FM		89
6S02	09	038		09	041		9/26/2008	330	FM		330
6S02	09	039		09	040		9/26/2008	200	FM		200
6S02	09	040		09	041		9/26/2008	85	FM		85
6S02	09	041		09	043		9/26/2008	180	FM		180
6S02	09	042		09	043		9/26/2008	100	FM		100
6S02	09	043		09	044		9/26/2008	140	FM		140
6S02	09	044		09	045		9/26/2008	200	FM		200
6S02	09	045		09	059		10/1/2008	150	FM		150
6S02	09	046		09	047		8/1/2008	121	JM	12	121
6S02	09	046		09	047		9/24/2008	116	FM		116
6S02	09	047		09	048		8/1/2008	106	JM	12	106
6S02	09	047		09	048		9/24/2008	100	FM		100
6S02	09	048		09	049		9/24/2008	94	FM		94

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6S02	09	049		09	050		8/1/2008	303	JM	12	303
6S02	09	049		09	050		9/24/2008	301	FM		301
6S02	09	050		09	052		9/24/2008	360	FM		360
6S02	09	051		09	052		9/24/2008	192	FM		192
6S02	09	052		09	053		9/29/2008	300	FM		300
6S02	09	053		09	054		9/29/2008	211	FM		211
6S02	09	054		09	055		8/1/2008	258	JM	12	258
6S02	09	054		09	055		9/29/2008	250	FM		250
6S02	09	055		09	056		9/29/2008	170	FM		170
6S02	09	056		09	057		9/29/2008	236	FM		236
6S02	09	057		09	058		9/29/2008	360	FM		360
6S02	09	057		09	058		8/1/2008	354	JM	12	354
6S02	09	058		09	059		9/29/2008	350	FM		350
6S02	09	059		09	073		10/1/2008	300	FM		300
6S02	09	060		09	061		10/1/2008	140	FM		140
6S02	09	060		09	061		8/1/2008	132	JM	12	132
6S02	09	061		09	062		10/1/2008	170	FM		170
6S02	09	061		09	062		2/1/2009	160	JM	6	320
6S02	09	062		09	063		10/1/2008	360	FM		360
6S02	09	062		09	063		2/1/2009	350	JM	6	700
6S02	09	063		09	064		8/1/2008	362	JM	12	362
6S02	09	063		09	064		10/1/2008	325	FM		325
6S02	09	064		09	065		10/1/2008	78	FM		78
6S02	09	064		09	065		8/1/2008	78	JM	12	78
6S02	09	065		09	066		8/1/2008	200	JM	12	200
6S02	09	065		09	066		10/1/2008	183	FM		183
6S02	09	066		09	068		10/1/2008	360	FM		360
6S02	09	066		09	068		2/1/2009	360	JM	6	720
6S02	09	067		09	068		10/1/2008	210	FM		210
6S02	09	067		09	136	C	10/1/2008	129	FM		129
6S02	09	068		09	069		10/1/2008	181	FM		181
6S02	09	069		09	070		10/1/2008	360	FM		360
6S02	09	069		09	070		8/1/2008	357	JM	12	357
6S02	09	070		09	071		8/1/2008	295	JM	12	295
6S02	09	070		09	071		10/1/2008	263	FM		263
6S02	09	071		09	072		10/1/2008	156	FM		156
6S02	09	072		09	073		8/1/2008	177	JM	12	177
6S02	09	072		09	073		10/1/2008	161	FM		161
6S02	09	073		09	074		10/1/2008	200	FM		200
6S03	09	074		09	075		10/2/2008	112	FM		112
6S03	09	075		09	079		10/2/2008	87	FM		87
6S03	09	076		09	077		10/2/2008	100	FM		100
6S03	09	077		09	078		10/2/2008	55	FM		55
6S03	09	078		09	079		10/2/2008	50	FM		50
6S03	09	079		09	080		10/2/2008	61	FM		61
6S03	09	080		09	081		10/2/2008	125	FM		125
6S03	09	081		09	082		10/2/2008	128	FM		128
6S03	09	082		09	083		10/2/2008	117	FM		117
6S03	09	083		09	084		10/13/2008	350	FM		350
6S04	09	084		09	085		10/13/2008	194	FM		194

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6S04	09	085		09	086		10/13/2008	240	FM		240
6S05	09	086	M	09	087		10/13/2008	245	FM		245
6S05	09	087		09	088		10/13/2008	251	FM		251
6S05	09	088		09	089		10/13/2008	439	FM		439
6S06	09	089		09	090		10/13/2008	127	FM		127
6S06	09	090		09	091		10/13/2008	283	FM		283
6S06	09	091		09	092		10/13/2008	105	FM		105
6S07	09	092		09	093		10/13/2008	337	FM		337
6S07	09	093		09	094		10/13/2008	326	FM		326
6S07	09	094		09	122		10/13/2008	332	FM		332
6S08	09	095		09	096		10/3/2008	253	FM		253
6S08	09	096		09	097		5/1/2009	272	JM	12	272
6S08	09	096		09	097		10/3/2008	269	FM		269
6S08	09	097		09	103		10/3/2008	141	FM		141
6S08	09	098		09	099		10/3/2008	135	FM		135
6S08	09	098		09	099		5/1/2009	135	JM	12	135
6S08	09	099		09	100		5/1/2009	250	JM	12	250
6S08	09	099		09	100		10/3/2008	240	FM		240
6S08	09	100		09	101		10/3/2008	170	FM		170
6S08	09	100		09	101		5/1/2009	91	JM	6	182
6S08	09	101		09	102		10/3/2008	185	FM		185
6S08	09	101		09	102		11/1/2008	154	JM	6	308
6S08	09	102		09	103		5/1/2009	215	JM	12	215
6S08	09	102		09	103		10/3/2008	212	FM		212
6S08	09	103		09	112		10/3/2008	250	FM		250
6S08	09	104		09	105		10/3/2008	210	FM		210
6S08	09	105		09	106		10/3/2008	203	FM		203
6S08	09	106		09	110		10/3/2008	200	FM		200
6S08	09	107		09	108		10/3/2008	276	FM		276
6S08	09	107		09	138	D	10/3/2008	3	FM		3
6S08	09	108		09	109		5/1/2009	277	JMR	6	554
6S08	09	108		09	109		10/3/2008	275	FM		275
6S08	09	109		09	110		10/3/2008	200	FM		200
6S08	09	110		09	111		10/3/2008	47	FM		47
6S08	09	111		09	112		10/3/2008	200	FM		200
6S08	09	112		09	113		10/3/2008	100	FM		100
6S08	09	115		09	118		10/10/2008	173	FM		173
6S08	09	116		09	117		10/10/2008	200	FM		200
6S08	09	117		09	118		1/1/2009	299	JM	12	299
6S08	09	118		09	119		10/10/2008	300	FM		300
6S08	09	119		09	121		1/1/2009	336	JM	12	336
6S08	09	119		09	121		10/10/2008	334	FM		334
6S08	09	120		09	121		10/10/2008	175	FM		175
6S08	09	121		09	122		10/10/2008	340	FM		340
6S09	08	174		08	176		10/9/2008	312	FM		312
6S09	08	175	C	08	176		10/9/2008	146	FM		146
6S09	08	176		08	177		10/9/2008	200	FM		200
6S09	08	177		08	178		10/9/2008	47	FM		47
6S09	08	178		08	179		10/9/2008	50	FM		50
6S09	08	179		08	182		10/9/2008	120	FM		120

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6S09	08	180		08	181		10/9/2008	91	FM		91
6S09	08	181		08	182		10/9/2008	170	FM		170
6S09	08	182		08	183		10/9/2008	200	FM		200
6S09	08	183		08	187		10/9/2008	153	FM		153
6S09	08	184		08	185		10/9/2008	281	FM		281
6S09	08	184		09	125		10/9/2008	75	FM		75
6S09	08	185		08	186		10/9/2008	269	FM		269
6S09	08	186		08	187		10/9/2008	300	FM		300
6S09	08	187		08	188		10/9/2008	400	FM		400
6S09	08	187		08	188		1/1/2009	400	JM	6	800
6S09	08	188		08	190		10/10/2008	234	FM		234
6S09	08	190		08	191		10/10/2008	266	FM		266
6S09	08	191		09	124		10/10/2008	325	FM		325
6S09	08	192		08	193		10/13/2008	320	FM		320
6S09	08	193		08	194		10/13/2008	170	FM		170
6S09	08	194		08	195		10/13/2008	181	FM		181
6S09	08	195		09	123		10/13/2008	235	FM		235
6S09	09	125		09	137		10/9/2008	25	FM		25
6S11	08	195		13	001		10/29/2008	356	FM		356
6S11	13	001		13	002		10/29/2008	350	FM		350
6S11	13	001		14	006		10/29/2008	225	FM		225
6S11	13	002		13	003		10/29/2008	321	FM		321
6S11	13	003		13	212	C	10/29/2008	245	FM		245
6S12	09	122		14	005		10/28/2008	350	FM		350
6S12	13	003		13	010		10/29/2008	336	FM		336
6S12	13	003		13	007		10/29/2008	140	FM		140
6S12	13	005		13	006		10/29/2008	133	FM		133
6S12	13	006		13	007		10/29/2008	43	FM		43
6S12	13	007		13	011		10/29/2008	332	FM		332
6S12	13	008		13	009		10/29/2008	300	FM		300
6S12	13	008		14	008		10/29/2008	294	FM		294
6S12	13	009		13	010		10/29/2008	294	FM		294
6S12	13	010		13	014		10/28/2008	345	FM		345
6S12	13	010		13	011		10/29/2008	150	FM		150
6S12	13	011		13	015		10/3/2008	335	FM		335
6S12	13	012		14	013		10/29/2008	426	FM		426
6S12	13	012		13	013		10/29/2008	380	FM		380
6S12	13	013		13	014		10/29/2008	375	FM		375
6S12	13	014		13	018		11/13/2008	340	FM		340
6S12	13	014		13	015		10/30/2008	150	FM		150
6S12	13	015		13	031		10/30/2008	351	FM		351
6S12	14	001	C	14	002		10/28/2008	255	FM		255
6S12	14	003		14	004		10/28/2008	400	FM		400
6S12	14	004		14	005		10/28/2008	400	FM		400
6S12	14	005		14	007		10/29/2008	331	FM		331
6S12	14	005		14	006		10/28/2008	270	FM		270
6S12	14	007		14	013		10/29/2008	335	FM		335
6S12	14	007		14	218		10/29/2008	300	FM		300
6S12	14	007		14	008		10/29/2008	267	FM		267
6S12	14	009		14	010		10/10/2008	235	FM		235

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6S12	14	009		14	191		10/10/2008	200	FM		200
6S12	14	010		14	011		10/10/2008	260	FM		260
6S12	14	011		14	012		10/29/2008	260	FM		260
6S12	14	012		14	013		10/29/2008	80	FM		80
6S12	14	209	D	14	218		10/29/2008	45	FM		45
6S13	13	016		13	017		11/13/2008	351	FM		351
6S13	13	016		14	030		11/13/2008	236	FM		236
6S13	13	017		13	018		11/13/2008	353	FM		353
6S13	13	018		13	031		11/13/2008	149	FM		149
6S13	13	019		13	020		3/18/2009	350	FM		350
6S13	13	019	C	14	029		11/3/2008	296	FM		296
6S13	13	020		13	053		11/3/2008	340	FM		340
6S13	13	020		13	021		11/3/2008	260	FM		260
6S13	13	021		13	022		11/3/2008	290	FM		290
6S13	13	022		13	023		11/13/2008	130	FM		130
6S13	13	023		13	025		11/13/2008	84	FM		84
6S13	13	024		13	025		11/13/2008	84	FM		84
6S13	13	025		13	026		11/13/2008	84	FM		84
6S13	13	026		13	028		11/13/2008	35	FM		35
6S13	13	027		13	028		11/13/2008	426	FM		426
6S13	13	027		13	204		11/13/2008	371	FM		371
6S13	13	028		13	029		11/13/2008	175	FM		175
6S13	13	029		13	030		11/13/2008	341	FM		341
6S13	13	030		13	031		11/14/2008	407	FM		407
6S13	13	031		13	032		11/14/2008	389	FM		389
6S13	13	032		13	033		11/14/2008	389	FM		389
6S13	13	033		13	038		11/17/2008	200	FM		200
6S13	14	014		14	015		10/30/2008	76	FM		76
6S13	14	015		14	017		10/30/2008	450	FM		450
6S13	14	016		14	017		10/30/2008	121	FM		121
6S13	14	017		14	020		10/30/2008	289	FM		289
6S13	14	018	C	14	019	C	10/30/2008	143	FM		143
6S13	14	019		14	020		10/30/2008	80	FM		80
6S13	14	020		14	021		10/30/2008	370	FM		370
6S13	14	022		14	023		10/30/2008	375	FM		375
6S13	14	023		14	024		10/30/2008	10	FM		10
6S13	14	024		14	025		10/30/2008	160	FM		160
6S13	14	025		14	026		10/30/2008	332	FM		332
6S13	14	026		14	027		10/30/2008	330	FM		330
6S13	14	028		14	029		11/3/2008	240	FM		240
6S14	13	034		13	035		11/14/2008	347	FM		347
6S14	13	034		13	198	C	11/14/2008	225	FM		225
6S14	13	035		13	036		11/14/2008	167	FM		167
6S14	13	036		13	037		11/17/2008	331	FM		331
6S14	13	037	M	13	038		11/17/2008	344	FM		344
6S14	13	038		13	039		11/17/2008	319	FM		319
6S14	13	039		13	040		11/17/2008	57	FM		57
6S14	13	040		13	048	M	11/17/2008	261	FM		261
6S15	08	196		08	197		11/14/2008	290	FM		290
6S15	08	197		08	198		11/14/2008	290	FM		290

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6S15	08	198		08	199		11/14/2008	290	FM		290
6S15	08	199		08	200		11/14/2008	290	FM		290
6S15	08	200		13	041		11/14/2008	150	FM		150
6S15	13	041		13	042		11/14/2008	250	FM		250
6S15	13	042		13	043		11/14/2008	293	FM		293
6S15	13	043		13	046		11/14/2008	313	FM		313
6S15	13	044		13	045		11/14/2008	140	FM		140
6S15	13	045		13	046		11/14/2008	300	FM		300
6S15	13	046		13	047		11/14/2008	325	FM		325
6S15	13	047		13	048		11/17/2008	400	FM		400
6S16	12	012		12	013		11/14/2008	88	FM		88
6S16	12	013		12	014		11/14/2008	200	FM		200
6S16	12	014		12	015		11/14/2008	123	FM		123
6S16	12	015		12	016		11/14/2008	43	FM		43
6S16	12	016		12	017		11/14/2008	32	FM		32
6S16	12	017		12	018		11/17/2008	295	FM		295
6S16	12	018		13	052		11/17/2008	415	FM		415
6S16	12	018		12	019		11/17/2008	225	FM		225
6S16	12	019		12	020		11/17/2008	420	FM		420
6S16	12	020		12	021	S	11/17/2008	23	FM		23
6S16	12	021	S	12	022	S	5/5/2009	85	FM	3	340
6S16	13	048		13	052		11/17/2008	318	FM		318
6S16	13	049		13	050		11/17/2008	332	FM		332
6S16	13	050		13	051		11/17/2008	325	FM		325
6S16	13	051		13	052		11/17/2008	300	FM		300
6S17	07	133		07	134		10/22/2008	280	FM		280
6S17	07	134		07	136		10/22/2008	320	FM		320
6S17	07	135		07	136		10/22/2008	345	FM		345
6S17	07	136		07	137		10/22/2008	157	FM		157
6S17	07	137		07	138		10/22/2008	390	FM		390
6S17	07	138		07	139		10/22/2008	272	FM		272
6S17	07	139		07	144		10/22/2008	193	FM		193
6S17	07	140		07	141		10/22/2008	220	FM		220
6S17	07	141		07	142		10/22/2008	330	FM		330
6S17	07	142		07	143		10/22/2008	300	FM		300
6S17	07	143		07	144		10/22/2008	165	FM		165
6S17	07	144		07	145		10/22/2008	270	FM		270
6S17	07	145		07	146		10/22/2008	250	FM		250
6S17	07	146		07	163		10/23/2008	300	FM		300
6S17	07	146		07	204	D	10/22/2008	89	FM		89
6S17	07	147		07	163		10/23/2008	260	FM		260
6S17	07	147		07	203	D	10/23/2008	59	FM		59
6S17	07	148		08	170		10/20/2008	360	FM		360
6S17	07	148		07	149		10/20/2008	173	FM		173
6S17	07	149		07	150		10/20/2008	265	FM		265
6S17	07	150		07	153		10/20/2008	347	FM		347
6S17	07	150		08	169		10/20/2008	200	FM		200
6S17	07	151		07	152		10/20/2008	185	FM		185
6S17	07	152		07	153		10/20/2008	230	FM		230
6S17	07	153		07	154		10/20/2008	200	FM		200

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6S17	07	154		08	167		10/20/2008	350	FM		350
6S17	07	154		07	155		10/20/2008	145	FM		145
6S17	07	155		07	156		10/22/2008	145	FM		145
6S17	07	156		07	157		10/22/2008	250	FM		250
6S17	07	157		07	158		10/22/2008	190	FM		190
6S17	07	158		07	160		10/22/2008	290	FM		290
6S17	07	159		07	201	D	10/22/2008	90	FM		90
6S17	07	160		07	162		10/23/2008	290	FM		290
6S17	07	161		07	162		10/23/2008	260	FM		260
6S17	07	161		07	202	D	10/23/2008	59	FM		59
6S17	07	162		07	163		10/23/2008	310	FM		310
6S17	07	163		07	167		10/23/2008	360	FM		360
6S17	07	164		07	167		10/23/2008	351	FM		351
6S17	07	165		07	166		10/23/2008	260	FM		260
6S17	07	165		07	198	C	10/23/2008	175	FM		175
6S17	07	166		07	167		10/23/2008	350	FM		350
6S17	07	167		07	171		5/1/2009	305	JMR	6	610
6S17	07	167		07	171		10/23/2008	300	FM		300
6S17	07	168		07	171		10/23/2008	300	FM		300
6S17	07	168		07	205		10/23/2008	42	FM		42
6S17	07	169		07	170		10/23/2008	300	FM		300
6S17	07	169		07	197	C	10/23/2008	160	FM		160
6S17	07	170		07	171		10/23/2008	310	FM		310
6S17	07	171		07	175		10/23/2008	300	FM		300
6S17	07	172		07	175		10/23/2008	360	FM		360
6S17	07	173		07	174		10/23/2008	310	FM		310
6S17	07	173		07	174		5/1/2009	300	JM	12	300
6S17	07	173		07	196	C	10/23/2008	144	FM		144
6S17	07	174		07	175		5/1/2009	305	JM	12	305
6S17	07	175		07	176	P	10/23/2008	300	FM		300
6S17	07	176	P	07	177	P	5/14/2009	250	FM	3	1000
6S17	07	177	P	07	178		11/17/2008	242	FM		242
6S17	08	158		08	159		10/20/2008	150	FM		150
6S17	08	159		08	160		10/20/2008	110	FM		110
6S17	08	160		08	161		10/20/2008	342	FM		342
6S17	08	161		08	166		10/20/2008	160	FM		160
6S17	08	162		08	166		10/20/2008	250	FM		250
6S17	08	163		08	164		10/20/2008	302	FM		302
6S17	08	163		08	164		6/1/2008	301	JM	12	301
6S17	08	164		08	165		10/20/2008	150	FM		150
6S17	08	165		08	166		10/20/2008	160	FM		160
6S17	08	166		08	167		10/20/2008	245	FM		245
6S17	08	168		08	169		10/20/2008	185	FM		185
6S18	07	183		08	144		10/27/2008	300	FM		300
6S18	07	183		07	200		10/27/2008	183	FM		183
6S18	07	184		07	185		10/27/2008	300	FM		300
6S18	07	184		07	192	C	10/24/2008	250	FM		250
6S18	07	185		07	191		10/27/2008	220	FM		220
6S18	07	186		07	187		10/22/2008	220	FM		220
6S18	07	187		07	188		10/22/2008	330	FM		330

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6S18	07	189		07	190		10/22/2008	38	FM		38
6S18	07	190		07	191		10/27/2008	165	FM		165
6S18	07	191		08	137		10/27/2008	71	FM		71
6S18	08	045		08	127		10/16/2008	200	FM		200
6S18	08	045		08	126		10/16/2008	105	FM		105
6S18	08	073		08	074		10/16/2008	250	FM		250
6S18	08	074		08	075		10/16/2008	322	FM		322
6S18	08	075		08	076		10/16/2008	127	FM		127
6S18	08	076		08	080		10/16/2008	150	FM		150
6S18	08	077		08	078		10/16/2008	127	FM		127
6S18	08	077		08	216	C	10/16/2008	68	FM		68
6S18	08	078		08	079		10/16/2008	150	FM		150
6S18	08	079		08	080		10/16/2008	175	FM		175
6S18	08	080		08	081		10/16/2008	120	FM		120
6S18	08	081		08	082		10/21/2008	100	FM		100
6S18	08	082		08	083		10/21/2008	100	FM		100
6S18	08	083		08	091		10/21/2008	150	FM		150
6S18	08	084		08	085		10/16/2008	300	FM		300
6S18	08	084		08	085		6/1/2008	296	JM	12	296
6S18	08	085		08	086		10/16/2008	340	FM		340
6S18	08	086		08	088		10/16/2008	320	FM		320
6S18	08	088		08	090		10/20/2008	115	FM		115
6S18	08	089		08	090		10/20/2008	180	FM		180
6S18	08	090		08	219		10/20/2008	135	FM		135
6S18	08	091		08	220		10/21/2008	275	FM		275
6S18	08	091		08	092		10/21/2008	275	FM		275
6S18	08	092		08	093		10/21/2008	240	FM		240
6S18	08	093		08	095		10/21/2008	190	FM		190
6S18	08	094		08	095		10/21/2008	360	FM		360
6S18	08	095		08	096		10/21/2008	125	FM		125
6S18	08	096		08	097		10/21/2008	50	FM		50
6S18	08	097		08	103		10/21/2008	125	FM		125
6S18	08	098		08	099		10/21/2008	189	FM		189
6S18	08	099		08	100		10/21/2008	215	FM		215
6S18	08	100		08	101		10/21/2008	140	FM		140
6S18	08	101		08	102		10/21/2008	135	FM		135
6S18	08	102		08	103		10/21/2008	400	FM		400
6S18	08	103		08	104		10/21/2008	165	FM		165
6S18	08	104		08	105		10/21/2008	315	FM		315
6S18	08	105		08	106		10/22/2008	220	FM		220
6S18	08	107		08	108		10/14/2008	344	FM		344
6S18	08	108		08	109		10/14/2008	50	FM		50
6S18	08	109		08	110		10/14/2008	50	FM		50
6S18	08	110		08	117		10/14/2008	200	FM		200
6S18	08	111		08	112		10/14/2008	174	FM		174
6S18	08	112		08	113		10/14/2008	200	FM		200
6S18	08	113		08	114		10/14/2008	156	FM		156
6S18	08	114		08	115		10/14/2008	120	FM		120
6S18	08	115		08	116		10/14/2008	70	FM		70
6S18	08	116		08	117		10/14/2008	100	FM		100

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6S18	08	117		08	118		10/10/2008	315	FM		315
6S18	08	118		08	119		10/14/2008	165	FM		165
6S18	08	119		08	120		10/16/2008	175	FM		175
6S18	08	120		08	121		10/16/2008	100	FM		100
6S18	08	121		08	126		10/16/2008	175	FM		175
6S18	08	122		08	123		10/13/2008	350	FM		350
6S18	08	123		08	124		10/14/2008	100	FM		100
6S18	08	124		08	125		10/14/2008	100	FM		100
6S18	08	125		08	126		10/14/2008	75	FM		75
6S18	08	127		08	128		10/24/2008	160	FM		160
6S18	08	128		08	129		10/24/2008	350	FM		350
6S18	08	129		08	130		10/24/2008	125	FM		125
6S18	08	130		08	131		10/24/2008	130	FM		130
6S18	08	131		08	132		10/24/2008	360	FM		360
6S18	08	132		08	133		10/24/2008	141	FM		141
6S18	08	133		08	134		10/24/2008	300	FM		300
6S18	08	134		08	189		10/24/2008	230	FM		230
6S18	08	135		08	136		10/24/2008	340	FM		340
6S18	08	135		08	189		10/24/2008	97	FM		97
6S18	08	136	P	08	138	P	10/27/2008	300	FM		300
6S18	08	137	P	08	138	P	10/27/2008	290	FM		290
6S18	08	138		08	145		10/27/2008	325	FM		325
6S18	08	139		08	140		10/27/2008	385	FM		385
6S18	08	140		08	141		10/27/2008	300	FM		300
6S18	08	141		08	142		10/27/2008	300	FM		300
6S18	08	142		08	143		10/27/2008	300	FM		300
6S18	08	143		08	145		10/27/2008	300	FM		300
6S18	08	144		08	145		10/27/2008	300	FM		300
6S18	08	145		08	152		10/27/2008	325	FM		325
6S18	08	189		08	188		10/22/2008	385	FM		385
6S18	08	219		08	220		10/20/2008	50	FM		50
6S19	08	146		08	147		10/27/2008	139	FM		139
6S19	08	147		08	148		10/27/2008	113	FM		113
6S19	08	148		08	149		10/27/2008	460	FM		460
6S19	08	150		08	151		10/27/2008	346	FM		346
6S19	08	151		08	152		10/27/2008	162	FM		162
6S20	07	182		08	153		10/27/2008	290	FM		290
6S20	07	182		07	199	C	10/27/2008	150	FM		150
6S20	08	152		08	154		10/27/2008	170	FM		170
6S20	08	153		08	154		10/27/2008	230	FM		230
6S20	08	155		08	156		10/28/2008	155	FM		155
6S20	08	156		08	157		10/28/2008	200	FM		200
6S21	07	178		07	181		11/17/2008	300	FM		300
6S21	07	178		12	023		11/17/2008	92	FM		92
6S21	07	179		08	157		11/17/2008	325	FM		325
6S21	07	179		07	180		11/17/2008	300	FM		300
6S21	07	180		07	181		11/17/2008	302	FM		302
6S22	12	023		12	024		11/17/2008	111	FM		111
6S23	12	024		12	025		11/17/2008	375	FM		375
6S23	12	025		12	026		11/17/2008	351	FM		351

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6S24	12	026		12	027		11/17/2008	256	FM		256
6S24	12	027		12	028		11/17/2008	240	FM		240
6S25	12	022	S	12	028		11/18/2008	158	FM		158
6S25	12	028		12	029		11/18/2008	456	FM		456
6S25	12	029		12	030	M	11/18/2008	450	FM		450
6S25	12	030	M	12	031		11/18/2008	380	FM		380
6W01	03	110		03	111		11/24/2008	272	FM		272
6W01	03	110		03	111		6/1/2008	272	JM	12	272
6W01	03	110		03	128	C	11/24/2008	250	FM		250
6W01	03	110		03	128	C	12/1/2008	250	JM	6	500
6W01	03	111		03	112		11/24/2008	317	FM		317
6W01	03	111		03	112		12/1/2008	315	JM	6	630
6W01	03	112		03	113		6/1/2008	300	JM	12	300
6W01	03	112		03	113		11/24/2008	297	FM		297
6W01	03	113		03	114		11/24/2008	243	FM		243
6W01	03	113		03	114		6/1/2008	243	JM	12	243
6W01	03	114		07	009		11/24/2008	382	FM		382
6W01	03	115		07	018		1/1/2009	152	JM	6	304
6W01	06	020		06	021		11/21/2008	294	FM		294
6W01	06	021		06	022		11/21/2008	107	FM		107
6W01	06	022		06	023		11/21/2008	130	FM		130
6W01	06	023		06	026		11/21/2008	324	FM		324
6W01	06	024		06	025		11/21/2008	300	FM		300
6W01	06	025		06	026		11/21/2008	281	FM		281
6W01	06	026		06	027		11/21/2008	229	FM		229
6W01	06	027		06	028		11/21/2008	326	FM		326
6W01	06	028		06	029		11/21/2008	168	FM		168
6W01	06	029		07	001		11/21/2008	160	FM		160
6W01	07	001		07	002		11/21/2008	220	FM		220
6W01	07	002		07	003		11/24/2008	345	FM		345
6W01	07	003		07	004		11/24/2008	344	FM		344
6W01	07	004		07	005		11/24/2008	349	FM		349
6W01	07	005		07	006		11/24/2008	240	FM		240
6W01	07	006		07	007		11/24/2008	205	FM		205
6W01	07	007		07	008		11/24/2008	380	FM		380
6W01	07	008		07	009		11/24/2008	300	FM		300
6W01	07	010		07	013		2/27/2009	344	FM		344
6W01	07	016		07	017		1/1/2009	92	JM	6	184
6W01	07	017		07	018		1/1/2009	287	JM	6	574
6W01	07	017		07	018		3/30/2009	265	FM		265
6W02	07	036		07	037		12/2/2008	75	FM		75
6W02	07	037		07	038		12/2/2008	205	FM		205
6W02	07	038		07	060		12/2/2008	327	FM		327
6W02	07	039		07	040		11/21/2008	333	FM		333
6W02	07	040		07	041		11/21/2008	195	FM		195
6W02	07	041		07	042		11/21/2008	200	FM		200
6W02	07	042		07	043		11/21/2008	106	FM		106
6W02	07	043		07	044		12/1/2008	160	FM		160
6W02	07	044		07	045		12/1/2008	35	FM		35
6W02	07	045		07	046		12/1/2008	150	FM		150

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
6W02	07	046		07	047		12/1/2008	200	FM		200
6W02	07	047		07	048		12/1/2008	150	FM		150
6W02	07	048		07	049		12/1/2008	120	FM		120
6W02	07	049		07	054		12/1/2008	100	FM		100
6W02	07	050		07	051		12/1/2008	320	FM		320
6W02	07	051		07	053		12/1/2008	100	FM		100
6W02	07	052		07	053		12/1/2008	322	FM		322
6W02	07	053		07	054		12/1/2008	100	FM		100
6W02	07	054		07	055		12/1/2008	100	FM		100
6W02	07	055		07	058		12/1/2008	115	FM		115
6W02	07	056		07	057		12/1/2008	160	FM		160
6W02	07	057		07	058		12/1/2008	115	FM		115
6W02	07	058		07	059		4/1/2009	38	JM	6	76
6W02	07	058		07	059		12/1/2008	30	FM		30
6W02	07	059		07	060		12/2/2008	135	FM		135
6W02	07	059		07	060		4/1/2009	130	JM	6	260
6W02	07	060		07	061		12/2/2008	127	FM		127
6W02	07	061		07	062		12/2/2008	300	FM		300
6W02	07	062		07	063		12/2/2008	349	FM		349
6W02	07	063		07	064		12/2/2008	349	FM		349
6W02	07	064		07	065		12/2/2008	349	FM		349
6W02	07	065		07	066		12/2/2008	349	FM		349
6W02	07	066		07	067		12/2/2008	121	FM		121
6W02	07	067		07	068		12/2/2008	204	FM		204
6W02	12	123		12	124		1/8/2009	111	FM		111
6W03	07	068		07	069		12/2/2008	129	FM		129
6W03	07	069		07	070		12/2/2008	179	FM		179
6W03	07	070		07	071		12/2/2008	320	FM		320
6W03	07	071		07	072		12/2/2008	320	FM		320
6W03	07	072		07	073		12/2/2008	284	FM		284
6W03	07	073		07	076		12/2/2008	296	FM		296
6W03	07	074		07	075		12/2/2008	157	FM		157
6W03	07	075		07	076		12/2/2008	263	FM		263
6W03	07	076		07	077		12/2/2008	257	FM		257
6W03	07	077		07	078		12/2/2008	252	FM		252
6W03	07	078		07	079		12/2/2008	314	FM		314
6W03	07	079		07	080		12/2/2008	231	FM		231
6W03	07	080		07	081		12/2/2008	215	FM		215
6W04	07	081		12	004		12/2/2008	331	FM		331
6W04	12	004		12	009	P	12/2/2008	357	FM		357
6W04	12	009	P	12	010		12/2/2008	332	FM		332
6W05	12	005		12	006		12/2/2008	218	FM		218
6W05	12	005		12	138	D	12/2/2008	13	FM		13
6W05	12	006		12	007		12/2/2008	218	FM		218
6W05	12	007		12	008	P	12/2/2008	323	FM		323
6W05	12	008	P	12	009	P	5/14/2009	300	FM	3	1200
6W05	12	010		12	011		12/2/2008	150	FM		150
6W05	12	011		12	031		12/2/2008	275	FM		275
7E01	11	001	D	11	002		1/5/2009	350	FM		350
7E01	11	002		11	003		1/5/2009	350	FM		350

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
7E01	11	003		11	004		1/5/2009	246	FM		246
7E01	11	005		11	006		1/5/2009	20	FM		20
7E01	11	006		11	007		1/5/2009	300	FM		300
7E01	11	007		11	008		1/5/2009	125	FM		125
7E01	11	008		11	009		1/5/2009	250	FM		250
7E01	11	009		11	010		1/5/2009	255	FM		255
7E01	11	010		11	018		1/5/2009	280	FM		280
7E01	11	011		11	012		12/11/2008	175	FM		175
7E01	11	012		11	083		12/11/2008	325	FM		325
7E01	11	013		11	014		12/11/2008	309	FM		309
7E01	11	013		11	083		12/11/2008	27	FM		27
7E01	11	014		11	015		12/11/2008	262	FM		262
7E01	11	018		11	019		1/5/2009	350	FM		350
7E01	11	019		11	020		1/5/2009	350	FM		350
7E01	11	020		11	024		1/5/2009	350	FM		350
7E02	11	015		12	122		12/11/2008	400	FM		400
7E02	11	021		11	022		12/11/2008	312	FM		312
7E02	11	022		11	023		12/11/2008	350	FM		350
7E02	11	022		12	126		12/11/2008	183	FM		183
7E02	11	023		11	024		12/11/2008	275	FM		275
7E02	11	024		11	025		1/5/2009	275	FM		275
7E02	11	025		11	026		1/5/2009	353	FM		353
7E02	11	026		11	028		1/5/2009	70	FM		70
7E02	11	027		11	028		1/5/2009	360	FM		360
7E02	11	028		11	029		1/5/2009	262	FM		262
7E02	11	029		11	031		1/5/2009	200	FM		200
7E02	11	030		11	031		1/5/2009	335	FM		335
7E02	11	030		11	078		1/5/2009	212	FM		212
7E02	11	031		11	032	M	1/5/2009	133	FM		133
7E02	12	121		12	122		1/8/2009	260	FM		260
7E02	12	122		12	123		1/8/2009	350	FM		350
7E02	12	124		12	125		1/8/2009	310	FM		310
7E02	12	125		12	126		12/11/2008	365	FM		365
7E03	06	146		11	077		12/18/2008	150	FM		150
7E03	11	032	M	11	048		1/5/2009	347	FM		347
7E03	11	037		11	038		12/11/2008	254	FM		254
7E03	11	038		11	039		12/11/2008	300	FM		300
7E03	11	039		11	040		12/11/2008	275	FM		275
7E03	11	040		11	041		12/11/2008	242	FM		242
7E03	11	042		11	043		1/5/2009	325	FM		325
7E03	11	043		11	048		1/5/2009	300	FM		300
7E03	11	044		37	020		12/11/2008	359	FM		359
7E03	11	044		11	045		12/11/2008	337	FM		337
7E03	11	045		11	046		12/11/2008	410	FM		410
7E03	11	046		11	047		1/5/2009	250	FM		250
7E03	11	047		11	048		1/5/2009	100	FM		100
7E03	11	048		11	049		1/5/2009	335	FM		335
7E03	11	049		11	050		1/5/2009	330	FM		330
7E03	11	050		11	051	M	1/5/2009	320	FM		320
7E03	11	051	M	11	077		1/5/2009	335	FM		335

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
7E03	37	018		37	019		12/11/2008	408	FM		408
7E03	37	018		37	123	D	12/11/2008	350	FM		350
7E03	37	019		37	020		12/11/2008	331	FM		331
7E04	06	132		06	133		12/16/2008	300	FM		300
7E04	06	133		06	135		12/16/2008	360	FM		360
7E04	06	134		06	135		12/16/2008	330	FM		330
7E04	06	135		06	136		12/16/2008	330	FM		330
7E04	06	136		06	141		12/16/2008	180	FM		180
7E04	06	137		06	138		12/18/2008	210	FM		210
7E04	06	138		06	139		12/18/2008	359	FM		359
7E04	06	139		06	140		12/18/2008	365	FM		365
7E04	06	140		06	141		12/18/2008	365	FM		365
7E04	06	141		06	142		12/18/2008	370	FM		370
7E04	06	142		06	146		12/18/2008	330	FM		330
7E05	06	143		06	144		12/18/2008	250	FM		250
7E05	06	144		06	145		12/18/2008	273	FM		273
7E05	06	145		06	146		12/18/2008	103	FM		103
7N01	05	029		06	147		1/16/2009	506	FM		506
7N01	05	029		05	030		1/16/2009	445	FM		445
7N01	05	030		05	031		1/16/2009	526	FM		526
7N02	05	040		05	044		1/9/2009	100	FM		100
7N02	05	041		05	042		1/8/2009	234	FM		234
7N02	05	042		05	043		1/9/2009	235	FM		235
7N02	05	042		05	138		1/8/2009	159	FM		159
7N02	05	043		05	044		1/9/2009	207	FM		207
7N02	05	044		05	045		1/9/2009	83	FM		83
7N02	05	045		05	046		1/9/2009	334	FM		334
7N02	05	046		05	054		1/9/2009	360	FM		360
7N02	05	047		05	048		1/8/2009	365	FM		365
7N02	05	048		05	049		1/8/2009	365	FM		365
7N02	05	049		05	050		1/8/2009	325	FM		325
7N02	05	050		05	051		1/8/2009	345	FM		345
7N02	05	051		05	052		1/9/2009	340	FM		340
7N02	05	052		05	053		1/9/2009	425	FM		425
7N02	05	053		05	054		1/9/2009	337	FM		337
7N02	05	054		05	055		1/9/2009	425	FM		425
7N02	05	055		05	067		1/9/2009	20	FM		20
7N02	05	056		05	064		1/16/2009	20	FM		20
7N02	05	132		05	133		1/8/2009	195	FM		195
7N02	05	133		05	134		1/8/2009	106	FM		106
7N02	05	134		05	135		1/8/2009	125	FM		125
7N02	05	135		05	136		1/8/2009	141	FM		141
7N02	05	136		05	137		1/8/2009	225	FM		225
7N02	05	137		05	138		1/8/2009	109	FM		109
7N03	05	064		05	140		1/16/2009	153	FM		153
7N03	05	140		05	165		1/16/2009	150	FM		150
7N04	05	058		37	004		1/13/2009	300	FM		300
7N04	05	058		05	059		1/13/2009	275	FM		275
7N04	05	058		05	112	C	1/13/2009	200	FM		200
7N04	05	059		05	060		1/13/2009	280	FM		280

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
7N04	05	060		05	061		1/15/2009	270	FM		270
7N04	05	061		05	062		1/15/2009	340	FM		340
7N04	05	062		05	067		1/15/2009	325	FM		325
7N04	05	063		05	065		1/15/2009	337	FM		337
7N04	05	063		37	025	D	1/15/2009	248	FM		248
7N04	05	065		05	066		1/15/2009	310	FM		310
7N04	05	065		37	001	D	1/15/2009	300	FM		300
7N04	05	066		05	067		1/15/2009	320	FM		320
7N04	05	067		37	017	M	1/15/2009	350	FM		350
7N04	05	067		05	068		1/15/2009	80	FM		80
7N04	05	068		05	069		1/15/2009	240	FM		240
7N04	05	069		05	070		1/15/2009	345	FM		345
7N04	05	069		05	157		1/15/2009	236	FM		236
7N04	05	070		05	165		1/15/2009	31	FM		31
7N04	05	071		05	165		1/16/2009	270	FM		270
7N04	05	071		05	072		1/16/2009	250	FM		250
7N04	05	072		05	073		1/16/2009	40	FM		40
7N04	05	155		05	156		1/15/2009	270	FM		270
7N04	05	156		05	157		1/15/2009	275	FM		275
7N04	37	002		37	003		1/13/2009	365	FM		365
7N04	37	002		37	024	D	1/13/2009	40	FM		40
7N04	37	003		37	004		1/13/2009	390	FM		390
7N04	37	005		37	006		1/13/2009	80	FM		80
7N04	37	005		37	022	D	1/13/2009	38	FM		38
7N04	37	006		37	007		1/13/2009	80	FM		80
7N04	37	007		37	013		1/13/2009	170	FM		170
7N04	37	008		37	009		1/13/2009	300	FM		300
7N04	37	008		37	021	D	1/13/2009	230	FM		230
7N04	37	009		37	010		1/13/2009	300	FM		300
7N04	37	010		37	011		1/13/2009	342	FM		342
7N04	37	011		37	012		1/13/2009	360	FM		360
7N04	37	012		37	013		1/13/2009	365	FM		365
7N04	37	013		37	014		1/15/2009	300	FM		300
7N04	37	013		37	028		1/13/2009	200	FM		200
7N04	37	014		37	015		1/15/2009	330	FM		330
7N04	37	015		37	016		1/15/2009	300	FM		300
7N04	37	016		37	017		1/15/2009	290	FM		290
7N04	37	026		37	027		1/13/2009	200	FM		200
7N04	37	027		37	028		1/13/2009	200	FM		200
7N05	05	074		05	161		1/15/2009	12	FM		12
7N05	05	158		05	159		1/15/2009	320	FM		320
7N05	05	159		05	160		1/15/2009	323	FM		323
7N05	05	160		05	161		1/15/2009	325	FM		325
7N05	05	161		05	162		1/15/2009	253	FM		253
7N05	05	162		05	163		1/15/2009	321	FM		321
7N05	05	163		05	164		1/15/2009	297	FM		297
7N06	05	077		05	078		1/9/2009	188	FM		188
7N06	05	078		05	079		1/9/2009	250	FM		250
7N06	05	079		05	088		1/9/2009	400	FM		400
7N06	05	088		05	089		1/9/2009	150	FM		150

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
7N06	05	089		05	091		1/20/2009	250	FM		250
7N06	05	089		05	090		1/20/2009	150	FM		150
7N08	01	110		01	111		1/7/2009	212	FM		212
7N08	01	111		01	112		1/7/2009	300	FM		300
7N08	01	112		01	113		1/7/2009	348	FM		348
7N08	01	113		05	013		1/7/2009	300	FM		300
7N08	01	113		01	116	D	1/7/2009	205	FM		205
7N08	05	001		05	002		1/7/2009	300	FM		300
7N08	05	002		05	005		1/7/2009	319	FM		319
7N08	05	003		05	004		1/7/2009	265	FM		265
7N08	05	004		05	005		1/7/2009	300	FM		300
7N08	05	005		05	006		1/7/2009	150	FM		150
7N08	05	006		05	007		1/7/2009	88	FM		88
7N08	05	007		05	010		1/7/2009	150	FM		150
7N08	05	008		05	009		1/7/2009	280	FM		280
7N08	05	009		05	010		1/7/2009	300	FM		300
7N08	05	010		05	011		1/7/2009	270	FM		270
7N08	05	011		05	012		1/7/2009	240	FM		240
7N08	05	012		05	013		1/7/2009	345	FM		345
7N08	05	013		05	015		1/7/2009	375	FM		375
7N08	05	014		05	015		1/7/2009	300	FM		300
7N08	05	015		05	017		1/7/2009	300	FM		300
7N08	05	016		05	017		1/7/2009	275	FM		275
7N08	05	017		05	019		1/7/2009	300	FM		300
7N08	05	018		05	019		1/7/2009	255	FM		255
7N08	05	019		05	020		1/7/2009	346	FM		346
7N08	05	020		05	022		1/7/2009	46	FM		46
7N08	05	021		05	022		1/7/2009	245	FM		245
7N08	05	022		05	152		1/7/2009	121	FM		121
7N08	05	023		05	024		1/7/2009	315	FM		315
7N08	05	023		05	152		1/7/2009	130	FM		130
7N08	05	024		05	151		1/16/2009	177	FM		177
7N08	05	024		05	153		1/16/2009	168	FM		168
7N08	05	025		05	026		1/16/2009	350	FM		350
7N08	05	025		05	153		1/16/2009	172	FM		172
7N08	05	026		05	027		1/16/2009	300	FM		300
7N08	05	026		05	120		1/16/2009	250	FM		250
7N08	05	027		05	028		1/16/2009	280	FM		280
7N08	05	028		05	093		1/16/2009	100	FM		100
7N08	05	114		05	115		1/16/2009	124	FM		124
7N08	05	114		05	122		1/8/2009	45	FM		45
7N08	05	115		05	116		1/16/2009	185	FM		185
7N08	05	116		05	117		1/16/2009	186	FM		186
7N08	05	117		05	118		1/16/2009	250	FM		250
7N08	05	118		05	119		1/16/2009	249	FM		249
7N08	05	119		05	120		1/16/2009	35	FM		35
7N08	05	121		05	147		1/8/2009	195	FM		195
7N08	05	121		05	123		1/8/2009	72	FM		72
7N08	05	122		05	123		1/8/2009	245	FM		245
7N08	05	123		05	124		1/8/2009	39	FM		39

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
7N08	05	124		05	125		1/8/2009	167	FM		167
7N08	05	125		05	126		1/8/2009	151	FM		151
7N08	05	126		05	127		1/8/2009	200	FM		200
7N08	05	127		05	128		1/8/2009	306	FM		306
7N08	05	128		05	129		1/8/2009	264	FM		264
7N08	05	128		05	146		1/8/2009	90	FM		90
7N08	05	129		05	130		1/8/2009	210	FM		210
7N08	05	130		05	131		1/8/2009	304	FM		304
7N08	05	141		05	142		1/8/2009	115	FM		115
7N08	05	141		05	154	D	1/8/2009	7	FM		7
7N08	05	142		05	143		1/8/2009	189	FM		189
7N08	05	143		05	144		1/8/2009	103	FM		103
7N08	05	144		05	145		1/8/2009	119	FM		119
7N08	05	145		05	146		1/8/2009	119	FM		119
7N08	05	147		05	148		1/8/2009	142	FM		142
7N08	05	148		05	149		1/20/2009	255	FM		255
7N08	05	150		05	151		1/7/2009	172	FM		172
7S01	05	095		05	096		12/4/2008	61	FM		61
7S01	05	096		05	098		12/4/2008	163	FM		163
7S01	05	097		05	098		12/4/2008	200	FM		200
7S01	05	098		06	037		12/4/2008	350	FM		350
7S01	06	030		06	031		12/4/2008	100	FM		100
7S01	06	031		06	032		12/1/2008	328	JM	12	328
7S01	06	031		06	032		12/4/2008	300	FM		300
7S01	06	032		06	033		12/4/2008	350	FM		350
7S01	06	033		06	034		12/4/2008	325	FM		325
7S01	06	034		06	035		12/4/2008	330	FM		330
7S01	06	035		06	036		12/4/2008	374	FM		374
7S01	06	036		06	040		12/4/2008	350	FM		350
7S01	06	037		06	038		12/4/2008	234	FM		234
7S01	06	038		06	039		12/4/2008	210	FM		210
7S01	06	039		06	040		12/4/2008	200	FM		200
7S01	06	040		06	041		12/4/2008	275	FM		275
7S01	06	041		06	042		12/4/2008	325	FM		325
7S01	06	042		06	043		12/4/2008	300	FM		300
7S01	06	043		06	044		12/4/2008	239	FM		239
7S01	06	044		06	045		12/4/2008	355	FM		355
7S01	06	045		06	046		12/4/2008	52	FM		52
7S01	06	046		06	047		12/4/2008	83	FM		83
7S01	06	047		06	059		12/8/2008	350	FM		350
7S01	06	048		06	050		12/4/2008	263	FM		263
7S01	06	049		06	050		12/4/2008	250	FM		250
7S01	06	050		06	051		12/4/2008	250	FM		250
7S01	06	051		06	052		12/4/2008	200	FM		200
7S01	06	051		06	150	C	12/4/2008	115	FM		115
7S01	06	052		06	054		12/4/2008	317	FM		317
7S01	06	053		06	054		12/4/2008	150	FM		150
7S01	06	054		06	055		12/4/2008	366	FM		366
7S01	06	055		06	056		12/8/2008	105	FM		105
7S01	06	056		06	057		12/8/2008	225	FM		225

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
7S01	06	057		06	058		12/8/2008	135	FM		135
7S01	06	058		06	059		12/8/2008	271	FM		271
7S01	06	058		06	151		12/8/2008	200	FM		200
7S01	06	059		06	060		12/8/2008	200	FM		200
7S01	06	060		06	067		12/8/2008	200	FM		200
7S01	06	061		06	062		12/8/2008	333	FM		333
7S01	06	062		06	063		12/8/2008	200	FM		200
7S01	06	063		06	064		12/8/2008	341	FM		341
7S01	06	064		06	065		12/8/2008	375	FM		375
7S01	06	065		06	066		12/8/2008	240	FM		240
7S01	06	066		06	067		12/8/2008	156	FM		156
7S01	06	067		06	068		12/8/2008	200	FM		200
7S01	06	068		06	072		12/8/2008	200	FM		200
7S01	06	069		06	070		12/8/2008	325	FM		325
7S01	06	070		06	071		12/8/2008	375	FM		375
7S01	06	071		06	072		12/8/2008	321	FM		321
7S01	06	072		06	074		12/8/2008	320	FM		320
7S01	06	073		06	074		12/8/2008	315	FM		315
7S01	06	074		06	076		12/8/2008	260	FM		260
7S01	06	075		06	076		12/8/2008	350	FM		350
7S01	06	076		06	077		12/8/2008	325	FM		325
7S01	06	077		06	078		12/8/2008	300	FM		300
7S01	06	078		06	079		12/8/2008	300	FM		300
7S01	06	078		06	079		1/1/2009	291	JM	12	291
7S01	06	079		06	121		12/8/2008	300	FM		300
7S02	06	080		06	084		12/3/2008	344	FM		344
7S02	06	081		06	082		12/3/2008	120	FM		120
7S02	06	082		06	083		12/3/2008	251	FM		251
7S02	06	083		06	084		12/3/2008	225	FM		225
7S02	06	084		06	085		12/3/2008	150	FM		150
7S02	06	085		06	092		12/3/2008	225	FM		225
7S02	06	086		06	087		12/3/2008	178	FM		178
7S02	06	087		06	088		12/3/2008	288	FM		288
7S02	06	088		06	089		12/3/2008	100	FM		100
7S02	06	090		06	091		12/3/2008	218	FM		218
7S02	06	091		06	092		12/3/2008	308	FM		308
7S02	06	092		06	097		12/3/2008	205	FM		205
7S02	06	093		06	094		12/3/2008	298	FM		298
7S02	06	094		06	097		12/3/2008	202	FM		202
7S02	06	095		06	096		12/3/2008	350	FM		350
7S02	06	095		07	115		12/3/2008	190	FM		190
7S02	06	096		06	097		12/3/2008	275	FM		275
7S02	06	097		06	098		12/3/2008	195	FM		195
7S02	06	098		06	101		12/3/2008	120	FM		120
7S02	06	099		06	100		12/3/2008	275	FM		275
7S02	06	100		06	101		12/3/2008	300	FM		300
7S02	06	101		06	102		12/3/2008	123	FM		123
7S02	06	102		06	106		12/3/2008	47	FM		47
7S02	06	103		06	104		12/5/2008	352	FM		352
7S02	06	104		06	106		12/5/2008	421	FM		421

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
7S02	06	105		06	106		12/5/2008	352	FM		352
7S02	06	105		07	193	C	12/5/2008	256	FM		256
7S02	06	106		06	111		12/5/2008	175	FM		175
7S02	06	107		06	108		12/5/2008	315	FM		315
7S02	06	108		06	109		12/5/2008	311	FM		311
7S02	06	109		06	111		12/5/2008	311	FM		311
7S02	06	110		06	111		12/5/2008	338	FM		338
7S02	06	110		07	114		12/5/2008	300	FM		300
7S02	06	111		06	113		12/5/2008	325	FM		325
7S02	06	112		06	113		12/8/2008	310	FM		310
7S02	06	112		07	113		12/5/2008	309	FM		309
7S02	06	113		06	115		12/8/2008	265	FM		265
7S02	06	114		06	115		12/8/2008	297	FM		297
7S02	06	114		07	096		12/8/2008	290	FM		290
7S02	06	115		06	117		12/8/2008	261	FM		261
7S02	06	116		07	093		12/8/2008	254	FM		254
7S02	06	116		06	117		12/8/2008	238	FM		238
7S02	06	117		06	119		12/8/2008	350	FM		350
7S02	06	118		07	091		12/8/2008	320	FM		320
7S02	06	118		06	119		12/8/2008	320	FM		320
7S02	06	119		06	120		12/8/2008	200	FM		200
7S02	06	120		06	121		12/8/2008	200	FM		200
7S02	07	088		07	089		12/8/2008	212	FM		212
7S02	07	089		07	090		12/8/2008	220	FM		220
7S02	07	090		07	091		12/8/2008	276	FM		276
7S02	07	090		07	194	C	12/8/2008	75	FM		75
7S02	07	092		07	093		12/8/2008	270	FM		270
7S02	07	094		07	095		12/8/2008	246	FM		246
7S02	07	095		07	096		12/8/2008	307	FM		307
7S02	07	097		07	098		12/4/2008	346	FM		346
7S02	07	098		07	099		12/4/2008	138	FM		138
7S02	07	099		07	100		12/4/2008	180	FM		180
7S02	07	100		07	101		12/4/2008	66	FM		66
7S02	07	101		07	210		12/5/2008	59	FM		59
7S02	07	102		07	103		12/5/2008	350	FM		350
7S02	07	102		07	212		12/5/2008	140	FM		140
7S02	07	103		07	105		12/5/2008	205	FM		205
7S02	07	104		07	105		12/5/2008	265	FM		265
7S02	07	105		07	107		12/5/2008	170	FM		170
7S02	07	106		07	107		12/5/2008	145	FM		145
7S02	07	107		07	108		12/5/2008	300	FM		300
7S02	07	108		07	109		12/5/2008	280	FM		280
7S02	07	109		07	195		12/5/2008	220	FM		220
7S02	07	109		07	110		12/5/2008	146	FM		146
7S02	07	110		07	112		12/5/2008	153	FM		153
7S02	07	111		07	112		12/5/2008	250	FM		250
7S02	07	112		07	113		12/5/2008	305	FM		305
7S02	07	210		07	211		12/5/2008	91	FM		91
7S02	07	211		07	212		12/5/2008	20	FM		20
7S03	06	121		06	123		12/9/2008	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
7S03	06	122		06	123		12/9/2008	280	FM		280
7S03	06	123		06	124		12/9/2008	300	FM		300
7S03	06	124		06	125		12/9/2008	300	FM		300
7S04	06	126		07	087		12/9/2008	300	FM		300
7S04	06	126		06	127		12/9/2008	300	FM		300
7S04	06	127		06	128		12/9/2008	300	FM		300
7S04	06	128		06	129	M	12/9/2008	206	FM		206
7S04	06	129	M	06	130		12/9/2008	200	FM		200
7S04	07	082		07	083		12/9/2008	230	FM		230
7S04	07	083		07	084		12/9/2008	240	FM		240
7S04	07	084		07	085		12/9/2008	253	FM		253
7S04	07	085		07	086		12/9/2008	290	FM		290
7S04	07	086		07	087		12/9/2008	300	FM		300
7S05	06	130		11	070		12/9/2008	237	FM		237
7S05	06	131		06	153	D	12/10/2008	292	FM		292
7S05	06	131		11	068		12/10/2008	188	FM		188
7S05	11	068		11	069		12/10/2008	45	FM		45
7S05	11	069		11	071		12/10/2008	250	FM		250
7S05	11	069		11	070		12/10/2008	115	FM		115
7S05	11	071		11	072		12/11/2008	215	FM		215
7S06	11	052		11	053		12/10/2008	190	FM		190
7S06	11	053		12	003		12/10/2008	300	FM		300
7S06	11	053		11	054		12/10/2008	295	FM		295
7S06	11	054		11	058		12/11/2008	300	FM		300
7S06	11	055		11	056		12/11/2008	195	FM		195
7S06	11	056		11	057		12/11/2008	195	FM		195
7S06	11	057		11	058		12/11/2008	110	FM		110
7S06	11	058		11	059		12/11/2008	300	FM		300
7S06	11	059		11	072		12/11/2008	230	FM		230
7S06	12	001	C	12	002		12/10/2008	270	FM		270
7S06	12	002		12	003		12/10/2008	292	FM		292
7S07	12	115	P	12	116	P	5/15/2009	330	FM	3	1320
7S07	12	116	P	12	117	P	5/15/2009	300	FM	3	1200
7S07	12	117	P	12	120	M	5/15/2009	15	FM	3	60
7S07	12	118		12	119		12/9/2008	310	FM		310
7S07	12	119		12	120		12/9/2008	300	FM		300
7S08	11	061		11	062		12/10/2008	360	FM		360
7S08	11	061		11	080	D	12/10/2008	85	FM		85
A 01	04	070		08	056		4/15/2009	232	FM		232
A 01	07	019		07	020		3/25/2009	78	FM		78
A 01	07	019		07	020		1/1/2009	78	JM	6	156
A 01	07	020		08	033		3/25/2009	275	FM		275
A 01	07	020		08	033		2/1/2009	274	JM	6	548
A 01	07	116		07	117		3/27/2009	250	FM		250
A 01	07	117		07	118		3/27/2009	186	FM		186
A 01	07	118		07	121		3/27/2009	292	FM		292
A 01	07	118		07	121		12/1/2008	292	JM	12	292
A 01	07	119		07	120		3/27/2009	142	FM		142
A 01	07	120		07	121		3/27/2009	403	FM		403
A 01	07	120		07	121		12/1/2008	396	JM	12	396

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
A 01	07	121		07	206		3/27/2009	203	FM		203
A 01	07	122		07	123		3/27/2009	255	FM		255
A 01	07	123		07	124		3/27/2009	262	FM		262
A 01	07	124		07	125		3/27/2009	187	FM		187
A 01	07	125		07	206		3/27/2009	86	FM		86
A 01	07	126		07	129		3/30/2009	217	FM		217
A 01	07	127		07	128		3/30/2009	137	FM		137
A 01	07	128		07	129		3/30/2009	202	FM		202
A 01	07	129		07	130		3/30/2009	220	FM		220
A 01	07	130		07	131		3/30/2009	300	FM		300
A 01	07	131		07	132		3/30/2009	275	FM		275
A 01	07	132		08	016		3/30/2009	182	FM		182
A 01	08	003		08	203	C	4/6/2009	249	FM		249
A 01	08	003		08	008	P	4/6/2009	186	FM		186
A 01	08	004		08	005		4/1/2009	250	JM	6	500
A 01	08	004		08	201		3/1/2009	237	JM	12	237
A 01	08	004		08	005		4/2/2009	230	FM		230
A 01	08	004		08	201		4/2/2009	200	FM		200
A 01	08	005		08	202		4/2/2009	228	FM		228
A 01	08	005	P	08	006	P	5/6/2009	150	FM	3	600
A 01	08	005	P	08	006	P	4/1/2009	115	JM	6	230
A 01	08	006	P	08	007	P	4/1/2009	125	JM	6	250
A 01	08	006	P	08	007	P	5/6/2009	110	FM	3	440
A 01	08	007	P	08	008	P	5/6/2009	241	FM	3	964
A 01	08	007		08	008		4/1/2009	240	JM	6	480
A 01	08	008		08	027		4/6/2009	245	FM		245
A 01	08	009		08	011		4/2/2009	193	FM		193
A 01	08	009		08	204	C	4/1/2009	140	JM	6	280
A 01	08	009		08	204	C	4/2/2009	133	FM		133
A 01	08	010		08	205	C	3/1/2009	300	JM	12	300
A 01	08	010		08	205		4/2/2009	251	FM		251
A 01	08	010		08	011		3/1/2009	190	JM	12	190
A 01	08	010		08	011		4/2/2009	165	FM		165
A 01	08	011		08	012		4/2/2009	113	FM		113
A 01	08	012		08	013		4/2/2009	237	FM		237
A 01	08	013		08	221		4/6/2009	272	FM		272
A 01	08	014		08	015		4/6/2009	167	FM		167
A 01	08	014		08	221		4/6/2009	132	FM		132
A 01	08	015		08	027		4/6/2009	75	FM		75
A 01	08	016		08	017		3/30/2009	256	FM		256
A 01	08	017		08	018		3/30/2009	215	FM		215
A 01	08	017		08	213	C	3/30/2009	95	FM		95
A 01	08	018		08	019		3/30/2009	292	FM		292
A 01	08	019		08	020		4/13/2009	333	FM		333
A 01	08	020		08	025		4/14/2009	113	FM		113
A 01	08	022		08	023		4/13/2009	100	FM		100
A 01	08	023		08	024		4/14/2009	200	FM		200
A 01	08	024		08	025		4/14/2009	250	FM		250
A 01	08	025		08	222		4/14/2009	88	FM		88
A 01	08	026		08	027		4/6/2009	150	FM		150

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
A 01	08	027		08	224		4/14/2009	115	FM		115
A 01	08	028		08	031		4/15/2009	295	FM		295
A 01	08	028		08	224		4/14/2009	102	FM		102
A 01	08	029		08	030		4/1/2009	150	FM		150
A 01	08	029		08	206		4/1/2009	143	FM		143
A 01	08	030		08	031		4/15/2009	125	FM		125
A 01	08	030		08	031		11/1/2008	120	JMR	12	120
A 01	08	031		08	032		4/15/2009	137	FM		137
A 01	08	032		08	053		4/15/2009	145	FM		145
A 01	08	033		08	034		3/25/2009	120	FM		120
A 01	08	034		08	035		3/25/2009	165	FM		165
A 01	08	034		08	218	C	3/25/2009	121	FM		121
A 01	08	035		08	036		3/25/2009	181	FM		181
A 01	08	036		08	040		3/25/2009	98	FM		98
A 01	08	037		08	038		3/25/2009	275	FM		275
A 01	08	037		08	207	C	3/25/2009	108	FM		108
A 01	08	038		08	039		3/25/2009	122	FM		122
A 01	08	039		08	040		3/25/2009	145	FM		145
A 01	08	040		08	041		3/31/2009	96	FM		96
A 01	08	041		08	042		3/31/2009	107	FM		107
A 01	08	042		08	043		3/31/2009	68	FM		68
A 01	08	042		08	043		4/1/2009	68	JM	6	136
A 01	08	043		08	048		10/1/2008	238	JM	12	238
A 01	08	043		08	048		3/31/2009	223	FM		223
A 01	08	044	C	08	050		4/1/2009	50	FM		50
A 01	08	046		08	047		4/1/2009	310	FM		310
A 01	08	046		08	225		4/1/2009	47	FM		47
A 01	08	047		08	049		4/1/2009	68	FM		68
A 01	08	048		08	049		4/1/2009	98	FM		98
A 01	08	049		08	050		4/1/2009	180	FM		180
A 01	08	050		08	051		12/1/2008	192	JM	12	192
A 01	08	050		08	051		4/1/2009	185	FM		185
A 01	08	051		08	215	C	4/1/2009	265	FM		265
A 01	08	051		08	215	C	12/1/2008	260	JM	6	520
A 01	08	051		08	052		4/1/2009	170	FM		170
A 01	08	051		08	214	D	4/1/2009	117	FM		117
A 01	08	052		08	053		4/15/2009	260	FM		260
A 01	08	053		08	054		4/15/2009	193	FM		193
A 01	08	054		08	055		4/15/2009	280	FM		280
A 01	08	055		08	056		4/15/2009	204	FM		204
A 01	08	056		08	221		4/15/2009	50	FM		50
A 01	08	208		08	221		3/31/2009	194	FM		194
A 01	08	208		08	228	D	3/31/2009	15	FM		15
A 01	08	222		08	223		4/14/2009	149	FM		149
A 01	08	223		08	224		4/14/2009	103	FM		103
A 01	08	225		08	226		4/1/2009	153	FM		153
A 02	03	107	C	03	108		3/31/2009	239	FM		239
A 02	03	107	C	03	108		5/1/2009	239	JM	12	239
A 02	03	108		07	022		3/31/2009	275	FM		275
A 02	03	108		03	109		3/31/2009	186	FM		186

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Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
A 02	03	109		04	069		3/31/2009	184	FM		184
A 02	04	069		04	155		3/31/2009	90	FM		90
A 02	04	070		04	071		4/15/2009	290	FM		290
A 02	04	071		04	072		4/15/2009	296	FM		296
A 02	04	071		04	155		4/15/2009	62	FM		62
A 02	04	072		04	154		4/15/2009	232	FM		232
A 02	07	021		08	002		3/31/2009	301	FM		301
A 02	07	021		07	208		3/31/2009	176	FM		176
A 02	07	021		07	022		3/31/2009	123	FM		123
A 02	07	208		07	209		3/31/2009	255	FM		255
A 02	08	001		08	210		3/31/2009	276	FM		276
A 02	08	001		08	002		3/31/2009	101	FM		101
A 03	03	106		04	080		5/4/2009	252	FM		252
A 03	04	074	P	04	139	P	5/4/2009	260	FM	3	1040
A 03	04	074	P	04	139	P	4/1/2009	120	JM	6	240
A 03	04	074	P	04	153		5/4/2009	100	FM		100
A 03	04	075	P	04	077	P	5/4/2009	150	FM	3	600
A 03	04	075	P	04	139	P	10/1/2008	120	JM	6	240
A 03	04	075	P	04	139	P	5/4/2009	100	FM	3	400
A 03	04	076	P	04	077	P	5/4/2009	110	FM	3	440
A 03	04	076	P	04	156	C	5/4/2009	100	FM	3	400
A 03	04	076	P	04	147	C	5/4/2009	75	FM	3	300
A 03	04	077	P	04	078	P	5/4/2009	114	FM	3	456
A 03	04	078	P	04	081		5/4/2009	330	FM	3	1320
A 03	04	079		04	080		5/4/2009	321	FM		321
A 03	04	080		04	081		5/4/2009	114	FM		114
A 03	04	081		04	082		1/1/2009	248	JM	6	496
A 03	04	081		04	082		5/4/2009	234	FM		234
A 03	04	081		04	146	D	5/4/2009	4	FM		4
A 04	04	082		04	124	C	5/4/2009	186	FM		186
A 04	04	082		04	124	C	1/1/2009	186	JM	6	372
A 05	02	070		02	071		2/26/2009	236	FM		236
A 05	02	071		02	072		2/26/2009	284	FM		284
A 05	02	072		03	034		2/26/2009	297	FM		297
A 05	03	034		03	037		2/26/2009	301	FM		301
A 05	03	035		07	013		2/26/2009	302	FM		302
A 05	03	035		03	036		2/26/2009	300	FM		300
A 05	03	036		03	037		2/26/2009	154	FM		154
A 05	03	037		03	038		2/26/2009	150	FM		150
A 05	03	038		03	039		2/26/2009	315	FM		315
A 05	03	039		03	041		3/13/2009	234	FM		234
A 05	03	040		03	041		3/13/2009	173	FM		173
A 05	03	041		03	049		3/23/2009	65	FM		65
A 05	03	042		03	043		3/23/2009	175	FM		175
A 05	03	042		03	130	C	3/23/2009	38	FM		38
A 05	03	043		03	044		3/23/2009	148	FM		148
A 05	03	044		03	045		3/23/2009	150	FM		150
A 05	03	044		03	045		1/1/2009	90	JM	6	180
A 05	03	045		03	046		3/23/2009	250	FM		250
A 05	03	046		03	047		3/23/2009	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
A 05	03	047		03	048		3/23/2009	200	FM		200
A 05	03	048		03	049		3/23/2009	300	FM		300
A 05	03	049		03	050		3/23/2009	357	FM		357
A 05	03	050		03	051		3/23/2009	350	FM		350
A 05	03	051		03	053		3/23/2009	220	FM		220
A 05	03	052		03	053		3/23/2009	165	FM		165
A 05	03	052		03	168	C	3/23/2009	30	FM		30
A 05	03	053		03	054		3/24/2009	32	FM		32
A 05	03	054		03	065		3/24/2009	20	FM		20
A 05	03	055		03	059		3/16/2009	171	FM		171
A 05	03	056		03	057		3/16/2009	243	FM		243
A 05	03	057		03	058		3/16/2009	110	FM		110
A 05	03	058		03	138		3/16/2009	121	FM		121
A 05	03	059		03	060		5/1/2009	345	JM	12	345
A 05	03	059		03	060		3/16/2009	344	FM		344
A 05	03	059		03	138		3/16/2009	100	FM		100
A 05	03	060		03	061		3/23/2009	120	FM		120
A 05	03	061		03	065		3/24/2009	17	FM		17
A 05	03	062		03	063		4/1/2009	232	JM	12	232
A 05	03	062		03	063		3/13/2009	231	FM		231
A 05	03	063		03	064		3/13/2009	336	FM		336
A 05	03	064		03	065		3/23/2009	14	FM		14
A 05	03	065		03	067		3/24/2009	100	FM		100
A 05	03	066		03	067		3/24/2009	268	FM		268
A 05	03	066		03	136	C	3/24/2009	241	FM		241
A 05	03	067		03	068		3/24/2009	109	FM		109
A 05	03	068		03	071		3/24/2009	224	FM		224
A 05	03	069		03	070		3/24/2009	324	FM		324
A 05	03	070		03	071		3/24/2009	200	FM		200
A 05	03	071		03	072	M	3/25/2009	300	FM		300
A 05	03	072	M	03	086		3/25/2009	315	FM		315
A 06	03	073		03	074		3/13/2009	200	FM		200
A 06	03	073		03	131	C	3/13/2009	109	FM		109
A 06	03	074		03	075		3/13/2009	115	FM		115
A 06	03	075		03	076		3/13/2009	101	FM		101
A 06	03	076		03	077		3/13/2009	353	FM		353
A 06	03	077		03	082		3/19/2009	201	FM		201
A 06	03	077		03	132	C	3/13/2009	148	FM		148
A 06	03	078		03	079		3/19/2009	205	FM		205
A 06	03	079		03	080		3/19/2009	245	FM		245
A 06	03	080		03	081		3/19/2009	356	FM		356
A 06	03	081		03	082		3/19/2009	237	FM		237
A 06	03	082		03	083		3/19/2009	351	FM		351
A 06	03	083		03	084		3/19/2009	322	FM		322
A 06	03	084		03	085		3/25/2009	288	FM		288
A 06	03	085		03	086		3/25/2009	158	FM		158
A 06	03	086		03	088		4/7/2009	237	FM		237
A 06	03	087		03	088		4/7/2009	5	FM		5
A 07	03	082		04	089		1/1/2009	400	JM	6	800
A 07	03	088		03	089		5/5/2009	250	FM		250

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
A 07	03	089		04	082		5/5/2009	387	FM		387
A 07	03	089		03	091		5/5/2009	25	FM		25
A 07	03	090		03	091		5/5/2009	260	FM		260
A 07	03	091		03	103		5/5/2009	274	FM		274
A 07	03	092		03	103		5/5/2009	213	FM		213
A 07	03	092		03	093	C	3/26/2009	190	FM		190
A 07	03	092		03	102		3/26/2009	105	FM		105
A 07	03	094	C	03	097		2/1/2009	170	JM	6	340
A 07	03	094	C	03	097		3/24/2009	160	FM		160
A 07	03	095	C	03	096		3/24/2009	349	FM		349
A 07	03	096		03	097		3/24/2009	313	FM		313
A 07	03	097		03	098		3/24/2009	323	FM		323
A 07	03	098		03	133	D	3/24/2009	275	FM		275
A 07	03	098		03	100		3/26/2009	240	FM		240
A 07	03	099		03	100		3/26/2009	190	FM		190
A 07	03	099		03	137	C	3/26/2009	75	FM		75
A 07	03	100		03	101		3/26/2009	350	FM		350
A 07	03	101		03	129		3/26/2009	350	FM		350
A 07	03	101		03	102		3/26/2009	102	FM		102
A 07	03	103		04	068		5/5/2009	235	FM		235
A 07	03	103		03	169		5/5/2009	136	FM		136
A 07	03	104		03	105		5/5/2009	325	FM		325
A 07	03	104		03	170		5/5/2009	86	FM		86
A 07	03	169		03	170		5/5/2009	78	FM		78
A 07	04	066		04	067		5/5/2009	288	FM		288
A 07	04	067		04	068		5/5/2009	287	FM		287
A 07	04	068		04	144	C	5/5/2009	185	FM		185
A 08	03	001		03	003	C	3/16/2009	284	FM		284
A 08	03	002	C	03	003		3/16/2009	242	FM		242
A 08	03	002	C	03	003		10/1/2008	225	JM	12	225
A 08	03	003		03	004		3/16/2009	271	FM		271
A 08	03	003		03	004		10/1/2008	270	JM	12	270
A 08	03	004		03	006		3/17/2009	181	FM		181
A 08	03	005		03	006		3/17/2009	192	FM		192
A 08	03	006		03	008		3/17/2009	180	FM		180
A 08	03	007		03	008		10/1/2008	280	JM	12	280
A 08	03	007		03	008		3/17/2009	272	FM		272
A 08	03	008		03	009		10/1/2008	280	JM	12	280
A 08	03	008		03	009		3/17/2009	264	FM		264
A 08	03	009		03	019		3/18/2009	300	FM		300
A 08	03	009		03	019		4/1/2009	237	JM	6	474
A 08	03	010	C	03	011		3/18/2009	127	FM		127
A 08	03	011		03	016		3/18/2009	215	FM		215
A 08	03	011		03	134	C	3/18/2009	81	FM		81
A 08	03	012		03	016		3/18/2009	296	FM		296
A 08	03	012		03	135	C	3/18/2009	140	FM		140
A 08	03	013	C	03	014		3/18/2009	122	FM		122
A 08	03	013	C	03	014		10/1/2008	115	JM	12	115
A 08	03	014		03	015		3/18/2009	215	FM		215
A 08	03	015		03	016		3/18/2009	127	FM		127

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
A 08	03	016		03	017		3/18/2009	170	FM		170
A 08	03	017		03	018		3/18/2009	139	FM		139
A 08	03	018		03	019		3/18/2009	350	FM		350
A 08	03	018		03	019		2/1/2009	350	JM	6	700
A 08	03	019		03	167		3/18/2009	180	FM		180
A 08	03	020		03	021		3/18/2009	344	FM		344
A 08	03	021		03	022		3/19/2009	345	FM		345
A 08	03	022		03	023		3/19/2009	290	FM		290
A 08	03	023		03	028		3/26/2009	285	FM		285
A 08	03	025		03	026		3/26/2009	296	FM		296
A 08	03	026		03	028		3/26/2009	182	FM		182
A 08	03	027		03	028		3/26/2009	202	FM		202
A 08	03	028		03	029		5/6/2009	281	FM		281
A 08	03	029		03	033		5/6/2009	200	FM		200
A 08	03	030		03	031		5/6/2009	247	FM		247
A 08	03	031		03	032		5/6/2009	212	FM		212
A 08	03	032		03	033		5/6/2009	212	FM		212
A 09	03	033		04	032		5/6/2009	250	FM		250
A 09	03	105	P	04	032	P	5/6/2009	395	FM	3	1580
A 09	04	032		04	033		5/6/2009	282	FM	3	1128
A 09	04	033		04	035		5/6/2009	285	FM	3	1140
A 09	04	035		04	036	M	5/6/2009	400	FM		400
A 09	04	036	M	04	037		5/6/2009	131	FM		131
A 10	04	037		04	053		5/4/2009	230	FM		230
A 10	04	038		04	039		4/13/2009	160	FM		160
A 10	04	039		04	040		4/13/2009	286	FM		286
A 10	04	040		04	042		4/13/2009	209	FM		209
A 10	04	041		04	042		4/13/2009	160	FM		160
A 10	04	042		04	043		4/20/2009	163	FM		163
A 10	04	043		04	051		4/20/2009	108	FM		108
A 10	04	044		04	045		4/20/2009	334	FM		334
A 10	04	044		04	125	C	4/20/2009	220	FM		220
A 10	04	045		04	048		4/20/2009	280	FM		280
A 10	04	045		04	126	C	4/20/2009	150	FM		150
A 10	04	046		04	047		4/20/2009	323	FM		323
A 10	04	046		04	152		4/15/2009	295	FM		295
A 10	04	046		04	127	C	4/15/2009	142	FM		142
A 10	04	047		04	048		4/20/2009	289	FM		289
A 10	04	047		04	145	C	4/20/2009	240	FM		240
A 10	04	048		04	049		4/20/2009	345	FM		345
A 10	04	049		04	050		4/20/2009	207	FM		207
A 10	04	050		04	051		4/20/2009	261	FM		261
A 10	04	051		04	052		5/4/2009	85	FM		85
A 10	04	052		04	053		5/4/2009	77	FM		77
A 10	04	053		04	059		5/4/2009	298	FM		298
A 10	04	054		04	055		4/9/2009	300	FM		300
A 10	04	054		04	129	C	4/9/2009	199	FM		199
A 10	04	055		04	056		4/9/2009	288	FM		288
A 10	04	055		04	148	C	4/9/2009	151	FM		151
A 10	04	056		04	057		4/9/2009	260	FM		260

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
A 10	04	056		04	141	C	5/1/2009	237	JM	12	237
A 10	04	056		04	141	C	4/9/2009	233	FM		233
A 10	04	057		04	058		4/13/2009	357	FM		357
A 10	04	058		04	059		5/4/2009	153	FM		153
A 10	04	059		04	065		5/4/2009	359	FM		359
A 10	04	060		04	130	C	5/1/2009	205	JM	12	205
A 10	04	060		04	130	C	4/9/2009	200	FM		200
A 10	04	060		04	061		4/9/2009	177	FM		177
A 10	04	061		04	063		4/9/2009	7	FM		7
A 10	04	062		04	063		4/9/2009	70	FM		70
A 10	04	063		04	064		4/9/2009	88	FM		88
A 10	04	064		04	065		5/4/2009	152	FM		152
A 10	04	065		04	157		5/7/2009	265	FM		265
A 10	04	152		04	153		4/15/2009	268	FM		268
A 10	04	153		04	154		4/15/2009	64	FM		64
B 01	04	094	D	04	096		5/11/2009	276	FM		276
B 01	04	094		04	149	C	5/11/2009	190	FM		190
B 01	04	095		04	136	C	4/1/2009	212	JM	12	212
B 01	04	095		04	136	C	5/11/2009	202	FM		202
B 01	04	095		04	096		5/11/2009	124	FM		124
B 01	04	096		04	097		4/1/2008	253	JM	12	253
B 01	04	096		04	097		5/11/2009	200	FM		200
B 01	04	097		04	103		4/1/2008	317	JM	12	317
B 01	04	097		04	103		5/13/2009	300	FM		300
B 01	04	098	C	04	099		5/11/2009	269	FM		269
B 01	04	099		08	059		5/11/2009	150	FM		150
B 01	04	099		04	101		5/11/2009	82	FM		82
B 01	04	100		04	102		5/13/2009	410	FM		410
B 01	04	100		04	101		5/11/2009	150	FM		150
B 01	04	102		04	103		5/13/2009	200	FM		200
B 01	04	103		04	117		5/13/2009	350	FM		350
B 01	04	104		04	138	C	5/11/2009	260	FM		260
B 01	04	104		04	105		5/11/2009	165	FM		165
B 01	04	104		04	142	C	5/11/2009	130	FM		130
B 01	04	105		04	137	C	10/1/2007	155	JM	6	310
B 01	04	105	C	04	137		4/1/2009	147	JM	6	294
B 01	04	105		04	137	C	5/11/2009	130	FM		130
B 01	04	105		04	107		5/11/2009	50	FM		50
B 01	04	106	C	04	107		5/11/2009	221	FM		221
B 01	04	106		04	158	C	5/4/2009	15	FM		15
B 01	04	107		04	108		4/1/2009	283	JM	12	283
B 01	04	107		04	108		5/11/2009	280	FM		280
B 01	04	108		04	109		5/11/2009	100	FM		100
B 01	04	108		04	109		4/1/2009	41	JM	12	41
B 01	04	109		04	117		4/1/2009	289	JM	12	289
B 01	04	109		04	117		5/13/2009	275	FM		275
B 01	04	110		04	140		3/1/2009	338	JM	12	338
B 01	04	110		04	115		5/11/2009	330	FM		330
B 01	04	110		04	140		5/8/2009	325	FM		325
B 01	04	110		04	115		4/1/2009	312	JM	6	624

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
B 01	04	111		04	134		3/1/2009	300	JM	12	300
B 01	04	111		04	112		5/8/2009	287	FM		287
B 01	04	111		04	134		5/8/2009	286	FM		286
B 01	04	111		04	135	C	5/8/2009	81	FM		81
B 01	04	112		04	113		5/8/2009	350	FM		350
B 01	04	112		04	113		4/1/2009	350	JM	6	700
B 01	04	113		04	114		4/1/2009	232	JM	6	464
B 01	04	113		04	114		5/8/2009	218	FM		218
B 01	04	114		04	115		3/1/2009	290	JM	12	290
B 01	04	114		04	115		5/11/2009	277	FM		277
B 01	04	115		04	116		3/1/2009	132	JM	12	132
B 01	04	115		04	116		5/13/2009	116	FM		116
B 01	04	116		04	117		5/13/2009	150	FM		150
B 01	04	117		04	120		5/13/2009	300	FM		300
B 01	04	118		04	119		5/12/2009	345	FM		345
B 01	04	119		04	120		7/10/2008	300	FM		300
B 01	04	120		04	121		7/10/2008	150	FM		150
B 01	04	121		04	122		7/10/2008	200	FM		200
B 01	08	053		08	212		5/8/2009	173	FM		173
B 01	08	057		08	058		5/8/2009	183	FM		183
B 01	08	057		08	209	C	5/8/2009	151	FM		151
B 01	08	058		08	059		5/11/2009	211	FM		211
B 01	08	058		08	212		5/8/2009	175	FM		175
B 02	04	083		04	084		5/12/2009	166	FM		166
B 02	04	084		04	085		5/12/2009	295	FM		295
B 02	04	085		04	086		5/12/2009	287	FM		287
B 02	04	086		04	087		5/12/2009	346	FM		346
B 02	04	087		04	089		5/12/2009	144	FM		144
B 02	04	088		04	089		10/1/2008	265	JM	12	265
B 02	04	088		04	089		5/12/2009	235	FM		235
B 02	04	088		04	132	C	5/12/2009	112	FM		112
B 02	04	088		04	131	C	5/12/2009	39	FM		39
B 02	04	089		04	093		4/1/2009	265	JM	6	530
B 02	04	089		04	093		5/12/2009	246	FM		246
B 02	04	089		04	133	C	5/12/2009	120	FM		120
B 02	04	090		04	091		5/12/2009	291	FM		291
B 02	04	091		04	092		5/12/2009	350	FM		350
B 02	04	091		04	128	C	5/12/2009	174	FM		174
B 02	04	092		04	093		5/12/2009	255	FM		255
B 02	04	093		04	150		7/10/2008	74	FM		74
B 02	04	122		04	123		7/10/2008	110	FM		110
B 02	04	123		04	150		7/10/2008	82	FM		82
C 01	04	007		04	025		7/8/2008	150	FM		150
C 01	04	008		04	009		7/8/2008	277	FM		277
C 01	04	009		04	010		7/8/2008	217	FM		217
C 01	04	010		04	025		7/8/2008	203	FM		203
C 01	04	011		04	012		7/8/2008	185	FM		185
C 01	04	012		04	013		7/8/2008	157	FM		157
C 01	04	013		04	014		7/8/2008	65	FM		65
C 01	04	014		04	017		7/8/2008	272	FM		272

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
C 01	04	014		04	151		7/8/2008	124	FM		124
C 01	04	015		04	016		7/8/2008	162	FM		162
C 01	04	016		04	017		7/8/2008	150	FM		150
C 01	04	017		04	020		7/8/2008	138	FM		138
C 01	04	018		04	019		7/8/2008	236	FM		236
C 01	04	019		04	020		7/8/2008	130	FM		130
C 01	04	020		04	021		7/8/2008	86	FM		86
C 01	04	021		04	022		7/8/2008	221	FM		221
C 01	04	022		04	023		7/8/2008	289	FM		289
C 01	04	023		04	024		7/8/2008	129	FM		129
C 01	04	025		04	031		7/8/2008	262	FM		262
C 01	04	026		04	027		7/8/2008	302	FM		302
C 01	04	027		04	028		7/8/2008	297	FM		297
C 01	04	028		04	029		7/8/2008	278	FM		278
C 01	04	029		04	030		7/8/2008	102	FM		102
C 01	04	030		04	031		7/8/2008	211	FM		211
Z 01	02	011		02	012		11/24/2008	200	FM		200
Z 01	02	012		02	015		11/25/2008	236	FM		236
Z 01	02	013		02	014		11/20/2008	300	FM		300
Z 01	02	013		03	127		11/20/2008	200	FM		200
Z 01	02	014		02	015		11/25/2008	318	FM		318
Z 01	02	015		02	016		11/25/2008	306	FM		306
Z 01	02	016		02	017		11/25/2008	293	FM		293
Z 01	02	017		02	018		11/25/2008	150	FM		150
Z 01	02	018		02	036		11/25/2008	200	FM		200
Z 01	02	019		02	020		11/19/2008	124	FM		124
Z 01	02	020		02	021		11/19/2008	200	FM		200
Z 01	02	021		02	022		11/19/2008	200	FM		200
Z 01	02	022		02	023		11/19/2008	61	FM		61
Z 01	02	023		02	024		11/19/2008	127	FM		127
Z 01	02	024		02	026		11/20/2008	200	FM		200
Z 01	02	025		02	026		11/20/2008	175	FM		175
Z 01	02	026		02	027		11/20/2008	200	FM		200
Z 01	02	026		02	085	D	11/20/2008	100	FM		100
Z 01	02	027		02	029		11/20/2008	250	FM		250
Z 01	02	028		02	029		11/20/2008	220	FM		220
Z 01	02	029		02	030		11/20/2008	250	FM		250
Z 01	02	030		02	031		11/20/2008	250	FM		250
Z 01	02	031		02	032		11/20/2008	150	FM		150
Z 01	02	031		02	087	C	11/20/2008	75	FM		75
Z 01	02	032		02	033		11/20/2008	125	FM		125
Z 01	02	033	P	02	034		11/20/2008	100	FM		100
Z 01	02	034		02	035		11/20/2008	115	FM		115
Z 01	02	035		02	036		11/25/2008	150	FM		150
Z 01	02	036		02	045		11/25/2008	100	FM		100
Z 01	02	037		02	038		11/20/2008	228	FM		228
Z 01	02	038		02	040		11/20/2008	243	FM		243
Z 01	02	039		02	040		11/20/2008	281	FM		281
Z 01	02	039		02	088	C	11/20/2008	96	FM		96
Z 01	02	040		02	041		11/20/2008	273	FM		273

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
Z 01	02	041		02	042		11/20/2008	318	FM		318
Z 01	02	042		02	043		11/20/2008	180	FM		180
Z 01	02	043		02	044		11/25/2008	400	FM		400
Z 01	02	044		02	045		11/25/2008	200	FM		200
Z 01	02	045		02	046		11/25/2008	175	FM		175
Z 01	02	046		02	047		11/25/2008	337	FM		337
Z 01	02	047		02	048		11/25/2008	300	FM		300
Z 01	02	048		02	068		11/25/2008	300	FM		300
Z 01	02	049		06	019		11/20/2008	300	FM		300
Z 01	02	049		02	050		11/20/2008	155	FM		155
Z 01	02	050		02	051		11/20/2008	200	FM		200
Z 01	02	051		02	053		11/24/2008	175	FM		175
Z 01	02	052		02	053		11/24/2008	65	FM		65
Z 01	02	053		02	054		11/24/2008	250	FM		250
Z 01	02	054		02	055		11/24/2008	219	FM		219
Z 01	02	055		02	058		11/24/2008	274	FM		274
Z 01	02	056		02	057		11/24/2008	200	FM		200
Z 01	02	057		02	058		11/24/2008	174	FM		174
Z 01	02	058		02	061		11/24/2008	267	FM		267
Z 01	02	059		02	060		11/24/2008	157	FM		157
Z 01	02	060		02	061		11/24/2008	200	FM		200
Z 01	02	061		02	062		11/24/2008	200	FM		200
Z 01	02	062		02	063		11/24/2008	325	FM		325
Z 01	02	063		02	065		11/24/2008	205	FM		205
Z 01	02	064		02	065		11/24/2008	112	FM		112
Z 01	02	065		02	066		11/24/2008	350	FM		350
Z 01	02	066		02	067		11/24/2008	100	FM		100
Z 01	02	067		02	068		11/25/2008	277	FM		277
Z 01	02	068		02	069		11/25/2008	344	FM		344
Z 01	03	125		03	126		11/20/2008	186	FM		186
Z 01	03	126		03	127		11/20/2008	265	FM		265
Z 01	03	139		03	159		11/18/2008	149	FM		149
Z 01	03	140		03	142		11/19/2008	345	FM		345
Z 01	03	140		03	141		11/18/2008	194	FM		194
Z 01	03	140		03	159		11/18/2008	156	FM		156
Z 01	03	142		03	160		11/19/2008	206	FM		206
Z 01	03	142		03	152		11/19/2008	161	FM		161
Z 01	03	142		03	143		11/19/2008	101	FM		101
Z 01	03	143		03	144		11/18/2008	107	FM		107
Z 01	03	144		03	145		11/18/2008	106	FM		106
Z 01	03	145		03	146		11/18/2008	108	FM		108
Z 01	03	146		03	147		11/18/2008	119	FM		119
Z 01	03	147		03	148		11/18/2008	104	FM		104
Z 01	03	148		03	149		11/18/2008	106	FM		106
Z 01	03	149		03	150		11/18/2008	108	FM		108
Z 01	03	150		03	151		11/18/2008	208	FM		208
Z 01	03	152		03	153		11/19/2008	174	FM		174
Z 01	03	152		03	155		11/19/2008	136	FM		136
Z 01	03	153		03	154	C	11/18/2008	123	FM		123
Z 01	03	155		03	156	C	11/19/2008	136	FM		136

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
Z 01	03	157		03	161		11/19/2008	135	FM		135
Z 01	03	157		03	160		11/19/2008	120	FM		120
Z 01	03	157		03	163		11/19/2008	105	FM		105
Z 01	03	157		03	158	D	11/19/2008	25	FM		25
Z 01	03	161		03	162	D	11/18/2008	75	FM		75
Z 01	03	162		03	164		11/18/2008	125	FM		125
Z 01	03	164		03	165		11/18/2008	325	FM		325
Z 01	03	165		03	166		11/18/2008	300	FM		300
Z 02	01	004		02	069		11/25/2008	330	FM		330
Z 02	01	004		01	005		11/25/2008	60	FM		60
Z 02	01	005		01	027		12/3/2008	300	FM		300
Z 02	01	005		02	010		11/25/2008	200	FM		200
Z 02	01	006		05	109		11/26/2008	363	FM		363
Z 02	01	006		01	008		11/26/2008	359	FM		359
Z 02	01	007		01	008		11/26/2008	105	FM		105
Z 02	01	008		01	009		11/26/2008	150	FM		150
Z 02	01	009		01	011		12/1/2008	200	FM		200
Z 02	01	010		05	103		12/1/2008	309	FM		309
Z 02	01	010		01	011		12/1/2008	211	FM		211
Z 02	01	011		01	012		12/1/2008	200	FM		200
Z 02	01	012		01	013		12/1/2008	350	FM		350
Z 02	01	013		01	017		12/1/2008	425	FM		425
Z 02	01	014		05	111		12/2/2008	350	FM		350
Z 02	01	014		01	015		12/2/2008	332	FM		332
Z 02	01	015		01	016		12/2/2008	355	FM		355
Z 02	01	016		01	017		12/2/2008	175	FM		175
Z 02	01	017	P	01	018	P	5/6/2009	175	FM	3	700
Z 02	01	018		01	019		12/2/2008	320	FM		320
Z 02	01	019		01	023		12/3/2008	355	FM		355
Z 02	01	020		02	084		12/3/2008	359	FM		359
Z 02	01	020		01	021		12/3/2008	353	FM		353
Z 02	01	021		01	022		12/3/2008	245	FM		245
Z 02	01	022		01	023		12/3/2008	300	FM		300
Z 02	01	023		02	083		12/3/2008	354	FM		354
Z 02	01	023		01	025		12/3/2008	298	FM		298
Z 02	01	024		02	078		12/2/2008	300	FM		300
Z 02	01	024		01	025		12/3/2008	221	FM		221
Z 02	01	025		01	026		12/3/2008	133	FM		133
Z 02	01	026		01	027		12/3/2008	150	FM		150
Z 02	01	027		01	028		12/3/2008	242	FM		242
Z 02	01	028		01	040		12/3/2008	300	FM		300
Z 02	02	010		02	089		11/25/2008	325	FM		325
Z 02	02	073		06	018		12/1/2008	314	FM		314
Z 02	02	073		02	074		12/1/2008	300	FM		300
Z 02	02	074		02	075		12/1/2008	300	FM		300
Z 02	02	075		02	076		12/1/2008	300	FM		300
Z 02	02	076		02	077		12/2/2008	300	FM		300
Z 02	02	077		02	078		12/2/2008	300	FM		300
Z 02	02	079		02	080		12/2/2008	225	FM		225
Z 02	02	080		02	081		12/2/2008	200	FM		200

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
Z 02	02	081		02	082		12/2/2008	350	FM		350
Z 02	02	082		02	083		12/2/2008	353	FM		353
Z 02	02	084		06	004		12/2/2008	350	FM		350
Z 02	02	089		02	090		11/21/2008	70	FM		70
Z 02	02	090		02	091		11/21/2008	600	FM		600
Z 02	02	091		02	092		11/21/2008	250	FM		250
Z 02	02	092		02	093		11/21/2008	83	FM		83
Z 02	02	093		02	094		11/21/2008	110	FM		110
Z 02	02	094		02	095		11/21/2008	360	FM		360
Z 02	05	099		05	100		11/26/2008	258	FM		258
Z 02	05	100		05	101		11/26/2008	305	FM		305
Z 02	05	101		05	102		11/26/2008	265	FM		265
Z 02	05	102		05	103		12/1/2008	294	FM		294
Z 02	05	104		05	106		11/26/2008	298	FM		298
Z 02	05	105		05	106		11/26/2008	130	FM		130
Z 02	05	106		05	107		11/26/2008	350	FM		350
Z 02	05	107		05	108		11/26/2008	350	FM		350
Z 02	05	108		05	109		11/26/2008	250	FM		250
Z 02	05	110		06	001		12/2/2008	330	FM		330
Z 02	05	110		05	111		12/2/2008	239	FM		239
Z 02	06	002		06	003		12/2/2008	300	FM		300
Z 02	06	003		06	004		12/2/2008	354	FM		354
Z 02	06	005		06	006		11/20/2008	350	FM		350
Z 02	06	006		06	152	C	11/20/2008	62	FM		62
Z 02	06	006		06	007		11/20/2008	45	FM		45
Z 02	06	007		06	148	C	11/20/2008	175	FM		175
Z 02	06	007		06	008		11/20/2008	141	FM		141
Z 02	06	008		06	009		12/1/2008	85	FM		85
Z 02	06	009		06	010		12/1/2008	275	FM		275
Z 02	06	010		06	011		12/1/2008	130	FM		130
Z 02	06	011		06	014		12/1/2008	247	FM		247
Z 02	06	012		06	013		12/1/2008	270	FM		270
Z 02	06	013		06	014		12/1/2008	301	FM		301
Z 02	06	014		06	017		12/1/2008	268	FM		268
Z 02	06	015		06	016		12/1/2008	343	FM		343
Z 02	06	016		06	017		12/1/2008	289	FM		289
Z 02	06	017		06	018		12/1/2008	295	FM		295
Z 03	01	029		01	030		12/4/2008	300	FM		300
Z 03	01	030		01	039		12/4/2008	204	FM		204
Z 03	01	031		01	032		12/3/2008	200	FM		200
Z 03	01	032		01	033		12/3/2008	353	FM		353
Z 03	01	033		01	120		12/3/2008	203	FM		203
Z 03	01	034		01	035		12/3/2008	348	FM		348
Z 03	01	034		01	120		12/3/2008	128	FM		128
Z 03	01	035		01	038		12/3/2008	342	FM		342
Z 03	01	036		01	037		12/3/2008	350	FM		350
Z 03	01	036		01	114	C	12/3/2008	176	FM		176
Z 03	01	037		01	038		12/3/2008	272	FM		272
Z 03	01	038		01	039		12/4/2008	320	FM		320
Z 03	01	039		01	040		12/4/2008	200	FM		200

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
Z 03	01	040		01	041		12/4/2008	375	FM		375
Z 03	01	041		01	042		12/8/2008	223	FM		223
Z 03	01	042		01	043		12/8/2008	267	FM		267
Z 03	01	043		01	044		12/8/2008	142	FM		142
Z 04	01	044		01	067		12/8/2008	50	FM		50
Z 04	01	045		01	046		12/8/2008	88	FM		88
Z 04	01	046		01	047		12/8/2008	88	FM		88
Z 04	01	047		01	048		12/8/2008	233	FM		233
Z 04	01	048		01	049		12/8/2008	232	FM		232
Z 04	01	049		01	058		12/8/2008	225	FM		225
Z 04	01	050		01	051		12/8/2008	68	FM		68
Z 04	01	051		01	052		12/8/2008	99	FM		99
Z 04	01	052		01	053		12/8/2008	120	FM		120
Z 04	01	053		01	054		12/8/2008	90	FM		90
Z 04	01	054		01	055		12/8/2008	102	FM		102
Z 04	01	055		01	056		12/8/2008	152	FM		152
Z 04	01	056		01	057		12/8/2008	136	FM		136
Z 04	01	057		01	058		12/8/2008	155	FM		155
Z 04	01	058		01	060		10/8/2008	179	FM		179
Z 04	01	059		01	060		12/8/2008	140	FM		140
Z 04	01	060		01	064		12/8/2008	226	FM		226
Z 04	01	061		01	062		12/8/2008	98	FM		98
Z 04	01	062		01	063		12/8/2008	220	FM		220
Z 04	01	063		01	064		12/8/2008	76	FM		76
Z 04	01	064		01	065		12/8/2008	100	FM		100
Z 04	01	065		01	066		12/8/2008	75	FM		75
Z 04	01	066		01	067		12/8/2008	85	FM		85
Z 04	01	067		01	068		12/9/2008	401	FM		401
Z 05	01	072		01	075		12/4/2008	115	FM		115
Z 05	01	073	C	01	117		12/4/2008	15	FM		15
Z 05	01	074		01	075		12/4/2008	150	FM		150
Z 05	01	074		01	117		12/4/2008	100	FM		100
Z 05	01	075		01	076		12/4/2008	102	FM		102
Z 05	01	076		01	077		12/4/2008	95	FM		95
Z 05	01	077		01	078		12/4/2008	182	FM		182
Z 05	01	078		01	079		12/4/2008	180	FM		180
Z 05	01	079		01	080		12/4/2008	212	FM		212
Z 05	01	080		01	081		12/4/2008	216	FM		216
Z 05	01	081		01	084		12/4/2008	216	FM		216
Z 05	01	082		01	083		12/4/2008	157	FM		157
Z 05	01	083		01	084		12/4/2008	200	FM		200
Z 05	01	084		01	085		12/5/2008	118	FM		118
Z 05	01	085		01	098		12/5/2008	224	FM		224
Z 05	01	086		01	087		12/4/2008	230	FM		230
Z 05	01	087		01	088		12/4/2008	297	FM		297
Z 05	01	088		01	089		12/4/2008	200	FM		200
Z 05	01	089		01	091		12/4/2008	100	FM		100
Z 05	01	090		01	091		12/4/2008	91	FM		91
Z 05	01	091		01	092		12/4/2008	256	FM		256
Z 05	01	092		01	093		12/4/2008	304	FM		304

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY2 Footage
Z 05	01	093		01	094		12/4/2008	232	FM		232
Z 05	01	094		01	095		12/4/2008	190	FM		190
Z 05	01	095		01	096		12/4/2008	152	FM		152
Z 05	01	096		01	097		12/5/2008	150	FM		150
Z 05	01	097		01	098		12/5/2008	28	FM		28
Z 05	01	098		01	099		12/5/2008	198	FM		198
Z 05	01	099		01	100		12/5/2008	87	FM		87
Z 05	01	117		01	118	C	12/4/2008	140	FM		140
Z 06	01	068		01	069		12/9/2008	50	FM		50
Z 06	01	069		01	070		12/9/2008	360	FM		360
Z 06	01	070		01	071		12/9/2008	325	FM		325
Z 06	01	071		01	102		12/9/2008	325	FM		325
Z 06	01	100		01	101		12/5/2008	335	FM		335
Z 06	01	101		01	102		12/9/2008	272	FM		272
Z 06	01	102		01	115		12/9/2008	52	FM		52
Z 06	01	103		01	104		12/9/2008	374	FM		374
Z 06	01	104		01	105		12/9/2008	300	FM		300
Z 06	01	106		01	107		12/30/2008	355	FM		355
Z 06	01	107		01	108		12/9/2008	344	FM		344
									Total Miles:		207.2

City of El Cajon
AS A COPERMITTEE OF THE
SAN DIEGO RIVER WATERSHED

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT (SECTION 7.0) 2008 – 2009

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Appendix A 7. 2009 Dry Weather Field Screening and Analytical Monitoring Program

Appendix B 1. Reports of Illicit Discharges/Complaints

CERTIFICATION

"I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Kathi Henry — 12.2.09

Signature — Date

Kathi Henry, City Manager — (619) 441-1718

Printed Name, Title — Phone Number

SECTION 7.0 ILLICIT DISCHARGE, DETECTION, AND ELIMINATION COMPONENT

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SECTION 7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 INTRODUCTION

The detection of illicit connections and illegal discharges (IC/IDs) is accomplished by using the following three mechanisms:

1. Conducting dry weather field screening and analytical monitoring mechanism.
2. Operating a public complaint hotline and web page.
3. Inspecting local businesses, municipal facilities, and the Municipal Separate Storm Sewer System (MS4).

When an IC/ID is detected or reported, the City investigates, inspects and appropriately follow-ups in order to identify the source or sources of the discharge. Once identified, voluntary compliance and escalating enforcement actions are implemented to immediately eliminate the IC/ID.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

The City provides information to the community on how to report illicit discharges and connections by including articles in sewer bills, semi-annual newsletters, bulletin boards and kiosks around City facilities, the City's Storm Water Protection Program's website, and through literature distributed during inspections and complaint follow up investigations. Citizens at the City are informed to notify sewer spills from private laterals or septic systems, to El Cajon Department of Public Works during business hours or the Police Department Communications Center 24-hour number. The Public Works Department or the Police Department 24-Hour Communications Center immediately informs the Public Works Maintenance Personnel who have the capability to respond 24-hours a day 7 days a week. The Public Works Maintenance Department is trained and has the tools and equipment to respond, contain and clean up sewage spills in accordance with the permit.

Beginning in Permit Year 2007-2008 (PY1) the City of El Cajon began to implement a Citywide protocol to make it easier for citizens to report any concerns via the City's main website. Citizens can report to the City Manager's Office from a list of concerns at the

site that include storm water violations and illegal discharges. All complaints are automatically routed to proper City departments. Storm water complaints are routed to staff from the Storm Water Section of Public Works and follow ups investigations are promptly conducted.

Figure 1 lists the number of complaints the City received and conducted follow up investigations. It is important to point out that these complaints were received through the City's Storm Water Hotline, City's Storm Water Website, or from the City Manager's Office, or observations of other City Departments.

Figure 1 Complaint and Referrals Addressed and Investigated

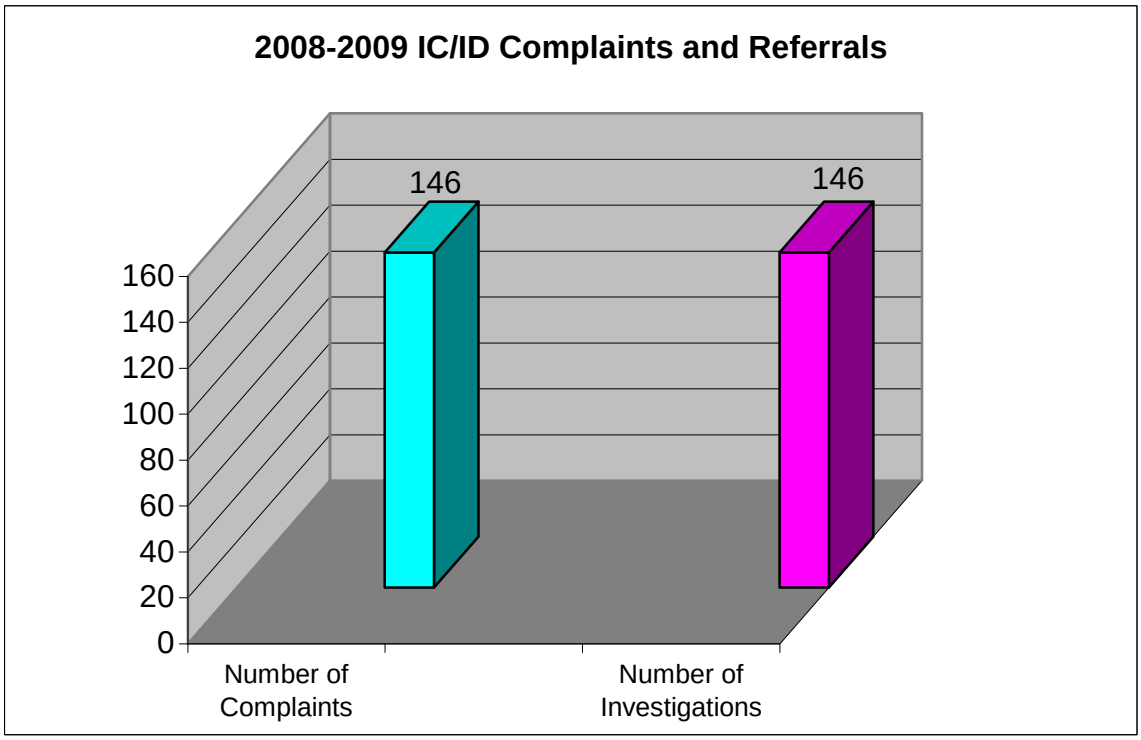

Figure 2 provides a brief summary of the type of illicit discharge detection and elimination complaints received for 2008-09. The number of complaints received during Permit Year 2008-09 (PY2) dropped by five from last year. The historical number of complaints received over the last six years is depicted in Figure 3 and it shows a general increasing trend on the number of storm water complaints received over that time frame. A possible reason for the increased number of complaints may be attributed to a better-informed citizenry.

Figure 2 Summary of IC/ID Calls and Complaints for 2007-2008

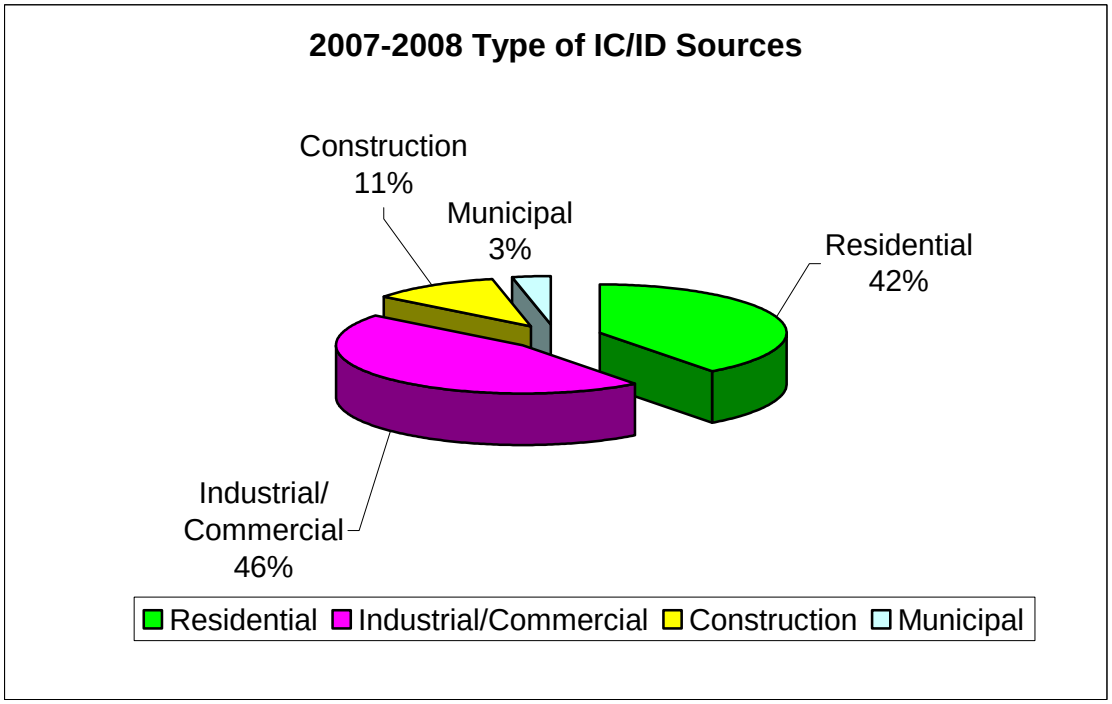

Figure 3 Historical IC/ID Complaints

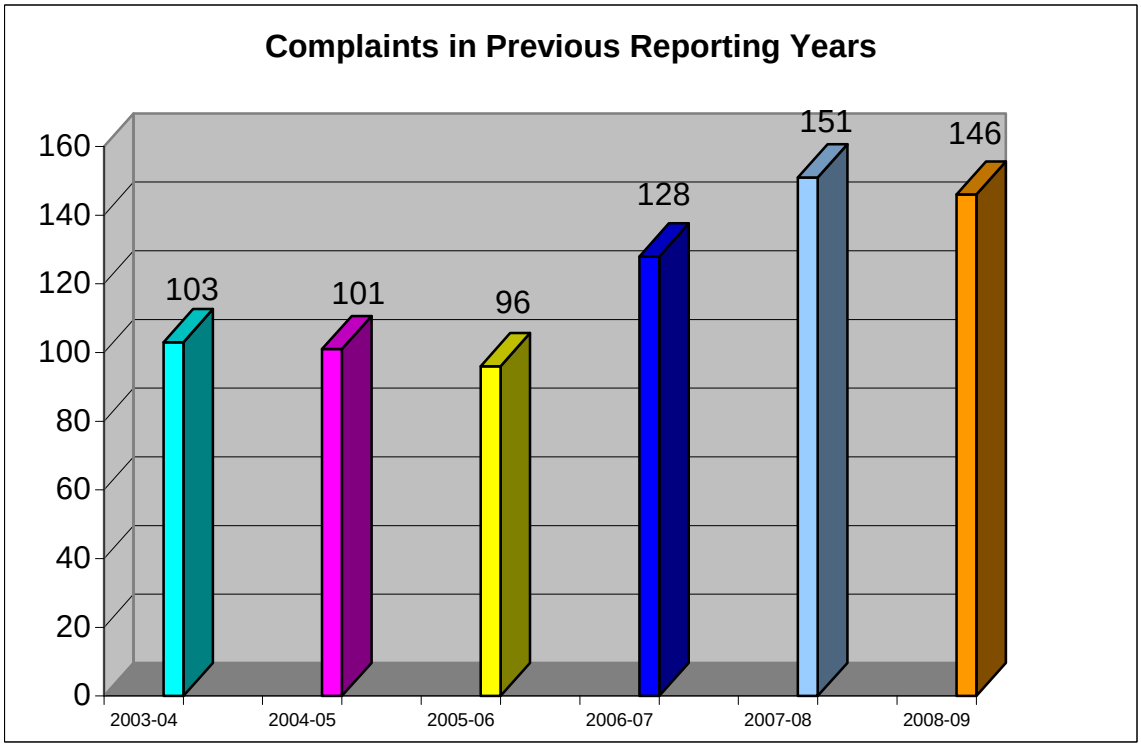

7.3 SPILL REPORTING, RESPONSE AND PREVENTION

Complaints are investigated usually within the day the information is received. Complaint listing is provided in Appendix B.1. The Complainant is contacted to discuss the details of their observation. Storm water staff schedules a meeting with the complainant if necessary. Figure 1, above, shows the number of complaints received, investigated, found as valid, and eliminated. Validity depends on whether the discharge is occurring at the time of the investigation; thus the reason for investigating as soon as the complaint is received. If the preponderance of evidence can link the discharger with the discharge, a verbal or written warning was issued. A monetary administrative citation program has been in existence since May 2003, and is part of the City's enforcement actions. See Appendix A.1 of the JURMP Annual Report 2008-09 for Citation Program details.

Elimination of valid discharges means a discharger was identified and the discharger had control over the discharge. In a number of cases, the discharge was valid (observed evidence), but a discharger was not found. The discharge was cleaned to the Maximum Extent Practicable and the location noted for further surveillance.

The City maintains full-time staff responsible for performing continuous maintenance activities on the sanitary sewer system. The City maintained approximately 211.6 miles of main sanitary sewer line. To prevent sewage spills and limit infiltration from sanitary sewer lines, the City has an aggressive program that:

- Televise designated areas for root infiltrations, protruding laterals, cracked pipes and other structural problems.
- Every 3 months investigates 59 problem manholes with demonstrated root intrusion
- Every 3 months investigates designated flat flows in designated segments for roots, scale, food/oil/grease accumulation or other possible reasons for stoppages
- Every 3 months cleans 14 sewer siphons and numerous other "trouble spot" areas

The City's goal is to have 5 or less reportable sewer main overflows per year, where a spill is any amount of sewage in the surface of the public right of way. From PY2002-03 through 2007-08 the City has met that goal. The City had 1 overflows or spills from sewer mains and recovered 5 gallons of sewage during the spills in PY2008-09. As indicated in the new municipal permit, in year PY2008-09, the City also tracked sewage overflows from private laterals to indicate additional problem areas. The City responded to 9 reported private sewer spills and recovered 166 gallons of sewage before entering the storm drain system.

Significant spills are contained with temporary berms and by protecting storm drain inlet openings. Spills are cleaned-up using absorbent materials and properly disposed. The City implements remedial actions to cleanup debris of sewage origin and to sanitize the affected areas. Vacuum (Vactor) trucks recover all significant spills originating from sanitary sewer overflow and wash water for proper disposal.

Significant spills of hazardous materials are contained from draining into the MS4 and cleaned by trained first responders and haz-mat teams. The El Cajon Fire Department responded to 7 incidents that involved either a hazardous material or a suspected hazardous material situation, none of the incidents resulted in discharges into the MS4.

7.4 URBAN RUNOFF MONITORING

7.4.1 Dry Weather Analytical Monitoring Investigation

The City has conducted a dry weather-monitoring program since 1993 and has increased the level of effort to determine the presence and types of pollution in the storm drain system. The Dry Weather program is an indication of urban runoff pollution, which is typically composed of irrigation runoff and other permitted non-storm water discharges. Dry weather monitoring is meant to identify areas where illegal discharges of consistent pollution (fertilizer runoff or sewer leaks) may be occurring or a single event (e.g. fecal coliform) exists. The Dry Weather program results are valuable in eliminating illegal discharges and illicit connections. Analyses were continued for dissolved oxygen, total dissolved solids and total organic carbon to assist with assessing pollutant levels that may impact 303(d) listings of Forrester Creek and the San Diego River.

Since 2002 the City has conducted a dry weather-monitoring program that consists of field screening observations, field screening analytical monitoring, laboratory analytical monitoring. For PY1, 34 sites were visited, sampled for field parameters, and compared with previous years for any trends. Additional sites were added or changed depending on available flows, site conditions, and proximity to other sampling stations.

The picture below shows a typical sampling location in an open channel. Laboratory analytical samples were collected at 10 sites (over 25% of the total collected) and sent to an offsite certified laboratory for further analysis. The following is a summary of the dry weather program results. The Dry Weather Field Screening and Analytical Monitoring Program Report is attached as Appendix A.7. Field Data sheets have been included where qualitative observations were made during each site visit.

Site 1	

The following is a summary of the dry weather monitoring activities.

- 31 out of 34 sites had ponded or measurable flowing water with flow rates varying from less than one to 109 gallons per minute,
- pH measurement of 9.2 was the highest at Site 1 and 7,
- Conductivity of 12.24 mS/cm at Site 8,
- Ammonia was not detected above the action level of 1.0 mg/L at any site,
- Maximum nitrate concentrations of 14.88 mg/L at Site 26 (follow-up at 1.92 mg/L),
- No detections of reactive phosphate at or above the action level,
- No detection of surfactant concentrations above action levels,
- Coliform levels exceeded the action level at two sites - Investigated,
- Fecal coliform exceed action levels at one site – follow up at the site was below action levels,
- Enterococcus did not exceed action levels at any of the sampled sites – Investigated, and

The City of El Cajon updated its Jurisdictional Urban Runoff Management Program (JURMP) in 2008. Based on years of field experience, the City has selected primary dry weather monitoring stations that provide adequate coverage of the entire MS4 system. Some modifications have been made since the last JURMP was developed in 2002. Site 13, which was usually dry, was replaced with Site 13A, which drains both the area upstream of Site 13 and an additional area that had not been previously monitored. Sites 24 and 41 were converted from alternate sites to primary sites. The City also added a trash assessment component to the dry weather-monitoring program as required in the R9-2007-0001 Municipal Permit. Results can be found in Section 5 of the 2009 City of

El Cajon Dry Weather Field Screening and Analytical Monitoring Program included in Appendix A.7.

7.5 INVESTIGATION/INSPECTION FOLLOW-UP AND ENFORCEMENT

7.5.1 Follow-Up Investigations From Dry Weather Monitoring Program

Field screening results were immediately compared to numeric action levels using best professional judgment. If a potential source was indicated, an investigation was initiated to determine the origination. Numeric exceedances of action levels that were not perceived as an immediate threat to water quality were re-sampled within 24 hours to confirm a continuing discharge. Field and laboratory analytical results were compared to numeric action levels and California Toxics Rule using Best Professional Judgment. Trash, debris, and algae were observed at a majority of the open channel sites.

Follow up investigations are divided into two categories. The first type is a confirmation visit to retest the constituent that had been measured above its respective action level. For field test exceedances, the confirmation visit occurs within one business day. For exceedances of laboratory constituent action levels, the confirmation visit is conducted within two business days of receiving the results. If the constituent in question remains above the action limit during the confirmation visit an upstream investigation will occur. The upstream investigation consists of "IC/ID follow-up" visits which intend to identify any illicit connections or illegal discharges into the storm water conveyance system. Please refer to Appendix A.7 for a more detailed explanation of the dry weather monitoring program follow-up investigations.

Based on the monitoring results follow up investigations were conducted at the following sites:

- pH levels were found to be high at Sites 1 and 7. High pH readings are often the result of photosynthesis and increased temperature, which both lower carbon dioxide levels in the water. The effects of temperature and algal photosynthesis often lead to lower pH values in the morning and higher values later in the day. This situation is consistent with the conditions at these two sites.

- An upstream investigation was conducted at Site 8 for TDS. The investigation confirmed that the exceedance was contributed to a transient flow, likely related to construction activities.

- Nitrate detected at Sites 22, 26, 30, and 37 were investigated and the following results or probable sources were concluded:
    - Site 22 – Possibly groundwater infiltration into the underground pipe conveyance between the end of the earthen channel and sampling location.
    - Site 26 – It is likely that the initial exceedance was due to a transient flow and effects of evapotranspiration in the ponded water.

- Sites 30 and 37 – Groundwater infiltrates into the corrugated steel pipe upstream of Site 37 from sections in the pipe that are damaged or degraded, Site 30 is located downstream of Site 37. The City conducted further investigation in this area in July 2008. The investigation included the drilling of hydro-punch borings to collect ground water samples. The groundwater samples confirmed high levels of nitrate-nitrogen, with concentrations at and above 16.7 mg/L. Groundwater elevations are high enough to potentially infiltrate into the corroded corrugated metal pipe.

- Total Coliform detected at Site 41 was investigated to locate potential sources. Results from Colilert and Enterolert tests are typically available within 24 hours. Quicker turnaround time allows for additional upstream investigations as needed. Trash and organic debris decomposition in the upstream residential area and channel to the southern channel, combined with human inhabitation are the probable sources of the total coliform bacteria.

As part of the follow-up actions and after the 2008 Dry Weather Field Screening and Analytical Monitoring Report was completed, the City developed educational materials that will be provided to all city residents via the City's newsletter. The educational materials provide information regarding the implementation of pet waste disposal best management practices.

The City is also conducting the following actions as recommended in the dry weather monitoring report:

- Provide additional educational materials regarding pet waste disposal and implementation of BMPs.

- Removal of trash, debris, and some organic material from several open channels. It is believed that accumulation of these constituents contributes to bacteria exceedances.

- Removal of concrete or ceramic dust to possibly eliminate the total dissolved solids exceedance.

7.5.2 Complaint Investigations

The City requires responsible party(ies) to take actions necessary and appropriate to disconnect, block, stop or divert drainage facilities and pipe connections that are determined to discharge pollutants to the municipal storm drain system. The City also requires responsible party(ies) to implement procedure to discontinue discharges, which are found to carry pollutant materials to the storm drain system. Procedures must consider the following actions for implementation:

- Disconnect all drainage pipes found to discharge illegal pollutants to the system.

- Plug sinks and drains, which are discharging illicit materials to the storm drain system.
- Divert illegal discharge to appropriate handling facility either sanitary sewer or on-site treatment methods. Contain and properly manage hazardous waste materials including proper storage and disposal methods.
- Eliminate source of discharge
- Remove pollutant materials from the site.
- Keep pollutant materials from coming in contact with discharge.
- Contain potential illegal discharges on site for treatment or proper disposal.

Illicit connections and illegal discharges which are not removed, eliminated or otherwise continue to discharge to the municipal storm drain system receive appropriate enforcement actions by the City.

As specified in the City Ordinance, the City is able to use various warnings and actions to correct facility or residential activities. For PY2008-09, as in previous years, the City mainly used coordination and partnerships to implement and enforce the requirements of the JURMP.

If enforcement was required, a written warning followed verbal warnings. The written warning provides a description of deficiencies that need to be corrected before a specified date to prevent subsequent escalating enforcement actions. Escalating violations result in monetary citations, three storm water staff are California Peace Officers able to issue Administrative Citations. City Public Works Maintenance personnel also assist Storm Water personnel and respond to discharges to stop, recover and clean pollutants when private property entities do not respond to the discharge in a timely manner. Violators that receive monetary Administrative Citations are also responsible to pay fees that may accrue from discharges to the storm drain system that require the intervention of City crews. Enforcement Criteria are provided in Appendix A.1.

The number of complaints the City received, conducted follow up investigations and eliminated are listed in Figure 4. As indicated previously, a quick response is the key to determining validity and eliminating the discharge or connection. The validity of the complaint depends on whether the discharge is occurring at the time of the investigation; thus the reason for investigating as soon as the complaint is received, 113 complaints were found to be valid. If the preponderance of evidence can link the discharger with the discharge, a warning was issued. In 23 cases, the complaint was valid (observed evidence of discharge), but a discharger was not found. In these cases the discharge or residue was cleaned to the Maximum Extent Practicable and the location noted for further surveillance. The identification of IC/IDs means that a discharger was identified and the discharger had control over the release to eliminate the discharge, 90 IC/IDs were identified and eliminated.

All valid storm water complaints were considered violations and follow up investigations were conducted. Of the 146 complaints and follow up investigation 95 enforcement actions were taken as follows:

- Verbal Warnings 72
- Written Warnings 6
- Administrative Monetary Citations 17

Table entitled "Reports of Illicit Discharges/Complaints" in Appendix B.1 provides detailed information on the type of complaints and follow up actions that the City took to resolve the discharges.

Figure 4 IC/ID Complaints Received and Resolved

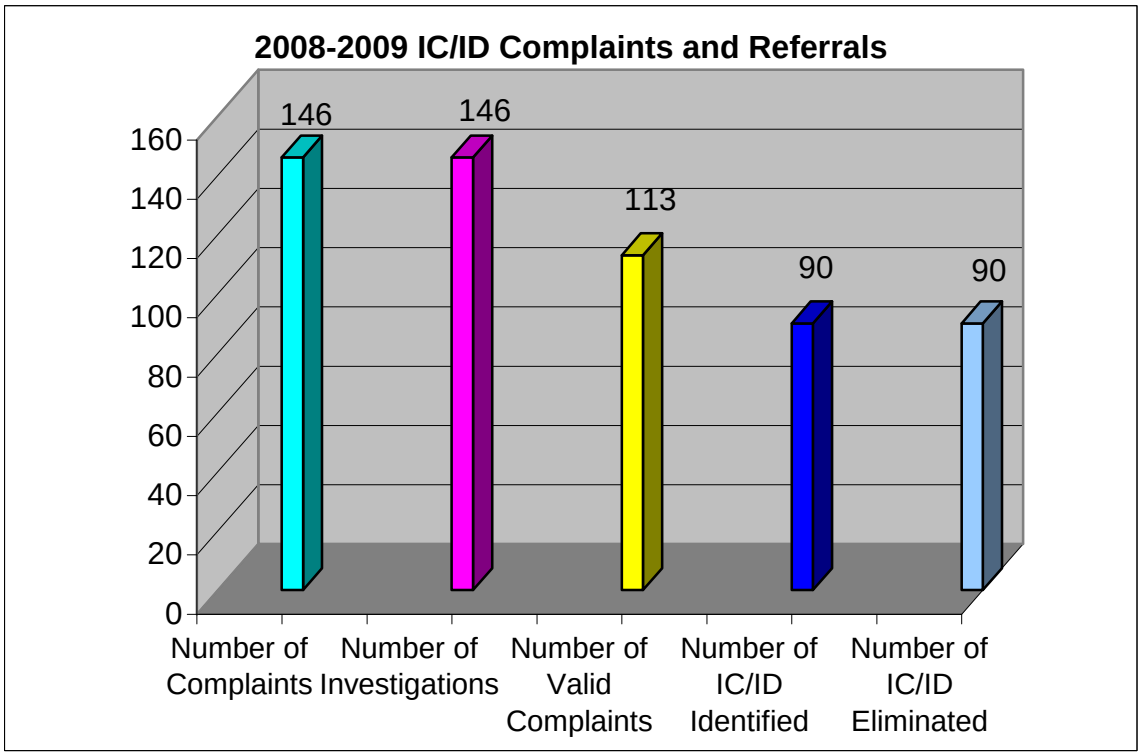

7.6 IMPROVEMENTS AND REGULATORY COMMENTS

As of the writing of this report no comments have been received for Annual Report PY2007-08.

Appendix A.1

STORM WATER ADMINISTRATIVE CITATION PROGRAM CRITERIA

1. Issue a Warning (followed by a letter, when possible)
   a. Whenever a discharge of pollutants is imminent or the potential exists, but the discharge has not yet entered the storm drain conveyance system (street, gutter, catch basin, etc.)
   b. Whenever a BMP is not effective for the pollutant or discharge and other BMP alternatives are available.
   c. Whenever a discharge origin cannot be determined through factual, investigative, or empirical evidence. Provide a cleanup schedule to be used as future enforcement.
   d. Small residential projects of less than 500 square feet of disturbed soil.
   e. An approved erosion and control plan has been issued and BMPs are partially implemented.
   f. Whenever activities are conducted in the right-of-way and no BMPs are implemented.
   g. Whenever a discharge of fully recoverable pollutants are discharged into the City's storm drain system (street and gutter only).

2. Issue a Citation
   a. Whenever there is a sewage overflow. (e.g. blockage; clean-out cap was removed to allow sewage to discharge into the street and storm drain).
   b. Whenever there is a discharge of unrecoverable pollutants into the storm drain conveyance system (street, gutter, catch basin, etc.)
   c. A Warning was previously issued (verbal or written).
   d. Any direct discharge into Forester Creek specifically any material which contains a 303(d) listed pollutant adopted by the State of California.(pH, TDS, and fecal coliform).
   e. An approved erosion and control plan has been issued and no BMPs are implemented.
   f. An egregious act of discharge (e.g. illegal dumping)

3. Issue a Penal Code Violation (PC374.3, 374.4, 374.7)
   a. When a First Citation was previously issued and this is a repeat violation.
   b. When the discharge is executed in the presence of any City Staff or after being told to cease operations. (waste, sewage, and litter discharges)
   c. Any direct discharge into Forester Creek, specifically material containing pollutants for which a 303(d) listing has been adopted by the State of California.(pH, TDS, and fecal coliform).

4. Issue a Stop Work Order
   a. For construction sites that received a warning and a first violation for discharging pollutants due to ineffective or proposed, but not yet implemented BMPs.
   b. A discharge of pollutants into the storm drain system, in addition to a citation, that requires immediate corrective action or mitigation.

5. Refer to Regional Board
   a. Repeated violations by a private citizen, property owner, or business for discharges to the storm drain system.
   b. A refusal to mitigate, remediate, or clean a spill or discharge of pollutants that will enter or have entered City MS4.

Appendix A.7

City of El Cajon
Dry Weather Field Screening and Analytical Monitoring Program
2009

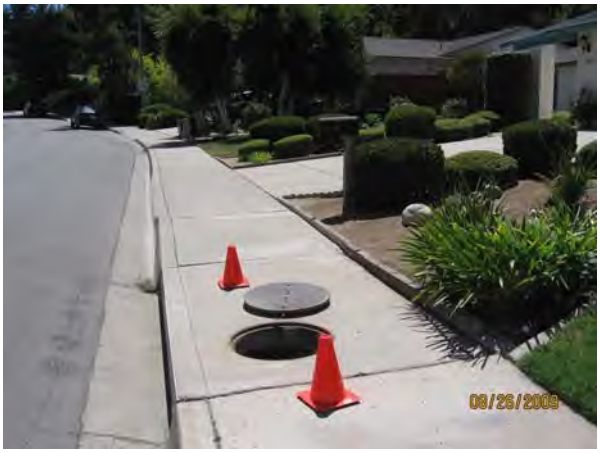

Submitted to:

City of El Cajon
Department of Public Works
200 Civic Center Way
El Cajon, CA 92020-3916

Prepared by:

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D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

November 10, 2009
Project No. 200928W-1

Jaime Campos, P.E.
Storm Water Program Manager
City of El Cajon
Department of Public Works
200 Civic Center Way
El Cajon, CA 92020-3916

Re: 2009 Dry Weather Field Screening and Analytical Monitoring Program City of El Cajon, California

Dear Mr. Campos:

Enclosed please find our final report for the City of El Cajon 2009 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of El Cajon during the 2009 dry weather season. The contents include field screening results, trash assessment data, analytical laboratory test results, analyses of the collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. It has been our pleasure working with the City of El Cajon on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

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1.0 INTRODUCTION

1.1 Program Overview

The purpose of the Dry Weather Field Screening and Analytical Monitoring Program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the storm water conveyance system, minimizing the negative impact of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following components:

- Field screening observations
- Field screening and analytical monitoring
- Trash assessments
- Laboratory analytical monitoring

The data gathered from dry weather monitoring is used to characterize discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as needed to detect and eliminate the sources of these pollutants. The results from the current year's Dry Weather Monitoring Program conducted by D-MAX Engineering, Inc., (D-MAX) are presented herein.

1.2 Hydrologic Setting

The City of El Cajon is part of the San Diego River Watershed (Hydrologic Unit 907). Forester Creek, the largest receiving water body in the City of El Cajon, travels westward through the City from the east, and exits in the northwest section of the City where it enters the City of Santee. Runoff is generated within the City of El Cajon from the following seven drainage basins:

- Forester Creek Basin
- Broadway Channel Basin
- Washington Channel Basin
- County Ditch Basin
- Airport Basin
- Fanita Basin
- Fletcher Basin

Broadway Channel Basin, Washington Channel Basin, County Ditch Basin, and Airport Basin all discharge into Forester Creek, which converges with the San Diego River in the City of Santee. Fanita Basin discharges to the City of Santee and is eventually conveyed to the San Diego River. Runoff transported through Fletcher Basin drains to the Alvarado Channel in the City of La Mesa, which also terminates in the San Diego River.

The City of El Cajon constitutes slightly more than three percent of the total area of the San Diego River watershed, which also contains portions of the Cities of Santee, San Diego, and La Mesa, as well as unincorporated county lands. The most recent Watershed Urban Runoff Management Program (WURMP) Annual Report identified bacteria indicators, phosphorus, TDS, low dissolved oxygen and turbidity as high priority Constituents of Concern (COC) for the entire San Diego River watershed. Additionally, the federal Clean Water Act 303(d) list designates Forester Creek as an impaired water body for fecal coliform, pH, total dissolved solids (TDS), low dissolved oxygen, and phosphorus.

1.3 Regulatory Requirements

In accordance with San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit), each of the Copermittees, including the City of El Cajon, is required to annually perform dry weather monitoring of discharges into its storm water conveyance system. During the dry weather season, May 1 through September 30, selected locations along the storm drain conveyance system are evaluated. This procedure includes recording field observations, estimating observed flow rates, and conducting field testing. The Municipal Permit also necessitates that the Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station is selected. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days.

1.4 Previous Work

The City of El Cajon has conducted dry weather field screening programs since 1993 at several locations within the City's storm water conveyance system. A summary of the number of sites sampled each year is displayed in Table 1-1. Historical dry weather monitoring data is included in Appendix A.

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER MONITORING

Year	Number of Field Screening Sites [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1993	6	data not available [3]			na
1994	6				na
1996-R1	8				na
1996-R2	8				na
1997	8				na
1998	8				na
1999-R1	8				na
1999-R2	8				na
2000	8				na
2001	8				na
2002	31	29	2	3	10
2003	31	30	1	1	10
2004	31	30	1	1	10
2005	31	30	1	2	10
2006	31	31	0	2	10
2007	31	31	0	2	10
2008	31	30	1	3	10

Notes:
na not analyzed, R1 round 1, R2 round 2
[1] Total number of sites with flowing or ponded water.
[2] Laboratory testing commenced in 2002 as required by Municipal Permit Order 2001-001.
[3] Available information does not distinguish between flowing and ponded sites during this period.

1.5 Report Outline

This report is presented in the following order:

Section 1, Introduction, includes a program overview, a discussion of the City's hydrologic setting, regulatory background, a summary of previous dry weather monitoring, and the report outline.

Section 2, **Sampling Locations,** describes the field screening sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and quantitative results of the field screening analyses.

Section 5, Trash Assessment, discusses the procedure and results of the trash assessment.

Section 6, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 7, Data Analysis, provides an analysis of this year's field and laboratory data, as well as a comparison of past results.

Section 8, Follow-up Investigations, details the results of follow-up investigations undertaken to isolate the sources of action level exceedances measured during the monitoring program.

Section 9, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Historical Dry Weather Monitoring Data

Appendix B Photographs of Sampling Locations

Appendix C Laboratory Analytical Reports

Appendix D Field Data and Trash Assessment Sheets

2.0 SAMPLING LOCATIONS

The City of El Cajon updated its Jurisdictional Urban Runoff Management Program (JURMP) in 2008. Based on years of field data, the City has selected primary dry weather monitoring stations that provide adequate coverage of the entire MS4 system. The City of El Cajon's 2009 Dry Weather Monitoring Program consisted of 31 designated primary monitoring stations, 10 of which are designated sampling sites for laboratory analysis. If a primary site was dry, an alternate station with flowing or ponded water was selected for monitoring. In 2009, sites 31, 36, and 39 were dry, and sites 9, 19 and 22 were selected as replacements. All sampling sites are located in the San Diego River Watershed, Hydrologic Unit 907.

Table 2-1 provides the site number, location, conveyance configuration, land uses, hydrologic subarea, and GPS coordinates of the sampling locations that were visited. Photographs of sampling locations are included in Appendix B. A complete map of the Municipal Separate Storm Sewer System (MS4), including sampling locations and drainage basins, is included as Figure 1. A map of the watersheds in and around the City of El Cajon, broken down into hydrologic subareas (HSA), is included as Figure 2.

TABLE 2-1
2009 DRY WEATHER MONITORING STATIONS

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
1	Forester Creek Channel, north of I-8, between Magnolia Avenue and Johnson Avenue, south of Parkway Plaza	Concrete Channel	Commercial	Residential	907.13	32.80386	-116.96450
2	Washington Channel, north of I-8, between Magnolia Avenue and Johnson Avenue, south of Parkway Plaza	Concrete Channel	Residential	Commercial	907.13	32.80363	-116.96548
3	North of Main Street, between Chambers Street and Johnson Avenue, ramp access next to Artesia Apartments	Concrete Channel	Residential	Commercial	907.13	32.79507	-116.96860
4	North of Vernon Way, between Johnson Avenue and Marshall Avenue	Concrete Channel	Industrial	Commercial	907.13	32.81221	-116.97348
5	Adjacent to the Weld Boulevard trolley station, southeast of the intersection of Marshall Avenue and Cuyamaca Street	Concrete Channel	Commercial	Industrial	907.13	32.82665	-116.98226
6	South end of Victor Avenue, south of Valley Village Drive	Concrete Channel	Commercial	Residential	907.13	32.80890	-116.95534
7	Fletcher Hills Creek Channel at the Fletcher Parkway and Chatham Street intersection	Concrete Channel	Residential	Commercial	907.11	32.79751	-117.00346
8	Southeast of the Fanita Drive and Weld Boulevard intersection	Concrete Channel	Residential	Open	907.12	32.82158	-116.99933
9	In front of 1473 Whitsett Drive, on the east sidewalk	Manhole	Residential	Open	907.12	32.81473	-116.99976
13A	In front of 1140 Petree Street, in middle of street.	Manhole	Residential	None	907.13	32.80581	-116.97696
14	Pierce Street, south of Wagner Drive, across from Educational Childcare, north of the National Guard facility	Outlet	Residential	Commercial	907.13	32.80074	-116.97671
15	Chase Avenue and Grossmont Avenue intersection, across from Grossmont Avenue in the south sidewalk	Manhole	Residential	Commercial	907.13	32.78237	-116.97815

TABLE 2-1
2009 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
17	Next to 350 Cypress Lane, east of Pioneer Way, on the north side of street	Earthen Channel	Industrial	Commercial	907.13	32.81660	-116.96609
18	East of Marshall Avenue, north of Vernon Way, west side of Forester Creek Channel	Outlet	Industrial	Commercial	907.13	32.81298	-116.97357
19	Southwest corner of the Jackman Street and Petree Street intersection	Manhole	Residential	Commercial	907.13	32.80576	-116.97344
20	North of 533 Main Street, under bridge on the west side of the channel, the southernmost of the two outfalls	Outlet	Commercial	Residential	907.13	32.79534	-116.96861
21	Southwest corner of the El Cajon Boulevard and West Palm Avenue intersection	Manhole	Commercial	Residential	907.13	32.79124	-116.97179
22	On the north side of West Washington Avenue, between Emerald Avenue and Van Houten Avenue, under the bridge	Outlet	Residential	Commercial	907.13	32.78786	-116.96767
23	On the west side of the Grant Avenue and Grossmont Avenue intersection, in front of 788 and 790 Grossmont Avenue, in the street	Manhole	Residential	Commercial	907.13	32.78586	-116.97468
24	On the north side of West Chase Avenue, between Emerald Avenue and Estes Street, easternmost outfall	Outlet	Residential	Open	907.13	32.78046	-116.96785
25	On the east side of Avocado Avenue, between Avenida Abajo and Skywood Drive	Earthen Channel	Residential	None	907.13	32.77390	-116.95860
26	Across from 1237 Victor Street, on the west side of the street between Hart Drive and Greenfield Drive	Manhole	Residential	Commercial	907.13	32.81249	-116.95534
27	On Ballantyne Street at the east end of Beech Street, next to the bus stop	Manhole	Residential	Commercial	907.13	32.80256	-116.95808
28	On the north side of East Madison Avenue, east of Jeffree Street	Manhole	Residential	Commercial	907.13	32.80065	-116.95276

TABLE 2-1
2009 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
30	On the south side of Madison Avenue, between Roberta Avenue and Roselle Avenue, in front of the Boys and Girls Club	Manhole	Residential	Commercial	907.13	32.80010	-116.94128
31	On Filbert Street, north of Lexington Avenue, in alley, south of channel	Catch Basin	Residential	None	907.13	32.79363	-116.95506
32	South of East Lexington Avenue, between South Lincoln Avenue and South Mollison Avenue, behind the Lincoln Park Apartments at 389 Lincoln Avenue	Outlet	Residential	None	907.13	32.79203	-116.95240
33	Next to 950 South Lincoln Avenue, between East Renette Avenue and Raymond Street	Outlet	Residential	None	907.13	32.78280	-116.95390
34	On the south side of Persimmon Avenue, between Crosby Street and North Second Street	Concrete Channel	Commercial	Residential	907.13	32.81143	-116.93633
36	On the south side of Oakdale Avenue in front of 1352, between Second Street and Grape Street	Catch Basin	Residential	Commercial	907.13	32.80204	-116.93327
37	On the east side of South Second Street, across from mobile home community entrance, between east Main Street and East Lexington Avenue	Catch Basin	Residential	Commercial	907.13	32.79447	-116.93714
38	On the west side of Jamacha Road, between Granite Hills Drive and Gustavo Street, southeast corner of 930 Jamacha Road, across from King's Mark Apartments	Manhole	Residential	None	907.13	32.78382	-116.92809
39	On the east side of East Main Street, between Greenfield Drive and Pepper Drive, next to Rebel Rent business	Manhole	Residential	Commercial	907.13	32.81341	-116.91750
41	Northwest of Summit Transmission business at 558 Johnson Avenue, south of the Johnson Avenue exit ramp off I-8 east	Concrete Channel	Industrial	Commercial	907.13	32.80209	-116.97163

Note: Sites 31, 36, and 39 were dry. Alternate sites 9, 19, and 22 were selected as replacements.

3.0 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of qualitative field observations, flow measurement, and quantitative field analyses of selected water quality parameters. Weather conditions, time since last rainfall, and the type of stormwater conveyance are recorded as well. Specific observations and results of the field water quality analyses are documented on field datasheets, which also serve as a record of the field visit. Datasheets are completed for every site visit regardless of whether or not samples were collected. Check boxes on the datasheets indicate if the visit is for routine field screening, confirmation of an exceedance, or an IC/ID follow-up visit. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation. Datasheets from the 2009 Dry Weather Monitoring Program are included as Appendix D. Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Qualitative field observations are made during each site visit. These observations include a general site assessment and record water odor, clarity, the presence of floatable materials, visible deposits or stains, and organisms. Evidence of present or past illicit connections and illegal discharges to the storm drain system can also be discovered through careful field observations. Each field screening location is photographed to document site conditions. Photographs are included in Appendix B.

Flow Measurement

Flow measurements can help estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative of an illegal discharge. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth, and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Surfactants, measured as methylene blue active substances (MBAS) (Surfactants are also referred to as detergents.)
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)
- Orthophosphate-Phosphorus (Orthophosphate-P)

The methods used to perform the above field analyses, along with the reporting limit, range, and accuracy of each method, are listed in Table 3-1.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.01 mS/cm	0 □20 mS/cm	± 2□ of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.1□C	0.0□C □ 60.0□C	± 0.5□C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.01	0.00 □14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703 Portable Turbidity Meter□□□	0.01 NTU	0.01 □50.00 NTU and 50 □1000 NTU	± 0.5 NTU or 5□ of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.00 mg/L □ 3.00 mg/L□	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer □Nitrate 3 Vacu-vials□ (K-6933) Cadmium reduction[3]□□□	1.13 mg/L□□	1.13 mg/L □ 113 mg/L□□	± 30□ of practical detection limit[4]
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer □Ammonia 3 Vacu-vials□ (K-1403) Salicylate□□□	0.100 mg/L□□	0.100 mg/L □ 3.000 mg/L□□	Varies with measured concentration[4,5]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer □Phosphate 2 Vacu-vials□ (K-8513) Stannous chloride chemistry[6]□□□	0.098 mg/L□□	0.098 mg/L □ 2.608 mg/L□□	Varies with measured concentration[4,5]
Dissolved Oxygen	Hanna Instruments HI 9145 Portable Dissolved Oxygen Meter	0.00 mg/L	0.00 to 45.00 mg/L	± 1.5□ of range

Notes:

EC □electrical conductivity
mS/cm □millisiemens per centimeter
□C □Degrees Celsius
NTU □nephelometric turbidity unit
mg/L □milligrams per liter
LED □light-emitting diode

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20□. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The practical detection limit for nitrate is 5.0 mg/L; however, the practical detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30□ at PDL, ±20□ for 25□ of full range, ±10□ for 75□ of full range, ±10□ for 120□ of full range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4□ of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The practical detection limit for orthophosphate is 0.3 mg/L; however, the practical detection limit for orthophosphate-phosphorus is lower due to the conversion.

□Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

□□Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

□□□Test method information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

3.2 Laboratory Analytical Methods

In accordance with the Municipal Permit, laboratory samples were collected at ten sites, representing 25 percent of the sites where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc, a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Total hardness
- Oil and grease
- Diazinon
- Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria
- Total Dissolved Solids (TDS)
- Total Organic Carbon (TOC)

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project includes the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters, turbidity meter and conductivity meter are tested daily before field screening begins. The pH meters are calibrated as needed with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter and conductivity meter are calibrated as needed using standard solutions.

Field sample collection containers are rinsed first with distilled water and then with the sample water prior to sample collection. Upon completion of sampling and testing at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water and dried.

The accuracy of field analytical techniques and equipment is assessed at the beginning of each sampling week by analyzing solutions of known concentrations for ammonia-nitrogen, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Maximum Holding Time [1]
Oil and Grease	USEPA 1664	5 mg/L	28 days
Total Hardness	USEPA 200.7	10 mg/L	14 days
Dissolved Cadmium	USEPA 200.8	0.001 mg/L	24 hours
Dissolved Copper	USEPA 200.8	0.001 mg/L	24 hours
Dissolved Lead	USEPA 200.8	0.001 mg/L	24 hours
Dissolved Zinc	USEPA 200.8	0.020 mg/L	24 hours
Total Dissolved Solids	SM2540C	20 mg/L	7 days
Total Organic Carbon	SM5310B	1.00 mg/L	28 days
Diazinon	USEPA 8141A	0.05 g/L	7 days
Chlorpyrifos	USEPA 8141A	0.05 g/L	7 days
Total Coliforms[2]	SM 9221	20 1,600,000 MPN/100 mL	6 hours
Fecal Coliforms[2]	SM 9221	20 160,000 MPN/100 mL	6 hours
Enterococci[2]	SM 9230	20 160,000 MPN/100 mL	6 hours
Total Coliforms	SM 9223 (IDEXX Colilert)[3]	10 2,419,600 MPN/100 mL	6 hours
Escherichia coli (*E. coli*) [4]	SM 9223 (IDEXX Colilert)[3]	10 2,419,600 MPN/100 mL	6 hours
Enterococci	IDEXX Enterolert[4]	10 241,960 MPN/100 mL	6 hours

Notes:
g/L micrograms per liter
MPN/100 mL most probable number (of colony-forming units) per 100 milliliters
[1] Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.
[2] For D-MAX's Dry Weather Monitoring Program, EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100 mL). For fecal coliforms and Enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.
[3] IDEXX Colilert and Enterolert tests are used during upstream investigations only.
[4] Number of fecal coliforms is derived from number of *E. coli* through the following formula:
Fecal Coliforms *E. coli* / 0.85. The converted fecal coliform count, not the number of *E. coli*, is reported in this report's data tables.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration (mg/L)	Acceptable Range* (mg/L)	Field Test Kit Results (mg/L)
06/22/09	Ammonia-Nitrogen	0.82	0.66 – 0.98	0.708
06/22/09	Surfactants	1.0	0.75 – 1.25	1.00
06/22/09	Nitrate **	44.3	31.0 – 57.6	40.79
06/22/09	Orthophosphate **	3.07	2.45 – 3.68	2.995
07/6/09	Ammonia-Nitrogen	0.82	0.66 – 0.98	0.661
07/6/09	Surfactants	1.0	0.75 – 1.25	1.20
07/6/09	Nitrate **	44.3	31.0 – 57.6	40.59
07/6/09	Orthophosphate **	3.07	2.45 – 3.68	3.098
08/24/09	Ammonia-Nitrogen	0.82	0.66 – 0.98	0.791
08/24/09	Surfactants	1.0	0.75 – 1.25	1.00
08/24/09	Nitrate **	44.3	31.0 – 57.6	43.87
08/24/09	Orthophosphate **	3.07	2.45 – 3.68	3.051

Notes:
*Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1.
**Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by multiplying the results by 0.226 for nitrate and 0.326 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis are collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed, and samples are delivered and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain of custody forms are included in Appendix C.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation is necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a re-sampling is conducted within two business days. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by the laboratory analyses, a comprehensive follow-up pollutant source investigation is conducted within two business days of receiving the analytical reports from the lab. The results of these investigations are included in Section 8 of this report. Recommendations based on these investigations are included in Section 9.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (see Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels based on county-wide sampling data. These action levels have been used by all San Diego County Copermittees since the 2003 dry weather season.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is a short term concentration limit in which aquatic life can be sustained. The CMC is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew. Best professional judgment may indicate that results which either exceed certain action levels or are statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
pH	□6.5 or 9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Temperature (□C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values □0.75 may indicate excessive potable water discharge or flushing.
Dissolved Oxygen (mg/L)	Best Professional Judgment	No regional action level has been established; evaluated based on best professional judgement.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (□g/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 □g/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (□g/L)	0.5	
Dissolved Cadmium (□g/L)	California Toxics Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd □ 14 ppb; Cu □ 38 ppb; Pb □ 209 ppb; and Zn □ 297 ppb.
Dissolved Copper (□g/L)		
Dissolved Lead (□g/L)		
Dissolved Zinc (□g/L)		
Total Dissolved Solids (mg/L)	Best Professional Judgment	No regional action level has been established; evaluated based on best professional judgement.
Total Organic Carbon (mg/L)		
Total Coliforms (MPN/100 mL)	50,000	Based on region-wide statistical analysis.
Fecal Coliforms (MPN/100 mL)	20,000	
Enterococci (MPN/100 mL)	10,000	

Notes:
[1] The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.
[2] Basin Plan □ Water Quality Control Plan for the San Diego Basin
WQO □ Water Quality Objective
ppb □ parts per billion

4.0 FIELD SCREENING RESULTS

A total of 34 monitoring stations were visited during the 2009 Dry Weather Monitoring Program, and field screening was conducted at the 31 sites where ponded or flowing water was observed. Primary sampling sites 31, 36, and 39 were dry; therefore, alternate sites 9, 19, and 22 were selected as replacements. Visual surveys were conducted at the three dry sites, and eight confirmation visits were performed for constituent exceedances. Completed field data sheets for each site visit are included in Appendix D.

4.1 Qualitative Observations

Qualitative observations are summarized below, and include data from initial site visits only; confirmation and follow-up visits are not included. Routine field screening and confirmation visit observations are presented in Table 4-1.

Light Conditions
Light conditions were sunny during all field screening visits.

Odor
Water at one site had a rotten egg smell. All other samples lacked any discernable odor.

Color
Water samples were yellow at two sites, brown at one site, and green at one site. All other samples were colorless.

Clarity
The majority of water samples were clear. Two sites had water with a slightly cloudy appearance.

Floatable Materials
Trash was commonly observed suspended in the water, noted at 20 sites. See Section 5 of this report for a complete trash assessment. No other types of floatable materials were observed.

Deposits
Sediment, gravel, and/or fine particulates were the deposits most frequently observed during field screening visits. No other types of deposits were noted.

Vegetation
All sites displayed appropriate vegetation for the observed conditions. Most sites did not support vegetation, due to a lack of sunlight and soil in concrete and underground conveyances. One concrete channel displayed limited vegetation, and sites located in earthen channels displayed normal vegetation. Flow was not restricted at any sites as a result of excessive vegetation.

Biology
The presence of various organisms can be an indicator of water quality. The presence of algae often indicates that water flow is persistent. The majority of sites contained insects, and those with sun exposure contained algae. Many sites were also host to snails, and one site supported crayfish.

TABLE 4-1
FIELD OBSERVATIONS

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
1	8/24/09	12:05	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae, Snails
1 (Confirmation)	8/25/09	10:15	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
2	6/25/09	12:20	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects, Algae
3	8/28/09	14:15	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
4	8/28/09	11:15	Sunny	None	None	Clear	Trash	None	None	Insects, Algae, Snails
5	6/25/09	16:00	Sunny	None	Yellow	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
6	8/25/09	10:30	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
7	8/24/09	10:00	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae, Snails
7 (Confirmation)	8/25/09	9:40	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae
8	8/25/09	12:45	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae, Snails
8 (Confirmation)	9/3/09	9:45	Sunny	None	None	Clear	Trash	Sediment, Fine Particulates	None	Insects, Algae, Snails
9	8/26/09	13:45	Sunny	None	Brown	Slightly Cloudy	None	Fine Particulates	None	Insects
13A	8/28/09	9:25	Sunny	None	None	Clear	None	Fine Particulates	None	Insects
14	8/28/09	10:10	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae, Snails
15	8/25/09	15:00	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects
17	8/25/09	12:00	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
18	8/28/09	10:50	Sunny	None	None	Clear	Trash	None	None	Insects, Algae, Snails
19	8/26/09	14:40	Sunny	None	None	Clear	None	Fine Particulates	None	Insects

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
20	8/28/09	13:50	Sunny	None	Yellow	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
21	8/27/09	12:45	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects
22	8/26/09	15:40	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
22 (Confirmation 1)	8/27/09	12:00	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
22 (Confirmation 2)	10/1/09	11:00	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
23	8/25/09	15:40	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects
24	8/24/09	11:10	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae, Snails
25	8/24/09	14:50	Sunny	None	None	Clear	Trash	Sediment, Fine Particulates	Normal	Insects, Crayfish
26	8/26/09	10:15	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects
26 (Confirmation)	8/27/09	11:00	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects
27	8/27/09	9:10	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects
28	8/26/09	11:20	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects
30	8/27/09	16:10	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects
30 (Confirmation)	8/28/09	12:20	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects
31(Dry)	8/26/09	12:00	Sunny	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	None	Insects
32	8/25/09	11:20	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
33	8/27/09	13:20	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
34	8/24/09	15:40	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae
36 (Dry)	8/26/09	12:20	Sunny	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	None	Insects
37	8/27/09	15:10	Sunny	None	None	Clear	Trash	Fine Particulates	None	None
37 (Confirmation)	8/28/09	11:50	Sunny	None	None	Clear	Trash, Dust Sheen	Fine Particulates	None	None
38	8/24/09	14:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
39 (Dry)	8/26/09	9:40	Sunny	ns	ns	ns	ns	Sediment, Fine Particulates	None	Insects
41	6/25/09	11:25	Sunny	Rotten Eggs	Green	Slightly Cloudy	Trash	Fine Particulates	Limited	Insects, Algae, Snails
41 (Confirmation)	7/7/09	9:50	Sunny	None	None	Clear	Trash	Sediment, Fine Particulates	Limited	Insects, Algae, Snails

Notes:
na □ not analyzed
ns □ not sampled (dry site)
denotes a confirmation visit
denotes a location sampled for laboratory analysis

4.2 Field Analytical Results

Field analyses are conducted at all sites with flowing or ponded water. The measured constituents are described below.

Flow rate quantifies the volume of fluid passing across a given surface per unit time. Flow rate measurements are needed to calculate the load or particular amount of a pollutant discharged.

Water temperature is needed to assess the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. In the field, water temperature is measured immediately upon sample collection at each site.

The **pH** is an expression of acidity or alkalinity of a water sample. The pH of an aquatic system will affect a variety of chemical reactions, including the availability of nutrients and the solubility of chemical substances, particularly heavy metals.

Turbidity describes the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation, thus reducing photosynthetic capacity, but excessive suspended particles can also absorb heat and increase water temperatures.

Specific conductance (conductivity) measurements indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water and potentially help indicate the presence of dissolved pollutants.

Surfactant concentrations in water samples often reflect illegal discharges from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms.

Ammonia-nitrogen (ammonia-N) is an indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-nitrogen (nitrate-N) is a common sign of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, resulting in oxygen depletion as algae decomposes and may eventually suffocate other aquatic life.

Orthophosphate-phosphorus (orthophosphate-P) is also an indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate-N, orthophosphate-P pollution can cause nutrient enrichment, stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient in plant growth.

Dissolved Oxygen measurements indicate the amount of gaseous oxygen (O_2) dissolved in the water. Photosynthesis by aquatic biota and diffusion from the surrounding air are the processes responsible for oxygen input. Oxygen depletion can be detrimental to aquatic life and is often caused by the decomposition of organic material. Excessive algal growth can contribute to lower dissolved oxygen concentrations through markedly increased photosynthesis, serving as a source of decomposing organic material when algae die. Higher values of dissolved oxygen often correspond with lower temperatures.

A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 shows the results of all field analyses conducted at each dry weather monitoring station. Graphs of the various parameters and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceed-ances	Graph Number
Flow Rate (gpm)	109	0 (ponded)	16	2	30	---	4-1
Temperature (°C)	33.1	24.8	28.49	28.2	2.31	0	4-2
pH	9.2	6.8	8.0	8.1	0.6	2	4-3
Turbidity (NTU)	72	0.03	7.47	2.42	14.22	0	4-4
Conductivity (mS/cm)	12.24	1.00	3.33	2.71	2.22	0	4-5
Surfactants (mg/L MBAS)	0.75	0.13	0.34	0.25	0.17	0	4-6
Ammonia-N (mg/L)	0.871	0.108	0.275	0.223	0.170	0	4-7
Nitrate-N (mg/L NO_3-N)	14.88	0.10	4.22	3.02	4.13	4	4-8
Orthophosphate-P (mg/L PO_4-P)	0.978	nd	0.169	0.131	0.191	0	4-9
Dissolved Oxygen (mg/L)	8.95	5.12	6.48	6.27	1.21	0	4-10

Notes:
gpm = gallons per minute
nd = not detected
Calculations include complete routine visit data only. Confirmation visits, follow-up visits, and dry sites not incorporated.

TABLE 4-3
FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants MBAS (mg/L)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate -P (mg/L)	Dissolved Oxygen (mg/L)
1	8/24/09	12:05	62	33.0	**9.2**	4.35	2.07	0.38	0.293	5.49	0.015	8.95
1 (Confirmation)	8/25/09	10:15	66	28.0	8.7	na	2.14	na	na	na	na	na
2	6/25/09	12:20	37	27.2	8.8	1.25	2.26	0.25	0.218	4.16	0.016	8.25
3	8/28/09	14:15	47	33.1	8.4	3.76	3.03	0.25	0.342	1.88	0.042	6.37
4	8/28/09	11:15	109	31.5	8.3	5.03	2.71	0.13	0.213	3.76	0.006	8.56
5	6/25/09	16:00	108	30.7	8.9	14.82	2.81	0.25	0.301	2.38	0.076	8.25
6	8/25/09	10:30	14	30.4	8.6	3.99	2.12	0.25	0.246	3.02	nd	8.82
7	8/24/09	10:00	1	24.8	**9.2**	21.97	1.00	0.25	0.182	0.17	0.260	7.83
7 (Confirmation)	8/25/09	9:40	1	24.1	8.4	na	1.20	na	na	na	na	na
8	8/25/09	12:45	31	31.1	8.2	10.40	12.24	0.75	0.279	6.72	0.117	8.55
8 (Confirmation)	9/3/09	9:45	28	26.9	8.0	14.32	2.87	na	na	na	na	na
9	8/26/09	13:45	2	28.2	6.8	37.15	4.00	0.50	0.594	0.10	0.215	5.37
13A	8/28/09	9:25	2	26.6	7.9	1.00	5.27	0.50	0.228	1.80	0.025	6.53
14	8/28/09	10:10	3	26.0	8.1	0.93	3.18	0.38	0.237	1.05	0.169	5.68
15	8/25/09	15:00	Ponded	26.5	7.7	1.62	3.44	0.25	0.172	1.05	0.174	5.22
17	8/25/09	12:00	Ponded	27.5	7.9	6.43	2.16	0.25	0.408	0.13	0.285	5.72
18	8/28/09	10:50	1	27.0	8.1	0.68	3.36	0.25	0.254	0.67	0.202	6.92
19	8/26/09	14:40	1	29.4	6.9	5.75	8.68	0.75	0.871	5.10	0.131	5.12
20	8/28/09	13:50	Ponded	28.2	7.9	2.42	5.05	0.75	0.607	0.28	0.978	5.12

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants MBAS (mg/L)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate -P (mg/L)	Dissolved Oxygen (mg/L)
21	8/27/09	12:45	□1	31.6	8.1	0.35	5.69	0.63	0.169	1.68	0.256	5.72
22	8/26/09	15:40	8	27.5	7.5	0.11	3.23	0.25	0.181	**11.21**	0.056□	5.64
22 (Confirmation 1)	8/27/09	12:00	5	27.3	7.6	na	3.15	na	na	9.11	na	na
22 (Confirmation 2)	10/1/09	11:00	2	23.0	7.5	0.19	3.14	na	na	8.06	na	na
23	8/25/09	15:40	2	28.2	8.2	2.12	3.28	0.25	0.174	3.85	0.260	6.27
24	8/24/09	11:10	3	25.6	8.0	0.77	2.53	0.25	0.154	1.76	0.091□	5.74
25	8/24/09	14:50	2	26.1	7.8	2.16	2.32	0.13	0.275	1.33	0.070□	5.71
26	8/26/09	10:15	Ponded	26.1	7.2	6.49	2.33	0.25	0.108	**14.88**	0.155	5.21
26 (Confirmation)	8/27/09	11:00	□1	27.5	7.9	na	2.47	na	na	1.92	na	na
27	8/27/09	9:10	Ponded	25.3	7.6	10.81	1.14	0.25	0.130	0.40□	0.493	5.53
28	8/26/09	11:20	1	29.8	7.9	7.85	1.61	0.25	0.238	3.56	0.134	6.62
30	8/27/09	16:10	2	29.2	7.6	5.44	2.27	0.25	0.222	**12.94**	0.086□	5.46
30 (Confirmation)	8/28/09	12:20	2	28.4	7.6	na	2.25	na	na	**12.09**	na	na
31	8/26/09	12:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
32	8/25/09	11:20	9	27.0	8.1	0.03	2.73	0.38	0.129	6.86	0.012□	6.77
33	8/27/09	13:20	1	29.8	8.1	0.59	2.34	0.25	0.217	4.90	0.371	5.75
34	8/24/09	15:40	12	26.7	8.1	0.26	2.07	0.25	0.223	7.29	0.040□	6.62
36	8/26/09	12:20	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants MBAS (mg/L)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate -P (mg/L)	Dissolved Oxygen (mg/L)
37	8/27/09	15:10	1	31.5	7.6	0.66	2.37	0.25	0.147	**12.94**	0.091	5.43
37 (Confirmation)	8/28/09	11:50	1	28.9	7.5	na	2.36	na	na	**13.92**	na	na
38	8/24/09	14:00	1	27.7	8.1	0.23	2.60	0.25	0.141	7.85	0.144	6.31
39	8/26/09	9:40	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
41	6/25/09	11:25	47	29.8	8.1	72	3.43	0.50	0.561	1.52	0.276	6.82
41 (Confirmation)	7/7/09	9:50	43	25.3	8.3	na	3.00	na	na	na	na	na
REPORTING LIMIT			**0**	**0.1**	**0.0**	**0.01**	**0.01**	**0.13**	**0.100**	**1.13**	**0.098**	**0.00**
ACTION LEVEL				**BPJ**	**6.5 9.0**	**BPJ**	**BPJ**	**1.00**	**1.000**	**10.00**	**2.000**	**BPJ**

Notes:
na not analyzed
nd not detected
ns not sampled (dry site)
BPJ Best Professional Judgment, see Section 3.4
Value reported is below the Practical Detection Limit (PDL). Per manufacturer, the value is reported but flagged. See footnotes to Table 3-1 for details.
No action level has been established for the purposes of dry weather monitoring.
Red Bold Type value exceeds action level
denotes a confirmation visit
denotes a location sampled for laboratory analysis

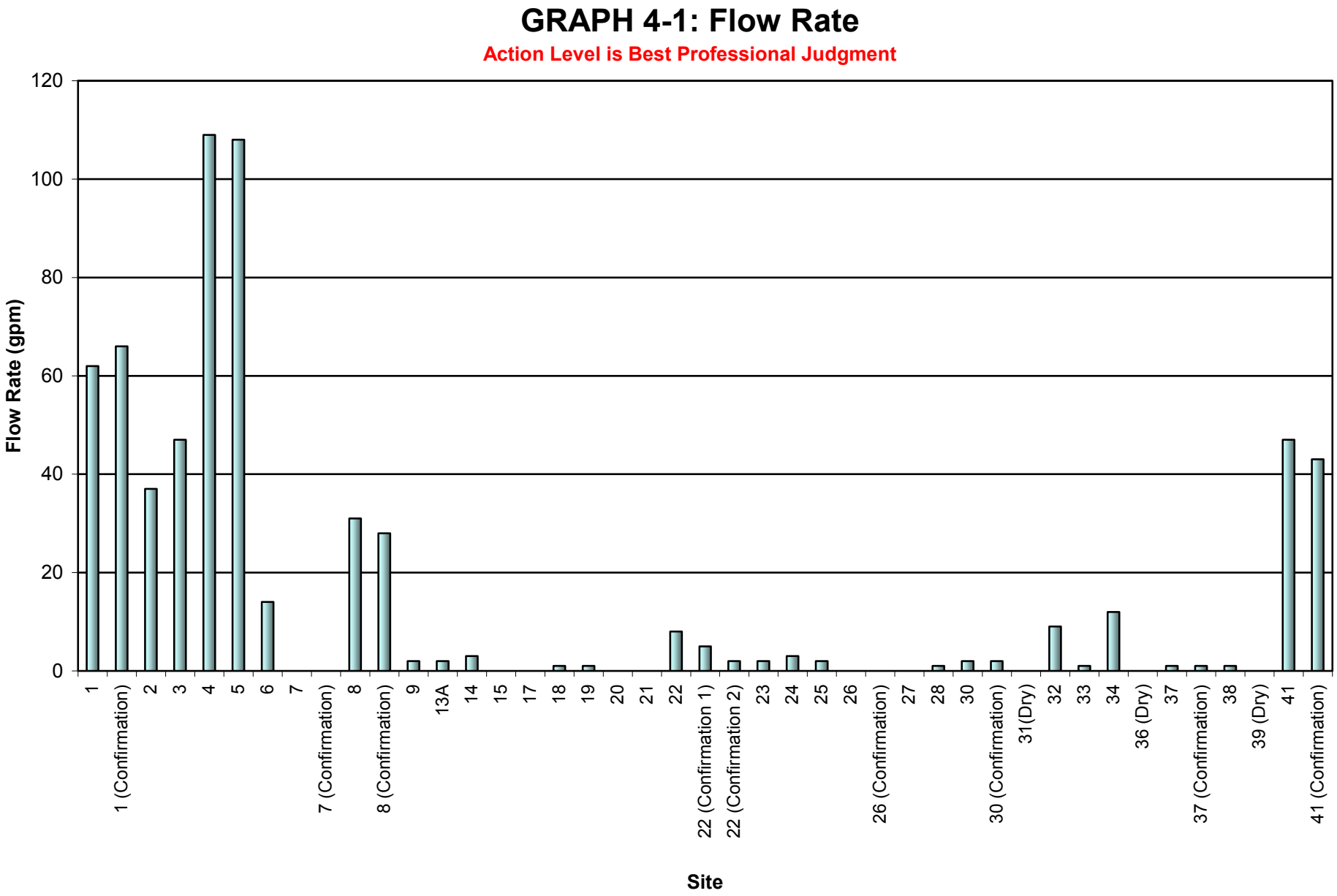
GRAPH 4-1: Flow Rate
Action Level is Best Professional Judgment
Flow Rate (gpm)
120
100
80
60
40
20
0
1
1 (Confirmation)
2
3
4
5
6
7
7 (Confirmation)
8
8 (Confirmation)
9
13A
14
15
17
18
19
20
21
22
22 (Confirmation 1)
22 (Confirmation 2)
23
24
25
26
26 (Confirmation)
27
28
30
30 (Confirmation)
31(Dry)
32
33
34
36 (Dry)
37
37 (Confirmation)
38
39 (Dry)
41
41 (Confirmation)
Site

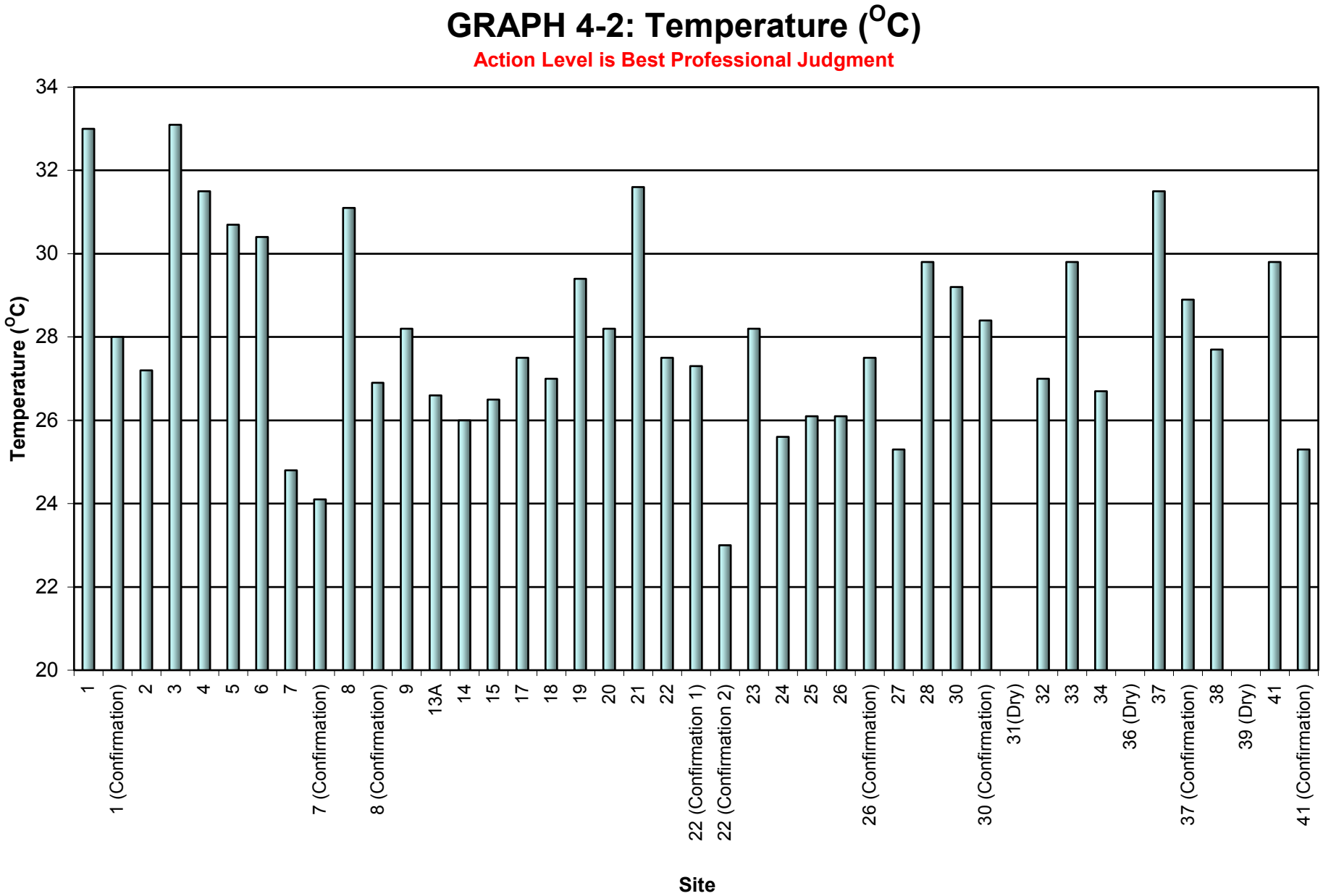
GRAPH 4-2: Temperature (°C)
Action Level is Best Professional Judgment
Temperature (°C)
34
32
30
28
26
24
22
20
1
1 (Confirmation)
2
3
4
5
6
7
7 (Confirmation)
8
8 (Confirmation)
9
13A
14
15
17
18
19
20
21
22
22 (Confirmation 1)
22 (Confirmation 2)
23
24
25
26
26 (Confirmation)
27
28
30
30 (Confirmation)
31(Dry)
32
33
34
36 (Dry)
37
37 (Confirmation)
38
39 (Dry)
41
41 (Confirmation)
Site

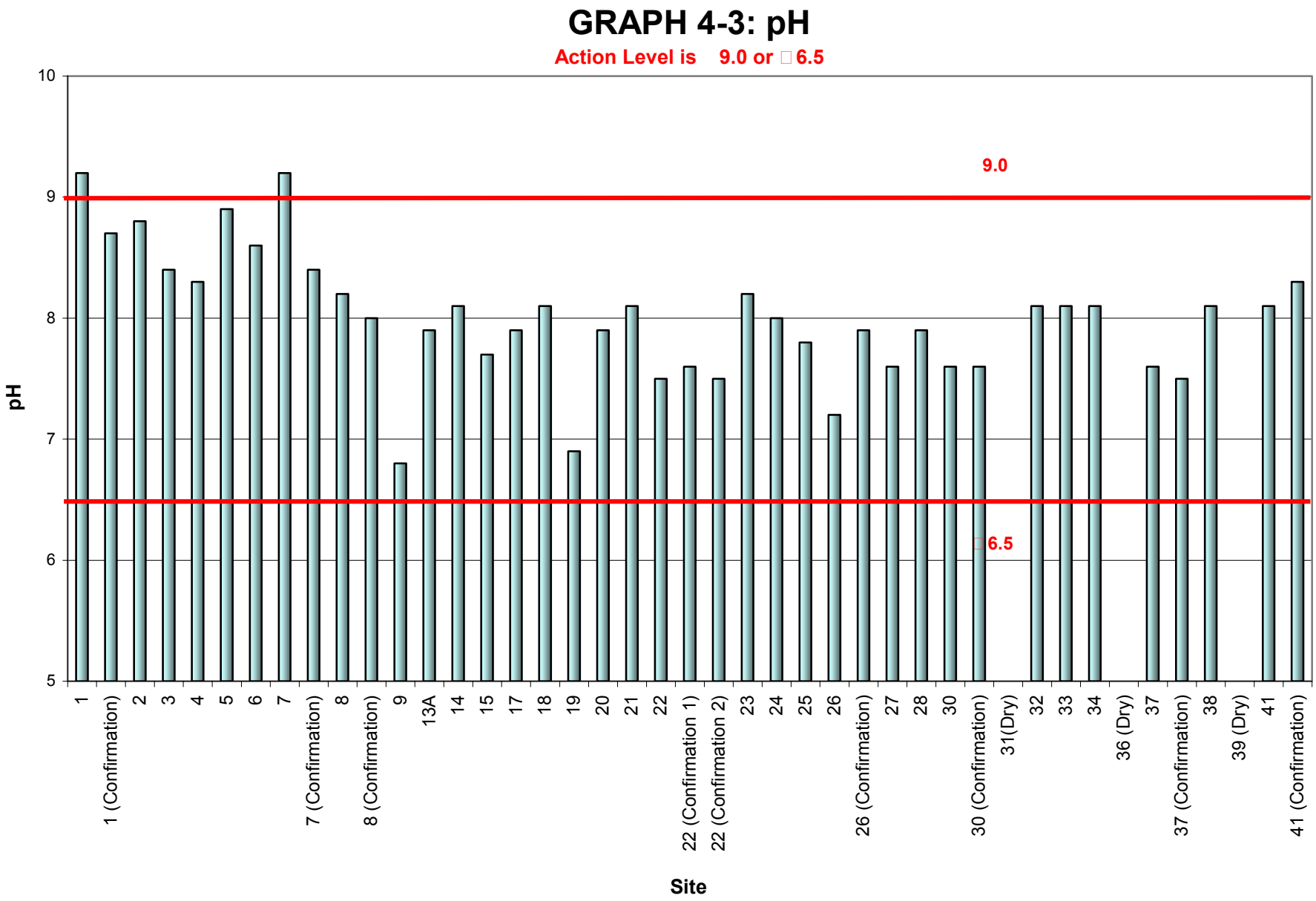
GRAPH 4-3: pH
Action Level is 9.0 or 6.5
9.0
6.5
pH
10
9
8
7
6
5
1
1 (Confirmation)
2
3
4
5
6
7
7 (Confirmation)
8
8 (Confirmation)
9
13A
14
15
17
18
19
20
21
22
22 (Confirmation 1)
22 (Confirmation 2)
23
24
25
26
26 (Confirmation)
27
28
30
30 (Confirmation)
31(Dry)
32
33
34
36 (Dry)
37
37 (Confirmation)
38
39 (Dry)
41
41 (Confirmation)
Site

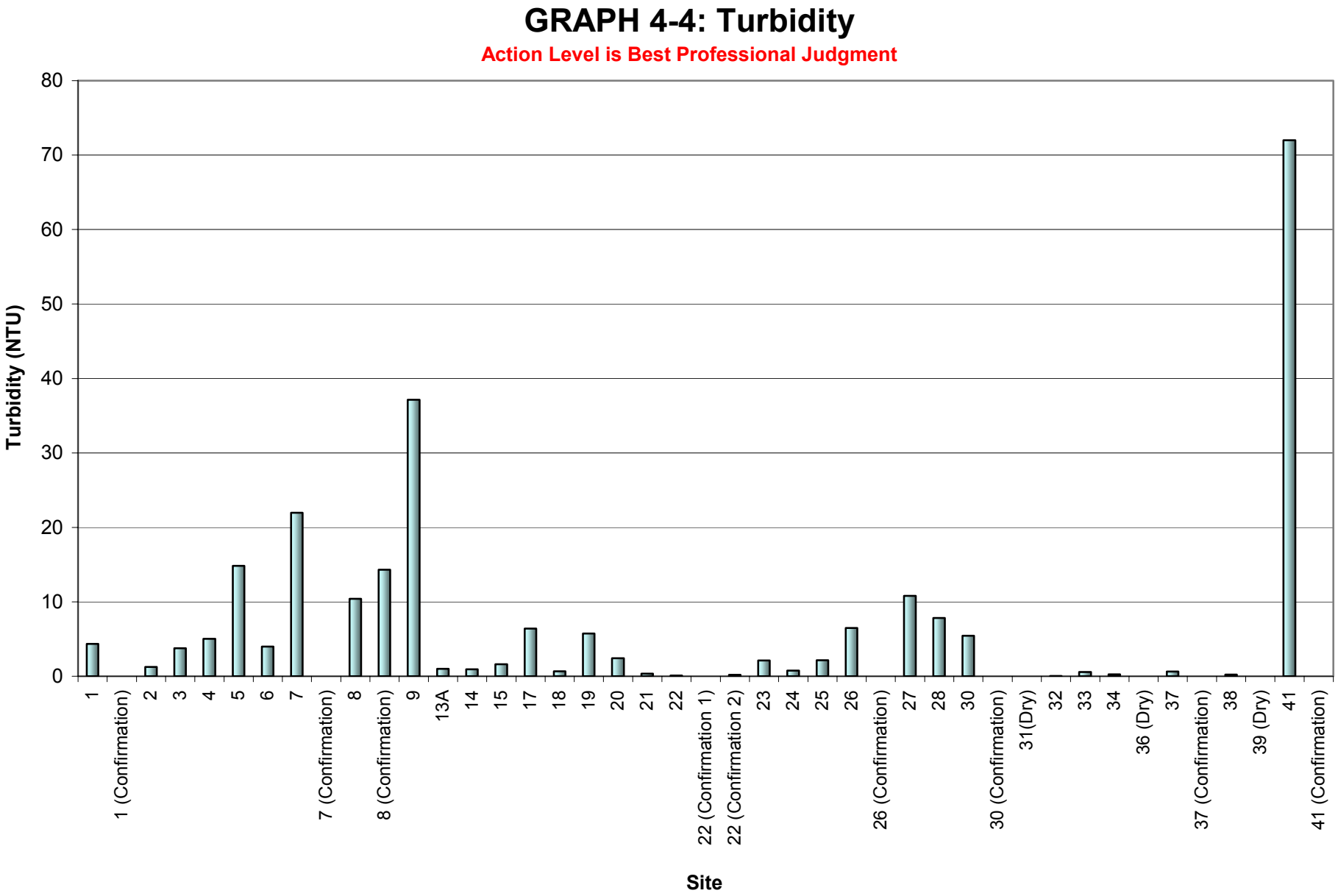
GRAPH 4-4: Turbidity
Action Level is Best Professional Judgment
Turbidity (NTU)
80
70
60
50
40
30
20
10
0
1
1 (Confirmation)
2
3
4
5
6
7
7 (Confirmation)
8
8 (Confirmation)
9
13A
14
15
17
18
19
20
21
22
22 (Confirmation 1)
22 (Confirmation 2)
23
24
25
26
26 (Confirmation)
27
28
30
30 (Confirmation)
31(Dry)
32
33
34
36 (Dry)
37
37 (Confirmation)
38
39 (Dry)
41
41 (Confirmation)
Site

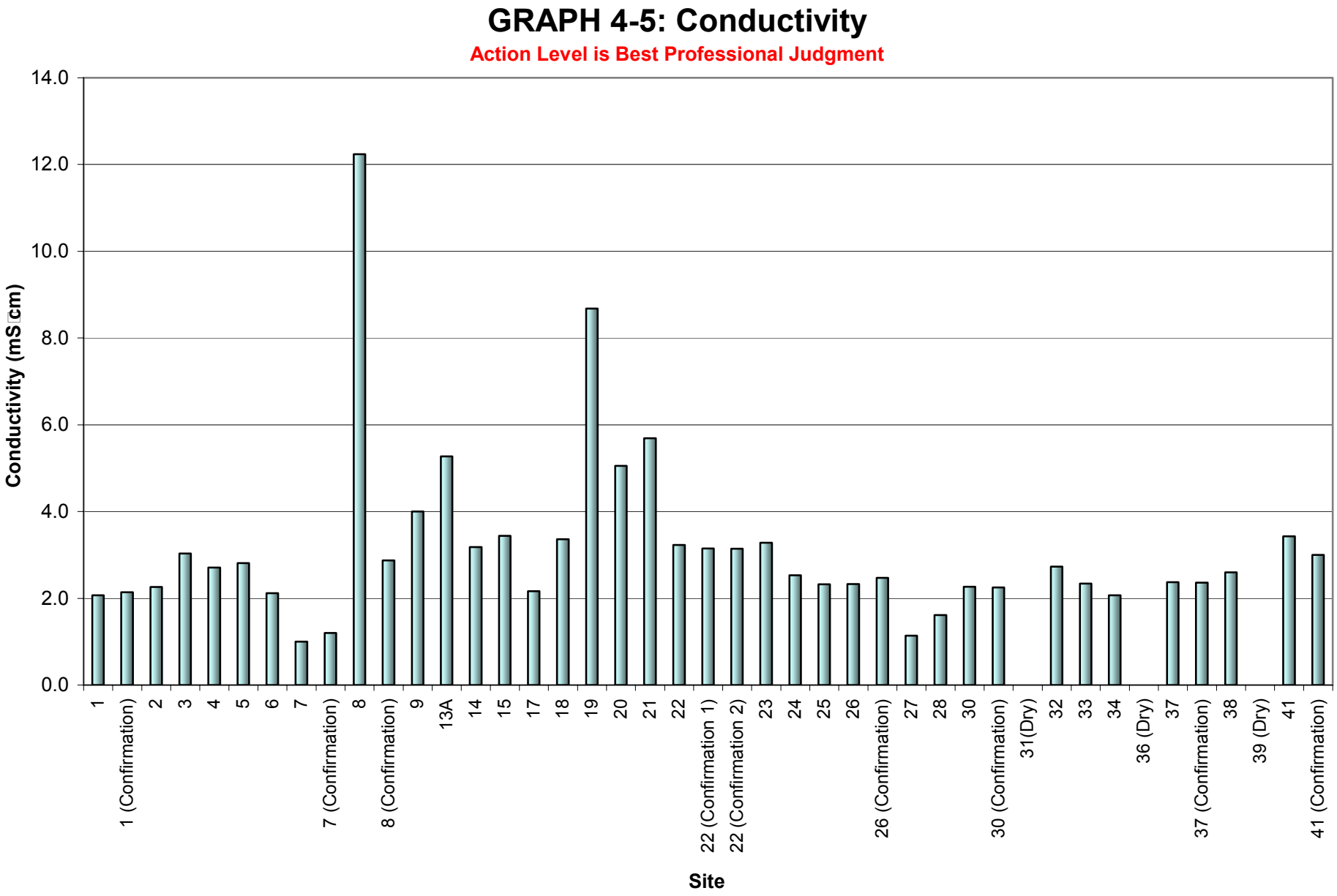
GRAPH 4-5: Conductivity
Action Level is Best Professional Judgment
Conductivity (mS/cm)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
1
1 (Confirmation)
2
3
4
5
6
7
7 (Confirmation)
8
8 (Confirmation)
9
13A
14
15
17
18
19
20
21
22
22 (Confirmation 1)
22 (Confirmation 2)
23
24
25
26
26 (Confirmation)
27
28
30
30 (Confirmation)
31(Dry)
32
33
34
36 (Dry)
37
37 (Confirmation)
38
39 (Dry)
41
41 (Confirmation)
Site

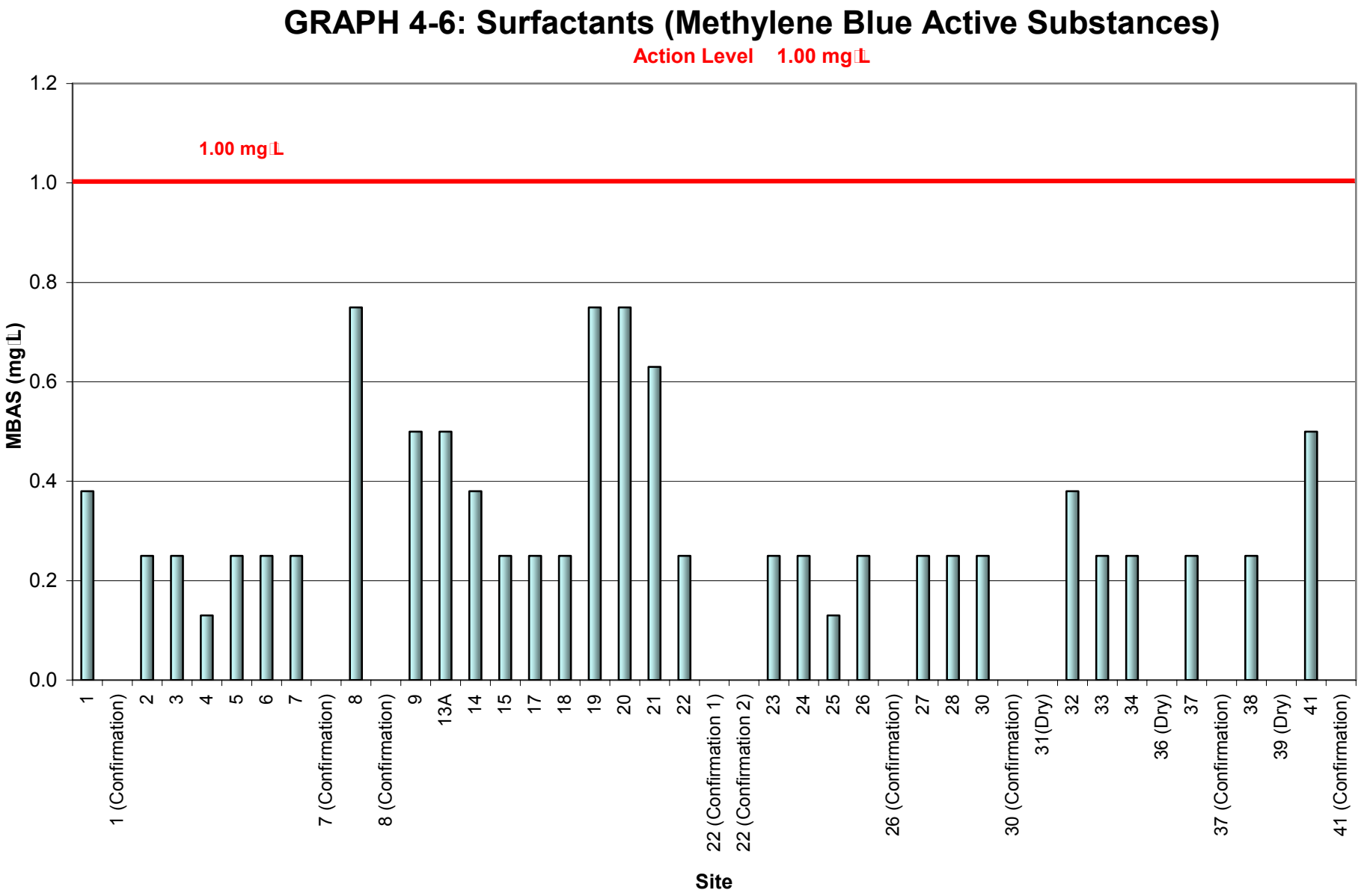
GRAPH 4-6: Surfactants (Methylene Blue Active Substances)
Action Level 1.00 mg/L
1.00 mg/L
MBAS (mg/L)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1
1 (Confirmation)
2
3
4
5
6
7
7 (Confirmation)
8
8 (Confirmation)
9
13A
14
15
17
18
19
20
21
22
22 (Confirmation 1)
22 (Confirmation 2)
23
24
25
26
26 (Confirmation)
27
28
30
30 (Confirmation)
31(Dry)
32
33
34
36 (Dry)
37
37 (Confirmation)
38
39 (Dry)
41
41 (Confirmation)
Site

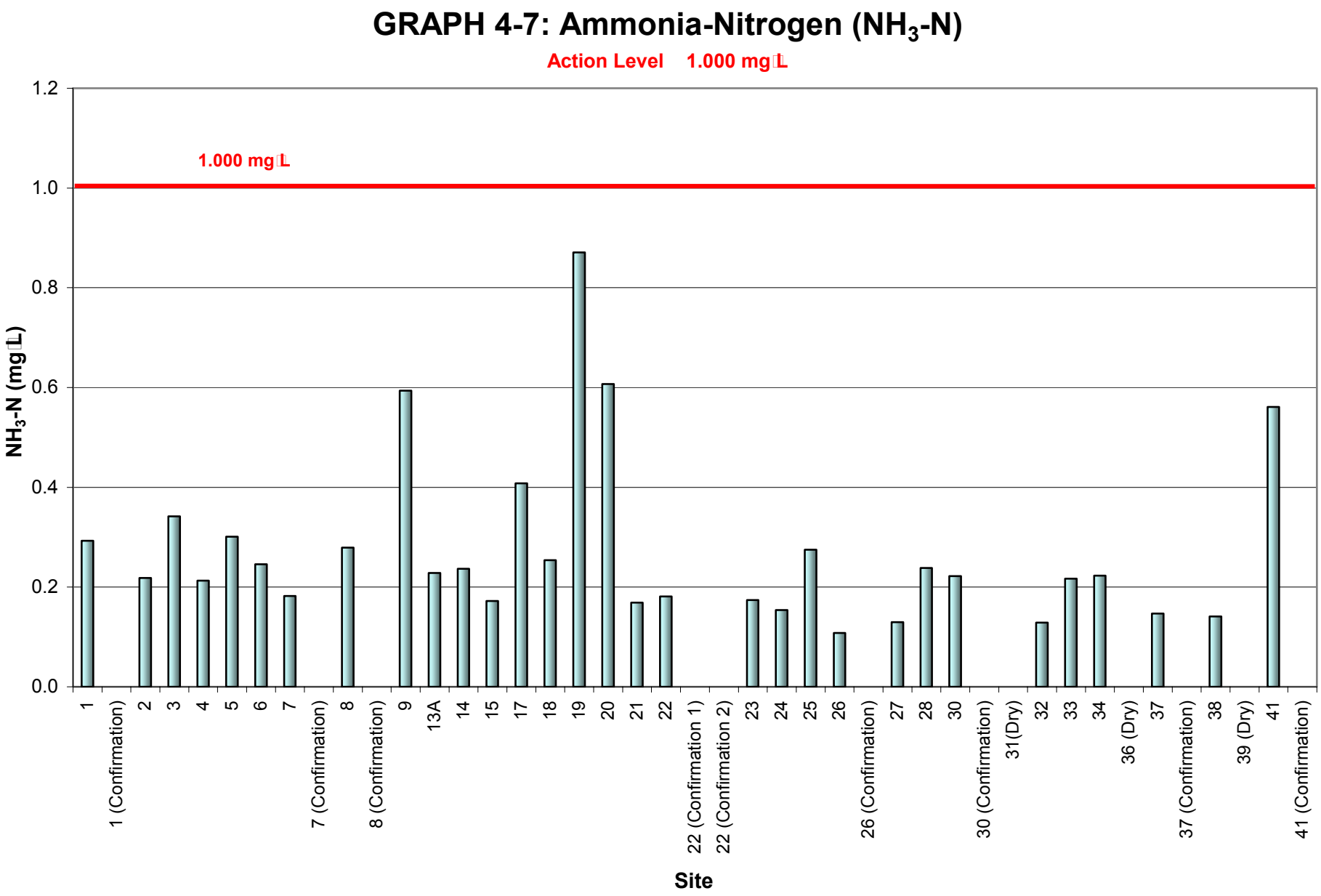
GRAPH 4-7: Ammonia-Nitrogen (NH_3-N)
Action Level 1.000 mg/L
1.000 mg/L
1.2
1.0
0.8
0.6
0.4
0.2
0.0
NH_3-N (mg/L)
1
1 (Confirmation)
2
3
4
5
6
7
7 (Confirmation)
8
8 (Confirmation)
9
13A
14
15
17
18
19
20
21
22
22 (Confirmation 1)
22 (Confirmation 2)
23
24
25
26
26 (Confirmation)
27
28
30
30 (Confirmation)
31(Dry)
32
33
34
36 (Dry)
37
37 (Confirmation)
38
39 (Dry)
41
41 (Confirmation)
Site

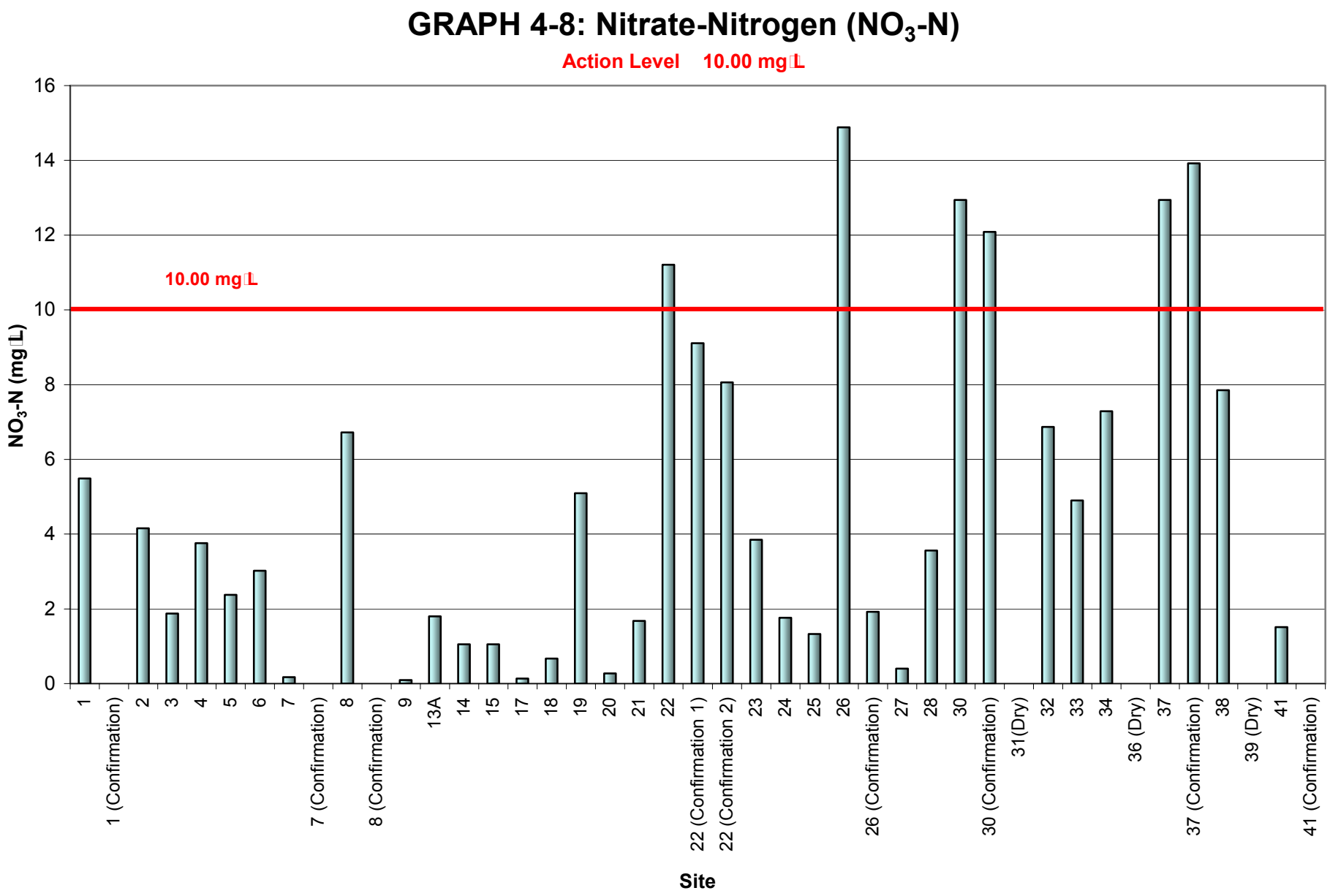
GRAPH 4-8: Nitrate-Nitrogen (NO_3-N)
Action Level 10.00 mg/L
10.00 mg/L
NO_3-N (mg/L)
16
14
12
10
8
6
4
2
0
1
1 (Confirmation)
2
3
4
5
6
7
7 (Confirmation)
8
8 (Confirmation)
9
13A
14
15
17
18
19
20
21
22
22 (Confirmation 1)
22 (Confirmation 2)
23
24
25
26
26 (Confirmation)
27
28
30
30 (Confirmation)
31(Dry)
32
33
34
36 (Dry)
37
37 (Confirmation)
38
39 (Dry)
41
41 (Confirmation)
Site

GRAPH 4-9: Orthophosphate-Phosphorus (PO_4-P)

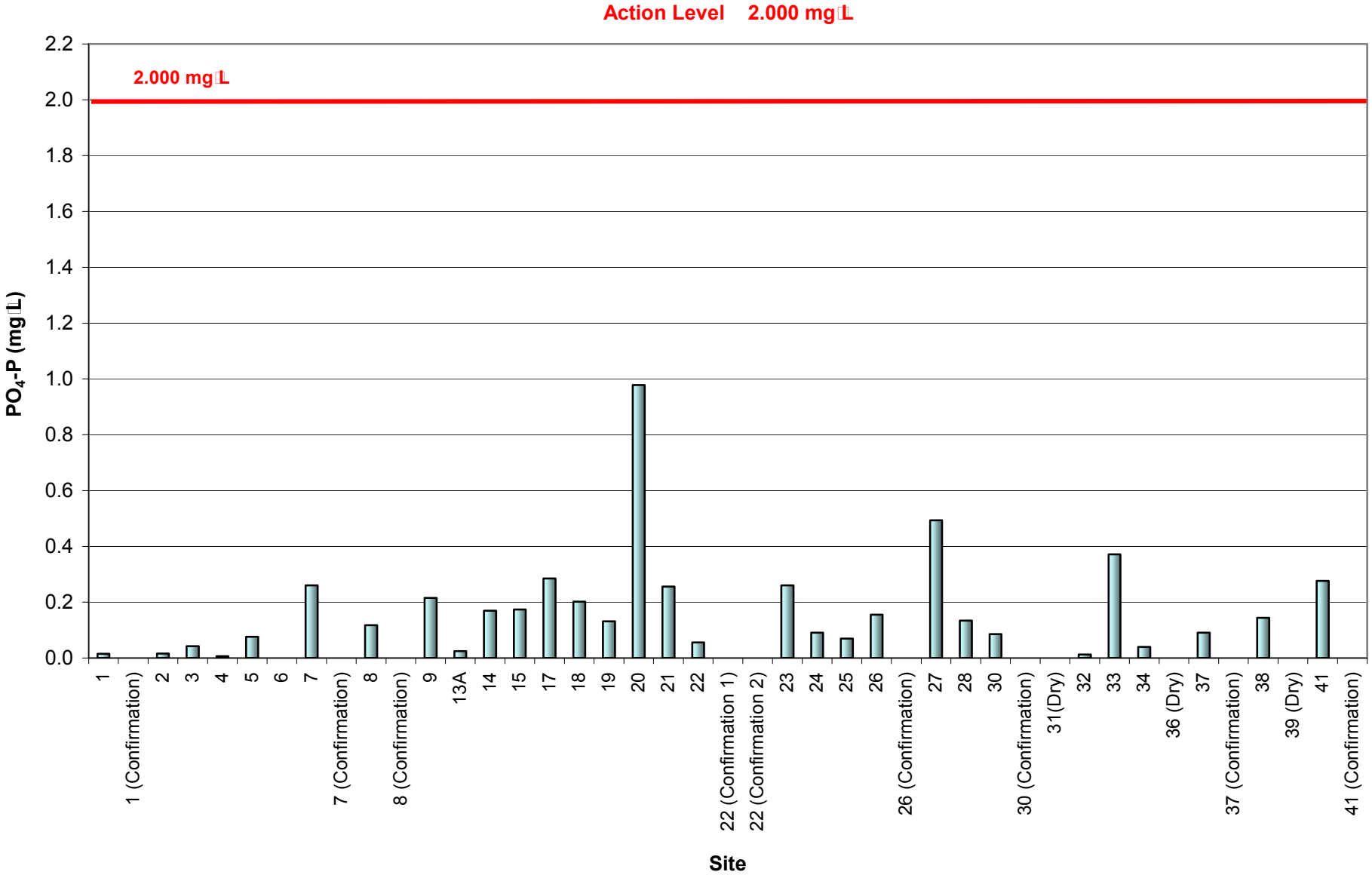

GRAPH 4-10: Dissolved Oxygen

Action Level is Best Professional Judgment

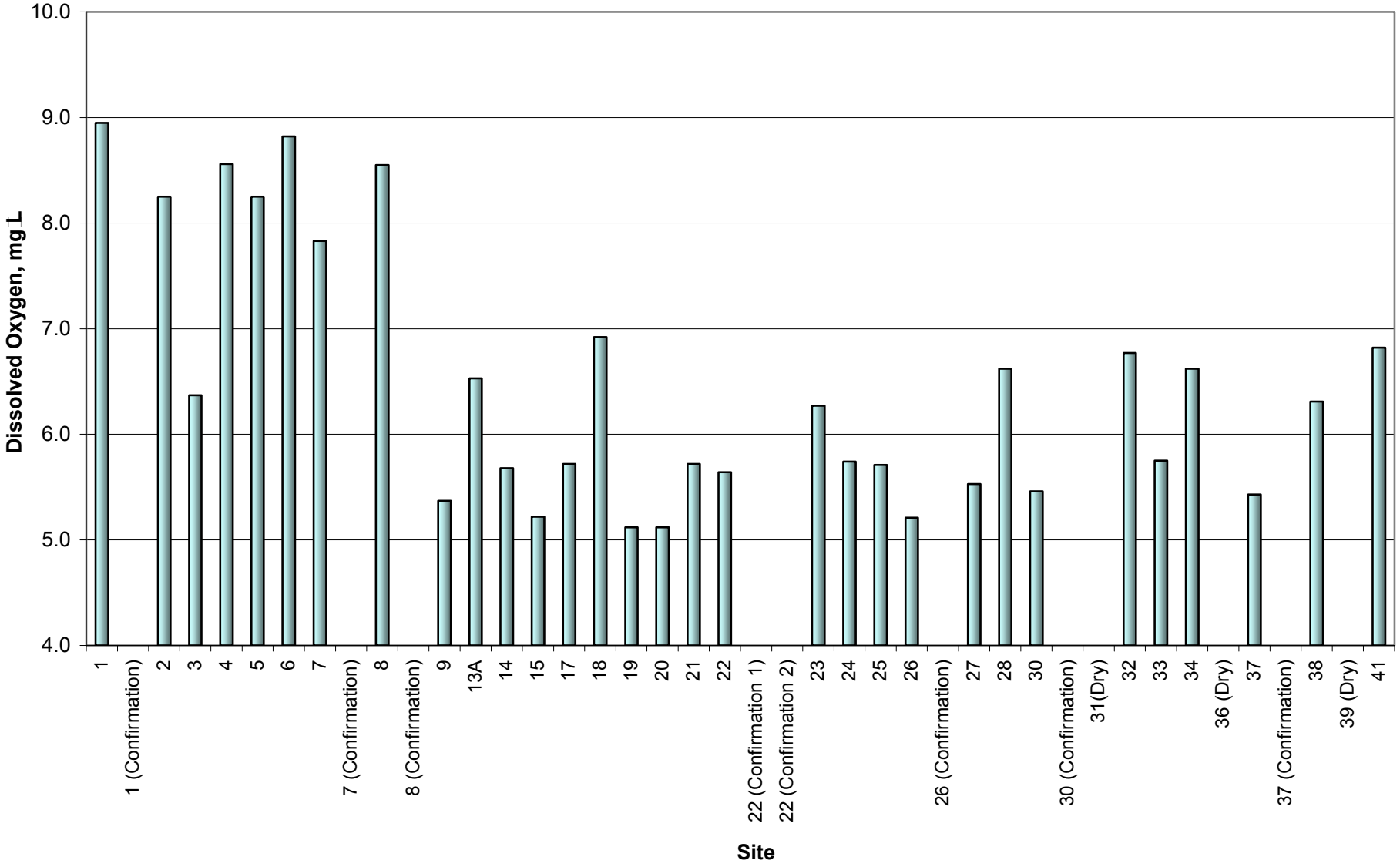

5.0 TRASH ASSESSMENT

5.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires all Copermittees, including the City of El Cajon, to assess the presence of trash in receiving waters and urban runoff at each dry weather monitoring site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a Trash Assessment Form to document the amount and extent of trash at each evaluated site. The form categorizes the site into one of five trash categories: optimal, suboptimal, marginal, submarginal, or poor. The form also addresses any potential threats that the trash may pose to human or aquatic health. For sites rating submarginal or poor, the form includes a section to record types, prevalence, potential routes, and sources of trash.

- A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form's five categories are primarily qualitative descriptions of the amount and extent of trash although a number of trash pieces is also included in each category as a rough guideline. The five categories are defined as follows.
- Optimal: On first glance, no trash visible. Little or no trash (□10 pieces) evident when evaluated area is closely examined for litter and debris.
- Suboptimal: On first glance, little or no trash visible. After close inspection small levels of trash (□10-50 pieces) evident in evaluated area.
- Marginal: Trash is evident in low to medium levels (□51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
- Submarginal: Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (□100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
- Poor: Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* □ Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment.

- *Threat to Aquatic Health* Large amount (50 pieces or more) of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amounts of settleable, degradable, and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the Comments section of the Trash Assessment Form.

If a site is labeled as submarginal or poor, it is assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on their prevalence and the potential threat to water quality they pose. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

The majority of sites were rated as optimal or suboptimal. Six sites were rated marginal, and no sites were rated submarginal or poor. No sites were considered to pose a threat to human or aquatic health. Table 5-1 and Graph 5-1 summarize the trash assessment results for routine sites in 2009. Figure 5-1 provides a map of field screening sites and their corresponding trash assessment. Copies of the Trash Assessment Forms completed at each site are included in Appendix D.

TABLE 5-1
TRASH ASSESSMENT RESULTS

Optimal (16 sites)		Suboptimal (12 sites)		Marginal (6 sites)	Submarginal (0 sites)	Poor (0 sites)
1	19	4	28	2	--	--
7	22	5	31	3		
8	23	18	33	6		
9	24	21	34	20		
13A	25	26	36	30		
14	32	27	37	41		
15	38					
17	39					

GRAPH 5-1
TRASH ASSESSMENT SUMMARY

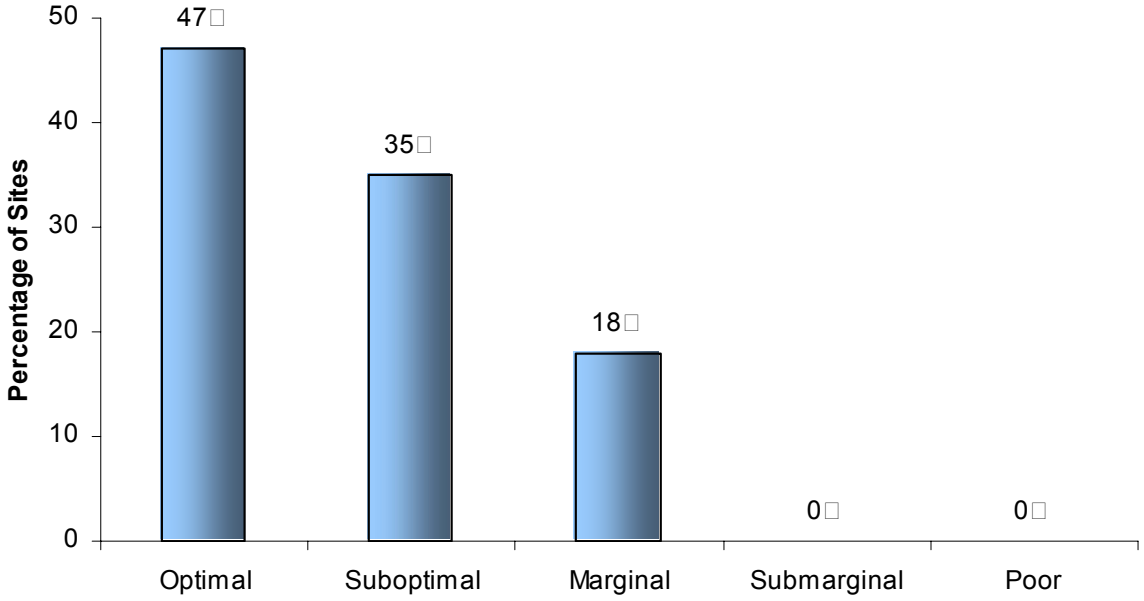

FIGURE 5-1
TRASH ASSESSMENT MAP

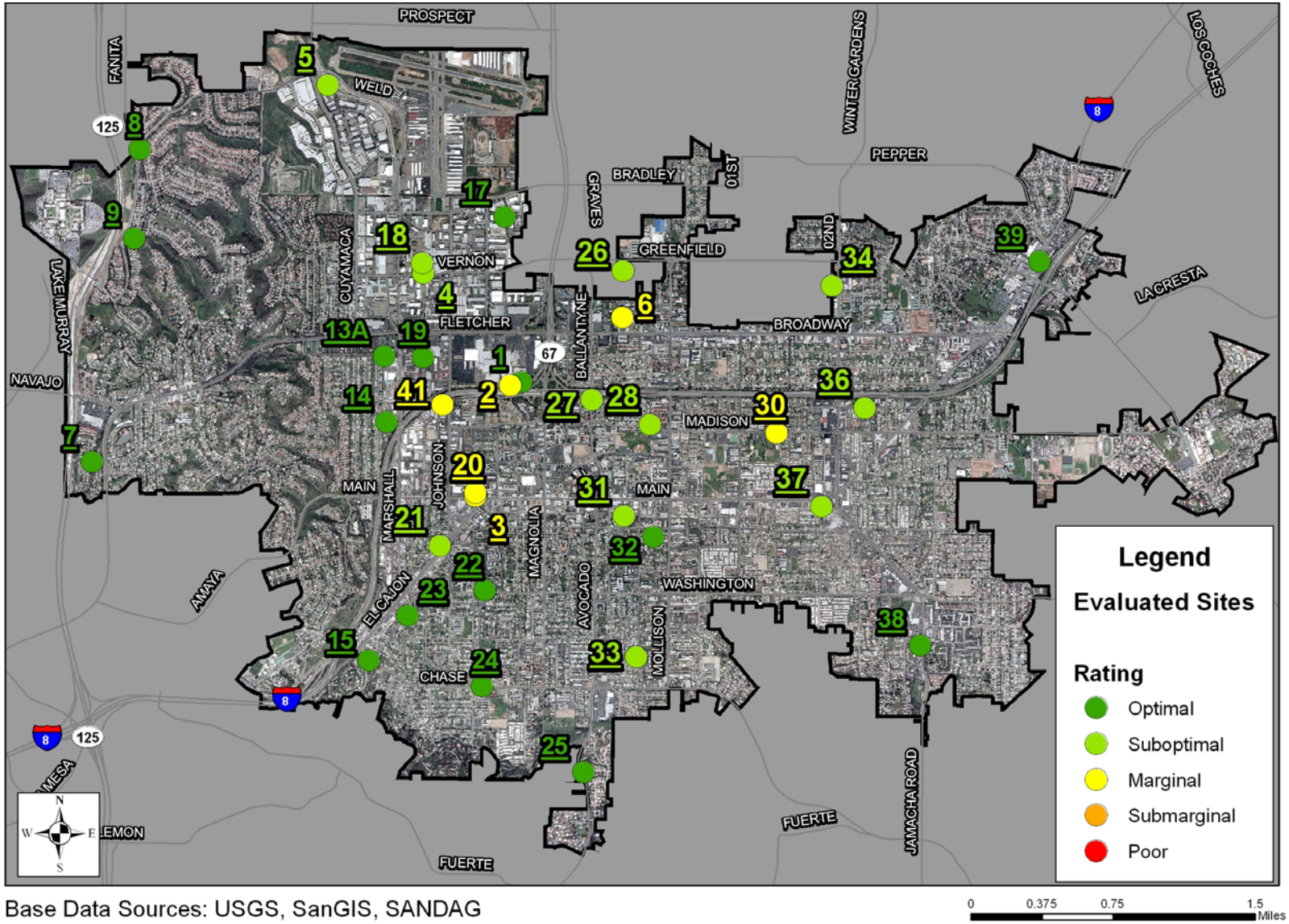

Base Data Sources: USGS, SanGIS, SANDAG

6.0 LABORATORY ANALYTICAL RESULTS

6.1 Summary

Laboratory analyses were conducted at 10 sites, representing over 25 percent of all sites with ponded or flowing water. The laboratory constituents measured are defined below.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$ equivalent. Hardness itself is not considered a pollutant, but is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Diazinon and **chlorpyrifos** are organophosphate pesticides that are highly toxic to insects, birds, and mammals, freshwater fish, and invertebrates. In 2005, the Environmental Protection Agency banned the sale of diazinon in the United States and tightened restrictions on chlorpyrifos use.

Coliform bacteria are relatively harmless to humans and are present in mammalian digestive tracts, most surface waters, and soils. Testing water samples for total coliform bacteria is a standard practice in public health. Total coliform is measured as an indicator of other more harmful pathogens, since these pathogens are generally present in much smaller quantities and are difficult to detect.

Fecal coliform, a subset of coliform bacteria, and ***Enterococcus*** are found primarily in the gastro-intestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material is human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness. As hardness increases, so does the Criterion Maximum Concentration (CMC), a concentration limit in which aquatic life can be sustained. CMC values differ for various metals. Dry weather monitoring laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 6-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

Total Organic Carbon (TOC) analysis indicates the concentration of organic carbon in the water, and includes substances such as naturally occurring humic acids along with solvents, pesticides, polyaromatic hydrocarbons and chlorinated organic compounds.

Total Dissolved Solids (TDS) measurements quantify the amount of dissolved minerals, cations, anions, and salts in the water. TDS is often related to conductivity and hardness. It can originate from natural sources, sewage runoff, urban runoff, and/or industrial wastewater.

In drinking water, it can affect the taste and aesthetic quality. In storm water, it can to some extent affect the lives of aquatic species, although only in high amounts.

Table 6-2 presents a statistical summary of the laboratory results from all samples. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included in Appendix C.

TABLE 6-1
CTR CMC FOR DISSOLVED METALS

Dissolved Cadmium			
Site	Total Hardness (mg/L)	CMC (mg/L)	Concentration (mg/L)
17	686	0.019	0.001
Dissolved Copper			
Site	Total Hardness (mg/L)	CMC (mg/L)	Concentration (mg/L)
1	445	0.050	0.003
2	639	0.050	0.002
5	616	0.050	0.003
6	667	0.050	0.002
7	321	0.040	0.019
8	1070	0.050	0.008
24	902	0.050	0.001
32	931	0.050	0.001
41	874	0.050	0.003

Notes:
Sites listed are those at which a particular dissolved metal was detected.
For equations and constants used in California Toxics Rule calculations, see http://www.epa.gov/ost/standards/ctr/toxic.pdf

TABLE 6-2
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Number of Exceedances
Total Hardness (mg/L $CaCO_3$)	1,070	321	*
Oil and Grease (mg/L)	nd	nd	0
Diazinon (□g/L)	0.07	nd	0
Chlorpyrifos (□g/L)	nd	nd	0
Cadmium (dissolved, mg/L)	0.001	nd	0
Copper (dissolved, mg/L)	0.019	nd	0
Lead (dissolved, mg/L)	nd	nd	0
Zinc (dissolved, mg/L)	nd	nd	0
Total Coliforms (MPN/100 mL)	900,000	500	1
Fecal Coliforms (MPN/100 mL)	50,000	220	1
Enterococci (MPN/100 mL)	3,000	70	0
Total Dissolved Solids (mg/L)	7,060	658	1
Total Organic Carbon (mg/L)	22	nd	0

Notes:
nd □ not detected
Calculations include complete routine visit data only. Confirmation visits, follow-up visits and dry sites not incorporated.
□Total hardness is not considered a pollutant and does not have an established action level.

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	Enterococci (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
1	8/24/09	12:05	nd	445	nd	0.003	nd	nd	nd	nd	500	300	70	1,320	14
2	6/25/09	12:20	nd	639	nd	0.002	nd	nd	nd	nd	2,200	3,300	70	1,130	5.9
5	6/25/09	16:00	nd	616	nd	0.003	nd	nd	nd	nd	2,800	270	130	1,680	12
6	8/25/09	10:30	nd	667	nd	0.002	nd	nd	nd	nd	11,000	5,000	3,000	1,420	12
7	8/24/09	10:00	nd	321	nd	0.019	nd	nd	0.07	nd	17,000	220	300	658	17
8	8/25/09	12:45	nd	1,070	nd	0.008	nd	nd	nd	nd	8,000	700	500	**7,060**	15
8 (Confirmation)	9/3/09	9:45	na	na	na	na	na	na	na	na	na	na	na	1,590	na
17	8/25/09	12:00	nd	686	0.001	nd	nd	nd	nd	nd	17,000	800	1,300	1,460	8.0
24	8/24/09	11:10	nd	902	nd	0.001	nd	nd	nd	nd	8,000	3,000	1,700	1,820	nd
32	8/25/09	11:20	nd	931	nd	0.001	nd	nd	nd	nd	8,000	2,300	700	1,910	4.0
41	6/25/09	11:25	nd	874	nd	0.003	nd	nd	nd	nd	**900,000**	**50,000**	1,100	2,200	22
41 (Confirmation)	7/7/09	9:50	na	na	na	na	na	na	na	na	**1,990,000**	2,776	na	na	na
Reporting Limits			**5**	**10**	**0.001**	**0.001**	**0.001**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**	**20**	**1.00**
Action Levels			**15**		**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**50,000**	**20,000**	**10,000**	**BPJ**	**BPJ**

Notes:
nd not detected
na not analyzed
Red values were at or above the measured constituent's action level
denotes a confirmation visit
Number of fecal coliforms for confirmation samples are derived from *E. coli* count. Number of fecal coliforms (Number of *E. coli*) / 0.85
Bacteria confirmation samples are analyzed using the Colilert and Enterolert methods described in Table 3-2, which have a reporting limit of 10 MPN/100 mL.
Total hardness is not considered a pollutant (see Section 3.4), and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependent on the total hardness value of the water sample.

7.0 DATA ANALYSIS

This section provides an overall evaluation of test results of the 2009 Dry Weather Monitoring Program, as well as a discussion of historical trends for various constituent exceedances.

7.1 2009 Results

Of the 31 sites sampled, exceedances of nitrate-nitrogen concentration were the most common, occurring at four sites. Two sites had pH measuring above the action level, and one site exceeded action levels for both total and fecal coliforms. Total dissolved solids were in exceedance this year for the first time in the history of the program. A summary of 2009 exceedances is presented in Table 7-1.

TABLE 7-1
2009 EXCEEDANCES AT A GLANCE

Constituent	Site 1	Site 7	Site 8	Site 22	Site 26	Site 30	Site 37	Site 41
pH	✓	✓						
Nitrate-N				✓	✓	✓	✓	
Total Coliforms								✓
Fecal Coliforms								✓
Total Dissolved Solids			✓					

Note: Table reflects exceedances occurring during routine visits only, not confirmation or follow-up visits.

7.2 Previous Results

Historical exceedance results are presented in Table 7-2, Graph 7-1, and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances by year for field screening, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

Since testing began in accordance with Order 2001-01, temperate, turbidity, dissolved oxygen, oil and grease, cadmium, lead, zinc, diazinon, chlorpyrifos, and total organic carbon have not measured above their respective action levels. Thus, these constituents are not included in the following table and graphs.

As shown in Graph 7-1, surfactants and ammonia-nitrogen level exceedances appear to be decreasing in recent years. Conductivity and orthophosphate-phosphorus have not been in exceedance since 2003 and 2002, respectively. Nitrate-nitrogen exceedances are prevalent from year to year, with no discernable trend.

As shown in Graph 7-2, total coliform level exceedances have been trending downward since 2006. Fecal coliform and *Enterococcus* level exceedances have been relatively steady at a low percentage of sites in recent years. Copper has not been in exceedance since 2006, and total dissolved solids were in exceedance this year for the first time in the history of the program. Since only eight years of data are available, trends cannot be drawn with a high degree of certainty.

TABLE 7-2
PERCENTAGE OF SITES WITH EXCEEDANCES BY YEAR

	Field Testing							Laboratory Analyses					
Year	Number of Field Testing Sites	pH	Conductivity	Surfactants	Ammonia-N	Nitrate-N	*Orthophosphate-P*	Number of Laboratory Sampling Sites	Total Dissolved Solids	Copper	Total Coliforms	Fecal Coliforms	Enterococci
2002	31	19	6	10	19	23	3	10	0	10	10	10	0
2003	31	23	3	0	10	10	0	10	0	0	30	30	20
2004	31	6	0	0	3	6	0	10	0	0	50	10	10
2005	31	3	0	13	0	13	0	10	0	0	40	10	10
2006	31	19	0	10	3	6	0	10	0	10	60	10	30
2007	31	10	0	3	3	13	0	10	0	0	30	10	10
2008	31	0	0	0	0	16	0	10	0	0	10	0	0
2009	31	6	0	0	0	13	0	10	10	0	10	10	0

Notes:
Results based on complete routine visits only. Confirmation visits, follow-up visits and dry sites not included.
By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

GRAPH 7-1
PERCENT OF SITES WITH FIELD SCREENING EXCEEDANCES BY YEAR

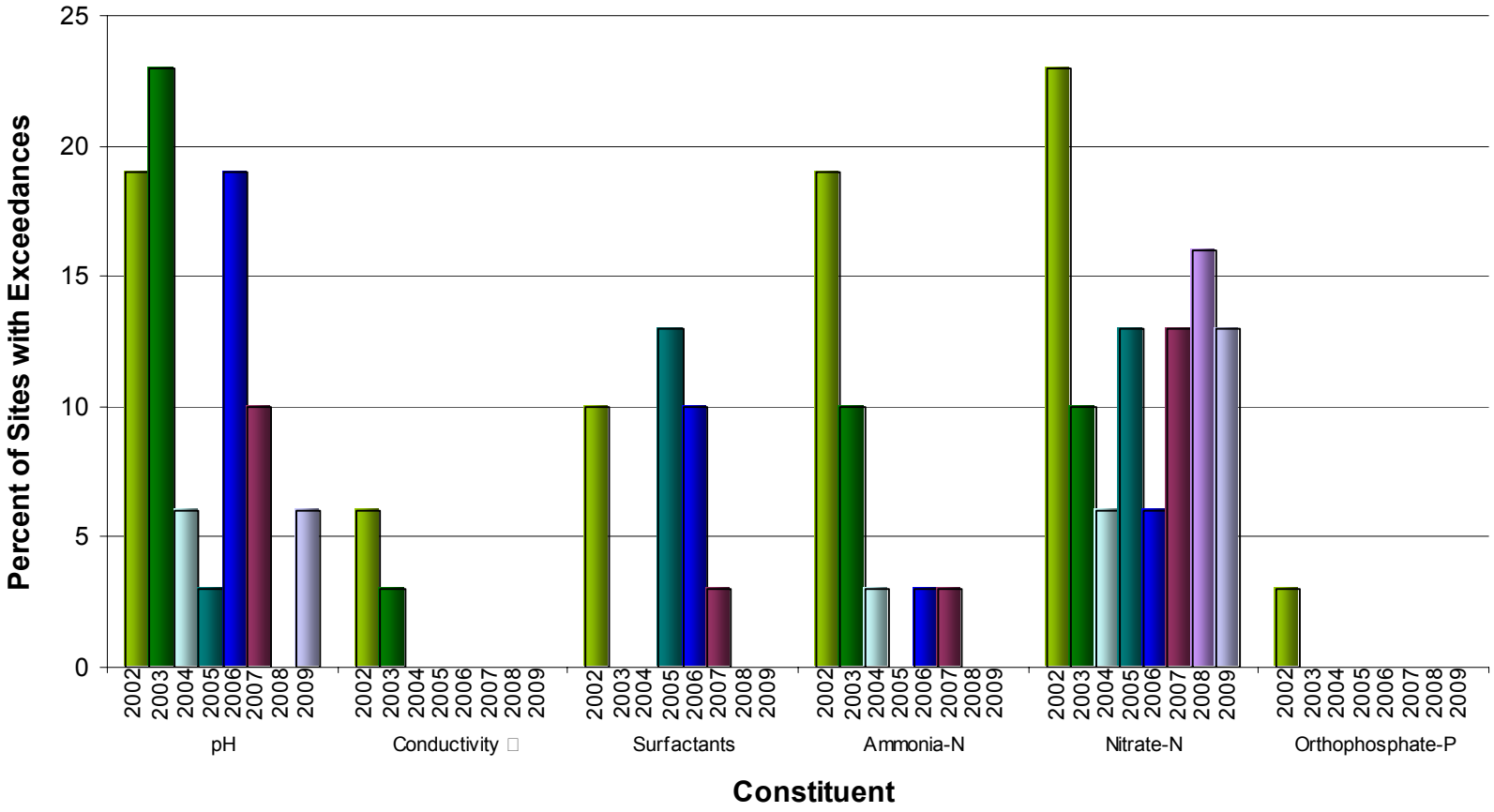

Note: Presented data are from routine visits only. Confirmation visits, follow-up visits and dry sites not included.

GRAPH 7-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

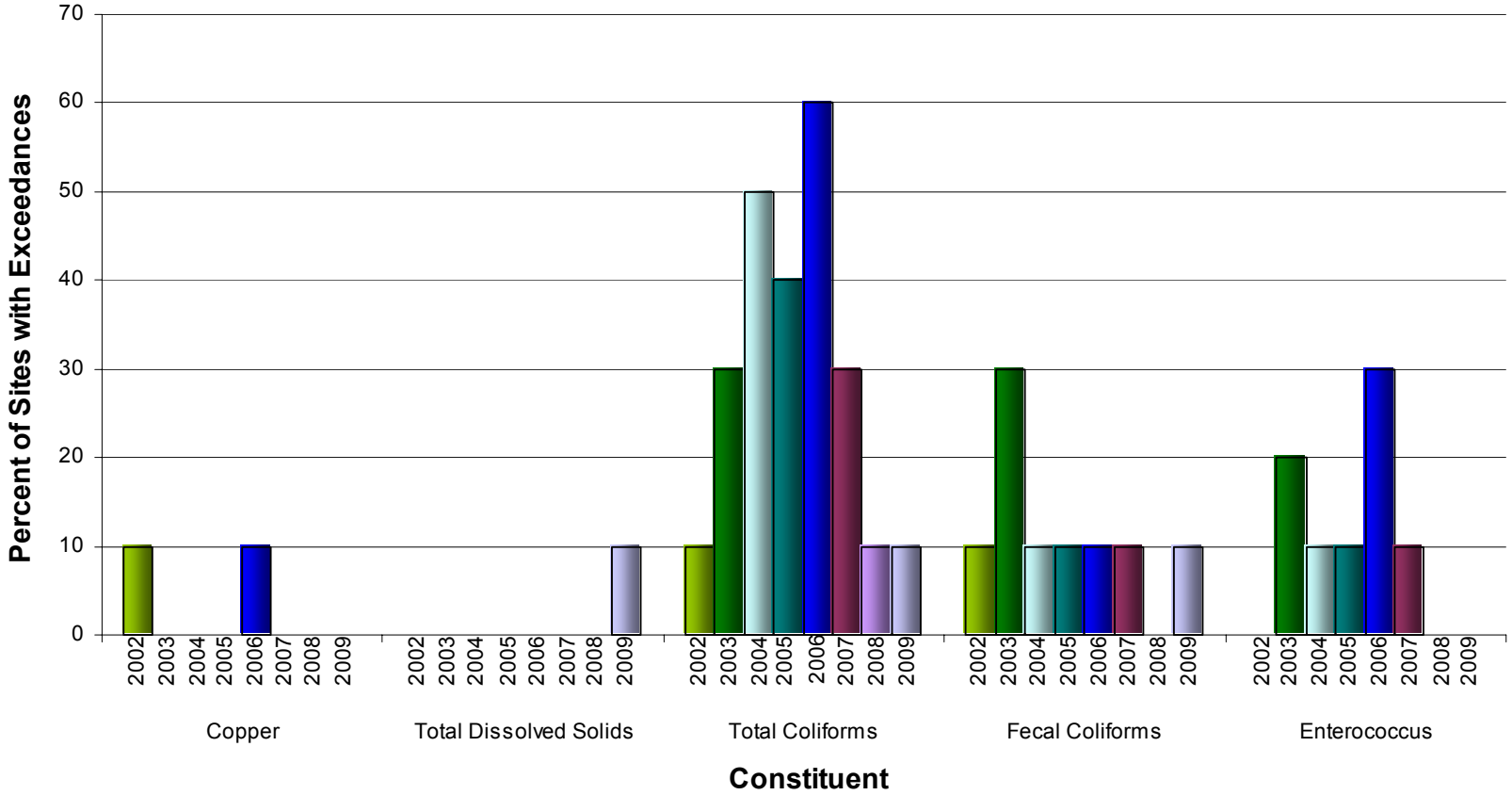

Note: Presented data are from routine visits only. Confirmation visits, follow-up visits and dry sites not included.

8.0 FOLLOW-UP INVESTIGATIONS

The purpose of follow-up investigations is to determine the sources of pollutants that exceeded action levels during the initial field screening and laboratory testing.

8.1 Investigation Procedures

Follow-up investigations are conducted in two rounds. The first follow-up investigations are for the sites at which action level exceedances are indicated by field testing. These investigations are in the form of additional field testing and are conducted within two business days of the initial findings. The second round of follow-up investigations are carried out for the sites at which laboratory testing shows elevated constituent levels. These investigations are conducted within two business days of receiving the laboratory test results.

During the follow-up investigations, flow rates are measured, visual observations are performed, and field testing is conducted. Visual observations, such as water color, clarity, odor, floatable materials, vegetation, and biology are recorded on field data sheets at each site. Field data sheets are included in Appendix D.

Source identification investigations begin by testing the water at the site again. This is referred to as a confirmation visit, as its purpose is to confirm the initial findings. If follow-up testing at a site results in constituent concentrations below specified action levels, the exceedance found during the initial sampling may have been due to a transient flow. If follow-up testing at a site finds constituent concentrations again above the specified action levels, an upstream investigation will be conducted. The field crew will progress upstream to isolate and identify potential pollutant sources.

Upstream investigations are also referred to as IC/ID follow-up visits, as the purpose is to identify illicit connections and illegal discharges. They are conducted by checking a number of upstream branches for any potential sources of the constituent of concern. The estimated flow rate in each branch and any relevant observations are recorded. Depending upon the constituent under investigation, laboratory samples may be collected for analysis.

The laboratory test for investigating upstream bacteria sources differs from routine bacteria testing. The IDEXX Colilert and IDEXX Enterolert test methods are used instead of the multiple tube fermentation methods used in routine testing. Information about these methods is provided in Table 3-2. Results for the Colilert and Enterolert tests are typically available within 24 hours, as opposed to the five business days needed for multiple tube fermentation analyses. The quicker turnaround time allows for additional upstream investigations as needed.

8.2 Investigated Sites

During the 2009 Dry Weather Monitoring Program, eight sites required follow-up investigations for constituent exceedances. During field screening, exceedances were noted at four sites for nitrate-nitrogen, and two sites for pH. Laboratory results indicated exceedances of total and fecal coliform bacteria at one site, and an exceedance of the best professional judgement action level for total dissolved solids at one site. Results of the field screening, confirmation, and upstream investigation visits are presented in this section.

Sites 1 and 7

Sites 1 and 7 both had pH values over the action level of 9.0. Both sites experienced similar conditions known to increase pH levels, and are discussed together below.

Site 1 is located in a concrete channel between Magnolia Avenue and Johnson Avenue. During the initial visit, the pH value was measured at 9.2. This site is exposed to sunlight, and the flow was shallow at a depth of 0.25 inches across a span of 80 inches. These conditions resulted in a high water temperature of 33.0°C during the afternoon when the initial visit took place. Additionally, algal growth was observed, as seen in Photo 8-1. The following morning the water temperature measured lower at 28.0°C with a pH of 8.7, within the acceptable range.

Site 7 is located in a concrete channel near the intersection of Fletcher Parkway and Chatham Street. During the initial visit, the flow was less than 1 gpm, the channel was exposed to sunlight, and algal growth was noted. The pH value was measured at 9.2 and the water temperature was 24.8°C. The following morning the temperature was lower, at 24.1°C, and the pH was measured within the acceptable range at 8.4.

Photo 8-1: Conditions at Site 1.

High pH readings are often the result of photosynthesis and increased temperature, which both lower carbon dioxide levels in the water. Because carbon dioxide forms carbonic acid when dissolved in water, removal of carbon dioxide from water makes the water more basic and results in higher pH readings. Typically the pH increases during daylight hours as sunlight stimulates algal photosynthesis and carbon dioxide is removed from water. During the night when algae is not photosynthesizing, the carbon dioxide level in the water increases due to biological respiration and physical diffusion of carbon dioxide from air into water, and the pH decreases. Because the solubility of gas in water is inversely proportional to the water temperature, carbon dioxide is less soluble in warmer water. Sunlight rapidly heats shallow, unshaded water in concrete channels, resulting in lower solubility for carbon dioxide later in the day when the water is warmer. The effects of temperature and algal photosynthesis often lead to lower pH values in the morning and higher values later in the day. This situation is consistent with the conditions at sites 1 and 7.

Site 8

Site 8 is located in a concrete channel southeast of the Fanita Drive and Weld Boulevard intersection. The channel receives runoff from primarily residential areas. During the routine visit, a flow of 31 gpm and fine particulate deposits were noted at the site, visible in Photo 8-2. Total dissolved solids were measured at 7,060 mg/L.

Since testing for total dissolved solids began in 2003, the maximum measurement at Site 8 was 1,810 mg/L. Since the total dissolved solids of the sample measured considerably higher than in previous years, and for what would be expected in a freshwater flow, an upstream investigation was initiated.

Upstream of the site, a residential area was investigated. At the intersection of Valley Lake Drive and Valley Mill Road, water was observed seeping into the street through a crack in the pavement. The water was flowing down the street and into a curb inlet that contributes to Site 8. The presence of algae growth indicates a consistent flow. Along the curbs of Valley Lake Drive, the field crew observed what was likely cement or ceramic dust. This indicates that recent construction activity in the area had contributed a fine dust to the storm water conveyance, which is likely to dissolve in water and be transported to Site 8 when there is sufficient flow, however, no active construction was observed. The City was notified of the particulate deposits and water seepage on Valley Lake Drive.

Photo 8-2: Fine particulate deposits in the channel at Site 8

During the confirmation visit to Site 8, total dissolved solids measured 1,590 mg/L. The initial total dissolved solids exceedance was attributed to a transient flow, likely related to construction activities.

Site 22

Site 22 is an outlet located off Washington Avenue between Emerald Avenue and Van Houten Avenue. This site has had high nitrate-nitrogen levels since field testing for the constituent began in 2002, with values measured over the action level during all but two of the past seven years. During the initial visit to the site this year, flow was measured at 8 gpm and the nitrate-nitrogen concentration of the sample was measured at 11.21 mg/L, over the action level of 10.00 mg/L. A confirmation visit was performed the following day, at which time the flow was measured at 5 gpm. The nitrate-nitrogen level of the sample was measured at 9.11 mg/L.

Although the confirmation value was just below the action level, further investigation was conducted due to the historical prevalence of nitrate-nitrogen exceedances. During this investigation, the nitrate-nitrogen level of the water at Site 22 was measured at 8.06 mg/L. Flow enters the site from an underground line to the east after passing through residential areas. These neighborhoods were investigated, and two points along the conveyance were sampled. Water at location 22-1 on Prescott Avenue was flowing at a rate of less than 1 gpm and had a nitrate-nitrogen level measured at 5.42 mg/L. Location 22-2 on Avocado Avenue was ponded and had a nitrate-nitrogen measurement of 5.26 mg/L.

Photo 8-3: Ponded water in the base of the metal pipe at upstream location 22-4, likely due to seepage

Upstream of these locations, the conveyance pipe meets an earthen channel. As seen in Photo 8-3, water appears to emerge through the areas

where the metal had corroded in the base of the pipe (location 22-4). The water was ponded, with a nitrate-nitrogen level measured at 3.72 mg/L. This pipe is separated from the upstream earthen channel by a concrete spillway. The water level in the earthen channel was too low to pass over this division during the investigation, and flow is not likely to breach this barrier at any time during dry weather monitoring. Upstream of this point, a sample was taken where water enters the earthen channel from a concrete channel conveyance. The nitrate-nitrogen level of this sample was measured at 0.37 mg/L.

The lowest nitrate-nitrogen level was measured upstream of the earthen channel and underground conveyance; the highest levels were downstream of these conveyances. Construction crews working in the area reported that the groundwater in the area was high, and any digging activity would encounter water below eight feet. Since most upstream locations were ponded but water was flowing downstream at Site 22, it seems likely that groundwater infiltration into the underground pipe conveyance between the end of the earthen channel and Site 22 is the source of flow and nitrate to Site 22.

TABLE 8-1
SITE 22 NITRATE-N UPSTREAM INVESTIGATION

Site	Date	Location	Flow (gpm)	Nitrate-N (mg/L)
22	8/26/09	Washington Avenue, between Emerald Avenue and Van Houten Avenue, at the north side of the bridge	8	**11.205**
22 (Confirmation 1)	8/27/09	Same as above	5	9.110
22 (Confirmation 2)	10/1/09	Same as above	2.0	8.060
22-1	10/1/09	In front of 733 Prescott Avenue. East side of road.	□1	5.420
22-2	10/1/09	Avocado Avenue, eastside in sidewalk. North of Lindell Avenue.	Ponded	5.260
22-3	10/1/09	At west end of Pauline Ave. Access via Avocado Ave across from Lindell Ave.	Ponded	0.370
22-4	10/1/09	In open lot east of Avocado Ave., north of Lindell Ave. Where earthen channel becomes underground pipe	Ponded	3.720

Note: **Red Bold Type** value exceeds action level

FIGURE 8-1
SITE 22 NITRATE-N UPSTREAM INVESTIGATION MAP

Base Data Sources: USGS, SanGIS, SANDAG, City of El Cajon

Site 26

Site 26 is located within a manhole on Victor Street, south of Greenfield Drive. During the initial visit, the water was ponded and the nitrate-nitrogen level of the sample measured 14.88 mg/L, above the action level. A confirmation visit was performed the following day, and a flow of less than 1 gpm was noted. The nitrate-nitrogen concentration of the sample measured 1.92 mg/L, below the action level. Upstream of the site are residential and commercial areas, and no source of nitrate-nitrogen discharge was observed. It seems likely that the intitial exceedance was due to a transient flow and effects of evaporation in the ponded water, wherein levels of nitrate-nitrogen would become concentrated. The absence of a nitrate-nitrogen exceedance during the confirmation visit, when the water was not ponded, supports this conclusion.

Sites 30 and 37

Site 30 is located within a manhole on Madison Avenue between Roberta Avenue and Roselle Avenue, just downstream of Site 37, which is located within a catch basin on South Second Street between east Main Street and Lexington Avenue. Samples from each site had identical exceedances of nitrate-nitrogen, measured at 12.94 mg/L during their initial visits on the same day. Confirmation visits were performed the following day, and the nitrate-nitrogen levels measured 12.09 mg/L at Site 30 and 13.92 at Site 37. Due to the proximity of these two locations on the same storm drain line and their coinciding upstream locations, both sites were investigated concurrently and are discussed together below.

Upstream of these sites is an area with a history of agricultural activity that is currently residential and commercial. The storm water conveyance is dry upstream of this area, and is flowing downstream without the addition of any visible surface flow. This situation indicates that water is entering the conveyance by seepage into the pipe. A groundwater study was performed at this location in 2008 at the City's request and revealed that the groundwater table in this area is high enough to influence the storm drain system. Samples of the groundwater confirmed high levels of nitrate-nitrogen were present, with sample concentrations at and above 16.7 mg/L. These findings support the conclusion that the source of nitrate-nitrogen at sites 30 and 37 is the seepage of nitrate-enriched groundwater into the storm water conveyance.

Site 41

Site 41 is located in a concrete channel northwest of 558 Johnson Avenue. During the initial visit, the water sample was green in color due to the presence of grass clippings, and had a strong rotten egg odor. Miscellaneous plastic trash, clothing, and grass clippings were observed in contact with the water. The site received a marginal trash assessment score, the flow rate was 47 gpm, and a high turbidity was measured at 72 NTU. The high turbidity was most likely due to channel maintenance activities upstream at the time of the visit, which are likely to agitate sediment within the channel. Laboratory analyses indicated total and fecal coliform levels exceeded action levels. Total coliform bacteria was measured at 900,000 MPN/100 mL, over the action level of 50,000 MPN/100 mL, and fecal coliform bacteria was measured at 50,000 MPN/100 mL, over the action level of 20,000 MPN/100 mL.

During the confirmation visit, the water had no odor or color, however trash and organic debris were still observed at the site. Sample analyses revealed elevated values of total coliform bacteria, measured at 1,990,000 MPN/100 mL; and fecal coliform bacteria levels measuring below the action level, at 2,776 MPN/100 mL. Two channels converging at Site 41, one from the south and one from the west (locations 41-S and 41-W, respectively) were examined. Each channel was sampled separately, and both contained total coliform bacteria above the action level, measuring 199,000 MPN/100 mL in the southern channel and 2,240,000 MPN/100 mL in the western channel. While the bacteria level was higher in the western channel, the southern channel was contributing the majority of the flow observed at Site 41.

Upstream of the western channel is a residential area where irrigation runoff was observed. An alleyway between Cuyamaca Street and El Monte Road, south of Wagner Drive, contained dog feces, trash, and a dead skunk, visible in Photo 8-4. The catch basins located within the alleyway and surrounding streets contained trash and debris. A sample was taken downstream of this area (location 41-2). The total coliform level measured at 517,000 MPN/100 mL and the fecal coliform level measured at 284,706 MPN/100 mL, both exceeding the action levels. A resident indicated that many people own dogs in the area and walk them through the neighborhood and in the alleyway. Further

Photo 8-4: Refuse, feces, and a dead skunk in an alley upstream of Site 41

upstream is a neighborhood in much cleaner condition; the sample taken just downstream of this area had bacteria measuring below action levels (location 41-4).

Photo 8-5: Debris in the southern channel, at upstream location 41-3

In the southern channel upstream of Site 41, a transient population inhabits portions of the channel beneath bridges. Their activities have been a probable source of bacteria to Site 41 in past years. Food packaging, bath tissue, and organic debris were observed in contact with the flow on the day of the upstream investigation, visible in Photo 8-5. A sample taken from this location (41-3) had total coliform levels measuring 141,000 MPN/100 mL, above the action level, and fecal coliform levels below the action level.

Trash and organic debris decomposition in the upstream residential area and channel to the south, combined with human inhabitation of the southern channel, are the most probable sources of total coliform bacteria to Site 41. The initial fecal coliform exceedance was concluded to be due to a transient flow. The results of this investigation are provided in Table 8-2, and a map of sampling locations is provided in Figure 8-2.

TABLE 8-2
SITE 41 BACTERIA UPSTREAM INVESTIGATION

Site	Date	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms* (MPN/100 mL)
41	6/25/09	Northwest of 558 Johnson Avenue, across via Johnson Avenue exit off I-8 east	47	**900,000**	**50,000**
41 (Confirmation)	7/7/09	*Same as above*	43	**1,990,000**	2,776
41-S	7/7/09	Channel from the south flowing into site 41	39	**199,000**	3,859
41-3	7/7/09	Primary Site 3. North of Main Street between Chambers Street and Johnson Avenue	47	**141,000**	1,835
41-W	7/7/09	Channel from the west flowing into site 41	3	**2,420,000**	4,894
41-2	7/7/09	Site 14. Pierce Street, south of Wagner Drive, across from "Grace Fellowship" north of the National Guard Facility	2	**517,000**	**284,706**
41-2 (Confirmation)	7/9/09	*Same as above*	2	**242,000**	**141,176**
41-4	7/9/09	Manhole in front of 351 Cuyamaca Street	2	17,300	3,071

Notes:
Red Bold Type value exceeds action level
Number of fecal coliforms for follow-up samples is derived from number of *E. coli* through the following formula:
Fecal Coliforms *E. coli* / 0.85. The converted fecal coliform count, not the number of *E. coli*, is reported in this data table.

FIGURE 8-2
SITE 41 BACTERIA UPSTREAM INVESTIGATION MAP

Base Data Sources: USGS, SanGIS, SANDAG, City of El Cajon

0 0.05 0.1 0.2 Miles

9.0 SUMMARY AND RECOMMENDATIONS

9.1 Summary of Field Screening and Laboratory Analysis Data

During the 2009 monitoring program, 31 primary sampling locations were visited. Sites 31, 36, and 39 were dry, and sites 9, 19, and 22 were selected as alternate locations for monitoring. A total of 31 sites were sampled for field analyses, 10 of which were also sampled for laboratory analyses. A summary of action level exceedances is presented in Table 9-1.

TABLE 9-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (31 samples)			
Analyte	Number of Exceedances	Percentage of Sites with Exceedances	Site(s) Exceeding Action Level
pH	2	6	1 and 7
Conductivity	0	0	---
Turbidity	0	0	---
Surfactants	0	0	---
Ammonia-N	0	0	---
Nitrate-N	4	13	22, 26, 30, and 37
Orthophosphate-P	0	0	---
Dissolved Oxygen	0	0	**---**
Laboratory Analyses (10 samples)			
Analyte	Number of Exceedances	Percentage of Sites with Exceedances	Site(s) Exceeding Action Level
Oil Grease	0	0	---
Cadmium	0	0	---
Copper	0	0	---
Lead	0	0	---
Zinc	0	0	---
Diazinon	0	0	---
Chlorpyrifos	0	0	---
Total Coliforms	1	10	41
Fecal Coliforms	1	10	41
Enterococci	0	0	---
Total Dissolved Solids	1	10	8
Total Organic Carbon	0	0	**---**

Note: Table data is based on routine visits only. Confirmation, follow-up and dry site visits not included.

9.2 Summary of Follow-up Investigation Data

Including both field screening and laboratory analyses, eight sites had parameters that exceeded established action levels. Table 9-2 shows the conclusions based on the results of the follow up investigations for these sites.

TABLE 9-2
SUMMARY OF FOLLOW-UP INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results / Probable Source
	Field	Laboratory	
1	pH	--	Transient; algal photosynthesis and increased temperature resulting in the removal of carbon dioxide and an increase in pH
7	pH	--	*Same as above*
8	---	Total Dissolved Solids	Transient, likely due to construction activities in upstream residential area
22	Nitrate-N	--	Groundwater seepage
26	Nitrate-N	--	Transient; potentially elevated due to concentration by the evaporation of ponded water
30	Nitrate-N	--	Groundwater seepage
37	Nitrate-N	--	*Same as above*
41	--	Total Coliforms, Fecal Coliforms	Trash and organic material decomposition, and the activities of transient populations in upstream areas

9.3 Recommendations

Based on the results of the 2009 Dry Weather Monitoring Program for the City of El Cajon, the following actions are recommended for consideration.

9.3.1 Education

- Provide educational material regarding pet waste disposal best management practices to the residents on El Monte Road, North Cuyamaca Street and North Pierce Street, south of Wagner Drive and north of West Main Street. This area is upstream of Site 41, and is believed to be contributing to the bacteria exceedances at Site 41.

9.3.2 Maintenance

- Remove concrete or ceramic dust from Valley Lake Drive, upstream of Site 8, which is believed to be contributing to the total dissolved solids exceedance noted this year.
- Remove trash and debris from Site 41, and in the upstream channel to the south. Where possible, take measures to discourage use of the channel by transient

populations. This area is upstream of Site 41, and is believed to be contributing to the bacteria exceedances at Site 41.

- Remove trash and organic waste from El Monte Road, North Cuyamaca Street and North Pierce Street, south of Wagner Drive and north of West Main Street, and all associated catch basins. This area is upstream of Site 41, and is believed to be contributing to the bacteria exceedances at Site 41. Increase the monitoring frequency of this area to prevent debris accumulation in the storm drain system.
- Remove trash and debris from sites 2, 3, 6, 20, 30, and 41, which received marginal trash assessment ratings.

Attachment

2009 Dry Weather Monitoring Report

FIGURE 2
WATERSHED MAP OF THE EL CAJON AREA, BROKEN INTO HYDROLOGIC SUBAREAS

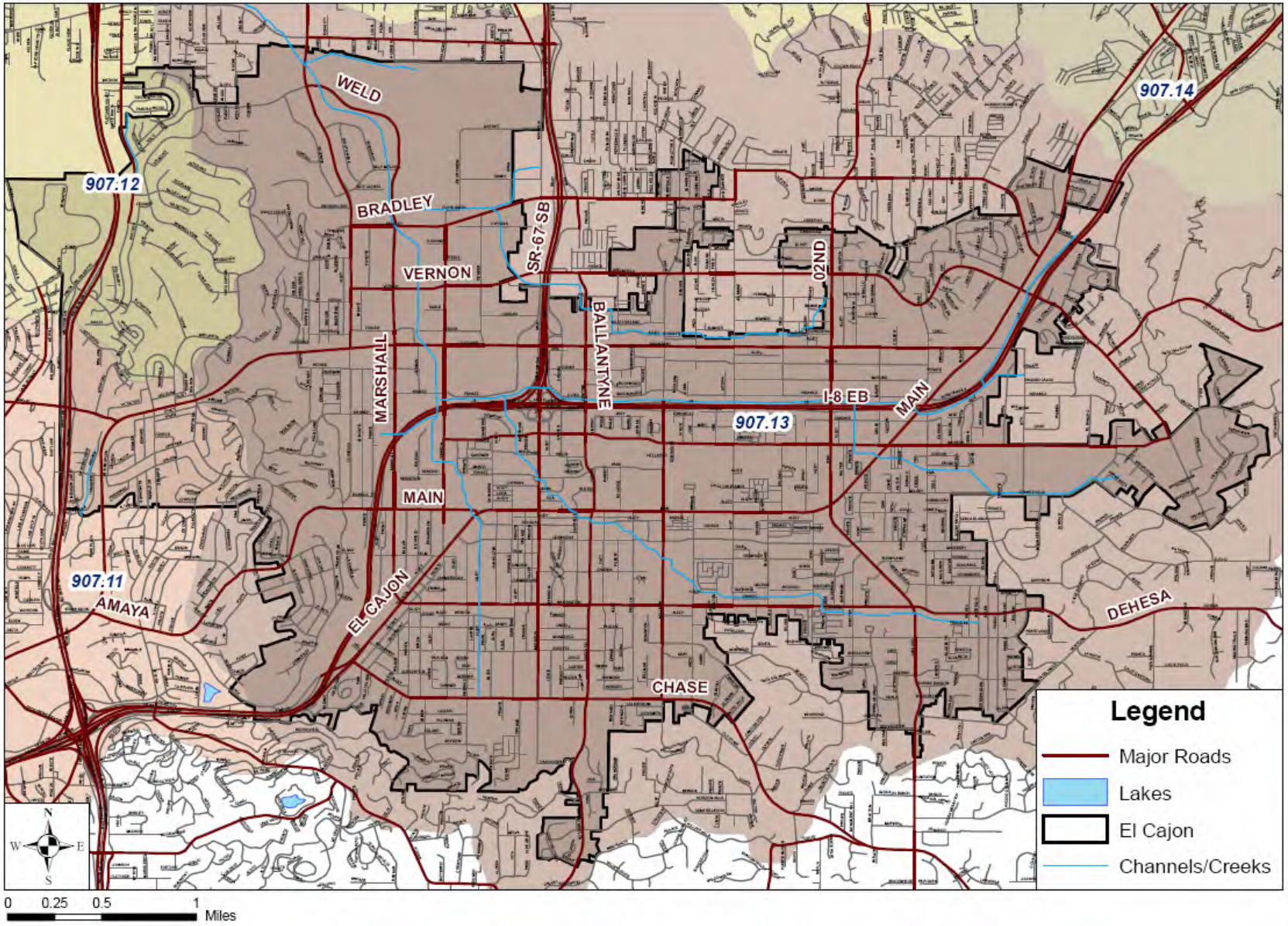

Appendix A

Historical Dry Weather Monitoring Data

City of El Cajon Dry Weather Historical Data

Site No.	1	2	3	4	5	6	7	8
1993								
pH	10.6	na	na	10.2	9.7	10.3		
Temperature (℃)	27	23	23	24	24	23		
Ammonia (mg/L)	na	na	na	na	na	na		
Surfactants (mg/L)	0.50	3.00	0.25	0.75	0.50	0.50		
Chlorine (mg/L)	1.5	0.8	0.2	0.4	0.2	0.8		
Copper (mg/L)	0.1	nd	nd	nd	nd	0.2		
Phenols (mg/L)	nd	nd	nd	nd	nd	nd		
1994								
pH	9.2	9.2	8.2	9.2	9.3	9.2		
Temperature (℃)	24	24	24	24	26	25		
Ammonia (mg/L)	na	na	na	na	na	na		
Surfactants (mg/L)	0.25	0.25	0.25	0.25	0.50	0.50		
Chlorine (mg/L)	1.0	1.0	0.8	1.0	1.5	1.0		
Copper (mg/L)	0.1	0.1	nd	nd	nd	nd		
Phenols (mg/L)	nd	nd	nd	nd	nd	nd		
January 1996								
pH	9.5	9.5	9.8	9.5	9.8	10.0	9.8	9.5
Temperature (℃)	28	28	26	22	24	22	20	20
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.25	0.60	0.75	0.50	0.50	0.25	0.25	0.50
Chlorine (mg/L)	0.60	nd	0.30	0.75	0.40	0.20	0.10	0.20
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
May 1996								
pH	9.6	9.8	9.4	9.7	9.5	9.8	9.4	9.6
Temperature (℃)	28.0	29.5	28.6	29.9	23.5	31.4	21.0	31.5
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.50	0.25	0.50	0.50	0.50	0.50	1.00	0.50
Chlorine (mg/L)	0.3	0.1	0.2	0.3	0.6	0.1	0.1	8.0
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
1997								
pH	9.4	9.8	9.8	9.3	9.9	9.9	8.2	9.0
Temperature (℃)	24	17	11	21	21	13	16	18
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.25	0.25	0.25	0.50	0.50	0.25	0.50	1.00
Chlorine (mg/L)	0.2	0.1	0.1	0.6	0.6	0.2	0.2	0.8
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
1998								
pH	8.7	8.1	8.3	8.3	8.5	9.0	8.9	7.9
Temperature (℃)	na	20	22	23	23	23	22	22
Ammonia (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Surfactants (mg/L)	nd	0.50	0.75	0.75	0.75	0.25	0.25	0.50
Chlorine (mg/L)	nd	0.40	0.40	0.80	0.80	0.75	0.75	0.80
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd

City of El Cajon Dry Weather Historical Data

Site No.	1	2	3	4	5	6	7	8
January 1999								
pH	9.0	8.6	9.0	9.3	8.8	9.8	9.0	8.4
Temperature (℃)	12.0	16.2	15.0	11.0	12.0	12.0	17.0	16.0
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.80	1.00	0.50	0.75	0.75	0.75	0.75	0.50
Chlorine (mg/L)	0.6	0.8	1.0	0.8	0.8	1.0	0.6	0.6
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
June 1999								
pH	9.9	8.1	9.1	8.3	8.9	9.5	8.8	8.8
Temperature (℃)	33	33	32	32	33	36	21	22
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Chlorine (mg/L)	1.0	0.8	0.8	0.8	0.8	1.0	0.1	0.8
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
2000								
pH	9.5	9.1	9.3	8.8	8.8	9.6	8.9	8.4
Temperature (℃)	32	32	34	30	33	34	22	23
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.25	0.25	0.75	0.25	0.25	0.5	0.75	0.25
Chlorine (mg/L)	1.0	0.8	1.0	1.0	1.0	1.0	0.2	0.8
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
2001								
pH	9.1	8.8	8.8	8.8	8.9	9.2	9.2	8.5
Temperature (℃)	11.4	15.9	14.3	13.1	17.6	12.2	8.8	9.2
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.25	0.75	0.5	0.25	0.25	0.25	0.50	0.5
Chlorine (mg/L)	0.6	0.4	0.6	0.7	0.6	nd	0.2	0.8
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	0.1	nd	nd	nd	nd	nd

City of El Cajon Dry Weather Historical Data

Site No.	1	2	3	4	5	6	7	8	9	12	13	14	15	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	36	37	38	39	40	41
2002																																					
Temp. ℃	26.0	23.5	30.5	31.0	32.0	33.0	23.5	27.0		23.0	22.5	21.5	24.0	21.0	20.5	22.0	25.0	27.0	22.0	25.5	22.0	20.0	23.0	24.5	26.0	26.5	20.0	ns	22.0	23.5	23.5	ns	20.0	25.0	ns		
pH	9.2	9.0	9.2	9.0	8.8	9.2	9.3	8.2		8.2	7.5	8.5	7.1	7.4	8.0	7.4	8.2	8.2	7.8	8.3	7.8	7.7	8.0	7.8	7.7	8.2	7.9	ns	8.3	7.8	8.3	ns	7.5	7.8	ns		
Conductivity (µmhos/cm)	1,754	1,974	2,790	2,940	2,550	2,600	1,710	5,910		2,300	1,144	3,040	3,760	1,410	2,930	6,140	1,631	2,470	3,210	3,090	4,290	2,550	2,490	2,740	1,150	1,502	2,580	ns	3,070	1,168	2,360	ns	2,460	1,371	ns		
Turbidity, NTU	1.99	4.72	5.57	18.94	15.13	8.53	10.81	9.82		38.34	60.00	3.75	10.52	43.52	14.21	32.25	2.66	18.77	0.66	20.20	5.18	9.36	32.61	10.40	15.93	44.60	2.47	ns	0.71	1.26	0.73	ns	2.43	2.71	ns		
Ammonia, mg/L	0.2	0.3	0.2	0.3	0.3	0.4	0.5	0.4		0.3	4.5	0.2	0.8	0.8	1.0	1.0	0.2	1.7	0.2	0.6	<0.1	0.2	0.9	1.0	0.6	1.0	0.3	ns	0.2	0.2	0.2	ns	0.2	0.6	ns		
Nitrate, mg/L	4.5	0.5	4.0	2.0	0.1	4.0	<0.1	24.0		4.0	<0.1	1.5	0.3	0.3	1.0	2.0	1.0	1.0	16.0	4.5	10.0	4.5	5.0	4.5	0.2	0.1	24.0	ns	28.0	1.0	20.0	ns	28.0	1.5	ns		
Orthophosphate-P, mg/L	0.05	0.03	0.03	0.03	0.03	0.03	0.10	0.13		0.65	2.61	0.26	0.20	0.10	1.63	0.49	0.33	0.33	0.07	0.33	0.07	0.13	1.96	0.33	0.98	1.96	0.13	ns	0.07	0.33	0.07	ns	0.33	0.49	ns		
Surfactants, mg/L - field screening	0.37	0.25	0.50	0.50	37.0	0.75	0.50	0.75		0.25	0.75	0.50	0.25	0.50	0.75	2.00	0.25	1.50	0.25	0.50	0.50	0.50	0.50	0.75	0.25	6.00	0.25	ns	0.25	0.25	0.25	ns	0.25	0.25	ns		
Surfactants (mg/L MBAS)	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50																					nd					nd			
Oil and Grease (mg/L)	nd	7.00	5.0	2.0	<1.0	2.0	5.0	<1.0																					nd					nd			
Total Hardness (mg/L $CaCO_3$)	422	600	500	582	549	664	468	1,140																					811					668			
Cadmium-diss (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd																					nd					nd			
Copper-diss (mg/L)	nd	nd	nd	nd	nd	nd	**0.11**	nd																					nd					nd			
Lead-diss (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd																					nd					nd			
Zinc-diss (mgL)	nd	nd	nd	nd	nd	nd	nd	nd																					nd					nd			
Diazinon (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd																					nd					nd			
Chlorpyrifos (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd																					nd					nd			
Total Coliform Bacteria (MPN/100ml)	2,200	7,000	1,700	17,000	30,000	2,800	17,000	**90,000**																					11,000					7,000			
Fecal Coliform Bacteria (MPN/100ml)	1,100	5,000	800	13,000	17,000	1,700	13,000	**50,000**																					8,000					5,000			
Enterococcus (MPN/100ml)	300	500	230	230	300	8,000	800	800																					800					800			
2003																																					
Temp. ℃	30.5	27.0	31.0	31.0	29.0	27.0	28.0	28.5			24.0	23.5	23.0	28.0	25.0		27.0	28.0	23.5	26.0	27.5	24.5	26.0	27.5	28.0		26.0	ns	24.5	26.5	25.0	27.5	27.0	26.0	30.0		30.0
pH	**9.3**	**9.1**	8.8	**9.0**	8.6	**9.0**	**9.2**	**9.0**			7.9	8.5	7.7	7.9	8.2		8.3	8.4	8.0	8.4	8.1	8.0	8.2	8.0	7.7		7.9	ns	8.2	8.4	8.3	8.1	7.4	8.2	**9.7**		8.5
Conductivity (µmhos/cm)	2,180	2,250	2,900	2,660	2,700	2,190	2,070	2,010			2,800	4,040	3,540	1,830	3,630		1,550	**6,390**	3,040	3,620	2,720	2,510	2,130	1,140	1,030		2,400	ns	2,710	2,220	2,310	4,080	2,560	2,440	1,320		3,230
Turbidity, NTU	5.26	2.24	2.54	5.34	6.36	4.98	8.94	2.45			12.75	4.92	12.68	9.25	2.17		0.48	2.58	0.43	7.75	1.69	9.29	29.34	7.14	4.84		0.43	ns	2.36	1.82	7.50	4.88	0.74	1.36	17.23		2.95
Ammonia, mg/L	0.2	0.3	0.2	0.3	0.2	0.3	0.6	0.2			1.0	0.3	0.2	0.1	**2.0**		0.3	0.2	0.3	0.3	0.1	0.3	0.4	0.8	0.8		0.1	ns	0.3	0.2	0.2	0.2	0.3	0.3	1.0		0.1
Nitrate, mg/L	6.4	4.0	4.8	1.5	2.0	5.0	0.1	1.6			0.8	0.6	1.0	0.3	0.8		0.8	3.5	10.0	3.2	2.4	3.5	8.0	0.4	0.2		**20.0**	ns	8.0	4.0	8.0	0.8	**28.0**	5.0	0.1		0.8
Orthophosphate-P, mg/L	nd	0.03	0.03	nd	nd	nd	0.13	0.03			0.65	0.16	0.10	0.07	0.33		0.20	0.23	0.13	0.13	0.16	0.07	0.82	0.65	0.82		0.10	ns	0.16	0.65	0.07	0.20	0.07	0.26	0.49		0.03
Surfactants, mg/L - field screening	0.25	0.25	0.25	0.25	0.13	0.25	0.25	0.13			0.50	0.38	0.25	0.25	0.25		0.13	0.50	0.25	0.25	0.25	0.13	0.25	0.25	0.25		0.25	ns	0.25	0.25	0.13	0.25	0.25	0.25	0.75		0.25
Dissolved Oxygen (mg/L)	11.6	11.0	12.9	13.2	11.1	9.7	7.6	11.0			5.0	7.9	9.0	6.5	6.3		7.1	6.3	7.4	7.5	6.5	6.8	6.8	6.6	5.0		7.0	ns	7.8	8.1	8.1	6.7	5.4	7.2	5.3		13.6
Surfactants (mg/LMBAS)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Oil and Grease (mg/L)	nd	nd			nd	nd	nd	1						nd							nd								nd								nd
Total Hardness (mg/L $CaCO_3$)	438	536			624	588	485	460						464							773								764								633
Cadmium-diss (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Copper-diss (mg/L)	nd	0.007			0.010	nd	0.044	nd						nd							nd								nd								nd
Lead-diss (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Zinc-diss (mgL)	nd	nd			nd	nd	nd	nd						0.021							nd								nd								nd
Diazinon (mg/L)	nd	nd			nd	nd	nd	nd						nd							0.33								nd								0.05
Chlorpyrifos (mg/L)	nd	nd			nd	nd	nd	0.15						nd							nd								nd								nd
Total Coliform Bacteria (MPN/100ml)	1,700	8,000			8,000	**90,000**	1,300	5,000						11,000							**90,000**								**160,000**								3,000
Fecal Coliform Bacteria (MPN/100ml)	500	3,000			2,300	**30,000**	5,000	1,700						5,000							**30,000**								**90,000**								1,300
Enterococcus (MPN/100ml)	1,700	5,000			800	8,000	**13,000**	1,700						300							800								**17,000**								1,700
Total Dissolved Solids (mg/L)	1,190	1,270			1,490	1,270	1,100	950						1,050							1,520								1,540								1,710
Total Organic Carbon (mg/L)	8.64	9.86			10.60	6.33	20.00	7.37						10.50							6.73								4.58								11.20
2004																																					
Temp. ℃	29.6	25.9	24.1	24.7	20.6	23.5	21.7	20.4		22.4	21.3	22.5	21.7	20.9		23.4	24.5	20.5	23.9	21.7	22.8	22.1	23.4	24.4		23.5	ns	21.9	22.4	22.6	26.3	24.3	23.6	29.6		29.9
pH	**9.2**	8.9	8.8	8.3	8.3	8.5	**9.3**	8.1		7.8	8.3	7.2	7.5	7.9		7.9	8.2	7.7	8.2	8.0	7.8	8.0	7.7	7.8		7.4	ns	8.0	7.9	8.2	8.1	7.2	7.9	8.7		8.5
Conductivity (µmhos/cm)	1,620	1,730	2,400	2,600	2,320	1,900	2,140	1,210		1,340	2,900	2,850	2,000	1,830		1,700	3,450	2,430	2,410	2,100	1,910	1,310	750	770		1,840	ns	2,300	1,340	1,700	2,660	2,500	2,560	1,250		2,250
Turbidity, NTU	11.22	3.44	4.03	5.11	4.74	8.80	14.34	15.68		18.77	21.55	9.41	6.54	11.31		0.94	1.39	1.09	8.26	1.86	2.08	7.03	2.09	7.22		1.02	ns	1.18	3.65	0.76	13.17	0.72	0.95	8.84		4.15
Ammonia, mg/L	0.2	0.3	0.8	0.3	0.3	0.3	0.8	0.2		**1.5**	0.3	0.6	0.5	0.8		0.3	0.3	0.2	0.3	0.2	0.2	0.7	0.3	0.4		0.1	ns	0.2	0.3	0.2	0.8	0.2	0.2	0.8		0.2
Nitrate, mg/L	5.0	2.5	1.25	3.8	1.25	5.0	1.3	1.3		1.3	1.3	1.3	1.3	1.3		1.3	2.5	7.5	2.5	2.5	2.5	7.5	2.5	1.3		**15.0**	ns	7.5	2.5	7.5	1.3	**20.0**	1.3	nd		2.5
Orthophosphate-P, mg/L	0.03	0.04	0.03	0.03	0.03	0.03	0.10	0.10		0.98	0.26	0.13	0.07	0.49		0.10	0.20	0.07	0.19	0.07	0.03	0.07	0.03	0.03		0.07	ns	0.05	0.49	0.07	0.49	0.05	0.20	0.49		0.03
Surfactants, mg/L - field screening	0.13	0.13	0.50	0.26	0.38	0.25	0.50	0.25		0.50	0.50	0.25	0.13	0.25		0.13	0.25	0.25	0.13	0.13	0.25	0.25	0.13	0.25		0.25	ns	0.13	0.38	0.25	0.25	0.25	0.25	0.50		0.25
Dissolved Oxygen (mg/L)	8.4	7.8	4.58	10.3	7.5	7.6	8.9	6.7		4.4	5.7	4.4	3.2	5.7		5.1	4.95	5.88	6.0	5.8	5.6	4.8	5.0	5.0		4.1	ns	5.3	5.3	4.5	5.7	4.3	5.3	7.3		2.4
Surfactants (mg/LMBAS)	nd	nd			nd	nd	nd	nd					nd							nd								nd								nd
Oil and Grease (mg/L)	nd	nd			nd	2	1	nd					3							nd								nd								3
Total Hardness (mg/L $CaCO_3$)	419	597			699	602	698	393					586							838								1,000								587
Cadmium-diss (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd								nd								nd
Copper-diss (mg/L)	nd	nd			nd	nd	0.037	nd					nd							nd								nd								nd
Lead-diss (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd								nd								nd
Zinc-diss (mgL)	nd	nd			nd	nd	nd	nd					nd							0.029								nd								nd
Diazinon (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd								nd								nd
Chlorpyrifos (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd								nd								nd
Total Coliform Bacteria (MPN/100ml)	17,000	17,000			**130,000**	**70,000**	3,300	**500,000**					30,000							11,000								**220,000**								**300,000**
Fecal Coliform Bacteria (MPN/100ml)	300	800			800	**50,000**	1,100	3,000					5,000							220								3,000								1,300
Enterococcus (MPN/100ml)	700	800			340	2,600	2,400	8,000					3,000							220								5,000								**11,000**
Total Dissolved Solids (mg/L)	1,330	1,540			1,900	1,320	1,930	955					1,540							1,890								2,020								1,840
Total Organic Carbon (mg/L)	10.50	9.68			10.90	16.00	33.50	5.07					9.19							5.46								4.32								12.40

City of El Cajon Dry Weather Historical Data

Site No.	1	2	3	4	5	6	7	8	9	12	13	14	15	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	36	37	38	39	40	41
2005																																					
Temp. (Celsius)	28.3	23.8	28.8	22.4	25.5	25.3	18.2	21.5			21.4	18.8	20.1	18.2	19.6		23.2	22.5	22.1	21.5	19.9	22.8	20.6	20.7	22.0		21.9	ns	21.3	21.8	21.7	ns	23.5	21.7	24.1	28.5	28.4
pH	8.4	8.5	8.4	8.5	8.6	8.6	7.9	7.9			8.2	8.4	7.7	7.7	8.2		8.3	8.4	7.9	8.2	8.2	7.9	8.4	7.7	7.5		7.6	ns	8.2	8.1	8.4	ns	7.4	7.9	8.4	8.7	8.6
Conductivity (µmhos/cm)	2,260	2,440	3,030	1,350	1,240	2,140	1,840	1,990			9,530	1,970	1,570	2,220	1,290		4,020	3,210	1,580	1,410	1,340	1,350	1,020	460	420		1,150	ns	2,890	1,540	1,080	ns	2,450	2,690	1,580	960	2,890
Turbidity (NTU)	5.37	1.35	15.66	4.20	3.43	2.74	35.49	9.02			9.04	2.70	2.77	8.41	5.58		3.92	0.64	0.57	3.14	1.41	5.52	0.86	20.32	3.37		0.02	ns	0.44	4.49	3.65	ns	1.31	1.27	3.40	24.47	4.26
Ammonia (mg/L)	0.2	0.2	0.4	0.2	0.1	0.2	0.8	0.2			0.1	0.3	0.1	0.2	0.6		0.1	0.1	0.2	0.3	0.3	0.4	0.2	0.4	0.5		0.1	ns	0.3	0.3	0.2	ns	0.3	0.5	0.3	0.3	0.3
Nitrate (mg/L)	8.75	7.50	5.00	5.00	6.25	8.75	1.25	1.25			2.50	1.25	2.50	2.50	2.50		1.25	3.75	10.0	3.75	3.75	2.50	15.0	1.25	1.25		12.50	ns	6.25	7.50	6.25	ns	20.0	6.25	1.25	6.25	5.00
Orthophosphate-P (mg/L)	0.03	0.03	0.07	< 0.03	0.03	<0.03	0.98	0.07			0.33	0.07	0.13	0.03	0.98		0.13	0.26	0.03	0.26	0.07	0.07	0.10	0.33	0.65		0.07	ns	0.03	0.07	0.07	ns	0.49	0.20	0.33	0.03	<0.03
Surfactants - field (mg/L)	0.50	0.50	0.38	0.88	0.50	0.50	1.25	0.25			1.0	0.75	0.25	0.50	0.50		0.50	1.25	0.50	0.38	0.38	0.25	0.50	0.50	0.50		0.50	ns	0.38	0.50	0.25	ns	0.38	0.75	0.25	0.25	0.38
Dissolved Oxygen (mg/L)	12.06	11.42	11.51	9.74	12.70	11.03	6.43	7.84			8.10	8.88	7.55	6.02	8.04		7.40	6.94	7.89	8.09	8.14	7.60	8.02	5.92	5.93		6.62	ns	8.12	7.33	8.54	ns	6.20	7.25	7.81	10.05	13.79
Surfactants (mg/L MBAS)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Oil & Grease (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Hardness (mg/L)	689	860			810	788	556	586						697							1,040								1,120								795
Cadmium (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Copper (diss) (mg/L)	nd	nd			nd	nd	0.059	0.015						nd							nd								nd								nd
Lead (diss) (mg/L)	nd	nd			nd	nd	0.014	nd						nd							nd								nd								nd
Zinc (diss) (mg/L)	nd	nd			nd	nd	0.481	nd						0.05							0.046								nd								nd
Diazinon (µg/l)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Chlorpyrifos (µg/l)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Coliform (MPN/100mL)	14,000	6,000			30,000	30,000	50,000	50,000						50,000							80,000								3,000								8,000
Fecal Coliform (MPN/100mL)	2,300	500			1,300	30,000	500	2,300						20							80								110								700
Enterococcus (MPN/100mL)	700	500			5,000	11,000	1,300	5,000						700							230								110								80
Total Dissolved Solid (mg/L)	1,550	1,670			1,700	1,490	1,320	1,200						1,470							2,000								2,110								1,950
Total Organic Carbon (mg/L)	52.7	71.7			53.4	93.3	139.0	51.1						87.0							96.2								168.0								138.0
2006																																					
Temp. (Celsius)	31.6	27.1	27.6	19.9	27.9	22.8	20.0	27.1			21.4	20.5	20.2	20.7	20.3		23.6	24.6	21.0	21.0	21.9	22.5	22.7	22.2	23.5		21.7	ns	22.0	22.1	21.4	ns	23.7	21.5	23.8	31.0	32.8
pH	9.4	8.9	9.1	8.5	8.7	9.1	9.1	8.3			8.1	8.5	7.8	7.7	8.0		8.3	8.3	7.7	8.3	8.1	7.9	7.5	7.8	7.6		7.5	ns	8.0	8.2	8.4	ns	7.2	8.1	8.8	9.6	9.1
Conductivity (mS/cm)	2.18	2.01	2.70	2.04	2.58	1.98	1.60	3.00			4.63	3.64	3.31	1.96	2.02		4.11	5.02	3.34	3.16	2.44	2.55	1.91	0.78	0.91		2.06	ns	2.50	2.62	2.15	ns	2.30	2.63	1.53	2.13	2.87
Turbidity (NTU)	11.55	4.69	9.23	2.12	2.06	2.53	3.35	18.32			4.21	23.00	1.90	7.90	8.68		1.07	14.37	0.54	5.11	1.68	1.02	21.96	8.86	12.17		3.52	ns	2.79	2.39	0.91	ns	0.35	1.21	14.47	8.89	1.31
Ammonia (mg/L)	0.6	0.1	0.2	0.3	0.8	0.4	0.2	0.6			0.6	0.3	0.2	0.4	0.8		0.3	0.3	0.2	0.8	0.8	0.4	0.8	0.3	1.5		0.2	ns	0.2	0.4	0.2	ns	0.8	0.2	0.8	0.4	0.2
Nitrate (mg/L)	7.50	5.00	2.50	6.25	5.00	7.50	3.75	5.00			3.75	2.50	1.25	3.75	2.50		2.50	5.00	7.50	5.00	3.75	3.75	8.75	2.50	2.50		12.50	ns	7.50	6.75	7.50	ns	15.00	5.00	7.50	3.75	3.75
Orthophosphate-P (mg/L)	0.03	0.03	0.03	0.03	0.03	nd	0.07	0.07			0.33	0.10	0.07	0.07	0.33		0.10	0.20	0.03	0.13	0.10	0.03	0.20	0.20	0.98		0.07	ns	0.03	0.13	0.07	ns	0.07	0.07	0.26	0.03	0.03
Surfactants - field (mg/L)	0.3	0.3	0.5	0.5	0.3	0.3	0.5	0.5			0.8	0.5	0.3	0.3	0.5		0.5	2.0	0.5	0.3	0.3	0.3	0.3	0.3	1.5		0.3	ns	0.3	0.3	0.3	ns	0.3	0.3	0.8	2.0	0.3
Dissolved Oxygen (mg/L)	13.80	13.10	9.80	12.85	10.66	10.60	8.50	9.82			7.22	8.24	6.23	5.04	6.87		6.85	5.54	5.78	7.52	7.10	7.90	5.95	5.38	4.53		5.64	ns	7.05	7.62	8.46	ns	5.23	6.53	9.37	6.70	14.70
Surfactants (mg/L MBAS)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Oil & Grease (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Hardness (mg/L)	515	533			60	545	329	76						528							769								735								62
Cadmium (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Copper (diss) (mg/L)	0.005	nd			nd	nd	0.047	0.009						nd							nd								nd								nd
Lead (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Zinc (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							0.027								0.022								nd
Diazinon (µg/l)	nd	nd			0.2	nd	nd	nd						nd							nd								nd								nd
Chlorpyrifos (µg/l)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Coliform (MPN/100mL)	23,000	13,000			170,000	130,000	7,000	900,000						110,000							130,000								130,000								30,000
Fecal Coliform (MPN/100mL)	40	210			500	2,300	7,000	3,000						500							8,000								3,000								30,000
Enterococcus (MPN/100mL)	20	2,300			70	1,300	13,000	80,000						3,000							2,200								2,800								13,000
Total Dissolved Solid (mg/L)	1,420	1,320			1,600	1,420	951	1,810						1,310							1,690								1,740								1,960
Total Organic Carbon (mg/L)	9.57	6.47			9.52	6.89	13.40	14.00						6.27							5.20								10.20								11.80
2007																																					
Temp. (Celsius)	27.1	28.0	30.2	25.7	27.8	32.9	23.0	33.1	21.6		26.3	24.5	21.9	25.9	22.9		25.4	27.1	22.9	24.4	24.5	23.7	23.0	23.5	24.1		25.6	ns	23.7	23.7	21.9	ns	26.2	23.9	31.5		31.5
pH	8.6	8.8	8.8	8.5	8.3	9.3	9.4	8.3	7.1		8.2	8.3	7.8	7.5	8.4		8.3	7.9	8.0	8.4	8.1	7.9	7.9	7.6	8.1		7.4	ns	8.3	8.3	8.4	ns	7.2	8.1	10.2		8.8
Conductivity (mS/cm)	2.21	2.27	2.80	2.30	2.35	2.12	0.95	3.34	2.63		3.69	4.03	3.31	2.56	3.44		1.99	2.05	2.94	3.05	2.21	2.31	1.20	0.90	0.87		2.25	ns	2.73	1.79	2.02	ns	2.51	2.19	1.15		2.26
Turbidity (NTU)	4.09	1.47	1.79	6.57	9.91	8.11	2.04	8.34	48.44		5.19	2.11	1.77	5.29	2.14		1.53	11.73	1.11	1.17	2.14	1.11	9.73	4.21	1.53		0.69	ns	0.95	1.05	0.99	ns	2.33	4.69	2.09		3.47
Ammonia (mg/L)	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.4	0.6		0.3	4.0	0.1	0.2	0.2		0.2	0.2	0.2	0.2	0.3	0.1	0.2	0.1	nd		0.1	ns	0.2	0.1	0.2	ns	0.2	0.4	0.1		0.2
Nitrate (mg/L)	6.46	3.07	2.26	2.24	1.92	3.07	0.23	0.79	0.43		0.54	12.20	4.80	0.63	0.57		0.52	0.25	10.24	3.41	1.31	3.12	4.54	0.11	0.75		14.25	ns	5.54	3.03	9.10	ns	12.02	5.31	0.02		0.95
Orthophosphate-P (mg/L)	0.03	0.07	0.03	0.07	0.07	0.03	0.07	0.13	0.55		0.68	1.56	0.13	0.10	0.23		0.46	0.20	0.07	0.16	0.20	0.07	0.49	0.36	0.23		0.07	ns	0.03	0.29	0.10	ns	0.07	0.75	0.10		0.03
Surfactants - field (mg/L)	0.50	0.38	0.25	0.50	0.50	0.25	0.25	0.50	0.50		0.75	1.25	0.75	0.50	0.63		0.38	0.50	0.38	0.50	0.75	0.38	0.50	0.25	0.38		0.50	ns	0.25	0.50	0.25	ns	0.50	0.63	0.50		0.50
Dissolved Oxygen (mg/L)	8.20	8.00	7.40	8.10	7.80	7.80	8.20	7.20	6.47		6.17	6.10	5.10	5.39	7.30		5.34	5.93	6.50	5.82	7.85	6.20	5.39	5.37	6.34		5.66	ns	7.10	6.85	8.30	ns	5.20	6.73	7.40		7.30
Surfactants (mg/L MBAS)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Oil & Grease (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Hardness (mg/L)	589	584			649	506	226	896						704							723								960								535
Cadmium (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Copper (diss) (mg/L)	nd	nd			nd	nd	0.011	0.070						nd							0.015								nd								0.060
Lead (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Zinc (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Diazinon (µg/l)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Chlorpyrifos (µg/l)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Coliform (MPN/100mL)	23,000	13,000			30,000	8,000	5,000	500,000						13,000							80,000								13,000								80,000
Fecal Coliform (MPN/100mL)	5,000	1,300			5,000	2,300	3,000	>160,000						300							17,000								3,000								2,300
Enterococcus (MPN/100mL)	1,300	130			800	230	2,300	8,000						2,300							24,000								500								500
Total Dissolved Solid (mg/L)	1,360	1,450			1,400	1,320	584	1,780						1,610							1,510								1,940								1,400
Total Organic Carbon (mg/L)	12.5	11.2			14.1	16.7	16.3	16.5						17.3							26.0								9.9								16.6

City of El Cajon Dry Weather Historical Data

Site No.	1	2	3	4	5	6	7	8	9	13A	14	15	17	18	19	20	21	22	23	24	25	26	27	28	30	31	32	33	34	36	37	38	39	41
2008																																		
Temp. (Celsius)	32.7	28.7	31.0	30.6	32.0	31.6	25.7	33.6	21.7	27.3	26.0	24.1	23.9	25.3	24.5	26.0	26.4	25.5	26.4	26.0	25.0	24.9	24.4	28.4	28.0	ns	25.5	27.0	25.5	ns	27.6	26.6	ns	34.2
pH	8.7	8.6	8.2	8.7	8.7	8.9	8.4	8.5	6.7	8.0	8.3	7.5	7.6	8.0	7.5	8.1	8.3	7.6	8.2	7.9	7.9	7.2	8.0	8.0	7.1	ns	8.1	8.1	8.2	ns	7.3	8.1	ns	8.3
Conductivity (mS/cm)	2.24	2.31	3.11	2.71	2.80	2.20	1.91	2.97	3.81	5.63	4.48	3.64	2.61	2.80	6.14	2.14	4.30	2.74	3.46	2.82	2.40	2.33	1.31	2.85	2.39	ns	2.92	2.03	2.20	ns	2.35	2.52	ns	3.04
Turbidity (NTU)	7.14	2.53	12.52	7.13	5.57	10.47	1.52	5.14	9.55	0.86	2.03	2.86	4.97	2.05	1.15	2.64	0.01	0.38	2.30	0.17	2.26	3.85	5.43	4.17	2.41	ns	1.42	1.51	1.24	ns	0.52	1.49	ns	2.36
Ammonia (mg/L)	0.3	0.3	0.2	0.3	0.3	0.3	0.1	0.3	0.6	0.3	0.3	0.2	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1	ns	0.2	0.4	0.3	ns	0.2	0.2	ns	0.3
Nitrate (mg/L)	6.83	3.16	4.79	3.53	2.12	4.52	0.68	0.54	0.70	1.67	1.20	2.06	2.46	1.27	2.76	0.77	1.83	**15.37**	5.04	2.73	1.49	8.77	1.36	**30.74**	**16.05**	ns	8.02	4.32	7.91	ns	**18.98**	**10.06**	ns	3.68
Orthophosphate-P (mg/L)	nd	nd	0.07	0.03	0.03	0.07	0.26	0.02	0.16	0.03	0.33	0.16	nd	0.13	0.13	0.39	0.10	0.03	0.23	0.10	0.07	0.23	0.33	0.23	0.03	ns	0.07	0.33	0.10	ns	0.03	0.20	ns	0.03
Surfactants - field (mg/L)	0.25	0.25	0.50	0.25	0.25	0.50	0.50	0.25	0.50	0.50	0.68	0.13	0.25	0.50	0.75	0.68	0.63	0.25	0.25	0.13	0.13	0.25	0.25	0.50	0.38	ns	0.25	0.50	0.75	ns	0.25	0.25	ns	0.25
Dissolved Oxygen (mg/L)	8.14	8.52	8.72	9.14	9.64	8.22	7.53	8.42	5.86	6.47	6.43	5.56	5.77	7.59	6.51	5.74	6.19	6.48	6.23	6.74	5.86	5.52	5.93	6.23	5.32	ns	6.92	5.95	7.11	ns	5.76	6.64	ns	8.20
Oil & Grease (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Total Hardness (mg/L)	531	659			480	599	674	728					736							1,040							995							619
Cadmium (diss) (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Copper (diss) (mg/L)	nd	nd			nd	0.005	0.013	nd					nd							nd							nd							nd
Lead (diss) (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Zinc (diss) (mg/L)	nd	nd			nd	nd	nd	nd					nd							0.023							nd							nd
Diazinon (µg/l)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Chlorpyrifos (µg/l)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Total Coliform (MPN/100mL)	22,000	13,000			5,000	**50,000**	23,000	13,000					13,000							3,000							13,000							2,300
Fecal Coliform (MPN/100mL)	3,000	800			1,300	8,000	1,100	800					300							1,700							8,000							2,300
Enterococcus (MPN/100mL)	2,200	210			40	7,000	8,000	170					6,000							3,000							5,000							110
Total Dissolved Solid (mg/L)	1,370	1,470			1,120	1,410	1,280	1,600					1,690							1,850							1,990							1,900
Total Organic Carbon (mg/L)	9.52	8.37			45.50	15.00	21.10	8.78					22.50							4.98							6.33							10.70

Appendix B

Photographs of Sampling Locations

Site 1	
Site 2	
Site 3	

Site 4	
Site 5	
Site 6	

Site 7	
Site 8	
Site 9	

Site 13A	
Site 14	
Site 15	

Site 17	
Site 18	
Site 19	

Site 20	
Site 21	
Site 22	

Site 23	
Site 24	
Site 25	

Site 26	
Site 27	
Site 28	

Site 30	
Site 31	
Site 32	

Site 33	
Site 34	
Site 36	

Site 37	
Site 38	
Site 39	

Site 41	

Appendix C

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

02 July 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906751

Project Name: El Cajon Dry Weather
Project Desc./#:200928W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/25/09 13:42. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906751

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 101	0906751-01	Water	06/25/09 10:15	06/25/09 13:42
Site 41	0906751-02	Water	06/25/09 11:25	06/25/09 13:42
Site 2	0906751-03	Water	06/25/09 12:20	06/25/09 13:42

NOTE: The TOC analyses were performed by a sub-contract laboratory, results to follow in a separate report.

9034

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906751

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 41 (0906751-02) Water Sampled: 06/25/09 11:25 Received: 06/25/09 13:42									
Cadmium	ND	0.001	mg/l	1	9062701	06/27/09	06/27/09	EPA 200.8	
Copper	**0.003**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Site 2 (0906751-03) Water Sampled: 06/25/09 12:20 Received: 06/25/09 13:42									
Cadmium	ND	0.001	mg/l	1	9062701	06/27/09	06/27/09	EPA 200.8	
Copper	**0.002**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

9035

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906751

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 41 (0906751-02) Water Sampled: 06/25/09 11:25 Received: 06/25/09 13:42									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9062901	06/29/09	06/30/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*92 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*128 %*	*60-130*		"	"	"	"	
Site 2 (0906751-03) Water Sampled: 06/25/09 12:20 Received: 06/25/09 13:42									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9062901	06/29/09	06/30/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*124 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*124 %*	*60-130*		"	"	"	"	

9036

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906751

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 41 (0906751-02) Water Sampled: 06/25/09 11:25 Received: 06/25/09 13:42									
Hardness (Total)	**874**	100	mg CaCO3/L	10	9063049	06/30/09	07/01/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9062610	06/26/09	06/26/09	EPA 1664A	
Site 2 (0906751-03) Water Sampled: 06/25/09 12:20 Received: 06/25/09 13:42									
Hardness (Total)	**639**	100	mg CaCO3/L	10	9063049	06/30/09	07/01/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9062610	06/26/09	06/26/09	EPA 1664A	

9037

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906751

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 101 (0906751-01) Water Sampled: 06/25/09 10:15 Received: 06/25/09 13:42									
Total Coliforms	**11000**	200	MPN/100 ml	100	9063011	06/25/09	06/29/09	SM 9221 B, E	
Fecal Coliforms	**500**	20	"	10	"	"	06/28/09	"	
Enterococcus	**130**	20	"	"	9063012	"	06/29/09	SM 9230 A, B	
Site 41 (0906751-02) Water Sampled: 06/25/09 11:25 Received: 06/25/09 13:42									
Total Coliforms	**900000**	2000	MPN/100 ml	1000	9063011	06/25/09	06/29/09	SM 9221 B, E	
Fecal Coliforms	**50000**	200	"	100	"	"	06/28/09	"	
Enterococcus	**1100**	20	"	10	9063012	"	06/29/09	SM 9230 A, B	
Site 2 (0906751-03) Water Sampled: 06/25/09 12:20 Received: 06/25/09 13:42									
Total Coliforms	**2200**	20	MPN/100 ml	10	9063011	06/25/09	06/29/09	SM 9221 B, E	
Fecal Coliforms	**1300**	20	"	"	"	"	06/28/09	"	
Enterococcus	**70**	20	"	"	9063012	"	06/29/09	SM 9230 A, B	

9038

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906751

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062701										
Blank (9062701-BLK1)				Prepared & Analyzed: 06/27/09						
Copper	ND	0.001	mg/l							
Zinc	ND	0.020	"							
Cadmium	ND	0.001	"							
Lead	ND	0.001	"							
LCS (9062701-BS1)				Prepared & Analyzed: 06/27/09						
Zinc	0.052	0.020	mg/l	0.0500		103	85-115			
Copper	0.051	0.001	"	0.0500		103	85-115			
Cadmium	0.052	0.001	"	0.0500		105	85-115			
Lead	0.051	0.001	"	0.0500		103	75-125			
LCS Dup (9062701-BSD1)				Prepared & Analyzed: 06/27/09						
Copper	0.052	0.001	mg/l	0.0500		104	85-115	0.9	20	
Lead	0.051	0.001	"	0.0500		102	75-125	0.9	20	
Zinc	0.052	0.020	"	0.0500		105	85-115	1	20	
Cadmium	0.053	0.001	"	0.0500		106	85-115	2	20	
Duplicate (9062701-DUP1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Copper	ND	0.001	mg/l		ND				20	
Zinc	ND	0.020	"		ND				20	
Cadmium	ND	0.001	"		ND				20	
Lead	ND	0.001	"		ND				20	
Matrix Spike (9062701-MS1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Lead	0.047	0.001	mg/l	0.0500	ND	94	75-125			
Copper	0.048	0.001	"	0.0500	ND	96	70-130			
Zinc	0.048	0.020	"	0.0500	ND	96	70-130			
Cadmium	0.049	0.001	"	0.0500	ND	98	70-130			

9039

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering	**EMA Log #: 0906751**
Project Name: El Cajon Dry Weather	

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062701										
Matrix Spike Dup (9062701-MSD1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Cadmium	0.050	0.001	mg/l	0.0500	ND	100	70-130	2	20	
Copper	0.048	0.001	"	0.0500	ND	97	70-130	1	20	
Zinc	0.049	0.020	"	0.0500	ND	98	70-130	2	20	
Lead	0.049	0.001	"	0.0500	ND	97	75-125	4	20	

9040

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906751

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062901										
Blank (9062901-BLK1)				Prepared: 06/29/09	Analyzed: 06/30/09					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.230*		*"*	*0.250*		*92*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
LCS (9062901-BS1)				Prepared: 06/29/09	Analyzed: 06/30/09					
Bolstar	0.42	0.10	ug/l	0.500		84	60-130			
Diazinon	0.47	0.05	"	0.500		94	60-130			
Ethoprop	0.50	0.05	"	0.500		100	60-130			
Mevinphos	0.47	0.25	"	0.500		94	60-130			
Methyl parathion	0.44	0.10	"	0.500		88	60-130			
Phorate	0.43	0.05	"	0.500		86	60-130			
Ronnel	0.52	0.25	"	0.500		104	60-130			
Trichlorinate	0.48	0.05	"	0.500		96	60-130			
Surrogate: Triphenyl phosphate	*0.280*		*"*	*0.250*		*112*	*60-130*			
Surrogate: Tribuytlphosphate	*0.290*		*"*	*0.250*		*116*	*60-130*			
LCS Dup (9062901-BSD1)				Prepared: 06/29/09	Analyzed: 06/30/09					
Bolstar	0.43	0.10	ug/l	0.500		86	60-130	2	30	
Diazinon	0.42	0.05	"	0.500		84	60-130	11	30	
Ethoprop	0.50	0.05	"	0.500		100	60-130	0	30	
Mevinphos	0.46	0.25	"	0.500		92	60-130	2	30	
Methyl parathion	0.46	0.10	"	0.500		92	60-130	4	30	
Phorate	0.46	0.05	"	0.500		92	60-130	7	30	
Ronnel	0.51	0.25	"	0.500		102	60-130	2	30	
Trichlorinate	0.46	0.05	"	0.500		92	60-130	4	30	
Surrogate: Triphenyl phosphate	*0.270*		*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.280*		*"*	*0.250*		*112*	*60-130*			

9041

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906751

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062610										
Blank (9062610-BLK1)				Prepared & Analyzed: 06/26/09						
Oil & Grease	ND	5	mg/l							
LCS (9062610-BS1)				Prepared & Analyzed: 06/26/09						
Oil & Grease	33	5	mg/l	40.0		84	78-114			
LCS Dup (9062610-BSD1)				Prepared & Analyzed: 06/26/09						
Oil & Grease	33	5	mg/l	40.0		82	78-114	1	20	
Batch 9063049										
Blank (9063049-BLK1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9063049-DUP1)		**Source: 0906758-02**		Prepared: 06/30/09 Analyzed: 07/01/09						
Hardness (Total)	275	10	mg CaCO3/L		271			1	20	

9042

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

EnviroMatrix Analytical, Inc.

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

9043

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CHAIN-OF-CUSTODY FORM

EnviroMatrix **Analytical, Inc.**

page_____of_____

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

EMA LOG #: 0906751

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / David
Address: 7220 Trade street, Suite 119
San Diego, CA, 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: El Cajon MS4 Monitoring
Project #: 200928W-3 PO#:

SAMPLE DETAILS

REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(814) (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☒TSS ☒TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) ☒Dissolved	Coliform ☒Total (MTF) ☒Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☒MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Nitrogen - N	Total Phosphorus-P	Total Hardness	TOC	TSS		Microbiology Notes: / Sample Comments:
01	Site 101	6/25/09 10:15	water	4P										X						X	X		X	X				
02	Site 41	" 11:25	"	4/5 G/P	X							X		X					X	X	X		X	X	X	X	X	
03	Site 2	" 12:20	"	" "	X							X		X					X	X	X		X	X	X	X	X	
04																												
05																												
06																												
07																												
08																												
09																												
10																												

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW)=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until _____/_____/_____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: [signature]	6/25/09
Print: Manouchehr Dadkhah	Print: Sean Flory	13:25
Company: D-Max Eng.	Company: EMA Inc	
Signature: [signature]	Signature: [signature]	6/25/09
Print: Sean Flory	Print: Danny Hunter	13:42
Company: EMA Inc	Company: EMA	
Signature:	Signature:	
Print:	Print:	
Company:	Company:	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

T= 5°C on ice

Date	Site	Dry Weather Report	MS4 Monitoring Report
6/25/09	**Site 2**	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
	Site 5	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
6/25/09	**Site 41**	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
6/25/09	**Site 101**	(none)	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
	Forrester Creek Upstream (FC-Upstream)	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	(None)

Highlighting denotes a test that is performed once but reported in both MS4 and Dry Weather reports.

EnviroMatrix Analytical, Inc.

06 July 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906760

Project Name: El Cajon Dry Weather
Project Desc./#:200928W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/25/09 17:05. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Forester Cr. Upstream	0906760-01	Water	06/25/09 14:45	06/25/09 17:05
Site 5	0906760-02	Water	06/25/09 16:00	06/25/09 17:05

NOTE: The TOC analyses were performed by a subcontract laboratory, results to follow in a separate report.

9047

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0906760-01) Water Sampled: 06/25/09 14:45 Received: 06/25/09 17:05									
Cadmium	ND	0.001	mg/l	1	9062701	06/27/09	06/27/09	EPA 200.8	
Copper	**0.002**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Site 5 (0906760-02) Water Sampled: 06/25/09 16:00 Received: 06/25/09 17:05									
Cadmium	ND	0.001	mg/l	1	9062701	06/27/09	06/27/09	EPA 200.8	
Copper	**0.003**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0906760-01) Water Sampled: 06/25/09 14:45 Received: 06/25/09 17:05									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9063040	06/30/09	07/01/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*104 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*104 %*	*60-130*		"	"	"	"	
Site 5 (0906760-02) Water Sampled: 06/25/09 16:00 Received: 06/25/09 17:05									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9063040	06/30/09	07/01/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*124 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*116 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0906760-01) Water Sampled: 06/25/09 14:45 Received: 06/25/09 17:05									
Hardness (Total)	**490**	100	mg CaCO3/L	10	9063049	06/30/09	07/01/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9062610	06/26/09	06/26/09	EPA 1664A	
Site 5 (0906760-02) Water Sampled: 06/25/09 16:00 Received: 06/25/09 17:05									
Hardness (Total)	**616**	100	mg CaCO3/L	10	9063049	06/30/09	07/01/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9062610	06/26/09	06/26/09	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Upstream (0906760-01) Water Sampled: 06/25/09 14:45 Received: 06/25/09 17:05									
Total Coliforms	**14000**	200	MPN/100 ml	100	9063009	06/25/09	06/29/09	SM 9221 B, E	
Fecal Coliforms	**1300**	20	"	10	"	"	06/28/09	"	
Enterococcus	**3000**	20	"	"	9063010	"	06/29/09	SM 9230 A, B	
Site 5 (0906760-02) Water Sampled: 06/25/09 16:00 Received: 06/25/09 17:05									
Total Coliforms	**2800**	20	MPN/100 ml	10	9063009	06/25/09	06/29/09	SM 9221 B, E	
Fecal Coliforms	**270**	20	"	"	"	"	06/28/09	"	
Enterococcus	**130**	20	"	"	9063010	"	06/29/09	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062701										
Blank (9062701-BLK1)				Prepared & Analyzed: 06/27/09						
Copper	ND	0.001	mg/l							
Cadmium	ND	0.001	"							
Zinc	ND	0.020	"							
Lead	ND	0.001	"							
LCS (9062701-BS1)				Prepared & Analyzed: 06/27/09						
Lead	0.051	0.001	mg/l	0.0500		103	75-125			
Zinc	0.052	0.020	"	0.0500		103	85-115			
Copper	0.051	0.001	"	0.0500		103	85-115			
Cadmium	0.052	0.001	"	0.0500		105	85-115			
LCS Dup (9062701-BSD1)				Prepared & Analyzed: 06/27/09						
Zinc	0.052	0.020	mg/l	0.0500		105	85-115	1	20	
Cadmium	0.053	0.001	"	0.0500		106	85-115	2	20	
Lead	0.051	0.001	"	0.0500		102	75-125	0.9	20	
Copper	0.052	0.001	"	0.0500		104	85-115	0.9	20	
Duplicate (9062701-DUP1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Zinc	ND	0.020	mg/l		ND				20	
Lead	ND	0.001	"		ND				20	
Copper	ND	0.001	"		ND				20	
Cadmium	ND	0.001	"		ND				20	
Matrix Spike (9062701-MS1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Lead	0.047	0.001	mg/l	0.0500	ND	94	75-125			
Copper	0.048	0.001	"	0.0500	ND	96	70-130			
Zinc	0.048	0.020	"	0.0500	ND	96	70-130			
Cadmium	0.049	0.001	"	0.0500	ND	98	70-130			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062701										
Matrix Spike Dup (9062701-MSD1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Zinc	0.049	0.020	mg/l	0.0500	ND	98	70-130	2	20	
Lead	0.049	0.001	"	0.0500	ND	97	75-125	4	20	
Cadmium	0.050	0.001	"	0.0500	ND	100	70-130	2	20	
Copper	0.048	0.001	"	0.0500	ND	97	70-130	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9063040										
Blank (9063040-BLK1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.250*		*"*	*0.250*		*100*	*60-130*			
LCS (9063040-BS1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Bolstar	0.43	0.10	ug/l	0.500		86	60-130			
Diazinon	0.33	0.05	"	0.500		66	60-130			
Ethoprop	0.49	0.05	"	0.500		98	60-130			
Mevinphos	0.43	0.25	"	0.500		86	60-130			
Methyl parathion	0.45	0.10	"	0.500		90	60-130			
Phorate	0.45	0.05	"	0.500		90	60-130			
Ronnel	0.52	0.25	"	0.500		104	60-130			
Trichlorinate	0.47	0.05	"	0.500		94	60-130			
Surrogate: Triphenyl phosphate	*0.260*		*"*	*0.250*		*104*	*60-130*			
Surrogate: Tribuytlphosphate	*0.280*		*"*	*0.250*		*112*	*60-130*			
LCS Dup (9063040-BSD1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Bolstar	0.32	0.10	ug/l	0.500		64	60-130	29	30	
Diazinon	0.35	0.05	"	0.500		70	60-130	6	30	
Ethoprop	0.48	0.05	"	0.500		96	60-130	2	30	
Mevinphos	0.43	0.25	"	0.500		86	60-130	0	30	
Methyl parathion	0.42	0.10	"	0.500		84	60-130	7	30	
Phorate	0.45	0.05	"	0.500		90	60-130	0	30	
Ronnel	0.47	0.25	"	0.500		94	60-130	10	30	
Trichlorinate	0.42	0.05	"	0.500		84	60-130	11	30	
Surrogate: Triphenyl phosphate	*0.280*		*"*	*0.250*		*112*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*		*"*	*0.250*		*108*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062610										
Blank (9062610-BLK1)				Prepared & Analyzed: 06/26/09						
Oil & Grease	ND	5	mg/l							
LCS (9062610-BS1)				Prepared & Analyzed: 06/26/09						
Oil & Grease	33	5	mg/l	40.0		84	78-114			
LCS Dup (9062610-BSD1)				Prepared & Analyzed: 06/26/09						
Oil & Grease	33	5	mg/l	40.0		82	78-114	1	20	
Batch 9063049										
Blank (9063049-BLK1)				Prepared: 06/30/09 Analyzed: 07/01/09						
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9063049-DUP1)		**Source: 0906758-02**		Prepared: 06/30/09 Analyzed: 07/01/09						
Hardness (Total)	275	10	mg CaCO3/L		271			1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0906760

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix Analytical, Inc.

page_____of_____

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

EMA LOG #: 0906760

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Sampler(s): Manouchehr / David
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same
Project ID: Elcajon 1754 Monitoring
Project #: 200928W-3 PO#:

REQUESTED ANALYSIS

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM D2887	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy ☐Nap	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☒TSS ☒TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Ni Ag (Zn) ☒Dissolved	Coliform, ☒Total (MTF) ☒Fecal (MTF) ☐Colilert,T+E.Coli	Enterococcus, ☒MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Toc	Total Hardness	Total Nitrogen-N	Total Phosphorus P	TDS		Microbiology Notes: / Sample Comments:
01	Forester Cr. Upptream	6/25/09	14:45	water	G/p 4/4	X							X						X	X	X		X	X			X		
02	site 5	"	16:00	"	" 4/5	X							X		X				X	X	X		X	X	X	X			
03																													
04																													
05																													
06																													
07																													
08																													
09																													
10																													

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☐STD (7 day)
[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____
[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until _____/_____/_____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY	DATE/TIME STAMP
Signature: Manouchehr Dadkhah	Signature: [signature]	6/25/09
Print: Manouchehr Dadkhah	Print: Seam Flory	17:05
Company: D-Max Eng.	Company: EMA Inc.	
Signature	Signature	
Print	Print	
Company	Company	
Signature	Signature	
Print	Print	
Company	Company	

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

Tabulation

Date	Site	Dry Weather Report	MS4 Monitoring Report
—	**Site 2**	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
6/25/09	**Site 5**	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
—	**Site 41**	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
—	**Site 101**	(none)	Total Dissolved Solids (TDS) Total Suspended Solids (TSS) Total Nitrogen-N Total Phosphorus-P Total Coliform Fecal Coliform Enterococcus
6/25/09	**Forrester Creek Upstream (FC-Upstream)**	Total Organic Carbon Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	(None)

Highlighting denotes a test that is performed once but reported in both MS4 and Dry Weather reports.

EnviroMatrix Analytical, Inc.

14 July 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0907173

Project Name: El Cajon Dry Weather
Project Desc./#: 200928W-2

Enclosed are the results of analyses for samples received by the laboratory on 07/07/09 12:01. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0907173

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 41	0907173-01	Water	07/07/09 09:50	07/07/09 12:01
Site 41-S	0907173-02	Water	07/07/09 10:00	07/07/09 12:01
Site 41-W	0907173-03	Water	07/07/09 10:10	07/07/09 12:01
Site 41-2	0907173-04	Water	07/07/09 11:00	07/07/09 12:01
Site 41-3	0907173-05	Water	07/07/09 11:25	07/07/09 12:01

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0907173

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
Site 41 (0907173-01) Water Sampled: 07/07/09 09:50 Received: 07/07/09 12:01								
Total Coliforms	**1990000**	1000	MPN/100 ml	1000	9070812	07/07/09 13:50 07/08/09 15:50	SM9223	
E. Coli	**2360**	10	"	10	"	07/07/09 13:50 07/08/09 15:50	"	
Site 41-S (0907173-02) Water Sampled: 07/07/09 10:00 Received: 07/07/09 12:01								
Total Coliforms	**199000**	100	MPN/100 ml	100	9070812	07/07/09 13:50 07/08/09 15:50	SM9223	
E. Coli	**3280**	10	"	10	"	07/07/09 13:50 07/08/09 15:50	"	
Site 41-W (0907173-03) Water Sampled: 07/07/09 10:10 Received: 07/07/09 12:01								
Total Coliforms	**2420000**	1000	MPN/100 ml	1000	9070812	07/07/09 13:50 07/08/09 15:50	SM9223	
E. Coli	**4160**	10	"	10	"	07/07/09 13:50 07/08/09 15:50	"	
Site 41-2 (0907173-04) Water Sampled: 07/07/09 11:00 Received: 07/07/09 12:01								
Total Coliforms	**517000**	1000	MPN/100 ml	1000	9070812	07/07/09 13:50 07/08/09 15:50	SM9223	
E. Coli	**242000**	100	"	100	"	07/07/09 13:50 07/08/09 15:50	"	
Site 41-3 (0907173-05) Water Sampled: 07/07/09 11:25 Received: 07/07/09 12:01								
Total Coliforms	**141000**	100	MPN/100 ml	100	9070812	07/07/09 13:50 07/08/09 15:50	SM9223	
E. Coli	**1560**	10	"	10	"	07/07/09 13:50 07/08/09 15:50	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

9062

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 0907173

Client: D-Max Engineering
Attn: Arsalan Dadkhah
Samplers(s): Manouchehr Tad
Address: 7220 Trade street, suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: El Cajon Dry Weather F.up
Project #: 200928W-2 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform, □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A X Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)						
1	Site 41	7/7/09	9:50	Water	1 P															X								
2	Site 41-S	"	10:00	"	"															X								
3	Site 41-W	"	10:10	"	"															X								
4	Site 41-2	"	11:05	"	"															X								
5	41-3	"	11:25	"	"															X								
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A
Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temp @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	7/7/09 1201	Signature: [signature]
Print: Manouchehr Dadkhah		Print: Sean Flory
Company: D-Max Eng.		Company: Fluid La
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

T=10° on ice

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.

White- EMA Canary - Accounting Pink - Client (w/report) Gold - Client (Relinquish)

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

16 July 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0907251

Project Name: El Cajon Dry Weather
Project Desc./#: 200928W-2 Follow Up

Enclosed are the results of analyses for samples received by the laboratory on 07/09/09 11:39. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0907251

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 14-1	0907251-01	Water	07/09/09 10:45	07/09/09 11:39
Site 14	0907251-02	Water	07/09/09 11:00	07/09/09 11:39

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0907251

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
Site 14-1 (0907251-01) Water Sampled: 07/09/09 10:45 Received: 07/09/09 11:39								
Total Coliforms	**17300**	10	MPN/100 ml	10	9071009	07/09/09 13:25 07/10/09 13:30	SM9223	
E. Coli	**2610**	10	"	"	"	07/09/09 13:25 07/10/09 13:30	"	
Site 14 (0907251-02) Water Sampled: 07/09/09 11:00 Received: 07/09/09 11:39								
Total Coliforms	**242000**	100	MPN/100 ml	100	9071009	07/09/09 13:25 07/10/09 13:30	SM9223	
E. Coli	**120000**	100	"	"	"	07/09/09 13:25 07/10/09 13:30	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

9067

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 0907251

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Samplers(s): Manouchehr / Tad
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-0644
Email:
Billing Address: Same

Project ID: El Cajon Dry Weather F.up
Project #: 200928W-2 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform, □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A ☒ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)						
1	Site 14-1	7/9/09	10:45	Water	1 P															X								
2	Site 14	"	11:00	"	1 P															X								
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS ☒ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax ☒ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** ☒ Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	7-9-09 11:39	Signature: [illegible]
Print: Manouchehr Dadkhah		Print: [illegible]
Company: D-Max Eng		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

T=7.2 on ice

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.

White- EMA Canary - Accounting Pink - Client (w/report) Gold - Client (Relinquish)

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

01 September 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0908610

Project Name: El Cajon Dry Weather
Project Desc./#:200928W-1

Enclosed are the results of analyses for samples received by the laboratory on 08/24/09 13:41. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908610

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
7	0908610-01	Water	08/24/09 10:00	08/24/09 13:41
24	0908610-02	Water	08/24/09 11:10	08/24/09 13:41
1	0908610-03	Water	08/24/09 12:05	08/24/09 13:41

NOTE: The TOC analyses were performed by a sub-contract laboratory, results to follow in a separate report.

9070

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908610

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
7 (0908610-01) Water Sampled: 08/24/09 10:00 Received: 08/24/09 13:41									
Cadmium	ND	0.001	mg/l	1	9083115	08/31/09	08/31/09	EPA 200.8	
Copper	**0.019**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
24 (0908610-02) Water Sampled: 08/24/09 11:10 Received: 08/24/09 13:41									
Cadmium	ND	0.001	mg/l	1	9083115	08/31/09	08/31/09	EPA 200.8	
Copper	**0.001**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
1 (0908610-03) Water Sampled: 08/24/09 12:05 Received: 08/24/09 13:41									
Cadmium	ND	0.001	mg/l	1	9083115	08/31/09	08/31/09	EPA 200.8	
Copper	**0.003**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908610

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
7 (0908610-01) Water Sampled: 08/24/09 10:00 Received: 08/24/09 13:41									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9082701	08/26/09	08/28/09	EPA 8141A	
Diazinon	**0.07**	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*96 %*	*60-130*		"	"	"	"	
24 (0908610-02) Water Sampled: 08/24/09 11:10 Received: 08/24/09 13:41									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9082701	08/26/09	08/28/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*108 %*	*60-130*		"	"	"	"	
1 (0908610-03) Water Sampled: 08/24/09 12:05 Received: 08/24/09 13:41									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9082701	08/26/09	08/28/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*116 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908610

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
7 (0908610-01) Water Sampled: 08/24/09 10:00 Received: 08/24/09 13:41									
Hardness (Total)	**321**	100	mg CaCO3/L	10	9082744	08/27/09	08/31/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9082635	08/27/09	08/27/09	EPA 1664A	
Total Dissolved Solids	**658**	20.0	"	"	9082629	08/26/09	08/27/09	SM2540 C	
24 (0908610-02) Water Sampled: 08/24/09 11:10 Received: 08/24/09 13:41									
Hardness (Total)	**902**	100	mg CaCO3/L	10	9082744	08/27/09	08/31/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9082635	08/27/09	08/27/09	EPA 1664A	
Total Dissolved Solids	**1820**	20.0	"	"	9082629	08/26/09	08/27/09	SM2540 C	
1 (0908610-03) Water Sampled: 08/24/09 12:05 Received: 08/24/09 13:41									
Hardness (Total)	**445**	100	mg CaCO3/L	10	9082744	08/27/09	08/31/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9082635	08/27/09	08/27/09	EPA 1664A	
Total Dissolved Solids	**1320**	20.0	"	"	9082629	08/26/09	08/27/09	SM2540 C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908610

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
7 (0908610-01) Water Sampled: 08/24/09 10:00 Received: 08/24/09 13:41									
Total Coliforms	**17000**	200	MPN/100 ml	100	9082532	08/24/09	08/28/09	SM 9221 B, E	
Fecal Coliforms	**220**	20	"	10	"	"	08/27/09	"	
Enterococcus	**300**	20	"	"	9082533	"	08/28/09	SM 9230 A, B	
24 (0908610-02) Water Sampled: 08/24/09 11:10 Received: 08/24/09 13:41									
Total Coliforms	**8000**	200	MPN/100 ml	100	9082532	08/24/09	08/28/09	SM 9221 B, E	
Fecal Coliforms	**3000**	200	"	"	"	"	08/27/09	"	
Enterococcus	**1700**	20	"	10	9082533	"	08/28/09	SM 9230 A, B	
1 (0908610-03) Water Sampled: 08/24/09 12:05 Received: 08/24/09 13:41									
Total Coliforms	**500**	20	MPN/100 ml	10	9082532	08/24/09	08/28/09	SM 9221 B, E	
Fecal Coliforms	**300**	20	"	"	"	"	08/27/09	"	
Enterococcus	**70**	20	"	"	9082533	"	08/28/09	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908610

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9083115										
Blank (9083115-BLK1)				Prepared & Analyzed: 08/31/09						
Copper	ND	0.001	mg/l							
Zinc	ND	0.020	"							
Cadmium	ND	0.001	"							
Lead	ND	0.001	"							
LCS (9083115-BS1)				Prepared & Analyzed: 08/31/09						
Cadmium	0.100	0.001	mg/l	0.100		100	85-115			
Copper	0.100	0.001	"	0.100		100	85-115			
Zinc	0.099	0.020	"	0.100		99	85-115			
Lead	0.101	0.001	"	0.100		101	75-125			
LCS Dup (9083115-BSD1)				Prepared & Analyzed: 08/31/09						
Copper	0.101	0.001	mg/l	0.100		101	85-115	1	20	
Zinc	0.100	0.020	"	0.100		100	85-115	1	20	
Lead	0.101	0.001	"	0.100		101	75-125	0.1	20	
Cadmium	0.101	0.001	"	0.100		101	85-115	0.8	20	
Duplicate (9083115-DUP1)		**Source: 0908610-02**		Prepared & Analyzed: 08/31/09						
Lead	ND	0.001	mg/l		ND				20	
Cadmium	0.0002	0.001	"		ND				20	
Copper	0.001	0.001	"		0.001			2	20	
Zinc	0.006	0.020	"		0.006			3	20	
Matrix Spike (9083115-MS1)		**Source: 0908610-02**		Prepared & Analyzed: 08/31/09						
Lead	0.098	0.001	mg/l	0.100	ND	98	75-125			
Zinc	0.092	0.020	"	0.100	0.006	86	70-130			
Copper	0.086	0.001	"	0.100	0.001	85	70-130			
Cadmium	0.088	0.001	"	0.100	ND	88	70-130			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908610

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9083115										
Matrix Spike Dup (9083115-MSD1)		**Source: 0908610-02**		Prepared & Analyzed: 08/31/09						
Lead	0.097	0.001	mg/l	0.100	ND	97	75-125	0.5	20	
Zinc	0.093	0.020	"	0.100	0.006	87	70-130	1	20	
Cadmium	0.089	0.001	"	0.100	ND	89	70-130	1	20	
Copper	0.088	0.001	"	0.100	0.001	86	70-130	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908610

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9082701										
Blank (9082701-BLK1)				Prepared: 08/26/09 Analyzed: 08/28/09						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.220*		*"*	*0.250*		*88*	*60-130*			
Surrogate: Tribuytlphosphate	*0.230*		*"*	*0.250*		*92*	*60-130*			
LCS (9082701-BS1)				Prepared: 08/26/09 Analyzed: 08/28/09						
Bolstar	0.35	0.10	ug/l	0.500		70	60-130			
Diazinon	0.42	0.05	"	0.500		84	60-130			
Ethoprop	0.41	0.05	"	0.500		82	60-130			
Mevinphos	0.40	0.25	"	0.500		80	60-130			
Methyl parathion	0.41	0.10	"	0.500		82	60-130			
Phorate	0.46	0.05	"	0.500		92	60-130			
Ronnel	0.41	0.25	"	0.500		82	60-130			
Trichlorinate	0.41	0.05	"	0.500		82	60-130			
Surrogate: Triphenyl phosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*		*"*	*0.250*		*108*	*60-130*			
LCS Dup (9082701-BSD1)				Prepared: 08/26/09 Analyzed: 08/28/09						
Bolstar	0.38	0.10	ug/l	0.500		76	60-130	8	30	
Diazinon	0.46	0.05	"	0.500		92	60-130	9	30	
Ethoprop	0.40	0.05	"	0.500		80	60-130	2	30	
Mevinphos	0.48	0.25	"	0.500		96	60-130	18	30	
Methyl parathion	0.45	0.10	"	0.500		90	60-130	9	30	
Phorate	0.40	0.05	"	0.500		80	60-130	14	30	
Ronnel	0.43	0.25	"	0.500		86	60-130	5	30	
Trichlorinate	0.49	0.05	"	0.500		98	60-130	18	30	
Surrogate: Triphenyl phosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908610

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9082629										
Blank (9082629-BLK1)				Prepared: 08/26/09	Analyzed: 08/27/09					
Total Dissolved Solids	ND	20.0	mg/l							
Duplicate (9082629-DUP1)		**Source: 0908520-01**		Prepared: 08/26/09	Analyzed: 08/27/09					
Total Dissolved Solids	1160	20.0	mg/l		1120			4	20	
Reference (9082629-SRM1)				Prepared: 08/26/09	Analyzed: 08/27/09					
Total Dissolved Solids	318	20.0	mg/l	283		112	6.93-113.0			
Batch 9082635										
Blank (9082635-BLK1)				Prepared & Analyzed: 08/26/09						
Oil & Grease	ND	5	mg/l							
LCS (9082635-BS1)				Prepared & Analyzed: 08/26/09						
Oil & Grease	33	5	mg/l	40.0		82	78-114			
LCS Dup (9082635-BSD1)				Prepared & Analyzed: 08/26/09						
Oil & Grease	39	5	mg/l	40.0		98	78-114	19	20	
Matrix Spike (9082635-MS1)		**Source: 0908345-01**		Prepared & Analyzed: 08/26/09						
Oil & Grease	152	5	mg/l	40.0	116	89	78-114			
Batch 9082744										
Blank (9082744-BLK1)				Prepared: 08/27/09	Analyzed: 08/30/09					
Hardness (Total)	ND	10	mg CaCO3/L							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908610

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9082744										
Duplicate (9082744-DUP1)		**Source: 0908657-02**		Prepared: 08/27/09	Analyzed: 08/30/09					
Hardness (Total)	885	100	mg CaCO3/L		931			5	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering	**EMA Log #: 0908610**
Project Name: El Cajon Dry Weather	

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 0908610

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Samplers(s): Manouchehr / Annika
Address: 7220 Trade Street Ste. 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: City of El Cajon Dry Weather Monitoring
Project #: 200928W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform, ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	Total Hardness	TOC			
1	7	8/24/09	10:00	water	4g/4p	X						X		X				X	X		X		X	X			
2	24	"	11:10	"	"	X						X		X				X	X		X		X	X			
3	1	"	12:05	"	"	X						X		X				X	X		X		X	X			
4																											
5																											
6																											
7																											
8																											
9																											
10																											

AUG 24 '09 17:70

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: [signature]	08/24/09 12:45	Signature: [signature]
Print: Annika Kubischta		Print: Kelly Leyden
Company: D-Max Engineering		Company: EMA
Signature: [signature]	8/24/09 13:41	Signature:
Print: Kelly Leyden		Print:
Company: EMA		Company:
Signature:		Signature:
Print:		Print:
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.

White- EMA Canary - Accounting Pink - Client (w/report) Gold - Client (Relinquish)

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T=5°C Blue Ice

EnviroMatrix Analytical, Inc.

01 September 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0908657

Project Name: El Cajon Dry Weather
Project Desc./#:200928W-1

Enclosed are the results of analyses for samples received by the laboratory on 08/25/09 13:54. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908657

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site-6	0908657-01	Stormwater	08/25/09 10:30	08/25/09 13:54
Site-32	0908657-02	Stormwater	08/25/09 11:20	08/25/09 13:54
Site-17	0908657-03	Stormwater	08/25/09 12:00	08/25/09 13:54
Site-8	0908657-04	Stormwater	08/25/09 12:45	08/25/09 13:54

NOTE: The TOC analyses were performed by a sub-contract laboratory, results to follow in a separate report.

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908657

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site-6 (0908657-01) Stormwater Sampled: 08/25/09 10:30 Received: 08/25/09 13:54									
Cadmium	ND	0.001	mg/l	1	9083115	08/31/09	08/31/09	EPA 200.8	
Copper	**0.002**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Site-32 (0908657-02) Stormwater Sampled: 08/25/09 11:20 Received: 08/25/09 13:54									
Cadmium	ND	0.001	mg/l	1	9083115	08/31/09	08/31/09	EPA 200.8	
Copper	**0.001**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Site-17 (0908657-03) Stormwater Sampled: 08/25/09 12:00 Received: 08/25/09 13:54									
Cadmium	**0.001**	0.001	mg/l	1	9083115	08/31/09	08/31/09	EPA 200.8	
Copper	ND	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Site-8 (0908657-04) Stormwater Sampled: 08/25/09 12:45 Received: 08/25/09 13:54									
Cadmium	ND	0.001	mg/l	1	9083115	08/31/09	08/31/09	EPA 200.8	
Copper	**0.008**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908657

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site-6 (0908657-01) Stormwater Sampled: 08/25/09 10:30 Received: 08/25/09 13:54									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9082701	08/26/09	08/28/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*		"	"	"	"	
Site-32 (0908657-02) Stormwater Sampled: 08/25/09 11:20 Received: 08/25/09 13:54									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9082701	08/26/09	08/28/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*112 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*92 %*	*60-130*		"	"	"	"	
Site-17 (0908657-03) Stormwater Sampled: 08/25/09 12:00 Received: 08/25/09 13:54									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9082701	08/26/09	08/28/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*120 %*	*60-130*		"	"	"	"	
Site-8 (0908657-04) Stormwater Sampled: 08/25/09 12:45 Received: 08/25/09 13:54									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9082701	08/26/09	08/28/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*136 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*104 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908657

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site-6 (0908657-01) Stormwater Sampled: 08/25/09 10:30 Received: 08/25/09 13:54									
Hardness (Total)	**667**	100	mg CaCO3/L	10	9082744	08/27/09	08/31/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9090148	09/01/09	09/01/09	EPA 1664A	
Total Dissolved Solids	**1420**	20.0	"	"	9082629	08/26/09	08/27/09	SM2540 C	
Site-32 (0908657-02) Stormwater Sampled: 08/25/09 11:20 Received: 08/25/09 13:54									
Hardness (Total)	**931**	100	mg CaCO3/L	10	9082744	08/27/09	08/30/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9090148	09/01/09	09/01/09	EPA 1664A	
Total Dissolved Solids	**1910**	20.0	"	"	9082629	08/26/09	08/27/09	SM2540 C	
Site-17 (0908657-03) Stormwater Sampled: 08/25/09 12:00 Received: 08/25/09 13:54									
Hardness (Total)	**686**	100	mg CaCO3/L	10	9082744	08/27/09	08/31/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9090148	09/01/09	09/01/09	EPA 1664A	
Total Dissolved Solids	**1460**	20.0	"	"	9082629	08/26/09	08/27/09	SM2540 C	
Site-8 (0908657-04) Stormwater Sampled: 08/25/09 12:45 Received: 08/25/09 13:54									
Hardness (Total)	**1070**	100	mg CaCO3/L	10	9082744	08/27/09	08/31/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9090148	09/01/09	09/01/09	EPA 1664A	
Total Dissolved Solids	**7060**	20.0	"	"	9082629	08/26/09	08/27/09	SM2540 C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908657

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site-6 (0908657-01) Stormwater Sampled: 08/25/09 10:30 Received: 08/25/09 13:54									
Total Coliforms	**11000**	200	MPN/100 ml	100	9082623	08/25/09	08/29/09	SM 9221 B, E	
Fecal Coliforms	**5000**	200	"	"	"	"	08/28/09	"	
Enterococcus	**3000**	200	"	"	9082624	"	08/29/09	SM 9230 A, B	
Site-32 (0908657-02) Stormwater Sampled: 08/25/09 11:20 Received: 08/25/09 13:54									
Total Coliforms	**8000**	200	MPN/100 ml	100	9082623	08/25/09	08/29/09	SM 9221 B, E	
Fecal Coliforms	**2300**	200	"	"	"	"	08/28/09	"	
Enterococcus	**700**	20	"	10	9082624	"	08/29/09	SM 9230 A, B	
Site-17 (0908657-03) Stormwater Sampled: 08/25/09 12:00 Received: 08/25/09 13:54									
Total Coliforms	**17000**	200	MPN/100 ml	100	9082623	08/25/09	08/29/09	SM 9221 B, E	
Fecal Coliforms	**800**	20	"	10	"	"	08/28/09	"	
Enterococcus	**1300**	20	"	"	9082624	"	08/29/09	SM 9230 A, B	
Site-8 (0908657-04) Stormwater Sampled: 08/25/09 12:45 Received: 08/25/09 13:54									
Total Coliforms	**8000**	200	MPN/100 ml	100	9082623	08/25/09	08/29/09	SM 9221 B, E	
Fecal Coliforms	**700**	20	"	10	"	"	08/28/09	"	
Enterococcus	**500**	20	"	"	9082624	"	08/29/09	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908657

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9083115										
Blank (9083115-BLK1)				Prepared & Analyzed: 08/31/09						
Copper	ND	0.001	mg/l							
Cadmium	ND	0.001	"							
Lead	ND	0.001	"							
Zinc	ND	0.020	"							
LCS (9083115-BS1)				Prepared & Analyzed: 08/31/09						
Cadmium	0.100	0.001	mg/l	0.100		100	85-115			
Copper	0.100	0.001	"	0.100		100	85-115			
Lead	0.101	0.001	"	0.100		101	75-125			
Zinc	0.099	0.020	"	0.100		99	85-115			
LCS Dup (9083115-BSD1)				Prepared & Analyzed: 08/31/09						
Cadmium	0.101	0.001	mg/l	0.100		101	85-115	0.8	20	
Zinc	0.100	0.020	"	0.100		100	85-115	1	20	
Copper	0.101	0.001	"	0.100		101	85-115	1	20	
Lead	0.101	0.001	"	0.100		101	75-125	0.1	20	
Duplicate (9083115-DUP1)		**Source: 0908610-02**		Prepared & Analyzed: 08/31/09						
Cadmium	0.0002	0.001	mg/l		ND				20	
Copper	0.001	0.001	"		0.001			2	20	
Zinc	0.006	0.020	"		0.006			3	20	
Lead	ND	0.001	"		ND				20	
Matrix Spike (9083115-MS1)		**Source: 0908610-02**		Prepared & Analyzed: 08/31/09						
Copper	0.086	0.001	mg/l	0.100	0.001	85	70-130			
Zinc	0.092	0.020	"	0.100	0.006	86	70-130			
Cadmium	0.088	0.001	"	0.100	ND	88	70-130			
Lead	0.098	0.001	"	0.100	ND	98	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908657

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9083115										
Matrix Spike Dup (9083115-MSD1)		**Source: 0908610-02**		Prepared & Analyzed: 08/31/09						
Copper	0.088	0.001	mg/l	0.100	0.001	86	70-130	1	20	
Lead	0.097	0.001	"	0.100	ND	97	75-125	0.5	20	
Cadmium	0.089	0.001	"	0.100	ND	89	70-130	1	20	
Zinc	0.093	0.020	"	0.100	0.006	87	70-130	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908657

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9082701										
Blank (9082701-BLK1)				Prepared: 08/26/09 Analyzed: 08/28/09						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.220*		*"*	*0.250*		*88*	*60-130*			
Surrogate: Tribuytlphosphate	*0.230*		*"*	*0.250*		*92*	*60-130*			
LCS (9082701-BS1)				Prepared: 08/26/09 Analyzed: 08/28/09						
Bolstar	0.35	0.10	ug/l	0.500		70	60-130			
Diazinon	0.42	0.05	"	0.500		84	60-130			
Ethoprop	0.41	0.05	"	0.500		82	60-130			
Mevinphos	0.40	0.25	"	0.500		80	60-130			
Methyl parathion	0.41	0.10	"	0.500		82	60-130			
Phorate	0.46	0.05	"	0.500		92	60-130			
Ronnel	0.41	0.25	"	0.500		82	60-130			
Trichlorinate	0.41	0.05	"	0.500		82	60-130			
Surrogate: Triphenyl phosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*		*"*	*0.250*		*108*	*60-130*			
LCS Dup (9082701-BSD1)				Prepared: 08/26/09 Analyzed: 08/28/09						
Bolstar	0.38	0.10	ug/l	0.500		76	60-130	8	30	
Diazinon	0.46	0.05	"	0.500		92	60-130	9	30	
Ethoprop	0.40	0.05	"	0.500		80	60-130	2	30	
Mevinphos	0.48	0.25	"	0.500		96	60-130	18	30	
Methyl parathion	0.45	0.10	"	0.500		90	60-130	9	30	
Phorate	0.40	0.05	"	0.500		80	60-130	14	30	
Ronnel	0.43	0.25	"	0.500		86	60-130	5	30	
Trichlorinate	0.49	0.05	"	0.500		98	60-130	18	30	
Surrogate: Triphenyl phosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908657

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9082629										
Blank (9082629-BLK1)				Prepared: 08/26/09	Analyzed: 08/27/09					
Total Dissolved Solids	ND	20.0	mg/l							
Duplicate (9082629-DUP1)		**Source: 0908520-01**		Prepared: 08/26/09	Analyzed: 08/27/09					
Total Dissolved Solids	1160	20.0	mg/l		1120			4	20	
Reference (9082629-SRM1)				Prepared: 08/26/09	Analyzed: 08/27/09					
Total Dissolved Solids	318	20.0	mg/l	283		112	6.93-113.0			
Batch 9082744										
Blank (9082744-BLK1)				Prepared: 08/27/09	Analyzed: 08/30/09					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9082744-DUP1)		**Source: 0908657-02**		Prepared: 08/27/09	Analyzed: 08/30/09					
Hardness (Total)	885	100	mg CaCO3/L		931			5	20	
Batch 9090148										
Blank (9090148-BLK1)				Prepared & Analyzed: 09/01/09						
Oil & Grease	ND	5	mg/l							
LCS (9090148-BS1)				Prepared & Analyzed: 09/01/09						
Oil & Grease	32	5	mg/l	40.0		80	78-114			
LCS Dup (9090148-BSD1)				Prepared & Analyzed: 09/01/09						
Oil & Grease	33	5	mg/l	40.0		82	78-114	4	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0908657

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 0908657

Client: D-Max Engineering
Attn: Arsalan Dadkhah
Samplers(s): JL/MD
Address: 7220 Trade St Ste 119
San Diego, CA 92121
Phone: 858-586-6600 Fax:
Email:
Billing Address: same

Project ID: El Cajon Dry Weather 2009
Project #: 200928W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn Total/Dissolved	Coliform, Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	Total Hardness	TOC			
1	Site-6	8/25/09	10:30	SW	4P/4G	X						X		X				X	X		X		X	X			
2	Site-32	↓	11:20	↓	↓	X						X		X				X	X		X		X	X			
3	Site-17		12:00			X						X		X				X	X		X		X	X			
4	Site-8		12:45			X						X		X				X	X		X		X	X			
5																											
6																											
7																											
8																											
9																											
10																											

AUG 25 '09 13:34

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

	RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature	[signature]	8/25/09 1339	[signature]
Print	Joe Leonard		Jonathan Fargus
Company	D-Max		EMA
Signature	[signature]	8/25/09 1354	[signature]
Print	Jonathan Fargus		Sean Flory
Company:	EMA		EMA Inc
Signature			Signature
Print			Print
Company:			Company:

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:_____
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

T=5° on ice

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.

White- EMA Canary - Accounting Pink - Client (w/report) Gold - Client (Relinquish)

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

08 September 2009

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0908610

Project Name: El Cajon Dry Weather
Project Number: 200928W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- TOC-Liquid by SM5310B

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

4340 Viewridge Avenue, Suite A • San Diego, California 92123 • (858) 560-7717 • Fax (858) 560-7763
Analytical Chemistry Laboratory

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: *01-Sep-09*

CLIENT: EnviroMatrix Analytical, Inc. **Lab Order:** 107068
Project: 0908610

Lab ID: 107068-001 **Collection Date:** 8/24/2009 10:00:00 AM
Client Sample ID: 7 **Matrix:** WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON				**SM5310B**		
RunID: TOC2_090826A QC Batch: R112263 PrepDate: Analyst: **JSD**						
Organic Carbon, Total	17	3.0		mg/L	1	8/26/2009 02:22 PM

Lab ID: 107068-002 **Collection Date:** 8/24/2009 11:10:00 AM
Client Sample ID: 24 **Matrix:** WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON				**SM5310B**		
RunID: TOC2_090826A QC Batch: R112263 PrepDate: Analyst: **JSD**						
Organic Carbon, Total	ND	3.0		mg/L	1	8/26/2009 02:54 PM

Lab ID: 107068-003 **Collection Date:** 8/24/2009 12:05:00 PM
Client Sample ID: 1 **Matrix:** WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON				**SM5310B**		
RunID: TOC2_090826A QC Batch: R112263 PrepDate: Analyst: **JSD**						
Organic Carbon, Total	14	3.0		mg/L	1	8/26/2009 03:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

Advanced Technology Laboratories

Date: *01-Sep-09*

CLIENT: EnviroMatrix Analytical, Inc.
Work Order: 107068
Project: 0908610

ANALYTICAL QC SUMMARY REPORT

TestCode: 415.1_5310B_W

Sample ID: **MB-R112263** SampType: **MBLK** TestCode: **415.1_5310B** Units: **mg/L** Prep Date: RunNo: **112263**
Client ID: **PBW** Batch ID: **R112263** TestNo: **SM5310B** Analysis Date: **8/26/2009** SeqNo: **1772811**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	0.240	3.0									

Sample ID: **LCS-R112263** SampType: **LCS** TestCode: **415.1_5310B** Units: **mg/L** Prep Date: RunNo: **112263**
Client ID: **LCSW** Batch ID: **R112263** TestNo: **SM5310B** Analysis Date: **8/26/2009** SeqNo: **1772812**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	19.930	3.0	20.00	0.2398	98.5	80	120				

Sample ID: **MB-MS** SampType: **MS** TestCode: **415.1_5310B** Units: **mg/L** Prep Date: RunNo: **112263**
Client ID: **ZZZZZZ** Batch ID: **R112263** TestNo: **SM5310B** Analysis Date: **8/26/2009** SeqNo: **1772813**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	19.970	3.0	20.00	0.2398	98.7	70	130				

Sample ID: **MB-MSD** SampType: **MSD** TestCode: **415.1_5310B** Units: **mg/L** Prep Date: RunNo: **112263**
Client ID: **ZZZZZZ** Batch ID: **R112263** TestNo: **SM5310B** Analysis Date: **8/26/2009** SeqNo: **1772814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	19.940	3.0	20.00	0.2398	98.5	70	130	19.97	0.150	20	

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 0908610

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Samplers(s): Manoochehr / Annika
Address: 7220 Trade Street Ste. 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: Same

Project ID: City of El Cajon Dry Weather Monitoring
Project #: 2009 28W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease ☐ 413.1 ☐ 413.2 ☒ 1664	8015B (TPH) ☐ Gas ☐ Diesel ☐ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐ pH ☐ EC ☐ TSS ☒ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ NH3	CAC Title 22/CAM17 Metals ☐ TTLC ☐ STLC	TCLP (RCRA) ☐ Metals ☐ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform, ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli ☐ P/A ☐ Enumeration	Enterococcus, ☒ MTF ☐ Enterolert	Heterotrophic Plate Count (HPC)	Total Hardness	TOC				
1	7	8/24/09	10:00	water	4g/4p	X						X		X				X	X		X		X	X				
2	24	"	11:10	"	"	X						X		X				X	X		X		X	X				
3	1	"	12:05	"	"	X						X		X				X	X		X		X	X				
4																												
5																												
6																												
7																												
8																												
9																												
10																												

AUG 24 '09 17:70

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: ☐ Courier ☐ UPS ☐ FedEx ☐ USPS ☐ Client Drop Off ☐ Other

[1]**Turn-Around-Time:** ☐ Same Day ☐ 24 hr ☐ 48 hr ☐ 3 day ☐ 4 day ☒ 5 day ☐ STD (7 day)

[1]**Reporting Requirements:** ☐ Fax ☐ PDF ☐ Excel ☐ Geotracker/EDF ☐ Hard Copy ☐ EDT

[1]**Sample Disposal:** ☐ By Laboratory ☐ [2]Return to Client: P/U or Delivery ☐ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: [signature]	08/24/09 12:45	Signature: [signature]
Print: Annika Kubisetta		Print: Kelly Leyden
Company: D-Max Engineering		Company: EMA
Signature: [signature]	8/24/09 13:41	Signature
Print: Kelly Leyden		Print
Company: EMA		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.

White- EMA Canary - Accounting Pink - Client (w/report) Gold - Client (Relinquish)

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T=5°C Blueice

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0908610

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Advanced Technology Laboratories - (S)
3275 Walnut Avenue
Signal Hill, CA 90755
Phone :(800) 499-4388
Fax: (562) 989-6348

STANDARD TAT

Please Use Sample Comments as Sample IDs on Report

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0908610-01	**Water**	**Sampled:08/24/09 10:00**	[redacted]	
TOC-Liquid by SM5310B	~~08/31/09 16:00~~	09/21/09 10:00		7
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			
Sample ID: 0908610-02	**Water**	**Sampled:08/24/09 11:10**	[redacted]	
TOC-Liquid by SM5310B	~~08/31/09 16:00~~	09/21/09 11:10		24
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			
Sample ID: 0908610-03	**Water**	**Sampled:08/24/09 12:05**	[redacted]	
TOC-Liquid by SM5310B	~~08/31/09 16:00~~	09/21/09 12:05		1
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			

Send report to jbeyer@enviromatrixinc.com, llurick@enviromatrixinc.com, and reports@enviromatrixinc.co

Released By	Date	Received By	Date
	8/24/09		
Released By	Date	Received By	Date

08 September 2009

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0908657

Project Name: El Cajon Dry Weather
Project Number: 200928W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- TOC-Liquid by SM5310B

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Advanced Technology Laboratories

ANALYTICAL RESULTS

Print Date: *01-Sep-09*

CLIENT: EnviroMatrix Analytical, Inc. **Lab Order:** 107115
Project: 0908657

Lab ID: 107115-001 **Collection Date:** 8/25/2009 10:30:00 AM
Client Sample ID: Site-6 **Matrix:** WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON						
				SM5310B		
RunID: TOC2_090827A QC Batch: R112314				PrepDate:		Analyst: **JSD**
Organic Carbon, Total	12	3.0		mg/L	1	8/27/2009 06:08 PM

Lab ID: 107115-002 **Collection Date:** 8/25/2009 11:20:00 AM
Client Sample ID: Site-32 **Matrix:** WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON						
				SM5310B		
RunID: TOC2_090827A QC Batch: R112314				PrepDate:		Analyst: **JSD**
Organic Carbon, Total	4.0	3.0		mg/L	1	8/27/2009 06:26 PM

Lab ID: 107115-003 **Collection Date:** 8/25/2009 12:00:00 PM
Client Sample ID: Site-17 **Matrix:** WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON						
				SM5310B		
RunID: TOC2_090827A QC Batch: R112314				PrepDate:		Analyst: **JSD**
Organic Carbon, Total	8.0	3.0		mg/L	1	8/27/2009 09:15 PM

Lab ID: 107115-004 **Collection Date:** 8/25/2009 12:45:00 PM
Client Sample ID: Site-8 **Matrix:** WATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON						
				SM5310B		
RunID: TOC2_090827A QC Batch: R112314				PrepDate:		Analyst: **JSD**
Organic Carbon, Total	15	3.0		mg/L	1	8/27/2009 06:55 PM

Qualifiers:
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified

Advanced Technology Laboratories

Date: *01-Sep-09*

CLIENT: EnviroMatrix Analytical, Inc.
Work Order: 107115
Project: 0908657

ANALYTICAL QC SUMMARY REPORT

TestCode: 415.1_5310B_W

Sample ID: **MB-R112314** SampType: **MBLK** TestCode: **415.1_5310B** Units: **mg/L** Prep Date: RunNo: **112314**
Client ID: **PBW** Batch ID: **R112314** TestNo: **SM5310B** Analysis Date: **8/27/2009** SeqNo: **1773711**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	0.405	3.0									

Sample ID: **LCS-R112314** SampType: **LCS** TestCode: **415.1_5310B** Units: **mg/L** Prep Date: RunNo: **112314**
Client ID: **LCSW** Batch ID: **R112314** TestNo: **SM5310B** Analysis Date: **8/27/2009** SeqNo: **1773712**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	19.270	3.0	20.00	0.4054	94.3	80	120				

Sample ID: **MB-MS** SampType: **MS** TestCode: **415.1_5310B** Units: **mg/L** Prep Date: RunNo: **112314**
Client ID: **ZZZZZZ** Batch ID: **R112314** TestNo: **SM5310B** Analysis Date: **8/27/2009** SeqNo: **1773713**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	18.940	3.0	20.00	0.4054	92.7	70	130				

Sample ID: **MB-MSD** SampType: **MSD** TestCode: **415.1_5310B** Units: **mg/L** Prep Date: RunNo: **112314**
Client ID: **ZZZZZZ** Batch ID: **R112314** TestNo: **SM5310B** Analysis Date: **8/27/2009** SeqNo: **1773714**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Organic Carbon, Total	19.410	3.0	20.00	0.4054	95.0	70	130	18.94	2.45	20	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference

Page___ of ___

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.

4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 0908657

Client: D-Max Engineering
Attn: Arsalan Dadkhah
Samplers(s): JL/MD
Address: 7220 Trade St Ste 119
San Diego, CA 92121
Phone: 858-586-6600 Fax:
Email:
Billing Address: same

Project ID: El Cajon Dry Weather 2009
Project #: 200923W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease ☐ 413.1 ☐ 413.2 ☒ 1664	8015B (TPH) ☐ Gas ☐ Diesel ☐ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐ pH ☐ EC ☐ TSS ☒ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ NH3	CAC Title 22/CAM17 Metals ☐ TTLC ☐ STLC	TCLP (RCRA) ☐ Metals ☐ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform, ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli ☐ P/A ☐ Enumeration	Enterococcus, ☒ MTF ☐ Enterolert	Heterotrophic Plate Count (HPC)	Total Hardness	TOC				
1	Site-6	8/25/09	10:30	SW	4P/4G	X						X		X				X	X		X		X	X				
2	Site-32	↓	11:20	↓	↓	X						X		X				X	X		X		X	X				
3	Site-17	↓	12:00	↓	↓	X						X		X				X	X		X		X	X				
4	Site-8	↓	12:45	↓	↓	X						X		X				X	X		X		X	X				
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: ☐ Courier ☐ UPS ☐ FedEx ☐ USPS ☐ Client Drop Off ☐ Other

[1]**Turn-Around-Time:** ☐ Same Day ☐ 24 hr ☐ 48 hr ☐ 3 day ☐ 4 day ☒ day ☐ STD (7 day)

[1]**Reporting Requirements:** ☐ Fax ☐ PDF ☐ Excel ☐ Geotracker/EDF ☐ Hard Copy ☐ EDT

[1]**Sample Disposal:** ☐ By Laboratory ☐ [2]Return to Client: P/U or Delivery ☐ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature [signature]	8/25/09 1339	Signature [signature]
Print Joe Leonard		Print Jonathan Vargas
Company: D-Max		Company: EMA
Signature [signature]	8/25/09 1354	Signature [signature]
Print Jonathan Vargas		Print Sam Flory
Company: EMA		Company: EMA Inc
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

T=5° on ice

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White- EMA Canary - Accounting Pink - Client (w/report) Gold - Client (Relinquish)

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0908657

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Advanced Technology Laboratories - (S)
3275 Walnut Avenue
Signal Hill, CA 90755
Phone :(800) 499-4388
Fax: (562) 989-6348

Please Use Sample Comments as Sample IDs on Report

Analysis	STANDARD TAT Due	Expires	Laboratory ID	Comments
Sample ID: 0908657-01	**Water**	**Sampled:08/25/09 10:30**	[redacted]	
TOC-Liquid by SM5310B	~~09/01/09 16:00~~	09/22/09 10:30		Site-6
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			
Sample ID: 0908657-02	**Water**	**Sampled:08/25/09 11:20**	[redacted]	
TOC-Liquid by SM5310B	~~09/01/09 16:00~~	09/22/09 11:20		Site-32
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			
Sample ID: 0908657-03	**Water**	**Sampled:08/25/09 12:00**	[redacted]	
TOC-Liquid by SM5310B	~~09/01/09 16:00~~	09/22/09 12:00		Site-17
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			
Sample ID: 0908657-04	**Water**	**Sampled:08/25/09 12:45**	[redacted]	
TOC-Liquid by SM5310B	~~09/01/09 16:00~~	09/22/09 12:45		Site-8
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			

Send report to jbeyer@enviromatrixinc.com, lwick@enviromatrixinc.com, and reports@enviromatrixinc.com

Released By	Date	Received By	Date
	8/26/09		
Released By	Date	Received By	Date

EnviroMatrix Analytical, Inc.

11 September 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0909097

Project Name: El Cajon Dry Weather
Project Desc./#:200928W-2 Follow Up

Enclosed are the results of analyses for samples received by the laboratory on 09/03/09 13:32. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0909097

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site-8	0909097-01	Stormwater	09/03/09 09:45	09/03/09 13:32

9105

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0909097

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site-8 (0909097-01) Stormwater Sampled: 09/03/09 09:45 Received: 09/03/09 13:32									
Total Dissolved Solids	**1590**	20.0	mg/l	1	9091024	09/09/09	09/10/09	SM2540 C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0909097

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9091024										
Blank (9091024-BLK1)				Prepared: 09/09/09	Analyzed: 09/10/09					
Total Dissolved Solids	ND	20.0	mg/l							
Duplicate (9091024-DUP1)		**Source: 0909201-01**		Prepared: 09/09/09	Analyzed: 09/10/09					
Total Dissolved Solids	ND	20.0	mg/l		ND				20	
Reference (9091024-SRM1)				Prepared: 09/09/09	Analyzed: 09/10/09					
Total Dissolved Solids	296	20.0	mg/l	283		105	6.93-113.0			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 0909097

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 0909097

Client: D-Max Engineering
Attn: Arsalan Dadkhah
Samplers(s): JL/MD
Address: 7220 Trade Street Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax:
Email:
Billing Address: same

Project ID: El Cajon Dry Weather Follow-Up
Project #: 200928W-2 PO #:

SEP 3 '09 13:53

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform, □ Total (MTF) □ Fecal (MTF)	Collilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)					
1	Site-8	9/3/09	9:45	SW	1G									X													
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A
Custody Seals Intact: Yes No N/A
COC/Labels Agree: Yes No N/A
Containers Properly Preseved: Yes No N/A
Temp @ Receipt:_____
Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature	9/3/09	Signature
Print: Joe Leonard	1316	Print: Sean Flury
Company: D-Max		Company: EMA
Signature	9/3/09	Signature
Print: Sean Flury	1332	Print: Louis Luna
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

Temp on ice

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.

White- EMA Canary - Accounting Pink - Client (w/report) Gold - Client (Relinquish)

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Appendix D

Field Data and Trash Assessment Sheets

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	1			Latitude	32.80386	Watershed: Hydrologic Unit	907
Location	Forester Creek channel, north of I-8, between Magnolia Avenue and Johnson Avenue, south of Parkway Plaza			Longitude	-116.96450	Hydrologic Area	907.1
				TB Page	1251-F4	Hydrologic Subarea (Optional)	907.13
Date	06/24/09	Time	12:05	Observer	MD/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 21, 22, 23

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	33.0	NH_3-N (mg/L)	0.293	NO_3 (mg/L)	24.28	Ortho-PO_4 (mg/L)	0.046
pH (pH units)	9.2	TURB (NTU)	4.35	NO_3-N (mg/L)	5.49	Ortho-PO_4-P (mg/L)	0.015
COND (mS/cm)	2.07	MBAS (mg/L)	0.38	DO (mg/L)	8.95		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	80	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	62	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2009 Trash Assessment Form

SITE ID: 1 DATE: 08/24/09

OBSERVER: MD/AK TIME: 12:05

LOCATION: Forester Creek Channel, north of I-8, between Magnolia Avenue and Johnson Avenue, south of Parkway Plaza

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For pH ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	1			Latitude	32.80386	Watershed: Hydrologic Unit	907
Location	Forester Creek Channel, north of I-8, between Magnolia Ave and Johnson Avenue, south of Pkwy Plaza			Longitude	-116.96550	Hydrologic Area	907.1
				TB Page	1251-F4	Hydrologic Subarea (Optional)	907.13
Date	8/25/09	Time	10:15	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae	☒ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.0	NH_3-N (mg/L)	nt	NO_3 (mg/L)	nt	Ortho-PO_4 (mg/L)	nt
pH (pH units)	8.7	TURB (NTU)	nt	NO_3-N (mg/L)	nt	Ortho-PO_4-P (mg/L)	nt
COND (mS/cm)	2.14	MBAS (mg/L)	nt	DO (mg/L)	nt		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	85	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	66	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	2		Latitude	32 80363	Watershed	Hydrologic Unit	907
Location	Washington Channel, North of I-8. Between Magnolia Ave and Johnson Ave, South of Pkwy Plaza		Longitude	-116.96548		Hydrologic Area	907.1
			TB Page	1251 – F4		Hydrologic Subarea (Optional)	907.13
Date	6/25/09	Time 1220	Observer	MD, DK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☒ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☒ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 9 – 12

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.2	NH_3-N (mg/L)	0.218	NO_3 (mg/L)	18.39	Ortho-PO_4 (mg/L)	0.048
pH (pH units)	8.8	TURB (NTU)	1.25	NO_3-N (mg/L)	4.156	Ortho-PO_4 -P (mg/L)	0.016
COND (mS/cm)	2.26	MBAS (mg/L)	0.25	~~Others~~ DO	8.25		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	48	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	37	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash: tennis ball, cigarette butts, plastic bag, dead duck, caps, glove
Leaf litter observed, brown/green algae, slight algae/musty smell at sight

2009 Trash Assessment Form

SITE ID: 2 DATE: 01/25/09

LOCATION: Washington channel, North of I-8 Between Magnolia Ave and Johnson Ave. South of Parkway Plaza TIME: 12:20

OBSERVER: DK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30x700

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☑ Receiving Water

Site ID	3		Latitude	32.79507	Watershed	Hydrologic Unit	907
Location	North of Main Street, between Chambers Street and Johnson Ave ramp access with car next to Artesia Apts		Longitude	-116.96860		Hydrologic Area	907.1
			TB Page	1251-E5		Hydrologic Subarea (Optional)	907.13
Date	8/28/09	Time 14:15	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 78, 79

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	33.1	NH_3-N (mg/L)	0.342	NO_3 (mg/L)	8.297	Ortho-PO_4 (mg/L)	0.128
pH (pH units)	8.4	TURB (NTU)	3.76	NO_3-N (mg/L)	1.875	Ortho-PO_4-P (mg/L)	0.042
COND (mS/cm)	3.03	MBAS (mg/L)	0.25	DO (mg/L)	6.37		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	60	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	47	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 3 DATE: 8/28/09

OBSERVER: JL/MD TIME: 14:15

LOCATION: North of Main Street, between Chambers Street and Johnson Ave, ramp access with car next to Artesia Ap

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☑ RECEIVING WATER ☑ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☑ Receiving Water

Site ID	4			Latitude	32.81221	Watershed: Hydrologic Unit	907
Location	North of Vernon Way, between Johnson and Marshall Avenues			Longitude	-116.97348	Hydrologic Area	907.1
				TB Page	1251-E3	Hydrologic Subarea (Optional)	907.13
Date	8/28/09	Time	11:15	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 74,75

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	31.5	NH_3-N (mg/L)	0.213	NO_3 (mg/L)	16.64	Ortho-PO_4 (mg/L)	0.018
pH (pH units)	8.3	TURB (NTU)	5.03	NO_3-N (mg/L)	3.761	Ortho-PO_4-P (mg/L)	0.006
COND (mS/cm)	2.71	MBAS (mg/L)	0.13	DO (mg/L)	8.56		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	70	in
Depth	0.50	in
Velocity	10/10	ft/sec
Flow	109	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 4 DATE: 8/28/09

OBSERVER: JL/MD TIME: 11:15

LOCATION: North of Vernon Way, between Johnson and Marshall Avenues

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	5		Latitude	32 ~~8445~~ 82665	Watershed	Hydrologic Unit	907
Location	Adjacent to the Weld Blvd. Trolley Station, SE of the Marshall Ave. / Cuyamaca St. intersection		Longitude	-116.98226		Hydrologic Area	907.1
			TB Page	1251-D1		Hydrologic Subarea (Optional)	907.13
Date	6/25/09	Time 16:00	Observer	DK, MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☒ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 15, 16

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	30.7	NH_3-N (mg/L)	0.301	NO_3 (mg/L)	~~0.301~~ 10.51	Ortho-PO_4 (mg/L)	0.234
pH (pH units)	8.9	TURB (NTU)	14.82	NO_3-N (mg/L)	2.375	Ortho-PO_4-P (mg/L)	0.076
COND (mS/cm)	2.81	MBAS (mg/L)	0.25	Others DO	8.25		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	80	in
Depth	0.5	in
Velocity	10/10	ft/sec
Flow	108	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Algae, snails observed. Trash: paper, plastic bottles

2009 Trash Assessment Form

SITE ID: 5 DATE: 6/25/09

LOCATION: Adjacent to weld blvd - trailer station SE of the Marshall Ave / Cuyamaca St. intersection TIME: 16:00

OBSERVER: David Kung

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50 x 40

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☒ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	6		Latitude	32.80890	Watershed	Hydrologic Unit	907
Location	South end of Victor ~~Drive~~ Ave, South of Valley Village Drive		Longitude	-116.95534		Hydrologic Area	907.1
			TB Page	1251-G3		Hydrologic Subarea (Optional)	907.13
Date	8/25/09	Time 10:30	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ~~☒ Fish~~ ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 30, 31

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	30.4	NH_3-N (mg/L)	0.246	NO_3 (mg/L)	13.36	Ortho-PO_4 (mg/L)	0.000 ND
pH (pH units)	8.6	TURB (NTU)	3.99	NO_3-N (mg/L)	3.019	Ortho-PO_4-P (mg/L)	0.000 ND
COND (mS/cm)	2.12	MBAS (mg/L)	0.25	DO (mg/L)	8.82		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	18	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	14	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 6 DATE: 8/25/09

OBSERVER: JL/MD TIME: 10:30

LOCATION: Southend of Victor Ave, south of Valley Village Dr.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 25x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	7		Latitude	32.79751	Watershed	Hydrologic Unit	907
Location	Fletcher Hills Creek Channel at Fletcher Parkway and Chatham Street		Longitude	-117.00346		Hydrologic Area	907.1
			TB Page	1251 - A5		Hydrologic Subarea (Optional)	907.11
Date	08/24/09	Time 10:00	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 17-18

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.8	NH_3-N (mg/L)	0.182	NO_3 (mg/L)	0.755	Ortho-PO_4 (mg/L)	0.798
pH (pH units)	9.2	TURB (NTU)	21.97	NO_3-N (mg/L)	0.171	Ortho-PO_4-P (mg/L)	0.260
COND (mS/cm)	1.00	MBAS (mg/L)	0.25	DO (mg/L)	7.83		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	41	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Large amount dead leaves, small amount trash: beverage cont, food wrappers

2009 Trash Assessment Form

SITE ID: 7 DATE: 08/24/09

OBSERVER: MD/AK TIME: 10:00

LOCATION: Fletcher Hills Creek Channel at Fletcher Parkway and Chatham Street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For pH ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	7		Latitude	32.79751	Watershed	Hydrologic Unit	907
Location	Fletcher Hills Creek Channel at Fletcher Parkway and Chatham Street		Longitude	-117.00346		Hydrologic Area	907.1
			TB Page	1251-A5		Hydrologic Subarea (Optional)	907.11
Date	8/25/09	Time 9:40	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.1	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	3.4	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.20	MBAS (mg/L)	na	DO (mg/L)	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	8			Latitude	32.82158	Watershed: Hydrologic Unit	907
Location	Southeast of the Fanita Dr weld Blvd intersection			Longitude	-116.99933	Hydrologic Area	907.1
				TB Page	1251 - B2	Hydrologic Subarea (Optional)	907.12
Date	8/25/09	Time	12:45	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 37, 38

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	31.1	NH3-N (mg/L)	0.279	NO3 (mg/L)	29.73	Ortho-PO4 (mg/L)	0.359
pH (pH units)	8.2	TURB (NTU)	10.40	NO3-N (mg/L)	6.719	Ortho-PO4 -P (mg/L)	0.117
COND (mS/cm)	12.24	MBAS (mg/L)	0.75	DO (mg/L)	8.55		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	40	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	31	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 8 DATE: 8/25/09

OBSERVER: JL/MD TIME: 12:45

LOCATION: Southeast of the Fanita Dr. / Weld Blvd intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 25x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For TDS, Cond ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	8		Latitude	32.82158	Watershed	Hydrologic Unit	907
Location	Southeast of the Fanita Dr. Weld Blvd intersection		Longitude	-116.99933		Hydrologic Area	907.1
			TB Page	1251-B2		Hydrologic Subarea (Optional)	907.12
Date	9/3/09	Time 9:45	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.9	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	8.0	TURB (NTU)	14.32	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	2.87	MBAS (mg/L)	na	DO (mg/L)	na		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	36	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	28	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	9			Latitude	32.81473	Watershed: Hydrologic Unit	907
Location	Whitsett Dr. in front of 1473 at the east sidewalk			Longitude	-116.99976	Hydrologic Area	907.1
				TB Page	1251-B3	Hydrologic Subarea (Optional)	907.12
Date	8/26/09	Time	13:45	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray			☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive				☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 52, 53

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.2	NH_3-N (mg/L)	0.594	NO_3 (mg/L)	0.423	Ortho-PO_4 (mg/L)	0.660
pH (pH units)	6.8	TURB (NTU)	37.15	NO_3-N (mg/L)	0.096	Ortho-PO_4-P (mg/L)	0.215
COND (mS/cm)	4.00	MBAS (mg/L)	0.50	DO (mg/L)	5.37		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 9 DATE: 8/26/09

OBSERVER: JL/MD TIME: 13:45

LOCATION: Whitsett Dr. in front of 1473 at the east sidewalk

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	13A			Latitude	32.80581	Watershed: Hydrologic Unit	907
Location	Petree Street, in the middle of the street. In front of 1140			Longitude	-116.97696	Hydrologic Area	907.1
				TB Page	1251-D4	Hydrologic Subarea (Optional)	907.13
Date	8/28/09	Time	9:25	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 68, 69

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.6	NH_3-N (mg/L)	0.228	NO_3 (mg/L)	7.951	Ortho-PO_4 (mg/L)	0.076
pH (pH units)	7.9	TURB (NTU)	1.00	NO_3-N (mg/L)	1.797	Ortho-PO_4 -P (mg/L)	0.025
COND (mS/cm)	5.27	MBAS (mg/L)	0.50	DO (mg/L)	6.53		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2009 Trash Assessment Form

SITE ID: 13A DATE: 8/28/09

OBSERVER: JL/MD TIME: 9:25

LOCATION: Petree Street, in the middle of the street. In front of #1140

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	14		Latitude	32.80074	Watershed	Hydrologic Unit	907
Location	Pierce Street, south of Wagner Drive, across from "Educational Childcare" north of National Guard facility		Longitude	-116.97671		Hydrologic Area	907.1
			TB Page	1251-D4		Hydrologic Subarea (Optional)	907.13
Date	8/28/09	Time 10:10	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 70, 71

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.0	NH_3-N (mg/L)	0.237	NO_3 (mg/L)	4.650	Ortho-PO_4 (mg/L)	0.518
pH (pH units)	8.1	TURB (NTU)	0.93	NO_3-N (mg/L)	1.051	Ortho-PO_4-P (mg/L)	0.169
COND (mS/cm)	3.18	MBAS (mg/L)	0.38	DO (mg/L)	5.68		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2009 Trash Assessment Form

SITE ID: 14 DATE: 8/28/09

OBSERVER: JL/MD TIME: 10:10

LOCATION: Pierce Street, south of Wagner Drive, across from "Educational Childcare," nor the the Nat'l Gu

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	15		Latitude	32.78237	Watershed	Hydrologic Unit	907
Location	Chase Ave and Grossmont Ave intersection, across from Grossmont Ave in south sidewalk		Longitude	-116.97815		Hydrologic Area	907.1
			TB Page	1251-D7		Hydrologic Subarea (Optional)	907.13
Date	8/25/09	Time 15:00	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 39, 40

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.5	NH_3-N (mg/L)	0.172	NO_3 (mg/L)	4.665	Ortho-PO_4 (mg/L)	0.533
pH (pH units)	7.7	TURB (NTU)	1.62	NO_3-N (mg/L)	1.054	Ortho-PO_4-P (mg/L)	0.174
COND (mS/cm)	3.44	MBAS (mg/L)	0.25	DO (mg/L)	5.22		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 15 DATE: 8/25/09

OBSERVER: JL/MD TIME: 15:00

LOCATION: Chase Ave and Grossmont Ave intersection, across from Grossmont Ave, in south sidewalk

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	17		Latitude	32.81660	Watershed	Hydrologic Unit	907
Location	Cypress Lane, east of Pioneer Way, next to 350 Cypress, north side of street		Longitude	-116.96609		Hydrologic Area	907.1
			TB Page	1251-F2		Hydrologic Subarea (Optional)	907.13
Date	8/25/09	Time 12:00	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae	☒ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 34, 35, 36

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.5	NH_3-N (mg/L)	0.408	NO_3 (mg/L)	0.579	Ortho-PO_4 (mg/L)	0.873
pH (pH units)	7.9	TURB (NTU)	6.43	NO_3-N (mg/L)	0.131	Ortho-PO_4-P (mg/L)	0.285
COND (mS/cm)	2.16	MBAS (mg/L)	0.25	DO (mg/L)	5.72		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 17 DATE: 8/25/09

OBSERVER: JL/MD TIME: 12:00

LOCATION: Cypress Lane, east of Pioneer Way, next to 350 Cypress, north side of stree

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	18			Latitude	32.81298	Watershed: Hydrologic Unit	907
Location	East of Marshall Ave, north of Vernon Way, west side of Forester Creek Channel			Longitude	-116.97357	Hydrologic Area	907.1
				TB Page	1251-E3	Hydrologic Subarea (Optional)	907.13
Date	8/28/09	Time	10:50	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☒ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** ~~72-75~~ 72,73

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.0	NH_3-N (mg/L)	0.254	NO_3 (mg/L)	2.980	Ortho-PO_4 (mg/L)	0.619
pH (pH units)	8.1	TURB (NTU)	0.68	NO_3-N (mg/L)	0.673	Ortho-PO_4-P (mg/L)	0.202
COND (mS/cm)	3.36	MBAS (mg/L)	0.25	DO (mg/L)	6.92		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 18 DATE: 8/28/09

OBSERVER: JL/MD TIME: 10:50

LOCATION: East side of Marshall Ave, north of Vernon Way, west side of Forester Creek Channel,

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	19			Latitude	32.80576	Watershed: Hydrologic Unit	907
Location	Southwest corner of Jackman Street and Petree Street intersection			Longitude	-116.97344	Hydrologic Area	907.1
				TB Page	1251-E4	Hydrologic Subarea (Optional)	907.13
Date	8/26/09	Time	14:40	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 54, 55

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	29.4	NH_3-N (mg/L)	0.871	NO_3 (mg/L)	22.55	Ortho-PO_4 (mg/L)	0.402
pH (pH units)	6.9	TURB (NTU)	5.75	NO_3-N (mg/L)	5.096	Ortho-PO_4-P (mg/L)	0.131
COND (mS/cm)	8.68	MBAS (mg/L)	0.75	DO (mg/L)	5.12		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 19 DATE: 8/26/08

OBSERVER: JL/MD TIME: 14:40

LOCATION: Southwest corner of Jackman Street and Petree Street intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6x6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	20			Latitude	32.79534	Watershed: Hydrologic Unit	907
Location	North of 533 Main Street, under bridge on west side of channel, the southernmost of the 2 outfalls			Longitude	-116.96861	Hydrologic Area	907.1
				TB Page	1251-E5	Hydrologic Subarea (Optional)	907.13
Date	8/28/09	Time	13:50	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 77

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.2	NH_3-N (mg/L)	0.607	NO_3 (mg/L)	1.219	Ortho-PO_4 (mg/L)	3.001
pH (pH units)	7.9	TURB (NTU)	2.42	NO_3-N (mg/L)	0.275	Ortho-PO_4-P (mg/L)	0.978
COND (mS/cm)	5.05	MBAS (mg/L)	0.75	DO (mg/L)	5.12		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 20 DATE: 8/28/09

OBSERVER: JL/MD TIME: 13:50

LOCATION: North of 533 Main Street, under bridge on westside of channel, the southern of the two outfalls

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 25x25

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	21			Latitude	32.79124	Watershed: Hydrologic Unit	907
Location	Southwest corner of El Cajon Blvd and West Palm Ave intersection			Longitude	-116.97179	Hydrologic Area	907.1
				TB Page	1251-E6	Hydrologic Subarea (Optional)	907.13
Date	8/27/09	Time	12:45	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 60, 61

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	31.6	NH3-N (mg/L)	0.169	NO3 (mg/L)	7.433	Ortho-PO4 (mg/L)	0.784
pH (pH units)	8.1	TURB (NTU)	0.35	NO3-N (mg/L)	1.680	Ortho-PO4 -P (mg/L)	0.256
COND (mS/cm)	5.69	MBAS (mg/L)	0.63	DO (mg/L)	5.72		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2009 Trash Assessment Form

SITE ID: 21 DATE: 8/27/09

OBSERVER: JL/MD TIME: 12:45

LOCATION: Southwest corner of El Cajon Blvd and West Palm Ave intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	22			Latitude	32.78786	Watershed: Hydrologic Unit	907
Location	Washington Avenue, between Emerald Ave and Van Houten Ave, at North side of bridge			Longitude	-116.96767	Hydrologic Area	907.1
				TB Page	1251-F6	Hydrologic Subarea (Optional)	907.13
Date	8/26/09	Time	15:40	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 56,57

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.5	NH_3-N (mg/L)	0.181	NO_3 (mg/L)	49.58	Ortho-PO_4 (mg/L)	0.173
pH (pH units)	7.5	TURB (NTU)	0.11	NO_3-N (mg/L)	11.205	Ortho-PO_4-P (mg/L)	0.056
COND (mS/cm)	3.23	MBAS (mg/L)	0.25	DO (mg/L)	5.64		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 22 DATE: 8/26/09

OBSERVER: JL/MD TIME: 15:40

LOCATION: Washington Ave, between Emerald Ave and Van Houten Ave at North sid of bridge

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	22		Latitude	32.78786	Watershed	Hydrologic Unit	907
Location	Washington Avenue, between Emerald Ave and Van Houten Ave, at north side of bridge		Longitude	-116.96767		Hydrologic Area	907.1
			TB Page	1251-F6		Hydrologic Subarea (Optional)	907.13
Date	8/27/09	Time 12:00	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☑ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	27.3	NH_3-N (mg/L)	nt	NO_3 (mg/L)	40.33	Ortho-PO_4 (mg/L)	nt
pH (pH units)	7.6	TURB (NTU)	nt	NO_3-N (mg/L)	9.11	Ortho-PO_4-P (mg/L)	nt
COND (mS/cm)	3.15	MBAS (mg/L)	nt	DO (mg/L)	nt		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

LN

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	22			Latitude	32.78786	Watershed: Hydrologic Unit	907
Location	Washington Avenue, between Emerald Ave and Van Houten Ave, at north side of bridge			Longitude	-116.96767	Hydrologic Area	907.1
				TB Page	1251-F6	Hydrologic Subarea (Optional)	90713
Date	10/1/09	Time	11:00	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	na	NO_3 (mg/L)	35.65	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.5	TURB (NTU)	0.19	NO_3-N (mg/L)	8.06	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	3.14	MBAS (mg/L)	na	DO (mg/L)	na		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

LV

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	22-1			Latitude	32.78695	Watershed: Hydrologic Unit	907
Location	In front of 733 Prescott Avenue. East side of road			Longitude	-116.95993	Hydrologic Area	907.1
				TB Page	1251-F6	Hydrologic Subarea (Optional)	907.13
Date	10/1/09	Time	12:15	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☒ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	23.97	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	5.42	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	DO (mg/L)	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	22-2		Latitude	32.78665	Watershed	Hydrologic Unit	907
Location	Avocado Avenue, Eastside in sidewalk, North of Lindell Avenue		Longitude	-116.95765		Hydrologic Area	907.1
			TB Page	1251-66		Hydrologic Subarea (Optional)	907.13
Date	10/1/09	Time 12:45	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	23.26	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	5.26	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	DO (mg/L)	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

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San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	West 22-3		Latitude	32.78567	Watershed	Hydrologic Unit	907
Location	At west end of Pauline Ave. Access via Avocado Ave across from Lindell Ave		Longitude	-116.95679		Hydrologic Area	907.1
			TB Page	1251-G6		Hydrologic Subarea (Optional)	907.13
Date	10/1/09	Time 13:10	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	1.659	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	0.37	Ortho-PO_4 -P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	DO (mg/L)	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Nitrate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	22-4		**Latitude**	32.78628	**Watershed**	**Hydrologic Unit**	907
Location	In open lot east of Avocado Ave, north of Lindell Ave. Where natural creek becomes underground channel		**Longitude**	-116.95705		**Hydrologic Area**	907.1
			TB Page	1251-G6		**Hydrologic Subarea** (Optional)	90713
Date	10/1/09	**Time** 13:30	**Observer**	JL/MD		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 37-55, Site 22 F-Up Photos Folder

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	16.47	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	3.72	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	DO (mg/L)	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	23		Latitude	32.78586	Watershed	Hydrologic Unit	907
Location	Grant Ave and Grossmont Ave intersection, in front of 788/790, in street		Longitude	-116.97468		Hydrologic Area	907.1
			TB Page	1251-E7		Hydrologic Subarea (Optional)	907.13
Date	8/25/09	Time 15:40	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 41, 42

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.2	NH_3-N (mg/L)	0.174	NO_3 (mg/L)	17.02	Ortho-PO_4 (mg/L)	0.799
pH (pH units)	8.2	TURB (NTU)	2.12	NO_3-N (mg/L)	3.847	Ortho-PO_4-P (mg/L)	0.260
COND (mS/cm)	3.28	MBAS (mg/L)	0.25	DO (mg/L)	6.27		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 23 DATE: 8/25/09

OBSERVER: JL/MD TIME: 15:40

LOCATION: Grant Ave and Grossmont Ave intersection, in front of 788/790 in street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	24		Latitude	32.78046	Watershed	Hydrologic Unit	907
Location	Chase Avenue, between Emerald Avenue and Estes Street north of street, easternmost outfall		Longitude	-116.96785		Hydrologic Area	907.1
			TB Page	1251-F7		Hydrologic Subarea (Optional)	907.13
Date	06/24/04	Time 11:10	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 19-20

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.6	NH_3-N (mg/L)	0.154	NO_3 (mg/L)	7.782	Ortho-PO_4 (mg/L)	0.280
pH (pH units)	8.0	TURB (NTU)	0.77	NO_3-N (mg/L)	1.759	Ortho-PO_4-P (mg/L)	0.091
COND (mS/cm)	2.53	MBAS (mg/L)	0.25	DO (mg/L)	5.74		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

4/4 Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2009 Trash Assessment Form

SITE ID: 24 DATE: 08/24/09

OBSERVER: MD/AK TIME: 11:10

LOCATION: Chase Avenue, between Emerald Avenue and Estes Street, north of street, easternmost outfall

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 8 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	25			Latitude	32.77390	Watershed: Hydrologic Unit	907
Location	East side of Avocado Avenue between Avenida Abajo and Skyline Drive			Longitude	-116.95860	Hydrologic Area	907.1
				TB Page	1271-G1	Hydrologic Subarea (Optional)	907.13
Date	08/24/09	Time	1450	Observer	MD/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/~~Gravel~~	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other crayfish

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 26-27

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.1	NH_3-N (mg/L)	0.275	NO_3 (mg/L)	5.867	Ortho-PO_4 (mg/L)	0.214
pH (pH units)	7.8	TURB (NTU)	2.16	NO_3-N (mg/L)	1.326	Ortho-PO_4 -P (mg/L)	0.070
COND (mS/cm)	2.32	MBAS (mg/L)	0.13	DO (mg/L)	5.71		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 25 DATE: 08/24/09

OBSERVER: MD/AK TIME: 1450

LOCATION: East side of Avocado Avenue, between Avenida Abajo and Skywood Drive

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	26			Latitude	32.81249	Watershed: Hydrologic Unit	907
Location	Greenfield Dr, west side of Victor Street, across from 1237			Longitude	-116.95534	Hydrologic Area	907.1
				TB Page	1251-G3	Hydrologic Subarea (Optional)	907.13
Date	8/26/09	Time	10:15	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 45, 46

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.1	NH_3-N (mg/L)	0.108	NO_3 (mg/L)	65.85	Ortho-PO_4 (mg/L)	0.474
pH (pH units)	7.2	TURB (NTU)	6.49	NO_3-N (mg/L)	14.88	Ortho-PO_4-P (mg/L)	0.155
COND (mS/cm)	2.33	MBAS (mg/L)	0.25	DO (mg/L)	5.21		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 26 DATE: 8/26/09

OBSERVER: JL/MD TIME: 10:15

LOCATION: Greenfield Dr. west side of Victor Street, across from 1237

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	26		Latitude	32.81249	Watershed	Hydrologic Unit	907
Location	Greenfield Dr. west side of Victor Street, across from 1237		Longitude	-116.95534		Hydrologic Area	907.1
			TB Page	1251-G3		Hydrologic Subarea (Optional)	907.13
Date	8/27/09	Time 11:00	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.5	NH_3-N (mg/L)	na	NO_3 (mg/L)	8.49	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.9	TURB (NTU)	na	NO_3-N (mg/L)	1.92	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	2.47	MBAS (mg/L)	na	DO (mg/L)	na		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	27			Latitude	32.80256	Watershed: Hydrologic Unit	907
Location	Ballantyne Street, across from Beech Street, next to the bus stop			Longitude	-116.95808	Hydrologic Area	907.1
				TB Page	1251-G4	Hydrologic Subarea (Optional)	907.13
Date	8/27/09	Time	9:40	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☒ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☒ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	**Tide Height:** _____ ft.
Last Rain	☒ > 72 hours	☐ < 72 hours				
Rainfall	☒ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 58, 59

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.3	NH3-N (mg/L)	0.130	NO3 (mg/L)	1.782	Ortho-PO4 (mg/L)	1.511
pH (pH units)	7.6	TURB (NTU)	10.81	NO3-N (mg/L)	0.403	Ortho-PO4 -P (mg/L)	0.493
COND (mS/cm)	1.14	MBAS (mg/L)	0.25	DO (mg/L)	5.53		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 27 DATE: 8/27/09

OBSERVER: JL/MD TIME: 9:40

LOCATION: Ballantyne Street, across from Beech Street, next to the bus stop

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

☑ MS4 ☐ Receiving Water

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	28		Latitude	32.80065	Watershed	Hydrologic Unit	907
Location	North side of Madison Avenue east of Jefree Street		Longitude	-116.95276		Hydrologic Area	907.1
			TB Page	1251-G4		Hydrologic Subarea (Optional)	907.13
Date	8/26/09	Time 11:20	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 47,48

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	29.8	NH_3-N (mg/L)	0.238	NO_3 (mg/L)	15.76	Ortho-PO_4 (mg/L)	0.411
pH (pH units)	7.9	TURB (NTU)	7.85	NO_3-N (mg/L)	3.562	Ortho-PO_4 -P (mg/L)	0.134
COND (mS/cm)	1.61	MBAS (mg/L)	0.25	DO (mg/L)	6.62		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 28 DATE: 8/26/09

OBSERVER: JL/MD TIME: 11:20

LOCATION: North side of Madison Avenue east of Jefree Street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

☑ MS4 ☐ Receiving Water

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	30			Latitude	32.80010	Watershed: Hydrologic Unit	907
Location	Madison Avenue, between Roberta Ave and Roselle Ave, in front of Boys and Girls Club			Longitude	-116.94128	Hydrologic Area	907.1
				TB Page	1251-J4	Hydrologic Subarea (Optional)	907.13
Date	8/27/09	Time	16:10	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 66, 67

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	29.2	NH_3-N (mg/L)	0.222	NO_3 (mg/L)	57.24	Ortho-PO_4 (mg/L)	0.264
pH (pH units)	7.6	TURB (NTU)	5.44	NO_3-N (mg/L)	12.94	Ortho-PO_4-P (mg/L)	0.086
COND (mS/cm)	2.27	MBAS (mg/L)	0.25	DO (mg/L)	5.46		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004, 4/15/2005, 4/19/2006, 3/13/2008

2009 Trash Assessment Form

SITE ID: 30 DATE: 8/27/09

OBSERVER: JL/MD TIME: 16:10

LOCATION: Madison Avenue, between Roberta Ave and Roselle Ave, in front of Boys/Girl Club

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	30		Latitude	32.80010	Watershed	Hydrologic Unit	907
Location	Madison Avenue, between Roberta Ave and Roselle Ave, in front of Boys and Girls club		Longitude	-116.94128		Hydrologic Area	907.1
			TB Page	1251-J4		Hydrologic Subarea (Optional)	907.13
Date	8/28/09	Time 12:20	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.4	NH_3-N (mg/L)	nt	NO_3 (mg/L)	53.51	Ortho-PO_4 (mg/L)	nt
pH (pH units)	7.6	TURB (NTU)	nt	NO_3-N (mg/L)	12.09	Ortho-PO_4-P (mg/L)	nt
COND (mS/cm)	2.25	MBAS (mg/L)	nt	DO (mg/L)	nt		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	31		Latitude	32.79363	Watershed	Hydrologic Unit	907
Location	North of Lexington Avenue and Filbert Street, in alley, South of channel		Longitude	-116.95506		Hydrologic Area	907.1
			TB Page	1251-G5		Hydrologic Subarea (Optional)	907.13
Date	8/26/09	Time 12:00	Observer	JL / MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other na
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other na
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other na
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other na
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 49

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH3-N (mg/L)	ns	NO3 (mg/L)	ns	Ortho-PO4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO3-N (mg/L)	ns	Ortho-PO4 -P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns	DO (mg/L)	ns		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 31 DATE: 8/26/09

OBSERVER: JL/MD TIME: 12:00

LOCATION: North of Lexington Avenue and Filbert Street, in alley, south of channel

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	32		Latitude	32.79203	Watershed	Hydrologic Unit	907
Location	Lincoln Ave, south of Lexington Ave, behind 389 Lincoln Park Apts		Longitude	-116.95240		Hydrologic Area	907.1
			TB Page	1251-G6		Hydrologic Subarea (Optional)	907.13
Date	8/25/09	Time 11:20	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☒ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae ☒ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 32, 33

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.0	NH_3-N (mg/L)	0.129	NO_3 (mg/L)	30.37	Ortho-PO_4 (mg/L)	0.037
pH (pH units)	8.1	TURB (NTU)	0.03	NO_3-N (mg/L)	6.864	Ortho-PO_4-P (mg/L)	0.012
COND (mS/cm)	2.73	MBAS (mg/L)	0.38	DO (mg/L)	6.77		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	12	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	9	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 32 DATE: 8/25/09

OBSERVER: JL/MD TIME: 11:20

LOCATION: Lincoln Ave, south of Lexington Ave, behind 389 Lincoln Park Apts

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	33		Latitude	32.78280	Watershed	Hydrologic Unit	907
Location	Next to 950 Lincoln Avenue, between Renette Avenue and Chase Ave		Longitude	-116.95390		Hydrologic Area	907.1
			TB Page	1251-G7		Hydrologic Subarea (Optional)	907.13
Date	8/27/09	Time 13:20	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae	☒ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 62, 63

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	29.8	NH_3-N (mg/L)	0.217	NO_3 (mg/L)	21.70	Ortho-PO_4 (mg/L)	1.138
pH (pH units)	8.1	TURB (NTU)	0.59	NO_3-N (mg/L)	4.904	Ortho-PO_4-P (mg/L)	0.371
COND (mS/cm)	2.34	MBAS (mg/L)	0.25	DO (mg/L)	5.75		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2009 Trash Assessment Form

SITE ID: 33 DATE: 8/27/09

OBSERVER: JL/MD TIME: 13:20

LOCATION: Next to 950 Lincoln Avenue, between Renette Ave and Chase Ave

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	34		Latitude	32.81143	Watershed	Hydrologic Unit	907
Location	Second Street, Persimmon Avenue, South of Street		Longitude	-116.93633		Hydrologic Area	907.1
			TB Page	1251 - J3		Hydrologic Subarea (Optional)	907.13
Date	08/24/09	Time 1540	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 28-29

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.7	NH_3-N (mg/L)	0.223	NO_3 (mg/L)	32.24	Ortho-PO_4 (mg/L)	0.123
pH (pH units)	8.1	TURB (NTU)	0.26	NO_3-N (mg/L)	7.29	Ortho-PO_4 -P (mg/L)	0.040
COND (mS/cm)	2.07	MBAS (mg/L)	0.25	DO (mg/L)	6.62		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	15	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	12	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 34 DATE: 08/24/09

OBSERVER: MD/AK TIME: 1540

LOCATION: Second Street, Persimmon Avenue, south of Street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 12

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	36		Latitude	32.80204	Watershed	Hydrologic Unit	907
Location	Oakdale Avenue, between Second street and Grape street in front of 1352		Longitude	-116.93327		Hydrologic Area	907.1
			TB Page	1252-A4		Hydrologic Subarea (Optional)	907.13
Date	8/26/09	Time 12:20	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other	na
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	na
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other	na
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	na
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 50, 51

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4 -P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns	DO (mg/L)	ns		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 36 DATE: 8/26/09

OBSERVER: JL/MD TIME: 12:20

LOCATION: Oakdale Avenue, between Second Street and Grape Street in front of

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15x8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	37			Latitude	32.79447	Watershed: Hydrologic Unit	907
Location	East side of South Second Street across from mobile home entrance, between East Main St. and Lexington Ave			Longitude	-116.93714	Hydrologic Area	907.1
				TB Page	1251-J5	Hydrologic Subarea (Optional)	907.13
Date	8/27/09	Time	15:10	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray			☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive				☐ Other
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 64, 65

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	31.5	NH_3-N (mg/L)	0.147	NO_3 (mg/L)	~~5.724~~ 57.24	Ortho-PO_4 (mg/L)	0.280
pH (pH units)	7.6	TURB (NTU)	0.66	NO_3-N (mg/L)	12.94	Ortho-PO_4-P (mg/L)	0.091
COND (mS/cm)	2.37	MBAS (mg/L)	0.25	DO (mg/L)	5.43		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow		gpm				Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 37 DATE: 8/27/09

OBSERVER: JL/MD TIME: 15:10

LOCATION: East side of South Second Street across from mobile home entrance between East Main St and Lexingt

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	37			Latitude	32.79447	Watershed: Hydrologic Unit	907
Location	East side of South Second Street across from mobile home entrance, between East Main St and Lexington Ave			Longitude	-116.93714	Hydrologic Area	907.1
				TB Page	1251-J5	Hydrologic Subarea (Optional)	907.13
Date	8/28/09	Time	11:50	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutte

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☒ Sheen Dust	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.9	NH_3-N (mg/L)	nt	NO_3 (mg/L)	61.60	Ortho-PO_4 (mg/L)	nt
pH (pH units)	7.5	TURB (NTU)	nt	NO_3-N (mg/L)	13.92	Ortho-PO_4-P (mg/L)	nt
COND (mS/cm)	2.36	MBAS (mg/L)	nt	DO (mg/L)	nt		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	38			Latitude	32.78382	Watershed: Hydrologic Unit	907
Location	Jamacha Road, west side of street at the southeast corner of residential address 930 (across from "King's Mark Apts.")			Longitude	-116.92809	Hydrologic Area	907.1
				TB Page	1252-A7	Hydrologic Subarea (Optional)	907.13
Date	08/24/09	Time	1400	Observer	MD/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 24 - 25

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.7	NH_3-N (mg/L)	0.141	NO_3 (mg/L)	34.73	Ortho-PO_4 (mg/L)	0.445
pH (pH units)	8.1	TURB (NTU)	0.23	NO_3-N (mg/L)	7.849	Ortho-PO_4-P (mg/L)	0.144
COND (mS/cm)	2.60	MBAS (mg/L)	0.25	DO (mg/L)	6.31		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 38 DATE: 08/24/09

OBSERVER: MD/AK TIME: 1400

LOCATION: Tamacha Road, west side of street, at the southeast corner of residential address 930 (across from "King's Mark Apts")

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	39			Latitude	32.81341	Watershed: Hydrologic Unit	907
Location	East Main Street, between Greenfield Dr. and Pepper Dr. east side of street, next to rental place			Longitude	-116.91750	Hydrologic Area	907.1
				TB Page	1252-B3	Hydrologic Subarea (Optional)	907.13
Date	8/26/09	Time	9:40	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other	na
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	na
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other	na
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	na
Deposits	☐ None	☑ Sediment/~~Gravel~~	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 43, 44

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns	DO (mg/L)	ns		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 39 DATE: 8/26/09

OBSERVER: JL/MD TIME: 9:40

LOCATION: East Main Street, between Greenfield Dr. and Pepper Dr, east side of street, next rental place

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	41		Latitude	32.80209	Watershed	Hydrologic Unit	907
Location	Northwest of 558 Johnson Ave. (Summit transmission) across via Johnson Ave. exit off I-8		Longitude	-116.97163		Hydrologic Area	907 1
			TB Page	1251-E4		Hydrologic Subarea (Optional)	907 13
Date	6/25/09	Time 11:25	Observer	DK, MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☒ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other green
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☒ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 5-8

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	29.8	NH3-N (mg/L)	0.561	NO3 (mg/L)	6.704	Ortho-PO4 (mg/L)	0.848
pH (pH units)	8.18	TURB (NTU)	72	NO3-N (mg/L)	1.515	Ortho-PO4-P (mg/L)	0.276
COND (mS/cm)	3.43	MBAS (mg/L)	0.5	Others DO	6.82		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width	60	in	Volume		mL	Diameter		ft
Depth	0.25	in	Time to Fill		sec	Depth		ft
Velocity	10/10	ft/sec	Flow		gpm	Velocity		ft/sec
Flow	47	gpm				Flow		gpm

COMMENTS: Strong musty/rotten egg odor at site. Green algae/sludge. Trash (plastic, hat, t-shirt, can). Grass clippings observed (most likely the cause of color and high turbidity). High turbidity may also be due to maintenance crew removing debris from channel

2009 Trash Assessment Form

SITE ID: 41 DATE: 6/25/09

LOCATION: Northwest of Johnson Ave (Summit Transmission), across via Johnson Ave. exit off I-8 TIME: 11:25

OBSERVER: David Kumagi

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): submarginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30x30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☒ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For bacteria ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	41			Latitude	32.80209	Watershed: Hydrologic Unit	907
Location	NW of 558 Johnson Ave (Summit Transmission) across via Johnson Ave Exit off of I-8			Longitude	-116.97163	Watershed: Hydrologic Area	907.1
				TB Page	1251-E4	Watershed: Hydrologic Subarea (Optional)	907.13
Date	7/7/09	Time	9:50	Observer	MD/TN	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	25.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	~~7.00~~ 8.3	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	3.00	MBAS (mg/L)	NA	Others	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	55	in
Depth	0.25	in
Velocity	0/10	ft/sec
Flow	43	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For BACTERIA

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	41-2			Latitude	32.80074	Watershed: Hydrologic Unit	907
Location	Same as site 14 Pierce St., south of Wagner Dr., across from "Grace Fellowship" north of the National Guard Facility			Longitude	-116.97671	Hydrologic Area	907.1
				TB Page	1257-D4	Hydrologic Subarea (Optional)	907.13
Date	7/7/09	Time	11:00	Observer	MD/TN	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Others	NS		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: High amounts of algae covering bottom of channel

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For BACTERIA

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	41-3			Latitude	32.79512	Watershed: Hydrologic Unit	907
Location	~~Downstream 15 ft from site 20~~ Same as site 3 North of Main St. between Chambers St & Johnson Ave, ramp access w/car next to "Artesia Apts"			Longitude	-116.96856	Hydrologic Area	907.1
				TB Page	1251-E5	Hydrologic Subarea (Optional)	907.13
Date	7/7/09	Time	11:25	Observer	MD/TN	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☒ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4 -P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Others	NS		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	60	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	47	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	41-4		Latitude	32.79823	Watershed	Hydrologic Unit	907
Location	Manhole in front of 351 Cuyamaca Street		Longitude	-116.97952		Hydrologic Area	907.1
			TB Page	1251-D5		Hydrologic Subarea (Optional)	907.13
Date	7/9/09	Time 10:45	Observer	MD/TN		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns	DO (mg/L)	ns		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	41-#2 Confirmation		Latitude	32.80074	Watershed	Hydrologic Unit	907
Location	Primary site 14, Pierce Street South of Wagner Drive, north of National Guard		Longitude	-116.97671		Hydrologic Area	907.1
			TB Page	1251-D4		Hydrologic Subarea (Optional)	907.13
Date	7/9/09	Time 11:00	Observer	MD/TN		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns	DO (mg/L)	ns		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	~~41~~ 41-S			Latitude	32.80211	Watershed: Hydrologic Unit	907
Location	Channel from the south flowing into site 41			Longitude	-116.97173	Hydrologic Area	907.1
				TB Page	1251-E4	Hydrologic Subarea (Optional)	907.13
Date	7/7/09	Time	10:00	Observer	MD/TN	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Others	NS		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	50	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	39	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of El Cajon

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For BACTERIA

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	~~41-2~~ 41-W			Latitude	32.80211	Watershed: Hydrologic Unit	907
Location	Channel from the west flowing into site 41			Longitude	-116.97173	Hydrologic Area	907.1
				TB Page	1251-E4	Hydrologic Subarea (Optional)	907.12
Date	7/7/09	Time	10:10	Observer	MD/TN	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Others	NS		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Appendix B.1

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
1	07/01/08	Residential		2584	Katherine St	Metal drain pipe on slope across street causing erosion when it rains.	Referred to PW street crew to evaluate position and condition of the pipe.	No		N/A
2	07/01/08	Residential		1043	Sunshine	Strong smell of sewage coming from under the house and ground is wet.	Met with the complainant's mother(tenent). Found no odor or sewage. No discharges observed. Most likely pooled water under very old house from deteriorated cast iron pipes. Advised to contact a plumbing service.	No		N/A
3	07/02/08	Commercial	Sew Pros	393	Broadway	Power washing the parking lot with no BMPs to prevent water from discharging to the street and gutter.	Contacted the business owner in process of washing the lot. He was advised to immediately cease and use a dry method for any future cleaning. Storm water educational materials were issued.	Yes		Yes
4	07/03/08	Commercial	SD County Credit Union	312	Main St	Broken irrigation pipe causing discharge of pollutants into the storm drain inlet located in ther rear alley.	Contacterd the office manager and advised to allert maintenance to repair the broken system. It was repaired the same day.	Yes		Yes
5	07/08/08	Commercial	Ultimate Champion of Tires	445	El Cajon Blvd	Water dumped and being swept into the street at tire change business behind AM/PM.	Contacted the business owner who stated that before he opened, someone washed a vehicle and he swept the water into the street.	No		Yes
6	07/09/08	Residential		244	Shady Lane	Large amount of dust and dirt in the street from road resurfacing.	No discharge observed on site. Roadway resurfacing underway. The contractor was contacted and advised to sweep all debris from the street and sidewalk. Storm water educational materials were issued.	Yes		N/A
7	07/10/08	Residential		712	Garfield Ave	Citizen phone complaint of a broken irrigation line at the property with water running into the street.	Contacted the resident and advised to cut the water to the irrigation and repair it. The work was done the same day.	Yes	Verbal	Yes
8	07/11/08	Commercial	Nails by Jacklyn	131	Magnolia	Employee using water to clean the building and paved area in front and side. No BMPs in place to prevent discharge to street and storm drain inlet.	Contacted the business owner and advised to cease all water use for cleaning and to use a dry method. Educational materials were issued.	Yes		Yes
9	07/14/08	Commercial	Wrangler Bar B Que	901	El Cajon Blvd	Grease discharged from the restaurant's waste grease bin.	Site inspection found the spill being cleanes by pressure wash company with proper BMPs implemented. Business owner stated waste container leaked and will be replaced. Discharge was confined to parking lot.	Yes		Yes
10	07/17/08	Residential		1311	Chase Ave	Grey water being released and flowing onto Chase Ave.	No evidence of a grey water discharge. Outside city limit.	No		N/A
11	07/17/08	Commercial	Por Favor Restaurant	148	Main St	Power washing outside patio allowing water to enter the alley behind the business.	Contacted the manager and advised to cease all washing activity and use an dry method until proper BMPs can be installed.	Yes	Monetary Citation	Yes
12	07/21/08	Commercial	PW Environmental	1015	Marshall	Carpet cleaning company discharged carpet cleaning wastewater to the storm drain.	Employees were contacted on site. This is a monitoring well. Using peroxide to unclog the system. No discharge to the storm water system.	No		N/A
13	07/21/08	Residential		283	Meadow Crest Dr	Repeat complaint of gray water being drained onto the sidewalk in front of the residence.	Site inspection found minor evidence of a discharge at base of brick wall in front of property. Will arrange full inspection with owner. Discharge found to be pool water over splash into patio drain at rear of house.	Yes		N/A

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
14	07/24/08	Residential		757	Pierce St	Citizen's phone complaint that irrigation system has been continuously running for two days and no response at the door.	Inspection found front yard irrigation overflowing into the street. No response at door. Water was turned off to the system. Card left at door. Owner responded later.	Yes		Yes
15	07/24/08	Residential		1045	Terrace Crest Dr	Citizen's phone complaint that a brown liquid was being discharged into the gutter.	No discharge noted in front of the residence or in street.	No		N/A
16	07/28/08	Commercial	Country Hills Health Care	1580	Broadway	Water from over irrigation flowing into the street and storm drain inlet.	Contacted the manager and advised that there may be a broken irrigation line. Porperty maintenance to research problem.	Yes	Written Warning	N/A
17	07/28/08	Commercial	Sunburst Transportation	1722	Main St	Fuel transport employee discharged approx. 40 agllons of fuel in rear lot of the CHP office.	PW crew and fire dept. on site to prevent flow from reaching the storm drain system. Hazardous waste company on site to clean and remove discharge. All contained on site.	Yes		Yes
18	07/30/08	Residential		636	Medford	Discharge of blackwater from and occupied camper in rear yard onto neighboring church property and entering the storm drain.	Notified zoning enforcement. The property owner and the occupant of the camper were contacted on site. A discharge pipe connected to the camper ended at the rear block wall . All other utilities were also attached to the camper. The owner was told to immedialtely remove all utilities and cease all discharges. The pipe was removed and capped. He was also instruced to clean the surrounding soil.	Yes		Yes
19	07/31/08	Construction	Habitat For Humanity	801	Avocado Ave	Inadequate construction entrance allowing tracking of sedimet into the street.	Written warning issued to the contractor. Advised to cease tracking sediment and sweep thestreet and sidewalk of all sediment.	Yes	Written Warning	Yes
20	08/05/08	Residential		129	Gina Ave	Someone at the residence dumping paint in the storm drain.	Storm water contacted the property owner on site. She accidentally spilled red paint I the driveway and used wate to clean it . The flow entered the gurb flowing north. None entered a drain inlet. She was advised to cease all use of water to clean paved areas and was given storm water educatinal materials.	Yes		Yes
21	08/04/08	Commercial	Yogurt Mill	935	Broadway	Waste yogurt on ground around the area.	Contacted the manager of the Yogurt Mill regarding housekeeping and power washing of the lot.	Yes	Verbal	N/A
22	08/04/08	Residential		1460	Whitsett	Drainage problem of unknown origin pooling in rear yard.	Met with the property owner on site and viewed rear yard pooling. Unable to determine source. No threat of discharge to street.	No	N/A	N/A
23	08/08/08	Commercial	Fletcher Hills Kwik Stop	2410	Fletcher Parkway	Service station employee using water and soap to clean the lot with no BMPs in place. Polluted water enterd the street and storm drain inlet.	Coontacted the business owner and advised to use a dry method to clean all paved areas.	Yes	Verbal	Yes
24	08/12/08	Commercial	Balboa Ambulance	1138	Broadway	Business operating with no business lic., next to channel with vehicle maintenance.	Contacted the operations manager and advised to conduct vehicle maintenance and washing off site and to obtain a valid city license.	Yes	Verbal	N/A
25	08/13/08	Commercial	Vacant Business	701	Johnson	Contractor observed using power washer to clean the exterior of the building with no BMPs in place. Discharge entered the street but no inlet.	Contacted the contractor and advised to cease using water to clean. Storm water educational materials were issued.	Yes	Verbal	Yes

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
26	08/14/08	Residential		1890	Calle del Conejo	Neighbor discharging into rear swale from two hoses.	Located two hoses from the pool area placed in concrete swale. Advised tenant to remove. No discharge noted.	Yes	Verbal	Yes
27	08/20/08	Residential		2680	Dryden	Water from over irrigation pooling in the street causing breeding of mosquitos.	Site inspection found no pooling. PW crew adviced complainant to also contact vector control.	No	N/A	N/A
28	08/21/08	Residential		2387	Rippey Ct	City property. Follow up on grading violations, interviews with neighbors. With John Phillips	Site inspection with John Phillips.	Yes	Verbal	N/A
29	08/21/08	Residential		1532	Washington	Green slime being washed into the gutter.	A site inspection found no current discharge. The discharge point was found to be from a rear patio drain. Water from the swimming pool caused the complaint. Storm water educational materials were issued to both parties.	No	N/A	N/A
30	08/22/08	Commercial	Foothills Adult Education Cntr.	1550	Melody Ln	Observed parking lot resurfacing and landscaping work along concrete channel edge with no BMPs to protect it.	Contacted the contractor on site an advised to remove soil piles near the channel. Found no discharge to the channel.	Yes	Verbal	N/A
31	08/22/08	Residential		802	Denise St	Neighbor is discharging diatomaceous earth with pool draining. Residue in curb.	Contacted the property owner who was told to clean all residue from the curb and cease discharging D.E. with pool water.	Yes	Verbal	Yes
32	08/25/08	Residential		143	Garfield Ave	Auto body repair in driveway and dumping waste in channel.	Contacted the property owner and tenant. Advised to cease all dumping and remove any residue from channel. Zoning enforcement also addressing the illegal business.	Yes	Verbal	Yes
33	08/26/08	Commercial	Vacant Business	2320	Fletcher Parkway	Construction demolition debris an larking lot in front of the business. Evidence of prior sediment discharge.	Contacted the contractor on site and advised to use a dry method to clean all paved areas. Storm water educational materials were issued.	Yes, all residue removed from street and gutter.	Verbal	Yes
34	08/28/08	Residential		674	Palomar	Neighbor washing paint into the gutter.	Discharge located in curb line in front of residence also found hose and nozzel in front yard with white paint residue on it. No response at door. Storm water educational materials left at door.	Yes	Verbal	Yes
35	08/28/08	Residential		880	Grossmont	Sewage overflow from blocked lateral.	Contacted the property owner to repair and clean. PW crew also cleaned the City's lateral section with no remedy.	Yes	Verbal	Yes
36	09/04/08	Residential		525	Camden	Complaint of over irrigation causing pooling of water in the roadway.	Contacted the apartment manager and requested that the irrigation be adjusted.	Yes	Verbal	N/A
37	09/09/08	Residential		440	Van Houten Ave	Discharge from sewer lateral into the drainage channel.	Property management contacted to repair sewer lateral an clean the area.	Yes	Monetary Citation	Yes
38	09/10/08	Residential		1135	Washington Hts	Vehicle oil spilled on roadway.	No oil found on roadway. Old staining in dirt area next to the road may be oil. No actions taken.	No	N/A	N/A
39	09/10/08	Commercial	ECP Powder Coating	1835	John Towers	Industrial Waste Water program noted that chemicals in 55 gal drums are stored outside without secondary containment.	Contacted the business owner who stated that he had not yet removed items or provided secondary containment. He was given two weeks	Yes	Verbal	Yes

Reports of Illicit Discharges/Complaints

2008-2009

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
40	09/12/08	Commercial	Cajon Ford Storage Lot	1025	Main St	Ford employees were observed using a water to clean the paved areas with water discharging to the street.	The employees were told to cease using water and swep remaining debris.	Yes	Verbal	Yes
41	09/12/08	Commercial	Ability Bail Bonds	570	El Cajon Blvd	Employee seen using water to clean the parking lot and sidewalk with no BMPs. Water discharged to the street.	Contacted the business manage and advised to cease using water and consider sweeping and spot cleaning of the sidewalk area.	Yes	Verbal	Yes
42	09/15/08	Commercial	Rock Auto Group	670	El Cajon Blvd	Employees using water to clean the lot and sidewalk areas.	Contacted the manager and advised to cease using water and use dry method	Yes	Verbal	Yes
43	09/15/08	Commercial	Grossmont College	8800	Grossmont College Dr	Padre Dam employee noted a potential illegal connection to the storm drain system near the athletic field. Complainant detected sewage odor at inlet.	Made contact with Padre Dam and College Operations staff. No odor noted. Santee notified of potential illegal connection. A storm drain inlet may be connected to the sewer line.	Yes	N/A	N/A
44	09/18/08	Residential		1433	Granite Hills Dr	Concrete work with no BMPs	Site inspection found no notable violations.	No	N/A	N/A
45	09/23/08	Commercial	Royal Palace Restaurant	1340	Broadway	Paving company employee power washing the parking lot	Water did not enter the street. Contacted the business manager and advised to cease using water to clean.. Sweep or vac.	Yes	Verbal	N/A
46	09/26/08	Mobile Business	The Detail Shop	315	Magnolia Ave	Mobile auto detailing business discharging water on ground. No BMPs in place to prevent the discharge from entering the street.	Contacted the mobile business owner and advised to cease business operations until proper BMPs are utilized.	Yes	Verbal	Yes
47	09/29/08	Construction	Condo Conversion	360	First St	Failure to maintain BMPS, tracking sediment	Citation issued to contractor with instructions to install and maintain BMPs	Yes	Monetary Citation	Yes
48	09/29/08	Construction	Condo Conversion	642	Mollison	Failure to maintain BMPs, Trash piles on site and no filters in lot drains.	Citation issued to contractor with instructions to install and maintain BMPs	Yes	Monetary Citation	Yes
49	09/29/08	Construction	Condo Conversion	927	Sunshine	Failure to maintain BMPs, debris piles and tracking.	Contractor instucted to install and maintain required BMPs.	Yes	Monetary Citation	Yes
50	10/03/08	Construction		560	Mollison	Security motorhome on site leaking sewage near lot drain inlet.	Contacted the security person on site and advised to correct the leak and discharge black water into sanitary sewer. Also instructed to install a filter in lot drain.	Yes	Verbal	Yes
51	10/07/08	Construction		1338	Naranca Ave	Sediment tracking and failure to maintain BMPs	Notified the property owner that a citation was being issued for the violations.	Yes	Monetary Citation	Yes
52	10/08/08	Municipal		(near) 1530	Avocado	Sewage overflow from manhole cover in the middle of the street.	City crew notified and responded with vac truck. Approx. 5gals discharged with none entering the storm drain inlet at Horizon.	Yes	N/A	Yes
53	10/08/08	Residential		1301	Groveland	Large amount of water flowing through concrete swale at rear of property and into the street.	Met with Helix water agent on site flushing line upstream. Work was halted and will clean area of all debris and place drain filters. Complainant must remove all construction over the swale.	Yes	N/A	Yes
54	10/10/08	Commercial	Food Land Market	1099	E Main St	Discharge of liquid pollutant a the rear of the store.	Met PW staff on site finding discharge of water near dumpster and water dumped by flower vendor. Also dirty grease bin and waste on ground under it.	Yes	Verbal	Yes
55	10/10/08	Construction	Vacant	198	Main St	Water discharging from the west side of the building with no BMPs in place. Water appeared to have an oily sheen.	The contractor was contacted on site. Water found pool at curb on Sunshine Ave. Discharge had stopped. Agreed to drain any remaining ito grass. No Oil found however water had rust in it.	Yes	Verbal	Yes

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56	10/10/08	Residential		236	Chambers Ave	Using water to clean the sidewalk and street in front of residence	Contacted the property owner on site and told to cease using water. Absorbent material was applied to the flow in the curb. The owner used a shop vac to remove the pooled liquid and disposed of it in the sewer.	Yes	Verbal	Yes
57	10/17/08	Commercial	La Z Boy	888	Johnson	Water from severe over irrigation flowing into street and storm drain inlet.	Water collecting pollutants. Sontacted the business manager and the landscaping company to readjust the system	Yes	Verbal	Yes
58	10/21/08	Residential		533	Jamacha	residen pouring fuel and oil in gutter.	Found no fuel or oil discharge. Property owner was drying dyed materials on top of trash cans which then drained to sidewalk carrying sediment. She was told to relocate materials and improve s/w corner of front yard to prevent any future discharge of sediment.	yes	Verbal	Yes
59	10/28/08	Commercial	Jack in the Box	393	Main St	Employees dumping wash water in the driveway	Contacted the store employees to cease dumping of a liqids outside.	Yes	Verbal	Yes
60	11/04/08	Commercial	Archer Automotive	661	El Cajon Blvd	Employees were observed power washing the exterior of the building and lot. Polluted water flowed across the lot and into the street.	The business owner was contacted and advised to cease all washing until proper BMPs are installed. A dry method was sugessted.	Yes	Verbal	Yes
61	11/07/08	Residential		1398	Whitsett Dr	Grading in rear yard with no BMPs in place. Doubts resident has grading permit.	Contacted the son of property owner and advised to install BMPs and contact city regarding grading plan submittal.	Yes	Verbal	N/A
62	11/12/08	Residential		1697	Lexington	Motorhome dumping raw sewage onto the street.	No evidence of raw sewage discharge.	No	N/A	N/A
63	11/17/08	Commercial	Sam's Quality Auto	267	Marshall Ave	Patron spilled a alrge amount of fuel on pavement and no one cleaned it up.	No evidence of a fuel spill noted. Found past discharge and staining from dumpster into drain inlet. Contacted the business owner to clean the area using a dry method.	Yes	Verbal	N/A
64	11/20/08	Commercial	Gas Depot	490	Second	Fuel discharging to ground and no one cleaning it.	Site inspection found no evidence of discharge	No	N/A	N/A
65	11/21/08	Commercial	Vacant	435	Main St	Drywall residue discharge from building rennovation entered the street and storm drain inlet.	contacted the property owner and advised to cease using water in lot unless BMPs are istalled to prevent a discharge. Residue was immediately cleaned.	Yes	Verbal	Yes
66	11/25/08	Residential		777	Murray Dr	Complained of mud tracked in front of his residence.	Site inspection found minor sediment tracking for rear of neighboring property.	Yes	N/A	N/A
67	12/01/08	Municipal		1678	Vista Del Valle	Storm drain inlet on disputed through road (Lisbon) overwhelmed by stormwater and sediment.	Research found road belongs to City of El Cajon. Repairs made and drains cleared. Sediment discharge is from county property. County notified.	Yes	N/A	Yes
68	12/01/08	Commercial	Vacant	1164	Second St	People living in a motorhome at rear of property dumping blackwater on the ground.	Contacted the business owner and advised to cease any discharges from the motorhome.	Yes	Verbal	N/A
69	12/02/08	Residential		797	Lemon Ave	Curb cut to make driveway.	Site inspection found what appears to be an existing cut with no paved driveway leading to a converted garage. No storm water issues noted	No	N/A	N/A
70	12/05/08	Mobile	La Fata Mobile Detailing	1664	Goldstone	Mobile business operating at residence with no BMPs in place. Discharge did not enter the drain inlet.	Contacted the business owner and advised to cease washing activity unless water can be retained and removed. A Shop Vac was employed.	Yes	Verbal	Yes

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	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
71	12/05/08	Municipal			Dillman At Markberry	Drain inlet needs a filter.	PW street crew notified. No evidence of illicit discharge.	No	N/A	N/A
72	12/12/08	Residential		2721	Katherine St	Heavy rain causes flooding due to clogged storm drains.	City crew responded and found that the drains in front of residence are not city maintained. Flood signs posted.	No	N/A	N/A
73	12/16/08	Residential		1772	Vista Del Valle	Sediment discharging to concrete swale from garage construction. Heavy Rain	Inspected the site with Pat Jackson. Made contact with the complainant and responsible party. Found one edge of garage footing washed out in heavy rain. Has gravel bags on site and deployed.	Yes	Verbal	Yes
74	12/16/08	Construction		189	Roanoke	Failure to provide adequate BMPs during a significant rain event. Failed construction entrance and uncovered soil piles causing a large amount of sediment discharge from the site.	Contacted the site superintendent to install drain protection and provide source protection.	Yes	Monetary Citation	Yes
75	12/23/08	Residential		2310	Orchard Ave	Sediment flowing into concrete swale during heavy rain.	Inspected the site with Pat J. finding erosion sediment from undeveloped county, non point source, flowing into city maintained drainage channel.	No	N/A	N/A
76	01/06/09	Residential		733	Wichita Ave	Tires and wheels dumped at the storm channel overcrossing	Tires were removed prior to any enforcement.	No	N/A	N/A
77	01/07/09	Construction	San Diego Contracting Inc	1539	Main St	Contractor has failed to maintain a construction entrance allowing sediment tracking onto roadway	Superintendent and assis. Were contacted and advised to improve the entrance and daily sweep.	No	Verbal	N/A
78	01/07/09	Residential		386	Renette Ave	the complainant stated that a vehicle turned around in her driveway leaving a large trail of oil in the street.	Absorbent material was applied and the PW streetr crew was notified to complete the cleanup	Yes	N/A	Yes
79	01/09/09	Residential		1452	Green field Dr	Private lateral overflow to gutter.	PW crew prevented the discharge from entering the storm drain inlet. Ther property owner was notified and a plumber responded and made repairs.	Yes	Verbal	Yes
80	01/12/09	Commercial	Wendy's	871	Broadway	Employee using water to clean the pavement and dumpster area.	Contacted the manager and told cease all use of water and to use dry method to clean outside areas. Storm water educational materials were issued.	Yes	Verbal	Yes
81	01/12/09	Commercial	Mustang Auto	727	El Cajon Blvd	Oil trap at the back of the shop is full and discharges oil during rain events.	Contacted the business owner and instructed him to change the gravel in the pit and clean the lot using a dry method or steam clean and remove the waste.		Verbal	N/A
82	01/13/09	Commercial	Westfielp Plaza	415	Parkway Plaza	Strong chemical odor noted in storm drain system originating from the mall service area at the north side of the building	Contacted the general manager and advised to cease all discharges and clean the area around the drain using a dry method.	Yes	Monetary Citation	Yes
83	01/15/09	Residential			Greenfield At Groveland Ter.	Large volume of water running down Greenfield at Tangerine St. and into the storm drain at Secon St.	Site inspection found water from a pool discharge entering Greenfield from undrer sidewalk drain. No odor of chlorine. Complainant advised.	No	N/A	N/A
84	01/21/09	Residential		421	Mollison	Private lateral spill at apartment complex. 5 Days old	Contacted the property management Co and the resident. To follow up. Plumbing service cleaned the area.	Yes	Verbal	Yes

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	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
85	01/26/09	Commercial	IQ Billiards	136	Main St	Water from leaking water valve crossing sidewalk and into the street.	Contacted the business owner and advised to repair the leak.	Yes	Verbal	N/A
86	01/29/09	Commercial	Walgreens	215	Second St	Water from ovrirrigation or broken line enter the street and drain inlet.	The Store manager was contacted and told to repair the irrigation lines and adjust the timer	Yes	Verbal	Yes
87	01/29/09	Commercial	Romeo's Car Wash	195	Second St	Water from vehicle washing activity flowing across the sidewalk and entering the street.	the business owner was contacted and agreed to arrange for a full site inspection.	Pending	Verbal	Pending
88	02/02/09	Residential	Ballantyne Terrace Apartments	444	Ballantyne	Over flow from private sewer lateral in driveway entering the street and storm drain inlet.	Property manager notified to call plumber. PW crew responded.	Yes	Monetary Citation	Yes
89	02/04/09	Commercial	Evergreen Environmental Serv.	412	Front St	Complaint of erosion at driveway from overflowing storm drain.	The erosion was a prior event and the driveway is now soncreted. The storm drain cover in question was in place no evidence of overflow from recent rain.	No	N/A	N/A
90	02/04/09	Commercial	Victoria's Mexican Food	677	Main St	Dirty and open grease bin located in rear parking lot.	Contacted the manager and instructed to clean or replace the grease bin and clean the surrounding area.	Yes	Verbal	N/A
91	02/05/09	Municipal		550	Fesler	Motorhome parked on the street leaking from waste discharge valve.	Street crew notified to clean area after vehicle removed.	Yes	N/A	Yes
92	02/09/09	Residential		1565	Soma Pl	Water discharge from unknown sounce every morning at 9:30	Site inspection found no evidence of water discharge in the area.	No	N/A	N/A
93	02/09/09	Commercial	Kaelin's Market	1435	Main St	Private lateral overflow to gutter and storm drain inlet during a heavy rain event.	The store manager was contacted and told to cease all water use and contact a plumbing service to repair the line.	Yes	Monetary Citation	Yes
94	02/10/09	Residential		1628	Hacienda	Diesel fuel spill on street in front of residence.	Found no evidence of a fuel spill.	No	N/A	N/A
95	02/11/09	Residential		1163	Peach Ave	Flooding in rear yard during heavy rain. Water draining through base of block wall from neighbor.	Evidence of pooled water in rear yard. Property is low spot of area. This is a civil matter.	No	N/A	N/A
96	02/16/09	Residential		1321	Greenfield Dr	Patio and parking lot at condo complex flooded during heavy rain. Drains not moving water.	The complainant was instructed to contact the property management to have the interior drains cleaned. There are no city storm drains involved.	No	N/A	N/A
97	02/20/09	Commercial	Pat and Oscars	375	Parkway Plaza	Two grease waste containers and the chainlink enclosure covered in grease.	Manager was contacted during prior mall enforcementon 1-13-09 and told to clean the grease bins and the enclosure. No efforts were made and a written warning was issued.	Yes	Written Warning	Yes
98	02/27/09	Commercial	Mobile Food truck	?	John Towers	A food truck was dumping grease into a storm drain inlet.	Was not able to locat a food truck in the area on several visits.	Yes	N/A	N/A
99	03/02/09	Residential		1600	Meadow Rd	Cement mixer parked on the street leaking oil with no drip pan under it.	A site inspection found a drip pan under the cement mixer parked on Zephyr St.	Yes	N/A	N/A
100	03/05/09	Commercial	Carl's Jr.	624	Fletcher Parkway	Water from over irrigation crossing the parking lot and entering the storm drain inlet .	The store manager was contacted and advised to cease watering. The landscaper turned off the water immediately.	Yes	Written Warning	Yes
101	03/09/09	Residential		1139	Naranca	Automotive fluid dumped at rear yard into the concrete channel.	The property owner was contacted nd advised to cease any further dumping into the channel. A meeting with the owner is scheduled to gather more info at the site.	Yes	Verbal	Yes

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	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
102	03/11/09	Commercial	Olaf Wieghorst Museum	133	Rea Ave	Concrete wash discharged into the alley.	Contacted the museum board mamber and advised to clean the alley and cease any further discharges. Storm water educational materials were issued.	Yes	Verbal	Yes
103	03/11/09	Commercial	El Cajon Meat Market	575	El Cajon Blvd	Employees using water to clean the paved lot areas with no BMPs in place to prevent polluted water from entering the street.	the dstore manager was contacted and advised to cease all use of water to clean. He was given educational materials.	Yes	Verbal	Yes
104	03/16/09	Commercial	99 Cent Store	733	Main St	Power wash employee using water to clean graffiti off glass with no BMPs in place to prevent a discharge to street.	Contacted the employee and told to stop using water and use a dry method or implement the proper BMPs.	Yes	Verbal	Yes
105	03/17/09	Residential	El Cajon Senior Towers	180	Ballantyne	Private lateral over flow into the street and storm drain.	Pw crew responded and recovered a portion of the spill. A portion did reach the storm drin inlet. A plumbing service responded immediately.	Yes	Monetary Citation	Yes
106	03/27/09	Commercial	Jack in the Box	393	Main St	Employee using wate to clean the paved areas. Possible broken irrigation pipe.	Contacted the store manager and advised to cease using water to clean pavement and repair the irrigation system. Torm wte educational materials were issued.	Yes	Verbal	Yes
107	03/30/09	Commercial	El Cajon Auto Recycling	1466	Pioneer Ave	Vehicle crushing activity causing soil contamination. Lot area is bare soil, tracking onto Steele St.	Contacted the business manager and advised to install stable entrance at Steele st and to sweep areas regularly, also instructed them to disgrard of all vehicle fluids properly. (not on ground)	Yes	Verbal	Yes
108	04/01/09	Commercial	Food 4 Less	444	Broadway	Private lateral spill due to grease blockage.	City crew responded and contained the spill. The blockage was cleared and the area cleaned.	Yes	Verbal	Yes
109	04/03/09	Construction		132	Meadow Crest Dr	Sediment tracking, failure to install and maintain the required BMPs.	Contacted the property owner/ contractor and advised to install and maintain the BMPs and to sweep all paved areas. Citation issued.	Yes	Written Warning	Yes
110	04/07/09	Construction	Countrywide Concrete Cutting	1138	Naranca Ave	Employee sweeping water and sediment into the street and curb with no BMPs in place.	Contacted the business owner on site and advised to cease and reclaim all pollutants.	Yes	Monetary Citation	Yes
111	04/08/09	Commercial	El Cajon Town and Country Plaza	330	Second St	Private lateral overflow into the alley behind the businesses.	Street crew responded and prevented the discharge from entering the stprm drain inlet.	Yes	Verbal	Yes
112	04/08/09	Construction	American Wrecking Inc.	1310	Broadway	Sediment tracking onto second St.	Contacted the site superintendent and advised to install proper entrance and to sweep all paved areas.	Yes	Verbal	Yes
113	04/13/09	Residential		592	Ballantyne	Neighbor dumping concrete wash wate into the gutter from hi back yard.	Contacted the property owner and instructed to dry clean all paved areas. There was concrete residue in the curb line. Storm water educational materials were issued	Yes	Verbal	Yes
114	04/16/09	Commercial	Rico's Expresso/Smoothies	532	Jamacha	Vehicle washing being done at the rear of the business with no BMPs in place.	Contacted the business owner and advised to cease all vehicle washing and to use a dry method to clean all paved areas.	Yes	Verbal	Yes
115	04/17/09	Mobile	Mobile Auto Detailing and Car Wash	172	Renette Ave	Santee requested information on this Mobile business. Violation was in Santee	Review found a valid business licence in El Cajon.	No	N/A	N/A
116	04/20/09	Commercial	El Cajon Town and Country Plaza	330	Second St	Private lateral overflow entered the storm drain inlet at the north end of the alley behind businesses.	The crew contactred a plumbing service and later contacted the property management company. A portion of the discharge was reclaimed. A citation was issued with notice to video and provide maintenance plan.	Yes	Monetary Citation	Yes

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	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
117	04/21/09	Commercial	Miller Towing	1416	Pioneer Way	Business is disassembling cars without raining them first.	Contacted the business manager and advised on site. No discharge was found. Ther was sediment tracking onto Steele St. throught the back gate. They are in the process of paving the entire lot and are aware of storm water requirements.	Yes	Verbal	Yes
118	04/23/09	Construction		132	Meadow Crest Dr	Failure to install and maintain minimum BMPs.	A citation was issued and posted on site for tracking and failure to maintain the required BMPs.	Yes	Monetary Citation	N/A
119	04/27/09	Commercial	Von's Store	1201	Avocado Ave	Storm Drain ditch behind store needs cleaning and illegal dumping.	No evidence of dumping, concrete drainage swale is clean. Stor manager notified of complaint and issued storm water educational materials.	No	N/A	N/A
120	04/27/09	Residential		1001	Avocado Ave	Neighbor's gray water flows onto her property. None leaves the property.	Spoke to the complainant and explained that it is a neighbor dispute and not a storm water issue. Advised to contact to zoning enforcement for other concerns.	Yes	N/A	N/A
121	05/01/09	Residential		1328	Cuyamaca	Soil piles in front of property from building rennovation with no BMPs in place	Contacted the site superintendent and advised to install perimeter controls and soil cover. No discharge observed. Storm wAter Educational materials were issued.	Yes	Verbal	N/A
122	05/04/09	Commercial	24 Hour Power Inc.	1177	Johnson	Business storing bare metal outdoors creating rust run off.	Contacted the business owner. Site has items stored outdoors under tarps. No evidence of rust runoff.	No	N/A	N/A
123	05/05/09	Commercial	Angel's Nails	131	Magnolia	Employee of the business discharging wash water into the storm drainage system.	The store owner was contacted and advised to cease all wash water discharge. She was given storm water educational materials.	Yes	Written Warning	Yes
124	05/05/09	Mobile	La Fata Mobile Detailing	950	Second St	Mobile vehicle washing business conducting business without proper BMPs I place. No business license in possession. No discharge to street or storm drain.	Advised the business owner to cease any further vehicle washing without BMPs and to obtain a business license and maintain in the vehicle.	Yes	Verbal	Yes
125	05/06/09	Residential		683	Washington	Apartment lot resurfacing with sediment being tracked onto Washington.	Contacted the apartment manager and instructed him to sweep the paved areas at the end of the day..	Yes	Verbal	N/A
126	05/06/09	Mobile	Veyda's Mobile Detailing	700	Johnson	Observed owner washing cars at this commercial facility with no BMPs in place.	Contacted the business owner and advised to cease all washing activity until proper BMPs are implemented.	Yes	Verbal	Yes
127	05/14/09	Mobile	My Personal Detailer		Main St	This mobile business owner was washing vehicles in a commercial parking lot with out BMPS in place to reclaim the wash water and properly dispose of it.	the business owner ws contactee and advised to use the BMPs he had on his vehicle to relaim the wash water. He was given storm water educational materials.	Yes	Verbal	Yes
128	05/18/09	Residential		1055	Mollison	Water is overflowing into the parking lot and into the street.	Site inspection found the discharge was from a dechlorinate spa.	No	N/A	N/A
129	05/18/09	Commercial	KFC	724	Fletcher Parkway	Restaurant employees releasing wash water into the storm drainage system.	The store manager was contacted on site. She said residue from a grease spill days before was being cleaned and some of the water got to the street. None entered the storm drain inlet. There is an under curb drain in front of the store.	Yes	Verbal	Yes

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130	05/20/09	Commercial	Estrada's Taco Shop	569	Second St	Water and food debris found in curb line regularly by street sweeper.	The business owner was contacted and said that the homeless use the water spigot in fornt of the store and leave it on before he gets there in the morning. It wass suggested that he removed the handle. There was no discharge or food found.	Yes	Verbal	Yes
131	05/20/09	Residential		959	Naranca Ave	Dog feces being throwm into the concrete channel at the rear of the property.	Contacted the propety owner and advised to cease all dumping into the channel. Educational materials were issued.	Yes	Verbal	Yes
132	05/21/09	Commercial	Arrieta Construction, Inc.	1215	Marshall Ave	A large amount ow water was seen flowing under a fence and out of the rear storage and parking lot of the business into the street and drain inlet on Vernon St.	The Busienss owner was contacted on site. An employee was fill a water truck and it overflowed. The water crossed the lot into a clarifier and then discharged to the street. Corrections were made immediately.	Yes	Verbal	Yes
133	05/22/09	Residential		922	Chase Ave	Neighbor occasionally dsicharges wash water to the street.	site inspedtion found no evidence of a discharge. Storm water educational materials were left at gate.	Yes	N/A	N/A
134	05/22/09	Residential		2877	Catarac Ct	Resident discharging paint washout to street and storm drain inlet.	Site inspedtion found white paint residue in street and curb in front on residence and leading to drain inlet. Property owner ws contacted and advised to cease all paint washing and to clean the curb area of all residue.	Yes	Verbal	Yes
135	05/26/09	Residential		1200	Mollison	Private lateral overflow to street at this multi unit complex. No onsite manager available. Discharge observed by street crew did not enter the storm drain inlet,	PW crew responded and reclaimed the discharge. Plumbing service was on site to repair the line.	Yes	Verbal	Yes
136	05/28/09	Municipal	SDG&E		Broadway at Third Ave	Sediment was bing washed into the storm drain from construction site.	The on site supervisor and the city inspector were notified. Workers struck an unmarked water line in the right of way. A large amount of water discharged with sediment to the storm drain system. BMPs were not able to contain the diacharge. Corrections were made. There was no discharge at the time of the storm water inspection.	Yes	Verbal	Yes
137	06/02/09	Commercial	Meat Market	575	Main St	Lot washing with no BMPs in place causing a discharge to the alley.	Contacted the store owner and advised to cease using water to clean the paved areas. Storm water educational materials were issued.	Yes	Verbal	Yes
138	06/10/09	Construction	Habitat For Humanity	801	Avocado	Sediment tracking and failure to maintain a construction entrance	Contacted the site superintendent and issued a first citation for the violations	Yes	Monetary Citation	Yes
139	06/14/09	Commercial	Union Bank	580	Second St	Pressure washing company conducting business without any BMPS in place.	Contacted the contractor and the bank manager and advised to cease all future washing until proper BMPs are used to prevent a discharge.	Yes	Verbal	Yes
140	06/17/09	Residential		803	Lauree St	Resident is throwing dog feces into the concrete channel at the rear of property	There were several small dogs at this address. A door tag was left. The owner responded and said it would not happen again. She would talk to her son.	Yes	Verbal	Yes
141	06/18/09	Industrial	Luth and Turley	1350	Hill St	A 55 gal drom at the rear of the business in starting to leak unknown substance.	Contacted the business owner and advised to contact Hazmat and remove the container.	Yes	Verbal	Yes
142	06/19/09	Construction	Suncoast Homes	1341	Main St	Failure to maintain BMPs for all bare soil.	Contacted the business representative and advised to install and maintain the BMPs . Citation was issued	Yes	Monetary Citation	N/A

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	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
143	06/22/09	Residential		391	Garfield Ave	Raw sewage in rear yard of this residence	Site inspection found no response or evidence of a violation. Educatinal material were left.	No	N/A	N/A
144	06/23/09	Commercial	Granite Hill High School	1719	Madison	Construction at school yard recreation area needs a construction entrance. Tracking	Contacted the onsite construction supervisor and advised to install BMPs and to sweep all paved areas.	Yes	Verbal	Yes
145	06/25/09	Construction	Starlett Construction Inc	965	Arnelle St	Discharge of concrete residue directly into the storm drain. No BMPs installed.	The on site supervisor for Toyota was contacted on site and issued a citation. He was directed to clean the curb line of any remaining residue.	Yes	Monetary Citation	Yes
146	06/29/09	Residential		979	Amistad	Drainage system at the rear of the property clogged with weeds.	Referred the complaint to the PW street crew.	No	N/A	N/A

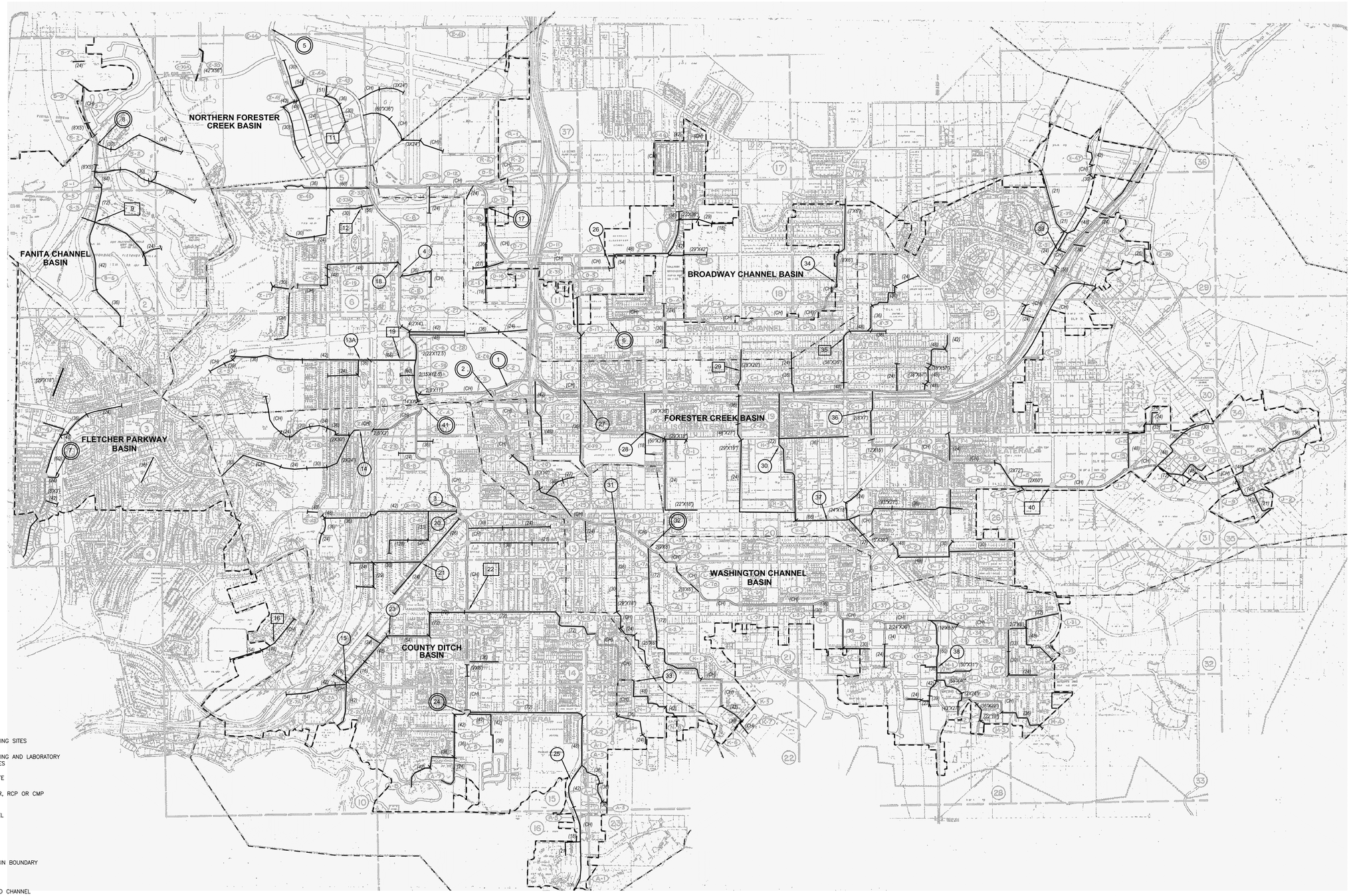

LEGEND

- (31) FIELD SCREENING SITES
- (32) FIELD SCREENING AND LABORATORY SAMPLING SITES
- [9] ALTERNATE SITE
- (42) PIPE DIAMETER, RCP OR CMP IN INCHES
- (CH) OPEN CHANNEL
- (72"x44") CMPA
- 2(5'x3') RCB
- DRAINAGE BASIN BOUNDARY
- CITY LIMITS
- EXISTING LINED CHANNEL
- EXISTING UNDERGROUND CULVERT/PIPE
- EXISTING PARTIAL DRAINAGE CROSSING
- EXISTING DRAINAGE CROSSING

N

0 2500 5000

APPROXIMATE GRAPHIC SCALE (FEET)

City of El Cajon

2009 DRY WEATHER SAMPLE LOCATION MAP

DRAWN BY: CM	CHECKED BY:	FIGURE NO: 1
FN: ELCAJON 2009	DATE: 09-08-09	

D-Max Engineering, Inc.

H:\DMAX\ELCAJON\ELCAJON 2009.DWG Sep 08, 2009 - 8:39am

City of El Cajon

AS A COPERMITTEE OF THE SAN DIEGO RIVER WATERSHED

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT 2009 – 2010

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EXECUTIVE SUMMARY

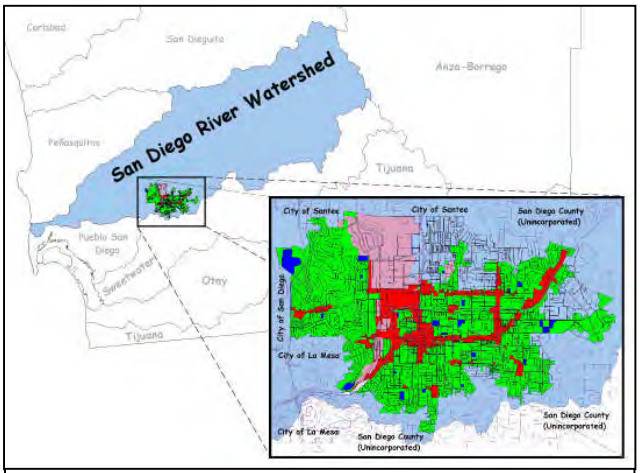

The City of El Cajon in the Context San Diego County and the San Diego River Watershed

The City of El Cajon (City), located in east San Diego County, is the eastern-most incorporated City within the San Diego River Watershed (Watershed). With 14.48 square miles and nearly 97,000 citizens, the City plans with other regional jurisdictions and acts locally to maintain the health of the San Diego River Watershed. A healthy watershed means thriving environmental communities and a state of well being among its constituency. Maintaining watershed health is achieved through compliance with Federal Clean Water Act requirements as stated in the San Diego County Municipal Storm Water Permit, Order No. R9-2007-0001, through water quality monitoring, biological assessments, and municipal vigilance to balance growing human demands with a healthy environment.

Permit Year 2009-2010 (PY 2009-10) marks Permit Year three (PY3) under the San Diego Region Order No. R9-2007-0001 (new municipal permit), which renewed Order No. 2001-001. The renewed municipal permit was adopted in January 24, 2007. Efforts started with jurisdictional planning and implementation, proceeded to local program assessment and continues to evolve into multi-jurisdictional and watershed actions. As in previous years, the City continued its focus of assessing program component effectiveness from Best Management Practices (BMP) implementation and determining how preventive measures affect watershed health from a local perspective. Many of the program's components have developed into BMP programs, whereby inspections can determine effectiveness of pollution reduction measures.

This Annual Report presents the City's efforts during the 2009-10 reporting period. Covered in this Report is the move toward adaptive management of the updated Jurisdictional Urban Runoff Management Program (JURMP) implementation and integration of general watershed principles for the San Diego River Watershed into local planning. Both the San Diego River Watershed Urban Runoff Management Plan (WURMP) and the City's JURMP were updated and submitted to the San Diego Regional Water Quality Control Board (RWQCB) on March 24, 2007, as required by the new municipal permit and extension. It is the responsibility of the City to balance jurisdictional and watershed requirements and maintain a healthy watershed within its jurisdiction.

Critical for the rest of the new permit cycle are Watershed adjustments to the City's Storm Water Pollution Prevention Program and deciding where best to place City efforts that will minimize or eliminate polluted runoff. Forrester Creek, the main tributary drainage channel in El Cajon, is a listed 303(d) waterbody with impairments for pH in the upper part (El Cajon and San Diego County) and for total dissolved solids (TDS) and fecal coliform in the lower portion within the City of Santee). El Cajon considers these three impairments to be the center of the Clean Water

Act objective "to restore the Nations Waters" to a chemical balance able to support the State's Basin Plan designations for fishable and swimmable waters.

A BMP to Pollutant Reduction Diagram was developed to connect BMPs to pollutants that are targeted for reduction as a result of their listing as 303(d) pollutants in Forrester Creek. This diagram and discussion is provided in the Introduction in Section 1.

This JURMP Annual Report for PY3 consists of 15 Sections, and is organized as follows:

Section 1 - Introduction. Describes the purpose of this Annual Report, the overall vision of the City, goals and objectives of the Storm Water Pollution Prevention Program; the regional integration of Watershed Health; assessment of program effectiveness to guide future actions, and Forrester Creek-specific criterion that relate to San Diego River Watershed and River health.

Section 2 - Development Planning Component. Lists the planning actions and building permits reviewed and the role of storm water in re-defining new development designs and describe the ways of confirming that commitment to storm water becomes a design reality.

Section 3 - Construction Component. Summarizes reviews of Erosion Control Plans, inspection of high priority sites, interactions with other City departments, and conditions during rainfall events.

Section 4 - Municipal Component. Summarizes the activities for municipal facilities, the sanitary sewer program, capital improvement projects affecting storm water quality, and municipal staff training.

Section 5 – Industrial and Commercial Component

- **Industrial Component**. Summarizes the activities conducted to assess the effectiveness of implemented industrial BMPs and better define the pollutants affecting storm water quality.
- **Commercial Component.** Summarizes the inspections, enforcements, and educational efforts to assess the effectiveness of implemented BMPs and better define the pollutants affecting storm water quality by business type.

Section 6 - Residential Component. Summarizes the challenges with educating the public, interactions with citizens, educational efforts, and enforcement at the residential level.

Section 7 - Illicit Discharge Detection and Elimination Component. (This section will be part of a separate submittal due on December 15, 2010) Summarizes the City's dry weather program that identifies illegal dumping and illicit connections to the storm drain system. An upstream/downstream analytical assessment was completed during the dry weather season.

Section 8 - Education Component. Summarizes programs implemented by the City to educate municipal employees, developers, contractors, business owners, the general public, and other priority groups

Section 9 - Public Participation Component. Summarizes the outreach efforts coordinated on a regional level through the Outreach Workgroup.

Section 10 - Fiscal Analysis Component. Reviews and compares previous storm water expenditures while projecting future program funding requirements.

Section 11 - Effectiveness Assessment Component. Provides summary tables for the existing and development components indicating estimated and actual pollutant-containing material reductions at the source or from preventive measures.

Section 12 – Special Investigations. Summarizes any special investigations that may have been conducted during the current reporting period.

Section 13 – Non-Emergency Fire Fighting. Summarizes non-emergency fire-fighting activities/training conducted during the current reporting period.

Section 14 – JURMP Revisions. Summarizes any changes or revisions to the JURMP that may have occurred during the current reporting period.

Section 15 - Conclusions and Recommendations. Summarizes the conclusions stated from each component and makes overall program conclusions and provides recommendations for future permit years.

Appendices contain City-developed checklists, guidance documents, outreach materials, lists of priority sites or facilities, correspondence and presentations to City staff and the local community.

The City achieved a number of important accomplishments during this reporting period, both in its role as a Copermittee, and through participation (and eventual leadership role) in the implementation of general watershed principles. Across the City, businesses and citizens, together, function within the JURMP and watershed to assist in identifying storm water issues and help prevent pollution from being discharged.

City Action Highlights include:

- Continue with a strong Enforcement program for City Ordinances 4686 (JURMP) and 4717 (Standard Urban Storm Water Management Program (SUSMP) requirements).
- As a City with little open space and a propensity for redevelopment, the City pursues common sense approaches to go beyond Permit compliance and achieve defensible, cost-effective storm water management practices for businesses and citizens through the SUSMP conditioning process.
- Continued implementation of a City-Wide Integrated Pesticide Management Program.
- The City continued its expanded scope of Dry Weather Monitoring Program. Additional information along concrete lined areas focuses on business districts or municipal areas. In doing so, it has made substantial strides in detecting and eliminating discharges and characterizing receiving waters and other conveyance discharges within its jurisdiction.
- Conducted upstream/downstream dry weather analysis in Forrester Creek to quantify the amounts of pollutants discharged within the City's jurisdiction.
- Inspected a total 319 Commercial and Industrial Facilities, 167 High TTWQ, 91 Medium TTWQ Facilities, and 52 Low TTWQ Facilities for compliance with the City's Municipal

Code and issued 5 warnings and 4 citations to commercial and industrial facilities for various violations of the City's storm water ordinance.

- Conducted inspections at 17 high priority construction sites. The City conducted monthly inspections at all high priority construction sites during the dry season and at least biweekly inspections during the wet season. The inspections revealed several violations or compliance issues and the City issued 9 enforcement actions, 2 of which were monetary citations.
- The City issued a total of 14 warnings and 7 citations for various violations of the City's storm water ordinances.
- Notified 57 mobile businesses about the implementation of minimum regional BMPs.

- The City's inspection programs emphasized pollution prevention BMPs such as clean trash storage and disposal areas; power washing BMPs; and maintenance of sewer laterals in addition to minimum required BMPs.
- The City's comprehensive street sweeping program swept 19,030 miles of streets and collected 3,463 cubic yards of materials from City streets. Sediment and silt account for 43% of the total, organic material accounted for 40%, and trash accounted for 17%.
- Collected 1,720 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins.
- Actively participated in the Management Committee, Regional Planning Workgroup, Outreach Workgroup, Regional Monitoring Workgroup, SUSMP/HMP Workgroup, Industrial/Commercial Workgroup and WURMP Leads Workgroup.
- Continued active participation with the San Diego River Watershed Workgroup.
- Continued efforts to reach out to community members on a wide range of urban runoff and storm water quality topics through approximately 305,000 copies of articles, brochures, and mailers.
- Conducted over-the-counter assistance and provided personalized residential BMP information to homeowners for small additions, remodels, pools and retaining wall projects.
- Began transition to report fiscal analysis based on the Standardized Fiscal Analysis Method and Format.

This reporting period is one of continued program assessment and focus of local actions to move toward a watershed protection program. This last year, the City continued to meet the new challenges of working within a watershed. The City continues in the role of the Lead Copermittee for the San Diego River Watershed. The City feels strongly that it has made significant strides looking within its jurisdictional boundaries as well as organizing inter-jurisdictional programs. Continuing improvement and refinement is the name of this storm water pollution prevention program as we continue to gather information and experience about how City activities affect the local receiving waters and the health of the San Diego River Watershed.

This Annual Report provides programmatic information and further steps in connecting activities to a significant movement for improving receiving water quality by the City of El Cajon. Over

the last year, the City has continued its effort at linking municipal activities to receiving water quality. Additional connections to receiving water quality from the implementation of BMPs will follow as information is gathered and assessed using a Long-Term Assessment process.

A listing of storm water contact personnel is provided as part Appendix C to help facilitate communication within the City and for the public and outside agencies to contact the appropriate City staff.

CERTIFICATION

"I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Kathi Henry — 9.8.10

Signature RT — Date

Kathi Henry, City Manager — (619) 441 1718

Printed Name, Title — Phone Number

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SECTION 1 INTRODUCTION

With each Permit Year (PY), the City of El Cajon reviews, assesses, and progresses towards a watershed approach to protect surface waters from urban runoff pollution. A continued emphasis towards identifying sources of pollutants and minimizing specific 303(d) impacts to Forrester Creek is the focus of this second year in the Permit Cycle (Order No. R9-2007-0001).

The typical steps for developing a pollution prevention and source control program are summarized below and discussed in more detail in Section 11, Effectiveness Assessment.

1. **Identify the issue.** Define each issue.
2. **Identify and assess sources.** Sources are identified by prioritizing based on location and type of business.
3. **Determine available control strategies**. To identify possible control strategies for each source.
4. **Evaluate control strategies**. To determine which control strategies are most likely to achieve measurable results.
5. **Establish a goal.** A goal may be set at any point during the development process. The goal is the desired outcome.
6. **Implement program.** Part of program implementation is selection of an effectiveness measurement tool to assess the program.
7. **Evaluate effectiveness.** Based on the effectiveness measurement, determine what has been learned.
8. **Modify program.** The results of the effectiveness measurement will help to determine the future direction for the program.

Described in this Third Permit Year (PY3) Annual Report is the implementation and collected information for each Permit component. Sections 2 through 11 highlight component accomplishments, activities, or areas of achievement for Development and Planning; Construction; Municipal; Industrial and Commercial Development; and Residential Development; Education and Outreach; Illicit Discharge, Detection and Elimination; Public Participation, Effectiveness Assessment; and Fiscal Analysis.

1.1 REGULATORY FRAMEWORK

Background

The City of El Cajon's (City) Jurisdictional Urban Runoff Management Plan (JURMP) was developed pursuant to Order No. 2001-001, National Pollutant Discharge Elimination System

(NPDES) Permit No. CAS0108758, the area-wide municipal separate storm sewer system (MS4) permit. The MS4 permit was established pursuant to Section 402(p) of the Federal Clean Water Act, which requires all point source discharges of pollutants into waters of the United States, including discharges from municipal separate storm sewer systems, to be regulated by a NPDES permit. On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), adopted Order No. R9-2007-0001, NPDES Permit No. CAS0108758 (Permit), to the City and 20 other Copermittees, for discharges of urban runoff from MS4s into the receiving waters within the SDRWQCB's jurisdiction.

The City is a participant and partner in the San Diego River Watershed along with the Cities of La Mesa, San Diego, Santee, and the County of San Diego. A watershed approach to storm water pollution provides the wider view of runoff impacts and requires jurisdictional approaches to include neighboring jurisdictions in future planning and reporting efforts.

The PYs are summarized as follows:

- PY5 – July 1, 2005 through June 30, 2006, as the City's programs mature, the City focused on watershed issues, including pollution prevention and education and continued to refine and improve the City's programs.
- PY6 - July 1, 2006 through June 30, 2007, preparing for issuance of a new permit containing watershed/regional permit requirements supported and subsidized by jurisdictional efforts.
- PY1 - July 1, 2007 through June 30, 2008, modifying and enhancing the storm water program to comply with the new Municipal Permit, R9-2007-001. New comprehensive JURMP prepared to create a detail framework of the program under the new permit.
- PY2 – July 1, 2008 through June 30, 2009, reassessment of initial JURMP implementation with refinements and reimplementation, as necessary.

Current and Future

- PY3 – July 1, 2009 through June 30, 2010, adopted final regional model SUSMP and reassessed initial JURMP implementation with refinements and reimplementation, as necessary.

1.1.1 Water Courses and Receiving Waters

The definition of the City's Storm Drain System is broad enough to include streets, gutters, inlets, catch basins, channels (lined and unlined), creeks, and streams. Our storm drain system starts at a facility's property line to the public right-of-way. By making such a distinction, it is clear to maintenance and storm water crews when it is the responsibility of the City to clean spills or illegal dumping of materials. If such a discharge occurs on private property and the discharge enters the City storm drain system, the property and business owner/contractor is contacted and educated on storm water requirements for their type of business. Property and business owners are charged for cost-recovery of City staff involvement.

The goal of PY3 and future program years will be a continuing focus on impairment of Forrester Creek with the ultimate goal of eliminating the impairment on Forrester Creek, and meeting the objective of the Clean Water Act to maintain and restore the chemical, physical, and biological integrity of the Nation's waters.

Table 2 lists the major storm water conveyance systems and describes the type of channel. Most conveyance systems are concrete-lined, making them easy to maintain, but present other types of challenges such as:

- Elevated pH (above 9)
- Shelter for homeless populations
- Trap for air blown trash and debris
- Easy target for illegal dumping

Table 2 – Storm Water Conveyance Systems

Water Courses	Type of Channel
Forrester Creek	• Open, concrete-lined trapezoidal channel • Underground culvert
Broadway Channel	• Open, concrete-lined channel • Underground culvert
Washington Channel	• Open, concrete-lined channel • Underground culvert
County Ditch	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel
Fanita Channel	• Underground culvert • Open, concrete-lined channel
Third Street Lateral	• Open, concrete-lined channel • Underground culvert
Fletcher Parkway Channel	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel

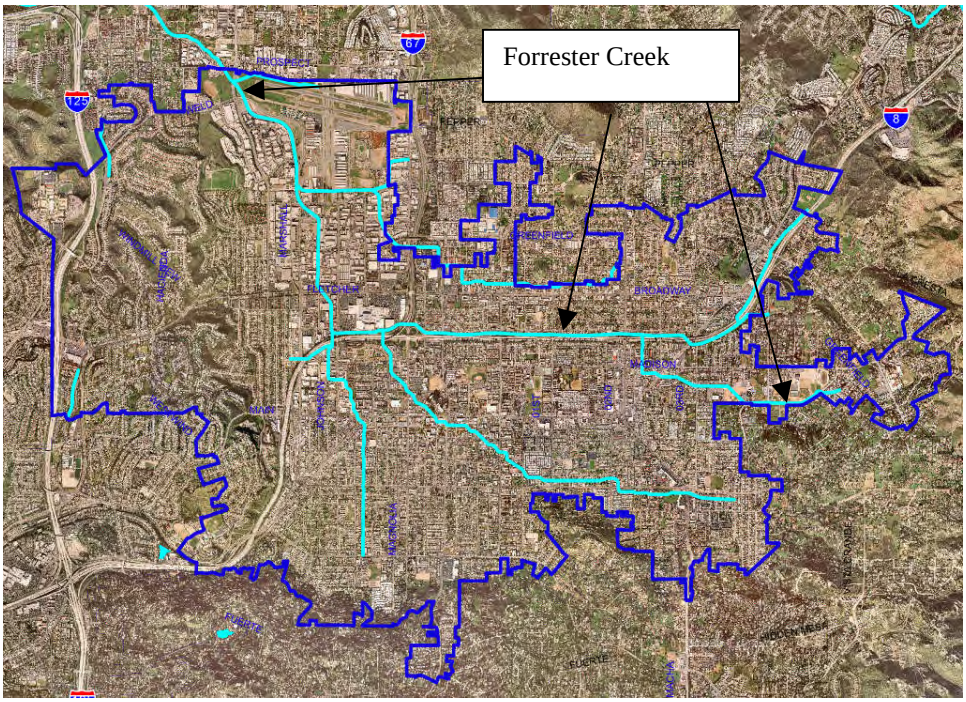

The picture to the left shows the City boundaries, Forrester Creek and the major channels within the City.

1.1.2 Approach and Changes to the Program

Approach

As the City becomes more experienced with its own programs and with what is working and what is not, the City modifies the implementation and management of its Storm Water Program. This Adaptive Management is a dynamic process of improving management activities incrementally, as decision makers learn from experience and better information and analytical tools become available. It involves checking progress made in achieving water quality goals, adjusting the management decisions accordingly, rechecking and readjusting – all the while incorporating new data and scientific knowledge. Beginning in early 2008 and continuing through PY3 (2009/2010), the City of El Cajon is developing a Storm Drain Master plan. Once complete, the Storm Drain Master Plan will provide the City with additional tools to assess and achieve water quality objectives. Adjustments to goals and objectives are expected to occur due to unforeseen circumstances and an unpredictable future.

One approach the City continues to implement (through education and training) is to change pollution prevention from the conventional recycle, reduce and reuse, to measures that target pollution prevention at the pollutant source. For Storm Water Pollution Prevention, consideration is given both to flow reduction measures and pollution source controls. Where water acts as the primary conveyor of pollution, pollution prevention measures can reduce pollution impacts by preventing pollutants from entering the flow, or by controlling the flow. In the development of an effective pollution prevention or management strategy, it is critical to understand how water cycles through the air and soil to ensure that measures are selected and implemented in an appropriate manner.

Changes to the Storm Water Program

Program Year 3 (PY3), and continuing into the next permit cycle, will be a continuing period of transition from purely jurisdictional to a jurisdictional/watershed approach. A few of the modifications include:

The San Diego River Flows Across Padre Dam

- Promoting a Clean Community, Healthy Watershed;
- Maintaining Watershed and River Health in the San Diego River Watershed;
- Focusing on 303(d) pollutants to restore Forrester Creek water quality;
- Continuing to assess the potential for increased flow from New or Re-Development projects and reduce flow from the current flow of approximately 94 gallons per minute during the dry season (a drop of 14 gallons per minute compared to last year's dry weather flow rate).
- Collecting information on upstream and downstream conditions to better assess areas (zones) where pollution is more probable or prevalent;
- Review of the analytical methods and a comparison to what information is actually needed to determine pollutant loads.

The City of El Cajon's Storm Water Pollution Prevention Program looks to pollution solutions in the form of Best Management Practices, proven procedures, or other new technologies. Table 1 (next page) lists the water quality and quantity issues in El Cajon and the possible solutions provided by the Jurisdictional Urban Runoff Management Plan (JURMP) components that comprise the Storm Water Pollution Prevention Program.

Table 1 – Storm Water Pollution Prevention Program Components

Water Quality or Quantity Issues	Pollution Solution
• Increased runoff (volume, frequency and duration) with impervious ground cover.	• Runoff control for flood and erosion protection (**New Development and Construction**) • Measures to maintain existing discharge rates. (**New Development/Redevelopment**)
• Increased base flows in streams due to changes in land use.	• Provide measures to maintain infiltration **(New Development/Redevelopment)** • Provide extended detention of runoff for low flows. (**New Development/Redevelopment**)
• Increased pollutant loadings with runoff.	• Provide measures to reduce pollutant sources, or remove pollutants, by settlement, absorption or filtration. (**Municipal, Industrial, Commercial, Residential Existing Development/Redevelopment**)
• Stream bed and bank changes due to erosion.	• Infiltration for control of runoff volume.(**New Development/Redevelopment**) • Rate of runoff control for erosion protection (**Construction/Redevelopment**)

Stronger move toward prevention of polluted discharges – distinguishing pollutant reduction from Pollution Prevention (recycle, reduce, reuse) activities, while connecting BMPs with the pollutant being reduced. A BMP to Pollutant Reduction Diagram is provided below and is the mainstay for the Existing and Development (including Construction) Components. This part of the transition occurred after Copermittees submitted a Framework for BMP Implementation in October 2003.

Inspection data collected under the original system was translated into BMP implementation results. The BMP implementation results data can be used to help prioritize follow-up actions, including inspections and education efforts in future program years.

BMP to Pollutant Reduction Diagram (See Following Page for Details)

Pollutant to BMP Table
BMPs target the reduction or elimination of a primary pollutant (sediment or fecal coliform) or pollutant group (oil & grease).

↓

Facilities and BMP Table
Individual Facilities are Required to Implement the Minimum BMPs

↓

Summarize Facility Types with Pollutant Reduced Table
Combines Table 1 and 2 to connect pollutant to (high priority) facility type, such as industrial, commercial/restaurants, municipal, residential area, or SUSMP/Parking Lot through the implementation of BMPs. Allows the calculation of percentages for implemented BMPs for high priority facilities.

↓

Transition to Effectiveness Assessment
Percentages between 80-100 overall implementation are used to calculate a quantity of pollutant(s) prevented from entering the storm drain system and thus reduction in pollutants ultimately discharged.
Reasonable Assumption: If inspection was impromptu, results observed on inspection day, in general, represent conditions at the facility for the entire year.
Calculations: Determine an *average* (typical for facility) discharge of the pollutant containing material.

The BMP to Pollutant Reduction Diagram demonstrates how BMPs are connected to pollutants that are connected to water quality. Our difficulty lies in quantifying those pollutant reductions with accurate and defensible results. In Section 11.0, estimates as well as empirical data are used to assess the effectiveness of the City's Storm Water Program by showing how much pollutant-containing materials were diverted toward a better disposal avenue.

1.2 COMMITMENT AND PARTICIPATION

The City of El Cajon is committed to promoting the concept and practice of preventing pollution at the source. Preventing pollution will prevent environmental problems. This saves the public and private sector from loss of resources and the costs to correct environmental damage. Urban runoff management requires the simultaneous pursuit of several objectives. The City is committed to:

- Enforcement of the Municipal Codes for Urban runoff (ECMC 13.10) and New or Site Re-Development (ECMC 16.60).
- Prevention of pollutant discharges into Forrester Creek as part of the San Diego River Watershed.
- Protection of water quality, aquatic species, and watershed ecosystems.
- Promotion of environmental quality and social well-being.

1.2.1 Jurisdictional Implementation

Pollution Prevention continues to be the focus of the City's JURMP and Storm Water Pollution Prevention Program for businesses and citizens. Compiled information on amounts of pollutants prevented from entering the storm drain system has a direct correlation to any decrease in pollutant loads from entering receiving waters. Pollutant amounts removed from streets, roadways and the storm drain system, or that have been recycled, have a direct correlation to water quality.

Land use consists of residential, commercial, industrial, municipal, and educational with recreational facilities. The City is at a "built-out" stage where most construction is redevelopment. Successful implementation of the updated City's Standard Urban Storm Water Management Program (SUSMP) supports the reduction in flow from a pollution prevention perspective. Development and redevelopment proposals that trigger the SUSMP requirements must submit plans consistent with reducing flow and impervious areas and must consider storm runoff treatment before the project will receive final City approval and proceeding to actual construction.

1.2.2 East County Cities Teamwork

Beginning in the Permit Year of 2002/2003 and continuing through this current Permit Year (PY3, 2009/2010), the East County Cities Workgroup gathered to discuss and tackle issues specifically affecting water quality issues in the East-County-Cities Area. Some of these "East County" challenges include:

- Tackling storm water issues from a "sand" perspective
- Highly transient populations
- Locally-focused City Management
- Boxed-in, built-out Development

1.2.3 Regional Teamwork

The City participated in regional efforts to promote storm water management practices and educate businesses and citizens to conduct business and daily lives with respect for water quality. When possible, the City attended or was an active participant in the following events.

- Management Committee Meetings
- Outreach Workgroup
- Residential Sources Workgroup
- East County Cities Workgroup (a.k.a., San Diego River Watershed Workgroup) **
- Commercial/Industrial Workgroup **
- Regional Monitoring Workgroup
- Dry Weather Monitoring Workgroup

** - Chaired Workgroup

1.3 WATERSHED AND RIVER HEALTH

As stated in the Clean Water Act, the objective is to maintain and restore the chemical, physical, and biological integrity of the Nation's waters. To address this objective, watershed and river health for the San Diego River can be described in terms of unique biophysical, socio-cultural, and economic characteristics. Biophysiochemical components are a watershed's elements and functions (its chemical, physical, and biological processes), while socio-cultural and economic components are the values and benefits provided by a functioning healthy watershed. The water quality aspect and stream flow (as hydrological patterns) of the biophysiochemical component list and the recreational/esthetic values of the socio-cultural and economic components are the only subjects directly addressed in our City's permit under Order No. R9-2007-0001.

Biophysiochemical:

- Basin geomorphology
- Hydrological patterns (stream flow addressed in Municipal Permit)

- Water quality (addressed in Municipal Permit)
- Biotic community and habitat

Socio-Cultural and Economic:

- Breakdown and recycling of pollutants
- Regulation of storm water discharges
- Groundwater and aquifer recharge
- Recreational and esthetic values (addressed in the Basin Plan, but included in Municipal Permit by reference)
- Habitat values (protected species, fisheries, etc.)

In general, the factors that determine ecosystem and watershed health are universal. A healthy watershed is one in which these components are maintained with thriving and balanced communities. An immutable characteristic of upper Forrester Creek is the concrete lining of this channel. In the 1960's, Forrester Creek was modified with a concrete channel in order to provide flood control for the expansion of the Interstate Highway easterly toward El Centro.

In a built-out urban area such as the City of El Cajon, defining and achieving creek, river and watershed health is complicated by a highly altered landscape (concrete channelization of Forrester Creek, highly urbanized, little open-space) and continued urban-infill and growth within and upstream of its jurisdiction. Nonetheless, the City has a vision and initially a broad goal for watershed and river health. The vision states the desired future for the city with respect to watersheds and waterways. The goal states that the City ultimately aims at maintaining watershed and river health for water quality and hydrological patterns, quantitatively and qualitatively.

Although it is unrealistic and infeasible to re-create the environmental conditions that existed before the City's development, it is prudent to consider predevelopment conditions when assessing the health of Forrester Creek and the San Diego River. Information about historical conditions is useful in understanding current watershed processes and functions that are essential to downstream watershed and river health. In fact, healthy downstream conditions may best be served by continual efforts by the City to reduce and eliminate pollutant discharges to Forrester Creek, to the maximum extent practicable.

1.4 WATERSHED PLANNING

The City recognizes the importance of watershed management as a guiding principle for its water quality management of the San Diego River Watershed. As required by Permit Section J, a Watershed Urban Runoff Management Plan (WURMP) was developed during PY2 and refined during subsequent permit years. As a member of the San Diego River Watershed, the City attended and participated in establishing the Watershed program for the San Diego River area. There is a learning curve to transitioning certain activities from a jurisdictional to a watershed approach.

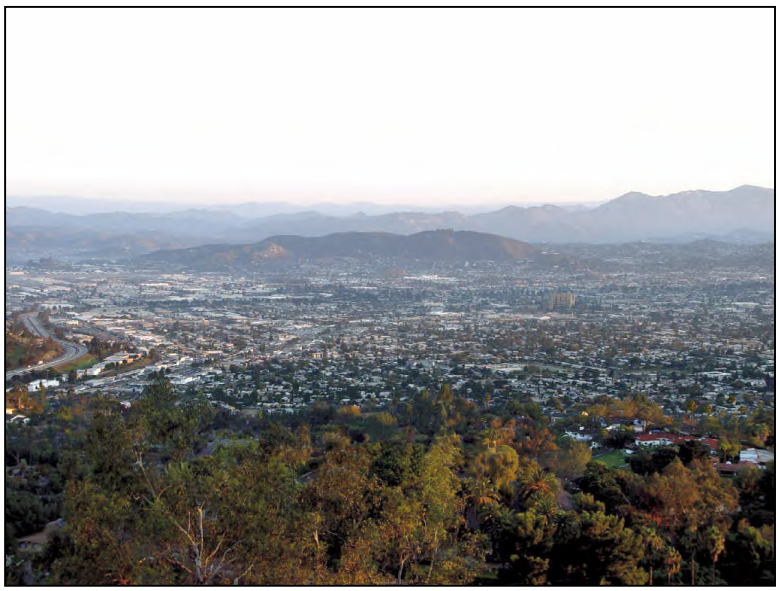

The picture to the right shows El Cajon as part of the inland watershed area. Much has been discussed during this permit year and an outline for the future watershed management is in place. The coming year will be one of implementation bringing new challenges to the storm water programs.

1.4.1 Water Quality and Stream Flow

Water quality has long since been the focus of many watershed programs. However, those programs and regulations have focused mostly on the chemical aspects of water quality, such as the concentrations of metals and organics, without considering how water quality is affected by the physical habitat in a stream or river. Water quality is greatly affected by the amount of large wood in the waterway, the river or stream's substrate (coarse gravel or fine sediment), the amount of native vegetation in floodplains and other aspects of physical habitat.

Physical habitat, in turn, is shaped in part by the larger forces of stream flow and hydrology. It has long been understood that the influence of stream flow, hydrology, physical habitat and water quality help determine which species are present within a watershed and the abundance, productivity and diversity of those species. For these reasons and others, the City defines its functional disposition in the watershed and river health as providing/conveying sustainable stream flow and hydrology and restoring and preserving water quality.

- **Stream Flow and Hydrology**: Maintain, or as necessary reduce, dry weather flow conditions using the Standard Urban Storm Water Management Plan to prevent an increase in runoff due to development and redevelopment projects, thereby protecting and improving watershed and stream health, channel function and public health and safety.
- **Water Quality:** Protect and improve surface water and groundwater quality and meet or surpass state and federal water quality standards and regulations.

Improving water quality within the City's jurisdiction will contribute to overall watershed health and will help keep the watershed as healthy as possible. John Muir said it best, "*When we try to pick out anything by itself, we find it hitched to everything else in the universe*".

1.5 GEOGRAPHICAL INFORMATION SYSTEM (GIS)

PY3 is the seventh year our City is using a Geographical Information System to present the location of El Cajon within the San Diego Watershed (See Figures following within this section). Base maps and information obtained from SanGIS provided the basic information to start layering jurisdictional and regional information. Deciding on the types of data and what needs to be shown are the biggest questions to answer.

In PY6 (2006/2007) the City created a new full-time GIS position to assist the Storm Water Program. The City is planning on implementing and developing an Enterprise GIS. To achieve this goal the City is currently dedicating more resources to a growing GIS staff and a new server.

One of the main benefits of GIS is improved management of your organization and resources. A GIS can link data sets together by common location data, such as parcel numbers, which helps departments and agencies share their data. Storm Water staff identified the Business License database as information easily integrated into a GIS to show and list the parcels within 200 feet of the five (5) major El Cajon drainage channels. The saying, "better information leads to better decisions" is true for GIS. A GIS is not just an automated decision making system but a tool to query, analyze, and map data in support of the decision making process.

The GIS maps presented in this PY3 Annual Report are used as tools by storm water staff to aid in the making of decisions that will be crucial to the direction of the Storm Water Program. Three maps follow this page showing:

- San Diego County Regional Watersheds
- San Diego River Watershed with a focus on El Cajon
- City of El Cajon showing Residential (green), Commercial (red), Industrial (pink), and School Districts (blue).

The information can be presented succinctly and clearly in the form of a map and accompanying report, allowing decision makers to focus on the real issues rather than trying to understand the data.

1.6 SIGNIFICANT ACCOMPLISHMENTS

The following significant accomplishments were completed and helped to maintain Watershed and River Health. Elimination of pollution is mainly due to routine scheduled municipal maintenance activities, municipal and commercial education efforts, outreach to the public and daily contact with citizens. The following is a summary of the major investments in reducing pollutant loads to receiving waters.

- Continued to implement and refine the Enforcement program for City Ordinances 4907 (JURMP) and 4908 (Standard Urban Storm Water Management Program (SUSMP) requirements). Streamlined enforcement activities with the inspection database to better coordinate and design correction actions.
- Continued to improve an inspection program for construction, commercial and industrial facilities based on Best Management Practices (BMP) implementation. Tracking BMP implementation and ensuring that all minimum required BMPs are installed and maintained properly helps ensure that pollutants are not discharges from those facilities. (List is continued following the three pages of GIS Maps).

Regional Watershed Map

SD River Watershed Map

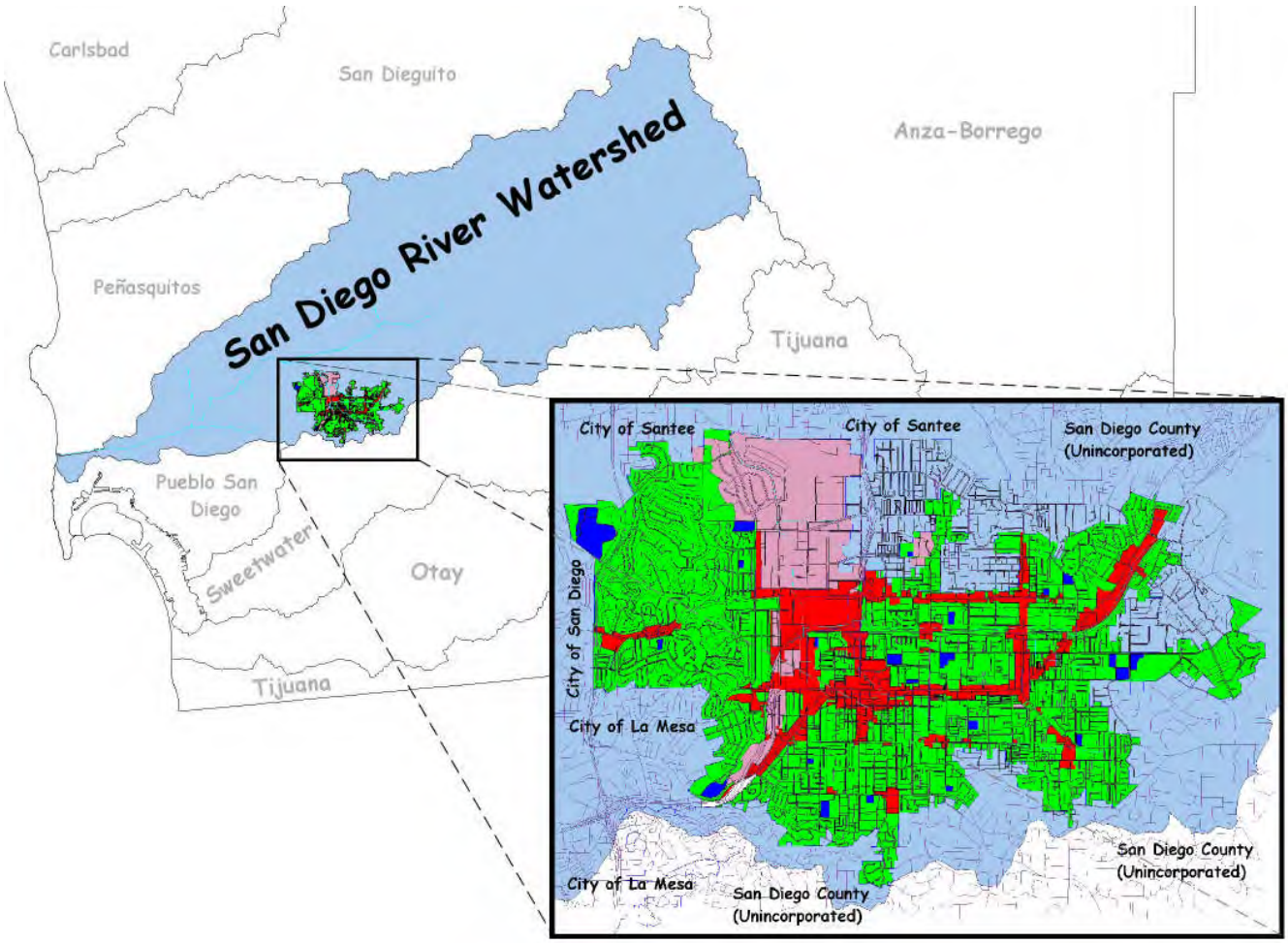

El Cajon GIS Map

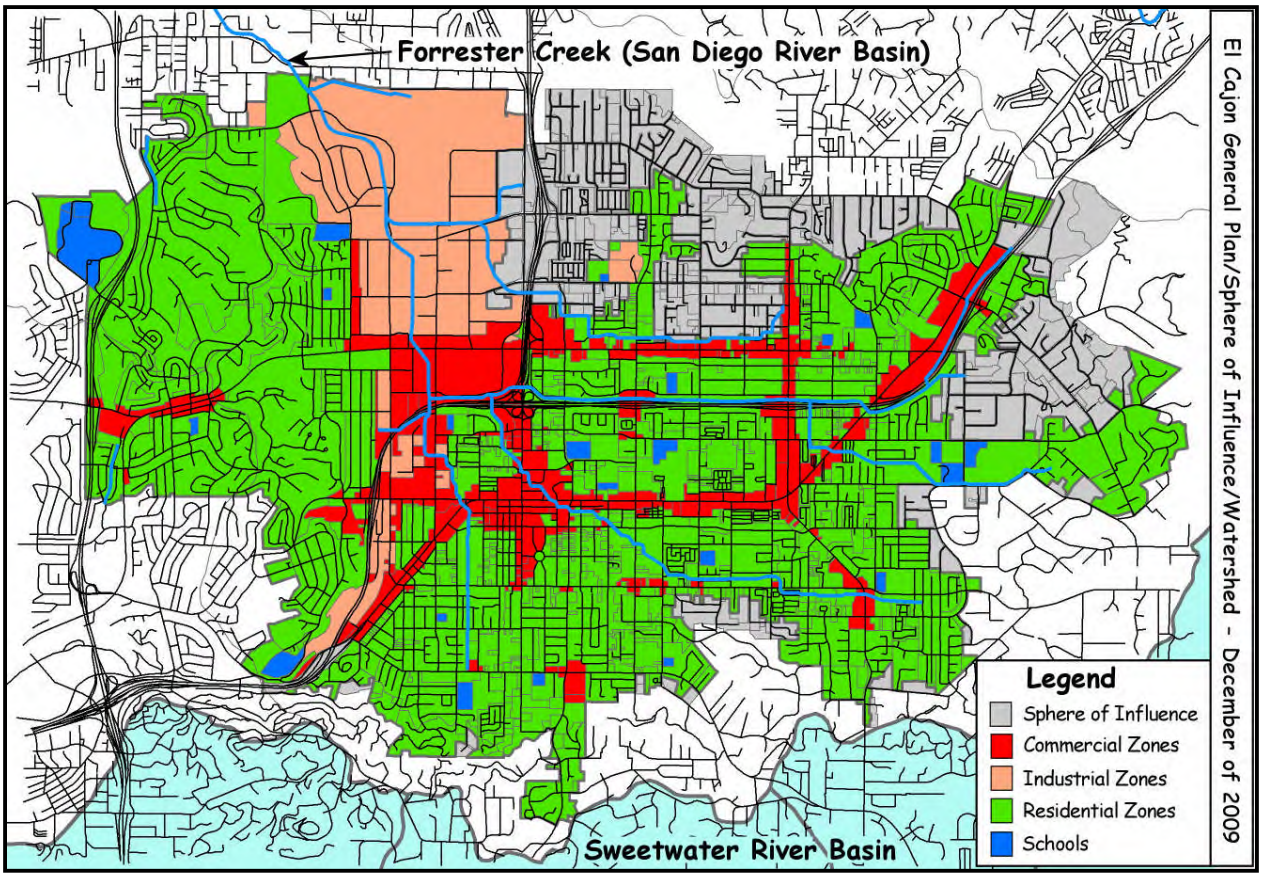

- Inspected and provided educational materials to 319 industrial and commercial businesses for compliance with the City's Municipal Code and the State's General Permits for construction and industrial activities.
- The City's comprehensive street sweeping program swept 17,250 miles of improved streets and collected 3,611 cubic yards of materials from City streets. About half (42%) of the material collected this year was sediment and silt. Many areas were swept twice per week.
- Collection of over 1,713 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins;
- Reached out to community members on a wide range of urban runoff and storm water quality topics through approximately 106,600 copies of articles, brochures, mailers, and over-the-counter sources.

1.7 RWQCB Compliance Reviews and Inspections

During this reporting period, no formal comments were received from the RWQCB regarding the Annual Report for PY2 (2008/2009). RWQCB staff did conduct an audit of El Cajon Storm Water Program SUSMP records during December of 2009.

1.8 Organization and Content of Annual Report

The Permit requires the submittal of an Annual Report to the SDRWQCB. This Annual Report covers the single permit year activities between July 1, 2009 and June 30, 2010. The Dry Weather Monitoring for 2010 will be submitted as a separate document on December 15, 2010.

The PY3 Annual Report presents and discusses implementation of the City's JURMP with a look at trends, BMP implementation, and overall JURMP effectiveness. Organization of the PY3 Annual Report is as follows:

- Executive Summary and Report Certification
- Section 1 - Introduction
- Section 2 - Development Planning Component
- Section 3 - Construction Component
- Section 4 - Municipal Component
- Section 5 - Industrial and Commercial Component
- Section 6 - Residential Component
- Section 7 - Illicit Discharge Detection and Elimination Component
- Section 8 - Education Component
- Section 9 - Public Participation Component
- Section 10 - Fiscal Analysis Component
- Section 11 - Effectiveness Assessment Component
- Section 12 - Special Investigations
- Section 13 - Non-Emergency Fire Fighting
- Section 14 - JURMP Revisions
- Section 15 - Conclusions and Recommendations

Charts, graphs, figures, and pictures are used to demonstrate the fulfillment of Permit and JURMP requirements or to highlight a special program accomplishment and event. Appendices provide additional information to validate activities or procedures.

Specific importance is placed on the assessment of JURMP implementation as this process is essential to determine if the City's program is reaching the Permit goal of improving receiving water quality. Some practices and structures (BMPs) listed in the JURMP to reduce or eliminate pollutants may prove to not be as effective as anticipated. An iterative process of BMP development, implementation, monitoring, and assessment focuses the JURMP such that JURMP programs are sufficiently comprehensive and effective to achieve Permit requirements and program objectives.

SECTION 2 DEVELOPMENT PLANNING COMPONENT

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2.3.1 Development Project Approval Process 4

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SECTION 2 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

Over the last few years the City of El Cajon (City) implemented procedures to minimized the short and long-term impact on receiving water quality from new development and redevelopment. Major steps were taken to accomplish this goal under Order No. 2001-001. The City completed the requirements of the plan which include the following four components:

1. Assessment of General Plan
2. Modification of Development (Project Approval Process)
3. Revision of Environmental Review Process
4. Conducted Education Efforts Focused on New Development and Redevelopment

During PY2009-10 the process continued to evolve to incorporate requirements under new Municipal Permit Order No. R9-2007-0001 and Interim SUSMP requirements. The City adopted updated Ordinances in PY1 to comply with new requirements.

2.2 ASSESSMENT OF GENERAL PLAN

The General Plan provides a jurisdictional framework for directing land use and development decisions within the City of El Cajon. Therefore, it is important that the General Plan include provisions to address water quality. The City incorporates elements into the General Plan that provide an adequate foundation for controlling land use and development in a manner consistent with water quality objectives required by the Municipal Permit Order No. 2007- 0001 (Permit).

On January 14, 2003, Resolution No. 10-03 was approved amending the General Plan and adding storm water runoff policies and objectives. The amendment is consistent with the City's Jurisdictional Urban Runoff Management Plan (JURMP) and provides policy and objectives dealing with storm water runoff to guide decision-making as mandated in the Permit. A copy of Resolution No. 10-30 is included in Appendix A.2. A copy of the General Plan is shown on the following page.

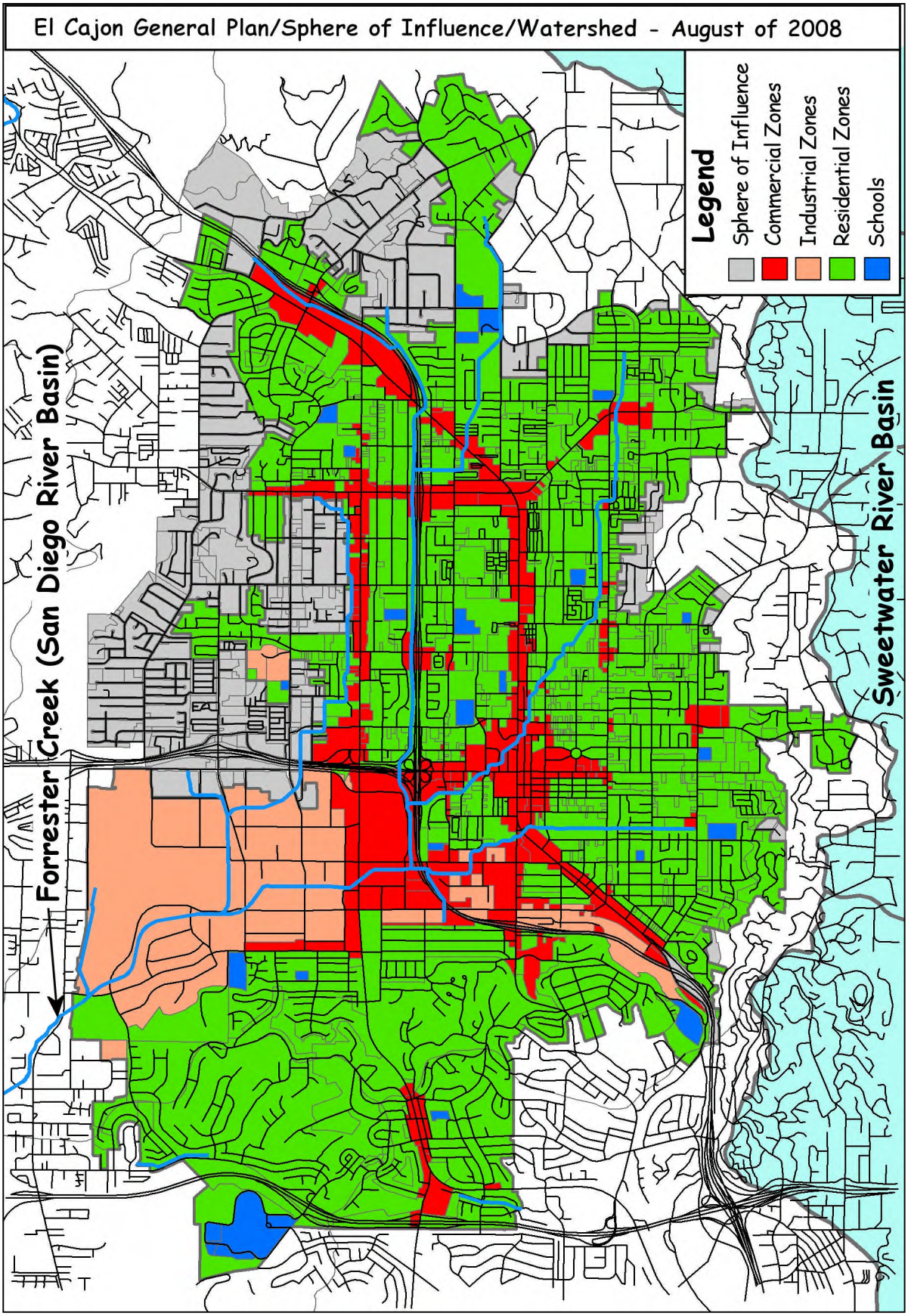
El Cajon General Plan/Sphere of Influence/Watershed - August of 2008
Forrester Creek (San Diego River Basin)
Sweetwater River Basin
Legend
Sphere of Influence
Commercial Zones
Industrial Zones
Residential Zones
Schools

2.3 MODIFICATION OF DEVELOPMENT

2.3.1 Development Project Approval Process

Development becomes a project once the applicant completes planning action forms that describe the type of development proposed. The planning action is routed to many departments including Storm Water. Consolidated comments from Public Works are attached directly to the project as a list of conditions to the proposed planning action. Conditions are then reviewed and accepted by City Council making them enforceable. The City does not issue building permits until all requirements addressing water quality are fulfilled. Similarly, the City does not grant a final occupancy certificate until all storm water requirements are completed.

To protect our natural resource waterways, the City has continued ordinance development and implementation to address water quantity and quality. New and Redevelopment projects are reviewed for applicable BMPs to attain:

- Reduction in paved areas
- Maximize infiltration
- Detain or retain flows to reduce the speed at which water discharges to natural areas, and break Directly Connected Impervious Areas (DCIAs).
- Minimize potential pollutants from reaching the Municipal Separate Storm Sewer System (MS4) from grading and other construction activities by meeting the provision specified in Section D.2 of the Permit.
- Require Industrial applicants subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities to provide evidence of coverage under the General Industrial Permit.
- Require project proponents to provide proof ensuring ongoing long-term maintenance of structural Treatment Control BMPs.

2.3.2 Standard Urban Storm Water Mitigation Plan

The City participated with other Copermittees in revising and updating the BMP requirements that were listed in the Model Standard Urban Storm Water Mitigation Plan (SUSMP) that was submitted to the Regional Water Quality Control Board (RWQCB) in February 2002. Consequently, the City adopted Ordinance 4717 adopted on December 2002 to implement local SUSMP to reduce pollutants and runoff flows from all new development and significant redevelopment. The City revised the SUSMP ordinance in December 2007, which adopted Ordinance 4908, creating Municipal Code 16.60 for New and Re-Development pursuant to SUSMP requirements per Permit R9-2007-0001. The City, subsequently, adopted the final Countywide Model SUSMP in February 2010.

The City will also incorporate a Hydromodification Management Plan (HMP) into the City's Local SUSMP. As of the writing of this annual report, the HMP has been developed by a consultant and regional workgroup and the draft HMP was submitted on January 24, 2009 with a revision submitted in May of 2009. After receiving comments from the RQWCB in June of 2009, the final HMP was prepared along an HMP Sizing Calculator. The final HMP was

accepted by the RQWCB on July 14, 2010 and the City will be incorporating HMP requirements into the Local SUSMP by January 14, 2011. No priority projects in the City of El Cajon have met HMP criteria as of yet, as no projects have disturbed more than fifty acres, and the City does not anticipate any projects that will in the future.

The City has also recently and comprehensively updated the El Cajon Sewer Ordinance to give the City legal authority to enforce the wastewater discharge requirements of Regional Water Quality control Board Order No. R9-2007-0005. For a complete summary of this Ordinance update, refer to Appendix D.3. For a complete copy of the new Sewer Ordinance, refer to Appendix D.4. For a summary of required private lateral inspections, inspection results and required repairs, refer to Appendix D.5.

Projects triggering the New and Re-Development SUSMP requirements are:

- Housing projects with at least 10 units
- Commercial developments at least 1 acre in size
- Heavy Industry
- Automotive repair shops
- Restaurants
- Hillside developments that are 5,000 square feet or greater
- Developments within Environmental Sensitive Areas
- Parking lots 5,000 square feet or more or with 15 or more parking spaces potentially exposed to urban runoff
- Streets, roads, highways, and freeways with an area equal to or greater than 5,000 square feet
- Retail Gas Outlets

Projects trigger the SUSMP requirements during the initiation of a planning action or environmental investigation brought on by the California Environmental Quality Act (CEQA). The Storm Water section of Public Works reviewed a total of 52 planning actions, 7 of which were categorized as high priority SUSMP projects (please refer to Appendix A.2 for a list). The City also carried over 9 SUSMP projects that are in varying degrees of development, design, or construction from previous years. Planning actions and New Development projects are tracked using a MS Excel spreadsheet.

An example Storm Water Mitigation Plan (SWMitP) that includes a list of SUSMP conditioning requirements are given to SUSMP priority projects at the earliest planning stage (please refer to Appendix A.2 for sample SWMitP). BMPs and the pollutants that are targeted for reduction or elimination to the maximum extent practicable (MEP) are listed in Table 1.

Table 1 – BMP to Pollutants for New and Re-Development Projects

BMP	Primary Pollutants	303(d) Pollutants
Site and Facility Design	Flow	
Site Design and Landscape Planning – SD-10	Flow	
Efficient Irrigation – SD-12	Nutrients	**TDS** **Nutrients**
Storm Drain Signage – SD-13	Trash Oil & Grease Toxics	
Pervious Pavements – SD-20	Sediment Oil & Grease	**TDS**
Trash Storage Areas – SD-32	Trash Bacteria	**Bacteria**
Vehicle Washing Areas – SD-33	Metals Detergent	**TDS**
Detention Basin - TC-22	Trash Sediment Metals Bacteria Oil & Grease Organics	**TDS** **Bacteria** **Nutrients** **ODS (Oxygen Demanding Substance)**
Vegetated Swale – TC-30	Sediment Metals Oil & Grease Organics	**TDS** **Nutrients** **ODS**
Bioretention – TC-32	Sediment Oil & Grease Nutrients Trash Metals Bacteria Organics	**TDS** **Nutrients** **Bacteria** **ODS**
Media Filter – TC-40	Sediment Trash Metals Bacteria Oil & Grease Organics	**TDS** **Bacteria** **ODS**
Water Quality Inlet Filter – TC-50	Oil & Grease Trash	
Vortex Separator – MP-51	Trash Sediment	
Drain Inserts – MP-52	Trash Oil & Grease	
Underground Concrete Retention - Proprietary	Flow	

SUSMP projects must identify pollutants of concern based on anticipated and potential pollutants generated from the proposed project and implement BMPs that target the reduction or elimination of the identified pollutants to the MEP. Anticipated and potential pollutants generated by land use type are shown in Table 2.

Table 2 – Anticipated and Potential Pollutants Generated by Land Use Type

Priority Project Categories	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >one acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Once potential pollutants of concern are identified for the proposed SUSMP project, BMPs must be selected from a list of required and project specific BMPs provided below in Table 3. All site design criteria are applied to every SUSMP project while source and treatment controls are dependent upon site location and type of pollutants.

Table 3 – Site Specific BMPs

	New Development (Including Re-Development)									
	Home Subdivisions ≥10 units	Heavy Industry ≥1 acre	Commercial Development ≥1 acre	Automotive Repair Shops	Restaurants	Hillside Development ≥ 5,000 sq ft	ESAs	Parking Lots ≥15spaces; ≥ 5,000 sq ft	Street, road, highways, and freeway ≥5,000 sq ft	Retail Gasoline Outlets
General Site Design (Apply All)										
Control Peak Runoff Rates	X	X	X	X	X	X	X	X	X	X
Minimize impervious Areas	X	X	X	X	X	X	X	X	X	X
Conserve Natural Areas	X	X	X	X	X	X	X	X	X	X
Protect/slopes/and channels	X	X	X	X	X	X	X	X	X	X
Minimize effective imperviousness	X	X	X	X	X	X	X	X	X	X
SOURCE CONTROLS (Apply all that are Applicable)										
Storm Drain Message and Signage	X	X	X	X	X	X	X	X	X	X
Outdoor storage area design		X	X	X	X					X
Trash Storage Area Design		X	X	X	X					X
Loading/unloading dock area design		X	X							
Repair/maintenance bay design				X						
Vehicle/Equipment/Accessory washing area design				X						
Fueling Area Design										X
Proof of Control Measure Maintenance	X	X	X	X	X	X	X	X	X	X
TREATMENT CONTROLS (Apply at least two)										
Inlet Filters	X	X	X	X	X	X	X	X	X	X
Grass Strip Filter	X	X	X	X	X	X	X	X	X	X
Grass Swale Filter	X			X		X	X	X	X	
Detention/Infiltration Basin	X		X	X	X	X			X	
Porous Pavement Detention	X		X		X	X		X		
Porous Landscape Detention	X	X	X		X			X	X	
Infiltration Trench	X		X				X	X		
Media Filter	X	X	X				X	X		
Proprietary Controls						X				X
Other										

For PY2009-10, seven (7) SUSMP projects completed construction and included Treatment Control BMPs. Projects with SUSMP requirements that were completed and inspected for BMP implementation in 2009-10 are listed in Table 4. For the current inventory of all sites with Treatment Control BMPs and BMP implementation infeasibility analyses please refer to Appendix A.2.

Table 4 – Application of SUSMP Structural BMPs for Completed Projects

SUSMP Project	Detention Basin/Area	Inlet Filter(s)	Porous Pavement	Pervious basin/swale	Hydrodynamic Separator	BMP Facilities Maintenance Agreement
1001 W. Bradley Ave. Waste Management Recyclables Transfer Center	NA	X	NA	X	NA	NA
Caracara Cir. Granite Hills Village Subdivision	X	X	NA	X	NA	X
Foundation Ln. Subdivision	NA	NA	NA	X	NA	X
1273 E. Main St. La Valencia Plaza	NA	NA	X	X	NA	X
1539 E. Main St. Self Storage Building	X	X	NA	X	NA	X
198 W. Main St. El Cajon Shopping Center	NA	X	NA	X	X	X
189 Roanoke Rd. Cajon Valley Union School District	NA	X	NA	X	NA	NA

One of the constructed SUSMP projects mentioned above was La Valencia Plaza. . This project was an existing vacant commercial property, which was almost completely paved over. The project had one main SUSMP trigger; the parking reconstruction was greater than 5,000 square feet. The structural BMPs that were implemented to comply with treatment and sizing criteria. The property is connected to an alley on the lower (south) side of the project that had an existing storm drain system. There were two parking lots proposed, with a large new commercial building between them. The flow from the western parking lot was directed toward the west side of the property where it would enter a vegetated swale with remediated soil prior to discharging through riprap to the alley. The runoff from the north end of the building was designed to discharged to a vegetated area on the north side for Low Impact Development (LID) compliance. The runoff from this area is then collected by a concrete ditch down the east property line and discharged, along with runoff from the southern portion of the building, to the east parking lot. The east parking lot was constructed out of pervious concrete over a 6” thick base layer of compacted gravel. A perforated pipe that outlet to the existing alley storm drain system was installed at the lower end for large flows.

2.3.3 Waiver Provisions

In the event that a Priority Project is unable to meet the treatment control BMP sizing requirements outlined in the City’s SUSMP, the City has the authority to issue a wavier. In order to receive a waiver for treatment control BMP sizing requirements, the project must prove that

all available treatment control BMPs have been determined to be infeasible for the site. If a waiver of infeasibility is issued, the City will notify the RWQCB within five days of granting the wavier. The following information will be provided to the Regional Board:

- The name of the City employee granting the waiver
- The name of the developer receiving the waiver
- The location of the site
- The reason for granting the waiver
- A description of the BMPs required for the site

The City has never granted such a wavier to a Priority Project in the past and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may choose to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the projects' watershed.

Table 5 – BMP Implementation Summary

BMP	Percent Implemented	Pollutant Prevented
Control Peak Runoff Rates	100	Flow
Minimize Impervious Areas	100	Flow
Conserve Natural Areas	100	Flow
Protect Slopes and Channels	100	Sediment
Minimize effective imperviousness	100	Flow
Storm Drain Message and Signage	43*	Trash, Oil & Grease
Trash Storage Areas	100	Trash, Oil & Grease
Repair/Maintenance Bay Design	100	Oil & Grease
Proof of Maintenance	100	Trash, Oil & Grease
Inlet Filter(s)	100	Sediment, Trash, Oil & Grease
Grass Strip or Swale (Biofiltration)	100	Flow, Sediment, Oil & Grease, Trash
Detention Basin/Area	100	Flow, Sediment, Oil & Grease, Trash
Hydrodynamic Separation System	14	Trash, Sediment, Oil & Grease
Infiltration Strip/Area	0	Flow, Sediment, Oil & Grease, Nutrients (**TDS**)
*Follow-ups to be conducted to ensure all signage implemented.		

Note on Table 5: Percentages of BMPs implemented, shown in Table 5, are based on the number of applicable sites. For example, if there were three hillside Development projects and all three-implemented slope stabilization, that would be all of the applicable projects. A 100% implementation equates to those applicable sites and not to all sites.

2.4 TREATMENT CONTROL BMP MAINTENANCE INSPECTIONS

All treatment control BMPs installed at priority development projects are regularly inspected by the City to ensure treatment controls are operating effectively and are being properly maintained. Inspection frequencies are based on the project's assigned TTWQ priority as determined by the

criteria outlined in the City's 2008 JURMP. Table 6 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 6 – Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Inspection Frequency
High	Annually (prior to the start of the rainy season)
Medium	Every two years
Low	As needed

The City requires annual verification of proper maintenance of all priority development treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. To ensure the continued maintenance of these BMPs the City is continuing to inspect SUSMP projects for the duration of the use of said site. As required by the Municipal Permit, a minimum of 20% of the total number of projects with approved treatment controls and a maximum of twice the average number of projects with treatment control BMPs approved per year are inspected annually. Additionally, 50% of all medium priority sites with drainage inserts are inspected annually. Inspections include examination of all treatment control BMPs at the site to verify that each treatment control BMP is working, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings are documented by the inspector using the City of El Cajon Treatment Control BMP Inspection form in Appendix A.2. In order to check the maintenance of a greater cross-section of sites the City will continue to rotate the list of the medium and low TTWQ sites that are inspected each year. If any deficiencies in treatment control operation and maintenance are noted during the inspection, the responsible party is notified, and appropriate enforcement actions are taken to achieve compliance. The list of the sites inspected in PY2009-10 can be found in Appendix A.2. Inspection findings and follow-up actions for each development site with installed treatment controls are included in the City's treatment control BMP tracking database.

2.5 REVISED ENVIRONMENTAL REVIEW PROCESS

The City of El Cajon revised CEQA forms and checklists to include questions related to water quality issues. The City reviews all projects for CEQA, however no projects completed the revised forms for PY2009-10. These forms are attached in Appendix A.2.

2.6 DEVELOPMENT PLANNING OUTREACH EFFORTS

Education efforts for disseminating information to planners, developers, and contractors on the JURMP requirements for new and significant redevelopment is provided through one-on-one and group discussions at the time of the various discretionary plan reviews and checks, during BMP development, and at time of obtaining the building permit. Topics include:

- Federal, state, local water quality laws and regulations
- Connection between land use decision and water quality goals
- New and Redevelopment requirements
- Water quality impacts from development (urbanization)
- Methods for minimizing impacts of development on water quality.
- Implementation of SUSMP requirements

2.7 REGULATORY COMMENTS

As of the writing of this report, no regulatory comments have been received for JURMP Annual Report 2008-09.

SECTION 3 CONSTRUCTION COMPONENT

3.1	Introduction	2
3.2	Prevention of Polluted Runoff	2
3.3	Updates to Ordinances	3
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SECTION 3 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

Construction in the City of El Cajon is a constant activity. Whether it is a 500 square foot remodeling project or a multi-single family residential subdivision, a minimum list of construction BMPs must be in place prior to any earth disturbance or material storage. With a City built out to its current borders, the City experiences re-development activities more so than new development. However, clearing currently developed lands and re-development is at the heart of this community's construction and revitalization efforts.

Park Avenue Subdivision

3.2 PREVENTION OF POLLUTED RUNOFF

The City uses the CalTrans Construction Site BMP Manual together with the California Storm Water Quality Association Best Management Practices (BMPs) Handbook as guidance for the application of appropriate BMPs. An emphasis on pollution prevention is the easiest and most convenient set of BMPs to implement and achieve the elimination of polluted discharges. The following prevention practices are part of the minimum set of BMPs for construction sites.

- Prevent sediment and other polluted runoff – Design a sediment basin to trap runoff for zero discharge, specifically for larger construction sites with enough room for sizing adequate basins.
- Prevent bacteria discharges – Place portable sanitary facility in secondary containment and secure to the ground or stable structure. Prevents tipping and loss of bacteria (fecal coliform) containing material.
- Prevent alkaline (greater than 10.0 pH) runoff – Require properly designed and installed Concrete Washout areas and encourage concrete contractor to haul away concrete waste. Concrete waste disposal should be at an offsite location with adequate control measures.

The City works closely, often one-on-one, with developers at the counter and field discussing ways to prevent pollution from entering the storm drain. The pollution prevention practices are required for any applicant looking for a building permit.

Copies of construction handouts provided by the building department and additional information given to developers, contractors, and homeowners at the time of Erosion Control Plan submittal can be found in Appendix A.3.

3.3 UPDATES TO ORDINANCES

In accordance with Section D.2.a of the Permit, the City Municipal Code Title 13 Chapter 13.10 *Storm Water Management and Discharge Control* was updated in 2008 to comply with the new grading requirements. The City Municipal Code Title 13 Chapter 13.10, Section 13.10.140; and Chapter 15.64, *Grading*, work together in addressing land disturbance, demolition, and construction activities for the elimination of sediment and other pollutants from discharging into the City's storm drain system.

3.4 MODIFICATION OF CONSTRUCTION AND GRADING APPROVAL PROCESS

Shortly after the Chapter 13.10 was updated, the City assessed and modified the local construction permit and grading approval process to comply with Section D.2.a of the Permit. All construction projects are required to go through a storm water review process. Construction and grading projects are required to implement measures to ensure that pollutants from the construction site are reduced to the Maximum Extent Practicable (MEP) and will not cause or contribute to an exceedance of water quality objectives. The City does not allow clearing of vegetation matter or grading activities until all necessary environmental clearances, including water quality, are secured and a grading, drainage, and erosion/sediment control plan is prepared, reviewed and approved by the City. During the review process, the City ensures that all applicable grading and storm water ordinances are fully implemented as required per El Cajon City Code Title 13, Chapter 13.10, Section 13.10.140; grading ordinance Chapter 15.64 and Chapter 16.60. The City does not issue Building Permits until requirements addressing storm water and water quality have been fulfilled.

3.5 PRIORITY CONSTRUCTION SITES AND SOURCE IDENTIFICATION

Periodically the City reviews the list of high priority construction projects to update the list for close monitoring and inspection of construction activities and BMPs implementation for reducing or eliminating pollution from entering the City's storm drain system. High priority status is applied to projects that pose a potential threat to water quality or location. Priority is also given to SUSMP projects that are complete and need to have the storm water controls verified and the maintenance plans reviewed. Table 1 lists the selection of BMPs that must considered and the appropriate BMPs installed at all high priority projects. See Section 3.8 for any Enforcement Actions. In PY3 the City had 1 medium priority construction project and 8 active high priority construction projects, all of which were SUSMP projects. Also in PY3 the City approved 91 low priority projects for construction. A list of all active and inactive high priority construction sites is given in Appendix B.2.c. No project was required to have advanced treatment during construction as none were classified as an exceptional TTWQ.

3.6 BMP IMPLEMENTATION AND REQUIREMENTS

The City established minimum BMPs that must be implemented at all construction sites regardless of the water quality prioritization. The City developed a list of BMPs required at all construction sites. This list first appeared in the JURMP as Appendix C, but has recently been revised and updated to comply with Order R9-2007-0001. BMPs specifically prevent, remove, or eliminate a pollutants or group of pollutants from entering the storm drain system.

Table 1, below, lists the minimum required BMPs for construction sites, the primary pollutant eliminated and the potentially affected 303(d) pollutant. Eliminating pollutants meets the Clean Water Act and Permit objectives for maintaining the biological, physical, and chemical integrity of the State's waters, while a "no impact" condition meets the restoring requirement of the Clean Water Act objective.

A first step toward connecting construction activities to water quality is shown in the following table. The next step is to quantify how many sites are compliant with the minimum BMP requirements. Table 1 summarizes the minimum BMP requirements and the pollutants that each targets for prevention (including minimization of grading activities), removal or elimination. Table 2 lists the different types of construction projects and the minimum BMPs required for each category. Table 3 connects and quantifies the number sites compliant with the required BMPs. In Section 11, the Effectiveness Assessment of the Construction Component will draw on this connection between BMP implemented and pollutant to determine if the program activities adequately reflect a move toward improving water quality or have little effect on water quality.

Table 1 – BMP to Pollutant

BMP	Application	Primary Pollutant Removed	303(d) Pollutant Impact
Silt Fence (SC-1)	Perimeter Control to remove sediment and debris in runoff	Sediment	TDS
Desiltation Basin (SC-2)	Captures sediment runoff and eliminates sediment runoff	Sediment	TDS
Gravel Bag Barrier (SC-6)	Perimeter Control for pavement to pavement. Removes sediment runoff	Sediment	TDS
Fiber Roll (SC-5) or Coconut Fiber Blankets	Erosion Control for slopes to prevent sediment runoff	Sediment	TDS
Stabilized Construction Entrance (TC-1)	Tracking control for imperviousness to pavement to prevent sediment tracking into streets	Sediment	TDS
Street Sweeping (SC-7)	Tracking control for paved areas. Collects/removes sediment tracked onto pavement	Sediment	TDS Phosphorus
Material Storage (WM-1)	Material coverage and containment or pavement or impervious surfaces to	Stucco, Paints,	pH TDS

BMP	Application	Primary Pollutant Removed	303(d) Pollutant Impact
	eliminate polluted runoff	Concrete	
Solid Waste (WM-5)	Trash/debris coverage and containment. Prevent trash runoff	Trash, debris*	Bacteria Phosphorus
Concrete Washout (WM-8)	Containment and disposal of concrete washout. Prevents concrete runoff	Concrete-laden Waters	pH TDS
Sanitary Waste (WM-9)	Containment of sanitary waste. Prevents bacteria runoff	Bacteria	Fecal Coliform
Vehicle/Equip Management (NS-8, NS-9, NS-10)	Containment of petroleum fluids. Prevents oil & grease runoff	Oil & Grease	TDS

***** Pollutant being monitored by East County Cities
"-" Designates "no impact" on levels of 303(d) pollutants; supports Clean Water Act objective to maintain or restore water quality

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Implementation is measured through onsite inspections. Success of that implementation depends on stage of project at time of contact, materials presented, BMP selection, and developer motivation to comply with construction requirements. The City provides a Storm Water Guideline to developers for Construction Projects. This simple, easy to use guide lists the construction BMPs to use for construction activities that would occur outdoors and potentially affect storm water quality.

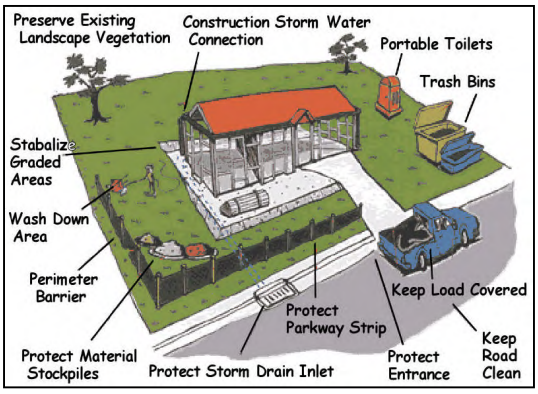

Associations, such as the Building Industry Association (BIA), have assisted in disseminating information to contractors and builders. Those construction personnel who do not belong to associations receive BMP information at the time of permit application or permit issuance. There is a noticeable difference between Storm Water savvy developers and those just starting their first storm water compliance experience. The City is working towards optimizing interactions at the Public Works counter. Landscaping as early as possible is emphasized regardless of season. This information is provided to contractors as permit issuance and during each scheduled inspection. BMPs must be appropriate for site-specific conditions. Installing BMPs for the sake of compliance is not complying with MEP.

There are four categories of construction projects:

1. Pools, retaining walls, remodels, and additions
2. Single Family Residences, Condo Conversions, and Subdivisions
3. Hillside Development
4. Commercial/Industrial

The minimum required BMPs per category of construction are shown in Table 2, on the next page.

The next steps complete the BMP cycle by verifying during inspections that the BMP is:

a. Present as required – indicates changes in knowledge and awareness.
b. Implemented properly and functioning correctly – indicator of behavioral changes.

Printed materials are available at the Public Works Department making over-the-counter interactions into educational opportunities. A City BMP guide, edited summaries of application JURMP sections, and personalize service functions as the City's implementation tools. To prioritize effectiveness efforts, the City focuses on the prevention and elimination of the 303(d) pollutants to address the restoration requirement of the Clean Water Act and our Municipal Storm Water Permit. Overall Effectiveness of the Construction Component is provided in Section 11.

Table 2 – Required BMPs for Construction Sites

Required Construction BMP	Construction Type			
	Pools, Retaining Walls, Remodels, Additions	SFR Subdivisions	Hillside Development	Commercial and Industrial
Silt Fence - SC-1	X	X	X	X
Storm Drain Inlet Protection (+Filter Fabric) SC-10	X	X	X	X
Sediment Basin or Trap SC- 2 or 3		X	X	X
Check Dams - SC-4		X	X	X
Fiber Rolls - SC-5			X	
Gravel Bags - SC-6	X	X	X	X
Street Sweeping - SC-7	X	X	X	X
Stabilized Construction Entrance - TC-1	X	X	X	X
Dust Control - WE-1		X	X	X
Scheduling - SS-1	X	X	X	X
Velocity Dissipation Devices - SS-10			X	
Preservation of Existing Vegetation - SS-2		X	X	X
Coconut Fiber Blankets - SS-7			X	
Material Storage - WM-1	X	X	X	X
Solid Waste Storage - WM-5	X	X	X	X
Concrete Waste - WM-8	X	X	X	X
Employee Training - City of El Cajon		X	X	X

X = Required; Implemented; and Verified

3.7 INSPECTION

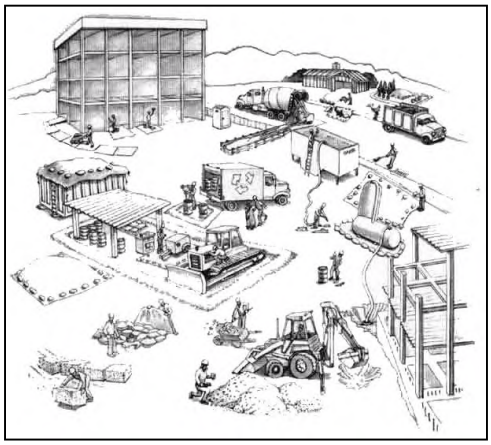

The City inspects all high priority projects as needed during the dry season and at least monthly or bi-weekly during the wet season. Inspections are completed using the form provided in Appendix A.3. In PY3, the City had 17 high priority projects, of which 8 were fully or partly active construction sites during the permit year and 9 were inactive for the entire duration. SUSMP projects are considered high priority construction projects and are inspected on the same schedule. All projects are inspected prior to completion of the projects to verify proper and complete installation of storm water treatment controls and review any long-term maintenance plans. 7 SUSMP projects were completed during PY3 and 9 became or remained inactive.

Projects designated as medium priority are inspected monthly during the wet season and on an as-needed basis during the dry season, as well as in response to a complaint received from City staff or the general public. The City had 1 medium priority project under construction during PY3. The City maintains a detailed record for high and medium priority projects. A spreadsheet showing the period of time, in weeks, that each construction site was active within the wet season and the number of inspections conducted during the wet season and the dry season is attached in Appendix B.2.c. It is important to note that inspections in the spreadsheet account only for the inspections conducted by the Public Works Department; inspections conducted by other departments, such as the Building Department, are not included in the table.

In accordance to the Municipal Permit and the City's JURMP document, the City inspects low priority construction projects on an as-needed basis. Building Department personnel constantly inspect all projects designated as low priority for their own Building Code requirements. For this reason, the Building Staff has been trained by the Storm Water Department to recognize when to contact Storm Water personnel due to improper construction BMPs. The City approved 91 low priority projects (consisting mostly of single family residential additions) for construction in PY3. During Permit Year 2009-10 the City continued to work toward creating a means of gathering more detailed information for low priority construction sites, including the period of time the site is active within the wet and dry seasons.

It is important to note that only inspections that were documented are included in the spreadsheet mentioned above. Visual inspections, which did take place through out the permit year, are not tracked.

Table 3, on the following page, shows the percentages of minimum BMPs implemented at high priority constructions, verified through inspections. The percentages are calculated from the inspection reports. The percentage indicates the number of sites that implemented the required BMP at the time of inspection. A "Yes" under corrective action indicates that specific conditions noted during the inspection warranted actions by the contractor, such as maintenance or BMP improvements.

Table 3 – BMP Deficiencies for High Priority Sites

BMP	Discharge during Rain	Corrective Action	Citation
Silt Fence	No	Yes	Yes
Storm Drain Inlet Protection	No	Yes	Yes
Sediment Basin	No	No	No
Check Dams	No	Yes	Yes
Fiber Rolls	No	Yes	No
Gravel Bag Berm	No	Yes	Yes
Street Sweeping/Vacuum	No	Yes	Yes
Stabilized Construction Entrance	Yes	Yes	Yes
Hydroseeding	No	No	No
Geotextiles and Mats	No	No	No
Material Delivery and Storage	No	No	No
Stockpile Management	Yes	Yes	No
Solid Waste Management	No	No	No
Concrete Waste Management	No	No	No
Sanitary Waste Management	No	No	No

Inspection of construction sites in PY3 verified that most construction sites implemented BMPs. All BMP deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions, and through enforcement actions. If corrective actions were needed, the construction site either completed the corrective action at the time of inspection or a follow-up visit was scheduled to verify the completion of corrective actions. When corrective actions are not completed in a timely manner, enforcement actions are issued. In PY3 the City had multiple enforcement actions related to construction inspections and follow-ups. Enforcement actions are further discussed in Section 3.8 and a list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc.) is attached in Appendix B.3.

Table 4 – Capital Improvement Project Assessment

2009-2010 CIP CONSTRUCTION SITE INSPECTIONS

Site Inspections		Enforcement Actions	
Job Site	**Minimum BMP's in place**	**Warning(s)**	**Administrative Citation(s)**
Street Resurfacing (Fletcher Pkwy., Cuyamaca St., Chase Ave.)	Y	N	N
Rubberized Slurry Street Resurfacing 2009 (Various Locations)	Y	N	N
Sidewalk Repair Project	Y	N	N
Rock Pile Removal at City Animal Shelter	Y	N	N
Multiple Property Demolition (400 Block of N. Johnson Ave.)	Y	N	N
Rubberized Slurry Street Resurfacing 2010 (Various Locations)	Y	N	N
Prescott Promenade Improvements	Y	N	N
Storm Drain Replacement and Lining (Various Locations)	Y	N	N

Public Works inspectors inspect the CIP projects for Storm Water compliance on an as-needed basis. This may be as frequently as weekly, or even daily, but generally no less than twice per month (when the inspectors are on the job for non-storm water related inspections) while the project is active. No CIP project met SUSMP criteria and no project disturbed more than one acre at any given time.

3.8 ENFORCEMENT

In PY3 the City had 9 enforcement actions pertaining to inspection follow-ups or complaints received for construction activities, 2 of which resulted in a monetary administrative citation. The City conducted follow-up inspections for all enforcement actions to verify that proper and complete corrective actions were taken in a timely manner. Corrective actions are needed to fix or improve a BMP even though that BMP may be implemented as written.

Administrative Citations are issued for discharges to the City's storm drain system. Most construction sites implement the minimum BMPs and inspections verified that the BMPs were effective in reducing or eliminating discharges to the storm water conveyance system. A list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3.
Other non-compliance issues, except as described above, were not experienced during PY3, although some deficiencies were noted during construction inspections. Deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions and through citations. All violations and deficiencies were corrected in a timely manner.

None of the violations resulted in threats to the environment or human health and notification to the Regional Board was not required.

3.9 CONSTRUCTION OUTREACH AND EDUCATION

Education of construction contractors and developers is conducted primarily through the permitting and inspection processes. The City's building department has the first contact with contractors and developers when a building permit application is completed. The following steps are taken by Building Division and Public Works/Storm Water staff:

1. Building Permit Application.
2. A Storm Water "Hold" is placed on the property.
3. Developer or contractor is given a Storm Water handout.
4. Discuss with developer or contractor, in detail, minimum BMPs and implementation requirements.
5. Developer or contractor generates an Erosion Control Plan plus any additional storm water requirements as necessary.
6. Review Erosion Control Plan and any additional requirements, comment, direct developer or contractor to make changes prior to approval.
7. Inspect according to priority.
8. Address Corrective Actions.

In PY3, the City reviewed and commented on 10 SUSMP projects, 12 Storm Water Mitigation Plans, no condominium conversion projects and 91 Erosion Control Plans for small projects. The City inspects all completed SUSMP projects to confirm proper installation of storm water controls and review the long-term maintenance plans. Copies of the Construction handouts and an example Erosion Control Plan Checklist for additions and remodels (small projects) are included in Appendix A.3.

Compliance is assessed through inspections by storm water staff or a City contractor. Inspections are completed on a scheduled frequency depending on the season. As mentioned above, during the wet season high priority construction projects are inspected at least monthly or bi-weekly.

3.10 IMPROVEMENTS AND REGULATORY COMMENTS

- Generating improvements increases program efficiencies by harvesting those BMPs that work and discarding those that do not.

Improvements

Improvements to the Construction Component include:

- Road Work – Vacuum any water used; no discharging after filtering allowed.
- All Construction Entrances must have adequate aggregate size (Minimum 2”-3”) or sufficient shaker-plate systems.
- Continue to focus inspection efforts on BMP implementation to facilitate Effectiveness Assessment.
- Continue to use BMP Implementation Inspection Checklist to list minimum required BMPs for construction.
- Continue to include SUSMP projects in the High Priority category.
- Continue to inspect construction of SUSMP projects as High Priority construction.
- Perimeter control – Use silt fence as primary perimeter control.

BMP improvements are needed as follows:

- The City is planning to continue to conduct training sessions with our construction inspectors and other department staff to make sure that reporting and compliance procedures are being followed appropriately.

Regulatory Comment

As of the writing of this report, no regulatory comments have been received for JURMP Annual Report 2008-09.

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SECTION 4 MUNICIPAL COMPONENT

4.1 INTRODUCTION TO MUNICIPAL FACILITY ACTIVITIES

As required by Section 4 of the Municipal Permit, existing municipal facilities must prevent or reduce pollutants in urban runoff by implementing a City-designed program to address specific outdoor activities that have the potential to impact water quality. Municipal facilities include streets, public parking lots, flood control devices, parks/recreation, administration and other public buildings, maintenance and storage areas, police, and fire/safety stations. Activities at any one of these facilities may have the potential for discharging pollutants as urban runoff or during a rain event. The Municipal Component of the JURMP defines a comprehensive program to reduce the potential for polluted discharges through:

- Pollution Prevention activities,
- Best Management Practice (BMP) implementation,
- Storm Water Inspections, and
- Recycling

Homeless

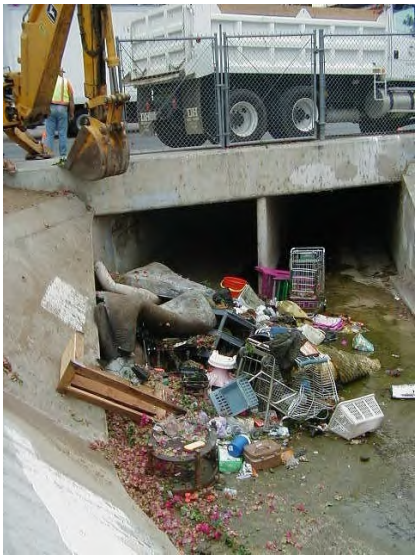

Of specific note are the Homeless that are not only a social problem, but become an uncontrollable water quality problem. Homeless encampments exist in storm water channels because of easy access and good outdoor weather conditions nearly year round. Although prevalent in the storm drain channels, the homeless are difficult to detect in the underground storm drain system comprised of reinforced concrete boxes and even more difficult to permanently remove. Detection is conducted through weekly/monthly inspections of popular entry places and complaints to the Storm Water Complaint Hotline. Removal is accomplished through police enforcement and the homeless have an option for other housing with the City's new interim housing project. The City cleans all of its channels at least twice annually and encampments are removed at that time, however, the encampments are often re-established once the channel maintenance in that area is finished.

The photograph above emphasizes the enormous amount of materials associated with homeless encampments in the storm drain channel. Other than the visible pollutants of trash and debris, there are also the less collectable, non-visible pollutants from human waste.

The list of major pollutants associated with the homeless living in these underground flood control devices are:

- trash, (a monitored pollutant for East County)
- debris, and
- fecal coliform (a listed 303(d) pollutant for Forester Creek).

Our dry weather-monitoring program is designed to capture information on the homeless and track elevated levels of fecal coliform. During PY3, D-Max Engineering undertook an investigation of fecal coliform and other constituents in the El-Cajon-area watershed. Results of the investigation were inconclusive, but did provide great insight into tracking bacteria in dry weather runoff. Specifics can be found in Section 7 of the Annual Report and Appendix A.7 of this Annual Report. The City will continue its efforts to reduce or eliminate the impacts caused by the homeless encampments within storm drain channels.

As in past years, Storm Water staff and City Maintenance crews teamed with Community Police and Interim Housing (a joint venture between Hammon Properties and Shadow Mountain Church) to move inhabitants into temporary housing, followed by clean up of storm drain channels. For those homeless willing to improve their situation, the Interim Housing group provides a “Hand Up” rather than a hand out. Those who wish to continue living in the City’s storm drain system are detained, but eventually find new living places on the street. A County-wide, long-term solution to the homeless is not yet definable for storm water.

4.1.1 Prevention of Polluted Runoff

Anytime pollution is prevented from entering the storm drain system, less pollution must be managed at end-of-pipe. The following prevention activities and corresponding BMPs are fully implemented at one or more of the many municipal facilities located within the City. As noted in Introductory Section, the focus of PY3 is continued BMP implementation such that prevention of polluted runoff is achieved to the Maximum Extent Practicable (MEP). The primary pollutants of concern for this prevention effort are the 303(d) impairments of Forester Creek that include pH, total dissolved solids (TDS) as nitrates; and fecal coliforms. The only impairment associated with the City of El Cajon or the upper section of Forrester Creek is pH. Further discussion of pH origin and any corrective actions are presented at the end of this section. Trash and debris is a specific issue being addressed as part of a watershed effort with the City of Santee.

When pollution is prevented from entering the storm drain system, it is either collected or eliminated. Collection requires management of gathered wastes, while elimination is true prevention, but much more difficult to accomplish. The following municipal activities encompass collection and elimination activities.

1. Erosion and sediment control prevents soils and sediments from washing away during rain events. BMPs implemented for City Improvement Projects to control erosion and sediment during project activities are as follows:

- Preservation of existing vegetation
- Scheduling of projects
- Seeding and planting of native plants and trees that are draught resistant and do not contribute to discharges of vegetative matter to the City's MS4.
- Establish plant ground cover before removing erosion or sediment controls.

2. Roadway and street maintenance activities preserve these facilities for a longer, useful existence. Many maintenance activities keep pollutants from entering the storm drain system. Listed below are the maintenance activities with the gross amounts of pollutants collected. Pollution removed equates to preventing polluted runoff that could be transported in urban runoff or storm water discharges.

- Street sweeping and cleaning – Swept 17,250 miles of curbed streets and removed 3,611 cubic yards of materials that were disposed as solid waste. There are a total of 337 curb-miles of streets and a total of 483 lane-miles withinin the City. As stated in greater detail in the JURMP, some areas are swept on a more frequent basis. By collecting 3,611 cubic yards of trash, debris, and sediment, these pollutants did not enter the storm drain system and did not further impair Forrester Creek.
- Collected 43 cubic yards from spills and other miscellaneous operations
- Completed 66 special sweeps at the request of citizens or City staff, collecting 35 cubic yards of material. This is a higher number of special sweeps, collecting more material than collected during PY2 (i.e., 58 special sweeps and 31 cubic yards).

3. Municipal vehicle maintenance facilities provide a valuable service in keeping the City's vehicles in top running condition. Maintenance activities are conducted in a manner to keep pollutants from entering the storm drain system. Listed below are the activities and their designated areas.

- Conduct vehicle maintenance indoors or under canopies
- Area designated for washing vehicles is covered and wash water drains to an oil/water separator before discharging to the sanitary sewer
- Area designated for rinsing street sweepers directly discharges to the sanitary sewer
- Recycling motor fluids (oil and antifreeze), tires, batteries, and metal

4. Landscaping maintenance activities beautify our parks, recreation, and administration buildings. Pollution prevention maintenance activities include:

- Collection of grass clippings and discarded as solid waste
- Sweep or blow residual clippings onto turf areas
- Clean City-owned patio and plaza areas using a machine that contains the cleaning liquids.
- Aerate soil frequently to encourage rain penetration and infiltration
- Maintain an Integrated Pesticide Management (IPM) program

5. Maintenance Procedures for MS4s includes inspecting and maintaining MS4 by cleaning, removing sediment, debris and vegetation; repairing or replacing damaged and failing structures; and stenciling/posting signs at storm water inlets and conveyance systems. Approximately 1,713 cubic yards were collected during PY3. Maintenance crews responded to 77 requests by city staff and citizens to maintain the storm drain system. A work survey request (WSR) is completed for each of the requests and filed at the Maintenance Yard on Vernon Way.

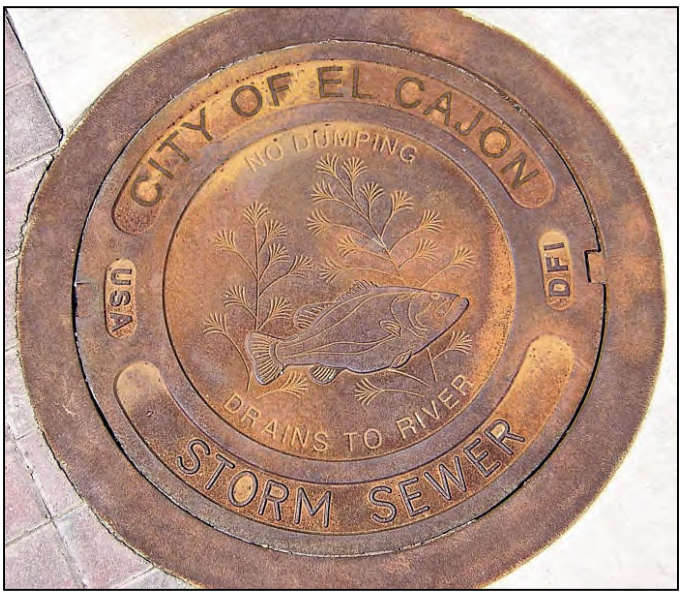

- Storm Drain Inlet/ Catch Basin cleaning
- Storm Drain system repair and maintenance

6. Building Maintenance activities at Municipal facilities prevent pollution by collecting debris, dirt, and organic materials before rain events transport this material to the storm drain system. Wash water is disposed into the sanitary sewer and dry methods are used to collect materials to dispose as solid waste. The following are completed on a weekly schedule:

- Sweep and clean parking lots
- Clean sidewalks
- Sweep and clean entry ways
- Control irrigation runoff and over-spray

7. A Sewer Maintenance program assists in preventing sanitary sewer spills and prevents sewage from entering the storm drain system using the following plans and BMPs:

- Identify and respond to overflow spills and leaks
- Contain and properly dispose of spilled sewage for public and private sewer overflows

- Repair damaged and leaking public sewer lines
- Identify potential problem areas, such as sewer lines in isolated, hard-to-access canyons, or sewer lines at end-of-life condition, for inclusion in annual Capital Improvement Projects
- TV inspection of sewer main lines
- Annual cleaning of main sewer lines
- Quarterly (3-month) cleaning of sewer siphons, trouble spots and problem manholes
- Quarterly (3-month) rodding and descaling of problem sewer lines
- Cleaning and inspection of trunk and outfall sewer mains as part of the preventive and predictive program.

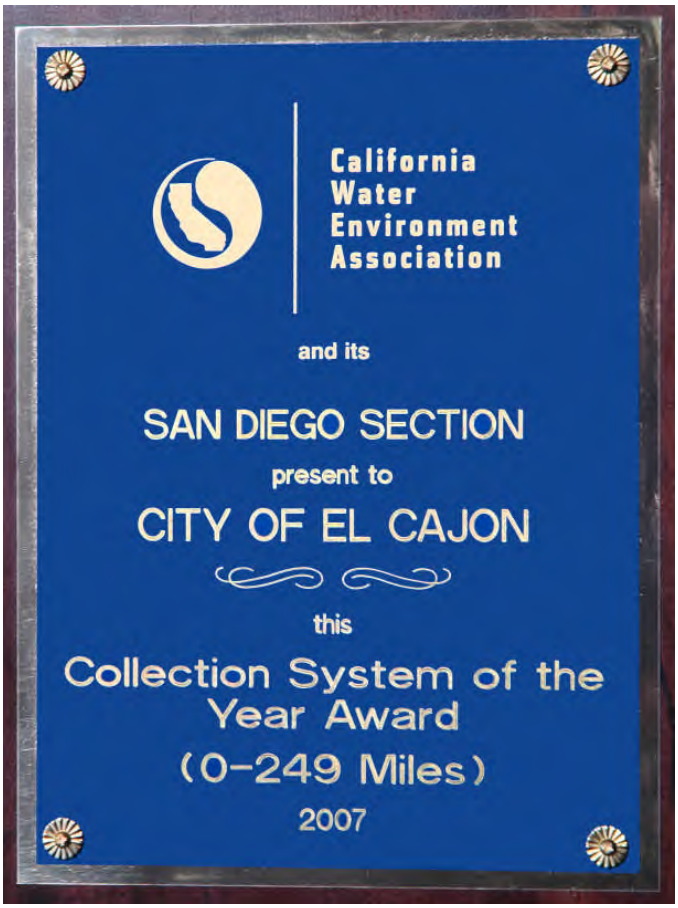

During PY3, the City cleaned 155.6 miles of sanitary sewer main line, while experiencing no public sanitary sewer overflows. The City also responded to 10 private lateral sewage spills and recovered 274 gallons of sewage for disposal to public sewer.

During PY1 (2007-2008), the City of El Cajon received the **Sewage Collection System of the Year Award** for collection systems under 250 miles in length by the **California Water Environment Association (CWEA)**. The award represents professional acknowledgement of decades of superior maintenance of the El Cajon Municipal Sewer System by many City workers. The City will continue to clean and maintain the Municipal Sewer to these standards.

4.1.2 Roads, Streets, Highways, & Bridges

The following are major City accomplishments during PY3 for roads, streets, highways, and bridges:

- Used the recently installed permanent wash rack for street sweepers to allow more time for cleaning equipment.
- Followed a strict preventive maintenance schedule for the new Elgin Crosswind street sweepers.
- Swept Downtown District twice per week.
- Swept non-Downtown Business and Commercial areas once per week
- Swept Residential areas and medians twice per month

Table 1 Summary of Street Sweeping Maintenance by Zone

Description	Silt (Yds)	Organic (Yds)	Trash (Yds)	Total (Yds)	Miles
Residential Streets	850	881	462	2193	9487
Residential Percentages	56.00%	61.00%	71.00%	63.00%	55%
Commercial Industrial Streets	667	563	189	1419	7763
Commercial Industrial Percentages	44.00%	39.00%	29.00%	37.00%	45%
Category Totals	1517	1444	650	3611	17250
Total Percentages	100.00%	100.00%	100.00%	100.00%	100%

City Maintenance crews collected a total of 3611 cubic yards of material from street sweeping. Table 1, and figures 1 and 2 show the distribution of material by type, cubic yard amounts, and percentages for materials. Total cubic yards of materials increased in PY3 as the City continues to increase the use of the Elgin Crosswind street sweepers. The total volume of trash, silt and organic material decreased, compared with PY2. Figure 2, below provides a summary chart for relative volumes and Figure 3 provides a comparison to amounts collected in previous years.

Figure 1

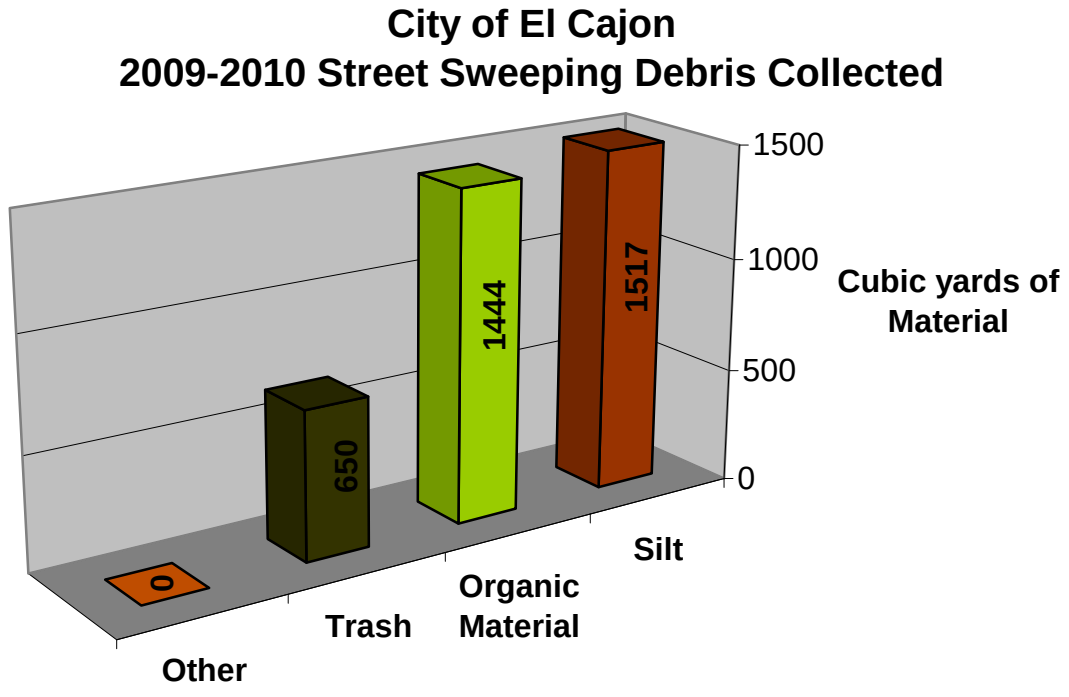

Comparing the percentages of materials collected in the streets with those from the channels, it is worth noting that about 250% more trash is collected in the street sweeping operations (490 cubic yards) than is recovered in channel cleaning operations (189 cubic yards). This difference may be due to the types of trash. The elimination of trash is best addressed at the source or generator. For the City of El Cajon, street trash is typically generated in highly commercialized areas that include restaurants, convenient stores, and department-like stores. Continuing as a major priority into the next Permit Year will be an ongoing effort to keep the downtown areas trash-free and street-clean. These prevention efforts are a partnering effort with the El Cajon Community Development Corporation (ECCDC) and businesses in the downtown area.

Currently, ECCDC hires the St. Madaline Sophies students to pick up trash and cigarette butts in the downtown area. During PY3, the ECCDC and storm water staff organized community functions to increase public awareness and improve downtown areas. "Lend a Hand" days were scheduled throughout PY3.

Figure 2

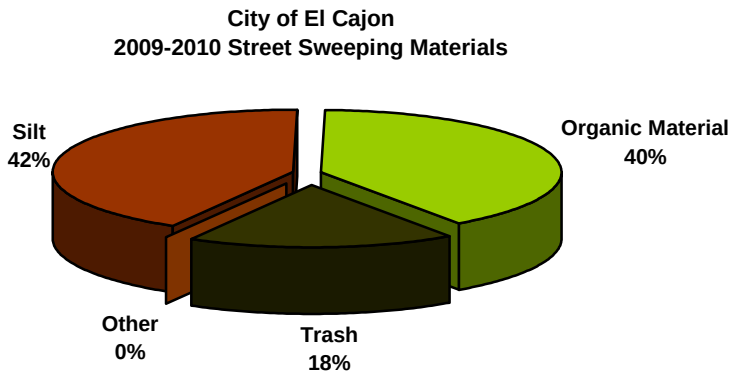

Figure 3

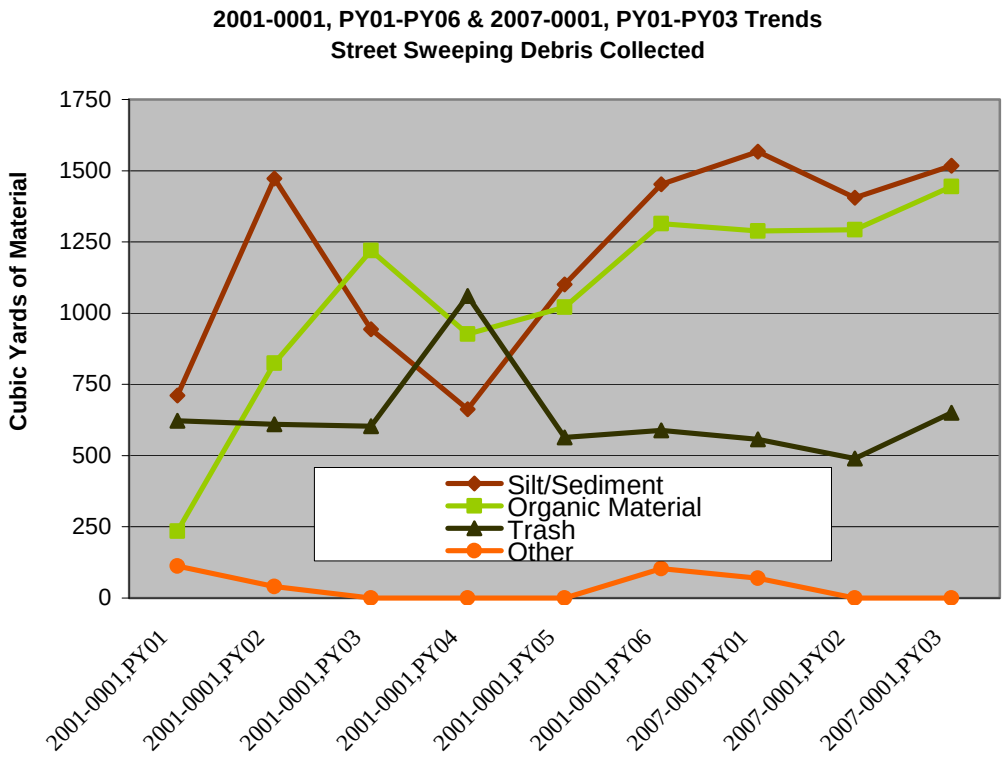

4.1.3 MS4 Maintenance

The City's Municipal Separate Storm Sewer System (MS4) is comprised of 53.0 miles of storm drains, inlets and catch basins, and 23.7 miles of open channels and culverts. The MS4 System functions to collect and convey surface runoff. Maintenance of this system is necessary for continuous transport of rainwater to prevent flooding and to drain urban flows away from populated areas and prevent flooding.

Figure 4

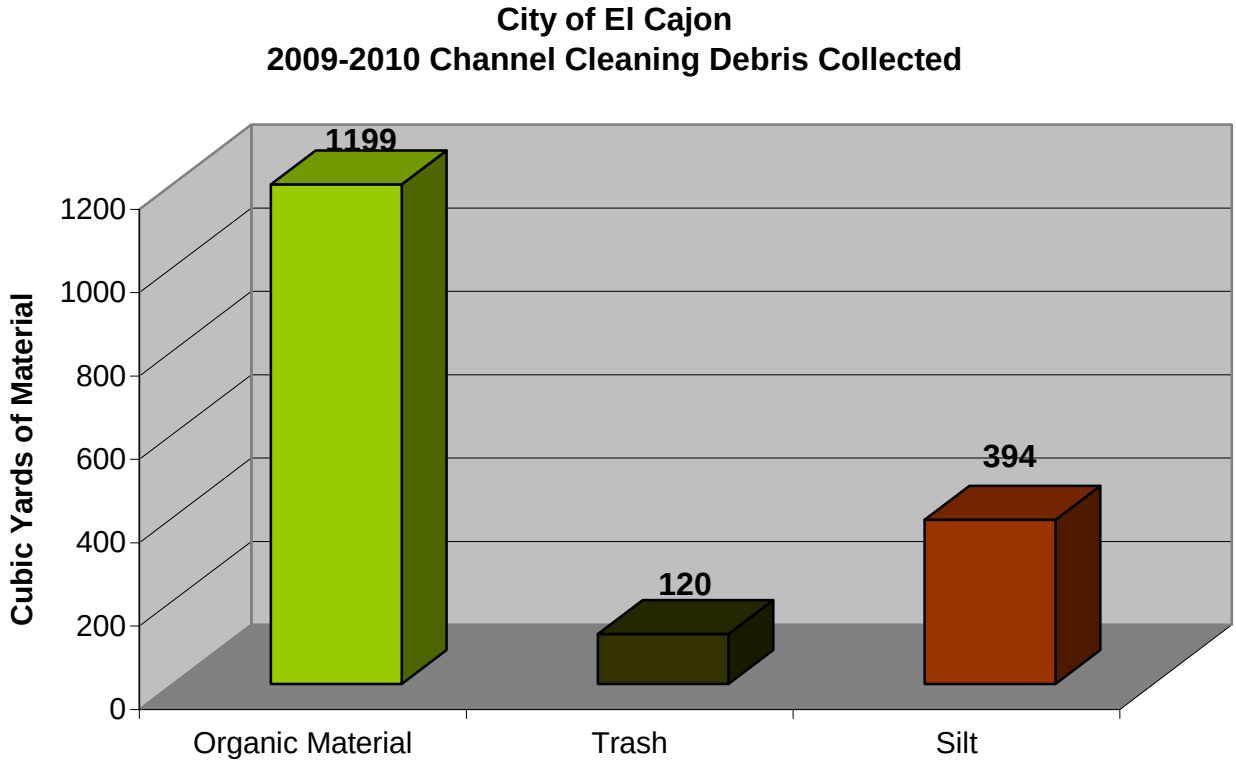

Work Service Requests (WSRs) document maintenance activities on the storm drain and open channel system. For PY3, 77 WSRs were completed for both emergency and non-emergency repairs/maintenance to the MS4. WSRs cover any type of needed maintenance and are available to all contacting our Municipal Maintenance Yard, located at 1050 Vernon Way, El Cajon.

The City's MS4 includes:

- Streets
- Gutters
- Storm Drain Inlets/ Catch Basins
- Underground pipes
- Culverts
- Rock-lined channels
- Concrete channels
- Unlined Creeks

City maintenance crews inspect all open channels once a month and perform a complete cleaning at least once each year. Storm drain inlets and pipes are inspected at least once each year and cleaned as necessary. Table 2 summarizes the number of miles of

channels and culverts inspected, together with a separate summary for drain inlets and pipes. We are in the process of converting from a years-old paper map inventory of the MS4, to a GIS-centric inventory. The GIS conversion is in transitional state where we are endeavoring to make our summary of MS4 inspection and cleaning more complete. Although we are currently maintaining our storm drain and channel system as directed in the Municipal Storm Water Permit, it is anticipated that future annual report will include additional detail in the MS4 maintenance summary as our maps become more complete. Implementation of the JURMP Municipal Component in PY3 resulted in:

- Trash/debris removal from storm drain conveyance system (defined above) completed annually as specified in the JURMP. Total removed is 1,713 cubic yards. For types of pollutants removed see Figure 4.
- Maintained 87 storm drain inlet filters located in the public right of way.
- Met JURMP requirements by cleaning catch basins, culverts, and concrete channels once for PY3 in the major channels and once for the minor channels. The Conservation Corps completes the cleaning for Hunter's Run, the open channel at Avocado and Pauline, and Cypress Channel.
- Flow line vegetation maintenance completed one time during PY3 (tree maintenance along major channels and median maintenance).
- Cleaning of Homeless waste and trash completed nine times during PY3.

Table 2 Summary of MS4 Inspection and Cleaning Activities

Drainage Structure Type	Number Miles Inspected	Number Miles Cleaned	Number Miles > 30% Full
Open Drainage Channels	283.92	17.50	0
Drainage Structure Type	Number Inlets Inspected	Number Inlets Cleaned	Number Inlets > 30% Full
MS4 Inlets/Catch Basins	2719	490	0
Drainage Structure Type	Number Miles Inspected	Number Miles Cleaned	Number Miles > 30% Full
MS4 Pipes and Culverts	53.01	6.16	0

4.1.4 Sanitary Sewer System

Continuity and consistency describes the City annual cleaning and maintenance of the sanitary sewer system. Few blockage conditions occur or reoccur when crews adhere to the normal maintenance routine. The El Cajon sewage collection system, consisting of nearly 195 miles of municipally owned sewer mains, is a transportation-only utility with the sewage treated at the Metro Wastewater Treatment Plant in Point Loma, San Diego. El Cajon's outfall sewer main transports sewage from the City, Wintergardens Sewer District, and Padre Dam/Lakeside/Alpine Sewer District.

The City of El Cajon has an aggressive maintenance program to prevent sewer overflows. An important maintenance goal is to flush and maintain the entire system at least once every 18 months which requires the flushing of 148 miles of sewer main each year. For PY3, maintenance crews cleaned 155.6 miles of sewer line in 12 months. Difficult areas, where solids and grease accumulate, or root intrusion is a problem, are on a more aggressive schedule of flushing and rodding every 3 months. A Summary of Sewer Operations and Maintenance Procedures is included as Appendix D.1. A complete summary of scheduled Municipal Sewer System Maintenance is included as Appendix D.2.

New-Generation Sewer Vactor Truck

An indispensable tool in preventing sewer blockages and overflows

As part of the aggressive preventive maintenance program, the City televises sewer mains when:

- A new sewer tap is installed
- New difficult areas are suspected
- Determining the type of maintenance or repair needed

Interior of Sewer Main Televising Van

There were no public sewer overflows from City-owned sewers for PY3. Sewer system activities and discharges are reported annually to the San Diego Regional Water Quality Control Board and the California Integrated Water Quality System (CIWQS), among others. In April of 2003, the City internally started tracking reported overflows from private sewer laterals, where homeowners or businesses require immediate system repair. Response to the private sewer overflow includes reimbursing the City for any storm drain cleanup costs due to the overflow into the public right-of-way.

For PY3, 10 private sewer spills were reported or detected by municipal staff. In all, 274 gallons of sewage liquids were recovered and disposed of in the municipal sanitary sewer. With private sewer spills, municipal crews estimate how long the spill was active and document an estimated number of unrecoverable gallons.

4.1.5 Corporate Yard

The City of El Cajon has one Corporate Yard located at 1050 Vernon Way. Four separate Public Works Divisions are located at this facility, as follows:

- Public Works Maintenance Division - coordinates maintenance for streets, storm drains, drainage channels and public sewers;
- Facility Maintenance Division – maintains City buildings and related facilities;
- Fleet Maintenance Division – maintains City vehicles, and
- City Parks Division – maintains City parks, median, landscapes and urban forest.

It takes coordination and collaboration for these crews to work in the public interest maintaining and improving the health, safety, convenience and quality of life for the City's citizens and visitors.

The Maintenance Division of Public Works maintains the city's infrastructure. Fleet and Facilities Management is part of Administrative Services and maintains the City's buildings, vehicles and equipment. The Parks Department controls and maintains parks, recreational areas, and other City-owned landscaped areas.

Annual inspections of each area is completed and corrective actions discussed with Department Management. An annual inspection was completed during June of 2010. Improvements at the Corporate Yard include:

New Vacuum Technology in Street Sweeping

Cleaning the Elgin Crosswind Sweeper in the City Wash-down Facility.

- New (Additional) Street Sweeper Wash-Down Area is now in service.
- Monthly visual inspections are conducted.
- Secondary containment is in place at all storage areas.
- Berms are in place around the wash and waste discharge areas.
- Employees are trained on storm water issues, dealing with the homeless, pesticide training, and managing hazardous materials.

The annual inspection of the Corporate Yard uncovered a few needed Corrective Actions as follows:

- Maintain recordkeeping for training and inspections as defined in the Corporate Yard SWPPP.
- Post and update procedures on use of Spill Kits.

The sample of the Checklist for Municipal Site Inspection is contained in Appendix A.4.

4.1.6 Municipal Airfield

Gillespie Field, located at 1720 Joe Crosson Drive, is the local airfield and governed by the San Diego County Airport Authority and the Federal Aviation Administration. The City of El Cajon inspects this facility for compliance with the Municipal Permit as well as the General Industrial Permit. Some of the new BMPs include:

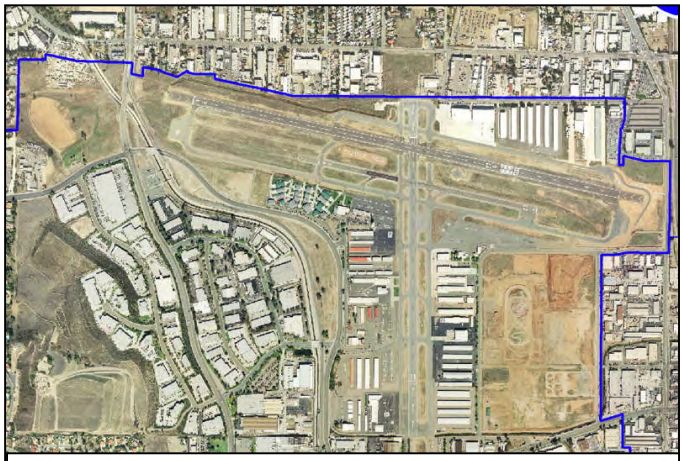

Gillespie Field - A County Airport Facility

- Wash racks with discharges hooked to the sanitary sewer. Use of manually adjusted shut-off valves eliminating flows to the sanitary sewer during rain events.
- Spill kits are in place throughout the airport.

4.1.7 Parks and Recreation

The Parks Division maintains, improves, protects, and develops the City's parks, landscaped median islands, public building grounds, and the urban forest for the benefit and enjoyment of the community. Maintenance of these nearly 120 acres is overseen by a well-trained, full-time staff that performs any necessary maintenance on a daily basis. Attractive public open spaces and well-maintained parks help to make El Cajon a better place to live, and encourages civic pride. Staff continually strives to promote a Cleaner Community through maintaining a Healthy Watershed while providing the community the highest quality and level of service possible.

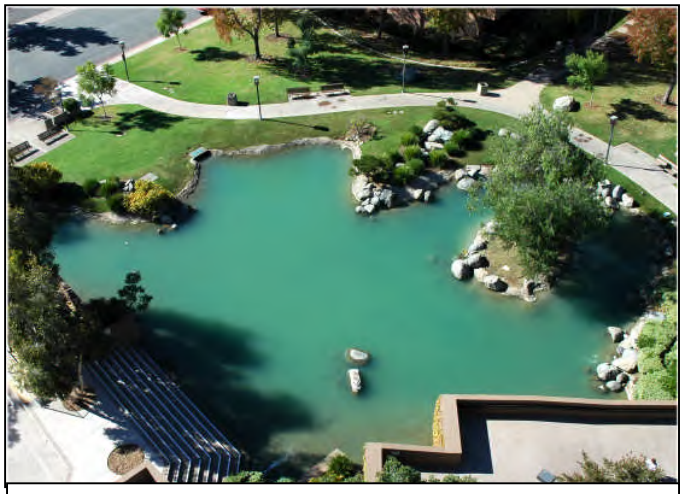

A City-Maintained Park Area Near City Hall

Parks and Recreation areas prevent pollutants from entering the storm drain system, by implementing BMPs such as:

- Providing Pet Waste Bags at Dog Park located at Wells Park
- Blowing organic cuttings and sediment onto grass and disposing collected wastes properly
- Use of mop and buckets to clean up after special City events (e.g., Cajon Classic Car Show and Concerts on the Green)
- Requiring Qualified Applicator Certificates and 20 hours of training for the safe and effective use of pesticides.

- Requiring Contractors that steam-clean or power-wash to capture, collect, and contain wash liquids, then dispose into the sanitary sewer.

4.2 MUNICIPAL BMPS

The City has developed a list of minimum BMPs for Municipal crews to use while maintaining the following categories of municipal-owned and managed facilities. Not counting streets, alleys, storm drain or sewer easements, there are 31 separate municipally maintained facilities within the City. Overall, the categories of Municipal facilities are as follows:

- Roads, Streets, Parking Facilities
- The Multiple Separate Storm Sewer System (MS4)
- Corporate Yard
- Municipal Buildings, Parks, Recreational Facilities, and Landscaping

Each minimum required BMP is connected in some way to a primary pollutant that is reduced or eliminated to the maximum extent practicable (MEP) when that BMP is implemented as written. Table 3 lists the Municipal BMPs that may be applied to municipal activities and areas, the primary pollutant(s) either reduced or eliminated and the 303(d) pollutant that may also be prevented. Not all BMPs listed in Table 3 are required for the 31 Municipally-operated areas.

Table 4 lists the four major municipal areas with their minimum required BMPs and whether they were implemented. An “X” for the BMP indicates the BMP is required.

Inspections complete the BMP cycle by:

- Confirming proper BMP Implementation (present as written in the California BMP Handbooks or by City of El Cajon Storm Water Staff)
- Verifying that the BMPs are maintained (during inspection) (See Table 4 in Section 4.2.1 for inspection results)

This Annual Report takes an important step in connecting activities, BMPs, and pollutant reduction to support the Assessment of JURMP Effectiveness contained in Section 11. The connection is shown by the following diagram.

Table 3 BMPs to Pollutants for Municipal BMPs

BMP	Application	Primary Pollutant Reduced or Eliminated	303(d) Pollutant Reduced
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies	pH; TDS; Fecal Coliform
Spill Prevention Control and Cleanup – SC11	Addresses spills	Varies	pH; TDS; Fecal Coliform
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	Oil & Grease Metals	-
Loading/Unloading – SC30	Controls the loading and unloading of materials	Varies Trash	-
Liquid Container Storage – SC31	Controls discharges from outdoor liquid containers	Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials	Pesticides Fertilizers	-
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris	TDS
Parking Lot and Storage Maintenance – SC43	Addresses sweeping and general maintenance of parking lots	Trash/debris Sediment	-
Drainage System Maintenance – SC44	Requires routine cleaning of the storm drain system	Trash/debris Sediment	-
Employee Training	Requires employees be trained in specific topics	Trash/debris	-
Storm Drain System Signage	Requires signs at storm drains or receiving waters	Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance	Requires routine maintenance of the sewer lateral	Fecal Coliform	Fecal Coliform TDS
Over-watering of Landscape	Requires overspray and over watering to be eliminated	Nitrates	TDS

"-" indicates no impact, positive or negative, to the Forrester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

4.2.1 Municipal Site BMP Implementation and Verification

As defined in the JURMP, five of the 31 Municipal-maintained areas are considered high priority due to their location, size, and/or potential to impact water quality. This includes the Civic Center-City Hall Plaza complex, Fire Station No. 9, Parks Storage Garage, Public Works Maintenance Division Office, and the Vehicle Maintenance Facility. These five are inspected annually. Annual inspections of high priority municipal areas are conducted to verify implementation of minimum required BMPs. Table 4 lists the minimum required BMPs and Municipal Functions. An "X" under the minimum required BMP indicates the BMP is:

- A minimum Requirement
- Implemented per written or required specification
- Verified during inspection

Table 4: Required & Implemented BMPs for Municipally-Maintained Areas

MUNICIPALLY-MAINTAINED AREAS				
	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Non-Storm-Water Discharges - SC10	X	X	X	X
Spill Prev/Contl/ Clean - SC11	X	X	X	X
Vehicle & Equipment Fueling - SC20				
Vehicle & Equipment Cleaning - SC21			X	
Vehicle & Equipment Repair - SC22			X	
Loading /Unloading - SC30			X	X
Liquid Container Storage - SC31				X
Raw Materials Storage – SC32	X		X	
Equip Operations - SC33			X	

MUNICIPALLY-MAINTAINED AREAS				
	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Building Repair/ Construction - SC42				X
Parking/Storage Maintenance - SC43			X	X
Drainage System Maintenance - SC44	X	X	X	X
Employee Training - City of El Cajon	X	X	X	X
Storm Drain System Signage - City of El Cajon	X	X	X	X
Public Participation and Education			X	X
Street Sweeping - City of El Cajon	X		X	
Vegetation Controls - City of El Cajon				X
Preservation of Existing Vegetation - City of El Cajon				X

MUNICIPALLY-MAINTAINED AREAS				
Waste Handling/ Disposal - SC34		X	X	X
Safer/Alternative Products - SC35			X	X
Contam/Erod Areas - SC40			X	X
Building/Grounds Maintenance - SC41			X	X

MUNICIPALLY-MAINTAINED AREAS				
Seeding and Planting - City of El Cajon				X
Mulching - City of El Cajon				X
Over-water Activities - City of El Cajon				X

X = Minimum Requirements

4.2.2 Implementation Analysis and Further Assessment

Table 5 summarizes the implemented BMPs for the five high priority Municipal Facilities where formal inspection and BMP usage was verified. It is important to note that no illegal discharges or spills were reported for any of the 31 City-owned or maintained areas.

Table 5 Percent BMP Implemented

BMP	Percent Implemented	Pollutant Prevented
Non-SW Discharge	100	Various: Fecal Coliform
Spill Prevention/Control/Cleanup	100	Various
V&E Cleaning	100	Metals
V&E Repair	100	Oil & Grease
Loading/unloading	100	Various
Liquid Container Storage	100	Oil & Grease
Raw Materials Storage	100	Pesticides
Equipment Operations	100	Oil & Grease
Waste Handling/Disposal	100	Bacteria
Safer/Alternative Products	100	Pesticides
Contaminated/Erodible Areas	100	Sediment
Building/Grounds Maintenance	100	Trash, Debris
Building Repair/Construction	100	Metals
Parking/Storage Maintenance	100	Oil & Grease, Trash, Debris
Drainage System Maintenance	100	Sediment, Trash, Debris
Employee Training	100	All
Public Participation and Education	100	Trash, Debris
Street Sweeping	100	Sediment, Trash, Debris
Sewer System Maintenance	100	Fecal Coliform
Vegetation Controls	100	Sediment
Preservation of Existing Vegetation	100	Sediment
Seeding and Planting	100	Sediment
Mulching	100	Sediment
Over-watering Activities	97	TDS (Nitrate)

(Highlighted – 303(d) listed pollutants)

The City Hall complex has an ever-existing issue with irrigation over spray and broken sprinkler lines due to large public visitor population and the homeless. Problems are fixed immediately, although never eliminated

The above information is used in Section 11 to support an Effectiveness Assessment of the Municipal Component and further define areas where improvements can be made.

4.3 PESTICIDE, HERBICIDE, AND FERTILIZER MANAGEMENT

4.3.1 Pesticide Regulatory Program – Integrated Pest Management

The City has adopted a Pesticide, Herbicide, and Fertilizer Management program as follows:

- Maintain a running inventory of pesticides, herbicides, and fertilizers,
- Implement a schedule for application of pesticides, herbicides, and fertilizers,
- Use an Integrated Pesticide Management (IPM) approach,
- Track use of pesticides, herbicides, and fertilizers,
- Train or license (Qualified Applicator Certificate) City personnel who apply pesticides, and
- Continuously train City personnel on BMPs.

The City maintains 120 acres, including landscaped medians, parkway trees, parks and public grounds and performs scheduled maintenance of all areas on a daily basis. Weed control is conducted along public streets and along storm water channels. Crews use concentrated pesticides and herbicides, both solid and liquid, as follows: Pre-emergent (Pre-E) at 1395 pounds, 3.7 gallons; Post-Emergent at 5.4 grams., 123.3 gallons (including Roundup); Contact Chemicals at 75 lbs.; and Pool Chemicals (chlorine and muriatic acid) at 55 lbs., 5,314 gallons.

To maintain the City's Park and Recreation areas, 17,000 lbs. of fertilizer were used on turf and landscape during the active growing seasons (Spring, Summer and Fall). Fertilizer applications consisted of polymer coasted slow release fertilizer. No fertilizers are applied when a rain event is pending. All fertilizers are applied using professionally trained City personnel utilizing BMPs. Applications are documented with fertilizer use reports.

4.4 MUNICIPAL STAFF TRAINING, SPECIAL EVENTS AND NOTABLE ACTIONS

New hires for City municipal staff receive New Employee Orientation Training that includes a module on storm water quality issues and concerns. In PY3 all Public Works, Parks Division and Facilities Maintenance personnel attended storm water training sessions conducted during September and October of 2009.

Figure 6

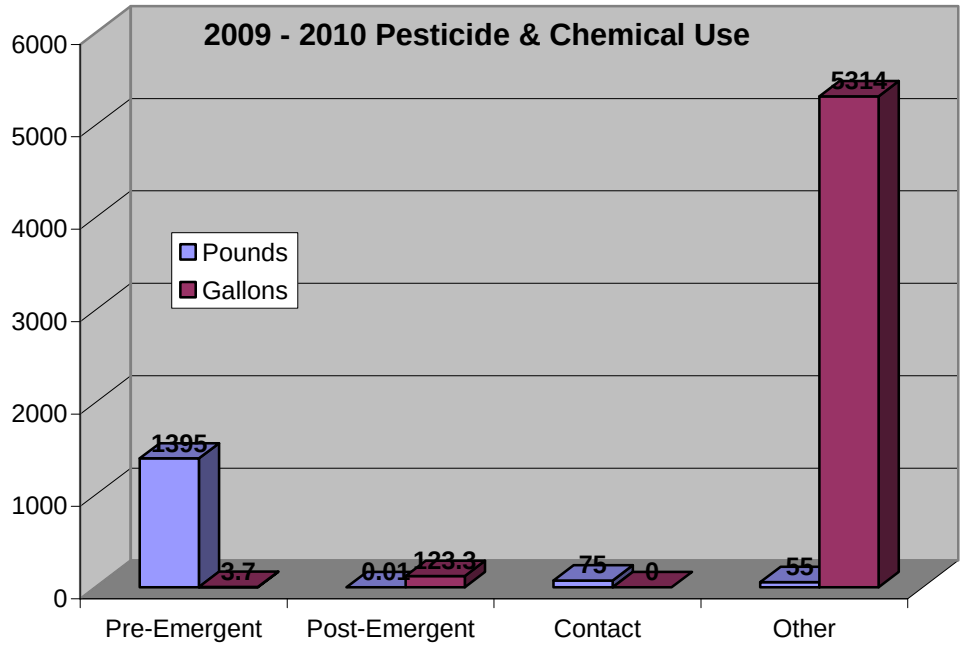

NATIONAL PUBLIC WORKS WEEK

Public Works Week emphasizes the importance of Street Maintenance, Sanitary Sewer and Storm Water system flushing, and other Emergency and Non-Emergency Services provided by Public Works Maintenance and Operations crews. Public Works Week highlights the equipment used to complete these tasks. In PY3, Public Works was celebrated during the week of May 16, 2010. The public, including students from nearby schools, were invited to view equipment and speak with Public Works crewmembers.

TRASH FENCE

The City of El Cajon is the first major jurisdiction within Forrester Creek watershed. Consequently, pollutants and trash that enter the storm drain system are carried downstream to the City of Santee where the Creek has not been improved. In response to the City of Santee's Forrester Creek Restoration Project, the City of El Cajon completed a bid and initial scouting for the placement of a trash and debris fence. The trash fence must be able to withstand forces from flows reaching 22 feet per second and hold heavier floating debris. Installation was

accomplished in the fall of 2005 and the trash fence has been in service since. The picture to the right shows trash and debris captured by the fence during a rainfall event.

Forrester Creek Trash Fence

WEB PAGE

The City of El Cajon added new content to a Storm Water Web Page that is part of the El Cajon, Municipal Web Site. The Hotline for the City and County plus reports, brochures, and guidance documents can be accessed from Portable Document Format files (PDF files) on the web site.

4.5 IMPROVEMENTS AND REGULATORY COMMENTS

The following are the major improvements completed for PY3.

- Comprehensively updated the El Cajon Sewer Ordinance to give the City legal authority to enforce the wastewater discharge requirements of ***Regional Water Quality control Board Order No. R9-2007-0005.*** **For a complete summary of this Ordinance update, refer to Appendix D.3.** For a complete copy of the new Sewer Ordinance, refer to Appendix D.4.
- Continued the improvement and functionality of the trash and debris fence for Forrester Creek, located upstream from Gillespie Field.
- Reviewed Storm Water Program for Capital Improvement Projects.
- Continued implementation of GIS to assist with maintenance of storm drain systems and the sanitary sewer system.
- Continued implemention of program for monthly self-inspection of Municipal Facilities and Operations.
- Continued to conduct maintenance of the existing storm drain inlet filters.
- Continued development of specific environmental indicators for accurate measurement of Urban Runoff Program effectiveness.
- Established defined measurements and actions to address watershed requirements and develop watershed management procedures.

No regulatory comments were received for the Municipal Component of the JURMP for PY2.

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SECTION 5 INDUSTRIAL & COMMERCIAL COMPONENT

5.1 INTRODUCTION

Industrial

The Industrial Component continued on its track of evaluating the implementation of Best Management Practices (BMPs). The component was originally revised at the end of 2004, adjusting the program to a BMP implementation and verification task and continued with the revision of the JURMP in 2008. Industrial inspections are the focus of the City's Industrial Component with the goal to verify the presence, proper implementation, and maintenance of BMPs. During the inspections, the City also checks that facilities have filed a Notice of Intent and has a Storm Water Pollution Prevention Plan pursuant to the General Industrial Permit, if required.

Proper implementation and maintenance of appropriate BMPs at industrial facilities will eliminate or reduce the discharge of pollutants from an Industrial site and prevent pollutants from entering the City's storm drain system. The City redesigned the inspection sheet to emphasize the use of BMPs for specific, potential pollutant producing activities. Industrial activities either have the potential to affect storm water runoff or have no direct or apparent affect. Industrial operations conducted in a manner that prevents the discharge of pollutants or pollutant contact with storm water should not have any impact on water quality. The City's focus is on identifying those industrial activities that have an actual or potential impact on water quality, requiring implementation of appropriate BMPs and periodic inspections of industrial facilities to verify compliance with City, state and federal water quality requirements.

Outdoor industrial activities have the greatest potential to impact receiving waters through outdoor storage, loading/unloading, fueling areas, vehicle/equipment maintenance, solid/hazardous waste storage, and parking lot runoff. A Storm Water Quality Inspection Form for Industrial-Commercial Facilities to document routine, follow-up, and compliance inspections is provided in Appendix A.5.

Commercial

Commercial facilities are those facilities that are designated by the County or by the City as a commercial facility with activities that may potentially affect the quality of receiving waters. In previous years, the City identified commercial facilities within its jurisdictional boundaries, and has categorized different commercial types for education, inspection and follow-up as

After the *Framework for BMP Implementation* was completed in October 2003, the Commercial Component was restructured into a BMP implementation program similar to other Existing Development (Municipal, Industrial, and Residential). Implementation, verified during onsite inspections, determines whether a BMP is either fully implemented or requires Corrective Action. A fully implemented BMP is counted towards preventing, eliminating, or reducing pollution discharged to the maximum extent practicable (MEP).

5.2 STATIONARY IND. & COMMERCIAL SALES/SOURCES/EQUIPMENT

5.2.1 Background

In 2002, the City developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01. As part of this program, the City was required to conduct industrial and commercial storm water compliance inspections to assess the implementation of the minimum best management practices (BMPs) required in the industrial and commercial section of the JURMP. On January 24, 2007, the updated Municipal Permit, Order No. R9-2007-0001 was adopted. This new Municipal Permit required each Copermittee, including the City, to update its JURMP document, including the industrial and commercial component, to comply with the new requirements.

The requirements of the new Municipal Permit went into effect in March 2008. The new Municipal Permit requires that all high Treat to Water Quality (TTWQ) sites be inspected after the year of implementation, the City of El Cajon chose to inspect all facilities in the commercial/industrial inventory designated as high TTWQ, as well as some medium and low TTWQ facilities. This helped the City meet an additional new Municipal Permit requirement that 25 percent of the total number of facilities on the City's inventory be inspected after the first year of program implementation. The City inspected all industrial facilities that are covered or are known to require coverage under the General Industrial Permit (Industrial Permit). Additional details on how the City met the requirements listed above are included in Section 5.2.2 of this report.

The City used professional consulting services to assist with inspections for reporting year 2009-2010. A total of 319 industrial and commercial facilities received site visit inspections. A detailed list of the facilities selected for inspections can be found in Appendix B.2.b of this report. Based on site visits the industrial/commercial inventory was updated from 544 to 738 facilities. The updated inventory, included in Appendix A.5, is composed of facilities that pose a high, medium and low TTWQ.

5.2.2 Source Characterization

The City's watershed-based inventory for industrial and commercial facilities was updated based on changes in business license information and the California Department of Water Resources list of Permittes covered under the General Industrial Permit. The City's Storm Water group has

developed a procedure to assist in reviewing and updating the City storm water inventory based on business license information (please refer to Appendix A.5 for document entitled "Business License and the Storm Water Program"). The inventory was further refined by field inspections conducted during the last three permit years. The updated inventory consists of 738 industrial and commercial facilities that are designated into high, medium, and low TTWQ stationary sites. Of the 738 businesses, 319 were inspected. A list of the businesses inspected during the fiscal year is attached in Appendix A.5.

5.2.3 Best Management Practice Requirements

Pollution prevention for industrial and commercial facilities eliminates the management of pollution and ultimately leads to a cleaner, healthier watershed. Although Best Management Practices for Commercial Facilities are used as a primary mechanism for reducing commercial discharges of pollutants into regional MS4s, the educational effort to change the way businesses conduct business is the final objective. The City encourages industries to apply pollution prevention tactics, such as the BMPs listed in Table 1, below. Storm Water staff or city representatives disseminate this information during inspections, letters, and enforcement actions. The following pollution prevention methods shall be considered and implemented to the MEP where applicable:

- Reduce quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease the generation of wastewater
- Display pollution prevention methods prominently to remind or instruct employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
Spill Prevention, response, control, and cleanup	Prevents spills, controls spills	Oil & Grease pH	pH
Raw Material Storage	Prevents pollutants on outdoor material storage	Oil & Grease	_

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
	from discharging		
Safer Alternative Products	Encourages use of less toxic materials	Pesticides Fertilizers	TDS
Good housekeeping of outdoor activity areas	Prevents pollutants from entering the storm drain system.	Oil & Grease	TDS
Employee Training	Prevents discharges, spill response, over-watering	Oil & Grease Pesticides Fertilizers	pH Fecal Coliform TDS
Private Sewer Lateral Maintenance	Preventive maintenance of sewer lateral prevents sewage overflows	Fecal Coliform Enterococcus Nitrates	Fecal Coliform TDS

5.2.4 Program Implementation

5.2.4.1 Priority Industrial-Commercial Sources

Industrial
Each year, industrial sites are re-prioritized to get an accurate picture of the number and types of industrial sites within the City's jurisdiction. Prioritization involves two steps: initially classifying a facility as being a high TTWQ based on site information; and subsequently confirming or reclassifying it based on field observations and additional information. The former step has been accomplished administratively using the data provided in the inventory of industrial sites. The latter step was completed following inspection of each industrial facility.

Additionally, pollutants were listed with the activities associated with industrial outdoor activities to assist in the selection of the most appropriate BMPs. This initial connection of pollutants, BMPs, and activities will be used to correlate water quality with JURMP requirements in the Annual Report. Below, in Table 2, is the City's listing of activities with the potential pollutants.

Table 2 – BMPs to Pollutants for Industrial Facilities

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies depending on discharge	-
Spill Prevention Control and Cleanup	Addresses spills	Varies depending on spill	-

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
– SC11			
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	(Petroleum) Oil & Grease Metals	-
Loading/Unloading – SC30	Controls the loading and unloading of materials	Varies depending on the materials Trash	-
Liquid Container Storage – SC31	Controls discharges associated with outdoor liquid containers	(Petroleum) Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies depending on the waste material Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials for cleaning, disinfecting, or other functions	Pesticides Fertilizers	-
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris Sediment	TDS
Parking Lot and Storage Maintenance – SC43		Trash/debris Sediment	-
Drainage System Maintenance – SC44		Trash/debris Sediment	-
Employee Training		Trash/debris	-
Storm Drain System Signage		Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance		Fecal Coliform Debris	Fecal Coliform TDS
Over-watering of Landscape		Nitrates	TDS

"-" indicates no impact positive or negative to the Forrester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

Commercial

A majority of the City's commercial sites can be categorized as shown in Table 3. Of specific concern are those businesses located near storm water channels. Activities from the commercial sites with the associated pollutants are shown in the following table.

Table 3 – Commercial BMPs to Specific Business Produced Pollutants

Business Type → **BMP ↓**	**Restaurants**	**Automotive Establishments**	**Retail Gasoline Outlets**	**Mobile Washing Businesses**
Non-Storm Water Discharges – SC10	Organics Trash	Oil & Grease Metals	Oil & Grease Metals	Oil & Grease, Metals
Spill Prevention Control and Cleanup – SC11	Trash Oil & Grease Organics/Bacteria	Trash Oil & Grease Metals	Trash Oil & Grease	TDS Metals
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22		Trash Oil & Grease Metals		Oil & Grease Metals TDS
Loading/Unloading – SC30	Organics/Bacteria Oil & Grease	Oil & Grease	Oil & Grease	
Liquid Container Storage – SC31		Oil & Grease		
Raw Material Storage – SC32		Oil & Grease		
Waste Handling and Disposal – SC34	Organics/Bacteria Oil & Grease Trash			Trash
Building and Grounds Maintenance	Organics/Bacteria Oil & Grease Trash	Trash	Trash	
Parking Lot and Storage Maintenance – SC43	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Drainage System Maintenance – SC44	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Employee Training	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Private Sewer Lateral Maintenance	Pathogens/Fecal Coliform TDS	Fecal Coliform TDS		
Over-Watering	TDS	TDS	TDS	

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5.2.4.2 Backgroud BMP Requirements and Implementation

Industrial

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of the Municipal Permit. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility. An "X" indicates the BMP is: Required by the City of El Cajon as a minimum BMP – Level 1 by the Industrial facility – Level 2 (Provided BMP information). These two levels were completed in previous permit years.

The next steps include:

- Implementation as observed during the onsite inspection – Level 3 (Verified in pervious permits years under permit 2001-001.)
- Connection to a specific Primary pollutant and any 303(d) pollutants identified for Forrester Creek to support an Effectiveness Assessment – Level 4 (Verified in pervious permits years under permit 2001-001.)

In past years the City applied "A Framework for the Implementation of Best Management Practice (BMP) Programs at Commercial and Industrial Sites" to implement BMPs at industrial sites. BMP selection and application began at JURMP development with a minimum number of BMPs. These minimum requirements were used to develop the industrial/commercial inspection checklist.

Table 5 – Required Industrial BMPs

Required Industrial BMPs	
Non-SW Discharges - SC10	X
Spill Prevention/Control/Cleanup - SC11	X
V&E Fueling - SC20	X
V&E Cleaning - SC21	X
V&E Rep - SC22	X
Loading/Unloading - SC30	X
Liquid Container Storage - SC31	
Raw Materials Storage - SC32	X
Equip Ops - SC33	
Waste Handling/Disposal - SC34	X
Safer/Alternative Prods - SC35	
Contam/Erod Areas - SC40	
Bldg/Grounds Maintenance - SC41	X
Bldg Rep/Construction – SC42	
Prkg/StorageMaint – SC43	X
Drainage Sys Maint - SC44	X
Employee Training - SWPPP	X

Required Industrial BMPs	
Storm Drain System Signage - Permit	
Private Sewer Lateral Maintenance - City of El Cajon	X
Over-water Landscape - City of El Cajon	X

5.2.4.3 Updated BMP Requirements

Pollution prevention methods are cost-effective BMPs that eliminate or reduce the generation of pollutants at their sources. Industrial and commercial facilities produce a range of pollutants, both indoors and outdoors, that can threaten human and environmental health if washed into the storm drain system by way of urban runoff. Businesses can benefit from pollution prevention methods by reducing labor time associated with excess pollutant waste handling, thereby re-directing labor time more efficiently to production, as well as the accompanying costs of storage, disposal or treatment.

The following pollution prevention methods are considered and implemented to the MEP where applicable:

- Reduce quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

In addition to the methods listed above, the City of El Cajon also reserves the authority to require a Storm Water Pollution Prevention Plan (SWPPP) for any Industrial or Commercial facility within its jurisdiction that discharges significant pollutants into receiving water bodies.
In addition to the pollution prevention BMPs described above, the City has also established minimum BMPs for all industrial and commercial sites. Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs, including structural and non-structural BMPs, are required of all facilities and are included in Appendix A.5 (General BMPs for Industrial/Commercial Facilities). Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs and Activity-Specific BMPs are required where applicable and are briefly listed below.

General BMPs

- Non-Structural BMPs

Non-Structural BMPs aim to prevent pollutants from coming into contact with storm water or authorized non-storm water discharges. Many of these methods already exist as part of the standard operating procedures for a site:

- Good housekeeping
- Preventive maintenance
- Material handling and storage of materials
- Employee training
- Solid waste (non-hazardous) handling and recycling
- Record keeping
- Self inspection/quality assurance
- Spill response

- Structural BMPs

  Structural BMPs consist of specialized equipment, structural components, or engineered technologies that can be used when non-structural BMPs are ineffective. Structural BMPs are site specific; therefore the facility operator needs to evaluate each proposed use. Proper installation and regular maintenance of structural BMPs are imperative to their effectiveness. Examples are as follows:

  - Overhead coverage of outdoor work areas or chemical storage.
  - Retention ponds, basins, or surface impoundments that confine storm water to the site.
  - Berms and concrete swales or channels that divert run-on and runoff away from pollutant sources.
  - Secondary containment structures.
  - Treatment controls, e.g., infiltration devices and oil/water separators, to reduce pollutants in storm water or authorized non-storm water discharges.

- **Activity-Specific BMPs**

  Appropriate BMPs will depend on the type of activities, pollutants, and potential source of pollutants. The BMP requirements for the following activities and areas are relatively common at industrial and commercial sites and required by the City.

  - Hazardous materials storage (incl. tanks)
  - Solid waste storage
  - Loading/unloading
  - Fueling
  - Wastewater treatment
  - Landscaping/ grounds keeping
  - Vehicle maintenance
  - Parking lots
  - Process water pre-treatment
  - Equipment storage
  - Washing of Equipment/Vehicles
  - Rooftops

5.2.4.4 Additional Controls for Industrial & Commercial Sites/Sources

Forrester Creek, which flows through the City, is 303(d) listed for fecal coliform, low dissolved oxygen, phosphorus, and TDS. The City has not identified any industrial or commercial facilities that are likely to be significant sources of fecal coliform or TDS. As a proactive measure, however, the City has assigned higher priorities to concrete and stone cutting businesses, as they may contribute to elevated TDS levels. Similarly, the City assigned higher priorities to animal-related businesses, which may be sources of fecal coliform if animal waste is not disposed of properly. The City also assigned higher priorities to commercial businesses associated with fertilizer use (i.e. nurseries, greenhouses, etc.) since low dissolved oxygen and elevated phosphorus levels are commonly associated improper fertilizer use and/or storage.
As mentioned previously in this report, the City has chosen to designate major channels within the City as ESAs. Major channels within the City are typically concrete, and hold no significant environmental value, however. The City has chosen to designate these areas as ESAs as a proactive measure to protect downstream water quality. During inspections of businesses that drain to 303(d) listed receiving waters or other ESAs, the City will conduct more detailed investigations into whether the businesses are potential sources of the pollutants of concern or may otherwise negatively impact the ESA. If a business is believed to be a significant source of key pollutants and the standard BMPs listed above are not adequate, the City will require additional BMPs so that discharges of the key pollutants of concern will be reduced to the MEP.

5.2.4.5 Sites Selected for Inspection

In 2008, the City created a Jurisdictional Urban Runoff Management Program (JURMP). The City's inspection program "aims to reduce and prevent industrial and commercial pollution discharges from the MS4 to the MEP to protect local receiving water bodies and to comply with the Municipal Permit" (JURMP, City, 2008). The City created an inventory list of businesses for inspection and followed the inspection protocol described in the City's JURMP.

In 2009, the City had developed a list of 51 industrial and 623 commercial facilities to inspect for compliance with federal, state, and local laws in accordance with the Municipal Permit. After 2009 inspections, the City's list was revised based on businesses no longer in existence. In 2010, the City conducted 45 industrial inspections and 91 commercial inspections to meet its permit required 25% inspection threshold of the 544 businesses inventoried on the Revised 2009 Facility List. Subsequently, additional businesses were added to the list based on changes in the business license database that may require inspections under the Municipal Permit. These additions resulted in an additional 177 inspections. In total, 319 inventoried businesses were inspected, resulting in 112 industrial businesses and 207 commercial businesses. There were 16 businesses additionally inspected that were vacant, moved, refused, or duplicate businesses. Approximately 43% of inventoried businesses were inspected during 2010.

Based on experience, the inspection process for industrial and commercial facilities is often more efficient when appointments are not scheduled. This allows inspectors to inspect neighboring businesses rather than driving longer distances from business to business to meet scheduled

appointments; it also eliminates time spent on the phone scheduling. In general, scheduling is conducted for industrial facilities that have or are required to have Industrial Permit coverage so that the proper facility personnel can be present for the inspection and materials such as SWPPPs and monitoring plans are located and easily accessible for review when the inspector arrives.

5.2.4.6 Industrial Inspections and Implementation of BMPs

In total, 112 industrial facilities were inspected during 2010. Industrial businesses were defined by 40 CFR §122.26(b) (14). Attachment 1 of the Industrial Permit lists those facilities whose principal activity is included under the Industrial Permit. All industrial facilities were assigned a high threat to water quality, consistent with the City's JURMP. Sites marked for the City to follow up on the initial inspection, and sites with a high TTWQ, including all industrial sites, require annual inspections. A breakdown of TTWQ ranks for industrial facilities is shown in Table 6. BMP implementation at industrial facilities is summarized in Table 7

- Approximately 65% of the industrial facilities required a follow-up inspection.
- A total of 22 out of 112 industrial facilities had submitted a Notice of Intent (NOI) under the Industrial Permit, had implemented stormwater monitoring programs, and maintained a Stormwater Pollution Prevention Plan (SWPPP).
- No businesses had a Notice of Termination (NOT).
- Five businesses obtained a Notice of Non-Applicability (NONA) and/or a No Exposure Certification (NEC).
- No IC/ID was observed.
- Fully implemented stormwater employee training was noted at 61 businesses.
- Out of the 1,730 applicable BMPs, 1,634 (94 percent) were fully or partially implemented.
- Only 6 percent of applicable BMPs were not implemented.

Table 6: Industrial Facilities

Threat	Number of Industrial Facilities
High TTWQ	108
Medium TTWQ	1
Low TTWQ	0
No TTWQ Determined	3

Table 7: Industrial Facility BMP Implementation

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.1 General	5	291	60	9	200

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.2 Landscaping	5	220	9	8	323
D.3 Materials and Wastes	13	632	131	52	641
D.4 Equipment, Vehicles, and Outdoor Activities	5	82	21	11	446
D.5 Other	5	151	27	16	356
TOTAL	**33**	**1386**	**248**	**96**	**1966**

(a) Individual BMPs in each BMP group are located in Section D of the City of El Cajon Commercial and Industrial Stormwater Compliance Inspection Form, (Please refer to Appendix A.5).

5.2.4.7 Commercial Inspections and Implementation of BMPs

In total, 207 commercial facilities were inspected during 2010. Commercial businesses were defined as those businesses not subject to the Industrial Permit, and that do not perform activities meeting the definition of industrial activity under 40 CFR §122.26(b)(14). Per the Municipal Permit, 25 percent of sites inventoried shall be inspected annually. In addition to industrial facilities requiring annual inspections, approximately 30 percent of commercial businesses inventoried were inspected during 2010. Commercial businesses requiring annual inspections were those with a high TTWQ and those that warranted a follow-up inspection. A breakdown of TTWQs for commercial facilities is presented in Table 8. BMP implementation at commercial facilities is summarized in Table 9.

- Annual inspections were recommended for 64 commercial facilities that did not require follow-up inspections.
- A total of 104 commercial business sites were assigned a medium to low TTWQ and did not require a follow-up inspection.
- A total of 36 businesses were recommended to increase their employee stormwater training, as little to no training was noted during the inspection. Increasing business education and emphasizing the importance of employee training may increase the effectiveness of pollution prevention practices and BMPs.
- No illicit connections were observed. However, three potential illegal discharges were noted during inspections.
- Approximately 50 percent of the eating establishments needed improved grease handling and/or storage.
- Approximately 60 percent of the facilities with significant outdoor activity needed improved cover for outdoor storage, including trash.
- Approximately 8 percent of the businesses needed improved spill prevention and response materials, including spill kits; 20 percent needed secondary containment for liquid storage.

- Out of the 3,443 applicable BMPs, (97%) were fully or partially implemented.
- Only 3 percent of applicable BMPs were not implemented.

Table 8: Commercial Facilities

Threat	Number of Commercial Facilities
High TTWQ	59
Medium TTWQ	90
Low TTWQ	52
No TTWQ Determine	6

Table 9: Commercial Facility BMPs Implementation

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.1 General	5	639	87	11	298
D.2 Landscaping	5	464	12	1	558
D.3 Materials and Wastes	13	1277	187	59	1168
D.4 Equipment, Vehicles, and Outdoor Activities	5	179	24	17	815
D.5 Other	5	412	48	26	549
TOTAL	**33**	**2971**	**358**	**114**	**3388**

(a) Individual BMPs in each BMP group are located in Section D of the City of El Cajon Commercial and Industrial Stormwater Compliance Inspection Form, see Appendix A.5.

5.2.4.8 Compliance and Enforcement

The follow-up priority classification section on the inspection form was designed to classify the level of necessity to perform a follow-up inspection at the facility. "Priority 1" follow-ups are given to facilities for which an active illicit connection or illegal discharge was observed. In these cases City's storm water personnel immediately instructed discharger to stop the discharge and an administrative citation was issued. "Priority 2" follow-ups typically have serious BMP-related issues. "Priority 3" follow-ups are given to facilities for which relatively minor BMP-related issues were observed.

A total of 3 businesses were found to be "Priority 1". Follow up inspections were scheduled and, whenever possible, investigations were conducted immediately.

As specified in the City Ordinance, the City is able to use various warnings and actions to correct a facility/activity and enforce the JURMP. For PY3, the City further coordinated with industry to implement and enforce the requirements of the JURMP and City Municipal Code. As with the other Permit component, enforcement generally is initiated with a verbal warning and followed up by a written warning. Enforcement using Administrative Citations was incorporated in May 2003. Appendix A.5 lists criteria for issuing Citations, document entitled "Storm Water Administrative Citation Program Criteria" and Appendix B.3 shows the list of enforcement actions taken by the City in PY2009-10.

5.2.4.9 Education

During inspections, business representatives were educated regarding storm water issues both through verbal interaction with the inspectors, and the distribution of printed storm water educational materials, when appropriate. In particular, the utilization of verbal interaction is extremely influential because it is tailored individually by the inspector to the specific issues and concerns of the facility and the facility representative. It prompts the facility representative to think about issues directly related to his or her daily actions as it applies to business activities. The inspector was able to provide information specific to the facility, which is beneficial to the facility representative due to the site-specific information. This information can help give the facility representative the proper tools to implement BMPs applicable to their business.

Printed educational materials were also distributed to businesses during inspections unless the facility representative declined to receive them. Posters specifically designed for automotive and restaurant activities were distributed as storm water educational materials. Also provided, when necessary, were NONA/NEC paperwork and NOI paperwork. Each have a separate cover sheet with instructions on how to file, and contacts in case any questions arise. Samples of some of the educational materials distributed are included in Appendix A.5. In some cases, educational material was not applicable to the business activity and was therefore not provided.

5.2.5 Stationary Ind. & Commercial Sites/Sources Effectiveness Assessment

5.2.5.1 Common BMP Implementation Deficiencies

Common issues were noted at a large number of businesses and are discussed below:

- Outside metal storage was an issue at both commercial and industrial facilities and required multiple recommendations to provide cover and secondary containment and/or to relocate metals. This was a common issue in 2009 and 2010.

- Hazardous waste drums, particularly oil drums, were also observed outdoors at multiple locations without secondary containment; some were missing lids and/or labels. This was a common issue in 2009 and 2010.
- Commercial businesses were commonly located on property owned and/or maintained by a third party. As such, many of the outdoor area inspections resulted in the business stating that their property management companies were responsible for issues such as landscaping, trash, and general cleanup. This was a common issue in 2009 and 2010.
- Approximately 24 percent of the businesses inspected had partially implemented or had not implemented stormwater employee training in 2010. This was a 5% decrease in employee training from 2009 and is attributed to inspection of new businesses unaware of stormwater requirements and concerns.
- Grease handling procedures at restaurants were recurring issues. Specific problems included: proper storage, proper containment, cleanup of grease spills, and keeping absorbent available near grease storage. This was a common issue in 2009 and 2010.
- Though many facilities did possess absorbent of some kind, actual spill kits were not very common and absorbent was typically not kept in clearly labeled containers or located near potential stormwater pollutant sources. This was a common issue in 2009 and 2010.
- In general, industrial facilities covered as mandatory under the State General Industrial Permit were more aware of stormwater concerns and had better training made available to employees than commercial businesses. Commercial businesses and industrial businesses conditionally subject to the State General Industrial permit often did not have any formal stormwater training program for employees. Inspectors noted an increase with this issue at conditional industrial businesses during 2010. The increase is attributed to inspection of new businesses unaware of stormwater requirements and concerns, many of which were conditionally subject to the State General Industrial Permit.

5.2.5.2 SIC Code Changes and Updated Inventory

Based on the SIC code corresponding with the current principal activity of the business, some inspections resulted in business category reclassifications. Assessment of whether the SIC code was considered industrial was based on SIC code of the Industrial Permit. Attachment 1 of the Industrial Permit lists SIC codes that require mandatory coverage under the Industrial Permit and SIC codes that require coverage under the Industrial Permit "conditionally", depending on potential outdoor exposure to stormwater

The revised 2010 inspection list contains 739 facilities. Of the 739 businesses, 319 were inspected. A list of businesses inspected during 2010 is contained in Attachment A.5. Out of 319 businesses, full inspections were conducted on 103 industrial facilities. The 112 industrial does not include five facilities initially categorized as industrial that were revised to commercial based on the inspector's determination of the business's principal activity and appropriate SIC code. Nor does it include three industrial facilities that were just added to the inventory during 2010. Industrial facilities located during the updated 2010 inventory will be inspected in the early part of permit year 2010-11.

A total of 179 commercial facilities were inventoried and had full inspections completed during 2010. A few facilities were listed two times on the original list due to the business having a different working name than the name on the business license. Some facilities were also vacant or refused immediate inspection. As a result, a total of 183 out of a possible 609 commercial facilities, or approximately 30% of all commercial businesses were inspected. The updated inventory list is located in Appendix A.

Table 10: Facility Inventory and Updated Numbers by Facility Category

Facility Category	Original Number of Facilities	Revised Number of Facilities
Industrial	45	130
Commercial	499	609
Total	544	739

5.3 MOBILE SOURCES ELEMENT

5.3.1 Background

Illegal discharges tend to be the major area of concern with mobile businesses. Due to the nature of their activities, mobile businesses are regulated somewhat differently than other businesses. Mobile businesses can be difficult to identify because many do not have City business licenses. Additionally, new mobile businesses are started and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed above and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option at this time.

5.3.2 Source Characterization

The mobile businesses known to operate within the City's jurisdiction are noted on the City's commercial inventory. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Pest control services
- Mobile carpet, drape or furniture cleaning
- Mobile construction trades
  - Painting and coating
  - Cement mixing or cutting
  - Masonry
  - Other contractors
- Landscaping

- Pool and fountain cleaning
- Power washing services

Because not all mobile businesses have obtained business licenses in the City or have a base of operations in the City, a continual process of refining and updating the City's inventory has been conducted. Sources for such inventory updates will include reported incidents, general observations by City staff, and available business licenses. The City participated in a regional effort to inventory and/or track mobile businesses. The Industrial/Commercial Regional Workgroup developed a regional database that included mobile businesses across Jurisdictions. The regional database in combination with the City's business license database provided the main source of information for prioritizing mobile businesses.

5.3.3 Best Management Practice Requirements

5.3.3.1 Updated BMP Requirements

In addition to all BMPs required for stationary sources; listed in Section 5.2.4.1, 5.2.4.2, and 5.2.4.3 of this report; mobile business where also required to implement the following minimum BMPs developed by the Regional Industrial/Commercial Workgroup:

- Storm Water Training
- Contain and Clean Up Spills (Spill Kits)
- Properly Handle All Waste (Solid, Liquid and Hazardous)
- Protect Storm Water Conveyance System: (Streets, Gutters and Alleys)
- Provide Proper Handling and Containment Of Materials
- Provide Equipment Washout Area

The most important BMPs for most mobile businesses typically involve non-Storm water discharge control and spill prevention, control, and cleanup.

5.3.3.2 Additional Controls for Mobile Sources

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. Aside from washing, cleaning, or other activities that may cause illegal discharges, mobile businesses are not likely to conduct activities that produce significant pollutant discharges. If in the future the City finds that even in the absence of illegal discharges the activities of mobile businesses are contributing pollutants of concern to a CWA section 303(d) impaired water body segments or are negatively impacting ESAs, additional controls will be required for those activities. Further, if the City has reason to believe that mobile businesses are generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more regularly visit those areas and/or take other actions to address the illegal discharges.

5.3.4 Education and Outreach

The City of El Cajon provides information and outreach regarding storm water quality to mobile business owners and operators. A business license is not issued to the mobile businesses listed under Section 5.3.2 until the new business proponent has the opportunity to talk to Storm Water personnel about pollution prevention and BMP implementation. If applicable to the facility, mobile businesses are also provided with educational materials outlining pollution prevention methods and other BMPs related to their activities prior to issuance of a business license and during inspections. Inspectors also give recommendations to businesses, where appropriate. Because a specific element of the industrial and commercial program is being newly developed it is anticipated that some mobile businesses are not aware of storm water requirements and that education will need to be a significant portion of the program. The educational program is described in more detail in Section 8 of this report.

5.3.4.1 Inter-Jurisdictional Cooperation

An inter-jurisdictional program for the regulation of mobile businesses was completed during this Permit Year. The City of El Cajon and the Port of San Diego were the Co-Chairs of the Regional Industrial/Commercial Workgroup. The workgroup took a leading role in the creation of a regional inventory of mobile businesses, standardization of BMP requirements across jurisdictions, and sharing of enforcement action information. Future tasks that remain to be completed are the development and distribution of standardized educational materials.

5.3.4.2 Owner/ Operator Notifications

As indicated in the City of El Cajon updated JURMP, the City assisted with the development of regional standard BMP requirements for mobiles business. During PY3 the City notified 57 mobile business owners/operators of the six (6) minimum required regional BMPs developed by the Industrial/Commercial Workgroup and mentioned in Section 5.3.3.1 above. Per the Permit, the notification had to be made within the first three years of implementation of the updated JURMP. Refer to Appendix A.5 for a copy of the letter of notification for mobile businesses.

5.3.4.3 Staff Training

Staff responsible for conducting storm water compliance inspections and enforcement of mobile sources is trained on inspection and enforcement procedures and BMP implementation as they relate to mobile businesses. City staff is also encouraged to be vigilant for illegal discharges from mobile businesses when working in the City and to report businesses that are not in compliance to the storm water hotline.

5.3.4.4 Inspections

Mobile sites/sources are inspected by the City on as needed basis. The most common triggers for these inspections are anticipated to be receipts of incident reports and direct visual observations by City staff. The inspections generally follow the same procedure as stationary facilities, described in Section 7.2.4.4 of the updated JURMP, although the main focus of most mobile business inspections will be on discharge control BMPs.

5.3.4.5 Enforcement

Most violations associated with mobile businesses have been historically attributed to illegal discharges. The City's enforcement approach to such discharges will require the discharge to be stopped and cleanup of discharged materials when applicable and feasible. Education is also provided to operators who are not aware of the City's storm water requirements. Businesses that do not possess the materials necessary to implement the required BMPs are required to demonstrate to the City that they have obtained such materials and can properly use them before the City allows such businesses to resume operations in the City. Mobile businesses that do not have City business licenses are required to obtain licenses. A detailed list of all enforcement actions taken by the City is included at Appendix B.3 of this report.

5.4 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements for PY3 experience includes:

- Make appropriate changes to the Industrial-Commercial Inspection Form.
- Continue to develop additional educational materials for distribution during inspections.
- Review dry weather monitoring and BMP implementation results to prioritize future commercial inspections.
- Continue to improve tracking of a continuously changing business inventory, both for stationary and mobile businesses.

No regulatory comments have been received for the Commercial and Industrial Component of the 2008/2009 Annual Report.

SECTION 6 RESIDENTIAL COMPONENT

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SECTION 6 RESIDENTIAL COMPONENT

INTRODUCTION

Pollution prevention is the focus of the JURMP Residential Component to prevent pollutants from residential activities from entering the storm drain system. Education is the best approach to implementing this component of the JURMP as the goal is to change behavior and perceptions. The City is successful in implementing the collection of household wastes and promoting used oil recycling. Each pound of household waste and used oil collected equates to one pound less of waste/pollutants that could be disposed improperly and enter the storm drain system.

6.1 PREVENTION OF POLLUTED RUNOFF

Preventing pollution is easier and less costly than treating wastes at the end of the pipe. The following pollution prevention BMP information is sent to residents via brochures in sewer billings and during face-to-face contact when a complaint or referral is investigated.

- Conduct automobile repair and maintenance under cover or with drip pans; recycle oil.
- Divert automobile wash liquids to landscaping.
- Store unused automobiles under cover; use absorbent pads or drip pans for leakage.
- Maintain garden and yard using natural remedies and drought-tolerant plants.
- Use less toxic products for home care/maintenance.
- Dechlorinate swimming pool water before releasing.
- Dispose of pet waste in the trash.
- Don’t use the street as your storage area for dirt, mulch, landscaping plants.
- The street is not a disposal area for concrete or paint washout, or hosing off driveway.

6.2 PRIORITY RESIDENTIAL SOURCES

Residential areas discharging directly to a major storm drain channel are the focus for pollution sources. Priority sources are directly related to 303(d) pollutants identified in Forrester Creek and the San Diego River. The following table connects sources with 303(d) pollutants. These same 303(d) pollutants are used in Section 11, Program Effectiveness Assessment to estimate the potential amounts of pollutant eliminated through prevention, intervention, and other BMP implementation.

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutants Prevented	Prevention of 303(d) pollutant
Composting	Reduces the amount of waste in the trash	Organics	
Use of a Professional Car Wash	Eliminates dirty, soapy water from the storm drain	Metals Detergents	**TDS**
Organic gardening	Eliminates fertilizers and pesticides	Nutrients Pesticides	**TDS**
Take a bag when walking the dog.	Eliminates dog waste from the Public Right of Way	Fecal Coliform Enterococcus Nitrates	**Fecal Coliform** **TDS**

6.3 BMP REQUIREMENTS

In addition to the pollution prevention BMPs, above, the following are encouraged in residential areas. Home improvement projects can cause side affects, like mud or concrete flowing into the street (see picture to the right). However, with an effective combination of BMPs applied to the maximum extent practicable, simple home projects can meet the City's BMP implementation requirements without much effort or expense.

Table 2 connects the use of BMPs with the prevention, reduction, or elimination of pollutants.

Table 2 – BMP to Pollutants for Residential Areas

BMP	Application	Primary Pollutants	303(d) Pollutants
Automobile Repair & Maintenance	Use Drip Pans Recycle Oil	Oil & Grease	
Automobile Washing	Use Commercial Car Wash	Metals Detergents	**TDS**
Automobile Parking	Use Drip Pans	Oil & Grease	
Garden and Yard Care	Compost or recycle waste	Organic Material	**TDS**
Home Care and Maintenance	Use Household Hazardous Waste Programs	Metals Toxic Substances	
Pet Waste Disposal	Take a bag when walking the dog	Fecal Coliform	**Fecal Coliform**
Private Lateral Maintenance*	Clean lateral every few years	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**
RV Parking & Maintenance	Use a legal dump station	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**

Changes in behavior have been noticed over the years, but although the message has been out in the community for several years, it is still new to many citizens. The Clean Community; Healthy Watershed, and Healthy Garden; Healthy Home (Integrated Pest Management) concepts will continue to be continuing messages for subsequent permit years.

6.4 BMP IMPLEMENTATION

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of Permit Section 6.3, BMP Implementation. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility.

The list of minimum BMPs for residential areas tracks along with pollution prevention concepts. Understanding through education is the basis for changing behavior in the residential community. By changing the way the residential community completes tasks around the home, benefits to water quality will be realized through wet weather monitoring. The common major routes for educating the citizens and disseminating information is through newsletters, sewer billing inserts, and City "drive-abouts" where information is delivered directly to target audiences.

Information on how to implement BMPs is provided to citizens through one-on-one visits, newsletters, sewer billing inserts and citizen complaints/referrals. Information that is distributed includes the following topics.

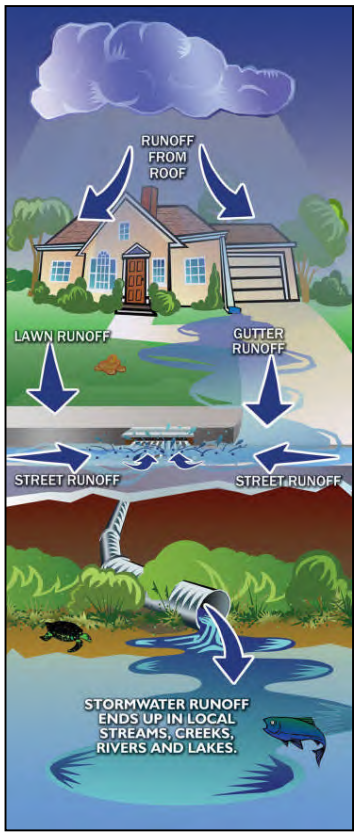

- Automotive Repair
- Car Washing
- How You Can Prevent Pollution from Entering the Storm Drain System
- Mobile Detailer BMPs
- PowerWashing
- Clean up After Your Pets
- Lawn and Garden Care
- Keeping Our Environment Clean!
- Over-Irrigation Can Cause Storm Water Pollution
- Washing Your Car
- What's the Problem with Pet Waste
- Keeping Our Yards and Our Storm Water Clean
- Trash and Street Sweeping Update
- Trash in Our Strom Drains
- Maintaining your Private Sewer Lateral
- Everything that goes into Our Storm Drains…Ends up in the Ocean
- Why It's Important to Keep Trash, Sediment and Debris Out of Storm Drains
- Pool Maintenance BMPs
- Creating Community by Keeping Our Storm Water Clean

Copies of brochures, newsletter articles, and flyers sent to El Cajon Citizens are included in Appendix A.6.

Table 5 - Required BMPs for Residential Areas

		Automobile Repair Maintenance	Automobile Washing	Automobile Parking	Garden & Yard Care	Home Care & Maintenance	Pet Waste Disposal	Private Lateral Maintenance	RV Parking & Maintenance
RESIDENTIAL	Vehicles & Equipment	X	X	X					X
	Home and Garden				X	X	X	X	
	Pets						X		
	Private Sewer Lateral					X		X	

Minimum required BMPs for the Residential Component are grouped into four (4) basic categories as shown in Table 5. It is only through consistent, simple messages, that citizens will start to implement the BMP identified for the activities around their homes.

An area where the Police Department is collaborating with Storm Water staff is RV Parking and Maintenance. Police Department staff assist Storm Water staff in locating areas where dumping is occurring. The resulting outreach effort should help East County residents to reduce the number of illegal dumping events within this region of the watershed.

As illustrated above, over-watering from many different homeowners' landscaped areas can have an impact on the landscaping and may result in a significant source of water in the street. What seems of little importance from one home combines with runoff from other homes forming small rivers that can move materials stored in the right-of-way or pollutants that are illegally discharged. Homeowners are encouraged to save water and money by adjusting sprinkler heads to reduce or eliminate overspray. When over-watering is discovered, an attempt is made to contact the responsible party. Door hangers are left with instructions when homeowners are not home. Staff schedule a return date to discuss the measures that can be taken by homeowners. When over-watering discharges decrease, there is a reduction of:

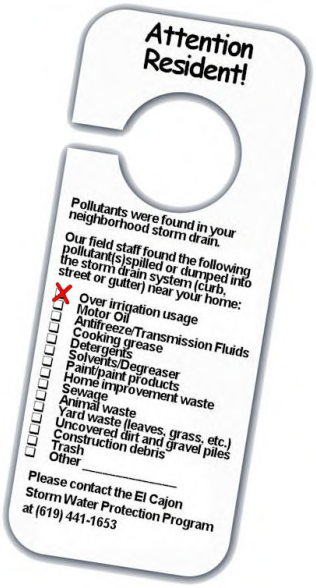

- the amount of water discharged to Forrester Creek
- the amount of pollutants transported to Forrester Creek during "No Rain" days

Improvement in decreasing over-watering will be measured by the amount of Forrester Creek flow leaving the City of El Cajon at the jurisdictional boundary to Santee. Flows measured during the dry weather program are an indication of daily flows. The PY2008-09 dry weather flow into Santee was measured at 94 gallons per minute, as measured at Dry Weather Station No. 5. Overall flows have been on the decrease in all permit years since PY2004-05, inclusive, and may indicate that outreach and education efforts that discourage over-irrigation are becoming effective. Additional flow measurements will be taken during the next annual cycle. The full Forrester Creek Study is contained in Appendix A.12.

6.4.1 Outreach to Residents

The City used various types of educational materials to distribute information and discuss the JURMP requirements with residents when responding to complaints or investigating a discharge. Brochures were provided to residents during face-to-face discussions concerning complaints and referrals. The City newsletter has included seven articles concerning routine activities where receiving waters may be impacted by pollutants. The newsletter is freely available for residents

and industrial/commercial business owners on a semi-annual basis. Two such printings were completed in PY3 and covered the following activities for residents:

- Keeping Trash, Sediment and Debris Out of Our Storm Drains
- Major Causes of Urban Runoff Pollution
- Mobile Business BMPs
- Pet Waste
- What You Can Do As a Business Owner to Keep our Storm Drain
- Difference Between Sewer and Storm Drains
- What You Can Do As a Food Take-Out Customer to Keep Our Storm Drains Clean

The City printed and distributed 38,000 copies, each, of the spring and fall newsletters with seven articles in total contained in both newsletters. As a result, residents are becoming more aware. An indication of this awareness is the increase in the number of complaints and referrals from the private sector. As the public and municipal staff gains more knowledge and awareness of urban runoff, additional increases in complaints and referrals are expected to continue to increase. Education of staff and residents is productive.

The City also included two articles with information about the Storm Water program as sewer bill inserts. A total of about 15,300 articles were distributed through out the City. The distribution was divided into approximately 13,300 residences and 2,000 non-residential facilities.

6.4.2 Recycling and Waste Collection Services

Keeping household wastes out of the storm drain system requires the implementation of a coordinated pickup program with a licensed facility to handle the wastes according to appropriate State and Local regulations. The City uses Waste Management to schedule routine and requested pickups for household wastes. Figures 1, 2, 3, and 4 show the total amount of household wastes, the type of wastes collected, recycled materials from curbside pickup (commercial and residential) and total amount of waste collected. There was 24 Household Hazardous Waste, Electronic Waste and Universal Waste Collection Event where a total of 2,015 participants dropped off over 266,106 pounds of materials. A total of 364,171 pounds of household hazardous waste was collected (Figure 1). Figure 2 shows the percentages of material types taken to the collection events. Waste Management collected a total of 79,739 tons of waste from residential, commercial and industrial areas (Figure 3). A total of 12,812 tons of materials were recycled from the curbside-recycling program, this program only includes residential areas.

The City of El Cajon works to promote and increase used oil collection through residential collections that include curbside pick-ups or encourages citizens to recycle used oil and filters. A grand total of 16,593 gallons of used oil and 1,217 used oil filters were collected from within the City. A total of 701 gallons of used oil and 467 used oil filters were collected from residential areas. While a total of 15,892 gallons of used oil and 750 used oil filters were collected from certified collection centers located within the City of El Cajon's jurisdiction.

Figure 1 – Household Hazardous Waste Collection

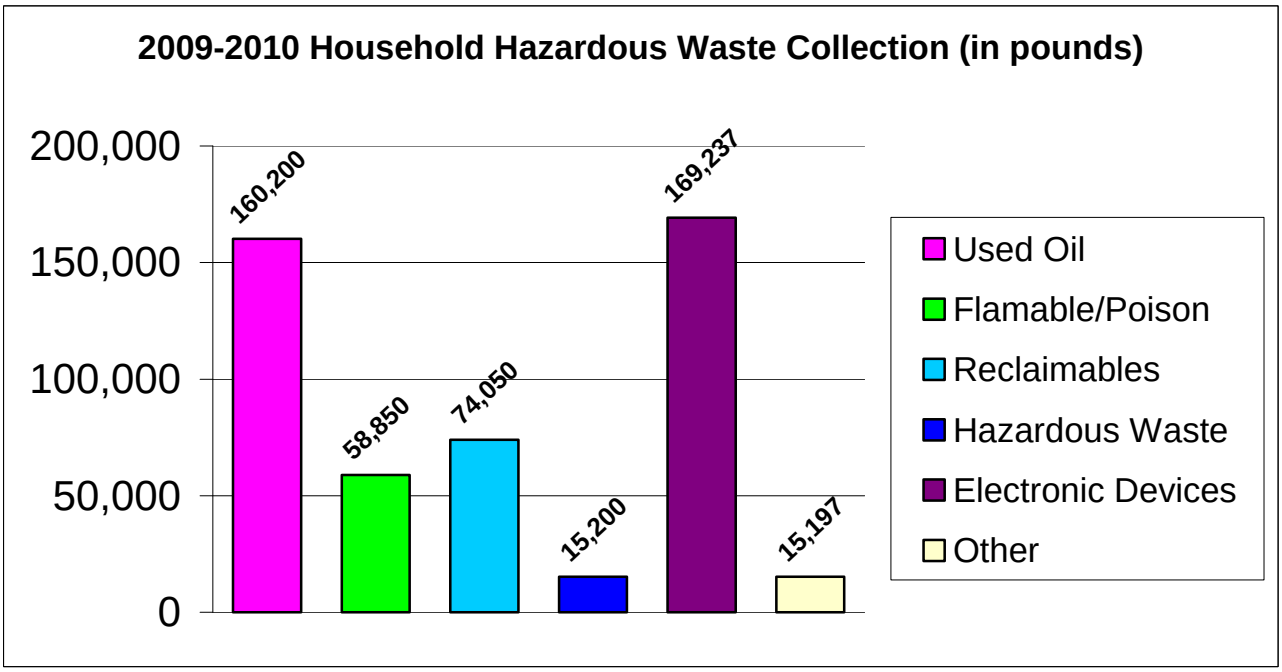

Figure 2 Percentages of HHW Type

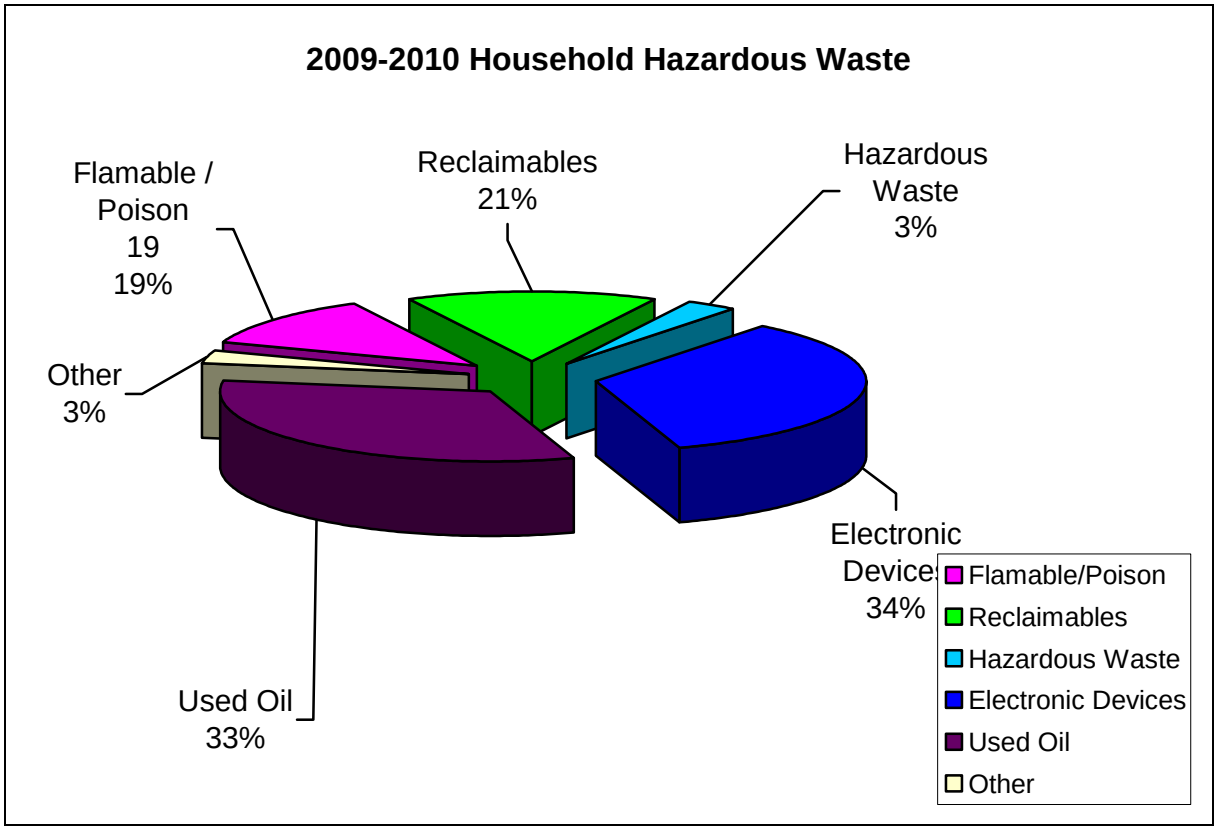

Figure 3

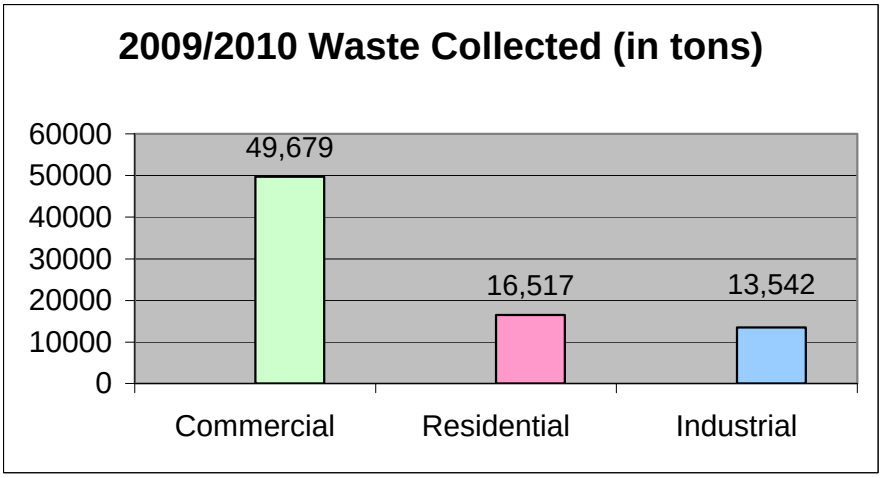

Figure 3 shows the amounts, in tons, of waste collected for Commercial and Residential sites. Waste collected equates to pollutants not discharged to the storm drain system.

6.4.3 Opportunities for Community Involvement

The El Cajon Community Development Center (ECCDC) prints and circulates a newsletter to the downtown area businesses on a quarterly basis. Additionally, the ECCDC prints a Clean & Safe report that covers actions to keep the downtown area clean and safe. The downtown Clean Team works to keep the community clean and performs daily litter removal, maintenance, and landscaping activities. Saint Madelines School provides the student workers who detail the downtown street and sidewalk areas by collecting cigarette butts, trash, and debris. Spills are reported directly to ECCDC for immediate removal and disposal.

Figure 4

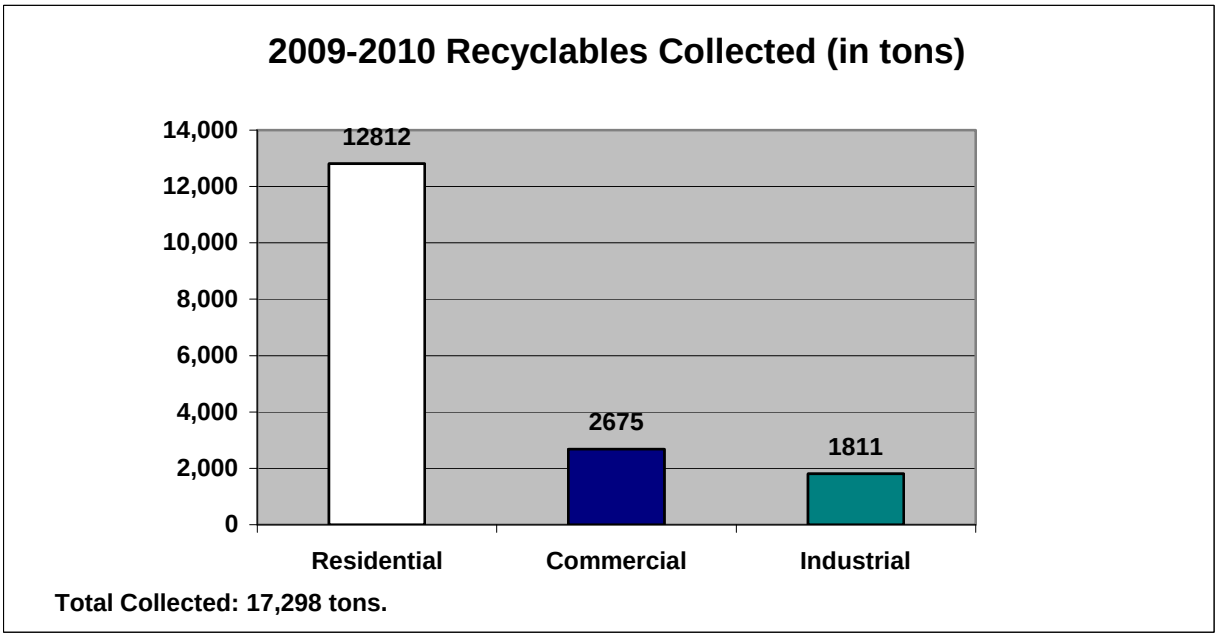

Recycling is a community effort. A total of 17,298 tons of recyclables (includes used oil, newspapers, glass, plastic, tin and aluminum) were collected through residential pickups or deliveries in 2009-10. Figure 4 indicates the amounts, in tons, of materials recycled through residential, commercial, and industrial recycling efforts for 2009-10. Amounts recycled are not placed in landfills or available for discharge to the storm drain system.

6.5 COMPLIANCE AND ENFORCEMENT

The City has a variety of enforcement actions upon discovering a residential action that may potentially affect the quality of receiving waters. Verbal warnings (with written documentation), written warnings, orders to abate and correct, and monetary fines are in the legal authority of the City. There are two routes of discovering illegal residential activities. One is through complaint/referral process. Complaints are received through direct contact with City staff, through the City Manager's office and through the City's Website (via e-mail). The other is during scheduled City monitoring and observations of other routine City department activities.

Depending on whether an actual discharge has occurred or there is a potential to discharge, a written warning or Administrative Citation is issued. Corrective actions are verified and the resident re-contacted for any further questions.

6.5.1 Complaints Received

Complaints are received through the City's or County's Hotline number or funneled through the City Manager's office. The City also receives complaints through the City's Storm Water Program website. Since the inception of the City's Enforcement Program, citizens take opportunities to inform municipal staff of their concerns during other routine activities. Investigations usually occur within 24 hours of complaint receipt with a follow-up phone call informing the complainant of the investigative results. Complaints were tracked using a simple table and software programs. A table in Appendix A.6 lists residential complaints tracked in PY3.

6.5.2 Investigation and Enforcement

Storm Water staff investigates each complaint. Contact with the potential discharger is focused on stopping the polluting activity and educating the citizen about our storm drain system and water quality.

Table 6 – Enforcement Actions

BMP Violated	Written Warnings	Administrative Citations	Actions	Follow-up
Automobile Repair & Maintenance	1	0	Stop Activity	Completed
Automobile Washing	0	0	No Action	None
Home Care and Maintenance	4	0	Stopped Activity	Completed
Private Lateral Maintenance	0	1	Stop Activity	Completed
RV Parking and Maintenance	0	0	No Action	None
TOTAL	5	1		

Written warnings followed each verbal warning in the form of a letter requesting corrective action or enforcement by the Administrative Citation Form (Refer to Appendix A.5 for a Copy Enforcement Criteria and Citation Form). Letters are used only when additional information and explanations are needed to get compliance from the potential discharger. A list of the enforcement actions issued to residents is included in Attachment D.

6.6 NOTABLE CITY ACTIONS

Pollution Prevention Days

The City of El Cajon hosted two "Pollution Prevention Days" events on July 8 and September 30, 2009 in downtown El Cajon. The events were scheduled to correspond with the "Cajon Classic Cruise" event, which attracts thousands of attendees each day. Of the thousands of people attending, hundreds of people approached the Storm Water Programs booth and received educational materials, flyers, and discussed issues related to automotive-related activities (e.g., tire recycling, waste

The crowds gather at the Pollution Prevention Days Event at the Cajon Classic Cruise.

management, car washes, and power washing) as well as other residential activities. See Appendix A.6 for additional photographs of this event.

Condominium Conversions

The next wave of residential communities is the conversion of apartment dwellings into Common Interest Developments or Condominiums. Restarting a small-developed community is a perfect opportunity to introduce or reintroduce storm water protection activities at the development level. Despite a down turn in the number of condominium conversions, the following are required for these types of projects:

- A Storm Water Site Plan that includes a map of the current storm drain system and a list of the internal and external improvements proposed prior to sale. Control of materials, upgrades to the drainage system and treatment are discussed.
- A Storm Water Maintenance Plan for Condominiums
- A Private Sewer Lateral Report, and
- Water Quality additions to the Covenants, Conditions, and Restrictions

6.7 IMPROVEMENTS AND REGULATORY COMMENTS

Throughout the year, the City adjusts JURMP Components based on experience and the need to correlate JURMP activities with water quality. As the Storm Water Pollution Prevention Program continues the move into a BMP implementation program and the reduction of pollutants discharged into the storm drain system, existing residential neighborhoods become a pivotal group to assist in making the water quality improvements a reality.

6.7.1 Improvements

Improvements for the Residential Component is more challenging as citizens view the storm water regulations as an infringement on individual rights. Choosing the correct approach and picking an area that is more beneficial to water quality takes thought and planning. Based on previous experience, the proposed actions for PY3 include:

- Meet with retirement communities to discuss and distribute storm water information
- Continue partnering with the El Cajon Community Development Corporation in reaching out to the community
- Continue to meet with new development Homeowner Associations to distribute storm water information

6.7.2 Regulatory Comments

The City did not receive regulatory comments for the Residential Section of the JURMP Annual Report for PY2.

Place Holder

(Section 7 to be Submitted December 15, 20)

SECTION 8 EDUCATION COMPONENT

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SECTION 8 EDUCATION COMPONENT

8.1 EDUCATION AND OUTREACH

The goal of the education component is an informed and knowledgeable community. It is crucial to the success of a storm water management program for City staff and the community at large to have easy access to reliable and accurate storm water information. Without a shared, common knowledge base of local water quality and urban runoff information, it is difficult to obtain public support for local storm water quality programs. The storm water educational materials need to be detailed and comprehensive enough to support a shift in individual daily actions while allowing community groups to back specific water quality measures. As with all the other components of this storm water pollution prevention program, maintaining and restoring the chemical, physical and biological integrity of state waters is the ultimate outcome.

If reduction is the goal, then prevention is the theme for the Storm Water Pollution Prevention Program. The Education Component continues to emphasize the basics topics, such as:

- The difference between the sanitary sewer and the storm drain system; and
- The street and storm drainage system is not your garbage disposal system; and
- Making small changes individually, adds up to big changes in our rivers and at the beaches.

The other part of a successful storm water program is an involved and committed municipal staff that contacts the public about potentially damaging discharging activities. Storm Water staff diligently works to educate the citizens and businesses within the City jurisdiction on water quality and ways to prevent pollution from entering the storm drain system. The goals of the City's education and outreach program are to raise awareness of urban runoff and change the behavior of citizens and businesses. The progression of topics will lead to Watershed concepts as the basics in storm water are grasped by the general public.

8.1.1 Education and Outreach Events

Educating staff and the public is the best way to effect change in people's behavior. It is clear that there is broad-based public support for a cleaner and healthier environment. When people can connect with and learn more about our storm water program, our program earns the respect our citizens and community leaders for protecting our water quality. An effective "learn and earn" outreach program should be both regional and jurisdictional, since a pooled effort regionally is able to educate on a more impressive scale. Additionally, since we all live in a watershed, storm water pollution and the protection of receiving waters defy jurisdictional boundaries. As the San Diego River Watershed Copermittees move toward a Watershed-based approach to storm water management, education and outreach efforts will follow watershed strategies on a regional basis. As shown above, the City of El Cajon developed a Storm Water "Watershed" Logo to promote pollution prevention and protection of water quality.

8.1.2 Jurisdictional Accomplishments

Outreach accomplishments during PY3 include the following list of education and outreach efforts.

- "Pollution Prevention Days at the Cajon Classic Cruise" – Two Wednesdays in July and September of 2009 (July 8 and September 9, 2009). The events carried the "National Pollution Prevention Week" (P2 Week) theme and the events were scheduled to correspond to peak attendance days for a local automotive-related event called the "Cajon Classic Cruise." Information relating to the event was also posted to the City of El Cajon Website. Both residents and business owners were encouraged to attend.
- Continue to work with the El Cajon Community Development Corporation (ECCDC) to close and protect dumpsters, keep trash areas clean, and encourage good housekeeping habits in the downtown area.
- Storm Water Education and Outreach Document Portfolios were prepared and issued to selected municipal staff with high probability of contact with citizens on storm water pollution prevention issues. This included staff tasked with commercial and industrial site inspections, construct site inspections, complaint investigations and SUSMP plan review. The use of the storm water information portfolio has allowed the storm water program to connect with citizens, staff and other interested parties in an effective and detailed manner.
- "Fire Safety Open House" This day-long, Saturday event (October 10, 2009) included booths, educational information and formal and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. It is estimated that approximately 3,000 visitors attended this event.
- SUSMP Training
- Johnson Elementary School Career Day – Presentation of Storm Water and Geographic Information System tools to students interested in careers in environmental sciences.

8.1.3 City Staff Training

Municipal staff at the Public Works, Parks, and Facilities Maintenance Departments were trained to refresh the basic storm water topics of pollution prevention and use of BMPs. Additionally, various other municipal staff was given the basics in storm water training including:

- What is a Watershed and what Watershed do we live in.
- Why is keeping our water clean important.
- The different types of pollutants and where these pollutants originate.
- The difference between the storm drain system and the sanitary sewer system.
- What can be done at work and at home to eliminate polluted runoff during rain events and all yearlong.

Municipal crews are given door hangers to use during their daily routine activities in the City. An example of a door hanger is provided in Appendix A.6. The door hanger alerts the resident to the potential discharge that exists on or near their property. Possible solutions and phone numbers for reporting discharges are provided.

8.1.4 Special Community Presentations

POLLUTION PREVENTION DAYS

The City of El Cajon hosted two "Pollution Prevention Days" (P2 Days) events on July 8, 2009 and September 30, 2009. Many thousands of people attended each of the P2 Day events. The two Wednesday events included booths, educational information and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. The El Cajon Community Development Corporation (El Cajon CDC) also participated in our P2 Days event and distributed information on revitalizing and keeping our community clean.

The crowds gather to enjoy the Pollution Prevention Days Event at the Cajon Classic Cruise.

EL CAJON FIRE DEPARTMENT FIRE AND SAFETY OPEN HOUSE

On October 10, 2009, the City participated in the El Cajon Fire Department "Fire and Safety Open House." This day-long, Saturday event included booths, educational information and formal and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. It is estimated that approximately 3,000 visitors stopped by, many of them visiting the storm water booth as they passed through.

CAREER DAY AT JOHNSON ELEMENTARY SCHOOL

The Storm Water program provided residential BMP information and promotional items to elementary school students from Johnson Elementary School. The event took place on November 13, 2009 and was presented by City Storm Water/GIS staff. A total of 120 students attended the Career Day presentation.

8.1.5 Regional- and Watershed-Related Outreach

The Residential Sources Workgroup focused its budget of $111,269 towards in-kind contribution to develop a Regional Residential Outreach Program that would address regional issues and would aid in a transition from a jurisdictional- to a watershed-related program approach. All Copermittees contribute funds towards the outreach workgroup to benefit a coordinated regional pollution prevention program. PY3 funds were used to develop and further implement a framework for the Regional Residential Outreach Program that would target audiences and provide information on barriers to, and benefits of, changes in behaviors. The City of El Cajon served on the committee during development of the RFP, and continued in PY3 as a member of the interagency Committee developing the Regional Residential Outreach Program.

The events coordinated by the Outreach Workgroup and paid for by all Copermittees included a Storm-Water- and Watershed-related booth at the San Diego County Fair that displayed and provided information to those attending the San Diego County Fair.

8.1.6 Educational Materials Jurisdictional Distribution

The City developed brochures on the following subjects for distribution to the public:

- Keeping Trash, Sediment and Debris Out of Our Storm Drains
- Major Causes of Urban Runoff Pollution
- Mobile Business BMPs
- Pet Waste
- What You Can Do As a Business Owner to Keep our Storm Drains Clean
- Difference Between Sewer and Storm Drains
- What You Can Do As a Food Take-Out Customer to Keep Our Storm Drains Clean

The City printed 38,000 copies of two semiannual newsletters containing a total of 7 articles and reaching an estimated 281,930 different readers. A summary of the topics covered in the 7 articles is included above and in Section 6, Residential Component, of this report. Storm water logos assist the City in getting the attention of citizens and businesses. Logos are a way to make a lasting impression with citizens and businesses. One storm water logo used by the City is shown above. The City also included two articles with information about the Storm Water program as sewer billing inserts. A total of about 15,300 articles were distributed through out the City. The distribution was divided into approximately 13,300 residential and 2,000 non-residential impressions.

Through the course of PY3, a number of contacts were made to the public using brochures, fliers, mailers, radio and TV Ad's. Copies of brochures, fliers, billing inserts and newsletter articles are contained in Appendix A.6.The following table indicates the types and quantity of outreach impressions.

Table 5

Material Type	Number Distributed
Articles/Newsletters	266,000
Sewer Billing Inserts	15,300
Brochures	330
Over-the-Counter	350
TOTAL	**281,930**

Commercial

Education of commercial facility owners and their employees occurs through the use of brochures oriented specifically to a type of activity. Written warnings are accompanied with a brochure on the activity as well as distribution of these brochures as outreach opportunities arise during business and construction site inspections, and complaint investigations. Approximately 330 brochures of various types were distributed as summarized below. More one-on-one distributions were completed this year as the City expanded its role in inspections, complaint investigations and the daily routines of residential communities. The following brochure topics were distributed during PY3.

- Vehicle and equipment washing and cleaning (35 copies)
- Vehicle and equipment operation, maintenance, and repairs (20 copies)
- Car Washing Guide (25 copies)
- What's Cookin Guide (80 copies)
- Green Wrench Guide (100 copies)
- Power Washing Guide (20 copies)
- Private Sewer Lateral maintenance (20 copies)
- Construction Best Management Practices (30 copies)

Industrial

Industrial facilities revise and refine their BMP requirements through the annual inspection process. The following are discussed and informational brochures are shared when necessary.

- Prevention of Non-Storm Water discharges
- Good Housekeeping Practices
- Vehicle and Equipment Washing, Repair, and Fueling
- Loading and Unloading of materials
- Solid and Hazardous Waste Management
- Spill Prevention and Response
- Building and grounds maintenance
- Parking Lot maintenance
- Storm drain system maintenance
- Private Sewer Lateral Maintenance

8.2 Leadership Activities and Partnerships

The City's major roles for educating the community include:

- Provided direction and information to the local East County Construction Council on matters dealing with proper implementation of construction BMPs and LID.
- Continue in partnerships with the Cities of Santee and La Mesa as well as the County of San Diego in training staff on storm water management to incorporate storm water reviews at the beginning of the Planning level review.

- Continued in a relationship with the El Cajon Community Development Corporation and their Community Ambassadors and Clean Team. The Community Ambassadors are employees that develop connections with businesses and the community that will promote a cleaner and safer city. The Clean Team are students of St. Madelines Sophie school and are happy to assist in various community tasks. The Clean Team picks up cigarette butts along the sidewalk and gutter that the City's street sweeper cannot collect.
- Collaborated with the El Cajon Community Development Corporation to provide basic storm water rules to vendors at the Cajon Classic Cruise events.
- Collaborated with "I Love a Clean San Diego" to conduct storm drain stenciling, as needed.
- Worked with the County of San Diego and others to oversee the preparation of a Residential Sources Outreach Program. Implementation of this program was a goal of the 2009/2010 joint Copermittee Outreach Workgroup. Further implementation will continue into the next reporting year.

8.3 Measuring Changes in Knowledge and Behavior

A basic measurement of increased knowledge is a test of that knowledge. The City's test is an increase in referrals and reports from municipal staff. The number of complaints and referrals from citizens, staff, and county hotline was equivalent to last year. The Regional Outreach Program funded by this year's Copermittee Outreach budget will develop a very detailed baseline of community awareness, and the barriers to, and the benefits of, changes in behavior.

8.4 IMPROVEMENTS AND REGULATORY COMMENTS

Changes to the City's Storm Water Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the activities in ways dictated by direct or indirect experience. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

8.4.1 Improvements

The following are proposed improvements for the next Permit Year (July 1, 2010 through June 30, 2011).

- Continue to coordinate and expand outreach and education efforts to local public schools.
- Coordinate outreach and public participation activities for Public Works Week.
- Expand distribution of outreach materials in sewer bills and local press.

8.4.2 Regulatory Comments

No regulatory comments have been received for the Education Component of the JURMP Annual Report for PY2.

SECTION 9 Public Participation Component

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9.2 Improvement and Regulatory Comments **2**
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SECTION 9 PUBLIC PARTICIPATION

INTRODUCTION

Public participation is an essential element of a successful Urban Runoff Management Program, but is more highly effective as a Watershed Component. Due to the nature of participation by organizations such as "I Love a Clean San Diego", watershed concepts are more easily introduced to participants from the entire watershed and not just a small segment of the population in one particular community. Wherever Copermittees' efforts can be combined to produce better results, it is a "win/win" situation for jurisdictions, the watershed and the communities they contain.

Educational efforts set the stage for getting the public involved with scheduled Storm Water Pollution Prevention events or interested in following the minimum required BMPs at home or business. Since prevention through familiarity and participation is the best solution to pollution, the public fulfills participation requirements by:

- Participating in storm drain stenciling,
- Reporting of discharge incidents using the City Manager's Office or the City and County hotline,
- Participating in events that collect or recycle hazardous waste and used oil , and
- Participating in local and regional cleanup events

9.1 REGIONAL PARTICIPATION

On a regional basis, the City of El Cajon is the lead for the San Diego River Watershed Workgroup and is a member of the Watershed Lead Committee group. The San Diego River Watershed workgroup has continued to work together, including stakeholders' input or participation when possible, taking advantage of relationships developed through the years since developing and completing the San Diego River Watershed Management Plan. The City of El Cajon chairs the San Diego River Watershed Copermittee meetings

The City supported the "I Love a Clean San Diego" (ILACSD) Annual Creek to Bay Cleanup. Volunteers collected a total of 680 pounds of trash and recyclables within the City (176 pounds of trash and 504 pounds of recyclable materials). As in past years, the City of El Cajon also gave permission to ILACSD to stencil the message

"No Dumping . . I Live Downstream" and a depiction of a dolphin or duck to the curb area adjacent to storm drain inlets within the City.

9.1.1 Regional and Local Storm Water Hotlines

The City and County have a Hotline that can be used by the public to report potential illicit discharges and connections. The Hotline phone number is provided in informational brochures to residents and businesses and is posted on the City Website. Public participation is an essential part of an illicit discharge elimination program. Many illicit discharges are one-time occurrences that may not be observed by City staff. Concerned citizens can help stop illicit discharges by reporting them to the City. The following provides the details of those Hotlines.

- ✓ **City of El Cajon Storm Water Hotline, (619) 441-1653**

The City Storm Water Hotline provides access Monday through Friday 8 a.m. – 5 p.m. and complainants are directed to the appropriate staff person. The City's hotline currently provides information in English and Spanish.

The City updated its Storm Water Web Page to contain the most recent brochures and reports. Documents are retrieved and opened using Abode Acrobat to open the posted PDF files. The Storm Water Web Page is "Quick Linked" from the City of El Cajon Home Page with links to a list of documents and other important websites.

- ✓ **County Storm Water Hotline, 1-888-846-0800**

The County storm water hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides services in both English and Spanish and a voice mail message for 24-hour public access. Relevant complaints received through the County hotline are forwarded to the City Storm Water Protection Program.

9.2 IMPROVEMENT AND REGULATORY COMMENTS

Changes and improvements to the City's Storm Water Participation Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the participatory activities in ways dictated by direct or indirect experience. As the focus of the program shifts to multi-jurisdictional participation on a watershed level, changes and improvements to the storm water program will be necessary. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

9.2.1 Improvements

The following are proposed improvements for the next Permit Year.

- Continue collaboration with community volunteer groups.
- Continued participate in Watershed-wide efforts.
- Focus the City's efforts on programs and activities that will have an impact on the watershed, its health, the 303(d) pollutants and their sources
- Continue to participate in the El Cajon Fire Department Open House to inform and engage children on water quality issues.

9.2.2 Regulatory Comments

No regulatory comments have been received for the Public Participation Component of the JURMP Annual Report for PY2.

SECTION 10 FISCAL ANALYSIS

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SECTION 10 FISCAL ANALYSIS

10.1 INTRODUCTION

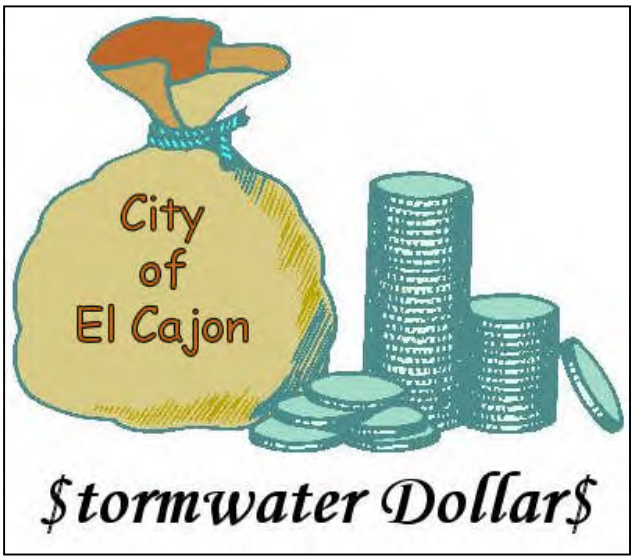

A fiscal analysis of the JURMP provides a vital assessment of resources for the current and upcoming Permit Years. This section of the report will incorporate guidance and standards developed collaboratively by the Copermittees and in accordance with the Municipal Permit. The City is reporting expenditures using summary tables developed by the Standardized Fiscal Analysis Method and Format adopted in February 2009 (summary tables and forms are included in Appendix A.10). The analysis attempts to identify adequate support and how resources are divided to support and fortify the JURMP, WURMP, and RURMP efforts.

In PY 2003-04, the City Storm Water staff developed a separate budget from other Public Works activities and sufficient to run the Storm Water Program. The Program continues to be adequately funded through the City's Sewer Fund. This funding source has been used since PY 2004-05 and will continue to be used for PY 2010-11.

10.2 GENERAL BUDGET INFORMATION

The following table shows actual expenditures from permit year 2003-04 through 2009-10 and the proposed 2010-11 budgets for the City's Urban Runoff Management Program.

Item	03-04	04-05	05-06	06-07	07-08	08-09	Estimated Actual 09-10	Proposed 10-11
Salaries (including benefits)	451,246	561,473	533,487	550,856	722,809	714,841	761,490	738,646
Materials, Services and Supplies	111,598	222,836	183,639	254,876	397,292	423,543	673,486	696,893
Capital Outlay	7,040	0	6,235	29,953	73,593			11,000
TOTAL	**569,884**	**784,309**	**723,361**	**835,685**	**1,193,644**	**1,138,384**	**1,434,976**	**1,446,539**

Budgets increased steadily from 2003-04 through 2006-07 under Municipal Permit Order 2001-001. The increase in PY 2007-08 was a result of allocating resources in anticipation of fulfilling

requirements for Municipal Permit R9-2007-001 (new permit). The budget to maintain the Storm Water Program in compliance with the New Permit dropped slightly in PY 2008-09 but may continue to increase in PY 2009-10 and the proposed budget for 2010-11. A copy of the budget is located in Appendix A.10.

The City's NPDES Urban Runoff Management Program funding was sufficient to meet the JURMP requirements in PY 2009-10 and will be sufficient to meet requirements in PY 2010-11. The City met its projected goal of continuously executing plans, procedures, and processes to implement JURMP requirements and assess the effectiveness of programs that were implemented.

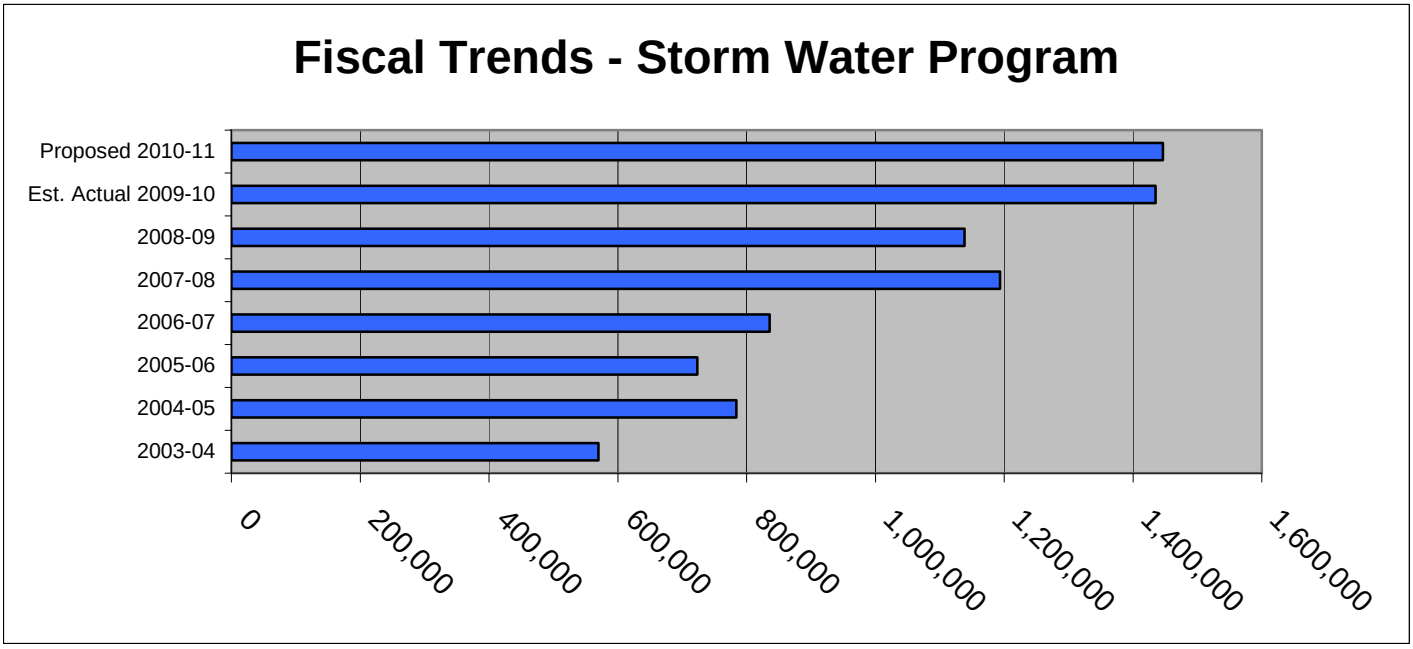

Modifications to the program were made that resulted in an increase in expenditures in PY 2004-05 and a slight decrease in PY 2005-06. The budget for PY 2004-05 contained some capital expenditures that were started in PY 2002-03 and PY 2003-04 such as a Geographical Information System dataset for map generation and a trash debris fence to collect trash and debris in Forrester Creek before discharging to Santee. From PY 2005-06 through PY 2008-09 there has been a steady increase in the budget to support the Storm Water Program. Overall a general increasing trend of funds have been allocated from PY 2002-03 through PY 2009-10 to sustain a viable storm water program.

10.3 FISCAL ANALYSIS METHODS

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J. 1 .a(3)(k), and J. 1 .c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis Methods document was submitted to the San Diego RWQCB by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

The budget for PY 2009-10 included a Storm Water Program Manager, 1 part-time senior engineering technician, 1 assistant engineer, 1 GIS technician, 1 compliance officer, and 1 part-time Engineering Intern. The personnel for PY2010-11 will remain unchanged with the same number and job classification as in the reporting year of this annual report. The City also has an open contract with three consultants to provide as-needed services to ensure the City meets its JURMP implementation requirements.

The City is using forms and tables developed by the new Fiscal Analysis Method for reporting (attached in Appendix A.10). It is important to note that while the Expenditure Summary table in Appendix A.10 shows jurisdictional expenditures per various permit components, it may not reflect all expenditures. Further modifications to the City's accounting and expenditure tracking will continue to be made through PY 2010-11 to better track expenditures for each jurisdictional component. Program components expenditures for development planning, construction, municipal, residential, and special investigations were difficult to dissect.

10.4.2 FUNDING SOURCES

In the long-term, funding for the Storm Water Program will continue to be even a bigger question with necessary increases required to maintain permit compliance. The City is constantly challenged with doing more with less after a continual decline in general fund budgets. For PY2009-10, the City completed all inspections, as well as other requirement of permit R9-2007-0001, with existing staff heavily complemented by a consultant.

Working efficiently is the goal of the jurisdictional urban runoff management program. Completing onsite inspections, tracking enforcement actions, and complaint/referral information allows the City to reduce the amount of time and paper to complete significant portions of the Municipal, Industrial, Commercial, Construction, and Land Use Planning JURMP Components.

For WURMP activities, the City will continue to coordinate with the other San Diego River Watershed Copermittees to complete watershed water quality activities and education activities.

Working together eliminates duplicative efforts and enhances the effect across a wider range of people and geographical area. The City manages a contract with a consultant to assist with the Watershed program and a share cost agreement has been in effect for a few years.

No regulatory comments were received during PY2008-09 for the City's Fiscal Analysis.

SECTION 11 PROGRAM ASSESSMENT

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SECTION 11 PROGRAM ASSESSMENT

11.1 INTRODUCTION

The City began using the standardized program effectiveness assessment soon after it was developed by the Copermittees during the previous permit cycle. The City also participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs. Due to a variety of complications on a regional level, that process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures.

Since the submittal of the JURMP in March 2008, no significant progress has been made on regionally standardized approaches to program effectiveness assessment. It is likely that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will revisit the issue of standardized assessment metrics and procedures in the near future. The City anticipates participating in the process of developing such regional standards and incorporating work products produced into its own local program effectiveness assessment system. Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

The City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1 through Level 4 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Level 1

Level 1 is documenting activities. Sections 1 through 10 of this PY3 Annual Report list activities, storm water controls, and when possible the quantity of pollutants collected and diverted from entering the storm drain system, viewed as a reduction in pollution-containing materials potentially available for discharge into the storm drain system. Existing and New Development, Construction, and Illicit Discharge Illegal Connection are the areas where quantifiable amounts of pollutants are reported as collected and removed from entering the storm drain system. By completing collection activities, the City maintains compliance with the Municipal Permit requirements.

11.2.2 Level 2 and 3

Refer to tables 11-3 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

11.2.3 Level 4

The primary goal of BMP implementation is to reduce the loading of pollutants to urban and storm water discharges. Pollutant load estimation is the first direct characterization of water quality through JURMP activities. Regionally, San Diego River Watershed receiving water quality results are from the major outfall to the Pacific Ocean. In the future, Watershed monitoring at the jurisdictional lines will at least assign responsibility of pollutant loads, but will not determine a reduction in pollutants. The best approach is to make sure wet weather and dry weather results do not exceed action levels.

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed.

11.3 ASSESSMENT OF PROGRAM MEASURES

Basic assessment of program measures begins with City-based questions. First, starting with what is known, then shifting to what is wished to be learned, and finally what was learned. During the first step, the "what is known" are the measurements compiled from each of the JURMP components. Measurements such as the amount of material removed during street sweeping or cleaning of catch basins are direct measurements of pollution diverted from entering waterways. At some point it may become appropriate to compare measurements to previous years, average measurements, or assess trends to assist with potential pollutant loads removed from a particular origin. Dry weather monitoring results are direct measurements of pollutants in urban runoff, but only partially address measurements of receiving water quality.

Sources, selected BMPs, measurements, and other indicators, identified in the previous Sections of this Annual Report for each of the Existing and New Development Components, report completed activities and achieved goals as required by Order No. R9-2007-0001 and the City's updated JURMP. In summary, the City completed program implementation as designed in the JURMP and is incompliance with the activity-based permit requirements.

11.3.1 Direct Measures of Program Activities

For many years, the City tracked efforts from various collection agencies with four types of direct measures, as follows:

- Street Sweeping,
- MS4 Cleaning/Maintenance,
- Oil Recycling, and
- Household Hazardous Waste Collection

In general, the City tracks these measures because they provide an important indication of the types and amounts of materials and wastes that are diverted from the MS4 through various means. Street Sweeping and MS4 Cleaning directly removes materials from the pathway of rainwater and urban runoff. Oil Recycling re-routes used oil from illegal disposal to refineries where it is ultimately reused. The Household Hazardous Waste program collects wastes that may otherwise be improperly disposed, potentially to the MS4.

a. Street Sweeping

The Department of Public Works collected an estimated 3,611 cubic yards of debris during its street sweeping activities (17,250 miles of curbed streets). This year, the City's street sweeping efforts have been consistent with previous years. Were it not for these efforts, the debris collected would otherwise be swept away during rain events. Collection provides important long-term water quality benefits.

b. MS4 Cleaning

In PY2009-10, City's storm drains were cleaned by the Department of Public Works resulting in the removal and proper disposal of 1,713 cubic yards of material from the storm drain system. As a whole, the City's effort remained the same as last year.

c. Recycling of Household/Commercial Waste and Oil Recycling

Recycling in El Cajon has good participation, but could always do better when the numbers are compared for recycled materials (17,298 tons) and waste (78,739 tons). Trends in waste collection will continue to be tracked. The 17,298 tons of other recyclables included - amongst other items - newspapers, glass, plastic, tin, and aluminum.

Oil recycling is tracked by independent recyclers that are certified collection centers (e.g. Jiffy Lube) and Waste Management for curbside pickup of used oil. A grand total of 16,593 gallons of used oil and 1,217 used oil filters were collected from within the City. A total of 701 gallons of used oil and 467 used oil filters were collected from residential areas. While a total of 15,892 gallons of used oil and 750 used oil filters were collected from certified collection centers located within the City of El Cajon's jurisdiction.

d. Household Hazardous Waste Collection

Waste Management of El Cajon collects the Household hazard waste for the City's jurisdiction. In PY2009-10 an estimated 364,171 pounds of household waste were collected; as opposed to 344,146 pounds in PY2008-09, 268,323 pounds collected in PY2007-08; 236,890 pounds collected in PY2006-07; 198, 015 pounds in PY2005-06; and an estimated 277,000 pounds of household hazardous waste/recyclables were collected at 19 events in PY2004-05. As a whole, the City's effectiveness in collecting HHW from its residents has increased consistently and significantly over the years.

11.3.2 Indirect Measures

In most instances, changes to receiving water quality cannot be directly compared to collection activities. However, many indirect measures have value in tracking the effectiveness of specific program activities, and may have additional utility in assessing long-term water quality changes. Many of these measures are reported and discussed throughout this Annual Report. To track and evaluate the effectiveness of its program implementation over time, the City has compiled summary statistics for several of measures.

Table 11.1

Indirect Measure		2009-2010
Complaints	Total Number received	143
	Number of Referrals from Other Departments	63
	Number of Enforcement Actions	21
Staff Training	City Staff Trained	49
Outreach	Outreach events conducted	4
	Number of Presentations	1
	Audience @ presentations	120

a. Complaints and Referrals

In this reporting period, the City received a slightly lower number of complaints than last year from other City departments, citizen calls, and county referrals. The City and County hotlines are described in Section 6 (Residential Component). As previously discussed, this trend underscores the effectiveness of the City's outreach and staff training efforts. As in previous years, it is believed that more of the City's citizens and staff are aware of storm water violations and understood what to do when water quality concerns were observed.

b. Staff Training

Levels of staff training during this reporting period were expanded to those of previous years. Although the City has made an important commitment to staff training under the previous and current Permit (see JURMP Section 8, Education), the consistency of these numbers also demonstrates the City's past commitment to training its staff. Training of staff with implementation responsibilities is not a new part of the City's storm water program. However, the scope and breadth of these and other programs has significantly increased.

c. Outreach

This year, the City conducted a number of one-on-one discussions at the Public Works front counter with building and planning applicants and with commercial businesses and industrial facilities during inspections and complaint follow-ups. Together, these increased face-to-face conversations demonstrate that the City is effectively implementing its outreach and education programs; details are provided in Section 8 (Education). The City also sent notifications to various types of mobile businesses for newly required BMPs.

11.3.3 Program Activities and Water Quality

Presenting a direct connection between pollutant load reduction and Storm Water Pollution Prevention Program activities continues to move forward, but is very slow moving and is very much under development. Copermittees have created a Framework document containing the six (6) Levels of Assessment. The PY2002-03 Annual Report addressed Levels 1 through 4. However, forecasting only generates numbers that could not be supported by calculation or program actions. For PY2009-10, the City continued with the slightly modified approach used for PY2008-09, which brings the assessment much closer to connecting activities with water quality. Amounts of pollutant-containing materials prevented from entering the storm drain system provides solid numbers while adding percentages of facilities known (through inspection) to be implementing minimum required BMPs and reduces the estimation factor.

11.4 LONG-TERM ASSESSMENT

The Annual Assessment indicates the City is meeting the requirements specified in their JURMP and collecting data associated with those program activities. At some point, a connection between activity completed and pollutant load in receiving waters will become a reality.

A Long-Term Assessment must answer key questions to guide future activities and build into the current program, the additional reporting requirements in order to connect program activities with actual improvement in receiving water quality. The Long-Term Effectiveness Assessment (LTEA) is conducted once every five years (permit renewal cycle) as changes to permits may change approaches and programs. Copermittees are preparing to begin work on this permit cycle's LTEA.

Table 11.2

Program Activity	Annual Questions	Permit Questions (Every 5th year)
Water Quality Assessment	What are the high priority quality problems and where do they occur? What constituent(s) is(are) causing the problems?	What are the changes to discharge and receiving water quality in my Watershed?
Program Planning	What are the priority sources of	Are the current programs

Program Activity	Annual Questions	Permit Questions (Every 5th year)
	pollutants? What BMPs are needed to control these pollutants? What are the targeted outcomes for the BMP Implementation? What are the projected Load Reductions from these implemented BMPs?	providing the information necessary to produce targeted outcomes?
Program Assessment	Were targeted outcomes achieved? What BMPs should be changed or should other BMPs added? Are costs associated with implementation feasible?	Is the cost worth the water quality changes?
Integrated Assessment	How well are the parts of the program working together? What other links can be made?	What other relationships between activities and water quality are evident?

Answers to the above questions come from further analysis of each existing component area. Tables of estimated pollutant loads removed are provided below. Areas where pollutant removal rates are high will be the areas to focus program efforts. Modifications to JURMP activities will be the result of this assessment.

Level 4 Pollutant Load Reductions are provided in the following tables for existing development. Estimates of average load reduction per event was the most difficult to find support evidence. Using the best knowledge available, the magnitude of total pollutants reduced is the most powerful in assessing the degree of success for the City's storm water program.

LEVEL 4 Assessment

Each of the following tables provides an estimate (supported with empirical data) for the amount of pollutant-containing materials prevented from entering the MS4 due to the activities of the Storm Water Pollution Prevention Program implemented in the City of El Cajon. As there is only one receiving water body in El Cajon, Forester Creek impairments were used as the constituents of concern when estimating possible amounts of pollutant-containing material prevented or a reduction in the amount of pollutant that could have discharged into Forester Creek. Only Existing Components were assessed through Level 4 as the most qualitative and quantitative information is available in these areas. The following paragraphs discuss assumptions incorporated into calculating the amounts provided as "Total" for each Existing Component.

The City of El Cajon installed a trash and debris fence in PY 2005-06 to capture trash from creek flows. Trash was added to the assessment due to the Forester Creek Improvement Project in Santee.

General Assumptions

There are a number of general assumptions within each table. Of most importance is the understanding that the amount (estimated or actual) removed or eliminated from discharging into the storm drain system is the amount of the material or liquid and does not equate to actual pollutant loads reduced. Secondly, the margin of error in these values is very high as most numbers were calculated using available information. Data quality is not necessarily a concern. This is an effort in determining where best to place education efforts and focus each program component.

Municipal

At 20 municipal maintained areas (parks, City Hall, recreation centers), staff cleaned area of pet waste, three times per year. Collection at each area was approximately one pound of pet waste. Pet waste does not equate to one pound of bacteria.

The City maintained 100% of laterals at approximately 24 buildings. No sewer overflows were experienced at City facilities. Pounds were estimated using 10 pounds (no factual basis other than one gallon of water equals 8 pounds) equaling one gallon of sewage. Private laterals not cleaned annually may experience stoppage depending on usage and care. Approximate gallons potentially dischargeable is 2 gallons times 10 equals 20 pounds time 24 buildings equals 480 pounds. The potential for error with this calculation is high.

Total dissolved solids from Municipal areas originate mainly from fertilizers applied by staff. There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation efforts that reduces overspray. All these activities reduce the amount of TDS available for discharge to the storm drain system.

Municipal activities do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.

Trash reduction at City facilities is a consistent effort with approximately 80 to 90% of the 400 City employees ensuring trash is placed in appropriate containers. One pound of trash per year per person is estimated. This amount may be estimated too high.

One park within the City, Wells Park, has an area designated as a “Dog Park” where citizens can take their dogs to walk and bags to collect pet waste are provided for cleaning after their dogs. The Parks Department collected approximately 9.5 tons of pet waste during PY2009-10.

The total calculated amounts of pollution prevented from entering the storm drain system are possibly estimated high and do not fully equate to improved water quality.

Industrial

There were 112 industrial facilities that were inspected that are conducting industrial activities within the City of El Cajon. It is estimated that 100% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during industrial inspections. If each facility is preventing one overflow of 5 gallons times 10 pounds,

then 50 pounds times 112 facilities equals 5,600 pounds of bacteria- containing materials did not discharge to the storm drain system.

Total dissolved solids from Industrial areas originate mainly from fertilizers applied by contracted staff to landscaped areas (usually a very small area compared to the total industrial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation effort that reduces overspray. All activities reduce the amount of TDS available for discharge to the storm drain system.

Based on inspections and enforcement of the industrial community, pH-affecting substances are reduced from entering the storm drain system through the implementation of BMPs as required by the General Industrial Permit. Amounts estimated have no factual basis.

Trash reduction at Industrial facilities is based on industrial inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads, as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections and the two enforcement actions taken at industrial facilities during this Permit Year.

Commercial

There were at least 59 commercial facilities conducting activities with the high potential to discharge bacteria-containing liquids, mainly eating and drinking establishments. Of those facilities, it is estimated that 50% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during commercial inspections. If each facility is preventing one overflow of 2 gallons times 10 pounds, then 20 pounds times 30 facilities equals 600 pounds of bacteria- containing materials that did not discharge to the storm drain system. This may be estimated high.

Total dissolved solids from 207 commercial facilities originate mainly from fertilizers applied by contracted staff or lease company personnel to landscaped areas (usually a very small area compared to the total area of the commercial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation efforts that reduce irrigation overspray. All these activities also reduce the amount of TDS available for discharge to the storm drain system. Commercial activities observed during inspections do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.

Trash reduction at Commercial facilities is based on inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads, as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections.

Residential

Bacteria source reductions for dog owners, homeowners, and Recreational Vehicles (RVs) is purely speculation, although the numbers of potential targets is accurate, based on circulated printed educational materials. Enforcement actions, however, indicate few reported sewage overflows from residential areas. Amounts calculated are estimated too high and should be adjusted with more factual information in future Permit Years.

Total Dissolved Solid and Trash reductions are also speculation based on information materials circulated throughout the City in the Spring and Fall newsletters. Amounts estimated are reasonable. Based on City observations, only a few neighborhoods have trash problems. These areas will continue to be targeted in future Permit Years.

* = Total amounts calculated appear reasonable with the exception of bacterial-containing materials. Factual information is not readily available for this element and estimations are high.

New Development

Only trash and TDS were assessed for New Development as a small-scale post-construction BMP data is not yet available. Speculations on the amount of trash are associated with post-construction BMPs provided, although no corroborating evidence could be found. Numbers calculated appear reasonable.

Construction

Most of the pollutant reductions at construction sites involve sediment. Based on the inspections completed, bacteria from Port-o-lets, pH from concrete washout, and trash rarely require a corrective action. Estimations of pollutant-containing material prevented are low and may be adjusted.

Pollutant Reduction Estimation Worksheets for Forrester Creek 303(d) Listed Pollutants (PY2009-2010)

Table 11.3 – Municipal Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted**	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Pet Waste	Maintenance	Pet Waste Bags picked up at Dog Park	Dog Area at City Park	100%	Entire Permit Year	Empirical Data	HIGH	9.5 tons of pet waste	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Education	Sewer insert - Your Private Sewer Lateral	20 buildings	100%	20	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Enforcement	Non-Storm Water Discharge	no sewage overflows	100%	0	Empirical Data	HIGH	0 gallons	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
TDS/Nitrates	Parks and Grassy Areas	Maintenance	Landscape Maintenance	20 grassy areas	100%	20	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (2.5 mg/L NO3)
Trash	Streets	Maintenance	Street Sweeping	17,250 miles	100%	17,250	Empirical Data	HIGH	3,611 Cubic Yards*	No Measurement at this time
	Channels	Maintenance	Channel Maintenance	8 major channels	100%	8	Empirical Data	HIGH	1,713 Cubic Yards*	No Measurement at this time
TOTAL									**5,324 Cubic Yards Trash ******	
* - Converted from cubic yards at 60 lb/cubic yard				*** - Represents only two months of usage					**9.5 Tons of fecal coliform 0 gal fecal coliform******	
**- Correlation to Water Quality TBD				**** - Actual Results						

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.4 – Industrial Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Private Lateral	Inspection	Private Sewer Lateral	112 inspected industrial facilities	TBD	TBD	In Progress	HIGH	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	112 inspected industrial facilities	100%	112	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash (not 303(d) listed, but monitored by East County)	Dumpster	Maintenance	Building/Grounds Maintenance	108 high priority industrial facilities	100%	108	Extrapolated Information	MEDIUM	(.1lb of trash) (108 facilities) (365 days) = 3,942 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	108 high priority industrial facilities	83%	90	Extrapolated Information	MEDIUM	(.05lb of trash) (90 facilities) (365 days) = 1,642.5 lb	No Measurement at this time
TOTAL									**5,584.5 lb of trash *****	
* - Diverted from the Storm Drain System *** - Estimated Results										
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

.1lb Trash = 8 cups/paper @ .2 ounces each

Table 11.5 – Commercial Component									
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted ***	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Private Lateral	Education	Private Lateral Maintenance	30	30	In Progress	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	207	166	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash	Dumpster	Maintenance	Building/Grounds Maintenance	207	105	Extrapolated Information	MEDIUM	(.1lb of trash) (105 facilities) (365 days) = 3,832.5 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	207	124	Extrapolated Information	MEDIUM	(.05lb of trash) (124 facilities) (365 days) = 2,266.65 lb	No Measurement at this time
								6,099 lb of trash ***	
TOTAL									
* - Diverted from the Storm Drain System			*** - Estimated Results						
**- Correlation to Water Quality TBD									

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.6 – Residential Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMPs Completed for Measurement**	**# of articles Distributed**	**% of Readers Implementing BMP (estimated)**	**# of Possible Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Sanitary Sewer	Education	Private Lateral Maintenance	38,000	0.1%	38	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
	Pets (Dogs & Cats)	Education	Pet Care	20,000 pet owners	10%	2,000	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS	Landscape Fertilizers	Education	Home/Garden Maintenance	38,000	0.5%	190	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
	Automobile	Education	Vehicle/Equip Cleaning	38,000	10%	3,800	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
pH	Concrete Washout	Education	Home Repair	38,000	5%	1,900	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7 pH)
TOTAL										

* - Diverted from Storm Drain System *** - Estimated Results

** - Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to WQ

Table 11.7 – New Development Component

ASSESSMENT LEVELS	Level 1	Level 1	Level 1	Level 1	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources (Completed Projects)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
TDS	Landscape	Inspection	Bio-filtration Area	7	5	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/l)
Trash	SW Inlets	Inspection	Inlet Filters	7	5	Extrapolated	MEDIUM	(.1lb of trash) (2 facilities) (365 days) = 73 lb	No Measurement at this time
	Landscape	Inspection	Media Filter	7	2	Extrapolated	MEDIUM	(.05lb of trash) (2 facilities) (365 days) = 36.5 lb	No Measurement at this time
	Paved Areas	Inspection	Detention Basin	7	2	Extrapolated	MEDIUM	(.05lb of trash) (2 facilities) (365 days) = 36.5 lb	No Measurement at this time
	Dumpster	Inspection	WM5 - Solid Waste Management	4	4	Extrapolated	MEDIUM	(.05lb of trash) (4 facilities) (365 days) = 73 lb	No Measurement at this time
TOTAL								**219 lbs of trash *** **	

* - Diverted from the Storm Drain System

*** - Estimated Results

**- Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.8 – Construction Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP (Section 3, Table 3)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Port-o-let	Inspection	WM9 - Sanitary Waste Management	20	99%	19	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
pH	Concrete Washout	Inspection	WM8 - Concrete Washout Management	20	97%	19	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7)
Trash	Dumpster	Inspection	WM5 - Solid Waste Management	20	100%	20	Extrapolated	MEDIUM	(.1lb of trash) (20 facilities) (180 days) = 360 lb	No Measurement at this time
TOTAL									**360 lbs of trash *** **	
* - Diverted from the Storm Drain System			*** - Estimated Results							
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

11.5 PROGRAM ASSESSMENT SUMMARY

Estimated Pollutant Load Tables indicate that Residential Areas continue to have the greatest potential for pollutant removal activities. Nearly three to seven times higher than the other areas, the residential community has the largest potential for reducing pollutants from entering the City's receiving waters.

Each component has been addressed as follows for strengths and improvements. Effective is viewed as meeting the Municipal Permit implementation and reporting requirements.

Component	Effective	Strength	Improvement
Municipal	Yes	Education (Training)	Continue to coordinate with other watershed Cities.
Industrial	Yes	Assessment of BMP Implementation	Revise Inspection Form and make changes accordingly.
Commercial	Yes	Assessment of BMP Implementation	Continue to contact mobile businesses on the required BMPs that need to be implemented.
Residential	Yes*	Outreach and Education	Contact property owners directly by targeting specific problem areas. Conduct drive-abouts at problem Residential areas.
New and ReDevelopment	Yes	Process	Continue to implement Permit requirements under the new regional model SUSMP and begin to prepare for the implementation of the HMP.
Construction	Yes	Inspections	Continue to work with inactive sites to maintain BMPs in good condition when needed.
Illegal Discharge Detection and Elimination	Yes	Monitoring	Increase frequency of monitoring and monitoring points.
Education	Yes	Team Efforts	Target elementary and middle school children.
Public Participation	Yes	Team Efforts	Continue efforts to team with Region whenever possible.

* Face-to-face contact is effective but slow moving.

11.6 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements are discussed throughout the Program Assessment section and are summarized above. No regulatory comments were received during PY2008-09 for the City's Assessment and Jurisdictional URMP Effectiveness Component.

SECTION 12 SPECIAL INVESTIGATIONS

12.1 FORRESTER CREEK IMPACT STUDY 1

SECTION 12 SPECIAL INVESTIGATIONS

12.1 FORRESTER CREEK IMPACT STUDY

For the seventh year, the City conducted an upstream/downstream monitoring of dry weather constituents of concern in Forrester Creek. The monitoring was conducted on July 7, 2010 to assess the relative amount of pollutants discharged within the jurisdictional boundaries of El Cajon into Forrester Creek. The upstream location is at the County boundary, specifically at Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of 1699 East Main Street. Flow at the upstream sample was approximately four (4) gallons per minute. During rain events, flow from Crest and other unincorporated County areas discharge directly into the City of El Cajon without treatment. To date, no analytical data have been collected for wet weather flows.

Table 1

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Nitrate (mg/L NO_3-N)
Upstream	7/7/10	4	25.9	7.6	1.75	1.72	12.73
Downstream*	7/7/10	94	18.4	8.2	4.06	2.82	5.77

Table 2

Site	Date	Total Hardness (mg/L$CaCO_3$)	Oil & Grease (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mlL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	7/7/10	482	nd	13,000	80	210	1,130	2.0
Downstream*	7/7/10	203	nd	22,000	3,000	5,000	1,840	5.9

nd = not detected

The following is a summary of the upstream/downstream results:

- Nitrates were detected at 12.73 mg/L upstream, and 5.77 mg/L downstream
- Orthophosphate upstream was 0.05 mg/L, and not detected downstream
- Detections of ammonia upstream was 0.14 mg/L, downstream was 0.42 mg/L
- Surfactants were detected at 0.13 mg/L upstream, and 0.25 mg/L downstream

Notable Results and Reasoning

Increase in flow to 90 gallons per minute from upstream to downstream. Downstream flows have decreased for the past four years. Concentrations of many constituents decrease from upstream to downstream; this includes nitrate, orthophosphate, total hardness, and zinc. Increase in the concentrations (from upstream to downstream) of pH, turbidity, conductivity, ammonia, dissolved oxygen, total hardness, and total coliform.

The City does not have an explanation at this time for the increase in flows or the significant increase in dry weather flow contributions within City boundaries. The City will continue to conduct further dry weather investigations to develop enough data to establish baseline conditions (for current channel configurations) and to develop priorities for more detailed investigations for pollutant and dry weather flow sources. A copy of the 2010 City of El Cajon Forester Creek Impact Study is included in Appendix A.12.

SECTION 13 NON-EMERGENCY FIRE FIGHTING FLOWS

INTRODUCTION 1

13.1 BEST MANAGEMENT PRACTICES 1

13.2 EDUCATIONAL METHODS 2

13.3 IMPROVEMENTS AND REGULATORY COMMENTS 2

SECTION 13 NON-EMERGENCY FIRE FIGHTING

Introduction

Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. BMPs and educational methods are used to reduce the discharge of pollutants to the MEP.

13.1 BEST MANAGEMENT PRACTICES

The City has already developed and implemented a program to reduce pollutants from non-emergency fire fighting flows, in accordance with Section B.3. of the Permit. BMPs will be implemented when conducting the following activities:

- Regular Maintenance of Fire and Emergency Vehicles and Equipment
- Training Exercises
- Facilities Maintenance
- Post-Emergency Rehabilitation of Response Equipment

These activities are conducted in a way to either minimize or eliminate the discharge of pollutants to the MS4. Detailed descriptions of BMPs are given for each activity below:

Regular Maintenance of Fire and Emergency Vehicles and Equipment

- Vehicles and equipment will be cleaned where runoff will be directed either to the sanitary sewer system or to a drain with an oil/water separator system.
- Vehicles and equipment will be cleaned where runoff will pond and evaporate and/or where runoff will filter through landscaped areas.
- Used-oil, hydraulic fluids, and antifreeze will be stored in containers for recycling or will be disposed as hazardous waste.
- Spill kits will be available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents will be minimized, and general cleaning solutions will be disposed of into the sanitary sewer system.
- Caustics, flammables, and solvents will be contained and disposed of properly as hazardous waste.

Training Exercises

- Water used in training exercises will be directed to landscaped areas whenever possible, and runoff from the training exercises will not be allowed to discharge to the MS4.
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff that could contribute to non-storm water discharges.

Facilities Maintenance

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways will be swept to remove debris. Debris will be placed in the trash. Interior

floors will be mopped as necessary, and the wastewater discharged into the sanitary sewer system or onto landscaped areas.

- Landscaped areas will be maintained as required to reduce introduction of leaves and other landscape waste into the MS4.
- Irrigation systems will be monitored and maintained as required to reduce irrigation water from going off-site.
- Spills will be cleaned up using spill kits provided at the work site, and disposal of spilled material will be in accordance with applicable regulations.
- Spills that require a cleanup beyond the ability of the on-site employees will be reported to the City Department of Public Works for assistance with appropriate resources
- Maintenance and repair of structures will be conducted using methods that do not contribute pollutants to the MS4
- General non-hazardous cleaning solutions will be disposed of in a utility sink that drains into the sanitary sewer system

Post-Emergency Rehabilitation of Response Equipment
Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency will be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. The use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified.

13.2 EDUCATIONAL METHODS

The Storm Water Division provided training to the Fire Department Personnel in PY2007-08 and PY2008-09. In PY2009-10, and for a second year in a row, the Storm Water group cooperated with the Fire Department on outreach materials conveying how best to conduct weed abatement prior to the fire season and remain in compliance with storm water regulations.

13.3 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements from PY2 experience include:

- Continue to coordinate with the Fire Department on outreach materials.
- Expanded maintenance Best Management Practices for fire fighting equipment and facilities.

Regulatory comments are not applicable to this portion of the JURMP update. Non-Emergency Fire Fighting is a new component of the annual update.

14.1 INTRODUCTION 1

SECTION 14 JURMP REVISIONS

14.1 INTRODUCTION

No changes to the JURMP occurred during PY2009-10.

Section 15 Conclusions and Recommendations

Introduction **1**

15.1 Conclusions **1**

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SECTION 15 CONCLUSIONS & RECOMMENDATIONS

INTRODUCTION

To conclude PY3 and recommend changes for PY4, this Section focuses on the challenges overcome this last year that will help eliminate inaccuracy or uncertainty for subsequent permit years. To summarize, the City:

- Continued implementation of the BMP-based inspections by focusing efforts on ensuring full implementation of appropriate BMPs at all high priority commercial, industrial, construction and municipal facilities.
- Continue to incorporate and contact storm water pollution prevention requirements for mobile businesses using regional mobile business database.
- Expanded public education efforts by targeting junior high school student population by conducting presentations; and continued participation in the Fire Department/Safety Open House, hosting Pollution Prevention Days events, and providing information to the mass public through the City newsletter.
- Continued efforts towards a Watershed-based program by conducting the fifth upstream/downstream water quality assessment of Forrester Creek.
- Refined the City's ability to track complaints, inspections, violations, and enforcement actions for accuracy and completeness.
- Opened contract for on-call analytical testing services to conduct follow-up responses to complaints, spills, and targeted investigations to identify potential pollutant source points.
- Hired consultant to assist with the review of storm water plans and requirements for proposed development and redevelopment projects.

15.1 CONCLUSIONS

A number of conclusions resulted from compiling the Annual Report information as follows:

The City continues to transition the activity-based requirements of Order No. 2001-001 to fulfill the requirements of Order No. R9-2007-001. The actions taken by the City to comply with these requirements are fully described in Sections 1 through 14 (particularly Section 11) of this Annual Report. The City will continue to meet the activity-based compliance requirements in future program years.

The City's focus on BMP implementation at high priority commercial and industrial facilities and at construction sites will reduce or prevent discharges of pollutants from those activities and sites. Once the City can reasonably assure that those priority activities are not discharging

pollutants, the City will be able to focus more effort on identifying and eliminating other (unknown, unidentified) sources of pollutants that continue to impact water quality.

The City's program must continue to move forward, from an emphasis on the activity-based compliance actions to water-quality-based activities that will help the City achieve the goal of reducing discharges of pollutants and restoring the quality of the receiving waters. These activities include collecting, evaluating and incorporating sufficient water quality data to set priorities, better identify problem areas, and to be able to demonstrate reductions in pollutants and improvements in water quality.

Effectively integrating jurisdictional into watershed programs will be a continued focus for the future. The Permit establishes important obligations at both jurisdictional and watershed levels. To accomplish this transition and integration, the City continues to meet with San Diego River Watershed Jurisdictions to provide some direction concerning urban runoff issues. Taking advantage of successes at other Cities strengthens individual and watershed programs.

The City must still address a number of unresolved data and information collection issues. Monitoring data are especially important to quantify pollutant loads within the jurisdiction of El Cajon. Additional dry weather monitoring stations are needed to better identify illegal discharge sources. The need for additional data and information must be carefully balanced with the costs of obtaining those items.

The solid base of protocols and procedures produced in 2001, continued into PY1 of the new permit and into the current reporting period with refinement supported by eight years of experience in program implementation. An unending challenge is changing the behavior of the approximately 96,000 residents and 2,000 businesses and their views of urban runoff pollution. The City is predominantly a community of rental units, which identifies the population as more transient than the typical single-family residential population. This outreach and education challenge will be changing as more rental complexes turned into common living complexes with home ownership. The following table summaries the City's storm water management strategy based on the challenges presented during the current reporting period, 2009/2010.

Table 1 – Challenges and Associated Strategies/Actions

Challenges	Strategies / Actions
Implementing the 14 components simultaneously	1. Prioritize implementation to maximize use of personnel, supplies, equipment, and budget. 2. Develop budget for PY4 to add jurisdictional and watershed outreach efforts to educate about potential TMDLs, public participation events, additional outreach materials, GIS data development, staff training, and treatment controls for trash and debris.
Adequate Staffing and Equipment	Train as many City staff in storm water pollution prevention and Best Management Practices.
Incorporate Storm Water Concepts and Requirements at the Planning Stage	Conduct training and work closely with Community Development staff to generate a Storm Water Information Packet to distribute to applicants.
Transition Jurisdictional Programs and activities into Watershed Activities.	1. Meet with WURMP Copermittees for implementation. 2. Explore strategies to fund watershed activities that go beyond the jurisdictional boundaries and plan for future TMDLs.
Tackle Inland City Issues	1. Develop City-specific education and outreach materials.
Maintain Adequate Monitoring tasks	1. Review dry weather monitoring results. 2. Use GIS and the City's Business License database to focus on the most highly potentially pollution production areas. 3. Develop a basic wet weather-monitoring program that is comparable with other Copermittee programs.

From July 1, 2003 through June 30, 2010, the City tackled a new set of challenges while maintaining the current level of provided services. In review, it was better to put resources towards implementing productive processes and procedures, rather than completing a task in the name of compliance. The City continues to brainstorm toward reaching higher standards in

future program years, while quantifying pollutant reductions from jurisdictional actions that may have a watershed impact.

15.2 RECOMMENDATIONS

Specific recommended improvements are listed at the end of each component. Below are some general improvements for the City's Urban Runoff Strategy.

- Continue to maintain adequately trained staff to implement JURMP activities,
- Create a comprehensive Geographical Information System for the Jurisdictional and Watershed Storm Water Program efforts.
- Increase emphasis on watershed training, San Diego River Watershed Copermittee cooperative efforts, and electronic tracking of program information,
- Coordinate through City departments a cohesive urban runoff management program,
- Generate a schedule of outreach events for the next Permit Year according to JURMP requirements,
- Continue to develop a comprehensive program to collect and organize information for the Annual Report,
- Add sample collection sites and frequency to the dry weather monitoring program, and
  focus on outreach and education activities for the most effective approach to managing storm water pollution.
- Complete development of a storm drain master plan map inventorying MS4 infrastructure.

Appendix A.1
(No Content)

Appendix A.2

RESOLUTION NO. 10–03

A RESOLUTION APPROVING GENERAL PLAN AMENDMENT 2002-04 TO ADD STORM WATER RUNOFF POLICIES AND OBJECTIVES TO GENERAL PLAN TEXT.

WHEREAS, the El Cajon City Council duly advertised and held a public hearing on January 14, 2003, to consider an item which had been set for General Plan consideration; and

WHEREAS, to facilitate understanding by the public, the City Council took tentative or preliminary votes on this item, which vote was not binding until the public hearing was completed; and

WHEREAS, the City Council duly considered all information presented, and listened to all persons who appeared before it to speak.

NOW, THEREFORE, BE IT RESOLVED that the El Cajon City Council hereby approves General Plan Amendment 2002-04 to add storm water policies to the General Plan text as indicated in Planning Commission Resolution No. 9734, on file in the office of the City Clerk, and made a part hereof by this reference.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at a Regular Joint City Council/Redevelopment Agency Meeting held this 14th day of January, 2003, by the following vote to wit:

AYES : Lewis, Kendrick, McClellan, Ramos, Santos
NOES : None
ABSENT : None
DISQUALIFY : None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

MARILYNN LINN, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Resolution No. 10-03 of the Resolutions of the City of El Cajon, California, as adopted by the City Council at the Regular Joint Meeting of the City Council/Redevelopment Agency on the 14th day of January, 2003.

for M Steele
Marilynn Linn, CMC, City Clerk

1/14/03 (103)

ORDINANCE NO. 4939

AN ORDINANCE REPEALING CHAPTER 16.60
OF TITLE 16 OF THE EL CAJON MUNICIPAL CODE
AND ADDING A NEW CHAPTER 16.60 TO TITLE 16 OF THE
EL CAJON MUNICIPAL CODE REGARDING THE CITY OF
EL CAJON STANDARD URBAN STORM WATER MITIGATION PLAN.

WHEREAS, the City of El Cajon, pursuant to its Water Quality Permit issued on February 21, 2001, is required to adopt certain implementation steps as mandated by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, one of the implementation steps requires the adoption of an Urban Storm Water Mitigation Plan based upon a pre-approved Model adopted on June 10, 2002, by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall be the Urban Storm Water Mitigation Plan adopted pursuant to the mandate of the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall allow for the adoption of resolutions and policies which shall implement the El Cajon Standard Urban Water Mitigation Plan not included in this Ordinance; and

WHEREAS, the adoption of this Ordinance, by the findings of the Regional Water Quality Control Board (San Diego Region), is exempt from the requirements of the California Environmental Quality Act; and

WHEREAS, the purpose of this Ordinance is to protect valuable water resources of the City of El Cajon and its surrounding environs from pollutants.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EL CAJON AS FOLLOWS:

Section 1: Chapter 16.60 of Title 16 of the El Cajon Municipal Code is hereby repealed.

Section 2: Chapter 16.60 is hereby added to Title 16 of the El Cajon Municipal Code to read as follows:

16.60.010 Title.

The ordinance codified in this chapter shall be known as the "Standard Urban Storm Water Mitigation Plan (SUSMP) ordinance of the City of El Cajon."

16.60.020 Statutory Authority.

A. The municipal storm water National Pollutant Discharge Elimination System (NPDES) permit (Order No. R9-2007-0001, as subsequently modified by renewal order, NPDES No. CAS0108758, hereinafter collectively referred to as "Municipal Permit") issued to San Diego County, San Diego County Regional Airport Authority, the Port of San Diego, and eighteen cities by the San Diego Regional Water Quality Control Board (Regional Board) on January 24, 2007, requires the development and implementation of a program addressing urban runoff pollution issues in development planning for public and private projects.

B. The requirement to implement a program for development planning is based on federal and state statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA"), and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The municipal permit requires the implementation of a Jurisdictional Urban Runoff Management Program (JURMP), which has been adopted by the City of El Cajon on February 12, 2002, as amended.

16.60.030 Purpose.

A. The primary objectives of this chapter are to:

1. Ensure that discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards;

2. Effectively prohibit non-storm water discharges in urban runoff; and

3. Reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

B. The regulations of this chapter were developed to address post-construction urban runoff pollution from new development and redevelopment applications that fall under "priority project" categories. The goal of this chapter is to develop and implement practicable policies to ensure, to the maximum extent practicable, that development does not increase pollutant loads from a project site and to consider urban runoff flow rates, velocities and durations. This goal may be achieved through site-specific controls and/or drainage area-based or shared structural treatment controls.

16.60.040 Applicability of chapter.

The regulations set forth in this chapter shall apply to the development plan approval process for discretionary development applications, and prior to issuing

development permits for ministerial projects. To allow flexibility in meeting the design standards set forth in this chapter, structural treatment control BMPs may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided certain conditions are met. All new development and significant redevelopment projects that fall into one of the following "priority project" categories are subject to the requirements of this chapter, subject to the lawful prior approval provisions of the municipal permit. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project footprint is subject to the requirements of this chapter. These categories are:

A. Residential development of ten (10) units or more;

B. Commercial development greater than one (1) acre;

C. Heavy industry/industrial development greater than one (1) acre;

D. Automotive repair shops;

E. Restaurants;

F. Hillside development greater than 5,000 square feet;

G. Projects located within or directly adjacent to or directly discharging to receiving waters within environmentally sensitive areas that create 2,500 square feet or more of impervious surface or increase the area of imperviousness to ten percent (10%) or more of its naturally occurring conditions, where "directly adjacent," is defined as situated within 200 feet of the environmentally sensitive area, and where "discharging directly to," is defined as outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands;

H. Parking lots with 5,000 square feet or more of impervious surface, or with more than fifteen (15) parking spaces and potentially exposed to urban runoff;

I. Streets, roads, highways, and freeways, which would create a new paved surface that is 5,000 square feet or more of impervious surface; and

J. Retail gasoline outlets of 5,000 square feet or more in size, or having a projected average daily traffic ("ADT") count of at least 100 vehicles per day regardless of size.

As part of the project review process and to comply with the regulations set in this chapter, the Public Works Department shall review development and redevelopment projects that create, add or replace 5,000 square feet or more of impervious surfaces. In addition to the priority categories identified in this chapter, priority projects shall also

include all other pollutant generating development projects that result in the disturbance of one acre or more of land.

16.60.050 Limited exclusion.

Trenching and resurfacing work associated with utility projects; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lanes on existing roads; and routine replacement of damaged pavement, such as pothole repair, are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are subject to the requirements of this chapter if one or more of the criteria for the above categories are met.

16.60.060 Applicability of chapter 13.10.

The provisions of Chapter 13.10 (Storm Water Management and Discharge Control), including the definitions and enforcement provisions, shall be applicable to this chapter as though fully set forth herein.

16.60.070 Administration – limitations.

Where requirements of this chapter conflict with established local codes, (e.g., specific language of signage used on storm drain stenciling), the city council may continue the local practice and modify this chapter to be consistent with the code, except that to the extent that the standards in this chapter are more stringent than those under local codes, such more stringent standards shall apply.

16.60.080 Administration – provisions for SUSMP requirements.

The requirements of this chapter shall be incorporated into the project design in accordance to that certain Countywide Model SUSMP, Standard Urban Stormwater Mitigation Plan Requirements for Development Applications, dated January 2, 2009, as may be amended from time to time (the "Countywide Model SUSMP"), and shown on the plans prior to approval of discretionary permits. For projects requiring only ministerial permits, the requirements of this chapter shall be incorporated into the project design and shown on the plans prior to the issuance of any ministerial permits. City departments carrying out public projects that are not required to obtain permits shall be responsible for ensuring the requirements of this chapter are incorporated into the project design and shown on the plans prior to bidding for construction contracts, or equivalent. For public projects, the requirements of this chapter must be incorporated into the project design and shown on the plans before allowing the project to commence.

16.60.090 Administration – implementation.

All priority projects shall implement one or a combination of storm water BMPs, including, (1) LID and site design BMPs, (2) source control BMPs and, (3) structural treatment BMPs after the pollutants and conditions of concern have been identified. Storm water BMPs shall be considered and implemented where expressly required by this chapter and if not so required where determined applicable and feasible by the Director of Public Works. The storm water BMPs shall adhere to the requirements of this chapter, and shall be correctly designed in accordance to the applicable Countywide Model SUSMP so as to remove pollutants to the maximum extent practicable. A flow chart summarizing the storm water BMP selection procedure is provided in Figure 1.

16.60.100 Administration – site design storm water treatment credits.

Project proponents may develop and submit for public review and comment and city council approval a regional model site design storm water treatment credits program that allows reductions in the volume or flow of storm water that must be captured or treated on a project in return for the inclusion of specified project design features in the project. The model site design storm water treatment credits program shall be deemed to be a part of this chapter following city council approval. Any such model program shall specify the conditions under which project proponents can be credited for the use of site design features and low impact development techniques that can reduce the volume of storm water runoff, preserve natural areas, and minimize the pollutant loads generated and potentially discharged from the site. Any site design storm water treatment credits program implemented shall be consistent and compliant with this chapter and approved by the city council.

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Figure 1. Storm Water BMP Selection Procedure Flow Chart

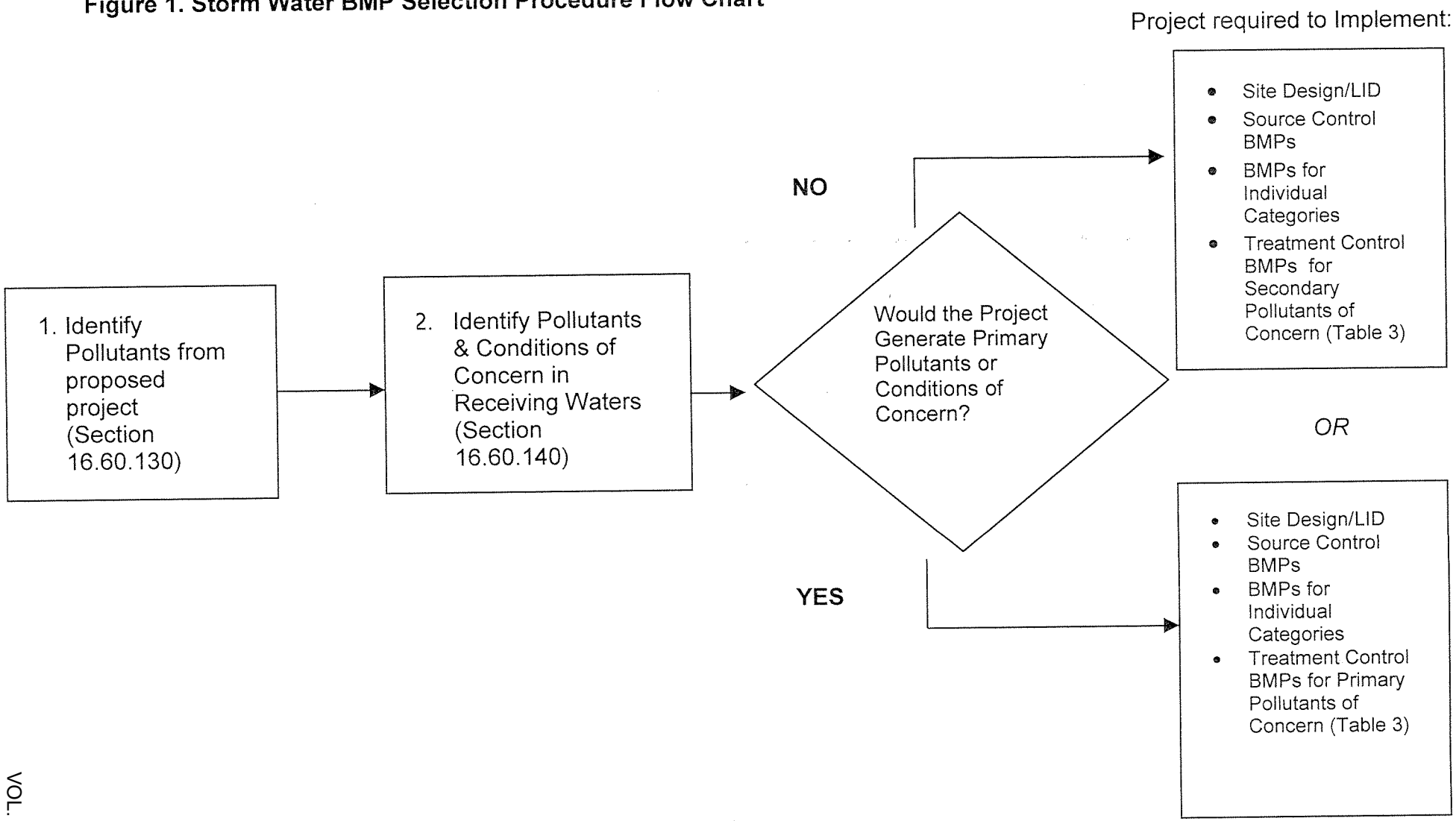

16.60.110 Identifying pollutants and conditions of concern.

A. Priority project proponents shall use this guidance to identify pollutants and conditions of concern, for which they need to mitigate or protect against. Site design and source control BMPs are required based on pollutants commonly associated with the proposed project type (see Table 2, "Standard Storm Water BMP Selection Matrix"). Treatment Control BMPs are also required for the project's expected pollutants of concern (see Table 3).

B. For private priority projects, the information shall be provided with the project application prior to being deemed complete.

C. For public priority projects, the information shall be provided by the Director of Public Works prior to bidding for construction contracts.

16.60.120 General categories of water pollution.

A. Sediments – Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms' survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

B. Nutrients – Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

C. Metals – Metals are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary sources of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

D. Organic Compounds – Organic compounds are carbon-based. Commercially available or naturally occurring organic compounds are found in

pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged into storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also absorb levels of organic compounds that are harmful or hazardous to aquatic life.

E. Trash & Debris – Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfides.

F. Oxygen-Demanding Substances – This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

G. Oil and Grease – Oil and grease are characterized as high-molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

H. Bacteria and Viruses – Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

I. Pesticides – Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

16.60.130 Identifying pollutants from the project area.

Using Table 1, pollutants shall be identified that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

Table 1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development > 10 units	X	X			X	X	X	X	X
Attached Residential Development > 10 units	X	X			X	P(1)	P(2)	P	X
Commercial Development > 1 acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry / Industrial Development > 1 acre	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development > 5,000 ft^2	X	X			X	X	X		X
Parking lots > 5,000 ft^2 or > 15 spaces	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets > 5,000 ft^2 or > 100 ADT			X	X	X	X	X		
Streets, Highways & Freeways > 5,000 ft^2	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) a potential pollutant if landscaping exists on site
(2) a potential pollutant if the project includes uncovered parking areas
(3) a potential pollutant if land use involves food or animal waste products
(4) including petroleum hydrocarbons
(5) including solvents

16.60.140 Identifying pollutants of concern.

A. Pollutants generated by the proposed priority project that exhibit one or more of the following characteristics are considered primary pollutants of concern:

1. Current loadings or historical deposits of the pollutant are impairing the beneficial uses of a receiving water;

2. Elevated levels of the pollutant are found in water or sediments of a receiving water and/or have the potential to be toxic to or bioaccumulate in organisms therein; and

3. Inputs of the pollutant are at a level high enough to be considered potentially toxic.

B. To identify primary pollutants of concern in receiving waters, each priority project shall, at a minimum, do the following:

1. For each of the proposed projects' discharge points, identify the receiving water(s) that each discharge point proposes to discharge to, including hydrologic unit basin number(s), as identified in the most recent version of the *Water Quality Control Plan for the San Diego Basin*, prepared by the San Diego Regional Water Quality Control Board;

2. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies. List any and all pollutants for which the receiving waters are impaired; and

3. Compare the list of pollutants for which the receiving waters are impaired with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing impairment of receiving waters shall be considered primary pollutants of concern.

For projects where no primary pollutants of concern exist, those pollutants identified through the use of Table 1 shall be considered secondary pollutants of concern.

16.60.150 Identifying conditions of concern.

A. Common impacts to the hydrologic regime resulting from development typically include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. These changes have the potential to permanently impact downstream channels and habitat integrity. A change to a priority project site's hydrologic regime would be considered a condition of concern if the change would impact downstream channels and habitat integrity. Because of these potential impacts, a director, or his or

her designee, may require that the following steps be followed for priority projects that, in their judgment, may impact the hydrologic regime:

1. Evaluate the project's conditions of concern in a drainage study report prepared by a registered civil engineer in the State of California, with experience in fluvial geomorphology and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, wet season groundwater depth, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed;

2. As part of the drainage study, a qualified, licensed professional shall provide a report on proposed infiltration techniques (trenches, basins, dry wells, permeable pavements with underground reservoir for infiltration) regarding any potential adverse geotechnical concerns. Geotechnical conditions (such as slope stability, expansive soils, compressible soils, seepage, groundwater depth, and loss of foundation or pavement subgrade) should be addressed, and mitigation measures provided;

3. As part of the drainage study, the civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of an altered flow regime;

4. The drainage study shall compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rate, flow velocity, runoff volume, time of concentration, and retention volume. These characteristics shall be developed for the two-year and 10-year frequency, Type I storm, of six-hour or 24-hour duration (whichever is the closer approximation of the site's time of concentration), during critical hydrologic conditions for soil and vegetative cover[1]. The drainage study shall report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions affecting downstream conditions of concern would be maintained by the proposed project, satisfactory to the Director of Public Works, by incorporating the site design, source control, and treatment control requirements identified in this chapter.

B. For priority development projects that disturb ("PDP") fifty (50) acres or more:

[1] Design storms can be found at http://www.wrcc.dri.edu/pcpnfreq.html. Applicants may calculate the storm events using local rain data. In addition, isopluvial maps contained in the County of San Diego Hydrology Manual may be used to extrapolate rainfall data to areas where insufficient data exists. If isopluvial maps are used interpolations shall be linear.

1. PDP post project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations (interim hydromodification criteria) where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

2. PDPs disturbing fifty (50) acres or more shall implement hydrologic controls to manage post-project runoff flow rates and durations as required by the interim hydromodification criteria.

16.60.160 Progression of storm water BMPs.

Site design BMPs reduce the need for source and/or treatment control BMPs, and source control BMPs may reduce the amount of treatment control BMPs needed. Throughout the following sections, all priority projects shall consider, and incorporate and implement storm water BMPs into the project design where expressly required by this chapter, and if not so required, where determined applicable and feasible by the Director of Public Works, in the following progression:

1. Site Design BMPs
2. Source Control BMPs
3. Treatment Control BMPs

16.60.170 Requirements to implement storm water BMPs.

Priority projects must implement LID site design BMPs and source control BMPs, and must also implement treatment control BMPs unless a waiver is granted based on the infeasibility of all treatment control BMPs. LID BMPs must meet the minimum requirements in section D.1.d.(4) of NPDES Permit No. CAS 0108758. BMPs must also achieve certain performance standards set out in section D.1.d.(5) and (6). Selection of BMPs from the menus included in this chapter, using the rules set out in this chapter, must fulfill these requirements. In addition, runoff treated by LID and site design or source control BMPs, such as rooftop runoff treated in landscaping, may be useful in reducing the quantity of runoff required to be treated in, "Treatment Control BMPs."

16.60.180 Selection of storm water BMPs.

Using the Treatment Control BMP Selection Matrix, each priority project shall select a structural treatment BMP by comparing the list of pollutants for which the downstream receiving waters are impaired (if any), with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing a Clean Water Act section 303(d) impairment of the receiving waters of the project shall be considered primary pollutants of concern. Priority projects that are anticipated to generate a primary pollutant of concern shall meet all applicable requirements of sections 16.60.160 to 16.60.370, and shall select a single or

combination of storm water BMPs from Table 3 that maximizes pollutant removal for the particular primary pollutant(s) of concern.

Alternatively, a project proponent may elect to implement a combination of LID BMPs that either disperse and infiltrate, or direct to bioretention facilities, the flows from all impervious areas on-site. These BMPs are presumed to provide maximum extent practicable treatment for all pollutants of concern; therefore no further documentation of the treatment BMP selection process is required.

16.60.190 Storm water BMPs for projects not generating pollutants.

Priority projects that are not anticipated to generate a pollutant for which the receiving water is Clean Water Act Section 303(d) impaired shall meet applicable standard requirements of establishing storm water BMPs, and shall select a single or combination of storm water BMPs from Table 3 which are effective for pollutant removal of the identified secondary pollutants of concern, consistent with the "maximum extent practicable" standard as defined in the attachment entitled "Definitions" of the Municipal Permit.

16.60.200 Storm water BMPs for projects generating primary and secondary pollutants.

Where a site generates both primary and secondary pollutants of concern, primary pollutants of concern receive priority for BMP selection. For such sites, selected BMPs must only maximize pollutant removal for the primary pollutants of concern. Where a site generates only secondary pollutants of concern, selected BMPs shall target the secondary pollutant of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 1), consistent with the maximum extent practicable standard as defined in the attachment entitled "Definitions" of the Municipal Permit.

Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the city when a feasibility analysis has been conducted, which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible. Treatment control BMPs shall not be constructed within a receiving water.

16.60.210 Alternative storm water BMPs.

Alternative storm water BMPs not identified in Table 3 may be approved at the discretion of the Director of Public Works, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 3.

Table 2. Site Design and Source Control Storm Water BMP Selection Matrix.

Priority Project Category	*Site Design BMPs(1)*	*Source Control BMPs(2)*	*Requirements Applicable to Individual Priority Project Categories(3)*										
			a. Private Roads	b. Residential Driveways & Guest Parking	c. Dock Areas	d. Maintenance Bays	e. Vehicle Wash Areas	f. Outdoor Processing Areas	g. Equipment Wash Areas	h. Parking Areas	i. Roadways	j. Fueling Areas	k. Hillside Landscaping
Detached Residential Development	R	R	R	R									R
Attached Residential Development	R	R	R										
Commercial Development > 1 acre	R	R			R	R	R	R					
Heavy Industry / Industrial Development > 1 acre	R	R			R	R	R	R	R			R	
Automotive Repair Shop	R	R			R	R	R		R			R	
Restaurants	R	R			R				R				
Hillside Development > 5,000 ft^2	R	R	R										R
Parking Lots > 5,000 ft^2 or > 15 spaces	R	R								R(4)			
Retail Gas Outlet = to or > 5,000 ft^2 or > 100 ADT	R	R					R					R	
Streets, Highways & Freeways > 5,000 ft^2	R	R									R		

R = Required; select BMPs as required from the applicable steps in Sections 16.60.130 & 16.60.140, or equivalent.
(1) Refer to Section 16.60.130.
(2) Refer to Section 16.60.140.
(3) Priority project categories must apply specific storm water BMP requirements, where applicable. Projects are subject to the requirements of all priority project categories that apply.
(4) Applies if the paved area totals > 5,000 square feet or with > 15 parking spaces and is potentially exposed to urban runoff.

Table 3. Treatment Control BMP Selection Matrix.

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	High-rate biofilters	High-rate media filters	Trash Racks & Hydro -dynamic Devices
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

Notes on Treatment Control BMP Categories

All rankings are relative. Ranking of all facilities assumes proper sizing, design, and periodic maintenance. Following are general descriptions of each category.

1. **Bioretention Facilities** (infiltration planters, flow-through planters, bioretention areas, and bioretention swales). Facilities are designed to capture runoff and infiltrate slowly through soil media, which also supports vegetation. Bioretention facilities, except for flow-through planters, effectively promote infiltration into native soils. In clay soils, facilities may capture excess treated runoff in an underdrain piped to the municipal storm drain system. Typical criteria: an infiltration surface area at least 4% of tributary impervious area, 6-inch average depth of top reservoir, 18-inch soil layer, 12-inch to 18-inch gravel subsurface storage layer.

2. **Settling Basins and Wetlands** (extended detention basins, "wet" basins, decorative or recreational lakes or water features also used for storm water treatment, constructed wetlands). Facilities are designed to capture a minimum water quality volume of 80% of total runoff and detain for a minimum of 48 hours. Some wetland designs have proven effective in removing nutrients, but performance varies.

3. **Infiltration Facilities or Practices** (infiltration basins, infiltration trenches, dry wells, dispersal of runoff to landscape, pervious pavements). These facilities and landscape designs capture, retain, and infiltrate a minimum of 80% of runoff into the ground. Infiltration facilities are generally only feasible in permeable (Hydrologic Soil Group A or B) soils. Volume and area of infiltration facilities depends on soil permeability and safety factor used. Typical criteria: Infiltration facilities should have pretreatment to remove silt to prolong life of the facility. A 10-foot vertical separation from average seasonal groundwater depth is required. Dispersal to landscape may be accomplished in any soil type and generally requires a maximum 2:1 ratio impervious:pervious and concave topography to ensure the first one (1) inch of rainfall is retained.

4. **Media Filters** (sand filters). Filters designed to treat runoff produced by a rainfall of 0.2 inches per hour (or 2×85th percentile hourly rainfall intensity) by slow infiltration through sand or other media. Typical criteria: Surface loading rate not to exceed 5 inches/hour. Entire surface of the sand must be accessible for maintenance.

5. **High Rate Biofilters** (tree wells, typically proprietary). Biofilters with specially designed media to rapidly filter runoff while removing some pollutants. Filterra® (proprietary version) recommends surface loading rates of up to 100 inches/hour.

6. **High-rate Media Filters** (typically proprietary). Vaults with replaceable cartridge filters filled with inorganic media.

7. **Drainage Inserts** have low effectiveness in removing pollutants that tend to associate with fine particles and have medium effectiveness in removing coarse sediment and trash. They are sometimes used to augment more effective treatment facilities and are sometimes used alone when more effective facilities have been deemed infeasible.

Notes on Pollutants of Concern:
In Table 4, Pollutants of Concern are grouped as gross pollutants (coarse sediment and trash), pollutants that tend to associate with fine particles, and pollutants that remain dissolved.

Table 4

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

16.60.220 Low Impact Development (LID) and Site Design BMP

A. Priority projects shall be designed so as to minimize directly connected impervious surfaces and to promote infiltration using LID techniques. Priority projects shall, to the maximum extent practicable, minimize the introduction of pollutants and conditions of concern that may result in significant impacts, generated from site runoff to the storm water conveyance system. Priority projects shall also control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat. Priority projects can address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Mimicking a site's natural hydrologic regime can be pursued by:

1. Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the storm water conveyance system, and minimizing clearing and grading.

2. Providing runoff storage measures dispersed throughout a site's landscape with the use of bioretention facilities and detention, retention, and infiltration practices.

B. Site design BMPs shall offer an innovative approach to urban storm water management that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates storm water controls throughout the urban landscape. Examples of many of these methods may be found in the County of San Diego's LID Handbook, and its publications, *Start at the Source*, and *Low-Impact Development Design Strategies*, in the City of Portland, Oregon's *Stormwater Manual*, and in the Contra Costa (California) Clean Water Program's *Stormwater C.3 Guidebook*.

16.60.230 Maintaining pre-development rainfall runoff characteristics.

A. Priority projects shall control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. In addition, projects should control runoff discharge volumes and durations to the maximum extent practicable using the site design, source control, and treatment control requirements.

B. Design Concept 1: Minimize Project's Impervious Footprint & Conserve Natural Areas. The following site design options shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works, during the site planning and approval process, consistent with applicable General Plan policies and other development regulations.

1. Minimize and disconnect impervious surfaces. This can be achieved in various ways, including, but not limited to, increasing building density (number of stories above or below ground) and developing land use regulations seeking to limit impervious surfaces. Decreasing the project's footprint can substantially reduce the project's impacts to water quality and hydrologic conditions.

2. Conserve natural areas, soils, and vegetation where feasible. This can be achieved by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition. The following list provides a guideline for determining the least sensitive portions of the site, in order of increasing sensitivity. Jurisdictions should also refer to their Multiple Species Conservation Plans or other biological regulations, as appropriate.

a. Areas devoid of vegetation, including previously graded areas and agricultural fields.

b. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands.
c. Areas of chamise or mixed chaparral, and non-native grasslands.
d. Areas containing coastal scrub communities.
e. All other upland communities.
f. Occupied habitat of sensitive species and all wetlands.
g. All areas necessary to maintain the viability of wildlife corridors. Within each of the previous categories, areas containing hillsides should be considered more sensitive than the same category without hillsides.

3. Construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, permeable asphalt, unit pavers, and granular materials.

4. Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.

5. Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.

6. Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.

7. Use natural drainage systems to the maximum extent practicable.

8. Other site design options that are comparable, and equally effective.

9. Minimize soil compaction.

C. Design Concept 2: Minimize Directly Connected Impervious Areas (DCIAs). Priority projects shall consider, and incorporate and implement the following design characteristics, where determined applicable and feasible by the Director of Public Works.

1. Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.

2. Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.

3. Other design characteristics that are comparable and equally effective.

16.60.240 Protection of slopes and channels.

Project plans shall include storm water BMPs to decrease the potential for erosion of slopes and/or channels, consistent with local codes and ordinances and with the approval of all agencies with jurisdiction, e.g., the U.S. Army Corps of Engineers, the San Diego Regional Water Quality Control Board, and the California Department of Fish and Game. The following design principles shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

A. Minimize disturbances to natural drainages.

B. Convey runoff safely from the tops of slopes.

C. Vegetate slopes with native or drought tolerant vegetation.

D. Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.

E. Stabilize permanent channel crossings.

F. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.

G. Other design principles that are comparable and equally effective.

16.60.250 Providing storm drain system stenciling and signage.

Storm drain stencils are highly visible source control messages, typically placed directly adjacent to storm drain inlets. The stencils contain a brief statement that prohibits the dumping of improper materials into the urban runoff conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. Priority projects shall include the following requirements in the project design:

A. Provide stenciling or labeling of all storm drain inlets and catch basins within the project area with prohibitive language (such as: "NO DUMPING – I LIVE IN <<name receiving water>>") and/or graphical icons to discourage illegal dumping.

B. Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

C. Maintain legibility of stencils and signs.

16.60.260 Designing outdoor material storage areas to reduce pollution introduction.

Improper storage of materials outdoors may increase the potential for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the urban runoff conveyance system. Where the priority project plans include outdoor areas for storage of hazardous materials that may contribute pollutants to the urban runoff conveyance system, the following storm water BMPs are required:

A. Hazardous materials with the potential to contaminate urban runoff shall either be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

B. The storage area shall be paved and sufficiently impervious to contain leaks and spills.

C. The storage area shall have a roof or awning to minimize direct precipitation within the secondary containment area.

16.60.270 Designing trash storage areas to reduce pollution introduction.

All trash container areas shall meet the following requirements (limited exclusion: detached residential homes):

A. Paved with an impervious surface, designed not to allow run-on from adjoining areas, screened or walled to prevent off-site transport of trash; and

B. Provide attached lids on all trash containers that exclude rain, and a permanent fire resistant roof or awning to minimize direct precipitation.

16.60.280 Using efficient irrigation systems and landscape design.

Priority projects shall design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water conveyance system. The irrigation system shall be in compliance with the requirements of all city ordinances regulating the efficient irrigation of landscaping. The following methods to reduce excessive irrigation runoff shall be considered,

and incorporated and implemented where determined applicable and feasible by the Public Works Department:

A. Employing rain shutoff devices to prevent irrigation after precipitation.

B. Designing irrigation systems to each landscape area's specific water requirements.

C. Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.

D. Employing other comparable, equally effective, methods to reduce irrigation water runoff.

16.60.300 Incorporate requirements applicable to individual priority project categories.

Where identified in Table 2, the following requirements shall be incorporated into applicable priority projects during the storm water BMP selection and design process. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for (g) Equipment Wash Areas <u>and</u> (h) Parking Areas into the project design).

A. Private Roads. The design of private roadway drainage shall use at least one of the following:

1. Rural swale system: street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings;

2. Urban curb/swale system: street slopes to curb, periodic swale inlets drain to vegetated swale/biofilter;

3. Dual drainage system: First flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder, high flows connect directly to storm water conveyance system;

4. Other methods, which are comparable and equally effective within the project.

B. Residential Driveways and Guest Parking. The design of driveways and private residential parking areas shall use at least one of the following features:

1. Design driveways with shared access, flared (single lane at street) or wheelstrips (paving only under tires); or, drain into landscaping prior to discharging to the storm water conveyance system;

2. Uncovered temporary or guest parking on private residential lots may be: paved with a permeable surface; or, designed to drain into landscaping prior to discharging to the storm water conveyance system;

3. Other features which are comparable and equally effective.

C. Dock Areas. Loading/unloading dock areas shall include the following:

1. Cover loading dock areas, or design drainage to preclude urban run-on and runoff;

2. Direct connections to storm drains from depressed loading docks (truck wells) are prohibited;

3. Other features which are comparable and equally effective.

D. Maintenance Bays. Maintenance bays shall include the following:

1. Repair/maintenance bays shall be indoors; or, designed to preclude urban run-on and runoff; and

2. Design a repair/maintenance bay drainage system to capture all wash water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit, or

3. Other features which are comparable and equally effective.

E. Vehicle Wash Areas. Priority projects that include areas for washing/steam cleaning of vehicles shall use the following:

1. Self-contained, and covered with a roof or overhang;

2. Equipped with a clarifier or other pretreatment facility;

3. Properly connected to a sanitary sewer; and

4. Other features which are comparable and equally effective.

F. Outdoor Processing Areas. Outdoor process equipment operations, such as rock grinding or crushing, painting or coating, grinding or sanding, degreasing or parts cleaning, landfills, waste piles, and wastewater and solid waste treatment and disposal, and other operations determined to be a potential threat to water quality by the Copermittee shall adhere to the following requirements:

1. Cover or enclose areas that would be the most significant source of pollutants; or, slope the area toward a dead-end sump; or, discharge to the sanitary sewer system following appropriate treatment in accordance with conditions established by the applicable sewer agency;

2. Grade or berm area to prevent run-on from surrounding areas;

3. Installation of storm drains in areas of equipment repair is prohibited;

4. Other features which are comparable or equally effective.

G. Equipment Wash Areas. Outdoor equipment/accessory washing and steam cleaning activities at priority projects shall use the following:

1. Be self-contained, and covered with a roof or overhang;

2. Have a grade or berm area to prevent run-on from surrounding areas;

3. Be equipped with a clarifier, grease trap or other pretreatment facility, as appropriate;

4. Properly connected to a sanitary sewer;

5. Installation of storm drains in wash areas is prohibited;

6. Other features which are comparable or equally effective.

H. Parking Areas. To minimize the offsite transport of pollutants from parking areas, the following design concepts shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

1. Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design;

2. Overflow parking (parking stalls provided in excess of the city's minimum parking requirements) should be constructed with permeable paving;

3. Other design concepts, which are comparable and equally effective.

I. Roadways. Priority roadway projects shall select treatment control BMPs following the treatment control selection procedure identified in this chapter entitled, "Establishing Storm Water BMPs."

J. Fueling Area. Retail and non-retail fuel dispensing areas shall contain the following:

1. Overhanging roof structure or canopy. The cover's minimum dimensions must be equal to or greater than the area within the grade break. The cover must not drain onto the fuel dispensing area and the downspouts must be routed to prevent drainage across the fueling area. The fueling area shall drain to the project's treatment control BMPs prior to discharging to the storm water conveyance system;

2. Paved with Portland cement concrete (or equivalent smooth impervious surface). The use of asphalt concrete shall be prohibited;

3. Have an appropriate slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of urban runoff; and

4. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus one (1) foot (0.3 meter), whichever is less.

K. Hillside Landscaping. Hillside areas that are disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, satisfactory to the Director of Public Works.

16.60.310 Treatment control BMP objectives.

A. Minimizing a development's detrimental effects on water quality can be most effectively achieved through the use of a combination of site design, source and treatment control storm water BMPs. Where projects have been designed to minimize, to the maximum extent practicable, the introduction of anticipated pollutants of concern that may result in significant impacts to the receiving waters through the implementation of site design and source control storm water BMPs, the development would still have the potential for pollutants of concern to enter the storm water conveyance system. Therefore, priority projects shall be designed to remove pollutants of concern from the storm water conveyance system to the maximum extent practicable through the incorporation and implementation of treatment control BMPs.

B. In meeting the requirements in this section, priority projects shall implement a single or combination of storm water BMPs that will remove anticipated pollutants of concern, as identified by the procedure of this chapter, from site runoff to the maximum extent practicable. Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the Director of Public Works when a feasibility analysis has been conducted, which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible. Treatment control BMPs must be implemented unless a waiver is granted to the project by the Director of Public Works based on the infeasibility of any treatment control BMP.

16.60.320 Design to treatment control BMP standards.

All priority projects shall design, construct and implement structural treatment control BMPs that meet the design standards of this section and the applicable Countywide Model SUSMP, unless specifically exempted by the limited exclusions listed in 16.60.350. Structural treatment control BMPs required by this section shall be operational prior to the use of any dependent development, and shall be located and designed in accordance with the requirements of this chapter.

16.60.330 Structural treatment control volume-based BMPs.

Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

A. Volume of runoff produced from a 24-hour 85th percentile storm event, as determined from isoplovial maps contained in the County of San Diego Hydrology Manual; or

B. Volume of runoff produced by the 85th percentile 24-hour runoff event, determined as the maximized capture urban runoff volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998)*; or

C. The volume of annual runoff based on unit basin storage volume, to achieve ninety percent (90%) or more volume treatment by the method recommended in *California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (1993)*; or

D. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event. Where this option is used, storm events shall be identified by their separation from one another by at least six hours of no rain.

16.60.340 Structural treatment control flow-based BMPs.

As an alternative to volume-based BMPs, structural treatment controls may be designed as flow-based BMPs. Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

A. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour for each hour of a storm event; or

B. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two, for each hour of a storm event; or

C. The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two, for each hour of a storm event.

16.60.350 Limited exclusions.

A. Proposed restaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical sizing criteria requirements listed in 16.60.320 through 16.60.340.

B. Where significant redevelopment results in an increase of less than fifty percent (50%) of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in 16.60.330 and 16.60.340 apply only to the addition, and not to the entire development.

16.60.360 Locating BMPs near pollutant sources.

Structural treatment control storm water BMPs should be implemented close to pollutant sources to minimize costs and maximize pollutant removal prior to runoff entering receiving waters. Such BMPs may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following requirements:

A. All structural treatment control BMPs shall be located so as to infiltrate, filter, and/or treat the required runoff volume or flow prior to its discharge to any receiving water body supporting beneficial uses;

B. Multiple post-construction structural treatment control BMPs for a single priority development project shall collectively be designed to comply with the design standards for structural treatment control BMPs;

C. Shared storm water BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;

D. Interim storm water BMPs that provide equivalent or greater treatment than is required by structural treatment control BMPs may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

16.60.370 Restrictions on use of infiltration BMPs.

At a minimum, use of structural treatment BMPs that are designed to primarily function as infiltration devices shall meet the following conditions[2]:

A. Urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants, such as sedimentation or filtration, prior to infiltration;

B. All dry weather flows shall be diverted from infiltration devices except for those non-storm water discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to storm water conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and dechlorinated swimming pool discharges;

C. Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used;

D. The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet or as determined on an individual, site-specific basis by the Director of Public Works. Where groundwater does not support beneficial uses, this vertical distance criterion may be reduced, provided groundwater quality is maintained;

E. The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic

[2] These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

content, clay content, and infiltration rate) that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses;

F. Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries; and other high threat to water quality land uses and activities as designated by the Director of Public Works;

G. The horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as determined on an individual, site-specific basis by the Director of Public Works.

16.60.380 Maintenance mechanism to be in place before acceptance.

Structural BMPs shall not be considered "effective," and shall not be accepted as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. As part of project review, if a project proponent is required to include interim or permanent structural BMPs in project plans, and if the Director of Public Works does not provide a mechanism for BMP maintenance, the project proponent shall provide verification of maintenance requirements through such means as may be appropriate, at the discretion of the Director of Public Works, including, but not limited to covenants, legal agreements, maintenance agreements, and/or conditional use permits.

16.60.390 Maintenance mechanisms.

Public equity maintenance. The city council may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the BMP. Unless acceptable to the city council, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed (e.g., through a trust fund, cash deposit, assessment district fees, bond, letter of credit or similar means). In addition, the city council may seek protection from liability by appropriate releases and indemnities. The city council shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The city council shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions, and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the facilities. The city council must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

A. Project proponent agreement to maintain storm water BMPs: The city council may enter into a contract with the project proponent obliging the project proponent to maintain, repair and replace the storm water BMPs as necessary into perpetuity. Security may be required.

B. Assessment districts: The city council may approve an Assessment District or other funding mechanism created by the project proponent to provide funds for storm water BMP maintenance, repair and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.

C. Lease provisions: In those cases where the city holds title to the land in question, and the land is being leased to another party for private or public use, the city council may assure storm water BMP maintenance, repair and replacement through conditions in the lease.

D. Conditional use permits: For discretionary projects only, the city council may assure maintenance of storm water BMPs through the inclusion of maintenance conditions in the conditional use permit. Security may be required.

E. Alternative mechanisms: The city council may accept alternative maintenance mechanisms if such mechanisms are as protective as those listed above.

16.60.400 Verification mechanisms.

For discretionary projects, the city approved method of storm water BMP maintenance shall be incorporated into the project's permit, and shall be consistent with permits issued by resource agencies, before city approval of discretionary permits. For projects requiring only ministerial permits, the approved method of storm water BMP maintenance shall be incorporated into the permit conditions before the issuance of any ministerial permits. In all instances, the project proponent shall provide proof of execution of an approved method of maintenance repair and replacement before the issuance of construction approvals. Public projects that are not required to obtain permits shall be responsible for ensuring that an approved method of storm water BMP maintenance repair and replacement is executed prior to the commencement of construction. For all properties, the verification mechanism will include the project proponent's signed statement, as part of the project application, accepting responsibility for all structural BMP maintenance, repair and replacement, until a city-approved entity agrees to assume responsibility for structural BMP maintenance, repair and replacement.

16.60.410 Maintenance requirements.

A. Operation & Maintenance (O&M) Plan: A copy of an O&M plan, prepared by the project proponent satisfactory to the Director of Public Works shall be attached to the approved maintenance agreement, which describes the designated responsible party to manage the storm water BMPs, employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities, copies of resource agency permits, and any other necessary activities. At a minimum, maintenance agreements shall require the inspection and servicing of all structural BMPs on an annual basis. The project proponent maintenance entity shall complete and maintain O&M forms to document all maintenance requirements. Parties responsible for the O&M plan shall retain records for at least 5 years. These documents shall be made available to the city for inspection upon request at any time.

B. Access Easement/Agreement: As part of the maintenance mechanism selected above, it shall include a copy of an executed access easement that shall be binding on the land throughout the life of the project, until such time that the storm water BMP requiring access is replaced, satisfactory to the Director of Public Works.

16.60.420 Waiver of structural treatment BMP requirements.

The requirement of implementing structural treatment BMPs may be waived if infeasibility can be established. A waiver of infeasibility shall be granted only when all available structural treatment BMPs have been considered and rejected as infeasible.

Waivers may only be granted from structural treatment BMP and structural treatment BMP sizing requirements. Priority development projects, whether or not granted a waiver may not cause or contribute to an exceedance of water quality objectives. Pollutants in runoff from projects granted a waiver must still be reduced to the maximum extent practicable.

Section 3: This Ordinance is adopted pursuant to the authority granted to the City of El Cajon under San Diego Regional Water Quality Control Board Order No. R9 2007-0001. This Ordinance encompasses a state-mandated requirement thereunder.

Section 4: This ordinance shall be effective thirty (30) days following its passage and adoption.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at an Adjourned Regular Joint City Council/Redevelopment Agency Meeting held this 23rd day of February 2010, by the following vote to wit:

AYES	:	Lewis, Hanson-Cox, Kendrick, McClellan, Wells
NOES	:	None
ABSENT	:	None
DISQUALIFY	:	None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

KATHIE RUTLEDGE, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Ordinance No. 4939 of the Ordinances of the City of El Cajon, California, as adopted by the City Council at the Adjourned Regular Joint Meeting of the City Council/Redevelopment Agency on the 23rd day of February 2010.

Kathie Rutledge
Kathie Rutledge, CMC, City Clerk

2/23/10 (Item 14.1)

STORM WATER

CONCEPTUAL PLAN

Planning Action [PUD or TSM or BP]

[Project Name]

[Project Address]

APN: [000-000-00]

Prepared By

[Engineer's Name]
[Engineering Company's Name]
[Engineering Company's Address]

For

[Developer's Name]
[Developer's Address]

Date:

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List attachments by Chapter here:

	Attachment No.	Title/Description
Chp 1	1	Copy of "Completed Storm Water SUSMP Intake Applicability Form for Development Projects"
Chp 2		
Chp 3	1	Project Location Map
	2	Pre-Development Site Map
	3	Storm Water Conceptual Plan
	4	Preliminary Treatment Calcs: Volume-Based Facilities
	5	Preliminary Treatment Calcs: Flow-Based Facilities
	6	Preliminary Detention Calcs: Flow-Control Facilities

Other City of El Cajon References:
Attachment No. 2 – Trash Enclosure Details
Attachment No. 3 – CC&Rs and Storm Water Maintenance Plan

PROJECT INTRODUCTION AND PROJECT BACKGROUND

The following shall be completed in its entirety prior to submittal. Refer to Chapter 4 for details on identifying constraints and opportunities for storm water control.

Project Name:

Project Location:

Project Description:

Existing Site Features and Conditions Including Topography:

Constraints and Opportunities for Storm Water Control:

CHAPTER 1 – POLICIES AND PROCEDURES

This Storm Water Conceptual Plan (Conceptual Plan) shall be prepared following the completion of the "***Storm Water SUSMP Applicability Form for Development Projects***" that can be obtained from the Planning Department during the project development phase.

This Conceptual Plan shall be used in conjunction with the Countywide Model Standard Urban Stormwater Mitigation Plan (SUSMP), which can be obtained at http://www.projectcleanwater.org. The Model SUSMP has step-by-step instructions, which will guide you in preparing the Conceptual Plan. The Chapters used herein correspond to the Model SUSMP and contained herein are City of El Cajon's (City) specific project requirements.

If the project requires a Hydromodification Management Plan (HMP) as determined in the Model SUSMP Chapter 2, page 26, the Engineer shall refer the Draft Hydromodification Plan, which can be obtained at http://www.projectcleanwater.org.

CONCEPTUAL PLAN PURPOSE

The purpose of this Conceptual Plan is to assist the Applicant in planning ahead for stormwater compliance. The most common (and costly) errors made by Applicants for development approvals with respect to stormwater quality compliance are:

1. Not planning for compliance early enough. The Applicant should think about strategies for stormwater quantity and quality compliance before completing a conceptual site design or sketching a layout of subdivision lots (Chapter 3).
2. Assuming proprietary stormwater treatment facilities will be adequate for compliance. Most are not adequate for anticipated pollutants (Chapter 2).
3. Not planning for periodic inspection and maintenance of treatment and flow-control facilities. Consider who will own and who will maintain the facilities in perpetuity and how they will obtain access, and identify which arrangements are acceptable to the City.
4. Not having the necessary experience or resources to prepare the calculations, reports, and implement innovative solutions to develop stormwater quality designs.

Managing runoff from a single development site may seem inconsequential, but by changing the way most sites are developed (or redeveloped), the City may be able to preserve and enhance existing stream ecosystems within our watershed.

STORM WATER COMPLIANCE PROCESS

Typically, during the Planning Phase, the City of El Cajon determines if a development project is a **"Priority Development Project"** following the completion of the **"Storm Water SUSMP Applicability Form for Development Projects"**. A **"Storm Water Conceptual Plan"** is then developed and submitted for review and approval. Then, during final design (or preparation of construction plans), a Storm Water Mitigation Plan (SWMitP) is required in accordance with the Standard Urban Storm Water Mitigation Plan (SUSMP) ordinance of the City of El Cajon (Ord. 4908, Chapter 16.60) and San Diego

Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001, NPDES Permit No. CAS0108758.

This Conceptual Plan is intended to ensure that the site provides enough space for adequate sizing and placement of stormwater facilities. The Conceptual Plan is a living document subject to revisions as needed by the Engineer of Work and the City during the Planning Phase. During final design (or preparation of the construction plans), the Engineer is required to comply with the Storm Water requirements through the preparation and approval of a SWMitP.

The City's Conceptual Plan submittal requirements are described in Chapter 3. The Conceptual Plan shall be completed in its entirety prior to submittal to the City otherwise it will be returned without review. If you have any questions during the preparation of the Conceptual Plan contact the Storm Water Department at (619) 441-1653.

Attach a copy of the completed "***Storm Water SUSMP Applicability Form for Development Projects".***

CHAPTER 2 – CONCEPTS AND CRITERIA

The City lies entirely within the San Diego River Watershed, Hydrologic Unit (HU) 907. The City recognizes the following drainage basins within the City, all of which eventually discharge into the San Diego River. The Engineer shall refer to the City of El Cajon Jurisdictional Urban Runoff Management Program (JURMP), which is available at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

Check the corresponding sub-watershed(s) for the project

☐ Broadway Channel Basin	☐ Washington Channel Basin	☐ County Ditch Basin	☐ Northern Forrester Creek Basin
☐ Forrester Creek Basin	☐ Fanita Basin	☐ Fletcher Parkway Basin	☐ Third Street Lateral

The following are designated as impaired waters by the RWQCB and USEPA pursuant to the Clean Water Act Section 303(d): ***Forrester Creek and the San Diego River***. The City follows a conservative approach with regards to pollutants impairing water bodies.

Water Quality (Treatment Requirements): The City requires that all pollutants of concern or water quality effect as identified on the Clean Water Act (CWA) 303(d) list be applied for the entire length of the corresponding water body. Determine the Anticipated and Potential Pollutants of Concern per Table 2-1 attached in the next page and per the Model SUSMP, Chapter 2.

Circle each as applicable:

Table 2.1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development > 10 Units	X	X			X	X	X	X	X
Attached Residential Development > 10 Units	X	X			X	P(1)	P(2)	P	X
Commercial Development > 1 acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry /Industrial Development > 1 acre	X		X	X	X	X	X		
Automotive Repair Shops			X	X (4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development > 5,000 ft^2	X	X			X	X	X		X
Parking Lots > 5,000 ft^2 or > 15 spaces	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets > 5,000ft^2 or > 100 ADT			X	X	X	X	X		
Streets, Highways & Freeways > 5,000 ft^2	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential

(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Check each half of a box as applicable:

Pollutants associated with 303(d) Listed ImpairedWaters To Which the Project Drains	Project Specific Anticipated and Potential Pollutants of Concern								
	Sed	Nut	HM	Org	T&D	ODS	O&G	B&V	Pes
Sed									
Nut		X							
HM									
Org									
T&D									
ODS						X			
O&G									
B&V								X	
Pes									

Sed = Sediment; Nut = Nutrients; HM = Heavy Metals; Org = Organics; T&D = Trash and Debris; ODS= Oxygen Demand Substances; O&G = Oils and Grease; B&V = Bacteria & Viruses; Pes = Pesticides;

The City requires that the Pollutants of Concern be grouped to determine how easily various treatment processes remove them. Refer to Table 2-2 inserted below from the Model SUSMP, Chapter 2.

If a box above has two (2) checks, it is considered a Primary Pollutant; one (1) check is considered a Secondary Pollutant. Check each pollutant below according to either Primary or Secondary Pollutant.

TABLE 2-2. GROUPING OF POTENTIAL POLLUTANTS of Concern by fate during stormwater treatment

Check off the Pollutants in the table below accordingly:

Primary	Secondary	Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
		Sediment	X	X	
		Nutrients		X	X
		Heavy Metals		X	
		Organic Compounds		X	
		Trash & Debris	X		
		Oxygen Demanding		X	
		Bacteria		X	
		Oil & Grease		X	
		Pesticides		X	

When selecting a treatment facility to remove a specific pollutant, the City requires that "Medium" or "High" Removal Efficiency BMPs treat all Primary Pollutants of concern as identified above. Refer to Table 2-3 inserted below from the Model SUSMP, Chapter 2, to determine an effective treatment facility.

Circle as applicable:

TABLE 2-3. GROUPS OF POLLUTANTS and relative effectiveness of treatment facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro -dynamic Devices (1)
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

*See page 23 of the Regional Model SUSMP for a discussion of selection of treatment facilities in special situations.

Notes: (1) Trash Racks & Hydrodynamic Devices shall not be used alone.
(2) The City shall reserve the right to determine if the selected treatment facility is appropriate, which may lead to selecting a higher efficiency treatment facility that originally selected by the Engineer.

The Engineer shall ensure that the area (i.e. parking lots, detached residential development, etc.) that requires the treatment actually drains to the selected treatment facility. This shall be clearly shown on the Conceptual Plan and delineated as such in the drainage report. If this is not clearly shown, the City reserves the right to reject the submittal.

Water Quantity (Detention Requirements): With the exception of projects that require a HMP, the City requires that the 2-year and the 10-year storm event be used for calculating peak flows and the 100-year storm event be used to demonstrate flooding impacts. The 2-year and the 10-year storm event shall be used to design stormwater detention facilities in accordance with the San Diego County Hydrology Manual, latest edition, Section 6. The 100-year shall be used to design a bypass system.

For guidance on preparing the Hydraulics and Hydrology Report (or Drainage Report), refer to the San Diego County Hydrology Manual, latest edition. The Engineer may consider using intensities from the latest edition of the City of El Cajon Improvement Standards, Figure 3.4-2 included in the next page for the

design of the drainage improvements (i.e. pipelines, catch basins, inlets, etc). Per the City's requirements, a Drainage Report is required and may be submitted separately or attached to the Conceptual Plan.

Fig. 3.4-2

AVERAGE INTENSITY-DURATION CURVES
El Cajon, California

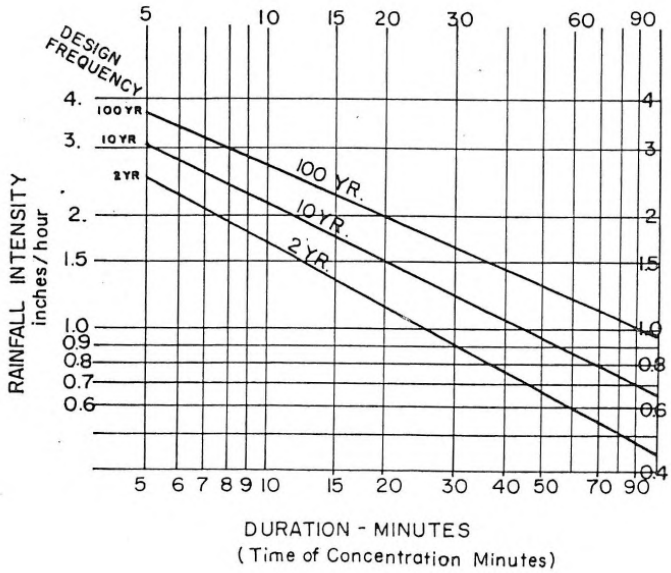

CHAPTER 3 – PREPARING YOUR PROJECT SUBMITTAL

The City requires that this entire packet be completed and submitted along with maps, calculations, details, and other information as requested herein. Attachments shall be listed in the Table of Contents.

Storm Water Conceptual Plan: The Plan shall be shown on a Standard D-size sheet and plotted using engineering scales only and not architectural scales. Preliminary size and location of proposed storm water BMPs must be shown on the Plan. This includes all LID, source control, and structural treatment BMPs. Detention facilities shall be shown, if required. It is important to show the intended location of the facilities even if the exact configuration and grading of the site may have minor modifications during final design. This will ensure that adequate provisions have been made to accommodate and locate the BMPs to achieve the required storm water management objectives.

The Engineer shall evaluate and determine the most appropriate BMPs or combination of BMPs to achieve applicable performance requirements. The selected BMPs need to achieve a “Medium” to “High” efficiency removal of the pollutants of concern for the proposed project. Once the most effective BMPs have been selected, the Plan can be developed and should include the following information:

1. Location of selected BMPs
2. Configuration of storm water conveyance system(s)
3. Proposed sizing (length, width and depth) of all BMPs
4. Location and dimensions of the Detention System, if required.
5. Proposed discharge structure details from the conveyance and storage systems, to the public storm drain system.

Conceptual Plan Submittal Checklist:

- ☐ Storm Water Conceptual Plan
- ☐ Storm Water Treatment Facilities Calculations
- ☐ Hydrologic and Hydraulic calculations, including sizing calculations for detention structures and other drainage facilities that will be used to manage storm water runoff
- ☐ A discussion describing the determination of potential and actual priority pollutants and pollutants of concern, receiving water quality and the consideration and selection of storm water BMPs, including LID, site design, source control and treatment control BMPs.

CHAPTER 4 – LOW IMPACT DEVELOPMENT (LID) DESIGN GUIDE

If the Engineer is not familiar with LID or permanent BMPs design, the Engineer shall refer to Chapter 4 of the Countywide Model SUSMP. The City strongly recommends that the Engineer meet with the Storm Water Department prior to selecting stormwater treatment and flow-control facilities if they are not familiar with the design and functionality of LID or BMPs. The Engineer can set up a meeting by contacting the Storm Water Department at (619) 441-1653.

Analyze Your Project for LID

The City strongly encourages the Applicant to consider the following opportunities for LID:

- ☐ Optimize the site plan by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.
- ☐ Conserve the natural areas such as existing trees, vegetation, and maximize sheet flow in order to mimic pre-development hydrologic cycle.
- ☐ Use pervious surfaces such as turf, gravel, or pervious pavement – or use surfaces that retain rainfall such as vegetated roofs shall be considered. All drainage from these surfaces is considered to be "self-retained" when designed properly. No further management of runoff is necessary. ***NOTE: Perform adequate geotechnical evaluations when using pervious pavements in Soil Type C and D.***
- ☐ Disperse runoff from impervious surfaces on to adjacent pervious surfaces (e.g. direct a roof downspout to disperse runoff onto a lawn, planter, or other pervious surface).

Alternatives to Integrated LID Design

The City requires that the Engineer consult with the Storm Water Department prior to proceeding with alternatives.

STORM WATER

MITIGATION PLAN

[Planning Action, PUD or TSM or BP]

[Project Name]

[Project Address]

APN: [000-000-00]

Prepared By

[Engineer's Name]
[Engineering Company's Name]
[Engineering Company's Address]

For

[Developer's Name]
[Developer's Address]

Date:

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CHAPTER 5 – OPERATION AND MAINTENANCE OF STORMWATER FACILITIES 20

List attachments by Chapter here:

	Attachment No.	Title/Description
Chp 1	1	Copy of "Completed Storm Water SUSMP Intake Applicability Form for Development Projects"
Chp 2		
Chp 3	1	Project Location Map
	2	Pre-Development Site Map
	3	Post-Development Site Map
	4	Proprietary Products Full Submittal
	5	Documentation to Demonstrate Past Project Success
	6	Treatment Calcs: Volume-Based Facilities
	7	Treatment Calcs: Flow-Based Facilities
	8	Detention Calcs: Flow-Control Facilities
Chp 4		
Chp 5	1	Storm Water Maintenance Plan
	2	Storm Water Maintenance Agreement

Other City of El Cajon References:
Attachment No. 2 – Trash Enclosure Details
Attachment No. 3 – CC&Rs and Storm Water Maintenance Plan

PROJECT INTRODUCTION AND PROJECT BACKGROUND

The following shall be completed in its entirety prior to submittal. Refer to Chapter 4 for details on identifying constraints and opportunities for storm water control.

Project Name:

Project Location:

Project Description:

Existing Site Features and Conditions Including Topography:

Constraints and Opportunities for Storm Water Control:

CHAPTER 1 – POLICIES AND PROCEDURES

This Storm Water Mitigation Plan (SWMitP) shall be prepared in conjunction with the Countywide Model Standard Urban Stormwater Mitigation Plan (SUSMP), which can be obtained at http://www.projectcleanwater.org. The Model SUSMP has step-by-step instructions, which will guide you in preparing the SWMitP. The Chapters used herein correspond to the Model SUSMP and contained herein are City of El Cajon's (City) specific project requirements.

If the project requires a Hydromodification Management Plan (HMP) as determined in the Model SUSMP Chapter 2, page 26, the Engineer shall refer the Draft Hydromodification Plan, which can be obtained at http://www.projectcleanwater.org.

The SWMitP shall been prepared under the direction of a Civil Engineer registered in the state of California. The Registered Civil Engineer shall attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

CERTIFICATION

I, _____, certify that the selection, sizing, and preliminary design of stormwater treatment and other control measures in this SWMitP meet the requirements of the Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments.

Signature: _____ Date: _____

AFFIX WET STAMP HERE ➔

SWMitP PURPOSE

The purpose of this SWMitP is to finalize the list of anticipated pollutants from the project, finalize proposed Low Impact Development (LID) principles, select final source control and treatment control Best Management Practices (BMPs), finalize sizing calculations for stormwater BMPs, and submit an appropriate maintenance plan. BMPs and LID features applied to all projects provide long-term solutions to water quality and help minimize downstream erosion. This SWMitP is intended to ensure the effectiveness of the selected LID's and BMPs proposed by checking that they have been sized properly, maintenance is feasible, and that the design is based on long-term fiscal planning. The SWMitP is a living document subject to revisions as needed by the Engineer of Work and the City.

STORM WATER COMPLIANCE PROCESS

Typically, during the Planning Level or Programming Phase, the City of El Cajon determines if a development project is a **"Priority Development Project"** following the completion of the **"Storm Water SUSMP Intake Applicability Form for Development Projects"**. A **"Storm Water Conceptual Plan"** is then developed and submitted for review and approval. Then, during final design (or preparation of construction plans), a Storm Water Mitigation Plan (SWMitP) is required in accordance with the Standard Urban Storm Water Mitigation Plan (SUSMP) ordinance of the City of El Cajon (Ord. 4908, Chapter 16.60) and San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001, NPDES Permit No. CAS0108758.

The City's SWMitP submittal requirements are described in Chapter 3. The SWMitP shall be completed in it entirety prior to submittal to the City of El Cajon otherwise it will be returned without review. If you have any questions during the preparation of the SWMitP contact the Storm Water Department at (619) 441-1653.

Complete the following:

1. Is the project on previously undeveloped land (new development)?

   YES NO

2. Is the project adding or creating 5,000-sf, or more, of impervious surface (redevelopment)?

   YES NO

If you answered YES to either 1 or 2, complete Table 1-1, inserted below from the Model SUSMP, Chapter 1.

TABLE 1-1. Priority Development Projects.

Is the project in any of these categories?

Yes ❑	No ❑	A	**Housing subdivisions of 10 or more dwelling units.** Examples: single-family homes, multi-family homes, condominiums, and apartments.
Yes ❑	No ❑	B	**Commercial—greater than one acre.** Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.
Yes ❑	No ❑	C	**Heavy industry—greater than one acre.** Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).
Yes ❑	No ❑	D	**Automotive repair shops.** A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.
Yes ❑	No ❑	E	**Restaurants.** Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.
Yes ❑	No ❑	F	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
Yes ❑	No ❑	G	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.
Yes ❑	No ❑	H	**Parking lots 5,000 square feet or more** or with 15 or more parking spaces and potentially exposed to urban runoff.
Yes ❑	No ❑	I	**Street, roads, highways, and freeways.** Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
Yes ❑	No ❑	J	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

If you answered YES to any of the Items in Table 1-1, the project is a "Priority Development Project". If the Engineer determines that the project is ***NOT*** a "Priority Development Project" call the Storm Water Department at (619) 441-1653 to confirm any SUSMP requirements for the project. If the Engineer determines that the project ***IS*** a "Priority Development Project" continue to the following Chapters.

1. Is the project a "Priority Development Project"? YES NO
2. If you answered yes, list all applicable categories per Table 1-1 → _____

To determine if the project is ***EXEMPT*** from preparing a Hydromodification Management Plan (HMP), refer to the Model SUSMP Chapter 1, Page 10-11. If the Engineer determines that a HMP is required, the City may consider granting an exemption. To make this determination, the Engineer may conduct an independent geomorphic study to determine the project's full hydromodification impact. The study must incorporate sediment transport modeling across the range of geomorphically-significant flows and demonstrate to the City's satisfaction that the project flows and sediment reductions will not detrimentally affect the receiving water to qualify for the exemption. If the project is ***NOT EXEMPT***, follow the instructions in the HMP, which can be obtained at http://www.projectcleanwater.org .

1. Does the project require a HMP? YES NO

CHAPTER 2 – CONCEPTS AND CRITERIA

The City lies entirely within the San Diego River Watershed, Hydrologic Unit (HU) 907. The City recognizes the following drainage basins within the City, all of which eventually discharge into the San Diego River. The Engineer shall refer to the City of El Cajon Jurisdictional Urban Runoff Management Program (JURMP), which is available at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

Check the corresponding watershed(s) for the project

☐ Broadway Channel Basin	☐ Washington Channel Basin	☐ County Ditch Basin	☐ Northern Forrester Creek Basin
☐ Forrester Creek Basin	☐ Fanita Basin	☐ Fletcher Parkway Basin	☐ Third Street Lateral

The following are designated as impaired waters by the RWQCB and USEPA pursuant to the Clean Water Act section 303(d): ***Forrester Creek and San Diego River***. The City follows a conservative approach with regards to pollutants impairing water bodies.

Water Quality (Treatment Requirements): The City Municipal Code requires that all pollutants of concern as identified on the CWA 303(d) list be applied for the entire length of the corresponding water body. Determine the Anticipated and Potential Pollutants of Concern from Table 2-1 in the following page per Chapter 2 of the Model SUSMP.

Circle each as applicable:

TABLE 2-1. ANTICIPATED AND POTENTIAL Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >one acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Check each half of a box as applicable:

Pollutants associated with 303(d) Listed ImpairedWaters To Which the Project Drains	Project Specific Anticipated and Potential Pollutants of Concern								
	Sed	Nut	HM	Org	T&D	ODS	O&G	B&V	Pes
Sed									
Nut		X							
HM									
Org									
T&D									
ODS						X			
O&G									
B&V								X	
Pes									

Sed = Sediment; Nut = Nutrients; HM = Heavy Metals; Org = Organics; T&D = Trash and Debris; ODS= Oxygen Demand Substances; O&G = Oils and Grease; B&V = Bacteria & Viruses; Pes = Pesticides; Oth = Other (i.e. Pharmaceuticals, etc.)

If a box above has two (2) checks, it is considered a Primary Pollutant; one (1) check is considered a Secondary Pollutant. Check each pollutant below according to either Primary or Secondary Pollutant.

The City requires that the Pollutants of Concern be grouped to determine how easily various treatment processes remove them. Refer to Table 2-2 below, inserted from Chapter 2 of the Model SUSMP.

TABLE 2-2. GROUPING OF POTENTIAL POLLUTANTS of Concern by fate during stormwater treatment

Check off the Pollutants in the table below accordingly:

Primary	Secondary	Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
		Sediment	X	X	
		Nutrients		X	X
		Heavy Metals		X	
		Organic Compounds		X	
		Trash & Debris	X		
		Oxygen Demanding		X	
		Bacteria		X	
		Oil & Grease		X	
		Pesticides		X	

When selecting a treatment facility to remove a specific pollutant, the City requires that "Medium" or "High" Removal Efficiency BMPs treat all Primary Pollutants of concern as identified above. Refer to Table 2-3 inserted below from the Model SUSMP, Chapter 2 to determine an effective treatment facility.

Circle as applicable:

TABLE 2-3. GROUPS OF POLLUTANTS and relative effectiveness of treatment facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro-dynamic Devices (1)
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

*See page 23 of the Regional Model SUSMP for a discussion of selection of treatment facilities in special situations.

Notes: (1) Trash Racks & Hydrodynamic Devices shall not be used alone.
(2) The City shall reserve the right to determine if the selected treatment facility is appropriate, which may lead to selecting a higher efficiency treatment facility than originally selected by the Engineer.

The Engineer shall ensure that the area (i.e. Parking Lots, etc.) that requires the treatment actually drain to the selected treatment facility. This shall be clearly shown on the construction plans and delineated as such in the drainage report. If this is not clearly shown, the City reserves the right to reject the submittal.

Water Quantity (Detention Requirements): The City requires that the 2-year and the 10-year storm event be used for calculating peak flows and the 100-year storm event be used to demonstrate flooding impacts. The 2-year and the 10-year storm event shall be used to design storm water detention facilities in accordance with the San Diego County Hydrology Manual, latest edition, Section 6. The 100-year shall be used to design a bypass system.

For guidance on preparing the Hydraulics and Hydrology Report (or Drainage Report), refer to the San Diego County Hydrology Manual, latest edition. The Engineer may consider using intensities from the latest edition of the City of El Cajon Improvement Standards, Figure 3.4-2 included below, for the design of the

drainage improvements (i.e. pipelines, catch basins, inlets, etc). Per the City's requirements, a Drainage Report is required and may be submitted separately or attached to the Conceptual Plan.

Fig. 3.4-2

AVERAGE INTENSITY-DURATION CURVES
El Cajon, California

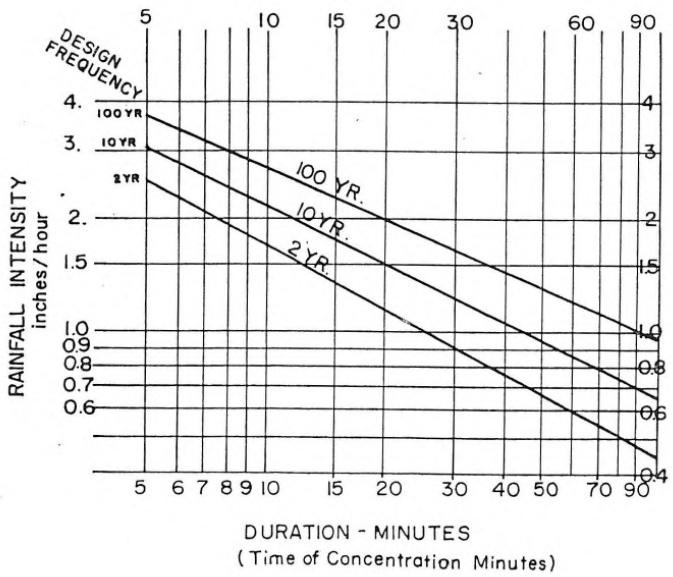

CHAPTER 3 – PREPARING YOUR PROJECT SUBMITTAL

The City requires that this entire packet be completed and submitted along with maps, calculations, proprietary products catalogue cut sheets, details, and other information as requested herein.

Complete and submit the "EXAMPLE PROJECT SUBMITTAL CHECKLIST" located in the Model SUSMP Chapter 3, Page 32. Attachments shall be listed in the Table of Contents.

Report Exhibits: In addition to the items requested in the "CHECKLIST", the City requires that the submittal shall include a location map of the project site, and inlets located a minimum of 200-feet beyond the project site. The maps shall be on a Standard D-size sheet and plotted using engineering scales only and not architectural scales.

Report Narrative: In addition to the items requested in the "CHECKLIST", the City requires a description of the existing topography, run-on and runoff issues, and unique conditions. Also, describe the details of the pre-construction condition and the post-construction condition.

Summarize the affects of the project on the pre-construction flows and specifically state if the flows were increased, decreased, fully mitigated, etc. and the impact the project may have on the downstream hydrology.

Report Tables: In addition to the items requested in the "CHECKLIST", the City requires completion of the tables included herein.

Refer to the Model SUSMP Chapter 4 for guidelines and available Low Impact Development (LID) treatment facilities. The City requires that the project consider at minimum the LID features listed below. Based on the project specifics, the City may require additional LID treatment facilities. The Engineer shall be responsible for selecting the most adequate treatment facility and for including the calculations necessary to justify the effectiveness of each facility. Follow the Model SUSMP Chapter 3, Step 3 to prepare your LID design.

Complete the following table:

Low Impact Development (LID)	**Applied**			**Narrative**
	Yes	No	N/A	
Control Peak Runoff Rates				
Minimize Disturbance to Natural Drainages and Waterways				

Low Impact Development (LID)	Applied			Narrative
	Yes	No	N/A	
Conserve Natural Areas, Soils, and Existing Vegetation				
Minimize and Disconnect Impervious Surfaces				
Minimize Soil Compaction				
Drain Runoff from Impervious Surfaces to Pervious Areas				
Drain Rooftops to Landscaping				
Maximize the Use of Pervious Pavement				
[List any others]				

Refer to the Model SUSMP Chapter 3, Step 4 for guidance on specifying source control BMPs. The City requires that the project consider at minimum the source control measures listed below. Based on the project specifics, the City may required additional permanent source control measures. The Engineer shall be responsible for selecting the most adequate source control measures and for including the calculations necessary to justify the effectiveness of each BMP and ensuring all BMPs are shown on the construction plans.

Complete the following table:

Potential Source of Runoff Pollutant	Permanent Source Control BMPs	Applied			Operational Source BMP Narrative
		Yes	No	N/A	
	Include storm drain stenciling and signage				
	Outdoor storage area shall be designed to contain pollutants				
	Trash storage area shall be secured, have a grade break or berm, and have a roof covering (See City of El Cajon References; Attachment No. 2)				

Potential Source of Runoff Pollutant	Permanent Source Control BMPs	Applied			Operational Source BMP Narrative
		Yes	No	N/A	
	Use efficient irrigation systems and landscape design				
	Hillside landscaping				

Refer to the Model SUSMP Chapter 2 for guidance on specifying treatment facilities. The Engineer shall be responsible for selecting the most adequate treatment facilities and for including the calculations necessary to justify the effectiveness of each facility and ensuring all facilities are shown on the construction plans. Note that the Engineer shall cross-reference Chapter 2 and ensure that the drainage area which was determined in Chapter 2 to contain potential pollutants of concern per Table 2-1 is indeed draining to the appropriate treatment facility. Sufficient grades shall be provided on the drainage plans to determine if the drainage area identified is actually draining to the proper treatment facility.

Complete the following table:

Treatment Facilities	Applied			Narrative to describe the selected facilities, location, drainage plans where facility is shown
	Yes	No	N/A	
Bioretention Facilities (LID)				
Settling Basins (Dry Ponds)				
Wet Ponds and Constructed Wetlands				
Infiltration Facilities or Practices (LID)				
Media Filters				
Higher-rate biofilters				
Higher-rate media filters				
Trash Racks & Hydrodynamic Devices				

Refer to the Model SUSMP Chapter 4, Table 4-1 for guidance on Integrated Management Practices (IMP). The Engineer shall be responsible for selecting the most adequate IMPs and for including the calculations necessary to justify the effectiveness of each IMP and ensuring all facilities are shown on the construction plans.

Complete the following table:

Runoff Management Facilities	**Applied**			**Narrative to describe the selected facilities, location, construction drawing where facility is shown**
	Yes	No	N/A	
Vegetated Roof				
Self-Retaining Areas				
Pervious Pavement				
Bioretention Facility				
Flow-through Planter				
Dry Well				
Cistern with Bioretention				

Runoff management facilities shall be per the standards found in the California Stormwater Quality Association (CASQA) Handbook, State Department of Transportation (Caltrans) Stormwater Handbook, or other well-recognized and certifying entity. If the Engineer is proposing propriety BMPs, this will require a "Propriety Product Full Submittal" attachment, which shall contain the manufacturer's catalogue cut sheets, past project photos, calculations, etc. for such proprietary items. In addition, if the Engineer is recommending facilities where functionality may be questionable, such as pervious pavement or dry wells in Type C and/or D soil types, this will require a "Documentation to Demonstrate Past Project Success" attachment, which shall contain, a list of five (5) similar applications completed within the last five (5) years and including contact information for the Engineer of Record and property owner to demonstrate proper functionality.

Report Calculations: In addition to the items requested in the "CHECKLIST", the City requires that runoff coefficients reflect the true imperviousness of the project area and not the land use coefficients. Calculate Q's to the nearest 0.1

cfs. The report shall clearly describe the design parameters used in the calculations and how the parameters, design criteria, constants, and other values were selected, derived, or obtained. Calculations shall show complete formulas, constants, solutions and actual step-by-step calculations. Calculations shall be attached with the header on top stating either:

"TREATMENT CALCULATIONS: VOLUME-BASED
FACILITY [TYPE] FOR DMA [NUMBER]

Or,

"TREATMENT CALCULATIONS: FLOW-BASED
FACILITY [TYPE] FOR DMA [NUMBER]

Or,

"DETENTION CALCULATIONS: FLOW-CONTROL
FACILITY [TYPE] FOR DMA [NUMBER]

If the calculation worksheet is not clearly labeled, the City reserves the right to reject the submittal. Once calculations are completed, the Engineer shall summarize final values in the tables below.

Water Quality (Treatment Facilities)

There are two types of treatment facilities – volume-based and flow-based. The Engineer shall refer to page 26 of the Model SUSMP, Chapter 2. The correct method shall be applied to each type of treatment facility.

Volume-based facilities are facilities whose functionality is based on treating a specific volume (V) of runoff produced by the 85th percentile 24-hour storm event as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map. When designed properly, these facilities will infiltrate, filter, or treat the required ***volume*** of storm water within the required time period.

Flow-based facilities are facilities whose functionality is based on treating a specific flow (Q) of runoff as determined by using the rational method. The Engineer shall refer to the "**Water Quantity**" paragraph located in Chapter 2 herein.

If the functionality of the facility selected depends on the total volume of water being treated, the Engineer shall complete the "V" column to demonstrate that the facility is adequate. If the functionality of the facility selected depends on the total flow of water being treated, the Engineer shall complete the "Q" column to demonstrate that the facility is adequate.

Treatment Calculation Summary:

Node Number	Facility Type	$V_{Treatment}$ (cf)	$Q_{Treatment}$ (cfs)

Water Quantity (Detention Facilities)

Detention facilities are designed to control flow such that post-development flows do not exceed pre-development flows and thus minimize downstream erosion. The Engineer shall refer to page 26 of the Model SUSMP, Chapter 2 for calculation details. These types of facilities include various detention or flow-control facilities (i.e. self-retaining areas, pervious pavements, flow-through planters, bioretention, etc) that when designed properly will detain the required flow on-site.

Detention Calculations Summary:

Project State	Q_2 (cfs) without BMPs	Q_2 (cfs) with BMPs	Q_{10} (cfs) without BMPs	Q_{10} (cfs) with BMPs	Q_{100} (cfs) without BMPs	Q_{100} (cfs) with BMPs
Pre-Development						
Post-Development						

CHAPTER 4 – LOW IMPACT DEVELOPMENT (LID) DESIGN GUIDE

If the Engineer is not familiar with LID or permanent BMPs design, the Engineer shall refer to the County of San Diego's LID Handbook available at http://www.sdcounty.ca.gov/dplu/procguid.html#hydro. The City strongly recommends that the Engineer meet with the Storm Water Department prior to selecting stormwater treatment and flow-control facilities if they are not familiar with the design and functionality of LIDs or BMPs. The Engineer can set up a meeting by contacting the Storm Water Department at (619) 441-1653.

Analyze Your Project for LID

The City requires that the analysis performed documenting the site layout and site design decisions be included under Chapter 3, Preparing Your Project Submittal along with any calculations, tables, and narratives.

The City strongly encourages the Engineer to consider the following opportunities for LID:

- ☐ Optimize the site plan by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.
- ☐ Conserve the natural areas such as existing trees, vegetation, and maximize sheet flow in order to mimic pre-development hydrologic cycle.
- ☐ Use pervious surfaces such as turf, gravel, or pervious pavement – vegetated roofs shall be considered. All drainage from these surfaces is considered to be "self-retained" when designed properly. No further management of runoff is necessary. ***NOTE: Perform adequate geotechnical evaluations when using pervious pavements in Soil Type C and D.***
- ☐ Disperse runoff from impervious surfaces on to adjacent pervious surfaces (e.g. direct a roof downspout to disperse runoff onto a lawn, planter, or other pervious surface).

Alternatives to Integrated LID Design

The City requires that the Engineer consult with the Storm Water Department prior to proceeding with alternatives.

CHAPTER 5 – OPERATION AND MAINTENANCE OF STORMWATER FACILITIES

This chapter shall include two documents – Storm Water Maintenance Plan and Storm Water Maintenance Agreement. The City requires that the Engineer follow "CC&Rs and Storm Water Maintenance Plan", Attachment No. 3 as listed under the City of El Cajon

Storm Water Maintenance Plan (Plan)

The Plan shall be prepared to adequately provide long-term treatment of all post-development BMPs on the project. This plan shall include permeable pavements. For more information refer to the six-stage process outlined in the Model SUSMP Chapter 5, Page 91

Maintenance Agreement with Easement and Covenant (Agreement)

The Agreement shall be prepared in conjunction with the City's Planning Department and a draft may be attached herein until the Agreement is final.

The Agreement's shall include the following:

1. Commit the land containing the permanent BMPs to being used only for purposes of the BMPs (no alternations, reconstruction, etc)
2. Commit the landowner to maintain the facilities in accordance with the Plan (this obligation would be passed on to future purchasers or successors of the landowner, or operate indefinitely as a covenant)
3. Provide an easement giving the City the right to enter (and access adjacent properties as necessary) to maintain the BMPs to the satisfaction of the City

NEW SUSMP PROJECTS FOR 2009-2010

	Date (First Submittal)	Street Number		Direction	Street	Address Surname	Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	12/21/09	-	-	-	Chambers Street & Linda Way (NEC & SEC)	-	Senior apartments		>10 residential units	Pending Review
2	2/25/10	619	623	-	Lincoln Avenue	Avenue	New subdivision		>10 residential units	Pending Review
3	12/28/09	1338	-	East	Main	Street	15-Unit Self Storage Fac. (Concept incomplete)	15-Unit Self Storage Facility	New Commercial	Pending Review
4	6/24/09	1385	-	East	Main	Street	Automotive Dealership	Expand De La Fuente Cadillac	Parking expansion	Infiltration basin, bioretention basins, pervious parking areas
5	10/27/09	620	-	South	Marshall	Avenue	Recycling Center, SUSMP	Recycling Center	Parking expansion	Pending Review
6	4/6/10	101	-	West	Washington	Avenue	Restaurant w/ drive-thru, SUSMP	Tres Hermanos	Restaurant	Pending Review

SUSMP PROJECTS UNDER REVIEW

	Street Number		Direction	Street	Address Surname	Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	965	-		Arnele	Avenue	Automotive Dealership	Toyota of El Cajon	>5000 sf parking redevelopment	Vegetated swales, Bioretention swale, Pervious parking areas, Covered trash enclosure
2	1001	-	West	Bradley	Avenue	Materials Recycling Transfer Station	Waste Management	>5000 sf redevelopment <200' from open channel	Vegetated swale, Inlet filter
3	1306	-		Broadway		Commercial Retail	Walgreens (915-975 N. Second St.)	Commercial Retail >1 acre	Vegetated swale, Detention structure, Inlet filters
4	656	-		Front	Street	New Office Building, Parking Lot		>5000 sf parking	Rock swales, Inlet filter
5	-	-		Gillespie Field		Airport Additions	Cajon Air Center at Gillespie	Commercial Retail >1 acre, >5000 sf parking	Pending Review
6	-	-		Grossmont	Terrace	I-8 & Murray		Commercial Retail >1 acre, >5000 sf parking	Pending Review
7	1333	-	South	Magnolia	Avenue	20 lot subdivision		>10 residential units	Vegetated swales, Detention basin
8	1385	-	East	Main	Street	Automotive Dealership	De La Fuente Cadillac	Parking expansion	Infiltration basin, Bioretention basins, Pervious parking areas
9	855	863	East	Main	Street	Commercial Retail	Razuki Mall	>5000 sf redevelopment	Vegetated swale, Detention basin, Covered trash enclosure, Inlet filter
10	1338	-	East	Main	Street	Common Interest Storage Facility		>5000 sf redevelopment	Infiltration trench, Covered vehicle wash area
11	-	-	North	Marshall	Avenue	New Hangar	Airworld Gillespie Field	>5000 sf redevelopment	Vegetated swales, Vehicle wash area, Inlet filter

Inventory of Priority Project Post-Contruction Structural Treatment Control BMPs

PY3 2009-2010

	Street Number	Thru	N,E, S,W	Street Name	Street Surname	Assessor's Parcel Number	Site Type	Priority Trigger	Project Priority	Post-Construction BMPs Applied	BMP Infeasibility	Priority of Treatment BMPs	09-10 Treatment BMP Maintenance Inspections		
													Date	Result	Follow-up Required
1	2706	-	-	Anjuli	Court	4810523200 - 4800	New Subdivision	SFR >10 Units	SUSMP	CDS (hydrodynamic separator) unit (in Public Right-of-Way: City Maintained)		Low	City Maintained	N/A	N/A
2	1001	-	West	Bradley	Avenue	4821310200, 0300, 0700, 1600	Parking Lot (925 O'Connor St.), New Construction Materials Recycling Transfer Facility	>5000sf Redevelopment, <200' from ESA	SUSMP	Pervious swales, channel drains, inlet filters		High	Final Inspection 1/29/10; Previous BMPs Inspected 6/30/10	New BMPs Installed 1/29/10; All BMPs maintained 6/30/10	No
3	1032	-	-	Broadway	-	4842932200	New Office Building	>5,000 Redevelopment	SUSMP	Swalegard inlet filter, grass buffer strip		Medium	-	-	-
4	1090	-	-	Broadway	-	4842931500	Gas Station (Re-Developed)	RGO	SUSMP	Grass filter strip, filter inserts		High	6/29/10	Grass filter strip dying; Debris in filter inserts	Yes
5	1174	-	-	Broadway	-	4843600100	Commercial Facility	Parking lot > 5000 sq ft	SUSMP	Inlet filter, trash enclosure	Site size constraints	High	6/29/10	Filters need maintainace/replacement	Yes
6	350	-	East	Chase	Avenue	4931723300	New Restaurant	New restaurant	SUSMP	Inlet filters		High	6/30/10	Det. basin free of debris, minimal vegetation; Inlet filters have debris	Yes
7	426	-	East	Chase	Avenue	4934302200	Restaurant - take-out	Restaurant - take-out	SUSMP	Grease trap, grease bin, inlet filters	Structural BMPs already onsite	High	6/28/10	Debris in filter inserts	Yes
8	450	-	East	Chase	Avenue	4934302200	Commercial	New Commercial >100,000 sf	High	Inlet filters	Site size constraints, Constructed prior to R9-2007-0001 Permit	Medium	-	-	-
9	763	-	West	Chase	Avenue	4924103600-4000	New Subdivision	4 New single-family residences (Anita Lee Way)	High	Grassy swales, curb outlet filters		Medium	-	-	-
10	369	385	-	El Cajon	Boulevard	4873231700	New show room addition	Parking lot > 5000 sq ft	SUSMP	Trash enclosure, detention basins, inlet filters		Medium	-	-	-
11	442.0	444	-	El Cajon	Boulevard	4875201300	Motorcycle sales and service	Auto sales and service	SUSMP	Pervious swales, Media filter vault, Signage, covered trash enclosure		Low	-	-	-
12	613.0	621.0	-	El Cajon	Boulevard	4875311700 & 1800	Commercial, Motorcycle Dealership	Commercial redevelopment	SUSMP	Inlet filter		Medium	6/25/2010	Inlet filter needs maintenance	Yes
13	670	-	-	El Cajon	Boulevard	4874801500	New Car Dealership	>15 Parking Spaces	SUSMP	Underground detention, hydrodynamic separator, signage		Low	-	-	-
14	1380	-	-	El Cajon	Boulevard	4877700700	Commercial Facility	>100,000 sq. ft commercial dev't, Parking > 5,000 sq ft	SUSMP	Underground detention system		Low	-	-	-
15	298	-	-	Fletcher	Parkway	4830714800	Commercial Facility	>100,000 sq. ft commercial dev't, Parking > 5,000 sq ft	SUSMP	Inlet filters, 2 CDS hydrodynamic separator units, filtration strip next to Garden Center		Medium	-	-	-
16	605	-	-	Fletcher	Parkway	4822705700	New Commercial	New Commercial	SUSMP	Flogard catch basin inserts		High	6/29/10	Catch basins need to be cleared of debris, inlet filters not present	Yes
17	475.0	487.0	-	Foundation	Lane	4930402500-2900	New 4 unit Subdivision (Previously 801 Avocado Ave.)	New street for 4 unit subdiv., <200' from open channel	SUSMP	Riprap channel, vegetated swale, inlet filter		Medium	Final Inspection 10/16/2009	BMPs installed	N/A
18	2000	-	-	Gillespie	Way	3872011200	New Industrial Complex	>5,000 sq ft Development	SUSMP	Detention area in parking, grassy swale, signage, filter inserts		Medium	-	-	-
19	1935	1941	-	Granite Hills	Drive	5112404000 - 5600	New Subdivision (Saddlebrook Ct. & Way)	Subdivision>10 Units	SUSMP	Detention basin, vegetated channel		Low	-	-	-
20	-	-	-	Grossmont College	Drive	3860710900	College Parking Lot	Parking lot > 5000 sq ft	SUSMP	Hydrodynamic separation system, detention area		Low	-	-	-
21	2062.0	2096.0	-	Ingamac Way	Avenue	5082400800	New Subdivision (Previously 2010 E. Madison Ave.)	Hillside Development	SUSMP	Extended detention basin, grassy swales		Medium	Final Inspection 9/15/2009	BMPs installed	N/A
22	912	930	-	Jamacha	Road	5144504300	New Multi Family Homes	>5,000 sq ft Development	SUSMP	Infiltration system, vegetated swale, storm drain inlet filters		Medium	6/28/10	No access to site; swale appears to have been removed	Yes
23	1780	1860	-	Joe Crosson	Drive	3871900600	Additions to existing aircraft hangers	>5,000 sq ft Development	SUSMP	Inlet filters, trash enclosures, enclosed wash areas	Site size and usage constraints, County Airport Authority	Medium	County Maintained	N/A	N/A
24	333	-	North	Johnson	Avenue	4871225400	New Commercial	>5,000 sq ft Development, contiguous to channel	SUSMP	Inlet filters, roof drains to landscaping	Site size constraints, Constructed prior to R9-2007-0001 Permit	High	6/30/10	Filters have little debris	No
25	605	-	West	Lexington	Avenue	4873230800	Commercial - Automotive Repair	>5,000 sq ft	SUSMP	gravel filter, rock energy dissipator, bio-detention basin		Low	-	-	-
26	1053	-	-	Loma Portal	Drive	4824430300	New Single Family Residence	Hillside development	SUSMP	Vegetated swale, filtration/detention system, inlet filter.		Medium	-	-	-
27	1470	-	East	Madison	Avenue	5110143400	Municipal Fire Station	>5,000 sq ft new parking	SUSMP	Trash enclosure, pervious concrete swale in (Municipal Building: City Maintained)		Low	City Maintained	N/A	N/A
28	1628	1646	East	Madison	Avenue	5110902600, 2700 & 5111010800	New Church	Parking lot > 5000 sq ft	SUSMP	Vegetated detention basin, storm drain inlet filters		Medium	-	-	-
29	2119	-	East	Madison	Avenue	5122301300	New Commercial	>5,000 sq ft new parking	SUSMP	Biofilters, detention basin		Low	-	-	-
30	245	-	East	Main	Street	4882110400	New Restaurant	New restaurant	SUSMP	Roof filters	Site size constraints	High	6/30/10	Roof filters not present; Filters must be installed	Yes
31	343	-	East	Main	Street	4882312600	New Commercial, Alley No. 25	< 200 ft from channel	SUSMP	Grassy swales, filter inserts		High	6/29/10	Grass swale OK, inlet filter in p. lot full of cigarette butts, signage needs replacement	Yes
32	1273.0	1275.0	East	Main	Street	4893900500	Commercial Buildings	>15 Parking spaces	SUSMP	Vegetated swale, porous pavement, trash enclosure		Low	Final Inspection 2/24/2010	BMPs installed	N/A

Inventory of Priority Project Post-Contruction Structural Treatment Control BMPs

	Street Number	Thru	N,E, S,W	Street Name	Street Surname	Assessor's Parcel Number	Site Type	Priority Trigger	Project Priority	Post-Construction BMPs Applied	BMP Infeasibility	Priority of Treatment BMPs	09-10 Treatment BMP Maintenance Inspections		
													Date	Result	Follow-up Required
33	1401	1409	East	Main	Street	5111711100 - 1600	Parking Lot, Channel Cover (De La Fuente Cadillac)	>5,000 sq ft new parking	SUSMP	Hydrodynamic separation system, inlet filters, underground detention box		High	6/30/10	Inlet filters free of debris; Hydrodynamic separator blocked by vehicle, could not inspect	Yes
34	1539.0	-	East	Main	Street	5073102000	Self-storage facility	Commercial > 1 acre	SUSMP	Underground detention, vegetated swale, inlet filters, trash enclosure, signage		Medium	Final Inspection 10/7/2009	BMPs installed	N/A
35	1700	-	East	Main	Street	5071201400	New Restaurant	New restaurant	SUSMP	Grass swales, inlet filter, infiltration basin		High	6/28/10	Inlet filters have minimal debris	No
36	1717	-	East	Main	Street	5072110200	Addition to equipment rental business	Commercial - equipment rental	SUSMP	Inlet filter, covered trash enclosure.	Site size constraints	High	6/29/10	Temp. equipment wash discharge into catch basin. Filter needs maintenance. Citation issued.	Yes
37	198	-	West	Main	Street	4871924700, 5100, & 5400	Commercial Center	New parking lot > 5000 sq ft	SUSMP	vegetated swles, hydrodynoamic separator, trench drain filters, filters and dry wells at trash enclosure, downspout and inlet filters		Medium	Final Inspection 8/1/2009	BMPs installed	N/A
38	1185	-	-	Marline	Avenue	4841921700	3 New single-family residences	3 New Single-family residences	Medium	Grassy swales		Low	-	-	-
39	1905	1915	North	Marshall	Avenue	3871900100	New Airport Hangars	>5,000 sq redevelopment	SUSMP	Inlet filters, larger SD pipe (48")	Site size and usage constraints, County Airport Authority	Medium	County Maintained	N/A	N/A
40	2694	-	-	Navajo	Road	4813221500	2 story office bldg.	>5,000 sq ft new parking	SUSMP	Inlet filter	Site size constraints	Medium	-	-	-
41	2732	-	-	Navajo	Road	4813211700	New Commercial	> 5000 sq ft	SUSMP	Flogard catch basin insert	Site size constraints	Medium	-	-	-
42	2766	-	-	Navajo	Road	4810104500	Expansion of Parking and Playground	Parking lot > 5000 sq ft	SUSMP	Hydrodynamic separation system, underground detention box		Medium	-	-	-
43	189.0	-	-	Roanoke	Road	4881131800	School	>15 Parking spaces	SUSMP	Vegetated swales, storm drain inlet filters, and other source control BMPs		Medium	Final Inspection 8/6/2009	BMPs installed	N/A
44	608	-	-	Sandra	Lane	5122600500	New Subdivision	New roadway (Sandra Lane)	SUSMP	grass-lined channel		Low	-	-	-
45	613	-	-	Sandra	Lane	5122600600	New Subdivision	New roadway (Sandra Lane)	SUSMP	detention basin		Low	-	-	-
46	622	-	-	Sandra	Lane	5122600400	New Subdivision	New roadway (Sandra Lane)	SUSMP	energy-dissipater		Low	-	-	-
47	635	-	-	Sandra	Lane	5122600700	New Subdivision	New roadway (Sandra Lane)	SUSMP	detention basin		Low	-	-	-
48	335	355	North	Second	Street	4891807800	New Restaurant	New restaurant	SUSMP	Grassy swale, trash enclosure, and outlet filter		Medium	-	-	-
49	1062	-	North	Second	Street	4842122500	RV repair	Parking lot > 5000 sq ft	SUSMP	Grass filter strip		Low	-	-	-
50	1190	-	North	Second	Street	4842021800	Commercial - Restaurant	new restaurant	SUSMP	Grass filter strip		Medium	-	-	-
51	901	921	-	Stoneys	Lane	4842814400 - 5900	Subdivision w/ private street (15 units)	SFR >10 Units, >5000sf new road	High	2 inlet filters	Constructed prior to R9-2001-0001 Permit	Medium	-	-	-
52	1143	-	East	Washington	Street	4893801500	Residential	Subdivision >10 housing units	SUSMP	Biofilters for each new housing unit (perimeter)		Low	-	-	-
53	1501	-	East	Washington	Avenue	5112807200	New Restaurant	New restaurant	SUSMP	Detention basin, signage, filter inserts		High	6/29/10	Infiltration basin and inlet filter look OK; Gravel swale off drive-thru needs maintenance	Yes
54	1326	1350	-	Wendell Cutting	Court	4843500100 - 1100	New Subdivision w/ private street	10 Single-family residential units	SUSMP	Grassy swales, underground detention, curb-inlet filter on Broadway		Medium	-	-	-
55	403	431	-	Wisconsin	Lane	4871740100-0800	New Subdivision	>5,000 sf Impervious surface (Private Street)	SUSMP	Sand media filter, underground detention basin, inlet filter		High	6/30/10	Minor debris and vegetation on media filter; Inlet filters have minimal debris from trees	No

CITY OF EL CAJON
TREATMENT CONTROL BMP INSPECTION

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Inspector Name:_____ Date:_____ Time:_____

Inspection Type: ☐ Routine ☐ Follow-Up ☐ Complaint ☐ Other:_____

A. PROJECT INFORMATION

Project Name: _____ Project Type: ☐ Private ☐ Public

Street Address: _____ ZIP _____

Nearest Receiving Waterbody:_____ Responsible Party:_____

Assigned Project Priority: ☐ High ☐ Medium ☐ Low APN: _____

B. TREATMENT CONTROL BMP ASSESSMENT

Treatment Control BMP	Number Implemented	ROW or Site Only?	% Properly Maintained	Comments
Indicate the number of each Treatment Control BMP committed to in the project's SUSMP report in the "Number Proposed" box. Adequacy of the BMP should be discussed in the "Comments" column.				
TC-10 (Infiltration Trench)				
TC-11 (Infiltration Basin)				
TC-12 (Retention/Irrigation)				
TC-20 (Wet Ponds)				
TC-21 (Constructed Wetlands)				
TC-22 (Extended Detention Basin)				
TC-30 (Vegetated Swale)				
TC-31 (Vegetated Buffer Strip)				
TC-32 (Bioretention)				
TC-40 (Media Filter)				
TC-50 (Water Quality Inlet)				
MP-20 (Wetland)				
MP-40 (Media Filter)				
MP-50 (Wet Vault)				
MP-51 (Vortex Separator)				
MP-52 (Drain Insert)				
Other:				

C. VISUAL OBSERVATIONS:

_____

_____

_____

D. FOLLOW-UP AND ENFORCEMENT ACTIONS

Describe corrective actions needed:_____

_____

_____

Enforcement Action Taken: ☐ None ☐ Written Notice ☐ Administrative Action ☐ Other_____

Follow Up Required? ☐ Yes ☐ No

Community Development Dept.
Planning Division
200 Civic Center Way
El Cajon CA 92020

ENVIRONMENTAL INFORMATION FORM

Part I - Initial Study
Negative Declaration $4,650.00 + $250.00 for each report
Mitigated Negative Declaration $4,650.00 + $250.00 for each report

The purpose of this form is to inform the City of the basic components of the proposed project so that the City may review the project pursuant to City Policies, Ordinances, and Guidelines; the California Environmental Quality Act; and the City's Rules and Procedures to Implement CEQA. It is important that the information requested in this application be provided in full.

The Initial Study is a requirement of the California Environmental Quality Act (CEQA) Guidelines and is used to determine whether further review of environmental factors of the project will be necessary, and, if so, whether a Negative Declaration (ND), Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR) will be the most appropriate document. Accuracy and completeness in the preparation of this study is essential. Incomplete materials will only result in a delay for the applicant, as the study will be rejected until properly completed.

INSTRUCTIONS: Please complete the following statement by filling in the designated blank spaces. Responses should be printed or typed so as to be legible. All appropriate spaces must be filled in and the required maps, photos, and plans submitted with this form. Additional information may be attached. The applicant should provide as much information as possible in this submittal to allow reviewers to have a thorough understanding of the project. Please submit this form and all support documents with the appropriate filing fee to the Community Development Department to begin the environmental review process. All maps/site plans shall be folded to 8½" by 11."

A. General Information

1. Name, address, telephone number, fax number and email of person to be contacted concerning this project:

   - Name
   - Address
   - Phone
   - Fax
   - Email

2. Name, address of legal property owner as shown on tax statement:

   - Name
   - Address

3. Address of project and/or description of location:

4. Assessor's Parcel Number(s) of project site:

5. List each project application which accompanies this form:

6. Have any preliminary documents been prepared for this projects (e.g. soil report or traffic impact analysis)? If yes, please identify name and date prepared:

7. List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state or federal agencies (i.e., Corps of Engineers, CalTrans, Air Pollution Control District or LAFCO):

8. Existing zoning of project site:

9. Existing General Plan Designation:

10. Fully describe the nature and purpose of the proposed project including the ultimate use of the property:

B. Project Description

1. Site size in acres or square footage:

2. Highest and lowest elevations on site (mean sea level):

3. Number of floors of proposed construction:

4. Number of proposed off-street parking spaces provided:

5. Anticipated project schedule (timeline):

6. Is this project dependent on an existing or future project? If yes, please explain:

7. Anticipated future phases:

8. If residential, include the number of units, unit sizes, range of sale prices or rents, and gross density (units) acre:

9. If commercial and/or office, indicate the types, square footage of each type (i.e., office, sales area, restaurant), whether neighborhood, city or regionally oriented, and total square footage of building area:

10. If industrial, indicate type, estimated employment per shift, loading facilities, square footage of office area and total square footage of building area:

11. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, and total square footage of building:

C. Existing Conditions

1. Number and species of existing trees 6 inches or larger in diameter:

2. Number, size, and species of trees to be removed:

3. Describe any power lines, water, sewer or storm drain mains, pipelines or other transmission lines which are located on or adjacent to the property:

4. Name of creeks and natural or man-made drainage channels through or adjacent to the property:

5. Primary vehicular access to property comes from which street(s):

6. Are any easements known to traverse the site? If yes, explain the type and purpose:

7. Provide details on existing uses of the site. Are there existing structures on the site? If yes, describe use and whether they will be demolished or relocated; if residential, give the number of current occupants:

8. Indicate service provider for:

    a. Water

    b. Sewer

    c. Fire protection

    d. Police protection

9. Is any portion of the site within the 100-year/500-year floodplain?

10. Is the site within the Gillespie Field Airport Land Use plan?

11. If yes, do any airport restrictions affect the proposal? *(May have to consult with Gillespie Airport personnel)*

12. Is the site located within two miles of Gillespie Field general aviation airport?

13. Is the site located within close proximity (200 feet) of a freeway?

14. Is the site listed on California's Environmental Protection Agency Hazardous Site List?

D. Environmental Analysis

Are the following items applicable to the project or its effects? Discuss all items checked "yes" or "maybe" on next page or attach additional sheets as necessary.

YES	MAYBE	NO	
☐	☐	☐	a. Change in existing features of any streams, lakes or hills, or substantial alteration of ground contours.
☐	☐	☐	b. Change in scenic views or vistas from existing residential areas or public lands or roads.
☐	☐	☐	c. Change in character of general area of project.
☐	☐	☐	d. Produce or involve large amounts of solid waste or litter.
☐	☐	☐	e. Disrupt or adversely affect an historic, cultural or archaeological site.
☐	☐	☐	f. Change in dust, ash, smoke, fumes or odors in vicinity.
☐	☐	☐	g. Change in stream, surface water, wetlands or ground water quality or quantity, or alteration of existing drainage patterns.
☐	☐	☐	h. Increase in impervious surfaces and associated increase runoff.
☐	☐	☐	i. Alteration in existing drainage patterns, runoff flow rates or volumes.
☐	☐	☐	j. Increased erosion.
☐	☐	☐	k. Use or disposal of heavy metals, pathogens,

petroleum derivatives, synthetic organics, sediment, nutrients, or oxygen demanding substances.

☐ ☐ ☐ l. Potential to impact already sensitive conditions or environmentally sensitive areas.

☐ ☐ ☐ m. Substantial change in existing noise or vibration levels in the vicinity.

☐ ☐ ☐ n. Site on filled land or on slope of 10 percent or more.

☐ ☐ ☐ o. Use or disposal of potentially hazardous material such as toxic substances, flammables or explosives.

☐ ☐ ☐ p. Substantial change in demand for municipal services (police, fire, water, sewer, etc.).

☐ ☐ ☐ q. Substantial increase in fuel or energy consumption (electricity, oil, natural gas, etc.).

☐ ☐ ☐ r. Relationship to a larger project or series of projects.

☐ ☐ ☐ s. Potential impact to aquatic, wetland or riparian habitiat.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date:_____ Signature:_____

Section 711.4 of the Fish and Game Code authorizes the County Clerk to collect a filing fee of up to $2,768.25 for the review of environmental documents by the State Department of Fish and Game. Should the State Department of Fish and Game decide to review the environmental documents associated with this project, the project applicant will become liable for paying this fee.

The applicant certifies by his/her signature below that he/she has been informed of this information and is aware that a fee may be required by the County Clerk with the filing of the environmental documents associated with his/her project.

Failure to pay the required fee in a timely manner may result in the delay in the start of the project.

Date:_____ Applicant's Signature:_____

Environmental Information Form Part II
Initial Study

1. Project Title: _____

2. Lead Agency Name and Address:

_____
_____
_____

3. Contact Person and Phone Number: _____

4. Project Location: _____

5. Project Sponsor's Name and Address:

_____
_____
_____

6. General Plan Designation: _____ 7. Zoning: _____

8. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheet(s) if necessary.)

_____
_____
_____

9. Surrounding Land Uses and Setting: (Briefly describe the project's surroundings.)

_____
_____
_____

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

_____
_____
_____

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Printed Name	For

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

a) Earlier Analyses Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

a) the significance criteria or threshold, if any, used to evaluate each question; and

b) the mitigation measure identified, if any, to reduce the impact to less than significance.

SAMPLE QUESTION

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☐
d)	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☐
II.	AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☐
d)	Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☐
e)	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	☐	☐	☐	☐
III.	AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☐
IV.	BIOLOGICAL RESOURCES. Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☐
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☐
V.	CULTURAL RESOURCES. Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☐
VI.	GEOLOGY AND SOILS. Would the project:				
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:	☐	☐	☐	☐
i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☐
ii)	Strong seismic ground shaking?	☐	☐	☐	☐
iii)	Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iv)	Landslides?	☐	☐	☐	☐
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☐
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☐
d)	Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☐
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☐
VII.	GREENHOUSE GAS EMISSIONS. Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☐
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☐	☐
VIII.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☐
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	HYDROLOGY AND WATER QUALITY. Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	☐	☐	☐	☐
e)	Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☐
h)	Place within a 100-year flood hazard area, structures that would impede or redirect flood flows?	☐	☐	☐	☐
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☐
j)	Expose people or structures to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☐
X.	LAND USE AND PLANNING. Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☐
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☐
XI.	MINERAL RESOURCES. Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☐
XII.	NOISE. Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☐
b)	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☐	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.	POPULATION AND HOUSING. Would the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	☐	☐	☐	☐
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
XIV.	PUBLIC SERVICES. Would the project:				
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☐
	Fire protection?	☐	☐	☐	☐
	Police protection?	☐	☐	☐	☐
	Schools?	☐	☐	☐	☐
	Parks?	☐	☐	☐	☐
	Other public facilities?	☐	☐	☐	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which have an adverse physical effect on the environment?	☐	☐	☐	☐
XVI. TRANSPORTATION / TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☐
e)	Result in inadequate emergency access?	☐	☐	☐	☐
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☐
XVII.	UTILITIES AND SERVICE SYSTEMS. Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☐
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? In making this determination, the Authority shall consider whether the project is subject to the water supply assessment requirements of Water Code Section 10910, et. seq. (SB 610), and the requirements of Government Code Section 664737 (SB 221).	☐	☐	☐	☐
e)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☐
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☐
XVIII.	MANDATORY FINDINGS OF SIGNIFICANCE				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☐	☐
c)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)	☐	☐	☐	☐
d)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☐

Project Name: _____

CITY OF EL CAJON SUSMP CHECKLIST

City of El Cajon
STORMWATER
Protection Program

MS4: ☐ Forrester Creek ☐ County Ditch Channel
☐ Broadway Channel ☐ Third Street Lateral
☐ Washington Channel ☐ Fletcher Parkway Lateral

PROJECT INFORMATION

Project Name: _____ Public Private

Project Address: _____

Project APN: _____

Project Size: (acres) _____ Notice of Intent: Yes No

Completed a SWPPP: Yes No

SUSMP CATEGORY

Check all SUSMP categories that apply to the project

☐ Residential Development ≥ 100 units
☐ Residential Development ≥ 10 units
☐ Commercial Development ≥ 1 acre
☐ Automotive Repair
☐ Restaurants
☐ Hillside Development ≥ 5,000 sq ft
☐ Parking Lots ≥ 5,000 sq ft or ≥ 15 spaces
☐ Streets, roads, highways, and freeways with ≥ 5,000 sq ft of new paved area
☐ Significant Redevelopment ≥ 5,000 sq ft of paved area on an already developed site
☐ Retail Gas Outlet

IDENTIFY POLLUTANTS FROM THE PROJECT AREA

Check all that apply to the project

☐ Sediment (dirt; silt; clay)
☐ Nutrients (fertilizers, sewages)
☐ Metals (dirt, silt, clay, paints, liquid/solid chemicals)
☐ Organics (food, vegetation)
☐ Trash and Debris
☐ Oxygen Demand Substances (organic matter)
☐ Petroleum (oil, grease)
☐ Bacteria and Viruses (fecal coliform, pathogens)
☐ Pesticides/Herbicides
☐ Toxics (acids, corrosives, chemicals)

Project Name: _____

IDENTIFY RECEIVING WATERS AND THE POLLUTANT SOURCES

Does the project discharge directly to: ☐ San Diego River? or ☐ Forester Creek?

What are the primary sources contributing to SD River and Forester Creek impairments of:

TDS?_____ _____ _____

Fecal Coliform? _____ _____

pH?_____ _____

(SD River only) Oxygen Depleting Constituents? _____ _____

(SD River only) Chlorpyrifos and Diazinon? _____

(SD River only) Total and Dissolved Copper? _____

IDENTIFY CONDITIONS OF CONCERN

☐ Was a drainage study report prepared? Yes No

☐ Was a Storm Water Mitigation Plan prepared? Yes No

☐ Were the reports prepared by a registered Civil Engineer? Yes No Who?_____

☐ Are there field photographs? Yes No (Attached?)

☐ Are the following calculated according to actual % imperviousness for the 6-hour, 10-year and 100-year frequency storms?

- ☐ Peak flow rate (pre and post-construction)
- ☐ Flow velocity
- ☐ Runoff volume
- ☐ Time of concentration (minimum of 5 minutes as defined in the SD Hydrology Manual to calculate Intensity values)
- ☐ Retention volume

☐ Are conditions of concern adequately identified using:

Site Design?	Yes	No
Source Control?	Yes	No
Treatment Control?	Yes	No

ESTABLISH STORM WATER LOW-IMPACT DEVELOPMENT (LID) BMPS

☐ ***Site Design BMPs***

SUSMP Projects **must** consider, incorporate, and implement where determined applicable and feasible by City storm water staff. (Check all that were considered, incorporated, or implemented):

- ☐ Maintain Pre-Development Rainfall Runoff Conditions
  - ☐ Minimize project's impervious footprint
  - ☐ Conserve natural areas
  - ☐ Construct low traffic areas (walkways, trails, patios, parking lots, alleys, etc) of permeable surfaces
  - ☐ Construct streets, sidewalks, and parking lot aisles to minimum widths
  - ☐ Maximize canopy interception by preserving existing trees and shrubs

Project Name: _____

- ☐ Preserve natural drainage systems
- ☐ Minimize Directly Connected Impervious Areas (DCIAs)
  - ☐ Drain rooftops into landscaping
  - ☐ Drain sidewalks, walkways, trails, and patios into landscaping
- ☐ Protect slopes and channels

Comments: _____

_____

☐ ***Source Control BMPs***

Does the project:

- ☐ Provide storm drain system stenciling and signage?
- ☐ Design outdoor material storage areas to reduce pollution introduction?
- ☐ Design trash storage areas to reduce pollution introduction (enclosed, covered, secured, and bermed)?
- ☐ Use efficient irrigations systems & landscape design (rain alert systems)?
- ☐ Incorporate requirements applicable to priority project categories such as:
  - ☐ Private Roads
  - ☐ Residential Driveways & Guest Parking
  - ☐ Dock Areas
  - ☐ Maintenance Bays
  - ☐ Vehicle Wash Areas
  - ☐ Outdoor Processing Areas
  - ☐ Equipment Wash Areas
  - ☐ Parking Areas
  - ☐ Roadways
  - ☐ Fueling Areas
  - ☐ Hillside Landscaping

☐ ***Treatment Control BMPs***

Check the treatment control(s) selected:

☐ Biofilters	☐ Detention Basin
☐ Infiltration basin/trench	☐ Filtration System
☐ Porous asphalt, concrete, other	☐ Hydrodynamic Separation System
☐ Filter Insert	☐ Sod-inlet Pre-treatment
☐ Grassy filter/swale	☐ Vegetated swale
☐ Proprietary Device	☐ Other: _____

☐ Do treatment controls effectively address primary pollutants of concern? Yes No

If No, describe corrective action: _____

_____

Verify the design of selected treatment controls:

☐ Was the control BMP designed for:	Volume	Flow
☐ Was the BMP design process described:	Yes	No
☐ Was the 85th percentile storm event used for design	Yes	No

If no, what design criteria was used: _____

Project Name: _____

☐ Was the BMP designed properly? If not, describe corrective actions: _____

_____

☐ Is the BMP(s) located near pollutant sources? Yes No
☐ Are there restrictions on use of infiltration BMPs? Yes No

Maintenance Requirements

☐ Was an Operations & Maintenance section attached? Yes No N/A
☐ Was a BMP Facilities Agreement signed by the property owner and filed with the Grant Deed? Yes No N/A
☐ Was a BMP Maintenance Agreement signed with the City to maintain post-construction BMPs? Yes No N/A
☐ Does this project require annual inspections and/or maintenance of BMPs by the City? Yes No N/A
☐ Was an access/easement agreement included? Yes No N/A
☐ Is there an HOA or other Common Interest planned for the project? Yes No N/A
☐ Were CC&Rs presented for review and acceptable? Yes No N/A
☐ Was a Storm Water Conveyance Maintenance Plan generated/received? Yes No N/A

Waiver of Structural Treatment BMP Requirements

☐ Was a waiver of infeasibility granted?
☐ Was the RWQCB notified?

Other Information

_____

_____

_____

Field Inspection

During BMP installation:
☐ Were the source control BMPs properly constructed in the field? ☐ Yes ☐ No
☐ Were the treatment control BMPs properly constructed in the field? ☐ Yes ☐ No

After project completion:
☐ Are all site design BMPs still in place? ☐ Yes ☐ No
☐ Are all source control BMPs still in place? ☐ Yes ☐ No
☐ Are treatment control BMPs still in place? ☐ Yes ☐ No
☐ Are all BMPs being maintained? ☐ Yes ☐ No

Appendix A.3

Storm Water Requirements for Construction Sites

The City's storm drain system is composed of the street, gutter, inlet, catch basin, ditches, streams, and concrete-lined channels.

1. Perimeter Controls (fiber roll; silt fence; gravel or sand bags) must be installed and kept in place throughout the project to prohibit the discharge of sediment and pollution from entering the storm drain system. If controls are moved to complete work, they must be replaced when work is completed or at end of day, whichever comes first.
2. Erosion Controls as required by an erosion and sediment control plan must be installed as designed.
3. Tracking of sediment and dirt must be cleaned up at the end of each working day.
4. Building Materials must be stored under cover at the end of each working day.
5. Spills must be reported to the site manager once they occur and cleaned up immediately. Spills that enter the City's storm drain system must be reported to the City Storm Water staff immediately.
6. Wash waters (including paint, dry wall mud, stucco, and other water-based materials) must be captured on site and contained, then disposed of in the appropriate place.
7. Port-o-lets must be secured and bermed.
8. Trash and debris shall be placed in appropriate containers during the workday with a final clean-up completed before leaving the site. If rain is predicted, wastes shall be covered.
9. Equipment shall be stored in a bermed area or with appropriate sized drip pans.
10. Equipment repair, servicing, or fueling must be completed undercover or within a bermed area for tasks completed within the workday. Spill kits must be within the bermed or repair areas.
11. Vehicle and equipment washing is prohibited.
12. The site will be secured at the end of each working day.
13. Report any destroyed controls to the site manager, immediately.

Under the City of El Cajon's Municipal Code §13.10.00, Storm Water Management and Discharge Control, it is illegal to discharge construction debris and materials, into the storm water conveyance system or any body of water.

Failure to prevent illegal discharges can result in fines of up to $10,000 a day per violation.

Under the law, contractors, the construction company, business owner, and property owner may receive a Citation for the same violation.

EROSION AND SEDIMENT CONTROL NOTES
FOR EROSION CONTROL PLANS
(HIGH AND MEDIUM PRIORITY PROJECTS)

Add the following notes (both pages) to the Storm Water Erosion Control site plan and implement as a condition to the Erosion Control Plan:

1. In case emergency work is required, contact _____ at _____.
   (name)
   (telephone number)

2. Erosion control measures shown on plans shall not be moved or modified without the approval of the Public Works inspector.

3. The contractor shall maintain all erosion control devices in working order to the satisfaction of the City Engineer throughout the construction phase of the project and until permanent ground cover and landscaping is established.

4. The contractor shall install additional erosion control measures as may be required by the City Engineer due to completed grading operations or unforeseen circumstances which may arise.

5. The contractor shall be responsible for and shall take necessary precautions to prevent public trespass onto areas where impounded waters create a hazardous condition.

6. Graded areas around the project perimeter must drain away from the face of slope at the conclusion of each working day.

7. All gravel bags shall have ¾ inch minimum aggregate (No sandbags and no burlap type bags allowed).

8. Existing streets shall be kept free of dirt and debris, and shall be maintained in good condition. Dust shall be controlled so that it is not a nuisance. The contractor shall be responsible for the repair of any street or property damaged, public or private, as a result of the work.

9. The Plan shall provide that no sand, silt, or debris shall be allowed to enter the storm drain system including public streets.

10. The owner and/or the owner's contractor shall implement the Plan and take remedial and preventive action immediately when pollutant discharge occurs and/or the City Engineer or the Building Division directs.

11. The above shall apply starting the 1st day of grading and/or construction and shall remain in effect until all grading and/or construction work has been completed and 70% of the disturbed land has been stabilized by approved vegetation, mulch, gravel, etc.

ALL EROSION AND SEDIMENT CONTROL SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE CITY OF EL CAJON'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) AND SHALL INCLUDE THE FOLLOWING:

Dry Season (May 1 through September 30)

1. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads and slopes. Slopes less than 33.3% or 1:3 (vertical vs. horizontal) may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement.

2. Adequate perimeter protection BMPs must be installed and maintained.

3. Adequate sediment control BMPs must be installed and maintained.

4. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

5. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and prevent sediment discharges must be stored on the site.

6. An approved "weather triggered" response plan is mandated for implementation in the event that a predicted storm event has at least a 50% chance of rain. The proponent must have the capacity to deploy the standby BMPs within 48 hours of the predicted storm event.

7. All slopes must be equipped with erosion prevention BMPs as soon as slopes are completed for any portion of the site.

8. Cleared or graded areas left exposed at any given time are limited to the amount of acreage that the project proponent can adequately protect prior to a predicted storm event.

Wet Season (October 1 through April 30)

In addition to the Dry Season Requirements:

1. Perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms.

2. Adequate erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a BMP fails, it must be repaired, improved or replaced with an acceptable alternate as soon as it is safe to do so.

3. The amount of exposed soil allowed at one time shall not exceed standby erosion and sediment control BMP capacity.

4. An incomplete disturbed area that is not being actively graded must be fully protected from erosion if left for 10 days or more.

City of El Cajon

Storm Water Quality Inspection for Construction Sites

BMP COMPLIANCE REPORT

You Are the Solution to Stormwater Pollution!

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Site Name: _____ Address: _____

Contractor Name: _____ Job Number: _____

Inspector Name & Phone #: _____ Date: _____/_____/_____Time: _____AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation **APN**: _____

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

Does Project Maintain a Stormwater Pollution Prevention Plan (SWPPP)? ❑ Yes ❑ No WDID: _____

Nearest Receiving Water(s): _____ Discharge Observed: ❑ Yes ❑ No _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

The Following List summarizes Minimum BMPs Required by the City of El Cajon Storm Water Ordinance (13.10) Additional BMPs May Be Required due to Site Conditions, Specific Activities, or by the Enforcement Official.

Minimum Construction Requirements	BMP Implemented?			Comments / Recommendations
	YES	NO	N/A	
Silt Fence – SE1				
Storm Drain Inlet Protection – SE10*+ filter fabric				
Sediment Basin – SE2				
Check Dams – SE4				
Fiber Rolls – SE5				
Gravel Bag Berm – SE6				
Street Sweeping/Vacuum – SE7				
Stabilized Construction Entrance – TC1				
Hydroseeding – EC4				
Geotexiles and Mats – EC7				
Material Delivery & Storage – WM1				
Stock Pile Management – WM3*				
Solid Waste Management – WM5*				
Concrete Waste Management – WM8				
Sanitary Waste Management – WM9				
Other*				
Other				

VIOLATIONS / REQUIRED CORRECTIVE ACTIONS

❑ Violation of Stormwater Ordinance: _____

❑ No Violations Have Been Noted; However BMP Implementation Is Required _____

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

200 E. Main Street, El Cajon California 92020 *TEL 619-441-1653 / FAX 619-579-5254*

Erosion Control Checklist for Low/Medium Priority Projects

$50.00 Fee (Receipt code: 5513 650b; ComPlus codes: Demo 516, Minor 518, Medium (no G&D) 520)

Address: _____

APN: _____-_____-_____-____ Permit #: _____ Fee ID(s): _____ : $ _____

Brief Project Description: _____

□ Formal Erosion Control Plan not needed. Sticker signed and placed on plans.

		YES	NO
1.	North arrow and Scale?		
2.	Legend?		
3.	Storm Water Notes?		
4.	Emergency phone number?		
5.	Drainage arrows/Topography?		
6.	Placement of BMPs?		
a.	Perimeter control [silt fence (SC-1) or gravel bags (SC-6)]		
b.	Slope protection [coconut fiber blankets or fiber rolls (SC-5)]		
c.	Street sweeping (SC-7)		
d.	Stabilized construction entrance (TC-1)		
e.	Material storage (WM-1)		
f.	Solid Waste Storage (WM-5)		
g.	Concrete washout (WM-8)		
h.	Sanitary waste (WM-9)		
7.	Address/Site location?		
8.	Erosion Control Plan heading?		
9.	Proposed and existing structures identified?		
10.	Property Boundaries?		

Notes: _____

_____

□ Fee(s) Entered into ComPlus

_____ _____/_____/_____ □ Comments Entered into ComPlus

Reviewer Signature Date Reviewed □ Logged into Excel Spreadsheet

Erosion Control Plan

City of El Cajon

GENERAL STORM WATER NOTES

A. ALL OPERATION WILL COMPLY WITH THE CITY'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PLAN (JURMP).

B. THE OWNER AND THE OWNER'S CONTRACTOR ARE RESPONSIBLE FOR POLLUTION PREVENTION PRACTICES TO PREVENT THE DISCHARGE OF SEDIMENT AND POLLUTANTS TO THE PUBLIC STORM DRAIN SYSTEM.

C. OWNER AND THE OWNER'S CONTRACTOR ARE RESPONSIBLE FOR THE PREVENTION OF EROSION CAUSED BY CLEARING OF VEGETATION, GRADING, DEMOLITION OR CONSTRUCTION.

D. SEDIMENT, POLLUTION AND EROSION CONTROL MEASURES WILL BE IMPLEMENTED STARTING THE FIRST DAY OF CLEARING, GRADING OR SOIL DISTURBANCE, OR CONSTRUCTION. THESE CONTROLS WILL REMAIN IN EFFECT UNTIL ALL RELEVANT OPERATIONS HAVE BEEN COMPLETED AND DISTURBED SOILS HAVE EITHER: 1) ESTABLISHED VEGETATION, OR 2) OTHER PERMANENT EROSION CONTROL AT 70 % COMPLETION.

EROSION AND SEDIMENT CONTROL NOTES

1. IN CASE OF EMERGENCY, CONTACT: NAME:_____ PHONE:_____

2. THE CONTRACTOR WILL MAINTAIN ALL SEDIMENT AND EROSION CONTROL DEVICES IN GOOD WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER THROUGHOUT EVERY PHASE OF THE PROJECT.

3. THE CONTRACTOR WILL INSTALL ALL EROSION CONTROL MEASURE ADDITIONAL TO THOSE SPECIFIED BY THE APPROVED EROSION CONTROL PLAN IF REQUIRED TO DO SO BY THE CITY ENGINEER.

4. THE CONTRACTOR AND PROPERTY OWNER WILL PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.

5. GRADED AREAS AROUND THE PROJECT PERIMETER WILL DRAIN AWAY FROM THE FACE OF SLOPES AT THE END OF EACH WORKING DAY.

6. ALL GRAVEL BAGS SHALL HAVE ¾ INCH MINIMUM AGGREGATE (NO SANDBAGS AND NO BURLAP TYPE BAGS ALLOWED) .

Project Address _____
Project APN _____
Permit Number _____
Applicant Name _____
Applicant Address _____

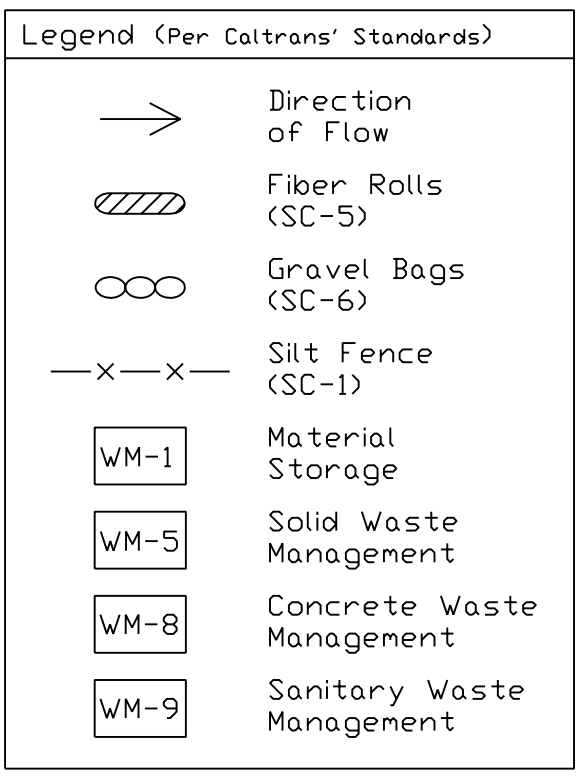

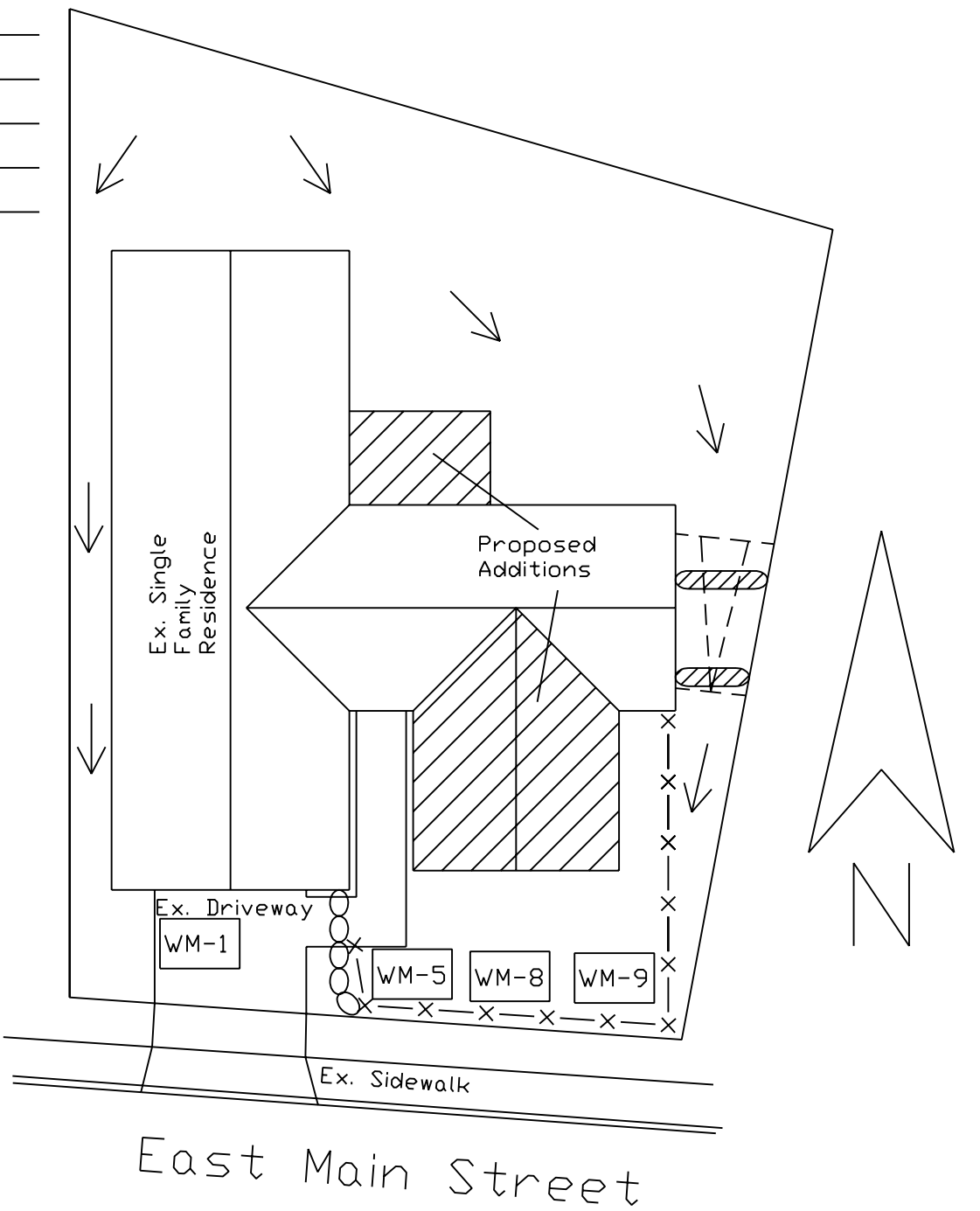

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City of El Cajon
Erosion and Sediment Control Plan Review Checklist

Date Completed	Not Applicable	
		Vicinity Map
_____	_____	Major roadways, geographic features or landmarks.
_____	_____	Site perimeter.
_____	_____	Geographic features.
_____	_____	General topography.
		Site Characteristics
_____	_____	North arrow, scale, and site boundary. Indicate the name of adjacent streets or roadway.
_____	_____	Location of existing drainage ways, channels, swales, creeks, streams on or near the site.
_____	_____	Location of storm drain inlets, outlets, catch basins – proposed, existing, on-site, and within 100 feet of site.
_____	_____	Location of existing and proposed buildings and paved areas.
_____	_____	Show and label existing and proposed improvements (streets, sidewalks, curb/gutter, utilities, etc)
_____	_____	The limits of the proposed disturbed area on the lot.
_____	_____	Approximate gradient and direction of slopes before grading operations.
_____	_____	Approximate gradient and direction of slopes after final grading operations.
_____	_____	Disturbed area outlined and labeled. All sediment control devices must be shown within the disturbed limits.
_____	_____	Overland runoff (sheet flow) coming onto the site from adjacent areas.
_____	_____	Delineation of pre and post development drainage areas, number of acres, and the direction of flow for each drainage area before and after development must be shown. Use separate plan sheets for clarity.
		Erosion Control Practices
_____	_____	Location of temporary soil piles
		Note: soil storage pile should be placed behind a sediment fence, 10-foot (minimum) wide vegetative strip should be covered with a tarp, or placed more than 25 feet from any down slope road or drainage way.
_____	_____	Location of gravel access drive(s).
		Note: Gravel drive should have 3 to 6 inch aggregate stone laid at least 10 feet wide and 12 inches thick. Drives should extend from the roadway 50 feet or to the house foundation (whichever is less).
_____	_____	Location of sediment controls (filter fabric fence, straw bale fence or 10-foot wide vegetative strips) that will prevent eroded soil from leaving the site.
_____	_____	Location of sediment barriers around on-site storm drain inlets.

Date Completed	Not Applicable	
_____	_____	Location of diversions. Note: Concentrated flow (drainage ways, ditches, channels, brow ditches) shall be diverted (re-directed) around disturbed areas. Overland runoff (sheet flow) from adjacent areas greater than 10,000 sq. ft. shall also be diverted around disturbed areas.
_____	_____	Location of practices that will be applied to control erosion on steep slopes that have been disturbed at any time by clearing, grading, or landscaping - slopes more than five feet in height, more than two hundred fifty square feet in total area, and steeper than three to one (run-to-rise). Note: Unstabilized drainage ways, ditches, channels, diversions, and inlets shall be protected from erosion through use of such practices as in-channel fabric or straw bale barriers, erosion control mats, staked sod, and rock riprap. When used, a given in-channel barrier should not receive drainage from more than two acres of unpaved area, or one acre of paved area. In-channel practices should not be installed in perennial streams (streams with year-round flow.)
_____	_____	Show Erosion Control Plan heading and standard notes.
_____	_____	Label all sediment control devices.
_____	_____	Show Standard details for sediment control devices.
_____	_____	No sediment control devices are to be located where water will damage building foundations.
_____	_____	Detail drawings and specifications for structural practices – any structural practices used must be illustrated with detailed drawings containing all dimensions and specifications. (i.e. de-silting basins)
_____	_____	Location of other planned practices not already noted. (Material Storage WM-1, Concrete Washout WM-8, Sanitary Waste WM-9, Solid Waste Storage WM-5)
_____	_____	Temporary stabilization of disturbed areas. Note: disturbed areas and soil piles left inactive for more than 10 days be stabilized by seeding (between April 1st and September 1st), or by other cover, such as tarping or mulching.
_____	_____	Permanent stabilization of site by re-vegetation or other means as soon as possible (lawn establishment). Indicate re-vegetation method: Seed ___ Sod ___ Other_____ Expect date of permanent re-vegetation: Re-vegetation responsibility of Builder ___ Owner/Buyer Is temporary seeding or mulching planned if site not seeded by September 1st or sodded by October 1st ? Yes ___ No ___
_____	_____	Use of downspouts and/or sump pump outlet extensions to direct runoff away from structures and onto sod or pavement until vegetation is stable. Downspouts shall be permanently to grass areas.
_____	_____	Proper disposal of building material waste so that pollutants and debris are not carried off-site by wind or water.
_____	_____	Maintenance of erosion control practices during construction: Name:_____ Title:_____ Phone & Fax:_____

- Sediment will be removed from behind sediment fences and barriers before it reaches a depth that is equal to half the barrier's height.
- Breaks and gaps in sediment fences and barriers will be repaired immediately.
- All sediment that moves off-site due to construction activity will be cleaned up before the end of the same workday.
- All sediment that moves off-site due to storm events will be cleaned up before the end of the next workday.
- Gravel access drives will be maintained throughout construction.
- All installed erosion control practices will be maintained until the disturbed areas they protect are stabilized.

Appendix A.4

City of El Cajon Municipal Facilities Inventory

No.	Facility Name	Facility Address	Facility Priority	Hydrologic Sub-Sub-Basin
1	Civic Center, City Hall and Plaza	200 E Main Street	High	Washington Channel
2	El Cajon Performing Arts Center	110 E Main Street	High	Washington Channel
3	Knox Hotel Museum (El Cajon Historical Society)	280 N Magnolia Avenue	Low	Washington Channel
4	Public Works Maintenance/Operations Office	1050 Vernon Way	High	Forrester Creek
5	Vehicle Maintenance Facility	1060 Vernon Way	High	Forrester Creek
6	Animal Control	1275 N Marshall Way	Medium	Forrester Creek
7	Community Policing Division	165 E Park Avenue	Low	Washington Channel
8	Resource Center, Community Social Services and Crisis House	1034 N Magnolia Avenue	Low	Broadway Channel
9	Pistol Range	100 Rueben Fleet Drive	Low	Forrester Creek
10	Police Department and Administration Center	100 Fletcher Parkway	Low	Broadway Channel
11	Police Department Detectives Offices	1035 Pioneer Way	Low	Forrester Creek
12	Fire Station No. 1 and Fire Department Administration	100 E Lexington Avenue	Low	Washington Channel
13	Fire Station No. 7	695 Tyrone Street	Low	Forrester Creek
14	Fire Station No. 8	842 N Third Street	Low	Forrester Creek
15	Fire Station No. 9	1301 N Marshall Avenue	High	Forrester Creek
16	Albert Van Zanten Park	1495 Greenfield Drive	High	Broadway Channel
17	Bill Beck Park	Pierce Street at Wagner Drive	High	Forrester Creek/County Ditch
18	Bostonia Recreation Center	1049 Bostonia Street	High	Forrester Creek
19	Bostonia Park	1049 Bostonia Street	Low	Forrester Creek
20	Cajon Valley Middle School Park	750 Park Avenue	High	Forrester Creek
21	Fire Station Park	Tyrone Street at Westwind Drive	High	Forrester Creek
22	Fletcher Hills Recreation Center and Pool	2345 Center Place	High	Mission San Diego/Alvarado Creek
23	Fletcher Hills Park	2345 Center Place	Low	Mission San Diego/Alvarado Creek
24	Hillside Recreation Center	840 Buena Terrace	High	Forrester Creek
25	Hillside Park	840 Buena Terrace	Low	Forrester Creek
26	Judson Park	Magnolia Avenue at Park Avenue	High	Washington Channel
27	John F. Kennedy Recreation Center	1675 E Madison Avenue	High	Forrester Creek
28	John F. Kennedy Park	1675 E Madison Avenue	Low	Forrester Creek
29	Prescott Promenade Park	200 Block of E Main Street	High	Washington Channel/County Ditch
30	Renette Recreation Center	935 Emerald Avenue	High	County Ditch
31	Renette Park	935 Emerald Avenue	Medium	County Ditch
32	Ronald Regan Community Center	195 E Douglas Avenue	High	County Ditch
33	Tuttle Park	379 W Chase Avenue	High	County Ditch
34	Wells Maintenance Facility and Recreation Center	1153 E Madison Avenue	High	Forrester Creek
35	Wells Park	1153 E Madison Avenue	Low	Forrester Creek

Storm Water Quality Checklist
For Municipal Facilities

Site Name:_____ Location:_____

Contact:_____

Date:_____ Type of Inspection: ☐ Routine Site Inspection

Weather Information: ☐ Prior to Forecast of Rain Event

Storm Start Date and Time:_____ Storm Duration:_____hours ☐ 24-hr Period During Extended Storm Event

Time Since Last Storm:_____hrs/days Rainfall:_____inches ☐ After Rain Event

Inspector Name and Title:_____

Inspector Signature:_____

Pollution Prevention BMPs	N/A	Yes	No	Comments / Corrective Action
Erosion and Sediment Control				
Is existing vegetation preserved?				
Are seeding and planting of native plants and trees considered?				
Are geotextiles and organic mats used for soil stabilization?				
Roadway and Bridge Maintenance				
Are streets swept and clean?				
Is street sweeping frequency adequate for the area?				
Municipal Vehicle Maintenance Facilities				
Are vehicles/equipment parked/stored in designated areas?				
Are vehicles and equipment regularly inspected for leaks and spills?				
Are detected leaks/spills contained and repaired as soon as possible?				
Landscaping Maintenance				
Are safer, alternative products used or considered?				
Is weather considered for landscaping activities?				
Are certified professionals used to handle, apply, and distribute pesticides, herbicides, and fertilizers?				
Is there an IPM used?				
Maintenance of MS4				
Is the mechanism for detecting and removing IC/ID situations implemented?				
Is the MS4 inspected, maintained, and repaired?				
Is a stenciling and sign program used to warn of effects of illegal dumping?				
Sewer Blockage Response				
Is there mechanism for identifying, containing, controlling, and repairing sewage leaks and spills?				
Is hazardous waste disposed of properly?				
Waste Management				
Is there a waste reduction program in place?				
Are wastes segregated for proper storage and disposal?				

Other Practices and Procedures				
Are dewatering activities controlled and managed appropriately?				
Is groundwater tested prior to disposal?				
Is the public educated and encouraged to participate in appropriate stormwater activities?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Housekeeping				
Is the area clear of visible trash/debris and impervious surfaces free of sediment?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are points of ingress/egress to public and private roads free from sediment, debris and mud from tracking?				
Are materials stored in their designated areas?				
Are dry methods used to clean?				
Employee Training				
Have employees been trained in basic stormwater management and BMP implementation?				
Visual Inspections				
Are visual inspections of the site conducted and documented on a regular basis?				
Are the discharge locations free of significant erosion or sediment transport?				
Improved Operation and Maintenance				
Are drainage control structures free of litter and debris?				
Waste Disposal and Recycling				
Are there designated areas for recycling of metal, tires, antifreeze, and used oil?				
Are waste containers covered?				
Are areas near or around waste containers free of leaks or spills?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are hazardous wastes stored and disposed appropriately? (in labeled, secondary containment; 55-gallon drums in a secured, designated area)				
Is secondary containment free of spills and rainwater?				
Preventive Maintenance				
Are there procedures for replacing used or worn materials or equipment prior to failure?				
Record Keeping				
Is there onsite storage of documented inspections, BMP evaluations, and audits?				
Is there onsite documentation of employee training?				
Is there an onsite SWPPP or other Pollution Control Document?				
Does the SWPPP adequately reflect the current site conditions and the construction operations? If not, explain required SWPPP revisions.				
Spill Prevention and Response				
Are there spill kits near outside stored materials, wastes, and recycling areas?				
Are spill response procedures clearly posted?				
Are employees trained in preventing spills?				

Material Inventory Procedures				
Are inventories of 30 days materials onsite?				
Material Storage Practices				
Are outside stored materials stored off the ground and covered or in appropriate containers? (Flammables stored in a flammables cabinet; antifreeze in double-walled container or in secondary containment)				
Visual evidence of spills, staining, or leaks from outside stored materials are not evident				
Storage Tanks				
Are outside above ground storage tanks double-walled or in secondary containment?				
Visual evidence of leaks or spills in the area are not visible				
Outside Storage				
Are materials stored outside under cover or in containers?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are outside material storage areas free of visual evidence of spills or runoff?				
Loading and Unloading				
Are loading and unloading areas free of litter and visual evidence of spills?				
Sediment and Erosion Control				
If sandbags are used, are they placed appropriately for the conditions?				
Are temporary soil stabilization measures installed and in working order?				
Is dust control necessary and implemented?				
Are soil stockpiles properly stored?				
Is inlet protection available for all operational storm drain inlets?				
Vehicle and Equipment Maintenance				
Is there a covered or inside area designated for vehicle and equipment maintenance?				
Are leaking vehicles stored inside or drip pans used for outside storage?				
Vehicle and Equipment Washing				
Is there a designated covered or inside area or commercial facility for washing vehicles and equipment?				
Park BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are grass clippings mulched or bagged for disposal?				
Are vegetation trimmings gathered and disposed as solid waste or recycled as mulch?				
Are sidewalks and parking lots cleaned using dry methods to collect and use as mulch or dispose as solid waste?				
Recreation BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Is pool water tested or treated for chlorine before discharge?				
Is pool filter backflush discharged to the sanitary sewer?				
Are pool chemicals stored inside and in appropriate				

containers?				
Non-Stormwater BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Non-Storm Water Management				
Is the site free of evidence of illegal connections and illicit discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
Other				
No other potential storm water pollution issues or concerns exist. If no, explain below.				

Explanations:_____

_____

_____

_____

_____

_____

_____

_____

Received by:_____ _____

Name (Print) **Date**

_____

Signature

Appendix A.5

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Chem-Tronics, Inc.	1150		W Bradley Ave	907.13	3724		Transportation Equipment	No	No	No	No	No	No	No	No	No	Yes	High	Yes	38711048	32.817630	-116.977425
Dixieline	1262		E Main St	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	Low	No	48917026	32.795824	-116.937353
Pacific Trans Enviromental Services, Inc.	1452		N Johnson Ave	907.13	4953		Electric, Gas, and Sanitary Services	No	No	No	No	No	No	No	No	No	No	High	Yes	48213109	32.815169	-116.971726
Waste Management Universal Refuse Removal	1001		W Bradley Ave	907.13	4953		Electric, Gas, and Sanitary Services	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48213116	32.816130	-116.974653
Pluck a Truck El Cajon Auto Recycling	1416		Pioneer Way	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	High	No	48302130	32.814520	-116.968026
Venus Printing	1183		E Main St	907.13	2759		Printing, Publishing, and Allied Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48938024	32.794586	-116.941734
Artimex Iron Co.	315		Cypress Ln	907.13	3441		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	Yes	No	No	No	No	No	No	No	High	Yes	48302210	32.816327	-116.964528
South Bay Welding	781		O Conner St	907.13	3441		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48213109	32.815319	-116.972323
California Countertop	1340		Hill St	907.13	3281		Stone, Clay, Glass, and Concrete Products	No	No	No	No	No	No	No	No	No	No	High	Yes	49265005	32.785691	-116.978089
Solo Cup Co	1160		Vernon Way	907.13	2656		Paper and Allied Products	No	No	No	No	No	No	No	No	No	No	High	No	48214010	32.813008	-116.977298
AJM Packaging Corporation	1160		Vernon Way	907.13	2656		Paper and Allied Products	No	No	No	No	No	No	No	No	No	No	High	Yes	48214010	32.813008	-116.977298
Veridiam	1717		N Cuyamaca St	907.13	3317		Primary Metal Industries	No	No	Yes	No	No	No	No	Yes	No	Yes	High	Yes	38719007	32.818413	-116.978995

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Certified Metal Craft Inc	877		Vernon Way	907.13	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48217001	32.811647	-116.972948
Triumph	203		N Johnson Ave	907.13	3728		Transportation Equipment	No	No	Yes	No	No	No	No	No	No	Yes	High	Yes	48712239	32.796697	-116.969942
Veolia Transportation Services, Inc.	1213		N Johnson Ave	907.13	4212		Motor Freight Transportation and Warehousing	No	No	No	No	No	No	No	No	No	No	High	Yes	48302122	32.812844	-116.970173
Cajon Valley Union School District Transportation	721		E Park Ave	907.13	4151		Local and Suburban Transit and Interurban Highway Passenger Transportation	No	No	No	No	No	No	No	No	No	No	High	Yes	48811318	32.797839	-116.953324
Decco Castings, Inc	1596		Pioneer Way	907.13	3365		Primary Metal Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38712116	32.817052	-116.968670
First Transit	800		Fesler St	907.13	4111		Local and Suburban Transit and Interurban Highway Passenger Transportation	No	No	No	No	No	No	No	No	No	No	High	Yes	48217012	32.809291	-116.972242
Toro Agricultural Irrigation	1588		N Marshall Ave	907.13	3524		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48214044	32.816011	-116.976253
San Diego Van & Storage	1426		Fayette St	907.13	4214		Motor Freight Transportation and Warehousing	No	No	No	No	No	No	No	No	No	No	High	Yes	48214022	32.814757	-116.978151
Allied Castings, Inc.	983		Vernon Way	907.13	3363		Primary Metal Industries	No	No	No	No	No	No	No	Yes	No	Yes	High	Yes	48212122	32.811870	-116.974547
Precision Metal Products, Inc.	850		W Bradley Ave	907.13	3463		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	Yes	No	No	No	No	No	No	Yes	High	Yes	38711041	32.817245	-116.973432
California Metals	297		S Marshall Ave	907.13	3599		Industrial and Commercial Machinery and Computer Equipment	No	No	Yes	No	No	No	No	No	No	No	High	Yes	48728108	32.793227	-116.975120

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Alturdyne	660		Steele	St	907.13	3621		Electronic and Other Electrical Equipment and Components, except computer	No	No	Yes	No	No	No	No	No	No	No	High	Yes	48302115	32.814552	-116.969887
Senior Aerospace	790		Greenfield	Dr	907.13	3724		Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48304022	32.814502	-116.952592
Jeldwen Windows and Doors	1111		Pioneer	Way	907.13	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48307121	32.810672	-116.966759
California Metals	636		Front	St	907.13	5093		Wholesale Trade; Durable Goods	No	No	Yes	No	No	No	No	No	No	No	High	Yes	48765001	32.789130	-116.977056
Grossmont Union High School District/Grossmont Union High School	1100		Murray	Dr	907.13	9411		Administration Of Educational Programs	No	No	No	No	No	No	No	Yes	No	No	High	No	48775010	32.780472	-116.985708
CCS Cleaning Service	205		Claydelle	Ave	907.13	7349		Business Services	No	No	No	No	No	No	No	No	No	No	Low	No	48823110	32.793716	-116.958534
Layfield Environmental Systems, Geosynthetics, & Industrial Services	1166		Fesler	St	907.13	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48212147	32.809836	-116.977620
Lite Stone Concrete	1105		N Marshall	Ave	907.13	3272		Stone, Clay, Glass, and Concrete Products	No	No	No	No	No	No	No	Yes	No	Yes	High	Yes	48212124	32.810474	-116.974887
Callen Camper Co.	125		S Marshall	Ave	907.13	7549		Automotive Repair Services, and Parking	Yes	No	Yes	No	No	No	No	Yes	No	No	Medium	No	48728105	32.794219	-116.975117
Evergreen Environmental Services	412		Front	St	907.13	4953		Electric, Gas, and Sanitary Services	No	No	No	No	No	No	No	No	No	No	High	Yes	48764018	32.791083	-116.977042
AA Equipment	411		N Marshall	Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	Yes	No	No	Medium	No	48712186	32.798824	-116.974842
Pacifica Glass Co, Inc.	1946		John Towers	Ave	907.13	5231		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	High	No	38719007	32.823469	-116.980498
Olympic Carpet Cleaning Supplies	538		Front	St	907.13	4959		Electric, Gas, and Sanitary Services	No	No	No	No	No	No	No	No	No	No	Low	No	48764003	32.790013	-116.977020

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Mil-Spec Metallics	755		Vernon Way	907.13	5051		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	High	Yes	48217033	32.811674	-116.972281
Kitchen Crafters	500		Front St	907.13	2434		Lumber and Wood Products, except furniture	No	No	No	No	No	No	No	No	No	No	High	Yes	48764019	32.790594	-116.977028
Russo Tile & Marble, Inc	651		Front St	907.13	3281		Stone, Clay, Glass, and Concrete Products	No	No	No	No	No	No	No	No	No	No	High	Yes	48765004	32.788854	-116.976603
Top Notch Commercial and Aerospace Manufacturing, Inc.	1488	17	Pioneer Way	907.13	3449		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48302111	32.815658	-116.967938
Curb & Vent Manufacturing, Inc.	1437		Fayette St	907.13	3444		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48214054	32.814991	-116.977362
Gardner Pool Plastering	801		Gable Way	907.13	1741		Construction - Special Trade	No	No	No	No	No	No	No	No	No	Yes	High	No	48217054	32.810066	-116.973075
US Air Conditioning	1250		N Marshall Ave	907.13	5075		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	Low	No	48214048	32.813508	-116.976217
Metal Engineering	390		Front St	907.13	3449		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48727407	32.791691	-116.977089
Fatboy Fiberglass and Welding	675		Front St	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Low	No	49265002	32.787918	-116.976764
Amatek Rotron	474		Raleigh Ave	907.13	3564		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48712188	32.799861	-116.973830
Super-Krete International, Inc.	1290		N Johnson Ave	907.13	3271		Stone, Clay, Glass, and Concrete Products	No	No	No	No	No	No	No	No	No	No	High	Yes	48213115	32.812819	-116.972212

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
East County Powder Coating	1835		John Towers Ave	907.13	1721		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	High	No	38719007	32.820799	-116.979562
Coco's # 1162	1025		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48224038	32.807247	-116.974450
Las Pita Cafe	388		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48811124	32.795252	-116.957537
Silva's Taco Shop	998		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48429110	32.807900	-116.948184
Serranos Super Salsa	795		Arnele Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	High	No	48225038	32.803774	-116.972495
McDonald's	1695		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	50720042	32.811477	-116.918417
El Cajon Courthouse Cafe	250		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48811128	32.795331	-116.959279
Los Ponchos Mexican & Seafood	777		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48428239	32.807377	-116.952559
Bonnys Cafe	596		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	Yes	Medium	No	48313063	32.808001	-116.954489
Boston Market #0735	706		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48217052	32.808283	-116.971331
Burger King 814	822		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48224029	32.805955	-116.971500
Sizzler	1030		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	High	No	48212149	32.808219	-116.973918
China Panda Garden Restaurant	1788		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	50712023	32.814563	-116.917209
Vons Grocery Company	2800		Fletcher Pkwy	907.11	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	48131028	32.801399	-117.003701
Cotixan Taco Shop #3	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48224031	32.805160	-116.971579
California Deli Works	553		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48732111	32.794674	-116.969306
Outback Steakhouse	722		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	High	No	51402160	32.786410	-116.928914

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Subway Sandwiches and Salad	915		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48428238	32.807475	-116.950388
Dominos Pizza #7705	1104		E Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48927301	32.787941	-116.944154
Consolidated Motors	410		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48752019	32.791180	-116.971820
New York Giant Pizza	356		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48717275	32.798555	-116.962559
Mamma Rosa Pizza	1773		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	50721101	32.814450	-116.916645
Thai Time Restaurant	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48224031	32.805157	-116.971481
Mangia Bene Ristorante	221		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48821107	32.794630	-116.959934
Harvest Ranch #1	759		Jamacha Rd	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	51128095	32.786142	-116.927562
Panda Rice Vietnamese/ Chinese Restaurant	907		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48428238	32.807474	-116.950515
McDonalds	886		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48217075	32.808088	-116.973106
Marietas East	1746		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	50712020	32.813688	-116.918103
Los Panchos Taco Shop	1709		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	50721104	32.812619	-116.917836
Thornton's Irish Pub and Chop House	1221		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48425147	32.807338	-116.939373
La China	2852		Fletcher Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48131032	32.800563	-117.002981
Downtown CafÃ©	182		E Main St	907.13	5813		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48808321	32.795205	-116.960500
Subway Sandwiches/Salads	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48224031	32.805158	-116.971400

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Auto Tech	590		S Marshall Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48764017	32.789683	-116.975801
Champion Collision and Paint/World Auto Body	187		N Marshall Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48712178	32.796061	-116.974862
Plant House Nursery	1163		N 2nd St	907.13	181		Ornamental Floriculture And Nursery Products	No	No	No	No	No	No	No	No	No	No	Medium	No	48423227	32.810924	-116.935070
Armstrong Garden Centers, Inc	1755		E Main St	907.13	181		Ornamental Floriculture And Nursery Products	No	No	No	No	No	No	No	No	No	Yes	Medium	No	50721101	32.814108	-116.916584
Dennys Restaurant	665		N Mollison Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48432243	32.803680	-116.950475
Juanbertos Mexican Food	1104		E Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	Yes	High	No	48927301	32.787940	-116.944252
Por Favor, Inc	148		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	High	No	48808315	32.795114	-116.961148
Ami Sushi	755		Arnele Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48225038	32.803776	-116.972182
Mis Z Gallos Taqueria Fruit & Deli	1088		Estes St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	High	No	49232015	32.780624	-116.966839
Wendy's #11	686		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	51126071	32.788049	-116.928764
Wendy's #01	871		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48428232	32.807233	-116.951723
Victorias Mexican Food	677		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48823306	32.794652	-116.954692
Valerio's	1267		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48412029	32.812674	-116.935248
Ali Baba Restaurant	421		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	Yes	High	No	48823231	32.794649	-116.957153
Dominos Pizza #7704	936		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48429107	32.807935	-116.949145

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Thomas Building Supply	137		S Johnson Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	Low	No	48732106	32.794211	-116.970871
Whillock Contracting, Inc.	346		Front St	907.13	1521		Building Construction - General Contractors and Operative Builders	No	No	No	No	No	No	No	No	No	No	Medium	No	48727111	32.792276	-116.976501
Sierra Pacific Landscape	304		Front St	907.13	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Low	No	48727102	32.792868	-116.976408
LW Blackinton, Inc.	380		Front St	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Low	No	48727110	32.792061	-116.976634
Builders Moulding Supply	1675		Pioneer Way	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	Medium	No	38712130	32.817575	-116.967270
McKeever Inc.	1100		N Magnolia Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	Medium	No	48307150	32.810849	-116.963353
Frazee Paint	1154		E Main St	907.13	5231		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	Low	No	48915031	32.795206	-116.942604
Gene Townsend Auto Body & Paint	609		S Marshall Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48748011	32.789386	-116.975142
Dal-Tile SSC West, Inc.	270		N Marshall Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	Yes	No	No	Low	No	48711026	32.796769	-116.975740

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Dragonfire San Diego	283		N Marshall Ave	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.797222	-116.975240
Home Depot	298		Fletcher Pkwy	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	Medium	No	48307148	32.809044	-116.964717
Classic Towing	1101		N Marshall Ave	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48212124	32.810362	-116.975397
C&D Towing Specialists	187		N Marshall Ave	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48712178	32.796061	-116.974862
Sam's Quality Auto Care	267		N Marshall Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.797019	-116.975254
Fast Water Heater Company	275		N Marshall Ave	907.13	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.797118	-116.975239
The Auto Center	243		N Marshall Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712179	32.796559	-116.975039
Rubios Mexican Grill #8	399		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48804007	32.798943	-116.962074
J&W Lumber	430		S Marshall Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	Low	No	48764016	32.790602	-116.975801
International House of Pancakes	1286		Oakdale Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	High	No	48931012	32.801939	-116.936194
Chicago on a Bun	2872		Fletcher Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48131030	32.801499	-117.004481
Albertsons, Inc. #6771	1608		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	50751021	32.808641	-116.920181
El Cajon International Food	502		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48811221	32.795269	-116.956198

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Dallmann Confections	780		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48425423	32.804794	-116.935923
Janet's Cafe #1	1696		Greenfield Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	50712014	32.812598	-116.918717
Jamacha Bar and Grill	777		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	51128096	32.785855	-116.927362
Tommys Italian Ristorante	1190		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	Yes	High	No	48420218	32.811377	-116.936073
Izzy's Cafe, Inc.	1252		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48422226	32.807958	-116.937738
Christy's Donuts	657		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	51155010	32.788472	-116.928225
Jack in the Box #3064	1700		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	50712014	32.812780	-116.918625
Golden Bagel Cafe	2744		Fletcher Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48131032	32.800927	-117.002932
Gillespie Field Cafe & Deli	2015		N Marshall Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.827966	-116.983319
The Lawless Pub	176		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48808320	32.795222	-116.960592
Executive Friendship Deli	1935		Friendship Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.824336	-116.978814
The Yogurt Mill	935		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48428226	32.807395	-116.949866
KFC #Y450061	724		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48217051	32.808283	-116.971678
Rosendos Mexican Food	1408		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48918031	32.800006	-116.931037
Taste of Athens	1784		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	50712023	32.814618	-116.917187
Pro Body Warehouse	782		Arnele Ave	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48224047	32.804160	-116.972368
Tortilleria Salsa Market	480		W Chase Ave	907.13	5148		Wholesale Trade; Nondurable goods	No	No	No	No	No	No	No	No	No	Yes	Medium	No	49232015	32.780676	-116.967396

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Ben's Market and Pastry	544		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48313054	32.807930	-116.954970
New York Bakery, Inc.	245		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48821104	32.794630	-116.959450
Hacienda La Casa Blanca	700		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48224033	32.804508	-116.971600
Broadway Farmer's Market	1039		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48429432	32.807282	-116.945690
Tropifruit & Deli	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48224031	32.805159	-116.971237
Al Rafdien Restaurant	474		W Douglas Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48733125	32.794373	-116.967146
Panda Express #1125	190		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48719248	32.796416	-116.962672
Babylon International Market	524		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48811243	32.795591	-116.955643
Elegant Buffet	1985		Friendship Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.824730	-116.980195
Garcia's Pueblo Mercado	1365		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	48918037	32.797855	-116.932431
Sunshine Co	548		Broadway	907.13	7349		Business Services	No	No	No	No	No	No	No	No	No	No	Low	No	48313054	32.807930	-116.954935
Mike's Deli and Market	289		El Cajon Blvd	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48732226	32.792958	-116.969440
Crumbs of Paris	586		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48313063	32.808001	-116.954581
Los Rancheros	165		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48819108	32.794624	-116.960753
Rodeo's Meat Market	927		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	48428230	32.807386	-116.950192
Entenmann's Orowheat Outlet	916		Broadway	907.13	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48428110	32.808063	-116.949742
US Lawn	304		Front St	907.13	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Low	No	48727102	32.792881	-116.976408
King House	500		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48313004	32.807961	-116.956709
The Three Amigos Auto Repair & Services	605		W Lexington Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48732308	32.792186	-116.969045

City of El Cajon Stationary Industrial and Commercial Facilities

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					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Goodyear Certified Tire	790		N Johnson Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	High	No	48224030	32.805563	-116.971545
Valley Muffler Shop	533		W Main St	907.13	7533		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	High	No	48732129	32.794694	-116.968545
Valley Transmission & Auto	1158		N 2nd St	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	High	No	48420219	32.810733	-116.936314
Trust Auto Repair	537		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48732130	32.794655	-116.968803
Aamco Transmission	355		N Johnson Ave	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712231	32.799036	-116.970317
Cummins Cal Pacific	310		N Johnson Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	High	No	48712133	32.798076	-116.971260
A-1 Glass Company	944		Broadway	907.13	7536		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48429107	32.807936	-116.949044
Caliber Collision Centers	332		N Johnson Ave	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48712171	32.798919	-116.971525
SID's Auto Body Inc.	1129		Broadway	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48418250	32.807380	-116.943270
DeVore Automotive	1253		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48412049	32.812441	-116.935248
Oil Changer #503	906		Fletcher Pkwy	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48212142	32.808213	-116.973489

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Russells Metal Fab	549		Raleigh Ave	907.13	3499		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48225037	32.801055	-116.972303
El Cajon Towing	327		Cypress Ln	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48302209	32.816327	-116.964784
El Cajon Smog & Auto Repair	720		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	High	No	48313014	32.807961	-116.953145
Broadway Smog Test-Only Station	1214		Broadway	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48420352	32.808011	-116.939495
East County Tire & Brake	616		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	Yes	No	No	No	No	Yes	High	No	48313021	32.808486	-116.953942
Riley Automotive II	1665		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	High	No	50720045	32.810572	-116.919056
Sids Auto Body, Inc.	1121		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	Yes	No	No	No	No	No	High	No	48418249	32.807514	-116.943488
JC Auto Repair	1492		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	High	No	51101115	32.803708	-116.927187
Auto Zone #5646	1795		E Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	50721101	32.814340	-116.916657
Ultimate Champion of Tires	445		W Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48733123	32.794695	-116.967064
San Diego Rods and Customs	1575		Pioneer Way	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	High	No	48302265	32.816502	-116.967392

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Big O Tires	844		N Johnson Ave	907.13	7534		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	High	No	48224028	32.806347	-116.971506
Cutting Edge Supply	1675		N Johnson Ave	907.13	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	Medium	No	38712132	32.817630	-116.970517
E&M Auto Parts	1647		E Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	Yes	High	No	50720046	32.810342	-116.919530
Discount Tires	1001		Broadway	907.13	7534		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48429429	32.807347	-116.947845
Popeyes Chicken	110		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48921045	32.794402	-116.936109
Country Waffles	1248	260	E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48917046	32.795175	-116.938289
Coco's #884	1324		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48918073	32.797291	-116.934181
Ottavio's Cucina Italiana	101		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	51117048	32.795383	-116.935410
On the Border	101		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48227056	32.807373	-116.963444
El Cotixan #1	538		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48931022	32.801124	-116.935976
Country Comfort Restaurant	1255		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	49329019	32.778183	-116.956700
El 2 Palmas	220		E Madison Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48334032	32.801016	-116.959930
Denny's Restaurant #7225	1202		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48711018	32.795347	-116.977906
Denny's Restaurant #6227	2691		Navajo Rd	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48131015	32.801266	-117.001742
Jack-in-the-Box #78	170		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48309011	32.807949	-116.960745

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Francos Pizza	574		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	51126071	32.788875	-116.929828
Jack In The Box #7	393		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48733102	32.794583	-116.965714
Jack in the Box #54	2733		Navajo Rd	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48131017	32.801691	-117.002695
Baskin Robbins #118	2396		Fletcher Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48115068	32.802803	-116.997253
Jack-in-the-Box #32	495		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48918060	32.799969	-116.935231
BurgerKing #947	225		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.793788	-116.934666
Baskin Robbins Ice Cream	328		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48916217	32.799267	-116.936319
The Cajon Pass Deli	1195		N Cuyamaca St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48231010	32.811592	-116.979345
Beef n' Bun	2477		Fletcher Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48139603	32.802013	-116.998642
Dubai Restaurant	123		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.794875	-116.935400
Hometown Buffet #722	390		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	Medium	No	48719253	32.795405	-116.965931
Genos BBQ	291		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	High	No	48815117	32.794630	-116.964562
Los Mendoza Taco Shop	303		Balantyne St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48811106	32.797539	-116.957588
Taco Bell #23723	335		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48918078	32.798533	-116.935037
Hammurabi Family Restaurant	401		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48733135	32.794416	-116.966420
Italian Pizza Restaurant	1438		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	50727025	32.807908	-116.929868
7 Eleven #34048	1021		W Washington Ave	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	49264109	32.787505	-116.974532

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Tres Hermanos Taco Shop	115		W Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	49216020	32.787504	-116.963020
Nita's Deli and Bakery	1444		Pioneer Way	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.815247	-116.968698
Applebees	107		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48227056	32.807372	-116.963607
Greektown Restaurant Buffet	345		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48733101	32.794745	-116.965522
Arby's Restaurant #231	325		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48918079	32.798049	-116.935053
El Cajon Shish Kabob	811		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48813406	32.794549	-116.952167
El Compadre Taco Shop	595		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48912354	32.801922	-116.935275
Dutch Touch Tattooing & Piercing	363		N 2nd St	907.13	8999		Services, Not Elsewhere Classified	No	No	No	No	No	No	No	No	No	No	Low	No	48918005	32.798909	-116.935422
KFC	555		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48912382	32.801258	-116.935281
Greek Style Chicken, Inc.	955		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48813311	32.794613	-116.949463
Catered Creations	1223		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48939010	32.794703	-116.939099
Carls Jr. Restaurant #483	520		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48931015	32.800674	-116.936567
Carl's Junior # 89	624		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48217069	32.808352	-116.969848
Pupuseria Salvadorena and Mexican Food	1207		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48939010	32.794701	-116.939456
Intellicept	1444		Pioneer Way	907.13	5099		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.815247	-116.968698
Ochoas Mexican Food	1051		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48838038	32.794583	-116.945863

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
China Diamond Restaurant	1265		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	49329020	32.778044	-116.957273
Pizza Hut #315029	1255		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	49329019	32.778183	-116.956700
Philly Steak Subs	312		Ballantyne St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48811106	32.797539	-116.957670
Estrada's Mexican Food	569		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48912349	32.801541	-116.935275
Quizno's Classic Subs	124		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48719255	32.795302	-116.962964
Starbucks Coffee #3417	903		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48428238	32.807386	-116.950575
Colimas Mexican Food	339		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48734101	32.794745	-116.965464
Sun Flexionics CafÃ©	790		Greenfield Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48304022	32.814502	-116.952592
Amarc Enterprises	1339		Broadway	907.13	5199		Wholesale Trade; Nondurable goods	No	No	No	No	No	No	No	No	No	No	Low	No	48426173	32.807347	-116.934300
Walgreens	215		N 2nd St	907.13	5912		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	Low	No	48918015	32.796813	-116.935067
Trepco West Grocery Depot	333		Walter Way	907.13	5141		Wholesale Trade; Nondurable goods	No	No	No	No	No	No	No	No	No	No	Low	No	48918074	32.797994	-116.934389
Shadow Mountain Ministries	2100		Greenfield Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	51214005	32.800010	-116.903864
Chen's Golden Palace	530		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48931022	32.800921	-116.935974
The Grinder	1300		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48404409	32.813619	-116.935981
Aztec Dining Services at Grossmont College	8800		Grossmont College Dr	907.12	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	38607109	32.814772	-117.006242
Tocumbo	1183		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48938024	32.794586	-116.941734
Foodland I.G.A.	1099		E Main St	907.13	5411		Food Stores	No	No	No	No	Yes	No	No	No	No	No	Medium	No	48838006	32.794554	-116.945117

City of El Cajon Stationary Industrial and Commercial Facilities

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					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Villas Mexican Food #1	798		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48425422	32.805041	-116.935925
J's Grill	1183		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	Medium	No	48938024	32.794586	-116.941734
Maya's Deli	450		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48307136	32.808469	-116.966717
Solid Rock CafÃ©	2100		Greenfield Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	51214005	32.800010	-116.903864
Tyler's Taste of Texas	576		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48931012	32.801853	-116.935933
Wienerschnitzel	1281		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48939013	32.794703	-116.937618
Wings N Things/Wing N It, Inc.	528		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48931022	32.800872	-116.935974
Papas Pizza	111		W Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	49216020	32.787504	-116.962971
Shakira Pastry	1183		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48938024	32.794586	-116.941734
El Pollo Loco	1145		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	49329022	32.779435	-116.957470
Broadway Market	1309		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48426160	32.807505	-116.935196
El Cajon Nutrition Center	325		Van Houten Ave	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48733109	32.792374	-116.965926
Panda Express #715	131		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48322146	32.807470	-116.960864
Starbucks Coffee #9863	745		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	51128095	32.786453	-116.927564
Circle J Liquor	1031		Broadway	907.13	5921		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	High	No	48429423	32.807394	-116.946559
Ponchos Mexican Restaurant	2257		Fletcher Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48143107	32.802818	-116.994627
Tropifruit & Deli	1263		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48425113	32.807257	-116.937299
Flour Power Custom Cakery	2382		Fletcher Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48115068	32.802804	-116.997090

City of El Cajon Stationary Industrial and Commercial Facilities

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					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Karina's Mexican Seafood	820		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	51402226	32.784795	-116.928154
Sprouts Farmer's Market	152		N 2nd St	907.13	5411		Food Stores	No	No	No	No	No	No	No	Yes	No	No	Medium	No	48917044	32.795922	-116.936425
Sombrero Mexican Food	1501		W Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	51128072	32.787249	-116.927150
Washington Market	121		W Washington Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	49216020	32.787503	-116.963095
Avocado Food Market	852		Avocado Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	49303212	32.784702	-116.957892
Kaelins Market	1435		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	51101426	32.800533	-116.929292
Vons #2367	950		N 2nd St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48422251	32.808229	-116.936438
Smart and Final Extra	1090		Fletcher Pkwy	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	48212149	32.808217	-116.974185
The Vons Co., Inc. #3044	1201		Avocado Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	49329018	32.778869	-116.956478
Ralph's Grocery Co # 102	300		N 2nd St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48916224	32.797453	-116.936305
Save A Lot #948	678		Jamacha Rd	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	51126071	32.788269	-116.929140
Finest Donuts	526		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48931022	32.800819	-116.935973
E Z Corner Market	1107		E Main St	907.13	5921		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	Medium	No	48938011	32.794664	-116.943628
Fiesta Nutrition	560		N 2nd St	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	48931021	32.801728	-116.936609
Starbucks #8943	450		E Chase Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	49343022	32.780779	-116.956647
Executive Gourment Catering/Aloha Catering	1321		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48426112	32.807563	-116.934656
The Pancake House	1000		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48422125	32.809038	-116.936073
Food 4 Less #394	444		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	48311023	32.808641	-116.957559
Pernicano's	1588		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	50731027	32.807394	-116.922836
Perry's Cafe	475		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48801036	32.800627	-116.961889
Vina & Co.	1444		Pioneer Way	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.815247	-116.968698
Personal Touch Dining Inc.	859		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	51431017	32.783924	-116.927600
Little Caesars Pizza	1299		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48921004	32.794777	-116.936267

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Rancho Villas	2425		Fletcher Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48140102	32.802183	-116.997734
Jack In The box # 3050	350		E Chase Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	49317233	32.780659	-116.958364
Papa John's Pizza #1597	1201		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48939010	32.794700	-116.939593
Poncho's Taco Shop	1279		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48939013	32.794519	-116.937550
Rally's Hamburgers	1261		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48939004	32.794706	-116.938624
Pizza Hut	306		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48309035	32.808397	-116.958845
Del Taco #1041	141		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48322147	32.807477	-116.960603
Trinity Heart Medical Supply	1331		Broadway	907.13	5047		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	Low	No	48426112	32.807394	-116.934559
La Hadas Mexican Food	558		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	51126071	32.789067	-116.930009
Pizza Xpress	1270		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48422222	32.808052	-116.937284
Long John Silvers	270		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48307149	32.808122	-116.964650
Los Chavos Mexican Food	1340		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48404412	32.813844	-116.935973
Hot Blend Coffee	250		S Marshall Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48726204	32.793311	-116.975696
Marechiaro Pizza House	854		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48425161	32.806539	-116.935953
Tasty Pizza	1109		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48938011	32.794665	-116.943433
McDonalds	281		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48918014	32.797341	-116.935037
North Park Produce	432		E Chase Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	49343022	32.780778	-116.956803

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Master's Cut	790		N 2nd St	907.13	7241		Personal Services	No	No	No	No	No	No	No	No	No	No	Low	No	48425422	32.804994	-116.936012
Panda Valley Mandarin Cuisine	1142		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48915031	32.795419	-116.942800
Royal Palace Restaurant and Banquet Hall	1340		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48423111	32.808255	-116.933909
Delias Taco Shop	293		El Cajon Blvd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48732226	32.792930	-116.969468
Starbucks Coffee #6530	124		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48719255	32.795302	-116.962964
Stuart Anderson's Black Angus Restaurant	1000		Graves Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48309013	32.809019	-116.960917
Fruitland & Deli	109		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	51117054	32.795019	-116.934898
Subway Sandwiches #4445	1175		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	49329017	32.779524	-116.956634
Sombreros Mexican Food, Inc.	1215		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48725045	32.794702	-116.978245
Taco Bell #16534	2827		Navajo Rd	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48131021	32.802074	-117.004276
Taco Bell #3077	584		N Mollison Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48338038	32.802138	-116.951323
The Barbecue Pit	2388		Fletcher Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48115068	32.802803	-116.997172
Wrangler Family BBQ Pit	901		El Cajon Blvd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	49264207	32.784286	-116.977514
Subway	341		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48918006	32.798727	-116.935037
Ricos Deli Expresso & Smoothie Bar	538		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	51126071	32.789328	-116.930417
Starbucks Coffee	2740		Fletcher Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48131032	32.800817	-117.002931
Rita's Mexican Food Inc./ Rita's Catering	1291		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48921044	32.794887	-116.936607

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
CVS Pharmacy	790		Jamacha Rd	907.13	5912		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	Low	No	51402149	32.785694	-116.928512
Happy Cow Car Wash	1055		N Cuyamaca St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48231017	32.809622	-116.979313
Salsa Mexican Food	1255		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	49329019	32.778183	-116.956700
Stephanie Emerson Catering	144		S Orange Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48815114	32.794000	-116.963694
Santana Mexican Grill	411		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48324087	32.807377	-116.957162
L&L Hawaiian BBQ	356		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48309039	32.807895	-116.958583
Big Frank's Café	163		Jamacha Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.794277	-116.935197
El Cajon Hearing Aid Center	761		Arnele Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Low	No	48225038	32.803639	-116.972224
Instrument Overhaul Service of San Diego, Inc.	1981		N Marshall Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.828104	-116.983141
Lynn's Locksmith Service	1380		E Main St	907.13	7299		Personal Services	No	No	No	No	No	No	No	No	No	No	Low	No	48918049	32.799305	-116.931756
Mario Upholstery	1211		N 2nd St	907.13	2512		Furniture and Fixtures	No	No	No	No	No	No	No	No	No	No	High	Yes	48412026	32.812030	-116.935491
Mason's Saw and Lawn Mower Service Inc.	1209		Broadway	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Medium	No	48425150	32.807508	-116.939658
El Cajon Flying Service (lessor)	1825		N Marshall Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	Yes	Low	No	38719006	32.825803	-116.977187
Precision Concepts Racing	1935		Friendship Dr	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.824336	-116.978814
Big Daddys Oil Arco #9577	495		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	Yes	High	No	48733124	32.794502	-116.967456
Apro #20	710		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	Yes	High	No	48425426	32.804266	-116.936100

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Golden State Aviation	1640	160	N Marshall Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	High	No	38719006	32.828036	-116.983173
Valero Station #3738	785		Jamacha Rd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	High	No	51128027	32.785563	-116.927500
7 Eleven at 0215	1479		E Washington Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	51128036	32.787469	-116.927608
7-Eleven Store # 2131-25085C	895		Broadway	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48428225	32.807411	-116.951287
2nd St. Gas & Mini, Big Daddy Oil #20	725		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	Yes	High	No	48426380	32.804333	-116.935256
Arco	900		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48428109	32.808061	-116.950545
Chevron Store #59	1701		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	50721105	32.812436	-116.917934
G&M Oil Co. #59	1701		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	Yes	Medium	No	50721105	32.812436	-116.917934
Super Star #2	1090		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	High	No	48429315	32.808099	-116.944845
Broadway Exxon #1019	898		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48428108	32.808058	-116.951314

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Main St Valero and Car Wash	1699		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	50720041	32.812006	-116.918335
Arco Facility #9572	1484		E Washington Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	51155009	32.788041	-116.927862
Chevron Stations Inc #1742	696		N Mollison Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	Yes	High	No	48432112	32.804105	-116.951270
Arco/Smog Pros	1410		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48918031	32.799970	-116.930984
Washington Arco	1092		E Washington Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	Yes	High	No	48840030	32.787972	-116.944884
Greenscape	333		W Lexington Ave	907.13	782		Agricultural Services	No	No	No	No	No	No	No	No	No	No	Low	No	48735113	32.792547	-116.965181
George's Lawn Equipment	747		E Main St	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Low	No	48813405	32.794549	-116.952412
Kladis Painting, Inc.	557		W Main St	907.13	1721		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Medium	No	48732111	32.794792	-116.969336
HIS Auto	279		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	High	No	48732226	32.793030	-116.969348
The Truck Stop	1175		Broadway	907.13	5271		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	Medium	No	48418212	32.807372	-116.940998
East Coast Auto Collision	1375		E Main St	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	High	No	51117114	32.798574	-116.931103

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
KMY Motorsports	1935		Friendship Dr	907.13	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.824336	-116.978814
KIA of El Cajon	541		N Johnson Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48226017	32.801555	-116.970189
A to Z Leasing	889		Arnele Ave	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	Medium	No	48225027	32.803108	-116.973223
unknown/ for sale	982		Broadway	907.13	5599		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	High	No	48429109	32.808094	-116.948562
Motoworld	315		N Magnolia Ave	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48804011	32.797847	-116.960926
Julio Cesar Chavez Auto Group	464		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	Yes	No	No	Yes	No	No	Yes	Yes	Yes	High	No	48716004	32.795361	-116.967548
American Scissor Lift, Inc.	400		N Johnson Ave	907.13	7359		Business Services	No	No	No	No	No	No	No	Yes	No	Yes	High	No	48712170	32.799549	-116.970364
De La Fuente Cadillac	1385		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	Yes	No	No	No	No	Yes	High	No	51117114	32.798766	-116.931273
Ludington's RV	1131		Broadway	907.13	5271		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	Medium	No	48418205	32.807377	-116.942948
California Park Models (not in business)	746		N 2nd St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	High	No	48425425	32.804519	-116.935921
Top Dollar	1150		N 2nd St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	Yes	High	No	48420220	32.810466	-116.936148

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
El Cajon Mitsubushi	247		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	No	No	Yes	No	No	Yes	No	Yes	High	No	48732227	32.793445	-116.968863
Best Auto Wholesaler	476		W Main St	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48716005	32.795322	-116.967917
Camper and Trailer Outlet	1183		Broadway	907.13	5599		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48418248	32.807372	-116.940670
Autoland Inc. / Mission Federal Credit Union	826		Jackman St	907.13	6061		Depository Institutions	No	No	No	No	No	No	No	No	No	No	Medium	No	48224048	32.806603	-116.973771
Spot Free Rinse Car Wash	1111		Broadway	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48418254	32.807443	-116.943816
Express Hand Car Wash	710		Jamacha Rd	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	51402144	32.787399	-116.928348
BJs Equipment Rentals	1717		E Main St	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	Yes	Medium	No	50721102	32.813163	-116.917345
Mor Furniture for Less/TRS Home Furnishings	880		Arnele Ave	907.13	2392		Apparel and Other Finished Products Made From Fabrics and Similar Material	No	No	No	No	No	No	No	No	No	No	Low	No	48224047	32.804157	-116.972856
Jump 4 Joy	1177		N 2nd St	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	Low	No	48423229	32.811351	-116.935486
Sunbelt Rentals Inc.	1114		N Magnolia Ave	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48307115	32.811344	-116.963006
Inflatable Design Group	1080		W Bradley Ave	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	Yes	Medium	No	38711039	32.817624	-116.975117
Penske Truck Leasing Co. LP	1120		Broadway	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48418418	32.808269	-116.943375
Jeromes	333		N Johnson Ave	907.13	5021		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	High	No	48712254	32.798247	-116.970312

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Exalt Customs	350		Coogan Way	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48307120	32.810165	-116.965416
J. C. Auto Detail	790		El Cajon Blvd	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.786605	-116.976453
County Collison Center	1535		Johnson Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48732135	32.793947	-116.970564
Powder Pros, Inc.	945		Industrial PL	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48712173	32.797197	-116.973737
Sid's Autobody	910		El Cajon Blvd	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	49265012	32.784850	-116.977904
Duraid Hermez Detail	816		N 2nd St	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48425255	32.805569	-116.936087
Fletcher Hills Automotive and Smog	1288		Felser St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48231014	32.809012	-116.979262
Centric Transmission	1265		Greenfield Dr	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48411009	32.813210	-116.937261
Cottonman Transmission	1286		Felser St	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48231014	32.809113	-116.979198
Jim Renner Auto Sales	1281		Greenfield Dr	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48411011	32.812919	-116.936523
San Diego Co. Fleet Service	1840		Weld Blvd	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.827051	-116.986980
Clancy's Towing	1385		Pioneer Way	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48302229	32.814219	-116.966767

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Rock Auto Group	790		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.786605	-116.976453
El Cajon Auto Electric	317		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48918012	32.797797	-116.935037
Elmer Sweetwood & Sons, Inc	151		S Sunshine Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48815112	32.794161	-116.964500
Earl Scheib	1002		W Main St	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48712150	32.795258	-116.974678
Money Tree	303		N 2nd St	907.13	6163		Nondepository Credit Institutions	No	No	No	No	No	No	No	No	No	No	Low	No	48918013	32.797602	-116.935037
El Cajon Muffler and Air Conditioning	1370		Broadway	907.13	7533		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48424029	32.808038	-116.932856
Exxon Mobil Oil Corp	1761		Greenfield Dr	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	50737045	32.811004	-116.916134
Valvoline Instant Oil Change	610		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48931009	32.802419	-116.936073
Chappelle's Exhaust and Custom Shop	1433		Pioneer Way	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48302246	32.814976	-116.967477
Poes Auto Body	727		El Cajon Blvd	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	49264108	32.787172	-116.974773
Precision Tune Auto Care	1191		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48939002	32.794696	-116.940416
Trick Trucks, Inc.	777		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	High	No	48426378	32.804999	-116.935250

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Auto Repair for Less	1189		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48939002	32.794695	-116.940496
William Transmission and Auto Repair	792		El Cajon Blvd	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	49265022	32.786463	-116.976472
Atlantic Auto Repair	1318		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48423224	32.808102	-116.934726
Victory Auto Service	935		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48728227	32.794805	-116.974048
California Smog & Auto Repair	595		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48753229	32.789874	-116.972251
Advance Paint and Body	790		El Cajon Blvd	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.786605	-116.976453
Loftis Motorsports	1189		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48939002	32.794613	-116.940495
Run Rite Auto Service	830		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48425223	32.805906	-116.936013
7 Stars Auto Glass Inc.	1100		El Cajon Blvd	907.13	7536		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48778027	32.783238	-116.979559
La Mesa Auto & Tire Center	2210		Fletcher Pkwy	907.11	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48115072	32.803481	-116.994063
Rancho del Oro Towing	1167		W Palm Ave	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48764024	32.791061	-116.976370
Sears Holding Company	1406		N Johnson Ave	907.13	5083		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	Low	No	48213110	32.814552	-116.971848

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Sun Auto Repair	1310		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48423221	32.808147	-116.935067
Decker's Auto Service	930		E Washington Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	49310219	32.788138	-116.950162
Canal Transmission	1249		DENVER LANE	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48409148	32.812827	-116.948975
Jiffy Lube Store #495	539		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48912381	32.800949	-116.935454
Atlas Radiator Shop	580		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	High	No	48752018	32.790288	-116.972717
Banny Hom Enterprises	1240		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	Yes	No	No	Yes	No	No	Medium	No	48711015	32.795252	-116.978820
Valley Automotive	813		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48426260	32.805541	-116.935250
Rods Automotive	1313		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48407119	32.813627	-116.935334
Millers Towing	1402		Pioneer Way	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	Yes	No	No	High	No	48302130	32.814444	-116.968698
A 1 Smog Test	507		Broadway	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48324104	32.807241	-116.956381
Imported Motor Cars	939		W Main St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48728231	32.794705	-116.974159
Express Auto Repair and tires	1316		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48423223	32.808133	-116.934875

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Clifton Mercedes Independent Sales/Service	1033		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48728132	32.794688	-116.974662
Ram 99	407		El Cajon Blvd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48753219	32.791074	-116.971134
Team Automotive Repair	354		Walter Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48918078	32.798465	-116.934735
Allman Family Auto	1265		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48425170	32.807217	-116.937504
Shamrock Racing Inc.	2030		Gillespie Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	38720116	32.824535	-116.984810
Kragen Auto Supply #1270	485		Broadway	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48324103	32.807522	-116.956539
Car Quest	391		N 2nd St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48918050	32.799066	-116.935037
Firestone Complete Auto Care #2254	435		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48918069	32.799483	-116.935275
Off Road Warehouse ORW	425		N Marshall Ave	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48712190	32.799576	-116.975039
New Battery Starter Shop	1056		E Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48933019	32.795130	-116.946332
Kragen Auto Parts #1173	101		S Mollison Ave	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48813312	32.794598	-116.950471

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Pep Boys Auto #813	201		Jamacha Rd	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.794012	-116.934928
Sleep Train	790	B	N Johnson Ave	907.13	5719		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	Yes	High	No	48224030	32.805563	-116.971545
Tipton Honda	889		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48225027	32.803108	-116.973223
Al Archard, Inc.	661		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48751201	32.788705	-116.973200
Pal of Mine Auto Sales	151		S Sunshine Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48815112	32.794161	-116.964500
Motor Sports Co.	775		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	49264103	32.786380	-116.975562
Auto Wholesalers	1440		E Main St	907.13	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	Low	No	51101536	32.801475	-116.929746
A&A Smog Test Only Station	267		N Marshall Ave	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.797020	-116.975157
Advanced Color Coating	1375		N Cuyamaca St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48214058	32.814033	-116.979284
Beau's Distribution	380		Vernon Way	907.13	7319		Business Services	No	No	No	No	No	No	No	No	No	No	Low	No	48302267	32.812705	-116.965841
76 Smog Test Only Station	640		Garfield Ave	907.11	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	Low	No	48136222	32.803006	-116.997743
Advance Auto Center	790		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.786605	-116.976453

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Pacific Car Co.	900		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	49265012	32.785044	-116.977864
County Motor Parts Co., Inc./Napa Auto and Truck Parts	1597		N Johnson Ave	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48302132	32.816608	-116.970192
Mopars by Jack	1429		Pioneer Way	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48302246	32.814935	-116.967460
Boomers	1155		Graves Ave	907.13	7999		Amusement and Recreation Services	No	Yes	No	No	No	No	No	Yes	Yes	No	Medium	No	48309042	32.810799	-116.961259
Parkway Bowl	1280		Fletcher Pkwy	907.13	7999		Amusement and Recreation Services	No	No	No	No	No	No	No	No	No	No	Medium	No	48212133	32.808233	-116.978670
Speedy TV	1257		Broadway	907.13	7622		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Low	No	48425149	32.807271	-116.937797
HiTech Welding & Forming	1990		Friendship Dr	907.13	3728		Transportation Equipment	No	No	No	No	No	No	No	Yes	No	No	High	Yes	38719006	32.824724	-116.980375
British Heritage Motorsports	1437		Pioneer Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48302247	32.815018	-116.967477
Name Unknown	1435		Pioneer Way	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Low	No	48302247	32.815072	-116.967477
Rick's RV Center	1546		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	50731037	32.805581	-116.925238
Wild Orchid Florist	908		E Washington Ave	907.13	5992		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	Low	No	49310208	32.787821	-116.950703
Jibe Studios	2333		Fletcher Pkwy	907.11	7911		Amusement and Recreation Services	No	No	No	No	No	No	No	No	No	No	Low	No	48143103	32.802438	-116.996495
Sew Pros Sewing and Vacuum Center	393		Broadway	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Low	No	48322248	32.807422	-116.958364
Best Nutrition & Market	147		Jamacha Rd	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.794504	-116.935312

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Aircraft Storage Spaces	1840		Joe Crosson Dr	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.820994	-116.969731
AM/PM	201		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	49322239	32.807347	-116.959937
Fletcher Hills KWIK stop	2410		Fletcher Pkwy	907.11	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48136223	32.802786	-116.997859
Arco AM/PM #640	593		N Mollison Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	Yes	High	No	48338035	32.802436	-116.950603
Sears	575		Fletcher Pkwy	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48227056	32.807232	-116.968683
Quick Trip Fuel & Market	596		N Mollison Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48338041	32.802511	-116.951420
G&M Oil Co. #94	1298		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48422245	32.808077	-116.936084
Shell	601		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48912235	32.802433	-116.935223
Arco AM/PM	1245		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48725046	32.794702	-116.978767
Super Star Stations	1110		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48915027	32.795252	-116.944234

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Thrifty	700		Avocado Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	No	No	No	No	No	No	Yes	No	Medium	No	49301015	32.787386	-116.958131
Arco #9562	978		N Cuyamaca St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48209302	32.808224	-116.979964
Exxon Mobil	695		El Cajon Blvd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48751101	32.787894	-116.974076
El Cajon Arco AM-PM	404		E Chase Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	49343021	32.780747	-116.957359
Golden State Gasoline	181		N 2nd St	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48918072	32.796122	-116.935275
Superstar 3	1090		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48712141	32.795263	-116.975087
Thrifty #9758	398		El Cajon Blvd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48731210	32.791605	-116.971370
G&M Oil #95	1099		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48728128	32.794688	-116.975120
2nd Street Gas Depot	490		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48916218	32.799961	-116.936062
SKS Inc.	610		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48931009	32.802419	-116.936073
Revco Gas	303		Jamacha Rd	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	51128040	32.792452	-116.933067

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Shell	515		N Magnolia Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48333031	32.801202	-116.961959
Advanced Electronic Solutions	1830		John Towers Ave	907.13	1731		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Low	No	38719007	32.820697	-116.979528
William Kelly & Sons	1044		Pioneer Way	907.13	1711		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Low	No	48307214	32.810221	-116.967959
Natural Env. Inc.	1162		N Marshall Ave	907.13	781		Agricultural Services	No	No	No	No	No	No	No	No	No	No	Medium	No	48232003	32.811400	-116.976007
Pacific Production Plumbing	1584		Pioneer Way	907.13	1711		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Medium	No	48302106	32.816677	-116.968120
Hamann Companies	1000		Pioneer Way	907.13	1541		Building Construction - General Contractors and Operative Builders	No	No	No	No	No	No	No	No	No	No	Low	No	48307209	32.809497	-116.968750
Pacific Refrigeration, Inc., A/c Service Co.	1440		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	50727007	32.808183	-116.929356
Ron Ellis Enterprises, Inc.	427		El Cajon Blvd	907.13	1522		Building Construction - General Contractors and Operative Builders	No	No	No	No	No	No	No	No	No	No	Medium	No	48753216	32.790863	-116.971429
Discount Auto Pawn	715		E Main St	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48813426	32.794671	-116.953130
Autohaus Stebel, Inc.	885		E Washington Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	49310471	32.787397	-116.951356
Good Times RV	1338		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48918019	32.797727	-116.933695
Auto Finance Specialists	385		El Cajon Blvd	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	Medium	No	48732317	32.791530	-116.970373
Bob Baker Lexus	1000		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48224032	32.804322	-116.975206

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
RP Racing	1259		Broadway	907.13	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	Low	No	48425170	32.807272	-116.937552
Spinali's Auto	919		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	49264219	32.783919	-116.977831
Tom Parker Auto Gallery	414		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48752011	32.791024	-116.972037
Stetts Iron Horse Ranch	453		El Cajon Blvd	907.13	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48753211	32.790466	-116.971600
RDI, LLC	385		S Marshall Ave	907.13	4141		Local and Suburban Transit and Interurban Highway Passenger Transportation	No	No	No	No	No	No	No	No	No	No	High	Yes	48729124	32.791528	-116.975225
El Cajon Harley Davidson	621		El Cajon Blvd	907.13	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48753118	32.789236	-116.972667
Hollywood Motors	1423		Broadway	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	50728169	32.807494	-116.930268
Veys Powersports	660		El Cajon Blvd	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48750014	32.789086	-116.973914
Mossy Nissan	1170		W Main St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	Yes	No	No	No	No	No	Low	No	48711027	32.795234	-116.975956
Car Pro Inc.	1427		Broadway	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	Low	No	50728169	32.807495	-116.930135

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Legacy Cars	920		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	49265012	32.784794	-116.977984
CLASSIC AUTO SALES	966		E Main St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48913022	32.795377	-116.948895
Truck and SUV Superstore, Inc	327		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48732304	32.792397	-116.969958
Auto d'Elegance	673		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48751105	32.788472	-116.973671
El Cajon Ford	1595		E Main St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	50733025	32.806805	-116.921642
Cunningham BMW	720		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48749019	32.787469	-116.975566
M&N Auto Services & Sales	344		Walter Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48918054	32.798308	-116.934792
American Finance	410		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48752019	32.791180	-116.971820
County Wide Dealer Service	410		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48752019	32.791180	-116.971820
WS Auto Sales, Inc.	775		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	49264103	32.786380	-116.975562

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Rice RV	1035		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48838040	32.794545	-116.946670
Hollywood Motors Storage Yard	1419		Broadway	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	50728169	32.807336	-116.930270
Alia Insurance Services Inc.	720		El Cajon Blvd	907.13	6411		Insurance Agents, Brokers, and Service	No	No	No	No	No	No	No	No	No	No	Low	No	48749019	32.787468	-116.975648
Bob Baker Chevrolet/Subaru	900		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48224032	32.804447	-116.973967
Carson Trailer Inc.	1111		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	48938011	32.793999	-116.943237
Enterprise Car Sales	850		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Low	No	49265013	32.785727	-116.977231
Mustang Auto and Classic Cars	727		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	49264108	32.787172	-116.974773
Crystal Clean Car Wash	111		S First St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48938019	32.794300	-116.944367
El Cajon Auto Trim Shop	645		W Lexington Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48732325	32.792483	-116.969343
Body Beautiful Car Wash, Inc.	690		El Cajon Blvd	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48749018	32.788358	-116.974773
Spot Free Rinse Car Wash	329		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48918055	32.798308	-116.935287

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Main Street Car Wash	1437		E Main St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	51101427	32.801372	-116.928637
East Valley Classic Car Wash	760		E Main St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48813104	32.795277	-116.952473
Romeo's Car Wash	195		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48918071	32.796383	-116.935078
Superior Car Wash	816		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48425255	32.805569	-116.936087
Triton Imaging	290		N Marshall Ave	907.13	2759		Printing, Publishing, and Allied Industries	No	No	No	No	No	No	No	No	No	No	Low	No	48711026	32.796972	-116.975948
Enterprise Rent-A-Car #3247	451		N Magnolia Ave	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48801025	32.799611	-116.961778
Toyota of El Cajon	965		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	No	Yes	No	Yes	No	No	No	No	High	No	48732102	32.793180	-116.970409
D3 Equipment	1475		Pioneer Way	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48302247	32.815411	-116.967480
El Cajon Moving Center	1186		E Main St	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48915029	32.795422	-116.941459
Rent-A-Center #01055	1047		E Main St	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	Low	No	48838038	32.794313	-116.945942
Distinctive Carpet Care	681		S Mollison Ave	907.13	7349		Business Services	No	No	No	No	No	No	No	No	No	No	Medium	No	49310208	32.788000	-116.950744
Western Exterminator Co	1320		Hill ST	907.13	7342		Business Services	No	No	No	No	No	No	No	No	No	No	Low	No	49265005	32.785691	-116.978089
Ribbit Pest Control, Inc.	435		W Douglas Ave	907.13	7342		Business Services	No	No	No	No	No	No	No	No	No	Yes	Low	No	48733130	32.793665	-116.966913
Cartwright Termite And Pest Control	1376		Broadway	907.13	7342		Business Services	No	No	No	No	No	No	No	No	No	No	Medium	No	48424028	32.808038	-116.932570
David A. Howe M.D.	505		N Mollison Ave	907.13	8011		Health Services	No	No	No	No	No	No	No	No	No	No	Low	No	48806219	32.800444	-116.950484
El Cajon Meat Market	575		E Main St	907.13	5421		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48823304	32.794652	-116.955023
Heartland Coin Club	695		Ballantyne St	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	Yes	Low	No	48327216	32.804097	-116.957470

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Crystal Pool Service	1109		N 2nd St	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	Medium	No	48423211	32.809919	-116.935317
San Diego Mobile Truck and Trailer Service	140		Millar Ave	907.1				No	No	No	No	No	No	No	No	No	No					
Alpha Powder Coating	1115		N Johnson Ave	907.1	3479		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	Yes	No	No	No	No	Yes	No	No	High	Yes	48217041	32.810585	-116.970673
Cedars Bakery	926		Broadway	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48428110	32.808058	-116.949406
Dolci Mango of El Cajon	330		Broadway	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48309035	32.808311	-116.958879
El Pollo Loco #3562	494		Broadway	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48313004	32.807933	-116.956826
Howards Bakery	1097		Broadway	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48429432	32.807438	-116.944829
Thai Style Restaurant	354		Broadway Ave	907.1	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	Medium	No	48309039	32.807896	-116.958420
Trujillos Taco Shop	1275		Broadway	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48425172	32.807352	-116.936942
7-Eleven #16070	394		W Chase Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	49233157	32.780743	-116.966212
Little Caesars Pizza	393	Suite B	E Chase Ave	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	49252223	32.780118	-116.958198
Sagmani's Restaurant	478		W Douglas Ave	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No		No			
Heavenly Taste	533		El Cajon Blvd	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48753208	32.790311	-116.971848
Heavenly Taste Cafe & Catering	533		El Cajon Blvd	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	48753208	32.790311	-116.971848
Leos Market	635		El Cajon Blvd	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48751228	32.788998	-116.973024
7-Eleven Food Store 13655E	2270		Fletcher Pkwy	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48115069	32.803255	-116.995093
Sunfood Corporation	1830	101	Gillespie Way	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	38720018	32.818948	-116.981554
7-Eleven Store #13657	1666		Greenfield Dr	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	50712015	32.812897	-116.919338
New Century Buffet	868		Jackman St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48224048	32.806715	-116.974862
7-Eleven Store #25302	711		Jamacha Rd	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	51128036	32.787368	-116.927579
7-Eleven Food Store 13660E	335		Jamacha Rd	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	51128045	32.792365	-116.932723

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Giant Pizza King #1	740		Jamacha Rd	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	51402161	32.786736	-116.928510
Sultan Baklava	131		Jamacha Rd	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.794806	-116.935357
7-Eleven 13658F	375		W Madison Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	48228308	32.800468	-116.966184
Freds Old Fashioned Burgers	1285		E Madison Ave	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Medium	No	48916217	32.800063	-116.936570
7-Eleven #21787	1253		W Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48725047	32.794693	-116.979134
7-Eleven Store #21788D	410		E Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Medium	No	48811267	32.795257	-116.956884
Antique Row Cafe of El Cajon	1185		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48939011	32.794549	-116.941031
Athena Foods	435		W Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48733123	32.794618	-116.967062
Baghdad Market	733		E Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48813419	32.794521	-116.952618
Bs Keg Beer	1429		E Main St	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	51101417	32.800407	-116.929842
Park Place Cafe	169		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No			
Downtown Grind	200		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48808323	32.795105	-116.960296
Park Place Cafe	169		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No			
Palms Grill	1255	A	E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48939004	32.794705	-116.938724
Mollison Market	725		S Mollison Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	49310351	32.787040	-116.950545
New East Buffet, Inc.	555		Montrose Ct	907.1	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	Yes	Medium	No	48230111	32.801485	-116.963637
7-Eleven #13651	1296		N 2nd St	907.1	5411		Food Stores	No	No	No	No	No	No	No	Yes	No	No	Medium	No	48411013	32.813166	-116.935976
Cotixan Mexican Restaurant	538		N 2nd St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Low	No	48931015	32.800887	-116.936722
West Coast Kitchen	1209	108	N 2nd St	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48412052	32.811981	-116.935468
7-Eleven #21834B	108		W Washington Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	48828219	32.787929	-116.962649
7-Eleven Food Store #16057B	1102		E Washington Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48927301	32.788007	-116.944209
Babis Bakery	910		E Washington Ave	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	Low	No	49310208	32.787817	-116.950547
Agape Veterinary Hospital	1291		N 2nd St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	Low	No	48412033	32.813130	-116.935409

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Angels Pet Parlor	731		Jamacha Rd	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	Low	No	51128095	32.786632	-116.927533
Animal Medical Center	600		Broadway Ave	907.1	742		Veterinary Services For Animal Specialties	No	Yes	No	Yes	No	No	No	No	No	No	Medium	No	48313063	32.808313	-116.954409
Banfield, The Pet Hospital	865		Jackman St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	Low	No	48224045	32.806822	-116.972976
Bastet Veterianary Hospital Inc.	1682		Greenfield Dr	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	Medium	No	50712015	32.813269	-116.919064
Beths Grooming	1028		Broadway	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	Low	No	48429322	32.807978	-116.946558
Bonnies Grooming	1215		N 2nd St	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	Low	No	48412026	32.812108	-116.935414
Camp Bow Wow	1677	A	N Marshall Ave	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	Yes	High	No	38711039	32.817720	-116.975327
Care & Comfort Veterinary Hospital, Inc.	522		E Chase St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	Low	No	49343023	32.780804	-116.955981
Cat & Doggie Works	1137		N 2nd St	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	Low	No	48423207	32.810505	-116.935391
El Cajon Valley Vet Hospital	560		N Johnson Ave	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	Yes	High	No	48225033	32.801196	-116.971518
Healthy Pet Pantry	681		Jamacha Rd	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	Low	No	51155009	32.787948	-116.927983

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					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Jamacha Veterinary Clinic	693		Jamacha Rd	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	Low	No	51155009	32.787880	-116.927933
Large Animal Veterinary Association	725		Jamacha Rd	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	Low	No	51128097	32.786962	-116.927454
Petco Animal Service, Inc.	540		N 2nd St	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	Medium	No	48931014	32.801160	-116.936920
Petsmart, Inc. #142	865		Jackman St	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	Low	No	48224045	32.806974	-116.972977
Puppy Time	513		Parkway Plaza	907.1				No	No	No	No	No	No	No	No	No	No					
Shear Perfection - Wendy Dog/Cat Grooming	1325		E Main St	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	Low	No	48918063	32.796864	-116.933616
Suds n Paws	2349		Fletcher Pkwy	907.1	7520		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48143103	32.802491	-116.996567
Tender Loving Care Pet Salon	1428		Broadway	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	Medium	No	50727025	32.807918	-116.930170
Abbey Clinic for Pets	1787		E Main St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	Medium	No	50721101	32.814282	-116.916842
Vets Pets, Inc.	522		E Chase St	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	Low	No	49343023	32.780804	-116.955981
Xtreme Glass	1510		Fayette St	907.1	1793		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Low	No	48214034	32.815945	-116.978112
2nd St. Gas & Mini	725		N 2nd St	907.1	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	Yes	No	No	No	No	Yes	High	No	48426380	32.804313	-116.935215
4 Wheel Parts Performance	480		N Johnson Ave	907.1	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No			
Autobahn	444		Vernon Way	907.1	5093		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	High	Yes	48302252	32.812518	-116.966770

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Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Auto Zone #3365	1080		E Main St	907.1	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48913029	32.795324	-116.945431
Superior Car Wash	816		N 2nd St	907.1	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48425255	32.805546	-116.936045
Ferguson Truck Body & Equipment	383		N Johnson Ave	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No			
Fletcher Hills Towing / Road One Allied Garden	1357		Pioneer Way	907.1	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	Yes	No	No	Medium	No	48302230	32.813935	-116.966729
Garnet Bros Trailer Repair	1667		E Main St	907.1				No	No	No	No	No	No	No	No	No	No					
Golden Hammer Auto Body Repair	631		W Lexington Ave	907.1	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48732325	32.792329	-116.969282
Harbor Freight Tools EC-14	1196		E Main St	907.1	5251		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	Low	No	48915025	32.795176	-116.940501
Legacy Cars	670		El Cajon Blvd	907.1	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48748015	32.788813	-116.974420
Joes Tire Shop	765		El Cajon Blvd	907.1	7534		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	49264105	32.786677	-116.975154
Meineke Car Care Center	830		N 2nd St	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48425223	32.805849	-116.935964
National Spring Inc.	1472		Fayette St	907.1	3493		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48214034	32.815417	-116.978107

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					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Omega Fuel Injection	1934	B	John Towers Ave	907.1	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.824324	-116.980587
Performance Choppers	444		El Cajon Blvd	907.1	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48752013	32.790762	-116.972160
On the Go Gas & Deli	500		N 2nd St	907.1	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Medium	No	48931016	32.800463	-116.936017
Quality RV, Inc.	1062		N 2nd St	907.1	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Medium	No	48421225	32.809438	-116.936109
Severin Mobile Auto Repair Team	225		Fletcher Pkwy	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Low	No	48143128	32.802918	-116.994057
Superstition Motors Inc.	606		S Marshall Ave	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Medium	No	48765011	32.789415	-116.975762
A&G Drapery Manufacturing	1490		Fayette St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
Abacor Inc.	1165		N Johnson Ave	907.1	7538		Automotive Repair Services, and Parking	No	No	Yes	No	Yes	No	No	No	No	Yes	High	No	48217031	32.811082	-116.969932
Advanced Finishing, Inc	1300	102	N Johnson Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48213115	32.813606	-116.971436
Aerodyne Engineering Co	1763		N Marshall Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	Yes	High	Yes	38711042	32.818015	-116.975671
Aerowind Corporation	1959		John Towers Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	Yes	No	No	No	No	No	No	No	High	Yes	38719006	32.824791	-116.980529

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					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
American Made Wrought Iron	1401	22	Pioneer Way	907.1	3446		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48302228	32.814505	-116.966282
Aspen Vinyl, Inc	601		W Main St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48732133	32.794538	-116.969615
Attention Getters Design	1385	101	N Johnson Ave	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48302121	32.814039	-116.970398
Autoworks International, LLC	462		Vernon Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes			
Avalon R F/Pacifitek	344		Coogan Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48307120	32.810168	-116.964769
Bath Co Shower Door	613		W Main St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48732134	32.794349	-116.970015
Big Daddy Trucking, Inc	1179	J	N Cuyamaca St	907.1	4212		Motor Freight Transportation and Warehousing	No	No	No	No	No	No	No	No	No	No	High	Yes			
Global Resource Options Inc. Gro Solar	1365	102	N Johnson Ave	907.1	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48302121	32.813723	-116.970331
Brantner & Assoc Inc	1700		Gillespie Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38720001	32.818842	-116.980870
C D & L Manufacturing L.L.C.	1000	K	W Bradley Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38711040	32.817568	-116.974457
C.P. Richard Signs, Inc.	1200	B	Billy Mitchell Dr.	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38719007	32.821235	-116.977468
California Custom Woodworks, Inc	1035	120	Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48307142	32.809388	-116.966715
California Sheet Metal	1020		N Marshall Ave	907.1	1761		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	High	Yes	48233009	32.809207	-116.976045
Chromalloy San Diego	1071		Industrial Pl	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
Circlemaster Inc	495		Raleigh Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			

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					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Cmeann Productions Inc	1890	101	Cordell Ct	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
Combo Aluminum Products	1100		N Johnson Ave	907.1	3499		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48217008	32.810879	-116.971604
Competition Textiles	1449		Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48302247	32.815131	-116.966925
Controlled Precision Mfg	352		Coogan Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48307120	32.810163	-116.965631
Countywide Metal Fab & Finish Inc.	1348		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	Yes	No	No	No	No	No	No	No	High	Yes	48307133	32.811492	-116.967256
Cutting Edge	1825	100	Gillespie Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38720005	32.821308	-116.982111
Dave Whipple Sheet Metal	1077		N Cuyamaca St	907.1	3444		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48231024	32.809827	-116.979007
Daymar Corporation	460	B	Cypress Ln	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38712130	32.817044	-116.966306
DelStar Technologies Inc.	1306		Fayette St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	Yes	No	No	No	No	No	No	No	High	Yes	48214020	32.813634	-116.978142
Designcrafted Bardon Cabinetry, Inc	1515		Fayette St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48214056	32.815674	-116.977323
Direct Sheet Metal	1423		Pioneer Way	907.1	3444		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48302246	32.814769	-116.967137
Doetsch Enterprises	515		Raleigh Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Ecology Care Inc.	1415		Broadway	907.1	782		Agricultural Services	No	No	No	No	No	No	No	Yes	No	No	Medium	No	50728164	32.807346	-116.930573
Embertons Machine & Tool, Inc.	1215	A	Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48302251	32.812693	-116.967226
Eye Grind Design	1069		Vernon Way	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48212120	32.811907	-116.975328
Fabcom	781		Vernon Way	907.1	3446		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	Yes	No	No	No	No	No	No	No	High	Yes	48217033	32.811888	-116.972448
First Class Packaging Inc	280	B	Cypress Ln	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38712155	32.817084	-116.964255
Fit N Hip Wear	1614		Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38712124	32.816924	-116.968111
Flexsystems Usa Inc	727		W Main St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48730231	32.794792	-116.971673
G P K Inc	535		Floyd Smith Dr	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
G3 Graphics, Inc.	1466	11	Pioneer Way	907.1	7336		Business Services	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.815286	-116.969055
Gammow Pools, Inc	842		Fesler St	907.1	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	Yes	Low	No	48217012	32.808915	-116.972309
Garvin Industries	316		Millar Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
Gibson & Barnes Top Notch Flight Suits	1900	140	Weld Blvd	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38423204	32.827360	-116.989143
Goodman Custom Woodworks	1957	C	Friendship Dr	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38719006	32.824546	-116.979001
Graphic Business Solutions Inc	1912		John Towers Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
Griffiths Machining	465		Vernon Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48307132	32.812164	-116.967187

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
High Precision Grind & Machining, Inc.	1130		Pioneer Way	907.1	3499		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48307211	32.811193	-116.968113
His Business Manufacturing Co	1180		N Johnson Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48217072	32.812096	-116.971180
Horne's Metal Works	1408		Pioneer Way	907.1	3459		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes			
House Of Bounce	959		Vernon Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
Iron Express	1401	4	Pioneer Way	907.1	3446		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48302228	32.814429	-116.967121
J. Dolan Drapery Workroom	1484		Fayette St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48214034	32.815670	-116.978110
Jack Chidgey & Son, L L C	1099		W Palm Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes			
Janie's Custom Draperies	336		Coogan Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48307120	32.810171	-116.964362
Jim Wolf Technology Inc	212		Millar Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48728111	32.793479	-116.974615
KD Cabinet	1065		Vernon Way	907.1	2434		Lumber and Wood Products, except furniture	No	No	No	No	No	No	No	No	No	No	High	Yes	48212120	32.811905	-116.975133
Leisure Designs Goodman Custom Woodworks	1957	C	Friendship Dr	907.1	2599		Furniture and Fixtures	No	No	No	No	No	No	No	No	No	No	High	Yes	38719006	32.824546	-116.979001

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Liddle Machine	1276		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48307121	32.810676	-116.967334
Livesay Marine	1250	A	Pioneer Way	907.1	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	High	Yes	48307121	32.810366	-116.967205
Mech Inclined Technicians	1112		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48307213	32.810919	-116.968078
Media Control Systems L.L.C.	1050	Q	Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48307214	32.810277	-116.968712
Metals Usa Building Products	1770	111	Gillespie Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38720016	32.820469	-116.982185
Meyer Eng	1445		Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
Micro-Mode Products, Inc.	1870		John Towers Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38719007	32.822229	-116.980093
Milans Synthesized Furniture	1991	G&H	Friendship Dr	907.1	2434		Lumber and Wood Products, except furniture	No	No	No	No	No	No	No	No	No	No	High	Yes	38719006	32.824788	-116.980218
Modern Septic Service Inc	1506		Pioneer Way	907.1	1711		Construction - Special Trade	No	No	Yes	No	No	No	No	Yes	No	No	Medium	No	48302109	32.815829	-116.968329
New Brunswick Industries	1850		Gillespie Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38720010	32.822169	-116.982932
Omni Pacific	505		Raleigh Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
P R S	1460		Fayette St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48214034	32.815203	-116.978106
Pacific Coast Water And Filtration	486		Raleigh Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
Phantom Research Laboratories, Inc.	1957	D	Friendship Dr	907.1	2833		Medicinal Chemicals And Botanical Products	No	No	No	No	No	No	No	No	No	No	High	Yes	38719006	32.824546	-116.979001

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Ponderosa Roasting Maint & Mfg	1466	10	Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48302111	32.815408	-116.967985
Pool Surfacing 2000 Inc.	104		Richardson Ave	907.1	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Low	No	48730130	32.794699	-116.972332
Premier Metal Processing Inc.	971		Vernon Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48212139	32.811884	-116.974081
Prime Heat, Inc	1844		Friendship Dr	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	Yes	No	No	No	No	High	Yes	38719007	32.821368	-116.977518
Professional's Choice Sports	2025	106	Gillespie Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
Pure Bioscience	1725		Gillespie Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38720003	32.819611	-116.980958
Q Microwave Inc	481		Cypress Ln	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48302265	32.816655	-116.967077
RMS Laser	1033		Vernon Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48212122	32.811842	-116.974748
Race Car Dynamics, Inc	1900	100	Weld Blvd	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38423204	32.827360	-116.989143
Raymonde Draperies	1399		N Cuyamaca St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48214058	32.814757	-116.979051
Medical Solutions	1987	I	Friendship Dr	907.1	5047		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.824763	-116.980073
Revolutionizer Products LLC	1957	A	Friendship Dr	907.1	5099		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.824546	-116.979001
Reyes Machining	1364		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	48307132	32.811876	-116.966947
S&D Precision Machine Shop	1390		Hill St	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	49265005	32.785543	-116.978232
San Diego Custom Extrusions	1866	D	Friendship Dr	907.1	3082		Unsupported Plastics Profile Shapes	No	No	No	No	No	No	No	No	No	No	High	Yes	38719007	32.822013	-116.977765

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
San Diego Soy Dairy, Inc	1330	B	Hill St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	49265005	32.785543	-116.978232
Sandmar Enterprises	1991	A	Friendship Dr	907.1	2511		Furniture and Fixtures	No	No	No	No	No	No	No	No	No	No	High	Yes	38719006	32.824788	-116.980218
Sentrec Electronics Inc.	1943	E	Friendship Dr	907.1	3679		Electronic and Other Electrical Equipment and Components, except computer	No	No	No	No	No	No	No	No	No	No	High	Yes	38719006	32.824249	-116.978618
St. Cyclewear	1200	D	Billy Mitchell Dr.	907.1	2389		Apparel and Other Finished Products Made From Fabrics and Similar Material	No	No	No	No	No	No	No	No	No	No	High	Yes	38719007	32.821235	-116.977468
Stine Game Tables	920		Fesler St	907.1	2599		Furniture and Fixtures	No	Yes	No	No	No	No	No	No	No	Yes	High	Yes	48212144	32.809647	-116.974008
KD Cabinet (820)	1065		Vernon Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes			
Sunswest Technologies Inc.	1050		Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	Yes	High	Yes			
T B S Irrigation Products Inc	1532		N Johnson Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48213106	32.815882	-116.971409
The Strip Shop	1050	1	Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48307214	32.810277	-116.968712
The Vintage Sign Company, Inc.	926		Felser St	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48212144	32.809649	-116.973747
Thermo Hem Manufacturing	1452		Fayette St	907.1	2399		Apparel and Other Finished Products Made From Fabrics and Similar Material	No	No	No	No	No	No	No	No	No	No	High	Yes	48214034	32.815613	-116.978345
Thunderbird Products	1148		N Marshall St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48232008	32.811011	-116.975874
Transportation Equipment Inc	1404		N Marshall Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48214046	32.814857	-116.976176

City of El Cajon Stationary Industrial and Commercial Facilities

Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	Code		Principal Products / Services	Potential Pollutants									Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
					SIC Code	NAICS Code		Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				Assessors Parcel Number (APN)	Latitude	Longitude
Tube Lighting Products	1346		Pioneer Way	907.1	3648		Electronic and Other Electrical Equipment and Components, except computer	No	No	No	No	No	No	No	No	No	No	High	Yes	48307133	32.811386	-116.967177
Turbine Aviation	1865	A	John Towers Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	High	Yes	38719007	32.822043	-116.980004
U S Wheel Remanufacturing	1000	P	W Bradley Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	38711040	32.817568	-116.974457
Urban Bloom Landscape, Inc.	1017		El Cajon Blvd	907.1	1711		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Low	No	49264203	32.783469	-116.978569
Vision Systems Inc	1895		Gillespie Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	Yes	No	No	No	No	No	No	No	High	Yes	38720115	32.823545	-116.982585
Waterdog Products, Inc.	1148		Pioneer Way	907.1	2821		Plastics Materials, Synthetic Resins, And Nonvulcanizable Elastom	No	No	No	No	No	No	No	No	No	No	High	Yes	48307211	32.811211	-116.968461
Diesel System Services	1934	B	John Towers Ave	907.1	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Medium	No	48302113	32.815038	-116.970387
Weldmac Mfg Co	1533		N Johnson Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48302137	32.815871	-116.970209
Zummay Custom Cabinetry	594	D	Front St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	High	Yes	48764004	32.789702	-116.976984

STORM WATER ADMINISTRATIVE CITATION PROGRAM CRITERIA

1. Issue a Warning (followed by a letter, when possible)
   a. Whenever a discharge of pollutants is imminent or the potential exists, but the discharge has not yet entered the storm drain conveyance system (street, gutter, catch basin, etc.)
   b. Whenever a BMP is not effective for the pollutant or discharge and other BMP alternatives are available.
   c. Whenever a discharge origin cannot be determined through factual, investigative, or empirical evidence. Provide a cleanup schedule to be used as future enforcement.
   d. Small residential projects of less than 500 square feet of disturbed soil.
   e. An approved erosion and control plan has been issued and BMPs are partially implemented.
   f. Whenever activities are conducted in the right-of-way and no BMPs are implemented.
   g. Whenever a discharge of fully recoverable pollutants are discharged into the City's storm drain system (street and gutter only).

2. Issue a Citation
   a. Whenever there is a sewage overflow. (e.g. blockage; clean-out cap was removed to allow sewage to discharge into the street and storm drain).
   b. Whenever there is a discharge of unrecoverable pollutants into the storm drain conveyance system (street, gutter, catch basin, etc.)
   c. A Warning was previously issued (verbal or written).
   d. Any direct discharge into Forester Creek specifically any material which contains a 303(d) listed pollutant adopted by the State of California.(pH, TDS, and fecal coliform).
   e. An approved erosion and control plan has been issued and no BMPs are implemented.
   f. An egregious act of discharge (e.g. illegal dumping)

3. Issue a Penal Code Violation (PC374.3, 374.4, 374.7)
   a. When a First Citation was previously issued and this is a repeat violation.
   b. When the discharge is executed in the presence of any City Staff or after being told to cease operations. (waste, sewage, and litter discharges)
   c. Any direct discharge into Forester Creek, specifically material containing pollutants for which a 303(d) listing has been adopted by the State of California.(pH, TDS, and fecal coliform).

4. Issue a Stop Work Order
   a. For construction sites that received a warning and a first violation for discharging pollutants due to ineffective or proposed, but not yet implemented BMPs.
   b. A discharge of pollutants into the storm drain system, in addition to a citation, that requires immediate corrective action or mitigation.

5. Refer to Regional Board
   a. Repeated violations by a private citizen, property owner, or business for discharges to the storm drain system.
   b. A refusal to mitigate, remediate, or clean a spill or discharge of pollutants that will enter or have entered City MS4.

CITY OF EL CAJON

200 East Main Street
El Cajon, CA 92020

Citation No. 00075

☐ Building ☐ Planning
☐ Fire ☐ Public Works

ADMINISTRATIVE CITATION

☐ WARNING

☐ 1ST CITATION $100 per violation ☐ 2ND CITATION $200 per violation ☐ 3RD CITATION $500 per violation ☐ OTHER _____ $_____

PAYMENT OF $_____ IS DUE NO LATER THAN _____. (See reverse side for payment information.) PAYMENT DOES NOT EXCUSE CORRECTION OF THE VIOLATION.

CORRECTION OF THE VIOLATION(S) INDICATED BELOW MUST BE COMPLETED BY: _____ (Date)

IF YOU FAIL TO CORRECT THE VIOLATION(S) BY THIS DATE, THE NEXT LEVEL OF CITATION MAY BE ISSUED.

PERSON CITED

Last Name First M.I.

Mailing Address City / State Zip Code

Violation Address City

☐ Property Owner ☐ Tenant
☐ Business Owner ☐ Other

Business Name _____

Assessor's Parcel Number

Code Section Violated	Date of Violation	Description Of Violation

☐ See attached for additional violations

Correction(s) Required

Issuing Officer: _____ Phone: (619) _____ Date Issued: _____

Signature of Person Cited: _____
(Signing this citation acknowledges receipt only, and is not an admission of guilt)

Citation Served: ☐ In person to: _____ ☐ Posted on Property
☐ By Mail ☐ Other _____

SEE REVERSE SIDE FOR APPEAL RIGHTS AND OTHER IMPORTANT INFORMATION

WHITE – CITY YELLOW – RESPONSIBLE PARTY PINK – FINANCE

City of El Cajon

STORM WATER COMPLIANCE INSPECTION FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Inspector Name: _____ Date: _____ Time: _____ FID# : _____

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

Result: ☐ Full Inspection ☐ Follow-up (i.e. not full) ☐ Could Not Contact ☐ Not Inventoried ☐ Refused ☐ Moved, Vacant ☐ Moved, Replaced ☐ Duplicate _____ ☐ Out of Jurisdiction

A. Contact Information

Original	Changes
Business Name: _____	Business Name: _____
Street Address _____	Street Address _____
Unit # El Cajon, CA	Unit # El Cajon, CA
Phone Number: _____	☐ Home based? ☐ Mobile Business?
Fax Number: _____	☐ Multiple businesses/units located at address?
Responsible Person _____	Facility Person Present: _____
Title: _____	E-mail: _____
Prop. Mgt. Co.: _____	Prop. Mgt. Phone: _____
Landscape Co.: _____	Landscape Phone: _____

Latitude: _____ Longitude: _____

Business Certificate Number _____ Exp.: _____ ☐ Unable to verify

B. Facility/Site Information

Principal activity _____

Currently assigned SIC Code(_____ _____ _____ _____

Do existing SIC Code(s) best represent principal activity? ☐ Yes ☐ No

Recommended SIC Code(s): _____ _____ _____ _____

Is facility subject to CA Statewide General Industrial Permit?: ☐ Mandatory ☐ Conditional ☐ No

If facility is subject to the CA Statewide General Industrial Permit, has the facility filed...

☐ NONA/NEC ☐ NOI WDID # _____ ☐ NOT Approval Date _____

Does the facility maintain a SWPPP or BMP Plan?: ☐ Yes ☐ No

Does the facility have a Storm Water monitoring program?: ☐ Yes ☐ No

Approximate distance to receiving water body: ☐ < 200 ft ☐ 200 - 1000 ft. ☐ > 1000 ft

THREAT TO WATER QUALITY ☐ High ☐ Medium ☐ Low

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C. Initial Observations

General Observations/Conditions of Concern:

Discharge Points:

Approximate Area covered by industrial or commercial activities: _____

Approximate % impervious surface of this area: _____

Exposed areas of significant outdoor activity and/or storage? ☐ Permanent ☐ Occasional ☐ None

D. BMP Assessment

Result
(bold indicates corrective actions required)

D.1 General BMPs	N/A	FI	**PI**	**NI**
1 Keep site free of litter, debris, and sediment using dry methods	☐	☐	☐	☐
2 Keep parking lots, sidewalks, and streets free of sediment and debris using dry methods	☐	☐	☐	☐
3 Keep outdoor areas free of leaks and spills	☐	☐	☐	☐
4 Collect water from pressure washing or hosing and dispose of appropriately	☐	☐	☐	☐
5 Direct roof downspouts away from areas of potential pollutants	☐	☐	☐	☐

Comments:

D.2 Landscaping BMP	N/A	FI	**PI**	**NI**
1 Properly manage pesticides/fertilizer; use IPM when feasible	☐	☐	☐	☐
2 Employ adequate erosion prevention measures (vegetation or physical stabilization)	☐	☐	☐	☐
3 Minimize over watering/over-irrigation	☐	☐	☐	☐
4 Properly store stockpiles to prevent material transport	☐	☐	☐	☐
5 Properly store and dispose of green waste	☐	☐	☐	☐

Comments:

D.3 BMPs for Materials and Wastes	N/A	FI	**PI**	**NI**
1 Protect trash area from contact with storm water	☐	☐	☐	☐
2 Keep trash area free of litter and debris, liquids, powders, sediment	☐	☐	☐	☐
3 Adequately cover materials stored outside	☐	☐	☐	☐
4 Prevent run-on from contacting materials stored outdoors	☐	☐	☐	☐
5 Properly label outdoor storage containers	☐	☐	☐	☐
6 Provide an accessible, functional, spill response kit	☐	☐	☐	☐
7 Equip liquid storage containers with secondary containment	☐	☐	☐	☐
8 Keep secondary containment free of spills and rainwater	☐	☐	☐	☐
9 Properly store and dispose of hazardous materials	☐	☐	☐	☐
10 Keep loading and unloading areas, including drains, free of debris	☐	☐	☐	☐

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D. BMP Assessment (continued)	Result (bold indicates corrective actions required)			
D.3 BMPs for Materials and Wastes (continued)	N/A	FI	**PI**	**NI**
11 Dispose of water generated by processing activities appropriately	☐	☐	☐	☐
12 Dispose of pool, spa, fountain, and filter backwash water properly	☐	☐	☐	☐
13 Clean floor mats in locations that do not drain to storm drain system	☐	☐	☐	☐
Comments:				
D.4 BMPs for Equipment, Vehicles, and Outdoor Activitie	N/A	FI	**PI**	**NI**
1 Conduct outdoor activities within contained areas (garage, under canopy, work shop)	☐	☐	☐	☐
2 Use drip pans to collect leaks/spills	☐	☐	☐	☐
3 Drain fluids from all non-operational vehicles stored outdoors	☐	☐	☐	☐
4 Provide materials (berm, mat, etc.) to protect storm drain inlets from spills and leaks	☐	☐	☐	☐
5 Perform vehicle/equipment washing in a contained area where runoff does not enter the M	☐	☐	☐	☐
Comments:				
D.5 Other BMPs	N/A	FI	**PI**	**NI**
1 Manage animals/animal waste in a manner that prevents animal waste being transported in run	☐	☐	☐	☐
2 Keep grease bin and area surrounding grease bin free of grease stains/spills	☐	☐	☐	☐
3 Keep storm drain inlets free of grease and other food debris	☐	☐	☐	☐
4 Identify and eliminate illicit connections and illegal discharges	☐	☐	☐	☐
5 Provide storm water training for appropriate employees	☐	☐	☐	☐
Comments:				

D.6 Additional Required Actions

☐ Based on inspection findings, it appears likely that significant levels of _____ would be present in storm water discharges from this site. Take action to reduce the levels of pollutants to the maximum extent practicable. Treatment control BMPs are likely necessary.

Owner/operator has been notified of recommended corrective actions verbally: ☐ Yes ☐ No If no, explain: _____

Please refer to http://www.ci.el-cajon.ca.us/dept/works/stormwater.html for more information on BMP implementation options.

D.7 Additional Questions	Comments/Results
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐ None ☐ Painting ☐ Fuelin ☐ Dust Dispersion or Mineral Processing ☐ Sandblasting ☐ Metal Smelting/Plating/Anodizing ☐ Chem Production / Mix ☐ Incinerator/Fuel Burning Device ☐ Other _____
Are there any treatment control BMPs on site? If yes, fill in the type and answer the three questions below.	☐ Yes ☐ No Type(s): _____
Are present treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ N/A
Approx. % of site that drains to treatment control BMPs?	_____ ☐ N/A
Do major potential pollutant sources drain to treatment control BMPs?	☐ All ☐ Some ☐ None ☐ N/A
Have any illicit connections or illegal discharges been identified...	☐ Yes ☐ No ☐ N/A
Have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
Were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A

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Were any non IC/ID-related corrective actions implemented during the site visit?	☐ Yes ☐ No
Were any educational materials distributed?	☐ Yes ☐ No ☐ N/A

D.8 Additional BMP Questions for Eating Establishments (only)

1 Is a spill kit present adjacent to grease storage areas	☐ Yes ☐ No ☐ N/A
2 Does the facility have a grease interceptor or grease traps on all fixtures	☐ Interceptor ☐ Traps (all) ☐ Traps (some) ☐ No
3 Are suitable spill proof containers present/used for grease transfer and storage?	☐ Yes ☐ No ☐ N/A
4 Does the facility use a commercial dishwasher?	☐ Yes ☐ No
5 Does the facility have a functional garbage disposal?	☐ Yes ☐ No
6 Does the facility use drain screens on all fixtures?	☐ Yes ☐ No
7 Are records for grease pick-up and removal manifests.logs availabl	☐ Yes ☐ No ☐ N/A
8 Are training materials and logs (for employees) available?	☐ Yes ☐ No ☐ N/A
9 Is the facility displaying the City of El Cajon BMP Placard?	☐ Yes ☐ No

Comments:

E. State General Industrial Permit Compliance*

☐ Non-compliance with the State Industrial Storm Water General Permit Noted.

☐ In the future, under a new Industrial Permit, which has not yet been adopted, this facility may be able to qualify for exemption from Permit coverage based on no outdoor exposure.

Specific Action(s) Required to Correct the Violation Described Above*:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the industrial permit - see Attachment 3 of the Industrial permit (www.waterboards.ca.gov/stormwtr/industrial.html).

☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the Regional Water Quality Control Board (RWQCB) for details (www.swrcb.ca.gov/rwqcb9/).

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) - see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program - see Section B of the Industrial Permit for guidelines.

☐ Complete a Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC). Contact the RWQCB for details.

F. Corrective Action Summary

☐ **Corrective Actions Required** Please refer to Sections D and E of this form.

☐ No corrective actions required at this time.

G. Recommended City Actions

General Assessment

Level of knowledge regarding Storm Water issues: ☐ High ☐ Medium ☐ Low

Level of cleanliness, BMP implementation, and orderliness of site: ☐ High ☐ Medium ☐ Low

Follow-up Inspection Priority: ☐ **1** ☐ **2** ☐ **3**

*Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

**Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

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City of El Cajon
Storm Water Quality Inspection for Commercial Sites (Eating Establishments)

You Are the Solution to Stormwater Pollution!
Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Restaurant Name: _____ Address: _____

Inspector Name & Phone #: _____ Date: _____/_____/_____Time: _____AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

.

The Following Additional BMPs Shall be Verified	BMP Implemented? YES	NO	N/A	Comments / Recommendations
Is a spill kit situated adjacent to grease storage areas?				
Does the facility use a commercial dishwasher				
Does Facility Have Grease Interceptor(s)?				
Does facility have grease traps on all fixtures in-lieu of single interceptor?				
Does facility have garbage disposal?				
Does facility use drain screens on all fixtures?				
Are suitable containers (spill proof) found for grease transfer and storage?				
Are records for grease pick-up and removal manifests/logs available?				
Is the facility displaying the City of El Cajon BMP placard?				
Are training materials and logs available?				
Other				
Other				
Other				

VIOLATIONS / REQUIRED CORRECTIVE ACTIONS

❑ Violation of Stormwater Ordinance: _____

❑ No Violations Have Been Noted; However BMP Implementation Is Required _____

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

200 E. Main Street, El Cajon California 92020 *TEL 619-441-1653 / FAX 619-579-5254*

"No Exposure" Conditional Exemption For Industrial Facilities

The proposed USEPA rules will establish a conditional exemption called a "No Exposure Exemption" for owners and operators of industrial facilities who can show that industrial materials, material handling operations and industrial processes, are not exposed to stormwater. Essentially, this exemption replaces the previous exemption for "light industry" which was remanded to USEPA from federal court to further define and substantiate the justification for such an exemption. A written certification will be required to be submitted to the permitting authority every three years on a form supplied by the authority. This potential conditional exemption applies to all industrial categories regardless of type, except construction sites and sources individually designated. The conditions for qualifying for the No Exposure Exemption will include the following:

1. Notification to the permitting authority at the beginning of each permit term;
2. Must allow the permitting authority or municipality to inspect the facility and to make the results of inspection public;
3. Upon request, submit a copy of the certification to the municipality in which the facility is located; and
4. Sign and certify the certification.

The permitting authority will still retain the legal authority to require the owner or operator of an industrial facility to apply for an individual or general NPDES permit if it determines that the discharge is, or may reasonably be, causing or contributing to a violation of a water quality standard, or is or may be interfering with the attainment or maintenance of a water quality standard, including a designated use.
In connection with the No Exposure Exemption being considered, USEPA is seeking comments on the issue of how to define "no exposure." Several important issues are listed for further review (but are not part of this proposed rule), including:

1. How to account for stormwater runoff from parking lots, roof tops, lawns and other non-industrial areas of an industrial facility;
2. Whether the construction of impervious surfaces, such as roofs to achieve no exposure that significantly increase stormwater runoff volume should be regulated to prevent adverse impacts to the receiving water simply due to increased quantity of flow;
3. Whether air emissions from roof vents or stacks should be considered in the evaluation of no exposure; and
4. Whether tight non-leaking drums, barrels or dumpsters are sufficient to quality for the no exposure exemption, or should there be a "potential to leak" evaluation included.

EL CAJON STORM WATER PROTECTION PROGRAM

FLOOR MATS, GREASE, OUTDOOR CLEANING, AND DUMPSTERS

In California, the storm water and sanitary sewer systems are separate. **They are *NOT* connected**. The sanitary sewer takes wastes from sinks, showers, and toilets to a treatment plant. The storm drain system collects polluted urban runoff and discharges without treatment, to creeks and rivers leading to ocean bays causing beach closures.

En California, el sistema de drenaje pluvial y el alcantarillado sanitario de aguas negras son independientes. **Estos sistemas *NO* están conectados**. El sistema de alcantarillado sanitario de aguas negras aleja desperdicios de fregaderos, regaderas, y escusados a una planta de tratamiento. El sistema de drenaje pluvial atrapa aguas pluviales contaminada por urbanización y fluye sin tratamiento alguno directamente a nuestros ríos, arroyos, bahías y mar provocando el cierre de playas.

CLEANING FLOOR MATS

Clean floor mats, filters and garbage cans in a mop sink, floor drain or proper outside area. **DO NOT** wash them in a parking lot, alley, sidewalk or street.

Limpie los tapetes de piso, los filtros y los botes de basura en un fregadero para trapeadores, desagüe de piso o en algún sitio apropiado afuera. **NO** los lave en los estacionamientos, callejones, veredas o en la calle.

RECYCLE GREASE & OIL

Recycle Grease & Oil. **DO NOT** pour it into sinks, floor drains, or onto a parking lot or street.

Recicle grasa y aceite. **NO** los arroje en lavaderos o desagües de piso ni en estacionamientos o calles.

DRY CLEANING METHOD

Use dry methods for spill cleanup (sweeping, cat litter, etc.) **DO NOT** hose down spills.

Use métodos secos para limpiar los derrames (escobas, aserrín, etc.). **NO** utilize mangueras para limpiar los derrames.

KEEP DUMPSTER AREA CLEAN

Keep dumpster area clean and lid closed. **DO NOT** fill it with liquid waste or hose it out.

Mantega el área alrededor del basurero limpia y la tapa del basurero cerrada. **NO** lo llene con desperdicios líquidos ni utilice la manguera.

WASHWATER DISPOSAL

Pour washwater into a janitorial or mop sink. **DO NOT** pour it out onto a parking lot, alley, sidewalk or street.

Arroje el agua empleada en la limpieza al fregadero para trapeadores. **NO** la arroje en los estacionamientos, callejones, veredas o en la calle.

It is illegal to purposefully or accidentally discharge pollution (anything other than rain water) into the streets, gutters, creeks, rivers, and ocean. To do so is in violation of El Cajon's Municipal Code 13.10 and the Federal Clean Water Act. Monetary fines and criminal charges may be issued.

Es contra la ley descargar contaminantes intencionalmente o accidentalmente (excepto agua de lluvias) a las calles, orillas de calle, arroyos, ríos, y océano. La descarga de contaminantes al sistema de drenaje pluvial es una violación del Código Municipal de la Ciudad de El Cajon (13.10) y de leyes Federales del "Clean Water Act". Multas y otras acciones legales podrían ser generadas en su contra.

ADOPT GOOD HOUSEKEEPING PRACTICES AND HELP KEEP OUR STREAMS, RIVERS, AND BEACHES CLEAN. FOR MORE INFORMATION, CALL **(619) 441-1653**.

ADOPTE PRACTICAS EFECTIVAS PARA EL MANEJO DE AGUAS PLUVIALES QUE REDUSCEN LA CONTAMINACIÓN Y AYUDE A MANTENER NUESTROS ARROYOS, RIOS, Y PLAYAS MÁS LIMPIOS. PARA MAYOR INFORMACIÓN LLAME AL **(619) 441-1653**.

STORM WATER PROTECTION IS IN GOOD HANDS...YOURS!

Operate a clean, dry shop. Sweep, mop or vacuum instead of hosing down garage floors or outdoor work areas.

Opere un negocio seco y limpio. Barra, trapée, o limpie con aspiradora en vez de regar con manguera los pisos de los garajes o las áreas de trabajo exteriores.

Prevent spills and leaks. Develop spill prevention and response procedures. Use drip pans and ground cloths under vehicles. Drain and recycle fluids from wrecked or leaking vehicles as soon as possible.

Prevenga los derrames y las goteras. Desarolle un plan para prevenir y responder a estos derrames. Use recipientes recolectores y trapos debajo de los vehiculos. Tire y recicle los fluidos de los vehiculos chocados o de los que tengan goteras tan pronto que sea posible.

Prevent wash water from entering storm drains. Use a commercial car wash facility for cleaning vehicles. It is illegal to allow car wash runoff from commercial vehicles to enter the storm drain.

Prevenga que la agua sucia entre en las alcantarillas. Use un negocio comercial del lavado de auto. Es ilegal permitir que la agua usada del lavado de vehiculos comerciales entre en las alcantarillas.

Protect outdoor work and storage areas. Cover equipment/ materials and work/ storage areas. Place bulk fluids in secondary containment.

Proteja las áreas de trabajo y almacenamiento exteriores. Cubra estas áreas y también los equipos y materiales. Ponga los fluidos de grandes cantidades en recipientes secundarios.

Clean parts in a self-contained sink/drum unit when working with solvents. Inspect parts-washing units daily for leaks and make necessary repairs immediately. Use aqueous cleaning solutions instead of solvents when possible. Recycle used solutions through a licensed hazardous waste hauler.

Limpie las piezas y los repuestos en una unidad de fregadero/ tambor cuando trabaje con solventes. Inspeccione las partes de la unidad de limpieza diariamente para detectar goteras y haga los arreglos necesarios inmediatamente. Use soluciones a base de agua en vez de los solventes cuando sea posible. Recicle las soluciones usadas por medio de una compañia con licencia para transportar deshechos peligrosos.

Dispose of waste properly. Recycle oil, oil filters and antifreeze. Never pour liquids down the gutter or storm drain.

Disponga de los deshechos correctamente. Recicle el aceite, los filtros de aceite y los anticongelantes. Nunca debe tirar liquidos en las alcantarillas o rejillas.

Storm water and the pollutants it carries flow directly into the nearest creek, river, lake or lagoon, eventually reaching the ocean. Do your part to help keep our waters clean for you, your family and our environment.

Las aguas pluviales llevan los contaminantes directamente a los arroyos, rios, lagos y lagunas, y finalmente se desembocan al océano. Haga su parte ayudando a mantener nuestras aguas para usted, su familia y el medio ambiente.

This poster is brought to you by the San Diego Regional Copermittees. To report complaints or for more information, call the Regional Stormwater Hotline at 1-888-846-0800.

Storm Water Pollution Prevention Program
THINK BLUE
You're the solution to storm drain pollution.
Protecting our beaches, bays, and waterways

project clean water

VOL. 2

GENERAL BEST MANAGEMENT PRACTICES FOR INDUSTRIAL AND COMMERCIAL FACILITIES

In accordance with Section D.3.b of the Municipal Permit, the City of El Cajon developed an inventory of general best management practices that may be selected where appropriate for implementation at all industrial facilities and high priority commercial facilities of the Jurisdictional URMP and revisions. General BMPs emphasize *non-structural* BMPs as an initial step toward low-cost, feasible implementation. In addition to general BMPs, high priority industrial and commercial facilities are also required to implement applicable activity-specific BMPs listed in the City's Updated JURMP document (Appendix C.3.2 and C.3.3). General BMPs are listed below in three tables:

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TABLE 1. GOOD HOUSEKEEPING BMPS 1
TABLE 2. MATERIALS HANDLING BMPS 3
TABLE 3. EQUIPMENT MAINTENANCE BMPS 7

In addition to the information provided within this section, more specific BMP information can be obtained from the Caltrans Storm Water Quality Handbooks (2003) and the California Storm Water Best Management Practice Handbook for Industrial/Commercial Facilities (2003).

TABLE 1. GOOD HOUSEKEEPING BMPS

BMP Name	Purpose	Description
Routinely Report Any Observed Non-Storm Water Discharges	Prevent improper handling and disposal of significant materials that may be spilled or deposited into the storm drain system	Develop adequate routine reporting procedures so personnel can identify an act of illegal dumping or suspicious non-storm water discharges; Post signs with information regarding appropriate reporting procedures
Perform Regular Cleaning	Eliminate the accumulation of pollutants (dirt, surplus materials, spilled or dropped substances, litter, and debris) that collect in areas that can discharge runoff to storm water. Such areas include maintenance shops, manufacturing facilities, metal fabrication shops, mechanic garages, loading docks, and storage areas	Maintain regular sweeping and cleaning schedules; Keep work areas dust free and orderly; Keep floors and ground surfaces dry using brooms, shovels, vacuum cleaners; Collect and dispose of garbage regularly
Avoid Hosing Down the Site	Eliminate contaminated runoff generated by "wet" cleaning or hosing down of outdoor paved areas such as work stations, loading/unloading sites, maintenance shops, storage areas, and any areas that may contribute pollutants to storm water	Dry methods of cleaning include sweeping, using damp rags or mops and vacuums; If hosing is necessary the downstream storm drain should be permanently or temporarily modified with a plug such as a rubber mat, filters, absorbent blankets or bermed with sandbags.
Perform Regular Pavement Sweeping	Prevent trash, litter, and particulate matter from accumulating on paved surfaces and reduce the potential for these materials to wash into storm drains during storm events	The frequency of regular dry sweeping should be scheduled according to the quantity, toxicity and usage of materials, proximity to source area, evidence of exposure to storm system, probability of exposure, and sensitivity of receiving water
Place Trash Receptacles in Appropriate Locations	Promote the proper placement, handling, and disposal of waste materials to reduce spillage and accumulation in outdoor areas that are exposed to storm water runoff	Place trash receptacles in accessible locations and in sufficient numbers; Train personnel as to the location of trash receptacles and waste handling areas
Train Employees to Properly Dispose of Wastes	Keep employees and personnel informed and aware of the most recent BMPs regarding waste management	New employees should be trained regarding proper waste handling such as warnings about pouring deposit wastes into the storm drain, reporting observed discharges, and recycling procedures; All employees should be trained annually
Permanently Seal Floor Drains that Discharge to the Storm Drain System	Eliminate connections that act as a pathway for spilled or leaked pollutant materials to enter the storm drain system	Interior floor drains should be permanently sealed (whenever safe for structural integrity) to prevent accidental illegal dumping of contaminants into the storm drain system
Confirm that No Industrial Sinks are Connected to the Storm Drain	Eliminate direct connections that can introduce pollutants to the storm drain system	Sinks in industrial areas should be connected to the sanitary sewer system or appropriate disposal locations; Review and inspect "As-built" piping diagrams and building or site plans to verify that sinks are not connected to any storm drain
Store Waste and Recycling Materials in Proper Containers	Protect waste and recycling materials from exposure to wind, weather elements and scavengers that can transport pollutants to storm water	Dry waste such as light scrap metal, floor sweepings, metal chips and paper that can be affected by wind should be kept in sealed containers; Keep dumpsters closed; Seal recycling drums; Label containers, keep them readily accessible and empty containers regularly

BMP Name	Purpose	Description
Control Roof Downspout Discharge	Where possible, divert runoff collected on roofs, canopies and other coverings from discharging into areas of potential pollutant use or storage	Downspouts should be directed to avoid critical areas such as fueling, fabrications, lead tool, and dye storage of hazardous waste storage areas
Minimize Storm Water Run-On from Adjacent Facilities and Properties	If possible, divert run-on generated by neighboring facilities or adjacent properties before it can enter the site grounds. This should be done in such a manner as to prevent flooding of adjacent property.	Berming, diversion ditches, and dikes can direct flow away from the site; Vegetated strips, grass swales, or infiltration basins and trenches can impede slow incoming flow
Conduct Refresher Courses in Operating and Safety Procedures	Reduce spills and accidents that may cause significant materials to contaminate the storm drain system	Personnel should be required to have training and refresher courses to learn new procedures and policies regarding equipment operation and review correct operating and safety procedures
Designate Special Areas for Draining or Replacing Fluids	Eliminate improper handling and disposal of waste and reduce accidental spillage of significant materials in an unprotected area	Motor oil, coolants, and other potential pollutant fluids should be drained and replaced at specific areas designated for this activity
Drain All Fluids From Stored or Salvaged Vehicles and Equipment	Eliminate the potential for spillage such as oil, antifreeze, and hydraulic fluid from vehicles and equipment under long-term storage	All oil and other fluids should be drained from vehicles being stored long-term or salvaged and the oil should be collected and recycled; Post signs on drained vehicles
Completely Drain Oil Filters before Disposal	Reduce potential for contamination of storm water due to spills and leaks from used oil filters	All filters should be completely drained into collection drums for recycling and disposal of used oil; Post signs stating requirements to completely drain filters before disposal
Wash Equipment and Vehicles in Designated Areas	Contain runoff that may carry detergents, oil, and/or grease from vehicle washing and eliminate potential for contact of polluted water with the storm drain system	Facilities should have designated, bermed wash areas that contain wash water and drain to the sanitary sewer, a sump, or to a filter
Discharge Wash Water to a Sanitary Sewer	Eliminate runoff generated by cleaning of vehicles, equipment, and floors from entering the storm drain	All washing should occur in designated contained areas and wash water should be discharged to a sanitary sewer, collected in dead-end sump tanks and transported to a treatment facility or filtered
Reduce the Amount of Liquid Cleaning Agents Used	Reduce potential for pollution from cleaning agents such as soaps and detergents used in any maintenance operations including vehicle, equipment, aircraft or ship cleaning, metal work, and painting practices	Use products other than liquid cleaning agents to the maximum extent practicable (MEP); Substitute cleaning methods such as wire brush scraping or using a bake oven
Substitute Non-Toxic or Less-Toxic Cleaning Solvents	Minimize exposure of organic solvents used for cleaning equipment and parts to storm water discharge	Substitute non-toxic or less-toxic cleaning agents; Use non-caustic detergents, water-based degreasers, non-chlorinated solvents and phosphate-free detergents; Manage cleaning materials properly

TABLE 2. MATERIALS HANDLING BMPS

BMP Name	Purpose	Description
Use Solvents Efficiently	Reduce potential for spills and leaks of cleaning solvents in repair and maintenance operations	Reuse solvents and use sparingly; Pre-soak parts in "dirty" solvent before placing in fresh solvent to reduce the volume of solvent used
Use Outside Contractor for Handling Used Solvents and Other Significant Materials	Prevent improper storage, handling, and disposal of solvents, oils, paint thinners, and other toxic chemicals to reduce potential for spills and contamination of storm water	Use private contractors such as Safety Kleen to handle the disposal and replenishing of toxic chemicals
Protect Storage Containers from Being Damaged by Vehicles	Prevent vehicle impact damage to storage containers such as ruptures and cracks that may lead to significant spills and leaks	Install bollards or traffic barriers, fences and curbs to protect containers stored in locations accessible to vehicles
Centralize Liquid Solvent Cleaning to One Location	Promote conservative use of liquid solvents in designated contained areas to reduce the potential for spills, illegal dumping, and improper use of the solvent	Promote cleaning of parts using "dry" methods; if liquid solvents are necessary, clean in central locations to reduce the number of personnel using solvents and promote proper use and disposal; ensure that cleaning locations are properly operated and maintained
Properly Store Containers	Prevent exposure of significant materials or potential pollutants stored in outdoor containers to storm water	Proper storage includes: provide 3 feet of aisle space to provide access for inspections, store drums and bags away from traffic routes, stack containers according to manufacturers instructions, store liquid containers in bermed area
Use Overpack Containers or Containment Pallets to Store 55-Gallon Drums Outside of Storage Areas	Contain and prevent chemical, oil, solvent, or liquid leaks from 55-gallon drums to prevent contamination of storm water	Overpack containers and spill prevention or containment pallets are secondary containers, generally constructed of plastic; Secondary containment should be adequate to hold the contents of the storage barrels should they break or leak
Provide Roof to Cover Source Area	Prevent contact of storm water rainfall with significant materials in critical areas	Construct a roof, canopy, or effective covering for critical areas such as fuel transfer, loading/unloading, mechanical shops, metal fabrication and hazardous material storage areas
Pave Bermed Areas	Prevent infiltration of spilled material into the soil and subsequent transmission to the storm drain system	Critical areas designated for material handling and storage, equipment repair, and maintenance operations should be paved with impervious material such as concrete, asphalt, clay or plastic and curbed by berms and dikes
Repair Leaky Roofs	Keep storm water from leaking into covered areas where hazardous substances, parts equipment, vehicles and materials are stored	Repair leaky roofs as required for each building, move stored equipment and materials to another covered area, train personnel to notify supervisors when leaks are observed

BMP Name	Purpose	Description
Recycle	Reduce the amount of hazardous and non-hazardous waste material such as solvents, oil, scrap metals, wash water and absorbent materials used at the site and prevent exposure of significant materials to storm water activity	Recycling collections should be conducted weekly and more frequent pickups may be established based on quantity, toxicity, probability of exposure of materials to storm water, length of storage time, evidence of exposure, and sensitivity of receiving waters
Control Spills	Reduce potential for spills and implement proper containment in the event of a spill or leak to prevent the contamination of storm water runoff	Material Safety Data Sheets (MSDS) should be followed for handling, storage and cleanup of significant materials; For small spills, use absorbents such as sand, straw, or sawdust; For larger spills, use spill kits, boom, and other response supplies
Label all Drums, Cans, Containers, Tanks, and Valves	Reduce the potential for misuse or spillage of stored materials; Ensure that appropriate procedures, equipment and storage containers are used to prevent spills and ensure that in the event of a spill the material is properly identified and the appropriate response is implemented	All containers should be labeled according to its contents (solvent, gasoline) hazardous substances should be labeled regarding the potential hazard (corrosive, radioactive, flammable, explosive, poisonous); Department of Transportation (DOT)labeling requires that labels be prominently displayed on transported hazardous and toxic materials
Construct Berms or Dikes Around Critical Areas	Provide secondary containment for critical areas such as material handling and storage, equipment repair and maintenance areas to divert spills and leaks away from the storm drain system	A raised berm or dike should be placed around all critical areas or source areas with a high potential for release of pollutants
Use "Doghouse" Design for Outdoor Storage of Small Liquid Containers	Reduce the potential for pollution from small containers of liquid materials (paints, solvents, antifreeze, and oil) stored outdoors	Store small containers, cans, and pails carrying toxic contents inside buildings or in a "doghouse"; A doghouse design consists of a two walled shed with a peaked roof to divert rainfall and flooring equipped with spill prevention pallets
Do Not Store Used Parts or Containers Directly on the Ground	Prevent potential contamination from used parts covered in oil and grease, leaks in 55-gallon drums and flammable storage lockers by limiting direct contact of these stored materials with ground surfaces	Store used parts, storage drums and flammable materials indoors; store small parts in sealed containers, place drums on pallets; Use waterproof tarpaulins to protect ground surface and to cover stored materials
Store Batteries in a Secondary Container	Prevent contamination such as battery acid and caustic material from batteries into runoff	Store lead-acid batteries and charging units on pallets, in a bermed area under a canopy or awning; Used and cracked batteries should be stored in sealed containers
Keep Open Flames away from Flammable Material	Prevent accidents and ensure safety of personnel and staff as well as prevent polluted or toxic ash, rubbish, and debris generated by accidents, explosions, fires, and other chemical reactions from entering the storm drain	Open flames and smoking are prohibited within 50 feet of flammable materials (including paints); Use spark-proof tools when closer than 50 feet and post warning signs in areas where flammable materials are stored
Use Door Skirt or Seal	Contain spills of toxic or potential pollutant materials during loading and unloading activities and prevent contact of leaking material with ground surface runoff	Retrofit doorways used for loading with rubber or plastic door skirts; The door skirt acts as a strip barrier that encloses and seals the open end of the trailer with the open door of the loading dock during loading and unloading operations

BMP Name	Purpose	Description
Employ Proper Handling Procedures to Transport Materials and Waste	Prevent damage such as fractures or ruptures (which can create leaks and spills) during transport of drums, containers and storage boxes carrying potential pollutants	Drums should be moved using a barrel cart or by placing the drum on a pallet and moving by forklift; A minimum of two persons should assist the forklift operator in transferring a drum to or from a pallet; Metallic strapping should be used to secure stacked drums
Control Dust and Particulates	Prevent pollution of storm water from indoor and outdoor industrial processes such as metal finishing, painting, sanding, grinding, sawing, milling, sandblasting, welding, and cement manufacturing that generate significant quantities of dust and particulates	Control the emission of dust particles generated by industrial processes by using filters, baghouses, electrostatic precipitators, cyclone concentrators, waterwalls, and other measures
Store Liquids and Significant Materials within a Building or Covered Area	Prevent leaks and spills of significant materials stored, handled, or transported outside, to minimize contamination of storm water	Store significant materials within an enclosed building or covered area on an impervious surface such as concrete to MEP; Direct contaminated runoff to a storm water treatment facility or containment; Clean spills and leaks
Recycle Pressure Wash Solvents	Eliminate discharge of waste water containing dirt, oils, grease, and paint from pressure wash systems to the storm drain	Pressure wash wastes should be recycled using a closed loop system or "zero-discharge system"; Train personnel on proper usage of pressure wash systems
Provide Overfill Protection	Prevent overflows that may occur during regular fueling operations or transfer of fuels and toxic liquids to vehicles, equipment, aircraft, and ships from exposure to storm water	Retrofit existing and new tanks with overfill prevention equipment such as automatic shut off valves, restricted flow devices, or alarms that indicate when the tank is almost full, and install secondary containment
Monitor Major Fueling Operations	Prevent accidental overflows containing fuels and toxic liquids during high-volume transfers (such as for fuel tankers) that may contaminate storm water	Implement a policy mandating second party monitoring of fuel operations; Monitor high-volume transfers; Train personnel for appropriate emergency spill response actions
Provide Absorbent Booms in Unbermed Fueling Areas	Contain accidental spills and leaks during fuel transfer operations and prevent contamination of runoff	Portable absorbent booms should be stored and readily available at fueling areas; These booms should be used to contain spills and leaks or spills
Eliminate Topping Off Tanks	Eliminate fuel spills from overfilling tanks and prevent contact of fuels with ground surface and storm runoff	Develop a policy to discourage "topping off" fuel tanks; Post warning signs stating explicit penalties
Install Leak Detection System	Detect leaks from underground storage tanks (USTs) that may leak fuel or toxic liquids and contaminate the soil or groundwater	Install leak detection systems such as automatic gauging, vapor monitoring, groundwater monitoring wells and interstitial monitoring; Keep a close inventory on all fuel transfers in and out
Designate Areas for Fueling from Mobile Fuel Tankers	Contain accidental spills and leaks from mobile fuel tankers (MFTs) to designated areas	Minimize the use of MFTs and perform fuel operations in designated areas particularly when a large number of vehicles are in use
Restrict Access to Storage Tanks	Prevent toxic discharges from storage tanks to the ground due to unauthorized handling and vandalism	Restrict access to tanks and valves to authorized personnel and properly trained employees; Supply a locked gate and fence the area around tanks

BMP Name	Purpose	Description
Divert Drainage to a Low-Flow Sump	Treat contaminated flows that drain directly into the storm drain system	Use structural controls such as a low-flow sump, oil/water separator, wet pond or infiltration basin so that spilled material is not discharged into the rest of the storm drain system

TABLE 3. EQUIPMENT MAINTENANCE BMPS

BMP Name	Purpose	Description
Restrict Access to Area and Equipment	Reduce pollutants in storm water runoff caused by the release of significant materials due to vandalism of vehicles and facility property, or unauthorized trespassing	Vehicle, equipment and storage areas should be fenced, gated and access restricted to authorized personnel; Fences and gates should be properly maintained and additional measures such as lighting of the area, security guards and alarms should be used appropriately
Keep Equipment and Vehicles Clean	Reduce oil and grease from leaky vehicles and equipment; These pollutants may accumulate on impervious runoff areas and can be washed into the storm drain	Regularly clean and maintain vehicles and equipment using dry methods; Centralize liquid solvent cleaning to one location and wash vehicles in designated areas
Maintain Equipment in Good Condition	Prevent spills and leaks due to corrosion, loose fittings, poor welding, and improper poorly fitted gaskets on vehicles and equipment	Equipment should be kept in good working condition and inspected regularly for fluid leaks; equipment that is leaking or in poor working condition should be repaired or replaced
Implement Qualifying Tests for Equipment and Vehicle Operators	Prevent accidents due to employee misuse or unfamiliarity with operating procedures that may result in leaks or spills that expose significant materials to storm water	Implement qualifying tests for personnel operating equipment or vehicles; Train personnel in safe operating procedures and basic maintenance and spill response procedures associated with particular equipment and vehicle operation
Dispose of Obsolete Equipment, Inoperable Vehicles, and Surplus Materials	Reduce the likelihood of storm water pollution due to oil and lubricant spills from leaky engine parts in obsolete equipment, inoperable vehicles and surplus materials stored on-site.	Perform proper off-site disposing and recycling of old parts, equipment, and surplus materials based on implementer's judgments of facility operations and conditions
Check Vehicles and Equipment for Leaks	Prevent contamination of storm water due to fluids from leaky engine parts on stored vehicles, aircraft or equipment	Stored or salvaged vehicles and equipment at the site must be inspected for oil and fluid leaks; Use drip pans to catch leaks and clean stains using "dry" methods
Park Vehicles or Equipment Indoors or under a Roof	Eliminate or reduce exposure of pollutants like oil and grease leaking from parked vehicles and equipment to storm water	Park and store vehicles and equipment indoors and under a roof, canopy, or other covering when available
Park Vehicles on an Impervious Surface	Prevent soil contamination and contamination of runoff; Prevent infiltration of spilled pollutants on ground surfaces into soil	Vehicles should be parked on an impervious surface such as concrete and asphalt that cannot be readily penetrated by rainfall
Use Drip Pans under Leaking Equipment	Contain fluids that may leak from equipment such as pumps, air conditioners, and boilers until equipment can be properly repaired or replaced	Drip pans should be placed under leaking equipment to collect any leaking fluid as a temporary BMP until the equipment is repaired or replaced
Perform Equipment Maintenance at Designated Areas	Contain oil, grease, engine coolant, and any pollutants generated by routine maintenance activities of small equipment such as sandblasters and sprayers and large equipment such as construction equipment, tanks, aircraft, and boats	Maintenance of equipment should only be performed in specific predetermined areas such as hangars, shops, garages, or dry docks; all employees and personnel should be trained and informed as to the location of these areas and appropriate BMPs to reduce and contain pollutants

BMP Name	Purpose	Description
Designate Areas for Washing Non-Vehicular Air Filters and Other Greasy Equipment	Contain oil and grease waste generated during cleaning and maintenance of mess hall cooking grills, air filters, and facilities where significant grease and soot can accumulate	Greasy equipment should be cleaned and maintained in designated areas where wash water and grease are contained and diverted to a sump or discharged to the sanitary sewer
Conduct Maintenance within Building or Covered Area	Prevent deposits and stains from oil, grease, or solvents spilled or leaked during maintenance activities from contacting storm water	Conduct maintenance of equipment and vehicles within an enclosed building or covered area such as hangars, garages, and shops; Clean all spills and leaks immediately using rags or dry absorbents

Date
Facility Name
Facility Address
Facility Representative

Subject: Stormwater Pollution Prevention requirements for your mobile business

Dear Business Owner/Operator:

As part of local water quality regulations, municipalities in the San Diego region are required to work with businesses conducting mobile operations to prevent stormwater pollution. Best Management Practices, commonly referred to as "BMPs", are operational efforts consisting of housekeeping practices, spill control and prevention, and proper use and storage of materials that are designed to reduce the environmental impact from certain activities. Using BMPs will help prevent pollution from your business. Proper implementation and maintenance of BMPs are critical to their effectiveness.

You have been identified as a mobile businesses operating in the San Diego region. Your business is required to implement the following regional BMPs during your business operations to prevent pollution.

- **Storm Water Training**
- **Contain and Clean Up Spills (Spill Kits)**
- **Properly Handle All Waste (Solid, Liquid and Hazardous)**
- **Protect Storm Water Conveyance System: (Streets, Gutters and Alleys)**
- **Provide Proper Handling and Containment Of Materials**
- **Provide Equipment Washout Area**

The attached document provides details on how to properly implement each of the required BMPs. Additional details about BMPs for mobile businesses are available on the "Project Clean Water Toolbox" website at (http://www.projectcleanwater.org/bmp/). Please evaluate and revise your practices as necessary to ensure that you do your part in preventing stormwater pollution.

You are currently on record as doing business in the municipalities listed below. You may also want to verify that you meet their regulations, as the BMP requirements for each city may vary slightly. If you have any questions or concerns, please contact the staff of the jurisdiction where you are conducting business.

Respectfully,

Required Minimum BMPs
For
Mobile Businesses

1) Storm Water Training:

Proper training is required to prevent the discharge of pollutants in to the storm water conveyance system. Train all workers to properly identify, transport and manage materials to prevent a discharge to the storm water conveyance system. Train all employees on discharge prohibitions, storm water best management practices (BMPs), pollution prevention and methods to control, contain and clean up spills.

2) Contain and Clean Up Spills (Spill Kits):

Keep written spill procedures and cleanup materials in each vehicle. Spill kits must be appropriate for materials used in the business activities. In the event of a spill immediately contain the spill on site. Use appropriate equipment and/or materials to clean up the spill. Immediately report any spill that cannot be completely contained to the jurisdiction where the spill occurred. Sweep up the material and dispose of it properly. If the spill is hazardous, contact the appropriate reporting agency and take appropriate clean up and disposal actions.

3) Properly Handle All Waste (Solid, Liquid and Hazardous):

Before starting a job consider the weather conditions and determine how to dispose of all waste. Properly remove all waste from the worksite or place in proper waste containers with lids. Never pour liquids into trashcans, dumpsters or storm drains. Liquid non-hazardous waste may be disposed to the sanitary sewer, if appropriate, or placed in sealed containers, removed from the worksite and disposed of properly. Inspect and label all hazardous waste containers prior to removal. For details on the management and disposal of specific chemical waste contact the County Hazardous Materials Division at (619) 338-2231.

4) Protect Storm Water Conveyance System: (Streets, Gutters and Alleys)

The storm water conveyance system is a direct connection to creeks, rivers, bays and the ocean. At the work site, locate the probable pollutant discharge points and install appropriate materials to contain the pollutants. Capture and remove pollutants from your activity as close to the work area as possible. Properly dispose of any collected liquid waste. Check with your local jurisdiction to determine if permits are required prior to disposing liquid wastes to the sanitary sewer system (mop sink, toilet, etc.) or whether they can be directed to landscaped areas that will not run off into the storm water conveyance system.

5) Provide Proper Handling and Containment Of Materials:

To prevent spills or discharges, all materials must be properly contained during use and transport. Provide secondary containment, to the maximum extent practicable, for all liquids in the event of spills, punctures or leaks during use and transport. Store materials and equipment securely in the vehicle to prevent loss. Provide leak proof lids for liquids and cover all materials and waste while not in use and during transport. Maintain a materials inventory and material safety data sheet (MSDS) if hazardous materials are being used or transported. Inspect and label all chemical containers.

6) Provide Equipment Washout Area:

Equipment washout areas should be located away from any storm drain inlets or open drainage facilities. The washout area can be a container, a berm or a liner to collect and contain liquids and prevent runoff. Remove washout out waste from the job site and dispose of properly.

- For additional details on mobile business best management practices consult:
  - Project Clean Water Tool Box at **www.projectcleanwater.org/bmp**
  - California Storm Water BMP Handbook at **www.cabmphandbooks.com**

These practices represent the minimum requirements. Contact the local jurisdiction where the job is located, as there may be more stringent requirements.

Business License and the Storm Water Program

Goal: Use information collected and stored in the Business License database to support the Storm Water Program inspection and public outreach components and potentially increase revenues for the Business License Program.

Process:

1. The Storm Water group has access to the Business License database.

2. The Finance Department provides the Storm Water group with a weekly or bi-weekly list of new businesses added to the Business License database.

3. Storm Water staff checks the business type information, SIC code, number of employees, and APNs for accuracy and adds needed information to the Business License database.

4. Storm Water staff may conduct site visits to new businesses when unsure about information that was provided.

5. The Storm Water section updates business inventories by appending new businesses that may present a high threat to water quality.

6. Develop a Storm Water informational sheet for Business License applicants. The Business License staff would hand out the informational sheet at the time. (Supports Storm Water outreach component)

Appendix A.6

Why It's Important to Keep Trash, Sediment and Debris Out of Our Storm Drains

Each year, the City of El Cajon conducts twice-yearly cleanups of all city storm drain inlets and drainage channels to remove trash, sediment and debris. In addition to this the City has developed a comprehensive street sweeping program with a twice-a-week sweeping cycle for commercial areas, a once-a-week sweeping cycle for industrial areas, and a biweekly sweeping cycle for residential areas. The City adheres to this sweeping schedule except when weather or equipment availability makes adherence to the sweeping schedule impossible. During times when street sweeping is impossible, City staff conduct "Storm Water Patrols" to identify localities where more limited, localized cleanups can be accomplished. As a result of the effort, City crews collect several thousand cubic yards of trash, sediment and debris each year in our efforts to keep our streets and storm water systems clean.

So, Why Is All That Trash In The El Cajon Drainage Channels?

Yet, in spite of these efforts, trash and debris continues to collect in our drainage channels and storm drains in large amounts, polluting the water and creating an unsightly mess. The reasons behind this trash accumulation range from problems with the homeless living in the drainage channels to thoughtless littering by average citizens. The intent of this article is to address the problem of littering so that all El Cajon residents can understand the importance of not littering, and by doing so, become a part of our community's solution to storm water pollution.

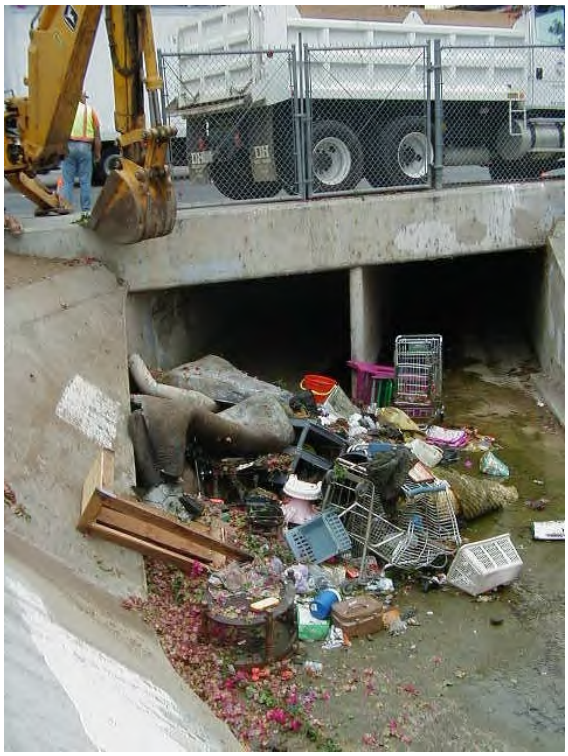

An analysis of the trash removed from City streets, storm drains and drainage channels reveals that a majority of the trash originates from sales at fast food restaurants, convenience stores, and take-out delicatessens. Well more than half of the trash removed consists of disposable beverage cups and food wrappers. The following two articles contain helpful hints for both business owners and customers to ensure that trash finds its was into trash trucks instead of finding its way into our streets, storm drains, drainage channels and ultimately the beaches.

As a concerned citizen, you can be proud that you are part of the Solution to Storm Water Pollution and not part of the problem. Remember, "Only Rain in the Drain!"

For more information, contact the El Cajon Storm Water Protection Program at (619) 441-1653, or use your web browser to access our program at:

http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Major Causes of Urban Runoff Pollution

What day-to-day activities cause urban runoff pollution? Here are some of the biggest causes:

- **Using automobiles.** Particles in auto exhaust contain toxic organics and heavy metals. Dripping motor oil and wear from brake linings and tires deposit pollutants on streets and highways.
- **Maintaining vehicles.** Vehicle maintenance results in drips and spills of oil, coolant and other fluids. When performed outdoors, these fluids soak into asphalt and concrete pavements until they are washed away with the next storm. Water from washing vehicles outdoors carries pollutants directly to the nearest storm drain.
- **Allowing drainage from the shop floor to flow outside.** Allowing process or clean-up water to drain out onto the street is an often-seen practice that transports pollutants to the storm drain.
- **Cleaning tools or equipment outdoors.** Cleaning or rinsing containers, tools, floor mats or other items outdoors discharges pollutants such as chemicals, detergents, oils, etc.
- **Dumping wastes.** People looking for a "shortcut" to dispose of used oil, paint or other wastes dump them directly into storm drain inlets, causing pollution.
- **Landscaping and grounds maintenance.** Overuse, or indiscriminate use, of fertilizers and pesticides results in these materials running off landscaped areas into storm drains.
- **Allowing dumpster areas to become untidy.** Liquids that leak from dumpsters or garbage left outside the dumpster get washed away during a storm.
- **Building or remodeling facilities.** Disturbing soil and vegetation during construction greatly increases erosion; sediment is a pollutant. During construction, proper material handling and waste disposal is especially important because much of the work is performed in areas subject to rainfall.

What are the consequences of these activities? The most immediate effects can be seen: many creeks have an oily sheen near storm drain outfalls, litter is left behind by receding waters after a storm, layers of oil-and-grease-laden sediments accumulate, and dead animals are occasionally found on beaches.

But the most serious effects are more subtle. Some toxic substances affect critical life-stages of certain organisms. Even if we do not usually see, or think about, these organisms (such as algae or mussels) they are part of the food supply for other plants and animals, including fish and birds. Pollutants in the aquatic environment disrupt the food chain. Other effects of urban runoff pollution include contamination of water supply sources and loss of recreational activities such as fishing, swimming, and boating.

People can stop storm water pollution because people cause it. By making small changes in the way we live and work, we can reduce the pollution we produce.

El Cajon Storm Water Protection Program

Best Management Practices for Mobile Businesses

Mobile businesses have the potential to pollute storm water through their everyday business activities. By implementing Best Management Practices (BMPs), mobile businesses can prevent storm water pollution.

Here are some examples of the types of mobile businesses regulated by the City of El Cajon:

- Auto Repair, Detailing and Washing
- Carpet, Drape, or Furniture Cleaning
- Fire Equipment and Sprinkler Maintenance
- Landscaping
- Pest Control Services
- Pet Grooming
- Portable Grooming
- Portable Sanitary Services, including Plumbing
- Power Washing Services
- Pool, Spa, and Fountain Maintenance
- Any mobile construction business (e.g. cement work, masonry, painting and coating)
- Any mobile business that utilizes water

Don't risk a fine

Under the authority of the State and Local Laws, the City of El Cajon can issue substantial fines if anything other than rainwater enters a gutter or storm drain. So, become part of our community's Storm Water Pollution Solution and:

✓ **Never** allow wash water to flow into the gutter or storm drain.

✓ **Never** dispose of wash water to streams or creeks where it can flow into wetlands or waterways.

✓ **Remember:** Only clean water should be allowed to run into gutters or storm drains, as they empty into our rivers and sea without any treatment. The drain is just for rain.

Wastewater containing oil must be passed through an oil separator before disposal to public sewer. Portable separators are available or wastewater can be stored in a tank and then emptied into a separator at your garage base. It **is not** recommend engines be cleaned as a mobile operation, due to the difficulties in handling large quantities of oil-contaminated wastewater.

Biodegradable detergents

Use biodegradable alternatives wherever they are available.

Although biodegradable products are less damaging to the environment, run-off containing these products must not be allowed to enter storm drains.

Note: Biodegradable detergents have been designed to be easily broken down by the microorganisms present in the sewage treatment process. Consequently, biodegradable products are designed to be eliminated at sewage treatment plants and are **not** environmentally-friendly products that should find their way into our storm drains, streams and the ocean.

Natural products

Natural products are **not** always harmless. Many 'natural' products are highly toxic. Be sure and read all instructions and follow the same guidelines for natural products as for other chemicals.

If you have questions, please call the El Cajon Storm Water Protection Program at (619) 441-1653.

What's the Scoop on Pet Waste

Bacteria - just the thought makes us squirm. We battle bacteria in our homes, but what about bacteria on our beaches and in our water? About 15 years ago, a water quality study demonstrated that water in our rivers and at our beaches was "unsafe" for human contact due to bacteria levels. But, where does all the bacteria come from? Certainly, overflows from sewage treatment plants can add to bacteria levels. But how about another culprit—how about our pets?

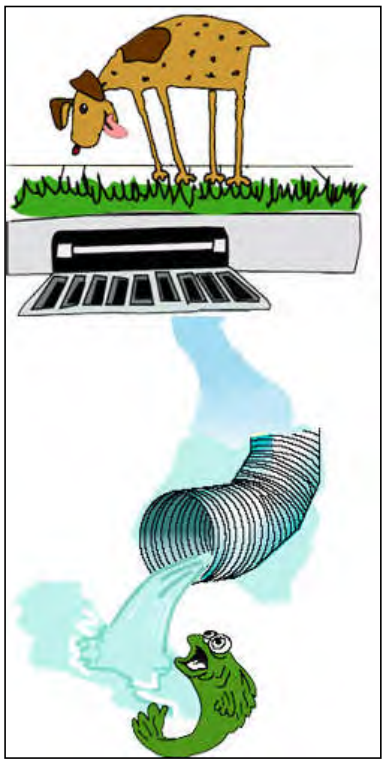

Pet waste contains bacteria, parasites and nutrients, all of which pollute our rivers and beaches. But could it really be that our pets help pollute our waters? Let's look at the numbers. A review of pet registration records reveals that there are at least 10,000 dogs in the City of El Cajon, and probably even more cats. Each dog produces an average of a half-pound of waste per day. That's 5,000 pounds of dog waste per day and 1.8 million pounds per year! Unfortunately, much of this waste is left lying around outside. As raindrops fall on the waste, particles wash away in the rainwater. This contaminated rainwater will contain bacteria, nutrients and parasites that eventually reach the storm drain system, and our local streams, rivers and beaches. It is because of this pollution that many beaches are closed to swimmers.

So what can we do? First of all – always pick up "your" poop and dispose of it properly. When walking with your pet, take a plastic bag or paper cup along and dispose of the waste properly by:

- ✓ Flushing pet waste down the toilet, or
- ✓ Putting pet waste in the household trash after securely wrapping it. (Never put pet waste in a landscape waste container or the compost bin), and
- ✓ Be aware of and follow the Storm Water Management Ordinance that governs pet waste cleanup. The Storm Water Management Ordinance states, *"Pet waste shall not be disposed to the storm water conveyance system or receiving waters."* Remember that, if not cleaned up and disposed of properly, pet waste will eventually find its way into the storm drain system.

You wouldn't want to live in a city that lacked a public sewer system. Likewise, not cleaning up and properly disposing of pet waste can be a pollution problem. You can be an important part of this pollution solution. Report any violations or other problems you witness by contacting the El Cajon Storm Water Protection Team at (619) 441-1653 or calling the Regional 24-hour Storm Water Hotline at 1-888-846-0800. Information and articles are also available at the El Cajon Storm Water Website at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

What You Can Do As A Business Owner to Keep Our Storm Drains Clean

Contaminants from your facility can contribute to polluted runoff when floors and outside areas such as sidewalks, patios and parking lots are not maintained or cleaned properly. Make an effort to educate your customers by speaking to them about not littering, or by posting some signs.

Hints On Keeping Floors and All Outside Areas Clean:

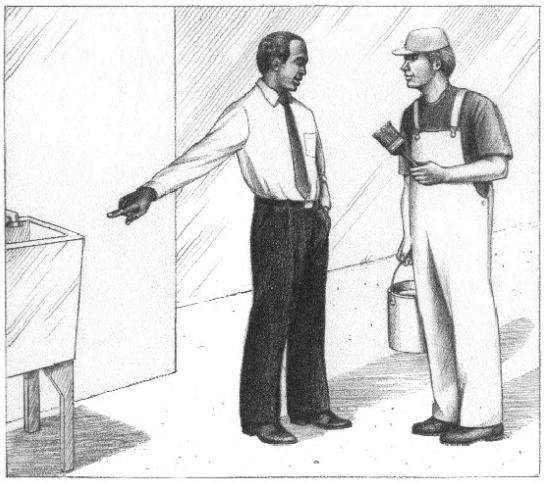

- Keep all outside areas (dumpsters, parking lots, etc.) free of trash and debris.
- Use absorbent for liquid spills, then sweep or use a slightly wet mop to finish cleaning outside areas.
- Regularly inspect and clean out grease traps.
- Avoid spilling onto floors or other surfaces through good housekeeping.
- Control litter by sweeping and picking up trash on a regular basis.
- Never dispose of wash waters to the storm drain.
- Use “dry” cleaning methods (sweeping, vacuuming, etc.) on sidewalks and parking lots and dispose of waste properly.
- Use damp mop to clean floors, and contain the wash water for proper disposal (sewer, on-site treatment, etc.).
- Label all storm drain inlets “No Dumping”.
- Clean up spills immediately to minimize safety hazards and deter spilling.
- Train all employees. Your success depends on an effective training program.

What Works In Parking Lots:

- Use dry cleaning methods to clean parking lot pavement – absorbents, brooms, or wire brushes.
- Clean up sediments and other solids from parking lots immediately to prevent them from blowing or washing away.
- Mechanically remove loose debris before washing the lot with water.
- Dispose of parking lot debris properly. To determine the proper disposal method, contact the facility that you expect to take the material to for disposal.
- Clean parking lots early in the day if heavy rains are forecast.
- Assign numbered parking spots for each driver or vehicle. This helps to identify leaking vehicles so they can be repaired.

- Pressure wash pavement only when necessary. Avoid the use of acids and other harsh cleaners.
- If pressure washing is used, wash with water only. Be aware that dissolved pollutants or cleaning products can travel through underlying soils and contaminate groundwater.

Keep The Trash inside Trash Bins or Trash Cans:

- Don’t put liquids in trash bins or trash cans.
- Place trash bins or trash on concrete surfaces.
- Keep lids tightly closed to keep the rain out.
- Assign someone to regularly clean up the ground around trash bins.
- If a trash bin or trash can leaks, immediately repair or replace it.
- Make sure that storage containers are in good condition and lined with a material that will not deteriorate.
- Trash bins or trash cans stored outside should be watertight, rodent-proof, and protected from tampering.

What's the Difference between Sanitary Sewers and Storm Drains?

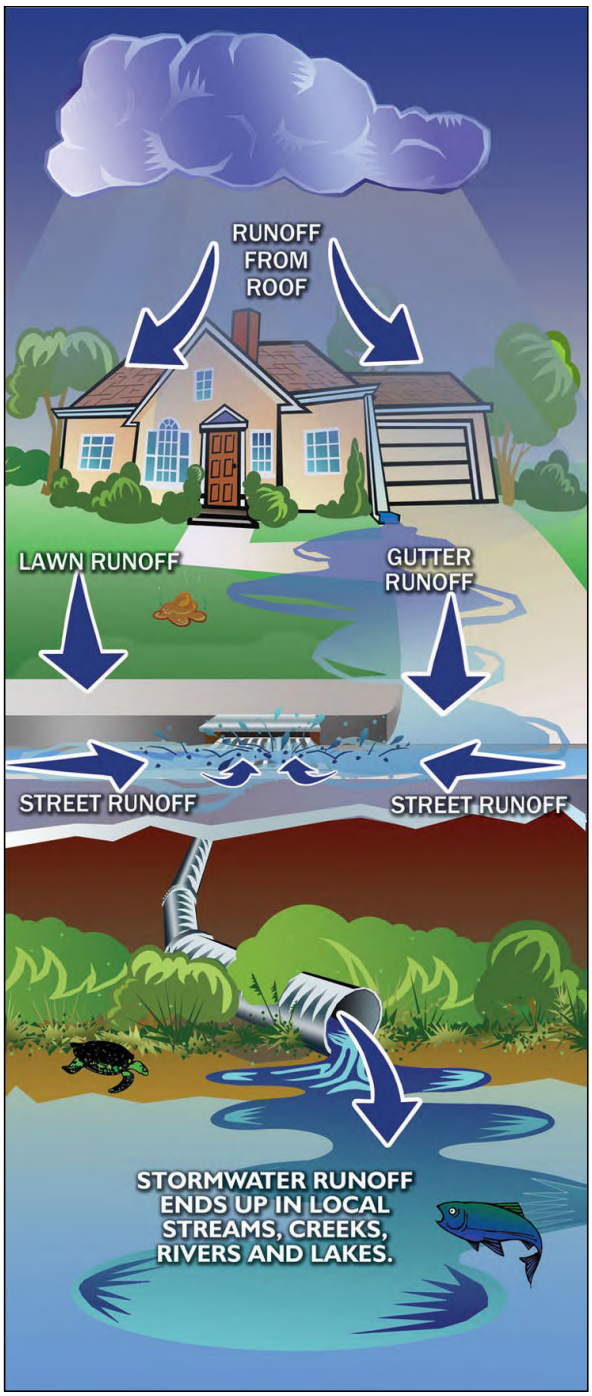

If you've seen one drain, you've seen them all. They are all the same, right? I can pour this cleaner down the drain because it goes to a wastewater treatment plant, right? **Not so!** It's important to understand the difference between sanitary sewers and storm drains so we can prevent environmental damage.

The **sanitary sewer** is a system of underground pipes that carries sewage from bathrooms, sinks, kitchens, and other plumbing components to a wastewater treatment plant, where it is filtered, treated and discharged.

The **storm drain** is a system designed to carry rainfall runoff and other outside, non-plumbed drainage. It is not designed to carry sewage or accept hazardous wastes. The runoff is carried in underground pipes or open ditches and discharges without treatment of any kind into local streams, rivers and other environmentally-sensitive, surface waters. Storm drain inlets are typically found along the curbed edges of street and other low-lying outdoor areas. Some older buildings have basement floor drains that connect to the storm drain system.

Disposal of chemicals or hazardous substances to the storm drain system damages the environment. Motor oil, cleaners, paints and other common household items that get into storm drains can poison fish, birds, and other wildlife, and can find their way into drinking water supplies. In addition, grass clippings, leaves, litter, and organic matter can clog storm drains and cause flooding.

Here are some things you can do to help maintain our sewer systems and keep our storm drains and environment clean:

- Do not pour anything into storm drains
- Keep storm drains clear of leaves, grass clippings, sticks and litter
- Repair any leaks and drips from your vehicle
- Collect and recycle motor oil

- Clean up spills using absorbants or dry sweeping and don't wash them into a drain
- Don't pour paints, solvents, cleaners, or anything that might be toxic into any drain – take it to your local household hazardous waste collection facility
- Minimize the use of herbicides, pesticides and fertilizers

Having a clean environment is of primary importance for our health and economy. Clean waterways provide recreation, commercial opportunities, fish habitat, and add beauty to our landscape. All of us benefit from clean water - and all of us have a role in getting and keeping our lakes, rivers, wetlands, beaches and groundwater clean.

For more easy steps on protecting streams and beaches, contact the El Cajon Storm Water Protection Program at (619) 441-1653.

What You Can Do As A Food Take-Out Customer to Keep Our Storm Drains Clean

Restaurants, fast food and food take-out establishments can contribute to storm water pollution through improper cleaning practices that allow food particles, oil, grease, trash and cleaning products to flow into the street, gutter or storm drain. These discharges pollute our streams, rivers, lagoons and ocean and are prohibited by law. Below are things you can do as a food take-out customer to help keep our storm drains clean:

- Make sure you collect and properly dispose or recycle all your trash.
- Talk with business owners if you see trash disposal problems at a business, or call the El Cajon Pollution Prevention Program at (619) 441-1653.
- Speak with others about the importance of not littering.
- Participate in community-sponsored cleanups.

As a concerned citizen, you can be proud that you are part of the **Solution to Storm Water Pollution** and not part of the problem. Remember, **"Only Rain in the Drain!"**

For more information, contact the El Cajon Storm Water Protection Program at (619) 441-1653, or use your web browser to access our program at:

http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

City of El Cajon
Storm Water Residential Complaints

2009-2010

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
1	07/09/09	Residential		1855	Lisa Terrace	Odor from unknown neighbors broken septic line.	Contacted the complainant and advised that the property is within the County jurisdiction.	No	N/A	N/A
2	07/15/09	Residential		959	Naranca Ave	Dog feces being thrown into open concrete channel at rear of property.	Property ower notified by door tag. No evidence of feces noted at time of inspection.	Yes	Verbal	N/A
3	07/16/09	Residential		1143	Loma Portal	Discharge of white residue to the street.	Contacted the property owner to clean allpaved areas of all residue. Storm water educational materials were issued.	Yes	Verbal	Yes
4	07/22/09	Residential		1593	Washington Ave	Apartment management sweeping debris into the street on Wichita side of the property.	Phone contact with complainant for details. No evidence of discharge of waste matter during a site inspection	Yes	N/A	N/A
5	07/22/09	Residential		934	Dennstedt Pl	Neighbor draining pool water onto complanants property causing structural damage.	After review the matter was found to be civil.	No	N/A	N/A
6	07/23/09	Residential		2903	Tahoe	Large amount of soil on street and sidewalk	Property owner was contacted and remov remaining soil and to sweep all paved areas.	No	Verbal	N/A
7	07/28/09	Residential		1265	Bermuda Pl	Sediment discharge to street from unimproved driveway.	Contacted the property owner on site and instructed him to install BMPs to prevent tracking and further erosion. Educational materials were issued.	Yes	Verbal	N/A
8	07/29/09	Residential		874	Hacienda	PW staff member observed sewer overflow during plumbing repair. The discharge entered the curb flowing into the storm drain inlet just north of the discharge point.	A notice was left on the door of the residence. Required report was submitted.	Yes	Verbal	Yes
9	08/10/09	Residential		848	Lemon Ave	On 8-9-09 a vehicle dumped oil on the pavement in front of the residence. Dirt was applied and swept up. Resident wants to know who to contact for removal.	The resident was contacted and advies to contact HAZMAT for removing the contaminated soil. She was referred to Waste management. There was evidence of a spill during site visit.	Yes	N/A	Yes
10	08/11/09	Residential		1575	Lily Ave	Resident is dumping paint wash water in front across sidewalk and into the street.	Site inspection found paint residue in the front yard vegetation,sidewalk and street. A card and door tag was left.	Yes	Verbal	Yes
11	08/17/09	Residential		612	Live Oak Dr	Sewer back up in front yard.	Site inspection located a sewage discharge in the left front yard and a broken sewer cap. The tenant ws contacted and advised to contact a plumber to make repairs and report to the City. No discharge to the street or drain inlet.	Yes	Verbal	Yes
12	08/28/09	Residential		396	Raleigh St	Unknown party is working on a diesel truck in the street allowing fluids to drain with no protection.	Site inspection found drain pan under the vehicle and small amount of fluid on surface. No one was present. Storm water information was left on the windshield.	Yes	N/A	N/A
13	09/01/09	Residential		1535	Melody Ln	Complaint of vehicle oil spill in driveway and sidewalk	Site inspection found a minor oil spill in the driveway and sidewalk covered with an absorbent material. No response at door. Storm water educational materials were issued.	Yes	N/A	N/A
14	09/02/09	Residential		988	Grouse St	Evidence of past discharge from mobile carpet cleaning vans parked in the driveway. None current.	Storm Water inspection found residue tracking to be coming from the neighboring street, Finch. Efforts failed to locate the source of th discharge. It appears to be from ground water seepage.	No	N/A	N/A
15	09/04/09	Residential		2010	Madison Ave	Neighboring property is constantly being overwatered. New construction. Questions if drainage is beig done properly.	Unable to Locate any noticable violations. Complainant notified	No	N/A	N/A
16	09/08/09	Residential	Cypress Park Apts	570	Lincoln St	Tenant repairing vehicles on the street. Threat of fluid discharges	Site inspection found no evidence of vehicle repair. No discharges noted.	No	N/A	N/A

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
17	09/14/09	Residential		455	Silverbrook Dr	Water flowing onto property from Padre Dam discharge pooling on her property.	Complainants property is in the county. Advised to contact county storm water hotline.	No	N/A	N/A
18	09/14/09	Residential		574	Macon St	Sewage has been running across the sidewalk for the last 3 months.	Site inspection found the discharge to be from a broken irrigation line. The property owner was contacted and advised to repair the line.	No	N/A	N/A
19	09/14/09	Residential		947	Amistad Ct	Vehicle oil stain in driveway with absobent material on it.	No response at door left tag with instructions to remove the absorbent once the oil is absorbed.	Yes	N/A	N/A
20	09/16/09	Residential		1204	Peach Ave	Bags of vegetation left in the street in curb line.	Public works crew removed the bags from in front of this foreclosed property.	Yes	N/A	N/A
21	09/18/09	Residential	SDG&E	847	Grossmont	Dirt from utility pole replacement left in the street. Pole # P275485	SDG&E was contacted and advised to remove the dirt	Yes	Verbal	Yes
22	09/18/09	Residential		805	Deland Ave	Large pile of dirt left in the street from landscaping work.	Left a notice on the door of the resident to remove the dirt from the street and sweep the area.	Yes	Verbal	N/A
23	10/01/09	Residential		899	Hacienda	Leaves and other vegetation being blown into the street and left there.	Contacted the property owner on site. He said he routinely sweeps vegetation into the street on days prior to street sweeing. He was advised to cease the activity and to sweep and properly dispose of all yard waste. Educational materials were issued.	Yes	Verbal	N/A
24	10/08/09	Residential		1751	El Pico Dr.	Ice plant removed, grading altered. Erosion concerns. Work was done over a year ago.	Found no evidence of recent grading at rear of property.	No	N/A	N/A
25	10/13/09	Residential		1356	Joliet Ave	Drain box at end of of Joliet has strong smell of urine, toilet paper on the grate.	Inspected the site finding dried toilet paper on the grate, soapy water in curbline appearing to come from this residence. Storm water info was left on the door.	Yes	N/A	N/A
26	10/13/09	Residential		584	Brockwood Dr	Sand Blasting residue being washed into the street.	PW crew investigated and found no evidence of residue or discharge.	No	N/A	N/A
27	10/23/09	Residential		514	Edwards St	Painting Co. dumping liquid into the storm drain.	A goup of men with painting equipment were parked in front of the residence but no painting activity underway. There was no evidence of dumping into the torm drain inlet. Storm water educational materials were issued.	Yes	Verbal	N/A
28	10/26/09	Residential		444	Skyview Ct	Pile of dirt dumped into the street at this location.	Contacted the resident and advised to remove the dirt pile at the end of the cul-de-sac.	Yes	Verbal	Yes
29	10/26/09	Residential		946	Anza St	Someone painting a large truck in the street.	Contacted the resident paint and roller to paint out graffiti on a pannel truck. A drop cloth was in place. Storm water educational materials were issued.	No	Verbal	N/A
30	11/02/09	Residential		1120	Hub Ct	Leaves and vegetation in the drainage swale at the rear of property poses threat of discharge to storm drain inlet during a rain event.	The complaint was forwarded to the PW crew to investigate. Determined to be propety owmers responsibility.	No	N/A	N/A
31	11/03/09	Residential		1408	Madison Ave	Large dirt piles on the paved areas in front and right side of the building.	A door tag was left with instructions to contact storm water.	Yes	Verbal	Yes
32	11/04/09	Residential		2069	Valley Lake Dr	Grading without a permit and no BMPs installed.	Contacted the property owner on site. Minor grading in rear and left front yards. No immediate threat of discharge during rain event. Storm water educatinal materials issued.	No	N/A	N/A
33	11/08/09	Residential	Parkview Apartments	277	First St	Private lateral spill	The event occurred over the weekend. Stormwater was contacted and began a follow up. A citation will be issued.	Yes	First	Yes
34	11/13/09	Residential		1146	Naranca	Private Lateral spill	City crew responded and contained the spill. The blockage was cleared and the area cleaned. Spill did not reach the storm drain inlet.	No	Verbal	Yes

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
35	11/13/09	Residential		727	Hawthorne Ave	Homeowner throwing dog feces over the fence and into the storm channel.	The property owner was contacted on site. He said tenants just moved out with dogs. There will be no further dumping in the channel. Storm water educational materials were issued.	Yes	Verbal	Yes
36	11/17/09	Residential		1282	Redwood St	Concrete being dumped in the street.	Resident is in process of re-landscaping the front yard. This is an unfinished street. No concrete discharge noted. Both parties contacted on site. Neighbor dispute. Storm water educational materials issued.	No	N/A	N/A
37	11/19/09	Residential	El Cajon Towers Apartments	180	Ballantyne	Pink liquid flowing in curb line from under curb drain.	Contacted the on site manager. The discharge was said to be from heating and air conditioning repair.	Yes	Warning	Yes
38	11/20/09	Residential		428	Omaha Ct	Street sweeper found white powder residue in the curb line in front of this residence and the street.	The property owner was contacted on site. The discharge was from pool cleaning and filter back flush of diatomaceous earth. Ther were advised to cease any further discharge and to clean the street of all residue which flowed down the gutter line to Taft St.	Yes	Verbal	Yes
39	11/24/09	Residential		165	Westdale Ct	Neighbor's excavation poses threat of erosionand property damage.	A site inspection with the property owner found no storm water issues. The rear slope is terraced. Irrigation lines were being installed.	No	N/A	N/A
40	11/24/09	Residential		290	Magnolia	An unknown liquid discharges periodically down the driveway and into the gutter on Magnolia	Site inspection found no discharge. This is a repeat complaint.	No	N/A	N/A
41	11/25/09	Residential		577	Tilling Way	Large piles of dirt in the street and bare slopes.	There is ongoing landscape rennovation with bare soil front and back yards. No BMPs on slopes or perimeter controls. Piles of soil and gravel in street. The property owner was contacted and advised to install BMPs.	Yes	Warning	Yes
42	12/02/09	Residential		990	Aster Ave	Oil spill flowing in curbline	Site inspection found spill covered with absorbent material. Resident said he applied the absorbent but had no info on vehicle or owner. PW crew to conduct follow-up. Oil found in under sidewalk drain. Complainant claims oil discharged at his point.	Yes	Warning	Yes
43	12/02/09	Residential		334	Horizon Hills Dr	Green discharge from gutter drain.	No discharge noted.	No	N/A	N/A
44	12/04/09	Residential		614	Madison	Oil spill flowing in curbline	Site inspection found oil in the street and gutter in fornt of the residence. The tenant stated that a vehicle discharged the oil and left. Dirt was used as an absorbent. It was removed and properly disposed of. Storm water educational materials were issued.	Yes	Verbal	Yes
45	12/14/09	Residential		1286	Redwood St	Waer ponding in the street, debris in gutter.	This is an unfinished street. No storm water issue exists.	No	N/A	N/A
46	12/15/09	Residential		480	Horizon Hills Dr	Pool water draining onto adjacent property and into the gutter.	Site inspection found no pool water discharge.	No	N/A	N/A
47	12/15/09	Residential		930	Layton St	Oil discharge in driveway.	Site inspection found abandoned property. Open oil containers in driveway overflowed during recent rain. Discharge was contained by Hazmat. Containers and other junk in driveway. Matter referred to city zoning enforcement.	Yes	N/A	Yes
48	12/21/09	Residential		537	Jeffree St	Oil draining from motorhome; possible soaps and chemicals	Site inspection found no oil, soap or other discharge. There was evidence of recent oil spill in drivway. Spoke to tenant and left storm water education materials.	Yes	Verbal	Yes
49	01/04/10	Residential		381	Minnesota Ave	Paint containers and leaking oil container dumped at rear sewer easement, undeveloped alley behid residence.	storm water contacted PW yard to remove the containers.	Yes	N/A	Yes

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
50	01/05/10	Residential		1158	Terrace Crest Dr	Sediment from grading work flowing into the street during heavy rains	Site inspection found no evidence of a discharge and no current grading.	No	N/A	N/A
51	01/07/10	Residential	Shady Lane Apartments	388	Shady Ln	Sewer runoff going into the storm drain in front of 1249 E Madison for 2 days.	Storm water located the discharge at te rear of the building. The cleanout cap ws removed. Discharge flowed into the storm drain inlet. PW crew responded with vac and manager notified to contact plumber.	yes	First	Yes
52	01/08/10	Residential		146	Blanchard Rd	Overflow water from neighbor's granite business	No evidence of a discharge and no return to phone call.	No	N/A	N/A
53	01/11/10	Residential		2440	Windmill View Rd	Water coming out of crack in the street.	PW street crew notified. No evidence of illicit discharge. Appears to be ground water seepage.	No	N/A	N/A
54	01/21/10	Residential		2721	Katherine St	Heavy rain causes flooding on the street.	This was no a storm water issue and the matter was referred to the PW street division for investigation.	No	N/A	N/A
55	01/25/10	Residential		1153	Gorsline Dr	Illegal grading in back yard altering grade.	No storm water issues noted. No grading. PW street crew cleaned the street.	No	N/A	N/A
56	01/25/10	Residential		1850	Calle del Conejo	Run on from county property into rear yard during heavy rains.	There was no evidence of run on from flume access road. This property is at a low spot and apex of neighboring driveways. No property damage noted. No recent grading.	No	N/A	N/A
57	02/02/10	Residential		1227	Yerba Verde	Some one dumped paint in the curbline.	A site inspection found no paint. There was tan mud in the curbline along the length of the street. It was not possible to determine the point of origin. A PW street crew was on site and in process of cleaning the street.	Yes	N/A	N/A
58	02/02/10	Residential		989	Grouse St	Concern that removal of short retaining wall and vegetation will cause erosion.	Storm water found the short retaining wall removed but the Ivy covered side yard appears to be adequate to prevent any sediment discharge.	No	N/A	N/A

THIS IS NOT A CITATION

HELP!

Pollutants were found in your neighborhood storm drain.

Our field staff found the following pollutant(s)spilled or dumped into the storm drain system (curb, street, gutter) near your home:

- ❑ Over irrigation usage
- ❑ Motor Oil
- ❑ Antifreeze/Transmission Fluids
- ❑ Cooking grease
- ❑ Detergents
- ❑ Solvents/Degreaser
- ❑ Paint/paint products
- ❑ Home improvement waste
- ❑ Sewage
- ❑ Animal waste
- ❑ Yard waste (leaves, grass, etc.)
- ❑ Uncovered dirt and gravel pile(s).
- ❑ Construction debris
- ❑ Trash
- ❑ Other

Be a Clean Water Leader

Storm water pollution is a problem that affects all of us. With a growing population of more than 95,000 residents and approximately 14 square miles of urbanized development, keeping our waters clean from pollutants has become increasingly difficult. With thousands of storm drain inlets, and nearly 100 miles of storm drain pipes and channels to clean and maintain, we need your help.

When it rains, water flows over across our yards and into our streets carrying pollutants into our storm drains. The problem is that storm drains are not connected to the wastewater sewer treatment plant. So, what's in the streets flows directly into our creeks, rivers and the ocean, without treatment.

Last year, too many of our beaches and bays were closed or posted as unsafe for swimming. As our City

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Leaders have said, “this is more than an inconvenience; it is a civic embarrassment.” **Discharging pollutants to the City's storm drain system is in violation of Title 13.24 of the El Cajon Municipal Code and violations can result in substantial fines.**

But, as a City resident, you can make a difference. By becoming a Clean Water Leader, both on the job and in your community, you can help make our stream, rivers and beaches free of pollution. When you're at home, share your knowledge with neighbors and family. As you drive to work, be aware of any illegal discharges. And, if you do see an illegal discharge, report it. In the City of El Cajon you can **call the City of El Cajon at (619) 441-1653, or the 24-hour Storm Water Hotline at (888) 846-0800**.

Whether at home or at work, by adopting some simple Best Management Practices (BMPs), you can stop pollutants from being generated and entering our storm drain system.

- ✓ Use dry clean-up methods for spills and outdoor cleaning. Vacuum, sweep, and use rags or dry absorbants. Properly remove and dispose of this material when the spill is absorbed.
- ✓ Properly label, store and dispose of hazardous wastes. Rake, sweep up, and place all debris (dust, litter, sediment, etc.) from your yard or near your property into a trashcan.
- ✓ Use a mop only when water is needed.

As you perform your daily activities be proactive. Assess the activity from a storm water pollution point-of-view and ask yourself; “does this activity, directly or indirectly, generate pollution?” And, “how can I get the job done and prevent debris from entering into the storm drain collection system?”

City of El Cajon

STORMWATER
Protection Program

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City of El Cajon

STORMWATER
Protection Program

Appendix A.7
(No Content)

Appendix A.8
(No Content)

Appendix A.9

CITY OF EL CAJON
PUBLIC PARTICIPATION MECHANISMS
PY3 – 2009/2010

DATE	LOCATION	NUMBER CONTACTED	DESCRIPTION
7/8/09	City of El Cajon Main Street	300	Pollution Prevention at Classic Cruise
9/30/09	City of El Cajon Main Street	300	Pollution Prevention at Classic Cruise
10/10/09	City of El Cajon Fire Station	3,000	Fire Station Open House
11/13/09	Johnson Elementary School	120	Career Day

RECEIVED
MAY 17 2010
CITY OF EL CAJON
ENGINEERING DIVISION

I LOVE A CLEAN SAN DIEGO
Serving San Diego County Since 1954.
Community. Environment. Education.

www.ilacsd.org T 619.291.0103 F 619.298.1314 4991 Pacific Hwy, Suite 115 San Diego, CA 92110

May 13, 2010

Jaime Campos
City of El Cajon
200 Civic Center Way
El Cajon, CA 92020

Dear Jaime,

On behalf of I Love A Clean San Diego, I would like to thank the City of El Cajon for its support of the annual Creek to Bay Cleanup. We had a great turnout this year and were able to make a big impact on the quality of local waterways. Our successes would not be possible without the support of invested cities like El Cajon.

Results from this year's cleanup were impressive, and coordinators are happy to report a volunteer surge of over 5,000 participants. Here are a few statistics from the 8th Annual Creek to Bay Cleanup:

- 5,181 volunteers
- 69 sites throughout San Diego County
- 186 miles covered
- Close to 160,000 pounds of trash and recyclables collected

Support from the City of El Cajon helped ILACSD to expand the event to cover new cleanup sites and provide supplies for more volunteers than ever before. Included is a one page document which highlights event accomplishments and captures volunteers in action.

We value and welcome your feedback on your experience as part of this year's Creek to Bay Cleanup. As we close the book on Creek to Bay, we are busy making plans for the Coastal Cleanup Day 2010 event. Save the date for CCD which will be held on Saturday September 25th this year. Feel free to contact us if you are interested in getting involved in Coastal Cleanup Day this year.

Best regards,

Natalie Roberts
Director of Community Events
I Love A Clean San Diego

Printed on Recycled Paper

Appendix A.10

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR URBAN RUNOFF MANAGEMENT PROGRAMS

Copermittee Name:	City of El Cajon
Date:	9/30/2010
Reporting Year:	2009-10

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS		
ADMINISTRATION	$	-
DEVELOPMENT PLANNING	$	4,319
CONSTRUCTION	$	-
MUNICIPAL	$	-
INDUSTRIAL AND COMMERCIAL	$	90,064
RESIDENTIAL	$	-
IDDE	$	36,550
EDUCATION	$	8,718
PUBLIC PARTICIPATION	$	-
SPECIAL INVESTIGATIONS	$	-
NON-EMERGENCY FIREFIGHTING	$	-
Jurisdictional Total	$	139,651

WATERSHED		
Watershed 1	$	4,014
Watershed 2	$	-
Watershed 3	$	-
Watershed 4	$	-
Watershed 5	$	-
Watershed 6	$	-
Watershed 7	$	-
Watershed 8	$	-
Watershed Total	$	4,014

REGIONAL		
Copermitttee Cost Share of Regional Budget	$	77,339
Regional Total	$	77,339

TOTAL COST	***$***	***221,004***

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR URBAN RUNOFF MANAGEMENT PROGRAMS

Copermittee Name:	City of El Cajon
Date:	9/30/2010
Reporting Year:	2009-10

FUND SUMMARY (AS APPLICABLE)

FUNDING BY SOURCE	
GENERAL FUND	
STORMWATER FEE	
PERMIT FEES	
DEVELOPER DEPOSITS AND FEES	
REGISTRATION AND INSPECTION FEES	
FLOOD CONTROL FEES	
FRANCHISE FEES	
GAS TAX	
UTILITY TAX	
ROAD FUND	
ENTERPRISE FUNDS	
TRUST FUNDS	
SPECIAL ASSESSMENT DISTRICTS	
STATE APPROPRIATED FUNDS	
GRANT FUNDS	
OTHER	$ 1,480,490
TOTAL	$ 1,480,490

ONE-TIME FUNDING	
GRANTS	
DONATIONS	
TOTAL	$ -

TOTAL FUNDING	$ 1,480,490

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR URBAN RUNOFF MANAGEMENT PROGRAMS

WATERSHED URBAN RUNOFF MANAGEMENT PROGRAM (WURMP)[1]

Copermittee Name:	City of El Cajon
Date:	9/30/2010
Reporting Year:	2009-10

	Watershed 1	Watershed 2	Watershed 3	Watershed 4	Watershed 5	Watershed 6	Watershed 7	Watershed 8
Administration								
Cost Share Contribution	$4,014							
Watershed Activities								
Other								
TOTAL	$4,014	$0	$0	$0	$0	$0	$0	$0

Foot Notes

1 - See Table 2-6 for detailed expenditure category explanations

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR URBAN RUNOFF MANAGEMENT PROGRAMS

REGIONAL URBAN RUNOFF MANAGEMENT PROGRAM (RURMP)[1]

Copermittee Name:	City of El Cajon
Date:	9/30/2010
Reporting Year:	2009-10

Regional Programs	Jurisdictional Cost Share Amount
Administration	
Cost Share Contribution	$77,339
Regional Activities	
Other	
TOTAL	$77,339

Foot Notes

1- See Table 2-8 for detailed expenditure category explanations

Activity: **Public Works NPDES Compliance** **Activity #:** **650750**

ACCOUNT / LINE ITEM NUMBER	JUSTIFICATION FOR SUPPLIES AND SERVICES BRIEF STATEMENTS & ESTIMATED AMOUNTS USED IN CALCULATING TOTALS FOR EACH LINE ITEM	FY2009-10 AMOUNT	CHANGE REQUESTED	FY2010-11 REQUEST
8150	**OFFICE SUPPLIES**	**$4,900**	**$0**	**$4,900**
	a Toner cartridges for printing of public education and outreach materials	$4,900	$0	$4,900
8160	**OPERATING SUPPLIES**	**$5,000**	**$0**	**$5,000**
	a Various supplies needed for Pollution Prevention Days	$5,000	$0	$5,000
8345	**LEGAL SERVICES**	**$7,500**	**$0**	**$7,500**
	a City Attorney's Office charges	$7,500	$0	$7,500
8363	**SYSTEM / COMPUTER ANALYST**	**$55,000**	**-$5,000**	**$50,000**
	a GIS Consultant	$50,000	$0	$50,000
	b eCommunity Plus special programming for low priority construction project reporting - decrease due to adoption of new system	$5,000	-$5,000	$0
8395	**OTHER/PROFESSIONAL/TECHNICAL SERVICES**	**$440,000**	**$0**	**$440,000**
	a San Diego River Watershed Management and update Watershed Urban Runoff Management Program Implementation - shared cost with Watershed copermitees.	$100,000	$0	$100,000
	b Industrial Commercial Inspections as required by the new 2007-01 permit and updated JURMP	$150,000	$0	$150,000
	c San Diego Regional Co-permittee Memorandum of Understanding Cost	$80,000	$0	$80,000
	d Dry Weather Testing and Extended Dry Weather Testing	$75,000	$0	$75,000
	e As needed on-call engineering services for plan check for SUSMP, Erosion Control Plans and Drainage Studies	$30,000	$0	$30,000
	f\ Water Quality Grant Writing services for request of State funds for Water Quality Monitoring, Water Quality Improvement Projects and Watershed Protection in Forrester Creek	$5,000	$0	$5,000
8510	**OVERHEAD REIMBURSEMENT**	**$128,857**	**-$16,056**	**$112,801**
	a Provided by Finance	$128,857	-$16,056	$112,801
8511	**FLEET/EQUIPMENT MAINTENANCE**	**$26,080**	**-$15,073**	**$11,007**
	a Provided by Fleet Maintenance	$26,080	-$15,073	$11,007
8522	**ADVERTISING**	**$1,000**	**$0**	**$1,000**
	a Advertising of Pollution Prevention Days	$1,000	$0	$1,000
8528	**COMMUNICATIONS**	**$2,000**	**-$500**	**$1,500**
	a Telephone and cellular phone service - decrease due to usage and new contract	$2,000	-$500	$1,500
8530	**CONTRIBUTIONS**	**$500**	**$250**	**$750**
	a Contribution to the San Diego River Coalition	$500	$0	$500
	b Contribution to I Love A Clean San Diego - transfer from 8572	$0	$250	$250
8560	**PERMITS & FEES**	**$20,000**	**$0**	**$20,000**
	a State Water Resources Control Board Fee	$20,000	$0	$20,000
8570	**PRINTING & BINDING**	**$8,500**	**-$500**	**$8,000**
	a Utility bill inserts for Pollution Prevention Days	$2,200	$0	$2,200
	b Poster and Brochure printing for Pollution Prevention Days	$0	$0	$0
	c Outreach (Reprints of various storm water outreach materials) - decrease due to usage	$2,200	-$500	$1,700

Activity: **Public Works NPDES Compliance** **Activity #:** **650750**

ACCOUNT / LINE ITEM NUMBER	JUSTIFICATION FOR SUPPLIES AND SERVICES BRIEF STATEMENTS & ESTIMATED AMOUNTS USED IN CALCULATING TOTALS FOR EACH LINE ITEM	FY2009-10 AMOUNT	CHANGE REQUESTED	FY2010-11 REQUEST
	d City Newsletter Printing	$4,100	$0	$4,100
8572	**PROMOTIONS**	**$10,000**	**$0**	**$10,000**
	a Promotional items for education and outreach efforts including Pollution Prevention Days	$10,000	$0	$10,000
8576	**REPAIRS & MAINTENANCE**	**$3,359**	**$0**	**$3,359**
	a Copier, printer and typewriter maintenance	$3,359	$0	$3,359
8586	**SOFTWARE AGREEMENTS**	**$18,076**	**$0**	**$18,076**
	a Business License Database	$720	$0	$720
	b Miscellaneous Software Agreements	$2,300	$0	$2,300
	c ESRI Maintenance Agreement	$9,000	$0	$9,000
	d Permitting Software Maintenance Agreement	$3,000	$0	$3,000
	e Share of Community Plus Licenses	$3,056	$0	$3,056
8594	**TRAINING, MEETINGS, & SCHOOLS**	**$3,500**	**-$500**	**$3,000**
	a Training for Division personnel - decrease due to usage	$3,500	-$500	$3,000
	TOTAL MATERIALS, SUPPLIES, & SERVICES	**$734,272**	**-$37,379**	**$696,893**

FY 2010-2011 ANNUAL BUDGET
DEPARTMENT EXPENDITURE WORKSHEET

Acct #	Account Title	FY07-08 Actual	FY08-09 Actual	FY09-10 Budgeted	FY09-10 Estimated	FY10-11 Proposed
650750						**WASTEWATER - NPDES**
7110	SALARIES	474,486	472,672	557,716	507,483	497,620
7120	OVERTIME	418	2,065	500	500	500
7130	VACATION/SICK CONVERSIONS	3,962	3,737	4,229	1,931	3,353
7140	FURLOUGH	-	-	-	-	-
7170	STIPEND	6,500	-	-	-	-
7310	PERS (EMPLOYER)	146,812	150,342	177,026	156,716	143,442
7312	POST RETIREMENT BENEFITS	9,697	10,470	11,064	11,489	12,889
7315	MEDICARE TAX	6,254	6,393	8,087	6,733	7,215
7320	SOCIAL SECURITY TAX	-	-	-	-	-
7325	CAFETERIA	53,323	53,760	63,840	57,820	56,280
7330	COMPENSATED ABSENCES	9,445	(2,786)	-	-	-
7335	WORKERS COMPENSATION	7,808	14,244	21,068	14,968	13,310
7340	LIFE INSURANCE	1,884	1,774	2,462	1,742	1,750
7345	LTD INSURANCE	1,666	1,626	2,243	1,581	1,714
7350	STD INSURANCE	555	542	750	527	573
7360	UNIFORM ALLOWANCE	-	-	-	-	-
TOTAL	**SALARY & BENEFITS**	**722,809**	**714,841**	**848,985**	**761,490**	**738,646**
8150	OFFICE SUPPLIES	2,693	3,640	4,900	3,000	4,900
8160	OPERATING SUPPLIES	2,453	773	5,000	3,000	5,000
8345	LEGAL SERVICES	-	5,444	7,500	7,500	7,500
8363	SYSTEM / COMPUTER ANALYST	17,550	-	55,000	30,000	50,000
8365	TEMPORARY SERVICES	-	19,556	-	-	-
8395	OTHER PROF/TECH SERVICES	229,284	252,629	440,000	435,000	440,000
8510	OVERHEAD REIMBURSEMENT	88,659	81,706	128,857	128,857	112,801
8511	FLEET/EQUIP REIMBURSEMENT	7,204	12,874	26,080	7,145	11,007
8520	VEHICLE REPLACEMNT CHARGE	-	-	-	-	-
8522	ADVERTISING	-	-	1,000	250	1,000
8528	COMMUNICATIONS	1,435	888	2,000	1,300	1,500
8530	CONTRIBUTIONS	-	-	500	500	750
8560	PERMITS AND FEES	17,930	17,999	20,000	17,999	20,000
8570	PRINTING AND BINDING	5,192	10,260	8,500	7,500	8,000
8572	PROMOTIONS	10,002	4,506	10,000	7,500	10,000
8574	RENT EXPENSE	-	-	-	-	-
8576	REPAIRS AND MAINTENANCE	-	2,914	3,359	3,359	3,359
8586	SOFTWARE AGREEMENTS	9,924	9,357	18,076	18,076	18,076
8588	SUBSCRIPTIONS	-	-	-	-	-
8594	TRAINING/MEETINGS/SCHOOLS	4,916	997	3,500	2,500	3,000
TOTAL	**MAT'L, SVC & SUPPLIES**	**397,242**	**423,543**	**734,272**	**673,486**	**696,893**
9010	MINOR FURN&EQUIP <$10,000	7,065	-	-	-	-
9020	MINOR COMPUTERS <$10,000	7,859	-	-	-	-
9030	SOFTWARE > $10,000	39,055	-	-	-	11,000
9035	FURN & EQUIP >$10,000	19,615	-	-	-	-
9040	VEHICLES	-	-	-	-	-
TOTAL	**CAPITAL OUTLAY**	**73,593**	**-**	**-**	**-**	**11,000**
	ACTIVITY TOTAL	**1,193,644**	**1,138,384**	**1,583,257**	**1,434,976**	**1,446,539**

Appendix A.11
(No Content)

Appendix A.12

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

August 23, 2010
Project No. 201034W-5

Jaime Campos, P.E.
Storm Water Program Manager
City of El Cajon
Department of Public Works
200 Civic Center Way
El Cajon, CA 92020-3916

Re: 2010 Forester Creek Impact Study
City of El Cajon, California

Dear Mr. Campos:

Enclosed please find our report for the City of El Cajon 2010 Forester Creek Impact Study. This project, conducted since 2004, is an additional study of the water quality in Forester Creek as it passes through El Cajon. The contents include field screening data, analytical laboratory test results, and analyses of the collected data. Copies of field data sheets and laboratory reports are attached.

It has been our pleasure working with the City of El Cajon on this project. If you have any questions regarding this report, please contact me at (858) 586-6600.

Sincerely,
D-MAX Engineering, Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

2010 CITY OF EL CAJON
FORESTER CREEK IMPACT STUDY

Forester Creek enters the City of El Cajon (City) from the east, running parallel to Interstate 8. After passing SR-67, the creek curves northward through the area around Gillespie Field before flowing into the City of Santee. Forester Creek eventually merges with the San Diego River just east of the junction of SR-52 and SR-125.

Constituents of Concern

The 2006 303(d) identified Forester Creek as an impaired water body for the following constituents:

- Fecal coliforms
- pH
- Total dissolved solids (TDS)
- Low dissolved oxygen
- Phosphorus

The most recent San Diego River Watershed Urban Runoff Management Program (WURMP) document identified the following constituents of concern for the watershed as a whole:

- Bacterial indicators
- TDS
- Low dissolved oxygen
- Phosphorus
- Turbidity

Site Selection

This objective of the Forester Creek Impact Study is to assess changes in the water quality of the creek as it flows through the City of El Cajon. In order to evaluate these differences, a sample was collected from the creek near its entrance to the City from the east (upstream) and another sample was taken where the creek exits the City in the north (downstream).

To prevent duplicate sampling and to minimize the costs of this study, Site 5 from the City's 2010 Dry Weather Monitoring Program and MS4 Outfall Monitoring Program was used as the downstream sample location. The upstream sampling location has been moved twice since 2002 due to the variable nature of the flow coming into the City. When Forester Creek does not receive water from outside the city limits, the sampling location may be moved slightly downstream to the nearest location with flowing or ponded water. Table 1 presents site location information, and Table 2 lists yearly locations of the upstream sampling point.

Methods

The same field and laboratory methods used during the City's Dry Weather Monitoring Program were used during the Forester Creek Impact Study. Samples were analyzed in the field for the following parameters:

- Temperature
- pH (potential candidate for delisting)
- Turbidity

- Conductivity
- Surfactants
- Ammonia-nitrogen (ammonia-N)
- Nitrate-nitrogen (nitrate-N)
- Orthophosphate-phosphorus (orthophosphate-P)
- Dissolved oxygen

Samples were collected and submitted to EnviroMatrix Analytical, Inc, a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Oil and grease
- Total hardness
- Dissolved cadmium
- Dissolved copper
- Dissolved lead
- Dissolved zinc
- Diazinon
- Chlorpyrifos
- Total coliform bacteria
- Fecal coliform bacteria
- *Enterococcus* bacteria
- TDS
- Total organic carbon (TOC)

Results and Analysis

To assess changes in water quality as the creek flows through the City, a comparison is made of constituent measurements at the upstream and downstream locations (Photos 1 and 2, respectively). However, a direct comparison of upstream and downstream constituent concentrations may be misleading, since flow is greater downstream. Assessments of constituents analyzed during the 2010 Forester Creek Impact Study are presented below.

Flow

Notable differences between the upstream and downstream flow rates include the following:

- The upstream site flowed at a rate of approximately 4 gpm, whereas the downstream site had a greater flow of 94 gpm.
- The greater flow downstream indicates that the majority of water in Forester Creek at the downstream site has been generated within City limits.
- The downstream flow is the lowest rate recorded in the history of the program.

Photo 1: Forester Creek Upstream Location

- The decrease in flow is likely attributable to drought conditions and associated water conservation activities and the mandatory water restrictions implemented in San Diego County during 2009 and 2010, which likely reduced base flow.

Photo 2: Forester Creek Downstream Location

Field Test Results

Table 3 presents the field test results for each site. Notable differences between the locations include:

- Temperatures recorded as part of the 2010 study were 25.9°C upstream and 18.4°C downstream. The difference in temperature is primarily due to atmospheric conditions at the time of sampling. The upstream site was sampled in the late afternoon in sunny weather, whereas the downstream site was sampled in the morning in overcast weather.

- Measurements of pH increased from 7.6 upstream to 8.2 downstream. The higher value of pH downstream is likely a result of an increase in photosynthesis at the downstream site, due to an increase of sun light in the wide, shallow channel. A greater rate of photosynthesis produces more algae which decreases levels of carbon dioxide and increases the pH. As temperature increases, carbon dioxide is less soluble in water, further increasing pH.

- Measurements for turbidity, conductivity, ammonia-N, surfactants, and dissolved oxygen were higher at the downstream site.

- Concentrations of nitrate-N and orthophosphate-P were greater upstream than downstream.

Laboratory Test Results

Table 4 shows laboratory results for both sampling locations. Some observations include:

- Total hardness and the dissolved zinc concentration were greater at the upstream location.

- Measurements of TDS and TOC were greater at the downstream site. The concentration of copper was slightly higher downstream. Counts of total coliforms, fecal coliforms, and Enterococci were also greater downstream.

- Oil and grease, dissolved cadmium, dissolved lead, diazinon, and chlorpyrifos were not detected at either site.

Data Trends

Tables 5 through 8 display historical data and trends for parameters analyzed at upstream and downstream locations. Data in these tables have been compared to the 2010 Dry Weather Monitoring Program action levels and Water Quality Objectives (WQO). The action levels were developed regionally by the Copermittee Dry Weather Monitoring Sub-Workgroup, and the WQO have been compiled from the Basin Plan and a guidance document prepared by the Copermittee Regional Monitoring Workgroup. Note that the data for measurements of

ammonia-N, nitrate-N, surfactants, and orthophosphate-P were collected using test kits, which have a much greater associated uncertainty than laboratory tests. These field test kits are useful in detecting major exceedances, but are inherently less precise than laboratory analytical tests.

Notable observations include:

- Over the years, the average flow has been substantially larger downstream than the upstream sampling point.
- The large decrease in the downstream flow rate in 2010, relative to previous years' downstream flow, indicates that even though pollutant concentrations in 2010 were not substantially different from levels recorded in recent years, the pollutant load leaving the City was much lower.
- Measurements of pH, ammonia-N, dissolved oxygen, TDS, and TOC have typically been slightly higher downstream.
- Concentrations of nitrate-N, orthophosphate-P, and bacteria have generally been higher at the upstream site.

Table 1
2010 Site Locations

Site	Location	Description	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
Upstream	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Valero gas station at 1699 E. Main Street	Concrete Channel	Commercial	Residential	907.13	32.81185	-116.91795
Downstream	Adjacent to the Weld Boulevard Trolley Station, southeast of the Marshall Avenue/Cuyamaca Street intersection	Concrete Channel	Commercial	Industrial	907.13	32.82665	-116.98226

Table 2
Forester Creek Upstream Site Yearly Locations

Year	Upstream Sampling Location
2006-2010	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Valero gas station at 1699 E. Main Street
2005	Fourth Street, north of Rancho Cajon Place, east side of the street
2004	Forester Creek at E. Main Street and Oakdale Avenue

Table 3
2010 Field Screening Results

Site	Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophosphate-P (mg/L)	Dissolved Oxygen (mg/L)
Upstream	7/7/2010	4	25.9	7.6	1.75	1.72	0.13	0.14	12.73	0.05	5.72
Downstream	7/7/2010	94	18.4	8.2	4.06	2.82	0.25	0.42	5.77	nd	8.32

Note: nd = not detected

Table 4
2010 Laboratory Analytical Results

Site	Date	Oil & Grease (mg/L)	Total Hardness (mg/L$CaCO_3$)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	7/7/2010	nd	482	nd	nd	nd	5.0J	nd	nd	13,000	80	210	1,130	2.0
Downstream	7/7/2010	nd	203	nd	1.0J	nd	0.9J	nd	nd	22,000	3,000	5,000	1,840	5.9

Notes: nd = not detected
J = Detected but below the reporting limit; therefore, result is an estimated concentration.

Table 5
Upstream Site 2004-2010 Field Screening Data

Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Dissolved Oxygen (mg/L)
6/24/2004	27	22.5	8.4	8.28	1.72	0.13	0.10	1.30	nd[1]	na
6/9/2005	2	18.8	8.4	80	1.35	0.25	0.20	8.75	0.26	8.94
6/13/2006	3	27.9	8.0	1.85	1.66	0.25	0.40	6.25	0.03	8.33
8/2/2007	2	26.7	7.6	1.28	1.61	0.38	0.10	8.14	0.07	7.66
8/11/2008	3	26.0	7.5	1.85	1.77	0.25	0.10	8.68	0.07	6.74
6/25/2009	2	27.2	7.8	2.06	1.74	0.25	0.13	9.88	0.07	6.48
7/7/2010	4	25.9	7.6	1.75	1.72	0.13	0.10	12.73	0.05	5.72
Maximum	27	27.9	8.4	80	1.77	0.38	0.40	12.73	0.26	8.94
Minimum	2	18.8	7.5	1.28	1.35	0.13	0.10	1.30	nd	5.72
Average	6	25.0	7.9	13.87	1.65	0.23	0.16	7.96	0.09	7.31
Median	3	26.0	7.8	1.85	1.72	0.25	0.10	8.68	0.07	7.20
Ambient WQO	*	**BPJ**	**<6.5, >9.0**	**20**	**	**0.5**	**EPA Freshwater CMC*** **	****	****	**<5.0**
% Exceedance *(WQO)*	*	0	0	14	**	0	0	****	****	0
Dry Weather Action Level	*	**BPJ**	**<6.5, >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.0**	**2.0**	**BPJ**
% Exceedance *(Dry Weather Action Level)*	*	0	0	14	0	0	0	14	0	0

Notes:
nd = not detected; na = not analyzed; BPJ = Best Professional Judgment; EPA = Environmental Protection Agency.
[1] Half the value of the detection limit value was used in statistical calculations for the not detected constituent.
* No established limit.
** There is no clear WQO in the Basin Plan, but a comparison is not necessary since TDS has been measured directly. See the laboratory data tables for TDS results.
*** The Criterion Maximum Concentration (salmonids absent), which varies based on pH, has been used because it applies to a one-hour maximum, and the ammonia level for this study was measured based on an instantaneous grab sample. See www.epa.gov/waterscience/criteria/ammonia.
**** Regional guidance suggests using the EPA's nutrient endpoint tool to determine the WQO. This tool requires more data than what was collected within the scope of this study.

Table 6
Upstream Site 2004-2010 Laboratory Analytical Data[1]

Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Zinc (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
6/24/2004	nd	5	409	nd	nd	nd	nd	240,000	2,100	500	1,020	10.4
6/9/2005	nd	nd	960	nd	nd	nd	nd	900,000	16,000	24,000	1,810	86.1
6/13/2006	nd	nd	48	nd	nd	nd	nd	300,000	3,000	8,000	1,090	11.4
8/2/2007	nd	nd	579	nd	nd	nd	nd	2,200	500	270	1,150	5.2
8/11/2008	na	nd	420	nd	nd	nd	nd	1,300	1,300	1,300	1,670	11.9
6/25/2009	na	nd	490	nd	2.0	nd	nd	14,000	1,300	3,000	1,080	3.5
7/7/2010	na	nd	482	nd	nd	nd	nd	13,000	80	210	1,130	2.0
Maximum	nd	5	960	nd	2.0	nd	nd	900,000	16,000	24,000	1,810	86.1
Minimum	nd	nd	48	nd	nd	nd	nd	1,300	80	210	1,020	2.0
Average	*	*	484	*	*	*	*	210,071	3,469	5,325	1,279	18.6
Median	*	*	482	*	*	*	*	14,000	1,300	1,300	1,130	10.4
WQO	**0.5**	**10**	**	**CTR CCC**	**CTR CCC**	**CTR CCC**	**CTR CCC**	**	**400**	**151**	**1,500*** **	**
% Exceedance *(WQO)*	0	0	**	0	0	0	0	**	86	100	29	**
Dry Weather Action Level	**1.0**	**15**	**	**CTR CMC**	**CTR CMC**	**CTR CMC**	**CTR CMC**	**130,000[2]**	**13,000[2]**	**7,000[2]**	**	**
% Exceedance *(Dry Weather Action Level)*	0	0	**	0	0	0	0	43	14	29	**	**

Notes:
nd = not detected; na = not analyzed.
CTR = California Toxics Rule, see www.epa.gov/ost/standards/ctr/toxic.pdf for more information; CCC =Criterion Continuous Concentration; CMC = Criterion Maximum Concentration.
[1] Diazinon and chlorpyrifos have not been detected in the history of this program and have been omitted from this table.
[2] Prior to 2010, dry weather action levels for bacterial indicators were: total coliforms – 50,000 MPN/100mL, fecal coliforms – 20,000 MPN/100mL, and Enterococci – 10,000 MPN/100 mL.
* Statistical calculation not performed.
** No established limit.
*** The Basin Plan does not list a TDS WQO for hydrologic subarea (HAS) 907.13. This value is taken from HAS 907.12, the closest HSA to 907.13.

Table 7
Downstream Site 2002-2010 Field Screening Data

Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate-P (mg/L)	Dissolved Oxygen (mg/L)
8/22/2002	168	32	8.8	15.13	2.55	0.37	0.30	0.10	0.03	na
8/14/2003	299	29	8.6	6.36	2.70	0.13	0.20	2.00	nd[1]	11.10
6/24/2004	204	30	8.7	19.75	2.73	0.25	0.30	2.50	nd[1]	na
6/28/2004	244	20.6	8.3	4.74	2.32	0.38	0.30	1.25	0.03	7.51
6/9/2005	412	25.5	8.6	3.43	1.24	0.50	0.10	6.25	0.03	12.74
6/13/2006	421	27.9	8.7	2.06	2.58	0.25	0.80	5.00	0.03	10.66
7/3/2007	281	27.8	8.3	9.91	2.35	0.50	0.30	1.92	0.07	10.40
8/11/2008	234	32.0	8.7	5.57	2.80	0.25	0.30	2.12	0.03	9.64
6/25/2009	108	30.7	8.9	14.82	2.81	0.25	0.30	2.38	0.08	8.25
7/7/2010	94	18.4	8.2	4.06	2.82	0.25	0.40	5.77	nd[1]	8.32
Maximum	421	32.0	8.9	19.75	2.82	0.50	0.80	6.25	0.08	12.74
Minimum	94	18.4	8.2	2.06	1.24	0.13	0.10	0.10	nd	7.51
Average	247	27.4	8.6	8.58	2.49	0.31	0.30	2.93	0.04	9.82
Median	239	28.5	8.7	5.97	2.64	0.25	0.30	2.25	0.03	10.02
Ambient WQO	*	**BPJ**	**<6.5, >9.0**	**20**	**	**0.5**	**EPA Freshwater CMC*** **	****	****	**<5.0**
% Exceedance *(WQO)*	*	0	0	0	**	20	0	****	****	0
Dry Weather Action Level	*	**BPJ**	**<6.5, >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10**	**2**	*
% Exceedance *(Dry Weather Action Level)*	*	0	0	0	0	0	0	0	0	*

Notes:
nd = not detected; na = not analyzed; BPJ = Best Professional Judgment; EPA = Environmental Protection Agency.
[1] Half the value of the detection or reporting limit value was used in statistical calculations for the not detected constituent.
* No established limit.
** There is no clear WQO in the Basin Plan, but a comparison is not necessary since TDS was measured directly. See lab data tables for TDS results.
*** The Criterion Maximum Concentration (salmonids absent), which varies based on pH, has been used because it applies to a one-hour maximum, and the ammonia level for this study was measured based on an instantaneous grab sample. See www.epa.gov/waterscience/criteria/ammonia.
**** Regional guidance suggests using the EPA's nutrient endpoint tool to determine the WQO. This tool requires more data than what was collected within the scope of this study.

Table 8
Downstream Site 2002-2010 Laboratory Analytical Data[1]

Date	Surfactants (mg/l MBAS)	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Zinc (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
8/22/2002	nd	nd	549	nd	nd	nd	nd	30,000	17,000	300	na	na
8/14/2003	nd	nd	624	nd	10.0	nd	nd	8,000	2,300	800	1,490	10.6
6/24/2004	nd	4	536	nd	nd	nd	nd	35,000	1,100	20	1,590	16.3
6/28/2004	nd	nd	699	nd	nd	nd	nd	130,000	800	340	1,900	10.9
6/9/2005	nd	nd	810	nd	nd	nd	nd	30,000	1,300	5,000	1,700	53.4
6/13/2006	nd	nd	60	nd	nd	nd	nd	170,000	500	70	1,600	9.52
7/3/2007	nd	nd	649	nd	nd	nd	nd	30,000	5,000	800	1,400	14.1
8/11/2008	na	nd	480	nd	nd	nd	nd	5,000	1,300	40	1,120	45.5
6/25/2009	na	nd	616	nd	3.0	nd	nd	2,800	270	130	1,680	12
7/7/2010	na	nd	203	nd	1.0J	nd	0.9J	22,000	3,000	5,000	1,840	5.9
Maximum	nd	4	810	nd	10.0	nd	nd	170,000	17,000	5,000	1,900	53.4
Minimum	nd	nd	60	nd	nd	nd	nd	2,800	270	20	1,120	5.9
Average	*	*	523	*	*	*	*	46,280	3,257	1,250	1,591	19.8
Median	*	*	583	*	*	*	*	30,000	1,300	320	1,600	12.0
WQO	**0.5**	**10**	**	**CTR CCC**	**CTR CCC**	**CTR CCC**	**CTR CCC**	**	**400**	**151**	**1,500*** **	**
% Exceedance *(WQO)*	0	0	**	0	0	0	0	**	90	60	66	**
Dry Weather Action Level	**1.0**	**15**	**	**CTR CMC**	**CTR CMC**	**CTR CMC**	**CTR CMC**	**130,000**[2]	**13,000**[2]	**7,000**[2]	**	**
% Exceedance *(Dry Weather Action Level)*	0	0	**	0	0	0	0	20	10	0	**	**

Notes: nd = not detected; na = not analyzed; J = Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
CTR=California Toxics Rule, see epa.gov/ost/standards/ctr/toxic.pdf for more information; CCC=Criterion Continuous Concentration; CMC=Criterion Maximum Concentration.
[1] Diazinon and chlorpyrifos have not been detected in the history of this program and have been omitted from this table.
[2] Prior to 2010, dry weather action levels for bacterial indicators were: total coliforms – 50,000 MPN/100mL, fecal coliforms – 20,000 MPN/100mL, and Enterococci – 10,000 MPN/100 mL.
* Statistical calculation not performed.
** No established limit.
*** The Basin Plan does not list a WQO for hydrologic subarea (HAS) 907.13. This value is taken from HAS 907.12, the closest HSA to 907.13.

Laboratory Reports

19 July 2010

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 10G0166

Project Name: El Cajon Dry Weather
Project Number: 201034W-5

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- TOC – Liquid by SM5310B

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Clinical Laboratory of San Bernardino, Inc.

13 July 2010 Clinical Lab No.: 10G0684

Louis Luick
EnviroMatrix Analytical, Inc.
4340 Viewridge., Ste. A
San Diego, CA 92123

Project Name: Drinking Water
Sub Project: 10G0166

Enclosed are the results of the analyses for samples received at the laboratory on 07/08/10 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

Stu Styles
Client Services Manager

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge., Ste. A San Diego CA. 92123	Project: Drinking Water Sub Project: 10G0166 Project Manager: Louis Luick	Work Order: 10G0684 Received: 07/08/10 14:45 Reported: 07/13/10

Forester Cr. Upstream **10G0684-01 (Water)** **Sample Date:** 07/07/10 15:10 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**2.0**	mg/L	0.30		07/12/10	07/12/10	1029027	

ND Analyte NOT DETECTED at or above the reporting limit

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge., Ste. A San Diego CA. 92123	Project: Drinking Water Sub Project: 10G0166 Project Manager: Louis Luick	Work Order: 10G0684 Received: 07/08/10 14:45 Reported: 07/13/10

General Chemical Analyses - Quality Control
Clinical Laboratory of San Bernardino

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1029027										
Blank (1029027-BLK1)				Prepared & Analyzed: 07/12/10						
Total Organic Carbon	ND	0.30	mg/L							
LCS (1029027-BS1)				Prepared & Analyzed: 07/12/10						
Total Organic Carbon	4.26	0.30	mg/L	5.0		85	80-120			
Matrix Spike (1029027-MS1)		**Source: 10G0680-02**		Prepared & Analyzed: 07/12/10						
Total Organic Carbon	7.64	0.30	mg/L	5.0	3.07	91	80-120			
Matrix Spike Dup (1029027-MSD1)		**Source: 10G0680-02**		Prepared & Analyzed: 07/12/10						
Total Organic Carbon	7.61	0.30	mg/L	5.0	3.07	91	80-120	0.5	20	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

(2)

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

10G0166

10G0684

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Clinical Lab of San Bernardino, Inc.
21881 Barton Rd
Grand Terrace, CA 92313
Phone :(909) 825-7693
Fax: (909) 825-7696

STD TAT

PLEASE SEND REPORTS TO:
jbeyer@enviromatrixinc.com;
lluick@enviromatrixinc.com;
reports@enviromatrixinc.com.
Use comments as sample ID on report.

Analysis	Due	Expires	Laboratory ID
Sample ID: 10G0166-01	**Water**	**Sampled:07/07/10 15:10**	
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 15:10	
Containers Supplied:			
Voa Vial - HCl (E)	Voa Vial - HCl (F)		

Forester Cr. Uptream

Released By	Date	Received By	Date
	7/8/10 1119	Leanne Kay	7-8-10 11:20
Leanne Kay	7-8-10		
Released By	Date	Received By	Date

8C

(2)

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

10G0166

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Clinical Lab of San Bernardino, Inc.
21881 Barton Rd
Grand Terrace, CA 92313
Phone :(909) 825-7693
Fax: (909) 825-7696

STD TAT

PLEASE SEND REPORTS TO:
jbeyer@enviromatrixinc.com;
lluick@enviromatrixinc.com;
reports@enviromatrixinc.com.
Use comments as sample ID on report.

Analysis	Due	Expires	Laboratory ID	
Sample ID: 10G0166-01	**Water**	**Sampled:07/07/10 15:10**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 15:10		Forester Cr. Uptream
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			

Released By	Date	Received By	Date
	7/8/10 1119	Leanne Lag	7-8-10 11:20

EnviroMatrix Analytical, Inc.

27 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0166

Project Name: El Cajon Dry Weather
Project Desc./#: 201034W-5

Enclosed are the results of analyses for samples received by the laboratory on 07/07/10 16:32. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A • San Diego, California 92123 • (858) 560-7717 • Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0166

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Forester Cr. Uptream	10G0166-01	Stormwater	07/07/10 15:10	07/07/10 16:32

NOTE: The TOC analyses were performed by a sub-contract laboratory, results to follow in a separate report.

9611

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0166

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Uptream (10G0166-01) Stormwater Sampled: 07/07/10 15:10 Received: 07/07/10 16:32										
Zinc	**0.005**	0.0003	0.020	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	ND	0.001	0.010	"	"	"	"	"	"	
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	

9612

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0166

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Uptream (10G0166-01) Stormwater Sampled: 07/07/10 15:10 Received: 07/07/10 16:32										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071214	07/12/10	07/14/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*112 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*			"	"	"	"	

9613

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0166

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Uptream (10G0166-01) Stormwater Sampled: 07/07/10 15:10 Received: 07/07/10 16:32										
Hardness (Total)	**482**	10	10	mg CaCO3/L	1	0071402	07/13/10	07/26/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	"	0071634	07/16/10	07/16/10	EPA 1664A	

9614

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0166

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Uptream (10G0166-01) Stormwater Sampled: 07/07/10 15:10 Received: 07/07/10 16:32										
Total Coliforms	**13000**	200	200	MPN/100 ml	100	0070822	07/07/10	07/11/10	SM 9221 B, E	
Fecal Coliforms	**80**	20	20	"	10	"	"	07/10/10	"	
Enterococcus	**210**	20	20	"	"	0070823	"	07/11/10	SM 9230 A, B	

9615

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0166

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071341											
Blank (0071341-BLK1)					Prepared & Analyzed: 07/13/10						
Copper	ND	0.001	0.010	mg/l							
Cadmium	ND	0.0002	0.001	"							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
LCS (0071341-BS1)					Prepared & Analyzed: 07/13/10						
Lead	0.049	0.001	0.005	mg/l	0.0500		98	75-125			
Zinc	0.051	0.0003	0.020	"	0.0500		101	75-125			
Copper	0.051	0.001	0.010	"	0.0500		101	75-125			
Cadmium	0.051	0.0002	0.001	"	0.0500		102	75-125			
LCS Dup (0071341-BSD1)					Prepared & Analyzed: 07/13/10						
Cadmium	0.052	0.0002	0.001	mg/l	0.0500		105	75-125	2	20	
Copper	0.052	0.001	0.010	"	0.0500		103	75-125	2	20	
Zinc	0.051	0.0003	0.020	"	0.0500		103	75-125	2	20	
Lead	0.049	0.001	0.005	"	0.0500		98	75-125	0.4	20	
Duplicate (0071341-DUP1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Zinc	0.0009	0.0003	0.020	mg/l		0.0009			3	20	J
Lead	ND	0.001	0.005	"		ND				20	
Cadmium	ND	0.0002	0.001	"		ND				20	
Copper	0.001	0.001	0.010	"		0.001			2	20	J
Matrix Spike (0071341-MS1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Lead	0.050	0.001	0.005	mg/l	0.0500	ND	100	75-125			
Zinc	0.045	0.0003	0.020	"	0.0500	0.0009	88	75-125			
Copper	0.044	0.001	0.010	"	0.0500	0.001	86	75-125			
Cadmium	0.045	0.0002	0.001	"	0.0500	ND	90	75-125			

9616

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0166

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071341											
Matrix Spike Dup (0071341-MSD1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500	ND	92	75-125	2	20	
Zinc	0.045	0.0003	0.020	"	0.0500	0.0009	88	75-125	0.8	20	
Lead	0.050	0.001	0.005	"	0.0500	ND	101	75-125	1	20	
Copper	0.044	0.001	0.010	"	0.0500	0.001	86	75-125	0.4	20	

9617

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0166

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071214											
Blank (0071214-BLK1)					Prepared: 07/12/10	Analyzed: 07/14/10					
Chlorpyrifos	ND	0.04	0.05	ug/l							
Diazinon	ND	0.04	0.05	"							
Malathion	ND	0.05	0.05	"							
Surrogate: Triphenyl phosphate	*0.270*			"	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*			"	*0.250*		*108*	*60-130*			
LCS (0071214-BS1)					Prepared: 07/12/10	Analyzed: 07/14/10					
Bolstar	0.41	0.09	0.10	ug/l	0.500		82	60-130			
Diazinon	0.44	0.04	0.05	"	0.500		88	60-130			
Ethoprop	0.46	0.05	0.05	"	0.500		92	60-130			
Mevinphos	0.43	0.21	0.25	"	0.500		86	60-130			
Methyl parathion	0.49	0.07	0.10	"	0.500		98	60-130			
Phorate	0.40	0.03	0.05	"	0.500		80	60-130			
Ronnel	0.40	0.16	0.25	"	0.500		80	60-130			
Trichlorinate	0.44	0.05	0.05	"	0.500		88	60-130			
Surrogate: Triphenyl phosphate	*0.270*			"	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.280*			"	*0.250*		*112*	*60-130*			
LCS Dup (0071214-BSD1)					Prepared: 07/12/10	Analyzed: 07/14/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	2	30	
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130	5	30	
Ethoprop	0.39	0.05	0.05	"	0.500		78	60-130	16	30	
Mevinphos	0.44	0.21	0.25	"	0.500		88	60-130	2	30	
Methyl parathion	0.42	0.07	0.10	"	0.500		84	60-130	15	30	
Phorate	0.40	0.03	0.05	"	0.500		80	60-130	0	30	
Ronnel	0.40	0.16	0.25	"	0.500		80	60-130	0	30	
Trichlorinate	0.41	0.05	0.05	"	0.500		82	60-130	7	30	
Surrogate: Triphenyl phosphate	*0.270*			"	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*			"	*0.250*		*108*	*60-130*			

9618

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0166

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071402											
Blank (0071402-BLK1)					Prepared: 07/13/10	Analyzed: 07/24/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0071402-DUP1)		**Source: 10G0092-01**			Prepared: 07/13/10	Analyzed: 07/26/10					
Hardness (Total)	301	10	10	mg CaCO3/L		273			10	20	
Batch 0071634											
Blank (0071634-BLK1)					Prepared & Analyzed: 07/16/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0071634-BS1)					Prepared & Analyzed: 07/16/10						
Oil & Grease	33	5	5	mg/l	40.0		82	78-114			
LCS Dup (0071634-BSD1)					Prepared & Analyzed: 07/16/10						
Oil & Grease	34	5	5	mg/l	40.0		84	78-114	3	20	

9619

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

9620

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

28 July 2010

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 10G0149

Project Name: El Cajon Dry Weather
Project Number: 201034W-3

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- TOC – Liquid by SM5310B

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Clinical Laboratory of San Bernardino, Inc.

13 July 2010 Clinical Lab No.: 10G0683

Louis Luick
EnviroMatrix Analytical, Inc.
4340 Viewridge., Ste. A
San Diego, CA 92123

Project Name: Drinking Water
Sub Project: 10G0149

Enclosed are the results of the analyses for samples received at the laboratory on 07/08/10 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

Stu Styles
Client Services Manager

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge.. Ste. A San Diego CA, 92123	Project: Drinking Water Sub Project: 10G0149 Project Manager: Louis Luick	Work Order: 10G0683 Received: 07/08/10 14:45 Reported: 07/13/10

Site 5 **10G0683-01 (Water)** **Sample Date:** 07/07/10 9:40 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**5.9**	mg/L	0.30		07/12/10	07/12/10	1029027	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge., Ste. A San Diego CA. 92123	Project: Drinking Water Sub Project: 10G0149 Project Manager: Louis Luick	Work Order: 10G0683 Received: 07/08/10 14:45 Reported: 07/13/10

Site 2 **10G0683-02 (Water)** **Sample Date:** 07/07/10 10:50 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**5.2**	mg/L	0.30		07/12/10	07/12/10	1029027	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc.	Project: Drinking Water	Work Order: 10G0683
4340 Viewridge., Ste. A	Sub Project: 10G0149	Received: 07/08/10 14:45
San Diego CA. 92123	Project Manager: Louis Luick	Reported: 07/13/10

Site 41 **10G0683-03 (Water)** **Sample Date:** 07/07/10 11:45 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**11**	mg/L	0.30		07/12/10	07/12/10	1029027	

ND Analyte NOT DETECTED at or above the reporting limit

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

EnviroMatrix Analytical, Inc. 4340 Viewridge., Ste. A San Diego CA, 92123	Project: Drinking Water Sub Project: 10G0149 Project Manager: Louis Luick	Work Order: 10G0683 Received: 07/08/10 14:45 Reported: 07/13/10

General Chemical Analyses - Quality Control
Clinical Laboratory of San Bernardino

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1029027										
Blank (1029027-BLK1)				Prepared & Analyzed: 07/12/10						
Total Organic Carbon	ND	0.30	mg/L							
LCS (1029027-BS1)				Prepared & Analyzed: 07/12/10						
Total Organic Carbon	4.26	0.30	mg/L	5.0		85	80-120			
Matrix Spike (1029027-MS1)		**Source: 10G0680-02**		Prepared & Analyzed: 07/12/10						
Total Organic Carbon	7.64	0.30	mg/L	5.0	3.07	91	80-120			
Matrix Spike Dup (1029027-MSD1)		**Source: 10G0680-02**		Prepared & Analyzed: 07/12/10						
Total Organic Carbon	7.61	0.30	mg/L	5.0	3.07	91	80-120	0.5	20	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

(6)

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

10G0149

1060683

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Clinical Lab of San Bernardino, Inc.
21881 Barton Rd
Grand Terrace, CA 92313
Phone :(909) 825-7693
Fax: (909) 825-7696

5 TO TAT

PLEASE SEND REPORTS TO:
jbeyer@enviromatrixinc.com;
lluick@enviromatrixinc.com;
reports@enviromatrixinc.com.
Use comments as sample ID on report.

Analysis	Due	Expires	Laboratory ID	
Sample ID: 10G0149-01	**Water**	**Sampled:07/07/10 09:40**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 09:40		Site 5
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			
Sample ID: 10G0149-02	**Water**	**Sampled:07/07/10 10:50**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 10:50		Site 2
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			
Sample ID: 10G0149-03	**Water**	**Sampled:07/07/10 11:45**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 11:45		Site 41
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			

Released By	Date	Received By	Date
	7/8/10 1119		7-8-10 11:20.
	7-8-10 2:49		

PC

(6)

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

10G0149

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

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jbeyer@enviromatrixinc.com;
lluick@enviromatrixinc.com;
reports@enviromatrixinc.com.
Use comments as sample ID on report.

STO TAT

Analysis	Due	Expires	Laboratory ID	
Sample ID: 10G0149-01	**Water**	**Sampled:07/07/10 09:40**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 09:40		Site 5
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			
Sample ID: 10G0149-02	**Water**	**Sampled:07/07/10 10:50**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 10:50		Site 2
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			
Sample ID: 10G0149-03	**Water**	**Sampled:07/07/10 11:45**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 11:45		Site 41
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			

Released By	Date	Received By	Date
	7/8/10 1119		7-8-10 11:20.
Released By	Date	Received By	Date

EnviroMatrix Analytical, Inc.

29 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0149

Project Name: El Cajon Dry Weather
Project Desc./#: 201034W-3

Enclosed are the results of analyses for samples received by the laboratory on 07/07/10 13:03. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site5	10G0149-01	Stormwater	07/07/10 09:40	07/07/10 13:03
Site2	10G0149-02	Stormwater	07/07/10 10:50	07/07/10 13:03
Site41	10G0149-03	Stormwater	07/07/10 11:45	07/07/10 13:03

NOTE: The TOC and TKN analyses were performed by a sub-contract laboratory, results to follow in a separate report.

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site5 (10G0149-01) Stormwater Sampled: 07/07/10 09:40 Received: 07/07/10 13:03										
Cadmium	ND	0.0002	0.001	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	
Copper	**0.001**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.0009**	0.0003	0.020	"	"	"	"	"	"	J
Site2 (10G0149-02) Stormwater Sampled: 07/07/10 10:50 Received: 07/07/10 13:03										
Copper	**0.002**	0.001	0.010	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	J
Cadmium	**0.0003**	0.0002	0.001	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.0009**	0.0003	0.020	"	"	"	"	"	"	J
Site41 (10G0149-03) Stormwater Sampled: 07/07/10 11:45 Received: 07/07/10 13:03										
Zinc	**0.002**	0.0003	0.020	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site5 (10G0149-01) Stormwater Sampled: 07/07/10 09:40 Received: 07/07/10 13:03										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071214	07/12/10	07/14/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*108 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*			"	"	"	"	
Site2 (10G0149-02) Stormwater Sampled: 07/07/10 10:50 Received: 07/07/10 13:03										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071214	07/12/10	07/14/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*108 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*			"	"	"	"	
Site41 (10G0149-03) Stormwater Sampled: 07/07/10 11:45 Received: 07/07/10 13:03										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071214	07/12/10	07/14/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*108 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*			"	"	"	"	

9632

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site5 (10G0149-01) Stormwater Sampled: 07/07/10 09:40 Received: 07/07/10 13:03										
Hardness (Total)	**203**	100	100	mg CaCO3/L	10	0071402	07/13/10	07/24/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0071339	07/14/10	07/14/10	EPA 1664A	
Site2 (10G0149-02) Stormwater Sampled: 07/07/10 10:50 Received: 07/07/10 13:03										
Hardness (Total)	**192**	100	100	mg CaCO3/L	10	0071402	07/13/10	07/26/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0071339	07/14/10	07/14/10	EPA 1664A	
Site41 (10G0149-03) Stormwater Sampled: 07/07/10 11:45 Received: 07/07/10 13:03										
Hardness (Total)	**400**	100	100	mg CaCO3/L	10	0071402	07/13/10	07/26/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0071339	07/14/10	07/14/10	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site5 (10G0149-01) Stormwater Sampled: 07/07/10 09:40 Received: 07/07/10 13:03										
Total Coliforms	**22000**	200	200	MPN/100 ml	100	0070806	07/07/10	07/11/10	SM 9221 B, E	
Fecal Coliforms	**3000**	200	200	"	"	"	"	07/10/10	"	
Enterococcus	**5000**	200	200	"	"	0070807	"	07/11/10	SM 9230 A, B	
Site2 (10G0149-02) Stormwater Sampled: 07/07/10 10:50 Received: 07/07/10 13:03										
Total Coliforms	**11000**	200	200	MPN/100 ml	100	0070806	07/07/10	07/11/10	SM 9221 B, E	
Fecal Coliforms	**2300**	200	200	"	"	"	"	07/10/10	"	
Enterococcus	**2200**	20	20	"	10	0070807	"	07/11/10	SM 9230 A, B	
Site41 (10G0149-03) Stormwater Sampled: 07/07/10 11:45 Received: 07/07/10 13:03										
Total Coliforms	**9000**	200	200	MPN/100 ml	100	0070806	07/07/10	07/11/10	SM 9221 B, E	
Fecal Coliforms	**1700**	20	20	"	10	"	"	07/10/10	"	
Enterococcus	**500**	20	20	"	"	0070807	"	07/11/10	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071341											
Blank (0071341-BLK1)					Prepared & Analyzed: 07/13/10						
Copper	ND	0.001	0.010	mg/l							
Cadmium	ND	0.0002	0.001	"							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
LCS (0071341-BS1)					Prepared & Analyzed: 07/13/10						
Zinc	0.051	0.0003	0.020	mg/l	0.0500		101	75-125			
Copper	0.051	0.001	0.010	"	0.0500		101	75-125			
Cadmium	0.051	0.0002	0.001	"	0.0500		102	75-125			
Lead	0.049	0.001	0.005	"	0.0500		98	75-125			
LCS Dup (0071341-BSD1)					Prepared & Analyzed: 07/13/10						
Lead	0.049	0.001	0.005	mg/l	0.0500		98	75-125	0.4	20	
Zinc	0.051	0.0003	0.020	"	0.0500		103	75-125	2	20	
Copper	0.052	0.001	0.010	"	0.0500		103	75-125	2	20	
Cadmium	0.052	0.0002	0.001	"	0.0500		105	75-125	2	20	
Duplicate (0071341-DUP1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Cadmium	ND	0.0002	0.001	mg/l		ND				20	
Copper	0.001	0.001	0.010	"		0.001			2	20	J
Lead	ND	0.001	0.005	"		ND				20	
Zinc	0.0009	0.0003	0.020	"		0.0009			3	20	J
Matrix Spike (0071341-MS1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Zinc	0.045	0.0003	0.020	mg/l	0.0500	0.0009	88	75-125			
Cadmium	0.045	0.0002	0.001	"	0.0500	ND	90	75-125			
Lead	0.050	0.001	0.005	"	0.0500	ND	100	75-125			
Copper	0.044	0.001	0.010	"	0.0500	0.001	86	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071341											
Matrix Spike Dup (0071341-MSD1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Copper	0.044	0.001	0.010	mg/l	0.0500	0.001	86	75-125	0.4	20	
Lead	0.050	0.001	0.005	"	0.0500	ND	101	75-125	1	20	
Cadmium	0.046	0.0002	0.001	"	0.0500	ND	92	75-125	2	20	
Zinc	0.045	0.0003	0.020	"	0.0500	0.0009	88	75-125	0.8	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071214											
Blank (0071214-BLK1)					Prepared: 07/12/10	Analyzed: 07/14/10					
Chlorpyrifos	ND	0.04	0.05	ug/l							
Diazinon	ND	0.04	0.05	"							
Malathion	ND	0.05	0.05	"							
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
LCS (0071214-BS1)					Prepared: 07/12/10	Analyzed: 07/14/10					
Bolstar	0.41	0.09	0.10	ug/l	0.500		82	60-130			
Diazinon	0.44	0.04	0.05	"	0.500		88	60-130			
Ethoprop	0.46	0.05	0.05	"	0.500		92	60-130			
Mevinphos	0.43	0.21	0.25	"	0.500		86	60-130			
Methyl parathion	0.49	0.07	0.10	"	0.500		98	60-130			
Phorate	0.40	0.03	0.05	"	0.500		80	60-130			
Ronnel	0.40	0.16	0.25	"	0.500		80	60-130			
Trichlorinate	0.44	0.05	0.05	"	0.500		88	60-130			
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.280*			*"*	*0.250*		*112*	*60-130*			
LCS Dup (0071214-BSD1)					Prepared: 07/12/10	Analyzed: 07/14/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	2	30	
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130	5	30	
Ethoprop	0.39	0.05	0.05	"	0.500		78	60-130	16	30	
Mevinphos	0.44	0.21	0.25	"	0.500		88	60-130	2	30	
Methyl parathion	0.42	0.07	0.10	"	0.500		84	60-130	15	30	
Phorate	0.40	0.03	0.05	"	0.500		80	60-130	0	30	
Ronnel	0.40	0.16	0.25	"	0.500		80	60-130	0	30	
Trichlorinate	0.41	0.05	0.05	"	0.500		82	60-130	7	30	
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071339											
Blank (0071339-BLK1)					Prepared & Analyzed: 07/13/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0071339-BS1)					Prepared & Analyzed: 07/13/10						
Oil & Grease	36	5	5	mg/l	40.0		90	78-114			
LCS Dup (0071339-BSD1)					Prepared & Analyzed: 07/13/10						
Oil & Grease	38	5	5	mg/l	40.0		95	78-114	6	20	
Batch 0071402											
Blank (0071402-BLK1)					Prepared: 07/13/10 Analyzed: 07/24/10						
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0071402-DUP1)			**Source: 10G0092-01**		Prepared: 07/13/10 Analyzed: 07/26/10						
Hardness (Total)	301	10	10	mg CaCO3/L		273			10	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

EnviroMatrix Analytical, Inc.

29 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0149

Project Name: El Cajon MS4 Monitoring
Project Desc./#: 201034W-3

Enclosed are the results of analyses for samples received by the laboratory on 07/07/10 13:03. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 10G0149

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site5	10G0149-01	Stormwater	07/07/10 09:40	07/07/10 13:03
Site2	10G0149-02	Stormwater	07/07/10 10:50	07/07/10 13:03
Site41	10G0149-03	Stormwater	07/07/10 11:45	07/07/10 13:03

NOTE: The TOC and TKN analyses were performed by a sub-contract laboratory, results to follow in a separate report.

9641

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 10G0149

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site5 (10G0149-01) Stormwater Sampled: 07/07/10 09:40 Received: 07/07/10 13:03										
Nitrate/Nitrite as N	**6.00**	0.22	1.25	mg/l	25	0071605	07/16/10	07/16/10	SM4500 NO3 E	
Total Nitrogen	**7.1**	0.5	0.5	"	1	0072833	07/27/10	07/27/10	Calculation	
Phosphorus, Total	**0.18**	0.02	0.05	"	"	0071427	07/14/10	07/14/10	SM4500 P B, E	
Total Dissolved Solids	**1840**	1.0	20.0	"	"	0071213	07/13/10	07/13/10	SM2540 C	
Total Suspended Solids	**17.0**	1.0	20.0	"	"	0071335	07/13/10	07/14/10	SM2540 D	J
Site2 (10G0149-02) Stormwater Sampled: 07/07/10 10:50 Received: 07/07/10 13:03										
Nitrate/Nitrite as N	**6.82**	0.22	1.25	mg/l	25	0071605	07/16/10	07/16/10	SM4500 NO3 E	
Total Nitrogen	**6.8**	0.5	0.5	"	1	0072833	07/27/10	07/27/10	Calculation	
Phosphorus, Total	**0.19**	0.02	0.05	"	"	0071427	07/14/10	07/14/10	SM4500 P B, E	
Total Dissolved Solids	**1710**	1.0	20.0	"	"	0071213	07/13/10	07/13/10	SM2540 C	
Total Suspended Solids	**10.0**	1.0	20.0	"	"	0071335	07/13/10	07/14/10	SM2540 D	J
Site41 (10G0149-03) Stormwater Sampled: 07/07/10 11:45 Received: 07/07/10 13:03										
Nitrate/Nitrite as N	**2.52**	0.22	1.25	mg/l	25	0071605	07/16/10	07/16/10	SM4500 NO3 E	
Total Nitrogen	**3.6**	0.5	0.5	"	1	0072833	07/27/10	07/27/10	Calculation	
Phosphorus, Total	**0.10**	0.02	0.05	"	"	0071427	07/14/10	07/14/10	SM4500 P B, E	
Total Dissolved Solids	**2290**	1.0	20.0	"	"	0071213	07/13/10	07/13/10	SM2540 C	
Total Suspended Solids	**8.0**	1.0	20.0	"	"	0071335	07/13/10	07/14/10	SM2540 D	J

9642

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 10G0149

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site5 (10G0149-01) Stormwater Sampled: 07/07/10 09:40 Received: 07/07/10 13:03										
Total Coliforms	**22000**	200	200	MPN/100 ml	100	0070806	07/07/10	07/11/10	SM 9221 B, E	
Fecal Coliforms	**3000**	200	200	"	"	"	"	07/10/10	"	
Enterococcus	**5000**	200	200	"	"	0070807	"	07/11/10	SM 9230 A, B	
Site2 (10G0149-02) Stormwater Sampled: 07/07/10 10:50 Received: 07/07/10 13:03										
Total Coliforms	**11000**	200	200	MPN/100 ml	100	0070806	07/07/10	07/11/10	SM 9221 B, E	
Fecal Coliforms	**2300**	200	200	"	"	"	"	07/10/10	"	
Enterococcus	**2200**	20	20	"	10	0070807	"	07/11/10	SM 9230 A, B	
Site41 (10G0149-03) Stormwater Sampled: 07/07/10 11:45 Received: 07/07/10 13:03										
Total Coliforms	**9000**	200	200	MPN/100 ml	100	0070806	07/07/10	07/11/10	SM 9221 B, E	
Fecal Coliforms	**1700**	20	20	"	10	"	"	07/10/10	"	
Enterococcus	**500**	20	20	"	"	0070807	"	07/11/10	SM 9230 A, B	

9643

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 10G0149

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071213											
Blank (0071213-BLK1)					Prepared: 07/12/10		Analyzed: 07/13/10				
Total Dissolved Solids	ND	1.0	10.0	mg/l							
Duplicate (0071213-DUP1)			**Source: 10G0243-01**		Prepared: 07/12/10		Analyzed: 07/13/10				
Total Dissolved Solids	2.0	1.0	10.0	mg/l		2.0			0	20	J
Reference (0071213-SRM1)					Prepared: 07/12/10		Analyzed: 07/13/10				
Total Dissolved Solids	284	1.0	20.0	mg/l	269		106	87-113			
Batch 0071335											
Blank (0071335-BLK1)					Prepared: 07/13/10		Analyzed: 07/14/10				
Total Suspended Solids	ND	1.0	20.0	mg/l							
Duplicate (0071335-DUP1)			**Source: 10G0186-01**		Prepared: 07/13/10		Analyzed: 07/14/10				
Total Suspended Solids	1.3	1.0	20.0	mg/l		1.2			8	20	J
Reference (0071335-SRM1)					Prepared: 07/13/10		Analyzed: 07/14/10				
Total Suspended Solids	48.0	1.0	20.0	mg/l	49.9		96	84.8-105			
Batch 0071427											
Blank (0071427-BLK1)					Prepared & Analyzed: 07/14/10						
Phosphorus, Total	ND	0.02	0.05	mg/l							
LCS (0071427-BS1)					Prepared & Analyzed: 07/14/10						
Phosphorus, Total	0.51	0.02	0.05	mg/l	0.500		101	80-120			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 10G0149

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071427											
LCS Dup (0071427-BSD1)					Prepared & Analyzed: 07/14/10						
Phosphorus, Total	0.47	0.02	0.05	mg/l	0.500		94	80-120	7	20	
Duplicate (0071427-DUP1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/14/10						
Phosphorus, Total	0.22	0.02	0.05	mg/l		0.18			20	20	
Matrix Spike (0071427-MS1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/14/10						
Phosphorus, Total	0.61	0.02	0.05	mg/l	0.500	0.18	85	80-120			
Matrix Spike Dup (0071427-MSD1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/14/10						
Phosphorus, Total	0.61	0.02	0.05	mg/l	0.500	0.18	86	80-120	0.3	20	
Batch 0071605											
Blank (0071605-BLK1)					Prepared & Analyzed: 07/16/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l							
LCS (0071605-BS1)					Prepared & Analyzed: 07/16/10						
Nitrate/Nitrite as N	0.52	0.009	0.05	mg/l	0.500		105	80-120			
LCS Dup (0071605-BSD1)					Prepared & Analyzed: 07/16/10						
Nitrate/Nitrite as N	0.51	0.009	0.05	mg/l	0.500		102	80-120	3	20	
Duplicate (0071605-DUP1)			**Source: 10G0167-01**		Prepared & Analyzed: 07/16/10						
Nitrate/Nitrite as N	4.72	0.22	1.25	mg/l		5.15			9	20	
Matrix Spike (0071605-MS1)			**Source: 10G0167-01**		Prepared & Analyzed: 07/16/10						
Nitrate/Nitrite as N	17.1	0.22	1.25	mg/l	13.0	5.15	92	80-120			

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Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 10G0149

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071605											
Matrix Spike Dup (0071605-MSD1)			**Source: 10G0167-01**		Prepared & Analyzed: 07/16/10						
Nitrate/Nitrite as N	18.6	0.22	1.25	mg/l	13.0	5.15	104	80-120	9	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon MS4 Monitoring

EMA Log #: 10G0149

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

11 August 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10H0154

Project Name: El Cajon Dry Weather
Project Desc./#: 201034W-5

Enclosed are the results of analyses for samples received by the laboratory on 07/07/10 16:32. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0154

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Forester Cr. Uptream	10H0154-01	Stormwater	07/07/10 15:10	07/07/10 16:32

9649

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0154

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Forester Cr. Uptream (10H0154-01) Stormwater Sampled: 07/07/10 15:10 Received: 07/07/10 16:32										
Total Dissolved Solids	**1130**	1.0	20.0	mg/l	1	0080932	08/08/10	08/09/10	SM2540 C	HT-07

9650

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0154

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0080932											
Blank (0080932-BLK1)					Prepared: 08/08/10		Analyzed: 08/09/10				
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0080932-DUP1)			**Source: 10H0057-01**		Prepared: 08/08/10		Analyzed: 08/09/10				
Total Dissolved Solids	1020	1.0	20.0	mg/l		1020			0.9	20	
Reference (0080932-SRM1)					Prepared: 08/08/10		Analyzed: 08/09/10				
Total Dissolved Solids	240	1.0	20.0	mg/l	269		89	87-113			

9651

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0154

Notes and Definitions

HT-07	This sample was analyzed outside of the method recommended holding time due to the analysis request being made after the holding time had expired.
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Field Datasheets

MRM

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ~~☑ MS4~~ ☑ Receiving Water (Both)

Site ID	Site 5		**Latitude**	32.82165	**Watershed**	**Hydrologic Unit**	907
Location	Adjacent to Weld Blvd. trolley station. SE. of intersection of Marshall Ave. & Cuyamaca St.		**Longitude**	-116.98226		**Hydrologic Area**	907.1
			TB Page	1251, D1		**Hydrologic Subarea** (Optional)	907.13
Date	7/7/10	**Time** 9:40	**Observer**	MD / BM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	~~☑ Limited~~	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 278 - 279

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.4	NH_3-N (mg/L)	0.422	NO_3 (mg/L)	25.51	Ortho-PO_4 (mg/L)	0.000
pH (pH units)	8.2	TURB (NTU)	4.06	NO_3-N (mg/L)	5.765	Ortho-PO_4-P (mg/L)	0.000
COND (mS/cm)	2.82	MBAS (mg/L)	0.25	DO (mg/L)	8.32		

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	90	in
Depth	0.5	in
Velocity	10/15	ft/sec
Flow	94	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

1C

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ~~☑ MS4~~ Both ☐ Receiving Water

Site ID	Forester Creek Upstream		**Latitude**	32.81185	**Watershed**	**Hydrologic Unit**	907
Location	Greenfield Ave. & I-8 W. ramp intersection behind SE corner of Valero gas station at 1199 E. Main St.		**Longitude**	-116.91795		**Hydrologic Area**	907.1
			TB Page	1252, B3		**Hydrologic Subarea** (Optional)	907.13
Date	7/7/10	**Time** 15:10	**Observer**	MD/BM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☑ Other algae

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 280 - 290

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.9	NH_3-N (mg/L)	0.140	NO_3 (mg/L)	56.33	Ortho-PO_4 (mg/L)	0.154
pH (pH units)	7.6	TURB (NTU)	1.75	NO_3-N (mg/L)	12.751	Ortho-PO_4-P (mg/L)	0.050
COND (mS/cm)	1.72	MBAS (mg/L)	0.13	DO (mg/L)	5.72		

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	9	in
Depth	0.25	in
Velocity	5/8	ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Appendix B.1

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
1	07/09/09	Residential		1855	Lisa Terrace	Odor from unknown neighbors broken septic line.	Contacted the complainant and advised that the property is within the County jurisdiction.	No	N/A	N/A
2	07/15/09	Residential		959	Naranca Ave	Dog feces being thrown into open concrete channel at rear of property.	Property ower notified by door tag. No evidence of feces noted at time of inspection.	Yes	Verbal	N/A
3	07/15/09	Mobile	Premium Roof S	1573	Green Grove Ave	Discharge of tile cutting residue to the street. Discharge did not enter the storm drain inlet.	Contacted the contractor and resident. They were advised to clean the area using a dry method. A written warning was issued.	Yes	Warning	Yes
4	07/16/09	Residential		1143	Loma Portal					
5	07/20/09	County	Sheryl's Gas sta	2411	Jamacha	Broken nozzel caused asoline discharge to street.	Referred to County storm water. PW and building official notified.	No	N/A	N/A
6	07/22/09	Residential		1593	Washington Ave	Apartment management sweeping debris into the street on Wichita side of the property.	Phone contact with complainant for details. No evidence of discharge of waste matter during a site inspection	Yes	N/A	N/A
7	07/22/09	Residential		934	Dennstedt Pl	Neighbor draining pool water onto complanants property causing structural damage.	After review the matter was found to be civil.	No	N/A	N/A
8	07/23/09	Residential		2903	Tahoe	Large amount of soil on street and sidewalk	The property owner was contacted on site. The landscaping soil was being moved to the rear yard. The owner was given storm water educatinal materials and told to sweep.	Yes	Verbal	Yes
9	07/23/09	Commercial	Sprouts	152	Second St	Strong odor of rotting food at the rear of the store.	Site inspection found water from foods storage area at rear discharged to rear lot. None left the property. Sthe store manager was contacted and advised to cleanthe area and recapture and properly dispose of it in the future.	Yes	Verbal	Yes
10	07/28/09	Residential		1265	Bermuda Pl	Sediment discharge to street from unimproved driveway.	Contacted the property owner on site and instructed him to install BMPs to prevent tracking and further erosion. Educational materials were issued.	Yes	Verbal	N/A
11	07/29/09	Residential		874	Hacienda	PW staff member observed sewer overflow during plumbing repair. The discharge entered the curb flowing into the storm drain inlet just north of the discharge point.	A notice was left on the door of the residence. Required report was submitted.	Yes	Verbal	Yes

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
12	07/31/09	Construction	Pacific Building	190	Main St	Routine construction inspection found sediment tracking, failed BMPs.	Contacted the site superintendent and advised to comply with the erosion control plans. He was issued a written warning.	Yes	Warning	Yes
13	08/06/09	Commercial	Coco's	1025	Fletcher Parkway	Open sewer cap on north side of property discharging sewage into grass and side walk.	Sontacted the general manager and advised to contact a plumbing service to clear the line scope the line and file a report.	Yes	First	Yes
14	08/10/09	Residential		848	Lemon Ave	On 8-9-09 a vehicle dumped oil on the pavement in front of the residence. Dirt was applied and swept up. Resident wants to know who to contact for removal.	The resident was contacted and advies to contact HAZMAT for removing the contaminated soil. She was referred to Waste management. There was evidence of a spill during site visit.	Yes	N/A	Yes
15	08/11/09	Residential		1575	Lily Ave	Resident is dumping paint wash water in front across sidewalk and into the street.	Site inspection found paint residue in the front yard vegetation,sidewalk and street. A card and door tag was left.	Yes	Verbal	Yes
16	08/17/09	Residential		612	Live Oak Dr	Sewer back up in front yard.	Site inspection located a sewage discharge in the left front yard and a broken sewer cap. The tenant ws contacted and advised to contact a plumber to make repairs and report to the City. No discharge to the street or drain inlet.	Yes	Verbal	Yes
17	08/19/09	Construction	Starrett Construc	965	Arnelle St	Sediment tracking and failure to install BMPs.	the contractor was contacted and instructed to improve the BPMs and to sweep all paved areas.	Yes	Second	Yes
18	08/19/09	Construction	San Diego Cont	1539	Main St	Illegal discharge of sediment-water, failure to properly install and maintain SWPPP required BMPs.	Contacted the superintendent and issued a citation and advised to make corrections immediately.	Yes	First	Yes
19	08/20/09	Commercial	Vey's Power Sp	660	El Cajon Blvd	Using water to power strip paint from the building.	Contacted the business manager and advised to cease using water and to thorougly dry clean all paved areas.	Yes	Verbal	Yes
20	08/21/09	Commercial	Toyota of El Caj	440	Johnson	Auto body reair work conducted outside with no BMPs adjacent to the storm channel.	Found auto repair an a minor discharge during inspection. Contacted the Toyota employees on site and advised to cease all outside work. The property was sold and they are moving out in two days.	Yes	Verbal	Yes
21	08/24/09	Commercial	Commercial Mul	1401	Pioneer Way	Water discharging from somewhere in the business cmplex.	Site inspection found no evidence of a discharge.	No	N/A	N/A
22	08/26/09	Mobile	Finest City Deta	300 Blk	Rea and Magnolia	Mobile detailer conducting business without BMPs in place.	The mobile business owner was contacted and advised to use proper BMPs that were on his truck to reclaim all wash water.	Yes	Verbal	Yes

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
23	08/28/09	Commercial	County Collision	153	Johnson	Neighboring busness has water continually running off the property.	Contacted the manager of the auto body business. Found moderate discharge of wash water at the rear of the business flowing acrosss the property line to rear of adjacent business. Also noted body work being done outside. He wat told to cease all outside work and washing. There is a covered wash and work area on site.	No	Verbal	Yes
24	08/28/09	Residential		396	Raleigh St	Unknown party is working on a diesel truck in the street allowing fluids to drain with no protection.	Site inspection found drain pan under the vehicle and small amount of fluid on surface. No one was present. Storm water information was left on the windshield.	Yes	N/A	N/A
25	08/31/09	Commercial	Abcana Industrie	545	Bradley	Strong chlorine fumes coming from plumbing fixtures at Napa Auto. Suspect neighboring business dumps chemicals in sewer.	contacted the business manager and conducted a full inspection of the site. No discharge was found. They wash out pool chlorine containers and wash to sewer. There were other storm water issues addressed	No	Verbal	N/A
26	09/01/09	Residential		1535	Melody Ln	Complaint of vehicle oil spill in driveway and sidewalk	Site inspection found a minor oil spill in the driveway and sidewalk covered with an absorbent material. No response at door. Storm water educational materials were issued.	Yes	N/A	N/A
27	09/02/09	Residential		988	Grouse St	Evidence of past discharge from mobile carpet cleaning vans parked in the driveway. None current.	Storm Water inspection found residue tracking to be coming from the neighboring street, Finch. Efforts failed to locate the source of th discharge. It appears to be from ground water seepage.	No	N/A	N/A
28	09/04/09	Residential		2010	Madison Ave	Neighboring property is constantly being overwatered. New construction. Questions if drainage is beig done properly.	Unable to Locate any noticable violations. Complainant notified	No	N/A	N/A
29	09/08/09	Residential	Cypress Park Ap	570	Lincoln St	Tenant repairing vehicles on the street. Threat of fluid discharges	Site inspection found no evidence of vehicle repair. No discharges noted.	No	N/A	N/A
30	09/08/09	Commercial	Julio Ceasar Ch	464	Main St	Rennovation ongoing on site, large soil piles with no BMPs, hard surfaces need sweeping.	The Business owner was contacted on site and advised to sweep all paved areas and provide protection for all soil piles.	Yes	Verbal	N/A
31	09/09/09	Construction	Pacific Building	190	Main St	Employee using water to clean the lot.	Contacted the project manager and advised to clean the paved areas by sweeping or vac. The water flowed directly into vegetated planters.	Yes	Verbal	N/A
32	09/14/09	Residential		455	Silverbrook Dr	Water flowing onto property from Padre Dam discharge pooling on her property.	Complainants property is in the county. Advised to contact county storm water hotline.	No	N/A	N/A
33	09/14/09	Residential		574	Macon St	Sewage has been running across the sidewalk for the last 3 months.	Site inspection found the discharge to be from a broken irrigation line. The property owner was contacted and advised to repair the line.	No	N/A	N/A

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34	09/14/09	Residential		947	Amistad Ct	Vehicle oil stain in driveway with absobent material on it.	No response at door left tag with instructions to remove the absorbent once the oil is absorbed.	Yes	N/A	N/A
35	09/16/09	Residential		1204	Peach Ave	Bags of vegetation left in the street in curb line.	Public works crew removed the bags from in front of this foreclosed property.	Yes	N/A	N/A
36	09/18/09	Residential	SDG&E	847	Grossmont	Dirt from utility pole replacement left in the street. Pole # P275485	SDG&E was contacted and advised to remove the dirt	Yes	Verbal	Yes
37	09/22/10	Commercial	Geno's BBQ	291	Main St	Waste grease bin and surrounding area is soiled.	The business manager was contacted and advised to replace the grease bin and thoroughly clean the area around it.	Yes	Verbal	N/A
38	09/23/09	Commercial	Target	250	Broadway	Early morning power washing in front and side of building.	Contacted the store manager and advised to cease all power washing unless the proper BMPs are installed.	Yes	Verbal	Yes
39	09/18/09	Residential		805	Deland Ave	Large pile of dirt left in the street from landscaping work.	Left a notice on the door of the resident to remove the dirt from the street and sweep the area.	Yes	Verbal	N/A
40	09/28/09	Commercial	Ambassador Ho	1556	Main St	Business is draining pool water onto Mains St.	Storm water inspection found pool water dechlorinated and exempt.	No	N/A	N/A
41	10/01/09	Residential		899	Hacienda	Leaves and other vegetation being blown into the street and left there.	Contacted the property owner on site. He said he routinely sweeps vegetation into the street on days prior to street sweeing. He was advised to cease the activity and to sweep and properly dispose of all yard waste. Educational materials were issued.	Yes	Verbal	N/A
42	10/07/09	Commercial	Heart Haven Re	1160	Broadway	Private lateral overflow on property.	Contacted the business owner and advised to contact a plumbing service and have the plumbing repaired and the area cleaned. The discharge entered the Broadway Channel.	Yes	First	Yes
43	10/08/09	Residential		1751	El Pico Dr.	Ice plant removed, grading altered. Erosion concerns. Work was done over a year ago.	Found no evidence of recent grading at rear of property.	No	N/A	N/A
44	10/12/09	Commercial	New East Buffet	555	Montrose Ct	Grease spill and accumulated trash at rear of building.	Contacted the restaurant manager and advised to clean the area and to replace the grease bin.	Yes	Verbal	Yes

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45	10/13/09	Residential		1356	Joliet Ave	Drain box at end of of Joliet has strong smell of urine, toilet paper on the grate.	Inspected the site finding dried toilet paper on the grate, soapy water in curbline appearing to come from this residence. Storm water info was left on the door.	Yes	N/A	N/A
46	10/13/09	Residential		584	Brockwood Dr	Sand Blasting residue being washed into the street.	PW crew investigated and found no evidence of residue or discharge.	No	N/A	N/A
47	10/21/09	Commercial	Arturo's Market	315	El Cajon Blvd	Evidence of recent discharge of a white residue on ground at rear of building being remodeled.	Contacted the contractors on site and advised to cease all discharges. Storm water educatinal materials were issued.	Yes	Verbal	Yes
48	10/23/09	Residential		514	Edwards St	Painting Co. dumping liquid into the storm drain.	A goup of men with painting equipment were parked in front of the residence but no painting activity underway. There was no evidence of dumping into the torm drain inlet. Storm water educational materials were issued.	Yes	Verbal	N/A
49	10/26/09	Residence		444	Skyview Ct	Pile of dirt dumped into the street at this location.	Contacted the resident and advised to remove the dirt pile at the end of the cul-de-sac.	Yes	Verbal	Yes
50	10/26/09	Residence		946	Anza St	Someone painting a large truck in the street.	Contacted the resident paint and roller to paint out graffiti on a pannel truck. A drop cloth was in place. Storm water educational materials were issued.	No	Verbal	N/A
51	10/28/09	Commercial	Julio Cesar Chav	464	Main St	Sediment tracking and minor discharge from marble polishing at front of building.	Contacted the contractor and business owner on site. Advised to cease all discharges and sweep the paved areas.	Yes	Warning	Yes
52	11/02/09	Municipal			Cosmo Ct at Vallea	strong odor coming from the storm drain inlets.	The complaint was forwarded to the PW crew to investigate.	Yes	N/A	N/A
53	11/02/09	Residential		1120	Hub Ct	Leaves and vegetation in the drainage swale at the rear of property poses threat of discharge to storm drain inlet during a rain event.	The complaint was forwarded to the PW crew to investigate. Determined to be propety owmers responsibility.	No	N/A	N/A
54	11/03/09	Residential		1408	Madison Ave	Large dirt piles on the paved areas in front and right side of the building.	A door tag was left with instructions to contact storm water.	Yes	Verbal	Yes
55	11/04/09	Residential		2069	Valley Lake Dr	Grading without a permit and no BMPs installed.	Contacted the property owner on site. Minor grading in rear and left front yards. No immediate threat of discharge during rain event. Storm water educatinal materials issued.	No	N/A	N/A

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56	11/04/09	Commercial	Main St. Gas an	489	Main St	Soil piles from ballard instillation emiting strong fuel odor.	Contacted the strore employee and contractor. Said soil pile would be removed properly. Hazmat notified as FYI.	Yes	Verbal	Yes
57	11/08/09	Residential	Parkview Apartn	277	First St	Private lateral spill	The event occurred over the weekend. Stormwater was contacted and began a follow up. A citation will be issued.	Yes	First	Yes
58	11/13/09	Residential		1146	Naranca	Private Lateral spill	City crew responded and contained the spill. The blockage was cleared and the area cleaned. Spill did not reach the storm drain inlet.	No	Verbal	Yes
59	11/13/09	Residential		727	Hawthorne Ave	Homeowner throwing dog feces over the fence and into the storm channel.	The property owner was contacted on site. He said tenants just moved out with dogs. There will be no further dumping in the channel. Storm water educational materials were issued.	Yes	Verbal	Yes
60	11/17/09	Residential		1282	Redwood St	Concrete being dumped in the street.	Resident is in process of re-landscaping the front yard. This is an unfinished street. No concrete discharge noted. Both parties contacted on site. Neighbor dispute. Storm water educational materials issued.	No	N/A	N/A
61	11/19/09	Residential	El Cajon Towers	180	Ballantyne	Pink liquid flowing in curb line from under curb drain.	Contacted the on site manager. The discharge was said to be from heating and air conditioning repair.	Yes	Warning	Yes
62	11/20/09	Residential		428	Omaha Ct	Street sweeper found white powder residue in the curb line in front of this residence and the street.	The property owner was contacted on site. The discharge was from pool cleaning and filter back flush of diatomaceous earth. Ther were advised to cease any further discharge and to clean the street of all residue which flowed down the gutter line to Taft St.	Yes	Verbal	Yes
63	11/23/09	Industrial	Lite Stone Conc	1105	Marshall Ave	Water discharging from the east side of the property and flowing into the Forrester Creek.	The business owner was contacted and stated the a broke hose caused the discharge. Evidence shows a regular pattern of discharge at this location.	Yes	Warning	Yes
64	11/24/09	Residential		165	Westdale Ct	Neighbor's excavation poses threat of erosionand property damage.	A site inspection with the property owner found no storm water issues. The rear slope is terraced. Irrigation lines were being installed.	No	N/A	N/A
65	11/24/09	Residential		290	Magnolia	An unknown liquid discharges periodically down the driveway and into the gutter on Magnolia	Site inspection found no discharge. This is a repeat complaint.	No	N/A	N/A
66	11/25/09	Residential		577	Tilling Way	Large piles of dirt in the street and bare slopes.	There is ongoing landscape rennovation with bare soil front and back yards. No BMPs on slopes or perimeter controls. Piles of soil and gravel in street. The property owner was contacted and advised to install BMPs.	Yes	Warning	Yes

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67	11/30/09	Construction	La Valencia Plaz	1273	Main St	Ppost rain sediment tracking into the alley and failure to install and maintain BMPS.	Contacted the superintendent and issued a citation and advised to make corrections immediately.	Yes	Warning	Yes
68	11/30/09	Commercial	Rally's Hamburg	1261	Main St	Discharge of wash water in to the strom drain conveyance system.	The store manager and owner were contacted on site and advised to immediately cease discharging all wash water. Storm water educational materials were issued.	Yes	First	Yes
69	12/02/09	Residential		990	Aster Ave	Oil spill flowing in curbline	Site inspection found spill covered with absorbent material. Resident said he applied the absorbent but had no info on vehicle or owner. PW crew to conduct follow-up. Oil found in under sidewalk drain. Complainant claims oil discharged at his point.	Yes	Warning	Yes
70	12/02/09	Residential		334	Horizon Hills Dr	Green discharge from gutter drain.	No discharge noted.	No	N/A	N/A
71	12/04/09	Residential		614	Madison	Oil spill flowing in curbline	Site inspection found oil in the street and gutter in fornt of the residence. The tenant stated that a vehicle discharged the oil and left. Dirt was used as an absorbent. It was removed and properly disposed of. Storm water educational materials were issued.	Yes	Verbal	Yes
72	12/14/09	Residential		1286	Redwood St	Waer ponding in the street, debris in gutter.	This is an unfinished street. No storm water issue exists.	No	N/A	N/A
73	12/15/09	Residential		480	Horizon Hills Dr	Pool water draining onto adjacent property and into the gutter.	Site inspection found no pool water discharge.	No	N/A	N/A
74	12/15/09	Residential		930	Layton St	Oil discharge in driveway.	Site inspection found abandoned property. Open oil containers in driveway overflowed during recent rain. Discharge was contained by Hazmat. Containers and other junk in driveway. Matter referred to city zoning enforcement.	Yes	N/A	Yes
75	12/18/09	Commercial	Julio Ceasar Ch	464	Main St	Sand blasting dust leaving the site.	Contacted the business owner and instructed to apply measures to minimize dust during concrete sand blasting.	Yes	Verbal	Yes
76	12/21/09	Residential		537	Jeffree St	Oil draining from motorhome; possible soaps and chemicals	Site inspection found no oil, soap or other discharge. There was evidence of recent oil spill in drivway. Spoke to tenant and left storm water education materials.	Yes	Verbal	Yes
77	12/29/09	Industrial	Waste Managen	1289	Rippey St	A Waste Management truck leaked a large amount of hydrolic fluid on the street in fornt of this residence.	Waste Management was contacted and advised to clean the spill. They stated that they have a contract with a spill response company.	Yes	Verbal	Yes

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78	12/30/09	Commercial	Main Street Squ	1183	Main St	Lateral overflow in parking lot for 2 days. Unable to reach the property owner.	The lateral overflow in the northeast portion of the parking lot was confined to private property. Tenants stated that the repair work had been done but there was visible debris and pooling. The property manager was contacted and advised to clean the area and remove the pooled sewage using a vac.	Yes	Verbal	Yes
79	01/04/10	Residential		381	Minnesota Ave	Paint containers and leaking oil container dumped at rear sewer easement, undeveloped alley behid residence.	storm water contacted PW yard to remove the containers.	Yes	N/A	Yes
80	01/05/10	Residential		1158	Terrace Crest Dr	Sediment from grading work flowing into the street during heavy rains	Site inspection found no evidence of a discharge and no current grading.	No	N/A	N/A
81	01/07/10	Commercial	7-11 Store	1102-04	Washington	Lateral overflow at the rear of the 7-11 store.	Storm water contacted the property owner on site. He was cleaning the area. The plumbing repairs were complete. He was advised to clean the paved areas and reclaim the waste. The discharge did not enter the strorm drain system.	Yes	Verbal	Yes
82	01/07/10	Residential	Shady Lane Apa	388	Shady Ln	Sewer runoff going into the storm drain in front of 1249 E Madison for 2 days.	Storm water located the discharge at te rear of the building. The cleanout cap ws removed. Discharge flowed into the storm drain inlet. PW crew responded with vac and manager notified to contact plumber.	yes	First	Yes
83	01/08/10	Residential		146	Blanchard Rd	Overflow water from neighbor's granite business	No evidence of a discharge and no return to phone call.	No	N/A	N/A
84	01/11/10	Residential		2440	Windmill View Rd	Water coming out of crack in the street.	PW street crew notified. No evidence of illicit discharge. Appears to be ground water seepage.	No	N/A	N/A
85	01/13/10	Construction	CE Wilson	1059	Australia St	Discharge of sediment, failure to install and maintain BMPs and slopes.	Property owner and contractor contacted and advised to repair BMPs and clean the street of all sediment.	Yes	Warning	Yes
86	01/14/10	Commercial	MTS Trolley Station		Arnelle St	Landscaping company power washing the trolley landing with no BMPs in place.	This matter was previously addressed by MTS and Aztec Landscaping. This was FYI for stormwater only. Contact info for all parties in file.	Yes	N/A	Yes
87	01/21/10	Residential		2721	Katherine St	Heavy rain causes flooding on the street.	This was no a storm water issue and the matter was referred to the PW street division for investigation.	No	N/A	N/A
88	01/25/10	Residential		1153	Gorsline Dr	Illegal grading in back yard altering grade.	No storm water issues noted. No grading. PW street crew cleaned the street.	No	N/A	N/A

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89	01/25/10	Residential		1850	Calle del Conejo	Run on from county property into rear yard during heavy rains.	There was no evidence of run on from flume access road. This property is at a low spot and apex of neighboring driveways. No property damage noted. No recent grading.	No	N/A	N/A
90	01/29/10	Commercial	Vacant	1168	Johnson	Sediment tracking from lot resurfacing.	Storm water contacted the contractor and advised to sweep the paved areas regularly	Yes	Verbal	Yes
91	02/02/10	Residential		1227	Yerba Verde	Some one dumped paint in the curbline.	A site inspection found no paint. There was tan mud in the curbline along the length of the street. It was not possible to determine the point of origin. A PW street crew was on site and in process of cleaning the street.	Yes	N/A	N/A
92	02/02/10	Residential		989	Grouse St	Concern that removal of short retaining wall and vegetation will cause erosion.	Storm water found the short retaining wall removed but the Ivy covered side yard appears to be adequate to prevent any sediment discharge.	No	N/A	N/A
93	02/02/10	Residential		1109	Hacienda	Neighbor across the street is burning material in the rear yard.	It fwas suggested that this matter be referred to the fire dept.	No	N/A	N/A
94	02/01/10	Municipal	CALTRANS		E. Main St @ I-8 e/b on ra	County Referral>>>> Insufficient BMPs at CALTRANS work site. Devegetated banks.	Storm water contacted the on site Caltrans supervisor was contacted on site and advised to Install additional BMPs if necessary prior to the next rain event and to sweep all paved areas daily. Currently, silt fencing and fiber rolls are being used.	Yes	Verbal	Yes
95	02/01/10	Residential		2381	Dryden Rd	Neighbor dumping materials into canyon to level yard. Using fence as a retaining wall. No stormwater issues noted. The matter was referred to zoning enforcement.	Resident dumped misc. junk and material in left rear yard to level. The yard borders a overgrown vegetated channel. No storm fwater issue noted. The matter was referred to zoning enforcement for further review.	No	N/A	N/A
96	02/05/10	Residential		871	Avocado Ave	Grading with no BMPs I place.	Minor grading in front yard is partly below sidewalk and poses no threar of sediment discharge. The contractor said he would install fiber roll if work is extended.	No	N/A	N/A
97	02/05/10	Residential		1718	Primrose Dr	Altered grading causing water to drain onto R/Ps property.	storm water met with the R/P on site and found no evidence of grading. Natural run on property. No storm water issues noted.	No	N/A	N/A
98	02/05/10	Residential		1071	Australia St	Vegetation removed from slopes causing erosion during rain events. Sediment discharge to street.	The property owner was conatacted on site and directed to install BMPs to prevent further erosion and discharge of sediment.	Yes	Verbal	Yes
99	02/11/10	Industrial	Waste Managen	1001	Bradley	Discharge of unknown liquid from the parking lot on the Marshal side.	PW crew immediately placed absorbent material on the spill. The discharge was contained and recovered by waste management personnel.	Yes	Verbal	Yes

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100	02/16/10	Residential		2788	Cataract Pl	Neighbor discharging white liquid into the street.	A white residue was found during a site inspection leading to the storm drain inlet at Chatham and Garden Grove. The property owner was contacted and advised to clean the street and cease any further discharges. This is a second violation. A written warning was issued.	Yes	Warning	Yes
101	02/17/10	Municipal	Evergreen Envir	412	Front St	Leaking storm drain pipe causing damage to concrete driveway.	Site inspection with Caltrans, PW street and engineering found depression in concrete driveway to building access. Repaired sink holes located east of the site.	No	N/A	N/A
102	02/22/10	Construction		861	Grossmont	Neighboring property has house demo, construction with no BMPs. Sediment tracking.	Contacted the property owner and advised to install required BMPs per erosion control plan and to sweep all paved areas daily.	Yes	Verbal	Yes
103	02/23/10	County		9739	Carta Ln	Soil erosion from recent rains causing damage to retaining wall.	Advised the complainant to contact the storm water hotline for the county.	No	N/A	N/A
104	02/23/10	Residential		1580	Primrose Dr	Construction underway with no BMPs inplace. Sediment discharge to street.	Storm water contacted the property owner and advised to install BMPs and sweep all paved areas	Yes	Verbal	Yes
105	02/24/10	Residential		1514	Wyatt Pl	White ford truck parked on the street leaking oil.	The vehicle owner at this address was contacted and advised to place a drip pan under the vehicle that was found parked across the street from the residence.	Yes	Verbal	Yes
106	03/02/10	Residential		585	Ballantyne	Large amount of palm fronds and leaves in the gutter.	Site inspection found unimproved front yard and driveway causing minor tracking and sediemnt discharge. Street crew notified. Educational materials were left at the door.	No	N/A	N/A
107	03/02/10	Residential		1314	Cuyamaca	Overflowing dumpster in alley.	Site inspection found no storm water issues. Mater ws referred to zoning enforcement.	No	N/A	N/A
108	03/05/10	Commercial	D 3 Equipment	1475	Pioneer Way	Wash rack water being discharged to the street.	Site inspection with business owner found no discharge, Area needs sweeping. Origional discharge was due to dewatering after weekend rains.	Yes	Verbal	Yes
109	03/09/10	Commercial	A Mart	250	Marshall Ave	Private lateral overflow	PW crew responded placing absorbent and vac. 10 gals entered storm drain inlet. The property and business owers responded. Corrected and cleaned	Yes	First	Yes
110	03/10/10	Residential		1043	Sunshine Ave	Neighbor directing water onto R/Ps property.	Matter referred to zoning enforcement.	No	N/A	N/A

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111	03/11/10	Residential		1274	Bermuda Ln	Muddy runoff erosion from neighboring property.	Site inspection found no erosion or significant sediment tranfer from the property, Neighboring properties have unprotected slopes to undeveloped street.	No	N/A	N/A
112	03/23/10	Commercial	Apartments	1022	Broadway	Dog feces is being dumped into the open channel at the rear of the property.	Site inspection found no feces in the channel. There was a small amount at the rear of the parking lot. A tenant was told about the violation. The feces was cleaned the next day.	Yes	Verbal	N/A
113	03/23/10	Commercial		1014	Broadway	Employees at Inky's Bike told PW staff member that someone is living at the rear of the property and dumping debris into the channel.	Site inspection found no trash in channel. Spoke to property owner and advised that zoning enforcement would be contacting him re: occupied camper at rear of property.	No	Verbal	N/A
114	04/05/10	Municipal			Forrester Creek	Report of strong odor of fuel in channel.	Site inspection found no odor of fuel in channel location or upstream.	Yes	N/A	N/A
115	04/06/10	Commercial	Valley Foods	1275	Main St	Roof down spout repositioned away from swale to discharge to sidewalk at north side of building.	Business owner was contacted and advised to remove or reposition the down spout to drain into the vegetated swale.	Yes	Warning	Yes
116	04/07/10	Commercial	Main St. Car W	1437	Main St	Wash water was discharging to the street through curb drain.	Site inspection found wash water discharging through curb drain and flowing west. Business owner was contacted. Will conduct follow up with owner present on 4/14/10.	Yes	Verbal	Yes
117	04/07/10	Mobile	Auto Salon Vehi	1080	Johnson	Sonducting vehicle washing withno BMPs in place to prevent wash water from entering the street. None entered the storm drain.	The business owner was contacted on site and advised to cease washing until proper BMPs are used.	Yes	Warning	Yes
118	04/12/10	Construction	Scantibodies Inc	1068	Broadway	Discharge of pollutants into te storm drainage system; failure to provide protection for debris and stock piles during a rain event.	Contacted the construction supervisor and directed to install required BMPs. Written warning was issued.	Yes	Warning	Yes
119	04/27/10	Residential		217	Orlando St	Drain located on property clogged with debris causing flooding on adjacent property.	Site inspection found no flooding or storm water violations, concern is civil matter.	No	N/A	N/A
120	04/28/10	Commercial	Fletcher Hills Town and County F		Navajo Rd	Inlet filter near Strarbuck's not maintained.	Site inspection found waer pooled in drain filter with debris. Property manager was contacted and advised to have all filters serviced.	Yes	Verbal	N/A
121	04/30/10	Commercial	WSC Demolition	522	Front St	Water from equipment washing discharging to the street.	Contacted the business manager and advised to cease all washing activities which was done immediately.	Yes	Verbal	Yes

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122	05/10/10	Commercial		790	Washington	Paint washing residue discharged to neighboring property through under curb pipes. Discharge possibly entered lot storm drain.	Site inspection found paint residue in rear lot of complex ending at the lot drain. No evidence of paint in the box. The property owner was contacted a nd advised to clean the area and protect the drain.	Yes	Verbal	Yes
123	05/17/10	Construction	Steve Julius Co	350	Second St	Major T/I work with soil disturbance with no BMPs in place per erosion control plan.	Contacted the surperintendent on site and advised to install required BMPs immediately as listed in erosion control plans.	Yes	Verbal	Yes
124	05/17/10	Residential		232	Murray Dr	Overgrown brush and transients pose a fire threat.	This matter was referred to the PW yard for review and action. The complainant was advised of the action.	Yes	N/A	N/A
125	05/17/10	Residential		133	Orlando St	Oil spill in grass area and street in front of apartment complex.	No oils spill found, grass burned in area only. No oil in street.	No	N/A	N/A
126	05/18/10	Residential		651	Benton Pl	Water flowing out of crack in the street.	Matter referred to street division and Helix water.	No	N/A	N/A
127	05/20/10	Residential		1338	Naranca Ave	Drainage ditch slope not adequate.	Contacted the complainant and advised to Consult PW regarding an easement at the rear of properties.	No	N/A	N/A
128	05/24/10	Residential		1556	Fargo Ave	Resident dumping concrete wash in gutter.	Site inspection found concrete residue in curbline. Street sweeper recently passed through. Educational material left with P/O's daughter.	Yes	Verbal	N/A
129	05/28/10	Residential		681	Skyview Ct	Broken private lateral in front yard discharging into the vegetation.	Site inspection found no broken lateral and no odor of discharge.	No	N/A	N/A
130	05/28/10	Residential		660	Sandra Ln	Illegal grading in back yard altering grade. BMPs needed.	Awaiting formal referral and notice to property owner.	No	Verbal	Yes
131	06/01/10	Residential			Mary st (Vacant Lot)	Weeds and trash on property.	PW crew to remove couch in ROW and matter referred to zoning enforcement for weed removal.	No	N/A	N/A
132	06/03/10	Commercial	American Scisso	400	Johnson	Lot removal and repaving an area in excess on one acre without proper pemits and with no BMPs in place at channel or exit.	Contractor contacted on site and advised to cease lot work until proper permits obtained. Official stop work to be issued.	Yes	Verbal	N/A

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
133	06/04/10	Commercial	Julio Cesar Chav	464	Main St	Discharge from irrigation, stains in curb line from concrete repair.	Contacted the business owner and advised to cease all discharges and to clean the concrete residue in the curb line.	Yes	Verbal	Yes
134	06/07/10	Commercial	Pinnick, Inc Ge	685	Front St	Vehicle washing on lot with ater discharging to street.	contacted the buinsess owner and instructed to cease all vehicle washing activity.	Yes	Verbal	Yes
135	06/08/10	Commercial		127	Lexington	Paint residue being washed into the street from unprotected wash out area at rear of building.	Contacted the contractor and business owner and told to cease all paint wash out unless proper BMPs are implemented and to clean the remaining residue using a dry method.	Yes	Verbal	Yes
136	06/09/10	Commercial	Gas Depot	490	Second St	Business conducting lot washing in early morning hours with no BMPs in place.	Contacted the business owner on site. He said there was no lot washing being done.. He was told to remove a hose from the south side of the building. There was no evidenve of washing.	Yes	Verbal	N/A
137	06/09/10	Residential		1610 to 26	Nicholas Pl	Draining washing machine dirty water into the storm drain channel.	Door tags left at three residences that appear to have discharge pipes to channel.	Yes	Verbal	Yes
138	06/14/10	Commercial	Foothills Christia	277	Broadway	Approx. 100 yards of dirt dumped on site for a youth bike course covering up drains.	PW crew inspected the site and determined that the matter should be referred to zoning or planning.	No	N/A	N/A
139	06/19/10	Residential		626	La Sombra Dr	White residue discharging from pipe entering the strom drain inlet.	Contacted the property owner who said discharge was from pool cleaning….diatomaceaous earth. They were told to cease all furture discharges to the stor drain. Storm water educational materials were issued.	Yes	Verbal	Yes
140	06/24/10	Commercial	Kia Motors	541	Johnson Ave	Discharge form vehicle wash area flows to street.	Site inspection found discharge from vehicle wash at rear of building. The roof for vehicle wash is inadequate. The service manager was contacted on site and advised that corrections must be made to the wash area. He said it is de-ionized water from the anti spotting process.	Yes	Verbal	Pending
141	06/24/10	Commercial	Chappelle's Exh	1419	Pioneer	Water from equipment cleaning discharging to the street. Work being conducted in the driveway.	The business owner was contacted on site and advised to cease all vehicle parts washing outside. Storm water educational materials were issued.	Yes	Verbal	Yes
142	06/29/10	Commercial	BJ's Equipment	1717	Main St	Discharge of equipment wash water into the storm drain system.	A written warning was issued. The business manager ws instructed to clean the catch basin filter maintain the area.	Yes	Written	Yes
143	06/29/10	Residential		856	Second St	Occupied camp trailer, black water being dumped in driveway.	No evidence of waste water discharge in driveway. A camper located in the driveway not ocupied at time of inspection. Matter referred to zoning enforcement.	No	N/A	N/A

Appendix B.2

	FACILITY NAME	ADDRESS	DATE
1	Fleet Maintenance	1060 Vernon Way	05/13/10
2	Parks Dept. storage Yard/Maint.	1060 Vernon way	05/13/10
3	Public Works Maintenance Yard	1050 VernonWay	05/13/10
4	John F. Kennedy Park	1675 E. Madison	03/29/10
5	Wells Park Rec./Maint./Police	1153 E. Madison	03/29/10
6	Abert Van Zanten Park	1495 Greenfield Dr	03/16/10
7	Hillside Park and Recreation Center	840 Buena Vista Terrace	04/21/10
8	Fire Station Park	Tyron St at Westwind Dr	04/21/10
9	Judson Park	Magnolia Ave at Park Ave	04/21/10
10	Civic Center Plaza And City Hall	200 E Main St	04/21/10
11	El Cajon Performing Arts Center	110 E Main St	04/21/10
12	Cajon Valley Middle School Park	750 Park Ave	04/21/10
13	Renette Park and Recreation Center	935 Emerald Ave	03/29/10

	FACILITY NAME	ADDRESS	DATE
14	Fletcher Hills Park, Pool and Recreation Center	2345 Center Pl	05/05/10
15	Tuttle Park	379 W Chase Ave	05/05/10
16	Fire Station #9 and Training Facility	1301 N. Marshall Ave	05/05/10
17	PresCott Promenade Park	200 Blk of E. Main St	05/05/10
18	Bostonia Park and Recreation Center	1049 Bostonia St	03/16/10
19	Ronald Regan Community Center	195 E. Douglas Ave	05/05/10
20	Bill Beck Park	Pierce St at Wagner Dr	05/05/10

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
1	Chem-Tronics, Inc.	1150	W	Bradley	Industrial, Mandatory	High	3724	Transportation Equipment
2	Pacific Trans Enviromental Services, Inc.	1452	N	Johnson	Industrial, Mandatory	High	4953	Electric, Gas, and Sanitary Services
3	Waste Management Universal Refuse Removal	1001	W	Bradley	Industrial, Mandatory	High	4953	Electric, Gas, and Sanitary Services
4	Pluck a Truck El Cajon Auto Recycling	1416		Pioneer Way	Commercial	High	7549	Automotive Repair Services, and Parking
5	Artimex Iron Co.	315		Cypress Ln	Industrial, Mandatory	High	3441	Fabricated Metal Products, except Machinery and Transportation Equipment
6	South Bay Welding	781		O Conner	Industrial, Mandatory	High	3441	Fabricated Metal Products, except Machinery and Transportation Equipment
7	California Countertop	1340		Hill	Industrial, Mandatory	High	3281	Stone, Clay, Glass, and Concrete Products
8	Solo Cup Co	1160		Vernon	Commercial	High	2656	Paper and Allied Products
9	AJM Packaging Corporation	1160		Vernon	Industrial, Conditional	High	2656	Paper and Allied Products
10	Veridiam	1717	N	Cuyamaca	Industrial, Mandatory	High	3317	Primary Metal Industries
11	Certified Metal Craft Inc	877		Vernon Way	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
12	Triumph	203	N	Johnson	Industrial, Conditional	High	3728	Transportation Equipment
13	Veolia Transportation Services, Inc.	1213	N	Johnson	Industrial, Mandatory	High	4212	Motor Freight Transportation and Warehousing
14	Cajon Valley Union School District Transportation	721	E	Park	Industrial, Mandatory	High	4151	Local and Suburban Transit and Interurban Highway Passenger Transportation
15	Decco Castings, Inc	1596		Pioneer Way	Industrial, Mandatory	High	3365	Primary Metal Industries
16	First Transit	800		Fesler	Industrial, Mandatory	High	4111	Local and Suburban Transit and Interurban Highway Passenger Transportation
17	Toro Agricultural Irrigation	1588	N	Marshall	Industrial, Conditional	High	3524	Industrial and Commercial Machinery and Computer Equipment
18	San Diego Van & Storage	1426		Fayette	Commercial	High	4214	Motor Freight Transportation and Warehousing
19	Allied Castings, Inc.	983		Vernon Way	Industrial, Mandatory	High	3363	Primary Metal Industries
20	Precision Metal Products, Inc.	850	W	Bradley	Industrial, Conditional	High	3463	Fabricated Metal Products, except Machinery and Transportation Equipment
21	California Metals	297	S	Marshall	Industrial, Mandatory	High	3599	Industrial and Commercial Machinery and Computer Equipment
22	Alturdyne	660		Steele	Industrial, Conditional	High	3621	Electronic and Other Electrical Equipment and Components, except computer
23	Senior Aerospace	790		Greenfield Dr	Industrial, Conditional	High	3724	Transportation Equipment

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
24	Jeldwen Windows and Doors	1111		Pioneer Way	Commercial	High	3999	Miscellaneous Manufacturing Industries
25	California Metals	636		Front	Industrial, Mandatory	High	5093	Wholesale Trade; Durable Goods
26	Grossmont Union High School District/Grossmont Union High School	1100		Murray Dr	Commercial	High	9411	Administration Of Educational Programs
27	Layfield Environmental Systems, Geosynthetics, & Industrial Services	1166		Fesler	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
28	Lite Stone Concrete	1105	N	Marshall	Industrial, Mandatory	High	3272	Stone, Clay, Glass, and Concrete Products
29	Callen Camper Co.	125	S	Marshall	Commercial	Medium	7549	Automotive Repair Services, and Parking
30	Evergreen Environmental Services	412		Front	Industrial, Mandatory	High	4953	Electric, Gas, and Sanitary Services
31	AA Equipment	411	N	Marshall	Commercial	Medium	7699	Miscellaneous Repair Services
32	Pacifica Glass Co, Inc.	1946		John Towers	Commercial	High	5231	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers
33	Kitchen Crafters	500		Front	Industrial, Conditional	High	2434	Lumber and Wood Products, except furniture
34	Russo Tile & Marble, Inc	651		Front	Industrial, Mandatory	High	3281	Stone, Clay, Glass, and Concrete Products
35	Top Notch Commercial and Aerospace Manufacturing, Inc.	1488		Pioneer Way	Industrial, Conditional	High	3449	Fabricated Metal Products, except Machinery and Transportation Equipment
36	Curb & Vent Manufacturing, Inc.	1437		Fayette St	Industrial, Conditional	Medium	3444	Fabricated Metal Products, except Machinery and Transportation Equipment
37	Gardner Pool Plastering	801		Gable Way	Commercial	High	1741	Construction - Special Trade
38	Metal Engineering	390		Front	Industrial, Conditional	High	3449	Fabricated Metal Products, except Machinery and Transportation Equipment
39	Amatek Rotron	474		Raleigh	Industrial, Conditional	High	3564	Industrial and Commercial Machinery and Computer Equipment
40	Super-Krete International, Inc.	1290	N	Johnson	Industrial, Mandatory	High	3271	Stone, Clay, Glass, and Concrete Products
41	East County Powder Coating	1835		John Towers	Commercial	High	1721	Construction - Special Trade
42	Las Pita Cafe	388	E	Main	Commercial	Medium	5812	Eating and Drinking Places
43	Serranos Super Salsa	795		Arnele	Commercial	High	5812	Eating and Drinking Places
44	Bonnys Cafe	596		Broadway	Commercial	Medium	5812	Eating and Drinking Places
45	Sizzler	1030		Fletcher Pkwy	Commercial	High	5812	Eating and Drinking Places
46	China Panda Garden Restaurant	1788	E	Main	Commercial	Medium	5812	Eating and Drinking Places
47	Outback Steakhouse	722		Jamacha	Commercial	High	5812	Eating and Drinking Places

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
48	Consolidated Motors	410		El Cajon	Commercial	Medium	5521	Automotive Dealers and Gasoline Service Stations
49	Marietas East	1746	E	Main	Commercial	Medium	5812	Eating and Drinking Places
50	Subway Sandwiches/Salads	762	N	Johnson	Commercial	Medium	5812	Eating and Drinking Places
51	Plant House Nursery	1163	N	2nd	Commercial	Medium	0181	Ornamental Floriculture And Nursery Products
52	Armstrong Garden Centers, Inc	1755	E	Main	Commercial	Medium	0181	Ornamental Floriculture And Nursery Products
53	Juanbertos Mexican Food	1104	E	Washington	Commercial	High	5812	Eating and Drinking Places
54	Por Favor, Inc	148	E	Main	Commercial	High	5812	Eating and Drinking Places
55	Mis Z Gallos Taqueria Fruit & Deli	1088		Estes	Commercial	High	5812	Eating and Drinking Places
56	Victorias Mexican Food	677	E	Main	Commercial	Medium	5812	Eating and Drinking Places
57	Ali Baba Restaurant	421	E	Main	Commercial	High	5812	Eating and Drinking Places
58	Fast Water Heater Company				Commercial	Medium	1799	Construction - Special Trade
59	International House of Pancakes	1286		Oakdale	Commercial	High	5812	Eating and Drinking Places
60	Dallmann Confections	780	N	2nd	Commercial	Medium	5812	Eating and Drinking Places
61	Tommys Italian Ristorante	1190	N	2nd	Commercial	High	5812	Eating and Drinking Places
62	Taste of Athens	1784	E	Main	Commercial	Medium	5812	Eating and Drinking Places
63	Goodyear Certified Tire	790	N	Johnson	Commercial	High	7538	Automotive Repair Services, and Parking
64	Valley Muffler Shop	533	W	Main	Commercial	High	7533	Automotive Repair Services, and Parking
65	Valley Transmission & Auto	1158	N	2nd	Commercial	High	7537	Automotive Repair Services, and Parking
66	Cummins Cal Pacific	310	N	Johnson	Commercial	High	7538	Automotive Repair Services, and Parking
67	Russells Metal Fab	549		Raleigh	Industrial, Conditional	High	3499	Fabricated Metal Products, except Machinery and Transportation Equipment
68	El Cajon Smog & Auto Repair	720		Broadway	Commercial	High	7539	Automotive Repair Services, and Parking
69	East County Tire & Brake	616		Broadway	Commercial	High	7538	Automotive Repair Services, and Parking
70	Riley Automotive II	1665	E	MAIN	Commercial	High	7538	Automotive Repair Services, and Parking
71	Sids Auto Body, Inc.	1121		Broadway	Commercial	High	7539	Automotive Repair Services, and Parking
72	JC Auto Repair	1492	E	Main	Commercial	High	7538	Automotive Repair Services, and Parking
73	San Diego Rods and Customs	1575		Pioneer Way	Commercial	High	7549	Automotive Repair Services, and Parking
74	Big O Tires	844	N	Johnson	Commercial	High	7534	Automotive Repair Services, and Parking
75	E&M Auto Parts	1647	E	Main	Commercial	High	5531	Automotive Dealers and Gasoline Service Stations
76	Country Waffles	1248	E	Main	Commercial	Medium	5812	Eating and Drinking Places

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
77	Country Comfort Restaurant	1255		Avocado	Commercial	Medium	5812	Eating and Drinking Places
78	Genos BBQ	291	W	Main	Commercial	High	5812	Eating and Drinking Places
79	Los Mendoza Taco Shop	303		Balantyne	Commercial	Medium	5812	Eating and Drinking Places
80	Greektown Restaurant Buffet	345	W	Main	Commercial	Medium	5812	Eating and Drinking Places
81	Carls Jr. Restaurant #483	520	N	2nd	Commercial	Medium	5812	Eating and Drinking Places
82	Ochoas Mexican Food	1051	E	Main	Commercial	Medium	5812	Eating and Drinking Places
83	Philly Steak Subs	312		Ballantyne	Commercial	Medium	5812	Eating and Drinking Places
84	Colimas Mexican Food	339	W	Main	Commercial	Medium	5812	Eating and Drinking Places
85	Shadow Mountain Ministries	2100		Greenfield Dr.	Commercial	Medium	5812	Eating and Drinking Places
86	Foodland I.G.A.	1099	E	Main	Commercial	Medium	5411	Food Stores
87	El Pollo Loco	1145		Avocado	Commercial	Medium	5812	Eating and Drinking Places
88	Circle J Liquor	1031		Broadway	Commercial	High		Miscellaneous Retail
89	Ponchos Mexican Restaurant	2257		Fletcher Pkwy	Commercial	Medium	5812	Eating and Drinking Places
90	Kaelins Market	1435	E	Main	Commercial	Medium	5411	Food Stores
91	Save A Lot #948	678		Jamacha	Commercial	Medium	5411	Food Stores
92	Delias Taco Shop	293		El Cajon	Commercial	Medium	5812	Eating and Drinking Places
93	Taco Bell #3077	584	N	Mollison	Commercial	Medium	5812	Eating and Drinking Places
94	Ricos Deli Expresso & Smoothie Bar	538		Jamamcha	Commercial	Medium	5812	Eating and Drinking Places
95	Santana Mexican Grill	411		Broadway	Commercial	Medium	5812	Eating and Drinking Places
96	Big Daddys Oil Arco #9577	495	W	Main	Commercial	High	5541	Automotive Dealers and Gasoline Service Stations
97	Apro #20	710	N	2nd	Commercial	High	5541	Automotive Dealers and Gasoline Service Stations
98	Golden State Aviation	1640	N	Marshall	Commercial	High	5541	Automotive Dealers and Gasoline Service Stations
99	Valero Station #3738	785		Jamacha	Commercial	High	5541	Automotive Dealers and Gasoline Service Stations
100	2nd St. Gas & Mini, Big Daddy Oil #20	725	N	2nd	Commercial	High	5541	Automotive Dealers and Gasoline Service Stations
101	Super Star #2	1090		Broadway	Commercial	High	5541	Automotive Dealers and Gasoline Service Stations
102	Chevron Stations Inc #1742	696	N	Mollison	Commercial	High	5541	Automotive Dealers and Gasoline Service Stations

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
103	Washington Arco	1092	E	Washington	Commercial	High	5541	Automotive Dealers and Gasoline Service Stations
104	Kladis Painting, Inc.	557	W	Main	Commercial	Medium	1721	Construction - Special Trade
105	East Coast Auto Collision	1375	E	Main	Commercial	High	7532	Automotive Repair Services, and Parking
106	unknown/ for sale	982		Broadway	Commercial	High		Automotive Dealers and Gasoline Service Stations
107	Julio Cesar Chavez Auto Group	464	W	Main	Commercial	High	7538	Automotive Repair Services, and Parking
108	American Scissor Lift, Inc.	400	N	Johnson	Commercial	High	7359	Business Services
109	De La Fuente Cadillac	1385	E	Main	Commercial	High	7538	Automotive Repair Services, and Parking
110	California Park Models (not in business)	746	N	2ND	Commercial	High		Automotive Dealers and Gasoline Service Stations
111	Top Dollar	1150	N	2nd	Commercial	High	5511	Automotive Dealers and Gasoline Service Stations
112	El Cajon Mitsubushi	247		El Cajon	Commercial	High	5511	Automotive Dealers and Gasoline Service Stations
113	Spot Free Rinse Car Wash	1111		Broadway	Commercial	Medium	7542	Automotive Repair Services, and Parking
114	Express Hand Car Wash	710		Jamacha	Commercial	Medium	7542	Automotive Repair Services, and Parking
115	Jeromes	333	N	Johnson	Commercial	High	5021	Wholesale Trade; Durable Goods
116	County Collison Center	1535		Johnson	Commercial	Medium	7532	Automotive Repair Services, and Parking
117	Trick Trucks, Inc.	777	N	2nd	Commercial	High	7538	Automotive Repair Services, and Parking
118	Atlantic Auto Repair	1318		Broadway	Commercial	Medium	7538	Automotive Repair Services, and Parking
119	California Smog & Auto Repair	595		El Cajon	Commercial	Medium	7538	Automotive Repair Services, and Parking
120	Atlas Radiator Shop	580		El Cajon	Commercial	High	7538	Automotive Repair Services, and Parking
121	Banny Hom Enterprises	1240	W	Main	Commercial	Medium	7538	Automotive Repair Services, and Parking
122	Valley Automotive	813	N	2nd	Commercial	Medium	7538	Automotive Repair Services, and Parking
123	Rods Automotive	1313	N	2nd	Commercial	Medium	7538	Automotive Repair Services, and Parking
124	Millers Towing	1402		Pioneer Way	Commercial	High	7521	Automotive Repair Services, and Parking
125	Express Auto Repair and tires	1316		Broadway	Commercial	Medium	7538	Automotive Repair Services, and Parking
126	Sleep Train	790B	N	Johnson	Commercial	High	5719	Eating and Drinking Places
127	Boomers	1155		Graves	Commercial	Medium	7999	Amusement and Recreation Services
128	HiTech Welding & Forming	1990		Friendship Dr	Industrial, Conditional	High	3728	Transportation Equipment
129	Arco AM/PM #640	593	N	Mollison	Commercial	High	5541	Automotive Dealers and Gasoline Service Stations
130	Sears	575		Fletcher Pkwy	Commercial	Medium	7539	Automotive Repair Services, and Parking

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Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
131	Quick Trip Fuel & Market	596	N	Mollison	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations
132	Thrifty #9758	398		El Cajon	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations
133	Autohaus Stebel, Inc.	885	E	Washington	Commercial	Medium	7538	Automotive Repair Services, and Parking
134	Tom Parker Auto Gallery	414		El Cajon	Commercial	Medium		
135	RDI, LLC	385	S	Marshall	Industrial, Mandatory	High	4141	Local and Suburban Transit and Interurban Highway Passenger Transportation
136	Veys Powersports	660		El Cajon	Commercial	Medium	5561	Automotive Dealers and Gasoline Service Stations
137	Hollywood Motors Storage Yard	1419		Broadway	Commercial	Medium	7521	Automotive Repair Services, and Parking
138	Body Beautiful Car Wash, Inc.	690		El Cajon	Commercial	Medium	7542	Automotive Repair Services, and Parking
139	Toyota of El Cajon	965		Arnele	Commercial	High	5511	Automotive Dealers and Gasoline Service Stations
140	D3 Equipment	1475		Pioneer Way	Commercial	Medium	7359	Business Services
141	San Diego Mobile Truck and Trailer Service	140		Millar	Commercial			
142	Alpha Powder Coating	1115	N	Johnson	Industrial, Conditional	High	3479	Fabricated Metal Products, except Machinery and Transportation Equipment
143	Cedars Bakery	926		Broadway	Commercial	Low	5461	Food Stores
144	Dolci Mango of El Cajon	330		Broadway	Commercial	Low	5812	Eating and Drinking Places
145	El Pollo Loco #3562	494		Broadway	Commercial	Low	5812	Eating and Drinking Places
146	Howards Bakery	1097		Broadway	Commercial	Low	5461	Food Stores
147	Thai Style Restaurant	354		Broadway	Commercial	Medium	5812	Eating and Drinking Places
148	Trujillos Taco Shop	1275		Broadway	Commercial	Medium	5812	Eating and Drinking Places
149	7-Eleven #16070	394	W	Chase	Commercial	Low	5411	Food Stores
150	Little Caesars Pizza	393	E	Chase	Commercial	Low	5812	Eating and Drinking Places
151	Heavenly Taste	533		El Cajon	Commercial	Low	5812	Eating and Drinking Places
152	Heavenly Taste Cafe & Catering	533		El Cajon	Commercial	Medium	5499	Food Stores
153	Leos Market	635		El Cajon	Commercial	Low	5411	Food Stores
154	7-Eleven Food Store 13655E	2270		Fletcher Pkwy	Commercial	Low	5411	Food Stores
155	Binary Rift Corporation/Star Tech Computers	830		Fletcher Pkwy	Commercial		7993	
156	Sunfood Corporation	1830		Gillespie	Commercial	Low	5499	Food Stores
157	7-Eleven Store #13657	1666		Greenfield	Commercial	Low	5411	Food Stores
158	New Century Buffet	868		Jackman	Commercial	Low	5812	Eating and Drinking Places

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
159	7-Eleven Store #25302	711		Jamacha	Commercial	Medium	5411	Food Stores
160	7-Eleven Food Store 13660E	335		Jamacha	Commercial	Low	5411	Food Stores
161	Giant Pizza King #1	740		Jamacha	Commercial	Low	5812	Eating and Drinking Places
162	Sultan Baklava	131		Jamacha	Commercial	Low	5461	Food Stores
163	7-Eleven 13658F	375	W	Madison	Commercial	Medium	5411	Food Stores
164	Freds Old Fashioned Burgers	1285	E	Madison	Commercial	Medium	5812	Eating and Drinking Places
165	7-Eleven #21787	1253	W	Main	Commercial	Low	5411	Food Stores
166	7-Eleven Store #21788D	410	E	Main	Commercial	Medium	5411	Food Stores
167	Antique Row Cafe of El Cajon	1185	E	Main	Commercial	Low	5812	Eating and Drinking Places
168	Athena Foods	435	W	Main	Commercial	Low	5411	Food Stores
169	Baghdad Market	733	E	Main	Commercial	Low	5411	Food Stores
170	Bs Keg Beer	1429	E	Main	Commercial	Low	5499	Food Stores
171	Park Place Cafe	169	E	Main	Commercial	Low	5812	Eating and Drinking Places
172	Downtown Grind	200	E	Main	Commercial	Medium	5812	Eating and Drinking Places
173	Park Place Cafe	169	E	Main	Commercial	Low	5812	Eating and Drinking Places
174	Palms Grill	1255	E	Main	Commercial	Low	5812	Eating and Drinking Places
175	Mollison Market	725	S	Mollison	Commercial	Low	5411	Food Stores
176	New East Buffet, Inc.	555		Montrose	Commercial	Medium	5812	Eating and Drinking Places
177	7-Eleven #13651	1296	N	2nd	Commercial	Medium	5411	Food Stores
178	Cotixan Mexican Restaurant	538	N	2nd	Commercial	Low	5812	Eating and Drinking Places
179	West Coast Kitchen	1209	N	2nd	Commercial	Low	5499	Food Stores
180	Montanas Savories & Sweets	780	N	2nd	Commercial	Low	5499	Food Stores
181	7-Eleven #21834B	108	W	Washington	Commercial	Low	5411	Food Stores
182	7-Eleven Food Store #16057B	1102	E	Washington	Commercial	Medium	5411	Food Stores
183	Babis Bakery	910	E	Washington	Commercial	Low	5461	Food Stores
184	Agape Veterinary Hospital	1291	N	2nd	Commercial	Low	0742	Veterinary Services For Animal Specialties
185	Angels Pet Parlor	731		Jamacha	Commercial	Low	0752	Animal Specialty Services, Except Veterinary
186	Animal Medical Center	600		Broadway	Commercial	Medium	0742	Veterinary Services For Animal Specialties
187	Banfield, The Pet Hospital	865		Jackman	Commercial	Low	7420	Veterinary Services For Animal Specialties

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
188	Bastet Veterianary Hospital Inc.	1682		Greenfield	Commercial	Medium	0742	Veterinary Services For Animal Specialties
189	Beths Grooming	1028		Broadway	Commercial	Low	0752	Animal Specialty Services, Except Veterinary
190	Bonnies Grooming	1215	N	2nd	Commercial	Low	0752	Animal Specialty Services, Except Veterinary
191	Camp Bow Wow	1677	N	Marshall	Commercial	High	0752	Animal Specialty Services, Except Veterinary
192	Care & Comfort Veterinary Hospital, Inc.	522	E	Chase	Commercial	Low	0742	Veterinary Services For Animal Specialties
193	Cat & Doggie Works	1137	N	2nd	Commercial	Low	0752	Animal Specialty Services, Except Veterinary
194	El Cajon Valley Vet Hospital	560	N	Johnson	Commercial	High	0742	Veterinary Services For Animal Specialties
195	Healthy Pet Pantry	681		Jamacha	Commercial	Low	5999	Miscellaneous Retail
196	Jamacha Veterinary Clinic	693		Jamacha	Commercial	Low	0742	Veterinary Services For Animal Specialties
197	Large Animal Veterinary Association	725		Jamacha	Commercial	Low	0742	Veterinary Services For Animal Specialties
198	Petco Animal Service, Inc.	540	N	2nd	Commercial	Medium	5999	Miscellaneous Retail
199	Petsmart, Inc. #142	865		Jackman	Commercial	Low	5999	Miscellaneous Retail
200	Puppy Time	513		Parkway Plaza	Commercial			
201	Shear Perfection - Wendy Dog/Cat Grooming	1325	E	Main	Commercial	Low	0752	Animal Specialty Services, Except Veterinary
202	Suds n Paws	2349		Fletcher	Commercial	Low	7520	Automotive Repair Services, and Parking
203	Tender Loving Care Pet Salon	1428		Broadway	Commercial	Medium	0752	Animal Specialty Services, Except Veterinary
204	Abbey Clinic for Pets	1787	E	Main	Commercial	Medium	0742	Veterinary Services For Animal Specialties
205	Vets Pets, Inc.	522	E	Chase	Commercial	Low	5999	Miscellaneous Retail
206	Xtreme Glass	1510		Fayette	Commercial	Low	1793	Construction - Special Trade
207	2nd St. Gas & Mini	725	N	2nd	Commercial	High	5541	Automotive Dealers and Gasoline Service Stations

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
208	4 Wheel Parts Performance	480	N	Johnson	Commercial	Medium	5531	Automotive Dealers and Gasoline Service Stations
209	Autobahn	444		Vernon	Industrial, Mandatory	High	5093	Wholesale Trade; Durable Goods
210	Auto Zone #3365	1080	E	Main	Commercial	Medium	5531	Automotive Dealers and Gasoline Service Stations
211	Superior Car Wash	816	N	2nd	Commercial	Medium	7542	Automotive Repair Services, and Parking
212	Fletcher Hills Towing / Road One Allied Garden	1357		Pioneer	Commercial	Medium	7549	Automotive Repair Services, and Parking
213	Garnet Bros Trailer Repair	1667	E	Main	Commercial			
214	Golden Hammer Auto Body Repair	631	W	Lexington	Commercial	Medium	7549	Automotive Repair Services, and Parking
215	Harbor Freight Tools EC-14	1196	E	Main	Commercial	Low	5251	Building Materials, Hardware, Garden Supply, and Mobile Home Dealers
216	Legacy Cars	670		El Cajon	Commercial	Medium	5511	Automotive Dealers and Gasoline Service Stations
217	Joes Tire Shop	765		El Cajon	Commercial	Medium	7534	Automotive Repair Services, and Parking
218	Meineke Car Care Center	830	N	2nd	Commercial	Low	7538	Automotive Repair Services, and Parking
219	National Spring Inc.	1472		Fayette	Industrial, Conditional	High	3493	Fabricated Metal Products, except Machinery and Transportation Equipment
220	Omega Fuel Injection	1934		John Towers	Commercial	Medium	7549	Automotive Repair Services, and Parking
221	Performance Choppers	444		El Cajon	Commercial	Medium	5571	Automotive Dealers and Gasoline Service Stations
222	On the Go Gas & Deli	500	N	2nd	Commercial	Medium	5541	Automotive Dealers and Gasoline Service Stations
223	Quality RV, Inc.	1062	N	2nd	Commercial	Medium	7699	Miscellaneous Repair Services
224	Severin Mobile Auto Repair Team	225		Fletcher Pkwy	Commercial	Low	7538	Automotive Repair Services, and Parking
225	Superstition Motors Inc.	606	S	Marshall	Commercial	Medium	7538	Automotive Repair Services, and Parking
226	Abacor Inc.	1165	N	Johnson	Commercial	High	7538	Automotive Repair Services, and Parking
227	Black Onyx, Inc Russos & Balagis Limosine Service	1300	N	Johnson	Commercial	High	7549	Industrial and Commercial Machinery and Computer Equipment
228	Aerodyne Engineering Co.	1763	N	Marshall	Industrial, conditional	High	3999	Miscellaneous Manufacturing Industries
229	Aerowind Corporation	1959		John Towers	Industrial, Conditional	High	3549	Industrial and Commercial Machinery and Computer Equipment
230	American Made Wrought Iron	1401		Pioneer	Industrial, Conditional	High	3446	Fabricated Metal Products, except Machinery and Transportation Equipment
231	Aspen Vinyl, Inc.	601	W	Main	Industrial, Conditional	High	3089	Miscellaneous Manufacturing Industries

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
232	Attention Getters Design	1385	N	Johnson	Industrial, Conditional	High	3993	Miscellaneous Manufacturing Industries
233	Autoworks International, LLC	462		Vernon	Commercial	High		Industrial and Commercial Machinery and Computer Equipment
234	Avalon RF	344		Coogan	Industrial, Conditional	High	3669	Miscellaneous Manufacturing Industries
235	Premier Glass	613	W	Main	Industrial, Conditional	High	3231	Miscellaneous Manufacturing Industries
236	Global Resource Options Inc. Gro Solar	1365	N	Johnson	Commercial	Medium	1799	Construction - Special Trade
237	Seacon Brantner & Associates, Inc.	1700		Gillespie	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
238	CD&L Manufacturing LLC	1000	W	Bradley	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
239	C.P. Richard Signs, Inc.	1200		Billy Mitchell Dr.	Industrial, Conditional	High	3993	Miscellaneous Manufacturing Industries
240	California Custom Woodworks, Inc.	1035		Pioneer	Industrial, Conditional	High	2434	Miscellaneous Manufacturing Industries
241	California Sheet Metal	1020	N	Marshall	Industrial, Conditional	High	3444	Construction - Special Trade
242	Combo Aluminum Products	1100	N	Johnson	Industrial, Conditional	High	3499	Fabricated Metal Products, except Machinery and Transportation Equipment
243	Competition Textiles	1449		Pioneer	Industrial, Conditional	High	2221	Miscellaneous Manufacturing Industries
244	Controlled Precision Manufacturing	352		Coogan	Industrial, Conditional	High	3728	Miscellaneous Manufacturing Industries
245	Countywide Metal Fab & Finish Inc.	1348		Pioneer	Industrial, Conditional	High	3549	Industrial and Commercial Machinery and Computer Equipment
246	Cutting Edge	1825		Gillespie	Industrial, Conditional	High	3572	Miscellaneous Manufacturing Industries
247	Dave Whipple Sheet Metal	1077	N	Cuyamaca	Industrial, Conditional	High	3444	Fabricated Metal Products, except Machinery and Transportation Equipment
248	Daymar Corporation	460		Cypress Ln	Industrial, Conditional	High	2095	Miscellaneous Manufacturing Industries
249	DelStar Technologies Inc.	1306		Fayette	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
250	Design Crafted Bardon Cabinetry, Inc	1515		Fayette	Industrial, Conditional	High	2434	Miscellaneous Manufacturing Industries
251	Direct Sheet Metal	1423		Pioneer	Industrial, Conditional	High	3444	Fabricated Metal Products, except Machinery and Transportation Equipment
252	Ecology Care Inc.	1415		Broadway	Commercial	Medium	0782	Agricultural Services
253	Embertons Machine & Tool, Inc.	1215		Pioneer	Industrial, Conditional	High	3549	Industrial and Commercial Machinery and Computer Equipment
254	Eye Grind Design	1069		Vernon	Industrial, Conditional	High	3993	Miscellaneous Manufacturing Industries
255	Fabcom	781		Vernon	Industrial, Conditional	High	3446	Fabricated Metal Products, except Machinery and Transportation Equipment
256	First Class Packaging Inc.	280		Cypress Ln.	Industrial, Mandatory	High	2499	Miscellaneous Manufacturing Industries
257	Fit N Hip Wear	1614		Pioneer	Industrial, Conditional	High	2299	Miscellaneous Manufacturing Industries
258	Flexsystems USA, Inc.	727	W	Main	Industrial, Conditional	High	3089	Miscellaneous Manufacturing Industries

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
259	G3 Graphics, Inc.	1466		Pioneer	Commercial	Low	7336	Business Services
260	Gammow Pools, Inc	842		Fesler	Commercial	Low	1799	Construction - Special Trade
261	Gibson & Barnes Top Notch Flight Suits	1900		Weld	Industrial, Conditional	High	2389	Miscellaneous Manufacturing Industries
262	Goodman Custom Woodworks	1957		Friendship	Industrial, Conditional	High	2511	Miscellaneous Manufacturing Industries
263	Griffiths Machining	465		Vernon Way	Industrial, conditional	High	3549	Industrial and Commercial Machinery and Computer Equipment
264	High Precision Grind & Machining, Inc.	1130		Pioneer	Industrial, Conditional	High	3499	Fabricated Metal Products, except Machinery and Transportation Equipment
265	His Business Manufacturing, Inc.	1180	N	Johnson	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
266	Iron Express	1401		Pioneer	Industrial, Conditional	High	3446	Fabricated Metal Products, except Machinery and Transportation Equipment
267	J Dolan Drapery Workroom	1484		Fayette	Industrial, Conditional	High	2391	Miscellaneous Manufacturing Industries
268	Janies Custom Draperies	336		Coogan	Industrial, Conditional	High	2399	Miscellaneous Manufacturing Industries
269	Jim Wolf Technology, Inc.	212		Millar	Commercial	High	5013	Miscellaneous Manufacturing Industries
270	KD Cabinet	1065		Vernon	Industrial, Conditional	High	2434	Lumber and Wood Products, except furniture
271	Leisure Designs Goodman Custom Woodworks	1957		Friendship	Industrial, Conditional	High	2599	Furniture and Fixtures
272	Liddle Machine	1276		Pioneer	Industrial, Conditional	High	3549	Industrial and Commercial Machinery and Computer Equipment
273	Livesay Marine	1250		Pioneer	Industrial, Conditional	High	7699	Miscellaneous Repair Services
274	Mech Inclined Technicians	112		Pioneer	Commercial	High	7538	Industrial and Commercial Machinery and Computer Equipment
275	Media Control Systems LLC	1050		Pioneer	Commercial	High	5064	Miscellaneous Manufacturing Industries
276	Metals USA Building Products	1770		Gillespie	Commercial	High	3999	Miscellaneous Manufacturing Industries
277	Micro-Mode Products, Inc.	1870		John Towers	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
278	Milans Synthesized Furniture	1991		Friendship Dr.	Industrial, Conditional	High	2434	Lumber and Wood Products, except furniture
279	Modern Septic Service Inc	1506		Pioneer	Commercial	Medium	1711	Construction - Special Trade
280	New Brunswick Industries	1850		Gillespie	Industrial, Conditional	High	3679	Miscellaneous Manufacturing Industries
281	PRS	1460		Fayette	Industrial, Conditional	High	3444	Miscellaneous Manufacturing Industries
282	Phantom Research Laboratories, Inc.	1957		Friendship Dr.	Industrial, Conditional	High	2833	Medicinal Chemicals And Botanical Products
283	Ponderosa Roasting Maintenance and Manufacturing	1466		Pioneer	Industrial, Conditional	High	2095	Miscellaneous Manufacturing Industries

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
284	Pool Surfacing 2000 Inc.	104		Richardson	Commercial	Low	1799	Construction - Special Trade
285	Premier Metal Processing Inc.	971		Vernon	Industrial, Conditional	High	3549	Industrial and Commercial Machinery and Computer Equipment
286	Prime Heat, Inc.	1844		Friendship	Industrial, Conditional	High	3629	Miscellaneous Manufacturing Industries
287	Pure Bioscience	1725		Gillespie	Industrial, Conditional	High	2833	Miscellaneous Manufacturing Industries
288	Q Microwave Inc.	481		Cypress	Industrial, Conditional	High	3631	Miscellaneous Manufacturing Industries
289	RMS Laser	1033		Vernon	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
290	Race Car Dynamics, Inc.	1900		Weld	Industrial, Conditional	High	3799	Miscellaneous Manufacturing Industries
291	Raymonde Draperies and Window Coverings	1339	N	Cuyamaca	Industrial, Conditional	High	2591	Miscellaneous Manufacturing Industries
292	Medical Solutions	1987		Friendship Dr.	Commercial	Low	5047	Wholesale Trade; Durable Goods
293	Revolutionizer Products LLC	1957		Friendship Dr.	Commercial	Medium	5099	Wholesale Trade; Durable Goods
294	Reyes Machining	1364		Pioneer	Industrial, Conditional	High	3549	Industrial and Commercial Machinery and Computer Equipment
295	S&D Precision Machine Shop	1390		Hill	Industrial, Conditional	High	3728	Industrial and Commercial Machinery and Computer Equipment
296	San Diego Custom Extrusions	1866		Friendship Dr.	Industrial, Conditional	High	3082	Unsupported Plastics Profile Shapes
297	San Diego Soy Dairy Inc.	1330		Hill	Industrial, Conditional	High	2099	Miscellaneous Manufacturing Industries
298	Sandmar Enterprises	1991		Friendship Dr.	Industrial, Conditional	High	2511	Furniture and Fixtures
299	Sentrec Electronics Inc.	1943		Friendship Dr.	Industrial, Conditional	High	3679	Electronic and Other Electrical Equipment and Components, except computer
300	St. Cyclewear	1200		Billy Mitchell Dr.	Industrial, Conditional	High	2389	Apparel and Other Finished Products Made From Fabrics and Similar Material
301	Stine Game Tables	920		Fesler	Industrial, Conditional	High	2599	Furniture and Fixtures
302	KD Cabinet (820)	1065		Vernon	Industrial, Conditional	High	2434	Miscellaneous Manufacturing Industries
303	Sunswest Technologies Inc.	1050		Pioneer	Commercial	High		Miscellaneous Manufacturing Industries
304	TBS Irrigation Products, Inc.	1532	N	Johnson	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
305	The Strip Shop	1050		Pioneer	Commercial	High	7641	Miscellaneous Manufacturing Industries
306	The Vintage Sign Company, Inc.	926		Felser	Industrial, Conditional	High	3993	Miscellaneous Manufacturing Industries
307	MB Manufacturing and Tool Corp.	1452		Fayette	Industrial, Conditional	High	3499	Apparel and Other Finished Products Made From Fabrics and Similar Material
308	Thunderbird Products	1148	N	Marshall	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
309	Pulltarps Advanced Tarping Technologies Mfg.	1404	N	Marshall	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
310	Tube Lighting Products	1346		Pioneer	Industrial, Conditional	High	3648	Electronic and Other Electrical Equipment and Components, except computer

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
311	Turbine Aviation	1865		John Towers	Industrial, Conditional	High	3549	Industrial and Commercial Machinery and Computer Equipment
312	US Wheel Remanufacturing	1000	W	Bradley	Industrial, Conditional	High	3714	Miscellaneous Manufacturing Industries
313	Urban Bloom Landscape, Inc.	1017		El Cajon	Commercial	Low	1711	Construction - Special Trade
314	Vision Systems Inc.	1895		Gillespie	Industrial, Conditional	High	3479	Miscellaneous Manufacturing Industries
315	Waterdog Products, Inc.	1148		Pioneer	Industrial, Mandatory	High	2821	Plastics Materials, Synthetic Resins, And Nonvulcanizable Elastom
316	Weldmac Manufacturing Co.	1533	N	Johnson	Industrial, Conditional	Medium	3549	Miscellaneous Repair Services
317	Weldmac Manufacturing Co.	1451	N	Johnson	Industrial, Conditional	High	3999	Miscellaneous Manufacturing Industries
318	Zummay Custom Cabinetry	594		Front	Industrial, Conditional	High	2434	Miscellaneous Manufacturing Industries
319	Deisel System Services	1934		John Towers	Commercial		7699	

City of El Cajon
Inspections Conducted at Construction Sites Permit Year 2009-10

	Description	Address or Location	WD ID#	SUSMP	SUSMP Trigger	Construction Priority	Site Size (acres) (*=disturbed area <1 acre)	Tributary to ESA	Assessor's Parcel Number	Wet Season Inspection Totals	Wet Season Weeks Active	Wet Season Weeks Inactive	Dry Season Inspection Totals	Dry Season Weeks Active Total	Dry Weeks Season Inactive Total	09-'10 Year Inspection Totals	09-'10 Year Weeks Active Totals	09-'10 Year Weeks Inactive Totals
1	Promenade Square	W. Main St. and S. Magnolia Ave.		Yes	Commercial >100,000 sf	High	2.21	No	4881521400-1700	**0**	**0**	**31**	**4**	**0**	**21**	**4**	**0**	**52**
2	Park Avenue	Park Ave. and Ballantyne St.	9 37C323514	Yes	>10 Unit Subdivision	High	5.85	No	4880400500	**0**	**0**	**31**	**1**	**0**	**21**	**1**	**0**	**52**
3	El Jardin Ct.	El Jardin Ct.		Yes	Street >5,000 sf	High	1.71	No	4970815200	**10**	**0**	**31**	**2**	**0**	**21**	**12**	**0**	**52**
4	Granite Hills Village	1435 E. Washington Ave.	9 37C343675	Yes	>10 Unit Subdivision	High	6.40	Yes	5140215900	**13**	**21**	**10**	**2**	**4**	**17**	**15**	**25**	**27**
5	Tilling Way	1415 Emerald Ave.		No	N/A	High	1.12	No	4925805100&5800	**9**	**0**	**31**	**0**	**0**	**21**	**9**	**0**	**52**
6	Rock Haven Ranch	2010 E. Madison Ave.	9 37C331322	Yes	Hillside Development >5,000 sf, Street >5,000 sf	High	4.93	No	5082400800	**1**	**0**	**31**	**2**	**0**	**21**	**3**	**0**	**52**
7	Ballantyne Glenn	823 Ballantyne St.	9 37C347110	Yes	>10 Unit Subdivision	High	2.60	No	5110143400	**11**	**0**	**31**	**2**	**0**	**21**	**13**	**0**	**52**
8	SC Valley Engineering	656 Front Street		Yes	Industrial, Parking >5000 sf	High	0.85	No	4832409100	**10**	**26**	**5**	**2**	**8**	**13**	**12**	**34**	**18**
9	Cajon Valley Union School District	189-225 Roanoke Rd.	9 37C344648	Yes	Parking Redevelopment >5,000 sf	High	13.59	No	4824430300	**0**	**0**	**31**	**4**	**0**	**21**	**4**	**0**	**52**
10	Pre-Fabricated Home Sales	1341 E. Main St.		No	Redevelopment >5,000 sf	High	0.82	No	4871710900	**0**	**0**	**31**	**2**	**0**	**21**	**2**	**0**	**52**
11	Extra Space Storage	1539 E. Main St.	9 37C352869	Yes	Commercial >1 acre	High	1.13	No	5073102000	**1**	**1**	**30**	**5**	**13**	**8**	**6**	**14**	**38**
12	Habitat for Humanity Project	Foundation Ln.		Yes	Street >5,000 sf, ESA	High	0.60	No	4930401800	**2**	**2**	**29**	**5**	**13**	**8**	**7**	**15**	**37**
13	Public Safety Center	100 Civic Center Way	937C351777	Yes	Commercial >1 acre, Parking Redevelopment >5,000 sf	High	8.39	Yes	4880724200	**31**	**31**	**0**	**16**	**16**	**5**	**47**	**47**	**5**
14	La Valencia Plaza	1273 E. Main St.		Yes	Parking Redevelopment >5,000 sf	High	0.69	No	4893900500	**12**	**20**	**11**	**5**	**13**	**8**	**17**	**33**	**19**
15	Waste Management Transfer Center	1001 W. Bradley Ave.		Yes	Redevelopment >5,000 sf, ESA	High	6.00*	Yes	4821310200&1600	**1**	**0**	**31**	**3**	**0**	**21**	**4**	**0**	**52**
16	El Cajon Shopping Center	198 W. Main St.	9 37C354393	Yes	Parking Redevelopment >5,000 sf	High	6.20*	No	4871924700	**0**	**0**	**31**	**3**	**5**	**16**	**3**	**5**	**47**
17	Toyota of El Cajon	965 Arnele Ave.	9 37C354905	Yes	Parking Redevelopment >5,000 sf, Automotive Repair	High	9.89	No	4822502600	**17**	**31**	**0**	**10**	**21**	**0**	**27**	**52**	**0**
									HIGH PRIORITY TOTALS =	**118**	**132**	**395**	**68**	**93**	**264**	**186**	**225**	**659**
1	Prescott Promenade	S. of E. Main St. @ Sulzfeld		No	N/A	Medium	1.50*	Yes	4882112100-2200	**6**	**6**	**25**	**8**	**8**	**13**	**14**	**14**	**38**
									MEDIUM PRIORITY TOTALS =	**6**	**6**	**25**	**8**	**8**	**13**	**14**	**14**	**38**

Appendix B.3

Enforcement Actions

2009-2010

	Citation Date	Person Cited	Business Name	Address Number	Street Name	Direction	Citation Number	Warning or Fee	Component	Violations	Disposition
1	7/15/2009	Amodor Hernandez	Premium Roof Service	1573	Green Grove Ave		PW 0628	Warning	Mobile	Mobile contractor discharging tile cutting residue to the storm water conveyance system.	Corrected
2	7/31/2009	Jack Williams	Pacific Building Group	190	Main St	W	PW 0677	Warning	Construction	Sediment tracking and failure to install and maintain BMPs	Corrected
3	8/7/2009	Kevin Deloach	Coco's Restaurant #1162	1025	Fletcher Parkway		PW 0684	First	Commercial	Private Lateral overflow into the storm water conveyance system.	Corrected
4	8/19/2010	Mark Canfield	San Diego Contracting Inc	1539	Main St	E	PW 0674	First	Construction	Discharge of sediment/water, Failure to fully impliment SWPPP, failure to manitain perimeter BMPs	Corrected
5	8/20/2009	Will House	Starrett Construction Inc.	965	Arnele Ave		PW 0676	Second	Construction	Sediment tracking and failure to install and maintain BMPs	Corrected
6	10/13/2009	Yousef Kurdy	Heart Haven Residential Care	1160	Broadway		PW 0665	First	Commercial	Private Lateral overflow into the storm water conveyance system.	Corrected
7	10/28/2009	Shawn Sagart	Julio Ceasar Chavez Auto Group	464	Main St	W	PW 0667	Warning	Commercial	Sediment tracking, minor block work discharge and failure to install and maintain BMPs.	Corrected
8	11/20/2009	Jim Roe	El Cajon Senior Tower Apartments	180	Ballantyne		PW 0629	Warning	Residential	Discharge of pink tinted water from airconditioning work on roof of building.	Corrected
9	11/23/2009	John Ward	Lite Stone Concrete	1105	Marshall	N	PW 0234	Warning	Industrial	Discharge of non-stormwater at the east side of the property.	Corrected
10	11/30/2009	Evan Salem	La Valencia Plaza LLC	1273	Main St	E	PW 0231	Warning	Construction	Sediment tracking and failure to install and maintain BMPs	Corrected
11	11/30/2009	Bobby Barrios	Rally's Hamburger	1261	Main St	E	PW 0232	First	Commercial	Discharge of wash water into the storm drainage system.	Corrected
12	12/2/2009	Isam Aziez		577	Tilling Way		PW 0233	Warning	Residential	Failure to install BMPs for disturbed soils.	Corrected
13	12/11/2009	Bobby Osborne		990	Aster Ave		PW 0236	Warning	Residential	Discharce of oil through under curb drain pipe into street.	Corrected
14	1/7/2010	Maribel Ramirez	Shady Lane Apts	388	Shady Lane		PW 0237	First	Residential	Private lateral discharge into storm drain inlet	Corrected
15	1/13/2010	Loc Nguyen	C E Wilson Construction	1059	Australia		PW 0238	Warning	Residential	Discharge of sediment, failure to install and maintain BMPs.	Corrected

Enforcement Actions

2009-2010

	Citation Date	Person Cited	Business Name	Address Number	Street Name	Direction	Citation Number	Warning or Fee	Component	Violations	Disposition
16	2/18/2010	Leroy Silva		2788	Cataract Pl		PW 0239	Warning	Residential	Discharge of diatomaceous earth directly into the street. The discharge flowed in the curb line and entered the storm drain inlet at Garden Grove and Chatham.	Corrected
17	3/2/2010	Turner Scholl	El Cajon Energy Center	222	Johnson	N	PW 0240	Warning	Construction	Discharge of sediment into the storm drain inlet from dewatering.	Corrected.
18	3/9/2010	Chuck Preppo	Trolley----- A Mart	250	Marshall	N	PW 0241	First	Commercial	Private lateral discharge to the storm water conveyance system.	Corrected
19	4/12/2010	Sayfe Salem	Valley Foods	1275	Main St	E	PW 0242	Warning	Commercial	Respositioned roof downspout to discharge across the sidewalk.	Pending
20	4/14/2010	Philip Simis	Scantibodies Laboratory Inc.	1068	Broadway		PW 0243	Warning	Commercial	Failure to install BMPs during a rain event. Soil and debris piles and inlet protection.	Corrected
21	6/29/2010	Robert Parrish	BJ's Equipment Rentals	1717	Main St	E	PW 0216	Warning	Commercial	Equipment wash water discharging to the storm drain.	Corrected

Appendix B.4
(No Content)

Appendix C.1

El Cajon Storm Water Program Contact List (PY)

Department	Contact Name	E-mail Address	Phone Number	Fax Number	Example of Responsibilities
Public Works	Rob Turner	rturner@ci.el-cajon.ca.us	(619) 441-1781	(619) 579-5254	Overall URMP oversight
Engineering	Michael Griffiths	mgriffiths@ci.el-cajon.ca.us	(619) 441-1785	(619) 579-5254	Oversees Public Works, Land Development process. Coordinates Implementation of BMPs and provides SWPPP review and engineering conditions of approval.
Storm Water Manager	Jaime Campos	jcampos@ci.el-cajon.ca.us	(619) 441-5554	(619) 579-5254	Generally oversees the assessment process and facilitates updates and changes to the URMP.
Planning Department	Barbara Ramirez	bramirez@ci.el-cajon.ca.us	(619)441-1771		Implementation of the land use component and facilitation of public education in regards to new. development.
Finance	Joyce Nevarez	jnevarez@ci.el-cajon.ca.us	(619)441-1543		Identify and secure sources of funds for implementation of the URMP.
Code Enforcement	Craig Bonner	cbonner@ci.el-cajon.ca.us	(619) 441-1663	(619) 579-5254	Code enforcement activities, public outreach programs and education activities
Code Enforcement & Erosion Control Plan/ SUSMP Review	Blake Behringer	bbehringer@ci.el-cajon.ca.us	(619) 441-1666	(619) 579-5254	Code enforcement activities and review of Erosion Control and SUSMP Plans for City projects and Private Development Contracts
Public Outreach	Robert Griswold	bgriswold@ci.el-cajon.ca.us	(619) 441-1704	(619) 579-5254	Facilitate public outreach programs and education activities.

Appendix C.2
(No Content)

Appendix D.1

CHAPTER 5 - -OPERATIONS AND MAINTENANCE

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5.
OPERATIONS AND MAINTENANCE

The City shall properly manage, operate and maintain all parts of the sanitary sewer system owned or operated by the City and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills and abilities.

The SSMP must include those elements listed below that are appropriate and applicable to the enrollee's system:

(A) Maintain an up-to-date map of the sanitary sewer system showing all gravity line segments and manholes, and applicable stormwater conveyance facilities,

(B) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) Program should have a system to document scheduled and conducted activities, such as work orders,

(C) Develop a rehab and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;

(D) Provide training for staff on a regular basis in sanitary sewer system operations and maintenance, require contractors to be appropriately trained; and

(E) Provide equipment and replacement part inventories including identification of critical replacement parts.

5.1 Mapping

The requirement for this section is to maintain an up-to-date map of the collection system showing all gravity line segments and manholes, and storm water conveyance facilities.

5.1.1 Compliance Summary

As part of the City's Sewer System Master Plan Updated in 2008, the City's consultant prepared a new GIS atlas book of the City's collection system integrating basin, parcel and address layers. The new book is in distribution with a set protocol for noting inaccuracies and changes. Books will be collected once annually and updates will include any new or reconstructed facilities as well as corrections to older data. The protocol for book distribution and periodic collection along with standardized notations to be used by field and office personnel to note pending revisions to the GIS model, is:

1. How many sewer books to be distributed?

   A. Three City Hall copies: front counter, Private Development, extra copy

   B. Seven Maintenance/Operation copies: **DM, MS, AND 5** maintenance positions/vehicles

2. All books to be numbered and assigned a unique number to each user.

   It's most important to have an audit trail to demonstrate to the Regional Board that all people that meet and deal with the public and are involved in the SSOPP and SSORP have the most up-to-date information possible. This issue will be addressed in the next Storm Water Program audit.

3. No unauthorized reproductions. If someone needs a book, that person needs to order one from the GIS Administrator. All changes made to the master document are to be coordinated with the GIS Administrator.

4. All notations and corrections are to be noted in numbered books only. Maintenance crews will provide their comments to the maintenance supervisor who will keep a running record of field changes in his book. Senior Engineering Tech will make notations from processed as-builts on the master book and on the GIS sewer layer as CIP or private development projects are completed. Books will be collected, updated and redistributed periodically. New map books will be provided to all parties at the beginning of the system maintenance cycle or on an annual basis.

5. The GIS Administrator **(ET)** will keep a log of users and book numbers; establish frequency of updating, procedures for editing books, printing and redistributing sewer books.

6. Each book shall have a title page showing the book number and the date of publication. Inclusion of revised pages, per comment No. 6, will be hand-written on the title page of each book. **ET** will also develop a legend to illustrate how to record changes to the system or annotation.

7. Counter Book No. 1 will be the master copy to track comments and changes noted by counter personnel. **ET** will place the revised pages in Counter Book No. 1 so that it will be an up-to-date living document. Minor revisions may be distributed to Maintenance/Operations if significant projects are completed during

the system maintenance cycle or significant corrections are made. Minor revision pages will be stapled over the older pages in the sewer map books.

The City has no pump stations, force mains or valves to maintain so the collection system reflects gravity flow facilities only including 14 gravity siphons throughout the City. Future enhancements to the sewer atlas will be to integrate scans of as-built plans and CCTV inspection video as attributes to each pipeline segment. GIS users can assess as-built construction data and pipeline conditions on the fly. In 2009, the City will be completing a master plan for MS4 facilities including a new GIS based storm drain atlas book similar to the sewer atlas. Once this task is completed, the sewer atlas book will have a new layer reflecting location of all drainage structures. This will replace the paper map storm drain atlas book currently used by the City in conjunction with the new sewer atlas.

5.1.1 Compliance Documents

The documents supporting compliance with the requirements for mapping are as follows:

- The GIS based sewer atlas book is contained in Vol. 2, Appendix 5-1.
- The existing storm drain atlas book is in Vol. 2, Appendix 5-2.

5.1.2 Roles and Responsibilities

The roles and responsibilities of staff supporting compliance with the mapping requirement of the Operations and Maintenance Program are as follows:

Engineering and maintenance staffs are allowed to make notations in the various numbered atlas books distributed to personnel for that purpose. Notations are made according to the standards and procedures noted above and developed for that purpose.

The only individual allowed to make changes to the GIS database is the City's GIS Administrator, who will collect the books annually to record the noted changes received from staff. New books with revision dates will be re-distributed.

5.2 City of El Cajon Sewer Collection System

Preventive Maintenance Program (PMP)

5.2.1 Introduction

A City Maintenance Program consists of the O&M practices the City utilizes to maintain all of its facilities including routine line cleaning and inspection (CCTV and visual), and hot spot or trouble spot identification and maintenance. The maintenance program also describes how complaints, service calls and alarm conditions are responded to. Additionally, the maintenance program should have a means of scheduling and tracking

maintenance needs and activities as well as evaluating the effectiveness of the maintenance performed.

Background

This Preventive Maintenance Program (PMP) document is submitted as required by the Regional Water Quality Control Board's (RWQCB) Waste Discharge Requirements (WDR) Order R9-2006-0003, Page 11 of 20, Section (IV) Operation and Maintenance Program, Part (b).

The City of El Cajon Preventive Maintenance Program (PMP) covers the assets we manage in our sanitary sewer system and is one component of our overall Sewer System Management Plan (SSMP). The PMP is based on an approach that combines preventive, predictive and corrective maintenance strategies and established best management practices.

Overview

The City of El Cajon manages roughly 200 miles of gravity sewer system comprising of manhole structures and their connecting pipeline segments. As of January 2009, we operate and maintain 14 inverted sewer siphons as part of the overall pipeline system. Our Engineering Department is currently engaged in a sewer mapping project and the exact mileage numbers may change, as data is refined.

The City of El Cajon does not own or maintain any portion of the sewer laterals (upper or lower laterals) that drain each privately owned parcel or property up to the point of connection to the local sewer; therefore, they are not a part of this plan nor are they catalogued.

We use both staff and/or contractors to perform the planned maintenance tasks at scheduled frequencies as part of our Preventive, Predictive and Corrective Program. Frequencies are established based on experience and attribute information to minimize risk of blockages or equipment failures that could possibly lead to a sanitary sewer overflow (SSO).

5.2.2 Compliance Summary

Preventive and Predictive Maintenance Program

Maintenance classified as preventive is proactive and is defined by a programmed, systematic approach to maintenance activities. This type of maintenance results in improved system performance, except in the case where major chronic problems are the result of design and/or construction flaws that cannot be completely corrected by O&M activities. Proactive maintenance is performed on a periodic (preventive) basis or an as needed (predictive) basis. Preventive maintenance can be scheduled on the basis of specific criteria such as known problem areas (e.g., a siphon that often gets clogged, a low point that is often first to overflow in a storm event, or even an area prone to blockages), equipment operating time since the last maintenance was performed, or passage of a certain amount of time (calendar period).

Preventive Maintenance (PM) Tasks

We have developed and continue to develop asset-specific maintenance tasks for the care of each asset throughout its life cycle.

Major PM task groupings are:

- Sewer inspection and condition assessment (performed concurrently with maintenance activities)
- Sewer cleaning, including flushing and rodding maintenance
- Siphon and trouble spot maintenance
- Problem manhole inspection and maintenance

PM Frequencies

As described above, the frequencies for preventive maintenance tasks are assigned to each asset or group of assets, as follows:

Table 5-1: – "Summary of Sewer Maintenance System Preventive Tasks"

Document Name	Maintenance Type	Length of Maintenance Cycle	Remarks
System Flushing and Routine Maintenance Task	Flushing	Goal to complete system cycle within 18 months	Not explicitly scheduled unless needed. Complete system cycle usually completed in 12 months
Siphons and Trouble Spots Task	Flushing, Descaling, Degreasing	3-month cycle	Issued quarterly in February, May, August and November
Monthly Rodding Task	Rodding	6- or 12-month cycle	Issued each month
Problem Manholes with Roots Task	Rodding and Debris Removal	3-month cycle	Mostly problem manholes with roots. Issued quarterly in February, May, August and November
Delinquent Rodding List	Follow-up to Scheduled Rodding	N/A	Issued each month. Used to correct errors in performed maintenance and data entry.

System Flushing and Routine Maintenance Task

Prior to the acquisition of modern high pressure cleaning equipment in the late 1970's, much of the City's sewer system had never been inspected or cleaned and the City experienced numerous complaints along with over 100 stoppages per year. A stoppage is a clogged sewer line, which can cause backups and odors and can possibly result in flooded homes and other property damage. The current on-going City preventive maintenance program has reduced complaints and stoppage incidences to less than five per year on average.

The City sewer flushing crew (equipment operator and maintenance worker) services the sewer mains in an upstream-to-downstream, basin-by-basin sequence. A flushing log is updated daily allowing the CMMS to track which mains have been serviced and how many feet have been cleaned and flushed each day. Although the goal is to completely flush all targeted sewer mains every 18 months, one complete cycle of cleaning and flushing is typically completed within 12 months. Upon completion of the flushing and cleaning cycle a new cycle of flushing and cleaning is immediately initiated. Total servicing mileage for July 1, 2007 through June 30, 2008 was approximately 219 miles in a collection system totaling 195 miles in length.

Sewer Root Removal Program

Another maintenance effort involves the removal of tree roots from sanitary sewers. Tree roots can be a real menace, damaging sewers and causing sewers to plug. Tree roots seek the moisture and nutrients offered by leaky pipe joints usually found in the older and sometimes cracked or broken sewer pipes. Current root removal methods are limited to mechanical rodding with several styles of rotating bits, which may prove ineffective in dense root areas. Our City is investigating the control of roots through the

application of mild herbicidal foam, applied from within the sanitary sewer, which kills the roots in a confined area, within and around, the sanitary sewer while not harming the tree. This herbicidal method is approved by the EPA as an acceptable root control best management practice, and does not interfere with the wastewater treatment processes.

The City maintains a list of problem sewer main segments with roots called the "Monthly Rodding Task" and services each segment on a three, six or twelve-month schedule. The City also maintains a list of "Problem Manholes With Roots" and services these manholes on a three-month schedule during February, May, August and November. The mechanical rodding crew consists of a truck-mounted continuous mechanical rodder, an equipment operator and a maintenance worker.

Sewer Trouble Spot and Siphon Program

As summarized in Section "PM Frequencies" above, the City maintains a list of sewer main segments with known flow problems, including City siphon segments, and cleans and flushes these segments on a three-month schedule. Our City is currently moving to install high and low-level flow alarms in our sanitary sewer siphons that will notify the City through text messaging and email in the event of a high or low-level flow event at one of the siphons.

Predictive Maintenance Tasks

Predictive Maintenance **(PD)** tasks (a subset of **PM**) are inspection and condition-assessment type tasks. These are performed to determine if the planned preventive maintenance task should be done as scheduled or rescheduled to a forward date if preventive maintenance, rehabilitation or replacement is not needed. Predictive Maintenance tasks are therefore performed based on asset condition and need rather than a strict time interval when maintenance may not be required. Predictive Maintenance tasks include but are not limited to the following:

- Closed Circuit TV (CCTV) video inspection of piping
- Visual inspection of the manhole structures and their flow channels
- Trending of flow monitoring data
- Inspection of inverted siphons during preventive maintenance
- Ground surface inspection of rights-of-way and easements over the gravity sewers.
- Odor and corrosion assessment and monitoring programs
- CCTV Sewer Inspections

One of the critical components of the predictive maintenance program involves internal inspection of sanitary sewers using a TV camera. A sealed TV camera is mounted on a device similar to a small-wheeled sled, which is guided through the sanitary sewer. As the T.V. camera is pulled through the sanitary sewer and viewed by inspection personnel above ground, sewer defects are recorded for future reference and repair. A

computerized ranking system analyzes the defects found in many individual sewer line segments and systematically prioritizes repairs for City sewer main repair crews.

Along with finding sewer system deficiencies and prioritizing maintenance activities, the T.V. crew is also responsible for inspecting all newly constructed sanitary sewers before they are put into service.

The Predictive Maintenance program will continue to develop as technology expands.

Corrective Maintenance Tasks

Corrective maintenance (CM) tasks are performed in response to a failure of an asset, component or part, or a critical utility outage. Low-risk items, such as light bulbs, pressure gauges, sensors, and small non-critical valves, are planned for run-to-failure, and as such, are not part of the PM Program. These items are replaced when they fail. When managed assets critical to the process fail they are scheduled for CM on an urgent or routine basis on a priority schedule. Some of these repairs may be capitalized as a follow-up activity depending on asset cost and life expectancy. These types of CM repairs include but are not limited to:

- Emergency cleaning to eliminate a pipe blockage
- Spot repair or replacement of a failed pipe
- Replacing a rattling or failed manhole cover
- Repairing damage caused by construction or failure of another utility (e.g., water or gas main breakage)
- Respond to, investigate and mitigate customer complaints and sewer overflows
- Repair of earthquake damage
- Repair after vandalism
- Staff documents CM tasks on paper at the time of the event. The event may be documented in the CMMS database, if appropriate.

CCTV or other failure analysis may also be done by staff as a CM task after a problem occurs in an effort to diagnose the cause of the problem and recommend changes, if indicated.

Findings may lead to a spot repair of the pipe, root cutting, re-cleaning for grease, or debris removal on a periodic preventive basis, or scheduling a manhole-to-manhole pipe replacement or rehabilitation in an urgent or lower priority planned manner. Major replacement or rehabilitation may be capitalized outside of the annual operating budget.

5.2.3 Compliance Documents

Hardcopy data files and paper records not recorded in our Computerized Maintenance Management System (CMMS) are available for review and audit. Standard Operating Procedures (SOPs) and Standard Maintenance Procedures (SMPs) ensure consistency. These are available for some maintenance tasks and are continuing to be developed for others. Mobile assets such as service trucks, generators, and other equipment are not covered by this PMP but are covered by plans developed by the maintenance program of our Public Works Department.

Sewer Asset Inventory and Attribute Data

Capital assets, minor components and their parts are catalogued in our paper records or the CMMS. Source or attribute data for each of these items is obtained from record drawings, sewer maps, plans and specifications and/or supplier data. Levels of care for each item are described in the tasks and frequencies information as catalogued in the CMMS or, in the interim, on lists, spreadsheets or annotated maps until the full CMMS implementation is completed.

Documents prepared through queries of the CMMS supporting the preventive maintenance servicing task of the sewer asset are summarized more completely in Table 1: "Summary of Sewer Maintenance System Preventive Tasks" in the Compliance Summary Section. A short summary of compliance documents is as follows:

- Sewer map layer in El Cajon Geographic Information System (GIS). The map contains special information that is used in developing maps used in operations & maintenance and spill response, Vol. 2, Appendix 5-1.

- El Cajon Sewer Maintenance System (CMMS), Vol. 2, Appendix 5-3. Used to track preventative maintenance and prepare work orders from monthly maintenance. It is anticipated that the CMMS will be integrated with the GIS in the near future. Monthly and quarterly work orders are prepared as follows:
- Flushing Report (monthly), 2008, Vol. 2, Appendix 5-4
- Mechanical rodding maintenance (monthly), 2008, Vol. 2, Appendix 5-5
- Delinquent mechanical rodding maintenance (monthly), Vol. 2, Appendix 5-6
- Siphon and Trouble Spot maintenance (quarterly), Vol. 2, Appendix 5-7
- Problem manhole maintenance (quarterly), Vol. 2, Appendix 5-8

5.2.4 Roles and Responsibilities

The staff positions and their responsibilities for the City's Preventive Maintenance Program are as follows:

The Preventive Maintenance Program is staffed by the following positions

- Deputy Director, **(DM)** (1)
- Public Works Supervisor **(MS)** (1)
- Equipment Operator, **(EO)** (2)
- Maintenance Worker, **(MW)** (2)
- Maintenance Crew Leader **(MCL)** (1)
- Associate Engineer **(AE)** (1)
- Senior Technician **(ET)** (1)
- Storm Water Code Enforcement Officer **(CEO)** (1)

Staff time budgeted for the Preventive Maintenance Program is summarized in the following table:

Table 2 – Staffing Time for Various Sewer Preventive Maintenance Tasks

Task (Top/Right) -→ Position (Left/Down)	Sewer Flushing	Sewer Roding	Sewer CCTV	SSO Response	Program Support	Position Totals
Equipment Operator	2.00	0.50	0.50	0.20		3.20
Maintenance Worker	2.00	0.50	0.50	0.20		3.20
Maintenance Crew Leader			0.50	0.50		1.00
Public Works Supervisor	0.20	0.20	0.20	0.20	0.20	1.00
Deputy Director					0.25	0.25
Associate Engineer			0.15		0.25	0.40
Senior Technician			0.10	0.25	0.50	0.85
Storm Water Code Compliance				0.10		0.10
Task Totals	4.20	1.20	1.95	1.45	1.20	10.00

The Equipment Operators and Maintenance Workers perform the day-to-day work summarized by tasks in Table 1: "Summary of Sewer Maintenance System Preventive Tasks" in the Compliance Summary Section.

Monitoring, Measurement and Program Modifications

Findings related to scheduled or non-scheduled tasks and work order tracking will continue to be evaluated by staff to improve reliability and system performance. In assessing the success of the PMP, changes in frequency or task activities, spare parts or recommended stock levels will be reviewed by the Maintenance Supervisor and

approved by the Deputy Director. Database changes and/or new instructions to contractors will follow.

Items recommended for rehabilitation or replacement through our Capital Improvement Program (CIP) will be sent by Deputy Director **(DM)** to the **AE** for funding and planning by the Division or forwarded to our Engineering Department for action in the agency wide CIP.

Our goal is to have a staff-driven process for improving our PMP. This process may be further explained and refined, as deemed necessary, in future revisions to our SSMP.

5.3 Rehabilitation and Replacement Plan

The Order requires the City to develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes and a system for ranking the condition of sewer pipes and scheduling rehabilitation. The rehabilitation and replacement plan should include a capital improvement plan (CIP) that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short-term and long-term plans plus a schedule for developing the funds needed for the capital improvement plan

5.3.1 Compliance Summary

In 2008, the City embarked on a system-wide cleaning and CCTV inspection program to survey the entire system over a 5-year period. Phase 1-2008 was performed by an outside contractor, National Plant Services, and included 52,000 feet of pipeline, 18" through 42" diameter pipelines representing 10 miles and 84 manholes including the City's sewer interceptor and trunk system from Main Street to Mission Gorge Road.

This portion of the system was last cleaned 25 years ago and several problem pipe segments were identified for annual cleaning and inspection. Others were identified and earmarked for repairs and will be included in the next annual CIP for rehabilitation. Interestingly, the manholes were found to be in very good condition in spite of their age suggesting that the City does not have a manhole corrosion problem.

The inspection contractor utilized NASSCO's pipe condition assessment codes (PCAP) for condition assessment and provided the City a complete database for entry into the City's planned CMMS (DBA Master Series) computerized maintenance system. The completed work represented a move by the City to inspect and clean every pipe segment in the City by the end of the 2013 fiscal year and rank each pipe for rehabilitation by a priority assignment generated by the CMMS system. When completed the City will have cleaned and inspected over 200 miles of pipeline and 4,800 manholes.

Video of each segment inspected will be characterized for defects and ranked by priority and included in the rehabilitation portion of the CIP. The City plans to spend one-half

million dollars each year for the next ten (10) years to systematically rehab all at-risk pipe segments and manholes.

The City also plans to spend 1.4 million dollars over the next four years to inspect and code each pipe segment and manhole in the City (Phases 2 through 5) using the pipe condition assessment process to identify and prioritize the system for rehabilitation if needed.

In 2009, the City plans to purchase a computerized maintenance management system (CMMS) to management the CCTV inspection database containing pipe condition assessment codes for prioritizing pipe rehabilitation. Using the data gathered, the City will include on a priority basis a portion of the most compromised pipe segments for repair or rehab utilizing a $500,000 dollar annual allowance in the CIP. Over the next ten (10) years the City will inspect, clean, code and prioritize the entire system for rehab if needed.

Also in 2009, the City will pass a new ordinance requiring the periodic inspection and repair of all private laterals and private collection systems. Single-family residential properties will be exempted unless a spill occurs or evidence of a problem exists during the City's systematic inspection of the public portion of the system.

Funding for the inspection and rehab effort will come from allocated funds from the City's wastewater enterprise fund. Rates for the fund will be examined for adjustment in the future.

5.3.2 Compliance Documents

The documents supporting compliance with the rehabilitation and replacement plan requirements are as follows:

- Phase 1- 2007 CCTV Inspection Report, on file in the Office of Public Works
- Phase 2-2008 CCTV Inspection Report, on file in the Office of Public Works
- Asset Management System -Pipe Rehab and Maintenance Management System, Vol. 2, Appendix 5-3
- 5-Year CIP Pipe Rehab and Lining and Replacement Plan, Vol. 2, Appendix 5-9
- NASSCO's Pipe Condition Assessment Program (PCAP), Vol. 2, Appendix 5-10
- Engineering/Construction and Maintenance Staff Organization Chart, Vol. 2, Appendix 3-1

5.3.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with the rehabilitation and replacement plan requirements are as follows:

Deputy Director of Public Works (DE) supervises the engineering staff responsible for planning and executing pipeline assessment and the 5-year CIP for rehabilitation and replacement (Design & Construction).

Associate Engineer-Chairman and Project Manger (AE) is responsible for organizing and managing the preparation of the Management Plan (SSMP), directing the pipeline condition assessment program, design and preparation of construction contract documents for both CCTV inspection, rehab and replacement, also new construction for both existing and future pipeline deficiencies.

Deputy Director of Public Works (DM) is responsible for directing and managing the maintenance staff in charge of routine, preventative maintenance, assessing the need for engineering solutions to solve maintenance issues and limited pipeline CCTV inspections.

Maintenance Supervisor (MS) is responsible for planning, scheduling CCTV assessments, maintaining equipment, training and supervising maintenance staff.

Maintenance Crew Leader (MCL) is responsible for operation of the City's CCTV van, cataloging video files, assessing pipe conditions and data basing Wincan PCAP codes.

5.4 Training Program

The City is required to provide training on a regular basis for staff in sanitary sewer system operations and maintenance and to require contractors to be appropriately trained.

5.4.1 Compliance Summary

The City of El Cajon has endorsed the certification program for collection system maintenance workers as prescribed by the California Water Environment Association. It is the goal of this plan that maintenance supervisors and maintenance workers will collectively be certified to their respective level of experience and education, Collection Systems Workers Grades 1, 2, 3 & 4 as prescribed by the California Water Environment Association (CWEA). The certification program assures that each worker has demonstrated the skill and knowledge necessary to work at the prescribe levels of competence.

Ethics in the workplace and in the daily work activities is an essential requirement of maintenance workers that maintain the City's collection system and are certified by the CWEA. Each worker and supervisor is expected to adhere to the Code of Ethics as set forth by the CWEA and provide assurance to the public that the health and welfare of the community is a primary concern of the maintenance staff.

All maintenance workers are required to receive training in the Traffic Control safety practices through the Southern California Chapter of the "American Public Works Association. The "WATCH Manual" (Work Area Traffic Control Handbook) is required reading for all maintenance workers in a work crew lead position. Each crew leader must demonstrate skills using the manuals guidelines for work area traffic control safety.

Each maintenance worker, regardless of rank, is required to take a course in confined space entry and pass certification for safe entries into confined areas that could contain hazardous air.

Maintenance workers that perform video inspection of pipelines must perform the pipeline condition assessment using standardized Pipeline Condition Assessment Codes (PACP) as trained and certified by the National Association of Sewer Serving Companies (NASSCO). NASSCO conducts periodic 2-day training courses for workers seeking certification in the pipeline condition assessment technology.

The City of El Cajon requires any contractor performing inspection or maintenance on the collection system to have its workers properly trained and certified in the area of application. All inspection work is performed using NASSCO PACP pipe assessment codes that are unitized with the City's computerized maintenance management system (CMMS).

All cleaning work performed by contractors using "Rodders" or "Vactors" are required to have individual personnel and supervisors trained and certified in collections system maintenance as prescribed by the CWEA and be trained in confined space entry.

5.4.2 Compliance Documents

The following documents demonstrate the type of training provided to staff and the training requirements required of contractors:

- Training records for each collections system maintenance worker employed by the City are collected and maintained at the field operations office for the Department of Public Works with duplicate files kept at the City's Department of Human Resources. Certification records are maintained respectively by CWEA and NASSCO and a master list of certified workers are listed on-line respectively at each organization's web site. Copies of certifications are filed in the Department of Human Resources.

- Contract administrators in the Department of Public Works prepare specifications and Special Provisions for each maintenance contract issued to perform work on the collections system. Standardized specifications relating to training requirements are contained in Volume 2, Appendix 5-115 Year CIP Pipe Rehab and Lining and Replacement Plan, Vol. 2, Appendix 5-9.

5.4.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with the staff and contractor training requirements are as follows:

The Deputy Director of Public Works-Maintenance (DM)

Manages the maintenance activities for the Department of Public Works. The collection system maintenance team working under the direction of the Deputy Director is supervised by the Public Works Supervisor **(MS)** who manages the day-to-day activities of the maintenance crew, including schedule maintenance, overflow response, overflow cleanup and CCTV inspection of pipelines. The maintenance supervisor directs all training, including scheduling, oversight and maintenance of training records. A training log is maintained at the operations office. An annual training budget is prepared and

approved each year to satisfy the training requirements of the department. Training for maintenance workers and supervisors for Wastewater Collection Systems workers are planned to begin 2009 with the maintenance supervisors first. Training for pipe condition assessment is also planned for 2009. Training of all staff will be a function of the budget and may span several years.

The Deputy Director of Public Works-Engineering (DE)

Administers the engineering and construction department that includes the preparation of all contract documents for CCTV inspection activities, rehab and replacement of pipelines. On a project-by-project basis assigns a staff level Associate Engineer as project manager to prepare the contract documents which include standard special provisions setting forth the training qualifications for employees employed by the contractor. Each contractor performing maintenance or inspection for the City must provide training documentation to demonstrate competence for any employee working on the collections system prior to beginning work.

5.5 Equipment and Parts Inventories

Each City is required to provide equipment and replacement part inventories, including identification of critical replacement parts for the operation and maintenance of its sewer collection system.

5.5.1 Compliance Summary

The City in the past has maintained an inventory of equipment for asset management purposes and to plan for life cycling and replacement of equipment needed to maintain the sewer system. In 2008, the City started compiling an inventory of all spare parts including a list of critical parts needed for equipment to be utilized for emergency situations.

The compiled list will be used to input onto the new CMMS maintenance management system to be implemented in 2009. The list will become an integral part of the asset and maintenance management activities including an annual audit of parts and equipment used to facilitate the sewer maintenance program.

The City also has a mutual aide agreement with all other Cities in the Metro system including its immediate neighbors, Santee, La Mesa Padre Dam, and the City and County of San Diego. Among other sharing responsibilities and compensation schedules, the agreement provides for sharing of spare parts and equipment should individual inventories fall short.

5.5.2 Compliance Documents

The documents supporting compliance with the requirement to maintain an inventory of equipment and parts including identification of critical parts are as follows:

- Equipment and parts inventory (12-19-2008), Vol. 2, Appendix 5-12
- Sewer maintenance list of critical parts- 2008, Vol. 2, Appendix 5-13

5.5.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with maintaining an inventory of equipment and parts including critical parts are as follows:

The Deputy Director of Public Works-Maintenance (DM)

Manages the maintenance activities for the Department of Public Works. The collection system maintenance team working under the direction of the Deputy Director is supervised by the Maintenance Supervisor **(MS)** who manages the day-to-day activities of the maintenance crew including schedule maintenance, overflow response, overflow cleanup and CCTV inspection of pipelines.

Maintenance Supervisor (MS)

Responsible for work orders for equipment maintenance, offering parts, providing tracking data to the Administrative Secretary or crew leader for entry into the asset management system.

Administrative Secretary

Responsible for data entry tracking equipment and parts numbers through an inventory control tool within the asset management system

Appendix D.2

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 23	21	089		22	077		7/1/2009	279	FM		279
1 23	22	054		22	055		7/1/2009	236	FM		236
1 23	22	055		22	056		7/1/2009	234	FM		234
1 23	22	056		22	057		7/1/2009	118	FM		118
1 23	22	057		22	060		7/1/2009	309	FM		309
1 23	22	057		22	093	D	7/1/2009	190	FM		190
1 23	22	058		22	059		7/1/2009	348	FM		348
1 23	22	059		22	060		7/1/2009	265	FM		265
1 23	22	060		22	062		7/1/2009	192	FM		192
1 23	22	061		22	062		7/1/2009	350	FM		350
1 23	22	062		22	069		7/1/2009	99	FM		99
1 23	22	063		22	064		7/1/2009	200	FM		200
1 23	22	064		22	065		7/1/2009	276	FM		276
1 23	22	065		22	066		7/1/2009	45	FM		45
1 23	22	066		22	067		7/1/2009	272	FM		272
1 23	22	067		22	068		7/1/2009	230	FM		230
1 23	22	068		22	069		7/1/2009	347	FM		347
6S17	07	167		07	171		7/1/2009	300	FM		300
6S17	07	168		07	205		7/1/2009	42	FM		42
6S17	07	169		07	197	C	7/1/2009	160	FM		160
6S17	07	169		07	170		7/1/2009	300	FM		300
6S17	07	168		07	171		7/1/2009	300	FM		300
6S17	07	170		07	171		7/1/2009	310	FM		310
6S17	07	171		07	175		7/1/2009	300	FM		300
6S17	07	172		07	175		7/1/2009	360	FM		360
6S17	07	173		07	174		7/1/2009	310	FM		310
6S17	07	173		07	196	C	7/1/2009	144	FM		144
6S17	07	174		07	175		7/1/2009	310	FM		310
6S18	07	184		07	192	C	7/1/2009	250	FM		250
6S18	07	184		07	185		7/1/2009	300	FM		300
6S18	07	190		07	191		7/1/2009	165	FM		165
6S18	07	185		07	191		7/1/2009	220	FM		220
1 23	21	062		21	063		7/7/2009	279	FM		279
1 23	21	062		22	080		7/7/2009	282	FM		282
1 23	21	063		21	064		7/7/2009	232	FM		232
1 23	21	064		21	066		7/7/2009	231	FM		231
1 23	21	065		21	066		7/7/2009	212	FM		212
1 23	21	066		21	067		7/7/2009	257	FM		257
1 23	21	067		21	068		7/7/2009	215	FM		215
1 23	21	068		21	140		7/7/2009	230	FM		230
1 23	21	069		21	140		7/7/2009	125	FM		125
1 23	22	069		22	070		7/7/2009	303	FM		303
1 23	22	070		22	071		7/7/2009	300	FM		300
1 23	22	071		22	072		7/7/2009	171	FM		171
1 23	22	072		22	073		7/7/2009	193	FM		193
1 23	22	073		22	074		7/7/2009	276	FM		276
1 23	22	074		22	075	S	7/7/2009	144	FM		144
1 23	22	076	S	22	078		7/7/2009	63	FM		63
1 23	22	077		22	078		7/7/2009	318	FM		318
1 23	22	078		22	079		7/7/2009	37	FM		37

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 23	22	080		22	095	D	7/7/2009	45	FM		45
1 24	21	073		21	074		7/7/2009	313	FM		313
1 24	21	074		21	075		7/7/2009	275	FM		275
1 24	21	077		21	078		7/7/2009	348	FM		348
1 24	22	010		22	047		7/7/2009	40	FM		40
1 24	22	010		22	048		7/7/2009	110	FM		110
1 24	22	046		22	047		7/7/2009	275	FM		275
1 24	22	048		22	049		7/7/2009	272	FM		272
1 24	22	049		22	050		7/7/2009	234	FM		234
6S18	08	127		08	128		7/8/2009	160	FM		160
6S18	08	128		08	129		7/8/2009	350	FM		350
6S18	08	129		08	130		7/8/2009	125	FM		125
6S18	08	130		08	131		7/8/2009	130	FM		130
6S18	08	131		08	132		7/8/2009	360	FM		360
6S18	08	132		08	133		7/8/2009	141	FM		141
6S18	08	133		08	134		7/8/2009	300	FM		300
6S18	07	183		07	200		7/9/2009	183	FM		183
6S18	07	191		08	137		7/9/2009	71	FM		71
6S18	08	134		08	189		7/9/2009	230	FM		230
6S18	08	135		08	189		7/9/2009	97	FM		97
6S18	08	135		08	136		7/9/2009	340	FM		340
6S18	08	136	P	08	138	P	7/9/2009	300	FM		300
6S18	08	137	P	08	138	P	7/9/2009	290	FM		290
6S18	08	139		08	140		7/9/2009	385	FM		385
6S18	08	140		08	141		7/9/2009	300	FM		300
6S18	08	141		08	142		7/9/2009	300	FM		300
6S18	08	142		08	143		7/9/2009	300	FM		300
6S18	08	143		08	145		7/9/2009	300	FM		300
6S18	07	183		08	144		7/9/2009	300	FM		300
6S18	08	144		08	145		7/9/2009	300	FM		300
1 01	32	042		33	034		7/10/2009	300	FM		300
1 01	32	042		32	043		7/10/2009	305	FM		305
1 01	33	015		33	028		7/10/2009	296	FM		296
1 01	33	027		33	028		7/10/2009	260	FM		260
1 01	33	028		33	033		7/10/2009	15	FM		15
1 01	33	031		33	032		7/10/2009	255	FM		255
1 01	33	032		33	033		7/10/2009	260	FM		260
1 01	33	033		33	034		7/10/2009	250	FM		250
1 02	33	009		33	010		7/10/2009	345	FM		345
1 02	32	045		32	046		7/13/2009	290	FM		290
1 02	32	045		33	011		7/13/2009	292	FM		292
1 02	32	048		33	005		7/13/2009	351	FM		351
1 02	33	001	C	33	003		7/13/2009	95	FM		95
1 02	33	002		33	003		7/13/2009	112	FM		112
1 02	33	003		33	004		7/13/2009	136	FM		136
1 02	33	004		33	005		7/13/2009	238	FM		238
1 02	33	010		33	011		7/13/2009	294	FM		294
1 06	28	045		28	046		7/13/2009	155	FM		155
1 06	28	047		28	048		7/13/2009	199	FM		199
1 06	28	048		28	049		7/13/2009	310	FM		310

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 06	28	049		28	050		7/13/2009	300	FM		300
1 07	28	059		28	060		7/13/2009	175	FM		175
1 07	28	060		28	061		7/13/2009	75	FM		75
1 07	28	061		28	063		7/13/2009	365	FM		365
1 07	28	062		28	063		7/13/2009	306	FM		306
6S18	08	145		08	152		7/13/2009	325	FM		325
6S19	08	146		08	217	C	7/13/2009	50	FM		50
6S19	08	146		08	147		7/13/2009	139	FM		139
6S19	08	147		08	148		7/13/2009	113	FM		113
6S19	08	148		08	149		7/13/2009	400	FM		400
6S19	08	149		08	150		7/13/2009	340	FM		340
6S19	08	150		08	151		7/13/2009	346	FM		346
6S19	08	151		08	152		7/13/2009	162	FM		162
6S20	07	182		07	199	C	7/13/2009	150	FM		150
6S20	07	182		08	153		7/13/2009	290	FM		290
6S20	08	152		08	154		7/13/2009	170	FM		170
6S20	08	153		08	154		7/13/2009	230	FM		230
1 06	28	044		28	052		7/14/2009	281	FM		281
1 06	28	050		28	051		7/14/2009	248	FM		248
1 06	28	051		28	052		7/14/2009	122	FM		122
1 06	28	052		28	053		7/14/2009	353	FM		353
6S01	08	060		08	061		7/14/2009	275	FM		275
6S01	08	062		08	063		7/14/2009	157	FM		157
6S01	08	061		08	063		7/14/2009	142	FM		142
6S01	08	063		08	064		7/14/2009	206	FM		206
6S01	08	064		08	065		7/14/2009	125	FM		125
6S01	08	065		08	066		7/14/2009	370	FM		370
6S01	08	066		08	067		7/14/2009	119	FM		119
6S01	08	067		08	068		7/14/2009	236	FM		236
6S01	08	068		09	008		7/14/2009	377	FM		377
6S01	08	069		08	070		7/14/2009	246	FM		246
6S01	08	070		09	004		7/14/2009	213	FM		213
6S01	08	071		08	072		7/14/2009	267	FM		267
6S01	08	072		09	001		7/14/2009	347	FM		347
6S01	09	001		09	002		7/14/2009	350	FM		350
6S01	09	002		09	003		7/14/2009	210	FM		210
6S01	09	003		09	005		7/14/2009	80	FM		80
6S01	09	004		09	005		7/14/2009	210	FM		210
1 06	27	090		27	178	D	7/15/2009	50	FM		50
1 06	27	091		27	092		7/15/2009	145	FM		145
1 06	27	091		28	035		7/15/2009	136	FM		136
1 06	28	027		28	028		7/15/2009	371	FM		371
1 06	28	028		28	029		7/15/2009	239	FM		239
1 06	28	029		28	031		7/15/2009	75	FM		75
1 06	28	030		28	031		7/15/2009	387	FM		387
1 06	28	031		28	032		7/15/2009	154	FM		154
1 06	28	032		28	034		7/15/2009	138	FM		138
1 06	28	033		28	034		7/15/2009	380	FM		380
1 06	28	034		28	035		7/15/2009	151	FM		151
1 07	27	097		27	189		7/15/2009	112	FM		112

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 07	27	098		27	189		7/15/2009	253	FM		253
1 07	27	180		27	181		7/15/2009	134	FM		134
1 07	27	181		27	182		7/15/2009	45	FM		45
1 07	27	182		27	183		7/15/2009	138	FM		138
1 07	27	183		27	184		7/15/2009	48	FM		48
1 07	27	184		27	185		7/15/2009	48	FM		48
1 07	27	185		27	186		7/15/2009	153	FM		153
1 07	27	185		27	187		7/15/2009	305	FM		305
1 07	27	187		27	188		7/15/2009	40	FM		40
1 07	27	188		27	189		7/15/2009	114	FM		114
1 07	27	180		28	064		7/15/2009	372	FM		372
6S13	14	018	C	14	019	C	7/15/2009	143	FM		143
6S13	14	019		14	020		7/15/2009	80	FM		80
1 02	32	058		32	059	D	7/16/2009	13	FM		13
1 02	32	055		32	057		7/16/2009	174	FM		174
1 02	32	057		32	058		7/16/2009	218	FM		218
1 06	27	092		27	094		7/16/2009	304	FM		304
1 06	27	093		27	094		7/16/2009	300	FM		300
1 06	27	093		28	053		7/16/2009	80	FM		80
1 06	27	094		27	095		7/16/2009	101	FM		101
1 06	27	095		27	100		7/16/2009	200	FM		200
1 07	27	098		27	099		7/16/2009	340	FM		340
1 07	27	099		27	100		7/16/2009	305	FM		305
1 07	27	101		27	102		7/16/2009	245	FM		245
1 07	27	102		27	103	M	7/16/2009	201	FM		201
1 02	32	033		32	055		7/17/2009	112	FM		112
1 02	32	033		32	034		7/17/2009	242	FM		242
1 02	32	034		32	035		7/17/2009	236	FM		236
1 02	32	035		32	037		7/17/2009	237	FM		237
1 02	32	036		32	037		7/17/2009	302	FM		302
1 02	32	036		32	053	D	7/17/2009	57	FM		57
1 02	27	106		32	049		7/20/2009	276	FM		276
1 02	32	037		32	041		7/20/2009	254	FM		254
1 02	32	038		32	039		7/20/2009	151	FM		151
1 02	32	039		32	040		7/20/2009	259	FM		259
1 02	32	040		32	041		7/20/2009	61	FM		61
1 02	32	041		32	044		7/20/2009	257	FM		257
1 02	32	043		32	044		7/20/2009	298	FM		298
1 02	32	044		32	047		7/20/2009	261	FM		261
1 02	32	046		32	047		7/20/2009	292	FM		292
1 02	32	047		32	049		7/20/2009	262	FM		262
1 02	32	048		32	049		7/20/2009	345	FM		345
1 03	27	106		27	107		7/20/2009	340	FM		340
1 04	32	007		32	009		7/20/2009	174	FM		174
1 04	32	008		32	009		7/20/2009	113	FM		113
1 04	32	012		32	013		7/20/2009	250	FM		250
1 04	32	012		32	056	C	7/20/2009	100	FM		100
1 04	32	013		32	014		7/20/2009	296	FM		296
1 04	32	020		32	021		7/20/2009	240	FM		240
1 04	32	023		32	024		7/20/2009	194	FM		194

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 04	32	025		32	026		7/20/2009	195	FM		195
1 04	32	031		32	049		7/20/2009	338	FM		338
6S01	09	005		09	006		7/20/2009	178	FM		178
6S01	09	006		09	007		7/20/2009	109	FM		109
6S01	09	007		09	009		7/20/2009	192	FM		192
6S01	09	008		09	009		7/20/2009	161	FM		161
6S01	09	009		09	010		7/20/2009	165	FM		165
6S01	09	010		09	011		7/20/2009	190	FM		190
6S01	09	011		09	016		7/20/2009	300	FM		300
6S01	09	012		09	016		7/20/2009	194	FM		194
6S01	09	013		09	014		7/20/2009	340	FM		340
6S01	09	014		09	015		7/20/2009	267	FM		267
6S01	09	015		09	016		7/20/2009	300	FM		300
6S01	09	016		09	017		7/20/2009	345	FM		345
6S01	09	017		09	018		7/20/2009	350	FM		350
6S01	09	018		09	019		7/20/2009	249	FM		249
6S01	09	019		09	020		7/20/2009	300	FM		300
1 03	27	105		27	108		7/21/2009	306	FM		306
1 03	27	107		27	108		7/21/2009	253	FM		253
1 03	27	108		32	032		7/21/2009	268	FM		268
1 04	27	104		27	105		7/21/2009	317	FM		317
1 04	32	009		32	011		7/21/2009	193	FM		193
1 04	32	010		32	011		7/21/2009	336	FM		336
1 04	32	011		32	017		7/21/2009	260	FM		260
1 04	32	014		32	017		7/21/2009	200	FM		200
1 04	32	015		32	016		7/21/2009	206	FM		206
1 04	32	016		32	017		7/21/2009	208	FM		208
1 04	32	017		32	022		7/21/2009	255	FM		255
1 04	32	019		32	022		7/21/2009	303	FM		303
1 04	32	021		32	022		7/21/2009	240	FM		240
1 04	32	022		32	027		7/21/2009	270	FM		270
1 04	32	024		32	027		7/21/2009	346	FM		346
1 04	32	026		32	027		7/21/2009	350	FM		350
1 04	32	027		32	028		7/21/2009	182	FM		182
1 04	32	029		32	030		7/21/2009	320	FM		320
1 04	32	030		32	032		7/21/2009	304	FM		304
1 04	32	031		32	032		7/21/2009	350	FM		350
6S01	09	020		09	022		7/21/2009	250	FM		250
6S01	09	021		09	022		7/21/2009	245	FM		245
6S01	09	021		09	135	C	7/21/2009	191	FM		191
6S02	09	022		09	035		7/21/2009	50	FM		50
6S02	09	034		09	035		7/21/2009	343	FM		343
6S02	09	036		10	001		7/21/2009	260	FM		260
6S02	09	036		09	037		7/21/2009	200	FM		200
6S02	09	037		09	038		7/21/2009	89	FM		89
6S02	09	038		09	041		7/21/2009	330	FM		330
6S02	09	039		09	040		7/21/2009	200	FM		200
6S02	09	040		09	041		7/21/2009	85	FM		85
6S02	09	042		09	043		7/21/2009	100	FM		100
6S02	09	041		09	043		7/21/2009	180	FM		180

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
6S02	09	043		09	044		7/21/2009	140	FM		140
1 12	27	144		27	145		7/22/2009	276	FM		276
1 12	27	144		32	005		7/22/2009	280	FM		280
1 12	27	145		27	147		7/22/2009	275	FM		275
1 12	27	146		27	147		7/22/2009	87	FM		87
1 12	27	147		27	150		7/22/2009	236	FM		236
1 12	27	148		27	149		7/22/2009	277	FM		277
1 12	27	148		32	004		7/22/2009	278	FM		278
1 12	27	149		27	150		7/22/2009	274	FM		274
1 12	27	150		27	153		7/22/2009	235	FM		235
1 12	27	151		27	152		7/22/2009	277	FM		277
1 12	27	151		32	003		7/22/2009	279	FM		279
1 12	27	152		27	153		7/22/2009	275	FM		275
1 12	27	162		27	163		7/22/2009	321	FM		321
1 12	27	162		32	006		7/22/2009	303	FM		303
1 12	27	163		27	164		7/22/2009	323	FM		323
1 12	27	164		27	165		7/22/2009	323	FM		323
1 12	27	153		27	156		7/23/2009	235	FM		235
1 12	27	154		27	155		7/23/2009	278	FM		278
1 12	27	155		27	156		7/23/2009	279	FM		279
1 12	27	156		27	159		7/23/2009	226	FM		226
1 12	27	157		27	158		7/23/2009	273	FM		273
1 12	27	158		27	159		7/23/2009	272	FM		272
1 12	32	001		32	002		7/23/2009	275	FM		275
1 12	27	141		27	142		7/24/2009	266	FM		266
1 12	27	141		32	002		7/24/2009	265	FM		265
1 12	27	142		27	143		7/24/2009	272	FM		272
1 12	27	143		27	160		7/24/2009	272	FM		272
1 12	27	159		27	160		7/24/2009	280	FM		280
1 12	27	161		27	166		7/24/2009	315	FM		315
1 12	27	165		27	166		7/24/2009	325	FM		325
1 12	27	166		27	167		7/24/2009	313	FM		313
1 04	27	108		27	109		7/27/2009	314	FM		314
1 04	27	109		27	110		7/27/2009	302	FM		302
1 04	27	110		27	111		7/27/2009	295	FM		295
1 04	27	111		27	113		7/27/2009	317	FM		317
1 04	27	112		27	113		7/27/2009	297	FM		297
1 04	27	113		27	114		7/27/2009	140	FM		140
1 05	27	114		27	115		7/27/2009	312	FM		312
1 05	27	114		27	161		7/27/2009	300	FM		300
1 09	27	103	M	27	115		7/27/2009	175	FM		175
1 09	27	115		27	116		7/27/2009	225	FM		225
6S02	09	035		09	045		7/27/2009	212	FM		212
6S02	09	044		09	045		7/27/2009	200	FM		200
6S02	09	058		09	059		7/27/2009	350	FM		350
6S02	09	045		09	059		7/27/2009	150	FM		150
6S02	09	059		09	073		7/27/2009	300	FM		300
6S02	09	071		09	072		7/27/2009	156	FM		156
6S02	09	072		09	073		7/27/2009	161	FM		161
6S02	09	073		09	074		7/27/2009	200	FM		200

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
6S03	09	074		09	075		7/27/2009	112	FM		112
6S03	09	075		09	079		7/27/2009	87	FM		87
1 09	27	116		27	118		7/28/2009	227	FM		227
1 09	27	117		27	118		7/28/2009	195	FM		195
1 09	27	118		27	119		7/28/2009	112	FM		112
1 10	27	119		27	120		7/28/2009	136	FM		136
1 10	27	120		27	121		7/28/2009	281	FM		281
1 10	27	121		27	122		7/28/2009	290	FM		290
1 10	27	122		27	126		7/28/2009	50	FM		50
1 10	27	126		27	138		7/28/2009	220	FM		220
1 10	27	127		27	128		7/28/2009	288	FM		288
1 10	27	129		27	133		7/28/2009	313	FM		313
1 10	27	130		27	131		7/28/2009	128	FM		128
1 10	27	130		27	179	C	7/28/2009	25	FM		25
1 10	27	131		27	132		7/28/2009	200	FM		200
1 10	27	132		27	133		7/28/2009	175	FM		175
1 10	27	133		27	134		7/28/2009	313	FM		313
1 10	27	134		27	136		7/28/2009	181	FM		181
1 10	27	135		27	136		7/28/2009	292	FM		292
1 10	27	136		27	137		7/28/2009	199	FM		199
1 10	27	137		27	138		7/28/2009	239	FM		239
1 10	27	138		27	171		7/28/2009	20	FM		20
6S03	09	076		09	077		7/28/2009	100	FM		100
6S03	09	077		09	078		7/28/2009	55	FM		55
6S03	09	078		09	079		7/28/2009	50	FM		50
6S03	09	079		09	080		7/28/2009	61	FM		61
6S03	09	080		09	081		7/28/2009	125	FM		125
6S03	09	081		09	082		7/28/2009	128	FM		128
6S03	09	082		09	083		7/28/2009	117	FM		117
6S08	09	098		09	099		7/28/2009	135	FM		135
6S08	09	099		09	100		7/28/2009	240	FM		240
6S08	09	100		09	101		7/28/2009	170	FM		170
6S08	09	101		09	102		7/28/2009	185	FM		185
6S08	09	107		09	108		7/28/2009	276	FM		276
6S08	09	107		09	138	D	7/28/2009	3	FM		3
6S08	09	108		09	109		7/28/2009	275	FM		275
6S09	08	174		08	176		7/28/2009	312	FM		312
6S09	08	175	C	08	176		7/28/2009	146	FM		146
6S09	08	176		08	177		7/28/2009	200	FM		200
6S09	08	177		08	178		7/28/2009	47	FM		47
6S09	08	178		08	179		7/28/2009	50	FM		50
1 17	28	008		28	009		7/29/2009	158	FM		158
1 17	28	009		28	010		7/29/2009	167	FM		167
1 17	28	009		28	066		7/29/2009	59	FM		59
1 17	28	010		28	011		7/29/2009	228	FM		228
1 17	28	011		28	017		7/29/2009	229	FM		229
1 17	28	012		28	013		7/29/2009	284	FM		284
1 17	28	013		28	014		7/29/2009	314	FM		314
1 17	28	014		28	015		7/29/2009	167	FM		167
1 17	28	015		28	016		7/29/2009	289	FM		289

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 17	28	015		28	067	D	7/29/2009	118	FM		118
1 17	28	016		28	017		7/29/2009	291	FM		291
1 17	27	053		27	054		7/30/2009	179	FM		179
1 17	27	054		27	055		7/30/2009	249	FM		249
1 17	27	054		28	007		7/30/2009	300	FM		300
1 17	27	064		27	065		7/30/2009	95	FM		95
1 17	27	065		27	067		7/30/2009	279	FM		279
1 17	27	065		28	026		7/30/2009	239	FM		239
1 17	27	066		27	067		7/30/2009	190	FM		190
1 17	28	001		28	004		7/30/2009	87	FM		87
1 17	28	002		28	003		7/30/2009	247	FM		247
1 17	28	003		28	004		7/30/2009	309	FM		309
1 17	28	004		28	007		7/30/2009	189	FM		189
1 17	28	005		28	006		7/30/2009	292	FM		292
1 17	28	006		28	007		7/30/2009	320	FM		320
1 17	28	017		28	018		7/30/2009	145	FM		145
1 17	28	018		28	019		7/30/2009	292	FM		292
1 17	28	019		28	020		7/30/2009	250	FM		250
1 17	28	021		28	025		7/30/2009	275	FM		275
1 17	28	022		28	023		7/30/2009	268	FM		268
1 17	28	023		28	024		7/30/2009	261	FM		261
1 17	28	024		28	025		7/30/2009	85	FM		85
1 17	28	025		28	026		7/30/2009	260	FM		260
6S08	09	095		09	096		7/30/2009	253	FM		253
6S08	09	096		09	097		7/30/2009	269	FM		269
6S08	09	097		09	103		7/30/2009	141	FM		141
6S08	09	102		09	103		7/30/2009	212	FM		212
6S08	09	103		09	112		7/30/2009	250	FM		250
6S08	09	104		09	105		7/30/2009	210	FM		210
6S08	09	105		09	106		7/30/2009	203	FM		203
6S08	09	106		09	110		7/30/2009	200	FM		200
6S08	09	109		09	110		7/30/2009	200	FM		200
6S08	09	110		09	111		7/30/2009	47	FM		47
6S08	09	111		09	112		7/30/2009	200	FM		200
6S08	09	112		09	113		7/30/2009	100	FM		100
6S09	08	179		08	182		7/30/2009	120	FM		120
6S09	08	180		08	181		7/30/2009	91	FM		91
6S09	08	181		08	182		7/30/2009	170	FM		170
A 01	07	125		07	126		7/30/2009	41	FM		41
1 12	26	090		26	091		8/3/2009	341	FM		341
1 12	26	090		31	034		8/3/2009	342	FM		342
1 12	26	091		26	094		8/3/2009	162	FM		162
1 12	26	092		26	093		8/3/2009	350	FM		350
1 12	26	093		26	094		8/3/2009	300	FM		300
1 12	26	094		26	095		8/3/2009	178	FM		178
1 12	26	095		26	096		8/3/2009	338	FM		338
1 12	26	096		26	137		8/3/2009	33	FM		33
1 12	26	096		27	170		8/3/2009	249	FM		249
1 12	26	097		26	137		8/3/2009	152	FM		152
1 12	26	137		26	185		8/3/2009	215	FM		215

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 12	26	185		26	186		8/3/2009	213	FM		213
1 12	27	160		27	170		8/3/2009	277	FM		277
1 12	27	167		27	168		8/3/2009	315	FM		315
1 12	27	168		27	169		8/3/2009	291	FM		291
1 12	27	169		27	170		8/3/2009	55	FM		55
1 12	31	033		31	034		8/3/2009	340	FM		340
6S09	08	182		08	183		8/3/2009	200	FM		200
6S09	09	125		09	137		8/3/2009	25	FM		25
6S09	08	183		08	187		8/3/2009	153	FM		153
6S09	08	184		09	125		8/3/2009	75	FM		75
6S09	08	184		08	185		8/3/2009	281	FM		281
6S09	08	185		08	186		8/3/2009	269	FM		269
6S09	08	186		08	187		8/3/2009	300	FM		300
6S09	08	187		08	188		8/3/2009	400	FM		400
6S09	08	188		08	190		8/3/2009	234	FM		234
6S09	08	190		08	191		8/3/2009	266	FM		266
6S09	08	191		09	124		8/3/2009	325	FM		325
6S08	09	113		09	114		8/4/2009	60	FM		60
6S08	09	114		09	115		8/4/2009	300	FM		300
6S08	09	115		09	118		8/4/2009	173	FM		173
6S08	09	116		09	117		8/4/2009	200	FM		200
6S08	09	117		09	118		8/4/2009	300	FM		300
6S08	09	118		09	119		8/4/2009	300	FM		300
6S08	09	120		09	121		8/4/2009	175	FM		175
6S20	08	154		08	155		8/4/2009	245	FM		245
6S20	08	155		08	156		8/4/2009	155	FM		155
6S20	08	156		08	157		8/4/2009	200	FM		200
1 13	26	103		26	104		8/5/2009	170	FM		170
1 13	26	104		26	105		8/5/2009	348	FM		348
1 13	26	105		26	108		8/5/2009	267	FM		267
1 13	26	106		26	107		8/5/2009	213	FM		213
1 13	26	107		26	108		8/5/2009	235	FM		235
1 13	26	108		26	110		8/5/2009	280	FM		280
1 13	26	109		26	110		8/5/2009	171	FM		171
1 13	26	110		26	113		8/5/2009	231	FM		231
1 13	26	111		26	112		8/5/2009	260	FM		260
1 13	26	112		26	113		8/5/2009	286	FM		286
1 13	26	113		26	116		8/5/2009	238	FM		238
1 13	26	114		26	115		8/5/2009	336	FM		336
1 13	26	115		26	116		8/5/2009	322	FM		322
1 13	26	116		26	119		8/5/2009	263	FM		263
1 13	26	117		26	118		8/5/2009	286	FM		286
1 13	26	118		26	119		8/5/2009	284	FM		284
1 13	26	119		26	123		8/5/2009	258	FM		258
1 13	26	120		26	121		8/5/2009	221	FM		221
1 13	26	121		26	122		8/5/2009	272	FM		272
1 13	26	122		26	123		8/5/2009	264	FM		264
4W02	12	092	M	12	093		8/8/2009	283	FM		283
7S07	12	117	P	12	120	M	8/11/2009	15	FM	3	60
1 13	26	123		26	124		8/12/2009	154	FM		154

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 13	26	124		26	125		8/12/2009	342	FM		342
1 13	26	124		26	138		8/12/2009	186	FM		186
1 13	26	125		26	126		8/12/2009	332	FM		332
1 13	26	126		26	129		8/12/2009	263	FM		263
1 13	26	127		26	128		8/12/2009	213	FM		213
1 13	26	128		26	129		8/12/2009	221	FM		221
1 13	26	130		26	131		8/12/2009	336	FM		336
1 13	26	131		26	133		8/12/2009	255	FM		255
1 13	26	132		26	133		8/12/2009	265	FM		265
1 13	26	133		26	134		8/12/2009	163	FM		163
1 13	26	133		26	184	C	8/12/2009	153	FM		153
1 13	26	134		26	136		8/12/2009	217	FM		217
1 13	26	135		26	136		8/12/2009	258	FM		258
1 13	26	138		26	141		8/12/2009	335	FM		335
1 13	26	139		26	140		8/12/2009	341	FM		341
1 13	26	140		26	141		8/12/2009	297	FM		297
1 17	27	055		27	075		8/12/2009	237	FM		237
1 17	27	060		27	061		8/12/2009	291	FM		291
1 17	27	061		27	062		8/12/2009	282	FM		282
1 17	27	062		27	063		8/12/2009	188	FM		188
1 17	27	063		27	172		8/12/2009	138	FM		138
1 17	27	063		27	174		8/12/2009	380	FM		380
1 17	27	068		27	069		8/12/2009	50	FM		50
1 17	27	069		27	070		8/12/2009	396	FM		396
1 17	27	070		27	075		8/12/2009	115	FM		115
1 17	27	070		27	172		8/12/2009	138	FM		138
1 17	27	071		27	173		8/12/2009	70	FM		70
1 17	27	072		27	073		8/12/2009	285	FM		285
1 17	27	072		27	173		8/12/2009	219	FM		219
1 17	27	073		27	074		8/12/2009	283	FM		283
1 17	27	074		27	075		8/12/2009	335	FM		335
1 17	27	173		27	174		8/12/2009	70	FM		70
1 17	27	174		27	175	C	8/12/2009	137	FM		137
1 12	26	042		26	098		8/13/2009	68	FM		68
1 12	26	042		26	099		8/13/2009	280	FM		280
1 12	26	097		26	098		8/13/2009	198	FM		198
1 12	26	099		26	100		8/13/2009	347	FM		347
1 13	26	129		26	145		8/13/2009	259	FM		259
1 13	26	136		26	141		8/13/2009	250	FM		250
1 13	26	141		26	143		8/13/2009	327	FM		327
1 13	26	142		26	143		8/13/2009	170	FM		170
1 13	26	143		26	144		8/13/2009	148	FM		148
1 13	26	144		26	145		8/13/2009	227	FM		227
1 13	26	145		26	146		8/13/2009	297	FM		297
1 13	26	146		26	149		8/13/2009	267	FM		267
1 13	26	147		26	148		8/13/2009	180	FM		180
1 13	26	148		26	149		8/13/2009	156	FM		156
1 10	27	139		27	140		8/17/2009	266	FM		266
1 10	27	139		27	171		8/17/2009	249	FM		249
1 11	26	152		27	140	M	8/17/2009	293	FM		293

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 12	26	100		26	101		8/17/2009	345	FM		345
1 12	26	101		26	102		8/17/2009	335	FM		335
1 13	26	102		26	150		8/17/2009	64	FM		64
1 13	26	149		26	150		8/17/2009	252	FM		252
1 14	26	150		26	153		8/18/2009	235	FM		235
1 14	26	152		26	153		8/18/2009	100	FM		100
1 14	26	153		26	154		8/18/2009	316	FM		316
1 14	26	154		26	155		8/18/2009	301	FM		301
1 14	26	156		26	157		8/18/2009	326	FM		326
1 14	26	157		26	158		8/18/2009	320	FM		320
1 14	26	158		26	159		8/18/2009	350	FM		350
1 14	26	159		26	160		8/18/2009	330	FM		330
1 14	26	160		26	161		8/18/2009	327	FM		327
1 14	26	161		26	162		8/18/2009	201	FM		201
1 14	26	162		26	163		8/18/2009	120	FM		120
1 17	27	075		27	076		8/20/2009	155	FM		155
1 17	27	076		27	077		8/20/2009	345	FM		345
1 18	27	045		27	046		8/20/2009	274	FM		274
1 18	27	045		27	115		8/20/2009	313	FM		313
1 18	27	046		27	047		8/20/2009	257	FM		257
1 18	27	047		27	048		8/20/2009	235	FM		235
1 18	27	048		27	052		8/20/2009	208	FM		208
1 18	27	052		27	078		8/20/2009	195	FM		195
1 18	27	077		27	078		8/20/2009	348	FM		348
1 18	27	078		27	079		8/20/2009	305	FM		305
1 18	27	079		27	080		8/20/2009	290	FM		290
1 18	27	080		27	082		8/20/2009	158	FM		158
1 18	27	081		27	082		8/20/2009	307	FM		307
1 18	27	082		27	083		8/20/2009	83	FM		83
1 18	27	083		27	085		8/20/2009	254	FM		254
1 18	27	084		27	085		8/20/2009	285	FM		285
1 18	27	085		27	086		8/20/2009	314	FM		314
6S03	09	083		09	084		8/25/2009	350	FM		350
6S04	09	084		09	085		8/25/2009	194	FM		194
6S04	09	085		09	086		8/25/2009	240	FM		240
6S05	09	086	M	09	087		8/25/2009	245	FM		245
6S05	09	087		09	088		8/26/2009	251	FM		251
6S05	09	088		09	089		8/26/2009	439	FM		439
6S06	09	089		09	090		8/26/2009	127	FM		127
6S06	09	090		09	091		8/26/2009	283	FM		283
6S06	09	091		09	092		8/26/2009	105	FM		105
6S07	09	092		09	093		8/26/2009	337	FM		337
6S07	09	093		09	094		8/26/2009	326	FM		326
6S07	09	094		09	122		8/27/2009	332	FM		332
6S08	09	121		09	122		8/27/2009	340	FM		340
6S08	09	122		09	123		8/27/2009	210	FM		210
6S09	08	191		08	194		8/27/2009	241	FM		241
6S09	08	192		08	193		8/27/2009	320	FM		320
6S09	08	193		08	194		8/27/2009	170	FM		170
6S09	08	194		08	195		8/27/2009	181	FM		181

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
6S09	08	195		09	123		8/27/2009	235	FM		235
6S12	14	001	C	14	002		8/27/2009	255	FM		255
6S12	14	002		14	003		8/27/2009	165	FM		165
6S12	14	003		14	004		8/27/2009	400	FM		400
6S12	14	004		14	005		8/27/2009	400	FM		400
6S12	09	122		14	005		8/27/2009	350	FM		350
6S12	14	009		14	010		8/27/2009	235	FM		235
6S12	14	009		14	191		8/27/2009	200	FM		200
6S12	14	010		14	011		8/27/2009	260	FM		260
6S12	14	011		14	012		8/27/2009	260	FM		260
6S15	08	196		08	197		8/27/2009	290	FM		290
6S15	08	197		08	198		8/27/2009	290	FM		290
6S15	08	198		08	199		8/27/2009	290	FM		290
6S15	08	199		08	200		8/27/2009	290	FM		290
1 24	21	075		21	076		8/31/2009	214	FM		214
1 24	21	076		21	079		8/31/2009	250	FM		250
1 24	21	076		22	053		8/31/2009	262	FM		262
1 24	21	078		21	079		8/31/2009	346	FM		346
1 24	21	079		21	080		8/31/2009	167	FM		167
1 24	21	080		21	081		8/31/2009	260	FM		260
1 24	22	050		22	051		8/31/2009	300	FM		300
1 24	22	051		22	052		8/31/2009	255	FM		255
1 24	22	052		22	053		8/31/2009	232	FM		232
6S11	08	195		13	001		8/31/2009	356	FM		356
6S11	13	001		13	002		8/31/2009	350	FM		350
6S11	13	001		14	006		8/31/2009	225	FM		225
6S11	13	002		13	003		8/31/2009	321	FM		321
6S11	13	003		13	212	C	8/31/2009	245	FM		245
6S12	13	008		13	009		8/31/2009	300	FM		300
6S12	14	005		14	006		8/31/2009	270	FM		270
6S12	14	005		14	007		8/31/2009	331	FM		331
6S12	14	007		14	008		8/31/2009	267	FM		267
6S12	14	007		14	218		8/31/2009	300	FM		300
6S12	13	008		14	008		8/31/2009	294	FM		294
6S12	14	209	D	14	218		8/31/2009	45	FM		45
6S12	13	009		13	010		9/1/2009	294	FM		294
6S12	13	003		13	010		9/1/2009	336	FM		336
6S12	13	010		13	014		9/1/2009	345	FM		345
6S12	13	012		13	013		9/1/2009	380	FM		380
6S12	13	013		13	014		9/1/2009	375	FM		375
6S12	14	007		14	013		9/1/2009	335	FM		335
6S12	14	012		14	013		9/1/2009	80	FM		80
6S12	13	012		14	013		9/1/2009	426	FM		426
1 18	21	090		21	092		9/2/2009	317	FM		317
1 18	21	090		27	089		9/2/2009	262	FM		262
1 18	21	091		21	092		9/2/2009	192	FM		192
1 18	27	086		27	087		9/2/2009	318	FM		318
1 18	27	087		27	089		9/2/2009	55	FM		55
1 18	27	088		27	089		9/2/2009	244	FM		244
5 17	14	014		14	032		9/2/2009	110	FM		110

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
6S12	13	005		13	006		9/2/2009	133	FM		133
6S12	13	006		13	007		9/2/2009	43	FM		43
6S12	13	003		13	007		9/2/2009	140	FM		140
6S12	13	010		13	011		9/2/2009	150	FM		150
6S12	13	007		13	011		9/2/2009	332	FM		332
6S12	13	011		13	015		9/2/2009	335	FM		335
6S12	13	014		13	015		9/2/2009	150	FM		150
6S13	14	014		14	015		9/2/2009	76	FM		76
6S13	14	016		14	017		9/2/2009	121	FM		121
6S13	14	017		14	020		9/2/2009	289	FM		289
6S13	14	020		14	021		9/2/2009	370	FM		370
6S14	13	034		13	198	C	9/2/2009	225	FM		225
6S14	13	034		13	035		9/2/2009	347	FM		347
6S12	13	014		13	018		9/3/2009	340	FM		340
6S13	13	016		14	030		9/3/2009	236	FM		236
6S13	13	016		13	017		9/3/2009	351	FM		351
6S13	13	017		13	018		9/3/2009	353	FM		353
6S14	13	035		13	036		9/3/2009	167	FM		167
6S14	13	036		13	037		9/3/2009	331	FM		331
6S16	12	013		12	014		9/3/2009	200	FM		200
6S16	12	014		12	015		9/3/2009	123	FM		123
1 18	21	092		21	093		9/9/2009	330	FMA		330
1 18	21	093		21	094	M	9/9/2009	341	FM		341
1 19	21	060		21	146		9/9/2009	63	FM		63
1 19	21	094	M	21	096		9/9/2009	335	FM		335
1 19	21	095		21	096		9/9/2009	265	FM		265
1 19	21	095		21	146		9/9/2009	197	FM		197
1 19	21	096		21	097		9/9/2009	222	FM		222
5 50	12	046		12	047		9/9/2009	300	FM		300
6S15	08	200		13	041		9/9/2009	150	FM		150
6S15	13	041		13	042		9/9/2009	250	FM		250
6S15	13	042		13	043		9/9/2009	293	FM		293
6S15	13	043		13	046		9/9/2009	313	FM		313
6S15	13	044		13	045		9/9/2009	140	FM		140
6S15	13	045		13	046		9/9/2009	300	FM		300
6S15	13	046		13	047		9/9/2009	325	FM		325
1 15	27	001		27	005		9/10/2009	337	FM		337
1 15	27	002		27	003		9/10/2009	272	FM		272
1 15	27	003		27	004		9/10/2009	270	FM		270
1 15	27	004		27	005		9/10/2009	304	FM		304
1 15	27	005		27	009		9/10/2009	279	FM		279
1 15	27	006		27	007		9/10/2009	283	FM		283
1 15	27	007		27	008		9/10/2009	276	FM		276
1 15	27	008		27	009		9/10/2009	185	FM		185
1 15	27	009		27	013		9/10/2009	225	FM		225
1 15	27	010		27	011		9/10/2009	233	FM		233
1 15	27	010		27	177	D	9/10/2009	20	FM		20
1 15	27	011		27	012		9/10/2009	236	FM		236
1 15	27	012		27	013		9/10/2009	226	FM		226
1 15	27	013		27	014		9/10/2009	96	FM		96

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 15	27	014		27	015		9/10/2009	240	FM		240
1 15	27	015		27	017		9/10/2009	301	FM		301
1 15	27	016		27	017		9/10/2009	128	FM		128
5 40	13	024		13	110		9/10/2009	300	FM		300
6S13	13	019	C	14	029		9/10/2009	296	FM		296
6S13	13	019		13	020		9/10/2009	350	FM		350
6S13	13	020		13	053		9/10/2009	300	FM		300
6S13	13	020		13	021		9/10/2009	260	FM		260
6S13	13	021		13	022		9/10/2009	290	FM		290
6S13	13	022		13	023		9/10/2009	130	FM		130
6S13	13	023		13	025		9/10/2009	84	FM		84
6S13	13	024		13	025		9/10/2009	84	FM		84
6S13	13	025		13	026		9/10/2009	84	FM		84
6S13	13	027		13	204		9/10/2009	371	FM		371
6S13	13	026		13	028		9/10/2009	35	FM		35
6S13	13	027		13	028		9/10/2009	426	FM		426
6S13	13	028		13	029		9/10/2009	175	FM		175
6S13	13	029		13	030		9/10/2009	341	FM		341
6S13	14	021		14	028		9/10/2009	375	FM		375
6S13	14	022		14	023		9/10/2009	375	FM		375
6S13	14	023		14	024		9/10/2009	10	FM		10
6S13	14	024		14	025		9/10/2009	160	FM		160
6S13	14	025		14	026		9/10/2009	332	FM		332
6S13	14	026		14	027		9/10/2009	330	FM		330
6S13	14	027		14	028		9/10/2009	330	FM		330
6S13	14	028		14	029		9/10/2009	240	FM		240
1 15	27	017		27	018		9/11/2009	188	FM		188
1 15	27	018		27	021		9/11/2009	188	FM		188
1 15	27	020		27	021		9/11/2009	235	FM		235
1 15	27	024		27	025		9/11/2009	226	FM		226
1 15	27	029		27	030		9/11/2009	145	FM		145
1 15	27	030		27	031		9/11/2009	291	FM		291
5 47	13	049		13	167	P	9/11/2009	9	FM		9
6S12	13	015		13	031		9/11/2009	351	FM		351
6S13	13	030		13	031		9/11/2009	407	FM		407
6S13	13	018		13	031		9/11/2009	149	FM		149
6S13	13	031		13	032		9/11/2009	389	FM		389
6S13	13	032		13	033		9/11/2009	389	FM		389
6S13	13	033		13	038		9/11/2009	200	FM		200
6S14	13	037	M	13	038		9/11/2009	344	FM		344
6S14	13	038		13	039		9/11/2009	319	FM		319
6S14	13	039		13	040		9/11/2009	57	FM		57
6S14	13	040		13	048	M	9/11/2009	261	FM		261
6S15	13	047		13	048		9/11/2009	400	FM		400
6S16	13	049		13	050		9/11/2009	332	FM		332
6S16	13	050		13	051		9/11/2009	325	FM		325
1 15	26	168		26	169		9/14/2009	91	FM		91
1 15	26	168		26	187		9/14/2009	47	FM		47
1 15	26	187		26	188		9/14/2009	59	FM		59
1 15	26	188		26	189		9/14/2009	119	FM		119

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 15	26	151		26	189		9/14/2009	75	FM		75
1 15	26	151		26	190		9/14/2009	107	FM		107
1 15	26	169		26	170		9/14/2009	272	FM		272
1 15	26	170		26	171		9/14/2009	279	FM		279
1 15	26	171		27	022		9/14/2009	210	FM		210
1 15	27	021		27	023		9/14/2009	326	FM		326
1 15	27	022		27	023		9/14/2009	103	FM		103
1 15	27	023		27	034		9/14/2009	110	FM		110
1 15	27	025		27	027		9/14/2009	197	FM		197
1 15	27	026		27	027		9/14/2009	112	FM		112
1 15	27	027		27	028		9/14/2009	130	FM		130
1 15	27	028		27	032		9/14/2009	238	FM		238
1 15	27	031		27	032		9/14/2009	78	FM		78
1 15	27	033		27	034		9/14/2009	217	FM		217
1 15	27	034		27	035		9/14/2009	317	FM		317
1 15	27	035		27	040		9/14/2009	145	FM		145
1 15	27	036		27	037		9/14/2009	315	FM		315
1 15	27	037		27	039		9/14/2009	256	FM		256
1 15	27	038		27	039		9/14/2009	317	FM		317
1 15	27	039		27	040		9/14/2009	278	FM		278
1 15	27	040		27	041		9/14/2009	177	FM		177
6S16	12	017		12	018		9/14/2009	295	FM		295
6S16	12	018		12	019		9/14/2009	225	FM		225
6S16	12	018		13	052		9/14/2009	415	FM		415
6S16	12	019		12	020		9/14/2009	420	FM		420
6S16	13	048		13	052		9/14/2009	318	FM		318
6S17	07	175		07	176	P	9/14/2009	300	FM		300
1 16	21	106		21	108		9/21/2009	131	FM		131
1 16	21	107		21	108		9/21/2009	245	FM		245
1 16	21	107		27	044		9/21/2009	240	FM		240
1 16	21	108		21	109		9/21/2009	205	FM		205
1 16	21	109		21	110		9/21/2009	322	FM		322
1 16	27	042		27	043		9/21/2009	320	FM		320
1 16	27	043		27	044		9/21/2009	248	FM		248
1 16	20	010		21	112		9/22/2009	221	FM		221
1 16	20	010		26	181		9/22/2009	297	FM		297
1 16	21	110		21	113		9/22/2009	329	FM		329
1 16	21	111		21	113		9/22/2009	313	FM		313
1 16	21	111		27	041		9/22/2009	318	FM		318
1 16	21	112		21	113		9/22/2009	213	FM		213
1 16	21	117		21	118		9/22/2009	64	FM		64
1 16	26	178		26	179		9/22/2009	300	FM		300
1 16	26	179		26	180		9/22/2009	297	FM		297
1 16	26	180		26	181		9/22/2009	297	FM		297
1 19	21	097		21	103		9/22/2009	179	FM		179
1 19	21	098		21	100		9/22/2009	127	FM		127
1 19	21	099		21	100		9/22/2009	165	FM		165
1 19	21	100		21	102		9/22/2009	263	FM		263
1 19	21	101		21	102		9/22/2009	167	FM		167
1 19	21	102		21	103		9/22/2009	264	FM		264

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 19	21	103		21	104		9/22/2009	292	FM		292
1 19	21	104		21	105		9/22/2009	323	FM		323
6S16	12	020		12	021	S	9/22/2009	23	FM		23
6S17	07	177	P	07	178		9/22/2009	242	FM		242
6S21	07	178		07	181		9/22/2009	300	FM		300
6S21	07	178		12	023		9/22/2009	92	FM		92
6S21	07	179		08	157		9/22/2009	325	FM		325
6S21	07	179		07	180		9/22/2009	300	FM		300
6S21	07	180		07	181		9/22/2009	302	FM		302
6S22	12	023		12	024		9/22/2009	111	FM		111
6S23	12	024		12	025		9/22/2009	375	FM		375
6S23	12	025		12	026		9/22/2009	351	FM		351
6S24	12	026		12	027		9/22/2009	256	FM		256
6S24	12	027		12	028		9/22/2009	240	FM		240
6S25	12	022	S	12	028		9/22/2009	158	FM		158
6S25	12	028		12	029		9/22/2009	456	FM		456
6S25	12	029		12	030	M	9/22/2009	450	FM		450
6S25	12	030	M	12	031		9/22/2009	380	FM		380
1 16	21	113		21	115		9/23/2009	266	FM		266
1 16	21	114		21	115		9/23/2009	201	FM		201
1 16	21	115		21	116		9/23/2009	65	FM		65
1 16	21	116		21	119		9/23/2009	182	FM		182
1 16	21	118		21	119		9/23/2009	236	FM		236
1 16	21	119		21	120		9/23/2009	130	FM		130
1 20	20	016		20	017		9/23/2009	287	FM		287
1 20	20	017		20	018		9/23/2009	267	FM		267
1 20	20	018		20	020		9/23/2009	263	FM		263
1 20	20	020		20	021		9/23/2009	105	FM		105
1 20	20	020		21	122		9/23/2009	222	FM		222
1 20	21	105		21	124		9/23/2009	326	FM		326
1 20	21	120	M	21	124		9/23/2009	300	FM		300
1 20	21	121		21	123		9/23/2009	291	FM		291
1 20	21	122		21	123		9/23/2009	46	FM		46
1 20	21	123		21	124		9/23/2009	261	FM		261
1 21	20	024		20	033		9/23/2009	183	FM		183
1 27	20	021		20	026		9/23/2009	211	FM		211
1 27	20	022		20	023		9/23/2009	225	FM		225
1 27	20	023		20	026		9/23/2009	305	FM		305
1 27	20	025		20	026		9/23/2009	298	FM		298
1 27	20	025		20	149		9/23/2009	182	FM		182
1 27	20	026		20	027		9/23/2009	114	FM		114
4W01	13	169		13	170		9/24/2009	330	FM		330
4W01	13	169		20	112		9/24/2009	229	FM		229
4W01	13	170		13	171		9/24/2009	40	FM		40
4W01	13	171		13	208		9/24/2009	201	FM		201
4W01	13	172		13	174		9/24/2009	20	FM		20
4W01	13	172		13	208		9/24/2009	200	FM		200
4W01	13	173		13	210		9/24/2009	65	FM		65
4W01	13	174		13	210		9/24/2009	200	FM		200
4W01	20	101		20	102		9/24/2009	280	FM		280

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
4W01	20	102		20	103		9/24/2009	272	FM		272
4W01	20	103		20	104		9/24/2009	300	FM		300
4W01	20	104		20	107		9/24/2009	366	FM		366
4W01	20	105		20	106		9/24/2009	358	FM		358
4W01	20	106		20	107		9/24/2009	355	FM		355
4W01	20	107		20	110		9/24/2009	366	FM		366
4W01	20	108		20	109		9/24/2009	58	FM		58
4W01	20	109		20	110		9/24/2009	300	FM		300
4W01	20	110		20	112		9/24/2009	361	FM		361
4W01	20	111		20	112		9/24/2009	317	FM		317
1 20	21	124		21	125		9/25/2009	280	FM		280
1 20	21	125		21	126		9/25/2009	280	FM		280
1 20	21	126		21	127		9/25/2009	280	FM		280
1 20	21	127		21	133		9/25/2009	275	FM		275
1 21	21	128		21	129		9/25/2009	233	FM		233
1 21	21	129		21	130	P	9/25/2009	235	FM		235
1 27	20	011		20	154		9/25/2009	118	FM		118
1 27	20	012		20	154		9/25/2009	162	FM		162
1 27	20	154		20	155		9/25/2009	266	FM		266
1 27	26	071		26	172		9/25/2009	250	FM		250
1 27	26	071		26	173		9/25/2009	36	FM		36
1 27	26	171		26	172		9/25/2009	282	FM		282
1 29	26	079		26	080		9/25/2009	100	FM		100
1 29	26	080		26	081		9/25/2009	262	FM		262
1 29	26	081		26	082		9/25/2009	359	FM		359
1 29	26	082		26	089		9/25/2009	201	FM		201
1 29	26	083		26	084		9/25/2009	296	FM		296
1 29	26	084		26	085		9/25/2009	234	FM		234
1 29	26	085		26	086		9/25/2009	168	FM		168
1 29	26	086		26	087		9/25/2009	170	FM		170
1 29	26	087		26	088		9/25/2009	288	FM		288
1 29	26	088		26	089		9/25/2009	318	FM		318
4W01	13	174		13	175		9/29/2009	340	FM		340
4W01	13	175		13	176		9/29/2009	340	FM		340
4W01	13	176		13	177		9/29/2009	330	FM		330
4W01	13	177		13	181		9/29/2009	268	FM		268
4W02	12	091		12	092	M	9/29/2009	323	FM		323
4W02	12	091		13	188		9/29/2009	327	FM		327
4W02	12	127		13	186		9/29/2009	250	FM		250
4W02	13	178		13	213		9/29/2009	162	FM		162
4W02	13	178		13	193		9/29/2009	344	FM		344
4W02	13	179		13	180		9/29/2009	288	FM		288
4W02	13	179		13	213		9/29/2009	181	FM		181
4W02	13	180		13	181		9/29/2009	293	FM		293
4W02	13	181		13	182		9/29/2009	52	FM		52
4W02	13	182		13	183		9/29/2009	244	FM		244
4W02	13	183		13	188		9/29/2009	353	FM		353
4W02	13	184		13	188		9/29/2009	250	FM		250
4W02	13	184		13	203	D	9/29/2009	250	FM		250
4W02	13	185		13	186		9/29/2009	110	FM		110

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
4W02	13	186		13	187		9/29/2009	210	FM		210
4W02	13	187		13	188		9/29/2009	304	FM		304
4W03	12	095	P	12	096		9/29/2009	235	FM		235
4W03	12	096		12	097		9/29/2009	257	FM		257
4W03	12	097		12	098		9/29/2009	320	FM		320
4W03	12	098		12	099		9/29/2009	320	FM		320
6W01	06	020		06	021		10/1/2009	294	FM		294
6W01	06	021		06	022		10/1/2009	107	FM		107
6W01	06	022		06	023		10/1/2009	130	FM		130
6W01	06	023		06	026		10/1/2009	324	FM		324
6W01	06	024		06	025		10/1/2009	300	FM		300
6W01	06	025		06	026		10/1/2009	281	FM		281
6W01	06	026		06	027		10/1/2009	229	FM		229
6W01	06	027		06	028		10/1/2009	326	FM		326
6W01	06	028		06	029		10/1/2009	168	FM		168
6W01	06	029		07	001		10/1/2009	160	FM		160
6W01	07	001		07	002		10/1/2009	220	FM		220
6W01	07	002		07	003		10/1/2009	345	FM		345
6W02	07	039		07	040		10/1/2009	333	FM		333
6W02	07	040		07	041		10/1/2009	195	FM		195
6W02	07	041		07	042		10/1/2009	200	FM		200
6W02	07	042		07	043		10/1/2009	106	FM		106
6W02	07	043		07	044		10/1/2009	160	FM		160
6W02	07	044		07	045		10/1/2009	35	FM		35
6W02	07	045		07	046		10/1/2009	150	FM		150
6W02	07	046		07	047		10/1/2009	200	FM		200
6W02	07	047		07	048		10/6/2009	150	FM		150
6W02	07	048		07	049		10/6/2009	120	FM		120
6W02	07	049		07	054		10/6/2009	100	FM		100
4W04	12	083		12	084		10/7/2009	250	FM		250
4W04	12	084		12	086		10/7/2009	200	FM		200
4W04	12	085		12	086		10/7/2009	36	FM		36
4W04	12	085		12	128	C	10/7/2009	157	FM		157
4W04	12	086		12	087		10/7/2009	200	FM		200
4W04	12	087		12	088		10/7/2009	320	FM		320
6W01	07	003		07	004		10/7/2009	344	FM		344
6W01	07	004		07	005		10/7/2009	349	FM		349
6W01	07	005		07	006		10/7/2009	240	FM		240
6W01	07	006		07	007		10/7/2009	205	FM		205
6W02	07	050		07	051		10/7/2009	320	FM		320
6W02	07	051		07	053		10/7/2009	100	FM		100
6W02	07	052		07	053		10/7/2009	322	FM		322
6W02	07	053		07	054		10/7/2009	100	FM		100
6W02	07	054		07	055		10/7/2009	100	FM		100
6W02	07	055		07	058		10/7/2009	115	FM		115
6W01	03	110		03	128	C	10/8/2009	250	FM		250
6W01	03	110		03	111		10/8/2009	272	FM		272
6W01	03	111		03	112		10/8/2009	317	FM		317
6W01	03	112		03	113		10/8/2009	297	FM		297
6W01	07	007		07	008		10/8/2009	380	FM		380

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
6W01	07	008		07	009		10/8/2009	300	FM		300
6W02	07	030		07	031		10/8/2009	250	FM		250
6W02	07	031		07	032		10/8/2009	225	FM		225
6W02	07	032		07	033		10/8/2009	53	FM		53
6W02	07	033		07	034		10/8/2009	205	FM		205
6W01	03	114		07	009		10/9/2009	382	FM		382
6W01	03	113		03	114		10/9/2009	243	FM		243
6W01	03	115		07	018		10/9/2009	200	FM		200
6W01	07	014		07	015		10/9/2009	118	FM		118
6W01	07	015		07	016		10/9/2009	358	FM		358
6W01	07	016		07	017		10/9/2009	90	FM		90
6W01	07	017		07	018		10/9/2009	265	FM		265
6W02	07	025	C	07	026		10/9/2009	150	FM		150
6W02	07	027		07	028		10/9/2009	250	FM		250
6W02	07	028		07	029		10/9/2009	202	FM		202
6W02	07	029		07	034		10/9/2009	106	FM		106
6W02	07	034		07	035		10/9/2009	50	FM		50
1 14	26	155		26	166		10/12/2009	256	FM		256
1 14	26	163		26	164		10/12/2009	283	FM		283
1 14	26	164		26	165		10/12/2009	319	FM		319
1 14	26	165		26	166		10/12/2009	52	FM		52
1 29	20	043		20	044		10/12/2009	333	FM		333
1 29	20	043		26	089		10/12/2009	372	FM		372
1 29	20	044		20	045		10/12/2009	332	FM		332
1 29	20	045		20	046		10/12/2009	331	FM		331
1 29	20	046		20	047		10/12/2009	335	FM		335
1 29	20	047		20	048		10/12/2009	323	FM		323
1 29	20	048		20	049		10/12/2009	328	FM		328
1 29	20	049		20	050		10/12/2009	330	FM		330
1 29	20	050		20	051		10/12/2009	329	FM		329
6W01	03	114		03	117		10/12/2009	264	FM		264
6W01	03	115		03	116		10/12/2009	140	FM		140
6W01	03	116		03	117		10/12/2009	145	FM		145
6W01	03	117		07	023		10/12/2009	368	FM		368
6W02	07	023		07	024		10/12/2009	144	FM		144
6W02	07	024		07	036		10/12/2009	124	FM		124
6W02	07	035		07	036		10/12/2009	100	FM		100
6W02	07	036		07	037		10/12/2009	75	FM		75
6W02	07	037		07	038		10/12/2009	205	FM		205
6W02	07	058		07	059		10/12/2009	30	FM		30
6W02	07	038		07	060		10/12/2009	327	FM		327
6W02	07	059		07	060		10/12/2009	135	FM		135
6W02	07	060		07	061		10/12/2009	127	FM		127
6W02	07	061		07	062		10/12/2009	300	FM		300
1 14	26	166		26	167		10/13/2009	270	FM		270
1 21	20	032		20	034		10/13/2009	202	FM		202
1 21	20	032		21	134		10/13/2009	323	FM		323
1 21	20	033		20	034		10/13/2009	280	FM		280
1 21	20	034		20	035	M	10/13/2009	120	FM		120
1 21	20	035	M	20	148		10/13/2009	27	FM		27

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 14	26	167		26	174		10/14/2009	244	FM		244
1 27	20	012		20	013		10/14/2009	284	FM		284
1 27	20	013		20	014		10/14/2009	337	FM		337
1 27	20	013		26	177		10/14/2009	338	FM		338
1 27	20	014		20	015		10/14/2009	333	FM		333
1 27	20	015		20	028		10/14/2009	334	FM		334
1 27	20	027		20	028		10/14/2009	325	FM		325
1 27	20	028		20	029		10/14/2009	273	FM		273
1 27	20	029		20	030		10/14/2009	286	FM		286
1 27	20	030		20	031		10/14/2009	281	FM		281
1 27	26	173		26	174		10/14/2009	289	FM		289
1 27	26	174		26	175		10/14/2009	239	FM		239
1 27	26	175		26	176		10/14/2009	339	FM		339
1 27	26	176		26	177		10/14/2009	350	FM		350
6W02	07	062		07	063		10/14/2009	349	FM		349
6W02	07	063		07	064		10/14/2009	349	FM		349
6W02	07	064		07	065		10/14/2009	349	FM		349
6W02	07	065		07	066		10/14/2009	349	FM		349
6W02	07	066		07	067		10/14/2009	121	FM		121
6W02	07	067		07	068		10/14/2009	204	FM		204
6W03	07	068		07	069		10/14/2009	129	FM		129
6W03	07	069		07	070		10/14/2009	179	FM		179
6W03	07	070		07	071		10/14/2009	320	FM		320
6W03	07	071		07	072		10/14/2009	320	FM		320
6W03	07	072		07	073		10/14/2009	284	FM		284
6W03	07	074		07	075		10/14/2009	157	FM		157
6W03	07	073		07	076		10/14/2009	296	FM		296
6W03	07	075		07	076		10/14/2009	263	FM		263
6W03	07	076		07	077		10/14/2009	257	FM		257
6W03	07	077		07	078		10/14/2009	252	FM		252
6W03	07	078		07	079		10/14/2009	314	FM		314
6W03	07	079		07	080		10/14/2009	231	FM		231
6W03	07	080		07	081		10/14/2009	215	FM		215
1 21	20	036		20	148		10/16/2009	300	FM		300
1 28	20	031		20	036		10/16/2009	282	FM		282
1 28	20	036		20	037		10/16/2009	283	FM		283
1 28	20	037		20	038		10/16/2009	287	FM		287
1 23	21	060		21	061		10/19/2009	300	FM		300
1 23	21	061		21	070		10/19/2009	305	FM		305
1 23	21	069		21	070		10/19/2009	285	FM		285
1 23	21	070		21	071		10/19/2009	303	FM		303
1 23	21	071		21	072		10/19/2009	300	FM		300
1 23	21	072		21	083		10/19/2009	292	FM		292
1 24	21	082		21	083		10/19/2009	300	FM		300
1 24	21	083		21	084		10/19/2009	253	FM		253
1 24	21	084		21	085		10/19/2009	252	FM		252
1 24	21	085		21	086		10/19/2009	310	FM		310
1 25	21	086		21	087		10/19/2009	289	FM		289
6W02	07	056		07	057		10/19/2009	160	FM		160
6W02	07	057		07	058		10/19/2009	115	FM		115

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
6W04	07	081		12	004		10/19/2009	331	FM		331
6W04	12	004		12	009	P	10/19/2009	357	FM		357
6W04	12	009	P	12	010		10/19/2009	332	FM		332
6W05	12	005		12	138	D	10/19/2009	13	FM		13
6W05	12	005		12	006		10/19/2009	218	FM		218
6W05	12	006		12	007		10/19/2009	218	FM		218
6W05	12	007		12	008	P	10/19/2009	323	FM		323
6W05	12	010		12	011		10/19/2009	150	FM		150
6W05	12	011		12	031		10/19/2009	275	FM		275
7S01	05	095		05	096		10/20/2009	61	FM		61
7S01	06	030		06	031		10/20/2009	100	FM		100
7S01	06	031		06	032		10/20/2009	300	FM		300
7S01	06	032		06	033		10/20/2009	350	FM		350
7S01	06	033		06	034		10/20/2009	325	FM		325
7S01	06	034		06	035		10/20/2009	330	FM		330
7S01	06	035		06	036		10/20/2009	374	FM		374
1 25	20	039		21	088		10/21/2009	317	FM		317
1 25	21	087		21	135		10/21/2009	230	FM		230
1 25	21	088		21	136		10/21/2009	22	FM		22
1 26	20	038		20	042		10/21/2009	287	FM		287
1 26	20	039	M	20	040		10/21/2009	300	FM		300
1 26	20	040		20	041		10/21/2009	300	FM		300
1 26	20	041		20	042		10/21/2009	300	FM		300
1 26	20	042		20	052		10/21/2009	75	FM		75
1 29	20	051		20	052		10/21/2009	331	FM		331
B 02	04	085		04	086		10/22/2009	287	FM		287
7S01	05	096		05	098		10/23/2009	163	FM		163
7S01	05	097		05	098		10/23/2009	200	FM		200
7S01	05	098		06	037		10/23/2009	350	FM		350
7S01	06	037		06	038		10/23/2009	234	FM		234
7S01	06	038		06	039		10/23/2009	210	FM		210
7S01	06	036		06	040		10/23/2009	350	FM		350
7S01	06	039		06	040		10/23/2009	200	FM		200
7S01	06	040		06	041		10/23/2009	275	FM		275
7S02	07	097		07	098		10/23/2009	346	FM		346
7S02	07	098		07	099		10/23/2009	138	FM		138
7S02	07	099		07	100		10/23/2009	180	FM		180
7S02	07	100		07	101		10/23/2009	66	FM		66
7S01	06	041		06	042		10/26/2009	325	FM		325
7S01	06	042		06	043		10/26/2009	300	FM		300
7S01	06	043		06	044		10/26/2009	239	FM		239
7S01	06	044		06	045		10/26/2009	355	FM		355
7S01	06	045		06	046		10/26/2009	52	FM		52
7S01	06	046		06	047		10/26/2009	83	FM		83
7S01	06	047		06	059		10/26/2009	350	FM		350
7S01	06	048		06	050		10/26/2009	263	FM		263
7S01	06	049		06	050		10/26/2009	250	FM		250
7S01	06	050		06	051		10/26/2009	250	FM		250
7S01	06	051		06	052		10/26/2009	200	FM		200
7S01	06	053		06	054		10/26/2009	150	FM		150

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
7S01	06	054		06	055		11/4/2009	366	FM		366
7S01	06	055		06	056		11/4/2009	105	FM		105
7S01	06	056		06	057		11/4/2009	225	FM		225
7S01	06	057		06	058		11/4/2009	135	FM		135
7S01	06	058		06	151		11/4/2009	200	FM		200
7S01	06	061		06	062		11/4/2009	333	FM		333
7S01	06	062		06	063		11/4/2009	200	FM		200
7S01	06	063		06	064		11/4/2009	341	FM		341
7S01	06	064		06	065		11/4/2009	375	FM		375
7S01	06	065		06	066		11/4/2009	240	FM		240
7S01	06	058		06	059		11/5/2009	271	FM		271
7S01	06	059		06	060		11/5/2009	200	FM		200
7S01	06	060		06	067		11/5/2009	200	FM		200
7S01	06	066		06	067		11/5/2009	156	FM		156
7S01	06	067		06	068		11/5/2009	200	FM		200
7S01	06	069		06	070		11/5/2009	325	FM		325
7S01	06	070		06	071		11/5/2009	375	FM		375
7S01	06	071		06	072		11/5/2009	321	FM		321
7S01	06	068		06	072		11/5/2009	200	FM		200
7S01	06	072		06	074		11/5/2009	320	FM		320
7S01	06	073		06	074		11/5/2009	315	FM		315
7S02	07	088		07	089		11/9/2009	212	FM		212
7S02	07	094		07	095		11/9/2009	246	FM		246
7S02	07	101		07	210		11/9/2009	59	FM		59
7S02	07	102		07	103		11/9/2009	350	FM		350
7S02	07	102		07	212		11/9/2009	140	FM		140
7S02	07	103		07	105		11/9/2009	205	FM		205
7S02	07	104		07	105		11/9/2009	265	FM		265
7S02	07	105		07	107		11/9/2009	170	FM		170
7S02	07	106		07	107		11/9/2009	145	FM		145
7S02	07	107		07	108		11/9/2009	300	FM		300
7S02	07	108		07	109		11/9/2009	280	FM		280
7S02	07	109		07	110		11/9/2009	146	FM		146
7S02	07	109		07	195		11/9/2009	220	FM		220
7S02	07	111		07	112		11/9/2009	250	FM		250
7S02	07	110		07	112		11/9/2009	153	FM		153
7S02	07	210		07	211		11/9/2009	91	FM		91
7S02	07	211		07	212		11/9/2009	20	FM		20
7S02	06	080		06	084		11/10/2009	344	FM		344
7S02	06	081		06	082		11/10/2009	120	FM		120
7S02	06	082		06	083		11/10/2009	251	FM		251
7S02	06	083		06	084		11/10/2009	225	FM		225
7S02	06	084		06	085		11/10/2009	150	FM		150
7S02	06	085		06	092		11/10/2009	225	FM		225
7S02	06	086		06	087		11/10/2009	178	FM		178
7S02	06	087		06	088		11/10/2009	288	FM		288
7S02	06	088		06	089		11/10/2009	100	FM		100
7S02	06	089		06	092		11/10/2009	247	FM		247
7S02	06	090		06	091		11/10/2009	218	FM		218
7S02	06	091		06	092		11/10/2009	308	FM		308

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
7S02	06	092		06	097		11/10/2009	205	FM		205
7S02	06	093		06	094		11/10/2009	298	FM		298
7S02	06	094		06	097		11/10/2009	202	FM		202
7S02	06	095		06	096		11/10/2009	350	FM		350
7S02	06	096		06	097		11/10/2009	275	FM		275
7S02	06	097		06	098		11/10/2009	195	FM		195
7S02	06	099		06	100		11/10/2009	275	FM		275
7S02	06	100		06	101		11/10/2009	300	FM		300
7S02	06	101		06	102		11/10/2009	123	FM		123
7S02	06	103		06	104		11/10/2009	352	FM		352
7S02	06	105		07	193	C	11/10/2009	256	FM		256
7S02	06	104		06	106		11/10/2009	421	FM		421
7S02	06	105		06	106		11/10/2009	352	FM		352
7S02	06	095		07	115		11/10/2009	190	FM		190
7S01	06	076		06	077		11/16/2009	325	FM		325
7S01	06	077		06	078		11/16/2009	300	FM		300
7S01	06	078		06	079		11/16/2009	300	FM		300
7S02	06	106		06	111		11/16/2009	175	FM		175
7S02	06	107		06	108		11/16/2009	315	FM		315
7S02	06	108		06	109		11/16/2009	311	FM		311
7S02	06	110		07	114		11/16/2009	300	FM		300
7S02	06	109		06	111		11/16/2009	311	FM		311
7S02	06	110		06	111		11/16/2009	338	FM		338
7S02	06	111		06	113		11/16/2009	325	FM		325
7S02	06	112		06	113		11/16/2009	310	FM		310
7S02	06	112		07	113		11/16/2009	309	FM		309
7S02	07	112		07	113		11/16/2009	305	FM		305
7S02	06	114		06	115		11/16/2009	297	FM		297
7S02	06	114		07	096		11/16/2009	290	FM		290
7S02	06	113		06	115		11/16/2009	265	FM		265
7S02	06	116		07	093		11/16/2009	254	FM		254
7S02	06	115		06	117		11/16/2009	261	FM		261
7S02	06	116		06	117		11/16/2009	238	FM		238
7S02	07	089		07	090		11/16/2009	220	FM		220
7S02	07	090		07	194	C	11/16/2009	75	FM		75
7S02	07	092		07	093		11/16/2009	270	FM		270
7S02	07	095		07	096		11/16/2009	307	FM		307
7S01	06	079		06	121		11/19/2009	300	FM		300
7S02	06	118		07	091		11/19/2009	320	FM		320
7S02	06	117		06	119		11/19/2009	350	FM		350
7S02	06	118		06	119		11/19/2009	320	FM		320
7S02	06	119		06	120		11/19/2009	200	FM		200
7S02	06	120		06	121		11/19/2009	200	FM		200
7S02	07	090		07	091		11/19/2009	276	FM		276
7S03	06	121		06	123		11/19/2009	300	FM		300
7S03	06	122		06	123		11/19/2009	280	FM		280
7S03	06	123		06	124		11/19/2009	300	FM		300
7S04	07	082		07	083		11/20/2009	230	FM		230
7S04	07	083		07	084		11/20/2009	240	FM		240
7S04	07	084		07	085		11/20/2009	253	FM		253

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
7S04	07	085		07	086		11/20/2009	290	FM		290
7S06	11	052		11	053		11/20/2009	190	FM		190
7S06	11	053		11	054		11/20/2009	295	FM		295
7S06	11	053		12	003		11/20/2009	300	FM		300
7S06	12	001	C	12	002		11/20/2009	270	FM		270
7S06	12	002		12	003		11/20/2009	292	FM		292
7S07	12	118		12	119		11/20/2009	310	FM		310
7S07	12	119		12	120		11/20/2009	300	FM		300
7S07	12	114		12	120	M	11/20/2009	414	FM		414
7S08	11	060		12	120		11/20/2009	405	FM		405
7S08	11	061		11	080	D	11/20/2009	85	FM		85
7S08	11	060		11	062		11/20/2009	183	FM		183
7S08	11	061		11	062		11/20/2009	360	FM		360
5 02	22	001		22	002		11/23/2009	267	FM		267
5 02	22	002		22	009		11/23/2009	350	FM		350
5 02	22	003		22	004		11/23/2009	342	FM		342
5 02	22	004		22	007		11/23/2009	122	FM		122
5 02	22	005		22	006		11/23/2009	133	FM		133
5 02	22	006		22	007		11/23/2009	290	FM		290
5 02	22	006		22	094	D	11/23/2009	105	FM		105
5 02	22	008		22	009		11/23/2009	262	FM		262
5 02	22	009		22	012		11/23/2009	337	FM		337
5 02	22	011		22	012		11/23/2009	244	FM		244
5 02	22	011		22	096		11/23/2009	82	FM		82
5 02	22	012		22	015		11/23/2009	303	FM		303
5 02	22	013		22	014		11/23/2009	245	FM		245
5 02	22	014		22	015		11/23/2009	307	FM		307
5 02	22	096		22	097		11/23/2009	170	FM		170
5 02	22	097		22	098		11/23/2009	40	FM		40
5 02	22	098		22	099		11/23/2009	124	FM		124
5 01	16	006		16	007		11/24/2009	351	FM		351
5 01	16	010		16	011		11/24/2009	225	FM		225
5 01	16	011		16	012		11/24/2009	83	FM		83
5 01	16	015		16	016		11/24/2009	220	FM		220
5 01	16	016		16	017		11/24/2009	90	FM		90
5 01	16	024		16	025		11/24/2009	265	FM		265
5 01	16	025		16	026		11/24/2009	293	FM		293
5 01	16	026		16	027		11/24/2009	150	FM		150
5 01	16	027		16	028		11/24/2009	150	FM		150
5 01	16	028		16	029		11/24/2009	122	FM		122
5 02	22	015		22	018		11/24/2009	200	FM		200
5 02	22	016		22	017		11/24/2009	344	FM		344
5 02	22	016		22	092	D	11/24/2009	54	FM		54
5 02	22	017		22	018		11/24/2009	60	FM		60
5 02	22	018		22	019		11/24/2009	252	FM		252
5 02	22	019		22	020		11/24/2009	278	FM		278
5 03	15	171		15	172		11/24/2009	300	FM		300
5 03	15	172		15	173		11/24/2009	300	FM		300
5 03	15	173		15	174		11/24/2009	127	FM		127
7S03	06	124		06	125		11/24/2009	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
7S03	06	125		06	128		11/24/2009	290	FM		290
7S04	06	126		07	087		11/24/2009	300	FM		300
7S04	06	126		06	127		11/24/2009	300	FM		300
7S04	06	127		06	128		11/24/2009	300	FM		300
7S04	06	128		06	129	M	11/24/2009	206	FM		206
7S04	07	086		07	087		11/24/2009	300	FM		300
7S05	11	067		11	072		11/24/2009	160	FM		160
7S08	11	062		11	063		11/24/2009	220	FM		220
7S09	11	063		11	064		11/24/2009	146	FM		146
7S09	11	064		11	065		11/24/2009	400	FM		400
7S09	11	065		11	066		11/24/2009	350	FM		350
7S09	11	066		11	081		11/24/2009	398	FM		398
7S09	11	067		11	082		11/24/2009	235	FM		235
7S09	11	081		11	082		11/24/2009	169	FM		169
7S04	06	129	M	06	130		11/25/2009	200	FM		200
7S05	06	131		11	068		11/25/2009	188	FM		188
7S05	06	131		06	153	D	11/25/2009	292	FM		292
7S05	11	068		11	069		11/25/2009	45	FM		45
7S05	06	130		11	070		11/25/2009	237	FM		237
7S05	11	069		11	070		11/25/2009	115	FM		115
7S05	11	071		11	072		11/25/2009	215	FM		215
7S06	11	055		11	056		11/25/2009	195	FM		195
7S06	11	056		11	057		11/25/2009	195	FM		195
7S06	11	054		11	058		11/25/2009	300	FM		300
7S06	11	057		11	058		11/25/2009	110	FM		110
7S06	11	058		11	059		11/25/2009	300	FM		300
7S06	11	059		11	072		11/25/2009	230	FM		230
7S10	11	072		11	073	M	11/25/2009	185	FM		185
7S10	11	073	M	11	074		11/25/2009	221	FM		221
7S10	11	074		11	075		11/25/2009	130	FM		130
7S10	11	075		11	076		11/25/2009	363	FM		363
7S10	11	076		11	077		11/25/2009	365	FM		365
5 01	16	036		16	037		11/30/2009	113	FM		113
5 01	16	036		23	010		11/30/2009	202	FM		202
5 01	16	037		23	006		11/30/2009	160	FM		160
5 01	22	081		23	002		11/30/2009	140	FM		140
5 01	22	081		22	082		11/30/2009	123	FM		123
5 01	22	082		22	083		11/30/2009	175	FM		175
5 01	22	083		22	084		11/30/2009	110	FM		110
5 01	22	083		22	085		11/30/2009	115	FM		115
5 01	22	085		22	086		11/30/2009	115	FM		115
5 01	22	086		22	088		11/30/2009	43	FM		43
5 01	22	087		22	088		11/30/2009	165	FM		165
5 01	22	088		22	089		11/30/2009	190	FM		190
5 01	22	089		22	090		11/30/2009	186	FM		186
5 01	22	090		22	091		11/30/2009	121	FM		121
5 01	23	001		23	002		11/30/2009	102	FM		102
5 01	23	003		23	004		11/30/2009	84	FM		84
5 01	23	004		23	005		11/30/2009	256	FM		256
5 01	23	005		23	006		11/30/2009	152	FM		152

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 01	23	007		23	008		11/30/2009	194	FM		194
5 01	23	008		23	010		11/30/2009	303	FM		303
5 01	23	009		23	010		11/30/2009	367	FM		367
5 01	23	011		23	013		11/30/2009	160	FM		160
5 01	23	012		23	013		11/30/2009	185	FM		185
5 01	23	014	C	23	017		11/30/2009	134	FM		134
5 01	23	015		23	016		11/30/2009	250	FM		250
5 01	23	016		23	017		11/30/2009	303	FM		303
5 01	16	017		16	019		12/1/2009	319	FM		319
5 01	16	018		16	019		12/1/2009	252	FM		252
5 01	16	019		16	020		12/1/2009	145	FM		145
5 01	16	020		16	021		12/1/2009	275	FM		275
5 01	16	021		16	022		12/1/2009	134	FM		134
5 28	21	028		22	033		12/1/2009	155	FM		155
5 28	21	028		21	029		12/1/2009	342	FM		342
5 28	21	029		21	030		12/1/2009	270	FM		270
5 28	22	024		22	025		12/1/2009	180	FM		180
5 28	22	025		22	026		12/1/2009	275	FM		275
5 28	22	026		22	027		12/1/2009	275	FM		275
5 28	22	028		22	029		12/1/2009	347	FM		347
5 28	22	027		22	031		12/1/2009	220	FM		220
5 28	22	029		22	031		12/1/2009	347	FM		347
5 28	22	030		22	031		12/1/2009	216	FM		216
5 28	22	031		22	033		12/1/2009	320	FM		320
5 28	22	032		22	033		12/1/2009	185	FM		185
5 01	15	162		15	163		12/2/2009	298	FM		298
5 01	15	163		15	164		12/2/2009	332	FM		332
5 01	15	164		15	165		12/2/2009	70	FM		70
5 01	15	166		15	167		12/2/2009	296	FM		296
5 01	15	165		22	091		12/2/2009	100	FM		100
5 01	15	167		15	168		12/2/2009	74	FM		74
5 01	15	168		15	169		12/2/2009	241	FM		241
5 01	15	169		15	170		12/2/2009	246	FM		246
5 01	16	007		16	008		12/2/2009	83	FM		83
5 01	16	008		16	009		12/2/2009	200	FM		200
5 01	16	009		16	013		12/2/2009	200	FM		200
5 01	16	012		16	013		12/2/2009	201	FM		201
5 01	16	013		16	014		12/2/2009	327	FM		327
5 01	16	014		16	023		12/2/2009	299	FM		299
5 01	16	022		16	023		12/2/2009	194	FM		194
5 01	16	023		16	030		12/2/2009	240	FM		240
5 01	16	023		23	017		12/2/2009	148	FM		148
5 01	16	029		16	030		12/2/2009	125	FM		125
5 01	16	030		16	032		12/2/2009	343	FM		343
5 01	16	031		16	032		12/2/2009	50	FM		50
5 01	16	031		23	013		12/2/2009	200	FM		200
5 01	16	032		16	035		12/2/2009	343	FM		343
5 01	16	033		16	034		12/2/2009	139	FM		139
5 01	16	034		16	035		12/2/2009	102	FM		102
5 01	16	035		16	038		12/2/2009	146	FM		146

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 01	16	035		16	041	D	12/2/2009	97	FM		97
5 01	16	037		16	038		12/2/2009	50	FM		50
5 01	16	038		16	039		12/2/2009	241	FM		241
5 01	16	039		16	040		12/2/2009	198	FM		198
5 01	15	162		16	040		12/2/2009	290	FM		290
5 02	22	020		22	021		12/3/2009	280	FM		280
5 03	15	170		15	175		12/3/2009	254	FM		254
5 03	15	175		22	021		12/3/2009	150	FM		150
5 03	22	021		22	022		12/3/2009	350	FM		350
6W02	12	123		12	124		12/3/2009	111	FM		111
7E01	11	001	D	11	002		12/3/2009	350	FM		350
7E01	11	002		11	003		12/3/2009	350	FM		350
7E01	11	003		11	004		12/3/2009	246	FM		246
7E01	11	004		11	005		12/3/2009	304	FM		304
7E01	11	005		11	006		12/3/2009	20	FM		20
7E01	11	006		11	007		12/3/2009	300	FM		300
7E01	11	007		11	008		12/3/2009	125	FM		125
7E01	11	008		11	009		12/3/2009	250	FM		250
7E01	11	009		11	010		12/3/2009	255	FM		255
7E01	11	011		11	012		12/3/2009	175	FM		175
7E01	11	012		11	083		12/3/2009	325	FM		325
7E01	11	013		11	083		12/3/2009	27	FM		27
7E01	11	013		11	014		12/3/2009	309	FM		309
7E01	11	014		11	015		12/3/2009	262	FM		262
7E01	11	015		11	016		12/3/2009	213	FM		213
7E01	11	016		11	017		12/3/2009	343	FM		343
7E02	11	015		12	122		12/3/2009	400	FM		400
7E02	12	121		12	122		12/3/2009	260	FM		260
7E02	12	122		12	123		12/3/2009	350	FM		350
7E02	12	124		12	125		12/3/2009	310	FM		310
5 28	21	015		22	038		12/9/2009	294	FM		294
5 28	21	015		21	016		12/9/2009	293	FM		293
5 28	21	016		21	017		12/9/2009	292	FM		292
5 28	21	017		21	020		12/9/2009	222	FM		222
5 28	21	017		21	143	D	12/9/2009	224	FM		224
5 28	21	018		22	036		12/9/2009	287	FM		287
5 28	21	018		21	019		12/9/2009	284	FM		284
5 28	21	019		21	020		12/9/2009	318	FM		318
5 28	21	020		21	021		12/9/2009	79	FM		79
5 28	21	021		21	022		12/9/2009	175	FM		175
5 28	21	022		21	023		12/9/2009	176	FM		176
5 28	21	030		21	031		12/9/2009	346	FM		346
5 28	21	031		21	032		12/9/2009	340	FM		340
5 28	22	034		22	035		12/9/2009	112	FM		112
5 28	22	035		22	036		12/9/2009	287	FM		287
5 28	22	037		22	038		12/9/2009	292	FM		292
5 29	22	039		22	040		12/9/2009	332	FM		332
5 29	22	040		22	041		12/9/2009	339	FM		339
5 29	22	041		22	042		12/9/2009	200	FM		200
5 29	22	042		22	100		12/9/2009	130	FM		130

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 04	15	128		15	129		12/10/2009	180	FM		180
5 04	15	129		15	131		12/10/2009	200	FM		200
5 04	15	130		15	131		12/10/2009	175	FM		175
5 04	15	131		15	132		12/10/2009	90	FM		90
5 04	15	132		15	133		12/10/2009	300	FM		300
5 04	15	133		15	134		12/10/2009	330	FM		330
5 04	15	134		15	135		12/10/2009	300	FM		300
5 04	15	135		15	176		12/10/2009	299	FM		299
5 04	15	136		15	176		12/10/2009	14	FM		14
5 04	15	142		15	143		12/10/2009	305	FM		305
5 04	15	142		15	177		12/10/2009	341	FM		341
5 04	15	177		15	178		12/10/2009	250	FM		250
5 04	15	178		15	179		12/10/2009	116	FM		116
5 04	15	179		15	210		12/10/2009	225	FM		225
5 29	21	044		22	045		12/10/2009	308	FM		308
5 29	22	043		22	100		12/10/2009	112	FM		112
5 29	22	043		22	101		12/10/2009	130	FM		130
5 29	22	044		22	045		12/10/2009	310	FM		310
5 29	22	044		22	101		12/10/2009	190	FM		190
7E01	11	018		11	033		12/10/2009	337	FM		337
7E03	11	033		11	034		12/10/2009	345	FM		345
7E03	11	034		11	035		12/10/2009	335	FM		335
7E03	11	035		11	036		12/10/2009	335	FM		335
7E03	11	037		11	038		12/10/2009	254	FM		254
7E03	11	038		11	039		12/10/2009	300	FM		300
7E03	11	039		11	040		12/10/2009	275	FM		275
7E03	11	040		11	041		12/10/2009	242	FM		242
7E03	11	036		11	041		12/10/2009	300	FM		300
7E03	11	041		11	079		12/10/2009	29	FM		29
7E03	11	044		37	020		12/10/2009	359	FM		359
7E03	37	018		37	123	D	12/10/2009	350	FM		350
7E03	37	018		37	019		12/10/2009	408	FM		408
7E03	37	019		37	020		12/10/2009	331	FM		331
7E03	11	042		11	079		12/11/2009	350	FM		350
7E03	11	044		11	045		12/11/2009	337	FM		337
7E03	11	045		11	046		12/11/2009	410	FM		410
7E03	11	046		11	047		12/11/2009	250	FM		250
7E04	06	132		06	133		12/11/2009	300	FM		300
7E04	06	133		06	135		12/11/2009	360	FM		360
7E04	06	134		06	135		12/11/2009	330	FM		330
7E04	06	135		06	136		12/11/2009	330	FM		330
7E04	06	136		06	141		12/11/2009	180	FM		180
7E04	06	137		06	138		12/11/2009	210	FM		210
7E04	06	138		06	139		12/11/2009	359	FM		359
7E04	06	139		06	140		12/11/2009	365	FM		365
7E04	06	140		06	141		12/11/2009	365	FM		365
7E04	06	141		06	142		12/11/2009	370	FM		370
7E04	06	142		06	146		12/11/2009	330	FM		330
7E05	06	143		06	144		12/11/2009	250	FM		250
5 29	21	044		21	045		12/14/2009	310	FM		310

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 29	21	045		21	046		12/14/2009	309	FM		309
5 29	21	046		21	047		12/14/2009	40	FM		40
5 29	21	047		21	048		12/14/2009	289	FM		289
5 29	21	049		21	050		12/14/2009	320	FM		320
5 29	21	050		21	051		12/14/2009	200	FM		200
5 29	21	048		21	052		12/14/2009	342	FM		342
5 29	21	051		21	052		12/14/2009	300	FM		300
5 29	21	052		21	053		12/14/2009	262	FM		262
5 29	21	053		21	054		12/14/2009	266	FM		266
5 29	21	054		21	145		12/14/2009	210	FM		210
5 29	21	055		21	057		12/14/2009	79	FM		79
5 29	21	055		21	145		12/14/2009	125	FM		125
5 29	21	056		21	057		12/14/2009	350	FM		350
5 29	21	057		21	058		12/14/2009	247	FM		247
5 29	21	058		21	059		12/14/2009	330	FM		330
7E05	06	144		06	145		12/15/2009	273	FM		273
7E05	06	145		06	146		12/15/2009	103	FM		103
7N08	01	111		01	112		12/15/2009	300	FM		300
7N08	05	001		05	002		12/15/2009	300	FM		300
7N08	05	003		05	004		12/15/2009	265	FM		265
7N08	05	002		05	005		12/15/2009	319	FM		319
5 03	21	001		21	002		12/16/2009	331	FM		331
5 03	21	002		21	142		12/16/2009	360	FM		360
5 03	21	001		22	023		12/16/2009	360	FM		360
5 03	22	022		22	023		12/16/2009	350	FM		350
5 28	21	036		21	144		12/16/2009	191	FM		191
5 28	21	037		21	144		12/16/2009	160	FM		160
5 31	21	041		21	042		12/16/2009	250	FM		250
5 31	21	042		21	043		12/16/2009	283	FM		283
7N08	01	110		01	111		12/16/2009	212	FM		212
7N08	05	004		05	005		12/16/2009	300	FM		300
7N08	05	005		05	006		12/16/2009	150	FM		150
7N08	05	006		05	007		12/16/2009	88	FM		88
7N08	05	008		05	009		12/16/2009	280	FM		280
7N08	05	007		05	010		12/16/2009	150	FM		150
7N08	05	009		05	010		12/16/2009	300	FM		300
7N08	05	010		05	011		12/16/2009	270	FM		270
7N08	05	011		05	012		12/16/2009	240	FM		240
5 28	21	023		21	024		12/17/2009	92	FM		92
5 28	21	025		21	026		12/17/2009	300	FM		300
5 28	21	024		21	027		12/17/2009	140	FM		140
5 28	21	026		21	027		12/17/2009	120	FM		120
5 28	21	007		21	033		12/17/2009	375	FM		375
5 28	21	027		21	033		12/17/2009	350	FM		350
5 28	21	032		21	033		12/17/2009	333	FM		333
5 28	21	033		21	034		12/17/2009	350	FM		350
5 28	21	034		21	035		12/17/2009	315	FM		315
5 28	21	035		21	038		12/17/2009	310	FM		310
5 28	21	037		21	038		12/17/2009	352	FM		352
5 28	21	038		21	039		12/17/2009	310	FM		310

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
7N08	01	112		01	113		12/17/2009	348	FM		348
7N08	01	113		01	116	D	12/17/2009	205	FM		205
7N08	01	113		05	013		12/17/2009	300	FM		300
7N08	05	012		05	013		12/17/2009	345	FM		345
7N08	05	013		05	015		12/17/2009	375	FM		375
7N08	05	014		05	015		12/17/2009	300	FM		300
7N08	05	015		05	017		12/17/2009	300	FM		300
7N08	05	016		05	017		12/17/2009	275	FM		275
7N08	05	017		05	019		12/17/2009	300	FM		300
7N08	05	018		05	019		12/17/2009	255	FM		255
7N08	05	019		05	020		12/17/2009	346	FM		346
7N08	05	020		05	022		12/17/2009	46	FM		46
7N08	05	021		05	022		12/17/2009	245	FM		245
7N08	05	022		05	152		12/17/2009	121	FM		121
7N08	05	023		05	024		12/17/2009	315	FM		315
7N08	05	023		05	152		12/17/2009	130	FM		130
5 28	21	039		21	040		12/18/2009	300	FM		300
5 31	20	134		21	059		12/18/2009	350	FM		350
5 31	20	134		20	135		12/18/2009	360	FM		360
5 31	20	135		20	136	M	12/18/2009	80	FM		80
5 31	20	136	M	21	043		12/18/2009	300	FM		300
5 33	20	136	M	20	137		12/18/2009	463	FM		463
5 33	20	137		21	040		12/18/2009	300	FM		300
5 07	14	155		14	156		12/21/2009	219	FM		219
5 07	14	156		14	157		12/21/2009	304	FM		304
5 07	14	157		14	160		12/21/2009	277	FM		277
5 07	14	157		15	161		12/21/2009	300	FM		300
5 07	14	158		14	159		12/21/2009	286	FM		286
5 07	14	159		14	160		12/21/2009	291	FM		291
5 07	14	160		14	162		12/21/2009	160	FM		160
5 07	14	161		14	162		12/21/2009	343	FM		343
5 07	14	161		14	193	C	12/21/2009	314	FM		314
5 07	14	162		14	164		12/21/2009	340	FM		340
5 07	14	163		14	164		12/21/2009	339	FM		339
5 07	14	163		14	192	C	12/21/2009	214	FM		214
5 07	14	164		14	165		12/21/2009	165	FM		165
5 07	14	165		14	167		12/21/2009	320	FM		320
5 07	14	165		14	194		12/21/2009	343	FM		343
5 07	14	166		14	167		12/21/2009	300	FM		300
5 07	15	154		15	155		12/21/2009	210	FM		210
5 07	15	155		15	156		12/21/2009	270	FM		270
5 07	15	156		15	157		12/21/2009	145	FM		145
5 07	15	157		15	158		12/21/2009	130	FM		130
5 07	15	158		15	161		12/21/2009	225	FM		225
5 07	15	159		15	160		12/21/2009	291	FM		291
5 07	15	160		15	161		12/21/2009	280	FM		280
5 12	15	022		15	028		1/4/2010	118	FM		118
5 12	15	022		16	004		1/4/2010	161	FM		161
5 12	15	023		15	024		1/4/2010	153	FM		153
5 12	15	023		16	002		1/4/2010	100	FM		100

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 12	15	024		15	025		1/4/2010	100	FM		100
5 12	15	025		15	026		1/4/2010	150	FM		150
5 12	15	026		15	027		1/4/2010	210	FM		210
5 12	15	027		15	028		1/4/2010	80	FM		80
5 12	16	001		16	002		1/4/2010	100	FM		100
5 12	16	003		16	004		1/4/2010	188	FM		188
5 12	15	028		15	029		1/5/2010	147	FM		147
5 12	15	029		15	030		1/5/2010	102	FM		102
5 12	15	030		15	031		1/5/2010	115	FM		115
5 12	15	031		15	037		1/5/2010	223	FM		223
5 12	15	032		15	033		1/5/2010	178	FM		178
5 12	15	033		15	034		1/5/2010	124	FM		124
5 12	15	034		15	035		1/5/2010	35	FM		35
5 12	15	035		15	036		1/5/2010	153	FM		153
5 12	15	036		15	037		1/5/2010	265	FM		265
5 12	15	037		15	038		1/5/2010	171	FM		171
5 12	15	053		15	054		1/5/2010	85	FM		85
5 12	15	054		15	205		1/5/2010	86	FM		86
5 12	15	055		15	061		1/5/2010	230	FM		230
5 12	15	055		15	205		1/5/2010	125	FM		125
5 12	15	056		15	057		1/5/2010	246	FM		246
5 12	15	057		15	059		1/5/2010	133	FM		133
5 12	15	058		15	059		1/5/2010	186	FM		186
5 12	15	059		15	204		1/5/2010	60	FM		60
5 12	15	060		15	061		1/5/2010	325	FM		325
5 12	15	060		15	204		1/5/2010	236	FM		236
5 12	15	062		15	063		1/5/2010	155	FM		155
5 12	15	063		15	064		1/5/2010	203	FM		203
5 12	15	064		15	065		1/5/2010	300	FM		300
5 12	15	065		15	066		1/5/2010	100	FM		100
5 12	15	206		15	207		1/5/2010	120	FM		120
5 12	15	207		15	208		1/5/2010	115	FM		115
7N08	05	128		05	129		1/5/2010	264	FM		264
7N08	05	128		05	146		1/5/2010	90	FM		90
7N08	05	129		05	130		1/5/2010	210	FM		210
7N08	05	130		05	131		1/5/2010	304	FM		304
7N08	05	141		05	142		1/5/2010	115	FM		115
7N08	05	141		05	154	D	1/5/2010	7	FM		7
7N08	05	142		05	143		1/5/2010	189	FM		189
7N08	05	143		05	144		1/5/2010	103	FM		103
7N08	05	144		05	145		1/5/2010	119	FM		119
7N08	05	145		05	146		1/5/2010	119	FM		119
7N08	05	149		05	150		1/5/2010	218	FM		218
7N08	05	150		05	151		1/5/2010	172	FM		172
7N04	37	005		37	006		1/6/2010	80	FM		80
7N04	37	005		37	022	D	1/6/2010	38	FM		38
7N04	37	006		37	007		1/6/2010	80	FM		80
7N04	37	008		37	021	D	1/6/2010	230	FM		230
7N04	37	008		37	009		1/6/2010	300	FM		300
7N04	37	009		37	010		1/6/2010	300	FM		300

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
7N04	37	010		37	011		1/6/2010	342	FM		342
7N04	37	011		37	012		1/6/2010	360	FM		360
7N04	37	007		37	013		1/6/2010	170	FM		170
7N04	37	012		37	013		1/6/2010	365	FM		365
7N04	37	013		37	028		1/6/2010	200	FM		200
7N04	37	027		37	028		1/6/2010	200	FM		200
7N08	05	121		05	123		1/6/2010	72	FM		72
7N08	05	121		05	147		1/6/2010	195	FM		195
7N08	05	123		05	124		1/6/2010	39	FM		39
7N08	05	124		05	125		1/6/2010	167	FM		167
7N08	05	125		05	126		1/6/2010	151	FM		151
7N08	05	126		05	127		1/6/2010	200	FM		200
7N08	05	127		05	128		1/6/2010	306	FM		306
7N08	05	147		05	148		1/6/2010	142	FM		142
A 01	07	019		07	020		1/6/2010	78	FM		78
A 01	07	020		08	033		1/6/2010	275	FM		275
5 04	15	136		15	140		1/7/2010	300	FM		300
5 04	15	137		15	139		1/7/2010	150	FM		150
5 04	15	138		15	139		1/7/2010	215	FM		215
5 04	15	139		15	140		1/7/2010	195	FM		195
5 04	15	140		15	141		1/7/2010	130	FM		130
5 04	15	141		15	180		1/7/2010	141	FM		141
5 04	15	143		15	148		1/7/2010	350	FM		350
5 04	15	144		15	145		1/7/2010	300	FM		300
5 04	15	144		15	200	D	1/7/2010	100	FM		100
5 04	15	145		15	147		1/7/2010	355	FM		355
5 04	15	146		15	147		1/7/2010	313	FM		313
5 04	15	147		15	148		1/7/2010	350	FM		350
5 04	15	148		15	180		1/7/2010	212	FM		212
5 12	15	061		15	067		1/7/2010	122	FM		122
5 12	15	066		15	067		1/7/2010	28	FM		28
5 03	21	002		21	003		1/8/2010	308	FM		308
5 03	21	003		21	004		1/8/2010	310	FM		310
5 03	21	004		21	005		1/8/2010	320	FM		320
5 03	21	005		21	006		1/8/2010	335	FM		335
5 05	14	138		14	139		1/11/2010	245	FM		245
5 05	14	138		15	153		1/11/2010	350	FM		350
5 05	14	143		14	144		1/11/2010	308	FM		308
5 05	14	143		14	203	C	1/11/2010	293	FM		293
5 05	14	144		14	204		1/11/2010	284	FM		284
5 05	15	152		15	153		1/11/2010	351	FM		351
5 11	14	096		14	097		1/11/2010	161	FM		161
5 11	14	096		15	127		1/11/2010	317	FM		317
5 11	15	125		15	126		1/11/2010	200	FM		200
5 11	15	125		15	209	D	1/11/2010	106	FM		106
5 11	15	126		15	127		1/11/2010	322	FM		322
5 04	15	148		15	149		1/12/2010	354	FM		354
5 04	15	149		15	150		1/12/2010	350	FM		350
5 04	15	150		15	151		1/12/2010	314	FM		314
5 05	14	140		14	141		1/12/2010	285	FM		285

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 05	14	140		15	151		1/12/2010	342	FM		342
5 05	14	141		14	142		1/12/2010	22	FM		22
5 05	14	142		14	145		1/12/2010	298	FM		298
5 05	14	142		14	214	C	1/12/2010	301	FM		301
5 05	14	144		14	145		1/12/2010	3	FM		3
5 05	14	145		14	146	M	1/12/2010	332	FM		332
5 12	15	038		15	041		1/13/2010	313	FM		313
5 12	15	039		15	040		1/13/2010	136	FM		136
5 12	15	040		15	041		1/13/2010	170	FM		170
5 12	15	041		15	042		1/13/2010	144	FM		144
5 12	15	042		15	046		1/13/2010	157	FM		157
5 12	15	043		15	044		1/13/2010	206	FM		206
5 12	15	044		15	045		1/13/2010	212	FM		212
5 12	15	045		15	046		1/13/2010	100	FM		100
5 12	15	046		15	047		1/13/2010	87	FM		87
5 12	15	047		15	048		1/13/2010	180	FM		180
5 12	15	048		15	049		1/13/2010	188	FM		188
5 12	15	049		15	050		1/13/2010	140	FM		140
5 12	15	050		15	052		1/13/2010	270	FM		270
5 12	15	051		15	052		1/13/2010	173	FM		173
5 12	15	051		15	197	C	1/13/2010	85	FM		85
5 12	15	052		15	070		1/13/2010	149	FM		149
5 12	15	067		15	068		1/13/2010	232	FM		232
5 12	15	068		15	069		1/13/2010	326	FM		326
5 12	15	068		15	198	C	1/13/2010	91	FM		91
5 12	15	069		15	070		1/13/2010	285	FM		285
5 12	15	069		15	202	D	1/13/2010	52	FM		52
5 12	15	070		15	075		1/13/2010	198	FM		198
5 12	15	071		15	072		1/13/2010	240	FM		240
5 12	15	071		15	201	D	1/13/2010	15	FM		15
5 12	15	072		15	073		1/13/2010	312	FM		312
5 12	15	073		15	074		1/13/2010	274	FM		274
5 12	15	074		15	075		1/13/2010	232	FM		232
5 12	15	075		15	077		1/14/2010	246	FM		246
5 13	10	082		10	083		1/14/2010	158	FM		158
5 13	10	083		10	084		1/14/2010	50	FM		50
5 13	10	084		10	085		1/14/2010	200	FM		200
5 13	10	085		15	012		1/14/2010	130	FM		130
5 13	15	012		15	013		1/14/2010	163	FM		163
5 13	15	013		15	014		1/14/2010	172	FM		172
5 13	15	014		15	015		1/14/2010	235	FM		235
5 13	15	015		15	016		1/14/2010	350	FM		350
5 13	15	016		15	017		1/14/2010	225	FM		225
5 13	15	076		15	077		1/14/2010	300	FM		300
5 13	15	076	A	15	199	C	1/14/2010	270	FM		270
5 13	15	077		15	080		1/14/2010	308	FM		308
5 13	15	078		15	079		1/14/2010	329	FM		329
5 13	15	079		15	080		1/14/2010	214	FM		214
7E01	11	010		11	018		1/26/2010	280	FM		280
7E01	11	017		11	018		1/26/2010	308	FM		308

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
7E01	11	018		11	019		1/26/2010	350	FM		350
7E01	11	019		11	020		1/26/2010	350	FM		350
7E01	11	020		11	024		1/26/2010	350	FM		350
7E02	11	021		11	022		1/26/2010	312	FM		312
7E02	11	022		12	126		1/26/2010	183	FM		183
7E02	11	022		11	023		1/26/2010	350	FM		350
7E02	11	023		11	024		1/26/2010	275	FM		275
7E02	11	024		11	025		1/26/2010	275	FM		275
7E02	12	125		12	126		1/26/2010	365	FM		365
7E02	11	025		11	026		1/27/2010	353	FM		353
7E02	11	026		11	028		1/27/2010	70	FM		70
7E02	11	027		11	028		1/27/2010	360	FM		360
7E02	11	028		11	029		1/27/2010	262	FM		262
7E02	11	030		11	078		1/27/2010	212	FM		212
7E02	11	029		11	031		1/27/2010	200	FM		200
7E02	11	030		11	031		1/27/2010	335	FM		335
7E02	11	031		11	032	M	1/27/2010	133	FM		133
7E03	11	048		11	049		1/27/2010	335	FM		335
7E03	11	049		11	050		1/27/2010	330	FM		330
7E03	11	050		11	051	M	1/27/2010	320	FM		320
7E03	06	146		11	077		1/27/2010	150	FM		150
7E03	11	051	M	11	077		1/27/2010	335	FM		335
7N02	05	132		05	133		1/28/2010	195	FM		195
7N02	05	133		05	134		1/28/2010	106	FM		106
7N02	05	134		05	135		1/28/2010	125	FM		125
7N08	05	024		05	151		1/28/2010	177	FM		177
7N08	05	024		05	153		1/28/2010	168	FM		168
7N08	05	025		05	026		1/28/2010	350	FM		350
7N08	05	025		05	153		1/28/2010	172	FM		172
7N08	05	114		05	115		1/28/2010	124	FM		124
7N08	05	115		05	116		1/28/2010	185	FM		185
7N08	05	116		05	117		1/28/2010	186	FM		186
7N08	05	117		05	118		1/28/2010	250	FM		250
7N08	05	118		05	119		1/28/2010	249	FM		249
7N08	05	119		05	120		1/28/2010	35	FM		35
7N08	05	114		05	122		1/28/2010	45	FM		45
7N08	05	122		05	123		1/28/2010	245	FM		245
5 13	10	081		15	007		1/29/2010	357	FM		357
5 13	15	007		15	008		1/29/2010	346	FM		346
5 13	15	008		15	011		1/29/2010	235	FM		235
5 13	15	009		15	010		1/29/2010	353	FM		353
5 13	15	010		15	011		1/29/2010	353	FM		353
5 13	15	011		15	018		1/29/2010	217	FM		217
5 13	15	017		15	018		1/29/2010	240	FM		240
5 13	15	018		15	019		1/29/2010	204	FM		204
5 13	15	019		15	021		1/29/2010	205	FM		205
5 13	15	020		15	021		1/29/2010	269	FM		269
7N02	05	041		05	042		1/29/2010	234	FM		234
7N02	05	042		05	043		1/29/2010	235	FM		235
7N02	05	040		05	044		1/29/2010	100	FM		100

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
7N02	05	043		05	044		1/29/2010	207	FM		207
7N02	05	044		05	045		1/29/2010	83	FM		83
7N02	05	045		05	046		1/29/2010	334	FM		334
7N02	05	135		05	136		1/29/2010	141	FM		141
7N02	05	136		05	137		1/29/2010	225	FM		225
7N02	05	137		05	138		1/29/2010	109	FM		109
7N02	05	042		05	138		1/29/2010	159	FM		159
7N06	05	077		05	078		1/29/2010	188	FM		188
7N06	05	078		05	079		1/29/2010	250	FM		250
7N06	05	079		05	088		1/29/2010	400	FM		400
7N06	05	088		05	089		1/29/2010	150	FM		150
7N08	05	026		05	120		1/29/2010	250	FM		250
7N08	05	026		05	027		1/29/2010	300	FM		300
7N08	05	027		05	028		1/29/2010	280	FM		280
7N08	05	028		05	093		1/29/2010	100	FM		100
5 13	15	021		15	083		2/1/2010	180	FM		180
5 13	15	081		15	082		2/1/2010	215	FM		215
5 13	15	082		15	083		2/1/2010	48	FM		48
5 13	15	083		15	084		2/1/2010	150	FM		150
5 13	15	084		15	085		2/1/2010	150	FM		150
5 14	15	085		15	087		2/1/2010	250	FM		250
5 14	15	086		15	087		2/1/2010	145	FM		145
5 21	15	094		15	095		2/1/2010	280	FM		280
5 21	15	095		15	096		2/1/2010	300	FM		300
5 14	15	085		15	098		2/2/2010	60	FM		60
5 14	15	087		15	089		2/2/2010	250	FM		250
5 14	15	088		15	089		2/2/2010	145	FM		145
5 14	15	089		15	090		2/2/2010	202	FM		202
5 21	14	060		14	061		2/2/2010	130	FM		130
5 21	14	060		15	109		2/2/2010	134	FM		134
5 21	14	061		15	108		2/2/2010	252	FM		252
5 21	15	093		15	097		2/2/2010	345	FM		345
5 21	15	098		15	099		2/2/2010	295	FM		295
5 21	15	099		15	100		2/2/2010	327	FM		327
5 21	15	097		15	102		2/2/2010	272	FM		272
5 21	15	100		15	102		2/2/2010	278	FM		278
5 21	15	101		15	102		2/2/2010	193	FM		193
5 21	15	102		15	105		2/2/2010	267	FM		267
5 21	15	103		15	105		2/2/2010	280	FM		280
5 21	15	104		15	105		2/2/2010	195	FM		195
5 21	15	105		15	108		2/2/2010	269	FM		269
5 21	15	107		15	203	D	2/2/2010	136	FM		136
5 21	15	106		15	108		2/2/2010	280	FM		280
5 21	15	107		15	108		2/2/2010	193	FM		193
1 21	21	133		21	134		2/4/2010	324	FM		324
5 22	14	065		14	066		2/4/2010	291	FM		291
5 22	14	066		15	124		2/4/2010	330	FM		330
5 22	15	110		15	111		2/4/2010	172	FM		172
5 22	15	111		15	112		2/4/2010	200	FM		200
5 22	15	113		15	114		2/4/2010	200	FM		200

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 22	15	112		15	115		2/4/2010	66	FM		66
5 22	15	114		15	115		2/4/2010	50	FM		50
5 22	15	115		15	116		2/4/2010	25	FM		25
5 22	15	116		15	117		2/4/2010	326	FM		326
5 22	15	117		15	118		2/4/2010	324	FM		324
5 22	15	118		15	123		2/4/2010	59	FM		59
5 22	15	119		15	120		2/4/2010	300	FM		300
5 22	15	120		15	122		2/4/2010	368	FM		368
5 22	15	122		15	123		2/4/2010	320	FM		320
5 22	15	123		15	124		2/4/2010	261	FM		261
5 22	14	066		14	067		2/5/2010	170	FM		170
5 22	14	067		14	068		2/5/2010	325	FM		325
5 22	14	068		14	077		2/5/2010	351	FM		351
5 22	14	069		14	070		2/5/2010	247	FM		247
5 22	14	070		14	071		2/5/2010	145	FM		145
5 22	14	072		14	073		2/5/2010	350	FM		350
5 22	14	071		14	073		2/5/2010	145	FM		145
5 22	14	073		14	075		2/5/2010	266	FM		266
5 22	14	074		14	075		2/5/2010	263	FM		263
5 22	14	075		14	076		2/5/2010	155	FM		155
5 22	14	076		14	077		2/5/2010	156	FM		156
5 22	14	077		14	201	S	2/5/2010	145	FM		145
5 35	20	141		21	014		2/8/2010	300	FM		300
5 35	20	141	M	20	142		2/8/2010	330	FM		330
5 35	21	006		21	007		2/8/2010	51	FM		51
5 35	21	007		21	009		2/8/2010	160	FM		160
5 35	21	008		21	009		2/8/2010	240	FM		240
5 35	21	010		21	011		2/8/2010	300	FM		300
5 35	21	011		21	012		2/8/2010	345	FM		345
5 35	21	012		21	137	C	2/8/2010	144	FM		144
5 35	21	012		21	013		2/8/2010	350	FM		350
5 35	21	013		21	014		2/8/2010	350	FM		350
5 36	20	113		20	114		2/8/2010	252	FM		252
5 36	20	114		20	115		2/8/2010	300	FM		300
5 36	20	115		20	116		2/8/2010	300	FM		300
5 36	20	116		20	117		2/8/2010	274	FM		274
5 36	20	117		20	145	D	2/8/2010	142	FM		142
5 36	20	117		20	118		2/9/2010	400	FM		400
5 36	20	009	C	20	119		2/9/2010	140	FM		140
5 36	20	119		20	120		2/9/2010	302	FM		302
5 36	20	122		20	123		2/9/2010	350	FM		350
5 36	20	123		20	124		2/9/2010	400	FM		400
5 36	20	124		20	125		2/9/2010	150	FM		150
5 36	20	126		20	147		2/9/2010	70	FM		70
5 36	20	126		20	127		2/9/2010	250	FM		250
5 36	20	127		20	128		2/9/2010	226	FM		226
5 36	20	128		20	129		2/9/2010	250	FM		250
5 36	20	125		20	130		2/9/2010	125	FM		125
5 36	20	129		20	130		2/9/2010	150	FM		150
5 36	20	130		20	131		2/9/2010	178	FM		178

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 36	20	131		20	132		2/9/2010	125	FM		125
5 36	20	132		20	133		2/9/2010	277	FM		277
5 33	20	137		20	138	P	2/10/2010	350	FM		350
5 36	20	118		20	121		2/10/2010	369	FM		369
5 36	20	120		20	121		2/10/2010	310	FM		310
5 36	20	133		20	140	P	2/10/2010	433	FM		433
5 36	13	088		20	143		2/10/2010	450	FM		450
5 36	20	121		20	144		2/10/2010	106	FM		106
5 21	14	056		14	057		2/11/2010	323	FM		323
5 21	14	057		14	058		2/11/2010	285	FM		285
5 21	14	057		15	092		2/11/2010	317	FM		317
5 21	14	058		14	059		2/11/2010	330	FM		330
5 21	14	061		14	062		2/11/2010	253	FM		253
5 21	14	059		14	062		2/11/2010	333	FM		333
5 21	14	062		14	063		2/11/2010	175	FM		175
5 21	14	063		14	064		2/11/2010	264	FM		264
5 21	15	091		15	092		2/11/2010	372	FM		372
7N01	05	029		05	030		2/11/2010	445	FM		445
7N01	05	029		06	147		2/11/2010	506	FM		506
7N01	05	030		05	031		2/11/2010	526	FM		526
7N02	05	047		05	048		2/11/2010	365	FM		365
7N02	05	048		05	049		2/11/2010	365	FM		365
7N02	05	049		05	050		2/11/2010	325	FM		325
7N02	05	050		05	051		2/11/2010	345	FM		345
7N02	05	051		05	052		2/11/2010	340	FM		340
7N02	05	052		05	053		2/11/2010	425	FM		425
7N02	05	046		05	054		2/11/2010	360	FM		360
7N02	05	053		05	054		2/11/2010	337	FM		337
7N02	05	054		05	055		2/11/2010	425	FM		425
7N05	05	074		05	161		2/11/2010	12	FM		12
7N05	05	158		05	159		2/11/2010	320	FM		320
7N05	05	159		05	160		2/11/2010	323	FM		323
7N05	05	160		05	161		2/11/2010	325	FM		325
7N05	05	161		05	162		2/11/2010	253	FM		253
7N05	05	162		05	163		2/11/2010	321	FM		321
7N05	05	163		05	164		2/11/2010	297	FM		297
7N04	05	058		05	112	C	2/12/2010	200	FM		200
7N04	05	058		37	004		2/12/2010	300	FM		300
7N04	05	058		05	059		2/12/2010	275	FM		275
7N04	05	059		05	060		2/12/2010	280	FM		280
7N04	05	060		05	061		2/12/2010	270	FM		270
7N04	05	061		05	062		2/12/2010	340	FM		340
7N04	05	063		37	025	D	2/12/2010	248	FM		248
7N04	05	063		05	065		2/12/2010	337	FM		337
7N04	05	065		05	066		2/12/2010	310	FM		310
7N04	05	065		37	001	D	2/12/2010	300	FM		300
7N04	05	155		05	156		2/12/2010	270	FM		270
7N04	05	156		05	157		2/12/2010	275	FM		275
7N04	37	002		37	024	D	2/12/2010	40	FM		40
7N04	37	002		37	003		2/12/2010	365	FM		365

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
7N04	37	003		37	004		2/12/2010	390	FM		390
5 11	14	097		14	101		2/16/2010	21	FM		21
5 11	14	098		14	099		2/16/2010	95	FM		95
5 11	14	099		14	100		2/16/2010	106	FM		106
5 11	14	099		14	190	D	2/16/2010	30	FM		30
5 11	14	100		14	101		2/16/2010	257	FM		257
5 11	14	101		14	102		2/16/2010	330	FM		330
5 11	14	102		14	103		2/16/2010	330	FM		330
5 11	14	103		14	104		2/16/2010	328	FM		328
5 11	14	104		14	110		2/16/2010	36	FM		36
5 11	14	105		14	106		2/16/2010	307	FM		307
5 11	14	106		14	107		2/16/2010	307	FM		307
5 11	14	107		14	109		2/16/2010	285	FM		285
5 21	14	064		14	078		2/16/2010	347	FM		347
5 23	14	078		14	200	S	2/16/2010	127	FM		127
5 37	13	088		13	091		2/16/2010	33	FM		33
5 37	13	089		13	095		2/16/2010	260	FM		260
5 37	13	089		14	189		2/16/2010	325	FM		325
5 37	13	090		13	095		2/16/2010	290	FM		290
5 37	14	183		14	184		2/16/2010	81	FM		81
5 37	14	184		14	185		2/16/2010	132	FM		132
5 37	14	184		14	219		2/16/2010	183	FM		183
5 37	14	185		14	186		2/16/2010	350	FM		350
5 37	14	186		14	187		2/16/2010	180	FM		180
5 37	14	187		14	211		2/16/2010	275	FM		275
5 37	14	187		14	188		2/16/2010	175	FM		175
5 37	14	188		14	189		2/16/2010	373	FM		373
5 37	14	219		14	220	D	2/16/2010	97	FM		97
5 37	14	219		14	221	D	2/16/2010	28	FM		28
5 11	14	115		14	116		2/17/2010	309	FM		309
5 11	14	115		14	195	C	2/17/2010	192	FM		192
5 23	14	078		14	082		2/17/2010	330	FM		330
5 24	14	079		14	217		2/17/2010	195	FM		195
5 24	14	080	S	14	082		2/17/2010	134	FM		134
5 24	14	081	S	14	217		2/17/2010	65	FM		65
5 37	13	093		13	094		2/17/2010	300	FM		300
5 37	13	094		13	096		2/17/2010	175	FM		175
5 37	13	096		13	097		2/17/2010	260	FM		260
5 37	13	092	T	13	098		2/17/2010	512	FM		512
5 37	13	097		13	098		2/17/2010	93	FM		93
5 37	14	177		14	178		2/17/2010	287	FM		287
5 37	14	178		14	179		2/17/2010	280	FM		280
5 37	14	179		14	180		2/17/2010	200	FM		200
5 37	14	180		14	181		2/17/2010	200	FM		200
5 37	14	181		14	182		2/17/2010	280	FM		280
5 37	13	093		14	182		2/17/2010	255	FM		255
Z 01	02	019		02	020		2/17/2010	124	FM		124
Z 01	02	020		02	021		2/17/2010	200	FM		200
Z 01	02	021		02	022		2/17/2010	200	FM		200
Z 01	02	022		02	023		2/17/2010	61	FM		61

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
Z 01	02	023		02	024		2/17/2010	127	FM		127
Z 01	03	140		03	141		2/17/2010	194	FM		194
Z 01	03	139		03	159		2/17/2010	149	FM		149
Z 01	03	140		03	159		2/17/2010	156	FM		156
Z 01	03	153		03	154	C	2/17/2010	123	FM		123
Z 01	03	155		03	156	C	2/17/2010	136	FM		136
Z 01	03	152		03	153		2/17/2010	174	FM		174
Z 01	03	152		03	155		2/17/2010	136	FM		136
Z 01	03	140		03	142		2/17/2010	345	FM		345
Z 01	03	142		03	152		2/17/2010	161	FM		161
Z 01	03	150		03	151		2/17/2010	208	FM		208
Z 01	03	149		03	150		2/17/2010	108	FM		108
Z 01	03	147		03	148		2/17/2010	104	FM		104
Z 01	03	146		03	147		2/17/2010	119	FM		119
Z 01	03	145		03	146		2/17/2010	108	FM		108
Z 01	03	144		03	145		2/17/2010	106	FM		106
Z 01	03	143		03	144		2/17/2010	107	FM		107
Z 01	03	142		03	143		2/17/2010	101	FM		101
Z 01	03	142		03	160		2/17/2010	206	FM		206
Z 01	03	157		03	158	D	2/17/2010	25	FM		25
Z 01	03	157		03	160		2/17/2010	120	FM		120
Z 01	03	157		03	161		2/17/2010	135	FM		135
Z 01	03	157		03	163		2/17/2010	105	FM		105
Z 01	03	161		03	162	D	2/17/2010	200	FM		200
Z 01	03	162		03	164		2/17/2010	125	FM		125
Z 01	03	164		03	165		2/17/2010	325	FM		325
Z 01	03	165		03	166		2/17/2010	300	FM		300
5 37	13	098		13	099		2/18/2010	510	FM		510
7N02	05	056		05	064		2/18/2010	20	FM		20
7N03	05	064		05	140		2/18/2010	153	FM		153
7N03	05	140		05	165		2/18/2010	150	FM		150
7N04	05	062		05	067		2/18/2010	325	FM		325
7N04	05	067		37	017	M	2/18/2010	350	FM		350
7N04	05	066		05	067		2/18/2010	320	FM		320
7N04	05	067		05	068		2/18/2010	80	FM		80
7N04	05	069		05	070		2/18/2010	345	FM		345
7N04	05	070		05	165		2/18/2010	31	FM		31
7N04	05	071		05	165		2/18/2010	270	FM		270
7N04	05	069		05	157		2/18/2010	236	FM		236
7N04	05	071		05	072		2/18/2010	250	FM		250
7N04	05	072		05	073		2/18/2010	40	FM		40
7N04	37	013		37	014		2/18/2010	300	FM		300
7N04	37	014		37	015		2/18/2010	330	FM		330
7N04	37	015		37	016		2/18/2010	300	FM		300
7N04	37	016		37	017		2/18/2010	290	FM		290
7N06	05	089		05	090		2/18/2010	150	FM		150
7N06	05	089		05	091		2/18/2010	250	FM		250
5 17	10	031	C	10	032		2/19/2010	102	FM		102
5 17	10	032		10	033		2/19/2010	358	FM		358
5 17	10	033		10	035		2/19/2010	120	FM		120

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 17	10	034		10	035		2/19/2010	50	FM		50
5 17	10	035		10	036		2/19/2010	250	FM		250
5 17	10	036		10	086		2/19/2010	170	FM		170
5 17	10	037		10	038		2/19/2010	97	FM		97
5 17	10	037		10	086		2/19/2010	97	FM		97
5 17	10	054	C	10	055		2/19/2010	44	FM		44
5 17	10	055		10	056		2/19/2010	294	FM		294
5 17	10	056		10	057		2/19/2010	355	FM		355
5 17	10	057		10	058		2/19/2010	177	FM		177
5 17	10	058		10	059		2/19/2010	73	FM		73
Z 01	02	037		02	038		2/23/2010	228	FM		228
Z 01	02	039		02	088	C	2/23/2010	96	FM		96
Z 01	02	038		02	040		2/23/2010	243	FM		243
Z 01	02	039		02	040		2/23/2010	281	FM		281
Z 01	02	040		02	041		2/23/2010	273	FM		273
Z 01	02	041		02	042		2/23/2010	318	FM		318
Z 01	02	042		02	043		2/23/2010	180	FM		180
Z 01	02	043		02	044		2/23/2010	400	FM		400
5 15	10	072		10	073		2/26/2010	89	FM		89
5 15	10	073		10	074		2/26/2010	199	FM		199
5 15	10	074		10	078		2/26/2010	299	FM		299
5 15	10	075		10	076		2/26/2010	315	FM		315
5 15	10	075		10	087	C	2/26/2010	62	FM		62
5 15	10	076		10	077		2/26/2010	254	FM		254
5 15	10	077		10	078		2/26/2010	87	FM		87
5 15	10	078		10	079		2/26/2010	180	FM		180
5 15	10	079		15	002		2/26/2010	335	FM		335
5 15	15	002		15	003		2/26/2010	187	FM		187
5 15	09	131		09	132		3/1/2010	316	FM		316
5 15	09	132		14	036		3/1/2010	320	FM		320
5 15	09	133		14	037		3/1/2010	390	FM		390
5 15	09	134		10	080		3/1/2010	300	FM		300
5 15	10	080		15	005		3/1/2010	312	FM		312
5 15	14	036		14	042		3/1/2010	153	FM		153
5 15	14	037		14	038		3/1/2010	276	FM		276
5 15	14	038		14	040		3/1/2010	290	FM		290
5 15	14	039		14	040		3/1/2010	300	FM		300
5 15	14	039		15	006		3/1/2010	300	FM		300
5 15	14	040		14	041		3/1/2010	325	FM		325
5 15	14	041		14	042		3/1/2010	310	FM		310
5 15	15	001		15	003		3/1/2010	250	FM		250
5 15	15	003		15	004		3/1/2010	51	FM		51
5 15	15	004		15	006		3/1/2010	250	FM		250
5 15	15	005		15	006		3/1/2010	383	FM		383
Z 01	02	011		02	012		3/1/2010	200	FM		200
Z 01	02	011		03	163		3/1/2010	200	FM		200
Z 01	02	025		02	026		3/1/2010	175	FM		175
Z 01	02	024		02	026		3/1/2010	200	FM		200
Z 01	02	026		02	085	D	3/1/2010	100	FM		100
Z 01	02	026		02	027		3/1/2010	200	FM		200

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
Z 01	02	027		02	029		3/1/2010	250	FM		250
Z 01	02	028		02	029		3/1/2010	220	FM		220
Z 01	02	029		02	030		3/1/2010	250	FM		250
Z 01	02	030		02	031		3/1/2010	250	FM		250
Z 01	02	031		02	032		3/1/2010	150	FM		150
Z 01	02	031		02	087	C	3/1/2010	75	FM		75
Z 01	02	032		02	033		3/1/2010	125	FM		125
Z 01	02	033	P	02	034		3/1/2010	100	FM		100
Z 01	03	125		03	126		3/1/2010	186	FM		186
5 05	14	146	M	14	147		3/2/2010	354	FM		354
5 06	14	147		14	148		3/2/2010	178	FM		178
5 08	14	148		14	149		3/2/2010	350	FM		350
1 13	26	145		26	183	C	3/3/2010	77	FM		77
5 08	14	149		14	151		3/3/2010	304	FM		304
5 17	10	038		10	040		3/3/2010	317	FM		317
5 17	10	039		10	040		3/3/2010	100	FM		100
5 17	10	040		10	041		3/3/2010	140	FM		140
5 17	10	050		10	051		3/3/2010	243	FM		243
5 17	10	050		10	088	D	3/3/2010	207	FM		207
5 17	10	051		10	052		3/3/2010	230	FM		230
5 17	10	052		10	053		3/3/2010	241	FM		241
5 17	10	060		10	062		3/3/2010	270	FM		270
5 17	10	062		10	063		3/3/2010	300	FM		300
5 17	10	063		10	064		3/3/2010	300	FM		300
5 17	10	064		10	065		3/3/2010	233	FM		233
5 06	14	148		14	171		3/5/2010	175	FM		175
5 08	13	058		13	059		3/5/2010	20	FM		20
5 08	13	058		14	154		3/5/2010	200	FM		200
5 08	14	151		14	152		3/5/2010	300	FM		300
5 08	14	152		14	153		3/5/2010	300	FM		300
5 08	14	153		14	154		3/5/2010	300	FM		300
5 10	14	124		14	125		3/5/2010	525	FM		525
5 10	14	128		14	129		3/5/2010	182	FM		182
5 10	14	129		14	130		3/5/2010	293	FM		293
5 10	14	133		14	134		3/5/2010	182	FM		182
5 10	14	134		14	135		3/5/2010	293	FM		293
5 37	13	099		13	100		3/5/2010	418	FM		418
5 25	14	083		14	084		3/9/2010	322	FM		322
5 25	14	084		14	086		3/9/2010	318	FM		318
5 25	14	085		14	086		3/9/2010	352	FM		352
5 25	14	085		14	208	D	3/9/2010	268	FM		268
5 14	14	046		14	047		3/10/2010	300	FM		300
5 14	14	046		15	090		3/10/2010	300	FM		300
5 14	14	047		14	048	M	3/10/2010	287	FM		287
5 15	14	042		14	045		3/10/2010	327	FM		327
5 15	14	043		14	044		3/10/2010	290	FM		290
5 15	14	043		14	196	C	3/10/2010	34	FM		34
5 15	14	044		14	045		3/10/2010	364	FM		364
5 15	14	045		14	048	M	3/10/2010	333	FM		333
5 25	14	086		14	087		3/10/2010	161	FM		161

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 25	14	087		14	089		3/10/2010	160	FM		160
5 25	14	088		14	197		3/10/2010	268	FM		268
5 25	14	088		14	089		3/10/2010	352	FM		352
5 25	14	089		14	198		3/10/2010	279	FM		279
Z 01	02	013		03	127		3/11/2010	200	FM		200
Z 01	02	013		02	014		3/11/2010	300	FM		300
Z 01	02	014		02	015		3/11/2010	318	FM		318
Z 01	02	012		02	015		3/11/2010	236	FM		236
Z 01	02	015		02	016		3/11/2010	306	FM		306
Z 01	02	016		02	017		3/11/2010	293	FM		293
Z 01	02	017		02	018		3/11/2010	150	FM		150
Z 01	02	018		02	036		3/11/2010	200	FM		200
Z 01	02	034		02	035		3/11/2010	115	FM		115
Z 01	02	035		02	036		3/11/2010	150	FM		150
Z 01	02	036		02	045		3/11/2010	100	FM		100
Z 01	02	044		02	045		3/11/2010	200	FM		200
Z 01	02	045		02	046		3/11/2010	175	FM		175
Z 01	02	046		02	047		3/11/2010	337	FM		337
Z 01	02	047		02	048		3/11/2010	300	FM		300
5 07	14	167		14	168		3/15/2010	28	FM		28
5 07	14	168		14	170		3/15/2010	314	FM		314
5 07	14	169		14	215		3/15/2010	161	FM		161
5 07	14	170		14	171		3/15/2010	370	FM		370
5 07	14	170		14	215		3/15/2010	184	FM		184
5 09	13	056		14	176		3/15/2010	250	FM		250
5 09	14	171		14	199		3/15/2010	240	FM		240
5 09	14	172		14	173		3/15/2010	280	FM		280
5 09	14	172		14	199		3/15/2010	248	FM		248
5 09	14	173		14	174		3/15/2010	203	FM		203
5 09	14	174		14	175		3/15/2010	204	FM		204
5 09	14	175		14	176		3/15/2010	284	FM		284
5 07	14	169		21	006		3/16/2010	322	FM		322
5 10	14	125		14	126		3/16/2010	390	FM		390
5 10	14	130		14	131		3/16/2010	362	FM		362
5 10	14	135		14	136		3/16/2010	380	FM		380
5 35	21	008		21	138	C	3/16/2010	55	FM		55
5 35	21	008		21	139	C	3/16/2010	84	FM		84
5 10	14	119		14	120		3/17/2010	155	FM		155
5 10	14	126		14	127		3/17/2010	350	FM		350
5 10	14	131		14	132		3/17/2010	357	FM		357
5 10	14	136		14	137		3/17/2010	407	FM		407
5 11	14	116		14	117	P	3/17/2010	415	FM		415
5 11	14	120		14	121		3/17/2010	140	FM		140
5 11	14	121		14	216		3/17/2010	262	FM		262
5 11	14	122		14	123		3/17/2010	389	FM		389
5 11	14	122		14	216		3/17/2010	101	FM		101
5 09	13	055		13	057		3/19/2010	175	FM		175
5 09	13	056		13	057		3/19/2010	210	FM		210
5 09	13	057		13	060		3/19/2010	223	FM		223
5 09	13	059		13	060		3/19/2010	119	FM		119

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 10	13	060		13	061		3/19/2010	327	FM		327
5 10	13	061		13	062		3/19/2010	199	FM		199
5 10	13	061		14	137		3/19/2010	392	FM		392
5 10	13	062		13	063		3/19/2010	189	FM		189
5 10	13	063		13	064		3/19/2010	186	FM		186
5 10	13	064		13	065		3/19/2010	226	FM		226
5 10	13	064		14	127		3/19/2010	383	FM		383
5 10	13	065		13	066		3/19/2010	200	FM		200
5 11	13	066		14	123		3/19/2010	383	FM		383
Z 02	01	006		05	109		3/22/2010	363	FM		363
Z 02	01	006		01	008		3/22/2010	359	FM		359
Z 02	01	007		01	008		3/22/2010	105	FM		105
Z 02	05	099		05	100		3/22/2010	258	FM		258
Z 02	05	100		05	101		3/22/2010	305	FM		305
Z 02	05	104		05	106		3/22/2010	298	FM		298
Z 02	05	105		05	106		3/22/2010	130	FM		130
Z 02	05	106		05	107		3/22/2010	350	FM		350
Z 02	05	107		05	108		3/22/2010	350	FM		350
Z 02	05	108		05	109		3/22/2010	250	FM		250
5 11	13	066		13	067		3/23/2010	325	FM		325
5 17	14	032		14	033		3/23/2010	109	FM		109
5 17	14	033		14	034		3/23/2010	350	FM		350
5 17	14	033		14	210		3/23/2010	360	FM		360
5 17	14	034		14	035		3/23/2010	100	FM		100
5 17	14	035		14	052		3/23/2010	331	FM		331
5 17	14	035		14	213		3/23/2010	256	FM		256
5 18	14	048	M	14	052		3/23/2010	300	FM		300
5 18	14	049		14	051		3/23/2010	200	FM		200
5 18	14	050		14	051		3/23/2010	120	FM		120
5 18	14	051		14	052		3/23/2010	135	FM		135
5 18	14	052		14	053		3/23/2010	350	FM		350
Z 01	02	049		02	050		3/23/2010	155	FM		155
Z 01	02	049		06	019		3/23/2010	300	FM		300
Z 01	02	050		02	051		3/23/2010	200	FM		200
Z 02	06	005		06	006		3/23/2010	350	FM		350
Z 02	06	006		06	152	C	3/23/2010	62	FM		62
Z 02	06	006		06	007		3/23/2010	45	FM		45
Z 02	06	008		06	009		3/23/2010	85	FM		85
Z 02	06	007		06	148	C	3/23/2010	175	FM		175
Z 02	06	009		06	010		3/23/2010	275	FM		275
Z 02	06	010		06	011		3/23/2010	130	FM		130
Z 02	06	011		06	014		3/23/2010	247	FM		247
Z 02	06	012		06	013		3/23/2010	270	FM		270
Z 02	06	013		06	014		3/23/2010	301	FM		301
5 38	13	101		13	103		3/24/2010	370	FM		370
5 38	13	103		13	105		3/24/2010	367	FM		367
5 39	13	078		13	079		3/24/2010	222	FM		222
5 39	13	079		13	082		3/24/2010	181	FM		181
5 39	13	081		13	082		3/24/2010	25	FM		25
5 39	13	082		13	083		3/24/2010	348	FM		348

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 41	13	070		13	072		3/24/2010	184	FM		184
5 41	13	070		13	209	D	3/24/2010	50	FM		50
5 41	13	071		13	072	P	3/24/2010	439	FM		439
5 41	13	072	P	13	074		3/24/2010	387	FM		387
5 41	13	073		13	074		3/24/2010	405	FM		405
5 41	13	074		13	075		3/24/2010	185	FM		185
5 41	13	076		13	077		3/24/2010	385	FM		385
5 41	13	075		13	078		3/24/2010	10	FM		10
5 41	13	077		13	078		3/24/2010	32	FM		32
5 41	13	080		13	081		3/24/2010	408	FM		408
5 17	09	130		10	011		3/25/2010	275	FM		275
5 17	09	130		10	012		3/25/2010	325	FM		325
5 17	10	006		10	007		3/25/2010	80	FM		80
5 17	10	007		10	008		3/25/2010	150	FM		150
5 17	10	008		10	009		3/25/2010	197	FM		197
5 17	10	009		10	010		3/25/2010	330	FM		330
5 17	10	010		10	011		3/25/2010	250	FM		250
5 17	10	013		10	014		3/25/2010	150	FM		150
5 17	10	014		10	015		3/25/2010	200	FM		200
5 17	10	015		10	019		3/25/2010	200	FM		200
5 17	10	016		10	017		3/25/2010	165	FM		165
5 17	10	017		10	018		3/25/2010	110	FM		110
5 19	14	053		14	054		3/25/2010	360	FM		360
5 20	14	054		14	055		3/25/2010	330	FM		330
5 26	14	055		14	090		3/25/2010	330	FM		330
5 26	14	089		14	090		3/25/2010	175	FM		175
5 26	14	090		14	091		3/25/2010	330	FM		330
5 17	10	018		10	019		3/29/2010	50	FM		50
Z 02	06	007		06	008		3/29/2010	141	FM		141
5 17	10	019		10	020		3/30/2010	380	FM		380
5 17	10	020		10	021		3/30/2010	240	FM		240
5 17	10	021		10	022		3/30/2010	450	FM		450
5 17	10	022		10	023		3/30/2010	50	FM		50
5 17	10	023		10	024		3/30/2010	75	FM		75
5 17	10	024		10	025		3/30/2010	165	FM		165
5 17	10	025		10	026		3/30/2010	60	FM		60
5 17	10	026		10	027		3/30/2010	100	FM		100
5 17	10	027		10	028		3/30/2010	200	FM		200
5 17	10	028		10	029		3/30/2010	60	FM		60
5 17	10	029		10	030		3/30/2010	80	FM		80
Z 02	01	024		02	078		3/30/2010	300	FM		300
Z 02	02	073		02	074		3/30/2010	300	FM		300
Z 02	02	074		02	075		3/30/2010	300	FM		300
Z 02	02	075		02	076		3/30/2010	300	FM		300
Z 02	02	076		02	077		3/30/2010	300	FM		300
Z 02	02	077		02	078		3/30/2010	300	FM		300
Z 02	02	084		06	004		3/30/2010	350	FM		350
Z 02	06	002		06	003		3/30/2010	300	FM		300
Z 02	06	003		06	004		3/30/2010	354	FM		354
Z 02	06	014		06	017		3/30/2010	268	FM		268

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
Z 02	06	015		06	016		3/30/2010	343	FM		343
Z 02	06	015		06	149	C	3/30/2010	140	FM		140
Z 02	06	016		06	017		3/30/2010	289	FM		289
Z 02	06	017		06	018		3/30/2010	295	FM		295
Z 02	02	073		06	018		3/30/2010	314	FM		314
5 17	10	012		10	044		3/31/2010	175	FM		175
5 17	10	030		10	042		3/31/2010	100	FM		100
5 17	10	041		10	042		3/31/2010	600	FM		600
5 17	10	042		10	043		3/31/2010	165	FM		165
5 17	10	043		10	044		3/31/2010	135	FM		135
5 17	10	044		10	045		3/31/2010	300	FM		300
5 26	14	091		14	092		3/31/2010	138	FM		138
5 26	14	092		14	093		3/31/2010	332	FM		332
5 26	14	093		14	094		3/31/2010	323	FM		323
Z 02	01	020		01	021		3/31/2010	353	FM		353
Z 02	01	020		02	084		3/31/2010	359	FM		359
Z 02	01	021		01	022		3/31/2010	245	FM		245
Z 02	02	091		02	092		3/31/2010	250	FM		250
Z 02	02	092		02	093		3/31/2010	83	FM		83
Z 02	02	093		02	094		3/31/2010	110	FM		110
Z 02	02	094		02	095		3/31/2010	360	FM		360
5 17	10	045		10	046		4/2/2010	281	FM		281
5 17	10	046		10	047		4/2/2010	351	FM		351
5 17	10	047		10	048		4/2/2010	175	FM		175
5 17	10	048		10	049		4/2/2010	92	FM		92
5 17	10	049		10	067		4/2/2010	150	FM		150
5 17	10	053		10	066		4/2/2010	217	FM		217
5 17	10	059		10	066		4/2/2010	431	FM		431
5 17	10	065		10	066		4/2/2010	62	FM		62
5 17	10	066		10	067		4/2/2010	350	FM		350
5 17	09	126		09	127		4/5/2010	330	FM		330
5 17	09	126		10	067		4/5/2010	350	FM		350
5 17	09	127		09	128		4/5/2010	330	FM		330
5 11	13	054	M	13	068		4/6/2010	100	FM		100
5 11	13	067		13	068		4/6/2010	100	FM		100
5 17	09	128		09	129		4/6/2010	335	FM		335
5 17	09	129		14	031		4/6/2010	9128	FM		9128
5 17	14	031		14	032		4/6/2010	362	FM		362
5 26	14	094		14	095		4/6/2010	200	FM		200
5 27	13	053		14	095		4/6/2010	149	FM		149
5 27	13	053		13	054	M	4/6/2010	310	FM		310
5 37	13	100		13	106		4/6/2010	372	FM		372
5 11	13	068		13	069		4/7/2010	250	FM		250
5 38	13	084		13	106		4/7/2010	185	FM		185
5 39	13	084		13	085		4/7/2010	460	FM		460
5 40	13	085		13	107		4/7/2010	180	FM		180
5 40	13	108	P	13	109	P	4/7/2010	179	FM	3	716
5 41	13	083		13	086		4/7/2010	27	FM		27
5 41	13	085		13	086		4/7/2010	361	FM		361
5 41	13	069		13	087		4/7/2010	350	FM		350

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 41	13	086		13	087		4/7/2010	200	FM		200
5 41	13	087		13	110		4/7/2010	100	FM		100
B 01	04	104		04	105		4/8/2010	165	FM		165
B 01	04	105		04	137	C	4/8/2010	130	FM		130
B 01	04	105		04	107		4/8/2010	50	FM		50
B 01	04	106	C	04	107		4/8/2010	221	FM		221
B 01	04	107		04	108		4/8/2010	280	FM		280
B 01	04	108		04	109		4/8/2010	100	FM		100
B 01	04	109		04	117		4/8/2010	275	FM		275
5 46	13	133		13	134		4/9/2010	128	FM		128
5 46	13	135		13	136		4/9/2010	286	FM		286
5 46	13	134		13	137		4/9/2010	22	FM		22
5 46	13	136		13	137		4/9/2010	288	FM		288
5 46	13	137		13	138		4/9/2010	245	FM		245
5 46	13	138		13	205		4/9/2010	105	FM		105
5 46	13	138		13	139		4/9/2010	295	FM		295
5 46	13	139		13	140		4/9/2010	150	FM		150
5 46	13	140		13	141		4/9/2010	95	FM		95
5 46	13	126		13	127		4/13/2010	305	FM		305
5 46	13	127		13	128		4/13/2010	305	FM		305
5 46	13	128		13	129		4/13/2010	275	FM		275
5 46	13	128		13	211		4/13/2010	360	FM		360
Z 02	01	014		05	111		4/13/2010	350	FM		350
Z 02	01	014		01	015		4/13/2010	332	FM		332
Z 02	01	015		01	016		4/13/2010	355	FM		355
Z 02	02	079		02	080		4/13/2010	225	FM		225
Z 02	02	080		02	081		4/13/2010	200	FM		200
Z 02	02	081		02	082		4/13/2010	350	FM		350
Z 02	02	082		02	083		4/13/2010	353	FM		353
Z 02	05	110		06	001		4/13/2010	330	FM		330
Z 02	05	110		05	111		4/13/2010	239	FM		239
5 46	13	141		13	142		4/14/2010	100	FM		100
5 46	13	142		13	143		4/14/2010	240	FM		240
5 46	13	143		13	144		4/14/2010	223	FM		223
5 46	13	144		13	145		4/14/2010	336	FM		336
5 47	13	154		13	155		4/14/2010	180	FM		180
5 47	13	155		13	156		4/14/2010	214	FM		214
5 47	13	156		13	158		4/14/2010	300	FM		300
5 47	13	157		13	158		4/14/2010	265	FM		265
5 47	13	158		13	200	S	4/14/2010	253	FM		253
5 47	13	160		13	161		4/14/2010	280	FM		280
Z 01	02	048		02	068		4/14/2010	300	FM		300
Z 01	02	051		02	053		4/14/2010	175	FM		175
Z 01	02	052		02	053		4/14/2010	65	FM		65
Z 01	02	053		02	054		4/14/2010	250	FM		250
Z 01	02	054		02	055		4/14/2010	219	FM		219
Z 01	02	055		02	058		4/14/2010	274	FM		274
Z 01	02	056		02	057		4/14/2010	200	FM		200
Z 01	02	057		02	058		4/14/2010	174	FM		174
Z 01	02	058		02	061		4/14/2010	267	FM		267

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
Z 01	02	059		02	060		4/14/2010	157	FM		157
Z 01	02	060		02	061		4/14/2010	200	FM		200
Z 01	02	061		02	062		4/14/2010	200	FM		200
Z 01	02	062		02	063		4/14/2010	325	FM		325
Z 01	02	063		02	065		4/14/2010	205	FM		205
Z 01	02	064		02	065		4/14/2010	112	FM		112
Z 01	02	065		02	066		4/14/2010	350	FM		350
Z 01	02	066		02	067		4/14/2010	100	FM		100
Z 01	02	067		02	068		4/14/2010	277	FM		277
Z 01	02	068		02	069		4/14/2010	344	FM		344
Z 02	01	004		02	069		4/14/2010	330	FM		330
Z 02	02	090		02	091		4/14/2010	600	FM		600
5 46	13	107		13	121		4/15/2010	157	FM		157
5 46	13	121		13	122		4/15/2010	137	FM		137
5 46	13	122		13	123		4/15/2010	362	FM		362
5 46	13	124		13	125		4/15/2010	300	FM		300
5 46	13	124		13	197	C	4/15/2010	120	FM		120
5 46	13	123		13	125		4/15/2010	163	FM		163
5 46	13	125		13	130		4/15/2010	300	FM		300
5 46	13	129		13	130		4/15/2010	283	FM		283
5 46	13	130		13	146		4/15/2010	326	FM		326
5 46	13	145		13	146		4/15/2010	333	FM		333
5 46	13	146		13	149		4/15/2010	141	FM		141
5 46	13	147		13	148		4/15/2010	305	FM		305
5 46	13	148		13	149		4/15/2010	295	FM		295
5 46	13	149		13	150		4/15/2010	288	FM		288
5 47	13	151		13	152		4/15/2010	304	FM		304
Z 02	01	004		01	005		4/15/2010	60	FM		60
Z 02	01	013		01	017		4/15/2010	425	FM		425
Z 02	01	016		01	017		4/15/2010	175	FM		175
Z 02	01	018		01	019		4/15/2010	320	FM		320
Z 02	01	022		01	023		4/15/2010	300	FM		300
Z 02	01	019		01	023		4/15/2010	355	FM		355
Z 02	01	023		01	025		4/15/2010	298	FM		298
Z 02	01	024		01	025		4/15/2010	221	FM		221
Z 02	01	025		01	026		4/15/2010	133	FM		133
Z 02	02	010		02	089		4/15/2010	325	FM		325
Z 02	01	023		02	083		4/15/2010	354	FM		354
Z 02	02	089		02	090		4/15/2010	70	FM		70
5 43	13	110		13	111		4/16/2010	300	FM		300
5 43	13	111		13	112		4/16/2010	48	FM		48
5 43	13	112		13	113		4/16/2010	58	FM		58
5 43	13	113		13	114		4/16/2010	150	FM		150
5 44	13	102		13	117		4/16/2010	200	FM		200
5 44	13	102		13	118		4/16/2010	250	FM		250
5 44	13	114		13	115		4/16/2010	188	FM		188
5 44	13	115		13	116		4/16/2010	234	FM		234
5 44	13	116		13	117		4/16/2010	72	FM		72
5 44	13	118		13	119		4/16/2010	600	FM		600
Z 02	01	026		01	027		4/16/2010	150	FM		150

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
Z 02	01	005		01	027		4/16/2010	300	FM		300
Z 02	01	027		01	028		4/16/2010	242	FM		242
Z 02	01	028		01	040		4/16/2010	300	FM		300
Z 02	01	005		02	010		4/16/2010	200	FM		200
Z 03	01	029		01	030		4/16/2010	300	FM		300
Z 03	01	031		01	032		4/16/2010	200	FM		200
Z 03	01	032		01	033		4/16/2010	353	FM		353
Z 03	01	033		01	120		4/16/2010	203	FM		203
Z 03	01	034		01	035		4/16/2010	348	FM		348
Z 03	01	034		01	120		4/16/2010	128	FM		128
Z 03	01	035		01	038		4/16/2010	342	FM		342
Z 03	01	036		01	037		4/16/2010	350	FM		350
Z 03	01	036		01	114	C	4/16/2010	176	FM		176
Z 03	01	037		01	038		4/16/2010	272	FM		272
Z 03	01	038		01	039		4/16/2010	320	FM		320
Z 03	01	030		01	039		4/16/2010	204	FM		204
Z 03	01	039		01	040		4/16/2010	200	FM		200
5 45	13	119		13	120		4/19/2010	600	FM		600
5 45	13	120		13	168		4/19/2010	332	FM		332
5 46	13	150		13	153		4/19/2010	122	FM		122
5 47	13	152		13	153		4/19/2010	300	FM		300
5 47	13	153		13	162		4/19/2010	186	FM		186
5 47	13	161		13	162		4/19/2010	277	FM		277
5 47	13	163		13	164		4/19/2010	302	FM		302
5 47	13	164		13	165		4/19/2010	288	FM		288
5 47	13	162		13	166		4/19/2010	306	FM		306
5 47	13	165		13	166		4/19/2010	200	FM		200
Z 05	01	073	C	01	117		4/19/2010	15	FM		15
Z 05	01	074		01	117		4/19/2010	100	FM		100
Z 05	01	082		01	083		4/19/2010	157	FM		157
Z 05	01	086		01	087		4/19/2010	230	FM		230
Z 05	01	087		01	088		4/19/2010	297	FM		297
Z 05	01	088		01	089		4/19/2010	200	FM		200
Z 05	01	089		01	091		4/19/2010	100	FM		100
Z 05	01	090		01	091		4/19/2010	91	FM		91
Z 05	01	091		01	092		4/19/2010	256	FM		256
Z 05	01	092		01	093		4/19/2010	304	FM		304
Z 05	01	093		01	094		4/19/2010	232	FM		232
Z 05	01	094		01	095		4/19/2010	190	FM		190
Z 05	01	095		01	096		4/19/2010	152	FM		152
Z 05	01	096		01	097		4/19/2010	150	FM		150
Z 05	01	097		01	098		4/19/2010	28	FM		28
Z 05	01	117		01	118	C	4/19/2010	140	FM		140
5 48	12	038		13	168		4/20/2010	590	FM		590
5 49	12	032		12	033		4/20/2010	212	FM		212
5 49	12	032		12	142	C	4/20/2010	93	FM		93
5 49	12	033		12	034		4/20/2010	180	FM		180
5 49	12	034		12	037		4/20/2010	345	FM		345
5 49	12	035		12	036		4/20/2010	372	FM		372
5 49	12	036		12	037		4/20/2010	213	FM		213

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 49	12	038		12	039		4/20/2010	102	FM		102
5 49	12	039		12	040		4/20/2010	250	FM		250
Z 04	01	050		01	051		4/20/2010	68	FM		68
Z 04	01	051		01	052		4/20/2010	99	FM		99
Z 04	01	052		01	053		4/20/2010	120	FM		120
Z 05	01	072		01	075		4/20/2010	115	FM		115
Z 05	01	074		01	075		4/20/2010	150	FM		150
Z 05	01	075		01	076		4/20/2010	102	FM		102
Z 05	01	076		01	077		4/20/2010	95	FM		95
Z 05	01	077		01	078		4/20/2010	182	FM		182
Z 05	01	078		01	079		4/20/2010	180	FM		180
Z 05	01	079		01	080		4/20/2010	212	FM		212
Z 05	01	080		01	081		4/20/2010	216	FM		216
Z 05	01	081		01	084		4/20/2010	216	FM		216
Z 05	01	083		01	084		4/20/2010	250	FM		250
Z 05	01	084		01	085		4/20/2010	118	FM		118
Z 05	01	085		01	098		4/20/2010	224	FM		224
Z 05	01	098		01	099		4/20/2010	198	FM		198
Z 05	01	099		01	100		4/20/2010	87	FM		87
Z 06	01	100		01	101		4/20/2010	335	FM		335
Z 03	01	040		01	041		4/29/2010	375	FM		375
Z 03	01	041		01	042		4/29/2010	223	FM		223
Z 03	01	042		01	043		4/29/2010	267	FM		267
Z 03	01	043		01	044		4/29/2010	142	FM		142
Z 04	01	044		01	067		4/29/2010	50	FM		50
Z 04	01	064		01	065		4/29/2010	100	FM		100
Z 04	01	065		01	066		4/29/2010	75	FM		75
Z 04	01	066		01	067		4/29/2010	85	FM		85
Z 04	01	067		01	068		4/30/2010	401	FM		401
Z 06	01	068		01	069		4/30/2010	50	FM		50
1 23	22	075	S	22	076	S	5/3/2010	48	FM	3	192
3E11	25	008	S	25	009	S	5/3/2010	48	FM	3	192
4S01	19	096	S	19	097	S	5/3/2010	66	FM	3	264
4S01	19	097	S	19	098	S	5/3/2010	183	FM	3	732
4S01	19	098	S	19	099	S	5/3/2010	206	FM	3	824
5 22	14	200	S	14	201	S	5/3/2010	50	FM	3	200
5 24	14	080	S	14	081	S	5/3/2010	52	FM	3	208
5 24	14	082		14	087	P	5/3/2010	175	FM	3	700
5 38	13	105	P	13	106	P	5/3/2010	315	FM	3	1260
5 40	13	106		13	107		5/3/2010	425	FM	3	1700
5 40	13	107		13	108		5/3/2010	303	FM	3	1212
5 40	13	109		13	110		5/3/2010	30	FM	3	120
5 46	13	131		13	207	D	5/3/2010	45	FM		45
5 46	13	131	P	13	132	P	5/3/2010	305	FM	3	1220
5 46	13	132	P	13	133	P	5/3/2010	310	FM	3	1240
5 47	13	159	S	13	200	S	5/3/2010	48	FM	3	192
5 47	13	166	P	13	167	P	5/3/2010	310	FM	3	1240
5 47	13	167	P	13	168	P	5/3/2010	18	FM	3	72
5 49	12	037	P	12	039	P	5/3/2010	155	FM	3	620
5 49	12	041	S	12	042	S	5/3/2010	80	FM	3	320

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 53	12	100	P	12	101	P	5/3/2010	325	FM	3	1300
5 53	12	101	P	12	102	P	5/3/2010	340	FM	3	1360
5 53	12	102	P	12	103	P	5/3/2010	275	FM	3	1100
5 53	12	103	P	12	133	P	5/3/2010	285	FM	3	1140
5 55	12	110		12	111		5/3/2010	165	FM	3	660
5 55	12	110		12	140		5/3/2010	165	FM	3	660
7S07	12	115	P	12	116	P	5/3/2010	340	FM	3	1360
Z 02	01	017	P	01	018	P	5/3/2010	175	FM	3	700
Z 06	01	069		01	070		5/3/2010	360	FM		360
Z 06	01	070		01	071		5/3/2010	325	FM		325
Z 06	01	071		01	102		5/3/2010	325	FM		325
Z 06	01	101		01	102		5/3/2010	272	FM		272
Z 06	01	102		01	115		5/3/2010	52	FM		52
Z 06	01	103		01	115		5/3/2010	342	FM		342
Z 06	01	103		01	104		5/3/2010	374	FM		374
1 25	21	135	S	21	136	S	5/4/2010	48	FM	3	192
3S17	25	080	M	25	125		5/4/2010	330	FM	3	1320
3S18	25	125		25	126	S	5/4/2010	8	FM	3	32
3S18	25	126	S	25	127	S	5/4/2010	22	FM	3	88
3S22	19	039	S	19	040	S	5/4/2010	25	FM	3	100
3S22	19	040	S	19	041	S	5/4/2010	65	FM	3	260
3S01	29	036		29	039		5/5/2010	215	FM		215
3S01	29	036		36	014		5/5/2010	333	FM		333
3S01	29	037		29	038		5/5/2010	265	FM		265
3S01	29	038		29	039		5/5/2010	260	FM		260
3S01	29	041	C	29	046		5/5/2010	113	FM		113
3S01	29	043		29	045		5/5/2010	381	FM		381
3S01	29	043		36	027		5/5/2010	375	FM		375
3S01	29	044		29	045		5/5/2010	300	FM		300
3S01	29	045		29	046		5/5/2010	213	FM		213
3S01	29	046		29	047		5/5/2010	192	FM		192
3S01	29	047		29	048		5/5/2010	200	FM		200
3S01	36	006		36	007		5/5/2010	195	FM		195
3S01	36	007		36	008		5/5/2010	391	FM		391
3S01	36	008		36	011		5/5/2010	300	FM		300
3S01	36	008		36	031	C	5/5/2010	112	FM		112
3S01	36	009		36	010		5/5/2010	146	FM		146
3S01	36	010		36	011		5/5/2010	366	FM		366
3S01	36	011		36	013		5/5/2010	283	FM		283
3S01	36	012		36	013		5/5/2010	420	FM		420
3S01	36	013		36	014		5/5/2010	203	FM		203
3E10	25	026	P	25	037	P	5/5/2010	344	FM	3	1376
3E12	25	037	P	25	038	P	5/5/2010	330	FM	3	1320
4N09	12	060	P	12	061	P	5/5/2010	305	FM	3	1220
4N09	12	061	P	12	062	P	5/5/2010	305	FM	3	1220
4N09	12	062	P	12	063	P	5/5/2010	95	FM	3	380
4S04	12	069		12	072		5/5/2010	385	FM	3	1540
4S04	12	072		12	073		5/5/2010	185	FM	3	740
6S16	12	021	S	12	022	S	5/5/2010	100	FM	3	400
6W05	12	008	P	12	009	P	5/5/2010	310	FM	3	1240

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
1 24	21	081	P	21	082	P	5/6/2010	300	FM	3	1200
3S14	25	064	P	25	066	P	5/6/2010	250	FM	3	1000
3S14	25	065	P	25	066	P	5/6/2010	150	FM	3	600
3S15	25	066	P	25	067	P	5/6/2010	90	FM	3	360
3S16	25	067	P	25	069	P	5/6/2010	250	FM	3	1000
3S16	25	068		25	069	P	5/6/2010	180	FM	3	720
3S16	25	069	P	25	070	P	5/6/2010	50	FM	3	200
3S23	19	042	S	19	074		5/6/2010	215	FM	3	860
3S23	19	074		19	075		5/6/2010	268	FM	3	1072
4N06	18	037	S	18	040	P	5/6/2010	314	FM	3	1256
5 03	15	174		15	175		5/6/2010	327	FM		327
5 04	15	145	P	15	174	P	5/6/2010	326	FM	3	1304
5 05	14	139	P	14	140	P	5/6/2010	360	FM	3	1440
5 05	14	139	P	14	212	D	5/6/2010	110	FM	3	440
1 17	27	056		27	057		5/7/2010	265	FM	3	1060
1 17	27	057		27	058		5/7/2010	295	FM	3	1180
1 17	27	058		27	059		5/7/2010	109	FM	3	436
1 17	27	059		27	060		5/7/2010	300	FM	3	1200
1 20	20	019	P	20	020	P	5/7/2010	350	FM	3	1400
1 21	21	130	P	21	131	P	5/7/2010	162	FM	3	648
1 21	21	131	P	21	132		5/7/2010	293	FM	3	1172
1 21	21	132	P	21	141	P	5/7/2010	111	FM	3	444
1 21	21	133	P	21	141	P	5/7/2010	185	FM	3	740
A 03	04	074	P	04	139	P	5/7/2010	175	FM	3	700
A 03	04	075	P	04	139	P	5/7/2010	120	FM	3	480
A 03	04	075	P	04	077	P	5/7/2010	125	FM	3	500
A 03	04	076	P	04	147	C	5/7/2010	81	FM	3	324
A 03	04	076	P	04	077	P	5/7/2010	102	FM	3	408
A 03	04	076	P	04	156	C	5/7/2010	102	FM	3	408
A 03	04	077	P	04	078	P	5/7/2010	90	FM	3	360
A 03	04	078	P	04	081		5/7/2010	85	FM	3	340
5 33	20	138	P	20	139	P	5/12/2010	140	FM	3	560
5 33	20	139	P	20	140	P	5/12/2010	170	FM	3	680
5 36	20	140		20	143		5/12/2010	355	FM	3	1420
5 36	20	142	M	20	143		5/12/2010	310	FM	3	1240
5 36	20	143		20	144		5/12/2010	215	FM	3	860
5 36	13	196	P	20	144	P	5/12/2010	255	FM	3	1020
A 01	08	005	P	08	006	P	5/12/2010	116	FM	3	464
A 01	08	006	P	08	007	P	5/12/2010	100	FM	3	400
A 01	08	007	P	08	008	P	5/12/2010	241	FM	3	964
3S05	29	088		29	089		5/15/2010	266	FM		266
5 11	14	108		14	109	P	5/19/2010	130	FM	3	520
5 11	14	109	P	14	110	P	5/19/2010	350	FM	3	1400
5 11	14	110	P	14	112	P	5/19/2010	290	FM	3	1160
5 11	14	111	P	14	112	P	5/19/2010	290	FM	3	1160
5 11	14	112	P	14	113	P	5/19/2010	84	FM	3	336
5 11	14	113	P	14	114	P	5/19/2010	168	FM	3	672
5 11	14	114	P	14	118	P	5/19/2010	250	FM	3	1000
5 11	14	117	P	14	118	P	5/19/2010	135	FM	3	540
5 11	14	117	P	14	202	P	5/19/2010	50	FM	3	200

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 11	14	118	P	14	119		5/19/2010	315	FM	3	1260
5 37	13	090	P	13	091	T	5/19/2010	295	FM	3	1180
5 37	13	091	T	13	092	T	5/19/2010	18	FM	3	72
6S17	07	176	P	07	177	P	5/19/2010	270	FM	3	1080
4S02	12	080	P	12	081	P	5/20/2010	377	FM	3	1508
4S02	12	081	P	12	082	P	5/20/2010	11	FM	3	44
4S04	12	078	M	12	081		5/20/2010	316	FM	3	1264
4S04	12	079	P	12	081	P	5/20/2010	330	FM	3	1320
4S04	12	079	P	12	137	D	5/20/2010	170	FM	3	680
4S04	12	080	P	12	141	D	5/20/2010	53	FM	3	212
4W03	12	093	P	12	094	P	5/20/2010	293	FM	3	1172
4W03	12	094	P	12	095	P	5/20/2010	224	FM	3	896
7S07	12	116	P	12	117	P	5/20/2010	295	FM	3	1180
2 01	34	001		35	001		5/21/2010	315	FM		315
2 01	34	001		35	002		5/21/2010	250	FM		250
2 01	35	002		35	004		5/21/2010	275	FM		275
2 01	35	003		35	004		5/21/2010	176	FM		176
2 01	35	006		35	007		5/21/2010	352	FM		352
2 01	35	007		35	010		5/21/2010	345	FM		345
2 01	35	008		35	009		5/21/2010	317	FM		317
2 01	35	009		35	010		5/21/2010	300	FM		300
2 01	35	010		35	011		5/21/2010	174	FM		174
2 01	31	003		31	004		5/24/2010	338	FM		338
2 01	31	003		35	039		5/24/2010	250	FM		250
2 01	31	003		35	046		5/24/2010	78	FM		78
2 01	31	004		31	006		5/24/2010	151	FM		151
2 01	31	005		31	006		5/24/2010	294	FM		294
2 01	31	006		31	007		5/24/2010	172	FM		172
2 01	31	007		31	009		5/24/2010	175	FM		175
2 01	31	008		31	009		5/24/2010	300	FM		300
2 01	31	009		31	010		5/24/2010	125	FM		125
2 01	31	010		31	037		5/24/2010	140	FM		140
2 01	31	037		31	038		5/24/2010	190	FM		190
2 01	35	004		35	005		5/24/2010	230	FM		230
2 01	35	005		35	012		5/24/2010	350	FM		350
2 01	35	011		35	012		5/24/2010	222	FM		222
2 01	35	012		35	013		5/24/2010	323	FM		323
2 01	35	013		35	015		5/24/2010	210	FM		210
2 01	35	014		35	015		5/24/2010	310	FM		310
2 01	35	015		35	016		5/24/2010	124	FM		124
2 01	35	016		35	017		5/24/2010	320	FM		320
2 01	35	017		35	018		5/24/2010	320	FM		320
2 01	35	018		35	036		5/24/2010	320	FM		320
2 01	35	019		35	020		5/24/2010	230	FM		230
2 01	35	020		35	022		5/24/2010	235	FM		235
2 01	35	021		35	022		5/24/2010	340	FM		340
2 01	35	022		35	023		5/24/2010	225	FM		225
2 01	35	023		35	031		5/24/2010	125	FM		125
2 01	35	024		35	025		5/24/2010	297	FM		297
2 01	35	025		35	026		5/24/2010	303	FM		303

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
2 01	35	026		35	027		5/24/2010	187	FM		187
2 01	35	027		35	028		5/24/2010	300	FM		300
2 01	35	028		35	029		5/24/2010	225	FM		225
2 01	35	029		35	030		5/24/2010	150	FM		150
2 01	35	030		35	031		5/24/2010	159	FM		159
2 01	35	031		35	034		5/24/2010	110	FM		110
2 01	35	032		35	033		5/24/2010	350	FM		350
2 01	35	033		35	034		5/24/2010	340	FM		340
2 01	35	034		35	035		5/24/2010	270	FM		270
2 01	35	035		35	036		5/24/2010	275	FM		275
2 01	35	035		35	040		5/24/2010	40	FM		40
2 01	35	036		35	037		5/24/2010	125	FM		125
2 01	35	037		35	038		5/24/2010	250	FM		250
2 01	35	038		35	043		5/24/2010	125	FM		125
2 01	35	039		35	043		5/24/2010	125	FM		125
2 01	35	040		35	041		5/24/2010	118	FM		118
2 01	35	041		35	042		5/24/2010	349	FM		349
2 01	35	043		35	044		5/24/2010	133	FM		133
2 01	35	044		35	045	C	5/24/2010	162	FM		162
2 01	31	043		31	044		5/25/2010	173	FM		173
2 01	31	044		31	045		5/25/2010	202	FM		202
2 01	31	044		31	048		5/25/2010	165	FM		165
2 01	31	045		31	046		5/25/2010	300	FM		300
2 01	31	046		31	047		5/25/2010	350	FM		350
2 01	31	048		31	049		5/25/2010	276	FM		276
2 01	30	021		30	022		5/26/2010	185	FM		185
2 01	30	022		31	002		5/26/2010	326	FM		326
2 01	31	001		31	002		5/26/2010	190	FM		190
2 01	31	011		31	015		5/26/2010	230	FM		230
2 01	31	012		31	014		5/26/2010	82	FM		82
2 01	31	013		31	014		5/26/2010	203	FM		203
2 01	31	014		31	015		5/26/2010	200	FM		200
2 01	34	026		34	027		5/26/2010	160	FM		160
2 01	34	027		34	028		5/26/2010	65	FM		65
2 01	34	027		34	029		5/26/2010	74	FM		74
2 01	34	028		34	030		5/26/2010	64	FM		64
7E03	11	042		11	043		5/26/2010	325	FM		325
7E03	11	032	M	11	048		5/26/2010	347	FM		347
7E03	11	043		11	048		5/26/2010	300	FM		300
7E03	11	047		11	048		5/26/2010	100	FM		100
2 01	34	008		34	009		5/27/2010	181	FM		181
2 01	34	009		34	010		5/27/2010	133	FM		133
2 01	34	010		34	011		5/27/2010	160	FM		160
2 01	34	011		34	012		5/27/2010	161	FM		161
2 01	34	012		34	013		5/27/2010	161	FM		161
2 01	34	013		34	014		5/27/2010	86	FM		86
2 01	34	014		34	015		5/27/2010	54	FM		54
2 01	34	015		34	020		5/27/2010	158	FM		158
2 01	34	016		34	017		5/27/2010	215	FM		215
2 01	34	017		34	018		5/27/2010	155	FM		155

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
2 01	34	018		34	019		5/27/2010	147	FM		147
2 01	34	020		34	021		5/27/2010	207	FM		207
2 01	34	021		34	022		5/27/2010	156	FM		156
2 01	34	024		34	025		5/27/2010	297	FM		297
2 01	34	002		34	003		5/28/2010	300	FM		300
2 01	34	002		35	047		5/28/2010	290	FM		290
2 01	34	003		34	004		5/28/2010	300	FM		300
2 01	34	005		34	006		5/28/2010	72	FM		72
2 01	34	006		34	007		5/28/2010	70	FM		70
2 01	34	007		34	008		5/28/2010	125	FM		125
2 01	34	007		34	031		5/28/2010	55	FM		55
2 01	34	023		34	033		5/28/2010	50	FM		50
2 01	34	031		34	032		5/28/2010	255	FM		255
2 03	25	172		25	173		6/1/2010	119	FM		119
2 03	25	172		30	023		6/1/2010	350	FM		350
2 03	25	173		25	176		6/1/2010	213	FM		213
2 03	25	174		25	175		6/1/2010	200	FM		200
2 03	25	175		25	176		6/1/2010	200	FM		200
2 03	25	179		25	180		6/1/2010	173	FM		173
2 03	25	180		25	181		6/1/2010	197	FM		197
2 03	25	181		25	182		6/1/2010	230	FM		230
2 03	25	182		26	001		6/1/2010	202	FM		202
2 03	25	182		30	012		6/1/2010	360	FM		360
2 03	30	008		30	009		6/1/2010	323	FM		323
2 03	30	009		30	010		6/1/2010	251	FM		251
2 03	30	010		30	012		6/1/2010	236	FM		236
2 03	30	011		30	012		6/1/2010	240	FM		240
2 03	30	013		30	014		6/1/2010	323	FM		323
2 03	30	013		30	024	C	6/1/2010	50	FM		50
2 03	30	014		30	015		6/1/2010	295	FM		295
2 03	30	015		30	016		6/1/2010	353	FM		353
2 03	30	016		30	017		6/1/2010	325	FM		325
2 03	30	017		30	018		6/1/2010	303	FM		303
2 03	30	018		30	019		6/1/2010	269	FM		269
2 03	30	019		30	020		6/1/2010	255	FM		255
2 01	31	002		31	016		6/2/2010	211	FM		211
2 01	31	015		31	016		6/2/2010	205	FM		205
2 01	31	016		31	017		6/2/2010	282	FM		282
2 01	31	016		31	035		6/2/2010	300	FM		300
2 01	31	035		31	036		6/2/2010	297	FM		297
2 01	31	036		31	040		6/2/2010	200	FM		200
2 01	31	041		31	043		6/2/2010	164	FM		164
2 01	31	041		35	047		6/2/2010	300	FM		300
2 01	31	040		31	042		6/2/2010	407	FM		407
2 01	31	042		31	043		6/2/2010	114	FM		114
2 02	31	017		31	018		6/2/2010	217	FM		217
2 03	25	171		26	005		6/2/2010	315	FM		315
2 03	25	176		25	177		6/2/2010	125	FM		125
2 03	25	177		25	178		6/2/2010	188	FM		188
2 03	25	178		26	003		6/2/2010	190	FM		190

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
2 02	31	018		31	019		6/3/2010	223	FM		223
2 02	31	019		31	020		6/3/2010	265	FM		265
2 02	31	019		31	050		6/3/2010	142	FM		142
2 02	31	020		31	021		6/3/2010	235	FM		235
2 02	31	021		31	022		6/3/2010	295	FM		295
2 02	31	022		31	023		6/3/2010	352	FM		352
2 02	31	023		31	024		6/3/2010	352	FM		352
2 02	31	024		31	025		6/3/2010	350	FM		350
2 03	26	001		26	002		6/3/2010	300	FM		300
2 03	26	002		31	030		6/3/2010	230	FM		230
2 03	30	020		31	027		6/3/2010	255	FM		255
2 03	31	025		31	026		6/3/2010	441	FM		441
2 03	31	026		31	027		6/3/2010	126	FM		126
2 03	31	027		31	028		6/3/2010	151	FM		151
2 03	31	028		31	029		6/3/2010	335	FM		335
2 03	31	029		31	030		6/3/2010	228	FM		228
2 04	31	031		31	052		6/4/2010	69	FM		69
2 04	31	052		31	053		6/4/2010	81	FM		81
2 04	31	053		31	054		6/4/2010	71	FM		71
2 04	31	054		31	055		6/4/2010	54	FM		54
2 04	31	055		31	056		6/4/2010	185	FM		185
2 04	31	057		31	058		6/4/2010	286	FM		286
2 04	31	058		31	059		6/4/2010	232	FM		232
2 04	31	059		31	060		6/4/2010	232	FM		232
2 03	25	170		25	202		6/7/2010	204	FM		204
2 03	25	170		26	007		6/7/2010	180	FM		180
2 03	26	002		26	004		6/7/2010	260	FM		260
2 03	26	003		26	004		6/7/2010	249	FM		249
2 03	26	004		26	006		6/7/2010	300	FM		300
2 03	26	005		26	006		6/7/2010	300	FM		300
2 03	26	006		26	008		6/7/2010	290	FM		290
2 03	26	007		26	008		6/7/2010	300	FM		300
2 03	26	008		26	009		6/7/2010	200	FM		200
2 04	26	010		26	011		6/7/2010	253	FM		253
2 04	26	010		31	032		6/7/2010	267	FM		267
2 04	26	011		26	012		6/7/2010	259	FM		259
2 04	26	012		26	013		6/7/2010	236	FM		236
2 04	26	013		26	014		6/7/2010	86	FN		86
2 04	26	014		26	015		6/7/2010	185	FM		185
2 04	26	015		26	016		6/7/2010	177	FM		177
2 04	26	020		26	021		6/7/2010	178	FM		178
2 04	26	021		26	022		6/7/2010	138	FM		138
2 04	26	022		26	023		6/7/2010	306	FM		306
2 04	26	023		26	024		6/7/2010	300	FM		300
2 04	26	024		26	025		6/7/2010	300	FM		300
2 04	26	030		26	031		6/7/2010	245	FM		245
2 04	26	031		26	032		6/7/2010	300	FM		300
2 04	31	031		31	032		6/7/2010	300	FM		300
3S01	29	103		36	022		6/7/2010	125	FM		125
3S01	36	015		36	016		6/7/2010	163	FM		163

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
3S01	36	016		36	017		6/7/2010	312	FM		312
3S01	36	020		36	021		6/7/2010	352	FM		352
3S01	36	020		36	030	D	6/7/2010	47	FM		47
3S01	36	021		36	022		6/7/2010	345	FM		345
3S01	36	022		36	039		6/7/2010	160	FM		160
3S01	36	033		36	034		6/7/2010	188	FM		188
3S01	36	034		36	035		6/7/2010	96	FM		96
3S01	36	035		36	036		6/7/2010	35	FM		35
3S01	36	036		36	037		6/7/2010	138	FM		138
3S01	36	037		36	038		6/7/2010	89	FM		89
3S01	36	038		36	039		6/7/2010	26	FM		26
2 03	26	009		26	034		6/8/2010	200	FM		200
2 04	26	016		26	019		6/8/2010	242	FM		242
2 04	26	017		26	018		6/8/2010	184	FM		184
2 04	26	018		26	019		6/8/2010	182	FM		182
2 04	26	019		26	026		6/8/2010	273	FM		273
2 04	26	025		26	026		6/8/2010	273	FM		273
2 04	26	026		26	029		6/8/2010	238	FM		238
2 04	26	027		26	028		6/8/2010	164	FM		164
2 04	26	028		26	029		6/8/2010	226	FM		226
2 04	26	029		26	033		6/8/2010	20	FM		20
2 04	26	032		26	033		6/8/2010	287	FM		287
2 04	26	033		26	034		6/8/2010	303	FM		303
2 04	26	034		26	035		6/8/2010	214	FM		214
2 05	26	035		26	036		6/8/2010	230	FM		230
2 05	26	036		26	037		6/8/2010	202	FM		202
3S05	29	074	C	29	075		6/8/2010	174	FM		174
3S05	29	075		29	083		6/8/2010	426	FM		426
3S05	29	076		29	077		6/8/2010	260	FM	3	1040
3S05	29	077		29	078		6/8/2010	175	FM	3	700
3S05	29	078		29	080		6/8/2010	195	FM	3	780
3S05	29	079		29	080		6/8/2010	208	FM		208
3S05	29	080		29	081		6/8/2010	70	FM	3	280
3S05	29	081		29	082		6/8/2010	215	FM	3	860
3S05	29	082		29	083		6/8/2010	299	FM		299
3S05	29	091		29	092		6/8/2010	292	FM		292
3S05	29	092		29	093		6/8/2010	99	FM		99
3S05	29	093		29	094		6/8/2010	156	FM		156
3S05	29	094		29	095		6/8/2010	28	FM		28
3S05	29	095		29	114	T	6/8/2010	44	FM		44
2 05	25	158		25	159		6/9/2010	233	FM		233
2 05	25	159		25	160		6/9/2010	305	FM		305
2 05	25	160		26	040		6/9/2010	300	FM		300
2 05	25	161		25	168		6/9/2010	130	FM		130
2 05	25	162		25	163		6/9/2010	271	FM		271
2 05	25	163		25	166		6/9/2010	212	FM		212
2 05	25	164		25	166		6/9/2010	100	FM		100
2 05	25	165		25	166		6/9/2010	325	FM		325
2 05	25	166		25	167		6/9/2010	217	FM		217
2 05	25	167		25	168		6/9/2010	208	FM		208

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
2 05	25	168		25	169		6/9/2010	330	FM		330
2 05	25	169		26	038		6/9/2010	287	FM		287
2 05	26	037		26	039		6/14/2010	250	FM		250
2 05	26	038	P	26	039	P	6/14/2010	315	FM	3	1260
2 05	26	039		26	041		6/14/2010	162	FM		162
2 05	26	040		26	041		6/14/2010	290	FM		290
2 05	26	041		26	043		6/14/2010	200	FM		200
2 05	26	043		26	044		6/14/2010	338	FM		338
2 05	26	044		26	045		6/14/2010	338	FM		338
3S05	29	083		29	084		6/14/2010	258	FM		258
3S05	29	084		29	110		6/14/2010	187	FM		187
3S05	29	085		29	110		6/14/2010	223	FM		223
3S05	29	086	C	29	087		6/14/2010	123	FM		123
3S05	29	087		29	088		6/14/2010	302	FM		302
3S05	29	110		29	111		6/14/2010	33	FM		33
3S05	29	111		29	112		6/14/2010	67	FM		67
3S05	29	112		29	113		6/14/2010	183	FM		183
2 05	26	045		26	046		6/15/2010	10	FM		10
2 05	26	046		26	047		6/15/2010	310	FM		310
2 06	25	145		25	146		6/15/2010	245	FM		245
2 06	25	146		25	147		6/15/2010	246	FM		246
2 06	25	147		25	150		6/15/2010	248	FM		248
2 06	25	148		25	150		6/15/2010	234	FM		234
2 06	25	149		25	150		6/15/2010	299	FM		299
2 06	25	149		26	182		6/15/2010	259	FM		259
2 06	25	150		25	151		6/15/2010	339	FM		339
2 06	25	151		25	152	S	6/15/2010	307	FM		307
2 06	25	152	S	25	153	S	6/15/2010	48	FM	3	192
2 06	25	153	S	25	154		6/15/2010	328	FM		328
2 07	25	140	P	25	141	P	6/15/2010	200	FM	3	800
2 07	25	141	P	25	144	P	6/15/2010	180	FM	3	720
2 07	25	142		25	144		6/15/2010	149	FM		149
2 07	25	143		25	144		6/15/2010	100	FM		100
2 07	25	144	P	26	068	P	6/15/2010	323	FM	3	1292
2 07	26	066		26	068		6/15/2010	151	FM		151
2 07	26	067		26	068		6/15/2010	112	FM		112
3S01	29	035		29	040		6/15/2010	247	FM		247
3S01	29	035		36	026		6/15/2010	151	FM		151
3S01	29	039		29	040		6/15/2010	164	FM		164
3S01	36	017		36	018		6/15/2010	273	FM		273
3S01	36	018		36	028	C	6/15/2010	206	FM		206
3S01	36	018		36	040		6/15/2010	143	FM		143
3S01	36	019		36	025		6/15/2010	200	FM		200
3S01	36	019		36	040		6/15/2010	89	FM		89
3S01	36	025		36	032		6/15/2010	134	FM		134
3S01	36	026		36	032		6/15/2010	118	FM		118
3S01	36	032		36	033		6/15/2010	178	FM		178
2 06	25	154		25	156		6/16/2010	332	FM		332
2 06	25	155		25	156		6/16/2010	136	FM		136
2 06	25	156		25	157		6/16/2010	340	FM		340

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
2 06	26	048		26	055		6/16/2010	248	FM		248
2 06	26	049		26	050		6/16/2010	296	FM		296
2 06	26	050		26	051		6/16/2010	285	FM		285
2 06	26	051		26	052		6/16/2010	312	FM		312
2 06	26	052		26	053		6/16/2010	301	FM		301
2 06	26	053		26	054		6/16/2010	300	FM		300
2 06	26	054		26	055		6/16/2010	363	FM		363
2 06	26	055		26	056		6/16/2010	348	FM		348
2 06	26	056		26	057		6/16/2010	340	FM		340
2 06	26	057		26	058		6/16/2010	342	FM		342
2 07	19	166		20	068		6/16/2010	273	FM		273
2 07	19	166		25	137		6/16/2010	190	FM		190
2 07	20	068		26	078		6/16/2010	245	FM		245
2 07	25	136		25	137		6/16/2010	229	FM		229
2 07	25	138		25	139		6/16/2010	306	FM		306
3S01	29	037		29	109		6/16/2010	45	FM		45
3S01	29	040		29	108		6/16/2010	483	FM		483
3S01	29	042		29	049		6/16/2010	302	FM		302
3S01	29	042		29	108		6/16/2010	247	FM		247
3S01	29	048		29	049		6/16/2010	100	FM		100
3S01	36	001		36	003		6/16/2010	371	FM		371
3S01	36	002		36	003		6/16/2010	245	FM		245
3S02	29	059		29	060		6/16/2010	97	FM		97
3S02	29	060		29	061		6/16/2010	217	FM		217
3S02	29	061		29	062		6/16/2010	273	FM		273
3S02	29	062		29	063		6/16/2010	209	FM		209
2 07	19	167		19	168		6/18/2010	211	FM		211
2 07	19	168		20	074		6/18/2010	250	FM		250
2 07	26	061		26	062		6/18/2010	323	FM		323
2 07	26	062		26	063		6/18/2010	327	FM		327
2 07	26	063		26	064		6/18/2010	323	FM		323
2 07	26	064		26	065		6/18/2010	323	FM		323
2 07	26	072		26	073		6/18/2010	322	FM		322
2 07	26	073		26	074		6/18/2010	318	FM		318
2 07	26	074		26	075		6/18/2010	316	FM		316
2 07	26	075		26	076		6/18/2010	325	FM		325
2 08	19	169		19	170	S	6/18/2010	30	FM		30
2 08	19	169		25	135		6/18/2010	192	FM		192
2 08	19	170	S	19	171	S	6/18/2010	9	FM	3	36
2 08	19	171	S	19	172	S	6/18/2010	36	FM	3	144
2 08	19	172	S	19	173	S	6/18/2010	9	FM	3	36
2 08	19	173	S	19	175		6/18/2010	117	FM		117
2 08	19	174		19	175		6/18/2010	172	FM		172
2 08	19	175		19	176		6/18/2010	351	FM		351
2 08	19	176		19	177		6/18/2010	193	FM		193
2 08	19	177		19	183		6/18/2010	350	FM		350
2 08	19	178		19	179		6/18/2010	153	FM		153
2 08	19	179		19	180		6/18/2010	200	FM		200
2 08	19	180		19	181		6/18/2010	79	FM		79
2 08	19	181		19	182		6/18/2010	296	FM		296

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
2 08	19	181		20	096		6/18/2010	260	FM		260
2 08	19	182		19	183		6/18/2010	98	FM		98
2 08	19	183		19	184		6/18/2010	130	FM		130
2 08	19	184		19	185		6/18/2010	240	FM		240
2 08	19	185		19	186		6/18/2010	238	FM		238
2 08	19	186		19	187		6/18/2010	200	FM		200
2 08	19	187		19	189		6/18/2010	7	FM		7
2 08	19	188		19	189		6/18/2010	317	FM		317
2 08	25	133		25	134		6/18/2010	119	FM		119
2 08	25	134		25	135		6/18/2010	305	FM		305
2 08	19	189		20	087		6/23/2010	241	FM		241
2 08	20	078		20	079		6/23/2010	275	FM		275
2 08	20	079		20	080		6/23/2010	261	FM		261
2 08	20	080		20	081		6/23/2010	51	FM		51
2 08	20	081		20	082		6/23/2010	267	FM		267
2 08	20	082		20	083		6/23/2010	299	FM		299
2 08	20	083		20	084		6/23/2010	281	FM		281
2 08	20	092		20	093		6/23/2010	248	FM		248
2 09	20	052		20	053		6/23/2010	236	FM		236
2 10	20	053		20	054		6/23/2010	228	FM		228
2 10	20	054		20	055	M	6/23/2010	238	FM		238
2 10	20	055	M	20	146		6/23/2010	98	FM		98
2 11	20	060		20	061		6/23/2010	414	FM		414
2 11	20	061		20	062		6/23/2010	185	FM		185
2 11	20	062		20	063		6/23/2010	323	FM		323
2 11	20	063		20	146		6/23/2010	236	FM		236
2 05	26	047		26	059		6/24/2010	315	FM		315
2 06	25	157		26	059		6/24/2010	310	FM		310
2 06	26	058		26	059		6/24/2010	410	FM		410
2 06	26	059		26	060	M	6/24/2010	363	FM		363
2 06	26	060		26	069	M	6/24/2010	319	FM		319
2 07	20	068		20	069		6/24/2010	280	FM		280
2 07	20	069		20	070		6/24/2010	126	FM		126
2 07	20	069		26	077		6/24/2010	194	FM		194
2 07	25	139		26	070		6/24/2010	345	FM		345
2 07	26	065	P	26	069	P	6/24/2010	333	FM	3	1332
2 07	26	068	P	26	069	P	6/24/2010	184	FM	3	736
2 07	26	069		26	070		6/24/2010	287	FM		287
2 07	26	070		26	077		6/24/2010	350	FM		350
2 07	26	076		26	077		6/24/2010	320	FM		320
2 10	20	054		20	153		6/24/2010	14	FM		14
2 11	20	063		20	064		6/24/2010	224	FM		224
2 11	20	066		20	067		6/24/2010	139	FM		139
2 11	20	151		20	152		6/24/2010	400	FM		400
2 11	20	152		20	153		6/24/2010	419	FM		419
3S03	24	148		24	150		6/24/2010	140	FM		140
3S03	24	149		24	150		6/24/2010	190	FM		190
3S03	24	152		24	153		6/24/2010	85	FM		85
3S03	24	153		24	154		6/24/2010	177	FM		177
3S03	24	154		29	023		6/24/2010	148	FM		148

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
3S03	24	155		29	024		6/24/2010	189	FM		189
3S03	29	022		29	023		6/24/2010	375	FM		375
3S03	29	023		29	024		6/24/2010	298	FM		298
3S03	29	024		29	025		6/24/2010	226	FM		226
3S03	29	025		29	026		6/24/2010	218	FM		218
A 03	04	081		04	082		7/2/2009	248	JM	6	496
A 04	04	082		04	124	C	7/2/2009	186	JM	6	372
A 07	03	082		04	089		7/2/2009	400	JM	6	800
6W01	03	115		07	018		7/6/2009	152	JM	6	304
6W01	07	016		07	017		7/6/2009	92	JM	6	184
6W01	07	017		07	018		7/6/2009	287	JM	6	574
5 17	10	032		10	033		7/8/2009	400	JM	6	800
5 17	10	036		10	086		7/8/2009	180	JM	6	360
6S09	08	187		08	188		7/8/2009	400	JM	6	800
A 01	07	019		07	020		7/8/2009	78	JM	6	156
5 17	10	053		10	066		7/13/2009	207	JM	6	414
5 17	10	056		10	057		7/13/2009	384	JM	6	768
5 17	10	057		10	058		7/16/2009	179	JM	12	179
5 17	10	058		10	059		7/16/2009	73	JM	12	73
3S03	29	022		29	023		8/1/2009	352	JM	12	352
6S02	08	173		09	060		8/1/2009	199	JM	12	199
6S02	09	024		09	025		8/1/2009	191	JM	12	191
6S02	09	036		09	037		8/1/2009	200	JM	12	200
6S02	09	046		09	047		8/1/2009	121	JM	12	121
6S02	09	047		09	048		8/1/2009	106	JM	12	106
6S02	09	049		09	050		8/1/2009	303	JM	12	303
6S02	09	054		09	055		8/1/2009	258	JM	12	258
6S02	09	057		09	058		8/1/2009	354	JM	12	354
6S02	09	060		09	061		8/1/2009	132	JM	12	132
6S02	09	063		09	064		8/1/2009	362	JM	12	362
6S02	09	064		09	065		8/1/2009	78	JM	12	78
6S02	09	065		09	066		8/1/2009	200	JM	12	200
6S02	09	069		09	070		8/1/2009	357	JM	12	357
6S02	09	070		09	071		8/1/2009	295	JM	12	295
6S02	09	072		09	073		8/1/2009	177	JM	12	177
1 17	28	005		28	006		9/1/2009	320	JM	12	320
1 01	32	051		33	031		10/1/2009	325	JM	12	325
1 01	33	029		33	030		10/1/2009	200	JM	12	200
2 03	25	170		26	007		10/1/2009	175	JM	12	175
3S08	24	083		24	084		10/1/2009	240	JM	12	240
3S08	24	089		24	091		10/1/2009	257	JM	12	257
3S14	25	060		25	061		10/1/2009	303	JM	12	303
5 12	15	051		15	052		10/1/2009	180	JM	12	180
5 12	15	052		15	070		10/1/2009	152	JM	12	152
5 12	15	071		15	072		10/1/2009	234	JM	12	234
5 12	15	073		15	074		10/1/2009	284	JM	12	284
5 12	15	074		15	075		10/1/2009	243	JM	12	243
5 13	10	082		10	083		10/1/2009	160	JM	12	160
5 13	10	084		10	085		10/1/2009	194	JM	12	194
5 13	15	012		15	013		10/1/2009	167	JM	12	167

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
5 22	14	075		14	076		10/1/2009	160	JM	12	160
5 22	14	076		14	077		10/1/2009	158	JM	12	158
6S01	09	021		09	135	C	10/1/2009	200	JM	12	200
A 01	08	043		08	048		10/1/2009	238	JM	12	238
A 08	03	002	C	03	003		10/1/2009	225	JM	12	225
A 08	03	003		03	004		10/1/2009	270	JM	12	270
A 08	03	007		03	008		10/1/2009	280	JM	12	280
A 08	03	008		03	009		10/1/2009	280	JM	12	280
A 08	03	013	C	03	014		10/1/2009	115	JM	12	115
B 02	04	088		04	089		10/1/2009	265	JM	12	265
5 01	16	015		16	016		11/1/2009	216	JMR	12	216
5 01	16	016		16	017		11/1/2009	87	JMR	12	87
5 01	16	017		16	019		11/1/2009	323	JMR	12	323
5 01	16	019		16	020		11/1/2009	145	JMR	12	145
5 01	16	020		16	021		11/1/2009	276	JMR	12	276
5 01	16	021		16	022		11/1/2009	128	JMR	12	128
5 01	16	022		16	023		11/1/2009	195	JMR	12	195
5 03	15	172		15	173		11/1/2009	305	JMR	12	305
A 01	08	030		08	031		11/1/2009	120	JMR	12	120
3E10	25	022		25	023		12/1/2009	349	JM	12	349
7S01	06	031		06	032		12/1/2009	328	JM	12	328
A 01	07	118		07	121		12/1/2009	292	JM	12	292
A 01	07	120		07	121		12/1/2009	396	JM	12	396
A 01	08	050		08	051		12/1/2009	192	JM	12	192
1 13	26	122		26	123		1/1/2010	276	JM	12	276
2 06	25	145		25	146		1/1/2010	256	JM	12	256
3S08	24	112		24	113		1/1/2010	115	JM	12	115
3S08	24	113		24	114		1/1/2010	355	JM	12	355
3S08	24	114		24	115		1/1/2010	199	JM	12	199
3S20	19	067		19	068		1/1/2010	377	JM	12	377
3E05	24	156		24	157		1/1/2010	177	JM	12	177
4S01	19	091		19	092		1/1/2010	347	JM	12	347
5 07	15	157		15	158		1/1/2010	220	JM	12	220
5 07	15	158		15	161		1/1/2010	265	JM	12	265
5 07	15	159		15	160		1/1/2010	268	JM	12	268
5 07	15	160		15	161		1/1/2010	273	JM	12	273
5 11	14	102		14	103		1/1/2010	332	JM	12	332
5 11	14	103		14	104		1/1/2010	334	JM	12	334
5 47	13	151		13	152		1/1/2010	302	JM	12	302
6S08	09	117		09	118		1/1/2010	299	JM	12	299
6S08	09	119		09	121		1/1/2010	336	JM	12	336
7S01	06	078		06	079		1/1/2010	291	JM	12	291
A 05	03	044		03	045		1/1/2010	90	JM	6	180
1 29	20	050		20	051		2/1/2010	322	JM	12	322
6S01	08	072		09	001		2/1/2010	355	JM	12	355
6S01	09	002		09	003		2/1/2010	204	JM	12	204
6S01	09	004		09	005		2/1/2010	237	JM	12	237
6S02	09	036		10	001		2/1/2010	304	JM	6	608
6S02	09	061		09	062		2/1/2010	160	JM	6	320
6S02	09	062		09	063		2/1/2010	350	JM	6	700

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
6S02	09	066		09	068		2/1/2010	360	JM	6	720
A 01	07	020		08	033		2/1/2010	274	JM	6	548
A 07	03	094	C	03	097		2/1/2010	170	JM	6	340
A 08	03	018		03	019		2/1/2010	350	JM	6	700
B 01	04	105	C	04	137		2/1/2010	147	JM	6	294
2 07	26	075		26	076		3/1/2010	330	JM	6	660
3E07	24	072		24	073		3/1/2010	300	JM	12	300
4N02	17	020		17	021		3/1/2010	280	JM	12	280
4S01	19	093		19	094		3/1/2010	242	JM	12	242
4S02	19	140		19	141		3/1/2010	140	JM	12	140
4S03	19	151		19	153		3/1/2010	116	JM	12	116
5 12	15	055		15	061		3/1/2010	209	JM	12	209
5 12	15	117		15	118		3/1/2010	306	JM	12	306
6S01	08	063		08	064		3/1/2010	240	JM	6	480
6S01	08	064		08	065		3/1/2010	129	JM	12	129
6S01	08	068		09	008		3/1/2010	380	JM	12	380
6W02	07	058		07	059		3/1/2010	38	JM	6	76
6W02	07	059		07	060		3/1/2010	130	JM	6	260
A 01	08	004		08	201		3/1/2010	237	JM	12	237
A 01	08	004		08	005		3/1/2010	250	JM	6	500
A 01	08	005	P	08	006	P	3/1/2010	115	JM	6	230
A 01	08	006	P	08	007	P	3/1/2010	125	JM	6	250
A 01	08	007		08	008		3/1/2010	240	JM	6	480
A 01	08	009		08	204	C	3/1/2010	140	JM	6	280
A 01	08	010		08	205	C	3/1/2010	300	JM	12	300
A 01	08	010		08	011		3/1/2010	190	JM	12	190
A 03	04	074	P	04	139	P	3/1/2010	120	JM	6	240
A 03	04	075	P	04	139	P	3/1/2010	120	JM	6	240
B 01	04	110		04	115		3/1/2010	312	JM	6	624
B 01	04	110		04	140		3/1/2010	338	JM	12	338
B 01	04	111		04	134		3/1/2010	300	JM	12	300
B 01	04	112		04	113		3/1/2010	350	JM	6	700
B 01	04	114		04	115		3/1/2010	290	JM	12	290
B 01	04	115		04	116		3/1/2010	132	JM	12	132
1 01	32	050		32	051		4/1/2010	383	JM	6	766
3E05	24	027		24	028		4/1/2010	324	JM	12	324
5 01	16	024		16	025		4/1/2010	295	JM	12	295
5 01	16	025		16	026		4/1/2010	310	JM	12	310
5 01	16	026		16	027		4/1/2010	126	JM	12	126
5 01	16	027		16	028		4/1/2010	64	JM	12	64
5 01	16	028		16	029		4/1/2010	118	JM	12	118
5 01	16	029		16	030		4/1/2010	145	JM	12	145
5 13	10	085		15	012		4/1/2010	123	JM	6	246
A 01	08	042		08	043		4/1/2010	68	JM	6	136
A 05	03	062		03	063		4/1/2010	232	JM	12	232
A 08	03	009		03	019		4/1/2010	237	JM	6	474
B 01	04	095		04	136	C	4/1/2010	212	JM	12	212
B 01	04	096		04	097		4/1/2010	253	JM	12	253
B 01	04	097		04	103		4/1/2010	317	JM	12	317
B 01	04	107		04	108		4/1/2010	283	JM	12	283

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY3 Footage
B 01	04	108		04	109		4/1/2010	41	JM	12	41
B 01	04	113		04	114		4/1/2010	232	JM	6	464
B 01	04	109		04	117		4/1/2010	289	JM	12	289
B 02	04	089		04	093		4/1/2010	265	JM	6	530
2 07	19	168		20	074		5/1/2010	270	JM	12	270
2 08	19	177		19	183		5/1/2010	350	JM	12	350
5 01	16	018		16	019		5/1/2010	247	JMR	6	494
6S01	08	062		08	063		5/1/2010	157	JM	6	314
6S08	09	096		09	097		5/1/2010	272	JM	12	272
6S08	09	098		09	099		5/1/2010	135	JM	12	135
6S08	09	099		09	100		5/1/2010	250	JM	12	250
6S08	09	100		09	101		5/1/2010	91	JM	6	182
6S08	09	101		09	102		5/1/2010	154	JM	6	308
6S08	09	102		09	103		5/1/2010	215	JM	12	215
6S08	09	108		09	109		5/1/2010	277	JMR	6	554
6S17	07	167		07	171		5/1/2010	305	JMR	6	610
6S17	07	173		07	174		5/1/2010	300	JM	12	300
6S17	07	174		07	175		5/1/2010	305	JM	12	305
A 02	03	107	C	03	108		5/1/2010	239	JM	12	239
A 05	03	058		03	138		5/1/2010	110	JM	12	110
A 05	03	059		03	138		5/1/2010	110	JM	12	110
A 05	03	059		03	060		5/1/2010	345	JM	12	345
A 10	04	056		04	141	C	5/1/2010	237	JM	12	237
A 10	04	060		04	130	C	5/1/2010	205	JM	12	205
3S03	29	005		29	007		6/1/2010	311	JM	12	311
3E06	24	050		24	052		6/1/2010	193	JM	12	193
3E06	24	051		24	052		6/1/2010	185	JM	12	185
5 01	16	032		16	035		6/1/2010	354	JM	6	708
5 12	15	040		15	041		6/1/2010	165	JM	12	165
5 12	15	047		15	048		6/1/2010	184	JM	12	184
5 12	15	050		15	052		6/1/2010	266	JM	6	532
5 25	14	088		14	197	C	6/1/2010	172	JM	12	172
5 25	14	088		14	089		6/1/2010	352	JM	12	352
6S01	09	009		09	010		6/1/2010	165	JM	6	330
6S17	08	163		08	164		6/1/2010	301	JM	12	301
6S18	08	084		08	085		6/1/2010	296	JM	12	296
6W01	03	110		03	128	C	6/1/2010	250	JM	6	500
6W01	03	110		03	111		6/1/2010	272	JM	12	272
6W01	03	111		03	112		6/1/2010	315	JM	6	630
6W01	03	112		03	113		6/1/2010	300	JM	12	300
6W01	03	113		03	114		6/1/2010	243	JM	12	243
A 01	08	051		08	215	C	6/1/2010	260	JM	6	520
									Total Miles:		155.56

Appendix D.3

Summary of Features Included the City's Sewer Ordinance Update
Effective July 23, 2009

1. 13.16.010: Requires all El Cajon inhabitants to be responsible for reporting sewer spills whether public or private and to take preventive measures to minimize or contain the spill until a professional plumber or City personnel respond to the reported incident. ***This provision makes it illegal to not report a spill in compliance with Regional Water Quality control Board Order No. R9-2007-0001.***

2. 13.16.012: Allows the Public Works Director under certain circumstances to waive any requirements or responsibilities set forth in the sewer ordinance.

3. 13.16.014: All building remodels that have an increase in plumbing fixture units or an increase of 400 or more square feet in floor area will be subject to a lateral video inspection and/or repair if needed. The following may be required based on results of the video inspection:

    a. Orders to repair if deemed necessary by the City with time limitations.
    b. If structural repairs are required it will be necessary to install a double cleanout plug at the property line.
    c. A grease/sand interceptor or trap will be required if the remodel is for a food serving establishment (FSE).

4. 13.16.014: Requires the public works director to keep records and issues permits for all private sewer or satellite collection system construction.

5. 13.16.015: Requires any work performed in these provisions to be performed by a licensed contractor.

6. 13.16.016: Requires any building failing a lateral inspection to affect repairs within 70 days (30+30+10) of notification.

7. 13.16.030: Provides for violations to be deemed a "Public Nuisance" and includes legal and monetary remedies to affect repairs if ordered by the Director of Public Works. See El Cajon Municipal Code Chapter 1.16 for remedies.

8. 13.20.010: Adds new definitions to terms used with changes to the ordinance.

    a. Building Sewer Inspections
    b. Cleanout Plugs and Double Cleanout Plugs
    c. Common Interest Developments
    d. Notice to Repair
    e. Fats, Oils and Grease (FOG)

9. 13.20.060: requires the installation of a double cleanout at the property line in building sewers for new and remodel building sewers or where notices of repair may be in effect.

10. Old Chapters 13.20.070 through 13.20.080 were removed and replaced with Chapter 13-38 that establishes new controls and limitations for the disposal of fats, oils and grease (FOG).

11. 13.24.040: Was modified to modernize the requirements for the type of connection to a lower sewer lateral using a mechanical joint with a clamp.

12. New chapter 13.37- Sewer and Lateral Inspections

    a. Requires maintenance and inspection of building sewers for all land uses when any of the following occurs.
        i. At any occurrence of an overflow
        ii. Evidence that the sewer lateral has not been properly maintained
        iii. Existence of a public health threat
        iv. Addition of new plumbing fixtures
        v. Addition of 400 or more square feet of floor area
    b. Exceptions to the above are allowed under certain circumstances and the Director of Public Works may waive certain requirements.
    c. Periodic inspection required for all common interest residential and all non-residential properties every 10 years.
    d. Defines lateral defects requiring repair.
    e. Permits access to private property for the purposes of inspecting building sewer.
    f. Establishes requirements and content of Inspection Reports
    g. Establishes authority to order repairs on private laterals and sets out the procedures for such an order.
    h. Provides for administrative guideline to be used for inspection and enforcement. Guidelines are in development and have not been adopted by the City Council.

13. New Chapter 13.38 “FOG” Ordinance includes the following provisions:

    a. Affects FSE’s only
    b. Defines certain terms used in the ordinance.
    c. Requires Grease/sand Interceptors for all new construction and for remodels. Allows grease traps under certain circumstances.
    d. Establishes triggers for installation of interceptors in existing facilities.
    e. Requires removal of garbage disposals for all existing establishments by January 2010. Prohibits garbage disposals in all new establishments.
    f. Establishes design requirements for interceptors.
    g. Establishes maintenance requirements and periodic inspection requirements.
    h. Sets forth enforcement and penalty guidelines
    i. Sets out guidelines for required Best Management Practices for handling FOG.

Appendix D.4

ORDINANCE NO. 4930

AN ORDINANCE REPEALING CHAPTERS 13.16, 13.20, 13.24, AND 13.28 OF THE EL CAJON MUNICIPAL CODE AND ADDING NEW CHAPTERS 13.16, 13.20, 13.24, 13.28, 13.37, AND 13.38 TO THE EL CAJON MUNICIPAL CODE RELATED TO SEWERS AND SEWAGE DISPOSAL.

THE CITY COUNCIL OF THE CITY OF EL CAJON DOES ORDAIN AS FOLLOWS:

Section 1. Chapter 13.16 of the El Cajon Municipal Code, is hereby repealed.

Section 2. A new Chapter 13.16 of the El Cajon Municipal Code is hereby added to read as follows:

13.16 SEWERS AND SEWAGE DISPOSAL – IN GENERAL

13.16.010 Compliance.

No person shall cause, suffer or permit the disposal of sewage, human excrement or other liquid wastes in any place or manner except through or by means of an approved plumbing and drainage system and an approved sewage disposal system installed and maintained in accordance with the provisions of the California Plumbing Code and Chapters 13.16 through 13.40.

No person shall allow sewage to escape or flow from a building, building drain, building sewer, soil line, or sewer lateral. An escape of sewage from a building, building drain, building sewer, soil line, or sewer lateral shall be considered a threat to the public health and welfare and shall be deemed a nuisance.

It shall be the responsibility of all residents, business owners, employees of local businesses, and citizens of El Cajon to notify the city of any discharge of unsanitary waste from a building sewer, lateral, cleanout plug or sewer main by stoppage or other means and take all measures to prevent further discharge, contain, or clean up such a discharge until a professional plumbing company or local authority has responded to the incident.

13.16.011 Delegations of power.

Whenever a power is granted to or imposed upon the director of public works under this title, such power may be exercised or the duty may be performed by a deputy or an authorized person unless expressly provided otherwise.

13.16.012 Restrictions on allowance of variances from title.

Whenever the director of public works is permitted by this title to grant an exception to any of the requirements of this title, such exceptions shall be granted by

(Continued on Page 2)

him, only if he finds that literal compliance is impossible or impractical because of peculiar conditions, in no way the fault of the person requesting such exceptions, and that the purpose of this title may be accomplished and public health and safety secured by alternative construction or procedure, in which case the director of public works may permit such alternative construction or procedure.

13.16.013 Conformation of facilities to title – new facilities.

All new public sewers, house connection sewers, and industrial liquid wastes pre-treatment plants shall conform to the requirements of this title unless specifically excepted.

13.16.014 Conformance - remodeling.

All remodeling of existing public sewers, building sewers, and industrial liquid wastes pre-treatment plants shall conform to the requirements of this title, unless specifically excepted. All new buildings or building remodels that include an increase of plumbing fixture units are subject to the provisions of this title.

13.16.015 Records.

The director of public works shall keep a permanent record of all permits issued and all plans requiring approval under the provisions of this title. The director of public works shall establish and maintain accurate records indicating all sewers constructed with public funds and accurate records of all main line sewers constructed hereafter with private funds, and the person or properties originally benefiting from and responsible for the financing of such sewers.

13.16.016 Who may do work under title – work to be subject to inspection and approval.

All work permitted under the provisions of this title shall be constructed by a licensed contractor and shall be subject to inspection by and shall meet the approval of the director of public works.

13.16.017 Notice to remedy house connection sewer deficiency.

In the event that a building sewer or lower lateral fails to pass inspection and is subsequently placed in service, the permittee shall be given notice in writing of such failure to pass inspection and shall within ten (10) days from the date of such notice make the construction conform to the requirements of this title.

13.16.020 Certain sanitary facilities required for all buildings.

Every building shall have sinks, water closets, and other sanitary fixtures and facilities.

(Continued on Page 3)

13.16.030 Public nuisance.

The violation of any provision of this chapter is deemed to be a public nuisance and may be abated in accordance with Chapter 1.16 of this code.

Section 3. Chapter 13.20 of the El Cajon Municipal Code is hereby repealed.

Section 4. A new Chapter 13.20 of the El Cajon Municipal Code is hereby added to read as follows:

13.20 SEWERS AND SEWAGE DISPOSAL – PUBLIC SEWERS GENERALLY

13.20.010 Definitions.

For purposes of Chapters 13.20 through 13.28, the following words and phrases have the meanings respectively ascribed to them by this section:

A. "B.O.D." This term, denoting biochemical oxygen demand, means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty (20) degrees centigrade, expressed in parts per million by weight.

B. "Building drain" means that part of the lowest horizontal piping of a drainage system that receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning two (2) feet outside the inner face of the building wall.

C. "Building sewer" means the extension from the building drain, beginning two (2) feet from the outside of the building, to the public sewer or other place of disposal including the lower lateral.

D. "Cleanout" means a sewer line fitting placed on a sewer to facilitate inspection, cleaning or maintenance of the sewer.

E. "Combined sewer" means a sewer receiving both surface runoff and sewage.

F. "Double cleanout" means the horizontal piping or pipe fittings that facilitate(s) the proper cleaning, inspection and physical access to the building sewer or lower lateral in either direction, upstream or downstream from the same entry point.

G. "Garbage" means solid wastes from the preparation, cooking and dispensing of food, and from the handling, storage of food waste or the sale of produce.

(Continued on Page 4)

H. "Industrial wastes" means the liquid wastes from industrial processes, as distinct from sanitary sewage.

I. "Licensed contractor" means a contractor having a valid license issued pursuant to the California Business and Professions Code which license includes the activities listed on the permit applied for.

J. "Lot" means any piece or parcel of land bounded and defined or shown upon a plot or deed recorded in the Office of the County Recorder, as a separate or individual parcel, except that in any event any building or structure covers more than a lot, the word "lot" shall include all such pieces or parcels of land upon which such building or structure is wholly or partly located.

K. "Lower sewer lateral" means horizontal pipe and fittings forming a connection to the sewer main line for the purposes of connecting a building sewer. The lower lateral extends from the public sewer main to the edge of the public right-of-way and terminates at a double cleanout.

L. "Natural outlet" means any outlet into a watercourse, pond, ditch, lake or other body of surface water or groundwater.

M. "pH" means the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

N. "Properly shredded garbage" means the wastes from the preparation and/or cooking of food that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half (½) inch in any dimension.

O. "Public sewer" means any main line sewer constructed in any street, highway, alley, place, or right-of-way dedicated for public use. Such term shall not include building drain, building sewer, or lower lateral.

P. "Director of public works" means any official agent, branch or function of the city responsible for the design, construction, maintenance and operation of sanitary sewers in the city. It shall include all officers, agents and employees engaged in sewer services.

Q. "Sanitary sewer" means a pipeline that carries wastewater and to which stormwaters, surface waters and groundwaters are not intentionally admitted.

R. "Sewage" means a combination of wastewater – carried waters from residences, business buildings, institutions and industrial establishments, together with such groundwaters, surface waters and stormwaters as may be present.

(Continued on Page 5)

S. "Sewage treatment plant" means any arrangement of devices and structures used for wastewater treatment.

T. "Sewer" or "Sewer line" means a pipe or conduit for carrying wastewater.

U. ""Sewerage works" means all facilities for collecting, pumping, treating and disposing of wastewater.

V. "Storm sewer or storm drain" means a pipeline that carries stormwaters and surface waters and drainage, but excludes wastewater and polluted industrial wastes.

W. "Suspended solids" means solids that either float on the surface or are in suspension in water, sewage or other liquids, and which are removable by laboratory filtering.

X. "Upper sewer lateral," also known as the "building sewer," means horizontal pipe and fittings forming a connection to the sewer main line for the purposes of connecting a building drain. The upper sewer lateral extends from the edge of public right-of-way and located by a double cleanout plug to the building drain.

Y. "Watercourse" means a channel in which a flow of water occurs, either continuously or intermittently.

Z. "Building sewer inspection" means an inspection of a building sewer lateral that consists of the retention of a pre-qualified contractor by the owner in order to visually examine and inspect a building sewer lateral in the manner deemed appropriate by the director of public works. Such an inspection shall, at a minimum, include the use of a closed-circuit television inspection device for the purposes of determining whether the building sewer lateral complies with the requirements of this chapter.

AA. "Commercial property" means any real property not used for residential purposes and not a common interest development.

BB. "Common interest development" means a development characterized by apartments, individual ownership of a condominium housing unit, or a residential parcel coupled with the shared ownership of (or right to use) common areas and facilities, including, but not limited to, condominium projects, community apartment projects, stock cooperatives and planned unit developments, which contains two (2) or more dwelling units and which has a building sewer lateral shared by two (2) more dwelling units.

(Continued on Page 6)

CC. "Notice to repair" means the notice and order issued by the director of public works to the owner advising that the owner appears to be in violation of the city of El Cajon Municipal Code with respect to the owner's building sewer lateral, or in violation of the code in the manner of the building sewer lateral's connection to the city sewer system, which notice and order directs the abatement of the identified apparent violation in a timely manner or, in the alternative, proof that the conditions identified in the notice and order do not exist.

DD. "Owner" means any person, partnership, association, corporation or fiduciary having legal title (or any partial interest) in any real property situated within the city.

13.20.020 Deposit of matter that will clog or obstruct flow of sewage.

No person shall place, throw or deposit or cause or permit to be placed, thrown or deposited in any public sewer, drain, catch basin, water closet, privy vault or cesspool, any dead animal, offal or garbage, fish, fruit or vegetable waste, pharmaceuticals, sand, liquid waste of any kind containing chemicals, greases, oil, tar or gasoline or any other objectionable materials or matter which will clog, obstruct, fill or prevent the effective use of or necessitate the frequent repair, clean out or flushing of such sewer, drain or catch basin.

13.20.030 Review and approval by director of public works prior to discharge of certain wastes into public sewers – preliminary treatment facilities.

The admission into the public sewers of any waters or waste having a five (5) day B.O.D. greater than five hundred (500) parts per million by weight, or containing more than five hundred (500) parts per million by weight of suspended solids, or containing any quantity of substances having the characteristics described in section 13.20.050, or having an average daily flow greater than two percent (2%) of the average daily sewage flow of the city, shall be subject to the review and approval of the director of public works. Where necessary, in the opinion of the director of public works, the owner shall provide, at his expense, such preliminary treatment as may be necessary to reduce the B.O.D. to five hundred (500) parts per million and the suspended solids to five hundred (500) parts per million by weight, or reduce objectionable characteristics or constituents to within the maximum limits provided for in section 13.20.050, or control the quantities and rates of discharge of such waters or wastes. Plans, specifications and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the director of public works, and no construction until such approval is obtained in writing.

Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

(Continued on Page 7)

13.20.040 Discharge of storm water or surface water.

No person shall discharge or cause to be discharged any storm water, surface water, groundwater, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters into any sanitary sewer.

Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers or to a natural outlet approved by the director of public works. Industrial cooling water or unpolluted process waters may be discharged, upon approval of the director of public works, to a storm sewer, sanitary sewer or natural outlet.

13.20.050 Discharge of certain wastes into public sewer prohibited.

Except as otherwise provided in Chapters 13.20 through 13.28, no person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer:

A. Any liquid or vapor having a temperature higher than one hundred fifty degrees (150º) Fahrenheit;

B. Any water or waste, which may contain more than one hundred (100) parts per million, by weight, of fat, oil or grease;

C. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas;

D. Any garbage of any kind that has not been property shredded;

E. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works;

F. Any waters or wastes having a pH lower than 5.0 or higher than 9.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works;

G. Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals or create any hazard in the receiving waters of the sewage treatment plant;

(Continued on Page 8)

H. Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant; and

I. Any noxious or malodorous gas or substance capable of creating a public nuisance.

13.20.060 Cleanout.

Where a building sewer is constructed, modified, remodeled or replaced, and is connected or reconnected to the lower sewer lateral or double cleanout shall be installed at the outside edge of the public right-of-way to facilitate the proper cleaning and inspection of the pipeline in either direction, upstream or downstream.

The above requirements also apply to all building sewers subject to a notice to repair.

13.20.070 Repealed.

13.20.080 Repealed.

13.20.090 Sewers carrying industrial wastes – construction and maintenance of manholes.

When required by the director of public works, the owner of any property served by a building sewer carrying industrial wastes shall install a suitable control manhole in the building sewer to facilitate observation, sampling and measurement of the wastes. Such manhole, when required, shall be accessible and safely located, and shall be constructed in accordance with plans approved by the director of public works. The manhole shall be installed by the owner at his expense, and shall be maintained by him so as to be safe and accessible at all times.

13.20.100 Analyses of wastes.

All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in sections 13.20.030 and 13.20.050 shall be determined in accordance with "Standard Methods for the Examination of Water and Sewage," and shall be sampled at the control manhole provided for in Section 13.20.090, or upon suitable samples taken at such control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected.

13.20.110 Repealed.

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13.20.115 Repealed.

13.20.120 Repealed.

13.20.130 Service to areas outside city – unauthorized use.

The use of the sewage disposal system of the city by persons without the authorization of the city council for the disposition of sewage from any area not within the corporate limits of the city is prohibited.

13.20.140 Applicability of chapter to agreements for treatment of industrial wastes.

No statement contained in Chapters 13.20 through 13.28 shall be construed as preventing any special agreement or arrangement between the city and any industrial concern whereby an industrial waste of unusual strength or character may be affected by the city for treatment, subject to payment therefor by the industrial concern.

13.20.150 Public sewer fees.

Public sewer fees shall be established from time to time by resolution or ordinance of the city council.

Section 5. Chapter 13.24 of the El Cajon Municipal Code is hereby repealed.

Section 6. A new Chapter 13.24 of the El Cajon Municipal Code is hereby added to read as follows:

13.24 SEWERS AND SEWAGE DISPOSAL – PUBLIC SEWER LATERALS

13.24.010 Soil line connection.

Where the plumbing soil line or building sewer joins a lower sewer lateral, stub or wye, such joint shall be made with a mechanical joint or clamp with a double cleanout according to current industry standards, or any other method approved by the director of public works. Minimum ground cover at such joint or at the property line shall be forty-two (42) inches unless otherwise specified by the engineering department of the city. The city's wastewater department shall not be obliged to connect to a soil line that is installed at less than the required minimum depth.

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13.24.020 Mains and laterals as part of same construction – installation requirements.

Where laterals are being installed by a general contractor as an integral part of the construction of a complete system of sewer mains, laterals and services under supervision of an inspection by the director of public works or his agents, the provisions of this chapter shall apply.

13.24.030 Connections to existing city sewer main.

Wherever an existing sewer main is to serve several lots in a private contract for improvements in a subdivision, the specific job of boring into the main and affixing a hub shall be performed by the city's wastewater department. The contractor shall pay the city a cash fee according to the current schedule of fees established by resolution by the city council for each entry into the main in advance of performance of the work. The contractor shall excavate to the sewer main at the site of the proposed lateral, exposing the sewer main pipe for the prescribed work by the city sanitation department. When the work by the city sanitation department is complete, the contractor shall be responsible for any damage to the main as a result of excavation, and shall have the same responsibility for any lateral installed as prescribed above as he has for any lateral built entirely for himself.

Section 7. Chapter 13.28 of the El Cajon Municipal Code is hereby repealed.

Section 8. A new Chapter 13.28 of the El Cajon Municipal Code is hereby added to read as follows:

13.28 SEWERS AND SEWAGE DISPOSAL – PUBLIC SEWER CONNECTIONS

13.28.010 Definitions.

For the purposes of this chapter, the following words and phrases shall have the meanings respectively ascribed to them by this section:

A. "Apartment" means a room or suite of rooms in a building occupied or designed for occupation by one family for living or sleeping purposes.

B. "Auto court" means any area, place or tract of land where two or more single family dwellings, or a building containing two or more apartments designated, used or intended wholly or in part for the accommodation of automobile transients are located and offered for hire, rent or lease. The term shall also include any motel.

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C. "Building or house" means a tent, penthouse, restroom or single or multiple family dwelling. These terms include all architectural structures.

D. "Bungalow court" means a group of four or more separate buildings, nor more than one story in height, each being erected or located on a parcel of ground under a separate roof, as a family domicile or residence and facing a common court.

E. "Family" means a person living alone or a group of two or more persons occupying an apartment.

F. "Motel" means a building of not more than one story, containing six or more guest rooms or apartments or combination thereof, each of which has a separate individual entrance leading directly from the outside of the building and is designed, used or intended wholly or in part for the accommodation of automobile transients.

G. "Multiple dwelling" means a building used or designated to be used as a dwelling for three or more families living independently of each other.

H. "Trailer court or auto and trailer camp" means an area or tract of land where space is rented or held out for rent to owners or users of trailer coaches or tent campers, furnishing their own camping equipment, or where free camping is permitted owners or users of trailer coaches or tent camp equipment for the purpose of securing their trade.

13.28.020 Unauthorized connections to public sewer prohibited.

No person other than the city, its agents and employees, shall connect any pipe, drain or sewer with any public sewer, or open or penetrate any public sewer in the city, or injure, break or remove or open any portion of any manhole, flush tank, inspection pipe or any other part of or appurtenance to any public sewer. Except where otherwise specifically provided in Chapters 13.20 through 13.28, the city shall install all connections to any existing public sewers.

13.28.030 Connection permits required.

No person shall connect to the sewage disposal lines of the city or discharge sewage into the sewer lines of the city or sewage disposal plant of the city without first obtaining a connection permit from the city.

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13.28.031 Connection to public sewer – required when sewer available.

All plumbing that receives the waste discharge from any building, structure or place of business, shall be connected to a public sewer.

All plumbing receiving water discharge that is connected to a private disposal system shall be connected to a public sewer within one (1) year after a public sewer becomes available.

13.28.032 When sewer not available.

The connection to a public sewer required by section 13.28.032 may be dispensed with when no public sewer is available and when, in the opinion of the Health Officer of the County, a private sewage disposal system would be adequate and safe and would not constitute a menace to public health.

13.28.033 When connection to approved private sewage disposal system required.

All plumbing receiving waste discharge, which is not connected to a public sewer shall be connected to a private sewage disposal system approved by the director of public works and health officer of the county.

13.28.034 Connections letting roof or surface water into sewers.

No person shall make or maintain any connection by pipes or otherwise with any public sewer by which roof or surface water may run into any such sewer.

13.28.035 Entering, disturbing or cleaning public sewers, structures or appurtenances.

No person shall, without authorization from the director of public works, open, enter, disturb or clean any public sewer, structure or appurtenance thereto.

13.28.036 Maintenance generally not to obstruct public sewer flow.

No person shall do, or cause to be done, any maintenance that would damage or obstruct the flow of any public sewer.

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13.28.037 Maintenance of private systems.

It shall be the responsibility of each property owner whose property is connected to the city sewer system to maintain continuously and satisfactorily in operation at his own expense, any house connection sewer, building sewer, private sewage disposal system, or industrial liquid waste pre-treatment facility. Failure to maintain such a private sewer system shall be sufficient grounds for immediate revocation of private sewer operating permit or industrial liquid waste permit of the person so failing and disconnection of his premises from the public sewer. Such a private sewer system is subject to required repairs as set out in a notice to repair issued pursuant to Section 13.20.010(DD). Users of private sewer disposal systems shall keep all cleanout caps and other access ports in place and properly sealed.

13.28.038 Septic tank or cesspool to be abandoned when main line connection obtained.

When a house connection sewer is constructed connecting a main line sewer, a house sewer which previously drained to a septic tank or cesspool, the septic tank or cesspool shall be abandoned and no portion of the house sewer shall then pass through or connect to such septic tank or cesspool

13.28.039 Procedure to effect abandonment of septic tank or cesspool.

When any septic tank or cesspool is abandoned, the top of such septic tank or cesspool shall be removed and the tank or cesspool shall be drained and filled with fine earth or sand and compacted and any pipes connecting to such tank or cesspool shall be cut directly outside of the tank or cesspool and shall be plugged with concrete. The abandonment of the septic tank or cesspool shall be complete before the house connection constructed shall be considered to have completely passed inspection.

13.28.040 Connection fees.

Before a permit shall be granted to connect to the sewage disposal system of the city, a connection fee and an inspection fee shall be paid to the city. Such fees shall be set from time to time by ordinance or resolution of the city council. Inspection fees shall be paid pursuant to Section 8.36.070 of this code.

13.28.080 Additional Connection Fee.

In addition to all other fees required by this title, a fee of two hundred dollars per connection shall be paid to this city before a permit shall be granted to connect to any sewer main of this city where such sewer main was constructed by the city or state or a component of the federal government.

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In addition to all other fees required by this title, except the fees set forth in the above paragraph, an additional fee per connection shall be paid to the city before a permit shall be granted to connect to any sewer line of the city where such sewer main or line was constructed pursuant to an agreement with the city to serve property other than that for which permission to connect is sought. Such a fee shall be set forth in such agreement.

13.28.090 Connections to mains constructed by Cajon Valley Union School District.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of two hundred dollars shall be paid the city before a permit shall be granted to connect to the sewer main located in Second Street from Dawnridge to Pepper Drive, and in Pepper Drive from Second Street to Peerless Drive, such sewer main having been constructed by the Cajon Valley Union School District.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of two hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer main located in Anza Street from a manhole which lies five hundred sixty feet south of the centerline of Washington Avenue to a manhole approximately four hundred fifty feet south of the westerly prolongation of the north line of the Anza Street school site as set forth on Record of Survey No. 5028, such sewer main having been constructed by the Cajon Valley Union School District.

13.28.100 Connections to Bradley-Johnson sewer.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of five hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer lines located as follows:

A. The sewer line extending easterly from the sewer outfall line along the future Bradley Avenue and southerly along Johnson Avenue to Vernon Way;

B. The sewer line extended to provide future service to unincorporated areas of the city as of October 1, 1967, on Steele Avenue and Vernon Way within the North Johnson Avenue 1913 Act Improvement District boundaries.

13.28.110 Connections to Pioneer Way-Cypress Lane sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of eight hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer lines located as follows:

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The sewer line in Pioneer Way extending northerly from the existing city boundary a distance of four hundred nine feet to Cypress Lane, and westerly in Cypress Lane to Johnson Avenue.

Said sewer line was constructed in connection with the Pioneer Way 1913 Act Improvement District, and the above fee shall be charged for each lateral to serve parcels not assessed for sewer mains.

13.28.120 Connections to Avocado South of Chase to DeWitt Court sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of six hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer lines located as follows:

The sewer line extending southerly along Avocado from nine hundred fifty feet south of the centerline of Chase Avenue to DeWitt Court.

Said sewer line was constructed by the city in connection with the improvement of Avocado south of Chase to south of DeWitt Court.

13.28.130 Connections to Fanita Drive sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of two hundred dollars for each dwelling unit or its equivalent shall be paid to the city before a permit shall be granted to connect to the trunk line sewer in Fanita Drive to be constructed by the city, or to any other sewer line which in turn uses the capacity of the Fanita Drive trunk sewer.

13.28.135 Connections to Bermuda Place sewer main.

In addition to all other fees required by this division, except the fee set forth in section 13.28.080, a fee of one thousand nine hundred ninety three dollars and six cents shall be paid to the city before a permit shall be granted to connect Assessor's Parcel No. 507-250-17 to the sewer main located in Bermuda Place. Said sewer line was constructed by the city in connection with the Bermuda Lane, et al. 1911 Act Improvement District (Assessment § 75).

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13.28.150 Connections to Melody Lane sewer main – Gull Place to Granite Hills Drive.

In addition to all other fees required by this chapter, except the fee set forth is section 13.28.080, a fee of nine dollars and twenty-two cents per front foot shall be paid to the city before a permit shall be granted to connect to the sewer line located on the southerly side of Melody Lane from the easterly subdivision boundary of Rancho Milagros, easterly to Granite Hills Drive. Said sewer line was constructed by the developers of Rancho Milagros subdivision.

13.28.155 Connections to Bradley Avenue sewer main – Johnson Avenue to Magnolia Avenue.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of thirty-six dollars per front foot shall be paid to the city before a permit shall be granted to connect the sewer line located in Bradley Avenue from Johnson Avenue to Magnolia Avenue. Said sewer line was constructed in connection with the Bradley-Cypress 1911 Act Improvement District.

13.28.160 Connections to Tilling Way sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of three thousand seven hundred twenty-four dollars and fourteen cents shall be paid to the city before a permit shall be granted to connect Assessor's Parcel No. 492-580-17 to the sewer line located in Tilling Way; and a fee of one thousand nine hundred forty-two dollars and one cent shall be paid to the city before a permit shall be granted to connect Assessor's Parcel No. 492-580-18 to the sewer line located in Tilling Way. Said sewer line was constructed by the city in connection with the Tilling Way 1911 Act Improvement District.

13.28.165 Connection to Chase Avenue sewer main.

In addition to all other fees required by this chapter, a fee of one thousand four hundred twenty dollars shall be paid to the city before a permit shall be granted to connect to the fifty-eight foot sewer lateral on the south side of Chase Avenue, one hundred seventy feet east of Mollison Avenue. The sewer lateral was constructed by the city in connection with street improvements as shown on drawing No. 11606 on file in the engineering division

Section 9. A new Chapter 13.37 of the El Cajon Municipal Code is hereby added to read as follows:

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13.37 SEWERS AND SEWAGE DISPOSAL – INSPECTIONS

13.37.020 Maintenance of private building sewer.

A. Maintenance of building sewer. Each owner shall maintain his building sewer lateral(s) free of displaced joints, open joints, root intrusion, substantial deterioration of the line, cracks, leaks, inflow, or infiltration of extraneous water, root intrusion, grease and sediment deposits, or any other similar conditions, defects, or obstructions likely to cause leakage or increase the chance for blockage of the building sewer.

B. Maintenance of septic tank. Each owner shall maintain his septic tank free of deterioration, corrosion, damage, disposal failure or any other similar deficiencies or defects likely to increase failure of the septic tank.

C. General maintenance requirements. The maintenance obligation imposed by this section shall be in addition to and supplemental of the general private sewer system maintenance obligations imposed in this title.

13.37.030 Building sewer inspections – access to premises.

The director of public works, or the building official, (or any designated representative or either the director of public works or the building official) is hereby authorized to inspect any building sewer in use within the city and connected to the city sewer system for the following purposes:

A. To determine the size, depth, and location of any sewer connection.

B. To determine the end outlet of any sewer connection by depositing harmless testing materials in any plumbing fixture attached thereto and flushing the same, if necessary.

C. To determine, by measurements and samples, the quantity and nature of the sewage or wastewater being discharged into any sewer.

D. To determine the location of the roof, swimming pool, floor and surface drains, and whether or not they physically connect to a building sewer.

E. To evaluate and determine defects in a sewer lateral following an overflow incident.

Nothing herein shall be deemed to provide the director of public works, the building official or their respective designees with any right or authority to enter a building or other apparently private or interior area of a real property, except to the extent such entry is expressly authorized by state law.

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13.37.040 Mandatory building sewer inspections.

A. Health and safety basis for requiring a building sewer lateral inspection.

An owner shall have the building sewer of his real property video-inspected in accordance with the requirements of this chapter (as directed and within the time period indicated by the director of public works) upon the occurrence of any of the following events:

1. Overflow or malfunction. Whenever the director of public works has sufficient evidence (as determined by the director) that the building sewer has recently overflowed or has recently malfunctioned;

2. Building sewer failure or lack of maintenance. Whenever, based on sewer system testing conducted by the city (of either the building sewer lateral or the city's public sewer system), the director of public works finds that there is sufficient evidence to conclude that the building sewer lateral has failed, is likely to fail, or has not been properly maintained; and

3. Public health threat. Upon any other reasonable cause to believe that there is a threat to the public health, safety or welfare due to the condition of a building sewer lateral or any other conditions causing a nuisance.

B. Events requiring a building sewer lateral inspection serving residential properties.

An owner shall have the building sewer lateral of his residential property inspected in accordance with the requirements of this chapter upon the occurrence of any of the following events or any other events in paragraph (A) above:

1. Home additions or remodels. Prior to the issuance of a city building permit for a residential building addition, remodel, or new improvements on the real property in excess of four hundred (400) square feet of habitable space as that phrase is defined in the most recently adopted California Building Code.

2. New plumbing fixtures. Prior to the issuance of a city building permit for all new plumbing fixtures attached to the building sewer lateral upon the residential property. (For the purposes of this section, the phrase "new plumbing fixtures" shall refer only to an increase in the number of plumbing fixtures in use on the real property prior to the application for a building permit for the "new" plumbing fixtures.)

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C. Schedule for lateral inspections – non-residential, multi-family and common interest development real properties.

1. Non-residential properties. An owner or owners of non-residential property within the city shall have that property's building sewer lateral(s) inspected in accordance with the requirements of this chapter or on occurrence of any conditions in paragraphs (A) or (B) above, or once every ten (10) years beginning on the first date of notification following the adoption of the ordinance first enacting this chapter. Within each subsequent ten (10) year period of time, such lateral inspections shall be performed. (For the purposes of this section, a property that has a mixture of allowed residential and non-residential uses shall be considered a non-residential property with respect to its compliance with the sewer lateral inspection requirements of this section.)

2. Common interest development, condominium, or multi-family properties. The owner or owners of a common interest development, condominium, or multi-family property shall have that property's building sewer lateral(s) inspected in accordance with the requirement of this chapter or on occurrence of any conditions in paragraphs (A) or (B) above, or once every ten (10) years beginning on the first date of notification following the enactment of the ordinance first enacting this chapter. Within each ten (10) year period of time, such lateral inspections shall occur.

D. Exception to inspection for recent prior inspections and repairs.

The following are exceptions to the inspection requirements of subparagraphs (B) and (C) above:

1. Prior replacement of sewer lateral. An owner otherwise required to perform a building sewer lateral inspection under (B) or (C) hereof shall not be required to perform such an inspection if the owner (or the owner's predecessor-in-interest) has originally installed or has replaced his property's building sewer lateral within the ten (10) years prior to the date of the application for a building permit.

2. Prior inspection or repair of a building sewer lateral. An owner otherwise required to perform an inspection under (B) or (C) shall not be required to perform such an inspection if the owner has either completed a remedial inspection (conducted in accordance with the inspection requirements of this chapter) or completed a permitted repair of the building sewer lateral within the three (3) years prior to the date the inspection would have otherwise been required, or has a valid compliance certificate.

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13.37.050 Requirements for a proper building sewer lateral inspection report.

A. Inspection report standards.

The building sewer inspection reports required by this chapter shall be prepared in accordance with the following requirements and specifications:

1. The inspection report shall be prepared by a pre-qualified contractor or any other professional otherwise registered by the City of El Cajon;

2. The inspection report shall identify all of the following:

   a. Any of the following conditions: displaced joints, open joints, root intrusion, substantial deterioration of the line, sags or depressions, cracks, leaks, inflow or infiltration of extraneous water, root intrusion, grease and sediment deposits or other conditions likely to increase the chance for blockage of the building sewer.

   b. Whether any connection, by pipes or otherwise, allows rainwater or groundwater to enter the building sewer or public sewer;

   c. Whether the building sewer has an installed backwater device where any outlet or trap of the building sewer is below the level of the nearest manhole. If a backwater device is already installed, the report shall indicate whether the backwater device is functioning properly.

   d. Where the building sewer includes a septic tank, the report shall identify the extent to which the septic tank is deteriorated, corroded, damaged, whether the disposal field has failed or any other relevant deficiency.

3. The inspection report shall contain an express certification from the certified inspector that the property has been inspected for any outdoor drain connection to the city sewer system and that no such unpermitted connection is present. It shall also contain either a videotape or DVD of the video inspection of the building sewer lateral in a format acceptable to the city, as established by the city regulations, policies or procedures.

4. The inspection report shall be submitted to the city for review and analysis accompanied with a review fee in addition to any other fee required by this chapter.

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B. Compliance with regulations. The inspection report shall, in all other aspects, comply with the requirements and specifications described in the director of public works' specifications for a building sewer lateral inspection report as established by the regulations authorized under this title.

13.37.060 Required building sewer lateral repairs.

A. Notice to repair or replace.

Upon receipt of the building sewer inspection report pursuant to this chapter, the director of public works (or his designee) will determine whether it indicates any deficiencies in the operation of the building sewer lateral and, thereafter, shall provide the owner(s) with a notice to repair or replace as may be deemed appropriate by the director. The notice to repair or replace shall specifically identify the deficiencies to be corrected and shall establish a deadline within which the owner(s) shall complete the required corrective actions. The corrective action may include a requirement that the lateral be replaced altogether and also may include the installation of cleanout, grease removal devices, and backwater valves if those devices are otherwise required by this code or any uniform code adopted by the city.

B. Obligations of the owner.

The owner shall repair his building sewer lateral to the satisfaction of the director of public works, and, if a building permit is required for the repairs, the owner shall obtain a final permit inspection and approval of the city building official.

C. Repairs upon other properties not required.

If a building sewer lateral traverses private property, without easements, other than the owner's property, the owner shall only be responsible for the repairs to that portion of the building sewer lateral that are upon the owner's property and also to that portion of the building sewer within a public right-of-way.

13.37.070 Common interest developments.

The homeowners association of a common interest development shall, along with the owner, be jointly and severally liable for the duties and obligations imposed by this chapter in relation to any building sewer lateral located within a common area of the development. If no homeowners association exists, then the individual unit owners, both jointly and individually, shall be liable for the duties and obligations with respect to building sewer laterals established by this chapter.

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13.37.080 Administrative guidelines for inspections.

Within ninety (90) days of the adoption of the ordinance enacting this chapter, the director of public works shall prepare and promulgate the public administrative guidelines that shall, among other things, establish the following:

A. A certification program for pre-qualified contractors or other professionals who will be accepted by the city to perform inspections and the basis for obtaining and maintaining such a certification or for a decertification;

B. Develop a standard inspection report form and specification for building sewer inspection reports;

C. Establish a notice format and standard enforcement timelines for the notice to repair and for repair and inspection service of that notice in a manner consistent with the requirements of due process. Such administrative guidelines shall be approved by a resolution of the city council; and

D. Administrative procedures for accepting, tracking, and inspecting permits for building sewers, grease interceptors, and inspection of food serving establishments.

Section 10. A new Chapter 13.38 of the El Cajon Municipal Code is hereby added to read as follows:

13.38 SEWERS AND SEWAGE DISPOSAL – FATS, OILS AND GREASE

13.38.010 Purpose and Intent.

A. It is the purpose and intent of this chapter to establish regulations for the disposal of grease and other insoluble waste discharges from every food service establishment (an “FSE”) within the city.

B. The city council, in enacting the ordinance codified in this chapter, intends to provide for the maximum beneficial public use of the city's sewer system, to prevent blockages of that system and the accidental discharge of wastewater into the storm drain system or receiving waters of the state, to ensure the cost of maintaining the city's sewer system is equitably distributed among users, to clarify grease disposal requirements for existing food service establishments, and to promote public health and safety.

C. In the event of any conflict or inconsistency between the provisions of this chapter and the provisions of the most recently adopted California Plumbing Code, the provisions of this chapter shall govern.

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13.38.020 Definitions.

As used in this chapter, the following terms are defined:

A. "Administrative authority" shall mean the director of public works, the building official, or any other official(s) as designated by the city manager.

B. "Authorized inspector" shall mean an inspector so designated by the administrative authority.

C. "Director" shall mean the director of public works or other official as designated by the city manager.

D. "Food grinder" shall mean any device installed for the purpose of disposing food waste in the public sewer system.

E. "FSE" "Food service establishment" shall mean any food preparation establishment, restaurant, cafeteria, or any other establishment preparing food for consumption. Domestic homes are not considered food service establishments under this definition.

F. "Grease" shall mean grease, or fatty or oily substances and other insoluble waste that turns or may turn viscous or solidifies with a change in temperature or other conditions.

G. "Grease interceptor" shall mean an underground multi-compartment device installed outside a food service establishment of a size and design in compliance with the California Plumbing Code and approved by the city.

H. "Grease removal facility" shall mean any grease interceptor, trap, drain, screen, or similar device that is designed or installed to reduce the amount of grease entering the wastewater system.

13.38.030 Grease/Sand interceptors.

A. Grease/sand interceptors that are properly sized and constructed shall be required for all buildings that include an increase in plumbing fixture units, and prior to commencing business for all new food service establishments determined by the director to generate grease in quantities greater than that commonly found in domestic sewage. Where grease/sand interceptors are impossible or impractical to install, a grease trap shall be installed.

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B. Grease/sand interceptors are required for all existing establishments where one or more of the following conditions exist:

1. A notice to repair has been issued for repair of the building sewer.

2. The establishment is unable to pass annual inspection without repeated violations.

3. The establishment is unable to complete implementation of best management practices as noted in the annual inspection report.

4. The establishment has violated any waste disposal requirements contained in the Municipal Code and where evidence of substantial grease is observed downstream of the establishment.

13.38.032 Grease storage facilities.

A. All new construction or remodels subject to a new conditional use permit for an FSE shall be required to either store waste grease on the inside of the building or outside in a secured enclosure that is covered, locked, and inside a secondary containment area or device large enough to store the same volume as the primary container. All storage containers shall be designed to prevent tipping and to provide a secure closing lid that shall remain closed at all times that the container is not being accessed. All containers that are used to transfer waste grease shall have a secured lid that prevents accidental spills during transfer.

B. All existing FSEs are required to either store waste grease on the inside of the building or outside in an area secure from vehicular driveways and parking in storage containers that are designed to prevent tipping and to provide a secure closing lid that shall remain closed at all times that the container is not being accessed. All containers that are used to transfer waste grease shall have a secured lid that prevents accidental spills during transfer.

C. All FSEs shall maintain the storage area using good housekeeping techniques to prevent the accumulation of waste grease deposits on the outside of grease containers and shall have an approved emergency spill kit available in close proximity to the storage facilities.

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13.38.040 Food grinders prohibited.

A. Food grinders shall be removed from all existing food service establishments by January 1, 2010.

B. After August 1, 2009, food grinders shall be prohibited in all new food service establishments.

13.38.050 Grease interceptor design and maintenance requirements.

A. General provisions.

1. The installation of a proper interceptor shall be the responsibility of the user who applies for a permit connection and the user whose operations cause or contribute to the necessity for an interceptor.

2. Interceptors shall be installed, utilized, and properly maintained for continuous and efficient operation at all times and at the expense of the user.

3. Interceptors shall be inspected periodically to ensure compliance with these regulations.

4. The administration authority shall approve the type, capacity, and construction of all interceptors shared by multiple businesses can be utilized if specifically authorized by the director and upon evidence of legal operating and maintenance agreements between the involved property owners or users. Provisions shall provide for independent, unilateral operation by one or more parties of the agreement in the case where default by one party has occurred.

5. Interceptors no longer in use shall be abandoned in accordance with the California Plumbing Code.

B. Design.

1. Interceptors for food service establishments shall be sized and designed in compliance with the California Plumbing Code, unless otherwise specified herein.

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2. Other factors that may influence the design include, but shall not be limited to, the following:

    a. The type of facility (such as a restaurant, bakery, food processing factory, etc.);

    b. The volume of the user's business or operation (such as number of meals served, number of seats, hours of operation, etc.);

    c. The peak flow of processed wastewater discharged to the collection system;

    d. Size and nature of facilities (including kitchen facilities) based on size, type, number of fixtures, and type of processing or cooking equipment used;

    e. The type of service provided or operation undertaken (such as dine-in meal service versus carry-out meal service);

    f. The type of foods or other materials used in cooking, processing or manufacturing operations conducted within the facility;

    g. The overall potential for grease-laden discharges;

    h. The existence of devices, procedures or processes designed to minimize the amount of fats, oil or grease from entering the collection system;

    i. The location of the facility, if it is located in a known problem area; and

    j. Any prior problems with the facility, such as blockages, violations, etc.

3. All interceptors shall be certified by the International Association of Plumbing and Mechanical Officers, or another listing agency approved by the director, and be plumbed according to the California Plumbing Code.

4. All grease interceptors shall include an effluent sample box of a type and size approved by the administrative authority.

(Continued on Page 27)

5. Inspection by the administrative authority, or an authorized inspector, of installed interceptors and piping prior to backfilling is required. Piping shall meet the requirements of the California Plumbing Code.

6. Interceptors shall have a sanitary tee located inside the sample box on the discharge side of the sample box.

7. Interceptors shall have a cleanout installed after the sample box on the private lateral and at intervals required by the California Plumbing Code.

8. All manholes and sample boxes are to be installed a minimum of one-half inch above the finished grade with a concrete collar a minimum of eighteen (18) inches around the manhole and sample box lids.

C. Interceptor Maintenance.

1. Any user who is required by the director or the ordinance codified in this chapter to install or operate an interceptor shall be required to adequately maintain the interceptor at the user's expense, so that the interceptor is in proper working order at all times. Maintenance shall include the complete removal of all contents, including floating materials, wastewater, sludge and solids. Decanting or discharging of removed waste back into the interceptor from which the waste was removed or into any other interceptor, for the purpose of reducing the volume to be hauled is prohibited.

2. Grease interceptors shall be cleaned out completely by a permitted waste hauler as necessary to assure that the interceptor will operate as designed at all times or as otherwise specified by the administrative authority.

3. The use of additives, directly or indirectly to the plumbing or sewer system, to emulsify grease and/or oil is specifically prohibited.

4. The use of biological additives as a supplement to interceptor maintenance, including the addition of microorganisms, may be authorized by the director and approval shall be obtained in writing prior to the use of such activities.

(Continued on Page 28)

5. A maintenance log indicating each pumping of an interceptor for the previous twelve (12) months and any other pertinent information shall be maintained by each establishment. This log shall include, but not be limited to, date, time, amount pumped, hauler, and disposal site, and the log shall be kept in a conspicuous location for inspection by the administrative authority or an authorized inspector during normal business hours.

6. All users must sign a waste manifest form before having a waste load transported by a permitted hauler. The user shall also keep copies of the manifest form for a period of three (3) years, and make all manifest records available for inspection by the administrative authority during normal business hours.

7. All waste removed from an interceptor must be disposed at a facility permitted by the county of San Diego or applicable regulatory agencies to receive such waste. The pumpage shall not be returned to the public sewer system or manhole, any private wastewater system or storm drains.

8. All interceptors shall be located as to be readily and easily accessible for cleaning, inspection and removal of intercepted waste.

9. Any fixture connected to a grease interceptor shall have a non-removable, secured food strainer of such integrity to withstand daily operational usage.

D. Required connections to interceptors. All three-compartment sinks, scullery (preparation) sinks, floor drains, and mop sinks along a cook line, pre-wash sinks at dishwashing stations, and all other fixtures that contribute grease into the wastewater system shall be connected to an interceptor.

E. Prohibited connections or additives to interceptors.

1. Final rinse discharge from automatic dishwasher shall not be connected to the interceptor.

2. The use of any additive, such as enzymes, surfactants or chemicals shall not be connected to any type of interceptor. Chemical additives, such as chlorinated solvents, or any other additives that causes the emulsification of grease, are strictly prohibited from use in any type of interceptor.

(Continued on Page 29)

F. Plan review.

1. Applicants or users shall be required to submit copies of detailed facility proposed interceptors, pretreatment facilities, spill containment facilities, and operating procedures, to the community development department. Facility plans shall also include site plans, floor plans, mechanical and plumbing plans, and details to show all wastewater plumbing, spill containment, and appurtenances by size, location, and elevation. The review of the plans and procedures shall in no way relieve the user of the responsibility of modifying the facilities or discharge, and to meet the requirements of this chapter or any requirements of other regulatory agencies.

2. All submitted drawings shall be prepared by a licensed and registered professional engineer. Any false information or misleading calculations submitted shall be the responsibility of the user.

3. The design, location and procedures for operation and maintenance of a required interceptor shall be approved by the administrative authority. Such approval shall be obtained prior to the user's connection of the facility to the public wastewater system.

4. No food service establishment or other identified user shall be constructed except according to plans and specifications approved by the administrative authority.

5. Approved plans and specifications shall not be changed or altered without written approval by the administrative authority.

13.38.060 Best management practices.

Best management practices (each, a “BMP,” in any combination, “BMPs”) as listed below shall be utilized by the FSE and shall be subject to periodic verification and approval by the administrative authority. If at any time the FSE is found to be in noncompliance with this requirement with regard to all of the BMPs below, such noncompliance shall be deemed a violation.

A. Drain screens.

1. Drain screens shall be installed on all drainage pipes in food preparation areas for existing food service establishments by January 1, 2010.

(Continued on Page 30)

2. After August 1, 2009, drain screens shall be installed on all drainage pipes in food preparation areas for all new food service establishments deemed by the director to generate grease.

B. Waste cooking oil.

1. All waste cooking oil shall be collected and stored properly in recycling bins, barrels or drums.

2. Such recycling bins, barrels or drums shall be maintained appropriately to ensure they do not leak.

3. Licensed haulers or an approved recycling facility must be used to dispose of waste cooking oil. A log of such activities will be completed and maintained in plain visible site for inspection by the administrative authority. All manifests for disposal of waste products will be complete and inserted into the log.

C. Food waste. All food waste shall be placed in enclosed plastic bags and disposed of directly into the trash or garbage, and not in sinks.

D. Employee training.

1. Employees of the food service establishment shall be trained by March 1, 2009, and twice each calendar year thereafter, on the following subjects:

a. How to "dry wipe" pots, pans, dishware and work areas before washing to remove grease;

b. How to properly dispose of food waste and solids in enclosed plastic bags prior to disposal in trash bins or containers to prevent leaking and odors;

c. The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped, and how to use absorption products to clean if spills occur; and

d. How to properly dispose of grease or oils from cooking equipment into grease bins, barrels or drums without spilling.

(Continued on Page 31)

2. Training shall be documented and employee signatures retained indicating each employee's attendance and understanding of the practices.

3. Training records shall be available for review at any reasonable time by the authorized inspector.

E. Kitchen exhaust filters shall be cleaned as frequently as necessary to be maintained in good operating condition, but in no event less than one time per month.

F. All best management practices shall be posted conspicuously in the food preparation and dishwashing areas at all times.

13.38.062 Right of inspection.

Food service establishments shall be open and available for inspection by an authorized inspector at all times during normal business hours to ensure that the operation and maintenance of the food service establishment complies with the requirements of this chapter.

13.38.070 Violations for penalties – enforcement.

A. Violations of this chapter may result in fines and/or penalties.

B. Failure to comply with the provisions of this chapter may result in one or more of the following:

1. Notices of noncompliance may be issued with a specified period of correction;

2. Administrative citations may be issued for violations in the amounts and manner set forth in Chapter 1.14 of this code;

3. A criminal complaint may be filed in accordance with Chapter 1.24 of this code;

4. Sewer service may be determined a public nuisance as described in section 13.16.030, and disconnected from the City's sewerage works upon order of a court of competent jurisdiction.

(Continued on Page 32)

C. Appeals of fines, penalties or requirements to install grease interceptors.

1. Unless otherwise provided in this code, appeals of civil or administrative fines, penalties, or other corrective actions shall be submitted to the city manager within thirty (30) days after the food service establishment has been notified of the penalty and/or corrective actions. The decision of the city manager shall be in writing.

2. The decision of the city manager can be appealed to the city council by submitting a written request to the city clerk within fifteen (15) days of the issuance of the city manager's decision, and payment of the appropriate fee, as set by resolution of the city council.

3. Upon appeal, the appellant shall, upon written request to the city manager, be provided within fifteen (15) days of said request, at reasonable cost to the appellant, copies of all reports, data or other documentary evidence upon which the citation is based.

Section 11. This ordinance shall be published as required by law and shall take effect thirty days after adoption. The City Council finds that this activity is not a project and therefore is not subject to the California Environmental Quality Act pursuant to CEQA Guidelines Section 15060(c)(3).

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at an Adjourned Regular Joint City Council/Redevelopment Agency Meeting held this 23rd day of June, 2009, by the following vote to wit:

AYES	:	Lewis, Hanson-Cox, Kendrick, McClellan, Wells
NOES	:	None
ABSENT	:	None
DISQUALIFY	:	None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

KATHIE RUTLEDGE, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Ordinance No. 4930 of the Ordinances of the City of El Cajon, California, as adopted by the City Council at the Adjourned Regular Joint Meeting of the City Council/Redevelopment Agency on the 23rd day of June, 2009.

Kathie Rutledge, CMC, City Clerk

6/23/09 (Item 14.1)

City of El Cajon
AS A COPERMITTEE OF THE SAN DIEGO RIVER WATERSHED

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT (SECTION 7.0) 2009 – 2010

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Appendix B 1. Reports of Illicit Discharges/Complaints

CERTIFICATION

"I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Kathi Henry — 11.15.10

Signature — Date

Kathi Henry, City Manager — (619) 441-1718

Printed Name, Title — Phone Number

SECTION 7.0 ILLICIT DISCHARGE, DETECTION, AND ELIMINATION COMPONENT

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SECTION 7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 INTRODUCTION

The detection of illicit connections and illegal discharges (IC/IDs) is accomplished by using the following three mechanisms:

1. Conducting dry weather field screening and analytical monitoring mechanism.
2. Operating a public complaint hotline and web page.
3. Inspecting local businesses, municipal facilities, and the Municipal Separate Storm Sewer System (MS4).

When an IC/ID is detected or reported, the City investigates, inspects and appropriately follow-ups in order to identify the source or sources of the discharge. Once identified, voluntary compliance and escalating enforcement actions are implemented to immediately eliminate the IC/ID.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

The City provides information to the community on how to report illicit discharges and connections by including articles in sewer bills, semi-annual newsletters, bulletin boards and kiosks around City facilities, the City's Storm Water Protection Program's website, and through literature distributed during inspections and complaint follow up investigations. Citizens are informed to notify sewer spills from private laterals or septic systems, to El Cajon Department of Public Works during business hours or the Police Department Communications Center 24-hour number. The Public Works Department or the Police Department 24-Hour Communications Center immediately informs the Public Works Maintenance Personnel who have the capability to respond 24-hours a day 7 days a week. The Public Works Maintenance Department is trained and has the tools and equipment to respond, contain and clean up sewage spills in accordance with the permit.

The City of El Cajon has a citywide protocol to make it easier for citizens to report any concerns via the City's main website. Citizens can report to the City Manager's Office from a list of concerns that include storm water violations and illegal discharges. All

complaints are automatically routed to proper City departments. Storm water complaints are routed to staff from the Storm Water Section of Public Works and follow up investigations are promptly conducted.

Figure 1 lists the number of complaints the City received and conducted follow up investigations. It is important to point out that these complaints were received through the City's Storm Water Hotline, the City's Storm Water Website, the City Manager's Office, the regional storm water hotline, or via observations of other City Departments.

Figure 1 Complaint and Referrals Addressed and Investigated

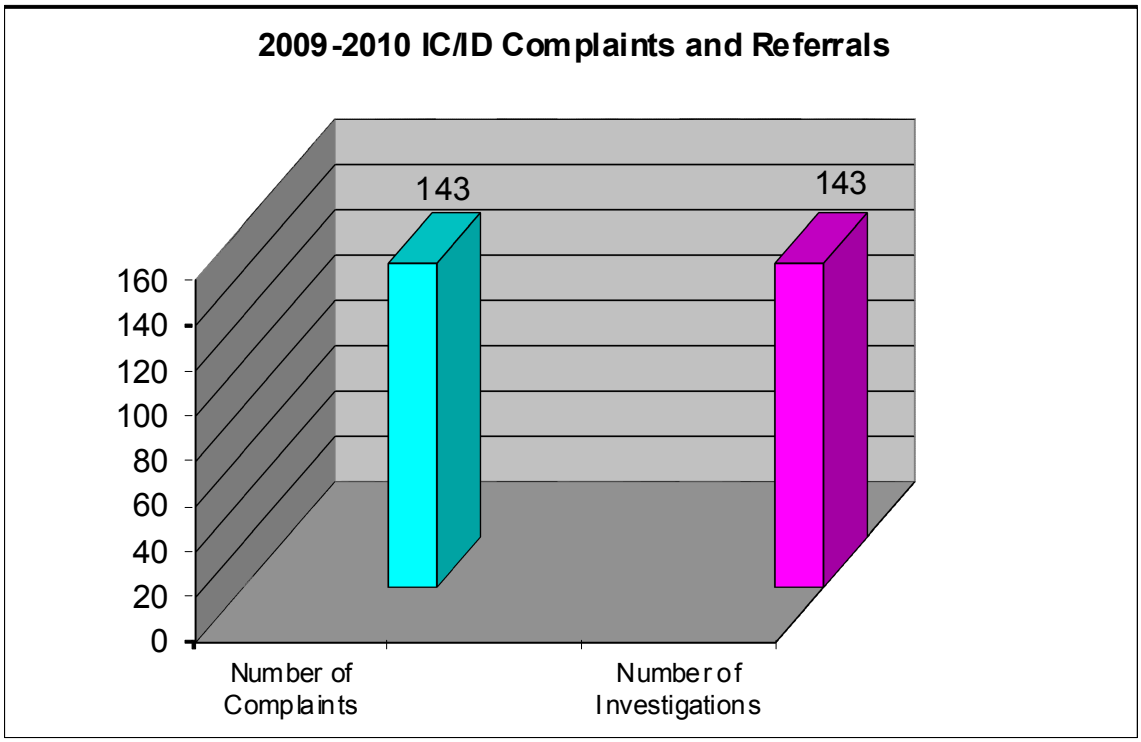

Figure 2 provides a brief summary of the type of illicit discharge detection and elimination complaints received for 2009-10. The number of complaints received during Permit Year 2009-10 (PY3) dropped by three from last year. The historical number of complaints received over the last seven years is depicted in Figure 3. Despite the slight decrease in the number of complaints over the last couple of year, the general trend has increased over the time frame shown in the graph. A possible reason for the increased number of complaints may be attributed to a better-informed citizenry and an increased awareness about storm water quality issues.

Figure 2 Summary of IC/ID Calls and Complaints for 2009-2010

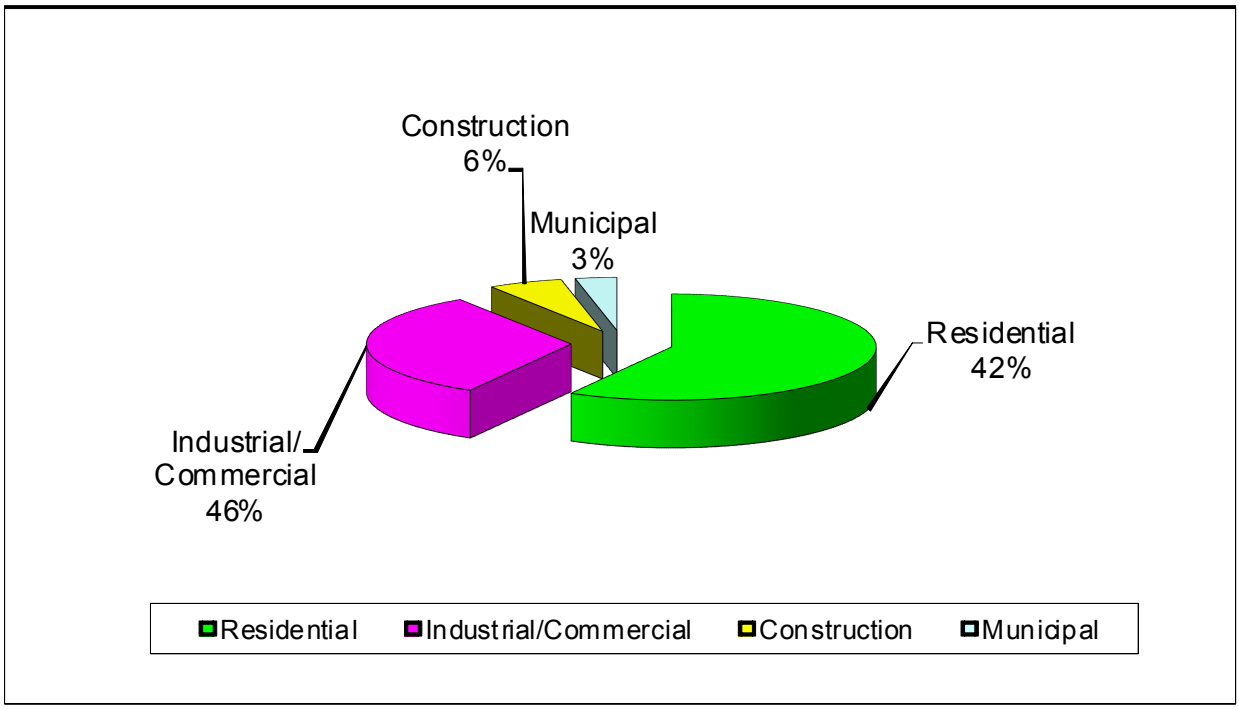

Figure 3 Historical IC/ID Complaints

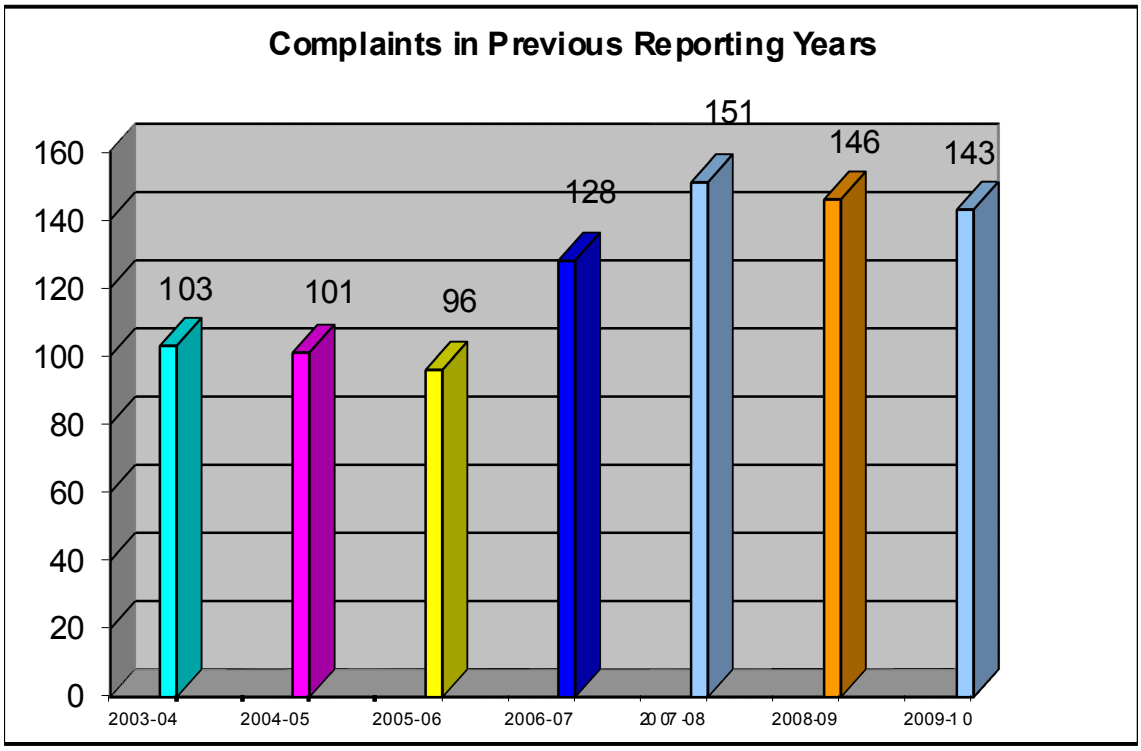

7.3 SPILL REPORTING, RESPONSE AND PREVENTION

Complaints are investigated usually within the day the information is received. A list of complaints for PY 3 is provided in Appendix B.1. The Complainant is contacted to discuss the details of their observation. Storm water staff schedules a meeting with the complainant if necessary. Figure 1, above, shows the number of complaints received, investigated, found as valid, and eliminated. Validity depends on whether the discharge is occurring at the time of the investigation; thus the reason for investigating as soon as the complaint is received. If the preponderance of evidence can link the discharger with the discharge, a verbal or written warning is issued. A monetary administrative citation program has been in existence since May 2003, and is part of the City's enforcement actions. Refer to Appendix A.1 for Citation Program details.

Elimination of valid discharges means a discharger was identified and the discharger had control over the discharge. In a number of cases, the discharge was valid (observed evidence), but a discharger was not found. The discharge was cleaned to the Maximum Extent Practicable and the location noted for further surveillance.

The City maintains full-time staff responsible for performing continuous maintenance activities on the sanitary sewer system. The City maintained approximately 155.6 miles of main sanitary sewer line. To prevent sewage spills and limit infiltration from sanitary sewer lines, the City has an aggressive program that:

- Televises designated areas for root infiltrations, protruding laterals, cracked pipes and other structural problems.
- Every 3 months investigates 51 problem manholes with demonstrated root intrusion (The number has dropped from 59 due to the City's aggressive maintenance and rehabilitation program).
- Every 3 months investigates designated flat flows in designated segments for roots, scale, food/oil/grease accumulation or other possible reasons for stoppages.
- Every 3 months cleans 14 sewer siphons and numerous other "trouble spot" areas.

The City's goal is to have 5 or less reportable public sewer main overflows per year. The City has met this goal from PY2002-03 through PY2009-10, with the exception of PY2008-09. In PY2009-10 the City had no overflows or spills from sewer mains. As indicated in the new municipal permit, in year PY2009-10, the City also tracked sewage overflows from private laterals to indicate additional problem areas. The City responded to 10 reported private sewer spills and recovered 274 gallons of sewage before entering the storm drain system.

Significant spills are contained with temporary berms and by protecting storm drain inlet openings. Spills are cleaned-up using absorbent materials and properly disposed. The City implements remedial actions to cleanup debris of sewage origin and to sanitize the affected areas. Vacuum (Vactor) trucks recover all significant spills originating from sanitary sewer overflow and wash water for proper disposal.

Significant spills of hazardous materials are contained from draining into the MS4 and cleaned by trained first responders and haz-mat teams. The El Cajon Fire Department responded to several incidents that involved typical household waste and auto collision issues but none of the incidents resulted in discharges into the MS4.

7.4 URBAN RUNOFF MONITORING

7.4.1 Dry Weather Analytical Monitoring Investigation

The City has conducted a dry weather-monitoring program since 1993 and has increased the level of effort to determine the presence and types of pollution in the storm drain system. The Dry Weather program is an indication of urban runoff pollution, which is typically composed of irrigation runoff and other permitted non-storm water discharges. Dry weather monitoring is meant to identify areas where illegal discharges of consistent pollution (fertilizer runoff or sewer leaks) may be occurring or a single event (e.g. fecal coliform) exists. The Dry Weather program results are valuable in eliminating illegal discharges and illicit connections. Analyses were continued for dissolved oxygen, total dissolved solids and total organic carbon to assist with assessing pollutant levels that may impact 303(d) listings of Forrester Creek and the San Diego River.

Since 2002 the City has conducted a dry weather-monitoring program that consists of field screening observations, field screening analytical monitoring, and laboratory analytical monitoring. For PY1, 34 sites were visited, sampled for field parameters, and compared with previous years to determine any trends. Additional sites were added or changed depending on available flows, site conditions, and proximity to other sampling stations.

The picture below shows a typical sampling location in an open channel. Laboratory analytical samples were collected at 10 sites (over 25% of the total collected) and sent to an offsite certified laboratory for further analysis. The following is a summary of the dry weather program results. The Dry Weather Field Screening and Analytical Monitoring Program Report is attached as Appendix A.7. Field Data sheets have been included where qualitative observations were made during each site visit.

Site 1	

The following is a summary of the dry weather monitoring activities.

- 29 out of 31 sites had ponded or measurable flowing water with flow rates varying from less than one to 94 gallons per minute,
- pH measurement of 8.6 was the highest at Site 41,
- Conductivity of 6.66 mS/cm at Site 19,
- Ammonia was not detected above the action level of 1.0 mg/L at any site,
- Maximum nitrate concentrations of 11.26 mg/L at Site 30,
- No detections of reactive phosphate at or above the action level,
- No detection of surfactant concentrations above action levels,
- Coliform levels exceeded the action level at one site - Investigated,
- Fecal coliform exceed action levels at two sites – these sites were investigated, the follow up at one of the sites was below action levels, and
- Enterococcus exceeded action levels at two sites – these sites were investigated, the follow up at one of the sites was below action levels.

The City of El Cajon updated its Jurisdictional Urban Runoff Management Program (JURMP) in 2008. Based on years of field experience, the City has selected primary dry weather monitoring stations that provide adequate coverage of the entire MS4 system. Some modifications have been made since the last JURMP was developed in 2002. Site 13, which was usually dry, was replaced with Site 13A, which drains both the area upstream of Site 13 and an additional area that had not been previously monitored. Sites 24 and 41 were converted from alternate sites to primary sites. The City also added a trash assessment component to the dry weather-monitoring program as required in the R9-2007-0001 Municipal Permit. Results can be found in Section 5 of the 2010 City of

El Cajon Dry Weather Field Screening and Analytical Monitoring Program included in Appendix A.7.

7.5 INVESTIGATION/INSPECTION FOLLOW-UP AND ENFORCEMENT

7.5.1 Follow-Up Investigations From Dry Weather Monitoring Program

Field screening results were immediately compared to numeric action levels using best professional judgment. If a potential source was indicated, an investigation was initiated to determine the origination. Numeric exceedances of action levels that were not perceived as an immediate threat to water quality were re-sampled within 24 hours to confirm a continuing discharge. Field and laboratory analytical results were compared to numeric action levels and California Toxics Rule using Best Professional Judgment. Trash, debris, and algae were observed at a majority of the open channel sites.

Follow up investigations are divided into two categories. The first type is a confirmation visit to retest the constituent that had been measured above its respective action level. For field test exceedances, the confirmation visit occurs within one business day. For exceedances of laboratory constituent action levels, the confirmation visit is conducted within two business days of receiving the results. If the constituent in question remains above the action limit during the confirmation visit an upstream investigation will occur. The upstream investigation consists of "IC/ID follow-up" visits which intend to identify any illicit connections or illegal discharges into the storm water conveyance system. Please refer to Appendix A.7 for a more detailed explanation of the dry weather monitoring program follow-up investigations.

Based on the monitoring results follow up investigations were conducted at the following sites:

- An upstream investigation was conducted at Site 1 for Enterococcus. During the follow up investigation Enterococcus bacteria decreased to below action levels. Since areas upstream of the site did not appear to be contributing significant sources of bacteria, it was concluded that the exceedance was likely the result of a transient flow.

- Nitrate detected at Sites 30, and 37 were investigated and the following results or probable sources were concluded:
    - <u>Sites 30 and 37</u> – Investigations conducted in the past have found that groundwater infiltrates into the corrugated steel pipe upstream of Site 37 from sections in the pipe that are damaged or degraded, Site 30 is located downstream of Site 37. The City conducted further investigation in this area in July 2008. The investigation included the drilling of hydro-punch borings to collect ground water samples. The groundwater samples confirmed high levels of nitrate-nitrogen, with concentrations around 16 to 18 mg/L. Groundwater elevations are high enough to potentially infiltrate into the corroded corrugated metal pipe.

- Exceedances of total and fecal as well as Enterococcus where measured during laboratory analysis at Site 7. At the confirmation visit trash, algae, and leaves were observed in contact with flow at the sites. Animal waste was also observed around the site. As a result, it was concluded that the exceedances are likely the result of bacteria directly arising from decomposing organic material.

- During the initial visit to Site 17, a fecal coliform exceedance was measured above the action level. No significant sources of bacteria were observed during the follow-up visit, and fecal coliform results decreased to below action levels. It was concluded that exceedance was likely the result of a transient flow.

The City has developed educational materials that will be provided to all city residents via the City's newsletters. The educational materials provide information regarding the implementation of pet waste disposal best management practices.

The City is also conducting the following actions as recommended in the dry weather monitoring report:

- Clean up decomposing leaves, algae, and trash at Site 7. These are likely contributing to the bacterial exceedances measured at this site.

- Remove trash and debris from sites 3, 30, and 32, which received marginal trash assessment ratings.

7.5.2 Complaint Investigations

The City requires responsible party(ies) to take actions necessary and appropriate to disconnect, block, stop or divert drainage facilities and pipe connections that are determined to discharge pollutants to the municipal storm drain system. The City also requires responsible party(ies) to implement procedure to discontinue discharges, which are found to carry pollutant materials to the storm drain system. Procedures must consider the following actions for implementation:

- Disconnect all drainage pipes found to discharge illegal pollutants to the system.
- Plug sinks and drains, which are discharging illicit materials to the storm drain system.
- Divert illegal discharge to appropriate handling facility either sanitary sewer or on-site treatment methods. Contain and properly manage hazardous waste materials including proper storage and disposal methods.
- Eliminate source of discharge
- Remove pollutant materials from the site.
- Keep pollutant materials from coming in contact with discharge.
- Contain potential illegal discharges on site for treatment or proper disposal.

Illicit connections and illegal discharges which are not removed, eliminated or otherwise continue to discharge to the municipal storm drain system receive appropriate enforcement actions by the City.

As specified in the City Ordinance, the City is able to use various warnings and actions to correct facility or residential activities. For PY2009-10, as in previous years, the City mainly used coordination and partnerships to implement and enforce the requirements of the JURMP.

If enforcement was required, a written warning followed verbal warnings. The written warning provides a description of deficiencies that need to be corrected before a specified date to prevent subsequent escalating enforcement actions. Escalating violations result in monetary citations, three storm water employees are California Peace Officers able to issue Administrative Citations. City Public Works Maintenance personnel also assist Storm Water personnel and respond to discharges to stop, recover and clean pollutants when private property entities do not respond to the discharge in a timely manner. Violators that receive monetary Administrative Citations are also responsible to pay fees that may accrue from discharges to the storm drain system that require the intervention of City crews. Enforcement Criteria are provided in Appendix A.1.

The numbers of complaints the City received, conducted follow up investigations and eliminated are listed in Figure 4. As indicated previously, a quick response is the key to determining validity and eliminating the discharge or connection. The validity of the complaint depends on whether the discharge is occurring at the time of the investigation; thus the reason for investigating as soon as the complaint is received, 99 complaints were found to be valid. If the preponderance of evidence can link the discharger with the discharge, a warning was issued. In 24 cases, the complaint was valid (observed evidence of discharge), but a discharger was not found. In these cases the discharge or residue was cleaned to the Maximum Extent Practicable and the location noted for further surveillance. The identification of IC/IDs means that a discharger was identified and the discharger had control over the release to eliminate the discharge, 75 IC/IDs were identified and eliminated.

All valid storm water complaints were considered violations and follow up investigations were conducted. Of the 143 complaints and follow up investigations, 84 enforcement actions were taken as follows:

- Verbal Warnings 60
- Written Warnings 14
- Administrative Monetary Citations 10

Table entitled “Reports of Illicit Discharges/Complaints” in Appendix B.1 provides detailed information on the type of complaints and follow up actions that the City took to resolve the discharges.

Figure 4 IC/ID Complaints Received and Resolved

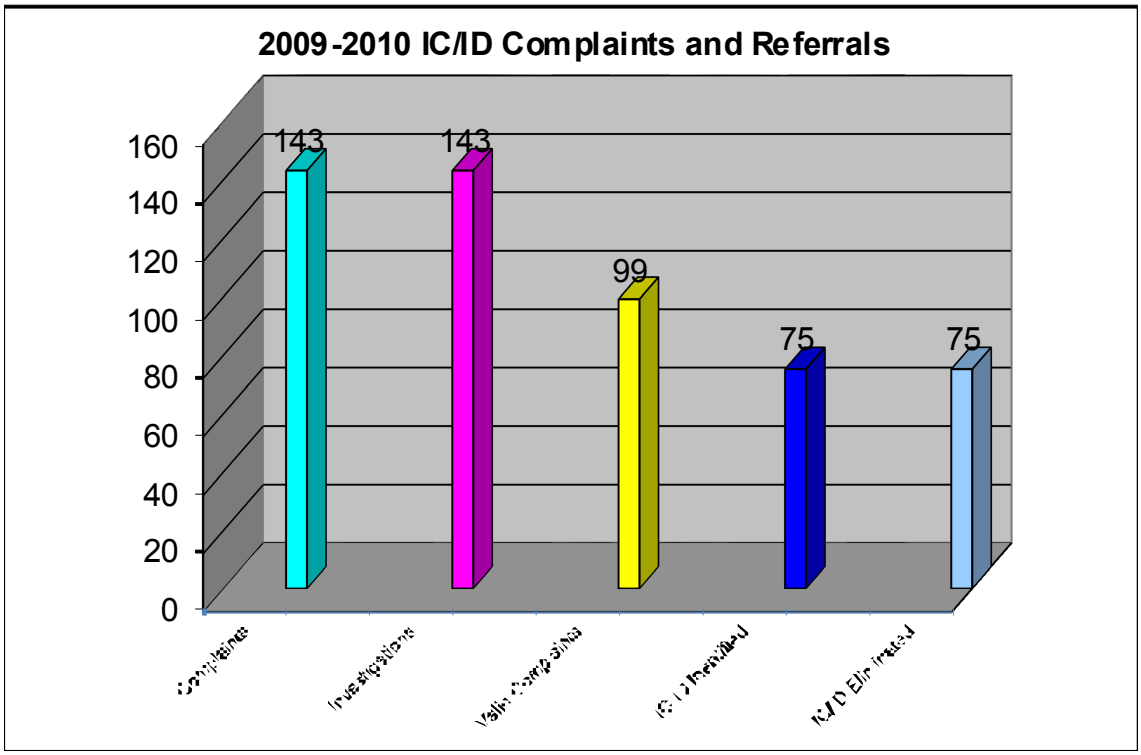

7.6 IMPROVEMENTS AND REGULATORY COMMENTS

As of the writing of this report no comments have been received for Annual Report PY2008-09.

Appendix A.1

STORM WATER ADMINISTRATIVE CITATION PROGRAM CRITERIA

1. Issue a Warning (followed by a letter, when possible)
   a. Whenever a discharge of pollutants is imminent or the potential exists, but the discharge has not yet entered the storm drain conveyance system (street, gutter, catch basin, etc.)
   b. Whenever a BMP is not effective for the pollutant or discharge and other BMP alternatives are available.
   c. Whenever a discharge origin cannot be determined through factual, investigative, or empirical evidence. Provide a cleanup schedule to be used as future enforcement.
   d. Small residential projects of less than 500 square feet of disturbed soil.
   e. An approved erosion and control plan has been issued and BMPs are partially implemented.
   f. Whenever activities are conducted in the right-of-way and no BMPs are implemented.
   g. Whenever a discharge of fully recoverable pollutants are discharged into the City's storm drain system (street and gutter only).

2. Issue a Citation
   a. Whenever there is a sewage overflow. (e.g. blockage; clean-out cap was removed to allow sewage to discharge into the street and storm drain).
   b. Whenever there is a discharge of unrecoverable pollutants into the storm drain conveyance system (street, gutter, catch basin, etc.)
   c. A Warning was previously issued (verbal or written).
   d. Any direct discharge into Forester Creek specifically any material which contains a 303(d) listed pollutant adopted by the State of California.(pH, TDS, and fecal coliform).
   e. An approved erosion and control plan has been issued and no BMPs are implemented.
   f. An egregious act of discharge (e.g. illegal dumping)

3. Issue a Penal Code Violation (PC374.3, 374.4, 374.7)
   a. When a First Citation was previously issued and this is a repeat violation.
   b. When the discharge is executed in the presence of any City Staff or after being told to cease operations. (waste, sewage, and litter discharges)
   c. Any direct discharge into Forester Creek, specifically material containing pollutants for which a 303(d) listing has been adopted by the State of California.(pH, TDS, and fecal coliform).

4. Issue a Stop Work Order
   a. For construction sites that received a warning and a first violation for discharging pollutants due to ineffective or proposed, but not yet implemented BMPs.
   b. A discharge of pollutants into the storm drain system, in addition to a citation, that requires immediate corrective action or mitigation.

5. Refer to Regional Board
   a. Repeated violations by a private citizen, property owner, or business for discharges to the storm drain system.
   b. A refusal to mitigate, remediate, or clean a spill or discharge of pollutants that will enter or have entered City MS4.

Appendix A.7

City of El Cajon
Dry Weather Field Screening and Analytical Monitoring Program
2010

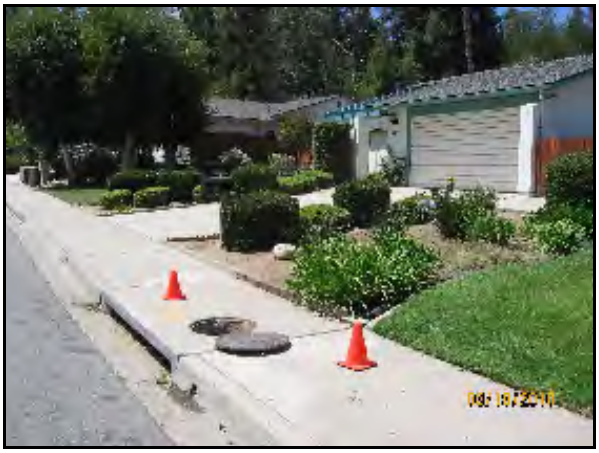

Submitted to:

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Prepared by:

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Consultants in Water & Environmental Sciences

November 12, 2010
Project No. 201034W-4

Jaime Campos, P.E.
Storm Water Program Manager
City of El Cajon
Department of Public Works
200 Civic Center Way
El Cajon, CA 92020-3916

Re: 2010 Dry Weather Field Screening and Analytical Monitoring Program
City of El Cajon, California

Dear Mr. Campos:

Enclosed please find our final report for the City of El Cajon 2010 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of El Cajon during the 2010 dry weather season. The contents include field screening results, trash assessment data, analytical laboratory test results, analyses of the collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. It has been our pleasure working with the City of El Cajon on this project. If you have any questions regarding this report, please call me at (858) 586-6600.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

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ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
µg/L	Micrograms per Liter
Basin Plan	Water Quality Control Plan for the San Diego Basin
CFR	Code of Federal Regulations
City	City of El Cajon
CMC	Criterion Maximum Concentration
COC	Constituent of Concern
Copermittees	The 18 cities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CTR	California Toxics Rule
CV	Coefficient of Variance
D-MAX	D-MAX Engineering, Inc.
E. coli	*Escherichia coli*
EC	Electrical Conductivity
EMA	EnviroMatrix Analytical, Inc.
FS	Functional Sensitivity
gpm	Gallons per Minute
GPS	Global Positioning System
HSA	Hydrologic Subarea
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illegal Discharge
JURMP	Jurisdictional Urban Runoff Management Program
LED	Light-Emitting Diode
MBAS	Methylene Blue Active Substances
mg/L	Milligrams per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) per 100 Milliliters
mS/cm	Millisiemens per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
na	Not Analyzed
nd	Not Detected
ns	Not Sampled (dry site)
NTU	Nephelometric Turbidity Unit
PDL	Practical Detection Limit
ppb	Parts per Billion
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board
TDS	Total Dissolved Solids
USEPA	United States Environmental Protection Agency
WQO	Water Quality Objective
WURMP	Watershed Urban Runoff Management Program

1.0 INTRODUCTION

1.1 Program Overview

The purpose of the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) is to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm water conveyance system, minimizing the negative impact of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following components:

- Field visual observations
- Field sampling
- Trash assessments
- Laboratory analytical monitoring

The data gathered from dry weather monitoring is used to characterize discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as needed to detect and eliminate the sources of these pollutants. The results from the current year's Dry Weather Monitoring Program conducted by D-MAX are presented herein.

1.2 Hydrologic Setting

The City of El Cajon (City) is part of the San Diego River Watershed. Forester Creek, the largest receiving water body in the City, travels westward through the City, and exits in the northwest section of the City where it enters the City of Santee. Runoff is generated within the City from the following seven drainage basins:

- Forester Creek Basin
- Broadway Channel Basin
- Washington Channel Basin
- County Ditch Basin
- Airport Basin
- Fanita Basin
- Fletcher Basin

Broadway Channel Basin, Washington Channel Basin, County Ditch Basin, and Airport Basin all discharge into Forester Creek, which converges with the San Diego River in the City of Santee. Fanita Basin discharges to the City of Santee and is eventually conveyed to the San Diego River. Runoff transported through Fletcher Basin drains to the Alvarado Channel in the City of La Mesa, which also contributes to the San Diego River.

The City of El Cajon constitutes slightly more than three percent of the total area of the San Diego River watershed, which also contains portions of the cities of Santee, San Diego, and La Mesa, as well as unincorporated portions of the County of San Diego. The most recent Watershed Urban Runoff Management Program (WURMP) Annual Report identified bacteria indicators, phosphorus, total dissolved solids (TDS), low dissolved oxygen and turbidity as high priority constituents of concern (COCs) for the entire San Diego River watershed. Additionally, the 2006 federal Clean Water Act 303(d) list designates Forester Creek as an impaired water body for fecal coliform, pH, TDS, low dissolved oxygen, and phosphorus.

1.3 Regulatory Requirements

In accordance with the San Diego County Municipal Storm Water Permit Order R9-2007-01 (Municipal Permit), each of the Copermittees is required to annually perform dry weather monitoring of discharges into its storm water conveyance system. During the dry weather season, May 1 through September 30, selected locations along the storm drain conveyance system are evaluated. This procedure includes recording field observations, estimating observed flow rates, and conducting field testing. The Municipal Permit also necessitates that the Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station is selected. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days.

1.4 Previous Work

The City has conducted dry weather field screening programs since 1993 at several locations within the City's storm water conveyance system. A summary of the number of sites sampled each year is displayed in Table 1-1. Historical dry weather monitoring data is included in Appendix A.

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER MONITORING

Year	Number of Field Screening Sites [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1993	6	data not available [3]			na
1994	6				na
1996-R1	8				na
1996-R2	8				na
1997	8				na
1998	8				na
1999-R1	8				na
1999-R2	8				na
2000	8				na
2001	8				na
2002	31	29	2	3	10
2003	31	30	1	1	10
2004	31	30	1	1	10
2005	31	30	1	2	10
2006	31	31	0	2	10
2007	31	31	0	2	10
2008	31	30	1	3	10
2009	31	26	5	3	10

Notes:
na = not analyzed, R1 = round 1, R2 = round 2
[1] Total number of sites with flowing or ponded water.
[2] Laboratory testing commenced in 2002 as required by Municipal Permit Order 2001-001.
[3] Available information does not distinguish between flowing and ponded sites during this period.

1.5 Report Outline

This report is presented in the following order:

Section 1, Introduction, includes a program overview, a discussion of the City's hydrologic setting, regulatory background, a summary of previous dry weather monitoring, and the report outline.

Section 2, **Sampling Locations,** describes the field screening sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and quantitative results of the field screening analyses.

Section 5, Trash Assessment, discusses the procedure and results of the trash assessment.

Section 6, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 7, Data Analysis, provides an analysis of this year's field and laboratory data, as well as a comparison of past results.

Section 8, Follow-up Investigations, details the results of follow-up investigations undertaken to isolate the sources of action level exceedances measured during the monitoring program.

Section 9, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Historical Dry Weather Monitoring Data

Appendix B Photographs of Sampling Locations

Appendix C Laboratory Analytical Reports

Appendix D Field Data and Trash Assessment Sheets

Appendix E Shapefiles of Parcels Suggested to Receive Educational Material

2.0 SAMPLING LOCATIONS

The City updated its Jurisdictional Urban Runoff Management Program (JURMP) in 2008. Based on years of field data, the City has selected primary dry weather monitoring stations that provide adequate coverage of the entire Municipal Separate Storm Sewer System (MS4). The City's 2010 Dry Weather Monitoring Program consisted of 31 primary monitoring stations, 10 of which are designated sampling sites for laboratory analysis. If a primary site was dry, an alternate station with flowing or ponded water was selected for monitoring. In 2010, sites 31, 36, and 39 were dry, and sites 9, 19 and 22 were selected as replacements. All sampling sites are located in the San Diego River Watershed, Hydrologic Unit 907.

Table 2-1 provides the site number, location, conveyance configuration, land uses, hydrologic subarea, and GPS coordinates of the sampling locations that were visited. Photographs of sampling locations are included in Appendix B. A complete map of the MS4, including sampling locations and drainage basins, is included as Figure 1 at the end of this report. A map of the watersheds in and around the City of El Cajon, broken down into HSAs, is included as Figure 2.

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
1	Forester Creek Channel, north of I-8, between Magnolia Avenue and Johnson Avenue, south of Parkway Plaza	Concrete Channel	Commercial	Residential	907.13	32.80386	-116.96450
2	Washington channel, north of I-8, between Magnolia Avenue and Johnson Avenue, south of Parkway Plaza	Concrete Channel	Residential	Commercial	907.13	32.80363	-116.96548
3	North of Main St., between Chambers St. and Johnson Ave., ramp access w/car next to Artesia Apartments	Concrete Channel	Residential	Commercial	907.13	32.79507	-116.96860
4	North of Vernon Way, between Johnson Ave. and Marshall Ave.	Concrete Channel	Industrial	Commercial	907.13	32.81221	-116.97348
5	Forester Creek channel, adjacent to the Weld Bouled trolley station, southeast of the Marshall Avenue and Cuyamaca Street intersection	Concrete Channel	Commercial	Industrial	907.13	32.82665	-116.98226
6	South end of Victor Ave., south of Valley Village Dr.	Concrete Channel	Commercial	Residential	907.13	32.80890	-116.95534
7	Fletcher Hills Creek Channel at Fletcher Parkway and Chatham Street	Concrete Channel	Residential	Commercial	907.11	32.79751	-117.00346
8	Southeast of the Fanita Dr. / Weld Blvd. intersection	Concrete Channel	Residential	Open	907.12	32.82158	-116.99933
9*	Whitsett Dr. in front of 1473, at the east sidewalk	Manhole	Residential	Open	907.12	32.81473	-116.99976
13A	Petree Street, in middle of street, In front of No. 1140	Manhole	Residential	None	907.13	32.80581	-116.97696
14	Pierce St., south of Wagner Dr., across from Grace Fellowship Church, north of the National Guard facility	Outlet	Residential	Commercial	907.13	32.80074	-116.97671
15	Chase Ave. and Grossmont Ave. intersection, across from Grossmont Ave. in the south sidewalk	Manhole	Residential	Commercial	907.13	32.78237	-116.97815

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
17	Next to 350 Cypress Lane, east of Pioneer Way, on the north side of the street	Earthen Channel	Industrial	Commercial	907.13	32.81660	-116.96609
18	East of Marshall Ave., north of Vernon Way, west side of Forester Creek Channel	Outlet	Industrial	Commercial	907.13	32.81298	-116.97357
19*	Southwest corner of Jackman St. and Petree St. intersection	Manhole	Residential	Commercial	907.13	32.80576	-116.97344
20	North of 533 Main St., under bridge on the west side of the channel, the southernmost of the two outfalls	Outlet	Commercial	Residential	907.13	32.79534	-116.96861
21	Southwest corner of El Cajon Blvd. and W. Palm Ave. intersection	Manhole	Commercial	Residential	907.13	32.79124	-116.97179
22*	Washington Ave., between Emerald Ave. and Van Houten Ave., at the north side of the bridge	Outlet	Residential	Commercial	907.13	32.78786	-116.96767
23	on the west side of Grant Ave & Grossmont Ave intersection, in front of 788,790 Grossmont Ave, in the street	Manhole	Residential	Commercial	907.13	32.78586	-116.97468
24	Chase Ave., between Emerald Ave. and Estes St. north of street, easternmost outfall	Outlet	Residential	Open	907.13	32.78046	-116.96785
25	East side of Avocado Ave., between Avenida Abajo and Skywood Dr.	Earthen Channel	Residential	None	907.13	32.77390	-116.95860
26	Greenfield Dr., west side of Victor St., across from No.1237	Manhole	Residential	Commercial	907.13	32.81249	-116.95534
27	Ballantyne St., across from Beech St., next to the bus stop	Manhole	Residential	Commercial	907.13	32.80256	-116.95808
28	North side of Madison Ave., east of Jefree St.	Manhole	Residential	Commercial	907.13	32.80065	-116.95276

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
30	Madison Ave., between Roberta Ave. and Roselle Ave., in front of the Boys and Girls Club	Manhole	Residential	Commercial	907.13	32.80010	-116.94128
31	North of Lexington Ave. and Filbert St., in alley, south of channel	Catch Basin	Residential	None	907.13	32.79363	-116.95506
32	Lincoln Ave., south of Lexington Ave., behind 389 "Lincoln Park Apts."	Outlet	Residential	None	907.13	32.79203	-116.95240
33	Next to 950 Lincoln Ave., between Renette Ave. and Raymond St.	Outlet	Residential	None	907.13	32.78280	-116.95390
34	Second St., Persimmon Avenue between Crosby Street and North Second Street.	Outlet	Commercial	Residential	907.13	32.81143	-116.93633
36	Oakdale Ave., between Second St. and Grape St., in front of 1352	Catch Basin	Residential	Commercial	907.13	32.80204	-116.93327
37	East side of S. Second St., across from mobile home community, entrance between E. Main St. and Lexington Ave.	Catch Basin	Residential	Commercial	907.12	32.79447	-116.93714
38	Jamacha Rd., west side of street, at the southeast corner of residential address 930 (across from "King's Mark Apts.")	Manhole	Residential	None	907.13	32.78382	-116.92809
39	E Main St., between Greenfield Dr. and Pepper Dr., east side of St., next to "Rebel Rent"	Manhole	Residential	Commercial	907.13	32.81341	-116.91750
41	Northwest of 558 Johnson Avenue	Concrete Channel	Industrial	Commercial	907.13	32.80209	-116.97163

Notes:
*Sites 31, 36, and 39 were dry. Alternate sites 9, 19, and 22 were selected as replacements.
Denotes a dry weather location sampled for both field screening and laboratory analysis.

3.0 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of flow measurements, qualitative field observations, and quantitative field analyses of selected water quality parameters. Weather conditions, time since last rainfall, and the type of storm water conveyance are recorded as well. Specific observations and results of the field water quality analyses are documented on field data sheets, which also serve as a record of the field visit. Data sheets are completed for every site visit regardless of whether or not samples were collected. Check boxes on the data sheets indicate if the visit is for routine field screening, confirmation of an exceedance, or an IC/ID follow-up visit. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation. Data sheets from the 2010 Dry Weather Monitoring Program are included as Appendix D.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Qualitative field observations are made during each site visit. These observations include a general site assessment and description of water odor, clarity, the presence of floatable materials, visible deposits or stains, and organisms. Evidence of present or past IC/IDs to the storm drain system can also be discovered through careful field observations. Each field screening location is photographed to document site conditions. Photographs of each site visited are included in Appendix B.

Flow Measurement

Flow measurements can help estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative of an illegal discharge. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth, and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)
- Orthophosphate-Phosphorus (Orthophosphate-P)
- Surfactants, measured as methylene blue active substances (MBAS)
- Dissolved Oxygen

The methods used to perform the above field analyses, along with the reporting limit, range, and accuracy of each method, are listed in Table 3-1.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Method Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.01 mS/cm	0 – 20 mS/cm	± 2% of FS[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.1°C	0.0°C – 60.0°C	± 0.5°C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.01	0.00 – 14.00	± 0.01
Turbidity	Hanna Instruments HI 93703 Portable Turbidity Meter*	0.00 NTU	0.00 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate*	0.20 mg/L**	0.20 mg/L – 3.00 mg/L**	Varies with measured concentration[2,3]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[4]*	1.13 mg/L**	1.13 mg/L – 113 mg/L**	± 30% of PDL[2]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[4]*	0.10 mg/L**	0.10 mg/L – 2.61 mg/L**	Varies with measured concentration[2,3]
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.00 mg/L – 3.00 mg/L***	± 0.13 & ± 0.5 mg/L[5]
Dissolved Oxygen	Hanna Instruments HI 9145 Portable Dissolved Oxygen Meter	0.00 mg/L	0.00 to 45.00 mg/L	± 1.5% of range

Notes:

EC = electrical conductivity
mS/cm = millisiemens per centimeter
°C = degrees Celsius
NTU = nephelometric turbidity unit
mg/L = milligrams per liter
LED = light-emitting diode

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] The Practical Detection Limit (PDL), also known as the reporting limit, is defined as the lower limit of the stated test range. Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The PDL for nitrate is 5.0 mg/L; however, the PDL for nitrate-nitrogen is lower due to the conversion.

[4] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The PDL for orthophosphate is 0.3 mg/L; however, the PDL for orthophosphate-phosphorus is lower due to the conversion.

[5] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

*Test method information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

3.2 Laboratory Analytical Methods

In accordance with the Municipal Permit, laboratory samples were collected at 10 sites, representing 25 percent of the sites where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical (EMA), Inc, a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Oil and grease
- Total hardness
- Diazinon
- Chlorpyrifos
- Dissolved Cadmium
- Dissolved Copper
- Dissolved Lead
- Dissolved Zinc
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria
- Total Dissolved Solids (TDS)
- Total Organic Carbon (TOC)

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

3.3 Quality Assurance and Quality Control

The Quality Assurance and Quality Control (QA/QC) Plan utilized for this project includes the Environmental Protection Agency (EPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters, turbidity meter, and conductivity meter are tested daily before field screening begins. The pH meters are calibrated as needed with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter and conductivity meter are calibrated as needed using standard solutions.

Field sample collection containers are rinsed first with distilled water and then with the sample water prior to sample collection. Upon completion of sampling and testing at each site, sample collection containers, test vials, and ion-sensitive electrodes are rinsed twice with distilled water and dried.

Field test kit accuracy is assessed prior to commencing sampling. Each lot, or batch, of Chemetrics ampoules is analyzed against standard solutions of known concentrations of ammonia-N, nitrate, orthophosphate, and surfactants. The results of these tests are shown in Table 3-3.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Method Detection Limit	Maximum Holding Time[1]
Oil and Grease	EPA 1664	5 mg/L	5 mg/L	28 days
Total Hardness	EPA 200.7	10 mg/L	10 mg/L	14 days
Dissolved Cadmium	EPA 200.8	1 µg/L	0.2 µg/L	24 hours
Dissolved Copper	EPA 200.8	10 µg/L	1 µg/L	24 hours
Dissolved Lead	EPA 200.8	5 µg/L	1 µg/L	24 hours
Dissolved Zinc	EPA 200.8	20 µg/L	0.3 µg/L	24 hours
Diazinon	EPA 8141A	0.05 µg/L	0.04 µg/L	7 days
Chlorpyrifos	EPA 8141A	0.05 µg/L	0.04 µg/L	7 days
Total Coliforms[2]	SM 9221	20 – 1,600,000 MPN/100 mL	20 MPN/100 mL	6 hours
Fecal Coliforms[2]	SM 9221	20 – 160,000 MPN/100 mL	20 MPN/100 mL	6 hours
Enterococci[2]	SM 9230	20 – 160,000 MPN/100 mL	20 MPN/100 mL	6 hours
Total Coliforms	SM 9223 (IDEXX Colilert)[3]	10 – 2,419,600 MPN/100 mL	10 MPN/100 mL	6 hours
Escherichia coli (E. coli) [4]	SM 9223 (IDEXX Colilert)[3]	10 – 2,419,600 MPN/100 mL	10 MPN/100 mL	6 hours
Enterococci	IDEXX Enterolert[3]	10 – 241,960 MPN/100 mL	10 MPN/100 mL	6 hours
Total Dissolved Solids	SM2540C	20 mg/L	1 mg/L	7 days
Total Organic Carbon	SM5310B	0.30 mg/L	0.30 mg/L	28 days

Notes:

µg/L = micrograms per liter

MPN/100 mL = most probable number (of colony-forming units) per 100 milliliters

[1] Maximum Holding Time values listed apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.

[2] For D-MAX's Dry Weather Monitoring Program, EMA performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100 mL). For fecal coliforms and Enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.

[3] IDEXX Colilert and Enterolert tests are performed by EMA. This test is used during upstream investigations only.

[4] Number of fecal coliforms is derived from number of *E. coli* through the following formula:
Fecal Coliforms = *E. coli* / 0.85. The converted fecal coliform count, not the number of *E. coli*, is reported in this report's data tables.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Analyte	Known Concentration (mg/L)	Acceptable Range* (mg/L)	Lot Number	Date	Field Test Kit Results (mg/L)
Ammonia-N	0.85	0.68 - 1.02	73707/2	5/17/2010	0.811
			74559/8	5/27/2010	0.821
			75425/13	6/30/2010	0.811
Nitrate**	44.3	31.0 - 57.6	75362/2	5/17/2010	42.77
			73960/4	5/17/2010	41.02
			75655/6	6/30/2010	38.56
			75655/8	6/30/2010	36.49
			75998/8	8/6/2010	46.63
Orthophosphate**	6.13	4.29 - 7.97	75263/4	5/17/2010	6.023
			73677/4	5/17/2010	5.265
			75756/4	6/30/2010	5.015
Surfactants	1.0	0.75 - 1.25	75440/75293/12	5/17/2010	1.0
			74268/74253/2	5/17/2010	1.0
			75638/75460/12	6/30/2010	1.0
			75638/75631/2	6/30/2010	1.0
			75928/75791/6	7/28/2010	1.0

Notes: *Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1. **Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by multiplying the results by 0.226 for nitrate and 0.326 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis are collected concurrently with field samples and utilize the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed, and samples are delivered and analyzed within the appropriate holding times listed in Table 3-2. Completed chain of custody forms are included in Appendix C.

3. 4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation is necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia-N concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a confirmation visit is conducted within two business days. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected

by the laboratory analyses, a comprehensive follow-up pollutant source investigation is initiated within two business days of receiving the laboratory results. A discussion of follow-up investigations is included in Section 8.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment (BPJ). The three approaches are described below and presented with associated constituents in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results. Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels based on county-wide sampling data. These action levels have been used by all San Diego County Copermittees since the 2003 dry weather season. For implementation in 2010, D-MAX performed statistical analysis on county-wide data to update action levels for bacterial indicators.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is a short term concentration limit in which aquatic life can be sustained. The CMC is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in EPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under BPJ, the need for a follow-up investigation is left to the discretion of the D-MAX field crew. BPJ may indicate that results which either exceed certain action levels or are statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
Conductivity (mS/cm)	BPJ	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values <0.75 may indicate excessive potable water discharge or flushing.
Temperature (°C)	BPJ	Base judgment on season, air temperature, channel type, shading, etc.
pH	<6.5 or >9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Turbidity (NTU)	BPJ	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Ammonia-N (mg/L)	1.0	Based on Sub-Workgroup experience. May also consider unionized ammonia fraction.
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Orthophosphate-P (mg/L)	2.0	EPA Multi-sector General Permit
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Sub-Workgroup field experience and possible field reagent interferences.
Dissolved Oxygen (mg/L)	BPJ	No regional action level has been established; evaluated based on best professional judgment.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Oil and Grease (mg/L)	15	EPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	CTR	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)		
Dissolved Lead (µg/L)		
Dissolved Zinc (µg/L)		
Total Coliforms (MPN/100 mL)	130,000	Bacteria action levels were updated for implementation in 2010 by the Dry Weather Monitoring Sub-Workgroup. Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	13,000	
Enterococci (MPN/100 mL)	7,000	
Total Dissolved Solids (mg/L)	BPJ	No regional action level has been established; evaluated based on best professional judgment.
Total Organic Carbon (mg/L)	BPJ	No regional action level has been established; evaluated based on best professional judgment.

Notes:
BPJ = Best Professional Judgment
WQO = Water Quality Objective
ppb = parts per billion
[1] The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information, including within-site and between-site sample variability.
[2] Basin Plan = Water Quality Control Plan for the San Diego Basin

4.0 FIELD SCREENING RESULTS

A total of 34 monitoring stations were visited during the 2010 Dry Weather Monitoring Program, and field screening was conducted at the 31 sites where ponded or flowing water was observed. Visual surveys were conducted at the dry sites, and three confirmation visits were performed for constituent exceedances. Completed field data sheets for each site visit are included in Appendix D.

4.1 Qualitative Observations

Qualitative observations are summarized below, and include data from initial site visits only; confirmation and follow-up visits are not included. Routine field screening and confirmation visit observations are presented in Table 4-1.

Light Conditions
Light conditions were sunny or overcast during all field screening visits.

Odor
Water at all sites lacked any discernable odor.

Color
Water samples were yellow at two sites. All other samples were colorless.

Clarity
All water samples were clear.

Floatable Materials
Trash was observed in the water at eight sites. See Section 5 of this report for a complete trash assessment. Bubbles and foam were reported on the water's surface at two sites, while leaves were reported floating at one site.

Deposits
Sediment, gravel, and/or fine particulates were the deposits observed during all field screening visits. No other types of deposits were noted.

Vegetation
All sites displayed appropriate vegetation for the observed conditions. Most sites did not support vegetation, due to a lack of sunlight and soil in concrete and underground conveyances. Sites located in earthen channels displayed normal vegetation. Flow was not restricted at any sites as a result of excessive vegetation.

Biology
The presence of various organisms can be an indicator of water quality. The presence of algae often indicates that water flow is persistent. The majority of sites contained insects, and most with sun exposure contained algae. Many sites were also host to snails.

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
1	8/17/10	10:20	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Snails
1	8/26/10	11:10	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Snails
2	7/7/10	10:50	Overcast	None	None	Clear	Trash, Leaves	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Larvae
3	8/23/10	16:50	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Snails
4	8/20/10	10:30	Sunny	None	None	Clear	Bubbles, Trash, Foam	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Snails
5	7/7/10	9:40	Overcast	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	None	Algae, Snails
6	8/16/10	11:45	Sunny	None	None	Clear	Bubbles, Trash, Foam	Sediment, Gravel, Fine Particulates	None	Insects, Algae
7	8/17/10	9:15	Sunny	None	Yellow	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Snails
7	8/26/10	9:35	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects
8	8/17/10	12:30	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Snails
9	8/18/10	12:00	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
13A	8/19/10	10:45	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
14	8/19/10	11:35	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Snails

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
15	8/20/10	11:35	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
17	8/17/10	11:30	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Snails
17	8/26/10	12:25	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Fish
18	8/20/10	9:50	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Snails
19	8/20/10	15:40	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
20	8/23/10	10:00	Sunny	None	Yellow	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects
21	8/19/10	14:15	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Snails
22	8/19/10	15:05	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Snails
23	8/20/10	14:50	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
24	8/16/10	10:30	Sunny	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	None	Insects, Algae
25	8/16/10	15:00	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
26	8/18/10	10:00	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
27	8/18/10	10:50	Sunny	None	None	Clear	None	Sediment, Gravel	None	None

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
28	8/19/10	9:45	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
30	8/18/10	15:00	Sunny	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	None	None
31	8/17/10	15:00	Sunny	ns	ns	ns	ns	Sediment, Gravel	None	None
32	8/16/10	12:50	Sunny	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	None	Algae
33	8/20/10	12:15	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Snails
34	8/17/10	15:30	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae
36	8/19/10	13:50	Sunny	ns	ns	ns	ns	Sediment, Gravel, Fine Particulates	None	None
37	8/18/10	14:10	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
38	8/16/10	15:50	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
39	8/18/10	9:30	Sunny	ns	ns	ns	ns	Sediment, Gravel, Fine Particulates	None	None
41	7/7/10	11:45	Overcast	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Snails

Notes:
Denotes a confirmation visit
ns = not sampled (dry site)

4.2 Field Analytical Results

Field analyses are conducted at all sites with flowing or ponded water. The measured constituents are described below.

Flow rate quantifies the volume of fluid passing across a given surface per unit time. Flow rate measurements are needed to calculate the load or particular amount of a pollutant discharged.

Water temperature is needed to assess the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. In the field, water temperature is measured immediately upon sample collection at each site.

The **pH** is an expression of acidity or alkalinity of a water sample. The pH of an aquatic system will affect a variety of chemical reactions, including the availability of nutrients and the solubility of chemical substances, particularly heavy metals.

Turbidity describes the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation, thus reducing photosynthetic capacity, but excessive suspended particles can also absorb heat and increase water temperatures.

Specific conductance (conductivity) measurements indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water and potentially help indicate the presence of dissolved pollutants.

Surfactant concentrations in water samples often reflect illegal discharges from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms.

Ammonia-nitrogen (ammonia-N) is an indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-nitrogen (nitrate-N) is a common sign of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, resulting in oxygen depletion as algae decomposes and may eventually suffocate other aquatic life.

Orthophosphate-phosphorus (orthophosphate-P) is also an indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate-N, orthophosphate-P pollution can cause nutrient enrichment, stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient in plant growth.

Dissolved Oxygen measurements indicate the amount of gaseous oxygen (O_2) dissolved in the water. Photosynthesis by aquatic biota and diffusion from the surrounding air are the processes responsible for oxygen input. Oxygen depletion can be detrimental to aquatic life and is often caused by the decomposition of organic material. Excessive algal growth can contribute to lower dissolved oxygen concentrations through markedly increased photosynthesis, serving as a source of decomposing organic material when algae die. Higher values of dissolved oxygen often correspond with lower temperatures.

A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 shows the results of all field analyses conducted at each dry weather monitoring station. Graphs of the various parameters and appropriate action levels for follow-up investigations are included at the end of this section. Values that were not detected have been plotted as half of the detection limit.

TABLE 4-2
FIELD SCREENING STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceedances	Graph Number
Flow Rate (gpm)	94	0 (ponded)	10.6	2.0	19.5	0	4-1
Temperature (ºC)	33.2	18.4	25.9	25.7	3.2	0	4-2
pH	8.6	6.6	7.8	7.8	0.5	0	4-3
Turbidity (NTU)	17.8	0.01	4.55	3.03	4.50	0	4-4
Conductivity (mS/cm)	6.66	1.09	3.12	2.77	1.42	0	4-5
Surfactants (mg/L MBAS)	0.75	0.13	0.35	0.25	0.19	0	4-6
Ammonia-N (mg/L)	0.66	0.02 J	0.32	0.32	0.14	0	4-7
Nitrate-N (mg/L NO_3-N)	11.3	0.47 J	3.44	2.36	3.12	2	4-8
Orthophosphate-P (mg/L PO_4-P)	0.66	nd	0.12	0.07	0.17	0	4-9
Dissolved Oxygen (mg/L)	8.44	4.43	6.22	5.82	1.16	0	4-10

Notes:
The data used in statistical calculations in this table are from routine visits only; data for confirmation visits and upstream investigations have not been incorporated.
nd = not detected; considered to be half of detection limit in statistical calculations.
J = Value reported is below the reporting limit; measurements have an increased percent error.

TABLE 4-3
FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate-P (mg/L)	Dissolved Oxygen (mg/L)
1	8/17/10	10:20	36	29.3	8.2	3.94	2.21	0.50	0.16 J	6.10	0.01 J	8.44
1	8/26/10	11:10	39	31.8	8.5	na	2.19	na	na	na	na	na
2	7/7/10	10:50	23	19.7	8.3	2.61	2.50	0.13	0.28	5.15	0.00 J	7.92
3	8/23/10	16:50	31	28.2	8.0	2.61	3.09	0.25	0.31	3.39	0.01 J	6.83
4	8/20/10	10:30	42	28.6	8.1	6.67	2.77	0.25	0.35	3.52	nd	8.12
5	7/7/10	9:40	94	18.4	8.2	4.06	2.82	0.25	0.42	5.75	0.00 J	8.32
6	8/16/10	11:45	4	31.6	8.3	5.60	2.20	0.25	0.02 J	4.12	0.07 J	7.69
7	8/17/10	9:15	<1	23.0	7.5	3.03	1.38	0.50	0.10 J	0.48 J	0.23	6.42
7	8/26/10	9:35	1	24.5	7.7	na	0.90	na	na	na	na	na
8	8/17/10	12:30	12	33.2	8.0	6.38	4.85	0.50	0.38	0.70 J	0.03 J	6.52
9	8/18/10	12:00	2	25.5	6.6	9.36	4.23	0.50	0.52	0.50 J	0.18	4.76
13A	8/19/10	10:45	1	27.7	7.8	2.46	5.41	0.50	0.28	1.19	0.10	5.86
14	8/19/10	11:35	2	28.9	8.3	5.69	4.79	0.50	0.57	0.47 J	0.08 J	6.32
15	8/20/10	11:35	1	23.4	7.6	2.52	1.56	0.13	0.34	0.53 J	0.07 J	5.43

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate-P (mg/L)	Dissolved Oxygen (mg/L)
17	8/17/10	11:30	5	23.8	7.3	7.14	2.94	0.13	0.36	0.52 J	0.02 J	4.43
17	8/26/10	12:25	5	25.3	7.7	na	2.94	na	na	na	na	na
18	8/20/10	9:50	2	23.4	7.6	1.34	4.39	0.50	0.22	0.52 J	0.08 J	5.48
19	8/20/10	15:40	1	26.0	7.5	4.34	6.66	0.50	0.28	2.64	0.14	5.16
20	8/23/10	10:00	Ponded	23.6	8.0	4.10	5.12	0.75	0.44	0.93 J	0.66	4.86
21	8/19/10	14:15	<1	29.1	8.2	0.17	6.01	0.75	0.17 J	1.69	0.14	5.82
22	8/19/10	15:05	12	25.6	7.8	0.01	3.05	0.25	0.32	5.73	0.06 J	5.48
23	8/20/10	14:50	3	25.7	8.1	0.89	2.93	0.25	0.35	2.83	0.15	5.62
24	8/16/10	10:30	3	23.4	7.5	2.44	2.68	0.13	0.32	1.77	0.10	7.72
25	8/16/10	15:00	3	26.1	7.6	1.09	2.31	0.25	0.31	2.03	0.02 J	5.63
26	8/18/10	10:00	Ponded	24.8	7.1	16.89	2.14	0.25	0.30	8.98	0.21	5.34
27	8/18/10	10:50	<1	25.9	7.3	17.80	1.09	0.25	0.35	0.61 J	0.63	4.57
28	8/19/10	9:45	1	29.8	7.3	13.01	1.31	0.75	0.59	0.87 J	0.48	5.37
30	8/18/10	15:00	1	26.2	7.3	4.95	2.32	0.25	0.22	**11.26***	0.05 J	5.32

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate-P (mg/L)	Dissolved Oxygen (mg/L)
31	8/17/10	15:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
32	8/16/10	12:50	5	24.8	7.8	0.35	2.93	0.25	0.33	5.05	nd	6.58
33	8/20/10	12:15	<1	27.9	8.3	6.76	1.99	0.13	0.20	2.36	0.15	7.44
34	8/17/10	15:30	8	24.8	8.0	1.20	2.12	0.13	0.19 J	7.82	nd	6.92
36	8/19/10	13:50	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
37	8/18/10	14:10	1	28.0	7.2	0.55	2.33	0.25	0.35	**10.23***	0.03 J	5.64
38	8/16/10	15:50	1	24.7	7.9	0.76	2.59	0.25	0.26	7.08	0.12	5.82
39	8/18/10	9:30	Dry	ns	ns	ns	ns	ns	ns	ns	ns	ns
41	7/7/10	11:45	32	22.9	8.6	2.45	3.85	0.50	0.66	1.99	0.01 J	7.10
REPORTING LIMIT			**0**	**0.1**	**0.01**	**0.00**	**0.01**	**0.13**	**0.20**	**1.13**	**0.098**	**0.00**
ACTION LEVEL			**	**BPJ**	**< 6.5 > 9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.0**	**2.0**	**BPJ**

Notes:
na = not analyzed; nd = not detected; ns = not sampled (dry site)
J = Value reported is below the reporting limit; measurements have an increased percent error.
Red values exceed action level.
* Confirmation visits were not conducted for sites with historical exceedances from known sources.
Denotes a confirmation visit

GRAPH 4-1: FLOW

Action Level is Best Professional Judgment

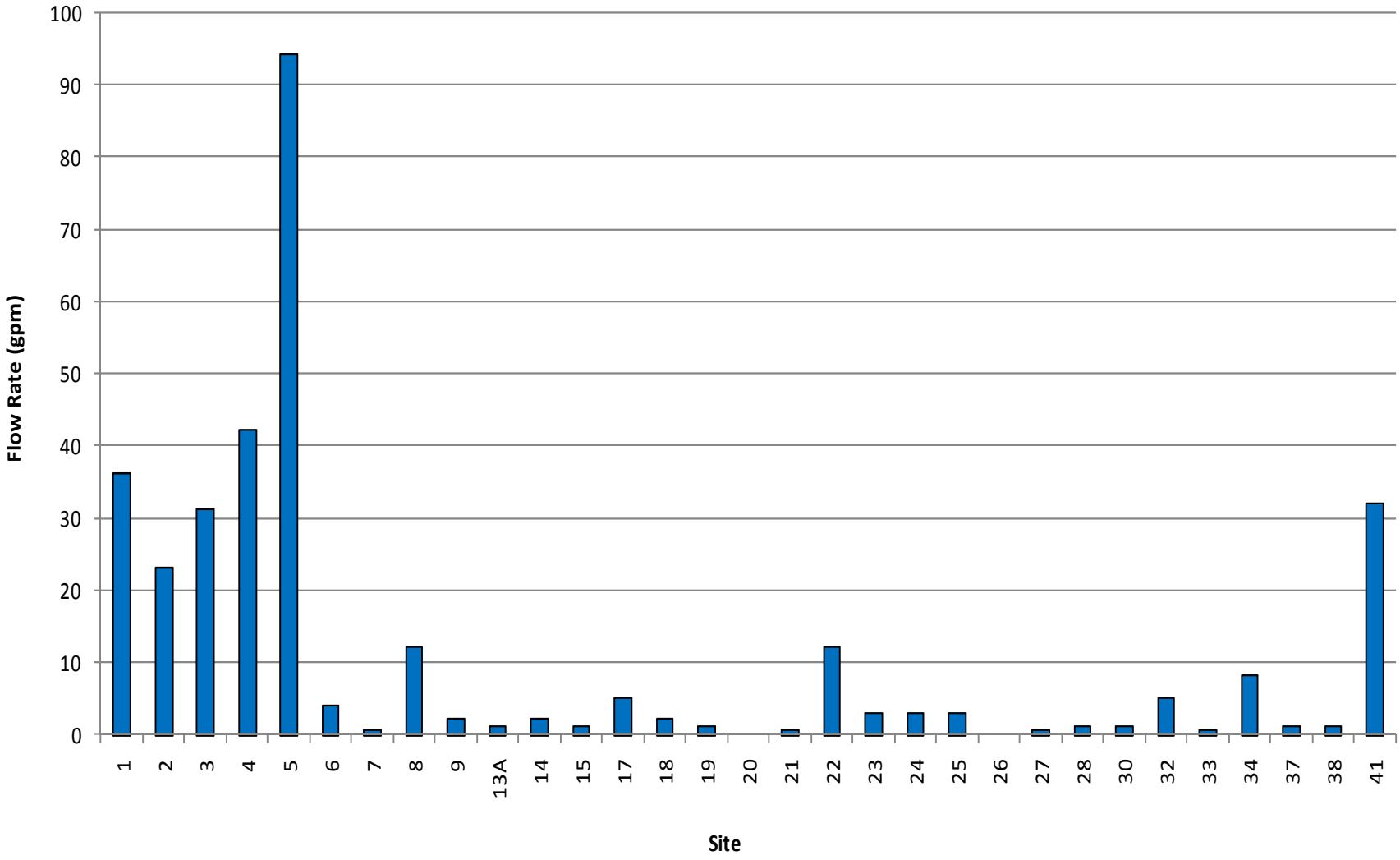

GRAPH 4-2: TEMPERATURE

Action Level is Best Professional Judgment

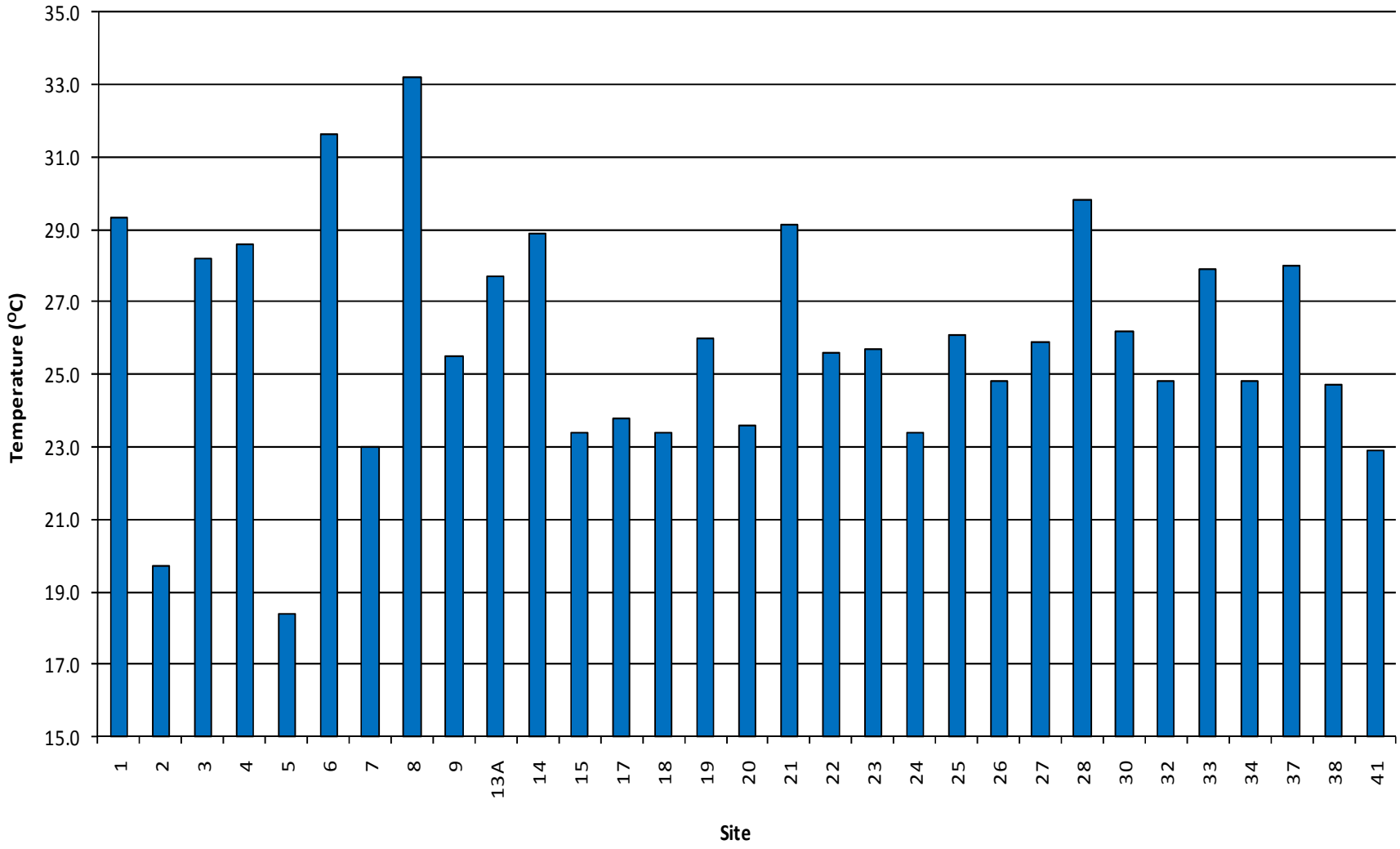

GRAPH 4-3: pH

Action Level is < 6.5 or > 9.0

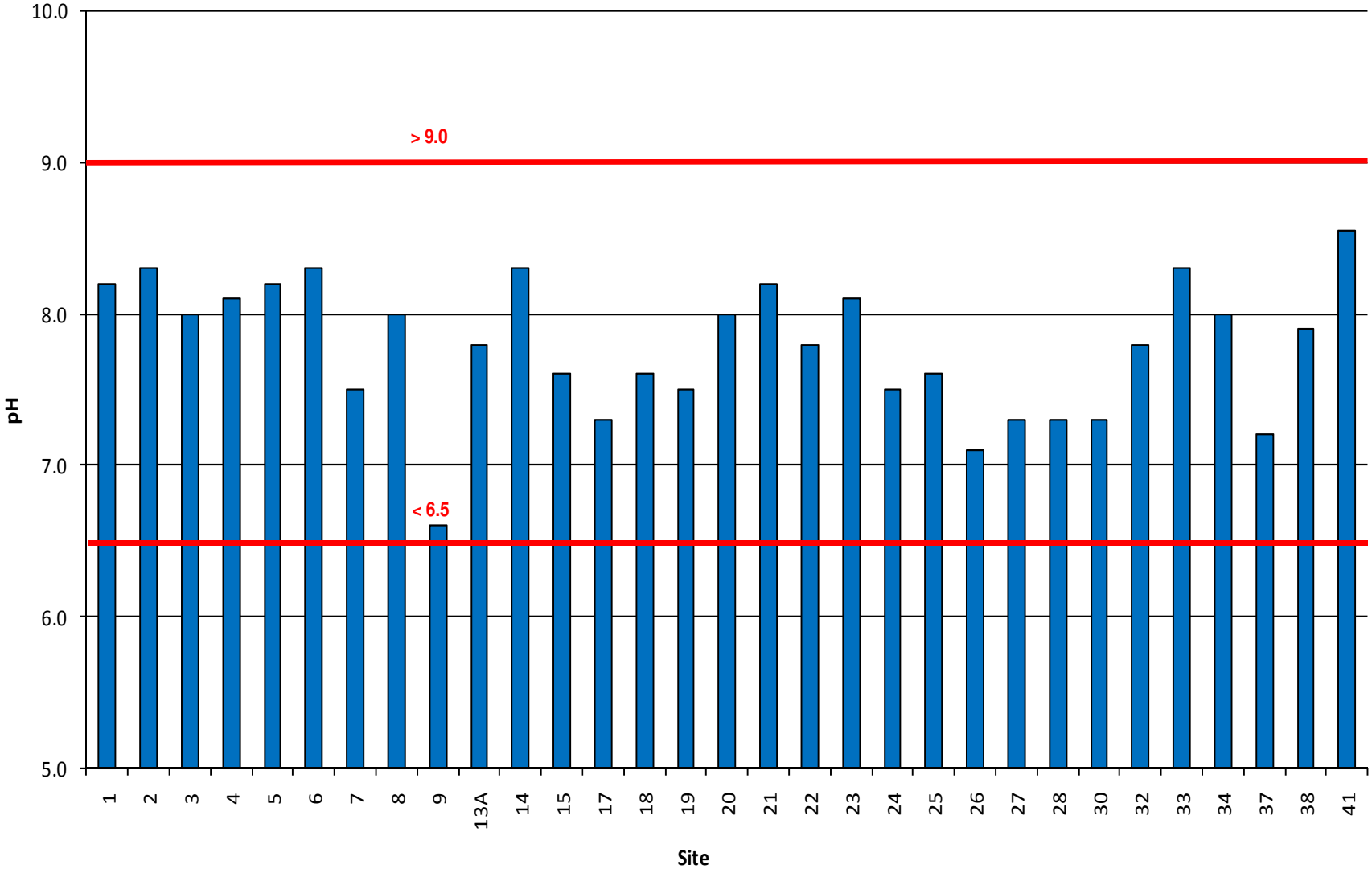

GRAPH 4-4: TURBIDITY

Action Level is Best Professional Judgment

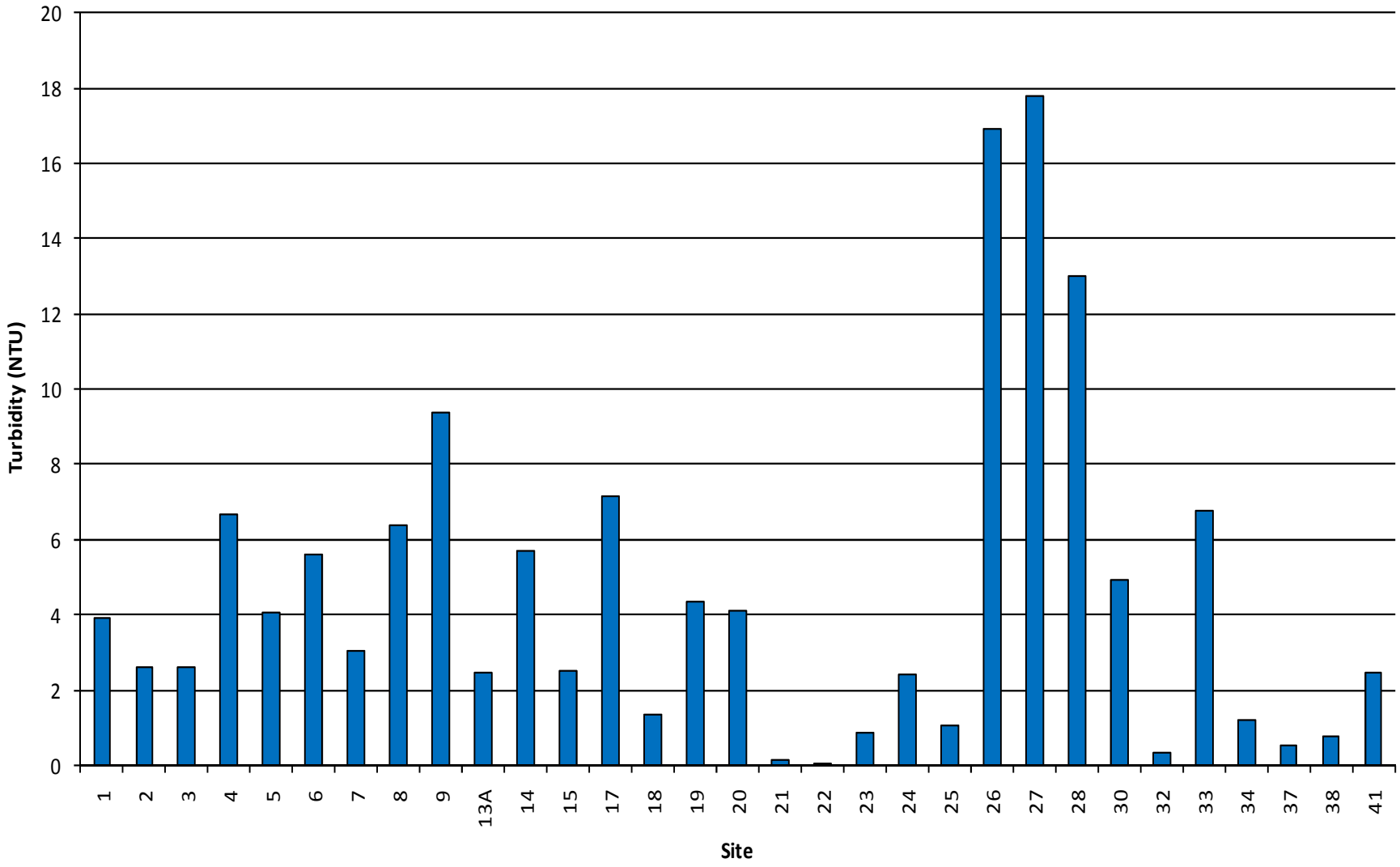

GRAPH 4-5: CONDUCTIVITY

Action Level is Best Professional Judgment

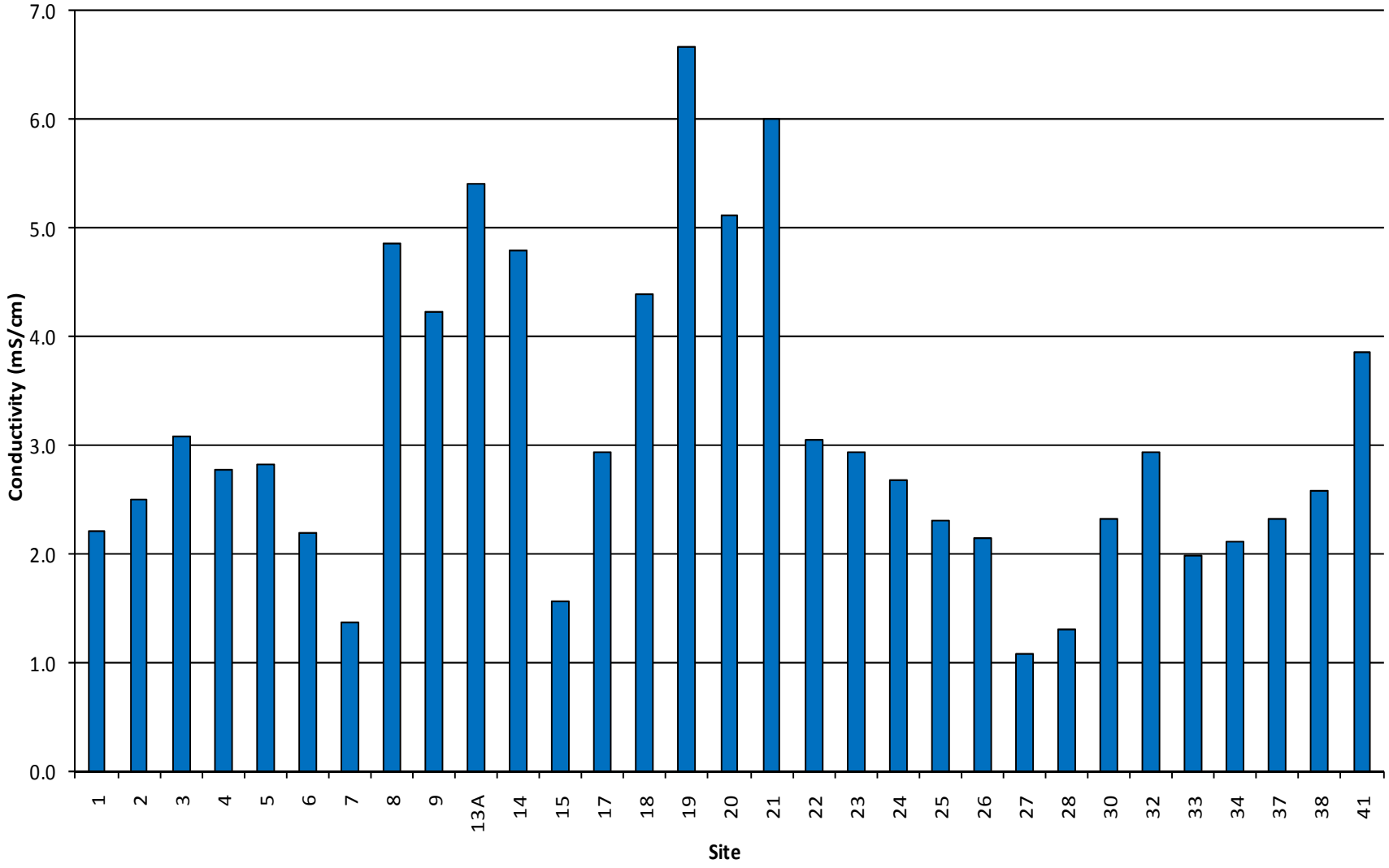

GRAPH 4-6: SURFACTANTS

Action Level = 1.0 mg/L

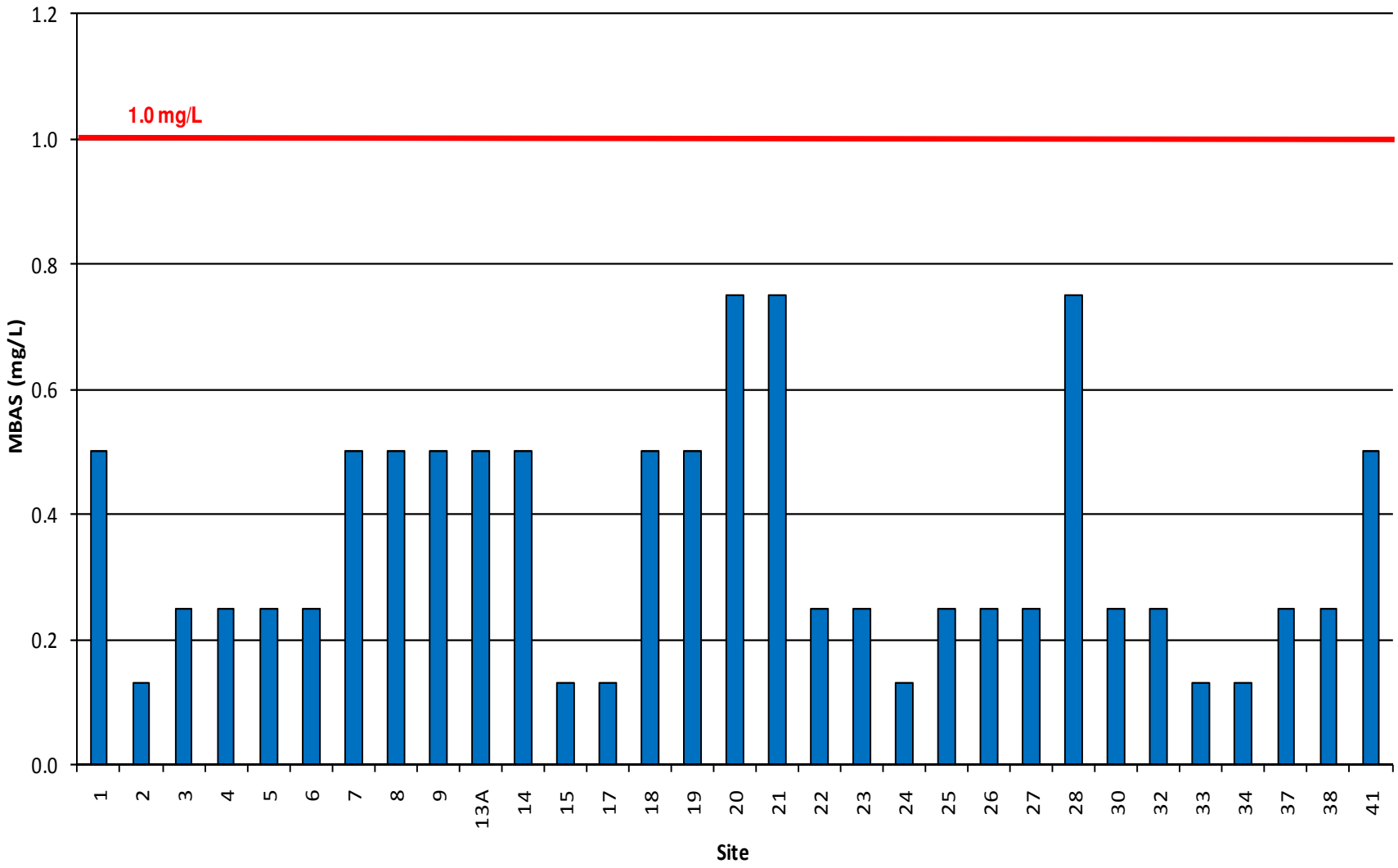

GRAPH 4-7: AMMONIA-N

Action Level = 1.0 mg/L

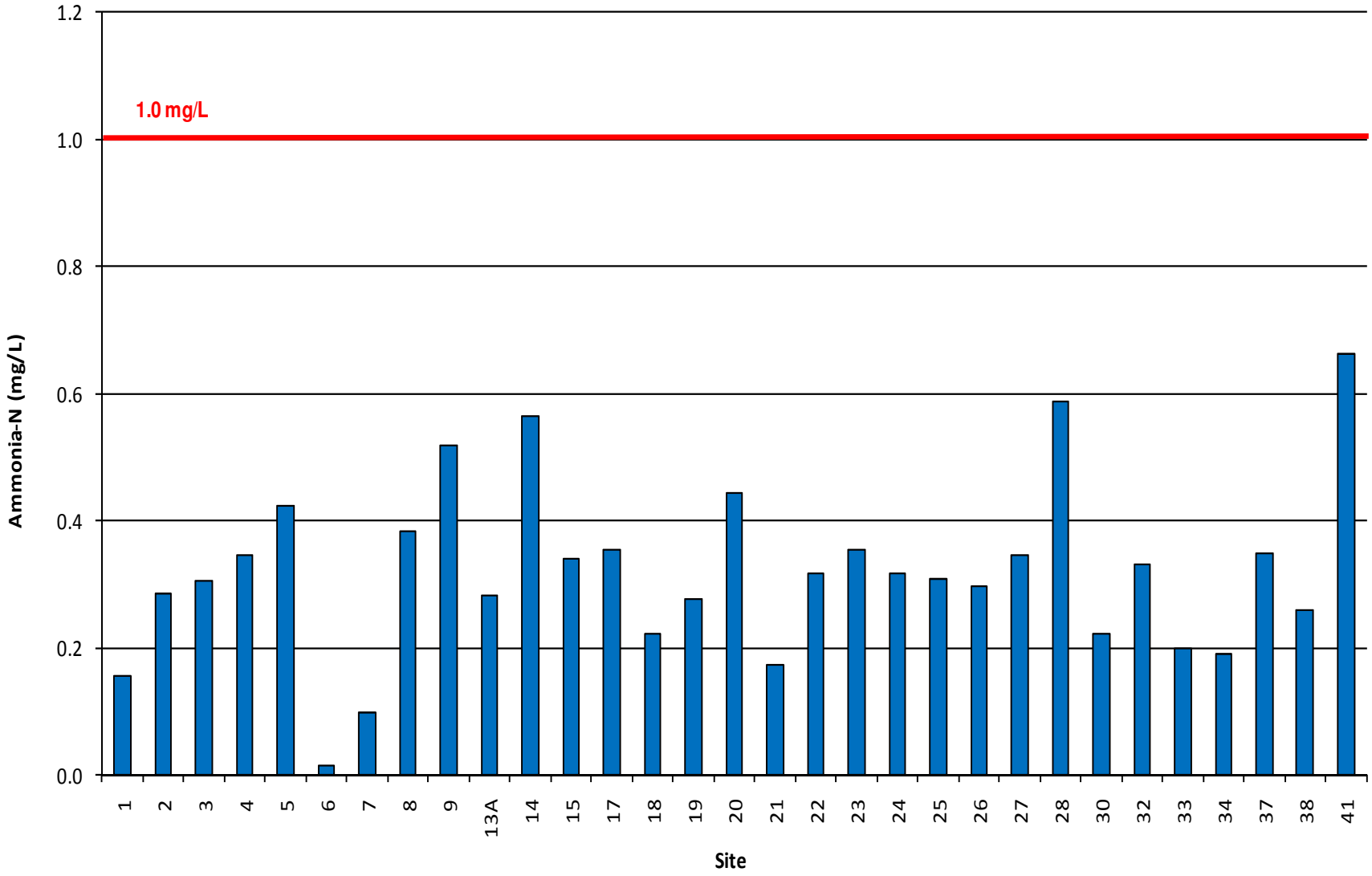

GRAPH 4-8: NITRATE-N
Action Level = 10.0 mg/L

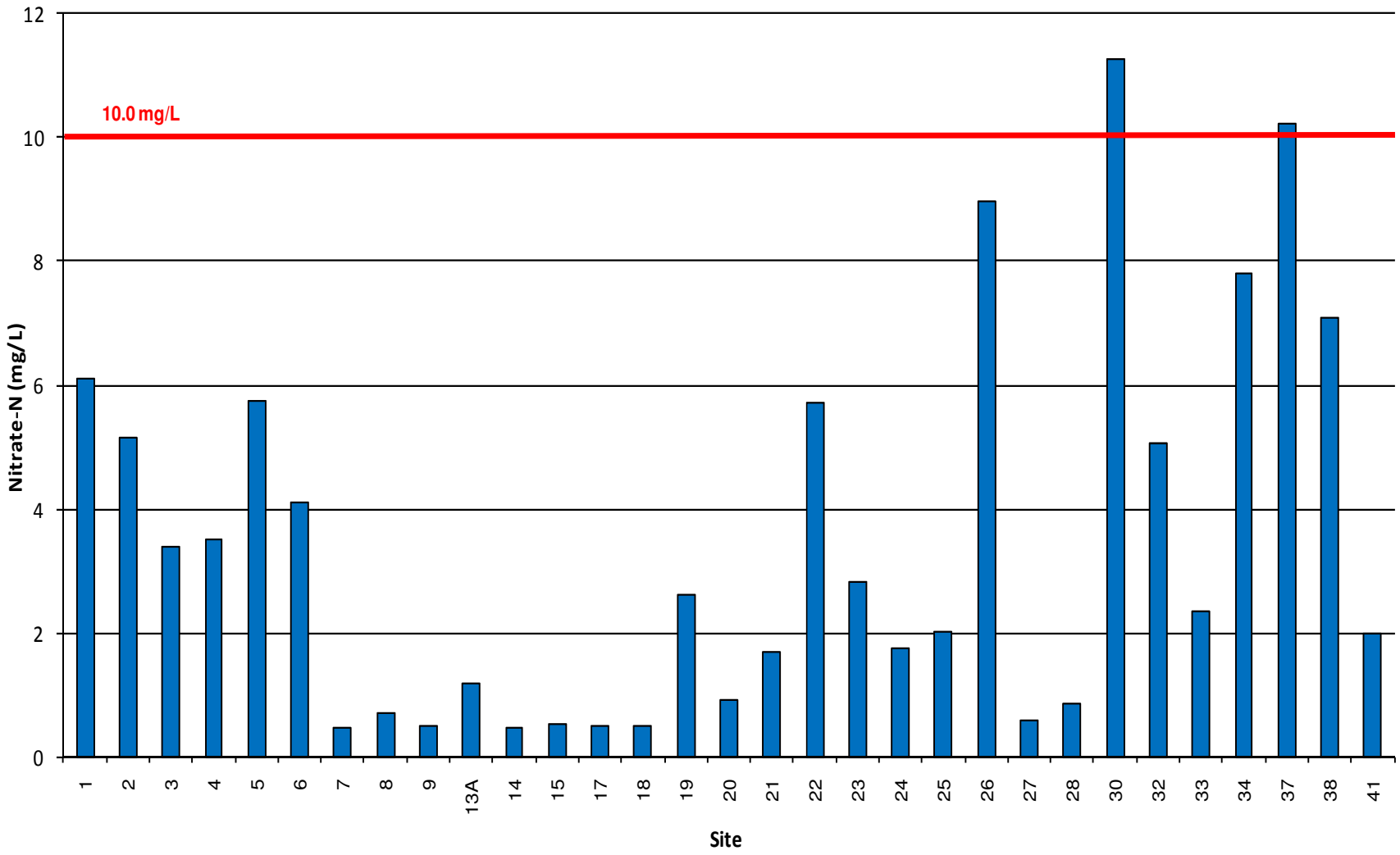

GRAPH 4-9: ORTHOPHOSPHATE-P

Action Level = 2.0 mg/L

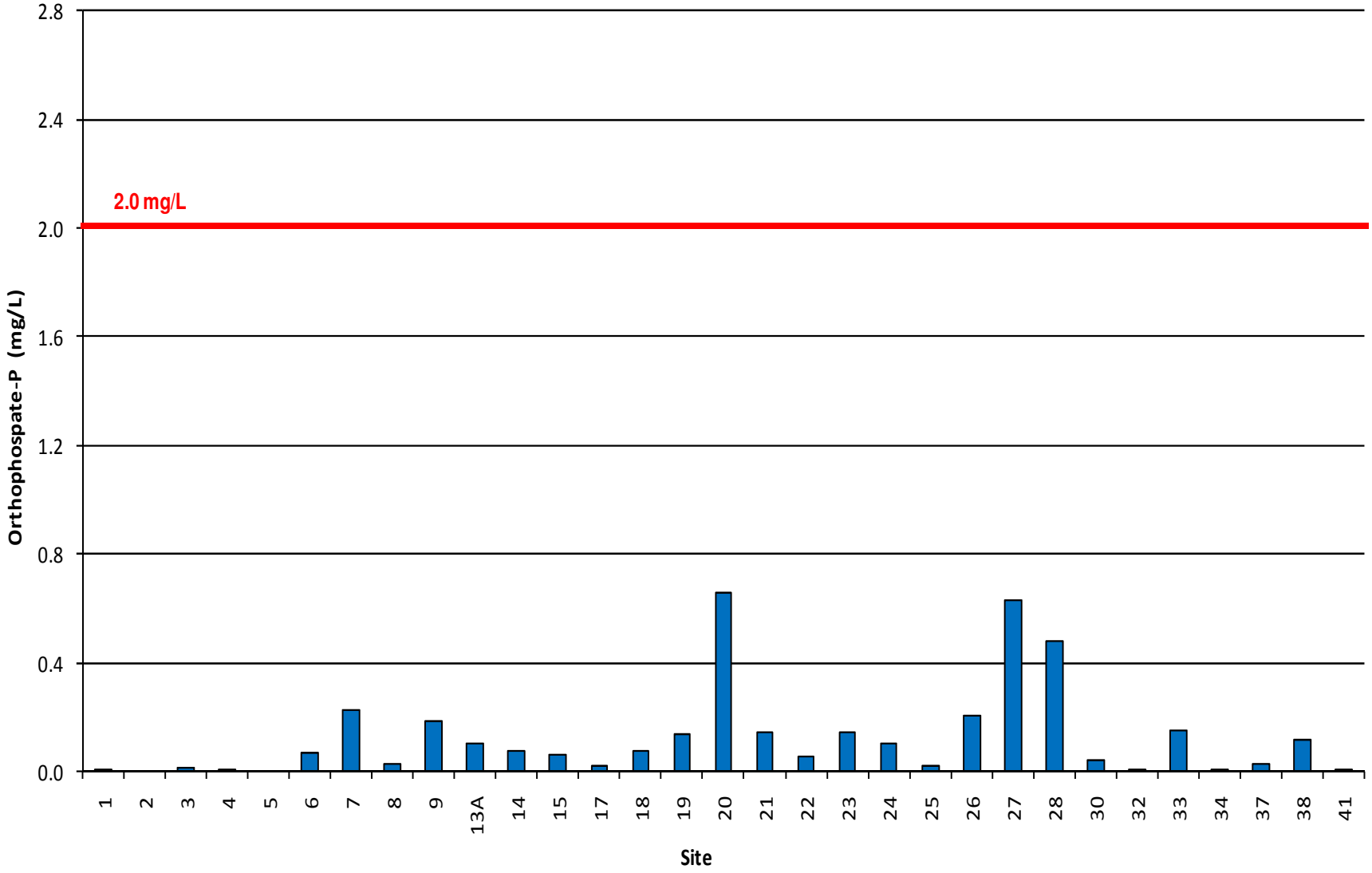

GRAPH 4-10: DISSOLVED OXYGEN

Action Level is Best Professional Judgment

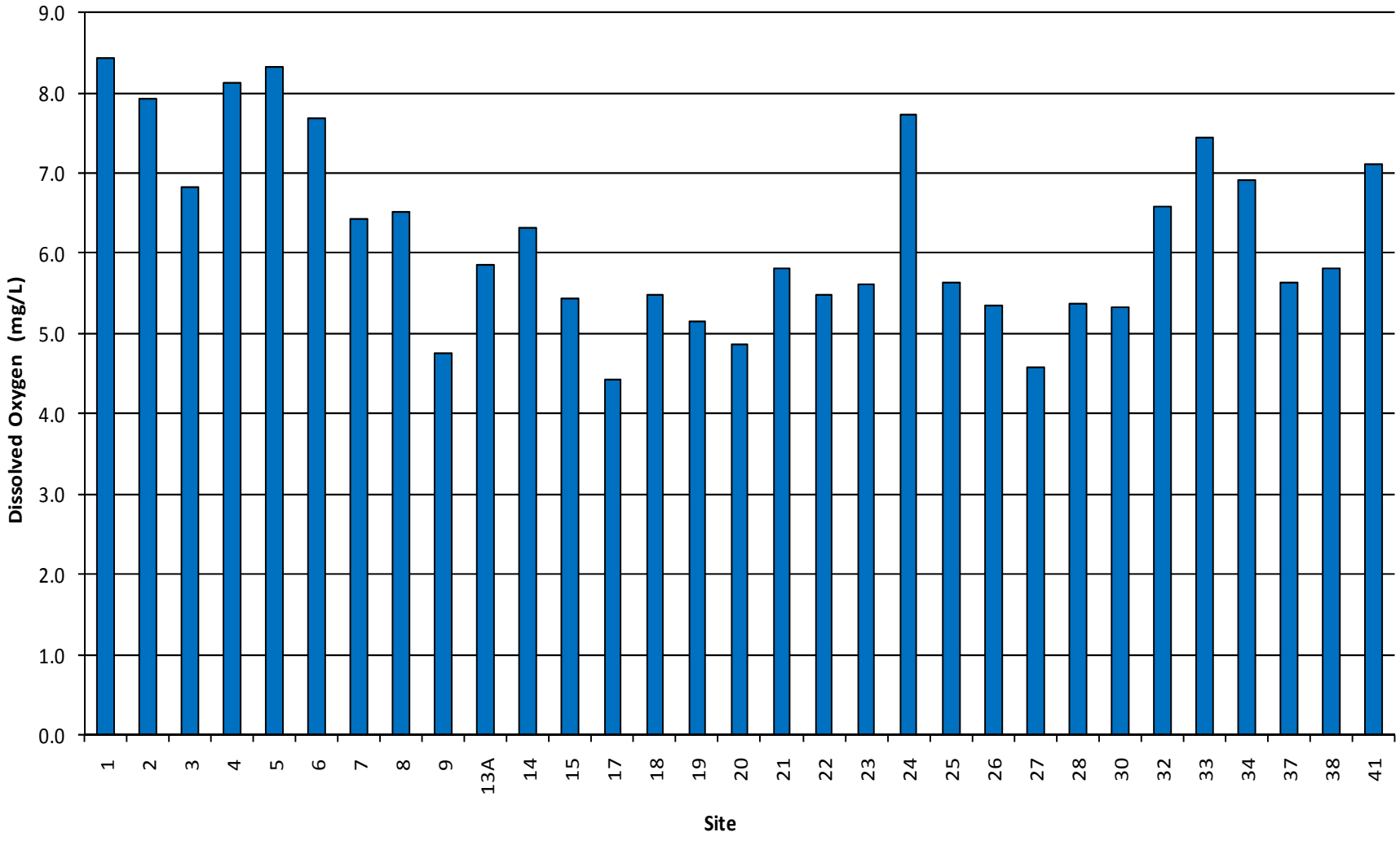

5.0 TRASH ASSESSMENT

5.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires all Copermittees, including the City of El Cajon, to assess the presence of trash in receiving waters and urban runoff at each dry weather monitoring site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Sub-Workgroup developed a Trash Assessment Form to document the amount and extent of trash at each evaluated site. The form categorizes the site into one of five trash categories: optimal, suboptimal, marginal, submarginal, or poor. The form also addresses any potential threats that the trash may pose to human or aquatic health. For sites rating submarginal or poor, the form includes a section to record types, prevalence, potential routes, and sources of trash.

- A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form's five categories are primarily qualitative descriptions of the amount and extent of trash although a number of trash pieces is also included in each category as a rough guideline. The five categories are defined as follows.
- Optimal: On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
- Suboptimal: On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
- Marginal: Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
- Submarginal: Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (~100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
- Poor: Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* – Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment.

- *Threat to Aquatic Health* – Large amount (50 pieces or more) of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amounts of settleable, degradable, and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Form.

If a site is labeled as submarginal or poor, it is assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on their prevalence and the potential threat to water quality they pose. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

The majority of sites were rated as optimal or suboptimal. Only three sites were rated marginal, and no sites were rated submarginal or poor. No sites were considered to pose a threat to human or aquatic health. Table 5-1 and Graph 5-1 summarize the trash assessment results for routine sites in 2010. Figure 5-1 provides a map of field screening sites and their corresponding trash assessment. Trash Assessment Forms completed at each site are included in Appendix D.

TABLE 5-1
TRASH ASSESSMENT RESULTS

Optimal (23 sites)		Suboptimal (8 sites)	Marginal (3 sites)	Submarginal (0 sites)	Poor (0 sites)
1	19	2	3	--	--
4	20	21	30		
5	23	22	32		
6	25	24			
7	31	26			
8	33	27			
9	34	28			
13A	36	41			
14	37				
15	38				
17	39				
18					

GRAPH 5-1
TRASH ASSESSMENT SUMMARY

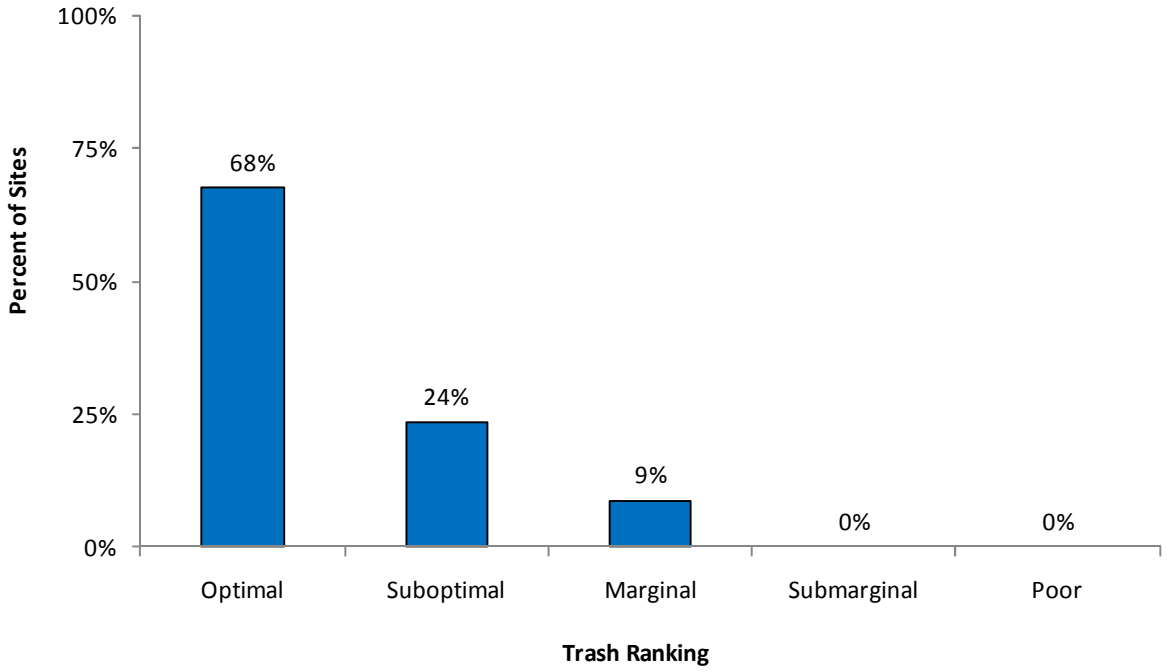

FIGURE 5-1
2010 TRASH ASSESSMENT MAP

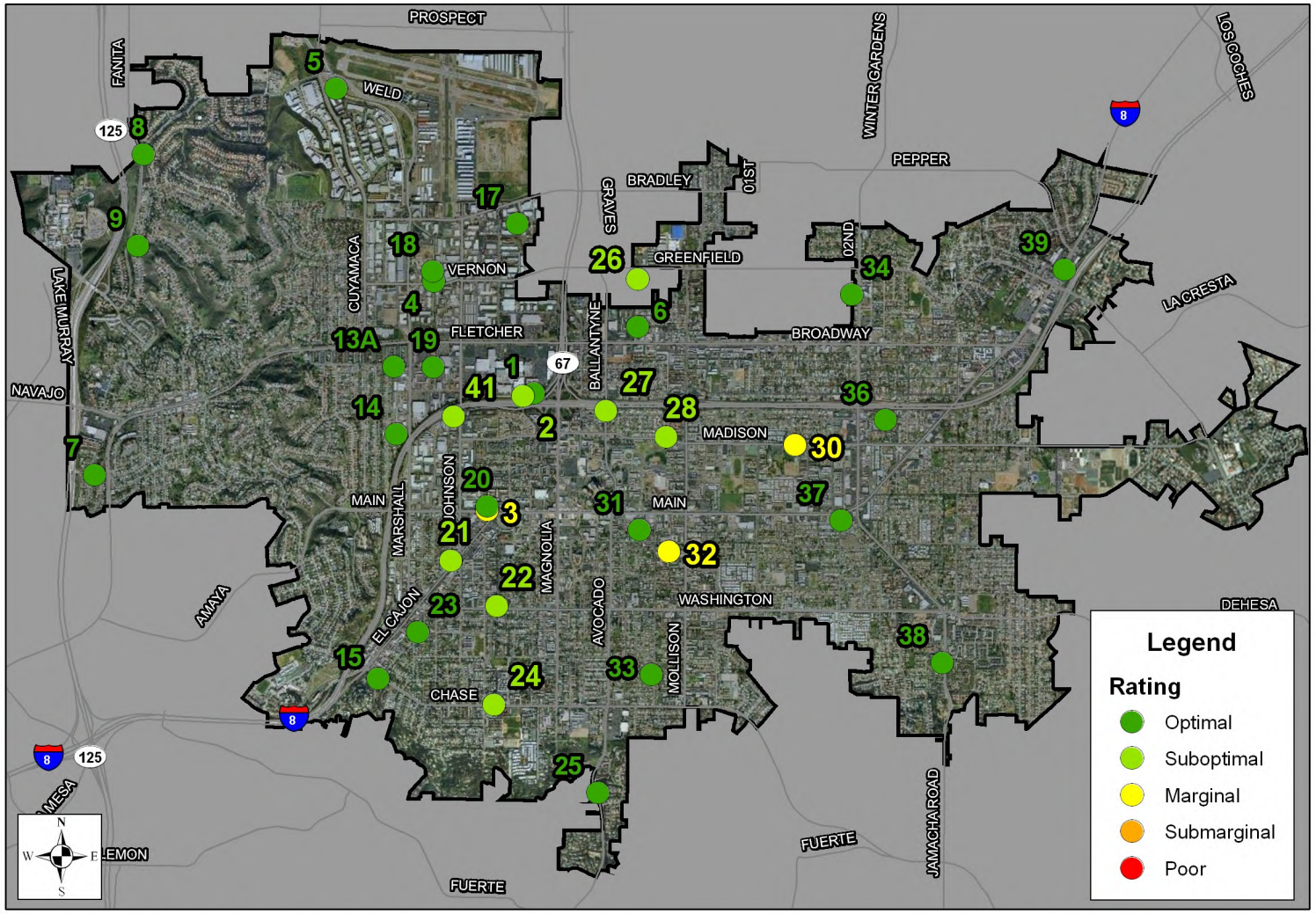

Base Data Sources: USGS, SanGIS, SANDAG

0 0.375 0.75 1.5 Miles

6.0 LABORATORY ANALYTICAL RESULTS

6.1 Summary

Laboratory analyses were conducted at 10 sites, representing over 25 percent of all sites with ponded or flowing water. The laboratory constituents measured are defined below.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$ equivalent. Hardness itself is not considered a pollutant, but is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Diazinon and **chlorpyrifos** are organophosphate pesticides that are highly toxic to insects, birds, and mammals, freshwater fish, and invertebrates. In 2005, the Environmental Protection Agency banned the sale of diazinon in the United States and tightened restrictions on chlorpyrifos use.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness. As hardness increases, so does the Criterion Maximum Concentration (CMC), a concentration limit in which aquatic life can be sustained. CMC values differ for various metals. Dry weather monitoring laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 6-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

TABLE 6-1
CTR – CMC FOR DISSOLVED METALS

Dissolved Cadmium			
Site	**Total Hardness (mg/L)**	**CMC (µg/L)**	**Concentration (µg/L)**
2	192	9	0.3
7	437	19	0.2
24	907	19	0.2
Dissolved Copper			
Site	**Total Hardness (mg/L)**	**CMC (µg/L)**	**Concentration (µg/L)**
1	526	49.6	19
2	192	24.8	2
5	203	26.2	1
6	589	49.6	2
7	437	49.6	24
8	1,010	49.6	2
17	835	49.6	1
24	907	49.6	2

Dissolved Copper			
32	929	49.6	2
41	400	49.6	2
Dissolved Lead			
Site	**Total Hardness (mg/L)**	**CMC (µg/L)**	**Concentration (µg/L)**
7	437	281	1
Dissolved Zinc			
Site	**Total Hardness (mg/L)**	**CMC (µg/L)**	**Concentration (µg/L)**
1	526	379.3	6
2	192	203.7	0.9
5	203	213.5	0.9
6	589	379.3	2
7	437	379.3	18
8	1,010	379.3	3
17	835	379.3	7
24	907	379.3	18
32	929	379.3	4
41	400	379.3	2

Note: Only those sites where a particular dissolved metal was detected are listed. For equations and constants used in California Toxics Rule calculations, see http://www.epa.gov/ost/standards/ctr/toxic.pdf.

Coliform bacteria are relatively harmless to humans and are present in mammalian digestive tracts, most surface waters, and soils. Testing water samples for total coliform bacteria is a standard practice in public health. Total coliform is measured as an indicator of other more harmful pathogens, since these pathogens are generally present in much smaller quantities and are difficult to detect.

Fecal coliform, a subset of coliform bacteria, and ***Enterococcus*** are found primarily in the gastro-intestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material is human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

Total Dissolved Solids measurements quantify the amount of dissolved minerals, cations, anions, and salts in the water. TDS is often related to conductivity and hardness. It can originate from natural sources, sewage runoff, urban runoff, and/or industrial wastewater. In drinking water, it can affect the taste and aesthetic quality. In storm water, it can to some extent affect the lives of aquatic species, although only in high amounts.

Total Organic Carbon analysis indicates the concentration of organic carbon in the water, and includes substances such as naturally occurring humic acids along with solvents, pesticides, polyaromatic hydrocarbons and chlorinated organic compounds.

Table 6-2 presents a statistical summary of the laboratory results from all samples. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included in Appendix C.

TABLE 6-2
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Number of Exceedances
Oil and Grease (mg/L)	7	nd	0
Total Hardness (mg/L CaCo3)	1010	192	*
Dissolved Cadmium (µg/L)	0.3	nd	0
Dissolved Copper (µg/L)	24	1	0
Dissolved Lead (µg/L)	1	nd	0
Dissolved Zinc (µg/L)	18	0.9	0
Diazinon (µg/L)	nd	nd	0
Chlorpyrifos (µg/L)	nd	nd	0
Total Coliform (MPN/100 mL)	280,000	800	1
Fecal Coliform (MPN/100 mL)	50,000	230	2
Enterococcus (MPN/100 mL)	24,000	40	2
Total Dissolved Solids (mg/L)	2670	952	0
Total Organic Carbon (mg/L)	23	4	0

Notes:
Calculations include complete routine visit data only. Confirmation visits, follow-up visits and dry sites not incorporated.
nd = not detected
*Total hardness is not considered a pollutant and does not have an established action level.

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)*	Enterococci (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
1	8/17/10	10:20	nd	526	nd	19	nd	6 J	nd	nd	8,000	1,300	**8,000**	1,410	5.4
1	8/26/10	11:10	na	na	na	na	na	na	na	na	na	na	447	na	na
2	7/7/10	10:50	nd	192	0.3 J	2 J	nd	0.9 J	nd	nd	11,000	2,300	2,200	1,710	5.2
5	7/7/10	9:40	nd	203	nd	1 J	nd	0.9 J	nd	nd	22,000	3,000	5,000	1,840	5.9
6	8/16/10	11:45	nd	589	nd	2 J	nd	2 J	nd	nd	23,000	2,300	220	1,580	11
7	8/17/10	9:15	7	437	0.2 J	24	1 J	18 J	nd	nd	**280,000**	**50,000**	**24,000**	952	23
7	8/26/10	9:35	na	na	na	na	na	na	na	na	**242,000**	**108,353**	**36,540**	na	na
8	8/17/10	12:30	nd	1010	nd	2 J	nd	3 J	nd	nd	30,000	5,000	1,100	2,670	16
17	8/17/10	11:30	nd	835	nd	1 J	nd	7 J	nd	nd	23,000**	**24,000**	1,700	2,040	9.5
17	8/26/10	12:25	na	na	na	na	na	na	na	na	19,900	335	na	na	na
24	8/16/10	10:30	nd	907	0.2 J	2 J	nd	18 J	nd	nd	5,000	500	1,300	1,860	5.2
32	8/16/10	12:50	nd	929	nd	2 J	nd	4 J	nd	nd	800	230	40	2,110	4
41	7/7/10	11:45	nd	400	nd	2 J	nd	2 J	nd	nd	9,000	1,700	500	2,290	11
Reporting Limits			**5**	**10**	**1**	**10**	**5**	**20**	**0.05**	**0.05**	**20*** **	**20*** **	**20*** **	**20**	**0.30**
Action Levels			**15**	********	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**130,000**	**13,000**	**7,000**	**BPJ**	**BPJ**

Notes: nd = not detected; na = not analyzed
Denotes a confirmation visit
Red values are at or exceed action level
J = Value reported is below the reporting limit; measurements have an increased percent error.
CTR = California Toxics Rule; CTR action levels for metals are calculated based upon on the total hardness value of the water sample.
* Number of fecal coliforms was derived from *E. coli* count. Number of fecal coliforms = (Number of *E. coli*) / 0.85.
** Bacteria test was based on a statistical analysis of the most probable number per 100 mL of sample water. As the dilution factor increases, test precision decreases. The fecal coliform test for this sample was run at a dilution of 100 and the total coliform test was run at a dilution of 1000. Therefore, the total coliform count has a larger margin of error.
*** Reporting limit is 10 MPN/100 mL for IDEXX tests used during confirmation and upstream testing.
**** Total hardness is not considered a pollutant (see section 3.4), and thus has no established action level for the purposes of dry weather monitoring.

7.0 DATA ANALYSIS

This section provides an overall evaluation of test results of the 2010 Dry Weather Monitoring Program, as well as a discussion of historical trends for various constituent exceedances.

7.1 2010 Results

Of the 31 sites sampled, there were two nitrate-nitrogen exceedances. In addition, two sites exceeded the action level for fecal coliforms, one of which also exceeded the action level for total coliforms. There were also two *Enterococcus* exceedances during this year's program. A summary of 2010 exceedances is presented in Table 7-1.

TABLE 7-1
2010 EXCEEDANCES AT A GLANCE

Constituent	Site 1	Site 7	Site 17	Site 30	Site 37
Nitrate-N				✓	✓
Total Coliforms		✓			
Fecal Coliforms		✓	✓		
Enterococci	✓	✓			

Note: Table reflects exceedances occurring during routine visits only, not confirmation or follow-up visits.

7.2 Previous Results

Historical exceedance results are presented in Table 7-2, Graph 7-1, and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances by year for field screening, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

Since testing began in accordance with Order 2001-01, temperature, turbidity, dissolved oxygen, oil and grease, dissolved cadmium, dissolved lead, dissolved zinc, diazinon, chlorpyrifos, and total organic carbon have not been measured above their respective action levels. Thus, these constituents are not included in the following table and graphs.

Based on historical dry weather data, the following observations have been made:

- pH exceedances have generally decreased since their peak in 2003.
- Conductivity and orthophosphate-phosphorus have not been in exceedance since 2003 and 2002, respectively.

- Surfactants and ammonia-nitrogen level exceedances have decreased in recent years, with no exceedances in 2008, 2009, and 2010.
- Nitrate-nitrogen exceedances are prevalent from year to year with no apparent trend. Still, all exceedance levels have been lower than the 2002 peak.
- Copper has not been in exceedance since 2006, and total dissolved solids have only been in exceedance once during the history of the dry weather monitoring program in 2009.
- Total coliform exceedances have been trending downward since 2006. *Note that dry weather action levels for bacterial indicators were revised in 2010. Constituents have been compared to action levels in effect at the time of sampling to identify exceedances.
- Fecal coliform and *Enterococcus* exceedances have been relatively steady at a low percentage of sites in recent years.*

TABLE 7-2
PERCENTAGE OF SITES WITH EXCEEDANCES BY YEAR

	Field Testing							Laboratory Analyses					
Year	**Number of Field Testing Sites**	**pH**	**Conductivity***	**Surfactants**	**Ammonia-N**	**Nitrate-N**	***Orthophosphate-P***	**Number of Laboratory Sampling Sites**	**Total Dissolved Solids**	**Copper**	**Total Coliforms****	**Fecal Coliforms****	**Enterococci****
2002	31	19	6	10	19	23	3	10	0	10	10	10	0
2003	31	23	3	0	10	10	0	10	0	0	30	30	20
2004	31	6	0	0	3	6	0	10	0	0	50	10	10
2005	31	3	0	13	0	13	0	10	0	0	40	10	10
2006	31	19	0	10	3	6	0	10	0	10	60	10	30
2007	31	10	0	3	3	13	0	10	0	0	30	10	10
2008	31	0	0	0	0	16	0	10	0	0	10	0	0
2009	31	6	0	0	0	13	0	10	10	0	10	10	0
2010	31	0	0	0	0	6	0	10	0	0	10	20	20

Notes:
Results based on complete routine visits only. Confirmation visits, follow-up visits and dry sites not included.
* By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.
** Note that dry weather action levels for bacterial indicators were revised in 2010. Constituents have been compared to action levels in effect at the time of sampling to identify exceedances.

GRAPH 7-1
PERCENT OF SITES WITH FIELD SCREENING EXCEEDANCES BY YEAR

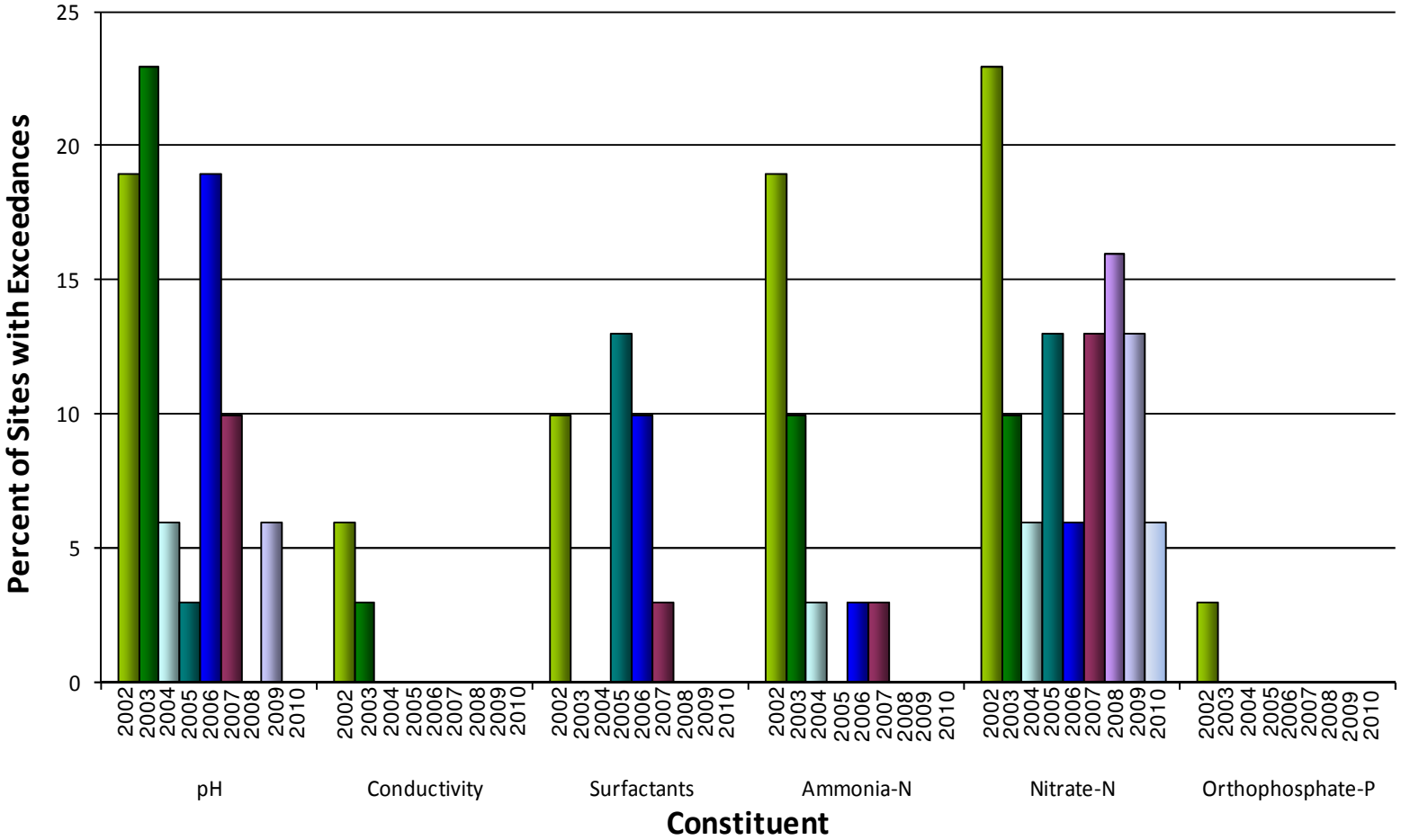

Note: Presented data are from routine visits only. Confirmation visits, follow-up visits and dry sites not included.

GRAPH 7-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

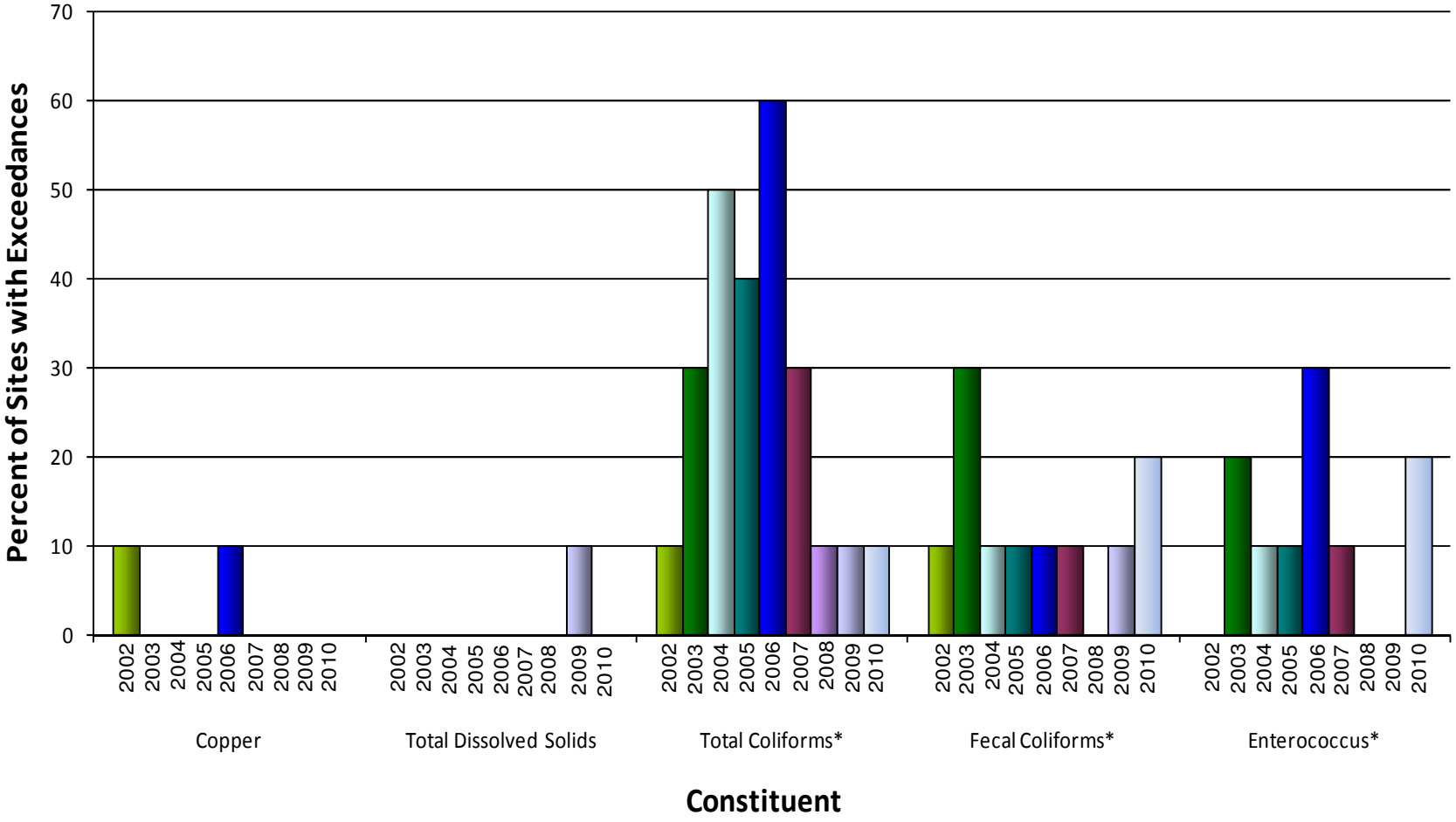

Notes: Presented data are from routine visits only. Confirmation visits, follow-up visits and dry sites not included.
*Dry weather action levels for bacterial indicators were revised in 2010. Constituents have been compared to action levels in effect at the time of sampling to identify exceedances.

8.0 FOLLOW-UP INVESTIGATIONS

One of the primary purposes of the Dry Weather Monitoring Program is to identify IC/IDs. When a parameter is measured at or above the regionally accepted action level, it is possible that an IC/ID is present and further investigation is performed. Procedures for such investigations are described below, followed by a discussion of the 2010 investigations.

8.1 Investigation Procedures

In the event that a constituent measurement is above the associated action level during the routine visit, a confirmation visit is typically conducted within two business days of receiving the result. The purpose of the confirmation visit is to verify whether the initial exceedance is persistent. The visit includes returning to the routine site to retest the water for the parameters initially in exceedance. In circumstances where an exceedance has been sufficiently investigated through previous studies and a confirmation visit was not likely to provide new information, a confirmation visit was not conducted.

If the constituent measures below specified action levels during the confirmation visit, the initial exceedance may have been due to a transient flow. If, however, the constituent concentration is found to exceed the specified action level during the confirmation visit, an upstream investigation is performed. In this case, the field crew progresses upstream to isolate and identify potential pollutant sources.

Follow-up investigations entail making visual observations of areas upstream of the routine site and collecting samples for field or lab analysis. Flow rates of each branch contributing to the site are measured, potential sources of the COC are identified, and sample data is used to assist in source identification. At each location sampled, visual observations are recorded on field data sheets and include water color, clarity, odor, floatable materials, vegetation, and biology present. Field data sheets are included in Appendix D.

8.2 Investigated Sites

During the 2010 Dry Weather Monitoring Program, five sites required follow-up investigations for constituent exceedances: two sites for nitrate-nitrogen and three sites for bacterial indicators. Results of the field screening, confirmation, and upstream investigation visits are presented in this section.

Site 1

Site 1 is located in a concrete channel between Magnolia Avenue and Johnson Avenue. During the initial site visit, an *Enterococcus* count of 8,000 MPN/100 mL was measured above the action level of 7,000 MPN/100 mL. *Enterococcus* bacteria decreased to 447 MPN/100 mL during the confirmation visit. Since areas upstream of the site did not appear to be contributing significant sources of bacteria, it was concluded that the exceedance was likely the result of a transient flow.

PHOTO 8-1: Site 1

Site 7

Site 7 is located in a concrete channel near the intersection of Fletcher Parkway and Chatham Street. During the initial site visit, the water sampled was yellow in color and flowing at less than 1 gpm. Exceedances in total and fecal coliform bacteria as well as *Enterococcus* were measured during laboratory analyses. At the confirmation visit, trash, algae, and leaves were observed in contact with flow at the site and in the channel upstream of the site. Animal waste was also observed around the site. As a result, it was concluded that the exceedances are likely the result of bacteria directly arising from decomposing organic material. In particular, total coliform counts are generally higher than the other bacterial indicators as a result of such decomposition. In addition, decomposing organic material can also provide a growth medium for fecal bacteria once they are introduced, especially at a site with low flow.

PHOTO 8-2: Leaf debris at Site 7

Fecal bacteria may have come from birds and squirrels that were observed onsite. Bird waste was observed on and around the sides of the channel upstream of the site.

The monitoring results of the investigation are presented in Table 8-1.

TABLE 8-1
SITE 7 BACTERIA INVESTIGATION RESULTS

Site	Location	Flow (gpm)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
7	Concrete channel near the intersection of Fletcher Parkway and Chatham Street.	<1	**280,000**	**50,000**	**24,000**
7 *(Confirmation)*	*Same as above*	1	**242,000**	**108,353**	**36,540**

Note: **Red** values were at or above the measured constituent's action level.

Site 17

Site 17 is located in an earthen channel on Cypress Lane east of Pioneer Way. During the initial site visit, a fecal coliform exceedance of 24,000 MPN/100 mL was measured above the action level of 13,000 MPN/100 mL. No significant sources of bacteria were observed during the follow-up visit, and fecal coliform bacteria decreased to 335 MPN/100 mL. Therefore, it was concluded that the exceedance was likely the result of a transient flow.

PHOTO 8-3: Cattails in the channel at Site 17

Sites 30 and 37

Site 30 is located in a manhole on Madison Avenue between Roberta Avenue and Roselle Avenue, just downstream of Site 37. Site 37 is located in a catch basin on S Second Street between E Main Street and E Lexington Avenue. This year, Site 30 had a nitrate-N level of 11.26 mg/L and Site 37 had a nitrate-N measuring 10.23 mg/L. As in previous years, no surface flow was observed contributing to the upstream MS4. Because this historical exceedance has been sufficiently investigated through previous studies, follow-up investigations were not likely to provide new information and were not conducted. [1]

Past investigations performed at these locations have found that that the MS4 upstream of these sites was either dry or had flow with relatively low levels of nitrate-N. In 2008, D-MAX assisted the City in performing a groundwater study in this area. Samples of the groundwater contained nitrate-N concentrations around 16 to 18 mg/L. The study also identified that the height of the groundwater was enough that it could seep into cracks in MS4 pipes. As part of an investigation in 2005, City personnel observed water seeping into corroded pipes immediately upstream Site 37. Accordingly, it was concluded that the nitrate-N exceedances at these locations is the result of infiltration of nitrate-containing groundwater into the MS4 conveyance.

[1] The Municipal Permit states: Copermittees shall either conduct an investigation to identify the source of the discharge or provide the rationale for why the discharge does not pose a threat to water quality and does not need further investigation. (p 42)

9.0 SUMMARY AND RECOMMENDATIONS

9.1 2010 Dry Weather Monitoring Program Summary

During the 2010 monitoring program, 31 primary sampling locations were visited. Sites 31, 36, and 39 were dry, and sites 9, 19, and 22 were selected as alternate locations for monitoring. Ten sites were sampled for laboratory analyses. A summary of action level exceedances is presented in Table 9-1.

TABLE 9-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (31 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedances**	**Sites Exceeding Action Level**
pH	0	0	---
Conductivity	0	0	---
Turbidity	0	0	---
Surfactants	0	0	---
Ammonia-N	0	0	---
Nitrate-N	2	6	30 and 37
Orthophosphate-P	0	0	---
Dissolved Oxygen	0	0	**---**
Laboratory Analyses (10 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedances**	**Sites Exceeding Action Level**
Oil & Grease	0	0	---
Cadmium	0	0	---
Copper	0	0	---
Lead	0	0	---
Zinc	0	0	---
Diazinon	0	0	---
Chlorpyrifos	0	0	---
Total Coliforms	1	10	7
Fecal Coliforms	2	20	7 and 17
Enterococci	2	20	1 and 7
Total Dissolved Solids	0	0	---
Total Organic Carbon	0	0	**---**

Note: Table data is based on routine visits only. Confirmation, follow-up and dry site visits not included.

9.2 Summary of Follow-up Investigation Data

Including field screening and laboratory analyses, five sites had parameters that exceeded established action levels. Table 9-2 shows the conclusions based on the results of the follow up investigations for these sites.

TABLE 9-2
SUMMARY OF FOLLOW-UP INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results / Probable Source
	Field	Laboratory	
1		*Enterococcus*	Exceedance not confirmed
7		Total coliforms, Fecal coliforms, and *Enterococcus*	Decomposition of leaves and algae and from wildlife waste
17		Fecal coliform	Exceedance not confirmed
30	Nitrate-N	--	Nitrate-containing groundwater seeping into the MS4 conveyance
37	Nitrate-N	--	*Same as above*

9.3 Recommendations

9.3.1 2009 Recommendation Implementation

In response to the recommendations presented in the 2009 Dry Weather Monitoring Program, the City took the following actions:

- Distributed educational materials on pet waste and the importance of picking up after pets. An informative article entitled “Pet Waste” was included in the City's spring 2010 newsletter. In addition, educational material on pet waste was included in a sewer bill insert for the May/June billing cycle, which was distributed City wide.
- Removed dust that appeared to be from concrete or ceramic work from Valley Lake Drive, upstream of Site 8.
- Removed trash and debris from Site 41 and in the upstream channel to the south.
- Removed trash and organic waste from El Monte Road, North Cuyamaca Street and North Pierce Street, south of Wagner Drive and north of West Main Street, and all associated catch basins.
- Removed trash and debris from sites 2, 3, 6, 20, 30, and 41, which received marginal trash assessment ratings in 2009.

9.3.2 2010 Recommendations

Based on the results of the City of El Cajon 2010 Dry Weather Monitoring Program, the following actions are recommended for consideration.

- Clean up decomposing leaves, algae, and trash at Site 7. These are likely contributing to the bacterial exceedances measured at this site.
- Remove trash and debris from sites 3, 30, and 32, which received marginal trash assessment ratings.
- Provide educational material regarding proper trash disposal to areas upstream of sites 3 and 30, which have received marginal ratings in previous trash assessments as well. A shapefile delineating the parcels recommended to receive educational material is included as Appendix E.

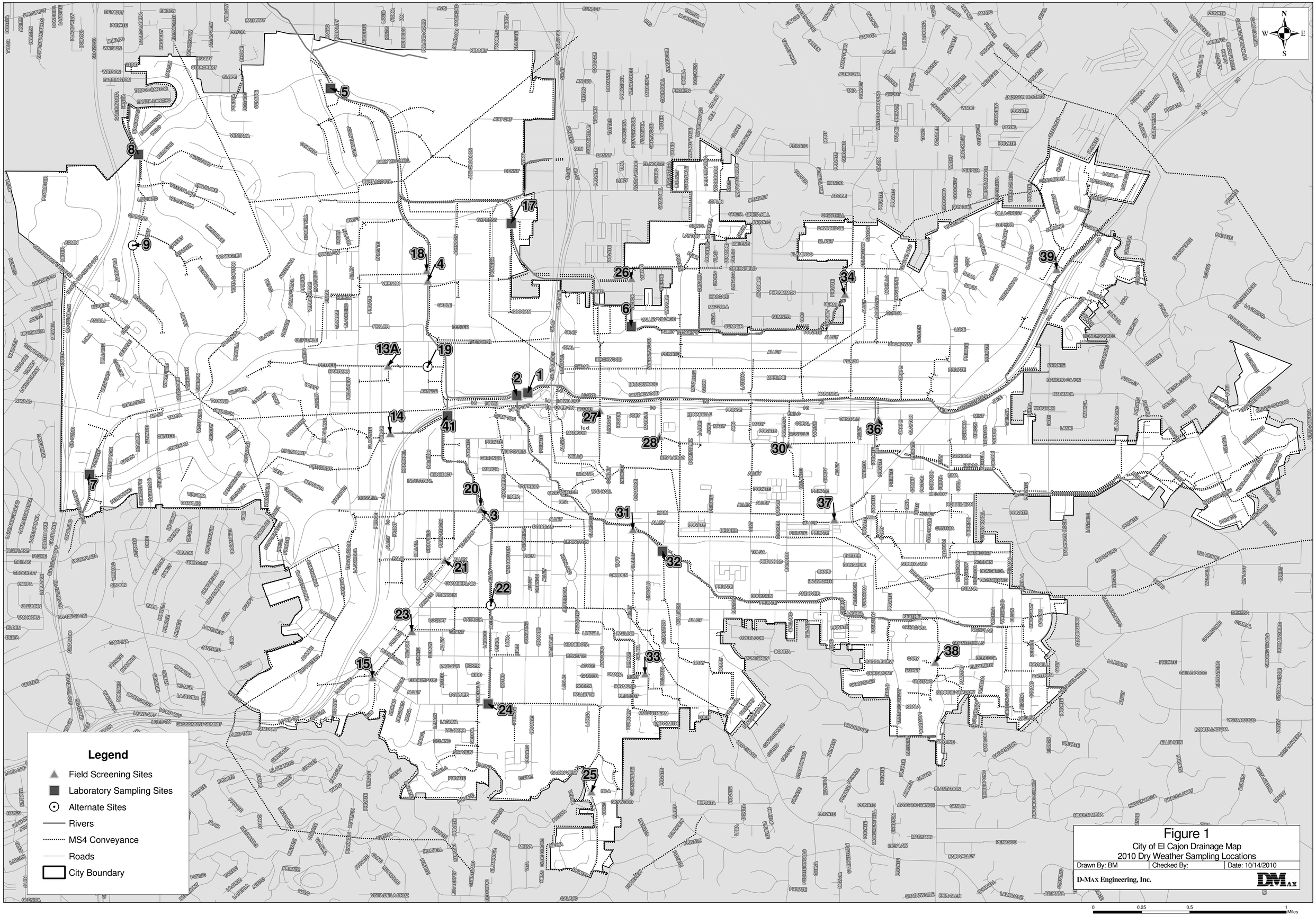

Figure 1
City of El Cajon Drainage Map
2010 Dry Weather Sampling Locations

Drawn By: BM	Checked By:	Date: 10/14/2010

D-MAX Engineering, Inc.

Base Data Sources: USGS, SanGIS, SANDAG

FIGURE 2
WATERSHED MAP OF THE EL CAJON AREA, BROKEN INTO HYDROLOGIC SUBAREAS

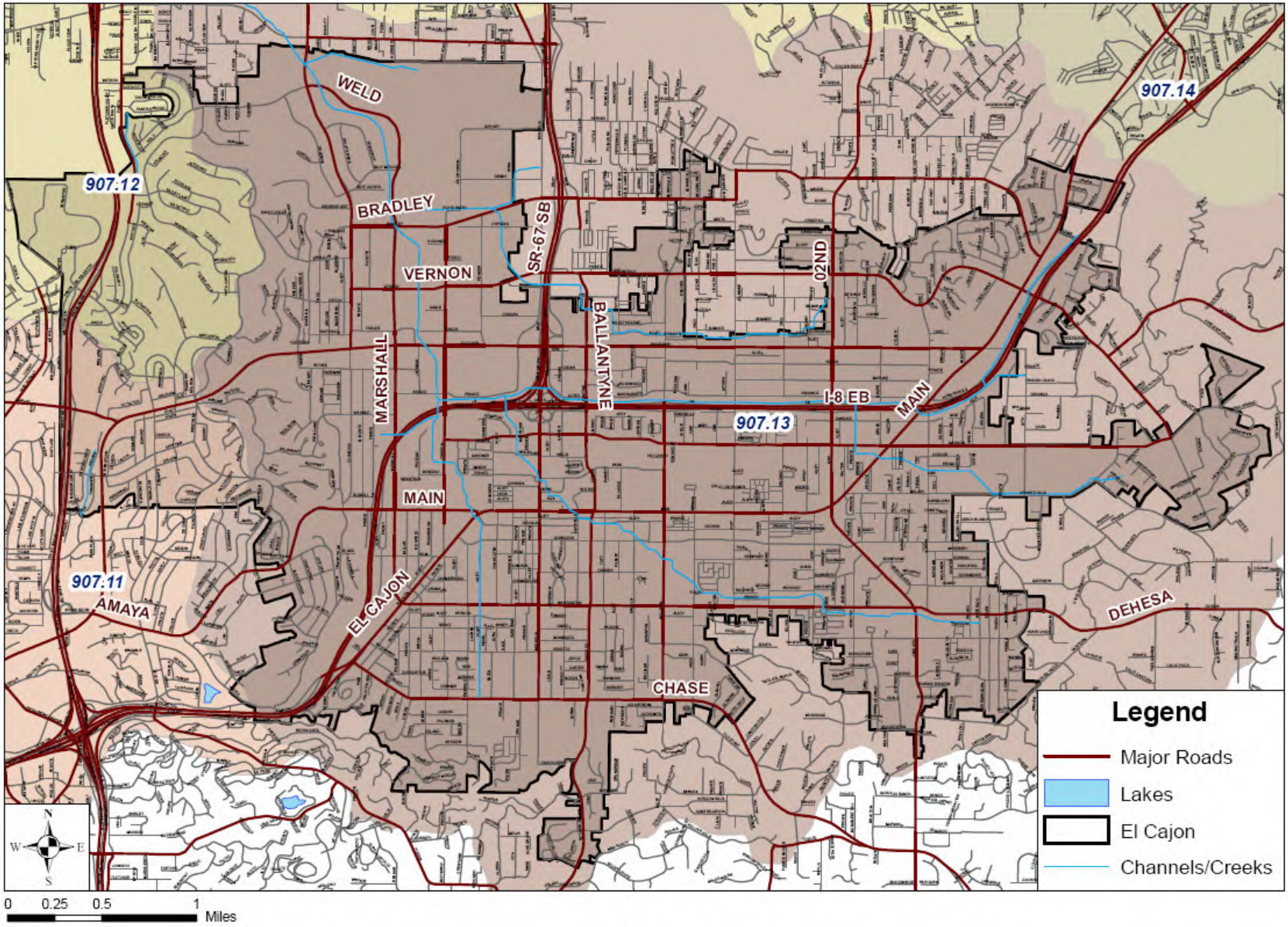

Appendix A

Historical Dry Weather Monitoring Data

City of El Cajon Dry Weather Historical Data

Site No.	1	2	3	4	5	6	7	8
1993								
pH	10.6	na	na	10.2	9.7	10.3		
Temperature (℃)	27	23	23	24	24	23		
Ammonia (mg/L)	na	na	na	na	na	na		
Surfactants (mg/L)	0.50	3.00	0.25	0.75	0.50	0.50		
Chlorine (mg/L)	1.5	0.8	0.2	0.4	0.2	0.8		
Copper (mg/L)	0.1	nd	nd	nd	nd	0.2		
Phenols (mg/L)	nd	nd	nd	nd	nd	nd		
1994								
pH	9.2	9.2	8.2	9.2	9.3	9.2		
Temperature (℃)	24	24	24	24	26	25		
Ammonia (mg/L)	na	na	na	na	na	na		
Surfactants (mg/L)	0.25	0.25	0.25	0.25	0.50	0.50		
Chlorine (mg/L)	1.0	1.0	0.8	1.0	1.5	1.0		
Copper (mg/L)	0.1	0.1	nd	nd	nd	nd		
Phenols (mg/L)	nd	nd	nd	nd	nd	nd		
January 1996								
pH	9.5	9.5	9.8	9.5	9.8	10.0	9.8	9.5
Temperature (℃)	28	28	26	22	24	22	20	20
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.25	0.60	0.75	0.50	0.50	0.25	0.25	0.50
Chlorine (mg/L)	0.60	nd	0.30	0.75	0.40	0.20	0.10	0.20
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
May 1996								
pH	9.6	9.8	9.4	9.7	9.5	9.8	9.4	9.6
Temperature (℃)	28.0	29.5	28.6	29.9	23.5	31.4	21.0	31.5
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.50	0.25	0.50	0.50	0.50	0.50	1.00	0.50
Chlorine (mg/L)	0.3	0.1	0.2	0.3	0.6	0.1	0.1	8.0
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
1997								
pH	9.4	9.8	9.8	9.3	9.9	9.9	8.2	9.0
Temperature (℃)	24	17	11	21	21	13	16	18
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.25	0.25	0.25	0.50	0.50	0.25	0.50	1.00
Chlorine (mg/L)	0.2	0.1	0.1	0.6	0.6	0.2	0.2	0.8
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
1998								
pH	8.7	8.1	8.3	8.3	8.5	9.0	8.9	7.9
Temperature (℃)	na	20	22	23	23	23	22	22
Ammonia (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Surfactants (mg/L)	nd	0.50	0.75	0.75	0.75	0.25	0.25	0.50
Chlorine (mg/L)	nd	0.40	0.40	0.80	0.80	0.75	0.75	0.80
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd

City of El Cajon Dry Weather Historical Data

Site No.	1	2	3	4	5	6	7	8
January 1999								
pH	9.0	8.6	9.0	9.3	8.8	9.8	9.0	8.4
Temperature (℃)	12.0	16.2	15.0	11.0	12.0	12.0	17.0	16.0
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.80	1.00	0.50	0.75	0.75	0.75	0.75	0.50
Chlorine (mg/L)	0.6	0.8	1.0	0.8	0.8	1.0	0.6	0.6
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
June 1999								
pH	9.9	8.1	9.1	8.3	8.9	9.5	8.8	8.8
Temperature (℃)	33	33	32	32	33	36	21	22
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Chlorine (mg/L)	1.0	0.8	0.8	0.8	0.8	1.0	0.1	0.8
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
2000								
pH	9.5	9.1	9.3	8.8	8.8	9.6	8.9	8.4
Temperature (℃)	32	32	34	30	33	34	22	23
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.25	0.25	0.75	0.25	0.25	0.5	0.75	0.25
Chlorine (mg/L)	1.0	0.8	1.0	1.0	1.0	1.0	0.2	0.8
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
2001								
pH	9.1	8.8	8.8	8.8	8.9	9.2	9.2	8.5
Temperature (℃)	11.4	15.9	14.3	13.1	17.6	12.2	8.8	9.2
Ammonia (mg/L)	na	na	na	na	na	na	na	na
Surfactants (mg/L)	0.25	0.75	0.5	0.25	0.25	0.25	0.50	0.5
Chlorine (mg/L)	0.6	0.4	0.6	0.7	0.6	nd	0.2	0.8
Copper (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd
Phenols (mg/L)	nd	nd	0.1	nd	nd	nd	nd	nd

City of El Cajon Dry Weather Historical Data

Site No.	1	2	3	4	5	6	7	8	9	12	13	14	15	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	36	37	38	39	40	41
2002																																					
Temp.°C	26.0	23.5	30.5	31.0	32.0	33.0	23.5	27.0		23.0	22.5	21.5	24.0	21.0	20.5	22.0	25.0	27.0	22.0	25.5	22.0	20.0	23.0	24.5	26.0	26.5	20.0	ns	22.0	23.5	23.5	ns	20.0	25.0	ns		
pH	9.2	9.0	9.2	9.0	8.8	9.2	9.3	8.2		8.2	7.5	8.5	7.1	7.4	8.0	7.4	8.2	8.2	7.8	8.3	7.8	7.7	8.0	7.8	7.7	8.2	7.9	ns	8.3	7.8	8.3	ns	7.5	7.8	ns		
Conductivity (µmhos/cm)	1,754	1,974	2,790	2,940	2,550	2,600	1,710	5,910		2,300	1,144	3,040	3,760	1,410	2,930	6,140	1,631	2,470	3,210	3,090	4,290	2,550	2,490	2,740	1,150	1,502	2,580	ns	3,070	1,168	2,360	ns	2,460	1,371	ns		
Turbidity, NTU	1.99	4.72	5.57	18.94	15.13	8.53	10.81	9.82		38.34	60.00	3.75	10.52	43.52	14.21	32.25	2.66	18.77	0.66	20.20	5.18	9.36	32.61	10.40	15.93	44.60	2.47	ns	0.71	1.26	0.73	ns	2.43	2.71	ns		
Ammonia, mg/L	0.2	0.3	0.2	0.3	0.3	0.4	0.5	0.4		0.3	4.5	0.2	0.8	0.8	1.0	1.0	0.2	1.7	0.2	0.6	<0.1	0.2	0.9	1.0	0.6	1.0	0.3	ns	0.2	0.2	0.2	ns	0.2	0.6	ns		
Nitrate, mg/L	4.5	0.5	4.0	2.0	0.1	4.0	<0.1	24.0		4.0	<0.1	1.5	0.3	0.3	1.0	2.0	1.0	1.0	16.0	4.5	10.0	4.5	5.0	4.5	0.2	0.1	24.0	ns	28.0	1.0	20.0	ns	28.0	1.5	ns		
Orthophosphate-P, mg/L	0.05	0.03	0.03	0.03	0.03	0.03	0.10	0.13		0.65	2.61	0.26	0.20	0.10	1.63	0.49	0.33	0.33	0.07	0.33	0.07	0.13	1.96	0.33	0.98	1.96	0.13	ns	0.07	0.33	0.07	ns	0.33	0.49	ns		
Surfactants, mg/L - field screening	0.37	0.25	0.50	0.50	37.0	0.75	0.50	0.75		0.25	0.75	0.50	0.25	0.50	0.75	2.00	0.25	1.50	0.25	0.50	0.50	0.50	0.50	0.75	0.25	6.00	0.25	ns	0.25	0.25	0.25	ns	0.25	0.25	ns		
Surfactants (mg/L MBAS)	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50																					nd					nd			
Oil and Grease (mg/L)	nd	7.00	5.0	2.0	<1.0	2.0	5.0	<1.0																					nd					nd			
Total Hardness (mg/L $CaCO_3$)	422	600	500	582	549	664	468	1,140																					811					668			
Cadmium-diss (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd																					nd					nd			
Copper-diss (mg/L)	nd	nd	nd	nd	nd	nd	0.11	nd																					nd					nd			
Lead-diss (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd																					nd					nd			
Zinc-diss (mgL)	nd	nd	nd	nd	nd	nd	nd	nd																					nd					nd			
Diazinon (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd																					nd					nd			
Chlorpyrifos (mg/L)	nd	nd	nd	nd	nd	nd	nd	nd																					nd					nd			
Total Coliform Bacteria (MPN/100ml)	2,200	7,000	1,700	17,000	30,000	2,800	17,000	90,000																					11,000					7,000			
Fecal Coliform Bacteria (MPN/100ml)	1,100	5,000	800	13,000	17,000	1,700	13,000	50,000																					8,000					5,000			
Enterococcus (MPN/100ml)	300	500	230	230	300	8,000	800	800																					800					800			
2003																																					
Temp.°C	30.5	27.0	31.0	31.0	29.0	27.0	28.0	28.5			24.0	23.5	23.0	28.0	25.0		27.0	28.0	23.5	26.0	27.5	24.5	26.0	27.5	28.0		26.0	ns	24.5	26.5	25.0	27.5	27.0	26.0	30.0		30.0
pH	9.3	9.1	8.8	9.0	8.6	9.0	9.2	9.0			7.9	8.5	7.7	7.9	8.2		8.3	8.4	8.0	8.4	8.1	8.0	8.2	8.0	7.7		7.9	ns	8.2	8.4	8.3	8.1	7.4	8.2	9.7		8.5
Conductivity (µmhos/cm)	2,180	2,250	2,900	2,660	2,700	2,190	2,070	2,010			2,800	4,040	3,540	1,830	3,630		1,550	6,390	3,040	3,620	2,720	2,510	2,130	1,140	1,030		2,400	ns	2,710	2,220	2,310	4,080	2,560	2,440	1,320		3,230
Turbidity, NTU	5.26	2.24	2.54	5.34	6.36	4.98	8.94	2.45			12.75	4.92	12.68	9.25	2.17		0.48	2.58	0.43	7.75	1.69	9.29	29.34	7.14	4.84		0.43	ns	2.36	1.82	7.50	4.88	0.74	1.36	17.23		2.95
Ammonia, mg/L	0.2	0.3	0.2	0.3	0.2	0.3	0.6	0.2			1.0	0.3	0.2	0.1	2.0		0.3	0.2	0.3	0.3	0.1	0.3	0.4	0.8	0.8		0.1	ns	0.3	0.2	0.2	0.2	0.3	0.3	1.0		0.1
Nitrate, mg/L	6.4	4.0	4.8	1.5	2.0	5.0	0.1	1.6			0.8	0.6	1.0	0.3	0.8		0.8	3.5	10.0	3.2	2.4	3.5	8.0	0.4	0.2		20.0	ns	8.0	4.0	8.0	0.8	28.0	5.0	0.1		0.8
Orthophosphate-P, mg/L	nd	0.03	0.03	nd	nd	nd	0.13	0.03			0.65	0.16	0.10	0.07	0.33		0.20	0.23	0.13	0.13	0.16	0.07	0.82	0.65	0.82		0.10	ns	0.16	0.65	0.07	0.20	0.07	0.26	0.49		0.03
Surfactants, mg/L - field screening	0.25	0.25	0.25	0.25	0.13	0.25	0.25	0.13			0.50	0.38	0.25	0.25	0.25		0.13	0.50	0.25	0.25	0.25	0.13	0.25	0.25	0.25		0.25	ns	0.25	0.25	0.13	0.25	0.25	0.25	0.75		0.25
Dissolved Oxygen (mg/L)	11.6	11.0	12.9	13.2	11.1	9.7	7.6	11.0			5.0	7.9	9.0	6.5	6.3		7.1	6.3	7.4	7.5	6.5	6.8	6.8	6.6	5.0		7.0	ns	7.8	8.1	8.1	6.7	5.4	7.2	5.3		13.6
Surfactants (mg/LMBAS)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Oil and Grease (mg/L)	nd	nd			nd	nd	nd	1						nd							nd								nd								nd
Total Hardness (mg/L $CaCO_3$)	438	536			624	588	485	460						464							773								764								633
Cadmium-diss (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Copper-diss (mg/L)	nd	0.007			0.010	nd	0.044	nd						nd							nd								nd								nd
Lead-diss (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Zinc-diss (mgL)	nd	nd			nd	nd	nd	nd						0.021							nd								nd								nd
Diazinon (mg/L)	nd	nd			nd	nd	nd	nd						nd							0.33								nd								0.05
Chlorpyrifos (mg/L)	nd	nd			nd	nd	nd	0.15						nd							nd								nd								nd
Total Coliform Bacteria (MPN/100ml)	1,700	8,000			8,000	90,000	1,300	5,000						11,000							90,000								160,000								3,000
Fecal Coliform Bacteria (MPN/100ml)	500	3,000			2,300	30,000	5,000	1,700						5,000							30,000								90,000								1,300
Enterococcus (MPN/100ml)	1,700	5,000			800	8,000	13,000	1,700						300							800								17,000								1,700
Total Dissolved Solids (mg/L)	1,190	1,270			1,490	1,270	1,100	950						1,050							1,520								1,540								1,710
Total Organic Carbon (mg/L)	8.64	9.86			10.60	6.33	20.00	7.37						10.50							6.73								4.58								11.20
2004																																					
Temp.°C	29.6	25.9	24.1	24.7	20.6	23.5	21.7	20.4			22.4	21.3	22.5	21.7	20.9		23.4	24.5	20.5	23.9	21.7	22.8	22.1	23.4	24.4		23.5	ns	21.9	22.4	22.6	26.3	24.3	23.6	29.6		29.9
pH	9.2	8.9	8.8	8.3	8.3	8.5	9.3	8.1			7.8	8.3	7.2	7.5	7.9		7.9	8.2	7.7	8.2	8.0	7.8	8.0	7.7	7.8		7.4	ns	8.0	7.9	8.2	8.1	7.2	7.9	8.7		8.5
Conductivity (µmhos/cm)	1,620	1,730	2,400	2,600	2,320	1,900	2,140	1,210			1,340	2,900	2,850	2,000	1,830		1,700	3,450	2,430	2,410	2,100	1,910	1,310	750	770		1,840	ns	2,300	1,340	1,700	2,660	2,500	2,560	1,250		2,250
Turbidity, NTU	11.22	3.44	4.03	5.11	4.74	8.80	14.34	15.68			18.77	21.55	9.41	6.54	11.31		0.94	1.39	1.09	8.26	1.86	2.08	7.03	2.09	7.22		1.02	ns	1.18	3.65	0.76	13.17	0.72	0.95	8.84		4.15
Ammonia, mg/L	0.2	0.3	0.8	0.3	0.3	0.3	0.8	0.2			1.5	0.3	0.6	0.5	0.8		0.3	0.3	0.2	0.3	0.2	0.2	0.7	0.3	0.4		0.1	ns	0.2	0.3	0.2	0.8	0.2	0.2	0.8		0.2
Nitrate, mg/L	5.0	2.5	1.25	3.8	1.25	5.0	1.3	1.3			1.3	1.3	1.3	1.3	1.3		1.3	2.5	7.5	2.5	2.5	2.5	7.5	2.5	1.3		15.0	ns	7.5	2.5	7.5	1.3	20.0	1.3	nd		2.5
Orthophosphate-P, mg/L	0.03	0.04	0.03	0.03	0.03	0.03	0.10	0.10			0.98	0.26	0.13	0.07	0.49		0.10	0.20	0.07	0.19	0.07	0.03	0.07	0.03	0.03		0.07	ns	0.05	0.49	0.07	0.49	0.05	0.20	0.49		0.03
Surfactants, mg/L - field screening	0.13	0.13	0.50	0.26	0.38	0.25	0.50	0.25			0.50	0.50	0.25	0.13	0.25		0.13	0.25	0.25	0.13	0.13	0.25	0.25	0.13	0.25		0.25	ns	0.13	0.38	0.25	0.25	0.25	0.25	0.50		0.25
Dissolved Oxygen (mg/L)	8.4	7.8	4.58	10.3	7.5	7.6	8.9	6.7			4.4	5.7	4.4	3.2	5.7		5.1	4.95	5.88	6.0	5.8	5.6	4.8	5.0	5.0		4.1	ns	5.3	5.3	4.5	5.7	4.3	5.3	7.3		2.4
Surfactants (mg/LMBAS)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Oil and Grease (mg/L)	nd	nd			nd	2	1	nd						3							nd								nd								3
Total Hardness (mg/L $CaCO_3$)	419	597			699	602	698	393						586							838								1,000								587
Cadmium-diss (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Copper-diss (mg/L)	nd	nd			nd	nd	0.037	nd						nd							nd								nd								nd
Lead-diss (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Zinc-diss (mgL)	nd	nd			nd	nd	nd	nd						nd							0.029								nd								nd
Diazinon (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Chlorpyrifos (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Coliform Bacteria (MPN/100ml)	17,000	17,000			130,000	70,000	3,300	500,000						30,000							11,000								220,000								300,000
Fecal Coliform Bacteria (MPN/100ml)	300	800			800	50,000	1,100	3,000						5,000							220								3,000								1,300
Enterococcus (MPN/100ml)	700	800			340	2,600	2,400	8,000						3,000							220								5,000								11,000
Total Dissolved Solids (mg/L)	1,330	1,540			1,900	1,320	1,930	955						1,540							1,890								2,020								1,840
Total Organic Carbon (mg/L)	10.50	9.68			10.90	16.00	33.50	5.07						9.19							5.46								4.32								12.40

City of El Cajon Dry Weather Historical Data

Site No.	1	2	3	4	5	6	7	8	9	12	13	14	15	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	36	37	38	39	40	41
2005																																					
Temp. (Celsius)	28.3	23.8	28.8	22.4	25.5	25.3	18.2	21.5			21.4	18.8	20.1	18.2	19.6		23.2	22.5	22.1	21.5	19.9	22.8	20.6	20.7	22.0		21.9	ns	21.3	21.8	21.7	ns	23.5	21.7	24.1	28.5	28.4
pH	8.4	8.5	8.4	8.5	8.6	8.6	7.9	7.9			8.2	8.4	7.7	7.7	8.2		8.3	8.4	7.9	8.2	8.2	7.9	8.4	7.7	7.5		7.6	ns	8.2	8.1	8.4	ns	7.4	7.9	8.4	8.7	8.6
Conductivity (µmhos/cm)	2,260	2,440	3,030	1,350	1,240	2,140	1,840	1,990			9,530	1,970	1,570	2,220	1,290		4,020	3,210	1,580	1,410	1,340	1,350	1,020	460	420		1,150	ns	2,890	1,540	1,080	ns	2,450	2,690	1,580	960	2,890
Turbidity (NTU)	5.37	1.35	15.66	4.20	3.43	2.74	35.49	9.02			9.04	2.70	2.77	8.41	5.58		3.92	0.64	0.57	3.14	1.41	5.52	0.86	20.32	3.37		0.02	ns	0.44	4.49	3.65	ns	1.31	1.27	3.40	24.47	4.26
Ammonia (mg/L)	0.2	0.2	0.4	0.2	0.1	0.2	0.8	0.2			0.1	0.3	0.1	0.2	0.6		0.1	0.1	0.2	0.3	0.3	0.4	0.2	0.4	0.5		0.1	ns	0.3	0.3	0.2	ns	0.3	0.5	0.3	0.3	0.3
Nitrate (mg/L)	8.75	7.50	5.00	5.00	6.25	8.75	1.25	1.25			2.50	1.25	2.50	2.50	2.50		1.25	3.75	10.0	3.75	3.75	2.50	15.0	1.25	1.25		12.50	ns	6.25	7.50	6.25	ns	20.0	6.25	1.25	6.25	5.00
Orthophosphate-P (mg/L)	0.03	0.03	0.07	< 0.03	0.03	<0.03	0.98	0.07			0.33	0.07	0.13	0.03	0.98		0.13	0.26	0.03	0.26	0.07	0.07	0.10	0.33	0.65		0.07	ns	0.03	0.07	0.07	ns	0.49	0.20	0.33	0.03	<0.03
Surfactants - field (mg/L)	0.50	0.50	0.38	0.88	0.50	0.50	1.25	0.25			1.0	0.75	0.25	0.50	0.50		0.50	1.25	0.50	0.38	0.38	0.25	0.50	0.50	0.50		0.50	ns	0.38	0.50	0.25	ns	0.38	0.75	0.25	0.25	0.38
Dissolved Oxygen (mg/L)	12.06	11.42	11.51	9.74	12.70	11.03	6.43	7.84			8.10	8.88	7.55	6.02	8.04		7.40	6.94	7.89	8.09	8.14	7.60	8.02	5.92	5.93		6.62	ns	8.12	7.33	8.54	ns	6.20	7.25	7.81	10.05	13.79
Surfactants (mg/L MBAS)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Oil & Grease (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Hardness (mg/L)	689	860			810	788	556	586						697							1,040								1,120								795
Cadmium (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Copper (diss) (mg/L)	nd	nd			nd	nd	0.059	0.015						nd							nd								nd								nd
Lead (diss) (mg/L)	nd	nd			nd	nd	0.014	nd						nd							nd								nd								nd
Zinc (diss) (mg/L)	nd	nd			nd	nd	0.481	nd						0.05							0.046								nd								nd
Diazinon (µg/l)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Chlorpyrifos (µg/l)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Coliform (MPN/100mL)	14,000	6,000			30,000	30,000	50,000	50,000						50,000							80,000								3,000								8,000
Fecal Coliform (MPN/100mL)	2,300	500			1,300	30,000	500	2,300						20							80								110								700
Enterococcus (MPN/100mL)	700	500			5,000	11,000	1,300	5,000						700							230								110								80
Total Dissolved Solid (mg/L)	1,550	1,670			1,700	1,490	1,320	1,200						1,470							2,000								2,110								1,950
Total Organic Carbon (mg/L)	52.7	71.7			53.4	93.3	139.0	51.1						87.0							96.2								168.0								138.0
2006																																					
Temp. (Celsius)	31.6	27.1	27.6	19.9	27.9	22.8	20.0	27.1			21.4	20.5	20.2	20.7	20.3		23.6	24.6	21.0	21.0	21.9	22.5	22.7	22.2	23.5		21.7	ns	22.0	22.1	21.4	ns	23.7	21.5	23.8	31.0	32.8
pH	9.4	8.9	9.1	8.5	8.7	9.1	9.1	8.3			8.1	8.5	7.8	7.7	8.0		8.3	8.3	7.7	8.3	8.1	7.9	7.5	7.8	7.6		7.5	ns	8.0	8.2	8.4	ns	7.2	8.1	8.8	9.6	9.1
Conductivity (mS/cm)	2.18	2.01	2.70	2.04	2.58	1.98	1.60	3.00			4.63	3.64	3.31	1.96	2.02		4.11	5.02	3.34	3.16	2.44	2.55	1.91	0.78	0.91		2.06	ns	2.50	2.62	2.15	ns	2.30	2.63	1.53	2.13	2.87
Turbidity (NTU)	11.55	4.69	9.23	2.12	2.06	2.53	3.35	18.32			4.21	23.00	1.90	7.90	8.68		1.07	14.37	0.54	5.11	1.68	1.02	21.96	8.86	12.17		3.52	ns	2.79	2.39	0.91	ns	0.35	1.21	14.47	8.89	1.31
Ammonia (mg/L)	0.6	0.1	0.2	0.3	0.8	0.4	0.2	0.6			0.6	0.3	0.2	0.4	0.8		0.3	0.3	0.2	0.8	0.8	0.4	0.8	0.3	1.5		0.2	ns	0.2	0.4	0.2	ns	0.8	0.2	0.8	0.4	0.2
Nitrate (mg/L)	7.50	5.00	2.50	6.25	5.00	7.50	3.75	5.00			3.75	2.50	1.25	3.75	2.50		2.50	5.00	7.50	5.00	3.75	3.75	8.75	2.50	2.50		12.50	ns	7.50	6.75	7.50	ns	15.00	5.00	7.50	3.75	3.75
Orthophosphate-P (mg/L)	0.03	0.03	0.03	0.03	0.03	nd	0.07	0.07			0.33	0.10	0.07	0.07	0.33		0.10	0.20	0.03	0.13	0.10	0.03	0.20	0.20	0.98		0.07	ns	0.03	0.13	0.07	ns	0.07	0.07	0.26	0.03	0.03
Surfactants - field (mg/L)	0.3	0.3	0.5	0.5	0.3	0.3	0.5	0.5			0.8	0.5	0.3	0.3	0.5		0.5	2.0	0.5	0.3	0.3	0.3	0.3	0.3	1.5		0.3	ns	0.3	0.3	0.3	ns	0.3	0.3	0.8	2.0	0.3
Dissolved Oxygen (mg/L)	13.80	13.10	9.80	12.85	10.66	10.60	8.50	9.82			7.22	8.24	6.23	5.04	6.87		6.85	5.54	5.78	7.52	7.10	7.90	5.95	5.38	4.53		5.64	ns	7.05	7.62	8.46	ns	5.23	6.53	9.37	6.70	14.70
Surfactants (mg/L MBAS)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Oil & Grease (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Hardness (mg/L)	515	533			60	545	329	76						528							769								735								62
Cadmium (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Copper (diss) (mg/L)	0.005	nd			nd	nd	0.047	0.009						nd							nd								nd								nd
Lead (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Zinc (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							0.027								0.022								nd
Diazinon (µg/l)	nd	nd			0.2	nd	nd	nd						nd							nd								nd								nd
Chlorpyrifos (µg/l)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Coliform (MPN/100mL)	23,000	13,000			170,000	130,000	7,000	900,000						110,000							130,000								130,000								30,000
Fecal Coliform (MPN/100mL)	40	210			500	2,300	7,000	3,000						500							8,000								3,000								30,000
Enterococcus (MPN/100mL)	20	2,300			70	1,300	13,000	80,000						3,000							2,200								2,800								13,000
Total Dissolved Solid (mg/L)	1,420	1,320			1,600	1,420	951	1,810						1,310							1,690								1,740								1,960
Total Organic Carbon (mg/L)	9.57	6.47			9.52	6.89	13.40	14.00						6.27							5.20								10.20								11.80
2007																																					
Temp. (Celsius)	27.1	28.0	30.2	25.7	27.8	32.9	23.0	33.1	21.6		26.3	24.5	21.9	25.9	22.9		25.4	27.1	22.9	24.4	24.5	23.7	23.0	23.5	24.1		25.6	ns	23.7	23.7	21.9	ns	26.2	23.9	31.5		31.5
pH	8.6	8.8	8.8	8.5	8.3	9.3	9.4	8.3	7.1		8.2	8.3	7.8	7.5	8.4		8.3	7.9	8.0	8.4	8.1	7.9	7.9	7.6	8.1		7.4	ns	8.3	8.3	8.4	ns	7.2	8.1	10.2		8.8
Conductivity (mS/cm)	2.21	2.27	2.80	2.30	2.35	2.12	0.95	3.34	2.63		3.69	4.03	3.31	2.56	3.44		1.99	2.05	2.94	3.05	2.21	2.31	1.20	0.90	0.87		2.25	ns	2.73	1.79	2.02	ns	2.51	2.19	1.15		2.26
Turbidity (NTU)	4.09	1.47	1.79	6.57	9.91	8.11	2.04	8.34	48.44		5.19	2.11	1.77	5.29	2.14		1.53	11.73	1.11	1.17	2.14	1.11	9.73	4.21	1.53		0.69	ns	0.95	1.05	0.99	ns	2.33	4.69	2.09		3.47
Ammonia (mg/L)	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.4	0.6		0.3	4.0	0.1	0.2	0.2		0.2	0.2	0.2	0.2	0.3	0.1	0.2	0.1	nd		0.1	ns	0.2	0.1	0.2	ns	0.2	0.4	0.1		0.2
Nitrate (mg/L)	6.46	3.07	2.26	2.24	1.92	3.07	0.23	0.79	0.43		0.54	12.20	4.80	0.63	0.57		0.52	0.25	10.24	3.41	1.31	3.12	4.54	0.11	0.75		14.25	ns	5.54	3.03	9.10	ns	12.02	5.31	0.02		0.95
Orthophosphate-P (mg/L)	0.03	0.07	0.03	0.07	0.07	0.03	0.07	0.13	0.55		0.68	1.56	0.13	0.10	0.23		0.46	0.20	0.07	0.16	0.20	0.07	0.49	0.36	0.23		0.07	ns	0.03	0.29	0.10	ns	0.07	0.75	0.10		0.03
Surfactants - field (mg/L)	0.50	0.38	0.25	0.50	0.50	0.25	0.25	0.50	0.50		0.75	1.25	0.75	0.50	0.63		0.38	0.50	0.38	0.50	0.75	0.38	0.50	0.25	0.38		0.50	ns	0.25	0.50	0.25	ns	0.50	0.63	0.50		0.50
Dissolved Oxygen (mg/L)	8.20	8.00	7.40	8.10	7.80	7.80	8.20	7.20	6.47		6.17	6.10	5.10	5.39	7.30		5.34	5.93	6.50	5.82	7.85	6.20	5.39	5.37	6.34		5.66	ns	7.10	6.85	8.30	ns	5.20	6.73	7.40		7.30
Surfactants (mg/L MBAS)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Oil & Grease (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Hardness (mg/L)	589	584			649	506	226	896						704							723								960								535
Cadmium (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Copper (diss) (mg/L)	nd	nd			nd	nd	0.011	0.070						nd							0.015								nd								0.060
Lead (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Zinc (diss) (mg/L)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Diazinon (µg/l)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Chlorpyrifos (µg/l)	nd	nd			nd	nd	nd	nd						nd							nd								nd								nd
Total Coliform (MPN/100mL)	23,000	13,000			30,000	8,000	5,000	500,000						13,000							80,000								13,000								80,000
Fecal Coliform (MPN/100mL)	5,000	1,300			5,000	2,300	3,000	>160,000						300							17,000								3,000								2,300
Enterococcus (MPN/100mL)	1,300	130			800	230	2,300	8,000						2,300							24,000								500								500
Total Dissolved Solid (mg/L)	1,360	1,450			1,400	1,320	584	1,780						1,610							1,510								1,940								1,400
Total Organic Carbon (mg/L)	12.5	11.2			14.1	16.7	16.3	16.5						17.3							26.0								9.9								16.6

City of El Cajon Dry Weather Historical Data

Site No.	1	2	3	4	5	6	7	8	9	13A	14	15	17	18	19	20	21	22	23	24	25	26	27	28	30	31	32	33	34	36	37	38	39	41
2008																																		
Temp. (Celsius)	32.7	28.7	31.0	30.6	32.0	31.6	25.7	33.6	21.7	27.3	26.0	24.1	23.9	25.3	24.5	26.0	26.4	25.5	26.4	26.0	25.0	24.9	24.4	28.4	28.0	ns	25.5	27.0	25.5	ns	27.6	26.6	ns	34.2
pH	8.7	8.6	8.2	8.7	8.7	8.9	8.4	8.5	6.7	8.0	8.3	7.5	7.6	8.0	7.5	8.1	8.3	7.6	8.2	7.9	7.9	7.2	8.0	8.0	7.1	ns	8.1	8.1	8.2	ns	7.3	8.1	ns	8.3
Conductivity (mS/cm)	2.24	2.31	3.11	2.71	2.80	2.20	1.91	2.97	3.81	5.63	4.48	3.64	2.61	2.80	6.14	2.14	4.30	2.74	3.46	2.82	2.40	2.33	1.31	2.85	2.39	ns	2.92	2.03	2.20	ns	2.35	2.52	ns	3.04
Turbidity (NTU)	7.14	2.53	12.52	7.13	5.57	10.47	1.52	5.14	9.55	0.86	2.03	2.86	4.97	2.05	1.15	2.64	0.01	0.38	2.30	0.17	2.26	3.85	5.43	4.17	2.41	ns	1.42	1.51	1.24	ns	0.52	1.49	ns	2.36
Ammonia (mg/L)	0.3	0.3	0.2	0.3	0.3	0.3	0.1	0.3	0.6	0.3	0.3	0.2	0.5	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1	ns	0.2	0.4	0.3	ns	0.2	0.2	ns	0.3
Nitrate (mg/L)	6.83	3.16	4.79	3.53	2.12	4.52	0.68	0.54	0.70	1.67	1.20	2.06	2.46	1.27	2.76	0.77	1.83	15.37	5.04	2.73	1.49	8.77	1.36	30.74	16.05	ns	8.02	4.32	7.91	ns	18.98	10.06	ns	3.68
Orthophosphate-P (mg/L)	nd	nd	0.07	0.03	0.03	0.07	0.26	0.02	0.16	0.03	0.33	0.16	nd	0.13	0.13	0.39	0.10	0.03	0.23	0.10	0.07	0.23	0.33	0.23	0.03	ns	0.07	0.33	0.10	ns	0.03	0.20	ns	0.03
Surfactants - field (mg/L)	0.25	0.25	0.50	0.25	0.25	0.50	0.50	0.25	0.50	0.50	0.68	0.13	0.25	0.50	0.75	0.68	0.63	0.25	0.25	0.13	0.13	0.25	0.25	0.50	0.38	ns	0.25	0.50	0.75	ns	0.25	0.25	ns	0.25
Dissolved Oxygen (mg/L)	8.14	8.52	8.72	9.14	9.64	8.22	7.53	8.42	5.86	6.47	6.43	5.56	5.77	7.59	6.51	5.74	6.19	6.48	6.23	6.74	5.86	5.52	5.93	6.23	5.32	ns	6.92	5.95	7.11	ns	5.76	6.64	ns	8.20
Oil & Grease (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Total Hardness (mg/L)	531	659			480	599	674	728					736							1,040							995							619
Cadmium (diss) (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Copper (diss) (mg/L)	nd	nd			nd	0.005	0.013	nd					nd							nd							nd							nd
Lead (diss) (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Zinc (diss) (mg/L)	nd	nd			nd	nd	nd	nd					nd							0.023							nd							nd
Diazinon (µg/l)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Chlorpyrifos (µg/l)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Total Coliform (MPN/100mL)	22,000	13,000			5,000	50,000	23,000	13,000					13,000							3,000							13,000							2,300
Fecal Coliform (MPN/100mL)	3,000	800			1,300	8,000	1,100	800					300							1,700							8,000							2,300
Enterococcus (MPN/100mL)	2,200	210			40	7,000	8,000	170					6,000							3,000							5,000							110
Total Dissolved Solid (mg/L)	1,370	1,470			1,120	1,410	1,280	1,600					1,690							1,850							1,990							1,900
Total Organic Carbon (mg/L)	9.52	8.37			45.50	15.00	21.10	8.78					22.50							4.98							6.33							10.70
2009																																		
Temp. (Celsius)	33.0	27.2	33.1	31.5	30.7	30.4	24.8	31.1	28.2	26.6	26.0	26.5	27.5	27.0	29.4	28.2	31.6	27.5	28.2	25.6	26.1	26.1	25.3	29.8	29.2	ns	27.0	29.8	26.7	ns	31.5	27.7	ns	29.8
pH	9.2	8.8	8.4	8.3	8.9	8.6	9.2	8.2	6.8	7.9	8.1	7.7	7.9	8.1	6.9	7.9	8.1	7.5	8.2	8.0	7.8	7.2	7.6	7.9	7.6	ns	8.1	8.1	8.1	ns	7.6	8.1	ns	8.1
Conductivity (mS/cm)	2.07	2.26	3.03	2.71	2.81	2.12	1.00	12.24	4.00	5.27	3.18	3.44	2.16	3.36	8.68	5.05	5.69	3.23	3.28	2.53	2.32	2.33	1.14	1.61	2.27	ns	2.73	2.34	2.07	ns	2.37	2.60	ns	3.43
Turbidity (NTU)	4.35	1.25	3.76	5.03	14.82	3.99	21.97	10.40	37.15	1.00	0.93	1.62	6.43	0.68	5.75	2.42	0.35	0.11	2.12	0.77	2.16	6.49	10.81	7.85	5.44	ns	0.03	0.59	0.26	ns	0.66	0.23	ns	72.00
Ammonia (mg/L)	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.6	0.2	0.2	0.2	0.4	0.3	0.9	0.6	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.2	0.2	ns	0.1	0.2	0.2	ns	0.1	0.1	ns	0.6
Nitrate (mg/L)	5.49	4.16	1.88	3.76	2.38	3.02	0.17	6.72	0.10	1.80	1.05	1.05	0.13	0.67	5.10	0.28	1.68	11.21	3.85	1.76	1.33	14.88	0.40	3.56	12.94	ns	6.86	4.90	7.29	ns	12.94	7.85	ns	1.52
Orthophosphate-P (mg/L)	0.02	0.02	0.04	0.01	0.08	nd	0.26	0.12	0.22	0.03	0.17	0.17	0.29	0.20	0.13	0.98	0.26	0.06	0.26	0.09	0.07	0.16	0.49	0.13	0.09	ns	0.01	0.37	0.04	ns	0.09	0.14	ns	0.28
Surfactants - field (mg/L)	0.38	0.25	0.25	0.13	0.25	0.25	0.25	0.75	0.50	0.50	0.38	0.25	0.25	0.25	0.75	0.75	0.63	0.25	0.25	0.25	0.13	0.25	0.25	0.25	0.25	ns	0.38	0.25	0.25	ns	0.25	0.25	ns	0.50
Dissolved Oxygen (mg/L)	8.95	8.25	6.37	8.56	8.25	8.82	7.83	8.55	5.37	6.53	5.68	5.22	5.72	6.92	5.12	5.12	5.72	5.64	6.27	5.74	5.71	5.21	5.53	6.62	5.46	ns	6.77	5.75	6.62	ns	5.43	6.31	ns	6.82
Oil & Grease (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Total Hardness (mg/L)	445	639			616	667	321	1070					686							902							931							874
Cadmium (diss) (mg/L)	nd	nd			nd	nd	nd	nd					0.001							nd							nd							nd
Copper (diss) (mg/L)	0.003	0.002			0.003	0.002	0.019	0.008					nd							0.001							0.001							0.003
Lead (diss) (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Zinc (diss) (mg/L)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Diazinon (µg/l)	nd	nd			nd	nd	0.07	nd					nd							nd							nd							nd
Chlorpyrifos (µg/l)	nd	nd			nd	nd	nd	nd					nd							nd							nd							nd
Total Coliform (MPN/100mL)	500	2,200			2,800	11,000	17,000	8,000					17,000							8,000							8,000							900,000
Fecal Coliform (MPN/100mL)	300	3,300			270	5,000	220	700					800							3,000							2,300							50,000
Enterococcus (MPN/100mL)	70	70			130	3,000	300	500					1,300							1,700							700							1,100
Total Dissolved Solid (mg/L)	1,320	1,130			1,680	1,420	658	7,060					1,460							1,820							1,910							2,200
Total Organic Carbon (mg/L)	14.00	5.90			12.00	12.00	17.00	15.00					8.00							nd							4.00							22.00

Appendix B

Photographs of Sampling Locations

Site 1	
Site 2	
Site 3	

Site 4	
Site 5	
Site 6	

Site 7	
Site 8	
Site 9	

Site 13A	
Site 14	
Site 15	

Site 17	
Site 18	
Site 19	

Site 20	
Site 21	
Site 22	

Site 23	
Site 24	
Site 25	

Site 26	
Site 27	
Site 28	

Site 30	
Site 31	
Site 32	

Site 33	
Site 34	
Site 36	

Site 37	
Site 38	
Site 39	

Site 41	

Appendix C

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

29 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0149

Project Name: El Cajon Dry Weather
Project Desc./#: 201034W-3

Enclosed are the results of analyses for samples received by the laboratory on 07/07/10 13:03. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site5	10G0149-01	Stormwater	07/07/10 09:40	07/07/10 13:03
Site2	10G0149-02	Stormwater	07/07/10 10:50	07/07/10 13:03
Site41	10G0149-03	Stormwater	07/07/10 11:45	07/07/10 13:03

NOTE: The TOC and TKN analyses were performed by a sub-contract laboratory, results to follow in a separate report.

9909

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site5 (10G0149-01) Stormwater Sampled: 07/07/10 09:40 Received: 07/07/10 13:03										
Cadmium	ND	0.0002	0.001	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	
Copper	**0.001**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.0009**	0.0003	0.020	"	"	"	"	"	"	J
Site2 (10G0149-02) Stormwater Sampled: 07/07/10 10:50 Received: 07/07/10 13:03										
Copper	**0.002**	0.001	0.010	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	J
Cadmium	**0.0003**	0.0002	0.001	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.0009**	0.0003	0.020	"	"	"	"	"	"	J
Site41 (10G0149-03) Stormwater Sampled: 07/07/10 11:45 Received: 07/07/10 13:03										
Zinc	**0.002**	0.0003	0.020	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	

9910

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site5 (10G0149-01) Stormwater Sampled: 07/07/10 09:40 Received: 07/07/10 13:03										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071214	07/12/10	07/14/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*108 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*			"	"	"	"	
Site2 (10G0149-02) Stormwater Sampled: 07/07/10 10:50 Received: 07/07/10 13:03										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071214	07/12/10	07/14/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*108 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*			"	"	"	"	
Site41 (10G0149-03) Stormwater Sampled: 07/07/10 11:45 Received: 07/07/10 13:03										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071214	07/12/10	07/14/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*108 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*			"	"	"	"	

9911

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site5 (10G0149-01) Stormwater Sampled: 07/07/10 09:40 Received: 07/07/10 13:03										
Hardness (Total)	**203**	100	100	mg CaCO3/L	10	0071402	07/13/10	07/24/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0071339	07/14/10	07/14/10	EPA 1664A	
Site2 (10G0149-02) Stormwater Sampled: 07/07/10 10:50 Received: 07/07/10 13:03										
Hardness (Total)	**192**	100	100	mg CaCO3/L	10	0071402	07/13/10	07/26/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0071339	07/14/10	07/14/10	EPA 1664A	
Site41 (10G0149-03) Stormwater Sampled: 07/07/10 11:45 Received: 07/07/10 13:03										
Hardness (Total)	**400**	100	100	mg CaCO3/L	10	0071402	07/13/10	07/26/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0071339	07/14/10	07/14/10	EPA 1664A	

9912

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site5 (10G0149-01) Stormwater Sampled: 07/07/10 09:40 Received: 07/07/10 13:03										
Total Coliforms	**22000**	200	200	MPN/100 ml	100	0070806	07/07/10	07/11/10	SM 9221 B, E	
Fecal Coliforms	**3000**	200	200	"	"	"	"	07/10/10	"	
Enterococcus	**5000**	200	200	"	"	0070807	"	07/11/10	SM 9230 A, B	
Site2 (10G0149-02) Stormwater Sampled: 07/07/10 10:50 Received: 07/07/10 13:03										
Total Coliforms	**11000**	200	200	MPN/100 ml	100	0070806	07/07/10	07/11/10	SM 9221 B, E	
Fecal Coliforms	**2300**	200	200	"	"	"	"	07/10/10	"	
Enterococcus	**2200**	20	20	"	10	0070807	"	07/11/10	SM 9230 A, B	
Site41 (10G0149-03) Stormwater Sampled: 07/07/10 11:45 Received: 07/07/10 13:03										
Total Coliforms	**9000**	200	200	MPN/100 ml	100	0070806	07/07/10	07/11/10	SM 9221 B, E	
Fecal Coliforms	**1700**	20	20	"	10	"	"	07/10/10	"	
Enterococcus	**500**	20	20	"	"	0070807	"	07/11/10	SM 9230 A, B	

9913

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071341											
Blank (0071341-BLK1)					Prepared & Analyzed: 07/13/10						
Copper	ND	0.001	0.010	mg/l							
Cadmium	ND	0.0002	0.001	"							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
LCS (0071341-BS1)					Prepared & Analyzed: 07/13/10						
Zinc	0.051	0.0003	0.020	mg/l	0.0500		101	75-125			
Copper	0.051	0.001	0.010	"	0.0500		101	75-125			
Cadmium	0.051	0.0002	0.001	"	0.0500		102	75-125			
Lead	0.049	0.001	0.005	"	0.0500		98	75-125			
LCS Dup (0071341-BSD1)					Prepared & Analyzed: 07/13/10						
Lead	0.049	0.001	0.005	mg/l	0.0500		98	75-125	0.4	20	
Zinc	0.051	0.0003	0.020	"	0.0500		103	75-125	2	20	
Copper	0.052	0.001	0.010	"	0.0500		103	75-125	2	20	
Cadmium	0.052	0.0002	0.001	"	0.0500		105	75-125	2	20	
Duplicate (0071341-DUP1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Cadmium	ND	0.0002	0.001	mg/l		ND				20	
Copper	0.001	0.001	0.010	"		0.001			2	20	J
Lead	ND	0.001	0.005	"		ND				20	
Zinc	0.0009	0.0003	0.020	"		0.0009			3	20	J
Matrix Spike (0071341-MS1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Zinc	0.045	0.0003	0.020	mg/l	0.0500	0.0009	88	75-125			
Cadmium	0.045	0.0002	0.001	"	0.0500	ND	90	75-125			
Lead	0.050	0.001	0.005	"	0.0500	ND	100	75-125			
Copper	0.044	0.001	0.010	"	0.0500	0.001	86	75-125			

9914

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071341											
Matrix Spike Dup (0071341-MSD1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Copper	0.044	0.001	0.010	mg/l	0.0500	0.001	86	75-125	0.4	20	
Lead	0.050	0.001	0.005	"	0.0500	ND	101	75-125	1	20	
Cadmium	0.046	0.0002	0.001	"	0.0500	ND	92	75-125	2	20	
Zinc	0.045	0.0003	0.020	"	0.0500	0.0009	88	75-125	0.8	20	

9915

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071214											
Blank (0071214-BLK1)					Prepared: 07/12/10	Analyzed: 07/14/10					
Chlorpyrifos	ND	0.04	0.05	ug/l							
Diazinon	ND	0.04	0.05	"							
Malathion	ND	0.05	0.05	"							
Surrogate: Triphenyl phosphate	*0.270*			"	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*			"	*0.250*		*108*	*60-130*			
LCS (0071214-BS1)					Prepared: 07/12/10	Analyzed: 07/14/10					
Bolstar	0.41	0.09	0.10	ug/l	0.500		82	60-130			
Diazinon	0.44	0.04	0.05	"	0.500		88	60-130			
Ethoprop	0.46	0.05	0.05	"	0.500		92	60-130			
Mevinphos	0.43	0.21	0.25	"	0.500		86	60-130			
Methyl parathion	0.49	0.07	0.10	"	0.500		98	60-130			
Phorate	0.40	0.03	0.05	"	0.500		80	60-130			
Ronnel	0.40	0.16	0.25	"	0.500		80	60-130			
Trichlorinate	0.44	0.05	0.05	"	0.500		88	60-130			
Surrogate: Triphenyl phosphate	*0.270*			"	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.280*			"	*0.250*		*112*	*60-130*			
LCS Dup (0071214-BSD1)					Prepared: 07/12/10	Analyzed: 07/14/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	2	30	
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130	5	30	
Ethoprop	0.39	0.05	0.05	"	0.500		78	60-130	16	30	
Mevinphos	0.44	0.21	0.25	"	0.500		88	60-130	2	30	
Methyl parathion	0.42	0.07	0.10	"	0.500		84	60-130	15	30	
Phorate	0.40	0.03	0.05	"	0.500		80	60-130	0	30	
Ronnel	0.40	0.16	0.25	"	0.500		80	60-130	0	30	
Trichlorinate	0.41	0.05	0.05	"	0.500		82	60-130	7	30	
Surrogate: Triphenyl phosphate	*0.270*			"	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*			"	*0.250*		*108*	*60-130*			

9916

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10G0149

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071339											
Blank (0071339-BLK1)					Prepared & Analyzed: 07/13/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0071339-BS1)					Prepared & Analyzed: 07/13/10						
Oil & Grease	36	5	5	mg/l	40.0		90	78-114			
LCS Dup (0071339-BSD1)					Prepared & Analyzed: 07/13/10						
Oil & Grease	38	5	5	mg/l	40.0		95	78-114	6	20	
Batch 0071402											
Blank (0071402-BLK1)					Prepared: 07/13/10 Analyzed: 07/24/10						
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0071402-DUP1)			**Source: 10G0092-01**		Prepared: 07/13/10 Analyzed: 07/26/10						
Hardness (Total)	301	10	10	mg CaCO3/L		273			10	20	

9917

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

9918

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 10G0149

Client: D-Max Engineering
Attn: Arsalan Radkhah
Samplers(s): MD/BM
Address: 7220 Trade St., Ste. 119
San Diego, CA 92121
Phone: (858) 586-1600 Fax: (858) 586-1644
Email:
Billing Address: same

Project ID: El Cajon Dry Weather MS4 Monitoring
Project #: 201034W-3 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease ☐ 413.1 ☐ 413.2 ☒ 1664	8015B (TPH) ☐ Gas ☐ Diesel ☐ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐ pH ☐ EC ☒ TSS ☒ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ NH3	CAC Title 22/CAM17 Metals ☐ TTLC ☐ STLC	TCLP (RCRA) ☐ Metals ☐ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli ☐ P/A ☐ Enumeration	Enterococcus, ☒ MTF ☐ Enterolert	Heterotrophic Plate Count (HPC)	☐ BOD ☐ COD ☐ Cyanide	TOC	Total Hardness	Total Nitrogen-N	Total Phosphorus-P
1	site 5	7/7/10	9:40	SW	2G/5P	X						X		X				X	X		X			X	X	X	X
2	site 2	"	10:50	SW	2G/5P	X						X		X				X	X		X			X	X	X	X
3	site 41	"	11:45	SW	2G/5P	X						X		X				X	X		X			X	X	X	X
4																											
5																											
6																											
7																											
8																											
9																											
10																											

7/10 13:08

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: ☐ Courier ☐ UPS ☐ FedEx ☐ USPS ☐ Client Drop Off ☐ Other

[1]**Turn-Around-Time:** ☐ Same Day ☐ 24 hr ☐ 48 hr ☐ 3 day ☐ 4 day ☒ 5 day ☐ STD (7 day)

[1]**Reporting Requirements:** ☐ Fax ☐ PDF ☐ Excel ☐ Geotracker/EDF ☐ Hard Copy ☐ EDT

[1]**Sample Disposal:** ☐ By Laboratory ☐ [2]Return to Client: P/U or Delivery ☐ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A — Temp @ Receipt: _____
COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: BM	7/7/10 12:45	Signature: Kelly Ryder
Print: Brianna Martin		Print: Kelly Ryder
Company: D-Max Engineering		Company: EMA
Signature: Kelly Ryder	7/7/10 12:03	Signature:
Print: Kelly Ryder		Print: Matt Ryder
Company: EMA		Company: EMA
Signature:		Signature:
Print:		Print:
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 3°C on ice

28 July 2010

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 10G0149

Project Name: El Cajon Dry Weather
Project Number: 201034W-3

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- TOC – Liquid by SM5310B

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Clinical Laboratory of San Bernardino, Inc.

13 July 2010 Clinical Lab No.: 10G0683

Louis Luick
EnviroMatrix Analytical, Inc.
4340 Viewridge., Ste. A
San Diego, CA 92123

Project Name: Drinking Water
Sub Project: 10G0149

Enclosed are the results of the analyses for samples received at the laboratory on 07/08/10 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

Stu Styles
Client Services Manager

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge.. Ste. A San Diego CA, 92123	Project: Drinking Water Sub Project: 10G0149 Project Manager: Louis Luick	Work Order: 10G0683 Received: 07/08/10 14:45 Reported: 07/13/10

Site 5 **10G0683-01 (Water)** **Sample Date:** 07/07/10 9:40 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**5.9**	mg/L	0.30		07/12/10	07/12/10	1029027	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge., Ste. A San Diego CA. 92123	Project: Drinking Water Sub Project: 10G0149 Project Manager: Louis Luick	Work Order: 10G0683 Received: 07/08/10 14:45 Reported: 07/13/10

Site 2 **10G0683-02 (Water)** **Sample Date:** 07/07/10 10:50 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**5.2**	mg/L	0.30		07/12/10	07/12/10	1029027	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc.	Project: Drinking Water	Work Order: 10G0683
4340 Viewridge., Ste. A	Sub Project: 10G0149	Received: 07/08/10 14:45
San Diego CA. 92123	Project Manager: Louis Luick	Reported: 07/13/10

Site 41 **10G0683-03 (Water)** **Sample Date:** 07/07/10 11:45 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**11**	mg/L	0.30		07/12/10	07/12/10	1029027	

ND Analyte NOT DETECTED at or above the reporting limit

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

EnviroMatrix Analytical, Inc. 4340 Viewridge., Ste. A San Diego CA, 92123	Project: Drinking Water Sub Project: 10G0149 Project Manager: Louis Luick	Work Order: 10G0683 Received: 07/08/10 14:45 Reported: 07/13/10

General Chemical Analyses - Quality Control
Clinical Laboratory of San Bernardino

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1029027										
Blank (1029027-BLK1)				Prepared & Analyzed: 07/12/10						
Total Organic Carbon	ND	0.30	mg/L							
LCS (1029027-BS1)				Prepared & Analyzed: 07/12/10						
Total Organic Carbon	4.26	0.30	mg/L	5.0		85	80-120			
Matrix Spike (1029027-MS1)		**Source: 10G0680-02**		Prepared & Analyzed: 07/12/10						
Total Organic Carbon	7.64	0.30	mg/L	5.0	3.07	91	80-120			
Matrix Spike Dup (1029027-MSD1)		**Source: 10G0680-02**		Prepared & Analyzed: 07/12/10						
Total Organic Carbon	7.61	0.30	mg/L	5.0	3.07	91	80-120	0.5	20	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

(6)

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

10G0149

1060683

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Clinical Lab of San Bernardino, Inc.
21881 Barton Rd
Grand Terrace, CA 92313
Phone :(909) 825-7693
Fax: (909) 825-7696

5 TO TAT

PLEASE SEND REPORTS TO:
jbeyer@enviromatrixinc.com;
lluick@enviromatrixinc.com;
reports@enviromatrixinc.com.
Use comments as sample ID on report.

Analysis	Due	Expires	Laboratory ID	
Sample ID: 10G0149-01	**Water**	**Sampled:07/07/10 09:40**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 09:40		Site 5
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			
Sample ID: 10G0149-02	**Water**	**Sampled:07/07/10 10:50**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 10:50		Site 2
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			
Sample ID: 10G0149-03	**Water**	**Sampled:07/07/10 11:45**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 11:45		Site 41
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			

Released By	Date	Received By	Date
	7/8/10 1119		7-8-10 11:20.
	7-8-10 2:49		

PC

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 1DG0149
Client: D-Max Engineering
Attn: Arsalan Dadkhah
Samplers(s): MD/BM
Address: 7220 Trade St., Ste. 119
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: same
Project ID: El Cajon Dry Weather MS4 Monitoring
Project #: 201034W-3 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC ☒ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	TOC	Total Hardness	Total Nitrogen-N	Total Phosphorus-P
1	site 5	7/7/10	9:40	SW	2G/SP	X						X		X				X	X		X			X	X	X	X
2	site 2	"	10:50	SW	2G/SP	X						X		X				X	X		X			X	X	X	X
3	site 41	"	11:45	SW	2G/SP	X						X		X				X	X		X			X	X	X	X
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: [signature]	7/7/10 12:45	Signature: [signature]
Print: Brianna Martin		Print: Kelly Hendon
Company: D-Max Engineering		Company: EMA
Signature: [signature]	7/7/10 13:03	Signature: [signature]
Print: Kelly Hendon		Print: Matt Cayden
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T = 3°C on ice

(6)

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

10G0149

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Clinical Lab of San Bernardino, Inc.
21881 Barton Rd
Grand Terrace, CA 92313
Phone :(909) 825-7693
Fax: (909) 825-7696

PLEASE SEND REPORTS TO:
jbeyer@enviromatrixinc.com;
lluick@enviromatrixinc.com;
reports@enviromatrixinc.com.
Use comments as sample ID on report.

STO TAT

Analysis	Due	Expires	Laboratory ID	
Sample ID: 10G0149-01	**Water**	**Sampled:07/07/10 09:40**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 09:40		Site 5
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			
Sample ID: 10G0149-02	**Water**	**Sampled:07/07/10 10:50**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 10:50		Site 2
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			
Sample ID: 10G0149-03	**Water**	**Sampled:07/07/10 11:45**		
TOC-Liquid by SM5310B	07/14/10 16:00	08/04/10 11:45		Site 41
Containers Supplied:				
Voa Vial - HCl (A)	Voa Vial - HCl (B)			

Released By	Date	Received By	Date
	7/8/10 1119		7-8-10 11:20.
Released By	Date	Received By	Date

EnviroMatrix Analytical, Inc.

26 August 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10H0404

Project Name: El Cajon Dry Weather
Project Desc./#: 201034W-1

Enclosed are the results of analyses for samples received by the laboratory on 08/16/10 14:04. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0404

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 24	10H0404-01	Stormwater	08/16/10 10:30	08/16/10 14:04
Site 6	10H0404-02	Stormwater	08/16/10 11:45	08/16/10 14:04
Site 32	10H0404-03	Stormwater	08/16/10 12:50	08/16/10 14:04

NOTE: The TOC analyses were performed by a sub-contract laboratory, results to follow in a separate report.

9930

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0404

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 24 (10H0404-01) Stormwater Sampled: 08/16/10 10:30 Received: 08/16/10 14:04										
Cadmium	**0.0002**	0.0002	0.001	mg/l	1	0081725	08/17/10	08/17/10	EPA 200.8	J
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.018**	0.0003	0.020	"	"	"	"	"	"	J
Site 6 (10H0404-02) Stormwater Sampled: 08/16/10 11:45 Received: 08/16/10 14:04										
Lead	ND	0.001	0.005	mg/l	1	0081725	08/17/10	08/17/10	EPA 200.8	
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J
Zinc	**0.002**	0.0003	0.020	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
Site 32 (10H0404-03) Stormwater Sampled: 08/16/10 12:50 Received: 08/16/10 14:04										
Lead	ND	0.001	0.005	mg/l	1	0081725	08/17/10	08/17/10	EPA 200.8	
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
Zinc	**0.004**	0.0003	0.020	"	"	"	"	"	"	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0404

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 24 (10H0404-01) Stormwater Sampled: 08/16/10 10:30 Received: 08/16/10 14:04										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0081944	08/19/10	08/25/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*112 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*96 %*	*60-130*			"	"	"	"	
Site 6 (10H0404-02) Stormwater Sampled: 08/16/10 11:45 Received: 08/16/10 14:04										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0081944	08/19/10	08/25/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*124 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*100 %*	*60-130*			"	"	"	"	
Site 32 (10H0404-03) Stormwater Sampled: 08/16/10 12:50 Received: 08/16/10 14:04										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0081944	08/19/10	08/25/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*112 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*100 %*	*60-130*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0404

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 24 (10H0404-01) Stormwater Sampled: 08/16/10 10:30 Received: 08/16/10 14:04										
Hardness (Total)	**907**	100	100	mg CaCO3/L	10	0081923	08/18/10	08/24/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0082020	08/20/10	08/20/10	EPA 1664A	
Total Dissolved Solids	**1860**	1.0	20.0	"	"	0082016	08/20/10	08/23/10	SM2540 C	
Site 6 (10H0404-02) Stormwater Sampled: 08/16/10 11:45 Received: 08/16/10 14:04										
Hardness (Total)	**589**	100	100	mg CaCO3/L	10	0081923	08/18/10	08/24/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0082020	08/20/10	08/20/10	EPA 1664A	
Total Dissolved Solids	**1580**	1.0	20.0	"	"	0082016	08/20/10	08/23/10	SM2540 C	
Site 32 (10H0404-03) Stormwater Sampled: 08/16/10 12:50 Received: 08/16/10 14:04										
Hardness (Total)	**929**	100	100	mg CaCO3/L	10	0081923	08/18/10	08/24/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0082020	08/20/10	08/20/10	EPA 1664A	
Total Dissolved Solids	**2110**	1.0	20.0	"	"	0082016	08/20/10	08/23/10	SM2540 C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0404

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 24 (10H0404-01) Stormwater Sampled: 08/16/10 10:30 Received: 08/16/10 14:04										
Total Coliforms	**5000**	200	200	MPN/100 ml	100	0081719	08/16/10	08/20/10	SM 9221 B, E	
Fecal Coliforms	**500**	20	20	"	10	"	"	08/19/10	"	
Enterococcus	**1300**	20	20	"	"	0081720	"	08/20/10	SM 9230 A, B	
Site 6 (10H0404-02) Stormwater Sampled: 08/16/10 11:45 Received: 08/16/10 14:04										
Total Coliforms	**23000**	2000	2000	MPN/100 ml	1000	0081719	08/16/10	08/20/10	SM 9221 B, E	
Fecal Coliforms	**2300**	200	200	"	100	"	"	08/19/10	"	
Enterococcus	**220**	20	20	"	10	0081720	"	08/20/10	SM 9230 A, B	
Site 32 (10H0404-03) Stormwater Sampled: 08/16/10 12:50 Received: 08/16/10 14:04										
Total Coliforms	**800**	20	20	MPN/100 ml	10	0081719	08/16/10	08/20/10	SM 9221 B, E	
Fecal Coliforms	**230**	20	20	"	"	"	"	08/19/10	"	
Enterococcus	**40**	20	20	"	"	0081720	"	08/20/10	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0404

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0081725											
Blank (0081725-BLK1)					Prepared & Analyzed: 08/17/10						
Cadmium	ND	0.0002	0.001	mg/l							
Zinc	ND	0.0003	0.020	"							
Copper	ND	0.001	0.010	"							
Lead	ND	0.001	0.005	"							
LCS (0081725-BS1)					Prepared & Analyzed: 08/17/10						
Cadmium	0.049	0.0002	0.001	mg/l	0.0500		98	75-125			
Zinc	0.055	0.0003	0.020	"	0.0500		109	75-125			
Lead	0.047	0.001	0.005	"	0.0500		95	75-125			
Copper	0.048	0.001	0.010	"	0.0500		97	75-125			
LCS Dup (0081725-BSD1)					Prepared & Analyzed: 08/17/10						
Zinc	0.049	0.0003	0.020	mg/l	0.0500		98	75-125	11	20	
Lead	0.050	0.001	0.005	"	0.0500		100	75-125	6	20	
Copper	0.048	0.001	0.010	"	0.0500		97	75-125	0.1	20	
Cadmium	0.049	0.0002	0.001	"	0.0500		97	75-125	0.3	20	
Duplicate (0081725-DUP1)			**Source: 10H0404-01**		Prepared & Analyzed: 08/17/10						
Cadmium	0.0002	0.0002	0.001	mg/l		0.0002			5	20	J
Copper	0.002	0.001	0.010	"		0.002			0.6	20	J
Zinc	0.008	0.0003	0.020	"		0.018			78	20	QR-04, J
Lead	ND	0.001	0.005	"		ND				20	
Matrix Spike (0081725-MS1)			**Source: 10H0404-01**		Prepared & Analyzed: 08/17/10						
Zinc	0.054	0.0003	0.020	mg/l	0.0500	0.018	72	75-125			QM-06
Lead	0.053	0.001	0.005	"	0.0500	ND	106	75-125			
Copper	0.047	0.001	0.010	"	0.0500	0.002	89	75-125			
Cadmium	0.049	0.0002	0.001	"	0.0500	0.0002	98	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0404

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0081725											
Matrix Spike Dup (0081725-MSD1)			**Source: 10H0404-01**		Prepared & Analyzed: 08/17/10						
Zinc	0.052	0.0003	0.020	mg/l	0.0500	0.018	69	75-125	3	20	QM-06
Lead	0.052	0.001	0.005	"	0.0500	ND	104	75-125	2	20	
Copper	0.045	0.001	0.010	"	0.0500	0.002	86	75-125	3	20	
Cadmium	0.048	0.0002	0.001	"	0.0500	0.0002	95	75-125	4	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0404

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0081944											
Blank (0081944-BLK1)					Prepared: 08/19/10 Analyzed: 08/25/10						
Chlorpyrifos	ND	0.04	0.05	ug/l							
Diazinon	ND	0.04	0.05	"							
Malathion	ND	0.05	0.05	"							
Surrogate: Triphenyl phosphate	*0.280*			*"*	*0.250*		*112*	*60-130*			
Surrogate: Tribuytlphosphate	*0.230*			*"*	*0.250*		*92*	*60-130*			
LCS (0081944-BS1)					Prepared: 08/19/10 Analyzed: 08/25/10						
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130			
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130			
Ethoprop	0.48	0.05	0.05	"	0.500		96	60-130			
Mevinphos	0.49	0.21	0.25	"	0.500		98	60-130			
Methyl parathion	0.47	0.07	0.10	"	0.500		94	60-130			
Phorate	0.46	0.03	0.05	"	0.500		92	60-130			
Ronnel	0.47	0.16	0.25	"	0.500		94	60-130			
Trichlorinate	0.42	0.05	0.05	"	0.500		84	60-130			
Surrogate: Triphenyl phosphate	*0.290*			*"*	*0.250*		*116*	*60-130*			
Surrogate: Tribuytlphosphate	*0.260*			*"*	*0.250*		*104*	*60-130*			
LCS Dup (0081944-BSD1)					Prepared: 08/19/10 Analyzed: 08/25/10						
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	0	30	
Diazinon	0.41	0.04	0.05	"	0.500		82	60-130	2	30	
Ethoprop	0.47	0.05	0.05	"	0.500		94	60-130	2	30	
Mevinphos	0.44	0.21	0.25	"	0.500		88	60-130	11	30	
Methyl parathion	0.47	0.07	0.10	"	0.500		94	60-130	0	30	
Phorate	0.48	0.03	0.05	"	0.500		96	60-130	4	30	
Ronnel	0.47	0.16	0.25	"	0.500		94	60-130	0	30	
Trichlorinate	0.42	0.05	0.05	"	0.500		84	60-130	0	30	
Surrogate: Triphenyl phosphate	*0.300*			*"*	*0.250*		*120*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0404

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0081923											
Blank (0081923-BLK1)					Prepared: 08/18/10	Analyzed: 08/24/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0081923-DUP1)			**Source: 10H0397-01**		Prepared: 08/18/10	Analyzed: 08/24/10					
Hardness (Total)	158	100	100	mg CaCO3/L		250			45	20	QR-02
Batch 0082016											
Blank (0082016-BLK1)					Prepared: 08/20/10	Analyzed: 08/23/10					
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0082016-DUP1)			**Source: 10H0477-01**		Prepared: 08/20/10	Analyzed: 08/23/10					
Total Dissolved Solids	846	1.0	20.0	mg/l		887			5	20	
Reference (0082016-SRM1)					Prepared: 08/20/10	Analyzed: 08/23/10					
Total Dissolved Solids	270	1.0	20.0	mg/l	252		107	87.6-112.3			
Batch 0082020											
Blank (0082020-BLK1)					Prepared & Analyzed: 08/20/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0082020-BS1)					Prepared & Analyzed: 08/20/10						
Oil & Grease	34	5	5	mg/l	40.0		86	78-114			
LCS Dup (0082020-BSD1)					Prepared & Analyzed: 08/20/10						
Oil & Grease	34	5	5	mg/l	40.0		86	78-114	0.6	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
QR-02	The RPD result exceeded the QC limits due to non-homogeneity of sample.
QM-06	Due to noted non-homogeneity of the QC sample matrix, the MS/MSD did not provide reliable results for accuracy and precision. Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 1010404

Client: D. Max Engineering
Attn: Arsalan Dadkhah
Samplers(s): MD / IT
Address: 7220 Trade street, Suite 119
San Diego CA 92121
Phone: Fax:
Email: ~~Same~~
Billing Address: Same

Project ID: El Cajon Dry Weather Monitoring
Project #: 201034W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Collert, T+E.Coli □ P/A □ Enumeration	Enterococcus, ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness	TOC			
1	site 24	8/16/10	10:30	SW	4G/4P	X						X		X				X	X		X			X	X			
2	site 6	~	11:45	~	~	X						X		X				X	X		X			X	X			
3	site 32	~	12:50	~	~	X						X		X				X	X		X			X	X			
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

	RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature	Manouchehr Dadkhah	8/16/10 13:40	Kelly Cayden
Print	Manouchehr Dadkhah		Kelly Cayden
Company:	D. Max Eng.		EMA
Signature	Kelly Cayden	8/16/10 14:04	
Print	Kelly Cayden		Matt Cayden
Company:	EMA		EMA
Signature			Signature
Print			Print
Company:			Company:

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 6°C On Ice

24 August 2010

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 10H0404

Project Name: El Cajon Dry Weather
Project Number: 201034W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- TOC – Liquid by SM5310B

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Clinical Laboratory of San Bernardino, Inc.

24 August 2010 Clinical Lab No.: 10H1476

Louis Luick
EnviroMatrix Analytical, Inc.
4340 Viewridge., Ste. A
San Diego, CA 92123

Project Name: Drinking Water
Sub Project: 10H0404

Enclosed are the results of the analyses for samples received at the laboratory on 08/18/10 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

Stephen Kavousy
Project Manager

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc.	Project: Drinking Water	Work Order: 10H1476
4340 Viewridge.. Ste. A	Sub Project: 10H0404	Received: 08/18/10 16:30
San Diego CA. 92123	Project Manager: Louis Luick	Reported: 08/24/10

Site 24 **10H1476-01 (Water)** **Sample Date:** 08/16/10 10:30 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**5.2**	mg/L	0.30		08/20/10	08/20/10	1034326	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge.. Ste. A San Diego CA. 92123	Project: Drinking Water Sub Project: 10H0404 Project Manager: Louis Luick	Work Order: 10H1476 Received: 08/18/10 16:30 Reported: 08/24/10

Site 6 **10H1476-02 (Water)** **Sample Date:** 08/16/10 11:45 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**11**	mg/L	0.30		08/20/10	08/20/10	1034326	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge.. Ste. A San Diego CA. 92123	Project: Drinking Water Sub Project: 10H0404 Project Manager: Louis Luick	Work Order: 10H1476 Received: 08/18/10 16:30 Reported: 08/24/10

Site 32 **10H1476-03 (Water)** **Sample Date:** 08/16/10 12:50 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**4.0**	mg/L	0.30		08/20/10	08/20/10	1034326	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc.	Project: Drinking Water	Work Order: 10H1476
4340 Viewridge., Ste. A	Sub Project: 10H0404	Received: 08/18/10 16:30
San Diego CA. 92123	Project Manager: Louis Luick	Reported: 08/24/10

General Chemical Analyses - Quality Control
Clinical Laboratory of San Bernardino

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1034326										
Blank (1034326-BLK1)				Prepared & Analyzed: 08/20/10						
Total Organic Carbon	ND	0.30	mg/L							
Blank (1034326-BLK2)				Prepared & Analyzed: 08/20/10						
Total Organic Carbon	ND	0.30	mg/L							
LCS (1034326-BS1)				Prepared & Analyzed: 08/20/10						
Total Organic Carbon	4.34	0.30	mg/L	5.0		87	80-120			
LCS (1034326-BS2)				Prepared & Analyzed: 08/20/10						
Total Organic Carbon	4.59	0.30	mg/L	5.0		92	80-120			
Matrix Spike (1034326-MS1)		**Source: 10H1455-01**		Prepared & Analyzed: 08/20/10						
Total Organic Carbon	6.50	0.30	mg/L	5.0	1.69	96	80-120			
Matrix Spike Dup (1034326-MSD1)		**Source: 10H1455-01**		Prepared & Analyzed: 08/20/10						
Total Organic Carbon	6.52	0.30	mg/L	5.0	1.69	97	80-120	0.3	20	

ND Analyte NOT DETECTED at or above the reporting limit

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

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SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

10H0404 10H1476

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Clinical Lab of San Bernardino, Inc.
21881 Barton Rd
Grand Terrace, CA 92313
Phone :(909) 825-7693
Fax: (909) 825-7696

PLEASE SEND REPORTS TO:
jbeyer@enviromatrixinc.com;
lluick@enviromatrixinc.com;
reports@enviromatrixinc.com.
Use comments as sample ID on report.

STO TAT

Analysis	Due	Expires	Laboratory ID	
Sample ID: 10H0404-01	**Water**	**Sampled:08/16/10 10:30**		
TOC-Liquid by SM5310B	08/23/10 16:00	09/13/10 10:30		Site 24
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			
Sample ID: 10H0404-02	**Water**	**Sampled:08/16/10 11:45**		
TOC-Liquid by SM5310B	08/23/10 16:00	09/13/10 11:45		Site 6
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			
Sample ID: 10H0404-03	**Water**	**Sampled:08/16/10 12:50**		
TOC-Liquid by SM5310B	08/23/10 16:00	09/13/10 12:50		Site 32
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			

Released By	Date	Received By	Date
	8/18/10 1148	Dianna Kang	8-18-10 11:49
Dianna Kang	8-18-10 / 4:30		
Released By	Date	Received By	Date

9c

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 1010404

Client: D-Max Engineering
Attn: Arsalan Dadkhah
Samplers(s): MD / IT
Address: 7220 Trade Street, Suite 119
San Diego CA 92121
Phone: Fax:
Email: ~~Same~~
Billing Address: Same

Project ID: El Cajon Dry Weather Monitoring
Project #: 201034W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) ☒ Dissolved	Coliform. ☒ Total (MTF) ☒ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, ☒ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness	TOC			
1	Site 24	8/16/10	10:30	SW	4G/4P	X						X		X				X	X		X			X	X			
2	Site 6	~	11:45	~	~	X						X		X				X	X		X			X	X			
3	Site 32	~	12:50	~	~	X						X		X				X	X		X			X	X			
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, (SW) = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Tanouschehr Dadkhah	8/16/10 13:40	Signature: Kelly Ogden
Print: Tanouschehr Dadkhah		Print: Kelly Ogden
Company: D-Max Eng.		Company: EMA
Signature: Kelly Ogden	8/16/10 14:04	Signature: Matt Ogden
Print: Kelly Ogden		Print:
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 6°C On Ice

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

10H0404

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

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PLEASE SEND REPORTS TO:
jbeyer@enviromatrixinc.com;
lluick@enviromatrixinc.com;
reports@enviromatrixinc.com.
Use comments as sample ID on report.

5 TO TAT

Analysis	Due	Expires	Laboratory ID	
Sample ID: 10H0404-01	**Water**	**Sampled:08/16/10 10:30**		
TOC-Liquid by SM5310B	08/23/10 16:00	09/13/10 10:30		Site 24
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			
Sample ID: 10H0404-02	**Water**	**Sampled:08/16/10 11:45**		
TOC-Liquid by SM5310B	08/23/10 16:00	09/13/10 11:45		Site 6
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			
Sample ID: 10H0404-03	**Water**	**Sampled:08/16/10 12:50**		
TOC-Liquid by SM5310B	08/23/10 16:00	09/13/10 12:50		Site 32
Containers Supplied:				
Voa Vial - HCl (E)	Voa Vial - HCl (F)			

Released By	Date	Received By	Date
	8/18/10 1148		8-18-10 11:49
Released By	Date	Received By	Date

EnviroMatrix Analytical, Inc.

27 August 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10H0432

Project Name: El Cajon Dry Weather
Project Desc./#: 201034W-1

Enclosed are the results of analyses for samples received by the laboratory on 08/17/10 13:32. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0432

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 7	10H0432-01	Stormwater	08/17/10 09:15	08/17/10 13:32
Site 1	10H0432-02	Stormwater	08/17/10 10:20	08/17/10 13:32
Site 17	10H0432-03	Stormwater	08/17/10 11:30	08/17/10 13:32
Site 8	10H0432-04	Stormwater	08/17/10 12:30	08/17/10 13:32

NOTE: The TOC analyses were performed by a sub-contract laboratory, results to follow in a separate report.

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0432

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 7 (10H0432-01) Stormwater Sampled: 08/17/10 09:15 Received: 08/17/10 13:32										
Cadmium	**0.0002**	0.0002	0.001	mg/l	1	0082427	08/24/10	08/24/10	EPA 200.8	J
Zinc	**0.018**	0.0003	0.020	"	"	"	"	"	"	J
Copper	**0.024**	0.001	0.010	"	"	"	"	"	"	
Lead	**0.001**	0.001	0.005	"	"	"	"	08/24/10	"	J
Site 1 (10H0432-02) Stormwater Sampled: 08/17/10 10:20 Received: 08/17/10 13:32										
Cadmium	ND	0.0002	0.001	mg/l	1	0082427	08/24/10	08/24/10	EPA 200.8	
Copper	**0.019**	0.001	0.010	"	"	"	"	"	"	
Lead	ND	0.001	0.005	"	"	"	"	08/24/10	"	
Zinc	**0.006**	0.0003	0.020	"	"	"	"	08/24/10	"	J
Site 17 (10H0432-03) Stormwater Sampled: 08/17/10 11:30 Received: 08/17/10 13:32										
Cadmium	ND	0.0002	0.001	mg/l	1	0082427	08/24/10	08/24/10	EPA 200.8	
Copper	**0.001**	0.001	0.010	"	"	"	"	"	"	J
Zinc	**0.007**	0.0003	0.020	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	08/24/10	"	
Site 8 (10H0432-04) Stormwater Sampled: 08/17/10 12:30 Received: 08/17/10 13:32										
Lead	ND	0.001	0.005	mg/l	1	0082427	08/24/10	08/24/10	EPA 200.8	
Zinc	**0.003**	0.0003	0.020	"	"	"	"	08/24/10	"	J
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0432

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 7 (10H0432-01) Stormwater Sampled: 08/17/10 09:15 Received: 08/17/10 13:32										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0081944	08/19/10	08/25/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*124 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*96 %*	*60-130*			"	"	"	"	
Site 1 (10H0432-02) Stormwater Sampled: 08/17/10 10:20 Received: 08/17/10 13:32										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0081944	08/19/10	08/25/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*108 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*92 %*	*60-130*			"	"	"	"	
Site 17 (10H0432-03) Stormwater Sampled: 08/17/10 11:30 Received: 08/17/10 13:32										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0081944	08/19/10	08/25/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*96 %*	*60-130*			"	"	"	"	
Site 8 (10H0432-04) Stormwater Sampled: 08/17/10 12:30 Received: 08/17/10 13:32										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0081944	08/19/10	08/25/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*96 %*	*60-130*			"	"	"	"	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0432

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 7 (10H0432-01) Stormwater Sampled: 08/17/10 09:15 Received: 08/17/10 13:32										
Hardness (Total)	**437**	100	100	mg CaCO3/L	10	0081923	08/18/10	08/24/10	EPA 200.7	
Oil & Grease	**7**	5	5	mg/l	1	0082434	08/24/10	08/24/10	EPA 1664A	
Total Dissolved Solids	**952**	1.0	20.0	"	"	0082425	08/24/10	08/26/10	SM2540 C	
Site 1 (10H0432-02) Stormwater Sampled: 08/17/10 10:20 Received: 08/17/10 13:32										
Hardness (Total)	**526**	100	100	mg CaCO3/L	10	0081923	08/18/10	08/24/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0082434	08/24/10	08/24/10	EPA 1664A	
Total Dissolved Solids	**1410**	1.0	20.0	"	"	0082425	08/24/10	08/26/10	SM2540 C	
Site 17 (10H0432-03) Stormwater Sampled: 08/17/10 11:30 Received: 08/17/10 13:32										
Hardness (Total)	**835**	100	100	mg CaCO3/L	10	0081923	08/18/10	08/24/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0082434	08/24/10	08/24/10	EPA 1664A	
Total Dissolved Solids	**2040**	1.0	20.0	"	"	0082425	08/24/10	08/26/10	SM2540 C	
Site 8 (10H0432-04) Stormwater Sampled: 08/17/10 12:30 Received: 08/17/10 13:32										
Hardness (Total)	**1010**	100	100	mg CaCO3/L	10	0081923	08/18/10	08/24/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0082434	08/24/10	08/24/10	EPA 1664A	
Total Dissolved Solids	**2670**	1.0	20.0	"	"	0082425	08/24/10	08/26/10	SM2540 C	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0432

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 7 (10H0432-01) Stormwater Sampled: 08/17/10 09:15 Received: 08/17/10 13:32										
Total Coliforms	**280000**	2000	2000	MPN/100 ml	1000	0081806	08/17/10	08/21/10	SM 9221 B, E	
Fecal Coliforms	**50000**	200	200	"	100	"	"	08/20/10	"	
Enterococcus	**24000**	200	200	"	"	0081807	"	08/21/10	SM 9230 A, B	
Site 1 (10H0432-02) Stormwater Sampled: 08/17/10 10:20 Received: 08/17/10 13:32										
Total Coliforms	**8000**	200	200	MPN/100 ml	100	0081806	08/17/10	08/21/10	SM 9221 B, E	
Fecal Coliforms	**1300**	20	20	"	10	"	"	08/20/10	"	
Enterococcus	**8000**	200	200	"	100	0081807	"	08/21/10	SM 9230 A, B	
Site 17 (10H0432-03) Stormwater Sampled: 08/17/10 11:30 Received: 08/17/10 13:32										
Total Coliforms	**23000**	2000	2000	MPN/100 ml	1000	0081806	08/17/10	08/21/10	SM 9221 B, E	
Fecal Coliforms	**24000**	200	200	"	100	"	"	08/20/10	"	
Enterococcus	**1700**	20	20	"	10	0081807	"	08/21/10	SM 9230 A, B	
Site 8 (10H0432-04) Stormwater Sampled: 08/17/10 12:30 Received: 08/17/10 13:32										
Total Coliforms	**30000**	2000	2000	MPN/100 ml	1000	0081806	08/17/10	08/21/10	SM 9221 B, E	
Fecal Coliforms	**5000**	200	200	"	100	"	"	08/20/10	"	
Enterococcus	**1100**	20	20	"	10	0081807	"	08/21/10	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0432

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0082427											
Blank (0082427-BLK1)					Prepared & Analyzed: 08/24/10						
Cadmium	ND	0.0002	0.001	mg/l							
Copper	ND	0.001	0.010	"							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
LCS (0082427-BS1)					Prepared & Analyzed: 08/24/10						
Zinc	0.050	0.0003	0.020	mg/l	0.0500		100	75-125			
Lead	0.050	0.001	0.005	"	0.0500		100	75-125			
Copper	0.050	0.001	0.010	"	0.0500		99	75-125			
Cadmium	0.049	0.0002	0.001	"	0.0500		98	75-125			
LCS Dup (0082427-BSD1)					Prepared & Analyzed: 08/24/10						
Copper	0.048	0.001	0.010	mg/l	0.0500		97	75-125	2	20	
Lead	0.051	0.001	0.005	"	0.0500		101	75-125	1	20	
Zinc	0.049	0.0003	0.020	"	0.0500		98	75-125	2	20	
Cadmium	0.048	0.0002	0.001	"	0.0500		95	75-125	3	20	
Duplicate (0082427-DUP1)		**Source: 10H0432-01**			Prepared & Analyzed: 08/24/10						
Cadmium	0.0002	0.0002	0.001	mg/l		0.0002				20	J
Copper	0.023	0.001	0.010	"		0.024			2	20	
Lead	ND	0.001	0.005	"		ND				20	
Zinc	0.018	0.0003	0.020	"		0.018			0.5	20	J
Matrix Spike (0082427-MS1)		**Source: 10H0432-01**			Prepared & Analyzed: 08/24/10						
Lead	0.051	0.001	0.005	mg/l	0.0500	ND	102	75-125			
Copper	0.068	0.001	0.010	"	0.0500	0.024	88	75-125			
Cadmium	0.047	0.0002	0.001	"	0.0500	0.0002	94	75-125			
Zinc	0.065	0.0003	0.020	"	0.0500	0.018	93	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0432

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0082427											
Matrix Spike Dup (0082427-MSD1)			**Source: 10H0432-01**		Prepared & Analyzed: 08/24/10						
Zinc	0.063	0.0003	0.020	mg/l	0.0500	0.018	88	75-125	3	20	
Copper	0.065	0.001	0.010	"	0.0500	0.024	83	75-125	4	20	
Cadmium	0.045	0.0002	0.001	"	0.0500	0.0002	89	75-125	5	20	
Lead	0.050	0.001	0.005	"	0.0500	ND	100	75-125	2	20	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0432

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0081944											
Blank (0081944-BLK1)					Prepared: 08/19/10	Analyzed: 08/25/10					
Chlorpyrifos	ND	0.04	0.05	ug/l							
Diazinon	ND	0.04	0.05	"							
Malathion	ND	0.05	0.05	"							
Surrogate: Triphenyl phosphate	*0.280*			*"*	*0.250*		*112*	*60-130*			
Surrogate: Tribuytlphosphate	*0.230*			*"*	*0.250*		*92*	*60-130*			
LCS (0081944-BS1)					Prepared: 08/19/10	Analyzed: 08/25/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130			
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130			
Ethoprop	0.48	0.05	0.05	"	0.500		96	60-130			
Mevinphos	0.49	0.21	0.25	"	0.500		98	60-130			
Methyl parathion	0.47	0.07	0.10	"	0.500		94	60-130			
Phorate	0.46	0.03	0.05	"	0.500		92	60-130			
Ronnel	0.47	0.16	0.25	"	0.500		94	60-130			
Trichlorinate	0.42	0.05	0.05	"	0.500		84	60-130			
Surrogate: Triphenyl phosphate	*0.290*			*"*	*0.250*		*116*	*60-130*			
Surrogate: Tribuytlphosphate	*0.260*			*"*	*0.250*		*104*	*60-130*			
LCS Dup (0081944-BSD1)					Prepared: 08/19/10	Analyzed: 08/25/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	0	30	
Diazinon	0.41	0.04	0.05	"	0.500		82	60-130	2	30	
Ethoprop	0.47	0.05	0.05	"	0.500		94	60-130	2	30	
Mevinphos	0.44	0.21	0.25	"	0.500		88	60-130	11	30	
Methyl parathion	0.47	0.07	0.10	"	0.500		94	60-130	0	30	
Phorate	0.48	0.03	0.05	"	0.500		96	60-130	4	30	
Ronnel	0.47	0.16	0.25	"	0.500		94	60-130	0	30	
Trichlorinate	0.42	0.05	0.05	"	0.500		84	60-130	0	30	
Surrogate: Triphenyl phosphate	*0.300*			*"*	*0.250*		*120*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0432

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0081923											
Blank (0081923-BLK1)					Prepared: 08/18/10	Analyzed: 08/24/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0081923-DUP1)			**Source: 10H0397-01**		Prepared: 08/18/10	Analyzed: 08/24/10					
Hardness (Total)	158	100	100	mg CaCO3/L		250			45	20	QR-02
Batch 0082425											
Blank (0082425-BLK1)					Prepared: 08/24/10	Analyzed: 08/26/10					
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0082425-DUP1)			**Source: 10H0431-01**		Prepared: 08/24/10	Analyzed: 08/26/10					
Total Dissolved Solids	1020	1.0	20.0	mg/l		1000			2	20	
Reference (0082425-SRM1)					Prepared: 08/24/10	Analyzed: 08/26/10					
Total Dissolved Solids	226	1.0	20.0	mg/l	252		90	87.6-112.3			
Batch 0082434											
Blank (0082434-BLK1)					Prepared & Analyzed: 08/24/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0082434-BS1)					Prepared & Analyzed: 08/24/10						
Oil & Grease	38	5	5	mg/l	40.0		94	78-114			
LCS Dup (0082434-BSD1)					Prepared & Analyzed: 08/24/10						
Oil & Grease	37	5	5	mg/l	40.0		93	78-114	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QR-02	The RPD result exceeded the QC limits due to non-homogeneity of sample.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 1040432
Client: D-Max Engineering Inc.
Attn: Arsalan Dadkhah
Samplers(s): MD/JT
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: 858-586-8600 Fax: 858-586-6644
Email:
Billing Address: Same
Project ID: El Cajon Dry Weather Monitoring
Project #: 201034W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 X 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS X TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn X Dissolved	Coliform. X Total (MTF) X Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus. X MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness	TOC			
1	Site 7	8/17/10	9:15	SW	4G/4P	X						X		X				X	X		X			X	X			
2	Site 1	"	10:20	"	"	X						X		X				X	X		X			X	X			
3	Site 17	"	11:30	"	"	X						X		X				X	X		X			X	X			
4	Site 8	"	12:30	"	"	X						X		X				X	X		X			X	X			
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	8/17/10 1:15	Signature: Heidi Thompson
Print: Manouchehr Dadkhah		Print: Heidi Thompson
Company: D-Max Eng.		Company: EMA
Signature: Heidi Thompson	8/17/10 13:32	Signature:
Print: Heidi Thompson		Print:
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

AUG 17 '10 13:54

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

10°C

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

24 August 2010

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 10H0432

Project Name: El Cajon Dry Weather
Project Number: 201034W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- TOC – Liquid by SM5310B

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Clinical Laboratory of San Bernardino, Inc.

24 August 2010 Clinical Lab No.: 10H1478

Louis Luick
EnviroMatrix Analytical, Inc.
4340 Viewridge., Ste. A
San Diego, CA 92123

Project Name: Drinking Water
Sub Project: 10H0432

Enclosed are the results of the analyses for samples received at the laboratory on 08/18/10 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

Stephen Kavousy
Project Manager

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge.. Ste. A San Diego CA. 92123	Project: Drinking Water Sub Project: 10H0432 Project Manager: Louis Luick	Work Order: 10H1478 Received: 08/18/10 16:30 Reported: 08/24/10

Site 7 **10H1478-01 (Water)** **Sample Date:** 08/17/10 9:15 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**23**	mg/L	0.30		08/20/10	08/20/10	1034326	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge.. Ste. A San Diego CA, 92123	Project: Drinking Water Sub Project: 10H0432 Project Manager: Louis Luick	Work Order: 10H1478 Received: 08/18/10 16:30 Reported: 08/24/10

Site 1 **10H1478-02 (Water)** **Sample Date:** 08/17/10 10:20 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**5.4**	mg/L	0.30		08/20/10	08/20/10	1034326	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge.. Ste. A San Diego CA. 92123	Project: Drinking Water Sub Project: 10H0432 Project Manager: Louis Luick	Work Order: 10H1478 Received: 08/18/10 16:30 Reported: 08/24/10

Site 17 **10H1478-03 (Water)** **Sample Date:** 08/17/10 11:30 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**9.5**	mg/L	0.30		08/20/10	08/20/10	1034326	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc. 4340 Viewridge., Ste. A San Diego CA, 92123	Project: Drinking Water Sub Project: 10H0432 Project Manager: Louis Luick	Work Order: 10H1478 Received: 08/18/10 16:30 Reported: 08/24/10

Site 8 **10H1478-04 (Water)** **Sample Date:** 08/17/10 12:30 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**16**	mg/L	0.30		08/20/10	08/20/10	1034326	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

EnviroMatrix Analytical, Inc. 4340 Viewridge.. Ste. A San Diego CA, 92123	Project: Drinking Water Sub Project: 10H0432 Project Manager: Louis Luick	Work Order: 10H1478 Received: 08/18/10 16:30 Reported: 08/24/10

General Chemical Analyses - Quality Control
Clinical Laboratory of San Bernardino

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1034326										
Blank (1034326-BLK1)				Prepared & Analyzed: 08/20/10						
Total Organic Carbon	ND	0.30	mg/L							
Blank (1034326-BLK2)				Prepared & Analyzed: 08/20/10						
Total Organic Carbon	ND	0.30	mg/L							
LCS (1034326-BS1)				Prepared & Analyzed: 08/20/10						
Total Organic Carbon	4.34	0.30	mg/L	5.0		87	80-120			
LCS (1034326-BS2)				Prepared & Analyzed: 08/20/10						
Total Organic Carbon	4.59	0.30	mg/L	5.0		92	80-120			
Matrix Spike (1034326-MS1)		**Source: 10H1455-01**		Prepared & Analyzed: 08/20/10						
Total Organic Carbon	6.50	0.30	mg/L	5.0	1.69	96	80-120			
Matrix Spike Dup (1034326-MSD1)		**Source: 10H1455-01**		Prepared & Analyzed: 08/20/10						
Total Organic Carbon	6.52	0.30	mg/L	5.0	1.69	97	80-120	0.3	20	

ND Analyte NOT DETECTED at or above the reporting limit

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

(8)

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

10H0432

10H1478

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Clinical Lab of San Bernardino, Inc.
21881 Barton Rd
Grand Terrace, CA 92313
Phone :(909) 825-7693
Fax: (909) 825-7696

STD TAT
due 8/24/10

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 10H0432-01	**Water**	**Sampled:08/17/10 09:15**		
TOC-Liquid by SM5310B	08/24/10 16:00	09/14/10 09:15		Site 7
Containers Supplied: 2 VOA HCl				
Sample ID: 10H0432-02	**Water**	**Sampled:08/17/10 10:20**		
TOC-Liquid by SM5310B	08/24/10 16:00	09/14/10 10:20		Site 1
Containers Supplied: 2 VOA HCl				
Sample ID: 10H0432-03	**Water**	**Sampled:08/17/10 11:30**		
TOC-Liquid by SM5310B	08/24/10 16:00	09/14/10 11:30		Site 17
Containers Supplied: 2 VOA HCl				
Sample ID: 10H0432-04	**Water**	**Sampled:08/17/10 12:30**		
TOC-Liquid by SM5310B	08/24/10 16:00	09/14/10 12:30		Site 8
Containers Supplied: 2 VOA HCl				

Released By	Date	Received By	Date
	8/18/10 1148	Deanna Long	8-18-10 11:48
Released By	Date	Received By	Date
	8-18-10 / 4:30		

9C

Page___ of ___

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.

4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 040432

Client: D-Max Engineering Inc.

Attn: Arsalan Dadkhah

Samplers(s): MDIIT

Address: 7220 Trade Street Suite 119
San Diego, CA 92121

Phone: 858-586-6600 Fax: 858-586-6644

Email:

Billing Address: Same

Project ID: El Cajon Dry Weather Monitoring

Project #: 201034W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 X 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS X TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) X Dissolved	Coliform. X Total (MTF) X Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, X MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness	TOC			
1	Site 7	8/16/10	9:15	SW	4G/4P	X						X		X				X	X		X			X	X			
2	Site 1	"	10:20	"	"	X						X		X				X	X		X			X	X			
3	Site 17	"	11:30	"	"	X						X		X				X	X		X			X	X			
4	Site 8	"	12:30	"	"	X						X		X				X	X		X			X	X			
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temp @ Receipt: _____

COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	8/17/10 1:15	Signature: Heidi Thompson
Print: Manouchehr Dadkhah		Print: Heidi Thompson
Company: D-Max Eng.		Company: EMA
Signature: Heidi Thompson	8/17/10 13:32	Signature: [illegible]
Print: Heidi Thompson		Print: [illegible]
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

10°C

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

(8)

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

10H0432

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Clinical Lab of San Bernardino, Inc.
21881 Barton Rd
Grand Terrace, CA 92313
Phone :(909) 825-7693
Fax: (909) 825-7696

STD TAT
due 8/24/10

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 10H0432-01	**Water**	**Sampled:08/17/10 09:15**		
TOC-Liquid by SM5310B	08/24/10 16:00	09/14/10 09:15		Site 7
Containers Supplied: 2 VOA HCl				
Sample ID: 10H0432-02	**Water**	**Sampled:08/17/10 10:20**		
TOC-Liquid by SM5310B	08/24/10 16:00	09/14/10 10:20		Site 1
Containers Supplied: 2 VOA HCl				
Sample ID: 10H0432-03	**Water**	**Sampled:08/17/10 11:30**		
TOC-Liquid by SM5310B	08/24/10 16:00	09/14/10 11:30		Site 17
Containers Supplied: 2 VOA HCl				
Sample ID: 10H0432-04	**Water**	**Sampled:08/17/10 12:30**		
TOC-Liquid by SM5310B	08/24/10 16:00	09/14/10 12:30		Site 8
Containers Supplied: 2 VOA HCl				

Released By	Date	Received By	Date
	8/18/10 1148	Deanna Lang	8-18-10 11:48

31 August 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10H0657

Project Name: El Cajon Dry Weather
Project Desc./#: 201034W-2

Enclosed are the results of analyses for samples received by the laboratory on 08/26/10 13:55. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0657

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 7	10H0657-01	Stormwater	08/26/10 09:35	08/26/10 13:55
Site 7-1	10H0657-02	Stormwater	08/26/10 10:05	08/26/10 13:55
Site 1	10H0657-03	Stormwater	08/26/10 11:10	08/26/10 13:55
Site 1-1	10H0657-04	Stormwater	08/26/10 11:50	08/26/10 13:55
Site 17	10H0657-05	Stormwater	08/26/10 12:25	08/26/10 13:55
Site 17-1	10H0657-06	Stormwater	08/26/10 13:00	08/26/10 13:55

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0657

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 7 (10H0657-01) Stormwater Sampled: 08/26/10 09:35 Received: 08/26/10 13:55										
Total Coliforms	**242000**	100	100	MPN/100 ml	100	0082713	08/26/10	08/27/10	SM9223	
E. Coli	**92100**	100	100	"	"	"	"	"	"	
Enterococcus	**36540**	100	100	"	"	0082714	08/26/10	08/27/10	Idexx	
Site 7-1 (10H0657-02) Stormwater Sampled: 08/26/10 10:05 Received: 08/26/10 13:55										
Total Coliforms	**10100**	10	10	MPN/100 ml	10	0082713	08/26/10	08/27/10	SM9223	
E. Coli	**213**	10	10	"	"	"	"	"	"	
Enterococcus	**4611**	10	10	"	"	0082714	08/26/10	08/27/10	Idexx	
Site 1 (10H0657-03) Stormwater Sampled: 08/26/10 11:10 Received: 08/26/10 13:55										
Enterococcus	**447**	10	10	MPN/100 ml	10	0082714	08/26/10	08/27/10	Idexx	
Site 1-1 (10H0657-04) Stormwater Sampled: 08/26/10 11:50 Received: 08/26/10 13:55										
Enterococcus	**11199**	10	10	MPN/100 ml	10	0082714	08/26/10	08/27/10	Idexx	
Site 17 (10H0657-05) Stormwater Sampled: 08/26/10 12:25 Received: 08/26/10 13:55										
Total Coliforms	**19900**	10	10	MPN/100 ml	10	0082713	08/26/10	08/27/10	SM9223	
E. Coli	**285**	10	10	"	"	"	"	"	"	
Site 17-1 (10H0657-06) Stormwater Sampled: 08/26/10 13:00 Received: 08/26/10 13:55										
Total Coliforms	**219000**	1000	1000	MPN/100 ml	1000	0082713	08/26/10	08/27/10	SM9223	
E. Coli	**173**	10	10	"	10	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 10H0657

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 1040657

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Samplers(s): MD/AT
Address: 7220 Trade street, suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: Same
Project ID: El Cajon Dry Weather F.up
Project #: 201032W-2 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform. □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A ☒ Enumeration	Enterococcus, □ MTF ☒ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide					
1	site 7	8/26/10	9:35	SW	2 P															X	X							
2	site 7-1	"	10:05	"	"															X	X							
3	site 1	"	11:10	"	1 P																X							
4	site 1-1	"	11:50	"	1 P																X							
5	site 17	"	12:25	"	1 P															X								
6	site 17-1	"	13:00	"	1 P															X								
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS ☒ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A — Temp @ Receipt:
COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	8/26/10 1355	Signature
Print: Manouchehr Dadkhah		Print: Matthew Lycen
Company: D-Max Eng		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

7°C

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

Appendix D

Field Data and Trash Assessment Sheets

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 1		Latitude	32.80386	Watershed	Hydrologic Unit	907.
Location	Forester Creek Channel, N of I-8, between Magnolia Ave & Johnson Ave, S of Parkway Plaza		Longitude	-116.96450		Hydrologic Area	907.1
			TB Page	1251-F4		Hydrologic Subarea (Optional)	907.13
Date	8/17/10	Time 10:20	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 15-16

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	29.3	NH_3-N (mg/L)	0.156	NO_3 (mg/L)	26.98	Ortho-PO_4 (mg/L)	0.032
pH (pH units)	8.2	TURB (NTU)	3.94	NO_3-N (mg/L)	6.097	Ortho-PO_4-P (mg/L)	0.010
COND (mS/cm)	2.21	MBAS (mg/L)	0.5	DO (mg/L)	8.44		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	70	in
Depth	.25	in
Velocity	10/15	ft/sec
Flow	36	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 1 **DATE:** 8/17/10

OBSERVER: MP/TT **TIME:** 10:20

LOCATION: Forester Creek Channel, N of I-8, between Magnolia Ave. & Johnson Ave., S of Parkway Plaza

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LO

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

Field Screening ✓Confirmation For Bacteria IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 ✓ Receiving Water

Site ID	Site 1		Latitude	32.80386	Watershed	Hydrologic Unit	907
Location	Forester Creek channel, N of I-8, between Magnolia Ave. & Johnson Ave., S of Parkway Plaza		Longitude	-116.96450		Hydrologic Area	907.1
			TB Page	1251-F4		Hydrologic Subarea (Optional)	907.13
Date	8/26/10	Time 11:10	Observer	MD/LC		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): ✓Residential Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓Sunny	Partly Cloudy	Overcast	Fog		
Tide	✓N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.
Last Rain	✓> 72 hours	< 72 hours				
Rainfall	✓None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	✓None	Yellow	Brown	White	Gray	Other
Clarity	✓Clear		Slightly Cloudy	Opaque		Other
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other
Vegetation	✓None	Limited	Normal	Excessive		Other

Biology	None	✓Insects	✓Algae	Fish	✓Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No Photo # ~~23-24~~ 88 - 89

Field Screening Samples Collected? ✓Yes No

Water Temp (°C)	31.8	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.5	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.19	MBAS (mg/L)	NA	DO (mg/L)	NA		

Analytical Lab Samples Collected? ✓☐Yes ☐No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	60	in
Depth	.25	in
Velocity	10/12	ft/sec
Flow	39 ~~40~~	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

W

Field Screening Confirmation For _____ ✓IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) MS4 ✓Receiving Water

Site ID	Site 1-1		Latitude	32.80372	Watershed	Hydrologic Unit	907
Location	W of the bridge, on Mollision Ave & I-8 entrance, in Forester Creek, access through channel		Longitude	-116.95082		Hydrologic Area	907.1
			TB Page	1251-G4		Hydrologic Subarea (Optional)	907.13
Date	8/26/10	Time 11:50	Observer	MO/CT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): ✓Residential Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ✓Sunny Partly Cloudy Overcast Fog

Tide ✓N/A Low Incoming High Outgoing **Tide Height:**_____ft.

Last Rain ✓> 72 hours < 72 hours

Rainfall None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	✓None	Yellow	Brown	White	Gray	Other
Clarity	✓Clear		Slightly Cloudy	Opaque		Other
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other
Vegetation	✓None	Limited	Normal	Excessive		Other

Biology None ✓Insects ✓Algae Fish ✓Snails Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No **Photo #** 95-98

Field Screening Samples Collected? Yes ✓No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	DO (mg/L)	NA		

Analytical Lab Samples Collected? ✓☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	70	in
Depth	.25	in
Velocity	10/15	ft/sec
Flow	36	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRM

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☑ Receiving Water

Site ID	Site 2		Latitude	32.00363	Watershed	Hydrologic Unit	907
Location	Washington channel N. of I-8 between Magnolia Ave. & Johnson Ave. S. of Parkway Plaza		Longitude	-116.96548		Hydrologic Area	907.1
			TB Page	1251, F4		Hydrologic Subarea (Optional)	907.13
Date	7/7/10	Time 10:50	Observer	MD / BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other leaves
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other larvae

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~280-281~~ 282 - 283

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.7	NH_3-N (mg/L)	0.284	NO_3 (mg/L)	22.78	Ortho-PO_4 (mg/L)	0.000
pH (pH units)	8.3	TURB (NTU)	2.61	NO_3-N (mg/L)	5.148	Ortho-PO_4-P (mg/L)	0.000
COND (mS/cm)	2.50	MBAS (mg/L)	0.13	DO (mg/L)	7.92		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	30	in
Depth	0.25	in
Velocity	10/10	ft/sec
Flow	23	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 2 **DATE:** 7/7/10

OBSERVER: MD/BM **TIME:** 10:50

LOCATION: Washington channel N. of I-8 between Magnolia Ave. & Johnson Ave. S. of Parkway Plaza

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 25 x 15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site 3	Latitude	32.79507	Watershed	Hydrologic Unit	907
Location	N of Main St, between Chambers St & Johnson Ave., ramp access next to Artesia Apartments	Longitude	-116.96860		Hydrologic Area	907.1
		TB Page	1251-E5		Hydrologic Subarea (Optional)	907.13
Date	8/23/10	Time 16:50	Observer	MD/LT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓Sunny	Partly Cloudy	Overcast	Fog		
Tide	✓N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.
Last Rain	✓> 72 hours	< 72 hours				
Rainfall	✓None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	✓None	Yellow	Brown	White	Gray	Other
Clarity	✓Clear		Slightly Cloudy	Opaque		Other
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other
Vegetation	✓None	Limited	Normal	Excessive		Other
Biology	None	✓Insects	✓Algae	Fish	✓Snails	Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow: ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No Photo # 62-63 64-65

Field Screening Samples Collected? ✓Yes No

Water Temp (°C)	28.2	NH_3-N (mg/L)	0.305	NO_3 (mg/L)	15.00	Ortho-PO_4 (mg/L)	0.041
pH (pH units)	8.0	TURB (NTU)	2.61	NO_3-N (mg/L)	3.39	Ortho-PO_4-P (mg/L)	0.013
COND (mS/cm)	3.09	MBAS (mg/L)	0.25	DO (mg/L)	6.83		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	40	in
Depth	.25	in
Velocity	5/5	ft/sec
Flow	31	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2010 Trash Assessment Form

SITE ID: Site 3 **DATE:** 8/23/10

OBSERVER: MD/IT **TIME:** 10:50

LOCATION: N. of Main St., between Chambers St. & Johnson Ave., ramp access next to Artesia Apartments

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) MS4 ✓ Receiving Water

Site ID	Site 4		Latitude	32.81221	Watershed	Hydrologic Unit	907
Location	N. of Vernon Way, between Johnson Ave & Marshall Ave.		Longitude	-116.97348		Hydrologic Area	907.1
			TB Page	1251-E3		Hydrologic Subarea (Optional)	907.13
Date	8/20/10	Time 10:30	Observer	MD/ IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential Commercial ✓ Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓ Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓ Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather: ✓ Sunny Partly Cloudy Overcast Fog

Tide: ✓ N/A Low Incoming High Outgoing **Tide Height:** _____ ft.

Last Rain: ✓ > 72 hours < 72 hours

Rainfall: ✓ None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor: ✓ None Musty Rotten Eggs Chemical Sewage Other

Color: ✓ None Yellow Brown White Gray Other

Clarity: ✓ Clear Slightly Cloudy Opaque Other

Floatables: None ✓ Trash ✓ Bubbles/Foam Sheen Fecal Matter Other

Deposits: None ✓ Sediment/Gravel ✓ Fine Particulates Stains Oily Deposits Other

Vegetation: ✓ None Limited Normal Excessive Other

Biology: None ✓ Insects ✓ Algae Fish ✓ Snails Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow: ✓ Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken ✓ Yes No **Photo #** 52-53

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	28.6	NH_3-N (mg/L)	0.346	NO_3 (mg/L)	15.59	Ortho-PO_4 (mg/L)	ND
pH (pH units)	8.1	TURB (NTU)	6.67	NO_3-N (mg/L)	3.523	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	2.77	MBAS (mg/L)	0.25	DO (mg/L)	8.12		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	45	in
Depth	.75	in
Velocity	12/10	ft/sec
Flow	42	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2010 Trash Assessment Form

SITE ID: Site 4 **DATE:** 8/20/10

OBSERVER: MD/IT **TIME:** 10:30

LOCATION: N. of Vernon Way, between Johnson Ave & Marshall Ave

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30x15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☑ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☑ Receiving Water (Both)

Site ID	Site 5		Latitude	32.82665	Watershed	Hydrologic Unit	907
Location	Adjacent to Weld Blvd. trolley station; SE. of intersection of Marshall Ave. & Cuyamaca St.		Longitude	-116.98226		Hydrologic Area	907.1
			TB Page	1251, D1		Hydrologic Subarea (Optional)	907.13
Date	7/7/10	Time 9:40	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	~~☐ Limited~~	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~278-279~~ 280-281

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.4	NH_3-N (mg/L)	0.422	NO_3 (mg/L)	25.51	Ortho-PO_4 (mg/L)	0.000
pH (pH units)	8.2	TURB (NTU)	4.06	NO_3-N (mg/L)	5.765	Ortho-PO_4-P (mg/L)	0.000
COND (mS/cm)	2.82	MBAS (mg/L)	0.25	DO (mg/L)	8.32		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	90	in
Depth	0.5	in
Velocity	10/15	ft/sec
Flow	94	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2010 Trash Assessment Form

SITE ID: 5 **DATE:** 7/7/10

OBSERVER: MD/BM **TIME:** 9:40

LOCATION: Adjacent to Weld Blvd. trolley station, SE of intersection of Marshall Ave. and Cuyamaca St.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): suboptimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50 x 40

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☑ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 6		Latitude	32.80890	Watershed	Hydrologic Unit	907
Location	S end of Victor Ave, S of Valley Village Dr.		Longitude	-116.95534		Hydrologic Area	907.1
			TB Page	1251-G3		Hydrologic Subarea (Optional)	907.13
Date	8/16/10	Time 11:45	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other larvae

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 9-5

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	31.6	NH_3-N (mg/L)	0.076	NO_3 (mg/L)	18.22	Ortho-PO_4 (mg/L)	0.214
pH (pH units)	8.3	TURB (NTU)	5.60	NO_3-N (mg/L)	4.118	Ortho-PO_4-P (mg/L)	0.070
COND (mS/cm)	2.20	MBAS (mg/L)	0.25	DO (mg/L)	7.69		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	.25	in
Velocity	10/20	ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2010 Trash Assessment Form

SITE ID: Site 6 **DATE:** 8/16/18

OBSERVER: MB/IT **TIME:** 11:45

LOCATION: S end of Victor Ave., S of Valley Village Dr.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LW

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 7		Latitude	32.79751	Watershed	Hydrologic Unit	907
Location	Fletcher Hills creek channel at the Fletcher Pkwy & Chatham St. intersection		Longitude	-117.00346		Hydrologic Area	907.1
			TB Page	1251-A5		Hydrologic Subarea (Optional)	907.11
Date	8/17/10	Time 9:15	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 13-14

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.097	NO_3 (mg/L)	2.116	Ortho-PO_4 (mg/L)	0.707
pH (pH units)	7.5	TURB (NTU)	3.03	NO_3-N (mg/L)	0.478	Ortho-PO_4-P (mg/L)	0.230
COND (mS/cm)	1.38	MBAS (mg/L)	0.5	DO (mg/L)	6.42		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Large amount of dead leaves in channel

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 7 **DATE:** 8/17/10

OBSERVER: MD/TT **TIME:** 9:15

LOCATION: Fletcher Hills Creek Channel at the Fletcher Pkwy & Chatham St. intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

Field Screening ✓Confirmation For Bacteria IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site #7		Latitude	32.79751	Watershed	Hydrologic Unit	707
Location	Fletcher Hills Creek Channel at Fletcher Pkwy & Chatham St.		Longitude	-117.00346		Hydrologic Area	907.1
			TB Page	1251-A5		Hydrologic Subarea (Optional)	707.11
Date	8/26/10	Time 9:35	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓Sunny	Partly Cloudy	Overcast	Fog		
Tide	✓N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.
Last Rain	✓> 72 hours	< 72 hours				
Rainfall	✓None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	✓None	Yellow	Brown	White	Gray	Other
Clarity	✓Clear		Slightly Cloudy	Opaque		Other
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other
Vegetation	✓None	Limited	Normal	Excessive		Other

Biology	None	✓Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow: ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No Photo # 66-67

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	24.5	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.7	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	0.90	MBAS (mg/L)	NA	DO (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, velocity cannot be determined

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
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LC

Field Screening Confirmation For _____ ✓ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	Site 7 - 1	Latitude	32.79938	Watershed	Hydrologic Unit	907
Location	Swale that comes from W and enters concrete channel before site 7	Longitude	-117.00288		Hydrologic Area	907.1
		TB Page	1251-A5		Hydrologic Subarea (Optional)	907.11
Date	8/26/10	Time	10:05	Observer	MO/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓ Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓ Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓ Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓ Sunny	Partly Cloudy	Overcast	Fog			
Tide	✓ N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.	
Last Rain	✓ > 72 hours	< 72 hours					
Rainfall	✓ None	< 0.1"	> 0.1"				

RUNOFF CHARACTERISTICS

Odor	✓ None	Musty	Rotten Eggs	Chemical	Sewage		Other
Color	✓ None	Yellow	Brown	White	Gray		Other
Clarity	✓ Clear		Slightly Cloudy	Opaque			Other
Floatables	✓ None	Trash	Bubbles/Foam	Sheen	Fecal Matter		Other
Deposits	✓ None	Sediment/Gravel	Fine Particulates	Stains	Oily Deposits		Other
Vegetation	✓ None	Limited	Normal	Excessive			Other
Biology	None	✓ Insects	✓ Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other
Water Flow	✓ Flowing	Ponded	Dry	Tidal			

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken ✓ Yes No Photo # 72-74

Field Screening Samples Collected? Yes ✓ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	DO (mg/L)	NA		

Analytical Lab Samples Collected? ✓ ☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Width, depth, & velocity could not be determined

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LN

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 8			Latitude	32.82158	Watershed: Hydrologic Unit	907
Location	SE of Fanita Dr. & Weld Blvd intersection			Longitude	-116.79933	Hydrologic Area	907.1
				TB Page	1251-B2	Hydrologic Subarea (Optional)	907.12
Date	8/17/10	Time	12:30	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 20-21

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	33.2	NH_3-N (mg/L)	0.382	NO_3 (mg/L)	3.110	Ortho-PO_4 (mg/L)	0.079
pH (pH units)	8.0	TURB (NTU)	6.38	NO_3-N (mg/L)	0.703	Ortho-PO_4-P (mg/L)	0.026
COND (mS/cm)	1.85	MBAS (mg/L)	0.5	DO (mg/L)	6.52		

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	24	in
Depth	.25	in
Velocity	10/15	ft/sec
Flow	12	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 8 **DATE:** 8/17/10

OBSERVER: MD/TT **TIME:** 12:30

LOCATION: SE of the Fanita Dr. & Weld Blvd intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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City of El Cajon
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☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 9		**Latitude**	32.81473	**Watershed**	**Hydrologic Unit**	907
Location	In front of 473 whitsett Dr., on the E sidewalk		**Longitude**	-116.99976		**Hydrologic Area**	907.1
			TB Page	1251-B3		**Hydrologic Subarea** (Optional)	907.12
Date	8/18/10	**Time** 12:00	**Observer**	MO/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 32-33

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.519	NO_3 (mg/L)	2.216	Ortho-PO_4 (mg/L)	0.562
pH (pH units)	6.6	TURB (NTU)	9.36	NO_3-N (mg/L)	0.501	Ortho-PO_4-P (mg/L)	0.183
COND (mS/cm)	4.23	MBAS (mg/L)	0.5	DO (mg/L)	4.76		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, & velocity unable to be measured due to deep manhole

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 9 **DATE:** 8/18/11

OBSERVER: MD/IT **TIME:** 12:00

LOCATION: In front of 1473 Whitsett Dr., on the E. sidewalk

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 13A		Latitude	32.80581	Watershed	Hydrologic Unit	907
Location	in front of 1140 Retree St, in middle of street		Longitude	-116.97696		Hydrologic Area	907.1
			TB Page	1251-D4		Hydrologic Subarea (Optional)	907.13
Date	8/19/10	Time 10:45	Observer	MD/LT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 40-41

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	27.7	NH_3-N (mg/L)	0.283	NO_3 (mg/L)	5.250	Ortho-PO_4 (mg/L)	0.316
pH (pH units)	7.8	TURB (NTU)	2.46	NO_3-N (mg/L)	1.187	Ortho-PO_4-P (mg/L)	0.103
COND (mS/cm)	5.41	MBAS (mg/L)	0.5	DO (mg/L)	5.86		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, & velocity unable to be determined due to deep manhole.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 13A **DATE:** 8/19/10

OBSERVER: MD/IT **TIME:** 10:45

LOCATION: In front of 1140 Petree St, in middle of street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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City of El Cajon
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☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 14		**Latitude**	32.80074	**Watershed**	**Hydrologic Unit**	907
Location	Pierce St., S of Wagner Dr., across from Grace Fellowship Church, N of National Guard facility		**Longitude**	-116.97671		**Hydrologic Area**	907.1
			TB Page	1251-D4		**Hydrologic Subarea** (Optional)	907.13
Date	8/19/10	**Time** 11:35	**Observer**	MD/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 42-43

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	28.9	NH_3-N (mg/L)	0.565	NO_3 (mg/L)	2.068	Ortho-PO_4 (mg/L)	0.238
pH (pH units)	8.3	TURB (NTU)	5.69	NO_3-N (mg/L)	0.467	Ortho-PO_4-P (mg/L)	0.078
COND (mS/cm)	4.79	MBAS (mg/L)	0.5	DO (mg/L)	6.32		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	.25	in
Velocity	5/10	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 14 **DATE:** 8/19/10

OBSERVER: MD/IT **TIME:** 11:35

LOCATION: Pierce St., S of Wagner Dr., across from Grace Fellowship Church, N of National Guard facility

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 15x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	Site 15		Latitude	32.78237	Watershed	Hydrologic Unit	907
Location	Chase Ave. & Grossmont Ave. intersection, across from Grossmont Ave. in the S. sidewalk		Longitude	-116.97815		Hydrologic Area	907.1
			TB Page	1251-D7		Hydrologic Subarea (Optional)	907.13
Date	8/20/10	Time 11:35	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓ Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓ Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): ✓ Manhole Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓ Sunny	Partly Cloudy	Overcast	Fog			
Tide	✓ N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.	
Last Rain	✓ > 72 hours	< 72 hours					
Rainfall	✓ None	< 0.1"	> 0.1"				

RUNOFF CHARACTERISTICS

Odor	✓ None	Musty	Rotten Eggs	Chemical	Sewage			Other
Color	✓ None	Yellow	Brown	White	Gray			Other
Clarity	✓ Clear		Slightly Cloudy	Opaque				Other
Floatables	✓ None	Trash	Bubbles/Foam	Sheen	Fecal Matter			Other
Deposits	None	✓ Sediment/Gravel	✓ Fine Particulates	Stains	Oily Deposits			Other
Vegetation	✓ None	Limited	Normal	Excessive				Other
Biology	✓ None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow: ✓ Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken ✓ Yes No Photo # 54-55

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	23.4	NH_3-N (mg/L)	0.340	NO_3 (mg/L)	2.342	Ortho-PO_4 (mg/L)	0.202
pH (pH units)	7.6	TURB (NTU)	2.52	NO_3-N (mg/L)	0.529	Ortho-PO_4-P (mg/L)	0.066
COND (mS/cm)	1.56	MBAS (mg/L)	0.13	DO (mg/L)	5.43		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, & velocity unable to be determined due to deep manhole

2010 Trash Assessment Form

SITE ID: Site 15 **DATE:** 8/20/10

OBSERVER: MD/IT **TIME:** 11:35

LOCATION: Chase Ave & Grossmont Ave. intersection, across from Grossmont Ave. in the S. sidewalk

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 17		Latitude	32.81660	Watershed	Hydrologic Unit	907
Location	Next to 350 Cypress Ln, E of Pioneer Way, on the N side of the street		Longitude	-116.76609		Hydrologic Area	907.1
			TB Page	1251-F2		Hydrologic Subarea (Optional)	907.13
Date	8/17/10	Time 11:30	Observer	MO/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** A-19

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.8	NH_3-N (mg/L)	0.355	NO_3 (mg/L)	2.316	Ortho-PO_4 (mg/L)	0.059
pH (pH units)	7.3	TURB (NTU)	7.14	NO_3-N (mg/L)	0.523	Ortho-PO_4-P (mg/L)	0.019
COND (mS/cm)	2.94	MBAS (mg/L)	0.13	DO (mg/L)	4.43		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, & velocity unable to be determined due to thick vegetation.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 17 **DATE:** 8/17/10

OBSERVER: MD/IT **TIME:** 11:30

LOCATION: Next to 350 Cypress Ln, E of Pioneer Wy, on the N side of the street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

2C

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

Field Screening ✓ Confirmation For Bacteria IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site 17		Latitude	32.81660	Watershed	Hydrologic Unit	907.
Location	Cypress Ln, E of Pioneer Way. next to 350 Cypress, N side of street		Longitude	-116.96609		Hydrologic Area	907.1
			TB Page	1251-F2		Hydrologic Subarea (Optional)	907.13
Date	8/26/10	Time 12:25	Observer	MD/LT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential | Commercial | ✓Industrial | Agricultural | Parks | Open

Land Use (Secondary) (Optional, greater than 10%): Residential | ✓Commercial | Industrial | Agricultural | Parks | Open | None

Conveyance (Check one only): Manhole | Catch Basin | Outlet | Concrete Channel | Natural Creek | ✓Earthen Channel | Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓Sunny	Partly Cloudy	Overcast	Fog			
Tide	✓N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.	
Last Rain	✓>72 hours	<72 hours					
Rainfall	✓None	<0.1"	>0.1"				

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other	
Color	✓None	Yellow	Brown	White	Gray	Other	
Clarity	✓Clear		Slightly Cloudy	Opaque		Other	
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other	
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other	
Vegetation	None	Limited	✓Normal	Excessive		Other	
Biology	None	✓Insects	✓Algae	✓Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other
Water Flow	✓Flowing	Ponded	Dry	Tidal			

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No Photo # 100-101

Field Screening Samples Collected? ✓Yes No

Water Temp (°C)	25.3	NH3-N (mg/L)	NA	NO3 (mg/L)	NA	Ortho-PO4 (mg/L)	NA
pH (pH units)	7.7	TURB (NTU)	NA	NO3-N (mg/L)	NA	Ortho-PO4 -P (mg/L)	NA
COND (mS/cm)	2.94	MBAS (mg/L)	NA	DO (mg/L)	NA		

Analytical Lab Samples Collected? ✓☐Yes ☐No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, velocity cannot be determined due to thick vegetation

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LC

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

Field Screening Confirmation For _____ ✓IC/ID Follow-Up For Bacteria(s)

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site 17-1		Latitude	32.81246	Watershed	Hydrologic Unit	907
Location	In earthern channel, on Vernon way, Across from 145 Magnolia Ave.		Longitude	-116.96338		Hydrologic Area	907.1
			TB Page	1251-F2		Hydrologic Subarea (Optional)	907.13
Date	8/26/10	Time 13:00	Observer	MB/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential Commercial ✓Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet Concrete Channel Natural Creek ✓Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ✓Sunny Partly Cloudy Overcast Fog

Tide ✓N/A Low Incoming High Outgoing **Tide Height:**_____ft.

Last Rain ✓>72 hours <72 hours

Rainfall ✓None <0.1" >0.1"

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	✓None	Yellow	Brown	White	Gray	Other
Clarity	✓Clear		Slightly Cloudy	Opaque		Other
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other
Vegetation	None	Limited	✓Normal	Excessive		Other
Biology	None	✓Insects	Algae	✓Fish	Snails	Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No **Photo #** 103

Field Screening Samples Collected? Yes ✓No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	DO (mg/L)	NA		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, velocity cannot be determined due to thick vegetation

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) (X) MS4 ✓ Receiving Water

Site ID	Site 18		Latitude	32.81298	Watershed	Hydrologic Unit	907
Location	E of Marshall Ave., N of Vernon Way, W side of Forester Creek Channel		Longitude	-116.97357		Hydrologic Area	907.1
			TB Page	1251-E3		Hydrologic Subarea (Optional)	907.13
Date	8/20/10	Time 9:50	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential Commercial ✓ Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓ Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin ✓ Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓ Sunny	Partly Cloudy	Overcast	Fog			
Tide	✓ N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.	
Last Rain	✓ > 72 hours	< 72 hours					
Rainfall	✓ None	< 0.1"	> 0.1"				

RUNOFF CHARACTERISTICS

Odor	✓ None	Musty	Rotten Eggs	Chemical	Sewage	Other	
Color	✓ None	Yellow	Brown	White	Gray	Other	
Clarity	✓ Clear		Slightly Cloudy	Opaque		Other	
Floatables	✓ None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other	
Deposits	None	✓ Sediment/Gravel	✓ Fine Particulates	Stains	Oily Deposits	Other	
Vegetation	✓ None	Limited	Normal	Excessive		Other	
Biology	None	✓ Insects	✓ Algae	Fish	✓ Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other
Water Flow	✓ Flowing	Ponded	Dry	Tidal			

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken ✓ Yes No **Photo #** 50-51

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	23.4	NH_3-N (mg/L)	0.221	NO_3 (mg/L)	2.317	Ortho-PO_4 (mg/L)	0.239
pH (pH units)	7.6	TURB (NTU)	1.34	NO_3-N (mg/L)	0.524	Ortho-PO_4-P (mg/L)	0.078
COND (mS/cm)	4.79	MBAS (mg/L)	0.5	DO (mg/L)	5.48		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	5	in
Depth	.25	in
Velocity	5/8	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 18 **DATE:** 8/20/10

OBSERVER: MD/IT **TIME:** 9:50

LOCATION: E of Marshall Ave., N of Vernon Way, W side of Forester Creek Channel

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☒ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site 19		Latitude	32.80576	Watershed	Hydrologic Unit	907
Location	SW corner of Jackman St. & Petree St. Intersection		Longitude	-116.97344		Hydrologic Area	907.1
			TB Page	1251-E4		Hydrologic Subarea (Optional)	907.13
Date	8/20/10	Time 15:40	Observer	MD/LT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): ✓Manhole Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓Sunny	Partly Cloudy	Overcast	Fog			
Tide	✓N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.	
Last Rain	✓> 72 hours	< 72 hours					
Rainfall	✓None	< 0.1"	> 0.1"				

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other	
Color	✓None	Yellow	Brown	White	Gray	Other	
Clarity	✓Clear		Slightly Cloudy	Opaque		Other	
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other	
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other	
Vegetation	✓None	Limited	Normal	Excessive		Other	
Biology	✓None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other
Water Flow	✓Flowing	Ponded	Dry	Tidal			

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No **Photo #** 60-61

Field Screening Samples Collected? ✓Yes No

Water Temp (°C)	26.0	NH_3-N (mg/L)	0.276	NO_3 (mg/L)	11.66	Ortho-PO_4 (mg/L)	0.430
pH (pH units)	7.5	TURB (NTU)	4.34	NO_3-N (mg/L)	2.635	Ortho-PO_4-P (mg/L)	0.140
COND (mS/cm)	6.66	MBAS (mg/L)	0.5	DO (mg/L)	5.16		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Width, depth, & velocity unable to be determined due to deep manhole.

2010 Trash Assessment Form

SITE ID: Site 19 **DATE:** 8/20/10

OBSERVER: MD/IT **TIME:** 15:40

LOCATION: SW corner of Jackman St. & Petree St intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site 20		Latitude	32.79534	Watershed	Hydrologic Unit	907
Location	N of 530 Main St., under bridge on the W side of the channel, the southernmost of two falls		Longitude	-116.96861		Hydrologic Area	907.1
			TB Page	1251-E5		Hydrologic Subarea (Optional)	907.13
Date	8/23/10	Time 10:00	Observer	MO/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): ✓Residential Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin ✓Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓Sunny	Partly Cloudy	Overcast	Fog		
Tide	✓N/A	Low	Incoming	High	Outgoing	**Tide Height:**_____ft.
Last Rain	✓> 72 hours	< 72 hours				
Rainfall	✓None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage			Other
Color	None	✓Yellow	Brown	White	Gray			Other
Clarity	✓Clear		Slightly Cloudy	Opaque				Other
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter			Other
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits			Other
Vegetation	✓None	Limited	Normal	Excessive				Other
Biology	None	✓Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other
Water Flow	Flowing	✓Ponded	Dry	Tidal				

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No **Photo #** ~~64-65~~ 62-63

Field Screening Samples Collected? ✓Yes No

Water Temp (°C)	23.6	NH_3-N (mg/L)	0.443	NO_3 (mg/L)	4.125	Ortho-PO_4 (mg/L)	2.009
pH (pH units)	8.0	TURB (NTU)	4.18	NO_3-N (mg/L)	0.932	Ortho-PO_4-P (mg/L)	0.655
COND (mS/cm)	5.12	MBAS (mg/L)	0.75	DO (mg/L)	4.86		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site **DATE:** 8/23/10

OBSERVER: MD/TT **TIME:** 10:00

LOCATION: N of 533 Main St., under bridge on the W. side of the channel, southernmost of two falls

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site 21		Latitude	32.79124	Watershed	Hydrologic Unit	907
Location	SW corner of El Cajon Blvd & W. Palm Ave. intersection		Longitude	-116.97179		Hydrologic Area	907.1
			TB Page	1251-E6		Hydrologic Subarea (Optional)	907.13
Date	8/19/10	Time 14:15	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): ✓Residential Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): ✓Manhole Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓Sunny	Partly Cloudy	Overcast	Fog			
Tide	✓N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.	
Last Rain	✓> 72 hours	< 72 hours					
Rainfall	✓None	< 0.1"	> 0.1"				

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other	
Color	✓None	Yellow	Brown	White	Gray	Other	
Clarity	✓Clear		Slightly Cloudy	Opaque		Other	
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other	
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other	
Vegetation	✓None	Limited	Normal	Excessive		Other	
Biology	None	Insects	Algae	Fish	✓Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow: ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No Photo # 46-47

Field Screening Samples Collected? ✓Yes No

Water Temp (°C)	29.1	NH_3-N (mg/L)	0.172	NO_3 (mg/L)	7.478	Ortho-PO_4 (mg/L)	0.437
pH (pH units)	8.2	TURB (NTU)	0.17	NO_3-N (mg/L)	1.690	Ortho-PO_4-P (mg/L)	0.142
COND (mS/cm)	6.01	MBAS (mg/L)	0.75	DO (mg/L)	5.82		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2010 Trash Assessment Form

SITE ID: Site 21 **DATE:** 8/19/10

OBSERVER: MD/IT **TIME:** 14:15

LOCATION: SW corner of El Cajon Blvd. & W. Palm Ave intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	Site 22		Latitude	32.78786	Watershed	Hydrologic Unit	907
Location	On the N side of W. Washington Ave., between Emerald Ave. & Van Houte Ave., under the bridge		Longitude	-116.96767		Hydrologic Area	907.1
			TB Page	1251-F6		Hydrologic Subarea (Optional)	907.13
Date	8/19/10	Time 15:05	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin ✓Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓Sunny	Partly Cloudy	Overcast	Fog		
Tide	✓N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.
Last Rain	✓> 72 hours	< 72 hours				
Rainfall	✓None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	✓None	Yellow	Brown	White	Gray	Other
Clarity	✓Clear		Slightly Cloudy	Opaque		Other
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other
Vegetation	✓None	Limited	Normal	Excessive		Other
Biology	None	✓Insects	✓Algae	Fish	✓Snails	Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow: ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No Photo # 48-~~48~~49

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	25.6	NH_3-N (mg/L)	0.316	NO_3 (mg/L)	25.34	Ortho-PO_4 (mg/L)	0.182
pH (pH units)	7.8	TURB (NTU)	0.01	NO_3-N (mg/L)	5.727	Ortho-PO_4-P (mg/L)	0.059
COND (mS/cm)	3.05	MBAS (mg/L)	0.25	DO (mg/L)	5.48		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	20	in
Depth	.25	in
Velocity	16/13	ft/sec
Flow	12	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2010 Trash Assessment Form

SITE ID: Site 22 **DATE:** 8/19/10

OBSERVER: MD/JT **TIME:** 15:05

LOCATION: On the N. side of W. Washington Ave., between Emerald Ave. & Van Houten Ave., under the bridge

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site 23		Latitude	32.78586	Watershed	Hydrologic Unit	907
Location	on the W. side of the Grant Ave. & Grossmont Ave. intersection, in front of 788 & 790 Grossmont Ave., in the Street		Longitude	-116.97468		Hydrologic Area	907.1
			TB Page	1251-E7		Hydrologic Subarea (Optional)	907.13
Date	8/20/10	Time 14:50	Observer	MO/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): ✓Manhole Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓Sunny	Partly Cloudy	Overcast	Fog			
Tide	✓N/A	Low	Incoming	High	Outgoing	Tide Height: ____ ft.	
Last Rain	✓> 72 hours	< 72 hours					
Rainfall	✓None	< 0.1"	> 0.1"				

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage		Other
Color	✓None	Yellow	Brown	White	Gray		Other
Clarity	✓Clear		Slightly Cloudy	Opaque			Other
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter		Other
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits		Other
Vegetation	✓None	Limited	Normal	Excessive			Other
Biology	✓None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No **Photo #** 58-59

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	25.7	NH_3-N (mg/L)	0.353	NO_3 (mg/L)	12.54	Ortho-PO_4 (mg/L)	0.451
pH (pH units)	8.1	TURB (NTU)	0.89	NO_3-N (mg/L)	2.834	Ortho-PO_4-P (mg/L)	0.147
COND (mS/cm)	2.93	MBAS (mg/L)	0.25	DO (mg/L)	5.62		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Width, depth, and velocity unable to be determined due to deep manhole

2010 Trash Assessment Form

SITE ID: Site 23 **DATE:** 8/20/10

OBSERVER: MD/IT **TIME:** 19:50

LOCATION: On the W. side of Grant Ave. & Grossmont Ave. intersection in front of 788 & 790 Grossmont Ave., in the street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 24		Latitude	32.78046	Watershed	Hydrologic Unit	907
Location	on the N side of Chase Ave. between Emerald Ave. & Estes St, easternmost outfall		Longitude	-116.96785		Hydrologic Area	907.1
			TB Page	1251-F7		Hydrologic Subarea (Optional)	907.13
Date	8/16/10	Time 10:30	Observer	MO/TT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 1-3

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	0.316	NO_3 (mg/L)	7.832	Ortho-PO_4 (mg/L)	0.314
pH (pH units)	7.5	TURB (NTU)	2.44	NO_3-N (mg/L)	1.770	Ortho-PO_4-P (mg/L)	0.102
COND (mS/cm)	2.68	MBAS (mg/L)	0.13	DO (mg/L)	7.72		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	.25	in
Velocity	10/15	ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2010 Trash Assessment Form

SITE ID: Site 24 **DATE:** 8/16/10

OBSERVER: MO/TT **TIME:** 10:30

LOCATION: On the N side of W Chase Ave, between Emerald Ave. & Estes St., easternmost outfall

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 15 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 25		Latitude	32.77390	Watershed	Hydrologic Unit	907
Location	On the E side of Avocado Ave., between Avenida Abajo & Skywood Dr.		Longitude	-116.95880		Hydrologic Area	907.1
			TB Page	1271-G1		Hydrologic Subarea (Optional)	907.13
Date	8/16/10	Time	15:00	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 8-10

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.1	NH_3-N (mg/L)	0.308	NO_3 (mg/L)	8.970	Ortho-PO_4 (mg/L)	0.072
pH (pH units)	7.6	TURB (NTU)	1.09	NO_3-N (mg/L)	2.027	Ortho-PO_4-P (mg/L)	0.023
COND (mS/cm)	2.31	MBAS (mg/L)	0.25	DO (mg/L)	5.63		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	.25	in
Velocity	5/8	ft/sec
Flow	~~0.25~~ 3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 25 **DATE:** 8/16/10

OBSERVER: MD/TT **TIME:** 15:00

LOCATION: On the E side of Avocado Ave. between Avenida Abajo & Skywood Dr.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LW

San Diego Stormwater Copermittees
City of El Cajon
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☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 26		**Latitude**	32.81249	**Watershed**	**Hydrologic Unit**	907
Location	Across from 1239 Victor St, on the W side of the street between Hart Dr & Greenfield Dr.		**Longitude**	-116.95534		**Hydrologic Area**	907.1
			TB Page	1251-G3		**Hydrologic Subarea** (Optional)	907.13
Date	8/18/16	**Time** 10:00	**Observer**	MD/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 28-29

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.8	NH_3-N (mg/L)	0.296	NO_3 (mg/L)	39.77	Ortho-PO_4 (mg/L)	0.628
pH (pH units)	7.1	TURB (NTU)	16.89	NO_3-N (mg/L)	8.979	Ortho-PO_4-P (mg/L)	0.205
COND (mS/cm)	2.14	MBAS (mg/L)	0.25	DO (mg/L)	5.34		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 26 **DATE:** 8/18/10

OBSERVER: MO/IT **TIME:** 10:00

LOCATION: Across from 1237 Victor St., on the W side of street between Hart Dr & Greenfield Dr.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 27		Latitude	32.80256	Watershed	Hydrologic Unit	907
Location	on Ballantyne St. at the E. end of Beech St, next to bus stop		Longitude	-116.95808		Hydrologic Area	907.1
			TB Page	1251-G4		Hydrologic Subarea (Optional)	907.13
Date	8/18/10	Time 10:50	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 30-31

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.9	NH_3-N (mg/L)	0.346	NO_3 (mg/L)	2.703	Ortho-PO_4 (mg/L)	1.931
pH (pH units)	7.3	TURB (NTU)	17.80	NO_3-N (mg/L)	0.611	Ortho-PO_4 -P (mg/L)	~~5.586~~ 0.630
COND (mS/cm)	1.09	MBAS (mg/L)	0.25	DO (mg/L)	4.57		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 27 **DATE:** 8/18/10

OBSERVER: MD/IT **TIME:** 10:50

LOCATION: On Ballantyne St. at the E. end of Beech St, next to bus stop

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MPH

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 28		Latitude	32.80065	Watershed	Hydrologic Unit	907
Location	On the N. side of E. Madison Ave, E. of Jeffree St.		Longitude	-116.95276		Hydrologic Area	907.1
			TB Page	1251-G4		Hydrologic Subarea (Optional)	907.13
Date	8/19/10	Time 9:45	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 38-39

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	29.8	NH_3-N (mg/L)	0.588	NO_3 (mg/L)	3.830	Ortho-PO_4 (mg/L)	1.480
pH (pH units)	7.3	TURB (NTU)	13.01	NO_3-N (mg/L)	0.866	Ortho-PO_4-P (mg/L)	0.482
COND (mS/cm)	1.31	MBAS (mg/L)	0.75	DO (mg/L)	5.37		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Width, depth, & velocity unable to be determined due to deep manhole

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 28 **DATE:** 8/19/10

OBSERVER: MD/IT **TIME:** 9:45

LOCATION: On the N. side of E. Madison Ave., E of Jeffree St.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 30		**Latitude**	32.80010	**Watershed**	**Hydrologic Unit**	907
Location	On the S. side of Madison Ave., between Roberta Ave. & Roselle Ave., in front of Boys & Girls Club		**Longitude**	-116.94128		**Hydrologic Area**	907.1
			TB Page	1251-J4		**Hydrologic Subarea** (Optional)	907.13
Date	8/18/10	**Time** 15:00	**Observer**	MD/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 36-37

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.2	NH_3-N (mg/L)	0.221	NO_3 (mg/L)	51.15	Ortho-PO_4 (mg/L)	0.138
pH (pH units)	7.3	TURB (NTU)	4.95	NO_3-N (mg/L)	11.560	Ortho-PO_4-P (mg/L)	0.045
COND (mS/cm)	2.32	MBAS (mg/L)	0.25	DO (mg/L)	5.32		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, and velocity unable to be determined due to deep manhole ~~catch bas~~

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 30 **DATE:** 8/18/10

OBSERVER: MO/IT **TIME:** 15:00

LOCATION: On the S. side of Madison Ave., between Roberta Ave. & Roselle Ave., in front of Boys & Girls Club

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LW

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 31		**Latitude**	32.79363	**Watershed**	**Hydrologic Unit**	907
Location	On Filbert St, N of Lexington Ave, in alley, S of channel		**Longitude**	-116.95506		**Hydrologic Area**	907.1
			TB Page	1251-G5		**Hydrologic Subarea** (Optional)	907.13
Date	8/17/10	**Time** 15:00	**Observer**	MD/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other NA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other NA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other NA
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other NA
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 22-23

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	DO (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 31 **DATE:** 8/17/10

OBSERVER: MP/IT **TIME:** 15:00

LOCATION: On Filbert St., North of Lexington Ave, in alley, S of channel

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 32		**Latitude**	32.79203	**Watershed**	**Hydrologic Unit**	907
Location	S of E Lexington Ave., between S. Lincoln Ave. & S Mollison Ave., behind the Lincoln Park Apts. at 389 Lincoln Ave.		**Longitude**	-116.95240		**Hydrologic Area**	907.1
			TB Page	1251-G6		**Hydrologic Subarea** (Optional)	907.13
Date	8/16/10	**Time** 12:50	**Observer**	MD/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 6-7

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.8	NH_3-N (mg/L)	0.330	NO_3 (mg/L)	22.35	Ortho-PO_4 (mg/L)	ND
pH (pH units)	7.8	TURB (NTU)	0.35	NO_3-N (mg/L)	5.051	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	2.93	MBAS (mg/L)	0.25	DO (mg/L)	6.58		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	.25	in
Velocity	10/15	ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2010 Trash Assessment Form

SITE ID: Site 32 **DATE:** 8/16/10

OBSERVER: MO/IT **TIME:** 12:50

LOCATION: S of E. Lexington Ave., between S. Lincoln Ave. & S. Mollison Ave., behind the Lincoln Park Apartments at 389 Lincoln Ave.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15x15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	Site 33		Latitude	32.78280	Watershed	Hydrologic Unit	907
Location	Next to 950 Lincoln Ave., between E. Renette Ave. & Raymond St.		Longitude	-116.95390		Hydrologic Area	907.1
			TB Page	1251-G7		Hydrologic Subarea (Optional)	907.13
Date	8/20/10	Time 12:15	Observer	MO/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓ Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial Industrial Agricultural Parks Open ✓ None

Conveyance (Check one only): Manhole Catch Basin ✓ Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓ Sunny	Partly Cloudy	Overcast	Fog		
Tide	✓ N/A	Low	Incoming	High	Outgoing	**Tide Height:** _____ ft.
Last Rain	✓ > 72 hours	< 72 hours				
Rainfall	✓ None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	✓ None	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	✓ None	Yellow	Brown	White	Gray	Other
Clarity	✓ Clear		Slightly Cloudy	Opaque		Other
Floatables	✓ None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	✓ Sediment/Gravel	✓ Fine Particulates	Stains	Oily Deposits	Other
Vegetation	✓ None	Limited	Normal	Excessive		Other
Biology	None	✓ Insects	✓ Algae	Fish	✓ Snails	Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow ✓ Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken ✓ Yes No **Photo #** 56-57

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	27.9	NH_3-N (mg/L)	0.200	NO_3 (mg/L)	10.45	Ortho-PO_4 (mg/L)	0.481
pH (pH units)	8.3	TURB (NTU)	6.76	NO_3-N (mg/L)	2.362	Ortho-PO_4-P (mg/L)	0.157
COND (mS/cm)	1.99	MBAS (mg/L)	0.13	DO (mg/L)	7.44		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	< 1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2010 Trash Assessment Form

SITE ID: Site 33 **DATE:** 8/20/10

OBSERVER: MO/LS **TIME:** 12:15

LOCATION: Next to 950 S. Lincoln Ave., between E. Renette Ave. & Raymond St.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LN

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 34		Latitude	32.81143	Watershed	Hydrologic Unit	907
Location	On the S side of Persimmon Ave., between Crosby St & N Second St.		Longitude	-116.93633		Hydrologic Area	907.1
			TB Page	1251-J3		Hydrologic Subarea (Optional)	907.13
Date	8/17/10	Time 15:30	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 24-25

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.8	NH_3-N (mg/L)	0.191	NO_3 (mg/L)	34.58	Ortho-PO_4 (mg/L)	ND
pH (pH units)	8.0	TURB (NTU)	1.20	NO_3-N (mg/L)	7.815	Ortho-PO_4-P (mg/L)	ND
COND (mS/cm)	2.12	MBAS (mg/L)	0.12	DO (mg/L)	6.92		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	17	in
Depth	.25	in
Velocity	5/8	ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 34 **DATE:** 8/17/10

OBSERVER: MD/IT **TIME:** 15:30

LOCATION: On the S. side of Persimmon Ave., between Crosby St. & N. Second St.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MPM

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 36		**Latitude**	32.80204	**Watershed**	**Hydrologic Unit**	907
Location	on the S. side of Oakdale Ave. in front of 1352, between Second St. & Grape St.		**Longitude**	-116.93327		**Hydrologic Area**	907.1
			TB Page	1252-A4		**Hydrologic Subarea** (Optional)	907.13
Date	8/19/10	**Time** 13:50	**Observer**	MO/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other NA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other NA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other NA
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other NA
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 44-45

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	DO (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 36 **DATE:** 8/19/10

OBSERVER: MD/IT **TIME:** 13:50

LOCATION: On the S. side of Oakdale Ave. in front of 1352, between Second St & Grape St.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 37		**Latitude**	32.79447	**Watershed**	**Hydrologic Unit**	907
Location	On the E side of S. Second St., across from mobile home community entrance, between E. Main St / E. Lexington Ave.		**Longitude**	-116.93714		**Hydrologic Area**	907.1
			TB Page	1251-J5		**Hydrologic Subarea** (Optional)	907.12
Date	8/18/10	**Time** 14:10	**Observer**	MD/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 34-35

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	28.0	NH_3-N (mg/L)	0.348	NO_3 (mg/L)	45.28	Ortho-PO_4 (mg/L)	0.095
pH (pH units)	7.2	TURB (NTU)	0.55	NO_3-N (mg/L)	10.23	Ortho-PO_4-P (mg/L)	0.031
COND (mS/cm)	2.33	MBAS (mg/L)	0.25	DO (mg/L)	5.64		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, & velocity unable to be determined because of deep catch basin

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 37 **DATE:** 8/18/10

OBSERVER: MD/IT **TIME:** 14:10

LOCATION: On the E. side of S. Second St., across from mobile home community entrance, between E. Main St. & E. Lexington Ave.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LN

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 38		**Latitude**	32.78382	**Watershed**	**Hydrologic Unit**	907
Location	on the W side of Jamacha Rd, between Granite Hills Dr. & Gustave St., SE corner of 930 Jamacha Rd, across from King's Mark Apts.		**Longitude**	-116.92809		**Hydrologic Area**	907.1
			TB Page	~~MD/CT~~ 1252-A7		**Hydrologic Subarea** (Optional)	907.13
Date	8/16/10	**Time** 15:50	**Observer**	MD/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 11-12

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.7	NH_3-N (mg/L)	0.260	NO_3 (mg/L)	31.33	Ortho-PO_4 (mg/L)	0.360
pH (pH units)	7.9	TURB (NTU)	0.76	NO_3-N (mg/L)	7.081	Ortho-PO_4-P (mg/L)	0.117
COND (mS/cm)	2.59	MBAS (mg/L)	0.25	DO (mg/L)	5.82		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Width, Depth, and velocity unable to be determined because site is in deep manhole.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 38 **DATE:** 8/16/10

OBSERVER: MD/IT **TIME:** 15:50

LOCATION: On the W side of Jamacha Rd, between Granite Hills Dr & Gustavo St., SE corner of 930 Jamacha Rd, across from King's Mark Apts.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 39		**Latitude**	32.81341	**Watershed**	**Hydrologic Unit**	907
Location	on the E side of E. Main St., between Greenfield Dr. & Pepper Dr. next to Rebel Rent business		**Longitude**	-116.91750		**Hydrologic Area**	907.1
			TB Page	1252-B3		**Hydrologic Subarea** (Optional)	907.13
Date	8/18/10	**Time** 9:30	**Observer**	MO/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other NA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other NA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other NA
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other NA
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 26-27

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	DO (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 39 **DATE:** 8/18/10

OBSERVER: MD/IT **TIME:** 9:30

LOCATION: On the E. side of E. Main St., between Greenfield Dr. & Pepper Dr., next to Rebel Rent business

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of El Cajon
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ~~☐ Receiving Water~~

Site ID	Site 41		**Latitude**	32.80209	**Watershed**	**Hydrologic Unit**	907
Location	NW of 558 Johnson Ave. ~~across via Johnson Ave. exit of I-8~~		**Longitude**	-116.97163		**Hydrologic Area**	907.1
			TB Page	1251, E4		**Hydrologic Subarea** (Optional)	907.13
Date	7/7/10	**Time** 10:45	**Observer**	MD/BM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~282-284~~ 284-286

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)	0.663	NO_3 (mg/L)	8.806	Ortho-PO_4 (mg/L)	0.035
pH (pH units)	8.55	TURB (NTU)	2.45	NO_3-N (mg/L)	1.990	Ortho-PO_4-P (mg/L)	0.011
COND (mS/cm)	3.85	MBAS (mg/L)	0.5	DO (mg/L)	7.10		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	50	in
Depth	0.25	in
Velocity	10/12	ft/sec
Flow	32	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: transients directly downstream from sampled location

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 91 **DATE:** 7/7/10

OBSERVER: MD/BM **TIME:** 11:45

LOCATION: NW of 558 Johnson Ave, across via Johnson Ave. exit

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Appendix B.1

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
1	07/09/09	Residential		1855	Lisa Terrace	Odor from unknown neighbors broken septic line.	Contacted the complainant and advised that the property is within the County jurisdiction.	No	N/A	N/A
2	07/15/09	Residential		959	Naranca Ave	Dog feces being thrown into open concrete channel at rear of property.	Property ower notified by door tag. No evidence of feces noted at time of inspection.	Yes	Verbal	N/A
3	07/15/09	Mobile	Premium Roof S	1573	Green Grove Ave	Discharge of tile cutting residue to the street. Discharge did not enter the storm drain inlet.	Contacted the contractor and resident. They were advised to clean the area using a dry method. A written warning was issued.	Yes	Warning	Yes
4	07/16/09	Residential		1143	Loma Portal					
5	07/20/09	County	Sheryl's Gas sta	2411	Jamacha	Broken nozzel caused gasoline discharge to street.	Referred to County storm water. PW and building official notified.	No	N/A	N/A
6	07/22/09	Residential		1593	Washington Ave	Apartment management sweeping debris into the street on Wichita side of the property.	Phone contact with complainant for details. No evidence of discharge of waste matter during a site inspection	Yes	N/A	N/A
7	07/22/09	Residential		934	Dennstedt Pl	Neighbor draining pool water onto complanants property causing structural damage.	After review the matter was found to be civil.	No	N/A	N/A
8	07/23/09	Residential		2903	Tahoe	Large amount of soil on street and sidewalk	The property owner was contacted on site. The landscaping soil was being moved to the rear yard. The owner was given storm water educatinal materials and told to sweep.	Yes	Verbal	Yes
9	07/23/09	Commercial	Sprouts	152	Second St	Strong odor of rotting food at the rear of the store.	Site inspection found water from foods storage area at rear discharged to rear lot. None left the property. Sthe store manager was contacted and advised to cleanthe area and recapture and properly dispose of it in the future.	Yes	Verbal	Yes
10	07/28/09	Residential		1265	Bermuda Pl	Sediment discharge to street from unimproved driveway.	Contacted the property owner on site and instructed him to install BMPs to prevent tracking and further erosion. Educational materials were issued.	Yes	Verbal	N/A
11	07/29/09	Residential		874	Hacienda	PW staff member observed sewer overflow during plumbing repair. The discharge entered the curb flowing into the storm drain inlet just north of the discharge point.	A notice was left on the door of the residence. Required report was submitted.	Yes	Verbal	Yes

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
12	07/31/09	Construction	Pacific Building	190	Main St	Routine construction inspection found sediment tracking, failed BMPs.	Contacted the site superintendent and advised to comply with the erosion control plans. He was issued a written warning.	Yes	Warning	Yes
13	08/06/09	Commercial	Coco's	1025	Fletcher Parkway	Open sewer cap on north side of property discharging sewage into grass and side walk.	Sontacted the general manager and advised to contact a plumbing service to clear the line scope the line and file a report.	Yes	First	Yes
14	08/10/09	Residential		848	Lemon Ave	On 8-9-09 a vehicle dumped oil on the pavement in front of the residence. Dirt was applied and swept up. Resident wants to know who to contact for removal.	The resident was contacted and advies to contact HAZMAT for removing the contaminated soil. She was referred to Waste management. There was evidence of a spill during site visit.	Yes	N/A	Yes
15	08/11/09	Residential		1575	Lily Ave	Resident is dumping paint wash water in front across sidewalk and into the street.	Site inspection found paint residue in the front yard vegetation,sidewalk and street. A card and door tag was left.	Yes	Verbal	Yes
16	08/17/09	Residential		612	Live Oak Dr	Sewer back up in front yard.	Site inspection located a sewage discharge in the left front yard and a broken sewer cap. The tenant ws contacted and advised to contact a plumber to make repairs and report to the City. No discharge to the street or drain inlet.	Yes	Verbal	Yes
17	08/19/09	Construction	Starrett Constru	965	Arnelle St	Sediment tracking and failure to install BMPs.	the contractor was contacted and instructed to improve the BPMs and to sweep all paved areas.	Yes	Second	Yes
18	08/19/09	Construction	San Diego Cont	1539	Main St	Illegal discharge of sediment-water, failure to properly install and maintain SWPPP required BMPs.	Contacted the superintendent and issued a citation and advised to make corrections immediately.	Yes	First	Yes
19	08/20/09	Commercial	Vey's Power Sp	660	El Cajon Blvd	Using water to power strip paint from the building.	Contacted the business manager and advised to cease using water and to thorougly dry clean all paved areas.	Yes	Verbal	Yes
20	08/21/09	Commercial	Toyota of El Caj	440	Johnson	Auto body reair work conducted outside with no BMPs adjacent to the storm channel.	Found auto repair an a minor discharge during inspection. Contacted the Toyota employees on site and advised to cease all outside work. The property was sold and they are moving out in two days.	Yes	Verbal	Yes
21	08/24/09	Commercial	Commercial Mul	1401	Pioneer Way	Water discharging from somewhere in the business cmplex.	Site inspection found no evidence of a discharge.	No	N/A	N/A
22	08/26/09	Mobile	Finest City Deta	300 Blk	Rea and Magnolia	Mobile detailer conducting business without BMPs in place.	The mobile business owner was contacted and advised to use proper BMPs that were on his truck to reclaim all wash water.	Yes	Verbal	Yes

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
23	08/28/09	Commercial	County Collision	153	Johnson	Neighboring busness has water continually running off the property.	Contacted the manager of the auto body business. Found moderate discharge of wash water at the rear of the business flowing acrosss the property line to rear of adjacent business. Also noted body work being done outside. He wat told to cease all outside work and washing. There is a covered wash and work area on site.	No	Verbal	Yes
24	08/28/09	Residential		396	Raleigh St	Unknown party is working on a diesel truck in the street allowing fluids to drain with no protection.	Site inspection found drain pan under the vehicle and small amount of fluid on surface. No one was present. Storm water information was left on the windshield.	Yes	N/A	N/A
25	08/31/09	Commercial	Abcana Industrie	545	Bradley	Strong chlorine fumes coming from plumbing fixtures at Napa Auto. Suspect neighboring business dumps chemicals in sewer.	contacted the business manager and conducted a full inspection of the site. No discharge was found. They wash out pool chlorine containers and wash to sewer. There were other storm water issues addressed	No	Verbal	N/A
26	09/01/09	Residential		1535	Melody Ln	Complaint of vehicle oil spill in driveway and sidewalk	Site inspection found a minor oil spill in the driveway and sidewalk covered with an absorbent material. No response at door. Storm water educational materials were issued.	Yes	N/A	N/A
27	09/02/09	Residential		988	Grouse St	Evidence of past discharge from mobile carpet cleaning vans parked in the driveway. None current.	Storm Water inspection found residue tracking to be coming from the neighboring street, Finch. Efforts failed to locate the source of th discharge. It appears to be from ground water seepage.	No	N/A	N/A
28	09/04/09	Residential		2010	Madison Ave	Neighboring property is constantly being overwatered. New construction. Questions if drainage is beig done properly.	Unable to Locate any noticable violations. Complainant notified	No	N/A	N/A
29	09/08/09	Residential	Cypress Park Ap	570	Lincoln St	Tenant repairing vehicles on the street. Threat of fluid discharges	Site inspection found no evidence of vehicle repair. No discharges noted.	No	N/A	N/A
30	09/08/09	Commercial	Julio Ceasar Ch	464	Main St	Rennovation ongoing on site, large soil piles with no BMPs, hard surfaces need sweeping.	The Business owner was contacted on site and advised to sweep all paved areas and provide protection for all soil piles.	Yes	Verbal	N/A
31	09/09/09	Construction	Pacific Building	190	Main St	Employee using water to clean the lot.	Contacted the project manager and advised to clean the paved areas by sweeping or vac. The water flowed directly into vegetated planters.	Yes	Verbal	N/A
32	09/14/09	Residential		455	Silverbrook Dr	Water flowing onto property from Padre Dam discharge pooling on her property.	Complainants property is in the county. Advised to contact county storm water hotline.	No	N/A	N/A
33	09/14/09	Residential		574	Macon St	Sewage has been running across the sidewalk for the last 3 months.	Site inspection found the discharge to be from a broken irrigation line. The property owner was contacted and advised to repair the line.	No	N/A	N/A

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
34	09/14/09	Residential		947	Amistad Ct	Vehicle oil stain in driveway with absobent material on it.	No response at door left tag with instructions to remove the absorbent once the oil is absorbed.	Yes	N/A	N/A
35	09/16/09	Residential		1204	Peach Ave	Bags of vegetation left in the street in curb line.	Public works crew removed the bags from in front of this foreclosed property.	Yes	N/A	N/A
36	09/18/09	Residential	SDG&E	847	Grossmont	Dirt from utility pole replacement left in the street. Pole # P275485	SDG&E was contacted and advised to remove the dirt	Yes	Verbal	Yes
37	09/22/10	Commercial	Geno's BBQ	291	Main St	Waste grease bin and surrounding area is soiled.	The business manager was contacted and advised to replace the grease bin and thoroughly clean the area around it.	Yes	Verbal	N/A
38	09/23/09	Commercial	Target	250	Broadway	Early morning power washing in front and side of building.	Contacted the store manager and advised to cease all power washing unless the proper BMPs are installed.	Yes	Verbal	Yes
39	09/18/09	Residential		805	Deland Ave	Large pile of dirt left in the street from landscaping work.	Left a notice on the door of the resident to remove the dirt from the street and sweep the area.	Yes	Verbal	N/A
40	09/28/09	Commercial	Ambassador Ho	1556	Main St	Business is draining pool water onto Mains St.	Storm water inspection found pool water dechlorinated and exempt.	No	N/A	N/A
41	10/01/09	Residential		899	Hacienda	Leaves and other vegetation being blown into the street and left there.	Contacted the property owner on site. He said he routinely sweeps vegetation into the street on days prior to street sweeing. He was advised to cease the activity and to sweep and properly dispose of all yard waste. Educational materials were issued.	Yes	Verbal	N/A
42	10/07/09	Commercial	Heart Haven Re	1160	Broadway	Private lateral overflow on property.	Contacted the business owner and advised to contact a plumbing service and have the plumbing repaired and the area cleaned. The discharge entered the Broadway Channel.	Yes	First	Yes
43	10/08/09	Residential		1751	El Pico Dr.	Ice plant removed, grading altered. Erosion concerns. Work was done over a year ago.	Found no evidence of recent grading at rear of property.	No	N/A	N/A
44	10/12/09	Commercial	New East Buffet	555	Montrose Ct	Grease spill and accumulated trash at rear of building.	Contacted the restaurant manager and advised to clean the area and to replace the grease bin.	Yes	Verbal	Yes

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
45	10/13/09	Residential		1356	Joliet Ave	Drain box at end of of Joliet has strong smell of urine, toilet paper on the grate.	Inspected the site finding dried toilet paper on the grate, soapy water in curbline appearing to come from this residence. Storm water info was left on the door.	Yes	N/A	N/A
46	10/13/09	Residential		584	Brockwood Dr	Sand Blasting residue being washed into the street.	PW crew investigated and found no evidence of residue or discharge.	No	N/A	N/A
47	10/21/09	Commercial	Arturo's Market	315	El Cajon Blvd	Evidence of recent discharge of a white residue on ground at rear of building being remodeled.	Contacted the contractors on site and advised to cease all discharges. Storm water educatinal materials were issued.	Yes	Verbal	Yes
48	10/23/09	Residential		514	Edwards St	Painting Co. dumping liquid into the storm drain.	A goup of men with painting equipment were parked in front of the residence but no painting activity underway. There was no evidence of dumping into the torm drain inlet. Storm water educational materials were issued.	Yes	Verbal	N/A
49	10/26/09	Residential		444	Skyview Ct	Pile of dirt dumped into the street at this location.	Contacted the resident and advised to remove the dirt pile at the end of the cul-de-sac.	Yes	Verbal	Yes
50	10/26/09	Residential		946	Anza St	Someone painting a large truck in the street.	Contacted the resident paint and roller to paint out graffiti on a pannel truck. A drop cloth was in place. Storm water educational materials were issued.	No	Verbal	N/A
51	10/28/09	Commercial	Julio Cesar Cha	464	Main St	Sediment tracking and minor discharge from marble polishing at front of building.	Contacted the contractor and business owner on site. Advised to cease all discharges and sweep the paved areas.	Yes	Warning	Yes
52	11/02/09	Municipal			Cosmo Ct at Vallea	strong odor coming from the storm drain inlets.	The complaint was forwarded to the PW crew to investigate.	Yes	N/A	N/A
53	11/02/09	Residential		1120	Hub Ct	Leaves and vegetation in the drainage swale at the rear of property poses threat of discharge to storm drain inlet during a rain event.	The complaint was forwarded to the PW crew to investigate. Determined to be propety owmers responsibility.	No	N/A	N/A
54	11/03/09	Residential		1408	Madison Ave	Large dirt piles on the paved areas in front and right side of the building.	A door tag was left with instructions to contact storm water.	Yes	Verbal	Yes
55	11/04/09	Residential		2069	Valley Lake Dr	Grading without a permit and no BMPs installed.	Contacted the property owner on site. Minor grading in rear and left front yards. No immediate threat of discharge during rain event. Storm water educatinal materials issued.	No	N/A	N/A

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
56	11/04/09	Commercial	Main St. Gas an	489	Main St	Soil piles from ballard instillation emiting strong fuel odor.	Contacted the strore employee and contractor. Said soil pile would be removed properly. Hazmat notified as FYI.	Yes	Verbal	Yes
57	11/08/09	Residential	Parkview Apartn	277	First St	Private lateral spill	The event occurred over the weekend. Stormwater was contacted and began a follow up. A citation will be issued.	Yes	First	Yes
58	11/13/09	Residential		1146	Naranca	Private Lateral spill	City crew responded and contained the spill. The blockage was cleared and the area cleaned. Spill did not reach the storm drain inlet.	No	Verbal	Yes
59	11/13/09	Residential		727	Hawthorne Ave	Homeowner throwing dog feces over the fence and into the storm channel.	The property owner was contacted on site. He said tenants just moved out with dogs. There will be no further dumping in the channel. Storm water educational materials were issued.	Yes	Verbal	Yes
60	11/17/09	Residential		1282	Redwood St	Concrete being dumped in the street.	Resident is in process of re-landscaping the front yard. This is an unfinished street. No concrete discharge noted. Both parties contacted on site. Neighbor dispute. Storm water educational materials issued.	No	N/A	N/A
61	11/19/09	Residential	El Cajon Towers	180	Ballantyne	Pink liquid flowing in curb line from under curb drain.	Contacted the on site manager. The discharge was said to be from heating and air conditioning repair.	Yes	Warning	Yes
62	11/20/09	Residential		428	Omaha Ct	Street sweeper found white powder residue in the curb line in front of this residence and the street.	The property owner was contacted on site. The discharge was from pool cleaning and filter back flush of diatomaceous earth. Ther were advised to cease any further discharge and to clean the street of all residue which flowed down the gutter line to Taft St.	Yes	Verbal	Yes
63	11/23/09	Industrial	Lite Stone Conc	1105	Marshall Ave	Water discharging from the east side of the property and flowing into the Forrester Creek.	The business owner was contacted and stated the a broke hose caused the discharge. Evidence shows a regular pattern of discharge at this location.	Yes	Warning	Yes
64	11/24/09	Residential		165	Westdale Ct	Neighbor's excavation poses threat of erosionand property damage.	A site inspection with the property owner found no storm water issues. The rear slope is terraced. Irrigation lines were being installed.	No	N/A	N/A
65	11/24/09	Residential		290	Magnolia	An unknown liquid discharges periodically down the driveway and into the gutter on Magnolia	Site inspection found no discharge. This is a repeat complaint.	No	N/A	N/A
66	11/25/09	Residential		577	Tilling Way	Large piles of dirt in the street and bare slopes.	There is ongoing landscape rennovation with bare soil front and back yards. No BMPs on slopes or perimeter controls. Piles of soil and gravel in street. The property owner was contacted and advised to install BMPs.	Yes	Warning	Yes

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
67	11/30/09	Construction	La Valencia Plaz	1273	Main St	Ppost rain sediment tracking into the alley and failure to install and maintain BMPS.	Contacted the superintendent and issued a citation and advised to make corrections immediately.	Yes	Warning	Yes
68	11/30/09	Commercial	Rally's Hamburg	1261	Main St	Discharge of wash water in to the strom drain conveyance system.	The store manager and owner were contacted on site and advised to immediately cease discharging all wash water. Storm water educational materials were issued.	Yes	First	Yes
69	12/02/09	Residential		990	Aster Ave	Oil spill flowing in curbline	Site inspection found spill covered with absorbent material. Resident said he applied the absorbent but had no info on vehicle or owner. PW crew to conduct follow-up. Oil found in under sidewalk drain. Complainant claims oil discharged at his point.	Yes	Warning	Yes
70	12/02/09	Residential		334	Horizon Hills Dr	Green discharge from gutter drain.	No discharge noted.	No	N/A	N/A
71	12/04/09	Residential		614	Madison	Oil spill flowing in curbline	Site inspection found oil in the street and gutter in fornt of the residence. The tenant stated that a vehicle discharged the oil and left. Dirt was used as an absorbent. It was removed and properly disposed of. Storm water educational materials were issued.	Yes	Verbal	Yes
72	12/14/09	Residential		1286	Redwood St	Waer ponding in the street, debris in gutter.	This is an unfinished street. No storm water issue exists.	No	N/A	N/A
73	12/15/09	Residential		480	Horizon Hills Dr	Pool water draining onto adjacent property and into the gutter.	Site inspection found no pool water discharge.	No	N/A	N/A
74	12/15/09	Residential		930	Layton St	Oil discharge in driveway.	Site inspection found abandoned property. Open oil containers in driveway overflowed during recent rain. Discharge was contained by Hazmat. Containers and other junk in driveway. Matter referred to city zoning enforcement.	Yes	N/A	Yes
75	12/18/09	Commercial	Julio Ceasar Ch	464	Main St	Sand blasting dust leaving the site.	Contacted the business owner and instructed to apply measures to minimize dust during concrete sand blasting.	Yes	Verbal	Yes
76	12/21/09	Residential		537	Jeffree St	Oil draining from motorhome; possible soaps and chemicals	Site inspection found no oil, soap or other discharge. There was evidence of recent oil spill in drivway. Spoke to tenant and left storm water education materials.	Yes	Verbal	Yes
77	12/29/09	Industrial	Waste Managen	1289	Rippey St	A Waste Management truck leaked a large amount of hydrolic fluid on the street in fornt of this residence.	Waste Management was contacted and advised to clean the spill. They stated that they have a contract with a spill response company.	Yes	Verbal	Yes

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
78	12/30/09	Commercial	Main Street Squ	1183	Main St	Lateral overflow in parking lot for 2 days. Unable to reach the property owner.	The lateral overflow in the northeast portion of the parking lot was confined to private property. Tenants stated that the repair work had been done but there was visible debris and pooling. The property manager was contacted and advised to clean the area and remove the pooled sewage using a vac.	Yes	Verbal	Yes
79	01/04/10	Residential		381	Minnesota Ave	Paint containers and leaking oil container dumped at rear sewer easement, undeveloped alley behid residence.	storm water contacted PW yard to remove the containers.	Yes	N/A	Yes
80	01/05/10	Residential		1158	Terrace Crest Dr	Sediment from grading work flowing into the street during heavy rains	Site inspection found no evidence of a discharge and no current grading.	No	N/A	N/A
81	01/07/10	Commercial	7-11 Store	1102-04	Washington	Lateral overflow at the rear of the 7-11 store.	Storm water contacted the property owner on site. He was cleaning the area. The plumbing repairs were complete. He was advised to clean the paved areas and reclaim the waste. The discharge did not enter the strorm drain system.	Yes	Verbal	Yes
82	01/07/10	Residential	Shady Lane Apa	388	Shady Ln	Sewer runoff going into the storm drain in front of 1249 E Madison for 2 days.	Storm water located the discharge at te rear of the building. The cleanout cap ws removed. Discharge flowed into the storm drain inlet. PW crew responded with vac and manager notified to contact plumber.	yes	First	Yes
83	01/08/10	Residential		146	Blanchard Rd	Overflow water from neighbor's granite business	No evidence of a discharge and no return to phone call.	No	N/A	N/A
84	01/11/10	Residential		2440	Windmill View Rd	Water coming out of crack in the street.	PW street crew notified. No evidence of illicit discharge. Appears to be ground water seepage.	No	N/A	N/A
85	01/13/10	Construction	CE Wilson	1059	Australia St	Discharge of sediment, failure to install and maintain BMPs and slopes.	Property owner and contractor contacted and advised to repair BMPs and clean the street of all sediment.	Yes	Warning	Yes
86	01/14/10	Commercial	MTS Trolley Station		Arnelle St	Landscaping company power washing the trolley landing with no BMPs in place.	This matter was previously addressed by MTS and Aztec Landscaping. This was FYI for stormwater only. Contact info for all parties in file.	Yes	N/A	Yes
87	01/21/10	Residential		2721	Katherine St	Heavy rain causes flooding on the street.	This was no a storm water issue and the matter was referred to the PW street division for investigation.	No	N/A	N/A
88	01/25/10	Residential		1153	Gorsline Dr	Illegal grading in back yard altering grade.	No storm water issues noted. No grading. PW street crew cleaned the street.	No	N/A	N/A

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
89	01/25/10	Residential		1850	Calle del Conejo	Run on from county property into rear yard during heavy rains.	There was no evidence of run on from flume access road. This property is at a low spot and apex of neighboring driveways. No property damage noted. No recent grading.	No	N/A	N/A
90	01/29/10	Commercial	Vacant	1168	Johnson	Sediment tracking from lot resurfacing.	Storm water contacted the contractor and advised to sweep the paved areas regularly	Yes	Verbal	Yes
91	02/02/10	Residential		1227	Yerba Verde	Some one dumped paint in the curbline.	A site inspection found no paint. There was tan mud in the curbline along the length of the street. It was not possible to determine the point of origin. A PW street crew was on site and in process of cleaning the street.	Yes	N/A	N/A
92	02/02/10	Residential		989	Grouse St	Concern that removal of short retaining wall and vegetation will cause erosion.	Storm water found the short retaining wall removed but the Ivy covered side yard appears to be adequate to prevent any sediment discharge.	No	N/A	N/A
93	02/02/10	Residential		1109	Hacienda	Neighbor across the street is burning material in the rear yard.	It fwas suggested that this matter be referred to the fire dept.	No	N/A	N/A
94	02/01/10	Municipal	CALTRANS		E. Main St @ I-8 e/b on ra	County Referral>>>> Insufficient BMPs at CALTRANS work site. Devegetated banks.	Storm water contacted the on site Caltrans supervisor was contacted on site and advised to Install additional BMPs if necessary prior to the next rain event and to sweep all paved areas daily. Currently, silt fencing and fiber rolls are being used.	Yes	Verbal	Yes
95	02/01/10	Residential		2381	Dryden Rd	Neighbor dumping materials into canyon to level yard. Using fence as a retaining wall. No stormwater issues noted. The matter was referred to zoning enforcement.	Resident dumped misc. junk and material in left rear yard to level. The yard borders a overgrown vegetated channel. No storm fwater issue noted. The matter was referred to zoning enforcement for further review.	No	N/A	N/A
96	02/05/10	Residential		871	Avocado Ave	Grading with no BMPs I place.	Minor grading in front yard is partly below sidewalk and poses no threar of sediment discharge. The contractor said he would install fiber roll if work is extended.	No	N/A	N/A
97	02/05/10	Residential		1718	Primrose Dr	Altered grading causing water to drain onto R/Ps property.	storm water met with the R/P on site and found no evidence of grading. Natural run on property. No storm water issues noted.	No	N/A	N/A
98	02/05/10	Residential		1071	Australia St	Vegetation removed from slopes causing erosion during rain events. Sediment discharge to street.	The property owner was conatacted on site and directed to install BMPs to prevent further erosion and discharge of sediment.	Yes	Verbal	Yes
99	02/11/10	Industrial	Waste Managen	1001	Bradley	Discharge of unknown liquid from the parking lot on the Marshal side.	PW crew immediately placed absorbent material on the spill. The discharge was contained and recovered by waste management personnel.	Yes	Verbal	Yes

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
100	02/16/10	Residential		2788	Cataract Pl	Neighbor discharging white liquid into the street.	A white residue was found during a site inspection leading to the storm drain inlet at Chatham and Garden Grove. The property owner was contacted and advised to clean the street and cease any further discharges. This is a second violation. A written warning was issued.	Yes	Warning	Yes
101	02/17/10	Municipal	Evergreen Envir	412	Front St	Leaking storm drain pipe causing damage to concrete driveway.	Site inspection with Caltrans, PW street and engineering found depression in concrete driveway to building access. Repaired sink holes located east of the site.	No	N/A	N/A
102	02/22/10	Construction		861	Grossmont	Neighboring property has house demo, construction with no BMPs. Sediment tracking.	Contacted the property owner and advised to install required BMPs per erosion control plan and to sweep all paved areas daily.	Yes	Verbal	Yes
103	02/23/10	County		9739	Carta Ln	Soil erosion from recent rains causing damage to retaining wall.	Advised the complainant to contact the storm water hotline for the county.	No	N/A	N/A
104	02/23/10	Residential		1580	Primrose Dr	Construction underway with no BMPs inplace. Sediment discharge to street.	Storm water contacted the property owner and advised to install BMPs and sweep all paved areas	Yes	Verbal	Yes
105	02/24/10	Residential		1514	Wyatt Pl	White ford truck parked on the street leaking oil.	The vehicle owner at this address was contacted and advised to place a drip pan under the vehicle that was found parked across the street from the residence.	Yes	Verbal	Yes
106	03/02/10	Residential		585	Ballantyne	Large amount of palm fronds and leaves in the gutter.	Site inspection found unimproved front yard and driveway causing minor tracking and sediemnt discharge. Street crew notified. Educational materials were left at the door.	No	N/A	N/A
107	03/02/10	Residential		1314	Cuyamaca	Overflowing dumpster in alley.	Site inspection found no storm water issues. Mater ws referred to zoning enforcement.	No	N/A	N/A
108	03/05/10	Commercial	D 3 Equipment	1475	Pioneer Way	Wash rack water being discharged to the street.	Site inspection with business owner found no discharge, Area needs sweeping. Origional discharge was due to dewatering after weekend rains.	Yes	Verbal	Yes
109	03/09/10	Commercial	A Mart	250	Marshall Ave	Private lateral overflow	PW crew responded placing absorbent and vac. 10 gals entered storm drain inlet. The property and business owers responded. Corrected and cleaned	Yes	First	Yes
110	03/10/10	Residential		1043	Sunshine Ave	Neighbor directing water onto R/Ps property.	Matter referred to zoning enforcement.	No	N/A	N/A

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
111	03/11/10	Residential		1274	Bermuda Ln	Muddy runoff erosion from neighboring property.	Site inspection found no erosion or significant sediment tranfer from the property, Neighboring properties have unprotected slopes to undeveloped street.	No	N/A	N/A
112	03/23/10	Commercial	Apartments	1022	Broadway	Dog feces is being dumped into the open channel at the rear of the property.	Site inspection found no feces in the channel. There was a small amount at the rear of the parking lot. A tenant was told about the violation. The feces was cleaned the next day.	Yes	Verbal	N/A
113	03/23/10	Commercial		1014	Broadway	Employees at Inky's Bike told PW staff member that someone is living at the rear of the property and dumping debris into the channel.	Site inspection found no trash in channel. Spoke to property owner and advised that zoning enforcement would be contacting him re: occupied camper at rear of property.	No	Verbal	N/A
114	04/05/10	Municipal			Forrester Creek	Report of strong odor of fuel in channel.	Site inspection found no odor of fuel in channel location or upstream.	Yes	N/A	N/A
115	04/06/10	Commercial	Valley Foods	1275	Main St	Roof down spout repositioned away from swale to discharge to sidewalk at north side of building.	Business owner was contacted and advised to remove or reposition the down spout to drain into the vegetated swale.	Yes	Warning	Yes
116	04/07/10	Commercial	Main St. Car W	1437	Main St	Wash water was discharging to the street through curb drain.	Site inspection found wash water discharging through curb drain and flowing west. Business owner was contacted. Will conduct follow up with owner present on 4/14/10.	Yes	Verbal	Yes
117	04/07/10	Mobile	Auto Salon Vehi	1080	Johnson	Sonducting vehicle washing withno BMPs in place to prevent wash water from entering the street. None entered the storm drain.	The business owner was contacted on site and advised to cease washing until proper BMPs are used.	Yes	Warning	Yes
118	04/12/10	Construction	Scantibodies Inc	1068	Broadway	Discharge of pollutants into te storm drainage system; failure to provide protection for debris and stock piles during a rain event.	Contacted the construction supervisor and directed to install required BMPs. Written warning was issued.	Yes	Warning	Yes
119	04/27/10	Residential		217	Orlando St	Drain located on property clogged with debris causing flooding on adjacent property.	Site inspection found no flooding or storm water violations, concern is civil matter.	No	N/A	N/A
120	04/28/10	Commercial	Fletcher Hills Town and County F		Navajo Rd	Inlet filter near Strarbuck's not maintained.	Site inspection found waer pooled in drain filter with debris. Property manager was contacted and advised to have all filters serviced.	Yes	Verbal	N/A
121	04/30/10	Commercial	WSC Demolition	522	Front St	Water from equipment washing discharging to the street.	Contacted the business manager and advised to cease all washing activities which was done immediately.	Yes	Verbal	Yes

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
122	05/10/10	Commercial		790	Washington	Paint washing residue discharged to neighboring property through under curb pipes. Discharge possibly entered lot storm drain.	Site inspection found paint residue in rear lot of complex ending at the lot drain. No evidence of paint in the box. The property owner was contacted a nd advised to clean the area and protect the drain.	Yes	Verbal	Yes
123	05/17/10	Construction	Steve Julius Co	350	Second St	Major T/I work with soil disturbance with no BMPs in place per erosion control plan.	Contacted the surperintendent on site and advised to install required BMPs immediately as listed in erosion control plans.	Yes	Verbal	Yes
124	05/17/10	Residential		232	Murray Dr	Overgrown brush and transients pose a fire threat.	This matter was referred to the PW yard for review and action. The complainant was advised of the action.	Yes	N/A	N/A
125	05/17/10	Residential		133	Orlando St	Oil spill in grass area and street in front of apartment complex.	No oils spill found, grass burned in area only. No oil in street.	No	N/A	N/A
126	05/18/10	Residential		651	Benton Pl	Water flowing out of crack in the street.	Matter referred to street division and Helix water.	No	N/A	N/A
127	05/20/10	Residential		1338	Naranca Ave	Drainage ditch slope not adequate.	Contacted the complainant and advised to Consult PW regarding an easement at the rear of properties.	No	N/A	N/A
128	05/24/10	Residential		1556	Fargo Ave	Resident dumping concrete wash in gutter.	Site inspection found concrete residue in curbline. Street sweeper recently passed through. Educational material left with P/O's daughter.	Yes	Verbal	N/A
129	05/28/10	Residential		681	Skyview Ct	Broken private lateral in front yard discharging into the vegetation.	Site inspection found no broken lateral and no odor of discharge.	No	N/A	N/A
130	05/28/10	Residential		660	Sandra Ln	Illegal grading in back yard altering grade. BMPs needed.	Awaiting formal referral and notice to property owner.	No	Verbal	Yes
131	06/01/10	Residential			Mary st (Vacant Lot)	Weeds and trash on property.	PW crew to remove couch in ROW and matter referred to zoning enforcement for weed removal.	No	N/A	N/A
132	06/03/10	Commercial	American Scisso	400	Johnson	Lot removal and repaving an area in excess on one acre without proper pemits and with no BMPs in place at channel or exit.	Contractor contacted on site and advised to cease lot work until proper permits obtained. Official stop work to be issued.	Yes	Verbal	N/A

Reports of Illicit Discharges/ Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
133	06/04/10	Commercial	Julio Cesar Cha	464	Main St	Discharge from irrigation, stains in curb line from concrete repair.	Contacted the business owner and advised to cease all discharges and to clean the concrete residue in the curb line.	Yes	Verbal	Yes
134	06/07/10	Commercial	Pinnick, Inc Ge	685	Front St	Vehicle washing on lot with ater discharging to street.	contacted the buinsess owner and instructed to cease all vehicle washing activity.	Yes	Verbal	Yes
135	06/08/10	Commercial		127	Lexington	Paint residue being washed into the street from unprotected wash out area at rear of building.	Contacted the contractor and business owner and told to cease all paint wash out unless proper BMPs are implemented and to clean the remaining residue using a dry method.	Yes	Verbal	Yes
136	06/09/10	Commercial	Gas Depot	490	Second St	Business conducting lot washing in early morning hours with no BMPs in place.	Contacted the business owner on site. He said there was no lot washing being done.. He was told to remove a hose from the south side of the building. There was no evidenve of washing.	Yes	Verbal	N/A
137	06/09/10	Residential		1610 to 26	Nicholas Pl	Draining washing machine dirty water into the storm drain channel.	Door tags left at three residences that appear to have discharge pipes to channel.	Yes	Verbal	Yes
138	06/14/10	Commercial	Foothills Christia	277	Broadway	Approx. 100 yards of dirt dumped on site for a youth bike course covering up drains.	PW crew inspected the site and determined that the matter should be referred to zoning or planning.	No	N/A	N/A
139	06/19/10	Residential		626	La Sombra Dr	White residue discharging from pipe entering the strom drain inlet.	Contacted the property owner who said discharge was from pool cleaning….diatomaceaous earth. They were told to cease all furture discharges to the stor drain. Storm water educational materials were issued.	Yes	Verbal	Yes
140	06/24/10	Commercial	Kia Motors	541	Johnson Ave	Discharge form vehicle wash area flows to street.	Site inspection found discharge from vehicle wash at rear of building. The roof for vehicle wash is inadequate. The service manager was contacted on site and advised that corrections must be made to the wash area. He said it is de-ionized water from the anti spotting process.	Yes	Verbal	Pending
141	06/24/10	Commercial	Chappelle's Exh	1419	Pioneer	Water from equipment cleaning discharging to the street. Work being conducted in the driveway.	The business owner was contacted on site and advised to cease all vehicle parts washing outside. Storm water educational materials were issued.	Yes	Verbal	Yes
142	06/29/10	Commercial	BJ's Equipment	1717	Main St	Discharge of equipment wash water into the storm drain system.	A written warning was issued. The business manager ws instructed to clean the catch basin filter maintain the area.	Yes	Written	Yes
143	06/29/10	Residential		856	Second St	Occupied camp trailer, black water being dumped in driveway.	No evidence of waste water discharge in driveway. A camper located in the driveway not ocupied at time of inspection. Matter referred to zoning enforcement.	No	N/A	N/A

City of El Cajon
AS A COPERMITTEE OF THE SAN DIEGO RIVER WATERSHED

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT 2010 – 2011

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EXECUTIVE SUMMARY

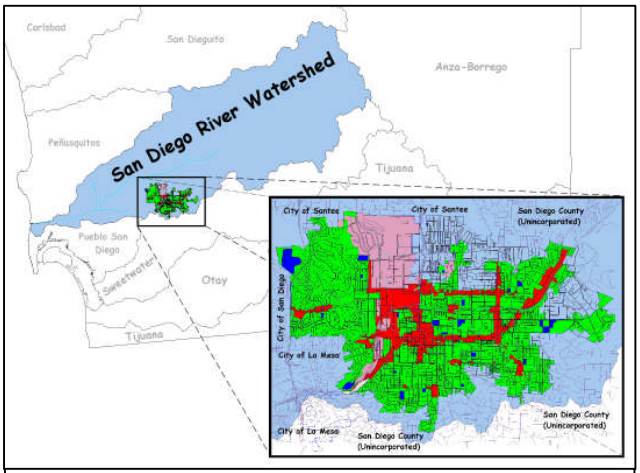

The City of El Cajon in the Context San Diego County and the San Diego River Watershed

The City of El Cajon (City), located in east San Diego County, is the eastern-most incorporated City within the San Diego River Watershed (Watershed). With 14.48 square miles and nearly 97,000 citizens, the City plans with other regional jurisdictions and acts locally to maintain the health of the San Diego River Watershed. A healthy watershed means thriving environmental communities and a state of well being among its constituency. Maintaining watershed health is achieved through compliance with Federal Clean Water Act requirements as stated in the San Diego County Municipal Storm Water Permit, Order No. R9-2007-0001, through water quality monitoring, biological assessments, and municipal vigilance to balance growing human demands with a healthy environment.

Permit Year 2010-2011 (PY 2010-11) marks Permit Year four (PY4) under the San Diego Region Order No. R9-2007-0001 (municipal permit), which renewed Order No. 2001-001. The renewed municipal permit was adopted in January 24, 2007. Efforts started with jurisdictional planning and implementation, proceeded to local program assessment and continues to evolve into multi-jurisdictional and watershed actions. As in previous years, the City continued its focus of assessing program component effectiveness from Best Management Practices (BMP) implementation and determining how preventive measures affect watershed health from a local perspective. Many of the program's components have developed into BMP programs, whereby inspections can determine effectiveness of pollution reduction measures.

This Annual Report presents the City's efforts during the 2010-11 reporting period. Covered in this Report is the move toward adaptive management of the updated Jurisdictional Urban Runoff Management Program (JURMP) implementation and integration of general watershed principles for the San Diego River Watershed into local planning. Both the San Diego River Watershed Urban Runoff Management Plan (WURMP) and the City's JURMP were updated and submitted to the San Diego Regional Water Quality Control Board (RWQCB) on January 24, 2008, as required by the new municipal permit and extension. It is the responsibility of the City to balance jurisdictional and watershed requirements and maintain a healthy watershed within its jurisdiction.

Critical for the remaining permit cycle are Watershed adjustments to the City's Storm Water Pollution Prevention Program and deciding where best to place City efforts that will minimize or eliminate polluted runoff. Forrester Creek, the main tributary drainage channel in El Cajon, is a listed 303(d) waterbody with impairments for pH in the upper part (El Cajon and San Diego County) and for total dissolved solids (TDS) and fecal coliform in the lower portion within the City of Santee). El Cajon considers these impairments to be the center of the Clean Water Act

objective "to restore the Nations Waters" to a chemical balance able to support the State's Basin Plan designations for fishable and swimmable waters. A BMP to Pollutant Reduction Diagram was developed to connect BMPs to pollutants that are targeted for reduction as a result of their listing as 303(d) pollutants in Forrester Creek. This diagram and discussion is provided in the Introduction in Section 1.

On November 12, 2010, USEPA approved the 2008-10 Clean Water Act (CWA) Section 303(d) List that includes listings for the San Diego Region. The revised list includes phosphorus and selenium.

This JURMP Annual Report for PY4 consists of 15 Sections, and is organized as follows:

Section 1 - Introduction. Describes the purpose of this Annual Report, the overall vision of the City, goals and objectives of the Storm Water Pollution Prevention Program; the regional integration of Watershed Health; assessment of program effectiveness to guide future actions, and Forrester Creek-specific criterion that relate to San Diego River Watershed and River health.

Section 2 - Development Planning Component. Lists the planning actions and building permits reviewed and the role of storm water in re-defining new development designs and describe the ways of confirming that commitment to storm water becomes a design reality.

Section 3 - Construction Component. Summarizes reviews of Erosion Control Plans, inspection of high priority sites, interactions with other City departments, and conditions during rainfall events.

Section 4 - Municipal Component. Summarizes the activities for municipal facilities, the sanitary sewer program, capital improvement projects affecting storm water quality, and municipal staff training.

Section 5 – Industrial and Commercial Component

- **Industrial Component**. Summarizes the activities conducted to assess the effectiveness of implemented industrial BMPs and better define the pollutants affecting storm water quality.
- **Commercial Component.** Summarizes the inspections, enforcements, and educational efforts to assess the effectiveness of implemented BMPs and better define the pollutants affecting storm water quality by business type.

Section 6 - Residential Component. Summarizes the challenges with educating the public, interactions with citizens, educational efforts, and enforcement at the residential level.

Section 7 - Illicit Discharge Detection and Elimination Component. (This section will be part of a separate submittal due on December 15, 2011) Summarizes the City's dry weather program that identifies illegal dumping and illicit connections to the storm drain system. An upstream/downstream analytical assessment was completed during the dry weather season.

Section 8 - Education Component. Summarizes programs implemented by the City to educate municipal employees, developers, contractors, business owners, the general public, and other priority groups

Section 9 - Public Participation Component. Summarizes the outreach efforts coordinated on a regional level through the Outreach Workgroup.

Section 10 - Fiscal Analysis Component. Reviews and compares previous storm water expenditures while projecting future program funding requirements.

Section 11 - Effectiveness Assessment Component. Provides summary tables for the existing and development components indicating estimated and actual pollutant-containing material reductions at the source or from preventive measures.

Section 12 – Special Investigations. Summarizes any special investigations that may have been conducted during the current reporting period.

Section 13 – Non-Emergency Fire Fighting. Summarizes non-emergency fire-fighting activities/training conducted during the current reporting period.

Section 14 – JURMP Revisions. Summarizes any changes or revisions to the JURMP that may have occurred during the current reporting period.

Section 15 - Conclusions and Recommendations. Summarizes the conclusions stated from each component and makes overall program conclusions and provides recommendations for future permit years.

Appendices contain City-developed checklists, guidance documents, outreach materials, lists of priority sites or facilities, correspondence and presentations to City staff and the local community.

The City achieved a number of important accomplishments during this reporting period, both in its role as a Copermittee, and through participation in the implementation of general watershed principles. Across the City, businesses and citizens, together, function within the JURMP and watershed to assist in identifying storm water issues and help prevent pollution from being discharged.

City Action Highlights include:

- Continue with a strong enforcement program and implementation of City Ordinances 4686 (JURMP) and 4939 (updated Standard Urban Storm Water Management Program (SUSMP) requirements).
- Continued implementation of a City-Wide Integrated Pesticide Management Program.
- As a City with little open space and a propensity for redevelopment, the City pursues common sense approaches to go beyond Permit compliance and achieve defensible, cost-effective storm water management practices for businesses and citizens through the SUSMP conditioning process.
- The City continued its expanded scope of Dry Weather Monitoring Program. In doing so, it has made substantial strides in detecting and eliminating discharges and characterizing receiving waters and other conveyance discharges within its jurisdiction.
- Conducted upstream/downstream dry weather analysis in Forrester Creek to quantify the amounts of pollutants discharged within the City's jurisdiction.
- Inspected a total 190 Commercial and Industrial Facilities, 129 industrial and 61 industrial facilities. All facilities that posed a high threat to water quality (TTWQ) were

inspected. Commercial and industrial facilities were issued 9 warnings and 2 citations for various violations of the City's storm water ordinance.

- Conducted inspections at 7 high priority construction sites. The City conducted monthly inspections at all high priority construction sites during the dry season and at least biweekly inspections during the wet season. The inspections revealed several violations or compliance issues and the City issued 5 enforcement actions, 2 of which were monetary citations.
- The City issued a total of 12 warnings and 5 citations for various violations of the City's storm water ordinances.
- The City's inspection programs emphasized pollution prevention BMPs such as clean trash storage and disposal areas; power washing BMPs; and maintenance of sewer laterals in addition to minimum required BMPs.
- The City's comprehensive street sweeping program swept 17,019 miles of streets and collected 3,746 cubic yards of materials from City streets. Sediment and silt accounted for 1,562 cubic yards, organic material accounted for 959 cubic yards, and trash accounted for 219 cubic yards.
- Collected 2,740 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins.
- Actively participated in the Management Committee, Regional Planning Workgroup, Outreach Workgroup, Regional Monitoring Workgroup, SUSMP/HMP Workgroup, Industrial/Commercial/Municipal Workgroups and the WURMP Leads Workgroup.
- Continued active participation with the San Diego River Watershed Workgroup.
- Continued efforts to reach out to community members on a wide range of urban runoff and storm water quality topics through approximately 266,000 copies of articles, brochures, and mailers.
- Conducted over-the-counter assistance and provided personalized residential BMP information to homeowners for small additions, remodels, pools and retaining wall projects.
- Continued the transition to report fiscal analysis based on the Standardized Fiscal Analysis Method and Format.

This reporting period is one of continued program assessment and focus of local actions to move toward a watershed protection program. This last year, the City continued to meet the new challenges of working within a watershed. The City continues in the role of the Lead Copermittee for the San Diego River Watershed. The City feels strongly that it has made significant strides looking within its jurisdictional boundaries as well as organizing inter-jurisdictional programs. Continuing improvement and refinement is the name of this storm water pollution prevention program as we continue to gather information and experience about how City activities in general affect the local receiving waters and the health of the San Diego River Watershed.

This Annual Report provides programmatic information and further steps in connecting activities to a significant movement for improving receiving water quality by the City of El Cajon. Over

the last year, the City has continued its effort at linking municipal activities to receiving water quality. Additional connections to receiving water quality from the implementation of BMPs will follow as information is gathered and assessed using a Long-Term Assessment process.

A listing of storm water contact personnel is provided as part Appendix C to help facilitate communication within the City and for the public and outside agencies to contact the appropriate City staff. A summary of the sanitary sewer maintenance and operations is also included in Appendix D.

CERTIFICATION

"I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Rob Turner — 9/14/11

Signature — Date

Rob Turner, City Manager (Acting) — (619) 441 1718

Printed Name, Title — Phone Number

SECTION 1 **INTRODUCTION**

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SECTION 1 INTRODUCTION

1.1 INTRODUCTION

With each Permit Year (PY), the City of El Cajon reviews, assesses, and progresses towards a watershed approach to protect surface waters from urban runoff pollution. A continued emphasis towards identifying sources of pollutants and minimizing specific 303(d) impacts to Forrester Creek is the focus of this second year in the Permit Cycle (Order No. R9-2007-0001).

Our Environment:
It's a Living Thing!

The typical steps for developing a pollution prevention and source control program are summarized below and discussed in more detail in Section 11, Effectiveness Assessment.

1. **Identify the issue.** Define each issue.
2. **Identify and assess sources.** Sources are identified by prioritizing based on location and type of business.
3. **Determine available control strategies**. To identify possible control strategies for each source.
4. **Evaluate control strategies**. To determine which control strategies are most likely to achieve measurable results.
5. **Establish a goal.** A goal may be set at any point during the development process. The goal is the desired outcome.
6. **Implement program.** Part of program implementation is selection of an effectiveness measurement tool to assess the program.
7. **Evaluate effectiveness.** Based on the effectiveness measurement, determine what has been learned.
8. **Modify program.** The results of the effectiveness measurement will help to determine the future direction for the program.

Described in this Fourth Permit Year (PY4) Annual Report is the implementation and collected information for each Permit component. Sections 2 through 11 highlight component accomplishments, activities, or areas of achievement for Development and Planning; Construction; Municipal; Industrial and Commercial Development; and Residential Development; Education and Outreach; Illicit Discharge, Detection and Elimination; Public Participation, Effectiveness Assessment; and Fiscal Analysis.

1.2 REGULATORY FRAMEWORK

Background

The City of El Cajon's (City) Jurisdictional Urban Runoff Management Plan (JURMP) was developed pursuant to Order No. 2001-001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758, the area-wide municipal separate storm sewer system (MS4) permit. The MS4 permit was established pursuant to Section 402(p) of the Federal Clean Water Act, which requires all point source discharges of pollutants into waters of the United States, including discharges from municipal separate storm sewer systems, to be regulated by a NPDES permit. On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), adopted Order No. R9-2007-0001, NPDES Permit No. CAS0108758 (Permit), to the City and 20 other Copermittees, for discharges of urban runoff from MS4s into the receiving waters within the SDRWQCB's jurisdiction.

The City is a participant and partner in the San Diego River Watershed along with the Cities of La Mesa, San Diego, Santee, and the County of San Diego. A watershed approach to storm water pollution provides the wider view of runoff impacts and requires jurisdictional approaches to include neighboring jurisdictions in future planning and reporting efforts.

The PYs are summarized as follows:

- PY6 - July 1, 2006 through June 30, 2007, preparing for issuance of a new permit containing watershed/regional permit requirements supported and subsidized by jurisdictional efforts.
- PY1 - July 1, 2007 through June 30, 2008, modifying and enhancing the storm water program to comply with the new Municipal Permit, R9-2007-001. New comprehensive JURMP prepared to create a detail framework of the program under the new permit.
- PY2 – July 1, 2008 through June 30, 2009, reassessment of initial JURMP implementation with refinements and reimplementation, as necessary.
- PY3 – July 1, 2009 through June 30, 2010, , as the City's programs continue to mature, the City focused on watershed issues, including pollution prevention and education and continued to refine and improve the City's programs.

Current and Future

- PY4 – July 1, 2010 through June 30, 2011, adopted final regional model SUSMP and reassessed initial JURMP implementation with refinements and reimplementation, as necessary.

1.2.1 Water Courses and Receiving Waters

The definition of the City's Storm Drain System is broad enough to include streets, gutters, inlets, catch basins, channels (lined and unlined), creeks, and streams. Our storm drain system starts at a facility's property line to the public right-of-way. By making such a distinction, it is clear to maintenance and storm water crews when it is the responsibility of the City to clean spills or illegal dumping of materials. If such a discharge occurs on private property and the discharge enters the City storm drain system, the property and business owner/contractor is

contacted and educated on storm water requirements for their type of business. Property and business owners are charged for cost-recovery of City staff involvement.

The goal of PY4 and future program years will be a continuing focus on impairment of Forrester Creek with the ultimate goal of eliminating the impairment on Forrester Creek, and meeting the objective of the Clean Water Act to maintain and restore the chemical, physical, and biological integrity of the Nation's waters.

Table 2 lists the major storm water conveyance systems and describes the type of channel. Most conveyance systems are concrete-lined, making them easy to maintain, but present other types of challenges such as:

- Elevated pH (above 9)
- Shelter for homeless populations
- Trap for air blown trash and debris
- Easy target for illegal dumping

Table 2 – Storm Water Conveyance Systems

Water Courses	Type of Channel
Forrester Creek	• Open, concrete-lined trapezoidal channel • Underground culvert
Broadway Channel	• Open, concrete-lined channel • Underground culvert
Washington Channel	• Open, concrete-lined channel • Underground culvert
County Ditch	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel
Fanita Channel	• Underground culvert • Open, concrete-lined channel
Third Street Lateral	• Open, concrete-lined channel • Underground culvert
Fletcher Parkway Channel	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel

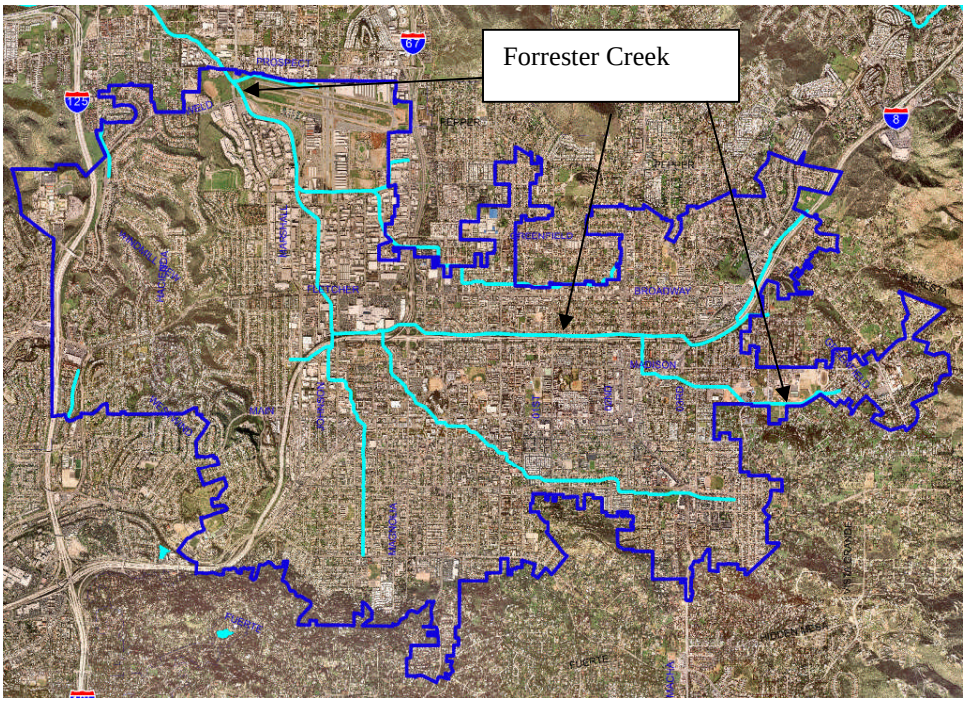

The picture to the left shows the City boundaries, Forrester Creek and the major channels within the City.

1.2.2 Approach and Changes to the Program

Approach

As the City becomes more experienced with its own programs and with what is working and what is not, the City modifies the implementation and management of its Storm Water Program. This Adaptive Management is a dynamic process of improving management activities incrementally, as decision makers learn from experience and better information and analytical tools become available. It involves checking progress made in achieving water quality goals, adjusting the management decisions accordingly, rechecking and readjusting – all the while incorporating new data and scientific knowledge. Beginning in early 2008 and continuing through PY4 (2010/2011), the City of El Cajon is developing a Storm Drain Master plan. Once complete, the Storm Drain Master Plan will provide the City with additional tools to assess and achieve water quality objectives. Adjustments to goals and objectives are expected to occur due to unforeseen circumstances and an unpredictable future.

One approach the City continues to implement (through education and training) is to change pollution prevention from the conventional recycle, reduce and reuse, to measures that target pollution prevention at the pollutant source. For Storm Water Pollution Prevention, consideration is given both to flow reduction measures and pollution source controls. Where water acts as the primary conveyor of pollution, pollution prevention measures can reduce pollution impacts by preventing pollutants from entering the flow, or by controlling the flow. In the development of an effective pollution prevention or management strategy, it is critical to understand how water cycles through the air and soil to ensure that measures are selected and implemented in an appropriate manner.

Changes to the Storm Water Program

Program Year 4 (PY4), and continuing into the next permit cycle, will be a continuing period of transition from purely jurisdictional to a jurisdictional/watershed approach. A few of the modifications include:

The San Diego River Flows Across Padre Dam

- Promoting a Clean Community, Healthy Watershed;
- Maintaining Watershed and River Health in the San Diego River Watershed;
- Focusing on 303(d) pollutants to restore Forrester Creek water quality;
- Continuing to assess the potential for increased flow from New or Re-Development projects and reduce flow from the current flow of approximately 94 gallons per minute during the dry season (a drop of 14 gallons per minute compared to last year's dry weather flow rate).
- Collecting information on upstream and downstream conditions to better assess areas (zones) where pollution is more probable or prevalent;
- Review of the analytical methods and a comparison to what information is actually needed to determine pollutant loads.

The City of El Cajon's Storm Water Pollution Prevention Program looks to pollution solutions in the form of Best Management Practices, proven procedures, or other new technologies. Table 1 (next page) lists the water quality and quantity issues in El Cajon and the possible solutions provided by the Jurisdictional Urban Runoff Management Plan (JURMP) components that comprise the Storm Water Pollution Prevention Program.

Table 1 – Storm Water Pollution Prevention Program Components

Water Quality or Quantity Issues	Pollution Solution
• Increased runoff (volume, frequency and duration) with impervious ground cover.	• Runoff control for flood and erosion protection (**New Development and Construction**) • Measures to maintain existing discharge rates. (**New Development/Redevelopment**)
• Increased base flows in streams due to changes in land use.	• Provide measures to maintain infiltration **(New Development/Redevelopment)** • Provide extended detention of runoff for low flows. (**New Development/Redevelopment**)
• Increased pollutant loadings with runoff.	• Provide measures to reduce pollutant sources, or remove pollutants, by settlement, absorption or filtration. (**Municipal, Industrial, Commercial, Residential Existing Development/Redevelopment**)
• Stream bed and bank changes due to erosion.	• Infiltration for control of runoff volume.(**New Development/Redevelopment**) • Rate of runoff control for erosion protection (**Construction/Redevelopment**)

Stronger move toward prevention of polluted discharges – distinguishing pollutant reduction from Pollution Prevention (recycle, reduce, reuse) activities, while connecting BMPs with the pollutant being reduced. A BMP to Pollutant Reduction Diagram is provided below and is the mainstay for the Existing and Development (including Construction) Components. This part of the transition occurred after Copermittees submitted a Framework for BMP Implementation in October 2003.

Inspection data collected under the original system was translated into BMP implementation results. The BMP implementation results data can be used to help prioritize follow-up actions, including inspections and education efforts in future program years.

BMP to Pollutant Reduction Diagram (See Following Page for Details)

Pollutant to BMP Table
BMPs target the reduction or elimination of a primary pollutant (sediment or fecal coliform) or pollutant group (oil & grease).

↓

Facilities and BMP Table
Individual Facilities are Required to Implement the Minimum BMPs

↓

Summarize Facility Types with Pollutant Reduced Table
Combines Table 1 and 2 to connect pollutant to (high priority) facility type, such as industrial, commercial/restaurants, municipal, residential area, or SUSMP/Parking Lot through the implementation of BMPs. Allows the calculation of percentages for implemented BMPs for high priority facilities.

↓

Transition to Effectiveness Assessment
Percentages between 80-100 overall implementation are used to calculate a quantity of pollutant(s) prevented from entering the storm drain system and thus reduction in pollutants ultimately discharged.
Reasonable Assumption: If inspection was impromptu, results observed on inspection day, in general, represent conditions at the facility for the entire year.
Calculations: Determine an *average* (typical for facility) discharge of the pollutant containing material.

The BMP to Pollutant Reduction Diagram demonstrates how BMPs are connected to pollutants that are connected to water quality. Our difficulty lies in quantifying those pollutant reductions with accurate and defensible results. In Section 11.0, estimates as well as empirical data are used to assess the effectiveness of the City's Storm Water Program by showing how much pollutant-containing materials were diverted toward a better disposal avenue.

1.3 COMMITMENT AND PARTICIPATION

The City of El Cajon is committed to promoting the concept and practice of preventing pollution at the source. Preventing pollution will prevent environmental problems. This saves the public and private sector from loss of resources and the costs to correct environmental damage. Urban runoff management requires the simultaneous pursuit of several objectives. The City is committed to:

- Enforcement of the Municipal Codes for Urban runoff (ECMC 13.10) and New or Site Re-Development (ECMC 16.60).
- Prevention of pollutant discharges into Forrester Creek as part of the San Diego River Watershed.
- Protection of water quality, aquatic species, and watershed ecosystems.
- Promotion of environmental quality and social well-being.

1.3.1 Jurisdictional Implementation

Pollution Prevention continues to be the focus of the City's JURMP and Storm Water Pollution Prevention Program for businesses and citizens. Compiled information on amounts of pollutants prevented from entering the storm drain system has a direct correlation to any decrease in pollutant loads from entering receiving waters. Pollutant amounts removed from streets, roadways and the storm drain system, or that have been recycled, have a direct correlation to water quality.

Land use consists of residential, commercial, industrial, municipal, and educational with recreational facilities. The City is at a "built-out" stage where most construction is redevelopment. Successful implementation of the updated City's Standard Urban Storm Water Management Program (SUSMP) supports the reduction in flow from a pollution prevention perspective. Development and redevelopment proposals that trigger the SUSMP requirements must submit plans consistent with reducing flow and impervious areas and must consider storm runoff treatment before the project will receive final City approval and proceeding to actual construction.

1.3.2 East County Cities Teamwork

Beginning in the Permit Year of 2002/2003 and continuing through this current Permit Year (PY4, 2010/2011), the East County Cities Workgroup gathered to discuss and tackle issues specifically affecting water quality issues in the East-County-Cities Area. Some of these "East County" challenges include:

- Tackling storm water issues from a "sand" perspective
- Highly transient populations
- Locally-focused City Management
- Boxed-in, built-out Development

1.3.3 Regional Teamwork

The City participated in regional efforts to promote storm water management practices and educate businesses and citizens to conduct business and daily lives with respect for water quality. When possible, the City attended or was an active participant in the following events.

- Management Committee Meetings
- Outreach Workgroup
- Residential Sources Workgroup
- East County Cities Workgroup (a.k.a., San Diego River Watershed Workgroup) **
- Commercial/Industrial Workgroup **
- Regional Monitoring Workgroup
- Dry Weather Monitoring Workgroup

** - Chaired Workgroup

1.4 WATERSHED AND RIVER HEALTH

As stated in the Clean Water Act, the objective is to maintain and restore the chemical, physical, and biological integrity of the Nation's waters. To address this objective, watershed and river health for the San Diego River can be described in terms of unique biophysical, socio-cultural, and economic characteristics. Biophysiochemical components are a watershed's elements and functions (its chemical, physical, and biological processes), while socio-cultural and economic components are the values and benefits provided by a functioning healthy watershed. The water quality aspect and stream flow (as hydrological patterns) of the biophysiochemical component list and the recreational/esthetic values of the socio-cultural and economic components are the only subjects directly addressed in our City's permit under Order No. R9-2007-0001.

Biophysiochemical:

- Basin geomorphology
- Hydrological patterns (stream flow addressed in Municipal Permit)

- Water quality (addressed in Municipal Permit)
- Biotic community and habitat

Socio-Cultural and Economic:

- Breakdown and recycling of pollutants
- Regulation of storm water discharges
- Groundwater and aquifer recharge
- Recreational and esthetic values (addressed in the Basin Plan, but included in Municipal Permit by reference)
- Habitat values (protected species, fisheries, etc.)

In general, the factors that determine ecosystem and watershed health are universal. A healthy watershed is one in which these components are maintained with thriving and balanced communities. An immutable characteristic of upper Forrester Creek is the concrete lining of this channel. In the 1960's, Forrester Creek was modified with a concrete channel in order to provide flood control for the expansion of the Interstate Highway easterly toward El Centro.

In a built-out urban area such as the City of El Cajon, defining and achieving creek, river and watershed health is complicated by a highly altered landscape (concrete channelization of Forrester Creek, highly urbanized, little open-space) and continued urban-infill and growth within and upstream of its jurisdiction. Nonetheless, the City has a vision and initially a broad goal for watershed and river health. The vision states the desired future for the city with respect to watersheds and waterways. The goal states that the City ultimately aims at maintaining watershed and river health for water quality and hydrological patterns, quantitatively and qualitatively.

Although it is unrealistic and infeasible to re-create the environmental conditions that existed before the City's development, it is prudent to consider predevelopment conditions when assessing the health of Forrester Creek and the San Diego River. Information about historical conditions is useful in understanding current watershed processes and functions that are essential to downstream watershed and river health. In fact, healthy downstream conditions may best be served by continual efforts by the City to reduce and eliminate pollutant discharges to Forrester Creek, to the maximum extent practicable.

1.5 WATERSHED PLANNING

The City recognizes the importance of watershed management as a guiding principle for its water quality management of the San Diego River Watershed. As required by Permit Section J, a Watershed Urban Runoff Management Plan (WURMP) was developed during PY2 and refined during subsequent permit years. As a member of the San Diego River Watershed, the City attended and participated in establishing the Watershed program for the San Diego River area. There is a learning curve to transitioning certain activities from a jurisdictional to a watershed approach.

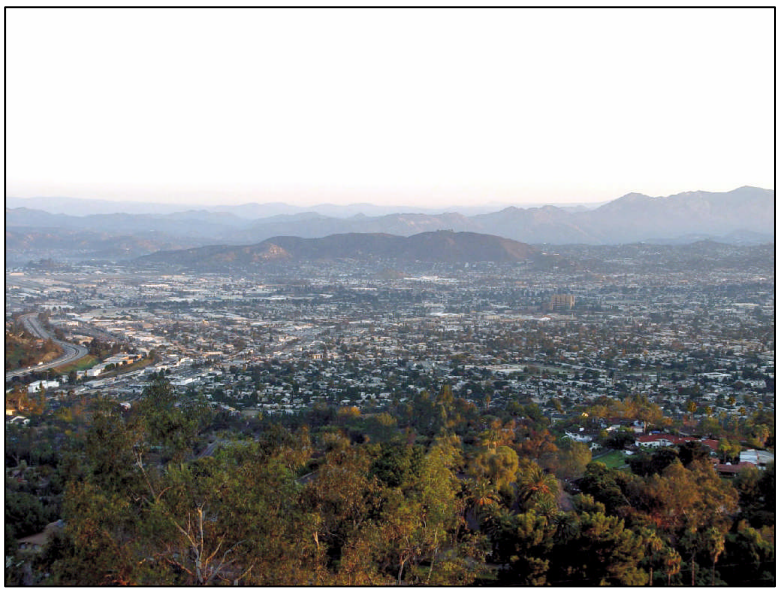

The picture to the right shows El Cajon as part of the inland watershed area. Much has been discussed during this permit year and an outline for the future watershed management is in place. The coming year will be one of implementation bringing new challenges to the storm water programs.

1.5.1 Water Quality and Stream Flow

Water quality has long since been the focus of many watershed programs. However, those programs and regulations have focused mostly on the chemical aspects of water quality, such as the concentrations of metals and organics, without considering how water quality is affected by the physical habitat in a stream or river. Water quality is greatly affected by the amount of large wood in the waterway, the river or stream's substrate (coarse gravel or fine sediment), the amount of native vegetation in floodplains and other aspects of physical habitat.

Physical habitat, in turn, is shaped in part by the larger forces of stream flow and hydrology. It has long been understood that the influence of stream flow, hydrology, physical habitat and water quality help determine which species are present within a watershed and the abundance, productivity and diversity of those species. For these reasons and others, the City defines its functional disposition in the watershed and river health as providing/conveying sustainable stream flow and hydrology and restoring and preserving water quality.

- **Stream Flow and Hydrology**: Maintain, or as necessary reduce, dry weather flow conditions using the Standard Urban Storm Water Management Plan to prevent an increase in runoff due to development and redevelopment projects, thereby protecting and improving watershed and stream health, channel function and public health and safety.
- **Water Quality:** Protect and improve surface water and groundwater quality and meet or surpass state and federal water quality standards and regulations.

Improving water quality within the City's jurisdiction will contribute to overall watershed health and will help keep the watershed as healthy as possible. John Muir said it best, "*When we try to pick out anything by itself, we find it hitched to everything else in the universe*".

1.6 GEOGRAPHICAL INFORMATION SYSTEM (GIS)

PY4 is the eighth year our City is using a Geographical Information System to present the location of El Cajon within the San Diego Watershed (See Figures following within this section). Base maps and information obtained from SanGIS provided the basic information to start layering jurisdictional and regional information. Deciding on the types of data and what needs to be shown are the biggest questions to answer.

In PY6 (2006/2007) the City created a new full-time GIS position to assist the Storm Water Program. The City is planning on implementing and developing an Enterprise GIS. To achieve this goal the City is currently dedicating more resources to a growing GIS staff and a new server.

One of the main benefits of GIS is improved management of your organization and resources. A GIS can link data sets together by common location data, such as parcel numbers, which helps departments and agencies share their data. Storm Water staff identified the Business License database as information easily integrated into a GIS to show and list the parcels within 200 feet of the five (5) major El Cajon drainage channels. The saying, "better information leads to better decisions" is true for GIS. A GIS is not just an automated decision making system but a tool to query, analyze, and map data in support of the decision making process.

The GIS maps presented in this PY4 Annual Report are used as tools by storm water staff to aid in the making of decisions that will be crucial to the direction of the Storm Water Program. Three maps follow this page showing:

- San Diego County Regional Watersheds
- San Diego River Watershed with a focus on El Cajon
- City of El Cajon showing Residential (green), Commercial (red), Industrial (pink), and School Districts (blue).

The information can be presented succinctly and clearly in the form of a map and accompanying report, allowing decision makers to focus on the real issues rather than trying to understand the data.

1.7 SIGNIFICANT ACCOMPLISHMENTS

The following significant accomplishments were completed and helped to maintain Watershed and River Health. Elimination of pollution is mainly due to routine scheduled municipal maintenance activities, municipal and commercial education efforts, outreach to the public and daily contact with citizens. The following is a summary of the major investments in reducing pollutant loads to receiving waters.

- Continued to implement and refine the Enforcement program for City Ordinances 4907 (JURMP) and 4908 (Standard Urban Storm Water Management Program (SUSMP) requirements). Streamlined enforcement activities with the inspection database to better coordinate and design correction actions.
- Continued to improve an inspection program for construction, commercial and industrial facilities based on Best Management Practices (BMP) implementation. Tracking BMP implementation and ensuring that all minimum required BMPs are installed and maintained properly helps ensure that pollutants are not discharges from those facilities. (List is continued following the three pages of GIS Maps).

Regional Watershed Map

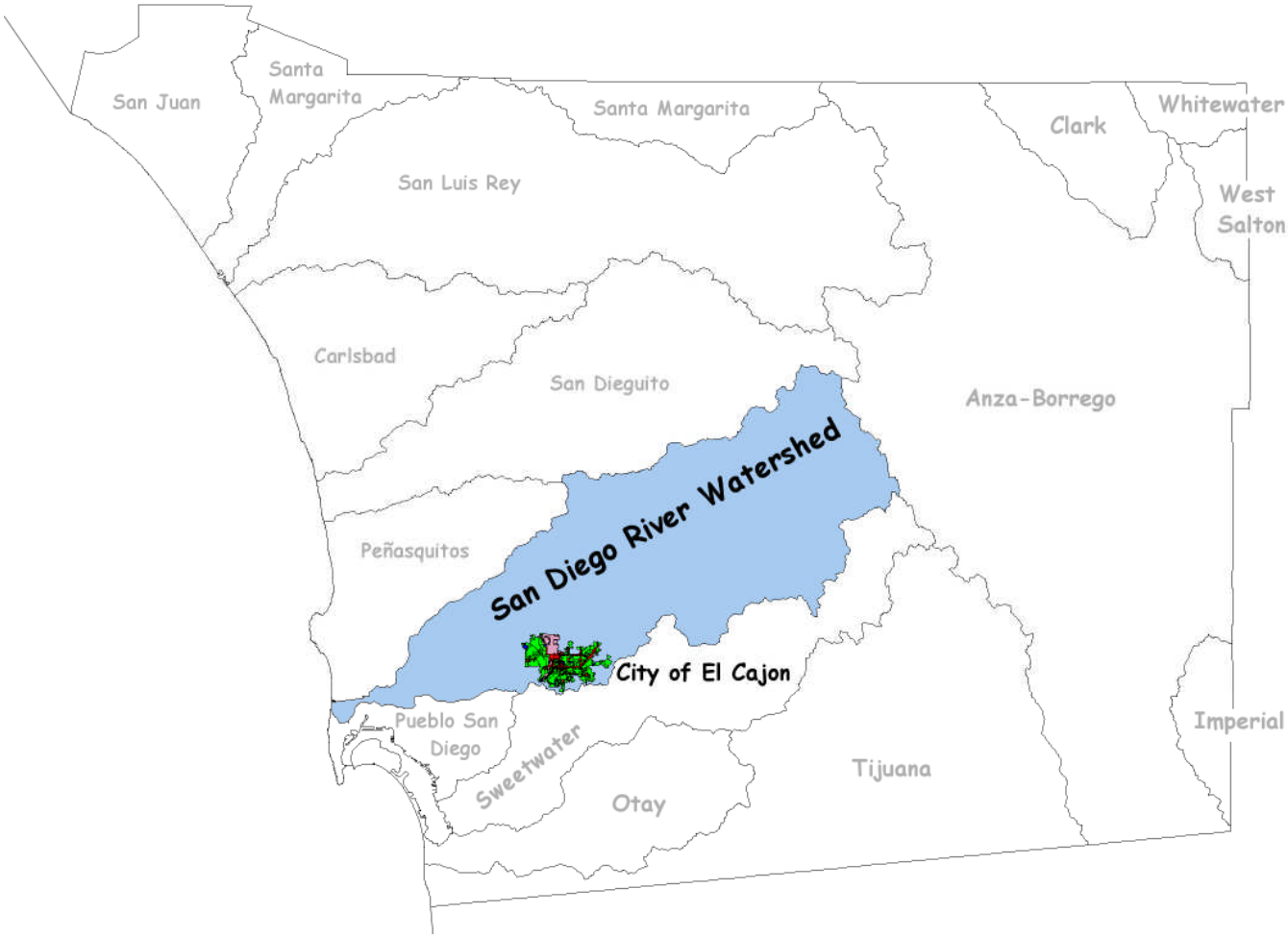

SD River Watershed Map

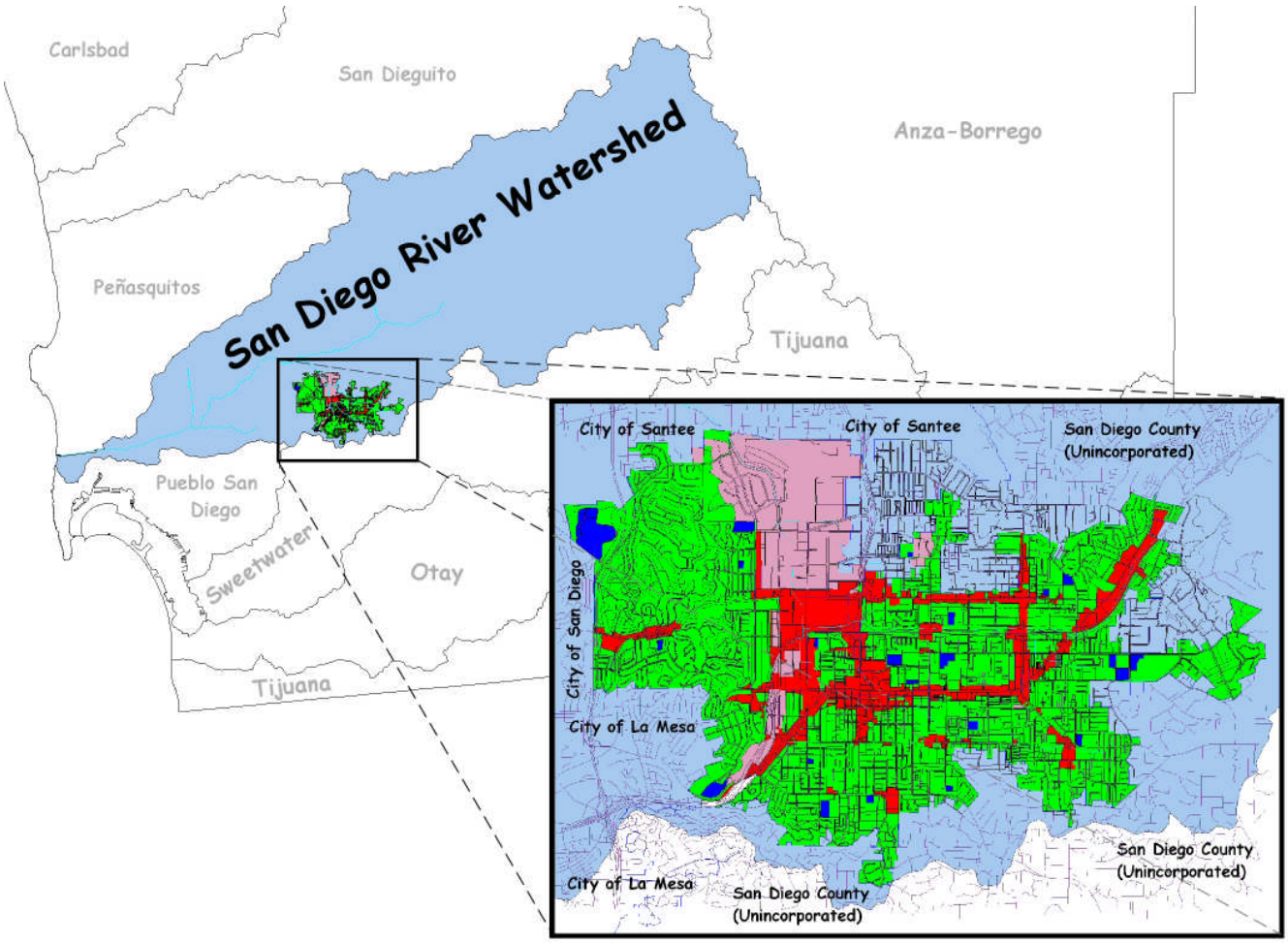

El Cajon GIS Map

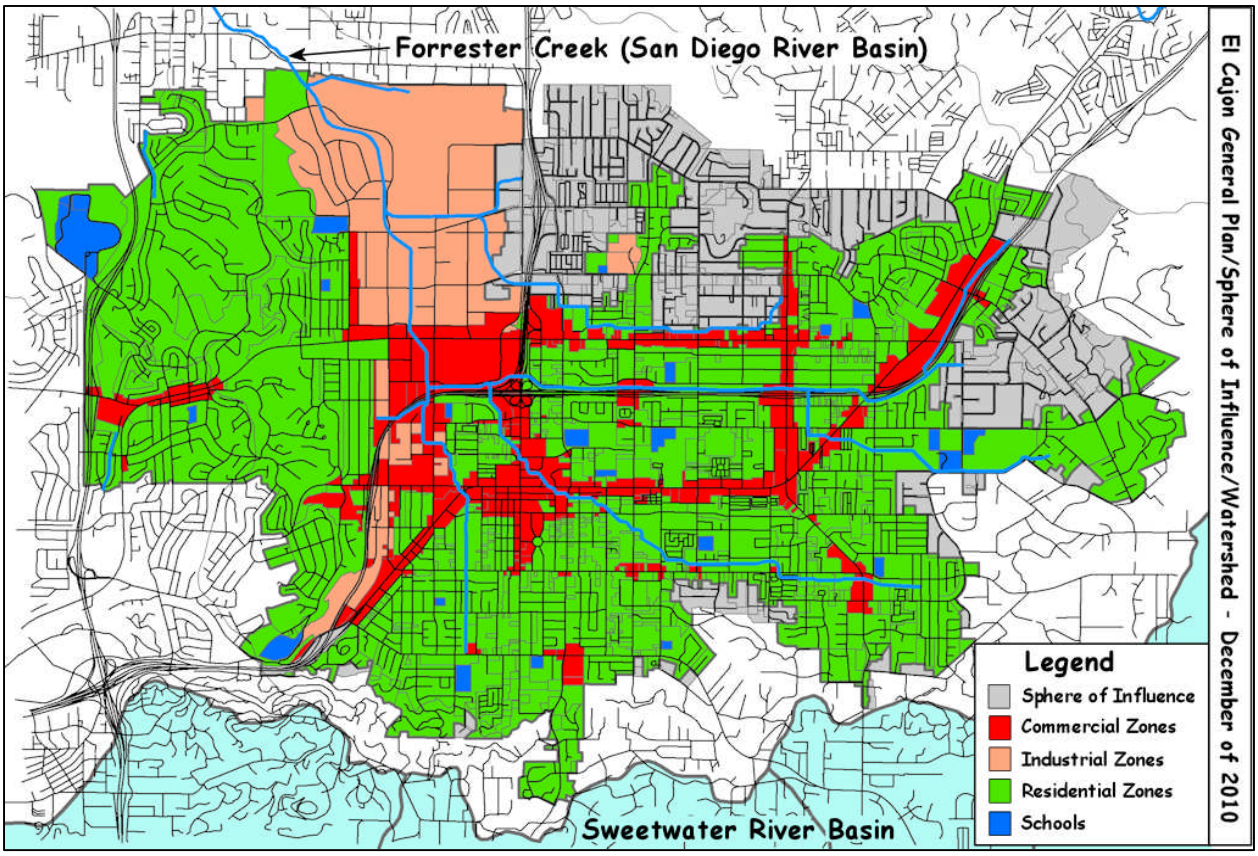

- Inspected and provided educational materials to 190 industrial and commercial businesses for compliance with the City's Municipal Code and the State's General Permits for construction and industrial activities.
- The City's comprehensive street sweeping program swept 17,019 miles of improved streets and collected 3,746 cubic yards of materials from City streets. About half (42%) of the material collected this year was sediment and silt. Many areas were swept twice per week.
- Collection of over 2,740 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins;
- Reached out to community members on a wide range of urban runoff and storm water quality topics through approximately 266,000 copies of articles, brochures, mailers, and over-the-counter sources.

1.8 RWQCB Compliance Reviews and Inspections

During this reporting period, no formal comments were received from the RWQCB regarding the Annual Report for PY3 (2009/2010). RWQCB staff did conduct an audit of El Cajon Storm Water Program SUSMP records during December of 2009.

1.9 Organization and Content of Annual Report

The Permit requires the submittal of an Annual Report to the SDRWQCB. This Annual Report covers the single permit year activities between July 1, 2010 and June 30, 2011. The Dry Weather Monitoring for 2011 (Section 7) will be submitted as a separate document on December 15, 2011.

The PY4 Annual Report presents and discusses implementation of the City's JURMP with a look at trends, BMP implementation, and overall JURMP effectiveness. Organization of the PY4 Annual Report is as follows:

- Executive Summary and Report Certification
- Section 1 - Introduction
- Section 2 - Development Planning Component
- Section 3 - Construction Component
- Section 4 - Municipal Component
- Section 5 - Industrial and Commercial Component
- Section 6 - Residential Component
- Section 7 - Illicit Discharge Detection and Elimination Component
- Section 8 - Education Component
- Section 9 - Public Participation Component
- Section 10 - Fiscal Analysis Component
- Section 11 - Effectiveness Assessment Component
- Section 12 - Special Investigations
- Section 13 - Non-Emergency Fire Fighting
- Section 14 - JURMP Revisions
- Section 15 - Conclusions and Recommendations

Charts, graphs, figures, and pictures are used to demonstrate the fulfillment of Permit and JURMP requirements or to highlight a special program accomplishment and event. Appendices provide additional information to validate activities or procedures.

Specific importance is placed on the assessment of JURMP implementation as this process is essential to determine if the City's program is reaching the Permit goal of improving receiving water quality. Some practices and structures (BMPs) listed in the JURMP to reduce or eliminate pollutants may prove to not be as effective as anticipated. An iterative process of BMP development, implementation, monitoring, and assessment focuses the JURMP such that JURMP programs are sufficiently comprehensive and effective to achieve Permit requirements and program objectives.

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SECTION 2 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

Over the last few years the City of El Cajon (City) implemented procedures to minimize the short and long-term impact on receiving water quality from new development and redevelopment. Major steps were taken to accomplish this goal under Order No. 2001-001. The City completed the requirements of the plan which include the following four components:

1. Assessment of General Plan
2. Modification of Development (Project Approval Process)
3. Revision of Environmental Review Process
4. Conducted Education Efforts Focused on New Development and Redevelopment

During PY2010-11 the process continued to evolve to incorporate requirements under new Municipal Permit Order No. R9-2007-0001 and SUSMP requirements. The City adopted updated Ordinances in PY1 and again during FY4 to comply with new requirements.

2.2 ASSESSMENT OF GENERAL PLAN

The General Plan provides a jurisdictional framework for directing land use and development decisions within the City of El Cajon. Therefore, it is important that the General Plan include provisions to address water quality. The City incorporates elements into the General Plan that provide an adequate foundation for controlling land use and development in a manner consistent with water quality objectives required by the Municipal Permit Order No. 2007- 0001 (Permit).

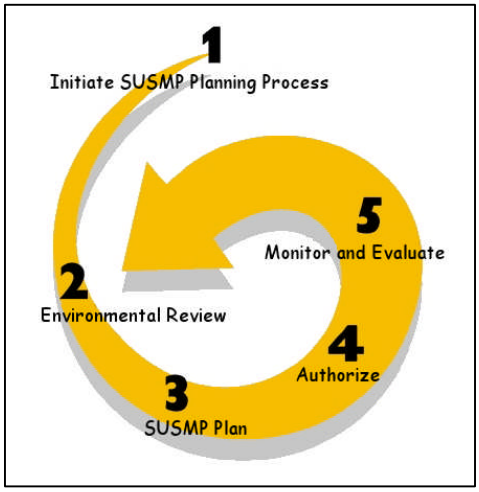

On January 14, 2003, Resolution No. 10-03 was approved amending the General Plan and adding storm water runoff policies and objectives. The amendment is consistent with the City's Jurisdictional Urban Runoff Management Plan (JURMP) and provides policy and objectives dealing with storm water runoff to guide decision-making as mandated in the Permit. A copy of Resolution No. 10-30 is included in Appendix A.2. A copy of the General Plan is shown on the following page.

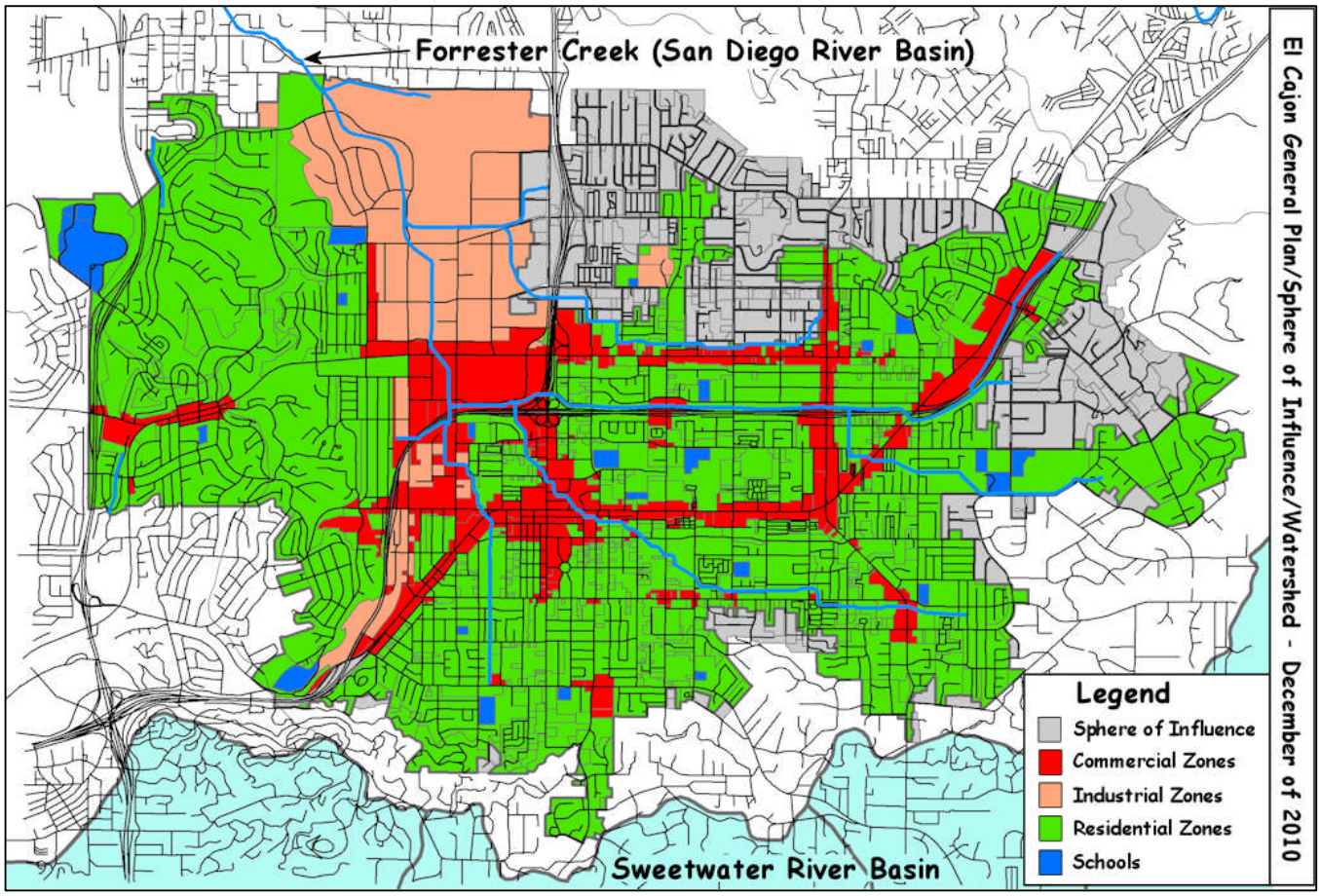

2.3 MODIFICATION OF DEVELOPMENT

2.3.1 Development Project Approval Process

Development becomes a project once the applicant completes planning action forms that describe the type of development proposed. The planning action is routed to many departments including Storm Water. Consolidated comments from Public Works are attached directly to the project as a list of conditions to the proposed planning action. Conditions are then reviewed and accepted by City Council making them enforceable. The City does not issue building permits until all requirements addressing water quality are fulfilled. Similarly, the City does not grant a final occupancy certificate until all storm water requirements are completed.

To protect our natural resource waterways, the City has continued ordinance development and implementation to address water quantity and quality. New and Redevelopment projects are reviewed for applicable BMPs to attain:

- Reduction in paved areas
- Maximize infiltration
- Detain or retain flows to reduce the speed at which water discharges to natural areas, and break Directly Connected Impervious Areas (DCIAs).
- Minimize potential pollutants from reaching the Municipal Separate Storm Sewer System (MS4) from grading and other construction activities by meeting the provision specified in Section D.2 of the Permit.
- Require Industrial applicants subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities to provide evidence of coverage under the General Industrial Permit.
- Require project proponents to provide proof ensuring ongoing long-term maintenance of structural Treatment Control BMPs.

2.3.2 Standard Urban Storm Water Mitigation Plan

The City participated with other Copermittees in revising and updating the BMP requirements that were listed in the Model Standard Urban Storm Water Mitigation Plan (SUSMP) that was submitted to the Regional Water Quality Control Board (RWQCB) in February 2002. Consequently, the City adopted Ordinance 4717 adopted on December 2002 to implement local SUSMP to reduce pollutants and runoff flows from all new development and significant redevelopment. The City revised the SUSMP ordinance in December 2007, which adopted Ordinance 4908, creating Municipal Code 16.60 for New and Re-Development pursuant to SUSMP requirements per Permit R9-2007-0001. The City, subsequently, adopted the final Countywide Model SUSMP in February 2010.

The City has incorporated the Hydromodification Management Plan (HMP) requirements into the City's Local SUSMP. The HMP was developed by a consultant, Brown & Caldwell, and regional workgroup and the draft HMP was submitted on January 24, 2009 with a revision submitted in May of 2009. After receiving comments from the RQWCB in June of 2009, the final HMP was prepared along an HMP Sizing Calculator. The final HMP was accepted by the RQWCB on July 14, 2010 and the HMP requirements were incorporated into the Local SUSMP in September of 2010 to meet the January 14, 2011 deadline. No priority projects in the City of El Cajon triggered interim HMP criteria, since proposed projects did not disturb more than fifty acres. All priority projects still under review have been and will continue to be assessed for HMP triggers. As of yet the City has not had to review calculations for HMP for any projects as all of the proposed projects have been deemed exempt from HMP sizing, having proposed to reduce the amount of impervious areas or at least to not exceed the amount of impervious area that was existing.

Last year the City also completed a comprehensive update of the El Cajon Sewer Ordinance to give the City legal authority to enforce the wastewater discharge requirements of Regional Water Quality control Board Order No. R9-2007-0005. For a complete summary of this Ordinance update, refer to Appendix D.3. For a complete copy of the new Sewer Ordinance, refer to Appendix D.4.

Projects triggering the New and Re-Development SUSMP requirements are:

- Housing projects with at least 10 units
- Commercial developments at least 1 acre in size
- Heavy Industry
- Automotive repair shops
- Restaurants
- Hillside developments that are 5,000 square feet or greater
- Developments within Environmental Sensitive Areas
- Parking lots 5,000 square feet or more or with 15 or more parking spaces potentially exposed to urban runoff
- Streets, roads, highways, and freeways with an area equal to or greater than 5,000 square feet
- Retail Gas Outlets

Projects trigger the SUSMP requirements during the initiation of a planning action or environmental investigation brought on by the California Environmental Quality Act (CEQA). The Storm Water section of Public Works reviewed a total of 42 planning actions, 1 of which was categorized as a high priority SUSMP project (please refer to Appendix A.2 for a list). A Capital Improvement Project (CIP) also met the SUSMP requirements and was designed reviewed, and constructed within PY2010-11 and prior to the adoption of the final HMP requirements. The City also carried over 1 other SUSMP project that has been under review since last year. Planning Actions and New Development projects are tracked using a MS Excel spreadsheet.

An example Storm Water Mitigation Plan (SWMitP) that includes a list of SUSMP conditioning requirements are given to SUSMP priority projects at the earliest planning stage (please refer to Appendix A.2 for sample SWMitP). BMPs and the pollutants that are targeted for reduction or elimination to the maximum extent practicable (MEP) are listed in Table 1.

Table 1 – BMP to Pollutants for New and Re-Development Projects

BMP	Primary Pollutants	303(d) Pollutants
Site and Facility Design	Flow	
Site Design and Landscape Planning – SD-10	Flow	
Efficient Irrigation – SD-12	Nutrients	**TDS** **Nutrients**
Storm Drain Signage – SD-13	Trash Oil & Grease Toxics	
Pervious Pavements – SD-20	Sediment Oil & Grease	**TDS**
Trash Storage Areas – SD-32	Trash Bacteria	**Bacteria**
Vehicle Washing Areas – SD-33	Metals Detergent	**TDS**
Detention Basin - TC-22	Trash Sediment Metals Bacteria Oil & Grease Organics	**TDS** **Bacteria** **Nutrients** **ODS (Oxygen Demanding Substance)**
Vegetated Swale – TC-30	Sediment Metals Oil & Grease Organics	**TDS** **Nutrients** **ODS**
Bioretention – TC-32	Sediment Oil & Grease Nutrients Trash Metals Bacteria Organics	**TDS** **Nutrients** **Bacteria** **ODS**
Media Filter – TC-40	Sediment Trash Metals Bacteria Oil & Grease Organics	**TDS** **Bacteria** **ODS**
Water Quality Inlet Filter – TC-50	Oil & Grease Trash	
Vortex Separator – MP-51	Trash Sediment	
Drain Inserts – MP-52	Trash Oil & Grease	
Underground Concrete Retention - Proprietary	Flow	

SUSMP projects must identify pollutants of concern based on anticipated and potential pollutants generated from the proposed project and implement BMPs that target the reduction or elimination of the identified pollutants to the MEP. Anticipated and potential pollutants generated by land use type are shown in Table 2.

Table 2 – Anticipated and Potential Pollutants Generated by Land Use Type

Priority Project Categories	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >one acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Once potential pollutants of concern are identified for the proposed SUSMP project, BMPs must be selected from a list of required and project specific BMPs provided below in Table 3. All site design criteria are applied to every SUSMP project while source and treatment controls are dependent upon site location and type of pollutants.

Table 3 – Site Specific BMPs

	New Development (Including Re-Development)									
	Home Subdivisions ≥10 units	Heavy Industry ≥1 acre	Commercial Development ≥1 acre	Automotive Repair Shops	Restaurants	Hillside Development ≥ 5,000 sq ft	ESAs	Parking Lots ≥15spaces; ≥ 5,000 sq ft	Street, road, highways, and freeway ≥5,000 sq ft	Retail Gasoline Outlets
General Site Design (Apply All)										
Control Peak Runoff Rates	X	X	X	X	X	X	X	X	X	X
Minimize impervious Areas	X	X	X	X	X	X	X	X	X	X
Conserve Natural Areas	X	X	X	X	X	X	X	X	X	X
Protect/slopes/and channels	X	X	X	X	X	X	X	X	X	X
Minimize effective imperviousness	X	X	X	X	X	X	X	X	X	X
SOURCE CONTROLS (Apply all that are Applicable)										
Storm Drain Message and Signage	X	X	X	X	X	X	X	X	X	X
Outdoor storage area design		X	X	X	X					X
Trash Storage Area Design		X	X	X	X					X
Loading/unloading dock area design		X	X							
Repair/maintenance bay design				X						
Vehicle/Equipment/Accessory washing area design				X						
Fueling Area Design										X
Proof of Control Measure Maintenance	X	X	X	X	X	X	X	X	X	X
TREATMENT CONTROLS (Apply at least two)										
Inlet Filters	X	X	X	X	X	X	X	X	X	X
Grass Strip Filter	X	X	X	X	X	X	X	X	X	X
Grass Swale Filter	X			X		X	X	X	X	
Detention/Infiltration Basin	X		X	X	X	X			X	
Porous Pavement Detention	X		X		X	X		X		
Porous Landscape Detention	X	X	X		X			X	X	
Infiltration Trench	X		X				X	X		
Media Filter	X	X	X				X	X		
Proprietary Controls						X				X
Other										

For PY2010-11, 5 SUSMP projects completed construction and included Treatment Control BMPs. Projects with SUSMP requirements that were completed and inspected for BMP implementation in 2010-11 are listed in Table 4. For the current inventory of all sites with Treatment Control BMPs and BMP implementation infeasibility analyses please refer to Appendix A.2.

Table 4 – Application of SUSMP Structural BMPs for Completed Projects

SUSMP Project	Detention Basin/Area	Inlet Filter(s)	Porous Pavement	Bioretention Basin(s)/Pervious basin/swale	Hydrodynamic Separator	BMP Facilities Maintenance Agreement
965 Arnele Ave. Toyota of El Cajon	NA	NA	X	X	NA	X
656 Front St.	X	X	NA	X	NA	NA
1341 E. Main St.	NA	X	NA	X	NA	NA
133 W. Main St.	NA	NA	NA	X	NA	NA
1301 N. Marshall Ave.	NA	NA	NA	X	NA	NA

One of the constructed SUSMP projects mentioned above was The Toyota of El Cajon project. This urban redevelopment project was a large, existing vacant commercial property, which was previously a Home Depot store and was mostly impervious. The project had two main SUSMP triggers; the parking reconstruction was greater than 5,000 square feet and an automotive service facility was added. This project was exempt from HMP requirements because the site is less than 50 acres and work on this project began prior to the finalization of HMP requirements. The project had one large portion of the parking lot to the north of the existing building that was re-graded and repaved. The building footprint was unchanged since the interior was only remodeled. The structural BMPs that were implemented to comply with treatment requirements are comprised of vegetated bioswales for Low Impact Development (LID) compliance and pervious paving and a segmented linear bioretention/media filter basin for both treatment and LID requirements.

The property already had a slight ridgeline closer to the southern property line that causes the project to discharge to both the northern and southern property lines. A small portion of the property discharges to an existing pervious swale to the south of the property. This swale is on Caltrans property and connects to a concrete swale that starts at the back of the neighboring property and extends eastward passed another property before it drops into the public storm drain system near the confluence point of the Forrester Creek and County Ditch. The flow from the southwestern quarter of the building was left in its pre-remodeled form. The runoff is directed to a concrete swale on the west side of the building and across an existing parking area where the combined flows from the building and pavement enter the pervious swale to the south property. No redevelopment was done in this area and no improvements were required.

The bulk of the property drains north to Arnele Avenue and it was on this portion of the property that the parking improvements were made and mitigated. The runoff from the eastern half of the building drains toward the easterly property line along with the runoff from all parking areas on

the eastern side of the building. The combined flows travel north to the segmented linear bioretention/media filter basin that was implemented. The basin was designed with 8 tiers of engineered soil over two 4" perforated underdrain pipes. The perforated pipes were connected to a raised overflow catch basin in the lowest tier, which in turn drains to the gutter on Arnele Avenue through a sidewalk curb outlet per San Diego Regional Standard Drawing D-25. The engineered soil was stabilized by topping the tiers with a layer of rock.

The remaining portion of the building drains toward Arnele through a vegetated swale. Because of existing conditions the flow from the swale then travels through riprap and discharges onto and combines with the runoff from a portion of the parking lot. The combined runoff then discharges to another vegetated swale that flows parallel to Arnele before discharging through riprap and a D-25 curb outlet to Arnele. The runoff from remainder of the redeveloped parking areas on the north end of the building were designed to discharged to a pervious parking area on the north side of the parking for treatment and Low Impact Development (LID) compliance. The pervious area consists of an interlocking grid system that is filled with gravel. The runoff from this area then is designed to flow down an embankment through a concrete ditch, embedded with rock for energy dissipation, to the riprap basin and D-25 curb outlet at the end of the swale along Arnele.

2.3.3 Waiver Provisions

In the event that a Priority Project is unable to meet the treatment control BMP sizing requirements outlined in the City's SUSMP, the City has the authority to issue a wavier. In order to receive a waiver for treatment control BMP sizing requirements, the project must prove that all available treatment control BMPs have been determined to be infeasible for the site. If a waiver of infeasibility is issued, the City will notify the RWQCB within five days of granting the wavier. The following information will be provided to the Regional Board:

- The name of the City employee granting the waiver
- The name of the developer receiving the waiver
- The location of the site
- The reason for granting the waiver
- A description of the BMPs required for the site

The City has never granted such a wavier to a Priority Project in the past and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may choose to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the projects' watershed.

Table 5 – BMP Implementation Summary

BMP	Percent Implemented	Pollutant Prevented
Control Peak Runoff Rates	100	Flow
Minimize Impervious Areas	100	Flow
Conserve Natural Areas	100	Flow

BMP	Percent Implemented	Pollutant Prevented
Protect Slopes and Channels	100	Sediment
Minimize effective imperviousness	100	Flow
Storm Drain Message and Signage	0*	Trash, Oil & Grease
Trash Storage Areas	100	Trash, Oil & Grease
Repair/Maintenance Bay Design	100	Oil & Grease
Proof of Maintenance	100	Trash, Oil & Grease
Inlet Filter(s)	100	Sediment, Trash, Oil & Grease
Grass Strip or Swale (Biofiltration)	100	Flow, Sediment, Oil & Grease, Trash
Detention Basin/Area	100	Flow, Sediment, Oil & Grease, Trash
Hydrodynamic Separation System	0	Trash, Sediment, Oil & Grease
Infiltration Strip/Area	100	Flow, Sediment, Oil & Grease, Nutrients (**TDS**)
*Both applicable projects were conditioned prior to the implementation of signage requirements. Follow-ups to be conducted to ensure all signage implemented.		

Note on Table 5: Percentages of BMPs implemented, shown in Table 5, are based on the number of applicable sites. For example, if there were three Hillside Development projects and all three-implemented slope stabilization, that would be all of the applicable projects. A 100% implementation equates to those applicable sites and not to all sites.

2.4 TREATMENT CONTROL BMP MAINTENANCE INSPECTIONS

All treatment control BMPs installed at priority development projects are regularly inspected by the City to ensure treatment controls are operating effectively and are being properly maintained. Inspection frequencies are based on the project's assigned TTWQ priority as determined by the criteria outlined in the City's 2008 JURMP. Table 6 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 6 – Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Inspection Frequency
High	Annually (prior to the start of the rainy season)
Medium	Every two years
Low	As needed

The City requires annual verification of proper maintenance of all priority development treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. To ensure the continued maintenance of these BMPs the City is continuing to inspect SUSMP projects for the duration of the use of said site. As required by the Municipal Permit, a minimum of 20% of the total number of projects with approved treatment controls and a maximum of twice the average number of projects with treatment control BMPs approved per year are inspected annually. Additionally, 50% of all medium priority sites with drainage inserts

are inspected annually. Inspections include examination of all treatment control BMPs at the site to verify that each treatment control BMP is working, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings are documented by the inspector using the City of El Cajon Treatment Control BMP Inspection form in Appendix A.2. In order to check the maintenance of a greater cross-section of sites the City will continue to rotate the list of the medium and low TTWQ sites that are inspected each year. If any deficiencies in treatment control operation and maintenance are noted during the inspection, the responsible party is notified, and appropriate enforcement actions are taken to achieve compliance. The list of the sites inspected in PY2010-11 can be found in Appendix A.2. Inspection findings and follow-up actions for each development site with installed treatment controls are included in the City's treatment control BMP tracking database. A Treatment Control BMP Maintenance Verification Letter and Form was sent to all sites in the inventory. A template of the letter can be found in Appendix A.2.

2.5 REVISED ENVIRONMENTAL REVIEW PROCESS

The City of El Cajon revised CEQA forms and checklists to include questions related to water quality issues. The City reviews all projects for CEQA, however there were no projects that needed to completed the revised forms for PY2010-11. These forms are attached in Appendix A.2.

2.6 DEVELOPMENT PLANNING OUTREACH EFFORTS

Education efforts for disseminating information to planners, developers, and contractors on the JURMP requirements for new and significant redevelopment is provided through one-on-one and group discussions at the time of the various discretionary plan reviews and checks, during BMP development, and at time of obtaining the building permit. Topics include:

- Federal, state, local water quality laws and regulations
- Connection between land use decisions and water quality goals
- New and Redevelopment requirements
- Water quality impacts from development (urbanization)
- Methods for minimizing impacts of development on water quality.
- Implementation of SUSMP requirements

2.7 REGULATORY COMMENTS

As of the writing of this report, no regulatory comments have been received for JURMP Annual Report 2009-10.

SECTION 3 CONSTRUCTION COMPONENT

3.1	Introduction	2
3.2	Prevention of Polluted Runoff	2
3.3	Updates to Ordinances	3
3.4	Modification of Construction and Grading Approval Process	3
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SECTION 3 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

Construction in the City of El Cajon is a constant activity. Whether it is a 500 square foot remodeling project or a multi-single family residential subdivision, a minimum list of construction BMPs must be in place prior to any earth disturbance or material storage. With a City built out to its current borders, the City experiences re-development activities more so than new development. However, clearing currently developed lands and re-development is at the heart of this community's construction and revitalization efforts.

Park Avenue Subdivision

3.2 PREVENTION OF POLLUTED RUNOFF

The City uses the CalTrans Construction Site BMP Manual together with the California Storm Water Quality Association Best Management Practices (BMPs) Handbook as guidance for the application of appropriate BMPs. An emphasis on pollution prevention is the easiest and most convenient set of BMPs to implement and achieve the elimination of polluted discharges. The following prevention practices are part of the minimum set of BMPs for construction sites.

- Prevent sediment and other polluted runoff – Design a sediment basin to trap runoff for zero discharge, specifically for larger construction sites with enough room for sizing adequate basins.
- Prevent bacteria discharges – Place portable sanitary facility in secondary containment and secure to the ground or stable structure. Prevents tipping and loss of bacteria (fecal coliform) containing material.
- Prevent alkaline (greater than 10.0 pH) runoff – Require properly designed and installed Concrete Washout areas and encourage concrete contractor to haul away concrete waste. Concrete waste disposal should be at an offsite location with adequate control measures.

The City works closely, often one-on-one, with developers at the counter and field discussing ways to prevent pollution from entering the storm drain. The pollution prevention practices are required for any applicant looking for a building permit.

Copies of construction handouts provided by the building department and additional information given to developers, contractors, and homeowners at the time of Erosion Control Plan submittal can be found in Appendix A.3.

3.3 UPDATES TO ORDINANCES

In accordance with Section D.2.a of the Permit, the City Municipal Code Title 13 Chapter 13.10 *Storm Water Management and Discharge Control* was updated in 2008 to comply with the new grading requirements. The City Municipal Code Title 13 Chapter 13.10, Section 13.10.140; and Chapter 15.64, *Grading*, work together in addressing land disturbance, demolition, and construction activities for the elimination of sediment and other pollutants from discharging into the City's storm drain system.

3.4 MODIFICATION OF CONSTRUCTION AND GRADING APPROVAL PROCESS

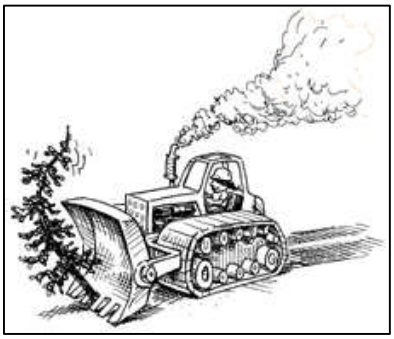

Shortly after the Chapter 13.10 was updated, the City assessed and modified the local construction permit and grading approval process to comply with Section D.2.a of the Permit. All construction projects are required to go through a storm water review process. Construction and grading projects are required to implement measures to ensure that pollutants from the construction site are reduced to the Maximum Extent Practicable (MEP) and will not cause or contribute to an exceedance of water quality objectives. The City does not allow clearing of vegetation matter or grading activities until all necessary environmental clearances, including water quality, are secured and a grading, drainage, and erosion/sediment control plan is prepared, reviewed and approved by the City. During the review process, the City ensures that all applicable grading and storm water ordinances are fully implemented as required per El Cajon City Code Title 13, Chapter 13.10, Section 13.10.140; grading ordinance Chapter 15.64 and Chapter 16.60. The City does not issue Building Permits until requirements addressing storm water and water quality have been fulfilled.

3.5 PRIORITY CONSTRUCTION SITES AND SOURCE IDENTIFICATION

Periodically the City reviews the list of high priority construction projects to update the list for close monitoring and inspection of construction activities and BMPs implementation for reducing or eliminating pollution from entering the City's storm drain system. High priority status is applied to projects that pose a potential threat to water quality or location. Priority is also given to SUSMP projects that are complete and need to have the storm water controls verified and the maintenance plans reviewed. Table 1 lists the selection of BMPs that must considered and the appropriate BMPs installed at all high priority projects. See Section 3.8 for any Enforcement Actions. In PY4 the City had 1 medium priority construction project and 6 active high priority construction projects, all of which were SUSMP projects. Also in PY4 the City approved 116 low priority projects for construction. A list of all active and inactive high priority construction sites is given in Appendix B.2.c. No project was required to have advanced treatment during construction as none were classified as an exceptional TTWQ.

3.6 BMP IMPLEMENTATION AND REQUIREMENTS

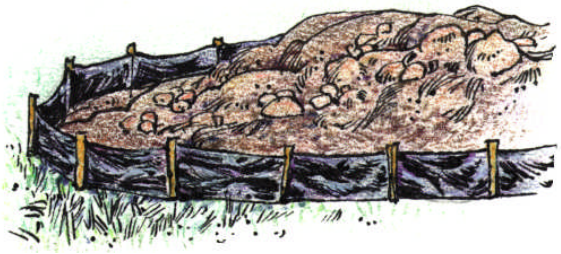

The City established minimum BMPs that must be implemented at all construction sites regardless of the water quality prioritization. The City developed a list of BMPs required at all construction sites. This list first appeared in the JURMP as Appendix C, but has recently been revised and updated to comply with Order R9-2007-0001. BMPs specifically prevent, remove, or eliminate a pollutants or group of pollutants from entering the storm drain system.

Table 1, below, lists the minimum required BMPs for construction sites, the primary pollutant eliminated and the potentially affected 303(d) pollutant. Eliminating pollutants meets the Clean Water Act and Permit objectives for maintaining the biological, physical, and chemical integrity of the State's waters, while a "no impact" condition meets the restoring requirement of the Clean Water Act objective.

A first step toward connecting construction activities to water quality is shown in the following table. The next step is to quantify how many sites are compliant with the minimum BMP requirements. Table 1 summarizes the minimum BMP requirements and the pollutants that each targets for prevention (including minimization of grading activities), removal or elimination. Table 2 lists the different types of construction projects and the minimum BMPs required for each category. Table 3 connects and quantifies the number sites compliant with the required BMPs. In Section 11, the Effectiveness Assessment of the Construction Component will draw on this connection between BMP implemented and pollutant to determine if the program activities adequately reflect a move toward improving water quality or have little effect on water quality.

Table 1 – BMP to Pollutant

BMP	Application	Primary Pollutant Removed	303(d) Pollutant Impact
Silt Fence (SC-1)	Perimeter Control to remove sediment and debris in runoff	Sediment	TDS
Desiltation Basin (SC-2)	Captures sediment runoff and eliminates sediment runoff	Sediment	TDS
Gravel Bag Barrier (SC-6)	Perimeter Control for pavement to pavement. Removes sediment runoff	Sediment	TDS
Fiber Roll (SC-5) or Coconut Fiber Blankets	Erosion Control for slopes to prevent sediment runoff	Sediment	TDS
Stabilized Construction Entrance (TC-1)	Tracking control for imperviousness to pavement to prevent sediment tracking into streets	Sediment	TDS
Street Sweeping (SC-7)	Tracking control for paved areas. Collects/removes sediment tracked onto pavement	Sediment	TDS Phosphorus
Material Storage (WM-1)	Material coverage and containment or pavement or impervious surfaces to	Stucco, Paints,	pH TDS

BMP	Application	Primary Pollutant Removed	303(d) Pollutant Impact
	eliminate polluted runoff	Concrete	
Solid Waste (WM-5)	Trash/debris coverage and containment. Prevent trash runoff	Trash, debris*	Bacteria Phosphorus
Concrete Washout (WM-8)	Containment and disposal of concrete washout. Prevents concrete runoff	Concrete-laden Waters	pH TDS
Sanitary Waste (WM-9)	Containment of sanitary waste. Prevents bacteria runoff	Bacteria	Fecal Coliform
Vehicle/Equip Management (NS-8, NS-9, NS-10)	Containment of petroleum fluids. Prevents oil & grease runoff	Oil & Grease	TDS

***** Pollutant being monitored by East County Cities
"-" Designates "no impact" on levels of 303(d) pollutants; supports Clean Water Act objective to maintain or restore water quality

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Implementation is measured through onsite inspections. Success of that implementation depends on stage of project at time of contact, materials presented, BMP selection, and developer motivation to comply with construction requirements. The City provides a Storm Water Guideline to developers for Construction Projects. This simple, easy to use guide lists the construction BMPs to use for construction activities that would occur outdoors and potentially affect storm water quality.

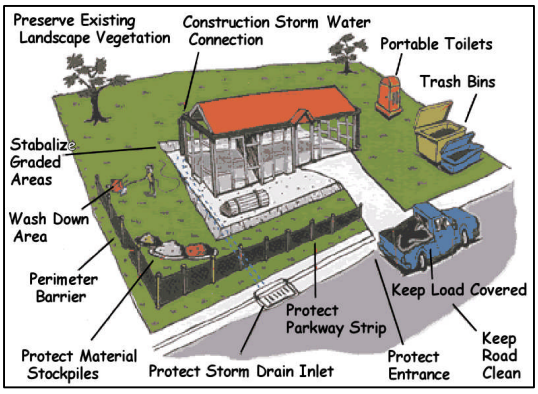

Associations, such as the Building Industry Association (BIA), have assisted in disseminating information to contractors and builders. Those construction personnel who do not belong to associations receive BMP information at the time of permit application or permit issuance. There is a noticeable difference between Storm Water savvy developers and those just starting their first storm water compliance experience. The City is working towards optimizing interactions at the Public Works counter. Landscaping as early as possible is emphasized regardless of season. This information is provided to contractors as permit issuance and during each scheduled inspection. BMPs must be appropriate for site-specific conditions. Installing BMPs for the sake of compliance is not complying with MEP.

There are four categories of construction projects:

1. Pools, retaining walls, remodels, and additions
2. Single Family Residences, Condo Conversions, and Subdivisions
3. Hillside Development
4. Commercial/Industrial

The minimum required BMPs per category of construction are shown in Table 2, on the next page. The next step is to complete the BMP cycle by verifying during inspections that any BMPs are:

a. Present as required – indicates changes in knowledge and awareness.
b. Implemented properly and functioning correctly – indicator of behavioral changes.

Printed materials are available at the Public Works Department making over-the-counter interactions into educational opportunities. A City BMP guide, edited summaries of application JURMP sections, and personalize service functions as the City's implementation tools. To prioritize effectiveness efforts, the City focuses on the prevention and elimination of the 303(d) pollutants to address the restoration requirement of the Clean Water Act and our Municipal Storm Water Permit. Overall Effectiveness of the Construction Component is provided in Section 11.

Table 2 – Required BMPs for Construction Sites

Required Construction BMP	Construction Type			
	Pools, Retaining Walls, Remodels, Additions	SFR Subdivisions	Hillside Development	Commercial and Industrial
Silt Fence - SC-1	X	X	X	X
Storm Drain Inlet Protection (+Filter Fabric) SC-10	X	X	X	X
Sediment Basin or Trap SC- 2 or 3		X	X	X
Check Dams - SC-4		X	X	X
Fiber Rolls - SC-5			X	
Gravel Bags - SC-6	X	X	X	X
Street Sweeping - SC-7	X	X	X	X
Stabilized Construction Entrance - TC-1	X	X	X	X
Dust Control - WE-1		X	X	X
Scheduling - SS-1	X	X	X	X
Velocity Dissipation Devices - SS-10			X	
Preservation of Existing Vegetation - SS-2		X	X	X
Coconut Fiber Blankets - SS-7			X	
Material Storage - WM-1	X	X	X	X
Solid Waste Storage - WM-5	X	X	X	X
Concrete Waste - WM-8	X	X	X	X
Employee Training - City of El Cajon		X	X	X

X = Required; Implemented; and Verified

3.7 INSPECTION

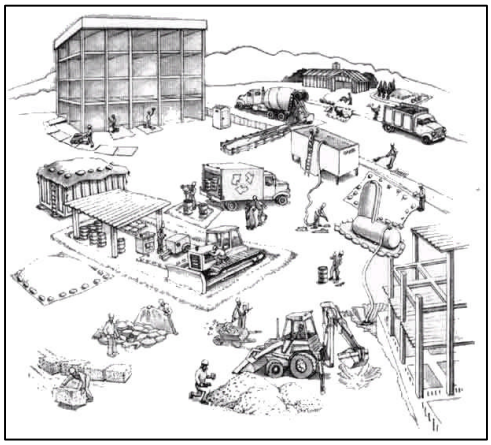

The City inspects all high priority projects as needed during the dry season and at least monthly or bi-weekly during the wet season. Inspections are completed using the form provided in Appendix A.3 (entitled City of El Cajon Storm Water Quality Inspection for Construction Sites). In PY4, the City had 7 high priority projects, of which 6 were fully or partly active construction sites during the permit year and 1 was inactive for the entire duration. There are also 4 SUSMP project construction sites that have been inactive since at least PY3 and prior to PY4 had achieved a minimum of 70% stabilized coverage. These projects have been deemed by the City as not just inactive, but temporarily abandoned and are inspected only as needed until the sites are disturbed in the future. SUSMP projects are considered high priority construction projects and are inspected on the same schedule. All projects are inspected prior to completion of the projects to verify proper and complete installation of storm water treatment controls and review any long-term maintenance plans. Five (5) SUSMP projects were completed during PY4 and became or remained inactive.

Projects designated as medium priority are inspected monthly during the wet season and on an as-needed basis during the dry season, as well as in response to a complaint received from City staff or the general public. The City had 1 medium priority project under construction during PY4. The City maintains a detailed record for high and medium priority projects. A spreadsheet showing the period of time, in weeks, that each construction site was active within the wet season and the number of inspections conducted during the wet season and the dry season is attached in Appendix B.2.c. It is important to note that inspections in the spreadsheet account only for the inspections conducted by the Public Works Department; inspections conducted by other departments, such as the Building Department, are not included in the table.

In accordance to the Municipal Permit and the City's JURMP document, the City inspects low priority construction projects on an as-needed basis. Building Department personnel constantly inspect all projects designated as low priority for their own Building Code requirements. For this reason, the Building Staff has been trained by the Storm Water Department to recognize when to contact Storm Water personnel due to improper construction BMPs. The City approved 116 low priority projects (consisting mostly of single family residential additions) for construction in PY4. During Permit Year 2010-11 the City has implemented a new system for tracking permit reviews. The City is working on incorporating a means of gathering more detailed information for low priority construction sites with this new system. Important information, including the period of time the site is active within the wet and dry seasons, may be extracted from the database that the program is based on.

It is important to note that only inspections that were documented are included in the spreadsheet mentioned above. Visual inspections, which did take place throughout the permit year, are not tracked.

Table 3, below, shows the minimum BMPs implemented at high priority constructions, verified through inspections. The results are generated from inspection reports. A "Yes" under corrective action indicates that specific conditions noted during the inspection warranted actions by the contractor, such as maintenance or BMP improvements. All boxes with "Yes" listed in the "Citation" column refer to deficiencies in the BMPs at one site on one occasion.

Table 3 – BMP Deficiencies for High Priority Sites

BMP	Discharge during Rain	Corrective Action	Citation
Silt Fence	No	Yes	Yes
Storm Drain Inlet Protection	No	Yes	Yes
Sediment Basin	Yes	Yes	Yes
Check Dams	No	Yes	Yes
Fiber Rolls	No	Yes	Yes
Gravel Bag Berm	No	Yes	Yes
Street Sweeping/Vacuum	No	Yes	Yes
Stabilized Construction Entrance	No	Yes	Yes
Hydroseeding	No	No	No
Geotextiles and Mats	No	No	No
Material Delivery and Storage	No	No	No
Stockpile Management	No	Yes	Yes
Solid Waste Management	No	No	No
Concrete Waste Management	No	No	No
Sanitary Waste Management	No	No	No

Inspection of construction sites in PY4 verified that most construction sites implemented BMPs. All BMP deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions, and through enforcement actions. If corrective actions were needed, the construction site either completed the corrective action at the time of inspection or a follow-up visit was scheduled to verify the completion of corrective actions. When corrective actions are not completed in a timely manner, enforcement actions are issued. In PY4 the City had only 1 enforcement action related to construction inspections and follow-ups. Enforcement actions are further discussed in Section 3.8 and a list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc.) is attached in Appendix B.3.

Table 4 – Capital Improvement Project Assessment

2010-2011 CIP Construction Site Inspections		Enforcement Actions	
Job Site	**Minimum BMP's in place**	**Warning(s)**	**Administrative Citation(s)**
Prescott Promenade Improvements	Y	N	N
Storm Drain Replacement and Lining (Various Locations)	Y	N	N
PCC Channel Repair Project	Y	N	N
PCC Alley Replacements	Y	N	N
Heartland Fire Training Facility – New Parking Lot (SUSMP)	Y	N	N
Heartland Fire Training Facility - Building Addition	Y	N	N
AC Overlay 2010	Y	N	N
Park Avenue & Overlay 2011	Y	N	N
Slurry Seal 2011	Y	N	N

Public Works inspectors inspect the CIP projects for Storm Water compliance on an as-needed basis. This may be as frequently as weekly, or even daily, but generally no less than twice per month (when the inspectors are on the job for non-storm water related inspections) while the project is active. One (1) CIP project met SUSMP criteria and no project disturbed more than one acre at any given time.

3.8 ENFORCEMENT

In PY4 the City had 3 enforcement actions pertaining to inspection follow-ups or complaints received for construction activities, 1 of which resulted in a monetary administrative citation. This citation was delivered to the Ballantyne Glen SUSMP project. The entire site drains to a sedimentation basin that became overburdened and discharged overly sediment-laden runoff during a rain due to lack of proper BMPs on each of the graded pads upstream. The City conducted follow-up inspections for all enforcement actions, including the Ballantyne Glen project, to verify that proper and complete corrective actions were taken in a timely manner. Corrective actions are needed to fix or improve a BMP even though that BMP may be implemented as written.

Administrative Citations are issued for discharges to the City's storm drain system. Most construction sites implement the minimum BMPs and inspections verified that the BMPs were effective in reducing or eliminating discharges to the storm water conveyance system. A list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3.

Other non-compliance issues for construction, except as described above, were not experienced during PY4, although some deficiencies were noted during construction inspections. Deficiencies are resolved through discussions between City staff, project construction personnel,

corrective actions and through citations. All violations and deficiencies were corrected in a timely manner.

None of the violations resulted in threats to the environment or human health and notification to the Regional Board was not required.

3.9 CONSTRUCTION OUTREACH AND EDUCATION

Education of construction contractors and developers is conducted primarily through the permitting and inspection processes. The City's building department has the first contact with contractors and developers when a building permit application is completed. The following steps are taken by Building Division and Public Works/Storm Water staff:

1. Building Permit Application.
2. A Storm Water "Hold" is placed on the property.
3. Developer or contractor is given a Storm Water handout.
4. Discuss with developer or contractor, in detail, minimum BMPs and implementation requirements.
5. Developer or contractor generates an Erosion Control Plan plus any additional storm water requirements as necessary.
6. Review Erosion Control Plan and any additional requirements, comment, direct developer or contractor to make changes prior to approval.
7. Inspect according to priority.
8. Address Corrective Actions.

In PY4, the City reviewed and commented on 1 SUSMP project, 2 Storm Water Mitigation Plans, no condominium conversion projects and 116 Erosion Control Plans for small projects. The City inspects all completed SUSMP projects to confirm proper installation of storm water controls and review the long-term maintenance plans. Copies of the Construction handouts and an example Erosion Control Plan Checklist for additions and remodels (small projects) are included in Appendix A.3.

Compliance is assessed through inspections by storm water staff or a City contractor. Inspections are completed on a scheduled frequency depending on the season. As mentioned above, during the wet season high priority construction projects are inspected at least monthly or bi-weekly.

3.10 IMPROVEMENTS AND REGULATORY COMMENTS

Generating improvements increases program efficiencies by harvesting those BMPs that work and discarding those that do not.

Improvements

Improvements to the Construction Component include:

- Implement the most recent updated General Construction Permit requirements.
- Road Work – Vacuum any water used; no discharging after filtering allowed.
- All Construction Entrances must have adequate aggregate size (upgraded to a minimum of 3”-6”) or sufficient shaker-plate systems.
- Construction Entrances to be lined with silt fencing to prevent vehicles from entering/exiting to the side.
- Continue to focus inspection efforts on BMP implementation to facilitate Effectiveness Assessment.
- Continue to use BMP Implementation Inspection Checklist to list minimum required BMPs for construction.
- Continue to inspect construction of SUSMP projects as High Priority construction.
- Continue to use silt fence as primary perimeter control.

BMP improvements are needed as follows:

- The City is planning to continue to conduct training sessions with our Building Department inspectors and other department staff to ensure that they are more aware of required BMPs at construction sites. This will allow Building Department staff to report BMP deficiencies to Storm Water personnel.

Regulatory Comment

As of the writing of this report, no regulatory comments have been received for JURMP Annual Report 2009-10.

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SECTION 4 MUNICIPAL COMPONENT

4.1 INTRODUCTION TO MUNICIPAL FACILITY ACTIVITIES

As required by Section 4 of the Municipal Permit, existing municipal facilities must prevent or reduce pollutants in urban runoff by implementing a City-designed program to address specific outdoor activities that have the potential to impact water quality. Municipal facilities include streets, public parking lots, flood control devices, parks/recreation, administration and other public buildings, maintenance and storage areas, police, and fire/safety stations. Activities at any one of these facilities may have the potential for discharging pollutants as urban runoff or during a rain event. The Municipal Component of the JURMP defines a comprehensive program to reduce the potential for polluted discharges through:

- Pollution Prevention activities,
- Best Management Practice (BMP) implementation,
- Storm Water Inspections, and
- Recycling

Homeless

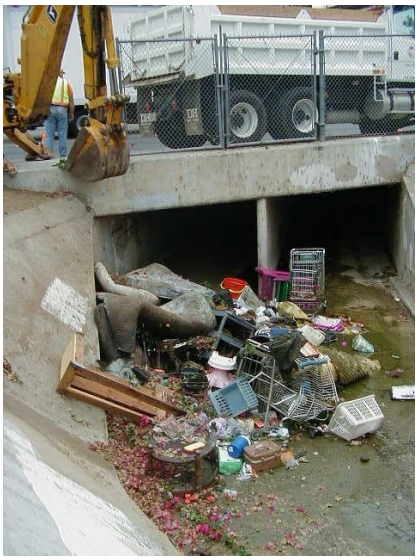

Of specific note are the Homeless that are not only a social problem, but become an uncontrollable water quality problem. Homeless encampments exist in storm water channels because of easy access and good outdoor weather conditions nearly year round. Although prevalent in the storm drain channels, the homeless are difficult to detect in the underground storm drain system comprised of reinforced concrete boxes and even more difficult to permanently remove. Detection is conducted through weekly/monthly inspections of popular entry places and complaints to the Storm Water Complaint Hotline. Removal is accomplished through police enforcement and the homeless have an option for other housing with the City's new interim housing project. The City cleans all of its channels at least twice annually and encampments are removed at that time, however, the encampments are often re-established once the channel maintenance in that area is finished.

The photograph above emphasizes the enormous amount of materials associated with homeless encampments in the storm drain channel. Other than the visible pollutants of trash and debris, there are also the less collectable, non-visible pollutants from human waste.

The list of major pollutants associated with the homeless living in these underground flood control devices are:

- trash, (a monitored pollutant for East County)
- debris, and
- fecal coliform (a listed 303(d) pollutant for Forester Creek).

Our dry weather-monitoring program is designed to capture information on the homeless and track elevated levels of fecal coliform. The City will continue its efforts to reduce or eliminate the impacts caused by the homeless encampments within storm drain channels.

As in past years, Storm Water staff and City Maintenance crews teamed with Community Police and Interim Housing (a joint venture between Hammon Properties and Shadow Mountain Church) to move inhabitants into temporary housing, followed by clean up of storm drain channels. For those homeless willing to improve their situation, the Interim Housing group provides a "Hand Up" rather than a hand out. Those who wish to continue living in the City's storm drain system are detained, but eventually find new living places on the street. A County-wide, long-term solution to the homeless is not yet definable for storm water.

4.1.1 Prevention of Polluted Runoff

Anytime pollution is prevented from entering the storm drain system, less pollution must be managed at end-of-pipe. The following prevention activities and corresponding BMPs are fully implemented at one or more of the many municipal facilities located within the City. As noted in Introductory Section, the focus of PY4 is continuing BMP implementation, such that prevention of polluted runoff is achieved to the Maximum Extent Practicable (MEP). The primary pollutants of concern for this prevention effort are the 303(d) impairments of Forester Creek that include pH, total dissolved solids (TDS) as nitrates; and fecal coliforms. The impairment associated with the City of El Cajon or the upper section of Forrester Creek are bacteria and pH. Our City is in the beginning phase of implementation of a bacteria TMDL study. Further discussion of pH origin and any corrective actions are presented at the end of this section. Trash and debris is a specific issue being addressed as part of a watershed effort with the City of Santee.

When pollution is prevented from entering the storm drain system, it is either collected or eliminated. Collection requires management of gathered wastes, while elimination is true

prevention, but much more difficult to accomplish. The following municipal activities encompass collection and elimination activities.

1. Erosion and sediment control prevents soils and sediments from washing away during rain events. BMPs implemented for City Improvement Projects to control erosion and sediment during project activities are as follows:

- Preservation of existing vegetation
- Scheduling of projects
- Seeding and planting of native plants and trees that are drought resistant and do not contribute to discharges of vegetative matter to the City's MS4.
- Establish plant ground cover before removing erosion or sediment controls.

2. Roadway and street maintenance activities preserve these facilities for a longer, useful existence. Many maintenance activities keep pollutants from entering the storm drain system. Listed below are the maintenance activities with the gross amounts of pollutants collected. Pollution removed equates to preventing polluted runoff that could be transported in urban runoff or storm water discharges.

- Street sweeping and cleaning – Swept 17,019 miles of curbed streets and removed 3,746 cubic yards of materials that were disposed as solid waste. There are a total of 337 curb-miles of streets and a total of 483 lane-miles within the City. As stated in greater detail in the JURMP, some areas are swept on a more frequent basis. By collecting 3,746 cubic yards of trash, debris, and sediment, these pollutants did not enter the storm drain system and did not further impair Forrester Creek.
- Collected 68 cubic yards from spills and other miscellaneous operations
- Completed 96 special sweeps at the request of citizens or City staff, collecting 32 cubic yards of material. This is a higher number of special sweeps, but less material was collected than during PY3 (i.e., 66 special sweeps and 35 cubic yards).

3. Municipal vehicle maintenance facilities provide a valuable service in keeping the City's vehicles in top running condition. Maintenance activities are conducted in a manner to keep pollutants from entering the storm drain system. Listed below are the activities and their designated areas.

- Conduct vehicle maintenance indoors or under canopies
- Area designated for washing vehicles is covered and wash water drains to an oil/water separator before discharging to the sanitary sewer
- Area designated for rinsing street sweepers directly discharges to the sanitary sewer
- Recycling motor fluids (oil and antifreeze), tires, batteries, and metal

4. Landscaping maintenance activities beautify our parks, recreation, and administration buildings. Pollution prevention maintenance activities include:

- Collection of grass clippings and discarded as solid waste

- Sweep or blow residual clippings onto turf areas
- Clean City-owned patio and plaza areas using a machine that contains the cleaning liquids.
- Aerate soil frequently to encourage rain penetration and infiltration
- Maintain an Integrated Pesticide Management (IPM) program

5. Maintenance Procedures for MS4s includes inspecting and maintaining MS4 by cleaning, removing sediment, debris and vegetation; repairing or replacing damaged and failing structures; and stenciling/posting signs at storm water inlets and conveyance systems. Approximately 12,740 cubic yards were collected during PY4. Maintenance crews responded to 17 requests by city staff and citizens to maintain the storm drain system. A work survey request (WSR) is completed for each of the requests and filed at the Maintenance Yard on Vernon Way.

- Storm Drain Inlet/ Catch Basin cleaning
- Storm Drain system repair and maintenance

6. Building Maintenance activities at Municipal facilities prevent pollution by collecting debris, dirt, and organic materials before rain events transport this material to the storm drain system. Wash water is disposed into the sanitary sewer and dry methods are used to collect materials to dispose as solid waste. The following are completed on a weekly schedule:

- Sweep and clean parking lots
- Clean sidewalks
- Sweep and clean entry ways
- Control irrigation runoff and over-spray

7. A Sewer Maintenance program assists in preventing sanitary sewer spills and prevents sewage from entering the storm drain system using the following plans and BMPs:

- Identify and respond to overflow spills and leaks
- Contain and properly dispose of spilled sewage for public and private sewer overflows
- Repair damaged and leaking public sewer lines
- Identify potential problem areas, such as sewer lines in isolated, hard-to-access canyons, or sewer lines at end-of-life condition, for inclusion in annual Capital Improvement Projects

- TV inspection of sewer main lines
- Annual cleaning of main sewer lines
- Quarterly (3-month) cleaning of sewer siphons, trouble spots and problem manholes
- Quarterly (3-month) rodding and descaling of problem sewer lines
- Cleaning and inspection of trunk and outfall sewer mains as part of the preventive and predictive program.

During PY4, the City cleaned 177.8 miles of sanitary sewer main line, while experiencing four public sanitary sewer overflows. The City also responded to two private lateral sewage spills. See the below sewer overflow summary table for more information on public and private sewer spills.

Table 1 Summary Public and Private Sewer Overflows

Description	Number	Overflow Volume (Gallons)	Volume Recovered (Gallons)	Volume Not Recovered (Gallons)
Public Sewer Spills	4	135,191	2,121	133,070
Private Sewer Lateral Spills	2	440	440	0

4.1.2 Roads, Streets, Highways, & Bridges

The following are major City accomplishments during PY4 for roads, streets, highways, and bridges:

- Used the recently installed permanent wash rack for street sweepers to allow more time for cleaning equipment.
- Followed a strict preventive maintenance schedule for the new Elgin Crosswind street sweepers.
- Swept Downtown District twice per week.
- Swept non-Downtown Business and Commercial areas once per week
- Swept Residential areas and medians twice per month

Table 2 Summary of Street Sweeping Maintenance by Zone

Description	Silt (Yds)	Organic (Yds)	Trash (Yds)	Total (Yds)	Miles
Residential Streets	783	854	442	2079	9641
Residential Percentages	47%	56%	60%	55%	57%
Commercial Industrial Streets	699	677	291	1667	7378
Commercial Industrial Percentages	53%	44%	40%	45%	43%
Category Totals	1452	1531	733	3746	17019
Total Percentages	100.00%	100.00%	100.00%	100.00%	100%

City Maintenance crews collected a total of 3746 cubic yards of material from street sweeping. Table 2, and figures 1 and 2 show the distribution of material by type, cubic yard amounts, and percentages for materials. Total cubic yards of materials increased in PY4 as the City continues to increase the use of the Elgin Crosswind street sweepers. The volume of trash, silt and organic material decreased for residential areas, compared with PY3, but increased for commercial and industrial areas. Figure 2, below provides a summary chart for relative volumes and Figure 3 provides a comparison to amounts collected in previous years.

Figure 1

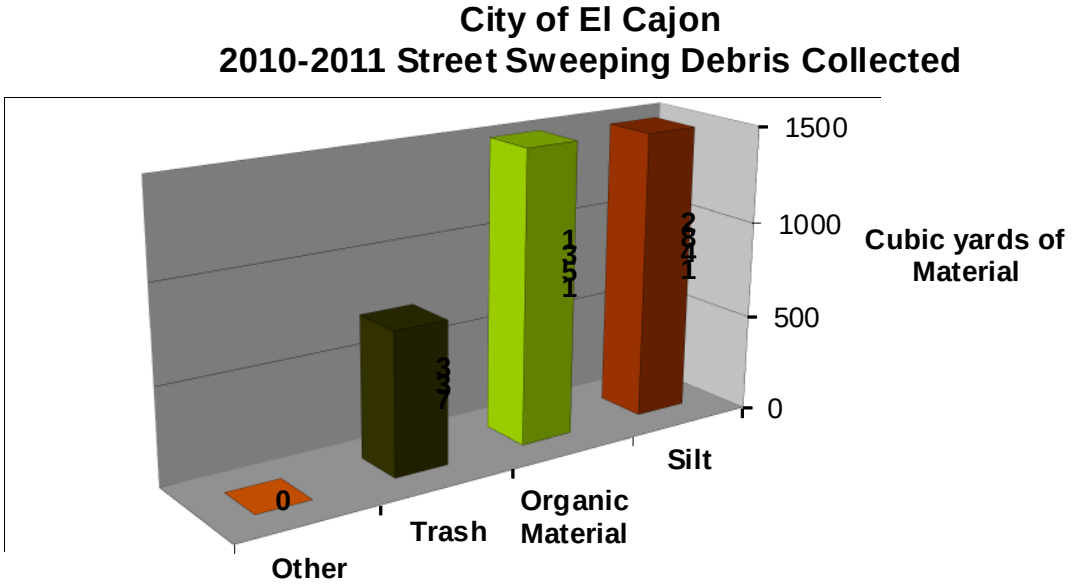

Comparing the percentages of materials collected in the streets with those from the channels, it is worth noting that about 230% more trash is collected in the street sweeping operations (733 cubic yards) than is recovered in channel cleaning operations (219 cubic yards). This difference may be due to the types of trash. The elimination of trash is best addressed at the source or generator. For the City of El Cajon, street trash is typically generated in highly commercialized areas that include restaurants, convenient stores, and department-like stores. Continuing as a major priority into the next Permit Year will be an ongoing effort to keep the downtown areas trash-free and street-clean. These prevention efforts are a partnering effort with the El Cajon Community Development Corporation (ECCDC) and businesses in the downtown area.

Currently, ECCDC hires the St. Madaline Sophies students to pick up trash and cigarette butts in the downtown area. During PY4, the ECCDC and storm water staff organized community functions to increase public awareness and improve downtown areas. "Lend a Hand" days were scheduled throughout PY4.

Figure 2

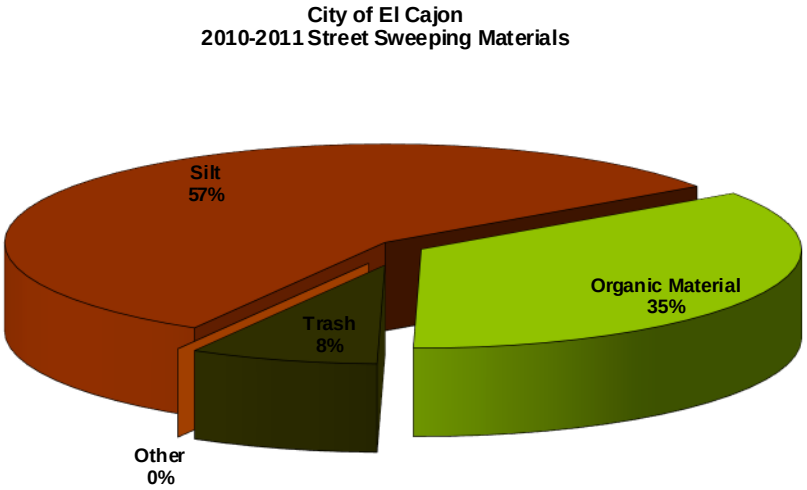

Figure 3

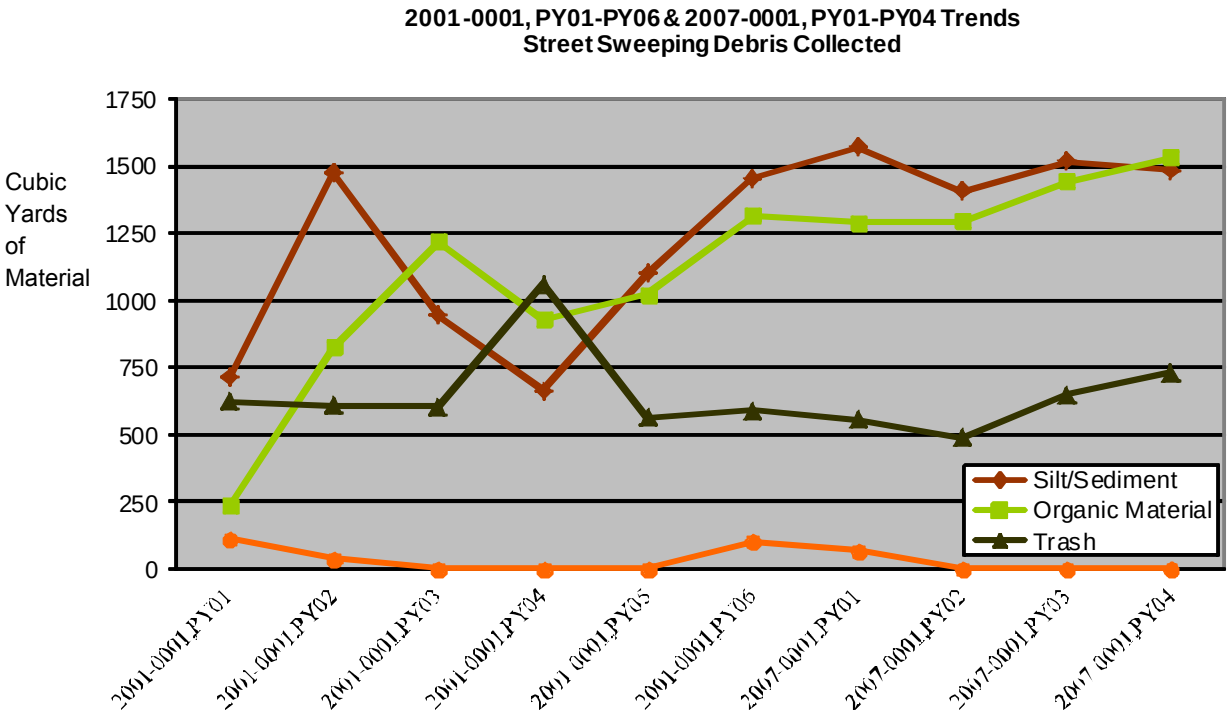

4.1.3 MS4 Maintenance

The City's Municipal Separate Storm Sewer System (MS4) is comprised of 53.0 miles of storm drains, inlets and catch basins, and 23.7 miles of open channels and culverts. The MS4 System functions to collect and convey surface runoff. Maintenance of this system is necessary for continuous transport of rainwater to prevent flooding and to drain urban flows away from populated areas and prevent flooding.

Figure 4

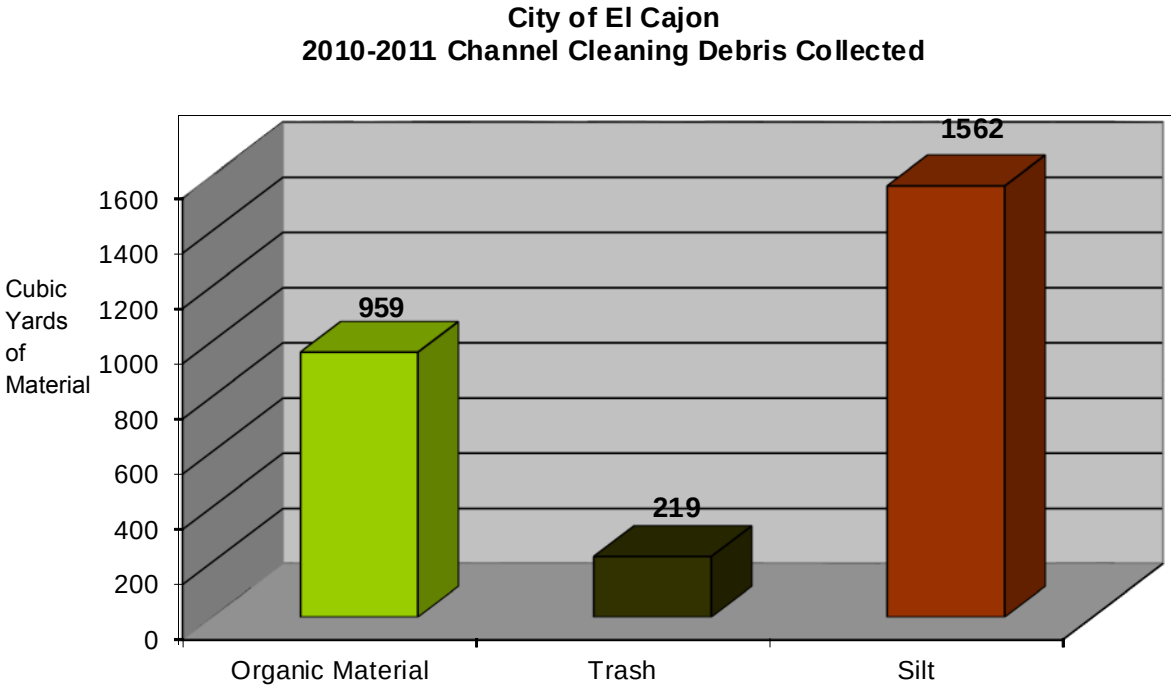

Work Service Requests (WSRs) document maintenance activities on the storm drain and open channel system. For PY4, 17 WSRs were completed for both emergency and non-emergency repairs/maintenance to the MS4. WSRs cover any type of needed maintenance and are available to all contacting our Municipal Maintenance Yard, located at 1050 Vernon Way, El Cajon.

The City's MS4 includes:

- Streets
- Gutters
- Storm Drain Inlets/ Catch Basins
- Underground pipes
- Culverts
- Rock-lined channels
- Concrete channels
- Unlined Creeks

City maintenance crews inspect all open channels once a month and perform a complete cleaning at least once each year. Storm drain inlets and pipes are inspected at least once each year and cleaned as necessary. Table 3 summarizes the number of miles of

channels and culverts inspected, together with a separate summary for drain inlets and pipes. We are in the process of converting from a years-old paper map inventory of the MS4, to a GIS-centric inventory. The GIS conversion is in transitional state where we are endeavoring to make our summary of MS4 inspection and cleaning more complete. Although we are currently maintaining our storm drain and channel system as directed in the Municipal Storm Water Permit, it is anticipated that future annual report will include additional detail in the MS4 maintenance summary as our maps become more complete. Implementation of the JURMP Municipal Component in PY4 resulted in:

- Trash/debris removal from storm drain conveyance system (defined above) completed annually as specified in the JURMP. Total removed is 2,740 cubic yards. For types of pollutants removed see Figure 4.
- Maintained 90 storm drain inlet filters located in the public right of way.
- Met JURMP requirements by cleaning catch basins, culverts, and concrete channels once for PY4 in the major channels and once for the minor channels. The Conservation Corps completes the cleaning for Hunter's Run, the open channel at Avocado and Pauline, and Cypress Channel.
- Flow line vegetation maintenance completed one time during PY4 (tree maintenance along major channels and median maintenance).
- Cleaning of Homeless waste and trash completed four times during PY4.

Table 3 Summary of MS4 Inspection and Cleaning Activities

Drainage Structure Type	Number Miles Inspected	Number Miles Cleaned	Number Miles > 30% Full
Open Drainage Channels	283.92	17.50	0
Drainage Structure Type	Number Inlets Inspected	Number Inlets Cleaned	Number Inlets > 30% Full
MS4 Inlets/Catch Basins	1594	1594	0
Drainage Structure Type	Number Miles Inspected	Number Miles Cleaned	Number Miles > 30% Full
MS4 Pipes and Culverts	53.01	6.16	0

4.1.4 Sanitary Sewer System

Continuity and consistency describes the City annual cleaning and maintenance of the sanitary sewer system. Few blockage conditions occur or reoccur when crews adhere to the normal maintenance routine. The El Cajon sewage collection system, consisting of nearly 195 miles of municipally owned sewer mains, is a transportation-only utility with the sewage treated at the Metro Wastewater Treatment Plant in Point Loma, San Diego. El Cajon's outfall sewer main transports sewage from the City, Wintergardens Sewer District, and Padre Dam/Lakeside/Alpine Sewer District.

The City of El Cajon has an aggressive maintenance program to prevent sewer overflows. An important maintenance goal is to flush and maintain the entire system at least once every 18 months, which requires the flushing of 148 miles of sewer main each year. For PY4, maintenance crews cleaned 177.8 miles of sewer line in 12 months. Difficult areas, where solids and grease accumulate, or root intrusion is a problem, are on a more aggressive schedule of flushing and rodding every 3 months. A Summary of Sewer Operations and Maintenance Procedures is included as Appendix D.1. A complete summary of scheduled Municipal Sewer System Maintenance is included as Appendix D.2.

New-Generation Sewer Vactor Truck

An indispensable tool in preventing sewer blockages and overflows

As part of the aggressive preventive maintenance program, the City televises sewer mains when:

- A new sewer tap is installed
- New difficult areas are suspected
- Determining the type of maintenance or repair needed

Interior of Sewer Main Televising Van

There were four public sewer overflows from City-owned sewers totaling 135,191 gallons for PY4. The city recovered and returned to sewer 2,121 gallons for the four public overflows. Sewer system activities and discharges are reported annually to the San Diego Regional Water Quality Control Board and the California Integrated Water Quality System (CIWQS), among others. In April of 2003, the City internally started tracking reported overflows from private sewer laterals, where homeowners or businesses require immediate system repair. Response to the private sewer overflow includes reimbursing the City for any storm drain cleanup costs due to the overflow into the public right-of-way.

For PY4, 2 private sewer overflows were reported or detected by municipal staff. In all, 440 gallons of sewage liquids were recovered and disposed of in the municipal sanitary sewer. No effluent from private overflows reached the storm drain or receiving waters. With private sewer spills, municipal crews may need to estimate how long the spill was active and document an estimated number of unrecoverable gallons.

4.1.5 Corporate Yard

The City of El Cajon has one Corporate Yard located at 1050 Vernon Way. Four separate Public Works Divisions are located at this facility, as follows:

- Public Works Maintenance Division - coordinates maintenance for streets, storm drains, drainage channels and public sewers;
- Facility Maintenance Division – maintains City buildings and related facilities;
- Fleet Maintenance Division – maintains City vehicles, and
- City Parks Division – maintains City parks, median, landscapes and urban forest.

It takes coordination and collaboration for these crews to work in the public interest maintaining and improving the health, safety, convenience and quality of life for the City's citizens and visitors.

The Maintenance Division of Public Works maintains the city's infrastructure. Fleet and Facilities Management is part of Administrative Services and maintains the City's buildings, vehicles and equipment. The Parks Division of Public Works controls and maintains parks, recreational areas, and other City-owned landscaped areas.

An annual inspection of each area is completed and corrective actions discussed with Department Management. Corporate Yard management is facilitated by being under a single, unified management. An annual inspection of the Corporate Yard was completed during June of 2011.

Improvements at the Corporate Yard include:

New Vacuum Technology in Street Sweeping

Cleaning the Elgin Crosswind Sweeper in the City Wash-down Facility.

- Two separate Street Sweeper Wash-Down Areas are now in service.
- Monthly visual inspections are conducted.
- Secondary containment is in place at all storage areas.
- Berms are in place around the wash and waste discharge areas.
- Employees are trained on storm water issues, dealing with the homeless, pesticide training, and managing hazardous materials.

The annual inspection of the Corporate Yard uncovered a few needed Corrective Actions as follows:

- Maintain recordkeeping for training and inspections as defined in the Corporate Yard SWPPP.

- Post and update procedures on use of Spill Kits.

The sample of the Checklist for Municipal Site Inspection is contained in Appendix A.4.

4.1.6 Municipal Airfield

Gillespie Field, located at 1720 Joe Crosson Drive, is the local airfield and governed by the San Diego County Airport Authority and the Federal Aviation Administration. The City of El Cajon inspects this facility for compliance with the Municipal Permit as well as the General Industrial Permit. Some of the new BMPs include:

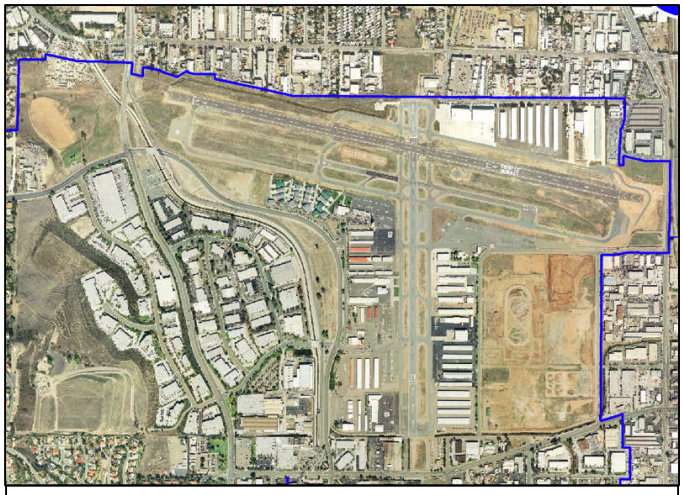

Gillespie Field - A County Airport Facility

- Wash racks with discharges hooked to the sanitary sewer. Use of manually adjusted shut-off valves eliminating flows to the sanitary sewer during rain events.
- Spill kits are in place throughout the airport.

4.1.7 Parks and Recreation

The Parks Division maintains, improves, protects, and develops the City's parks, landscaped median islands, public building grounds, and the urban forest for the benefit and enjoyment of the community. Maintenance of these nearly 120 acres is overseen by a well-trained, full-time staff that performs any necessary maintenance on a daily basis. Attractive public open spaces and well-maintained parks help to make El Cajon a better place to live, and encourages civic pride. Staff continually strives to promote a Cleaner Community through maintaining a Healthy Watershed while providing the community the highest quality and level of service possible.

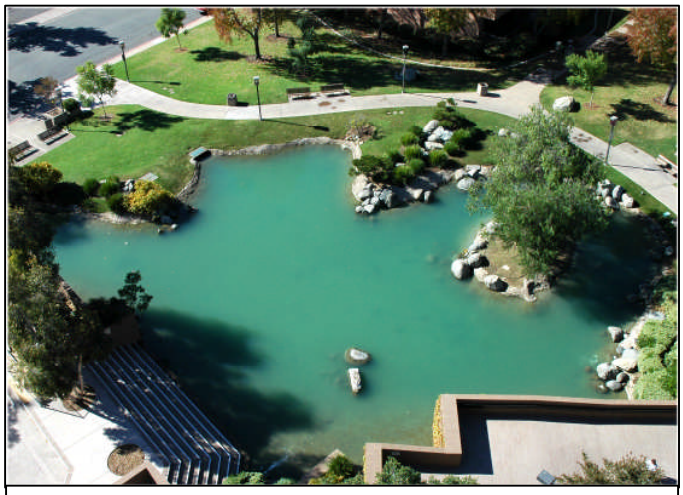

A City-Maintained Park Area Near City Hall

Park and Recreation areas prevent pollutants from entering the storm drain system, by implementing BMPs such as:

- Providing Pet Waste Bags at Dog Park located at Wells Park
- Blowing organic cuttings and sediment onto grass and disposing collected wastes properly

- Use of mop and buckets to clean up after special City events (e.g., Cajon Classic Car Show and Concerts on the Green)
- Requiring Qualified Applicator Certificates and 20 hours of training for the safe and effective use of pesticides.
- Requiring Contractors that steam-clean or power-wash to capture, collect, and contain wash liquids, then dispose into the sanitary sewer.

4.2 MUNICIPAL BMPS

The City has developed a list of minimum BMPs for Municipal crews to use while maintaining the following categories of municipal-owned and managed facilities. Not counting streets, alleys, storm drain or sewer easements, there are 31 separate municipally maintained facilities within the City. Overall, the categories of Municipal facilities are as follows:

- Roads, Streets, Parking Facilities
- The Multiple Separate Storm Sewer System (MS4)
- Corporate Yard
- Municipal Buildings, Parks, Recreational Facilities, and Landscaping

Each minimum required BMP is connected in some way to a primary pollutant that is reduced or eliminated to the maximum extent practicable (MEP) when that BMP is implemented as written. Table 3 lists the Municipal BMPs that may be applied to municipal activities and areas, the primary pollutant(s) either reduced or eliminated and the 303(d) pollutant that may also be prevented. Not all BMPs listed in Table 4 are required for the 31 Municipally-operated areas.

Table 4 lists the four major municipal areas with their minimum required BMPs and whether they were implemented. An “X” for the BMP indicates the BMP is required.

Inspections complete the BMP cycle by:

- Confirming proper BMP Implementation (present as written in the California BMP Handbooks or by City of El Cajon Storm Water Staff)
- Verifying that the BMPs are maintained (during inspection) (See Table 4 in Section 4.2.1 for inspection results)

This Annual Report takes an important step in connecting activities, BMPs, and pollutant reduction to support the Assessment of JURMP Effectiveness contained in Section 11. The connection is shown by the following diagram.

Table 4 BMPs to Pollutants for Municipal BMPs

BMP	Application	Primary Pollutant Reduced or Eliminated	303(d) Pollutant Reduced
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies	pH; TDS; Fecal Coliform
Spill Prevention Control and Cleanup – SC11	Addresses spills	Varies	pH; TDS; Fecal Coliform
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	Oil & Grease Metals	-
Loading/Unloading – SC30	Controls the loading and unloading of materials	Varies Trash	-
Liquid Container Storage – SC31	Controls discharges from outdoor liquid containers	Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials	Pesticides Fertilizers	-
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris	TDS
Parking Lot and Storage Maintenance – SC43	Addresses sweeping and general maintenance of parking lots	Trash/debris Sediment	-
Drainage System Maintenance – SC44	Requires routine cleaning of the storm drain system	Trash/debris Sediment	-
Employee Training	Requires employees be trained in specific topics	Trash/debris	-
Storm Drain System Signage	Requires signs at storm drains or receiving waters	Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance	Requires routine maintenance of the sewer lateral	Fecal Coliform	Fecal Coliform TDS
Over-watering of Landscape	Requires overspray and over watering to be eliminated	Nitrates	TDS

"-" indicates no impact, positive or negative, to the Forrester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

4.2.1 Municipal Site BMP Implementation and Verification

As defined in the JURMP, five of the 31 Municipal-maintained areas are considered high priority due to their location, size, and/or potential to impact water quality. This includes the Civic Center-City Hall Plaza complex, Fire Station No. 9, Parks Storage Garage, Public Works Maintenance Division Office, and the Vehicle Maintenance Facility. These five are inspected annually. Annual inspections of high priority municipal areas are conducted to verify implementation of minimum required BMPs. Table 5 lists the minimum required BMPs and Municipal Functions. An "X" under the minimum required BMP indicates the BMP is:

- A minimum Requirement
- Implemented per written or required specification
- Verified during inspection

Table 5: Required & Implemented BMPs for Municipally-Maintained Areas

MUNICIPALLY-MAINTAINED AREAS				
	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Non-Storm-Water Discharges - SC10	X	X	X	X
Spill Prev/Contl/ Clean - SC11	X	X	X	X
Vehicle & Equipment Fueling - SC20				
Vehicle & Equipment Cleaning - SC21			X	
Vehicle & Equipment Repair - SC22			X	
Loading /Unloading - SC30			X	X
Liquid Container Storage - SC31				X
Raw Materials Storage – SC32	X		X	
Equip Operations - SC33			X	

MUNICIPALLY-MAINTAINED AREAS				
	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Building Repair/ Construction - SC42				X
Parking/Storage Maintenance - SC43			X	X
Drainage System Maintenance - SC44	X	X	X	X
Employee Training - City of El Cajon	X	X	X	X
Storm Drain System Signage - City of El Cajon	X	X	X	X
Public Participation and Education			X	X
Street Sweeping - City of El Cajon	X		X	
Vegetation Controls - City of El Cajon				X
Preservation of Existing Vegetation - City of El Cajon				X

MUNICIPALLY-MAINTAINED AREAS				
Waste Handling/ Disposal - SC34		X	X	X
Safer/Alternative Products - SC35			X	X
Contam/Erod Areas - SC40			X	X
Building/Grounds Maintenance - SC41			X	X

MUNICIPALLY-MAINTAINED AREAS				
Seeding and Planting - City of El Cajon				X
Mulching - City of El Cajon				X
Over-water Activities - City of El Cajon				X

X = Minimum Requirements

4.2.2 Implementation Analysis and Further Assessment

Table 6 summarizes the implemented BMPs for the five high priority Municipal Facilities where formal inspection and BMP usage was verified. It is important to note that no illegal discharges or spills were reported for any of the 31 City-owned or maintained areas.

Table 6 Percent BMP Implemented

BMP	Percent Implemented	Pollutant Prevented
Non-SW Discharge	100	Various: Fecal Coliform
Spill Prevention/Control/Cleanup	100	Various
V&E Cleaning	100	Metals
V&E Repair	100	Oil & Grease
Loading/unloading	100	Various
Liquid Container Storage	100	Oil & Grease
Raw Materials Storage	100	Pesticides
Equipment Operations	100	Oil & Grease
Waste Handling/Disposal	100	Bacteria
Safer/Alternative Products	100	Pesticides
Contaminated/Erodible Areas	100	Sediment
Building/Grounds Maintenance	100	Trash, Debris
Building Repair/Construction	100	Metals
Parking/Storage Maintenance	100	Oil & Grease, Trash, Debris
Drainage System Maintenance	100	Sediment, Trash, Debris
Employee Training	100	All
Public Participation and Education	100	Trash, Debris
Street Sweeping	100	Sediment, Trash, Debris
Sewer System Maintenance	100	Fecal Coliform
Vegetation Controls	100	Sediment
Preservation of Existing Vegetation	100	Sediment
Seeding and Planting	100	Sediment
Mulching	100	Sediment
Over-watering Activities	97	TDS (Nitrate)

(Highlighted – 303(d) listed pollutants)

The City Hall complex has an ever-existing issue with irrigation over spray and broken sprinkler lines due to large public visitor population and the homeless. Problems are fixed immediately, although never eliminated

The above information is used in Section 11 to support an Effectiveness Assessment of the Municipal Component and further define areas where improvements can be made.

4.3 PESTICIDE, HERBICIDE, AND FERTILIZER MANAGEMENT

4.3.1 Pesticide Regulatory Program – Integrated Pest Management

The City has adopted a Pesticide, Herbicide, and Fertilizer Management program as follows:

- Maintain a running inventory of pesticides, herbicides, and fertilizers,
- Implement a schedule for application of pesticides, herbicides, and fertilizers,
- Use an Integrated Pesticide Management (IPM) approach,
- Track use of pesticides, herbicides, and fertilizers,
- Train or license (Qualified Applicator Certificate) City personnel who apply pesticides, and
- Continuously train City personnel on BMPs.

The City maintains 120 acres, including landscaped medians, parkway trees, parks and public grounds and performs scheduled maintenance of all areas on a daily basis. Weed control is conducted along public streets and along storm water channels. Crews use concentrated pesticides and herbicides, both solid and liquid, as follows: Pre-emergent (Pre-E) at 1395 pounds, 3.7 gallons; Post-Emergent at 5.4 grams., 123.3 gallons (including Roundup); Contact Chemicals at 75 lbs.; and Pool Chemicals (chlorine and muriatic acid) at 55 lbs., 5,314 gallons.

To maintain the City's Park and Recreation areas, 17,000 lbs. of fertilizer were used on turf and landscape during the active growing seasons (Spring, Summer and Fall). Fertilizer applications consisted of polymer coasted slow release fertilizer. No fertilizers are applied when a rain event is pending. All fertilizers are applied using professionally trained City personnel utilizing BMPs. Applications are documented with fertilizer use reports.

4.4 MUNICIPAL STAFF TRAINING, SPECIAL EVENTS AND NOTABLE ACTIONS

New hires for City municipal staff receive New Employee Orientation Training that includes a module on storm water quality issues and concerns. In PY4 all Public Works, Parks Division and Facilities Maintenance personnel attended storm water training sessions conducted during September and October of 2010.

Figure 6

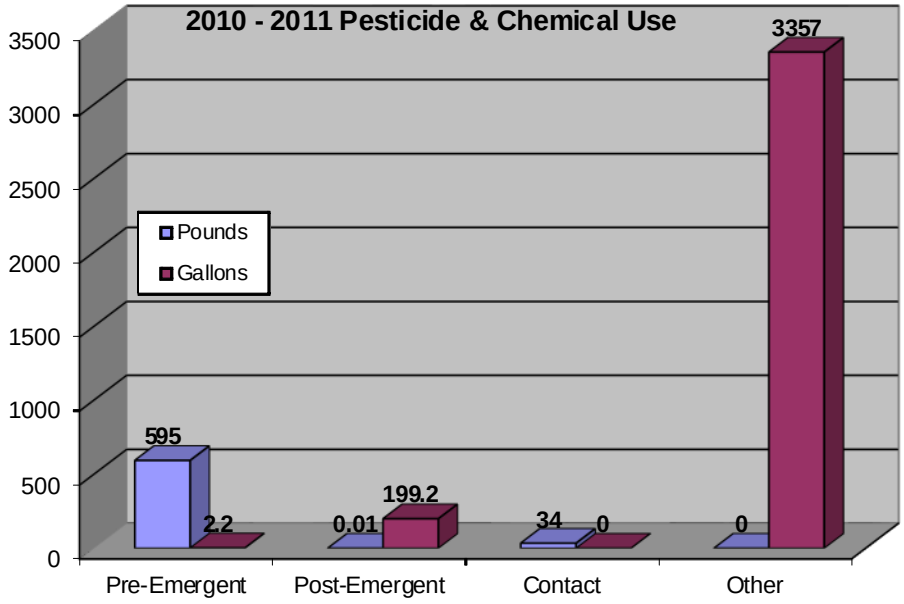

NATIONAL PUBLIC WORKS WEEK

Public Works Week emphasizes the importance of Street Maintenance, Sanitary Sewer and Storm Water system flushing, and other Emergency and Non-Emergency Services provided by Public Works Maintenance and Operations crews. Public Works Week highlights the equipment used to complete these tasks. In PY4, Public Works was celebrated during the week of May 15, 2011. The public, including students from nearby schools, were invited to view equipment and speak with Public Works crewmembers.

TRASH FENCE

The City of El Cajon is the first major jurisdiction within Forrester Creek watershed. Consequently, pollutants and trash that enter the storm drain system are carried downstream to the City of Santee where the Creek has not been improved. In response to the City of Santee's Forrester Creek Restoration Project, the City of El Cajon completed a bid and initial scouting for the placement of a trash and debris fence. The trash fence must be able to withstand forces from

flows reaching 22 feet per second and hold heavier floating debris. Installation was accomplished in the fall of 2005 and the trash fence has been in service since. The picture to the right shows trash and debris captured by the fence during a rainfall event.

Forrester Creek Trash Fence

WEB PAGE

The City of El Cajon added new content to a Storm Water Web Page that is part of the El Cajon, Municipal Web Site. The Hotline for the City and County plus reports, brochures, and guidance documents can be accessed from Portable Document Format files (PDF files) on the web site.

4.5 IMPROVEMENTS AND REGULATORY COMMENTS

The following are the major improvements completed for PY4.

- Continued implemention of the El Cajon Sewer Ordinance giving the City legal authority to enforce the wastewater discharge requirements of ***Regional Water Quality control Board Order No. R9-2007-0005.*** **For a complete summary of this Ordinance update, refer to Appendix D.3.** For a complete copy of the new Sewer Ordinance, refer to Appendix D.4.
- Continued the improvement and functionality of the trash and debris fence for Forrester Creek, located upstream from Gillespie Field.
- Reviewed Storm Water Program for Capital Improvement Projects.
- Continued implementation of GIS to assist with maintenance of storm drain systems and the sanitary sewer system.
- Continued implementation of program for monthly self-inspection of Municipal Facilities and Operations.
- Continued to conduct maintenance of the existing storm drain inlet filters.
- Continued development of specific environmental indicators for accurate measurement of Urban Runoff Program effectiveness.
- Established defined measurements and actions to address watershed requirements and develop watershed management procedures.

No regulatory comments were received for the Municipal Component of the JURMP for PY3.

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SECTION 5 INDUSTRIAL & COMMERCIAL COMPONENT

5.1 INTRODUCTION

Industrial

The Industrial Component continued on its track of evaluating the implementation of Best Management Practices (BMPs). The component was originally revised at the end of 2004, adjusting the program to a BMP implementation and verification task and continued with the revision of the JURMP in 2008. Industrial inspections are the focus of the City's Industrial Component with the goal to verify the presence, proper implementation, and maintenance of BMPs. During the inspections, the City also checks that facilities have filed a Notice of Intent and has a Storm Water Pollution Prevention Plan pursuant to the General Industrial Permit, if required.

Proper implementation and maintenance of appropriate BMPs at industrial facilities will eliminate or reduce the discharge of pollutants from an Industrial site and prevent pollutants from entering the City's storm drain system. The City redesigned the inspection sheet to emphasize the use of BMPs for specific, potential pollutant producing activities. Industrial activities either have the potential to affect storm water runoff or have no direct or apparent affect. Industrial operations conducted in a manner that prevents the discharge of pollutants or pollutant contact with storm water should not have any impact on water quality. The City's focus is on identifying those industrial activities that have an actual or potential impact on water quality, requiring implementation of appropriate BMPs and periodic inspections of industrial facilities to verify compliance with City, state and federal water quality requirements.

Outdoor industrial activities have the greatest potential to impact receiving waters through outdoor storage, loading/unloading, fueling areas, vehicle/equipment maintenance, solid/hazardous waste storage, and parking lot runoff. A Storm Water Quality Inspection Form for Industrial-Commercial Facilities to document routine, follow-up, and compliance inspections is provided in Appendix A.5.

Commercial

Commercial facilities are those facilities that are designated by the City, or the County, as a commercial facility with activities that may potentially affect the quality of receiving waters. In previous years, the City identified commercial facilities within its jurisdictional boundaries, and has categorized different commercial types for education, inspection, and follow-up.

After the *Framework for BMP Implementation* was completed in October 2003, the Commercial Component was restructured into a BMP implementation program similar to other Existing Development (Municipal, Industrial, and Residential). Implementation, verified during onsite inspections, determines whether a BMP is either fully implemented or requires Corrective Action. A fully implemented BMP is counted towards preventing, eliminating, or reducing pollution discharged to the maximum extent practicable (MEP).

5.2 STATIONARY IND. & COMMERCIAL SALES/SOURCES/EQUIPMENT

5.2.1 Background

In 2002, the City developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01. As part of this program, the City was required to conduct industrial and commercial storm water compliance inspections to assess the implementation of the minimum best management practices (BMPs) required in the industrial and commercial section of the JURMP. On January 24, 2007, the updated Municipal Permit, Order No. R9-2007-0001 was adopted. This new Municipal Permit required each Copermittee, including the City, to update its JURMP document. The industrial and commercial components were updated to comply with the new requirements.

The requirements of the new Municipal Permit went into effect in March 2008. The new Municipal Permit requires that all high Treat to Water Quality (TTWQ) sites be inspected after the year of implementation. The City of El Cajon chose to inspect all facilities in the commercial/industrial inventory designated as high TTWQ, as well as some medium and low TTWQ facilities. This helped the City meet an additional new Municipal Permit requirement that 25 percent of the total number of facilities on the City's inventory be inspected after the first year of program implementation. The City inspected all industrial facilities that are covered or are known to require coverage under the General Industrial Permit (Industrial Permit). Additional details on how the City met the requirements listed above are included in Section 5.2.2 of this report.

The City used professional consulting services to assist with inspections for reporting year 2010-2011. A total of 190 industrial and commercial facilities received site visit inspections. A detailed list of the facilities selected for inspections can be found in Appendix B.2.b of this report. Based on site visits the industrial/commercial inventory was updated from 738 to 713 facilities. The updated inventory, included in Appendix A.5, is composed of facilities that pose a high, medium and low TTWQ.

5.2.2 Source Characterization

The City's watershed-based inventory for industrial and commercial facilities was updated based on changes in business license information and the California Department of Water Resources list of Permittes covered under the General Industrial Permit. The City's Storm Water group has

developed a procedure to assist in reviewing and updating the City storm water inventory based on business license information (please refer to Appendix A.5 for document entitled "Business License and the Storm Water Program"). The inventory was further refined by field inspections conducted during pervious permit years. The updated inventory consists of 713 industrial and commercial facilities that are designated into high, medium, and low TTWQ stationary sites. Of the 713 businesses, 190 were inspected. A list of the businesses inspected during the fiscal year is attached in Appendix A.5.

5.2.3 Best Management Practice Requirements

Pollution prevention for industrial and commercial facilities eliminates the management of pollution and ultimately leads to a cleaner, healthier watershed. Although Best Management Practices for Commercial Facilities are used as a primary mechanism for reducing commercial discharges of pollutants into regional MS4s, the educational effort to change the way businesses conduct business is the final objective. The City encourages industries to apply pollution prevention tactics, such as the BMPs listed in Table 1, below. Storm Water staff or city representatives disseminate this information during inspections, letters, and enforcement actions. The following pollution prevention methods shall be considered and implemented to the MEP where applicable:

- Reduce quantity of toxic materials used or substitute with less-toxic materials
- Use minimal cleaning water to decrease the generation of wastewater
- Display pollution prevention methods prominently to remind or instruct employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
Spill Prevention, response, control, and cleanup	Prevents spills, controls spills	Oil & Grease pH	pH
Raw Material Storage	Prevents pollutants on outdoor material storage	Oil & Grease	_

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
	from discharging		
Safer Alternative Products	Encourages use of less toxic materials	Pesticides Fertilizers	TDS Phosphates
Good housekeeping of outdoor activity areas	Prevents pollutants from entering the storm drain system.	Oil & Grease	TDS
Employee Training	Prevents discharges, spill response, over-watering	Oil & Grease Pesticides Fertilizers	pH Fecal Coliform TDS Phosphates
Private Sewer Lateral Maintenance	Preventive maintenance of sewer lateral prevents sewage overflows	Fecal Coliform Enterococcus Nitrates	Fecal Coliform TDS

5.2.4 Program Implementation

5.2.4.1 Priority Industrial-Commercial Sources

Industrial
Each year, industrial sites are re-prioritized to get an accurate picture of the number and types of industrial sites within the City's jurisdiction. Prioritization involves two steps: initially classifying a facility as being a high TTWQ based on site information; and subsequently confirming or reclassifying it based on field observations and additional information. The former step has been accomplished administratively using the data provided in the inventory of industrial sites. The latter step was completed following inspection of each industrial facility.

Additionally, pollutants were listed with the activities associated with industrial outdoor activities to assist in the selection of the most appropriate BMPs. This initial connection of pollutants, BMPs, and activities will be used to correlate water quality with JURMP requirements in the Annual Report. Below, in Table 2, is the City's listing of activities with the potential pollutants.

Table 2 – BMPs to Pollutants for Industrial Facilities

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies depending on discharge	-
Spill Prevention	Addresses spills	Varies depending on	-

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
Control and Cleanup – SC11		spill	
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	(Petroleum) Oil & Grease Metals	-
Loading/Unloading – SC30	Controls the loading and unloading of materials	Varies depending on the materials Trash	-
Liquid Container Storage – SC31	Controls discharges associated with outdoor liquid containers	(Petroleum) Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies depending on the waste material Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials for cleaning, disinfecting, or other functions	Pesticides Fertilizers	Phosphates
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris Sediment	TDS Phosphates
Parking Lot and Storage Maintenance – SC43		Trash/debris Sediment	-
Drainage System Maintenance – SC44		Trash/debris Sediment	-
Employee Training		Trash/debris	-
Storm Drain System Signage		Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance		Fecal Coliform Debris	Fecal Coliform TDS
Over-watering of Landscape		Nitrates Phosphates	TDS Phosphates

"-" indicates no impact positive or negative to the Forrester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

Commercial

A majority of the City's commercial sites can be categorized as shown in Table 3. Of specific concern are those businesses located near storm water channels. Activities from the commercial sites with the associated pollutants are shown in the following table.

Table 3 – Commercial BMPs to Specific Business Produced Pollutants

Business Type → **BMP ↓**	**Restaurants**	**Automotive Establishments**	**Retail Gasoline Outlets**	**Mobile Washing Businesses**
Non-Storm Water Discharges – SC10	Organics Trash	Oil & Grease Metals	Oil & Grease Metals	Oil & Grease, Metals
Spill Prevention Control and Cleanup – SC11	Trash Oil & Grease Organics/Bacteria	Trash Oil & Grease Metals	Trash Oil & Grease	TDS Metals
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22		Trash Oil & Grease Metals		Oil & Grease Metals TDS
Loading/Unloading – SC30	Organics/Bacteria Oil & Grease	Oil & Grease	Oil & Grease	
Liquid Container Storage – SC31		Oil & Grease		
Raw Material Storage – SC32		Oil & Grease		
Waste Handling and Disposal – SC34	Organics/Bacteria Oil & Grease Trash			Trash
Building and Grounds Maintenance	Organics/Bacteria Oil & Grease Trash	Trash	Trash	
Parking Lot and Storage Maintenance – SC43	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Drainage System Maintenance – SC44	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Employee Training	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Private Sewer Lateral Maintenance	Pathogens/Fecal Coliform TDS	Fecal Coliform TDS		
Over-Watering	TDS	TDS	TDS	

5.2.4.2 Backgroud BMP Requirements and Implementation

Industrial

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of the Municipal Permit. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility. An "X" indicates the BMP is: Required by the City of El Cajon as a minimum BMP – Level 1 by the Industrial facility – Level 2 (Provided BMP information). These two levels were completed in previous permit years.

The next steps include:

- Implementation as observed during the onsite inspection – Level 3 (Verified in previous permits years)
- Connection to a specific Primary pollutant and any 303(d) pollutants identified for Forrester Creek to support an Effectiveness Assessment – Level 4 (Verified in previous permits years)

In past years the City applied "A Framework for the Implementation of Best Management Practice (BMP) Programs at Commercial and Industrial Sites" to implement BMPs at industrial sites. BMP selection and application began at JURMP development with a minimum number of BMPs. These minimum requirements were used to develop the industrial/commercial inspection checklist.

Table 5 – Required Industrial BMPs

Required Industrial BMPs	
Non-SW Discharges - SC10	X
Spill Prevention/Control/Cleanup - SC11	X
V&E Fueling - SC20	X
V&E Cleaning - SC21	X
V&E Rep - SC22	X
Loading/Unloading - SC30	X
Liquid Container Storage - SC31	
Raw Materials Storage - SC32	X
Equip Ops - SC33	
Waste Handling/Disposal - SC34	X
Safer/Alternative Prods - SC35	
Contam/Erod Areas - SC40	
Bldg/Grounds Maintenance - SC41	X
Bldg Rep/Construction – SC42	
Prkg/StorageMaint – SC43	X
Drainage Sys Maint - SC44	X
Employee Training - SWPPP	X
Storm Drain System Signage - Permit	

Required Industrial BMPs	
Private Sewer Lateral Maintenance - City of El Cajon	X
Over-water Landscape - City of El Cajon	X

5.2.4.3 Updated BMP Requirements

Pollution prevention methods are cost-effective BMPs that eliminate or reduce the generation of pollutants at their sources. Industrial and commercial facilities produce a range of pollutants, both indoors and outdoors, that can threaten human and environmental health if washed into the storm drain system by way of urban runoff. Businesses can benefit from pollution prevention methods by reducing labor time associated with excess pollutant waste handling, thereby re-directing labor time more efficiently to production, as well as the accompanying costs of storage, disposal or treatment.

The following pollution prevention methods are considered and implemented to the MEP where applicable:

- Reduce quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

In addition to the methods listed above, the City of El Cajon also reserves the authority to require a Storm Water Pollution Prevention Plan (SWPPP) for any Industrial or Commercial facility within its jurisdiction that discharges significant pollutants into receiving water bodies. In addition to the pollution prevention BMPs described above, the City has also established minimum BMPs for all industrial and commercial sites. Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs, including structural and non-structural BMPs, are required of all facilities and are included in Appendix A.5 (General BMPs for Industrial/Commercial Facilities). Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs and Activity-Specific BMPs are required where applicable and are briefly listed below.

General BMPs

- Non-Structural BMPs

Non-Structural BMPs aim to prevent pollutants from coming into contact with storm water or authorized non-storm water discharges. Many of these methods already exist as part of the standard operating procedures for a site:

- Good housekeeping
- Preventive maintenance
- Material handling and storage of materials
- Employee training
- Solid waste (non-hazardous) handling and recycling
- Record keeping
- Self inspection/quality assurance
- Spill response

- Structural BMPs

  Structural BMPs consist of specialized equipment, structural components, or engineered technologies that can be used when non-structural BMPs are ineffective. Structural BMPs are site specific; therefore the facility operator needs to evaluate each proposed use. Proper installation and regular maintenance of structural BMPs are imperative to their effectiveness. Examples are as follows:

  - Overhead coverage of outdoor work areas or chemical storage.
  - Retention ponds, basins, or surface impoundments that confine storm water to the site.
  - Berms and concrete swales or channels that divert run-on and runoff away from pollutant sources.
  - Secondary containment structures.
  - Treatment controls, e.g., infiltration devices and oil/water separators, to reduce pollutants in storm water or authorized non-storm water discharges.

Activity-Specific BMPs

Appropriate BMPs will depend on the type of activities, pollutants, and potential source of pollutants. The BMP requirements for the following activities and areas are relatively common at industrial and commercial sites and required by the City.

- Hazardous materials storage (including tanks)
- Solid waste storage
- Loading/unloading
- Fueling
- Wastewater treatment
- Landscaping/ grounds keeping
- Vehicle maintenance
- Parking lots
- Process water pre-treatment
- Equipment storage
- Washing of Equipment/Vehicles
- Rooftops

5.2.4.4 Additional Controls for Industrial & Commercial Sites/Sources

Forrester Creek, which flows through the City, is 303(d) listed for fecal coliform, low dissolved oxygen, phosphorus, and TDS. The City has not identified any industrial or commercial facilities that are likely to be significant sources of fecal coliform or TDS. As a proactive measure, however, the City has assigned higher priorities to concrete and stone cutting businesses, as they may contribute to elevated TDS levels. Similarly, the City assigned higher priorities to animal-related businesses, which may be sources of fecal coliform if animal waste is not disposed of properly. The City also assigned higher priorities to commercial businesses associated with fertilizer use (i.e. nurseries, greenhouses, etc.) since low dissolved oxygen and elevated phosphorus levels are commonly associated to improper fertilizer use and/or storage.
As mentioned previously in this report, the City has chosen to designate major channels within the City as ESAs. Major channels within the City are typically concrete, and hold no significant environmental value, however. The City has chosen to designate these areas as ESAs as a proactive measure to protect downstream water quality. During inspections of businesses that drain to 303(d) listed receiving waters or other ESAs, the City will conduct more detailed investigations into whether the businesses are potential sources of the pollutants of concern or may otherwise negatively impact the ESA. If a business is believed to be a significant source of key pollutants and the standard BMPs listed above are not adequate, the City will require additional BMPs so that discharges of the key pollutants of concern will be reduced to the MEP.

5.2.4.5 Sites Selected for Inspection

In 2008, the City created a Jurisdictional Urban Runoff Management Program (JURMP). The City's inspection program "aims to reduce and prevent industrial and commercial pollution discharges from the MS4 to the MEP to protect local receiving water bodies and to comply with the Municipal Permit" (JURMP, City, 2008). The City created an inventory list of businesses for inspection and followed the inspection protocol described in the City's JURMP.

In 2009, the City developed a list of 51 industrial and 623 commercial facilities to inspect for compliance with federal, state, and local laws in accordance with the Municipal Permit. After inspections in 2009, the City's inventory has been revised and edited yearly, at a minimum, for new facilities or businesses that are no longer in existence. In 2011, the City conducted 126 industrial inspections and 60 commercial inspections to meet its permit required 25% inspection threshold from the total 713 stationary businesses. In total, 186 inventoried businesses were inspected. There were 4 businesses additionally inspected that were vacant, moved, refused, or duplicate businesses.

Based on experience, the inspection process for industrial and commercial facilities is often more efficient when appointments are not scheduled. This allows inspectors to inspect neighboring businesses rather than driving longer distances from business to business to meet scheduled appointments; it also eliminates time spent on the phone scheduling. In general, scheduling is conducted for industrial facilities that have or are required to have Industrial Permit coverage so

that the proper facility personnel can be present for the inspection and materials such as SWPPPs and monitoring plans are located and easily accessible for review when the inspector arrives.

5.2.4.6 Industrial Inspections and Implementation of BMPs

In total, 129 industrial facilities were inspected during 2011. Industrial businesses were defined by 40 CFR §122.26(b) (14). Attachment 1 of the Industrial Permit lists those facilities whose principal activity is included under the Industrial Permit. All industrial facilities were assigned a high threat to water quality, consistent with the City's JURMP. Sites marked for the City to follow up on the initial inspection, and sites with a high TTWQ, including all industrial sites, require annual inspections. A breakdown of TTWQ ranks for industrial facilities is shown in Table 6. BMP implementation at industrial facilities is summarized in Table 7

- Approximately 58% of the industrial facilities required a follow-up inspection.
- A total of 17 out of 129 industrial facilities had submitted a Notice of Intent (NOI) under the Industrial Permit, had implemented stormwater monitoring programs, and maintained a Stormwater Pollution Prevention Plan (SWPPP).
- Three businesses had a Notice of Termination (NOT).
- Five businesses obtained a Notice of Non-Applicability (NONA) and/or a No Exposure Certification (NEC).
- No IC/ID was observed.
- Fully implemented stormwater employee training was noted at 61 businesses.
- Out of the 1,517 applicable BMPs, 1,414 (93 percent) were fully or partially implemented.
- Only 7 percent of applicable BMPs were not implemented.

Table 6: Industrial Facilities

Threat	Number of Industrial Facilities
High TTWQ	24
Medium TTWQ	96
Low TTWQ	6
No TTWQ Determined	3

Table 7: Industrial Facility BMP Implementation

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.1 General	7	482	71	11	257
D.2 Landscaping	5	161	7	0	421
D.3 Materials and	13	409	149	82	879

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
Wastes					
D.4 Equipment, Vehicles, and Outdoor Activities	5	47	23	9	510
D.5 Other	5	62	3	1	515
TOTAL	**35**	**1161**	**253**	**103**	**2582**

(a) Individual BMPs in each BMP group are located in Section D of the City of El Cajon Commercial and Industrial Stormwater Compliance Inspection Form, (Please refer to Appendix A.5).

5.2.4.7 Commercial Inspections and Implementation of BMPs

In total, 61 commercial facilities were inspected during 2011. Commercial businesses were defined as those businesses not subject to the Industrial Permit, and that do not perform activities meeting the definition of industrial activity under 40 CFR §122.26(b)(14). Over 25 percent of sites inventoried were inspected annually. Commercial businesses requiring annual inspections were those with a high TTWQ and those that warranted a follow-up inspection. A breakdown of TTWQs for commercial facilities is presented in Table 8. BMP implementation at commercial facilities is summarized in Table 9.

- No illicit connections were observed. However, two potential illegal discharges were noted during inspections.
- Approximately 23 percent of the facilities with significant outdoor activity needed improved cover for outdoor storage, including trash.
- Approximately 25 percent of applicable businesses needed improved spill prevention and response materials, including spill kits; 11 percent needed secondary containment for liquid storage.
- Out of the 842 applicable BMPs, (88%) were fully or partially implemented.
- Only 12 percent of applicable BMPs were not implemented.

Table 8: Commercial Facilities

Threat	Number of Commercial Facilities
High TTWQ	27
Medium TTWQ	28
Low TTWQ	5
No TTWQ Determine	1

Table 9: Commercial Facility BMPs Implementation

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.1 General	7	236	35	10	104
D.2 Landscaping	5	87	4	0	168
D.3 Materials and Wastes	13	200	74	74	377
D.4 Equipment, Vehicles, and Outdoor Activities	5	44	15	9	212
D.5 Other	5	39	10	5	226
TOTAL	**33**	**606**	**138**	**98**	**1087**

(a) Individual BMPs in each BMP group are located in Section D of the City of El Cajon Commercial and Industrial Stormwater Compliance Inspection Form, see Appendix A.5.

5.2.4.8 Compliance and Enforcement

The follow-up priority classification section on the inspection form was designed to classify the level of necessity to perform a follow-up inspection at the facility. "Priority 1" follow-ups are given to facilities for which an active illicit connection or illegal discharge was observed. In these cases City's storm water personnel immediately instructed discharger to stop the discharge and an administrative citation was issued. "Priority 2" follow-ups typically have serious BMP-related issues. "Priority 3" follow-ups are given to facilities for which relatively minor BMP-related issues were observed.

A total of 1 businesses were found to be "Priority 1". Follow up inspections were scheduled and, whenever possible, investigations were conducted immediately.

As specified in the City Ordinance, the City is able to use various warnings and actions to correct a facility/activity and enforce the JURMP. For PY4, the City further coordinated with industry to implement and enforce the requirements of the JURMP and City Municipal Code. As with the other Permit component, enforcement generally is initiated with a verbal warning and followed up by a written warning. Enforcement using Administrative Citations was incorporated in May 2003. Appendix A.5 lists criteria for issuing Citations, document entitled "Storm Water Administrative Citation Program Criteria" and Appendix B.3 shows the list of enforcement actions taken by the City in PY2010-11.

5.2.4.9 Education

During inspections, business representatives were educated regarding storm water issues both through verbal interaction with the inspectors, and the distribution of printed storm water educational materials, when appropriate. In particular, the utilization of verbal interaction is extremely influential because it is tailored individually by the inspector to the specific issues and concerns of the facility and the facility representative. It prompts the facility representative to think about issues directly related to his or her daily actions as it applies to business activities. The inspector was able to provide information specific to the facility, which is beneficial to the facility representative due to the site-specific information. This information can help give the facility representative the proper tools to implement BMPs applicable to their business.

Printed educational materials were also distributed to businesses during inspections unless the facility representative declined to receive them. Posters specifically designed for automotive and restaurant activities were distributed as storm water educational materials. Also provided, when necessary, were NONA/NEC paperwork, NOI paperwork, and information of about the Industrial Permit draft. Each have a separate cover sheet with instructions on how to file, and contacts in case any questions arise. Samples of some of the educational materials distributed are included in Appendix A.5. In some cases, educational material was not applicable to the business activity and was therefore not provided.

5.2.5 Stationary Ind. & Commercial Sites/Sources Effectiveness Assessment

5.2.5.1 Common BMP Implementation Deficiencies

Common issues were noted at a large number of businesses and are discussed below:

- Outside metal storage was an issue at both commercial and industrial facilities and required multiple recommendations to provide cover and secondary containment and/or to relocate metals.
- Hazardous waste drums, particularly oil drums, were also observed outdoors at multiple locations without secondary containment; some were missing lids and/or labels.
- Commercial businesses were commonly located on property owned and/or maintained by a third party. As such, many of the outdoor area inspections resulted in the business stating that their property management companies were responsible for issues such as landscaping, trash, and general cleanup.
- Grease handling procedures at restaurants were recurring issues. Specific problems included: proper storage, proper containment, cleanup of grease spills, and keeping absorbent available near grease storage.

- Though many facilities did possess absorbent of some kind, actual spill kits were not very common and absorbent was typically not kept in clearly labeled containers or located near potential stormwater pollutant sources.
- In general, industrial facilities covered as mandatory under the State General Industrial Permit were more aware of stormwater concerns and had better training made available to employees than commercial businesses. Commercial businesses and industrial businesses conditionally subject to the State General Industrial permit often did not have any formal stormwater training program for employees.

5.2.5.2 SIC Code Changes and Updated Inventory

Based on the SIC code corresponding with the current principal activity of the business, some inspections resulted in business category reclassifications. Assessment of whether the SIC code was considered industrial was based on SIC code of the Industrial Permit. Attachment 1 of the Industrial Permit lists SIC codes that require mandatory coverage under the Industrial Permit and SIC codes that require coverage under the Industrial Permit "conditionally", depending on potential outdoor exposure to stormwater

The revised 2011 inspection list contains 715 facilities. Of the 715 businesses, 201 site visits were conducted. Out of 201 businesses, full inspections were conducted on 190 facilities. A list of businesses inspected during 2011 is contained in Attachment A.5. The inventory decreased from 739 facilities in 2010, mostly due to businesses closing down. The updated inventory list is located in Appendix A.5.

5.3 MOBILE SOURCES ELEMENT

5.3.1 Background

Illegal discharges tend to be the major area of concern with mobile businesses. Due to the nature of their activities, mobile businesses are regulated somewhat differently than other businesses. Mobile businesses can be difficult to identify because many do not have City business licenses. More than stationary businesses, mobile businesses are very dynamic with the start of new businesses and the closing of existing businesses on a relatively regular basis. For the reasons listed above and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option at this time.

5.3.2 Source Characterization

The mobile businesses known to operate within the City's jurisdiction are noted on the City's commercial inventory. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Pest control services
- Mobile carpet, drape or furniture cleaning
- Mobile construction trades
  - Painting and coating
  - Cement mixing or cutting
  - Masonry
  - Other contractors
- Landscaping
- Pool and fountain cleaning
- Power washing services

Because not all mobile businesses have obtained business licenses in the City or have a base of operations in the City, a continual process of refining and updating the City's inventory has been conducted. Sources for such inventory updates will include reported incidents, general observations by City staff, and available business licenses. The City participated in a regional effort to inventory and/or track mobile businesses. The Industrial/Commercial Regional Workgroup developed a regional database that included mobile businesses across Jurisdictions. The regional database in combination with the City's business license database provided the main source of information for prioritizing mobile businesses.

5.3.3 Best Management Practice Requirements

5.3.3.1 Updated BMP Requirements

In addition to all BMPs required for stationary sources; listed in Section 5.2.4.1, 5.2.4.2, and 5.2.4.3 of this report; mobile business are also required to implement the following minimum BMPs developed by the Regional Industrial/Commercial Workgroup:

- Storm Water Training
- Contain and Clean Up Spills (Spill Kits)
- Properly Handle All Waste (Solid, Liquid and Hazardous)
- Protect Storm Water Conveyance System: (Streets, Gutters and Alleys)
- Provide Proper Handling and Containment Of Materials
- Provide Equipment Washout Area

The most important BMPs for most mobile businesses typically involve non-Storm water discharge control and spill prevention, control, and cleanup. New mobile businesses applying for a business license received information about the required BMPs listed above. A copy of the required BMP information given to new business license applicants can be found in Appendix 5.

5.3.3.2 Additional Controls for Mobile Sources

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. Aside from washing, cleaning, or other activities that may cause illegal discharges, mobile businesses are not likely to conduct activities that produce significant pollutant discharges. If in the future the City finds that even in the absence of illegal discharges the activities of mobile businesses are contributing pollutants of concern to a CWA section 303(d) impaired water body segments or are negatively impacting ESAs, additional controls will be required for those activities. Further, if the City has reason to believe that mobile businesses are generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more regularly visit those areas and/or take other actions to address the illegal discharges.

5.3.4 Education and Outreach

The City of El Cajon provides information and outreach regarding storm water quality to mobile business owners and operators. A business license is not issued to the mobile businesses listed under Section 5.3.2 until the new business proponent has the opportunity to talk to Storm Water personnel about pollution prevention and BMP implementation. If applicable to the facility, mobile businesses are also provided with educational materials outlining pollution prevention methods and other BMPs related to their activities prior to issuance of a business license and during inspections. Inspectors also give recommendations to businesses, where appropriate. Because this specific element of the industrial and commercial program is fairly new it is anticipated that some mobile businesses it is anticipated that education will continue to be a significant portion of the program. The educational program is described in more detail in Section 8 of this report.

5.3.4.1 Inter-Jurisdictional Cooperation

An inter-jurisdictional program for the regulation of mobile businesses was completed during Permit Year 2009-10. The City of El Cajon and the Port of San Diego were the Co-Chairs of the Regional Industrial/Commercial Workgroup. The workgroup took a leading role in the creation of a regional inventory of mobile businesses, standardization of BMP requirements across jurisdictions, and sharing of enforcement action information.

5.3.4.2 Staff Training

Staff responsible for conducting storm water compliance inspections and enforcement of mobile sources is trained on inspection and enforcement procedures and BMP implementation as they relate to mobile businesses. City staff is also encouraged to be vigilant for illegal discharges from mobile businesses working within the City and to report businesses that are not in compliance to the storm water hotline.

5.3.4.3 Inspections

Mobile sites/sources are inspected by the City on an as needed basis. The most common triggers for these inspections are receipts of incident reports and direct visual observations by City staff. The inspections generally follow the same procedure as stationary facilities, described in Section 7.2.4.4 of the updated JURMP, although the main focus of most mobile business inspections is on discharge control BMPs.

5.3.4.4 Enforcement

Most violations associated with mobile businesses have been historically attributed to illegal discharges. The City's enforcement approach to such discharges will require the discharge to be stopped and cleanup of discharged materials when applicable and feasible. Education is also provided to operators who are not aware of the City's storm water requirements. Businesses that do not possess the materials necessary to implement the required BMPs are required to demonstrate to the City that they have obtained such materials and can properly use them before the City allows such businesses to resume operations in the City. Mobile businesses that do not have City business licenses are required to obtain one. A detailed list of all enforcement actions taken by the City is included at Appendix B.3 of this report.

5.4 IMPROVEMENTS AND REGULATORY COMMENTS

A Notice of Storm Water Inventory Short Comings was received from San Diego Coastkeeper. Whereas the notice commended the City for the detailed stationary business inventory table in the JURMP Annual Report for FY 2009-10, it did specify a need to add some clarity to the table. More specifically, the comment referred to the column entitled "Tributary to a 303(d) Listed" within the table. It was indicated that the column was unclear as to whether it intended to represent both (1) whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and (2) whether the site/source generates pollutants for which the water body segment is impaired, or only the former.

The table was edited to include both pieces of information. The columns entitled "Potential Pollutants" show the pollutants associated with the facilities. An asterisk next to the pollutants also indicates the pollutants associated with 303(d) listed impaired water bodies. These minor edits address the issues pointed out in the San Diego Coastkeeper Notice of Storm Water Inventory Short Comings, by making it easier to determine sources that are both tributary to a 303(d) listed water and generate pollutants for which the water is impaired – exactly what pollutant(s) impair the receiving water. A copy of the updated stationary business inventory table is included in Appendix A.5.

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SECTION 6 RESIDENTIAL COMPONENT

INTRODUCTION

Pollution prevention is the focus of the JURMP Residential Component to prevent pollutants from entering the storm drain system related to residential activities. Education is the best approach to implementing this component of the JURMP as the goal is to change behavior and perceptions. The City is successful in implementing the collection of household wastes and promoting used oil recycling. Each pound of household waste and used oil collected equates to one pound less of waste/pollutants that could be disposed improperly and enter the storm drain system.

6.1 PREVENTION OF POLLUTED RUNOFF

Preventing pollution is easier and less costly than treating wastes at the end of the pipe. The following pollution prevention BMP information is sent to residents via brochures in sewer billings, newsletters, and during face-to-face contact when a complaint or referral is investigated.

- Conduct automobile repair and maintenance under cover or with drip pans; recycle oil.
- Divert automobile wash liquids to landscaping.
- Store unused automobiles under cover; use absorbent pads or drip pans for leakage.
- Maintain garden and yard using natural remedies and drought-tolerant plants.
- Use less toxic products for home care/maintenance.
- Dechlorinate swimming pool water before releasing.
- Dispose of pet waste in the trash.
- Don’t use the street as your storage area for dirt, mulch, landscaping plants.
- The street is not a disposal area for concrete or paint washout, or hosing off driveway.

6.2 PRIORITY RESIDENTIAL SOURCES

Residential areas discharging directly to a major storm drain channel are the focus for pollution sources. Priority sources are directly related to 303(d) pollutants identified in Forrester Creek and the San Diego River. The following table connects sources with 303(d) pollutants. These same 303(d) pollutants are used in Section 11, Program Effectiveness Assessment to estimate the potential amounts of pollutant eliminated through prevention, intervention, and other BMP implementation.

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutants Prevented	Prevention of 303(d) pollutant
Composting	Reduces the amount of waste in the trash	Organics	**Phosphorous**
Use of a Professional Car Wash	Eliminates dirty, soapy water from the storm drain	Metals Detergents	**TDS** **Phosphorous**
Organic gardening	Eliminates fertilizers and pesticides	Nutrients Pesticides	**TDS**
Take a bag when walking the dog.	Eliminates dog waste from the Public Right of Way	Fecal Coliform Enterococcus Nitrates	**Fecal Coliform** **TDS**

6.3 BMP REQUIREMENTS

In addition to the pollution prevention BMPs, above, the following are encouraged in residential areas. Home improvement projects can cause side affects, like mud or concrete flowing into the street (see picture to the right). However, with an effective combination of BMPs applied to the maximum extent practicable, simple home projects can meet the City's BMP implementation requirements without much effort or expense.

Table 2 connects the use of BMPs with the prevention, reduction, or elimination of pollutants.

Table 2 – BMP to Pollutants for Residential Areas

BMP	Application	Primary Pollutants	303(d) Pollutants
Automobile Repair & Maintenance	Use Drip Pans Recycle Oil	Oil & Grease	
Automobile Washing	Use Commercial Car Wash	Metals Detergents	**TDS**
Automobile Parking	Use Drip Pans	Oil & Grease	
Garden and Yard Care	Compost or recycle waste	Organic Material	**TDS** **Phosphorous**
Home Care and Maintenance	Use Household Hazardous Waste Programs	Metals Toxic Substances	
Pet Waste Disposal	Take a bag when walking the dog	Fecal Coliform	**Fecal Coliform**
Private Lateral Maintenance*	Clean lateral every few years	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**
RV Parking & Maintenance	Use a legal dump station	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**

Changes in behavior have been noticed over the years, but although the message has been out in the community for several years, it is still new to many citizens. The Clean Community; Healthy Watershed, and Healthy Garden; Healthy Home (Integrated Pest Management) concepts will continue to be continuing messages for subsequent permit years.

6.4 BMP IMPLEMENTATION

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of Permit Section 6.3, BMP Implementation. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility.

The list of minimum BMPs for residential areas tracks along with pollution prevention concepts. Understanding through education and outreach is the basis for changing behavior in the residential community. By changing the way the residential community completes tasks around the home, benefits to water quality will be realized through wet weather monitoring. The common major routes for educating the citizens and disseminating information is through newsletters, sewer billing inserts, and City "drive-abouts" where information is delivered directly to target audiences.

Information on how to implement BMPs is provided to citizens through one-on-one visits, newsletters, sewer billing inserts and citizen complaints/referrals. Information that is distributed includes the following topics.

- Automotive Repair
- Car Washing
- How You Can Prevent Pollution from Entering the Storm Drain System
- Mobile Detailer BMPs
- PowerWashing
- Clean up After Your Pets
- Lawn and Garden Care
- Keeping Our Environment Clean!
- Over-Irrigation Can Cause Storm Water Pollution
- Washing Your Car
- What's the Problem with Pet Waste
- Keeping Our Yards and Our Storm Water Clean
- Trash and Street Sweeping Update
- Trash in Our Strom Drains
- Maintaining your Private Sewer Lateral
- Everything that goes into Our Storm Drains…Ends up in the Ocean
- Why It's Important to Keep Trash, Sediment and Debris Out of Storm Drains
- Pool Maintenance BMPs

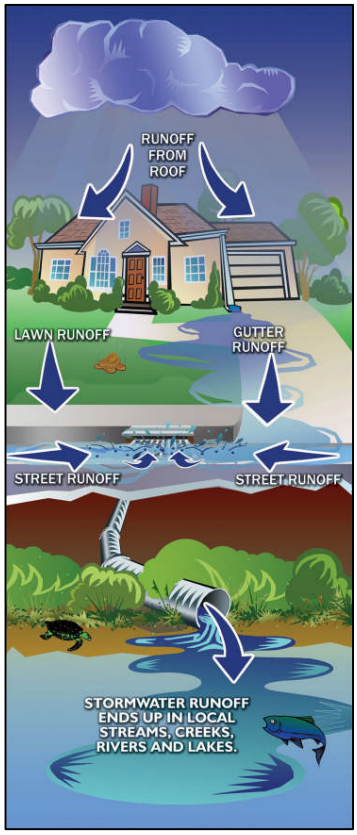

- Creating Community by Keeping Our Storm Water Clean

Copies of brochures, newsletter articles, and flyers sent to El Cajon Citizens are included in Appendix A.6.

Table 5 - Required BMPs for Residential Areas

		Automobile Repair Maintenance	Automobile Washing	Automobile Parking	Garden & Yard Care	Home Care & Maintenance	Pet Waste Disposal	Private Lateral Maintenance	RV Parking & Maintenance
RESIDENTIAL	Vehicles & Equipment	X	X	X					X
	Home and Garden				X	X	X	X	
	Pets						X		
	Private Sewer Lateral					X		X	

Minimum required BMPs for the Residential Component are grouped into four (4) basic categories as shown in Table 5. It is only through consistent, simple messages, that citizens will start to implement the BMP identified for the activities around their homes.

An area where the Police Department continues to collaborate with Storm Water staff is RV Parking and Maintenance. Police Department staff assist Storm Water staff in locating areas where dumping is occurring. The resulting outreach effort should help East County residents to reduce the number of illegal dumping events within this region of the watershed.

As illustrated above, over-watering from many different homeowners' landscaped areas can have an impact on the landscaping and may result in a significant source of water in the street. What seems of little importance from one home combines with runoff from other homes forming small rivers that can move materials stored in the right-of-way or pollutants that are illegally discharged. Homeowners are encouraged to save water and money by adjusting sprinkler heads to reduce or eliminate overspray. When over-watering is discovered, an attempt is made to contact the responsible party. Door hangers are left with instructions when homeowners are not home. Staff schedule a return date to discuss the measures that can be taken by homeowners. When over-watering discharges decrease, there is a reduction of:

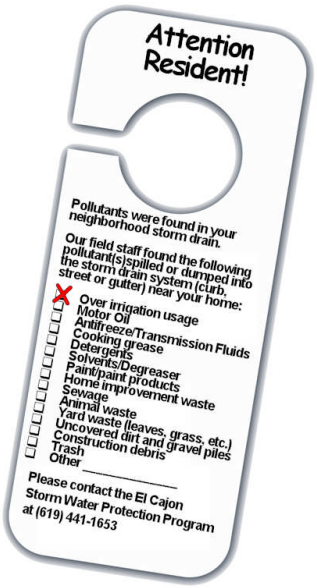

- the amount of water discharged to Forrester Creek
- the amount of pollutants transported to Forrester Creek during "No Rain" days

Improvement in decreasing over-watering will be measured by the amount of Forrester Creek flow leaving the City of El Cajon at the jurisdictional boundary to Santee. Flows measured during the dry weather program are an indication of daily flows. The PY2010-11 dry weather flow into Santee was measured at 83 gallons per minute, as measured at Dry Weather Station No. 5. Overall flows have been on the decrease in all permit years since PY2004-05, inclusive, and may indicate that outreach and education efforts that discourage over-irrigation are becoming effective. Additional flow measurements will be taken during the next annual cycle. The full Forrester Creek Study is contained in Appendix A.12.

6.4.1 Outreach to Residents

The City used various types of educational materials to distribute information and discuss the JURMP requirements with residents when responding to complaints or investigating a discharge. Brochures were provided to residents during face-to-face discussions concerning complaints and referrals. The City newsletter has included seven articles concerning routine activities where receiving waters may be impacted by pollutants. The newsletter is freely available for residents

and industrial/commercial business owners on a semi-annual basis. Two such printings were completed in PY4 and covered the following activities for residents:

- Residential Automotive Repair and Maintenance
- What You Can Do to Reduce Urban Runoff Pollution
- How Should I Wash My Car?
- Pollution Prevention Tips for Landscape & Gardening
- Sewer Spill Reference Guide
- Residential Repair, Repair and Remodeling – Part 1
- Residential Repair, Repair and Remodeling – Part 2

The City printed and distributed 38,000 copies, each, of the spring and fall newsletters with seven articles in total contained in both newsletters. As a result, residents are becoming more aware. An indication of this awareness is the increase in the number of complaints and referrals from the private sector. As the public and municipal staff gains more knowledge and awareness of urban runoff, additional increases in complaints and referrals are expected to continue to increase. Education of staff and residents is productive.

6.4.2 Recycling and Waste Collection Services

Keeping household wastes out of the storm drain system requires the implementation of a coordinated pickup program with a licensed facility to handle the wastes according to appropriate State and Local regulations. The City uses Waste Management to schedule routine and requested pickups for household wastes. Figures 1, 2, 3, and 4 show the total amount of household wastes, the type of wastes collected, recycled materials from curbside pickup (commercial and residential) and total amount of waste collected. There were 23 Household Hazardous Waste, Electronic Waste and Universal Waste Collection Events where a total of 1,718 participants dropped off over 290,107 pounds of materials. A total of 489,616 pounds of household hazardous waste was collected (Figure 1). Figure 2 shows the percentages of material types taken to the collection events. Waste Management collected a total of 74,078 tons of waste from residential, commercial and industrial areas (Figure 3). A total of 18,281 tons of materials were recycled from the curbside-recycling program, this program only includes residential areas.

The City of El Cajon works to promote and increase used oil collection through residential collections that include curbside pick-ups or encourages citizens to recycle used oil and filters. A grand total of 12,709 gallons of used oil and 1,783 used oil filters were collected from within the City. A total of 434 gallons of used oil and 277 used oil filters were collected from residential areas, while a total of 12,275 gallons of used oil and 1,506 used oil filters were collected from certified collection centers located within the City of El Cajon's jurisdiction.

Figure 1 – Household Hazardous Waste Collection

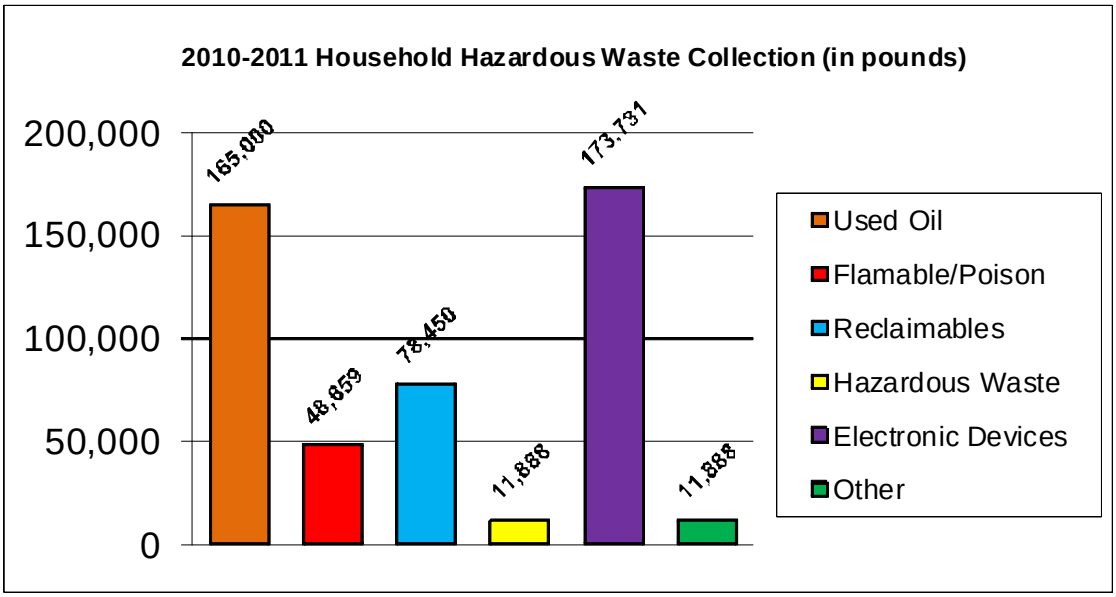

Figure 2 Percentages of HHW Type

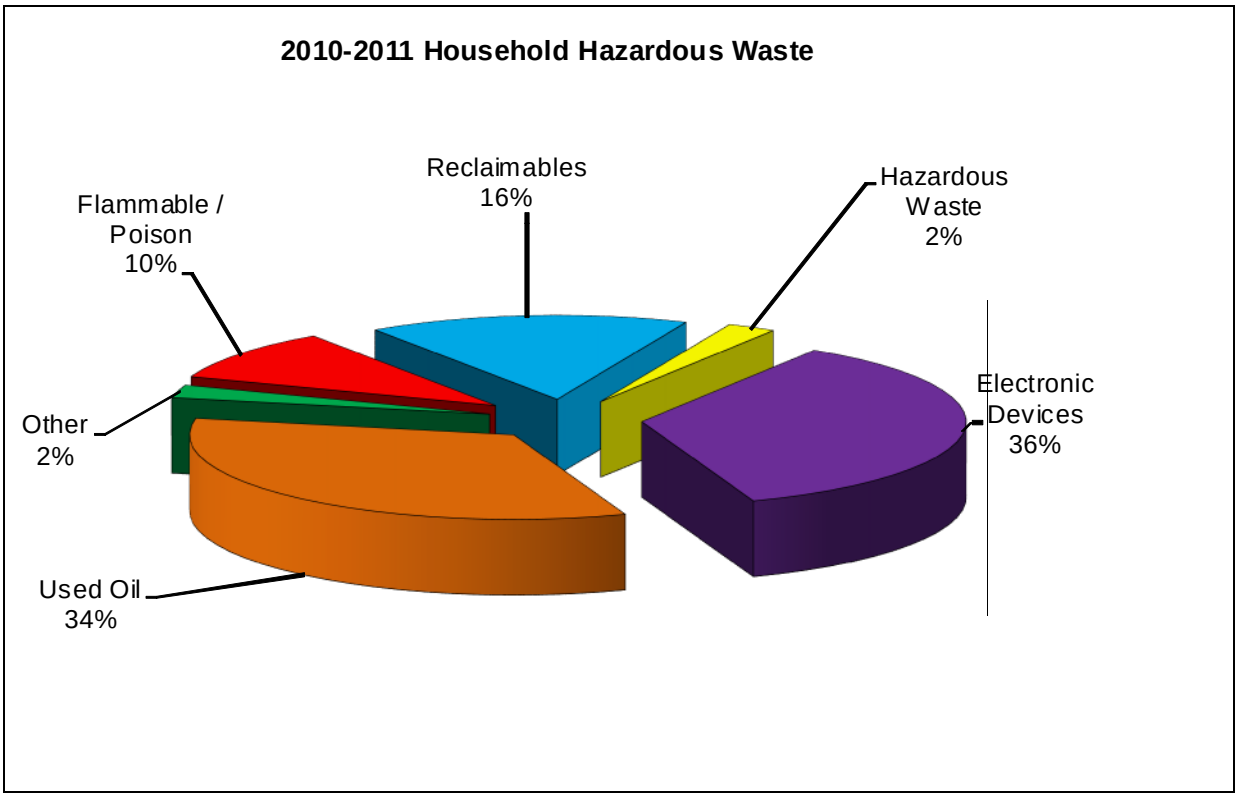

Figure 3

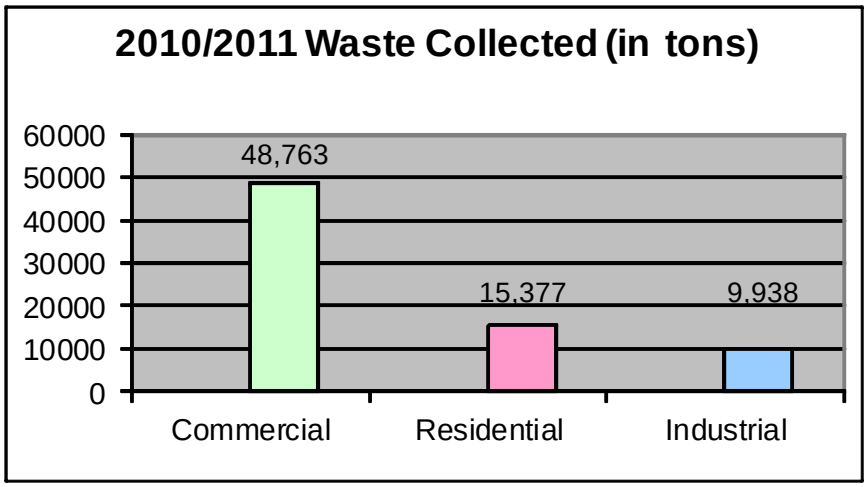

Figure 3 shows the amounts, in tons, of waste collected for Commercial and Residential sites. Waste collected equates to pollutants not discharged to the storm drain system.

6.4.3 Opportunities for Community Involvement

The El Cajon Community Development Center (ECCDC) prints and circulates a newsletter to the downtown area businesses on a quarterly basis. Additionally, the ECCDC prints a Clean & Safe report that covers actions to keep the downtown area clean and safe. The downtown Clean Team works to keep the community clean and performs daily litter removal, maintenance, and landscaping activities. Saint Madelines School provides the student workers who detail the downtown street and sidewalk areas by collecting cigarette butts, trash, and debris. Spills are reported directly to ECCDC for immediate removal and disposal.

Figure 4

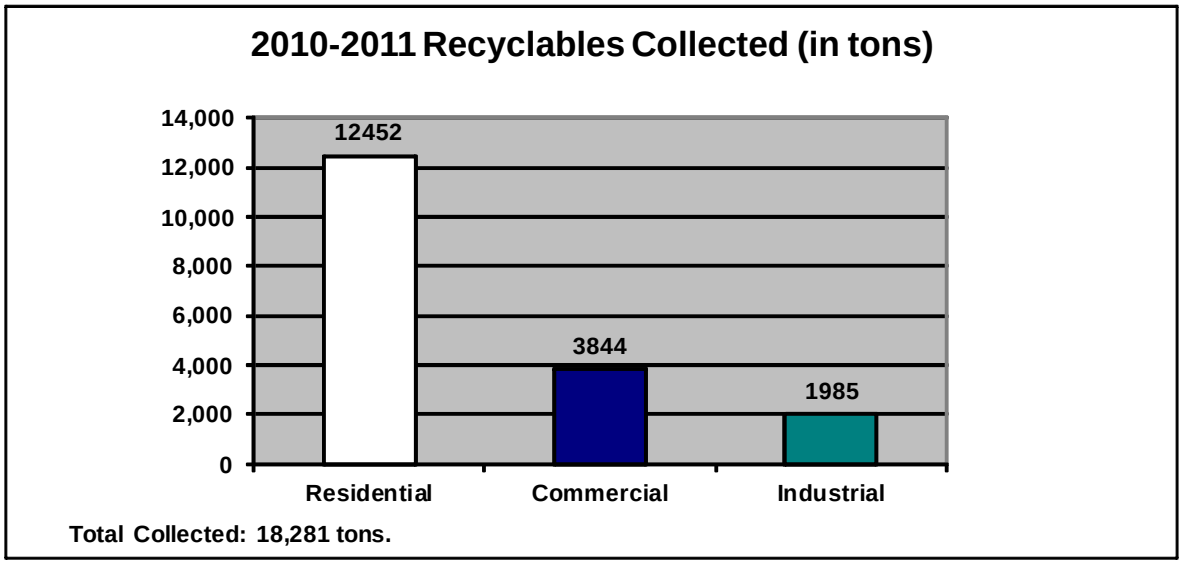

Recycling is a community effort. A total of 18,281 tons of recyclables (includes used oil, newspapers, glass, plastic, tin and aluminum) were collected through residential pickups or deliveries in 2010-11. Figure 4 indicates the amounts, in tons, of materials recycled through residential, commercial, and industrial recycling efforts for 2010-11. Amounts recycled are not placed in landfills or available for discharge to the storm drain system.

6.5 COMPLIANCE AND ENFORCEMENT

The City has a variety of enforcement actions upon discovering a residential action that may potentially affect the quality of receiving waters. Verbal warnings (with written documentation), written warnings, orders to abate and correct, and monetary fines are in the legal authority of the City. There are two routes of discovering illegal residential activities. One is through complaint/referral process. Complaints are received through direct contact with City staff, through the City Manager's office and through the City's Website (via e-mail). The other is during scheduled City monitoring and observations of other routine City department activities.

Depending on whether an actual discharge has occurred or there is a potential to discharge, a written warning or Administrative Citation is issued. Corrective actions are verified and the resident re-contacted for any further questions.

6.5.1 Complaints Received

Complaints are received through the City's or County's Hotline number or funneled through the City Manager's office. The City also receives complaints through the City's Storm Water Program website. Since the inception of the City's Enforcement Program, citizens take opportunities to inform municipal staff of their concerns during other routine activities. Investigations usually occur within 24 hours of complaint receipt with a follow-up phone call informing the complainant of the investigative results. Complaints were tracked using a simple table and software programs. A table in Appendix A.6 lists residential complaints tracked in PY4.

6.5.2 Investigation and Enforcement

Storm Water staff investigates each complaint. Contact with the potential discharger is focused on stopping the polluting activity and educating the citizen about our storm drain system and water quality.

Table 6 – Enforcement Actions

BMP Violated	Written Warnings	Administrative Citations	Actions	Follow-up
Automobile Repair & Maintenance	0	0	Stop Activity	None
Automobile Washing	0	0	Stop Activity	None
Home Care and Maintenance	0	1	Stopped Activity	Completed
Private Lateral Maintenance	1	0	Stop Activity	Completed
RV Parking and Maintenance	0	1	Stop Activity	Completed
TOTAL	1	2		

Written warnings followed each verbal warning in the form of a letter requesting corrective action or enforcement by the Administrative Citation Form (Refer to Appendix A.5 for a Copy Enforcement Criteria and Citation Form). Letters are used only when additional information and explanations are needed to get compliance from the potential discharger. A list of the enforcement actions issued to residents is included in Attachment B.3.

6.6 NOTABLE CITY ACTIONS

Apartment Complexes and Recent Condominium Conversions

Newer residential communities formed by conversion of apartment dwellings into Common Interest Developments or Condominiums continues to offer a good opportunity for divulging information about the storm water program. Restarting a small-developed community is a perfect opportunity to introduce or reintroduce storm water protection activities at the development level. Despite a down turn in the number of condominium conversions, the following are required for these types of projects:

- A Storm Water Site Plan that includes a map of the current storm drain system and a list of the internal and external improvements proposed prior to sale. Control of materials, upgrades to the drainage system and treatment are discussed.
- A Storm Water Maintenance Plan for Condominiums
- A Private Sewer Lateral Report, and
- Water Quality additions to the Covenants, Conditions, and Restrictions

6.7 IMPROVEMENTS AND REGULATORY COMMENTS

Throughout the year, the City adjusts JURMP Components based on experience and the need to correlate JURMP activities with water quality. As the Storm Water Pollution Prevention Program continues the move into a BMP implementation program and the reduction of pollutants discharged into the storm drain system, existing residential neighborhoods become a pivotal group to assist in making the water quality improvements a reality.

6.7.1 Improvements

Improvements for the Residential Component is more challenging as citizens view the storm water regulations as an infringement on individual rights. Choosing the correct approach and picking an area that is more beneficial to water quality takes thought and planning. Based on previous experience, the proposed actions for PY5 include:

- Continue partnering with the El Cajon Community Development Corporation in reaching out to the community
- Continue to meet with new development Homeowner Associations to distribute storm water information

6.7.2 Regulatory Comments

The City did not receive regulatory comments for the Residential Section of the JURMP Annual Report for PY3.

Place Holder

(Section 7 to be Submitted December 15, 2011)

SECTION 8 EDUCATION COMPONENT

8.1 EDUCATION AND OUTREACH 1
8.1.1 Education and Outreach Events 2
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SECTION 8 EDUCATION COMPONENT

8.1 EDUCATION AND OUTREACH

The goal of the education component is an informed and knowledgeable community. It is crucial to the success of a storm water management program for City staff and the community at large to have easy access to reliable and accurate storm water information. Without a shared, common knowledge base of local water quality and urban runoff information, it is difficult to obtain public support for local storm water quality programs. The storm water educational materials need to be detailed and comprehensive enough to support a shift in individual daily actions while allowing community groups to back specific water quality measures. As with all the other components of this storm water pollution prevention program, maintaining and restoring the chemical, physical and biological integrity of state waters is the ultimate outcome.

If reduction is the goal, then prevention is the theme for the Storm Water Pollution Prevention Program. The Education Component continues to emphasize the basic topics, such as:

- The difference between the sanitary sewer and the storm drain system; and
- The street and storm drainage system is not your garbage disposal system; and
- Making small changes individually, adds up to big changes in our rivers and at the beaches.

The other part of a successful storm water program is an involved and committed municipal staff that contacts the public about potentially damaging discharging activities. Storm Water staff diligently works to educate the citizens and businesses within the City jurisdiction on water quality and ways to prevent pollution from entering the storm drain system. The goals of the City's education and outreach program are to raise awareness of urban runoff and change the behavior of citizens and businesses. The progression of topics will lead to Watershed concepts as the basics in storm water are understood by the general public.

8.1.1 Education and Outreach Events

Educating staff and the public is the best way to effect change in people's behavior. It is clear that there is broad-based public support for a cleaner and healthier environment. When people can connect with and learn more about our storm water program, our program earns the respect our citizens and community leaders for protecting our water quality. An effective "learn and earn" outreach program should be both regional and jurisdictional, since a pooled effort regionally is able to educate on a more impressive scale. Additionally, since we all live in a watershed, storm water pollution and the protection of receiving waters defy jurisdictional boundaries. As the San Diego River Watershed Copermittees move toward a Watershed-based approach to storm water management, education and outreach efforts will follow watershed strategies on a regional basis. As shown above, the City of El Cajon developed a Storm Water "Watershed" Logo to promote pollution prevention and protection of water quality.

8.1.2 Jurisdictional Accomplishments

Outreach accomplishments during PY4 include the following list of education and outreach efforts.

- California State Retirees Group Meeting – Information was provided to a group of about 30 members about the El Cajon Storm Water Program and the importance of keeping our water ways clean and conserving water (reducing urban runoff).
- Cuyamaca College Waste Water Class – presentation was made to the class regarding storm water regulations and the storm water program for the City of El Cajon.
- Continue to work with the El Cajon Community Development Corporation (ECCDC) to close and protect dumpsters, keep trash areas clean, and encourage good housekeeping habits in the downtown area.
- Storm Water Education and Outreach Document Portfolios were prepared and issued to selected municipal staff with high probability of contact with citizens on storm water pollution prevention issues. This included staff tasked with commercial and industrial site inspections, construct site inspections, complaint investigations and SUSMP plan review. The use of the storm water information portfolio has allowed the storm water program to connect with citizens, staff and other interested parties in an effective and detailed manner.
- "Fire Safety Open House" This day-long, Saturday event (October 9, 2010) included booths, educational information and formal and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. It is estimated that approximately 3,000 visitors attended this event.
- Johnson Elementary School Career Day – Presentation of Storm Water and Geographic Information System tools and storm water regulations to students interested in careers in environmental sciences.

- El Cajon Library Multicultural Fiesta – This event included a booth with Storm Water program information as well as some "give-aways". The event drew an approximate 2,000 participants.

8.1.3 City Staff Training

Municipal staff was given the basics in storm water training including:

- What is a Watershed and what Watershed do we live in.
- Why is keeping our water clean important.
- The different types of pollutants and where these pollutants originate.
- The difference between the storm drain system and the sanitary sewer system.
- What can be done at work and at home to eliminate polluted runoff during rain events and all yearlong.

Municipal crews are given door hangers to use during their daily routine activities in the City. An example of a door hanger is provided in Appendix A.6. The door hanger alerts the resident to the potential discharge that exists on or near their property. Possible solutions and phone numbers for reporting discharges are provided.

8.1.4 Special Community Presentations

EL CAJON FIRE DEPARTMENT FIRE AND SAFETY OPEN HOUSE

On October 11, 2010, the City participated in the El Cajon Fire Department "Fire and Safety Open House." This day-long, Saturday event included booths, educational information and formal and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. It is estimated that approximately 3,000 visitors stopped by, many of them visiting the storm water booth as they passed through. A watershed model is used to demonstrate to children how rain water can pollute our water-ways.

CALIFORNIA STATE RETIREES GROUP

Water quality and water conservation information was given to about 30 members of the group. The presentation took place on August 25, 2010, and it regularly meets at the El Cajon Sizzler conference room.

CUYAMACA COLLEGE

The Storm Water Department gave a presentation at a Waste Water Science class at Cuyamaca College on October 28, 2010. The topic of the presentation had an emphasis on Federal, State and City of El Cajon Storm Water regulations. The class had approximately 40 students interested in the subject.

CAREER DAY AT JOHNSON ELEMENTARY SCHOOL

The Storm Water program provided residential BMP information and promotional items to elementary school students from Johnson Elementary School. The event took place on November 10, 2010 and was presented by City Storm Water/GIS staff. A total of approximately 150 students attended the Career Day presentation.

El CAJON LIBRARY MULTICULTURAL FIESTA

The Storm Water Program had a booth with information about the program and the watershed. While this event had an overall multicultural flavor, agencies were invited to attend and participate. The event took place at the El Cajon Library on April 2, 2011. Approximately 2,000 attendees participated in the event.

8.1.5 Regional- and Watershed-Related Outreach

The Residential Sources Workgroup focused its budget of $320,825 towards in-kind contribution to develop a Regional Residential Outreach Program that would address regional issues and would aid in a transition from a jurisdictional- to a watershed-related program approach. All Copermittees contribute funds towards the outreach workgroup to benefit a coordinated regional pollution prevention program. PY4 funds were used to develop and further implement a framework for the Regional Residential Outreach Program that would target audiences and provide information on barriers to, and benefits of, changes in behaviors. The City of El Cajon served on the committee during development of the RFP, and continued in PY4 as a member of the interagency Committee developing the Regional Residential Outreach Program.

The events coordinated by the Outreach Workgroup and paid for by all Copermittees.

8.1.6 Educational Materials Jurisdictional Distribution

The City developed brochures on the following subjects for distribution to the public:

- Residential Automotive Repair and Maintenance
- What You Can Do to Reduce Urban Runoff Pollution
- How Should I Wash My Car?
- Pollution Prevention Tips for Landscape & Gardening
- Sewer Spill Reference Guide
- Residential Repair, Repair and Remodeling – Part 1
- Residential Repair, Repair and Remodeling – Part 2

The City printed 38,000 copies of two semiannual newsletters containing a total of 7 articles and reaching an estimated 266,000 different readers. A summary of the topics covered in the 7 articles is included above and in Section 6, Residential Component, of this report. Storm water logos assist the City in getting the attention of citizens and businesses. Logos are a way to make a lasting impression with citizens and businesses. One storm water logo used by the City is shown above.

Through the course of PY4, a number of contacts were made to the public using brochures, fliers, mailers, radio and TV Ad's. Copies of brochures, fliers, and newsletter articles are contained in Appendix A.6.The following table indicates the types and quantity of outreach impressions.

Table 5

Material Type	Number Distributed
Articles/Newsletters	266,000
Sewer Billing Inserts	0
Brochures	330
Over-the-Counter	350
TOTAL	**266,680**

Commercial

Education of commercial facility owners and their employees occurs through the use of brochures oriented specifically to a type of activity. Written warnings are accompanied with a brochure on the activity as well as distribution of these brochures as outreach opportunities arise during business and construction site inspections, and complaint investigations. More one-on-one distributions were completed this year as the City expanded its role in inspections, complaint investigations and the daily routines of residential communities.

Industrial

Industrial facilities revise and refine their BMP requirements through the annual inspection process. The following are discussed and informational brochures are shared when necessary.

- Prevention of Non-Storm Water discharges
- Good Housekeeping Practices
- Vehicle and Equipment Washing, Repair, and Fueling
- Loading and Unloading of materials
- Solid and Hazardous Waste Management
- Spill Prevention and Response
- Building and grounds maintenance
- Parking Lot maintenance
- Storm drain system maintenance
- Private Sewer Lateral Maintenance

8.2 LEADERSHIP ACTIVITIES AND PARTNERSHIPS

The City's major roles for educating the community include:

- Provided direction and information to the local East County Construction Council on matters dealing with proper implementation of construction BMPs and LID.
- Continue in partnerships with the Cities of Santee, La Mesa, San Diego and County of San Diego in training staff on storm water management.
- Continued in a relationship with the El Cajon Community Development Corporation and their Community Ambassadors and Clean Team. The Community Ambassadors are employees that develop connections with businesses and the community that will promote a cleaner and safer city. The Clean Team are students of St. Madelines Sophie school and are happy to assist in various community tasks. The Clean Team picks up cigarette butts and other debris along the sidewalk and gutter that the City's street sweeper cannot collect.

- Served as the Co-Chair to the Regional Industrial/Commercial Workgroup.
- Collaborated with "I Love a Clean San Diego" to conduct storm drain stenciling, as needed.

8.3 MEASURING CHANGES IN KNOWLEDGE AND BEHAVIOR

A basic measurement of increased knowledge is a test of that knowledge. The City's test has been a steady flow of referrals and reports from municipal staff. The number of complaints and referrals from citizens and county hotline declined from last year. The Regional Outreach Program funded by this year's Copermittee Outreach budget will continue to develop a very detailed baseline of community awareness, and the barriers to, and the benefits of, changes in behavior.

8.4 IMPROVEMENTS AND REGULATORY COMMENTS

Changes to the City's Storm Water Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the activities in ways dictated by direct or indirect experience. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

8.4.1 Improvements

The following are proposed improvements for the next Permit Year (July 1, 2011 through June 30, 2012).

- Continue to coordinate and expand outreach and education efforts to local public schools.
- Coordinate outreach and public participation activities for Public Works Week.

8.4.2 Regulatory Comments

No regulatory comments have been received for the Education Component of the JURMP Annual Report for PY3.

SECTION 9 Public Participation Component

Introduction **1**

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9.1.1 Regional and Local Storm Water Hotlines 2

9.2 Improvement and Regulatory Comments **2**
9.2.1 Improvements 3
9.2.2 Regulatory Comments 3

SECTION 9 PUBLIC PARTICIPATION

INTRODUCTION

Public participation is an essential element of a successful Urban Runoff Management Program, but is more highly effective as a Watershed Component. Due to the nature of participation by organizations such as "I Love a Clean San Diego", watershed concepts are more easily introduced to participants from the entire watershed and not just a small segment of the population in one particular community. Wherever Copermittees' efforts can be combined to produce better results, it is a "win/win" situation for jurisdictions, the watershed and the communities they contain.

Educational efforts set the stage for getting the public involved with scheduled Storm Water Pollution Prevention events or interested in following the minimum required BMPs at home or business. Since prevention through familiarity and participation is the best solution to pollution, the public fulfills participation requirements by:

- Participating in storm drain stenciling,
- Reporting of discharge incidents using the City Manager's Office or the City and County hotline,
- Participating in events that collect or recycle hazardous waste and used oil , and
- Participating in local and regional cleanup events

9.1 REGIONAL PARTICIPATION

On a regional basis, the City of El Cajon is the lead for the San Diego River Watershed Workgroup and is a member of the Watershed Lead Committee group. The San Diego River Watershed workgroup has continued to work together, including stakeholders' input or participation when possible, taking advantage of relationships developed through the years since developing and completing the San Diego River Watershed Management Plan. The City of El Cajon chairs the San Diego River Watershed Copermittee meetings.

The City supported the "I Love a Clean San Diego" (ILACSD) Annual Creek to Bay Cleanup. Over 30 volunteers collected a total of 151 pounds of trash within the City. As in past years, the City of El Cajon also gave permission to ILACSD to stencil the message "No Dumping . . I Live Downstream" and a depiction of a dolphin or duck to the curb area adjacent to storm drain inlets within the City.

9.1.1 Regional and Local Storm Water Hotlines

The City and County have a Hotline that can be used by the public to report potential illicit discharges and connections. The Hotline phone number is provided in informational brochures to residents and businesses and is posted on the City Website. Public participation is an essential part of an illicit discharge elimination program. Many illicit discharges are one-time occurrences that may not be observed by City staff. Concerned citizens can help stop illicit discharges by reporting them to the City. The following provides the details of those Hotlines.

- ✓ **City of El Cajon Storm Water Hotline, (619) 441-1653**

The City Storm Water Hotline provides access Monday through Friday 8 a.m. – 5 p.m. and complainants are directed to the appropriate staff person. The City's hotline currently provides information in English and Spanish.

The City updates its Storm Water Web Page to contain the most recent brochures and reports. Documents are retrieved and opened using Abode Acrobat to open the posted PDF files. The Storm Water Web Page is "Quick Linked" from the City of El Cajon Home Page with links to a list of documents and other important websites.

- ✓ **County Storm Water Hotline, 1-888-846-0800**

The County storm water hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides services in both English and Spanish and a voice mail message for 24-hour public access. Relevant complaints received through the County hotline are forwarded to the City Storm Water Protection Program.

9.2 IMPROVEMENT AND REGULATORY COMMENTS

Changes and improvements to the City's Storm Water Participation Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the participatory activities in ways dictated by direct or indirect experience. As the focus of the program shifts to multi-jurisdictional participation on a watershed level, changes and improvements to the storm water program will be necessary. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

9.2.1 Improvements

The following are proposed improvements for the next Permit Year.

- Continue collaboration with community volunteer groups.
- Continued participate in Watershed-wide efforts.
- Focus the City's efforts on programs and activities that will have an impact on the watershed, its health, the most recent pollutants of concern based on the 303(d) list and their sources
- Continue to participate in the El Cajon Fire Department Open House and other school activities to inform and engage children on water quality issues.

9.2.2 Regulatory Comments

No regulatory comments have been received for the Public Participation Component of the JURMP Annual Report for PY3.

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SECTION 10 FISCAL ANALYSIS

10.1 INTRODUCTION

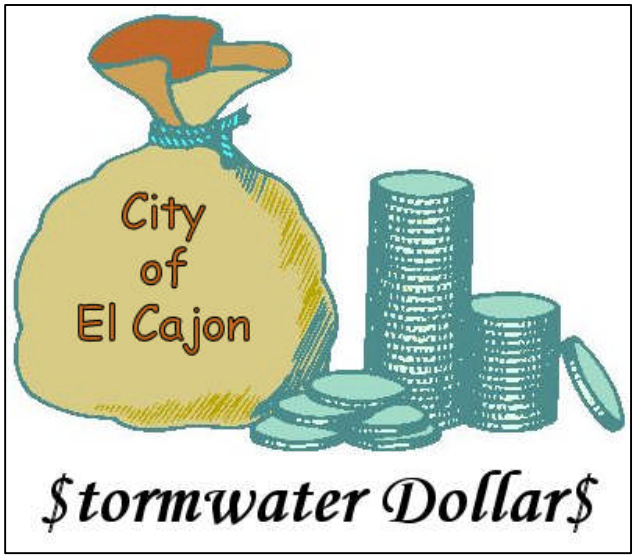

A fiscal analysis of the JURMP provides a vital assessment of resources for the current and upcoming Permit Years. This section of the report will incorporate guidance and standards developed collaboratively by the Copermittees and in accordance with the Municipal Permit. The City is reporting expenditures using summary tables developed by the Standardized Fiscal Analysis Method and Format adopted in February 2009 (summary tables and forms are included in Appendix A.10). The analysis attempts to identify adequate support and how resources are divided to support and fortify the JURMP, WURMP, and RURMP efforts.

In PY 2003-04, the City Storm Water staff developed a separate budget from other Public Works activities and sufficient to run the Storm Water Program. The Program continues to be adequately funded through the City's Sewer Fund. This funding source has been used since PY 2004-05 and will continue to be used for PY 2011-12.

10.2 GENERAL BUDGET INFORMATION

The following table shows actual expenditures from permit year 2003-04 through 2009-10 and the proposed 2010-11 budgets for the City's Urban Runoff Management Program.

Item	04-05	05-06	06-07	07-08	08-09	09-10	Estimated Actual 10-11	Proposed 11-12
Salaries (including benefits)	561,473	533,487	550,856	722,809	714,841	781,174	765,857	769,863
Materials, Services and Supplies	222,836	183,639	254,876	397,292	423,543	421,181	363,908	697,910
Capital Outlay	0	6,235	29,953	73,593			10,873	11,200
TOTAL	**784,309**	**723,361**	**835,685**	**1,193,644**	**1,138,384**	**1,202,355**	**1,140,638**	**1,478,973**

Budgets increased steadily from 2003-04 through 2006-07 under Municipal Permit Order 2001-001. The increase in PY 2007-08 was a result of allocating resources in anticipation of fulfilling requirements for Municipal Permit R9-2007-001. The budget to maintain the Storm Water Program in compliance with the Permit dropped slightly in PY 2008-09 but increased again in PY 2009-10. Based on estimates for PY 2010-11 and the proposed budget for PY 2011-12, the over –all budgets for the Storm Water Program continue to increase. A copy of the budget is located in Appendix A.10.

The City's NPDES Urban Runoff Management Program funding was sufficient to meet the JURMP requirements in PY 2010-11 and is projected to be sufficient to meet requirements in PY 2011-12. The City met its projected goal of continuously executing plans, procedures, and processes to implement JURMP requirements and assess the effectiveness of its programs.

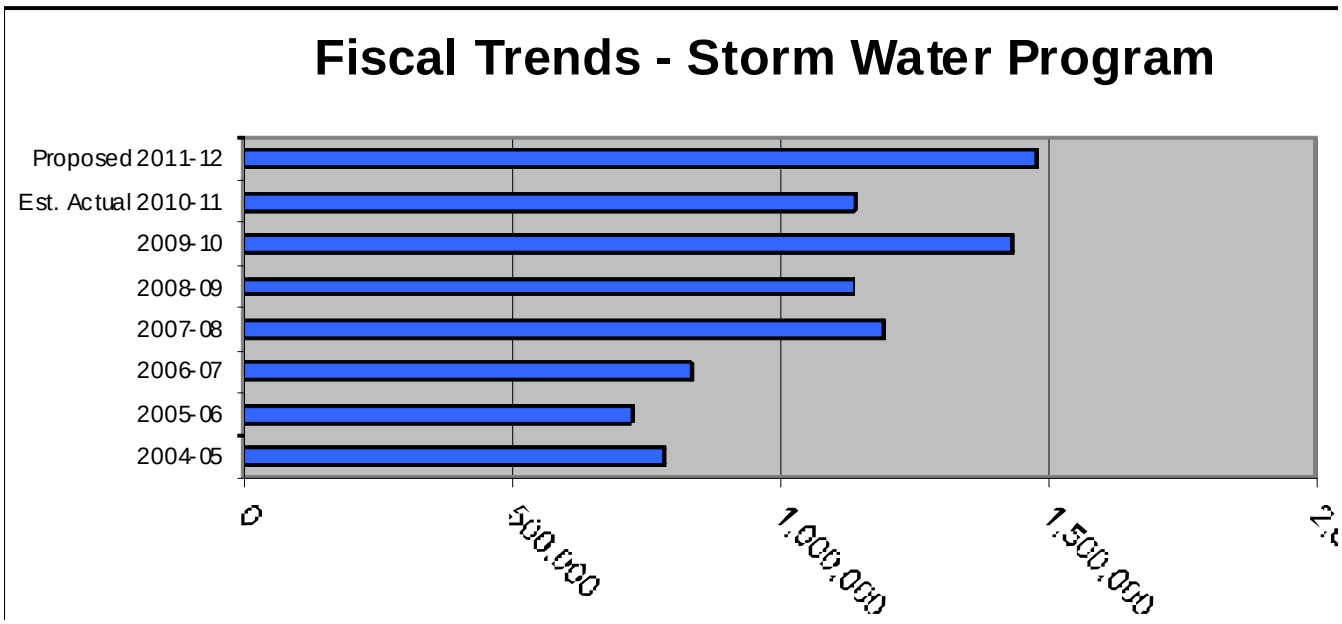

Modifications to the program were made that resulted in an increase in expenditures in PY 2004-05 and a slight decrease in PY 2005-06. The budget for PY 2004-05 contained some capital expenditures that were started in PY 2002-03 and PY 2003-04 such as a Geographical Information System dataset for map generation and a trash debris fence to collect trash and debris in Forrester Creek before discharging to Santee. From PY 2005-06 through PY 2009-10 there has been a steady increase in the budget to support the Storm Water Program. Overall, a general increasing trend of funds has been allocated from PY 2002-03 through the proposed PY 2011-12 to sustain a viable storm water program.

10.3 FISCAL ANALYSIS METHODS

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J. 1 .a(3)(k), and J. 1 .c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis Methods document was submitted to the San Diego RWQCB by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

The budget for PY 2010-11 included a Storm Water Program Manager, 1 part-time senior engineering technician, 1 assistant engineer, 1 GIS technician, 1 compliance officer, and 1 part-time Engineering Intern. The personnel for PY2011-12 will remain unchanged with the same number and job classification as in the reporting year of this annual report. The City also has an open contract with two consultants to provide as-needed services to ensure the City meets its JURMP implementation requirements.

The City is using forms and tables developed by the new Fiscal Analysis Method for reporting (attached in Appendix A.10). It is important to note that while the Expenditure Summary table in Appendix A.10 shows jurisdictional expenditures per various permit components, it may not reflect all expenditures. Further modifications to the City's accounting and expenditure tracking will continue to be made in the future to better track expenditures for each jurisdictional component. Program components expenditures for development planning, construction, municipal, industrial/commercial, residential, and special investigations were difficult to dissect.

10.4.2 FUNDING SOURCES

In the long-term, funding for the Storm Water Program will continue to be even a bigger question with necessary increases required to maintain permit compliance. The City is constantly challenged with doing more with less after a continual decline in general fund budgets. For PY2010-11, the City completed all inspections, as well as other requirements of permit R9-2007-0001, with existing staff heavily complemented by consultants.

Working efficiently is the goal of the jurisdictional urban runoff management program. Completing onsite inspections, tracking enforcement actions, and complaint/referral information allows the City to reduce the amount of time and paper to complete significant portions of the Municipal, Industrial, Commercial, Construction, and Land Use Planning JURMP Components.

For WURMP activities, the City will continue to coordinate with the other San Diego River Watershed Copermittees to complete watershed water quality activities and education activities.

Working together eliminates duplicative efforts and enhances the effect across a wider range of people and geographical area. The City manages a contract with a consultant to assist with the Watershed program and a share cost agreement has been in effect for a few years.

No regulatory comments were received during PY2010-11 for the City's Fiscal Analysis.

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SECTION 11 PROGRAM ASSESSMENT

11.1 INTRODUCTION

The City began using the standardized program effectiveness assessment soon after it was developed by the Copermittees during the previous permit cycle. The City also participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs. Due to a variety of complications on a regional level, that process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures.

Since the submittal of the JURMP in March 2008, no significant progress has been made on regionally standardized approaches to program effectiveness assessment. It is likely that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will revisit the issue of standardized assessment metrics and procedures in the near future. The City anticipates participating in the process of developing such regional standards and incorporating work products produced into its own local program effectiveness assessment system. Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

The City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

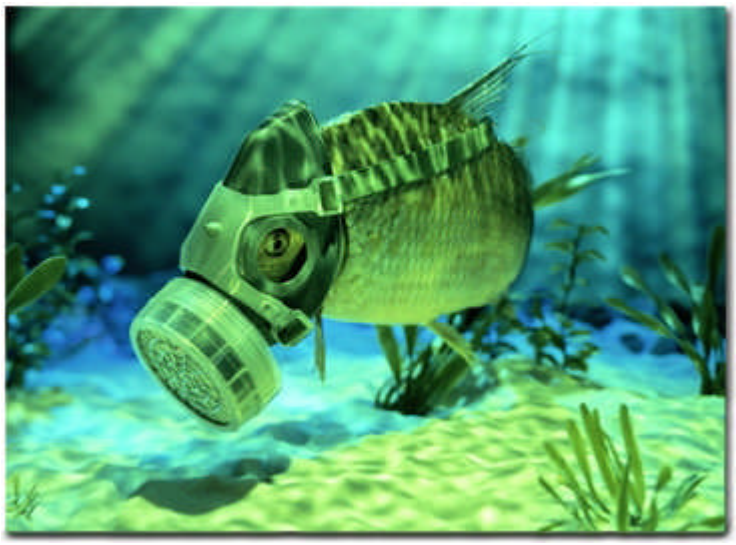

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1 through Level 4 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the last released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Level 1

Level 1 is documenting activities. Sections 1 through 10 of this PY4 Annual Report list activities, storm water controls, and when possible the quantity of pollutants collected and diverted from entering the storm drain system, viewed as a reduction in pollution-containing materials potentially available for discharge into the storm drain system. Existing and New Development, Construction, and Illicit Discharge Illegal Connection are the areas where quantifiable amounts of pollutants are reported as collected and removed from entering the storm drain system. By completing collection activities, the City maintains compliance with the Municipal Permit requirements.

11.2.2 Level 2 and 3

Refer to tables 11-3 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

11.2.3 Level 4

The primary goal of BMP implementation is to reduce the loading of pollutants to urban and storm water discharges. Pollutant load estimation is the first direct characterization of water quality through JURMP activities. Regionally, San Diego River Watershed receiving water quality results are from the major outfall to the Pacific Ocean. In the future, Watershed monitoring at the jurisdictional lines will at least assign responsibility of pollutant loads, but will not determine a reduction in pollutants. The best approach is to make sure wet weather and dry weather results do not exceed action levels.

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed.

11.3 ASSESSMENT OF PROGRAM MEASURES

Basic assessment of program measures begins with City-based questions. First, starting with what is known, then shifting to what is wished to be learned, and finally what was learned. During the first step, the "what is known" are the measurements compiled from each of the JURMP components. Measurements such as the amount of material removed during street sweeping or cleaning of catch basins are direct measurements of pollution diverted from entering waterways. At some point it may become appropriate to compare measurements to previous years, average measurements, or assess trends to assist with potential pollutant loads removed from a particular origin. Dry weather monitoring results are direct measurements of pollutants in urban runoff, but only partially address measurements of receiving water quality.

Sources, selected BMPs, measurements, and other indicators, identified in the previous Sections of this Annual Report for each of the Existing and New Development Components, report completed activities and achieved goals as required by Order No. R9-2007-0001 and the City's updated JURMP. In summary, the City completed program implementation as designed in the JURMP and is incompliance with the activity-based permit requirements.

11.3.1 Direct Measures of Program Activities

For many years, the City has tracked efforts from various collection agencies with four types of direct measures, as follows:

- Street Sweeping,
- MS4 Cleaning/Maintenance,
- Oil Recycling, and
- Household Hazardous Waste Collection

In general, the City tracks these measures because they provide an important indication of the types and amounts of materials and wastes that are diverted from the MS4 through various means. Street Sweeping and MS4 Cleaning directly removes materials from the pathway of rainwater and urban runoff. Oil Recycling re-routes used oil from illegal disposal to refineries where it is ultimately reused. The Household Hazardous Waste program collects wastes that may otherwise be improperly disposed, potentially to the MS4.

a. Street Sweeping

The Department of Public Works collected an estimated 3,746 cubic yards of debris during its street sweeping activities (17,019 miles of curbed streets). This year, the City's street sweeping efforts have been consistent with previous years. Were it not for these efforts, the debris collected would otherwise be swept away during rain events. Collection provides important long-term water quality benefits.

b. MS4 Cleaning

In PY2010-11, City's storm drains were cleaned by the Department of Public Works resulting in the removal and proper disposal of 2,740 cubic yards of material from the storm drain system. As a whole, the City's effort remained the same as last year.

c. Recycling of Household/Commercial Waste and Oil Recycling

Recycling in El Cajon has good participation, but could always do better when the numbers are compared for recycled materials (18,280 tons) and waste (74,078 tons). Trends in waste collection will continue to be tracked. The 18,281 tons of other recyclables included - amongst other items - newspapers, glass, plastic, tin, and aluminum.

Oil recycling is tracked by independent recyclers that are certified collection centers (e.g. Jiffy Lube) and Waste Management for curbside pickup of used oil. A grand total of 12,709 gallons of used oil and 1,783 used oil filters were collected from within the City. A total of 434 gallons of used oil and 277 used oil filters were collected from residential areas. While a total of 12,275 gallons of used oil and 1,506 used oil filters were collected from certified collection centers located within the City of El Cajon's jurisdiction.

d. Household Hazardous Waste Collection

Waste Management of El Cajon collects the Household Hazard Waste (HHW) for the City's jurisdiction. In PY2010-11 an estimated 489,619 pounds of household hazardous waste were collected, compared to an estimated 364,171 pounds in PY2010-09, d; 344,146 pounds in PY2008-09, 268,323 pounds collected in PY2007-08; 236,890 pounds collected in PY2006-07; 198, 015 pounds in PY2005-06; and an estimated 277,000 pounds of household hazardous waste/recyclables were collected at 19 events in PY2004-05. As a whole, the City's effectiveness in collecting HHW from its residents has increased consistently and significantly over the years.

11.3.2 Indirect Measures

In most instances, changes to receiving water quality cannot be directly compared to collection activities. However, many indirect measures have value in tracking the effectiveness of specific program activities, and may have additional utility in assessing long-term water quality changes. Many of these measures are reported and discussed throughout this Annual Report. To track and evaluate the effectiveness of its program implementation over time, the City has compiled summary statistics for several of measures.

Table 11.1

Indirect Measure		2010-2011
Complaints	Total Number received	77
	Number of Referrals from Other Departments	37
	Number of Enforcement Actions	17
Staff Training	City Staff Trained (In Storm Water Management)	9
Outreach	Outreach events conducted	3
	Number of Presentations	2
	Audience @ presentations	70

a. Complaints and Referrals

In this reporting period, the City received a lower number of total complaints than last year from other City departments, citizen calls, and county referrals. The City and County hotlines are described in Section 6 (Residential Component). As previously discussed, this trend underscores the effectiveness of the City's outreach and staff training efforts. As in previous years, it is believed that more of the City's citizens and staff are aware of storm water violations and understand what to do when water quality concerns were observed.

b. Staff Training

Levels of staff training during this reporting period were expanded to those of previous years. Although the City has made an important commitment to staff training under the previous and current Permit (see JURMP Section 8, Education), the consistency of these numbers also demonstrates the City's past commitment to training its staff. Training of staff with implementation responsibilities is not a new part of the City's storm water program. However, the scope and breadth of these and other programs has significantly increased.

c. Outreach

This year, the City conducted a number of one-on-one discussions at the Public Works front counter with building and planning applicants and with commercial businesses and industrial facilities during inspections and complaint follow-ups. Together, these increased face-to-face conversations demonstrate that the City is effectively implementing its outreach and education programs; details are provided in Section 8 (Education). The City also sent notifications to various types of mobile businesses for newly required BMPs.

11.3.3 Program Activities and Water Quality

Presenting a direct connection between pollutant load reduction and Storm Water Pollution Prevention Program activities continues to slowly move forward and is very much under development. Copermittees have created a Framework document containing the six (6) Levels of Assessment. The PY2002-03 Annual Report addressed Levels 1 through 4. However, forecasting only generates numbers that could not be supported by calculation or program actions. For PY2010-11, the City continued with the slightly modified approach used for PY2008-09, which brings the assessment much closer to connecting activities with water quality. Amounts of pollutant-containing materials prevented from entering the storm drain system provides solid numbers while adding percentages of facilities known (through inspection) to be implementing minimum required BMPs and reduces the estimation factor.

11.4 LONG-TERM ASSESSMENT

The Annual Assessment indicates the City is meeting the requirements specified in their JURMP and collecting data associated with those program activities. At some point, a connection between activity completed and pollutant load in receiving waters will become a reality.

A Long-Term Assessment must answer key questions to guide future activities and build into the current program, the additional reporting requirements in order to connect program activities with actual improvement in receiving water quality. The Long-Term Effectiveness Assessment (LTEA) is conducted once every five years (permit renewal cycle) as changes to permits may change approaches and programs. Copermittees are preparing to begin work on this permit cycle's LTEA.

Table 11.2

Program Activity	Annual Questions	Permit Questions (Every 5th year)
Water Quality Assessment	What are the high priority quality problems and where do they occur? What constituent(s) is(are) causing the problems?	What are the changes to discharge and receiving water quality in my Watershed?
Program Planning	What are the priority sources of	Are the current programs

Program Activity	Annual Questions	Permit Questions (Every 5th year)
	pollutants? What BMPs are needed to control these pollutants? What are the targeted outcomes for the BMP Implementation? What are the projected Load Reductions from these implemented BMPs?	providing the information necessary to produce targeted outcomes?
Program Assessment	Were targeted outcomes achieved? What BMPs should be changed or should other BMPs added? Are costs associated with implementation feasible?	Is the cost worth the water quality changes?
Integrated Assessment	How well are the parts of the program working together? What other links can be made?	What other relationships between activities and water quality are evident?

Answers to the above questions come from further analysis of each existing component area. Tables of estimated pollutant loads removed are provided below. Areas where pollutant removal rates are high will be the areas to focus program efforts. Modifications to JURMP activities will be the result of this assessment.

Level 4 Pollutant Load Reductions are provided in the following tables for existing development. Estimates of average load reduction per event was the most difficult to find support evidence. Using the best knowledge available, the magnitude of total pollutants reduced is the most powerful in assessing the degree of success for the City's storm water program.

LEVEL 4 Assessment

Each of the following tables provides an estimate (supported with empirical data) for the amount of pollutant-containing materials prevented from entering the MS4 due to the activities of the Storm Water Pollution Prevention Program implemented in the City of El Cajon. As there is only one receiving water body in El Cajon, Forester Creek impairments were used as the constituents of concern when estimating possible amounts of pollutant-containing material prevented or a reduction in the amount of pollutant that could have discharged into Forester Creek. Only Existing Components were assessed through Level 4 as the most qualitative and quantitative information is available in these areas. The following paragraphs discuss assumptions incorporated into calculating the amounts provided as "Total" for each Existing Component.

The City of El Cajon installed a trash and debris fence in PY 2005-06 to capture trash from creek flows. Trash was added to the assessment due to the Forester Creek Improvement Project in Santee.

General Assumptions

There are a number of general assumptions within each table. Of most importance is the understanding that the amount (estimated or actual) removed or eliminated from discharging into the storm drain system is the amount of the material or liquid and does not equate to actual pollutant loads reduced. Secondly, the margin of error in these values is very high as most numbers were calculated using available information. Data quality is not necessarily a concern. This is an effort in determining where best to place education efforts and focus each program component.

Municipal

At 20 municipal maintained areas (parks, City Hall, recreation centers), staff cleaned area of pet waste, three times per year. Collection at each area was approximately one pound of pet waste. Pet waste does not equate to one pound of bacteria.

The City maintained 100% of laterals at approximately 24 buildings. No sewer overflows were experienced at City facilities. Pounds were estimated using 10 pounds (no factual basis other than one gallon of water equals 8 pounds) equaling one gallon of sewage. Private laterals not cleaned annually may experience stoppage depending on usage and care. Approximate gallons potentially dischargeable is 2 gallons times 10 equals 20 pounds time 24 buildings equals 480 pounds. The potential for error with this calculation is high.

Total dissolved solids from Municipal areas originate mainly from fertilizers applied by staff. There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation efforts that reduces overspray. All these activities reduce the amount of TDS available for discharge to the storm drain system.

Municipal activities do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.

Trash reduction at City facilities is a consistent effort with approximately 80 to 90% of the 400 City employees ensuring trash is placed in appropriate containers. One pound of trash per year per person is estimated. This amount may be estimated too high.

One park within the City, Wells Park, has an area designated as a “Dog Park” where citizens can take their dogs to walk, bags to collect pet waste are provided for cleaning after their dogs. The Parks Department collected approximately 15,600 pounds of pet waste during PY2010-11.

The total calculated amounts of pollution prevented from entering the storm drain system are possibly estimated high and do not fully equate to improved water quality.

Industrial

There were 129 industrial facilities that were inspected that are conducting industrial activities within the City of El Cajon. It is estimated that 100% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during industrial inspections. If each facility is preventing one overflow of 5 gallons times 10 pounds,

then 50 pounds times 129 facilities equals 6,450 pounds of bacteria- containing materials did not discharge to the storm drain system.

Total dissolved solids from Industrial areas originate mainly from fertilizers applied by contracted staff to landscaped areas (usually a very small area compared to the total industrial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation effort that reduces overspray. All activities reduce the amount of TDS available for discharge to the storm drain system.

Based on inspections and enforcement of the industrial community, pH-affecting substances are reduced from entering the storm drain system through the implementation of BMPs as required by the General Industrial Permit. Amounts estimated have no factual basis.

Trash reduction at Industrial facilities is based on industrial inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads, as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections and the two enforcement actions taken at industrial facilities during this Permit Year.

Commercial

There were at least 61 commercial facilities conducting activities with the high potential to discharge bacteria-containing liquids, mainly eating and drinking establishments. Of those facilities, it is estimated that 50% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during commercial inspections. If each facility is preventing one overflow of 2 gallons times 10 pounds, then 20 pounds times 30.5 facilities equals 610 pounds of bacteria- containing materials that did not discharge to the storm drain system. This may be estimated high.

Total dissolved solids from 61 commercial facilities originate mainly from fertilizers applied by contracted staff or lease company personnel to landscaped areas (usually a very small area compared to the total area of the commercial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation efforts that reduce irrigation overspray. All these activities also reduce the amount of TDS available for discharge to the storm drain system. Commercial activities observed during inspections do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.

Trash reduction at Commercial facilities is based on inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads, as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections.

Residential

Bacteria source reductions for dog owners, homeowners, and Recreational Vehicles (RVs) is purely speculation, although the numbers of potential targets is accurate, based on circulated printed educational materials and educational booths that the City has conducted for this reporting year. Enforcement actions, however, indicate few reported sewage overflows from residential areas. Amounts calculated are estimated too high and should be adjusted with more factual information in future Permit Years.

Total Dissolved Solid and Trash reductions are also speculation based on information materials circulated throughout the City in the Spring and Fall newsletters. Amounts estimated are reasonable. Based on City observations, only a few neighborhoods have trash problems. These areas will continue to be targeted in future Permit Years.

* = Total amounts calculated appear reasonable with the exception of bacterial-containing materials. Factual information is not readily available for this element and estimations are high.

New Development

Only trash and TDS were assessed for New Development as a small-scale post-construction BMP data assessment is not yet available. Speculations on the amount of trash are associated with post-construction BMPs provided, although no corroborating evidence could be found. Numbers calculated appear reasonable.

Construction

Most of the pollutant reductions at construction sites involve sediment. Based on the inspections completed, bacteria from Port-o-lets, pH from concrete washout, and trash rarely require a corrective action. Estimations of pollutant-containing material prevented are low and may be adjusted.

Pollutant Reduction Estimation Worksheets for Forrester Creek 303(d) Listed Pollutants (PY2010-2011)

Table 11.3 – Municipal Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted**	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Pet Waste	Maintenance	Pet Waste Bags picked up at Dog Park	Dog Area at City Park	100%	Entire Permit Year	Empirical Data	HIGH	15,600 pounds of pet waste	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Education	Sewer insert - Your Private Sewer Lateral	20 buildings	100%	20	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Enforcement	Non-Storm Water Discharge	no sewage overflows	100%	0	Empirical Data	HIGH	0 gallons	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
TDS/Nitrates	Parks and Grassy Areas	Maintenance	Landscape Maintenance	20 grassy areas	100%	20	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (2.5 mg/L NO3)
Trash	Streets	Maintenance	Street Sweeping	17,250 miles	100%	17,019	Empirical Data	HIGH	3,746 Cubic Yards*	No Measurement at this time
	Channels	Maintenance	Channel Maintenance	8 major channels	100%	8	Empirical Data	HIGH	2,740 Cubic Yards*	No Measurement at this time
TOTAL									**6,486 Cubic Yards Trash ******	
* - Converted from cubic yards at 60 lb/cubic yard				*** - Represents only two months of usage					**16,600 Pounds of fecal coliform 0 gal fecal coliform******	
**- Correlation to Water Quality TBD				**** - Actual Results						

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.4 – Industrial Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Private Lateral	Inspection	Private Sewer Lateral	129 inspected industrial facilities	TBD	TBD	In Progress	HIGH	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	129 inspected industrial facilities	100%	129	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash (not 303(d) listed, but monitored by East County)	Dumpster	Maintenance	Building/Grounds Maintenance	57 high priority industrial facilities	100%	57	Extrapolated Information	MEDIUM	(.1lb of trash) (57 facilities) (365 days) = 2,080 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	57 high priority industrial facilities	83%	47	Extrapolated Information	MEDIUM	(.05lb of trash) (47 facilities) (365 days) = 858 lb	No Measurement at this time
TOTAL									**2,938 lb of trash *****	
* - Diverted from the Storm Drain System *** - Estimated Results										
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

.1lb Trash = 8 cups/paper @ .2 ounces each

Table 11.5 – Commercial Component									
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted ***	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Private Lateral	Education	Private Lateral Maintenance	61	61	In Progress	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	61	49	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash	Dumpster	Maintenance	Building/Grounds Maintenance	61	31	Extrapolated Information	MEDIUM	(.1lb of trash) (31 facilities) (365 days) = 1,132 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	61	37	Extrapolated Information	MEDIUM	(.05lb of trash) (37 facilities) (365 days) = 675 lb	No Measurement at this time
								1,806 lb of trash ***	
TOTAL									
* - Diverted from the Storm Drain System			*** - Estimated Results						
**- Correlation to Water Quality TBD									

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.6 – Residential Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMPs Completed for Measurement**	**# of articles Distributed**	**% of Readers Implementing BMP (estimated)**	**# of Possible Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Sanitary Sewer	Education	Private Lateral Maintenance	38,000	0.1%	38	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
	Pets (Dogs & Cats)	Education	Pet Care	20,000 pet owners	10%	2,000	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS	Landscape Fertilizers	Education	Home/Garden Maintenance	38,000	0.5%	190	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
	Automobile	Education	Vehicle/Equip Cleaning	38,000	10%	3,800	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
pH	Concrete Washout	Education	Home Repair	38,000	5%	1,900	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7 pH)
TOTAL										

* - Diverted from Storm Drain System *** - Estimated Results

** - Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to WQ

Table 11.7 – New Development Component

ASSESSMENT LEVELS	Level 1	Level 1	Level 1	Level 1	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources (Completed Projects)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
TDS	Landscape	Inspection	Bio-filtration Area	1	1	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/l)
Trash	SW Inlets	Inspection	Inlet Filters	1	1	Extrapolated	MEDIUM	(.1lb of trash) (1 facilities) (365 days) = 37 lb	No Measurement at this time
	Landscape	Inspection	Media Filter	1	1	Extrapolated	MEDIUM	(.05lb of trash) (1 facilities) (365 days) = 18 lb	No Measurement at this time
	Paved Areas	Inspection	Detention Basin	1	1	Extrapolated	MEDIUM	(.05lb of trash) (1 facilities) (365 days) = 18 lb	No Measurement at this time
	Dumpster	Inspection	WM5 - Solid Waste Management	1	1	Extrapolated	MEDIUM	(.05lb of trash) (1 facilities) (365 days) = 18 lb	No Measurement at this time
TOTAL								**91 lbs of trash *** **	

* - Diverted from the Storm Drain System

*** - Estimated Results

**- Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.8 – Construction Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP (Section 3, Table 3)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Port-o-let	Inspection	WM9 - Sanitary Waste Management	8	99%	8	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
pH	Concrete Washout	Inspection	WM8 - Concrete Washout Management	8	97%	8	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7)
Trash	Dumpster	Inspection	WM5 - Solid Waste Management	8	100%	8	Extrapolated	MEDIUM	(.1lb of trash) (8 facilities) (180 days) = 144 lb	No Measurement at this time
TOTAL									**144 lbs of trash *****	
* - Diverted from the Storm Drain System			*** - Estimated Results							
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

11.5 PROGRAM ASSESSMENT SUMMARY

Estimated Pollutant Load Tables indicate that Residential Areas continue to have the greatest potential for pollutant removal activities. Nearly three to seven times higher than the other areas, the residential community has the largest potential for reducing pollutants from entering the City's receiving waters.

Each component has been addressed as follows for strengths and improvements. Effective is viewed as meeting the Municipal Permit implementation and reporting requirements.

Component	Effective	Strength	Improvement
Municipal	Yes	Education (Training)	Continue to coordinate with other watershed Cities, and whenever possible with stakeholders.
Industrial	Yes	Assessment of BMP Implementation	Continue to refine Inspection Form and make changes accordingly.
Commercial	Yes	Assessment of BMP Implementation	Continue to contact mobile businesses on the required BMPs that need to be implemented.
Residential	Yes*	Outreach and Education	Contact property owners directly by targeting specific problem areas. Conduct drive-abouts at problem Residential areas.
New and ReDevelopment	Yes	Process	Continue to implement Permit requirements under the updated regional model SUSMP and HMP.
Construction	Yes	Inspections	Continue to work with inactive sites to maintain BMPs in good condition when needed.
Illegal Discharge Detection and Elimination	Yes	Monitoring	Increase frequency of monitoring points.
Education	Yes	Team Efforts	Continue to target elementary and middle school children.
Public Participation	Yes	Team Efforts	Continue efforts to team with Region whenever possible.

* Face-to-face contact is effective but slow moving.

11.6 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements are discussed throughout the Program Assessment section and are summarized above. No regulatory comments were received during PY2009-10 for the City's Assessment and Jurisdictional URMP Effectiveness Component.

SECTION 12 SPECIAL INVESTIGATIONS

12.1 FORRESTER CREEK IMPACT STUDY 1

SECTION 12 SPECIAL INVESTIGATIONS

12.1 FORRESTER CREEK IMPACT STUDY

For the seventh year, the City conducted an upstream/downstream monitoring of dry weather constituents of concern in Forrester Creek. The monitoring was conducted on August 8, 2011 to assess the relative amount of pollutants discharged within the jurisdictional boundaries of El Cajon into Forrester Creek. The upstream location is at the County boundary, specifically at Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of 1699 East Main Street. Flow at the upstream sample was approximately three (3) gallons per minute. During rain events, flow from Crest and other unincorporated County areas discharge directly into the City of El Cajon without treatment. To date, no analytical data have been collected for wet weather flows.

Table 1

Site ID	Date	Flow (gpm)	Temp (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Nitrate (mg/L NO_3-N)
Upstream	8/8/2011	3	24.7	7.56	2.31	1.69	8.49
Downstream*	8/8/2011	83	30.6	8.62	7.70	2.55	3.91

Table 2

Site	Date	Total Hardness (mg/L$CaCO_3$)	Oil & Grease (mg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mlL)	Enterococcus (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	8/8/2011	343	nd	800	110	400	1,160	nd
Downstream*	8/8/2011	434	nd	500	20	400	1,720	2.2

nd = not detected

The following is a summary of the upstream/downstream results:

- Nitrates were detected at 8.49 mg/L upstream, and 3.91 mg/L downstream
- Orthophosphate upstream was 0.04 mg/L, and 0.02 mg/L downstream
- Detections of ammonia upstream was 0.19 mg/L, downstream was 0.27 mg/L
- Surfactants were detected at 0.25 mg/L upstream, and 0.25 mg/L downstream

Notable Results and Reasoning

Even though there was an increase in flow of 80 gallons per minute from upstream to downstream, the overall downstream flows have steadily decreased for the past five years. Concentrations of a couple of constituents have also decreased from upstream to downstream; this includes nitrate, orthophosphate, total coliform, and fecal coliform bacteria. Increase in the concentrations (from upstream to downstream) of pH, total hardness, turbidity, conductivity, ammonia, and dissolved oxygen.

The City does not have an explanation at this time for the increase in flows or the increase in dry weather flow contributions within City boundaries. The City will continue to conduct further dry weather investigations to develop enough data to establish baseline conditions (for current channel configurations) and to develop priorities for more detailed investigations for pollutant and dry weather flow sources. The City will also continue to conduct outreach to the community to reduce over-irrigation as an attempt to reduce dry weather flows. The 2011 City of El Cajon Forester Creek Impact Study contains more detailed information about the results of this investigation. A copy of the study is included in Appendix A.12 of this report.

SECTION 13 NON-EMERGENCY FIRE FIGHTING FLOWS

INTRODUCTION 1

13.1 BEST MANAGEMENT PRACTICES 1

13.2 EDUCATIONAL METHODS 2

13.3 IMPROVEMENTS AND REGULATORY COMMENTS 2

SECTION 13 NON-EMERGENCY FIRE FIGHTING

Introduction

Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. BMPs and educational methods are used to reduce the discharge of pollutants to the MEP.

13.1 BEST MANAGEMENT PRACTICES

The City has already developed and implemented a program to reduce pollutants from non-emergency fire fighting flows, in accordance with Section B.3. of the Permit. BMPs were implemented when conducting the following activities:

- Regular Maintenance of Fire and Emergency Vehicles and Equipment
- Training Exercises
- Facilities Maintenance
- Post-Emergency Rehabilitation of Response Equipment

These activities are conducted in a way to either minimize or eliminate the discharge of pollutants to the MS4. Detailed descriptions of BMPs are given for each activity below:

Regular Maintenance of Fire and Emergency Vehicles and Equipment

- Vehicles and equipment are cleaned where runoff is directed either to the sanitary sewer system or to a drain with an oil/water separator system.
- Vehicles and equipment are cleaned where runoff ponds and evaporates and/or where runoff filters through landscaped areas.
- Used-oil, hydraulic fluids, and antifreeze are stored in containers for recycling or disposed as hazardous waste.
- Spill kits are available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents are minimized, and general cleaning solutions are disposed of into the sanitary sewer system.
- Caustics, flammables, and solvents are contained and disposed of properly as hazardous waste.

Training Exercises

- Water used in training exercises is directed to landscaped areas whenever possible, and runoff from the training exercises is not allowed to discharge to the MS4.
- Live fire training activities are pre-planned to allow integration of barriers to off-site runoff that could contribute to non-storm water discharges or conducted at a designated training area that drains to the sanitary sewer via a multi-compartment separator.

Facilities Maintenance

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways are swept to remove debris. Debris is placed in the trash. Interior floors are

mopped as necessary, and the wastewater is discharged into the sanitary sewer system or onto landscaped areas.

- Landscaped areas are maintained as required to reduce introduction of leaves and other landscape waste into the MS4.
- Irrigation systems are monitored and maintained as required to reduce irrigation water from going off-site.
- Spills are cleaned up using spill kits provided at the work site, and disposal of spilled material are conducted in accordance with applicable regulations.
- Spills that require a cleanup beyond the ability of the on-site employees are reported to the City Department of Public Works for assistance with appropriate resources.
- Maintenance and repair of structures are conducted using methods that do not contribute pollutants to the MS4.
- General non-hazardous cleaning solutions are disposed of in a utility sink that drains into the sanitary sewer system.

Post-Emergency Rehabilitation of Response Equipment

Tools, fire hoses, ladders, and other equipment used at the scene of an emergency are restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. The use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified.

13.2 EDUCATIONAL METHODS

The Storm Water Division provided informal training to Fire Department Personnel. In PY2010-11 the Storm Water group cooperated with the Fire Department on outreach materials conveying how best to conduct weed abatement prior to the fire season staying in compliance with storm water regulations.

13.3 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements from PY3 experience include:

- Continue to coordinate with the Fire Department on outreach materials.
- Expanded maintenance Best Management Practices for fire fighting equipment and facilities.

Regulatory comments are not applicable to this portion of the JURMP update. Non-Emergency Fire Fighting is a new component of the annual update.

SECTION 14 JURMP REVISIONS

14.1 INTRODUCTION 1

SECTION 14 JURMP REVISIONS

14.1 INTRODUCTION

No changes to the JURMP occurred during PY2010-11.

Section 15 Conclusions and Recommendations

Introduction **1**

15.1 Conclusions **1**

Table 1 – Challenges and Associated Strategies/Actions 3

15.2 Recommendations **4**

SECTION 15 CONCLUSIONS & RECOMMENDATIONS

INTRODUCTION

To conclude PY4 and recommend changes for PY5, this Section focuses on the challenges overcome this last year that will help eliminate inaccuracy or uncertainty for subsequent permit years. To summarize, the City:

- Continued implementation of the BMP-based inspections by focusing efforts on ensuring full implementation of appropriate BMPs at all high priority commercial, industrial, construction and municipal facilities.
- Continue to incorporate and contact storm water pollution prevention requirements for mobile businesses using regional mobile business database.
- Expanded public education efforts by targeting elementary and junior high school student population by conducting presentations; and continued participation in the Fire Department/Safety Open House, as well as other events in which a pollution prevention booth was placed, and providing information to the mass public through the City newsletter.
- Continued efforts towards a Watershed-based program by conducting the seventh upstream/downstream water quality assessment of Forrester Creek.
- Refined the City's ability to track cumulative complaints, inspections, violations, and enforcement actions for accuracy and completeness.
- Opened contract for on-call analytical testing services to conduct follow-up responses to complaints, spills, and targeted investigations to identify potential pollutant source points.
- Maintains a contract with a consultant to assist with the review of storm water plans and requirements for proposed development and redevelopment projects.

15.1 CONCLUSIONS

A number of conclusions resulted from compiling the Annual Report information as follows:

The City continues to fulfill the requirements of Order No. R9-2007-001. The actions taken by the City to comply with these requirements are fully described in Sections 1 through 14 (particularly Section 11) of this Annual Report. The City will continue to meet the activity-based compliance requirements in future program years.

The City's focus on BMP implementation at high priority commercial and industrial facilities and at construction sites will reduce or prevent discharges of pollutants from those activities and sites. Once the City can reasonably assure that those priority activities are not discharging

pollutants, the City will be able to focus more effort on identifying and eliminating other (unknown, unidentified) sources of pollutants that continue to impact water quality.

The City's program must continue to move forward, from an emphasis on the activity-based compliance actions to water-quality-based activities that will help the City achieve the goal of reducing discharges of pollutants and restoring the quality of the receiving waters. These activities include collecting, evaluating and incorporating sufficient water quality data to set priorities, better identify problem areas, and to be able to demonstrate reductions in pollutants and improvements in water quality.

Effectively integrating jurisdictional into watershed programs will be a continued focus for the future. The Permit establishes important obligations at both jurisdictional and watershed levels. To accomplish this transition and integration, the City continues to meet with San Diego River Watershed Jurisdictions to provide some direction concerning urban runoff issues. Taking advantage of successes at other Cities strengthens individual and watershed programs.

The City must still address a number of unresolved data and information collection issues. Monitoring data are especially important to quantify pollutant loads within the jurisdiction of El Cajon. Additional dry weather monitoring stations may be helpful to better identify illegal discharge sources. The need for additional data and information must be carefully balanced with the costs of obtaining those items.

The solid base of protocols and procedures produced in previous permit years continue into the current reporting period with refinement supported by eight years of experience in program implementation. An unending challenge is changing the behavior of the approximately 99,000 residents and 2,000 businesses and their views of urban runoff pollution. The City is predominantly a community of rental units, which identifies the population as more transient than the typical single-family residential population. This outreach and education challenge will be changing as more rental complexes may convert into common living complexes with home ownership. The following table summaries the City's storm water management strategy based on the challenges presented during the current reporting period, 2010-11.

Table 1 – Challenges and Associated Strategies/Actions

Challenges	Strategies / Actions
Implementing the 14 components simultaneously	1. Prioritize implementation to maximize use of personnel, supplies, equipment, and budget. 2. Develop budget for PY5 to add jurisdictional and watershed outreach efforts to educate about potential TMDLs, public participation events, additional outreach materials, GIS data development, staff training, and treatment controls for trash and debris.
Adequate Staffing and Equipment	Train as many City staff in storm water pollution prevention and Best Management Practices.
Incorporate Storm Water Concepts and Requirements at the Planning Stage	Conduct training and work closely with Community Development staff to generate a Storm Water Information Packet to distribute to applicants.
Transition Jurisdictional Programs and activities into Watershed Activities.	1. Meet with WURMP Copermittees for implementation. 2. Explore strategies to fund watershed activities that go beyond the jurisdictional boundaries and plan for future TMDLs.
Tackle Inland City Issues	1. Develop City-specific education and outreach materials.
Maintain Adequate Monitoring tasks	1. Review dry weather monitoring results. 2. Use GIS and the City's Business License database to focus on the most highly potentially pollution production areas. 3. Develop a basic wet weather-monitoring program that is comparable with other Copermittee programs.

From July 1, 2003 through June 30, 2011, the City tackled a new set of challenges while maintaining the current level of services provided. In review, it was better to put resources towards implementing productive processes and procedures, rather than completing a task in the name of compliance. The City continues to brainstorm to reach higher standards in future

program years, while quantifying pollutant reductions from jurisdictional actions that may have a watershed impact.

15.2 RECOMMENDATIONS

Specific recommended improvements are listed at the end of each component. Below are some general improvements for the City's Urban Runoff Strategy.

- Increase emphasis on watershed training, San Diego River Watershed Copermittee cooperative efforts, and electronic tracking of program information,
- Continue to maintain adequately trained staff to implement JURMP activities,
- Focus on outreach and education activities for the most effective approach to managing storm water pollution.
- Create a comprehensive Geographical Information System for the Jurisdictional and Watershed Storm Water Program efforts.
- Coordinate through City departments a cohesive urban runoff management program,
- Continue to develop a comprehensive program to collect and organize information for the Annual Report,
- Complete development of a storm drain master plan map inventorying MS4 infrastructure.

Appendix A.1
(No Content)

Appendix A.2

RESOLUTION NO. 10–03

A RESOLUTION APPROVING GENERAL PLAN AMENDMENT 2002-04 TO ADD STORM WATER RUNOFF POLICIES AND OBJECTIVES TO GENERAL PLAN TEXT.

WHEREAS, the El Cajon City Council duly advertised and held a public hearing on January 14, 2003, to consider an item which had been set for General Plan consideration; and

WHEREAS, to facilitate understanding by the public, the City Council took tentative or preliminary votes on this item, which vote was not binding until the public hearing was completed; and

WHEREAS, the City Council duly considered all information presented, and listened to all persons who appeared before it to speak.

NOW, THEREFORE, BE IT RESOLVED that the El Cajon City Council hereby approves General Plan Amendment 2002-04 to add storm water policies to the General Plan text as indicated in Planning Commission Resolution No. 9734, on file in the office of the City Clerk, and made a part hereof by this reference.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at a Regular Joint City Council/Redevelopment Agency Meeting held this 14th day of January, 2003, by the following vote to wit:

AYES : Lewis, Kendrick, McClellan, Ramos, Santos
NOES : None
ABSENT : None
DISQUALIFY : None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

MARILYNN LINN, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Resolution No. 10-03 of the Resolutions of the City of El Cajon, California, as adopted by the City Council at the Regular Joint Meeting of the City Council/Redevelopment Agency on the 14th day of January, 2003.

for M Steele
Marilynn Linn, CMC, City Clerk

1/14/03 (103)

STAFF REPORT AND RECOMMENDATION
PLANNING COMMISSION MEETING
DECEMBER 9, 2002 - 7:00 PM

COUNCIL CHAMBER
200 E. MAIN STREET
EL CAJON, CA 92020

AGENDA ITEM #3

PUBLIC HEARING ON
GENERAL PLAN AMENDMENT 2002-04 – Planning Commission

Request to add storm water policies to General Plan text.

******** ******** ******** ********

STAFF RECOMMENDATION: RECOMMEND APPROVAL

******** ******** ******** ********

ENVIRONMENTAL IMPACT INFORMATION

The proposed project is exempt from environmental review in accordance with Section 15308 of CEQA Guidelines.

DISCUSSION

As part of the local implementation of the federal Clean Water Act, the County of San Diego and its 18 cities have obtained a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board. The NPDES permit addresses the handling of storm water runoff by the 18 cities, their residents and businesses. Part of the NPDES permit includes a Jurisdictional Urban Runoff Management Program (JURMP) (Note: there are lots of acronyms used in the storm water runoff dictionary).

Although most of the City's storm water and drainage implementation is carried out by the Department of Public Works, there is a requirement in the NPDES and the JURMP that the General Plan include policies and principles which address water quality and storm water runoff. An attempt to add these policies and

principles to the General Plan last year was withdrawn when it was determined to be premature (GPA 2001-01).

Goal 8 of the El Cajon General Plan says, "The livability of El Cajon will be maintained and enhanced through respect for the environment." There are a number of policies under this goal which address other environmental issues and concerns and this is where the staff believes the policy and objectives (principles) for storm water runoff should be located within the City's general plan text.

RECOMMENDATION

It is recommended that the Planning Commission recommend approval of General Plan Amendment 2002-04 to add storm water runoff policy and objectives to the text of the General Plan as follows and for the following reasons:

Add the following objective and policies to Goal 8.

"Objective 8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into a municipal separate storm sewer system. (MS4)

8-10.3. The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.

8-10.4. The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-

structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. The City will reduce pollutants associated with vehicles and increasing traffic resulting from development. The City will coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable."

Reasons for Recommendation

A. This amendment to the text of the City's general plan will add a policy and objectives addressing storm water runoff as required by the National Pollution Discharge Elimination System (NPDES) permit issued to the City.

B. This amendment will provide policy and objectives dealing with storm water runoff to guide decision-making in the city.

C. This amendment is consistent with the City's Jurisdictional Urban Runoff Management Program (JURMP).

Refer to staff for a resolution stating the decision of the Planning Commission.

JSG:co

EL CAJON GENERAL PLAN 2000

Text and Map adopted by
City Council Resolution No. 10-91
on January 8, 1991

Text and Map amended by
City Council Resolution No. 31-98
on February 10, 1998

January, 2001

OBJECTIVE

8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants off site and into a municipal separate storm sewer system. (MS4)

8-10.3. The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.

8-10.4. The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and

sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. The City will reduce pollutants associated with vehicles and increasing traffic resulting from development. The City will coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

GOAL 9

A strong, competitive region-wide commercial base will be created and retained.

OBJECTIVE

9-1. Parkway Plaza and its immediate vicinity will be maintained as the City's regional shopping center.

POLICIES

9-1.1. Parkway Plaza shall be expanded from its original size and the number of major tenants and stores shall be increased.

9-1.2. The City shall continue to improve traffic circulation in the vicinity of Parkway Plaza.

9-1.3. The City shall cooperate with Parkway Plaza in the provision of parking facilities and may develop special

ORDINANCE NO. 4939

AN ORDINANCE REPEALING CHAPTER 16.60
OF TITLE 16 OF THE EL CAJON MUNICIPAL CODE
AND ADDING A NEW CHAPTER 16.60 TO TITLE 16 OF THE
EL CAJON MUNICIPAL CODE REGARDING THE CITY OF
EL CAJON STANDARD URBAN STORM WATER MITIGATION PLAN.

WHEREAS, the City of El Cajon, pursuant to its Water Quality Permit issued on February 21, 2001, is required to adopt certain implementation steps as mandated by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, one of the implementation steps requires the adoption of an Urban Storm Water Mitigation Plan based upon a pre-approved Model adopted on June 10, 2002, by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall be the Urban Storm Water Mitigation Plan adopted pursuant to the mandate of the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall allow for the adoption of resolutions and policies which shall implement the El Cajon Standard Urban Water Mitigation Plan not included in this Ordinance; and

WHEREAS, the adoption of this Ordinance, by the findings of the Regional Water Quality Control Board (San Diego Region), is exempt from the requirements of the California Environmental Quality Act; and

WHEREAS, the purpose of this Ordinance is to protect valuable water resources of the City of El Cajon and its surrounding environs from pollutants.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EL CAJON AS FOLLOWS:

Section 1: Chapter 16.60 of Title 16 of the El Cajon Municipal Code is hereby repealed.

Section 2: Chapter 16.60 is hereby added to Title 16 of the El Cajon Municipal Code to read as follows:

16.60.010 Title.

The ordinance codified in this chapter shall be known as the "Standard Urban Storm Water Mitigation Plan (SUSMP) ordinance of the City of El Cajon."

16.60.020 Statutory Authority.

A. The municipal storm water National Pollutant Discharge Elimination System (NPDES) permit (Order No. R9-2007-0001, as subsequently modified by renewal order, NPDES No. CAS0108758, hereinafter collectively referred to as "Municipal Permit") issued to San Diego County, San Diego County Regional Airport Authority, the Port of San Diego, and eighteen cities by the San Diego Regional Water Quality Control Board (Regional Board) on January 24, 2007, requires the development and implementation of a program addressing urban runoff pollution issues in development planning for public and private projects.

B. The requirement to implement a program for development planning is based on federal and state statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA"), and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The municipal permit requires the implementation of a Jurisdictional Urban Runoff Management Program (JURMP), which has been adopted by the City of El Cajon on February 12, 2002, as amended.

16.60.030 Purpose.

A. The primary objectives of this chapter are to:

1. Ensure that discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards;

2. Effectively prohibit non-storm water discharges in urban runoff; and

3. Reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

B. The regulations of this chapter were developed to address post-construction urban runoff pollution from new development and redevelopment applications that fall under "priority project" categories. The goal of this chapter is to develop and implement practicable policies to ensure, to the maximum extent practicable, that development does not increase pollutant loads from a project site and to consider urban runoff flow rates, velocities and durations. This goal may be achieved through site-specific controls and/or drainage area-based or shared structural treatment controls.

16.60.040 Applicability of chapter.

The regulations set forth in this chapter shall apply to the development plan approval process for discretionary development applications, and prior to issuing

development permits for ministerial projects. To allow flexibility in meeting the design standards set forth in this chapter, structural treatment control BMPs may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided certain conditions are met. All new development and significant redevelopment projects that fall into one of the following "priority project" categories are subject to the requirements of this chapter, subject to the lawful prior approval provisions of the municipal permit. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project footprint is subject to the requirements of this chapter. These categories are:

A. Residential development of ten (10) units or more;

B. Commercial development greater than one (1) acre;

C. Heavy industry/industrial development greater than one (1) acre;

D. Automotive repair shops;

E. Restaurants;

F. Hillside development greater than 5,000 square feet;

G. Projects located within or directly adjacent to or directly discharging to receiving waters within environmentally sensitive areas that create 2,500 square feet or more of impervious surface or increase the area of imperviousness to ten percent (10%) or more of its naturally occurring conditions, where "directly adjacent," is defined as situated within 200 feet of the environmentally sensitive area, and where "discharging directly to," is defined as outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands;

H. Parking lots with 5,000 square feet or more of impervious surface, or with more than fifteen (15) parking spaces and potentially exposed to urban runoff;

I. Streets, roads, highways, and freeways, which would create a new paved surface that is 5,000 square feet or more of impervious surface; and

J. Retail gasoline outlets of 5,000 square feet or more in size, or having a projected average daily traffic ("ADT") count of at least 100 vehicles per day regardless of size.

As part of the project review process and to comply with the regulations set in this chapter, the Public Works Department shall review development and redevelopment projects that create, add or replace 5,000 square feet or more of impervious surfaces. In addition to the priority categories identified in this chapter, priority projects shall also

include all other pollutant generating development projects that result in the disturbance of one acre or more of land.

16.60.050 Limited exclusion.

Trenching and resurfacing work associated with utility projects; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lanes on existing roads; and routine replacement of damaged pavement, such as pothole repair, are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are subject to the requirements of this chapter if one or more of the criteria for the above categories are met.

16.60.060 Applicability of chapter 13.10.

The provisions of Chapter 13.10 (Storm Water Management and Discharge Control), including the definitions and enforcement provisions, shall be applicable to this chapter as though fully set forth herein.

16.60.070 Administration – limitations.

Where requirements of this chapter conflict with established local codes, (e.g., specific language of signage used on storm drain stenciling), the city council may continue the local practice and modify this chapter to be consistent with the code, except that to the extent that the standards in this chapter are more stringent than those under local codes, such more stringent standards shall apply.

16.60.080 Administration – provisions for SUSMP requirements.

The requirements of this chapter shall be incorporated into the project design in accordance to that certain Countywide Model SUSMP, Standard Urban Stormwater Mitigation Plan Requirements for Development Applications, dated January 2, 2009, as may be amended from time to time (the "Countywide Model SUSMP"), and shown on the plans prior to approval of discretionary permits. For projects requiring only ministerial permits, the requirements of this chapter shall be incorporated into the project design and shown on the plans prior to the issuance of any ministerial permits. City departments carrying out public projects that are not required to obtain permits shall be responsible for ensuring the requirements of this chapter are incorporated into the project design and shown on the plans prior to bidding for construction contracts, or equivalent. For public projects, the requirements of this chapter must be incorporated into the project design and shown on the plans before allowing the project to commence.

16.60.090 Administration – implementation.

All priority projects shall implement one or a combination of storm water BMPs, including, (1) LID and site design BMPs, (2) source control BMPs and, (3) structural treatment BMPs after the pollutants and conditions of concern have been identified. Storm water BMPs shall be considered and implemented where expressly required by this chapter and if not so required where determined applicable and feasible by the Director of Public Works. The storm water BMPs shall adhere to the requirements of this chapter, and shall be correctly designed in accordance to the applicable Countywide Model SUSMP so as to remove pollutants to the maximum extent practicable. A flow chart summarizing the storm water BMP selection procedure is provided in Figure 1.

16.60.100 Administration – site design storm water treatment credits.

Project proponents may develop and submit for public review and comment and city council approval a regional model site design storm water treatment credits program that allows reductions in the volume or flow of storm water that must be captured or treated on a project in return for the inclusion of specified project design features in the project. The model site design storm water treatment credits program shall be deemed to be a part of this chapter following city council approval. Any such model program shall specify the conditions under which project proponents can be credited for the use of site design features and low impact development techniques that can reduce the volume of storm water runoff, preserve natural areas, and minimize the pollutant loads generated and potentially discharged from the site. Any site design storm water treatment credits program implemented shall be consistent and compliant with this chapter and approved by the city council.

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Figure 1. Storm Water BMP Selection Procedure Flow Chart

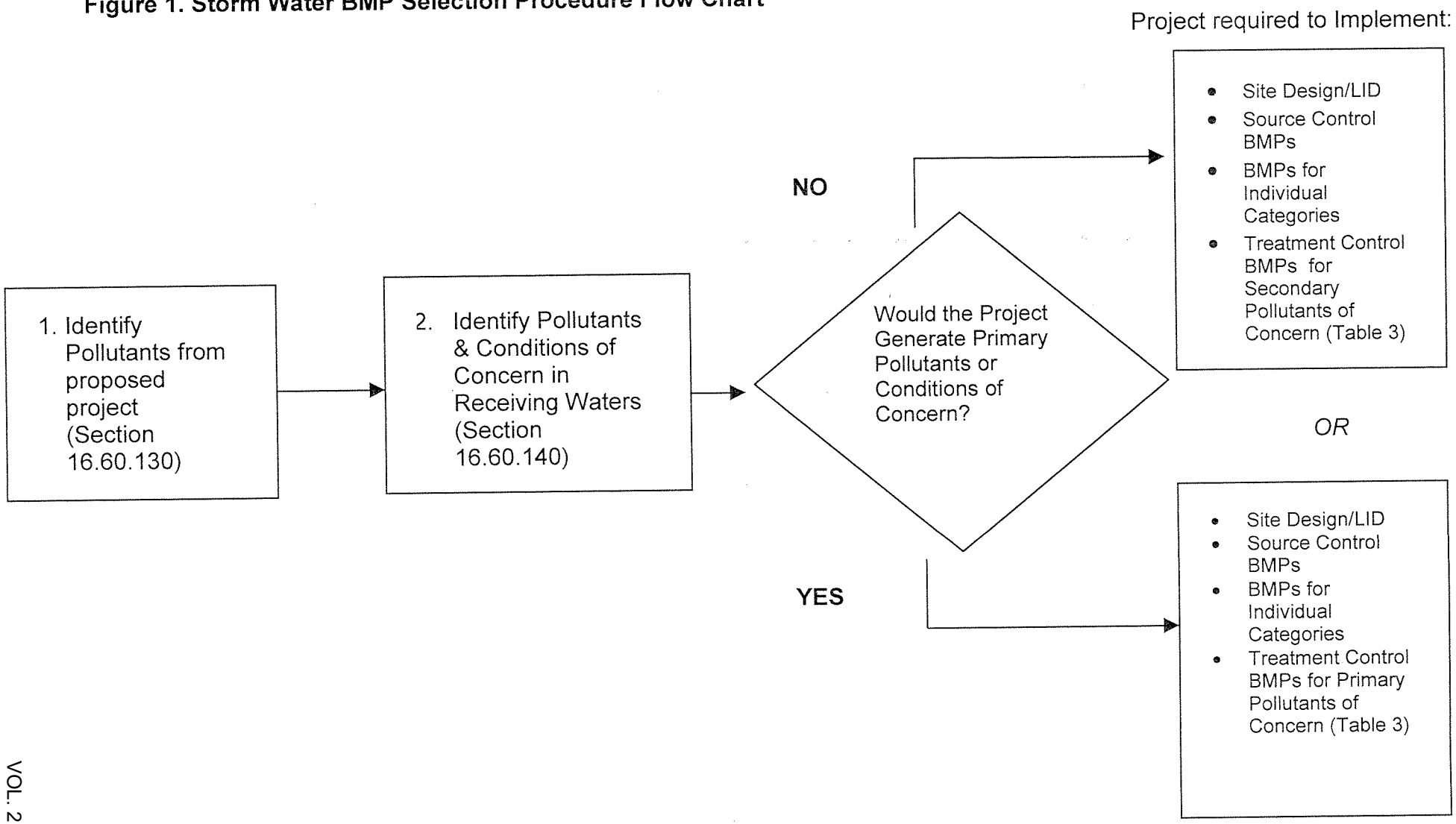

16.60.110 Identifying pollutants and conditions of concern.

A. Priority project proponents shall use this guidance to identify pollutants and conditions of concern, for which they need to mitigate or protect against. Site design and source control BMPs are required based on pollutants commonly associated with the proposed project type (see Table 2, "Standard Storm Water BMP Selection Matrix"). Treatment Control BMPs are also required for the project's expected pollutants of concern (see Table 3).

B. For private priority projects, the information shall be provided with the project application prior to being deemed complete.

C. For public priority projects, the information shall be provided by the Director of Public Works prior to bidding for construction contracts.

16.60.120 General categories of water pollution.

A. Sediments – Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms' survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

B. Nutrients – Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

C. Metals – Metals are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary sources of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

D. Organic Compounds – Organic compounds are carbon-based. Commercially available or naturally occurring organic compounds are found in

pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged into storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also absorb levels of organic compounds that are harmful or hazardous to aquatic life.

E. Trash & Debris – Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfides.

F. Oxygen-Demanding Substances – This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

G. Oil and Grease – Oil and grease are characterized as high-molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

H. Bacteria and Viruses – Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

I. Pesticides – Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

16.60.130 Identifying pollutants from the project area.

Using Table 1, pollutants shall be identified that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

Table 1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development > 10 units	X	X			X	X	X	X	X
Attached Residential Development > 10 units	X	X			X	P(1)	P(2)	P	X
Commercial Development > 1 acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry / Industrial Development > 1 acre	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development > 5,000 ft^2	X	X			X	X	X		X
Parking lots > 5,000 ft^2 or > 15 spaces	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets > 5,000 ft^2 or > 100 ADT			X	X	X	X	X		
Streets, Highways & Freeways > 5,000 ft^2	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) a potential pollutant if landscaping exists on site
(2) a potential pollutant if the project includes uncovered parking areas
(3) a potential pollutant if land use involves food or animal waste products
(4) including petroleum hydrocarbons
(5) including solvents

16.60.140 Identifying pollutants of concern.

A. Pollutants generated by the proposed priority project that exhibit one or more of the following characteristics are considered primary pollutants of concern:

1. Current loadings or historical deposits of the pollutant are impairing the beneficial uses of a receiving water;

2. Elevated levels of the pollutant are found in water or sediments of a receiving water and/or have the potential to be toxic to or bioaccumulate in organisms therein; and

3. Inputs of the pollutant are at a level high enough to be considered potentially toxic.

B. To identify primary pollutants of concern in receiving waters, each priority project shall, at a minimum, do the following:

1. For each of the proposed projects' discharge points, identify the receiving water(s) that each discharge point proposes to discharge to, including hydrologic unit basin number(s), as identified in the most recent version of the *Water Quality Control Plan for the San Diego Basin*, prepared by the San Diego Regional Water Quality Control Board;

2. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies. List any and all pollutants for which the receiving waters are impaired; and

3. Compare the list of pollutants for which the receiving waters are impaired with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing impairment of receiving waters shall be considered primary pollutants of concern.

For projects where no primary pollutants of concern exist, those pollutants identified through the use of Table 1 shall be considered secondary pollutants of concern.

16.60.150 Identifying conditions of concern.

A. Common impacts to the hydrologic regime resulting from development typically include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. These changes have the potential to permanently impact downstream channels and habitat integrity. A change to a priority project site's hydrologic regime would be considered a condition of concern if the change would impact downstream channels and habitat integrity. Because of these potential impacts, a director, or his or

her designee, may require that the following steps be followed for priority projects that, in their judgment, may impact the hydrologic regime:

1. Evaluate the project's conditions of concern in a drainage study report prepared by a registered civil engineer in the State of California, with experience in fluvial geomorphology and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, wet season groundwater depth, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed;

2. As part of the drainage study, a qualified, licensed professional shall provide a report on proposed infiltration techniques (trenches, basins, dry wells, permeable pavements with underground reservoir for infiltration) regarding any potential adverse geotechnical concerns. Geotechnical conditions (such as slope stability, expansive soils, compressible soils, seepage, groundwater depth, and loss of foundation or pavement subgrade) should be addressed, and mitigation measures provided;

3. As part of the drainage study, the civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of an altered flow regime;

4. The drainage study shall compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rate, flow velocity, runoff volume, time of concentration, and retention volume. These characteristics shall be developed for the two-year and 10-year frequency, Type I storm, of six-hour or 24-hour duration (whichever is the closer approximation of the site's time of concentration), during critical hydrologic conditions for soil and vegetative cover[1]. The drainage study shall report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions affecting downstream conditions of concern would be maintained by the proposed project, satisfactory to the Director of Public Works, by incorporating the site design, source control, and treatment control requirements identified in this chapter.

B. For priority development projects that disturb ("PDP") fifty (50) acres or more:

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[1] Design storms can be found at http://www.wrcc.dri.edu/pcpnfreq.html. Applicants may calculate the storm events using local rain data. In addition, isopluvial maps contained in the County of San Diego Hydrology Manual may be used to extrapolate rainfall data to areas where insufficient data exists. If isopluvial maps are used interpolations shall be linear.

1. PDP post project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations (interim hydromodification criteria) where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

2. PDPs disturbing fifty (50) acres or more shall implement hydrologic controls to manage post-project runoff flow rates and durations as required by the interim hydromodification criteria.

16.60.160 Progression of storm water BMPs.

Site design BMPs reduce the need for source and/or treatment control BMPs, and source control BMPs may reduce the amount of treatment control BMPs needed. Throughout the following sections, all priority projects shall consider, and incorporate and implement storm water BMPs into the project design where expressly required by this chapter, and if not so required, where determined applicable and feasible by the Director of Public Works, in the following progression:

1. Site Design BMPs
2. Source Control BMPs
3. Treatment Control BMPs

16.60.170 Requirements to implement storm water BMPs.

Priority projects must implement LID site design BMPs and source control BMPs, and must also implement treatment control BMPs unless a waiver is granted based on the infeasibility of all treatment control BMPs. LID BMPs must meet the minimum requirements in section D.1.d.(4) of NPDES Permit No. CAS 0108758. BMPs must also achieve certain performance standards set out in section D.1.d.(5) and (6). Selection of BMPs from the menus included in this chapter, using the rules set out in this chapter, must fulfill these requirements. In addition, runoff treated by LID and site design or source control BMPs, such as rooftop runoff treated in landscaping, may be useful in reducing the quantity of runoff required to be treated in, "Treatment Control BMPs."

16.60.180 Selection of storm water BMPs.

Using the Treatment Control BMP Selection Matrix, each priority project shall select a structural treatment BMP by comparing the list of pollutants for which the downstream receiving waters are impaired (if any), with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing a Clean Water Act section 303(d) impairment of the receiving waters of the project shall be considered primary pollutants of concern. Priority projects that are anticipated to generate a primary pollutant of concern shall meet all applicable requirements of sections 16.60.160 to 16.60.370, and shall select a single or

combination of storm water BMPs from Table 3 that maximizes pollutant removal for the particular primary pollutant(s) of concern.

Alternatively, a project proponent may elect to implement a combination of LID BMPs that either disperse and infiltrate, or direct to bioretention facilities, the flows from all impervious areas on-site. These BMPs are presumed to provide maximum extent practicable treatment for all pollutants of concern; therefore no further documentation of the treatment BMP selection process is required.

16.60.190 Storm water BMPs for projects not generating pollutants.

Priority projects that are not anticipated to generate a pollutant for which the receiving water is Clean Water Act Section 303(d) impaired shall meet applicable standard requirements of establishing storm water BMPs, and shall select a single or combination of storm water BMPs from Table 3 which are effective for pollutant removal of the identified secondary pollutants of concern, consistent with the "maximum extent practicable" standard as defined in the attachment entitled "Definitions" of the Municipal Permit.

16.60.200 Storm water BMPs for projects generating primary and secondary pollutants.

Where a site generates both primary and secondary pollutants of concern, primary pollutants of concern receive priority for BMP selection. For such sites, selected BMPs must only maximize pollutant removal for the primary pollutants of concern. Where a site generates only secondary pollutants of concern, selected BMPs shall target the secondary pollutant of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 1), consistent with the maximum extent practicable standard as defined in the attachment entitled "Definitions" of the Municipal Permit.

Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the city when a feasibility analysis has been conducted, which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible. Treatment control BMPs shall not be constructed within a receiving water.

16.60.210 Alternative storm water BMPs.

Alternative storm water BMPs not identified in Table 3 may be approved at the discretion of the Director of Public Works, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 3.

Table 2. Site Design and Source Control Storm Water BMP Selection Matrix.

Priority Project Category	*Site Design BMPs(1)*	*Source Control BMPs(2)*	*Requirements Applicable to Individual Priority Project Categories(3)*										
			a. Private Roads	b. Residential Driveways & Guest Parking	c. Dock Areas	d. Maintenance Bays	e. Vehicle Wash Areas	f. Outdoor Processing Areas	g. Equipment Wash Areas	h. Parking Areas	i. Roadways	j. Fueling Areas	k. Hillside Landscaping
Detached Residential Development	R	R	R	R									R
Attached Residential Development	R	R	R										
Commercial Development > 1 acre	R	R			R	R	R	R					
Heavy Industry / Industrial Development > 1 acre	R	R			R	R	R	R	R			R	
Automotive Repair Shop	R	R			R	R	R		R			R	
Restaurants	R	R			R				R				
Hillside Development > 5,000 ft^2	R	R	R										R
Parking Lots > 5,000 ft^2 or > 15 spaces	R	R								R(4)			
Retail Gas Outlet = to or > 5,000 ft^2 or > 100 ADT	R	R					R					R	
Streets, Highways & Freeways > 5,000 ft^2	R	R									R		

R = Required; select BMPs as required from the applicable steps in Sections 16.60.130 & 16.60.140, or equivalent.
(1) Refer to Section 16.60.130.
(2) Refer to Section 16.60.140.
(3) Priority project categories must apply specific storm water BMP requirements, where applicable. Projects are subject to the requirements of all priority project categories that apply.
(4) Applies if the paved area totals > 5,000 square feet or with > 15 parking spaces and is potentially exposed to urban runoff.

Table 3. Treatment Control BMP Selection Matrix.

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	High-rate biofilters	High-rate media filters	Trash Racks & Hydro -dynamic Devices
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

Notes on Treatment Control BMP Categories

All rankings are relative. Ranking of all facilities assumes proper sizing, design, and periodic maintenance. Following are general descriptions of each category.

1. **Bioretention Facilities** (infiltration planters, flow-through planters, bioretention areas, and bioretention swales). Facilities are designed to capture runoff and infiltrate slowly through soil media, which also supports vegetation. Bioretention facilities, except for flow-through planters, effectively promote infiltration into native soils. In clay soils, facilities may capture excess treated runoff in an underdrain piped to the municipal storm drain system. Typical criteria: an infiltration surface area at least 4% of tributary impervious area, 6-inch average depth of top reservoir, 18-inch soil layer, 12-inch to 18-inch gravel subsurface storage layer.

2. **Settling Basins and Wetlands** (extended detention basins, "wet" basins, decorative or recreational lakes or water features also used for storm water treatment, constructed wetlands). Facilities are designed to capture a minimum water quality volume of 80% of total runoff and detain for a minimum of 48 hours. Some wetland designs have proven effective in removing nutrients, but performance varies.

3. **Infiltration Facilities or Practices** (infiltration basins, infiltration trenches, dry wells, dispersal of runoff to landscape, pervious pavements). These facilities and landscape designs capture, retain, and infiltrate a minimum of 80% of runoff into the ground. Infiltration facilities are generally only feasible in permeable (Hydrologic Soil Group A or B) soils. Volume and area of infiltration facilities depends on soil permeability and safety factor used. Typical criteria: Infiltration facilities should have pretreatment to remove silt to prolong life of the facility. A 10-foot vertical separation from average seasonal groundwater depth is required. Dispersal to landscape may be accomplished in any soil type and generally requires a maximum 2:1 ratio impervious:pervious and concave topography to ensure the first one (1) inch of rainfall is retained.

4. **Media Filters** (sand filters). Filters designed to treat runoff produced by a rainfall of 0.2 inches per hour (or 2×85th percentile hourly rainfall intensity) by slow infiltration through sand or other media. Typical criteria: Surface loading rate not to exceed 5 inches/hour. Entire surface of the sand must be accessible for maintenance.

5. **High Rate Biofilters** (tree wells, typically proprietary). Biofilters with specially designed media to rapidly filter runoff while removing some pollutants. Filterra® (proprietary version) recommends surface loading rates of up to 100 inches/hour.

6. **High-rate Media Filters** (typically proprietary). Vaults with replaceable cartridge filters filled with inorganic media.

7. **Drainage Inserts** have low effectiveness in removing pollutants that tend to associate with fine particles and have medium effectiveness in removing coarse sediment and trash. They are sometimes used to augment more effective treatment facilities and are sometimes used alone when more effective facilities have been deemed infeasible.

Notes on Pollutants of Concern:
In Table 4, Pollutants of Concern are grouped as gross pollutants (coarse sediment and trash), pollutants that tend to associate with fine particles, and pollutants that remain dissolved.

Table 4

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

16.60.220 Low Impact Development (LID) and Site Design BMP

A. Priority projects shall be designed so as to minimize directly connected impervious surfaces and to promote infiltration using LID techniques. Priority projects shall, to the maximum extent practicable, minimize the introduction of pollutants and conditions of concern that may result in significant impacts, generated from site runoff to the storm water conveyance system. Priority projects shall also control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat. Priority projects can address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Mimicking a site's natural hydrologic regime can be pursued by:

1. Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the storm water conveyance system, and minimizing clearing and grading.

2. Providing runoff storage measures dispersed throughout a site's landscape with the use of bioretention facilities and detention, retention, and infiltration practices.

B. Site design BMPs shall offer an innovative approach to urban storm water management that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates storm water controls throughout the urban landscape. Examples of many of these methods may be found in the County of San Diego's LID Handbook, and its publications, *Start at the Source*, and *Low-Impact Development Design Strategies*, in the City of Portland, Oregon's *Stormwater Manual*, and in the Contra Costa (California) Clean Water Program's *Stormwater C.3 Guidebook*.

16.60.230 Maintaining pre-development rainfall runoff characteristics.

A. Priority projects shall control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. In addition, projects should control runoff discharge volumes and durations to the maximum extent practicable using the site design, source control, and treatment control requirements.

B. Design Concept 1: Minimize Project's Impervious Footprint & Conserve Natural Areas. The following site design options shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works, during the site planning and approval process, consistent with applicable General Plan policies and other development regulations.

1. Minimize and disconnect impervious surfaces. This can be achieved in various ways, including, but not limited to, increasing building density (number of stories above or below ground) and developing land use regulations seeking to limit impervious surfaces. Decreasing the project's footprint can substantially reduce the project's impacts to water quality and hydrologic conditions.

2. Conserve natural areas, soils, and vegetation where feasible. This can be achieved by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition. The following list provides a guideline for determining the least sensitive portions of the site, in order of increasing sensitivity. Jurisdictions should also refer to their Multiple Species Conservation Plans or other biological regulations, as appropriate.

a. Areas devoid of vegetation, including previously graded areas and agricultural fields.

b. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands.
c. Areas of chamise or mixed chaparral, and non-native grasslands.
d. Areas containing coastal scrub communities.
e. All other upland communities.
f. Occupied habitat of sensitive species and all wetlands.
g. All areas necessary to maintain the viability of wildlife corridors. Within each of the previous categories, areas containing hillsides should be considered more sensitive than the same category without hillsides.

3. Construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, permeable asphalt, unit pavers, and granular materials.

4. Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.

5. Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.

6. Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.

7. Use natural drainage systems to the maximum extent practicable.

8. Other site design options that are comparable, and equally effective.

9. Minimize soil compaction.

C. Design Concept 2: Minimize Directly Connected Impervious Areas (DCIAs). Priority projects shall consider, and incorporate and implement the following design characteristics, where determined applicable and feasible by the Director of Public Works.

1. Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.

2. Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.

3. Other design characteristics that are comparable and equally effective.

16.60.240 Protection of slopes and channels.

Project plans shall include storm water BMPs to decrease the potential for erosion of slopes and/or channels, consistent with local codes and ordinances and with the approval of all agencies with jurisdiction, e.g., the U.S. Army Corps of Engineers, the San Diego Regional Water Quality Control Board, and the California Department of Fish and Game. The following design principles shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

A. Minimize disturbances to natural drainages.

B. Convey runoff safely from the tops of slopes.

C. Vegetate slopes with native or drought tolerant vegetation.

D. Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.

E. Stabilize permanent channel crossings.

F. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.

G. Other design principles that are comparable and equally effective.

16.60.250 Providing storm drain system stenciling and signage.

Storm drain stencils are highly visible source control messages, typically placed directly adjacent to storm drain inlets. The stencils contain a brief statement that prohibits the dumping of improper materials into the urban runoff conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. Priority projects shall include the following requirements in the project design:

A. Provide stenciling or labeling of all storm drain inlets and catch basins within the project area with prohibitive language (such as: "NO DUMPING – I LIVE IN <<name receiving water>>") and/or graphical icons to discourage illegal dumping.

B. Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

C. Maintain legibility of stencils and signs.

16.60.260 Designing outdoor material storage areas to reduce pollution introduction.

Improper storage of materials outdoors may increase the potential for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the urban runoff conveyance system. Where the priority project plans include outdoor areas for storage of hazardous materials that may contribute pollutants to the urban runoff conveyance system, the following storm water BMPs are required:

A. Hazardous materials with the potential to contaminate urban runoff shall either be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

B. The storage area shall be paved and sufficiently impervious to contain leaks and spills.

C. The storage area shall have a roof or awning to minimize direct precipitation within the secondary containment area.

16.60.270 Designing trash storage areas to reduce pollution introduction.

All trash container areas shall meet the following requirements (limited exclusion: detached residential homes):

A. Paved with an impervious surface, designed not to allow run-on from adjoining areas, screened or walled to prevent off-site transport of trash; and

B. Provide attached lids on all trash containers that exclude rain, and a permanent fire resistant roof or awning to minimize direct precipitation.

16.60.280 Using efficient irrigation systems and landscape design.

Priority projects shall design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water conveyance system. The irrigation system shall be in compliance with the requirements of all city ordinances regulating the efficient irrigation of landscaping. The following methods to reduce excessive irrigation runoff shall be considered,

and incorporated and implemented where determined applicable and feasible by the Public Works Department:

A. Employing rain shutoff devices to prevent irrigation after precipitation.

B. Designing irrigation systems to each landscape area's specific water requirements.

C. Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.

D. Employing other comparable, equally effective, methods to reduce irrigation water runoff.

16.60.300 Incorporate requirements applicable to individual priority project categories.

Where identified in Table 2, the following requirements shall be incorporated into applicable priority projects during the storm water BMP selection and design process. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for (g) Equipment Wash Areas <u>and</u> (h) Parking Areas into the project design).

A. Private Roads. The design of private roadway drainage shall use at least one of the following:

1. Rural swale system: street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings;

2. Urban curb/swale system: street slopes to curb, periodic swale inlets drain to vegetated swale/biofilter;

3. Dual drainage system: First flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder, high flows connect directly to storm water conveyance system;

4. Other methods, which are comparable and equally effective within the project.

B. Residential Driveways and Guest Parking. The design of driveways and private residential parking areas shall use at least one of the following features:

1. Design driveways with shared access, flared (single lane at street) or wheelstrips (paving only under tires); or, drain into landscaping prior to discharging to the storm water conveyance system;

2. Uncovered temporary or guest parking on private residential lots may be: paved with a permeable surface; or, designed to drain into landscaping prior to discharging to the storm water conveyance system;

3. Other features which are comparable and equally effective.

C. Dock Areas. Loading/unloading dock areas shall include the following:

1. Cover loading dock areas, or design drainage to preclude urban run-on and runoff;

2. Direct connections to storm drains from depressed loading docks (truck wells) are prohibited;

3. Other features which are comparable and equally effective.

D. Maintenance Bays. Maintenance bays shall include the following:

1. Repair/maintenance bays shall be indoors; or, designed to preclude urban run-on and runoff; and

2. Design a repair/maintenance bay drainage system to capture all wash water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit, or

3. Other features which are comparable and equally effective.

E. Vehicle Wash Areas. Priority projects that include areas for washing/steam cleaning of vehicles shall use the following:

1. Self-contained, and covered with a roof or overhang;

2. Equipped with a clarifier or other pretreatment facility;

3. Properly connected to a sanitary sewer; and

4. Other features which are comparable and equally effective.

F. Outdoor Processing Areas. Outdoor process equipment operations, such as rock grinding or crushing, painting or coating, grinding or sanding, degreasing or parts cleaning, landfills, waste piles, and wastewater and solid waste treatment and disposal, and other operations determined to be a potential threat to water quality by the Copermittee shall adhere to the following requirements:

1. Cover or enclose areas that would be the most significant source of pollutants; or, slope the area toward a dead-end sump; or, discharge to the sanitary sewer system following appropriate treatment in accordance with conditions established by the applicable sewer agency;

2. Grade or berm area to prevent run-on from surrounding areas;

3. Installation of storm drains in areas of equipment repair is prohibited;

4. Other features which are comparable or equally effective.

G. Equipment Wash Areas. Outdoor equipment/accessory washing and steam cleaning activities at priority projects shall use the following:

1. Be self-contained, and covered with a roof or overhang;

2. Have a grade or berm area to prevent run-on from surrounding areas;

3. Be equipped with a clarifier, grease trap or other pretreatment facility, as appropriate;

4. Properly connected to a sanitary sewer;

5. Installation of storm drains in wash areas is prohibited;

6. Other features which are comparable or equally effective.

H. Parking Areas. To minimize the offsite transport of pollutants from parking areas, the following design concepts shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

1. Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design;

2. Overflow parking (parking stalls provided in excess of the city's minimum parking requirements) should be constructed with permeable paving;

3. Other design concepts, which are comparable and equally effective.

I. Roadways. Priority roadway projects shall select treatment control BMPs following the treatment control selection procedure identified in this chapter entitled, "Establishing Storm Water BMPs."

J. Fueling Area. Retail and non-retail fuel dispensing areas shall contain the following:

1. Overhanging roof structure or canopy. The cover's minimum dimensions must be equal to or greater than the area within the grade break. The cover must not drain onto the fuel dispensing area and the downspouts must be routed to prevent drainage across the fueling area. The fueling area shall drain to the project's treatment control BMPs prior to discharging to the storm water conveyance system;

2. Paved with Portland cement concrete (or equivalent smooth impervious surface). The use of asphalt concrete shall be prohibited;

3. Have an appropriate slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of urban runoff; and

4. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus one (1) foot (0.3 meter), whichever is less.

K. Hillside Landscaping. Hillside areas that are disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, satisfactory to the Director of Public Works.

16.60.310 Treatment control BMP objectives.

A. Minimizing a development's detrimental effects on water quality can be most effectively achieved through the use of a combination of site design, source and treatment control storm water BMPs. Where projects have been designed to minimize, to the maximum extent practicable, the introduction of anticipated pollutants of concern that may result in significant impacts to the receiving waters through the implementation of site design and source control storm water BMPs, the development would still have the potential for pollutants of concern to enter the storm water conveyance system. Therefore, priority projects shall be designed to remove pollutants of concern from the storm water conveyance system to the maximum extent practicable through the incorporation and implementation of treatment control BMPs.

B. In meeting the requirements in this section, priority projects shall implement a single or combination of storm water BMPs that will remove anticipated pollutants of concern, as identified by the procedure of this chapter, from site runoff to the maximum extent practicable. Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the Director of Public Works when a feasibility analysis has been conducted, which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible. Treatment control BMPs must be implemented unless a waiver is granted to the project by the Director of Public Works based on the infeasibility of any treatment control BMP.

16.60.320 Design to treatment control BMP standards.

All priority projects shall design, construct and implement structural treatment control BMPs that meet the design standards of this section and the applicable Countywide Model SUSMP, unless specifically exempted by the limited exclusions listed in 16.60.350. Structural treatment control BMPs required by this section shall be operational prior to the use of any dependent development, and shall be located and designed in accordance with the requirements of this chapter.

16.60.330 Structural treatment control volume-based BMPs.

Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

A. Volume of runoff produced from a 24-hour 85th percentile storm event, as determined from isoplovial maps contained in the County of San Diego Hydrology Manual; or

B. Volume of runoff produced by the 85th percentile 24-hour runoff event, determined as the maximized capture urban runoff volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998)*; or

C. The volume of annual runoff based on unit basin storage volume, to achieve ninety percent (90%) or more volume treatment by the method recommended in *California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (1993)*; or

D. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event. Where this option is used, storm events shall be identified by their separation from one another by at least six hours of no rain.

16.60.340 Structural treatment control flow-based BMPs.

As an alternative to volume-based BMPs, structural treatment controls may be designed as flow-based BMPs. Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

A. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour for each hour of a storm event; or

B. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two, for each hour of a storm event; or

C. The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two, for each hour of a storm event.

16.60.350 Limited exclusions.

A. Proposed restaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical sizing criteria requirements listed in 16.60.320 through 16.60.340.

B. Where significant redevelopment results in an increase of less than fifty percent (50%) of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in 16.60.330 and 16.60.340 apply only to the addition, and not to the entire development.

16.60.360 Locating BMPs near pollutant sources.

Structural treatment control storm water BMPs should be implemented close to pollutant sources to minimize costs and maximize pollutant removal prior to runoff entering receiving waters. Such BMPs may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following requirements:

A. All structural treatment control BMPs shall be located so as to infiltrate, filter, and/or treat the required runoff volume or flow prior to its discharge to any receiving water body supporting beneficial uses;

B. Multiple post-construction structural treatment control BMPs for a single priority development project shall collectively be designed to comply with the design standards for structural treatment control BMPs;

C. Shared storm water BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;

D. Interim storm water BMPs that provide equivalent or greater treatment than is required by structural treatment control BMPs may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

16.60.370 Restrictions on use of infiltration BMPs.

At a minimum, use of structural treatment BMPs that are designed to primarily function as infiltration devices shall meet the following conditions[2]:

A. Urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants, such as sedimentation or filtration, prior to infiltration;

B. All dry weather flows shall be diverted from infiltration devices except for those non-storm water discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to storm water conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and dechlorinated swimming pool discharges;

C. Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used;

D. The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet or as determined on an individual, site-specific basis by the Director of Public Works. Where groundwater does not support beneficial uses, this vertical distance criterion may be reduced, provided groundwater quality is maintained;

E. The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic

[2] These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

content, clay content, and infiltration rate) that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses;

F. Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries; and other high threat to water quality land uses and activities as designated by the Director of Public Works;

G. The horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as determined on an individual, site-specific basis by the Director of Public Works.

16.60.380 Maintenance mechanism to be in place before acceptance.

Structural BMPs shall not be considered "effective," and shall not be accepted as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. As part of project review, if a project proponent is required to include interim or permanent structural BMPs in project plans, and if the Director of Public Works does not provide a mechanism for BMP maintenance, the project proponent shall provide verification of maintenance requirements through such means as may be appropriate, at the discretion of the Director of Public Works, including, but not limited to covenants, legal agreements, maintenance agreements, and/or conditional use permits.

16.60.390 Maintenance mechanisms.

Public equity maintenance. The city council may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the BMP. Unless acceptable to the city council, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed (e.g., through a trust fund, cash deposit, assessment district fees, bond, letter of credit or similar means). In addition, the city council may seek protection from liability by appropriate releases and indemnities. The city council shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The city council shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions, and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the facilities. The city council must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

A. Project proponent agreement to maintain storm water BMPs: The city council may enter into a contract with the project proponent obliging the project proponent to maintain, repair and replace the storm water BMPs as necessary into perpetuity. Security may be required.

B. Assessment districts: The city council may approve an Assessment District or other funding mechanism created by the project proponent to provide funds for storm water BMP maintenance, repair and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.

C. Lease provisions: In those cases where the city holds title to the land in question, and the land is being leased to another party for private or public use, the city council may assure storm water BMP maintenance, repair and replacement through conditions in the lease.

D. Conditional use permits: For discretionary projects only, the city council may assure maintenance of storm water BMPs through the inclusion of maintenance conditions in the conditional use permit. Security may be required.

E. Alternative mechanisms: The city council may accept alternative maintenance mechanisms if such mechanisms are as protective as those listed above.

16.60.400 Verification mechanisms.

For discretionary projects, the city approved method of storm water BMP maintenance shall be incorporated into the project's permit, and shall be consistent with permits issued by resource agencies, before city approval of discretionary permits. For projects requiring only ministerial permits, the approved method of storm water BMP maintenance shall be incorporated into the permit conditions before the issuance of any ministerial permits. In all instances, the project proponent shall provide proof of execution of an approved method of maintenance repair and replacement before the issuance of construction approvals. Public projects that are not required to obtain permits shall be responsible for ensuring that an approved method of storm water BMP maintenance repair and replacement is executed prior to the commencement of construction. For all properties, the verification mechanism will include the project proponent's signed statement, as part of the project application, accepting responsibility for all structural BMP maintenance, repair and replacement, until a city-approved entity agrees to assume responsibility for structural BMP maintenance, repair and replacement.

16.60.410 Maintenance requirements.

A. Operation & Maintenance (O&M) Plan: A copy of an O&M plan, prepared by the project proponent satisfactory to the Director of Public Works shall be attached to the approved maintenance agreement, which describes the designated responsible party to manage the storm water BMPs, employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities, copies of resource agency permits, and any other necessary activities. At a minimum, maintenance agreements shall require the inspection and servicing of all structural BMPs on an annual basis. The project proponent maintenance entity shall complete and maintain O&M forms to document all maintenance requirements. Parties responsible for the O&M plan shall retain records for at least 5 years. These documents shall be made available to the city for inspection upon request at any time.

B. Access Easement/Agreement: As part of the maintenance mechanism selected above, it shall include a copy of an executed access easement that shall be binding on the land throughout the life of the project, until such time that the storm water BMP requiring access is replaced, satisfactory to the Director of Public Works.

16.60.420 Waiver of structural treatment BMP requirements.

The requirement of implementing structural treatment BMPs may be waived if infeasibility can be established. A waiver of infeasibility shall be granted only when all available structural treatment BMPs have been considered and rejected as infeasible.

Waivers may only be granted from structural treatment BMP and structural treatment BMP sizing requirements. Priority development projects, whether or not granted a waiver may not cause or contribute to an exceedance of water quality objectives. Pollutants in runoff from projects granted a waiver must still be reduced to the maximum extent practicable.

Section 3: This Ordinance is adopted pursuant to the authority granted to the City of El Cajon under San Diego Regional Water Quality Control Board Order No. R9 2007-0001. This Ordinance encompasses a state-mandated requirement thereunder.

Section 4: This ordinance shall be effective thirty (30) days following its passage and adoption.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at an Adjourned Regular Joint City Council/Redevelopment Agency Meeting held this 23rd day of February 2010, by the following vote to wit:

AYES	:	Lewis, Hanson-Cox, Kendrick, McClellan, Wells
NOES	:	None
ABSENT	:	None
DISQUALIFY	:	None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

KATHIE RUTLEDGE, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Ordinance No. 4939 of the Ordinances of the City of El Cajon, California, as adopted by the City Council at the Adjourned Regular Joint Meeting of the City Council/Redevelopment Agency on the 23rd day of February 2010.

Kathie Rutledge
Kathie Rutledge, CMC, City Clerk

2/23/10 (Item 14.1)

STORM WATER

CONCEPTUAL PLAN

Planning Action [PUD or TSM or BP]

[Project Name]

[Project Address]

APN: [000-000-00]

Prepared By

[Engineer's Name]
[Engineering Company's Name]
[Engineering Company's Address]

For

[Developer's Name]
[Developer's Address]

Date:

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List attachments by Chapter here:

	Attachment No.	Title/Description
Chp 1	1	Copy of "Completed Storm Water SUSMP Intake Applicability Form for Development Projects"
Chp 2		
Chp 3	1	Project Location Map
	2	Pre-Development Site Map
	3	Storm Water Conceptual Plan
	4	Preliminary Treatment Calcs: Volume-Based Facilities
	5	Preliminary Treatment Calcs: Flow-Based Facilities
	6	Preliminary Detention Calcs: Flow-Control Facilities

Other City of El Cajon References:
Attachment No. 2 – Trash Enclosure Details
Attachment No. 3 – CC&Rs and Storm Water Maintenance Plan

PROJECT INTRODUCTION AND PROJECT BACKGROUND

The following shall be completed in its entirety prior to submittal. Refer to Chapter 4 for details on identifying constraints and opportunities for storm water control.

Project Name:

Project Location:

Project Description:

Existing Site Features and Conditions Including Topography:

Constraints and Opportunities for Storm Water Control:

CHAPTER 1 – POLICIES AND PROCEDURES

This Storm Water Conceptual Plan (Conceptual Plan) shall be prepared following the completion of the "***Storm Water SUSMP Applicability Form for Development Projects***" that can be obtained from the Planning Department during the project development phase.

This Conceptual Plan shall be used in conjunction with the Countywide Model Standard Urban Stormwater Mitigation Plan (SUSMP), which can be obtained at http://www.projectcleanwater.org. The Model SUSMP has step-by-step instructions, which will guide you in preparing the Conceptual Plan. The Chapters used herein correspond to the Model SUSMP and contained herein are City of El Cajon's (City) specific project requirements.

If the project requires a Hydromodification Management Plan (HMP) as determined in the Model SUSMP Chapter 2, page 26, the Engineer shall refer the Draft Hydromodification Plan, which can be obtained at http://www.projectcleanwater.org.

CONCEPTUAL PLAN PURPOSE

The purpose of this Conceptual Plan is to assist the Applicant in planning ahead for stormwater compliance. The most common (and costly) errors made by Applicants for development approvals with respect to stormwater quality compliance are:

1. Not planning for compliance early enough. The Applicant should think about strategies for stormwater quantity and quality compliance before completing a conceptual site design or sketching a layout of subdivision lots (Chapter 3).
2. Assuming proprietary stormwater treatment facilities will be adequate for compliance. Most are not adequate for anticipated pollutants (Chapter 2).
3. Not planning for periodic inspection and maintenance of treatment and flow-control facilities. Consider who will own and who will maintain the facilities in perpetuity and how they will obtain access, and identify which arrangements are acceptable to the City.
4. Not having the necessary experience or resources to prepare the calculations, reports, and implement innovative solutions to develop stormwater quality designs.

Managing runoff from a single development site may seem inconsequential, but by changing the way most sites are developed (or redeveloped), the City may be able to preserve and enhance existing stream ecosystems within our watershed.

STORM WATER COMPLIANCE PROCESS

Typically, during the Planning Phase, the City of El Cajon determines if a development project is a **"Priority Development Project"** following the completion of the **"Storm Water SUSMP Applicability Form for Development Projects"**. A **"Storm Water Conceptual Plan"** is then developed and submitted for review and approval. Then, during final design (or preparation of construction plans), a Storm Water Mitigation Plan (SWMitP) is required in accordance with the Standard Urban Storm Water Mitigation Plan (SUSMP) ordinance of the City of El Cajon (Ord. 4908, Chapter 16.60) and San Diego

Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001, NPDES Permit No. CAS0108758.

This Conceptual Plan is intended to ensure that the site provides enough space for adequate sizing and placement of stormwater facilities. The Conceptual Plan is a living document subject to revisions as needed by the Engineer of Work and the City during the Planning Phase. During final design (or preparation of the construction plans), the Engineer is required to comply with the Storm Water requirements through the preparation and approval of a SWMitP.

The City's Conceptual Plan submittal requirements are described in Chapter 3. The Conceptual Plan shall be completed in its entirety prior to submittal to the City otherwise it will be returned without review. If you have any questions during the preparation of the Conceptual Plan contact the Storm Water Department at (619) 441-1653.

Attach a copy of the completed "***Storm Water SUSMP Applicability Form for Development Projects".***

CHAPTER 2 – CONCEPTS AND CRITERIA

The City lies entirely within the San Diego River Watershed, Hydrologic Unit (HU) 907. The City recognizes the following drainage basins within the City, all of which eventually discharge into the San Diego River. The Engineer shall refer to the City of El Cajon Jurisdictional Urban Runoff Management Program (JURMP), which is available at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

Check the corresponding sub-watershed(s) for the project

☐ Broadway Channel Basin	☐ Washington Channel Basin	☐ County Ditch Basin	☐ Northern Forrester Creek Basin
☐ Forrester Creek Basin	☐ Fanita Basin	☐ Fletcher Parkway Basin	☐ Third Street Lateral

The following are designated as impaired waters by the RWQCB and USEPA pursuant to the Clean Water Act Section 303(d): ***Forrester Creek and the San Diego River***. The City follows a conservative approach with regards to pollutants impairing water bodies.

Water Quality (Treatment Requirements): The City requires that all pollutants of concern or water quality effect as identified on the Clean Water Act (CWA) 303(d) list be applied for the entire length of the corresponding water body. Determine the Anticipated and Potential Pollutants of Concern per Table 2-1 attached in the next page and per the Model SUSMP, Chapter 2.

Circle each as applicable:

Table 2.1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development > 10 Units	X	X			X	X	X	X	X
Attached Residential Development > 10 Units	X	X			X	P(1)	P(2)	P	X
Commercial Development > 1 acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry /Industrial Development > 1 acre	X		X	X	X	X	X		
Automotive Repair Shops			X	X (4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development > 5,000 ft^2	X	X			X	X	X		X
Parking Lots > 5,000 ft^2 or > 15 spaces	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets > 5,000ft^2 or > 100 ADT			X	X	X	X	X		
Streets, Highways & Freeways > 5,000 ft^2	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential

(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Check each half of a box as applicable:

Pollutants associated with 303(d) Listed ImpairedWaters To Which the Project Drains	Project Specific Anticipated and Potential Pollutants of Concern								
	Sed	Nut	HM	Org	T&D	ODS	O&G	B&V	Pes
Sed									
Nut		X							
HM									
Org									
T&D									
ODS						X			
O&G									
B&V								X	
Pes									

Sed = Sediment; Nut = Nutrients; HM = Heavy Metals; Org = Organics; T&D = Trash and Debris; ODS= Oxygen Demand Substances; O&G = Oils and Grease; B&V = Bacteria & Viruses; Pes = Pesticides;

The City requires that the Pollutants of Concern be grouped to determine how easily various treatment processes remove them. Refer to Table 2-2 inserted below from the Model SUSMP, Chapter 2.

If a box above has two (2) checks, it is considered a Primary Pollutant; one (1) check is considered a Secondary Pollutant. Check each pollutant below according to either Primary or Secondary Pollutant.

TABLE 2-2. GROUPING OF POTENTIAL POLLUTANTS of Concern by fate during stormwater treatment

Check off the Pollutants in the table below accordingly:

Primary	Secondary	Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
		Sediment	X	X	
		Nutrients		X	X
		Heavy Metals		X	
		Organic Compounds		X	
		Trash & Debris	X		
		Oxygen Demanding		X	
		Bacteria		X	
		Oil & Grease		X	
		Pesticides		X	

When selecting a treatment facility to remove a specific pollutant, the City requires that "Medium" or "High" Removal Efficiency BMPs treat all Primary Pollutants of concern as identified above. Refer to Table 2-3 inserted below from the Model SUSMP, Chapter 2, to determine an effective treatment facility.

Circle as applicable:

TABLE 2-3. GROUPS OF POLLUTANTS and relative effectiveness of treatment facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro -dynamic Devices (1)
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

*See page 23 of the Regional Model SUSMP for a discussion of selection of treatment facilities in special situations.

Notes: (1) Trash Racks & Hydrodynamic Devices shall not be used alone.
(2) The City shall reserve the right to determine if the selected treatment facility is appropriate, which may lead to selecting a higher efficiency treatment facility that originally selected by the Engineer.

The Engineer shall ensure that the area (i.e. parking lots, detached residential development, etc.) that requires the treatment actually drains to the selected treatment facility. This shall be clearly shown on the Conceptual Plan and delineated as such in the drainage report. If this is not clearly shown, the City reserves the right to reject the submittal.

Water Quantity (Detention Requirements): With the exception of projects that require a HMP, the City requires that the 2-year and the 10-year storm event be used for calculating peak flows and the 100-year storm event be used to demonstrate flooding impacts. The 2-year and the 10-year storm event shall be used to design stormwater detention facilities in accordance with the San Diego County Hydrology Manual, latest edition, Section 6. The 100-year shall be used to design a bypass system.

For guidance on preparing the Hydraulics and Hydrology Report (or Drainage Report), refer to the San Diego County Hydrology Manual, latest edition. The Engineer may consider using intensities from the latest edition of the City of El Cajon Improvement Standards, Figure 3.4-2 included in the next page for the

design of the drainage improvements (i.e. pipelines, catch basins, inlets, etc). Per the City's requirements, a Drainage Report is required and may be submitted separately or attached to the Conceptual Plan.

Fig. 3.4-2

AVERAGE INTENSITY-DURATION CURVES
El Cajon, California

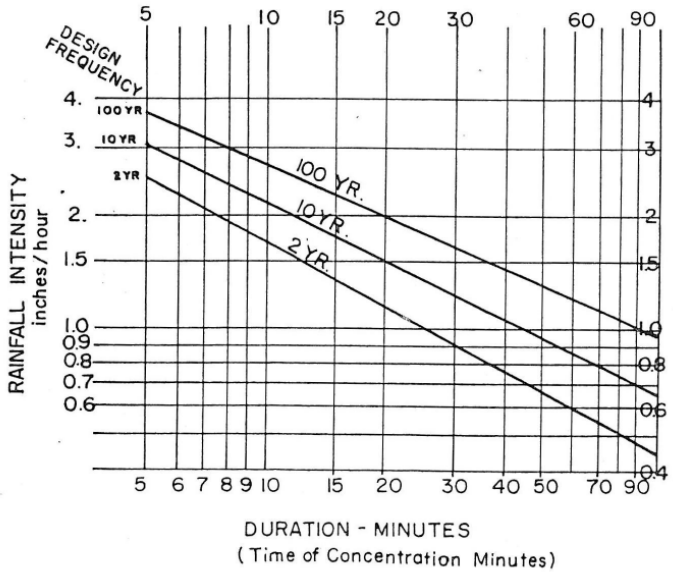

CHAPTER 3 – PREPARING YOUR PROJECT SUBMITTAL

The City requires that this entire packet be completed and submitted along with maps, calculations, details, and other information as requested herein. Attachments shall be listed in the Table of Contents.

Storm Water Conceptual Plan: The Plan shall be shown on a Standard D-size sheet and plotted using engineering scales only and not architectural scales. Preliminary size and location of proposed storm water BMPs must be shown on the Plan. This includes all LID, source control, and structural treatment BMPs. Detention facilities shall be shown, if required. It is important to show the intended location of the facilities even if the exact configuration and grading of the site may have minor modifications during final design. This will ensure that adequate provisions have been made to accommodate and locate the BMPs to achieve the required storm water management objectives.

The Engineer shall evaluate and determine the most appropriate BMPs or combination of BMPs to achieve applicable performance requirements. The selected BMPs need to achieve a “Medium” to “High” efficiency removal of the pollutants of concern for the proposed project. Once the most effective BMPs have been selected, the Plan can be developed and should include the following information:

1. Location of selected BMPs
2. Configuration of storm water conveyance system(s)
3. Proposed sizing (length, width and depth) of all BMPs
4. Location and dimensions of the Detention System, if required.
5. Proposed discharge structure details from the conveyance and storage systems, to the public storm drain system.

Conceptual Plan Submittal Checklist:

- ☐ Storm Water Conceptual Plan
- ☐ Storm Water Treatment Facilities Calculations
- ☐ Hydrologic and Hydraulic calculations, including sizing calculations for detention structures and other drainage facilities that will be used to manage storm water runoff
- ☐ A discussion describing the determination of potential and actual priority pollutants and pollutants of concern, receiving water quality and the consideration and selection of storm water BMPs, including LID, site design, source control and treatment control BMPs.

CHAPTER 4 – LOW IMPACT DEVELOPMENT (LID) DESIGN GUIDE

If the Engineer is not familiar with LID or permanent BMPs design, the Engineer shall refer to Chapter 4 of the Countywide Model SUSMP. The City strongly recommends that the Engineer meet with the Storm Water Department prior to selecting stormwater treatment and flow-control facilities if they are not familiar with the design and functionality of LID or BMPs. The Engineer can set up a meeting by contacting the Storm Water Department at (619) 441-1653.

Analyze Your Project for LID

The City strongly encourages the Applicant to consider the following opportunities for LID:

- ☐ Optimize the site plan by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.
- ☐ Conserve the natural areas such as existing trees, vegetation, and maximize sheet flow in order to mimic pre-development hydrologic cycle.
- ☐ Use pervious surfaces such as turf, gravel, or pervious pavement – or use surfaces that retain rainfall such as vegetated roofs shall be considered. All drainage from these surfaces is considered to be "self-retained" when designed properly. No further management of runoff is necessary. ***NOTE: Perform adequate geotechnical evaluations when using pervious pavements in Soil Type C and D.***
- ☐ Disperse runoff from impervious surfaces on to adjacent pervious surfaces (e.g. direct a roof downspout to disperse runoff onto a lawn, planter, or other pervious surface).

Alternatives to Integrated LID Design

The City requires that the Engineer consult with the Storm Water Department prior to proceeding with alternatives.

STORM WATER

MITIGATION PLAN

[Planning Action, PUD or TSM or BP]

[Project Name]

[Project Address]

APN: [000-000-00]

Prepared By

[Engineer's Name]
[Engineering Company's Name]
[Engineering Company's Address]

For

[Developer's Name]
[Developer's Address]

Date:

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CHAPTER 5 – OPERATION AND MAINTENANCE OF STORMWATER FACILITIES..... 20

List attachments by Chapter here:

	Attachment No.	Title/Description
Chp 1	1	Copy of "Completed Storm Water SUSMP Intake Applicability Form for Development Projects"
Chp 2		
Chp 3	1	Project Location Map
	2	Pre-Development Site Map
	3	Post-Development Site Map
	4	Proprietary Products Full Submittal
	5	Documentation to Demonstrate Past Project Success
	6	Treatment Calcs: Volume-Based Facilities
	7	Treatment Calcs: Flow-Based Facilities
	8	Detention Calcs: Flow-Control Facilities
Chp 4		
Chp 5	1	Storm Water Maintenance Plan
	2	Storm Water Maintenance Agreement

Other City of El Cajon References:
Attachment No. 2 – Trash Enclosure Details
Attachment No. 3 – CC&Rs and Storm Water Maintenance Plan

PROJECT INTRODUCTION AND PROJECT BACKGROUND

The following shall be completed in its entirety prior to submittal. Refer to Chapter 4 for details on identifying constraints and opportunities for storm water control.

Project Name:

Project Location:

Project Description:

Existing Site Features and Conditions Including Topography:

Constraints and Opportunities for Storm Water Control:

CHAPTER 1 – POLICIES AND PROCEDURES

This Storm Water Mitigation Plan (SWMitP) shall be prepared in conjunction with the Countywide Model Standard Urban Stormwater Mitigation Plan (SUSMP), which can be obtained at http://www.projectcleanwater.org. The Model SUSMP has step-by-step instructions, which will guide you in preparing the SWMitP. The Chapters used herein correspond to the Model SUSMP and contained herein are City of El Cajon's (City) specific project requirements.

If the project requires a Hydromodification Management Plan (HMP) as determined in the Model SUSMP Chapter 2, page 26, the Engineer shall refer the Draft Hydromodification Plan, which can be obtained at http://www.projectcleanwater.org.

The SWMitP shall been prepared under the direction of a Civil Engineer registered in the state of California. The Registered Civil Engineer shall attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

CERTIFICATION

I, _____, certify that the selection, sizing, and preliminary design of stormwater treatment and other control measures in this SWMitP meet the requirements of the Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments.

Signature: _____ Date: _____

AFFIX WET STAMP HERE ➔

SWMitP PURPOSE

The purpose of this SWMitP is to finalize the list of anticipated pollutants from the project, finalize proposed Low Impact Development (LID) principles, select final source control and treatment control Best Management Practices (BMPs), finalize sizing calculations for stormwater BMPs, and submit an appropriate maintenance plan. BMPs and LID features applied to all projects provide long-term solutions to water quality and help minimize downstream erosion. This SWMitP is intended to ensure the effectiveness of the selected LID's and BMPs proposed by checking that they have been sized properly, maintenance is feasible, and that the design is based on long-term fiscal planning. The SWMitP is a living document subject to revisions as needed by the Engineer of Work and the City.

STORM WATER COMPLIANCE PROCESS

Typically, during the Planning Level or Programming Phase, the City of El Cajon determines if a development project is a **"Priority Development Project"** following the completion of the **"Storm Water SUSMP Intake Applicability Form for Development Projects"**. A **"Storm Water Conceptual Plan"** is then developed and submitted for review and approval. Then, during final design (or preparation of construction plans), a Storm Water Mitigation Plan (SWMitP) is required in accordance with the Standard Urban Storm Water Mitigation Plan (SUSMP) ordinance of the City of El Cajon (Ord. 4908, Chapter 16.60) and San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001, NPDES Permit No. CAS0108758.

The City's SWMitP submittal requirements are described in Chapter 3. The SWMitP shall be completed in it entirety prior to submittal to the City of El Cajon otherwise it will be returned without review. If you have any questions during the preparation of the SWMitP contact the Storm Water Department at (619) 441-1653.

Complete the following:

1. Is the project on previously undeveloped land (new development)?

   YES NO

2. Is the project adding or creating 5,000-sf, or more, of impervious surface (redevelopment)?

   YES NO

If you answered YES to either 1 or 2, complete Table 1-1, inserted below from the Model SUSMP, Chapter 1.

TABLE 1-1. Priority Development Projects.

Is the project in any of these categories?

Yes ❑	No ❑	A	**Housing subdivisions of 10 or more dwelling units.** Examples: single-family homes, multi-family homes, condominiums, and apartments.
Yes ❑	No ❑	B	**Commercial—greater than one acre.** Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.
Yes ❑	No ❑	C	**Heavy industry—greater than one acre.** Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).
Yes ❑	No ❑	D	**Automotive repair shops.** A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.
Yes ❑	No ❑	E	**Restaurants.** Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.
Yes ❑	No ❑	F	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
Yes ❑	No ❑	G	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.
Yes ❑	No ❑	H	**Parking lots 5,000 square feet or more** or with 15 or more parking spaces and potentially exposed to urban runoff.
Yes ❑	No ❑	I	**Street, roads, highways, and freeways.** Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
Yes ❑	No ❑	J	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

If you answered YES to any of the Items in Table 1-1, the project is a "Priority Development Project". If the Engineer determines that the project is ***NOT*** a "Priority Development Project" call the Storm Water Department at (619) 441-1653 to confirm any SUSMP requirements for the project. If the Engineer determines that the project ***IS*** a "Priority Development Project" continue to the following Chapters.

1. Is the project a "Priority Development Project"? YES NO
2. If you answered yes, list all applicable categories per Table 1-1 → _____

To determine if the project is ***EXEMPT*** from preparing a Hydromodification Management Plan (HMP), refer to the Model SUSMP Chapter 1, Page 10-11. If the Engineer determines that a HMP is required, the City may consider granting an exemption. To make this determination, the Engineer may conduct an independent geomorphic study to determine the project's full hydromodification impact. The study must incorporate sediment transport modeling across the range of geomorphically-significant flows and demonstrate to the City's satisfaction that the project flows and sediment reductions will not detrimentally affect the receiving water to qualify for the exemption. If the project is ***NOT EXEMPT***, follow the instructions in the HMP, which can be obtained at http://www.projectcleanwater.org .

1. Does the project require a HMP? YES NO

CHAPTER 2 – CONCEPTS AND CRITERIA

The City lies entirely within the San Diego River Watershed, Hydrologic Unit (HU) 907. The City recognizes the following drainage basins within the City, all of which eventually discharge into the San Diego River. The Engineer shall refer to the City of El Cajon Jurisdictional Urban Runoff Management Program (JURMP), which is available at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

Check the corresponding watershed(s) for the project

☐ Broadway Channel Basin	☐ Washington Channel Basin	☐ County Ditch Basin	☐ Northern Forrester Creek Basin
☐ Forrester Creek Basin	☐ Fanita Basin	☐ Fletcher Parkway Basin	☐ Third Street Lateral

The following are designated as impaired waters by the RWQCB and USEPA pursuant to the Clean Water Act section 303(d): ***Forrester Creek and San Diego River***. The City follows a conservative approach with regards to pollutants impairing water bodies.

Water Quality (Treatment Requirements): The City Municipal Code requires that all pollutants of concern as identified on the CWA 303(d) list be applied for the entire length of the corresponding water body. Determine the Anticipated and Potential Pollutants of Concern from Table 2-1 in the following page per Chapter 2 of the Model SUSMP.

Circle each as applicable:

TABLE 2-1. ANTICIPATED AND POTENTIAL Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >one acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Check each half of a box as applicable:

Pollutants associated with 303(d) Listed ImpairedWaters To Which the Project Drains	Project Specific Anticipated and Potential Pollutants of Concern: Sed	Nut	HM	Org	T&D	ODS	O&G	B&V	Pes
Sed									
Nut		X							
HM									
Org									
T&D									
ODS						X			
O&G									
B&V								X	
Pes									

Sed = Sediment; Nut = Nutrients; HM = Heavy Metals; Org = Organics; T&D = Trash and Debris; ODS= Oxygen Demand Substances; O&G = Oils and Grease; B&V = Bacteria & Viruses; Pes = Pesticides; Oth = Other (i.e. Pharmaceuticals, etc.)

If a box above has two (2) checks, it is considered a Primary Pollutant; one (1) check is considered a Secondary Pollutant. Check each pollutant below according to either Primary or Secondary Pollutant.

The City requires that the Pollutants of Concern be grouped to determine how easily various treatment processes remove them. Refer to Table 2-2 below, inserted from Chapter 2 of the Model SUSMP.

TABLE 2-2. GROUPING OF POTENTIAL POLLUTANTS of Concern by fate during stormwater treatment

Check off the Pollutants in the table below accordingly:

Primary	Secondary	Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
		Sediment	X	X	
		Nutrients		X	X
		Heavy Metals		X	
		Organic Compounds		X	
		Trash & Debris	X		
		Oxygen Demanding		X	
		Bacteria		X	
		Oil & Grease		X	
		Pesticides		X	

When selecting a treatment facility to remove a specific pollutant, the City requires that "Medium" or "High" Removal Efficiency BMPs treat all Primary Pollutants of concern as identified above. Refer to Table 2-3 inserted below from the Model SUSMP, Chapter 2 to determine an effective treatment facility.

Circle as applicable:

TABLE 2-3. GROUPS OF POLLUTANTS and relative effectiveness of treatment facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro-dynamic Devices (1)
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

*See page 23 of the Regional Model SUSMP for a discussion of selection of treatment facilities in special situations.

Notes: (1) Trash Racks & Hydrodynamic Devices shall not be used alone.
(2) The City shall reserve the right to determine if the selected treatment facility is appropriate, which may lead to selecting a higher efficiency treatment facility than originally selected by the Engineer.

The Engineer shall ensure that the area (i.e. Parking Lots, etc.) that requires the treatment actually drain to the selected treatment facility. This shall be clearly shown on the construction plans and delineated as such in the drainage report. If this is not clearly shown, the City reserves the right to reject the submittal.

Water Quantity (Detention Requirements): The City requires that the 2-year and the 10-year storm event be used for calculating peak flows and the 100-year storm event be used to demonstrate flooding impacts. The 2-year and the 10-year storm event shall be used to design storm water detention facilities in accordance with the San Diego County Hydrology Manual, latest edition, Section 6. The 100-year shall be used to design a bypass system.

For guidance on preparing the Hydraulics and Hydrology Report (or Drainage Report), refer to the San Diego County Hydrology Manual, latest edition. The Engineer may consider using intensities from the latest edition of the City of El Cajon Improvement Standards, Figure 3.4-2 included below, for the design of the

drainage improvements (i.e. pipelines, catch basins, inlets, etc). Per the City's requirements, a Drainage Report is required and may be submitted separately or attached to the Conceptual Plan.

Fig. 3.4-2

AVERAGE INTENSITY-DURATION CURVES
El Cajon, California

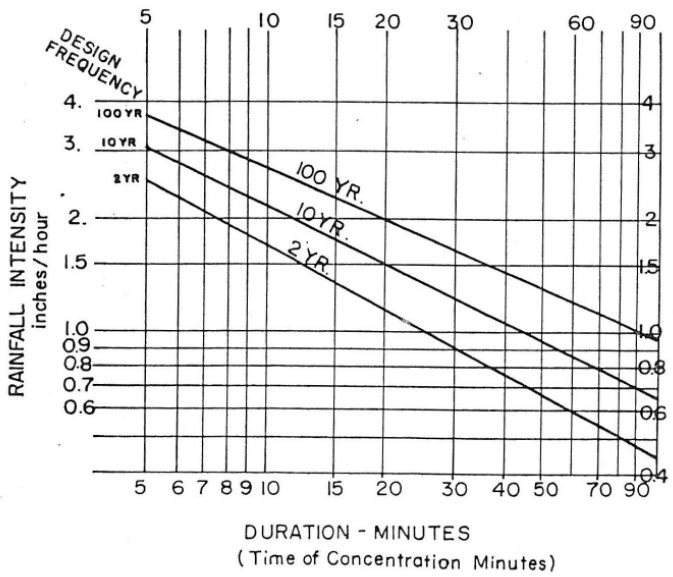

CHAPTER 3 – PREPARING YOUR PROJECT SUBMITTAL

The City requires that this entire packet be completed and submitted along with maps, calculations, proprietary products catalogue cut sheets, details, and other information as requested herein.

Complete and submit the "EXAMPLE PROJECT SUBMITTAL CHECKLIST" located in the Model SUSMP Chapter 3, Page 32. Attachments shall be listed in the Table of Contents.

Report Exhibits: In addition to the items requested in the "CHECKLIST", the City requires that the submittal shall include a location map of the project site, and inlets located a minimum of 200-feet beyond the project site. The maps shall be on a Standard D-size sheet and plotted using engineering scales only and not architectural scales.

Report Narrative: In addition to the items requested in the "CHECKLIST", the City requires a description of the existing topography, run-on and runoff issues, and unique conditions. Also, describe the details of the pre-construction condition and the post-construction condition.

Summarize the affects of the project on the pre-construction flows and specifically state if the flows were increased, decreased, fully mitigated, etc. and the impact the project may have on the downstream hydrology.

Report Tables: In addition to the items requested in the "CHECKLIST", the City requires completion of the tables included herein.

Refer to the Model SUSMP Chapter 4 for guidelines and available Low Impact Development (LID) treatment facilities. The City requires that the project consider at minimum the LID features listed below. Based on the project specifics, the City may require additional LID treatment facilities. The Engineer shall be responsible for selecting the most adequate treatment facility and for including the calculations necessary to justify the effectiveness of each facility. Follow the Model SUSMP Chapter 3, Step 3 to prepare your LID design.

Complete the following table:

Low Impact Development (LID)	Applied			Narrative
	Yes	No	N/A	
Control Peak Runoff Rates				
Minimize Disturbance to Natural Drainages and Waterways				

Low Impact Development (LID)	Applied			Narrative
	Yes	No	N/A	
Conserve Natural Areas, Soils, and Existing Vegetation				
Minimize and Disconnect Impervious Surfaces				
Minimize Soil Compaction				
Drain Runoff from Impervious Surfaces to Pervious Areas				
Drain Rooftops to Landscaping				
Maximize the Use of Pervious Pavement				
[List any others]				

Refer to the Model SUSMP Chapter 3, Step 4 for guidance on specifying source control BMPs. The City requires that the project consider at minimum the source control measures listed below. Based on the project specifics, the City may required additional permanent source control measures. The Engineer shall be responsible for selecting the most adequate source control measures and for including the calculations necessary to justify the effectiveness of each BMP and ensuring all BMPs are shown on the construction plans.

Complete the following table:

Potential Source of Runoff Pollutant	Permanent Source Control BMPs	Applied			Operational Source BMP Narrative
		Yes	No	N/A	
	Include storm drain stenciling and signage				
	Outdoor storage area shall be designed to contain pollutants				
	Trash storage area shall be secured, have a grade break or berm, and have a roof covering (See City of El Cajon References; Attachment No. 2)				

Potential Source of Runoff Pollutant	Permanent Source Control BMPs	Applied			Operational Source BMP Narrative
		Yes	No	N/A	
	Use efficient irrigation systems and landscape design				
	Hillside landscaping				

Refer to the Model SUSMP Chapter 2 for guidance on specifying treatment facilities. The Engineer shall be responsible for selecting the most adequate treatment facilities and for including the calculations necessary to justify the effectiveness of each facility and ensuring all facilities are shown on the construction plans. Note that the Engineer shall cross-reference Chapter 2 and ensure that the drainage area which was determined in Chapter 2 to contain potential pollutants of concern per Table 2-1 is indeed draining to the appropriate treatment facility. Sufficient grades shall be provided on the drainage plans to determine if the drainage area identified is actually draining to the proper treatment facility.

Complete the following table:

Treatment Facilities	Applied			Narrative to describe the selected facilities, location, drainage plans where facility is shown
	Yes	No	N/A	
Bioretention Facilities (LID)				
Settling Basins (Dry Ponds)				
Wet Ponds and Constructed Wetlands				
Infiltration Facilities or Practices (LID)				
Media Filters				
Higher-rate biofilters				
Higher-rate media filters				
Trash Racks & Hydrodynamic Devices				

Refer to the Model SUSMP Chapter 4, Table 4-1 for guidance on Integrated Management Practices (IMP). The Engineer shall be responsible for selecting the most adequate IMPs and for including the calculations necessary to justify the effectiveness of each IMP and ensuring all facilities are shown on the construction plans.

Complete the following table:

Runoff Management Facilities	**Applied**			**Narrative to describe the selected facilities, location, construction drawing where facility is shown**
	Yes	No	N/A	
Vegetated Roof				
Self-Retaining Areas				
Pervious Pavement				
Bioretention Facility				
Flow-through Planter				
Dry Well				
Cistern with Bioretention				

Runoff management facilities shall be per the standards found in the California Stormwater Quality Association (CASQA) Handbook, State Department of Transportation (Caltrans) Stormwater Handbook, or other well-recognized and certifying entity. If the Engineer is proposing propriety BMPs, this will require a "Propriety Product Full Submittal" attachment, which shall contain the manufacturer's catalogue cut sheets, past project photos, calculations, etc. for such proprietary items. In addition, if the Engineer is recommending facilities where functionality may be questionable, such as pervious pavement or dry wells in Type C and/or D soil types, this will require a "Documentation to Demonstrate Past Project Success" attachment, which shall contain, a list of five (5) similar applications completed within the last five (5) years and including contact information for the Engineer of Record and property owner to demonstrate proper functionality.

Report Calculations: In addition to the items requested in the "CHECKLIST", the City requires that runoff coefficients reflect the true imperviousness of the project area and not the land use coefficients. Calculate Q's to the nearest 0.1

cfs. The report shall clearly describe the design parameters used in the calculations and how the parameters, design criteria, constants, and other values were selected, derived, or obtained. Calculations shall show complete formulas, constants, solutions and actual step-by-step calculations. Calculations shall be attached with the header on top stating either:

"TREATMENT CALCULATIONS: VOLUME-BASED
FACILITY [TYPE] FOR DMA [NUMBER]

Or,

"TREATMENT CALCULATIONS: FLOW-BASED
FACILITY [TYPE] FOR DMA [NUMBER]

Or,

"DETENTION CALCULATIONS: FLOW-CONTROL
FACILITY [TYPE] FOR DMA [NUMBER]

If the calculation worksheet is not clearly labeled, the City reserves the right to reject the submittal. Once calculations are completed, the Engineer shall summarize final values in the tables below.

Water Quality (Treatment Facilities)

There are two types of treatment facilities – volume-based and flow-based. The Engineer shall refer to page 26 of the Model SUSMP, Chapter 2. The correct method shall be applied to each type of treatment facility.

Volume-based facilities are facilities whose functionality is based on treating a specific volume (V) of runoff produced by the 85th percentile 24-hour storm event as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map. When designed properly, these facilities will infiltrate, filter, or treat the required ***volume*** of storm water within the required time period.

Flow-based facilities are facilities whose functionality is based on treating a specific flow (Q) of runoff as determined by using the rational method. The Engineer shall refer to the "**Water Quantity**" paragraph located in Chapter 2 herein.

If the functionality of the facility selected depends on the total volume of water being treated, the Engineer shall complete the "V" column to demonstrate that the facility is adequate. If the functionality of the facility selected depends on the total flow of water being treated, the Engineer shall complete the "Q" column to demonstrate that the facility is adequate.

Treatment Calculation Summary:

Node Number	Facility Type	$V_{Treatment}$ (cf)	$Q_{Treatment}$ (cfs)

Water Quantity (Detention Facilities)

Detention facilities are designed to control flow such that post-development flows do not exceed pre-development flows and thus minimize downstream erosion. The Engineer shall refer to page 26 of the Model SUSMP, Chapter 2 for calculation details. These types of facilities include various detention or flow-control facilities (i.e. self-retaining areas, pervious pavements, flow-through planters, bioretention, etc) that when designed properly will detain the required flow on-site.

Detention Calculations Summary:

Project State	Q_2 (cfs) without BMPs	Q_2 (cfs) with BMPs	Q_{10} (cfs) without BMPs	Q_{10} (cfs) with BMPs	Q_{100} (cfs) without BMPs	Q_{100} (cfs) with BMPs
Pre-Development						
Post-Development						

CHAPTER 4 – LOW IMPACT DEVELOPMENT (LID) DESIGN GUIDE

If the Engineer is not familiar with LID or permanent BMPs design, the Engineer shall refer to the County of San Diego's LID Handbook available at http://www.sdcounty.ca.gov/dplu/procguid.html#hydro. The City strongly recommends that the Engineer meet with the Storm Water Department prior to selecting stormwater treatment and flow-control facilities if they are not familiar with the design and functionality of LIDs or BMPs. The Engineer can set up a meeting by contacting the Storm Water Department at (619) 441-1653.

Analyze Your Project for LID

The City requires that the analysis performed documenting the site layout and site design decisions be included under Chapter 3, Preparing Your Project Submittal along with any calculations, tables, and narratives.

The City strongly encourages the Engineer to consider the following opportunities for LID:

- ☐ Optimize the site plan by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.
- ☐ Conserve the natural areas such as existing trees, vegetation, and maximize sheet flow in order to mimic pre-development hydrologic cycle.
- ☐ Use pervious surfaces such as turf, gravel, or pervious pavement – vegetated roofs shall be considered. All drainage from these surfaces is considered to be "self-retained" when designed properly. No further management of runoff is necessary. ***NOTE: Perform adequate geotechnical evaluations when using pervious pavements in Soil Type C and D.***
- ☐ Disperse runoff from impervious surfaces on to adjacent pervious surfaces (e.g. direct a roof downspout to disperse runoff onto a lawn, planter, or other pervious surface).

Alternatives to Integrated LID Design

The City requires that the Engineer consult with the Storm Water Department prior to proceeding with alternatives.

CHAPTER 5 – OPERATION AND MAINTENANCE OF STORMWATER FACILITIES

This chapter shall include two documents – Storm Water Maintenance Plan and Storm Water Maintenance Agreement. The City requires that the Engineer follow "CC&Rs and Storm Water Maintenance Plan", Attachment No. 3 as listed under the City of El Cajon

Storm Water Maintenance Plan (Plan)

The Plan shall be prepared to adequately provide long-term treatment of all post-development BMPs on the project. This plan shall include permeable pavements. For more information refer to the six-stage process outlined in the Model SUSMP Chapter 5, Page 91

Maintenance Agreement with Easement and Covenant (Agreement)

The Agreement shall be prepared in conjunction with the City's Planning Department and a draft may be attached herein until the Agreement is final.

The Agreement's shall include the following:

1. Commit the land containing the permanent BMPs to being used only for purposes of the BMPs (no alternations, reconstruction, etc)
2. Commit the landowner to maintain the facilities in accordance with the Plan (this obligation would be passed on to future purchasers or successors of the landowner, or operate indefinitely as a covenant)
3. Provide an easement giving the City the right to enter (and access adjacent properties as necessary) to maintain the BMPs to the satisfaction of the City

NEW SUSMP PROJECTS FOR 2010-2011

	First Submittal Date	Street Number (X_Thru_Y)		Direction	Street	Address Surname	Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	1/20/2011	440	500	North	Johnson	Avenue	Truck Dealer, Repair Shop	Inland Kenworth	Commercial Dev't > 1 Acre, Automotive Repair, New Parking >5000 sf, Tributary to ESA	Bioretention basins, Inlet filters, Covered trash enclosure, Designated indoor vehicle wash

SUSMP PROJECTS UNDER REVIEW

	Street Number		Direction	Street	Address Surname	Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	440	500	North	Johnson	Avenue	Truck Dealer, Repair Shop	Inland Kenworth	Commercial Dev't > 1 Acre, Automotive Repair, New Parking >5000 sf, Tributary to ESA	Bioretention basins, Inlet filters, Covered trash enclosure, Designated indoor vehicle wash
2	101		West	Washington	Avenue	New Restaurant, Parking Lot Redev't	Tres Hermanos Restaurant	New Restaurant, Parking Lot Redev't >5000 sf	Bioretention basins, Trash enclosure drained to treatment BMP

Priority Project Post-Contruction Treatment Control BMP Inventory

# (All)	Street Number	Thru	Direction	Street Name	Street Surname	Assessor's Parcel Number	Site Treatment BMP Priority	Development Priority	Site Type	Priority Trigger	All Post-Construction BMPs Applied	Receiving Water	BMP Infeasibility	10-11 Treatment BMP Maintenance Inspections		
														Date	Result	Follow-up Required
1	1108	1116		Anita Lee	Lane	4924103600	Medium	High	New Subdivision, Old APN: 4924102100, 2200	4 New SFR subdivision (FKA 763 W. Chase Ave.)	Grassy swales, Curb outlet filters	County Ditch	Does not meet SUSMP thresholds	-	-	-
2	2706			Anjuli	Court	4810523200 - 4800	Low	SUSMP	New Subdivision, Old APN: 4810521900 & 2500	SFR >10 Units	CDS (hydrodynamic separator) unit (in Public Right-of-Way: City Maintained)	Fanita Channel	-	-	-	-
3	965			Arnele	Avenue	4822502600	Medium	SUSMP	Auto sales and service	Auto sales and service >1 acre, >5000 sf parking redevelopment	Vegetated bioswales, pervious buffer strip, bioretention swale, covered TE	Forrester Creek	-	11/2/10	BMPs installed, vegetated swale growth must be checked	Yes
4	1001		West	Bradley	Avenue	4821310200, 0300, 0700, 1600	High	SUSMP	Parking Lot (925 O'Connor St.), New Construction Materials Recycling Transfer Facility	>5,000 sq ft Development	Pervious swales, inlet filter, and detention basin	Forrester Creek	-	6/23/11	BMPs maintained properly	No
5	1032			Broadway		4842932200	Medium	SUSMP	New Office Building	>5,000 Redevelopment	Swalegard inlet filter, grass buffer strip	Broadway Channel	-	6/27/11	Some swale overgrowth, but does not appear to obstruct flow from Swale Gard which is in place with minor amount of sediment	No
6	1090			Broadway		4842931500	High	SUSMP	Gas Station (Re-Developed)	RGO (Re-Developed)	Grass filter strip, filter inserts	Broadway Channel	-	6/23/11	BMPs maintained properly	No
7	1174			Broadway		4843600100	High	SUSMP	Commercial Facility, Old APN: 4841840900	Parking lot > 5000 sq ft, <200 from ESA	Inlet filters, trash enclosure (uncovered)	Broadway Channel	Site size constraints	6/29/11	Both CBs sediment-laden. S'ly CB missing filter. "No Dumping" signage faded	Yes
8	350		East	Chase	Avenue	4931723300	High	SUSMP	New Restaurant	New restaurant	Inlet Filters	County Ditch	-	6/24/11	Both filters full of debris	Yes
9	450		East	Chase	Avenue	4934302200	High	High	Commercial	New Commercial >100,000 sf	Inlet Filters	County Ditch	Structural BMPs already onsite	6/24/11	Filter at NEC of building covered by stored mat'ls, lot drain filter needs to be cleaned/replaced	Yes
10	327	385		El Cajon	Boulevard	4873230400&1700	Medium	SUSMP	New show room addition	Parking lot > 5000 sq ft	trash enclosure, detention basins, inlet filters	County Ditch	-	6/30/11	BMPs maintained properly	Yes
11	442	444		El Cajon	Boulevard	4875201300	Low	SUSMP	Motorcycle sales and service	Auto sales and service	Pervious swale, Media filter vaults, Signage, covered trash enclosure	County Ditch	-	-	-	-
12	613	621		El Cajon	Boulevard	4875311700 & 1800	Medium	SUSMP	Commercial, Motorcycle Dealership, Old APN: 4895310600, 1700, 1800	>5,000 sq ft new parking	Inlet Filter	County Ditch	-	-	-	-
13	670			El Cajon	Boulevard	4874801500	Low	SUSMP	New Car Dealership	>15 Parking Spaces	Underground detention, Hydrodynamic Separator, Signage	County Ditch	-	-	-	-
14	1380			El Cajon	Boulevard	4877700700	Low	SUSMP	Commercial Facility	>100,000 sq. ft commercial dev't, Parking > 5,000 sq ft	Underground detention system	County Ditch	-	-	-	-
15	-			El Jardin	Court	-	Medium	SUSMP	Cul-de-sac	New Street >5000 sf	2 Filter inserts	County Ditch	-	-	-	-
16	298			Fletcher	Parkway	4830714800	Medium	SUSMP	Commercial Facility	>100,000 sq. ft commercial dev't, Parking lot > 5000 sq ft	Inlet filters, 2 CDS Units, filtration strip next to Garden Center	Forrester Creek	-	-	-	-
17	605			Fletcher	Parkway	4822705700	High	SUSMP	New Commercial, Old APN: 4822705200	New Commercial	Flogard catch basin filter inserts	Forrester Creek	-	6/30/11	No filters found onsite	Yes
18	475	487		Foundation	Lane	4930401800, 2500-2900	Medium	SUSMP	New 4 unit Subdivision (Previously 801 Avocado Ave.)	New street for 4 unit subdiv., <200' from open channel	Riprap channel, vegetated swale, inlet filter	County Ditch	-	-	-	-
19	2000			Gillespie	Way	3872011200	Medium	SUSMP	New Industrial Complex	>5,000 sq ft development	Detention area in parking, grassy swale, signage, filter inserts	Forrester Creek	-	-	-	-
20	1935	1941		Granite Hills	Drive	5112404000 - 5600	Low	SUSMP	New Subdivision, Old APN: 5112044100-5600	Subdivision>10 Units	Detention basin, vegetated channel	Forrester Creek	-	-	-	-
21				Grossmont College	Drive	3860710900, 3860720400 & 0900, 4810103500	Low	SUSMP	College Parking Lot	Parking lot > 5000 sq ft	Hydrodynamic separation system, detention area	Fanita Channel	-	-	-	-
22	2062	2096		Ingamac Way	Avenue	5082400800	Medium	SUSMP	New Subdivision (Previously 2010 E. Madison Ave.)	Hillside Development	Extended detention basin, grassy swales, inlet filter	Forrester Creek	-	-	-	-
23	912	930		Jamacha	Road	5144504300	Medium	SUSMP	New Multi Family Homes	>5,000 sq ft Development	Infiltration system, vegetated swale, storm drain inlet filters	Washington Channel	-	-	-	-
24	333		North	Johnson	Avenue	4871225400	High	SUSMP	New Commercial	>5,000 sq ft Development, contiguous to channel	Inlet filters, roof drains to landscaping	County Ditch	Site size constraints, Constructed prior to R9-2007-0001 Permit	6/23/11	Minor debris in filters	Yes
25	605		West	Lexington	Avenue	4873230800	Low	SUSMP	Commercial - Automotive Repair	>5,000 sq ft Development	Gravel filter, rock energy dissipater, bio-detention basin	County Ditch	-	-	-	-
26	1053			Loma Portal	Drive	4824430300	Medium	SUSMP	New Single Family Residence	Hillside Development	Vegetated swale, filtration/detention system, inlet filter.	Forrester Creek	-	-	-	-
27	1470		East	Madison	Avenue	5110143400	Low	SUSMP	Municipal Fire Station	>5,000 sq ft new parking	Trash enclosure, pervious concrete swale	Forrester Creek	-	-	-	-

Priority Project Post-Contruction Treatment Control BMP Inventory

# (All)	Street Number	Thru	Direction	Street Name	Street Surname	Assessor's Parcel Number	Site Treatment BMP Priority	Development Priority	Site Type	Priority Trigger	All Post-Construction BMPs Applied	Receiving Water	BMP Infeasibility	10-11 Treatment BMP Maintenance Inspections		
														Date	Result	Follow-up Required
28	1628	1646	East	Madison	Avenue	5110902600, 2700 & 5111010800	Medium	SUSMP	New Church, Old APN: 5110901600-2400	Parking lot > 5000 sq ft	Vegetated detention basin, storm drain inlet filters	Forrester Creek	-	6/30/11	BMPs maintained properly	No
29	2119		East	Madison	Avenue	5122301300	Low	SUSMP	New Commercial	>5,000 sq ft new parking	Biofilters, Detention Basin	Forrester Creek	-	-	-	-
30	245		East	Main	Street	4882110400	High	SUSMP	New Restaurant	New restaurant	Roof filters	Washington Channel	Site size constraints	6/27/11	Vacant business, could not inspect	Yes
31	343		East	Main	Street	4882312600	High	SUSMP	New Commercial, Alley No. 25	< 200 ft from channel	Grassy swales, filter inserts	Washington Channel	-	6/29/11	P. lot CB heavily sediment-laden. "No Dumping" signage needs replacement.	Yes
32	1273	1275	East	Main	Street	4893900500	Low	SUSMP	Commercial	>15 Parking Spaces	Vegetated Swale, Porous Pavement, Trash Enclosure	Forrester Creek	-	-	-	-
33	1341		East	Main	Street	4891806200	Medium	SUSMP	General Commercial, Manufactured home sales	>15 Parking spaces	Vegetated swales, Gravel infiltration areas, Inlet filter inserts, Pervious area in Trash Enclosure	Forrester Creek	-	-	-	-
34	1401	1409	East	Main	Street	5111711100 - 1600	High	SUSMP	Parking Lot, Channel Cover	>5,000 sq ft new parking	Hydrodynamic separation system, inlet filters, underground detention box	Forrester Creek	-	6/30/11	1 filter needs cleaning. All other BMPs properly maintained	No
35	1539		East	Main	Street	5073102000	Medium	SUSMP	Self-storage facility	Commercial > 1 Acre	Underground detention, Vegetated swale, Inlet filters, Trash Enclosure, Signage	Forrester Creek	-	-	-	-
36	1700		East	Main	Street	5071201400	High	SUSMP	New Restaurant	New restaurant	Grass swales, Inlet filter, infiltration basin	Forrester Creek	-	6/23/11	BMPs maintained properly	No
37	1717		East	Main	Street	5072110200	High	SUSMP	Addition to equipment rental business	Commercial - equipment rental	Inlet filter, covered trash enclosure.	Forrester Creek	Site size constraints	6/29/11	Filter sediment laden. Filtration booms need replacement	Yes
38	198		West	Main	Street	4871924700, 5100, & 5400	Medium	SUSMP	Commercial Center	New parking lot > 5000 sq ft	Vegetated swles, hydrodynoamic separator, trench drain filters, filters and dry wells at trash enclosure, downspout and inlet filters	Washington Ch. / County Ditch	-	-	-	-
39	1301		North	Marshall	Avenue		Low	SUSMP	Parking Lot	Parking >15 spaces	Gravel infiltration basin	Forrester Creek	-	-	-	-
40	2694			Navajo	Road	4813221500	Medium	SUSMP	2 story office bldg.	>5,000 sq ft new parking	Inlet Filter	Fletcher Parkway Channel	Site size constraints	-	-	-
41	2732			Navajo	Road	4813211700	Medium	SUSMP	New Commercial	> 5000 sq ft	Flogard catch basin filter insert	Fletcher Parkway Channel	Site size constraints	-	-	-
42	2766			Navajo	Road	4810103900, 4810104400-46, 4810513200-3300, 4810820100, 4810820800	Medium	SUSMP	Expansion of Parking and Playground	>5,000 sq ft new parking	Hydrodynamic separation system, underground detention box	Fletcher Parkway Channel	-	-	-	-
43	189			Roanoke	Road	4881131800	Medium	SUSMP	School	>15 Parking spaces	Grassy swales, storm drain inlet filters, and source control BMPs (covered TE & fuel areas)	Washington Channel	-	-	-	-
44	-			Sandra	Lane	-	Medium	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek	-	-	-	-
45	608			Sandra	Lane	5122600100	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek	-	-	-	-
46	613			Sandra	Lane	5122600200	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek	-	-	-	-
47	622			Sandra	Lane	5122600300	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek	-	-	-	-
48	635			Sandra	Lane	5122600500	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek	-	-	-	-
49	335	355	North	Second	Street	4891807800	Medium	SUSMP	New Restaurant	New restaurant	Grassy swale, trash enclosure, and outlet filter	Forrester Creek	-	6/23/11	BMPs need to be maintained	Yes
50	1062		North	Second	Street	4842122500	Low	SUSMP	RV repair	Parking lot > 5000 sq ft	Grass Filter Strip	Broadway Channel	-	-	-	-
51	1190		North	Second	Street	4842021800	Medium	SUSMP	Commercial - Restaurant	new restaurant	Grass filter strip	Broadway Channel	-	6/22/11	Grass buffer strip is dead and needs replacement	Yes
52	901	921		Stoneys	Lane	4842814400 - 5900	Medium	High	New Subdivision w/ private street (15 units), Old APN: 4842822500	SFR >10 Units, >5000sf new road	2 Inlet Filters	Broadway Channel	Constructed prior to R9-2001-0001 Permit	-	-	-
53	938		East	Washington	Avenue	4931023000	Low	SUSMP	New Commercial	>5,000 sq ft new parking	Pervious swale, TE	Washington Channel	-	-	-	-
54	1225	1285	East	Washington	Avenue	4931201600, 1800, 7800-8000	Low	SUSMP	Residential	> 10 housing units	Biofilters for each new housing unit (perimeter)	Washington Channel	-	-	-	-

Priority Project Post-Contruction Treatment Control BMP Inventory

# (All)	Street Number	Thru	Direction	Street Name	Street Surname	Assessor's Parcel Number	Site Treatment BMP Priority	Development Priority	Site Type	Priority Trigger	All Post-Construction BMPs Applied	Receiving Water	BMP Infeasibility	10-11 Treatment BMP Maintenance Inspections		
														Date	Result	Follow-up Required
55	1435		East	Washington	Avenue	5140215900	High	SUSMP	New Subdivision	SFR >10 Units	Vegetated swale, two extended detention basin, storm drain inlet filters, signage	Washington Channel	-	6/27/11	Some scouring and pet waste in vegetated swale.	No
56	1501		East	Washington	Avenue	5112807200	High	SUSMP	New Restaurant	New restaurant	Detention basin, signage, filter inserts	Washington Channel	-	6/29/11	CB below drive-thru has standing water and mosquito larvae. All other BMPs maintained properly.	No
57	1326	1350		Wendell Cutting	Court	4843500100 - 1100	Medium	SUSMP	New Subdivision w/ private street	10 Single-family residential units	Grassy Swales, underground detention, curb-inlet filter on Broadway	Broadway Channel	-	-	-	-
58	403	431		Wisconsin	Lane	4871740100-0800	High	SUSMP	New Subdivision	>5,000 sf Impervious surface (Private Street)	Sand media filter, underground detention basin, inlet filter	Washington Channel	-	6/27/11	Minor debris in filters but otherwise BMPs maintained properly.	No

CITY OF EL CAJON
TREATMENT CONTROL BMP INSPECTION

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Inspector Name:_____ Date:_____ Time:_____

Inspection Type: ☐ Routine ☐ Follow-Up ☐ Complaint ☐ Other:_____

A. PROJECT INFORMATION

Project Name: _____ Project Type: ☐ Private ☐ Public

Street Address: _____ ZIP _____

Nearest Receiving Waterbody:_____ Responsible Party:_____

Assigned Project Priority: ☐ High ☐ Medium ☐ Low APN: _____

B. TREATMENT CONTROL BMP ASSESSMENT

Treatment Control BMP	Number Implemented	ROW or Site Only?	% Properly Maintained	Comments
Indicate the number of each Treatment Control BMP committed to in the project's SUSMP report in the "Number Proposed" box. Adequacy of the BMP should be discussed in the "Comments" column.				
TC-10 (Infiltration Trench)				
TC-11 (Infiltration Basin)				
TC-12 (Retention/Irrigation)				
TC-20 (Wet Ponds)				
TC-21 (Constructed Wetlands)				
TC-22 (Extended Detention Basin)				
TC-30 (Vegetated Swale)				
TC-31 (Vegetated Buffer Strip)				
TC-32 (Bioretention)				
TC-40 (Media Filter)				
TC-50 (Water Quality Inlet)				
MP-20 (Wetland)				
MP-40 (Media Filter)				
MP-50 (Wet Vault)				
MP-51 (Vortex Separator)				
MP-52 (Drain Insert)				
Other:				

C. VISUAL OBSERVATIONS:

_____

_____

_____

D. FOLLOW-UP AND ENFORCEMENT ACTIONS

Describe corrective actions needed:_____

_____

_____

Enforcement Action Taken: ☐ None ☐ Written Notice ☐ Administrative Action ☐ Other_____

Follow Up Required? ☐ Yes ☐ No

Xxx. XX, 2011

«Owner_Name__Company_Title» «Owner_Last_Name»
«Owner_Address_Street»
«Owner_Address_City», «Owner_Address_StateZip»

RE: Treatment Control BMP Maintenance Verification Form

Dear Property Owner(s):

According to City records, you are responsible for at least the **«Treatment_Control_BMPs_Applied»**, which «Letter_Language», located at «Street_Number» «Direction» «Street_Name» «Street_Surname». Annual verification of effective operation and maintenance for all Treatment Control BMPs located at «Street_Number» «Direction» «Street_Name» «Street_Surname» was a condition of the permit to develop the site. Treatment Control BMPs are required to be maintained by the appropriate party as stated in the site's Storm Water Mitigation Plan and/or Operation and Maintenance Agreement. You are required by City of El Cajon Municipal Code 16.60.400 to provide proof that the Treatment Control BMP is in place and functioning properly. You are also required to verify the maintenance of the Treatment Control BMPs onsite by mailing the completed form back to the City no later than **July 1, 2011**. Failure to do so may result in a citation, which could carry monetary penalties. Please update any incorrect information shown hereon.

The City is required to inspect certain sites with known Treatment Control BMPs annually as part of the maintenance verification process to comply with California Regional Water Quality Control Board, San Diego Region, Order No. R9-2007-0001. The inspections are scheduled to take place before July 1, 2010.

Please visit the City's website at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html or contact the Public Works Department at 619-441-1653 for more information regarding the City's Storm Water Protection Program.

Please complete the table on the following page regarding the maintenance of all Treatment Control BMPs that you are responsible for at your site. Please be sure to list any BMPs present on your property that were not mentioned above to ensure that our records are complete. Once the form has been completed, a signed copy of the page must be submitted to the City of El Cajon Public Works Storm Water Department. An envelope has been included for your convenience. Thank you for your cooperation.

Sincerely,

_____

Jaime Campos
Storm Water Program Manager
Associate Civil Engineer
Jcampos@cityofelcajon.us

RE: Treatment Control Best Management Practices
Location: «Street_Number» «Direction» «Street_Name» «Street_Surname»
Owner: «Owner_Name__Company_Title» «Owner_Last_Name»
«Owner_Address_Street»
«Owner_Address_City», «Owner_Address_StateZip»

BMP Type	Onsite (Y/N)	Number Onsite	Date(s) Maintained
TC-10 Infiltration Trench			
TC-11 Infiltration Basin			
TC-12 Retention/Irrigation			
TC-20 Wet Ponds			
TC-21 Constructed Wetlands			
TC-22 Extended Detention Basin			
TC-30 Vegetated Swale			
TC-31 Vegetated Buffer Strip			
TC-32 Bioretention			
TC-40 Media Filter			
TC-50 Water Quality Inlet			
TC-60 Multiple Systems			
MP-20 Wetland			
MP-40 Media Filter			
MP-50 Wet Vault			
MP-51 Vortex Separator			
MP-52 Drain Inserts			
Other: _____			

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Responsible Party — Date

«Responsible_Party»
Printed Name of Responsible Party — Title

«Responsible_Party_Telephone» — «Responsible_Party_Fax»
Daytime Phone — Fax

«Responsible_Party_Email»
Email

Community Development Dept.
Planning Division
200 Civic Center Way
El Cajon CA 92020

ENVIRONMENTAL INFORMATION FORM

Part I - Initial Study
Negative Declaration $4,650.00 + $250.00 for each report
Mitigated Negative Declaration $4,650.00 + $250.00 for each report

The purpose of this form is to inform the City of the basic components of the proposed project so that the City may review the project pursuant to City Policies, Ordinances, and Guidelines; the California Environmental Quality Act; and the City's Rules and Procedures to Implement CEQA. It is important that the information requested in this application be provided in full.

The Initial Study is a requirement of the California Environmental Quality Act (CEQA) Guidelines and is used to determine whether further review of environmental factors of the project will be necessary, and, if so, whether a Negative Declaration (ND), Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR) will be the most appropriate document. Accuracy and completeness in the preparation of this study is essential. Incomplete materials will only result in a delay for the applicant, as the study will be rejected until properly completed.

INSTRUCTIONS: Please complete the following statement by filling in the designated blank spaces. Responses should be printed or typed so as to be legible. All appropriate spaces must be filled in and the required maps, photos, and plans submitted with this form. Additional information may be attached. The applicant should provide as much information as possible in this submittal to allow reviewers to have a thorough understanding of the project. Please submit this form and all support documents with the appropriate filing fee to the Community Development Department to begin the environmental review process. All maps/site plans shall be folded to 8½" by 11."

A. General Information

1. Name, address, telephone number, fax number and email of person to be contacted concerning this project:

   - Name
   - Address
   - Phone
   - Fax
   - Email

2. Name, address of legal property owner as shown on tax statement:

   - Name
   - Address

3. Address of project and/or description of location:

4. Assessor's Parcel Number(s) of project site:

5. List each project application which accompanies this form:

6. Have any preliminary documents been prepared for this projects (e.g. soil report or traffic impact analysis)? If yes, please identify name and date prepared:

7. List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state or federal agencies (i.e., Corps of Engineers, CalTrans, Air Pollution Control District or LAFCO):

8. Existing zoning of project site:

9. Existing General Plan Designation:

10. Fully describe the nature and purpose of the proposed project including the ultimate use of the property:

B. Project Description

1. Site size in acres or square footage:

2. Highest and lowest elevations on site (mean sea level):

3. Number of floors of proposed construction:

4. Number of proposed off-street parking spaces provided:

5. Anticipated project schedule (timeline):

6. Is this project dependent on an existing or future project? If yes, please explain:

7. Anticipated future phases:

8. If residential, include the number of units, unit sizes, range of sale prices or rents, and gross density (units) acre:

9. If commercial and/or office, indicate the types, square footage of each type (i.e., office, sales area, restaurant), whether neighborhood, city or regionally oriented, and total square footage of building area:

10. If industrial, indicate type, estimated employment per shift, loading facilities, square footage of office area and total square footage of building area:

11. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, and total square footage of building:

C. Existing Conditions

1. Number and species of existing trees 6 inches or larger in diameter:

2. Number, size, and species of trees to be removed:

3. Describe any power lines, water, sewer or storm drain mains, pipelines or other transmission lines which are located on or adjacent to the property:

4. Name of creeks and natural or man-made drainage channels through or adjacent to the property:

5. Primary vehicular access to property comes from which street(s):

6. Are any easements known to traverse the site? If yes, explain the type and purpose:

7. Provide details on existing uses of the site. Are there existing structures on the site? If yes, describe use and whether they will be demolished or relocated; if residential, give the number of current occupants:

8. Indicate service provider for:

    a. Water

    b. Sewer

    c. Fire protection

    d. Police protection

9. Is any portion of the site within the 100-year/500-year floodplain?

10. Is the site within the Gillespie Field Airport Land Use plan?

11. If yes, do any airport restrictions affect the proposal? *(May have to consult with Gillespie Airport personnel)*

12. Is the site located within two miles of Gillespie Field general aviation airport?

13. Is the site located within close proximity (200 feet) of a freeway?

14. Is the site listed on California's Environmental Protection Agency Hazardous Site List?

D. Environmental Analysis

Are the following items applicable to the project or its effects? Discuss all items checked "yes" or "maybe" on next page or attach additional sheets as necessary.

YES	MAYBE	NO	
☐	☐	☐	a. Change in existing features of any streams, lakes or hills, or substantial alteration of ground contours.
☐	☐	☐	b. Change in scenic views or vistas from existing residential areas or public lands or roads.
☐	☐	☐	c. Change in character of general area of project.
☐	☐	☐	d. Produce or involve large amounts of solid waste or litter.
☐	☐	☐	e. Disrupt or adversely affect an historic, cultural or archaeological site.
☐	☐	☐	f. Change in dust, ash, smoke, fumes or odors in vicinity.
☐	☐	☐	g. Change in stream, surface water, wetlands or ground water quality or quantity, or alteration of existing drainage patterns.
☐	☐	☐	h. Increase in impervious surfaces and associated increase runoff.
☐	☐	☐	i. Alteration in existing drainage patterns, runoff flow rates or volumes.
☐	☐	☐	j. Increased erosion.
☐	☐	☐	k. Use or disposal of heavy metals, pathogens,

petroleum derivatives, synthetic organics, sediment, nutrients, or oxygen demanding substances.

☐ ☐ ☐ l. Potential to impact already sensitive conditions or environmentally sensitive areas.

☐ ☐ ☐ m. Substantial change in existing noise or vibration levels in the vicinity.

☐ ☐ ☐ n. Site on filled land or on slope of 10 percent or more.

☐ ☐ ☐ o. Use or disposal of potentially hazardous material such as toxic substances, flammables or explosives.

☐ ☐ ☐ p. Substantial change in demand for municipal services (police, fire, water, sewer, etc.).

☐ ☐ ☐ q. Substantial increase in fuel or energy consumption (electricity, oil, natural gas, etc.).

☐ ☐ ☐ r. Relationship to a larger project or series of projects.

☐ ☐ ☐ s. Potential impact to aquatic, wetland or riparian habitiat.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date:_____ Signature:_____

Section 711.4 of the Fish and Game Code authorizes the County Clerk to collect a filing fee of up to $2,768.25 for the review of environmental documents by the State Department of Fish and Game. Should the State Department of Fish and Game decide to review the environmental documents associated with this project, the project applicant will become liable for paying this fee.

The applicant certifies by his/her signature below that he/she has been informed of this information and is aware that a fee may be required by the County Clerk with the filing of the environmental documents associated with his/her project.

Failure to pay the required fee in a timely manner may result in the delay in the start of the project.

Date:_____ Applicant's Signature:_____

Environmental Information Form Part II
Initial Study

1. Project Title: _____

2. Lead Agency Name and Address:

_____
_____
_____

3. Contact Person and Phone Number: _____

4. Project Location: _____

5. Project Sponsor's Name and Address:

_____
_____
_____

6. General Plan Designation: _____ 7. Zoning: _____

8. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheet(s) if necessary.)

_____
_____
_____

9. Surrounding Land Uses and Setting: (Briefly describe the project's surroundings.)

_____
_____
_____

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

_____
_____
_____

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Printed Name	For

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

a) Earlier Analyses Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

a) the significance criteria or threshold, if any, used to evaluate each question; and

b) the mitigation measure identified, if any, to reduce the impact to less than significance.

SAMPLE QUESTION

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☐
d)	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☐
II.	AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☐
d)	Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☐
e)	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	☐	☐	☐	☐
III.	AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☐
IV.	BIOLOGICAL RESOURCES. Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☐
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☐
V.	CULTURAL RESOURCES. Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☐
VI.	GEOLOGY AND SOILS. Would the project:				
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:	☐	☐	☐	☐
i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☐
ii)	Strong seismic ground shaking?	☐	☐	☐	☐
iii)	Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iv)	Landslides?	☐	☐	☐	☐
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☐
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☐
d)	Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☐
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☐
VII.	GREENHOUSE GAS EMISSIONS. Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☐
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☐	☐
VIII.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☐
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	HYDROLOGY AND WATER QUALITY. Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	☐	☐	☐	☐
e)	Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☐
h)	Place within a 100-year flood hazard area, structures that would impede or redirect flood flows?	☐	☐	☐	☐
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☐
j)	Expose people or structures to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☐
X.	LAND USE AND PLANNING. Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☐
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☐
XI.	MINERAL RESOURCES. Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☐
XII.	NOISE. Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☐
b)	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☐	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.	POPULATION AND HOUSING. Would the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	☐	☐	☐	☐
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
XIV.	PUBLIC SERVICES. Would the project:				
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☐
	Fire protection?	☐	☐	☐	☐
	Police protection?	☐	☐	☐	☐
	Schools?	☐	☐	☐	☐
	Parks?	☐	☐	☐	☐
	Other public facilities?	☐	☐	☐	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which have an adverse physical effect on the environment?	☐	☐	☐	☐
XVI. TRANSPORTATION / TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☐
e)	Result in inadequate emergency access?	☐	☐	☐	☐
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☐
XVII.	UTILITIES AND SERVICE SYSTEMS. Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☐
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? In making this determination, the Authority shall consider whether the project is subject to the water supply assessment requirements of Water Code Section 10910, et. seq. (SB 610), and the requirements of Government Code Section 664737 (SB 221).	☐	☐	☐	☐
e)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☐
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☐
XVIII.	MANDATORY FINDINGS OF SIGNIFICANCE				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☐	☐
c)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)	☐	☐	☐	☐
d)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☐

Project Name: _____

CITY OF EL CAJON SUSMP CHECKLIST

City of El Cajon
STORMWATER
Protection Program

MS4: ☐ Forrester Creek ☐ County Ditch Channel
☐ Broadway Channel ☐ Third Street Lateral
☐ Washington Channel ☐ Fletcher Parkway Lateral

PROJECT INFORMATION

Project Name: _____ Public Private

Project Address: _____

Project APN: _____

Project Size: (acres) _____ Notice of Intent: Yes No

Completed a SWPPP: Yes No

SUSMP CATEGORY

Check all SUSMP categories that apply to the project

☐ Residential Development ≥ 100 units
☐ Residential Development ≥ 10 units
☐ Commercial Development ≥ 1 acre
☐ Automotive Repair
☐ Restaurants
☐ Hillside Development ≥ 5,000 sq ft
☐ Parking Lots ≥ 5,000 sq ft or ≥ 15 spaces
☐ Streets, roads, highways, and freeways with ≥ 5,000 sq ft of new paved area
☐ Significant Redevelopment ≥ 5,000 sq ft of paved area on an already developed site
☐ Retail Gas Outlet

IDENTIFY POLLUTANTS FROM THE PROJECT AREA

Check all that apply to the project

☐ Sediment (dirt; silt; clay)
☐ Nutrients (fertilizers, sewages)
☐ Metals (dirt, silt, clay, paints, liquid/solid chemicals)
☐ Organics (food, vegetation)
☐ Trash and Debris
☐ Oxygen Demand Substances (organic matter)
☐ Petroleum (oil, grease)
☐ Bacteria and Viruses (fecal coliform, pathogens)
☐ Pesticides/Herbicides
☐ Toxics (acids, corrosives, chemicals)

Project Name: _____

IDENTIFY RECEIVING WATERS AND THE POLLUTANT SOURCES

Does the project discharge directly to: ☐ San Diego River? or ☐ Forester Creek?

What are the primary sources contributing to SD River and Forester Creek impairments of:

TDS?_____ _____ _____

Fecal Coliform? _____ _____

pH?_____ _____

(SD River only) Oxygen Depleting Constituents? _____ _____

(SD River only) Chlorpyrifos and Diazinon? _____

(SD River only) Total and Dissolved Copper? _____

IDENTIFY CONDITIONS OF CONCERN

☐ Was a drainage study report prepared? Yes No

☐ Was a Storm Water Mitigation Plan prepared? Yes No

☐ Were the reports prepared by a registered Civil Engineer? Yes No Who?_____

☐ Are there field photographs? Yes No (Attached?)

☐ Are the following calculated according to actual % imperviousness for the 6-hour, 10-year and 100-year frequency storms?

- ☐ Peak flow rate (pre and post-construction)
- ☐ Flow velocity
- ☐ Runoff volume
- ☐ Time of concentration (minimum of 5 minutes as defined in the SD Hydrology Manual to calculate Intensity values)
- ☐ Retention volume

☐ Are conditions of concern adequately identified using:

Site Design?	Yes	No
Source Control?	Yes	No
Treatment Control?	Yes	No

ESTABLISH STORM WATER LOW-IMPACT DEVELOPMENT (LID) BMPS

☐ ***Site Design BMPs***

SUSMP Projects **must** consider, incorporate, and implement where determined applicable and feasible by City storm water staff. (Check all that were considered, incorporated, or implemented):

- ☐ Maintain Pre-Development Rainfall Runoff Conditions
  - ☐ Minimize project's impervious footprint
  - ☐ Conserve natural areas
  - ☐ Construct low traffic areas (walkways, trails, patios, parking lots, alleys, etc) of permeable surfaces
  - ☐ Construct streets, sidewalks, and parking lot aisles to minimum widths
  - ☐ Maximize canopy interception by preserving existing trees and shrubs

Project Name: _____

- ☐ Preserve natural drainage systems
- ☐ Minimize Directly Connected Impervious Areas (DCIAs)
  - ☐ Drain rooftops into landscaping
  - ☐ Drain sidewalks, walkways, trails, and patios into landscaping
- ☐ Protect slopes and channels

Comments: _____

_____

☐ ***Source Control BMPs***

Does the project:

- ☐ Provide storm drain system stenciling and signage?
- ☐ Design outdoor material storage areas to reduce pollution introduction?
- ☐ Design trash storage areas to reduce pollution introduction (enclosed, covered, secured, and bermed)?
- ☐ Use efficient irrigations systems & landscape design (rain alert systems)?
- ☐ Incorporate requirements applicable to priority project categories such as:
  - ☐ Private Roads
  - ☐ Residential Driveways & Guest Parking
  - ☐ Dock Areas
  - ☐ Maintenance Bays
  - ☐ Vehicle Wash Areas
  - ☐ Outdoor Processing Areas
  - ☐ Equipment Wash Areas
  - ☐ Parking Areas
  - ☐ Roadways
  - ☐ Fueling Areas
  - ☐ Hillside Landscaping

☐ ***Treatment Control BMPs***

Check the treatment control(s) selected:

☐ Biofilters	☐ Detention Basin
☐ Infiltration basin/trench	☐ Filtration System
☐ Porous asphalt, concrete, other	☐ Hydrodynamic Separation System
☐ Filter Insert	☐ Sod-inlet Pre-treatment
☐ Grassy filter/swale	☐ Vegetated swale
☐ Proprietary Device	☐ Other: _____

☐ Do treatment controls effectively address primary pollutants of concern? Yes No

If No, describe corrective action: _____

_____

Verify the design of selected treatment controls:

☐ Was the control BMP designed for:	Volume	Flow
☐ Was the BMP design process described:	Yes	No
☐ Was the 85th percentile storm event used for design	Yes	No

If no, what design criteria was used: _____

Project Name: _____

☐ Was the BMP designed properly? If not, describe corrective actions: _____

_____

☐ Is the BMP(s) located near pollutant sources? Yes No
☐ Are there restrictions on use of infiltration BMPs? Yes No

Maintenance Requirements

☐ Was an Operations & Maintenance section attached? Yes No N/A
☐ Was a BMP Facilities Agreement signed by the property owner and filed with the Grant Deed? Yes No N/A
☐ Was a BMP Maintenance Agreement signed with the City to maintain post-construction BMPs? Yes No N/A
☐ Does this project require annual inspections and/or maintenance of BMPs by the City? Yes No N/A
☐ Was an access/easement agreement included? Yes No N/A
☐ Is there an HOA or other Common Interest planned for the project? Yes No N/A
☐ Were CC&Rs presented for review and acceptable? Yes No N/A
☐ Was a Storm Water Conveyance Maintenance Plan generated/received? Yes No N/A

Waiver of Structural Treatment BMP Requirements

☐ Was a waiver of infeasibility granted?
☐ Was the RWQCB notified?

Other Information

_____

_____

_____

Field Inspection

During BMP installation:
☐ Were the source control BMPs properly constructed in the field? ☐ Yes ☐ No
☐ Were the treatment control BMPs properly constructed in the field? ☐ Yes ☐ No

After project completion:
☐ Are all site design BMPs still in place? ☐ Yes ☐ No
☐ Are all source control BMPs still in place? ☐ Yes ☐ No
☐ Are treatment control BMPs still in place? ☐ Yes ☐ No
☐ Are all BMPs being maintained? ☐ Yes ☐ No

Appendix A.3

Storm Water Requirements for Construction Sites

The City's storm drain system is composed of the street, gutter, inlet, catch basin, ditches, streams, and concrete-lined channels.

1. Perimeter Controls (fiber roll; silt fence; gravel or sand bags) must be installed and kept in place throughout the project to prohibit the discharge of sediment and pollution from entering the storm drain system. If controls are moved to complete work, they must be replaced when work is completed or at end of day, whichever comes first.
2. Erosion Controls as required by an erosion and sediment control plan must be installed as designed.
3. Tracking of sediment and dirt must be cleaned up at the end of each working day.
4. Building Materials must be stored under cover at the end of each working day.
5. Spills must be reported to the site manager once they occur and cleaned up immediately. Spills that enter the City's storm drain system must be reported to the City Storm Water staff immediately.
6. Wash waters (including paint, dry wall mud, stucco, and other water-based materials) must be captured on site and contained, then disposed of in the appropriate place.
7. Port-o-lets must be secured and bermed.
8. Trash and debris shall be placed in appropriate containers during the workday with a final clean-up completed before leaving the site. If rain is predicted, wastes shall be covered.
9. Equipment shall be stored in a bermed area or with appropriate sized drip pans.
10. Equipment repair, servicing, or fueling must be completed undercover or within a bermed area for tasks completed within the workday. Spill kits must be within the bermed or repair areas.
11. Vehicle and equipment washing is prohibited.
12. The site will be secured at the end of each working day.
13. Report any destroyed controls to the site manager, immediately.

Under the City of El Cajon's Municipal Code §13.10.00, Storm Water Management and Discharge Control, it is illegal to discharge construction debris and materials, into the storm water conveyance system or any body of water.

Failure to prevent illegal discharges can result in fines of up to $10,000 a day per violation.

Under the law, contractors, the construction company, business owner, and property owner may receive a Citation for the same violation.

EROSION AND SEDIMENT CONTROL NOTES
FOR EROSION CONTROL PLANS
(HIGH AND MEDIUM PRIORITY PROJECTS)

Add the following notes (both pages) to the Storm Water Erosion Control site plan and implement as a condition to the Erosion Control Plan:

1. In case emergency work is required, contact _____ at _____.
   (name) (telephone number)

2. Erosion control measures shown on plans shall not be moved or modified without the approval of the Public Works inspector.

3. The contractor shall maintain all erosion control devices in working order to the satisfaction of the City Engineer throughout the construction phase of the project and until permanent ground cover and landscaping is established.

4. The contractor shall install additional erosion control measures as may be required by the City Engineer due to completed grading operations or unforeseen circumstances which may arise.

5. The contractor shall be responsible for and shall take necessary precautions to prevent public trespass onto areas where impounded waters create a hazardous condition.

6. Graded areas around the project perimeter must drain away from the face of slope at the conclusion of each working day.

7. All gravel bags shall have ¾ inch minimum aggregate (No sandbags and no burlap type bags allowed).

8. Existing streets shall be kept free of dirt and debris, and shall be maintained in good condition. Dust shall be controlled so that it is not a nuisance. The contractor shall be responsible for the repair of any street or property damaged, public or private, as a result of the work.

9. The Plan shall provide that no sand, silt, or debris shall be allowed to enter the storm drain system including public streets.

10. The owner and/or the owner's contractor shall implement the Plan and take remedial and preventive action immediately when pollutant discharge occurs and/or the City Engineer or the Building Division directs.

11. The above shall apply starting the 1st day of grading and/or construction and shall remain in effect until all grading and/or construction work has been completed and 70% of the disturbed land has been stabilized by approved vegetation, mulch, gravel, etc.

ALL EROSION AND SEDIMENT CONTROL SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE CITY OF EL CAJON'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) AND SHALL INCLUDE THE FOLLOWING:

Dry Season (May 1 through September 30)

1. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads and slopes. Slopes less than 33.3% or 1:3 (vertical vs. horizontal) may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement.

2. Adequate perimeter protection BMPs must be installed and maintained.

3. Adequate sediment control BMPs must be installed and maintained.

4. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

5. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and prevent sediment discharges must be stored on the site.

6. An approved "weather triggered" response plan is mandated for implementation in the event that a predicted storm event has at least a 50% chance of rain. The proponent must have the capacity to deploy the standby BMPs within 48 hours of the predicted storm event.

7. All slopes must be equipped with erosion prevention BMPs as soon as slopes are completed for any portion of the site.

8. Cleared or graded areas left exposed at any given time are limited to the amount of acreage that the project proponent can adequately protect prior to a predicted storm event.

Wet Season (October 1 through April 30)

In addition to the Dry Season Requirements:

1. Perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms.

2. Adequate erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a BMP fails, it must be repaired, improved or replaced with an acceptable alternate as soon as it is safe to do so.

3. The amount of exposed soil allowed at one time shall not exceed standby erosion and sediment control BMP capacity.

4. An incomplete disturbed area that is not being actively graded must be fully protected from erosion if left for 10 days or more.

(Do not place on the Construction Plans; circle YES or NO)

Yes No 1. Does your project have 50 acres or more of disturbed soil?

Yes No 2. Will your project have at least one acre of disturbed soil and (1) be tributary to a water body 303(d) listed for sediment or (2) be located less than 200 feet from and ESA or directly discharging to an ESA?

Yes No 3. Will your project have at least one acre of disturbed soil but NOT (1) be tributary to a water body 303(d) listed for sediment and NOT (2) be located less than 200 feet from and ESA or directly discharging to an ESA?

Yes No 4. Does your project require a grading permit?

General Construction Permit:
If the answer to questions 1, 2, or 3 in Section 2 is "Yes", your project requires coverage under the General Construction Permit. A Notice of Intent (NOI) must be filed with the State Water Resources Control Board (SWRCB) and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared for your project.

Yes No Is this project subject to the General Construction Permit?

Construction Activities Threat to Water Quality Prioritization:
If the answer to question 1 or 2 is YES, your project is **HIGH** priority.

If the answers to questions 1 and 2 are NO, but the answer to either question 3 or question 4 is YES, your project is **MEDIUM** priority.

If all answers are NO, your project is **LOW** priority.

(Place this note on the Construction Plans and check the appropriate box)

This project is ☐ HIGH ☐ MEDIUM ☐ LOW priority threat to water quality.

Storm Water Notes for Erosion Control Plans (Low Priority Projects)

General Storm Water Notes

1. All operations will comply with the City's Jurisdictional Urban Runoff Management Plan (JURMP).

2. The owner and the owner's contractor are responsible for pollution prevention practices to prevent the discharge of sediment and pollutants to the public storm drain system.

3. Owner and the owner's contractor are responsible for the prevention of erosion caused by clearing of vegetation, grading, demolition or construction.

4. Sediment, pollution and erosion control measures will be implemented starting the first day of clearing, grading or soil disturbance, or construction. These controls will remain in effect until all relevant operations have been completed and disturbed soils have either: 1) established vegetation, or 2) other permanent erosion control at 70% completion.

Erosion And Sediment Control Notes

1. In case of emergency, contact: Name: _____, Phone: _____

2. The contractor will maintain all sediment and erosion control devices in good working order to the satisfaction of the city engineer throughout every phase of the project.

3. The contractor will install all erosion control measures additional to those specified by the approved Erosion Control Plan if required to do so by the city engineer.

4. The contractor and property owner will prevent public trespass onto areas where impounded waters create a hazardous condition.

5. Graded areas around the project perimeter will drain away from the face of slopes at the end of each working day.

6. All gravel bags shall have ¾ inch minimum aggregate (No sandbags and no burlap type bags allowed).

(Do not place on the Construction Plans; circle YES or NO)

Yes No 1. Does your project have 50 acres or more of disturbed soil?

Yes No 2. Will your project have at least one acre of disturbed soil and (1) be tributary to a water body 303(d) listed for sediment or (2) be located less than 200 feet from and ESA or directly discharging to an ESA?

Yes No 3. Will your project have at least one acre of disturbed soil but NOT (1) be tributary to a water body 303(d) listed for sediment and NOT (2) be located less than 200 feet from and ESA or directly discharging to an ESA?

Yes No 4. Does your project require a grading permit?

General Construction Permit:
If the answer to questions 1, 2, or 3 in Section 2 is "Yes", your project requires coverage under the General Construction Permit. A Notice of Intent (NOI) must be filed with the State Water Resources Control Board (SWRCB) and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared for your project.

Yes No Is this project subject to the General Construction Permit?

Construction Activities Threat to Water Quality Prioritization:
If the answer to question 1 or 2 is YES, your project is **HIGH** priority.

If the answers to questions 1 and 2 are NO, but the answer to either question 3 or question 4 is YES, your project is **MEDIUM** priority.

If all answers are NO, your project is **LOW** priority.

(Place this note on the Construction Plans and check the appropriate box)

This project is ☐ HIGH ☐ MEDIUM ☐ LOW priority threat to water quality.

City of El Cajon

Storm Water Quality Inspection for Construction Sites

BMP COMPLIANCE REPORT

You Are the Solution to Stormwater Pollution!

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Site Name: _____ Address: _____

Contractor Name: _____ Job Number: _____

Inspector Name & Phone #: _____ Date: _____/_____/_____Time: _____AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation **APN**: _____

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

Does Project Maintain a Stormwater Pollution Prevention Plan (SWPPP)? ❑ Yes ❑ No WDID: _____

Nearest Receiving Water(s): _____ Discharge Observed: ❑ Yes ❑ No _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

The Following List summarizes Minimum BMPs Required by the City of El Cajon Storm Water Ordinance (13.10) Additional BMPs May Be Required due to Site Conditions, Specific Activities, or by the Enforcement Official.

Minimum Construction Requirements	BMP Implemented?			Comments / Recommendations
	YES	NO	N/A	
Silt Fence – SE1				
Storm Drain Inlet Protection – SE10*+ filter fabric				
Sediment Basin – SE2				
Check Dams – SE4				
Fiber Rolls – SE5				
Gravel Bag Berm – SE6				
Street Sweeping/Vacuum – SE7				
Stabilized Construction Entrance – TC1				
Hydroseeding – EC4				
Geotexiles and Mats – EC7				
Material Delivery & Storage – WM1				
Stock Pile Management – WM3*				
Solid Waste Management – WM5*				
Concrete Waste Management – WM8				
Sanitary Waste Management – WM9				
Other*				
Other				

VIOLATIONS / REQUIRED CORRECTIVE ACTIONS

❑ Violation of Stormwater Ordinance: _____

❑ No Violations Have Been Noted; However BMP Implementation Is Required _____

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

200 E. Main Street, El Cajon California 92020 *TEL 619-441-1653 / FAX 619-579-5254*

Erosion Control Checklist for Low/Medium Priority Projects

$50.00 Fee (Receipt code: 5513 650b; ComPlus codes: Demo 516, Minor 518, Medium (no G&D) 520)

Address: _____

APN: _____-_____-_____-____ Permit #: _____ Fee ID(s): _____ : $ _____

Brief Project Description: _____

□ Formal Erosion Control Plan not needed. Sticker signed and placed on plans.

		YES	NO
1.	North arrow and Scale?		
2.	Legend?		
3.	Storm Water Notes?		
4.	Emergency phone number?		
5.	Drainage arrows/Topography?		
6.	Placement of BMPs?		
a.	Perimeter control [silt fence (SC-1) or gravel bags (SC-6)]		
b.	Slope protection [coconut fiber blankets or fiber rolls (SC-5)]		
c.	Street sweeping (SC-7)		
d.	Stabilized construction entrance (TC-1)		
e.	Material storage (WM-1)		
f.	Solid Waste Storage (WM-5)		
g.	Concrete washout (WM-8)		
h.	Sanitary waste (WM-9)		
7.	Address/Site location?		
8.	Erosion Control Plan heading?		
9.	Proposed and existing structures identified?		
10.	Property Boundaries?		

Notes: _____

_____

□ Fee(s) Entered into ComPlus

_____ _____/_____/_____ □ Comments Entered into ComPlus

Reviewer Signature Date Reviewed □ Logged into Excel Spreadsheet

Erosion Control Plan

City of El Cajon

GENERAL STORM WATER NOTES

A. ALL OPERATION WILL COMPLY WITH THE CITY'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PLAN (JURMP).

B. THE OWNER AND THE OWNER'S CONTRACTOR ARE RESPONSIBLE FOR POLLUTION PREVENTION PRACTICES TO PREVENT THE DISCHARGE OF SEDIMENT AND POLLUTANTS TO THE PUBLIC STORM DRAIN SYSTEM.

C. OWNER AND THE OWNER'S CONTRACTOR ARE RESPONSIBLE FOR THE PREVENTION OF EROSION CAUSED BY CLEARING OF VEGETATION, GRADING, DEMOLITION OR CONSTRUCTION.

D. SEDIMENT, POLLUTION AND EROSION CONTROL MEASURES WILL BE IMPLEMENTED STARTING THE FIRST DAY OF CLEARING, GRADING OR SOIL DISTURBANCE, OR CONSTRUCTION. THESE CONTROLS WILL REMAIN IN EFFECT UNTIL ALL RELEVANT OPERATIONS HAVE BEEN COMPLETED AND DISTURBED SOILS HAVE EITHER: 1) ESTABLISHED VEGETATION, OR 2) OTHER PERMANENT EROSION CONTROL AT 70 % COMPLETION.

EROSION AND SEDIMENT CONTROL NOTES

1. IN CASE OF EMERGENCY, CONTACT: NAME:_____ PHONE:_____

2. THE CONTRACTOR WILL MAINTAIN ALL SEDIMENT AND EROSION CONTROL DEVICES IN GOOD WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER THROUGHOUT EVERY PHASE OF THE PROJECT.

3. THE CONTRACTOR WILL INSTALL ALL EROSION CONTROL MEASURE ADDITIONAL TO THOSE SPECIFIED BY THE APPROVED EROSION CONTROL PLAN IF REQUIRED TO DO SO BY THE CITY ENGINEER.

4. THE CONTRACTOR AND PROPERTY OWNER WILL PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.

5. GRADED AREAS AROUND THE PROJECT PERIMETER WILL DRAIN AWAY FROM THE FACE OF SLOPES AT THE END OF EACH WORKING DAY.

6. ALL GRAVEL BAGS SHALL HAVE ¾ INCH MINIMUM AGGREGATE (NO SANDBAGS AND NO BURLAP TYPE BAGS ALLOWED) .

Project Address _____
Project APN _____
Permit Number _____
Applicant Name _____
Applicant Address _____

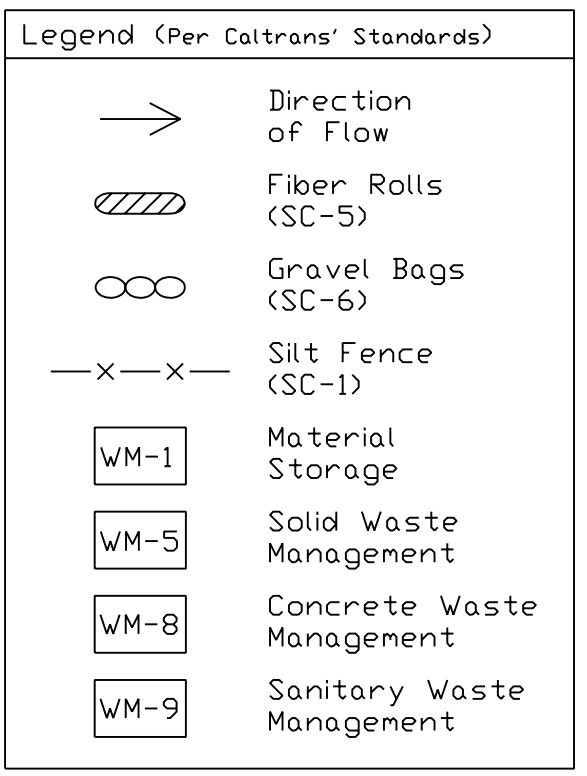

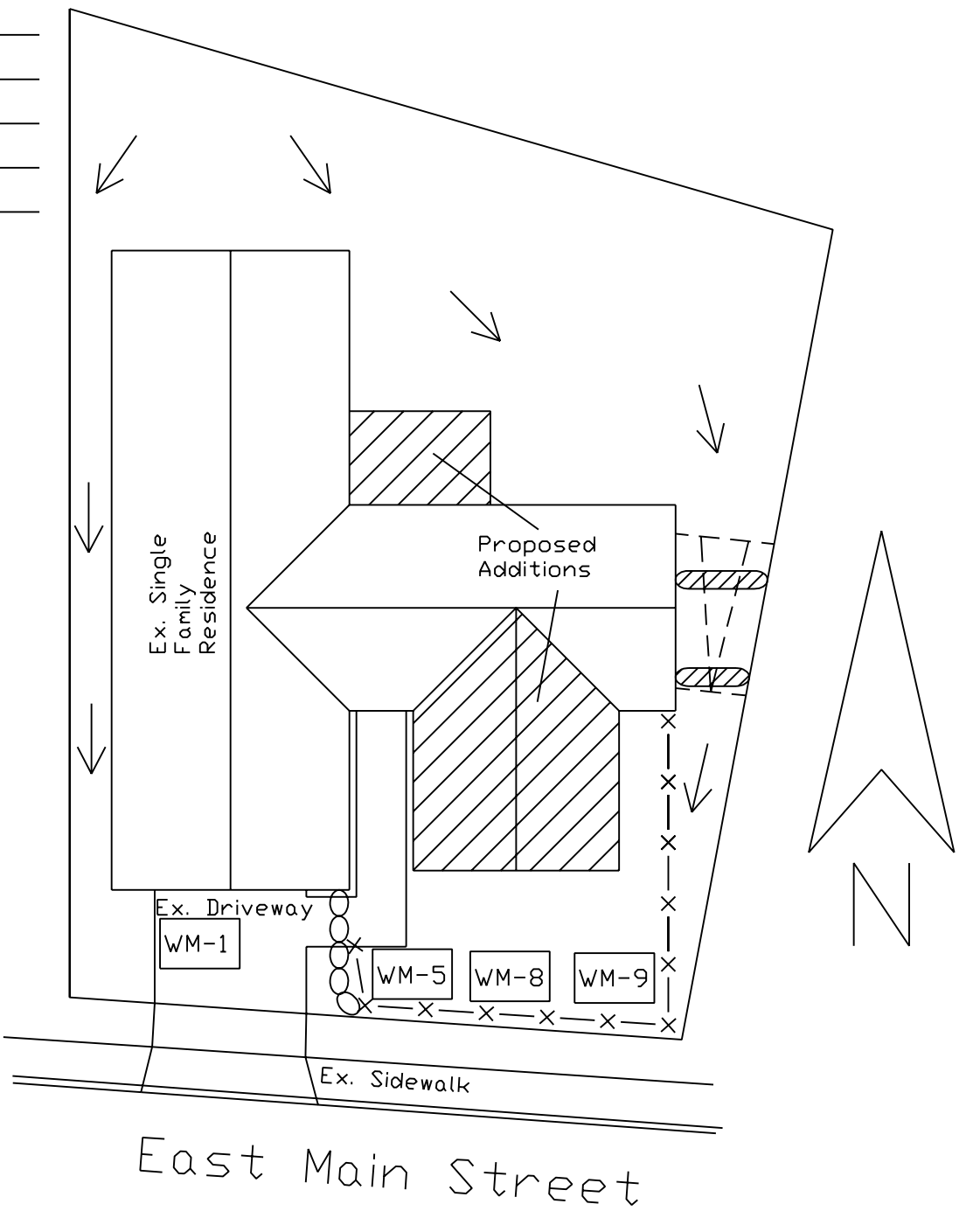

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City of El Cajon
Erosion and Sediment Control Plan Review Checklist

Date Completed	Not Applicable	
		Vicinity Map
_____	_____	Major roadways, geographic features or landmarks.
_____	_____	Site perimeter.
_____	_____	Geographic features.
_____	_____	General topography.
		Site Characteristics
_____	_____	North arrow, scale, and site boundary. Indicate the name of adjacent streets or roadway.
_____	_____	Location of existing drainage ways, channels, swales, creeks, streams on or near the site.
_____	_____	Location of storm drain inlets, outlets, catch basins – proposed, existing, on-site, and within 100 feet of site.
_____	_____	Location of existing and proposed buildings and paved areas.
_____	_____	Show and label existing and proposed improvements (streets, sidewalks, curb/gutter, utilities, etc)
_____	_____	The limits of the proposed disturbed area on the lot.
_____	_____	Approximate gradient and direction of slopes before grading operations.
_____	_____	Approximate gradient and direction of slopes after final grading operations.
_____	_____	Disturbed area outlined and labeled. All sediment control devices must be shown within the disturbed limits.
_____	_____	Overland runoff (sheet flow) coming onto the site from adjacent areas.
_____	_____	Delineation of pre and post development drainage areas, number of acres, and the direction of flow for each drainage area before and after development must be shown. Use separate plan sheets for clarity.
		Erosion Control Practices
_____	_____	Location of temporary soil piles
		Note: soil storage pile should be placed behind a sediment fence, 10-foot (minimum) wide vegetative strip should be covered with a tarp, or placed more than 25 feet from any down slope road or drainage way.
_____	_____	Location of gravel access drive(s).
		Note: Gravel drive should have 3 to 6 inch aggregate stone laid at least 10 feet wide and 12 inches thick. Drives should extend from the roadway 50 feet or to the house foundation (whichever is less).
_____	_____	Location of sediment controls (filter fabric fence, straw bale fence or 10-foot wide vegetative strips) that will prevent eroded soil from leaving the site.
_____	_____	Location of sediment barriers around on-site storm drain inlets.

Date Completed	Not Applicable	
_____	_____	Location of diversions. Note: Concentrated flow (drainage ways, ditches, channels, brow ditches) shall be diverted (re-directed) around disturbed areas. Overland runoff (sheet flow) from adjacent areas greater than 10,000 sq. ft. shall also be diverted around disturbed areas.
_____	_____	Location of practices that will be applied to control erosion on steep slopes that have been disturbed at any time by clearing, grading, or landscaping - slopes more than five feet in height, more than two hundred fifty square feet in total area, and steeper than three to one (run-to-rise). Note: Unstabilized drainage ways, ditches, channels, diversions, and inlets shall be protected from erosion through use of such practices as in-channel fabric or straw bale barriers, erosion control mats, staked sod, and rock riprap. When used, a given in-channel barrier should not receive drainage from more than two acres of unpaved area, or one acre of paved area. In-channel practices should not be installed in perennial streams (streams with year-round flow.)
_____	_____	Show Erosion Control Plan heading and standard notes.
_____	_____	Label all sediment control devices.
_____	_____	Show Standard details for sediment control devices.
_____	_____	No sediment control devices are to be located where water will damage building foundations.
_____	_____	Detail drawings and specifications for structural practices – any structural practices used must be illustrated with detailed drawings containing all dimensions and specifications. (i.e. de-silting basins)
_____	_____	Location of other planned practices not already noted. (Material Storage WM-1, Concrete Washout WM-8, Sanitary Waste WM-9, Solid Waste Storage WM-5)
_____	_____	Temporary stabilization of disturbed areas. Note: disturbed areas and soil piles left inactive for more than 10 days be stabilized by seeding (between April 1st and September 1st), or by other cover, such as tarping or mulching.
_____	_____	Permanent stabilization of site by re-vegetation or other means as soon as possible (lawn establishment). Indicate re-vegetation method: Seed ___ Sod ___ Other_____ Expect date of permanent re-vegetation: Re-vegetation responsibility of Builder ___ Owner/Buyer Is temporary seeding or mulching planned if site not seeded by September 1st or sodded by October 1st ? Yes ___ No ___
_____	_____	Use of downspouts and/or sump pump outlet extensions to direct runoff away from structures and onto sod or pavement until vegetation is stable. Downspouts shall be permanently to grass areas.
_____	_____	Proper disposal of building material waste so that pollutants and debris are not carried off-site by wind or water.
_____	_____	Maintenance of erosion control practices during construction: Name:_____ Title:_____ Phone & Fax:_____

- Sediment will be removed from behind sediment fences and barriers before it reaches a depth that is equal to half the barrier's height.
- Breaks and gaps in sediment fences and barriers will be repaired immediately.
- All sediment that moves off-site due to construction activity will be cleaned up before the end of the same workday.
- All sediment that moves off-site due to storm events will be cleaned up before the end of the next workday.
- Gravel access drives will be maintained throughout construction.
- All installed erosion control practices will be maintained until the disturbed areas they protect are stabilized.

Appendix A.4

City of El Cajon Municipal Facilities Inventory

No.	Facility Name	Facility Address	Facility Priority	Hydrologic Sub-Sub-Basin
1	Civic Center, City Hall and Plaza	200 E Main Street	High	Washington Channel
2	El Cajon Performing Arts Center	110 E Main Street	High	Washington Channel
3	Knox Hotel Museum (El Cajon Historical Society)	280 N Magnolia Avenue	Low	Washington Channel
4	Public Works Maintenance/Operations Office	1050 Vernon Way	High	Forrester Creek
5	Vehicle Maintenance Facility	1060 Vernon Way	High	Forrester Creek
6	Animal Control	1275 N Marshall Way	Medium	Forrester Creek
7	Community Policing Division	165 E Park Avenue	Low	Washington Channel
8	Resource Center, Community Social Services and Crisis House	1034 N Magnolia Avenue	Low	Broadway Channel
9	Pistol Range	100 Rueben Fleet Drive	Low	Forrester Creek
10	Police Department and Administration Center	100 Fletcher Parkway	Low	Broadway Channel
11	Police Department Detectives Offices	1035 Pioneer Way	Low	Forrester Creek
12	Fire Station No. 1 and Fire Department Administration	100 E Lexington Avenue	Low	Washington Channel
13	Fire Station No. 7	695 Tyrone Street	Low	Forrester Creek
14	Fire Station No. 8	842 N Third Street	Low	Forrester Creek
15	Fire Station No. 9	1301 N Marshall Avenue	High	Forrester Creek
16	Albert Van Zanten Park	1495 Greenfield Drive	High	Broadway Channel
17	Bill Beck Park	Pierce Street at Wagner Drive	High	Forrester Creek/County Ditch
18	Bostonia Recreation Center	1049 Bostonia Street	High	Forrester Creek
19	Bostonia Park	1049 Bostonia Street	Low	Forrester Creek
20	Cajon Valley Middle School Park	750 Park Avenue	High	Forrester Creek
21	Fire Station Park	Tyrone Street at Westwind Drive	High	Forrester Creek
22	Fletcher Hills Recreation Center and Pool	2345 Center Place	High	Mission San Diego/Alvarado Creek
23	Fletcher Hills Park	2345 Center Place	Low	Mission San Diego/Alvarado Creek
24	Hillside Recreation Center	840 Buena Terrace	High	Forrester Creek
25	Hillside Park	840 Buena Terrace	Low	Forrester Creek
26	Judson Park	Magnolia Avenue at Park Avenue	High	Washington Channel
27	John F. Kennedy Recreation Center	1675 E Madison Avenue	High	Forrester Creek
28	John F. Kennedy Park	1675 E Madison Avenue	Low	Forrester Creek
29	Prescott Promenade Park	200 Block of E Main Street	High	Washington Channel/County Ditch
30	Renette Recreation Center	935 Emerald Avenue	High	County Ditch
31	Renette Park	935 Emerald Avenue	Medium	County Ditch
32	Ronald Regan Community Center	195 E Douglas Avenue	High	County Ditch
33	Tuttle Park	379 W Chase Avenue	High	County Ditch
34	Wells Maintenance Facility and Recreation Center	1153 E Madison Avenue	High	Forrester Creek
35	Wells Park	1153 E Madison Avenue	Low	Forrester Creek

Storm Water Quality Checklist
For Municipal Facilities

Site Name:_____ Location:_____

Contact:_____

Date:_____ Type of Inspection: ☐ Routine Site Inspection

Weather Information: ☐ Prior to Forecast of Rain Event

Storm Start Date and Time:_____ Storm Duration:_____hours ☐ 24-hr Period During Extended Storm Event

Time Since Last Storm:_____hrs/days Rainfall:_____inches ☐ After Rain Event

Inspector Name and Title:_____

Inspector Signature:_____

Pollution Prevention BMPs	N/A	Yes	No	Comments / Corrective Action
Erosion and Sediment Control				
Is existing vegetation preserved?				
Are seeding and planting of native plants and trees considered?				
Are geotextiles and organic mats used for soil stabilization?				
Roadway and Bridge Maintenance				
Are streets swept and clean?				
Is street sweeping frequency adequate for the area?				
Municipal Vehicle Maintenance Facilities				
Are vehicles/equipment parked/stored in designated areas?				
Are vehicles and equipment regularly inspected for leaks and spills?				
Are detected leaks/spills contained and repaired as soon as possible?				
Landscaping Maintenance				
Are safer, alternative products used or considered?				
Is weather considered for landscaping activities?				
Are certified professionals used to handle, apply, and distribute pesticides, herbicides, and fertilizers?				
Is there an IPM used?				
Maintenance of MS4				
Is the mechanism for detecting and removing IC/ID situations implemented?				
Is the MS4 inspected, maintained, and repaired?				
Is a stenciling and sign program used to warn of effects of illegal dumping?				
Sewer Blockage Response				
Is there mechanism for identifying, containing, controlling, and repairing sewage leaks and spills?				
Is hazardous waste disposed of properly?				
Waste Management				
Is there a waste reduction program in place?				
Are wastes segregated for proper storage and disposal?				

Other Practices and Procedures				
Are dewatering activities controlled and managed appropriately?				
Is groundwater tested prior to disposal?				
Is the public educated and encouraged to participate in appropriate stormwater activities?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Housekeeping				
Is the area clear of visible trash/debris and impervious surfaces free of sediment?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are points of ingress/egress to public and private roads free from sediment, debris and mud from tracking?				
Are materials stored in their designated areas?				
Are dry methods used to clean?				
Employee Training				
Have employees been trained in basic stormwater management and BMP implementation?				
Visual Inspections				
Are visual inspections of the site conducted and documented on a regular basis?				
Are the discharge locations free of significant erosion or sediment transport?				
Improved Operation and Maintenance				
Are drainage control structures free of litter and debris?				
Waste Disposal and Recycling				
Are there designated areas for recycling of metal, tires, antifreeze, and used oil?				
Are waste containers covered?				
Are areas near or around waste containers free of leaks or spills?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are hazardous wastes stored and disposed appropriately? (in labeled, secondary containment; 55-gallon drums in a secured, designated area)				
Is secondary containment free of spills and rainwater?				
Preventive Maintenance				
Are there procedures for replacing used or worn materials or equipment prior to failure?				
Record Keeping				
Is there onsite storage of documented inspections, BMP evaluations, and audits?				
Is there onsite documentation of employee training?				
Is there an onsite SWPPP or other Pollution Control Document?				
Does the SWPPP adequately reflect the current site conditions and the construction operations? If not, explain required SWPPP revisions.				
Spill Prevention and Response				
Are there spill kits near outside stored materials, wastes, and recycling areas?				
Are spill response procedures clearly posted?				
Are employees trained in preventing spills?				

Material Inventory Procedures				
Are inventories of 30 days materials onsite?				
Material Storage Practices				
Are outside stored materials stored off the ground and covered or in appropriate containers? (Flammables stored in a flammables cabinet; antifreeze in double-walled container or in secondary containment)				
Visual evidence of spills, staining, or leaks from outside stored materials are not evident				
Storage Tanks				
Are outside above ground storage tanks double-walled or in secondary containment?				
Visual evidence of leaks or spills in the area are not visible				
Outside Storage				
Are materials stored outside under cover or in containers?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are outside material storage areas free of visual evidence of spills or runoff?				
Loading and Unloading				
Are loading and unloading areas free of litter and visual evidence of spills?				
Sediment and Erosion Control				
If sandbags are used, are they placed appropriately for the conditions?				
Are temporary soil stabilization measures installed and in working order?				
Is dust control necessary and implemented?				
Are soil stockpiles properly stored?				
Is inlet protection available for all operational storm drain inlets?				
Vehicle and Equipment Maintenance				
Is there a covered or inside area designated for vehicle and equipment maintenance?				
Are leaking vehicles stored inside or drip pans used for outside storage?				
Vehicle and Equipment Washing				
Is there a designated covered or inside area or commercial facility for washing vehicles and equipment?				
Park BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are grass clippings mulched or bagged for disposal?				
Are vegetation trimmings gathered and disposed as solid waste or recycled as mulch?				
Are sidewalks and parking lots cleaned using dry methods to collect and use as mulch or dispose as solid waste?				
Recreation BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Is pool water tested or treated for chlorine before discharge?				
Is pool filter backflush discharged to the sanitary sewer?				
Are pool chemicals stored inside and in appropriate				

containers?				
Non-Stormwater BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Non-Storm Water Management				
Is the site free of evidence of illegal connections and illicit discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
Other				
No other potential storm water pollution issues or concerns exist. If no, explain below.				

Explanations:_____

_____

_____

_____

_____

_____

_____

_____

Received by:_____ _____

Name (Print) **Date**

_____

Signature

Appendix A.5

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
1	Apro #20	710		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48425426	32.80427	-116.9361
2	2nd St. Gas & Mini, Big Daddy Oil #20	725		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48426380	32.80433	-116.93526
3	2nd St. Gas & Mini	725		N 2nd St	907.1	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	Yes	No	No	No	No	No	Yes	High	No	48426380	32.80431	-116.93521
4	Trick Trucks, Inc.	777		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	High	No	48426378	32.805	-116.93525
5	Top Dollar	1150		N 2nd St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	Low	No	48420220	32.81047	-116.93615
6	Valley Transmission & Auto	1158		N 2nd St	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48420219	32.81073	-116.93631
7	Tommys Italian Ristorante	1190		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48420218	32.81138	-116.93607
8	Mario Upholstery	1211		N 2nd St	907.13	7641		Furniture and Fixtures	No	No	No	No	No	No	No	No	No	No	No	Low	No	48412026	32.81203	-116.93549
9	Serranos Super Salsa	795		Arnele Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	High	No	48225038	32.80377	-116.97249
10	Toyota of El Cajon	965		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	No	No	No	Yes	No	No	No	No	No	High	No	48732102	32.79318	-116.97041
11	C.P. Richard Signs, Inc.	1200	B	Billy Mitchell Dr.	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38719007	32.82124	-116.97747
12	St. Cyclewear	1200	D	Billy Mitchell Dr.	907.1	2389		Apparel and Other Finished Products Made From Fabrics and Similar Material	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38719007	32.82124	-116.97747
13	Precision Metal Products, Inc.	850		W Bradley Ave	907.13	3463		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	Yes	No	No	No	No	No	No	No	Yes	High	Yes	38711041	32.81724	-116.97343
14	U S Wheel Remanufacturing	1000	P	W Bradley Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38711040	32.81757	-116.97446
15	Waste Management Universal Refuse Removal	1001		W Bradley Ave	907.13	4953		Electric, Gas, and Sanitary Services	No	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48213116	32.81613	-116.97465
16	Chem-Tronics, Inc.	1150		W Bradley Ave	907.13	3724		Transportation Equipment	No	No	No	No	No	No	No	No	No	Yes	Yes	High	Yes	38711048	32.81763	-116.97743

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
17	East County Tire & Brake	616		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	Yes	No	No	No	No	No	Yes	High	No	48313021	32.80849	-116.95394
18	El Cajon Smog & Auto Repair	720		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48313014	32.80796	-116.95314
19	Super Star #2	1090		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	High	No	48429315	32.8081	-116.94484
20	Sid's Auto Body, Inc. (1121)	1129		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	Yes	No	No	No	No	No	No	High	No	48418249	32.80751	-116.94349
21	Janie's Custom Draperies	336		Coogan Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307120	32.81017	-116.96436
22	Avalon R F/Pacifitek	344		Coogan Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48307120	32.81017	-116.96477
23	Controlled Precision Mfg	352		Coogan Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48307120	32.81016	-116.96563
24	Cmeann Productions Inc	1890	101	Cordell Ct	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	No			
25	Dave Whipple Sheet Metal	1077		N Cuyamaca St	907.1	3444		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48231024	32.80983	-116.97901
26	Raymonde Draperies	1399		N Cuyamaca St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	No	48214058	32.81476	-116.97905
27	Veridiam	1717		N Cuyamaca St	907.13	3317		Primary Metal Industries	No	No	Yes	No	No	No	No	Yes	No	No	Yes	High	Yes	38719007	32.81841	-116.97899
28	First Class Packaging Inc	280	B	Cypress Ln	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38712155	32.81708	-116.96426
29	Artimex Iron Co.	315		Cypress Ln	907.13	3441		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	Yes	No	No	No	No	No	No	No	No	High	Yes	48302210	32.81633	-116.96453
30	Daymar Corporation	460	B	Cypress Ln	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38712130	32.81704	-116.96631
31	Q Microwave Inc	481		Cypress Ln	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48302265	32.81666	-116.96708
32	El Cajon Mitsubushi	247		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	No	No	Yes	No	No	Yes	No	No	Yes	High	No	48732227	32.79344	-116.96886
33	HIS Auto	279		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732226	32.79303	-116.96935
34	Atlas Radiator Shop	580		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	High	No	48752018	32.79029	-116.97272

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
35	Mis Z Gallos Taqueria Fruit & Deli	1088		Estes	St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	High	No	49232015	32.78062	-116.96684
36	DelStar Technologies Inc.	1306		Fayette	St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	Yes	No	No	No	No	No	No	No	No	High	Yes	48214020	32.81363	-116.97814
37	San Diego Van & Storage	1426		Fayette	St	907.13	4214		Motor Freight Transportation and Warehousing	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48214022	32.81476	-116.97815
38	P R S	1460		Fayette	St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48214034	32.8152	-116.97811
39	National Spring Inc.	1472		Fayette	St	907.1	3493		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48214034	32.81542	-116.97811
40	J. Dolan Drapery Workroom	1484		Fayette	St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48214034	32.81567	-116.97811
41	A&G Drapery Manufacturing	1490		Fayette	St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes			
42	The Vintage Sign Company, Inc.	926		Felser	St	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	Yes	Medium	Yes	48212144	32.80965	-116.97375
43	Stine Game Tables	920		Fesler	St	907.1	2599		Furniture and Fixtures	No	Yes	No	No	No	No	No	No	No	No	Yes	High	Yes	48212144	32.80965	-116.97401
44	Layfield Environmental Systems, Geosynthetics, & Industrial Services	1166		Fesler	St	907.13	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48212147	32.80984	-116.97762
45	First Transit	800		Fesler	St	907.13	4111		Local and Suburban Transit and Interurban Highway Passenger Transportation	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48217012	32.80929	-116.97224
46	Sizzler	1030		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	High	No	48212149	32.80822	-116.97392
47	Prime Heat, Inc	1844		Friendship	Dr	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	Yes	No	No	No	No	No	Medium	Yes	38719007	32.82137	-116.97752
48	Sentrec Electronics Inc.	1943	E	Friendship	Dr	907.1	3679		Electronic and Other Electrical Equipment and Components, except computer	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38719006	32.82425	-116.97862
49	Phantom Research Laboratories, Inc.	1957	D	Friendship	Dr	907.1	2833		Medicinal Chemicals And Botanical Products	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38719006	32.82455	-116.979
50	HiTech Welding & Forming	1990		Friendship	Dr	907.13	3728		Transportation Equipment	No	No	No	No	No	No	No	Yes	No	No	No	High	Yes	38719006	32.82472	-116.98038
51	Milans Synthesized Furniture	1991	G&H	Friendship	Dr	907.1	2434		Lumber and Wood Products, except furniture	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38719006	32.82479	-116.98022
52	Sandmar Enterprises	1991	A	Friendship	Dr	907.1	2511		Furniture and Fixtures	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38719006	32.82479	-116.98022

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
53	Metal Engineering	390		Front	St	907.13	3449		Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48727407	32.79169	-116.97709
54	Kitchen Crafters	500		Front	St	907.13	2434		Lumber and Wood Products, except furniture	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48764019	32.79059	-116.97703
55	Zummay Custom Cabinetry	594	D	Front	St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48764004	32.7897	-116.97698
56	California Metals (Front St.)	636		Front	St	907.13	5093		Wholesale Trade; Durable Goods	No	No	Yes	No	No	No	No	No	No	No	No	High	Yes	48765001	32.78913	-116.97706
57	Russo Tile & Marble, Inc	651		Front	St	907.13	3281		Stone, Clay, Glass, and Concrete Products	No	No	No	No	No	No	No	No	No	Yes	No	High	Yes	48765004	32.78885	-116.9766
58	Evergreen Environmental Services	412		Front	St	907.13	4953		Electric, Gas, and Sanitary Services	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48764018	32.79108	-116.97704
59	Abacor Inc.	766		Gable	Way		7538	High	Automotive Services										No			Yes			
60	Gardner Pool Plastering	801		Gable	Way	907.13	1741		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48217054	32.81007	-116.97308
61	Brantner & Assoc Inc	1700		Gillespie	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	38720001	32.81884	-116.98087
62	Pure Bioscience	1725		Gillespie	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	38720003	32.81961	-116.98096
63	Cutting Edge	1825	100	Gillespie	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38720005	32.82131	-116.98211
64	New Brunswick Industries	1850		Gillespie	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38720010	32.82217	-116.98293
65	Vision Systems Inc	1895		Gillespie	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	Yes	No	No	No	No	No	No	No	No	High	Yes	38720115	32.82355	-116.98259
66	Professional's Choice Sports	2025	106	Gillespie	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes			
67	Senior Aerospace	790		Greenfield	Dr	907.13	3724		Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48304022	32.8145	-116.95259
68	San Diego Soy Dairy, Inc	1330	B	Hill	St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	49265005	32.78554	-116.97823
69	California Countertop	1340		Hill	St	907.13	3281		Stone, Clay, Glass, and Concrete Products	No	No	No	No	No	No	No	No	No	Yes	No	High	Yes	49265005	32.78569	-116.97809
70	S&D Precision Machine Shop	1390		Hill	St	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	49265005	32.78554	-116.97823
71	Chromalloy San Diego	1071		Industrial	Pl	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes			
72	Outback Steakhouse	722		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	No	High	No	51402160	32.78641	-116.92891

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
73	Valero Station #3738	785		Jamacha Rd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	High	No	51128027	32.78556	-116.9275
74	East County Powder Coating	1835		John Towers Ave	907.13	1721		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	High	No	38719007	32.8208	-116.97956
75	Turbine Aviation	1865	A	John Towers Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	High	Yes	38719007	32.82204	-116.98
76	Micro-Mode Products, Inc.	1870		John Towers Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	38719007	32.82223	-116.98009
77	Graphic Business Solutions Inc	1912		John Towers Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes			
78	Aerowind Corporation	1959		John Towers Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	Yes	No	No	No	No	No	No	No	No	High	Yes	38719006	32.82479	-116.98053
79	Triumph	203		N Johnson Ave	907.13	3728		Transportation Equipment	No	No	Yes	No	No	No	No	No	No	No	Yes	High	Yes	48712239	32.7967	-116.96994
80	Cummins Cal Pacific	310		N Johnson Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	High	No	48712133	32.79808	-116.97126
81	Jeromes	333		N Johnson Ave	907.13	5021		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	High	No	48712254	32.79825	-116.97031
82	American Scissor Lift, Inc.	400		N Johnson Ave	907.13	7359		Business Services	No	No	No	No	No	No	No	Yes	No	No	Yes	High	No	48712170	32.79955	-116.97036
83	El Cajon Valley Vet Hospital	560		N Johnson Ave	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48225033	32.8012	-116.97152
84	Goodyear Certified Tire	790		N Johnson Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	High	No	48224030	32.80556	-116.97154
85	Sleep Train	790	B	N Johnson Ave	907.13	5719		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	N/A	No	48224030	32.80556	-116.97154
86	Big O Tires/ Tire Pros	844		N Johnson Ave	907.13	7534		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	High	No	48224028	32.80635	-116.97151
87	Combo Aluminum Products	1100		N Johnson Ave	907.1	3499		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48217008	32.81088	-116.9716
88	Alpha Powder Coating	440		Front St		3479												No			Yes			
89	Abacor Inc.	1165		N Johnson Ave	907.1	7538		Automotive Repair Services, and Parking	No	No	Yes	No	Yes	No	No	No	No	No	Yes	High	No	48217031	32.81108	-116.96993
90	J&B Materials	1165		N Johnson Ave		5099												No			No	48217031	32.81108	-116.96993
91	His Business Manufacturing Co	1180		N Johnson Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	Yes	Medium	Yes	48217072	32.8121	-116.97118
92	Veolia Transportation Services, Inc.	1213		N Johnson Ave	907.13	4212		Motor Freight Transportation and Warehousing	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48302122	32.81284	-116.97017
93	Super-Krete International, Inc.	1290		N Johnson Ave	907.13	5032		Stone, Clay, Glass, and Concrete Products	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48213115	32.81282	-116.97221

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
94	Attention Getters Design	1385	101	N Johnson Ave	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48302121	32.81404	-116.9704
95	Pacific Trans Enviromental Services, Inc.	1452		N Johnson Ave	907.13	4953		Electric, Gas, and Sanitary Services	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48213109	32.81517	-116.97173
96	T B S Irrigation Products Inc	1532		N Johnson Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48213106	32.81588	-116.97141
97	Weldmac Mfg Co	1533		N Johnson Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48302137	32.81587	-116.97021
98	Por Favor, Inc	148		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	High	No	48808315	32.79511	-116.96115
99	Ali Baba Restaurant	421		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48823231	32.79465	-116.95715
100	Venus Printing	1183		E Main St	907.13	2759		Printing, Publishing, and Allied Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48938024	32.79459	-116.94173
101	East Coast Auto Collision	1375		E Main St	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	High	No	51117114	32.79857	-116.9311
102	De La Fuente Cadillac	1385		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	Yes	No	No	No	No	No	Yes	High	No	51117114	32.79877	-116.93127
103	JC Auto Repair	1492		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	High	No	51101115	32.80371	-116.92719
104	E&M Auto Parts	1647		E Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	High	No	50720046	32.81034	-116.91953
105	Riley Automotive II	1665		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	High	No	50720045	32.81057	-116.91906
106	Genos BBQ (Closed and Replaced by Santanas	291		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	No	High	No	48815117	32.79463	-116.96456
107	Julio Cesar Chavez Auto Group	464		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	Yes	No	No	Yes	No	No	Yes	Yes	No	Yes	High	No	48716004	32.79536	-116.96755
108	Big Daddys Oil Arco #9577	495		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48733124	32.7945	-116.96746
109	Valley Muffler Shop	533		W Main St	907.13	7533		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48732129	32.79469	-116.96854
110	Bath Co Shower Door	613		W Main St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48732134	32.79435	-116.97002
111	Flexsystems Usa Inc	727		W Main St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48730231	32.79479	-116.97167
112	California Sheet Metal	1020		N Marshall Ave	907.1	1761		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48233009	32.80921	-116.97605

City of El Cajon Stationary Industrial and Commercial Facilities

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
113	Lite Stone Concrete	1105		N Marshall Ave	907.13	3272		Stone, Clay, Glass, and Concrete Products	No	No	No	No	No	No	No	Yes	No	Yes	Yes	High	Yes	48212124	32.81047	-116.97489
114	Thunderbird Products	1148		N Marshall St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48232008	32.81101	-116.97587
115	Transportation Equipment Inc	1404		N Marshall Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48214046	32.81486	-116.97618
116	Toro Agricultural Irrigation	1588		N Marshall Ave	907.13	3524		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48214044	32.81601	-116.97625
117	Golden State Aviation	1640	160	N Johnson Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82804	-116.98317
118	Camp Bow Wow	1677	A	N Marshall Ave	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	38711039	32.81772	-116.97533
119	California Metals (Marshall)	297		S Marshall Ave	907.13	3599		Industrial and Commercial Machinery and Computer Equipment	No	No	Yes	No	No	No	No	No	No	No	No	High	Yes	48728108	32.79323	-116.97512
120	RDI, LLC	385		S Marshall Ave	907.13	4141		Local and Suburban Transit and Interurban Highway Passenger Transportation	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48729124	32.79153	-116.97523
121	Jim Wolf Technology Inc	212		Millar Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48728111	32.79348	-116.97462
122	Garvin Industries	316		Millar Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes			
123	Arco AM/PM #640	593		N Mollison Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48338035	32.80244	-116.9506
124	Chevron Stations Inc #1742	696		N Mollison Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48432112	32.8041	-116.95127
125	South Bay Welding	781		O Conner St	907.13	3441		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48213109	32.81532	-116.97232
126	International House of Pancakes	1286		Oakdale Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	High	No	48931012	32.80194	-116.93619
127	Jack Chidgey & Son, L L C	1099		W Palm Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	Low	No			
128	Cajon Valley Union School District Transportation	777		E Park Ave	907.13	4151		Local and Suburban Transit and Interurban Highway Passenger Transportation	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48811318	32.79784	-116.95332
129	Media Control Systems L.L.C.	1050	Q	Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48307214	32.81028	-116.96871
130	The Strip Shop	1050	1	Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	Yes	Low	Yes	48307214	32.81028	-116.96871

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
131	Mech Inclined Technicians	1112		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48307213	32.81092	-116.96808
132	High Precision Grind & Machining, Inc.	1130		Pioneer Way	907.1	3499		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48307211	32.81119	-116.96811
133	Waterdog Products, Inc.	1148		Pioneer Way	907.1	2821		Plastics Materials, Synthetic Resins, And Nonvulcanizable Elastom	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48307211	32.81121	-116.96846
134	Embertons Machine & Tool, Inc.	1215	A	Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48302251	32.81269	-116.96723
135	Livesay Marine	1250	A	Pioneer Way	907.1	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48307121	32.81037	-116.9672
136	Liddle Machine	1276		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48307121	32.81068	-116.96733
137	Tube Lighting Products	1346		Pioneer Way	907.1	3648		Electronic and Other Electrical Equipment and Components, except computer	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48307133	32.81139	-116.96718
138	Reyes Machining	1364		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48307132	32.81188	-116.96695
139	American Made Wrought Iron	1401	22	Pioneer Way	907.1	3446		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48302228	32.8145	-116.96628
140	Iron Express	1401	4	Pioneer Way	907.1	3446		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48302228	32.81443	-116.96712
141	Millers Towing	1402		Pioneer Way	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	Yes	No	No	No	High	No	48302130	32.81444	-116.9687
142	Kropf's Custom Sheet Metal	1408		Pioneer Way		3459												No			Yes			
143	Pluck a Truck El Cajon Auto Recycling	1416		Pioneer Way	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	High	No	48302130	32.81452	-116.96803
144	Direct Sheet Metal	1423		Pioneer Way	907.1	3444		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48302246	32.81477	-116.96714
145	Meyer Eng	1445		Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes			
146	Competition Textiles	1449		Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48302247	32.81513	-116.96693

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
147	Ponderosa Roasting Maint & Mfg	1466	10	Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48302111	32.81541	-116.96799
148	Top Notch Commercial and Aerospace Manufacturing, Inc.	1488	17	Pioneer Way	907.13	3449		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48302111	32.81566	-116.96794
149	San Diego Rods and Customs	1575		Pioneer Way	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48302265	32.8165	-116.96739
150	Decco Castings, Inc	1596		Pioneer Way	907.13	3365		Primary Metal Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	38712116	32.81705	-116.96867
151	Fit N Hip Wear	1614		Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38712124	32.81692	-116.96811
152	Countywide Metal Fab & Finish Inc.	1348		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	Yes	No	No	No	No	No	No	No	No	High	Yes	48307133	32.81149	-116.96726
153	Circlemaster Inc	495		Raleigh Ave	907.1	3449		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes			
154	Omni Pacific	505		Raleigh Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes			
155	Doetsch Enterprises	515		Raleigh Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes			
156	Russells Metal Fab	549		Raleigh Ave	907.13	3499		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48225037	32.80105	-116.9723
157	Amatek Rotron	474		Raleigh Ave	907.13	3564		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48712188	32.79986	-116.97383
158	Alturdyne	660		Steele St	907.13	3621		Electronic and Other Electrical Equipment and Components, except computer	No	No	Yes	No	No	No	No	No	No	No	No	High	Yes	48302115	32.81455	-116.96989
159	Autobahn	444		Vernon Way	907.1	5093		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48302252	32.81252	-116.96677
160	Griffiths Machining	465		Vernon Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48307132	32.81216	-116.96719
161	Mil-Spec Metallics	755		Vernon Way	907.13	5051		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48217033	32.81167	-116.97228
162	East County Metal Supply	755		Vernon Way		5051												No		High	No			
163	Fabcom	781		Vernon Way	907.1	3446		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	Yes	No	No	No	No	No	No	No	No	High	Yes	48217033	32.81189	-116.97245

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
164	Certified Metal Craft Inc	877		Vernon Way	907.13	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48217001	32.81165	-116.97295
165	House Of Bounce	959		Vernon Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes			
166	Premier Metal Processing Inc.	971		Vernon Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	Yes	High	Yes	48212139	32.81188	-116.97408
167	Allied Castings, Inc.	983		Vernon Way	907.13	3363		Primary Metal Industries	No	No	No	No	No	No	No	Yes	No	No	Yes	High	Yes	48212122	32.81187	-116.97455
168	KD Cabinet	1065		Vernon Way	907.1	2434		Lumber and Wood Products, except furniture	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48212120	32.81191	-116.97513
169	Eye Grind Design	1069		Vernon Way	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48212120	32.81191	-116.97533
170	AJM Packaging Corporation	1160		Vernon Way	907.13	2656		Paper and Allied Products	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48214010	32.81301	-116.9773
171	RMS Laser	1033		Vernon Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48212122	32.81184	-116.97475
172	Washington Arco	1092		E Washington Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48840030	32.78797	-116.94488
173	Juanbertos Mexican Food	1104		E Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	High	No	48927301	32.78794	-116.94425
174	Gibson & Barnes Top Notch Flight Suits	1900	140	Weld Blvd	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38423204	32.82736	-116.98914
175	Race Car Dynamics, Inc	1900	100	Weld Blvd	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38423204	32.82736	-116.98914
176	Golden State Gasoline	181		N 2nd St	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918072	32.79612	-116.93528
177	Romeo's Car Wash	195		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918071	32.79638	-116.93508
178	Walgreens	215		N 2nd St	907.13	5912		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918015	32.79681	-116.93507
179	McDonald's (2nd)	281		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918014	32.79734	-116.93504
180	Ralph's Grocery Co # 102	300		N 2nd St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48916224	32.79745	-116.93631
181	Money Tree	303		N 2nd St	907.13	6163		Nondepository Credit Institutions	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918013	32.7976	-116.93504
182	El Cajon Auto Electric	317		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918012	32.7978	-116.93504
183	Arby's Restaurant #231	325		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918079	32.79805	-116.93505
184	Baskin Robbins Ice Cream	328		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48916217	32.79927	-116.93632
185	Taco Bell #23723	335		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918078	32.79853	-116.93504

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
186	Subway Sandwiches (2nd)	341		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918006	32.79873	-116.93504
187	Dutch Touch Tattooing & Piercing	363		N 2nd St	907.13	8999		Services, Not Elsewhere Classified	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918005	32.79891	-116.93542
188	Car Quest	391		N 2nd St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918050	32.79907	-116.93504
189	2nd Street Gas Depot	490		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48916218	32.79996	-116.93606
190	Finest Donuts	526		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931022	32.80082	-116.93597
191	Wings N Things/Wing N It, Inc.	528		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931022	32.80087	-116.93597
192	Cotixan Mexican Restaurant	538		N 2nd St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931015	32.80089	-116.93672
193	Jiffy Lube Store #495	539		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48912381	32.80095	-116.93545
194	KFC	555		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48912382	32.80126	-116.93528
195	Estrada's Mexican Food	569		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48912349	32.80154	-116.93528
196	Tyler's Taste of Texas	576		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931012	32.80185	-116.93593
197	Shell (2nd)	601		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48912235	32.80243	-116.93522
198	Valvoline Instant Oil Change	610		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931009	32.80242	-116.93607
199	SKS Inc.	610		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931009	32.80242	-116.93607
200	Master's Cut	790		N 2nd St	907.13	7241		Personal Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425422	32.80499	-116.93601
201	Villas Mexican Food #1	798		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425422	32.80504	-116.93592
202	Duraid Hermez Detail	816		N 2nd St	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425255	32.80557	-116.93609
203	Run Rite Auto Service	830		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425223	32.80591	-116.93601
204	Meineke Car Care Center	830		N 2nd St	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425223	32.80585	-116.93596
205	Marechiaro Pizza House	854		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425161	32.80654	-116.93595
206	Vons #2367	950		N 2nd St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48422251	32.80823	-116.93644
207	The Pancake House	1000		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48422125	32.80904	-116.93607
208	Cat & Doggie Works	1137		N 2nd St	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Low	No	48423207	32.81051	-116.93539
209	Jump 4 Joy	1177		N 2nd St	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48423229	32.81135	-116.93549
210	West Coast Kitchen	1209	108	N 2nd St	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48412052	32.81198	-116.93547

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
211	Bonnies Grooming	1215		N 2nd St	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Low	No	48412026	32.81211	-116.93541
212	Agape Veterinary Hospital	1291		N 2nd St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Low	No	48412033	32.81313	-116.93541
213	The Grinder	1300		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48404409	32.81362	-116.93598
214	El Cajon Hearing Aid Center	761		Arnele Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48225038	32.80364	-116.97222
215	Pro Body Warehouse	782		Arnele Ave	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224047	32.80416	-116.97237
216	Mor Furniture for Less/TRS Home Furnishings	880		Arnele Ave	907.13	2392		Apparel and Other Finished Products Made From Fabrics and Similar Material	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224047	32.80416	-116.97286
217	Avocado Food Market	852		Avocado Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49303212	32.7847	-116.95789
218	Subway Sandwiches #4445	1175		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49329017	32.77952	-116.95663
219	The Vons Co., Inc. #3044	1201		Avocado Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49329018	32.77887	-116.95648
220	Pizza Hut #315029	1255		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49329019	32.77818	-116.9567
221	China Diamond Restaurant	1265		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49329020	32.77804	-116.95727
222	Heartland Coin Club	695		Ballantyne St	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	Yes	Low	No	48327216	32.8041	-116.95747
223	Panda Express #715	131		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48322146	32.80747	-116.96086
224	Jack-in-the-Box #78	170		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48309011	32.80795	-116.96075
225	AM/PM	201		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49322239	32.80735	-116.95994
226	Pizza Hut	306		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48309035	32.8084	-116.95884
227	Dolci Mango of El Cajon	330		Broadway	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48309035	32.80831	-116.95888
228	L&L Hawaiian BBQ	356		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48309039	32.8079	-116.95858
229	Sew Pros Sewing and Vacuum Center	393		Broadway	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48322248	32.80742	-116.95836
230	El Pollo Loco #3562	494		Broadway	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48313004	32.80793	-116.95683
231	King House	500		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48313004	32.80796	-116.95671
232	A 1 Smog Test	507		Broadway	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48324104	32.80724	-116.95638
233	Ben's Market and Pastry	544		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48313054	32.80793	-116.95497
234	Sunshine Co	548		Broadway	907.13	7349		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48313054	32.80793	-116.95493
235	Wendy's #01	871		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428232	32.80723	-116.95172
236	7-Eleven Store # 2131-25085C	895		Broadway	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428225	32.80741	-116.95129

City of El Cajon Stationary Industrial and Commercial Facilities

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
237	Starbucks Coffee #3417	903		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428238	32.80739	-116.95058
238	Subway Sandwiches (Broadway)	915		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428238	32.80747	-116.95039
239	Entenmann's Orowheat Outlet	916		Broadway	907.13	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428110	32.80806	-116.94974
240	Cedars Bakery	926		Broadway	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428110	32.80806	-116.94941
241	The Yogurt Mill	935		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428226	32.8074	-116.94987
242	Dominos Pizza #7704	936		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48429107	32.80794	-116.94914
243	Beths Grooming	1028		Broadway	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Low	No	48429322	32.80798	-116.94656
244	Broadway Farmer's Market	1039		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48429432	32.80728	-116.94569
245	Howards Bakery	1097		Broadway	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48429432	32.80744	-116.94483
246	Camper and Trailer Outlet	1183		Broadway	907.13	5599		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48418248	32.80737	-116.94067
247	Izzy's Cafe, Inc.	1252		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48422226	32.80796	-116.93774
248	Speedy TV	1257		Broadway	907.13	7622		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425149	32.80727	-116.9378
249	RP Racing	1259		Broadway	907.13	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425170	32.80727	-116.93755
250	Tropifruit & Deli (Broadway)	1263		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425113	32.80726	-116.9373
251	Allman Family Auto	1265		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425170	32.80722	-116.9375
252	Pizza Xpress	1270		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48422222	32.80805	-116.93728
253	G&M Oil Co. #94	1298		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48422245	32.80808	-116.93608
254	Broadway Market	1309		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48426160	32.80751	-116.9352
255	Sun Auto Repair	1310		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48423221	32.80815	-116.93507
256	Executive Gourment Catering/Aloha Catering	1321		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48426112	32.80756	-116.93466
257	Trinity Heart Medical Supply	1331		Broadway	907.13	5047		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48426112	32.80739	-116.93456
258	Amarc Enterprises	1339		Broadway	907.13	5199		Wholesale Trade; Nondurable goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48426173	32.80735	-116.9343
259	Royal Palace Restaurant and Banquet Hall	1340		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48423111	32.80825	-116.93391
260	El Cajon Muffler and Air Conditioning	1370		Broadway	907.13	7533		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48424029	32.80804	-116.93286
261	Hollywood Motors	1423		Broadway	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	50728169	32.80749	-116.93027

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
262	Car Pro Inc.	1427		Broadway	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	50728169	32.80749	-116.93013
263	Italian Pizza Restaurant	1438		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	50727025	32.80791	-116.92987
264	Pacific Refrigeration, Inc., A/c Service Co.	1440		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	50727007	32.80818	-116.92936
265	Albertsons, Inc. #6771	1608		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	50751021	32.80864	-116.92018
266	Little Caesars Pizza (Chase)	393	Suite B	E Chase Ave	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49252223	32.78012	-116.9582
267	El Cajon Arco AM-PM	404		E Chase Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49343021	32.78075	-116.95736
268	North Park Produce	432		E Chase Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49343022	32.78078	-116.9568
269	Care & Comfort Veterinary Hospital, Inc.	522		E Chase St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Low	No	49343023	32.7808	-116.95598
270	Vets Pets, Inc.	522		E Chase St	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	49343023	32.7808	-116.95598
271	7-Eleven #16070	394		W Chase Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49233157	32.78074	-116.96621
272	CCS Cleaning Service	205		Claydelle Ave	907.13	7349		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48823110	32.79372	-116.95853
273	Exalt Customs	350		Coogan Way	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307120	32.81016	-116.96542
274	Arco #9562	978		N Cuyamaca St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48209302	32.80822	-116.97996
275	The Cajon Pass Deli	1195		N Cuyamaca St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48231010	32.81159	-116.97935
276	Advanced Color Coating	1375		N Cuyamaca St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48214058	32.81403	-116.97928
277	Ribbit Pest Control, Inc.	435		W Douglas Ave	907.13	7342		Business Services	No	No	No	No	No	No	No	No	No	No	Yes	Low	No	48733130	32.79367	-116.96691
278	Mike's Deli and Market	289		El Cajon Blvd	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48732226	32.79296	-116.96944
279	Truck and SUV Superstore, Inc	327		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48732304	32.7924	-116.96996
280	Stetts Iron Horse Ranch	453		El Cajon Blvd	907.13	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48753211	32.79047	-116.9716
281	Heavenly Taste	533		El Cajon Blvd	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48753208	32.79031	-116.97185
282	El Cajon Harley Davidson	621		El Cajon Blvd	907.13	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48753118	32.78924	-116.97267
283	Leos Market	635		El Cajon Blvd	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48751228	32.789	-116.97302
284	Auto d'Elegance	673		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48751105	32.78847	-116.97367
285	Alia Insurance Services Inc.	720		El Cajon Blvd	907.13	6411		Insurance Agents, Brokers, and Service	No	No	No	No	No	No	No	No	No	No	No	Low	No	48749019	32.78747	-116.97565

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
286	Poes Auto Body	727		El Cajon Blvd	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264108	32.78717	-116.97477
287	Mustang Auto and Classic Cars	727		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264108	32.78717	-116.97477
288	Motor Sports Co.	775		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264103	32.78638	-116.97556
289	WS Auto Sales, Inc.	775		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264103	32.78638	-116.97556
290	J. C. Auto Detail	790		El Cajon Blvd	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.7866	-116.97645
291	Rock Auto Group	790		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.7866	-116.97645
292	Advance Paint and Body	790		El Cajon Blvd	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.7866	-116.97645
293	Advance Auto Center	790		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.7866	-116.97645
294	Enterprise Car Sales	850		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265013	32.78573	-116.97723
295	Wrangler Family BBQ Pit	901		El Cajon Blvd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264207	32.78429	-116.97751
296	Sid's Auto Body, Inc. (El Cajon)	910		El Cajon Blvd	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265012	32.78485	-116.9779
297	Spinali's Auto	919		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264219	32.78392	-116.97783
298	Legacy Cars (920)	920		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265012	32.78479	-116.97798
299	Urban Bloom Landscape, Inc.	1017		El Cajon Blvd	907.1	1711		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264203	32.78347	-116.97857
300	7 Stars Auto Glass Inc.	1100		El Cajon Blvd	907.13	7536		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48778027	32.78324	-116.97956
301	Cunningham BMW	720		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48749019	32.78747	-116.97557
302	Xtreme Glass	1510		Fayette St	907.1	1793		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	48214034	32.81594	-116.97811
303	Cottonman Transmission	1286		Felser St	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48231014	32.80911	-116.9792
304	Fletcher Hills Automotive and Smog	1288		Felser St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48231014	32.80901	-116.97926
305	Gammow Pools, Inc	842		Fesler St	907.1	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Yes	Low	No	48217012	32.80892	-116.97231
306	Crystal Clean Car Wash	111		S First St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48938019	32.7943	-116.94437
307	Severin Mobile Auto Repair Team	225		Fletcher Pkwy	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48143128	32.80292	-116.99406
308	Long John Silvers	270		Fletcher Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307149	32.80812	-116.96465

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
309	Maya's Deli	450		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307136	32.80847	-116.96672
310	Carl's Junior # 89	624		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48217069	32.80835	-116.96985
311	La Mesa Auto & Tire Center	2210		Fletcher	Pkwy	907.11	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48115072	32.80348	-116.99406
312	7-Eleven Food Store 13655E	2270		Fletcher	Pkwy	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48115069	32.80326	-116.99509
313	Jibe Studios	2333		Fletcher	Pkwy	907.11	7911		Amusement and Recreation Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48143103	32.80244	-116.99649
314	Suds n Paws	2349		Fletcher	Pkwy	907.1	7520		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48143103	32.80249	-116.99657
315	Flour Power Custom Cakery	2382		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48115068	32.8028	-116.99709
316	Fletcher Hills KWIK stop	2410		Fletcher	Pkwy	907.11	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48136223	32.80279	-116.99786
317	La China	2852		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48131032	32.80056	-117.00298
318	Medical Solutions	1987	I	Friendship	Dr	907.1	5047		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.82476	-116.98007
319	Sierra Pacific Landscape	304		Front	St	907.13	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	48727102	32.79287	-116.97641
320	US Lawn	304		Front	St	907.13	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	48727102	32.79288	-116.97641
321	LW Blackinton, Inc.	380		Front	St	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48727110	32.79206	-116.97663
322	Olympic Carpet Cleaning Supplies	538		Front	St	907.13	4959		Electric, Gas, and Sanitary Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48764003	32.79001	-116.97702
323	Fatboy Fiberglass and Welding	675		Front	St	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265002	32.78792	-116.97676
324	76 Smog Test Only Station	640		Garfield	Ave	907.11	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48136222	32.80301	-116.99774
325	Sunfood Corporation	1830	101	Gillespie	Way	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	38720018	32.81895	-116.98155
326	Shamrock Racing Inc.	2030		Gillespie	Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	38720116	32.82454	-116.98481
327	Stuart Anderson's Black Angus Restaurant	1000		Graves	Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48309013	32.80902	-116.96092
328	Centric Transmission	1265		Greenfield	Dr	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48411009	32.81321	-116.93726
329	Jim Renner Auto Sales	1281		Greenfield	Dr	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48411011	32.81292	-116.93652
330	7-Eleven Store #13657	1666		Greenfield	Dr	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	50712015	32.8129	-116.91934
331	Solid Rock Café	2100		Greenfield	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51214005	32.80001	-116.90386
332	Western Exterminator Co	1320		Hill	ST	907.13	7342		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265005	32.78569	-116.97809
333	Powder Pros, Inc.	945		Industrial	PL	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48712173	32.7972	-116.97374

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
334	Banfield, The Pet Hospital	865		Jackman	St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224045	32.80682	-116.97298
335	Petsmart, Inc. #142	865		Jackman	St	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224045	32.80697	-116.97298
336	New Century Buffet	868		Jackman	St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224048	32.80672	-116.97486
337	Dubai Restaurant	123		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.79487	-116.9354
338	Sultan Baklava	131		Jamacha	Rd	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.79481	-116.93536
339	Best Nutrition & Market	147		Jamacha	Rd	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.7945	-116.93531
340	Big Frank's Café	163		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.79428	-116.9352
341	Pep Boys Auto #813	201		Jamacha	Rd	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.79401	-116.93493
342	BurgerKing #947	225		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.79379	-116.93467
343	7-Eleven Food Store 13660E	335		Jamacha	Rd	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128045	32.79237	-116.93272
344	Francos Pizza	574		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51126071	32.78888	-116.92983
345	Healthy Pet Pantry	681		Jamacha	Rd	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	51155009	32.78795	-116.92798
346	Wendy's #11	686		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51126071	32.78805	-116.92876
347	Jamacha Veterinary Clinic	693		Jamacha	Rd	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Low	No	51155009	32.78788	-116.92793
348	Large Animal Veterinary Association	725		Jamacha	Rd	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128097	32.78696	-116.92745
349	Angels Pet Parlor	731		Jamacha	Rd	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128095	32.78663	-116.92753
350	Giant Pizza King #1	740		Jamacha	Rd	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51402161	32.78674	-116.92851
351	Starbucks Coffee #9863	745		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128095	32.78645	-116.92756
352	CVS Pharmacy	790		Jamacha	Rd	907.13	5912		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	51402149	32.78569	-116.92851
353	Personal Touch Dining Inc.	859		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51431017	32.78392	-116.9276
354	Aircraft Storage Spaces	1840		Joe Crosson	Dr	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.82099	-116.96973
355	Advanced Electronic Solutions	1830		John Towers	Ave	907.13	1731		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719007	32.8207	-116.97953
356	Tropifruit & Deli (Johnson)	762		N Johnson	Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224031	32.80516	-116.97124
357	Burger King 814	822		N Johnson	Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224029	32.80595	-116.9715
358	Sears Holding Company	1406		N Johnson	Ave	907.13	5083		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48213110	32.81455	-116.97185
359	County Motor Parts Co., Inc./Napa Auto and Truck Parts	1597		N Johnson	Ave	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302132	32.81661	-116.97019

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
360	Thomas Building Supply	137		S Johnson Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Low	No	48732106	32.79421	-116.97087
361	Greenscape	333		W Lexington Ave	907.13	782		Agricultural Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48735113	32.79255	-116.96518
362	El Cajon Auto Trim Shop	645		W Lexington Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48732325	32.79248	-116.96934
363	New York Giant Pizza	356		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48717275	32.79856	-116.96256
364	Enterprise Rent-A-Car #3247	451		N Magnolia Ave	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48801025	32.79961	-116.96178
365	Shell (Magnolia)	515		N Magnolia Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48333031	32.8012	-116.96196
366	Park Place Cafe	169		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No			
367	Park Place Cafe	169		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No			
368	The Lawless Pub	176		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48808320	32.79522	-116.96059
369	New York Bakery, Inc.	245		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48821104	32.79463	-116.95945
370	El Cajon International Food	502		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48811221	32.79527	-116.9562
371	Babylon International Market	524		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48811243	32.79559	-116.95564
372	El Cajon Meat Market	575		E Main St	907.13	5421		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48823304	32.79465	-116.95502
373	Discount Auto Pawn	715		E Main St	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48813426	32.79467	-116.95313
374	Baghdad Market	733		E Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48813419	32.79452	-116.95262
375	George's Lawn Equipment	747		E Main St	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48813405	32.79455	-116.95241
376	East Valley Classic Car Wash	760		E Main St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48813104	32.79528	-116.95247
377	Greek Style Chicken, Inc.	955		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48813311	32.79461	-116.94946
378	CLASSIC AUTO SALES	966		E Main St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48913022	32.79538	-116.94889
379	Rice RV	1035		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48838040	32.79455	-116.94667
380	Rent-A-Center #01055	1047		E Main St	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48838038	32.79431	-116.94594
381	New Battery Starter Shop	1056		E Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48933019	32.79513	-116.94633
382	Tasty Pizza	1109		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48938011	32.79467	-116.94343
383	Carson Trailer Inc.	1111		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48938011	32.794	-116.94324

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
384	Panda Valley Mandarin Cuisine	1142		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48915031	32.79542	-116.9428
385	Frazee Paint	1154		E Main St	907.13	5231		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Low	No	48915031	32.79521	-116.9426
386	Tocumbo	1183		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48938024	32.79459	-116.94173
387	Shakira Pastry	1183		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48938024	32.79459	-116.94173
388	Antique Row Cafe of El Cajon	1185		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939011	32.79455	-116.94103
389	El Cajon Moving Center	1186		E Main St	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48915029	32.79542	-116.94146
390	Loftis Motorsports	1189		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939002	32.79461	-116.9405
391	Precision Tune Auto Care	1191		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939002	32.7947	-116.94042
392	Harbor Freight Tools EC-14	1196		E Main St	907.1	5251		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Low	No	48915025	32.79518	-116.9405
393	Papa John's Pizza #1597	1201		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939010	32.7947	-116.93959
394	Pupuseria Salvadorena and Mexican Food	1207		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939010	32.7947	-116.93946
395	Catered Creations	1223		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939010	32.7947	-116.9391
396	Palms Grill	1255	A	E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939004	32.79471	-116.93872
397	Dixieline	1262		E Main St	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Low	No	48917026	32.79582	-116.93735
398	Little Caesars Pizza (Main)	1299		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48921004	32.79478	-116.93627
399	Coco's #884	1324		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918073	32.79729	-116.93418
400	Shear Perfection - Wendy Dog/Cat Grooming	1325		E Main St	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918063	32.79686	-116.93362
401	Lynn's Locksmith Service	1380		E Main St	907.13	7299		Personal Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918049	32.7993	-116.93176
402	Bs Keg Beer	1429		E Main St	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	51101417	32.80041	-116.92984
403	Main Street Car Wash	1437		E Main St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	51101427	32.80137	-116.92864
404	Auto Wholesalers	1440		E Main St	907.13	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	51101536	32.80147	-116.92975
405	Pernicano's	1588		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	50731027	32.80739	-116.92284
406	McDonald's (Main)	1695		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	50720042	32.81148	-116.91842
407	Jack in the Box #3064	1700		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	50712014	32.81278	-116.91863

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
408	Auto Zone #5646	1795		E Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	50721101	32.81434	-116.91666
409	Quizno's Classic Subs	124		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48719255	32.7953	-116.96296
410	Athena Foods	435		W Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48733123	32.79462	-116.96706
411	Victory Auto Service	935		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48728227	32.79481	-116.97405
412	Imported Motor Cars	939		W Main St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48728231	32.7947	-116.97416
413	Earl Scheib	1002		W Main St	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48712150	32.79526	-116.97468
414	Superstar 3	1090		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48712141	32.79526	-116.97509
415	G&M Oil #95	1099		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48728128	32.79469	-116.97512
416	Mossy Nissan	1170		W Main St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	Yes	No	No	No	No	No	No	Low	No	48711027	32.79523	-116.97596
417	Arco AM/PM	1245		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48725046	32.7947	-116.97877
418	7-Eleven #21787	1253		W Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48725047	32.79469	-116.97913
419	Dal-Tile SSC West, Inc.	270		N Marshall Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	Yes	No	No	No	Low	No	48711026	32.79677	-116.97574
420	Triton Imaging	290		N Marshall Ave	907.13	2759		Printing, Publishing, and Allied Industries	No	No	No	No	No	No	No	No	No	No	No	Low	No	48711026	32.79697	-116.97595
421	Off Road Warehouse ORW	425		N Marshall Ave	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48712190	32.79958	-116.97504
422	US Air Conditioning	1250		N Marshall Ave	907.13	5075		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48214048	32.81351	-116.97622
423	El Cajon Flying Service (lessor)	1825		N Marshall Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Yes	Low	No	38719006	32.8258	-116.97719
424	Instrument Overhaul Service of San Diego, Inc.	1981		N Marshall Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.8281	-116.98314
425	Gillespie Field Cafe & Deli	2015		N Marshall Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.82797	-116.98332
426	Hot Blend Coffee	250		S Marshall Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48726204	32.79331	-116.9757
427	J&W Lumber	430		S Marshall Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Low	No	48764016	32.7906	-116.9758
428	David A. Howe M.D.	505		N Mollison Ave	907.13	8011		Health Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48806219	32.80044	-116.95048
429	Kragen Auto Parts #1173	101		S Mollison Ave	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48813312	32.7946	-116.95047
430	Mollison Market	725		S Mollison Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49310351	32.78704	-116.95055
431	Jack in the Box #54	2733		Navajo Rd	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48131017	32.80169	-117.00269

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
432	Stephanie Emerson Catering	144		S Orange Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48815114	32.794	-116.96369
433	Rancho del Oro Towing	1167		W Palm Ave	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48764024	32.79106	-116.97637
434	Hamann Companies	1000		Pioneer Way	907.13	1541		Building Construction - General Contractors and Operative Builders	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307209	32.8095	-116.96875
435	William Kelly & Sons	1044		Pioneer Way	907.13	1711		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307214	32.81022	-116.96796
436	Mopars by Jack	1429		Pioneer Way	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302246	32.81494	-116.96746
437	Chappelle's Exhaust and Custom Shop	1433		Pioneer Way	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302246	32.81498	-116.96748
438	Name Unknown	1435		Pioneer Way	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302247	32.81507	-116.96748
439	British Heritage Motorsports	1437		Pioneer Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302247	32.81502	-116.96748
440	Nita's Deli and Bakery	1444		Pioneer Way	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.81525	-116.9687
441	Intellicept	1444		Pioneer Way	907.13	5099		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.81525	-116.9687
442	Vina & Co.	1444		Pioneer Way	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.81525	-116.9687
443	G3 Graphics, Inc.	1466	11	Pioneer Way	907.1	7336		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.81529	-116.96905
444	Pool Surfacing 2000 Inc.	104		Richardson Ave	907.1	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	48730130	32.7947	-116.97233
445	Elmer Sweetwood & Sons, Inc	151		S Sunshine Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48815112	32.79416	-116.9645
446	Pal of Mine Auto Sales	151		S Sunshine Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48815112	32.79416	-116.9645
447	El Cajon Nutrition Center	325		Van Houten Ave	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48733109	32.79237	-116.96593
448	Beau's Distribution	380		Vernon Way	907.13	7319		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302267	32.8127	-116.96584
449	Trepco West Grocery Depot	333		Walter Way	907.13	5141		Wholesale Trade; Nondurable goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918074	32.79799	-116.93439
450	M&N Auto Services & Sales	344		Walter Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918054	32.79831	-116.93479
451	Wild Orchid Florist	908		E Washington Ave	907.13	5992		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	49310208	32.78782	-116.9507
452	Babis Bakery	910		E Washington Ave	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49310208	32.78782	-116.95055
453	7-Eleven at 0215	1479		E Washington Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128036	32.78747	-116.92761
454	7-Eleven #21834B	108		W Washington Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48828219	32.78793	-116.96265
455	Papas Pizza	111		W Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49216020	32.7875	-116.96297
456	Tres Hermanos Taco Shop	115		W Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49216020	32.7875	-116.96302
457	Washington Market	121		W Washington Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49216020	32.7875	-116.96309
458	7-Eleven #34048	1021		W Washington Ave	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264109	32.78751	-116.97453

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
459	Sombreros Mexican Food	1501		W Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128072	32.78725	-116.92715
460	San Diego Co. Fleet Service	1840		Weld Blvd	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.82705	-116.98698
461	Sprouts Farmer's Market	152		N 2nd St	907.13	5411		Food Stores	No	No	No	No	No	No	No	Yes	No	No	No	Medium	No	48917044	32.79592	-116.93643
462	Spot Free Rinse Car Wash (2nd)	329		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918055	32.79831	-116.93529
463	Firestone Complete Auto Care #2254	435		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918069	32.79948	-116.93528
464	Jack-in-the-Box #32	495		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918060	32.79997	-116.93523
465	On the Go Gas & Deli	500		N 2nd St	907.1	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931016	32.80046	-116.93602
466	Carls Jr. Restaurant #483	520		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931015	32.80067	-116.93657
467	Chen's Golden Palace	530		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931022	32.80092	-116.93597
468	El Cotixan #1	538		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931022	32.80112	-116.93598
469	Petco Animal Service, Inc.	540		N 2nd St	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931014	32.80116	-116.93692
470	Fiesta Nutrition	560		N 2nd St	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931021	32.80173	-116.93661
471	El Compadre Taco Shop	595		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48912354	32.80192	-116.93528
472	Dallmann Confections	780		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425423	32.80479	-116.93592
473	Valley Automotive	813		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48426260	32.80554	-116.93525
474	Superior Car Wash	816		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425255	32.80555	-116.93605
475	Superior Car Wash	816		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425255	32.80555	-116.93605
476	Quality RV, Inc.	1062		N 2nd St	907.1	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48421225	32.80944	-116.93611
477	Crystal Pool Service	1109		N 2nd St	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48423211	32.80992	-116.93532
478	Plant House Nursery	1163		N 2nd St	907.13	181		Ornamental Floriculture And Nursery Products	No	No	No	Yes	No	No	No	No	No	No	No	Medium	No	48423227	32.81092	-116.93507
479	DeVore Automotive	1253		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48412049	32.81244	-116.93525
480	Valerio's	1267		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48412029	32.81267	-116.93525
481	7-Eleven #13651	1296		N 2nd St	907.1	5411		Food Stores	No	No	No	No	No	No	No	Yes	No	No	No	Medium	No	48411013	32.81317	-116.93598
482	Rods Automotive	1313		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48407119	32.81363	-116.93533
483	Los Chavos Mexican Food	1340		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48404412	32.81384	-116.93597
484	Ami Sushi	755		Arnele Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48225038	32.80378	-116.97218

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
485	A to Z Leasing	889		Arnele Ave	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48225027	32.80311	-116.97322
486	Tipton Honda	889		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48225027	32.80311	-116.97322
487	Bob Baker Chevrolet/Subaru	900		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224032	32.80445	-116.97397
488	Bob Baker Lexus	1000		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224032	32.80432	-116.97521
489	Thrifty	700		Avocado Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	No	No	No	No	No	No	Yes	No	No	Medium	No	49301015	32.78739	-116.95813
490	El Pollo Loco	1145		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49329022	32.77944	-116.95747
491	Country Comfort Restaurant	1255		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49329019	32.77818	-116.9567
492	Salsa Mexican Food	1255		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49329019	32.77818	-116.9567
493	Los Mendoza Taco Shop	303		Balantyne St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48811106	32.79754	-116.95759
494	Philly Steak Subs	312		Ballantyne St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48811106	32.79754	-116.95767
495	Inflatable Design Group	1080		W Bradley Ave	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	38711039	32.81762	-116.97512
496	Del Taco #1041	141		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48322147	32.80748	-116.9606
497	Thai Style Restaurant	354		Broadway Ave	907.1	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	No	Medium	No	48309039	32.8079	-116.95842
498	Santana Mexican Grill	411		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48324087	32.80738	-116.95716
499	Food 4 Less #394	444		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48311023	32.80864	-116.95756
500	Kragen Auto Supply #1270	485		Broadway	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48324103	32.80752	-116.95654
501	Crumbs of Paris	586		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48313063	32.808	-116.95458
502	Bonnys Cafe	596		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	Yes	Medium	No	48313063	32.808	-116.95449
503	Animal Medical Center	600		Broadway Ave	907.1	742		Veterinary Services For Animal Specialties	No	Yes	No	Yes	No	No	No	No	No	No	No	Medium	No	48313063	32.80831	-116.95441
504	Los Ponchos Mexican & Seafood	777		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48428239	32.80738	-116.95256
505	Broadway Exxon #1019	898		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48428108	32.80806	-116.95131
506	Arco	900		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48428109	32.80806	-116.95054
507	Panda Rice Vietnamese/ Chinese Restaurant	907		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48428238	32.80747	-116.95051
508	Rodeo's Meat Market	927		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48428230	32.80739	-116.95019
509	A-1 Glass Company	944		Broadway	907.13	7536		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48429107	32.80794	-116.94904

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
510	Silva's Taco Shop	998		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48429110	32.8079	-116.94818
511	Discount Tires	1001		Broadway	907.13	7534		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48429429	32.80735	-116.94784
512	Spot Free Rinse Car Wash (Broadway)	1111		Broadway	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48418254	32.80744	-116.94382
513	Penske Truck Leasing Co. LP	1120		Broadway	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48418418	32.80827	-116.94338
514	Sid's Auto Body, Inc. (1129)	1129		Broadway	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48418250	32.80738	-116.94327
515	Ludington's RV	1131		Broadway	907.13	5271		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48418205	32.80738	-116.94295
516	The Truck Stop	1175		Broadway	907.13	5271		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48418212	32.80737	-116.941
517	Mason's Saw and Lawn Mower Service Inc.	1209		Broadway	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425150	32.80751	-116.93966
518	Broadway Smog Test-Only Station	1214		Broadway	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48420352	32.80801	-116.93949
519	Thornton's Irish Pub and Chop House	1221		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425147	32.80734	-116.93937
520	Trujillos Taco Shop	1275		Broadway	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425172	32.80735	-116.93694
521	Express Auto Repair and tires	1316		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48423223	32.80813	-116.93488
522	Atlantic Auto Repair	1318		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48423224	32.8081	-116.93473
523	Cartwright Termite And Pest Control	1376		Broadway	907.13	7342		Business Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48424028	32.80804	-116.93257
524	Ecology Care Inc.	1415		Broadway	907.1	782		Agricultural Services	No	No	No	No	No	No	No	Yes	No	No	No	Medium	No	50728164	32.80735	-116.93057
525	Hollywood Motors Storage Yard	1419		Broadway	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50728169	32.80734	-116.93027
526	Tender Loving Care Pet Salon	1428		Broadway	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50727025	32.80792	-116.93017
527	Jack In The box # 3050	350		E Chase Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49317233	32.78066	-116.95836
528	Starbucks Coffee #8943	450		E Chase Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49343022	32.78078	-116.95665
529	Tortilleria Salsa Market	480		W Chase Ave	907.13	5148		Wholesale Trade; Nondurable goods	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	49232015	32.78068	-116.9674
530	Happy Cow Car Wash	1055		N Cuyamaca St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48231017	32.80962	-116.97931
531	El Cajon Towing	327		Cypress Ln	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48302209	32.81633	-116.96478

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
532	Canal Transmission	1249		Denver Ln	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48409148	32.81283	-116.94898
533	Al Rafdien Restaurant	474		W Douglas Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48733125	32.79437	-116.96715
534	Auto Finance Specialists	385		El Cajon Blvd	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732317	32.79153	-116.97037
535	Thrifty #9758	398		El Cajon Blvd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48731210	32.79161	-116.97137
536	Ram 99	407		El Cajon Blvd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48753219	32.79107	-116.97113
537	Consolidated Motors	410		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48752019	32.79118	-116.97182
538	American Finance	410		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48752019	32.79118	-116.97182
539	County Wide Dealer Service	410		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48752019	32.79118	-116.97182
540	Tom Parker Auto Gallery	414		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48752011	32.79102	-116.97204
541	Ron Ellis Enterprises, Inc.	427		El Cajon Blvd	907.13	1522		Building Construction - General Contractors and Operative Builders	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48753216	32.79086	-116.97143
542	Performance Choppers	444		El Cajon Blvd	907.1	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48752013	32.79076	-116.97216
543	Heavenly Taste Cafe & Catering	533		El Cajon Blvd	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48753208	32.79031	-116.97185
544	California Smog & Auto Repair	595		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48753229	32.78987	-116.97225
545	Veys Powersports	660		El Cajon Blvd	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48750014	32.78909	-116.97391
546	Al Archard, Inc.	661		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48751201	32.7887	-116.9732
547	Legacy Cars (670)	670		El Cajon Blvd	907.1	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48748015	32.78881	-116.97442
548	Body Beautiful Car Wash, Inc.	690		El Cajon Blvd	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48749018	32.78836	-116.97477
549	Exxon Mobil	695		El Cajon Blvd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48751101	32.78789	-116.97408
550	Joes Tire Shop	765		El Cajon Blvd	907.1	7534		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49264105	32.78668	-116.97515
551	William Transmission and Auto Repair	792		El Cajon Blvd	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49265022	32.78646	-116.97647
552	Pacific Car Co.	900		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49265012	32.78504	-116.97786
553	Delias Taco Shop	293		El Cajon Blvd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732226	32.79293	-116.96947

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
554	Curb & Vent Manufacturing, Inc.	1437		Fayette	St	907.13	3444		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48214054	32.81499	-116.97736
555	On the Border	101		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48227056	32.80737	-116.96344
556	Applebees	107		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48227056	32.80737	-116.96361
557	Home Depot	298		Fletcher	Pkwy	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48307148	32.80904	-116.96472
558	Sears	575		Fletcher	Pkwy	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48227056	32.80723	-116.96868
559	Boston Market #0735	706		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48217052	32.80828	-116.97133
560	KFC #Y450061	724		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48217051	32.80828	-116.97168
561	McDonald's (Fletcher)	886		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48217075	32.80809	-116.97311
562	Oil Changer #503	906		Fletcher	Pkwy	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48212142	32.80821	-116.97349
563	Smart and Final Extra	1090		Fletcher	Pkwy	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48212149	32.80822	-116.97418
564	Parkway Bowl	1280		Fletcher	Pkwy	907.13	7999		Amusement and Recreation Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48212133	32.80823	-116.97867
565	Ponchos Mexican Restaurant	2257		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48143107	32.80282	-116.99463
566	The Barbecue Pit	2388		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48115068	32.8028	-116.99717
567	Baskin Robbins #118	2396		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48115068	32.8028	-116.99725
568	Rancho Villas	2425		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48140102	32.80218	-116.99773
569	Beef n' Bun	2477		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48139603	32.80201	-116.99864
570	Starbucks Coffee	2740		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131032	32.80082	-117.00293
571	Golden Bagel Cafe	2744		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131032	32.80093	-117.00293
572	Vons Grocery Company	2800		Fletcher	Pkwy	907.11	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131028	32.8014	-117.0037
573	Chicago on a Bun	2872		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131030	32.8015	-117.00448
574	Coco's # 1162	1025		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224038	32.80725	-116.97445
575	Executive Friendship Deli	1935		Friendship	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82434	-116.97881
576	Precision Concepts Racing	1935		Friendship	Dr	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82434	-116.97881
577	KMY Motorsports	1935		Friendship	Dr	907.13	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82434	-116.97881
578	Revolutionizer Products LLC	1957	A	Friendship	Dr	907.1	5099		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82455	-116.979
579	Elegant Buffet	1985		Friendship	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82473	-116.98019

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
580	Whillock Contracting, Inc.	346		Front	St	907.13	1521		Building Construction - General Contractors and Operative Builders	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48727111	32.79228	-116.9765
581	Boomers	1155		Graves	Ave	907.13	7999		Amusement and Recreation Services	No	Yes	No	No	No	No	No	Yes	Yes	No	No	Medium	No	48309042	32.8108	-116.96126
582	Sun Flexionics Café	790		Greenfield	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48304022	32.8145	-116.95259
583	Bastet Veterianary Hospital Inc.	1682		Greenfield	Dr	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50712015	32.81327	-116.91906
584	Janet's Cafe #1	1696		Greenfield	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50712014	32.8126	-116.91872
585	Exxon Mobil Oil Corp	1761		Greenfield	Dr	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50737045	32.811	-116.91613
586	Shadow Mountain Ministries	2100		Greenfield	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51214005	32.80001	-116.90386
587	Aztec Dining Services at Grossmont College	8800		Grossmont College	Dr	907.12	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38607109	32.81477	-117.00624
588	Autoland Inc. / Mission Federal Credit Union	826		Jackman	St	907.13	6061		Depository Institutions	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224048	32.8066	-116.97377
589	Ottavio's Cucina Italiana	101		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51117048	32.79538	-116.93541
590	Fruitland & Deli	109		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51117054	32.79502	-116.9349
591	Popeyes Chicken	110		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48921045	32.7944	-116.93611
592	Revco Gas	303		Jamacha	Rd	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51128040	32.79245	-116.93307
593	Ricos Deli Expresso & Smoothie Bar	538		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51126071	32.78933	-116.93042
594	La Hadas Mexican Food	558		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51126071	32.78907	-116.93001
595	Christy's Donuts	657		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51155010	32.78847	-116.92823
596	Save A Lot #948	678		Jamacha	Rd	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51126071	32.78827	-116.92914
597	Express Hand Car Wash	710		Jamacha	Rd	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51402144	32.7874	-116.92835
598	7-Eleven Store #25302	711		Jamacha	Rd	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51128036	32.78737	-116.92758
599	Harvest Ranch #1	759		Jamacha	Rd	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51128095	32.78614	-116.92756
600	Jamacha Bar and Grill	777		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51128096	32.78585	-116.92736
601	Karina's Mexican Seafood	820		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51402226	32.78479	-116.92815
602	Omega Fuel Injection	1934	B	John Towers	Ave	907.1	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82432	-116.98059
603	Diesel System Services	1934	B	John Towers	Ave	907.1	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48302113	32.81504	-116.97039
604	County Collison Center	1535		Johnson	Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732135	32.79395	-116.97056

City of El Cajon Stationary Industrial and Commercial Facilities

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
605	Caliber Collision Centers	332		N Johnson Ave	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48712171	32.79892	-116.97153
606	Aamco Transmission	355		N Johnson Ave	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712231	32.79904	-116.97032
607	Ferguson Truck Body & Equipment	383		N Johnson Ave	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No			
608	4 Wheel Parts Performance	480		N Johnson Ave	907.1	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No			
609	KIA of El Cajon	541		N Johnson Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48226017	32.80155	-116.97019
610	Hacienda La Casa Blanca	700		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224033	32.80451	-116.9716
611	Cotixan Taco Shop #3	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224031	32.80516	-116.97158
612	Thai Time Restaurant	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224031	32.80516	-116.97148
613	Subway Sandwiches (Johnson)	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224031	32.80516	-116.9714
614	Global Resource Options Inc. Gro Solar	1365	102	N Johnson Ave	907.1	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48302121	32.81372	-116.97033
615	Cutting Edge Supply	1675		N Johnson Ave	907.13	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38712132	32.81763	-116.97052
616	The Three Amigos Auto Repair & Services	605		W Lexington Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732308	32.79219	-116.96904
617	Golden Hammer Auto Body Repair	631		W Lexington Ave	907.1	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732325	32.79233	-116.96928
618	El 2 Palmas	220		E Madison Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48334032	32.80102	-116.95993
619	Freds Old Fashioned Burgers	1285		E Madison Ave	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48916217	32.80006	-116.93657
620	7-Eleven 13658F	375		W Madison Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48228308	32.80047	-116.96618
621	Panda Express #1125	190		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48719248	32.79642	-116.96267
622	Motoworld	315		N Magnolia Ave	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48804011	32.79785	-116.96093
623	Rubios Mexican Grill #8	399		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48804007	32.79894	-116.96207
624	Perry's Cafe	475		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48801036	32.80063	-116.96189
625	McKeever Inc.	1100		N Magnolia Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48307150	32.81085	-116.96335
626	Sunbelt Rentals Inc.	1114		N Magnolia Ave	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48307115	32.81134	-116.96301

City of El Cajon Stationary Industrial and Commercial Facilities

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
627	Los Rancheros	165		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48819108	32.79462	-116.96075
628	Downtown CafÃ©	182		E Main St	907.13	5813		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48808321	32.7952	-116.9605
629	Downtown Grind	200		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48808323	32.79511	-116.9603
630	Mangia Bene Ristorante	221		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48821107	32.79463	-116.95993
631	El Cajon Courthouse Cafe	250		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48811128	32.79533	-116.95928
632	Las Pita Cafe	388		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48811124	32.79525	-116.95754
633	7-Eleven Store #21788D	410		E Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48811267	32.79526	-116.95688
634	Victorias Mexican Food	677		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48823306	32.79465	-116.95469
635	El Cajon Shish Kabob	811		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48813406	32.79455	-116.95217
636	Ochoas Mexican Food	1051		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48838038	32.79458	-116.94586
637	Auto Zone #3365	1080		E Main St	907.1	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48913029	32.79532	-116.94543
638	Foodland I.G.A.	1099		E Main St	907.13	5411		Food Stores	No	No	No	No	Yes	No	No	No	No	No	No	Medium	No	48838006	32.79455	-116.94512
639	E Z Corner Market	1107		E Main St	907.13	5921		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48938011	32.79466	-116.94363
640	Super Star Stations	1110		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48915027	32.79525	-116.94423
641	J's Grill	1183		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	No	Medium	No	48938024	32.79459	-116.94173
642	Auto Repair for Less	1189		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48939002	32.7947	-116.9405
643	Country Waffles	1248	260	E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48917046	32.79517	-116.93829
644	Rally's Hamburgers	1261		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48939004	32.79471	-116.93862
645	Poncho's Taco Shop	1279		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48939013	32.79452	-116.93755
646	Wienerschnitzel	1281		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48939013	32.7947	-116.93762
647	Rita's Mexican Food Inc./ Rita's Catering	1291		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48921044	32.79489	-116.93661
648	Good Times RV	1338		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918019	32.79773	-116.93369
649	Garcia's Pueblo Mercado	1365		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918037	32.79785	-116.93243
650	Rosendos Mexican Food	1408		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918031	32.80001	-116.93104
651	Arco/Smog Pros	1410		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918031	32.79997	-116.93098
652	Kaelins Market	1435		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51101426	32.80053	-116.92929
653	Rick's RV Center	1546		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50731037	32.80558	-116.92524

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
654	El Cajon Ford	1595		E Main St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50733025	32.8068	-116.92164
655	Main St Valero and Car Wash	1699		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50720041	32.81201	-116.91834
656	Chevron Store #59	1701		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50721105	32.81244	-116.91793
657	G&M Oil Co. #59	1701		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	50721105	32.81244	-116.91793
658	Los Panchos Taco Shop	1709		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50721104	32.81262	-116.91784
659	BJs Equipment Rentals	1717		E Main St	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	50721102	32.81316	-116.91734
660	Marietas East	1746		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50712020	32.81369	-116.9181
661	Armstrong Garden Centers, Inc	1755		E Main St	907.13	181		Ornamental Floriculture And Nursery Products	No	No	No	Yes	No	No	No	No	No	No	Yes	Medium	No	50721101	32.81411	-116.91658
662	Mamma Rosa Pizza	1773		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50721101	32.81445	-116.91665
663	Taste of Athens	1784		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50712023	32.81462	-116.91719
664	Abbey Clinic for Pets	1787		E Main St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50721101	32.81428	-116.91684
665	China Panda Garden Restaurant	1788		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50712023	32.81456	-116.91721
666	Starbucks Coffee #6530	124		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48719255	32.7953	-116.96296
667	Colimas Mexican Food	339		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48734101	32.79475	-116.96546
668	Greektown Restaurant Buffet	345		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48733101	32.79475	-116.96552
669	Hometown Buffet #722	390		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	No	Medium	No	48719253	32.7954	-116.96593
670	Jack In The Box #7	393		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48733102	32.79458	-116.96571
671	Hammurabi Family Restaurant	401		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48733135	32.79442	-116.96642
672	Ultimate Champion of Tires	445		W Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48733123	32.79469	-116.96706
673	Best Auto Wholesaler	476		W Main St	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48716005	32.79532	-116.96792
674	Trust Auto Repair	537		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48732130	32.79465	-116.9688
675	California Deli Works	553		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48732111	32.79467	-116.96931
676	Kladis Painting, Inc.	557		W Main St	907.13	1721		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732111	32.79479	-116.96934
677	Clifton Mercedes Independent Sales/Service	1033		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48728132	32.79469	-116.97466

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
678	Denny's Restaurant #7225	1202		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48711018	32.79535	-116.97791
679	Sombreros Mexican Food, Inc.	1215		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48725045	32.7947	-116.97824
680	Banny Hom Enterprises	1240		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	Yes	No	No	Yes	No	No	No	Medium	No	48711015	32.79525	-116.97882
681	Champion Collision and Paint/World Auto Body	187		N Marshall Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48712178	32.79606	-116.97486
682	C&D Towing Specialists	187		N Marshall Ave	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48712178	32.79606	-116.97486
683	The Auto Center	243		N Marshall Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712179	32.79656	-116.97504
684	Sam's Quality Auto Care	267		N Marshall Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.79702	-116.97525
685	A&A Smog Test Only Station	267		N Marshall Ave	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.79702	-116.97516
686	Fast Water Heater Company	275		N Marshall Ave	907.13	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.79712	-116.97524
687	Dragonfire San Diego	283		N Marshall Ave	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.79722	-116.97524
688	AA Equipment	411		N Marshall Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	Yes	No	No	No	Medium	No	48712186	32.79882	-116.97484
689	Classic Towing	1101		N Marshall Ave	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48212124	32.81036	-116.9754
690	Natural Env. Inc.	1162		N Marshall Ave	907.13	781		Agricultural Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48232003	32.8114	-116.97601
691	Callen Camper Co.	125		S Marshall Ave	907.13	7549		Automotive Repair Services, and Parking	Yes	No	Yes	No	No	No	No	Yes	No	No	No	Medium	No	48728105	32.79422	-116.97512
692	Auto Tech	590		S Marshall Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48764017	32.78968	-116.9758
693	Superstition Motors Inc.	606		S Marshall Ave	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48765011	32.78942	-116.97576
694	Gene Townsend Auto Body & Paint	609		S Marshall Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48748011	32.78939	-116.97514
695	Taco Bell #3077	584		N Mollison Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48338038	32.80214	-116.95132
696	Quick Trip Fuel & Market	596		N Mollison Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48338041	32.80251	-116.95142
697	Dennys Restaurant	665		N Mollison Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48432243	32.80368	-116.95048
698	Distinctive Carpet Care	681		S Mollison Ave	907.13	7349		Business Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49310208	32.788	-116.95074
699	New East Buffet, Inc.	555		Montrose Ct	907.1	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	Yes	Medium	No	48230111	32.80148	-116.96364
700	Denny's Restaurant #6227	2691		Navajo Rd	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131015	32.80127	-117.00174
701	Taco Bell #16534	2827		Navajo Rd	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131021	32.80207	-117.00428

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
702	Clancy's Towing	1385		Pioneer Way	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48302229	32.81422	-116.96677
703	D3 Equipment	1475		Pioneer Way	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48302247	32.81541	-116.96748
704	Modern Septic Service Inc	1506		Pioneer Way	907.1	1711		Construction - Special Trade	No	No	Yes	No	No	No	No	Yes	No	No	No	Medium	No	48302109	32.81583	-116.96833
705	Pacific Production Plumbing	1584		Pioneer Way	907.13	1711		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48302106	32.81668	-116.96812
706	Builders Moulding Supply	1675		Pioneer Way	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38712130	32.81757	-116.96727
707	Fletcher Hills Towing / Road One Allied Garden	1357		Pioneer Way	907.1	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	Yes	No	No	No	Medium	No	48302230	32.81393	-116.96673
708	Team Automotive Repair	354		Walter Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918078	32.79847	-116.93473
709	Autohaus Stebel, Inc.	885		E Washington Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49310471	32.7874	-116.95136
710	Decker's Auto Service	930		E Washington Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49310219	32.78814	-116.95016
711	7-Eleven Food Store #16057B	1102		E Washington Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48927301	32.78801	-116.94421
712	Dominos Pizza #7705	1104		E Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48927301	32.78794	-116.94415
713	Arco Facility #9572	1484		E Washington Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51155009	32.78804	-116.92786

City of El Cajon
STORMWATER
Pollution Prevention Program

STORM WATER ADMINISTRATIVE CITATION PROGRAM CRITERIA

1. Issue a Warning (followed by a letter, when possible)
   a. Whenever a discharge of pollutants is imminent or the potential exists, but the discharge has not yet entered the storm drain conveyance system (street, gutter, catch basin, etc.)
   b. Whenever a BMP is not effective for the pollutant or discharge and other BMP alternatives are available.
   c. Whenever a discharge origin cannot be determined through factual, investigative, or empirical evidence. Provide a cleanup schedule to be used as future enforcement.
   d. Small residential projects of less than 500 square feet of disturbed soil.
   e. An approved erosion and control plan has been issued and BMPs are partially implemented.
   f. Whenever activities are conducted in the right-of-way and no BMPs are implemented.
   g. Whenever a discharge of fully recoverable pollutants are discharged into the City's storm drain system (street and gutter only).

2. Issue a Citation
   a. Whenever there is a sewage overflow. (e.g. blockage; clean-out cap was removed to allow sewage to discharge into the street and storm drain).
   b. Whenever there is a discharge of unrecoverable pollutants into the storm drain conveyance system (street, gutter, catch basin, etc.)
   c. A Warning was previously issued (verbal or written).
   d. Any direct discharge into Forester Creek specifically any material which contains a 303(d) listed pollutant adopted by the State of California.(pH, TDS, and fecal coliform).
   e. An approved erosion and control plan has been issued and no BMPs are implemented.
   f. An egregious act of discharge (e.g. illegal dumping)

3. Issue a Penal Code Violation (PC374.3, 374.4, 374.7)
   a. When a First Citation was previously issued and this is a repeat violation.
   b. When the discharge is executed in the presence of any City Staff or after being told to cease operations. (waste, sewage, and litter discharges)
   c. Any direct discharge into Forester Creek, specifically material containing pollutants for which a 303(d) listing has been adopted by the State of California.(pH, TDS, and fecal coliform).

4. Issue a Stop Work Order
   a. For construction sites that received a warning and a first violation for discharging pollutants due to ineffective or proposed, but not yet implemented BMPs.
   b. A discharge of pollutants into the storm drain system, in addition to a citation, that requires immediate corrective action or mitigation.

5. Refer to Regional Board
   a. Repeated violations by a private citizen, property owner, or business for discharges to the storm drain system.
   b. A refusal to mitigate, remediate, or clean a spill or discharge of pollutants that will enter or have entered City MS4.

CITY OF EL CAJON

200 East Main Street
El Cajon, CA 92020

Citation No. 00075

☐ Building ☐ Planning
☐ Fire ☐ Public Works

ADMINISTRATIVE CITATION

☐ WARNING

☐ 1ST CITATION $100 per violation ☐ 2ND CITATION $200 per violation ☐ 3RD CITATION $500 per violation ☐ OTHER _____ $_____

PAYMENT OF $_____ IS DUE NO LATER THAN _____. (See reverse side for payment information.) PAYMENT DOES NOT EXCUSE CORRECTION OF THE VIOLATION.

CORRECTION OF THE VIOLATION(S) INDICATED BELOW MUST BE COMPLETED BY: _____ (Date)

IF YOU FAIL TO CORRECT THE VIOLATION(S) BY THIS DATE, THE NEXT LEVEL OF CITATION MAY BE ISSUED.

PERSON CITED

Last Name First M.I.

Mailing Address City / State Zip Code

Violation Address City

☐ Property Owner ☐ Tenant
☐ Business Owner ☐ Other

Business Name _____

Assessor's Parcel Number

Code Section Violated	Date of Violation	Description Of Violation

☐ See attached for additional violations

Correction(s) Required

Issuing Officer: _____ Phone: (619) _____ Date Issued: _____

Signature of Person Cited: _____
(Signing this citation acknowledges receipt only, and is not an admission of guilt)

Citation Served: ☐ In person to: _____ ☐ Posted on Property
☐ By Mail ☐ Other _____

SEE REVERSE SIDE FOR APPEAL RIGHTS AND OTHER IMPORTANT INFORMATION

WHITE – CITY YELLOW – RESPONSIBLE PARTY PINK – FINANCE

CITY OF EL CAJON

STORM WATER COMPLIANCE INSPECTION FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Inspected by D-MAX Engineering, Inc.

Inspector Name _____ Date ___/___/___ Time _____ AM / PM

Type of Inspection:
☐ Routine ☐ Follow-up
☐ Complaint Investigation

Result: ☐ Full Insp. ☐ Could not Contact ☐ Not Inventoried ☐ Moved, Vacant ☐ Refused
☐ Moved, Replaced by _____ ☐ Follow-up (i.e. not full)
☐ Out of Jurisdiction ☐ Duplicate of: _____ ☐ Mobile

A. CONTACT INFORMATION

Original	Changes
Business Name _____	Business Name _____
Street Address _____	Street Address _____
	☐ change _____
Responsible Person(s) _____	Responsible Person(s) _____
Title: _____	Business Telephone # (____) _____ - _____ ext. _____
Business Telephone # (____) _____ - _____ ext. _____	Business Fax # (_____) _____ - _____
Business Fax # (_____) _____ - _____	

Home Based? ☐ Yes ☐ No Mobile Business? ☐ Yes ☐ No

Is this facility located in a multi-suite complex? ☐ Yes ☐ No

Facility personnel present: _____

B. FACILITY/SITE INFORMATION

Principal activity: _____

Assigned NAICS code(s) _____ and/*or* SIC Code(s) _____

Does NAICS Code best represent principal activity: ☐ Yes ☐ No SIC? ☐ Yes ☐ No

Recommended change of NAICS Code(s)? _____ Of SIC? _____

Existing NAICS code(s) _____ *and* **SIC Code(s)** _____

Status Update (if no longer active in City or does not need an inspection): ☐ Moved/Out of Business ☐ Duplicate
☐ Not Inventoried ☐ Out of Jurisdiction

Does facility have a current business certificate? ☐ Yes ☐ No #_____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐ Mandatory ☐ Conditional ☐ No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐ Yes ☐ No WDID: 9 37I0_____

Has facility filed a Notice Of Termination (NOT) for the WDID# listed above? ☐ Yes ☐ No Approval date: _____ month/yr

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a storm water monitoring program? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Approximate distance to receiving water body: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Discharge points: _____

Approximate area covered by industrial or commercial activities: _____ square feet

Approximate % impervious surface of this area _____ %

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP Assessment

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.1 General					
Keep site free of litter, debris, and sediment using dry methods					
Keep parking lots, sidewalks, and streets free of sediment and debris using dry methods					
Keep outdoor areas free of spills and leaks					
Collect water from pressure washing or hosing and dispose of appropriately					☐ Unknown Performed by:
Direct roof downspouts away from areas of potential pollutants					
Sewer lateral(s) maintenance					
Establish a regular schedule for private sewer lateral maintenance					
D.2 Landscaping					
Properly manage pesticides/fertilizer; use IPM when feasible					☐ Unknown Landscaping Co:
Employ adequate erosion prevention measures (vegetation or physical stabilization)					
Minimize over watering/over-irrigation					
Properly store stockpiles to prevent material transport					
Properly store and dispose of green waste					☐ Unknown
D.3 Materials and Wastes					
Protect trash area from contact with storm water					
Keep trash area free of litter and debris, liquids, powders, sediment					
Adequately cover materials stored outside					
Prevent run-on from contacting materials stored outdoors					
Properly label outdoor storage containers					
Provide an accessible, functional spill response kit					
Equip liquid storage containers with secondary containment					
Keep secondary containment free of spills and rainwater					
Properly store and dispose of hazardous materials					
Keep loading and unloading areas, including drains, free of debris					
Dispose of water generated by processing activities appropriately					
Dispose of pool, spa, fountain, and filter backwash water properly					☐ Unknown Performed by:

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
Clean floor mats in locations that do not drain to storm drain system					
D.4 Equipment, Vehicles, and Outdoor Activities					
Conduct outdoor activities within contained areas (garage, under canopy, work shop)					
Use drip pans to collect leaks/spills					
Drain fluids from all non-operational vehicles stored outdoors					
Vehicle and equipment fueling					
Provide materials (berm, mat, etc.) to protect storm drain inlets from spills and leaks					
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4					
D.5 Other					
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff					
Keep grease bin and area surrounding grease bin free of grease stains/spills					
Keep storm drain inlets free of grease and other food debris					
Identify and eliminate illicit connections and illegal discharges					
Provide storm water training for appropriate employees					

D.6 ADDITIONAL REQUIRED ACTIONS

☐ Based on inspection findings, it appears likely that significant levels of _____ would be present in storm water discharges from this site. Take action to reduce the levels of _____ to the maximum extent practicable. Treatment control BMPs are likely necessary.

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax

Please refer to http://www.ci.el-cajon.ca.us/dept/works/stormwater.html for more information on BMP implementation options.

D.7 Additional Questions	Comments/Results
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐ Painting ☐ Sandblasting ☐ Fuel Distribution ☐ Dust dispersion or mineral processing ☐ Metal smelting ☐ Metal plating or anodizing ☐ Chemical production or mixing ☐ Large fuel burning device ☐ Incinerator
Does facility have a grease trap or grease interceptor?	☐ No ☐ Grease Trap ☐ Grease Interceptor ☐ Unknown
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A

What is the approximate percentage of the site that drains to the treatment control BMPs?	☐ N/A
Do major potential pollutant sources drain to treatment BMP(s)?	☐ All ☐ Some ☐ None ☐ N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	NOI NONA/NEC IF IF-S SP SP-S IS IS-S AF AF-S DU DU-S MB

E. STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE*

☐ Non-compliance with the State Industrial Storm Water General Permit noted.

☐ In the future, under a new Industrial Permit, which has not yet been adopted, this facility may be able to qualify for exemption from Permit coverage based on no outdoor exposure.

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE*:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit—see Attachment 3 of the Industrial Permit (www.waterboards.ca.gov/stormwtr/industrial.html).

☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP)—see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required:

F. CORRECTIVE ACTION SUMMARY

☐ **Corrective Actions Required.** Please refer to sections D.1-D.6 and E of this form

☐ No Corrective Actions Required at this Time.

G. RECOMMENDED CITY ACTIONS**

Follow Up Inspection Priority: ☐ **Priority 1** ☐ **Priority 2** ☐ **Priority 3**

ASSESSMENT

Level of knowledge regarding stormwater issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

*Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

**Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

CITY OF EL CAJON

SWPPP/BMP PLAN AND/OR STORM WATER MONITORING PLAN ATTACHMENT

Inspected by D-MAX Engineering, Inc.

SWPPP REVIEW* **Does facility maintain a SWPPP/BMP Plan:** ☐ Yes ☐ No ☐ Unknown ☐ Not Available

SWPPP Component	Provided		Comments
Site Map/Description	☐ Yes	☐ No	
Materials List	☐ Yes	☐ No	
Significant Spills/Leaks	☐ Yes	☐ No	
Pollution Prevention Team (Identification of current team members.)	☐ Yes	☐ No	
Industrial Activities	☐ Yes	☐ No	
Pollutant Sources/Risks	☐ Yes	☐ No	
Compliance Activity Schedule (Procedures to conduct annual site compliance evaluation.)	☐ Yes	☐ No	
Employee Training	☐ Yes	☐ No	
Accessible to staff	☐ Yes	☐ No	
Storm Water BMPs	☐ Yes	☐ No	

*The SWPPP review portion of the inspection focuses mainly on proposed BMPs and monitoring practices. It is not intended to be a comprehensive assessment of compliance with all SWPPP-related requirements of the General Industrial Permit.

STORM WATER MONITORING PROGRAM

Does this facility have a storm water monitoring program? ☐ Yes ☐ No ☐ N/A

Was appropriate monitoring conducted during the most recent wet season? ☐ Yes ☐ No

If not, does the facility have documentation of no qualifying rain events? ☐ Yes ☐ No

If not, is the facility in a GMP and not scheduled for most recent year? ☐ Yes ☐ No

Do monitoring results show that existing BMPs are effective in removing pollutants? ☐ Yes ☐ No ☐ None Available

If not, were potential sources of the identified pollutants observed during the inspection? ☐ Yes ☐ No

If yes, list the potential sources and their associated pollutants: _____

Exceedances Noted (list dates, locations, constituent(s) and numeric value(s)):

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

"RW 303(d)" = Receiving water impairments, as listed in the most recent 303(d) list
"WS COC" = High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
"PDP" = pollutant discharge potential.
"Emp. Training" = employee training activities focused on storm water pollution prevention
"Housekeeping" = standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
"Minor Struct." = minor structural BMPs that do not require building permits, such as covering with tarps or building berms
"Major Struct." = major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results* are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results* are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results* are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results* above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results* exceed the EPA benchmark by an order of magnitude or more

City of El Cajon

Storm Water Quality Inspection for Commercial Sites (Eating Establishments)

BMP COMPLIANCE REPORT

You Are the Solution to Stormwater Pollution!

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Restaurant Name: _____ Address: _____

Inspector Name & Phone #: _____ Date: ____/____/____ Time: _____ AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation **APN**: _____

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

Does Project Maintain a Stormwater Pollution Prevention Plan (SWPPP)? ❑ Yes ❑ No WDID: _____

Nearest Receiving Water(s): _____ Discharge Observed: ❑ Yes ❑ No _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

The Following List summarizes Minimum BMPs Required by the City of El Cajon Storm Water Ordinance (13.10) Additional BMPs May Be Required due to Site Conditions, Specific Activities, or by the Enforcement Official.

Minimum Construction Requirements	BMP Implemented? YES	NO	N/A	Comments / Recommendations
Non-SW Discharges – SC10				
Spill Prevention/Control/Cleanup – SC11				
Loading/Unloading – SC30				
Liquid Container Storage – SC31				
Waste Handling/Disposal – SC34				
Building/Grounds Maintenance – SC41				
Building Repair/Construction – SC42				
Parking/Storage Maintenance – SC43				
Drainage System Maintenance – SC44				
Employee Training – City of El Cajon				
Private Sewer Lateral Maintenance - City of El Cajon				
Over Watering Minimization - City of El Cajon				
Other				
Other				
Other				
Other*				

VIOLATIONS / REQUIRED CORRECTIVE ACTIONS

❑ Violation of Stormwater Ordinance: _____

❑ No Violations Have Been Noted; However BMP Implementation Is Required _____

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

200 E. Main Street, El Cajon California 92020 *TEL 619-441-1653 / FAX 619-579-5254*

"No Exposure" Conditional Exemption For Industrial Facilities

The proposed USEPA rules will establish a conditional exemption called a "No Exposure Exemption" for owners and operators of industrial facilities who can show that industrial materials, material handling operations and industrial processes, are not exposed to stormwater. Essentially, this exemption replaces the previous exemption for "light industry" which was remanded to USEPA from federal court to further define and substantiate the justification for such an exemption. A written certification will be required to be submitted to the permitting authority every three years on a form supplied by the authority. This potential conditional exemption applies to all industrial categories regardless of type, except construction sites and sources individually designated. The conditions for qualifying for the No Exposure Exemption will include the following:

1. Notification to the permitting authority at the beginning of each permit term;
2. Must allow the permitting authority or municipality to inspect the facility and to make the results of inspection public;
3. Upon request, submit a copy of the certification to the municipality in which the facility is located; and
4. Sign and certify the certification.

The permitting authority will still retain the legal authority to require the owner or operator of an industrial facility to apply for an individual or general NPDES permit if it determines that the discharge is, or may reasonably be, causing or contributing to a violation of a water quality standard, or is or may be interfering with the attainment or maintenance of a water quality standard, including a designated use.
In connection with the No Exposure Exemption being considered, USEPA is seeking comments on the issue of how to define "no exposure." Several important issues are listed for further review (but are not part of this proposed rule), including:

1. How to account for stormwater runoff from parking lots, roof tops, lawns and other non-industrial areas of an industrial facility;
2. Whether the construction of impervious surfaces, such as roofs to achieve no exposure that significantly increase stormwater runoff volume should be regulated to prevent adverse impacts to the receiving water simply due to increased quantity of flow;
3. Whether air emissions from roof vents or stacks should be considered in the evaluation of no exposure; and
4. Whether tight non-leaking drums, barrels or dumpsters are sufficient to quality for the no exposure exemption, or should there be a "potential to leak" evaluation included.

EL CAJON STORM WATER PROTECTION PROGRAM

FLOOR MATS, GREASE, OUTDOOR CLEANING, AND DUMPSTERS

In California, the storm water and sanitary sewer systems are separate. **They are *NOT* connected**. The sanitary sewer takes wastes from sinks, showers, and toilets to a treatment plant. The storm drain system collects polluted urban runoff and discharges without treatment, to creeks and rivers leading to ocean bays causing beach closures.

En California, el sistema de drenaje pluvial y el alcantarillado sanitario de aguas negras son independientes. **Estos sistemas *NO* están conectados**. El sistema de alcantarillado sanitario de aguas negras aleja desperdicios de fregaderos, regaderas, y escusados a una planta de tratamiento. El sistema de drenaje pluvial atrapa aguas pluviales contaminada por urbanización y fluye sin tratamiento alguno directamente a nuestros ríos, arroyos, bahías y mar provocando el cierre de playas.

CLEANING FLOOR MATS

Clean floor mats, filters and garbage cans in a mop sink, floor drain or proper outside area. **DO NOT** wash them in a parking lot, alley, sidewalk or street.

Limpie los tapetes de piso, los filtros y los botes de basura en un fregadero para trapeadores, desagüe de piso o en algún sitio apropiado afuera. **NO** los lave en los estacionamientos, callejones, veredas o en la calle.

RECYCLE GREASE & OIL

Recycle Grease & Oil. **DO NOT** pour it into sinks, floor drains, or onto a parking lot or street.

Recicle grasa y aceite. **NO** los arroje en lavaderos o desagües de piso ni en estacionamientos o calles.

DRY CLEANING METHOD

Use dry methods for spill cleanup (sweeping, cat litter, etc.) **DO NOT** hose down spills.

Use métodos secos para limpiar los derrames (escobas, aserrín, etc.). **NO** utilize mangueras para limpiar los derrames.

KEEP DUMPSTER AREA CLEAN

Keep dumpster area clean and lid closed. **DO NOT** fill it with liquid waste or hose it out.

Mantega el área alrededor del basurero limpia y la tapa del basurero cerrada. **NO** lo llene con desperdicios líquidos ni utilice la manguera.

WASHWATER DISPOSAL

Pour washwater into a janitorial or mop sink. **DO NOT** pour it out onto a parking lot, alley, sidewalk or street.

Arroje el agua empleada en la limpieza al fregadero para trapeadores. **NO** la arroje en los estacionamientos, callejones, veredas o en la calle.

It is illegal to purposefully or accidentally discharge pollution (anything other than rain water) into the streets, gutters, creeks, rivers, and ocean. To do so is in violation of El Cajon's Municipal Code 13.10 and the Federal Clean Water Act. Monetary fines and criminal charges may be issued.

Es contra la ley descargar contaminantes intencionalmente o accidentalmente (excepto agua de lluvias) a las calles, orillas de calle, arroyos, ríos, y océano. La descarga de contaminantes al sistema de drenaje pluvial es una violación del Código Municipal de la Ciudad de El Cajon (13.10) y de leyes Federales del "Clean Water Act". Multas y otras acciones legales podrían ser generadas en su contra.

ADOPT GOOD HOUSEKEEPING PRACTICES AND HELP KEEP OUR STREAMS, RIVERS, AND BEACHES CLEAN. FOR MORE INFORMATION, CALL (619) 441-1653.

ADOPTE PRACTICAS EFECTIVAS PARA EL MANEJO DE AGUAS PLUVIALES QUE REDUSCEN LA CONTAMINACIÓN Y AYUDE A MANTENER NUESTROS ARROYOS, RIOS, Y PLAYAS MÁS LIMPIOS. PARA MAYOR INFORMACIÓN LLAME AL (619) 441-1653.

STORM WATER PROTECTION IS IN GOOD HANDS...YOURS!

Operate a clean, dry shop. Sweep, mop or vacuum instead of hosing down garage floors or outdoor work areas.

Opere un negocio seco y limpio. Barra, trapée, o limpie con aspiradora en vez de regar con manguera los pisos de los garajes o las áreas de trabajo exteriores.

Prevent spills and leaks. Develop spill prevention and response procedures. Use drip pans and ground cloths under vehicles. Drain and recycle fluids from wrecked or leaking vehicles as soon as possible.

Prevenga los derrames y las goteras. Desarolle un plan para prevenir y responder a estos derrames. Use recipientes recolectores y trapos debajo de los vehículos. Tire y recicle los fluidos de los vehículos chocados o de los que tengan goteras tan pronto que sea posible.

Prevent wash water from entering storm drains. Use a commercial car wash facility for cleaning vehicles. It is illegal to allow car wash runoff from commercial vehicles to enter the storm drain.

Prevenga que la agua sucia entre en las alcantarillas. Use un negocio comercial del lavado de auto. Es ilegal permitir que la agua usada del lavado de vehículos comerciales entre en las alcantarillas.

Protect outdoor work and storage areas. Cover equipment/ materials and work/ storage areas. Place bulk fluids in secondary containment.

Proteja las áreas de trabajo y almacenamiento exteriores. Cubra estas áreas y también los equipos y materiales. Ponga los fluidos de grandes cantidades en recipientes secundarios.

Clean parts in a self-contained sink/drum unit when working with solvents. Inspect parts-washing units daily for leaks and make necessary repairs immediately. Use aqueous cleaning solutions instead of solvents when possible. Recycle used solutions through a licensed hazardous waste hauler.

Limpie las piezas y los repuestos en una unidad de fregadero/ tambor cuando trabaje con solventes. Inspeccione las partes de la unidad de limpieza diariamente para detectar goteras y haga los arreglos necesarios inmediatamente. Use soluciones a base de agua en vez de los solventes cuando sea posible. Recicle las soluciones usadas por medio de una compañía con licencia para transportar deshechos peligrosos.

Dispose of waste properly. Recycle oil, oil filters and antifreeze. Never pour liquids down the gutter or storm drain.

Disponga de los deshechos correctamente. Recicle el aceite, los filtros de aceite y los anticongelantes. Nunca debe tirar líquidos en las alcantarillas o rejillas.

Storm water and the pollutants it carries flow directly into the nearest creek, river, lake or lagoon, eventually reaching the ocean. Do your part to help keep our waters clean for you, your family and our environment.

Las aguas pluviales llevan los contaminantes directamente a los arroyos, rios, lagos y lagunas, y finalmente se desembocan al océano. Haga su parte ayudando a mantener nuestras aguas para usted, su familia y el medio ambiente.

This poster is brought to you by the San Diego Regional Copermittees. To report complaints or for more information, call the Regional Stormwater Hotline at 1-888-846-0800.

Storm Water Pollution Prevention Program
THINK BLUE
You're the solution to storm drain pollution.
Protecting our beaches, bays, and waterways

project clean water

GENERAL BEST MANAGEMENT PRACTICES FOR INDUSTRIAL AND COMMERCIAL FACILITIES

In accordance with Section D.3.b of the Municipal Permit, the City of El Cajon developed an inventory of general best management practices that may be selected where appropriate for implementation at all industrial facilities and high priority commercial facilities of the Jurisdictional URMP and revisions. General BMPs emphasize *non-structural* BMPs as an initial step toward low-cost, feasible implementation. In addition to general BMPs, high priority industrial and commercial facilities are also required to implement applicable activity-specific BMPs listed in the City's Updated JURMP document (Appendix C.3.2 and C.3.3). General BMPs are listed below in three tables:

TABLE OF CONTENTS PAGE

TABLE 1. GOOD HOUSEKEEPING BMPS 1
TABLE 2. MATERIALS HANDLING BMPS 3
TABLE 3. EQUIPMENT MAINTENANCE BMPS 7

In addition to the information provided within this section, more specific BMP information can be obtained from the Caltrans Storm Water Quality Handbooks (2003) and the California Storm Water Best Management Practice Handbook for Industrial/Commercial Facilities (2003).

TABLE 1. GOOD HOUSEKEEPING BMPS

BMP Name	Purpose	Description
Routinely Report Any Observed Non-Storm Water Discharges	Prevent improper handling and disposal of significant materials that may be spilled or deposited into the storm drain system	Develop adequate routine reporting procedures so personnel can identify an act of illegal dumping or suspicious non-storm water discharges; Post signs with information regarding appropriate reporting procedures
Perform Regular Cleaning	Eliminate the accumulation of pollutants (dirt, surplus materials, spilled or dropped substances, litter, and debris) that collect in areas that can discharge runoff to storm water. Such areas include maintenance shops, manufacturing facilities, metal fabrication shops, mechanic garages, loading docks, and storage areas	Maintain regular sweeping and cleaning schedules; Keep work areas dust free and orderly; Keep floors and ground surfaces dry using brooms, shovels, vacuum cleaners; Collect and dispose of garbage regularly
Avoid Hosing Down the Site	Eliminate contaminated runoff generated by "wet" cleaning or hosing down of outdoor paved areas such as work stations, loading/unloading sites, maintenance shops, storage areas, and any areas that may contribute pollutants to storm water	Dry methods of cleaning include sweeping, using damp rags or mops and vacuums; If hosing is necessary the downstream storm drain should be permanently or temporarily modified with a plug such as a rubber mat, filters, absorbent blankets or bermed with sandbags.
Perform Regular Pavement Sweeping	Prevent trash, litter, and particulate matter from accumulating on paved surfaces and reduce the potential for these materials to wash into storm drains during storm events	The frequency of regular dry sweeping should be scheduled according to the quantity, toxicity and usage of materials, proximity to source area, evidence of exposure to storm system, probability of exposure, and sensitivity of receiving water
Place Trash Receptacles in Appropriate Locations	Promote the proper placement, handling, and disposal of waste materials to reduce spillage and accumulation in outdoor areas that are exposed to storm water runoff	Place trash receptacles in accessible locations and in sufficient numbers; Train personnel as to the location of trash receptacles and waste handling areas
Train Employees to Properly Dispose of Wastes	Keep employees and personnel informed and aware of the most recent BMPs regarding waste management	New employees should be trained regarding proper waste handling such as warnings about pouring deposit wastes into the storm drain, reporting observed discharges, and recycling procedures; All employees should be trained annually
Permanently Seal Floor Drains that Discharge to the Storm Drain System	Eliminate connections that act as a pathway for spilled or leaked pollutant materials to enter the storm drain system	Interior floor drains should be permanently sealed (whenever safe for structural integrity) to prevent accidental illegal dumping of contaminants into the storm drain system
Confirm that No Industrial Sinks are Connected to the Storm Drain	Eliminate direct connections that can introduce pollutants to the storm drain system	Sinks in industrial areas should be connected to the sanitary sewer system or appropriate disposal locations; Review and inspect "As-built" piping diagrams and building or site plans to verify that sinks are not connected to any storm drain
Store Waste and Recycling Materials in Proper Containers	Protect waste and recycling materials from exposure to wind, weather elements and scavengers that can transport pollutants to storm water	Dry waste such as light scrap metal, floor sweepings, metal chips and paper that can be affected by wind should be kept in sealed containers; Keep dumpsters closed; Seal recycling drums; Label containers, keep them readily accessible and empty containers regularly

BMP Name	Purpose	Description
Control Roof Downspout Discharge	Where possible, divert runoff collected on roofs, canopies and other coverings from discharging into areas of potential pollutant use or storage	Downspouts should be directed to avoid critical areas such as fueling, fabrications, lead tool, and dye storage of hazardous waste storage areas
Minimize Storm Water Run-On from Adjacent Facilities and Properties	If possible, divert run-on generated by neighboring facilities or adjacent properties before it can enter the site grounds. This should be done in such a manner as to prevent flooding of adjacent property.	Berming, diversion ditches, and dikes can direct flow away from the site; Vegetated strips, grass swales, or infiltration basins and trenches can impede slow incoming flow
Conduct Refresher Courses in Operating and Safety Procedures	Reduce spills and accidents that may cause significant materials to contaminate the storm drain system	Personnel should be required to have training and refresher courses to learn new procedures and policies regarding equipment operation and review correct operating and safety procedures
Designate Special Areas for Draining or Replacing Fluids	Eliminate improper handling and disposal of waste and reduce accidental spillage of significant materials in an unprotected area	Motor oil, coolants, and other potential pollutant fluids should be drained and replaced at specific areas designated for this activity
Drain All Fluids From Stored or Salvaged Vehicles and Equipment	Eliminate the potential for spillage such as oil, antifreeze, and hydraulic fluid from vehicles and equipment under long-term storage	All oil and other fluids should be drained from vehicles being stored long-term or salvaged and the oil should be collected and recycled; Post signs on drained vehicles
Completely Drain Oil Filters before Disposal	Reduce potential for contamination of storm water due to spills and leaks from used oil filters	All filters should be completely drained into collection drums for recycling and disposal of used oil; Post signs stating requirements to completely drain filters before disposal
Wash Equipment and Vehicles in Designated Areas	Contain runoff that may carry detergents, oil, and/or grease from vehicle washing and eliminate potential for contact of polluted water with the storm drain system	Facilities should have designated, bermed wash areas that contain wash water and drain to the sanitary sewer, a sump, or to a filter
Discharge Wash Water to a Sanitary Sewer	Eliminate runoff generated by cleaning of vehicles, equipment, and floors from entering the storm drain	All washing should occur in designated contained areas and wash water should be discharged to a sanitary sewer, collected in dead-end sump tanks and transported to a treatment facility or filtered
Reduce the Amount of Liquid Cleaning Agents Used	Reduce potential for pollution from cleaning agents such as soaps and detergents used in any maintenance operations including vehicle, equipment, aircraft or ship cleaning, metal work, and painting practices	Use products other than liquid cleaning agents to the maximum extent practicable (MEP); Substitute cleaning methods such as wire brush scraping or using a bake oven
Substitute Non-Toxic or Less-Toxic Cleaning Solvents	Minimize exposure of organic solvents used for cleaning equipment and parts to storm water discharge	Substitute non-toxic or less-toxic cleaning agents; Use non-caustic detergents, water-based degreasers, non-chlorinated solvents and phosphate-free detergents; Manage cleaning materials properly

TABLE 2. MATERIALS HANDLING BMPS

BMP Name	Purpose	Description
Use Solvents Efficiently	Reduce potential for spills and leaks of cleaning solvents in repair and maintenance operations	Reuse solvents and use sparingly; Pre-soak parts in "dirty" solvent before placing in fresh solvent to reduce the volume of solvent used
Use Outside Contractor for Handling Used Solvents and Other Significant Materials	Prevent improper storage, handling, and disposal of solvents, oils, paint thinners, and other toxic chemicals to reduce potential for spills and contamination of storm water	Use private contractors such as Safety Kleen to handle the disposal and replenishing of toxic chemicals
Protect Storage Containers from Being Damaged by Vehicles	Prevent vehicle impact damage to storage containers such as ruptures and cracks that may lead to significant spills and leaks	Install bollards or traffic barriers, fences and curbs to protect containers stored in locations accessible to vehicles
Centralize Liquid Solvent Cleaning to One Location	Promote conservative use of liquid solvents in designated contained areas to reduce the potential for spills, illegal dumping, and improper use of the solvent	Promote cleaning of parts using "dry" methods; if liquid solvents are necessary, clean in central locations to reduce the number of personnel using solvents and promote proper use and disposal; ensure that cleaning locations are properly operated and maintained
Properly Store Containers	Prevent exposure of significant materials or potential pollutants stored in outdoor containers to storm water	Proper storage includes: provide 3 feet of aisle space to provide access for inspections, store drums and bags away from traffic routes, stack containers according to manufacturers instructions, store liquid containers in bermed area
Use Overpack Containers or Containment Pallets to Store 55-Gallon Drums Outside of Storage Areas	Contain and prevent chemical, oil, solvent, or liquid leaks from 55-gallon drums to prevent contamination of storm water	Overpack containers and spill prevention or containment pallets are secondary containers, generally constructed of plastic; Secondary containment should be adequate to hold the contents of the storage barrels should they break or leak
Provide Roof to Cover Source Area	Prevent contact of storm water rainfall with significant materials in critical areas	Construct a roof, canopy, or effective covering for critical areas such as fuel transfer, loading/unloading, mechanical shops, metal fabrication and hazardous material storage areas
Pave Bermed Areas	Prevent infiltration of spilled material into the soil and subsequent transmission to the storm drain system	Critical areas designated for material handling and storage, equipment repair, and maintenance operations should be paved with impervious material such as concrete, asphalt, clay or plastic and curbed by berms and dikes
Repair Leaky Roofs	Keep storm water from leaking into covered areas where hazardous substances, parts equipment, vehicles and materials are stored	Repair leaky roofs as required for each building, move stored equipment and materials to another covered area, train personnel to notify supervisors when leaks are observed

BMP Name	Purpose	Description
Recycle	Reduce the amount of hazardous and non-hazardous waste material such as solvents, oil, scrap metals, wash water and absorbent materials used at the site and prevent exposure of significant materials to storm water activity	Recycling collections should be conducted weekly and more frequent pickups may be established based on quantity, toxicity, probability of exposure of materials to storm water, length of storage time, evidence of exposure, and sensitivity of receiving waters
Control Spills	Reduce potential for spills and implement proper containment in the event of a spill or leak to prevent the contamination of storm water runoff	Material Safety Data Sheets (MSDS) should be followed for handling, storage and cleanup of significant materials; For small spills, use absorbents such as sand, straw, or sawdust; For larger spills, use spill kits, boom, and other response supplies
Label all Drums, Cans, Containers, Tanks, and Valves	Reduce the potential for misuse or spillage of stored materials; Ensure that appropriate procedures, equipment and storage containers are used to prevent spills and ensure that in the event of a spill the material is properly identified and the appropriate response is implemented	All containers should be labeled according to its contents (solvent, gasoline) hazardous substances should be labeled regarding the potential hazard (corrosive, radioactive, flammable, explosive, poisonous); Department of Transportation (DOT)labeling requires that labels be prominently displayed on transported hazardous and toxic materials
Construct Berms or Dikes Around Critical Areas	Provide secondary containment for critical areas such as material handling and storage, equipment repair and maintenance areas to divert spills and leaks away from the storm drain system	A raised berm or dike should be placed around all critical areas or source areas with a high potential for release of pollutants
Use "Doghouse" Design for Outdoor Storage of Small Liquid Containers	Reduce the potential for pollution from small containers of liquid materials (paints, solvents, antifreeze, and oil) stored outdoors	Store small containers, cans, and pails carrying toxic contents inside buildings or in a "doghouse"; A doghouse design consists of a two walled shed with a peaked roof to divert rainfall and flooring equipped with spill prevention pallets
Do Not Store Used Parts or Containers Directly on the Ground	Prevent potential contamination from used parts covered in oil and grease, leaks in 55-gallon drums and flammable storage lockers by limiting direct contact of these stored materials with ground surfaces	Store used parts, storage drums and flammable materials indoors; store small parts in sealed containers, place drums on pallets; Use waterproof tarpaulins to protect ground surface and to cover stored materials
Store Batteries in a Secondary Container	Prevent contamination such as battery acid and caustic material from batteries into runoff	Store lead-acid batteries and charging units on pallets, in a bermed area under a canopy or awning; Used and cracked batteries should be stored in sealed containers
Keep Open Flames away from Flammable Material	Prevent accidents and ensure safety of personnel and staff as well as prevent polluted or toxic ash, rubbish, and debris generated by accidents, explosions, fires, and other chemical reactions from entering the storm drain	Open flames and smoking are prohibited within 50 feet of flammable materials (including paints); Use spark-proof tools when closer than 50 feet and post warning signs in areas where flammable materials are stored
Use Door Skirt or Seal	Contain spills of toxic or potential pollutant materials during loading and unloading activities and prevent contact of leaking material with ground surface runoff	Retrofit doorways used for loading with rubber or plastic door skirts; The door skirt acts as a strip barrier that encloses and seals the open end of the trailer with the open door of the loading dock during loading and unloading operations

BMP Name	Purpose	Description
Employ Proper Handling Procedures to Transport Materials and Waste	Prevent damage such as fractures or ruptures (which can create leaks and spills) during transport of drums, containers and storage boxes carrying potential pollutants	Drums should be moved using a barrel cart or by placing the drum on a pallet and moving by forklift; A minimum of two persons should assist the forklift operator in transferring a drum to or from a pallet; Metallic strapping should be used to secure stacked drums
Control Dust and Particulates	Prevent pollution of storm water from indoor and outdoor industrial processes such as metal finishing, painting, sanding, grinding, sawing, milling, sandblasting, welding, and cement manufacturing that generate significant quantities of dust and particulates	Control the emission of dust particles generated by industrial processes by using filters, baghouses, electrostatic precipitators, cyclone concentrators, waterwalls, and other measures
Store Liquids and Significant Materials within a Building or Covered Area	Prevent leaks and spills of significant materials stored, handled, or transported outside, to minimize contamination of storm water	Store significant materials within an enclosed building or covered area on an impervious surface such as concrete to MEP; Direct contaminated runoff to a storm water treatment facility or containment; Clean spills and leaks
Recycle Pressure Wash Solvents	Eliminate discharge of waste water containing dirt, oils, grease, and paint from pressure wash systems to the storm drain	Pressure wash wastes should be recycled using a closed loop system or "zero-discharge system"; Train personnel on proper usage of pressure wash systems
Provide Overfill Protection	Prevent overflows that may occur during regular fueling operations or transfer of fuels and toxic liquids to vehicles, equipment, aircraft, and ships from exposure to storm water	Retrofit existing and new tanks with overfill prevention equipment such as automatic shut off valves, restricted flow devices, or alarms that indicate when the tank is almost full, and install secondary containment
Monitor Major Fueling Operations	Prevent accidental overflows containing fuels and toxic liquids during high-volume transfers (such as for fuel tankers) that may contaminate storm water	Implement a policy mandating second party monitoring of fuel operations; Monitor high-volume transfers; Train personnel for appropriate emergency spill response actions
Provide Absorbent Booms in Unbermed Fueling Areas	Contain accidental spills and leaks during fuel transfer operations and prevent contamination of runoff	Portable absorbent booms should be stored and readily available at fueling areas; These booms should be used to contain spills and leaks or spills
Eliminate Topping Off Tanks	Eliminate fuel spills from overfilling tanks and prevent contact of fuels with ground surface and storm runoff	Develop a policy to discourage "topping off" fuel tanks; Post warning signs stating explicit penalties
Install Leak Detection System	Detect leaks from underground storage tanks (USTs) that may leak fuel or toxic liquids and contaminate the soil or groundwater	Install leak detection systems such as automatic gauging, vapor monitoring, groundwater monitoring wells and interstitial monitoring; Keep a close inventory on all fuel transfers in and out
Designate Areas for Fueling from Mobile Fuel Tankers	Contain accidental spills and leaks from mobile fuel tankers (MFTs) to designated areas	Minimize the use of MFTs and perform fuel operations in designated areas particularly when a large number of vehicles are in use
Restrict Access to Storage Tanks	Prevent toxic discharges from storage tanks to the ground due to unauthorized handling and vandalism	Restrict access to tanks and valves to authorized personnel and properly trained employees; Supply a locked gate and fence the area around tanks

BMP Name	Purpose	Description
Divert Drainage to a Low-Flow Sump	Treat contaminated flows that drain directly into the storm drain system	Use structural controls such as a low-flow sump, oil/water separator, wet pond or infiltration basin so that spilled material is not discharged into the rest of the storm drain system

TABLE 3. EQUIPMENT MAINTENANCE BMPS

BMP Name	Purpose	Description
Restrict Access to Area and Equipment	Reduce pollutants in storm water runoff caused by the release of significant materials due to vandalism of vehicles and facility property, or unauthorized trespassing	Vehicle, equipment and storage areas should be fenced, gated and access restricted to authorized personnel; Fences and gates should be properly maintained and additional measures such as lighting of the area, security guards and alarms should be used appropriately
Keep Equipment and Vehicles Clean	Reduce oil and grease from leaky vehicles and equipment; These pollutants may accumulate on impervious runoff areas and can be washed into the storm drain	Regularly clean and maintain vehicles and equipment using dry methods; Centralize liquid solvent cleaning to one location and wash vehicles in designated areas
Maintain Equipment in Good Condition	Prevent spills and leaks due to corrosion, loose fittings, poor welding, and improper poorly fitted gaskets on vehicles and equipment	Equipment should be kept in good working condition and inspected regularly for fluid leaks; equipment that is leaking or in poor working condition should be repaired or replaced
Implement Qualifying Tests for Equipment and Vehicle Operators	Prevent accidents due to employee misuse or unfamiliarity with operating procedures that may result in leaks or spills that expose significant materials to storm water	Implement qualifying tests for personnel operating equipment or vehicles; Train personnel in safe operating procedures and basic maintenance and spill response procedures associated with particular equipment and vehicle operation
Dispose of Obsolete Equipment, Inoperable Vehicles, and Surplus Materials	Reduce the likelihood of storm water pollution due to oil and lubricant spills from leaky engine parts in obsolete equipment, inoperable vehicles and surplus materials stored on-site.	Perform proper off-site disposing and recycling of old parts, equipment, and surplus materials based on implementer's judgments of facility operations and conditions
Check Vehicles and Equipment for Leaks	Prevent contamination of storm water due to fluids from leaky engine parts on stored vehicles, aircraft or equipment	Stored or salvaged vehicles and equipment at the site must be inspected for oil and fluid leaks; Use drip pans to catch leaks and clean stains using "dry" methods
Park Vehicles or Equipment Indoors or under a Roof	Eliminate or reduce exposure of pollutants like oil and grease leaking from parked vehicles and equipment to storm water	Park and store vehicles and equipment indoors and under a roof, canopy, or other covering when available
Park Vehicles on an Impervious Surface	Prevent soil contamination and contamination of runoff; Prevent infiltration of spilled pollutants on ground surfaces into soil	Vehicles should be parked on an impervious surface such as concrete and asphalt that cannot be readily penetrated by rainfall
Use Drip Pans under Leaking Equipment	Contain fluids that may leak from equipment such as pumps, air conditioners, and boilers until equipment can be properly repaired or replaced	Drip pans should be placed under leaking equipment to collect any leaking fluid as a temporary BMP until the equipment is repaired or replaced
Perform Equipment Maintenance at Designated Areas	Contain oil, grease, engine coolant, and any pollutants generated by routine maintenance activities of small equipment such as sandblasters and sprayers and large equipment such as construction equipment, tanks, aircraft, and boats	Maintenance of equipment should only be performed in specific predetermined areas such as hangars, shops, garages, or dry docks; all employees and personnel should be trained and informed as to the location of these areas and appropriate BMPs to reduce and contain pollutants

BMP Name	Purpose	Description
Designate Areas for Washing Non-Vehicular Air Filters and Other Greasy Equipment	Contain oil and grease waste generated during cleaning and maintenance of mess hall cooking grills, air filters, and facilities where significant grease and soot can accumulate	Greasy equipment should be cleaned and maintained in designated areas where wash water and grease are contained and diverted to a sump or discharged to the sanitary sewer
Conduct Maintenance within Building or Covered Area	Prevent deposits and stains from oil, grease, or solvents spilled or leaked during maintenance activities from contacting storm water	Conduct maintenance of equipment and vehicles within an enclosed building or covered area such as hangars, garages, and shops; Clean all spills and leaks immediately using rags or dry absorbents

Date
Facility Name
Facility Address
Facility Representative

Subject: Stormwater Pollution Prevention requirements for your mobile business

Dear Business Owner/Operator:

As part of local water quality regulations, municipalities in the San Diego region are required to work with businesses conducting mobile operations to prevent stormwater pollution. Best Management Practices, commonly referred to as "BMPs", are operational efforts consisting of housekeeping practices, spill control and prevention, and proper use and storage of materials that are designed to reduce the environmental impact from certain activities. Using BMPs will help prevent pollution from your business. Proper implementation and maintenance of BMPs are critical to their effectiveness.

You have been identified as a mobile businesses operating in the San Diego region. Your business is required to implement the following regional BMPs during your business operations to prevent pollution.

- **Storm Water Training**
- **Contain and Clean Up Spills (Spill Kits)**
- **Properly Handle All Waste (Solid, Liquid and Hazardous)**
- **Protect Storm Water Conveyance System: (Streets, Gutters and Alleys)**
- **Provide Proper Handling and Containment Of Materials**
- **Provide Equipment Washout Area**

The attached document provides details on how to properly implement each of the required BMPs. Additional details about BMPs for mobile businesses are available on the "Project Clean Water Toolbox" website at (http://www.projectcleanwater.org/bmp/). Please evaluate and revise your practices as necessary to ensure that you do your part in preventing stormwater pollution.

You are currently on record as doing business in the municipalities listed below. You may also want to verify that you meet their regulations, as the BMP requirements for each city may vary slightly. If you have any questions or concerns, please contact the staff of the jurisdiction where you are conducting business.

Respectfully,

Required Minimum BMPs
For
Mobile Businesses

1) Storm Water Training:

Proper training is required to prevent the discharge of pollutants in to the storm water conveyance system. Train all workers to properly identify, transport and manage materials to prevent a discharge to the storm water conveyance system. Train all employees on discharge prohibitions, storm water best management practices (BMPs), pollution prevention and methods to control, contain and clean up spills.

2) Contain and Clean Up Spills (Spill Kits):

Keep written spill procedures and cleanup materials in each vehicle. Spill kits must be appropriate for materials used in the business activities. In the event of a spill immediately contain the spill on site. Use appropriate equipment and/or materials to clean up the spill. Immediately report any spill that cannot be completely contained to the jurisdiction where the spill occurred. Sweep up the material and dispose of it properly. If the spill is hazardous, contact the appropriate reporting agency and take appropriate clean up and disposal actions.

3) Properly Handle All Waste (Solid, Liquid and Hazardous):

Before starting a job consider the weather conditions and determine how to dispose of all waste. Properly remove all waste from the worksite or place in proper waste containers with lids. Never pour liquids into trashcans, dumpsters or storm drains. Liquid non-hazardous waste may be disposed to the sanitary sewer, if appropriate, or placed in sealed containers, removed from the worksite and disposed of properly. Inspect and label all hazardous waste containers prior to removal. For details on the management and disposal of specific chemical waste contact the County Hazardous Materials Division at (619) 338-2231.

4) Protect Storm Water Conveyance System: (Streets, Gutters and Alleys)

The storm water conveyance system is a direct connection to creeks, rivers, bays and the ocean. At the work site, locate the probable pollutant discharge points and install appropriate materials to contain the pollutants. Capture and remove pollutants from your activity as close to the work area as possible. Properly dispose of any collected liquid waste. Check with your local jurisdiction to determine if permits are required prior to disposing liquid wastes to the sanitary sewer system (mop sink, toilet, etc.) or whether they can be directed to landscaped areas that will not run off into the storm water conveyance system.

5) Provide Proper Handling and Containment Of Materials:

To prevent spills or discharges, all materials must be properly contained during use and transport. Provide secondary containment, to the maximum extent practicable, for all liquids in the event of spills, punctures or leaks during use and transport. Store materials and equipment securely in the vehicle to prevent loss. Provide leak proof lids for liquids and cover all materials and waste while not in use and during transport. Maintain a materials inventory and material safety data sheet (MSDS) if hazardous materials are being used or transported. Inspect and label all chemical containers.

6) Provide Equipment Washout Area:

Equipment washout areas should be located away from any storm drain inlets or open drainage facilities. The washout area can be a container, a berm or a liner to collect and contain liquids and prevent runoff. Remove washout out waste from the job site and dispose of properly.

- For additional details on mobile business best management practices consult:
  - Project Clean Water Tool Box at **www.projectcleanwater.org/bmp**
  - California Storm Water BMP Handbook at **www.cabmphandbooks.com**

These practices represent the minimum requirements. Contact the local jurisdiction where the job is located, as there may be more stringent requirements.

Business License and the Storm Water Program

Goal: Use information collected and stored in the Business License database to support the Storm Water Program inspection and public outreach components and potentially increase revenues for the Business License Program.

Process:

1. The Storm Water group has access to the Business License database.

2. The Finance Department provides the Storm Water group with a weekly or bi-weekly list of new businesses added to the Business License database.

3. Storm Water staff checks the business type information, SIC code, number of employees, and APNs for accuracy and adds needed information to the Business License database.

4. Storm Water staff may conduct site visits to new businesses when unsure about information that was provided.

5. The Storm Water section updates business inventories by appending new businesses that may present a high threat to water quality.

6. Develop a Storm Water informational sheet for Business License applicants. The Business License staff would hand out the informational sheet at the time. (Supports Storm Water outreach component)

Appendix A.6

Residential Automobile Repair and Maintenance

Many people prefer to repair and maintain their vehicles at home. Those that do, need to ensure that these activities do not pollute our streams, rivers, bays and the ocean. Automobile maintenance and repair activities can introduce chemicals such as oil, grease, antifreeze, hydraulic and brake fluids, and metals to our surface and groundwater. A recent study estimated that the amount of oil running off our streets and driveways and ultimately flowing into the ocean is equal to an Exxon Valdez oil spill — 10.9 million gallons — every eight months (NRC, 2002).

Keep in mind that zoning laws require that cars parked at residential properties be operational at all times. So, pulling the engine or otherwise disabling the vehicle might result in a administrative violation or fine. Plan to take your vehicle to a professional facility for major repairs.

Minimum Requirements

The following best management practices (BMPs) or equivalent measures, methods, or practices are required if you engage in automobile repair and maintenance at your home.

- Collect all used oil, antifreeze, or other vehicle fluids in containers with tight fitting lids. Do not mix these fluids in the same container as this limits your ability to recycle the oil at your local auto parts store or service station.
- Never dispose of used oil, antifreeze, or other fluids into a storm drain, into a ditch, or onto the ground. Oil should be recycled at an auto parts store or service station. Other fluids can be disposed of at a household hazardous waste collection site.
- Never clean the engine or undercarriage of your vehicle at home. For this type of cleaning, take the vehicle to a commercial car wash facility.
- Use drip pans, tarps, or even cardboard and newspaper under the vehicle to capture leaks or spills that may occur during maintenance and repair activities. This ensures spilled fluids won't be washed to the storm drainage system the next time it rains.
- Clean up spills with rags or absorbent material, such as sand, dirt, or cat litter. Do not wash down or hose down these spills to the curbs, roadway, or storm drains. Sweep up absorbents and dispose of them in your garbage can.
- Store automotive parts, such as batteries, engines, transmissions, and other parts that may have oily or greasy residue on them, under cover and off the ground to minimize rainwater contact. Rainwater can wash pollutants off these parts and send pollutants to storm drainage systems and groundwater. Tarps are an inexpensive and easy solution to covering parts.

Contact the Storm Water Program at (619) 441-1653 for additional information.

El Cajon Storm Water Protection Program

What You Can Do To Reduce Urban Runoff Pollution

The key to preventing urban runoff from threatening local water quality is for each of us, as private citizens, to recognize the problem of urban runoff pollution and how our actions can have an impact. Here are some ways you can help reduce urban runoff pollution:

- Buy "environmentally safe" household cleaners
- Properly store all toxic materials
- Take all unwanted hazardous materials to local collection sites. Contact Waste Management at (619) 596-5100 to make an appointment
- Use kitty litter or other absorbent to remove spills from pavement, and then place the absorbent material in a sealed bag in the trash
- Use pesticides, herbicides and fertilizers sparingly and carefully
- Use a broom instead of a hose to clean up yard clippings, and
- Place the yard clippings in your green waste recycle bin for pickup or
- Start a compost bin in an area of your yard not draining to the storm drain
- Clean up pet and other animal wastes and properly dispose of them the trash
- Take used motor oil and antifreeze to a recycling center or hazardous waste collection center
- Reduce leakage of oil, antifreeze and other fluids from your car by regular inspection and maintenance

By changing the way we act as individuals, our combined impact on improving water quality can be tremendous.

For more information and tips on improving our water quality, call the City of El Cajon Storm Water Management Program at (619) 441-1653. And remember, **you are an important part of the pollution solution**. Hope to hear from you soon!

How Should I Wash My Car?

The Challenges of Maintaining a Clean Environment

In today's world, we face many changes especially concerning environmental protection. As never before, all of us are required, both in our personal surroundings and in our communities, to pay attention to how we care for the environment, as well as the legacy we leave behind for generations to follow. We are challenged to change the way we live for the sake of creating a sustainable world.

As our collective environmental concerns continue to develop we have focused on the ways we disposed of trash. Anti-litter ordinances lead the way to production of environmentally sensitive papers and plastics, which also has led to trash recycling bins and green waste bins.

It's now time to think about how we wash our cars and the impact home car washing has, as it depletes our water resources and pollutes our environment.

Why Is Home Car Washing a Problem?

Most car washing is being done at home with a hose and a bucket of soap in the driveway. A small percentage of residential car washers will use a hose with a trigger nozzle and wash their cars on more appropriate surfaces such as their lawn that will allow the water to seep into the soil, limiting the amount of water used and eliminating wastewater runoff into community wetlands, rivers, bays and the ocean.

However, the majority will wash their cars in their driveway with their garden hose using an average of 100 gallons or more of water. Studies indicate an average of 100 gallons of water flow thru a typical 5/8" garden hose every 10 minutes. The runoff water then becomes wastewater mixed with soaps, road acids, brake dust, and other harmful contaminants.

When wastewater is allowed to run freely down the driveway into the gutters, the water empties straight into the storm drain and straight into our community wetlands, rivers, bays and the ocean.

Many residents are completely unaware of where wastewater from their residential car wash goes. Why? Many probably think that the outside water goes where the inside water goes—to a treatment plant of some sort. When asked about storm drain at the end of the street, residents will often refer to it as the sewer. If they only knew and understood that the water that enters the storm drain flows into our waterways, most residents would willingly change by washing their cars on their lawns using a trigger nozzle, or choose to use a professional car wash in the same way they choose to use a professional oil change center.

Contact the Storm Water Program at (619) 441-1653 for additional information.

Pollution Prevention Tips for Landscape & Gardening

Clean beaches and healthy creeks, rivers, bays and ocean are important to our City's wellbeing. However, many common activities can lead to water pollution if you're not careful. Fertilizers, pesticides and other chemicals that are left on yards or driveways can be blown or washed into storm drains that flow to the ocean. Over-watering lawns can also send materials into storm drains. Unlike sanitary sewer flows from sinks and toilets, water in storm drains is not treated before entering our waterways.

You would never pour gardening products into the ocean, so don't let them enter the storm drains. Follow these easy tips to help prevent water pollution:

General Landscaping Tips

- Never allow gardening products or polluted water to enter the street, gutter or storm drain.
- Protect stockpiles and materials from wind and rain by storing them under tarps or secured plastic sheeting.
- Prevent erosion of slopes by planting fast-growing, dense ground covering plants. These will shield and bind the soil.
- Plant native vegetation to reduce the amount of water, fertilizers, and pesticide applied to the landscape.
- Never apply pesticides or fertilizers when rain is predicted within the next 48 hours.

Garden & Lawn Maintenance

- Do not overwater. Use irrigation practices such as drip irrigation, soaker hoses or micro spray systems. Periodically inspect and fix leaks and misdirected sprinklers.
- Do not rake or blow leaves, clippings or pruning waste into the street, gutter or storm drain. Instead, dispose of green waste by composting, hauling it to a permitted landfill, or recycling it through you're the green waste recycling program.
- Use slow-release fertilizers to minimize leaching, and use organic fertilizers.
- Read labels and use only as directed. Do not over-apply pesticides or fertilizers. Apply to spots as needed, rather than blanketing an entire area.
- Store pesticides, fertilizers and other chemicals in a dry covered area to prevent exposure that may result in the deterioration of containers and packaging.
- Rinse empty pesticide containers and re-use rinse water as you would use the
- product. Do not dump rinse water down storm drains. Dispose of empty containers in the trash.
- When available, use non-toxic alternatives to traditional pesticides, and use pesticides specifically designed to control the pest you are targeting
- If fertilizer is spilled, sweep up the spill before irrigating. If the spill is liquid, apply an absorbent material such as cat litter, and then sweep it up and dispose of it in the trash.

- Take unwanted pesticides to a Household Hazardous Waste Collection Center to be recycled. Locations are provided below.

Contact the Storm Water Program at (619) 441-1653 for additional information.

Sewage Spill Reference Guide
Your Responsibilities as a Private Property Owner

How a Sewer System Works

A typical sanitary sewer system is constructed of a network of pipes, laterals and mains connecting to each building and transporting sewage to a wastewater treatment plant (see diagram to the right).

A property owner's sewer pipe is called a **sewer lateral** and connects to a larger city-maintained pipe called a sewer main typically located in the street.

As stated in the El Cajon Municipal Code, **sewer laterals are the responsibility of the property owner** and must be maintained by the property owner for the entire distance from the house to the sewer main.

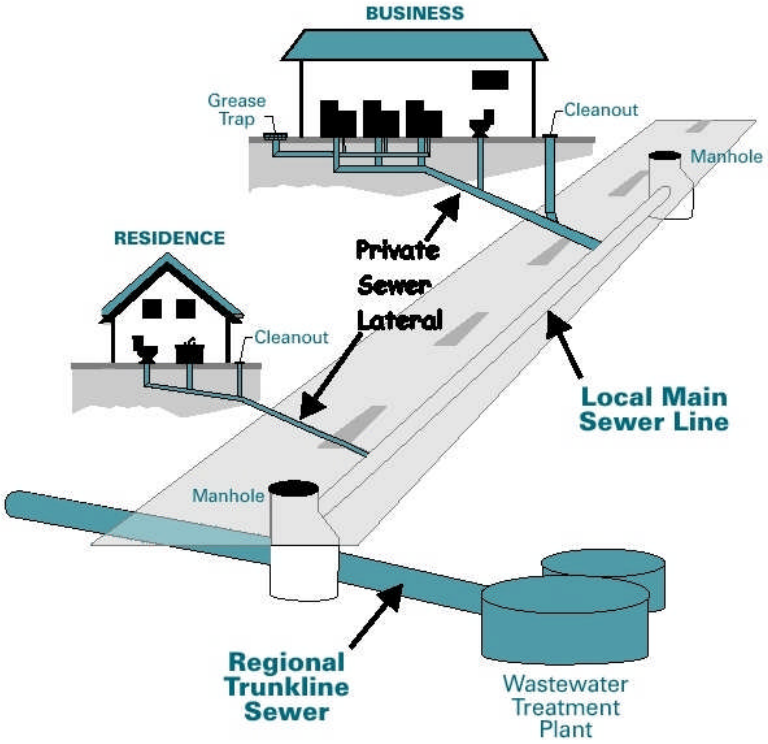

What is a Sewage Spill?

Sewage spills occur when the wastewater being transported via underground pipes overflows through a manhole, cleanout, or broken pipe. Sewage spills can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches.

Common Causes of Sewage Spills

Grease builds up inside and eventually blocks sewer pipes. Grease gets into the sewer from food establishments, household drains, as well as from poorly maintained commercial grease traps and interceptors. Grease is a common cause of sewer pipe blockages, especially in commercial and industrial areas.

Large objects such as paper towels, rags, disposable diapers or children's toys can contribute to a blockage.

Structural problems caused by tree roots in the lines, broken or cracked pipes, missing or broken cleanout caps, or undersized sewers can cause blockages. Blockages by roots are a common cause of blockages in residential areas.

Infiltration and inflow impacts pipe capacity and is caused when groundwater or rainwater enters the sewer system through pipe defects and illegal connections.

You Are Responsible for a Sewage Spill Caused by a Blockage or Break in Your Sewer Lines!

Time is of the essence in dealing with sewage spills. You are required to **immediately:**

- ✓ **Control and minimize the spill.** Keep spills contained on private property and out of gutter, storm drains and public waterways by shutting off or not using the water.
- ✓ **Use sandbags, dirt or plastic sheeting** to prevent sewage from entering the storm drain system.
- ✓ **Clear the sewer blockage.** Always wear gloves and wash your hands. It is recommended that a plumbing professional be called for clearing blockages and making necessary repairs.
- ✓ **Notify the El Cajon Department of Public Works** by calling (619) 441-1653 during non-holiday business hours (8am to 5pm, M-F), or call the Police Department Communications Center 24-hour number at (619) 579-3311. City forces can help in containing and capturing the sewer spill, but we need your telephoned notification. The City of El Cajon is currently required by California State Law to report any and all known sewage spills to a State-wide reporting system, regardless of whether they occur on private or public lands.

You May Be Liable

Allowing sewage from your home, business or property to discharge to a gutter or storm drain may subject you to penalties and/or out-of-pocket costs to reimburse our city for clean-up efforts and enforcement actions.

What To Look For

Sewage spills can be a very noticeable gushing of water from a manhole or a slow water leak that may take time to be noticed. Investigate suspicious looking wet areas. Look for:

- ✓ Drain backups inside the building.
- ✓ Wet ground and water leaking around manhole lids on to your street.
- ✓ Leaking water from cleanouts or outside drains.
- ✓ Unusual strong offensive odors from wet areas near sidewalks, external walls, or landscaped areas.
- ✓ Slow draining or clogged sinks and toilets

Be Cautious

Keep people and pets away form the affected area. Untreated sewage has high levels of disease-causing viruses and bacteria.

How You Can Prevent Sewage Spills Before They Happen

- ✓ Never put grease down garbage disposals, drains or toilets.
- ✓ Perform periodic cleaning to eliminate grease, debris and roots in your house plumbing and sewer lateral.
- ✓ Repair any structural problems in your sewer system and eliminate any rainwater infiltration or inflow into your plumbing system.
- ✓ Do not dispose of paper towels, or other large objects in toilets.

El Cajon Storm Water Protection Program
Residential Repair, Restoration and Remodeling – Part 1

Residential repair, restoration and remodeling is a difficult and stressful time for home owners. In spite of these disruptions, you want to do your part in keeping your home, yard, neighborhood and community clean and healthy. Here are some ways that you can accomplish this while keeping our storm drains, creeks, rivers and beaches clean. These environmentally-friendly practices are called Best Management Practices, or BMPs. Please pass these tips along to anyone doing repair, restoration or remodeling at your home or property.

Construction - Sediment from excavation and other construction projects is the most common pollutant washed from work sites. Sediment entering the ocean through storm drains harms fish and other wildlife.

General Practices

- ALWAYS store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways.
- Keep all construction debris away from the street, gutter, and storm drain.
- Look for and clean up material that may have traveled away from your property after each days work.
- If you (or your contractor) keep a dumpster at your site, be sure it is securely covered with a lid or tarp when not in use.

Erosion Control

- Schedule grading and excavation projects during period when rain is not expected.
- Cover excavated material and stockpiles of asphalt, sand, etc., with plastic tarps.
- Prevent erosion by planting annual and perennial grasses. These will bind the soil, preventing erosion

Lumber - Cover chemically treated wood during rain events. This will prevent the chemicals from washing into storm drains.

Concrete and Masonry Construction - Fresh concrete and mortar application materials can wash or blow into the street, gutter, or storm drain, posing a hazard to fish, wildlife, and people. To avoid polluting:

- NEVER dispose of cement washout or concrete dust onto driveways, streets, gutters, or storm drains.
- NEVER wash excess material from bricklaying, patio, driveway or sidewalk construction into a street or storm drain. Sweep up and dispose of small amounts of excess dry concrete, grout, and mortar in the trash.

- Wash concrete or brick areas ONLY when the wash water can flow onto a dirt area without further runoff, or drain onto a surface which has been bermed so that the water and solids can be pumped off or vacuumed up for disposal.
- DON'T mix up more fresh concrete or mortar than you will need for a project.
- PROTECT dry materials from wind. Secure bags of concrete mix and mortar after they are open.
- Set up and operate small mixers on tarps or heavy plastic drop cloths.
- Protect applications of fresh concrete and mortar from rainfall until the material has dried

El Cajon Storm Water Protection Program
Residential Repair, Restoration and Remodeling – Part 2

Indoor and Outdoor Painting - All paints and solvents contain chemicals that are harmful to fish and wildlife. It is especially important to prevent these chemicals from entering storm drains.

- Keep all liquid paint products away from the street, gutter, and storm drains. Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and should be disposed of properly. When thoroughly dry, used brushes, rags, drop cloths, and empty paints cans (lids off) may be disposed of as trash.
- Reuse paint thinner. Set used thinner aside in a closed jar to settle out paint particles. Then pour off clear liquid for future use.
- To dispose of the remaining paint sludge and any other household hazardous wastes that might result from your project, you can call Waste Management at (619) 596-5100 to make an appointment. For additional options in disposing of residential waste including renting of waste dumpsters call at 1(800) DUMPSTER or (619) 596-5100
- Never put flammable products such as oil-based paint or thinner down any drain or into the garbage!

Paint Cleanup

- NEVER clean brushes or rinse paint containers into a street, gutter, or storm drain.
- For oil-based paints, paint out brushes as much as possible. Clean with thinner, filter, and reuse the thinner.
- For water based paints, paint out brushes as much as possible, then rinse in sink.

Paint Removal – Paint removal and the compounds used in its removal are hazardous wastes. You can call (619) 596-5100 to schedule an appointment for disposal.

- Chemical paint stripping residue, including saturated rags, chips and dust from paints containing lead or tributyl tin, are considered hazardous waste. Please collect all hazardous materials for proper disposal.
- When stripping or cleaning building exteriors with high-pressure water, use sandbags or berms, or seal the storm drain with plugs or rubber mats.

City of El Cajon
OUR WATER
Take it personally!
Storm Water Pollution Prevention Program

Who Can You Contact? - For more information or to report illegal dumping you can contact the El Cajon Storm Water Protection Program at (619) 441-1653 or at www.ci.el-cajon.ca.us. Remember that through your efforts you are the Pollution Solution.

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
1	07/06/10	Residential		2790	Anjuli	Complaint of dirt in the culvert at the rear of the property.	Inspected the site with zoning enforcement. Dirt at rear slope must be removed, encroachment permit required for front slope patio work. No threat to storm water MS4.	No	Verbal	N/A
2	07/21/10	Residential		998	Finch St	Storm drain water accumulating in fornt of his house cousing algae to form.	Site inspection and record review found the discharge to be irrigation/ground water.	No	N/A	N/A
3	7/62/10	Residential		140	Wells Ave	Large amount of dirt dumped in the driveway of this apartment complex.	Sthe property owner was contacted on site and advised to remove the dirt pile to another location on the property.	Yes	Verbal	N/A
4	07/29/10	Residential		712	Pierce St	Large soil pile blocking the drainage easement.	Unable to view dirt pile. Property owner has building plan and will move the pile.	No	Verbal	N/A
5	08/02/10	Residential		1145	Naranca Ave	Dog feces being thrown into the channel.	Made contact with the property owner. Inside small dog to elderly owners. Said it was likely neighbor at 1441. That owner was also contacted.	Yes	Verbal	N/A
6	08/03/10	Residential		1175	Naranca Ave	Black water discharge from a motorhome in rear yard into the storm channel.	Notified zoning enforcement. The property owner and the occupant of the camper were contacted on site. A discharge pipe connected to the camper was directed through the rear fence into the channel. There was evidence of fecal matter and paper on the channel wall face. The pipe was removed immediately.	Yes	First	Yes
7	08/05/10	Residential		1443	Egret	Referred a citizens concerning raw sewage from motorhome being dumped into the storm drain inlet.	The property ower was contacted on site and said the motorhome belongs to a guest. Three 5 gal paint cans wereplaced under it.	Yes	First	Yes
8	08/11/10	Residential		1692	Primrose Ave	Delivered paper ads in driveway being kicked into the curb and drain.	Site inspection found no visible violations.	No	N/A	N/A
9	08/18/10	Residential		171	Minnesota Ave	The owner has cemented in the drain/ sewer in front of his driveway.	Site inspection found that the resient poured concrete in the concrete swale at the driveway entrance to flatten it out for easier access.	No	N/A	N/A
10	10/14/10	Residential		540	Ballard Ave	Dirt coming out of a drainage gutter at the left side of the complainants property.	Dirt was found coming out of an under curb drain after landscaping work.	No	N/A	N/A
11	10/19/10	Residential		1807	Double D Dr	Discharge of sediment from trenching in driveway onto roadway.	Inspection found trenching from new water line in driveway with no BMPs in place during rain event. P/O out of town. Notice posted on door. Neighboring tenant noticed also.	Yes	Verbal	yes
12	11/12/10	Residential		1540	Greenfield Dr	Property owner states that runoff from Clark St has been diverted onto his property by City work. Asphalt berm.	Met with property owner on site. No storm water issues exist. The berm was most likely placed by the complainant'sneighbor.	No	N/A	N/A
13	11/30/10	Residential		377	Chambers Ave	Neighbor dumping trash/ paint on property and previously placed hose drain onto lot.	The property is undeveloped with minor ground cover. Dried paint waste was found in one spot st the rear fence. No liquid waste was found. No storm water violations were noted.	No	N/A	N/A
14	12/07/10	Residential	Mollison Arms Apartments	254-280	Mollison Ave N	Lateral overflow discharge to the street. It did not enter a storm drain.	Roto Responded and was present unpon storm water inspection. The PW crew responded and was able to reclaim the discharge.	Yes	Written	Yes
15	12/17/10	Residential		1400	Finch St	Storm water received a complaint referral from the County Dept . of Agriculture regarding a compost pile located close to roadway and dwelling.	The property manager was contacted on site. The vegetation piles were from recent tree trimming. All piles have been removed. No storm water issues were noted.	No	N/A	N/A

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
16	12/13/10	Residential		861	Grossmont Ave	Discharge of concrete wash into the street and gutter.	Contacted the property owner. Drveway construction for new residence. Contractor not on site. Minor discharge noted. Onwer claimed BMPs were in place during pour.	Yes	Verbal	Yes
17	12/21/10	Residential		2428	Charles Way	Grading, wood stacking, altering drainage	No storm water violations were noted during a site inspection. The natural drainage that runs behind the property does not apper to be compromised.	No	N/A	N/A
18	12/21/10	Residential		2125	Dryden Rd	Altered grading to provide additional parking.	No storm water violations were noted during a site inspection with the complainant present. No grading was observed. The case was referred to zoning enforcement for the inoperative vehicles.	No	N/A	N/A
19	12/22/10	Residential		1163	Nidrah St	Altered city drainage by relocating fence.	No storm water violations were noted during a site inspection. After consulting with the complainant it was determined that this is a civil matter.	No	N/A	N/A
20	12/22/10	Residential		217	Orlando St	Sediment discharge through under curb drain during heavy rain.	Unable to locate the source of the sediment discharge.	Yes	N/A	Yes
21	01/04/11	Residential		776	Pelican Way	Out door washing machine discharging water to the street.	During a site inspection it was determined that the discharge was from ground water.	No	N/A	N/A
22	01/05/11	Residential		427	Coachwood	Slope erosion into the street, appears to be from downspout location.	No soil was found in street during a site inspection. The property owner was contacted on site. She said she is contacting a contractor to repair the slope and that the downspout did not contribute to the erosion. Ground squirrel holes.	No	N/A	N/A
23	01/06/11	Residential		1090	Pine St	Large amount of dirt in street. Crew working with limited BMPs.	Soil was found to be from slope failure after recent storm. Gravel bags in curbline. Soil removed and pavement being swept. Not further action required.	N/A	N/A	Yes
24	01/10/11	Residential		979	Eden Ln	The storm drain inlet outside her home is not working.	A site inspection found the drain in question to be an outlet. Water draining from the surrounding hills pools at this location. No storm water issues were noted.	No	N/A	N/A
25	01/18/11	Residential		1042	Coleen Ct	Tenant reportedly washing unknow material with green tint down the driveway daily.	A site inspection found no evidence of a discharge. Through an interpreter it was determined that the water on the pavement was from lawn watering. Storm water educational were issued.	No	N/A	N/A
26	01/26/11	Residential		493	Graves	Gray water draining from property, through a trench doug along the edge of the driveway, onto the street.	The tenant was contacted and advised to relocate the washing machine discharge pipe to the sanitary sewer.	Yes	Verbal	Yes
27	01/31/11	Residential		1034	Anza St , S	Fuel discharge from weekend accident near storm draininlet.	A site inspection found that the fuel discharge had been cleaned. The complainant was notified.	No	N/A	N/A
28	02/24/11	Residential		814	Lauree St	Discharge of white residue to the street.	The property is being rennovated. The property owner was contacted and advised to cease all discharges. The gutter was swept clean of sidement and residue.	Yes	Verbal	Yes
29	03/03/11	Residential		1716	Woodburn Ave	Discharge of chlorinated pool water onto neighboring properties and the street.	There was no response at the door and no evidence of a current discharge. Unable to view the rear yard. Contact information was left at the door. The complainant was contacted on site and advised to contact the city for any future discharges.	No	N/A	N/A
30	03/10/11	Residential		926	Finch St	Excess water in the street in front of residence; concerned about slope on Fletcher Pkwy.	During a site inspection it was determined that the discharge was from ground water.	No	N/A	N/A
31	03/15/11	Residential		1925	Quidort Ct	Water constantly flowing in the curbline in front of the complainants residence.	During a site inspection it was determined that the discharge was from dechlorinated pool water discharge.	No	N/A	N/A

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
32	03/15/11	Residential		1578	Dumar St	Large soil piles in the street. Workers using fwater to clean the pavement.	Workers for the property owner were contacted on site and advised to remove the soil piles from the street and to clean the pavement by sweeping. There was evidence that sediment was discharging from the site.	Yes	Verbal	Yes
33	04/11/11	Residential		713	Wichita Ave	Oil in street and large piles of soil in front yard.	There is evidence of an oil spill in front of the residence and absorbent material removal. Educational material was left at the door.	No	N/A	N/A
34	04/19/11	Residential		609	Cedar St	On old Cadillac at the corner of Maplewood Ln leaking oil on the street every day.	No vehicle was observed leaking oil during a site inspection. There was a small amount of oil in the curb line. Absorbent material was applied. The complainant was advised of the city's action.	Yes	N/A	Yes
35	04/20/11	Residential		2687	Littleton St	Oil discharge in driveway and flowing onto neighboring property.	The resident was contacted on site. Two oil filter were found on the ground but no discharge of oil was noted. He was also informed of concerns regarding misc. junk and inop vehicles in the front of the property.	No	Verbal	N/A
36	04/25/11	Residential		1398	Cuyamaca St N	Clear water is streaming in front of the residence for weeks	The flow was found to be ground water discharge from properties up hill.	No	N/A	N/A
37	05/12/11	Residential		747	Sunshine Ave S.	The police dispatch through zoning enforcement referred a citizen complaint of sewage being drained into the street on a Saturday.	Storm water staff inspected the site and found no evidence of a sewage discharge.	No	N/A	N/A
38	05/18/11	Residential		1377	Finch St	Overwatering causing hill to fail, water going into the storm drain	No overwatering was noted during a site inspection. There was evidence of continued ground water discharges in the area from recent rain events.	No	N/A	N/A
39	06/01/11	Residential		1470	Marline Ave	The neighbor brought in two truck loads of dirt and raised the grade of the property changing the natural drainage of the complainants propety.	Storm water staff contacted the complainant on site finding no significant grading and no obvious obstruction to the flow of the property.	No	N/A	N/A
40	06/03/11	Residential		1377	Yerba Verde	Discharge of an oily substance in the curbline.	Storm water staff responded and found discharge evidence. It appeard to be oil on water. A notice was left at the door.	Yes	Verbal	Yes
41	06/07/11	Residential	Villa Washington Apts	1121	Washington E	Neighbor's grading causing drainage issues.	Storm water staff met with the complainant on site and determined that the matter is civil.	No	N/A	N/A
42	06/14/11	Residential		947	Taft St	Large wooden structure being used as an oil drip pan left in the street.	Storm water staff inspected the site finding the wooden structure win oil pooled in it, in the ROW.	Yes	Verbal	N/A

THIS IS NOT A CITATION

HELP!

Pollutants were found in your neighborhood storm drain.

Our field staff found the following pollutant(s)spilled or dumped into the storm drain system (curb, street, gutter) near your home:

- ❑ Over irrigation usage
- ❑ Motor Oil
- ❑ Antifreeze/Transmission Fluids
- ❑ Cooking grease
- ❑ Detergents
- ❑ Solvents/Degreaser
- ❑ Paint/paint products
- ❑ Home improvement waste
- ❑ Sewage
- ❑ Animal waste
- ❑ Yard waste (leaves, grass, etc.)
- ❑ Uncovered dirt and gravel pile(s).
- ❑ Construction debris
- ❑ Trash
- ❑ Other

Be a Clean Water Leader

Storm water pollution is a problem that affects all of us. With a growing population of more than 95,000 residents and approximately 14 square miles of urbanized development, keeping our waters clean from pollutants has become increasingly difficult. With thousands of storm drain inlets, and nearly 100 miles of storm drain pipes and channels to clean and maintain, we need your help.

When it rains, water flows over across our yards and into our streets carrying pollutants into our storm drains. The problem is that storm drains are not connected to the wastewater sewer treatment plant. So, what's in the streets flows directly into our creeks, rivers and the ocean, without treatment.

Last year, too many of our beaches and bays were closed or posted as unsafe for swimming. As our City

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Leaders have said, “this is more than an inconvenience; it is a civic embarrassment.” **Discharging pollutants to the City's storm drain system is in violation of Title 13.24 of the El Cajon Municipal Code and violations can result in substantial fines.**

But, as a City resident, you can make a difference. By becoming a Clean Water Leader, both on the job and in your community, you can help make our stream, rivers and beaches free of pollution. When you're at home, share your knowledge with neighbors and family. As you drive to work, be aware of any illegal discharges. And, if you do see an illegal discharge, report it. In the City of El Cajon you can **call the City of El Cajon at (619) 441-1653, or the 24-hour Storm Water Hotline at (888) 846-0800**.

Whether at home or at work, by adopting some simple Best Management Practices (BMPs), you can stop pollutants from being generated and entering our storm drain system.

- ✓ Use dry clean-up methods for spills and outdoor cleaning. Vacuum, sweep, and use rags or dry absorbants. Properly remove and dispose of this material when the spill is absorbed.
- ✓ Properly label, store and dispose of hazardous wastes. Rake, sweep up, and place all debris (dust, litter, sediment, etc.) from your yard or near your property into a trashcan.
- ✓ Use a mop only when water is needed.

As you perform your daily activities be proactive. Assess the activity from a storm water pollution point-of-view and ask yourself; “does this activity, directly or indirectly, generate pollution?” And, “how can I get the job done and prevent debris from entering into the storm drain collection system?”

City of El Cajon

STORMWATER
Protection Program

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City of El Cajon

STORMWATER
Protection Program

Appendix A.7
(No Content)

Appendix A.8
(No Content)

Appendix A.9

CITY OF EL CAJON
PUBLIC PARTICIPATION MECHANISMS
PY4 – 2010/2011

DATE	LOCATION	NUMBER CONTACTED	DESCRIPTION
8/25/10	California State Retirees Group	30	Retirees Group Meeting
10/11/10	City of El Cajon Fire Station	3,000	Fire Station Open House
10/28/10	Cuyamaca College	40	Class presentation regarding storm water programs
11/10/10	Johnson Elementary School	150	Career Day
4/2/11	El Cajon County Library	2,000	El Cajon Library Multicultural Fiesta

Appendix A.10

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	
ADMINISTRATION	
DEVELOPMENT PLANNING	
CONSTRUCTION	
MUNICIPAL	
INDUSTRIAL AND COMMERCIAL	
RESIDENTIAL	
IDDE	$36,626
EDUCATION	$2,301
PUBLIC PARTICIPATION	
SPECIAL INVESTIGATIONS	
NON-EMERGENCY FIREFIGHTING	
Jurisdictional Total	***$38,927***

WATERSHED	
Watershed 1	$4,463
Watershed 2	
Watershed 3	
Watershed 4	
Watershed 5	
Watershed 6	
Watershed 7	
Watershed 8	
Watershed Total	***$4,463***

REGIONAL	
Copermitttee Cost Share of Regional	
Regional Total	**$58,745**

TOTAL COSTS	***$102,135***

FUND SUMMARY (AS APPLICABLE)

FUNDING BY SOURCE	
GENERAL FUND	
STORMWATER FEE	
PERMIT FEES	
DEVELOPER DEPOSITS AND FEES	
REGISTRATION AND INSPECTION FEES	
FLOOD CONTROL FEES	
FRANCHISE FEES	
GAS TAX	
UTILITY TAX	
ROAD FUND	
ENTERPRISE FUNDS	
TRUST FUNDS	
SPECIAL ASSESSMENT DISTRICTS	
STATE APPROPRIATED FUNDS	
GRANT FUNDS	
OTHER	$1,483,491
TOTAL	$1,483,491

ONE-TIME FUNDING	
	GRANTS
DONATIONS	
TOTAL	

TOTAL FUNDING	$1,483,491

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR URBAN RUNOFF MANAGEMENT PROGRAMS

WATERSHED URBAN RUNOFF MANAGEMENT PROGRAM (WURMP)

	Watershed 1	Watershed 2	Watershed 3	Watershed 4	Watershed 5	Watershed 6	Watershed 7	Watershed 8
Administration(1)	$4,463							
Cost Share Contribution								
Watershed Activities								
Other								
TOTAL	$4,463							

(1) Administration. Includes Watershed strategic planning, management, mapping, assessment, and reporting

REGIONAL URBAN RUNOFF MANAGEMENT PROGRAM (RURM P)

Regional Programs	Jurisdictional Cost Share Amount
Administration (1)	
Cost Share Contribution	$58,745
Other (2)	
TOTAL	$58,745

1.Administration - includes assessment, reporting, management, etc.
2.Other - Examples include: regional and special studies,

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP)

	JURMP Component	Change from Pre-existing Costs			Expenditure contributes to Multiple Programs	Explanation
		No Change	Partial Increase	New Requirement		
1	**ADMINISTRATION**		x			
2	**DEVELOPMENT PLANNING**			x		
A	**Land Use Planning**			x		
B	**Environmental Review**			x		
C	**Development Project Approval and Verification**			x		
C1	**Public Projects (CIP)**			x		
C2	**Private Projects**			x		
3	**CONSTRUCTION**		x			
A	**Public Projects (CIP)**		x			
B	**Private Projects**		x			
4	**MUNICIPAL**			x		
A	**Administration (1)**					
B	**Operations & Maintenance of MS4 and Structure Controls (11)**		x			
C	**Management of Pesticides, Herbicides, and Fertilizers**		x			
D	**Sweeping of Municipal Areas**	x				
E	**Infiltration Sanitary Sewer to MS4-Preventative Maintenance**		x			
F	**Roads, Streets, Highways, and Parking Facilities**		x			
G	**Flood Management Projects and Flood Control Devices**		x			
H	**Areas & Activities - CWA Section 303(d) water bodies**		x			
I	**Active or Closed Municipal Landfills**	x				
J	**POTWs and Sanitary Sewage Collection Systems**	x				
K	**Solid Waste Transfer Facilities**	x				
L	**Corporate Yards**		x			
M	**Household Hazardous Waste Collection Facilities**	x				
N	**Municipal Airfields**	x				
O	**Parks and Recreation Facilities**	x				
P	**Special Event Venues & Special Events**		x			
Q	**Power Washing**		x			
R	**Other Municipal Areas and Activities- Contribute a Significant Pollutant Load to MS4**		x			
S	**Enforcement of Municipal Areas and Activities**		x			

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP)

	JURMP Component	Change from Pre-existing Costs			Expenditure contributes to Multiple Programs	Explanation
		No Change	Partial Increase	New Requirement		
5	**INDUSTRIAL AND COMMERCIAL**		x			
A	**Industrial Sites**		x			
B	**Commercial Sites**		x			
C	**Mobile Commercial Sites**			x		
6	**RESIDENTIAL**		x			
7	**IDDE** (7) (10)		x			
8	**EDUCATION** (8) (10)		x			
9	**PUBLIC PARTICIPATION** (9) (10)		x			
10	**FISCAL ANALYSIS**		x			
11	**PROGRAM EFFECTIVENESS ASSESSMENT**		x			
12	**SPECIAL INVESTIGATIONS**		x			
13	**NON-EMERGENCY FIRE FIGHTING**		x			
14	**REPORTING**		x			
15	**MODIFICATION OF PROGRAMS**		x			

Definitions/Notes:

1 Administration - General Planning; Community Planning; Policy Decisions to Implement Citywide Activities (ordinance, zoning,etc.); SUSMP; HMP; Staff Training (including conferences, seminars, etc.); Staff Education on new issues, policies and procedures; and, Component Performance Assessment

2 Inspection - Initial and Post-Construction Verification

3 Outreach - Reaching External Audiences

4 Extension of Staff, etc. (relevant only where contract activities are not otherwise captured)

5 Other - One time equipment/material/tool purchase

p p j p p p y

6 Development Planning (Engineering Concept Design, Final Design and Bid Package), Construction (SWPPP/NOI, Self-Inspection (contracted, staffed internally), temporary erosion controls)

7 ICID - Illicit Discharge Detection and Elimination

8 Education Component is captured in each of the previous components - internal educations is included in Administration/Assessment and external is included in the Outreach element.

9 Public Participation - Targets activities that promote the participation of the public in updating, development and implementation of the JURMP. Can be either captured in the Outreach elements of each component or tracked separately.

10 Include only activities not otherwise covered in 1 through 5 above.

11 Repeat outline as necessary to cover individual program elements

12 Include maintenance inspections for MS4 and roads; include compliance inspections for other facilities; if inspections and maintenance are inter-mingled, cover under BMPs only

Activity: Public Works NPDES Compliance Activity #: 650750

ACCOUNT / LINE ITEM NUMBER	JUSTIFICATION FOR SUPPLIES AND SERVICES BRIEF STATEMENTS & ESTIMATED AMOUNTS USED IN CALCULATING TOTALS FOR EACH LINE ITEM	FY2010-11 AMOUNT	CHANGE REQUESTED	REQUEST
8150	**OFFICE SUPPLIES**	**$4,900**	**$0**	**$4,900**
	a Toner cartridges for printing of public education and outreach	$4,900	$0	$4,900
8160	**OPERATING SUPPLIES**	**$5,000**	**-$2,000**	**$3,000**
	a Various supplies needed for Pollution Prevention Days - decrease due to usage	$5,000	-$2,000	$3,000
8345	**LEGAL SERVICES**	**$7,500**	**$0**	**$7,500**
	a City Attorney's Office charges	$7,500	$0	$7,500
8363	**SYSTEM / COMPUTER ANALYST**	**$76,200**	**-$56,200**	**$20,000**
	a GIS Consultant - reduction due to implementation status of program	$76,200	-$56,200	$20,000
8395	**OTHER/PROFESSIONAL/TECHNICAL SERVICES**	**$440,000**	**-$10,000**	**$430,000**
	a San Diego River Watershed Management and update Watershed Urban Runoff Management Program Implementation - shared cost with Watershed copermitees.	$100,000	$0	$100,000
	b Services to comply with the total maximum daily loads for bacteria	$150,000	$0	$150,000
	c San Diego Regional Co-permittee Memorandum of Understanding Cost	$80,000	$0	$80,000
	d Dry Weather Testing and Extended Dry Weather Testing	$75,000	$0	$75,000
	e As needed on-call engineering services for plan check for SUSMP, Erosion Control Plans and Drainage Studies - decrease due to usage	$30,000	-$5,000	$25,000
	f Water Quality Grant Writing services for request of State funds for Water Quality Monitoring, Water Quality Improvement Projects and Watershed Protection in Forrester Creek - program dropped	$5,000	-$5,000	$0
8510	**OVERHEAD REIMBURSEMENT**	**$112,801**	**$5,962**	**$118,763**
	a Provided by Finance	$112,801	$5,962	$118,763
8511	**FLEET/EQUIPMENT MAINTENANCE**	**$11,007**	**-$3,889**	**$7,118**
	a Provided by Fleet Maintenance	$11,007	-$3,889	$7,118
8522	**ADVERTISING**	**$1,000**	**-$500**	**$500**
	a Advertising of Pollution Prevention Days - decrease due to usage	$1,000	-$500	$500
8528	**COMMUNICATIONS**	**$1,500**	**$0**	**$1,500**
	a Telephone and cellular phone service	$1,500	$0	$1,500
8530	**CONTRIBUTIONS**	**$750**	**$0**	**$750**
	a Contribution to the San Diego River Coalition	$500	$0	$500
	b Contribution to I Love A Clean San Diego	$250	$0	$250

Activity: **Public Works NPDES Compliance** Activity #: **650750**

ACCOUNT / LINE ITEM NUMBER	JUSTIFICATION FOR SUPPLIES AND SERVICES BRIEF STATEMENTS & ESTIMATED AMOUNTS USED IN CALCULATING TOTALS FOR EACH LINE ITEM	FY2010-11 AMOUNT	CHANGE REQUESTED	REQUEST
8560	**PERMITS & FEES**	**$20,000**	**$0**	**$20,000**
	a State Water Resources Control Board Fee	$20,000	$0	$20,000
8570	**PRINTING & BINDING**	**$8,000**	**$0**	**$8,000**
	a Utility bill inserts for Pollution Prevention Days	$2,200	$0	$2,200
	b Poster and Brochure printing for Pollution Prevention Days	$0	$0	$0
	c Outreach (Reprints of various storm water outreach materials)	$1,700	$0	$1,700
	d City Newsletter Printing	$4,100	$0	$4,100
8572	**PROMOTIONS**	**$10,000**	**-$2,000**	**$8,000**
	a Promotional items for education and outreach efforts including Pollution Prevention Days - decrease due to usage	$10,000	-$2,000	$8,000
8576	**REPAIRS & MAINTENANCE**	**$3,359**	**$0**	**$3,359**
	a Copier, printer and typewriter maintenance	$3,359	$0	$3,359
8586	**SOFTWARE AGREEMENTS**	**$18,076**	**$43,444**	**$61,520**
	a Business License Database - increase due to contract cost	$720	$3,500	$4,220
	b Miscellaneous Software Agreements	$2,300		$2,300
	c ESRI Maintenance Agreement - upgrade license to City wide license agreement	$9,000	$42,000	$51,000
	d Permitting Software Maintenance Agreement	$3,000	$0	$3,000
	e Share of Community Plus Licenses	$3,056	-$2,056	$1,000
8594	**TRAINING, MEETINGS, & SCHOOLS**	**$3,000**	**$0**	**$3,000**
	a Training for Division personnel	$3,000	$0	$3,000
	TOTAL MATERIALS, SUPPLIES, & SERVICES	**$723,093**	**-$25,183**	**$697,910**

FY 2011-2012 ANNUAL BUDGET
DEPARTMENT EXPENDITURE WORKSHEET

Acct #	Account Title	FY08-09 Actual	FY09-10 Actual	FY10-11 Budgeted	FY10-11 Estimated	FY11-12 Proposed
650750						**WASTEWATER - NPDES**
7110	SALARIES	472,672	507,524	508,372	509,777	498,875
7120	OVERTIME	2,065	306	500	150	500
7130	VACATION/SICK CONVERSIONS	3,737	3,461	3,353	11,055	5,831
7140	FURLOUGH	-	-	-	-	-
7170	STIPEND	-	-	-	-	-
7310	PERS (EMPLOYER)	150,342	160,291	143,442	148,102	165,649
7312	POST RETIREMENT BENEFITS	10,470	11,064	12,889	13,101	14,145
7315	MEDICARE TAX	6,393	6,858	7,215	7,024	7,234
7320	SOCIAL SECURITY TAX	-	-	-	-	-
7325	CAFETERIA	53,760	58,668	56,280	56,216	57,960
7330	COMPENSATED ABSENCES	(2,786)	11,506	-	-	-
7335	WORKERS COMPENSATION	14,244	15,241	13,310	10,563	16,654
7336	UNEMPLOYMENT INSURANCE	-	2,214	-	8,364	-
7340	LIFE INSURANCE	1,774	1,834	1,750	1,505	1,270
7345	LTD INSURANCE	1,626	1,654	1,714	-	1,196
7350	STD INSURANCE	542	551	573	-	549
7360	UNIFORM ALLOWANCE	-	-	-	-	-
TOTAL	**SALARY & BENEFITS**	**714,841**	**781,174**	**749,398**	**765,857**	**769,863**
8150	OFFICE SUPPLIES	3,640	2,968	4,900	4,900	4,900
8160	OPERATING SUPPLIES	773	2,105	5,000	750	3,000
8345	LEGAL SERVICES	5,444	-	7,500	7,500	7,500
8363	SYSTEM / COMPUTER ANALYST	-	-	76,200	26,200	20,000
8365	TEMPORARY SERVICES	19,556	-	-	-	-
8395	OTHER PROF/TECH SERVICES	252,629	242,552	440,000	150,000	430,000
8510	OVERHEAD REIMBURSEMENT	81,706	128,857	112,801	112,801	118,763
8511	FLEET/EQUIP REIMBURSEMENT	12,874	4,002	11,007	11,007	7,118
8520	VEHICLE REPLACEMNT CHARGE	-	-	-	-	-
8522	ADVERTISING	-	-	1,000	500	500
8528	COMMUNICATIONS	888	1,078	1,500	800	1,500
8530	CONTRIBUTIONS	-	500	750	750	750
8560	PERMITS AND FEES	17,999	18,011	20,000	20,000	20,000
8570	PRINTING AND BINDING	10,260	2,323	8,000	5,000	8,000
8572	PROMOTIONS	4,506	6,396	10,000	6,000	8,000
8574	RENT EXPENSE	-	-	-	-	-
8576	REPAIRS AND MAINTENANCE	2,914	-	3,359	1,500	3,359
8586	SOFTWARE AGREEMENTS	9,357	11,603	18,076	15,000	61,520
8588	SUBSCRIPTIONS	-	-	-	-	-
8594	TRAINING/MEETINGS/SCHOOLS	997	787	3,000	1,200	3,000
TOTAL	**MAT'L, SVC & SUPPLIES**	**423,543**	**421,181**	**723,093**	**363,908**	**697,910**
9010	MINOR FURN&EQUIP <$10,000	-	-	-	-	-
9020	MINOR COMPUTERS <$10,000	-	-	-	-	-
9030	SOFTWARE > $10,000	-	-	11,000	10,873	-
9035	FURN & EQUIP >$10,000	-	-	-	-	11,200
9040	VEHICLES	-	-	-	-	-
TOTAL	**CAPITAL OUTLAY**	**-**	**-**	**11,000**	**10,873**	**11,200**
	ACTIVITY TOTAL	**1,138,384**	**1,202,355**	**1,483,491**	**1,140,638**	**1,478,973**

Appendix A.11
(No Content)

Appendix A.12

CITY OF EL CAJON
FORESTER CREEK IMPACT STUDY
2011

Submitted to:

City of El Cajon
Department of Public Works
200 Civic Center Way
El Cajon, CA 92020-3916

Prepared by:

D-MAX Engineering, Inc.
7220 Trade Street, Suite 119
San Diego, CA 92121
Tel: (858) 586-6600
Fax: (858) 586-6644

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

August 24, 2011
Project No. 201124W

Jaime Campos, P.E.
Storm Water Program Manager
City of El Cajon
Department of Public Works
200 Civic Center Way
El Cajon, CA 92020-3916

Re: 2011 Forester Creek Impact Study
City of El Cajon, California

Dear Mr. Campos:

Enclosed please find our report for the City of El Cajon 2011 Forester Creek Impact Study. This project, conducted since 2004, is a study of the water quality in Forester Creek as it passes through El Cajon. The contents include field screening data, analytical laboratory test results, and analyses of the collected data. Copies of field data sheets and laboratory reports are attached.

It has been our pleasure working with the City of El Cajon on this project. Please feel free to contact us if you have any questions.

Sincerely,
D-MAX Engineering, Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

2011 CITY OF EL CAJON
FORESTER CREEK IMPACT STUDY

Forester Creek enters the City of El Cajon (City) from the east, running parallel to Interstate 8. After passing SR-67, the creek curves northward through the area around Gillespie Field before flowing into the City of Santee. Forester Creek eventually merges with the San Diego River just east of the junction of SR-52 and SR-125.

Constituents of Concern

The 2008 Section 303(d) List, which was approved in November 2010, has identified Forester Creek as an impaired water body for the following constituents:

- Phosphorus
- Selenium
- pH
- Fecal coliforms
- Total dissolved solids (TDS)

Note that the fecal coliform and TDS impairments have been named for the lower 1 mile of Forester Creek, which is located outside of the City of El Cajon's jurisdiction.

The 2009-2010 San Diego River Watershed Urban Runoff Management Program (WURMP) Annual Report identifies the following high priority pollutants for the watershed, based on the 2008 WURMP Document:

- Bacterial indicators
- Phosphorus
- TDS, including chloride
- Low dissolved oxygen (DO)
- Turbidity

Site Selection

This objective of the Forester Creek Impact Study is to assess changes in the water quality of the creek as it flows through the City of El Cajon. In order to evaluate these differences, a sample was collected from the creek near its entrance to the City from the east (upstream) and another sample was taken where the creek exits the City in the north (downstream).

The upstream sampling location has been moved twice since 2002 due to the variable nature of the flow coming into the City. When Forester Creek does not receive water from outside the city limits, the sampling location may be moved slightly downstream to the nearest location with flowing or ponded water.

The downstream sampling location is the same as Site 5 in the MS4 Outfall Monitoring Program and Dry Weather Monitoring Program. Data from the MS4 Outfall Monitoring visit in July 2011 has been included in the historical tables; however, only downstream data collected on the same date as the upstream sample in August 2011 is discussed in the text.

Figure 1 on the following page is a map of the sampling locations. Table 1 presents current site location information, and Table 2 lists yearly locations of the upstream sampling point.

Figure 1: Site Locations

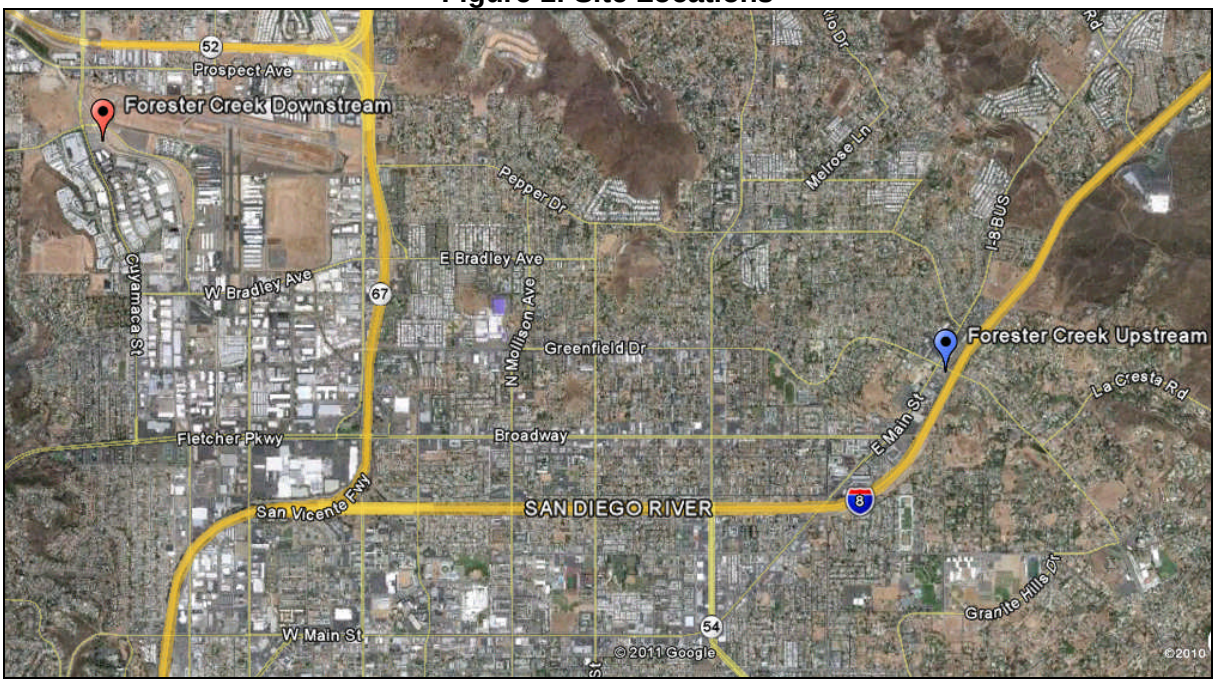

Methods

The same field and laboratory methods used during the City's Dry Weather Monitoring Program were used during the Forester Creek Impact Study. Samples were analyzed in the field for the following parameters:

- Temperature
- pH
- Turbidity
- Conductivity
- Surfactants
- Ammonia-nitrogen (ammonia-N)
- Nitrate-nitrogen (nitrate-N)
- Orthophosphate-phosphorus (orthophosphate-P)
- DO

Samples were collected and submitted to a laboratory certified by the California Department of Health Services for analysis of the following constituents:

- Oil and grease
- Total hardness
- Dissolved cadmium
- Dissolved copper
- Dissolved lead
- Dissolved zinc
- Diazinon
- Chlorpyrifos
- Total coliform bacteria
- Fecal coliform bacteria
- *Enterococcus* bacteria
- TDS
- Total organic carbon (TOC)

Results and Analysis

To assess changes in water quality as the creek flows through the City, a comparison is made of constituent measurements at the upstream and downstream locations (Photos 1 and 2, respectively). However, a direct comparison of upstream and downstream constituent concentrations is not indicative of pollutant loads since flow is greater downstream.

Assessments of constituents analyzed during the 2011 Forester Creek Impact Study are as follows.

Flow

Notable differences between the upstream and downstream flow rates include the following:

- The upstream site flowed at a rate of approximately 3 gpm, whereas the downstream site had a greater flow of 83 gpm.
- The greater flow downstream indicates that the majority of water in Forester Creek at the downstream site has been generated within City limits.
- The downstream flow is the lowest rate recorded in the history of the program.

Field Test Results

Table 3 presents the field test results for each site. Notable differences between the locations include:

- The flow rate increased from 3 gpm upstream to 83 gpm downstream on the same day.
- Temperatures recorded as part of the 2011 study were 24.7°C upstream and 30.6°C downstream. The difference in temperature is primarily due to atmospheric conditions at the time of sampling.

Photo 1: Forester Creek Upstream Location

- Measurements of pH increased from 7.56 upstream to 8.62 downstream. The higher pH downstream is likely a result of increased photosynthesis at the downstream site, where the wide, shallow channel receives a significant amount of sunlight. A greater rate of photosynthesis decreases levels of carbon dioxide, thereby increasing the pH. As temperature increases, carbon dioxide is less soluble in water, which further increases pH.
- The concentration of surfactants was the same at both sites, measuring 0.25 mg/L.
- Measurements for turbidity, conductivity, ammonia-N, and DO were higher at the downstream site.
- Concentrations of nitrate-N and orthophosphate-P were greater upstream than downstream.

Laboratory Test Results

Table 4 presents laboratory results for both sampling locations. Notable observations include:

- With the exception of bacterial indicators, concentrations of all detected laboratory constituents were higher at the downstream location. These include: total hardness, dissolved copper, dissolved zinc, TDS, and TOC.

- Counts of total coliform and fecal coliform bacteria were lower at the downstream location. *Enterococcus* counts were the same at both sites.

- Oil and grease, dissolved cadmium, dissolved lead, diazinon, and chlorpyrifos were not detected at either the upstream or downstream location.

PHOTO 2: Forester Creek Downstream Location

Data Trends

Tables 5 through 8 display historical data and trends for parameters analyzed at upstream and downstream locations. Data in these tables have been compared to the 2011 Dry Weather Monitoring Program action levels and Water Quality Objectives (WQO). The action levels were developed regionally by the Copermittee Dry Weather Monitoring Sub-Workgroup, and the WQO have been compiled from the Basin Plan and a guidance document prepared by the Copermittee Regional Monitoring Workgroup. Note that the data for measurements of ammonia-N, nitrate-N, surfactants, and orthophosphate-P were collected using field test kits, which have a much greater associated uncertainty than laboratory tests. These field test kits are useful in detecting major exceedances, but are inherently less precise than laboratory analytical tests. Figures 2 and 3 include graphs of historical data by constituent for both upstream and downstream locations. Where two sets of data exist for a given year, average values were plotted.

General findings include:

- Flow at the downstream location has been decreasing over time, with this year having the lowest flow measured in the history of the program. In the absence of increasing pollutant concentrations, lower flow means a smaller pollutant load leaving the City.

- Total coliform and TOC concentrations were the lowest measured in the history of this program at both the upstream and downstream sites.

- Concentrations of nitrate-N have generally been higher at the upstream site.

- Dissolved cadmium has not been detected at either location in the history of the program. Dissolved zinc, copper, and lead have been detected infrequently and in low concentrations, and more often at the downstream location.

- Measurements of DO, temperature, pH, conductivity, turbidity, ammonia-N, and TOC have typically been slightly higher downstream.

Table 1
2011 Site Locations

Site	Location	Description	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
Upstream	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Valero gas station at 1699 E. Main Street	Concrete Channel	Commercial	Residential	907.13	32.81185	-116.91795
Downstream	Adjacent to the Weld Boulevard Trolley Station, southeast of the Marshall Avenue and Cuyamaca Street intersection	Concrete Channel	Commercial	Industrial	907.13	32.82665	-116.98226

Table 2
Forester Creek Upstream Site Yearly Locations

Year	Upstream Sampling Location
2006-2011	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Valero gas station at 1699 E. Main Street
2005	Fourth Street, north of Rancho Cajon Place, east side of the street
2004	Forester Creek at E. Main Street and Oakdale Avenue

Table 3
2011 Field Screening Results

Site	Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophosphate -P (mg/L)	Dissolved Oxygen (mg/L)
Upstream	8/8/2011	3	24.7	7.56	2.31	1.69	0.25	0.190	8.489	0.036	5.52
Downstream	8/8/2011	83	30.6	8.62	7.70	2.55	0.25	0.274	3.908	0.022	7.96

Table 4
2011 Laboratory Analytical Results

Site	Date	Oil & Grease (mg/L)	Total Hardness (mg/L$CaCO_3$)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	8/8/2011	nd	343	nd	1.5 J	nd	nd	nd	nd	800	110	400	1,160	nd
Downstream	8/8/2011	nd	464	nd	3.4 J	nd	9.7 J	nd	nd	500	20	400	1,720	2.2

Notes: nd = not detected
J = Detected but below the reporting limit; therefore, result is an estimate.

Table 5
Upstream Site 2004-2011 Field Screening Data

Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Dissolved Oxygen (mg/L)
6/24/2004	27	22.5	8.4	8.28	1.72	0.13	0.10	1.30	nd	na
6/9/2005	2	18.8	8.4	80	1.35	0.25	0.20	8.75	0.26	8.94
6/13/2006	3	27.9	8.0	1.85	1.66	0.25	0.40	6.25	0.03	8.33
8/2/2007	2	26.7	7.6	1.28	1.61	0.38	0.10	8.14	0.07	7.66
8/11/2008	3	26.0	7.5	1.85	1.77	0.25	0.10	8.68	0.07	6.74
6/25/2009	2	27.2	7.8	2.06	1.74	0.25	0.13	9.88	0.07	6.48
7/7/2010	4	25.9	7.6	1.75	1.72	0.13	0.10	12.73	0.05	5.72
8/8/2011	3	24.7	7.6	2.31	1.69	0.25	0.19	8.50	0.04	5.52
Maximum	27	27.9	8.4	80	1.77	0.38	0.40	12.73	0.26	8.94
Minimum	2	18.8	7.5	1.28	1.35	0.13	0.10	1.30	nd	5.52
Average	6	25.0	7.9	12.42	1.66	0.24	0.16	8.03	0.07	7.06
Median	3	26.0	7.7	1.96	1.71	0.25	0.11	8.58	0.06	6.74
Ambient WQO	*****	**BPJ**	**<6.5, >9.0**	**20**	******	**0.5**	**EPA Freshwater CMC[1]**	**1.0[2]**	**0.1[3]**	**<5.0**
% Exceedance *(WQO)*	*	0	0	13	**	0	0	100	13	0
Dry Weather Action Level	*****	**BPJ**	**<6.5, >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.0**	**2.0**	*****
% Exceedance *(DW)*	*	0	0	0	0	0	0	13	0	*

Notes:
nd = not detected; na = not analyzed; BPJ = Best Professional Judgment; EPA = U.S. Environmental Protection Agency; DW = Dry Weather
Numbers in table have been rounded for presentation; unrounded values have been used in statistical calculations.
Half the value of the detection limit value was used in statistical calculations for the constituent that was not detected.
[1] The Criterion Maximum Concentration (salmonids absent), which varies based on pH, has been used because it applies to a one-hour maximum, and the ammonia level for this study was measured based on an instantaneous grab sample. See www.epa.gov/waterscience/criteria/ammonia.
[2] The Basin Plan WQO for total nitrogen WQO of1.0 mg/L has been used since nitrate-N is a component of total nitrogen.
[3] The Basin Plan WQO of 0.1 mg/L for total phosphorus has been applied since the Basin Plan does not provide a separate limit for orthophosphate-P.
* No established limit.
** There is no clear WQO in the Basin Plan, but a comparison is not necessary since TDS has been measured directly. See the laboratory data tables for TDS results.

Table 6
Upstream Site 2004-2011 Laboratory Analytical Data[1]

Date	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
6/24/2004	5	409	nd	nd	nd	nd	240,000	2,100	500	1,020	10.4
6/9/2005	nd	960	nd	nd	nd	nd	900,000	16,000	24,000	1,810	86.1
6/13/2006	nd	48	nd	nd	nd	nd	300,000	3,000	8,000	1,090	11.4
8/2/2007	nd	579	nd	nd	nd	nd	2,200	500	270	1,150	5.2
8/11/2008	nd	420	nd	nd	nd	nd	1,300	1,300	1,300	1,670	11.9
6/25/2009	nd	490	nd	2.0 J	nd	nd	14,000	1,300	3,000	1,080	3.5
7/7/2010	nd	482	nd	nd	nd	nd	13,000	80	210	1,130	2.0
8/8/2011	nd	343	nd	1.5 J	nd	nd	800	110	400	1,160	nd
Maximum	5	960	nd	2.0 J	nd	nd	900,000	16,000	24,000	1,810	86.1
Minimum	nd	48	nd	nd	nd	nd	800	80	210	1,020	nd
Average	*	466	*	*	*	*	183,913	3,049	4,710	1,264	16.3
Median	*	451	*	*	*	*	13,500	1,300	900	1,140	7.8
Ambient WQO	**10**	**	**CTR CMC & CCC**				**1,000[2]**	**200[2]**	**33[2]**	**1,500*** **	**
% Exceedance *(WQO)*	0	**	0	0	0	0	88	75	100	25	**
Dry Weather Action Level	**15**	**	**CTR CMC**				**130,000**	**13,000**	**7,000**	**	**
% Exceedance *(DW)*	0	**	0	0	0	0	38	13	25	**	**

Notes:
nd = not detected; na = not analyzed; J = Detected but below the reporting limit; therefore, result is an estimate; DW = Dry Weather
CTR = California Toxics Rule, see www.epa.gov/ost/standards/ctr/toxic.pdf for more information; CCC =Criterion Continuous Concentration; CMC = Criterion Maximum Concentration.
Numbers in table have been rounded for presentation; unrounded values have been used in statistical calculations.
Half the value of the detection limit value was used in statistical calculations for the constituent that was not detected.
[1] Surfactants (laboratory), diazinon and chlorpyrifos have not been detected in the history of this program and have been omitted from this table.
[2] Bacteria TMDL dry weather targets, which are technically applicable to geometric mean rather than to single samples. These low targets were used for a conservative assessment.
* Statistical calculation not performed.
** No established limit.
*** The Basin Plan does not list a TDS WQO for hydrologic subarea (HSA) 907.13. This value is taken from HSA 907.12, the closest HSA to 907.13.

Table 7
Downstream Site 2002-2011 Field Screening Data

Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate-P (mg/L)	Dissolved Oxygen (mg/L)
8/22/2002	168	32	8.8	15.13	2.55	0.37	0.30	0.10	0.03	na
8/14/2003	299	29	8.6	6.36	2.70	0.13	0.20	2.00	nd	11.10
6/24/2004	204	30	8.7	19.75	2.73	0.25	0.30	2.50	nd	na
6/28/2004	244	20.6	8.3	4.74	2.32	0.38	0.30	1.25	0.03	7.51
6/9/2005	412	25.5	8.6	3.43	1.24	0.50	0.10	6.25	0.03	12.74
6/13/2006	421	27.9	8.7	2.06	2.58	0.25	0.80	5.00	0.03	10.66
7/3/2007	281	27.8	8.3	9.91	2.35	0.50	0.30	1.92	0.07	10.40
8/11/2008	234	32.0	8.7	5.57	2.80	0.25	0.30	2.12	0.03	9.64
6/25/2009	108	30.7	8.9	14.82	2.81	0.25	0.30	2.38	0.08	8.25
7/7/2010	94	18.4	8.2	4.06	2.82	0.25	0.40	5.77	nd	8.32
7/7/2011	73	33.7	8.7	10.88	2.61	0.25	0.01	2.25	0.04	8.47
8/8/2011	83	30.6	8.6	7.70	2.55	0.25	0.27	3.91	0.02	7.96
Maximum	421	33.7	8.9	19.75	2.82	0.50	0.80	6.25	0.08	12.74
Minimum	73	18.4	8.2	2.06	1.24	0.13	0.01	0.10	nd	7.51
Average	218	28.2	8.6	8.70	2.51	0.30	0.30	2.95	0.06	9.51
Median	219	29.5	8.6	7.03	2.60	0.25	0.30	2.32	0.03	9.06
Ambient WQO	*****	**BPJ**	**<6.5, >9.0**	**20**	******	**0.5**	**EPA Freshwater CMC[1]**	**1.0[2]**	**0.1[3]**	**<5.0**
% Exceedance *(WQO)*	*	0	0	0	**	17	0	92	25	0
Dry Weather Action Level	*****	**BPJ**	**<6.5, 9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10**	**2**	*****
% Exceedance *(DW)*	*	0	0	0	0	0	0	0	0	*

Notes:
nd = not detected; na = not analyzed; BPJ = Best Professional Judgment; EPA = U.S. Environmental Protection Agency; DW = Dry Weather
Numbers in table have been rounded for presentation; unrounded values have been used in statistical calculations.
Half the value of the detection limit value was used in statistical calculations for the constituent that was not detected.
[1] The Criterion Maximum Concentration (salmonids absent), which varies based on pH, has been used because it applies to a one-hour maximum, and the ammonia level for this study was measured based on an instantaneous grab sample. See www.epa.gov/waterscience/criteria/ammonia.
[2] The Basin Plan WQO for total nitrogen WQO of 1.0 mg/L has been used since nitrate-N is a component of total nitrogen.
[3] The Basin Plan WQO of 0.1 mg/L for total phosphorus has been applied since the Basin Plan does not provide a separate limit for orthophosphate phosphorus.
* No established limit.
** There is no clear WQO in the Basin Plan, but a comparison is not necessary since TDS has been measured directly. See the laboratory data tables for TDS results.

Table 8
Downstream Site 2002-2011 Laboratory Analytical Data[1]

Date	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
8/22/2002	nd	549	nd	nd	nd	nd	30,000	17,000	300	na	na
8/14/2003	nd	624	nd	10	nd	nd	8,000	2,300	800	1,490	10.6
6/24/2004	4	536	nd	nd	nd	nd	35,000	1,100	20	1,590	16.3
6/28/2004	nd	699	nd	nd	nd	nd	130,000	800	340	1,900	10.9
6/9/2005	nd	810	nd	nd	nd	nd	30,000	1,300	5,000	1,700	53.4
6/13/2006	nd	60	nd	nd	nd	nd	170,000	500	70	1,600	9.52
7/3/2007	nd	649	nd	nd	nd	nd	30,000	5,000	800	1,400	14.1
8/11/2008	nd	480	nd	nd	nd	nd	5,000	1,300	40	1,120	45.5
6/25/2009	nd	616	nd	3	nd	nd	2,800	270	130	1,680	12
7/7/2010	nd	203	nd	1	nd	0.9 J	22,000	3,000	5,000	1,840	5.9
7/7/2011	nd	641	nd	3	1	3	11,000	2,200	230	1,670	10
8/8/2011	nd	464	nd	3.4	nd	9.7	500	20	400	1,720	2.2
Maximum	4	810	nd	10	1	9.7	170,000	17,000	5,000	1,900	53.4
Minimum	nd	60	nd	nd	nd	nd	500	20	20	1,120	2.2
Average	*	528	*	*	*	*	35,525	2,899	1,094	1,610	17.3
Median	*	583	*	*	*	*	26,000	1,300	320	1,670	10.9
Ambient WQO	**10**	**	**CTR CMC & CCC**				**1,000[2]**	**200[2]**	**33[2]**	**1,500*** **	**
% Exceedance *(WQO)*	0	**	0	0	0	0	92	92	92	73	**
DW Action Level	**15**	**	**CTR CMC**				**130,000**	**13,000**	**7,000**	**	**
% Exceedance *(DW)*	0	**	0	0	0	0	17	8	0	**	**

Notes:
nd = not detected; na = not analyzed; J = Detected but below the reporting limit; therefore, result is an estimate; DW = Dry Weather
CTR = California Toxics Rule, see www.epa.gov/ost/standards/ctr/toxic.pdf for more information; CCC =Criterion Continuous Concentration; CMC = Criterion Maximum Concentration.
Numbers in table have been rounded for presentation; unrounded values have been used in statistical calculations.
Half the value of the detection limit value was used in statistical calculations for the constituent that was not detected.
[1] Surfactants (laboratory), diazinon and chlorpyrifos have not been detected in the history of this program and have been omitted from this table.
[2] Bacteria TMDL dry weather targets, which are technically applicable to geometric mean rather than to single samples. These low targets were used for a conservative assessment.
* Statistical calculation not performed.
** No established limit.
*** The Basin Plan does not list a TDS WQO for hydrologic subarea (HSA) 907.13. This value is taken from HSA 907.12, the closest HSA to 907.13.

Figure 2: Historical Comparison of Field Constituents

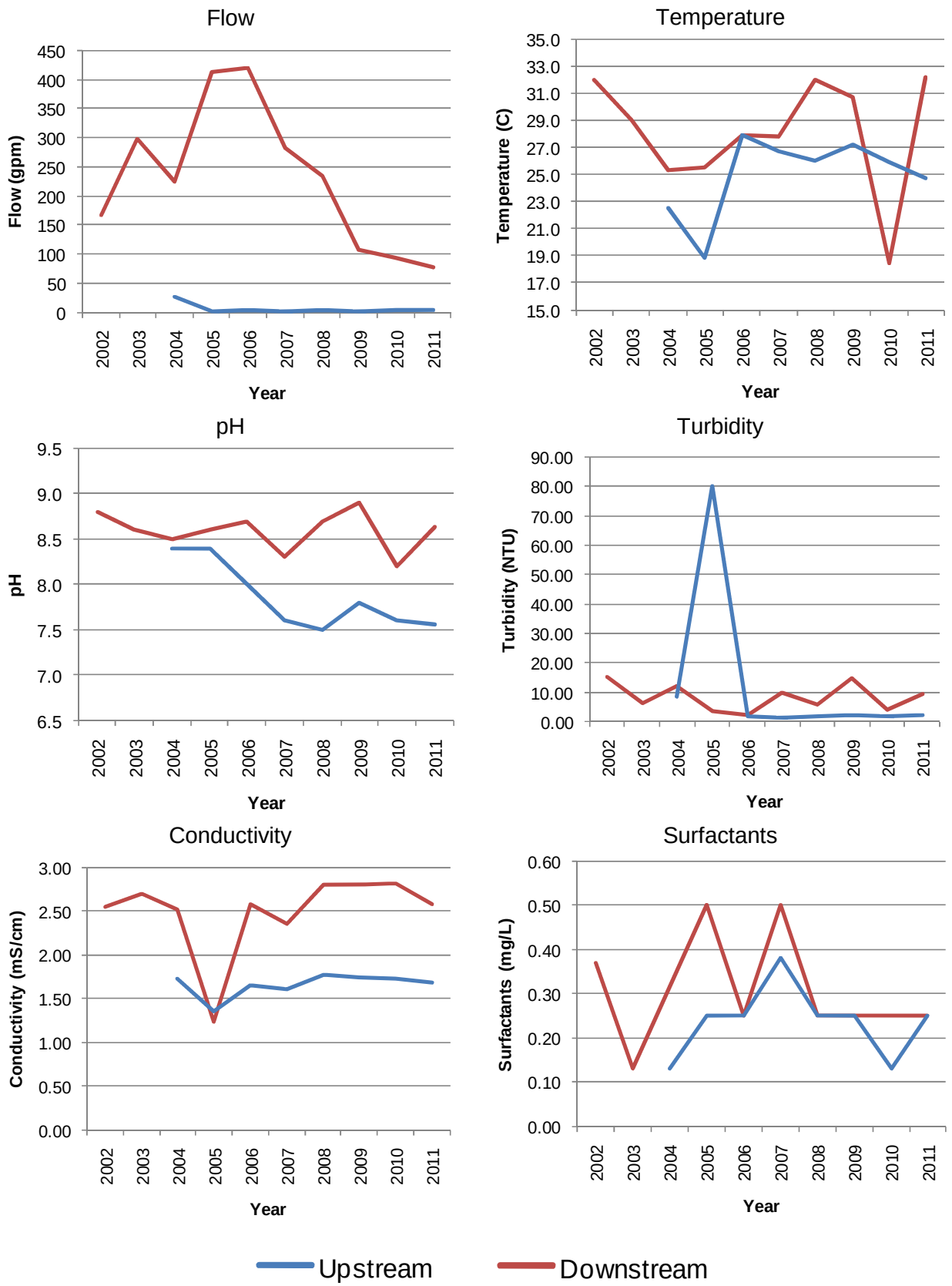

Figure 2: Historical Comparison of Field Constituents (continued)

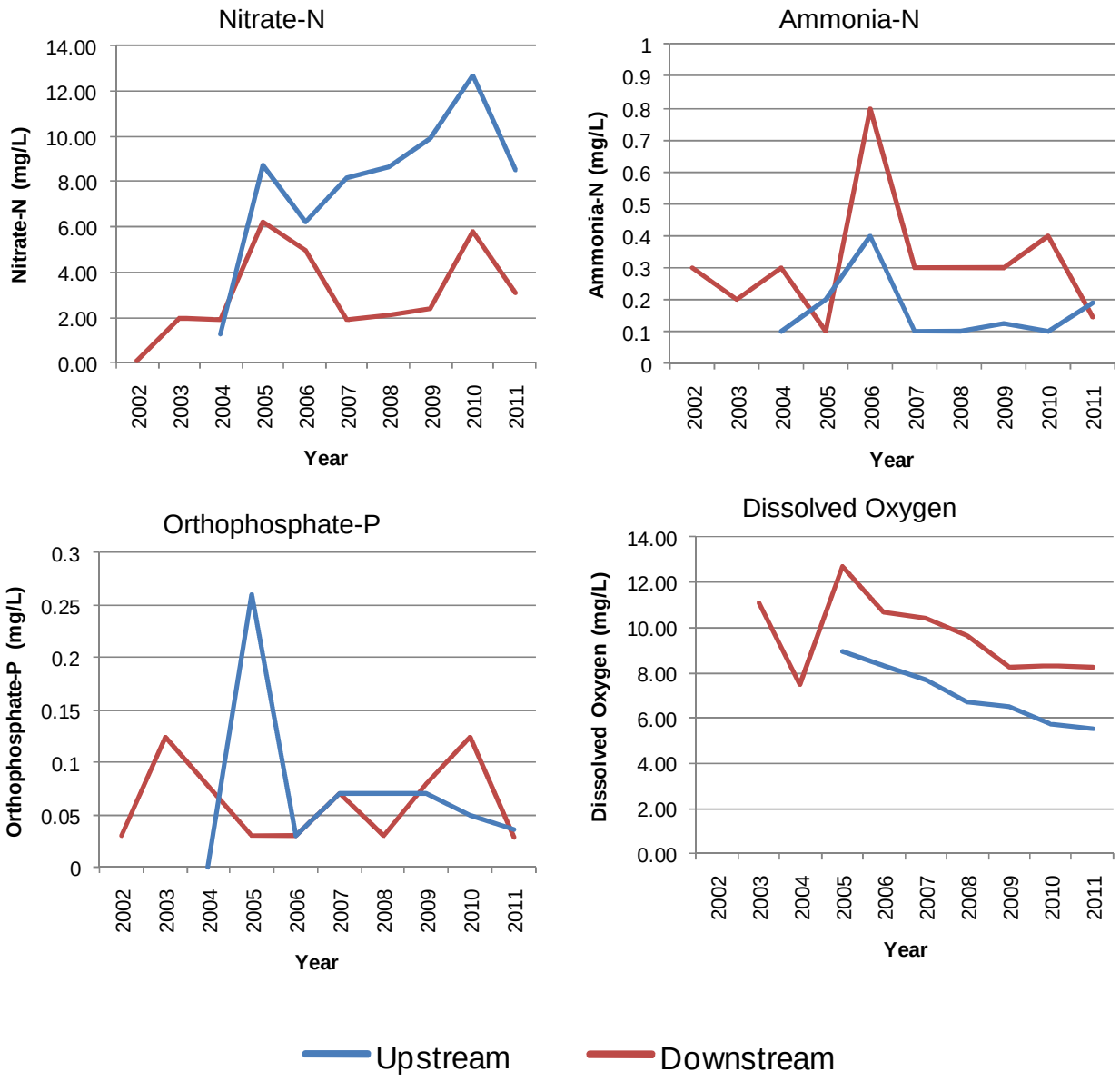

Figure 3: Historical Comparison of Select Laboratory Constituents

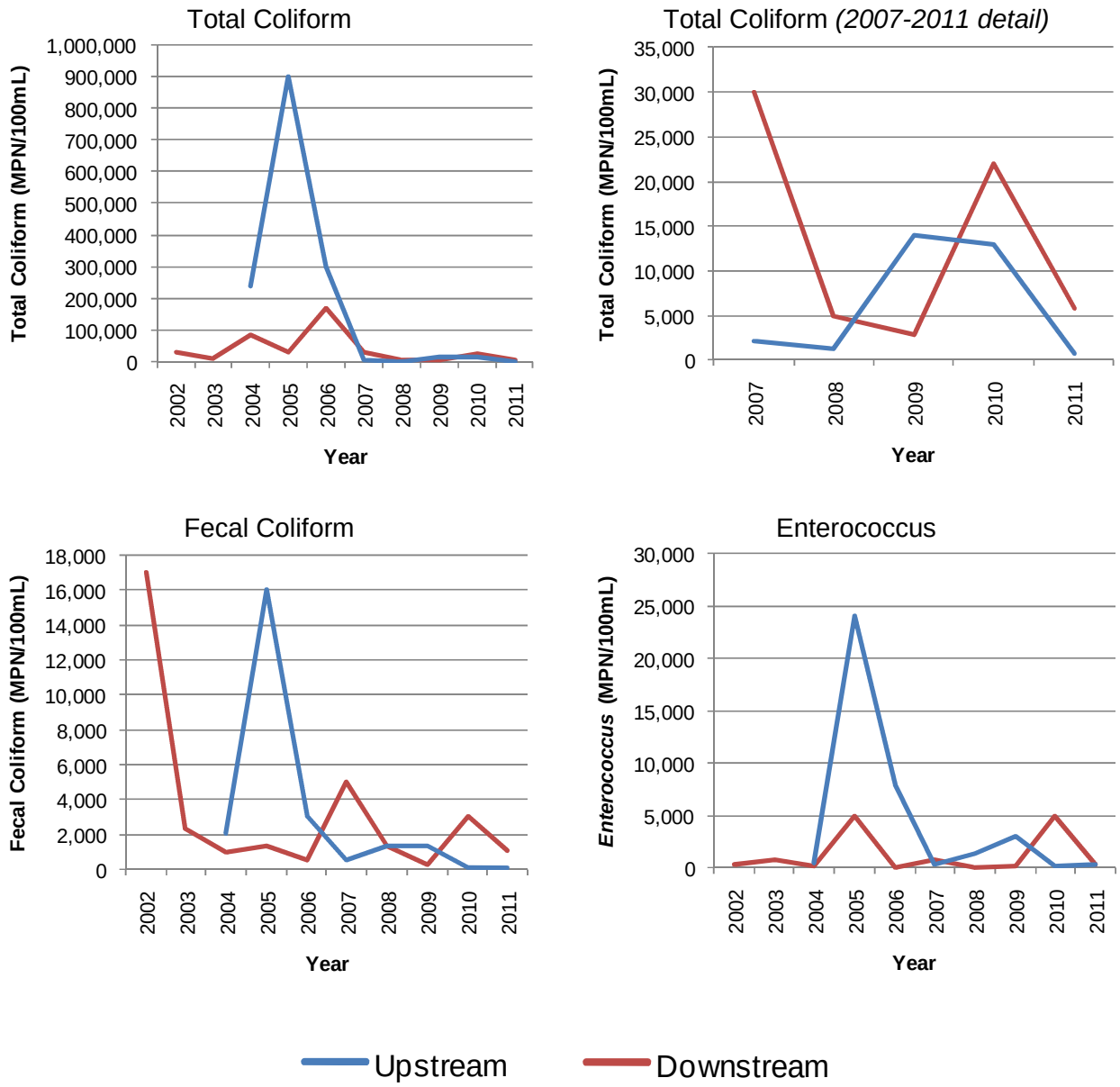

Figure 3: Historical Comparison of Select Laboratory Constituents (continued)

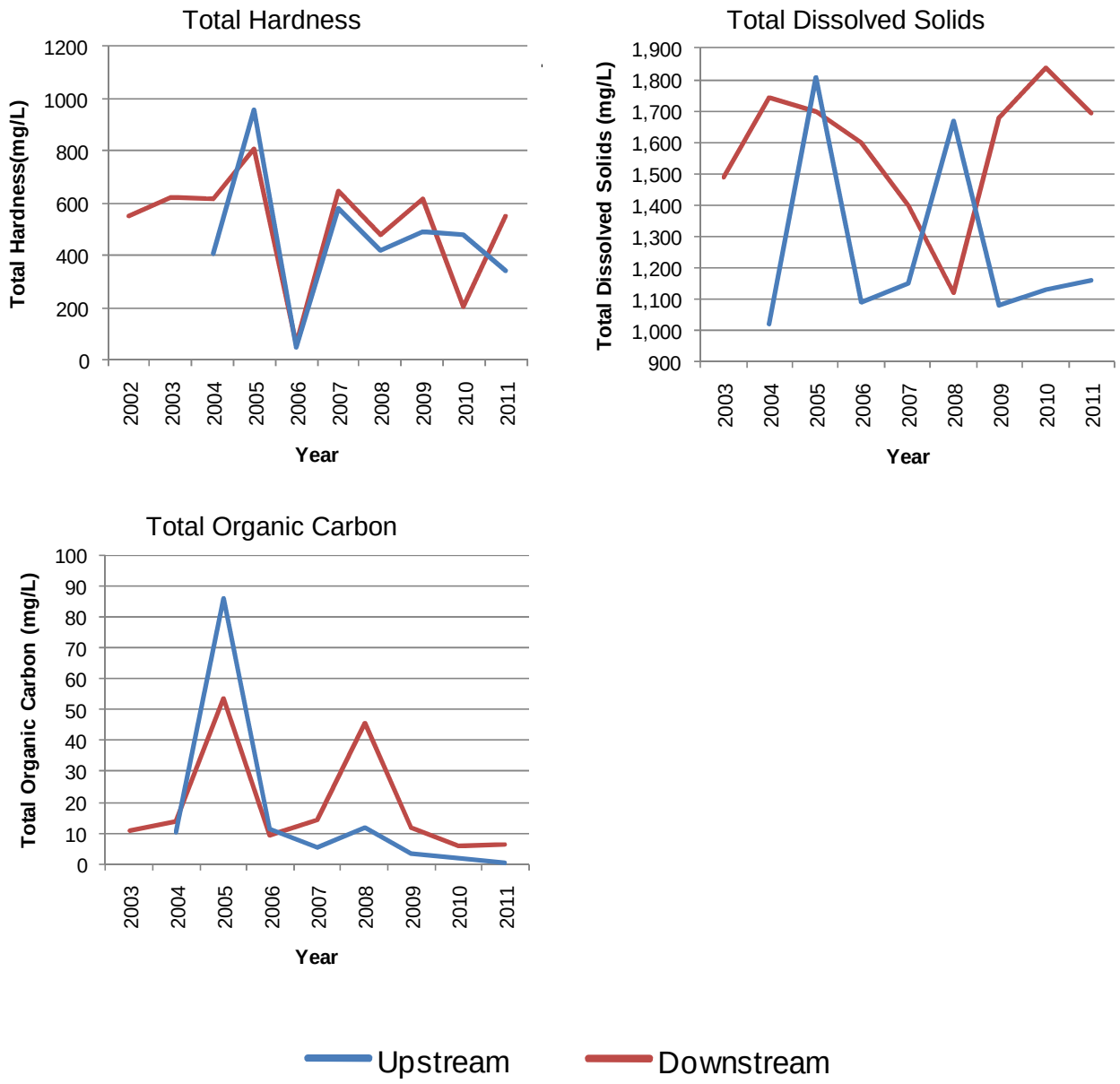

Program:
✓Dry Weather
MS4 Outfall Monitoring
✓Additional Study

City of El Cajon
Dry Weather Monitoring Field Datasheet

DW Station Class:
Field-only Site
✓Lab Site
Alternate ICID

Visit Type: ✓Routine Confirmation for _____ IC/ID Follow-Up for _____ Duplicate Blank

Site ID	FC Upstream			**Latitude**	32.81185	**Watershed** **Hydrologic Unit**	907
Location	Greenfield Avenue & I-8W on ramp intersection behind SE corner of Valero Gas station at 1699 E. Main Street			**Longitude**	-116.91795	**Hydrologic Area**	907.1
				TB Page	1252, B3	**Hydrologic Subarea** (Optional)	907.13
Date	8/8/11	**Time**	10:15	**Observer**	MD/BN	**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): ✓Residential Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ✓Sunny Partly Cloudy Overcast Fog

Tide ✓N/A Low Incoming High Outgoing **Tide Height:**_____ft.

Last Rain ✓> 72 hours < 72 hours

Rainfall ✓None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage		Other	ns (dry)	na
Color	✓None	Yellow	Brown	White	Gray		Other	ns (dry)	na
Clarity	✓Clear	Slightly Cloudy		Opaque			Other	ns (dry)	na
Floatables	✓None	Trash	Bubbles	Foam	Sheen	Fecal Matter	Other	ns (dry)	na
Deposits	None	Sediment	Gravel	✓Fine Particulates	Stains	Oily Deposits	Other		na
Vegetation	✓None	Limited	Normal	Excessive			Other		na
Biology	None	✓Insects	✓Algae	Fish	Snails	Mussels/ Barnacles	Other		na

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? ✓No *Yes:* ☐*Irrigation Runoff* ☐*Other:* _____

Photo # 67-70

Field Screening Samples Collected? ✓Yes No **Analytical Lab Samples Collected?** ✓Yes No

Water Temp (°C)	24.7	NH_3-N (mg/L)	0.190	NO_3 (mg/L)	37.56	Ortho-PO_4 (mg/L)	0.110
pH (pH units)	7.56	TURB (NTU)	2.31	NO_3-N (mg/L)	8.489	Ortho-PO_4 -P (mg/L)	0.036
COND (mS/cm)	1.69	MBAS (mg/L)	0.25	DO (mg/L)	5.52		

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.25	in
Velocity	5/8	ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Program:
✓Dry Weather
MS4 Outfall Monitoring
Additional Study

City of El Cajon
Dry Weather Monitoring Field Datasheet

DW Station Class:
Field-only Site
✓Lab Site
Alternate ICID

Visit Type: ✓Routine Confirmation for _____ IC/ID Follow-Up for _____ Duplicate Blank

Site ID	5		**Latitude**	32.82670	**Watershed**	**Hydrologic Unit**	907
Location	Adjacent to the Weld Boulevard trolley station, southeast of intersection of Marshall Avenue and Cuyamaca Street		**Longitude**	-116.98737		**Hydrologic Area**	907.1
			TB Page	1251, D1		**Hydrologic Subarea** (Optional)	907.13
Date	8/8/11	**Time** 11:30	**Observer**	MD/BN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial ✓Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ✓Sunny Partly Cloudy Overcast Fog

Tide ✓N/A Low Incoming High Outgoing **Tide Height:**_____ft.

Last Rain ✓> 72 hours < 72 hours

Rainfall ✓None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage		Other	ns (dry)	na
Color	✓None	Yellow	Brown	White	Gray		Other	ns (dry)	na
Clarity	✓Clear	Slightly Cloudy		Opaque			Other	ns (dry)	na
Floatables	None	Trash	✓Bubbles	Foam	Sheen	Fecal Matter	Other	ns (dry)	na
Deposits	None	Sediment	Gravel	✓Fine Particulates	Stains	Oily Deposits	Other		na
Vegetation	✓None	Limited	Normal	Excessive			Other		na
Biology	None	✓Insects	✓Algae	Fish	Snails	Mussels/ Barnacles	Other		na

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? ✓Yes No N/A

Evidence of Overland Flow? ✓No *Yes:* ☐*Irrigation Runoff* ☐*Other:*_____

Photo # 71-72

Field Screening Samples Collected? ✓Yes No **Analytical Lab Samples Collected?** ✓Yes No

Water Temp (°C)	30.6	NH_3-N (mg/L)	0.274	NO_3 (mg/L)	17.29	Ortho-PO_4 (mg/L)	0.069
pH (pH units)	8.62	TURB (NTU)	7.70	NO_3-N (mg/L)	3.908	Ortho-PO_4 -P (mg/L)	0.022
COND (mS/cm)	2.55	MBAS (mg/L)	0.25	DO (mg/L)	7.96		

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	85	in
Depth	0.5	in
Velocity	5/8	ft/sec
Flow	83	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

D-Max Engineering, Inc.	Project:	201124W-1	
7220 Trade Street Suite #119	Project Number:	El Cajon Dry Weather	**Reported:**
San Diego CA, 92121	Project Manager:	Manouchehr Dadkhah	08/15/11 15:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
F.C. Upstream	1108133-01	Liquid	08/08/11 10:15	08/08/11 12:47
Site 5	1108133-02	Liquid	08/08/11 11:30	08/08/11 12:47

CASE NARRATIVE

SAMPLE RECEIPT:	Samples were received intact, at 4 °C, and accompanied by chain of custody documentation.
PRESERVATION:	Samples requiring preservation were verified prior to sample preparation and analysis.
HOLDING TIMES:	All holding times were met, unless otherwise noted in the report with data qualifiers.
QA/QC CRITERIA:	All quality objective criteria were met, except as noted in the report with data qualifiers.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

D-Max Engineering, Inc.	Project: 201124W-1	
7220 Trade Street Suite #119	Project Number: El Cajon Dry Weather	**Reported:**
San Diego CA, 92121	Project Manager: Manouchehr Dadkhah	08/15/11 15:32

Microbiological Parameters by APHA Standard Methods
Sierra Analytical Labs, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
F.C. Upstream (1108133-01) Liquid Sampled: 08/08/11 10:15 Received: 08/08/11 12:47										
Enterococcus	**400**	20	20	MPN/100 mL	10	B1H1522	08/08/11	08/08/11 15:55	SM 9230B	
Fecal Coliforms	**110**	20	20	"	"	"	"	"	SM 9221E	
Total Coliforms	**800**	20	20	"	"	"	"	"	SM 9221B	
Site 5 (1108133-02) Liquid Sampled: 08/08/11 11:30 Received: 08/08/11 12:47										
Enterococcus	**400**	20	20	MPN/100 mL	10	B1H1522	08/08/11	08/08/11 15:55	SM 9230B	
Fecal Coliforms	**20**	20	20	"	"	"	"	"	SM 9221E	
Total Coliforms	**500**	20	20	"	"	"	"	"	SM 9221B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

D-Max Engineering, Inc.	Project: 201124W-1	
7220 Trade Street Suite #119	Project Number: El Cajon Dry Weather	**Reported:**
San Diego CA, 92121	Project Manager: Manouchehr Dadkhah	08/15/11 15:32

Conventional Chemistry Parameters by APHA/EPA Methods
Sierra Analytical Labs, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
F.C. Upstream (1108133-01) Liquid Sampled: 08/08/11 10:15 Received: 08/08/11 12:47										
Hexane Extractable Material (HEM)	ND	1.40	2.00	mg/L	1	B1H1116	08/08/11	08/11/11 13:50	EPA 1664	
Total Dissolved Solids	**1160**	1.00	1.00	"	"	"	"	"	EPA 160.1	
Site 5 (1108133-02) Liquid Sampled: 08/08/11 11:30 Received: 08/08/11 12:47										
Hexane Extractable Material (HEM)	ND	1.40	2.00	mg/L	1	B1H1116	08/08/11	08/11/11 13:50	EPA 1664	
Total Dissolved Solids	**1720**	1.00	1.00	"	"	"	"	"	EPA 160.1	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

D-Max Engineering, Inc.	Project: 201124W-1	
7220 Trade Street Suite #119	Project Number: El Cajon Dry Weather	**Reported:**
San Diego CA, 92121	Project Manager: Manouchehr Dadkhah	08/15/11 15:32

Total Organic Carbon (TOC) by SM 5310 B
Sierra Analytical Labs, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
F.C. Upstream (1108133-01) Liquid Sampled: 08/08/11 10:15 Received: 08/08/11 12:47										
Total Organic Carbon	ND	0.50	0.50	mg/L	1	B1H1027	08/09/11	08/11/11 14:18	SM 5310 B	
Site 5 (1108133-02) Liquid Sampled: 08/08/11 11:30 Received: 08/08/11 12:47										
Total Organic Carbon	**2.2**	0.50	0.50	mg/L	1	B1H1027	08/09/11	08/11/11 14:18	SM 5310 B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

D-Max Engineering, Inc.	Project: 201124W-1	
7220 Trade Street Suite #119	Project Number: El Cajon Dry Weather	**Reported:**
San Diego CA, 92121	Project Manager: Manouchehr Dadkhah	08/15/11 15:32

Metals (Dissolved) by EPA 200 Series Methods
Sierra Analytical Labs, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
F.C. Upstream (1108133-01) Liquid Sampled: 08/08/11 10:15 Received: 08/08/11 12:47										
Cadmium	ND	0.35	4.0	µg/L	2	B1H0904	08/09/11	08/09/11 14:14	EPA 200.8	
Copper	**1.5**	0.72	20	"	"	"	"	"	"	J
Lead	ND	0.36	4.0	"	"	"	"	"	"	
Zinc	ND	5.6	28	"	"	"	"	"	"	
Site 5 (1108133-02) Liquid Sampled: 08/08/11 11:30 Received: 08/08/11 12:47										
Cadmium	ND	0.35	4.0	µg/L	2	B1H0904	08/09/11	08/09/11 14:34	EPA 200.8	
Copper	**3.4**	0.72	20	"	"	"	"	"	"	J
Lead	ND	0.36	4.0	"	"	"	"	"	"	
Zinc	**9.7**	5.6	28	"	"	"	"	"	"	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

D-Max Engineering, Inc.	Project: 201124W-1	
7220 Trade Street Suite #119	Project Number: El Cajon Dry Weather	**Reported:**
San Diego CA, 92121	Project Manager: Manouchehr Dadkhah	08/15/11 15:32

Inductively Coupled Plasma (ICP) Spectroscopy
Sierra Analytical Labs, Inc.

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
F.C. Upstream (1108133-01) Liquid Sampled: 08/08/11 10:15 Received: 08/08/11 12:47										
Hardness	**343**	0.132	1.32	mg/L	1	B1H1119	08/11/11	08/11/11 13:58	Calculation	
Site 5 (1108133-02) Liquid Sampled: 08/08/11 11:30 Received: 08/08/11 12:47										
Hardness	**464**	0.132	1.32	mg/L	1	B1H1119	08/11/11	08/11/11 13:58	Calculation	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

D-Max Engineering, Inc.	Project: 201124W-1	
7220 Trade Street Suite #119	Project Number: El Cajon Dry Weather	**Reported:**
San Diego CA, 92121	Project Manager: Manouchehr Dadkhah	08/15/11 15:32

Total Organic Carbon (TOC) by SM 5310 B - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B1H1027 - Organic Carbon										
Blank (B1H1027-BLK1)				Prepared & Analyzed: 08/10/11						
Total Organic Carbon	ND	0.50	mg/L							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

D-Max Engineering, Inc.	Project: 201124W-1	
7220 Trade Street Suite #119	Project Number: El Cajon Dry Weather	**Reported:**
San Diego CA, 92121	Project Manager: Manouchehr Dadkhah	08/15/11 15:32

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B1H0904 - EPA 200 Series										
Blank (B1H0904-BLK1)				Prepared & Analyzed: 08/09/11						
Cadmium	ND	4.0	µg/L							
Copper	0.846	20	"							J
Lead	ND	4.0	"							
Zinc	ND	28	"							
LCS (B1H0904-BS1)				Prepared & Analyzed: 08/09/11						
Cadmium	102	4.0	µg/L	100		102	85-115			
Copper	89.5	20	"	100		89.5	85-115			
Lead	104	4.0	"	100		104	85-115			
Zinc	95.5	28	"	100		95.5	85-115			
Matrix Spike (B1H0904-MS1)		**Source: 1108133-01**		Prepared & Analyzed: 08/09/11						
Cadmium	97.3	4.0	µg/L	100	ND	97.3	70-130			
Copper	84.1	20	"	100	1.5	82.6	70-130			
Lead	96.7	4.0	"	100	ND	96.7	70-130			
Zinc	88.3	28	"	100	ND	88.3	70-130			
Matrix Spike Dup (B1H0904-MSD1)		**Source: 1108133-01**		Prepared & Analyzed: 08/09/11						
Cadmium	103	4.0	µg/L	100	ND	103	70-130	5.69	30	
Copper	87.5	20	"	100	1.5	86.0	70-130	3.96	30	
Lead	101	4.0	"	100	ND	101	70-130	4.35	30	
Zinc	93.1	28	"	100	ND	93.1	70-130	5.29	30	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN OF CUSTODY RECORD

SIERRA ANALYTICAL
TEL: 949•348•9389
FAX: 949•348•9115
26052 Merit Circle• Suite 105•Laguna Hills, CA•92653

Date: 7 / 28 / 11 Page 1 of 1

Lab Project No.: 1107389

Client: D-Max Engineering, Inc.
Client Address: 7220 Trade street, Suite 119
San Diego, CA 92121

Client Tel. No.: 858-586-6600
Client Fax. No.: 858-586-6644
Client Proj. Mgr.: Arsalan Dadkhah

Client Project ID: 20 1126W-1

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☒ Normal ☐ Mobile

Geotracker EDD Info:

Client LOGCODE

Site Global ID

Analysis Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	Oil & Grease (EPA 1664)	Total Hardness (EPA 200.7)	Dis. Copper (EPA 200.8)	Dis. Lead (EPA 200.8)	Dis. Cadmium (EPA 200.8)	Dis. Zinc (EPA 200.8)	Total Coliform (SM 9221B)	Fecal Coliform (SM 9221B)	Enterococcus (SM 9230)				Field Point Names/ Comments
E-12	01	7/28/11	9:50	SW		1G/3P	4	X	X	X	X	X	X	X	X	X				
A-11	02	7/28/11	11:00	SW		1G/3P	4	X	X	X	X	X	X	X	X	X				

1 Sampler Signature: Manouchehr Dadkhah
Printed Name: Manouchehr Dadkhah
Shipped Via:
(Carrier/Waybill No.)

Total Number of Containers Submitted to Laboratory: 8

2 Relinquished By: Manouchehr Dadkhah — Date: 7/28/11 — Time: 13:00 — Company: D-Max Eng.
Received By: [illegible] — Date: 7.28.11 — Time: 13:00 — Company: SA

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analysis specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

3 Relinquished By: [illegible] — Date: 7.28.11 — Time: 15:05 — Company: SA
Received By: [illegible] — Date: 7-28-11 — Time: 1505 — Company: Lucora

Total Number of Containers Received by Laboratory: 8

4 Relinquished By: — Date: — Time: — Company:
Received By: — Date: — Time: — Company:

Special Instructions:

Sample Disposal:
☐ Return to Client
☐ Lab Disposal*
☐ Archive _____ mos.
☐ Other _____

FOR LABORATORY USE ONLY - Sample Receipt Conditions:

☒ Intact
☐ Sample Seals
☒ Properly Labelled
☒ Appropriate Sample Container
☒ Chilled - Temp. (°C) 4.0
☐ Preservatives - Verified By
☐ Other
☒ Storage Location: Micro-Room 2

Rev: 102005

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

Program:
✓Dry Weather
MS4 Outfall Monitoring
✓Additional Study

City of El Cajon
Dry Weather Monitoring Field Datasheet

DW Station Class:
Field-only Site
✓Lab Site
Alternate ICID

Visit Type: ✓Routine Confirmation for _____ IC/ID Follow-Up for _____ Duplicate Blank

Site ID	FC Upstream			**Latitude**	32.81185	**Watershed** **Hydrologic Unit**	907
Location	Greenfield Avenue & I-8W on ramp intersection behind SE corner of Valero Gas station at 1699 E. Main Street			**Longitude**	-116.91795	**Hydrologic Area**	907.1
				TB Page	1252, B3	**Hydrologic Subarea** (Optional)	907.13
Date	8/8/11	**Time**	10:15	**Observer**	MD/BN	**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): ✓Residential Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ✓Sunny Partly Cloudy Overcast Fog

Tide ✓N/A Low Incoming High Outgoing **Tide Height:**_____ft.

Last Rain ✓> 72 hours < 72 hours

Rainfall ✓None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage		Other	ns (dry)	na
Color	✓None	Yellow	Brown	White	Gray		Other	ns (dry)	na
Clarity	✓Clear	Slightly Cloudy		Opaque			Other	ns (dry)	na
Floatables	✓None	Trash	Bubbles	Foam	Sheen	Fecal Matter	Other	ns (dry)	na
Deposits	None	Sediment	Gravel	✓Fine Particulates	Stains	Oily Deposits	Other		na
Vegetation	✓None	Limited	Normal	Excessive			Other		na
Biology	None	✓Insects	✓Algae	Fish	Snails	Mussels/ Barnacles	Other		na

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? ✓No *Yes:* ☐*Irrigation Runoff* ☐*Other:* _____

Photo # 67-70

Field Screening Samples Collected? ✓Yes No **Analytical Lab Samples Collected?** ✓Yes No

Water Temp (°C)	24.7	NH_3-N (mg/L)	0.190	NO_3 (mg/L)	37.56	Ortho-PO_4 (mg/L)	0.110
pH (pH units)	7.56	TURB (NTU)	2.31	NO_3-N (mg/L)	8.489	Ortho-PO_4 -P (mg/L)	0.036
COND (mS/cm)	1.69	MBAS (mg/L)	0.25	DO (mg/L)	5.52		

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.25	in
Velocity	5/8	ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Program:
✓Dry Weather
MS4 Outfall Monitoring
Additional Study

City of El Cajon
Dry Weather Monitoring Field Datasheet

DW Station Class:
Field-only Site
✓Lab Site
Alternate ICID

Visit Type: ✓Routine Confirmation for _____ IC/ID Follow-Up for _____ Duplicate Blank

Site ID	5		**Latitude**	32.82670	**Watershed**	**Hydrologic Unit**	907
Location	Adjacent to the Weld Boulevard trolley station, southeast of intersection of Marshall Avenue and Cuyamaca Street		**Longitude**	-116.98737		**Hydrologic Area**	907.1
			TB Page	1251, D1		**Hydrologic Subarea** (Optional)	907.13
Date	8/8/11	**Time** 11:30	**Observer**	MD/BN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial ✓Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ✓Sunny Partly Cloudy Overcast Fog

Tide ✓N/A Low Incoming High Outgoing **Tide Height:**_____ft.

Last Rain ✓> 72 hours < 72 hours

Rainfall ✓None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor ✓None Musty Rotten Eggs Chemical Sewage Other ns (dry) na

Color ✓None Yellow Brown White Gray Other ns (dry) na

Clarity ✓Clear Slightly Cloudy Opaque Other ns (dry) na

Floatables ✓None Trash ✓Bubbles Foam Sheen Fecal Matter Other ns (dry) na

Deposits ✓None Sediment Gravel ✓Fine Particulates Stains Oily Deposits Other na

Vegetation ✓None Limited Normal Excessive Other na

Biology None ✓Insects ✓Algae Fish Snails Mussels/ Barnacles Other na

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? ✓Yes No N/A

Evidence of Overland Flow? ✓No *Yes:* ☐*Irrigation Runoff* ☐*Other:* _____

Photo # 71-72

Field Screening Samples Collected? ✓Yes No **Analytical Lab Samples Collected?** ✓Yes No

Water Temp (°C)	30.6	NH_3-N (mg/L)	0.274	NO_3 (mg/L)	17.29	Ortho-PO_4 (mg/L)	0.069
pH (pH units)	8.62	TURB (NTU)	7.70	NO_3-N (mg/L)	3.908	Ortho-PO_4 -P (mg/L)	0.022
COND (mS/cm)	2.55	MBAS (mg/L)	0.25	DO (mg/L)	7.96		

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	85	in
Depth	0.5	in
Velocity	5/8	ft/sec
Flow	83	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Appendix B.1

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
1	07/06/10	Residential		2790	Anjuli	Complaint of dirt in the culvert at the rear of the property.	Inspected the site with zoning enforcement. Dirt at rear slope must be removed, encroachment permit required for front slope patio work. No threat to storm water MS4.	No	Verbal	N/A
2	07/06/10	Municipal		406	Johnson Ave	Vehicle motor oil dumped in the street.	Street crew was notified to respond with absorbent material to remove oil and one quart container.	Yes	N/A	N/A
3	07/08/10	Commercial		1437	Main St	Strong odor coming from an occuopied motorhome located at the rear of the property.	Site inspection found an unoccupied motor home parked in the rear lot. There was no evidence of a discharge. The matter was referred to zoning enforcement.	No	N/A	N/A
4	07/21/10	Residential		998	Finch St	Storm drain water accumulating in fornt of his house cousing algae to form.	Site inspection and record review found the discharge to be irrigation/ground water.	No	N/A	N/A
5	07/22/10	Commercial	New Century Buffet	868	Jackman	Restaurant employees draining wash water out rear door nightly.	Site inspection found soiled grease bin and area. The manager was contacted on site and advised to cease any dumping and to clean the grease and trash bins.	Yes	Verbal	N/A
6	07/22/10	Commercial	Los Rancheros Mexican & Seafood	165	Main St	Accumulation of trash next to the trash enclosure.	A site inspection found a large amount of trash on the ground beside the dumpster. The store manager was contacted and advised to clean the area and possibly have another bin delivered.	Yes	Verbal	Yes
7	7/62/10	Residential		140	Wells Ave	Large amount of dirt dumped in the driveway of this apartment complex.	Sthe property owner was contacted on site and advised to remove the dirt pile to another location on the property.	Yes	Verbal	N/A
8	07/29/10	Residential		712	Pierce St	Large soil pile blocking the drainage easement.	Unable to view dirt pile. Property owner has building plan and will move the pile.	No	Verbal	N/A
9	08/02/10	Commercial	Body Beautiful Carwash	690	El Cajon Blvd	An employee was observed hosing down the sidewalk. The discharge entered the strom drai inlet.	The buiness manager ws contacted and instructed to cease using water to clean all paved areas.	Yes	Verbal	Yes
10	08/02/10	Residential		1145	Naranca Ave	Dog feces being thrown into the channel.	Mae contact with the property owner. Inside small dog to elderly owners. Said it was likely neighbor at 1441. That owner was also contacted.	Yes	Verbal	N/A
11	08/03/10	Residential		1175	Naranca Ave	Black water discharge from a motorhome in rear yard into the storm channel.	Notified zoning enforcement. The property owner and the occupant of the camper were contacted on site. A discharge pipe connected to the camper was directed through the rear fence into the channel. There was evidence of fecal matter and paper on the channel wall face. The pipe was removed immediately.	Yes	First	Yes

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
12	08/05/10	Residential		1443	Egret	Referred a citizens concerning raw sewage from motorhome being dumped into the storm drain inlet.	The property ower was contacted on site and said the motorhome belongs to a guest. Three 5 gal paint cans wereplaced under it.	Yes	First	Yes
13	08/11/10	Residential		1692	Primrose Ave	Delivered paper ads in driveway being kicked into the curb and drain.	Site inspection found no visible violations.	No	N/A	N/A
14	08/11/10	Commercial		711	Avocado Ave	Water form over irrigation entering storm drain inlet and street.	Contacted the business owner and advised to reset timer and sweep paved areas.	Yes	Verbal	Yes
15	08/18/10	Residential		171	Minnesota Ave	The owner has cemented in the drain/ sewer in front of his driveway.	Site inspection found that the resient poured concrete in the concrete swale at the driveway entrance to flatten it out for easier access.	No	N/A	N/A
16	09/24/10	Commercial	Severin Mobile Auto Repair Team	2235	Fletcher Parkway	Greasy substance in the gutter. An inspection confirmed that there was residue of grease/oil outside the hoist to the street.	The business owner was contacted and advised to cease any discharges and to obtain a spill kit immediately. He was also directed to cover or remove all material stored outside.	Yes	Verbal	Yes
17	10/07/10	Industrial	Chromalloy	1071	Industrial Pl	Complaint that a white residue is discharging from the site.	A site inspection with the environmental manager found no evidence of a discharge. He stated tht the business was in the process of moving to Miramar in the spring.	No	Verbal	N/A
18	10/13/10	Commercial	MTS Trolley Station	250	Marshall Ave N	Powerwashing landing area with no BMPS in place to reclaim the water.	The MTS contractor was contacted on site. Employees were just finishing power washing and removing the BMPs when the hose broke at the valve discharging water to the street. The water was immediately turned off.	Yes	Verbal	Yes
19	10/14/10	Residential		540	Ballard Ave	Dirt coming out of a drainage gutter at the left side of the complainants property.	Dirt was found coming out of an under curb drain after landscaping work.	No	N/A	N/A
20	10/15/10	Construction	Pacific Commercial Construction	1133	Avocado Ave	Minor discharge of drywall residue did not enter drain inlet, debris piles with no BMPs in place.	The principal contractor was contacted on site and advised to install and maintain the required BMPs.	Yes	Verbal	Yes
21	10/19/10	Residential		1807	Double D Dr	Discharge of sediment from trenching in driveway onto roadway.	Inspection found trenching from new water line in driveway with no BMPs in place during rain event. P/O out of town. Notice posted on door. Neighboring tenant noticed also.	Yes	Verbal	yes
22	11/12/10	Residential		1540	Greenfield Dr	Property owner states that runoff from Clark St has been diverted onto his property by City work. Asphalt berm.	Met with property owner on site. No storm water issues exist. The berm was most likely placed by the complainant'sneighbor.	No	N/A	N/A

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
23	11/23/10	Commercial	Consolidated Motors	410	El Cajon Blvd	Discharge of oil into the alley at the rear of the business. Open used oil containers	Storm water staff applied absorbent to the the spill which flowed under the fence at the rear of the business. The manager was contacted and told to clean the area and to remove all open oil containers.	Yes	Written	Yes
24	11/30/10	Residential		377	Chambers Ave	Neighbor dumping trash/ paint on property and previously placed hose drain onto lot.	The property is undeveloped with minor ground cover. Dried paint waste was found in one spot st the rear fence. No liquid waste was found. No storm water violations were noted.	No	N/A	N/A
25	11/30/10	Commercial	Atlas Radiator Shop	580	El Cajon Blvd	Discharge of polluted water from a trench drain through a sump pump to the alley.	The business owner was contacted and advised to cease all further discharges and to relocate the trench drain pipe.	Yes	Written	Yes
26	12/01/10	Industrial	SEACON	955	Vernon Way	An employee was obsered using a garden hose to wash the building exterior with no BMPs in place to prevent a discharge to the storm water conveyance system.	The business manager was contacted and instructed to cease all building washing unless proper methods are used. Storm water educational materials were issued.	Yes	Verbal	Yes
27	12/07/10	Residential	Mollison Arms Apartments	254-280	Mollison Ave N	Lateral overflow discharge to the street. It did not enter a storm drain.	Roto Responded and was present unpon storm water inspection. The PW crew responded and was able to reclaim the discharge.	Yes	Written	Yes
28	12/10/10	Commercial	Montgomery Middle School	1570	Melody Ln	Lateral overflow and saw cut discharge to the street.	PW crew responded and prevent the discharge forom entering the storm drain inlet.	Yes	Written	Yes
29	12/17/10	Residential		1400	Finch St	Storm water received a complaint referral from the County Dept . of Agriculture regarding a compost pile located close to roadway and dwelling.	The property manager was contacted on site. The vegetation piles were from recent tree trimming. All piles have been removed. No storm water issues were noted.	No	N/A	N/A
30	12/13/10	Residential		861	Grossmont Ave	Discharge of concrete wash into the street and gutter.	Contacted the property owner. Drveway construction for new residence. Contractor not on site. Minor discharge noted. Onwer claimed BMPs were in place during pour.	Yes	Verbal	Yes
31	12/21/10	Residential		2428	Charles Way	Grading, wood stacking, altering drainage	No storm water violations were noted during a site inspection. The natural drainage that runs behind the property does not apper to be compromised.	No	N/A	N/A
32	12/21/10	Residential		2125	Dryden Rd	Altered grading to provide additional parking.	No storm water violations were noted during a site inspection with the complainant present. No grading was observed. The case was referred to zoning enforcement for the inoperative vehicles.	No	N/A	N/A
33	12/22/10	Residential		1163	Nidrah St	Altered city drainage by relocating fence.	No storm water violations were noted during a site inspection. After consulting with the complainant it was determined that this is a civil matter.	No	N/A	N/A

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
34	12/22/10	Residential		217	Orlando St	Sediment discharge through under curb drain during heavy rain.	Unable to locate the source of the sediment discharge.	Yes	N/A	Yes
35	01/04/11	Residential		776	Pelican Way	Out door washing machine discharging water to the street.	During a site inspection it was determined that the discharge was from ground water.	No	N/A	N/A
36	01/05/11	Residential		427	Coachwood	Slope erosion into the street, appears to be from downspout location.	No soil was found in street during a site inspection. The property owner was contacted on site. She said she is contacting a contractor to repair the slope and that the downspout did not contribute to the erosion. Ground squirrel holes.	No	N/A	N/A
37	01/10/11	Commercial	Home Depot	298	Fletcher Parkway	Received a complaint referral from water board regarding water with heavy oil sheen in parking lot discharging to the storm drain.	Unable to locate the location of the discharge and there was no residue observed. The business manager was contacted and advised of the complaint.	N/A	N/A	N/A
38	01/06/11	Residential		1090	Pine St	Large amount of dirt in street. Crew working with limited BMPs.	Soil was found to be from slope failure after recent storm. Gravel bags in curbline. Soil removed and pavement being swept. Not further action required.	N/A	N/A	Yes
39	01/10/11	Residential		979	Eden Ln	The storm drain inlet outside her home is not working.	A site inspection found the drain in question to be an outlet. Water draining from the surrounding hills pools at this location. No storm water issues were noted.	No	N/A	N/A
40	01/18/11	Residential		1042	Coleen Ct	Tenant reportedly washing unknow material with green tint down the driveway daily.	A site inspection found no evidence of a discharge. Through an interpreter it was determined that the water on the pavement was from lawn watering. Storm water educational were issued.	No	N/A	N/A
41	01/19/11	Commercial	Carl's Jr.	520	Second St, N	There was evidence of recent pavement washing around the entrance to the business.	The store management ws contacted and advised to cease all pavement washing using a hose and mop instead. Storm water eductional materials were issued.	Yes	Verbal	Yes
42	01/24/11	Industrial	West Coast Air	1155	Pioneer Way	The storm water dept was asked to inspect the drain inlets at this location. The building is undergoing renovation. Uncovered debris piles on south side of the building. A hose was discharging across the pavement to a storm drain inlet at east side of building.	The building superintendent was contacted and advised to correct the violations and to protect all storm drains.	Yes	Verbal	Yes
43	01/26/11	Residential		493	Graves	Gray water draining from property, through a trench doug along the edge of the driveway, onto the street.	The tenant was contacted and advised to relocate the washing machine discharge pipe to the sanitary sewer.	Yes	Verbal	Yes
44	01/28/11	Commercial	Leo's Market	635	El Cajon Blvd	Employee of the business using a power washer to clean the pavement in fornt of the business.	The employee and the business owner were contacted on site and advised to cease all power washing unless the water can be reclaimed and properly disposed of.	Yes	Verbal	Yes

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
45	01/31/11	Residential		1034	Anza St , S	Fuel discharge from weekend accident near storm draininlet.	A site inspection found that the fuel discharge had been cleaned. The complainant was notified.	No	N/A	N/A
46	02/01/11	Industrial	Chiloni Granite Design	594	Front St	Discharge of granite cutting residue across lot and into street. No BMPs utilized.	The business owner was instructed to cease all granite cutting activity until proper method of reclaiming the waste are in place. He was also instructed to clean the paved areas using a dry method and to obtain a city business license.	Yes	Written	Yes
47	02/03/11	Commercial	U-Haul	1186	Main St, E	Oil draining from pipes into the parking lot behind Harbor Freight.	The storm manager was contacted on site. The pipes were found to be from a hydrolic system that has been removed. There are no active discharges. The lot will be steamcleaned with the proper BMPs in place.	Yes	Verbal	Yes
48	02/04/11	Construction	Arrieta Construction, Inc.	352	Dwane St	Company performing slope repair tracking sediment to street, failed construction entrance and drain inlet not properly protected.	Contacted the on site construction manager and advised him to repair and replace BMPs and to sweep all paved areas daily.	Yes	Verbal	Yes
49	02/08/11	Commercial	Westfield Plaza	415	Fletcher Parkway	Power washing of paved areas around main entrance with no BMPs in place. Discharge was allowed to enter the storm drain inlet.	The facility manager , with the landscaping rep. Were contacted and advised to cease all power washing unless proper BMPs are utilized. Educational materials were issued.	Yes	Second	Yes
50	02/17/11	Commercial	New East Buffet	555	Montrose Ct	Wastewater staff observed substancial accumulation of grease down stream from the establishment.	The property was inspected with the business management. No grease interceptor was observed. The waste grease bin was closed and the area fairly clean. They were advised that a notice would be sent.	No	Notice	N/A
51	02/18/11	Commercial	Bagdad Café	532	Main St E	New business permit improvement. Failure to implement trash enclosure BMP.	Business was contacted several times for compliance. An administrative citation ws issued.	No	First	N/A
52	02/22/11	Construction	Weiland Dev Co		Birchwood Ln.	During a post rain inspection, significan sediment tracking was noted, no BMPs at graded pads, detention basin being used for sediment control, unprotected soil piles.	The contractor was contacted and advised to make corrections. And a citation was issued.	Yes	First	Yes
53	02/24/11	Residential		814	Lauree St	Discharge of white residue to the street.	The property is being rennovated. The property owner was contacted and advised to cease all discharges. The gutter was swept clean of sidement and residue.	Yes	Verbal	Yes
54	03/03/11	Residential		1716	Woodburn Ave	Discharge of chlorinated pool water onto neighboring properties and the street.	There was no response at the door and no evidence of a current discharge. Unable to view the rear yard. Contact information was left at the door. The complainant was contacted on site and advised to contact the city for any future discharges.	No	N/A	N/A
55	03/10/11	Residential		926	Finch St	Excess water in the street in front of residence; concerned about slope on Fletcher Pkwy.	During a site inspection it was determined that the discharge was from ground water.	No	N/A	N/A

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
56	03/15/11	Residential		1925	Quidort Ct	Water constantly flowing in the curbline in front of the complainants residence.	During a site inspection it was determined that the discharge was from dechlorinated pool water discharge.	No	N/A	N/A
57	03/15/11	Residential		1578	Dumar St	Large soil piles in the street. Workers using fwater to clean the pavement.	Workers for the property owner were contacted on site and advised to remove the soil piles from the street and to clean the pavement by sweeping. There was evidence that sediment was discharging from the site.	Yes	Verbal	Yes
58	03/17/11	Commercial	Broadway Market	1039	Broadway	Market is draining sink and fryer onto the property.	The store manager was contacted on site. No evidence of a discharge was found on the exterior of the building.	No	N/A	N/A
59	03/29/11	Industrial	California Metals	636	Front St	Tarps applied to the hillside during the rains have torn.	No storm water issues were noted during a site inspection. The matter was referred to zoning enforcement.	N/A	N/A	N/A
60	04/11/11	Residential		713	Wichita Ave	Oil in street and large piles of soil in front yard.	There is evidence of an oil spill in front of the residence and absorbent material removal. Educational material was left at the door.	No	N/A	N/A
61	04/11/11	Commercial	Dr. Michael A Tortora D.C.	124	Rea St	Concrete saw cutting residue flowing into the street. No BMPs.	Contacted the business owner and the contractor and advised to cease cutting until proper BMPs are in place. Storm water educational materials were issued.	Yes	Verbal	Yes
62	04/18/11	Commercial	Jamacha Junction Steakhouse	777	Jamacha Rd	Employee power washing the building exterior with no BMPs in place. Wash water discharged to the parking lot only.	The employee an the business owner were advised to cease washing until proper methods are used to prevent a discharge.	Yes	Verbal	Yes
63	04/19/11	Residential		609	Cedar St	On old Cadillac at the corner of Maplewood Ln leaking oil on the street every day.	No vehicle was observed leaking oil during a site inspection. There was a small amount of oil in the curb line. Absorbent material was applied. The complainant was advised of the city's action.	Yes	N/A	Yes
64	04/20/11	Residential		2687	Littleton St	Oil discharge in driveway and flowing onto neighboring property.	The resident was contacted on site. Two oil filter were found on the ground but no discharge of oil was noted. He was also informed of concerns regarding misc. junk and inop vehicles in the front of the property.	No	Verbal	N/A
65	04/25/11	Residential		1398	Cuyamaca St N	Clear water is streaming in front of the residence for weeks	The flow was found to be ground water discharge from properties up hill.	No	N/A	N/A
66	05/12/11	Residential		747	Sunshine Ave S.	The police dispatch through zoning enforcement referred a citizen complaint of sewage being drained into the street on a Saturday.	Storm water staff inspected the site and found no evidence of a sewage discharge.	No	N/A	N/A

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
67	05/18/11	Residential		1377	Finch St	Overwatering causing hill to fail, water going into the storm drain	No overwatering was noted during a site inspection. There was evidence of continued ground water discharges in the area from recent rain events.	No	N/A	N/A
68	05/23/11	Commercial	Bedco Truck and Equipment	1174	Pioneer Way	Employee doing vehicle washing in the lot.	The business owner was contacted on site and advised to cease all vehicle washing. Educational materials were issued.	Yes	Verbal	Yes
69	05/23/11	Commercial	Thunder Ranch	1236	Pioneer Way	Vehicle body work being done outdoors with a large amout of residue on the ground, misc. vehicle parts exposed to storm water.	The business owner was contacted on site and advised to cease all outdoor working and to vac the area.	Yes	Verbal	Yes
70	06/01/11	Residential		1470	Marline Ave	The neighbor brought in two truck loads of dirt and raised the grade of the property changing the natural drainage of the complainants propety.	Storm water staff contacted the complainant on site finding no significant grading and no obvious obstruction to the flow of the property.	No	N/A	N/A
71	06/03/11	Commercial	Shopping Center - Red Wing Shoes	941	Broadway	Black water discharge from a motorhome in the parking lot.	Storm water staff responded and found evidence of a discharge. The motorhome had left the property. The property management was coantacted and advised to clean the area.	Yes	Verbal	Yes
72	06/03/11	Residential		1377	Yerba Verde	Discharge of an oily substance in the curbline.	Storm water staff responded and found discharge evidence. It appeard to be oil on water. A notice was left at the door.	Yes	Verbal	Yes
73	06/07/11	Residential	Villa Washington Apts	1121	Washington E	Neighbor's grading causing drainage issues.	Storm water staff met with the complainant on site and determined that the matter is civil.	No	N/A	N/A
74	06/08/11	Commercial	Public Storage	1047	Pioneer Way	Discharge of sediment by over irrigation during construction activity.	The contractor and the business owner were contacted and advised to install bmps and reset the irrigation timer.	Yes	Verbal	Yes
75	06/14/11	Residential		947	Taft St	Large wooden structure being used as an oil drip pan left in the street.	Storm water staff inspected the site finding the wooden structure win oil pooled in it, in the ROW.	Yes	Verbal	N/A
76	06/14/11	Commercial	Blackington & Assoc.	380	Front St	Smokers throw their butts in the street and large amount of them go down the storm drain.	A search of the area found a large accumulation of butts in front of the business at the curb. It was determined that the acitvity is from trolley riders that arenot allowed to smoke at the station across the street. The matter was referred to the city street crew.	No	N/A	N/A
77	06/22/11	Commercial	KFC	555	Second St N	Waste oil/grease being dumped into the dumpster and trash enclosure.	The business manager was contacted on site and instructed to clean the trash enclosure and to replace the dumpster. Cease dumping waste grease in other than proper container for removal.	Yes	Verbal	Pending

Appendix B.2

High Priority **Municipal Facilities Inspected** **2010-2011**

	FACILITY NAME	ADDRESS	Inspection Date
1	Fleet Maintenance	1060 Vernon Way	12/20/10
2	Parks Dept. storage Yard/Maint.	1060 Vernon way	12/20/10
3	Public Works Maintenance Yard	1050 VernonWay	10/19/10
4	John F. Kennedy Park	1675 E. Madison	11/22/10
5	Wells Park Rec./Maint./Police	1153 E. Madison	12/01/10
6	Abert Van Zanten Park	1495 Greenfield Dr	02/07/11
7	Hillside Park and Recreation Center	840 Buena Vista Terrace	02/25/11
8	Fire Station Park	Tyron St at Westwind Dr	02/10/11

Municipal Facilities Inspected

	FACILITY NAME	ADDRESS	Inspection Date
9	Judson Park	Magnolia Ave at Park Ave	01/31/11
10	Civic Center Plaza And City Hall	200 Civic Center Way	02/03/11
11	El Cajon Performing Arts Center	110 E Main St	02/03/11
12	Cajon Valley Middle School Park	750 Park Ave	01/25/11
13	Renette Park and Recreation Center	935 Emerald Ave	02/02/11
14	Fletcher Hills Park, Pool and Recreation Center	2345 Center Pl	01/31/11
15	Tuttle Park	379 W Chase Ave	10/13/10
16	Fire Station #9 and Training Facility	1301 N. Marshall Ave	02/08/11

High Priority **Municipal Facilities Inspected** **2010-2011**

	FACILITY NAME	ADDRESS	Inspection Date
17	PresCott Promenade Park	200 Blk of E. Main St	01/28/11
18	Bostonia Park and Recreation Center	1049 Bostonia St	01/20/11
19	Ronald Regan Community Center	195 E. Douglas Ave	01/26/11
20	Bill Beck Park	Pierce St at Wagner Dr	01/31/11

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
1	AUTO TECH	590	S	MARSHALL	Commercial	Medium	7538	Auto Repair
2	RACE CAR DYNAMICS, INC	1900		WELD	Industrial	Medium	3999	Manufacturing, Misc
3	S&D PRECISION MACHINE SHOP	1390		HILL	Industrial	Medium	3549	Manufacturing, Equipment
4	California Countertop Quartz & Granite	1340		Hill	Industrial	High	3281	Manufacturing, Stone/Glass
5	East County Powder Coating	1835		John Towers	Commercial	High	3479	Painting/Coating
6	TURBINE AVIATION	1865		JOHN TOWERS	Industrial	Medium	3999	Manufacturing, Misc
7	MICRO-MODE PRODUCTS INC	1870		JOHN TOWERS	Industrial	Medium	3999	Manufacturing, Misc
8	GRAPHIC BUSINESS SOLUTIONS INC	1912		JOHN TOWERS	Industrial	Medium	3999	Manufacturing, Misc
9	PACIFICA GLASS CO, INC	1946		JOHN TOWERS	Commercial	Medium	5031	Building Materials
10	RUSSO TILE & MARBLE INC	635		FRONT	Industrial	HIGH	3281	Manufacturing, Stone/Glass
11	PROFESSIONALS CHOICE SPORTS	2025		GILLESPIE	Industrial	Medium	3999	Manufacturing, Misc
12	VALERO STATION #3738	785		JAMACHA	Commercial	Medium	5541	Fueling
13	Brantner and Associates, Inc.	1700		Gillespie	Industrial	Medium	3999	Manufacturing, Misc
14	Pure Bioscience	1725		Gillespie way	Industrial	Medium	3999	Manufacturing, Biotech/Pharmaceutical
15	METALS USA BUILDING PRODUCTS	1770		GILLESPIE	Industrial	Medium	3999	Manufacturing, Misc
16	VISION SYSTEMS INC	1895		GILLESPIE	Industrial	Medium	3999	Manufacturing, Misc
17	NEW BRUNSWICK INDUSTRIES	1850		GILLESPIE	Industrial	Medium	3999	Manufacturing, Misc
18	CUTTING EDGE	1825		GILLESPIE	Industrial	Medium	3999	Manufacturing, Misc
19	GARDNER POOL PLASTERING	801		GABLE	Commercial	HIGH	1742	Painting/Coating
20	Thai Time	762	N	Johnson Ave	Commercial	High	5812	Eating/Drinking Establishments
21	KITCHEN CRAFTERS	500		FRONT	Industrial	Medium		Manufacturing, Misc
22	JUANBERTO'S MEXICAN FOOD	1104	E	Washington Ave	Commercial	High	5812	Eating/Drinking Establishments
23	INTERNATIONAL HOUSE OF PANCAKES	1286		OAKDALE	Commercial	High	5812	Eating/Drinking Establishments
24	SANDMAR ENTERPRISES	1991		FRIENDSHIP	Industrial	Medium	3999	Manufacturing, Misc
25	MILANS SYNTHESIZED FURN	1991		FRIENDSHIP	Industrial	Medium	2542	Manufacturing, Misc
26	K F C #Y450087	555	N	SECOND	Commercial	Medium	5812	Eating/Drinking Establishments
27	PHANTOM RESEARCH LABORATORIES, INC	1957		FRIENDSHIP	Industrial	Medium	3999	Manufacturing, Misc
28	SENTREC ELECTRONICS INC	1943		FRIENDSHIP	Industrial	Medium	3999	Manufacturing, Misc
29	HI-TECH WELDING AND FORMING, INC	1990		FRIENDSHIP	Commercial	Low	7699	Equipment Repair
30	LAYFIELD ENVIRONMENTAL SYSTEMS CORP.	1166		FESLER	Industrial	Medium	3081	
31	Santana's Mexican Food	291	W	MAIN	Commercial	Medium	5812	Eating/Drinking Establishments
32	SAN DIEGO CUSTOM EXTRUSIONS	1866		FRIENDSHIP	Industrial			
33	GOODMAN CUSTOM WOODWORKS	1957		FRIENDSHIP	Industrial	Medium	3999	Manufacturing, Misc

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
34	STINE GAME TABLES	920		FESLER	Industrial	Medium		Manufacturing, Misc
35	THE VINTAGE SIGN CO., INC.	926		FESLER	Industrial	Medium		Manufacturing, Misc
36	FIRST TRANSIT	800		FESLER	Industrial	High		Transportation Service
37	VALLEY MUFFLER SHOP	533	W	MAIN	Commercial	Medium	7539	Auto Repair
38	PRIME HEAT, INC	1844		FRIENDSHIP	Industrial	Medium	3999	Manufacturing, Misc
39	EL CAJON MITSUBISHI	247		EL CAJON	Commercial	Medium	5511	Vehicle Dealers
40	BIG DADDY TRUCKING, INC.	1179	N.	CUYAMACA	Commercial			
41	WASTE MANAGEMENT	1001	W	BRADLEY	Industrial	Medium	4953	Waste Management
42	Q MICROWAVE INC	481		CYPRESS	Industrial	Medium	3999	Manufacturing, Misc
43	FIRST CLASS PACKAGING INC	280		CYPRESS	Industrial	Medium	3999	Manufacturing, Misc
44	DAYMAR CORPORATION	460		CYPRESS	Industrial	Medium	3999	Manufacturing, Misc
45	ALI BABA RESTAURANT	421	E	MAIN	Commercial	High	5812	Eating/Drinking Establishments
46	DAVE WHIPPLE SHEET METAL	1077	N.	CUYAMACA	Industrial	Medium		Manufacturing, Misc
47	POR FAVOR INC	148	E	MAIN	Commercial	High	5812	Eating/Drinking Establishments
48	SIZZLER RESTAURANT	1030		FLETCHER	Commercial	High	5812	Eating/Drinking Establishments
49	PRS, INC.	1460		FAYETTE	Industrial	Medium		Manufacturing, Misc
50	Mis Dos Gallos Taqueria Fruit & Deli	1088		Estes St	Commercial	High	5812	Eating/Drinking Establishments
51	TOMMYS ITALIAN DELI	1190	N	SECOND	Commercial	High	5812	Eating/Drinking Establishments
52	Outback Steakhouse	722		Jamacha Rd	Commercial	High	5812	Eating/Drinking Establishments
53	J. DOLAN DRAPERY WORKROOM	1484		FAYETTE	Industrial	Medium	3999	Manufacturing, Misc
54	SERRANOS SUPER SALSA	795		ARNELE	Commercial	High	5812	Eating/Drinking Establishments
55	A&G DRAPERY MANUFACTURING	1490		FAYETTE	Industrial	Medium	3999	Manufacturing, Misc
56	DELSTAR TECHNOLOGIES, INC	1306		FAYETTE	Industrial	Medium	3599	Manufacturing, Equipment
57	NATIONAL SPRING, INC.	1472		FAYETTE	Industrial	Low		Manufacturing, Misc
58	SAN DIEGO VAN & STORAGE	1426		FAYETTE	Industrial	HIGH	4214	Ground Transportation
59	HIS AUTO	279		EL CAJON BLVD.	Commercial	Medium		Auto Sales Lot
60	ARTIMEX IRON CO.	315		CYPRESS	Industrial	HIGH	1791	Other Contractor
61	MARIO'S UPHOLSTERY	1211	N	SECOND	Commercial	Medium	7699	Equipment Repair
62	RAYMONDE DRAPERIES	1555	N	CUYAMACA	Industrial	Medium	3999	Manufacturing, Misc
63	SID'S AUTO BODY, INC.	1129		BROADWAY	Commercial	High		Auto Repair
64	TOYOTA OF EL CAJON	965		ARNELE	Commercial	High		Vehicle Dealers
65	VERIDIUM	1717	N	CUYAMACA	Industrial	HIGH	3999	Manufacturing, Misc
66	Atlas Radiator Shop	580		El Cajon	Commercial	Low	7539	Auto Repair

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
67	JANIE'S CUSTOM DRAPERIES	336		COOGAN	Industrial	Medium	3999	Manufacturing, Misc
68	AVALON RF/PACIFITEK	344		COOGAN	Industrial	Medium	3999	Manufacturing, Misc
69	US WHEEL REMANUFACTURING	1000	W	BRADLEY	Industrial	Medium	3999	Manufacturing, Misc
70	TRICK TRUCKS, INC.	777	N	SECOND	Commercial	Low	7539	Auto Repair
71	SUPER STAR #2	1090		BROADWAY	Commercial	Medium	5541	Fueling
72	VALLEY TRANSMISSION & AUTO	1158	N	SECOND	Commercial	Medium	7537	Auto Repair
73	CALIFORNIA PARK MODELS	746	N	SECOND	Commercial	Medium	5561	Vehicle Dealers
74	SAN DIEGO MOBILE TRUCK & TRAILER SERVICE L.L.C.	125	S	MARSHALL	Industrial	Medium	3999	Manufacturing, Misc
75	Evergreen Environmental Services	412		Front	Industrial	Low	4226	Wholesale/Storage/Warehousing
76	Eye Grind Design	1069		Vernon Way	Industrial	Low	3581	Manufacturing, Misc
77	CONTROLLED PRECISION MFG	352		COOGAN	Industrial	Medium	3999	Manufacturing, Misc
78	CMEANN PRODUCTIONS	1890		CORDELL	Industrial	Medium	3999	Manufacturing, Misc
79	EAST COUNTY TIRE & BRAKE	616		BROADWAY	Commercial	Medium	7539	Auto Repair
80	RMS Laser	1033		Vernon Way	Industrial	Low	3999	Manufacturing, Misc
81	PRECISION METAL PRODUCTS, INC	850	W	BRADLEY	Industrial	HIGH	3599	Manufacturing, Equipment
82	EL CAJON SMOG AND AUTO REPAIR	720		BROADWAY	Commercial	Medium	7539	Auto Repair
83	C.P. RICHARDS SIGNS, INC	1200		BILLY MITCHELL	Industrial	Medium	3999	Manufacturing, Misc
84	ST CYCLEWEAR	1200		BILLY MITCHELL	Industrial	Medium	3999	Manufacturing, Misc
85	TOP DOLLAR #1	1150	N	SECOND	Commercial	Medium	5511	Vehicle Dealers
86	APRO #20	710	N	SECOND	Commercial	Medium	5541	Fueling
87	2ND ST GAS AND MINI	725	N	SECOND	Commercial	Medium	5541	Fueling
88	CHROMALLOY SAN DIEGO	1071		INDUSTRIAL	Industrial	Medium	3999	Manufacturing, Misc
89	CHEM-TRONICS INC	1150	W	BRADLEY	Industrial	HIGH	3999	Manufacturing, Misc
90	METAL ENGINEERING	390		FRONT	Industrial	Medium	3999	Manufacturing, Misc
91	HORNES METAL WORKS	1408		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
92	CAJON VALLEY UNION SCH DIST.	777	E	PARK	Industrial	HIGH	4151	Ground Transportation
93	WELDMAC MFG CO	1533	N	JOHNSON	Industrial	Medium	3999	Manufacturing, Equipment
94	PACIFIC TRANS ENVIRONMENTAL SVC INC	1452	N	JOHNSON	Industrial	Medium	4953	Waste Management
95	CALIFORNIA METALS	297-333	S	MARSHALL	Industrial	HIGH	3599	Manufacturing, Equipment
96	FLEXSYSTEMS USA INC	727	W	MAIN	Industrial	Medium	3999	Manufacturing, Misc

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
97	BIG DADDYS OIL - ARCO #9577	495	W	MAIN	Commercial	High		Fueling
98	JC AUTO REPAIR	1492	E	MAIN	Commercial	High		Eating/Drinking Establishments
99	PREMIER GLASS	613	W	MAIN	Industrial	Medium		Manufacturing, Misc
100	DE LA FUENTE CADILLAC	1385	E	MAIN	Commercial	Medium	5511	Vehicle Dealers
101	RILEY AUTOMOTIVE	1665	E	MAIN	Commercial	Medium	7539	Auto Repair
102	JULIO CESAR CHAVEZ AUTO GROUP	464	W.	MAIN	Commercial	High		Auto Sales
103	EAST COUNTY AUTO CENTER/EAST COUNTY AUTO COLLISION	1375	E	MAIN	Commercial	Medium	5511	Vehicle Dealers
104	AMERICAN MADE WROUGHT IRON	1401		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
105	G P K INC	535		FLOYD SMITH	Industrial	Medium	3999	Manufacturing, Misc
106	T B S IRRIGATION PRODUCTS INC	1532	N	JOHNSON	Industrial	Medium	3999	Manufacturing, Misc
107	BIG O TIRES	844	N	JOHNSON	Commercial	Medium	5531	Auto Supplies
108	EAST COUNTY TIRE PROS	844	N	JOHNSON	Commercial	High	7534	Auto Repair
109	ZUMMAY CUSTOM CABINETRY	594		FRONT	Industrial	Medium		Manufacturing, Misc
110	SAN DIEGO SOY DAIRY, INC	1330		HILL	Industrial	Medium	3999	Manufacturing, Misc
111	AEROWIND CORPORATION	1959		JOHN TOWERS	Industrial	Medium	3599	Manufacturing, Equipment
112	GOODYEAR CERTIFIED TIRE	790	N	JOHNSON	Commercial	High		Auto Repair
113	CUMMINS CAL PACIFIC L.L.C.	310	N	JOHNSON	Commercial	Medium	7538	Auto Repair
114	JEROME'S	333	N	JOHNSON	Commercial	Medium	5021	Wholesale/Storage/Warehousing
115	E&M AUTO PARTS	1647	E	MAIN	Commercial	Medium	5531	Auto Supplies
116	VENUS PRINTING	1183	E	MAIN	Industrial	HIGH	2741	Printing
117	ATTENTION GETTERS	1385	N	JOHNSON	Industrial	Medium	3999	Manufacturing, Misc
118	COMBO ALUMINUM PRODUCTS	1100	N	JOHNSON	Industrial	Medium	3999	Manufacturing, Misc
119	VEOLIA TRANSPORTATION	1213	N	JOHNSON	Commercial	High	4789	Transportation Service
120	EL CAJON VALLEY VETERINARY HOSPITAL	560	N	JOHNSON	Commercial	High		Animal Facilities
121	RACE CAR DYNAMICS, INC	1900		WELD	Industrial	Medium	3999	Manufacturing, Misc
122	KROPF'S CUSTOM SHEET METAL	1408		PIONEER	Industrial	High		Other Contractor
123	KD CABINET	1065		VERNON	Industrial	Medium		Manufacturing, Wood/Furniture
124	WASHINGTON ARCO	1092	E	WASHINGTON	Commercial	Medium	5541	Fueling
125	AMERICAN SCISSOR LIFT, INC.	400	N	JOHNSON	Commercial	High		Rental Equipment
126	ASPEN VINYL INC.	601	W	MAIN	Industrial			
127	CALIFORNIA SHEET METAL	1020	N	MARSHALL	Industrial	Medium		Manufacturing, Misc
128	THUNDERBIRD PRODUCTS	1148	N	MARSHALL	Industrial	Medium	3999	Manufacturing, Misc

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY
129	PULLTARPS	1404 N MARSHALL	Industrial	Medium		Manufacturing, Misc
130	CAMP BOW WOW	1677 N MARSHALL AVE	Commercial	High		Animal Facilities
131	GOLDEN STATE AVIATION	1640 N JOHNSON	Industrial	Medium	4581	Air Transit
132	JACK CHIDGEY & SON, L L C	1099 W PALM	Industrial	Medium	3599	Manufacturing, Equipment
133	ARCO A.M./P.M. #640	593 N MOLLISON	Commercial	Low	5541	Fueling
134	TRIUMPH FABRICATIONS - SAN DIEGO, INC	203 N JOHNSON	Industrial	HIGH	3999	Manufacturing, Misc
135	SLEEP TRAIN MATTRESS CENTER	790 N JOHNSON	Commercial	Medium	5531	Automotive Service
136	HIS BUSINESS MANUFACTURING CO	1180 N JOHNSON	Industrial	Medium	3999	Manufacturing, Misc
137	SUPER-KRETE INTERNATIONAL INC	1290 N JOHNSON	Commercial	HIGH	5032	Building Materials
138	ADVANCED FINISHING, INC	1300 N JOHNSON	Industrial	Medium	3599	Manufacturing, Equipment
139	IRON EXPRESS	1401 PIONEER	Industrial	Low		Manufacturing, Misc
140	WATERDOG PRODUCTS INC	1148 PIONEER	Industrial	Medium	3999	Manufacturing, Misc
141	LIVESAY MARINE	1250 PIONEER	Industrial	Medium	3999	Manufacturing, Misc
142	CHEVRON STATION INC #1742	696 N MOLLISON	Commercial	Medium	5541	Fueling
143	TORO AGRICULTURAL IRRIGATION	1588 N MARSHALL	Industrial	HIGH	3999	Manufacturing, Misc
144	AERODYNE ENGINEERING CO	1763 N MARSHALL	Industrial	Medium	3999	Manufacturing, Misc
145	ALPHA POWDER COATING CO	440 FRONT	Industrial	Medium	3999	Manufacturing, Misc
146	J & B MATERIALS, INC.	1165 N JOHNSON	Commercial	High		Building Materials
147	ABACOR, INC	766 GABLE	Industrial	Medium	3999	Manufacturing, Misc
148	GARVIN INDUSTRIES	316 MILLAR	Industrial	Medium	3999	Manufacturing, Misc
149	JIM WOLF TECHNOLOGY INC	212 MILLAR	Industrial	Medium	3999	Manufacturing, Misc
150	RDI, LLC.	385 S. MARSHALL	Commercial	High		Transpotation Facility
151	AJM PACKAGING CORPORATION	1160 VERNON	Industrial	High		Manufacturing
152	ALLIED CASTINGS INC	983 VERNON	Industrial	HIGH	3271	Manufacturing, Concrete
153	MECH INCLINED TECHNICIANS	1112 PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
154	GIBSON & BARNES TOP NOTCH FLIGHT SUITS	1900 WELD	Industrial	Medium	3999	Manufacturing, Misc
155	PREMIER METAL PROCESSING INC	1488 PIONEER	Industrial	Medium	3599	Manufacturing, Misc
156	AUTOWORKS INTERNATIONAL FABRICATION	462 VERNON	Industrial	Medium	3599	Manufacturing, Equipment
157	HOUSE OF BOUNCE	959 VERNON	Industrial	Medium	3999	Manufacturing, Misc
158	CERTIFIED METAL CRAFT INC	877 VERNON	Industrial	HIGH	3999	Manufacturing, Misc
159	RUSSELLS METALFAB CO	549 RALEIGH	Industrial	Medium	3499	Manufacturing, Primary Metal
160	AUTOBAHN	444 VERNON	Industrial	High		Recycling

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
161	GRIFFITHS MACHINING	465		VERNON	Industrial	Medium	3599	Manufacturing, Equipment
162	MIL SPEC METALLICS	755		VERNON	Commercial	Medium	5014	Auto Supplies
163	DECCO CASTINGS INC	1596		PIONEER	Industrial	HIGH	3365	Manufacturing, Primary Metal
164	ALTURDYNE	660		STEELE	Industrial	HIGH	3621	Manufacturing, Equipment
165	DOETSCH ENTERPRISES	515		RALEIGH	Industrial	Medium	3999	Manufacturing, Misc
166	AMETEK ROTRON	474		RALEIGH	Industrial	Medium	3564	Manufacturing, Equipment
167	FABCOM	781		VERNON	Industrial	Medium	3599	Manufacturing, Equipment
168	East County Metal Supply	755		Vernon	Industrial	High	3449	Manufacturing, Fabricated Metal
169	OMNI PACIFIC	505		RALEIGH	Industrial	Medium	3999	Manufacturing, Misc
170	DIRECT SHEETMETAL	1423		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
171	MEYER ENG	1445		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
172	TOP NOTCH MANUFACTURING INC	1488		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
173	SAN DIEGO ROD & CUSTOM	1575		PIONEER	Commercial	High		Auto Repair
174	CIRCLEMASTER INC	495		RALEIGH	Industrial	Medium	3999	Manufacturing, Misc
175	COUNTYWIDE METAL FAB & FINISH INC	1348		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
176	PLUCK A TRUCK EL CAJON AUTO RECYCLING	1416		PIONEER	Industrial	High		Manufacturing, Misc
177	COMPETITION TEXTILES	1449		PIONEER	Industrial	Medium	3999	Manufacturing, Misc
178	PONDEROSA ROASTING MAINT. & MFG.	1466		PIONEER	Industrial	Low		Manufacturing, Misc
179	MILLER'S TOWING	1402		PIONEER	Commercial	Low	7549	Auto Repair
180	MEDIA CONTROL SYSTEMS L.L.C.	1050		PIONEER	Industrial	Medium	5084	Manufacturing, Misc
181	FIT N HIP WEAR	1618		PIONEER	Industrial	Medium	3999	Manufacturing, Misc
182	SUNWEST TECHNOLOGIES INC	1050		PIONEER	Industrial	Medium	3999	Manufacturing, Misc
183	THE STRIP SHOP	1050		PIONEER	Industrial	Medium	3999	Manufacturing, Misc
184	LITE STONE CONCRETE	1105	N	MARSHALL	Industrial	High	3272	Manufacturing, Concrete
185	HIGH PRECISION GRINDING & MACHINING, INC.	1130		PIONEER	Industrial	Medium	3999	Manufacturing, Misc
186	SOUTH BAY WELDING	781		O'CONNOR	Industrial	HIGH	3441	Manufacturing, Structural Steel
187	TUBE LIGHTING PRODUCTS	1346		PIONEER	Industrial	Medium	3648	Manufacturing, Misc
188	EMBERTON'S MACHINE & TOOL	1215		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
189	LIDDLE MACHINE	1276		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
190	REYES MACHINING	1364		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment

City of El Cajon
Inspections Conducted at Construction Sites Permit Year 2010-11

	Description	Address or Location	WD ID#	SUSMP	SUSMP Trigger	Construction Priority	Site Size (acres) (*=disturbed area <1 acre)	Tributary to ESA	Assessor's Parcel Number	Wet Season Inspection Totals	Wet Season Weeks Active	Wet Season Weeks Inactive	Dry Season Inspection Totals	Dry Season Weeks Active Total	Dry Weeks Season Inactive Total	'10-'11 Year Inspection Totals	'10-'11 Year Weeks Active Totals	'10-'11 Year Weeks Inactive Totals
1	Toyota of El Cajon	965 Arnele Avenue	9 37C354905	Yes	Parking Redevelopment >5,000 sf, Add Automotive Repair	High	9.89	No	4822502600	**3**	**0**	**31**	**0**	**0**	**21**	**3**	**0**	**52**
2	Ballantyne Glenn (Birchwood Lane)	823 Ballantyne Street	9 37C347110	Yes	>10 Unit Subdivision	High	2.60	No	5110143400	**23**	**31**	**0**	**5**	**21**	**0**	**28**	**52**	**0**
3	Public Safety Center	100 Civic Center Way	937C351777	Yes	Commercial >1 acre, Parking Redevelopment >5,000 sf	High	8.39	Yes	4880724200	**23**	**31**	**0**	**7**	**21**	**0**	**30**	**52**	**0**
4	SC Valley Engineering	656 Front Street		Yes	Industrial, Parking >5000 sf	High	0.85	No	4832409100	**0**	**0**	**31**	**2**	**8**	**13**	**2**	**8**	**44**
5	Pre-Fabricated Home Sales	1341 Main Street, East		Yes	Parking and Redevelopment >5,000 sf	High	0.82	No	4871710900	**4**	**1**	**30**	**0**	**0**	**21**	**4**	**1**	**51**
6	Promenade Square	133 Main Street, West		Yes	Commercial >100,000 sf	High	2.21	No	4881521400-1700	**0**	**0**	**31**	**3**	**4**	**17**	**3**	**4**	**48**
7	Heartland Fire Parking lot	1301 Marshall Avenue, North		Yes	Parking >5,000 sf	High	0.40	No	4821311600	**7**	**11**	**20**	**0**	**0**	**21**	**7**	**11**	**41**
HIGH PRIORITY TOTALS =										**60**	**74**	**143**	**17**	**54**	**93**	**77**	**128**	**236**
1	Prescott Promenade	South of Main Street, East @ Sulzfeld		No	N/A	Medium	1.50*	Yes	4882112100-2200	**0**	**0**	**31**	**7**	**7**	**14**	**7**	**7**	**45**
MEDIUM PRIORITY TOTALS =										**0**	**0**	**31**	**7**	**7**	**14**	**7**	**7**	**45**

Appendix B.3

Enforcement Actions

2009-2010

	Citation Date	Person Cited	Business Name	Address Number	Street Name	Direction	Citation Number	Warning or Fee	Component	Violations	Disposition
1	7/15/2009	Amodor Hernandez	Premium Roof Service	1573	Green Grove Ave		PW 0628	Warning	Mobile	Mobile contractor discharging tile cutting residue to the storm water conveyance system.	Corrected
2	7/31/2009	Jack Williams	Pacific Building Group	190	Main St	W	PW 0677	Warning	Construction	Sediment tracking and failure to install and maintain BMPs	Corrected
3	8/7/2009	Kevin Deloach	Coco's Restaurant #1162	1025	Fletcher Parkway		PW 0684	First	Commercial	Private Lateral overflow into the storm water conveyance system.	Corrected
4	8/19/2010	Mark Canfield	San Diego Contracting Inc	1539	Main St	E	PW 0674	First	Construction	Discharge of sediment/water, Failure to fully impliment SWPPP, failure to manitain perimeter BMPs	Corrected
5	8/20/2009	Will House	Starrett Construction Inc.	965	Arnele Ave		PW 0676	Second	Construction	Sediment tracking and failure to install and maintain BMPs	Corrected
6	10/13/2009	Yousef Kurdy	Heart Haven Residential Care	1160	Broadway		PW 0665	First	Commercial	Private Lateral overflow into the storm water conveyance system.	Corrected
7	10/28/2009	Shawn Sagart	Julio Ceasar Chavez Auto Group	464	Main St	W	PW 0667	Warning	Commercial	Sediment tracking, minor block work discharge and failure to install and maintain BMPs.	Corrected
8	11/20/2009	Jim Roe	El Cajon Senior Tower Apartments	180	Ballantyne		PW 0629	Warning	Residential	Discharge of pink tinted water from airconditioning work on roof of building.	Corrected
9	11/23/2009	John Ward	Lite Stone Concrete	1105	Marshall	N	PW 0234	Warning	Industrial	Discharge of non-stormwater at the east side of the property.	Corrected
10	11/30/2009	Evan Salem	La Valencia Plaza LLC	1273	Main St	E	PW 0231	Warning	Construction	Sediment tracking and failure to install and maintain BMPs	Corrected
11	11/30/2009	Bobby Barrios	Rally's Hamburger	1261	Main St	E	PW 0232	First	Commercial	Discharge of wash water into the storm drainage system.	Corrected
12	12/2/2009	Isam Aziez		577	Tilling Way		PW 0233	Warning	Residential	Failure to install BMPs for disturbed soils.	Corrected
13	12/11/2009	Bobby Osborne		990	Aster Ave		PW 0236	Warning	Residential	Discharce of oil through under curb drain pipe into street.	Corrected
14	1/7/2010	Maribel Ramirez	Shady Lane Apts	388	Shady Lane		PW 0237	First	Residential	Private lateral discharge into storm drain inlet	Corrected
15	1/13/2010	Loc Nguyen	C E Wilson Construction	1059	Australia		PW 0238	Warning	Residential	Discharge of sediment, failure to install and maintain BMPs.	Corrected

Enforcement Actions

2009-2010

	Citation Date	Person Cited	Business Name	Address Number	Street Name	Direction	Citation Number	Warning or Fee	Component	Violations	Disposition
16	2/18/2010	Leroy Silva		2788	Cataract Pl		PW 0239	Warning	Residential	Discharge of diatomaceous earth directly into the street. The discharge flowed in the curb line and entered the storm drain inlet at Garden Grove and Chatham.	Corrected
17	3/2/2010	Turner Scholl	El Cajon Energy Center	222	Johnson	N	PW 0240	Warning	Construction	Discharge of sediment into the storm drain inlet from dewatering.	Corrected.
18	3/9/2010	Chuck Preppo	Trolley----- A Mart	250	Marshall	N	PW 0241	First	Commercial	Private lateral discharge to the storm water conveyance system.	Corrected
19	4/12/2010	Sayfe Salem	Valley Foods	1275	Main St	E	PW 0242	Warning	Commercial	Respositioned roof downspout to discharge across the sidewalk.	Pending
20	4/14/2010	Philip Simis	Scantibodies Laboratory Inc.	1068	Broadway		PW 0243	Warning	Commercial	Failure to install BMPs during a rain event. Soil and debris piles and inlet protection.	Corrected
21	6/29/2010	Robert Parrish	BJ's Equipment Rentals	1717	Main St	E	PW 0216	Warning	Commercial	Equipment wash water discharging to the storm drain.	Corrected

Appendix B.4
(No Content)

Appendix C.1

El Cajon Storm Water Program Contact List (PY4)

Department	Contact Name	E-mail Address	Phone Number	Fax Number	Example of Responsibilities
Public Works	Dennis Davies	ddavies@cityofelcajon.us	(619) 441-1661	(619) 579-5254	Oversees Public Works, Land Development process. Coordinates Implementation of
Storm Water Manager	Jaime Campos	jcampos@cityofelcajon.us	(619) 441-5554	(619) 579-5254	Generally oversees the assessment process and facilitates updates and changes to the URMP.
Planning Department	Manjeet Ranu	MRanu@cityofelcajon.us	(619)441-1771		Implementation of the land use component and facilitation of public education in regards to new. development.
Finance	Joyce Nevarez	jnevarez@cityofelcajon.us	(619)441-1543		Identify and secure sources of funds for implementation of the URMP.
Code Enforcement/Inspection	Craig Bonner	cbonner@cityofelcajon.us	(619) 441-1663	(619) 579-5254	Code enforcement activities, inspections, public outreach programs and education activities
SUSMP and Erosion Control Plan Review/Code Enforcement	Blake Behringer	bbehringer@cityofelcajon.us	(619) 441-1666	(619) 579-5254	Code enforcement activities and review of Erosion Control and SUSMP Plans for City projects and Private Development Contracts
Public Outreach	Robert Griswold	bgriswold@cityofelcajon.us	(619) 441-1704	(619) 579-5254	Facilitate public outreach programs and education activities.

Appendix C.2
(No Content)

Appendix D.1

CHAPTER 5 - -OPERATIONS AND MAINTENANCE

SECTION CONTENTS PAGE NO.

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5.
OPERATIONS AND MAINTENANCE

The City shall properly manage, operate and maintain all parts of the sanitary sewer system owned or operated by the City and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills and abilities.

The SSMP must include those elements listed below that are appropriate and applicable to the enrollee's system:

(A) Maintain an up-to-date map of the sanitary sewer system showing all gravity line segments and manholes, and applicable stormwater conveyance facilities,

(B) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) Program should have a system to document scheduled and conducted activities, such as work orders,

(C) Develop a rehab and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;

(D) Provide training for staff on a regular basis in sanitary sewer system operations and maintenance, require contractors to be appropriately trained; and

(E) Provide equipment and replacement part inventories including identification of critical replacement parts.

5.1 Mapping

The requirement for this section is to maintain an up-to-date map of the collection system showing all gravity line segments and manholes, and storm water conveyance facilities.

5.1.1 Compliance Summary

As part of the City's Sewer System Master Plan Updated in 2008, the City's consultant prepared a new GIS atlas book of the City's collection system integrating basin, parcel and address layers. The new book is in distribution with a set protocol for noting inaccuracies and changes. Books will be collected once annually and updates will include any new or reconstructed facilities as well as corrections to older data. The protocol for book distribution and periodic collection along with standardized notations to be used by field and office personnel to note pending revisions to the GIS model, is:

1. How many sewer books to be distributed?

   A. Three City Hall copies: front counter, Private Development, extra copy

   B. Seven Maintenance/Operation copies: **DM, MS, AND 5** maintenance positions/vehicles

2. All books to be numbered and assigned a unique number to each user.

   It's most important to have an audit trail to demonstrate to the Regional Board that all people that meet and deal with the public and are involved in the SSOPP and SSORP have the most up-to-date information possible. This issue will be addressed in the next Storm Water Program audit.

3. No unauthorized reproductions. If someone needs a book, that person needs to order one from the GIS Administrator. All changes made to the master document are to be coordinated with the GIS Administrator.

4. All notations and corrections are to be noted in numbered books only. Maintenance crews will provide their comments to the maintenance supervisor who will keep a running record of field changes in his book. Senior Engineering Tech will make notations from processed as-builts on the master book and on the GIS sewer layer as CIP or private development projects are completed. Books will be collected, updated and redistributed periodically. New map books will be provided to all parties at the beginning of the system maintenance cycle or on an annual basis.

5. The GIS Administrator **(ET)** will keep a log of users and book numbers; establish frequency of updating, procedures for editing books, printing and redistributing sewer books.

6. Each book shall have a title page showing the book number and the date of publication. Inclusion of revised pages, per comment No. 6, will be hand-written on the title page of each book. **ET** will also develop a legend to illustrate how to record changes to the system or annotation.

7. Counter Book No. 1 will be the master copy to track comments and changes noted by counter personnel. **ET** will place the revised pages in Counter Book No. 1 so that it will be an up-to-date living document. Minor revisions may be distributed to Maintenance/Operations if significant projects are completed during

the system maintenance cycle or significant corrections are made. Minor revision pages will be stapled over the older pages in the sewer map books.

The City has no pump stations, force mains or valves to maintain so the collection system reflects gravity flow facilities only including 14 gravity siphons throughout the City. Future enhancements to the sewer atlas will be to integrate scans of as-built plans and CCTV inspection video as attributes to each pipeline segment. GIS users can assess as-built construction data and pipeline conditions on the fly. In 2009, the City will be completing a master plan for MS4 facilities including a new GIS based storm drain atlas book similar to the sewer atlas. Once this task is completed, the sewer atlas book will have a new layer reflecting location of all drainage structures. This will replace the paper map storm drain atlas book currently used by the City in conjunction with the new sewer atlas.

5.1.1 Compliance Documents

The documents supporting compliance with the requirements for mapping are as follows:

- The GIS based sewer atlas book is contained in Vol. 2, Appendix 5-1.
- The existing storm drain atlas book is in Vol. 2, Appendix 5-2.

5.1.2 Roles and Responsibilities

The roles and responsibilities of staff supporting compliance with the mapping requirement of the Operations and Maintenance Program are as follows:

Engineering and maintenance staffs are allowed to make notations in the various numbered atlas books distributed to personnel for that purpose. Notations are made according to the standards and procedures noted above and developed for that purpose.

The only individual allowed to make changes to the GIS database is the City's GIS Administrator, who will collect the books annually to record the noted changes received from staff. New books with revision dates will be re-distributed.

5.2 City of El Cajon Sewer Collection System

Preventive Maintenance Program (PMP)

5.2.1 Introduction

A City Maintenance Program consists of the O&M practices the City utilizes to maintain all of its facilities including routine line cleaning and inspection (CCTV and visual), and hot spot or trouble spot identification and maintenance. The maintenance program also describes how complaints, service calls and alarm conditions are responded to. Additionally, the maintenance program should have a means of scheduling and tracking

maintenance needs and activities as well as evaluating the effectiveness of the maintenance performed.

Background

This Preventive Maintenance Program (PMP) document is submitted as required by the Regional Water Quality Control Board's (RWQCB) Waste Discharge Requirements (WDR) Order R9-2006-0003, Page 11 of 20, Section (IV) Operation and Maintenance Program, Part (b).

The City of El Cajon Preventive Maintenance Program (PMP) covers the assets we manage in our sanitary sewer system and is one component of our overall Sewer System Management Plan (SSMP). The PMP is based on an approach that combines preventive, predictive and corrective maintenance strategies and established best management practices.

Overview

The City of El Cajon manages roughly 200 miles of gravity sewer system comprising of manhole structures and their connecting pipeline segments. As of January 2009, we operate and maintain 14 inverted sewer siphons as part of the overall pipeline system. Our Engineering Department is currently engaged in a sewer mapping project and the exact mileage numbers may change, as data is refined.

The City of El Cajon does not own or maintain any portion of the sewer laterals (upper or lower laterals) that drain each privately owned parcel or property up to the point of connection to the local sewer; therefore, they are not a part of this plan nor are they catalogued.

We use both staff and/or contractors to perform the planned maintenance tasks at scheduled frequencies as part of our Preventive, Predictive and Corrective Program. Frequencies are established based on experience and attribute information to minimize risk of blockages or equipment failures that could possibly lead to a sanitary sewer overflow (SSO).

5.2.2 Compliance Summary

Preventive and Predictive Maintenance Program

Maintenance classified as preventive is proactive and is defined by a programmed, systematic approach to maintenance activities. This type of maintenance results in improved system performance, except in the case where major chronic problems are the result of design and/or construction flaws that cannot be completely corrected by O&M activities. Proactive maintenance is performed on a periodic (preventive) basis or an as needed (predictive) basis. Preventive maintenance can be scheduled on the basis of specific criteria such as known problem areas (e.g., a siphon that often gets clogged, a low point that is often first to overflow in a storm event, or even an area prone to blockages), equipment operating time since the last maintenance was performed, or passage of a certain amount of time (calendar period).

Preventive Maintenance (PM) Tasks

We have developed and continue to develop asset-specific maintenance tasks for the care of each asset throughout its life cycle.

Major PM task groupings are:

- Sewer inspection and condition assessment (performed concurrently with maintenance activities)
- Sewer cleaning, including flushing and rodding maintenance
- Siphon and trouble spot maintenance
- Problem manhole inspection and maintenance

PM Frequencies

As described above, the frequencies for preventive maintenance tasks are assigned to each asset or group of assets, as follows:

Table 5-1: – "Summary of Sewer Maintenance System Preventive Tasks"

Document Name	Maintenance Type	Length of Maintenance Cycle	Remarks
System Flushing and Routine Maintenance Task	Flushing	Goal to complete system cycle within 18 months	Not explicitly scheduled unless needed. Complete system cycle usually completed in 12 months
Siphons and Trouble Spots Task	Flushing, Descaling, Degreasing	3-month cycle	Issued quarterly in February, May, August and November
Monthly Rodding Task	Rodding	6- or 12-month cycle	Issued each month
Problem Manholes with Roots Task	Rodding and Debris Removal	3-month cycle	Mostly problem manholes with roots. Issued quarterly in February, May, August and November
Delinquent Rodding List	Follow-up to Scheduled Rodding	N/A	Issued each month. Used to correct errors in performed maintenance and data entry.

System Flushing and Routine Maintenance Task

Prior to the acquisition of modern high pressure cleaning equipment in the late 1970's, much of the City's sewer system had never been inspected or cleaned and the City experienced numerous complaints along with over 100 stoppages per year. A stoppage is a clogged sewer line, which can cause backups and odors and can possibly result in flooded homes and other property damage. The current on-going City preventive maintenance program has reduced complaints and stoppage incidences to less than five per year on average.

The City sewer flushing crew (equipment operator and maintenance worker) services the sewer mains in an upstream-to-downstream, basin-by-basin sequence. A flushing log is updated daily allowing the CMMS to track which mains have been serviced and how many feet have been cleaned and flushed each day. Although the goal is to completely flush all targeted sewer mains every 18 months, one complete cycle of cleaning and flushing is typically completed within 12 months. Upon completion of the flushing and cleaning cycle a new cycle of flushing and cleaning is immediately initiated. Total servicing mileage for July 1, 2007 through June 30, 2008 was approximately 219 miles in a collection system totaling 195 miles in length.

Sewer Root Removal Program

Another maintenance effort involves the removal of tree roots from sanitary sewers. Tree roots can be a real menace, damaging sewers and causing sewers to plug. Tree roots seek the moisture and nutrients offered by leaky pipe joints usually found in the older and sometimes cracked or broken sewer pipes. Current root removal methods are limited to mechanical rodding with several styles of rotating bits, which may prove ineffective in dense root areas. Our City is investigating the control of roots through the

application of mild herbicidal foam, applied from within the sanitary sewer, which kills the roots in a confined area, within and around, the sanitary sewer while not harming the tree. This herbicidal method is approved by the EPA as an acceptable root control best management practice, and does not interfere with the wastewater treatment processes.

The City maintains a list of problem sewer main segments with roots called the "Monthly Rodding Task" and services each segment on a three, six or twelve-month schedule. The City also maintains a list of "Problem Manholes With Roots" and services these manholes on a three-month schedule during February, May, August and November. The mechanical rodding crew consists of a truck-mounted continuous mechanical rodder, an equipment operator and a maintenance worker.

Sewer Trouble Spot and Siphon Program

As summarized in Section "PM Frequencies" above, the City maintains a list of sewer main segments with known flow problems, including City siphon segments, and cleans and flushes these segments on a three-month schedule. Our City is currently moving to install high and low-level flow alarms in our sanitary sewer siphons that will notify the City through text messaging and email in the event of a high or low-level flow event at one of the siphons.

Predictive Maintenance Tasks

Predictive Maintenance **(PD)** tasks (a subset of **PM**) are inspection and condition-assessment type tasks. These are performed to determine if the planned preventive maintenance task should be done as scheduled or rescheduled to a forward date if preventive maintenance, rehabilitation or replacement is not needed. Predictive Maintenance tasks are therefore performed based on asset condition and need rather than a strict time interval when maintenance may not be required. Predictive Maintenance tasks include but are not limited to the following:

- Closed Circuit TV (CCTV) video inspection of piping
- Visual inspection of the manhole structures and their flow channels
- Trending of flow monitoring data
- Inspection of inverted siphons during preventive maintenance
- Ground surface inspection of rights-of-way and easements over the gravity sewers.
- Odor and corrosion assessment and monitoring programs
- CCTV Sewer Inspections

One of the critical components of the predictive maintenance program involves internal inspection of sanitary sewers using a TV camera. A sealed TV camera is mounted on a device similar to a small-wheeled sled, which is guided through the sanitary sewer. As the T.V. camera is pulled through the sanitary sewer and viewed by inspection personnel above ground, sewer defects are recorded for future reference and repair. A

computerized ranking system analyzes the defects found in many individual sewer line segments and systematically prioritizes repairs for City sewer main repair crews.

Along with finding sewer system deficiencies and prioritizing maintenance activities, the T.V. crew is also responsible for inspecting all newly constructed sanitary sewers before they are put into service.

The Predictive Maintenance program will continue to develop as technology expands.

Corrective Maintenance Tasks

Corrective maintenance (CM) tasks are performed in response to a failure of an asset, component or part, or a critical utility outage. Low-risk items, such as light bulbs, pressure gauges, sensors, and small non-critical valves, are planned for run-to-failure, and as such, are not part of the PM Program. These items are replaced when they fail. When managed assets critical to the process fail they are scheduled for CM on an urgent or routine basis on a priority schedule. Some of these repairs may be capitalized as a follow-up activity depending on asset cost and life expectancy. These types of CM repairs include but are not limited to:

- Emergency cleaning to eliminate a pipe blockage
- Spot repair or replacement of a failed pipe
- Replacing a rattling or failed manhole cover
- Repairing damage caused by construction or failure of another utility (e.g., water or gas main breakage)
- Respond to, investigate and mitigate customer complaints and sewer overflows
- Repair of earthquake damage
- Repair after vandalism
- Staff documents CM tasks on paper at the time of the event. The event may be documented in the CMMS database, if appropriate.

CCTV or other failure analysis may also be done by staff as a CM task after a problem occurs in an effort to diagnose the cause of the problem and recommend changes, if indicated.

Findings may lead to a spot repair of the pipe, root cutting, re-cleaning for grease, or debris removal on a periodic preventive basis, or scheduling a manhole-to-manhole pipe replacement or rehabilitation in an urgent or lower priority planned manner. Major replacement or rehabilitation may be capitalized outside of the annual operating budget.

5.2.3 Compliance Documents

Hardcopy data files and paper records not recorded in our Computerized Maintenance Management System (CMMS) are available for review and audit. Standard Operating Procedures (SOPs) and Standard Maintenance Procedures (SMPs) ensure consistency. These are available for some maintenance tasks and are continuing to be developed for others. Mobile assets such as service trucks, generators, and other equipment are not covered by this PMP but are covered by plans developed by the maintenance program of our Public Works Department.

Sewer Asset Inventory and Attribute Data

Capital assets, minor components and their parts are catalogued in our paper records or the CMMS. Source or attribute data for each of these items is obtained from record drawings, sewer maps, plans and specifications and/or supplier data. Levels of care for each item are described in the tasks and frequencies information as catalogued in the CMMS or, in the interim, on lists, spreadsheets or annotated maps until the full CMMS implementation is completed.

Documents prepared through queries of the CMMS supporting the preventive maintenance servicing task of the sewer asset are summarized more completely in Table 1: "Summary of Sewer Maintenance System Preventive Tasks" in the Compliance Summary Section. A short summary of compliance documents is as follows:

- Sewer map layer in El Cajon Geographic Information System (GIS). The map contains special information that is used in developing maps used in operations & maintenance and spill response, Vol. 2, Appendix 5-1.

- El Cajon Sewer Maintenance System (CMMS), Vol. 2, Appendix 5-3. Used to track preventative maintenance and prepare work orders from monthly maintenance. It is anticipated that the CMMS will be integrated with the GIS in the near future. Monthly and quarterly work orders are prepared as follows:
- Flushing Report (monthly), 2008, Vol. 2, Appendix 5-4
- Mechanical rodding maintenance (monthly), 2008, Vol. 2, Appendix 5-5
- Delinquent mechanical rodding maintenance (monthly), Vol. 2, Appendix 5-6
- Siphon and Trouble Spot maintenance (quarterly), Vol. 2, Appendix 5-7
- Problem manhole maintenance (quarterly), Vol. 2, Appendix 5-8

5.2.4 Roles and Responsibilities

The staff positions and their responsibilities for the City's Preventive Maintenance Program are as follows:

The Preventive Maintenance Program is staffed by the following positions

- Deputy Director, **(DM)** (1)
- Public Works Supervisor **(MS)** (1)
- Equipment Operator, **(EO)** (2)
- Maintenance Worker, **(MW)** (2)
- Maintenance Crew Leader **(MCL)** (1)
- Associate Engineer **(AE)** (1)
- Senior Technician **(ET)** (1)
- Storm Water Code Enforcement Officer **(CEO)** (1)

Staff time budgeted for the Preventive Maintenance Program is summarized in the following table:

Table 2 – Staffing Time for Various Sewer Preventive Maintenance Tasks

Task (Top/Right) -→ Position (Left/Down)	Sewer Flushing	Sewer Roding	Sewer CCTV	SSO Response	Program Support	Position Totals
Equipment Operator	2.00	0.50	0.50	0.20		3.20
Maintenance Worker	2.00	0.50	0.50	0.20		3.20
Maintenance Crew Leader			0.50	0.50		1.00
Public Works Supervisor	0.20	0.20	0.20	0.20	0.20	1.00
Deputy Director					0.25	0.25
Associate Engineer			0.15		0.25	0.40
Senior Technician			0.10	0.25	0.50	0.85
Storm Water Code Compliance				0.10		0.10
Task Totals	4.20	1.20	1.95	1.45	1.20	10.00

The Equipment Operators and Maintenance Workers perform the day-to-day work summarized by tasks in Table 1: "Summary of Sewer Maintenance System Preventive Tasks" in the Compliance Summary Section.

Monitoring, Measurement and Program Modifications

Findings related to scheduled or non-scheduled tasks and work order tracking will continue to be evaluated by staff to improve reliability and system performance. In assessing the success of the PMP, changes in frequency or task activities, spare parts or recommended stock levels will be reviewed by the Maintenance Supervisor and

approved by the Deputy Director. Database changes and/or new instructions to contractors will follow.

Items recommended for rehabilitation or replacement through our Capital Improvement Program (CIP) will be sent by Deputy Director **(DM)** to the **AE** for funding and planning by the Division or forwarded to our Engineering Department for action in the agency wide CIP.

Our goal is to have a staff-driven process for improving our PMP. This process may be further explained and refined, as deemed necessary, in future revisions to our SSMP.

5.3 Rehabilitation and Replacement Plan

The Order requires the City to develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes and a system for ranking the condition of sewer pipes and scheduling rehabilitation. The rehabilitation and replacement plan should include a capital improvement plan (CIP) that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short-term and long-term plans plus a schedule for developing the funds needed for the capital improvement plan

5.3.1 Compliance Summary

In 2008, the City embarked on a system-wide cleaning and CCTV inspection program to survey the entire system over a 5-year period. Phase 1-2008 was performed by an outside contractor, National Plant Services, and included 52,000 feet of pipeline, 18" through 42" diameter pipelines representing 10 miles and 84 manholes including the City's sewer interceptor and trunk system from Main Street to Mission Gorge Road.

This portion of the system was last cleaned 25 years ago and several problem pipe segments were identified for annual cleaning and inspection. Others were identified and earmarked for repairs and will be included in the next annual CIP for rehabilitation. Interestingly, the manholes were found to be in very good condition in spite of their age suggesting that the City does not have a manhole corrosion problem.

The inspection contractor utilized NASSCO's pipe condition assessment codes (PCAP) for condition assessment and provided the City a complete database for entry into the City's planned CMMS (DBA Master Series) computerized maintenance system. The completed work represented a move by the City to inspect and clean every pipe segment in the City by the end of the 2013 fiscal year and rank each pipe for rehabilitation by a priority assignment generated by the CMMS system. When completed the City will have cleaned and inspected over 200 miles of pipeline and 4,800 manholes.

Video of each segment inspected will be characterized for defects and ranked by priority and included in the rehabilitation portion of the CIP. The City plans to spend one-half

million dollars each year for the next ten (10) years to systematically rehab all at-risk pipe segments and manholes.

The City also plans to spend 1.4 million dollars over the next four years to inspect and code each pipe segment and manhole in the City (Phases 2 through 5) using the pipe condition assessment process to identify and prioritize the system for rehabilitation if needed.

In 2009, the City plans to purchase a computerized maintenance management system (CMMS) to management the CCTV inspection database containing pipe condition assessment codes for prioritizing pipe rehabilitation. Using the data gathered, the City will include on a priority basis a portion of the most compromised pipe segments for repair or rehab utilizing a $500,000 dollar annual allowance in the CIP. Over the next ten (10) years the City will inspect, clean, code and prioritize the entire system for rehab if needed.

Also in 2009, the City will pass a new ordinance requiring the periodic inspection and repair of all private laterals and private collection systems. Single-family residential properties will be exempted unless a spill occurs or evidence of a problem exists during the City's systematic inspection of the public portion of the system.

Funding for the inspection and rehab effort will come from allocated funds from the City's wastewater enterprise fund. Rates for the fund will be examined for adjustment in the future.

5.3.2 Compliance Documents

The documents supporting compliance with the rehabilitation and replacement plan requirements are as follows:

- Phase 1- 2007 CCTV Inspection Report, on file in the Office of Public Works
- Phase 2-2008 CCTV Inspection Report, on file in the Office of Public Works
- Asset Management System -Pipe Rehab and Maintenance Management System, Vol. 2, Appendix 5-3
- 5-Year CIP Pipe Rehab and Lining and Replacement Plan, Vol. 2, Appendix 5-9
- NASSCO's Pipe Condition Assessment Program (PCAP), Vol. 2, Appendix 5-10
- Engineering/Construction and Maintenance Staff Organization Chart, Vol. 2, Appendix 3-1

5.3.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with the rehabilitation and replacement plan requirements are as follows:

Deputy Director of Public Works (DE) supervises the engineering staff responsible for planning and executing pipeline assessment and the 5-year CIP for rehabilitation and replacement (Design & Construction).

Associate Engineer-Chairman and Project Manger (AE) is responsible for organizing and managing the preparation of the Management Plan (SSMP), directing the pipeline condition assessment program, design and preparation of construction contract documents for both CCTV inspection, rehab and replacement, also new construction for both existing and future pipeline deficiencies.

Deputy Director of Public Works (DM) is responsible for directing and managing the maintenance staff in charge of routine, preventative maintenance, assessing the need for engineering solutions to solve maintenance issues and limited pipeline CCTV inspections.

Maintenance Supervisor (MS) is responsible for planning, scheduling CCTV assessments, maintaining equipment, training and supervising maintenance staff.

Maintenance Crew Leader (MCL) is responsible for operation of the City's CCTV van, cataloging video files, assessing pipe conditions and data basing Wincan PCAP codes.

5.4 Training Program

The City is required to provide training on a regular basis for staff in sanitary sewer system operations and maintenance and to require contractors to be appropriately trained.

5.4.1 Compliance Summary

The City of El Cajon has endorsed the certification program for collection system maintenance workers as prescribed by the California Water Environment Association. It is the goal of this plan that maintenance supervisors and maintenance workers will collectively be certified to their respective level of experience and education, Collection Systems Workers Grades 1, 2, 3 & 4 as prescribed by the California Water Environment Association (CWEA). The certification program assures that each worker has demonstrated the skill and knowledge necessary to work at the prescribe levels of competence.

Ethics in the workplace and in the daily work activities is an essential requirement of maintenance workers that maintain the City's collection system and are certified by the CWEA. Each worker and supervisor is expected to adhere to the Code of Ethics as set forth by the CWEA and provide assurance to the public that the health and welfare of the community is a primary concern of the maintenance staff.

All maintenance workers are required to receive training in the Traffic Control safety practices through the Southern California Chapter of the "American Public Works Association. The "WATCH Manual" (Work Area Traffic Control Handbook) is required reading for all maintenance workers in a work crew lead position. Each crew leader must demonstrate skills using the manuals guidelines for work area traffic control safety.

Each maintenance worker, regardless of rank, is required to take a course in confined space entry and pass certification for safe entries into confined areas that could contain hazardous air.

Maintenance workers that perform video inspection of pipelines must perform the pipeline condition assessment using standardized Pipeline Condition Assessment Codes (PACP) as trained and certified by the National Association of Sewer Serving Companies (NASSCO). NASSCO conducts periodic 2-day training courses for workers seeking certification in the pipeline condition assessment technology.

The City of El Cajon requires any contractor performing inspection or maintenance on the collection system to have its workers properly trained and certified in the area of application. All inspection work is performed using NASSCO PACP pipe assessment codes that are unitized with the City's computerized maintenance management system (CMMS).

All cleaning work performed by contractors using "Rodders" or "Vactors" are required to have individual personnel and supervisors trained and certified in collections system maintenance as prescribed by the CWEA and be trained in confined space entry.

5.4.2 Compliance Documents

The following documents demonstrate the type of training provided to staff and the training requirements required of contractors:

- Training records for each collections system maintenance worker employed by the City are collected and maintained at the field operations office for the Department of Public Works with duplicate files kept at the City's Department of Human Resources. Certification records are maintained respectively by CWEA and NASSCO and a master list of certified workers are listed on-line respectively at each organization's web site. Copies of certifications are filed in the Department of Human Resources.

- Contract administrators in the Department of Public Works prepare specifications and Special Provisions for each maintenance contract issued to perform work on the collections system. Standardized specifications relating to training requirements are contained in Volume 2, Appendix 5-115 Year CIP Pipe Rehab and Lining and Replacement Plan, Vol. 2, Appendix 5-9.

5.4.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with the staff and contractor training requirements are as follows:

The Deputy Director of Public Works-Maintenance (DM)

Manages the maintenance activities for the Department of Public Works. The collection system maintenance team working under the direction of the Deputy Director is supervised by the Public Works Supervisor **(MS)** who manages the day-to-day activities of the maintenance crew, including schedule maintenance, overflow response, overflow cleanup and CCTV inspection of pipelines. The maintenance supervisor directs all training, including scheduling, oversight and maintenance of training records. A training log is maintained at the operations office. An annual training budget is prepared and

approved each year to satisfy the training requirements of the department. Training for maintenance workers and supervisors for Wastewater Collection Systems workers are planned to begin 2009 with the maintenance supervisors first. Training for pipe condition assessment is also planned for 2009. Training of all staff will be a function of the budget and may span several years.

The Deputy Director of Public Works-Engineering (DE)

Administers the engineering and construction department that includes the preparation of all contract documents for CCTV inspection activities, rehab and replacement of pipelines. On a project-by-project basis assigns a staff level Associate Engineer as project manager to prepare the contract documents which include standard special provisions setting forth the training qualifications for employees employed by the contractor. Each contractor performing maintenance or inspection for the City must provide training documentation to demonstrate competence for any employee working on the collections system prior to beginning work.

5.5 Equipment and Parts Inventories

Each City is required to provide equipment and replacement part inventories, including identification of critical replacement parts for the operation and maintenance of its sewer collection system.

5.5.1 Compliance Summary

The City in the past has maintained an inventory of equipment for asset management purposes and to plan for life cycling and replacement of equipment needed to maintain the sewer system. In 2008, the City started compiling an inventory of all spare parts including a list of critical parts needed for equipment to be utilized for emergency situations.

The compiled list will be used to input onto the new CMMS maintenance management system to be implemented in 2009. The list will become an integral part of the asset and maintenance management activities including an annual audit of parts and equipment used to facilitate the sewer maintenance program.

The City also has a mutual aide agreement with all other Cities in the Metro system including its immediate neighbors, Santee, La Mesa Padre Dam, and the City and County of San Diego. Among other sharing responsibilities and compensation schedules, the agreement provides for sharing of spare parts and equipment should individual inventories fall short.

5.5.2 Compliance Documents

The documents supporting compliance with the requirement to maintain an inventory of equipment and parts including identification of critical parts are as follows:

- Equipment and parts inventory (12-19-2008), Vol. 2, Appendix 5-12
- Sewer maintenance list of critical parts- 2008, Vol. 2, Appendix 5-13

5.5.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with maintaining an inventory of equipment and parts including critical parts are as follows:

The Deputy Director of Public Works-Maintenance (DM)

Manages the maintenance activities for the Department of Public Works. The collection system maintenance team working under the direction of the Deputy Director is supervised by the Maintenance Supervisor **(MS)** who manages the day-to-day activities of the maintenance crew including schedule maintenance, overflow response, overflow cleanup and CCTV inspection of pipelines.

Maintenance Supervisor (MS)

Responsible for work orders for equipment maintenance, offering parts, providing tracking data to the Administrative Secretary or crew leader for entry into the asset management system.

Administrative Secretary

Responsible for data entry tracking equipment and parts numbers through an inventory control tool within the asset management system

Appendix D.2

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
3S03	29	011		29	021		7/1/2010	250	FM		250
3S03	29	014		29	015		7/1/2010	253	FM		253
3S03	29	015		29	021		7/1/2010	254	FM		254
3S03	29	016		29	017		7/1/2010	199	FM		199
3S03	29	017		29	018		7/1/2010	400	FM		400
3S03	29	018		29	019		7/1/2010	102	FM		102
3S03	29	019		29	020		7/1/2010	217	FM		217
3S03	29	020		29	021		7/1/2010	321	FM		321
3S03	29	021		29	027		7/1/2010	300	FM		300
3S03	29	026		29	027		7/1/2010	348	FM		348
3S08	24	083		24	084		7/1/2010	233	FM		233
3S08	24	085		24	086		7/1/2010	278	FM		278
3S08	24	084		24	087		7/6/2010	315	FM		315
3S08	24	086		24	087		7/6/2010	100	FM		100
3S08	24	087		24	088		7/6/2010	315	FM		315
3S08	24	088		24	091		7/6/2010	300	FM		300
3S08	24	089		24	091		7/6/2010	360	FM		360
3S08	24	090		24	091		7/6/2010	176	FM		176
3S08	24	091		24	092		7/6/2010	300	FM		300
3S08	24	112		24	113		7/6/2010	130	FM		130
3S08	24	112		24	161	D	7/6/2010	12	FM		12
3S08	24	113		24	114		7/6/2010	353	FM		353
3S08	24	114		24	115		7/6/2010	162	FM		162
3S08	24	115		24	116		7/6/2010	141	FM		141
3S08	24	116		24	117		7/6/2010	156	FM		156
3S08	24	117		24	127		7/6/2010	219	FM		219
3S08	24	118		24	119		7/6/2010	155	FM		155
3S08	24	119		24	120		7/6/2010	76	FM		76
3S08	24	120		24	125		7/6/2010	144	FM		144
3S08	24	120		24	126		7/6/2010	30	FM		30
3S08	24	124	C	24	125		7/6/2010	140	FM		140
3E05	24	156		24	157		7/6/2010	185	FM		185
3E05	24	156		24	160	D	7/6/2010	100	FM		100
3S03	29	030		29	031		7/8/2010	289	FM		289
3S08	24	099		24	101		7/8/2010	255	FM		255
3S08	24	100		24	101		7/8/2010	158	FM		158
3S08	24	101		24	102		7/8/2010	74	FM		74
3S08	24	102		24	103		7/8/2010	195	FM		195
3S08	24	105		24	106		7/8/2010	260	FM		260
3S08	24	105		24	158	C	7/8/2010	117	FM		117
3S08	24	107		24	108		7/8/2010	301	FM		301
3S08	24	127		24	128		7/8/2010	162	FM		162
3S08	24	128		24	129		7/8/2010	286	FM		286
3S08	24	129		24	130		7/8/2010	281	FM		281
3S08	24	130		24	131		7/8/2010	220	FM		220
3S03	24	093		24	094		7/12/2010	170	FM		170
3S08	24	092		24	095		7/12/2010	105	FM		105
3S08	24	094		24	095		7/12/2010	145	FM		145
3S08	24	095		24	096		7/12/2010	290	FM		290
3S08	24	096		24	098		7/12/2010	210	FM		210

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
3S08	24	097		24	098		7/12/2010	300	FM		300
3S08	24	106		24	110		7/12/2010	185	FM		185
3S08	24	108		24	109		7/12/2010	95	FM		95
3S08	24	109		24	110		7/12/2010	125	FM		125
3S08	24	110		24	111		7/12/2010	195	FM		195
3S08	24	135		24	136		7/12/2010	106	FM		106
3S08	24	135		24	159	C	7/12/2010	77	FM		77
3S08	24	136		24	137		7/12/2010	219	FM		219
3S08	24	137		24	138		7/12/2010	200	FM		200
3S08	24	143		24	144		7/12/2010	200	FM		200
3S08	24	144		24	145		7/12/2010	219	FM		219
3S08	24	098		24	104		7/13/2010	200	FM		200
3S08	24	103		24	104		7/13/2010	150	FM		150
3S08	24	104		24	133		7/13/2010	300	FM		300
3S08	24	111		24	133		7/13/2010	145	FM		145
3S08	24	131		24	133		7/13/2010	110	FM		110
3S08	24	133		24	134		7/13/2010	235	FM		235
3S08	24	134		24	139		7/13/2010	110	FM		110
3S08	24	138		24	139		7/13/2010	228	FM		228
3S08	24	139		24	140		7/13/2010	91	FM		91
3S08	24	140		24	142		7/13/2010	109	FM		109
3S08	24	141		24	142		7/13/2010	250	FM		250
3S08	24	142		24	146		7/13/2010	195	FM		195
3S08	24	145		24	146		7/13/2010	145	FM		145
3S08	24	146		24	147		7/13/2010	300	FM		300
3S08	24	147		25	081		7/13/2010	250	FM		250
3S08	25	081		25	084		7/13/2010	257	FM		257
3S08	25	082		25	083		7/13/2010	245	FM		245
3S08	25	083		25	084		7/13/2010	263	FM		263
3S08	25	084		25	085		7/13/2010	195	FM		195
3S05	29	089		29	090		7/14/2010	351	FM		351
3S05	29	090		29	104	C	7/14/2010	107	FM		107
3S05	29	090		29	114	J	7/14/2010	180	FM		180
3S05	29	096		29	114	T	7/14/2010	243	FM		243
5 17	10	057		10	058		7/16/2010	179	JM	12	179
5 17	10	058		10	059		7/16/2010	73	JM	12	73
3E05	24	033		24	034		7/21/2010	65	FM		65
6S02	09	046		09	047		8/1/2010	121	JM	12	121
A 05	03	054		03	065		8/4/2010	20	FM		20
3S03	29	034		29	069		8/5/2010	253	FM		253
6S02	09	047		09	048		8/11/2010	106	JM	12	106
6S02	08	173		09	060		8/12/2010	199	JM	12	199
6S02	09	024		09	025		8/12/2010	191	JM	12	191
6S02	09	036		09	037		8/12/2010	200	JM	12	200
6S02	09	049		09	050		8/12/2010	303	JM	12	303
6S02	09	054		09	055		8/12/2010	258	JM	12	258
6S02	09	057		09	058		8/12/2010	354	JM	12	354
3S03	24	093		29	028		8/12/2010	250	FM		250
3S03	29	027		29	033		8/12/2010	298	FM		298
3S03	29	028		29	029		8/12/2010	248	FM		248

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
3S03	29	029		29	032		8/12/2010	241	FM		241
3S03	29	031		29	032		8/12/2010	301	FM		301
3S03	29	032		29	033		8/12/2010	142	FM		142
3S03	29	033		29	106		8/12/2010	99	FM		99
3S03	29	034		29	106		8/12/2010	231	FM		231
3S05	29	096		29	097		8/12/2010	237	FM		237
3S05	29	097		29	098		8/12/2010	242	FM		242
3S01	29	058		29	069		8/13/2010	355	FM		355
3S02	29	067		29	068		8/13/2010	277	FM		277
3S03	29	068		29	069		8/13/2010	60	FM		60
3S05	29	098		29	099		8/13/2010	345	FM		345
3S06	29	100		29	101		8/13/2010	366	FM		366
3S06	29	101		29	102		8/13/2010	346	FM		346
3S06	29	102		30	003		8/13/2010	356	FM		356
3S06	30	003		30	004		8/13/2010	379	FM		379
3S04	29	069		29	070		8/16/2010	293	FM		293
3S04	29	070		29	071		8/16/2010	196	FM		196
3S04	29	072		29	073		8/16/2010	283	FM		283
3S04	29	073		30	001		8/16/2010	268	FM		268
3S04	30	001		30	002		8/16/2010	207	FM		207
3S06	30	002	M	30	005		8/16/2010	175	FM		175
3S06	30	004		30	005		8/16/2010	160	FM		160
3S14	25	059		25	201		8/16/2010	15	FM		15
3S14	25	060		25	061		8/16/2010	325	FM		325
3S14	25	061		25	062		8/16/2010	201	FM		201
3S14	25	062		25	063		8/16/2010	200	FM		200
3S14	25	063		25	064		8/16/2010	254	FM		254
3S14	25	201		30	028		8/16/2010	322	FM		322
3S14	30	028		30	029		8/16/2010	300	FM		300
3S14	30	029		30	030		8/16/2010	258	FM		258
3S15	25	054		25	055		8/16/2010	331	FM		331
3S15	25	055		25	056		8/16/2010	332	FM		332
3S15	25	056		25	057		8/16/2010	333	FM		333
3S15	25	057		25	058		8/16/2010	252	FM		252
6S02	09	060		09	061		8/17/2010	132	JM	12	132
6S02	09	063		09	064		8/18/2010	362	JM	12	362
6S02	09	064		09	065		8/18/2010	78	JM	12	78
3S15	25	058		25	067	P	8/18/2010	252	FM		252
3S17	25	070	P	25	071		8/18/2010	352	FM		352
3S17	25	071		25	072		8/18/2010	208	FM		208
3S17	25	072		25	073		8/18/2010	126	FM		126
3S17	25	073		25	074		8/18/2010	348	FM		348
3S17	25	074		25	077		8/18/2010	300	FM		300
3S17	25	075		25	077		8/18/2010	169	FM		169
3S17	25	076		25	077		8/18/2010	314	FM		314
3S17	25	077		25	078		8/18/2010	337	FM		337
3S17	25	078		25	079		8/18/2010	326	FM		326
3S17	25	079		25	080	M	8/18/2010	340	FM		340
3S03	29	022		29	023		8/19/2010	352	JM	12	352
6S02	09	065		09	066		8/19/2010	200	JM	12	200

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
6S02	09	069		09	070		8/19/2010	357	JM	12	357
6S02	09	070		09	071		8/19/2010	295	JM	12	295
6S02	09	072		09	073		8/19/2010	177	JM	12	177
3S04	29	071		29	107		8/20/2010	89	FM		89
3S04	29	072		29	107		8/20/2010	286	FM		286
6S02	09	060		09	061		8/20/2010	140	FM		140
3S07	25	086	M	25	087		8/23/2010	166	FM		166
3S07	25	086	M	30	007		8/23/2010	220	FM		220
3S07	25	087		25	189		8/23/2010	134	FM		134
3S07	25	088		25	189		8/23/2010	290	FM		290
3S07	30	007		30	027	D	8/23/2010	50	FM		50
3S09	25	091		25	092		8/23/2010	275	FM		275
3S09	25	092		25	093		8/23/2010	297	FM		297
3S09	25	093		25	094		8/23/2010	330	FM		330
3S06	30	005		30	006		8/25/2010	150	FM		150
3S07	25	089		25	090		8/25/2010	301	FM		301
3S08	25	085		25	090		8/25/2010	202	FM		202
3S09	25	090		25	190		8/25/2010	39	FM		39
3S09	25	094		25	095		8/25/2010	296	FM		296
3S09	25	095		25	190		8/25/2010	24	FM		24
3S09	25	190		25	191		8/25/2010	520	FM		520
3S09	25	191		25	192		8/25/2010	550	FM		550
3S09	25	192		30	025		8/25/2010	452	FM		452
3S09	30	006		30	026		8/25/2010	100	FM		100
3S09	30	025		30	026		8/25/2010	42	FM		42
3S09	25	095		25	096		9/1/2010	202	FM		202
3S09	25	096		25	097		9/1/2010	222	FM		222
3S09	25	097		25	098		9/1/2010	214	FM		214
3S09	25	098		25	100		9/1/2010	227	FM		227
3S09	25	100		25	101		9/1/2010	350	FM		350
3E11	25	008	S	25	188	D	9/3/2010	200	FM		200
3S11	25	101		25	102		9/7/2010	344	FM		344
3S11	25	102		25	103		9/7/2010	290	FM		290
3S11	25	103		25	105		9/7/2010	300	FM		300
3S11	25	104		25	105		9/7/2010	321	FM		321
3S11	25	105		25	106		9/7/2010	316	FM		316
3E11	19	007		19	008		9/7/2010	10	FM		10
3E11	19	011		19	012		9/7/2010	549	FM		549
3S11	25	107		25	199		9/9/2010	124	FM		124
3S11	25	108		25	199		9/9/2010	213	FM		213
3S11	25	106		25	107		9/9/2010	330	FM		330
3S12	25	097		25	109		9/9/2010	300	FM		300
3S12	25	109		25	110		9/9/2010	331	FM		331
3S12	25	110		25	111		9/9/2010	337	FM		337
3S11	25	108		25	122		9/10/2010	335	FM		335
3S12	25	111		25	113		9/10/2010	298	FM		298
3S12	25	112		25	113		9/10/2010	250	FM		250
3S12	25	113		25	114		9/10/2010	300	FM		300
3S12	25	114		25	115		9/10/2010	287	FM		287
3S12	25	115		25	116		9/10/2010	304	FM		304

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
3S12	25	116		25	120		9/10/2010	333	FM		333
3S12	25	118		25	119		9/10/2010	141	FM		141
3S12	25	119		25	120		9/10/2010	207	FM		207
3S12	25	120		25	121		9/10/2010	224	FM		224
3S12	25	121		25	122		9/10/2010	230	FM		230
3S13	25	122		25	123		9/10/2010	229	FM		229
3S18	25	123		25	125		9/10/2010	228	FM		228
3S18	25	124		25	125		9/10/2010	150	FM		150
3S19	25	042		25	043		9/10/2010	285	FM		285
1 17	28	005		28	006		9/13/2010	320	JM	12	320
3S19	19	044		19	045		9/13/2010	350	FM		350
3S19	19	044		25	047		9/13/2010	346	FM		346
3S19	19	045		19	046		9/13/2010	350	FM		350
3S19	25	043		25	044		9/13/2010	294	FM		294
3S19	25	044		25	045		9/13/2010	299	FM		299
3S19	25	045		25	047		9/13/2010	297	FM		297
3S19	25	046		25	047		9/13/2010	300	FM		300
3S19	25	048		25	049		9/13/2010	341	FM		341
3S19	25	049		25	050		9/13/2010	299	FM		299
3S19	25	050		25	051		9/13/2010	299	FM		299
3S19	25	051		25	053		9/13/2010	298	FM		298
3S19	25	052		25	053		9/13/2010	299	FM		299
3S18	25	127	S	25	128		9/14/2010	306	FM		306
3S18	25	128		25	129		9/14/2010	334	FM		334
3S18	25	129		25	130		9/14/2010	336	FM		336
3S19	19	049		19	050		9/14/2010	337	FM		337
3S19	19	049		25	053		9/14/2010	345	FM		345
3S19	19	050		19	051		9/14/2010	338	FM		338
3S18	19	054		19	055		9/16/2010	335	FM		335
3S18	19	054		25	132		9/16/2010	335	FM		335
3S18	19	055		19	056	M	9/16/2010	339	FM		339
3S18	25	130		25	132		9/16/2010	324	FM		324
3S18	25	131		25	132		9/16/2010	300	FM		300
3S19	19	043		19	047		9/16/2010	350	FM		350
3S19	19	046		19	047		9/16/2010	315	FM		315
3S19	19	047		19	048		9/16/2010	222	FM		222
3S19	19	048		19	052		9/16/2010	221	FM		221
3S19	19	051		19	052		9/16/2010	340	FM		340
3S19	19	052		19	053		9/16/2010	224	FM		224
3S24	19	077		19	078		9/16/2010	302	FM		302
3S24	19	078		19	079		9/16/2010	302	FM		302
3S24	19	079		19	192		9/16/2010	250	FM		250
3S24	19	080		19	081		9/16/2010	300	FM		300
3S24	19	080		19	192		9/16/2010	54	FM		54
3S24	19	081		19	082		9/16/2010	200	FM		200
3S24	19	192		19	193		9/16/2010	228	FM		228
3E11	19	012		19	022		9/16/2010	28	FM		28
3E14	19	021		19	022		9/16/2010	244	FM		244
3S20	19	053		19	058		9/20/2010	274	FM		274
3S20	19	056	M	19	058		9/20/2010	342	FM		342

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
3S20	19	057		19	058		9/20/2010	166	FM		166
3S20	19	058		19	061		9/20/2010	243	FM		243
3S20	19	059		19	060		9/20/2010	353	FM		353
3S20	19	060		19	061		9/20/2010	355	FM		355
3S20	19	061		19	063		9/20/2010	264	FM		264
3S20	19	063		19	064		9/20/2010	207	FM		207
3S22	19	026		19	028		9/20/2010	211	FM		211
3S22	19	027		19	028		9/20/2010	119	FM		119
3S22	19	028		19	029		9/20/2010	250	FM		250
3S22	19	029		19	031		9/20/2010	285	FM		285
3S22	19	029		20	097		9/20/2010	237	FM		237
3S22	19	030		19	031		9/20/2010	349	FM		349
3S22	19	031		19	196		9/20/2010	21	FM		21
3S22	19	032		19	033		9/20/2010	235	FM		235
3S22	19	032		20	098		9/20/2010	302	FM		302
3S22	19	033		19	036		9/20/2010	258	FM		258
3S22	19	033		19	196		9/20/2010	258	FM		258
3S22	19	034	C	19	035		9/20/2010	68	FM		68
3S22	19	035		19	036		9/20/2010	126	FM		126
3S20	19	064		19	065		9/22/2010	332	FM		332
3S20	19	065		19	066		9/22/2010	248	FM		248
3S20	19	066		19	068		9/22/2010	34	FM		34
3S20	19	068		19	069		9/22/2010	144	FM		144
3S20	19	069		19	072		9/22/2010	170	FM		170
3S20	19	070		19	071		9/22/2010	206	FM		206
3S20	19	071		19	072		9/22/2010	233	FM		233
3S21	19	023	M	19	197		9/22/2010	227	FM		227
3S22	19	024		19	025		9/22/2010	157	FM		157
3S22	19	024		19	197		9/22/2010	124	FM		124
3S22	19	036		19	037		9/22/2010	112	FM		112
3S22	19	037		19	038		9/22/2010	225	FM		225
4S01	19	085		19	203		9/22/2010	23	FM		23
4S01	19	086	M	19	203		9/22/2010	300	FM		300
4S01	19	207		19	208		9/22/2010	132	FM		132
4S01	19	208		20	150		9/22/2010	116	FM		116
4N02	17	022		17	023		9/27/2010	205	FM		205
4S01	19	022		19	085		9/28/2010	44	FM		44
1 01	32	051		33	031		10/1/2010	325	JM	12	325
1 01	33	029		33	030		10/1/2010	200	JM	12	200
2 03	25	170		26	007		10/1/2010	175	JM	12	175
3S08	24	083		24	084		10/1/2010	240	JM	12	240
3S08	24	089		24	091		10/1/2010	257	JM	12	257
3S14	25	060		25	061		10/1/2010	303	JM	12	303
5 12	15	052		15	070		10/1/2010	152	JM	12	152
5 12	15	071		15	072		10/1/2010	234	JM	12	234
5 12	15	073		15	074		10/1/2010	284	JM	12	284
5 12	15	074		15	075		10/1/2010	243	JM	12	243
5 13	10	082		10	083		10/1/2010	160	JM	12	160
5 13	10	084		10	085		10/1/2010	194	JM	12	194
5 13	15	012		15	013		10/1/2010	167	JM	12	167

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 22	14	075		14	076		10/1/2010	160	JM	12	160
5 22	14	076		14	077		10/1/2010	158	JM	12	158
6S01	09	021		09	135	C	10/1/2010	200	JM	12	200
A 01	08	043		08	048		10/1/2010	238	JM	12	238
A 08	03	002	C	03	003		10/1/2010	225	JM	12	225
A 08	03	003		03	004		10/1/2010	270	JM	12	270
A 08	03	007		03	008		10/1/2010	280	JM	12	280
A 08	03	008		03	009		10/1/2010	280	JM	12	280
A 08	03	013	C	03	014		10/1/2010	115	JM	12	115
B 02	04	088		04	089		10/1/2010	265	JM	12	265
4N06	19	113		19	209		10/7/2010	200	FM		200
4N08	19	110		19	113		10/7/2010	253	FM		253
4N08	19	113		19	114		10/7/2010	300	FM		300
4N08	19	114		19	115		10/7/2010	320	FM		320
4N08	19	115		19	116		10/7/2010	360	FM		360
4N08	19	116		19	117		10/7/2010	320	FM		320
4N09	19	117		19	118		10/7/2010	310	FM		310
4N09	12	058		12	059		10/8/2010	275	FM		275
4N09	12	058		19	119		10/8/2010	310	FM		310
4N09	19	118		19	119		10/8/2010	320	FM		320
4S01	12	139		19	198		10/8/2010	440	FM		440
4S02	19	198		19	199		10/8/2010	500	FM		500
3S20	19	073		19	074		10/11/2010	275	FM		275
3S22	19	040	S	19	207		10/11/2010	350	FM		350
A 08	03	013	C	03	014		10/11/2010	122	FM		122
A 08	03	014		03	015		10/11/2010	215	FM		215
3S22	19	041	S	19	206		10/12/2010	350	FM		350
3S24	19	075		19	076		10/12/2010	300	FM		300
3S24	19	076		19	083		10/12/2010	265	FM		265
3S24	19	082		19	083		10/12/2010	355	FM		355
3S24	19	083		19	084		10/12/2010	40	FM		40
4N09	12	059		12	063		10/12/2010	310	FM		310
4N09	12	063	P	12	130		10/12/2010	10	FM		10
4S01	19	205		19	206		10/12/2010	478	FM		478
4S02	12	130		12	139		10/12/2010	301	FM		301
5 55	12	130		12	131		10/12/2010	280	FM		280
5 55	12	131		12	132		10/12/2010	410	FM		410
3S24	19	084		19	085		10/13/2010	350	FM		350
4S01	19	202		19	203		10/14/2010	32	FM		32
4S01	19	203		19	205		10/14/2010	504	FM		504
A 08	03	001		03	003	C	10/14/2010	284	FM		284
A 08	03	002	C	03	003		10/14/2010	242	FM		242
A 08	03	003		03	004		10/14/2010	271	FM		271
A 08	03	004		03	006		10/14/2010	181	FM		181
A 08	03	005		03	006		10/14/2010	192	FM		192
A 08	03	006		03	008		10/14/2010	180	FM		180
A 08	03	007		03	008		10/14/2010	272	FM		272
A 08	03	008		03	009		10/14/2010	264	FM		264
A 08	03	010	C	03	011		10/14/2010	127	FM		127
A 08	03	011		03	016		10/14/2010	215	FM		215

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
A 08	03	011		03	134	C	10/14/2010	81	FM		81
A 08	03	012		03	016		10/14/2010	296	FM		296
A 08	03	012		03	135	C	10/14/2010	140	FM		140
A 08	03	015		03	016		10/14/2010	127	FM		127
A 08	03	016		03	017		10/14/2010	170	FM		170
A 08	03	017		03	018		10/14/2010	139	FM		139
4S03	19	151		19	153		10/15/2010	114	FM		114
4S03	19	152		19	153		10/15/2010	234	FM		234
4S03	19	152		20	100		10/15/2010	236	FM		236
4S03	19	153		19	155		10/15/2010	255	FM		255
4S03	19	154		19	155		10/15/2010	349	FM		349
4S03	19	155		19	158		10/15/2010	254	FM		254
4S03	19	156		19	157		10/15/2010	136	FM		136
4S03	19	157		19	158		10/15/2010	347	FM		347
4S03	19	158		19	160		10/15/2010	255	FM		255
4S03	19	159		19	160		10/15/2010	353	FM		353
4S03	19	160		19	163		10/15/2010	255	FM		255
4S03	19	161		19	162		10/15/2010	146	FM		146
4S03	19	162		19	163		10/15/2010	295	FM		295
4S03	19	163		19	164		10/15/2010	256	FM		256
4S03	19	164		19	165		10/15/2010	268	FM		268
A 05	03	056		03	057		10/15/2010	243	FM		243
A 05	03	057		03	058		10/15/2010	110	FM		110
A 05	03	058		03	138		10/15/2010	121	FM		121
A 06	03	073		03	131	C	10/15/2010	109	FM		109
A 06	03	073		03	074		10/15/2010	200	FM		200
A 06	03	074		03	075		10/15/2010	115	FM		115
A 06	03	075		03	076		10/15/2010	101	FM		101
A 06	03	076		03	077		10/15/2010	353	FM		353
A 06	03	077		03	132	C	10/15/2010	148	FM		148
A 08	03	018		03	019		10/15/2010	350	FM		350
A 08	03	009		03	019		10/15/2010	300	FM		300
A 08	03	019		03	167		10/15/2010	180	FM		180
A 08	03	019		03	020		10/15/2010	224	FM		224
A 08	03	020		03	021		10/15/2010	344	FM		344
A 08	03	021		03	022		10/15/2010	345	FM		345
A 08	03	022		03	023		10/15/2010	290	FM		290
4S03	13	189		13	202	D	10/18/2010	134	FM		134
4S03	13	189		13	214		10/18/2010	250	FM		250
4S03	13	190		13	191		10/18/2010	264	FM		264
4S03	13	191		13	192		10/18/2010	350	FM		350
4S03	13	192		13	214		10/18/2010	100	FM		100
4S03	13	193		13	194		10/18/2010	325	FM		325
4S03	13	193		13	201	D	10/18/2010	269	FM		269
4S03	13	193		20	156		10/18/2010	302	FM		302
4S03	19	165		20	007		10/18/2010	229	FM		229
4S03	20	001		20	002		10/18/2010	260	FM		260
4S03	20	002		20	003		10/18/2010	344	FM		344
4S03	20	003		20	004		10/18/2010	345	FM		345
4S03	20	004		20	005		10/18/2010	344	FM		344

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
4S03	20	005		20	006		10/18/2010	181	FM		181
4S03	20	006		20	007		10/18/2010	190	FM		190
6W01	07	010		07	013		10/18/2010	344	FM		344
A 05	02	070		02	071		10/18/2010	236	FM		236
A 05	02	071		02	072		10/18/2010	284	FM		284
A 05	02	072		03	034		10/18/2010	297	FM		297
A 05	03	035		07	013		10/18/2010	302	FM		302
A 05	03	062		03	063		10/18/2010	231	FM		231
A 06	03	077		03	082		10/18/2010	201	FM		201
A 06	03	079		03	080		10/18/2010	245	FM		245
A 06	03	080		03	081		10/18/2010	356	FM		356
A 06	03	081		03	082		10/18/2010	237	FM		237
A 06	03	082		03	083		10/18/2010	351	FM		351
A 06	03	083		03	084		10/18/2010	322	FM		322
4S03	12	064		12	069		10/19/2010	327	FM		327
4S03	12	065		12	066		10/19/2010	335	FM		335
4S03	12	065		13	195		10/19/2010	330	FM		330
4S03	12	066		12	067		10/19/2010	40	FM		40
4S03	12	068		12	069		10/19/2010	344	FM		344
4S03	13	194		13	195		10/19/2010	320	FM		320
4S03	13	195		20	007		10/19/2010	265	FM		265
A 05	03	034		03	037		10/19/2010	301	FM		301
A 05	03	035		03	036		10/19/2010	300	FM		300
A 05	03	036		03	037		10/19/2010	154	FM		154
A 05	03	037		03	038		10/19/2010	150	FM		150
A 05	03	038		03	039		10/19/2010	315	FM		315
A 05	03	039		03	041		10/19/2010	234	FM		234
A 05	03	040		03	041		10/19/2010	173	FM		173
A 05	03	042		03	130	C	10/19/2010	38	FM		38
A 05	03	042		03	043		10/19/2010	175	FM		175
A 05	03	063		03	064		10/19/2010	336	FM		336
4S04	12	070		12	071		10/21/2010	274	FM		274
4S04	12	071		12	072		10/21/2010	226	FM		226
4S04	12	073		12	074		10/21/2010	285	FM		285
4S04	12	074		12	077		10/21/2010	287	FM		287
4S04	12	075		12	076		10/21/2010	261	FM		261
4S04	12	076		12	077		10/21/2010	320	FM		320
4S04	12	077		12	143		10/21/2010	288	FM		288
4S01	18	045		18	046		10/22/2010	337	FM		337
4S01	18	046		18	048		10/22/2010	262	FM		262
4S01	18	047		18	048		10/22/2010	70	FM		70
4S01	18	048		18	049		10/22/2010	310	FM		310
4S01	18	049		18	050		10/22/2010	330	FM		330
4S01	18	050		18	052		10/22/2010	312	FM		312
4S01	18	051		18	052		10/22/2010	89	FM		89
4S01	18	052		19	095		10/22/2010	250	FM		250
4S01	19	091		19	092		10/22/2010	333	FM		333
4S01	19	092		19	093		10/22/2010	281	FM		281
4S01	19	093		19	094		10/22/2010	225	FM		225
4S01	19	094		19	095		10/22/2010	313	FM		313

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
A 05	03	041		03	049		10/22/2010	65	FM		65
A 05	03	043		03	044		10/22/2010	148	FM		148
4S01	19	086	M	19	087		10/26/2010	223	FM		223
4S01	19	087		19	089		10/26/2010	275	FM		275
4S01	19	088		19	089		10/26/2010	362	FM		362
4S01	19	089		19	090		10/26/2010	290	FM		290
4S01	19	090		19	099		10/26/2010	225	FM		225
4S01	19	095		19	096	S	10/26/2010	195	FM		195
A 05	03	049		03	050		10/26/2010	357	FM		357
A 05	03	050		03	051		10/26/2010	350	FM		350
A 05	03	051		03	053		10/26/2010	220	FM		220
A 05	03	052		03	053		10/26/2010	165	FM		165
A 05	03	052		03	168	C	10/26/2010	30	FM		30
A 05	03	053		03	054		10/26/2010	32	FM		32
A 05	03	055		03	059		10/26/2010	171	FM		171
A 05	03	059		03	138		10/26/2010	100	FM		100
A 05	03	059		03	060		10/26/2010	344	FM		344
A 05	03	060		03	061		10/26/2010	120	FM		120
A 05	03	061		03	065		10/26/2010	17	FM		17
A 05	03	064		03	065		10/26/2010	14	FM		14
A 05	03	066		03	067		10/26/2010	268	FM		268
A 05	03	066		03	136	C	10/26/2010	241	FM		241
A 05	03	065		03	067		10/26/2010	100	FM		100
A 05	03	067		03	068		10/26/2010	109	FM		109
A 05	03	069		03	070		10/26/2010	324	FM		324
A 05	03	070		03	071		10/26/2010	200	FM		200
A 05	03	068		03	071		10/26/2010	224	FM		224
A 05	03	071		03	072	M	10/26/2010	300	FM		300
4S01	19	099		19	100	M	10/27/2010	100	FM		100
4S01	19	100	M	19	101		10/27/2010	310	FM		310
4S01	19	199		19	200		10/27/2010	425	FM		425
4S01	19	200		19	201		10/27/2010	435	FM		435
4S01	19	201		19	202		10/27/2010	425	FM		425
A 01	07	116		07	117		10/27/2010	250	FM		250
A 01	07	117		07	118		10/27/2010	186	FM		186
A 01	07	119		07	120		10/27/2010	142	FM		142
A 01	07	118		07	121		10/27/2010	292	FM		292
A 01	07	120		07	121		10/27/2010	403	FM		403
A 01	07	121		07	206		10/27/2010	203	FM		203
A 01	07	122		07	123		10/27/2010	255	FM		255
A 01	07	123		07	124		10/27/2010	262	FM		262
A 01	07	124		07	125		10/27/2010	187	FM		187
A 01	07	125		07	206		10/27/2010	86	FM		86
A 01	07	125		07	126		10/27/2010	41	FM		41
A 01	07	127		07	128		10/27/2010	137	FM		137
A 01	07	126		07	129		10/27/2010	217	FM		217
A 01	07	128		07	129		10/27/2010	202	FM		202
A 01	07	129		07	130		10/28/2010	220	FM		220
A 01	07	130		07	131		10/28/2010	300	FM		300
A 01	07	131		07	132		10/28/2010	275	FM		275

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
A 01	07	132		08	016		10/28/2010	182	FM		182
A 01	08	016		08	017		10/28/2010	256	FM		256
A 01	08	017		08	213	C	10/28/2010	95	FM		95
4S02	19	120		19	121		10/29/2010	304	FM		304
4S02	19	121		19	123		10/29/2010	253	FM		253
4S02	19	122		19	123		10/29/2010	160	FM		160
4S02	19	123		19	124		10/29/2010	28	FM		28
4S02	19	124		19	127		10/29/2010	160	FM		160
4S02	19	125		19	126		10/29/2010	300	FM		300
4S02	19	126		19	127		10/29/2010	301	FM		301
4S02	19	127		19	129		10/29/2010	259	FM		259
4S02	19	128		19	129		10/29/2010	262	FM		262
4S02	19	129		19	130		10/29/2010	155	FM		155
4S02	19	130		19	132		10/29/2010	121	FM		121
4S02	19	131		19	132		10/29/2010	210	FM		210
4S02	19	132		19	133		10/29/2010	250	FM		250
4S02	19	133		19	139		10/29/2010	197	FM		197
4S02	19	134		19	135		10/29/2010	321	FM		321
4S02	19	135		19	136		10/29/2010	205	FM		205
4S02	19	136		19	137		10/29/2010	158	FM		158
4S02	19	137		19	138		10/29/2010	217	FM		217
4S02	19	138		19	139		10/29/2010	202	FM		202
4S02	19	139		19	141		10/29/2010	261	FM		261
4S02	19	140		19	141		10/29/2010	140	FM		140
5 01	16	015		16	016		11/1/2010	216	JMR	12	216
5 01	16	016		16	017		11/1/2010	87	JMR	12	87
5 01	16	017		16	019		11/1/2010	323	JMR	12	323
5 01	16	019		16	020		11/1/2010	145	JMR	12	145
5 01	16	020		16	021		11/1/2010	276	JMR	12	276
5 01	16	021		16	022		11/1/2010	128	JMR	12	128
5 01	16	022		16	023		11/1/2010	195	JMR	12	195
5 03	15	172		15	173		11/1/2010	305	JMR	12	305
A 01	08	030		08	031		11/1/2010	120	JMR	12	120
C 01	04	011		04	012		11/3/2010	185	FM		185
C 01	04	012		04	013		11/3/2010	157	FM		157
C 01	04	013		04	014		11/3/2010	65	FM		65
C 01	04	015		04	016		11/3/2010	162	FM		162
C 01	04	014		04	017		11/3/2010	272	FM		272
C 01	04	014		04	151		11/3/2010	124	FM		124
C 01	04	016		04	017		11/3/2010	150	FM		150
C 01	04	017		04	020		11/3/2010	138	FM		138
C 01	04	018		04	019		11/3/2010	236	FM		236
C 01	04	019		04	020		11/3/2010	130	FM		130
C 01	04	020		04	021		11/3/2010	86	FM		86
C 01	04	021		04	022		11/3/2010	221	FM		221
C 01	04	022		04	023		11/3/2010	289	FM		289
C 01	04	023		04	024		11/3/2010	129	FM		129
C 01	04	026		04	027		11/3/2010	302	FM		302
C 01	04	027		04	028		11/3/2010	297	FM		297
C 01	04	028		04	029		11/3/2010	278	FM		278

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
C 01	04	029		04	030		11/3/2010	102	FM		102
A 07	04	066		04	067		11/9/2010	288	FM		288
A 10	04	038		04	039		11/9/2010	160	FM		160
A 10	04	039		04	040		11/9/2010	286	FM		286
A 10	04	040		04	042		11/9/2010	209	FM		209
A 10	04	042		04	043		11/9/2010	163	FM		163
C 01	04	008		04	009		11/9/2010	277	FM		277
C 01	04	009		04	010		11/9/2010	217	FM		217
C 01	04	010		04	025		11/9/2010	203	FM		203
C 01	04	024		04	025		11/9/2010	133	FM		133
C 01	04	007		04	025		11/9/2010	150	FM		150
C 01	04	025		04	031		11/9/2010	262	FM		262
C 01	04	030		04	031		11/9/2010	211	FM		211
A 01	07	019		07	020		11/10/2010	78	FM		78
A 01	07	020		08	033		11/10/2010	275	FM		275
A 01	08	017		08	018		11/10/2010	215	FM		215
A 01	08	018		08	019		11/10/2010	292	FM		292
A 01	08	019		08	020		11/10/2010	333	FM		333
A 01	08	020		08	025		11/10/2010	113	FM		113
A 01	08	033		08	034		11/10/2010	120	FM		120
A 01	08	034		08	218	C	11/10/2010	121	FM		121
A 01	08	034		08	035		11/10/2010	165	FM		165
A 01	08	035		08	036		11/10/2010	181	FM		181
A 01	08	036		08	040		11/10/2010	98	FM		98
A 01	08	037		08	038		11/10/2010	275	FM		275
A 01	08	037		08	207	C	11/10/2010	108	FM		108
A 01	08	038		08	039		11/10/2010	122	FM		122
A 01	08	039		08	040		11/10/2010	145	FM		145
A 01	08	040		08	041		11/10/2010	96	FM		96
A 01	08	041		08	042		11/10/2010	107	FM		107
A 01	08	042		08	043		11/10/2010	68	FM		68
A 01	08	046		08	047		11/10/2010	310	FM		310
A 01	08	046		08	225		11/10/2010	47	FM		47
A 01	08	225		08	226		11/10/2010	153	FM		153
A 01	08	004		08	201		11/12/2010	200	FM		200
A 01	08	004		08	005		11/12/2010	230	FM		230
A 01	08	005		08	202		11/12/2010	228	FM		228
A 01	08	009		08	011		11/12/2010	193	FM		193
A 01	08	009		08	204	C	11/12/2010	133	FM		133
A 01	08	010		08	205		11/12/2010	251	FM		251
A 01	08	010		08	011		11/12/2010	165	FM		165
5 04	15	145	P	15	174	P	11/15/2010	326	FM	3	1304
A 01	08	003		08	203	C	11/15/2010	249	FM		249
A 01	08	003		08	008	P	11/15/2010	186	FM		186
A 01	08	008		08	027		11/15/2010	245	FM		245
A 01	08	011		08	012		11/15/2010	113	FM		113
A 01	08	012		08	013		11/15/2010	237	FM		237
A 01	08	013		08	221		11/15/2010	272	FM		272
A 01	08	014		08	015		11/15/2010	167	FM		167
A 01	08	014		08	221		11/15/2010	132	FM		132

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
A 01	08	015		08	027		11/15/2010	75	FM		75
A 01	08	026		08	027		11/15/2010	150	FM		150
A 01	08	029		08	206		11/15/2010	143	FM		143
A 01	08	029		08	030		11/15/2010	150	FM		150
A 01	08	043		08	048		11/15/2010	223	FM		223
A 01	08	047		08	049		11/15/2010	68	FM		68
A 01	08	048		08	049		11/15/2010	98	FM		98
A 01	08	049		08	050		11/15/2010	180	FM		180
A 01	08	044	C	08	050		11/15/2010	50	FM		50
A 01	08	050		08	051		11/15/2010	185	FM		185
A 01	08	051		08	214	D	11/15/2010	117	FM		117
A 01	08	051		08	215	C	11/15/2010	265	FM		265
A 01	08	051		08	052		11/15/2010	170	FM		170
1 17	27	059		27	060		11/16/2010	300	FM	3	1200
A 02	07	021		08	002		11/16/2010	301	FM		301
A 02	08	001		08	002		11/16/2010	101	FM		101
A 02	08	001		08	210		11/16/2010	276	FM		276
A 10	04	044		04	125	C	11/16/2010	220	FM		220
A 10	04	044		04	045		11/16/2010	334	FM		334
A 10	04	045		04	126	C	11/16/2010	150	FM		150
A 10	04	054		04	129	C	11/16/2010	199	FM		199
A 10	04	054		04	055		11/16/2010	300	FM		300
A 10	04	055		04	148	C	11/16/2010	151	FM		151
A 10	04	055		04	056		11/16/2010	288	FM		288
A 10	04	056		04	057		11/16/2010	260	FM		260
A 10	04	056		04	141	C	11/16/2010	233	FM		233
A 10	04	057		04	058		11/16/2010	357	FM		357
A 10	04	060		04	130	C	11/16/2010	200	FM		200
A 10	04	060		04	061		11/16/2010	177	FM		177
A 10	04	061		04	063		11/16/2010	7	FM		7
A 10	04	062		04	063		11/16/2010	70	FM		70
A 10	04	063		04	064		11/16/2010	88	FM		88
4S02	19	142		19	143		11/17/2010	275	FM		275
4S02	19	143		19	144		11/17/2010	181	FM		181
4S02	19	144		19	145		11/17/2010	300	FM		300
4S02	19	145		19	146		11/17/2010	203	FM		203
4S02	19	146		19	148		11/17/2010	166	FM		166
4S02	19	147		19	148		11/17/2010	140	FM		140
4S02	19	148		19	149		11/17/2010	216	FM		216
4S02	19	149		19	150		11/17/2010	181	FM		181
A 02	03	108		07	022		11/17/2010	275	FM		275
A 02	03	108		03	109		11/17/2010	186	FM		186
A 02	03	109		04	069		11/17/2010	184	FM		184
A 02	07	021		07	022		11/17/2010	123	FM		123
A 02	07	021		07	208		11/17/2010	176	FM		176
A 02	07	208		07	209		11/17/2010	255	FM		255
A 03	04	079		04	080		11/17/2010	321	FM		321
A 03	03	106		04	080		11/17/2010	252	FM		252
A 03	04	080		04	081		11/17/2010	114	FM		114
A 05	03	072	M	03	086		11/17/2010	315	FM		315

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
A 06	03	084		03	085		11/17/2010	288	FM		288
A 06	03	085		03	086		11/17/2010	158	FM		158
A 06	03	086		03	088		11/17/2010	237	FM		237
A 06	03	087		03	088		11/17/2010	5	FM		5
A 07	03	099		03	137	C	11/17/2010	75	FM		75
A 07	03	098		03	100		11/17/2010	240	FM		240
A 07	03	099		03	100		11/17/2010	190	FM		190
A 07	03	100		03	101		11/17/2010	350	FM		350
A 07	03	101		03	129		11/17/2010	350	FM		350
A 03	04	081		04	082		11/18/2010	234	FM		234
A 04	04	082		04	124	C	11/18/2010	186	FM		186
A 07	03	088		03	089		11/18/2010	250	FM		250
A 07	03	089		03	091		11/18/2010	25	FM		25
A 07	03	089		04	082		11/18/2010	387	FM		387
A 07	03	090		03	091		11/18/2010	260	FM		260
A 07	03	092		03	093	C	11/18/2010	190	FM		190
A 07	03	092		03	102		11/18/2010	105	FM		105
A 07	03	101		03	102		11/18/2010	102	FM		102
A 07	04	067		04	068		11/18/2010	287	FM		287
A 07	04	068		04	144	C	11/18/2010	185	FM		185
A 01	08	022		08	023		11/19/2010	100	FM		100
A 01	08	023		08	024		11/19/2010	200	FM		200
A 01	08	024		08	025		11/22/2010	250	FM		250
A 01	08	025		08	222		11/22/2010	88	FM		88
A 01	08	222		08	223		11/22/2010	149	FM		149
A 01	08	027		08	224		11/23/2010	115	FM		115
A 01	08	028		08	224		11/23/2010	102	FM		102
A 01	08	028		08	031		11/23/2010	295	FM		295
A 01	08	030		08	031		11/23/2010	125	FM		125
A 01	08	031		08	032		11/23/2010	137	FM		137
A 01	08	032		08	053		11/23/2010	145	FM		145
A 01	08	052		08	053		11/23/2010	260	FM		260
A 01	08	053		08	054		11/23/2010	193	FM		193
A 01	08	054		08	055		11/23/2010	280	FM		280
A 01	08	055		08	056		11/23/2010	204	FM		204
A 01	08	056		08	221		11/23/2010	50	FM		50
A 01	08	208		08	221		11/23/2010	194	FM		194
A 01	08	208		08	228	D	11/23/2010	15	FM		15
A 01	08	223		08	224		11/23/2010	103	FM		103
A 01	04	070		08	056		11/24/2010	232	FM		232
A 02	04	069		04	155		11/24/2010	90	FM		90
A 02	04	070		04	071		11/24/2010	290	FM		290
A 02	04	071		04	072		11/24/2010	296	FM		296
A 02	04	071		04	155		11/24/2010	62	FM		62
A 02	04	072		04	154		11/24/2010	232	FM		232
A 10	04	045		04	048		11/24/2010	280	FM		280
A 10	04	046		04	047		11/24/2010	323	FM		323
A 10	04	046		04	127	C	11/24/2010	142	FM		142
A 10	04	046		04	152		11/24/2010	295	FM		295
A 10	04	047		04	048		11/24/2010	289	FM		289

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
A 10	04	047		04	145	C	11/24/2010	240	FM		240
A 10	04	152		04	153		11/24/2010	268	FM		268
A 10	04	153		04	154		11/24/2010	64	FM		64
4S02	12	055		12	056		11/29/2010	330	FM		330
4S02	12	056		12	057		11/29/2010	325	FM		325
4S02	12	056		19	101		11/29/2010	350	FM		350
A 07	03	091		03	103		11/29/2010	274	FM		274
A 07	03	092		03	103		11/29/2010	213	FM		213
A 07	03	103		04	068		11/29/2010	235	FM		235
A 07	03	103		03	169		11/29/2010	136	FM		136
A 07	03	104		03	105		11/29/2010	325	FM		325
A 07	03	104		03	170		11/29/2010	86	FM		86
A 07	03	169		03	170		11/29/2010	78	FM		78
A 08	03	023		03	028		11/29/2010	285	FM		285
A 08	03	025		03	026		11/29/2010	296	FM		296
A 08	03	026		03	028		11/29/2010	182	FM		182
A 08	03	027		03	028		11/29/2010	202	FM		202
A 10	04	043		04	051		11/29/2010	108	FM		108
A 10	04	048		04	049		11/29/2010	345	FM		345
A 10	04	049		04	050		11/29/2010	207	FM		207
A 10	04	050		04	051		11/29/2010	261	FM		261
4S02	12	057		12	082		11/30/2010	305	FM		305
4S04	12	082		12	089		11/30/2010	300	FM		300
5 52	12	089		12	090		11/30/2010	300	FM		300
5 53	12	090		12	099		11/30/2010	270	FM		270
B 02	04	083		04	084		11/30/2010	166	FM		166
B 02	04	084		04	085		11/30/2010	295	FM		295
B 02	04	085		04	086		11/30/2010	287	FM		287
B 02	04	086		04	087		11/30/2010	346	FM		346
B 02	04	087		04	089		11/30/2010	144	FM		144
B 02	04	088		04	089		11/30/2010	235	FM		235
B 02	04	088		04	131	C	11/30/2010	39	FM		39
B 02	04	088		04	132	C	11/30/2010	112	FM		112
B 02	04	089		04	133	C	11/30/2010	120	FM		120
A 08	03	028		03	029		12/1/2010	281	FM		281
A 08	03	030		03	031		12/1/2010	247	FM		247
A 08	03	031		03	032		12/1/2010	212	FM		212
A 08	03	029		03	033		12/1/2010	200	FM		200
A 08	03	032		03	033		12/1/2010	212	FM		212
A 09	03	033		04	032		12/1/2010	250	FM		250
A 09	04	035		04	036	M	12/1/2010	400	FM		400
A 09	04	036	M	04	037		12/1/2010	131	FM		131
A 10	04	051		04	052		12/1/2010	85	FM		85
A 10	04	037		04	053		12/1/2010	230	FM		230
A 10	04	052		04	053		12/1/2010	77	FM		77
A 10	04	053		04	059		12/1/2010	298	FM		298
A 10	04	058		04	059		12/1/2010	153	FM		153
6S01	08	062		08	063		12/2/2010	157	FM		157
6S01	08	061		08	063		12/2/2010	142	FM		142
6S01	08	063		08	064		12/2/2010	206	FM		206

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
6S01	08	064		08	065		12/2/2010	125	FM		125
6S01	08	065		08	066		12/2/2010	370	FM		370
6S01	08	066		08	067		12/2/2010	119	FM		119
6S01	08	067		08	068		12/2/2010	236	FM		236
6S01	08	068		09	008		12/2/2010	377	FM		377
6S01	08	069		08	070		12/2/2010	246	FM		246
6S01	08	070		09	004		12/2/2010	213	FM		213
6S01	08	071		08	072		12/2/2010	267	FM		267
6S01	08	072		09	001		12/2/2010	347	FM		347
6S01	09	001		09	002		12/2/2010	350	FM		350
6S01	09	002		09	003		12/2/2010	210	FM		210
6S01	09	003		09	005		12/2/2010	80	FM		80
6S01	09	004		09	005		12/2/2010	210	FM		210
6S01	09	005		09	006		12/2/2010	178	FM		178
6S01	09	006		09	007		12/2/2010	109	FM		109
A 10	04	059		04	065		12/2/2010	359	FM		359
A 10	04	064		04	065		12/2/2010	152	FM		152
A 10	04	065		04	160		12/2/2010	267	FM		267
B 01	04	098	C	04	099		12/2/2010	269	FM		269
B 01	04	099		08	059		12/2/2010	150	FM		150
B 01	08	057		08	058		12/2/2010	183	FM		183
B 01	08	057		08	209	C	12/2/2010	151	FM		151
B 01	08	058		08	059		12/2/2010	211	FM		211
B 01	08	058		08	212		12/2/2010	175	FM		175
B 01	04	110		04	140		12/3/2010	325	FM		325
B 01	04	111		04	134		12/3/2010	286	FM		286
B 01	04	111		04	135	C	12/3/2010	81	FM		81
B 01	04	111		04	112		12/3/2010	287	FM		287
B 01	04	112		04	113		12/3/2010	350	FM		350
B 01	04	113		04	114		12/3/2010	218	FM		218
B 01	04	114		04	115		12/3/2010	277	FM		277
B 01	04	115		04	116		12/3/2010	116	FM		116
6S01	09	007		09	009		12/6/2010	192	FM		192
6S01	09	008		09	009		12/6/2010	161	FM		161
6S01	09	009		09	010		12/6/2010	165	FM		165
6S01	09	010		09	011		12/6/2010	190	FM		190
6S02	09	023		09	025		12/6/2010	170	FM		170
6S02	09	024		09	025		12/6/2010	190	FM		190
6S02	09	025		09	026		12/6/2010	100	FM		100
6S02	09	026		09	027		12/6/2010	256	FM		256
6S02	09	027		09	029		12/6/2010	310	FM		310
6S02	09	028		09	029		12/6/2010	200	FM		200
6S02	09	029		09	030		12/6/2010	310	FM		310
6S02	09	030		09	031		12/6/2010	260	FM		260
6S02	09	031		09	032		12/6/2010	217	FM		217
6S02	09	046		09	047		12/6/2010	116	FM		116
6S02	09	047		09	048		12/6/2010	100	FM		100
6S02	09	048		09	049		12/6/2010	94	FM		94
6S02	09	049		09	050		12/6/2010	301	FM		301
6S02	09	050		09	052		12/6/2010	360	FM		360

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
6S02	09	051		09	052		12/6/2010	192	FM		192
6S02	09	052		09	053		12/6/2010	300	FM		300
6S02	09	053		09	054		12/6/2010	211	FM		211
6S02	09	054		09	055		12/6/2010	250	FM		250
6S02	09	055		09	056		12/6/2010	170	FM		170
B 01	04	095		04	136	C	12/6/2010	202	FM		202
B 01	04	094	D	04	096		12/6/2010	276	FM		276
B 01	04	094		04	149	C	12/6/2010	190	FM		190
B 01	04	095		04	096		12/6/2010	124	FM		124
B 01	04	096		04	097		12/6/2010	200	FM		200
B 01	04	104		04	138	C	12/6/2010	260	FM		260
B 01	04	104		04	142	C	12/6/2010	130	FM		130
B 01	04	104		04	105		12/6/2010	165	FM		165
B 01	04	105		04	137	C	12/6/2010	130	FM		130
B 01	04	105		04	107		12/6/2010	50	FM		50
B 01	04	106	C	04	107		12/6/2010	221	FM		221
B 01	04	107		04	108		12/6/2010	280	FM		280
6S01	09	011		09	016		12/7/2010	300	FM		300
6S01	09	012		09	016		12/7/2010	194	FM		194
6S01	09	013		09	014		12/7/2010	340	FM		340
6S01	09	014		09	015		12/7/2010	267	FM		267
6S01	09	015		09	016		12/7/2010	300	FM		300
6S01	09	017		09	018		12/7/2010	350	FM		350
6S01	09	018		09	019		12/7/2010	249	FM		249
6S01	09	019		09	020		12/7/2010	300	FM		300
6S01	09	020		09	022		12/7/2010	250	FM		250
6S01	09	021		09	022		12/7/2010	245	FM		245
6S01	09	021		09	135	C	12/7/2010	191	FM		191
6S02	09	032		09	033		12/7/2010	220	FM		220
6S02	09	033		09	034		12/7/2010	250	FM		250
6S02	09	022		09	035		12/7/2010	50	FM		50
6S02	09	034		09	035		12/7/2010	343	FM		343
6S02	09	056		09	057		12/7/2010	236	FM		236
B 01	04	097		04	103		12/7/2010	300	FM		300
B 01	04	100		04	102		12/7/2010	410	FM		410
B 01	04	103		04	117		12/7/2010	350	FM		350
B 01	04	108		04	109		12/7/2010	100	FM		100
B 01	04	116		04	117		12/7/2010	150	FM		150
B 01	04	109		04	117		12/7/2010	275	FM		275
B 01	04	117		04	120		12/7/2010	300	FM		300
B 01	04	118		04	119		12/7/2010	345	FM		345
B 01	04	119		04	120		12/7/2010	300	FM		300
B 01	04	120		04	121		12/7/2010	150	FM		150
B 01	04	121		04	122		12/7/2010	200	FM		200
B 02	04	090		04	091		12/7/2010	291	FM		291
B 02	04	091		04	128	C	12/7/2010	174	FM		174
B 02	04	091		04	092		12/7/2010	350	FM		350
B 02	04	089		04	093		12/7/2010	246	FM		246
B 02	04	092		04	093		12/7/2010	255	FM		255
6S01	08	060		08	061		12/8/2010	275	FM		275

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
6S02	08	171		08	172		12/8/2010	160	FM		160
6S02	08	172		08	173		12/8/2010	129	FM		129
6S02	08	173		09	060		12/8/2010	182	FM		182
6S02	09	035		09	045		12/8/2010	212	FM		212
6S02	09	036		10	001		12/8/2010	260	FM		260
6S02	09	036		09	037		12/8/2010	200	FM		200
6S02	09	037		09	038		12/8/2010	89	FM		89
6S02	09	038		09	041		12/8/2010	330	FM		330
6S02	09	040		09	041		12/8/2010	85	FM		85
6S02	09	042		09	043		12/8/2010	100	FM		100
6S02	09	041		09	043		12/8/2010	180	FM		180
6S02	09	043		09	044		12/8/2010	140	FM		140
6S02	09	044		09	045		12/8/2010	200	FM		200
6S02	09	058		09	059		12/8/2010	350	FM		350
6S02	09	045		09	059		12/8/2010	150	FM		150
6S02	09	061		09	062		12/8/2010	170	FM		170
6S02	09	062		09	063		12/8/2010	360	FM		360
6S02	09	063		09	064		12/8/2010	325	FM		325
6S02	09	064		09	065		12/8/2010	78	FM		78
6S02	09	065		09	066		12/8/2010	183	FM		183
6S02	09	066		09	068		12/8/2010	360	FM		360
6S02	09	067		09	068		12/8/2010	210	FM		210
6S02	09	067		09	136	C	12/8/2010	129	FM		129
6S08	09	095		09	096		12/8/2010	253	FM		253
6S08	09	096		09	097		12/8/2010	269	FM		269
6S08	09	098		09	099		12/8/2010	135	FM		135
6S08	09	099		09	100		12/8/2010	240	FM		240
6S08	09	100		09	101		12/8/2010	170	FM		170
6S08	09	101		09	102		12/8/2010	185	FM		185
6S08	09	097		09	103		12/8/2010	141	FM		141
6S08	09	102		09	103		12/8/2010	212	FM		212
6S08	09	103		09	112		12/8/2010	250	FM		250
6S08	09	108		09	109		12/8/2010	275	FM		275
6S08	09	109		09	110		12/8/2010	200	FM		200
6S08	09	111		09	112		12/8/2010	200	FM		200
6S08	09	112		09	113		12/8/2010	100	FM		100
B 02	04	122		04	123		12/8/2010	110	FM		110
B 02	04	123		04	150		12/8/2010	82	FM		82
1 01	32	050		32	051		12/9/2010	400	FM		400
1 01	32	051		33	031		12/9/2010	318	FM		318
1 01	33	012		33	013		12/9/2010	166	FM		166
1 01	33	013		33	014		12/9/2010	285	FM		285
1 01	33	014		33	015		12/9/2010	288	FM		288
1 01	33	015		33	028		12/9/2010	296	FM		296
1 01	33	016		33	017		12/9/2010	130	FM		130
1 01	33	017		33	018		12/9/2010	79	FM		79
1 01	33	018		33	020		12/9/2010	357	FM		357
1 01	33	019		33	020		12/9/2010	157	FM		157
1 01	33	020		33	021		12/9/2010	39	FM		39
1 01	33	021		33	027		12/9/2010	400	FM		400

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
1 01	33	022		33	024		12/9/2010	270	FM		270
1 01	33	023		33	024		12/9/2010	203	FM		203
1 01	33	024		33	026		12/9/2010	248	FM		248
1 01	33	025		33	026		12/9/2010	260	FM		260
1 01	33	026		33	027		12/9/2010	277	FM		277
1 01	33	027		33	028		12/9/2010	260	FM		260
1 01	33	028		33	033		12/9/2010	15	FM		15
1 01	33	029		33	030		12/9/2010	200	FM		200
1 01	33	030		33	031		12/9/2010	230	FM		230
1 01	33	031		33	032		12/9/2010	255	FM		255
1 01	33	032		33	033		12/9/2010	260	FM		260
6S08	09	107		09	108		12/9/2010	276	FM		276
6S08	09	107		09	138	D	12/9/2010	3	FM		3
3E10	25	022		25	023		12/10/2010	349	JM	12	349
5 12	15	051		15	052		12/10/2010	180	JM	12	180
6S01	09	009		09	010		12/10/2010	165	JM	6	330
7S01	06	031		06	032		12/10/2010	328	JM	12	328
A 01	07	118		07	121		12/10/2010	292	JM	12	292
A 01	07	120		07	121		12/10/2010	396	JM	12	396
A 01	08	050		08	051		12/10/2010	192	JM	12	192
6S02	09	057		09	058		12/10/2010	360	FM		360
6S02	09	059		09	073		12/10/2010	300	FM		300
6S02	09	068		09	069		12/10/2010	181	FM		181
6S02	09	069		09	070		12/10/2010	360	FM		360
6S02	09	070		09	071		12/10/2010	263	FM		263
6S02	09	071		09	072		12/10/2010	156	FM		156
6S02	09	072		09	073		12/10/2010	161	FM		161
6S08	09	113		09	114		12/10/2010	60	FM		60
6S08	09	114		09	115		12/10/2010	300	FM		300
6S08	09	115		09	118		12/10/2010	173	FM		173
6S08	09	116		09	117		12/10/2010	200	FM		200
6S08	09	117		09	118		12/10/2010	300	FM		300
6S08	09	118		09	119		12/10/2010	300	FM		300
6S08	09	119		09	121		12/10/2010	334	FM		334
6S08	09	120		09	121		12/10/2010	175	FM		175
1 01	32	042		33	034		12/13/2010	300	FM		300
1 01	32	042		32	043		12/13/2010	305	FM		305
1 01	33	033		33	034		12/13/2010	250	FM		250
1 02	32	045		32	046		12/13/2010	290	FM		290
1 02	32	045		33	011		12/13/2010	292	FM		292
1 02	33	006		33	007		12/13/2010	93	FM		93
1 02	33	008		33	009		12/13/2010	300	FM		300
1 02	33	009		33	010		12/13/2010	345	FM		345
1 02	33	010		33	011		12/13/2010	294	FM		294
6S02	09	073		09	074		12/13/2010	200	FM		200
6S03	09	074		09	075		12/13/2010	112	FM		112
6S03	09	075		09	079		12/13/2010	87	FM		87
6S03	09	076		09	077		12/13/2010	100	FM		100
6S03	09	077		09	078		12/13/2010	55	FM		55
6S03	09	078		09	079		12/13/2010	50	FM		50

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
6S03	09	079		09	080		12/13/2010	61	FM		61
6S03	09	080		09	081		12/13/2010	125	FM		125
6S03	09	081		09	082		12/13/2010	128	FM		128
6S03	09	082		09	083		12/13/2010	117	FM		117
1 02	32	036		32	053	D	12/14/2010	57	FM		57
1 02	32	038		32	039		12/14/2010	151	FM		151
1 02	32	039		32	040		12/14/2010	259	FM		259
1 02	32	048		33	005		12/14/2010	351	FM		351
1 02	33	001	C	33	003		12/14/2010	95	FM		95
1 02	33	002		33	003		12/14/2010	112	FM		112
1 02	33	004		33	005		12/14/2010	238	FM		238
1 07	28	054		28	055		12/15/2010	302	FM		302
1 07	28	055		28	056		12/15/2010	169	FM		169
1 07	28	056		28	059		12/15/2010	85	FM		85
1 07	28	057		28	058		12/15/2010	154	FM		154
1 07	28	058		28	059		12/15/2010	250	FM		250
1 07	28	059		28	060		12/15/2010	175	FM		175
1 07	28	060		28	061		12/15/2010	75	FM		75
1 07	28	061		28	063		12/15/2010	365	FM		365
1 07	28	062		28	063		12/15/2010	306	FM		306
1 07	28	063		28	064		12/15/2010	261	FM		261
1 07	27	097		27	189		12/17/2010	112	FM		112
1 07	27	098		27	099		12/17/2010	340	FM		340
1 07	27	098		27	189		12/17/2010	253	FM		253
1 07	27	180		27	181		12/17/2010	134	FM		134
1 07	27	181		27	182		12/17/2010	45	FM		45
1 07	27	182		27	183		12/17/2010	138	FM		138
1 07	27	183		27	184		12/17/2010	48	FM		48
1 07	27	184		27	185		12/17/2010	48	FM		48
1 07	27	185		27	187		12/17/2010	305	FM		305
1 07	27	187		27	188		12/17/2010	40	FM		40
1 07	27	188		27	189		12/17/2010	114	FM		114
1 07	27	180		28	064		12/17/2010	372	FM		372
6S04	09	085		09	086		12/17/2010	240	FM		240
6S05	09	086	M	09	087		12/17/2010	245	FM		245
6S05	09	087		09	088		12/17/2010	251	FM		251
6S05	09	088		09	089		12/17/2010	439	FM		439
6S06	09	089		09	090		12/17/2010	127	FM		127
6S09	08	174		08	176		12/17/2010	312	FM		312
6S09	08	175	C	08	176		12/17/2010	146	FM		146
6S09	08	176		08	177		12/17/2010	200	FM		200
6S09	08	177		08	178		12/17/2010	47	FM		47
6S09	08	178		08	179		12/17/2010	50	FM		50
6S09	08	179		08	182		12/17/2010	120	FM		120
6S09	08	180		08	181		12/17/2010	91	FM		91
6S09	08	181		08	182		12/17/2010	170	FM		170
1 13	26	122		26	123		1/1/2011	276	JM	12	276
2 06	25	145		25	146		1/1/2011	256	JM	12	256
3S08	24	112		24	113		1/1/2011	115	JM	12	115
3S08	24	113		24	114		1/1/2011	355	JM	12	355

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
3S08	24	114		24	115		1/1/2011	199	JM	12	199
3S20	19	067		19	068		1/1/2011	377	JM	12	377
3E05	24	156		24	157		1/1/2011	177	JM	12	177
4S01	19	091		19	092		1/1/2011	347	JM	12	347
5 07	15	157		15	158		1/1/2011	220	JM	12	220
5 07	15	158		15	161		1/1/2011	265	JM	12	265
5 07	15	159		15	160		1/1/2011	268	JM	12	268
5 07	15	160		15	161		1/1/2011	273	JM	12	273
5 11	14	102		14	103		1/1/2011	332	JM	12	332
5 11	14	103		14	104		1/1/2011	334	JM	12	334
5 17	10	032		10	033		1/1/2011	400	JM	6	800
5 17	10	036		10	086		1/1/2011	180	JM	6	360
5 17	10	053		10	066		1/1/2011	207	JM	6	414
5 17	10	056		10	057		1/1/2011	384	JM	6	768
5 47	13	151		13	152		1/1/2011	302	JM	12	302
6S08	09	117		09	118		1/1/2011	299	JM	12	299
6S08	09	119		09	121		1/1/2011	336	JM	12	336
6S09	08	187		08	188		1/1/2011	400	JM	6	800
6W01	03	115		07	018		1/1/2011	152	JM	6	304
6W01	07	016		07	017		1/1/2011	92	JM	6	184
6W01	07	017		07	018		1/1/2011	287	JM	6	574
7S01	06	078		06	079		1/1/2011	291	JM	12	291
A 01	07	019		07	020		1/1/2011	78	JM	6	156
A 03	04	081		04	082		1/1/2011	248	JM	6	496
A 04	04	082		04	124	C	1/1/2011	186	JM	6	372
A 05	03	044		03	045		1/1/2011	90	JM	6	180
A 07	03	082		04	089		1/1/2011	400	JM	6	800
6S06	09	090		09	091		1/4/2011	283	FM		283
6S06	09	091		09	092		1/4/2011	105	FM		105
6S07	09	092		09	093		1/4/2011	337	FM		337
6S07	09	093		09	094		1/4/2011	326	FM		326
6S07	09	094		09	122		1/4/2011	332	FM		332
6S08	09	121		09	122		1/4/2011	340	FM		340
6S08	09	122		09	123		1/4/2011	210	FM		210
6S09	08	182		08	183		1/4/2011	200	FM		200
6S09	09	125		09	137		1/4/2011	25	FM		25
6S09	08	183		08	187		1/4/2011	153	FM		153
6S09	08	184		09	125		1/4/2011	75	FM		75
6S09	08	184		08	185		1/4/2011	281	FM		281
6S09	08	185		08	186		1/4/2011	269	FM		269
6S09	08	186		08	187		1/4/2011	300	FM		300
6S09	08	187		08	188		1/4/2011	400	FM		400
6S09	08	188		08	190		1/4/2011	234	FM		234
6S09	08	190		08	191		1/4/2011	266	FM		266
6S09	08	191		09	124		1/4/2011	325	FM		325
6S09	08	191		08	194		1/4/2011	241	FM		241
6S09	08	192		08	193		1/4/2011	320	FM		320
6S09	08	193		08	194		1/4/2011	170	FM		170
6S09	08	194		08	195		1/4/2011	181	FM		181
6S09	08	195		09	123		1/4/2011	235	FM		235

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
1 02	27	106		32	049		1/5/2011	276	FM		276
1 02	32	033		32	055		1/5/2011	112	FM		112
1 02	32	033		32	034		1/5/2011	242	FM		242
1 02	32	034		32	035		1/5/2011	236	FM		236
1 02	32	035		32	037		1/5/2011	237	FM		237
1 02	32	036		32	037		1/5/2011	302	FM		302
1 02	32	037		32	041		1/5/2011	254	FM		254
1 02	32	040		32	041		1/5/2011	61	FM		61
1 02	32	041		32	044		1/5/2011	257	FM		257
1 02	32	043		32	044		1/5/2011	298	FM		298
1 02	32	044		32	047		1/5/2011	261	FM		261
1 02	32	046		32	047		1/5/2011	292	FM		292
1 02	32	047		32	049		1/5/2011	262	FM		262
1 02	32	058		32	059	D	1/5/2011	13	FM		13
1 02	32	055		32	057		1/5/2011	174	FM		174
1 02	32	057		32	058		1/5/2011	218	FM		218
1 04	32	007		32	009		1/5/2011	174	FM		174
1 04	32	008		32	009		1/5/2011	113	FM		113
1 04	32	012		32	013		1/5/2011	250	FM		250
1 04	32	012		32	056	C	1/5/2011	100	FM		100
1 04	32	013		32	014		1/5/2011	296	FM		296
1 04	32	015		32	016		1/5/2011	206	FM		206
6S11	08	195		13	001		1/5/2011	356	FM		356
6S11	13	001		13	002		1/5/2011	350	FM		350
6S11	13	001		14	006		1/5/2011	225	FM		225
6S11	13	002		13	003		1/5/2011	321	FM		321
6S11	13	003		13	212	C	1/5/2011	245	FM		245
6S12	14	001	C	14	002		1/5/2011	255	FM		255
6S12	14	002		14	003		1/5/2011	165	FM		165
6S12	14	003		14	004		1/5/2011	400	FM		400
6S12	14	004		14	005		1/5/2011	400	FM		400
6S12	09	122		14	005		1/5/2011	350	FM		350
6S12	14	005		14	006		1/5/2011	270	FM		270
6S12	14	005		14	007		1/5/2011	331	FM		331
6S12	14	007		14	218		1/5/2011	300	FM		300
6S12	14	009		14	010		1/5/2011	235	FM		235
6S12	14	009		14	191		1/5/2011	200	FM		200
6S12	14	010		14	011		1/5/2011	260	FM		260
6S12	14	011		14	012		1/5/2011	260	FM		260
1 03	27	106		27	107		1/6/2011	340	FM		340
1 04	27	104		27	105		1/6/2011	317	FM		317
1 04	32	018		32	019		1/6/2011	347	FM		347
1 04	32	020		32	021		1/6/2011	240	FM		240
1 04	32	023		32	024		1/6/2011	194	FM		194
1 04	32	025		32	026		1/6/2011	195	FM		195
6S12	13	008		13	009		1/6/2011	300	FM		300
6S12	13	009		13	010		1/6/2011	294	FM		294
6S12	13	003		13	010		1/6/2011	336	FM		336
6S12	14	007		14	008		1/6/2011	267	FM		267
6S12	13	008		14	008		1/6/2011	294	FM		294

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
1 03	27	105		27	108		1/7/2011	306	FM		306
1 03	27	107		27	108		1/7/2011	253	FM		253
1 03	27	108		32	032		1/7/2011	268	FM		268
1 04	32	009		32	011		1/7/2011	193	FM		193
1 04	32	010		32	011		1/7/2011	336	FM		336
1 04	32	011		32	017		1/7/2011	260	FM		260
1 04	32	014		32	017		1/7/2011	200	FM		200
1 04	32	016		32	017		1/7/2011	208	FM		208
1 04	32	017		32	022		1/7/2011	255	FM		255
1 04	32	019		32	022		1/7/2011	303	FM		303
1 04	32	021		32	022		1/7/2011	240	FM		240
1 04	32	022		32	027		1/7/2011	270	FM		270
1 04	32	024		32	027		1/7/2011	346	FM		346
1 04	32	026		32	027		1/7/2011	350	FM		350
1 04	32	027		32	028		1/7/2011	182	FM		182
1 04	32	028		32	032		1/7/2011	85	FM		85
6S12	13	005		13	006		1/7/2011	133	FM		133
6S12	13	006		13	007		1/7/2011	43	FM		43
6S12	13	003		13	007		1/7/2011	140	FM		140
6S12	13	010		13	011		1/7/2011	150	FM		150
6S12	13	010		13	014		1/7/2011	345	FM		345
6S12	13	007		13	011		1/7/2011	332	FM		332
6S12	13	011		13	015		1/7/2011	335	FM		335
6S12	13	012		13	013		1/7/2011	380	FM		380
6S12	13	013		13	014		1/7/2011	375	FM		375
6S12	13	014		13	015		1/7/2011	150	FM		150
1 12	27	144		27	145		1/10/2011	276	FM		276
1 12	27	144		32	005		1/10/2011	280	FM		280
1 12	27	145		27	147		1/10/2011	275	FM		275
1 12	27	146		27	147		1/10/2011	87	FM		87
1 12	27	147		27	150		1/10/2011	236	FM		236
1 12	27	148		27	149		1/10/2011	277	FM		277
1 12	27	148		32	004		1/10/2011	278	FM		278
1 12	27	149		27	150		1/10/2011	274	FM		274
1 12	27	150		27	153		1/10/2011	235	FM		235
1 12	27	151		27	152		1/10/2011	277	FM		277
1 12	27	151		32	003		1/10/2011	279	FM		279
1 12	27	152		27	153		1/10/2011	275	FM		275
1 12	27	153		27	156		1/10/2011	235	FM		235
1 12	27	154		27	155		1/10/2011	278	FM		278
1 12	27	155		27	156		1/10/2011	279	FM		279
1 12	27	156		27	159		1/10/2011	226	FM		226
1 12	27	157		27	158		1/10/2011	273	FM		273
1 12	27	158		27	159		1/10/2011	272	FM		272
5 17	14	014		14	032		1/10/2011	110	FM		110
6S13	14	014		14	015		1/10/2011	76	FM		76
6S13	14	015		14	017		1/10/2011	450	FM		450
6S13	14	016		14	017		1/10/2011	121	FM		121
6S13	14	018	C	14	019	C	1/10/2011	143	FM		143
6S13	14	017		14	020		1/10/2011	289	FM		289

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
6S13	14	019		14	020		1/10/2011	80	FM		80
6S13	14	020		14	021		1/10/2011	370	FM		370
6S15	08	196		08	197		1/10/2011	290	FM		290
6S15	08	197		08	198		1/10/2011	290	FM		290
6S15	08	198		08	199		1/10/2011	290	FM		290
6S15	08	199		08	200		1/10/2011	290	FM		290
6S12	13	014		13	018		1/11/2011	340	FM		340
6S13	13	016		14	030		1/11/2011	236	FM		236
6S13	13	016		13	017		1/11/2011	351	FM		351
6S13	13	017		13	018		1/11/2011	353	FM		353
6S13	13	019	C	14	029		1/11/2011	296	FM		296
6S13	13	019		13	020		1/11/2011	350	FM		350
6S13	13	020		13	053		1/11/2011	282	FM		282
6S13	13	020		13	021		1/11/2011	260	FM		260
6S13	13	021		13	022		1/11/2011	290	FM		290
6S13	13	022		13	023		1/11/2011	130	FM		130
6S13	13	023		13	025		1/11/2011	84	FM		84
6S13	13	024		13	025		1/11/2011	84	FM		84
6S13	13	025		13	026		1/11/2011	84	FM		84
6S13	13	027		13	204		1/11/2011	371	FM		371
6S13	13	026		13	028		1/11/2011	35	FM		35
6S13	13	027		13	028		1/11/2011	426	FM		426
6S13	13	028		13	029		1/11/2011	175	FM		175
6S13	14	021		14	028		1/11/2011	375	FM		375
6S13	14	022		14	023		1/11/2011	375	FM		375
6S13	14	023		14	024		1/11/2011	10	FM		10
6S13	14	024		14	025		1/11/2011	160	FM		160
6S13	14	025		14	026		1/11/2011	332	FM		332
6S13	14	026		14	027		1/11/2011	330	FM		330
6S13	14	027		14	028		1/11/2011	330	FM		330
6S13	14	028		14	029		1/11/2011	240	FM		240
1 04	27	108		27	109		1/13/2011	314	FM		314
1 04	27	109		27	110		1/13/2011	302	FM		302
1 04	27	110		27	111		1/13/2011	295	FM		295
1 04	27	111		27	113		1/13/2011	317	FM		317
1 04	27	112		27	113		1/13/2011	297	FM		297
1 04	27	113		27	114		1/13/2011	140	FM		140
1 05	27	114		27	161		1/13/2011	300	FM		300
1 12	27	141		27	142		1/13/2011	266	FM		266
1 12	27	141		32	002		1/13/2011	265	FM		265
1 12	27	142		27	143		1/13/2011	272	FM		272
1 12	27	143		27	160		1/13/2011	272	FM		272
1 12	27	159		27	160		1/13/2011	280	FM		280
1 12	27	161		27	166		1/13/2011	315	FM		315
1 12	32	001		32	002		1/13/2011	275	FM		275
1 10	27	127		27	128		1/14/2011	288	FM		288
1 10	27	128		27	129		1/14/2011	160	FM		160
1 10	27	129		27	133		1/14/2011	313	FM		313
1 10	27	130		27	131		1/14/2011	128	FM		128
1 10	27	130		27	179	C	1/14/2011	25	FM		25

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
1 10	27	131		27	132		1/14/2011	200	FM		200
1 10	27	132		27	133		1/14/2011	175	FM		175
1 10	27	133		27	134		1/14/2011	313	FM		313
1 10	27	134		27	136		1/14/2011	181	FM		181
1 10	27	135		27	136		1/14/2011	292	FM		292
1 10	27	136		27	137		1/14/2011	199	FM		199
1 12	27	160		27	170		1/14/2011	277	FM		277
6S17	07	145		07	146		1/27/2011	250	FM		250
6S17	07	146		07	204	D	1/27/2011	89	FM		89
6S17	07	147		07	203	D	1/27/2011	59	FM		59
6S17	07	146		07	163		1/27/2011	300	FM		300
6S17	07	147		07	163		1/27/2011	260	FM		260
6S17	07	162		07	163		1/27/2011	310	FM		310
6S17	07	163		07	167		1/27/2011	360	FM		360
6S17	07	165		07	198	C	1/27/2011	175	FM		175
6S17	07	165		07	166		1/27/2011	260	FM		260
6S17	07	166		07	167		1/27/2011	350	FM		350
6S17	07	164		07	167		1/27/2011	351	FM		351
6S17	07	167		07	171		1/27/2011	300	FM		300
6S17	07	168		07	205		1/27/2011	42	FM		42
6S17	07	169		07	197	C	1/27/2011	160	FM		160
6S17	07	169		07	170		1/27/2011	300	FM		300
6S17	07	168		07	171		1/27/2011	300	FM		300
6S17	07	170		07	171		1/27/2011	310	FM		310
6S17	07	171		07	175		1/27/2011	300	FM		300
6S17	07	172		07	175		1/27/2011	360	FM		360
6S17	07	173		07	174		1/27/2011	310	FM		310
6S17	07	173		07	196	C	1/27/2011	144	FM		144
6S17	07	174		07	175		1/27/2011	310	FM		310
6S18	08	045		08	126		1/28/2011	105	FM		105
6S18	08	045		08	127		1/28/2011	200	FM		200
6S18	08	121		08	126		1/28/2011	175	FM		175
6S18	08	127		08	128		1/28/2011	160	FM		160
6S18	08	128		08	129		1/28/2011	350	FM		350
6S18	08	129		08	130		1/28/2011	125	FM		125
6S18	07	184		07	192	C	1/31/2011	250	FM		250
6S18	07	184		07	185		1/31/2011	300	FM		300
6S18	07	186		07	187		1/31/2011	220	FM		220
6S18	07	187		07	188		1/31/2011	330	FM		330
6S18	07	188		07	189		1/31/2011	200	FM		200
6S18	07	188		08	106		1/31/2011	295	FM		295
6S18	07	189		07	190		1/31/2011	38	FM		38
6S18	07	190		07	191		1/31/2011	165	FM		165
6S18	07	185		07	191		1/31/2011	220	FM		220
6S18	07	191		08	137		1/31/2011	71	FM		71
6S18	08	130		08	131		1/31/2011	130	FM		130
6S18	08	131		08	132		1/31/2011	360	FM		360
6S18	08	132		08	133		1/31/2011	141	FM		141
6S18	08	133		08	134		1/31/2011	300	FM		300
6S18	08	134		08	189		1/31/2011	230	FM		230

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
6S18	08	135		08	189		1/31/2011	97	FM		97
6S18	08	135		08	136		1/31/2011	340	FM		340
6S18	08	136	P	08	138	P	1/31/2011	300	FM		300
6S18	08	137	P	08	138	P	1/31/2011	290	FM		290
1 29	20	050		20	051		2/1/2011	322	JM	12	322
6S01	08	072		09	001		2/1/2011	355	JM	12	355
6S01	09	002		09	003		2/1/2011	204	JM	12	204
6S01	09	004		09	005		2/1/2011	237	JM	12	237
6S02	09	036		10	001		2/1/2011	304	JM	6	608
6S02	09	061		09	062		2/1/2011	160	JM	6	320
6S02	09	062		09	063		2/1/2011	350	JM	6	700
6S02	09	066		09	068		2/1/2011	360	JM	6	720
A 01	07	020		08	033		2/1/2011	274	JM	6	548
A 07	03	094	C	03	097		2/1/2011	170	JM	6	340
A 08	03	018		03	019		2/1/2011	350	JM	6	700
B 01	04	105	C	04	137		2/1/2011	147	JM	6	294
5 22	14	200	S	14	201	S	2/1/2011	50	FM	3	200
5 24	14	080	S	14	081	S	2/1/2011	52	FM	3	208
6S18	07	183		07	200		2/1/2011	183	FM		183
6S18	08	138		08	145		2/1/2011	325	FM		325
6S18	08	139		08	140		2/1/2011	385	FM		385
6S18	08	140		08	141		2/1/2011	300	FM		300
6S18	08	141		08	142		2/1/2011	300	FM		300
6S18	08	142		08	143		2/1/2011	300	FM		300
6S18	08	143		08	145		2/1/2011	300	FM		300
6S18	07	183		08	144		2/1/2011	300	FM		300
6S18	08	144		08	145		2/1/2011	300	FM		300
6S18	08	145		08	152		2/1/2011	325	FM		325
6S19	08	146		08	217	C	2/1/2011	50	FM		50
6S19	08	146		08	147		2/1/2011	139	FM		139
6S19	08	147		08	148		2/1/2011	113	FM		113
6S19	08	148		08	149		2/1/2011	400	FM		400
6S19	08	149		08	150		2/1/2011	340	FM		340
6S19	08	150		08	151		2/1/2011	346	FM		346
6S19	08	151		08	152		2/1/2011	162	FM		162
6S20	07	182		07	199	C	2/1/2011	150	FM		150
6S20	07	182		08	153		2/1/2011	290	FM		290
6S20	08	152		08	154		2/1/2011	170	FM		170
6S20	08	153		08	154		2/1/2011	230	FM		230
1 24	21	081	P	21	082	P	2/2/2011	300	FM	3	1200
6S17	07	175		07	176	P	2/2/2011	300	FM		300
6S20	08	154		08	155		2/2/2011	245	FM		245
6S20	08	155		08	156		2/2/2011	155	FM		155
6S17	07	177	P	07	178		2/3/2011	242	FM		242
6S20	08	156		08	157		2/3/2011	200	FM		200
6S21	07	178		07	181		2/3/2011	300	FM		300
6S21	07	179		08	157		2/3/2011	325	FM		325
6S21	07	179		07	180		2/3/2011	300	FM		300
6S21	07	180		07	181		2/3/2011	302	FM		302
6S21	07	178		12	023		2/4/2011	92	FM		92

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
6S22	12	023		12	024		2/4/2011	111	FM		111
6S23	12	024		12	025		2/4/2011	375	FM		375
6S23	12	025		12	026		2/4/2011	351	FM		351
6S24	12	026		12	027		2/4/2011	256	FM		256
6S16	12	018		12	019		2/7/2011	225	FM		225
7S07	12	115	P	12	116	P	2/7/2011	340	FM	3	1360
7S07	12	116	P	12	117	P	2/7/2011	295	FM	3	1180
7S07	12	117	P	12	120	M	2/7/2011	15	FM	3	60
4W01	20	101		20	102		2/8/2011	280	FM		280
4W01	20	102		20	103		2/8/2011	272	FM		272
4W01	20	103		20	104		2/8/2011	300	FM		300
4W01	20	104		20	107		2/8/2011	366	FM		366
4W01	20	105		20	106		2/8/2011	358	FM		358
4W01	20	106		20	107		2/8/2011	355	FM		355
4W01	20	107		20	110		2/8/2011	366	FM		366
4W01	20	108		20	109		2/8/2011	58	FM		58
4W01	20	109		20	110		2/8/2011	300	FM		300
4W01	20	110		20	112		2/8/2011	361	FM		361
4W01	20	111		20	112		2/8/2011	317	FM		317
5 05	14	139	P	14	140	P	2/8/2011	360	FM	3	1440
5 05	14	139	P	14	212	D	2/8/2011	110	FM	3	440
4W02	13	178		13	213		2/9/2011	162	FM		162
4W02	13	178		13	193		2/9/2011	344	FM		344
4W02	13	179		13	180		2/9/2011	288	FM		288
4W02	13	179		13	213		2/9/2011	181	FM		181
5 11	14	108		14	109	P	2/9/2011	130	FM	3	520
5 11	14	109	P	14	110	P	2/9/2011	350	FM	3	1400
5 11	14	110	P	14	112	P	2/9/2011	290	FM	3	1160
5 11	14	111	P	14	112	P	2/9/2011	290	FM	3	1160
5 11	14	112	P	14	113	P	2/9/2011	84	FM	3	336
5 11	14	113	P	14	114	P	2/9/2011	168	FM	3	672
5 11	14	114	P	14	118	P	2/9/2011	250	FM	3	1000
5 11	14	117	P	14	118	P	2/9/2011	135	FM	3	540
5 11	14	117	P	14	202	P	2/9/2011	50	FM	3	200
5 11	14	118	P	14	119		2/9/2011	315	FM	3	1260
5 24	14	082		14	087	P	2/9/2011	175	FM	3	700
6S16	12	019		12	020		2/9/2011	420	FM		420
6S16	12	020		12	021	S	2/9/2011	23	FM		23
1 23	22	054		22	055		2/10/2011	236	FM		236
1 23	22	058		22	059		2/10/2011	348	FM		348
1 23	22	063		22	064		2/10/2011	200	FM		200
1 23	22	064		22	065		2/10/2011	276	FM		276
1 23	22	065		22	066		2/10/2011	45	FM		45
1 23	22	066		22	067		2/10/2011	272	FM		272
1 23	22	067		22	068		2/10/2011	230	FM		230
4W01	13	169		13	170		2/10/2011	330	FM		330
4W01	13	170		13	171		2/10/2011	40	FM		40
4W01	13	171		13	208		2/10/2011	201	FM		201
4W01	13	172		13	174		2/10/2011	20	FM		20
4W01	13	172		13	208		2/10/2011	200	FM		200

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
4W01	13	173		13	210		2/10/2011	65	FM		65
4W01	13	174		13	210		2/10/2011	200	FM		200
6S24	12	027		12	028		2/10/2011	240	FM		240
6S25	12	022	S	12	028		2/10/2011	158	FM		158
1 29	26	079		26	080		2/11/2011	100	FM		100
1 29	26	080		26	081		2/11/2011	262	FM		262
1 29	26	081		26	082		2/11/2011	359	FM		359
1 29	20	043		20	044		2/14/2011	333	FM		333
1 29	20	043		26	089		2/14/2011	372	FM		372
1 29	20	044		20	045		2/14/2011	332	FM		332
1 29	20	045		20	046		2/14/2011	331	FM		331
1 29	20	046		20	047		2/14/2011	335	FM		335
1 29	20	047		20	048		2/14/2011	323	FM		323
1 29	20	048		20	049		2/14/2011	328	FM		328
1 29	26	082		26	089		2/14/2011	201	FM		201
1 29	26	083		26	084		2/14/2011	296	FM		296
1 29	26	084		26	085		2/14/2011	234	FM		234
1 29	26	085		26	086		2/14/2011	168	FM		168
1 29	26	086		26	087		2/14/2011	170	FM		170
1 29	26	087		26	088		2/14/2011	288	FM		288
1 29	26	088		26	089		2/14/2011	318	FM		318
4W01	13	174		13	175		2/14/2011	340	FM		340
4W01	13	175		13	176		2/14/2011	340	FM		340
4W01	13	176		13	177		2/14/2011	330	FM		330
6S25	12	028		12	029		2/14/2011	456	FM		456
1 15	27	001		27	005		2/15/2011	337	FM		337
1 15	27	002		27	003		2/15/2011	272	FM		272
1 15	27	003		27	004		2/15/2011	270	FM		270
1 15	27	004		27	005		2/15/2011	304	FM		304
1 15	27	005		27	009		2/15/2011	279	FM		279
1 15	27	006		27	007		2/15/2011	283	FM		283
1 15	27	007		27	008		2/15/2011	276	FM		276
1 15	27	008		27	009		2/15/2011	185	FM		185
1 15	27	009		27	013		2/15/2011	225	FM		225
1 15	27	010		27	011		2/15/2011	233	FM		233
1 15	27	010		27	177	D	2/15/2011	20	FM		20
1 15	27	011		27	012		2/15/2011	236	FM		236
1 15	27	012		27	013		2/15/2011	226	FM		226
1 29	20	049		20	050		2/15/2011	330	FM		330
1 29	20	050		20	051		2/15/2011	329	FM		329
4W01	13	177		13	181		2/15/2011	268	FM		268
4W02	12	127		13	186		2/15/2011	250	FM	3	1000
4W02	13	180		13	181		2/15/2011	293	FM		293
4W02	13	181		13	182		2/15/2011	52	FM		52
4W02	13	182		13	183		2/15/2011	244	FM		244
4W02	13	183		13	188		2/15/2011	353	FM		353
4W02	13	184		13	188		2/15/2011	250	FM		250
4W02	13	184		13	203	D	2/15/2011	250	FM		250
4W02	13	185		13	186		2/15/2011	110	FM	3	440
4W02	13	186		13	187		2/15/2011	210	FM	3	840

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
4W02	13	187		13	188		2/15/2011	304	FM	3	1216
5 47	13	156		13	182		2/15/2011	47	FM		47
5 23	14	078		14	082		2/23/2011	330	FM	3	1320
5 23	14	078		14	200	S	2/23/2011	127	FM	3	508
5 24	14	080	S	14	082		2/23/2011	134	FM	3	536
2 07	26	075		26	076		3/1/2011	330	JM	6	660
3E07	24	072		24	073		3/1/2011	300	JM	12	300
4N02	17	020		17	021		3/1/2011	280	JM	12	280
4S01	19	093		19	094		3/1/2011	242	JM	12	242
4S02	19	140		19	141		3/1/2011	140	JM	12	140
4S03	19	151		19	153		3/1/2011	116	JM	12	116
5 12	15	055		15	061		3/1/2011	209	JM	12	209
5 12	15	117		15	118		3/1/2011	306	JM	12	306
6S01	08	062		08	063		3/1/2011	157	JM	6	314
6S01	08	063		08	064		3/1/2011	240	JM	6	480
6S01	08	064		08	065		3/1/2011	129	JM	12	129
6S01	08	068		09	008		3/1/2011	380	JM	12	380
6W02	07	058		07	059		3/1/2011	38	JM	6	76
6W02	07	059		07	060		3/1/2011	130	JM	6	260
A 01	08	004		08	201		3/1/2011	237	JM	12	237
A 01	08	004		08	005		3/1/2011	250	JM	6	500
A 01	08	005	P	08	006	P	3/1/2011	115	JM	6	230
A 01	08	006	P	08	007	P	3/1/2011	125	JM	6	250
A 01	08	007		08	008		3/1/2011	240	JM	6	480
A 01	08	009		08	204	C	3/1/2011	140	JM	6	280
A 01	08	010		08	205	C	3/1/2011	300	JM	12	300
A 01	08	010		08	011		3/1/2011	190	JM	12	190
A 03	04	074	P	04	139	P	3/1/2011	120	JM	6	240
A 03	04	075	P	04	139	P	3/1/2011	120	JM	6	240
B 01	04	110		04	115		3/1/2011	312	JM	6	624
B 01	04	110		04	140		3/1/2011	338	JM	12	338
B 01	04	111		04	134		3/1/2011	300	JM	12	300
B 01	04	112		04	113		3/1/2011	350	JM	6	700
B 01	04	114		04	115		3/1/2011	290	JM	12	290
B 01	04	115		04	116		3/1/2011	132	JM	12	132
7S02	07	109		07	195		3/4/2011	225	JM	6	450
1 15	27	034		27	035		3/11/2011	317	FM		317
1 15	27	035		27	040		3/11/2011	145	FM		145
1 15	27	036		27	037		3/11/2011	315	FM		315
1 15	27	037		27	039		3/11/2011	256	FM		256
1 15	27	038		27	039		3/11/2011	317	FM		317
1 15	27	039		27	040		3/11/2011	278	FM		278
1 15	27	040		27	041		3/11/2011	177	FM		177
1 16	21	111		27	041		3/11/2011	318	FM		318
1 11	26	152		27	140	M	3/14/2011	293	FM		293
1 14	26	150		26	153		3/14/2011	235	FM		235
1 14	26	152		26	153		3/14/2011	100	FM		100
1 14	26	153		26	154		3/14/2011	316	FM		316
1 14	26	154		26	155		3/14/2011	301	FM		301
1 14	26	155		26	166		3/14/2011	256	FM		256

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
1 14	26	164		26	165		3/14/2011	319	FM		319
1 14	26	165		26	166		3/14/2011	52	FM		52
1 14	26	166		26	167		3/14/2011	270	FM		270
1 14	26	167		26	174		3/14/2011	244	FM		244
1 16	26	178		26	179		3/14/2011	300	FM		300
1 16	26	179		26	180		3/14/2011	297	FM		297
1 16	26	180		26	181		3/14/2011	297	FM		297
1 27	26	173		26	174		3/14/2011	289	FM		289
1 27	26	174		26	175		3/14/2011	239	FM		239
1 16	20	010		20	011		3/15/2011	281	FM		281
1 16	20	010		21	112		3/15/2011	221	FM		221
1 16	20	010		26	181		3/15/2011	297	FM		297
1 16	21	110		21	113		3/15/2011	329	FM		329
1 16	21	111		21	113		3/15/2011	313	FM		313
1 16	21	112		21	113		3/15/2011	213	FM		213
1 16	21	113		21	115		3/15/2011	266	FM		266
1 16	21	114		21	115		3/15/2011	201	FM		201
1 16	21	115		21	116		3/15/2011	65	FM		65
1 16	21	116		21	119		3/15/2011	182	FM		182
1 16	21	117		21	118		3/15/2011	64	FM		64
1 16	21	118		21	119		3/15/2011	236	FM		236
1 19	21	098		21	100		3/15/2011	127	FM		127
1 19	21	099		21	100		3/15/2011	165	FM		165
1 19	21	100		21	102		3/15/2011	263	FM		263
1 19	21	101		21	102		3/15/2011	167	FM		167
1 27	20	011		20	154		3/15/2011	118	FM		118
1 27	20	012		20	013		3/15/2011	284	FM		284
1 27	20	012		20	154		3/15/2011	162	FM		162
1 27	20	013		20	014		3/15/2011	337	FM		337
1 27	20	013		26	177		3/15/2011	338	FM		338
1 27	20	014		20	015		3/15/2011	333	FM		333
1 27	20	154		20	155		3/15/2011	266	FM		266
1 27	26	175		26	176		3/15/2011	339	FM		339
1 27	26	176		26	177		3/15/2011	350	FM		350
1 18	27	052		27	078		3/16/2011	195	FM		195
1 18	27	078		27	079		3/16/2011	305	FM		305
1 18	27	079		27	080		3/16/2011	290	FM		290
1 18	27	080		27	082		3/16/2011	158	FM		158
1 18	27	081		27	082		3/16/2011	307	FM		307
1 18	27	082		27	083		3/16/2011	83	FM		83
1 18	27	083		27	085		3/16/2011	254	FM		254
1 18	27	084		27	085		3/16/2011	285	FM		285
1 18	27	085		27	086		3/16/2011	314	FM		314
1 18	27	086		27	087		3/16/2011	318	FM		318
1 18	27	087		27	089		3/16/2011	55	FM		55
1 18	27	088		27	089		3/16/2011	244	FM		244
1 20	20	020		20	021		3/16/2011	105	FM		105
1 21	20	024		20	033		3/16/2011	183	FM		183
1 27	20	015		20	028		3/16/2011	334	FM		334
1 27	20	021		20	026		3/16/2011	211	FM		211

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
1 27	20	022		20	023		3/16/2011	225	FM		225
1 27	20	023		20	026		3/16/2011	305	FM		305
1 27	20	025		20	026		3/16/2011	298	FM		298
1 27	20	025		20	149		3/16/2011	182	FM		182
1 27	20	026		20	027		3/16/2011	114	FM		114
1 27	20	027		20	028		3/16/2011	325	FM		325
1 27	20	028		20	029		3/16/2011	273	FM		273
1 27	20	029		20	030		3/16/2011	286	FM		286
1 27	20	030		20	031		3/16/2011	281	FM		281
1 18	21	090		21	092		3/17/2011	317	FM		317
1 18	21	090		27	089		3/17/2011	262	FM		262
1 18	21	091		21	092		3/17/2011	192	FM		192
1 18	21	092		21	093		3/17/2011	330	FMA		330
1 18	21	093		21	094	M	3/17/2011	341	FM		341
1 20	20	016		20	017		3/17/2011	287	FM		287
1 20	20	017		20	018		3/17/2011	267	FM		267
1 20	20	018		20	020		3/17/2011	263	FM		263
1 20	20	020		21	122		3/17/2011	222	FM		222
1 20	21	121		21	123		3/17/2011	291	FM		291
1 20	21	122		21	123		3/17/2011	46	FM		46
1 19	21	060		21	146		3/18/2011	63	FM		63
1 19	21	094	M	21	096		3/18/2011	335	FM		335
1 19	21	095		21	096		3/18/2011	265	FM		265
1 19	21	095		21	146		3/18/2011	197	FM		197
1 23	21	060		21	061		3/18/2011	300	FM		300
1 23	21	062		21	063		3/18/2011	279	FM		279
1 23	21	062		22	080		3/18/2011	282	FM		282
1 23	21	063		21	064		3/18/2011	232	FM		232
5 21	15	093		15	097		3/18/2011	345	FM		345
5 21	15	094		15	095		3/18/2011	280	FM		280
5 21	15	095		15	096		3/18/2011	300	FM		300
5 21	15	096		15	097		3/18/2011	294	FM		294
5 21	15	099		15	100		3/18/2011	327	FM		327
5 21	15	097		15	102		3/18/2011	272	FM		272
5 21	15	100		15	102		3/18/2011	278	FM		278
5 21	15	101		15	102		3/18/2011	193	FM		193
5 21	15	102		15	105		3/18/2011	267	FM		267
5 21	15	103		15	105		3/18/2011	280	FM		280
5 21	15	104		15	105		3/18/2011	195	FM		195
5 21	15	105		15	108		3/18/2011	269	FM		269
5 21	15	107		15	203	D	3/18/2011	136	FM		136
5 21	15	107		15	108		3/18/2011	193	FM		193
1 21	21	128		21	129		3/22/2011	233	FM		233
1 21	21	129		21	130	P	3/22/2011	235	FM		235
1 24	21	073		21	074		3/22/2011	313	FM		313
1 24	21	074		21	075		3/22/2011	275	FM		275
1 24	21	077		21	078		3/22/2011	348	FM		348
5 21	14	056		14	057		3/22/2011	323	FM		323
5 21	14	057		14	058		3/22/2011	285	FM		285
5 21	14	057		15	092		3/22/2011	317	FM		317

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 21	14	058		14	059		3/22/2011	330	FM		330
5 21	14	060		14	061		3/22/2011	130	FM		130
5 21	14	060		15	109		3/22/2011	134	FM		134
5 21	14	061		14	062		3/22/2011	253	FM		253
5 21	14	061		15	108		3/22/2011	252	FM		252
5 21	14	059		14	062		3/22/2011	333	FM		333
5 21	14	062		14	063		3/22/2011	175	FM		175
5 21	14	063		14	064		3/22/2011	264	FM		264
5 21	15	091		15	092		3/22/2011	372	FM		372
5 21	15	106		15	108		3/22/2011	280	FM		280
1 19	21	096		21	097		3/23/2011	222	FM		222
1 19	21	097		21	103		3/23/2011	179	FM		179
1 19	21	102		21	103		3/23/2011	264	FM		264
1 19	21	103		21	104		3/23/2011	292	FM		292
1 19	21	104		21	105		3/23/2011	323	FM		323
1 23	22	056		22	057		3/23/2011	118	FM		118
1 23	22	057		22	060		3/23/2011	309	FM		309
1 23	22	057		22	093	D	3/23/2011	190	FM		190
1 23	22	059		22	060		3/23/2011	265	FM		265
1 23	22	060		22	062		3/23/2011	192	FM		192
1 23	22	061		22	062		3/23/2011	350	FM		350
1 23	22	062		22	069		3/23/2011	99	FM		99
1 23	22	068		22	069		3/23/2011	347	FM		347
1 23	22	069		22	070		3/23/2011	303	FM		303
1 23	22	070		22	071		3/23/2011	300	FM		300
1 24	22	010		22	047		3/23/2011	40	FM		40
1 24	22	010		22	048		3/23/2011	110	FM		110
1 24	22	046		22	047		3/23/2011	275	FM		275
1 24	22	048		22	049		3/23/2011	272	FM		272
1 24	22	049		22	050		3/23/2011	234	FM		234
1 24	22	050		22	051		3/23/2011	300	FM		300
5 22	15	110		15	111		3/23/2011	172	FM		172
5 22	15	111		15	112		3/23/2011	200	FM		200
5 22	15	113		15	114		3/23/2011	200	FM		200
5 22	15	112		15	115		3/23/2011	66	FM		66
5 22	15	114		15	115		3/23/2011	50	FM		50
5 22	15	115		15	116		3/23/2011	25	FM		25
5 22	15	116		15	117		3/23/2011	326	FM		326
5 22	15	117		15	118		3/23/2011	324	FM		324
5 22	15	118		15	123		3/23/2011	59	FM		59
5 22	15	119		15	120		3/23/2011	300	FM		300
5 22	15	120		15	122		3/23/2011	368	FM		368
5 22	15	122		15	123		3/23/2011	320	FM		320
5 22	15	123		15	124		3/23/2011	261	FM		261
1 16	21	119		21	120		3/24/2011	130	FM		130
1 20	21	105		21	124		3/24/2011	326	FM		326
1 20	21	120	M	21	124		3/24/2011	300	FM		300
1 20	21	123		21	124		3/24/2011	261	FM		261
1 20	21	124		21	125		3/24/2011	280	FM		280
1 20	21	125		21	126		3/24/2011	280	FM		280

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
1 20	21	126		21	127		3/24/2011	280	FM		280
1 20	21	127		21	133		3/24/2011	275	FM		275
1 21	20	032		20	034		3/24/2011	202	FM		202
1 21	20	032		21	134		3/24/2011	323	FM		323
1 21	20	033		20	034		3/24/2011	280	FM		280
1 21	20	034		20	035	M	3/24/2011	120	FM		120
1 21	20	035	M	20	148		3/24/2011	27	FM		27
1 21	20	036		20	148		3/24/2011	300	FM		300
1 21	21	133		21	134		3/24/2011	324	FM		324
1 28	20	031		20	036		3/24/2011	282	FM		282
1 28	20	036		20	037		3/24/2011	283	FM		283
1 28	20	037		20	038		3/24/2011	287	FM		287
5 21	14	064		14	078		3/24/2011	347	FM		347
5 22	14	065		14	066		3/24/2011	291	FM		291
5 22	14	065		14	206	D	3/24/2011	13	FM		13
5 22	14	066		14	067		3/24/2011	170	FM		170
5 22	14	066		15	124		3/24/2011	330	FM		330
5 22	14	067		14	068		3/24/2011	325	FM		325
5 22	14	068		14	077		3/24/2011	351	FM		351
5 22	14	069		14	070		3/24/2011	247	FM		247
5 22	14	070		14	071		3/24/2011	145	FM		145
5 22	14	072		14	073		3/24/2011	350	FM		350
5 22	14	071		14	073		3/24/2011	145	FM		145
5 22	14	073		14	075		3/24/2011	266	FM		266
5 22	14	074		14	075		3/24/2011	263	FM		263
5 22	14	075		14	076		3/24/2011	155	FM		155
5 22	14	076		14	077		3/24/2011	156	FM		156
5 22	14	077		14	201	S	3/24/2011	145	FM		145
5 18	14	052		14	053		3/28/2011	350	FM		350
5 19	14	053		14	054		3/28/2011	360	FM		360
5 20	14	054		14	055		3/28/2011	330	FM		330
5 24	14	079		14	217		3/28/2011	195	FM		195
5 24	14	081	S	14	217		3/28/2011	65	FM		65
5 25	14	083		14	084		3/28/2011	322	FM		322
5 25	14	084		14	086		3/28/2011	318	FM		318
5 25	14	085		14	086		3/28/2011	352	FM		352
5 25	14	085		14	208	D	3/28/2011	268	FM		268
5 25	14	086		14	087		3/28/2011	161	FM		161
5 25	14	087		14	089		3/28/2011	160	FM		160
5 25	14	088		14	197		3/28/2011	268	FM		268
5 25	14	088		14	089		3/28/2011	352	FM		352
5 25	14	089		14	198		3/28/2011	279	FM		279
1 23	21	064		21	066		3/29/2011	231	FM		231
1 23	21	065		21	066		3/29/2011	212	FM		212
1 23	21	065		22	079		3/29/2011	179	FM		179
1 23	21	066		21	067		3/29/2011	257	FM		257
1 23	21	067		21	068		3/29/2011	215	FM		215
1 23	21	068		21	140		3/29/2011	230	FM		230
1 23	21	069		21	140		3/29/2011	125	FM		125
1 23	22	071		22	072		3/29/2011	171	FM		171

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
1 23	22	072		22	073		3/29/2011	193	FM		193
1 23	22	073		22	074		3/29/2011	276	FM		276
1 23	22	074		22	075	S	3/29/2011	144	FM		144
1 23	22	076	S	22	078		3/29/2011	63	FM		63
1 23	22	077		22	078		3/29/2011	318	FM		318
1 23	22	078		22	079		3/29/2011	37	FM		37
1 24	21	075		21	076		3/29/2011	214	FM		214
1 24	21	076		21	079		3/29/2011	250	FM		250
1 24	21	076		22	053		3/29/2011	262	FM		262
1 24	21	078		21	079		3/29/2011	346	FM		346
1 24	21	079		21	080		3/29/2011	167	FM		167
1 24	21	080		21	081		3/29/2011	260	FM		260
1 24	22	051		22	052		3/29/2011	255	FM		255
1 24	22	052		22	053		3/29/2011	232	FM		232
5 11	14	096		14	097		3/29/2011	161	FM		161
5 11	14	096		15	127		3/29/2011	317	FM		317
5 11	14	097		14	101		3/29/2011	21	FM		21
5 11	14	098		14	099		3/29/2011	95	FM		95
5 11	14	099		14	100		3/29/2011	106	FM		106
5 11	14	099		14	190	D	3/29/2011	30	FM		30
5 11	14	100		14	101		3/29/2011	257	FM		257
5 11	14	101		14	102		3/29/2011	330	FM		330
5 11	14	102		14	103		3/29/2011	330	FM		330
5 11	14	103		14	104		3/29/2011	328	FM		328
5 11	14	104		14	110		3/29/2011	36	FM		36
5 11	14	105		14	106		3/29/2011	307	FM		307
5 11	14	106		14	107		3/29/2011	307	FM		307
5 11	14	107		14	109		3/29/2011	285	FM		285
5 11	15	125		15	126		3/29/2011	200	FM		200
5 11	15	125		15	209	D	3/29/2011	106	FM		106
5 11	15	126		15	127		3/29/2011	322	FM		322
5 26	14	055		14	090		3/29/2011	330	FM		330
5 26	14	089		14	090		3/29/2011	175	FM		175
1 02	32	048		32	049		3/30/2011	345	FM		345
1 02	33	003		33	004		3/30/2011	136	FM		136
1 04	32	029		32	030		3/30/2011	320	FM		320
1 04	32	030		32	032		3/30/2011	304	FM		304
1 04	32	031		32	032		3/30/2011	350	FM		350
1 04	32	031		32	049		3/30/2011	338	FM		338
1 12	27	162		27	163		3/30/2011	321	FM		321
1 12	27	162		32	006		3/30/2011	303	FM		303
1 12	27	163		27	164		3/30/2011	323	FM		323
1 12	27	164		27	165		3/30/2011	323	FM		323
1 12	27	165		27	166		3/30/2011	325	FM		325
1 12	27	166		27	167		3/30/2011	313	FM		313
1 12	27	167		27	168		3/30/2011	315	FM		315
1 12	27	168		27	169		3/30/2011	291	FM		291
1 12	27	169		27	170		3/30/2011	55	FM		55
1 23	21	061		21	070		3/30/2011	305	FM		305
1 23	21	069		21	070		3/30/2011	285	FM		285

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
1 23	21	070		21	071		3/30/2011	303	FM		303
1 23	21	071		21	072		3/30/2011	300	FM		300
1 23	21	072		21	083		3/30/2011	292	FM		292
1 24	21	083		21	084		3/30/2011	253	FM		253
1 24	21	084		21	085		3/30/2011	252	FM		252
1 24	21	085		21	086		3/30/2011	310	FM		310
1 25	20	039		21	088		3/30/2011	317	FM		317
1 25	21	086		21	087		3/30/2011	289	FM		289
1 25	21	087		21	135		3/30/2011	230	FM		230
1 25	21	088		21	136		3/30/2011	22	FM		22
1 26	20	038		20	042		3/30/2011	287	FM		287
1 26	20	039	M	20	040		3/30/2011	300	FM		300
1 26	20	040		20	041		3/30/2011	300	FM		300
1 26	20	041		20	042		3/30/2011	300	FM		300
1 26	20	042		20	052		3/30/2011	75	FM		75
1 29	20	051		20	052		3/30/2011	331	FM		331
2 09	20	052		20	053		3/30/2011	236	FM		236
5 04	15	128		15	129		3/31/2011	180	FM		180
5 04	15	129		15	131		3/31/2011	200	FM		200
5 04	15	130		15	131		3/31/2011	175	FM		175
5 04	15	131		15	132		3/31/2011	90	FM		90
5 04	15	132		15	133		3/31/2011	300	FM		300
5 04	15	133		15	134		3/31/2011	330	FM		330
5 04	15	134		15	135		3/31/2011	300	FM		300
5 04	15	135		15	176		3/31/2011	299	FM		299
5 04	15	136		15	140		3/31/2011	300	FM		300
5 04	15	136		15	176		3/31/2011	14	FM		14
5 04	15	137		15	139		3/31/2011	150	FM		150
5 04	15	138		15	139		3/31/2011	215	FM		215
5 04	15	139		15	140		3/31/2011	195	FM		195
5 04	15	140		15	141		3/31/2011	130	FM		130
5 04	15	141		15	180		3/31/2011	141	FM		141
5 04	15	142		15	143		3/31/2011	305	FM		305
5 04	15	142		15	177		3/31/2011	341	FM		341
5 04	15	177		15	178		3/31/2011	250	FM		250
5 04	15	178		15	179		3/31/2011	116	FM		116
5 04	15	179		15	210		3/31/2011	225	FM		225
1 01	32	050		32	051		4/1/2011	383	JM	6	766
3E05	24	027		24	028		4/1/2011	324	JM	12	324
5 01	16	024		16	025		4/1/2011	295	JM	12	295
5 01	16	025		16	026		4/1/2011	310	JM	12	310
5 01	16	026		16	027		4/1/2011	126	JM	12	126
5 01	16	027		16	028		4/1/2011	64	JM	12	64
5 01	16	028		16	029		4/1/2011	118	JM	12	118
5 01	16	029		16	030		4/1/2011	145	JM	12	145
5 13	10	085		15	012		4/1/2011	123	JM	6	246
A 01	08	042		08	043		4/1/2011	68	JM	6	136
A 05	03	062		03	063		4/1/2011	232	JM	12	232
A 08	03	009		03	019		4/1/2011	237	JM	6	474
B 01	04	095		04	136	C	4/1/2011	212	JM	12	212

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
B 01	04	096		04	097		4/1/2011	253	JM	12	253
B 01	04	097		04	103		4/1/2011	317	JM	12	317
B 01	04	107		04	108		4/1/2011	283	JM	12	283
B 01	04	108		04	109		4/1/2011	41	JM	12	41
B 01	04	113		04	114		4/1/2011	232	JM	6	464
B 01	04	109		04	117		4/1/2011	289	JM	12	289
B 02	04	089		04	093		4/1/2011	265	JM	6	530
5 04	15	143		15	148		4/1/2011	350	FM		350
5 04	15	144		15	145		4/1/2011	300	FM		300
5 04	15	144		15	200	D	4/1/2011	100	FM		100
5 04	15	145		15	147		4/1/2011	355	FM		355
5 04	15	146		15	147		4/1/2011	313	FM		313
5 04	15	147		15	148		4/1/2011	350	FM		350
5 04	15	148		15	149		4/1/2011	354	FM		354
5 04	15	148		15	180		4/1/2011	212	FM		212
5 04	15	149		15	150		4/4/2011	350	FM		350
5 04	15	150		15	151		4/4/2011	314	FM		314
5 05	14	138		14	139		4/4/2011	245	FM		245
5 05	14	138		15	153		4/4/2011	350	FM		350
5 05	14	140		14	141		4/4/2011	285	FM		285
5 05	14	140		15	151		4/4/2011	342	FM		342
5 05	14	141		14	142		4/4/2011	22	FM		22
5 05	14	142		14	145		4/4/2011	298	FM		298
5 05	14	142		14	214	C	4/4/2011	301	FM		301
5 05	14	143		14	144		4/4/2011	308	FM		308
5 05	14	143		14	203	C	4/4/2011	293	FM		293
5 05	14	144		14	145		4/4/2011	3	FM		3
5 05	14	144		14	204		4/4/2011	284	FM		284
5 05	14	145		14	146	M	4/4/2011	332	FM		332
5 05	15	152		15	153		4/4/2011	351	FM		351
7S01	05	095		05	096		4/4/2011	61	FM		61
7S01	05	096		05	098		4/4/2011	163	FM		163
7S01	05	097		05	098		4/4/2011	200	FM		200
7S01	06	030		06	031		4/4/2011	100	FM		100
7S01	06	031		06	032		4/4/2011	300	FM		300
7S01	06	032		06	033		4/4/2011	350	FM		350
7S01	06	033		06	034		4/4/2011	325	FM		325
7S01	06	034		06	035		4/4/2011	330	FM		330
7S01	06	035		06	036		4/4/2011	374	FM		374
7S01	05	098		06	037		4/4/2011	350	FM		350
7S01	06	037		06	038		4/4/2011	234	FM		234
7S01	06	038		06	039		4/4/2011	210	FM		210
7S01	06	036		06	040		4/4/2011	350	FM		350
7S01	06	039		06	040		4/4/2011	200	FM		200
7S02	07	097		07	098		4/4/2011	346	FM		346
7S02	07	098		07	099		4/4/2011	138	FM		138
7S02	07	099		07	100		4/4/2011	180	FM		180
7S02	07	100		07	101		4/4/2011	66	FM		66
7S02	07	101		07	210		4/4/2011	59	FM		59
7S02	07	102		07	103		4/4/2011	350	FM		350

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
7S02	07	102		07	212		4/4/2011	140	FM		140
7S02	07	103		07	105		4/4/2011	205	FM		205
7S02	07	104		07	105		4/4/2011	265	FM		265
7S02	07	210		07	211		4/4/2011	91	FM		91
7S02	07	211		07	212		4/4/2011	20	FM		20
5 07	14	155		14	156		4/5/2011	219	FM		219
5 07	14	156		14	157		4/5/2011	304	FM		304
5 07	14	157		14	160		4/5/2011	277	FM		277
5 07	14	157		15	161		4/5/2011	300	FM		300
5 07	14	158		14	159		4/5/2011	286	FM		286
5 07	14	159		14	160		4/5/2011	291	FM		291
5 07	14	160		14	162		4/5/2011	160	FM		160
5 07	14	161		14	162		4/5/2011	343	FM		343
5 07	14	161		14	193	C	4/5/2011	314	FM		314
5 07	14	162		14	164		4/5/2011	340	FM		340
5 07	14	163		14	164		4/5/2011	339	FM		339
5 07	14	163		14	192	C	4/5/2011	214	FM		214
5 07	15	154		15	155		4/5/2011	210	FM		210
5 07	15	155		15	156		4/5/2011	270	FM		270
5 07	15	156		15	157		4/5/2011	145	FM		145
5 07	15	157		15	158		4/5/2011	130	FM		130
5 07	15	158		15	161		4/5/2011	225	FM		225
5 07	15	159		15	160		4/5/2011	291	FM		291
5 07	15	160		15	161		4/5/2011	280	FM		280
7S02	06	080		06	084		4/5/2011	344	FM		344
7S02	06	081		06	082		4/5/2011	120	FM		120
7S02	06	082		06	083		4/5/2011	251	FM		251
7S02	06	083		06	084		4/5/2011	225	FM		225
7S02	06	084		06	085		4/5/2011	150	FM		150
7S02	06	085		06	092		4/5/2011	225	FM		225
7S02	06	086		06	087		4/5/2011	178	FM		178
7S02	06	087		06	088		4/5/2011	288	FM		288
7S02	06	088		06	089		4/5/2011	100	FM		100
7S02	06	089		06	092		4/5/2011	247	FM		247
7S02	06	090		06	091		4/5/2011	218	FM		218
7S02	06	091		06	092		4/5/2011	308	FM		308
7S02	06	093		06	094		4/5/2011	298	FM		298
7S02	06	095		06	096		4/5/2011	350	FM		350
7S02	06	099		06	100		4/5/2011	275	FM		275
7S02	06	103		06	104		4/5/2011	352	FM		352
7S02	06	105		07	193	C	4/5/2011	256	FM		256
7S02	06	110		07	114		4/5/2011	300	FM		300
7S02	07	105		07	107		4/5/2011	170	FM		170
7S02	07	106		07	107		4/5/2011	145	FM		145
7S02	07	107		07	108		4/5/2011	300	FM		300
7S02	07	108		07	109		4/5/2011	280	FM		280
7S02	07	109		07	195		4/5/2011	220	FM		220
7S02	06	095		07	115		4/5/2011	190	FM		190
7S01	06	069		06	070		4/6/2011	325	FM		325
7S01	06	070		06	071		4/6/2011	375	FM		375

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
7S02	06	092		06	097		4/6/2011	205	FM		205
7S02	06	094		06	097		4/6/2011	202	FM		202
7S02	06	096		06	097		4/6/2011	275	FM		275
7S02	06	097		06	098		4/6/2011	195	FM		195
7S02	06	098		06	101		4/6/2011	120	FM		120
7S02	06	100		06	101		4/6/2011	300	FM		300
7S02	06	101		06	102		4/6/2011	123	FM		123
7S02	06	102		06	106		4/6/2011	47	FM		47
7S02	06	104		06	106		4/6/2011	421	FM		421
7S02	06	105		06	106		4/6/2011	352	FM		352
7S02	06	107		06	108		4/6/2011	315	FM		315
7S02	06	108		06	109		4/6/2011	311	FM		311
7S02	06	112		07	113		4/6/2011	309	FM		309
7S02	07	112		07	113		4/6/2011	305	FM		305
7S02	06	114		07	096		4/6/2011	290	FM		290
7S02	06	116		07	093		4/6/2011	254	FM		254
7S02	07	088		07	089		4/6/2011	212	FM		212
7S02	07	092		07	093		4/6/2011	270	FM		270
7S02	07	094		07	095		4/6/2011	246	FM		246
7S02	07	095		07	096		4/6/2011	307	FM		307
7S02	07	109		07	110		4/6/2011	146	FM		146
7S02	07	111		07	112		4/6/2011	250	FM		250
7S02	07	110		07	112		4/6/2011	153	FM		153
7S01	06	048		06	050		4/7/2011	263	FM		263
7S01	06	049		06	050		4/7/2011	250	FM		250
7S01	06	050		06	051		4/7/2011	250	FM		250
7S01	06	051		06	052		4/7/2011	200	FM		200
7S01	06	051		06	150	C	4/7/2011	115	FM		115
7S01	06	052		06	054		4/7/2011	317	FM		317
7S01	06	053		06	054		4/7/2011	150	FM		150
7S01	06	054		06	055		4/7/2011	366	FM		366
7S01	06	055		06	056		4/7/2011	105	FM		105
7S01	06	056		06	057		4/7/2011	225	FM		225
7S01	06	057		06	058		4/7/2011	135	FM		135
7S01	06	058		06	151		4/7/2011	200	FM		200
7S01	06	061		06	062		4/7/2011	333	FM		333
7S01	06	062		06	063		4/7/2011	200	FM		200
7S01	06	063		06	064		4/7/2011	341	FM		341
7S01	06	064		06	065		4/7/2011	375	FM		375
7S01	06	065		06	066		4/7/2011	240	FM		240
7S02	06	106		06	111		4/7/2011	175	FM		175
7S02	06	109		06	111		4/7/2011	311	FM		311
7S02	06	110		06	111		4/7/2011	338	FM		338
7S02	06	111		06	113		4/7/2011	325	FM		325
7S02	06	112		06	113		4/7/2011	310	FM		310
7S02	06	114		06	115		4/7/2011	297	FM		297
7S02	06	113		06	115		4/7/2011	265	FM		265
7S02	06	115		06	117		4/7/2011	261	FM		261
7S02	06	116		06	117		4/7/2011	238	FM		238
7S01	06	040		06	041		4/8/2011	275	FM		275

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
7S01	06	041		06	042		4/8/2011	325	FM		325
7S01	06	042		06	043		4/8/2011	300	FM		300
7S01	06	043		06	044		4/8/2011	239	FM		239
7S01	06	044		06	045		4/8/2011	355	FM		355
7S01	06	045		06	046		4/8/2011	52	FM		52
7S01	06	046		06	047		4/8/2011	83	FM		83
7S01	06	047		06	059		4/8/2011	350	FM		350
7S01	06	058		06	059		4/8/2011	271	FM		271
7S01	06	059		06	060		4/8/2011	200	FM		200
7S01	06	060		06	067		4/8/2011	200	FM		200
7S01	06	066		06	067		4/8/2011	156	FM		156
7S01	06	067		06	068		4/8/2011	200	FM		200
7S01	06	071		06	072		4/8/2011	321	FM		321
7S01	06	068		06	072		4/8/2011	200	FM		200
7S01	06	072		06	074		4/8/2011	320	FM		320
7S01	06	073		06	074		4/8/2011	315	FM		315
7S01	06	074		06	076		4/8/2011	260	FM		260
7S01	06	075		06	076		4/8/2011	350	FM		350
7S02	06	118		07	091		4/8/2011	320	FM		320
7S02	06	117		06	119		4/8/2011	350	FM		350
7S02	06	118		06	119		4/8/2011	320	FM		320
7S02	06	119		06	120		4/8/2011	200	FM		200
7S02	07	089		07	090		4/8/2011	220	FM		220
7S02	07	090		07	091		4/8/2011	276	FM		276
7S02	07	090		07	194	C	4/8/2011	75	FM		75
5 07	14	164		14	165		4/11/2011	165	FM		165
5 07	14	165		14	167		4/11/2011	320	FM		320
5 07	14	165		14	194		4/11/2011	343	FM		343
5 07	14	166		14	167		4/11/2011	300	FM		300
5 07	14	167		14	168		4/11/2011	28	FM		28
5 07	14	168		14	170		4/11/2011	314	FM		314
5 07	14	169		14	215		4/11/2011	161	FM		161
5 07	14	169		21	006		4/11/2011	322	FM		322
5 07	14	170		14	171		4/11/2011	370	FM		370
5 07	14	170		14	215		4/11/2011	184	FM		184
5 09	13	056		14	176		4/11/2011	250	FM		250
5 09	14	171		14	199		4/11/2011	240	FM		240
5 09	14	172		14	173		4/11/2011	280	FM		280
5 09	14	172		14	199		4/11/2011	248	FM		248
5 09	14	173		14	174		4/11/2011	203	FM		203
5 09	14	174		14	175		4/11/2011	204	FM		204
5 09	14	175		14	176		4/11/2011	284	FM		284
5 37	14	177		14	178		4/11/2011	287	FM		287
5 37	14	178		14	179		4/11/2011	280	FM		280
5 37	14	179		14	180		4/11/2011	200	FM		200
5 37	14	180		14	181		4/11/2011	200	FM		200
5 37	14	181		14	182		4/11/2011	280	FM		280
5 37	13	093		14	182		4/11/2011	255	FM		255
7S01	06	076		06	077		4/11/2011	325	FM		325
7S01	06	077		06	078		4/11/2011	300	FM		300

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
7S01	06	078		06	079		4/11/2011	300	FM		300
7S01	06	079		06	121		4/11/2011	300	FM		300
7S02	06	120		06	121		4/11/2011	200	FM		200
7S03	06	121		06	123		4/11/2011	300	FM		300
7S03	06	122		06	123		4/11/2011	280	FM		280
7S03	06	123		06	124		4/11/2011	300	FM		300
7S03	06	124		06	125		4/11/2011	300	FM		300
7S04	07	082		07	083		4/11/2011	230	FM		230
7S04	07	083		07	084		4/11/2011	240	FM		240
7S04	07	084		07	085		4/11/2011	253	FM		253
7S04	07	085		07	086		4/11/2011	290	FM		290
7S04	07	086		07	087		4/11/2011	300	FM		300
7S06	12	001	C	12	002		4/11/2011	270	FM		270
7S06	12	002		12	003		4/11/2011	292	FM		292
5 05	14	146	M	14	147		4/12/2011	354	FM		354
5 06	14	147		14	148		4/12/2011	178	FM		178
5 06	14	148		14	171		4/12/2011	175	FM		175
5 08	13	058		13	059		4/12/2011	20	FM		20
5 08	13	058		14	154		4/12/2011	200	FM		200
5 08	14	148		14	149		4/12/2011	350	FM		350
5 08	14	149		14	151		4/12/2011	304	FM		304
5 08	14	151		14	152		4/12/2011	300	FM		300
5 08	14	152		14	153		4/12/2011	300	FM		300
5 08	14	153		14	154		4/12/2011	300	FM		300
7S03	06	125		06	128		4/12/2011	290	FM		290
7S04	06	126		07	087		4/12/2011	300	FM		300
7S04	06	126		06	127		4/12/2011	300	FM		300
7S04	06	127		06	128		4/12/2011	300	FM		300
7S04	06	128		06	129	M	4/12/2011	206	FM		206
7S05	06	131		11	068		4/12/2011	188	FM		188
7S05	06	131		06	153	D	4/12/2011	292	FM		292
7S05	11	068		11	069		4/12/2011	45	FM		45
7S05	11	068		11	084		4/12/2011	75	FM		75
7S05	06	130		11	070		4/12/2011	237	FM		237
7S05	11	069		11	070		4/12/2011	115	FM		115
7S05	11	069		11	071		4/12/2011	250	FM		250
7S05	11	071		11	072		4/12/2011	215	FM		215
7S06	11	052		11	053		4/12/2011	190	FM		190
7S06	11	053		11	054		4/12/2011	295	FM		295
7S06	11	053		12	003		4/12/2011	300	FM		300
7S06	11	055		11	056		4/12/2011	195	FM		195
7S06	11	056		11	057		4/12/2011	195	FM		195
7S06	11	054		11	058		4/12/2011	300	FM		300
7S06	11	057		11	058		4/12/2011	110	FM		110
7S06	11	058		11	059		4/12/2011	300	FM		300
7S06	11	059		11	072		4/12/2011	230	FM		230
5 10	14	128		14	129		4/13/2011	182	FM		182
5 10	14	129		14	130		4/13/2011	293	FM		293
5 10	14	130		14	131		4/13/2011	362	FM		362
5 10	14	131		14	132		4/13/2011	357	FM		357

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 10	14	133		14	134		4/13/2011	182	FM		182
5 10	14	134		14	135		4/13/2011	293	FM		293
5 10	14	135		14	136		4/13/2011	380	FM		380
5 10	14	136		14	137		4/13/2011	407	FM		407
7S05	11	067		11	072		4/13/2011	160	FM		160
7S07	12	118		12	119		4/13/2011	310	FM		310
7S07	12	119		12	120		4/13/2011	300	FM		300
7S07	12	114		12	120	M	4/13/2011	414	FM		414
7S08	11	060		12	120		4/13/2011	405	FM		405
7S08	11	061		11	080	D	4/13/2011	85	FM		85
7S08	11	060		11	062		4/13/2011	183	FM		183
7S08	11	061		11	062		4/13/2011	360	FM		360
7S08	11	062		11	063		4/13/2011	220	FM		220
7S09	11	063		11	064		4/13/2011	146	FM		146
7S09	11	064		11	065		4/13/2011	400	FM		400
7S09	11	065		11	066		4/13/2011	350	FM		350
7S09	11	066		11	081		4/13/2011	398	FM		398
7S09	11	067		11	082		4/13/2011	235	FM		235
7S09	11	081		11	082		4/13/2011	169	FM		169
7S10	11	072		11	073	M	4/13/2011	185	FM		185
7S10	11	073	M	11	074		4/13/2011	221	FM		221
7S10	11	074		11	075		4/13/2011	130	FM		130
7S10	11	075		11	076		4/13/2011	363	FM		363
5 10	14	119		14	120		4/14/2011	155	FM		155
5 10	14	124		14	125		4/14/2011	525	FM		525
5 10	14	125		14	126		4/14/2011	390	FM		390
5 10	14	126		14	127		4/14/2011	350	FM		350
5 11	14	115		14	116		4/14/2011	309	FM		309
5 11	14	115		14	195	C	4/14/2011	192	FM		192
5 11	14	116		14	117	P	4/14/2011	415	FM		415
5 11	14	120		14	121		4/14/2011	140	FM		140
5 11	14	121		14	216		4/14/2011	262	FM		262
5 11	14	122		14	123		4/14/2011	389	FM		389
5 11	14	122		14	216		4/14/2011	101	FM		101
5 26	14	090		14	091		4/14/2011	330	FM		330
5 26	14	091		14	222		4/14/2011	138	FM		138
5 26	14	092		14	093		4/14/2011	332	FM		332
5 26	14	093		14	094		4/14/2011	323	FM		323
5 26	14	094		14	095		4/14/2011	200	FM		200
5 27	13	053		14	095		4/14/2011	149	FM		149
5 37	14	183		14	184		4/14/2011	81	FM		81
5 37	14	184		14	185		4/14/2011	132	FM		132
5 37	14	184		14	219		4/14/2011	183	FM		183
5 37	14	185		14	186		4/14/2011	350	FM		350
5 37	14	186		14	187		4/14/2011	180	FM		180
5 37	14	187		14	211		4/14/2011	275	FM		275
5 37	14	187		14	188		4/14/2011	175	FM		175
5 37	14	188		14	189		4/14/2011	373	FM		373
7E01	11	011		11	012		4/14/2011	175	FM		175
7E01	11	012		11	083		4/14/2011	325	FM		325

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
7E01	11	013		11	083		4/14/2011	27	FM		27
7E01	11	013		11	014		4/14/2011	309	FM		309
7E03	11	037		11	038		4/14/2011	254	FM		254
7E03	11	038		11	039		4/14/2011	300	FM		300
7E03	11	039		11	040		4/14/2011	275	FM		275
7E03	11	044		37	020		4/14/2011	359	FM		359
7E03	11	044		11	045		4/14/2011	337	FM		337
7E03	11	045		11	046		4/14/2011	410	FM		410
7E03	11	046		11	047		4/14/2011	250	FM		250
7E03	37	018		37	123	D	4/14/2011	350	FM		350
7E03	37	018		37	019		4/14/2011	408	FM		408
7E03	37	019		37	020		4/14/2011	331	FM		331
5 26	14	092		14	222		4/15/2011	195	FM		195
5 17	10	013		10	014		4/18/2011	150	FM		150
5 17	10	014		10	015		4/18/2011	200	FM		200
5 17	10	015		10	019		4/18/2011	200	FM		200
5 17	10	016		10	017		4/18/2011	165	FM		165
5 17	10	017		10	018		4/18/2011	110	FM		110
5 17	10	018		10	019		4/18/2011	50	FM		50
5 17	10	019		10	020		4/18/2011	380	FM		380
5 17	10	020		10	021		4/18/2011	240	FM		240
5 17	10	021		10	022		4/18/2011	450	FM		450
5 17	10	022		10	023		4/18/2011	50	FM		50
5 17	10	023		10	024		4/18/2011	75	FM		75
5 17	10	024		10	025		4/18/2011	165	FM		165
5 17	10	025		10	026		4/18/2011	60	FM		60
5 17	10	026		10	027		4/18/2011	100	FM		100
5 17	10	027		10	028		4/18/2011	200	FM		200
5 17	10	028		10	029		4/18/2011	60	FM		60
5 17	10	029		10	030		4/18/2011	80	FM		80
5 17	10	030		10	042		4/18/2011	100	FM		100
5 17	10	041		10	042		4/18/2011	600	FM		600
7E01	11	001	D	11	002		4/18/2011	350	FM		350
7E01	11	002		11	003		4/18/2011	350	FM		350
7E01	11	003		11	004		4/18/2011	246	FM		246
7E01	11	004		11	005		4/18/2011	304	FM		304
7E01	11	005		11	006		4/18/2011	20	FM		20
7E01	11	006		11	007		4/18/2011	300	FM		300
7E01	11	007		11	008		4/18/2011	125	FM		125
7E01	11	008		11	009		4/18/2011	250	FM		250
7E01	11	009		11	010		4/18/2011	255	FM		255
7E04	06	132		06	133		4/18/2011	300	FM		300
7E04	06	133		06	135		4/18/2011	360	FM		360
7E04	06	134		06	135		4/18/2011	330	FM		330
7E04	06	135		06	136		4/18/2011	330	FM		330
7E04	06	136		06	141		4/18/2011	180	FM		180
7E04	06	137		06	138		4/18/2011	210	FM		210
7E04	06	138		06	139		4/18/2011	359	FM		359
7E04	06	139		06	140		4/18/2011	365	FM		365
7E04	06	140		06	141		4/18/2011	365	FM		365

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
7E04	06	141		06	142		4/18/2011	370	FM		370
7E04	06	142		06	146		4/18/2011	330	FM		330
7E05	06	143		06	144		4/18/2011	250	FM		250
7E05	06	144		06	145		4/18/2011	273	FM		273
7E05	06	145		06	146		4/18/2011	103	FM		103
4N09	12	152		12	153		4/19/2011	279	FM		279
4N09	12	153		12	154		4/19/2011	85	FM		85
5 09	13	055		13	057		4/19/2011	175	FM		175
5 09	13	056		13	057		4/19/2011	210	FM		210
5 09	13	057		13	060		4/19/2011	223	FM		223
5 09	13	059		13	060		4/19/2011	119	FM		119
5 10	13	060		13	061		4/19/2011	327	FM		327
5 10	13	061		13	062		4/19/2011	199	FM		199
5 10	13	061		14	137		4/19/2011	392	FM		392
5 10	13	062		13	063		4/19/2011	189	FM		189
5 10	13	063		13	064		4/19/2011	186	FM		186
5 10	13	064		13	065		4/19/2011	226	FM		226
5 10	13	064		14	127		4/19/2011	383	FM		383
5 17	10	006		10	007		4/19/2011	80	FM		80
5 17	10	007		10	008		4/19/2011	150	FM		150
5 17	10	008		10	009		4/19/2011	197	FM		197
5 37	13	093		13	094		4/19/2011	300	FM		300
6S16	12	014		12	015		4/19/2011	123	FM		123
6W02	12	123		12	124		4/19/2011	111	FM		111
7E01	11	010		11	018		4/19/2011	280	FM		280
7E01	11	015		11	016		4/19/2011	213	FM		213
7E01	11	017		11	018		4/19/2011	308	FM		308
7E01	11	018		11	033		4/19/2011	337	FM		337
7E01	11	018		11	019		4/19/2011	350	FM		350
7E01	11	019		11	020		4/19/2011	350	FM		350
7E02	11	015		12	122		4/19/2011	400	FM		400
7E02	12	121		12	122		4/19/2011	260	FM		260
7E02	12	122		12	123		4/19/2011	350	FM		350
7E03	11	033		11	034		4/19/2011	345	FM		345
7E03	11	034		11	035		4/19/2011	335	FM		335
7E03	11	035		11	036		4/19/2011	335	FM		335
7E03	11	040		11	041		4/19/2011	242	FM		242
7E03	11	036		11	041		4/19/2011	300	FM		300
7E03	11	041		11	079		4/19/2011	29	FM		29
7E03	11	042		11	079		4/19/2011	350	FM		350
7E03	11	042		11	043		4/19/2011	325	FM		325
5 01	16	005		16	006		4/20/2011	350	FM		350
5 01	16	006		16	007		4/20/2011	351	FM		351
5 01	16	010		16	011		4/20/2011	225	FM		225
5 01	16	011		16	012		4/20/2011	83	FM		83
5 01	16	015		16	016		4/20/2011	220	FM		220
5 01	16	016		16	017		4/20/2011	90	FM		90
5 01	16	017		16	019		4/20/2011	319	FM		319
5 01	16	018		16	019		4/20/2011	252	FM		252
5 01	16	019		16	020		4/20/2011	145	FM		145

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 01	16	020		16	021		4/20/2011	275	FM		275
5 01	16	024		16	025		4/20/2011	265	FM		265
5 01	16	025		16	026		4/20/2011	293	FM		293
5 10	13	065		13	066		4/20/2011	200	FM		200
5 11	13	054	M	13	068		4/20/2011	100	FM		100
5 11	13	066		13	067		4/20/2011	325	FM		325
5 11	13	066		14	123		4/20/2011	383	FM		383
5 11	13	067		13	068		4/20/2011	100	FM		100
5 27	13	053		13	054	M	4/20/2011	310	FM		310
7E01	11	020		11	024		4/20/2011	350	FM		350
7E02	11	021		11	022		4/20/2011	312	FM		312
7E02	11	022		12	126		4/20/2011	183	FM		183
7E02	11	022		11	023		4/20/2011	350	FM		350
7E02	11	023		11	024		4/20/2011	275	FM		275
7E02	11	030		11	078		4/20/2011	212	FM		212
7E02	12	124		12	125		4/20/2011	310	FM		310
7E02	12	125		12	126		4/20/2011	365	FM		365
5 01	16	036		16	037		4/21/2011	113	FM		113
5 01	16	036		23	010		4/21/2011	202	FM		202
5 01	16	037		23	006		4/21/2011	160	FM		160
5 01	22	081		23	002		4/21/2011	140	FM		140
5 01	22	081		22	082		4/21/2011	123	FM		123
5 01	22	082		22	083		4/21/2011	175	FM		175
5 01	22	083		22	084		4/21/2011	110	FM		110
5 01	22	083		22	085		4/21/2011	115	FM		115
5 01	22	085		22	086		4/21/2011	115	FM		115
5 01	22	086		22	088		4/21/2011	43	FM		43
5 01	22	087		22	088		4/21/2011	165	FM		165
5 01	22	088		22	089		4/21/2011	190	FM		190
5 01	22	089		22	090		4/21/2011	186	FM		186
5 01	22	090		22	091		4/21/2011	121	FM		121
5 01	23	001		23	002		4/21/2011	102	FM		102
5 01	23	003		23	004		4/21/2011	84	FM		84
5 01	23	004		23	005		4/21/2011	256	FM		256
5 01	23	005		23	006		4/21/2011	152	FM		152
5 01	23	007		23	008		4/21/2011	194	FM		194
5 01	23	008		23	010		4/21/2011	303	FM		303
5 01	23	009		23	010		4/21/2011	367	FM		367
5 01	23	011		23	013		4/21/2011	160	FM		160
5 01	23	012		23	013		4/21/2011	185	FM		185
5 01	23	014	C	23	017		4/21/2011	134	FM		134
5 01	23	015		23	016		4/21/2011	250	FM		250
5 01	23	016		23	017		4/21/2011	303	FM		303
7E02	11	024		11	025		4/21/2011	275	FM		275
7E02	11	025		11	026		4/21/2011	353	FM		353
7E02	11	026		11	028		4/21/2011	70	FM		70
7E02	11	027		11	028		4/21/2011	360	FM		360
7E02	11	028		11	029		4/21/2011	262	FM		262
7E02	11	029		11	031		4/21/2011	200	FM		200
7E02	11	030		11	031		4/21/2011	335	FM		335

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
7E02	11	031		11	032	M	4/21/2011	133	FM		133
7E03	11	032	M	11	048		4/21/2011	347	FM		347
7E03	11	043		11	048		4/21/2011	300	FM		300
7E03	11	047		11	048		4/21/2011	100	FM		100
7E03	11	048		11	049		4/21/2011	335	FM		335
7E03	11	049		11	050		4/21/2011	330	FM		330
7E03	11	050		11	051	M	4/21/2011	320	FM		320
7N02	05	047		05	048		4/21/2011	365	FM		365
7N02	05	048		05	049		4/21/2011	365	FM		365
7N02	05	049		05	050		4/21/2011	325	FM		325
7N02	05	050		05	051		4/21/2011	345	FM		345
7N08	01	110		01	111		4/22/2011	212	FM		212
7N08	01	111		01	112		4/22/2011	300	FM		300
7N08	01	112		01	113		4/22/2011	348	FM		348
7N08	01	113		01	116	D	4/22/2011	205	FM		205
7N08	01	113		05	013		4/22/2011	300	FM		300
7N08	05	001		05	002		4/22/2011	300	FM		300
7N08	05	003		05	004		4/22/2011	265	FM		265
7N08	05	002		05	005		4/22/2011	319	FM		319
7N08	05	004		05	005		4/22/2011	300	FM		300
7N08	05	005		05	006		4/22/2011	150	FM		150
7N08	05	006		05	007		4/22/2011	88	FM		88
7N08	05	008		05	009		4/22/2011	280	FM		280
7N08	05	007		05	010		4/22/2011	150	FM		150
7N08	05	009		05	010		4/22/2011	300	FM		300
7N08	05	010		05	011		4/22/2011	270	FM		270
7N08	05	011		05	012		4/22/2011	240	FM		240
7N08	05	012		05	013		4/22/2011	345	FM		345
7N08	05	013		05	015		4/22/2011	375	FM		375
7N08	05	014		05	015		4/22/2011	300	FM		300
7N08	05	015		05	017		4/22/2011	300	FM		300
7N08	05	016		05	017		4/22/2011	275	FM		275
7N08	05	017		05	019		4/22/2011	300	FM		300
7N08	05	018		05	019		4/22/2011	255	FM		255
7N08	05	019		05	020		4/22/2011	346	FM		346
7N08	05	020		05	022		4/22/2011	46	FM		46
7N08	05	021		05	022		4/22/2011	245	FM		245
7N08	05	022		05	152		4/22/2011	121	FM		121
7N08	05	023		05	152		4/22/2011	130	FM		130
5 02	22	001		22	002		4/25/2011	267	FM		267
5 02	22	002		22	009		4/25/2011	350	FM		350
5 02	22	003		22	004		4/25/2011	342	FM		342
5 02	22	004		22	007		4/25/2011	122	FM		122
5 02	22	005		22	006		4/25/2011	133	FM		133
5 02	22	006		22	007		4/25/2011	290	FM		290
5 02	22	006		22	094	D	4/25/2011	105	FM		105
5 02	22	007		22	008		4/25/2011	161	FM		161
5 02	22	008		22	009		4/25/2011	262	FM		262
5 02	22	009		22	012		4/25/2011	337	FM		337
5 02	22	011		22	012		4/25/2011	244	FM		244

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 02	22	011		22	096		4/25/2011	82	FM		82
5 02	22	012		22	015		4/25/2011	303	FM		303
5 02	22	013		22	014		4/25/2011	245	FM		245
5 02	22	014		22	015		4/25/2011	307	FM		307
5 02	22	015		22	018		4/25/2011	200	FM		200
5 02	22	016		22	017		4/25/2011	344	FM		344
5 02	22	016		22	092	D	4/25/2011	54	FM		54
5 02	22	017		22	018		4/25/2011	60	FM		60
5 02	22	018		22	019		4/25/2011	252	FM		252
5 02	22	019		22	020		4/25/2011	278	FM		278
5 02	22	096		22	097		4/25/2011	170	FM		170
5 02	22	097		22	098		4/25/2011	40	FM		40
5 02	22	098		22	099		4/25/2011	124	FM		124
7N02	05	041		05	042		4/25/2011	234	FM		234
7N02	05	042		05	043		4/25/2011	235	FM		235
7N02	05	043		05	044		4/25/2011	207	FM		207
7N02	05	044		05	045		4/25/2011	83	FM		83
7N02	05	045		05	046		4/25/2011	334	FM		334
7N02	05	051		05	052		4/25/2011	340	FM		340
7N02	05	052		05	053		4/25/2011	425	FM		425
7N02	05	046		05	054		4/25/2011	360	FM		360
7N02	05	053		05	054		4/25/2011	337	FM		337
7N02	05	132		05	133		4/25/2011	195	FM		195
7N02	05	133		05	134		4/25/2011	106	FM		106
7N02	05	134		05	135		4/25/2011	125	FM		125
7N02	05	135		05	136		4/25/2011	141	FM		141
7N02	05	136		05	137		4/25/2011	225	FM		225
7N02	05	137		05	138		4/25/2011	109	FM		109
7N02	05	042		05	138		4/25/2011	159	FM		159
7N08	05	149		05	150		4/25/2011	218	FM		218
7N08	05	150		05	151		4/25/2011	172	FM		172
5 01	16	007		16	008		4/26/2011	83	FM		83
5 01	16	008		16	009		4/26/2011	200	FM		200
5 01	16	009		16	013		4/26/2011	200	FM		200
5 01	16	012		16	013		4/26/2011	201	FM		201
5 01	16	013		16	014		4/26/2011	327	FM		327
5 01	16	014		16	023		4/26/2011	299	FM		299
5 01	16	022		16	023		4/26/2011	194	FM		194
5 01	16	023		16	030		4/26/2011	240	FM		240
5 01	16	023		23	017		4/26/2011	148	FM		148
5 01	16	026		16	027		4/26/2011	150	FM		150
5 01	16	027		16	028		4/26/2011	150	FM		150
5 01	16	029		16	030		4/26/2011	125	FM		125
5 01	16	030		16	032		4/26/2011	343	FM		343
5 01	16	031		16	032		4/26/2011	50	FM		50
5 01	16	031		23	013		4/26/2011	200	FM		200
5 01	16	032		16	035		4/26/2011	343	FM		343
5 01	15	162		15	163		4/27/2011	298	FM		298
5 01	15	163		15	164		4/27/2011	332	FM		332
5 01	15	164		15	165		4/27/2011	70	FM		70

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 01	15	165		15	166		4/27/2011	301	FM		301
5 01	15	166		15	167		4/27/2011	296	FM		296
5 01	15	165		22	091		4/27/2011	100	FM		100
5 01	15	167		15	168		4/27/2011	74	FM		74
5 01	15	168		15	169		4/27/2011	241	FM		241
5 01	15	169		15	170		4/27/2011	246	FM		246
5 01	16	034		16	035		4/27/2011	102	FM		102
5 01	16	035		16	038		4/27/2011	146	FM		146
5 01	16	035		16	041	D	4/27/2011	97	FM		97
5 01	16	037		16	038		4/27/2011	50	FM		50
5 01	16	038		16	039		4/27/2011	241	FM		241
5 01	16	039		16	040		4/27/2011	198	FM		198
5 01	15	162		16	040		4/27/2011	290	FM		290
5 03	15	171		15	172		4/27/2011	300	FM		300
5 03	15	172		15	173		4/27/2011	300	FM		300
5 03	15	173		15	174		4/27/2011	127	FM		127
5 03	15	170		15	175		4/28/2011	254	FM		254
5 03	15	174		15	175		4/28/2011	327	FM		327
5 28	21	015		22	038		4/28/2011	294	FM		294
5 28	21	015		21	016		4/28/2011	293	FM		293
5 28	21	016		21	017		4/28/2011	292	FM		292
5 28	21	017		21	143	D	4/28/2011	224	FM		224
5 28	21	028		22	033		4/28/2011	155	FM		155
5 28	21	028		21	029		4/28/2011	342	FM		342
5 28	21	029		21	030		4/28/2011	270	FM		270
5 28	21	030		21	031		4/28/2011	346	FM		346
5 28	21	031		21	032		4/28/2011	340	FM		340
5 28	22	024		22	025		4/28/2011	180	FM		180
5 28	22	025		22	026		4/28/2011	275	FM		275
5 28	22	026		22	027		4/28/2011	275	FM		275
5 28	22	028		22	029		4/28/2011	347	FM		347
5 28	22	027		22	031		4/28/2011	220	FM		220
5 28	22	029		22	031		4/28/2011	347	FM		347
5 28	22	030		22	031		4/28/2011	216	FM		216
5 28	22	031		22	033		4/28/2011	320	FM		320
5 28	22	032		22	033		4/28/2011	185	FM		185
5 28	22	037		22	038		4/28/2011	292	FM		292
5 28	21	017		21	020		4/29/2011	222	FM		222
5 28	21	018		22	036		4/29/2011	287	FM		287
5 28	21	018		21	019		4/29/2011	284	FM		284
5 28	21	019		21	020		4/29/2011	318	FM		318
5 28	21	020		21	021		4/29/2011	79	FM		79
5 28	21	021		21	022		4/29/2011	175	FM		175
5 28	21	022		21	023		4/29/2011	176	FM		176
5 28	22	034		22	035		4/29/2011	112	FM		112
5 29	22	039		22	040		4/29/2011	332	FM		332
5 29	22	040		22	041		4/29/2011	339	FM		339
7N04	37	005		37	006		4/29/2011	80	FM		80
7N04	37	005		37	022	D	4/29/2011	38	FM		38
7N04	37	006		37	007		4/29/2011	80	FM		80

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
7N04	37	008		37	021	D	4/29/2011	230	FM		230
7N04	37	008		37	009		4/29/2011	300	FM		300
7N04	37	009		37	010		4/29/2011	300	FM		300
7N04	37	010		37	011		4/29/2011	342	FM		342
7N04	37	011		37	012		4/29/2011	360	FM		360
7N04	37	007		37	013		4/29/2011	170	FM		170
7N04	37	012		37	013		4/29/2011	365	FM		365
7N04	37	013		37	028		4/29/2011	200	FM		200
7N04	37	026		37	027		4/29/2011	200	FM		200
7N04	37	027		37	028		4/29/2011	200	FM		200
7N05	05	074		05	161		4/29/2011	12	FM		12
7N05	05	158		05	159		4/29/2011	320	FM		320
7N05	05	159		05	160		4/29/2011	323	FM		323
7N05	05	160		05	161		4/29/2011	325	FM		325
7N05	05	161		05	162		4/29/2011	253	FM		253
7N05	05	162		05	163		4/29/2011	321	FM		321
7N05	05	163		05	164		4/29/2011	297	FM		297
7N06	05	077		05	078		4/29/2011	188	FM		188
7N06	05	078		05	079		4/29/2011	250	FM		250
7N06	05	079		05	088		4/29/2011	400	FM		400
7N06	05	088		05	089		4/29/2011	150	FM		150
2 07	19	168		20	074		5/1/2011	270	JM	12	270
2 08	19	177		19	183		5/1/2011	350	JM	12	350
5 01	16	018		16	019		5/1/2011	247	JMR	6	494
6S08	09	096		09	097		5/1/2011	272	JM	12	272
6S08	09	098		09	099		5/1/2011	135	JM	12	135
6S08	09	099		09	100		5/1/2011	250	JM	12	250
6S08	09	100		09	101		5/1/2011	91	JM	6	182
6S08	09	101		09	102		5/1/2011	154	JM	6	308
6S08	09	102		09	103		5/1/2011	215	JM	12	215
6S08	09	108		09	109		5/1/2011	277	JMR	6	554
6S17	07	167		07	171		5/1/2011	305	JMR	6	610
6S17	07	173		07	174		5/1/2011	300	JM	12	300
6S17	07	174		07	175		5/1/2011	305	JM	12	305
A 02	03	107	C	03	108		5/1/2011	239	JM	12	239
A 05	03	058		03	138		5/1/2011	110	JM	12	110
A 05	03	059		03	138		5/1/2011	110	JM	12	110
A 05	03	059		03	060		5/1/2011	345	JM	12	345
A 10	04	056		04	141	C	5/1/2011	237	JM	12	237
A 10	04	060		04	130	C	5/1/2011	205	JM	12	205
4N06	18	037	S	18	053	S	5/1/2011	100	FM	3	400
1 25	21	135	S	21	136	S	5/2/2011	48	FM	3	192
2 06	25	152	S	25	153	S	5/2/2011	48	FM	3	192
2 08	19	170	S	19	171	S	5/2/2011	9	FM	3	36
2 08	19	171	S	19	172	S	5/2/2011	36	FM	3	144
2 08	19	172	S	19	173	S	5/2/2011	9	FM	3	36
3S17	25	080	M	25	125		5/2/2011	330	FM	3	1320
3S18	25	125		25	126	S	5/2/2011	8	FM	3	32
3S18	25	126	S	25	127	S	5/2/2011	22	FM	3	88
3S22	19	039	S	19	040	S	5/2/2011	25	FM	3	100

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
3S22	19	040	S	19	041	S	5/2/2011	65	FM	3	260
3S23	19	042	S	19	074		5/2/2011	215	FM	3	860
3S23	19	074		19	075		5/2/2011	268	FM	3	1072
3E11	25	008	S	25	009	S	5/2/2011	48	FM	3	192
4S01	19	096	S	19	097	S	5/2/2011	66	FM	3	264
4S01	19	097	S	19	098	S	5/2/2011	183	FM	3	732
4S01	19	098	S	19	099	S	5/2/2011	206	FM	3	824
5 49	12	041	S	12	042	S	5/2/2011	80	FM	3	320
6S16	12	021	S	12	022	S	5/2/2011	100	FM	3	400
1 23	22	075	S	22	076	S	5/3/2011	48	FM	3	192
3S05	29	076		29	077		5/3/2011	260	FM	3	1040
3S05	29	077		29	078		5/3/2011	175	FM	3	700
3S05	29	078		29	080		5/3/2011	195	FM	3	780
3S05	29	080		29	081		5/3/2011	70	FM	3	280
3S05	29	081		29	082		5/3/2011	215	FM	3	860
5 29	21	044		21	045		5/3/2011	310	FM		310
5 29	21	044		22	045		5/3/2011	308	FM		308
5 29	21	045		21	046		5/3/2011	309	FM		309
5 29	21	046		21	047		5/3/2011	40	FM		40
5 29	21	047		21	048		5/3/2011	289	FM		289
5 29	22	041		22	042		5/3/2011	200	FM		200
5 29	22	042		22	100		5/3/2011	130	FM		130
5 29	22	043		22	100		5/3/2011	112	FM		112
5 29	22	043		22	101		5/3/2011	130	FM		130
5 29	22	044		22	045		5/3/2011	310	FM		310
5 29	22	044		22	101		5/3/2011	190	FM		190
5 47	13	159	S	13	200	S	5/3/2011	48	FM	3	192
4N09	12	060	P	12	061	P	5/4/2011	305	FM	3	1220
4N09	12	061	P	12	062	P	5/4/2011	305	FM	3	1220
4N09	12	062	P	12	063	P	5/4/2011	95	FM	3	380
4S04	12	069		12	072		5/4/2011	385	FM	3	1540
4S04	12	072		12	073		5/4/2011	185	FM	3	740
5 28	21	023		21	024		5/4/2011	92	FM		92
5 28	21	025		21	026		5/4/2011	300	FM		300
5 28	21	024		21	027		5/4/2011	140	FM		140
5 28	21	026		21	027		5/4/2011	120	FM		120
5 28	21	027		21	033		5/4/2011	350	FM		350
5 28	21	032		21	033		5/4/2011	333	FM		333
5 28	21	036		21	144		5/4/2011	191	FM		191
5 28	21	037		21	144		5/4/2011	160	FM		160
5 29	21	049		21	050		5/4/2011	320	FM		320
5 29	21	050		21	051		5/4/2011	200	FM		200
5 29	21	048		21	052		5/4/2011	342	FM		342
5 29	21	051		21	052		5/4/2011	300	FM		300
5 29	21	052		21	053		5/4/2011	262	FM		262
5 29	21	053		21	054		5/4/2011	266	FM		266
5 29	21	054		21	145		5/4/2011	210	FM		210
5 31	21	041		21	042		5/4/2011	250	FM		250
5 31	21	042		21	043		5/4/2011	283	FM		283
6S17	07	176	P	07	177	P	5/4/2011	270	FM	3	1080

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
A 01	08	005	P	08	006	P	5/4/2011	116	FM	3	464
A 01	08	006	P	08	007	P	5/4/2011	100	FM	3	400
A 01	08	007	P	08	008	P	5/4/2011	241	FM	3	964
A 03	04	074	P	04	139	P	5/4/2011	175	FM	3	700
A 03	04	075	P	04	139	P	5/4/2011	120	FM	3	480
A 03	04	075	P	04	077	P	5/4/2011	125	FM	3	500
A 03	04	076	P	04	147	C	5/4/2011	81	FM	3	324
A 03	04	076	P	04	077	P	5/4/2011	102	FM	3	408
A 03	04	076	P	04	156	C	5/4/2011	102	FM	3	408
A 03	04	077	P	04	078	P	5/4/2011	90	FM	3	360
A 03	04	078	P	04	081		5/4/2011	85	FM	3	340
A 09	03	105	P	04	032	P	5/4/2011	350	FM	3	1400
A 09	04	032		04	033		5/4/2011	280	FM	3	1120
A 09	04	033		04	035		5/4/2011	338	FM	3	1352
1 17	27	056		27	057		5/5/2011	265	FM	3	1060
1 17	27	057		27	058		5/5/2011	295	FM	3	1180
1 17	27	058		27	059		5/5/2011	109	FM	3	436
2 07	25	140	P	25	141	P	5/5/2011	200	FM	3	800
2 07	25	141	P	25	144	P	5/5/2011	180	FM	3	720
2 07	25	144	P	26	068	P	5/5/2011	323	FM	3	1292
2 07	26	065	P	26	069	P	5/5/2011	333	FM	3	1332
2 07	26	068	P	26	069	P	5/5/2011	184	FM	3	736
4W03	12	093	P	12	094	P	5/5/2011	293	FM	3	1172
4W03	12	094	P	12	095	P	5/5/2011	224	FM	3	896
5 02	22	020		22	021		5/5/2011	280	FM		280
5 03	15	175		22	021		5/5/2011	150	FM		150
5 03	22	021		22	022		5/5/2011	350	FM		350
5 29	21	055		21	057		5/5/2011	79	FM		79
5 29	21	055		21	145		5/5/2011	125	FM		125
5 29	21	056		21	057		5/5/2011	350	FM		350
5 29	21	057		21	058		5/5/2011	247	FM		247
5 29	21	058		21	059		5/5/2011	330	FM		330
5 46	13	131	P	13	132	P	5/5/2011	305	FM	3	1220
5 46	13	132	P	13	133	P	5/5/2011	310	FM	3	1240
5 47	13	166	P	13	167	P	5/5/2011	310	FM	3	1240
5 47	13	167	P	13	168	P	5/5/2011	18	FM	3	72
5 49	12	037	P	12	039	P	5/5/2011	155	FM	3	620
7N04	37	013		37	014		5/5/2011	300	FM		300
7N04	37	014		37	015		5/5/2011	330	FM		330
7N04	37	015		37	016		5/5/2011	300	FM		300
7N04	37	016		37	017		5/5/2011	290	FM		290
1 20	20	019	P	20	020	P	5/6/2011	350	FM	3	1400
1 21	21	130	P	21	131	P	5/6/2011	162	FM	3	648
1 21	21	131	P	21	132		5/6/2011	293	FM	3	1172
1 21	21	132	P	21	141	P	5/6/2011	111	FM	3	444
1 21	21	133	P	21	141	P	5/6/2011	185	FM	3	740
3E10	25	026	P	25	037	P	5/6/2011	344	FM	3	1376
3E12	25	037	P	25	038	P	5/6/2011	330	FM	3	1320
4N06	18	037	S	18	040	P	5/6/2011	314	FM	3	1256
5 40	13	106		13	107		5/6/2011	425	FM	3	1700

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
2 05	26	038	P	26	039	P	5/9/2011	315	FM	3	1260
3S14	25	064	P	25	066	P	5/9/2011	250	FM	3	1000
3S14	25	065	P	25	066	P	5/9/2011	150	FM	3	600
3S15	25	066	P	25	067	P	5/9/2011	90	FM	3	360
3S16	25	067	P	25	069	P	5/9/2011	250	FM	3	1000
3S16	25	068		25	069	P	5/9/2011	180	FM	3	720
3S16	25	069	P	25	070	P	5/9/2011	50	FM	3	200
4S02	12	080	P	12	081	P	5/9/2011	377	FM	3	1508
4S02	12	081	P	12	082	P	5/9/2011	11	FM	3	44
4S04	12	078	M	12	081		5/9/2011	316	FM	3	1264
4S04	12	079	P	12	081	P	5/9/2011	330	FM	3	1320
4S04	12	079	P	12	137	D	5/9/2011	170	FM	3	680
4S04	12	080	P	12	141	D	5/9/2011	53	FM	3	212
5 53	12	100	P	12	101	P	5/9/2011	325	FM	3	1300
5 53	12	101	P	12	102	P	5/9/2011	340	FM	3	1360
5 53	12	102	P	12	103	P	5/9/2011	275	FM	3	1100
5 53	12	103	P	12	133	P	5/9/2011	285	FM	3	1140
5 55	12	110		12	111		5/9/2011	165	FM	3	660
5 55	12	110		12	140		5/9/2011	165	FM	3	660
6W05	12	008	P	12	009	P	5/9/2011	310	FM	3	1240
7N04	05	058		05	112	C	5/10/2011	200	FM		200
7N04	05	058		37	004		5/10/2011	300	FM		300
7N04	05	058		05	059		5/10/2011	275	FM		275
7N04	05	059		05	060		5/10/2011	280	FM		280
7N04	37	002		37	024	D	5/10/2011	40	FM		40
7N04	37	002		37	003		5/10/2011	365	FM		365
7N04	37	003		37	004		5/10/2011	390	FM		390
7N08	05	121		05	123		5/10/2011	72	FM		72
7N08	05	121		05	147		5/10/2011	195	FM		195
7N08	05	122		05	123		5/10/2011	245	FM		245
7N08	05	123		05	124		5/10/2011	39	FM		39
7N08	05	124		05	125		5/10/2011	167	FM		167
7N08	05	125		05	126		5/10/2011	151	FM		151
7N08	05	126		05	127		5/10/2011	200	FM		200
7N08	05	127		05	128		5/10/2011	306	FM		306
7N08	05	128		05	129		5/10/2011	264	FM		264
7N08	05	128		05	146		5/10/2011	90	FM		90
7N08	05	129		05	130		5/10/2011	210	FM		210
7N08	05	130		05	131		5/10/2011	304	FM		304
7N08	05	141		05	142		5/10/2011	115	FM		115
7N08	05	141		05	154	D	5/10/2011	7	FM		7
7N08	05	142		05	143		5/10/2011	189	FM		189
7N08	05	143		05	144		5/10/2011	103	FM		103
7N08	05	144		05	145		5/10/2011	119	FM		119
7N08	05	145		05	146		5/10/2011	119	FM		119
7N08	05	147		05	148		5/10/2011	142	FM		142
5 17	09	130		10	011		5/11/2011	275	FM		275
5 17	09	130		10	012		5/11/2011	325	FM		325
5 17	10	009		10	010		5/11/2011	9	FM		9
5 17	10	010		10	011		5/11/2011	250	FM		250

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 28	21	033		21	034		5/11/2011	350	FM		350
5 28	21	034		21	035		5/11/2011	315	FM		315
5 28	21	035		21	038		5/11/2011	310	FM		310
5 28	21	037		21	038		5/11/2011	352	FM		352
5 28	21	038		21	039		5/11/2011	310	FM		310
5 28	21	039		21	040		5/11/2011	300	FM		300
7N04	05	060		05	061		5/11/2011	270	FM		270
7N04	05	061		05	062		5/11/2011	340	FM		340
7N04	05	063		37	025	D	5/11/2011	248	FM		248
7N04	05	063		05	065		5/11/2011	337	FM		337
7N04	05	062		05	067		5/11/2011	325	FM		325
7N04	05	067		37	017	M	5/11/2011	350	FM		350
7N04	05	065		05	066		5/11/2011	310	FM		310
7N04	05	065		37	001	D	5/11/2011	300	FM		300
7N04	05	066		05	067		5/11/2011	320	FM		320
7N04	05	067		05	068		5/11/2011	80	FM		80
7N04	05	068		05	069		5/11/2011	240	FM		240
7N04	05	069		05	070		5/11/2011	345	FM		345
7N04	05	070		05	165		5/11/2011	31	FM		31
7N04	05	069		05	157		5/11/2011	236	FM		236
7N04	05	155		05	156		5/11/2011	270	FM		270
7N04	05	156		05	157		5/11/2011	275	FM		275
7N08	05	023		05	024		5/11/2011	315	FM		315
7N08	05	024		05	151		5/11/2011	177	FM		177
7N08	05	024		05	153		5/11/2011	168	FM		168
7N08	05	025		05	153		5/11/2011	172	FM		172
7N08	05	114		05	115		5/11/2011	124	FM		124
7N08	05	115		05	116		5/11/2011	185	FM		185
7N08	05	116		05	117		5/11/2011	186	FM		186
7N08	05	117		05	118		5/11/2011	250	FM		250
7N08	05	118		05	119		5/11/2011	249	FM		249
7N08	05	119		05	120		5/11/2011	35	FM		35
7N08	05	114		05	122		5/11/2011	45	FM		45
5 31	20	134		21	059		5/12/2011	350	FM		350
5 31	20	134		20	135		5/12/2011	360	FM		360
5 31	20	135		20	136	M	5/12/2011	80	FM		80
5 31	20	136	M	21	043		5/12/2011	300	FM		300
5 33	20	136	M	20	137		5/12/2011	463	FM		463
5 33	20	137		21	040		5/12/2011	300	FM		300
5 36	20	122		20	123		5/12/2011	350	FM		350
5 36	20	123		20	124		5/12/2011	400	FM		400
5 36	20	124		20	125		5/12/2011	150	FM		150
7N01	05	029		05	030		5/12/2011	445	FM		445
7N01	05	029		06	147		5/12/2011	506	FM		506
7N01	05	030		05	031		5/12/2011	526	FM		526
7N02	05	056		05	064		5/12/2011	20	FM		20
7N03	05	064		05	140		5/12/2011	153	FM		153
7N03	05	140		05	165		5/12/2011	150	FM		150
7N04	05	071		05	165		5/12/2011	270	FM		270
7N04	05	071		05	072		5/12/2011	250	FM		250

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
7N04	05	072		05	073		5/12/2011	40	FM		40
7N06	05	089		05	090		5/12/2011	150	FM		150
7N06	05	089		05	091		5/12/2011	250	FM		250
7N08	05	025		05	026		5/12/2011	350	FM		350
7N08	05	026		05	120		5/12/2011	250	FM		250
7N08	05	026		05	027		5/12/2011	300	FM		300
7N08	05	027		05	028		5/12/2011	280	FM		280
7N08	05	028		05	093		5/12/2011	100	FM		100
5 36	20	126		20	147		5/16/2011	70	FM		70
5 36	20	126		20	127		5/16/2011	250	FM		250
5 36	20	127		20	128		5/16/2011	226	FM		226
5 36	20	128		20	129		5/16/2011	250	FM		250
5 36	20	125		20	130		5/16/2011	125	FM		125
5 36	20	129		20	130		5/16/2011	150	FM		150
5 36	20	130		20	131		5/16/2011	178	FM		178
5 36	20	131		20	132		5/16/2011	125	FM		125
5 36	20	132		20	133		5/16/2011	277	FM		277
Z 05	01	073	C	01	117		5/16/2011	15	FM		15
Z 05	01	074		01	117		5/16/2011	100	FM		100
Z 05	01	072		01	075		5/16/2011	115	FM		115
Z 05	01	074		01	075		5/16/2011	150	FM		150
Z 05	01	075		01	076		5/16/2011	102	FM		102
Z 05	01	076		01	077		5/16/2011	95	FM		95
Z 05	01	077		01	078		5/16/2011	182	FM		182
Z 05	01	078		01	079		5/16/2011	180	FM		180
Z 05	01	079		01	080		5/16/2011	212	FM		212
Z 05	01	080		01	081		5/16/2011	216	FM		216
Z 05	01	082		01	083		5/16/2011	157	FM		157
Z 05	01	081		01	084		5/16/2011	216	FM		216
Z 05	01	083		01	084		5/16/2011	171	FM		171
Z 05	01	084		01	085		5/16/2011	118	FM		118
Z 05	01	086		01	087		5/16/2011	230	FM		230
Z 05	01	087		01	088		5/16/2011	297	FM		297
Z 05	01	088		01	089		5/16/2011	200	FM		200
Z 05	01	089		01	091		5/16/2011	100	FM		100
Z 05	01	090		01	091		5/16/2011	91	FM		91
Z 05	01	091		01	092		5/16/2011	256	FM		256
Z 05	01	092		01	093		5/16/2011	304	FM		304
Z 05	01	093		01	094		5/16/2011	232	FM		232
Z 05	01	094		01	095		5/16/2011	190	FM		190
Z 05	01	095		01	096		5/16/2011	152	FM		152
Z 05	01	096		01	097		5/16/2011	150	FM		150
Z 05	01	085		01	098		5/16/2011	224	FM		224
Z 05	01	097		01	098		5/16/2011	28	FM		28
Z 05	01	098		01	099		5/16/2011	198	FM		198
Z 05	01	099		01	100		5/16/2011	87	FM		87
Z 05	01	117		01	118	C	5/16/2011	140	FM		140
Z 06	01	100		01	101		5/16/2011	335	FM		335
5 33	20	137		20	138	P	5/17/2011	350	FM		350
5 33	20	138	P	20	139	P	5/17/2011	140	FM	3	560

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 33	20	139	P	20	140	P	5/17/2011	170	FM	3	680
5 36	20	113		20	114		5/17/2011	252	FM		252
5 36	20	114		20	115		5/17/2011	300	FM		300
5 36	20	115		20	116		5/17/2011	300	FM		300
5 36	20	116		20	117		5/17/2011	274	FM		274
5 36	20	117		20	145	D	5/17/2011	142	FM		142
5 36	20	133		20	140	P	5/17/2011	433	FM		433
Z 03	01	029		01	030		5/17/2011	300	FM		300
Z 03	01	031		01	032		5/17/2011	200	FM		200
Z 03	01	032		01	033		5/17/2011	353	FM		353
Z 03	01	033		01	120		5/17/2011	203	FM		203
Z 03	01	034		01	035		5/17/2011	348	FM		348
Z 03	01	034		01	120		5/17/2011	128	FM		128
Z 03	01	035		01	038		5/17/2011	342	FM		342
Z 03	01	036		01	037		5/17/2011	350	FM		350
Z 03	01	036		01	114	C	5/17/2011	176	FM		176
Z 03	01	037		01	038		5/17/2011	272	FM		272
Z 03	01	038		01	039		5/17/2011	320	FM		320
Z 03	01	030		01	039		5/17/2011	204	FM		204
Z 03	01	039		01	040		5/17/2011	200	FM		200
Z 04	01	045		01	046		5/17/2011	88	FM		88
Z 04	01	046		01	047		5/17/2011	88	FM		88
Z 04	01	047		01	048		5/17/2011	233	FM		233
Z 04	01	048		01	049		5/17/2011	232	FM		232
Z 04	01	050		01	051		5/17/2011	68	FM		68
Z 04	01	051		01	052		5/17/2011	99	FM		99
Z 04	01	052		01	053		5/17/2011	120	FM		120
Z 04	01	053		01	054		5/17/2011	90	FM		90
Z 04	01	054		01	055		5/17/2011	102	FM		102
Z 04	01	055		01	056		5/17/2011	152	FM		152
Z 04	01	056		01	057		5/17/2011	136	FM		136
Z 04	01	049		01	058		5/17/2011	225	FM		225
Z 04	01	057		01	058		5/17/2011	155	FM		155
Z 04	01	058		01	060		5/17/2011	179	FM		179
Z 04	01	059		01	060		5/17/2011	140	FM		140
Z 04	01	061		01	062		5/17/2011	98	FM		98
Z 04	01	062		01	063		5/17/2011	220	FM		220
Z 04	01	060		01	064		5/17/2011	226	FM		226
Z 04	01	063		01	064		5/17/2011	76	FM		76
Z 04	01	064		01	065		5/17/2011	100	FM		100
Z 04	01	065		01	066		5/17/2011	75	FM		75
5 36	20	009	C	20	119		5/18/2011	140	FM		140
5 36	20	119		20	120		5/18/2011	302	FM		302
Z 02	01	006		05	109		5/18/2011	363	FM		363
Z 02	01	006		01	008		5/18/2011	359	FM		359
Z 02	01	007		01	008		5/18/2011	105	FM		105
Z 02	01	008		01	009		5/18/2011	150	FM		150
Z 02	01	009		01	011		5/18/2011	200	FM		200
Z 02	01	010		05	103		5/18/2011	309	FM		309
Z 02	01	010		01	011		5/18/2011	211	FM		211

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
Z 02	01	011		01	012		5/18/2011	200	FM		200
Z 02	01	012		01	013		5/18/2011	350	FM		350
Z 02	01	013		01	017		5/18/2011	425	FM		425
Z 02	05	099		05	100		5/18/2011	258	FM		258
Z 02	05	100		05	101		5/18/2011	305	FM		305
Z 02	05	101		05	102		5/18/2011	265	FM		265
Z 02	05	102		05	103		5/18/2011	294	FM		294
Z 02	05	104		05	106		5/18/2011	298	FM		298
Z 02	05	105		05	106		5/18/2011	115	FM		115
Z 02	05	106		05	107		5/18/2011	350	FM		350
Z 02	05	107		05	108		5/18/2011	350	FM		350
Z 02	05	108		05	109		5/18/2011	250	FM		250
5 03	21	001		21	002		5/19/2011	331	FM		331
5 03	21	002		21	142		5/19/2011	360	FM		360
5 03	21	001		22	023		5/19/2011	360	FM		360
5 03	21	002		21	003		5/19/2011	308	FM		308
5 03	21	003		21	004		5/19/2011	310	FM		310
5 03	21	004		21	005		5/19/2011	320	FM		320
5 03	21	005		21	006		5/19/2011	335	FM		335
5 03	22	022		22	023		5/19/2011	350	FM		350
5 28	21	007		21	033		5/19/2011	375	FM		375
5 36	20	117		20	118		5/19/2011	400	FM		400
5 36	20	118		20	121		5/19/2011	369	FM		369
5 36	20	120		20	121		5/19/2011	310	FM		310
A 05	03	044		03	045		5/19/2011	150	FM		150
A 05	03	045		03	046		5/19/2011	250	FM		250
A 05	03	046		03	047		5/19/2011	300	FM		300
A 05	03	047		03	048		5/19/2011	200	FM		200
A 05	03	048		03	049		5/19/2011	300	FM		300
Z 01	02	037		02	038		5/19/2011	228	FM		228
Z 01	02	039		02	088	C	5/19/2011	96	FM		96
Z 01	02	038		02	040		5/19/2011	243	FM		243
Z 01	02	039		02	040		5/19/2011	281	FM		281
Z 01	02	040		02	041		5/19/2011	273	FM		273
Z 01	02	041		02	042		5/19/2011	318	FM		318
Z 01	02	042		02	043		5/19/2011	180	FM		180
Z 01	02	043		02	044		5/19/2011	400	FM		400
Z 01	02	049		02	050		5/19/2011	155	FM		155
Z 01	02	049		06	019		5/19/2011	300	FM		300
Z 01	02	050		02	051		5/19/2011	200	FM		200
Z 01	02	051		02	053		5/19/2011	175	FM		175
Z 02	06	005		06	006		5/19/2011	350	FM		350
Z 02	06	006		06	152	C	5/19/2011	62	FM		62
Z 02	06	006		06	007		5/19/2011	45	FM		45
Z 02	06	007		06	008		5/19/2011	141	FM		141
Z 02	06	008		06	009		5/19/2011	85	FM		85
Z 02	06	007		06	148	C	5/19/2011	175	FM		175
Z 02	06	009		06	010		5/19/2011	275	FM		275
Z 02	06	010		06	011		5/19/2011	130	FM		130
Z 02	06	011		06	014		5/19/2011	247	FM		247

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
Z 02	06	012		06	013		5/19/2011	270	FM		270
Z 02	06	013		06	014		5/19/2011	301	FM		301
Z 02	06	014		06	017		5/19/2011	268	FM		268
Z 02	06	015		06	016		5/19/2011	343	FM		343
Z 02	06	015		06	149	C	5/19/2011	140	FM		140
Z 02	06	016		06	017		5/19/2011	289	FM		289
5 35	21	006		21	007		5/20/2011	51	FM		51
5 35	21	007		21	009		5/20/2011	160	FM		160
5 35	21	008		21	138	C	5/20/2011	55	FM		55
5 35	21	008		21	139	C	5/20/2011	84	FM		84
5 35	21	008		21	009		5/20/2011	240	FM		240
5 35	21	009		21	010		5/20/2011	175	FM		175
5 35	21	010		21	011		5/20/2011	300	FM		300
5 35	21	011		21	012		5/20/2011	345	FM		345
5 35	21	012		21	137	C	5/20/2011	144	FM		144
Z 02	01	014		05	111		5/20/2011	350	FM		350
Z 02	01	014		01	015		5/20/2011	332	FM		332
Z 02	01	015		01	016		5/20/2011	355	FM		355
Z 02	01	016		01	017		5/20/2011	175	FM		175
Z 02	01	017	P	01	018	P	5/20/2011	175	FM	3	700
Z 02	01	018		01	019		5/20/2011	320	FM		320
Z 02	01	024		02	078		5/20/2011	300	FM		300
Z 02	02	073		02	074		5/20/2011	300	FM		300
Z 02	02	074		02	075		5/20/2011	300	FM		300
Z 02	02	075		02	076		5/20/2011	300	FM		300
Z 02	02	076		02	077		5/20/2011	300	FM		300
Z 02	02	077		02	078		5/20/2011	300	FM		300
Z 02	02	079		02	080		5/20/2011	225	FM		225
Z 02	02	080		02	081		5/20/2011	200	FM		200
Z 02	02	081		02	082		5/20/2011	350	FM		350
Z 02	02	082		02	083		5/20/2011	353	FM		353
Z 02	05	110		06	001		5/20/2011	330	FM		330
Z 02	05	110		05	111		5/20/2011	239	FM		239
Z 02	06	017		06	018		5/20/2011	295	FM		295
Z 02	02	073		06	018		5/20/2011	314	FM		314
5 35	20	141		21	014		5/23/2011	300	FM		300
5 35	20	141	M	20	142		5/23/2011	330	FM		330
5 35	21	012		21	013		5/23/2011	350	FM		350
5 35	21	013		21	014		5/23/2011	350	FM		350
5 36	20	140		20	143		5/23/2011	355	FM	3	1420
5 36	20	142	M	20	143		5/23/2011	310	FM	3	1240
5 36	20	121		20	144		5/23/2011	106	FM		106
5 37	13	089		13	095		5/23/2011	260	FM		260
5 37	13	089		14	189		5/23/2011	325	FM		325
5 37	13	090		13	095		5/23/2011	290	FM		290
5 37	13	094		13	096		5/23/2011	175	FM		175
5 37	13	096		13	097		5/23/2011	260	FM		260
Z 01	02	013		03	127		5/23/2011	200	FM		200
Z 01	02	013		02	014		5/23/2011	300	FM		300
Z 01	02	052		02	053		5/23/2011	65	FM		65

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
Z 01	02	053		02	054		5/23/2011	250	FM		250
Z 01	02	054		02	055		5/23/2011	219	FM		219
Z 01	02	055		02	058		5/23/2011	274	FM		274
Z 01	02	056		02	057		5/23/2011	200	FM		200
Z 01	02	057		02	058		5/23/2011	174	FM		174
Z 01	02	058		02	061		5/23/2011	267	FM		267
Z 01	02	059		02	060		5/23/2011	157	FM		157
Z 01	02	060		02	061		5/23/2011	200	FM		200
Z 01	02	061		02	062		5/23/2011	200	FM		200
Z 01	02	062		02	063		5/23/2011	325	FM		325
Z 01	02	063		02	065		5/23/2011	205	FM		205
Z 01	02	064		02	065		5/23/2011	112	FM		112
Z 01	02	065		02	066		5/23/2011	350	FM		350
Z 01	02	066		02	067		5/23/2011	100	FM		100
Z 01	03	125		03	126		5/23/2011	186	FM		186
Z 01	03	126		03	127		5/23/2011	265	FM		265
Z 02	01	020		01	021		5/23/2011	353	FM		353
Z 02	01	020		02	084		5/23/2011	359	FM		359
Z 02	01	021		01	022		5/23/2011	245	FM		245
Z 02	01	022		01	023		5/23/2011	300	FM		300
Z 02	01	019		01	023		5/23/2011	355	FM		355
Z 02	01	023		01	025		5/23/2011	298	FM		298
Z 02	01	024		01	025		5/23/2011	221	FM		221
Z 02	01	025		01	026		5/23/2011	133	FM		133
Z 02	01	023		02	083		5/23/2011	354	FM		354
Z 02	02	084		06	004		5/23/2011	350	FM		350
Z 02	06	002		06	003		5/23/2011	300	FM		300
Z 02	06	003		06	004		5/23/2011	354	FM		354
5 36	13	088		20	143		5/24/2011	450	FM		450
5 36	20	143		20	144		5/24/2011	215	FM	3	860
5 36	13	196	P	20	144	P	5/24/2011	255	FM	3	1020
5 37	13	088		13	091		5/24/2011	33	FM		33
5 37	13	090	P	13	091	T	5/24/2011	295	FM	3	1180
5 37	13	091	T	13	092	T	5/24/2011	18	FM	3	72
5 37	13	092	T	13	098		5/24/2011	512	FM		512
5 37	13	097		13	098		5/24/2011	93	FM		93
5 37	13	098		13	099		5/24/2011	510	FM		510
5 37	13	099		13	100		5/24/2011	418	FM		418
5 37	13	100		13	106		5/24/2011	372	FM		372
Z 01	02	019		02	020		5/24/2011	124	FM		124
Z 01	02	020		02	021		5/24/2011	200	FM		200
Z 01	02	021		02	022		5/24/2011	200	FM		200
Z 01	02	022		02	023		5/24/2011	61	FM		61
Z 01	02	023		02	024		5/24/2011	127	FM		127
Z 01	02	025		02	026		5/24/2011	175	FM		175
Z 01	02	024		02	026		5/24/2011	200	FM		200
Z 01	02	026		02	085	D	5/24/2011	100	FM		100
Z 01	02	026		02	027		5/24/2011	200	FM		200
Z 01	02	027		02	029		5/24/2011	250	FM		250
Z 01	02	028		02	029		5/24/2011	220	FM		220

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
Z 01	02	029		02	030		5/24/2011	250	FM		250
Z 01	02	030		02	031		5/24/2011	250	FM		250
Z 01	02	031		02	032		5/24/2011	150	FM		150
Z 01	02	031		02	087	C	5/24/2011	75	FM		75
Z 01	02	032		02	033		5/24/2011	125	FM		125
Z 01	02	033	P	02	034		5/24/2011	100	FM		100
Z 01	02	034		02	035		5/24/2011	115	FM		115
Z 01	03	140		03	141		5/24/2011	194	FM		194
Z 01	03	139		03	159		5/24/2011	149	FM		149
Z 01	03	140		03	159		5/24/2011	156	FM		156
Z 01	03	153		03	154	C	5/24/2011	123	FM		123
Z 01	03	155		03	156	C	5/24/2011	136	FM		136
Z 01	03	152		03	153		5/24/2011	174	FM		174
Z 01	03	152		03	155		5/24/2011	136	FM		136
Z 01	03	140		03	142		5/24/2011	345	FM		345
Z 01	03	142		03	152		5/24/2011	161	FM		161
Z 01	03	150		03	151		5/24/2011	208	FM		208
Z 01	03	149		03	150		5/24/2011	108	FM		108
Z 01	03	148		03	149		5/24/2011	106	FM		106
Z 01	03	147		03	148		5/24/2011	104	FM		104
Z 01	03	146		03	147		5/24/2011	119	FM		119
Z 01	03	145		03	146		5/24/2011	108	FM		108
Z 01	03	144		03	145		5/24/2011	106	FM		106
Z 01	03	143		03	144		5/24/2011	107	FM		107
Z 01	03	142		03	143		5/24/2011	101	FM		101
Z 01	03	142		03	160		5/24/2011	206	FM		206
Z 01	03	157		03	158	D	5/24/2011	25	FM		25
Z 01	03	157		03	160		5/24/2011	120	FM		120
Z 01	03	157		03	161		5/24/2011	135	FM		135
Z 01	03	157		03	163		5/24/2011	105	FM		105
Z 01	03	161		03	162	D	5/24/2011	25	FM		25
Z 01	03	162		03	164		5/24/2011	125	FM		125
Z 01	03	164		03	165		5/24/2011	325	FM		325
Z 01	03	165		03	166		5/24/2011	300	FM		300
5 38	13	101		13	103		5/25/2011	370	FM		370
5 38	13	103		13	105		5/25/2011	367	FM		367
5 38	13	105	P	13	106	P	5/25/2011	315	FM	3	1260
5 39	13	078		13	079		5/25/2011	222	FM		222
5 39	13	079		13	082		5/25/2011	181	FM		181
5 39	13	084		13	085		5/25/2011	460	FM		460
5 41	13	070		13	072		5/25/2011	184	FM		184
5 41	13	070		13	209	D	5/25/2011	50	FM		50
5 41	13	071		13	072	P	5/25/2011	439	FM		439
5 41	13	072	P	13	074		5/25/2011	387	FM		387
5 41	13	073		13	074		5/25/2011	405	FM		405
5 41	13	074		13	075		5/25/2011	185	FM		185
5 41	13	076		13	077		5/25/2011	385	FM		385
5 41	13	075		13	078		5/25/2011	10	FM		10
5 41	13	077		13	078		5/25/2011	32	FM		32
5 41	13	080		13	081		5/25/2011	408	FM		408

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
Z 01	02	011		02	012		5/25/2011	200	FM		200
Z 01	02	011		03	163		5/25/2011	300	FM		300
Z 01	02	014		02	015		5/25/2011	318	FM		318
Z 01	02	012		02	015		5/25/2011	236	FM		236
Z 01	02	015		02	016		5/25/2011	306	FM		306
Z 01	02	016		02	017		5/25/2011	293	FM		293
Z 01	02	017		02	018		5/25/2011	150	FM		150
Z 01	02	018		02	036		5/25/2011	200	FM		200
Z 01	02	035		02	036		5/25/2011	150	FM		150
Z 01	02	036		02	045		5/25/2011	100	FM		100
Z 01	02	044		02	045		5/25/2011	200	FM		200
Z 01	02	045		02	046		5/25/2011	175	FM		175
Z 01	02	046		02	047		5/25/2011	337	FM		337
Z 01	02	047		02	048		5/25/2011	300	FM		300
Z 01	02	048		02	068		5/25/2011	300	FM		300
Z 01	02	067		02	068		5/25/2011	277	FM		277
Z 01	02	068		02	069		5/25/2011	344	FM		344
Z 02	01	004		01	005		5/25/2011	60	FM		60
Z 02	01	004		02	069		5/25/2011	330	FM		330
Z 02	01	026		01	027		5/25/2011	150	FM		150
Z 02	01	005		01	027		5/25/2011	300	FM		300
Z 02	01	027		01	028		5/25/2011	242	FM		242
Z 02	01	028		01	040		5/25/2011	300	FM		300
Z 02	01	005		02	010		5/25/2011	200	FM		200
Z 02	02	010		02	089		5/25/2011	325	FM		325
Z 02	02	089		02	090		5/25/2011	70	FM		70
Z 02	02	090		02	091		5/25/2011	600	FM		600
Z 02	02	091		02	092		5/25/2011	250	FM		250
Z 02	02	092		02	093		5/25/2011	83	FM		83
Z 02	02	093		02	094		5/25/2011	110	FM		110
Z 02	02	094		02	095		5/25/2011	360	FM		360
5 11	13	068		13	069		5/26/2011	250	FM		250
5 39	13	081		13	082		5/26/2011	25	FM		25
5 39	13	082		13	083		5/26/2011	348	FM		348
5 40	13	107		13	108		5/26/2011	303	FM	3	1212
5 40	13	108	P	13	109	P	5/26/2011	179	FM	3	716
5 40	13	109		13	110		5/26/2011	30	FM	3	120
5 41	13	083		13	086		5/26/2011	27	FM		27
5 41	13	069		13	087		5/26/2011	350	FM		350
5 41	13	086		13	087		5/26/2011	200	FM		200
5 41	13	087		13	110		5/26/2011	100	FM		100
Z 03	01	040		01	041		5/26/2011	375	FM		375
Z 03	01	041		01	042		5/26/2011	223	FM		223
Z 03	01	042		01	043		5/26/2011	267	FM		267
Z 03	01	043		01	044		5/26/2011	142	FM		142
Z 04	01	044		01	067		5/26/2011	50	FM		50
Z 04	01	066		01	067		5/26/2011	85	FM		85
Z 04	01	067		01	068		5/26/2011	401	FM		401
Z 06	01	068		01	069		5/26/2011	50	FM		50
5 40	13	085		13	107		5/31/2011	180	FM		180

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 46	13	107		13	121		5/31/2011	157	FM		157
5 46	13	121		13	122		5/31/2011	137	FM		137
5 46	13	122		13	123		5/31/2011	362	FM		362
5 46	13	124		13	125		5/31/2011	300	FM		300
5 46	13	124		13	197	C	5/31/2011	120	FM		120
5 46	13	123		13	125		5/31/2011	163	FM		163
5 46	13	125		13	130		5/31/2011	300	FM		300
5 46	13	126		13	127		5/31/2011	305	FM		305
5 46	13	127		13	128		5/31/2011	305	FM		305
5 46	13	128		13	129		5/31/2011	275	FM		275
5 46	13	128		13	211		5/31/2011	360	FM		360
5 46	13	129		13	130		5/31/2011	283	FM		283
Z 06	01	069		01	070		5/31/2011	360	FM		360
Z 06	01	070		01	071		5/31/2011	325	FM		325
Z 06	01	071		01	102		5/31/2011	325	FM		325
Z 06	01	101		01	102		5/31/2011	272	FM		272
Z 06	01	102		01	115		5/31/2011	52	FM		52
Z 06	01	103		01	115		5/31/2011	342	FM		342
Z 06	01	103		01	104		5/31/2011	374	FM		374
Z 06	01	104		01	105		5/31/2011	300	FM		300
Z 06	01	105		01	106		5/31/2011	306	FM		306
Z 06	01	106		01	107		5/31/2011	355	FM		355
Z 06	01	107		01	108		5/31/2011	344	FM		344
3S03	29	005		29	007		6/1/2011	311	JM	12	311
3E06	24	050		24	052		6/1/2011	193	JM	12	193
3E06	24	051		24	052		6/1/2011	185	JM	12	185
5 01	16	032		16	035		6/1/2011	354	JM	6	708
5 12	15	040		15	041		6/1/2011	165	JM	12	165
5 12	15	047		15	048		6/1/2011	184	JM	12	184
5 12	15	050		15	052		6/1/2011	266	JM	6	532
5 25	14	088		14	197	C	6/1/2011	172	JM	12	172
5 25	14	088		14	089		6/1/2011	352	JM	12	352
6S17	08	163		08	164		6/1/2011	301	JM	12	301
6S18	08	084		08	085		6/1/2011	296	JM	12	296
6W01	03	110		03	128	C	6/1/2011	250	JM	6	500
6W01	03	110		03	111		6/1/2011	272	JM	12	272
6W01	03	111		03	112		6/1/2011	315	JM	6	630
6W01	03	112		03	113		6/1/2011	300	JM	12	300
6W01	03	113		03	114		6/1/2011	243	JM	12	243
A 01	08	051		08	215	C	6/1/2011	260	JM	6	520
2 01	34	005		34	006		6/1/2011	72	FM		72
2 01	34	006		34	007		6/1/2011	70	FM		70
2 01	34	007		34	008		6/1/2011	125	FM		125
2 01	34	007		34	031		6/1/2011	55	FM		55
2 01	34	008		34	009		6/1/2011	181	FM		181
2 01	34	009		34	010		6/1/2011	133	FM		133
2 01	34	010		34	011		6/1/2011	160	FM		160
2 01	34	011		34	012		6/1/2011	161	FM		161
2 01	34	012		34	013		6/1/2011	161	FM		161
2 01	34	013		34	014		6/1/2011	86	FM		86

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
2 01	34	014		34	015		6/1/2011	54	FM		54
2 01	34	015		34	016		6/1/2011	81	FM		81
2 01	34	015		34	020		6/1/2011	158	FM		158
2 01	34	016		34	017		6/1/2011	215	FM		215
2 01	34	017		34	018		6/1/2011	155	FM		155
2 01	34	018		34	019		6/1/2011	147	FM		147
2 01	34	020		34	021		6/1/2011	207	FM		207
2 01	34	021		34	022		6/1/2011	156	FM		156
2 01	34	026		34	027		6/1/2011	160	FM		160
2 01	34	027		34	028		6/1/2011	65	FM		65
2 01	34	027		34	029		6/1/2011	74	FM		74
2 01	34	028		34	030		6/1/2011	64	FM		64
2 01	34	031		34	032		6/1/2011	255	FM		255
2 01	34	034		34	035		6/1/2011	310	FM		310
2 01	34	035		34	036		6/1/2011	276	FM		276
2 01	35	024		35	025		6/1/2011	297	FM		297
2 01	35	025		35	026		6/1/2011	303	FM		303
2 01	35	026		35	027		6/1/2011	187	FM		187
2 01	35	028		35	029		6/1/2011	225	FM		225
2 01	35	029		35	030		6/1/2011	150	FM		150
2 01	35	040		35	041		6/1/2011	118	FM		118
2 01	35	041		35	042		6/1/2011	349	FM		349
5 46	13	131		13	207	D	6/1/2011	45	FM		45
5 46	13	133		13	134		6/1/2011	128	FM		128
5 46	13	135		13	136		6/1/2011	286	FM		286
5 46	13	134		13	137		6/1/2011	22	FM		22
5 46	13	136		13	137		6/1/2011	288	FM		288
5 46	13	137		13	138		6/1/2011	245	FM		245
5 46	13	138		13	205		6/1/2011	105	FM		105
5 46	13	138		13	139		6/1/2011	295	FM		295
5 46	13	139		13	140		6/1/2011	150	FM		150
5 46	13	140		13	141		6/1/2011	95	FM		95
5 46	13	141		13	142		6/1/2011	100	FM		100
5 46	13	142		13	143		6/1/2011	240	FM		240
5 46	13	143		13	144		6/1/2011	223	FM		223
5 46	13	144		13	145		6/1/2011	336	FM		336
5 46	13	147		13	148		6/1/2011	305	FM		305
5 47	13	151		13	152		6/1/2011	304	FM		304
5 47	13	156		13	158		6/1/2011	300	FM		300
5 47	13	157		13	158		6/1/2011	265	FM		265
5 47	13	158		13	200	S	6/1/2011	253	FM		253
5 47	13	159	S	13	215		6/1/2011	130	FM		130
5 47	13	160		13	161		6/1/2011	280	FM		280
5 47	13	160		13	215		6/1/2011	30	FM		30
2 01	30	021		30	022		6/2/2011	185	FM		185
2 01	30	022		31	002		6/2/2011	326	FM		326
2 01	31	001		31	002		6/2/2011	190	FM		190
2 01	34	001		35	001		6/2/2011	315	FM		315
2 01	34	001		35	002		6/2/2011	250	FM		250
2 01	35	002		35	004		6/2/2011	275	FM		275

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
2 01	35	003		35	004		6/2/2011	176	FM		176
2 01	35	004		35	005		6/2/2011	230	FM		230
2 01	35	005		35	012		6/2/2011	350	FM		350
2 01	35	006		35	007		6/2/2011	352	FM		352
2 01	35	007		35	010		6/2/2011	345	FM		345
2 01	35	008		35	009		6/2/2011	317	FM		317
2 01	35	009		35	010		6/2/2011	300	FM		300
2 01	35	010		35	011		6/2/2011	174	FM		174
2 01	35	011		35	012		6/2/2011	222	FM		222
2 01	35	012		35	013		6/2/2011	323	FM		323
2 01	35	019		35	020		6/2/2011	230	FM		230
2 01	35	020		35	022		6/2/2011	235	FM		235
2 01	35	021		35	022		6/2/2011	340	FM		340
2 01	35	022		35	023		6/2/2011	225	FM		225
2 01	35	023		35	031		6/2/2011	125	FM		125
2 01	35	030		35	031		6/2/2011	159	FM		159
2 01	35	031		35	034		6/2/2011	110	FM		110
2 01	35	032		35	033		6/2/2011	350	FM		350
2 01	35	033		35	034		6/2/2011	340	FM		340
2 01	35	034		35	035		6/2/2011	270	FM		270
2 01	35	035		35	040		6/2/2011	40	FM		40
5 46	13	130		13	146		6/2/2011	326	FM		326
5 46	13	145		13	146		6/2/2011	333	FM		333
5 46	13	146		13	149		6/2/2011	141	FM		141
5 46	13	148		13	149		6/2/2011	295	FM		295
5 46	13	149		13	150		6/2/2011	288	FM		288
5 46	13	150		13	153		6/2/2011	122	FM		122
5 47	13	152		13	153		6/2/2011	300	FM		300
5 47	13	154		13	155		6/2/2011	180	FM		180
5 47	13	155		13	156		6/2/2011	214	FM		214
2 01	31	035		31	036		6/3/2011	297	FM		297
2 01	31	036		31	040		6/3/2011	200	FM		200
2 01	31	041		35	047		6/3/2011	121	FM		121
2 01	31	040		31	042		6/3/2011	407	FM		407
2 01	31	042		31	043		6/3/2011	114	FM		114
2 01	34	002		34	003		6/3/2011	300	FM		300
2 01	34	002		35	047		6/3/2011	290	FM		290
2 01	34	003		34	004		6/3/2011	300	FM		300
2 01	34	023		34	033		6/3/2011	50	FM		50
2 01	34	024		34	025		6/3/2011	297	FM		297
2 01	35	013		35	015		6/3/2011	210	FM		210
2 01	35	014		35	015		6/3/2011	310	FM		310
2 01	35	015		35	016		6/3/2011	124	FM		124
2 01	35	016		35	017		6/3/2011	320	FM		320
2 01	35	017		35	018		6/3/2011	320	FM		320
2 01	35	018		35	036		6/3/2011	320	FM		320
2 01	35	035		35	036		6/3/2011	275	FM		275
2 01	35	036		35	037		6/3/2011	125	FM		125
5 43	13	110		13	111		6/3/2011	300	FM		300
5 43	13	111		13	112		6/3/2011	48	FM		48

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 43	13	112		13	113		6/3/2011	58	FM		58
5 43	13	113		13	114		6/3/2011	150	FM		150
5 44	13	114		13	115		6/3/2011	188	FM		188
5 47	13	153		13	162		6/3/2011	186	FM		186
5 47	13	161		13	162		6/3/2011	277	FM		277
5 47	13	163		13	164		6/3/2011	302	FM		302
5 47	13	164		13	165		6/3/2011	288	FM		288
5 47	13	162		13	166		6/3/2011	306	FM		306
5 47	13	165		13	166		6/3/2011	140	FM		140
5 49	12	032		12	033		6/3/2011	212	FM		212
5 49	12	032		12	142	C	6/3/2011	93	FM		93
5 49	12	033		12	034		6/3/2011	180	FM		180
5 49	12	034		12	037		6/3/2011	345	FM		345
5 49	12	036		12	037		6/3/2011	213	FM		213
6S14	13	035		13	036		6/3/2011	167	FM		167
2 03	25	170		25	202		6/6/2011	204	FM		204
2 03	25	170		26	007		6/6/2011	180	FM		180
2 03	25	171		26	005		6/6/2011	315	FM		315
2 03	25	172		25	173		6/6/2011	119	FM		119
2 03	25	172		30	023		6/6/2011	350	FM		350
2 03	25	173		25	176		6/6/2011	213	FM		213
2 03	25	174		25	175		6/6/2011	200	FM		200
2 03	25	175		25	176		6/6/2011	200	FM		200
2 03	25	176		25	177		6/6/2011	125	FM		125
2 03	25	177		25	178		6/6/2011	188	FM		188
2 03	25	178		26	003		6/6/2011	190	FM		190
2 03	25	179		25	180		6/6/2011	173	FM		173
2 03	25	180		25	181		6/6/2011	197	FM		197
2 03	25	181		25	182		6/6/2011	230	FM		230
2 03	25	182		26	001		6/6/2011	202	FM		202
2 03	25	182		30	012		6/6/2011	360	FM		360
2 03	30	008		30	009		6/6/2011	323	FM		323
2 03	30	009		30	010		6/6/2011	251	FM		251
2 03	30	010		30	012		6/6/2011	236	FM		236
2 03	30	011		30	012		6/6/2011	240	FM		240
2 03	30	013		30	014		6/6/2011	323	FM		323
2 03	30	013		30	024	C	6/6/2011	50	FM		50
2 03	30	014		30	015		6/6/2011	295	FM		295
2 03	30	015		30	016		6/6/2011	353	FM		353
2 03	30	016		30	017		6/6/2011	325	FM		325
2 03	30	017		30	018		6/6/2011	303	FM		303
2 03	30	018		30	019		6/6/2011	269	FM		269
2 03	30	019		30	020		6/6/2011	255	FM		255
2 05	25	162		25	163		6/6/2011	271	FM		271
2 05	25	163		25	166		6/6/2011	212	FM		212
2 05	25	164		25	166		6/6/2011	100	FM		100
2 05	25	165		25	166		6/6/2011	325	FM		325
2 05	25	166		25	167		6/6/2011	217	FM		217
5 44	13	115		13	116		6/6/2011	234	FM		234
2 04	26	010		26	011		6/8/2011	253	FM		253

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
2 04	26	010		31	032		6/8/2011	267	FM		267
2 04	26	011		26	012		6/8/2011	259	FM		259
2 04	26	012		26	013		6/8/2011	236	FM		236
2 04	26	013		26	014		6/8/2011	86	FN		86
2 04	26	014		26	015		6/8/2011	185	FM		185
2 04	26	015		26	016		6/8/2011	177	FM		177
2 04	26	016		26	019		6/8/2011	242	FM		242
2 04	26	017		26	018		6/8/2011	184	FM		184
2 04	26	018		26	019		6/8/2011	182	FM		182
2 04	26	020		26	021		6/8/2011	178	FM		178
2 04	26	021		26	022		6/8/2011	138	FM		138
2 04	26	022		26	023		6/8/2011	306	FM		306
2 04	26	023		26	024		6/8/2011	300	FM		300
2 04	26	024		26	025		6/8/2011	300	FM		300
2 04	26	027		26	028		6/8/2011	164	FM		164
2 04	26	030		26	031		6/8/2011	245	FM		245
2 04	26	031		26	032		6/8/2011	300	FM		300
2 04	31	031		31	032		6/8/2011	300	FM		300
2 04	31	031		31	052		6/8/2011	69	FM		69
2 04	31	052		31	053		6/8/2011	81	FM		81
2 04	31	053		31	054		6/8/2011	71	FM		71
2 04	31	054		31	055		6/8/2011	54	FM		54
2 04	31	055		31	056		6/8/2011	185	FM		185
2 04	31	056		31	057		6/8/2011	250	FM		250
2 04	31	057		31	058		6/8/2011	286	FM		286
2 04	31	058		31	059		6/8/2011	232	FM		232
2 04	31	059		31	060		6/8/2011	232	FM		232
2 04	31	060		31	061		6/8/2011	229	FM		229
2 04	31	061		31	062	D	6/8/2011	10	FM		10
2 05	25	158		25	159		6/8/2011	233	FM		233
2 05	25	159		25	160		6/8/2011	305	FM		305
2 05	25	160		26	040		6/8/2011	300	FM		300
5 48	12	038		13	168		6/8/2011	590	FM		590
5 49	12	038		12	039		6/8/2011	102	FM		102
5 49	12	039		12	040		6/8/2011	303	FM		303
2 01	31	003		31	004		6/9/2011	338	FM		338
2 01	31	003		35	039		6/9/2011	250	FM		250
2 01	31	003		35	046		6/9/2011	78	FM		78
2 01	31	004		31	006		6/9/2011	151	FM		151
2 01	31	005		31	006		6/9/2011	294	FM		294
2 01	31	044		31	048		6/9/2011	165	FM		165
2 01	31	045		31	046		6/9/2011	300	FM		300
2 01	31	046		31	047		6/9/2011	350	FM		350
2 01	31	048		31	049		6/9/2011	276	FM		276
2 01	35	037		35	038		6/9/2011	250	FM		250
2 01	35	038		35	043		6/9/2011	125	FM		125
2 01	35	039		35	043		6/9/2011	125	FM		125
2 01	35	043		35	044		6/9/2011	133	FM		133
2 01	35	044		35	045	C	6/9/2011	162	FM		162
2 04	26	019		26	026		6/9/2011	273	FM		273

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
2 04	26	025		26	026		6/9/2011	273	FM		273
2 04	26	026		26	029		6/9/2011	238	FM		238
2 04	26	028		26	029		6/9/2011	226	FM		226
2 04	26	032		26	033		6/9/2011	287	FM		287
2 05	25	161		25	168		6/9/2011	130	FM		130
2 05	25	167		25	168		6/9/2011	208	FM		208
2 05	25	168		25	169		6/9/2011	330	FM		330
2 05	25	169		26	038		6/9/2011	287	FM		287
2 06	25	145		25	146		6/9/2011	245	FM		245
2 06	25	146		25	147		6/9/2011	246	FM		246
2 06	25	147		25	150		6/9/2011	248	FM		248
2 06	25	148		25	150		6/9/2011	234	FM		234
2 06	25	149		25	150		6/9/2011	299	FM		299
2 06	25	149		26	182		6/9/2011	259	FM		259
2 06	25	150		25	151		6/9/2011	339	FM		339
2 06	25	151		25	152	S	6/9/2011	307	FM		307
2 06	25	153	S	25	154		6/9/2011	328	FM		328
2 07	26	061		26	062		6/9/2011	323	FM		323
2 07	26	062		26	063		6/9/2011	327	FM		327
2 07	26	063		26	064		6/9/2011	323	FM		323
2 07	26	064		26	065		6/9/2011	323	FM		323
2 07	26	072		26	073		6/9/2011	322	FM		322
2 07	26	073		26	074		6/9/2011	318	FM		318
2 07	26	074		26	075		6/9/2011	316	FM		316
2 07	26	075		26	076		6/9/2011	325	FM		325
2 01	31	044		31	045		6/10/2011	202	FM		202
5 17	10	012		10	044		6/10/2011	175	FM		175
5 17	10	042		10	043		6/10/2011	165	FM		165
5 17	10	043		10	044		6/10/2011	135	FM		135
5 17	10	044		10	045		6/10/2011	300	FM		300
5 17	10	045		10	046		6/10/2011	281	FM		281
5 17	10	046		10	047		6/10/2011	351	FM		351
5 17	10	047		10	048		6/10/2011	175	FM		175
5 49	12	040		12	041	S	6/10/2011	300	FM		300
5 49	12	042	S	12	108		6/10/2011	42	FM		42
5 49	12	043	S	12	108		6/10/2011	53	FM		53
2 01	31	002		31	016		6/13/2011	211	FM		211
2 01	31	006		31	007		6/13/2011	172	FM		172
2 01	31	007		31	009		6/13/2011	175	FM		175
2 01	31	008		31	009		6/13/2011	300	FM		300
2 01	31	009		31	010		6/13/2011	125	FM		125
2 01	31	010		31	037		6/13/2011	140	FM		140
2 01	31	011		31	015		6/13/2011	230	FM		230
2 01	31	011		31	037		6/13/2011	215	FM		215
2 01	31	012		31	014		6/13/2011	82	FM		82
2 01	31	012		31	042		6/13/2011	110	FM		110
2 01	31	013		31	014		6/13/2011	203	FM		203
2 01	31	014		31	015		6/13/2011	200	FM		200
2 01	31	015		31	016		6/13/2011	205	FM		205
2 01	31	016		31	017		6/13/2011	282	FM		282

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
2 01	31	016		31	035		6/13/2011	300	FM		300
2 01	31	037		31	038		6/13/2011	190	FM		190
2 02	31	017		31	018		6/13/2011	217	FM		217
2 02	31	018		31	019		6/13/2011	223	FM		223
2 02	31	019		31	020		6/13/2011	265	FM		265
2 02	31	019		31	050		6/13/2011	142	FM		142
2 02	31	020		31	021		6/13/2011	235	FM		235
2 02	31	021		31	022		6/13/2011	295	FM		295
2 02	31	022		31	023		6/13/2011	352	FM		352
2 06	26	049		26	050		6/13/2011	296	FM		296
2 06	26	050		26	051		6/13/2011	285	FM		285
2 06	26	051		26	052		6/13/2011	312	FM		312
2 06	26	052		26	053		6/13/2011	301	FM		301
2 06	26	053		26	054		6/13/2011	300	FM		300
5 17	10	048		10	049		6/13/2011	92	FM		92
5 17	10	049		10	067		6/13/2011	150	FM		150
5 17	10	066		10	067		6/13/2011	350	FM		350
5 49	12	043		12	044		6/13/2011	200	FM		200
5 49	12	044		12	145		6/13/2011	127	FM		127
5 49	12	129		12	145		6/13/2011	153	FM		153
5 50	12	045		12	129		6/13/2011	320	FM		320
5 50	12	045		12	046		6/13/2011	240	FM		240
5 50	12	046		12	047		6/13/2011	300	FM		300
5 50	12	047		12	048		6/13/2011	256	FM		256
5 50	12	048		12	049		6/13/2011	375	FM		375
2 02	31	023		31	024		6/14/2011	352	FM		352
2 02	31	024		31	025		6/14/2011	350	FM		350
2 03	30	020		31	027		6/14/2011	255	FM		255
2 03	31	025		31	026		6/14/2011	441	FM		441
2 03	31	026		31	027		6/14/2011	126	FM		126
2 03	31	027		31	028		6/14/2011	151	FM		151
2 03	31	028		31	029		6/14/2011	335	FM		335
2 03	31	029		31	030		6/14/2011	228	FM		228
2 06	26	048		26	055		6/14/2011	248	FM		248
2 06	26	054		26	055		6/14/2011	363	FM		363
2 06	26	055		26	056		6/14/2011	348	FM		348
2 06	26	056		26	057		6/14/2011	340	FM		340
2 06	26	057		26	058		6/14/2011	342	FM		342
2 07	25	138		25	139		6/14/2011	306	FM		306
2 07	25	142		25	144		6/14/2011	149	FM		149
2 07	25	143		25	144		6/14/2011	100	FM		100
2 07	26	066		26	068		6/14/2011	151	FM		151
2 07	26	067		26	068		6/14/2011	112	FM		112
2 08	19	169		25	135		6/14/2011	192	FM		192
2 08	25	133		25	134		6/14/2011	119	FM		119
2 08	25	134		25	135		6/14/2011	305	FM		305
5 17	09	126		09	127		6/14/2011	330	FM		330
5 17	09	126		10	067		6/14/2011	9126	FM		9126
5 17	09	127		09	128		6/14/2011	330	FM		330
5 17	09	128		09	129		6/14/2011	335	FM		335

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
5 17	09	129		14	031		6/14/2011	300	FM		300
2 03	26	001		26	002		6/15/2011	300	FM		300
2 03	26	002		26	004		6/15/2011	260	FM		260
2 03	26	002		31	030		6/15/2011	230	FM		230
2 03	26	003		26	004		6/15/2011	249	FM		249
2 03	26	004		26	006		6/15/2011	300	FM		300
2 03	26	005		26	006		6/15/2011	300	FM		300
2 03	26	006		26	008		6/15/2011	290	FM		290
2 03	26	007		26	008		6/15/2011	300	FM		300
2 03	26	008		26	009		6/15/2011	200	FM		200
2 07	19	166		20	068		6/15/2011	273	FM		273
2 07	19	166		25	137		6/15/2011	190	FM		190
2 07	19	167		19	168		6/15/2011	211	FM		211
2 07	19	168		20	074		6/15/2011	250	FM		250
2 07	20	068		26	078		6/15/2011	245	FM		245
2 07	25	136		25	137		6/15/2011	229	FM		229
2 08	19	169		19	170	S	6/15/2011	30	FM		30
2 08	19	173	S	19	175		6/15/2011	117	FM		117
2 08	19	174		19	175		6/15/2011	172	FM		172
2 08	19	175		19	176		6/15/2011	351	FM		351
2 08	19	176		19	177		6/15/2011	193	FM		193
2 08	20	078		20	079		6/15/2011	275	FM		275
2 08	20	079		20	080		6/15/2011	261	FM		261
2 08	20	080		20	081		6/15/2011	51	FM		51
2 08	20	081		20	082		6/15/2011	267	FM		267
2 08	20	082		20	083		6/15/2011	299	FM		299
2 08	20	083		20	084		6/15/2011	281	FM		281
2 08	20	092		20	093		6/15/2011	248	FM		248
5 51	12	049		12	113		6/15/2011	600	FM		600
5 53	12	104		12	144		6/15/2011	143	FM		143
5 53	12	104		12	106	M	6/15/2011	275	FM		275
5 53	12	106	M	12	107	M	6/15/2011	415	FM		415
5 53	12	099		12	144		6/15/2011	335	FM		335
5 55	12	107	M	12	111		6/15/2011	405	FM		405
5 55	12	111		12	112		6/15/2011	80	FM		80
5 55	12	112		12	113		6/15/2011	480	FM		480
2 03	26	009		26	034		6/16/2011	200	FM		200
2 04	26	033		26	034		6/16/2011	303	FM		303
2 04	26	034		26	035		6/16/2011	214	FM		214
2 05	26	035		26	036		6/16/2011	230	FM		230
2 05	26	036		26	037		6/16/2011	202	FM		202
2 05	26	037		26	039		6/16/2011	250	FM		250
2 05	26	039		26	041		6/16/2011	162	FM		162
2 05	26	040		26	041		6/16/2011	290	FM		290
2 05	26	041		26	043		6/16/2011	200	FM		200
2 05	26	043		26	044		6/16/2011	338	FM		338
2 05	26	044		26	045		6/16/2011	338	FM		338
2 05	26	045		26	046		6/16/2011	10	FM		10
2 05	26	046		26	047		6/16/2011	310	FM		310
2 08	19	177		19	183		6/16/2011	350	FM		350

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
2 08	19	178		19	179		6/16/2011	153	FM		153
2 08	19	179		19	180		6/16/2011	200	FM		200
2 08	19	180		19	181		6/16/2011	79	FM		79
2 08	19	181		19	182		6/16/2011	296	FM		296
2 08	19	181		20	096		6/16/2011	260	FM		260
2 08	19	182		19	183		6/16/2011	98	FM		98
2 08	19	183		19	184		6/16/2011	130	FM		130
2 08	19	184		19	185		6/16/2011	240	FM		240
2 08	19	185		19	186		6/16/2011	238	FM		238
2 08	19	186		19	187		6/16/2011	200	FM		200
2 08	19	187		19	189		6/16/2011	7	FM		7
2 08	19	188		19	189		6/16/2011	317	FM		317
2 08	19	189		20	087		6/16/2011	241	FM		241
5 17	14	031		14	032		6/16/2011	362	FM		362
5 53	12	105		12	134		6/16/2011	50	FM		50
5 53	12	132		12	133	P	6/16/2011	460	FM		460
5 53	12	133	P	12	134		6/16/2011	275	FM		275
5 53	12	134		12	135		6/16/2011	415	FM		415
5 55	12	121		12	135		6/16/2011	396	FM		396
2 05	26	047		26	059		6/17/2011	315	FM		315
2 06	25	154		25	156		6/17/2011	332	FM		332
2 06	25	155		25	156		6/17/2011	136	FM		136
2 06	25	156		25	157		6/17/2011	340	FM		340
2 06	25	157		26	059		6/17/2011	310	FM		310
2 06	26	058		26	059		6/17/2011	410	FM		410
2 06	26	059		26	060	M	6/17/2011	363	FM		363
2 06	26	060		26	069	M	6/17/2011	319	FM		319
2 07	20	068		20	069		6/17/2011	280	FM		280
2 07	20	069		20	070		6/17/2011	126	FM		126
2 07	20	069		26	077		6/17/2011	194	FM		194
2 07	20	070		20	075		6/17/2011	143	FM		143
2 07	20	074		20	075		6/17/2011	256	FM		256
2 07	20	075		20	076		6/17/2011	284	FM		284
2 07	25	139		26	070		6/17/2011	345	FM		345
2 07	26	069		26	070		6/17/2011	287	FM		287
2 07	26	070		26	077		6/17/2011	350	FM		350
2 07	26	076		26	077		6/17/2011	320	FM		320
2 08	20	076		20	077		6/17/2011	259	FM		259
2 08	20	077		20	085		6/17/2011	301	FM		301
2 08	20	084		20	085		6/17/2011	300	FM		300
2 10	20	053		20	054		6/17/2011	228	FM		228
2 10	20	054		20	055	M	6/17/2011	238	FM		238
2 10	20	054		20	153		6/17/2011	14	FM		14
2 10	20	055	M	20	146		6/17/2011	98	FM		98
2 11	20	060		20	061		6/17/2011	414	FM		414
2 11	20	061		20	062		6/17/2011	185	FM		185
2 11	20	062		20	063		6/17/2011	323	FM		323
2 11	20	063		20	146		6/17/2011	236	FM		236
2 11	20	152		20	153		6/17/2011	419	FM		419
6W01	03	114		03	117		6/17/2011	264	FM		264

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
6W01	03	115		07	018		6/17/2011	200	FM		200
6W01	03	115		03	116		6/17/2011	140	FM		140
6W01	03	116		03	117		6/17/2011	145	FM		145
6W01	07	014		07	015		6/17/2011	118	FM		118
6W01	07	015		07	016		6/17/2011	358	FM		358
6W01	07	016		07	017		6/17/2011	90	FM		90
6W01	07	017		07	018		6/17/2011	265	FM		265
2 08	20	064		20	066		6/20/2011	107	FM		107
2 08	20	085		20	086		6/20/2011	249	FM		249
2 08	20	086		20	088		6/20/2011	226	FM		226
2 08	20	087		20	088		6/20/2011	221	FM		221
2 08	20	088		20	089		6/20/2011	298	FM		298
2 08	20	089		20	090		6/20/2011	308	FM		308
2 08	20	090		20	091		6/20/2011	244	FM		244
2 08	20	091		20	094		6/20/2011	256	FM		256
2 08	20	093		20	094		6/20/2011	240	FM		240
2 08	20	094		20	095		6/20/2011	292	FM		292
2 11	20	063		20	064		6/20/2011	224	FM		224
2 11	20	066		20	067		6/20/2011	139	FM		139
2 11	20	067		20	095		6/20/2011	247	FM		247
2 11	20	150		20	151		6/20/2011	512	FM		512
2 11	20	151		20	152		6/20/2011	400	FM		400
3S21	19	023	M	20	095		6/20/2011	341	FM		341
3E07	24	065		24	066		6/20/2011	129	FM		129
3E07	24	066		24	067		6/20/2011	317	FM		317
3E07	24	067		24	069		6/20/2011	325	FM		325
3E07	24	068		24	069		6/20/2011	115	FM		115
3E07	24	079		24	080		6/20/2011	321	FM		321
3E07	24	080		24	081		6/20/2011	327	FM		327
6W02	07	025	C	07	026		6/20/2011	150	FM		150
6W02	07	026		07	029		6/20/2011	149	FM		149
6W02	07	027		07	028		6/20/2011	250	FM		250
6W02	07	028		07	029		6/20/2011	202	FM		202
6W02	07	029		07	034		6/20/2011	106	FM		106
6W02	07	030		07	031		6/20/2011	250	FM		250
6W02	07	031		07	032		6/20/2011	225	FM		225
6W02	07	032		07	033		6/20/2011	53	FM		53
6W02	07	033		07	034		6/20/2011	205	FM		205
6W02	07	039		07	040		6/20/2011	333	FM		333
6W02	07	040		07	041		6/20/2011	195	FM		195
6W02	07	041		07	042		6/20/2011	200	FM		200
6W02	07	042		07	043		6/20/2011	106	FM		106
6W02	07	043		07	044		6/20/2011	160	FM		160
3E02	24	001		24	002		6/21/2011	137	FM		137
3E02	24	001		24	164	C	6/21/2011	187	FM		187
3E02	24	002		24	003		6/21/2011	253	FM		253
3E02	24	003		24	004		6/21/2011	307	FM		307
3E02	24	004		24	005		6/21/2011	296	FM		296
3E07	24	069		24	073		6/21/2011	258	FM		258
3E07	24	070		24	071		6/21/2011	197	FM		197

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
3E07	24	071		24	072		6/21/2011	280	FM		280
3E07	24	072		24	073		6/21/2011	278	FM		278
3E07	24	073		24	077		6/21/2011	266	FM		266
3E07	24	074		24	075		6/21/2011	278	FM		278
3E07	24	075		24	171		6/21/2011	190	FM		190
3E07	24	076		24	077		6/21/2011	152	FM		152
3E07	24	076		24	171		6/21/2011	42	FM		42
3E07	24	077		24	078		6/21/2011	169	FM		169
3E07	24	078		24	082		6/21/2011	156	FM		156
3E07	24	081		24	082		6/21/2011	182	FM		182
3E07	24	082		25	029		6/21/2011	169	FM		169
3E07	25	028		25	031		6/21/2011	287	FM		287
3E07	25	028		25	200		6/21/2011	100	FM		100
3E07	25	029		25	172		6/21/2011	277	FM		277
3E07	25	030		25	031		6/21/2011	322	FM		322
3E07	25	030		25	172		6/21/2011	54	FM		54
3E10	25	011		25	205		6/21/2011	130	FM		130
3E10	25	012		25	017		6/21/2011	279	FM		279
3E10	25	012		25	205		6/21/2011	130	FM		130
3E10	25	013		25	016		6/21/2011	135	FM		135
3E10	25	014		25	015		6/21/2011	262	FM		262
3E10	25	015		25	016		6/21/2011	262	FM		262
3E10	25	016		25	017		6/21/2011	200	FM		200
6W01	03	117		07	023		6/21/2011	368	FM		368
6W02	07	023		07	024		6/21/2011	144	FM		144
6W02	07	024		07	036		6/21/2011	124	FM		124
6W02	07	034		07	035		6/21/2011	50	FM		50
6W02	07	035		07	036		6/21/2011	100	FM		100
6W02	07	044		07	045		6/21/2011	35	FM		35
6W02	07	045		07	046		6/21/2011	150	FM		150
6W02	07	046		07	047		6/21/2011	200	FM		200
6W02	07	047		07	048		6/21/2011	150	FM		150
6W02	07	048		07	049		6/21/2011	120	FM		120
6W02	07	049		07	054		6/21/2011	100	FM		100
6W02	07	050		07	051		6/21/2011	320	FM		320
6W02	07	051		07	053		6/21/2011	100	FM		100
6W02	07	052		07	053		6/21/2011	322	FM		322
6W02	07	053		07	054		6/21/2011	100	FM		100
3E02	24	008		24	009		6/22/2011	99	FM		99
3E02	24	008		24	163	D	6/22/2011	80	FM		80
3E02	24	009		24	010		6/22/2011	196	FM		196
3E02	24	009		24	166	D	6/22/2011	167	FM		167
3E02	24	010		24	011		6/22/2011	282	FM		282
3E02	24	011		24	012		6/22/2011	297	FM		297
3E02	24	012		24	013		6/22/2011	288	FM		288
3E03	24	016		24	017		6/22/2011	295	FM		295
3E03	24	017		24	018		6/22/2011	289	FM		289
3E03	24	018		24	019		6/22/2011	275	FM		275
3E03	24	019		24	020		6/22/2011	287	FM		287
3E05	24	023		24	024		6/22/2011	293	FM		293

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
3E05	24	023		24	146		6/22/2011	163	FM		163
3E05	24	024		24	034		6/22/2011	252	FM		252
3E05	24	025		24	026		6/22/2011	107	FM		107
3E05	24	026		24	027		6/22/2011	209	FM		209
3E05	24	027		24	028		6/22/2011	310	FM		310
3E05	24	028		24	030		6/22/2011	235	FM		235
3E05	24	030		24	031		6/22/2011	265	FM		265
3E05	24	031		24	032		6/22/2011	289	FM		289
3E05	24	032		24	033		6/22/2011	148	FM		148
3E05	24	034		24	035		6/22/2011	300	FM		300
3E05	24	035		24	037		6/22/2011	141	FM		141
3E05	24	036		24	037		6/22/2011	206	FM		206
3E05	24	037		24	038		6/22/2011	220	FM		220
3E05	24	038		24	042		6/22/2011	56	FM		56
3E05	24	039		24	040		6/22/2011	267	FM		267
3E05	24	040		24	041		6/22/2011	250	FM		250
3E05	24	041		24	042		6/22/2011	237	FM		237
3E05	24	041		24	162	D	6/22/2011	31	FM		31
3E05	24	042		24	043		6/22/2011	160	FM		160
3E06	24	043		24	165		6/22/2011	160	FM		160
3E06	24	044		24	045		6/22/2011	300	FM		300
3E06	24	044		24	165		6/22/2011	139	FM		139
3E06	24	045		24	059		6/22/2011	300	FM		300
3E06	24	046		24	049		6/22/2011	157	FM		157
3E06	24	047		24	048		6/22/2011	165	FM		165
3E06	24	048		24	049		6/22/2011	155	FM		155
3E06	24	049		24	050		6/22/2011	77	FM		77
3E06	24	050		24	052		6/22/2011	190	FM		190
3E06	24	051		24	052		6/22/2011	186	FM		186
3E06	24	052		24	053		6/22/2011	77	FM		77
3E06	24	053		24	054		6/22/2011	76	FM		76
3E06	24	054		24	055		6/22/2011	188	FM		188
3E06	24	055		24	057		6/22/2011	193	FM		193
3E06	24	056		24	057		6/22/2011	300	FM		300
3E06	24	057		24	058		6/22/2011	195	FM		195
3E06	24	058		24	059		6/22/2011	195	FM		195
3E11	25	001		25	002		6/22/2011	275	FM		275
3E11	25	002		25	003		6/22/2011	261	FM		261
3E11	25	003		25	187	D	6/22/2011	125	FM		125
6W02	07	036		07	037		6/23/2011	75	FM		75
6W02	07	037		07	038		6/23/2011	205	FM		205
6W02	07	054		07	055		6/23/2011	100	FM		100
6W02	07	055		07	058		6/23/2011	115	FM		115
6W02	07	056		07	057		6/23/2011	160	FM		160
6W02	07	057		07	058		6/23/2011	115	FM		115
6W02	07	058		07	059		6/23/2011	30	FM		30
6W02	07	038		07	060		6/23/2011	327	FM		327
6W02	07	059		07	060		6/23/2011	135	FM		135
6W02	07	060		07	061		6/23/2011	127	FM		127
6W02	07	061		07	062		6/23/2011	300	FM		300

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
6W02	07	062		07	063		6/23/2011	349	FM		349
6W02	07	063		07	064		6/23/2011	349	FM		349
6W02	07	064		07	065		6/23/2011	349	FM		349
6W02	07	065		07	066		6/23/2011	349	FM		349
6W02	07	066		07	067		6/23/2011	121	FM		121
6W02	07	067		07	068		6/23/2011	204	FM		204
6W03	07	068		07	069		6/23/2011	129	FM		129
6W03	07	069		07	070		6/23/2011	179	FM		179
3E02	24	005		24	006		6/24/2011	315	FM		315
3E02	24	006		24	007		6/24/2011	179	FM		179
3E02	24	007		24	014		6/24/2011	181	FM		181
3E02	24	013		24	014		6/24/2011	290	FM		290
3E03	24	015		24	021		6/24/2011	180	FM		180
3E03	24	020		24	021		6/24/2011	300	FM		300
3E03	24	021		24	022		6/24/2011	185	FM		185
3E03	24	022		24	060		6/24/2011	200	FM		200
3E03	24	060		24	061		6/24/2011	331	FM		331
3E03	24	061		24	063		6/24/2011	334	FM		334
3E03	24	062		24	063		6/24/2011	140	FM		140
3E03	24	063		24	064		6/24/2011	303	FM		303
3E03	24	064		25	034		6/24/2011	320	FM		320
3E03	25	033		25	034		6/24/2011	193	FM		193
3E03	25	034		25	203		6/24/2011	40	FM		40
3E06	24	059		24	060		6/24/2011	307	FM		307
6W03	07	070		07	071		6/27/2011	320	FM		320
6W03	07	071		07	072		6/27/2011	320	FM		320
6W03	07	072		07	073		6/27/2011	284	FM		284
6W03	07	074		07	075		6/27/2011	157	FM		157
6W03	07	073		07	076		6/27/2011	296	FM		296
6W03	07	075		07	076		6/27/2011	263	FM		263
6W03	07	076		07	077		6/27/2011	257	FM		257
6W03	07	077		07	078		6/27/2011	252	FM		252
6W03	07	078		07	079		6/27/2011	314	FM		314
6W05	12	005		12	138	D	6/27/2011	13	FM		13
6W05	12	005		12	006		6/27/2011	218	FM		218
6W05	12	006		12	007		6/27/2011	218	FM		218
6W05	12	007		12	008	P	6/27/2011	323	FM		323
3E02	24	014		24	167		6/28/2011	47	FM		47
3E02	24	167		24	168		6/28/2011	522	FM		522
3E02	24	168		24	169		6/28/2011	544	FM		544
3E02	24	169		24	170		6/28/2011	421	FM		421
3E02	24	170		25	195		6/28/2011	468	FM		468
3E02	25	194		25	195		6/28/2011	324	FM		324
3E10	25	017		25	021		6/28/2011	50	FM		50
3E10	25	018		25	019		6/28/2011	250	FM		250
3E10	25	019		25	020		6/28/2011	311	FM		311
3E10	25	020		25	021		6/28/2011	50	FM		50
3E10	25	021		25	022		6/28/2011	349	FM		349
3E10	25	022		25	023		6/28/2011	349	FM		349
3E10	25	023		25	024		6/28/2011	329	FM		329

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

Basin	MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY4 Footage
3E10	25	024		25	025		6/28/2011	332	FM		332
3E10	25	025		25	026		6/28/2011	347	FM		347
6S25	12	030	M	12	031		6/28/2011	380	FM		380
6W03	07	080		07	081		6/28/2011	215	FM		215
6W04	07	081		12	004		6/28/2011	331	FM		331
6W04	12	004		12	009	P	6/28/2011	357	FM		357
6W04	12	009	P	12	010		6/28/2011	332	FM		332
6W05	12	010		12	011		6/28/2011	150	FM		150
6W05	12	011		12	031		6/28/2011	275	FM		275
3E02	25	193		25	194		6/29/2011	304	FM		304
3E03	25	035		25	036		6/29/2011	351	FM		351
3E03	25	035		25	203		6/29/2011	352	FM		352
3E07	25	036		25	186		6/29/2011	205	FM		205
3E07	25	186		25	193		6/29/2011	35	FM		35
1 23	21	089		22	077		6/30/2011	279	FM		279
4S03	12	067		12	068		6/30/2011	341	FM		341
7S04	06	129	M	06	130		6/30/2011	200	FM		200
A 07	03	096		03	097		6/30/2011	313	FM		313
									Total Miles:		177.79

Appendix D.3

Summary of Features Included the City's Sewer Ordinance Update
Effective July 23, 2009

1. 13.16.010: Requires all El Cajon inhabitants to be responsible for reporting sewer spills whether public or private and to take preventive measures to minimize or contain the spill until a professional plumber or City personnel respond to the reported incident. ***This provision makes it illegal to not report a spill in compliance with Regional Water Quality control Board Order No. R9-2007-0001.***

2. 13.16.012: Allows the Public Works Director under certain circumstances to waive any requirements or responsibilities set forth in the sewer ordinance.

3. 13.16.014: All building remodels that have an increase in plumbing fixture units or an increase of 400 or more square feet in floor area will be subject to a lateral video inspection and/or repair if needed. The following may be required based on results of the video inspection:

    a. Orders to repair if deemed necessary by the City with time limitations.
    b. If structural repairs are required it will be necessary to install a double cleanout plug at the property line.
    c. A grease/sand interceptor or trap will be required if the remodel is for a food serving establishment (FSE).

4. 13.16.014: Requires the public works director to keep records and issues permits for all private sewer or satellite collection system construction.

5. 13.16.015: Requires any work performed in these provisions to be performed by a licensed contractor.

6. 13.16.016: Requires any building failing a lateral inspection to affect repairs within 70 days (30+30+10) of notification.

7. 13.16.030: Provides for violations to be deemed a "Public Nuisance" and includes legal and monetary remedies to affect repairs if ordered by the Director of Public Works. See El Cajon Municipal Code Chapter 1.16 for remedies.

8. 13.20.010: Adds new definitions to terms used with changes to the ordinance.

    a. Building Sewer Inspections
    b. Cleanout Plugs and Double Cleanout Plugs
    c. Common Interest Developments
    d. Notice to Repair
    e. Fats, Oils and Grease (FOG)

9. 13.20.060: requires the installation of a double cleanout at the property line in building sewers for new and remodel building sewers or where notices of repair may be in effect.

10. Old Chapters 13.20.070 through 13.20.080 were removed and replaced with Chapter 13-38 that establishes new controls and limitations for the disposal of fats, oils and grease (FOG).

11. 13.24.040: Was modified to modernize the requirements for the type of connection to a lower sewer lateral using a mechanical joint with a clamp.

12. New chapter 13.37- Sewer and Lateral Inspections

    a. Requires maintenance and inspection of building sewers for all land uses when any of the following occurs.
        i. At any occurrence of an overflow
        ii. Evidence that the sewer lateral has not been properly maintained
        iii. Existence of a public health threat
        iv. Addition of new plumbing fixtures
        v. Addition of 400 or more square feet of floor area
    b. Exceptions to the above are allowed under certain circumstances and the Director of Public Works may waive certain requirements.
    c. Periodic inspection required for all common interest residential and all non-residential properties every 10 years.
    d. Defines lateral defects requiring repair.
    e. Permits access to private property for the purposes of inspecting building sewer.
    f. Establishes requirements and content of Inspection Reports
    g. Establishes authority to order repairs on private laterals and sets out the procedures for such an order.
    h. Provides for administrative guideline to be used for inspection and enforcement. Guidelines are in development and have not been adopted by the City Council.

13. New Chapter 13.38 “FOG” Ordinance includes the following provisions:

    a. Affects FSE’s only
    b. Defines certain terms used in the ordinance.
    c. Requires Grease/sand Interceptors for all new construction and for remodels. Allows grease traps under certain circumstances.
    d. Establishes triggers for installation of interceptors in existing facilities.
    e. Requires removal of garbage disposals for all existing establishments by January 2010. Prohibits garbage disposals in all new establishments.
    f. Establishes design requirements for interceptors.
    g. Establishes maintenance requirements and periodic inspection requirements.
    h. Sets forth enforcement and penalty guidelines
    i. Sets out guidelines for required Best Management Practices for handling FOG.

Appendix D.4

ORDINANCE NO. 4930

AN ORDINANCE REPEALING CHAPTERS 13.16, 13.20, 13.24, AND 13.28 OF THE EL CAJON MUNICIPAL CODE AND ADDING NEW CHAPTERS 13.16, 13.20, 13.24, 13.28, 13.37, AND 13.38 TO THE EL CAJON MUNICIPAL CODE RELATED TO SEWERS AND SEWAGE DISPOSAL.

THE CITY COUNCIL OF THE CITY OF EL CAJON DOES ORDAIN AS FOLLOWS:

Section 1. Chapter 13.16 of the El Cajon Municipal Code, is hereby repealed.

Section 2. A new Chapter 13.16 of the El Cajon Municipal Code is hereby added to read as follows:

13.16 SEWERS AND SEWAGE DISPOSAL – IN GENERAL

13.16.010 Compliance.

No person shall cause, suffer or permit the disposal of sewage, human excrement or other liquid wastes in any place or manner except through or by means of an approved plumbing and drainage system and an approved sewage disposal system installed and maintained in accordance with the provisions of the California Plumbing Code and Chapters 13.16 through 13.40.

No person shall allow sewage to escape or flow from a building, building drain, building sewer, soil line, or sewer lateral. An escape of sewage from a building, building drain, building sewer, soil line, or sewer lateral shall be considered a threat to the public health and welfare and shall be deemed a nuisance.

It shall be the responsibility of all residents, business owners, employees of local businesses, and citizens of El Cajon to notify the city of any discharge of unsanitary waste from a building sewer, lateral, cleanout plug or sewer main by stoppage or other means and take all measures to prevent further discharge, contain, or clean up such a discharge until a professional plumbing company or local authority has responded to the incident.

13.16.011 Delegations of power.

Whenever a power is granted to or imposed upon the director of public works under this title, such power may be exercised or the duty may be performed by a deputy or an authorized person unless expressly provided otherwise.

13.16.012 Restrictions on allowance of variances from title.

Whenever the director of public works is permitted by this title to grant an exception to any of the requirements of this title, such exceptions shall be granted by

(Continued on Page 2)

him, only if he finds that literal compliance is impossible or impractical because of peculiar conditions, in no way the fault of the person requesting such exceptions, and that the purpose of this title may be accomplished and public health and safety secured by alternative construction or procedure, in which case the director of public works may permit such alternative construction or procedure.

13.16.013 Conformation of facilities to title – new facilities.

All new public sewers, house connection sewers, and industrial liquid wastes pre-treatment plants shall conform to the requirements of this title unless specifically excepted.

13.16.014 Conformance - remodeling.

All remodeling of existing public sewers, building sewers, and industrial liquid wastes pre-treatment plants shall conform to the requirements of this title, unless specifically excepted. All new buildings or building remodels that include an increase of plumbing fixture units are subject to the provisions of this title.

13.16.015 Records.

The director of public works shall keep a permanent record of all permits issued and all plans requiring approval under the provisions of this title. The director of public works shall establish and maintain accurate records indicating all sewers constructed with public funds and accurate records of all main line sewers constructed hereafter with private funds, and the person or properties originally benefiting from and responsible for the financing of such sewers.

13.16.016 Who may do work under title – work to be subject to inspection and approval.

All work permitted under the provisions of this title shall be constructed by a licensed contractor and shall be subject to inspection by and shall meet the approval of the director of public works.

13.16.017 Notice to remedy house connection sewer deficiency.

In the event that a building sewer or lower lateral fails to pass inspection and is subsequently placed in service, the permittee shall be given notice in writing of such failure to pass inspection and shall within ten (10) days from the date of such notice make the construction conform to the requirements of this title.

13.16.020 Certain sanitary facilities required for all buildings.

Every building shall have sinks, water closets, and other sanitary fixtures and facilities.

(Continued on Page 3)

13.16.030 Public nuisance.

The violation of any provision of this chapter is deemed to be a public nuisance and may be abated in accordance with Chapter 1.16 of this code.

Section 3. Chapter 13.20 of the El Cajon Municipal Code is hereby repealed.

Section 4. A new Chapter 13.20 of the El Cajon Municipal Code is hereby added to read as follows:

13.20 SEWERS AND SEWAGE DISPOSAL – PUBLIC SEWERS GENERALLY

13.20.010 Definitions.

For purposes of Chapters 13.20 through 13.28, the following words and phrases have the meanings respectively ascribed to them by this section:

A. "B.O.D." This term, denoting biochemical oxygen demand, means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty (20) degrees centigrade, expressed in parts per million by weight.

B. "Building drain" means that part of the lowest horizontal piping of a drainage system that receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning two (2) feet outside the inner face of the building wall.

C. "Building sewer" means the extension from the building drain, beginning two (2) feet from the outside of the building, to the public sewer or other place of disposal including the lower lateral.

D. "Cleanout" means a sewer line fitting placed on a sewer to facilitate inspection, cleaning or maintenance of the sewer.

E. "Combined sewer" means a sewer receiving both surface runoff and sewage.

F. "Double cleanout" means the horizontal piping or pipe fittings that facilitate(s) the proper cleaning, inspection and physical access to the building sewer or lower lateral in either direction, upstream or downstream from the same entry point.

G. "Garbage" means solid wastes from the preparation, cooking and dispensing of food, and from the handling, storage of food waste or the sale of produce.

(Continued on Page 4)

H. "Industrial wastes" means the liquid wastes from industrial processes, as distinct from sanitary sewage.

I. "Licensed contractor" means a contractor having a valid license issued pursuant to the California Business and Professions Code which license includes the activities listed on the permit applied for.

J. "Lot" means any piece or parcel of land bounded and defined or shown upon a plot or deed recorded in the Office of the County Recorder, as a separate or individual parcel, except that in any event any building or structure covers more than a lot, the word "lot" shall include all such pieces or parcels of land upon which such building or structure is wholly or partly located.

K. "Lower sewer lateral" means horizontal pipe and fittings forming a connection to the sewer main line for the purposes of connecting a building sewer. The lower lateral extends from the public sewer main to the edge of the public right-of-way and terminates at a double cleanout.

L. "Natural outlet" means any outlet into a watercourse, pond, ditch, lake or other body of surface water or groundwater.

M. "pH" means the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

N. "Properly shredded garbage" means the wastes from the preparation and/or cooking of food that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half (½) inch in any dimension.

O. "Public sewer" means any main line sewer constructed in any street, highway, alley, place, or right-of-way dedicated for public use. Such term shall not include building drain, building sewer, or lower lateral.

P. "Director of public works" means any official agent, branch or function of the city responsible for the design, construction, maintenance and operation of sanitary sewers in the city. It shall include all officers, agents and employees engaged in sewer services.

Q. "Sanitary sewer" means a pipeline that carries wastewater and to which stormwaters, surface waters and groundwaters are not intentionally admitted.

R. "Sewage" means a combination of wastewater – carried waters from residences, business buildings, institutions and industrial establishments, together with such groundwaters, surface waters and stormwaters as may be present.

(Continued on Page 5)

S. "Sewage treatment plant" means any arrangement of devices and structures used for wastewater treatment.

T. "Sewer" or "Sewer line" means a pipe or conduit for carrying wastewater.

U. ""Sewerage works" means all facilities for collecting, pumping, treating and disposing of wastewater.

V. "Storm sewer or storm drain" means a pipeline that carries stormwaters and surface waters and drainage, but excludes wastewater and polluted industrial wastes.

W. "Suspended solids" means solids that either float on the surface or are in suspension in water, sewage or other liquids, and which are removable by laboratory filtering.

X. "Upper sewer lateral," also known as the "building sewer," means horizontal pipe and fittings forming a connection to the sewer main line for the purposes of connecting a building drain. The upper sewer lateral extends from the edge of public right-of-way and located by a double cleanout plug to the building drain.

Y. "Watercourse" means a channel in which a flow of water occurs, either continuously or intermittently.

Z. "Building sewer inspection" means an inspection of a building sewer lateral that consists of the retention of a pre-qualified contractor by the owner in order to visually examine and inspect a building sewer lateral in the manner deemed appropriate by the director of public works. Such an inspection shall, at a minimum, include the use of a closed-circuit television inspection device for the purposes of determining whether the building sewer lateral complies with the requirements of this chapter.

AA. "Commercial property" means any real property not used for residential purposes and not a common interest development.

BB. "Common interest development" means a development characterized by apartments, individual ownership of a condominium housing unit, or a residential parcel coupled with the shared ownership of (or right to use) common areas and facilities, including, but not limited to, condominium projects, community apartment projects, stock cooperatives and planned unit developments, which contains two (2) or more dwelling units and which has a building sewer lateral shared by two (2) more dwelling units.

(Continued on Page 6)

CC. "Notice to repair" means the notice and order issued by the director of public works to the owner advising that the owner appears to be in violation of the city of El Cajon Municipal Code with respect to the owner's building sewer lateral, or in violation of the code in the manner of the building sewer lateral's connection to the city sewer system, which notice and order directs the abatement of the identified apparent violation in a timely manner or, in the alternative, proof that the conditions identified in the notice and order do not exist.

DD. "Owner" means any person, partnership, association, corporation or fiduciary having legal title (or any partial interest) in any real property situated within the city.

13.20.020 Deposit of matter that will clog or obstruct flow of sewage.

No person shall place, throw or deposit or cause or permit to be placed, thrown or deposited in any public sewer, drain, catch basin, water closet, privy vault or cesspool, any dead animal, offal or garbage, fish, fruit or vegetable waste, pharmaceuticals, sand, liquid waste of any kind containing chemicals, greases, oil, tar or gasoline or any other objectionable materials or matter which will clog, obstruct, fill or prevent the effective use of or necessitate the frequent repair, clean out or flushing of such sewer, drain or catch basin.

13.20.030 Review and approval by director of public works prior to discharge of certain wastes into public sewers – preliminary treatment facilities.

The admission into the public sewers of any waters or waste having a five (5) day B.O.D. greater than five hundred (500) parts per million by weight, or containing more than five hundred (500) parts per million by weight of suspended solids, or containing any quantity of substances having the characteristics described in section 13.20.050, or having an average daily flow greater than two percent (2%) of the average daily sewage flow of the city, shall be subject to the review and approval of the director of public works. Where necessary, in the opinion of the director of public works, the owner shall provide, at his expense, such preliminary treatment as may be necessary to reduce the B.O.D. to five hundred (500) parts per million and the suspended solids to five hundred (500) parts per million by weight, or reduce objectionable characteristics or constituents to within the maximum limits provided for in section 13.20.050, or control the quantities and rates of discharge of such waters or wastes. Plans, specifications and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the director of public works, and no construction until such approval is obtained in writing.

Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

(Continued on Page 7)

13.20.040 Discharge of storm water or surface water.

No person shall discharge or cause to be discharged any storm water, surface water, groundwater, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters into any sanitary sewer.

Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers or to a natural outlet approved by the director of public works. Industrial cooling water or unpolluted process waters may be discharged, upon approval of the director of public works, to a storm sewer, sanitary sewer or natural outlet.

13.20.050 Discharge of certain wastes into public sewer prohibited.

Except as otherwise provided in Chapters 13.20 through 13.28, no person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer:

A. Any liquid or vapor having a temperature higher than one hundred fifty degrees (150º) Fahrenheit;

B. Any water or waste, which may contain more than one hundred (100) parts per million, by weight, of fat, oil or grease;

C. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas;

D. Any garbage of any kind that has not been property shredded;

E. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works;

F. Any waters or wastes having a pH lower than 5.0 or higher than 9.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works;

G. Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals or create any hazard in the receiving waters of the sewage treatment plant;

(Continued on Page 8)

H. Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant; and

I. Any noxious or malodorous gas or substance capable of creating a public nuisance.

13.20.060 Cleanout.

Where a building sewer is constructed, modified, remodeled or replaced, and is connected or reconnected to the lower sewer lateral or double cleanout shall be installed at the outside edge of the public right-of-way to facilitate the proper cleaning and inspection of the pipeline in either direction, upstream or downstream.

The above requirements also apply to all building sewers subject to a notice to repair.

13.20.070 Repealed.

13.20.080 Repealed.

13.20.090 Sewers carrying industrial wastes – construction and maintenance of manholes.

When required by the director of public works, the owner of any property served by a building sewer carrying industrial wastes shall install a suitable control manhole in the building sewer to facilitate observation, sampling and measurement of the wastes. Such manhole, when required, shall be accessible and safely located, and shall be constructed in accordance with plans approved by the director of public works. The manhole shall be installed by the owner at his expense, and shall be maintained by him so as to be safe and accessible at all times.

13.20.100 Analyses of wastes.

All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in sections 13.20.030 and 13.20.050 shall be determined in accordance with "Standard Methods for the Examination of Water and Sewage," and shall be sampled at the control manhole provided for in Section 13.20.090, or upon suitable samples taken at such control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected.

13.20.110 Repealed.

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13.20.115 Repealed.

13.20.120 Repealed.

13.20.130 Service to areas outside city – unauthorized use.

The use of the sewage disposal system of the city by persons without the authorization of the city council for the disposition of sewage from any area not within the corporate limits of the city is prohibited.

13.20.140 Applicability of chapter to agreements for treatment of industrial wastes.

No statement contained in Chapters 13.20 through 13.28 shall be construed as preventing any special agreement or arrangement between the city and any industrial concern whereby an industrial waste of unusual strength or character may be affected by the city for treatment, subject to payment therefor by the industrial concern.

13.20.150 Public sewer fees.

Public sewer fees shall be established from time to time by resolution or ordinance of the city council.

Section 5. Chapter 13.24 of the El Cajon Municipal Code is hereby repealed.

Section 6. A new Chapter 13.24 of the El Cajon Municipal Code is hereby added to read as follows:

13.24 SEWERS AND SEWAGE DISPOSAL – PUBLIC SEWER LATERALS

13.24.010 Soil line connection.

Where the plumbing soil line or building sewer joins a lower sewer lateral, stub or wye, such joint shall be made with a mechanical joint or clamp with a double cleanout according to current industry standards, or any other method approved by the director of public works. Minimum ground cover at such joint or at the property line shall be forty-two (42) inches unless otherwise specified by the engineering department of the city. The city's wastewater department shall not be obliged to connect to a soil line that is installed at less than the required minimum depth.

(Continued on Page 10)

13.24.020 Mains and laterals as part of same construction – installation requirements.

Where laterals are being installed by a general contractor as an integral part of the construction of a complete system of sewer mains, laterals and services under supervision of an inspection by the director of public works or his agents, the provisions of this chapter shall apply.

13.24.030 Connections to existing city sewer main.

Wherever an existing sewer main is to serve several lots in a private contract for improvements in a subdivision, the specific job of boring into the main and affixing a hub shall be performed by the city's wastewater department. The contractor shall pay the city a cash fee according to the current schedule of fees established by resolution by the city council for each entry into the main in advance of performance of the work. The contractor shall excavate to the sewer main at the site of the proposed lateral, exposing the sewer main pipe for the prescribed work by the city sanitation department. When the work by the city sanitation department is complete, the contractor shall be responsible for any damage to the main as a result of excavation, and shall have the same responsibility for any lateral installed as prescribed above as he has for any lateral built entirely for himself.

Section 7. Chapter 13.28 of the El Cajon Municipal Code is hereby repealed.

Section 8. A new Chapter 13.28 of the El Cajon Municipal Code is hereby added to read as follows:

13.28 SEWERS AND SEWAGE DISPOSAL – PUBLIC SEWER CONNECTIONS

13.28.010 Definitions.

For the purposes of this chapter, the following words and phrases shall have the meanings respectively ascribed to them by this section:

A. "Apartment" means a room or suite of rooms in a building occupied or designed for occupation by one family for living or sleeping purposes.

B. "Auto court" means any area, place or tract of land where two or more single family dwellings, or a building containing two or more apartments designated, used or intended wholly or in part for the accommodation of automobile transients are located and offered for hire, rent or lease. The term shall also include any motel.

(Continued on Page 11)

C. "Building or house" means a tent, penthouse, restroom or single or multiple family dwelling. These terms include all architectural structures.

D. "Bungalow court" means a group of four or more separate buildings, nor more than one story in height, each being erected or located on a parcel of ground under a separate roof, as a family domicile or residence and facing a common court.

E. "Family" means a person living alone or a group of two or more persons occupying an apartment.

F. "Motel" means a building of not more than one story, containing six or more guest rooms or apartments or combination thereof, each of which has a separate individual entrance leading directly from the outside of the building and is designed, used or intended wholly or in part for the accommodation of automobile transients.

G. "Multiple dwelling" means a building used or designated to be used as a dwelling for three or more families living independently of each other.

H. "Trailer court or auto and trailer camp" means an area or tract of land where space is rented or held out for rent to owners or users of trailer coaches or tent campers, furnishing their own camping equipment, or where free camping is permitted owners or users of trailer coaches or tent camp equipment for the purpose of securing their trade.

13.28.020 Unauthorized connections to public sewer prohibited.

No person other than the city, its agents and employees, shall connect any pipe, drain or sewer with any public sewer, or open or penetrate any public sewer in the city, or injure, break or remove or open any portion of any manhole, flush tank, inspection pipe or any other part of or appurtenance to any public sewer. Except where otherwise specifically provided in Chapters 13.20 through 13.28, the city shall install all connections to any existing public sewers.

13.28.030 Connection permits required.

No person shall connect to the sewage disposal lines of the city or discharge sewage into the sewer lines of the city or sewage disposal plant of the city without first obtaining a connection permit from the city.

(Continued on Page 12)

13.28.031 Connection to public sewer – required when sewer available.

All plumbing that receives the waste discharge from any building, structure or place of business, shall be connected to a public sewer.

All plumbing receiving water discharge that is connected to a private disposal system shall be connected to a public sewer within one (1) year after a public sewer becomes available.

13.28.032 When sewer not available.

The connection to a public sewer required by section 13.28.032 may be dispensed with when no public sewer is available and when, in the opinion of the Health Officer of the County, a private sewage disposal system would be adequate and safe and would not constitute a menace to public health.

13.28.033 When connection to approved private sewage disposal system required.

All plumbing receiving waste discharge, which is not connected to a public sewer shall be connected to a private sewage disposal system approved by the director of public works and health officer of the county.

13.28.034 Connections letting roof or surface water into sewers.

No person shall make or maintain any connection by pipes or otherwise with any public sewer by which roof or surface water may run into any such sewer.

13.28.035 Entering, disturbing or cleaning public sewers, structures or appurtenances.

No person shall, without authorization from the director of public works, open, enter, disturb or clean any public sewer, structure or appurtenance thereto.

13.28.036 Maintenance generally not to obstruct public sewer flow.

No person shall do, or cause to be done, any maintenance that would damage or obstruct the flow of any public sewer.

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13.28.037 Maintenance of private systems.

It shall be the responsibility of each property owner whose property is connected to the city sewer system to maintain continuously and satisfactorily in operation at his own expense, any house connection sewer, building sewer, private sewage disposal system, or industrial liquid waste pre-treatment facility. Failure to maintain such a private sewer system shall be sufficient grounds for immediate revocation of private sewer operating permit or industrial liquid waste permit of the person so failing and disconnection of his premises from the public sewer. Such a private sewer system is subject to required repairs as set out in a notice to repair issued pursuant to Section 13.20.010(DD). Users of private sewer disposal systems shall keep all cleanout caps and other access ports in place and properly sealed.

13.28.038 Septic tank or cesspool to be abandoned when main line connection obtained.

When a house connection sewer is constructed connecting a main line sewer, a house sewer which previously drained to a septic tank or cesspool, the septic tank or cesspool shall be abandoned and no portion of the house sewer shall then pass through or connect to such septic tank or cesspool

13.28.039 Procedure to effect abandonment of septic tank or cesspool.

When any septic tank or cesspool is abandoned, the top of such septic tank or cesspool shall be removed and the tank or cesspool shall be drained and filled with fine earth or sand and compacted and any pipes connecting to such tank or cesspool shall be cut directly outside of the tank or cesspool and shall be plugged with concrete. The abandonment of the septic tank or cesspool shall be complete before the house connection constructed shall be considered to have completely passed inspection.

13.28.040 Connection fees.

Before a permit shall be granted to connect to the sewage disposal system of the city, a connection fee and an inspection fee shall be paid to the city. Such fees shall be set from time to time by ordinance or resolution of the city council. Inspection fees shall be paid pursuant to Section 8.36.070 of this code.

13.28.080 Additional Connection Fee.

In addition to all other fees required by this title, a fee of two hundred dollars per connection shall be paid to this city before a permit shall be granted to connect to any sewer main of this city where such sewer main was constructed by the city or state or a component of the federal government.

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In addition to all other fees required by this title, except the fees set forth in the above paragraph, an additional fee per connection shall be paid to the city before a permit shall be granted to connect to any sewer line of the city where such sewer main or line was constructed pursuant to an agreement with the city to serve property other than that for which permission to connect is sought. Such a fee shall be set forth in such agreement.

13.28.090 Connections to mains constructed by Cajon Valley Union School District.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of two hundred dollars shall be paid the city before a permit shall be granted to connect to the sewer main located in Second Street from Dawnridge to Pepper Drive, and in Pepper Drive from Second Street to Peerless Drive, such sewer main having been constructed by the Cajon Valley Union School District.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of two hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer main located in Anza Street from a manhole which lies five hundred sixty feet south of the centerline of Washington Avenue to a manhole approximately four hundred fifty feet south of the westerly prolongation of the north line of the Anza Street school site as set forth on Record of Survey No. 5028, such sewer main having been constructed by the Cajon Valley Union School District.

13.28.100 Connections to Bradley-Johnson sewer.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of five hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer lines located as follows:

A. The sewer line extending easterly from the sewer outfall line along the future Bradley Avenue and southerly along Johnson Avenue to Vernon Way;

B. The sewer line extended to provide future service to unincorporated areas of the city as of October 1, 1967, on Steele Avenue and Vernon Way within the North Johnson Avenue 1913 Act Improvement District boundaries.

13.28.110 Connections to Pioneer Way-Cypress Lane sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of eight hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer lines located as follows:

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The sewer line in Pioneer Way extending northerly from the existing city boundary a distance of four hundred nine feet to Cypress Lane, and westerly in Cypress Lane to Johnson Avenue.

Said sewer line was constructed in connection with the Pioneer Way 1913 Act Improvement District, and the above fee shall be charged for each lateral to serve parcels not assessed for sewer mains.

13.28.120 Connections to Avocado South of Chase to DeWitt Court sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of six hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer lines located as follows:

The sewer line extending southerly along Avocado from nine hundred fifty feet south of the centerline of Chase Avenue to DeWitt Court.

Said sewer line was constructed by the city in connection with the improvement of Avocado south of Chase to south of DeWitt Court.

13.28.130 Connections to Fanita Drive sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of two hundred dollars for each dwelling unit or its equivalent shall be paid to the city before a permit shall be granted to connect to the trunk line sewer in Fanita Drive to be constructed by the city, or to any other sewer line which in turn uses the capacity of the Fanita Drive trunk sewer.

13.28.135 Connections to Bermuda Place sewer main.

In addition to all other fees required by this division, except the fee set forth in section 13.28.080, a fee of one thousand nine hundred ninety three dollars and six cents shall be paid to the city before a permit shall be granted to connect Assessor's Parcel No. 507-250-17 to the sewer main located in Bermuda Place. Said sewer line was constructed by the city in connection with the Bermuda Lane, et al. 1911 Act Improvement District (Assessment § 75).

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13.28.150 Connections to Melody Lane sewer main – Gull Place to Granite Hills Drive.

In addition to all other fees required by this chapter, except the fee set forth is section 13.28.080, a fee of nine dollars and twenty-two cents per front foot shall be paid to the city before a permit shall be granted to connect to the sewer line located on the southerly side of Melody Lane from the easterly subdivision boundary of Rancho Milagros, easterly to Granite Hills Drive. Said sewer line was constructed by the developers of Rancho Milagros subdivision.

13.28.155 Connections to Bradley Avenue sewer main – Johnson Avenue to Magnolia Avenue.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of thirty-six dollars per front foot shall be paid to the city before a permit shall be granted to connect the sewer line located in Bradley Avenue from Johnson Avenue to Magnolia Avenue. Said sewer line was constructed in connection with the Bradley-Cypress 1911 Act Improvement District.

13.28.160 Connections to Tilling Way sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of three thousand seven hundred twenty-four dollars and fourteen cents shall be paid to the city before a permit shall be granted to connect Assessor's Parcel No. 492-580-17 to the sewer line located in Tilling Way; and a fee of one thousand nine hundred forty-two dollars and one cent shall be paid to the city before a permit shall be granted to connect Assessor's Parcel No. 492-580-18 to the sewer line located in Tilling Way. Said sewer line was constructed by the city in connection with the Tilling Way 1911 Act Improvement District.

13.28.165 Connection to Chase Avenue sewer main.

In addition to all other fees required by this chapter, a fee of one thousand four hundred twenty dollars shall be paid to the city before a permit shall be granted to connect to the fifty-eight foot sewer lateral on the south side of Chase Avenue, one hundred seventy feet east of Mollison Avenue. The sewer lateral was constructed by the city in connection with street improvements as shown on drawing No. 11606 on file in the engineering division

Section 9. A new Chapter 13.37 of the El Cajon Municipal Code is hereby added to read as follows:

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13.37 SEWERS AND SEWAGE DISPOSAL – INSPECTIONS

13.37.020 Maintenance of private building sewer.

A. Maintenance of building sewer. Each owner shall maintain his building sewer lateral(s) free of displaced joints, open joints, root intrusion, substantial deterioration of the line, cracks, leaks, inflow, or infiltration of extraneous water, root intrusion, grease and sediment deposits, or any other similar conditions, defects, or obstructions likely to cause leakage or increase the chance for blockage of the building sewer.

B. Maintenance of septic tank. Each owner shall maintain his septic tank free of deterioration, corrosion, damage, disposal failure or any other similar deficiencies or defects likely to increase failure of the septic tank.

C. General maintenance requirements. The maintenance obligation imposed by this section shall be in addition to and supplemental of the general private sewer system maintenance obligations imposed in this title.

13.37.030 Building sewer inspections – access to premises.

The director of public works, or the building official, (or any designated representative or either the director of public works or the building official) is hereby authorized to inspect any building sewer in use within the city and connected to the city sewer system for the following purposes:

A. To determine the size, depth, and location of any sewer connection.

B. To determine the end outlet of any sewer connection by depositing harmless testing materials in any plumbing fixture attached thereto and flushing the same, if necessary.

C. To determine, by measurements and samples, the quantity and nature of the sewage or wastewater being discharged into any sewer.

D. To determine the location of the roof, swimming pool, floor and surface drains, and whether or not they physically connect to a building sewer.

E. To evaluate and determine defects in a sewer lateral following an overflow incident.

Nothing herein shall be deemed to provide the director of public works, the building official or their respective designees with any right or authority to enter a building or other apparently private or interior area of a real property, except to the extent such entry is expressly authorized by state law.

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13.37.040 Mandatory building sewer inspections.

A. Health and safety basis for requiring a building sewer lateral inspection.

An owner shall have the building sewer of his real property video-inspected in accordance with the requirements of this chapter (as directed and within the time period indicated by the director of public works) upon the occurrence of any of the following events:

1. Overflow or malfunction. Whenever the director of public works has sufficient evidence (as determined by the director) that the building sewer has recently overflowed or has recently malfunctioned;

2. Building sewer failure or lack of maintenance. Whenever, based on sewer system testing conducted by the city (of either the building sewer lateral or the city's public sewer system), the director of public works finds that there is sufficient evidence to conclude that the building sewer lateral has failed, is likely to fail, or has not been properly maintained; and

3. Public health threat. Upon any other reasonable cause to believe that there is a threat to the public health, safety or welfare due to the condition of a building sewer lateral or any other conditions causing a nuisance.

B. Events requiring a building sewer lateral inspection serving residential properties.

An owner shall have the building sewer lateral of his residential property inspected in accordance with the requirements of this chapter upon the occurrence of any of the following events or any other events in paragraph (A) above:

1. Home additions or remodels. Prior to the issuance of a city building permit for a residential building addition, remodel, or new improvements on the real property in excess of four hundred (400) square feet of habitable space as that phrase is defined in the most recently adopted California Building Code.

2. New plumbing fixtures. Prior to the issuance of a city building permit for all new plumbing fixtures attached to the building sewer lateral upon the residential property. (For the purposes of this section, the phrase "new plumbing fixtures" shall refer only to an increase in the number of plumbing fixtures in use on the real property prior to the application for a building permit for the "new" plumbing fixtures.)

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C. Schedule for lateral inspections – non-residential, multi-family and common interest development real properties.

1. Non-residential properties. An owner or owners of non-residential property within the city shall have that property's building sewer lateral(s) inspected in accordance with the requirements of this chapter or on occurrence of any conditions in paragraphs (A) or (B) above, or once every ten (10) years beginning on the first date of notification following the adoption of the ordinance first enacting this chapter. Within each subsequent ten (10) year period of time, such lateral inspections shall be performed. (For the purposes of this section, a property that has a mixture of allowed residential and non-residential uses shall be considered a non-residential property with respect to its compliance with the sewer lateral inspection requirements of this section.)

2. Common interest development, condominium, or multi-family properties. The owner or owners of a common interest development, condominium, or multi-family property shall have that property's building sewer lateral(s) inspected in accordance with the requirement of this chapter or on occurrence of any conditions in paragraphs (A) or (B) above, or once every ten (10) years beginning on the first date of notification following the enactment of the ordinance first enacting this chapter. Within each ten (10) year period of time, such lateral inspections shall occur.

D. Exception to inspection for recent prior inspections and repairs.

The following are exceptions to the inspection requirements of subparagraphs (B) and (C) above:

1. Prior replacement of sewer lateral. An owner otherwise required to perform a building sewer lateral inspection under (B) or (C) hereof shall not be required to perform such an inspection if the owner (or the owner's predecessor-in-interest) has originally installed or has replaced his property's building sewer lateral within the ten (10) years prior to the date of the application for a building permit.

2. Prior inspection or repair of a building sewer lateral. An owner otherwise required to perform an inspection under (B) or (C) shall not be required to perform such an inspection if the owner has either completed a remedial inspection (conducted in accordance with the inspection requirements of this chapter) or completed a permitted repair of the building sewer lateral within the three (3) years prior to the date the inspection would have otherwise been required, or has a valid compliance certificate.

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13.37.050 Requirements for a proper building sewer lateral inspection report.

A. Inspection report standards.

The building sewer inspection reports required by this chapter shall be prepared in accordance with the following requirements and specifications:

1. The inspection report shall be prepared by a pre-qualified contractor or any other professional otherwise registered by the City of El Cajon;

2. The inspection report shall identify all of the following:

   a. Any of the following conditions: displaced joints, open joints, root intrusion, substantial deterioration of the line, sags or depressions, cracks, leaks, inflow or infiltration of extraneous water, root intrusion, grease and sediment deposits or other conditions likely to increase the chance for blockage of the building sewer.

   b. Whether any connection, by pipes or otherwise, allows rainwater or groundwater to enter the building sewer or public sewer;

   c. Whether the building sewer has an installed backwater device where any outlet or trap of the building sewer is below the level of the nearest manhole. If a backwater device is already installed, the report shall indicate whether the backwater device is functioning properly.

   d. Where the building sewer includes a septic tank, the report shall identify the extent to which the septic tank is deteriorated, corroded, damaged, whether the disposal field has failed or any other relevant deficiency.

3. The inspection report shall contain an express certification from the certified inspector that the property has been inspected for any outdoor drain connection to the city sewer system and that no such unpermitted connection is present. It shall also contain either a videotape or DVD of the video inspection of the building sewer lateral in a format acceptable to the city, as established by the city regulations, policies or procedures.

4. The inspection report shall be submitted to the city for review and analysis accompanied with a review fee in addition to any other fee required by this chapter.

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B. Compliance with regulations. The inspection report shall, in all other aspects, comply with the requirements and specifications described in the director of public works' specifications for a building sewer lateral inspection report as established by the regulations authorized under this title.

13.37.060 Required building sewer lateral repairs.

A. Notice to repair or replace.

Upon receipt of the building sewer inspection report pursuant to this chapter, the director of public works (or his designee) will determine whether it indicates any deficiencies in the operation of the building sewer lateral and, thereafter, shall provide the owner(s) with a notice to repair or replace as may be deemed appropriate by the director. The notice to repair or replace shall specifically identify the deficiencies to be corrected and shall establish a deadline within which the owner(s) shall complete the required corrective actions. The corrective action may include a requirement that the lateral be replaced altogether and also may include the installation of cleanout, grease removal devices, and backwater valves if those devices are otherwise required by this code or any uniform code adopted by the city.

B. Obligations of the owner.

The owner shall repair his building sewer lateral to the satisfaction of the director of public works, and, if a building permit is required for the repairs, the owner shall obtain a final permit inspection and approval of the city building official.

C. Repairs upon other properties not required.

If a building sewer lateral traverses private property, without easements, other than the owner's property, the owner shall only be responsible for the repairs to that portion of the building sewer lateral that are upon the owner's property and also to that portion of the building sewer within a public right-of-way.

13.37.070 Common interest developments.

The homeowners association of a common interest development shall, along with the owner, be jointly and severally liable for the duties and obligations imposed by this chapter in relation to any building sewer lateral located within a common area of the development. If no homeowners association exists, then the individual unit owners, both jointly and individually, shall be liable for the duties and obligations with respect to building sewer laterals established by this chapter.

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13.37.080 Administrative guidelines for inspections.

Within ninety (90) days of the adoption of the ordinance enacting this chapter, the director of public works shall prepare and promulgate the public administrative guidelines that shall, among other things, establish the following:

A. A certification program for pre-qualified contractors or other professionals who will be accepted by the city to perform inspections and the basis for obtaining and maintaining such a certification or for a decertification;

B. Develop a standard inspection report form and specification for building sewer inspection reports;

C. Establish a notice format and standard enforcement timelines for the notice to repair and for repair and inspection service of that notice in a manner consistent with the requirements of due process. Such administrative guidelines shall be approved by a resolution of the city council; and

D. Administrative procedures for accepting, tracking, and inspecting permits for building sewers, grease interceptors, and inspection of food serving establishments.

Section 10. A new Chapter 13.38 of the El Cajon Municipal Code is hereby added to read as follows:

13.38 SEWERS AND SEWAGE DISPOSAL – FATS, OILS AND GREASE

13.38.010 Purpose and Intent.

A. It is the purpose and intent of this chapter to establish regulations for the disposal of grease and other insoluble waste discharges from every food service establishment (an “FSE”) within the city.

B. The city council, in enacting the ordinance codified in this chapter, intends to provide for the maximum beneficial public use of the city's sewer system, to prevent blockages of that system and the accidental discharge of wastewater into the storm drain system or receiving waters of the state, to ensure the cost of maintaining the city's sewer system is equitably distributed among users, to clarify grease disposal requirements for existing food service establishments, and to promote public health and safety.

C. In the event of any conflict or inconsistency between the provisions of this chapter and the provisions of the most recently adopted California Plumbing Code, the provisions of this chapter shall govern.

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13.38.020 Definitions.

As used in this chapter, the following terms are defined:

A. "Administrative authority" shall mean the director of public works, the building official, or any other official(s) as designated by the city manager.

B. "Authorized inspector" shall mean an inspector so designated by the administrative authority.

C. "Director" shall mean the director of public works or other official as designated by the city manager.

D. "Food grinder" shall mean any device installed for the purpose of disposing food waste in the public sewer system.

E. "FSE" "Food service establishment" shall mean any food preparation establishment, restaurant, cafeteria, or any other establishment preparing food for consumption. Domestic homes are not considered food service establishments under this definition.

F. "Grease" shall mean grease, or fatty or oily substances and other insoluble waste that turns or may turn viscous or solidifies with a change in temperature or other conditions.

G. "Grease interceptor" shall mean an underground multi-compartment device installed outside a food service establishment of a size and design in compliance with the California Plumbing Code and approved by the city.

H. "Grease removal facility" shall mean any grease interceptor, trap, drain, screen, or similar device that is designed or installed to reduce the amount of grease entering the wastewater system.

13.38.030 Grease/Sand interceptors.

A. Grease/sand interceptors that are properly sized and constructed shall be required for all buildings that include an increase in plumbing fixture units, and prior to commencing business for all new food service establishments determined by the director to generate grease in quantities greater than that commonly found in domestic sewage. Where grease/sand interceptors are impossible or impractical to install, a grease trap shall be installed.

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B. Grease/sand interceptors are required for all existing establishments where one or more of the following conditions exist:

1. A notice to repair has been issued for repair of the building sewer.

2. The establishment is unable to pass annual inspection without repeated violations.

3. The establishment is unable to complete implementation of best management practices as noted in the annual inspection report.

4. The establishment has violated any waste disposal requirements contained in the Municipal Code and where evidence of substantial grease is observed downstream of the establishment.

13.38.032 Grease storage facilities.

A. All new construction or remodels subject to a new conditional use permit for an FSE shall be required to either store waste grease on the inside of the building or outside in a secured enclosure that is covered, locked, and inside a secondary containment area or device large enough to store the same volume as the primary container. All storage containers shall be designed to prevent tipping and to provide a secure closing lid that shall remain closed at all times that the container is not being accessed. All containers that are used to transfer waste grease shall have a secured lid that prevents accidental spills during transfer.

B. All existing FSEs are required to either store waste grease on the inside of the building or outside in an area secure from vehicular driveways and parking in storage containers that are designed to prevent tipping and to provide a secure closing lid that shall remain closed at all times that the container is not being accessed. All containers that are used to transfer waste grease shall have a secured lid that prevents accidental spills during transfer.

C. All FSEs shall maintain the storage area using good housekeeping techniques to prevent the accumulation of waste grease deposits on the outside of grease containers and shall have an approved emergency spill kit available in close proximity to the storage facilities.

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13.38.040 Food grinders prohibited.

A. Food grinders shall be removed from all existing food service establishments by January 1, 2010.

B. After August 1, 2009, food grinders shall be prohibited in all new food service establishments.

13.38.050 Grease interceptor design and maintenance requirements.

A. General provisions.

1. The installation of a proper interceptor shall be the responsibility of the user who applies for a permit connection and the user whose operations cause or contribute to the necessity for an interceptor.

2. Interceptors shall be installed, utilized, and properly maintained for continuous and efficient operation at all times and at the expense of the user.

3. Interceptors shall be inspected periodically to ensure compliance with these regulations.

4. The administration authority shall approve the type, capacity, and construction of all interceptors shared by multiple businesses can be utilized if specifically authorized by the director and upon evidence of legal operating and maintenance agreements between the involved property owners or users. Provisions shall provide for independent, unilateral operation by one or more parties of the agreement in the case where default by one party has occurred.

5. Interceptors no longer in use shall be abandoned in accordance with the California Plumbing Code.

B. Design.

1. Interceptors for food service establishments shall be sized and designed in compliance with the California Plumbing Code, unless otherwise specified herein.

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2. Other factors that may influence the design include, but shall not be limited to, the following:

    a. The type of facility (such as a restaurant, bakery, food processing factory, etc.);

    b. The volume of the user's business or operation (such as number of meals served, number of seats, hours of operation, etc.);

    c. The peak flow of processed wastewater discharged to the collection system;

    d. Size and nature of facilities (including kitchen facilities) based on size, type, number of fixtures, and type of processing or cooking equipment used;

    e. The type of service provided or operation undertaken (such as dine-in meal service versus carry-out meal service);

    f. The type of foods or other materials used in cooking, processing or manufacturing operations conducted within the facility;

    g. The overall potential for grease-laden discharges;

    h. The existence of devices, procedures or processes designed to minimize the amount of fats, oil or grease from entering the collection system;

    i. The location of the facility, if it is located in a known problem area; and

    j. Any prior problems with the facility, such as blockages, violations, etc.

3. All interceptors shall be certified by the International Association of Plumbing and Mechanical Officers, or another listing agency approved by the director, and be plumbed according to the California Plumbing Code.

4. All grease interceptors shall include an effluent sample box of a type and size approved by the administrative authority.

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5. Inspection by the administrative authority, or an authorized inspector, of installed interceptors and piping prior to backfilling is required. Piping shall meet the requirements of the California Plumbing Code.

6. Interceptors shall have a sanitary tee located inside the sample box on the discharge side of the sample box.

7. Interceptors shall have a cleanout installed after the sample box on the private lateral and at intervals required by the California Plumbing Code.

8. All manholes and sample boxes are to be installed a minimum of one-half inch above the finished grade with a concrete collar a minimum of eighteen (18) inches around the manhole and sample box lids.

C. Interceptor Maintenance.

1. Any user who is required by the director or the ordinance codified in this chapter to install or operate an interceptor shall be required to adequately maintain the interceptor at the user's expense, so that the interceptor is in proper working order at all times. Maintenance shall include the complete removal of all contents, including floating materials, wastewater, sludge and solids. Decanting or discharging of removed waste back into the interceptor from which the waste was removed or into any other interceptor, for the purpose of reducing the volume to be hauled is prohibited.

2. Grease interceptors shall be cleaned out completely by a permitted waste hauler as necessary to assure that the interceptor will operate as designed at all times or as otherwise specified by the administrative authority.

3. The use of additives, directly or indirectly to the plumbing or sewer system, to emulsify grease and/or oil is specifically prohibited.

4. The use of biological additives as a supplement to interceptor maintenance, including the addition of microorganisms, may be authorized by the director and approval shall be obtained in writing prior to the use of such activities.

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5. A maintenance log indicating each pumping of an interceptor for the previous twelve (12) months and any other pertinent information shall be maintained by each establishment. This log shall include, but not be limited to, date, time, amount pumped, hauler, and disposal site, and the log shall be kept in a conspicuous location for inspection by the administrative authority or an authorized inspector during normal business hours.

6. All users must sign a waste manifest form before having a waste load transported by a permitted hauler. The user shall also keep copies of the manifest form for a period of three (3) years, and make all manifest records available for inspection by the administrative authority during normal business hours.

7. All waste removed from an interceptor must be disposed at a facility permitted by the county of San Diego or applicable regulatory agencies to receive such waste. The pumpage shall not be returned to the public sewer system or manhole, any private wastewater system or storm drains.

8. All interceptors shall be located as to be readily and easily accessible for cleaning, inspection and removal of intercepted waste.

9. Any fixture connected to a grease interceptor shall have a non-removable, secured food strainer of such integrity to withstand daily operational usage.

D. Required connections to interceptors. All three-compartment sinks, scullery (preparation) sinks, floor drains, and mop sinks along a cook line, pre-wash sinks at dishwashing stations, and all other fixtures that contribute grease into the wastewater system shall be connected to an interceptor.

E. Prohibited connections or additives to interceptors.

1. Final rinse discharge from automatic dishwasher shall not be connected to the interceptor.

2. The use of any additive, such as enzymes, surfactants or chemicals shall not be connected to any type of interceptor. Chemical additives, such as chlorinated solvents, or any other additives that causes the emulsification of grease, are strictly prohibited from use in any type of interceptor.

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F. Plan review.

1. Applicants or users shall be required to submit copies of detailed facility proposed interceptors, pretreatment facilities, spill containment facilities, and operating procedures, to the community development department. Facility plans shall also include site plans, floor plans, mechanical and plumbing plans, and details to show all wastewater plumbing, spill containment, and appurtenances by size, location, and elevation. The review of the plans and procedures shall in no way relieve the user of the responsibility of modifying the facilities or discharge, and to meet the requirements of this chapter or any requirements of other regulatory agencies.

2. All submitted drawings shall be prepared by a licensed and registered professional engineer. Any false information or misleading calculations submitted shall be the responsibility of the user.

3. The design, location and procedures for operation and maintenance of a required interceptor shall be approved by the administrative authority. Such approval shall be obtained prior to the user's connection of the facility to the public wastewater system.

4. No food service establishment or other identified user shall be constructed except according to plans and specifications approved by the administrative authority.

5. Approved plans and specifications shall not be changed or altered without written approval by the administrative authority.

13.38.060 Best management practices.

Best management practices (each, a “BMP,” in any combination, “BMPs”) as listed below shall be utilized by the FSE and shall be subject to periodic verification and approval by the administrative authority. If at any time the FSE is found to be in noncompliance with this requirement with regard to all of the BMPs below, such noncompliance shall be deemed a violation.

A. Drain screens.

1. Drain screens shall be installed on all drainage pipes in food preparation areas for existing food service establishments by January 1, 2010.

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2. After August 1, 2009, drain screens shall be installed on all drainage pipes in food preparation areas for all new food service establishments deemed by the director to generate grease.

B. Waste cooking oil.

1. All waste cooking oil shall be collected and stored properly in recycling bins, barrels or drums.

2. Such recycling bins, barrels or drums shall be maintained appropriately to ensure they do not leak.

3. Licensed haulers or an approved recycling facility must be used to dispose of waste cooking oil. A log of such activities will be completed and maintained in plain visible site for inspection by the administrative authority. All manifests for disposal of waste products will be complete and inserted into the log.

C. Food waste. All food waste shall be placed in enclosed plastic bags and disposed of directly into the trash or garbage, and not in sinks.

D. Employee training.

1. Employees of the food service establishment shall be trained by March 1, 2009, and twice each calendar year thereafter, on the following subjects:

a. How to "dry wipe" pots, pans, dishware and work areas before washing to remove grease;

b. How to properly dispose of food waste and solids in enclosed plastic bags prior to disposal in trash bins or containers to prevent leaking and odors;

c. The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped, and how to use absorption products to clean if spills occur; and

d. How to properly dispose of grease or oils from cooking equipment into grease bins, barrels or drums without spilling.

(Continued on Page 31)

2. Training shall be documented and employee signatures retained indicating each employee's attendance and understanding of the practices.

3. Training records shall be available for review at any reasonable time by the authorized inspector.

E. Kitchen exhaust filters shall be cleaned as frequently as necessary to be maintained in good operating condition, but in no event less than one time per month.

F. All best management practices shall be posted conspicuously in the food preparation and dishwashing areas at all times.

13.38.062 Right of inspection.

Food service establishments shall be open and available for inspection by an authorized inspector at all times during normal business hours to ensure that the operation and maintenance of the food service establishment complies with the requirements of this chapter.

13.38.070 Violations for penalties – enforcement.

A. Violations of this chapter may result in fines and/or penalties.

B. Failure to comply with the provisions of this chapter may result in one or more of the following:

1. Notices of noncompliance may be issued with a specified period of correction;

2. Administrative citations may be issued for violations in the amounts and manner set forth in Chapter 1.14 of this code;

3. A criminal complaint may be filed in accordance with Chapter 1.24 of this code;

4. Sewer service may be determined a public nuisance as described in section 13.16.030, and disconnected from the City's sewerage works upon order of a court of competent jurisdiction.

(Continued on Page 32)

C. Appeals of fines, penalties or requirements to install grease interceptors.

1. Unless otherwise provided in this code, appeals of civil or administrative fines, penalties, or other corrective actions shall be submitted to the city manager within thirty (30) days after the food service establishment has been notified of the penalty and/or corrective actions. The decision of the city manager shall be in writing.

2. The decision of the city manager can be appealed to the city council by submitting a written request to the city clerk within fifteen (15) days of the issuance of the city manager's decision, and payment of the appropriate fee, as set by resolution of the city council.

3. Upon appeal, the appellant shall, upon written request to the city manager, be provided within fifteen (15) days of said request, at reasonable cost to the appellant, copies of all reports, data or other documentary evidence upon which the citation is based.

Section 11. This ordinance shall be published as required by law and shall take effect thirty days after adoption. The City Council finds that this activity is not a project and therefore is not subject to the California Environmental Quality Act pursuant to CEQA Guidelines Section 15060(c)(3).

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at an Adjourned Regular Joint City Council/Redevelopment Agency Meeting held this 23rd day of June, 2009, by the following vote to wit:

AYES	:	Lewis, Hanson-Cox, Kendrick, McClellan, Wells
NOES	:	None
ABSENT	:	None
DISQUALIFY	:	None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

KATHIE RUTLEDGE, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Ordinance No. 4930 of the Ordinances of the City of El Cajon, California, as adopted by the City Council at the Adjourned Regular Joint Meeting of the City Council/Redevelopment Agency on the 23rd day of June, 2009.

Kathie Rutledge, CMC, City Clerk

6/23/09 (Item 14.1)

City of El Cajon
AS A COPERMITTEE OF THE SAN DIEGO RIVER WATERSHED

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT 2011 – 2012

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EXECUTIVE SUMMARY

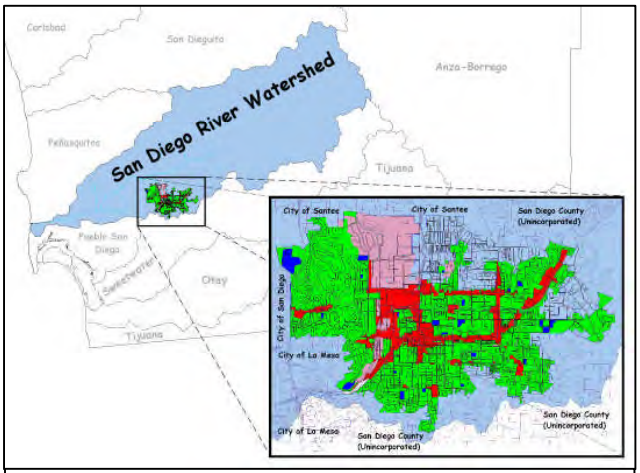

The City of El Cajon in the Context San Diego County and the San Diego River Watershed

The City of El Cajon (City), located in east San Diego County, is the eastern-most incorporated City within the San Diego River Watershed (Watershed). With 14.48 square miles and nearly 91,000 citizens, the City plans with other regional jurisdictions and acts locally to maintain the health of the San Diego River Watershed. A healthy watershed means thriving environmental communities and a state of well being among its constituency. Maintaining watershed health is achieved through compliance with Federal Clean Water Act requirements as stated in the San Diego County Municipal Storm Water Permit, Order No. R9-2007-0001, through water quality monitoring, biological assessments, and municipal vigilance to balance growing human demands with a healthy environment.

Permit Year 2011-2012 (PY 2011-12) marks Permit Year five (PY5) under the San Diego Region Order No. R9-2007-0001 (municipal permit), which renewed Order No. 2001-001. The renewed municipal permit was adopted in January 24, 2007. Efforts started with jurisdictional planning and implementation, proceeded to local program assessment and continues to evolve into multi-jurisdictional and watershed actions. As in previous years, the City continued its focus of assessing program component effectiveness from Best Management Practices (BMP) implementation and determining how preventive measures affect watershed health from a local perspective. Many of the program's components have developed into BMP programs, whereby inspections can determine effectiveness of pollution reduction measures.

This Annual Report presents the City's efforts during the 2011-12 reporting period. Covered in this Report is the move toward adaptive management of the updated Jurisdictional Urban Runoff Management Program (JURMP) implementation and integration of general watershed principles for the San Diego River Watershed into local planning. Both the San Diego River Watershed Urban Runoff Management Plan (WURMP) and the City's JURMP were updated and submitted to the San Diego Regional Water Quality Control Board (RWQCB) on January 24, 2008, as required by the new municipal permit and extension. It is the responsibility of the City to balance jurisdictional and watershed requirements and to maintain a healthy watershed within its jurisdiction.

Critical for the remaining permit cycle are Watershed adjustments to the City's Storm Water Pollution Prevention Program and deciding where best to place City efforts that will minimize or eliminate polluted runoff. Forrester Creek, the main tributary drainage channel in El Cajon, is a listed 303(d) waterbody with impairments for pH in the upper part (El Cajon and San Diego County) and for total dissolved solids (TDS) and fecal coliform in the lower portion within the City of Santee. El Cajon considers these impairments to be the center of the Clean Water Act

objective "to restore the Nations Waters" to a chemical balance able to support the State's Basin Plan designations for fishable and swimmable waters. A BMP to Pollutant Reduction Diagram was developed to connect BMPs to pollutants that are targeted for reduction as a result of their listing as 303(d) pollutants in Forrester Creek. This diagram and discussion is provided in the Introduction in Section 1.

On November 12, 2010, USEPA approved the 2008-10 Clean Water Act (CWA) Section 303(d) List that includes listings for the San Diego Region. The revised list includes phosphorus and selenium.

This JURMP Annual Report for PY5 consists of 15 Sections, and is organized as follows:

Section 1 - Introduction. Describes the purpose of this Annual Report, the overall vision of the City, goals and objectives of the Storm Water Pollution Prevention Program; the regional integration of Watershed Health; assessment of program effectiveness to guide future actions, and Forrester Creek-specific criterion that relate to San Diego River Watershed and River health.

Section 2 - Development Planning Component. Lists the planning actions and building permits reviewed and the role of storm water in re-defining new development designs and describe the ways of confirming that commitment to storm water becomes a design reality.

Section 3 - Construction Component. Summarizes reviews of Erosion Control Plans, inspection of high priority sites, interactions with other City departments, and conditions during rainfall events.

Section 4 - Municipal Component. Summarizes the activities for municipal facilities, the sanitary sewer program, capital improvement projects affecting storm water quality, and municipal staff training.

Section 5 – Industrial and Commercial Component

- **Industrial Component**. Summarizes the activities conducted to assess the effectiveness of implemented industrial BMPs and better define the pollutants affecting storm water quality.
- **Commercial Component.** Summarizes the inspections, enforcements, and educational efforts to assess the effectiveness of implemented BMPs and better define the pollutants affecting storm water quality by business type.

Section 6 - Residential Component. Summarizes the challenges with educating the public, interactions with citizens, educational efforts, and enforcement at the residential level.

Section 7 - Illicit Discharge Detection and Elimination Component. (This section will be part of a separate submittal due on December 15, 2012) Summarizes the City's dry weather program that identifies illegal dumping and illicit connections to the storm drain system. An upstream/downstream analytical assessment was completed during the dry weather season.

Section 8 - Education Component. Summarizes programs implemented by the City to educate municipal employees, developers, contractors, business owners, the general public, and other priority groups

Section 9 - Public Participation Component. Summarizes the outreach efforts coordinated on a regional level through the Outreach Workgroup.

Section 10 - Fiscal Analysis Component. Reviews and compares previous storm water expenditures while projecting future program funding requirements.

Section 11 - Effectiveness Assessment Component. Provides summary tables for the existing and development components indicating estimated and actual pollutant-containing material reductions at the source or from preventive measures.

Section 12 – Special Investigations. Summarizes any special investigations that may have been conducted during the current reporting period.

Section 13 – Non-Emergency Fire Fighting. Summarizes non-emergency fire-fighting activities/training conducted during the current reporting period.

Section 14 – JURMP Revisions. Summarizes any changes or revisions to the JURMP that may have occurred during the current reporting period.

Section 15 - Conclusions and Recommendations. Summarizes the conclusions stated from each component and makes overall program conclusions and provides recommendations for future permit years.

Appendices contain City-developed checklists, guidance documents, outreach materials, lists of priority sites or facilities, correspondence and presentations to City staff and the local community.

The City achieved a number of important accomplishments during this reporting period, both in its role as a Copermittee, and through participation in the implementation of general watershed principles. Across the City, businesses and citizens, together, function within the JURMP and watershed to assist in identifying storm water issues and help prevent pollution from being discharged.

City Action Highlights include:

- Continue with a strong enforcement program and implementation of City Ordinances 4686 (JURMP) and 4939 (updated Standard Urban Storm Water Management Program (SUSMP) requirements).
- Continued implementation of a City-Wide Integrated Pesticide Management Program.
- As a City with little open space and a propensity for redevelopment, the City pursues common sense approaches to go beyond Permit compliance and achieve defensible, cost-effective storm water management practices for businesses and citizens through the SUSMP conditioning process.
- The City continued its expanded scope of Dry Weather Monitoring Program. In doing so, it has made substantial strides in detecting and eliminating discharges and characterizing receiving waters and other conveyance discharges within its jurisdiction.
- Conducted upstream/downstream dry weather analysis in Forrester Creek to quantify the amounts of pollutants discharged within the City's jurisdiction.
- Inspected a total 208 Commercial and Industrial Facilities, 76 industrial and 132 commercial facilities. All facilities that posed a high threat to water quality (TTWQ)

were inspected. Commercial and industrial facilities were issued 7 warnings and 2 citations for various violations of the City's storm water ordinance.

- Conducted inspections at 4 high priority construction sites. The City conducted monthly inspections at all high priority construction sites during the dry season and at least biweekly inspections during the wet season. The inspections revealed several violations or compliance issues and the City issued 8 enforcement actions, 3 of which were monetary citations.
- The City issued a total of 15 warnings and 7 citations for various violations of the City's storm water ordinances.
- The City's inspection programs emphasized pollution prevention BMPs such as clean trash storage and disposal areas; power washing BMPs; and maintenance of sewer laterals in addition to minimum required BMPs.
- The City's comprehensive street sweeping program swept 17,677 miles of streets and collected 3,710 cubic yards of materials from City streets. Sediment and silt accounted for 1,421 cubic yards, organic material accounted for 1,507 cubic yards, and trash accounted for 782 cubic yards.
- Collected 1,788 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins.
- Actively participated in the Management Committee, Regional Program Planning Subcommittee, Outreach Workgroup, Regional Monitoring Workgroup, SUSMP/HMP Workgroup, Industrial/Commercial/Municipal Workgroups and the WURMP Leads Workgroup.
- Continued active participation with the San Diego River Watershed Workgroup.
- Continued efforts to reach out to community members on a wide range of urban runoff and storm water quality topics through approximately 190,700 copies of articles, brochures, and mailers.
- Conducted over-the-counter assistance and provided personalized residential BMP information to homeowners for small additions, remodels, pools and retaining wall projects.
- Continued the transition to report fiscal analysis based on the Standardized Fiscal Analysis Method and Format.

This reporting period is one of continued program assessment and focus of local actions to move toward a watershed protection program. This last year, the City continued to meet the new challenges of working within a watershed. The City continues in the role of the Lead Copermittee for the San Diego River Watershed. The City feels strongly that it has made significant strides looking within its jurisdictional boundaries as well as organizing inter-jurisdictional programs. Continuing improvement and refinement is the name of this storm water pollution prevention program as we continue to gather information and experience about how City activities in general affect the local receiving waters and the health of the San Diego River Watershed.

This Annual Report provides programmatic information and further steps in connecting activities to a significant movement for improving receiving water quality by the City of El Cajon. Over the last year, the City has continued its effort at linking municipal activities to receiving water quality. Additional connections to receiving water quality from the implementation of BMPs will follow as information is gathered and assessed using a Long-Term Assessment process.

A listing of storm water contact personnel is provided in Appendix C to help facilitate communication within the City and for the public and outside agencies to contact the appropriate City staff. A summary of the sanitary sewer maintenance and operations is also included in Appendix D.

CERTIFICATION

"I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature

9/10/12
Date

Douglas Williford, City Manager
Printed Name, Title

(619) 441 1718
Phone Number

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SECTION 1 INTRODUCTION

1.1 INTRODUCTION

With each Permit Year (PY), the City of El Cajon reviews, assesses, and continues to progress towards a watershed approach to protect surface waters from urban runoff pollution. A continued emphasis towards identifying sources of pollutants and minimizing specific 303(d) impacts to Forrester Creek is the focus of this fifth year in the Permit Cycle (Order No. R9-2007-0001).

The typical steps for developing a pollution prevention and source control program are summarized below and discussed in more detail in Section 11, Effectiveness Assessment.

1. **Identify the issue.** Define each issue.
2. **Identify and assess sources.** Sources are identified by prioritizing based on location and type of business.
3. **Determine available control strategies**. To identify possible control strategies for each source.
4. **Evaluate control strategies**. To determine which control strategies are most likely to achieve measurable results.
5. **Establish a goal.** A goal may be set at any point during the development process. The goal is the desired outcome.
6. **Implement program.** Part of program implementation is selection of an effectiveness measurement tool to assess the program.
7. **Evaluate effectiveness.** Based on the effectiveness measurement, determine what has been learned.
8. **Modify program.** The results of the effectiveness measurement will help to determine the future direction for the program.

Described in this Fifth Permit Year (PY5) Annual Report is the implementation and collected information for each Permit component. Sections 2 through 11 highlight component accomplishments, activities, or areas of achievement for Development and Planning; Construction; Municipal; Industrial and Commercial Development; Residential Development; Education and Outreach; Illicit Discharge and Detection Elimination (submitted as a separate deliverable); Public Participation; Effectiveness Assessment; and Fiscal Analysis.

1.2 REGULATORY FRAMEWORK

Background

The City of El Cajon's (City) Jurisdictional Urban Runoff Management Plan (JURMP) was developed pursuant to Order No. 2001-001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758, the area-wide municipal separate storm sewer system (MS4) permit. The MS4 permit was established pursuant to Section 402(p) of the Federal Clean Water Act, which requires all point source discharges of pollutants into waters of the United States, including discharges from municipal separate storm sewer systems, to be regulated by a NPDES permit. On January 24, 2007, the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), adopted Order No. R9-2007-0001, NPDES Permit No. CAS0108758 (Permit), to the City and 20 other Copermittees, for discharges of urban runoff from MS4s into the receiving waters within the SDRWQCB's jurisdiction.

The City is a participant and partner in the San Diego River Watershed along with the Cities of La Mesa, San Diego, Santee, and the County of San Diego. A watershed approach to storm water pollution provides the wider view of runoff impacts and requires jurisdictional approaches to include neighboring jurisdictions in future planning and reporting efforts.

The PYs are summarized as follows:

- PY1 - July 1, 2007 through June 30, 2008, modified and enhanced the storm water program to comply with the new Municipal Permit, R9-2007-001. New comprehensive JURMP prepared to create a detail framework of the program under the new permit.
- PY2 – July 1, 2008 through June 30, 2009, reassessment of initial JURMP implementation with refinements and reimplementation, as necessary.
- PY3 – July 1, 2009 through June 30, 2010, as the City's programs continue to mature, the City focused on watershed issues, including pollution prevention and education and continued to refine and improve the City's programs.
- PY4 – July 1, 2010 through June 30, 2011, adopted final regional model SUSMP and reassessed initial JURMP implementation with refinements and reimplementation, as necessary.

Current and Future

- PY5 – July 1- 2011 through June 30, 2012, preparing for issuance of new permit with a stronger emphasis on watershed permit requirements.

1.2.1 Water Courses and Receiving Waters

The definition of the City's Storm Drain System is broad enough to include streets, gutters, inlets, catch basins, channels (lined and unlined), creeks, and streams. Our storm drain system starts at a facility's property line to the public right-of-way. By making such a distinction, it is clear to maintenance and storm water crews when it is the responsibility of the City to clean spills or illegal dumping of materials. If such a discharge occurs on private property and the discharge enters the City storm drain system, the property and business owner/manager or contractor is contacted and educated on storm water requirements for their type of business.

Property and business owners are charged for cost-recovery of City staff involvement and enforcement actions are levied.

The goal of PY5 and future program years will be a continuing focus on impairment of Forrester Creek with the ultimate goal of eliminating the impairment on Forrester Creek, and meeting the objective of the Clean Water Act to maintain and restore the chemical, physical, and biological integrity of the Nation's waters.

Table 2 lists the major storm water conveyance systems and describes the type of channel. Most conveyance systems are concrete-lined, making them easy to maintain, but present other types of challenges such as:

- Elevated pH (at times above 9)
- Shelter for homeless populations
- Trap for air blown trash and debris
- Easy target for illegal dumping

Table 2 – Storm Water Conveyance Systems

Water Courses	Type of Channel
Forrester Creek	• Open, concrete-lined trapezoidal channel • Underground culvert
Broadway Channel	• Open, concrete-lined channel • Underground culvert
Washington Channel	• Open, concrete-lined channel • Underground culvert
County Ditch	• Open, concrete-lined channel • Underground culvert • Open, natural-lined channel
Fanita Channel	• Underground culvert • Open, concrete-lined channel
Third Street Lateral	• Open, concrete-lined channel • Underground culvert
Fletcher Parkway/Chatham Channel	• Open, concrete-lined channel • Underground culvert

Water Courses	Type of Channel
	• Open, natural-lined channel

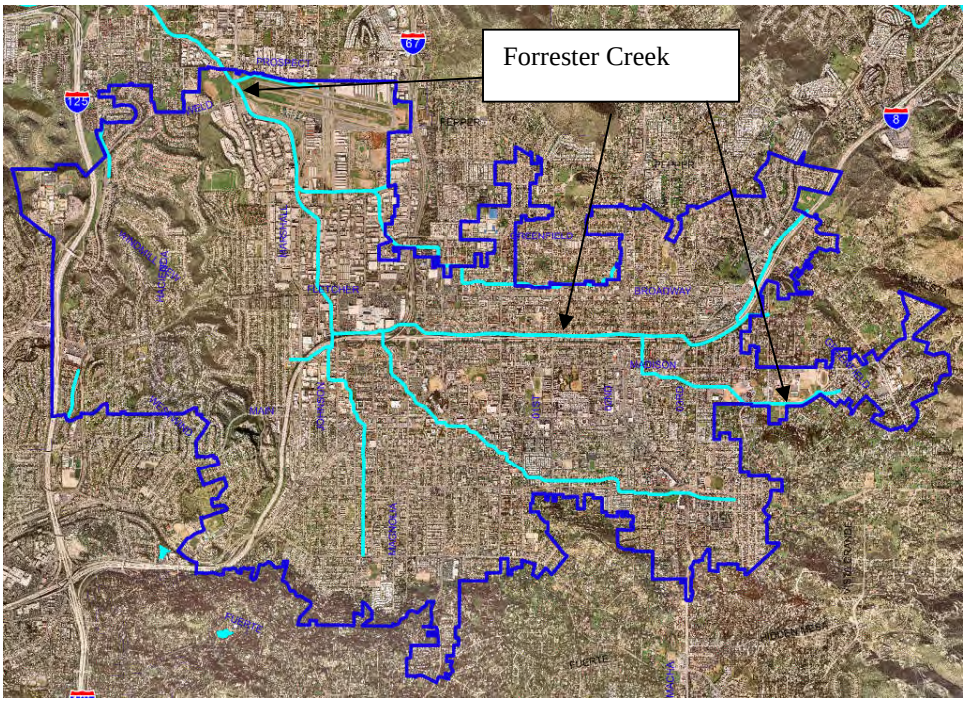

The picture to the left shows the City boundaries, Forrester Creek and the major channels within the City.

1.2.2 Approach and Changes to the Program

Approach

As the City becomes more experienced with its own programs and with what is working and what is not, the City modifies the implementation and management of its Storm Water Program. This adaptive management is a dynamic process of improving management activities incrementally, as decision makers learn from experience and better information and analytical tools become available. It involves checking progress made in achieving water quality goals, adjusting the management decisions accordingly, rechecking and readjusting – all the while incorporating new data and scientific knowledge. Beginning in early 2008 and continuing through PY5 (2011/2012), the City of El Cajon continues to develop a Storm Drain Master plan. Once complete, the Storm Drain Master Plan will provide the City with additional tools to assess and achieve water quality objectives. Adjustments to goals and objectives are expected to occur due to unforeseen circumstances and an unpredictable future.

One approach the City continues to implement (through education and training) is to change pollution prevention from the conventional recycle, reduce and reuse, to measures that target pollution prevention at the pollutant source. For Storm Water Pollution Prevention, consideration is given both to flow reduction measures and pollution source controls. Where water acts as the primary conveyor of pollution, pollution prevention measures can reduce

pollution impacts by preventing pollutants from entering the flow, or by controlling the flow. In the development of an effective pollution prevention or management strategy, it is critical to understand how water cycles through the air and soil to ensure that measures are selected and implemented in an appropriate manner.

Changes to the Storm Water Program

Program Year 5 (PY5), and continuing into the next permit cycle, will be a continuing period of transition from purely jurisdictional to a more watershed/jurisdictional approach. A few of the modifications include:

The San Diego River Flows Across Padre Dam

- Promoting a Clean Community, Healthy Watershed;
- Working more closely with San Diego River Watershed Copermittees to maintain watershed and river health in the San Diego River Watershed;
- Focusing on 303(d) pollutants to restore Forrester Creek water quality;
- Continuing to assess the potential for increased flow from New or Re-Development projects and reduce flow from the current flow of approximately 83 gallons per minute during the dry season (a drop of 11 gallons per minute compared to last year's dry weather flow rate).
- Collecting information on upstream and downstream conditions to better assess areas (zones) where pollution is more probable or prevalent;
- Review of the analytical methods and a comparison to what information is actually needed to determine pollutant loads.

The City of El Cajon's Storm Water Pollution Prevention Program looks to pollution solutions in the form of Best Management Practices, proven procedures, or other new technologies. Table 1 (next page) lists the water quality and quantity issues in El Cajon and the possible solutions provided by the JURMP components that comprise the Storm Water Pollution Prevention Program.

Table 1 – Storm Water Pollution Prevention Program Components

Water Quality or Quantity Issues	Pollution Solution
• Increased runoff (volume, frequency and duration) with impervious ground cover.	• Runoff control for flood and erosion protection (**New Development and Construction**) • Measures to maintain existing discharge rates. (**New Development/Redevelopment**)
• Increased base flows in streams due to changes in land use.	• Provide measures to maintain infiltration **(New Development/Redevelopment)** • Provide extended detention of runoff for low flows. (**New Development/Redevelopment**)
• Increased pollutant loadings with runoff.	• Provide measures to reduce pollutant sources, or remove pollutants, by settlement, absorption or filtration. (**Municipal, Industrial, Commercial, Residential Existing Development/Redevelopment**)
• Stream bed and bank changes due to erosion.	• Infiltration for control of runoff volume.(**New Development/Redevelopment**) • Rate of runoff control for erosion protection in compliance with HMP requirements (**Construction/Redevelopment**)

Stronger move toward prevention of polluted discharges – distinguishing pollutant reduction from Pollution Prevention (recycle, reduce, reuse) activities, while connecting BMPs with the pollutant being reduced. A BMP to Pollutant Reduction Diagram is provided below and is the mainstay for the Existing and Development (including Construction) Components. This part of the transition occurred after Copermittees submitted a Framework for BMP Implementation in October 2003.

Inspection data collected under the original system was translated into BMP implementation results. The BMP implementation results data can be used to help prioritize follow-up actions, including inspections and education efforts.

BMP to Pollutant Reduction Diagram (See Following Page for Details)

Pollutant to BMP Table
BMPs target the reduction or elimination of a primary pollutant (sediment or fecal coliform) or pollutant group (oil & grease).

↓

Facilities and BMP Table
Individual Facilities are Required to Implement the Minimum BMPs

↓

Summarize Facility Types with Pollutant Reduced Table
Combines Table 1 and 2 to connect pollutant to (high priority) facility type, such as industrial, commercial/restaurants, municipal, residential area, or SUSMP/Parking Lot through the implementation of BMPs. Allows the calculation of percentages for implemented BMPs for high priority facilities.

↓

Transition to Effectiveness Assessment
Percentages between 80-100 overall implementation are used to calculate a quantity of pollutant(s) prevented from entering the storm drain system and thus reduction in pollutants ultimately discharged.
Reasonable Assumption: If inspection was impromptu, results observed on inspection day, in general, represent conditions at the facility for the entire year.
Calculations: Determine an *average* (typical for facility) discharge of the pollutant containing material.

The BMP to Pollutant Reduction Diagram demonstrates how BMPs are connected to pollutants that are connected to water quality. Our difficulty lies in quantifying those pollutant reductions with accurate and defensible results. In Section 11.0, estimates as well as empirical data are used to assess the effectiveness of the City's Storm Water Program by showing how much pollutant-containing materials were diverted toward a better disposal avenue.

1.3 COMMITMENT AND PARTICIPATION

The City of El Cajon is committed to promoting the concept and practice of preventing pollution at the source. Preventing pollution will prevent environmental problems. This saves the public and private sector from loss of resources and the costs to correct environmental damage. Urban runoff management requires the simultaneous pursuit of several objectives. The City is committed to:

- Enforcement of the Municipal Codes for Urban runoff (ECMC 13.10) and New or Land Development and Re-Development (ECMC 16.60).
- Prevention of pollutant discharges into Forrester Creek as part of the San Diego River Watershed.
- Protection of water quality, aquatic species, and watershed ecosystems.
- Promotion of environmental quality and social well-being.

1.3.1 Jurisdictional Implementation

Pollution Prevention continues to be the focus of the City's JURMP and Storm Water Pollution Prevention Program for businesses and citizens. Compiled information on amounts of pollutants prevented from entering the storm drain system has a direct correlation to any decrease in pollutant loads from entering receiving waters. Pollutant amounts removed from streets, roadways and the storm drain system, or that have been recycled, have a direct correlation to water quality.

Land use consists of residential, commercial, industrial, municipal, and educational with recreational facilities. The City is at a "built-out" stage where most construction is redevelopment. Successful implementation of the updated City's Standard Urban Storm Water Management Program (SUSMP) supports the reduction in flow from a pollution prevention perspective. Development and redevelopment proposals that trigger the SUSMP requirements must submit plans consistent with reducing flow and impervious areas and must consider storm

runoff treatment before the project will receive final City approval and proceeding to actual construction.

1.3.2 Watershed Teamwork

Beginning in the Permit Year of 2002/2003 and continuing through this current Permit Year (PY5, 2011/2012), the jurisdictions within the San Diego River Watershed have gathered to discuss and tackle issues specifically affecting water quality issues in the watershed. Some of the challenges that are currently present from a watershed perspective are the following:

- Total Maximum Daily Loads for bacteria
- Highly transient populations

1.3.3 Regional Teamwork

The City participated in regional efforts to promote storm water management practices and educate businesses and citizens to conduct business and daily lives with respect for water quality. When possible, the City attended or was an active participant in the following events.

- Management Committee Meetings
- Program Planning Subcommittee
- Education/Outreach Workgroup
- San Diego River Watershed Workgroup **
- Commercial/Industrial/Municipal Workgroup
- Regional Monitoring Workgroup
- Dry Weather Monitoring Workgroup

** - Chaired Workgroup

1.4 WATERSHED AND RIVER HEALTH

As stated in the Clean Water Act, the objective is to maintain and restore the chemical, physical, and biological integrity of the Nation's waters. To address this objective, watershed and river health for the San Diego River can be described in terms of unique biophysical, socio-cultural, and economic characteristics. Biophysiochemical components are a watershed's elements and functions (its chemical, physical, and biological processes), while socio-cultural and economic components are the values and benefits provided by a functioning healthy watershed. The water quality aspect and stream flow (as hydrological patterns) of the biophysiochemical component list and the recreational/esthetic values of the socio-cultural and economic components are the only subjects directly addressed in our City's permit under Order No. R9-2007-0001.

Biophysiochemical:

- Basin geomorphology
- Hydrological patterns (stream flow addressed in

Municipal Permit)
- Water quality (addressed in Municipal Permit)
- Biotic community and habitat

Socio-Cultural and Economic:
- Breakdown and recycling of pollutants
- Regulation of storm water discharges
- Groundwater and aquifer recharge
- Recreational and esthetic values (addressed in the Basin Plan, but included in Municipal Permit by reference)
- Habitat values (protected species, fisheries, etc.)

In general, the factors that determine ecosystem and watershed health are universal. A healthy watershed is one in which these components are maintained with thriving and balanced communities. An immutable characteristic of upper Forrester Creek is the concrete lining of this channel. In the 1960's, Forrester Creek was modified with a concrete channel in order to provide flood control for the expansion of the Interstate Highway easterly toward El Centro.

In a built-out urban area such as the City of El Cajon, defining and achieving creek, river and watershed health is complicated by a highly altered landscape (concrete channelization of Forrester Creek, highly urbanized, little open-space) and continued urban-infill and growth within and upstream of its jurisdiction. Nonetheless, the City has a vision and initially a broad goal for watershed and river health. The vision states the desired future for the city with respect to watersheds and waterways. The goal states that the City ultimately aims at maintaining watershed and river health for water quality and hydrological patterns, quantitatively and qualitatively.

Although it is unrealistic and infeasible to re-create the environmental conditions that existed before the City's development, it is prudent to consider predevelopment conditions when assessing the health of Forrester Creek and the San Diego River. Information about historical conditions is useful in understanding current watershed processes and functions that are essential to downstream watershed and river health. In fact, healthy downstream conditions may best be served by continual efforts by the City to reduce and eliminate pollutant discharges to Forrester Creek, to the maximum extent practicable.

1.5 WATERSHED PLANNING

The City recognizes the importance of watershed management as a guiding principle for its water quality management of the San Diego River Watershed. As required by Permit Section J, a Watershed Urban Runoff Management Plan (WURMP) was developed during PY2 and refined during subsequent permit years. As a member of the San Diego River Watershed, the City attended and participated in establishing the Watershed program for the San Diego River area. There is a learning curve to transitioning certain activities from a jurisdictional to a watershed approach.

The picture to the right shows El Cajon as part of the inland watershed area. To improve watershed management much has been planned and implemented during the past permit years. For this PY, a plan to address watershed management that include compliance with the bacteria TMDL is under development and it will be completed by next PY.

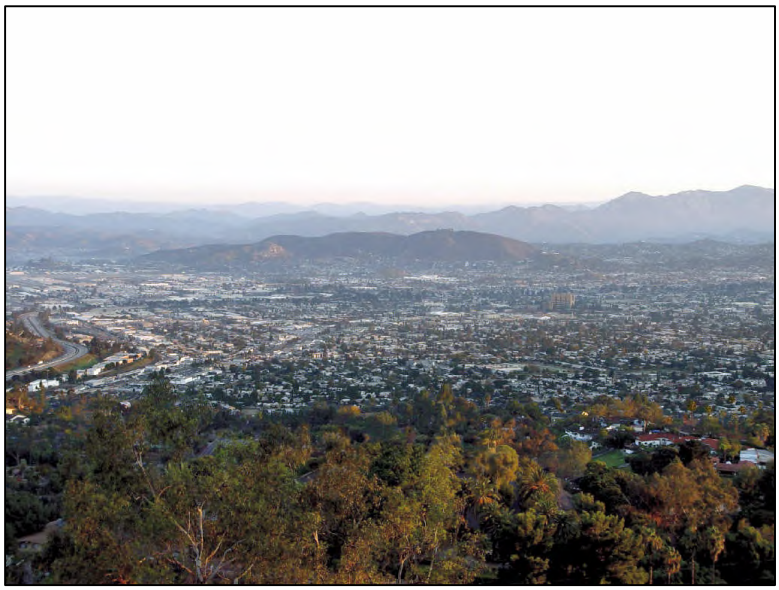

Water Quality and Stream Flow
Water quality has long since been the focus of many watershed programs. However, those programs and regulations have focused mostly on the chemical aspects of water quality, such as the concentrations of metals and organics, without considering how water quality is affected by the physical habitat in a stream or river. Water quality is greatly affected by the amount of large wood in the waterway, the river or stream's substrate (coarse gravel or fine sediment), the amount of native vegetation in floodplains and other aspects of physical habitat.

Physical habitat, in turn, is shaped in part by the larger forces of stream flow and hydrology. It has long been understood that the influence of stream flow, hydrology, physical habitat and water quality help determine which species are present within a watershed and the abundance, productivity and diversity of those species. For these reasons and others, the City defines its functional disposition in the watershed and river health as providing/conveying sustainable stream flow and hydrology and restoring and preserving water quality.

- **Stream Flow and Hydrology**: Maintain, or as necessary reduce, dry weather flow conditions using the Standard Urban Storm Water Management Plan to prevent an increase in runoff due to development and redevelopment projects, thereby protecting and improving watershed and stream health, channel function and public health and safety.
- **Water Quality:** Protect and improve surface water and groundwater quality and meet or surpass state and federal water quality standards and regulations.

Improving water quality within the City's jurisdiction will contribute to overall watershed health and will help keep the watershed as healthy as possible. John Muir said it best, "*When we try to pick out anything by itself, we find it hitched to everything else in the universe*".

1.6 GEOGRAPHICAL INFORMATION SYSTEM (GIS)

PY5 is the ninth year our City is using a Geographical Information System to present the location of El Cajon within the San Diego Watershed (See Figures following within this section). Base maps and information obtained from SanGIS provided the basic information to start layering jurisdictional and regional information. Deciding on the types of data and what needs to be shown are the biggest questions to answer.

In 2006-2007 the City created a new full-time GIS position to assist the Storm Water Program. The City is working on completing and implementing an Enterprise GIS. To achieve this goal the City is currently dedicating more resources to a growing GIS staff and a new server.

One of the main benefits of GIS is improved management of your organization and resources. A GIS can link data sets together by common location data, such as parcel numbers, which helps departments and agencies share their data. Storm Water staff identified the Business License database as information easily integrated into a GIS to show and list the parcels within 200 feet of the five (5) major El Cajon drainage channels. The saying, "better information leads to better decisions" is true for GIS. A GIS is not just an automated decision making system but a tool to query, analyze, and map data in support of the decision making process.

The GIS maps presented in this PY5 Annual Report are used as tools by storm water staff to aid in the making of decisions that will be crucial to the direction of the Storm Water Program. Three maps follow this page showing:

- San Diego County Regional Watersheds
- San Diego River Watershed with a focus on El Cajon
- City of El Cajon showing Residential (green), Commercial (red), Industrial (pink), and School Districts (blue).

The information can be presented succinctly and clearly in the form of a map and accompanying report, allowing decision makers to focus on the real issues rather than trying to understand the data.

1.7 SIGNIFICANT ACCOMPLISHMENTS

The following significant accomplishments were completed and helped to maintain Watershed and River Health. Elimination of pollution is mainly due to routine scheduled municipal maintenance activities, municipal and commercial education efforts, outreach to the public and daily contact with citizens. The following is a summary of the major investments in reducing pollutant loads to receiving waters.

- Continued to implement and refine the Enforcement program for City Ordinances 4907 (JURMP) and 4908 (Standard Urban Storm Water Management Program (SUSMP) requirements). Streamlined enforcement activities with the inspection database to better coordinate and design correction actions.
- Continued to improve an inspection program for construction, commercial and industrial facilities based on Best Management Practices (BMP) implementation. Tracking BMP implementation and ensuring that all minimum required BMPs are installed and maintained properly helps ensure that pollutants are not discharges from those facilities. (List is continued following the three pages of GIS Maps).

Regional Watershed Map

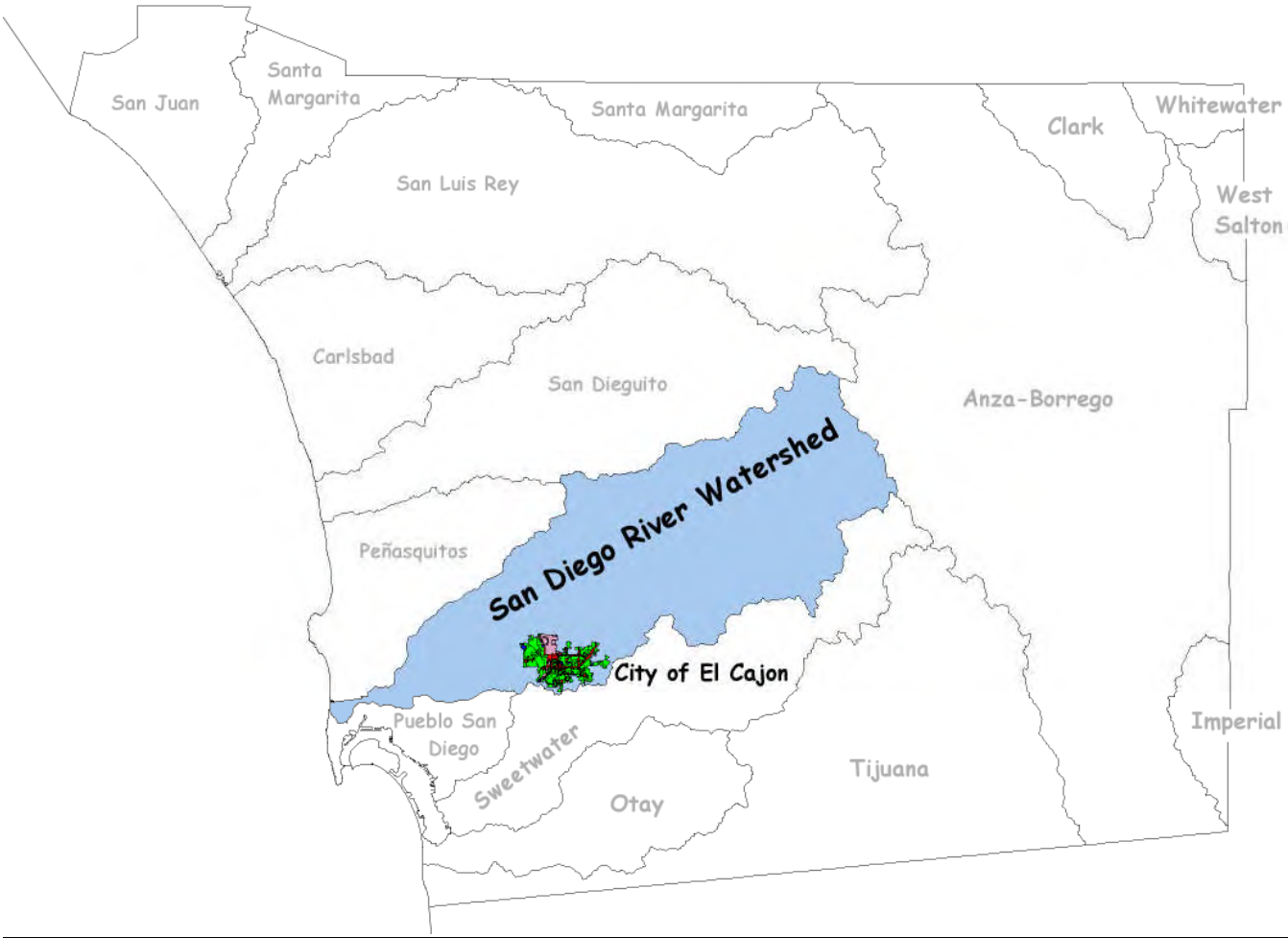

SD River Watershed Map

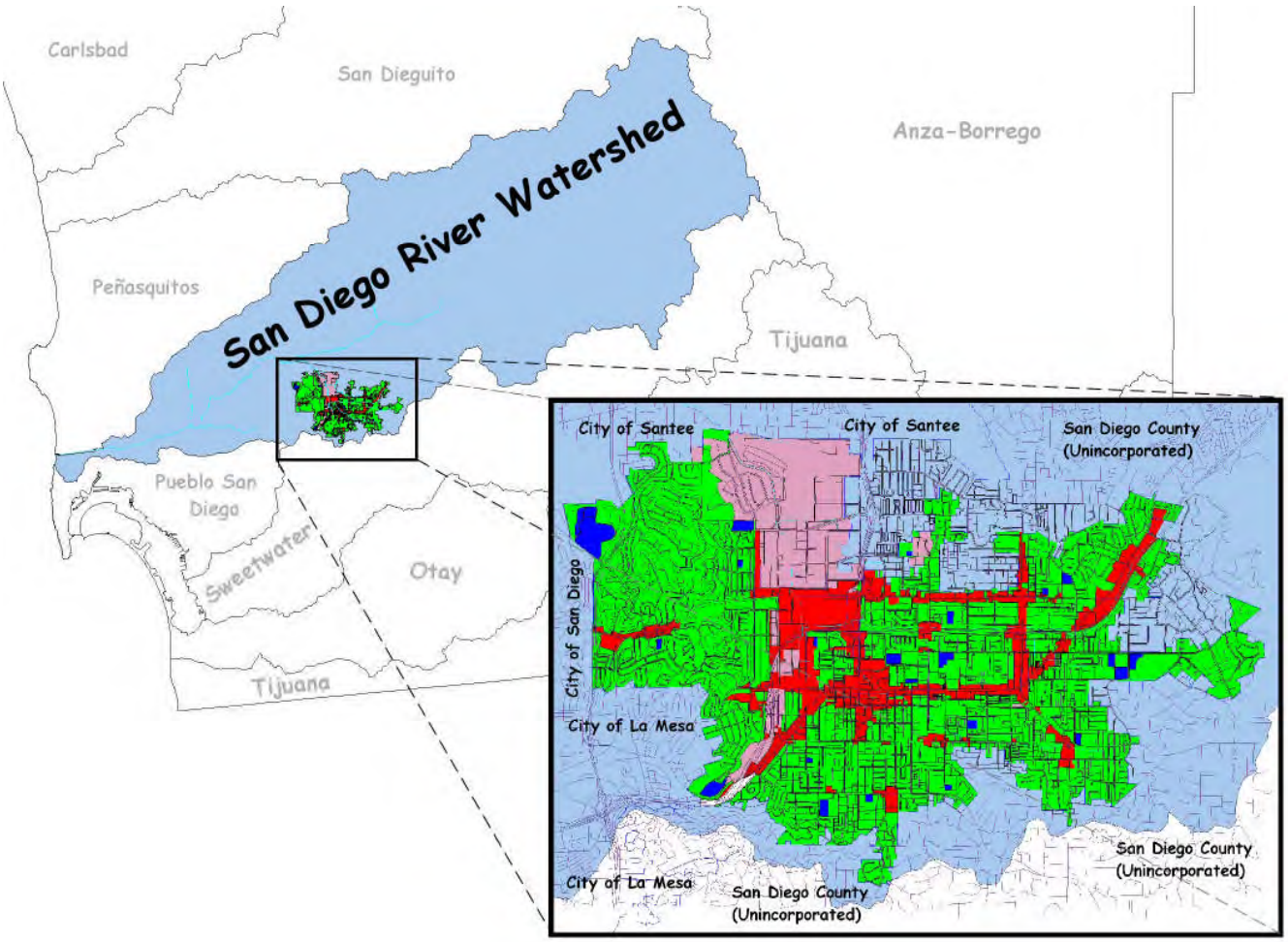

El Cajon GIS Map

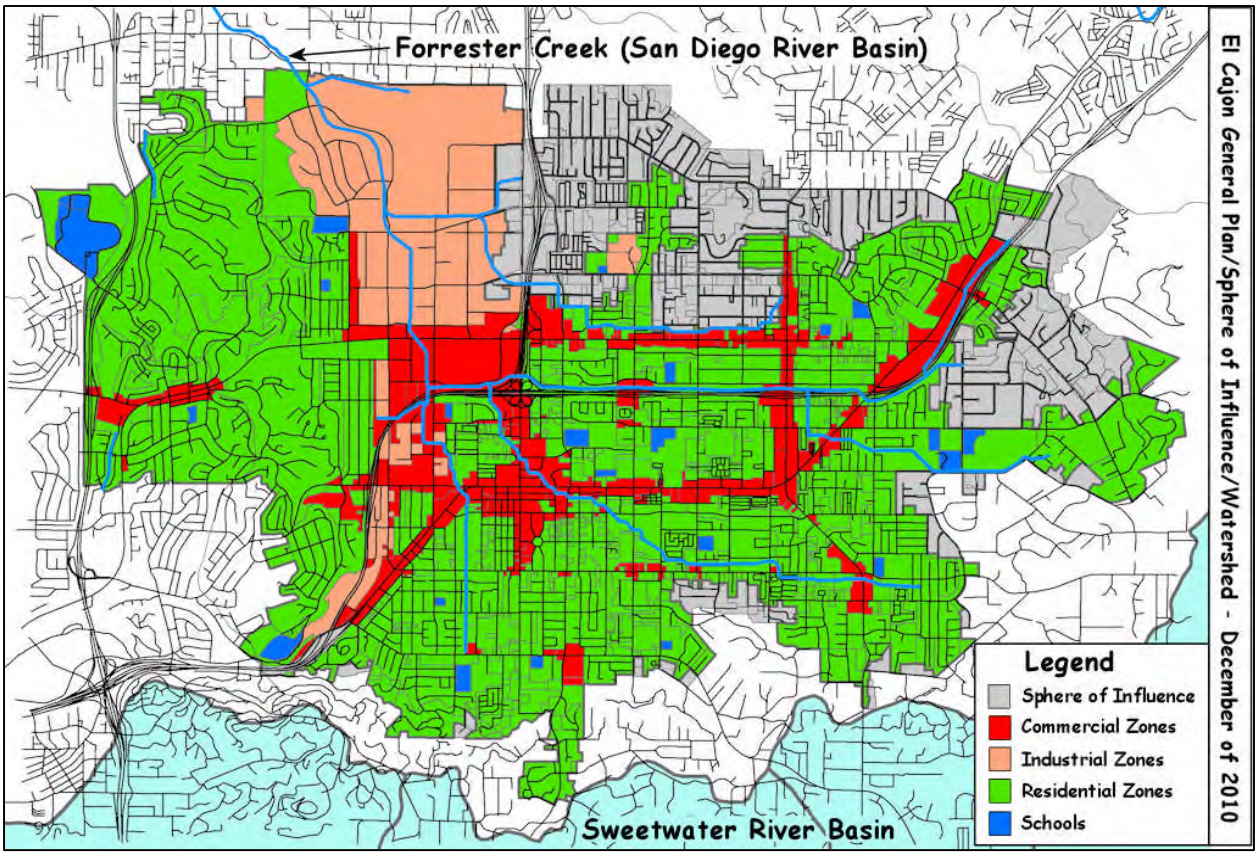

- Inspected and provided educational materials to 208 industrial and commercial businesses for compliance with the City's Municipal Code and the State's General Permits for construction and industrial activities.
- The City's comprehensive street sweeping program swept 17,677 miles of improved streets and collected 3,710 cubic yards of materials from City streets. About 38% of the material collected this year was sediment and silt. Many areas were swept twice per week.
- Collection of over 1,788 cubic yards of materials from City inlets, culverts, concrete-lined channels, and catch basins;
- Reached out to community members on a wide range of urban runoff and storm water quality topics through approximately 266,000 copies of articles, brochures, mailers, and over-the-counter sources.

1.8 RWQCB Compliance Reviews and Inspections

During this reporting period, no formal comments were received from the RWQCB regarding the Annual Report for PY4 (2010-11).

1.9 Organization and Content of Annual Report

The Permit requires the submittal of an Annual Report to the SDRWQCB. This Annual Report covers the single permit year activities between July 1, 2011 and June 30, 2012. The Dry Weather Monitoring for 2012 (Section 7) will be submitted as a separate document on December 15, 2012.

The PY5 Annual Report presents and discusses implementation of the City's JURMP with a look at trends, BMP implementation, and overall JURMP effectiveness. Organization of the PY5 Annual Report is as follows:

- Executive Summary and Report Certification
- Section 1 - Introduction
- Section 2 - Development Planning Component
- Section 3 - Construction Component
- Section 4 - Municipal Component
- Section 5 - Industrial and Commercial Component
- Section 6 - Residential Component
- Section 7 - Illicit Discharge Detection and Elimination Component
- Section 8 - Education Component
- Section 9 - Public Participation Component
- Section 10 - Fiscal Analysis Component
- Section 11 - Effectiveness Assessment Component
- Section 12 - Special Investigations
- Section 13 - Non-Emergency Fire Fighting
- Section 14 - JURMP Revisions
- Section 15 - Conclusions and Recommendations

Charts, graphs, figures, and pictures are used to demonstrate the fulfillment of Permit and JURMP requirements or to highlight a special program accomplishment and event. Appendices provide additional information to validate activities or procedures.

Specific importance is placed on the assessment of JURMP implementation as this process is essential to determine if the City's program is reaching the Permit goal of improving receiving water quality. Some practices and structures (BMPs) listed in the JURMP to reduce or eliminate pollutants may prove to not be as effective as anticipated. An iterative process of BMP development, implementation, monitoring, and assessment focuses the JURMP such that JURMP programs are sufficiently comprehensive and effective to achieve Permit requirements and program objectives.

SECTION 2 DEVELOPMENT PLANNING COMPONENT

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SECTION 2 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

Over the last few years the City of El Cajon (City) implemented procedures to minimize the short and long-term impact on receiving water quality from new development and redevelopment. Major steps were taken to accomplish this goal under Order No. 2001-001. The City completed the requirements of the plan which include the following four components:

1. Assessment of General Plan
2. Modification of Development (Project Approval Process)
3. Revision of Environmental Review Process
4. Conducted Education Efforts Focused on New Development and Redevelopment

During PY2011-12 the process continued to evolve to incorporate requirements under new Municipal Permit Order No. R9-2007-0001 and SUSMP requirements. The City adopted updated Ordinances in PY1 and again during PY4 to comply with new requirements.

2.2 ASSESSMENT OF GENERAL PLAN

The General Plan provides a jurisdictional framework for directing land use and development decisions within the City. Therefore, it is important that the General Plan include provisions to address water quality. The City incorporates elements into the General Plan that provide an adequate foundation for controlling land use and development in a manner consistent with water quality objectives required by the Municipal Permit Order No. 2007- 0001 (Permit).

On January 14, 2003, Resolution No. 10-03 was approved amending the General Plan and adding storm water runoff policies and objectives. The amendment is consistent with the City's Jurisdictional Urban Runoff Management Plan (JURMP) and provides policy and objectives dealing with storm water runoff to guide decision-making as mandated in the Permit. A copy of Resolution No. 10-30 is included in Appendix A.2. A copy of the General Plan is shown on the following page.

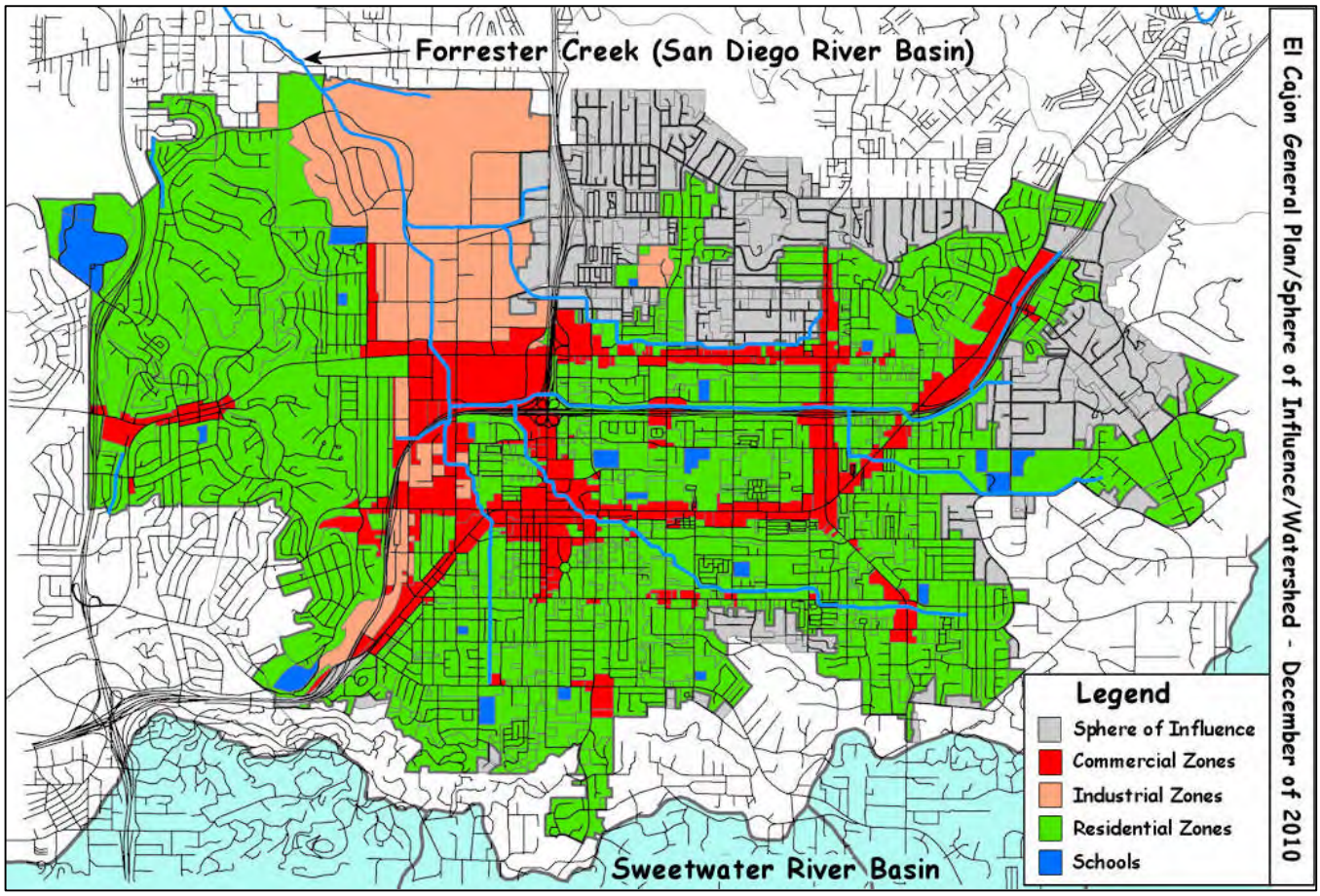

2.3 MODIFICATION OF DEVELOPMENT

2.3.1 Development Project Approval Process

Development becomes a project once the applicant completes planning action forms that describe the type of development proposed. The planning action is routed to many departments including Storm Water. Consolidated comments from Public Works are attached directly to the project as a list of conditions to the proposed planning action. Conditions are then reviewed and accepted by City Council making them enforceable. The City does not issue building permits until all requirements addressing water quality are fulfilled. Similarly, the City does not grant a final occupancy certificate until all storm water requirements are completed.

To protect our natural resource waterways, the City has continued ordinance development and implementation to address water quantity and quality. New and Redevelopment projects are reviewed for applicable BMPs to attain:

- Reduction in paved areas
- Maximize infiltration
- Detain or retain flows to reduce the speed at which water discharges to natural areas, and break Directly Connected Impervious Areas (DCIAs).
- Minimize potential pollutants from reaching the Municipal Separate Storm Sewer System (MS4) from grading and other construction activities by meeting the provision specified in Section D.2 of the Permit.
- Require Industrial applicants subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities to provide evidence of coverage under the General Industrial Permit.
- Require project proponents to provide proof ensuring ongoing long-term maintenance of structural Treatment Control BMPs.

2.3.2 Standard Urban Storm Water Mitigation Plan

The City participated with other Copermittees in revising and updating the BMP requirements that were listed in the Model Standard Urban Storm Water Mitigation Plan (SUSMP) that was submitted to the Regional Water Quality Control Board (RWQCB) in February 2002. Consequently, the City adopted Ordinance 4717 adopted on December 2002 to implement local SUSMP to reduce pollutants and runoff flows from all new development and significant redevelopment. The City revised the SUSMP ordinance in December 2007, which adopted Ordinance 4908, creating Municipal Code 16.60 for New and Re-Development pursuant to SUSMP requirements per Permit R9-2007-0001. The City, subsequently, adopted the final Countywide Model SUSMP in February 2010.

The City has incorporated the Hydromodification Management Plan (HMP) requirements into the City's Local SUSMP. The HMP was developed by a consultant, Brown & Caldwell, and regional workgroup and the draft HMP was submitted on January 24, 2009 with a revision submitted in May of 2009. After receiving comments from the RQWCB in June of 2009, the final HMP was prepared along an HMP Sizing Calculator. The final HMP was accepted by the RQWCB on July 14, 2010 and the HMP requirements were incorporated into the Local SUSMP in September of 2010 to meet the January 14, 2011 deadline. No priority projects in the City of El Cajon triggered interim HMP criteria, since proposed projects did not disturb more than fifty acres. All priority projects still under review have been and will continue to be assessed for HMP triggers. As of yet the City has not had to review calculations for HMP for any projects as all of the proposed projects have been deemed exempt from HMP sizing, having proposed to reduce the amount of impervious areas or at least to not exceed the amount of impervious area that was existing.

Last year the City also completed a comprehensive update of the El Cajon Sewer Ordinance to give the City legal authority to enforce the wastewater discharge requirements of Regional Water Quality control Board Order No. R9-2007-0005. For a complete summary of this Ordinance update, refer to Appendix D.3. For a complete copy of the new Sewer Ordinance, refer to Appendix D.4.

Projects triggering the New and Re-Development SUSMP requirements are:

- Housing projects with at least 10 units
- Commercial developments at least 1 acre in size
- Heavy Industry
- Automotive repair shops
- Restaurants
- Hillside developments that are 5,000 square feet or greater
- Developments within Environmental Sensitive Areas
- Parking lots 5,000 square feet or more or with 15 or more parking spaces potentially exposed to urban runoff
- Streets, roads, highways, and freeways with an area equal to or greater than 5,000 square feet
- Retail Gas Outlets

Projects trigger the SUSMP requirements during the initiation of a planning action or environmental investigation brought on by the California Environmental Quality Act (CEQA). The Storm Water section of Public Works reviewed a total of 53 planning actions, none of which were categorized as a new high priority SUSMP project (please refer to Appendix A.2 for a list). The City reviewed 5 SUSMP projects, some of which had been under review since last year and years prior (please refer to Appendix A.2 for a list). Planning Actions and New Development projects are tracked using a MS Excel spreadsheet.

An example Storm Water Mitigation Plan (SWMitP) that includes a list of SUSMP conditioning requirements are given to SUSMP priority projects at the earliest planning stage (please refer to Appendix A.2 for sample SWMitP). BMPs and the pollutants that are targeted for reduction or elimination to the maximum extent practicable (MEP) are listed in Table 1.

Table 1 – BMP to Pollutants for New and Re-Development Projects

BMP	Primary Pollutants	303(d) Pollutants
Site and Facility Design	Flow	
Site Design and Landscape Planning – SD-10	Flow	
Efficient Irrigation – SD-12	Nutrients	**TDS** **Nutrients**
Storm Drain Signage – SD-13	Trash Oil & Grease Toxics	
Pervious Pavements – SD-20	Sediment Oil & Grease	**TDS**
Trash Storage Areas – SD-32	Trash Bacteria	**Bacteria**
Vehicle Washing Areas – SD-33	Metals Detergent	**TDS**
Detention Basin - TC-22	Trash Sediment Metals Bacteria Oil & Grease Organics	**TDS** **Bacteria** **Nutrients** **ODS (Oxygen Demanding Substance)**
Vegetated Swale – TC-30	Sediment Metals Oil & Grease Organics	**TDS** **Nutrients** **ODS**
Bioretention – TC-32	Sediment Oil & Grease Nutrients Trash Metals Bacteria Organics	**TDS** **Nutrients** **Bacteria** **ODS**
Media Filter – TC-40	Sediment Trash Metals Bacteria Oil & Grease Organics	**TDS** **Bacteria** **ODS**
Water Quality Inlet Filter – TC-50	Oil & Grease Trash	
Vortex Separator – MP-51	Trash Sediment	
Drain Inserts – MP-52	Trash Oil & Grease	
Underground Concrete Retention - Proprietary	Flow	

SUSMP projects must identify pollutants of concern based on anticipated and potential pollutants generated from the proposed project and implement BMPs that target the reduction or elimination of the identified pollutants to the MEP. Anticipated and potential pollutants generated by land use type are shown in Table 2.

Table 2 – Anticipated and Potential Pollutants Generated by Land Use Type

Priority Project Categories	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >one acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Once potential pollutants of concern are identified for the proposed SUSMP project, BMPs must be selected from a list of required and project specific BMPs provided below in Table 3. All site design criteria are applied to every SUSMP project while source and treatment controls are dependent upon site location and type of pollutants.

Table 3 – Site Specific BMPs

	New Development (Including Re-Development)									
	Home Subdivisions ≥10 units	Heavy Industry ≥1 acre	Commercial Development ≥1 acre	Automotive Repair Shops	Restaurants	Hillside Development ≥ 5,000 sq ft	ESAs	Parking Lots ≥15spaces; ≥ 5,000 sq ft	Street, road, highways, and freeway ≥5,000 sq ft	Retail Gasoline Outlets
General Site Design (Apply All)										
Control Peak Runoff Rates	X	X	X	X	X	X	X	X	X	X
Minimize impervious Areas	X	X	X	X	X	X	X	X	X	X
Conserve Natural Areas	X	X	X	X	X	X	X	X	X	X
Protect/slopes/and channels	X	X	X	X	X	X	X	X	X	X
Minimize effective imperviousness	X	X	X	X	X	X	X	X	X	X
SOURCE CONTROLS (Apply all that are Applicable)										
Storm Drain Message and Signage	X	X	X	X	X	X	X	X	X	X
Outdoor storage area design		X	X	X	X					X
Trash Storage Area Design		X	X	X	X					X
Loading/unloading dock area design		X	X							
Repair/maintenance bay design				X						
Vehicle/Equipment/Accessory washing area design				X						
Fueling Area Design										X
Proof of Control Measure Maintenance	X	X	X	X	X	X	X	X	X	X
TREATMENT CONTROLS (Apply at least two)										
Inlet Filters	X	X	X	X	X	X	X	X	X	X
Grass Strip Filter	X	X	X	X	X	X	X	X	X	X
Grass Swale Filter	X			X		X	X	X	X	
Detention/Infiltration Basin	X		X	X	X	X			X	
Porous Pavement Detention	X		X		X	X		X		
Porous Landscape Detention	X	X	X		X			X	X	
Infiltration Trench	X		X				X	X		
Media Filter	X	X	X				X	X		
Proprietary Controls						X				X
Other										

For PY2011-12, 2 SUSMP projects completed construction and included Treatment Control BMPs. Projects with SUSMP requirements that were completed and inspected for BMP implementation in 2011-12 are listed in Table 4. For the current inventory of all sites with Treatment Control BMPs and BMP implementation infeasibility analyses please refer to Appendix A.2.

Table 4 – Application of SUSMP Structural BMPs for Completed Projects

SUSMP Project	Media Filter(s)	Inlet Filter(s)	Porous Pavement	Bioretention Basin(s)	Vegetated Swale(s)	BMP Facilities Maintenance Agreement
100 Civic Center Way Public Safety Center	X	NA	NA	NA	X	NA
500 N. Johnson Ave. Inland Kenworth	NA	X	NA	X	NA	X

One of the constructed SUSMP projects mentioned above was the Inland Kenworth project. This large scale urban redevelopment project was a recently demolished commercial property, which was previously a multi-unit commercial complex that was nearly 100% impervious. The project met four SUSMP triggers: the project created more than 2,500 square feet of impervious area within an ESA; the parking areas proposed were greater than 5,000 square feet; and was a commercial project over one acre with an automotive service facility. This project was exempt from HMP requirements because the completed project had an overall net reduction in impervious area. The project site had one large building surrounded by driveway lanes with a large parking lot area to the south. The property was flanked by the County Ditch concrete channel along its entire western property boundary.

The structural BMPs that were implemented to treat the post construction storm water runoff from the building drive aisles and parking lot area through Low Impact Development (LID) practices were vegetated bioretention basins that surrounded the northern southern and eastern perimeters. The post construction storm water runoff from these areas was designed to flow down the embankment of each of the bioretention basins through a series of openings in the curb. The embankments below these curb-cuts were protected with rock riprap for energy dissipation.

All basins were designed with a 4” perforated underdrain pipe system that was attached to an overflow catch basin. These catch basins each contained a multi-stage inlet filter that included a treatment boom around the opening for filtering fine sediments and fossil fuels and a basket and mesh bag capture system for coarser sediments and debris, including trash. These catch basins were, in turn, connected to either the existing County Ditch channel or an existing lateral that ran across the property and ultimately connected to the County Ditch channel.

2.3.3 Waiver Provisions

In the event that a Priority Project is unable to meet the treatment control BMP sizing requirements outlined in the City’s SUSMP, the City has the authority to issue a wavier. In order to receive a waiver for treatment control BMP sizing requirements, the project must prove that

all available treatment control BMPs have been determined to be infeasible for the site. If a waiver of infeasibility is issued, the City will notify the RWQCB within five days of granting the wavier. The following information will be provided to the Regional Board:

- The name of the City employee granting the waiver
- The name of the developer receiving the waiver
- The location of the site
- The reason for granting the waiver
- A description of the BMPs required for the site

The City has never granted such a wavier to a Priority Project in the past and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may choose to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the projects' watershed.

Table 5 – BMP Implementation Summary

BMP	Percent Implemented	Pollutant Prevented
Control Peak Runoff Rates	100	Flow
Minimize Impervious Areas	100	Flow
Conserve Natural Areas	100	Flow
BMP	**Percent Implemented**	**Pollutant Prevented**
Protect Slopes and Channels	100	Sediment
Minimize effective imperviousness	100	Flow
Storm Drain Message and Signage	100	Trash, Oil & Grease
Trash Storage Areas	100	Trash, Oil & Grease
Repair/Maintenance Bay Design	100	Oil & Grease
Proof of Maintenance	100	Trash, Oil & Grease
Inlet Filter(s)	50	Sediment, Trash, Oil & Grease
Grass Strip or Swale (Biofiltration)	50	Flow, Sediment, Oil & Grease, Trash
Detention Basin/Area	100	Flow, Sediment, Oil & Grease, Trash
Bioretention	50	Trash, Sediment, Oil & Grease
Infiltration Strip/Area	0	Flow, Sediment, Oil & Grease, Nutrients (**TDS**)

Note on Table 5: Percentages of BMPs implemented, shown in Table 5, are based on the number of applicable sites. For example, if there were three Hillside Development projects and all three-implemented slope stabilization, that would be all of the applicable projects. A 100% implementation equates to those applicable sites and not to all sites.

2.4 TREATMENT CONTROL BMP MAINTENANCE INSPECTIONS

All treatment control BMPs installed at priority development projects are regularly inspected by the City to ensure treatment controls are operating effectively and are being properly maintained. Inspection frequencies are based on the project's assigned TTWQ priority as determined by the criteria outlined in the City's 2008 JURMP. Table 6 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 6 – Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Inspection Frequency
High	Annually (prior to the start of the rainy season)
Medium	Every two years
Low	As needed

The City requires annual verification of proper maintenance of all priority development treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. To ensure the continued maintenance of these BMPs, the City is continuing to inspect SUSMP projects for the duration of the use of said site. As required by the Municipal Permit, a minimum of 20% of the total number of projects with approved treatment controls and a maximum of twice the average number of projects with treatment control BMPs approved per year are inspected annually. Additionally, 50% of all medium priority sites with drainage inserts are inspected annually. Inspections include examination of all treatment control BMPs at the site to verify that each treatment control BMP is working, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings are documented by the inspector using the City of El Cajon Treatment Control BMP Inspection form in Appendix A.2. In order to check the maintenance of a greater cross-section of sites, the City will continue to rotate the list of the medium and low TTWQ sites that are inspected each year. If any deficiencies in treatment control operation and maintenance are noted during the inspection, the responsible party is notified, and appropriate enforcement actions are taken to achieve compliance. The list of the sites inspected in PY2011-12 can be found in Appendix A.2. Inspection findings and follow-up actions for each development site with installed treatment controls are included in the City's treatment control BMP tracking database. A Treatment Control BMP Maintenance Verification Letter and Form was sent to all sites in the inventory. A template of the letter can be found in Appendix A.2.

2.5 REVISED ENVIRONMENTAL REVIEW PROCESS

The City of El Cajon revised CEQA forms and checklists to include questions related to water quality issues. The City reviews all projects for CEQA and there were 2 projects that needed to complete the revised forms for PY2011-12. These forms are attached in Appendix A.2.

2.6 DEVELOPMENT PLANNING OUTREACH EFFORTS

Education efforts for disseminating information to planners, developers, and contractors on the JURMP requirements for new and significant redevelopment is provided through one-on-one and

group discussions at the time of the various discretionary plan reviews and checks, during BMP development, and at time of obtaining the building permit. Topics include:

- Federal, state, local water quality laws and regulations
- Connection between land use decisions and water quality goals
- New and Redevelopment requirements
- Water quality impacts from development (urbanization)
- Methods for minimizing impacts of development on water quality.
- Implementation of SUSMP requirements

2.7 REGULATORY COMMENTS

As of the writing of this report, no regulatory comments have been received for JURMP Annual Report 2010-11.

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SECTION 3 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

Construction in the City of El Cajon is a constant activity. Whether it is a 500 square foot remodeling project or a multi-single family residential subdivision, a minimum list of construction BMPs must be in place prior to any earth disturbance or material storage. With a City built out to its current borders, the City experiences re-development activities more so than new development. However, clearing currently developed lands and re-development is at the heart of this community's construction and revitalization efforts.

Park Avenue Subdivision

3.2 PREVENTION OF POLLUTED RUNOFF

The City uses the CalTrans Construction Site BMP Manual together with the California Storm Water Quality Association Best Management Practices (BMPs) Handbook as guidance for the application of appropriate BMPs. An emphasis on pollution prevention is the easiest and most convenient set of BMPs to implement and achieve the elimination of polluted discharges. The following prevention practices are part of the minimum set of BMPs for construction sites.

- Prevent sediment and other polluted runoff – Design a sediment basin to trap runoff for zero discharge, specifically for larger construction sites with enough room for sizing adequate basins.
- Prevent bacteria discharges – Place portable sanitary facility in secondary containment and secure to the ground or stable structure. Prevents tipping and loss of bacteria (fecal coliform) containing material.
- Prevent alkaline (greater than 10.0 pH) runoff – Require properly designed and installed Concrete Washout areas and encourage concrete contractor to haul away concrete waste. Concrete waste disposal should be at an offsite location with adequate control measures.

The City works closely, often one-on-one, with developers at the counter and field discussing ways to prevent pollution from entering the storm drain. The pollution prevention practices are required for any applicant looking for a building permit.

Copies of construction handouts provided by the building department and additional information given to developers, contractors, and homeowners at the time of Erosion Control Plan submittal can be found in Appendix A.3.

3.3 UPDATES TO ORDINANCES

In accordance with Section D.2.a of the Permit, the City Municipal Code Title 13 Chapter 13.10 *Storm Water Management and Discharge Control* was updated in 2008 to comply with the new grading requirements. The City Municipal Code Title 13 Chapter 13.10, Section 13.10.140; and Chapter 15.64, *Grading*, work together in addressing land disturbance, demolition, and construction activities for the elimination of sediment and other pollutants from discharging into the City's storm drain system.

3.4 MODIFICATION OF CONSTRUCTION AND GRADING APPROVAL PROCESS

Shortly after the Chapter 13.10 was updated, the City assessed and modified the local construction permit and grading approval process to comply with Section D.2.a of the Permit. All construction projects are required to go through a storm water review process. Construction and grading projects are required to implement measures to ensure that pollutants from the construction site are reduced to the Maximum Extent Practicable (MEP) and will not cause or contribute to an exceedance of water quality objectives. The City does not allow clearing of vegetation matter or grading activities until all necessary environmental clearances, including water quality, are secured and a grading, drainage, and erosion/sediment control plan is prepared, reviewed and approved by the City. During the review process, the City ensures that all applicable grading and storm water ordinances are fully implemented as required per El Cajon City Code Title 13, Chapter 13.10, Section 13.10.140; grading ordinance Chapter 15.64 and Chapter 16.60. The City does not issue Building Permits until requirements addressing storm water and water quality have been fulfilled.

3.5 PRIORITY CONSTRUCTION SITES AND SOURCE IDENTIFICATION

Periodically the City reviews the list of high priority construction projects to update the list for close monitoring and inspection of construction activities and BMPs implementation for reducing or eliminating pollution from entering the City's storm drain system. High priority status is applied to projects that pose a potential threat to water quality or location. Priority is also given to SUSMP projects that are complete and need to have the storm water controls verified and the maintenance plans reviewed. Table 1 lists the selection of BMPs that must considered and the appropriate BMPs installed at all high priority projects. See Section 3.8 for any Enforcement Actions. In PY5 the City had no medium priority construction project and 4 active high priority construction projects, all of which were SUSMP projects. Also in PY5 the City approved 126 low priority projects for construction. A list of all active and inactive high priority construction sites is given in Appendix B.2.c. No project was required to have advanced treatment during construction as none were classified as an exceptional TTWQ.

3.6 BMP IMPLEMENTATION AND REQUIREMENTS

The City established minimum BMPs that must be implemented at all construction sites regardless of the water quality prioritization. The City developed a list of BMPs required at all construction sites. This list first appeared in the JURMP as Appendix C, but has recently been revised and updated to comply with Order R9-2007-0001. BMPs specifically prevent, remove, or eliminate a pollutants or group of pollutants from entering the storm drain system.

Table 1, below, lists the minimum required BMPs for construction sites, the primary pollutant eliminated and the potentially affected 303(d) pollutant. Eliminating pollutants meets the Clean Water Act and Permit objectives for maintaining the biological, physical, and chemical integrity of the State's waters, while a "no impact" condition meets the restoring requirement of the Clean Water Act objective.

A first step toward connecting construction activities to water quality is shown in the following table. The next step is to quantify how many sites are compliant with the minimum BMP requirements. Table 1 summarizes the minimum BMP requirements and the pollutants that each targets for prevention (including minimization of grading activities), removal or elimination. Table 2 lists the different types of construction projects and the minimum BMPs required for each category. Table 3 connects and quantifies the number sites compliant with the required BMPs. In Section 11, the Effectiveness Assessment of the Construction Component will draw on this connection between BMP implemented and pollutant to determine if the program activities adequately reflect a move toward improving water quality or have little effect on water quality.

Table 1 – BMP to Pollutant

BMP	Application	Primary Pollutant Removed	303(d) Pollutant Impact
Silt Fence (SC-1)	Perimeter Control to remove sediment and debris in runoff	Sediment	TDS
Desiltation Basin (SC-2)	Captures sediment runoff and eliminates sediment runoff	Sediment	TDS
Gravel Bag Barrier (SC-6)	Perimeter Control for pavement to pavement. Removes sediment runoff	Sediment	TDS
Fiber Roll (SC-5) or Coconut Fiber Blankets	Erosion Control for slopes to prevent sediment runoff	Sediment	TDS
Stabilized Construction Entrance (TC-1)	Tracking control for imperviousness to pavement to prevent sediment tracking into streets	Sediment	TDS
Street Sweeping (SC-7)	Tracking control for paved areas. Collects/removes sediment tracked onto pavement	Sediment	TDS Phosphorus
Material Storage (WM-1)	Material coverage and containment or pavement or impervious surfaces to	Stucco, Paints,	pH TDS

BMP	Application	Primary Pollutant Removed	303(d) Pollutant Impact
	eliminate polluted runoff	Concrete	
Solid Waste (WM-5)	Trash/debris coverage and containment. Prevent trash runoff	Trash, debris*	Bacteria Phosphorus
Concrete Washout (WM-8)	Containment and disposal of concrete washout. Prevents concrete runoff	Concrete-laden Waters	pH TDS
Sanitary Waste (WM-9)	Containment of sanitary waste. Prevents bacteria runoff	Bacteria	Fecal Coliform
Vehicle/Equip Management (NS-8, NS-9, NS-10)	Containment of petroleum fluids. Prevents oil & grease runoff	Oil & Grease	TDS

* Pollutant being monitored by East County Cities
"-" Designates "no impact" on levels of 303(d) pollutants; supports Clean Water Act objective to maintain or restore water quality

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Implementation is measured through onsite inspections. Success of that implementation depends on stage of project at time of contact, materials presented, BMP selection, and developer motivation to comply with construction requirements. The City provides a Storm Water Guideline to developers for Construction Projects. This simple, easy to use guide lists the construction BMPs to use for construction activities that would occur outdoors and potentially affect storm water quality.

Associations, such as the Building Industry Association (BIA), have assisted in disseminating information to contractors and builders. Those construction personnel who do not belong to associations receive BMP information at the time of permit application or permit issuance. There is a noticeable difference between Storm Water savvy developers and those just starting their first storm water compliance experience. The City is working towards optimizing interactions at the Public Works counter. Landscaping as early as possible is emphasized regardless of season. This information is provided to contractors as permit issuance and during each scheduled inspection. BMPs must be appropriate for site-specific conditions. Installing BMPs for the sake of compliance is not complying with MEP.

There are four categories of construction projects:

1. Pools, retaining walls, remodels, and additions
2. Single Family Residences, Condo Conversions, and Subdivisions
3. Hillside Development
4. Commercial/Industrial

The minimum required BMPs per category of construction are shown in Table 2, on the next page. The next step is to complete the BMP cycle by verifying during inspections that any BMPs are:

a. Present as required – indicates changes in knowledge and awareness.
b. Implemented properly and functioning correctly – indicator of behavioral changes.

Printed materials are available at the Public Works Department making over-the-counter interactions into educational opportunities. A City BMP guide, edited summaries of application JURMP sections, and personalize service functions as the City's implementation tools. To prioritize effectiveness efforts, the City focuses on the prevention and elimination of the 303(d) pollutants to address the restoration requirement of the Clean Water Act and our Municipal Storm Water Permit. Overall Effectiveness of the Construction Component is provided in Section 11.

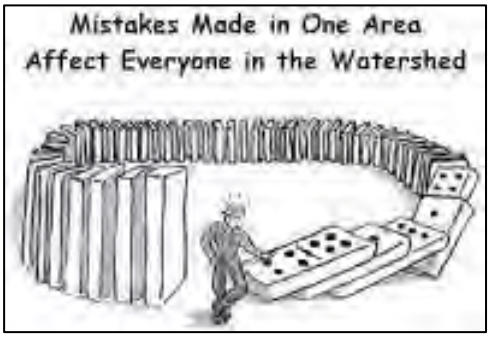

Table 2 – Required BMPs for Construction Sites

Required Construction BMP	Construction Type			
	Pools, Retaining Walls, Remodels, Additions	SFR Subdivisions	Hillside Development	Commercial and Industrial
Silt Fence - SC-1	X	X	X	X
Storm Drain Inlet Protection (+Filter Fabric) SC-10	X	X	X	X
Sediment Basin or Trap SC- 2 or 3		X	X	X
Check Dams - SC-4		X	X	X
Fiber Rolls - SC-5			X	
Gravel Bags - SC-6	X	X	X	X
Street Sweeping - SC-7	X	X	X	X
Stabilized Construction Entrance - TC-1	X	X	X	X
Dust Control - WE-1		X	X	X
Scheduling - SS-1	X	X	X	X
Velocity Dissipation Devices - SS-10			X	
Preservation of Existing Vegetation - SS-2		X	X	X
Coconut Fiber Blankets - SS-7			X	
Material Storage - WM-1	X	X	X	X
Solid Waste Storage - WM-5	X	X	X	X
Concrete Waste - WM-8	X	X	X	X
Employee Training - City of El Cajon		X	X	X

X = Required; Implemented; and Verified

3.7 INSPECTION

The City inspects all high priority projects as needed during the dry season and at least monthly or bi-weekly during the wet season. Inspections are completed using the form provided in Appendix A.3 (entitled City of El Cajon Storm Water Quality Inspection for Construction Sites). In PY5, the City had high priority projects, of which 4 were fully or partly active construction sites during the permit year and 1 was inactive for the entire duration. There are also 4 SUSMP project construction sites that have been inactive since at least PY4 and prior to PY5 had achieved a minimum of 70% stabilized coverage. These projects have been deemed by the City as not just inactive, but temporarily abandoned and are inspected only as needed until the sites are disturbed in the future. SUSMP projects are considered high priority construction projects and are inspected on the same schedule. All projects are inspected prior to completion of the projects to verify proper and complete installation of storm water treatment controls and review any long-term maintenance plans. Two (2) SUSMP projects were completed during PY5 and 4 remained inactive.

Projects designated as medium priority are inspected monthly during the wet season and on an as-needed basis during the dry season, as well as in response to a complaint received from City staff or the general public. The City had no medium priority projects under construction during PY5. The City maintains a detailed record for high and medium priority projects. A spreadsheet showing the period of time, in weeks, that each construction site was active within the wet season and the number of inspections conducted during the wet season and the dry season is attached in Appendix B.2.c. It is important to note that inspections in the spreadsheet account only for the inspections conducted by the Public Works Department; inspections conducted by other departments, which have also been trained in proper BMP implementation (such as the Building Department), are not included in the table.

In accordance to the Municipal Permit and the City's JURMP document, the City inspects low priority construction projects on an as-needed basis. Building Department personnel constantly inspect all projects designated as low priority for their own Building Code requirements. For this reason, the Building Staff has been trained by the Storm Water Department to recognize when to contact Storm Water personnel due to improper construction BMPs. The City approved 126 low priority projects (consisting mostly of single family residential additions) for construction in PY5. During Permit Year 2010-11 the City had implemented a new system for tracking permit reviews. The City is working on incorporating a means of gathering more detailed information for low priority construction sites with this new system. Important information, including the period of time the site is active within the wet and dry seasons, may be extracted from the database that the program is based on.

It is important to note that only inspections that were documented are included in the spreadsheet mentioned above. Visual inspections, which did take place throughout the permit year, are not tracked.

Table 3, below, shows the minimum BMPs implemented at high priority constructions, verified through inspections. The results are generated from inspection reports. A "Yes" under corrective action indicates that specific conditions noted during the inspection warranted actions by the contractor, such as maintenance or BMP improvements. All boxes with "Yes" listed in the "Citation" column refer to deficiencies in the BMPs at one site on one occasion.

Table 3 – BMP Deficiencies for High Priority Sites

BMP	Discharge during Rain	Corrective Action	Citation
Silt Fence	Yes	Yes	Yes
Storm Drain Inlet Protection	Yes	Yes	Yes
Sediment Basin	Yes	Yes	Yes
Check Dams	No	No	No
Fiber Rolls	No	No	No
Gravel Bag Berm	No	No	No
Street Sweeping/Vacuum	Yes	Yes	Yes
Stabilized Construction Entrance	No	No	No
Hydroseeding	No	No	No
Geotextiles and Mats	No	No	No
Material Delivery and Storage	No	No	No
Stockpile Management	Yes	Yes	Yes
Solid Waste Management	No	No	No
Concrete Waste Management	No	No	No
Sanitary Waste Management	No	No	No

Inspection of construction sites in PY5 verified that most construction sites implemented BMPs. All BMP deficiencies were resolved through discussions between City staff, project construction personnel, corrective actions, and through enforcement actions. If corrective actions were needed, the construction site either completed the corrective action at the time of inspection or a follow-up visit was scheduled to verify the completion of corrective actions. When corrective actions are not completed in a timely manner, enforcement actions are issued. In PY5 the City had 12 enforcement actions related to construction inspections and follow-ups, but only 4 of those were related to priority project sites. Enforcement actions are further discussed in Section 3.8 and a list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc.) is attached in Appendix B.3.

Table 4 – Capital Improvement Project Assessment

2011-2012 CIP Construction Site Inspections		Enforcement Actions	
Job Site	**Minimum BMP's in place**	**Warning(s)**	**Administrative Citation(s)**
Overlay 2012 – Park Avenue and Vicinity	Y	N	N
Resurfacing 2011 – Rubberized Slurry	Y	N	N
Storm Drain Pipe Repair 2011 – East Main Street and Bermuda Lane	Y	N	N
Chaparral High School Storm Drain Replacement	Y	N	N
Heartland Fire Training Facility – Concrete Paving	Y	N	N

Public Works inspectors inspect the CIP projects for Storm Water compliance on an as-needed basis. This may be as frequently as weekly, or even daily, but generally no less than twice per month (when the inspectors are on the job for non-storm water related inspections) while the project is active. No CIP project met SUSMP criteria and no project disturbed more than one acre at any given time.

3.8 ENFORCEMENT

In PY5 the City had 3 enforcement actions pertaining to inspection follow-ups or complaints received for construction activities, 1 of which resulted in a monetary administrative citation. This citation was delivered to the Ballantyne Glen SUSMP project. The entire site drains to a sedimentation basin that became overburdened and discharged overly sediment-laden runoff during a rain due to lack of proper BMPs on each of the graded pads upstream. The City conducted follow-up inspections for all enforcement actions, including the Ballantyne Glen project, to verify that proper and complete corrective actions were taken in a timely manner. Corrective actions are needed to fix or improve a BMP even though that BMP may be implemented as written.

Administrative Citations are issued for discharges to the City's storm drain system. Most construction sites implement the minimum BMPs and inspections verified that the BMPs were effective in reducing or eliminating discharges to the storm water conveyance system. A list of enforcement actions categorized by components (i.e. construction, commercial, industrial, etc) is attached in Appendix B.3.

Other non-compliance issues for construction, except as described above, were not experienced during PY5, although some deficiencies were noted during construction inspections. Deficiencies are resolved through discussions between City staff, project construction personnel, corrective actions and through citations. All violations and deficiencies were corrected in a timely manner.

None of the violations resulted in threats to the environment or human health and notification to the Regional Board was not required.

3.9 CONSTRUCTION OUTREACH AND EDUCATION

Education of construction contractors and developers is conducted primarily through the permitting and inspection processes. The City's building department has the first contact with contractors and developers when a building permit application is completed. The following steps are taken by Building Division and Public Works/Storm Water staff:

1. Building Permit Application.
2. A Storm Water "Hold" is placed on the property.
3. Developer or contractor is given a Storm Water handout.
4. Discuss with developer or contractor, in detail, minimum BMPs and implementation requirements.
5. Developer or contractor generates an Erosion Control Plan plus any additional storm water requirements as necessary.
6. Review Erosion Control Plan and any additional requirements, comment, direct developer or contractor to make changes prior to approval.
7. Inspect according to priority.
8. Address Corrective Actions.

In PY5, the City reviewed and commented on 3 SUSMP projects, 5 Storm Water Mitigation Plans, no condominium conversion projects and 126 Erosion Control Plans for small projects. The City inspects all completed SUSMP projects to confirm proper installation of storm water controls and review the long-term maintenance plans. Copies of the Construction handouts and an example Erosion Control Plan Checklist for additions and remodels (small projects) are included in Appendix A.3.

Compliance is assessed through inspections by storm water staff or a City contractor. Inspections are completed on a scheduled frequency depending on the season. As mentioned above, during the wet season high priority construction projects are inspected at least monthly or bi-weekly.

3.10 IMPROVEMENTS AND REGULATORY COMMENTS

Generating improvements increases program efficiencies by harvesting those BMPs that work and discarding those that do not.

Improvements

Improvements to the Construction Component include:

- Storm Water Code Enforcement Officer is now provided with a copy of each approved Erosion Control Plan in addition to the office copy in an effort to keep an inventory in the City vehicle so they can be at-hand in the field if there are any issues on a site.
- Continue to focus inspection efforts on BMP implementation to facilitate Effectiveness Assessment.
- Continue to use BMP Implementation Inspection Checklist to list minimum required BMPs for construction.
- Continue to inspect construction of SUSMP projects as High Priority construction.
- Continue to use silt fences and gravel bags as primary perimeter controls.

Regulatory Comment

As of the writing of this report, no regulatory comments have been received for JURMP Annual Report 2010-11.

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SECTION 4 MUNICIPAL COMPONENT

4.1 INTRODUCTION TO MUNICIPAL FACILITY ACTIVITIES

As required by Section 4 of the Municipal Permit, existing municipal facilities must prevent or reduce pollutants in urban runoff by implementing a City-designed program to address specific outdoor activities that have the potential to impact water quality. Municipal facilities include streets, public parking lots, flood control devices, parks/recreation, administration and other public buildings, maintenance and storage areas, police, and fire/safety stations. Activities at any one of these facilities may have the potential for discharging pollutants as urban runoff or during a rain event. The Municipal Component of the JURMP defines a comprehensive program to reduce the potential for polluted discharges through:

- Pollution Prevention activities,
- Best Management Practice (BMP) implementation,
- Storm Water Inspections, and
- Recycling

Homeless

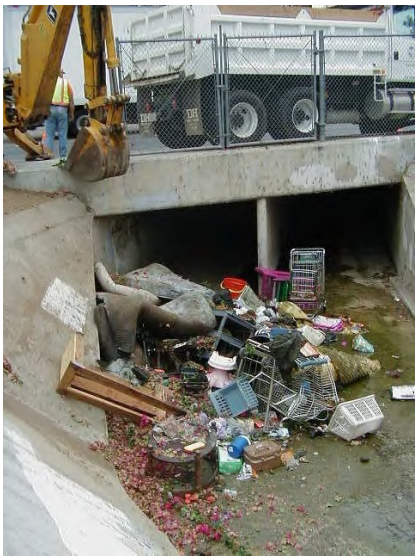

Of specific note are the Homeless that are not only a social problem, but become an uncontrollable water quality problem. Homeless encampments exist in storm water channels because of easy access and good outdoor weather conditions nearly year round. Although prevalent in the storm drain channels, the homeless are difficult to detect in the underground storm drain system comprised of reinforced concrete boxes and even more difficult to permanently remove. Detection is conducted through weekly/monthly inspections of popular entry places and complaints to the Storm Water Complaint Hotline. Removal is accomplished through police enforcement and the homeless have an option for other housing with the City's new interim housing project. The City cleans all of its channels at least twice annually and encampments are removed at that time, however, the encampments are often re-established once the channel maintenance in that area is finished.

The photograph above emphasizes the enormous amount of materials associated with homeless encampments in the storm drain channel. Other than the visible pollutants of trash and debris, there are also the less collectable, non-visible pollutants from human waste.

The list of major pollutants associated with the homeless living in these underground flood control devices are:

- trash, (a monitored pollutant for East County)
- debris, and
- fecal coliform (a listed 303(d) pollutant for Forester Creek).

Our dry weather-monitoring program is designed to capture information on the homeless and track elevated levels of fecal coliform. The City will continue its efforts to reduce or eliminate the impacts caused by the homeless encampments within storm drain channels.

As in past years, Storm Water staff and City Maintenance crews teamed with Community Police and Interim Housing (a joint venture between Hammon Properties and Shadow Mountain Church) to move inhabitants into temporary housing, followed by clean up of storm drain channels. For those homeless willing to improve their situation, the Interim Housing group provides a "Hand Up" rather than a hand out. Those who wish to continue living in the City's storm drain system are detained, but eventually find new living places on the street. A County-wide, long-term solution to the homeless is not yet definable for storm water.

4.1.1 Prevention of Polluted Runoff

Anytime pollution is prevented from entering the storm drain system, less pollution must be managed at end-of-pipe. The following prevention activities and corresponding BMPs are fully implemented at one or more of the many municipal facilities located within the City. As noted in Introductory Section, the focus of PY5 is continuing BMP implementation, such that prevention of polluted runoff is achieved to the Maximum Extent Practicable (MEP). The primary pollutants of concern for this prevention effort are the 303(d) impairments of Forester Creek that include pH, total dissolved solids (TDS) as nitrates; and fecal coliforms. The impairment associated with the City of El Cajon or the upper section of Forrester Creek are bacteria and pH. Our City is in the beginning phase of implementation of a bacteria TMDL study. Further discussion of pH origin and any corrective actions are presented at the end of this section. Trash and debris is a specific issue being addressed as part of a watershed effort with the City of Santee.

When pollution is prevented from entering the storm drain system, it is either collected or eliminated. Collection requires management of gathered wastes, while elimination is true

prevention, but much more difficult to accomplish. The following municipal activities encompass collection and elimination activities.

1. Erosion and sediment control prevents soils and sediments from washing away during rain events. BMPs implemented for City Improvement Projects to control erosion and sediment during project activities are as follows:

- Preservation of existing vegetation
- Scheduling of projects
- Seeding and planting of native plants and trees that are drought resistant and do not contribute to discharges of vegetative matter to the City's MS4.
- Establish plant ground cover before removing erosion or sediment controls.

2. Roadway and street maintenance activities preserve these facilities for a longer, useful existence. Many maintenance activities keep pollutants from entering the storm drain system. Listed below are the maintenance activities with the gross amounts of pollutants collected. Pollution removed equates to preventing polluted runoff that could be transported in urban runoff or storm water discharges.

- Street sweeping and cleaning - Swept 17,677 miles of curbed streets and removed 3,710 cubic yards of materials that were disposed as solid waste. There are a total of 337 curb-miles of streets and a total of 483 lane-miles within the City. As stated in greater detail in the JURMP, some areas are swept on a more frequent basis. By collecting 3,710 cubic yards of trash, debris, and sediment, these pollutants did not enter the storm drain system and did not further impair Forrester Creek.
- Collected 42 cubic yards from spills and other miscellaneous operations
- Completed 78 special sweeps at the request of citizens or City staff, collecting 26 cubic yards of material. This is a lower number of special sweeps, but less material was collected than during PY4 (i.e., 66 special sweeps and 35 cubic yards).

3. Municipal vehicle maintenance facilities provide a valuable service in keeping the City's vehicles in top running condition. Maintenance activities are conducted in a manner to keep pollutants from entering the storm drain system. Listed below are the activities and their designated areas.

- Conduct vehicle maintenance indoors or under canopies
- Area designated for washing vehicles is covered and wash water drains to an oil/water separator before discharging to the sanitary sewer
- Area designated for rinsing street sweepers directly discharges to the sanitary sewer
- Recycling motor fluids (oil and antifreeze), tires, batteries, and metal

4. Landscaping maintenance activities beautify our parks, recreation, and administration buildings. Pollution prevention maintenance activities include:

- Collection of grass clippings and discarded as solid waste

- Sweep or blow residual clippings onto turf areas
- Clean City-owned patio and plaza areas uses machinery that retains the cleaning liquids during the cleaning process
- Aerate soil frequently to encourage rain penetration and infiltration
- Maintain an Integrated Pesticide Management (IPM) program

5. Maintenance Procedures for MS4s includes inspecting and maintaining MS4 by cleaning, removing sediment, debris and vegetation; repairing or replacing damaged and failing structures; and stenciling/posting signs at storm water inlets and conveyance systems. Approximately 3,710 cubic yards were collected during PY5. Maintenance crews responded to 17 requests by city staff and citizens to maintain the storm drain system. A work survey request (WSR) is completed for each of the requests and filed at the Maintenance Yard on Vernon Way.

- Storm Drain Inlet/ Catch Basin cleaning
- Storm Drain system repair and maintenance

6. Building Maintenance activities at Municipal facilities prevent pollution by collecting debris, dirt, and organic materials before rain events transport this material to the storm drain system. Wash water is disposed into the sanitary sewer and dry methods are used to collect materials to dispose as solid waste. The following are completed on a weekly schedule:

- Sweep and clean parking lots
- Clean sidewalks
- Sweep and clean entry ways
- Control irrigation runoff and over-spray

7. A Sewer Maintenance program assists in preventing sanitary sewer spills and prevents sewage from entering the storm drain system using the following plans and BMPs:

- Identify and respond to overflow spills and leaks
- Contain and properly dispose of spilled sewage for public and private sewer overflows
- Repair damaged and leaking public sewer lines

- Identify potential problem areas, such as sewer lines in isolated, hard-to-access canyons, or sewer lines at end-of-life condition, for inclusion in annual Capital Improvement Projects
- TV inspection of sewer main lines
- Annual cleaning of main sewer lines
- Quarterly (3-month) cleaning of sewer siphons, trouble spots and problem manholes
- Quarterly (3-month) rodding and descaling of problem sewer lines
- Cleaning and inspection of trunk and outfall sewer mains as part of the preventive and predictive program.

During PY5, the City cleaned 218.96 miles of sanitary sewer main line, while experiencing four public sanitary sewer overflows. The City also responded to ten private lateral sewage spills. See the below sewer overflow summary table for more information on public and private sewer spills.

Table 1 Summary Public and Private Sewer Overflows

Description	Number	Overflow Volume (Gallons)	Volume Recovered (Gallons)	Volume Not Recovered (Gallons)
Public Sewer Spills	2	80	0	0
Private Sewer Lateral Spills	10	2,180	1,615	520

4.1.2 Roads, Streets, Highways, & Bridges

The following are major City accomplishments during PY5 for roads, streets, highways, and bridges:

- Used the recently installed permanent wash rack for street sweepers to allow more time for cleaning equipment.
- Followed a strict preventive maintenance schedule for the new Elgin Crosswind street sweepers.
- Swept Downtown District twice per week.
- Swept non-Downtown Business and Commercial areas once per week
- Swept Residential areas and medians twice per month

Table 2 Summary of Street Sweeping Maintenance by Zone

Description	Silt	Organic	Trash	Total	Miles
	Yds.				
Residential Streets	765	867	469	2,101	9,992
Residential Street Percentages	36%	41%	22%		
Commercial Industrial Streets	656	640	313	1,609	7,685
Commercial Industrial Percentages	41%	40%	19%		
Category Totals	1,421	1,507	782	3,710	17,677
Overall Category Percentages	38%	41%	21%		
Total Percentages (%)	100%	100%	100%	100%	100%

City Maintenance crews collected a total of 3,710 cubic yards of material from street sweeping. Table 2, and figures 1 and 2 show the distribution of material by type, cubic yard amounts, and percentages for materials. Total cubic yards of materials increased in PY5 as the City continues to increase the use of the Elgin Crosswind street sweepers. The volume of trash, silt and organic material decreased for residential areas, compared with PY5, but increased for commercial and industrial areas. Figure 2, below provides a summary chart for relative volumes and Figure 3 provides a comparison to amounts collected in previous years.

Figure 1

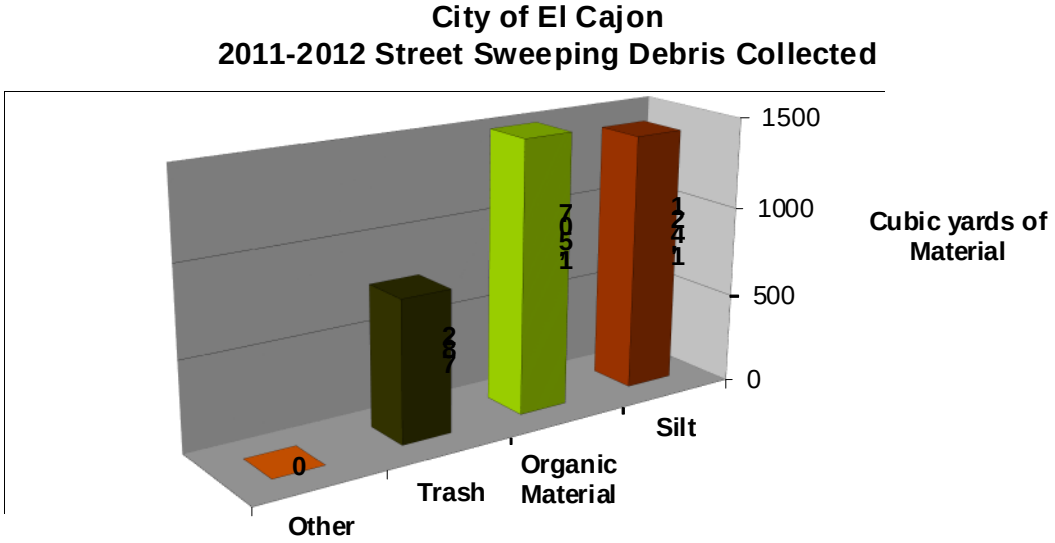

Comparing the percentages of materials collected in the streets with those from the channels, it is worth noting that about 212% more trash is collected in the street sweeping operations (3,710 cubic yards) than is recovered in channel cleaning operations (1,746 cubic yards). This difference may be due to the types of trash. The elimination of trash is best addressed at the source or generator. For the City of El Cajon, street trash is typically generated in highly commercialized areas that include restaurants, convenient stores, and department-like stores. Continuing as a major priority into the next Permit Year will be an ongoing effort to keep the downtown areas trash-free and street-clean. These prevention efforts are a partnering effort with the El Cajon Community Development Corporation (ECCDC) and businesses in the downtown area.

Currently, ECCDC hires the St. Madeleine Sophie's Center students to pick up trash and cigarette butts in the downtown area. During PY5, the ECCDC and storm water staff organized community functions to increase public awareness and improve downtown areas. "Lend a Hand" days were scheduled throughout PY5.

Figure 2

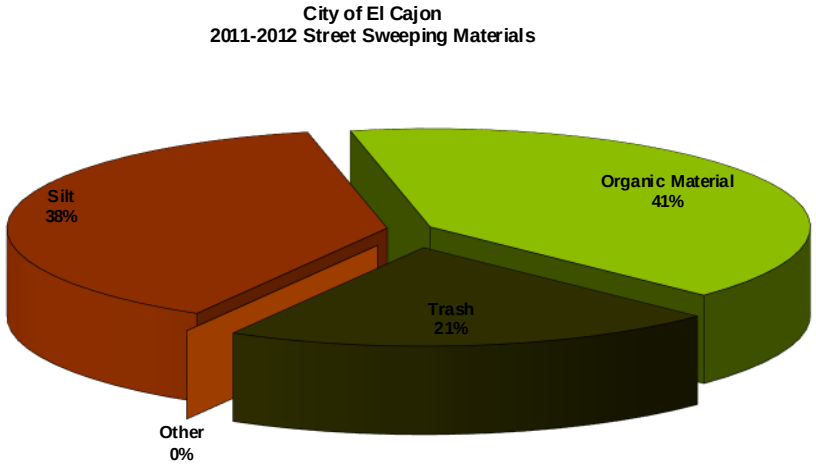
City of El Cajon
2011-2012 Street Sweeping Materials
Silt
38%
Organic Material
41%
Trash
21%
Other
0%

Figure 3

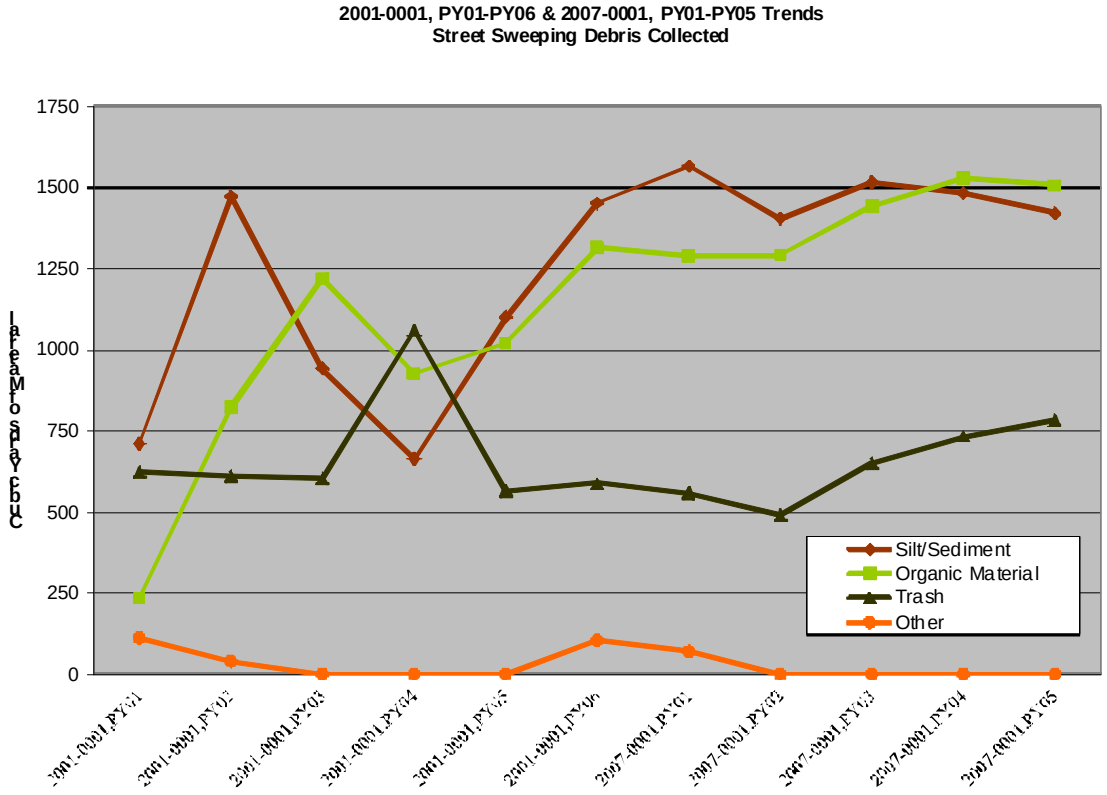
2001-0001, PY01-PY06 & 2007-0001, PY01-PY05 Trends
Street Sweeping Debris Collected
1750
1500
1250
1000
750
500
250
0
Silt/Sediment
Organic Material
Trash
Other

4.1.3 MS4 Maintenance

The City's Municipal Separate Storm Sewer System (MS4) is comprised of 53.0 miles of storm drains, inlets and catch basins, and 23.7 miles of open channels and culverts. The MS4 System functions to collect and convey surface runoff. Maintenance of this system is necessary for continuous transport of rainwater to prevent flooding and to drain urban flows away from populated areas and prevent flooding.

Figure 4

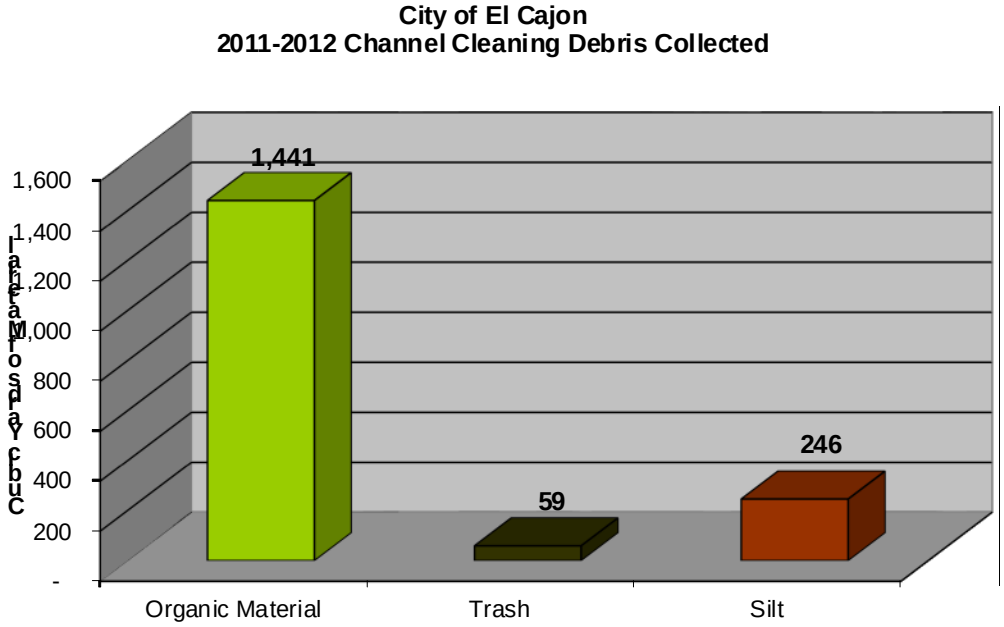

Work Service Requests (WSRs) document maintenance activities on the storm drain and open channel system. For PY5, 17 WSRs were completed for both emergency and non-emergency repairs/maintenance to the MS4. WSRs cover any type of needed maintenance and are available to all contacting our Municipal Maintenance Yard, located at 1050 Vernon Way, El Cajon.

The City's MS4 includes:

- Streets
- Gutters
- Storm Drain Inlets/ Catch Basins
- Underground pipes
- Culverts

- Rock-lined channels
- Concrete channels
- Unlined Creeks

City maintenance crews inspect all open channels once a month and perform a complete cleaning at least once each year. Storm drain inlets and pipes are inspected at least once each year and cleaned as necessary. Table 3 summarizes the number of miles of channels and culverts inspected, together with a separate summary for drain inlets and pipes. We are in the process of converting from a years-old paper map inventory of the MS4, to a GIS-centric inventory. The GIS conversion is in transitional state where we are endeavoring to make our summary of MS4 inspection and cleaning more complete. Although we are currently maintaining our storm drain and channel system as directed in the Municipal Storm Water Permit, it is anticipated that future annual reports will include additional detail in the MS4 maintenance summary as our maps become more complete. Implementation of the JURMP Municipal Component in PY5 resulted in:

- Trash/debris removal from storm drain conveyance system (defined above) completed annually as specified in the JURMP. Total removed is 1,746 cubic yards. For types of pollutants removed see Figure 4.
- Approximately 2,408 feet of storm drain was inspected with CCT camera and none exceeded 30% capacity.
- Maintained 90 storm drain inlet filters located in the public right of way.
- Met JURMP requirements by cleaning catch basins, culverts, and concrete channels once for PY5 in the major channels and once for the minor channels. The Conservation Corps completes the cleaning for Hunter's Run, the open channel at Avocado and Pauline, and Cypress Channel.
- Flow line vegetation maintenance completed one time during PY5 (tree maintenance along major channels and median maintenance).
- Cleaning of Homeless waste and trash completed four times during PY5.

Table 3 Summary of MS4 Inspection and Cleaning Activities

Drainage Structure Type	Number Miles Inspected	Number Miles Cleaned	Number Miles > 30% Full
Open Drainage Channels	283.92	17.50	0
Drainage Structure Type	Number Inlets Inspected	Number Inlets Cleaned	Number Inlets > 30% Full
MS4 Inlets/Catch Basins	1,377	1,377	0
Drainage Structure Type	Number Miles Inspected	Number Miles Cleaned	Number Miles > 30% Full
MS4 Pipes and Culverts	53.01	6.16	0

4.1.4 Sanitary Sewer System

Continuity and consistency describes the City annual cleaning and maintenance of the sanitary sewer system. Few blockage conditions occur or reoccur when crews adhere to the normal maintenance routine. The El Cajon sewage collection system, consisting of nearly 195 miles of municipally owned sewer mains, is a transportation-only utility with the sewage treated at the Metro Wastewater Treatment Plant in Point Loma, San Diego. El Cajon's outfall sewer main transports sewage from the City, Wintergardens Sewer District, and Padre Dam/Lakeside/Alpine Sewer District.

The City of El Cajon has an aggressive maintenance program to prevent sewer overflows. An important maintenance goal is to flush and maintain the entire system at least once every 18 months, which requires the flushing of 148 miles of sewer main each year. For PY5, maintenance crews cleaned 218.96 miles of sewer line in 12 months. Difficult areas, where solids and grease accumulate, or root intrusion is a problem, are on a more aggressive schedule of flushing and rodding every 3 months. A Summary of Sewer Operations and Maintenance Procedures is included as Appendix D.1. A complete summary of scheduled Municipal Sewer System Maintenance is included as Appendix D.2.

New-Generation Sewer Vactor Truck

An indispensable tool in preventing sewer blockages and overflows

As part of the aggressive preventive maintenance program, the City televises sewer mains when:

- A new sewer tap is installed
- New difficult areas are suspected
- Determining the type of maintenance or repair needed

Interior of Sewer Main Televising Van

There were two public sewer overflows from City-owned sewers totaling 80 gallons for PY5. The city recovered and returned to sewer 0 gallons for the two public overflows. Sewage overflows infiltrated into the bare ground. No sewage from public sewer overflows entered into the storm drain system or receiving waters. Sewer system activities and discharges are reported annually to the San Diego Regional Water Quality Control Board and the California Integrated Water Quality System (CIWQS), among others. In April of 2003, the City internally started tracking reported overflows from private sewer laterals, where homeowners or businesses require immediate system repair. Response to the private

sewer overflow includes reimbursing the City for any storm drain cleanup costs due to the overflow into the public right-of-way.

For PY5, 10 private sewer overflows were reported or detected by municipal staff. An approximate total of 2,180 gallons was estimated in overflow volume. In all, 1,615 gallons of sewage liquids were recovered and disposed of in the municipal sanitary sewer. No effluent from private overflows reached the storm drain or receiving waters. With private sewer spills, municipal crews may need to estimate how long the spill was active and document an estimated number of unrecoverable gallons.

4.1.5 Corporate Yard

The City of El Cajon has one Corporate Yard located at 1050 Vernon Way. Four separate Public Works Divisions are located at this facility, as follows:

- Public Works Maintenance Division - conducts and coordinates maintenance for streets, storm drains, drainage channels and public sewers;
- Facility Maintenance Division - conducts maintenance activities on City buildings and related facilities;
- Fleet Maintenance Division - maintains and services all City vehicles, and
- City Parks Division - conducts maintenance activities on City parks, ROW median areas, landscapes and urban forest.

It takes coordination and collaboration for these crews to work in the public interest maintaining and improving the health, safety, convenience and quality of life for the City's citizens and visitors.

The Maintenance Division of Public Works maintains the city's infrastructure. Fleet and Facilities Management is part of Administrative Services and maintains the City’s buildings, vehicles and equipment. The Parks Division of Public Works controls and maintains parks, recreational areas, and other City-owned landscaped areas.

An annual inspection of each area is completed and corrective actions discussed with Department Management. The Corporate Yard is facilitated by being under a single, unified management. An annual inspection of the Corporate Yard was completed during June of 2012.

New Vacuum Technology in Street Sweeping

Cleaning the Elgin Crosswind Sweeper in the City Wash-down Facility.

Improvements at the Corporate Yard include:

- Monthly visual inspections are conducted.
- Secondary containment is in place at all storage areas.
- Berms are in place around the wash and waste discharge areas.
- Employees are trained on storm water issues, dealing with the homeless, pesticide storage/application procedures training, and managing hazardous materials.
- Two separate Street Sweeper Wash-Down Areas are now in service.

The annual inspection of the Corporate Yard uncovered a few needed Corrective Actions as follows:

- Maintain recordkeeping for training and inspections as defined in the Corporate Yard SWPPP.
- Post and update procedures on use of Spill Kits.

The sample of the Checklist for Municipal Site Inspection is contained in Appendix A.4.

4.1.6 Municipal Airfield

Gillespie Field, located at 1720 Joe Crosson Drive, is the local airfield and governed by the San Diego County Airport Authority and the Federal Aviation Administration. The City of El Cajon inspects this facility for compliance with the Municipal Permit as well as the General Industrial Permit. Some of the new BMPs include:

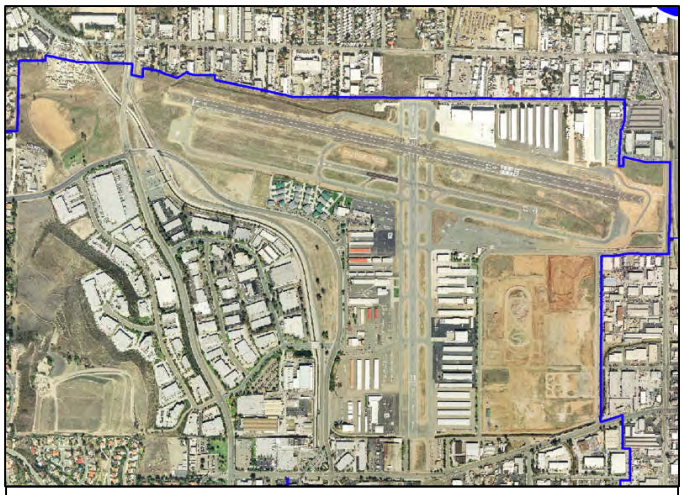

Gillespie Field - A County Airport Facility

- Wash racks with discharges hooked to the sanitary sewer. Use of manually adjusted shut-off valves eliminating flows to the sanitary sewer during rain events.
- Spill kits are in place throughout the airport.

4.1.7 Parks and Recreation

The Parks Division maintains, improves, protects, and develops the City's parks, landscaped median islands, public building grounds, and the urban forest for the benefit and enjoyment of the community. Maintenance of these nearly 120 acres is overseen by a well-trained, full-time staff that performs any necessary maintenance on a daily basis. Attractive public open spaces and well-maintained parks help to make El Cajon a better place to live, and encourages civic pride. Staff continually strives to promote a Cleaner Community through maintaining a Healthy Watershed while providing the community the highest quality and level of service possible.

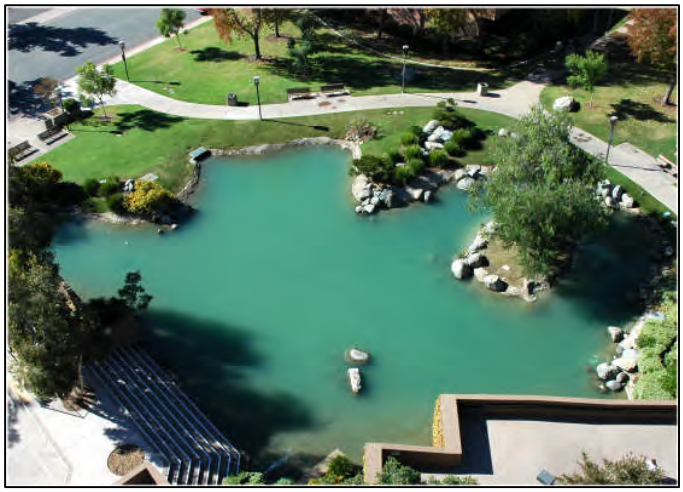

In PY5, Parks and Recreation obtained purchase contracts with a steam cleaning company requiring compliance with the City's Storm Water Pollution Prevention. All Park Program construction bid awards require Contractor to provide written plan indicating implementation of the City's Storm Water Pollution Prevention. Recently completed the Public Safety Center and Civic Center Plaza improvements. Both projects included pervious paving and vegetative swales to improve stormwater runoff quality.

Park and Recreation areas prevent pollutants from entering the storm drain system, by implementing BMPs such as:

- Providing Pet Waste Bags at Dog Park located at Wells Park and Hillside Park
- Doggies-pots are installed throughout Wells Dog Park. The Doggie-Pots are refuse containers for dog feces that have self-shutting lids to keep out rain and irrigation water. The Doggie-Pots also dispense small plastic bags to assist with collection. Over 15,000 pounds of pet waste was removed from Dog Park this PY5.
- Tree trimming operations generated 208 tons of greenwaste some of which was used in City Parks and City Open Space to suppress weeds and increase rainfall infiltration on soil slopes. Any remaining greenwaste not used by the City was delivered to Sycamore landfill for use by the County residents.
- Blowing organic cuttings and sediment onto grass and disposing collected wastes properly
- Use of mop and buckets to clean up after special City events (e.g., Cajon Classic Car Show and Concerts on the Green)
- Requiring Qualified Applicator Certificates and 20 hours of training for the safe and effective use of pesticides.
- Requiring Contractors that steam-clean or power-wash to capture, collect, and contain wash liquids, then dispose into the sanitary sewer.

- Parks Division continues to exercise Best Management Practices in all aspects of our operation.

4.2 MUNICIPAL BMPS

The City has developed a list of minimum BMPs for Municipal crews to use while maintaining the following categories of municipal-owned and managed facilities. Not counting streets, alleys, storm drain or sewer easements, there are 31 separate municipally maintained facilities within the City. Overall, the categories of Municipal facilities are as follows:

- Roads, Streets, Parking Facilities
- The Multiple Separate Storm Sewer System (MS4)
- Corporate Yard
- Municipal Buildings, Parks, Recreational Facilities, and Landscaping

Each minimum required BMP is connected in some way to a primary pollutant that is reduced or eliminated to the maximum extent practicable (MEP) when that BMP is implemented as written. Table 3 lists the Municipal BMPs that may be applied to municipal activities and areas, the primary pollutant(s) either reduced or eliminated and the 303(d) pollutant that may also be prevented. Not all BMPs listed in Table 4 are required for the 31 Municipally-operated areas.

Table 4 lists the four major municipal areas with their minimum required BMPs and whether they were implemented. An "X" for the BMP indicates the BMP is required.

Inspections complete the BMP cycle by:

- Confirming proper BMP Implementation (present as written in the California BMP Handbooks or by City of El Cajon Storm Water Staff)
- Verifying that the BMPs are maintained (during inspection) (See Table 4 in Section 4.2.1 for inspection results)

This Annual Report takes an important step in connecting activities, BMPs, and pollutant reduction to support the Assessment of JURMP Effectiveness contained in Section 11. The connection is shown by the following diagram.

Table 4 Structural/Non-Structural BMPs related to pollutants for Municipal Activities

BMP	Application	Primary Pollutant Reduced or Eliminated	303(d) Pollutant Reduced
Non-Storm Water Discharges - SC10	Addresses any discharge that is not storm water related	Varies	pH; TDS; Fecal Coliform
Spill Prevention Control and Cleanup - SC11	Addresses spills	Varies	pH; TDS; Fecal Coliform

BMP	Application	Primary Pollutant Reduced or Eliminated	303(d) Pollutant Reduced
Vehicle or Equipment Cleaning, Fueling, or Repair - SC20; 21;22	Controls motor fluids	Oil & Grease Metals	-
Loading/Unloading - SC30	Controls the loading and unloading of materials	Varies Trash	-
Liquid Container Storage - SC31	Controls discharges from outdoor liquid containers	Oil & Grease pH	pH
Raw Material Storage - SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal - SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies Trash	-
Safe Alternative Products - SC34	Encourages the use of less toxic materials	Pesticides Fertilizers	-
Building and Grounds Maintenance - SC41	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris	TDS
Parking Lot and Storage Maintenance - SC43	Addresses sweeping and general maintenance of parking lots	Trash/debris Sediment	-
Drainage System Maintenance - SC44	Requires routine cleaning of the storm drain system	Trash/debris Sediment	-
Employee Training	Requires employees be trained in specific topics	Trash/debris	-
Storm Drain System Signage - SD13	Requires signs at storm drains or receiving waters	Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance	Requires routine maintenance of the sewer lateral	Fecal Coliform	Fecal Coliform TDS
Over-watering of Landscape	Requires overspray and over watering to be eliminated	Nitrates	TDS

"-" indicates no impact, positive or negative, to the Forrester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

4.2.1 Municipal Site BMP Implementation and Verification

As defined in the JURMP, five of the 31 Municipal-maintained areas are considered high priority due to their location, size, and/or potential to impact water quality. This includes the Civic Center-City Hall Plaza complex, Fire Station No. 9, Parks Storage Garage, Public Works Maintenance Division Office, and the Vehicle Maintenance Facility. These five are inspected annually. Annual inspections of high priority municipal areas are conducted to verify

implementation of minimum required BMPs. Table 5 lists the minimum required BMPs and Municipal Functions. An "X" under the minimum required BMP indicates the BMP is:

- A minimum requirement
- Implemented per written or required specification
- Verified during inspection

Table 5: Required & Implemented BMPs for Municipally-Maintained Areas

MUNICIPALLY-MAINTAINED AREAS	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Non-Storm-Water Discharges - SC10	X	X	X	X
Spill Prevention, Control & Cleanup - SC11	X	X	X	X
Vehicle & Equipment Fueling - SC20				
Vehicle & Equipment Cleaning - SC21			X	
Vehicle & Equipment Repair - SC22			X	
Outdoor Loading & Unloading - SC30			X	X
Outdoor Liquid Container Storage - SC31				X
Outdoor Equipment Maintenance - SC32	X		X	
Outdoor Storage of Raw Materials - SC33			X	
Waste Handling & Disposal - SC34		X	X	X
Safer Alternative Products - SC35			X	X
Contaminated or Eroded Areas - SC40			X	X
Building & Grounds Maintenance - SC41			X	X

MUNICIPALLY-MAINTAINED AREAS	Roads, Streets, Parking Facilities	MS4	Corporate Yards	Municipal Buildings, Parks, Recreational Facilities and Landscaping
Building Repair & Construction - SC42				X
Parking/Storage Area Maintenance - SC43			X	X
Drainage System Maintenance - SC44	X	X	X	X
Employee Training - City of El Cajon	X	X	X	X
Storm Drain System Signage - City of El Cajon	X	X	X	X
Public Participation & Education			X	X
Street Sweeping - City of El Cajon	X		X	
Vegetation Controls - City of El Cajon				X
Preservation of Existing Vegetation - City of El Cajon				X
Seeding and Planting - City of El Cajon				X
Mulching - City of El Cajon				X
Over-water Activities - City of El Cajon				X

X = Minimum Requirements

4.2.2 Implementation Analysis and Further Assessment

Table 6 summarizes the implemented BMPs for the five high priority Municipal Facilities where formal inspection and BMP usage was verified. It is important to note that no illegal discharges or spills were reported for any of the 31 City-owned or maintained areas.

Table 6 Percent BMP Implemented

BMP	Percent Implemented	Pollutant Prevented
Non-SW Discharge	100	Various: Fecal Coliform
Spill Prevention/Control/Cleanup	100	Various
V&E Cleaning	100	Metals
V&E Repair	100	Oil & Grease
Loading/unloading	100	Various
Liquid Container Storage	100	Oil & Grease
Raw Materials Storage	100	Pesticides
Equipment Operations	100	Oil & Grease
Waste Handling/Disposal	100	Bacteria
Safer/Alternative Products	100	Pesticides
Contaminated/Erodible Areas	100	Sediment
Building/Grounds Maintenance	100	Trash, Debris
Building Repair/Construction	100	Metals
Parking/Storage Maintenance	100	Oil & Grease, Trash, Debris
Drainage System Maintenance	100	Sediment, Trash, Debris
Employee Training	100	All
Public Participation and Education	100	Trash, Debris
Street Sweeping	100	Sediment, Trash, Debris
Sewer System Maintenance	100	Fecal Coliform
Vegetation Controls	100	Sediment
Preservation of Existing Vegetation	100	Sediment
Seeding and Planting	100	Sediment
Mulching	100	Sediment
Over-watering Activities	97	TDS (Nitrate)

(Highlighted – 303(d) listed pollutants)

The City Hall complex has an ever-existing issue with irrigation over spray and broken sprinkler lines due to large public visitor population and the homeless. Problems are fixed immediately, although never totally eliminated.

The above information is used in Section 11 to support an Effectiveness Assessment of the Municipal Component and further define areas where improvements can be made.

4.3 PESTICIDE, HERBICIDE, AND FERTILIZER MANAGEMENT

4.3.1 Pesticide Regulatory Program – Integrated Pest Management

The City has adopted a Pesticide, Herbicide, and Fertilizer Management program as follows:

- Maintain a running inventory of pesticides, herbicides, and fertilizers,
- Implement a schedule for application of pesticides, herbicides, and fertilizers,
- Use an Integrated Pesticide Management (IPM) approach,
- Track use of pesticides, herbicides, and fertilizers,
- Train or license (Qualified Applicator Certificate) City personnel who apply pesticides, and
- Continuously train City personnel on BMPs.

The City maintains 120 acres, including landscaped medians, parkway trees, parks and public grounds and performs scheduled maintenance of all areas on a daily basis. Weed control is conducted along public streets and along storm water channels. Crews use concentrated pesticides and herbicides, both solid and liquid, as follows: Pre-emergent (Pre-E) at 2,254.5 pounds, 1.75 gallons; Post-Emergent at 1.8 grams., 76 gallons (including Roundup); Contact Chemicals at 0 lbs.; and Pool Chemicals (chlorine and muriatic acid) at 55 lbs., 5,314 gallons.

To maintain the City's Park and Recreation areas, 14,377 lbs. of fertilizer were used on turf and landscape during the active growing seasons (Spring, Summer and Fall). Fertilizer applications consisted of polymer coasted slow release fertilizer. No fertilizers are applied when a rain event is pending. All fertilizers are applied using professionally trained City personnel utilizing BMPs. Applications are documented with fertilizer use reports.

4.4 MUNICIPAL STAFF TRAINING, SPECIAL EVENTS AND NOTABLE ACTIONS

New hires for City municipal staff receive New Employee Orientation Training that includes a module on storm water quality issues and concerns. All Qualified Applicator Certificate (QAC) employees receive 20-hrs of classroom instruction training every two years for the safe and effective use of pesticides. All Pest Control Advisors (PCA) employees receive 40-hours of classroom instruction every two years for the safe and effective use of pesticides. The pesticide application training includes contaminated runoff prevention techniques and groundwater contamination prevention. In PY5 all Public Works, Parks Division and Facilities Maintenance personnel attended storm water training sessions conducted during September and October of 2011.

Figure 6

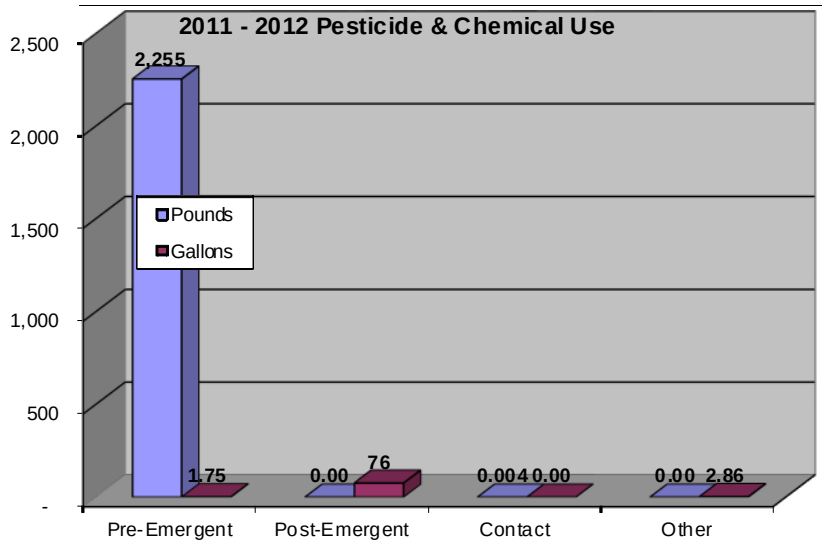

NATIONAL PUBLIC WORKS WEEK

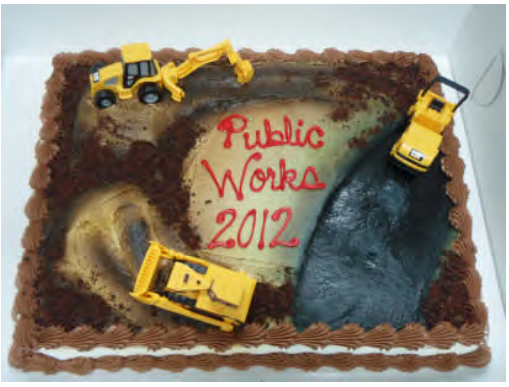

Public Works Week emphasizes the importance of Street Maintenance, Sanitary Sewer and Storm Water system flushing, and other Emergency and Non-Emergency Services provided by Public Works Maintenance and Operations crews. Public Works Week highlights the equipment used to complete these tasks. In PY5, Public Works was celebrated during the week of May 24, 2012. The public, including students from nearby schools, were invited to view equipment and speak with Public Works crewmembers.

TRASH FENCE

The City of El Cajon is the first major jurisdiction within Forrester Creek watershed. Consequently, pollutants and trash that enter the storm drain system are carried downstream to the City of Santee where the Creek has not been improved. In response to the City of Santee's Forrester Creek Restoration Project, the City of El Cajon completed a bid and initial scouting for the placement of a trash and debris fence. The trash fence must be able to withstand forces from flows reaching 22 feet per second and hold heavier floating debris. Installation was accomplished in the fall of 2005 and the trash fence has been in service since. The picture to the right shows trash and debris captured by the fence during a rainfall event.

WEB PAGE

The City of El Cajon continuously add and update pertinent content to the Storm Water Web Page that is part of the El Cajon, Municipal Web Site. Reports, brochures, and guidance documents can be accessed from Portable Document Format files (PDF files) on the web site (http://www.ci.el-cajon.ca.us/dept/works/stormwater.html).

Forrester Creek Trash Fence

4.5 IMPROVEMENTS AND REGULATORY COMMENTS

The following are the major improvements completed for PY5.

- Continued implementation of the El Cajon Sewer Ordinance giving the City legal authority to enforce the wastewater discharge requirements of the ***San Diego Regional Water Quality Control Board Order No. R9-2007-0005.*** **For a complete summary of this Ordinance update, refer to Appendix D.3.** For a complete copy of the new Sewer Ordinance, refer to Appendix D.4.
- Continued the improvement and functionality of the trash and debris fence for Forrester Creek, located upstream from Gillespie Field.
- Reviewed Storm Water Program for Capital Improvement Projects.
- Continued implementation of GIS to assist with maintenance of storm drain systems and the sanitary sewer system.
- Continued implementation of program for monthly self-inspection of Municipal Facilities and Operations.
- Continued to conduct inspection and maintenance of existing Site Design, Source Control and Treatment Control BMPs maintenance.
- Continued to conduct routine inspection and maintenance of storm drain inlets, culverts, channels.
- Continued development of specific environmental indicators for accurate measurement of Urban Runoff Program effectiveness.
- Established defined measurements and actions to address watershed requirements and developed watershed management procedures.
- Developed comprehensive pamphlets for Industrial & Commercial facilities focusing on General Housekeeping, Restaurants focusing on Fats, Oil & Grease and Construction sites. The developed pamphlets were translated into both Spanish and Arabic.

No regulatory comments were received for the Municipal Component of the JURMP Annual Report 2010-2011.

SECTION 5 INDUSTRIAL & COMMERCIAL COMPONENT

5.1 INTRODUCTION 1
5.2 STATIONARY IND. & COMMERCIAL SALES/SOURCES/EQUIPMENT 2
5.2.1 Background 2
5.2.2 Source Characterization 2
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SECTION 5 INDUSTRIAL & COMMERCIAL COMPONENT

5.1 INTRODUCTION

Industrial

The Industrial Component continued on its track of evaluating the implementation of Best Management Practices (BMPs). The component was originally revised at the end of 2004, adjusting the program to a BMP implementation and verification task and continued with the revision of the JURMP in 2008. Industrial inspections are the focus of the City's Industrial Component with the goal to verify the presence, proper implementation, and maintenance of BMPs. During the inspections, the City also checks that facilities have filed a Notice of Intent and has a Storm Water Pollution Prevention Plan pursuant to the General Industrial Permit, and if required.

Proper implementation and maintenance of appropriate BMPs at industrial facilities will eliminate or reduce the discharge of pollutants from an Industrial site and prevent pollutants from entering the City's storm drain system. The City redesigned the inspection sheet to emphasize the use of BMPs for specific, potential pollutant producing activities. Industrial activities either have the potential to affect storm water runoff or have no direct or apparent affect. Industrial operations conducted in a manner that prevents the discharge of pollutants or pollutant contact with storm water should not have any impact on water quality. The City's focus is on identifying those industrial activities that have an actual or potential impact on water quality, requiring implementation of appropriate BMPs and periodic inspections of industrial facilities to verify compliance with City, state and federal water quality requirements.

Outdoor industrial activities have the greatest potential to impact receiving waters through outdoor storage, loading/unloading, fueling areas, vehicle/equipment maintenance, solid/hazardous waste storage, and parking lot runoff. A Storm Water Quality Inspection Form for Industrial-Commercial Facilities to document routine, follow-up, and compliance inspections is provided in Appendix A.5.

Commercial

Commercial facilities are those facilities that are designated by the City, or the County, as a commercial facility with activities that may potentially affect the quality of receiving waters. In previous years, the City identified commercial facilities within its jurisdictional boundaries, and has categorized different commercial types for education, inspection, and follow-up.

After the *Framework for BMP Implementation* was completed in October 2003, the Commercial Component was restructured into a BMP implementation program similar to other Existing Development (Municipal, Industrial, and Residential). Implementation, verified during onsite inspections, determines whether a BMP is either fully implemented or requires Corrective Action. A fully implemented BMP is counted towards preventing, eliminating, or reducing pollution discharged to the maximum extent practicable (MEP).

5.2 STATIONARY IND. & COMMERCIAL SALES/SOURCES/EQUIPMENT

5.2.1 Background

In 2002, the City developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01. As part of this program, the City was required to conduct industrial and commercial storm water compliance inspections to assess the implementation of the minimum best management practices (BMPs) required in the industrial and commercial section of the JURMP. On January 24, 2007, the updated Municipal Permit, Order No. R9-2007-0001 was adopted. This new Municipal Permit required each Copermittee, including the City, to update its JURMP document. The industrial and commercial components were updated to comply with the new requirements.

The requirements of the new Municipal Permit went into effect in March 2008. The new Municipal Permit requires that all high Treat to Water Quality (TTWQ) sites be inspected after the year of implementation. The City of El Cajon chose to inspect all facilities in the commercial/industrial inventory designated as high TTWQ, as well as some medium and low TTWQ facilities. This helped the City meet the Municipal Permit requirement that 25 percent of the total number of facilities on the City's inventory be inspected after the first year of program implementation. The City inspected all industrial facilities that are covered or are known to require coverage under the General Industrial Permit (Industrial Permit). Additional details on how the City met the requirements listed above are included in Section 5.2.2 of this report.

A total of 208 industrial and commercial facilities received site visit inspections. A detailed list of the facilities selected for inspections can be found in Appendix B.2.b of this report. Based on site visits the industrial/commercial inventory was updated from 713 to 781 facilities. The updated inventory, entitled "City El Cajon Stationary Industrial and Commercial Facilities", is included in Appendix A.5 and is composed of facilities that pose a high, medium, and low TTWQ.

5.2.2 Source Characterization

The City's watershed-based inventory for industrial and commercial facilities was updated based on changes in business license information and the California Department of Water Resources list of Permittes covered under the General Industrial Permit. The City's Storm Water group has developed a procedure to assist in reviewing and updating the City storm water inventory based

on business license information (please refer to Appendix A.5 for document entitled "Business License and the Storm Water Program"). The inventory was further refined by field inspections conducted during previous permit years. The updated inventory consists of 781 industrial and commercial facilities that are designated into high, medium, and low TTWQ stationary sites. Of the 781 businesses, 208 were inspected. A list of the businesses inspected during the fiscal year is attached in Appendix A.5.

5.2.3 Best Management Practice Requirements

Pollution prevention for industrial and commercial facilities eliminates the management of pollution and ultimately leads to a cleaner, healthier watershed. Although Best Management Practices for Commercial Facilities are used as a primary mechanism for reducing commercial discharges of pollutants into regional MS4s, the educational effort to change the way businesses conduct business is the final objective. The City encourages industries to apply pollution prevention tactics, such as the BMPs listed in Table 1, below. Storm Water staff or city representatives disseminate this information during inspections, letters, and enforcement actions. The following pollution prevention methods shall be considered and implemented to the MEP where applicable:

- Reduce quantity of toxic materials used or substitute with less-toxic materials
- Use minimal cleaning water to decrease the generation of wastewater
- Display pollution prevention methods prominently to remind or instruct employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
Spill Prevention, response, control, and cleanup	Prevents spills, controls spills	Oil & Grease pH	pH
Raw Material Storage	Prevents pollutants on outdoor material storage from discharging	Oil & Grease	_

Prevention BMP	Prevention Mechanism	Primary Pollutant Prevented	Prevention of impact to 303(d) pollutant
Safer Alternative Products	Encourages use of less toxic materials	Pesticides Fertilizers	TDS Phosphates
Good housekeeping of outdoor activity areas	Prevents pollutants from entering the storm drain system.	Oil & Grease	TDS
Employee Training	Prevents discharges, spill response, over-watering	Oil & Grease Pesticides Fertilizers	pH Fecal Coliform TDS Phosphates
Private Sewer Lateral Maintenance	Preventive maintenance of sewer lateral prevents sewage overflows	Fecal Coliform Enterococcus Nitrates	Fecal Coliform TDS

5.2.4 Program Implementation

5.2.4.1 Priority Industrial-Commercial Sources

Industrial
Each year, industrial sites are re-prioritized to get an accurate picture of the number and types of industrial sites within the City's jurisdiction. Prioritization involves two steps: initially classifying a facility as being a high TTWQ based on site information; and subsequently confirming or reclassifying it based on field observations and additional information. The former step has been accomplished administratively using the data provided in the inventory of industrial sites. The latter step was completed following inspection of each industrial facility.

Additionally, pollutants were listed with the activities associated with industrial outdoor activities to assist in the selection of the most appropriate BMPs. This initial connection of pollutants, BMPs, and activities will be used to correlate water quality with JURMP requirements in the Annual Report. Below, in Table 2, is the City's listing of activities with the potential pollutants.

Table 2 – BMPs to Pollutants for Industrial Facilities

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
Non-Storm Water Discharges – SC10	Addresses any discharge that is not storm water	Varies depending on discharge	-
Spill Prevention Control and Cleanup	Addresses spills	Varies depending on spill	-

BMP	Application	Primary Pollutant Addressed	303(d) Pollutant Impact
– SC11			
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22	Controls motor fluids	(Petroleum) Oil & Grease Metals	-
Loading/Unloading – SC30	Controls the loading and unloading of materials	Varies depending on the materials Trash	-
Liquid Container Storage – SC31	Controls discharges associated with outdoor liquid containers	(Petroleum) Oil & Grease pH	pH
Raw Material Storage – SC32	Controls the outdoor storage of raw materials.	Metals	-
Waste Handling and Disposal – SC34	Controls any discharges from the collection, storage, and disposal of waste materials.	Varies depending on the waste material Trash	-
Safe Alternative Products – SC34	Encourages the use of less toxic materials for cleaning, disinfecting, or other functions	Pesticides Fertilizers	Phosphates
Building and Grounds Maintenance	Addresses General Housekeeping and preventative maintenance	Fertilizers Trash/debris Sediment	TDS Phosphates
Parking Lot and Storage Maintenance – SC43		Trash/debris Sediment	-
Drainage System Maintenance – SC44		Trash/debris Sediment	-
Employee Training		Trash/debris	-
Storm Drain System Signage		Trash/debris Fecal Coliform	Fecal Coliform
Private Sewer Lateral Maintenance		Fecal Coliform Debris	Fecal Coliform TDS
Over-watering of Landscape		Nitrates Phosphates	TDS Phosphates

"-" indicates no impact positive or negative to the Forrester Creek 303(d) pollutants of TDS, fecal Coliform, and pH.

Commercial

A majority of the City's commercial sites can be categorized as shown in Table 3. Of specific concern are those businesses located near storm water channels. Activities from the commercial sites with the associated pollutants are shown in the following table.

Table 3 – Commercial BMPs to Specific Business Produced Pollutants

Business Type → **BMP ↓**	**Restaurants**	**Automotive Establishments**	**Retail Gasoline Outlets**	**Mobile Washing Businesses**
Non-Storm Water Discharges – SC10	Organics Trash	Oil & Grease Metals	Oil & Grease Metals	Oil & Grease, Metals
Spill Prevention Control and Cleanup – SC11	Trash Oil & Grease Organics/Bacteria	Trash Oil & Grease Metals	Trash Oil & Grease	TDS Metals
Vehicle or Equipment Cleaning, Fueling, or Repair – SC20; 21;22		Trash Oil & Grease Metals		Oil & Grease Metals TDS
Loading/Unloading – SC30	Organics/Bacteria Oil & Grease	Oil & Grease	Oil & Grease	
Liquid Container Storage – SC31		Oil & Grease		
Raw Material Storage – SC32		Oil & Grease		
Waste Handling and Disposal – SC34	Organics/Bacteria Oil & Grease Trash			Trash
Building and Grounds Maintenance	Organics/Bacteria Oil & Grease Trash	Trash	Trash	
Parking Lot and Storage Maintenance – SC43	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Drainage System Maintenance – SC44	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Employee Training	Organics/Bacteria Oil & Grease Trash	Trash Oil & Grease	Trash Oil & Grease	
Private Sewer Lateral Maintenance	Pathogens/Fecal Coliform TDS	Fecal Coliform TDS		
Over-Watering	TDS	TDS	TDS	

10702

5.2.4.2 Backgroud BMP Requirements and Implementation

Industrial

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of the Municipal Permit. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility. An "X" indicates the BMP is: Required by the City of El Cajon as a minimum BMP – Level 1 by the Industrial facility – Level 2 (Provided BMP information). These two levels were completed in previous permit years.

The next steps include:

- Implementation as observed during the onsite inspection – Level 3 (Verified in previous permits years)
- Connection to a specific Primary pollutant and any 303(d) pollutants identified for Forrester Creek to support an Effectiveness Assessment – Level 4 (Verified in previous permits years)

In past years the City applied "A Framework for the Implementation of Best Management Practice (BMP) Programs at Commercial and Industrial Sites" to implement BMPs at industrial sites. BMP selection and application began at JURMP development with a minimum number of BMPs. These minimum requirements were used to develop the industrial/commercial inspection checklist.

Table 5 – Required Industrial BMPs

Required Industrial BMPs	
Non-SW Discharges - SC10	X
Spill Prevention/Control/Cleanup - SC11	X
V&E Fueling - SC20	X
V&E Cleaning - SC21	X
V&E Rep - SC22	X
Loading/Unloading - SC30	X
Liquid Container Storage - SC31	
Raw Materials Storage - SC32	X
Equip Ops - SC33	
Waste Handling/Disposal - SC34	X
Safer/Alternative Prods - SC35	
Contam/Erod Areas - SC40	
Bldg/Grounds Maintenance - SC41	X
Bldg Rep/Construction – SC42	
Prkg/StorageMaint – SC43	X
Drainage Sys Maint - SC44	X
Employee Training - SWPPP	X
Storm Drain System Signage - Permit	

Required Industrial BMPs	
Private Sewer Lateral Maintenance - City of El Cajon	X
Over-water Landscape - City of El Cajon	X

5.2.4.3 Updated BMP Requirements

Pollution prevention methods are cost-effective BMPs that eliminate or reduce the generation of pollutants at their sources. Industrial and commercial facilities produce a range of pollutants, both indoors and outdoors, that can threaten human and environmental health if washed into the storm drain system by way of urban runoff. Businesses can benefit from pollution prevention methods by reducing labor time associated with excess pollutant waste handling, thereby re-directing labor time more efficiently to production, as well as the accompanying costs of storage, disposal or treatment.

The following pollution prevention methods are considered and implemented to the MEP where applicable:

- Reduce quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

In addition to the methods listed above, the City of El Cajon also reserves the authority to require a Storm Water Pollution Prevention Plan (SWPPP) for any Industrial or Commercial facility within its jurisdiction that discharges significant pollutants into receiving water bodies. In addition to the pollution prevention BMPs described above, the City has also established minimum BMPs for all industrial and commercial sites. Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs, including structural and non-structural BMPs, are required of all facilities and are included in Appendix A.5 (General BMPs for Industrial/Commercial Facilities). Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs and Activity-Specific BMPs are required where applicable and are briefly listed below.

General BMPs

- Non-Structural BMPs

Non-Structural BMPs aim to prevent pollutants from coming into contact with storm water or authorized non-storm water discharges. Many of these methods already exist as part of the standard operating procedures for a site:

- Good housekeeping
- Preventive maintenance
- Material handling and storage of materials
- Employee training
- Solid waste (non-hazardous) handling and recycling
- Record keeping
- Self inspection/quality assurance
- Spill response

- Structural BMPs

  Structural BMPs consist of specialized equipment, structural components, or engineered technologies that can be used when non-structural BMPs are ineffective. Structural BMPs are site specific; therefore the facility operator needs to evaluate each proposed use. Proper installation and regular maintenance of structural BMPs are imperative to their effectiveness. Examples are as follows:

  - Overhead coverage of outdoor work areas or chemical storage.
  - Retention ponds, basins, or surface impoundments that confine storm water to the site.
  - Berms and concrete swales or channels that divert run-on and runoff away from pollutant sources.
  - Secondary containment structures.
  - Treatment controls, e.g., infiltration devices and oil/water separators, to reduce pollutants in storm water or authorized non-storm water discharges.

Activity-Specific BMPs

Appropriate BMPs will depend on the type of activities, pollutants, and potential source of pollutants. The BMP requirements for the following activities and areas are relatively common at industrial and commercial sites and required by the City.

- Hazardous materials storage (including tanks)
- Solid waste storage
- Loading/unloading
- Fueling
- Wastewater treatment
- Landscaping/ grounds keeping
- Vehicle maintenance
- Parking lots
- Process water pre-treatment
- Equipment storage
- Washing of Equipment/Vehicles
- Rooftops

5.2.4.4 Additional Controls for Industrial & Commercial Sites/Sources

Forrester Creek, which flows through the City, is 303(d) listed for fecal coliform, low dissolved oxygen, phosphorus, and TDS. The City has not identified any industrial or commercial facilities that are likely to be significant sources of fecal coliform or TDS. As a proactive measure, however, the City has assigned higher priorities to concrete and stone cutting businesses, as they may contribute to elevated TDS levels. Similarly, the City assigned higher priorities to animal-related businesses, which may be sources of fecal coliform if animal waste is not disposed of properly. The City also assigned higher priorities to commercial businesses associated with fertilizer use (i.e. nurseries, greenhouses, etc.) since low dissolved oxygen and elevated phosphorus levels are commonly associated to improper fertilizer use and/or storage.
As mentioned previously in this report, the City has chosen to designate major channels within the City as ESAs. Major channels within the City are typically concrete, and hold no significant environmental value, however. The City has chosen to designate these areas as ESAs as a proactive measure to protect downstream water quality. During inspections of businesses that drain to 303(d) listed receiving waters or other ESAs, the City will conduct more detailed investigations into whether the businesses are potential sources of the pollutants of concern or may otherwise negatively impact the ESA. If a business is believed to be a significant source of key pollutants and the standard BMPs listed above are not adequate, the City will require additional BMPs so that discharges of the key pollutants of concern will be reduced to the MEP.

5.2.4.5 Sites Selected for Inspection

In 2008, the City created a Jurisdictional Urban Runoff Management Program (JURMP). The City's inspection program "aims to reduce and prevent industrial and commercial pollution discharges from the MS4 to the MEP to protect local receiving water bodies and to comply with the Municipal Permit" (JURMP, City, 2008). The City created an inventory list of businesses for inspection and followed the inspection protocol described in the City's JURMP.

In 2009, the City developed a list of 51 industrial and 623 commercial facilities to inspect for compliance with federal, state, and local laws in accordance with the Municipal Permit. After inspections in 2009, the City's inventory has been revised and edited yearly, at a minimum, for new facilities or businesses that are no longer in existence. In 2012, the City conducted 69 industrial inspections and 129 commercial inspections adding to a total of 208 facilities and making up approximately 27% of the 781 stationary businesses inventory.

Based on experience, the inspection process for industrial and commercial facilities is often more efficient when appointments are not scheduled. This allows inspectors to inspect neighboring businesses rather than driving longer distances from business to business to meet scheduled appointments; it also eliminates time spent on the phone scheduling. In general, scheduling is conducted for industrial facilities that have, or are required to have, Industrial Permit coverage so that the proper facility personnel can be present for the inspection and materials such as SWPPPs and monitoring plans are easily accessible for review when the inspector arrives.

5.2.4.6 Industrial Inspections and Implementation of BMPs

In total, 69 industrial facilities were inspected during 2012. Industrial businesses were defined by 40 CFR §122.26(b) (14). Attachment 1 of the Industrial Permit lists those facilities whose principal activity is included under the Industrial Permit. All industrial facilities were assigned a high threat to water quality, consistent with the City's JURMP. Sites marked for the City to follow up on the initial inspection, and sites with a high TTWQ, including all industrial sites, require annual inspections. A breakdown of TTWQ ranks for industrial facilities is shown in Table 6. BMP implementation at industrial facilities is summarized in Table 7

- A total of 22 out of 76 industrial facilities had submitted a Notice of Intent (NOI) under the Industrial Permit, had implemented stormwater monitoring programs, and maintained a Stormwater Pollution Prevention Plan (SWPPP).
- No businesses had Notice of Terminations (NOTs).
- Eighteen businesses obtained a Notice of Non-Applicability (NONA) and/or a No Exposure Certification (NEC).
- No IC/ID was observed.
- Fully implemented storm water employee training was noted at 135 businesses.
- Out of the 1,073 applicable BMPs, 1,000 (93 percent) were fully or partially implemented.
- Only 7 percent of applicable BMPs were not implemented.

Table 6: Industrial Facilities

Threat	Number of Industrial Facilities
High TTWQ	23
Medium TTWQ	44
Low TTWQ	3
No TTWQ Determined	6

Table 7: Industrial Facility BMP Implementation

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.1 General	7	324	31	5	172
D.2 Landscaping	5	124	3	2	251
D.3 Materials and Wastes	13	332	82	58	516
D.4 Equipment, Vehicles, and Outdoor Activities	5	46	8	7	319

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.5 Other	5	48	2	1	329
TOTAL	**35**	**874**	**126**	**73**	**1587**

(a) Individual BMPs in each BMP group are located in Section D of the City of El Cajon Commercial and Industrial Stormwater Compliance Inspection Form, (Please refer to Appendix A.5).

5.2.4.7 Commercial Inspections and Implementation of BMPs

In total, 132 commercial facilities were inspected during 2012. Commercial businesses were defined as those businesses not subject to the Industrial Permit, and that do not perform activities meeting the definition of industrial activity under 40 CFR §122.26(b)(14). Over 25 percent of the facilities inventoried were inspected. Commercial businesses requiring annual inspections were those with a high TTWQ and those that warranted a follow-up inspection. A breakdown of TTWQs for commercial facilities is presented in Table 8. BMP implementation at commercial facilities is summarized in Table 9.

- No illicit connections were observed. However, five potential illegal discharges were noted during inspections.
- Approximately 7 percent of the facilities with significant outdoor activity needed improved trash storage areas.
- Approximately 5 percent of applicable businesses needed improved spill prevention and response materials, including spill kits; 2 percent needed secondary containment for liquid storage.
- Out of the 1769 applicable BMPs, (93%) were fully or partially implemented.
- Only 7 percent of applicable BMPs were not implemented.

Table 8: Commercial Facilities

Threat	Number of Commercial Facilities
High TTWQ	30
Medium TTWQ	40
Low TTWQ	17
No TTWQ Determined	45

Table 9: Commercial Facility BMPs Implementation

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.1 General	7	464	34	20	274

BMP Group[(a)]	Number of BMPs in Group	Fully Implemented	Partially Implemented	Not Implemented	N/A
D.2 Landscaping	5	221	4	2	433
D.3 Materials and Wastes	13	585	75	83	973
D.4 Equipment, Vehicles, and Outdoor Activities	5	109	18	12	521
D.5 Other	5	125	7	10	518
TOTAL	**35**	**1504**	**138**	**127**	**2719**

(a) Individual BMPs in each BMP group are located in Section D of the City of El Cajon Commercial and Industrial Stormwater Compliance Inspection Form, see Appendix A.5.

5.2.4.8 Compliance and Enforcement

An immediate follow-up is given to facilities for which an active illicit connection or illegal discharge was observed. In these cases, City's storm water personnel promptly instructed the discharger to stop the discharge and an administrative citation was issued. Follow-ups are also conducted for facilities that have serious BMP-related issues.

A total of 7 facilities were found to need follow-up inspections. Follow up inspections were scheduled and, whenever possible, investigations were conducted immediately.

As specified in the City Ordinance, the City is able to use various warnings and actions to correct a facility/activity and enforce the JURMP. For PY5, the City coordinated with industry to implement and enforce the requirements of the JURMP and City Municipal Code. As with the other Permit component, enforcement generally is initiated with a verbal warning and followed up by a written warning. Enforcement using Administrative Citations was incorporated in May 2003. Appendix A.5 lists criteria for issuing Citations, document entitled "Storm Water Administrative Citation Program Criteria" and Appendix B.3 shows the list of enforcement actions taken by the City in PY2011-12.

5.2.4.9 Education

During inspections, business representatives were educated regarding storm water issues both through verbal interaction with the inspectors, and the distribution of printed storm water educational materials, when appropriate. In particular, the utilization of verbal interaction is extremely influential because it is tailored individually by the inspector to the specific issues and

concerns of the facility and the facility representative. It prompts the facility representative to think about issues directly related to his or her daily actions as it applies to business activities. The inspector was able to provide information specific to the facility, which is beneficial to the facility representative due to the site-specific information. This information can help give the facility representative the proper tools to implement BMPs applicable to their business.

Printed educational materials were also distributed to businesses during inspections unless the facility representative declined to receive them. Posters specifically designed for automotive and restaurant activities were distributed as storm water educational materials. Also provided, when necessary, were NONA/NEC paperwork, NOI paperwork, and information about the Industrial Permit draft. Each have a separate cover sheet with instructions on how to file, and contacts in case any questions arise. Samples of some of the educational materials distributed are included in Appendix A.5. In some cases, educational material was not applicable to the business activity and was, therefore, not provided.

5.2.5 Stationary Industrial & Commercial Sites/Sources Effectiveness Assessment

5.2.5.1 Common BMP Implementation Deficiencies

Common issues were noted at a large number of businesses and are discussed below:

- Commercial businesses were commonly located on property owned and/or maintained by a third party. As such, many of the outdoor area inspections resulted in the business stating that their property management companies were responsible for issues such as landscaping, trash, and general cleanup.
- Outside metal storage was an issue at both commercial and industrial facilities and required multiple recommendations to provide cover and secondary containment and/or to relocate metals.
- Hazardous waste drums, particularly oil drums, were also observed outdoors at multiple locations without secondary containment; some were missing lids and/or labels.
- Grease handling procedures at restaurants were recurring issues. Specific problems included: proper storage, proper containment, cleanup of grease spills, and keeping absorbent available near grease storage.
- Though many facilities did possess absorbent of some kind, actual spill kits were not very common and absorbent was typically not kept in clearly labeled containers or located near potential stormwater pollutant sources.
- In general, industrial facilities covered as mandatory under the State General Industrial Permit were more aware of stormwater concerns and had better training made available to employees than commercial businesses. Commercial businesses

and industrial businesses conditionally subject to the State General Industrial permit often did not have any formal stormwater training program for employees.

5.2.5.2 SIC Code Changes and Updated Inventory

Based on the SIC code corresponding with the current principal activity of the business, some inspections resulted in business category reclassifications. Assessment of whether the SIC code was considered industrial was based on SIC code of the Industrial Permit. Attachment 1 of the Industrial Permit lists SIC codes that require mandatory coverage under the Industrial Permit and SIC codes that require coverage under the Industrial Permit "conditionally", depending on potential outdoor exposure to stormwater.

The revised 2012 inspection list contains 781 facilities. Of the 781 businesses, 208 site visits were conducted for full inspections. A list of businesses inspected during 2012 is contained in Attachment A.5. The inventory increased from 713 facilities in 2011. The updated inventory list is located in Appendix A.5.

5.3 MOBILE SOURCES ELEMENT

5.3.1 Background

Illegal discharges tend to be the major area of concern with mobile businesses. Due to the nature of their activities, mobile businesses are regulated somewhat differently than other businesses. Mobile businesses can be difficult to identify because many do not have City business licenses. More than stationary businesses, mobile businesses are very dynamic with the start of new businesses and the closing of existing businesses on a relatively regular basis. For the reasons listed above and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option at this time.

5.3.2 Source Characterization

The mobile businesses known to operate within the City's jurisdiction are noted on the City's commercial inventory. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Pest control services
- Mobile carpet, drape or furniture cleaning
- Mobile construction trades
  - Painting and coating
  - Cement mixing or cutting
  - Masonry

  - Other contractors
- Landscaping
- Pool and fountain cleaning
- Power washing services

Because not all mobile businesses have obtained business licenses in the City or have a base of operations in the City, a continual process of refining and updating the City's inventory has been conducted. Sources for such inventory updates will include reported incidents, general observations by City staff, and available business licenses. The City participated in a regional effort to inventory and/or track mobile businesses. The Industrial/Commercial Regional Workgroup developed a regional database that included mobile businesses across Jurisdictions. The regional database in combination with the City's business license database provided the main source of information for prioritizing mobile businesses.

5.3.3 Best Management Practice Requirements

5.3.3.1 Updated BMP Requirements

In addition to all BMPs required for stationary sources; listed in Section 5.2.4.1, 5.2.4.2, and 5.2.4.3 of this report; mobile business are also required to implement the following minimum BMPs developed by the Regional Industrial/Commercial Workgroup:

- Storm Water Training
- Contain and Clean Up Spills (Spill Kits)
- Properly Handle All Waste (Solid, Liquid and Hazardous)
- Protect Storm Water Conveyance System: (Streets, Gutters and Alleys)
- Provide Proper Handling and Containment Of Materials
- Provide Equipment Washout Area

The most important BMPs for most mobile businesses typically involve non-Storm water discharge control and spill prevention, control, and cleanup. New mobile businesses applying for a business license received information about the required BMPs listed above. A copy of the required BMP information given to new business license applicants can be found in Appendix 5.

5.3.3.2 Additional Controls for Mobile Sources

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. Aside from washing, cleaning, or other activities that may cause illegal discharges, mobile businesses are not likely to conduct activities that produce significant pollutant discharges. If in the future the City finds that even in the absence of illegal discharges the activities of mobile businesses are contributing pollutants of concern to a CWA section 303(d) impaired water body segments or are negatively impacting ESAs, additional controls will be required for those activities. Further, if the City has reason to believe that mobile businesses

are generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more regularly visit those areas and/or take other actions to address the illegal discharges.

5.3.4 Education and Outreach

The City of El Cajon provides information and outreach regarding storm water quality to mobile business owners and operators. A business license is not issued to the mobile businesses listed under Section 5.3.2 until the new business proponent has the opportunity to talk to Storm Water personnel about pollution prevention and BMP implementation. If applicable to the facility, mobile businesses are also provided with educational materials outlining pollution prevention methods and other BMPs related to their activities prior to issuance of a business license and during inspections. Inspectors also give recommendations to businesses, where appropriate. Because this specific element of the industrial and commercial program is fairly new it is anticipated that some mobile businesses it is anticipated that education will continue to be a significant portion of the program. The educational program is described in more detail in Section 8 of this report.

5.3.4.1 Inter-Jurisdictional Cooperation

An inter-jurisdictional program for the regulation of mobile businesses was completed during Permit Year 2009-10. The City of El Cajon and the Port of San Diego were the Co-Chairs of the Regional Industrial/Commercial Workgroup during that permit year. The workgroup took a leading role in the creation of a regional inventory of mobile businesses, standardization of BMP requirements across jurisdictions, and sharing of enforcement action information.

5.3.4.2 Staff Training

Staff responsible for conducting storm water compliance inspections and enforcement of mobile sources is trained on inspection and enforcement procedures and BMP implementation as they relate to mobile businesses. City staff is also encouraged to be vigilant for illegal discharges from mobile businesses working within the City and to report businesses that are not in compliance to the storm water hotline.

5.3.4.3 Inspections

Mobile sites/sources are inspected by the City on an as needed basis. The most common triggers for these inspections are receipts of incident reports and direct visual observations by City staff. The inspections generally follow the same procedure as stationary facilities, described in Section 7.2.4.4 of the updated JURMP, although the main focus of most mobile business inspections is on discharge control BMPs.

5.3.4.4 Enforcement

Most violations associated with mobile businesses have been historically attributed to illegal discharges. The City's enforcement approach to such discharges will require the discharge to be stopped and cleanup of discharged materials when applicable and feasible. Education is also provided to operators who are not aware of the City's storm water requirements. Businesses that do not possess the materials necessary to implement the required BMPs are required to demonstrate to the City that they have obtained such materials and can properly use them before the City allows such businesses to resume operations in the City. Mobile businesses that do not have City business licenses are required to obtain one. A detailed list of all enforcement actions taken by the City is included at Appendix B.3 of this report.

5.4 IMPROVEMENTS AND REGULATORY COMMENTS

No comments were received for this section of the annual report for 2010-11. The City continued to track business facilities using a stationary business inventory table that was modified last permit year based on a notice received from San Diego Coastkeeper.

Whereas the notice commended the City for the detailed stationary business inventory table in the JURMP Annual Report for PY 3, it did specify a need to add some clarity to the table. More specifically, the comment referred to the column entitled "Tributary to a 303(d) Listed" within the table. It was indicated that the column was unclear as to whether it intended to represent both (1) whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and (2) whether the site/source generates pollutants for which the water body segment is impaired, or only the former.

The stationary business inventory table was edited to include both pieces of information in the last annual report. The columns entitled "Potential Pollutants" show the pollutants associated with the facilities. An asterisk next to the pollutants also indicates the pollutants associated with 303(d) listed impaired water bodies. These minor edits address the issues pointed out in the San Diego Coastkeeper Notice of Storm Water Inventory Short Comings, by making it easier to determine sources that are both tributary to a 303(d) listed water and generate pollutants for which the water is impaired – exactly what pollutant(s) impair the receiving water. A copy of the updated stationary business inventory table is included in Appendix A.5.

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SECTION 6 RESIDENTIAL COMPONENT

INTRODUCTION

Pollution prevention is the focus of the JURMP Residential Component to prevent pollutants from entering the storm drain system related to residential activities. Education is the best approach to implementing this component of the JURMP as the goal is to change behavior and perceptions. The City is successful in implementing the collection of household wastes and promoting used oil recycling. Each pound of household waste and used oil collected equates to one pound less of waste/pollutants that could be disposed improperly and enter the storm drain system.

6.1 PREVENTION OF POLLUTED RUNOFF

Preventing pollution is easier and less costly than treating wastes at the end of the pipe. The following pollution prevention BMP information is sent to residents via brochures in sewer billings, newsletters, and during face-to-face contact when a complaint or referral is investigated.

- Implement good housekeeping BMPs.
- Conduct automobile repair and maintenance under cover or with drip pans; recycle oil.
- Divert automobile wash liquids to landscaping.
- Store unused automobiles under cover; use absorbent pads or drip pans for leakage.
- Maintain garden and yard using natural remedies and drought-tolerant plants.
- Use less toxic products for home care/maintenance.
- Dechlorinate swimming pool water before releasing.
- Dispose of pet waste in the trash.
- Don’t use the street as your storage area for dirt, mulch, landscaping plants.
- The street is not a disposal area for concrete or paint washout, or hosing off driveway.

6.2 PRIORITY RESIDENTIAL SOURCES

Residential areas discharging directly to a major storm drain channel are the focus for pollution sources. Priority sources are directly related to 303(d) pollutants identified in Forrester Creek and the San Diego River. The following table connects sources with 303(d) pollutants. These same 303(d) pollutants are used in Section 11, Program Effectiveness Assessment to estimate the potential amounts of pollutant eliminated through prevention, intervention, and other BMP implementation.

Table 1 – Prevention BMPs

Prevention BMP	Prevention Mechanism	Primary Pollutants Prevented	Prevention of 303(d) pollutant
Composting	Reduces the amount of waste in the trash	Organics	**Phosphorous**
Use of a Professional Car Wash	Eliminates dirty, soapy water from the storm drain	Metals Detergents	**TDS** **Phosphorous**
Organic gardening	Eliminates fertilizers and pesticides	Nutrients Pesticides	**TDS**
Take a bag when walking the dog.	Eliminates dog waste from the Public Right of Way	Fecal Coliform Enterococcus Nitrates	**Fecal Coliform** **TDS**

6.3 BMP REQUIREMENTS

In addition to the pollution prevention BMPs, above, the following are encouraged in residential areas. Home improvement projects can cause side effects, like mud or concrete flowing into the street (see picture to the right). However, with an effective combination of BMPs applied to the maximum extent practicable, simple home projects can meet the City's BMP implementation requirements without much effort or expense.

Table 2 connects the use of BMPs with the prevention, reduction, or elimination of pollutants.

Table 2 – BMP to Pollutants for Residential Areas

BMP	Application	Primary Pollutants	303(d) Pollutants
Automobile Repair & Maintenance	Use Drip Pans Recycle Oil	Oil & Grease	
Automobile Washing	Use Commercial Car Wash	Metals Detergents	**TDS**
Automobile Parking	Use Drip Pans	Oil & Grease	
Garden and Yard Care	Compost or recycle waste	Organic Material	**TDS** **Phosphorous**
Home Care and Maintenance	Use Household Hazardous Waste Programs	Metals Toxic Substances	
Pet Waste Disposal	Take a bag when walking the dog	Fecal Coliform	**Fecal Coliform**
Private Lateral Maintenance*	Clean lateral every few years	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**
RV Parking & Maintenance	Use a legal dump station	Fecal Coliform Enterococcus Pathogens	**Fecal Coliform** **TDS**

Changes in behavior have been noticed over the years, but although the message has been out in the community for several years, it is still new to many citizens. The Clean Community; Healthy Watershed, and Healthy Garden; Healthy Home (Integrated Pest Management) concepts will be continuing messages in subsequent permit years.

6.4 BMP IMPLEMENTATION

Commitment to BMP requirements is listed in the City's JURMP and meets the requirements of Permit Section 6.3, BMP Implementation. Implementation includes selection/application, dissemination of information, and evaluation of implementation at the facility.

The list of minimum BMPs for residential areas tracks along with pollution prevention concepts. Understanding through education and outreach is the basis for changing behavior in the residential community. By changing the way the residential community completes tasks around the home, benefits to water quality will be realized through wet weather monitoring. The common major routes for educating the citizens and disseminating information is through newsletters, sewer billing inserts, and City "drive-abouts" where information is delivered directly to target audiences.

Information on how to implement BMPs is provided to citizens through one-on-one visits, newsletters, sewer billing inserts and citizen complaints/referrals. Information that is distributed includes the following topics.

- Automotive Repair
- Car Washing
- How You Can Prevent Pollution from Entering the Storm Drain System
- Mobile Detailer BMPs
- PowerWashing
- Clean up After Your Pets
- Lawn and Garden Care
- Keeping Our Environment Clean!
- Over-Irrigation Can Cause Storm Water Pollution
- Washing Your Car
- What's the Problem with Pet Waste
- Keeping Our Yards and Our Storm Water Clean
- Trash and Street Sweeping Update
- Trash in Our Strom Drains
- Maintaining your Private Sewer Lateral
- Everything that goes into Our Storm Drains…Ends up in the Ocean
- Why It's Important to Keep Trash, Sediment and Debris Out of Storm Drains
- Pool Maintenance BMPs

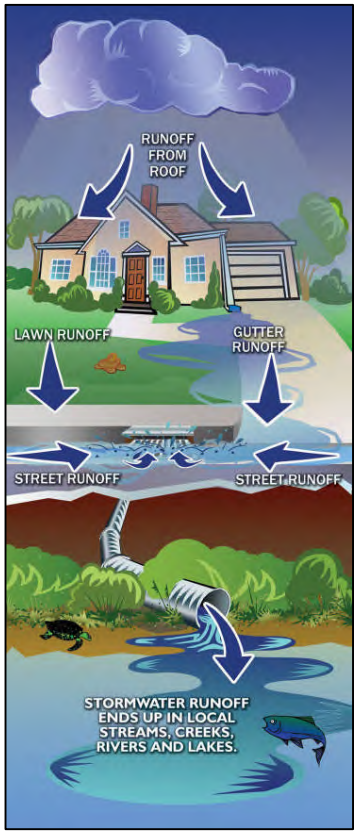

- Creating Community by Keeping Our Storm Water Clean

Copies of brochures, newsletter articles, and flyers sent to El Cajon Citizens are included in Appendix A.6.

Table 5 - Required BMPs for Residential Areas

		Automobile Repair Maintenance	Automobile Washing	Automobile Parking	Garden & Yard Care	Home Care & Maintenance	Pet Waste Disposal	Private Lateral Maintenance	RV Parking & Maintenance
RESIDENTIAL	Vehicles & Equipment	X	X	X					X
	Home and Garden				X	X	X	X	
	Pets						X		
	Private Sewer Lateral					X		X	

Minimum required BMPs for the Residential Component are grouped into four (4) basic categories as shown in Table 5. It is only through consistent, simple messages, that citizens will start to implement the BMP identified for the activities around their homes.

An area where the Police Department continues to collaborate with Storm Water staff is RV Parking and Maintenance. Police Department staff assist Storm Water staff in locating areas where dumping is occurring. The resulting outreach effort should help East County residents to reduce the number of illegal dumping events within this region of the watershed.

As illustrated above, over-watering from many different homeowners' landscaped areas can have an impact on the landscaping and may result in a significant source of water in the street. What seems of little importance from one home combines with runoff from other homes forming small rivers that can move materials stored in the right-of-way or pollutants that are illegally discharged. Homeowners are encouraged to save water and money by adjusting sprinkler heads to reduce or eliminate overspray. When over-watering is discovered, an attempt is made to contact the responsible party. Door hangers are left with instructions when homeowners are not home. Staff schedule a return date to discuss the measures that can be taken by homeowners. When over-watering discharges decrease, there is a reduction of:

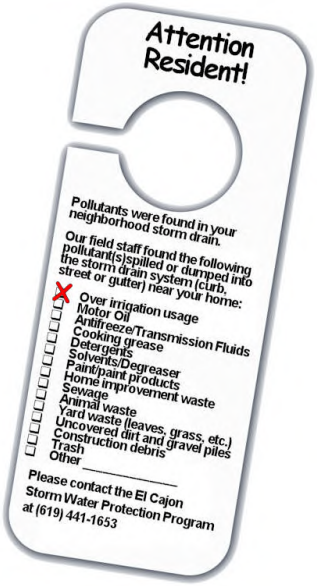

- the amount of water discharged to Forrester Creek
- the amount of pollutants transported to Forrester Creek during "No Rain" days

Improvement in decreasing over-watering will be measured by the amount of Forrester Creek flow leaving the City of El Cajon at the jurisdictional boundary to Santee. Flows measured during the dry weather program are an indication of daily flows. The PY2011-12 dry weather flow into Santee was measured at 45 gallons per minute, as measured at Dry Weather Station No. 5. Overall flows have been on the decrease in all permit years since PY2004-05, inclusive, and may indicate that outreach and education efforts that discourage over-irrigation, along with incentives from the various water purveyors, are becoming effective. Additional flow measurements will be taken during the next annual cycle. The full Forrester Creek Study is contained in Appendix A.12.

6.4.1 Outreach to Residents

The City used various types of educational materials to distribute information and discuss the JURMP requirements with residents when responding to complaints or investigating a discharge. Brochures were provided to residents during face-to-face discussions concerning complaints and referrals. The City newsletter has included seven articles concerning routine activities where

receiving waters may be impacted by pollutants. The newsletter is freely available for residents and industrial/commercial business owners on a semi-annual basis. Two such printings were completed in PY5 and covered the following activities for residents:

- Clean Up After Your Pets
- Don't Trash El Cajon
- Pool Maintenance BMPs
- Residential Automobile Repair and Maintenance
- Good Housekeeping
- Reduce Lawn Water

The City printed and distributed 38,000 copies, each, of the spring and fall newsletters with five articles in total contained in both newsletters. As a result, residents are becoming more aware of the storm water program. An indication of this awareness is the increase in the number of complaints and referrals from the private sector. As the public and municipal staff gains more knowledge and awareness of urban runoff, additional increases in complaints and referrals are expected to continue to increase. Education of staff and residents is productive.

6.4.2 Recycling and Waste Collection Services

Keeping household wastes out of the storm drain system requires the implementation of a coordinated pickup program with a licensed facility to handle the wastes according to appropriate State and Local regulations. The City uses Waste Management to schedule routine and requested pickups for household wastes. Figures 1, 2, 3, and 4 show the total amount of household wastes, the type of wastes collected, recycled materials from curbside pickup (commercial and residential) and total amount of waste collected. There were 23 Household Hazardous Waste, Electronic Waste and Universal Waste Collection Events where a total of 2,087 participants dropped off a total of 250,632 pounds of household hazardous waste (Figure 1). Figure 2 shows the percentages of material types taken to the collection events. Waste Management collected a total of 72,536 tons of waste from residential, commercial and industrial areas (Figure 3). A total of 16,181 tons of materials were recycled from the curbside-recycling program, this program only includes residential areas.

The City of El Cajon works to promote and increase used oil collection through residential collections that include curbside pick-ups or encourages citizens to recycle used oil and filters. A total of 150,801 gallons of used oil were collected from within the City. A total of 20,932 gallons of used oil were collected from residential areas, while a total of 129,869 gallons of used oil and 12 used oil filters were collected from 14 certified collection centers located within the City of El Cajon's jurisdiction.

Figure 1 – Household Hazardous Waste Collection

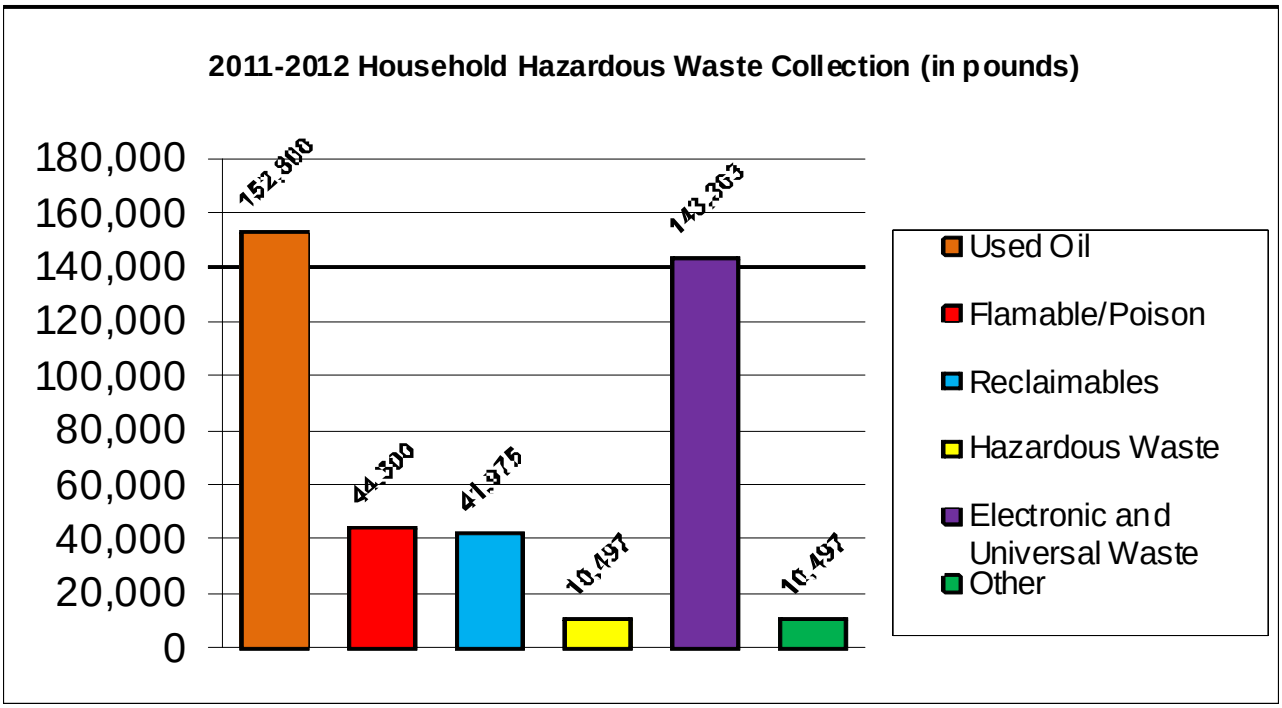

Figure 2 Percentages of HHW Type

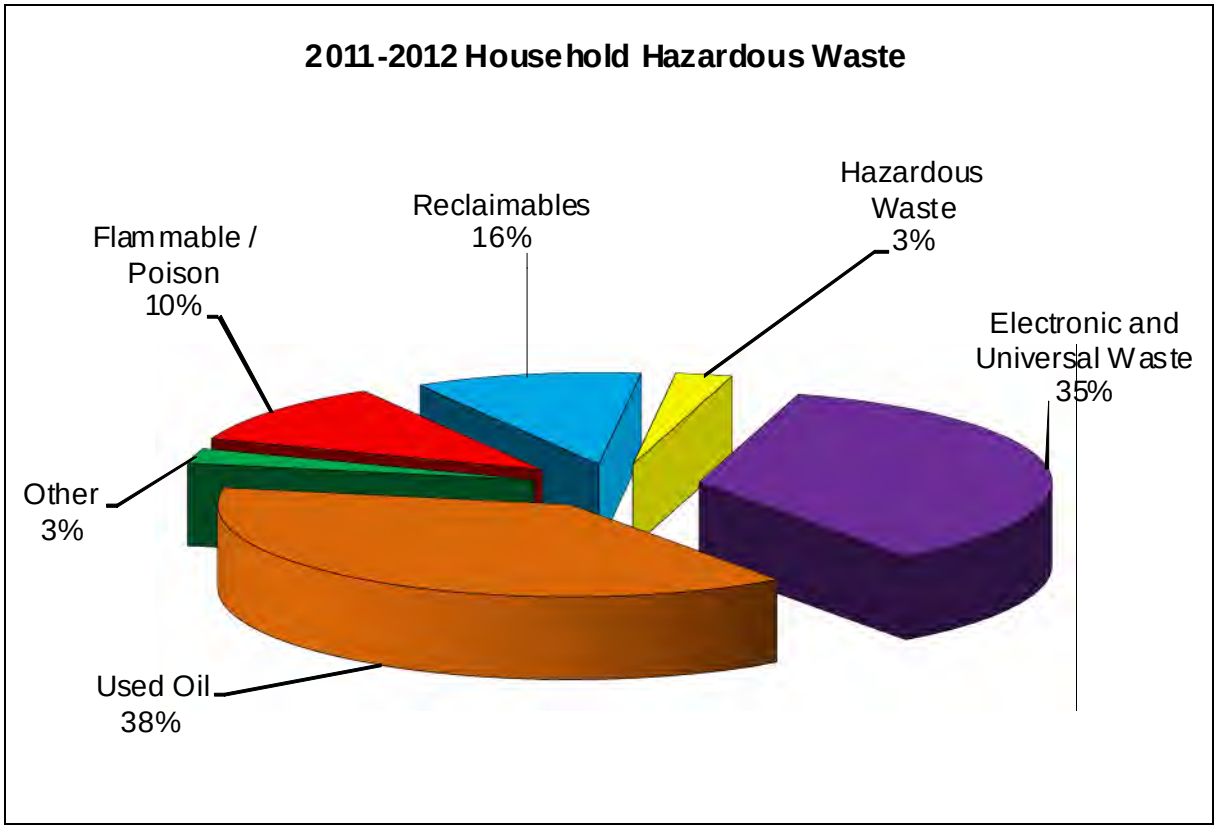

Figure 3

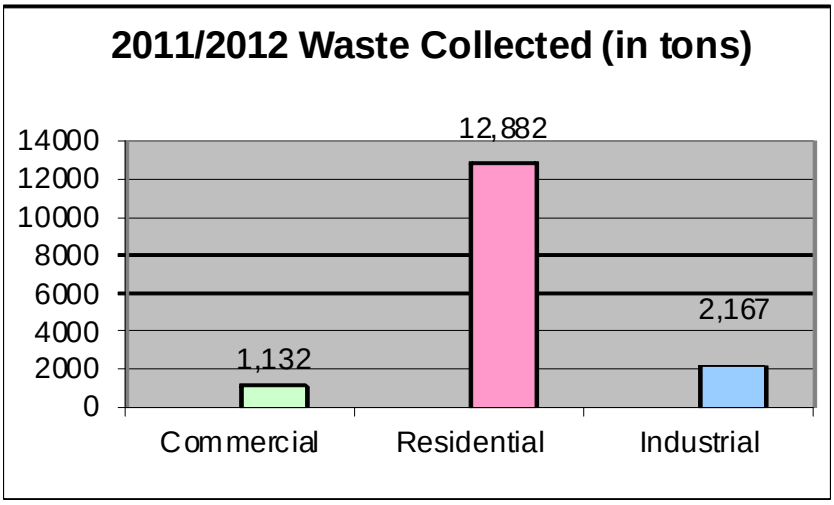

Figure 3 shows the amounts, in tons, of waste collected for Commercial and Residential sites. Waste collected equates to pollutants not discharged to the storm drain system.

6.4.3 Opportunities for Community Involvement

The El Cajon Community Development Center (ECCDC) prints and circulates a newsletter to the downtown area businesses on a quarterly basis. Additionally, the ECCDC prints a Clean & Safe report that covers actions to keep the downtown area clean and safe. The downtown Clean Team works to keep the community clean and performs daily litter removal, maintenance, and landscaping activities. Saint Madeleine Sophie's Center provides student workers who detail the downtown street and sidewalk areas by collecting cigarette butts, trash, and debris. Spills are reported directly to ECCDC for immediate removal and disposal.

Figure 4

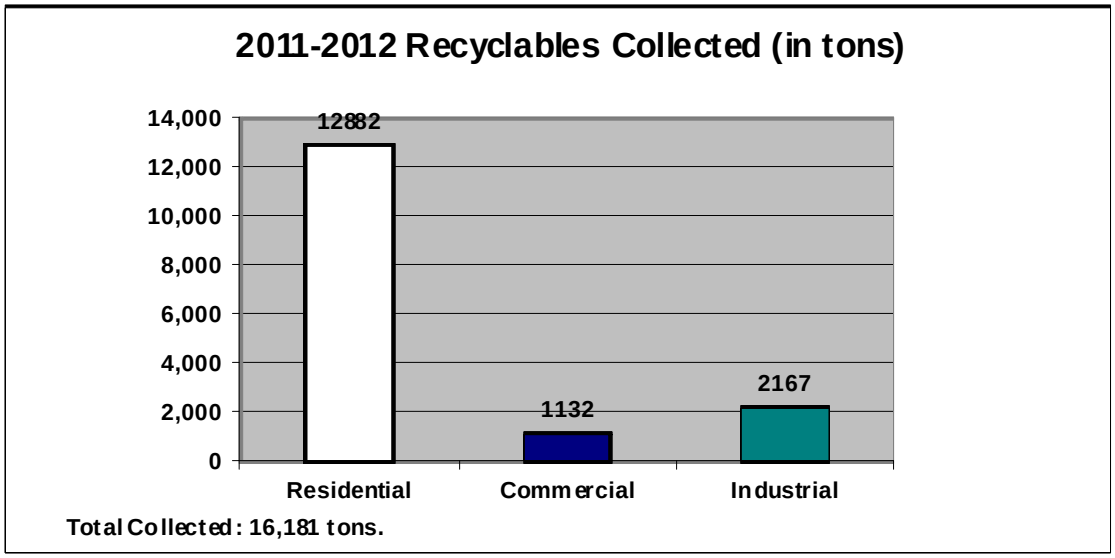

Recycling is a community effort. A total of 16,181 tons of recyclables (includes used oil, newspapers, glass, plastic, tin and aluminum) were collected through residential pickups or deliveries in 2011-12. Figure 4 indicates the amounts, in tons, of materials recycled through residential, commercial, and industrial recycling efforts for 2011-12. Amounts recycled are not placed in landfills or available for discharge to the storm drain system.

6.5 COMPLIANCE AND ENFORCEMENT

The City has a variety of enforcement actions upon discovering a residential action that may potentially affect the quality of receiving waters. Verbal warnings (with written documentation), written warnings, orders to abate and correct, and monetary fines are in the legal authority of the City. There are two routes of discovering illegal residential activities. One is through complaint/referral process. Complaints are received through direct contact with City staff, through the City Manager's office and through the City's Website (via e-mail). The other is during scheduled City monitoring and observations of other routine City department activities.

Depending on whether an actual discharge has occurred or there is a potential to discharge, a written warning or Administrative Citation is issued. Corrective actions are verified and the resident re-contacted for any further questions.

6.5.1 Complaints Received

Complaints are received through the City's or County's Hotline number or funneled through the City Manager's office. The City also receives complaints through the City's Storm Water Program website. Since the inception of the City's Enforcement Program, citizens take opportunities to inform municipal staff of their concerns during other routine activities. Investigations usually occur within 24 hours of complaint receipt with a follow-up phone call informing the complainant of the investigative results. Complaints were tracked using a simple table and software program. A table in Appendix A.6 lists residential complaints tracked in PY5.

6.5.2 Investigation and Enforcement

Storm Water staff investigates each complaint. Contact with the potential discharger is focused on stopping the polluting activity and educating the citizen about our storm drain system and water quality.

Table 6 – Enforcement Actions

BMP Violated	Written Warnings	Administrative Citations	Actions	Follow-up
Automobile Repair & Maintenance	1	0	Stop Activity	None
Automobile Washing	1	0	Stop Activity	None
Home Care and Maintenance	1	0	Stopped Activity	Completed
Private Lateral Maintenance	1	1	Stop Activity	Completed
RV Parking and Maintenance	0	0	Stop Activity	Completed
TOTAL	4	1		

Written warnings followed each verbal warning in the form of a letter or notification requesting corrective action or enforcement by the Administrative Citation Form (Refer to Appendix A.5 for a Copy Enforcement Criteria and Citation Form). Letters are used only when additional information and explanations are needed to get compliance from the potential discharger. A list of the enforcement actions issued to residents is included in Attachment B.3.

6.6 Notable City Actions

Apartment Complexes and Condominium Conversions

Newer residential communities formed by conversion of apartment dwellings into Common Interest Developments or Condominiums continues to offer a good opportunity for divulging information about the storm water program. Restarting a small-developed community is a perfect opportunity to introduce or reintroduce storm water protection activities at the development level. Despite a down turn in the number of condominium conversions, the following are required for these types of projects:

- A Storm Water Site Plan that includes a map of the current storm drain system and a list of the internal and external improvements proposed prior to sale. Control of materials, upgrades to the drainage system and treatment are discussed.
- A Storm Water Maintenance Plan for Condominiums
- A Private Sewer Lateral Report, and
- Water Quality additions to the Covenants, Conditions, and Restrictions

6.7 Improvements and Regulatory Comments

Throughout the year, the City adjusts JURMP Components based on experience and the need to correlate JURMP activities with water quality. As the Storm Water Pollution Prevention Program continues the move into a BMP implementation program and the reduction of pollutants

discharged into the storm drain system, existing residential neighborhoods become a pivotal group to assist in making the water quality improvements a reality.

6.7.1 Improvements

Improvements for the Residential Component is more challenging as citizens view the storm water regulations as an infringement on individual rights. Choosing the correct approach and picking an area that is more beneficial to water quality takes thought and planning. Based on past experience, the proposed actions for PY5 include:

- Continue partnering with the El Cajon Community Development Corporation in reaching out to the community
- Continue to meet with new development Home Owner Associations to distribute storm water information
- Contact property management companies to in order to disseminate storm water information.

6.7.2 Regulatory Comments

The City did not receive regulatory comments for the Residential Section of the JURMP Annual Report for 2010-11.

Place Holder

(Section 7 to be Submitted December 15, 2012)

SECTION 8 EDUCATION COMPONENT

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SECTION 8 EDUCATION COMPONENT

8.1 EDUCATION AND OUTREACH

The goal of the education component is an informed and knowledgeable community. It is crucial to the success of a storm water management program for City staff and the community at large to have easy access to reliable and accurate storm water information. Without a shared, common knowledge base of local water quality and urban runoff information, it is difficult to obtain public support for local storm water quality programs. The storm water educational materials need to be detailed and comprehensive enough to support a shift in individual daily actions while allowing community groups to back specific water quality measures. As with all the other components of this storm water pollution prevention program, maintaining and restoring the chemical, physical and biological integrity of state waters is the ultimate outcome.

If reduction is the goal, then prevention is the theme for the Storm Water Pollution Prevention Program. The Education Component continues to emphasize the basic topics, such as:

- The difference between the sanitary sewer and the storm drain system; and
- The street and storm drainage system is not your garbage disposal system; and
- Making small changes individually, adds up to big changes in our rivers and at the beaches.

The other part of a successful storm water program is an involved and committed municipal staff that contacts the public about potentially damaging discharging activities. Storm Water staff diligently works to educate the citizens and businesses within the City jurisdiction on water quality and ways to prevent pollution from entering the storm drain system. The goals of the City's education and outreach program are to raise awareness of urban runoff and change the behavior of citizens and businesses. The progression of topics will lead to Watershed concepts as the basics in storm water are understood by the general public.

8.1.1 Education and Outreach Events

Educating staff and the public is the best way to effect change in people's behavior. It is clear that there is broad-based public support for a cleaner and healthier environment. When people can connect with and learn more about our storm water program, our program earns the respect our citizens and community leaders for protecting our water quality. An effective "learn and earn" outreach program should be both regional and jurisdictional, since a pooled effort regionally is able to educate on a more impressive scale. Additionally, since we all live in a watershed, storm water pollution and the protection of receiving waters defy jurisdictional boundaries. As the San Diego River Watershed Copermittees move toward a Watershed-based approach to storm water management, education and outreach efforts will follow watershed strategies on a regional basis. As shown above, the City of El Cajon developed a Storm Water "Watershed" Logo, as well as other logos, to promote pollution prevention and protection of water quality.

8.1.2 Jurisdictional Accomplishments

Outreach accomplishments during PY5 include the following list of education and outreach efforts.

- Continue to work with the El Cajon Community Development Corporation (ECCDC) to close and protect dumpsters, keep trash areas clean, and encourage good housekeeping habits in the downtown area.
- Storm Water Education and Outreach Document Portfolios were prepared and issued to selected municipal staff with high probability of contact with citizens on storm water pollution prevention issues. This included staff tasked with commercial and industrial site inspections, construct site inspections, complaint and investigations. The use of the storm water information portfolio has allowed the storm water program to connect with citizens, staff and other interested parties in an effective and detailed manner.
- "Fire Safety Open House" This day-long, Saturday event (October 4, 2011) included booths, educational information and formal and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. It is estimated that approximately 5,000 visitors attended this event.
- "Sustain La Mesa" Environmental Festival – This event was held at Harry Griffen Park which serves the citizens of La Mesa and El Cajon. The event was held October 8, 2011 and was attended by an estimated 1,500 people.
- Johnson Elementary School Career Day – Presentation of Storm Water and Geographic Information System was presented to students interested in careers in environmental sciences.
- El Cajon Library Multicultural Fiesta – This event included a booth with Storm Water program information as well as some "give-a ways". The event drew an approximate 2,000 participants.

- El Cajon Car Show – The City was invited by the "I Love a Clean San Diego" organization to set up a display in a booth at the El Cajon Cruise on August 17, 2011. Information regarding auto repair and maintenance were distributed at the event.
- Think Blue Radio Spots – The City of El Cajon collaborated in the recording of two radio spots for the regional Think Blue Campaign.
- El Cajon Arbor Day – The Storm Water Department participated in Arbor Day.

8.1.3 City Staff Training

Municipal staff was given the basics in storm water training including:

- What is a Watershed and what Watershed do we live in.
- Why is keeping our water clean important.
- The different types of pollutants and where these pollutants originate.
- The difference between the storm drain system and the sanitary sewer system.
- What can be done at work and at home to eliminate polluted runoff during rain events and all yearlong.

Municipal crews are given door hangers to use during their daily routine activities in the City. An example of a door hanger is provided in Appendix A.6. The door hanger alerts the resident to the potential discharge that may exist on or near their property. Possible solutions and phone numbers for reporting discharges are provided.

8.1.4 Special Community Presentations

EL CAJON FIRE DEPARTMENT FIRE AND SAFETY OPEN HOUSE

On October 8, 2011, the City participated in the El Cajon Fire Department "Fire and Safety Open House." This day-long, Saturday event included booths, educational information and formal and informal demonstrations and hands-on explanations on various activities that help prevent storm water pollution. It is estimated that approximately 5,000 visitors attended the event; many of them visited the storm water booth as they passed through. A watershed model is used to demonstrate to children how rain water can pollute our water-ways.

CAREER DAY AT JOHNSON ELEMENTARY SCHOOL

The Storm Water program provided residential BMP information and promotional items to elementary school students from Johnson Elementary School. The event took place on November 10, 2011 and was presented by City Storm Water/GIS staff. A total of approximately 150 students attended the Career Day presentation.

El CAJON LIBRARY MULTICULTURAL FIESTA

The Storm Water Program had a booth with information about the program and the watershed. While this event had an overall multicultural flavor, agencies were invited to attend and participate. The event took place at the El Cajon Library on April 14, 2012. Approximately 2,000 attendees participated in the event.

SUSTAIN LA MESA

This event took place at Griffen Park which serves both communities of La Mesa and El Cajon. The event took place October 8, 2011 and the City of El Cajon Storm Water Pollution Prevention Program had a booth at the event. The booth had information about keeping storm drains in neighborhoods clean and properly disposing of hazardous materials. Information was also given about the watershed and how discharges reach the San Diego River and the Pacific Ocean.

EL CAJON CAR SHOW

Information was provided from a booth that was put together by the "I Love a Clean San Diego" organization at the El Cajon Cruise Car show August 17, 2011. The information included how to prevent pollutants related to activities from auto repair and maintenance.

ARBOR DAY

This event was organized by the City of El Cajon Parks Department April 26, 2012 to celebrate the City's reception of the Tree City USA award. The City Storm Water Pollution Prevention Program had a booth at this event and distributed general information about the program that included the management and proper use of fertilizers.

8.1.5 Regional and Watershed-Related Outreach

As in previous permit years the Residential Sources Workgroup focused its budget towards in-kind contribution to develop a Regional Education and Outreach Program that address regional issues and will aid in a transition from a jurisdictional to a watershed-related program approach. All Copermittees contribute funds towards the outreach workgroup to benefit a coordinated regional pollution prevention program. PY5 funds were used to further develop an approach that targets audiences and provides uniform information to the region. The City of El Cajon served on some of the committees and collaborated in the recording of two radio spots for the regional

Think Blue Campaign. The announcements were recorded January 2012 by City of El Cajon Staff and were aired shortly afterwards in a local radio station. The announcements touched on the topics of litter and improving regional water quality.

8.1.6 Educational Materials Jurisdictional Distribution

The City developed brochures on the following subjects for distribution to the public:

- Clean Up After Your Pets
- Don't Trash El Cajon
- Pool Maintenance BMPs
- Residential Automobile Repair and Maintenance
- Good Housekeeping
- Reduce Lawn Water

The City printed 38,000 copies of two semiannual newsletters containing a total of 5 articles and reaching an estimated 190,000 different readers. A summary of the topics covered in the 5 articles is included above and in Section 6, Residential Component, of this report. Storm water logos assist the City in getting the attention of citizens and businesses. Logos are a way to make a lasting impression with citizens and businesses. One storm water logo used by the City is shown above.

Through the course of PY5, a number of contacts were made to the public using brochures, fliers, mailers, radio and TV Ad's. Copies of brochures, fliers, and newsletter articles are contained in Appendix A.6.The following table indicates the types and quantity of outreach impressions.

Table 5

Material Type	Number Distributed
Articles/Newsletters	190,000
Sewer Billing Inserts	0
Brochures	400
Over-the-Counter	300
TOTAL	**190,700**

Commercial

Education of commercial facility owners and their employees occurs through the use of brochures oriented specifically to a type of activity. Written warnings are accompanied with a brochure on the activity as well as distribution of these brochures as outreach opportunities arise during business and construction site inspections, and complaint investigations. More one-on-one distributions were completed this year as the City expanded its role in inspections, complaint investigations and the daily routines of residential communities.

Industrial

Industrial facilities revise and refine their BMP requirements through the annual inspection process. The following are discussed and informational brochures are shared when necessary.

- Prevention of Non-Storm Water discharges
- Good Housekeeping Practices
- Vehicle and Equipment Washing, Repair, and Fueling
- Loading and Unloading of materials
- Solid and Hazardous Waste Management
- Spill Prevention and Response
- Building and grounds maintenance
- Parking Lot maintenance
- Storm drain system maintenance
- Private Sewer Lateral Maintenance

8.2 LEADERSHIP ACTIVITIES AND PARTNERSHIPS

The City's major roles for educating the community include:

- Continue in partnerships with the Cities of Santee, La Mesa, San Diego and County of San Diego in training staff on storm water management.
- Continued in a relationship with the El Cajon Community Development Corporation and their Community Ambassadors and Clean Team. The Community Ambassadors are employees that develop connections with businesses and the community that will promote a cleaner and safer city. The Clean Team are students of St. Madeleine Sophie's Center and are happy to assist in various community tasks. The Clean Team picks up cigarette butts and other debris along the sidewalk and gutter that the City's street sweeper cannot collect.

- Collaborated with "I Love a Clean San Diego" to conduct storm drain stenciling, on an as needed basis.

8.3 MEASURING CHANGES IN KNOWLEDGE AND BEHAVIOR

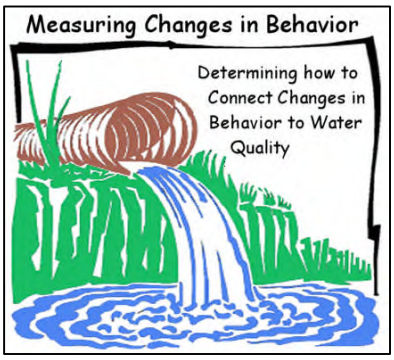

A basic measurement of increased knowledge is a test of that knowledge. The City's test has been a steady flow of referrals and reports from municipal staff. The number of complaints and referrals from citizens and county hotline declined from last year. The Regional Outreach Program funded by this year's Copermittee Outreach budget will continue to develop a very detailed baseline of community awareness, and the barriers to, and the benefits of, changes in behavior.

8.4 IMPROVEMENTS AND REGULATORY COMMENTS

Changes to the City's Storm Water Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the activities in ways dictated by direct or indirect experience. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

8.4.1 Improvements

The following are proposed improvements for the next Permit Year (July 1, 2012 through June 30, 2013).

- Continue to coordinate and expand outreach and education efforts to local public schools.
- Coordinate outreach and public participation activities for Public Works Week.

8.4.2 Regulatory Comments

No regulatory comments have been received for the Education Component of the JURMP Annual Report for 2010-11.

SECTION 9 Public Participation Component

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9.2 Improvement and Regulatory Comments **2**
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SECTION 9 PUBLIC PARTICIPATION

INTRODUCTION

Public participation is an essential element of a successful Urban Runoff Management Program, but is more highly effective as a Watershed Component. Due to the nature of participation by organizations such as "I Love a Clean San Diego", watershed concepts are more easily introduced to participants from the entire watershed and not just a small segment of the population in one particular community. Wherever Copermittees' efforts can be combined to produce better results, it is a "win/win" situation for jurisdictions, the watershed and the communities they contain.

Educational efforts set the stage for getting the public involved with scheduled Storm Water Pollution Prevention events or interested in following the minimum required BMPs at home or business. Since prevention through familiarity and participation is the best solution to pollution, the public fulfills participation requirements by:

- Participating in storm drain stenciling,
- Reporting of discharge incidents using the City Manager's Office or the City and County hotline,
- Participating in events that collect or recycle hazardous waste and used oil , and
- Participating in local and regional cleanup events

9.1 REGIONAL PARTICIPATION

On a regional basis, the City of El Cajon is the lead for the San Diego River Watershed Workgroup and is a member of the Watershed Lead Committee group. The San Diego River Watershed workgroup has continued to work together, including stakeholders' input or participation when possible, taking advantage of relationships developed through the years since developing and completing the San Diego River Watershed Management Plan. The City of El Cajon chairs the San Diego River Watershed Copermittee meetings.

The City supported the "I Love a Clean San Diego" (ILACSD) Annual Creek to Bay Cleanup. Over 54 volunteers collected a total of 183 pounds of trash and recyclable materials within the City. As in past years, the City of El Cajon also gave permission to ILACSD to stencil the message "No Dumping . . I Live Downstream" and a depiction of a dolphin or duck to the curb area adjacent to storm drain inlets within the City.

9.1.1 Regional and Local Storm Water Hotlines

The City and County have a Hotline that can be used by the public to report potential illicit discharges and connections. The Hotline phone number is provided in informational brochures to residents and businesses and is posted on the City Website. Public participation is an essential part of an illicit discharge elimination program. Many illicit discharges are one-time occurrences that may not be observed by City staff. Concerned citizens can help stop illicit discharges by reporting them to the City. The following provides the details of those Hotlines.

- ✓ **City of El Cajon Storm Water Hotline, (619) 441-1653**

The City Storm Water Hotline provides access Monday through Friday 7:30 a.m. – 5:30 p.m. and complainants are directed to the appropriate staff person. The City's hotline currently provides information in English and Spanish.

The City updates its Storm Water Web Page to contain the most recent brochures and reports. Documents are retrieved using Abode Acrobat to open the posted PDF files. The Storm Water Web Page is "Quick Linked" from the City of El Cajon Home Page with links to a list of documents and other important websites.

- ✓ **County Storm Water Hotline, 1-888-846-0800**

The County storm water hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides services in both English and Spanish and a voice mail message for 24-hour public access. Relevant complaints received through the County hotline are forwarded to the City Storm Water Protection Program.

9.2 IMPROVEMENT AND REGULATORY COMMENTS

Changes and improvements to the City's Storm Water Participation Program are initiated through gathered experience and regulatory comments. Improvements are commitments generated by the City to modify the participatory activities in ways dictated by direct or indirect experience. As the focus of the program shifts to multi-jurisdictional participation on a watershed level, changes and improvements to the storm water program will be necessary. Regulatory comments are requests or directives to address potential deficiencies in the JURMP.

9.2.1 Improvements

The following are proposed improvements for the next Permit Year.

- Continue collaboration with community volunteer groups.
- Continued participation in Watershed-wide efforts.
- Focus the City's efforts on programs and activities that will have an impact on the watershed, its health, the most recent pollutants of concern based on the 303(d) list and their sources
- Continue to participate in the El Cajon Fire Department Open House and other school activities to inform and engage children on water quality issues.
- Start preparing the implementation of the bacteria TMDL requirements.

9.2.2 Regulatory Comments

No regulatory comments have been received for the Public Participation Component of the JURMP Annual Report for 2010-11.

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SECTION 10 FISCAL ANALYSIS

10.1 INTRODUCTION

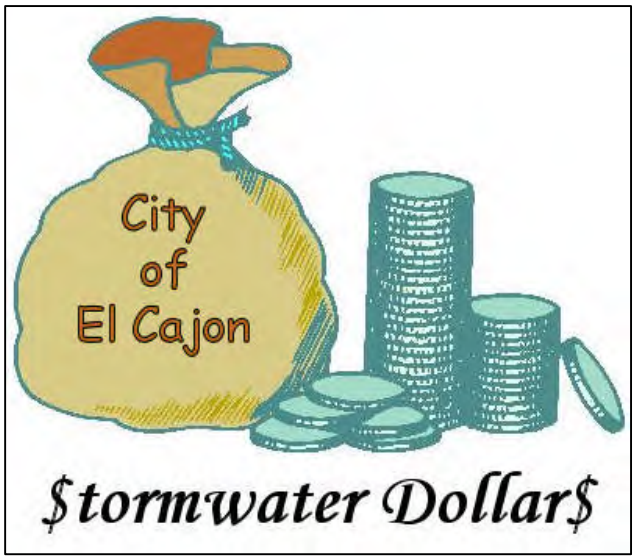

A fiscal analysis of the JURMP provides a vital assessment of resources for the current and upcoming Permit Years. This section of the report will incorporate guidance and standards developed collaboratively by the Copermittees and in accordance with the Municipal Permit. The City is reporting expenditures using summary tables developed by the Standardized Fiscal Analysis Method and Format adopted in February 2009 (summary tables and forms are included in Appendix A.10). The analysis attempts to identify adequate support and how resources are divided to support and fortify the JURMP, WURMP, and RURMP efforts.

In PY 2003-04, the City Storm Water staff developed a separate budget from other Public Works activities and sufficient to run the Storm Water Program. The Program continues to be adequately funded through the City's Sewer Fund. This funding source has been used since PY 2004-05 and will continue to be used for PY 2012-13.

10.2 GENERAL BUDGET INFORMATION

The following table shows actual expenditures from permit year 2003-04 through 2010-11, estimated actual budget for 2011-12, and the proposed 2012-13 budget for the City's Urban Runoff Management Program.

Item	05-06	06-07	07-08	08-09	09-10	10-11	Estimated Actual 11-12	Proposed 12-13
Salaries (including benefits)	533,487	550,856	722,809	714,841	781,174	765,041	766,054	744,864
Materials, Services and Supplies	183,639	254,876	397,292	423,543	421,181	335,939	506,288	709,275
Capital Outlay	6,235	29,953	73,593			10,873	10,460	
TOTAL	**723,361**	**835,685**	**1,193,644**	**1,138,384**	**1,202,355**	**1,111,853**	**1,282,802**	**1,454,139**

Budgets increased steadily from 2003-04 through 2006-07 under Municipal Permit Order 2001-001. The increase in PY 2007-08 was a result of allocating resources in anticipation of fulfilling requirements for Municipal Permit R9-2007-001. The budget to maintain the Storm Water Program in compliance with the Permit dropped slightly in PY 2008-09 but increased again in PY 2009-10. Based on estimates for PY 2011-12 and the proposed budget for PY 2012-13, the over –all budgets for the Storm Water Program will continue to increase, especially with the anticipation of the renewal of the Municipal Permit. A copy of the budget is located in Appendix A.10.

The City's NPDES Urban Runoff Management Program funding was sufficient to meet the JURMP requirements in PY 2011-12 and is projected to be sufficient to meet requirements in PY 2012-13. The City met its projected goal of continuously executing plans, procedures, and processes to implement JURMP requirements and assess the effectiveness of its programs.

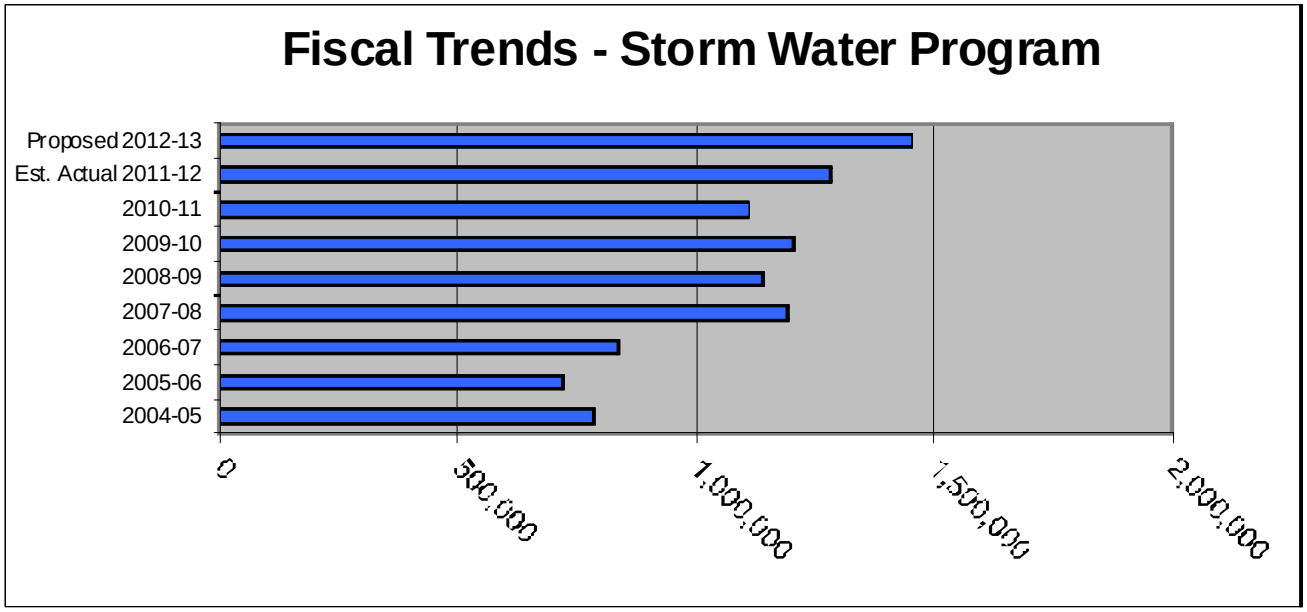

Modifications to the program were made that resulted in an increase in expenditures in PY 2004-05 and a slight decrease in PY 2005-06. The budget for PY 2004-05 contained some capital expenditures that were started in PY 2002-03 and PY 2003-04 such as a Geographical Information System dataset for map generation and a trash debris fence to collect trash and debris in Forrester Creek before discharging to Santee. From PY 2005-06 through PY 2011-12 there has been a steady increase in the budget to support the Storm Water Program. Overall, a general increasing trend of funds has been allocated from PY 2002-03 through the proposed PY 2012-13 to sustain a viable storm water program.

10.3 FISCAL ANALYSIS METHODS

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J. 1 .a(3)(k), and J. 1 .c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis Methods document was submitted to the San Diego RWQCB by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

The budget for PY 2011-12 included a Storm Water Program Manager, 1 part-time senior engineering technician, 1 assistant engineer, 1 GIS technician, 1 compliance officer, and 2 part-time Engineering Intern. The personnel for PY2012-13 will remain unchanged with the same number and job classification as in the current reporting year. The City also has an open contract with two consultants to provide as-needed services to ensure the City meets its JURMP implementation requirements.

The City is using forms and tables developed by the new Fiscal Analysis Method for reporting (attached in Appendix A.10). It is important to note that while the Expenditure Summary table in Appendix A.10 shows jurisdictional expenditures for various permit components, it may not reflect all expenditures. Further modifications to the City's accounting and expenditure tracking will continue to be made in the future to better track expenditures for each jurisdictional component. Program components expenditures for development planning, construction, municipal, industrial/commercial, residential, and special investigations were difficult to dissect.

10.4.2 FUNDING SOURCES

In the long-term, funding for the Storm Water Program will continue to be even a bigger question with necessary increases required to maintain permit compliance related to permit renewals and up-coming new requirements. The City is constantly challenged with doing more with less after a continual decline in general fund budgets. For PY2011-12, the City completed all inspections, monitoring, and complaint investigations, as well as other requirements of permit R9-2007-0001, with existing staff complemented by consultants.

Working efficiently is the goal of the jurisdictional urban runoff management program. Completing onsite inspections, tracking enforcement actions, and complaint/referral information allows the City to reduce the amount of time and paper to complete significant portions of the Municipal, Industrial, Commercial, Construction, and Land Use Planning JURMP Components.

For WURMP activities, the City will continue to coordinate with the other San Diego River Watershed Copermittees to complete watershed water quality activities and education activities. Working together eliminates duplicative efforts and enhances the effect across a wider range of people and geographical area. The City manages a contract with a consultant to assist with the Watershed program and a share cost agreement has been in effect for a few years.

No regulatory comments were received for the Fiscal Analysis component of the JURMP Annual Report for 2010-11.

SECTION 11 PROGRAM ASSESSMENT

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SECTION 11 PROGRAM ASSESSMENT

11.1 INTRODUCTION

The City began using the standardized program effectiveness assessment soon after it was developed by the Copermittees during the previous permit cycle. The City also participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs. Due to a variety of complications on a regional level, that process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures.

Since the submittal of the JURMP in March 2008, little significant progress has been made on regionally standardized approaches to program effectiveness assessment. It is likely that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will revisit the issue of standardized assessment metrics and procedures in the near future. The City anticipates participating in the process of developing such regional standards and incorporating work products produced into its own local program effectiveness assessment system. Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

The City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Documenting Activities – Based Permit Requirements
Level 2: Raising Awareness/Knowledge
Level 3: Changing Behavior/BMP Implementation
Level 4: Reducing Load from Sources
Level 5: Improving Runoff Quality
Level 6: Protecting Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1 through Level 4 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the last released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Level 1

Level 1 is documenting activities. Sections 1 through 10 of this PY5 Annual Report list activities, storm water controls, and when possible the quantity of pollutants collected and diverted from entering the storm drain system, viewed as a reduction in pollution-containing materials potentially available for discharge into the storm drain system. Existing and New Development, Construction, and Illicit Discharge Illegal Connection are the areas where quantifiable amounts of pollutants are reported as collected and removed from entering the storm drain system. By completing collection activities, the City maintains compliance with the Municipal Permit requirements.

11.2.2 Level 2 and 3

Refer to tables 11-3 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

11.2.3 Level 4

The primary goal of BMP implementation is to reduce the loading of pollutants to urban and storm water discharges. Pollutant load estimation is the first direct characterization of water quality through JURMP activities. Regionally, San Diego River Watershed receiving water quality results are from the major outfall to the Pacific Ocean. In the future, Watershed monitoring at the jurisdictional lines will at least assign responsibility of pollutant loads, but will not determine a reduction in pollutants. The best approach is to make sure wet weather and dry weather results do not exceed action levels.

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed.

11.3 ASSESSMENT OF PROGRAM MEASURES

Basic assessment of program measures begins with City-based questions. First, starting with what is known, then shifting to what is wished to be learned, and finally what was learned. During the first step, the "what is known" are the measurements compiled from each of the JURMP components. Measurements such as the amount of material removed during street sweeping or cleaning of catch basins are direct measurements of pollution diverted from entering waterways. At some point it may become appropriate to compare measurements to previous years, average measurements, or assess trends to assist with potential pollutant loads removed from a particular origin. Dry weather monitoring results are direct measurements of pollutants in urban runoff, but only partially address measurements of receiving water quality.

Sources, selected BMPs, measurements, and other indicators, identified in the previous Sections of this Annual Report for each of the Existing and New Development Components, report completed activities and achieved goals as required by Order No. R9-2007-0001 and the City's updated JURMP. In summary, the City completed program implementation as designed in the JURMP and is incompliance with the activity-based permit requirements.

11.3.1 Direct Measures of Program Activities

For many years, the City has tracked efforts from various collection agencies with four types of direct measures, as follows:

- Street Sweeping,
- MS4 Cleaning/Maintenance,
- Oil Recycling, and
- Household Hazardous Waste Collection

In general, the City tracks these measures because they provide an important indication of the types and amounts of materials and wastes that are diverted from the MS4 through various means. Street Sweeping and MS4 Cleaning directly removes materials from the pathway of rainwater and urban runoff. Oil Recycling re-routes used oil from illegal disposal to refineries where it is ultimately reused. The Household Hazardous Waste program collects wastes that may otherwise be improperly disposed, potentially to the MS4.

a. Street Sweeping

The Department of Public Works collected an estimated 3,710 cubic yards of debris during its street sweeping activities (17,677 miles of curbed streets). This year, the City's street sweeping efforts have been consistent with previous years, with a slight increase in the number of miles swept. Were it not for these efforts, the debris collected would otherwise be swept away during rain events. Collection provides important long-term water quality benefits.

b. MS4 Cleaning

In PY2011-12, City's storm drains were cleaned by the Department of Public Works resulting in the removal and proper disposal of 1,788 cubic yards of material from the storm drain system. As a whole, the City's effort remained the same as last year.

c. Recycling of Household/Commercial Waste and Oil Recycling

Recycling in El Cajon has good participation, but could always do better when the numbers are compared for recycled materials (16,181 tons) and waste (72,536 tons). Trends in waste collection will continue to be tracked. The 16,181 tons of recyclables included - amongst other items - newspapers, glass, plastic, tin, and aluminum.

Oil recycling is tracked by independent recyclers that are certified collection centers (e.g. Jiffy Lube) and Waste Management for curbside pickup of used oil. A grand total of 150,801 gallons of used oil were collected from within the City. A total of 20,932 gallons of used oil were collected from residential areas. While a total of 129,869 gallons of used oil were collected from certified collection centers located within the City of El Cajon's jurisdiction.

d. Household Hazardous Waste Collection

Waste Management of El Cajon collects the Household Hazard Waste (HHW) for the City's jurisdiction. An estimated 403,432 pounds of household hazardous waste was collected in permit year 2011-12. In permit year 2010-11 a total of 489,619 pounds were collected, compared to an estimated 364,171 pounds in PY2009-10, 344,146 pounds in PY2008-09, 268,323 pounds collected in PY2007-08; 236,890 pounds collected in PY2006-07; 198, 015 pounds in PY2005-06; and an estimated 277,000 pounds of household hazardous waste/recyclables were collected at 19 events in PY2004-05. As a whole, the City's effectiveness in collecting HHW from its residents has increased consistently and significantly over the years.

11.3.2 Indirect Measures

In most instances, changes to receiving water quality cannot be directly compared to collection activities. However, many indirect measures have value in tracking the effectiveness of specific program activities, and may have additional utility in assessing long-term water quality changes. Many of these measures are reported and discussed throughout this Annual Report. To track and evaluate the effectiveness of its program implementation over time, the City has compiled summary statistics for several measures.

Table 11.1

Indirect Measure		2011-2012
Complaints	Total Number received	110
	Number of Referrals from Other Departments	39
	Number of Enforcement Actions	22
Staff Training	City Staff Trained (In Storm Water Management)	162
Outreach	Outreach events conducted	5
	Number of Presentations	1
	Audience @ presentations	120

a. Complaints and Referrals

In this reporting period, the City received a higher number of total complaints than last year from other City departments, citizen calls, and county referrals. The City and County hotlines are described in Section 6 (Residential Component). As previously discussed, this trend underscores the effectiveness of the City's outreach and staff training efforts. As in previous years, it is believed that more of the City's citizens and staff are aware of storm water violations and understand what to do when water quality concerns were observed.

b. Staff Training

Levels of staff training during this reporting period were expanded to those of previous years. Although the City has made an important commitment to staff training under the previous and current Permit (see JURMP Section 8, Education), the consistency of these numbers also demonstrates the City's past commitment to training its staff. Training of staff with implementation responsibilities is not a new part of the City's storm water program. However, the scope and breadth of these and other programs has significantly increased.

c. Outreach

This year, the City conducted a number of one-on-one discussions at the Public Works front counter with building and planning applicants and with commercial businesses and industrial facilities during inspections and complaint follow-ups. Together, these increased face-to-face conversations demonstrate that the City is effectively implementing its outreach and education programs; details are provided in Section 8 (Education). The City also sent notifications to various types of mobile businesses for newly required BMPs.

11.3.3 Program Activities and Water Quality

Presenting a direct connection between pollutant load reduction and Storm Water Pollution Prevention Program activities continues to slowly move forward and is very much under development. Copermittees have created a Framework document containing the six (6) Levels of Assessment. The PY2002-03 Annual Report addressed Levels 1 through 4. However, forecasting only generates numbers that could not be supported by calculation or program actions. For PY2011-12, the City continued with the slightly modified approach used for PY2008-09, which brings the assessment much closer to connecting activities with water quality. Amounts of pollutant-containing materials prevented from entering the storm drain system provides solid numbers while adding percentages of facilities known (through inspection) to be implementing minimum required BMPs and reduces the estimation factor.

11.4 LONG-TERM ASSESSMENT

The Annual Assessment indicates the City is meeting the requirements specified in their JURMP and collecting data associated with those program activities. At some point, a connection between activity completed and pollutant load in receiving waters will become a reality.

A Long-Term Assessment must answer key questions to guide future activities and build into the current program, the additional reporting requirements in order to connect program activities with actual improvement in receiving water quality. The Long-Term Effectiveness Assessment (LTEA) is conducted once every five years (permit renewal cycle) as changes to permits may change approaches and programs. Copermittees are preparing to begin work on this permit cycle's LTEA.

Table 11.2

Program Activity	Annual Questions	Permit Questions (Every 5th year)
Water Quality Assessment	What are the high priority quality problems and where do they occur? What constituent(s) is(are) causing the problems?	What are the changes to discharge and receiving water quality in my Watershed?
Program Planning	What are the priority sources of	Are the current programs

Program Activity	Annual Questions	Permit Questions (Every 5th year)
	pollutants? What BMPs are needed to control these pollutants? What are the targeted outcomes for the BMP Implementation? What are the projected Load Reductions from these implemented BMPs?	providing the information necessary to produce targeted outcomes?
Program Assessment	Were targeted outcomes achieved? What BMPs should be changed or should other BMPs added? Are costs associated with implementation feasible?	Is the cost worth the water quality changes?
Integrated Assessment	How well are the parts of the program working together? What other links can be made?	What other relationships between activities and water quality are evident?

Answers to the above questions come from further analysis of each existing component area. Tables of estimated pollutant loads removed are provided below. Areas where pollutant removal rates are high will be the areas to focus program efforts. Modifications to JURMP activities will be the result of this assessment.

Level 4 Pollutant Load Reductions are provided in the following tables for existing development. Estimates of average load reduction per event was the most difficult to find support evidence. Using the best knowledge available, the magnitude of total pollutants reduced is the most powerful in assessing the degree of success for the City's storm water program.

LEVEL 4 Assessment

Each of the following tables provides an estimate (supported with empirical data) for the amount of pollutant-containing materials prevented from entering the MS4 due to the activities of the Storm Water Pollution Prevention Program implemented in the City of El Cajon. As there is only one receiving water body in El Cajon, Forester Creek impairments were used as the constituents of concern when estimating possible amounts of pollutant-containing material prevented or a reduction in the amount of pollutant that could have discharged into Forester Creek. Only Existing Components were assessed through Level 4 as the most qualitative and quantitative information is available in these areas. The following paragraphs discuss assumptions incorporated into calculating the amounts provided as "Total" for each Existing Component.

The City of El Cajon installed a trash and debris fence in PY 2005-06 to capture trash from creek flows. Trash was added to the assessment due to the Forester Creek Improvement Project in Santee.

General Assumptions

There are a number of general assumptions within each table. Of most importance is the understanding that the amount (estimated or actual) removed or eliminated from discharging into the storm drain system is the amount of the material or liquid and does not equate to actual pollutant loads reduced. Secondly, the margin of error in these values is very high as most numbers were calculated using available information. Data quality is not necessarily a concern. This is an effort in determining where best to place education efforts and focus each program component.

Municipal

At 28 municipal maintained areas (parks, City Hall, recreation centers), staff cleaned area of pet waste, three times per year. Collection at each area was approximately one pound of pet waste. Pet waste does not equate to one pound of bacteria.

The City maintained 100% of laterals at approximately 28 buildings/facilities. No sewer overflows were experienced at City facilities. Pounds were estimated using 10 pounds (no factual basis other than one gallon of water equals 8 pounds) equaling one gallon of sewage. Private laterals not cleaned annually may experience stoppage depending on usage and care. Approximate gallons potentially dischargeable is 2 gallons times 10 equals 20 pounds time 24 buildings equals 560 pounds. The potential for error with this calculation is high.

Total dissolved solids from Municipal areas originate mainly from fertilizers applied by staff. There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation efforts that reduces overspray. All these activities reduce the amount of TDS available for discharge to the storm drain system.

Municipal activities do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.

Trash reduction at City facilities is a consistent effort with approximately 80 to 90% of the 400 City employees ensuring trash is placed in appropriate containers. One pound of trash per year per person is estimated. This amount may be estimated too high.

One park within the City, Wells Park, has an area designated as a “Dog Park” where citizens can take their dogs to walk, bags to collect pet waste are provided for cleaning after their dogs. The Parks Department collected over 15,000 pounds of pet waste during PY2011-12.

The total calculated amounts of pollution prevented from entering the storm drain system are possibly estimated high and do not fully equate to improved water quality.

Industrial

There were 76 industrial facilities that were inspected that are conducting industrial activities within the City of El Cajon. It is estimated that 100% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during industrial inspections. If each facility is preventing one overflow of 5 gallons times 10 pounds,

then 50 pounds times 76 facilities equals 3,800 pounds of bacteria- containing materials did not discharge to the storm drain system.

Total dissolved solids from Industrial areas originate mainly from fertilizers applied by contracted staff to landscaped areas (usually a very small area compared to the total industrial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation effort that reduces overspray. All activities reduce the amount of TDS available for discharge to the storm drain system.

Based on inspections and enforcement of the industrial community, pH-affecting substances are reduced from entering the storm drain system through the implementation of BMPs as required by the General Industrial Permit. Amounts estimated have no factual basis.

Trash reduction at Industrial facilities is based on industrial inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads, as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections and the two enforcement actions taken at industrial facilities during this Permit Year.

Commercial

There were at least 132 commercial facilities conducting activities with the high potential to discharge bacteria-containing liquids, mainly eating and drinking establishments. Of those facilities, it is estimated that 50% of these facilities are maintaining their private laterals and do not spill portable container fluids. This information was noted during commercial inspections. If each facility is preventing one overflow of 2 gallons times 10 pounds, then 20 pounds times 66 facilities equals 1,320 pounds of bacteria- containing materials that did not discharge to the storm drain system. This may be estimated high.

Total dissolved solids from 61 commercial facilities originate mainly from fertilizers applied by contracted staff or lease company personnel to landscaped areas (usually a very small area compared to the total area of the commercial site). There is an overall reduction in use of fertilizers, use of less hazardous applications and water conservation efforts that reduce irrigation overspray. All these activities also reduce the amount of TDS available for discharge to the storm drain system. Commercial activities observed during inspections do not use materials or generate waste that would increase pH and as such is listed as “not applicable”.

Trash reduction at Commercial facilities is based on inspections, although no factual amounts are readily available.

Total amounts do not equate to reduction in receiving water body loads, as no empirical data is available. However, amounts reduced appear reasonable, based on observations during inspections.

Residential

Bacteria source reductions for dog owners, homeowners, and Recreational Vehicles (RVs) is purely speculation, although the numbers of potential targets is accurate, based on circulated printed educational materials and educational booths that the City has conducted for this reporting year. Enforcement actions, however, indicate few reported sewage overflows from residential areas. Amounts calculated are estimated too high and should be adjusted with more factual information in future Permit Years.

Total Dissolved Solid and Trash reductions are also speculation based on information materials circulated throughout the City in the Spring and Fall newsletters. Amounts estimated are reasonable. Based on City observations, only a few neighborhoods have trash problems. These areas will continue to be targeted in future Permit Years.

* = Total amounts calculated appear reasonable with the exception of bacterial-containing materials. Factual information is not readily available for this element and estimations are high.

New Development

Only trash and TDS were assessed for New Development as a small-scale post-construction BMP data assessment is not yet available. Speculations on the amount of trash are associated with post-construction BMPs provided, although no corroborating evidence could be found. Numbers calculated appear reasonable.

Construction

Most of the pollutant reductions at construction sites involve sediment. Based on the inspections completed, bacteria from Port-o-lets, pH from concrete washout, and trash rarely require a corrective action. Estimations of pollutant-containing material prevented are low and may be adjusted.

Pollutant Reduction Estimation Worksheets for Forrester Creek 303(d) Listed Pollutants (PY2011-2012)

Table 11.3 – Municipal Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted**	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Pet Waste	Maintenance	Pet Waste Bags picked up at Dog Park	Dog Area at City Park	100%	Entire Permit Year	Empirical Data	HIGH	15,000 pounds of pet waste	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Education	Sewer insert - Your Private Sewer Lateral	28 buildings	100%	28	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
	Private Lateral	Enforcement	Non-Storm Water Discharge	no sewage overflows	100%	0	Empirical Data	HIGH	0 gallons	**BELOW ACTION LEVELS** (1100 MPN/100 ml)
TDS/Nitrates	Parks and Grassy Areas	Maintenance	Landscape Maintenance	28 grassy areas	100%	28	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (2.5 mg/L NO3)
Trash	Streets	Maintenance	Street Sweeping	17,677 miles	100%	17,677	Empirical Data	HIGH	3,710 Cubic Yards*	No Measurement at this time
	Channels	Maintenance	Channel Maintenance	8 major channels	100%	8	Empirical Data	HIGH	1,746 Cubic Yards*	No Measurement at this time
TOTAL									**5,456 Cubic Yards Trash ******	
* - Converted from cubic yards at 60 lb/cubic yard				*** - Represents only two months of usage					**15,000 Pounds of fecal coliform 0 gal fecal coliform******	
**- Correlation to Water Quality TBD				**** - Actual Results						

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.4 – Industrial Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Private Lateral	Inspection	Private Sewer Lateral	76 inspected industrial facilities	TBD	TBD	In Progress	HIGH	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	76 inspected industrial facilities	100%	76	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash (not 303(d) listed, but monitored by El Cajon)	Dumpster	Maintenance	Building/Grounds Maintenance	76 inspected industrial facilities	100%	76	Extrapolated Information	MEDIUM	(.1lb of trash) (76 facilities) (365 days) = 2,774 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	76 inspected industrial facilities	83%	63	Extrapolated Information	MEDIUM	(.05lb of trash) (63 facilities) (365 days) = 1,151 lb	No Measurement at this time
TOTAL									**3,925 lb of trash *****	
* - Diverted from the Storm Drain System *** - Estimated Results										
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

.1lb Trash = 8 cups/paper @ .2 ounces each

Table 11.5 – Commercial Component									
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMP Completed for Measurement**	**# of Targeted Sources**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted ***	**Downstream Dry Weather Monitoring Results ****
Fecal Coliform	Private Lateral	Education	Private Lateral Maintenance	132	132	In Progress	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS/Nitrates	Landscape	Maintenance	Over-Watering Activities	132	106	Extrapolated Information	MEDIUM	Estimate if WQ is above action levels.	**BELOW ACTION LEVELS** (10 mg/L NO3)
Trash	Dumpster	Maintenance	Building/Grounds Maintenance	132	66	Extrapolated Information	MEDIUM	(.1lb of trash) (66 facilities) (365 days) = 2,409 lb	No Measurement at this time
	Parking Lot	Maintenance	Parking Lot Maintenance	132	80	Extrapolated Information	MEDIUM	(.05lb of trash) (80 facilities) (365 days) = 1,461 lb	No Measurement at this time
								3,870 lb of trash ***	
TOTAL									
* - Diverted from the Storm Drain System			*** - Estimated Results						
**- Correlation to Water Quality TBD									

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.6 – Residential Component

Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Program Activity**	**Specific BMPs Completed for Measurement**	**# of articles Distributed**	**% of Readers Implementing BMP (estimated)**	**# of Possible Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Sanitary Sewer	Education	Private Lateral Maintenance	38,000	0.1%	38	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
	Pets (Dogs & Cats)	Education	Pet Care	20,000 pet owners	10%	2,000	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
TDS	Landscape Fertilizers	Education	Home/Garden Maintenance	38,000	0.5%	190	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
	Automobile	Education	Vehicle/Equip Cleaning	38,000	10%	3,800	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/L)
pH	Concrete Washout	Education	Home Repair	38,000	5%	1,900	Best Available Knowledge	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7 pH)
TOTAL										

* - Diverted from Storm Drain System *** - Estimated Results

** - Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to WQ

Table 11.7 – New Development Component

ASSESSMENT LEVELS	Level 1	Level 1	Level 1	Level 1	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources (Completed Projects)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
TDS	Landscape	Inspection	Bio-filtration Area	2	2	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (10 mg/l)
Trash	SW Inlets	Inspection	Inlet Filters	2	2	Extrapolated	MEDIUM	(.1lb of trash) (2 facilities) (365 days) = 73 lb	No Measurement at this time
	Landscape	Inspection	Media Filter	2	2	Extrapolated	MEDIUM	(.05lb of trash) (2 facilities) (365 days) = 36.5 lb	No Measurement at this time
	Paved Areas	Inspection	Detention Basin	2	2	Extrapolated	MEDIUM	(.05lb of trash) (2 facilities) (365 days) = 36.5 lb	No Measurement at this time
	Dumpster	Inspection	WM5 - Solid Waste Management	2	2	Extrapolated	MEDIUM	(.05lb of trash) (2 facilities) (365 days) = 36.5 lb	No Measurement at this time
TOTAL								**182.5 lbs of trash *****	

* - Diverted from the Storm Drain System

*** - Estimated Results

**- Correlation to Water Quality TBD

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

Table 11.8 – Construction Component										
Assessment Levels	Level 1	Level 1	Level 1	Level 1	Level 2/3	Level 2/3			Level 4	Water Quality
Forrester Creek 303(d) Impairments (Constituents)	**Targeted Source**	**Completed Program Activity**	**Specific BMPs Completed for Measurement**	**# of Targeted Sources**	**% of Facilities Implementing BMP (Section 3, Table 3)**	**# of Successful Events**	**Method of Estimation**	**Confidence Level**	**Amounts of pollutant material Diverted***	**Downstream Dry Weather Monitoring Results****
Fecal Coliform	Port-o-let	Inspection	WM9 - Sanitary Waste Management	4	99%	4	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (4000 MPN/100 ml)
pH	Concrete Washout	Inspection	WM8 - Concrete Washout Management	4	97%	4	Extrapolated	LOW	Estimate if WQ is above action levels	**BELOW ACTION LEVELS** (8.7)
Trash	Dumpster	Inspection	WM5 - Solid Waste Management	4	100%	4	Extrapolated	MEDIUM	(.1lb of trash) (4 facilities) (180 days) = 72 lb	No Measurement at this time
TOTAL									**72 lbs of trash *****	
* - Diverted from the Storm Drain System			*** - Estimated Results							
**- Correlation to Water Quality TBD										

Caution: Table may contain erroneous information

Note: Pollution prevented from entering the storm drain has not yet been directly related to water quality.

11.5 PROGRAM ASSESSMENT SUMMARY

Estimated Pollutant Load Tables indicate that Residential Areas continue to have the greatest potential for pollutant removal activities. Nearly three to seven times higher than the other areas, the residential community has the largest potential for reducing pollutants from entering the City's receiving waters.

Each component has been addressed as follows for strengths and improvements. Effective is viewed as meeting the Municipal Permit implementation and reporting requirements.

Component	Effective	Strength	Improvement
Municipal	Yes	Education (Training)	Continue to coordinate with other watershed Cities, and whenever possible with stakeholders.
Industrial	Yes	Assessment of BMP Implementation	Continue to refine Inspection Form and make changes accordingly.
Commercial	Yes	Assessment of BMP Implementation	Continue to contact mobile businesses on the required BMPs that need to be implemented.
Residential	Yes*	Outreach and Education	Contact property owners directly by targeting specific problem areas. Conduct drive-abouts at problem Residential areas.
New and Re-Development	Yes	Process	Continue to implement Permit requirements under the updated regional model SUSMP and HMP.
Construction	Yes	Inspections	Continue to work with inactive sites to maintain BMPs in good condition when needed.
Illegal Discharge Detection and Elimination	Yes	Monitoring	Increase frequency of monitoring points.
Education	Yes	Team Efforts	Continue to target elementary and middle school children.
Public Participation	Yes	Team Efforts	Continue efforts to team with Region whenever possible.

* Face-to-face contact is effective but slow moving.

11.6 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements are discussed throughout the Program Assessment section and are summarized above. The City will implement adaptive management strategy developed by the region to help with the assessment of the program. No regulatory comments were received for the Assessment and Jurisdictional URMP Effectiveness Component for 2010-11.

SECTION 12 SPECIAL INVESTIGATIONS

12.1 FORRESTER CREEK IMPACT STUDY 1

SECTION 12 SPECIAL INVESTIGATIONS

12.1 FORRESTER CREEK IMPACT STUDY

For the eighth year, the City conducted an upstream/downstream monitoring of dry weather constituents of concern in Forrester Creek. The water quality monitoring was conducted on July 10, 2012 to assess the relative amount of pollutants discharged within the jurisdictional boundaries of El Cajon into Forrester Creek.

The upstream location is at the upper County boundary, specifically at Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of 1699 East Main Street. Flow at the upstream sample was approximately 2-gallons per minute. During rain events, flow from Crest and other unincorporated County areas discharge directly into the City of El Cajon without treatment.

The downstream location is adjacent to Weld Boulevard trolley station, southeast of Marshall Avenue and Cuyamaca Street intersection. Flow in the downstream was approximately 45-gallons per minute. The analytical results are very similar to values recorded in the previous years. To date, no analytical data have been collected for wet weather flows.

Table 1 - Field Screening

Location	Flow	Temp	pH	Turbidity	Conductivity	Surfactants MBAS	Ammonia-N	Nitrate NO_3-N	Orthophosphate-P	Dissolved Oxygen
	GPM	°C	-	NTU	mS/cm	mg/L				
Upstream	2	27.6	7.6	2.18	1.74	0.13	0.33	7.10	0.04	5.81
Downstream	45	34.6	8.3	35.48	2.68	0.25	0.63	9.56	0.11	6.75
Sample Date - 7/10/12										

Table 2 - Metals & Pesticides

Location	Oil & Grease	Total Hardness	Total Dissolved Solids	Total Organic Carbon	Cadmium	Copper	Lead	Zinc	Diazinon	Chlorpyrifos
	mg/L				µg/L					
Upstream	ND	552	1,170	8.6	0.2J	4.0J	ND	0.005	ND	ND
Downstream	ND	635	1,920	2.9	ND	ND	ND	5.0J	ND	ND

Sample Date - 7/10/12

ND = Not detected

J = Detected but below the reporting limit.

Table 3 - Bacteria

Location	Coliform	Fecal Coliform	Enterococcus
	MPN/100 mL		
Upstream	**11,000**	**1,300**	**20**
Downstream	**8,000**	**2,300**	**220**

Table 4 - Water Quality Objectives

Analyte	Action Level	Source
pH	6.5 - 9.0 Units	Basin Plan[1]
Turbidity	20 NTU	Basin Plan[1]
Total Dissolved Solids (TDS)	1,500 mg/L	Basin Plan[1]
Sulfate	250 mg/L	Basin Plan[1]
Methylene Blue Activated Substances (MBAS)	0.5 mg/L	Basin Plan[1]
Specific Conductance	200 µmhos/cm	NPDES General Permit/EPA Benchmarks
Ammonia-A	1.0 mg/L	WURMP[2]
Nitrate-N	10 mg/L	Basin Plan[1]

Analyte	Action Level	Source
Orthophosphate-P	2.0 mg/L	NPDES General Permit
Oil & Grease	15 mg/L	NPDES General Permit. If petroleum sheen is observed in the sampling point, a sample should be collected from the water surface. Visual observations may justify immediate investigation and/or follow-up.
Diazinon	0.5 µg/L	Response to Diazinon and Chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos	0.5 µg/L	
Cadmium	4.3 µg/L	California Toxics Rule, Criterion Maximum Continuous Concentration.
Copper	13 µg/L	
Lead	65 µg/L	
Zinc	120 µg/L	
Total Coliform bacteria	130,000 MPN/100mL(W)	Bacteria levels in many storm drains are likely to exceed public health guidance criteria.
Fecal Coliform bacteria	33 MPN/100mL(S) 13,000 MPN/100mL(W)	
Enterococcus bacteria	126 MPN/100mL(S) 7,000 MPN/100mL(W)	

[1] Water Quality Objectives in the Basin Plan shall not to be exceeded more than 10% of the time during any one year period.
[2] Watershed Urban Runoff Management Program
(S) - Steady state conditions
(W)- Action levels are based on upper 90% confidence level of Copermittees dry weather analytical monitoring data.

Discussion & summary of sampling results:

Forester creek flow has been steadily reducing over time. The upstream flow rate started at a peak of approximately 25 GPM and has since reduced down to approximately 2 GPM. The downstream flow rate started at approximately 170 GPM and has reduced down to approximately 45 GPM. The reduced flow may be contributed to educating the public about controlling over irrigation and controlling dry weather flows. In addition, the reduction can be contributed to increased costs for potable water and a need to conserve.

The inorganic constituents appear to be within range of the San Diego Regional Water Quality Control Board Basin Plan - Water Quality Objectives (WQO). The downstream turbidity result of 35.48mg/L exceeds the turbidity WQO by approximately 77.40%. This exceedance of the turbidity WQO can be contributed to the amount of summer time algal growth and transient activities within the creek. The total dissolved solids (TDS) increased between the upstream and downstream sampling points. The downstream TDS result of 1,920mg/L exceeds the TDS WQO by approximately 28%. This exceedance in the WQO can be contributed to natural springs or perched groundwater surfacing and flowing through the creek. The dissolved oxygen concentration increased between the upstream and downstream sampling points. The concentrations of Methylene Blue Activated Substances, Ammonia-Nitrogen, Nitrates and Ortho-phosphate were all within the WQOs.

The toxic constituents including dissolved metals and pesticides (Diazinon and Chlorpyrifos) did not exceed the WQOs. Mainly, the constituents were not detected within the water quality samples. Coliform bacteria, fecal bacteria and enterococcus bacteria all decreased in the downstream sampling results. The steady state coliform bacteria and enterococcus bacteria WQOs were not exceeded. Although the action level was not exceeded, the steady state fecal coliform bacteria WQO appears to be exceeded by 98.60%. This exceedance can be a result of transient activities within the creek. The City continues to survey the channel segments of Forester Creek and cleans the channels on a routinely basis.

The overall dry weather water quality discharging from within the City limits into Forester Creek appear to within WQOs. The amount of dry weather flows in Forester creek is decreasing over time. The City will continue to conduct dry weather investigations to develop data to establish baseline conditions (for current channel configurations) and to develop priorities for more detailed investigations to determine pollutant sources. The City will also continue to conduct public outreach to the community at large in order to help reduce runoff irrigation to help reduce and control dry weather flows into Forester creek.

The 2012 City of El Cajon Forester Creek Impact Study contains more detailed information about the results of this investigation. A copy of the study is included in Appendix A.12 of this report.

SECTION 13 NON-EMERGENCY FIRE FIGHTING FLOWS

INTRODUCTION 1

13.1 BEST MANAGEMENT PRACTICES 1

13.2 EDUCATIONAL METHODS 2

13.3 IMPROVEMENTS AND REGULATORY COMMENTS 2

SECTION 13 NON-EMERGENCY FIRE FIGHTING

Introduction

Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. BMPs and educational methods are used to reduce the discharge of pollutants to the MEP.

13.1 BEST MANAGEMENT PRACTICES

The City has already developed and implemented a program to reduce pollutants from non-emergency fire fighting flows, in accordance with Section B.3. of the Permit. BMPs were implemented when conducting the following activities:

- Regular Maintenance of Fire and Emergency Vehicles and Equipment
- Training Exercises
- Facilities Maintenance
- Post-Emergency Rehabilitation of Response Equipment

These activities are conducted in a way to either minimize or eliminate the discharge of pollutants to the MS4. Detailed descriptions of BMPs are given for each activity below:

Regular Maintenance of Fire and Emergency Vehicles and Equipment

- Vehicles and equipment are cleaned where runoff is directed either to the sanitary sewer system or to a drain with an oil/water separator system.
- Vehicles and equipment are cleaned where runoff ponds and evaporates and/or where runoff filters through landscaped areas.
- Used-oil, hydraulic fluids, and antifreeze are stored in containers for recycling or disposed as hazardous waste.
- Spill kits are available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents are minimized, and general cleaning solutions are disposed of into the sanitary sewer system.
- Caustics, flammables, and solvents are contained and disposed of properly as hazardous waste.

Training Exercises

- Water used in training exercises is directed to landscaped areas whenever possible, and runoff from the training exercises is not allowed to discharge to the MS4.
- Live fire training activities are pre-planned to allow integration of barriers to off-site runoff that could contribute to non-storm water discharges or conducted at a designated training area that drains to the sanitary sewer via a multi-compartment separator.

Facilities Maintenance

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways are swept to remove debris. Debris is placed in the trash. Interior floors are

mopped as necessary, and the wastewater is discharged into the sanitary sewer system or onto landscaped areas.

- Landscaped areas are maintained as required to reduce introduction of leaves and other landscape waste into the MS4.
- Irrigation systems are monitored and maintained as required to reduce irrigation water from going off-site.
- Spills are cleaned up using spill kits provided at the work site, and disposal of spilled material are conducted in accordance with applicable regulations.
- Spills that require a cleanup beyond the ability of the on-site employees are reported to the City Department of Public Works for assistance with appropriate resources.
- Maintenance and repair of structures are conducted using methods that do not contribute pollutants to the MS4.
- General non-hazardous cleaning solutions are disposed of in a utility sink that drains into the sanitary sewer system.

Post-Emergency Rehabilitation of Response Equipment

Tools, fire hoses, ladders, and other equipment used at the scene of an emergency are restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. The use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified.

13.2 EDUCATIONAL METHODS

The Storm Water Division provided informal training to Fire Department Personnel. In past years the Storm Water group collaborated with the Fire Department on developing outreach materials with language conveying the message on how best to conduct weed abatement prior to the fire season while staying in compliance with storm water regulations. These materials have been used for a number of years.

13.3 IMPROVEMENTS AND REGULATORY COMMENTS

Improvements from 2010/11 experience include:

- Continue to coordinate with the Fire Department on outreach materials.
- Expanded maintenance Best Management Practices for fire fighting equipment and facilities.

Regulatory comments are not applicable to this portion of the JURMP update. Non-Emergency Fire Fighting is a new component of the annual update.

SECTION 14 JURMP REVISIONS

14.1 INTRODUCTION 1

SECTION 14 JURMP REVISIONS

14.1 INTRODUCTION

No changes to the JURMP occurred during PY2011-12.

Section 15 Conclusions and Recommendations

Introduction **1**

15.1 Conclusions **1**

Table 1 – Challenges and Associated Strategies/Actions 3

15.2 Recommendations **4**

SECTION 15 CONCLUSIONS & RECOMMENDATIONS

INTRODUCTION

To conclude PY5 and recommend changes for the next permit year, this Section focuses on the challenges that were overcome this last year that will help eliminate inaccuracy or uncertainty for subsequent permit years. To summarize, the City:

- Continued implementation of the BMP-based inspections by focusing efforts on ensuring full implementation of appropriate BMPs at all high priority commercial, industrial, construction and municipal facilities.
- Continue to incorporate and contact storm water pollution prevention requirements for mobile businesses using regional mobile business database.
- Expanded public education efforts by targeting elementary and junior high school student population by conducting presentations; and continued participation in the Fire Department/Safety Open House, as well as other events in which a pollution prevention booth was placed, and providing information to the mass public through the City newsletter.
- Continued efforts towards a Watershed-based program by conducting the seventh upstream/downstream water quality assessment of Forrester Creek.
- Refined the City's ability to track cumulative complaints, inspections, violations, and enforcement actions for accuracy and completeness.
- Continued to have an opened contract for on-call analytical testing services to conduct follow-up responses to complaints, spills, and targeted investigations to identify potential pollutant source points.
- Maintains a contract with a consultant to assist with the review of storm water plans and requirements for proposed development and redevelopment projects.

15.1 CONCLUSIONS

A number of conclusions resulted from compiling the Annual Report information as follows:

The City continues to fulfill the requirements of Order No. R9-2007-001. The actions taken by the City to comply with these requirements are fully described in Sections 1 through 14 (particularly Section 11) of this Annual Report. The City will continue to meet the activity-based compliance requirements in future program years.

The City's focus on BMP implementation at high priority commercial and industrial facilities and at construction sites will reduce or prevent discharges of pollutants from those activities and sites. Once the City can reasonably assure that those priority activities are not discharging

pollutants, the City will be able to focus more effort on identifying and eliminating other sources of pollutants that continue to impact water quality.

The City's program must continue to move forward, from an emphasis on the activity-based compliance actions to water-quality-based activities that will help the City achieve the goal of reducing discharges of pollutants and restoring the quality of the receiving waters. These activities include collecting, evaluating and incorporating sufficient water quality data to set priorities, better identify problem areas, and to be able to demonstrate reductions in pollutants and improvements in water quality.

Effectively integrating jurisdictional into watershed programs will be a continued focus for the future. The Permit establishes important obligations at both jurisdictional and watershed levels. To accomplish this transition and integration, the City continues to meet with San Diego River Watershed Jurisdictions to provide some direction concerning urban runoff issues. Taking advantage of successes at other Cities strengthens individual and watershed programs.

The City must still address a number of unresolved data and information collection issues. Monitoring data are especially important to quantify pollutant loads within the jurisdiction of El Cajon. Additional dry weather monitoring stations may be helpful to better identify illegal discharge sources. The need for additional data and information must be carefully balanced with the costs of obtaining those items.

The solid base of protocols and procedures produced in previous permit years continue into the current reporting period with refinement supported by nine years of experience in program implementation. An unending challenge is changing the behavior of the approximately 99,000 residents and 2,000 businesses and their views of urban runoff pollution. The City is predominantly a community of rental units, which identifies the population as more transient than the typical single-family residential population. These outreach and education challenges have changed as more rental complexes converted into common living complexes with home ownership. The following table summaries the City's storm water management strategy based on the challenges presented during the current reporting period, 2011-12.

Table 1 – Challenges and Associated Strategies/Actions

Challenges	Strategies / Actions
Implementing the 14 storm water components simultaneously	1. Prioritize implementation to maximize use of personnel, supplies, equipment, and budget. 2. Develop budget for next fiscal year to add jurisdictional and watershed outreach efforts to educate about TMDLs, public participation events, additional outreach materials, GIS data development, staff training, and treatment controls for trash and debris.
Adequate Staffing and Equipment	Train as many City staff in storm water pollution prevention and Best Management Practices.
Incorporate Storm Water Concepts and Requirements at the Planning Stage	Conduct training and work closely with Community Development staff to generate a Storm Water Information Packet to distribute to applicants.
Transition Jurisdictional Programs and activities into Watershed Activities.	1. Meet with WURMP Copermittees for collaboration and implementation of a watershed based approach. 2. Explore strategies to fund watershed activities that go beyond the jurisdictional boundaries and plan for future TMDLs.
Tackle Inland City Issues	1. Develop City-specific education and outreach materials.
Maintain Adequate Monitoring tasks	1. Review dry weather monitoring results. 2. Use GIS and the City's Business License database to focus on the most highly potentially pollution production areas. 3. Develop a basic wet weather-monitoring program that is comparable with other Copermittee programs and upcoming TMDLs.

From July 1, 2003 through June 30, 2012, the City has tackled new set of challenges while maintaining the current level of services provided to citizens of El Cajon. In review, it was better to put resources towards implementing productive processes and procedures, rather than

completing a task in the name of compliance. The City continues to brainstorm to reach higher standards in future program years, while quantifying pollutant reductions from jurisdictional actions that may have a watershed impact.

15.2 RECOMMENDATIONS

Specific recommended improvements are listed at the end of each component. Below are some general improvements for the City's Urban Runoff Strategy.

- Start transitioning from a jurisdictional to a more watershed based program,
- Prepare to start with the implementation of the next permit cycle and the bacteria TMDL,
- Increase emphasis on watershed training, San Diego River Watershed Copermittee cooperative efforts, and electronic tracking of program information,
- Continue to maintain adequately trained staff to implement JURMP activities,
- Focus on outreach and education activities for the most effective approach to managing storm water pollution.
- Coordinate through City departments a cohesive urban runoff management program,
- Continue to develop a comprehensive program to collect and organize information for the Annual Report,
- Complete development of a storm drain master plan map inventorying MS4 infrastructure.

Appendix A.1
(No Content)

Appendix A.2

RESOLUTION NO. 10–03

A RESOLUTION APPROVING GENERAL PLAN AMENDMENT 2002-04 TO ADD STORM WATER RUNOFF POLICIES AND OBJECTIVES TO GENERAL PLAN TEXT.

WHEREAS, the El Cajon City Council duly advertised and held a public hearing on January 14, 2003, to consider an item which had been set for General Plan consideration; and

WHEREAS, to facilitate understanding by the public, the City Council took tentative or preliminary votes on this item, which vote was not binding until the public hearing was completed; and

WHEREAS, the City Council duly considered all information presented, and listened to all persons who appeared before it to speak.

NOW, THEREFORE, BE IT RESOLVED that the El Cajon City Council hereby approves General Plan Amendment 2002-04 to add storm water policies to the General Plan text as indicated in Planning Commission Resolution No. 9734, on file in the office of the City Clerk, and made a part hereof by this reference.

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at a Regular Joint City Council/Redevelopment Agency Meeting held this 14th day of January, 2003, by the following vote to wit:

AYES : Lewis, Kendrick, McClellan, Ramos, Santos
NOES : None
ABSENT : None
DISQUALIFY : None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

MARILYNN LINN, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Resolution No. 10-03 of the Resolutions of the City of El Cajon, California, as adopted by the City Council at the Regular Joint Meeting of the City Council/Redevelopment Agency on the 14th day of January, 2003.

for M Steele
Marilynn Linn, CMC, City Clerk

1/14/03 (103)

STAFF REPORT AND RECOMMENDATION
PLANNING COMMISSION MEETING
DECEMBER 9, 2002 - 7:00 PM

COUNCIL CHAMBER
200 E. MAIN STREET
EL CAJON, CA 92020

AGENDA ITEM #3

PUBLIC HEARING ON
GENERAL PLAN AMENDMENT 2002-04 – Planning Commission

Request to add storm water policies to General Plan text.

******** ******** ******** ********

STAFF RECOMMENDATION: RECOMMEND APPROVAL

******** ******** ******** ********

ENVIRONMENTAL IMPACT INFORMATION

The proposed project is exempt from environmental review in accordance with Section 15308 of CEQA Guidelines.

DISCUSSION

As part of the local implementation of the federal Clean Water Act, the County of San Diego and its 18 cities have obtained a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board. The NPDES permit addresses the handling of storm water runoff by the 18 cities, their residents and businesses. Part of the NPDES permit includes a Jurisdictional Urban Runoff Management Program (JURMP) (Note: there are lots of acronyms used in the storm water runoff dictionary).

Although most of the City's storm water and drainage implementation is carried out by the Department of Public Works, there is a requirement in the NPDES and the JURMP that the General Plan include policies and principles which address water quality and storm water runoff. An attempt to add these policies and

principles to the General Plan last year was withdrawn when it was determined to be premature (GPA 2001-01).

Goal 8 of the El Cajon General Plan says, "The livability of El Cajon will be maintained and enhanced through respect for the environment." There are a number of policies under this goal which address other environmental issues and concerns and this is where the staff believes the policy and objectives (principles) for storm water runoff should be located within the City's general plan text.

RECOMMENDATION

It is recommended that the Planning Commission recommend approval of General Plan Amendment 2002-04 to add storm water runoff policy and objectives to the text of the General Plan as follows and for the following reasons:

Add the following objective and policies to Goal 8.

"Objective 8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into a municipal separate storm sewer system. (MS4)

8-10.3. The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.

8-10.4. The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

8-10.5. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-

structural best management practices to mitigate the projected increases in pollutant loads and flows.

8-10.6. The City will avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

8-10.7. The City will reduce pollutants associated with vehicles and increasing traffic resulting from development. The City will coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable."

Reasons for Recommendation

A. This amendment to the text of the City's general plan will add a policy and objectives addressing storm water runoff as required by the National Pollution Discharge Elimination System (NPDES) permit issued to the City.

B. This amendment will provide policy and objectives dealing with storm water runoff to guide decision-making in the city.

C. This amendment is consistent with the City's Jurisdictional Urban Runoff Management Program (JURMP).

Refer to staff for a resolution stating the decision of the Planning Commission.

JSG:co

EL CAJON GENERAL PLAN 2000

Text and Map adopted by
City Council Resolution No. 10-91
on January 8, 1991

Text and Map amended by
City Council Resolution No. 31-98
on February 10, 1998

January, 2001

OBJECTIVE

8-10. Achieve and maintain a level of water quality which protects affected watersheds by minimizing runoff which may cause erosion and pollution.

POLICIES

8-10.1. The City shall minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment. Where feasible, the City will insure that new development or redevelopment slows runoff and maximizes on-site infiltration of runoff.

8-10.2. The City shall implement pollution prevention methods supplemented by pollutant source controls and treatment. The City will use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants off site and into a municipal separate storm sewer system. (MS4)

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sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

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8-10.8. The City will implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

8-10.9. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

GOAL 9

A strong, competitive region-wide commercial base will be created and retained.

OBJECTIVE

9-1. Parkway Plaza and its immediate vicinity will be maintained as the City's regional shopping center.

POLICIES

9-1.1. Parkway Plaza shall be expanded from its original size and the number of major tenants and stores shall be increased.

9-1.2. The City shall continue to improve traffic circulation in the vicinity of Parkway Plaza.

9-1.3. The City shall cooperate with Parkway Plaza in the provision of parking facilities and may develop special

ORDINANCE NO. 4939

AN ORDINANCE REPEALING CHAPTER 16.60
OF TITLE 16 OF THE EL CAJON MUNICIPAL CODE
AND ADDING A NEW CHAPTER 16.60 TO TITLE 16 OF THE
EL CAJON MUNICIPAL CODE REGARDING THE CITY OF
EL CAJON STANDARD URBAN STORM WATER MITIGATION PLAN.

WHEREAS, the City of El Cajon, pursuant to its Water Quality Permit issued on February 21, 2001, is required to adopt certain implementation steps as mandated by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, one of the implementation steps requires the adoption of an Urban Storm Water Mitigation Plan based upon a pre-approved Model adopted on June 10, 2002, by the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall be the Urban Storm Water Mitigation Plan adopted pursuant to the mandate of the Regional Water Quality Control Board (San Diego Region); and

WHEREAS, this Ordinance shall allow for the adoption of resolutions and policies which shall implement the El Cajon Standard Urban Water Mitigation Plan not included in this Ordinance; and

WHEREAS, the adoption of this Ordinance, by the findings of the Regional Water Quality Control Board (San Diego Region), is exempt from the requirements of the California Environmental Quality Act; and

WHEREAS, the purpose of this Ordinance is to protect valuable water resources of the City of El Cajon and its surrounding environs from pollutants.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EL CAJON AS FOLLOWS:

Section 1: Chapter 16.60 of Title 16 of the El Cajon Municipal Code is hereby repealed.

Section 2: Chapter 16.60 is hereby added to Title 16 of the El Cajon Municipal Code to read as follows:

16.60.010 Title.

The ordinance codified in this chapter shall be known as the "Standard Urban Storm Water Mitigation Plan (SUSMP) ordinance of the City of El Cajon."

16.60.020 Statutory Authority.

A. The municipal storm water National Pollutant Discharge Elimination System (NPDES) permit (Order No. R9-2007-0001, as subsequently modified by renewal order, NPDES No. CAS0108758, hereinafter collectively referred to as "Municipal Permit") issued to San Diego County, San Diego County Regional Airport Authority, the Port of San Diego, and eighteen cities by the San Diego Regional Water Quality Control Board (Regional Board) on January 24, 2007, requires the development and implementation of a program addressing urban runoff pollution issues in development planning for public and private projects.

B. The requirement to implement a program for development planning is based on federal and state statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA"), and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The municipal permit requires the implementation of a Jurisdictional Urban Runoff Management Program (JURMP), which has been adopted by the City of El Cajon on February 12, 2002, as amended.

16.60.030 Purpose.

A. The primary objectives of this chapter are to:

1. Ensure that discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards;

2. Effectively prohibit non-storm water discharges in urban runoff; and

3. Reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

B. The regulations of this chapter were developed to address post-construction urban runoff pollution from new development and redevelopment applications that fall under "priority project" categories. The goal of this chapter is to develop and implement practicable policies to ensure, to the maximum extent practicable, that development does not increase pollutant loads from a project site and to consider urban runoff flow rates, velocities and durations. This goal may be achieved through site-specific controls and/or drainage area-based or shared structural treatment controls.

16.60.040 Applicability of chapter.

The regulations set forth in this chapter shall apply to the development plan approval process for discretionary development applications, and prior to issuing

development permits for ministerial projects. To allow flexibility in meeting the design standards set forth in this chapter, structural treatment control BMPs may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided certain conditions are met. All new development and significant redevelopment projects that fall into one of the following "priority project" categories are subject to the requirements of this chapter, subject to the lawful prior approval provisions of the municipal permit. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project footprint is subject to the requirements of this chapter. These categories are:

A. Residential development of ten (10) units or more;

B. Commercial development greater than one (1) acre;

C. Heavy industry/industrial development greater than one (1) acre;

D. Automotive repair shops;

E. Restaurants;

F. Hillside development greater than 5,000 square feet;

G. Projects located within or directly adjacent to or directly discharging to receiving waters within environmentally sensitive areas that create 2,500 square feet or more of impervious surface or increase the area of imperviousness to ten percent (10%) or more of its naturally occurring conditions, where "directly adjacent," is defined as situated within 200 feet of the environmentally sensitive area, and where "discharging directly to," is defined as outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands;

H. Parking lots with 5,000 square feet or more of impervious surface, or with more than fifteen (15) parking spaces and potentially exposed to urban runoff;

I. Streets, roads, highways, and freeways, which would create a new paved surface that is 5,000 square feet or more of impervious surface; and

J. Retail gasoline outlets of 5,000 square feet or more in size, or having a projected average daily traffic ("ADT") count of at least 100 vehicles per day regardless of size.

As part of the project review process and to comply with the regulations set in this chapter, the Public Works Department shall review development and redevelopment projects that create, add or replace 5,000 square feet or more of impervious surfaces. In addition to the priority categories identified in this chapter, priority projects shall also

include all other pollutant generating development projects that result in the disturbance of one acre or more of land.

16.60.050 Limited exclusion.

Trenching and resurfacing work associated with utility projects; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lanes on existing roads; and routine replacement of damaged pavement, such as pothole repair, are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are subject to the requirements of this chapter if one or more of the criteria for the above categories are met.

16.60.060 Applicability of chapter 13.10.

The provisions of Chapter 13.10 (Storm Water Management and Discharge Control), including the definitions and enforcement provisions, shall be applicable to this chapter as though fully set forth herein.

16.60.070 Administration – limitations.

Where requirements of this chapter conflict with established local codes, (e.g., specific language of signage used on storm drain stenciling), the city council may continue the local practice and modify this chapter to be consistent with the code, except that to the extent that the standards in this chapter are more stringent than those under local codes, such more stringent standards shall apply.

16.60.080 Administration – provisions for SUSMP requirements.

The requirements of this chapter shall be incorporated into the project design in accordance to that certain Countywide Model SUSMP, Standard Urban Stormwater Mitigation Plan Requirements for Development Applications, dated January 2, 2009, as may be amended from time to time (the "Countywide Model SUSMP"), and shown on the plans prior to approval of discretionary permits. For projects requiring only ministerial permits, the requirements of this chapter shall be incorporated into the project design and shown on the plans prior to the issuance of any ministerial permits. City departments carrying out public projects that are not required to obtain permits shall be responsible for ensuring the requirements of this chapter are incorporated into the project design and shown on the plans prior to bidding for construction contracts, or equivalent. For public projects, the requirements of this chapter must be incorporated into the project design and shown on the plans before allowing the project to commence.

16.60.090 Administration – implementation.

All priority projects shall implement one or a combination of storm water BMPs, including, (1) LID and site design BMPs, (2) source control BMPs and, (3) structural treatment BMPs after the pollutants and conditions of concern have been identified. Storm water BMPs shall be considered and implemented where expressly required by this chapter and if not so required where determined applicable and feasible by the Director of Public Works. The storm water BMPs shall adhere to the requirements of this chapter, and shall be correctly designed in accordance to the applicable Countywide Model SUSMP so as to remove pollutants to the maximum extent practicable. A flow chart summarizing the storm water BMP selection procedure is provided in Figure 1.

16.60.100 Administration – site design storm water treatment credits.

Project proponents may develop and submit for public review and comment and city council approval a regional model site design storm water treatment credits program that allows reductions in the volume or flow of storm water that must be captured or treated on a project in return for the inclusion of specified project design features in the project. The model site design storm water treatment credits program shall be deemed to be a part of this chapter following city council approval. Any such model program shall specify the conditions under which project proponents can be credited for the use of site design features and low impact development techniques that can reduce the volume of storm water runoff, preserve natural areas, and minimize the pollutant loads generated and potentially discharged from the site. Any site design storm water treatment credits program implemented shall be consistent and compliant with this chapter and approved by the city council.

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Figure 1. Storm Water BMP Selection Procedure Flow Chart

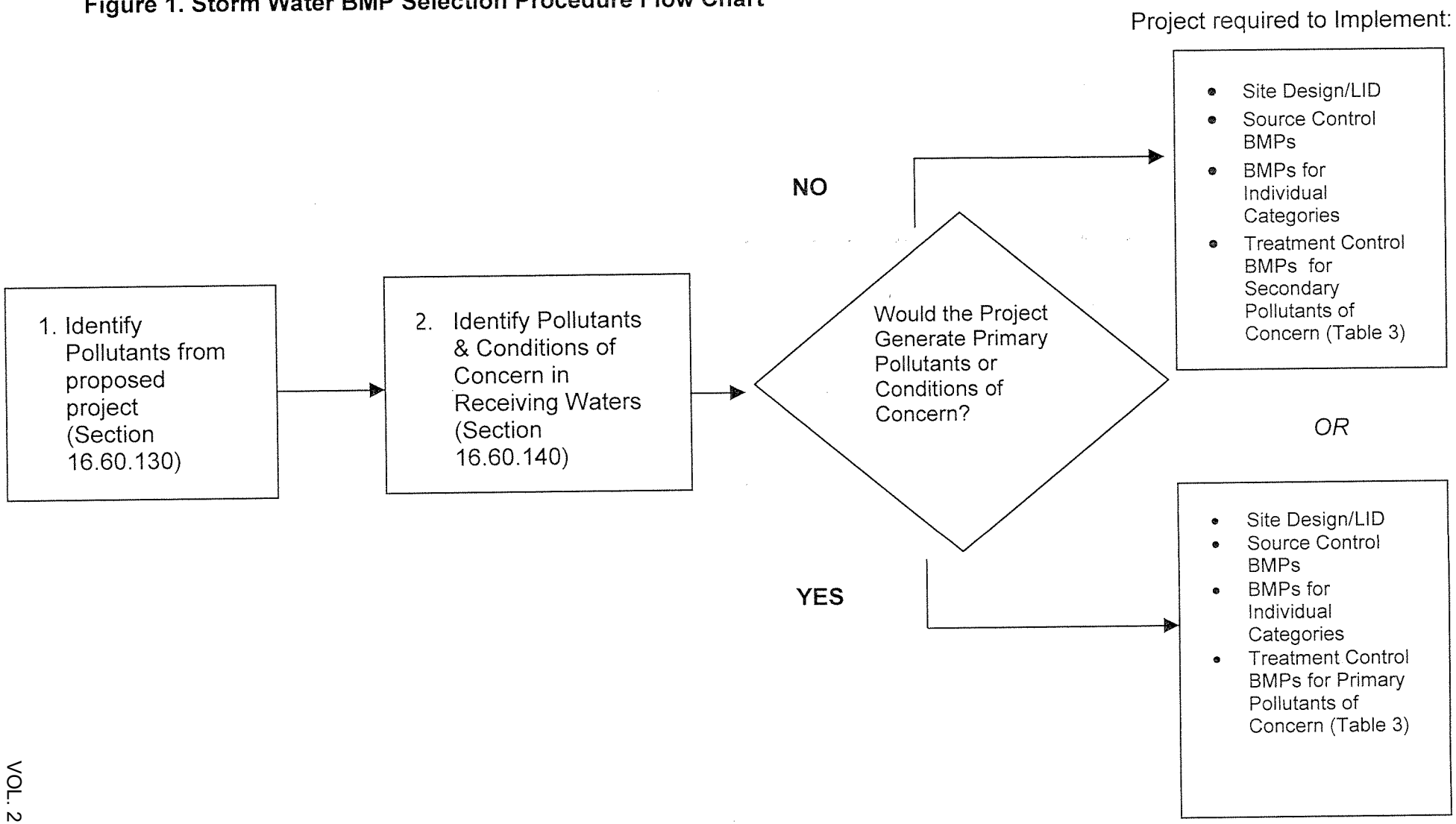

16.60.110 Identifying pollutants and conditions of concern.

A. Priority project proponents shall use this guidance to identify pollutants and conditions of concern, for which they need to mitigate or protect against. Site design and source control BMPs are required based on pollutants commonly associated with the proposed project type (see Table 2, "Standard Storm Water BMP Selection Matrix"). Treatment Control BMPs are also required for the project's expected pollutants of concern (see Table 3).

B. For private priority projects, the information shall be provided with the project application prior to being deemed complete.

C. For public priority projects, the information shall be provided by the Director of Public Works prior to bidding for construction contracts.

16.60.120 General categories of water pollution.

A. Sediments – Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms' survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

B. Nutrients – Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

C. Metals – Metals are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary sources of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

D. Organic Compounds – Organic compounds are carbon-based. Commercially available or naturally occurring organic compounds are found in

pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged into storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also absorb levels of organic compounds that are harmful or hazardous to aquatic life.

E. Trash & Debris – Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfides.

F. Oxygen-Demanding Substances – This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

G. Oil and Grease – Oil and grease are characterized as high-molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

H. Bacteria and Viruses – Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

I. Pesticides – Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

16.60.130 Identifying pollutants from the project area.

Using Table 1, pollutants shall be identified that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

Table 1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development > 10 units	X	X			X	X	X	X	X
Attached Residential Development > 10 units	X	X			X	P(1)	P(2)	P	X
Commercial Development > 1 acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry / Industrial Development > 1 acre	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development > 5,000 ft^2	X	X			X	X	X		X
Parking lots > 5,000 ft^2 or > 15 spaces	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets > 5,000 ft^2 or > 100 ADT			X	X	X	X	X		
Streets, Highways & Freeways > 5,000 ft^2	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) a potential pollutant if landscaping exists on site
(2) a potential pollutant if the project includes uncovered parking areas
(3) a potential pollutant if land use involves food or animal waste products
(4) including petroleum hydrocarbons
(5) including solvents

16.60.140 Identifying pollutants of concern.

A. Pollutants generated by the proposed priority project that exhibit one or more of the following characteristics are considered primary pollutants of concern:

1. Current loadings or historical deposits of the pollutant are impairing the beneficial uses of a receiving water;

2. Elevated levels of the pollutant are found in water or sediments of a receiving water and/or have the potential to be toxic to or bioaccumulate in organisms therein; and

3. Inputs of the pollutant are at a level high enough to be considered potentially toxic.

B. To identify primary pollutants of concern in receiving waters, each priority project shall, at a minimum, do the following:

1. For each of the proposed projects' discharge points, identify the receiving water(s) that each discharge point proposes to discharge to, including hydrologic unit basin number(s), as identified in the most recent version of the *Water Quality Control Plan for the San Diego Basin*, prepared by the San Diego Regional Water Quality Control Board;

2. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies. List any and all pollutants for which the receiving waters are impaired; and

3. Compare the list of pollutants for which the receiving waters are impaired with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing impairment of receiving waters shall be considered primary pollutants of concern.

For projects where no primary pollutants of concern exist, those pollutants identified through the use of Table 1 shall be considered secondary pollutants of concern.

16.60.150 Identifying conditions of concern.

A. Common impacts to the hydrologic regime resulting from development typically include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. These changes have the potential to permanently impact downstream channels and habitat integrity. A change to a priority project site's hydrologic regime would be considered a condition of concern if the change would impact downstream channels and habitat integrity. Because of these potential impacts, a director, or his or

her designee, may require that the following steps be followed for priority projects that, in their judgment, may impact the hydrologic regime:

1. Evaluate the project's conditions of concern in a drainage study report prepared by a registered civil engineer in the State of California, with experience in fluvial geomorphology and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, wet season groundwater depth, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed;

2. As part of the drainage study, a qualified, licensed professional shall provide a report on proposed infiltration techniques (trenches, basins, dry wells, permeable pavements with underground reservoir for infiltration) regarding any potential adverse geotechnical concerns. Geotechnical conditions (such as slope stability, expansive soils, compressible soils, seepage, groundwater depth, and loss of foundation or pavement subgrade) should be addressed, and mitigation measures provided;

3. As part of the drainage study, the civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of an altered flow regime;

4. The drainage study shall compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rate, flow velocity, runoff volume, time of concentration, and retention volume. These characteristics shall be developed for the two-year and 10-year frequency, Type I storm, of six-hour or 24-hour duration (whichever is the closer approximation of the site's time of concentration), during critical hydrologic conditions for soil and vegetative cover[1]. The drainage study shall report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions affecting downstream conditions of concern would be maintained by the proposed project, satisfactory to the Director of Public Works, by incorporating the site design, source control, and treatment control requirements identified in this chapter.

B. For priority development projects that disturb ("PDP") fifty (50) acres or more:

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[1] Design storms can be found at http://www.wrcc.dri.edu/pcpnfreq.html. Applicants may calculate the storm events using local rain data. In addition, isopluvial maps contained in the County of San Diego Hydrology Manual may be used to extrapolate rainfall data to areas where insufficient data exists. If isopluvial maps are used interpolations shall be linear.

1. PDP post project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations (interim hydromodification criteria) where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

2. PDPs disturbing fifty (50) acres or more shall implement hydrologic controls to manage post-project runoff flow rates and durations as required by the interim hydromodification criteria.

16.60.160 Progression of storm water BMPs.

Site design BMPs reduce the need for source and/or treatment control BMPs, and source control BMPs may reduce the amount of treatment control BMPs needed. Throughout the following sections, all priority projects shall consider, and incorporate and implement storm water BMPs into the project design where expressly required by this chapter, and if not so required, where determined applicable and feasible by the Director of Public Works, in the following progression:

1. Site Design BMPs
2. Source Control BMPs
3. Treatment Control BMPs

16.60.170 Requirements to implement storm water BMPs.

Priority projects must implement LID site design BMPs and source control BMPs, and must also implement treatment control BMPs unless a waiver is granted based on the infeasibility of all treatment control BMPs. LID BMPs must meet the minimum requirements in section D.1.d.(4) of NPDES Permit No. CAS 0108758. BMPs must also achieve certain performance standards set out in section D.1.d.(5) and (6). Selection of BMPs from the menus included in this chapter, using the rules set out in this chapter, must fulfill these requirements. In addition, runoff treated by LID and site design or source control BMPs, such as rooftop runoff treated in landscaping, may be useful in reducing the quantity of runoff required to be treated in, "Treatment Control BMPs."

16.60.180 Selection of storm water BMPs.

Using the Treatment Control BMP Selection Matrix, each priority project shall select a structural treatment BMP by comparing the list of pollutants for which the downstream receiving waters are impaired (if any), with the pollutants anticipated to be generated by the project (as identified in Table 1). Any pollutants identified by Table 1 which are also causing a Clean Water Act section 303(d) impairment of the receiving waters of the project shall be considered primary pollutants of concern. Priority projects that are anticipated to generate a primary pollutant of concern shall meet all applicable requirements of sections 16.60.160 to 16.60.370, and shall select a single or

combination of storm water BMPs from Table 3 that maximizes pollutant removal for the particular primary pollutant(s) of concern.

Alternatively, a project proponent may elect to implement a combination of LID BMPs that either disperse and infiltrate, or direct to bioretention facilities, the flows from all impervious areas on-site. These BMPs are presumed to provide maximum extent practicable treatment for all pollutants of concern; therefore no further documentation of the treatment BMP selection process is required.

16.60.190 Storm water BMPs for projects not generating pollutants.

Priority projects that are not anticipated to generate a pollutant for which the receiving water is Clean Water Act Section 303(d) impaired shall meet applicable standard requirements of establishing storm water BMPs, and shall select a single or combination of storm water BMPs from Table 3 which are effective for pollutant removal of the identified secondary pollutants of concern, consistent with the "maximum extent practicable" standard as defined in the attachment entitled "Definitions" of the Municipal Permit.

16.60.200 Storm water BMPs for projects generating primary and secondary pollutants.

Where a site generates both primary and secondary pollutants of concern, primary pollutants of concern receive priority for BMP selection. For such sites, selected BMPs must only maximize pollutant removal for the primary pollutants of concern. Where a site generates only secondary pollutants of concern, selected BMPs shall target the secondary pollutant of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 1), consistent with the maximum extent practicable standard as defined in the attachment entitled "Definitions" of the Municipal Permit.

Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the city when a feasibility analysis has been conducted, which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible. Treatment control BMPs shall not be constructed within a receiving water.

16.60.210 Alternative storm water BMPs.

Alternative storm water BMPs not identified in Table 3 may be approved at the discretion of the Director of Public Works, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 3.

Table 2. Site Design and Source Control Storm Water BMP Selection Matrix.

Priority Project Category	*Site Design BMPs(1)*	*Source Control BMPs(2)*	*Requirements Applicable to Individual Priority Project Categories(3)*										
			a. Private Roads	b. Residential Driveways & Guest Parking	c. Dock Areas	d. Maintenance Bays	e. Vehicle Wash Areas	f. Outdoor Processing Areas	g. Equipment Wash Areas	h. Parking Areas	i. Roadways	j. Fueling Areas	k. Hillside Landscaping
Detached Residential Development	R	R	R	R									R
Attached Residential Development	R	R	R										
Commercial Development > 1 acre	R	R			R	R	R	R					
Heavy Industry / Industrial Development > 1 acre	R	R			R	R	R	R	R			R	
Automotive Repair Shop	R	R			R	R	R		R			R	
Restaurants	R	R			R				R				
Hillside Development > 5,000 ft^2	R	R	R										R
Parking Lots > 5,000 ft^2 or > 15 spaces	R	R								R(4)			
Retail Gas Outlet = to or > 5,000 ft^2 or > 100 ADT	R	R					R					R	
Streets, Highways & Freeways > 5,000 ft^2	R	R									R		

R = Required; select BMPs as required from the applicable steps in Sections 16.60.130 & 16.60.140, or equivalent.
(1) Refer to Section 16.60.130.
(2) Refer to Section 16.60.140.
(3) Priority project categories must apply specific storm water BMP requirements, where applicable. Projects are subject to the requirements of all priority project categories that apply.
(4) Applies if the paved area totals > 5,000 square feet or with > 15 parking spaces and is potentially exposed to urban runoff.

Table 3. Treatment Control BMP Selection Matrix.

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	High-rate biofilters	High-rate media filters	Trash Racks & Hydro -dynamic Devices
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

Notes on Treatment Control BMP Categories

All rankings are relative. Ranking of all facilities assumes proper sizing, design, and periodic maintenance. Following are general descriptions of each category.

1. **Bioretention Facilities** (infiltration planters, flow-through planters, bioretention areas, and bioretention swales). Facilities are designed to capture runoff and infiltrate slowly through soil media, which also supports vegetation. Bioretention facilities, except for flow-through planters, effectively promote infiltration into native soils. In clay soils, facilities may capture excess treated runoff in an underdrain piped to the municipal storm drain system. Typical criteria: an infiltration surface area at least 4% of tributary impervious area, 6-inch average depth of top reservoir, 18-inch soil layer, 12-inch to 18-inch gravel subsurface storage layer.

2. **Settling Basins and Wetlands** (extended detention basins, "wet" basins, decorative or recreational lakes or water features also used for storm water treatment, constructed wetlands). Facilities are designed to capture a minimum water quality volume of 80% of total runoff and detain for a minimum of 48 hours. Some wetland designs have proven effective in removing nutrients, but performance varies.

3. **Infiltration Facilities or Practices** (infiltration basins, infiltration trenches, dry wells, dispersal of runoff to landscape, pervious pavements). These facilities and landscape designs capture, retain, and infiltrate a minimum of 80% of runoff into the ground. Infiltration facilities are generally only feasible in permeable (Hydrologic Soil Group A or B) soils. Volume and area of infiltration facilities depends on soil permeability and safety factor used. Typical criteria: Infiltration facilities should have pretreatment to remove silt to prolong life of the facility. A 10-foot vertical separation from average seasonal groundwater depth is required. Dispersal to landscape may be accomplished in any soil type and generally requires a maximum 2:1 ratio impervious:pervious and concave topography to ensure the first one (1) inch of rainfall is retained.

4. **Media Filters** (sand filters). Filters designed to treat runoff produced by a rainfall of 0.2 inches per hour (or 2×85th percentile hourly rainfall intensity) by slow infiltration through sand or other media. Typical criteria: Surface loading rate not to exceed 5 inches/hour. Entire surface of the sand must be accessible for maintenance.

5. **High Rate Biofilters** (tree wells, typically proprietary). Biofilters with specially designed media to rapidly filter runoff while removing some pollutants. Filterra® (proprietary version) recommends surface loading rates of up to 100 inches/hour.

6. **High-rate Media Filters** (typically proprietary). Vaults with replaceable cartridge filters filled with inorganic media.

7. **Drainage Inserts** have low effectiveness in removing pollutants that tend to associate with fine particles and have medium effectiveness in removing coarse sediment and trash. They are sometimes used to augment more effective treatment facilities and are sometimes used alone when more effective facilities have been deemed infeasible.

Notes on Pollutants of Concern:
In Table 4, Pollutants of Concern are grouped as gross pollutants (coarse sediment and trash), pollutants that tend to associate with fine particles, and pollutants that remain dissolved.

Table 4

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

16.60.220 Low Impact Development (LID) and Site Design BMP

A. Priority projects shall be designed so as to minimize directly connected impervious surfaces and to promote infiltration using LID techniques. Priority projects shall, to the maximum extent practicable, minimize the introduction of pollutants and conditions of concern that may result in significant impacts, generated from site runoff to the storm water conveyance system. Priority projects shall also control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat. Priority projects can address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Mimicking a site's natural hydrologic regime can be pursued by:

1. Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the storm water conveyance system, and minimizing clearing and grading.

2. Providing runoff storage measures dispersed throughout a site's landscape with the use of bioretention facilities and detention, retention, and infiltration practices.

B. Site design BMPs shall offer an innovative approach to urban storm water management that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates storm water controls throughout the urban landscape. Examples of many of these methods may be found in the County of San Diego's LID Handbook, and its publications, *Start at the Source*, and *Low-Impact Development Design Strategies*, in the City of Portland, Oregon's *Stormwater Manual*, and in the Contra Costa (California) Clean Water Program's *Stormwater C.3 Guidebook*.

16.60.230 Maintaining pre-development rainfall runoff characteristics.

A. Priority projects shall control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. In addition, projects should control runoff discharge volumes and durations to the maximum extent practicable using the site design, source control, and treatment control requirements.

B. Design Concept 1: Minimize Project's Impervious Footprint & Conserve Natural Areas. The following site design options shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works, during the site planning and approval process, consistent with applicable General Plan policies and other development regulations.

1. Minimize and disconnect impervious surfaces. This can be achieved in various ways, including, but not limited to, increasing building density (number of stories above or below ground) and developing land use regulations seeking to limit impervious surfaces. Decreasing the project's footprint can substantially reduce the project's impacts to water quality and hydrologic conditions.

2. Conserve natural areas, soils, and vegetation where feasible. This can be achieved by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition. The following list provides a guideline for determining the least sensitive portions of the site, in order of increasing sensitivity. Jurisdictions should also refer to their Multiple Species Conservation Plans or other biological regulations, as appropriate.

a. Areas devoid of vegetation, including previously graded areas and agricultural fields.

b. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands.
c. Areas of chamise or mixed chaparral, and non-native grasslands.
d. Areas containing coastal scrub communities.
e. All other upland communities.
f. Occupied habitat of sensitive species and all wetlands.
g. All areas necessary to maintain the viability of wildlife corridors. Within each of the previous categories, areas containing hillsides should be considered more sensitive than the same category without hillsides.

3. Construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, permeable asphalt, unit pavers, and granular materials.

4. Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.

5. Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.

6. Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.

7. Use natural drainage systems to the maximum extent practicable.

8. Other site design options that are comparable, and equally effective.

9. Minimize soil compaction.

C. Design Concept 2: Minimize Directly Connected Impervious Areas (DCIAs). Priority projects shall consider, and incorporate and implement the following design characteristics, where determined applicable and feasible by the Director of Public Works.

1. Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.

2. Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.

3. Other design characteristics that are comparable and equally effective.

16.60.240 Protection of slopes and channels.

Project plans shall include storm water BMPs to decrease the potential for erosion of slopes and/or channels, consistent with local codes and ordinances and with the approval of all agencies with jurisdiction, e.g., the U.S. Army Corps of Engineers, the San Diego Regional Water Quality Control Board, and the California Department of Fish and Game. The following design principles shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

A. Minimize disturbances to natural drainages.

B. Convey runoff safely from the tops of slopes.

C. Vegetate slopes with native or drought tolerant vegetation.

D. Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.

E. Stabilize permanent channel crossings.

F. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.

G. Other design principles that are comparable and equally effective.

16.60.250 Providing storm drain system stenciling and signage.

Storm drain stencils are highly visible source control messages, typically placed directly adjacent to storm drain inlets. The stencils contain a brief statement that prohibits the dumping of improper materials into the urban runoff conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. Priority projects shall include the following requirements in the project design:

A. Provide stenciling or labeling of all storm drain inlets and catch basins within the project area with prohibitive language (such as: "NO DUMPING – I LIVE IN <<name receiving water>>") and/or graphical icons to discourage illegal dumping.

B. Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

C. Maintain legibility of stencils and signs.

16.60.260 Designing outdoor material storage areas to reduce pollution introduction.

Improper storage of materials outdoors may increase the potential for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the urban runoff conveyance system. Where the priority project plans include outdoor areas for storage of hazardous materials that may contribute pollutants to the urban runoff conveyance system, the following storm water BMPs are required:

A. Hazardous materials with the potential to contaminate urban runoff shall either be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

B. The storage area shall be paved and sufficiently impervious to contain leaks and spills.

C. The storage area shall have a roof or awning to minimize direct precipitation within the secondary containment area.

16.60.270 Designing trash storage areas to reduce pollution introduction.

All trash container areas shall meet the following requirements (limited exclusion: detached residential homes):

A. Paved with an impervious surface, designed not to allow run-on from adjoining areas, screened or walled to prevent off-site transport of trash; and

B. Provide attached lids on all trash containers that exclude rain, and a permanent fire resistant roof or awning to minimize direct precipitation.

16.60.280 Using efficient irrigation systems and landscape design.

Priority projects shall design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water conveyance system. The irrigation system shall be in compliance with the requirements of all city ordinances regulating the efficient irrigation of landscaping. The following methods to reduce excessive irrigation runoff shall be considered,

and incorporated and implemented where determined applicable and feasible by the Public Works Department:

A. Employing rain shutoff devices to prevent irrigation after precipitation.

B. Designing irrigation systems to each landscape area's specific water requirements.

C. Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.

D. Employing other comparable, equally effective, methods to reduce irrigation water runoff.

16.60.300 Incorporate requirements applicable to individual priority project categories.

Where identified in Table 2, the following requirements shall be incorporated into applicable priority projects during the storm water BMP selection and design process. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for (g) Equipment Wash Areas <u>and</u> (h) Parking Areas into the project design).

A. Private Roads. The design of private roadway drainage shall use at least one of the following:

1. Rural swale system: street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings;

2. Urban curb/swale system: street slopes to curb, periodic swale inlets drain to vegetated swale/biofilter;

3. Dual drainage system: First flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder, high flows connect directly to storm water conveyance system;

4. Other methods, which are comparable and equally effective within the project.

B. Residential Driveways and Guest Parking. The design of driveways and private residential parking areas shall use at least one of the following features:

1. Design driveways with shared access, flared (single lane at street) or wheelstrips (paving only under tires); or, drain into landscaping prior to discharging to the storm water conveyance system;

2. Uncovered temporary or guest parking on private residential lots may be: paved with a permeable surface; or, designed to drain into landscaping prior to discharging to the storm water conveyance system;

3. Other features which are comparable and equally effective.

C. Dock Areas. Loading/unloading dock areas shall include the following:

1. Cover loading dock areas, or design drainage to preclude urban run-on and runoff;

2. Direct connections to storm drains from depressed loading docks (truck wells) are prohibited;

3. Other features which are comparable and equally effective.

D. Maintenance Bays. Maintenance bays shall include the following:

1. Repair/maintenance bays shall be indoors; or, designed to preclude urban run-on and runoff; and

2. Design a repair/maintenance bay drainage system to capture all wash water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by local jurisdiction, obtain an Industrial Waste Discharge Permit, or

3. Other features which are comparable and equally effective.

E. Vehicle Wash Areas. Priority projects that include areas for washing/steam cleaning of vehicles shall use the following:

1. Self-contained, and covered with a roof or overhang;

2. Equipped with a clarifier or other pretreatment facility;

3. Properly connected to a sanitary sewer; and

4. Other features which are comparable and equally effective.

F. Outdoor Processing Areas. Outdoor process equipment operations, such as rock grinding or crushing, painting or coating, grinding or sanding, degreasing or parts cleaning, landfills, waste piles, and wastewater and solid waste treatment and disposal, and other operations determined to be a potential threat to water quality by the Copermittee shall adhere to the following requirements:

1. Cover or enclose areas that would be the most significant source of pollutants; or, slope the area toward a dead-end sump; or, discharge to the sanitary sewer system following appropriate treatment in accordance with conditions established by the applicable sewer agency;

2. Grade or berm area to prevent run-on from surrounding areas;

3. Installation of storm drains in areas of equipment repair is prohibited;

4. Other features which are comparable or equally effective.

G. Equipment Wash Areas. Outdoor equipment/accessory washing and steam cleaning activities at priority projects shall use the following:

1. Be self-contained, and covered with a roof or overhang;

2. Have a grade or berm area to prevent run-on from surrounding areas;

3. Be equipped with a clarifier, grease trap or other pretreatment facility, as appropriate;

4. Properly connected to a sanitary sewer;

5. Installation of storm drains in wash areas is prohibited;

6. Other features which are comparable or equally effective.

H. Parking Areas. To minimize the offsite transport of pollutants from parking areas, the following design concepts shall be considered, and incorporated and implemented where determined applicable and feasible by the Director of Public Works:

1. Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design;

2. Overflow parking (parking stalls provided in excess of the city's minimum parking requirements) should be constructed with permeable paving;

3. Other design concepts, which are comparable and equally effective.

I. Roadways. Priority roadway projects shall select treatment control BMPs following the treatment control selection procedure identified in this chapter entitled, "Establishing Storm Water BMPs."

J. Fueling Area. Retail and non-retail fuel dispensing areas shall contain the following:

1. Overhanging roof structure or canopy. The cover's minimum dimensions must be equal to or greater than the area within the grade break. The cover must not drain onto the fuel dispensing area and the downspouts must be routed to prevent drainage across the fueling area. The fueling area shall drain to the project's treatment control BMPs prior to discharging to the storm water conveyance system;

2. Paved with Portland cement concrete (or equivalent smooth impervious surface). The use of asphalt concrete shall be prohibited;

3. Have an appropriate slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of urban runoff; and

4. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus one (1) foot (0.3 meter), whichever is less.

K. Hillside Landscaping. Hillside areas that are disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, satisfactory to the Director of Public Works.

16.60.310 Treatment control BMP objectives.

A. Minimizing a development's detrimental effects on water quality can be most effectively achieved through the use of a combination of site design, source and treatment control storm water BMPs. Where projects have been designed to minimize, to the maximum extent practicable, the introduction of anticipated pollutants of concern that may result in significant impacts to the receiving waters through the implementation of site design and source control storm water BMPs, the development would still have the potential for pollutants of concern to enter the storm water conveyance system. Therefore, priority projects shall be designed to remove pollutants of concern from the storm water conveyance system to the maximum extent practicable through the incorporation and implementation of treatment control BMPs.

B. In meeting the requirements in this section, priority projects shall implement a single or combination of storm water BMPs that will remove anticipated pollutants of concern, as identified by the procedure of this chapter, from site runoff to the maximum extent practicable. Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the Director of Public Works when a feasibility analysis has been conducted, which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible. Treatment control BMPs must be implemented unless a waiver is granted to the project by the Director of Public Works based on the infeasibility of any treatment control BMP.

16.60.320 Design to treatment control BMP standards.

All priority projects shall design, construct and implement structural treatment control BMPs that meet the design standards of this section and the applicable Countywide Model SUSMP, unless specifically exempted by the limited exclusions listed in 16.60.350. Structural treatment control BMPs required by this section shall be operational prior to the use of any dependent development, and shall be located and designed in accordance with the requirements of this chapter.

16.60.330 Structural treatment control volume-based BMPs.

Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

A. Volume of runoff produced from a 24-hour 85th percentile storm event, as determined from isoplovial maps contained in the County of San Diego Hydrology Manual; or

B. Volume of runoff produced by the 85th percentile 24-hour runoff event, determined as the maximized capture urban runoff volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998)*; or

C. The volume of annual runoff based on unit basin storage volume, to achieve ninety percent (90%) or more volume treatment by the method recommended in *California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (1993)*; or

D. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event. Where this option is used, storm events shall be identified by their separation from one another by at least six hours of no rain.

16.60.340 Structural treatment control flow-based BMPs.

As an alternative to volume-based BMPs, structural treatment controls may be designed as flow-based BMPs. Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

A. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour for each hour of a storm event; or

B. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two, for each hour of a storm event; or

C. The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two, for each hour of a storm event.

16.60.350 Limited exclusions.

A. Proposed restaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical sizing criteria requirements listed in 16.60.320 through 16.60.340.

B. Where significant redevelopment results in an increase of less than fifty percent (50%) of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in 16.60.330 and 16.60.340 apply only to the addition, and not to the entire development.

16.60.360 Locating BMPs near pollutant sources.

Structural treatment control storm water BMPs should be implemented close to pollutant sources to minimize costs and maximize pollutant removal prior to runoff entering receiving waters. Such BMPs may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following requirements:

A. All structural treatment control BMPs shall be located so as to infiltrate, filter, and/or treat the required runoff volume or flow prior to its discharge to any receiving water body supporting beneficial uses;

B. Multiple post-construction structural treatment control BMPs for a single priority development project shall collectively be designed to comply with the design standards for structural treatment control BMPs;

C. Shared storm water BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;

D. Interim storm water BMPs that provide equivalent or greater treatment than is required by structural treatment control BMPs may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

16.60.370 Restrictions on use of infiltration BMPs.

At a minimum, use of structural treatment BMPs that are designed to primarily function as infiltration devices shall meet the following conditions[2]:

A. Urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants, such as sedimentation or filtration, prior to infiltration;

B. All dry weather flows shall be diverted from infiltration devices except for those non-storm water discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to storm water conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and dechlorinated swimming pool discharges;

C. Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used;

D. The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet or as determined on an individual, site-specific basis by the Director of Public Works. Where groundwater does not support beneficial uses, this vertical distance criterion may be reduced, provided groundwater quality is maintained;

E. The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic

[2] These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

content, clay content, and infiltration rate) that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses;

F. Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries; and other high threat to water quality land uses and activities as designated by the Director of Public Works;

G. The horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as determined on an individual, site-specific basis by the Director of Public Works.

16.60.380 Maintenance mechanism to be in place before acceptance.

Structural BMPs shall not be considered "effective," and shall not be accepted as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. As part of project review, if a project proponent is required to include interim or permanent structural BMPs in project plans, and if the Director of Public Works does not provide a mechanism for BMP maintenance, the project proponent shall provide verification of maintenance requirements through such means as may be appropriate, at the discretion of the Director of Public Works, including, but not limited to covenants, legal agreements, maintenance agreements, and/or conditional use permits.

16.60.390 Maintenance mechanisms.

Public equity maintenance. The city council may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the BMP. Unless acceptable to the city council, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed (e.g., through a trust fund, cash deposit, assessment district fees, bond, letter of credit or similar means). In addition, the city council may seek protection from liability by appropriate releases and indemnities. The city council shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The city council shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions, and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the facilities. The city council must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

A. Project proponent agreement to maintain storm water BMPs: The city council may enter into a contract with the project proponent obliging the project proponent to maintain, repair and replace the storm water BMPs as necessary into perpetuity. Security may be required.

B. Assessment districts: The city council may approve an Assessment District or other funding mechanism created by the project proponent to provide funds for storm water BMP maintenance, repair and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.

C. Lease provisions: In those cases where the city holds title to the land in question, and the land is being leased to another party for private or public use, the city council may assure storm water BMP maintenance, repair and replacement through conditions in the lease.

D. Conditional use permits: For discretionary projects only, the city council may assure maintenance of storm water BMPs through the inclusion of maintenance conditions in the conditional use permit. Security may be required.

E. Alternative mechanisms: The city council may accept alternative maintenance mechanisms if such mechanisms are as protective as those listed above.

16.60.400 Verification mechanisms.

For discretionary projects, the city approved method of storm water BMP maintenance shall be incorporated into the project's permit, and shall be consistent with permits issued by resource agencies, before city approval of discretionary permits. For projects requiring only ministerial permits, the approved method of storm water BMP maintenance shall be incorporated into the permit conditions before the issuance of any ministerial permits. In all instances, the project proponent shall provide proof of execution of an approved method of maintenance repair and replacement before the issuance of construction approvals. Public projects that are not required to obtain permits shall be responsible for ensuring that an approved method of storm water BMP maintenance repair and replacement is executed prior to the commencement of construction. For all properties, the verification mechanism will include the project proponent's signed statement, as part of the project application, accepting responsibility for all structural BMP maintenance, repair and replacement, until a city-approved entity agrees to assume responsibility for structural BMP maintenance, repair and replacement.

16.60.410 Maintenance requirements.

A. Operation & Maintenance (O&M) Plan: A copy of an O&M plan, prepared by the project proponent satisfactory to the Director of Public Works shall be attached to the approved maintenance agreement, which describes the designated responsible party to manage the storm water BMPs, employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities, copies of resource agency permits, and any other necessary activities. At a minimum, maintenance agreements shall require the inspection and servicing of all structural BMPs on an annual basis. The project proponent maintenance entity shall complete and maintain O&M forms to document all maintenance requirements. Parties responsible for the O&M plan shall retain records for at least 5 years. These documents shall be made available to the city for inspection upon request at any time.

B. Access Easement/Agreement: As part of the maintenance mechanism selected above, it shall include a copy of an executed access easement that shall be binding on the land throughout the life of the project, until such time that the storm water BMP requiring access is replaced, satisfactory to the Director of Public Works.

16.60.420 Waiver of structural treatment BMP requirements.

The requirement of implementing structural treatment BMPs may be waived if infeasibility can be established. A waiver of infeasibility shall be granted only when all available structural treatment BMPs have been considered and rejected as infeasible.

Waivers may only be granted from structural treatment BMP and structural treatment BMP sizing requirements. Priority development projects, whether or not granted a waiver may not cause or contribute to an exceedance of water quality objectives. Pollutants in runoff from projects granted a waiver must still be reduced to the maximum extent practicable.

Section 3: This Ordinance is adopted pursuant to the authority granted to the City of El Cajon under San Diego Regional Water Quality Control Board Order No. R9 2007-0001. This Ordinance encompasses a state-mandated requirement thereunder.

Section 4: This ordinance shall be effective thirty (30) days following its passage and adoption.

Ordinance No. 4939

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at an Adjourned Regular Joint City Council/Redevelopment Agency Meeting held this 23rd day of February 2010, by the following vote to wit:

AYES	:	Lewis, Hanson-Cox, Kendrick, McClellan, Wells
NOES	:	None
ABSENT	:	None
DISQUALIFY	:	None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

KATHIE RUTLEDGE, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Ordinance No. 4939 of the Ordinances of the City of El Cajon, California, as adopted by the City Council at the Adjourned Regular Joint Meeting of the City Council/Redevelopment Agency on the 23rd day of February 2010.

Kathie Rutledge
Kathie Rutledge, CMC, City Clerk

2/23/10 (Item 14.1)

STORM WATER

MITIGATION PLAN

[Planning Action, PUD or TSM or BP]

[Project Name]

[Project Address]

APN: [000-000-00]

Prepared By

[Engineer's Name]
[Engineering Company's Name]
[Engineering Company's Address]

For

[Developer's Name]
[Developer's Address]

Date:

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CHAPTER 5 – OPERATION AND MAINTENANCE OF STORMWATER FACILITIES 20

List attachments by Chapter here:

	Attachment No.	Title/Description
Chp 1	1	Copy of "Completed Storm Water SUSMP Intake Applicability Form for Development Projects"
Chp 2		
Chp 3	1	Project Location Map
	2	Pre-Development Site Map
	3	Post-Development Site Map
	4	Proprietary Products Full Submittal
	5	Documentation to Demonstrate Past Project Success
	6	Treatment Calcs: Volume-Based Facilities
	7	Treatment Calcs: Flow-Based Facilities
	8	Detention Calcs: Flow-Control Facilities
Chp 4		
Chp 5	1	Storm Water Maintenance Plan
	2	Storm Water Maintenance Agreement

Other City of El Cajon References:
Attachment No. 2 – Trash Enclosure Details
Attachment No. 3 – CC&Rs and Storm Water Maintenance Plan

PROJECT INTRODUCTION AND PROJECT BACKGROUND

The following shall be completed in its entirety prior to submittal. Refer to Chapter 4 for details on identifying constraints and opportunities for storm water control.

Project Name:

Project Location:

Project Description:

Existing Site Features and Conditions Including Topography:

Constraints and Opportunities for Storm Water Control:

CHAPTER 1 – POLICIES AND PROCEDURES

This Storm Water Mitigation Plan (SWMitP) shall be prepared in conjunction with the Countywide Model Standard Urban Stormwater Mitigation Plan (SUSMP), which can be obtained at http://www.projectcleanwater.org. The Model SUSMP has step-by-step instructions, which will guide you in preparing the SWMitP. The Chapters used herein correspond to the Model SUSMP and contained herein are City of El Cajon's (City) specific project requirements.

If the project requires a Hydromodification Management Plan (HMP) as determined in the Model SUSMP, the Engineer shall refer the Hydromodification Plan, which can be obtained at http://www.projectcleanwater.org.

The SWMitP shall be prepared under the direction of a Civil Engineer registered in the state of California. The Registered Civil Engineer shall attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

CERTIFICATION

I, _____, certify that the selection, sizing, and preliminary design of stormwater treatment and other control measures in this SWMitP meet the requirements of the Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments.

Signature: _____ Date: _____

AFFIX WET STAMP HERE ➔

SWMitP PURPOSE

The purpose of this SWMitP is to finalize the list of anticipated pollutants from the project, finalize proposed Low Impact Development (LID) principles; select final source control and treatment control Best Management Practices (BMPs), finalize sizing calculations for storm water BMPs, and submit an appropriate maintenance plan. BMPs and LID features applied to all projects provide long-term solutions to water quality and help minimize downstream erosion. This SWMitP is intended to ensure the effectiveness of the selected LID's and BMPs proposed by checking that they have been sized properly, maintenance is feasible, and that the design is based on long-term fiscal planning. The SWMitP is a living document subject to revisions as needed by the Engineer of Work and the City.

STORM WATER COMPLIANCE PROCESS

Typically, during the Planning Level or Programming Phase, the City of El Cajon determines if a development project is a **"Priority Development Project"** following the completion of the **"Storm Water SUSMP Intake Applicability Form for Development Projects"**. A **"Storm Water Conceptual Plan"** is then developed and submitted for review and approval. Then, during final design (or preparation of construction plans), a Storm Water Mitigation Plan (SWMitP) is required in accordance with the Standard Urban Storm Water Mitigation Plan (SUSMP) ordinance of the City of El Cajon (Ord. 4908, Chapter 16.60) and San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001, NPDES Permit No. CAS0108758.

The City's SWMitP submittal requirements are described in Chapter 3. The SWMitP shall be completed in it entirety prior to submittal to the City of El Cajon otherwise it will be returned without review. If you have any questions during the preparation of the SWMitP contact the Storm Water Department at (619) 441-1653.

Complete the following:

1. Is the project on previously undeveloped land (new development)?

   YES NO

2. Is the project adding or creating 5,000-sf, or more, of impervious surface (redevelopment)?

   YES NO

If you answered YES to either 1 or 2, complete Table 1-1, inserted below from the Model SUSMP, Chapter 1.

TABLE 1-1. Priority Development Projects.

Is the project in any of these categories?

Yes ❑	No ❑	**A**	**Housing subdivisions of 10 or more dwelling units.** Examples: single-family homes, multi-family homes, condominiums, and apartments.
Yes ❑	No ❑	**B**	**Commercial—greater than one acre.** Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.
Yes ❑	No ❑	**C**	**Heavy industry—greater than one acre.** Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).
Yes ❑	No ❑	**D**	**Automotive repair shops.** A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.
Yes ❑	No ❑	**E**	**Restaurants.** Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.
Yes ❑	No ❑	**F**	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
Yes ❑	No ❑	**G**	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.
Yes ❑	No ❑	**H**	**Parking lots 5,000 square feet or more** or with 15 or more parking spaces and potentially exposed to urban runoff.
Yes ❑	No ❑	**I**	**Street, roads, highways, and freeways.** Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
Yes ❑	No ❑	**J**	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

If you answered YES to any of the Items in Table 1-1, the project is a "Priority Development Project". If the Engineer determines that the project is ***NOT*** a "Priority Development Project" call the Storm Water Department at (619) 441-1653 to confirm any SUSMP requirements for the project. If the Engineer determines that the project ***IS*** a "Priority Development Project" continue to the following Chapters.

1. Is the project a "Priority Development Project"? YES NO
2. If you answered yes, list all applicable categories per Table 1-1 → _____

To determine if the project is ***EXEMPT*** from preparing a Hydromodification Management Plan (HMP), refer to the Model SUSMP Chapter 1. If the Engineer determines that a HMP is required, the City may consider granting an exemption. To make this determination, the Engineer may conduct an independent geomorphic study to determine the project's full hydromodification impact. The study must incorporate sediment transport modeling across the range of geomorphically-significant flows and demonstrate to the City's satisfaction that the project flows and sediment reductions will not detrimentally affect the receiving water to qualify for the exemption. If the project is ***NOT EXEMPT***, follow the instructions in the HMP, which can be obtained at http://www.projectcleanwater.org .

1. Does the project require a HMP? YES NO

CHAPTER 2 – CONCEPTS AND CRITERIA

The City lies entirely within the San Diego River Watershed, Hydrologic Unit (HU) 907. The City recognizes the following drainage basins within the City, all of which eventually discharge into the San Diego River. The Engineer shall refer to the City of El Cajon Jurisdictional Urban Runoff Management Program (JURMP), which is available at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

Check the corresponding watershed(s) for the project

☐ Broadway Channel Basin	☐ Washington Channel Basin	☐ County Ditch Basin	☐ Northern Forrester Creek Basin
☐ Forrester Creek Basin	☐ Fanita Basin	☐ Fletcher Parkway Basin	☐ Third Street Lateral

The following are designated as impaired waters by the RWQCB and USEPA pursuant to the Clean Water Act section 303(d): ***Forrester Creek and San Diego River***. The City follows a conservative approach with regards to pollutants impairing water bodies.

Water Quality (Treatment Requirements): The City Municipal Code requires that all pollutants of concern as identified on the CWA 303(d) list be applied for the entire length of the corresponding water body. Determine the Anticipated and Potential Pollutants of Concern from Table 2-1 in the following page per Chapter 2 of the Model SUSMP.

Circle each as applicable:

TABLE 2-1. ANTICIPATED AND POTENTIAL Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >one acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Check each half of a box as applicable:

Pollutants associated with 303(d) Listed ImpairedWaters To Which the Project Drains	Project Specific Anticipated and Potential Pollutants of Concern								
	Sed	Nut	HM	Org	T&D	ODS	O&G	B&V	Pes
Sed									
Nut		X							
HM									
Org									
T&D									
ODS						X			
O&G									
B&V								X	
Pes									

Sed = Sediment; Nut = Nutrients; HM = Heavy Metals; Org = Organics; T&D = Trash and Debris; ODS= Oxygen Demand Substances; O&G = Oils and Grease; B&V = Bacteria & Viruses; Pes = Pesticides; Oth = Other (i.e. Pharmaceuticals, etc.)

If a box above has two (2) checks, it is considered a Primary Pollutant; one (1) check is considered a Secondary Pollutant. Check each pollutant below according to either Primary or Secondary Pollutant.

The City requires that the Pollutants of Concern be grouped to determine how easily various treatment processes remove them. Refer to Table 2-2 below, inserted from Chapter 2 of the Model SUSMP.

TABLE 2-2. GROUPING OF POTENTIAL POLLUTANTS of Concern by fate during stormwater treatment

Check off the Pollutants in the table below accordingly:

Primary	Secondary	Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
		Sediment	X	X	
		Nutrients		X	X
		Heavy Metals		X	
		Organic Compounds		X	
		Trash & Debris	X		
		Oxygen Demanding		X	
		Bacteria		X	
		Oil & Grease		X	
		Pesticides		X	

When selecting a treatment facility to remove a specific pollutant, the City requires that "Medium" or "High" Removal Efficiency BMPs treat all Primary Pollutants of concern as identified above. Refer to Table 2-3 inserted below from the Model SUSMP, Chapter 2 to determine an effective treatment facility.

Circle as applicable:

TABLE 2-3. GROUPS OF POLLUTANTS and relative effectiveness of treatment facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro -dynamic Devices (1)
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

*See page 23 of the Regional Model SUSMP for a discussion of selection of treatment facilities in special situations.

Notes: (1) Trash Racks & Hydrodynamic Devices shall not be used alone.
(2) The City shall reserve the right to determine if the selected treatment facility is appropriate, which may lead to selecting a higher efficiency treatment facility than originally selected by the Engineer.

The Engineer shall ensure that the area (i.e. Parking Lots, etc.) that requires the treatment actually drain to the selected treatment facility. This shall be clearly shown on the construction plans and delineated as such in the drainage report. If this is not clearly shown, the City reserves the right to reject the submittal.

Water Quantity (Detention Requirements): The City requires that the 2-year and the 10-year storm event be used for calculating peak flows and the 100-year storm event be used to demonstrate flooding impacts. The 2-year and the 10-year storm event shall be used to design storm water detention facilities in accordance with the San Diego County Hydrology Manual, latest edition, Section 6. The 100-year shall be used to design a bypass system.

For guidance on preparing the Hydraulics and Hydrology Report (or Drainage Report), refer to the San Diego County Hydrology Manual, latest edition. The Engineer may consider using intensities from the latest edition of the City of El Cajon Improvement Standards, Figure 3.4-2 included below, for the design of the

drainage improvements (i.e. pipelines, catch basins, inlets, etc). Per the City's requirements, a Drainage Report is required and may be submitted separately or attached to the Conceptual Plan.

Fig. 3.4-2

AVERAGE INTENSITY-DURATION CURVES
El Cajon, California

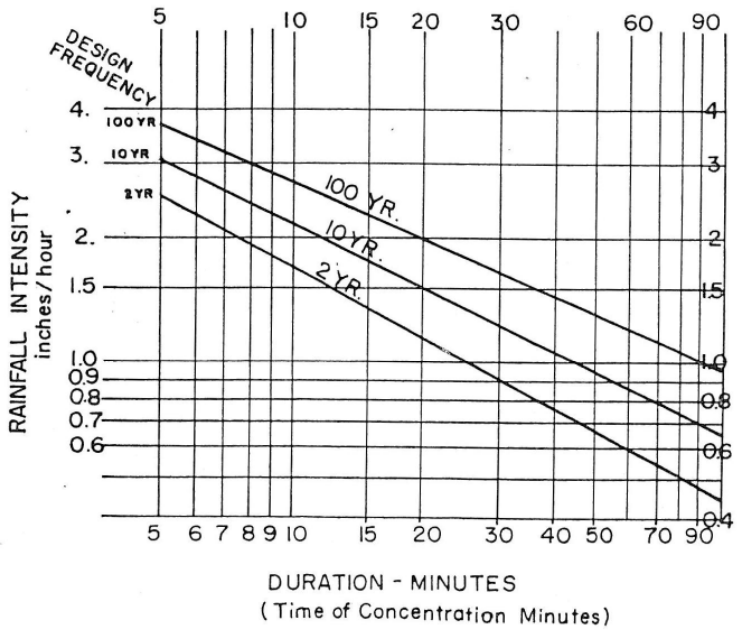

CHAPTER 3 – PREPARING YOUR PROJECT SUBMITTAL

The City requires that this entire packet be completed and submitted along with maps, calculations, proprietary products catalogue cut sheets, details, and other information as requested herein.

Complete and submit the "EXAMPLE PROJECT SUBMITTAL CHECKLIST" located in the Model SUSMP Chapter 3, Page 46. Attachments shall be listed in the Table of Contents.

Report Exhibits: In addition to the items requested in the "CHECKLIST", the City requires that the submittal shall include a location map of the project site, and inlets located a minimum of 200-feet beyond the project site. The maps shall be on a Standard D-size sheet and plotted using engineering scales only and not architectural scales.

Report Narrative: In addition to the items requested in the "CHECKLIST", the City requires a description of the existing topography, run-on and runoff issues, and unique conditions. Also, describe the details of the pre-construction condition and the post-construction condition.

Summarize the affects of the project on the pre-construction flows and specifically state if the flows were increased, decreased, fully mitigated, etc. and the impact the project may have on the downstream hydrology.

Report Tables: In addition to the items requested in the "CHECKLIST", the City requires completion of the tables included herein.

Refer to the Model SUSMP Chapter 4 for guidelines and available Low Impact Development (LID) treatment facilities. The City requires that the project consider at minimum the LID features listed below. Based on the project specifics, the City may require additional LID treatment facilities. The Engineer shall be responsible for selecting the most adequate treatment facility and for including the calculations necessary to justify the effectiveness of each facility. Follow the Model SUSMP Chapter 3, Step 3 to prepare your LID design.

Complete the following table:

Low Impact Development (LID)	Applied			Narrative
	Yes	No	N/A	
Control Peak Runoff Rates				
Minimize Disturbance to Natural Drainages and Waterways				

Low Impact Development (LID)	Applied			Narrative
	Yes	No	N/A	
Conserve Natural Areas, Soils, and Existing Vegetation				
Minimize and Disconnect Impervious Surfaces				
Minimize Soil Compaction				
Drain Runoff from Impervious Surfaces to Pervious Areas				
Drain Rooftops to Landscaping				
Maximize the Use of Pervious Pavement				
[List any others]				

Refer to the Model SUSMP Chapter 3, Step 4 for guidance on specifying source control BMPs. The City requires that the project consider at minimum the source control measures listed below. Based on the project specifics, the City may required additional permanent source control measures. The Engineer shall be responsible for selecting the most adequate source control measures and for including the calculations necessary to justify the effectiveness of each BMP and ensuring all BMPs are shown on the construction plans.

Complete the following table:

Potential Source of Runoff Pollutant	Permanent Source Control BMPs	Applied			Operational Source BMP Narrative
		Yes	No	N/A	
	Include storm drain stenciling and signage				
	Outdoor storage area shall be designed to contain pollutants				
	Trash storage area shall be secured, have a grade break or berm, and have a roof covering (See City of El Cajon References; Attachment No. 2)				

Potential Source of Runoff Pollutant	Permanent Source Control BMPs	Applied			Operational Source BMP Narrative
		Yes	No	N/A	
	Use efficient irrigation systems and landscape design				
	Hillside landscaping				

Refer to the Model SUSMP Chapter 2 for guidance on specifying treatment facilities. The Engineer shall be responsible for selecting the most adequate treatment facilities and for including the calculations necessary to justify the effectiveness of each facility and ensuring all facilities are shown on the construction plans. Note that the Engineer shall cross-reference Chapter 2 and ensure that the drainage area which was determined in Chapter 2 to contain potential pollutants of concern per Table 2-1 is indeed draining to the appropriate treatment facility. Sufficient grades shall be provided on the drainage plans to determine if the drainage area identified is actually draining to the proper treatment facility.

Complete the following table:

Treatment Facilities	Applied			Narrative to describe the selected facilities, location, drainage plans where facility is shown
	Yes	No	N/A	
Bioretention Facilities (LID)				
Settling Basins (Dry Ponds)				
Wet Ponds and Constructed Wetlands				
Infiltration Facilities or Practices (LID)				
Media Filters				
Higher-rate biofilters				
Higher-rate media filters				
Trash Racks & Hydrodynamic Devices				

Refer to the Model SUSMP Chapter 4, Table 4-1 for guidance on Integrated Management Practices (IMP). The Engineer shall be responsible for selecting the most adequate IMPs and for including the calculations necessary to justify the effectiveness of each IMP and ensuring all facilities are shown on the construction plans.

Complete the following table:

Runoff Management Facilities	**Applied**			**Narrative to describe the selected facilities, location, construction drawing where facility is shown**
	Yes	No	N/A	
Vegetated Roof				
Self-Retaining Areas				
Pervious Pavement				
Bioretention Facility				
Flow-through Planter				
Dry Well				
Cistern with Bioretention				

Runoff management facilities shall be per the standards found in the California Stormwater Quality Association (CASQA) Handbook, State Department of Transportation (Caltrans) Stormwater Handbook, or other well-recognized and certifying entity. If the Engineer is proposing propriety BMPs, this will require a "Propriety Product Full Submittal" attachment, which shall contain the manufacturer's catalogue cut sheets, past project photos, calculations, etc. for such proprietary items. In addition, if the Engineer is recommending facilities where functionality may be questionable, such as pervious pavement or dry wells in Type C and/or D soil types, this will require a "Documentation to Demonstrate Past Project Success" attachment, which shall contain, a list of five (5) similar applications completed within the last five (5) years and including contact information for the Engineer of Record and property owner to demonstrate proper functionality.

Report Calculations: In addition to the items requested in the "CHECKLIST", the City requires that runoff coefficients reflect the true imperviousness of the project area and not the land use coefficients. Calculate Q's to the nearest 0.1

cfs. The report shall clearly describe the design parameters used in the calculations and how the parameters, design criteria, constants, and other values were selected, derived, or obtained. Calculations shall show complete formulas, constants, solutions and actual step-by-step calculations. Calculations shall be attached with the header on top stating either:

"TREATMENT CALCULATIONS: VOLUME-BASED
FACILITY [TYPE] FOR DMA [NUMBER]

Or,

"TREATMENT CALCULATIONS: FLOW-BASED
FACILITY [TYPE] FOR DMA [NUMBER]

Or,

"DETENTION CALCULATIONS: FLOW-CONTROL
FACILITY [TYPE] FOR DMA [NUMBER]

If the calculation worksheet is not clearly labeled, the City reserves the right to reject the submittal. Once calculations are completed, the Engineer shall summarize final values in the tables below.

Water Quality (Treatment Facilities)

There are two types of treatment facilities – volume-based and flow-based. The Engineer shall refer to page 40 of the Model SUSMP, Chapter 2, for sizing requirements of storm water treatment facilities. The correct method shall be applied to each type of treatment facility.

Volume-based facilities are facilities whose functionality is based on treating a specific volume (V) of runoff produced by the 85th percentile 24-hour storm event as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map. When designed properly, these facilities will infiltrate, filter, or treat the required ***volume*** of storm water within the required time period.

Flow-based facilities are facilities whose functionality is based on treating a specific flow (Q) of runoff as determined by using the rational method. The Engineer shall refer to the "**Water Quantity**" paragraph located in Chapter 2 herein.

If the functionality of the facility selected depends on the total volume of water being treated, the Engineer shall complete the "V" column to demonstrate that the facility is adequate. If the functionality of the facility selected depends on the total flow of water being treated, the Engineer shall complete the "Q" column to demonstrate that the facility is adequate.

Treatment Calculation Summary:

Node Number	Facility Type	$V_{Treatment}$ (cf)	$Q_{Treatment}$ (cfs)

Water Quantity (Detention Facilities)

Detention facilities are designed to control flow such that post-development flows do not exceed pre-development flows and thus minimize downstream erosion. The Engineer shall refer to Model SUSMP, Chapter 2 for calculation details. These types of facilities include various detention or flow-control facilities (i.e. self-retaining areas, pervious pavements, flow-through planters, bioretention, etc) that when designed properly will detain the required flow on-site.

Detention Calculations Summary:

Project State	Q_2 (cfs) without BMPs	Q_2 (cfs) with BMPs	Q_{10} (cfs) without BMPs	Q_{10} (cfs) with BMPs	Q_{100} (cfs) without BMPs	Q_{100} (cfs) with BMPs
Pre-Development						
Post-Development						

CHAPTER 4 – LOW IMPACT DEVELOPMENT (LID) DESIGN GUIDE

If the Engineer is not familiar with LID or permanent BMPs design, the Engineer shall refer to the County of San Diego's LID Handbook available at http://www.sdcounty.ca.gov/dplu/procguid.html#hydro. The City strongly recommends that the Engineer meet with the Storm Water Department prior to selecting storm water treatment and flow-control facilities if they are not familiar with the design and functionality of LIDs or BMPs. The Engineer can set up a meeting by contacting the Storm Water Department at (619) 441-1653.

Analyze Your Project for LID

The City requires that the analysis performed documenting the site layout and site design decisions be included under Chapter 3, Preparing Your Project Submittal along with any calculations, tables, and narratives.

The City strongly encourages the Engineer to consider the following opportunities for LID:

- ☐ Optimize the site plan by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.
- ☐ Conserve the natural areas such as existing trees, vegetation, and maximize sheet flow in order to mimic pre-development hydrologic cycle.
- ☐ Use pervious surfaces such as turf, gravel, or pervious pavement – vegetated roofs shall be considered. All drainage from these surfaces is considered to be "self-retained" when designed properly. No further management of runoff is necessary. ***NOTE: Perform adequate geotechnical evaluations when using pervious pavements in Soil Type C and D.***
- ☐ Disperse runoff from impervious surfaces on to adjacent pervious surfaces (e.g. direct a roof downspout to disperse runoff onto a lawn, planter, or other pervious surface).

Alternatives to Integrated LID Design

The City requires that the Engineer consult with the Storm Water Department prior to proceeding with alternatives.

CHAPTER 5 – OPERATION AND MAINTENANCE OF STORMWATER FACILITIES

This chapter shall include two documents – Storm Water Maintenance Plan and Storm Water Maintenance Agreement. The City requires that the Engineer follow "CC&Rs and Storm Water Maintenance Plan", Attachment No. 3 as listed under the City of El Cajon

Storm Water Maintenance Plan (Plan)

The Plan shall be prepared to adequately provide long-term treatment of all post-development BMPs on the project. This plan shall include permeable pavements. For more information refer to the six-stage process outlined in the Model SUSMP Chapter 5

Maintenance Agreement with Easement and Covenant (Agreement)

The Agreement shall be prepared in conjunction with the City's Planning Department and a draft may be attached herein until the Agreement is final.

The Agreement's shall include the following:

1. Commit the land containing the permanent BMPs to being used only for purposes of the BMPs (no alternations, reconstruction, etc)
2. Commit the landowner to maintain the facilities in accordance with the Plan (this obligation would be passed on to future purchasers or successors of the landowner, or operate indefinitely as a covenant)
3. Provide an easement giving the City the right to enter (and access adjacent properties as necessary) to maintain the BMPs to the satisfaction of the City

STORM WATER

CONCEPTUAL PLAN

Planning Action [PUD or TSM or BP]

[Project Name]

[Project Address]

APN: [000-000-00]

Prepared By

[Engineer's Name]
[Engineering Company's Name]
[Engineering Company's Address]

For

[Developer's Name]
[Developer's Address]

Date:

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List attachments by Chapter here:

	Attachment No.	Title/Description
Chp 1	1	Copy of "Completed Storm Water SUSMP Intake Applicability Form for Development Projects"
Chp 2		
Chp 3	1	Project Location Map
	2	Pre-Development Site Map
	3	Storm Water Conceptual Plan
	4	Preliminary Treatment Calcs: Volume-Based Facilities
	5	Preliminary Treatment Calcs: Flow-Based Facilities
	6	Preliminary Detention Calcs: Flow-Control Facilities

Other City of El Cajon References:
Attachment No. 2 – Trash Enclosure Details
Attachment No. 3 – CC&Rs and Storm Water Maintenance Plan

PROJECT INTRODUCTION AND PROJECT BACKGROUND

The following shall be completed in its entirety prior to submittal. Refer to Chapter 4 for details on identifying constraints and opportunities for storm water control.

Project Name:

Project Location:

Project Description:

Existing Site Features and Conditions Including Topography:

Constraints and Opportunities for Storm Water Control:

CHAPTER 1 – POLICIES AND PROCEDURES

This Storm Water Conceptual Plan (Conceptual Plan) shall be prepared following the completion of the "***Storm Water SUSMP Applicability Form for Development Projects***" that can be obtained from the Planning Department during the project development phase.

This Conceptual Plan shall be used in conjunction with the Countywide Model Standard Urban Stormwater Mitigation Plan (SUSMP), which can be obtained at http://www.projectcleanwater.org. The Model SUSMP has step-by-step instructions, which will guide you in preparing the Conceptual Plan. The Chapters used herein correspond to the Model SUSMP and contained herein are City of El Cajon's (City) specific project requirements.

If the project requires a Hydromodification Management Plan (HMP) as determined in the Model SUSMP Chapter 2, page 26, the Engineer shall refer the Draft Hydromodification Plan, which can be obtained at http://www.projectcleanwater.org.

CONCEPTUAL PLAN PURPOSE

The purpose of this Conceptual Plan is to assist the Applicant in planning ahead for stormwater compliance. The most common (and costly) errors made by Applicants for development approvals with respect to stormwater quality compliance are:

1. Not planning for compliance early enough. The Applicant should think about strategies for stormwater quantity and quality compliance before completing a conceptual site design or sketching a layout of subdivision lots (Chapter 3).
2. Assuming proprietary stormwater treatment facilities will be adequate for compliance. Most are not adequate for anticipated pollutants (Chapter 2).
3. Not planning for periodic inspection and maintenance of treatment and flow-control facilities. Consider who will own and who will maintain the facilities in perpetuity and how they will obtain access, and identify which arrangements are acceptable to the City.
4. Not having the necessary experience or resources to prepare the calculations, reports, and implement innovative solutions to develop stormwater quality designs.

Managing runoff from a single development site may seem inconsequential, but by changing the way most sites are developed (or redeveloped), the City may be able to preserve and enhance existing stream ecosystems within our watershed.

STORM WATER COMPLIANCE PROCESS

Typically, during the Planning Phase, the City of El Cajon determines if a development project is a **"Priority Development Project"** following the completion of the **"Storm Water SUSMP Applicability Form for Development Projects"**. A **"Storm Water Conceptual Plan"** is then developed and submitted for review and approval. Then, during final design (or preparation of construction plans), a Storm Water Mitigation Plan (SWMitP) is required in accordance with the Standard Urban Storm Water Mitigation Plan (SUSMP) ordinance of the City of El Cajon (Ord. 4908, Chapter 16.60) and San Diego

Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001, NPDES Permit No. CAS0108758.

This Conceptual Plan is intended to ensure that the site provides enough space for adequate sizing and placement of stormwater facilities. The Conceptual Plan is a living document subject to revisions as needed by the Engineer of Work and the City during the Planning Phase. During final design (or preparation of the construction plans), the Engineer is required to comply with the Storm Water requirements through the preparation and approval of a SWMitP.

The City's Conceptual Plan submittal requirements are described in Chapter 3. The Conceptual Plan shall be completed in its entirety prior to submittal to the City otherwise it will be returned without review. If you have any questions during the preparation of the Conceptual Plan contact the Storm Water Department at (619) 441-1653.

Attach a copy of the completed "***Storm Water SUSMP Applicability Form for Development Projects".***

CHAPTER 2 – CONCEPTS AND CRITERIA

The City lies entirely within the San Diego River Watershed, Hydrologic Unit (HU) 907. The City recognizes the following drainage basins within the City, all of which eventually discharge into the San Diego River. The Engineer shall refer to the City of El Cajon Jurisdictional Urban Runoff Management Program (JURMP), which is available at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

Check the corresponding sub-watershed(s) for the project

☐ Broadway Channel Basin	☐ Washington Channel Basin	☐ County Ditch Basin	☐ Northern Forrester Creek Basin
☐ Forrester Creek Basin	☐ Fanita Basin	☐ Fletcher Parkway Basin	☐ Third Street Lateral

The following are designated as impaired waters by the RWQCB and USEPA pursuant to the Clean Water Act Section 303(d): ***Forrester Creek and the San Diego River***. The City follows a conservative approach with regards to pollutants impairing water bodies.

Water Quality (Treatment Requirements): The City requires that all pollutants of concern or water quality effect as identified on the Clean Water Act (CWA) 303(d) list be applied for the entire length of the corresponding water body. Determine the Anticipated and Potential Pollutants of Concern per Table 2-1 attached in the next page and per the Model SUSMP, Chapter 2.

Circle each as applicable:

Table 2.1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development > 10 Units	X	X			X	X	X	X	X
Attached Residential Development > 10 Units	X	X			X	P(1)	P(2)	P	X
Commercial Development > 1 acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry /Industrial Development > 1 acre	X		X	X	X	X	X		
Automotive Repair Shops			X	X (4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development > 5,000 ft^2	X	X			X	X	X		X
Parking Lots > 5,000 ft^2 or > 15 spaces	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets > 5,000ft^2 or > 100 ADT			X	X	X	X	X		
Streets, Highways & Freeways > 5,000 ft^2	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential

(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Check each half of a box as applicable:

Pollutants associated with 303(d) Listed ImpairedWaters To Which the Project Drains	Project Specific Anticipated and Potential Pollutants of Concern								
	Sed	Nut	HM	Org	T&D	ODS	O&G	B&V	Pes
Sed									
Nut		X							
HM									
Org									
T&D									
ODS						X			
O&G									
B&V								X	
Pes									

Sed = Sediment; Nut = Nutrients; HM = Heavy Metals; Org = Organics; T&D = Trash and Debris; ODS= Oxygen Demand Substances; O&G = Oils and Grease; B&V = Bacteria & Viruses; Pes = Pesticides;

The City requires that the Pollutants of Concern be grouped to determine how easily various treatment processes remove them. Refer to Table 2-2 inserted below from the Model SUSMP, Chapter 2.

If a box above has two (2) checks, it is considered a Primary Pollutant; one (1) check is considered a Secondary Pollutant. Check each pollutant below according to either Primary or Secondary Pollutant.

TABLE 2-2. GROUPING OF POTENTIAL POLLUTANTS of Concern by fate during stormwater treatment

Check off the Pollutants in the table below accordingly:

Primary	Secondary	Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
		Sediment	X	X	
		Nutrients		X	X
		Heavy Metals		X	
		Organic Compounds		X	
		Trash & Debris	X		
		Oxygen Demanding		X	
		Bacteria		X	
		Oil & Grease		X	
		Pesticides		X	

When selecting a treatment facility to remove a specific pollutant, the City requires that "Medium" or "High" Removal Efficiency BMPs treat all Primary Pollutants of concern as identified above. Refer to Table 2-3 inserted below from the Model SUSMP, Chapter 2, to determine an effective treatment facility.

Circle as applicable:

TABLE 2-3. GROUPS OF POLLUTANTS and relative effectiveness of treatment facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro -dynamic Devices (1)
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

*See page 23 of the Regional Model SUSMP for a discussion of selection of treatment facilities in special situations.

Notes: (1) Trash Racks & Hydrodynamic Devices shall not be used alone.
(2) The City shall reserve the right to determine if the selected treatment facility is appropriate, which may lead to selecting a higher efficiency treatment facility that originally selected by the Engineer.

The Engineer shall ensure that the area (i.e. parking lots, detached residential development, etc.) that requires the treatment actually drains to the selected treatment facility. This shall be clearly shown on the Conceptual Plan and delineated as such in the drainage report. If this is not clearly shown, the City reserves the right to reject the submittal.

Water Quantity (Detention Requirements): With the exception of projects that require a HMP, the City requires that the 2-year and the 10-year storm event be used for calculating peak flows and the 100-year storm event be used to demonstrate flooding impacts. The 2-year and the 10-year storm event shall be used to design stormwater detention facilities in accordance with the San Diego County Hydrology Manual, latest edition, Section 6. The 100-year shall be used to design a bypass system.

For guidance on preparing the Hydraulics and Hydrology Report (or Drainage Report), refer to the San Diego County Hydrology Manual, latest edition. The Engineer may consider using intensities from the latest edition of the City of El Cajon Improvement Standards, Figure 3.4-2 included in the next page for the

design of the drainage improvements (i.e. pipelines, catch basins, inlets, etc). Per the City's requirements, a Drainage Report is required and may be submitted separately or attached to the Conceptual Plan.

Fig. 3.4-2

AVERAGE INTENSITY-DURATION CURVES
El Cajon, California

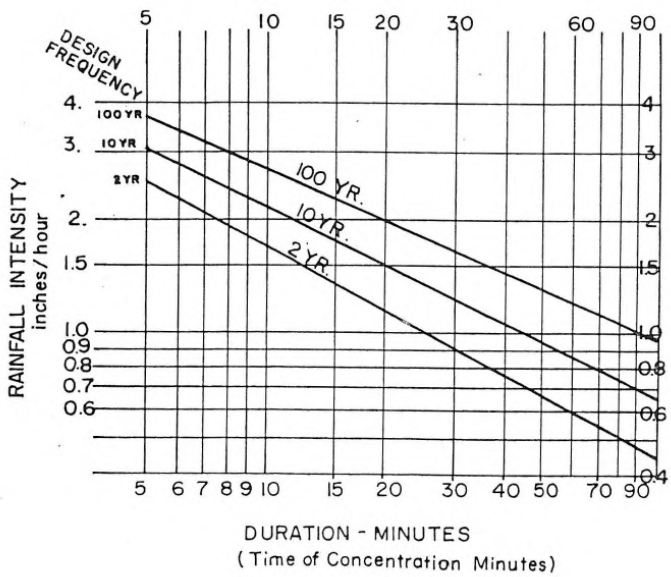

CHAPTER 3 – PREPARING YOUR PROJECT SUBMITTAL

The City requires that this entire packet be completed and submitted along with maps, calculations, details, and other information as requested herein. Attachments shall be listed in the Table of Contents.

Storm Water Conceptual Plan: The Plan shall be shown on a Standard D-size sheet and plotted using engineering scales only and not architectural scales. Preliminary size and location of proposed storm water BMPs must be shown on the Plan. This includes all LID, source control, and structural treatment BMPs. Detention facilities shall be shown, if required. It is important to show the intended location of the facilities even if the exact configuration and grading of the site may have minor modifications during final design. This will ensure that adequate provisions have been made to accommodate and locate the BMPs to achieve the required storm water management objectives.

The Engineer shall evaluate and determine the most appropriate BMPs or combination of BMPs to achieve applicable performance requirements. The selected BMPs need to achieve a “Medium” to “High” efficiency removal of the pollutants of concern for the proposed project. Once the most effective BMPs have been selected, the Plan can be developed and should include the following information:

1. Location of selected BMPs
2. Configuration of storm water conveyance system(s)
3. Proposed sizing (length, width and depth) of all BMPs
4. Location and dimensions of the Detention System, if required.
5. Proposed discharge structure details from the conveyance and storage systems, to the public storm drain system.

Conceptual Plan Submittal Checklist:

- ☐ Storm Water Conceptual Plan
- ☐ Storm Water Treatment Facilities Calculations
- ☐ Hydrologic and Hydraulic calculations, including sizing calculations for detention structures and other drainage facilities that will be used to manage storm water runoff
- ☐ A discussion describing the determination of potential and actual priority pollutants and pollutants of concern, receiving water quality and the consideration and selection of storm water BMPs, including LID, site design, source control and treatment control BMPs.

CHAPTER 4 – LOW IMPACT DEVELOPMENT (LID) DESIGN GUIDE

If the Engineer is not familiar with LID or permanent BMPs design, the Engineer shall refer to Chapter 4 of the Countywide Model SUSMP. The City strongly recommends that the Engineer meet with the Storm Water Department prior to selecting stormwater treatment and flow-control facilities if they are not familiar with the design and functionality of LID or BMPs. The Engineer can set up a meeting by contacting the Storm Water Department at (619) 441-1653.

Analyze Your Project for LID

The City strongly encourages the Applicant to consider the following opportunities for LID:

- ☐ Optimize the site plan by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.
- ☐ Conserve the natural areas such as existing trees, vegetation, and maximize sheet flow in order to mimic pre-development hydrologic cycle.
- ☐ Use pervious surfaces such as turf, gravel, or pervious pavement – or use surfaces that retain rainfall such as vegetated roofs shall be considered. All drainage from these surfaces is considered to be "self-retained" when designed properly. No further management of runoff is necessary. ***NOTE: Perform adequate geotechnical evaluations when using pervious pavements in Soil Type C and D.***
- ☐ Disperse runoff from impervious surfaces on to adjacent pervious surfaces (e.g. direct a roof downspout to disperse runoff onto a lawn, planter, or other pervious surface).

Alternatives to Integrated LID Design

The City requires that the Engineer consult with the Storm Water Department prior to proceeding with alternatives.

STORM WATER

MITIGATION PLAN

[Planning Action, PUD or TSM or BP]

[Project Name]

[Project Address]

APN: [000-000-00]

Prepared By

[Engineer's Name]
[Engineering Company's Name]
[Engineering Company's Address]

For

[Developer's Name]
[Developer's Address]

Date:

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CHAPTER 5 – OPERATION AND MAINTENANCE OF STORMWATER FACILITIES 20

List attachments by Chapter here:

	Attachment No.	Title/Description
Chp 1	1	Copy of "Completed Storm Water SUSMP Intake Applicability Form for Development Projects"
Chp 2		
Chp 3	1	Project Location Map
	2	Pre-Development Site Map
	3	Post-Development Site Map
	4	Proprietary Products Full Submittal
	5	Documentation to Demonstrate Past Project Success
	6	Treatment Calcs: Volume-Based Facilities
	7	Treatment Calcs: Flow-Based Facilities
	8	Detention Calcs: Flow-Control Facilities
Chp 4		
Chp 5	1	Storm Water Maintenance Plan
	2	Storm Water Maintenance Agreement

Other City of El Cajon References:
Attachment No. 2 – Trash Enclosure Details
Attachment No. 3 – CC&Rs and Storm Water Maintenance Plan

PROJECT INTRODUCTION AND PROJECT BACKGROUND

The following shall be completed in its entirety prior to submittal. Refer to Chapter 4 for details on identifying constraints and opportunities for storm water control.

Project Name:

Project Location:

Project Description:

Existing Site Features and Conditions Including Topography:

Constraints and Opportunities for Storm Water Control:

CHAPTER 1 – POLICIES AND PROCEDURES

This Storm Water Mitigation Plan (SWMitP) shall be prepared in conjunction with the Countywide Model Standard Urban Stormwater Mitigation Plan (SUSMP), which can be obtained at http://www.projectcleanwater.org. The Model SUSMP has step-by-step instructions, which will guide you in preparing the SWMitP. The Chapters used herein correspond to the Model SUSMP and contained herein are City of El Cajon's (City) specific project requirements.

If the project requires a Hydromodification Management Plan (HMP) as determined in the Model SUSMP, the Engineer shall refer the Hydromodification Plan, which can be obtained at http://www.projectcleanwater.org.

The SWMitP shall be prepared under the direction of a Civil Engineer registered in the state of California. The Registered Civil Engineer shall attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

CERTIFICATION

I, _____, certify that the selection, sizing, and preliminary design of stormwater treatment and other control measures in this SWMitP meet the requirements of the Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments.

Signature: _____ Date: _____

AFFIX WET STAMP HERE ➔

SWMitP PURPOSE

The purpose of this SWMitP is to finalize the list of anticipated pollutants from the project, finalize proposed Low Impact Development (LID) principles; select final source control and treatment control Best Management Practices (BMPs), finalize sizing calculations for storm water BMPs, and submit an appropriate maintenance plan. BMPs and LID features applied to all projects provide long-term solutions to water quality and help minimize downstream erosion. This SWMitP is intended to ensure the effectiveness of the selected LID's and BMPs proposed by checking that they have been sized properly, maintenance is feasible, and that the design is based on long-term fiscal planning. The SWMitP is a living document subject to revisions as needed by the Engineer of Work and the City.

STORM WATER COMPLIANCE PROCESS

Typically, during the Planning Level or Programming Phase, the City of El Cajon determines if a development project is a **"Priority Development Project"** following the completion of the **"Storm Water SUSMP Intake Applicability Form for Development Projects"**. A **"Storm Water Conceptual Plan"** is then developed and submitted for review and approval. Then, during final design (or preparation of construction plans), a Storm Water Mitigation Plan (SWMitP) is required in accordance with the Standard Urban Storm Water Mitigation Plan (SUSMP) ordinance of the City of El Cajon (Ord. 4908, Chapter 16.60) and San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001, NPDES Permit No. CAS0108758.

The City's SWMitP submittal requirements are described in Chapter 3. The SWMitP shall be completed in it entirety prior to submittal to the City of El Cajon otherwise it will be returned without review. If you have any questions during the preparation of the SWMitP contact the Storm Water Department at (619) 441-1653.

Complete the following:

1. Is the project on previously undeveloped land (new development)?

   YES NO

2. Is the project adding or creating 5,000-sf, or more, of impervious surface (redevelopment)?

   YES NO

If you answered YES to either 1 or 2, complete Table 1-1, inserted below from the Model SUSMP, Chapter 1.

TABLE 1-1. Priority Development Projects.

Is the project in any of these categories?

Yes ❑	No ❑	**A**	**Housing subdivisions of 10 or more dwelling units.** Examples: single-family homes, multi-family homes, condominiums, and apartments.
Yes ❑	No ❑	**B**	**Commercial—greater than one acre.** Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.
Yes ❑	No ❑	**C**	**Heavy industry—greater than one acre.** Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).
Yes ❑	No ❑	**D**	**Automotive repair shops.** A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.
Yes ❑	No ❑	**E**	**Restaurants.** Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.
Yes ❑	No ❑	**F**	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
Yes ❑	No ❑	**G**	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.
Yes ❑	No ❑	**H**	**Parking lots 5,000 square feet or more** or with 15 or more parking spaces and potentially exposed to urban runoff.
Yes ❑	No ❑	**I**	**Street, roads, highways, and freeways.** Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
Yes ❑	No ❑	**J**	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

If you answered YES to any of the Items in Table 1-1, the project is a "Priority Development Project". If the Engineer determines that the project is ***NOT*** a "Priority Development Project" call the Storm Water Department at (619) 441-1653 to confirm any SUSMP requirements for the project. If the Engineer determines that the project ***IS*** a "Priority Development Project" continue to the following Chapters.

1. Is the project a "Priority Development Project"? YES NO
2. If you answered yes, list all applicable categories per Table 1-1 → _____

To determine if the project is ***EXEMPT*** from preparing a Hydromodification Management Plan (HMP), refer to the Model SUSMP Chapter 1. If the Engineer determines that a HMP is required, the City may consider granting an exemption. To make this determination, the Engineer may conduct an independent geomorphic study to determine the project's full hydromodification impact. The study must incorporate sediment transport modeling across the range of geomorphically-significant flows and demonstrate to the City's satisfaction that the project flows and sediment reductions will not detrimentally affect the receiving water to qualify for the exemption. If the project is ***NOT EXEMPT***, follow the instructions in the HMP, which can be obtained at http://www.projectcleanwater.org .

1. Does the project require a HMP? YES NO

CHAPTER 2 – CONCEPTS AND CRITERIA

The City lies entirely within the San Diego River Watershed, Hydrologic Unit (HU) 907. The City recognizes the following drainage basins within the City, all of which eventually discharge into the San Diego River. The Engineer shall refer to the City of El Cajon Jurisdictional Urban Runoff Management Program (JURMP), which is available at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

Check the corresponding watershed(s) for the project

☐ Broadway Channel Basin	☐ Washington Channel Basin	☐ County Ditch Basin	☐ Northern Forrester Creek Basin
☐ Forrester Creek Basin	☐ Fanita Basin	☐ Fletcher Parkway Basin	☐ Third Street Lateral

The following are designated as impaired waters by the RWQCB and USEPA pursuant to the Clean Water Act section 303(d): ***Forrester Creek and San Diego River***. The City follows a conservative approach with regards to pollutants impairing water bodies.

Water Quality (Treatment Requirements): The City Municipal Code requires that all pollutants of concern as identified on the CWA 303(d) list be applied for the entire length of the corresponding water body. Determine the Anticipated and Potential Pollutants of Concern from Table 2-1 in the following page per Chapter 2 of the Model SUSMP.

Circle each as applicable:

TABLE 2-1. ANTICIPATED AND POTENTIAL Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Priority Project Categories	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >one acre	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

Check each half of a box as applicable:

Pollutants associated with 303(d) Listed ImpairedWaters To Which the Project Drains	Project Specific Anticipated and Potential Pollutants of Concern: Sed	Nut	HM	Org	T&D	ODS	O&G	B&V	Pes
Sed									
Nut		X							
HM									
Org									
T&D									
ODS						X			
O&G									
B&V								X	
Pes									

Sed = Sediment; Nut = Nutrients; HM = Heavy Metals; Org = Organics; T&D = Trash and Debris; ODS= Oxygen Demand Substances; O&G = Oils and Grease; B&V = Bacteria & Viruses; Pes = Pesticides; Oth = Other (i.e. Pharmaceuticals, etc.)

If a box above has two (2) checks, it is considered a Primary Pollutant; one (1) check is considered a Secondary Pollutant. Check each pollutant below according to either Primary or Secondary Pollutant.

The City requires that the Pollutants of Concern be grouped to determine how easily various treatment processes remove them. Refer to Table 2-2 below, inserted from Chapter 2 of the Model SUSMP.

TABLE 2-2. GROUPING OF POTENTIAL POLLUTANTS of Concern by fate during stormwater treatment

Check off the Pollutants in the table below accordingly:

Primary	Secondary	Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
		Sediment	X	X	
		Nutrients		X	X
		Heavy Metals		X	
		Organic Compounds		X	
		Trash & Debris	X		
		Oxygen Demanding		X	
		Bacteria		X	
		Oil & Grease		X	
		Pesticides		X	

When selecting a treatment facility to remove a specific pollutant, the City requires that "Medium" or "High" Removal Efficiency BMPs treat all Primary Pollutants of concern as identified above. Refer to Table 2-3 inserted below from the Model SUSMP, Chapter 2 to determine an effective treatment facility.

Circle as applicable:

TABLE 2-3. GROUPS OF POLLUTANTS and relative effectiveness of treatment facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro -dynamic Devices (1)
Coarse Sediment and Trash	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low

*See page 23 of the Regional Model SUSMP for a discussion of selection of treatment facilities in special situations.

Notes: (1) Trash Racks & Hydrodynamic Devices shall not be used alone.
(2) The City shall reserve the right to determine if the selected treatment facility is appropriate, which may lead to selecting a higher efficiency treatment facility than originally selected by the Engineer.

The Engineer shall ensure that the area (i.e. Parking Lots, etc.) that requires the treatment actually drain to the selected treatment facility. This shall be clearly shown on the construction plans and delineated as such in the drainage report. If this is not clearly shown, the City reserves the right to reject the submittal.

Water Quantity (Detention Requirements): The City requires that the 2-year and the 10-year storm event be used for calculating peak flows and the 100-year storm event be used to demonstrate flooding impacts. The 2-year and the 10-year storm event shall be used to design storm water detention facilities in accordance with the San Diego County Hydrology Manual, latest edition, Section 6. The 100-year shall be used to design a bypass system.

For guidance on preparing the Hydraulics and Hydrology Report (or Drainage Report), refer to the San Diego County Hydrology Manual, latest edition. The Engineer may consider using intensities from the latest edition of the City of El Cajon Improvement Standards, Figure 3.4-2 included below, for the design of the

drainage improvements (i.e. pipelines, catch basins, inlets, etc). Per the City's requirements, a Drainage Report is required and may be submitted separately or attached to the Conceptual Plan.

Fig. 3.4-2

AVERAGE INTENSITY-DURATION CURVES
El Cajon, California

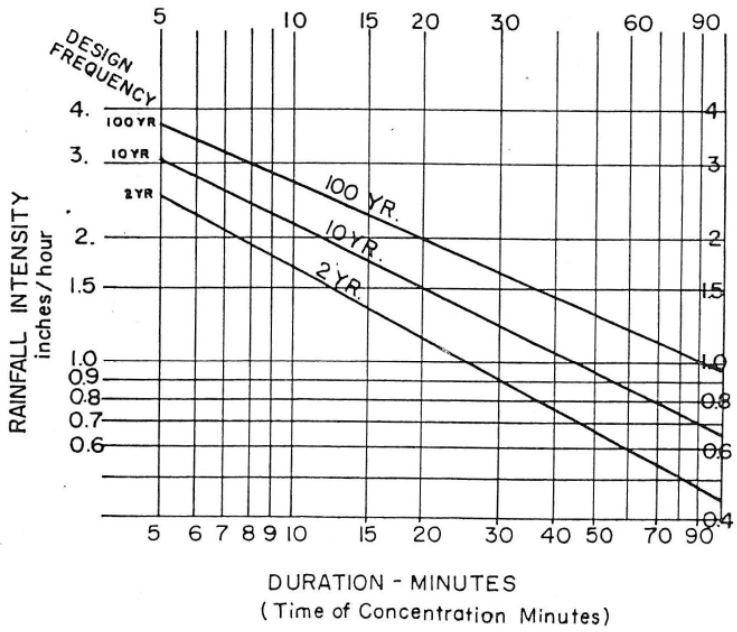

CHAPTER 3 – PREPARING YOUR PROJECT SUBMITTAL

The City requires that this entire packet be completed and submitted along with maps, calculations, proprietary products catalogue cut sheets, details, and other information as requested herein.

Complete and submit the "EXAMPLE PROJECT SUBMITTAL CHECKLIST" located in the Model SUSMP Chapter 3, Page 46. Attachments shall be listed in the Table of Contents.

Report Exhibits: In addition to the items requested in the "CHECKLIST", the City requires that the submittal shall include a location map of the project site, and inlets located a minimum of 200-feet beyond the project site. The maps shall be on a Standard D-size sheet and plotted using engineering scales only and not architectural scales.

Report Narrative: In addition to the items requested in the "CHECKLIST", the City requires a description of the existing topography, run-on and runoff issues, and unique conditions. Also, describe the details of the pre-construction condition and the post-construction condition.

Summarize the affects of the project on the pre-construction flows and specifically state if the flows were increased, decreased, fully mitigated, etc. and the impact the project may have on the downstream hydrology.

Report Tables: In addition to the items requested in the "CHECKLIST", the City requires completion of the tables included herein.

Refer to the Model SUSMP Chapter 4 for guidelines and available Low Impact Development (LID) treatment facilities. The City requires that the project consider at minimum the LID features listed below. Based on the project specifics, the City may require additional LID treatment facilities. The Engineer shall be responsible for selecting the most adequate treatment facility and for including the calculations necessary to justify the effectiveness of each facility. Follow the Model SUSMP Chapter 3, Step 3 to prepare your LID design.

Complete the following table:

Low Impact Development (LID)	Applied			Narrative
	Yes	No	N/A	
Control Peak Runoff Rates				
Minimize Disturbance to Natural Drainages and Waterways				

Low Impact Development (LID)	Applied			Narrative
	Yes	No	N/A	
Conserve Natural Areas, Soils, and Existing Vegetation				
Minimize and Disconnect Impervious Surfaces				
Minimize Soil Compaction				
Drain Runoff from Impervious Surfaces to Pervious Areas				
Drain Rooftops to Landscaping				
Maximize the Use of Pervious Pavement				
[List any others]				

Refer to the Model SUSMP Chapter 3, Step 4 for guidance on specifying source control BMPs. The City requires that the project consider at minimum the source control measures listed below. Based on the project specifics, the City may required additional permanent source control measures. The Engineer shall be responsible for selecting the most adequate source control measures and for including the calculations necessary to justify the effectiveness of each BMP and ensuring all BMPs are shown on the construction plans.

Complete the following table:

Potential Source of Runoff Pollutant	Permanent Source Control BMPs	Applied			Operational Source BMP Narrative
		Yes	No	N/A	
	Include storm drain stenciling and signage				
	Outdoor storage area shall be designed to contain pollutants				
	Trash storage area shall be secured, have a grade break or berm, and have a roof covering (See City of El Cajon References; Attachment No. 2)				

Potential Source of Runoff Pollutant	Permanent Source Control BMPs	Applied			Operational Source BMP Narrative
		Yes	No	N/A	
	Use efficient irrigation systems and landscape design				
	Hillside landscaping				

Refer to the Model SUSMP Chapter 2 for guidance on specifying treatment facilities. The Engineer shall be responsible for selecting the most adequate treatment facilities and for including the calculations necessary to justify the effectiveness of each facility and ensuring all facilities are shown on the construction plans. Note that the Engineer shall cross-reference Chapter 2 and ensure that the drainage area which was determined in Chapter 2 to contain potential pollutants of concern per Table 2-1 is indeed draining to the appropriate treatment facility. Sufficient grades shall be provided on the drainage plans to determine if the drainage area identified is actually draining to the proper treatment facility.

Complete the following table:

Treatment Facilities	Applied			Narrative to describe the selected facilities, location, drainage plans where facility is shown
	Yes	No	N/A	
Bioretention Facilities (LID)				
Settling Basins (Dry Ponds)				
Wet Ponds and Constructed Wetlands				
Infiltration Facilities or Practices (LID)				
Media Filters				
Higher-rate biofilters				
Higher-rate media filters				
Trash Racks & Hydrodynamic Devices				

Refer to the Model SUSMP Chapter 4, Table 4-1 for guidance on Integrated Management Practices (IMP). The Engineer shall be responsible for selecting the most adequate IMPs and for including the calculations necessary to justify the effectiveness of each IMP and ensuring all facilities are shown on the construction plans.

Complete the following table:

Runoff Management Facilities	**Applied**			**Narrative to describe the selected facilities, location, construction drawing where facility is shown**
	Yes	No	N/A	
Vegetated Roof				
Self-Retaining Areas				
Pervious Pavement				
Bioretention Facility				
Flow-through Planter				
Dry Well				
Cistern with Bioretention				

Runoff management facilities shall be per the standards found in the California Stormwater Quality Association (CASQA) Handbook, State Department of Transportation (Caltrans) Stormwater Handbook, or other well-recognized and certifying entity. If the Engineer is proposing propriety BMPs, this will require a "Propriety Product Full Submittal" attachment, which shall contain the manufacturer's catalogue cut sheets, past project photos, calculations, etc. for such proprietary items. In addition, if the Engineer is recommending facilities where functionality may be questionable, such as pervious pavement or dry wells in Type C and/or D soil types, this will require a "Documentation to Demonstrate Past Project Success" attachment, which shall contain, a list of five (5) similar applications completed within the last five (5) years and including contact information for the Engineer of Record and property owner to demonstrate proper functionality.

Report Calculations: In addition to the items requested in the "CHECKLIST", the City requires that runoff coefficients reflect the true imperviousness of the project area and not the land use coefficients. Calculate Q's to the nearest 0.1

cfs. The report shall clearly describe the design parameters used in the calculations and how the parameters, design criteria, constants, and other values were selected, derived, or obtained. Calculations shall show complete formulas, constants, solutions and actual step-by-step calculations. Calculations shall be attached with the header on top stating either:

"TREATMENT CALCULATIONS: VOLUME-BASED
FACILITY [TYPE] FOR DMA [NUMBER]

Or,

"TREATMENT CALCULATIONS: FLOW-BASED
FACILITY [TYPE] FOR DMA [NUMBER]

Or,

"DETENTION CALCULATIONS: FLOW-CONTROL
FACILITY [TYPE] FOR DMA [NUMBER]

If the calculation worksheet is not clearly labeled, the City reserves the right to reject the submittal. Once calculations are completed, the Engineer shall summarize final values in the tables below.

Water Quality (Treatment Facilities)

There are two types of treatment facilities – volume-based and flow-based. The Engineer shall refer to page 40 of the Model SUSMP, Chapter 2, for sizing requirements of storm water treatment facilities. The correct method shall be applied to each type of treatment facility.

Volume-based facilities are facilities whose functionality is based on treating a specific volume (V) of runoff produced by the 85th percentile 24-hour storm event as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map. When designed properly, these facilities will infiltrate, filter, or treat the required ***volume*** of storm water within the required time period.

Flow-based facilities are facilities whose functionality is based on treating a specific flow (Q) of runoff as determined by using the rational method. The Engineer shall refer to the "**Water Quantity**" paragraph located in Chapter 2 herein.

If the functionality of the facility selected depends on the total volume of water being treated, the Engineer shall complete the "V" column to demonstrate that the facility is adequate. If the functionality of the facility selected depends on the total flow of water being treated, the Engineer shall complete the "Q" column to demonstrate that the facility is adequate.

Treatment Calculation Summary:

Node Number	Facility Type	$V_{Treatment}$ (cf)	$Q_{Treatment}$ (cfs)

Water Quantity (Detention Facilities)

Detention facilities are designed to control flow such that post-development flows do not exceed pre-development flows and thus minimize downstream erosion. The Engineer shall refer to Model SUSMP, Chapter 2 for calculation details. These types of facilities include various detention or flow-control facilities (i.e. self-retaining areas, pervious pavements, flow-through planters, bioretention, etc) that when designed properly will detain the required flow on-site.

Detention Calculations Summary:

Project State	Q_2 (cfs) without BMPs	Q_2 (cfs) with BMPs	Q_{10} (cfs) without BMPs	Q_{10} (cfs) with BMPs	Q_{100} (cfs) without BMPs	Q_{100} (cfs) with BMPs
Pre-Development						
Post-Development						

CHAPTER 4 – LOW IMPACT DEVELOPMENT (LID) DESIGN GUIDE

If the Engineer is not familiar with LID or permanent BMPs design, the Engineer shall refer to the County of San Diego's LID Handbook available at http://www.sdcounty.ca.gov/dplu/procguid.html#hydro. The City strongly recommends that the Engineer meet with the Storm Water Department prior to selecting storm water treatment and flow-control facilities if they are not familiar with the design and functionality of LIDs or BMPs. The Engineer can set up a meeting by contacting the Storm Water Department at (619) 441-1653.

Analyze Your Project for LID

The City requires that the analysis performed documenting the site layout and site design decisions be included under Chapter 3, Preparing Your Project Submittal along with any calculations, tables, and narratives.

The City strongly encourages the Engineer to consider the following opportunities for LID:

- ☐ Optimize the site plan by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.
- ☐ Conserve the natural areas such as existing trees, vegetation, and maximize sheet flow in order to mimic pre-development hydrologic cycle.
- ☐ Use pervious surfaces such as turf, gravel, or pervious pavement – vegetated roofs shall be considered. All drainage from these surfaces is considered to be "self-retained" when designed properly. No further management of runoff is necessary. ***NOTE: Perform adequate geotechnical evaluations when using pervious pavements in Soil Type C and D.***
- ☐ Disperse runoff from impervious surfaces on to adjacent pervious surfaces (e.g. direct a roof downspout to disperse runoff onto a lawn, planter, or other pervious surface).

Alternatives to Integrated LID Design

The City requires that the Engineer consult with the Storm Water Department prior to proceeding with alternatives.

CHAPTER 5 – OPERATION AND MAINTENANCE OF STORMWATER FACILITIES

This chapter shall include two documents – Storm Water Maintenance Plan and Storm Water Maintenance Agreement. The City requires that the Engineer follow "CC&Rs and Storm Water Maintenance Plan", Attachment No. 3 as listed under the City of El Cajon

Storm Water Maintenance Plan (Plan)

The Plan shall be prepared to adequately provide long-term treatment of all post-development BMPs on the project. This plan shall include permeable pavements. For more information refer to the six-stage process outlined in the Model SUSMP Chapter 5

Maintenance Agreement with Easement and Covenant (Agreement)

The Agreement shall be prepared in conjunction with the City's Planning Department and a draft may be attached herein until the Agreement is final.

The Agreement's shall include the following:

1. Commit the land containing the permanent BMPs to being used only for purposes of the BMPs (no alternations, reconstruction, etc)
2. Commit the landowner to maintain the facilities in accordance with the Plan (this obligation would be passed on to future purchasers or successors of the landowner, or operate indefinitely as a covenant)
3. Provide an easement giving the City the right to enter (and access adjacent properties as necessary) to maintain the BMPs to the satisfaction of the City

NEW SUSMP PROJECTS FOR 2011-2012

	First Submittal Date	Street Number (X_Thru_		Direction	Street	Address Surname	Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	N/A									

SUSMP PROJECTS UNDER REVIEW

2011-2012

	Street Number		Direction	Street	Address Surname	Site Type	Project Name	SUSMP Trigger	BMPs Applied
1	440	500	North	Johnson	Avenue	Truck Dealer, Repair Shop	Inland Kenworth	Commercial Dev't > 1 Acre, Automotive Repair, New Parking >5000 sf, Tributary to ESA	Bioretention Basins, Inlet filters, Covered Trash Enclosure, Designated Indoor Vehicle Wash, No Dumping Signage
2	101		West	Washington	Avenue	New Restaurant,	Tres Hermanos Restaurant	New Restaurant, Parking Lot Redev't >5000 sf	Bioretention Basins, Trash Enclosure Drained to Treatment BMP
3	1306			Broadway		Commercial Retail	Walgreens	Commercial Dev't > 1 Acre	Vegetated Swale, Underground Detention, Inlet Filters, Covered Trash Enclosure, No Dumping Signage
4				Cary	Court	Subdivision	Cary Court	Subdivision >10 units	Bioretention Basins
5	131	151		Chambers	Street	Multi-unit Residential	Solterra Senior Residences	Multi-unit Residential >10 units	Bioretention Basins, Inlet filters, Interior Trash Storage, Media Filter

Priority Project Post-Contruction Treatment Control BMP Inventory

# (All)	Street Number	Thru	Direction	Street Name	Street Surname	Assessor's Parcel Number	Site Treatment BMP Priority	Development Priority	Site Type	Priority Trigger	All Post-Construction BMPs Applied	Receiving Water	BMP Infeasibility	11-12 Treatment BMP Maintenance Inspections				
														Date	Result	Follow-up Required	Action Taken	Inspector
1	1108	1116		Anita Lee	Lane	4924103600	Medium	High	New Subdivision, Old APN: 4924102100, 2200	4 New SFR subdivision (FKA 763 W. Chase Ave.)	Grassy swales, Curb outlet filters	County Ditch	Does not meet SUSMP thresholds					
2	2706			Anjuli	Court	4810523200 - 4800	Low	SUSMP	New Subdivision, Old APN: 4810521900 & 2500	SFR >10 Units	CDS (hydrodynamic separator) unit (in Public Right-of-Way: City Maintained)	Fanita Channel						
3	965			Arnele	Avenue	4822502600	Medium	SUSMP	Auto sales and service	Auto sales and service >1 acre, >5000 sf parking redevelopment	Vegetated bioswales, pervious buffer strip, bioretention swale, covered TE	Forrester Creek						
4	1001		West	Bradley	Avenue	4821310200, 0300, 0700, 1600	High	SUSMP	Parking Lot (925 O'Connor St.), New Construction Materials Recycling Transfer Facility	>5,000 sq ft Development	Pervious swales, inlet filter, and detention basin	Forrester Creek		9/22/11	BMPs maintained	No	None	C. Bonner
5	1032			Broadway		4842932200	Medium	SUSMP	New Office Building	>5,000 Redevelopment	Swalegard inlet filter, grass buffer strip	Broadway Channel						
6	1090			Broadway		4842931500	High	SUSMP	Gas Station (Re-Developed)	RGO (Re-Developed)	Grass filter strip, filter inserts	Broadway Channel		9/26/11	Filters clean, vegetated strip needs reseeding	Yes	None	C. Bonner
7	1174			Broadway		4843600100	High	SUSMP	Commercial Facility, Old APN: 4841840900	Parking lot > 5000 sq ft, <200 from ESA	Inlet filters, trash enclosure (uncovered)	Broadway Channel	Site size constraints	9/26/11	Sediment laden filters, signage needs repainting	Yes	Written Notice	C. Bonner
8	350		East	Chase	Avenue	4931723300	High	SUSMP	New Restaurant	New restaurant	inlet filters	County Ditch		9/26/11	Debris in filters	Yes	Written Notice	C. Bonner
9	450		East	Chase	Avenue	4934302200	High	High	Commercial	New Commercial >100,000 sf	Inlet Filters	County Ditch	Structural BMPs already onsite	9/26/11	Filters need to be cleaned	Yes	None	C. Bonner
10	100			Civic Center	Way	4880720400	High	SUSMP	Municipal Building, Parking Lot	Parking lot > 5000 sq ft, <200 from ESA, New Municipal >100,000 sf	Vegetated Swales, Media Filters, Inlet Filters, Signage	Washington Channel		Final Inspection 12/21/2011	BMPs Implemented	No	None	J. Campos
11	327	385		El Cajon	Boulevard	4873230400&1700	Medium	SUSMP	New show room addition	Parking lot > 5000 sq ft	trash enclosure, detention basins, inlet filters	County Ditch						
12	442	444		El Cajon	Boulevard	4875201300	Low	SUSMP	Motorcycle sales and service	Auto sales and service	Pervious swale, Media filter vaults, Signage, covered trash enclosure	County Ditch						
13	613	621		El Cajon	Boulevard	4875311700 & 1800	Medium	SUSMP	Commercial, Motorcycle Dealership, Old APN: 4895310600, 1700, 1800	>5,000 sq ft new parking	Inlet Filter	County Ditch						
14	670			El Cajon	Boulevard	4874801500	Low	SUSMP	New Car Dealership	>15 Parking Spaces	Underground detention, Hydrodynamic Separator, Signage	County Ditch						
15	1380			El Cajon	Boulevard	4877700700	Low	SUSMP	Commercial Facility	>100,000 sq. ft commercial dev't, Parking > 5,000 sq ft	Underground detention system	County Ditch						
16	-			El Jardin	Court	-	Medium	SUSMP	Cul-de-sac	New Street >5000 sf	2 Filter inserts	County Ditch						
17	298			Fletcher	Parkway	4830714800	Medium	SUSMP	Commercial Facility	>100,000 sq. ft commercial dev't, Parking lot > 5000 sq ft	Inlet filters, 2 CDS Units, filtration strip next to Garden Center	Forrester Creek						
18	605			Fletcher	Parkway	4822705700	High	SUSMP	New Commercial, Old APN: 4822705200	New Commercial	Flogard catch basin filter inserts	Forrester Creek		9/22/11	Filters not installed	Yes	Written Notice	C. Bonner
19	475	487		Foundation	Lane	4930401800, 2500-2900	Medium	SUSMP	New 4 unit Subdivision (Previously 801 Avocado Ave.)	New street for 4 unit subdiv., <200' from open channel	Riprap channel, vegetated swale, inlet filter	County Ditch		6/28/12	Swale vegetation cleared, rock needed; not able to inspect filter	Yes	None	C. Bonner
20	2000			Gillespie	Way	3872011200	Medium	SUSMP	New Industrial Complex	>5,000 sq ft development	Detention area in parking, grassy swale, signage, filter inserts	Forrester Creek						
21	1935	1941		Granite Hills	Drive	5112404000 - 5600	Low	SUSMP	New Subdivision, Old APN: 5112044100-5600	Subdivision>10 Units	Detention basin, vegetated channel	Forrester Creek						
22				Grossmont College	Drive	3860710900, 3860720400 & 0900, 4810103500	Low	SUSMP	College Parking Lot	Parking lot > 5000 sq ft	Hydrodynamic separation system, detention area	Fanita Channel						
23	2062	2096		Ingamac Way	Avenue	5082400800	Medium	SUSMP	New Subdivision (Previously 2010 E. Madison Ave.)	Hillside Development	Extended detention basin, grassy swales, inlet filter	Forrester Creek						
24	912	930		Jamacha	Road	5144504300	Medium	SUSMP	New Multi Family Homes	>5,000 sq ft Development	Infiltration system, vegetated swale, storm drain inlet filters	Washington Channel						
25	333		North	Johnson	Avenue	4871225400	High	SUSMP	New Commercial	>5,000 sq ft Development, contiguous to channel	Inlet filters, roof drains to landscaping	County Ditch	Site size constraints, Constructed prior to R9-2007-0001 Permit	9/23/11	Roof drains diverted to rock/landscaped area	No	None	C. Bonner
26	440	500	North	Johnson	Avenue	4871214300, 4822503200	High	SUSMP	Commercial - Truck Sales & Repair	Parking lot > 5000 sq ft, <200 from ESA, New Commercial >100,000 sf	Bioretention Basins, Inlet Filters, Covered Trash Enclosure, Signage	County Ditch		Final Inspection 5/17/2012	BMPs Implemented	No	None	C. Bonner
27	605		West	Lexington	Avenue	4873230800	Low	SUSMP	Commercial - Automotive Repair	>5,000 sq ft Development	gravel filter, rock energy dissipater, bio-detention basin	County Ditch						
28	1053			Loma Portal	Drive	4824430300	Medium	SUSMP	New Single Family Residence	Hillside Development	Vegetated swale, filtration/detention system, inlet filter.	Forrester Creek						
29	1470		East	Madison	Avenue	5110143400	Low	SUSMP	Municipal Fire Station	>5,000 sq ft new parking	Trash enclosure, pervious concrete swale	Forrester Creek						
30	1628	1646	East	Madison	Avenue	5110902600, 2700 & 5111010800	Medium	SUSMP	New Church, Old APN: 5110901600-2400	Parking lot > 5000 sq ft	Vegetated detention basin, storm drain inlet filters	Forrester Creek						
31	2119		East	Madison	Avenue	5122301300	Low	SUSMP	New Commercial	>5,000 sq ft new parking	Biofilters, Detention Basin	Forrester Creek						
32	245		East	Main	Street	4882110400	High	SUSMP	New Restaurant	New restaurant	Roof filters	Washington Channel	Site size constraints	9/23/11	Out of Business, cannot access	Yes	None	C. Bonner
33	343		East	Main	Street	4882312600	High	SUSMP	New Commercial, Alley No. 25	< 200 ft from channel	Grassy swales, filter inserts	Washington Channel		9/27/11	Parking lot filter needs cleaning	Yes	None	C. Bonner
34	1273	1275	East	Main	Street	4893900500	Low	SUSMP	Commercial	>15 Parking Spaces	Vegetated Swale, Porous Pavement, Trash Enclosure	Forrester Creek						
35	1341		East	Main	Street	4891806200	Medium	SUSMP	General Commercial, Manufactured home sales	>15 Parking spaces	Vegetated swales, Gravel infiltration areas, Inlet filter inserts, Pervious area in Trash Enclosure	Forrester Creek		6/28/12	Site vacant, no BMP issues	No	None	C. Bonner
36	1401	1409	East	Main	Street	5111711100 - 1600	High	SUSMP	Parking Lot, Channel Cover	>5,000 sq ft new parking	Hydrodynamic separation system, inlet filters, underground detention box	Forrester Creek		9/23/11	BMPs maintained	No	None	C. Bonner
37	1539		East	Main	Street	5073102000	Medium	SUSMP	Self-storage facility	Commercial > 1 Acre	Underground detention, Vegetated swale, Inlet filters, Trash Enclosure, Signage	Forrester Creek						
38	1700		East	Main	Street	5071201400	High	SUSMP	New Restaurant	New restaurant	Grass swales, Inlet filter, infiltration basin	Forrester Creek		9/23/11	BMPs maintained	No	None	C. Bonner
39	1717		East	Main	Street	5072110200	High	SUSMP	Addition to equipment rental business	Commercial - equipment rental	Inlet filter, covered trash enclosure.	Forrester Creek	Site size constraints	9/23/11	Sediment laden filters, booms needs replacing	Yes	None	C. Bonner
40	198		West	Main	Street	4871924700, 5100, & 5400	Medium	SUSMP	Commercial Center	New parking lot > 5000 sq ft	vegetated swles, hydrodynoamic separator, trench drain filters, filters and dry wells at trash enclosure, downspout and inlet filters	Washington Ch. / County Ditch						
41	1301		North	Marshall	Avenue		Low	SUSMP	Parking Lot	Parking >15 spaces	Gravel infiltration basin	Forrester Creek						
42	2694			Navajo	Road	4813221500	Medium	SUSMP	2 story office bldg.	>5,000 sq ft new parking	Inlet Filter	Fletcher Parkway Channel	Site size constraints	6/28/12	Filter needs cleaning	Yea	None	C. Bonner
43	2732			Navajo	Road	4813211700	Medium	SUSMP	New Commercial	> 5000 sq ft	Flogard catch basin filter insert	Fletcher Parkway Channel	Site size constraints					
44	2766			Navajo	Road	4810103900, 4810104400-46, 4810513200-3300, 4810820100, 4810820800	Medium	SUSMP	Expansion of Parking and Playground	>5,000 sq ft new parking	Hydrodynamic separation system, underground detention box	Fletcher Parkway Channel						
45	189			Roanoke	Road	4881131800	Medium	SUSMP	School	>15 Parking spaces	Grassy swales, storm drain inlet filters, and source control BMPs (covered TE & fuel areas)	Washington Channel						
46	-			Sandra	Lane	-	Medium	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek						

Priority Project Post-Contruction Treatment Control BMP Inventory

# (All)	Street Number	Thru	Direction	Street Name	Street Surname	Assessor's Parcel Number	Site Treatment BMP Priority	Development Priority	Site Type	Priority Trigger	All Post-Construction BMPs Applied	Receiving Water	BMP Infeasibility	11-12 Treatment BMP Maintenance Inspections				
														Date	Result	Follow-up Required	Action Taken	Inspector
47	608			Sandra	Lane	5122600100	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek						
48	613			Sandra	Lane	5122600200	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek						
49	622			Sandra	Lane	5122600300	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek						
50	635			Sandra	Lane	5122600500	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek						
51	335	355	North	Second	Street	4891807800	Medium	SUSMP	New Restaurant	New restaurant	Grassy swale, trash enclosure, and outlet filter	Forrester Creek		6/28/12	Vegetation overgrown, swale operates during higher flows, ponding in parking lot at lower flows; not able to inspect filter	Yes	None	C. Bonner
52	1062		North	Second	Street	4842122500	Low	SUSMP	RV repair	Parking lot > 5000 sq ft	Grass Filter Strip	Broadway Channel						
53	1190		North	Second	Street	4842021800	Medium	SUSMP	Commercial - Restaurant	new restaurant	Grass filter strip	Broadway Channel						
54	901	921		Stoneys	Lane	4842814400 - 5900	Medium	High	New Subdivision w/ private street (15 units), Old APN: 4842822500	SFR >10 Units, >5000sf new road	2 Inlet Filters	Broadway Channel	Constructed prior to R9-2001-0001 Permit					
55	938		East	Washington	Avenue	4931023000	Low	SUSMP	New Commercial	>5,000 sq ft new parking	Pervious swale, TE	Washington Channel						
56	1225	1285	East	Washington	Avenue	4931201600, 1800, 7800-8000	Low	SUSMP	Residential	> 10 housing units	Biofilters for each new housing unit (perimeter)	Washington Channel						
57	1435		East	Washington	Avenue	5140215900	High	SUSMP	New Subdivision	SFR >10 Units	Vegetated swale, two extended detention basin, storm drain inlet filters, signage	Washington Channel		9/23/11	BMPs maintained	No	None	C. Bonner
58	1501		East	Washington	Avenue	5112807200	High	SUSMP	New Restaurant	New restaurant	Detention basin, signage, filter inserts	Washington Channel		9/26/11	Debris in filter near driveway	Yes	None	C. Bonner
59	1326	1350		Wendell Cutting	Court	4843500100 - 1100	Medium	SUSMP	New Subdivision w/ private street	10 Single-family residential units	Grassy Swales, underground detention, curb-inlet filter on Broadway	Broadway Channel						
60	403	431		Wisconsin	Lane	4871740100-0800	High	SUSMP	New Subdivision	>5,000 sf Impervious surface (Private Street)	Sand media filter, underground detention basin, inlet filter	Washington Channel		9/27/11	Debris in filter, gravel needs to be replaced	Yes	None	C. Bonner

Priority Project Post-Contruction Treatment Control BMP Inventory

# (All)	Street Number	Thru	Direction	Street Name	Street Surname	Assessor's Parcel Number	Site Treatment BMP Priority	Development Priority	Site Type	Priority Trigger	All Post-Construction BMPs Applied	Receiving Water	BMP Infeasibility	10-11 Treatment BMP Maintenance Inspections		
														Date	Result	Follow-up Required
28	1628	1646	East	Madison	Avenue	5110902600, 2700 & 5111010800	Medium	SUSMP	New Church, Old APN: 5110901600-2400	Parking lot > 5000 sq ft	Vegetated detention basin, storm drain inlet filters	Forrester Creek	-	6/30/11	BMPs maintained properly	No
29	2119		East	Madison	Avenue	5122301300	Low	SUSMP	New Commercial	>5,000 sq ft new parking	Biofilters, Detention Basin	Forrester Creek	-	-	-	-
30	245		East	Main	Street	4882110400	High	SUSMP	New Restaurant	New restaurant	Roof filters	Washington Channel	Site size constraints	6/27/11	Vacant business, could not inspect	Yes
31	343		East	Main	Street	4882312600	High	SUSMP	New Commercial, Alley No. 25	< 200 ft from channel	Grassy swales, filter inserts	Washington Channel	-	6/29/11	P. lot CB heavily sediment-laden. "No Dumping" signage needs replacement.	Yes
32	1273	1275	East	Main	Street	4893900500	Low	SUSMP	Commercial	>15 Parking Spaces	Vegetated Swale, Porous Pavement, Trash Enclosure	Forrester Creek	-	-	-	-
33	1341		East	Main	Street	4891806200	Medium	SUSMP	General Commercial, Manufactured home sales	>15 Parking spaces	Vegetated swales, Gravel infiltration areas, Inlet filter inserts, Pervious area in Trash Enclosure	Forrester Creek	-	-	-	-
34	1401	1409	East	Main	Street	5111711100 - 1600	High	SUSMP	Parking Lot, Channel Cover	>5,000 sq ft new parking	Hydrodynamic separation system, inlet filters, underground detention box	Forrester Creek	-	6/30/11	1 filter needs cleaning. All other BMPs properly maintained	No
35	1539		East	Main	Street	5073102000	Medium	SUSMP	Self-storage facility	Commercial > 1 Acre	Underground detention, Vegetated swale, Inlet filters, Trash Enclosure, Signage	Forrester Creek	-	-	-	-
36	1700		East	Main	Street	5071201400	High	SUSMP	New Restaurant	New restaurant	Grass swales, Inlet filter, infiltration basin	Forrester Creek	-	6/23/11	BMPs maintained properly	No
37	1717		East	Main	Street	5072110200	High	SUSMP	Addition to equipment rental business	Commercial - equipment rental	Inlet filter, covered trash enclosure.	Forrester Creek	Site size constraints	6/29/11	Filter sediment laden. Filtration booms need replacement	Yes
38	198		West	Main	Street	4871924700, 5100, & 5400	Medium	SUSMP	Commercial Center	New parking lot > 5000 sq ft	Vegetated swles, hydrodynoamic separator, trench drain filters, filters and dry wells at trash enclosure, downspout and inlet filters	Washington Ch. / County Ditch	-	-	-	-
39	1301		North	Marshall	Avenue		Low	SUSMP	Parking Lot	Parking >15 spaces	Gravel infiltration basin	Forrester Creek	-	-	-	-
40	2694			Navajo	Road	4813221500	Medium	SUSMP	2 story office bldg.	>5,000 sq ft new parking	Inlet Filter	Fletcher Parkway Channel	Site size constraints	-	-	-
41	2732			Navajo	Road	4813211700	Medium	SUSMP	New Commercial	> 5000 sq ft	Flogard catch basin filter insert	Fletcher Parkway Channel	Site size constraints	-	-	-
42	2766			Navajo	Road	4810103900, 4810104400-46, 4810513200-3300, 4810820100, 4810820800	Medium	SUSMP	Expansion of Parking and Playground	>5,000 sq ft new parking	Hydrodynamic separation system, underground detention box	Fletcher Parkway Channel	-	-	-	-
43	189			Roanoke	Road	4881131800	Medium	SUSMP	School	>15 Parking spaces	Grassy swales, storm drain inlet filters, and source control BMPs (covered TE & fuel areas)	Washington Channel	-	-	-	-
44	-			Sandra	Lane	-	Medium	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek	-	-	-	-
45	608			Sandra	Lane	5122600100	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek	-	-	-	-
46	613			Sandra	Lane	5122600200	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek	-	-	-	-
47	622			Sandra	Lane	5122600300	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek	-	-	-	-
48	635			Sandra	Lane	5122600500	Low	SUSMP	New Subdivision, street (608-688 Sandra Ln) frmly 2121-2123 E. Madison)	New Roadway, Subdivision	Grass-lined channel, filter inserts, Energy-Dissipater, Detention Basin	Forrester Creek	-	-	-	-
49	335	355	North	Second	Street	4891807800	Medium	SUSMP	New Restaurant	New restaurant	Grassy swale, trash enclosure, and outlet filter	Forrester Creek	-	6/23/11	BMPs need to be maintained	Yes
50	1062		North	Second	Street	4842122500	Low	SUSMP	RV repair	Parking lot > 5000 sq ft	Grass Filter Strip	Broadway Channel	-	-	-	-
51	1190		North	Second	Street	4842021800	Medium	SUSMP	Commercial - Restaurant	new restaurant	Grass filter strip	Broadway Channel	-	6/22/11	Grass buffer strip is dead and needs replacement	Yes
52	901	921		Stoneys	Lane	4842814400 - 5900	Medium	High	New Subdivision w/ private street (15 units), Old APN: 4842822500	SFR >10 Units, >5000sf new road	2 Inlet Filters	Broadway Channel	Constructed prior to R9-2001-0001 Permit	-	-	-
53	938		East	Washington	Avenue	4931023000	Low	SUSMP	New Commercial	>5,000 sq ft new parking	Pervious swale, TE	Washington Channel	-	-	-	-
54	1225	1285	East	Washington	Avenue	4931201600, 1800, 7800-8000	Low	SUSMP	Residential	> 10 housing units	Biofilters for each new housing unit (perimeter)	Washington Channel	-	-	-	-

Priority Project Post-Contruction Treatment Control BMP Inventory

# (All)	Street Number	Thru	Direction	Street Name	Street Surname	Assessor's Parcel Number	Site Treatment BMP Priority	Development Priority	Site Type	Priority Trigger	All Post-Construction BMPs Applied	Receiving Water	BMP Infeasibility	10-11 Treatment BMP Maintenance Inspections		
														Date	Result	Follow-up Required
55	1435		East	Washington	Avenue	5140215900	High	SUSMP	New Subdivision	SFR >10 Units	Vegetated swale, two extended detention basin, storm drain inlet filters, signage	Washington Channel	-	6/27/11	Some scouring and pet waste in vegetated swale.	No
56	1501		East	Washington	Avenue	5112807200	High	SUSMP	New Restaurant	New restaurant	Detention basin, signage, filter inserts	Washington Channel	-	6/29/11	CB below drive-thru has standing water and mosquito larvae. All other BMPs maintained properly.	No
57	1326	1350		Wendell Cutting	Court	4843500100 - 1100	Medium	SUSMP	New Subdivision w/ private street	10 Single-family residential units	Grassy Swales, underground detention, curb-inlet filter on Broadway	Broadway Channel	-	-	-	-
58	403	431		Wisconsin	Lane	4871740100-0800	High	SUSMP	New Subdivision	>5,000 sf Impervious surface (Private Street)	Sand media filter, underground detention basin, inlet filter	Washington Channel	-	6/27/11	Minor debris in filters but otherwise BMPs maintained properly.	No

CITY OF EL CAJON
TREATMENT CONTROL BMP INSPECTION

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Inspector Name:_____ Date:_____ Time:_____

Inspection Type: ☐ Routine ☐ Follow-Up ☐ Complaint APN: «Assessors_Parcel_Number»

A. PROJECT INFORMATION

Project Name: «Project_Name» Project Type: ☐ Private ☐ Public

Street Address: «Street_Number» «Direction» «Street_Name» «Street_Surname» ZIP:_____

Project Trigger: «Priority_Trigger» Responsible Party: «Responsible_Party»

Assigned Project Priority: **«Site_Treatment_BMP_Priority»** Receiving Waterbody: «Receiving_Water»

B. TREATMENT CONTROL BMP ASSESSMENT

Treatment Control BMP	Number Implemented	ROW or Site Only?	% Properly Maintained	Comments
Indicate the number of each Treatment Control BMP committed to in the project's SUSMP report in the "Number Proposed" box. Adequacy of the BMP should be discussed in the "Comments" column.				
TC-10 (Infiltration Trench)				
TC-11 (Infiltration Basin)				
TC-12 (Retention/Irrigation)				
TC-20 (Wet Ponds)				
TC-21 (Constructed Wetlands)				
TC-22 (Extended Detention Basin)				
TC-30 (Vegetated Swale)				
TC-31 (Vegetated Buffer Strip)				
TC-32 (Bioretention)				
TC-40 (Media Filter)				
TC-50 (Water Quality Inlet)				
MP-20 (Wetland)				
MP-40 (Media Filter)				
MP-50 (Wet Vault)				
MP-51 (Vortex Separator)				
MP-52 (Drain Insert)				
Other:				

C. VISUAL OBSERVATIONS:

_____

_____

_____

D. FOLLOW-UP AND ENFORCEMENT ACTIONS

Describe corrective actions needed:_____

_____

_____

Enforcement Action Taken: ☐ None ☐ Written Notice ☐ Administrative Action ☐ Other_____

Follow Up Required? ☐ Yes ☐ No

Xxx. XX, 2011

«Owner_Name__Company_Title» «Owner_Last_Name»
«Owner_Address_Street»
«Owner_Address_City», «Owner_Address_StateZip»

RE: Treatment Control BMP Maintenance Verification Form

Dear Property Owner(s):

According to City records, you are responsible for at least the **«Treatment_Control_BMPs_Applied»**, which «Letter_Language», located at «Street_Number» «Direction» «Street_Name» «Street_Surname». Annual verification of effective operation and maintenance for all Treatment Control BMPs located at «Street_Number» «Direction» «Street_Name» «Street_Surname» was a condition of the permit to develop the site. Treatment Control BMPs are required to be maintained by the appropriate party as stated in the site's Storm Water Mitigation Plan and/or Operation and Maintenance Agreement. You are required by City of El Cajon Municipal Code 16.60.400 to provide proof that the Treatment Control BMP is in place and functioning properly. You are also required to verify the maintenance of the Treatment Control BMPs onsite by mailing the completed form back to the City no later than **July 1, 2011**. Failure to do so may result in a citation, which could carry monetary penalties. Please update any incorrect information shown hereon.

The City is required to inspect certain sites with known Treatment Control BMPs annually as part of the maintenance verification process to comply with California Regional Water Quality Control Board, San Diego Region, Order No. R9-2007-0001. The inspections are scheduled to take place before July 1, 2010.

Please visit the City's website at http://www.ci.el-cajon.ca.us/dept/works/stormwater.html or contact the Public Works Department at 619-441-1653 for more information regarding the City's Storm Water Protection Program.

Please complete the table on the following page regarding the maintenance of all Treatment Control BMPs that you are responsible for at your site. Please be sure to list any BMPs present on your property that were not mentioned above to ensure that our records are complete. Once the form has been completed, a signed copy of the page must be submitted to the City of El Cajon Public Works Storm Water Department. An envelope has been included for your convenience. Thank you for your cooperation.

Sincerely,

_____

Jaime Campos
Storm Water Program Manager
Associate Civil Engineer
Jcampos@cityofelcajon.us

RE: Treatment Control Best Management Practices
Location: «Street_Number» «Direction» «Street_Name» «Street_Surname»
Owner: «Owner_Name__Company_Title» «Owner_Last_Name»
«Owner_Address_Street»
«Owner_Address_City», «Owner_Address_StateZip»

BMP Type	Onsite (Y/N)	Number Onsite	Date(s) Maintained
TC-10 Infiltration Trench			
TC-11 Infiltration Basin			
TC-12 Retention/Irrigation			
TC-20 Wet Ponds			
TC-21 Constructed Wetlands			
TC-22 Extended Detention Basin			
TC-30 Vegetated Swale			
TC-31 Vegetated Buffer Strip			
TC-32 Bioretention			
TC-40 Media Filter			
TC-50 Water Quality Inlet			
TC-60 Multiple Systems			
MP-20 Wetland			
MP-40 Media Filter			
MP-50 Wet Vault			
MP-51 Vortex Separator			
MP-52 Drain Inserts			
Other: _____			

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Responsible Party — Date

«Responsible_Party»
Printed Name of Responsible Party — Title

«Responsible_Party_Telephone» — «Responsible_Party_Fax»
Daytime Phone — Fax

«Responsible_Party_Email»
Email

Community Development Dept.
Planning Division
200 Civic Center Way
El Cajon CA 92020

ENVIRONMENTAL INFORMATION FORM

Part I - Initial Study
Negative Declaration $4,650.00 + $250.00 for each report
Mitigated Negative Declaration $4,650.00 + $250.00 for each report

The purpose of this form is to inform the City of the basic components of the proposed project so that the City may review the project pursuant to City Policies, Ordinances, and Guidelines; the California Environmental Quality Act; and the City's Rules and Procedures to Implement CEQA. It is important that the information requested in this application be provided in full.

The Initial Study is a requirement of the California Environmental Quality Act (CEQA) Guidelines and is used to determine whether further review of environmental factors of the project will be necessary, and, if so, whether a Negative Declaration (ND), Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR) will be the most appropriate document. Accuracy and completeness in the preparation of this study is essential. Incomplete materials will only result in a delay for the applicant, as the study will be rejected until properly completed.

INSTRUCTIONS: Please complete the following statement by filling in the designated blank spaces. Responses should be printed or typed so as to be legible. All appropriate spaces must be filled in and the required maps, photos, and plans submitted with this form. Additional information may be attached. The applicant should provide as much information as possible in this submittal to allow reviewers to have a thorough understanding of the project. Please submit this form and all support documents with the appropriate filing fee to the Community Development Department to begin the environmental review process. All maps/site plans shall be folded to 8½" by 11."

A. General Information

1. Name, address, telephone number, fax number and email of person to be contacted concerning this project:

   - Name
   - Address
   - Phone
   - Fax
   - Email

2. Name, address of legal property owner as shown on tax statement:

   - Name
   - Address

3. Address of project and/or description of location:

4. Assessor's Parcel Number(s) of project site:

5. List each project application which accompanies this form:

6. Have any preliminary documents been prepared for this projects (e.g. soil report or traffic impact analysis)? If yes, please identify name and date prepared:

7. List and describe any other related permits and other public approvals required for this project, including those required by city, regional, state or federal agencies (i.e., Corps of Engineers, CalTrans, Air Pollution Control District or LAFCO):

8. Existing zoning of project site:

9. Existing General Plan Designation:

10. Fully describe the nature and purpose of the proposed project including the ultimate use of the property:

B. Project Description

1. Site size in acres or square footage:

2. Highest and lowest elevations on site (mean sea level):

3. Number of floors of proposed construction:

4. Number of proposed off-street parking spaces provided:

5. Anticipated project schedule (timeline):

6. Is this project dependent on an existing or future project? If yes, please explain:

7. Anticipated future phases:

8. If residential, include the number of units, unit sizes, range of sale prices or rents, and gross density (units) acre:

9. If commercial and/or office, indicate the types, square footage of each type (i.e., office, sales area, restaurant), whether neighborhood, city or regionally oriented, and total square footage of building area:

10. If industrial, indicate type, estimated employment per shift, loading facilities, square footage of office area and total square footage of building area:

11. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, and total square footage of building:

C. Existing Conditions

1. Number and species of existing trees 6 inches or larger in diameter:

2. Number, size, and species of trees to be removed:

3. Describe any power lines, water, sewer or storm drain mains, pipelines or other transmission lines which are located on or adjacent to the property:

4. Name of creeks and natural or man-made drainage channels through or adjacent to the property:

5. Primary vehicular access to property comes from which street(s):

6. Are any easements known to traverse the site? If yes, explain the type and purpose:

7. Provide details on existing uses of the site. Are there existing structures on the site? If yes, describe use and whether they will be demolished or relocated; if residential, give the number of current occupants:

8. Indicate service provider for:

    a. Water

    b. Sewer

    c. Fire protection

    d. Police protection

9. Is any portion of the site within the 100-year/500-year floodplain?

10. Is the site within the Gillespie Field Airport Land Use plan?

11. If yes, do any airport restrictions affect the proposal? *(May have to consult with Gillespie Airport personnel)*

12. Is the site located within two miles of Gillespie Field general aviation airport?

13. Is the site located within close proximity (200 feet) of a freeway?

14. Is the site listed on California's Environmental Protection Agency Hazardous Site List?

D. Environmental Analysis

Are the following items applicable to the project or its effects? Discuss all items checked "yes" or "maybe" on next page or attach additional sheets as necessary.

YES	MAYBE	NO	
☐	☐	☐	a. Change in existing features of any streams, lakes or hills, or substantial alteration of ground contours.
☐	☐	☐	b. Change in scenic views or vistas from existing residential areas or public lands or roads.
☐	☐	☐	c. Change in character of general area of project.
☐	☐	☐	d. Produce or involve large amounts of solid waste or litter.
☐	☐	☐	e. Disrupt or adversely affect an historic, cultural or archaeological site.
☐	☐	☐	f. Change in dust, ash, smoke, fumes or odors in vicinity.
☐	☐	☐	g. Change in stream, surface water, wetlands or ground water quality or quantity, or alteration of existing drainage patterns.
☐	☐	☐	h. Increase in impervious surfaces and associated increase runoff.
☐	☐	☐	i. Alteration in existing drainage patterns, runoff flow rates or volumes.
☐	☐	☐	j. Increased erosion.
☐	☐	☐	k. Use or disposal of heavy metals, pathogens,

petroleum derivatives, synthetic organics, sediment, nutrients, or oxygen demanding substances.

☐ ☐ ☐ l. Potential to impact already sensitive conditions or environmentally sensitive areas.

☐ ☐ ☐ m. Substantial change in existing noise or vibration levels in the vicinity.

☐ ☐ ☐ n. Site on filled land or on slope of 10 percent or more.

☐ ☐ ☐ o. Use or disposal of potentially hazardous material such as toxic substances, flammables or explosives.

☐ ☐ ☐ p. Substantial change in demand for municipal services (police, fire, water, sewer, etc.).

☐ ☐ ☐ q. Substantial increase in fuel or energy consumption (electricity, oil, natural gas, etc.).

☐ ☐ ☐ r. Relationship to a larger project or series of projects.

☐ ☐ ☐ s. Potential impact to aquatic, wetland or riparian habitiat.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date:_____ Signature:_____

Section 711.4 of the Fish and Game Code authorizes the County Clerk to collect a filing fee of up to $2,768.25 for the review of environmental documents by the State Department of Fish and Game. Should the State Department of Fish and Game decide to review the environmental documents associated with this project, the project applicant will become liable for paying this fee.

The applicant certifies by his/her signature below that he/she has been informed of this information and is aware that a fee may be required by the County Clerk with the filing of the environmental documents associated with his/her project.

Failure to pay the required fee in a timely manner may result in the delay in the start of the project.

Date:_____ Applicant's Signature:_____

Environmental Information Form Part II
Initial Study

1. Project Title: _____

2. Lead Agency Name and Address:

_____
_____
_____

3. Contact Person and Phone Number: _____

4. Project Location: _____

5. Project Sponsor's Name and Address:

_____
_____
_____

6. General Plan Designation: _____ 7. Zoning: _____

8. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheet(s) if necessary.)

_____
_____
_____

9. Surrounding Land Uses and Setting: (Briefly describe the project's surroundings.)

_____
_____
_____

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

_____
_____
_____

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Printed Name	For

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

a) Earlier Analyses Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

a) the significance criteria or threshold, if any, used to evaluate each question; and

b) the mitigation measure identified, if any, to reduce the impact to less than significance.

SAMPLE QUESTION

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☐
d)	Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☐
II.	AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☐
d)	Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☐	☐
e)	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	☐	☐	☐	☐
III.	AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☐
IV.	BIOLOGICAL RESOURCES. Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☐
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☐
V.	CULTURAL RESOURCES. Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☐
VI.	GEOLOGY AND SOILS. Would the project:				
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:	☐	☐	☐	☐
i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☐
ii)	Strong seismic ground shaking?	☐	☐	☐	☐
iii)	Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iv)	Landslides?	☐	☐	☐	☐
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☐
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☐
d)	Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☐
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☐
VII.	GREENHOUSE GAS EMISSIONS. Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☐
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☐	☐
VIII.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☐
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☐
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☐
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	HYDROLOGY AND WATER QUALITY. Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☐
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	☐	☐	☐	☐
e)	Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☐
h)	Place within a 100-year flood hazard area, structures that would impede or redirect flood flows?	☐	☐	☐	☐
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☐
j)	Expose people or structures to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☐
X.	LAND USE AND PLANNING. Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☐
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☐
XI.	MINERAL RESOURCES. Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☐
XII.	NOISE. Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☐
b)	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☐	☐
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☐
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☐
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.	POPULATION AND HOUSING. Would the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	☐	☐	☐	☐
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐
XIV.	PUBLIC SERVICES. Would the project:				
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☐
	Fire protection?	☐	☐	☐	☐
	Police protection?	☐	☐	☐	☐
	Schools?	☐	☐	☐	☐
	Parks?	☐	☐	☐	☐
	Other public facilities?	☐	☐	☐	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which have an adverse physical effect on the environment?	☐	☐	☐	☐
XVI. TRANSPORTATION / TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☐
e)	Result in inadequate emergency access?	☐	☐	☐	☐
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☐
XVII.	UTILITIES AND SERVICE SYSTEMS. Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☐
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? In making this determination, the Authority shall consider whether the project is subject to the water supply assessment requirements of Water Code Section 10910, et. seq. (SB 610), and the requirements of Government Code Section 664737 (SB 221).	☐	☐	☐	☐
e)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☐
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☐
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☐
XVIII.	MANDATORY FINDINGS OF SIGNIFICANCE				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☐

Issues:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b)	Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	☐	☐	☐	☐
c)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)	☐	☐	☐	☐
d)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☐

Project Name: _____

CITY OF EL CAJON SUSMP CHECKLIST

City of El Cajon
STORMWATER
Protection Program

MS4: ☐ Forrester Creek ☐ County Ditch Channel
☐ Broadway Channel ☐ Third Street Lateral
☐ Washington Channel ☐ Fletcher Parkway Lateral

PROJECT INFORMATION

Project Name: _____ Public Private

Project Address: _____

Project APN: _____

Project Size: (acres) _____ Notice of Intent: Yes No

Completed a SWPPP: Yes No

SUSMP CATEGORY

Check all SUSMP categories that apply to the project

☐ Residential Development ≥ 100 units
☐ Residential Development ≥ 10 units
☐ Commercial Development ≥ 1 acre
☐ Automotive Repair
☐ Restaurants
☐ Hillside Development ≥ 5,000 sq ft
☐ Parking Lots ≥ 5,000 sq ft or ≥ 15 spaces
☐ Streets, roads, highways, and freeways with ≥ 5,000 sq ft of new paved area
☐ Significant Redevelopment ≥ 5,000 sq ft of paved area on an already developed site
☐ Retail Gas Outlet

IDENTIFY POLLUTANTS FROM THE PROJECT AREA

Check all that apply to the project

☐ Sediment (dirt; silt; clay)
☐ Nutrients (fertilizers, sewages)
☐ Metals (dirt, silt, clay, paints, liquid/solid chemicals)
☐ Organics (food, vegetation)
☐ Trash and Debris
☐ Oxygen Demand Substances (organic matter)
☐ Petroleum (oil, grease)
☐ Bacteria and Viruses (fecal coliform, pathogens)
☐ Pesticides/Herbicides
☐ Toxics (acids, corrosives, chemicals)

Project Name: _____

IDENTIFY RECEIVING WATERS AND THE POLLUTANT SOURCES

Does the project discharge directly to: ☐ San Diego River? or ☐ Forester Creek?

What are the primary sources contributing to SD River and Forester Creek impairments of:
TDS?_____ _____ _____

Fecal Coliform? _____ _____

pH?_____ _____

(SD River only) Oxygen Depleting Constituents? _____ _____

(SD River only) Chlorpyrifos and Diazinon? _____

(SD River only) Total and Dissolved Copper? _____

IDENTIFY CONDITIONS OF CONCERN

☐ Was a drainage study report prepared? Yes No
☐ Was a Storm Water Mitigation Plan prepared? Yes No
☐ Were the reports prepared by a registered Civil Engineer? Yes No Who?_____
☐ Are there field photographs? Yes No (Attached?)
☐ Are the following calculated according to actual % imperviousness for the 6-hour, 10-year and 100-year frequency storms?

- ☐ Peak flow rate (pre and post-construction)
- ☐ Flow velocity
- ☐ Runoff volume
- ☐ Time of concentration (minimum of 5 minutes as defined in the SD Hydrology Manual to calculate Intensity values)
- ☐ Retention volume

☐ Are conditions of concern adequately identified using:

Site Design?	Yes	No
Source Control?	Yes	No
Treatment Control?	Yes	No

ESTABLISH STORM WATER LOW-IMPACT DEVELOPMENT (LID) BMPS

☐ ***Site Design BMPs***

SUSMP Projects **must** consider, incorporate, and implement where determined applicable and feasible by City storm water staff. (Check all that were considered, incorporated, or implemented):

- ☐ Maintain Pre-Development Rainfall Runoff Conditions
  - ☐ Minimize project's impervious footprint
  - ☐ Conserve natural areas
  - ☐ Construct low traffic areas (walkways, trails, patios, parking lots, alleys, etc) of permeable surfaces
  - ☐ Construct streets, sidewalks, and parking lot aisles to minimum widths
  - ☐ Maximize canopy interception by preserving existing trees and shrubs

Project Name: _____

- ☐ Preserve natural drainage systems
- ☐ Minimize Directly Connected Impervious Areas (DCIAs)
  - ☐ Drain rooftops into landscaping
  - ☐ Drain sidewalks, walkways, trails, and patios into landscaping
- ☐ Protect slopes and channels

Comments: _____

_____

☐ ***Source Control BMPs***

Does the project:

- ☐ Provide storm drain system stenciling and signage?
- ☐ Design outdoor material storage areas to reduce pollution introduction?
- ☐ Design trash storage areas to reduce pollution introduction (enclosed, covered, secured, and bermed)?
- ☐ Use efficient irrigations systems & landscape design (rain alert systems)?
- ☐ Incorporate requirements applicable to priority project categories such as:
  - ☐ Private Roads
  - ☐ Residential Driveways & Guest Parking
  - ☐ Dock Areas
  - ☐ Maintenance Bays
  - ☐ Vehicle Wash Areas
  - ☐ Outdoor Processing Areas
  - ☐ Equipment Wash Areas
  - ☐ Parking Areas
  - ☐ Roadways
  - ☐ Fueling Areas
  - ☐ Hillside Landscaping

☐ ***Treatment Control BMPs***

Check the treatment control(s) selected:

☐ Biofilters	☐ Detention Basin
☐ Infiltration basin/trench	☐ Filtration System
☐ Porous asphalt, concrete, other	☐ Hydrodynamic Separation System
☐ Filter Insert	☐ Sod-inlet Pre-treatment
☐ Grassy filter/swale	☐ Vegetated swale
☐ Proprietary Device	☐ Other: _____

☐ Do treatment controls effectively address primary pollutants of concern? Yes No

If No, describe corrective action: _____

_____

Verify the design of selected treatment controls:

☐ Was the control BMP designed for:	Volume	Flow
☐ Was the BMP design process described:	Yes	No
☐ Was the 85th percentile storm event used for design	Yes	No

If no, what design criteria was used: _____

Project Name: _____

☐ Was the BMP designed properly? If not, describe corrective actions: _____

_____

☐ Is the BMP(s) located near pollutant sources? Yes No
☐ Are there restrictions on use of infiltration BMPs? Yes No

Maintenance Requirements

☐ Was an Operations & Maintenance section attached? Yes No N/A
☐ Was a BMP Facilities Agreement signed by the property owner and filed with the Grant Deed? Yes No N/A
☐ Was a BMP Maintenance Agreement signed with the City to maintain post-construction BMPs? Yes No N/A
☐ Does this project require annual inspections and/or maintenance of BMPs by the City? Yes No N/A
☐ Was an access/easement agreement included? Yes No N/A
☐ Is there an HOA or other Common Interest planned for the project? Yes No N/A
☐ Were CC&Rs presented for review and acceptable? Yes No N/A
☐ Was a Storm Water Conveyance Maintenance Plan generated/received? Yes No N/A

Waiver of Structural Treatment BMP Requirements

☐ Was a waiver of infeasibility granted?
☐ Was the RWQCB notified?

Other Information

_____

_____

_____

Field Inspection

During BMP installation:
☐ Were the source control BMPs properly constructed in the field? ☐ Yes ☐ No
☐ Were the treatment control BMPs properly constructed in the field? ☐ Yes ☐ No

After project completion:
☐ Are all site design BMPs still in place? ☐ Yes ☐ No
☐ Are all source control BMPs still in place? ☐ Yes ☐ No
☐ Are treatment control BMPs still in place? ☐ Yes ☐ No
☐ Are all BMPs being maintained? ☐ Yes ☐ No

Appendix A.3

Storm Water Requirements for Construction Sites

The City's storm drain system is composed of the street, gutter, inlet, catch basin, ditches, streams, and concrete-lined channels.

1. Perimeter Controls (fiber roll; silt fence; gravel or sand bags) must be installed and kept in place throughout the project to prohibit the discharge of sediment and pollution from entering the storm drain system. If controls are moved to complete work, they must be replaced when work is completed or at end of day, whichever comes first.
2. Erosion Controls as required by an erosion and sediment control plan must be installed as designed.
3. Tracking of sediment and dirt must be cleaned up at the end of each working day.
4. Building Materials must be stored under cover at the end of each working day.
5. Spills must be reported to the site manager once they occur and cleaned up immediately. Spills that enter the City's storm drain system must be reported to the City Storm Water staff immediately.
6. Wash waters (including paint, dry wall mud, stucco, and other water-based materials) must be captured on site and contained, then disposed of in the appropriate place.
7. Port-o-lets must be secured and bermed.
8. Trash and debris shall be placed in appropriate containers during the workday with a final clean-up completed before leaving the site. If rain is predicted, wastes shall be covered.
9. Equipment shall be stored in a bermed area or with appropriate sized drip pans.
10. Equipment repair, servicing, or fueling must be completed undercover or within a bermed area for tasks completed within the workday. Spill kits must be within the bermed or repair areas.
11. Vehicle and equipment washing is prohibited.
12. The site will be secured at the end of each working day.
13. Report any destroyed controls to the site manager, immediately.

Under the City of El Cajon's Municipal Code §13.10.00, Storm Water Management and Discharge Control, it is illegal to discharge construction debris and materials, into the storm water conveyance system or any body of water.

Failure to prevent illegal discharges can result in fines of up to $10,000 a day per violation.

Under the law, contractors, the construction company, business owner, and property owner may receive a Citation for the same violation.

EROSION AND SEDIMENT CONTROL NOTES
FOR EROSION CONTROL PLANS
(HIGH AND MEDIUM PRIORITY PROJECTS)

Add the following notes (both pages) to the Storm Water Erosion Control site plan and implement as a condition to the Erosion Control Plan:

1. In case emergency work is required, contact _____ at _____.
   (name) (telephone number)

2. Erosion control measures shown on plans shall not be moved or modified without the approval of the Public Works inspector.

3. The contractor shall maintain all erosion control devices in working order to the satisfaction of the City Engineer throughout the construction phase of the project and until permanent ground cover and landscaping is established.

4. The contractor shall install additional erosion control measures as may be required by the City Engineer due to completed grading operations or unforeseen circumstances which may arise.

5. The contractor shall be responsible for and shall take necessary precautions to prevent public trespass onto areas where impounded waters create a hazardous condition.

6. Graded areas around the project perimeter must drain away from the face of slope at the conclusion of each working day.

7. All gravel bags shall have ¾ inch minimum aggregate (No sandbags and no burlap type bags allowed).

8. Existing streets shall be kept free of dirt and debris, and shall be maintained in good condition. Dust shall be controlled so that it is not a nuisance. The contractor shall be responsible for the repair of any street or property damaged, public or private, as a result of the work.

9. The Plan shall provide that no sand, silt, or debris shall be allowed to enter the storm drain system including public streets.

10. The owner and/or the owner's contractor shall implement the Plan and take remedial and preventive action immediately when pollutant discharge occurs and/or the City Engineer or the Building Division directs.

11. The above shall apply starting the 1st day of grading and/or construction and shall remain in effect until all grading and/or construction work has been completed and 70% of the disturbed land has been stabilized by approved vegetation, mulch, gravel, etc.

ALL EROSION AND SEDIMENT CONTROL SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE CITY OF EL CAJON'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP) AND SHALL INCLUDE THE FOLLOWING:

Dry Season (May 1 through September 30)

1. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads and slopes. Slopes less than 33.3% or 1:3 (vertical vs. horizontal) may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement.

2. Adequate perimeter protection BMPs must be installed and maintained.

3. Adequate sediment control BMPs must be installed and maintained.

4. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

5. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and prevent sediment discharges must be stored on the site.

6. An approved "weather triggered" response plan is mandated for implementation in the event that a predicted storm event has at least a 50% chance of rain. The proponent must have the capacity to deploy the standby BMPs within 48 hours of the predicted storm event.

7. All slopes must be equipped with erosion prevention BMPs as soon as slopes are completed for any portion of the site.

8. Cleared or graded areas left exposed at any given time are limited to the amount of acreage that the project proponent can adequately protect prior to a predicted storm event.

Wet Season (October 1 through April 30)

In addition to the Dry Season Requirements:

1. Perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms.

2. Adequate erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a BMP fails, it must be repaired, improved or replaced with an acceptable alternate as soon as it is safe to do so.

3. The amount of exposed soil allowed at one time shall not exceed standby erosion and sediment control BMP capacity.

4. An incomplete disturbed area that is not being actively graded must be fully protected from erosion if left for 10 days or more.

(Do not place on the Construction Plans; circle YES or NO)

Yes No 1. Does your project have 50 acres or more of disturbed soil?

Yes No 2. Will your project have at least one acre of disturbed soil <u>and</u> (1) be tributary to a water body 303(d) listed for sediment or (2) be located less than 200 feet from and ESA or directly discharging to an ESA?

Yes No 3. Will your project have at least one acre of disturbed soil <u>but NOT</u> (1) be tributary to a water body 303(d) listed for sediment <u>and NOT</u> (2) be located less than 200 feet from and ESA or directly discharging to an ESA?

Yes No 4. Does your project require a grading permit?

<u>General Construction Permit:</u>
If the answer to questions 1, 2, or 3 in Section 2 is "Yes", your project requires coverage under the General Construction Permit. A Notice of Intent (NOI) must be filed with the State Water Resources Control Board (SWRCB) and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared for your project.

Yes No Is this project subject to the General Construction Permit?

<u>Construction Activities Threat to Water Quality Prioritization:</u>
If the answer to question 1 or 2 is YES, your project is **HIGH** priority.

If the answers to questions 1 and 2 are NO, but the answer to either question 3 or question 4 is YES, your project is **MEDIUM** priority.

If all answers are NO, your project is **LOW** priority.

(Place this note on the Construction Plans and check the appropriate box)

This project is ☐ HIGH ☐ MEDIUM ☐ LOW priority threat to water quality.

Storm Water Notes for Erosion Control Plans (Low Priority Projects)

General Storm Water Notes

1. All operations will comply with the City's Jurisdictional Urban Runoff Management Plan (JURMP).

2. The owner and the owner's contractor are responsible for pollution prevention practices to prevent the discharge of sediment and pollutants to the public storm drain system.

3. Owner and the owner's contractor are responsible for the prevention of erosion caused by clearing of vegetation, grading, demolition or construction.

4. Sediment, pollution and erosion control measures will be implemented starting the first day of clearing, grading or soil disturbance, or construction. These controls will remain in effect until all relevant operations have been completed and disturbed soils have either: 1) established vegetation, or 2) other permanent erosion control at 70% completion.

Erosion And Sediment Control Notes

1. In case of emergency, contact: Name: _____, Phone: _____

2. The contractor will maintain all sediment and erosion control devices in good working order to the satisfaction of the city engineer throughout every phase of the project.

3. The contractor will install all erosion control measures additional to those specified by the approved Erosion Control Plan if required to do so by the city engineer.

4. The contractor and property owner will prevent public trespass onto areas where impounded waters create a hazardous condition.

5. Graded areas around the project perimeter will drain away from the face of slopes at the end of each working day.

6. All gravel bags shall have ¾ inch minimum aggregate (No sandbags and no burlap type bags allowed).

(Do not place on the Construction Plans; circle YES or NO)

Yes No 1. Does your project have 50 acres or more of disturbed soil?

Yes No 2. Will your project have at least one acre of disturbed soil and (1) be tributary to a water body 303(d) listed for sediment or (2) be located less than 200 feet from and ESA or directly discharging to an ESA?

Yes No 3. Will your project have at least one acre of disturbed soil but NOT (1) be tributary to a water body 303(d) listed for sediment and NOT (2) be located less than 200 feet from and ESA or directly discharging to an ESA?

Yes No 4. Does your project require a grading permit?

General Construction Permit:
If the answer to questions 1, 2, or 3 in Section 2 is "Yes", your project requires coverage under the General Construction Permit. A Notice of Intent (NOI) must be filed with the State Water Resources Control Board (SWRCB) and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared for your project.

Yes No Is this project subject to the General Construction Permit?

Construction Activities Threat to Water Quality Prioritization:
If the answer to question 1 or 2 is YES, your project is **HIGH** priority.

If the answers to questions 1 and 2 are NO, but the answer to either question 3 or question 4 is YES, your project is **MEDIUM** priority.

If all answers are NO, your project is **LOW** priority.

(Place this note on the Construction Plans and check the appropriate box)

This project is ☐ HIGH ☐ MEDIUM ☐ LOW priority threat to water quality.

City of El Cajon

Storm Water Quality Inspection for Construction Sites

BMP COMPLIANCE REPORT

You Are the Solution to Stormwater Pollution!

Please Visit: http://www.ci.el-cajon.ca.us/dept/works/stormwater.html

Site Name: _____ Address: _____

Contractor Name: _____ Job Number: _____

Inspector Name & Phone #: _____ Date: _____/_____/_____Time: _____AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation **APN**: _____

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

Does Project Maintain a Stormwater Pollution Prevention Plan (SWPPP)? ❑ Yes ❑ No WDID: _____

Nearest Receiving Water(s): _____ Discharge Observed: ❑ Yes ❑ No _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

The Following List summarizes Minimum BMPs Required by the City of El Cajon Storm Water Ordinance (13.10) Additional BMPs May Be Required due to Site Conditions, Specific Activities, or by the Enforcement Official.

Minimum Construction Requirements	BMP Implemented?			Comments / Recommendations
	YES	NO	N/A	
Silt Fence – SE1				
Storm Drain Inlet Protection – SE10*+ filter fabric				
Sediment Basin – SE2				
Check Dams – SE4				
Fiber Rolls – SE5				
Gravel Bag Berm – SE6				
Street Sweeping/Vacuum – SE7				
Stabilized Construction Entrance – TC1				
Hydroseeding – EC4				
Geotexiles and Mats – EC7				
Material Delivery & Storage – WM1				
Stock Pile Management – WM3*				
Solid Waste Management – WM5*				
Concrete Waste Management – WM8				
Sanitary Waste Management – WM9				
Other*				
Other				

VIOLATIONS / REQUIRED CORRECTIVE ACTIONS

❑ Violation of Stormwater Ordinance: _____

❑ No Violations Have Been Noted; However BMP Implementation Is Required _____

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

200 E. Main Street, El Cajon California 92020 *TEL 619-441-1653 / FAX 619-579-5254*

Erosion Control Checklist for Low/Medium Priority Projects

$50.00 Fee (Receipt code: 5513 650b; ComPlus codes: Demo 516, Minor 518, Medium (no G&D) 520)

Address: _____

APN: _____-_____-_____-____ Permit #: _____ Fee ID(s): _____ : $ _____

Brief Project Description: _____

□ Formal Erosion Control Plan not needed. Sticker signed and placed on plans.

		YES	NO
1.	North arrow and Scale?		
2.	Legend?		
3.	Storm Water Notes?		
4.	Emergency phone number?		
5.	Drainage arrows/Topography?		
6.	Placement of BMPs?		
a.	Perimeter control [silt fence (SC-1) or gravel bags (SC-6)]		
b.	Slope protection [coconut fiber blankets or fiber rolls (SC-5)]		
c.	Street sweeping (SC-7)		
d.	Stabilized construction entrance (TC-1)		
e.	Material storage (WM-1)		
f.	Solid Waste Storage (WM-5)		
g.	Concrete washout (WM-8)		
h.	Sanitary waste (WM-9)		
7.	Address/Site location?		
8.	Erosion Control Plan heading?		
9.	Proposed and existing structures identified?		
10.	Property Boundaries?		

Notes: _____

_____

□ Fee(s) Entered into ComPlus

_____ _____/_____/_____ □ Comments Entered into ComPlus

Reviewer Signature Date Reviewed □ Logged into Excel Spreadsheet

Erosion Control Plan

City of El Cajon

GENERAL STORM WATER NOTES

A. ALL OPERATION WILL COMPLY WITH THE CITY'S JURISDICTIONAL URBAN RUNOFF MANAGEMENT PLAN (JURMP).

B. THE OWNER AND THE OWNER'S CONTRACTOR ARE RESPONSIBLE FOR POLLUTION PREVENTION PRACTICES TO PREVENT THE DISCHARGE OF SEDIMENT AND POLLUTANTS TO THE PUBLIC STORM DRAIN SYSTEM.

C. OWNER AND THE OWNER'S CONTRACTOR ARE RESPONSIBLE FOR THE PREVENTION OF EROSION CAUSED BY CLEARING OF VEGETATION, GRADING, DEMOLITION OR CONSTRUCTION.

D. SEDIMENT, POLLUTION AND EROSION CONTROL MEASURES WILL BE IMPLEMENTED STARTING THE FIRST DAY OF CLEARING, GRADING OR SOIL DISTURBANCE, OR CONSTRUCTION. THESE CONTROLS WILL REMAIN IN EFFECT UNTIL ALL RELEVANT OPERATIONS HAVE BEEN COMPLETED AND DISTURBED SOILS HAVE EITHER: 1) ESTABLISHED VEGETATION, OR 2) OTHER PERMANENT EROSION CONTROL AT 70 % COMPLETION.

EROSION AND SEDIMENT CONTROL NOTES

1. IN CASE OF EMERGENCY, CONTACT: NAME:_____ PHONE:_____

2. THE CONTRACTOR WILL MAINTAIN ALL SEDIMENT AND EROSION CONTROL DEVICES IN GOOD WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER THROUGHOUT EVERY PHASE OF THE PROJECT.

3. THE CONTRACTOR WILL INSTALL ALL EROSION CONTROL MEASURE ADDITIONAL TO THOSE SPECIFIED BY THE APPROVED EROSION CONTROL PLAN IF REQUIRED TO DO SO BY THE CITY ENGINEER.

4. THE CONTRACTOR AND PROPERTY OWNER WILL PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.

5. GRADED AREAS AROUND THE PROJECT PERIMETER WILL DRAIN AWAY FROM THE FACE OF SLOPES AT THE END OF EACH WORKING DAY.

6. ALL GRAVEL BAGS SHALL HAVE ¾ INCH MINIMUM AGGREGATE (NO SANDBAGS AND NO BURLAP TYPE BAGS ALLOWED) .

Project Address _____
Project APN _____
Permit Number _____
Applicant Name _____
Applicant Address _____

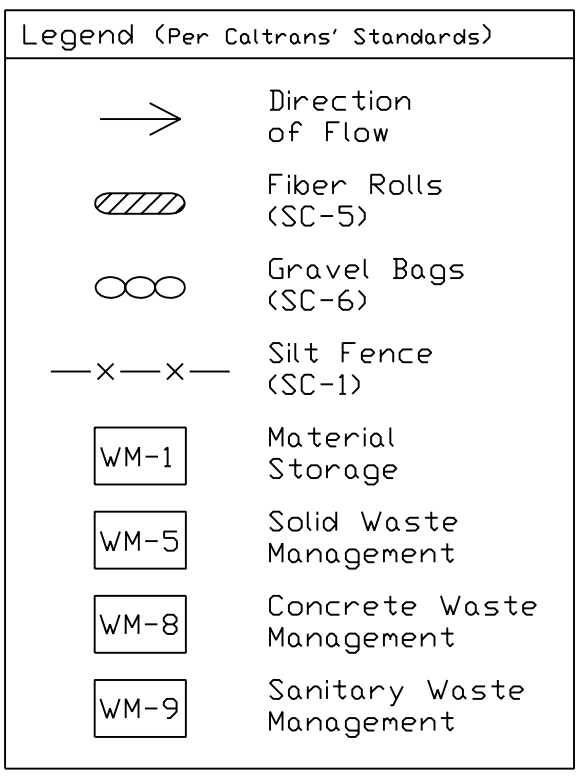

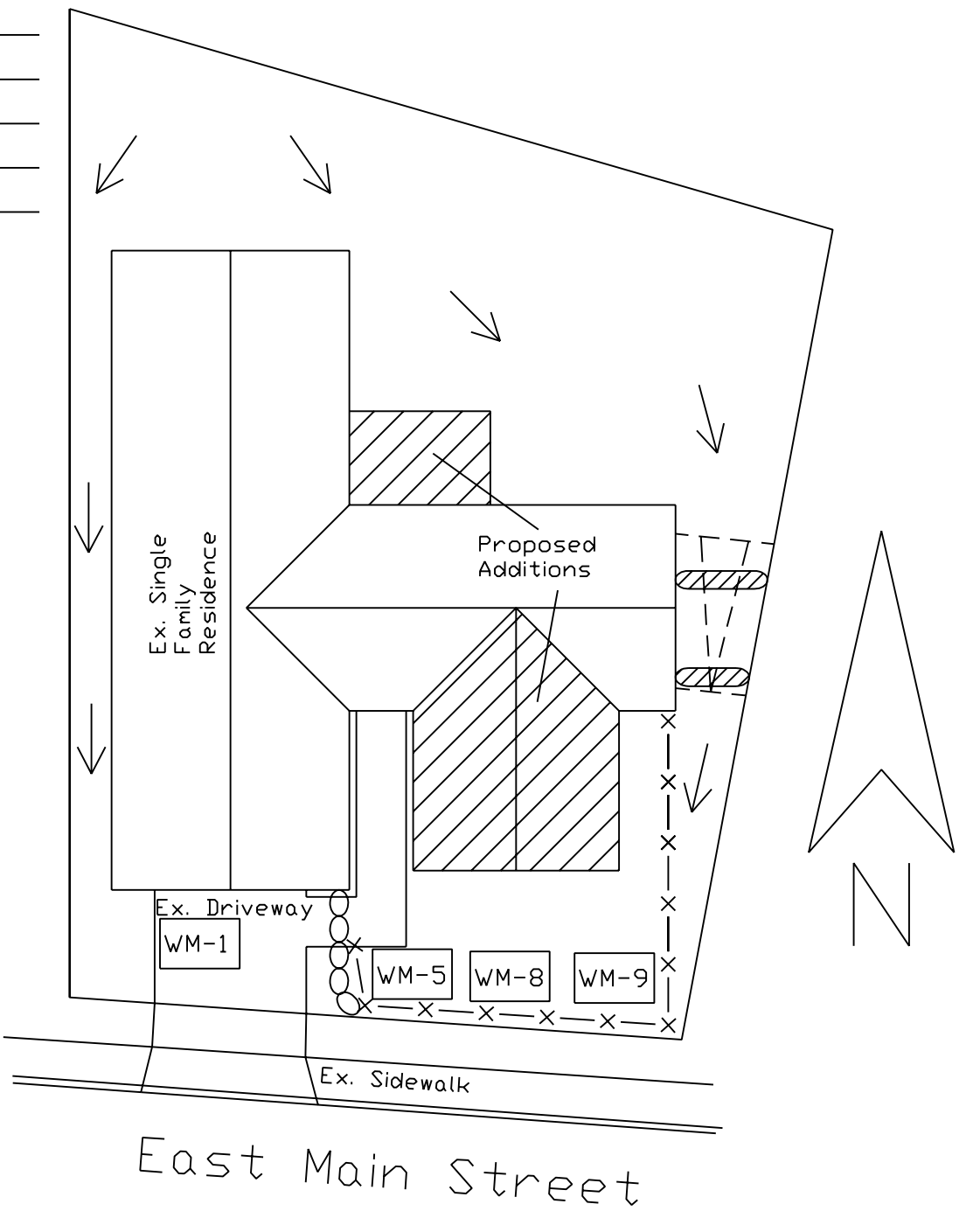

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City of El Cajon
Erosion and Sediment Control Plan Review Checklist

Date Completed	Not Applicable	
		Vicinity Map
_____	_____	Major roadways, geographic features or landmarks.
_____	_____	Site perimeter.
_____	_____	Geographic features.
_____	_____	General topography.
		Site Characteristics
_____	_____	North arrow, scale, and site boundary. Indicate the name of adjacent streets or roadway.
_____	_____	Location of existing drainage ways, channels, swales, creeks, streams on or near the site.
_____	_____	Location of storm drain inlets, outlets, catch basins – proposed, existing, on-site, and within 100 feet of site.
_____	_____	Location of existing and proposed buildings and paved areas.
_____	_____	Show and label existing and proposed improvements (streets, sidewalks, curb/gutter, utilities, etc)
_____	_____	The limits of the proposed disturbed area on the lot.
_____	_____	Approximate gradient and direction of slopes before grading operations.
_____	_____	Approximate gradient and direction of slopes after final grading operations.
_____	_____	Disturbed area outlined and labeled. All sediment control devices must be shown within the disturbed limits.
_____	_____	Overland runoff (sheet flow) coming onto the site from adjacent areas.
_____	_____	Delineation of pre and post development drainage areas, number of acres, and the direction of flow for each drainage area before and after development must be shown. Use separate plan sheets for clarity.
		Erosion Control Practices
_____	_____	Location of temporary soil piles
		Note: soil storage pile should be placed behind a sediment fence, 10-foot (minimum) wide vegetative strip should be covered with a tarp, or placed more than 25 feet from any down slope road or drainage way.
_____	_____	Location of gravel access drive(s).
		Note: Gravel drive should have 3 to 6 inch aggregate stone laid at least 10 feet wide and 12 inches thick. Drives should extend from the roadway 50 feet or to the house foundation (whichever is less).
_____	_____	Location of sediment controls (filter fabric fence, straw bale fence or 10-foot wide vegetative strips) that will prevent eroded soil from leaving the site.
_____	_____	Location of sediment barriers around on-site storm drain inlets.

Date Completed	Not Applicable	
_____	_____	Location of diversions. Note: Concentrated flow (drainage ways, ditches, channels, brow ditches) shall be diverted (re-directed) around disturbed areas. Overland runoff (sheet flow) from adjacent areas greater than 10,000 sq. ft. shall also be diverted around disturbed areas.
_____	_____	Location of practices that will be applied to control erosion on steep slopes that have been disturbed at any time by clearing, grading, or landscaping - slopes more than five feet in height, more than two hundred fifty square feet in total area, and steeper than three to one (run-to-rise). Note: Unstabilized drainage ways, ditches, channels, diversions, and inlets shall be protected from erosion through use of such practices as in-channel fabric or straw bale barriers, erosion control mats, staked sod, and rock riprap. When used, a given in-channel barrier should not receive drainage from more than two acres of unpaved area, or one acre of paved area. In-channel practices should not be installed in perennial streams (streams with year-round flow.)
_____	_____	Show Erosion Control Plan heading and standard notes.
_____	_____	Label all sediment control devices.
_____	_____	Show Standard details for sediment control devices.
_____	_____	No sediment control devices are to be located where water will damage building foundations.
_____	_____	Detail drawings and specifications for structural practices – any structural practices used must be illustrated with detailed drawings containing all dimensions and specifications. (i.e. de-silting basins)
_____	_____	Location of other planned practices not already noted. (Material Storage WM-1, Concrete Washout WM-8, Sanitary Waste WM-9, Solid Waste Storage WM-5)
_____	_____	Temporary stabilization of disturbed areas. Note: disturbed areas and soil piles left inactive for more than 10 days be stabilized by seeding (between April 1st and September 1st), or by other cover, such as tarping or mulching.
_____	_____	Permanent stabilization of site by re-vegetation or other means as soon as possible (lawn establishment). Indicate re-vegetation method: Seed ___ Sod ___ Other_____ Expect date of permanent re-vegetation: Re-vegetation responsibility of Builder ___ Owner/Buyer Is temporary seeding or mulching planned if site not seeded by September 1st or sodded by October 1st ? Yes ___ No ___
_____	_____	Use of downspouts and/or sump pump outlet extensions to direct runoff away from structures and onto sod or pavement until vegetation is stable. Downspouts shall be permanently to grass areas.
_____	_____	Proper disposal of building material waste so that pollutants and debris are not carried off-site by wind or water.
_____	_____	Maintenance of erosion control practices during construction: Name:_____ Title:_____ Phone & Fax:_____

- Sediment will be removed from behind sediment fences and barriers before it reaches a depth that is equal to half the barrier's height.
- Breaks and gaps in sediment fences and barriers will be repaired immediately.
- All sediment that moves off-site due to construction activity will be cleaned up before the end of the same workday.
- All sediment that moves off-site due to storm events will be cleaned up before the end of the next workday.
- Gravel access drives will be maintained throughout construction.
- All installed erosion control practices will be maintained until the disturbed areas they protect are stabilized.

Appendix A.4

City of El Cajon Municipal Facilities Inventory

No.	Facility Name	Facility Address	Facility Priority	Hydrologic Sub-Sub-Basin
1	Civic Center, City Hall and Plaza	200 Civic Center Way	High	Washington Channel
2	El Cajon Performing Arts Center	110 E Main Street	High	Washington Channel
3	Knox Hotel Museum (El Cajon Historical Society)	280 N Magnolia Avenue	Low	Washington Channel
4	Public Works Maintenance/Operations Office	1050 Vernon Way	High	Forrester Creek
5	Vehicle Maintenance Facility	1060 Vernon Way	High	Forrester Creek
6	Animal Control	1275 N Marshall Way	Medium	Forrester Creek
7	Community Policing Division	165 E Park Avenue	Low	Washington Channel
8	Resource Center, Community Social Services and Crisis House	1034 N Magnolia Avenue	Low	Broadway Channel
9	Pistol Range	100 Rueben Fleet Drive	Low	Forrester Creek
10	Public Safety Center	100 Civic Center Way	High	Washington Channel
11	Police Department Detectives Offices	1035 Pioneer Way	Low	Forrester Creek
12	Fire Station No. 1 and Fire Department Administration	100 E Lexington Avenue	Low	Washington Channel
13	Fire Station No. 7	695 Tyrone Street	Low	Forrester Creek
14	Fire Station No. 8	842 N Third Street	Low	Forrester Creek
15	Fire Station No. 9	1301 N Marshall Avenue	High	Forrester Creek
16	Albert Van Zanten Park	1495 Greenfield Drive	High	Broadway Channel
17	Bill Beck Park	Pierce Street at Wagner Drive	High	Forrester Creek/County Ditch
18	Bostonia Recreation Center	1049 Bostonia Street	High	Forrester Creek
19	Bostonia Park	1049 Bostonia Street	Low	Forrester Creek
20	Cajon Valley Middle School Park	750 Park Avenue	High	Forrester Creek
21	Fire Station Park	Tyrone Street at Westwind Drive	High	Forrester Creek
22	Fletcher Hills Recreation Center and Pool	2345 Center Place	High	Mission San Diego/Alvarado Creek
23	Fletcher Hills Park	2345 Center Place	Low	Mission San Diego/Alvarado Creek
24	Hillside Recreation Center	840 Buena Terrace	High	Forrester Creek
25	Hillside Park	840 Buena Terrace	Low	Forrester Creek
26	Judson Park	Magnolia Avenue at Park Avenue	High	Washington Channel
27	John F. Kennedy Recreation Center	1675 E Madison Avenue	High	Forrester Creek
28	John F. Kennedy Park	1675 E Madison Avenue	Low	Forrester Creek
29	Prescott Promenade Park	200 Block of E Main Street	High	Washington Channel/County Ditch
30	Renette Recreation Center	935 Emerald Avenue	High	County Ditch
31	Renette Park	935 Emerald Avenue	Medium	County Ditch
32	Ronald Regan Community Center	195 E Douglas Avenue	High	County Ditch
33	Tuttle Park	379 W Chase Avenue	High	County Ditch
34	Wells Maintenance Facility and Recreation Center	1153 E Madison Avenue	High	Forrester Creek
35	Wells Park	1153 E Madison Avenue	Low	Forrester Creek

Storm Water Quality Checklist
For Municipal Facilities

Site Name:_____ Location:_____

Contact:_____

Date:_____ Type of Inspection: ☐ Routine Site Inspection

Weather Information: ☐ Prior to Forecast of Rain Event

Storm Start Date and Time:_____ Storm Duration:_____hours ☐ 24-hr Period During Extended Storm Event

Time Since Last Storm:_____hrs/days Rainfall:_____inches ☐ After Rain Event

Inspector Name and Title:_____

Inspector Signature:_____

Pollution Prevention BMPs	N/A	Yes	No	Comments / Corrective Action
Erosion and Sediment Control				
Is existing vegetation preserved?				
Are seeding and planting of native plants and trees considered?				
Are geotextiles and organic mats used for soil stabilization?				
Roadway and Bridge Maintenance				
Are streets swept and clean?				
Is street sweeping frequency adequate for the area?				
Municipal Vehicle Maintenance Facilities				
Are vehicles/equipment parked/stored in designated areas?				
Are vehicles and equipment regularly inspected for leaks and spills?				
Are detected leaks/spills contained and repaired as soon as possible?				
Landscaping Maintenance				
Are safer, alternative products used or considered?				
Is weather considered for landscaping activities?				
Are certified professionals used to handle, apply, and distribute pesticides, herbicides, and fertilizers?				
Is there an IPM used?				
Maintenance of MS4				
Is the mechanism for detecting and removing IC/ID situations implemented?				
Is the MS4 inspected, maintained, and repaired?				
Is a stenciling and sign program used to warn of effects of illegal dumping?				
Sewer Blockage Response				
Is there mechanism for identifying, containing, controlling, and repairing sewage leaks and spills?				
Is hazardous waste disposed of properly?				
Waste Management				
Is there a waste reduction program in place?				
Are wastes segregated for proper storage and disposal?				

Other Practices and Procedures				
Are dewatering activities controlled and managed appropriately?				
Is groundwater tested prior to disposal?				
Is the public educated and encouraged to participate in appropriate stormwater activities?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Housekeeping				
Is the area clear of visible trash/debris and impervious surfaces free of sediment?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are points of ingress/egress to public and private roads free from sediment, debris and mud from tracking?				
Are materials stored in their designated areas?				
Are dry methods used to clean?				
Employee Training				
Have employees been trained in basic stormwater management and BMP implementation?				
Visual Inspections				
Are visual inspections of the site conducted and documented on a regular basis?				
Are the discharge locations free of significant erosion or sediment transport?				
Improved Operation and Maintenance				
Are drainage control structures free of litter and debris?				
Waste Disposal and Recycling				
Are there designated areas for recycling of metal, tires, antifreeze, and used oil?				
Are waste containers covered?				
Are areas near or around waste containers free of leaks or spills?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are hazardous wastes stored and disposed appropriately? (in labeled, secondary containment; 55-gallon drums in a secured, designated area)				
Is secondary containment free of spills and rainwater?				
Preventive Maintenance				
Are there procedures for replacing used or worn materials or equipment prior to failure?				
Record Keeping				
Is there onsite storage of documented inspections, BMP evaluations, and audits?				
Is there onsite documentation of employee training?				
Is there an onsite SWPPP or other Pollution Control Document?				
Does the SWPPP adequately reflect the current site conditions and the construction operations? If not, explain required SWPPP revisions.				
Spill Prevention and Response				
Are there spill kits near outside stored materials, wastes, and recycling areas?				
Are spill response procedures clearly posted?				
Are employees trained in preventing spills?				

Material Inventory Procedures				
Are inventories of 30 days materials onsite?				
Material Storage Practices				
Are outside stored materials stored off the ground and covered or in appropriate containers? (Flammables stored in a flammables cabinet; antifreeze in double-walled container or in secondary containment)				
Visual evidence of spills, staining, or leaks from outside stored materials are not evident				
Storage Tanks				
Are outside above ground storage tanks double-walled or in secondary containment?				
Visual evidence of leaks or spills in the area are not visible				
Outside Storage				
Are materials stored outside under cover or in containers?				
Maintenance BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are outside material storage areas free of visual evidence of spills or runoff?				
Loading and Unloading				
Are loading and unloading areas free of litter and visual evidence of spills?				
Sediment and Erosion Control				
If sandbags are used, are they placed appropriately for the conditions?				
Are temporary soil stabilization measures installed and in working order?				
Is dust control necessary and implemented?				
Are soil stockpiles properly stored?				
Is inlet protection available for all operational storm drain inlets?				
Vehicle and Equipment Maintenance				
Is there a covered or inside area designated for vehicle and equipment maintenance?				
Are leaking vehicles stored inside or drip pans used for outside storage?				
Vehicle and Equipment Washing				
Is there a designated covered or inside area or commercial facility for washing vehicles and equipment?				
Park BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Are grass clippings mulched or bagged for disposal?				
Are vegetation trimmings gathered and disposed as solid waste or recycled as mulch?				
Are sidewalks and parking lots cleaned using dry methods to collect and use as mulch or dispose as solid waste?				
Recreation BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Is pool water tested or treated for chlorine before discharge?				
Is pool filter backflush discharged to the sanitary sewer?				
Are pool chemicals stored inside and in appropriate				

containers?				
Non-Stormwater BMPs	**N/A**	**Yes**	**No**	**Comments / Corrective Action**
Non-Storm Water Management				
Is the site free of evidence of illegal connections and illicit discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
Other				
No other potential storm water pollution issues or concerns exist. If no, explain below.				

Explanations:_____

_____

_____

_____

_____

_____

_____

_____

Received by:_____ _____

Name (Print) **Date**

_____

Signature

Appendix A.5

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
1	Sagmani's Restaurants	478		W Douglas Ave	907.1	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	No	Medium	No			
2	Garnet Bros Trailer Repair	1667		E Main St	907.1				No	No	No	No	No	No	No	No	No	No	No	N/A				
3	San Diego Mobile Truck and Trailer Service	140		Millar Ave	907.1				No	No	No	No	No	No	No	No	No	No	No					
4	Puppy Time	513		Parkway Plaza	907.1				No	No	No	No	No	No	No	No	No	No	No	N/A				
5	Apro #20	710		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	Yes	No	No	Yes	No	No	High	No	48425426	32.80427	-116.9361
6	2nd St. Gas & Mini, Big Daddy Oil #20	725		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	Yes	No	Yes	Yes	No	No	No	No	No	High	No	48426380	32.80433	-116.93526
7	California Park Models (not in business)	746		N 2nd St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	N/A	No	48425425	32.80452	-116.93592
8	Trick Trucks, Inc.	777		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48426378	32.805	-116.93525
9	Top Dollar	1150		N 2nd St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	48420220	32.81047	-116.93615
10	Valley Transmission & Auto	1158		N 2nd St	907.13	7537		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48420219	32.81073	-116.93631
11	Tommys Italian Ristorante	1190		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	N/A	N/A	No	48420218	32.81138	-116.93607
12	Mario Upholstery	1211		N 2nd St	907.13	7641		Furniture and Fixtures	No	No	No	No	No	No	No	No	No	No	No	Low	No	48412026	32.81203	-116.93549
13	Feral Cat Coalition	1291		N 2nd St	907.13	8734	5419	Veterinary Services For Animal Specialties	Yes	Yes	No	No	No	No	No	No	Yes	No	Yes	High	No	48412033		
14	Serranos Super Salsa	795		Arnele Ave	907.13	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48225038	32.80377	-116.97249
15	Toyota of El Cajon	965		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	No	Yes	No	Yes	No	No	No	No	No	High	No	48732102	32.79318	-116.97041
16	C.P. Richard Signs, Inc.	1200	B	Billy Mitchell Dr.	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	n	Yes	No	No	No	Yes	No	No	Low	Yes	38719007	32.82124	-116.97747
17	St. Cyclewear	1200	D	Billy Mitchell Dr.	907.1	2389		Apparel and Other Finished Products Made From Fabrics and Similar Material	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38719007	32.82124	-116.97747
18	Precision Metal Products, Inc.	850		W Bradley Ave	907.13	3463		Fabricated Metal Products, except Machinery and Transportation Equipment	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	Yes	38711041	32.81724	-116.97343
19	C D & L Manufacturing L.L.C.	1000	K	W Bradley Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	No	No	No	Yes	No	No	N/A	No	38711040	32.81757	-116.97446
20	U S Wheel Remanufacturing	1000	P	W Bradley Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Medium	No	38711040	32.81757	-116.97446

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
21	Waste Management Universal Refuse Removal	1001		W Bradley Ave	907.13	4953	56211	Waste Management Service	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	High	Yes	48213116	32.81613	-116.97465
22	Chem-Tronics, Inc.	1150		W Bradley Ave	907.13	3724	336412	Manufacturing Aircraft Parts	No	Yes	Yes	No	Yes	No	No	No	Yes	Yes	Yes	High	Yes	38711048	32.81763	-116.97743
23	East County Tire & Brake	616		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	No	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48313021	32.80849	-116.95394
24	El Cajon Smog & Auto Repair	720		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48313014	32.80796	-116.95314
25	Car 1234	982		Broadway	907.13	5599		Automotive Sales-Used	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48429109	32.80809	-116.94856
26	Super Star #2	1090		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48429315	32.8081	-116.94484
27	Sid's Auto Body, Inc. (1121)	1129		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48418249	32.80751	-116.94349
28	TNT Automotive	1419		Broadway	907.13	5511	4411	Automotive Sales- Used Only	No	No	No	No	No	No	No	No	No	No	No	N/A	No			
29	Janie's Custom Draperies	336		Coogan Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307120	32.81017	-116.96436
30	Avalon R F/Pacifitek	344		Coogan Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48307120	32.81017	-116.96477
31	Controlled Precision Mfg	352		Coogan Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48307120	32.81016	-116.96563
32	Cmeann Productions Inc	1890	101	Cordell Ct	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	No			
33	Dave Whipple Sheet Metal	1077		N Cuyamaca St	907.1	3444		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48231024	32.80983	-116.97901
34	Big Daddy Trucking, Inc	1179	J	N Cuyamaca St	907.1	4212		Motor Freight Transportation and Warehousing	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes			
35	Machine Tool Service	1381		Cuyamaca St	907.13	3599	33271	Machine Shop- Manufacturing	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	4821405852		
36	Raymonde Draperies	1399		N Cuyamaca St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	No	48214058	32.81476	-116.97905
37	Veridiam	1717		N Cuyamaca St	907.13	3317		Primary Metal Industries	No	Yes	Yes	No	No	No	No	Yes	No	No	No	High	Yes	38719007	32.81841	-116.97899
38	First Class Packaging Inc	280	B	Cypress Ln	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38712155	32.81708	-116.96426
39	Miller Towing	301		Cypress Ln	907.13	7549	488410	Motor Vehicle Towing	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No			
40	Artimex Iron Co.	315		Cypress Ln	907.13	3441		Fabricated Metal Products, except Machinery and Transportation Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	48302210	32.81633	-116.96453
41	Spiral Assembly Systems Inc	460	A	Cypress Ln	907.13	3599	33399	Metal work / Machine Shop	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Medium	No	38712130	32.81704	-116.96631
42	Daymar Corporation	460	B	Cypress Ln	907.1	3999	33999	Misc. Manufacturing	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38712130	32.81704	-116.96631

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
43	Q Microwave Inc	481		Cypress	Ln	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48302265	32.81666	-116.96708
44	MD Auto Group	110		El Cajon	Blvd	907.13	5521	4411	Automotive Sales- Used Only	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48732116		
45	American Recycling	210		El Cajon	Blvd	907.13	5093	56211	Waste Management Service	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No	Yes	High	Yes	48732117		
46	El Cajon Mitsubushi	247		El Cajon	Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	No	No	Yes	No	No	Yes	No	No	No	High	No	48732227	32.79344	-116.96886
47	HIS Auto	279		El Cajon	Blvd	907.13	5521	44112	Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48732226	32.79303	-116.96935
48	Atlas Radiator Shop	580		El Cajon	Blvd	907.13	7538	81111	Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48752018	32.79029	-116.97272
49	Mis Z Gallos Taqueria Fruit & Deli	1088		Estes	St	907.13	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	49232015	32.78062	-116.96684
50	DelStar Technologies Inc.	1306		Fayette	St	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Medium	No	48214020	32.81363	-116.97814
51	San Diego Welding and Forming	1327		Fayette	St	907.13	3999	33999	Misc. Manufacturing	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	No			
52	San Diego Van & Storage	1426		Fayette	St	907.13	4214		Motor Freight Transportation and Warehousing	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48214022	32.81476	-116.97815
53	Thermo Hem Manufacturing	1452		Fayette	St	907.1	2399		Made From Fabrics and Similar Material	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes	48214034	32.81561	-116.97835
54	Mbcnc	1452		Fayette	St	907.13	3599	33271	Metal work / Machine Shop	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Low	No			
55	P R S	1460		Fayette	St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48214034	32.8152	-116.97811
56	National Spring Inc.	1472		Fayette	St	907.1	3493		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48214034	32.81542	-116.97811
57	J. Dolan Drapery Workroom	1484		Fayette	St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48214034	32.81567	-116.97811
58	A&G Drapery Manufacturing	1490		Fayette	St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes			
59	Designcrafted Bardon Cabinetry, Inc	1515		Fayette	St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes	48214056	32.81567	-116.97732
60	The Vintage Sign Company, Inc.	926		Felser	St	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	Yes	Medium	Yes	48212144	32.80965	-116.97375
61	Stine Game Tables	920		Fesler	St	907.1	2599		Furniture and Fixtures	No	Yes	No	No	No	Yes	No	No	Yes	No	No	Medium	No	48212144	32.80965	-116.97401
62	Layfield Environmental Systems, Geosynthetics, & Industrial Services	1166		Fesler	St	907.13	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	Yes	Yes	No	No	Yes	No	No	High	Yes	48212147	32.80984	-116.97762
63	First Transit	800		Fesler	St	907.13	4111		Local and Suburban Transit and Interurban Highway Passenger Transportation	No	Yes	No	No	Yes	No	No	No	Yes	No	No	High	Yes	48217012	32.80929	-116.97224
64	Sizzler	1030		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	High	No	48212149	32.80822	-116.97392
65	G P K Inc	535		Floyd Smith	Dr	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes			
66	Prime Heat, Inc	1844		Friendship	Dr	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	Yes	No	No	No	No	No	Medium	Yes	38719007	32.82137	-116.97752

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
67	San Diego Custom Extrusions	1866	D	Friendship	Dr	907.1	3082		Unsupported Plastics Profile Shapes	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes	38719007	32.82201	-116.97776
68	Sentrec Electronics Inc.	1943	E	Friendship	Dr	907.1	3679		Electronic and Other Electrical Equipment and Components, except computer	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38719006	32.82425	-116.97862
69	Goodman Custom Woodworks	1957	C	Friendship	Dr	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes	38719006	32.82455	-116.979
70	Leisure Designs Goodman Custom Woodworks	1957	C	Friendship	Dr	907.1	2599		Furniture and Fixtures	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes	38719006	32.82455	-116.979
71	Phantom Research Laboratories, Inc.	1957	D	Friendship	Dr	907.1	2833		Medicinal Chemicals And Botanical Products	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38719006	32.82455	-116.979
72	RSR Autosport	1985	I	Friendship	Dr	907.13	3999	33999	Misc. Manufacturing	No	No	Yes	No	No	No	No	No	Yes	No	No	Low	No	38719007		
73	HiTech Welding & Forming	1990		Friendship	Dr	907.13	3728		Transportation Equipment	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No	N/A	No	38719006	32.82472	-116.98038
74	Milans Synthesized Furniture	1991	G&H	Friendship	Dr	907.1	2434		Lumber and Wood Products, except furniture	No	Yes	No	No	No	Yes	No	No	Yes	No	No	Medium	No	38719006	32.82479	-116.98022
75	Sandmar Enterprises	1991	A	Friendship	Dr	907.1	2511		Furniture and Fixtures	No	Yes	No	No	No	Yes	No	No	Yes	No	No	Medium	No	38719006	32.82479	-116.98022
76	Metal Engineering	390		Front	St	907.13	3449		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48727407	32.79169	-116.97709
77	Kitchen Crafters	500		Front	St	907.13	2434	3371	Lumber and Wood Products, except furniture	No	Yes	No	No	No	Yes	No	No	Yes	No	No	Low	No	48764019	32.79059	-116.97703
78	Zummay Custom Cabinetry	594	D	Front	St	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	No	No	No	Yes	No	No	Yes	No	No	Low	No	48764004	32.7897	-116.97698
79	Ghiloni Granite Design	594	C	Front	St	907.13	1743	2389	Ceramic-Tile Contractor	No	Yes	No	No	No	No	No	No	Yes	No	No	Medium	No	48764004		
80	California Metals (Front St.)	636		Front	St	907.13	5093		Waste Management Service-Recycling	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	High	Yes	48765001	32.78913	-116.97706
81	Russo Tile & Marble, Inc	651		Front	St	907.13	3281		Stone, Clay, Glass, and Concrete Products	No	Yes	No	No	No	No	No	No	Yes	Yes	No	High	Yes	48765004	32.78885	-116.9766
82	Evergreen Environmental Services	412		Front	St	907.13	4953		Electric, Gas, and Sanitary Services	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	High	Yes	48764018	32.79108	-116.97704
83	Abacor Inc.	766		Gable	Way		7538		Automotive Services	No	Yes								No		Medium	No			
84	Goldfield stage	795		Gable	Way	907.13	4141	4855	Bus Charter Service	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No	No	High	Yes	48217040		
85	Gardner Pool Plastering	801		Gable	Way	907.13	1741		Construction - Special Trade	No	Yes	Yes	No	No	Yes	No	Yes	Yes	No	No	High	No	48217054	32.81007	-116.97308
86	Brantner & Assoc Inc	1700		Gillespie	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38720001	32.81884	-116.98087
87	Pure Bioscience	1725		Gillespie	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38720003	32.81961	-116.98096
88	Metals Usa Building Products	1770	111	Gillespie	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes	38720016	32.82047	-116.98219
89	Cutting Edge	1825	100	Gillespie	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38720005	32.82131	-116.98211
90	New Brunswick Industries	1850		Gillespie	Way	907.1	3999	33999	Miscellaneous Manufacturing Industries	No	Yes	No	No	Yes	No	No	No	Yes	No	No	Medium	No	76023030	32.82217	-116.98293

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
91	Vision Systems Inc	1895		Gillespie Way	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	38720115	32.82355	-116.98259
92	Professional's Choice Sports	2025	106	Gillespie Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes			
93	Luchner Tool Engineering	788		Greenfield Way	907.13	3545	3335	Tool Manufacturing	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Low	No			
94	Senior Aerospace	790		Greenfield Dr	907.13	3724		Areospace Manufacturing	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No	No	High	Yes	48304022	32.8145	-116.95259
95	San Diego Soy Dairy, Inc	1330	B	Hill St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	49265005	32.78554	-116.97823
96	California Countertop	1340		Hill St	907.13	3281		Stone, Clay, Glass, and Concrete Products	No	No	No	No	No	No	No	No	No	Yes	No	High	Yes	49265005	32.78569	-116.97809
97	State Stone Works	1370		Hill St	907.13	3281	3279	Stone product manufacture	No	Yes	No	No	No	Yes	No	Yes	Yes	No	No	High	No	4926500507		
98	S&D Precision Machine Shop	1390		Hill St	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	49265005	32.78554	-116.97823
99	Chromalloy San Diego	1071		Industrial Pl	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	N/A	N/A			
100	Autobahn	1071		Industrial P	907.13	4231	5093	Auto Dismantler-wholesale parts	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes			
101	Outback Steakhouse	722		Jamacha Rd	907.13	5812	81111	Eating and Drinking Places	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	High	No	51402160	32.78641	-116.92891
102	Valero Station #3738	785		Jamacha Rd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	51128027	32.78556	-116.9275
103	El Cajon Powder Coating	1835		John Towers Ave	907.13	3999	33999	Misc Manufacturing	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	No	38719007	32.8208	-116.97956
104	Turbine Aviation	1865	A	John Towers Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	Yes	38719007	32.82204	-116.98
105	Micro-Mode Products, Inc.	1870		John Towers Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	38719007	32.82223	-116.98009
106	Graphic Business Solutions Inc	1912		John Towers Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes			
107	Pacifica Glass Co, Inc.	1946		John Towers Ave	907.13	5231		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	N/A	No	38719007	32.82347	-116.9805
108	Aerowind Corporation	1959		John Towers Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	38719006	32.82479	-116.98053
109	Triumph	203		N Johnson Ave	907.13	3728		Transportation Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	48712239	32.7967	-116.96994
110	Cummins Cal Pacific	310		N Johnson Ave	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48712133	32.79808	-116.97126
111	Jeromes	333		N Johnson Ave	907.13	5021		Wholesale Trade; Durable Goods	No	No	No	No	Yes	No	No	No	Yes	No	No	Medium	No	48712254	32.79825	-116.97031
112	American Scissor Lift, Inc.	400		N Johnson Ave	907.13	7359		Business Services	No	Yes	Yes	No	No	No	No	No	Yes	No	Yes	High	No	48712170	32.79955	-116.97036
113	Auto City Sales	400		N Johnson Ave	907.13	5521	44112	Automotive Sales- Used Only	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No			
114	El Cajon Valley Vet Hospital	560		N Johnson Ave	907.1	742		Veterinary Services For Animal Specialties	Yes	Yes	No	No	No	No	Yes	No	Yes	No	Yes	High	No	48225033	32.8012	-116.97152
115	Goodyear Certified Tire	790		N Johnson Ave	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48224030	32.80556	-116.97154

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
116	Sleep Train	790	B	N Johnson Ave	907.13	5719		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	N/A	No	48224030	32.80556	-116.97154
117	Tire Pros	844		N Johnson Ave	907.13	7534		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48224028	32.80635	-116.97151
118	Combo Aluminum Products	1100		N Johnson Ave	907.1	3499		Fabricated Metal Products, except Machinery and Transportation Equipment	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	Yes	48217008	32.81088	-116.9716
119	Alpha Powder Coating	1165		N Johnson Ave	907.1	3479		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	N/A	No	48217041	32.81058	-116.97067
120	Alpha Powder Coating	440		Front St		3479												No						
121	Abacor Inc.	1165		N Johnson Ave	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	N/A	No	48217031	32.81108	-116.96993
122	J&B Materials	1165		N Johnson Ave	907.13	5099	42399	Building Materials Wholesale	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48217031	32.81108	-116.96993
123	His Business Manufacturing Co	1180		N Johnson Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	Yes	Medium	Yes	48217072	32.8121	-116.97118
124	Veolia Transportation Services, Inc.	1213		N Johnson Ave	907.13	4212		Motor Freight Transportation and Warehousing	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	48302122	32.81284	-116.97017
125	Super-Krete International, Inc.	1290		N Johnson Ave	907.13	5032		Stone, Clay, Glass, and Concrete Products	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48213115	32.81282	-116.97221
126	Advanced Finishing, Inc	1300	102	N Johnson Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes	48213115	32.81361	-116.97144
127	Attention Getters Design	1385	101	N Johnson Ave	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48302121	32.81404	-116.9704
128	Pacific Trans Enviromental Services, Inc.	1452		N Johnson Ave	907.13	4953		Electric, Gas, and Sanitary Services	Yes	Yes	No	No	No	No	No	No	Yes	No	Yes	High	No	48213109	32.81517	-116.97173
129	T B S Irrigation Products Inc	1532		N Johnson Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48213106	32.81588	-116.97141
130	Weldmac Mfg Co	1533		N Johnson Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	Yes	48302137	32.81587	-116.97021
131	The Palms Restaurant and Banquet Hall	143		E Main St	907.13	5813	72241	Eating and Drinking Places-Cabaret	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	Medium	No	48819105		
132	Por Favor, Inc	148		E Main St	907.13	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48808315	32.79511	-116.96115
133	Downtown Café	182		E Main St	907.13	5812		Eating and Drinking Places	Yes	No	No	Yes	No	No	No	No	Yes	No	Yes	High	No	48808321	32.79521	-116.9605
134	Ali Baba Restaurant	421		E Main St	907.13	5812		Eating and Drinking Places	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	No	Yes	High	No	48823231	32.79465	-116.95715
135	Venus Printing	1183		E Main St	907.13	2759		Printing, Publishing, and Allied Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48938024	32.79459	-116.94173
136	East Coast Auto Collision	1375		E Main St	907.13	7532		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	51117114	32.79857	-116.9311
137	De La Fuente Cadillac	1385		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	51117114	32.79877	-116.93127
138	JC Auto Repair	1492		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	51101115	32.80371	-116.92719
139	E&M Auto Parts	1647		E Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	50720046	32.81034	-116.91953
140	Riley Automotive II	1665		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	50720045	32.81057	-116.91906

City of El Cajon Stationary Industrial and Commercial Facilities

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
141	Santana's Mexican Food	291		W Main St	907.13	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	Medium	No	48815117	32.79463	-116.96456
142	Julio Cesar Chavez Auto Group	464		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	Yes	No	No	Yes	No	No	Yes	Yes	No	No	High	No	48716004	32.79536	-116.96755
143	Big Daddys Oil Arco #9577	495		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48733124	32.7945	-116.96746
144	Valley Muffler Shop	533		W Main St	907.13	7533		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48732129	32.79469	-116.96854
145	Aspen Vinyl, Inc	601		W Main St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes	48732133	32.79454	-116.96962
146	Bath Co Shower Door	613		W Main St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48732134	32.79435	-116.97002
147	Flexsystems Usa Inc	727		W Main St	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48730231	32.79479	-116.97167
148	California Sheet Metal	1020		N Marshall Ave	907.1	1761		Construction - Special Trade	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	No	48233009	32.80921	-116.97605
149	Lite Stone Concrete	1105		N Marshall Ave	907.13	3272		Stone, Clay, Glass, and Concrete Products	No	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	High	Yes	48212124	32.81047	-116.97489
150	Thunderbird Products	1148		N Marshall St	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	No	No	No	No	No	No	Yes	No	No	High	No	48232008	32.81101	-116.97587
151	Transportation Equipment Inc	1404		N Marshall Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48214046	32.81486	-116.97618
152	Toro Agricultural Irrigation	1588		N Marshall Ave	907.13	3524		Industrial and Commercial Machinery and Computer Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	48214044	32.81601	-116.97625
153	Golden State Aviation	1640	160	N Johnson Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82804	-116.98317
154	Camp Bow Wow	1677	A	N Marshall Ave	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	38711039	32.81772	-116.97533
155	Aerodyne Engineering Co	1763		N Marshall Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	Yes	Medium	Yes	38711042	32.81802	-116.97567
156	California Metals (Marshall)	297		S Marshall Ave	907.13	3599		Industrial and Commercial Machinery and Computer Equipment Recycling	Yes	Yes	Yes	No	No	No	No	No	Yes	No	Yes	High	Yes	48728108	32.79323	-116.97512
157	RDI, LLC	385		S Marshall Ave	907.13	4141		Local and Suburban Transit and Interurban Highway Passenger Transportation	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48729124	32.79153	-116.97523
158	Jim Wolf Technology Inc	212		Millar Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	Yes	48728111	32.79348	-116.97462
159	Garvin Industries	316		Millar Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	Yes			
160	Arco AM/PM #640	593		N Mollison Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	High	No	48338035	32.80244	-116.9506
161	Chevron Stations Inc #1742	696		N Mollison Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48432112	32.8041	-116.95127

City of El Cajon Stationary Industrial and Commercial Facilities

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
162	South Bay Welding	781		O Conner St	907.13	3441		Fabricated Metal Products, except Machinery and Transportation Equipment	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	Yes	48213109	32.81532	-116.97232
163	International House of Pancakes	1286		Oakdale Ave	907.13	5812		Eating and Drinking Places	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	High	No	48931012	32.80194	-116.93619
164	Jack Chidgey & Son, L L C	1099		W Palm Ave	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	Low	No			
165	Cajon Valley Union School District Transportation	777		E Park Ave	907.13	4151		Local and Suburban Transit and Interurban Highway Passenger Transportation	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	48811318	32.79784	-116.95332
166	California Custom Woodworks, Inc	1035	120	Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	N/A	Yes	48307142	32.80939	-116.96672
167	Tackett Machine LLc	1050	D	Pioneer Way	907.13	3599	3327	Metal work / Machine Shop	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48307214		
168	Media Control Systems L.L.C.	1050	Q	Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48307214	32.81028	-116.96871
169	Sunswest Technologies Inc.	1050		Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	Yes	N/A	Yes			
170	The Strip Shop	1050	1	Pioneer Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	Yes	Low	Yes	48307214	32.81028	-116.96871
171	Jeldwen Windows and Doors	1111		Pioneer Way	907.13	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48307121	32.81067	-116.96676
172	Mech Inclined Technicians	1112		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	Yes	48307213	32.81092	-116.96808
173	High Precision Grind & Machining, Inc.	1130		Pioneer Way	907.1	3499		Fabricated Metal Products, except Machinery and Transportation Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48307211	32.81119	-116.96811
174	Waterdog Products, Inc.	1148		Pioneer Way	907.1	2821		Plastics Materials, Synthetic Resins, And Nonvulcanizable Elastom	No	Yes	No	No	Yes	No	No	No	Yes	No	No	High	Yes	48307211	32.81121	-116.96846
175	Bedco Inc	1174		Pioneer Way	907.13	3741	3363	Motor Vehicle Parts Manufacturing	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No	No	Medium	No	48307212		
176	Embertons Machine & Tool, Inc.	1215	A	Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48302251	32.81269	-116.96723
177	Livesay Marine	1250	A	Pioneer Way	907.1	7699		Miscellaneous Repair Services	No	Yes	No	No	No	No	No	No	Yes	No	No	High	Yes	48307121	32.81037	-116.9672
178	Liddle Machine	1276		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	Yes	48307121	32.81068	-116.96733
179	Tube Lighting Products	1346		Pioneer Way	907.1	3648		Electronic and Other Electrical Equipment and Components, except computer	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48307133	32.81139	-116.96718
180	Reyes Machining	1364		Pioneer Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	48307132	32.81188	-116.96695
181	American Made Wrought Iron	1401	22	Pioneer Way	907.1	3446		Fabricated Metal Products, except Machinery and Transportation Equipment	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Medium	Yes	48302228	32.8145	-116.96628

City of El Cajon Stationary Industrial and Commercial Facilities

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							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
182	Iron Express	1401	4	Pioneer	Way	907.1	3446		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48302228	32.81443	-116.96712
183	Millers Towing	1402		Pioneer	Way	907.13	7521		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No	No	High	No	48302130	32.81444	-116.9687
184	Horne's Metal Works	1408		Pioneer	Way	907.1	3459		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	High	Yes			
185	Kropf's Custom Sheet Metal	1408		Pioneer	Way	907.13	1799	23899	Sheet Metal Contractor	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Low	No			
186	Pluck a Truck El Cajon Auto Recycling	1416		Pioneer	Way	907.13	7549		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48302130	32.81452	-116.96803
187	Direct Sheet Metal	1423		Pioneer	Way	907.1	3444		Fabricated Metal Products, except Machinery and Transportation Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48302246	32.81477	-116.96714
188	Meyer Eng	1445		Pioneer	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes			
189	Competition Textiles	1449		Pioneer	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48302247	32.81513	-116.96693
190	Ponderosa Roasting Maint & Mfg	1466	10	Pioneer	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48302111	32.81541	-116.96799
191	Top Notch Commercial and Aerospace Manufacturing, Inc.	1488	17	Pioneer	Way	907.13	3599	33271	Fabricated Metal Products, except Machinery and Transportation Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48302111	32.81566	-116.96794
192	San Diego Rods and Customs	1575		Pioneer	Way	907.13	7549		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48302265	32.8165	-116.96739
193	Decco Castings, Inc	1596		Pioneer	Way	907.13	3365		Primary Metal Industries	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No	High	Yes	38712116	32.81705	-116.96867
194	Fit N Hip Wear	1614		Pioneer	Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	38712124	32.81692	-116.96811
195	Countywide Metal Fab & Finish Inc.	1348		Pioneer	Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	48307133	32.81149	-116.96726
196	Master Halco Inc	485		Raleigh	Ave	907.13	5039	44419	Building Material Wholesale	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48712162		
197	Barking Lot	486		Raleigh	Ave	907.1	752	81291	Animal Specialty Services, Except Veterinary	Yes	Yes	No	No	No	No	No	No	Yes	No	Yes	Medium	No			
198	Circlemaster Inc	495		Raleigh	Ave	907.1	3449		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	N/A	N/A			
199	Omni Pacific	505		Raleigh	Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	No			
200	Doetsch Enterprises	515		Raleigh	Ave	907.1	3999		Miscellaneous Manufacturing Industries	No	Yes	No	No	No	No	No	No	Yes	No	No	High	Yes			
201	Russells Metal Fab	549		Raleigh	Ave	907.13	3499		Fabricated Metal Products, except Machinery and Transportation Equipment	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Medium	No	48225037	32.80105	-116.9723
202	Amatek Rotron	474		Raleigh	Ave	907.13	3564		Industrial and Commercial Machinery and Computer Equipment	No	Yes	No	No	No	No	No	No	Yes	No	No	High	No	48712188	32.79986	-116.97383
203	Alturdyne	660		Steele	St	907.13	3621		Electronic and Other Electrical Equipment and Components, except computer	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	48302115	32.81455	-116.96989
204	Autobahn	444		Vernon	Way	907.1	5093		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	High	Yes	48302252	32.81252	-116.96677

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
205	A&S Glass & Screen	457		Vernon Way	907.13	3442	3323	Manufacturing- Glass/Screen Doors	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Low	No	48307132		
206	Autoworks International, LLC	462		Vernon Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	High	Yes			
207	J & S Transmissions and Automotive	462	C	Vernon Way	907.13	7537	811113	Automotive Repair and Service	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48302252		
208	Griffiths Machining	465		Vernon Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48307132	32.81216	-116.96719
209	Vcsd Inc.	585		Vernon Way	907.13	1751	23899	Cabinet Manufacturing	No	Yes	No	No	No	Yes	No	No	Yes	No	No	Medium	No	48307217		
210	Mil-Spec Metallics	755		Vernon Way	907.13	5051		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	Yes	48217033	32.81167	-116.97228
211	East County Metal Supply	755		Vernon Way	907.13	5051	4239	Wholesale Trade- Metal	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48217033		
212	Fabcom	781		Vernon Way	907.1	3446		Fabricated Metal Products, except Machinery and Transportation Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	48217033	32.81189	-116.97245
213	Certified Metal Craft Inc	877		Vernon Way	907.13	3999		Miscellaneous Manufacturing Industries	No	Yes	Yes	No	No	No	No	No	Yes	No	No	High	Yes	48217001	32.81165	-116.97295
214	House Of Bounce	959		Vernon Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes			
215	Premier Metal Processing Inc.	971		Vernon Way	907.1	3549		Industrial and Commercial Machinery and Computer Equipment	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes	48212139	32.81188	-116.97408
216	Allied Castings, Inc.	983		Vernon Way	907.13	3363		Primary Metal Industries	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	N/A	N/A	48212122	32.81187	-116.97455
217	KD Cabinet	1065		Vernon Way	907.1	2434		Lumber and Wood Products, except furniture	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48212120	32.81191	-116.97513
218	Eye Grind Design	1069		Vernon Way	907.1	3993		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48212120	32.81191	-116.97533
219	AJM Packaging Corporation	1160		Vernon Way	907.13	2656		Paper and Allied Products	No	Yes	No	No	Yes	No	No	No	Yes	No	No	High	Yes	48214010	32.81301	-116.9773
220	RMS Laser	1033		Vernon Way	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48212122	32.81184	-116.97475
221	Washington Arco	1092		E Washington Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48840030	32.78797	-116.94488
222	Juanbertos Mexican Food	1104		E Washington Ave	907.13	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48927301	32.78794	-116.94425
223	Gibson & Barnes Top Notch Flight Suits	1900	140	Weld Blvd	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38423204	32.82736	-116.98914
224	Race Car Dynamics, Inc	1900	100	Weld Blvd	907.1	3999		Miscellaneous Manufacturing Industries	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	38423204	32.82736	-116.98914
225	Golden State Gasoline	181		N 2nd St	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918072	32.79612	-116.93528
226	Romeo's Car Wash	195		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918071	32.79638	-116.93508
227	Walgreens	215		N 2nd St	907.13	5912		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918015	32.79681	-116.93507
228	McDonald's (2nd)	281		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918014	32.79734	-116.93504
229	Ralph's Grocery Co # 102	300		N 2nd St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48916224	32.79745	-116.93631
230	Money Tree	303		N 2nd St	907.13	6163		Nondepository Credit Institutions	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918013	32.7976	-116.93504

City of El Cajon Stationary Industrial and Commercial Facilities

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
231	El Cajon Auto Electric	317		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918012	32.7978	-116.93504
232	Arby's Restaurant #231	325		N 2nd St	907.13	5812	72211	Eating and Drinking Places	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	Low	No	48918079	32.79805	-116.93505
233	Baskin Robbins Ice Cream	328		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48916217	32.79927	-116.93632
234	Taco Bell #23723	335		N 2nd St	907.13	5812		Eating and Drinking Places	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	Low	No	48918078	32.79853	-116.93504
235	Subway Sandwiches (2nd)	341		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918006	32.79873	-116.93504
236	Dutch Touch Tattooing & Piercing	363		N 2nd St	907.13	8999		Services, Not Elsewhere Classified	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918005	32.79891	-116.93542
237	Car Quest	391		N 2nd St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918050	32.79907	-116.93504
238	2nd Street Gas Depot	490		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48916218	32.79996	-116.93606
239	Finest Donuts	526		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931022	32.80082	-116.93597
240	Wings N Things/Wing N It, Inc.	528		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931022	32.80087	-116.93597
241	Cotixan Mexican Restaurant	538		N 2nd St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931015	32.80089	-116.93672
242	Jiffy Lube Store #495	539		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48912381	32.80095	-116.93545
243	KFC	555		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48912382	32.80126	-116.93528
244	Estrada's Mexican Food	569		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48912349	32.80154	-116.93528
245	Tyler's Taste of Texas	576		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931012	32.80185	-116.93593
246	Shell (2nd)	601		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48912235	32.80243	-116.93522
247	Valvoline Instant Oil Change	610		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931009	32.80242	-116.93607
248	SKS Inc.	610		N 2nd St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48931009	32.80242	-116.93607
249	Master's Cut	790		N 2nd St	907.13	7241		Personal Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425422	32.80499	-116.93601
250	Dragon Fire	797		N Second St	907.13	7539	81111	Automotive Repair	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48712110		
251	Villas Mexican Food #1	798		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425422	32.80504	-116.93592
252	Duraid Hermez Detail	816		N 2nd St	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425255	32.80557	-116.93609
253	Run Rite Auto Service	830		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425223	32.80591	-116.93601
254	Meineke Car Care Center	830		N 2nd St	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425223	32.80585	-116.93596
255	Marechiaro Pizza House	854		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425161	32.80654	-116.93595
256	Vons #2367	950		N 2nd St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48422251	32.80823	-116.93644
257	The Pancake House	1000		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48422125	32.80904	-116.93607
258	Cat & Doggie Works	1137		N 2nd St	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Low	No	48423207	32.81051	-116.93539
259	Jump 4 Joy	1177		N 2nd St	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48423229	32.81135	-116.93549
260	West Coast Kitchen	1209	108	N 2nd St	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48412052	32.81198	-116.93547

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							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
261	Bonnies Grooming	1215		N 2nd	St	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Low	No	48412026	32.81211	-116.93541
262	Agape Veterinary Hospital	1291		N 2nd	St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Low	No	48412033	32.81313	-116.93541
263	The Grinder	1300		N 2nd	St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48404409	32.81362	-116.93598
264	El Cajon Hearing Aid Center	761		Arnele	Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48225038	32.80364	-116.97222
265	Pro Body Warehouse	782		Arnele	Ave	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224047	32.80416	-116.97237
266	Mor Furniture for Less/TRS Home Furnishings	880		Arnele	Ave	907.13	2392		Apparel and Other Finished Products Made From Fabrics and Similar Material	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224047	32.80416	-116.97286
267	Avocado Food Market	852		Avocado	Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49303212	32.7847	-116.95789
268	Subway Sandwiches #4445	1175		Avocado	Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49329017	32.77952	-116.95663
269	The Vons Co., Inc. #3044	1201		Avocado	Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49329018	32.77887	-116.95648
270	Pizza Hut #315029	1255		Avocado	Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49329019	32.77818	-116.9567
271	China Diamond Restaurant	1265		Avocado	Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49329020	32.77804	-116.95727
272	Heartland Coin Club	695		Ballantyne	St	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	Yes	Low	No	48327216	32.8041	-116.95747
273	Panda Express #715	131		Broadway		907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48322146	32.80747	-116.96086
274	Jack-in-the-Box #78	170		Broadway		907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48309011	32.80795	-116.96075
275	Arco AM/PM	201		Broadway		907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	49322239	32.80735	-116.95994
276	Pizza Hut	306		Broadway		907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48309035	32.8084	-116.95884
277	Dolci Mango of El Cajon	330		Broadway		907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48309035	32.80831	-116.95888
278	L&L Hawaiian BBQ	356		Broadway		907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48309039	32.8079	-116.95858
279	Sew Pros Sewing and Vacuum Center	393		Broadway		907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48322248	32.80742	-116.95836
280	El Pollo Loco #3562	494		Broadway		907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48313004	32.80793	-116.95683
281	King House	500		Broadway		907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48313004	32.80796	-116.95671
282	A 1 Smog Test	507		Broadway		907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48324104	32.80724	-116.95638
283	Ben's Market and Pastry	544		Broadway		907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48313054	32.80793	-116.95497
284	Sunshine Co	548		Broadway		907.13	7349		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48313054	32.80793	-116.95493
285	Wendy's #01	871		Broadway		907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428232	32.80723	-116.95172
286	7-Eleven Store # 2131-25085C	895		Broadway		907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428225	32.80741	-116.95129
287	Starbucks Coffee #3417	903		Broadway		907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428238	32.80739	-116.95058
288	Subway Sandwiches (Broadway)	915		Broadway		907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428238	32.80747	-116.95039
289	Entenmann's Orowheat Outlet	916		Broadway		907.13	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428110	32.80806	-116.94974
290	Cedars Bakery	926		Broadway		907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428110	32.80806	-116.94941

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
291	The Yogurt Mill	935		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48428226	32.8074	-116.94987
292	Dominos Pizza #7704	936		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48429107	32.80794	-116.94914
293	Beths Grooming	1028		Broadway	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Low	No	48429322	32.80798	-116.94656
294	Broadway Farmer's Market	1039		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48429432	32.80728	-116.94569
295	Howards Bakery	1097		Broadway	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48429432	32.80744	-116.94483
296	Camper and Trailer Outlet	1183		Broadway	907.13	5599		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48418248	32.80737	-116.94067
297	Izzy's Cafe, Inc.	1252		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48422226	32.80796	-116.93774
298	Napa Auto Parts	1220		Broadway	907.13	5531	4413	Automotive Parts Retail	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48420356		
299	Speedy TV	1257		Broadway	907.13	7622		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425149	32.80727	-116.9378
300	RP Racing	1259		Broadway	907.13	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425170	32.80727	-116.93755
301	Tropifruit & Deli (Broadway)	1263		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425113	32.80726	-116.9373
302	Allman Family Auto	1265		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48425170	32.80722	-116.9375
303	Pizza Xpress	1270		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48422222	32.80805	-116.93728
304	G&M Oil Co. #94	1298		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48422245	32.80808	-116.93608
305	Broadway Market	1309		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48426160	32.80751	-116.9352
306	Sun Auto Repair	953		Broadway	907.13	7539		Automotive Repair Services, and Parking	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Medium	No	48423221	32.80815	-116.93507
307	Executive Gourment Catering/Aloha Catering	1321		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48426112	32.80756	-116.93466
308	Trinity Heart Medical Supply	1331		Broadway	907.13	5047		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48426112	32.80739	-116.93456
309	Amarc Enterprises	1339		Broadway	907.13	5199		Wholesale Trade; Nondurable goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48426173	32.80735	-116.9343
310	Royal Palace Restaurant and Banquet Hall	1340		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48423111	32.80825	-116.93391
311	El Cajon Muffler and Air Conditioning	1370		Broadway	907.13	7533		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48424029	32.80804	-116.93286
312	Hollywood Motors	1423		Broadway	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	50728169	32.80749	-116.93027
313	Car Pro Inc.	1427		Broadway	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	50728169	32.80749	-116.93013
314	Italian Pizza Restaurant	1438		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	50727025	32.80791	-116.92987
315	Pacific Refrigeration, Inc., A/c Service Co.	1440		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	50727007	32.80818	-116.92936
316	Albertsons, Inc. #6771	1608		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	50751021	32.80864	-116.92018
317	Little Caesars Pizza (Chase)	393	Suite B	E Chase Ave	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49252223	32.78012	-116.9582
318	El Cajon Arco AM-PM	404		E Chase Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49343021	32.78075	-116.95736
319	North Park Produce	432		E Chase Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49343022	32.78078	-116.9568

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
320	Care & Comfort Veterinary Hospital, Inc.	522		E Chase	St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Low	No	49343023	32.7808	-116.95598
321	Vets Pets, Inc.	522		E Chase	St	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	49343023	32.7808	-116.95598
322	7-Eleven #16070	394		W Chase	Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49233157	32.78074	-116.96621
323	CCS Cleaning Service	205		Claydelle	Ave	907.13	7349		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48823110	32.79372	-116.95853
324	Exalt Customs	350		Coogan	Way	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307120	32.81016	-116.96542
325	Arco #9562	978		N Cuyamaca	St	907.13	5541	44719	Automotive Dealers and Gasoline Service Stations	No	Yes	No	No	Yes	No	No	No	Yes	No	No	Medium	No	48209302	32.80822	-116.97996
326	The Cajon Pass Deli	1195		N Cuyamaca	St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48231010	32.81159	-116.97935
327	Advanced Color Coating	1375		N Cuyamaca	St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48214058	32.81403	-116.97928
328	Ribbit Pest Control, Inc.	435		W Douglas	Ave	907.13	7342		Business Services	No	No	No	No	No	No	No	No	No	No	Yes	Low	No	48733130	32.79367	-116.96691
329	Legend Auto Group	457		W Douglas	Ave	907.13	5012	42311	Automotive Sales-Wholesale	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48733129		
330	Mike's Deli and Market	289		El Cajon	Blvd	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48732226	32.79296	-116.96944
331	Truck and SUV Superstore, Inc	327		El Cajon	Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48732304	32.7924	-116.96996
332	Stetts Iron Horse Ranch	453		El Cajon	Blvd	907.13	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48753211	32.79047	-116.9716
333	Heavenly Taste	533		El Cajon	Blvd	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48753208	32.79031	-116.97185
334	El Cajon Harley Davidson	621		El Cajon	Blvd	907.13	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48753118	32.78924	-116.97267
335	Leos Market	635		El Cajon	Blvd	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48751228	32.789	-116.97302
336	Auto d'Elegance	673		El Cajon	Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48751105	32.78847	-116.97367
337	Grove Motorcycle	687		El Cajon	Blvd	907.13	5571	44122	Motorcycle Parts and Service	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	48751102		
338	Alia Insurance Services Inc.	720		El Cajon	Blvd	907.13	6411		Insurance Agents, Brokers, and Service	No	No	No	No	No	No	No	No	No	No	No	Low	No	48749019	32.78747	-116.97565
339	Poes Auto Body	727		El Cajon	Blvd	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264108	32.78717	-116.97477
340	Mustang Auto and Classic Cars	727		El Cajon	Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264108	32.78717	-116.97477
341	Motor Sports Co.	775		El Cajon	Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264103	32.78638	-116.97556
342	WS Auto Sales, Inc.	775		El Cajon	Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	N/A	No	49264103	32.78638	-116.97556
343	J. C. Auto Detail	790		El Cajon	Blvd	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.7866	-116.97645
344	Rock Auto Group	790		El Cajon	Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.7866	-116.97645
345	Advance Paint and Body	790		El Cajon	Blvd	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.7866	-116.97645
346	Advance Auto Center	790		El Cajon	Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265022	32.7866	-116.97645
347	Enterprise Car Sales	850		El Cajon	Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265013	32.78573	-116.97723
348	Wrangler Family BBQ Pit	901		El Cajon	Blvd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264207	32.78429	-116.97751

City of El Cajon Stationary Industrial and Commercial Facilities

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							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
349	Sid's Auto Body, Inc. (El Cajon)	910		El Cajon	Blvd	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265012	32.78485	-116.9779
350	Spinali's Auto	919		El Cajon	Blvd	907.13	7542	81119	Carwash and Auto Detailing	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	49264219	32.78392	-116.97783
351	Legacy Cars (920)	920		El Cajon	Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	N/A	N/A	No	49265011	32.78479	-116.97798
352	Auto Proz	920		El Cajon	Blvd	907.13	5521	44112	Automotive Sales- Used Only	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	49265011	32.78479	-116.97798
353	Urban Bloom Landscape, Inc.	1017		El Cajon	Blvd	907.1	1711		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	49264203	32.78347	-116.97857
354	7 Star Auto Glass	1100		El Cajon	Blvd	907.13	7536		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	48778027	32.78324	-116.97956
355	Cunningham BMW	720		El Cajon	Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48749019	32.78747	-116.97557
356	Xtreme Glass	1510		Fayette	St	907.1	1793		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	48214034	32.81594	-116.97811
357	Cottonman Transmission	1286		Felser	St	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48231014	32.80911	-116.9792
358	Fletcher Hills Automotive and Smog	1288		Felser	St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48231014	32.80901	-116.97926
359	Gammow Pools, Inc	842		Fesler	St	907.1	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Yes	Low	No	48217012	32.80892	-116.97231
360	Crystal Clean Car Wash	111		S First	St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48938019	32.7943	-116.94437
361	Severin Mobile Auto Repair Team	225		Fletcher	Pkwy	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48143128	32.80292	-116.99406
362	Long John Silvers	270		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307149	32.80812	-116.96465
363	Maya's Deli	450		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307136	32.80847	-116.96672
364	Carl's Junior # 89	624		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48217069	32.80835	-116.96985
365	La Mesa Auto & Tire Center	2210		Fletcher	Pkwy	907.11	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48115072	32.80348	-116.99406
366	7-Eleven Food Store 13655E	2270		Fletcher	Pkwy	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48115069	32.80326	-116.99509
367	Jibe Studios	2333		Fletcher	Pkwy	907.11	7911		Amusement and Recreation Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48143103	32.80244	-116.99649
368	Suds n Paws	2349		Fletcher	Pkwy	907.1	7520		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48143103	32.80249	-116.99657
369	Flour Power Custom Cakery	2382		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48115068	32.8028	-116.99709
370	Fletcher Hills KWIK stop	2410		Fletcher	Pkwy	907.11	5541	44711	Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	48136223	32.80279	-116.99786
371	La China	2852		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48131032	32.80056	-117.00298
372	Medical Solutions	1987	I	Friendship	Dr	907.1	5047		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.82476	-116.98007
373	Sierra Pacific Landscape	304		Front	St	907.13	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	48727102	32.79287	-116.97641
374	US Lawn	304		Front	St	907.13	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	48727102	32.79288	-116.97641
375	LW Blackinton, Inc.	380		Front	St	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48727110	32.79206	-116.97663
376	Olympic Carpet Cleaning Supplies	538		Front	St	907.13	4959		Electric, Gas, and Sanitary Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48764003	32.79001	-116.97702
377	Fatboy Fiberglass and Welding	675		Front	St	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265002	32.78792	-116.97676
378	76 Smog Test Only Station	640		Garfield	Ave	907.11	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48136222	32.80301	-116.99774
379	Auto Electric Nanche	640		Garfield	Ave	907.13	7538	81111	Automotive Repair Services	No	Yes	No	No	Yes	No	No	No	Yes	No	No	Low	No	48136222		

City of El Cajon Stationary Industrial and Commercial Facilities

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							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
380	Sunfood Corporation	1830	101	Gillespie	Way	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	38720018	32.81895	-116.98155
381	Shamrock Racing Inc.	2030		Gillespie	Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	38720116	32.82454	-116.98481
382	Stuart Anderson's Black Angus Restaurant	1000		Graves	Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48309013	32.80902	-116.96092
383	Centric Transmission	1265		Greenfield	Dr	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48411009	32.81321	-116.93726
384	Jim Renner Auto Sales	1281		Greenfield	Dr	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48411011	32.81292	-116.93652
385	7-Eleven Store #13657	1666		Greenfield	Dr	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	50712015	32.8129	-116.91934
386	Solid Rock Café	2100		Greenfield	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51214005	32.80001	-116.90386
387	Western Exterminator Co	1320		Hill	ST	907.13	7342		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	49265005	32.78569	-116.97809
388	Powder Pros, Inc.	945		Industrial	PL	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48712173	32.7972	-116.97374
389	Banfield, The Pet Hospital	865		Jackman	St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224045	32.80682	-116.97298
390	Petsmart, Inc. #142	865		Jackman	St	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224045	32.80697	-116.97298
391	New Century Buffet	868		Jackman	St	907.1	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48224048	32.80672	-116.97486
392	Dubai Restaurant	123		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.79487	-116.9354
393	Sultan Baklava	131		Jamacha	Rd	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.79481	-116.93536
394	Best Nutrition & Market	147		Jamacha	Rd	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.7945	-116.93531
395	Big Frank's Café	163		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.79428	-116.9352
396	Pep Boys Auto #813	201		Jamacha	Rd	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.79401	-116.93493
397	BurgerKing #947	225		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51117054	32.79379	-116.93467
398	7-Eleven Food Store 13660E	335		Jamacha	Rd	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128045	32.79237	-116.93272
399	Francos Pizza	574		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51126071	32.78888	-116.92983
400	Healthy Pet Pantry	681		Jamacha	Rd	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	51155009	32.78795	-116.92798
401	Wendy's #11	686		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51126071	32.78805	-116.92876
402	Jamacha Veterinary Clinic	693		Jamacha	Rd	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Low	No	51155009	32.78788	-116.92793
403	Large Animal Veterinary Association	725		Jamacha	Rd	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128097	32.78696	-116.92745
404	Angels Pet Parlor	731		Jamacha	Rd	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128095	32.78663	-116.92753
405	Giant Pizza King #1	740		Jamacha	Rd	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51402161	32.78674	-116.92851
406	Starbucks Coffee #9863	745		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128095	32.78645	-116.92756
407	CVS Pharmacy	790		Jamacha	Rd	907.13	5912		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	51402149	32.78569	-116.92851
408	Personal Touch Dining Inc.	859		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	51431017	32.78392	-116.9276
409	Aircraft Storage Spaces	1840		Joe Crosson	Dr	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.82099	-116.96973
410	Advanced Electronic Solutions	1830		John Towers	Ave	907.13	1731		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719007	32.8207	-116.97953

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
411	Tropifruit & Deli (Johnson)	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224031	32.80516	-116.97124
412	Burger King 814	822		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48224029	32.80595	-116.9715
413	Sears Holding Company	1406		N Johnson Ave	907.13	5083		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48213110	32.81455	-116.97185
414	County Motor Parts Co., Inc./Napa Auto and Truck Parts	1597		N Johnson Ave	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302132	32.81661	-116.97019
415	Thomas Building Supply	137		S Johnson Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Low	No	48732106	32.79421	-116.97087
416	Greenscape	333		W Lexington Ave	907.13	782		Agricultural Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48735113	32.79255	-116.96518
417	El Cajon Auto Trim Shop	645		W Lexington Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48732325	32.79248	-116.96934
418	New York Giant Pizza	356		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48717275	32.79856	-116.96256
419	GorgesTire Shop	404		N Magnolia Ave	907.13	5531	44132	Automive Repair- Tires	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48801024		
420	Enterprise Rent-A-Car #3247	451		N Magnolia Ave	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48801025	32.79961	-116.96178
421	Shell (Magnolia)	515		N Magnolia Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48333031	32.8012	-116.96196
422	Park Place Cafe	169		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No			
423	Park Place Cafe	169		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No			
424	The Lawless Pub	176		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48808320	32.79522	-116.96059
425	New York Bakery, Inc.	245		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48821104	32.79463	-116.95945
426	Happy's (Pizza)	388		E Main St	907.13	5811	72211	Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48811124		
427	El Cajon International Food	502		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48811221	32.79527	-116.9562
428	Babylon International Market	524		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48811243	32.79559	-116.95564
429	El Cajon Meat Market	575		E Main St	907.13	5421		Food Stores	Yes	No	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48823304	32.79465	-116.95502
430	Discount Auto Pawn	715		E Main St	907.13	7521		Automotive Repair Services, and Parking	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Low	No	48813426	32.79467	-116.95313
431	Baghdad Market	733		E Main St	907.1	5411	44511	Food Stores	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	High	No	48813419	32.79452	-116.95262
432	George's Lawn Equipment	747		E Main St	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48813405	32.79455	-116.95241
433	East Valley Classic Car Wash	760		E Main St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48813104	32.79528	-116.95247
434	Greek Style Chicken, Inc.	955		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48813311	32.79461	-116.94946
435	CLASSIC AUTO SALES	966		E Main St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48913022	32.79538	-116.94889
436	Rice RV	1035		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	48838040	32.79455	-116.94667
437	Rent-A-Center #01055	1047		E Main St	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48838038	32.79431	-116.94594
438	New Battery Starter Shop	1056		E Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48933019	32.79513	-116.94633
439	Tasty Pizza	1109		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48938011	32.79467	-116.94343

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
440	Carson Trailer Inc.	1111		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48938011	32.794	-116.94324
441	Panda Valley Mandarin Cuisine	1142		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48915031	32.79542	-116.9428
442	Frazee Paint	1154		E Main St	907.13	5231		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Low	No	48915031	32.79521	-116.9426
443	Tocumbo	1183		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48938024	32.79459	-116.94173
444	Shakira Pastry	1183		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48938024	32.79459	-116.94173
445	Antique Row Cafe of El Cajon	1185		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939011	32.79455	-116.94103
446	El Cajon Moving Center	1186		E Main St	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48915029	32.79542	-116.94146
447	Loftis Motorsports	1189		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939002	32.79461	-116.9405
448	Precision Tune Auto Care	1191		E Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939002	32.7947	-116.94042
449	Harbor Freight Tools EC-14	1196		E Main St	907.1	5251		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Low	No	48915025	32.79518	-116.9405
450	Papa John's Pizza #1597	1201		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939010	32.7947	-116.93959
451	Pupuseria Salvadorena and Mexican Food	1207		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939010	32.7947	-116.93946
452	Catered Creations	1223		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939010	32.7947	-116.9391
453	Palms Grill	1255	A	E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48939004	32.79471	-116.93872
454	Dixieline	1262		E Main St	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Low	No	48917026	32.79582	-116.93735
455	Little Caesars Pizza (Main)	1299		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48921004	32.79478	-116.93627
456	Coco's #884	1324		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918073	32.79729	-116.93418
457	Shear Perfection - Wendy Dog/Cat Grooming	1325		E Main St	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918063	32.79686	-116.93362
458	Lynn's Locksmith Service	1380		E Main St	907.13	7299		Personal Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918049	32.7993	-116.93176
459	Bs Keg Beer	1429		E Main St	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	51101417	32.80041	-116.92984
460	Main Street Car Wash	1437		E Main St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	51101427	32.80137	-116.92864
461	Auto Wholesalers	1440		E Main St	907.13	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	51101536	32.80147	-116.92975
462	Pernicano's	1588		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	50731027	32.80739	-116.92284
463	McDonald's (Main)	1695		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	50720042	32.81148	-116.91842
464	Jack in the Box #3064	1700		E Main St	907.13	5812	72211	Eating and Drinking Places	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	High	No	50712014	32.81278	-116.91863
465	Menchie's	1710		E Main St	907.13	5812	72221	Eating and Drinking Places	Yes	Yes	Yes	No	No	No	No	No	Yes	No	Yes	Medium	No	50712015		
466	Auto Zone #5646	1795		E Main St	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	50721101	32.81434	-116.91666
467	Quizno's Classic Subs	124		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48719255	32.7953	-116.96296
468	Athena Foods	435		W Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48733123	32.79462	-116.96706

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
469	Victory Auto Service	935		W Main St	907.13	7549	81119	Automotive Repair Services	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	48728227	32.79481	-116.97405
470	Imported Motor Cars	939		W Main St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48728231	32.7947	-116.97416
471	Earl Scheib	1002		W Main St	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48712150	32.79526	-116.97468
472	Superstar 3	1090		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48712141	32.79526	-116.97509
473	G&M Oil #95	1099		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48728128	32.79469	-116.97512
474	Mossy Nissan	1170		W Main St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	Yes	No	No	No	No	No	No	Low	No	48711027	32.79523	-116.97596
475	Arco AM/PM	1245		W Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48725046	32.7947	-116.97877
476	7-Eleven #21787	1253		W Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48725047	32.79469	-116.97913
477	So Cal Suspensions	227	A	N Marshall Ave	907.13	7539	81111	Automotive Repairs	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	48712179		
478	S & R Auto Repair	227	B	N Marshall Ave	907.13	7538	81111	Automotive Repair	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	48712179		
479	Dal-Tile SSC West, Inc.	270		N Marshall Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	Yes	No	No	No	Low	No	48711026	32.79677	-116.97574
480	Triton Imaging	290		N Marshall Ave	907.13	2759		Printing, Publishing, and Allied Industries	No	No	No	No	No	No	No	No	No	No	No	Low	No	48711026	32.79697	-116.97595
481	Off Road Warehouse ORW	425		N Marshall Ave	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48712190	32.79958	-116.97504
482	US Air Conditioning	1250		N Marshall Ave	907.13	5075		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48214048	32.81351	-116.97622
483	El Cajon Flying Service (lessor)	1825		N Marshall Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	Yes	Low	No	38719006	32.8258	-116.97719
484	Instrument Overhaul Service of San Diego, Inc.	1981		N Marshall Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.8281	-116.98314
485	Gillespie Field Cafe & Deli	2015		N Marshall Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.82797	-116.98332
486	Hot Blend Coffee	250		S Marshall Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48726204	32.79331	-116.9757
487	J&W Lumber	430		S Marshall Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Low	No	48764016	32.7906	-116.9758
488	David A. Howe M.D.	505		N Mollison Ave	907.13	8011		Health Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48806219	32.80044	-116.95048
489	Kragen Auto Parts #1173	101		S Mollison Ave	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48813312	32.7946	-116.95047
490	Mollison Market	725		S Mollison Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49310351	32.78704	-116.95055
491	Jack in the Box #54	2733		Navajo Rd	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48131017	32.80169	-117.00269
492	Stephanie Emerson Catering	144		S Orange Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48815114	32.794	-116.96369
493	Rancho del Oro Towing	1167		W Palm Ave	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48764024	32.79106	-116.97637
494	Hamann Companies	1000		Pioneer Way	907.13	1541		Building Construction - General Contractors and Operative Builders	No	No	No	No	No	No	No	No	No	No	No	Low	No	48307209	32.8095	-116.96875
495	William Kelly & Sons	1044	D	Pioneer Way	907.13	1711		Construction - Special Trade	No	Yes	No	No	No	No	No	No	Yes	No	No	Low	No	48307214	32.81022	-116.96796
496	Bear Machine	1044	K	Pioneer Way	907.13	3549	3335	Metal work / Machine Shop	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Low	No	48307214		
497	Mopars by Jack	1429		Pioneer Way	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302246	32.81494	-116.96746

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
498	Chappelle's Exhaust and Custom Shop	1433		Pioneer Way	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302246	32.81498	-116.96748
499	Name Unknown	1435		Pioneer Way	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302247	32.81507	-116.96748
500	British Heritage Motorsports	1437		Pioneer Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302247	32.81502	-116.96748
501	Nita's Deli and Bakery	1444		Pioneer Way	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.81525	-116.9687
502	Intellicept	1444		Pioneer Way	907.13	5099		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.81525	-116.9687
503	Vina & Co.	1444		Pioneer Way	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.81525	-116.9687
504	G3 Graphics, Inc.	1466	11	Pioneer Way	907.1	7336		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302111	32.81529	-116.96905
505	Pool Surfacing 2000 Inc.	104		Richardson Ave	907.1	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Low	No	48730130	32.7947	-116.97233
506	Elmer Sweetwood & Sons, Inc	151		S Sunshine Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48815112	32.79416	-116.9645
507	Pal of Mine Auto Sales	151		S Sunshine Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	48815112	32.79416	-116.9645
508	El Cajon Nutrition Center	325		Van Houten Ave	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48733109	32.79237	-116.96593
509	Beau's Distribution	380		Vernon Way	907.13	7319		Business Services	No	No	No	No	No	No	No	No	No	No	No	Low	No	48302267	32.8127	-116.96584
510	Trepco West Grocery Depot	333		Walter Way	907.13	5141		Wholesale Trade; Nondurable goods	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918074	32.79799	-116.93439
511	M&N Auto Services & Sales	344		Walter Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	48918054	32.79831	-116.93479
512	Wild Orchid Florist	908		E Washington Ave	907.13	5992		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Low	No	49310208	32.78782	-116.9507
513	Babis Bakery	910		E Washington Ave	907.1	5461		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49310208	32.78782	-116.95055
514	7-Eleven at 0215	1479		E Washington Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Low	No	51128036	32.78747	-116.92761
515	7-Eleven #21834B	108		W Washington Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	48828219	32.78793	-116.96265
516	Papas Pizza	111		W Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49216020	32.7875	-116.96297
517	Tres Hermanos Taco Shop	115		W Washington Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Low	No	49216020	32.7875	-116.96302
518	Washington Market	121		W Washington Ave	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Low	No	49216020	32.7875	-116.96309
519	7-Eleven #34048	1021		W Washington Ave	907.13	5499		Food Stores	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	Medium	No	49264109	32.78751	-116.97453
520	Sombreros Mexican Food	1501		E Washington Ave	907.13	5811	72211	Eating and Drinking Places	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	High	No	51128072	32.78725	-116.92715
521	San Diego Co. Fleet Service	1840		Weld Blvd	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Low	No	38719006	32.82705	-116.98698
522	Sprouts Farmer's Market	152		N 2nd St	907.13	5411		Food Stores	No	No	No	No	No	No	No	Yes	No	No	No	Medium	No	48917044	32.79592	-116.93643
523	Spot Free Rinse Car Wash (2nd)	329		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918055	32.79831	-116.93529
524	Firestone Complete Auto Care #2254	435		N 2nd St	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918069	32.79948	-116.93528
525	Jack-in-the-Box #32	495		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918060	32.79997	-116.93523
526	On the Go Gas	500		N 2nd St	907.1	5541	4471	Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48931016	32.80046	-116.93602
527	Carls Jr. Restaurant #483	520		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931015	32.80067	-116.93657
528	Chen's Golden Palace	530		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931022	32.80092	-116.93597
529	El Cotixan #1	538		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931022	32.80112	-116.93598

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
530	Petco Animal Service, Inc.	540		N 2nd St	907.1	5999		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931014	32.80116	-116.93692
531	Fiesta Nutrition	560		N 2nd St	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48931021	32.80173	-116.93661
532	El Compadre Taco Shop	595		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48912354	32.80192	-116.93528
533	Dallmann Confections	780		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425423	32.80479	-116.93592
534	Valley Automotive	813		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48426260	32.80554	-116.93525
535	Superior Car Wash	816		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425255	32.80555	-116.93605
536	Superior Car Wash	816		N 2nd St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425255	32.80555	-116.93605
537	Quality RV, Inc.	1062		N 2nd St	907.1	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48421225	32.80944	-116.93611
538	Crystal Pool Service	1109		N 2nd St	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48423211	32.80992	-116.93532
539	Plant House Nursery	1163		N 2nd St	907.13	181		Ornamental Floriculture And Nursery Products	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48423227	32.81092	-116.93507
540	DeVore Automotive	1253		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48412049	32.81244	-116.93525
541	Valerio's	1267		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48412029	32.81267	-116.93525
542	7-Eleven #13651	1296		N 2nd St	907.1	5411		Food Stores	No	No	No	No	No	No	No	Yes	No	No	No	Medium	No	48411013	32.81317	-116.93598
543	Rods Automotive	1313		N 2nd St	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48407119	32.81363	-116.93533
544	Los Chavos Mexican Food	1340		N 2nd St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48404412	32.81384	-116.93597
545	Ami Sushi	755		Arnele Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48225038	32.80378	-116.97218
546	A to Z Leasing	889		Arnele Ave	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48225027	32.80311	-116.97322
547	Tipton Honda	889		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48225027	32.80311	-116.97322
548	Bob Baker Chevrolet/Subaru	900		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48224032	32.80445	-116.97397
549	Bob Baker Lexus	1000		Arnele Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48224032	32.80432	-116.97521
550	Thrifty	700		Avocado Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	49301015	32.78739	-116.95813
551	El Pollo Loco	1145		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49329022	32.77944	-116.95747
552	Country Comfort Restaurant	1255		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49329019	32.77818	-116.9567
553	Salsa Mexican Food	1255		Avocado Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49329019	32.77818	-116.9567
554	Los Mendoza Taco Shop	303		Balantyne St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48811106	32.79754	-116.95759
555	Philly Steak Subs	312		Ballantyne St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48811106	32.79754	-116.95767
556	Inflatable Design Group	1080	B&C	W Bradley Ave	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	38711039	32.81762	-116.97512
557	A & J Powder Coating	1080	D	W Bradley Ave	907.13	3549	3335	Metal work / Machine Shop	No	Yes	Yes						Yes	No	No	Medium	No			
558	Del Taco #1041	141		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48322147	32.80748	-116.9606
559	Thai Style Restaurant	354		Broadway Ave	907.1	5812	72211	Eating and Drinking Places	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	Medium	No	48309039	32.8079	-116.95842
560	Santana Mexican Grill	411		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48324087	32.80738	-116.95716

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
561	Food 4 Less #394	444		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48311023	32.80864	-116.95756
562	Kragen Auto Supply #1270	485		Broadway	907.13	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48324103	32.80752	-116.95654
563	Crumbs of Paris	586		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48313063	32.808	-116.95458
564	Bonnys Cafe	596		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	Yes	Medium	No	48313063	32.808	-116.95449
565	Animal Medical Center	600		Broadway Ave	907.1	742		Veterinary Services For Animal Specialties	No	Yes	No	Yes	No	No	No	No	No	No	No	Medium	No	48313063	32.80831	-116.95441
566	Los Ponchos Mexican & Seafood	777		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48428239	32.80738	-116.95256
567	Broadway Exxon #1019	898		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48428108	32.80806	-116.95131
568	Arco	900		Broadway	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48428109	32.80806	-116.95054
569	Panda Rice Vietnamese/ Chinese Restaurant	907		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48428238	32.80747	-116.95051
570	Rodeo's Meat Market	927		Broadway	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48428230	32.80739	-116.95019
571	A-1 Glass Company	944		Broadway	907.13	7536		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48429107	32.80794	-116.94904
572	Silva's Taco Shop	998		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48429110	32.8079	-116.94818
573	Discount Tires	1001		Broadway	907.13	7534		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48429429	32.80735	-116.94784
574	Broadway Tire and Automotive	1105		Broadway	907.13	7538	81111	Automotive Repair Services, and Parking	No	Yes	Yes	No	No	No	No	No	Yes	No	No	Medium	No			
575	Spot Free Rinse Car Wash (Broadway)	1111		Broadway	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48418254	32.80744	-116.94382
576	Penske Truck Leasing Co. LP	1120		Broadway	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48418418	32.80827	-116.94338
577	Sid's Auto Body, Inc. (1129)	1129		Broadway	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48418250	32.80738	-116.94327
578	Ludington's RV	1131		Broadway	907.13	5271		Recreational Vehicle Dealer	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48418205	32.80738	-116.94295
579	The Truck Stop	1175		Broadway	907.13	5271		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48418212	32.80737	-116.941
580	Mason's Saw and Lawn Mower Service Inc.	1209		Broadway	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425150	32.80751	-116.93966
581	Broadway Smog Test-Only Station	1214		Broadway	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48420352	32.80801	-116.93949
582	Thornton's Irish Pub and Chop House	1221		Broadway	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425147	32.80734	-116.93937
583	Trujillos Taco Shop	1275		Broadway	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48425172	32.80735	-116.93694
584	Express Auto Repair and tires	1316		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48423223	32.80813	-116.93488
585	Atlantic Auto Repair	1318		Broadway	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48423224	32.8081	-116.93473
586	Cartwright Termite And Pest Control	1376		Broadway	907.13	7342		Business Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48424028	32.80804	-116.93257
587	WS Auto Sales, Inc.	1403		Broadway	907.13	5521	44112	Automotive Sales- Used Only	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	50728152		
588	Ecology Care Inc.	1415		Broadway	907.1	782		Agricultural Services	No	No	No	No	No	No	No	Yes	No	No	No	Medium	No	50728164	32.80735	-116.93057

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
589	Hollywood Motors Storage Yard	1419		Broadway	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50728169	32.80734	-116.93027
590	Tender Loving Care Pet Salon	1428		Broadway	907.1	752		Animal Specialty Services, Except Veterinary	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50727025	32.80792	-116.93017
591	Jack In The box # 3050	350		E Chase Ave	907.13	5812	72211	Eating and Drinking Places	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	Medium	No	49317233	32.78066	-116.95836
592	Starbucks Coffee #8943	450		E Chase Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49343022	32.78078	-116.95665
593	Tortilleria Salsa Market	480		W Chase Ave	907.13	5148		Wholesale Trade; Nondurable goods	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	49232015	32.78068	-116.9674
594	Happy Cow Car Wash	1055		N Cuyamaca St	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48231017	32.80962	-116.97931
595	El Cajon Towing	327		Cypress Ln	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48302209	32.81633	-116.96478
596	Canal Transmission	1249		Denver Ln	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48409148	32.81283	-116.94898
597	Al Rafdien Restaurant	474		W Douglas Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48733125	32.79437	-116.96715
598	Auto Finance Specialists	385		El Cajon Blvd	907.13	7389		Business Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732317	32.79153	-116.97037
599	Thrifty #9758	398		El Cajon Blvd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48731210	32.79161	-116.97137
600	Ram 99	407		El Cajon Blvd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48753219	32.79107	-116.97113
601	Consolidated Motors	410		El Cajon Blvd	907.13	5521	44112	Automotive Sales- Used Only	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48752019	32.79118	-116.97182
602	American Finance	410		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48752019	32.79118	-116.97182
603	County Wide Dealer Service	410		El Cajon Blvd	907.13	5521		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48752019	32.79118	-116.97182
604	Tom Parker Auto Gallery	414		El Cajon Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48752011	32.79102	-116.97204
605	Ron Ellis Enterprises, Inc.	427		El Cajon Blvd	907.13	1522		Building Construction - General Contractors and Operative Builders	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48753216	32.79086	-116.97143
606	Performance Choppers	444		El Cajon Blvd	907.1	5571	441	Motorcycle Parts and Service	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48752013	32.79076	-116.97216
607	Heavenly Taste Cafe & Catering	533		El Cajon Blvd	907.1	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48753208	32.79031	-116.97185
608	California Smog & Auto Repair	595		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48753229	32.78987	-116.97225
609	Veys Powersports	660		El Cajon Blvd	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48750014	32.78909	-116.97391
610	Al Archard, Inc.	661		El Cajon Blvd	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48751201	32.7887	-116.9732
611	Legacy Cars (670)	670		El Cajon Blvd	907.1	5511	4411	Automotive Sales New and Used	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48748015	32.78881	-116.97442
612	Body Beautiful Car Wash, Inc.	690		El Cajon Blvd	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48749018	32.78836	-116.97477
613	Exxon Mobil	695		El Cajon Blvd	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48751101	32.78789	-116.97408
614	Joes Tire Shop	765		El Cajon Blvd	907.1	7534		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49264105	32.78668	-116.97515

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
615	William Transmission and Auto Repair	792		El Cajon	Blvd	907.13	7537		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49265022	32.78646	-116.97647
616	Pacific Car Co.	900		El Cajon	Blvd	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49265012	32.78504	-116.97786
617	Delias Taco Shop	293		El Cajon	Blvd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732226	32.79293	-116.96947
618	Curb & Vent Manufacturing, Inc.	1437		Fayette	St	907.13	3444		Fabricated Metal Products, except Machinery and Transportation Equipment	No	No	No	No	No	No	No	No	No	No	No	Medium	Yes	48214054	32.81499	-116.97736
619	On the Border	101		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48227056	32.80737	-116.96344
620	Applebees	107		Fletcher	Pkwy	907.13	5812	72211	Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48227056	32.80737	-116.96361
621	Home Depot	298		Fletcher	Pkwy	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48307148	32.80904	-116.96472
622	Sears	575		Fletcher	Pkwy	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48227056	32.80723	-116.96868
623	Boston Market #0735	706		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48217052	32.80828	-116.97133
624	KFC #Y450061	724		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48217051	32.80828	-116.97168
625	McDonald's (Fletcher)	886		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	High	No	48217075	32.80809	-116.97311
626	Oil Changer #503	906		Fletcher	Pkwy	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48212142	32.80821	-116.97349
627	Smart and Final Extra	1090		Fletcher	Pkwy	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48212149	32.80822	-116.97418
628	Parkway Bowl	1280		Fletcher	Pkwy	907.13	7999		Amusement and Recreation Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48212133	32.80823	-116.97867
629	Ponchos Mexican Restaurant	2257		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48143107	32.80282	-116.99463
630	The Barbecue Pit	2388		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48115068	32.8028	-116.99717
631	Baskin Robbins #118	2396		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48115068	32.8028	-116.99725
632	Rancho Villas	2425		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48140102	32.80218	-116.99773
633	Beef n' Bun	2477		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48139603	32.80201	-116.99864
634	Starbucks Coffee	2740		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131032	32.80082	-117.00293
635	Golden Bagel Cafe	2744		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131032	32.80093	-117.00293
636	Vons Grocery Company	2800		Fletcher	Pkwy	907.11	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131028	32.8014	-117.0037
637	Chicago on a Bun	2872		Fletcher	Pkwy	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131030	32.8015	-117.00448
638	Coco's # 1162	1025		Fletcher	Pkwy	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224038	32.80725	-116.97445
639	Executive Friendship Deli	1935		Friendship	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82434	-116.97881
640	Precision Concepts Racing	1935		Friendship	Dr	907.13	7699	81131	Motorcycle Repair	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Low	No	38719006	32.82434	-116.97881
641	KMY Motorsports	1935		Friendship	Dr	907.13	5571		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82434	-116.97881
642	Revolutionizer Products LLC	1957	A	Friendship	Dr	907.1	5099		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82455	-116.979
643	Elegant Buffet	1985		Friendship	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82473	-116.98019
644	Whillock Contracting, Inc.	346		Front	St	907.13	1521		Building Construction - General Contractors and Operative Builders	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48727111	32.79228	-116.9765

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
645	Boomers	1155		Graves	Ave	907.13	7999		Amusement and Recreation Services	No	Yes	No	No	No	No	No	Yes	Yes	No	No	Medium	No	48309042	32.8108	-116.96126
646	Sun Flexionics Café	790		Greenfield	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48304022	32.8145	-116.95259
647	Bastet Veterianary Hospital Inc.	1682		Greenfield	Dr	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50712015	32.81327	-116.91906
648	Janet's Cafe #1	1696		Greenfield	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50712014	32.8126	-116.91872
649	Exxon Mobil Oil Corp	1761		Greenfield	Dr	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50737045	32.811	-116.91613
650	Shadow Mountain Ministries	2100		Greenfield	Dr	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51214005	32.80001	-116.90386
651	Aztec Dining Services at Grossmont College	8800		Grossmont College	Dr	907.12	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38607109	32.81477	-117.00624
652	Autoland Inc. / Mission Federal Credit Union	826		Jackman	St	907.13	6061		Depository Institutions	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224048	32.8066	-116.97377
653	Ottavio's Cucina Italiana	101		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51117048	32.79538	-116.93541
654	Fruitland & Deli	109		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51117054	32.79502	-116.9349
655	Popeyes Chicken	110		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48921045	32.7944	-116.93611
656	Revco Gas	303		Jamacha	Rd	907.13	5499		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51128040	32.79245	-116.93307
657	Ricos Deli Expresso & Smoothie Bar	538		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51126071	32.78933	-116.93042
658	La Hadas Mexican Food	558		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51126071	32.78907	-116.93001
659	Christy's Donuts	657		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51155010	32.78847	-116.92823
660	Save A Lot #948	678		Jamacha	Rd	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51126071	32.78827	-116.92914
661	Express Hand Car Wash	710		Jamacha	Rd	907.13	7542		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51402144	32.7874	-116.92835
662	7-Eleven Store #25302	711		Jamacha	Rd	907.1	5411	4451	Food Stores	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	51128036	32.78737	-116.92758
663	Harvest Ranch #1	759		Jamacha	Rd	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51128095	32.78614	-116.92756
664	Jamacha Bar and Grill	777		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51128096	32.78585	-116.92736
665	Karina's Mexican Seafood	820		Jamacha	Rd	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51402226	32.78479	-116.92815
666	Omega Fuel Injection	1934	B	John Towers	Ave	907.1	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38719006	32.82432	-116.98059
667	Diesel System Services	1934	B	John Towers	Ave	907.1	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48302113	32.81504	-116.97039
668	County Collison Center	1535		Johnson	Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732135	32.79395	-116.97056
669	Caliber Collision Centers	332		N Johnson	Ave	907.13	7539		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48712171	32.79892	-116.97153
670	Aamco Transmission	355		N Johnson	Ave	907.13	7537		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48712231	32.79904	-116.97032
671	Ferguson Truck Body & Equipment	383		N Johnson	Ave	907.1	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No			
672																			No						
673	4 Wheel Parts Performance	480		N Johnson	Ave	907.1	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No			

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
674	Team KIA of El Cajon	541		N Johnson Ave	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No	48226017	32.80155	-116.97019
675	Hacienda La Casa Blanca	700		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224033	32.80451	-116.9716
676	Cotixan Taco Shop #3	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48224031	32.80516	-116.97158
677	Thai Time Restaurant	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48224031	32.80516	-116.97148
678	Subway Sandwiches (Johnson)	762		N Johnson Ave	907.13	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	Medium	No	48224031	32.80516	-116.9714
679	Global Resource Options Inc. Gro Solar	1365	102	N Johnson Ave	907.1	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48302121	32.81372	-116.97033
680	Cutting Edge Supply	1675		N Johnson Ave	907.13	5013		Wholesale Trade; Durable Goods	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38712132	32.81763	-116.97052
681	The Three Amigos Auto Repair & Services	605		W Lexington Ave	907.13	7538	81111	Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48732308	32.79219	-116.96904
682	Golden Hammer Auto Body Repair	631		W Lexington Ave	907.1	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732325	32.79233	-116.96928
683	El 2 Palmas	220		E Madison Ave	907.13	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	Medium	No	48334032	32.80102	-116.95993
684	Freds Old Fashioned Burgers	1285		E Madison Ave	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48916217	32.80006	-116.93657
685	7-Eleven 13658F	375		W Madison Ave	907.1	5411	4451	Convenience Food Stores	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	Medium	No	48228308	32.80047	-116.96618
686	El Cajon Brewing Co	110		N Magnolia Ave	907.13	5812	72211	Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48719256		
687	Panda Express #1125	190		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48719248	32.79642	-116.96267
688	Motoworld	315		N Magnolia Ave	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48804011	32.79785	-116.96093
689	Rubios Mexican Grill #8	399		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48804007	32.79894	-116.96207
690	Perry's Cafe	475		N Magnolia Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48801036	32.80063	-116.96189
691	McKeever Inc.	1100		N Magnolia Ave	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48307150	32.81085	-116.96335
692	Sunbelt Rentals Inc.	1114		N Magnolia Ave	907.13	7513		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48307115	32.81134	-116.96301
693	Los Rancheros	165		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48819108	32.79462	-116.96075
694	Downtown Grind	200		E Main St	907.1	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48808323	32.79511	-116.9603
695	Mangia Bene Ristorante	221		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48821107	32.79463	-116.95993
696	El Cajon Courthouse Cafe	250		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48811128	32.79533	-116.95928
697	Las Pita Cafe	388		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48811124	32.79525	-116.95754
698	7-Eleven Store #21788D	410		E Main St	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48811267	32.79526	-116.95688
699	Victorias Mexican Food	677		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48823306	32.79465	-116.95469
700	El Cajon Shish Kabob	811		E Main St	907.13	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48813406	32.79455	-116.95217

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
701	Ochoas Mexican Food	1051		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48838038	32.79458	-116.94586
702	Auto Zone #3365	1080		E Main St	907.1	5531		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48913029	32.79532	-116.94543
703	Foodland I.G.A.	1099		E Main St	907.13	5411		Food Stores	No	No	No	No	Yes	No	No	No	No	No	No	Medium	No	48838006	32.79455	-116.94512
704	E Z Corner Market	1107		E Main St	907.13	5921		Miscellaneous Retail	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48938011	32.79466	-116.94363
705	Super Star Stations	1110		E Main St	907.13	5541	4477	Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48915027	32.79525	-116.94423
706	J's Grill	1183		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	No	Medium	No	48938024	32.79459	-116.94173
707	Auto Repair for Less	1189		E Main St	907.13	7538	81111	Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48939002	32.7947	-116.9405
708	Country Waffles	1248	260	E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48917046	32.79517	-116.93829
709	Rally's Hamburgers	1261		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48939004	32.79471	-116.93862
710	Poncho's Taco Shop	1279		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48939013	32.79452	-116.93755
711	Wienerschnitzel	1281		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48939013	32.7947	-116.93762
712	Rita's Mexican Food Inc./ Rita's Catering	1291		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48921044	32.79489	-116.93661
713	Good Times RV	1338		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48918019	32.79773	-116.93369
714	Garcia's Pueblo Mercado	1365		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918037	32.79785	-116.93243
715	Rosendos Mexican Food	1408		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918031	32.80001	-116.93104
716	Arco/Smog Pros	1410		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918031	32.79997	-116.93098
717	Kaelins Market	1435		E Main St	907.13	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	No	Medium	No	51101426	32.80053	-116.92929
718	Rick's RV Center	1546		E Main St	907.13	5561		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50731037	32.80558	-116.92524
719	El Cajon Ford	1595		E Main St	907.13	5511		Automotive Dealers and Gasoline Service Stations	No	Yes	No	No	Yes	No	No	No	Yes	No	No	Medium	No	50733025	32.8068	-116.92164
720	Main St Valero and Car Wash	1699		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50720041	32.81201	-116.91834
721	Chevron Store #59	1701		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50721105	32.81244	-116.91793
722	G&M Oil Co. #59	1701		E Main St	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	50721105	32.81244	-116.91793
723	Los Panchos Taco Shop	1709		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50721104	32.81262	-116.91784
724	BJs Equipment Rentals	1717		E Main St	907.13	7359		Business Services	No	No	Yes	No	Yes	No	No	Yes	Yes	No	No	Medium	No	50721102	32.81316	-116.91734
725	Marietas East	1746		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50712020	32.81369	-116.9181

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name	Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
726	Armstrong Garden Centers, Inc	1755		E Main St	907.13	181		Ornamental Floriculture And Nursery Products	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	High	No	50721101	32.81411	-116.91658
727	Mamma Rosa Pizza	1773		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50721101	32.81445	-116.91665
728	Taste of Athens	1784		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50712023	32.81462	-116.91719
729	Abbey Clinic for Pets	1787		E Main St	907.1	742		Veterinary Services For Animal Specialties	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50721101	32.81428	-116.91684
730	China Panda Garden Restaurant	1788		E Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	50712023	32.81456	-116.91721
731	Starbucks Coffee #6530	124		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48719255	32.7953	-116.96296
732	Colimas Mexican Food	339		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48734101	32.79475	-116.96546
733	Greektown Restaurant Buffet	345		W Main St	907.13	5812	72211	Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	Medium	No	48733101	32.79475	-116.96552
734	Hometown Buffet #722	390		W Main St	907.13	5812		Eating and Drinking Places	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Yes	High	No	48719253	32.7954	-116.96593
735	Jack In The Box #7	393		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48733102	32.79458	-116.96571
736	Hammurabi Family Restaurant	401		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48733135	32.79442	-116.96642
737	Ultimate Champion of Tires	445		W Main St	907.13	5531		Automotive Service and Parts	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48733123	32.79469	-116.96706
738	Best Auto Wholesaler	476		W Main St	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48716005	32.79532	-116.96792
739	Trust Auto Repair	537		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	Yes	Medium	No	48732130	32.79465	-116.9688
740	California Deli Works	553		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48732111	32.79467	-116.96931
741	Kladis Painting, Inc.	557		W Main St	907.13	1721		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48732111	32.79479	-116.96934
742	Independent Sales/Service	1033		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48728132	32.79469	-116.97466
743	Denny's Restaurant #7225	1202		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48711018	32.79535	-116.97791
744	Sombreros Mexican Food, Inc.	1215		W Main St	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48725045	32.7947	-116.97824
745	Banny Hom Enterprises	1240		W Main St	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	Yes	No	No	Yes	No	No	No	Medium	No	48711015	32.79525	-116.97882

City of El Cajon Stationary Industrial and Commercial Facilities

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						SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
746	and Paint/World Auto Body	187		N Marshall Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48712178	32.79606	-116.97486
747	C&D Towing Specialists	187		N Marshall Ave	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48712178	32.79606	-116.97486
748	The Auto Center	243		N Marshall Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48712179	32.79656	-116.97504
749	Transmission Tire & Auto Repair	259		N Marshall Ave	907.13	7537	81111	Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	49812179		
750	Sam's Quality Auto Care	267		N Marshall Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.79702	-116.97525
751	A&A Smog Test Only Station	267		N Marshall Ave	907.13	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.79702	-116.97516
752	Fast Water Heater Company	275		N Marshall Ave	907.13	1799		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48712110	32.79712	-116.97524
753	Quality Auto Care	267	A	N Marshall Ave	907.13	7538		Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	No			
754	Dragonfire San Diego	283		N Marshall Ave	907.13	7539	81111	Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48712110	32.79722	-116.97524
755	AA Equipment	411		N Marshall Ave	907.13	7699		Miscellaneous Repair Services	No	No	No	No	No	No	No	Yes	No	No	No	Medium	No	48712186	32.79882	-116.97484
756	Classic Towing	1101		N Marshall Ave	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48212124	32.81036	-116.9754
757	Natural Env. Inc.	1162		N Marshall Ave	907.13	781		Agricultural Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48232003	32.8114	-116.97601
758	Callen Camper Co.	125		S Marshall Ave	907.13	7549		Automotive Repair Services, and Parking	Yes	No	Yes	No	No	No	No	Yes	No	No	No	Medium	No	48728105	32.79422	-116.97512
759	Auto Tech	590		S Marshall Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48764017	32.78968	-116.9758
760	Superstition Motors Inc.	606		S Marshall Ave	907.1	7538	81111	Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	48765011	32.78942	-116.97576
761	Gene Townsend Auto Body & Paint	609		S Marshall Ave	907.13	7532		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48748011	32.78939	-116.97514
762	Taco Bell #3077	584		N Mollison Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48338038	32.80214	-116.95132
763	Quick Trip Fuel & Market	596		N Mollison Ave	907.13	5541		Automotive Dealers and Gasoline Service Stations	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48338041	32.80251	-116.95142
764	Dennys Restaurant # 6392	665		N Mollison Ave	907.13	5812		Eating and Drinking Places	Yes	No	Yes	No	Yes	No	No	No	Yes	No	Yes	High	No	48432243	32.80368	-116.95048
765	Distinctive Carpet Care	681		S Mollison Ave	907.13	7349		Business Services	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49310208	32.788	-116.95074

City of El Cajon Stationary Industrial and Commercial Facilities

	Facility Name	Address Number	Suite #	Street Name		Hydrologic Area	SIC/NAICS Code		Principal Products / Services	Potential Pollutants * Indicates pollutants associated with 303(d) listed impaired water bodies										Tributary to 303(d) Listed	TTWQ	Industrial Permit	GIS Mapping Options		
							SIC Code	NAICS Code		Bacteria *	Gross Pollutants	Metals	Nutrients *	Oil & Grease	Organics	Pesticides	Sediment	Trash	pH *				Assessors Parcel Number (APN)	Latitude	Longitude
766	New East Buffet, Inc.	555		Montrose	Ct	907.1	5812		Eating and Drinking Places	No	No	No	No	Yes	No	No	No	No	No	Yes	Medium	No	48230111	32.80148	-116.96364
767	Grossmont Union High Schoool District	1100		Murray	Dr		8211		Secondary School Auto Shop	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	High	Yes			
768	Denny's Restaurant #6227	2691		Navajo	Rd	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131015	32.80127	-117.00174
769	Taco Bell #16534	2827		Navajo	Rd	907.11	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48131021	32.80207	-117.00428
770	Clancy's Towing	1385		Pioneer	Way	907.13	7521		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48302229	32.81422	-116.96677
771	D3 Equipment	1475		Pioneer	Way	907.13	7359		Business Services	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48302247	32.81541	-116.96748
772	Modern Septic Service Inc	1506		Pioneer	Way	907.1	1711		Construction - Special Trade	No	No	Yes	No	No	No	No	Yes	No	No	No	Medium	No	48302109	32.81583	-116.96833
773	Pacific Production Plumbing	1584		Pioneer	Way	907.13	1711		Construction - Special Trade	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48302106	32.81668	-116.96812
774	Builders Moulding Supply	1675		Pioneer	Way	907.13	5211		Building Materials, Hardware, Garden Supply, and Mobile Home Dealers	No	No	No	No	No	No	No	No	No	No	No	Medium	No	38712130	32.81757	-116.96727
775	/ Road One Allied Garden	1357		Pioneer	Way	907.1	7549		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	Yes	No	No	No	Medium	No	48302230	32.81393	-116.96673
776	Team Automotive Repair	354		Walter	Way	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48918078	32.79847	-116.93473
777	Autohaus Stebel, Inc.	885		E Washington	Ave	907.13	7538		Automotive Repair Services, and Parking	No	No	No	No	No	No	No	No	No	No	No	Medium	No	49310471	32.7874	-116.95136
778	Decker's Auto Service	930		E Washington	Ave	907.13	7538	81111	Automotive Repair Services, and Parking	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	49310219	32.78814	-116.95016
779	7-Eleven Food Store #16057B	1102		E Washington	Ave	907.1	5411		Food Stores	No	No	No	No	No	No	No	No	No	No	Yes	Medium	No	48927301	32.78801	-116.94421
780	Dominos Pizza #7705	1104		E Washington	Ave	907.13	5812		Eating and Drinking Places	No	No	No	No	No	No	No	No	No	No	No	Medium	No	48927301	32.78794	-116.94415
781	Arco Facility #9572	1484		E Washington	Ave	907.13	5541	44719	Automotive Dealers and Gasoline Service Stations	No	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Medium	No	51155009	32.78804	-116.92786

STORM WATER ADMINISTRATIVE CITATION PROGRAM CRITERIA

1. Issue a Warning (followed by a letter, when possible)
   a. Whenever a discharge of pollutants is imminent or the potential exists, but the discharge has not yet entered the storm drain conveyance system (street, gutter, catch basin, etc.)
   b. Whenever a BMP is not effective for the pollutant or discharge and other BMP alternatives are available.
   c. Whenever a discharge origin cannot be determined through factual, investigative, or empirical evidence. Provide a cleanup schedule to be used as future enforcement.
   d. Small residential projects of less than 500 square feet of disturbed soil.
   e. An approved erosion and control plan has been issued and BMPs are partially implemented.
   f. Whenever activities are conducted in the right-of-way and no BMPs are implemented.
   g. Whenever a discharge of fully recoverable pollutants are discharged into the City's storm drain system (street and gutter only).

2. Issue a Citation
   a. Whenever there is a sewage overflow. (e.g. blockage; clean-out cap was removed to allow sewage to discharge into the street and storm drain).
   b. Whenever there is a discharge of unrecoverable pollutants into the storm drain conveyance system (street, gutter, catch basin, etc.)
   c. A Warning was previously issued (verbal or written).
   d. Any direct discharge into Forester Creek specifically any material which contains a 303(d) listed pollutant adopted by the State of California.(pH, TDS, and fecal coliform).
   e. An approved erosion and control plan has been issued and no BMPs are implemented.
   f. An egregious act of discharge (e.g. illegal dumping)

3. Issue a Penal Code Violation (PC374.3, 374.4, 374.7)
   a. When a First Citation was previously issued and this is a repeat violation.
   b. When the discharge is executed in the presence of any City Staff or after being told to cease operations. (waste, sewage, and litter discharges)
   c. Any direct discharge into Forester Creek, specifically material containing pollutants for which a 303(d) listing has been adopted by the State of California.(pH, TDS, and fecal coliform).

4. Issue a Stop Work Order
   a. For construction sites that received a warning and a first violation for discharging pollutants due to ineffective or proposed, but not yet implemented BMPs.
   b. A discharge of pollutants into the storm drain system, in addition to a citation, that requires immediate corrective action or mitigation.

5. Refer to Regional Board
   a. Repeated violations by a private citizen, property owner, or business for discharges to the storm drain system.
   b. A refusal to mitigate, remediate, or clean a spill or discharge of pollutants that will enter or have entered City MS4.

CITY OF EL CAJON

200 East Main Street
El Cajon, CA 92020

Citation No. 00075

☐ Building ☐ Planning
☐ Fire ☐ Public Works

ADMINISTRATIVE CITATION

☐ WARNING

☐ 1ST CITATION $100 per violation ☐ 2ND CITATION $200 per violation ☐ 3RD CITATION $500 per violation ☐ OTHER $_____

PAYMENT OF $_____ IS DUE NO LATER THAN _____. (See reverse side for payment information.) PAYMENT DOES NOT EXCUSE CORRECTION OF THE VIOLATION.

CORRECTION OF THE VIOLATION(S) INDICATED BELOW MUST BE COMPLETED BY: _____ (Date)

IF YOU FAIL TO CORRECT THE VIOLATION(S) BY THIS DATE, THE NEXT LEVEL OF CITATION MAY BE ISSUED.

PERSON CITED

Last Name First M.I.

Mailing Address City / State Zip Code

Violation Address City

☐ Property Owner ☐ Tenant
☐ Business Owner ☐ Other

Business Name _____

Assessor's Parcel Number

Code Section Violated	Date of Violation	Description Of Violation

☐ See attached for additional violations

Correction(s) Required

Issuing Officer: _____ Phone: (619) _____ Date Issued: _____

Signature of Person Cited: _____
(Signing this citation acknowledges receipt only, and is not an admission of guilt)

Citation Served: ☐ In person to: _____ ☐ Posted on Property
☐ By Mail ☐ Other _____

SEE REVERSE SIDE FOR APPEAL RIGHTS AND OTHER IMPORTANT INFORMATION

WHITE – CITY YELLOW – RESPONSIBLE PARTY PINK – FINANCE

CITY OF EL CAJON

STORM WATER COMPLIANCE INSPECTION FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

Result: ☐ Full Insp. ☐ Could not Contact ☐ Not Inventoried ☐ Moved, Vacant ☐ Refused ☐ Moved, Replaced by_____ ☐ Follow-up (i.e. not full) ☐ Out of Jurisdiction ☐ Duplicate of: _____ ☐ Mobile

A. CONTACT INFORMATION

Original

Business Name_____

_____

Street Address _____

_____

Responsible Person(s)_____

Title:_____

Business Telephone # (____) _____ -_____ext._____

Business Fax # (_____) _____ - _____

Changes

Business Name_____

_____

Street Address_____

☐ change _____

Responsible Person(s)_____

Business Telephone # (____) _____ -_____ext._____

Business Fax # (_____) _____ - _____

Home Based? ☐ Yes ☐ No Mobile Business? ☐ Yes ☐ No

Is this facility located in a multi-suite complex? ☐ Yes ☐ No

Facility personnel present:_____ Signature: _____

B. FACILITY/SITE INFORMATION

Principal activity:_____

Does facility have a current business certificate? ☐ Yes ☐ No #_____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐ Mandatory ☐ Conditional ☐ No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐ Yes ☐ No WDID: 9 37I0_____

Has facility filed a Notice Of Termination (NOT) for the WDID# listed above? ☐ Yes ☐ No Approval date:_____ month/yr

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a storm water monitoring program? ☐ Yes ☐ No Does

Existing Status

Existing SIC Code: _____ Existing SIC (#2): _____ Existing SIC (#3): _____

Nearest Water Body: ☐ Forrester Creek ☐Washington Channel ☐ County Channel ☐ Broadway Channel ☐ Fanita Channel ☐ Chatham Channel ☐

Approximate Distance to Water Body:

Approximate Size of Site (FT^2): _____ Sensitivity of Receiving Water:

Approximate Percent Impervious

C. INITIAL OBSERVATIONS

Approximate distance to receiving water body: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Discharge points: _____

_____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate % impervious surface of this area_____%

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP ASSESSMENT

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.1 General					
Keep site free of litter, debris, and sediment using dry methods					
Keep parking lots, sidewalks, and streets free of sediment and debris using dry methods					
Keep outdoor areas free of spills and leaks					
Collect water from pressure washing or hosing and dispose of appropriately					☐ Unknown Performed by:
Direct roof downspouts away from areas of potential pollutants					
D.2 Landscaping					
Properly manage pesticides/fertilizer; use IPM when feasible					☐ Unknown Landscaping Co:
Employ adequate erosion prevention measures (vegetation or physical stabilization)					
Minimize over watering/over-irrigation					
Properly store stockpiles to prevent material transport					
Properly store and dispose of green waste					☐ Unknown
D.3 Materials and Wastes					
Protect trash area from contact with storm water					
Keep trash area free of litter and debris, liquids, powders, sediment					
Adequately cover materials stored outside					
Prevent run-on from contacting materials stored outdoors					
Properly label outdoor storage containers					
Provide an accessible, functional spill response kit					
Equip liquid storage containers with secondary containment					
Keep secondary containment free of spills and rainwater					
Properly store and dispose of hazardous materials					
Keep loading and unloading areas, including drains, free of debris					
Dispose of water generated by processing activities appropriately					
Dispose of pool, spa, fountain, and filter backwash water properly					☐ Unknown Performed by:
Clean floor mats in locations that do not drain to storm drain system					

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.4 Equipment, Vehicles, and Outdoor Activities					
Conduct outdoor activities within contained areas (garage, under canopy, work shop)					
Use drip pans to collect leaks/spills					
Drain fluids from all non-operational vehicles stored outdoors					
Provide materials (berm, mat, etc.) to protect storm drain inlets from spills and leaks					
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4					
D.5 Other					
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff					
Keep grease bin and area surrounding grease bin free of grease stains/spills					
Keep storm drain inlets free of grease and other food debris					
Identify and eliminate illicit connections and illegal discharges					
Provide storm water training for appropriate employees					

D.6 ADDITIONAL REQUIRED ACTIONS

☐ Based on inspection findings, it appears likely that significant levels of _____ would be present in storm water discharges from this site. Take action to reduce the levels of _____ to the maximum extent practicable. Treatment control BMPs are likely necessary.

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax

Please refer to http://www.ci.el-cajon.ca.us/dept/works/stormwater.html for more information on BMP implementation options.

D.7 Additional Questions	Comments/Results
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐ Painting ☐ Sandblasting ☐ Fuel Distribution ☐ Dust dispersion or mineral processing ☐ Metal smelting ☐ Metal plating or anodizing ☐ Chemical production or mixing ☐ Large fuel burning device ☐ Incinerator
Does facility have a grease trap or grease interceptor?	☐ No ☐ Grease Trap ☐ Grease Interceptor ☐ Unknown
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A
What is the approximate percentage of the site that drains to the treatment control BMPs?	☐ N/A

Do major potential pollutant sources drain to treatment BMP(s)?	☐ All ☐ Some ☐ None ☐ N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	☐ NOI ☐ NONA/NEC ☐ Auto Poster ☐ Restaurant Poster

E. STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE*

☐ Non-compliance with the State Industrial Storm Water General Permit noted.

☐ In the future, under a new Industrial Permit, which has not yet been adopted, this facility may be able to qualify for exemption from Permit coverage based on no outdoor exposure.

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE*:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit—see Attachment 3 of the Industrial Permit (www.waterboards.ca.gov/stormwtr/industrial.html).

☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP)—see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required:

F. CORRECTIVE ACTION SUMMARY

☐ **Corrective Actions Required.** Please refer to sections D.1-D.6 and E of this form and, if applicable, the Food Establishment Storm Water BMP Assessment form (if applicable, it is attached).

☐ No Corrective Actions Required at this Time.

G. RECOMMENDED CITY ACTIONS**

Follow Up Inspection Priority: ☐ **Priority 1** ☐ **Priority 2** ☐ **Priority 3**

ASSESSMENT

Level of knowledge regarding stormwater issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

*Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

**Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

City of El Cajon
Inspection for Commercial Sites (Eating Establishments)
Fat, Oil, and Grease (FOG)

You Are the Solution to Stormwater Pollution!

Please Visit: http://www.cityofelcajon.us/dept/works/stormwater.html

Restaurant Name: _____ Address: _____

Inspector Name & Phone #: _____ Date: _____/_____/_____Time: _____AM / PM

Type of Inspection: ❑Routine ❑Follow-Up ❑Complaint Investigation APN #:_____

Responsible Person(s): _____ Phone Number: (_____) _____ - _____

GENERAL OBSERVATIONS / CONDITIONS OF CONCERN

_____

_____

REQUIRED BEST MANAGEMENT PRACTICES (BMP)

The Following Additional BMPs Shall be Verified	BMP Implemented? Fully Implemented	Partially Implemented	NO	N/A	Comments
Is a spill kit situated adjacent to grease storage areas?					
Does the facility use a commercial dishwasher					
Does facility maintain pumping records?					
Does facility have grease interceptor(s)?					❑If yes, what size(s): _____
Does facility have grease traps on all fixtures in-lieu of single interceptor?					❑If yes, how many: _____
Does facility have garbage disposal?					
Does facility use drain screens on all fixtures?					
Are suitable containers (spill proof) found for grease transfer and storage?					
Are records for grease pick-up and removal manifests/logs available?					Frequency of maintenance: ❑ Annually ❑ Every 6 mns ❑ Quarterly ❑ Monthly ❑Weekly ❑ Unknown ❑ Other
Is the facility displaying the City of El Cajon BMP placard?					
Are training materials and logs available?					
Other					

About how often is fryer oil replaced? ❑ Monthly ❑Every 2 weeks ❑ Weekly ❑ Twice/week ❑ Daily ❑Don't know

How is oil disposed of? _____

REQUIRED CORRECTIVE ACTIONS

❑ OTHER Corrective Action(s): _____

Received By (Signature): _____ Date: _____ /_____ /_____

"No Exposure" Conditional Exemption For Industrial Facilities

The proposed USEPA rules will establish a conditional exemption called a "No Exposure Exemption" for owners and operators of industrial facilities who can show that industrial materials, material handling operations and industrial processes, are not exposed to stormwater. Essentially, this exemption replaces the previous exemption for "light industry" which was remanded to USEPA from federal court to further define and substantiate the justification for such an exemption. A written certification will be required to be submitted to the permitting authority every three years on a form supplied by the authority. This potential conditional exemption applies to all industrial categories regardless of type, except construction sites and sources individually designated. The conditions for qualifying for the No Exposure Exemption will include the following:

1. Notification to the permitting authority at the beginning of each permit term;
2. Must allow the permitting authority or municipality to inspect the facility and to make the results of inspection public;
3. Upon request, submit a copy of the certification to the municipality in which the facility is located; and
4. Sign and certify the certification.

The permitting authority will still retain the legal authority to require the owner or operator of an industrial facility to apply for an individual or general NPDES permit if it determines that the discharge is, or may reasonably be, causing or contributing to a violation of a water quality standard, or is or may be interfering with the attainment or maintenance of a water quality standard, including a designated use.
In connection with the No Exposure Exemption being considered, USEPA is seeking comments on the issue of how to define "no exposure." Several important issues are listed for further review (but are not part of this proposed rule), including:

1. How to account for stormwater runoff from parking lots, roof tops, lawns and other non-industrial areas of an industrial facility;
2. Whether the construction of impervious surfaces, such as roofs to achieve no exposure that significantly increase stormwater runoff volume should be regulated to prevent adverse impacts to the receiving water simply due to increased quantity of flow;
3. Whether air emissions from roof vents or stacks should be considered in the evaluation of no exposure; and
4. Whether tight non-leaking drums, barrels or dumpsters are sufficient to quality for the no exposure exemption, or should there be a "potential to leak" evaluation included.

EL CAJON STORM WATER PROTECTION PROGRAM

FLOOR MATS, GREASE, OUTDOOR CLEANING, AND DUMPSTERS

In California, the storm water and sanitary sewer systems are separate. **They are *NOT* connected**. The sanitary sewer takes wastes from sinks, showers, and toilets to a treatment plant. The storm drain system collects polluted urban runoff and discharges without treatment, to creeks and rivers leading to ocean bays causing beach closures.

En California, el sistema de drenaje pluvial y el alcantarillado sanitario de aguas negras son independientes. **Estos sistemas *NO* están conectados**. El sistema de alcantarillado sanitario de aguas negras aleja desperdicios de fregaderos, regaderas, y escusados a una planta de tratamiento. El sistema de drenaje pluvial atrapa aguas pluviales contaminada por urbanización y fluye sin tratamiento alguno directamente a nuestros ríos, arroyos, bahías y mar provocando el cierre de playas.

CLEANING FLOOR MATS

Clean floor mats, filters and garbage cans in a mop sink, floor drain or proper outside area. **DO NOT** wash them in a parking lot, alley, sidewalk or street.

Limpie los tapetes de piso, los filtros y los botes de basura en un fregadero para trapeadores, desagüe de piso o en algún sitio apropiado afuera. **NO** los lave en los estacionamientos, callejones, veredas o en la calle.

RECYCLE GREASE & OIL

Recycle Grease & Oil. **DO NOT** pour it into sinks, floor drains, or onto a parking lot or street.

Recicle grasa y aceite. **NO** los arroje en lavaderos o desagües de piso ni en estacionamientos o calles.

DRY CLEANING METHOD

Use dry methods for spill cleanup (sweeping, cat litter, etc.) **DO NOT** hose down spills.

Use métodos secos para limpiar los derrames (escobas, aserrín, etc.). **NO** utilize mangueras para limpiar los derrames.

KEEP DUMPSTER AREA CLEAN

Keep dumpster area clean and lid closed. **DO NOT** fill it with liquid waste or hose it out.

Mantega el área alrededor del basurero limpia y la tapa del basurero cerrada. **NO** lo llene con desperdicios líquidos ni utilice la manguera.

WASHWATER DISPOSAL

Pour washwater into a janitorial or mop sink. **DO NOT** pour it out onto a parking lot, alley, sidewalk or street.

Arroje el agua empleada en la limpieza al fregadero para trapeadores. **NO** la arroje en los estacionamientos, callejones, veredas o en la calle.

It is illegal to purposefully or accidentally discharge pollution (anything other than rain water) into the streets, gutters, creeks, rivers, and ocean. To do so is in violation of El Cajon's Municipal Code 13.10 and the Federal Clean Water Act. Monetary fines and criminal charges may be issued.

Es contra la ley descargar contaminantes intencionalmente o accidentalmente (excepto agua de lluvias) a las calles, orillas de calle, arroyos, ríos, y océano. La descarga de contaminantes al sistema de drenaje pluvial es una violación del Código Municipal de la Ciudad de El Cajon (13.10) y de leyes Federales del "Clean Water Act". Multas y otras acciones legales podrían ser generadas en su contra.

ADOPT GOOD HOUSEKEEPING PRACTICES AND HELP KEEP OUR STREAMS, RIVERS, AND BEACHES CLEAN. FOR MORE INFORMATION, CALL **(619) 441-1653**.

ADOPTE PRACTICAS EFECTIVAS PARA EL MANEJO DE AGUAS PLUVIALES QUE REDUSCEN LA CONTAMINACIÓN Y AYUDE A MANTENER NUESTROS ARROYOS, RIOS, Y PLAYAS MÁS LIMPIOS. PARA MAYOR INFORMACIÓN LLAME AL **(619) 441-1653**.

STORM WATER PROTECTION IS IN GOOD HANDS...YOURS!

Operate a clean, dry shop. Sweep, mop or vacuum instead of hosing down garage floors or outdoor work areas.

Opere un negocio seco y limpio. Barra, trapée, o limpie con aspiradora en vez de regar con manguera los pisos de los garajes o las áreas de trabajo exteriores.

Prevent spills and leaks. Develop spill prevention and response procedures. Use drip pans and ground cloths under vehicles. Drain and recycle fluids from wrecked or leaking vehicles as soon as possible.

Prevenga los derrames y las goteras. Desarolle un plan para prevenir y responder a estos derrames. Use recipientes recolectores y trapos debajo de los vehiculos. Tire y recicle los fluidos de los vehiculos chocados o de los que tengan goteras tan pronto que sea posible.

Prevent wash water from entering storm drains. Use a commercial car wash facility for cleaning vehicles. It is illegal to allow car wash runoff from commercial vehicles to enter the storm drain.

Prevenga que la agua sucia entre en las alcantarillas. Use un negocio comercial del lavado de auto. Es ilegal permitir que la agua usada del lavado de vehiculos comerciales entre en las alcantarillas.

Protect outdoor work and storage areas. Cover equipment/ materials and work/ storage areas. Place bulk fluids in secondary containment.

Proteja las áreas de trabajo y almacenamiento exteriores. Cubra estas áreas y también los equipos y materiales. Ponga los fluidos de grandes cantidades en recipientes secundarios.

Clean parts in a self-contained sink/drum unit when working with solvents. Inspect parts-washing units daily for leaks and make necessary repairs immediately. Use aqueous cleaning solutions instead of solvents when possible. Recycle used solutions through a licensed hazardous waste hauler.

Limpie las piezas y los repuestos en una unidad de fregadero/ tambor cuando trabaje con solventes. Inspeccione las partes de la unidad de limpieza diariamente para detectar goteras y haga los arreglos necesarios inmediatamente. Use soluciones a base de agua en vez de los solventes cuando sea posible. Recicle las soluciones usadas por medio de una compañia con licencia para transportar deshechos peligrosos.

Dispose of waste properly. Recycle oil, oil filters and antifreeze. Never pour liquids down the gutter or storm drain.

Disponga de los deshechos correctamente. Recicle el aceite, los filtros de aceite y los anticongelantes. Nunca debe tirar liquidos en las alcantarillas o rejillas.

Storm water and the pollutants it carries flow directly into the nearest creek, river, lake or lagoon, eventually reaching the ocean. Do your part to help keep our waters clean for you, your family and our environment.

Las aguas pluviales llevan los contaminantes directamente a los arroyos, rios, lagos y lagunas, y finalmente se desembocan al océano. Haga su parte ayudando a mantener nuestras aguas para usted, su familia y el medio ambiente.

This poster is brought to you by the San Diego Regional Copermittees. To report complaints or for more information, call the Regional Stormwater Hotline at 1-888-846-0800.

Storm Water Pollution Prevention Program
THINK BLUE
You're the solution to storm drain pollution.
Protecting our beaches, bays, and waterways

project clean water

GENERAL BEST MANAGEMENT PRACTICES FOR INDUSTRIAL AND COMMERCIAL FACILITIES

In accordance with Section D.3.b of the Municipal Permit, the City of El Cajon developed an inventory of general best management practices that may be selected where appropriate for implementation at all industrial facilities and high priority commercial facilities of the Jurisdictional URMP and revisions. General BMPs emphasize *non-structural* BMPs as an initial step toward low-cost, feasible implementation. In addition to general BMPs, high priority industrial and commercial facilities are also required to implement applicable activity-specific BMPs listed in the City's Updated JURMP document (Appendix C.3.2 and C.3.3). General BMPs are listed below in three tables:

TABLE OF CONTENTS PAGE

TABLE 1. GOOD HOUSEKEEPING BMPS 1
TABLE 2. MATERIALS HANDLING BMPS 4
TABLE 3. EQUIPMENT MAINTENANCE BMPS 8

In addition to the information provided within this section, more specific BMP information can be obtained from the Caltrans Storm Water Quality Handbooks (2003) and the California Storm Water Best Management Practice Handbook for Industrial/Commercial Facilities (2003).

TABLE 1. GOOD HOUSEKEEPING BMPS

BMP Name	Purpose	Description
Routinely Report Any Observed Non-Storm Water Discharges	Prevent improper handling and disposal of significant materials that may be spilled or deposited into the storm drain system	Develop adequate routine reporting procedures so personnel can identify an act of illegal dumping or suspicious non-storm water discharges; Post signs with information regarding appropriate reporting procedures
Perform Regular Cleaning	Eliminate the accumulation of pollutants (dirt, surplus materials, spilled or dropped substances, litter, and debris) that collect in areas that can discharge runoff to storm water. Such areas include maintenance shops, manufacturing facilities, metal fabrication shops, mechanic garages, loading docks, and storage areas	Maintain regular sweeping and cleaning schedules; Keep work areas dust free and orderly; Keep floors and ground surfaces dry using brooms, shovels, vacuum cleaners; Collect and dispose of garbage regularly
Avoid Hosing Down the Site	Eliminate contaminated runoff generated by "wet" cleaning or hosing down of outdoor paved areas such as work stations, loading/unloading sites, maintenance shops, storage areas, and any areas that may contribute pollutants to storm water	Dry methods of cleaning include sweeping, using damp rags or mops and vacuums; If hosing is necessary the downstream storm drain should be permanently or temporarily modified with a plug such as a rubber mat, filters, absorbent blankets or bermed with sandbags.
Perform Regular Pavement Sweeping	Prevent trash, litter, and particulate matter from accumulating on paved surfaces and reduce the potential for these materials to wash into storm drains during storm events	The frequency of regular dry sweeping should be scheduled according to the quantity, toxicity and usage of materials, proximity to source area, evidence of exposure to storm system, probability of exposure, and sensitivity of receiving water
Place Trash Receptacles in Appropriate Locations	Promote the proper placement, handling, and disposal of waste materials to reduce spillage and accumulation in outdoor areas that are exposed to storm water runoff	Place trash receptacles in accessible locations and in sufficient numbers; Train personnel as to the location of trash receptacles and waste handling areas
Train Employees to Properly Dispose of Wastes	Keep employees and personnel informed and aware of the most recent BMPs regarding waste management	New employees should be trained regarding proper waste handling such as warnings about pouring deposit wastes into the storm drain, reporting observed discharges, and recycling procedures; All employees should be trained annually
Permanently Seal Floor Drains that Discharge to the Storm Drain System	Eliminate connections that act as a pathway for spilled or leaked pollutant materials to enter the storm drain system	Interior floor drains should be permanently sealed (whenever safe for structural integrity) to prevent accidental illegal dumping of contaminants into the storm drain system
Confirm that No Industrial Sinks are Connected to the Storm Drain	Eliminate direct connections that can introduce pollutants to the storm drain system	Sinks in industrial areas should be connected to the sanitary sewer system or appropriate disposal locations; Review and inspect "As-built" piping diagrams and building or site plans to verify that sinks are not connected to any storm drain

BMP Name	Purpose	Description
Store Waste and Recycling Materials in Proper Containers	Protect waste and recycling materials from exposure to wind, weather elements and scavengers that can transport pollutants to storm water	Dry waste such as light scrap metal, floor sweepings, metal chips and paper that can be affected by wind should be kept in sealed containers; Keep dumpsters closed; Seal recycling drums; Label containers, keep them readily accessible and empty containers regularly
Control Roof Downspout Discharge	Where possible, divert runoff collected on roofs, canopies and other coverings from discharging into areas of potential pollutant use or storage	Downspouts should be directed to avoid critical areas such as fueling, fabrications, lead tool, and dye storage of hazardous waste storage areas
Minimize Storm Water Run-On from Adjacent Facilities and Properties	If possible, divert run-on generated by neighboring facilities or adjacent properties before it can enter the site grounds. This should be done in such a manner as to prevent flooding of adjacent property.	Berming, diversion ditches, and dikes can direct flow away from the site; Vegetated strips, grass swales, or infiltration basins and trenches can impede slow incoming flow
Conduct Refresher Courses in Operating and Safety Procedures	Reduce spills and accidents that may cause significant materials to contaminate the storm drain system	Personnel should be required to have training and refresher courses to learn new procedures and policies regarding equipment operation and review correct operating and safety procedures
Designate Special Areas for Draining or Replacing Fluids	Eliminate improper handling and disposal of waste and reduce accidental spillage of significant materials in an unprotected area	Motor oil, coolants, and other potential pollutant fluids should be drained and replaced at specific areas designated for this activity
Drain All Fluids From Stored or Salvaged Vehicles and Equipment	Eliminate the potential for spillage such as oil, antifreeze, and hydraulic fluid from vehicles and equipment under long-term storage	All oil and other fluids should be drained from vehicles being stored long-term or salvaged and the oil should be collected and recycled; Post signs on drained vehicles
Completely Drain Oil Filters before Disposal	Reduce potential for contamination of storm water due to spills and leaks from used oil filters	All filters should be completely drained into collection drums for recycling and disposal of used oil; Post signs stating requirements to completely drain filters before disposal
Wash Equipment and Vehicles in Designated Areas	Contain runoff that may carry detergents, oil, and/or grease from vehicle washing and eliminate potential for contact of polluted water with the storm drain system	Facilities should have designated, bermed wash areas that contain wash water and drain to the sanitary sewer, a sump, or to a filter
Discharge Wash Water to a Sanitary Sewer	Eliminate runoff generated by cleaning of vehicles, equipment, and floors from entering the storm drain	All washing should occur in designated contained areas and wash water should be discharged to a sanitary sewer, collected in dead-end sump tanks and transported to a treatment facility or filtered
Reduce the Amount of Liquid Cleaning Agents Used	Reduce potential for pollution from cleaning agents such as soaps and detergents used in any maintenance operations including vehicle, equipment, aircraft or ship cleaning, metal work, and painting practices	Use products other than liquid cleaning agents to the maximum extent practicable (MEP); Substitute cleaning methods such as wire brush scraping or using a bake oven

BMP Name	Purpose	Description
Substitute Non-Toxic or Less-Toxic Cleaning Solvents	Minimize exposure of organic solvents used for cleaning equipment and parts to storm water discharge	Substitute non-toxic or less-toxic cleaning agents; Use non-caustic detergents, water-based degreasers, non-chlorinated solvents and phosphate-free detergents; Manage cleaning materials properly

TABLE 2. MATERIALS HANDLING BMPS

BMP Name	Purpose	Description
Use Solvents Efficiently	Reduce potential for spills and leaks of cleaning solvents in repair and maintenance operations	Reuse solvents and use sparingly; Pre-soak parts in "dirty" solvent before placing in fresh solvent to reduce the volume of solvent used
Use Outside Contractor for Handling Used Solvents and Other Significant Materials	Prevent improper storage, handling, and disposal of solvents, oils, paint thinners, and other toxic chemicals to reduce potential for spills and contamination of storm water	Use private contractors such as Safety Kleen to handle the disposal and replenishing of toxic chemicals
Protect Storage Containers from Being Damaged by Vehicles	Prevent vehicle impact damage to storage containers such as ruptures and cracks that may lead to significant spills and leaks	Install bollards or traffic barriers, fences and curbs to protect containers stored in locations accessible to vehicles
Centralize Liquid Solvent Cleaning to One Location	Promote conservative use of liquid solvents in designated contained areas to reduce the potential for spills, illegal dumping, and improper use of the solvent	Promote cleaning of parts using "dry" methods; if liquid solvents are necessary, clean in central locations to reduce the number of personnel using solvents and promote proper use and disposal; ensure that cleaning locations are properly operated and maintained
Properly Store Containers	Prevent exposure of significant materials or potential pollutants stored in outdoor containers to storm water	Proper storage includes: provide 3 feet of aisle space to provide access for inspections, store drums and bags away from traffic routes, stack containers according to manufacturers instructions, store liquid containers in bermed area
Use Overpack Containers or Containment Pallets to Store 55-Gallon Drums Outside of Storage Areas	Contain and prevent chemical, oil, solvent, or liquid leaks from 55-gallon drums to prevent contamination of storm water	Overpack containers and spill prevention or containment pallets are secondary containers, generally constructed of plastic; Secondary containment should be adequate to hold the contents of the storage barrels should they break or leak
Provide Roof to Cover Source Area	Prevent contact of storm water rainfall with significant materials in critical areas	Construct a roof, canopy, or effective covering for critical areas such as fuel transfer, loading/unloading, mechanical shops, metal fabrication and hazardous material storage areas
Pave Bermed Areas	Prevent infiltration of spilled material into the soil and subsequent transmission to the storm drain system	Critical areas designated for material handling and storage, equipment repair, and maintenance operations should be paved with impervious material such as concrete, asphalt, clay or plastic and curbed by berms and dikes
Repair Leaky Roofs	Keep storm water from leaking into covered areas where hazardous substances, parts equipment, vehicles and materials are stored	Repair leaky roofs as required for each building, move stored equipment and materials to another covered area, train personnel to notify supervisors when leaks are observed

BMP Name	Purpose	Description
Recycle	Reduce the amount of hazardous and non-hazardous waste material such as solvents, oil, scrap metals, wash water and absorbent materials used at the site and prevent exposure of significant materials to storm water activity	Recycling collections should be conducted weekly and more frequent pickups may be established based on quantity, toxicity, probability of exposure of materials to storm water, length of storage time, evidence of exposure, and sensitivity of receiving waters
Control Spills	Reduce potential for spills and implement proper containment in the event of a spill or leak to prevent the contamination of storm water runoff	Material Safety Data Sheets (MSDS) should be followed for handling, storage and cleanup of significant materials; For small spills, use absorbents such as sand, straw, or sawdust; For larger spills, use spill kits, boom, and other response supplies
Label all Drums, Cans, Containers, Tanks, and Valves	Reduce the potential for misuse or spillage of stored materials; Ensure that appropriate procedures, equipment and storage containers are used to prevent spills and ensure that in the event of a spill the material is properly identified and the appropriate response is implemented	All containers should be labeled according to its contents (solvent, gasoline) hazardous substances should be labeled regarding the potential hazard (corrosive, radioactive, flammable, explosive, poisonous); Department of Transportation (DOT)labeling requires that labels be prominently displayed on transported hazardous and toxic materials
Construct Berms or Dikes Around Critical Areas	Provide secondary containment for critical areas such as material handling and storage, equipment repair and maintenance areas to divert spills and leaks away from the storm drain system	A raised berm or dike should be placed around all critical areas or source areas with a high potential for release of pollutants
Use "Doghouse" Design for Outdoor Storage of Small Liquid Containers	Reduce the potential for pollution from small containers of liquid materials (paints, solvents, antifreeze, and oil) stored outdoors	Store small containers, cans, and pails carrying toxic contents inside buildings or in a "doghouse"; A doghouse design consists of a two walled shed with a peaked roof to divert rainfall and flooring equipped with spill prevention pallets
Do Not Store Used Parts or Containers Directly on the Ground	Prevent potential contamination from used parts covered in oil and grease, leaks in 55-gallon drums and flammable storage lockers by limiting direct contact of these stored materials with ground surfaces	Store used parts, storage drums and flammable materials indoors; store small parts in sealed containers, place drums on pallets; Use waterproof tarpaulins to protect ground surface and to cover stored materials
Store Batteries in a Secondary Container	Prevent contamination such as battery acid and caustic material from batteries into runoff	Store lead-acid batteries and charging units on pallets, in a bermed area under a canopy or awning; Used and cracked batteries should be stored in sealed containers
Keep Open Flames away from Flammable Material	Prevent accidents and ensure safety of personnel and staff as well as prevent polluted or toxic ash, rubbish, and debris generated by accidents, explosions, fires, and other chemical reactions from entering the storm drain	Open flames and smoking are prohibited within 50 feet of flammable materials (including paints); Use spark-proof tools when closer than 50 feet and post warning signs in areas where flammable materials are stored
Use Door Skirt or Seal	Contain spills of toxic or potential pollutant materials during loading and unloading activities and prevent contact of leaking material with ground surface runoff	Retrofit doorways used for loading with rubber or plastic door skirts; The door skirt acts as a strip barrier that encloses and seals the open end of the trailer with the open door of the loading dock during loading and unloading operations

BMP Name	Purpose	Description
Employ Proper Handling Procedures to Transport Materials and Waste	Prevent damage such as fractures or ruptures (which can create leaks and spills) during transport of drums, containers and storage boxes carrying potential pollutants	Drums should be moved using a barrel cart or by placing the drum on a pallet and moving by forklift; A minimum of two persons should assist the forklift operator in transferring a drum to or from a pallet; Metallic strapping should be used to secure stacked drums
Control Dust and Particulates	Prevent pollution of storm water from indoor and outdoor industrial processes such as metal finishing, painting, sanding, grinding, sawing, milling, sandblasting, welding, and cement manufacturing that generate significant quantities of dust and particulates	Control the emission of dust particles generated by industrial processes by using filters, baghouses, electrostatic precipitators, cyclone concentrators, waterwalls, and other measures
Store Liquids and Significant Materials within a Building or Covered Area	Prevent leaks and spills of significant materials stored, handled, or transported outside, to minimize contamination of storm water	Store significant materials within an enclosed building or covered area on an impervious surface such as concrete to MEP; Direct contaminated runoff to a storm water treatment facility or containment; Clean spills and leaks
Recycle Pressure Wash Solvents	Eliminate discharge of waste water containing dirt, oils, grease, and paint from pressure wash systems to the storm drain	Pressure wash wastes should be recycled using a closed loop system or "zero-discharge system"; Train personnel on proper usage of pressure wash systems
Provide Overfill Protection	Prevent overflows that may occur during regular fueling operations or transfer of fuels and toxic liquids to vehicles, equipment, aircraft, and ships from exposure to storm water	Retrofit existing and new tanks with overfill prevention equipment such as automatic shut off valves, restricted flow devices, or alarms that indicate when the tank is almost full, and install secondary containment
Monitor Major Fueling Operations	Prevent accidental overflows containing fuels and toxic liquids during high-volume transfers (such as for fuel tankers) that may contaminate storm water	Implement a policy mandating second party monitoring of fuel operations; Monitor high-volume transfers; Train personnel for appropriate emergency spill response actions
Provide Absorbent Booms in Unbermed Fueling Areas	Contain accidental spills and leaks during fuel transfer operations and prevent contamination of runoff	Portable absorbent booms should be stored and readily available at fueling areas; These booms should be used to contain spills and leaks or spills
Eliminate Topping Off Tanks	Eliminate fuel spills from overfilling tanks and prevent contact of fuels with ground surface and storm runoff	Develop a policy to discourage "topping off" fuel tanks; Post warning signs stating explicit penalties
Install Leak Detection System	Detect leaks from underground storage tanks (USTs) that may leak fuel or toxic liquids and contaminate the soil or groundwater	Install leak detection systems such as automatic gauging, vapor monitoring, groundwater monitoring wells and interstitial monitoring; Keep a close inventory on all fuel transfers in and out
Designate Areas for Fueling from Mobile Fuel Tankers	Contain accidental spills and leaks from mobile fuel tankers (MFTs) to designated areas	Minimize the use of MFTs and perform fuel operations in designated areas particularly when a large number of vehicles are in use
Restrict Access to Storage Tanks	Prevent toxic discharges from storage tanks to the ground due to unauthorized handling and vandalism	Restrict access to tanks and valves to authorized personnel and properly trained employees; Supply a locked gate and fence the area around tanks

BMP Name	Purpose	Description
Divert Drainage to a Low-Flow Sump	Treat contaminated flows that drain directly into the storm drain system	Use structural controls such as a low-flow sump, oil/water separator, wet pond or infiltration basin so that spilled material is not discharged into the rest of the storm drain system

TABLE 3. EQUIPMENT MAINTENANCE BMPS

BMP Name	Purpose	Description
Restrict Access to Area and Equipment	Reduce pollutants in storm water runoff caused by the release of significant materials due to vandalism of vehicles and facility property, or unauthorized trespassing	Vehicle, equipment and storage areas should be fenced, gated and access restricted to authorized personnel; Fences and gates should be properly maintained and additional measures such as lighting of the area, security guards and alarms should be used appropriately
Keep Equipment and Vehicles Clean	Reduce oil and grease from leaky vehicles and equipment; These pollutants may accumulate on impervious runoff areas and can be washed into the storm drain	Regularly clean and maintain vehicles and equipment using dry methods; Centralize liquid solvent cleaning to one location and wash vehicles in designated areas
Maintain Equipment in Good Condition	Prevent spills and leaks due to corrosion, loose fittings, poor welding, and improper poorly fitted gaskets on vehicles and equipment	Equipment should be kept in good working condition and inspected regularly for fluid leaks; equipment that is leaking or in poor working condition should be repaired or replaced
Implement Qualifying Tests for Equipment and Vehicle Operators	Prevent accidents due to employee misuse or unfamiliarity with operating procedures that may result in leaks or spills that expose significant materials to storm water	Implement qualifying tests for personnel operating equipment or vehicles; Train personnel in safe operating procedures and basic maintenance and spill response procedures associated with particular equipment and vehicle operation
Dispose of Obsolete Equipment, Inoperable Vehicles, and Surplus Materials	Reduce the likelihood of storm water pollution due to oil and lubricant spills from leaky engine parts in obsolete equipment, inoperable vehicles and surplus materials stored on-site.	Perform proper off-site disposing and recycling of old parts, equipment, and surplus materials based on implementer's judgments of facility operations and conditions
Check Vehicles and Equipment for Leaks	Prevent contamination of storm water due to fluids from leaky engine parts on stored vehicles, aircraft or equipment	Stored or salvaged vehicles and equipment at the site must be inspected for oil and fluid leaks; Use drip pans to catch leaks and clean stains using "dry" methods
Park Vehicles or Equipment Indoors or under a Roof	Eliminate or reduce exposure of pollutants like oil and grease leaking from parked vehicles and equipment to storm water	Park and store vehicles and equipment indoors and under a roof, canopy, or other covering when available
Park Vehicles on an Impervious Surface	Prevent soil contamination and contamination of runoff; Prevent infiltration of spilled pollutants on ground surfaces into soil	Vehicles should be parked on an impervious surface such as concrete and asphalt that cannot be readily penetrated by rainfall
Use Drip Pans under Leaking Equipment	Contain fluids that may leak from equipment such as pumps, air conditioners, and boilers until equipment can be properly repaired or replaced	Drip pans should be placed under leaking equipment to collect any leaking fluid as a temporary BMP until the equipment is repaired or replaced
Perform Equipment Maintenance at Designated Areas	Contain oil, grease, engine coolant, and any pollutants generated by routine maintenance activities of small equipment such as sandblasters and sprayers and large equipment such as construction equipment, tanks, aircraft, and boats	Maintenance of equipment should only be performed in specific predetermined areas such as hangars, shops, garages, or dry docks; all employees and personnel should be trained and informed as to the location of these areas and appropriate BMPs to reduce and contain pollutants

BMP Name	Purpose	Description
Designate Areas for Washing Non-Vehicular Air Filters and Other Greasy Equipment	Contain oil and grease waste generated during cleaning and maintenance of mess hall cooking grills, air filters, and facilities where significant grease and soot can accumulate	Greasy equipment should be cleaned and maintained in designated areas where wash water and grease are contained and diverted to a sump or discharged to the sanitary sewer
Conduct Maintenance within Building or Covered Area	Prevent deposits and stains from oil, grease, or solvents spilled or leaked during maintenance activities from contacting storm water	Conduct maintenance of equipment and vehicles within an enclosed building or covered area such as hangars, garages, and shops; Clean all spills and leaks immediately using rags or dry absorbents

Date
Facility Name
Facility Address
Facility Representative

Subject: Stormwater Pollution Prevention requirements for your mobile business

Dear Business Owner/Operator:

As part of local water quality regulations, municipalities in the San Diego region are required to work with businesses conducting mobile operations to prevent stormwater pollution. Best Management Practices, commonly referred to as "BMPs", are operational efforts consisting of housekeeping practices, spill control and prevention, and proper use and storage of materials that are designed to reduce the environmental impact from certain activities. Using BMPs will help prevent pollution from your business. Proper implementation and maintenance of BMPs are critical to their effectiveness.

You have been identified as a mobile businesses operating in the San Diego region. Your business is required to implement the following regional BMPs during your business operations to prevent pollution.

- **Storm Water Training**
- **Contain and Clean Up Spills (Spill Kits)**
- **Properly Handle All Waste (Solid, Liquid and Hazardous)**
- **Protect Storm Water Conveyance System: (Streets, Gutters and Alleys)**
- **Provide Proper Handling and Containment Of Materials**
- **Provide Equipment Washout Area**

The attached document provides details on how to properly implement each of the required BMPs. Additional details about BMPs for mobile businesses are available on the "Project Clean Water Toolbox" website at (http://www.projectcleanwater.org/bmp/). Please evaluate and revise your practices as necessary to ensure that you do your part in preventing stormwater pollution.

You are currently on record as doing business in the municipalities listed below. You may also want to verify that you meet their regulations, as the BMP requirements for each city may vary slightly. If you have any questions or concerns, please contact the staff of the jurisdiction where you are conducting business.

Respectfully,

Required Minimum BMPs
For
Mobile Businesses

1) Storm Water Training:

Proper training is required to prevent the discharge of pollutants in to the storm water conveyance system. Train all workers to properly identify, transport and manage materials to prevent a discharge to the storm water conveyance system. Train all employees on discharge prohibitions, storm water best management practices (BMPs), pollution prevention and methods to control, contain and clean up spills.

2) Contain and Clean Up Spills (Spill Kits):

Keep written spill procedures and cleanup materials in each vehicle. Spill kits must be appropriate for materials used in the business activities. In the event of a spill immediately contain the spill on site. Use appropriate equipment and/or materials to clean up the spill. Immediately report any spill that cannot be completely contained to the jurisdiction where the spill occurred. Sweep up the material and dispose of it properly. If the spill is hazardous, contact the appropriate reporting agency and take appropriate clean up and disposal actions.

3) Properly Handle All Waste (Solid, Liquid and Hazardous):

Before starting a job consider the weather conditions and determine how to dispose of all waste. Properly remove all waste from the worksite or place in proper waste containers with lids. Never pour liquids into trashcans, dumpsters or storm drains. Liquid non-hazardous waste may be disposed to the sanitary sewer, if appropriate, or placed in sealed containers, removed from the worksite and disposed of properly. Inspect and label all hazardous waste containers prior to removal. For details on the management and disposal of specific chemical waste contact the County Hazardous Materials Division at (619) 338-2231.

4) Protect Storm Water Conveyance System: (Streets, Gutters and Alleys)

The storm water conveyance system is a direct connection to creeks, rivers, bays and the ocean. At the work site, locate the probable pollutant discharge points and install appropriate materials to contain the pollutants. Capture and remove pollutants from your activity as close to the work area as possible. Properly dispose of any collected liquid waste. Check with your local jurisdiction to determine if permits are required prior to disposing liquid wastes to the sanitary sewer system (mop sink, toilet, etc.) or whether they can be directed to landscaped areas that will not run off into the storm water conveyance system.

5) Provide Proper Handling and Containment Of Materials:

To prevent spills or discharges, all materials must be properly contained during use and transport. Provide secondary containment, to the maximum extent practicable, for all liquids in the event of spills, punctures or leaks during use and transport. Store materials and equipment securely in the vehicle to prevent loss. Provide leak proof lids for liquids and cover all materials and waste while not in use and during transport. Maintain a materials inventory and material safety data sheet (MSDS) if hazardous materials are being used or transported. Inspect and label all chemical containers.

6) Provide Equipment Washout Area:

Equipment washout areas should be located away from any storm drain inlets or open drainage facilities. The washout area can be a container, a berm or a liner to collect and contain liquids and prevent runoff. Remove washout out waste from the job site and dispose of properly.

- For additional details on mobile business best management practices consult:
  - Project Clean Water Tool Box at **www.projectcleanwater.org/bmp**
  - California Storm Water BMP Handbook at **www.cabmphandbooks.com**

These practices represent the minimum requirements. Contact the local jurisdiction where the job is located, as there may be more stringent requirements.

Business License and the Storm Water Program

Goal: Use information collected and stored in the Business License database to support the Storm Water Program inspection and public outreach components and potentially increase revenues for the Business License Program.

Process:

1. The Storm Water group has access to the Business License database.

2. The Finance Department provides the Storm Water group with a weekly or bi-weekly list of new businesses added to the Business License database.

3. Storm Water staff checks the business type information, SIC code, number of employees, and APNs for accuracy and adds needed information to the Business License database.

4. Storm Water staff may conduct site visits to new businesses when unsure about information that was provided.

5. The Storm Water section updates business inventories by appending new businesses that may present a high threat to water quality.

6. Develop a Storm Water informational sheet for Business License applicants. The Business License staff would hand out the informational sheet at the time. (Supports Storm Water outreach component)

Appendix A.6

El Cajon Storm Water Pollution Prevention Program

Pet Care Tips That Help Keep Our Water Clean

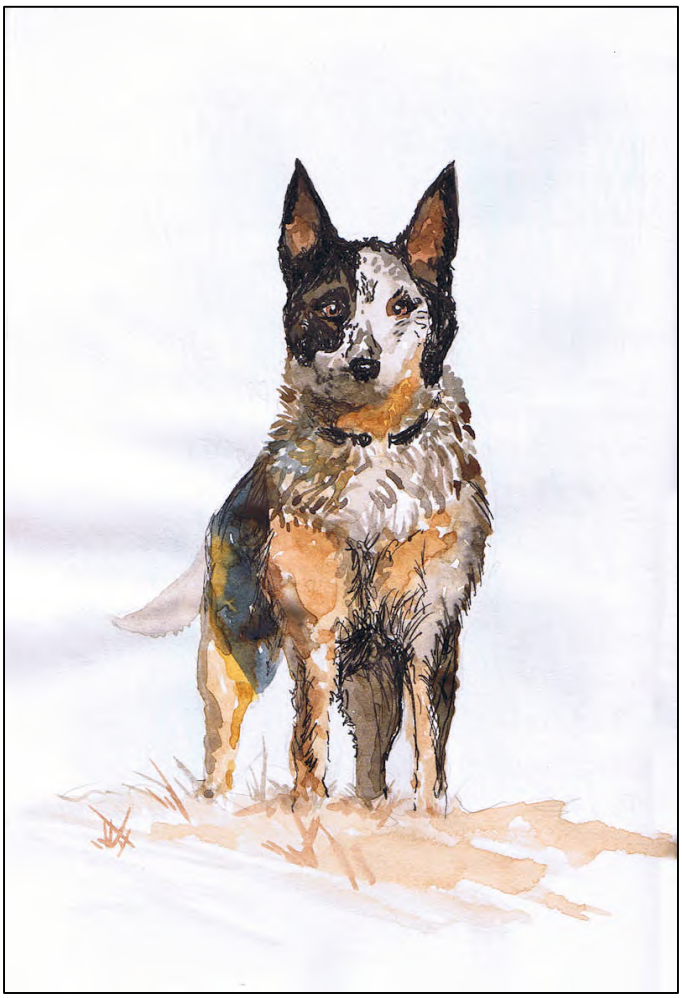

We have all probably had some unpleasant personal experience with pet waste. It is not something we like to see, especially in a park where we want to walk or play. And we do not like to step in it, of course. But what we see is only one part of the problem. If not cleaned up and disposed of properly, the bacteria in pet waste gets washed into the streets, down storm drains, and into creeks, rivers and eventually the beaches.

How Pet Waste Can Harm Us, If Not Handled Properly

- Spreads diseases between pets.
- Infects children and adults with disease-causing bacteria and parasites.

How You Can Make A Difference And Keep Our Water Clean!

When walking with your pet, take a plastic bag or paper cup along and dispose of the waste properly by

- ✓ Putting pet waste in the household trash after securely wrapping it. (Never put pet waste in a landscape waste container or the compost bin), and
- ✓ Be aware of and follow the Storm Water Management Ordinance that governs pet waste cleanup. The Storm Water Management Ordinance states, *"Pet waste shall not be disposed to the storm water conveyance system or receiving waters."* Remember that, if not cleaned up and disposed of properly, pet waste will eventually find its way into the storm drain system.

Do You Know How Many Dogs Live In El Cajon?

- Around 10,000 registered dogs reside in the City of El Cajon.
- These dogs create approximately 5,000 pounds of pet waste per day!
- Pets, as well as humans, can catch diseases through coming into contact with infected pet waste.

The number of pets in El Cajon is much greater than the number of wild animals that once lived here. If we kept just a few pets their waste might not be much of a problem. But we keep a lot of dogs (and probably even more cats)

You wouldn't want to live in a city that lacked a public sewer system. With as many dogs living in the City of El Cajon, not cleaning up and properly disposing of pet waste can be a pollution problem. You can be an important part of the pollution solution.

For more information, contact the Storm Water Program at (619) 441-1653, or browse the web to http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

Don’t Trash El Cajon!

Trash is a major component of pollution entering streams and rivers in our watershed. Every year thousands of pounds of trash and debris are removed from Forrester Creek and other drainages tributary to the San Diego River in the El Cajon area. Most trash enters our local creeks, and ultimately the San Diego River via the storm drain system. By taking a few simple steps, such as throwing all trash into the proper receptacles, or holding onto trash until a receptacle can be found, everyone can greatly reduce the amount of trash clogging our waterways.

Cigarette butts are the most littered item found in the United States and around the world, and El Cajon is no exception. Due to smoking bans inside public places in California and other states, over 99 percent of cigarettes are now smoked outside. A direct increase in the effects to the environment has been seen. Cigarette butts thrown onto streets, parking lots and sidewalks get washed into storm drains, which flow to creeks, rivers, and eventually to our beaches and ocean. Once submerged in water, toxic chemicals from cigarette smoke found in cigarette filters are released, threatening water quality and marine life. Cigarette butts thrown into the environment have also been linked to fires and are especially dangerous during dry weather.

The Surfrider Foundation, I Love a Clean San Diego, the American Heart Association, California Highway Patrol (CHP), and several other organizations have gotten together to crack down on cigarette butts in the environment. Through a program called 'Hold On To Your Butt' (see more details at http://sandiego.surfrider.org/campaigns/hold-on-to-your-butt), people can call 1-800-NOSMOKE and report drivers throwing cigarette butts out their vehicle windows. The CHP responds by sending a warning letter to the offender. With the help of concerned citizens and programs like these the amount of trash entering our watershed’s streams and rivers can be reduced.

For more information, contact the Storm Water Program at (619) 441-1653, or browse the web to http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

How Should I Wash My Car?

The Challenges of Maintaining a Clean Environment

In today's world, we face many changes especially concerning environmental protection. As never before, all of us are required, both in our personal surroundings and in our communities, to pay attention to how we care for the environment, as well as the legacy we leave behind for generations to follow. We are challenged to change the way we live for the sake of creating a sustainable world.

As our collective environmental concerns continue to develop we have focused on the ways we disposed of trash. Anti-litter ordinances lead the way to production of environmentally sensitive papers and plastics, which also has led to trash recycling bins and green waste bins.

It's now time to think about how we wash our cars and the impact home car washing has, as it depletes our water resources and pollutes our environment.

Why Is Home Car Washing a Problem?

Most car washing is being done at home with a hose and a bucket of soap in the driveway. A small percentage of residential car washers will use a hose with a trigger nozzle and wash their cars on more appropriate surfaces such as their lawn that will allow the water to seep into the soil, limiting the amount of water used and eliminating wastewater runoff into community wetlands, rivers, bays and the ocean.

However, the majority will wash their cars in their driveway with their garden hose using an average of 100 gallons or more of water. Studies indicate an average of 100 gallons of water flow thru a typical 5/8" garden hose every 10 minutes. The runoff water then becomes wastewater mixed with soaps, road acids, brake dust, and other harmful contaminants.

When wastewater is allowed to run freely down the driveway into the gutters, the water empties straight into the storm drain and straight into our community wetlands, rivers, bays and the ocean.

Many residents are completely unaware of where wastewater from their residential car wash goes. Why? Many probably think that the outside water goes where the inside water goes—to a treatment plant of some sort. When asked about storm drain at the end of the street, residents will often refer to it as the sewer. If they only knew and understood that the water that enters the storm drain flows into our waterways, most residents would willingly change by washing their cars on their lawns using a trigger nozzle, or choose to use a professional car wash in the same way they choose to use a professional oil change center.

Contact the Storm Water Program at (619) 441-1653 for additional information.

City of El Cajon Storm Water Protection Program

Pool Maintenance and the Water Quality Act

Maintenance of your pool is critical to the health of your swimmers, as well as important to keeping costs in line. However, many people don't fully understand the importance of proper maintenance to keeping our streams, rivers and beaches healthy and clean.

This article explains the regulatory issues pertaining to the discharge of pool water and the two methods by which it may be discharged. Many pools are plumbed to allow the discharge to go directly to the sanitary sewer.

Before you allow anything to go into the gutter or storm drain, stop to think. Storm drains run directly into channels and creeks, through wetlands and to the ocean.

Acceptable and Preferred Method of Disposal

When the discharge of pool water to the sanitary sewer is not feasible, federal law allows the release of dechlorinated swimming pool water. In the City of El Cajon, the guidelines for such a release require pool owners to ensure that all the following criteria are met:

- The residential chlorine does not exceed 0.1 mg/l (parts per million);
- The pH is between 6.5 and 8.5;
- The water is free of any unusual coloration;
- There is no discharge of filter media;
- There is no discharge of acid cleaning wastes; and
- Any pipe connection to the storm drain system has a valid permit with final approval from the City of El Cajon.

How can I find out if I'm within the standards?

Compliance with this guidance can be verified using a pool testing kit. Excess chlorine can be eliminated by not adding the chlorine tablets for a couple of days prior to discharge or by purchasing dechlorinating chemicals from a local pool supply company.

Doing your part!

By ensuring compliance with these criteria, you will make a significant contribution toward keeping pollutants out of our City storm drains and downstream creeks, streams and the ocean, and in so doing, you will help to protect plants and wildlife that are sensitive to pool chemicals.

Residential Automobile Repair and Maintenance

Many people prefer to repair and maintain their vehicles at home. Those that do, need to ensure that these activities do not pollute our streams, rivers, bays and the ocean. Automobile maintenance and repair activities can introduce chemicals such as oil, grease, antifreeze, hydraulic and brake fluids, and metals to our surface and groundwater. A recent study estimated that the amount of oil running off our streets and driveways and ultimately flowing into the ocean is equal to an Exxon Valdez oil spill — 10.9 million gallons — every eight months (NRC, 2002).

Keep in mind that zoning laws require that cars parked at residential properties be operational at all times. So, pulling the engine or otherwise disabling the vehicle might result in an administrative violation or fine. Plan to take your vehicle to a professional facility for major repairs.

Minimum Requirements

The following best management practices (BMPs) or equivalent measures, methods, or practices are required if you engage in automobile repair and maintenance at your home.

- Collect all used oil, antifreeze, or other vehicle fluids in containers with tight fitting lids. Do not mix these fluids in the same container as this limits your ability to recycle the oil at your local auto parts store or service station.
- Never dispose of used oil, antifreeze, or other fluids into a storm drain, into a ditch, or onto the ground. Oil should be recycled at an auto parts store or service station. Other fluids can be disposed of at a household hazardous waste collection site.
- Never clean the engine or undercarriage of your vehicle at home. For this type of cleaning, take the vehicle to a commercial car wash facility.
- Use drip pans, tarps, or even cardboard and newspaper under the vehicle to capture leaks or spills that may occur during maintenance and repair activities. This ensures spilled fluids won't be washed to the storm drainage system the next time it rains.
- Clean up spills with rags or absorbent material, such as sand, dirt, or cat litter. Do not wash down or hose down these spills to the curbs, roadway, or storm drains. Sweep up absorbents and dispose of them in your garbage can.
- Store automotive parts, such as batteries, engines, transmissions, and other parts that may have oily or greasy residue on them, under cover and off the ground to minimize rainwater contact. Rainwater can wash pollutants off these parts and send pollutants to storm drainage systems and groundwater. Tarps are an inexpensive and easy solution to covering parts.

For more information, contact the Storm Water Program at (619) 441-1653, or browse the web to http://www.ci.el-cajon.ca.us/dept/works/stormwater.html.

Good Housekeeping

Solid waste is a major component of pollution entering streams and rivers in our watershed. Every year thousands of pounds of solid waste are removed from Forrester Creek and other drainages tributary to the San Diego River in the El Cajon area.

Everything in the watershed affects the water quality in the stream. Hazardous chemicals, automotive products, pesticides, herbicides, fertilizers, pet wastes, excessive soil erosion and air pollution can all contribute to water pollution. These pollutants do not have to be dumped directly into waterways to cause a problem. These pollutants can be washed from streets, lawns, roofs or outside storage areas by rainfall, eventually ending up in streams, rivers and the ocean.

The discharge of pollutants to storm water from waste handling and disposal can be prevented and reduced by storing and disposing waste generated on-site. Store trash, oil based products cleaning products, paints, and similar products in cabinets and containers with lids and covers. Indoor or outdoor surfaces shall be cleaned using dry methods (e.g., sweeper, broom) unless adequate precautions have been taken to prevent the entry of wash water into the storm drain system.

Residential Tips:

- Collect trash and properly dispose in covered solid waste container to prevent spillage.
- Use dry cleaning methods such as sweeping and absorbent materials when cleaning hard surface areas such as driveways and sidewalks.
- Properly collect and dispose of landscape clippings.
- Clean out rain gutters before the rainy season to help reduce the discharge of decomposing leaves.
- Recycle and/or dispose of old unused paints, chemical cleaning products, etc.

Business Tips:

- Collect trash and properly dispose in covered solid waste container to prevent spillage.
- Keep the trash enclosure area free of loose trash and debris.
- Use dry cleaning methods such as sweeping and absorbent materials when cleaning hard surface areas such as dumpster area, loading docks, food handling and driveways. If water must be used, dispose of rinse and wash water from cleaning into a sanitary sewer (if allowed by the local sewer authority). Do not discharge wash water to the street or storm drain system.

- Wash floor mats, grease filters, etc. into areas where waste water or rinse water will discharge to a floor sink or drain into the sanitary sewer.
- Properly store chemical products, paints, oil based products inside enclosure containers.
- Use drip pans or absorbent materials whenever there is a potential spill of liquids during transfer. Clean up any spilled materials immediately and properly dispose of these materials.

For more information, contact the Storm Water Protection Program at (619) 441-1653, or browse the web to http://www.cityofelcajon.us/dept/works/stormwater.html.

Reduce Lawn Water!

On the average, each person uses approximately 80 gallons of water per day inside their home. An equivalent amount of water is used each day to maintain outdoor landscaping. Landscaped areas generally place the highest demand on water resources. Much of this water is needlessly wasted.

The amount of water required for maintaining landscaping depends on the types and locations of the plants (i.e., lawn, flowers, trees and shrubs). The length of time spent watering your landscaped areas should reflect your plant's needs.

Over watering your landscaped areas may result in excess irrigation water and pollutants being conveyed into the storm drain system. The excess irrigation water that flows off your property and over curbs and into gutters can pick up pollutants including sediment, fertilizers, pesticides, trash, and bacteria along the pathway. Irrigation runoff from landscaped areas has been found to contain high concentrations of these pollutants which can poison fish and contaminate the local waterways.

Sediment can harm aquatic life by clogging the gills of fish, block light transmission - lowering water temperatures, and inhibiting photosynthesis. Organics, such as grass clippings and decomposing leaves, can cause algal blooms and bacteria growth. Fertilizers contain nutrients such as phosphorus and nitrogen that fertilize aquatic algae blooms and promote bacterial growth which can degrade water quality.

Irrigation runoff from landscaped areas has been found to contain high concentrations of fertilizers and pesticides. When pesticides wash into local waterways they can poison fish and contaminate the water runoff. Runoff flows enter Forrester Creek and can impact other tributary drainages including the San Diego River and ultimately the beach.

Taking a few simple steps as identified below, we can greatly reduce our impact on Forester Creek and help save money.

Simple Water Saving Tips

- Water your lawn regularly for short periods of time (10-15minutes).
- Water during late-night or early morning hours (8pm-6am).
- Avoid watering on windy days.
- Fertilize your lawn in the spring instead of the summer.
- Do not allow weeds to grow in your lawn because they rob your lawn of water.
- Adjust watering times and schedules to ensure that the appropriate amount of water is being utilized on landscaped areas.
- Maintain sprinkler heads and nozzles in good working condition.
- Set up your sprinklers so they do not spray the sidewalk or driveway.
- Mix mulch into the soil matrix to help retain moisture and help reduce the need for frequent watering.
- Use an automatic timer to program each water zone for only the amount of water needed.

For more information, contact the Storm Water Protection Program at (619) 441-1653, or browse the web to http://www.cityofelcajon.us/dept/works/stormwater.html.

City of El Cajon
Storm Water Residential Complaints

2011-2012

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
1	07/18/11	Residential		1890	Calle del Conejo	Resident Draining green slime swimming poop water into the street.	The property was inspected and no discharge was noted.	No	N/A	N/A
2	08/02/11	Residential		1515	Broadway	Large soil piles in driveway with no BMPs in place to prevent sediment discharge.	The contractor and gardener were contacted on site and advised to install BMPs for the soil piles.	No	Verbal	N/A
3	08/05/11	Residential		1571	Greenfield Dr	Large dirt piles and exposed soil in the front yard with no BMPs in place.	A site inspection confirmed the complaint. The resident was unavailable so instructions were left for them to contact the City.	N/A	Verbal	N/A
4	08/12/11	Residential		444	Ballantyne	Private lateral overflow in parking lot discharging to the street.	The PW street crew was present and applied absorbent to prevent the discharge from entering the storm drain. The Vactor truck was able to reclaim all of the discharge.	Yes	Verbal	Yes
5	08/15/11	Residential		1231	Eastside Dr	Discharge of pool filter back flush into the street.	The property owner was contacted and advised to cease any further discharges of pool back flush water into the storm drain system. Storm water educational materials were issued.	Yes	Verbal	Yes
6	08/31/11	Residential		1942	Belmore Ct	Large piles of soil in front yard with no BMPs in place,	Storm water educational materials were left at the door.	No	Verbal	N/A
7	09/06/11	Residential		1554	Lexington	Unknown type pollutant being discharged to the street.	A site inspection found no evidence of a discharge. The building is undergoing rennovation. Storm water educational materials were issued.	No	N/A	N/A
8	09/14/11	Residential		432	Hills Ln	Large soil pile dumped in the right of way with no BMPs in place. Also rear slope in rear yard being doug out for a retaining wall with no permits on file.	The contractor was contacted on site and advised to remove the soil pile and to clean the paved areas without using wate. He was also instructed to submit plans to the city for review.	Yes	Verbal	Yes
9	09/22/11	Residential		575	Graves Ave	Private lateral overflow into the storm drain.	The manager was contacted on site. A plumbing service responded and affected the repairs.	Yes	Verbal	Yes
10	09/26/11	Residential		1286	Bostonia St	Blowing leaves into the street without picking them up.	A large tree in the front yard is dropping leaves. Many found in curbline. No evidence of blowing into the street. Also found small soil pile in driveway. A door tag was left.	No	N/A	N/A
11	09/27/11	Residential		1163	Marline Ave	Occupants are continually washing pollutants down the driveway. 10/14/11 a second compaint was received. The resident was contacted on site.	The front gate, across driveway was closed. There was no discharge noted during an inspection. Storm water educational materials were left on the gate.	No	N/A	N/A
12	09/29/11	Residential		289	El Cajon Blvd	Tenants of building conducting a vehicle washing business in the parking lot behind the building	The residents were advised to cease all vehicle washing activity.	Yes	Verbal	Yes
13	10/04/11	Residential		2585	Windmill View Rd	Landscaper uning a hose to wash off equipment in the street.	The contractor was contacted on site and advised to cease using water to clean or to do it in the landscape area.	Yes	Verbal	Yes
14	10/17/11	Residential		600	Oakwood Way	Large brush pile dumped into the storm channel.	The property owner was contacted on site and advised to cease dumping brush into the channel. Storm water educational materials were issued.	Yes	Verbal	Yes
15	10/20/11	Residential		108	Westwind Dr	Concrete residue being washed down the driveway and into the street.	The resident was contacted and advised to cease all discharges and to protect the material piles in the driveway.	Yes	Verbal	Yes
16	10/27/11	Residential		716	Broadway	There is a large pile of soil in the drieway from trenching job.	The apartment manager was contacted on site and advised to remove the soil piles or protect them.	Yes	Verbal	Yes

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
17	10/27/11	Residential		549	Graves Ave	The apartment manager rinsed sewage into the gutter from a sewer pipe burst in a garage.	The was no evidence of a discharge found during a site inspection; however the manager was contacted and advised to contact the city in the event of any future discharges. Reporting info was advised.	No	N/A	N/A
18	10/31/11	Residential		922	Coleen Ct	Trash from neighboring property being thrown into concrete drainage ditch.	No trash was found in the concrete ditch that runs along the west side of the property and discharges to Broadway. No other storm water issues were noted. The complainant was contacted and advised of the Citys findings.	No	N/A	N/A
19	10/31/11	Residential		743	Magnolia S	City public works duty crew members notified the storm water department of a sewage overflow into the street. The discharge entered the storm drain inlet at Washington. The property owner was also observed by city staff using a hose to wash debris into the gutter.	The property owner and manager were contacted on site and instructed to inspect the sewer system and to cease using water to clean any paved surfaces. Storm water educational materials were issued.	Yes	First	Yes
20	11/01/11	Residential		1026	Dennistedt Ct	The resident has a vehicle that constantly drain fluid onto the street.	Storm water staff inspected the site and found evidence of recent fluid spill but no vehicle. An informal follow up will continue to locate the vehicle in question.	Yes	Verbal	Yes
21	11/02/11	Residential		662	Tyrone St	A large amount of water is flowing in the drain box near the complainant's residence. No rain event in progress.	An investigation and inspection of the area found that pipes leading into the box are from Helix Water tanks located above the complainants property.	No	N/A	N/A
22	11/03/11	Residential		760	Carlow Ct	Water from this neighboring property is ruining the asphalt in front of his residence.	A site inspection found that the water is from irrigation. No obvious storm water violations were noted.	No	N/A	N/A
23	11/04/11	Residential		1150	Hardin Dr	Complaint of dog feces being dumped into drainage easement. And neighbors encroachement into the easement.	When contacted to view the easement, the complainant stated that the matter had been resolved and no further action from the city was necessary.	No	N/A	N/A
24	11/07/11	Residential		907	Avocado Ave	Water pooling in the driveway from uphill sources and not from recent rains.	An inspection of the site found no storm water issues. This is a ground water problem possibly involving other properties.	No	N/A	N/A
25	11/14/11	Residential		990	Aster Ave	City staff referred a complaint that oil was dumped into drain and discharged to the street and storm drain inlet over the weekend	Storm water inspected the site on 11-14-11 finding no evidence of oil dumping on the property. There is oil residue in the street and curbline near a curb drain. The property owner, contacted on site, stated that he did not pour oil into any drain and has no idea of how the oil gotinto the street. He was advised to improve his housekeeping for engine repair work done in the garage. No current discharge was noted. Storm water educational materials were issued.	Yes	Verbal	Yes
26	11/14/11	Residential		1456	Wagner	Automotive fluids being washed down the driveway.	Storm water staff inspected the site finding no evidence of a discharge. Zoning enforcement will follow up for continued auto repair business at this residence.	No	Verbal	N/A
27	11/16/11	Residential		357	Westwind Dr	Sediment and rock discharge to the street and storm drian inlet from unvegetated, unprotected front yard.	Storm water staff contacted the property owner who ws instructed to sweep all paved areas and install BMPs to prevent any further erosion and discharge.	Yes	Verbal	Yes
28	11/21/11	Residential		154	Westwind Dr	A berm or barior was eliminated when the driveway was resurfaced and now storm water discharges to a neighboring property.	Following a site inspection by storm water staff it was determined that there are no storm water issues or violations noted. The driveway does not appear to have been resurfaced.	No	N/A	N/A

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
29	11/28/11	Residential		1341	Dove St	PW crew member contacted the storm water dept. regarding a private lateral overflow in the front yard.	Storm water staff inspected the site and found the discharge from an open cleanout in the driveway. The discharge did not enter a storm drain inlet. Absorbent material was applied in the curbline. Storm water educational materials were issued. The property owner was instructed to clean the area and contact a plumbing service.	Yes	Verbal	Yes
30	12/06/11	Residential		1223	Eastside Dr	Discharge of pool filter back flush into the street.	Storm water staff inspected the site finding diatomaceous earth residue in the curbline from a under curb discharge pipe. Storm water educational materials were left at the door.	Yes	Verbal	Yes
31	12/08/11	Residential		955	Wilson Ave	Washing of commercial on residential property.	A site inspection of the property revealed no evidence of storm water violations. The complainant later reversed complaint.	No	N/A	N/A
32	12/19/11	Residential		889	Brockton Ave	Front yard soil bare for relandscaping. No BMPs in place to prevent soil discharge.	Storm water staff contacted the landscape contractor and left storm water educational materials for the proerty owner.	No	Verbal	N/A
33	12/22/11	Residential		244	Shady Ln	During heavy rains, flooding occurs in parking lot due to an elevation change on the neighboring property.	Pending review of public works staff. Most likely a private matter.	No	N/A	N/A
34	01/03/12	Residential		568	El Cajon Blvd	A white Cadillac with a tan roof (lic# 852ZOZ) is leaking oil into the storm drain.	Storm water staff was unable to locate the vehicle or noticable oil stains on the pavement in the area in question.	No	N/A	N/A
35	01/09/12	Residential		1707	Gustavo Ave	Neighbor blocking the storm drain to prevent pet access causing flooding on complainant's property.	A site inpection of the site found a concrete channel between the properties has wire mesh and fencing over it at the discharge point. It is on private property. The matter was referred to the PW crew for any possible easements.	No	N/A	N/A
36	01/10/12	Residential		765	Alveda Ave	Neighbor dug up yard yard with trenches and no protection.	An inspection of the site found that the front yard has been dug up and trenched with no BMPs in place to prevent sediment discharge. The resident was instructed to install silt fencing or fiber rolls. Storm water educational materials were issued.		Verbal	N/A
37	01/17/12	Residential		636	Medford	Raw sewage in rear yard from garage discharge pipe.	An inspection of the site revealed no evidence of a sewage discharge. Zoning enforcement was also notified of the possible occupied garage.	No	N/A	N/A
38	01/18/12	Residential		1720	Horizon Heights Cir	Large piles of soil dumped in the driveway, grading without a permit. No BMPs installed for exposed soils.	The Site was inspected by storm water and zoning enforcement staff. There was a large pile of soil in the driveway with no BMPs and a large amount of various debris dumped on the rear slope. The propert owner was contacted and advised to install protection for the soil pile and cease any frther dumping. The matter was referred to the planned development staff for further action regarding illegal grading.	No	Verbal	N/A
39	01/19/12	Residential		863	Mollison Ave S	Pipe in driveway discharging unknown liquid to the storm drain in the driveway.	Storm water staff conducted a site inspection and found what appears to be a ground water discharge pipe near the trash enclosure. There were no violations noted.	No	N/A	N/A
40	01/19/12	Residential		213	El Cajon Blvd	The trailer park owner has failed to remove sewage under the trailer of the complainant.	When contacted by storm water staff, the complainant stated that the owner removed the sewage just after he filed the complaint.	No	N/A	N/A

City of El Cajon
Storm Water Residential Complaints

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Corrected
41	02/13/12	Residential		679	McClure St	Lateral overflow in driveway flowing to the street and storm drain inlet.	Storm water staff responded finding that a small amount of the sewage discharge entered the storm drain. A plumbing service was on site to affect repairs and the property owner was notified.	Yes	Verbal	Yes
42	02/21/12	Residential		630	Naranca Ave	Resident using a hose to wash sediment down the driveway and into the street.	Storm water staff inspected the site and found recent landscaping work in the front and side yards. There was evidence of sediment discharged to the street and extending west in the curb line. The disdharge did not enter the storm drain inlet. The resident was given storm water educational materials and instructed to cease using water to clean the paved areas.	Yes	Verbal	Yes

THIS IS NOT A CITATION

HELP!

Pollutants were found in your neighborhood storm drain.

Our field staff found the following pollutant(s)spilled or dumped into the storm drain system (curb, street, gutter) near your home:

- ❑ Over irrigation usage
- ❑ Motor Oil
- ❑ Antifreeze/Transmission Fluids
- ❑ Cooking grease
- ❑ Detergents
- ❑ Solvents/Degreaser
- ❑ Paint/paint products
- ❑ Home improvement waste
- ❑ Sewage
- ❑ Animal waste
- ❑ Yard waste (leaves, grass, etc.)
- ❑ Uncovered dirt and gravel pile(s).
- ❑ Construction debris
- ❑ Trash
- ❑ Other

Be a Clean Water Leader

Storm water pollution is a problem that affects all of us. With a growing population of more than 95,000 residents and approximately 14 square miles of urbanized development, keeping our waters clean from pollutants has become increasingly difficult. With thousands of storm drain inlets, and nearly 100 miles of storm drain pipes and channels to clean and maintain, we need your help.

When it rains, water flows over across our yards and into our streets carrying pollutants into our storm drains. The problem is that storm drains are not connected to the wastewater sewer treatment plant. So, what's in the streets flows directly into our creeks, rivers and the ocean, without treatment.

Last year, too many of our beaches and bays were closed or posted as unsafe for swimming. As our City

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Leaders have said, “this is more than an inconvenience; it is a civic embarrassment.” **Discharging pollutants to the City's storm drain system is in violation of Title 13.24 of the El Cajon Municipal Code and violations can result in substantial fines.**

But, as a City resident, you can make a difference. By becoming a Clean Water Leader, both on the job and in your community, you can help make our stream, rivers and beaches free of pollution. When you're at home, share your knowledge with neighbors and family. As you drive to work, be aware of any illegal discharges. And, if you do see an illegal discharge, report it. In the City of El Cajon you can **call the City of El Cajon at (619) 441-1653, or the 24-hour Storm Water Hotline at (888) 846-0800**.

Whether at home or at work, by adopting some simple Best Management Practices (BMPs), you can stop pollutants from being generated and entering our storm drain system.

- ✓ Use dry clean-up methods for spills and outdoor cleaning. Vacuum, sweep, and use rags or dry absorbants. Properly remove and dispose of this material when the spill is absorbed.
- ✓ Properly label, store and dispose of hazardous wastes. Rake, sweep up, and place all debris (dust, litter, sediment, etc.) from your yard or near your property into a trashcan.
- ✓ Use a mop only when water is needed.

As you perform your daily activities be proactive. Assess the activity from a storm water pollution point-of-view and ask yourself; “does this activity, directly or indirectly, generate pollution?” And, “how can I get the job done and prevent debris from entering into the storm drain collection system?”

City of El Cajon

STORMWATER
Protection Program

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City of El Cajon

STORMWATER
Protection Program

Appendix A.7
(No Content)

Appendix A.8
(No Content)

Appendix A.9

CITY OF EL CAJON
PUBLIC PARTICIPATION MECHANISMS
PY5 – 2011 – 2012

DATE	LOCATION	NUMBER CONTACTED	DESCRIPTION
8/25/10	California State Retirees Group	30	Retirees Group Meeting
10/11/10	City of El Cajon Fire Station	3,000	Fire Station Open House
10/28/10	Cuyamaca College	40	Class presentation regarding storm water programs
11/10/10	Johnson Elementary School	150	Career Day
4/2/11	El Cajon County Library	2,000	El Cajon Library Multicultural Fiesta

Appendix A.10

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	
ADMINISTRATION	
DEVELOPMENT PLANNING	
CONSTRUCTION	
MUNICIPAL	
INDUSTRIAL AND COMMERCIAL	
RESIDENTIAL	
IDDE	$35,675
EDUCATION	$10,074
PUBLIC PARTICIPATION	
SPECIAL INVESTIGATIONS	
NON-EMERGENCY FIREFIGHTING	
Jurisdictional Total	***$45,749***

WATERSHED	
Watershed 1	$4,463
Watershed 2	
Watershed 3	
Watershed 4	
Watershed 5	
Watershed 6	
Watershed 7	
Watershed 8	
Watershed Total	***$4,463***

REGIONAL	
Copermitttee Cost Share of Regional	
Regional Total	**$57,943**

TOTAL COSTS	***$108,155***

FUND SUMMARY (AS APPLICABLE)

FUNDING BY SOURCE	
GENERAL FUND	
STORMWATER FEE	
PERMIT FEES	
DEVELOPER DEPOSITS AND FEES	
REGISTRATION AND INSPECTION FEES	
FLOOD CONTROL FEES	
FRANCHISE FEES	
GAS TAX	
UTILITY TAX	
ROAD FUND	
ENTERPRISE FUNDS	
TRUST FUNDS	
SPECIAL ASSESSMENT DISTRICTS	
STATE APPROPRIATED FUNDS	
GRANT FUNDS	
OTHER	$1,478,973
TOTAL	$1,478,973

ONE-TIME FUNDING	
	GRANTS
DONATIONS	
TOTAL	

TOTAL FUNDING	$1,478,973

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR URBAN RUNOFF MANAGEMENT PROGRAMS

WATERSHED URBAN RUNOFF MANAGEMENT PROGRAM (WURMP)

	Watershed 1	Watershed 2	Watershed 3	Watershed 4	Watershed 5	Watershed 6	Watershed 7	Watershed 8
Administration(1)	$4,463							
Cost Share Contribution								
Watershed Activities								
Other								
TOTAL	$4,463							

(1) Administration. Includes Watershed strategic planning, management, mapping, assessment, and reporting

REGIONAL URBAN RUNOFF MANAGEMENT PROGRAM (RURM P)

Regional Programs	Jurisdictional Cost Share Amount
Administration (1)	
Cost Share Contribution	$57,943
Other (2)	
TOTAL	$57,943

1.Administration - includes assessment, reporting, management, etc.
2.Other - Examples include: regional and special studies,

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP)

	JURMP Component	Change from Pre-existing Costs			Expenditure contributes to Multiple Programs	Explanation
		No Change	Partial Increase	New Requirement		
1	**ADMINISTRATION**		x			
2	**DEVELOPMENT PLANNING**			x		
A	**Land Use Planning**			x		
B	**Environmental Review**			x		
C	**Development Project Approval and Verification**			x		
C1	**Public Projects (CIP)**			x		
C2	**Private Projects**			x		
3	**CONSTRUCTION**		x			
A	**Public Projects (CIP)**		x			
B	**Private Projects**		x			
4	**MUNICIPAL**			x		
A	**Administration (1)**					
B	**Operations & Maintenance of MS4 and Structure Controls (11)**		x			
C	**Management of Pesticides, Herbicides, and Fertilizers**		x			
D	**Sweeping of Municipal Areas**	x				
E	**Infiltration Sanitary Sewer to MS4-Preventative Maintenance**		x			
F	**Roads, Streets, Highways, and Parking Facilities**		x			
G	**Flood Management Projects and Flood Control Devices**		x			
H	**Areas & Activities - CWA Section 303(d) water bodies**		x			
I	**Active or Closed Municipal Landfills**	x				
J	**POTWs and Sanitary Sewage Collection Systems**	x				
K	**Solid Waste Transfer Facilities**	x				
L	**Corporate Yards**		x			
M	**Household Hazardous Waste Collection Facilities**	x				
N	**Municipal Airfields**	x				
O	**Parks and Recreation Facilities**	x				
P	**Special Event Venues & Special Events**		x			
Q	**Power Washing**		x			
R	**Other Municipal Areas and Activities- Contribute a Significant Pollutant Load to MS4**		x			
S	**Enforcement of Municipal Areas and Activities**		x			

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM (JURMP)

	JURMP Component	Change from Pre-existing Costs			Expenditure contributes to Multiple Programs	Explanation
		No Change	Partial Increase	New Requirement		
5	**INDUSTRIAL AND COMMERCIAL**		x			
A	**Industrial Sites**		x			
B	**Commercial Sites**		x			
C	**Mobile Commercial Sites**			x		
6	**RESIDENTIAL**		x			
7	**IDDE** (7) (10)		x			
8	**EDUCATION** (8) (10)		x			
9	**PUBLIC PARTICIPATION** (9) (10)		x			
10	**FISCAL ANALYSIS**		x			
11	**PROGRAM EFFECTIVENESS ASSESSMENT**		x			
12	**SPECIAL INVESTIGATIONS**		x			
13	**NON-EMERGENCY FIRE FIGHTING**		x			
14	**REPORTING**		x			
15	**MODIFICATION OF PROGRAMS**		x			

Definitions/Notes:

1 Administration - General Planning; Community Planning; Policy Decisions to Implement Citywide Activities (ordinance, zoning,etc.); SUSMP; HMP; Staff Training (including conferences, seminars, etc.); Staff Education on new issues, policies and procedures; and, Component Performance Assessment

2 Inspection - Initial and Post-Construction Verification

3 Outreach - Reaching External Audiences

4 Extension of Staff, etc. (relevant only where contract activities are not otherwise captured)

5 Other - One time equipment/material/tool purchase

p p j p p p y

6 Development Planning (Engineering Concept Design, Final Design and Bid Package), Construction (SWPPP/NOI, Self-Inspection (contracted, staffed internally), temporary erosion controls)

7 ICID - Illicit Discharge Detection and Elimination

8 Education Component is captured in each of the previous components - internal educations is included in Administration/Assessment and external is included in the Outreach element.

9 Public Participation - Targets activities that promote the participation of the public in updating, development and implementation of the JURMP. Can be either captured in the Outreach elements of each component or tracked separately.

10 Include only activities not otherwise covered in 1 through 5 above.

11 Repeat outline as necessary to cover individual program elements

12 Include maintenance inspections for MS4 and roads; include compliance inspections for other facilities; if inspections and maintenance are inter-mingled, cover under BMPs only

Activity: Public Works NPDES Compliance Activity #: 650750

ACCOUNT / LINE ITEM NUMBER	JUSTIFICATION FOR SUPPLIES AND SERVICES BRIEF STATEMENTS & ESTIMATED AMOUNTS USED IN CALCULATING TOTALS FOR EACH LINE ITEM	FY2011-12 AMOUNT	CHANGE REQUESTED	FY2012-13 REQUEST
8150	**OFFICE SUPPLIES**	**$4,900**	**$0**	**$4,900**
	a Toner cartridges for printing of reports and map books	$4,900	$0	$4,900
8160	**OPERATING SUPPLIES**	**$3,000**	**$0**	**$3,000**
	a Various materials and supplies needed for various educational and outreach programs	$3,000	$0	$3,000
8345	**LEGAL SERVICES**	**$7,500**	**$0**	**$7,500**
	a City Attorney's Office charges	$7,500	$0	$7,500
8363	**SYSTEM / COMPUTER ANALYST**	**$20,000**	**$5,000**	**$25,000**
	a GIS Consultant - increase due to installation of new server	$20,000	$5,000	$25,000
8395	**OTHER/PROFESSIONAL/TECHNICAL SERVICES**	**$430,000**	**-$5,000**	**$425,000**
	a San Diego River Watershed Management and update Watershed Urban Runoff Management Program Implementation - shared cost with Watershed copermitees - decrease due to historical data	$100,000	-$5,000	$95,000
	b Services to comply with the total maximum daily loads for bacteria	$150,000	$0	$150,000
	c San Diego Regional Co-permittee Memorandum of Understanding Cost	$80,000	$0	$80,000
	d Dry Weather Testing and Extended Dry Weather Testing	$75,000	$0	$75,000
	e As needed on-call engineering services for plan check for SUSMP, Erosion Control Plans and Drainage Studies - decrease due to usage	$25,000	$0	$25,000
	f Water Quality Grant Writing services for request of State funds for Water Quality Monitoring, Water Quality Improvement Projects and Watershed Protection in Forrester Creek - program dropped	$0	$0	$0
8510	**OVERHEAD REIMBURSEMENT**	**$118,763**	**$13,077**	**$131,840**
	a Provided by Finance	$118,763	$13,077	$131,840
8511	**FLEET/EQUIPMENT MAINTENANCE**	**$7,118**	**-$1,712**	**$5,406**
	a Provided by Fleet Maintenance	$7,118	-$1,712	$5,406
8522	**ADVERTISING**	**$500**	**$0**	**$500**
	a Advertising of Pollution Prevention Days - decrease due to usage	$500	$0	$500
8528	**COMMUNICATIONS**	**$1,500**	**-$500**	**$1,000**
	a Telephone and cellular phone service - decrease due to usage	$1,500	-$500	$1,000
8530	**CONTRIBUTIONS**	**$750**	**$0**	**$750**
	a Contribution to the San Diego River Coalition	$500	$0	$500
	b Contribution to I Love A Clean San Diego	$250	$0	$250

Activity: Public Works NPDES Compliance Activity #: 650750

ACCOUNT / LINE ITEM NUMBER	JUSTIFICATION FOR SUPPLIES AND SERVICES BRIEF STATEMENTS & ESTIMATED AMOUNTS USED IN CALCULATING TOTALS FOR EACH LINE ITEM	FY2011-12 AMOUNT	CHANGE REQUESTED	FY2012-13 REQUEST
8560	**PERMITS & FEES**	**$20,000**	**$5,000**	**$25,000**
	a State Water Resources Control Board Fee - increase due to anticipated rise in fee	$20,000	$5,000	$25,000
8570	**PRINTING & BINDING**	**$8,000**	**$0**	**$8,000**
	a Utility bill inserts for Pollution Prevention Days	$2,200	$0	$2,200
	b Poster and Brochure printing for Pollution Prevention Days	$0	$0	$0
	c Outreach (Reprints of various storm water outreach materials)	$1,700	$0	$1,700
	d City Newsletter Printing	$4,100	$0	$4,100
8572	**PROMOTIONS**	**$8,000**	**$0**	**$8,000**
	a Promotional items for education and outreach efforts including Pollution Prevention Days - decrease due to usage	$8,000	$0	$8,000
8576	**REPAIRS & MAINTENANCE**	**$3,359**	**$0**	**$3,359**
	a Copier, printer, plotter and typewriter maintenance	$3,359	$0	$3,359
8586	**SOFTWARE AGREEMENTS**	**$61,520**	**-$8,000**	**$53,520**
	a Business License Database	$4,220	$0	$4,220
	b Miscellaneous Software Agreements	$2,300		$2,300
	c ESRI Maintenance Agreement - license for City wide license agreement - decrease due to anticipated cost	$51,000	-$8,000	$43,000
	d Permitting Software Maintenance Agreement	$3,000	$0	$3,000
	e Share of Community Plus Licenses	$1,000	$0	$1,000
8594	**TRAINING, MEETINGS, & SCHOOLS**	**$3,000**	**$3,500**	**$6,500**
	a Training for Division personnel - increase due to training for new Permit and new GIS server	$3,000	$3,500	$6,500
	TOTAL MATERIALS, SUPPLIES, & SERVICES	**$697,910**	**$11,365**	**$709,275**

FY 2012-2013 ANNUAL BUDGET
DEPARTMENT EXPENDITURE WORKSHEET

Acct #	Account Title	FY09-10 Actual	FY10-11 Actual	FY11-12 Budgeted	FY11-12 Estimated	FY12-13 Proposed
650750						WASTEWATER - NPDES
7110	SALARIES	507,524	507,988	498,875	483,125	481,045
7120	OVERTIME	306	81	500	500	500
7130	VACATION/SICK CONVERSIONS	3,461	7,745	5,831	28,511	20,375
7140	FURLOUGH	-	-	-	-	-
7170	STIPEND	-	-	-	-	-
7310	PERS (EMPLOYER)	160,291	147,861	165,649	155,000	131,906
7312	POST RETIREMENT BENEFITS	11,064	12,889	14,145	18,288	16,387
7315	MEDICARE TAX	6,858	6,922	7,234	6,852	6,975
7320	SOCIAL SECURITY TAX	-	-	-	-	-
7325	CAFETERIA	58,668	57,330	57,960	59,696	68,340
7330	COMPENSATED ABSENCES	11,506	6,372	-	-	-
7335	WORKERS COMPENSATION	15,241	9,923	16,654	11,108	16,675
7336	UNEMPLOYMENT INSURANCE	2,214	4,182	-	-	-
7340	LIFE INSURANCE	1,834	1,677	1,270	1,247	1,142
7345	LTD INSURANCE	1,654	1,522	1,196	1,191	1,041
7350	STD INSURANCE	551	550	549	536	478
7360	UNIFORM ALLOWANCE	-	-	-	-	-
TOTAL	SALARY & BENEFITS	781,174	765,041	769,863	766,054	744,864
8150	OFFICE SUPPLIES	2,968	6,355	4,900	4,900	4,900
8160	OPERATING SUPPLIES	2,105	892	3,000	2,000	3,000
8345	LEGAL SERVICES	-	-	7,500	1,000	7,500
8363	SYSTEM / COMPUTER ANALYST	-	8,640	20,000	18,000	25,000
8365	TEMPORARY SERVICES	-	-	-	-	-
8395	OTHER PROF/TECH SERVICES	242,552	162,001	430,000	300,000	425,000
8510	OVERHEAD REIMBURSEMENT	128,857	112,801	118,763	118,763	131,840
8511	FLEET/EQUIP REIMBURSEMENT	4,002	11,007	7,118	7,118	5,400
8520	VEHICLE REPLACEMNT CHARGE	-	-	-	-	-
8522	ADVERTISING	-	-	500	-	500
8528	COMMUNICATIONS	1,078	670	1,500	1,000	1,000
8530	CONTRIBUTIONS	500	750	750	750	750
8560	PERMITS AND FEES	18,011	18,088	20,000	25,000	25,000
8570	PRINTING AND BINDING	2,323	2,301	8,000	2,000	8,000
8572	PROMOTIONS	6,396	235	8,000	8,000	8,000
8574	RENT EXPENSE		-	-	-	-
8576	REPAIRS AND MAINTENANCE	-	100	3,359	2,000	3,359
8586	SOFTWARE AGREEMENTS	11,603	11,603	61,520	12,757	53,520
8588	SUBSCRIPTIONS	-	-	-	-	-
8594	TRAINING/MEETINGS/SCHOOLS	787	466	3,000	3,500	6,500
TOTAL	MAT'L, SVC & SUPPLIES	421,181	335,939	697,910	506,288	709,275
9010	MINOR FURN&EQUIP <$10,000	-	-	-	-	-
9020	MINOR COMPUTERS <$10,000	-	-	-	-	-
9030	SOFTWARE > $10,000	-	10,873	-	-	-
9035	FURN & EQUIP >$10,000	-	-	11,200	10,460	-
9040	VEHICLES	-	-	-	-	-
TOTAL	CAPITAL OUTLAY	-	10,873	11,200	10,460	-
	ACTIVITY TOTAL	1,202,355	1,111,853	1,478,973	1,282,802	1,454,139

Appendix A.11
(No Content)

Appendix A.12

City of El Cajon
2012 Forester Creek Study

Final Report

PREPARED FOR: CITY OF EL CAJON
DEPARTMENT OF PUBLIC WORKS
200 Civic Center Way
El Cajon, CA 92020

PREPARED BY: D-MAX ENGINEERING, INC.
7220 Trade Street, Suite 119
San Diego, CA 92121
(858) 586-6600

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

September 12, 2012
Project No. 201222W

Jaime Campos, P.E.
Storm Water Program Manager
City of El Cajon
Department of Public Works
200 Civic Center Way
El Cajon, CA 92020-3916

Re: 2012 Forester Creek Impact Study
City of El Cajon, California

Dear Mr. Campos:

Enclosed please find our report for the City of El Cajon 2012 Forester Creek Impact Study. This project, conducted since 2004, is a study of the water quality in Forester Creek as it passes through El Cajon. The contents include field screening data, analytical laboratory test results, and analyses of the collected data. Copies of field data sheets and laboratory reports are attached.

It has been our pleasure working with the City of El Cajon on this project. Please feel free to contact us if you have any questions.

Sincerely,
D-MAX Engineering, Inc.

John Quenzer, CPSWQ
Senior Scientist

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

2012 CITY OF EL CAJON
FORESTER CREEK IMPACT STUDY

Forester Creek enters the City of El Cajon (City) from the east, running parallel to Interstate 8. After passing SR-67, the creek curves northward through the area around Gillespie Field before flowing into the City of Santee. Forester Creek eventually merges with the San Diego River just east of the junction of SR-52 and SR-125.

Constituents of Concern

The 2010 Section 303(d) List has identified Forester Creek as an impaired water body for the following constituents:

- pH
- Fecal coliforms
- Selenium
- Total dissolved solids (TDS)

Note that the fecal coliform and TDS impairments have been named for the lower 1 mile of Forester Creek, which is located outside of the City of El Cajon's jurisdiction.

Forester Creek is also subject to a Total Maximum Daily Load (TMDL) for bacteria as part of the TMDL that covers the overall San Diego River Watershed. The responsible parties in the watershed, including the City of El Cajon, are developing a Comprehensive Load Reduction Plan (CLRP) and monitoring plan for the San Diego River TMDL. In addition to the constituents mentioned above, nutrients, particularly phosphorus, have been identified as pollutants of concern in the San Diego River Watershed.

Site Selection

When originally initiated in 2004, this study aimed to evaluate water quality and flow rates at the upstream and downstream ends of Forester Creek within the City of El Cajon. The upstream site is located toward the east side of the City, while the downstream site is located at the northwest side of the City.

The upstream sampling location has been moved twice since 2002 due to the variable nature of the flow coming into the City. When Forester Creek does not receive water from outside the city limits, the sampling location may be moved slightly downstream to the nearest location with flowing or ponded water.

The downstream sampling location is the same as Site 5 in the MS4 Outfall Monitoring Program and Dry Weather Monitoring Program. Figure 1 on the following page is a map of the sampling locations, along with major Dry Weather Monitoring Program stations at the downstream ends of major sub-basins within the City. Table 1 presents current site location information, and Table 2 lists yearly locations of the upstream sampling point.

Figure 1: Site Locations

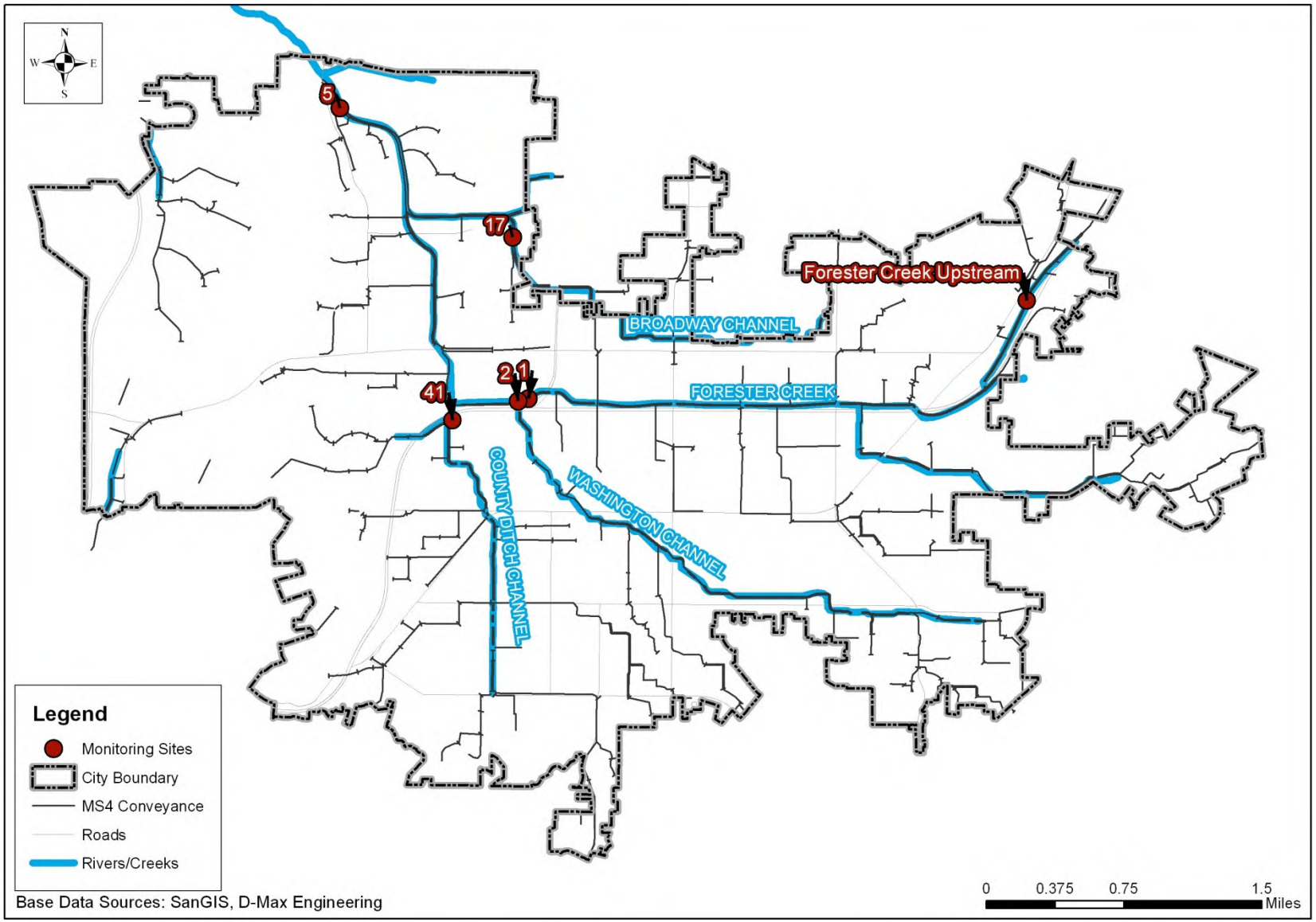

Methods

The same field and laboratory methods used during the City's Dry Weather Monitoring Program were used during the Forester Creek Impact Study. Samples were analyzed in the field for the following parameters:

- Temperature
- pH
- Turbidity
- Conductivity
- Surfactants
- Ammonia-nitrogen (ammonia-N)
- Nitrate-nitrogen (nitrate-N)
- Orthophosphate-phosphorus (orthophosphate-P)
- DO

Samples were collected and submitted to a laboratory certified by the California Department of Health Services for analysis of the following constituents:

- Oil and grease
- Total hardness
- Dissolved cadmium
- Dissolved copper
- Dissolved lead
- Dissolved zinc
- Diazinon
- Chlorpyrifos
- Total coliform bacteria
- Fecal coliform bacteria
- *Enterococcus* bacteria
- TDS
- Total organic carbon (TOC)

Results

The sites were sampled in July 2012; results of the field and laboratory testing are presented in Tables 3 and 4. Also note that the samples from the initial visit could not be analyzed for TDS, so a second visit about one week later was completed to collect additional samples for that analaysis. Flow rates and physical parameters were very similar between the two sets of visits.

Data from the present year and the historical data from previous years are presented in Tables 5 through 8. Results in 2012 were generally similar to values recorded in previous years.

Discussion

Flow Rates

A significant decrease in flow rate has been observed at both the upstream and downstream sites in recent years. The flow rate at the downstream site, 45 gallons per minute (gpm), was the lowest recorded in the history of the program. A similar decreasing trend has also been seen in the sites at the downstream ends of the major sub-basins within the City that are tested as part of the City's Dry Weather Monitoring Program. Figure 2 shows historical flow rates for the upstream and downstream sites as well as for sites 2 (Washington Channel basin), 17 (Broadway Channel basin), 41 (County Ditch basin), and 1 (Forester Creek basin, east of the junctions with the other three basins). Locations of all the stations can be found on the map included as Figure 1.

Figure 2: Historical Flow Rates

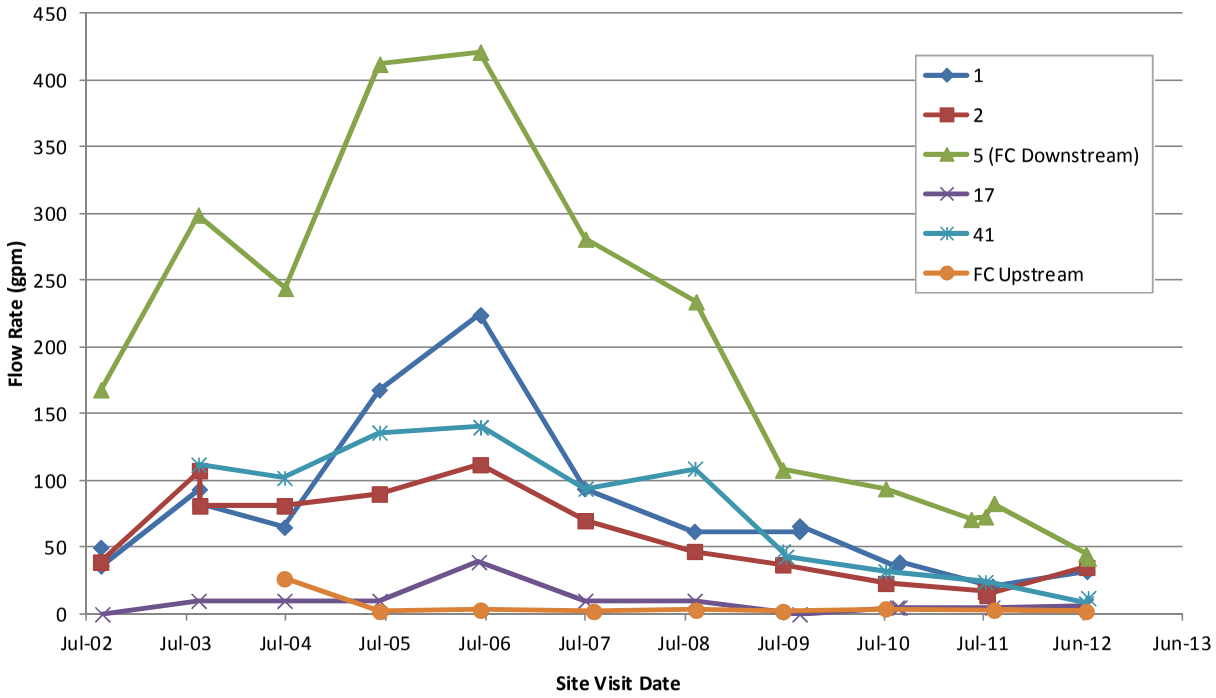

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As shown in Figure 2, across all years of the study, the flow rate at the upstream site has been much smaller than the flow rate at the downstream site.

Key Constituents: Summary

The constituents most frequently exceeding water quality standards are the same at both sites and generally are in line with the 303(d) listings for Forester Creek:

- Bacteria (total and fecal coliforms and enterococci)
- TDS
- Nutrients (especially nitrate-nitrogen)

Nitrate-nitrogen, total coliforms, fecal coliforms, and enterococci have exceeded their Basin Plan Water Quality Objectives (WQO) in over 90 percent of the samples at the downstream site, and TDS has exceeded the WQO in 75 percent of the samples at the dowstream site. Similar exceedance percentages have been observed at the upstream site for these constituents, with the exception of TDS, which has a lower exceedance rate at the upstream site.

Note that this study has not tested for total phosphorus; however, the City's MS4 outfall monitoring program does include this test. Four samples have been collected at the downstream site since 2009, with an average value of 0.12 mg/L. Three of the samples have been at or above the Basin Plan WQO of 0.1 mg/L, but, as demonstrated by the average value, the results have typically been very close to the WQO.

Conversely, pH has never exceeded the WQO in any of the samples at the upstream or downstream site over the life of this study. Selenium, which was recently added to the 303(d) list, has not been tested as part of this study.

Key Constituents: Concentrations and Loading Rates

The flow rate at Forester Creek Upstream has consistently been much lower than the flow rate at the downstream site (Site 5), and pollutant concentrations have typically been similar at the two sites. During dry weather conditions, then, the majority of the flow observed at the downstream site is generated from the major sub-basins that lie largely within the City of El Cajon. Recognizing this, for 2012 a comparison among the downstream site and the sites associated with the City's major sub-basins, described earlier in this report, was made for several key constituents: nitrate-nitrogen, bacteria, and TDS. Data for those other sites was taken from the City's Dry Weather Monitoring Program reports. Both concentrations or counts and loading rates, calculated based on flow measurements and field and laboratory results, were assessed. Loading rates are based on instantaneous flow measurements and grab samples, so they should be assessed with caution. Because the flow rate from Broadway Channel to the Forester Creek channel is often very low, the Broadway Channel site (Site 17) was generally observed to have the lowest loading rates of all the major sub-basin sites assessed.

Nitrate-nitrogen loading rates have decreased substantially since the mid 2000s, mirroring the decrease in flow rates over the same period. In more recent years, nitrate-nitrogen concentrations have also been decreasing, with the exception of Site 1 (Forester Creek basin, east of junction of Washington Channel). Site 1 is downstream of the major MS4 line that includes Dry Weather Monitoring Program Sites 30 and 37, which historically have had high nitrate levels. Upstream investigation, including groundwater investigations, by D-MAX and the City have shown that seepage into the pipe from groundwater is the main source of nitrate-nitrogen in this area. Note that of the main sub-basins assessed, the area upstream of Site 1 also typically has contributed the highest nitrate-nitrogen loading rate downstream to Site 5.

Results for TDS show decreasing loading rates over the past several years. The decrease in TDS loading rate appears to be almost entirely due to decreased flow rates, as TDS levels have not significantly decreased in recent years, and have even increased somewhat at Site 41 (County Ditch Channel basin).

In contrast to nitrate and TDS, bacteria results are much more variable from year to year. No clear trend, increasing or decreasing, has been observed for total or fecal coliforms. Several spikes in loading rates have been observed over the years, often attributable more to much higher concentrations being measured than to increases in flow rates. Sites 2 (Washington Channel) and 41 (County Ditch Channel) have had more of these high concentrations than Sites 1 (Forester Creek Channel, east of junction with Washington Channel) and 17 (Broadway Channel). Overall, the results show that bacteria counts are highly variable, although for most sites the concentrations and loading rates recorded in 2012 are among the lower values in program history.

Table 1
2012 Site Locations

Site	Location	Description	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
Upstream	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Valero gas station at 1699 E. Main Street	Concrete Channel	Commercial	Residential	907.13	32.81185	-116.91795
Downstream	Adjacent to the Weld Boulevard Trolley Station, southeast of the Marshall Avenue and Cuyamaca Street intersection	Concrete Channel	Commercial	Industrial	907.13	32.82665	-116.98226

Table 2
Forester Creek Upstream Site Yearly Locations

Year	Upstream Sampling Location
2006-Present	Greenfield Avenue and I-8 west onramp intersection, behind southeast corner of Valero gas station at 1699 E. Main Street
2005	Fourth Street, north of Rancho Cajon Place, east side of the street
2004	Forester Creek at E. Main Street and Oakdale Avenue

Table 3
2012 Field Screening Results

Site	Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophosphate -P (mg/L)	Dissolved Oxygen (mg/L)
Upstream	7/10/2012	2	27.6	7.6	2.18	1.74	0.13	0.33	7.10	0.04	5.81
Downstream	7/10/2012	45	34.6	8.3	35.48	2.68	0.25	0.63	9.56	0.11	6.75

Table 4
2012 Laboratory Analytical Results

Site	Date	Oil & Grease (mg/L)	Total Hardness (mg/L$CaCO_3$)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
Upstream	7/10/2012	nd	552	0.2 J	4.0 J	nd	0.005	nd	nd	11,000	1,300	20	1,170	8.6
Downstream	7/10/2012	nd	635	nd	nd	nd	5.0 J	nd	nd	8,000	2,300	220	1,920	2.9

Notes: nd = not detected
J = Detected but below the reporting limit; therefore, result is an estimate.

Table 5
Upstream Site 2004-2012 Field Screening Data

Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophos-phate-P (mg/L)	Dissolved Oxygen (mg/L)
6/24/2004	27	22.5	8.4	8.28	1.72	0.13	0.10	1.30	nd	na
6/9/2005	2	18.8	8.4	80	1.35	0.25	0.20	8.75	0.26	8.94
6/13/2006	3	27.9	8.0	1.85	1.66	0.25	0.40	6.25	0.03	8.33
8/2/2007	2	26.7	7.6	1.28	1.61	0.38	0.10	8.14	0.07	7.66
8/11/2008	3	26.0	7.5	1.85	1.77	0.25	0.10	8.68	0.07	6.74
6/25/2009	2	27.2	7.8	2.06	1.74	0.25	0.13	9.88	0.07	6.48
7/7/2010	4	25.9	7.6	1.75	1.72	0.13	0.10	12.73	0.05	5.72
8/8/2011	3	24.7	7.6	2.31	1.69	0.25	0.19	8.50	0.04	5.52
7/10/2012	2	27.6	7.6	2.18	1.74	0.13	0.33	7.10	0.04	5.81
Maximum	27	27.9	8.4	80.00	1.77	0.38	0.40	12.73	0.26	8.94
Minimum	2	18.8	7.5	1.28	1.35	0.13	0.10	1.30	nd	5.52
Average	5	25.3	7.8	11.28	1.67	0.22	0.18	7.92	0.07	6.90
Median	3	26.0	7.6	2.06	1.72	0.25	0.13	8.49	0.05	6.61
Ambient WQO	*	**BPJ**	**<6.5, >9.0**	**20**	**	**0.5**	**EPA Freshwater CMC[1]**	**1.0[2]**	**0.1[3]**	**<5.0**
% Exceedance *(WQO)*	*	0	0	11	**	0	0	100	11	0
Dry Weather Action Level	*	**BPJ**	**<6.5, >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.0**	**2.0**	*
% Exceedance *(DW)*	*	0	0	0	0	0	0	13	0	*

Notes:
nd = not detected; na = not analyzed; BPJ = Best Professional Judgment; EPA = U.S. Environmental Protection Agency; DW = Dry Weather
Numbers in table have been rounded for presentation; unrounded values have been used in statistical calculations.
Half the value of the detection limit value was used in statistical calculations for the constituent that was not detected.
[1] The Criterion Maximum Concentration (salmonids absent), which varies based on pH, has been used because it applies to a one-hour maximum, and the ammonia level for this study was measured based on an instantaneous grab sample. See www.epa.gov/waterscience/criteria/ammonia.
[2] The Basin Plan WQO for total nitrogen WQO of1.0 mg/L has been used since nitrate-N is a component of total nitrogen.
[3] The Basin Plan WQO of 0.1 mg/L for total phosphorus has been applied since the Basin Plan does not provide a separate limit for orthophosphate-P.
* No established limit.
** There is no clear WQO in the Basin Plan, but a comparison is not necessary since TDS has been measured directly. See the laboratory data tables for TDS results.

Table 6
Upstream Site 2004-2012 Laboratory Analytical Data[1]

Date	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
6/24/2004	5	409	nd	nd	nd	nd	240,000	2,100	500	1,020	10.4
6/9/2005	nd	960	nd	nd	nd	nd	900,000	16,000	24,000	1,810	86.1
6/13/2006	nd	48	nd	nd	nd	nd	300,000	3,000	8,000	1,090	11.4
8/2/2007	nd	579	nd	nd	nd	nd	2,200	500	270	1,150	5.2
8/11/2008	nd	420	nd	nd	nd	nd	1,300	1,300	1,300	1,670	11.9
6/25/2009	nd	490	nd	2.0 J	nd	nd	14,000	1,300	3,000	1,080	3.5
7/7/2010	nd	482	nd	nd	nd	nd	13,000	80	210	1,130	2.0
8/8/2011	nd	343	nd	1.5 J	nd	nd	800	110	400	1,160	nd
7/10/2012	nd	552	0.2 J	4.0 J	nd	0.005	11,000	1,300	20	1,170	8.6
Maximum	5	960	0.2	4.0	nd	nd	900,000	16,000	24,000	1,810	86.1
Minimum	nd	48	nd	nd	nd	nd	800	80	20	1,020	nd
Average	*	476	*	*	*	*	164,700	2,854	4,189	1,253	15.5
Median	*	482	*	*	*	*	13,000	1,300	500	1,150	8.6
Ambient WQO	**10**	**		**CTR CMC & CCC**			**1,000[2]**	**200[2]**	**33[2]**	**1,500*** **	**
% Exceedance *(WQO)*	0	**	0	0	0	0	89	78	89	22	**
Dry Weather Action Level	**15**	**		**CTR CMC**			**130,000**	**13,000**	**7,000**	**	**
% Exceedance *(DW)*	0	**	0	0	0	0	33	11	22	**	**

Notes:
nd = not detected; na = not analyzed; J = Detected but below the reporting limit; therefore, result is an estimate; DW = Dry Weather
CTR = California Toxics Rule, see www.epa.gov/ost/standards/ctr/toxic.pdf for more information; CCC =Criterion Continuous Concentration; CMC = Criterion Maximum Concentration.
Numbers in table have been rounded for presentation; unrounded values have been used in statistical calculations.
Half the value of the detection limit value was used in statistical calculations for the constituent that was not detected.
[1] Surfactants (laboratory), diazinon and chlorpyrifos have not been detected in the history of this program and have been omitted from this table.
[2] Bacteria TMDL dry weather targets, which are technically applicable to geometric mean rather than to single samples. These low targets were used for a conservative assessment.
* Statistical calculation not performed.
** No established limit.
*** The Basin Plan does not list a TDS WQO for hydrologic subarea (HSA) 907.13. This value is taken from HSA 907.12, the closest HSA to 907.13.

Table 7
Downstream Site 2002-2012 Field Screening Data

Date	Flow (gpm)	Temperature (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate-P (mg/L)	Dissolved Oxygen (mg/L)
8/22/2002	168	32	8.8	15.13	2.55	0.37	0.30	0.10	0.03	na
8/14/2003	299	29	8.6	6.36	2.70	0.13	0.20	2.00	nd	11.10
6/24/2004	204	30	8.7	19.75	2.73	0.25	0.30	2.50	nd	na
6/28/2004	244	20.6	8.3	4.74	2.32	0.38	0.30	1.25	0.03	7.51
6/9/2005	412	25.5	8.6	3.43	1.24	0.50	0.10	6.25	0.03	12.74
6/13/2006	421	27.9	8.7	2.06	2.58	0.25	0.80	5.00	0.03	10.66
7/3/2007	281	27.8	8.3	9.91	2.35	0.50	0.30	1.92	0.07	10.40
8/11/2008	234	32.0	8.7	5.57	2.80	0.25	0.30	2.12	0.03	9.64
6/25/2009	108	30.7	8.9	14.82	2.81	0.25	0.30	2.38	0.08	8.25
7/7/2010	94	18.4	8.2	4.06	2.82	0.25	0.40	5.77	nd	8.32
7/7/2011	73	33.7	8.7	10.88	2.61	0.25	0.01	2.25	0.04	8.47
8/8/2011	83	30.6	8.6	7.70	2.55	0.25	0.27	3.91	0.02	7.96
7/10/2012	45	34.6	8.3	35.48	2.68	0.25	0.63	9.56	0.11	6.75
Maximum	421	34.6	8.9	35.48	2.82	0.50	0.80	9.56	0.11	12.74
Minimum	45	18.4	8.2	2.06	1.24	0.13	0.01	0.10	nd	6.75
Average	205	28.7	8.6	10.76	2.52	0.30	0.32	3.46	0.04	9.25
Median	204	30.0	8.6	7.70	2.61	0.25	0.30	2.38	0.03	8.47
Ambient WQO	*	**BPJ**	**<6.5, >9.0**	**20**	**	**0.5**	**EPA Freshwater CMC[1]**	**1.0[2]**	**0.1[3]**	**<5.0**
% Exceedance *(WQO)*	*	0	0	0	**	15	0	92	8	0
Dry Weather Action Level	*	**BPJ**	**<6.5, 9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10**	**2**	*
% Exceedance *(DW)*	*	0	0	0	0	0	0	0	0	*

Notes:
nd = not detected; na = not analyzed; BPJ = Best Professional Judgment; EPA = U.S. Environmental Protection Agency; DW = Dry Weather
Numbers in table have been rounded for presentation; unrounded values have been used in statistical calculations.
Half the value of the detection limit value was used in statistical calculations for the constituent that was not detected.
[1] The Criterion Maximum Concentration (salmonids absent), which varies based on pH, has been used because it applies to a one-hour maximum, and the ammonia level for this study was measured based on an instantaneous grab sample. See www.epa.gov/waterscience/criteria/ammonia.
[2] The Basin Plan WQO for total nitrogen WQO of 1.0 mg/L has been used since nitrate-N is a component of total nitrogen.
[3] The Basin Plan WQO of 0.1 mg/L for total phosphorus has been applied since the Basin Plan does not provide a separate limit for orthophosphate phosphorus.
* No established limit.
** There is no clear WQO in the Basin Plan, but a comparison is not necessary since TDS has been measured directly. See the laboratory data tables for TDS results.

Table 8
Downstream Site 2002-2012 Laboratory Analytical Data[1]

Date	Oil & Grease (mg/L)	Total Hardness (mg/LCaCO3)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)
8/22/2002	nd	549	nd	nd	nd	nd	30,000	17,000	300	na	na
8/14/2003	nd	624	nd	10	nd	nd	8,000	2,300	800	1,490	10.6
6/24/2004	4	536	nd	nd	nd	nd	35,000	1,100	20	1,590	16.3
6/28/2004	nd	699	nd	nd	nd	nd	130,000	800	340	1,900	10.9
6/9/2005	nd	810	nd	nd	nd	nd	30,000	1,300	5,000	1,700	53.4
6/13/2006	nd	60	nd	nd	nd	nd	170,000	500	70	1,600	9.52
7/3/2007	nd	649	nd	nd	nd	nd	30,000	5,000	800	1,400	14.1
8/11/2008	nd	480	nd	nd	nd	nd	5,000	1,300	40	1,120	45.5
6/25/2009	nd	616	nd	3	nd	nd	2,800	270	130	1,680	12
7/7/2010	nd	203	nd	1	nd	0.9 J	22,000	3,000	5,000	1,840	5.9
7/7/2011	nd	641	nd	3	1	3	11,000	2,200	230	1,670	10
8/8/2011	nd	464	nd	3.4	nd	9.7	500	20	400	1,720	2.2
7/10/2012	nd	635	nd	nd	nd	5.0 J	8,000	2,300	220	1,920	2.9
Maximum	4	810	nd	10	1	9.7	170,000	17,000	5,000	1,920	53.4
Minimum	nd	60	nd	nd	nd	nd	500	20	20	1,120	2.2
Average	*	536	*	*	*	*	37,100	2,853	1,027	1,636	16.1
Median	*	616	*	*	*	*	22,000	1,300	300	1,675	10.8
Ambient WQO	**10**	**		**CTR CMC & CCC**			**1,000[2]**	**200[2]**	**33[2]**	**1,500*** **	**
% Exceedance *(WQO)*	0	**	0	0	0	0	92	92	92	75	**
DW Action Level	**15**	**		**CTR CMC**			**130,000**	**13,000**	**7,000**	**	**
% Exceedance *(DW)*	0	**	0	0	0	0	15	8	0	**	**

Notes:
nd = not detected; na = not analyzed; J = Detected but below the reporting limit; therefore, result is an estimate; DW = Dry Weather
CTR = California Toxics Rule, see www.epa.gov/ost/standards/ctr/toxic.pdf for more information; CCC =Criterion Continuous Concentration; CMC = Criterion Maximum Concentration.
Numbers in table have been rounded for presentation; unrounded values have been used in statistical calculations.
Half the value of the detection limit value was used in statistical calculations for the constituent that was not detected.
[1] Surfactants (laboratory), diazinon and chlorpyrifos have not been detected in the history of this program and have been omitted from this table.
[2] Bacteria TMDL dry weather targets, which are technically applicable to geometric mean rather than to single samples. These low targets were used for a conservative assessment.
* Statistical calculation not performed.
** No established limit.
*** The Basin Plan does not list a TDS WQO for hydrologic subarea (HSA) 907.13. This value is taken from HSA 907.12, the closest HSA to 907.13.

Figure 3: Concentrations and Loading Rates for Key Constituents

Figure 3: Concentrations and Loading Rates for Key Constituents

Concentration

Loading Rate

Total Coliform

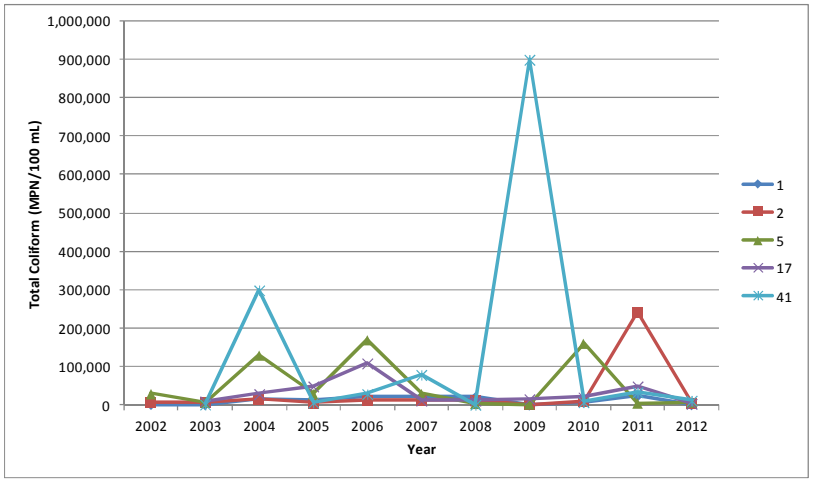

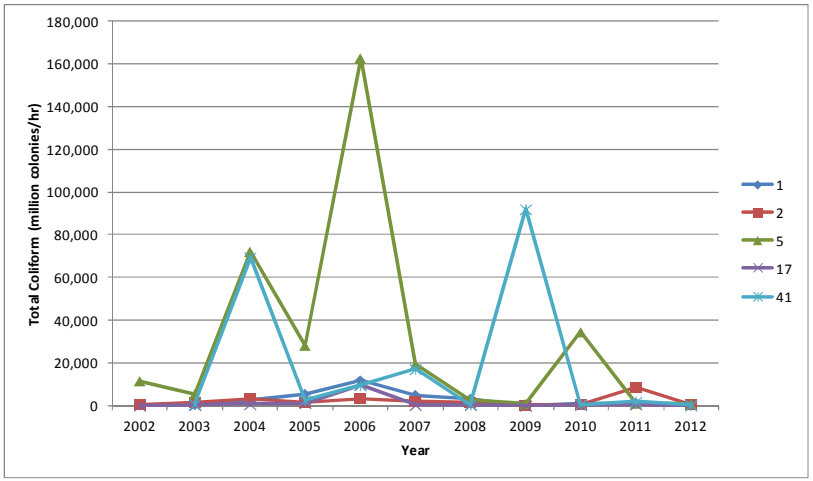

Fecal Coliform

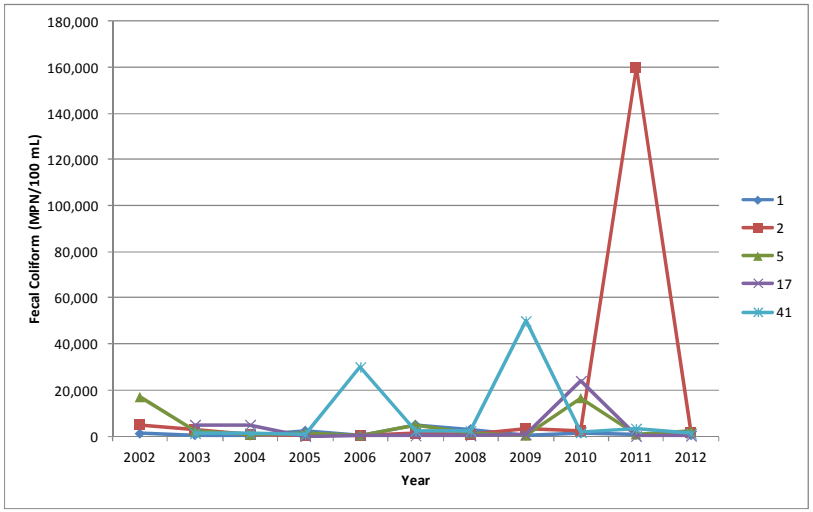

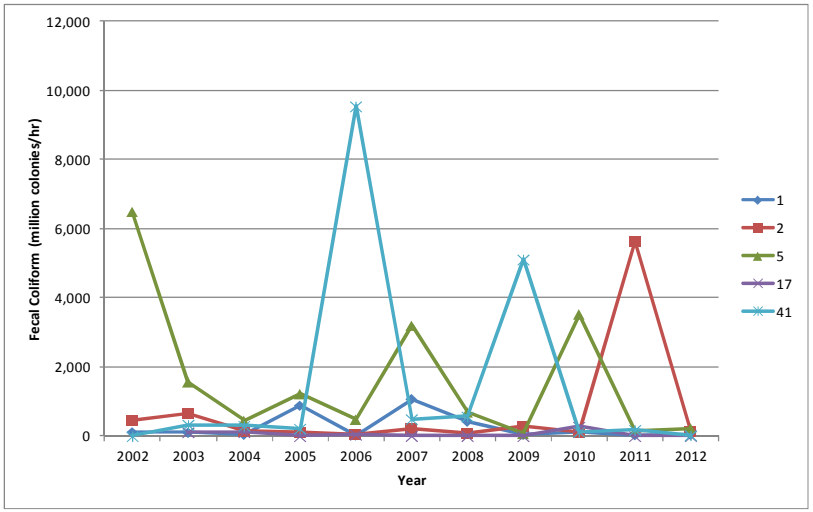

Figure 3: Concentrations and Loading Rates for Key Constituents

Enterococcus

Concentration

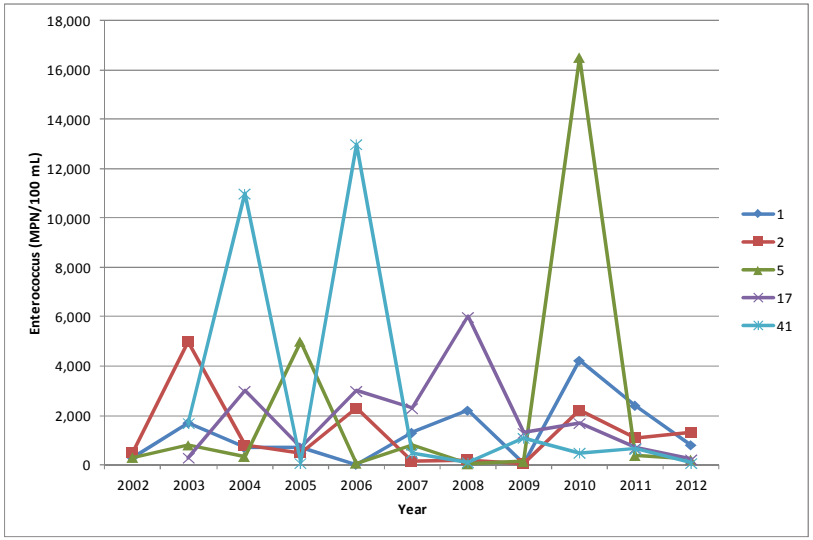

Loading Rate

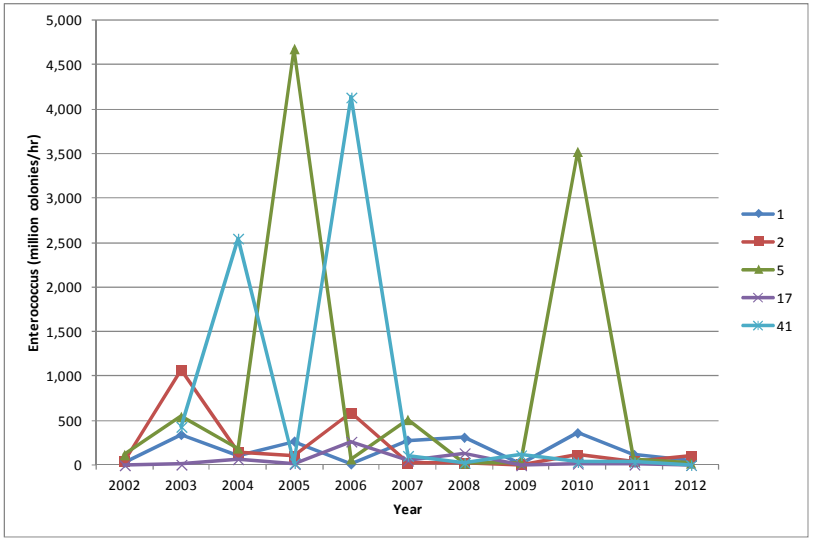

☒ Dry Weather
☒ MS4 Outfall Monitoring
☐ Additional Study

City of El Cajon
Dry Weather Monitoring Field Datasheet

☐ **Routine Investigation** ☐ **Confirmation for** _____ ☐ **IC/ID Follow-Up for** _____

Site ID	5		**Latitude**	32.82670	**Watershed**	**Hydrologic Unit**	907
Location	Adjacent to the Weld Boulevard trolley station, southeast of Marshall Avenue and Cuyamaca Street intersection		**Longitude**	-116.98237		**Hydrologic Area**	907.1
			TB Page	1251 D1		**Hydrologic Subarea** (Optional)	907.13
Date	7/18/12	**Time** 16:35	**Observer**	MD/BN	**Discharge Area** (Optional)		

Land Use (Primary) Commercial

Land Use (Secondary) Industrial

Conveyance Concrete Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☐ > 72 hours ☐ < 72 hours

Rainfall ☐ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other ☐ ns (dry) ☐ na

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other ☐ ns (dry) ☐ na

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other ☐ ns (dry) ☐ na

Floatables ☐ None ☐ Trash ☐ Bubbles ☐ Foam ☐ Sheen ☐ Fecal Matter ☐ Other ☐ ns (dry) ☐ na

Deposits ☐ None ☐ Sediment ☐ Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other ☐ na

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other ☐ na

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Other ☐ na

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☒ No ☐ *Yes:* ☐ *Irrigation Runoff* ☐ *Other:* _____

Photo # ——

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.4	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.80	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	2.95	MBAS (mg/L)	NA	DO (mg/L)	NA		

Analytical Lab Samples Collected? ☒ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	75	in
Depth	0.25	in
Velocity	10/14	ft/sec
Flow	42	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Re-sample for TDS

☒ Dry Weather
☒ MS4 Outfall Monitoring
☐ Additional Study

City of El Cajon
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ Confirmation for _____ ☐ IC/ID Follow-Up for _____

Site ID	5		Latitude	32.82670	Watershed	Hydrologic Unit	907
Location	Adjacent to the Weld Boulevard trolley station, southeast of Marshall Avenue and Cuyamaca Street intersection		Longitude	-116.98237		Hydrologic Area	907.1
			TB Page	1251 D1		Hydrologic Subarea (Optional)	907.13
Date	7/10/12	Time 12:10	Observer	MD/BN/JP	Discharge Area (Optional)		

Land Use (Primary) Commercial

Land Use (Secondary) Industrial

Conveyance Concrete Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other ☐ ns (dry) ☐ na

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other ☐ ns (dry) ☐ na

Clarity ☐ Clear ☒ Slightly Cloudy ☐ Opaque ☐ Other ☐ ns (dry) ☐ na

Floatables ☐ None ☐ Trash ☐ Bubbles ☐ Foam ☐ Sheen ☐ Fecal Matter ☒ Other Algae ☐ ns (dry) ☐ na

Deposits ☐ None ☐ Sediment ☐ Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other ☐ na

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other ☐ na

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Other ☐ na

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☒ No ☐ *Yes:* ☐ *Irrigation Runoff* ☐ *Other:* _____

Photo # 31-33

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	34.6	NH_3-N (mg/L)	0.625	NO_3 (mg/L)	9.558	Ortho-PO_4 (mg/L)	0.339
pH (pH units)	8.31	TURB (NTU)	35.48	NO_3-N (mg/L)	2.160	Ortho-PO_4-P (mg/L)	0.111
COND (mS/cm)	2.68	MBAS (mg/L)	0.25	DO (mg/L)	6.75		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	80	in
Depth	0.25	in
Velocity	10/14	ft/sec
Flow	45	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Upstream investigation for turbidity was not conducted because looked to be from algae floatables clouding the water, rather than from an illegal discharge.

☒ Dry Weather
☐ MS4 Outfall Monitoring
☒ Additional Study

City of El Cajon
Dry Weather Monitoring Field Datasheet

☒ **Routine Investigation** ☐ **Confirmation for** _____ ☐ **IC/ID Follow-Up for** _____

Site ID	Forester Creek Upstream		**Latitude**	32.81185	**Watershed**	**Hydrologic Unit**	907
Location	Greenfield Avenue & I-8 W onramp intersection behind the southeast corner of Valero Gas Station at 1699 E Main Street		**Longitude**	-116.91795		**Hydrologic Area**	907.1
			TB Page	1252 B3		**Hydrologic Subarea** (Optional)	907.13
Date	7/18/12	**Time** 15:25	**Observer**	MD/BW	**Discharge Area** (Optional)		

Land Use (Primary) Commercial

Land Use (Secondary) Residential

Conveyance Concrete Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☐ > 72 hours ☐ < 72 hours

Rainfall ☐ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other ☐ ns (dry) ☐ na

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other ☐ ns (dry) ☐ na

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other ☐ ns (dry) ☐ na

Floatables ☐ None ☐ Trash ☐ Bubbles ☐ Foam ☐ Sheen ☐ Fecal Matter ☐ Other ☐ ns (dry) ☐ na

Deposits ☐ None ☐ Sediment ☐ Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other ☐ na

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other ☐ na

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Other ☐ na

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☒ No ☐ *Yes:* ☐ *Irrigation Runoff* ☐ *Other:* _____

Photo # ——

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.7	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.53	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.75	MBAS (mg/L)	NA	DO (mg/L)	NA		

Analytical Lab Samples Collected? ☒ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	7	in
Depth	0.2	in
Velocity	5/10	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Re-sample for TDS

JR

☒ Dry Weather
☐ MS4 Outfall Monitoring
☒ Additional Study

City of El Cajon
Dry Weather Monitoring Field Datasheet

☒ **Routine Investigation** ☐ **Confirmation for** _____ ☐ **IC/ID Follow-Up for** _____

Site ID	Forester Creek Upstream		**Latitude**	32.81185	**Watershed**	**Hydrologic Unit**	907
Location	Greenfield Avenue & I-8 W onramp intersection behind the southeast corner of Valero Gas Station at 1699 E Main Street		**Longitude**	-116.91795		**Hydrologic Area**	907.1
			TB Page	1252 B3		**Hydrologic Subarea** (Optional)	907.13
Date	7/10/12	**Time** 11:00	**Observer**	MD/BN/JP		**Discharge Area** (Optional)	

Land Use (Primary) Commercial

Land Use (Secondary) Residential

Conveyance Concrete Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other ☐ ns (dry) ☐ na

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other ☐ ns (dry) ☐ na

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other ☐ ns (dry) ☐ na

Floatables ☒ None ☐ Trash ☐ Bubbles ☐ Foam ☐ Sheen ☐ Fecal Matter ☐ Other ☐ ns (dry) ☐ na

Deposits ☐ None ☐ Sediment ☐ Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other ☐ na

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other ☐ na

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Other ☐ na

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☒ No ☐ *Yes:* ☐ *Irrigation Runoff* ☐ *Other:* _____

Photo # 28-30

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.6	NH_3-N (mg/L)	0.331	NO_3 (mg/L)	31.40	Ortho-PO_4 (mg/L)	0.117
pH (pH units)	7.57	TURB (NTU)	2.18	NO_3-N (mg/L)	7.10	Ortho-PO_4 -P (mg/L)	0.038
COND (mS/cm)	1.74	MBAS (mg/L)	0.13	DO (mg/L)	5.81		

Analytical Lab Samples Collected? ☒ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.2	in
Velocity	5/10	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

EnviroMatrix Analytical, Inc.

18 July 2012

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 12G0230

Project Name: El Cajon Dry Weather
Project Desc./#: 201222W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/10/12 13:23. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A • San Diego, California 92123 • (858) 560-7717 • Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 41	12G0230-01	Stormwater	07/10/12 09:40	07/10/12 13:23
FC Upstream	12G0230-02	Stormwater	07/10/12 11:00	07/10/12 13:23
Site 5	12G0230-03	Stormwater	07/10/12 12:10	07/10/12 13:23

NOTE: The TOC analyses were performed by a sub-contract laboratory, results to follow in a separate report.

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 41 (12G0230-01) Stormwater Sampled: 07/10/12 09:40 Received: 07/10/12 13:23										
Zinc	**0.003**	0.002	0.100	mg/l	5	2071136	07/11/12	07/17/12	EPA 200.8	J
Cadmium	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.007**	0.005	0.050	"	"	"	"	"	"	J
Lead	ND	0.005	0.025	"	"	"	"	"	"	
FC Upstream (12G0230-02) Stormwater Sampled: 07/10/12 11:00 Received: 07/10/12 13:23										
Cadmium	**0.0002**	0.0002	0.001	mg/l	1	2071136	07/11/12	07/12/12	EPA 200.8	J
Copper	**0.004**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.005**	0.0003	0.020	"	"	"	"	"	"	J
Site 5 (12G0230-03) Stormwater Sampled: 07/10/12 12:10 Received: 07/10/12 13:23										
Cadmium	ND	0.001	0.005	mg/l	5	2071136	07/11/12	07/17/12	EPA 200.8	
Copper	ND	0.005	0.050	"	"	"	"	"	"	
Lead	ND	0.005	0.025	"	"	"	"	"	"	
Zinc	**0.005**	0.002	0.100	"	"	"	"	"	"	J

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 41 (12G0230-01) Stormwater Sampled: 07/10/12 09:40 Received: 07/10/12 13:23										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	2071174	07/10/12	07/14/12	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*			"	"	"	"	
FC Upstream (12G0230-02) Stormwater Sampled: 07/10/12 11:00 Received: 07/10/12 13:23										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	2071174	07/10/12	07/14/12	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*84 %*	*60-130*			"	"	"	"	
Site 5 (12G0230-03) Stormwater Sampled: 07/10/12 12:10 Received: 07/10/12 13:23										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	2071174	07/10/12	07/14/12	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*			"	"	"	"	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 41 (12G0230-01) Stormwater Sampled: 07/10/12 09:40 Received: 07/10/12 13:23										
Hardness (Total)	**646**	100	100	mg CaCO3/L	10	2071253	07/12/12	07/13/12	EPA 200.7	
Nitrate/Nitrite as N	**1.83**	0.09	0.50	mg/l	"	2071670	07/16/12	07/16/12	SM4500 NO3 E	
Total Kjeldahl Nitrogen	**0.8**	0.3	0.5	"	1	2071679	07/16/12	07/16/12	SM4500 N C	
Total Nitrogen	**2.6**	0.5	0.5	"	"	2071764	"	"	Calculation	
Oil & Grease	ND	5	5	"	"	2071672	07/17/12	07/17/12	EPA 1664A	
Phosphorus, Total	**0.02**	0.02	0.05	"	"	2071752	07/17/12	07/17/12	SM4500 P B, E	J
Total Suspended Solids	**10.0**	1.0	20.0	"	"	2071320	07/12/12	07/13/12	SM2540 D	J
FC Upstream (12G0230-02) Stormwater Sampled: 07/10/12 11:00 Received: 07/10/12 13:23										
Hardness (Total)	**552**	100	100	mg CaCO3/L	10	2071253	07/12/12	07/13/12	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	2071672	07/17/12	07/17/12	EPA 1664A	
Site 5 (12G0230-03) Stormwater Sampled: 07/10/12 12:10 Received: 07/10/12 13:23										
Hardness (Total)	**635**	100	100	mg CaCO3/L	10	2071253	07/12/12	07/13/12	EPA 200.7	
Nitrate/Nitrite as N	**3.88**	0.09	0.50	mg/l	"	2071670	07/16/12	07/16/12	SM4500 NO3 E	
Total Kjeldahl Nitrogen	**1.3**	0.3	0.5	"	1	2071679	07/16/12	07/16/12	SM4500 N C	
Total Nitrogen	**5.2**	0.5	0.5	"	"	2071764	"	"	Calculation	
Oil & Grease	ND	5	5	"	"	2071672	07/17/12	07/17/12	EPA 1664A	
Phosphorus, Total	**0.14**	0.02	0.05	"	"	2071752	07/17/12	07/17/12	SM4500 P B, E	
Total Suspended Solids	**77.0**	1.0	20.0	"	"	2071320	07/12/12	07/13/12	SM2540 D	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 41 (12G0230-01) Stormwater Sampled: 07/10/12 09:40 Received: 07/10/12 13:23										
Total Coliforms	**13000**	200	200	MPN/100 ml	100	2071146	07/10/12	07/14/12	SM 9221 B, E	
Fecal Coliforms	**1100**	20	20	"	10	"	"	07/13/12	"	
Enterococcus	**80**	20	20	"	"	2071147	"	07/14/12	SM 9230 A, B	
FC Upstream (12G0230-02) Stormwater Sampled: 07/10/12 11:00 Received: 07/10/12 13:23										
Total Coliforms	**11000**	200	200	MPN/100 ml	100	2071146	07/10/12	07/14/12	SM 9221 B, E	
Fecal Coliforms	**1300**	20	20	"	10	"	"	07/13/12	"	
Enterococcus	**20**	20	20	"	"	2071147	"	07/14/12	SM 9230 A, B	
Site 5 (12G0230-03) Stormwater Sampled: 07/10/12 12:10 Received: 07/10/12 13:23										
Total Coliforms	**8000**	200	200	MPN/100 ml	100	2071146	07/10/12	07/14/12	SM 9221 B, E	
Fecal Coliforms	**2300**	200	200	"	"	"	"	07/13/12	"	
Enterococcus	**220**	20	20	"	10	2071147	"	07/14/12	SM 9230 A, B	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2071136											
Blank (2071136-BLK1)					Prepared: 07/11/12		Analyzed: 07/12/12				
Lead	ND	0.001	0.005	mg/l							
Zinc	ND	0.0003	0.020	"							
Cadmium	ND	0.0002	0.001	"							
Copper	ND	0.001	0.010	"							
LCS (2071136-BS1)					Prepared: 07/11/12		Analyzed: 07/12/12				
Cadmium	0.052	0.0002	0.001	mg/l	0.0500		103	75-125			
Copper	0.051	0.001	0.010	"	0.0500		102	75-125			
Lead	0.052	0.001	0.005	"	0.0500		104	75-125			
Zinc	0.051	0.0003	0.020	"	0.0500		103	75-125			
LCS Dup (2071136-BSD1)					Prepared: 07/11/12		Analyzed: 07/12/12				
Lead	0.051	0.001	0.005	mg/l	0.0500		103	75-125	1	20	
Cadmium	0.052	0.0002	0.001	"	0.0500		104	75-125	1	20	
Zinc	0.051	0.0003	0.020	"	0.0500		102	75-125	0.7	20	
Copper	0.052	0.001	0.010	"	0.0500		103	75-125	0.9	20	
Duplicate (2071136-DUP1)			**Source: 12G0186-01**		Prepared: 07/11/12		Analyzed: 07/12/12				
Copper	0.016	0.001	0.010	mg/l		0.014			9	20	
Lead	0.002	0.001	0.005	"		0.002			5	20	J
Zinc	0.003	0.0003	0.020	"		0.003			2	20	J
Cadmium	0.0002	0.0002	0.001	"		0.0002			5	20	J
Matrix Spike (2071136-MS1)			**Source: 12G0186-01**		Prepared: 07/11/12		Analyzed: 07/12/12				
Lead	0.059	0.001	0.005	mg/l	0.0500	0.002	114	75-125			
Copper	0.060	0.001	0.010	"	0.0500	0.014	92	75-125			
Cadmium	0.044	0.0002	0.001	"	0.0500	0.0002	87	75-125			
Zinc	0.041	0.0003	0.020	"	0.0500	0.003	76	75-125			

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2071136											
Matrix Spike Dup (2071136-MSD1)			**Source: 12G0186-01**		Prepared: 07/11/12	Analyzed: 07/12/12					
Zinc	0.039	0.0003	0.020	mg/l	0.0500	0.003	72	75-125	5	20	QM-05
Cadmium	0.041	0.0002	0.001	"	0.0500	0.0002	82	75-125	6	20	
Copper	0.059	0.001	0.010	"	0.0500	0.014	88	75-125	3	20	
Lead	0.060	0.001	0.005	"	0.0500	0.002	116	75-125	2	20	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2071174											
Blank (2071174-BLK1)					Prepared: 07/09/12	Analyzed: 07/14/12					
Chlorpyrifos	ND	0.04	0.05	ug/l							
Diazinon	ND	0.04	0.05	"							
Surrogate: Triphenyl phosphate	*0.210*			*"*	*0.250*		*84*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			
LCS (2071174-BS1)					Prepared: 07/09/12	Analyzed: 07/14/12					
Bolstar	0.50	0.09	0.10	ug/l	0.500		100	60-130			
Chlorpyrifos	0.50	0.04	0.05	"	0.500		100	60-130			
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130			
Ethoprop	0.44	0.05	0.05	"	0.500		88	60-130			
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130			
Methyl parathion	0.40	0.07	0.10	"	0.500		80	60-130			
Phorate	0.46	0.03	0.05	"	0.500		92	60-130			
Ronnel	0.46	0.16	0.25	"	0.500		92	60-130			
Trichlorinate	0.44	0.05	0.05	"	0.500		88	60-130			
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.230*			*"*	*0.250*		*92*	*60-130*			
LCS Dup (2071174-BSD1)					Prepared: 07/09/12	Analyzed: 07/14/12					
Bolstar	0.48	0.09	0.10	ug/l	0.500		96	60-130	4	30	
Chlorpyrifos	0.49	0.04	0.05	"	0.500		98	60-130	2	30	
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130	0	30	
Ethoprop	0.42	0.05	0.05	"	0.500		84	60-130	5	30	
Mevinphos	0.33	0.21	0.25	"	0.500		66	60-130	19	30	
Methyl parathion	0.43	0.07	0.10	"	0.500		86	60-130	7	30	
Phorate	0.40	0.03	0.05	"	0.500		80	60-130	14	30	
Ronnel	0.44	0.16	0.25	"	0.500		88	60-130	4	30	
Trichlorinate	0.41	0.05	0.05	"	0.500		82	60-130	7	30	
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.220*			*"*	*0.250*		*88*	*60-130*			

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2071253											
Blank (2071253-BLK1)					Prepared: 07/12/12	Analyzed: 07/13/12					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (2071253-DUP1)			**Source: 12G0286-01**		Prepared: 07/12/12	Analyzed: 07/13/12					
Hardness (Total)	723	100	100	mg CaCO3/L		718			0.8	20	
Batch 2071320											
Blank (2071320-BLK1)					Prepared: 07/12/12	Analyzed: 07/13/12					
Total Suspended Solids	ND	1.0	20.0	mg/l							
Duplicate (2071320-DUP1)			**Source: 12G0138-01**		Prepared: 07/12/12	Analyzed: 07/13/12					
Total Suspended Solids	4.0	1.0	20.0	mg/l		4.0			0	20	J
Reference (2071320-SRM1)					Prepared: 07/12/12	Analyzed: 07/13/12					
Total Suspended Solids	96.0	1.0	20.0	mg/l	100		96	82.9-110			
Batch 2071670											
Blank (2071670-BLK1)					Prepared & Analyzed: 07/16/12						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l							
LCS (2071670-BS1)					Prepared & Analyzed: 07/16/12						
Nitrate/Nitrite as N	0.57	0.009	0.05	mg/l	0.500		114	80-120			
LCS Dup (2071670-BSD1)					Prepared & Analyzed: 07/16/12						
Nitrate/Nitrite as N	0.57	0.009	0.05	mg/l	0.500		114	80-120	0.4	20	

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2071670											
Duplicate (2071670-DUP1)			**Source: 12G0307-02**		Prepared & Analyzed: 07/16/12						
Nitrate/Nitrite as N	5.90	0.09	0.50	mg/l		5.64			5	20	
Matrix Spike (2071670-MS1)			**Source: 12G0307-02**		Prepared & Analyzed: 07/16/12						
Nitrate/Nitrite as N	19.4	0.22	1.25	mg/l	12.5	5.64	110	80-120			
Matrix Spike Dup (2071670-MSD1)			**Source: 12G0307-02**		Prepared & Analyzed: 07/16/12						
Nitrate/Nitrite as N	19.4	0.22	1.25	mg/l	12.5	5.64	110	80-120	0.2	20	
Batch 2071672											
Blank (2071672-BLK1)					Prepared & Analyzed: 07/16/12						
Oil & Grease	ND	5	5	mg/l							
LCS (2071672-BS1)					Prepared & Analyzed: 07/16/12						
Oil & Grease	37	5	5	mg/l	40.0		92	78-114			
LCS Dup (2071672-BSD1)					Prepared & Analyzed: 07/16/12						
Oil & Grease	39	5	5	mg/l	40.0		97	78-114	6	20	
Batch 2071679											
Blank (2071679-BLK1)					Prepared & Analyzed: 07/16/12						
Total Kjeldahl Nitrogen	ND	0.3	0.5	mg/l							
LCS (2071679-BS1)					Prepared & Analyzed: 07/16/12						
Total Kjeldahl Nitrogen	3.8	0.3	0.5	mg/l	4.10		93	80-120			

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Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2071679											
LCS Dup (2071679-BSD1)					Prepared & Analyzed: 07/16/12						
Total Kjeldahl Nitrogen	4.1	0.3	0.5	mg/l	4.10		100	80-120	7	20	
Duplicate (2071679-DUP1)			**Source: 12G0385-05**		Prepared & Analyzed: 07/16/12						
Total Kjeldahl Nitrogen	ND	0.3	0.5	mg/l		ND				20	
Matrix Spike (2071679-MS1)			**Source: 12G0385-05**		Prepared & Analyzed: 07/16/12						
Total Kjeldahl Nitrogen	3.8	0.3	0.5	mg/l	4.10	ND	92	80-120			
Matrix Spike Dup (2071679-MSD1)			**Source: 12G0385-05**		Prepared & Analyzed: 07/16/12						
Total Kjeldahl Nitrogen	3.7	0.3	0.5	mg/l	4.10	ND	91	80-120	1	20	
Batch 2071752											
Blank (2071752-BLK1)					Prepared & Analyzed: 07/17/12						
Phosphorus, Total	ND	0.02	0.05	mg/l							
LCS (2071752-BS1)					Prepared & Analyzed: 07/17/12						
Phosphorus, Total	0.48	0.02	0.05	mg/l	0.500		95	80-120			
LCS Dup (2071752-BSD1)					Prepared & Analyzed: 07/17/12						
Phosphorus, Total	0.48	0.02	0.05	mg/l	0.500		95	80-120	0.4	20	
Duplicate (2071752-DUP1)			**Source: 12G0307-01**		Prepared & Analyzed: 07/17/12						
Phosphorus, Total	0.18	0.02	0.05	mg/l		0.20			13	20	
Matrix Spike (2071752-MS1)			**Source: 12G0307-01**		Prepared & Analyzed: 07/17/12						
Phosphorus, Total	0.69	0.02	0.05	mg/l	0.500	0.20	97	80-120			

11046

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0230

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2071752											
Matrix Spike Dup (2071752-MSD1)			**Source: 12G0307-01**		Prepared & Analyzed: 07/17/12						
Phosphorus, Total	0.64	0.02	0.05	mg/l	0.500	0.20	87	80-120	8	20	

11047

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

11048

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 120230

Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Samplers(s): MD / BN
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: Same

Project ID: El Cajon Dry Weather
Project #: 201222W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 X 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC X TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cr Cu Pb Ni Ag Zn X Dissolved	Coliform, X Total (MTF) X Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, X MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness	TOC	Total Nitrogen-N	Total Phosphorus-P	
1	Site 41	7/10/12	9:40	SW	4g/5P	X						X		X				X X	X		X			X X	X X	X	X	
2	EC Upstream	"	11:00	SW	4g/5P	X						X						X X	X X		X X			X X	X X	X	X	
3	Site 5	"	12:10	SW	4g/5P	X						X		X				X X	X		X X			X X	X X	X	X	
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkh	7/10/12 1:00	Signature: Heidi
Print: Manouchehr Dadkhah		Print: Heidi Thompson
Company: D-Max Eng.		Company: EMA
Signature: Heidi	7/10/12 1323	Signature:
Print: Heidi Thompson		Print: DAVID Nguyen
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

7°C on ice

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

20 July 2012

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 12G0230

Project Name: El Cajon Dry Weather
Project Number: 20122W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- TOC – Liquid by SM5310B

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

4340 Viewridge Avenue, Suite A • San Diego, California 92123 • (858) 560-7717 • Fax (858) 560-7763
Analytical Chemistry Laboratory

Clinical Laboratory of San Bernardino, Inc.

19 July 2012 Clinical Lab No.: 12G0907

Louis Luick
EnviroMatrix Analytical, Inc.
4340 Viewridge., Ste. A
San Diego, CA 92123

Project Name: TOC Analysis
Sub Project: 12G0230

Enclosed are the results of the analyses for samples received at the laboratory on 07/11/12 . Samples were received within temperature range, in correct containers and preservation.

Analyses were performed pursuant to client's chain of custody, within hold times, utilizing EPA or other ELAP approved methodologies.

I certify that the results are within compliance both technically and for completeness. Analytical results are attached to this letter. Please call if any additional information and or assistance are needed.

Thank you for choosing Clinical Laboratory of San Bernardino for your analytical needs.

Sincerely,

Stephen Kavousy

Stephen Kavousy
Project Manager

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc.	Project: TOC Analysis	Work Order: 12G0907
4340 Viewridge., Ste. A	Sub Project: 12G0230	Received: 07/11/12 15:26
San Diego CA, 92123	Project Manager: Louis Luick	Reported: 07/19/12

Site 41 **12G0907-01 (Water)** **Sample Date:** 07/10/12 9:40 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**11**	mg/L	1.5		07/17/12	07/17/12	1229039	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc.	Project: TOC Analysis	Work Order: 12G0907
4340 Viewridge., Ste. A	Sub Project: 12G0230	Received: 07/11/12 15:26
San Diego CA, 92123	Project Manager: Louis Luick	Reported: 07/19/12

FC Upstream **12G0907-02 (Water)** **Sample Date:** 07/10/12 11:00 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**2.9**	mg/L	0.30		07/13/12	07/13/12	1228417	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc.	Project: TOC Analysis	Work Order: 12G0907
4340 Viewridge., Ste. A	Sub Project: 12G0230	Received: 07/11/12 15:26
San Diego CA. 92123	Project Manager: Louis Luick	Reported: 07/19/12

Site 5 **12G0907-03 (Water)** **Sample Date:** 07/10/12 12:10 **Sampler:** Not Listed

Analyte	Method	Result	Units	Rep. Limit	MCL	Prepared	Analyzed	Batch	Qualifier
General Chemical Analyses									
Total Organic Carbon	SM 5310B	**8.6**	mg/L	1.5		07/13/12	07/14/12	1228417	

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

EnviroMatrix Analytical, Inc.	Project: TOC Analysis	Work Order: 12G0907
4340 Viewridge., Ste. A	Sub Project: 12G0230	Received: 07/11/12 15:26
San Diego CA, 92123	Project Manager: Louis Luick	Reported: 07/19/12

General Chemical Analyses - Quality Control

Clinical Laboratory of San Bernardino

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1228417										
Blank (1228417-BLK1)				Prepared & Analyzed: 07/13/12						
Total Organic Carbon	ND	0.30	mg/L							
Blank (1228417-BLK2)				Prepared & Analyzed: 07/13/12						
Total Organic Carbon	ND	0.30	mg/L							
LCS (1228417-BS1)				Prepared & Analyzed: 07/13/12						
Total Organic Carbon	1.97	0.30	mg/L	2.0		98	80-120			
LCS (1228417-BS2)				Prepared & Analyzed: 07/13/12						
Total Organic Carbon	2.00	0.30	mg/L	2.0		100	80-120			
Matrix Spike (1228417-MS1)		**Source: 12G0865-04**		Prepared & Analyzed: 07/13/12						
Total Organic Carbon	4.16	0.30	mg/L	2.0	2.13	101	80-120			
Matrix Spike Dup (1228417-MSD1)		**Source: 12G0865-04**		Prepared & Analyzed: 07/13/12						
Total Organic Carbon	4.27	0.30	mg/L	2.0	2.13	107	80-120	3	20	
Batch 1229039										
Blank (1229039-BLK1)				Prepared & Analyzed: 07/17/12						
Total Organic Carbon	ND	0.30	mg/L							
LCS (1229039-BS1)				Prepared & Analyzed: 07/17/12						
Total Organic Carbon	1.97	0.30	mg/L	2.0		98	80-120			
Matrix Spike (1229039-MS1)		**Source: 12G1132-02**		Prepared & Analyzed: 07/17/12						
Total Organic Carbon	3.07	0.30	mg/L	2.0	1.08	99	80-120			

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

Clinical Laboratory of San Bernardino, Inc.

EnviroMatrix Analytical, Inc.	Project: TOC Analysis	Work Order: 12G0907
4340 Viewridge., Ste. A	Sub Project: 12G0230	Received: 07/11/12 15:26
San Diego CA. 92123	Project Manager: Louis Luick	Reported: 07/19/12

General Chemical Analyses - Quality Control

Clinical Laboratory of San Bernardino

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1229039										
Matrix Spike Dup (1229039-MSD1)		**Source: 12G1132-02**		Prepared & Analyzed: 07/17/12						
Total Organic Carbon	3.14	0.30	mg/L	2.0	1.08	103	80-120	2	20	

ND Analyte NOT DETECTED at or above the reporting limit

Post Office Box 329 San Bernardino, CA 92402 (909) 825-7693 Fax (909) 825-7696 ELAP Number 1088

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

12G0230

PLEASE SEND REPORTS TO:
jbeyer@enviromatrixinc.com;
lluick@enviromatrixinc.com;
reports@enviromatrixinc.com.
Use comments as sample ID on report.

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Clinical Lab of San Bernardino, Inc.
21881 Barton Rd
Grand Terrace, CA 92313
Phone :(909) 825-7693
Fax: (909) 825-7696

12G0907

STND

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 12G0230-01	**Water**	**Sampled:07/10/12 09:40**		
TOC-Liquid by SM5310B	~~07/17/12 16:00~~	08/07/12 09:40		Site 41
Containers Supplied:				
Voa Vial - HCl (F)	Voa Vial - HCl (G)			
Sample ID: 12G0230-02	**Water**	**Sampled:07/10/12 11:00**		
TOC-Liquid by SM5310B	~~07/17/12 16:00~~	08/07/12 11:00		FC Upstream
Containers Supplied:				
Voa Vial - HCl (F)	Voa Vial - HCl (G)			
Sample ID: 12G0230-03	**Water**	**Sampled:07/10/12 12:10**		
TOC-Liquid by SM5310B	~~07/17/12 16:00~~	08/07/12 12:10		Site 5
Containers Supplied:				
Voa Vial - HCl (F)	Voa Vial - HCl (G)			

12°

Released By	Date	Received By	Date
DAVID NGUYEN	7-11-12 ~~7-11-12~~ DN		7-11-12 / 10:27 AM
BEN SALCEDO	7-11-12 / 3:26 PM		

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

12G0230

PLEASE SEND REPORTS TO:
jbeyer@enviromatrixinc.com;
lluick@enviromatrixinc.com;
reports@enviromatrixinc.com.
Use comments as sample ID on report.

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jennifer Beyer

RECEIVING LABORATORY:

Clinical Lab of San Bernardino, Inc.
21881 Barton Rd
Grand Terrace, CA 92313
Phone :(909) 825-7693
Fax: (909) 825-7696

STND

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 12G0230-01	**Water**	**Sampled:07/10/12 09:40**		
TOC-Liquid by SM5310B	~~07/17/12 16:00~~	08/07/12 09:40		Site 41
Containers Supplied:				
Voa Vial - HCl (F)	Voa Vial - HCl (G)			
Sample ID: 12G0230-02	**Water**	**Sampled:07/10/12 11:00**		
TOC-Liquid by SM5310B	~~07/17/12 16:00~~	08/07/12 11:00		FC Upstream
Containers Supplied:				
Voa Vial - HCl (F)	Voa Vial - HCl (G)			
Sample ID: 12G0230-03	**Water**	**Sampled:07/10/12 12:10**		
TOC-Liquid by SM5310B	~~07/17/12 16:00~~	08/07/12 12:10		Site 5
Containers Supplied:				
Voa Vial - HCl (F)	Voa Vial - HCl (G)			

Released By	Date	Received By	Date
DAVID Nguyen	7-11-12 ~~7-11-12~~ DN		7-11-12 / 10:17
Released By	Date	Received By	Date

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 1260230

Client: D-Max Engineering, Inc
Attn: Arsalan Dadkhah
Samplers(s): MD / BN
Address: 7220 Trade street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: Same

Project ID: El Cajon Dry Weather
Project #: 2012221W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 X 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC X TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn X Dissolved	Coliform, X Total (MTF) X Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, X MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide	Total Hardness	TOC	Total Nitrogen-N	Total Phosphorus-P
1	Site 41	7/10/12	9:40	SW	4g/5P	X						X		X				X	X		X			X	X	X	X
2	FC Upstream	"	11:00	SW	4g/5P	X						X						X	X		X			X	X	X	X
3	Site 5	"	12:10	SW	4g/5P	X						X		X				X	X		X			X	X	X	X
4																											
5																											
6																											
7																											
8																											
9																											
10																											

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]Turn-Around-Time: □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)
[1]Reporting Requirements: □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]Sample Disposal: □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	7/10/12 1:00	Signature: Heidi
Print: Manouchehr Dadkhah		Print: Heidi Thompson
Company: D-Max Eng		Company: EMA
Signature: Heidi	7/10/12 1323	Signature:
Print: Heidi Thompson		Print: DAVID Nguyen
Company: EMA		Company: EMA
Signature		Signature
Print		Print
Company:		Company:

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

7°C on ice

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

26 July 2012

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 12G0464

Project Name: El Cajon Dry Weather
Project Desc./#: 201222W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/18/12 17:09. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A • San Diego, California 92123 • (858) 560-7717 • Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0464

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FC Upstream	12G0464-01	Stormwater	07/18/12 15:25	07/18/12 17:09
Site 41	12G0464-02	Stormwater	07/18/12 16:15	07/18/12 17:09
Site 5	12G0464-03	Stormwater	07/18/12 16:35	07/18/12 17:09

11061

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0464

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
FC Upstream (12G0464-01) Stormwater Sampled: 07/18/12 15:25 Received: 07/18/12 17:09										
Total Dissolved Solids	**1170**	1.0	20.0	mg/l	1	2072450	07/24/12	07/25/12	SM2540 C	
Site 41 (12G0464-02) Stormwater Sampled: 07/18/12 16:15 Received: 07/18/12 17:09										
Total Dissolved Solids	**2390**	1.0	20.0	mg/l	1	2072450	07/24/12	07/25/12	SM2540 C	
Site 5 (12G0464-03) Stormwater Sampled: 07/18/12 16:35 Received: 07/18/12 17:09										
Total Dissolved Solids	**1920**	1.0	20.0	mg/l	1	2072450	07/24/12	07/25/12	SM2540 C	

11062

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0464

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2072450											
Blank (2072450-BLK1)					Prepared: 07/24/12		Analyzed: 07/25/12				
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (2072450-DUP1)			**Source: 12G0385-11**		Prepared: 07/24/12		Analyzed: 07/25/12				
Total Dissolved Solids	758	1.0	20.0	mg/l		751			0.9	20	
Reference (2072450-SRM1)					Prepared: 07/24/12		Analyzed: 07/26/12				
Total Dissolved Solids	336	1.0	20.0	mg/l	272		124	74.6-125.4			

11063

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: El Cajon Dry Weather

EMA Log #: 12G0464

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY RECORD

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A - San Diego, CA 92123 - Phone (858) 560-7717 - Fax (858) 560-7763

EMA LOG #: 1290464
Client: D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
Samplers(s): MD / BN
Address: 7220 Trade Street, Suite 119
San Diego, CA 92121
Phone: 858-586-6600 Fax: 858-586-6644
Email:
Billing Address: Same

Project ID: El Cajon Dry Weather
Project #: 201222W-1 PO #:

Requested Analysis

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TTLC □ STLC	TCLP (RCRA) □ Metals □ Organics	Cd Cr Cu Pb Ni Ag Zn □ Dissolved	Coliform, □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumeration	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)	□ BOD □ COD □ Cyanide					
1	FC upstream	7/18/12	15:25	SW	1 P									X														
2	Site 41	"	16:15	"	1 P									X														
3	Site 5	"	16:35	"	"									X														
4																												
5																												
6																												
7																												
8																												
9																												
10																												

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid
Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other
[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)
[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT
[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RECEIVED BY
Signature: Manouchehr Dadkhah	7/18/12 1709	Signature:
Print: Manouchehr Dadkhah		Print: DAVID NGUYEN
Company: D-Max Eng		Company: EMA
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

7°C for FC

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of invoice. Samples will be disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

Appendix B.1

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
1	07/01/11	Commercial	Leo's Market	635	El Cajon Blvd	The front of the business was hosed off and the water flowed into the street.	The business owner was contacted and advised to cease all pavement washing. A written warning was issued.	Yes	Written	Yes
2	07/12/11	Construction		470	Tyrone St	Discharge of concrete waste on the street.	The contractor was contacted on site and advised to cease all concrete washing on street and to clean the area of all residue.	Yes	Verbal	Yes
3	07/11/11	Commercial	Vey's Power Sports Inc	660	El Cajon Blvd	Pavement washing with no BMPs in place.	An employee was contacted on site and advised to cease all pavement washing unless proper BMPs are in place	Yes	Verbal	Yes
4	07/14/11	Commercial	T-Shirt Wholesale	1090	Main St E	Water drain in on property from unknown source.	A site inspection found that the water is from air conditioning condensate.	No	N/A	N/A
5	07/18/11	Residential		1890	Calle del Conejo	Resident Draining green slime swimming poop water into the street.	The property was inspected and no discharge was noted.	No	N/A	N/A
6	07/21/11	Commercial	Sprouts--Party City	152	Second St N	Water flowing into the street and storm drain from over irrigation.	The property manager was contacted and instructed to secure the irrigation system to prevent any further discharges to the storm water drainage system.	Yes	Verbal	Yes
7	07/25/11	Commercial	Public Storage	1047	Johnson Ave N	Discharge of sediment laden water from broken water pipe into the storm drain inlet.	The property owner and water authority were notified and responded. The system is being repaired.	Yes	Verbal	Yes
8	07/27/11	Commercial	USS Midway Theater/ Christian Comm. Th	1545	Pioneer Way	An employee of the business was observed power washing metal bleachers in the front lot with no BMPs in place. The discharge entered the street and drain inlet.	The business manager was contacted on site and told to cease all power washing unless proper BMPs were implemented.	Yes	Verbal	Yes
9	07/27/11	Construction	West Coast Air	550	Park Ave E	Sediment discharge to the street and failure to install and maintain required BMPs.	The site superintendent was contacted on site and instructed to implement the required BMPs. A written warning was issued.	Yes	Written	Yes
10	08/02/11	Residential	Bree Manor Apts	1515	Broadway	Large soil piles in driveway with no BMPs in place to prevent sediment discharge.	The contractor and gardener were contacted on site and advised to install BMPs for the soil piles.	No	Verbal	N/A
11	08/05/11	Residential		1571	Greenfield Dr	Large dirt piles and exposed soil in the front yard with no BMPs in place.	A site inspection confirmed the complaint. The resident was unavailable so instructions were left for them to contact the City.	N/A	Verbal	N/A

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12	08/12/11	Residential	Ballantyne Terrace Apartments	444	Ballantyne	Private lateral overflow in parking lot discharging to the street.	The PW street crew was present and applied absorbent to prevent the discharge from entering the storm drain. The Vactor truck was able to reclaim all of the discharge.	Yes	Verbal	Yes
13	08/15/11	Residential		1231	Eastside Dr	Discharge of pool filter back flush into the street.	The property owner was contacted and advised to cease any further discharges of pool back flush water into the storm drain system. Storm water educational materials were issued.	Yes	Verbal	Yes
14	08/16/11	Commercial	The Barking Lot	486	Raleigh St	A liquid discharge was observed on the west side of the building coming from the inside of the building.	The business owner was contacted on site and advised to install the proper BMPs to prevent any further discharges from the building.	Yes	Warning	Yes
15	08/19/11	Commercial	Pacific Refrigeration	1440	Broadway	An employee of the business was observed washing vehicles in the front lot with no BMPs in place.	The employees was instructed to cease all vehicle washing until the proper BMPs are installed.	Yes	Verbal	Yes
16	08/26/11	Commercial	American Recycling	210	El Cajon Blvd	Discharge of fluids into the storm drain.	The site was inspected and no discharge was located. Storm water educational materials were issued.	No	Verbal	N/A
17	08/31/11	Residential		1942	Belmore Ct	Large piles of soil in front yard with no BMPs in place,	Storm water educational materials were left at the door.	No	Verbal	N/A
18	09/06/11	Residential		1554	Lexington	Unknown type pollutant being discharged to the street.	A site inspection found no evidence of a discharge. The building is undergoing rennovation. Storm water educational materials were issued.	No	N/A	N/A
19	09/09/11	Commercial	Eldorado Care Center	510	Washington Ave E	The PW crew contacted storm water regarding a sewer spill at the facility. The discharge did not enter the strom drain and reclaimed.	The manager and the plumbing service employee were contacted on site. Repairs were in process.	Yes	Verbal	Yes
20	09/14/11	Residential		432	Hills Ln	Large soil pile dumped in the right of way with no BMPs in place. Also rear slope in rear yard being doug out for a retaining wall with no permits on file.	The contractor was contacted on site and advised to remove the soil pile and to clean the paved areas without using wate. He was also instructed to submit plans to the city for review.	Yes	Verbal	Yes
21	09/19/11	Construction	Whiting-Turner Contracting Co.	2800	Fletcher Parkway	Pavement washing with no BMPs in place at construction site.	The superintendent was contacted on site and cited. Ther was and on site QSP	Yes	Warning	Yes
22	09/22/11	Residential	Talavera Apatrments	575	Graves Ave	Private lateral overflow into the storm drain.	The manager was contacted on site. A plumbing service responded and affected the repairs.	Yes	Verbal	Yes

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23	09/26/11	Residential		1286	Bostonia St	Blowing leaves into the street without picking them up.	A large tree in the front yard is dropping leaves. Many found in curbline. No evidence of blowing into the street. Also found small soil pile in driveway. A door tag was left.	No	N/A	N/A
24	09/26/11	Construction	West Coast Air	550	Park Ave E	Sediment tracking and failure to install, implement and maintain requied BMPs.	The site superintendent was contacted on site and instructed to implement the required BMPs. A citation was issued.	Yes	First	Yes
25	09/27/11	Residential		1163	Marline Ave	Occupants are continually washing pollutants down the driveway. 10/14/11 a second compaint was received. The resident was contacted on site.	The front gate, across driveway was closed. There was no discharge noted during an inspection. Storm water educational materials were left on the gate.	No	N/A	N/A
26	09/29/11	Residential		289	El Cajon Blvd	Tenants of building conducting a vehicle washing business in the parking lot behind the building	The residents were advised to cease all vehicle washing activity.	Yes	Verbal	Yes
27	10/04/11	Construction		982	Broadway	Construction activity on site with no BMPs in place. Sediment tracking onto the roadway.	The propert owner was contacted and advised to sweep all paved surfaces and to install a construction entrance and other appropriate BMPs.	Yes	Verbal	Yes
28	10/04/11	Residential		2585	Windmill View Rd	Landscaper uning a hose to wash off equipment in the street.	The contractor was contacted on site and advised to cease using water to clean or to do it in the landscape area.	Yes	Verbal	Yes
29	10/07/11	Commercial	Valley Grocery Market	575	Main St E	Employee using a hose to clean out the dumpster in rear lot allowing the discharge to flow down the alley.	The store manager was contacted on site and advised to cease all use of water in cleaning outdoors.	Yes	Verbal	Yes
30	10/13/11	Industrial	Waste Management	1001	Bradley Ave W	Discharge of unknown liquid into the channel near fuel pumps.	A site in spection was conducted. Evidence of a discharge was located on the channel wall and a filter sock at the drain location was in need of replacement. Also noted was a large amount of fine dust on the roadway surfaces that should be removed by vac.	Yes	Verbal	Yes
31	10/13/11	Municipal		1944	Falmouth Dr. (easement)	The resident contacted the City regarding a continuous sewage discharge from the easement at the rear of his property.	PW crew responded, prevented the discharge from entering a storm drain and reclaimed polluted soil.	Yes	N/A	Yes
32	10/17/11	Residential		600	Oakwood Way	Large brush pile dumped into the storm channel.	The property owner was contacted on site and advised to cease dumping brush into the channel. Storm water educational materials were issued.	Yes	Verbal	Yes
33	10/20/11	Residential		108	Westwind Dr	Concrete residue being washed down the driveway and into the street.	The resident was contacted and advised to cease all discharges and to protect the material piles in the driveway.	Yes	Verbal	Yes

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34	10/26/11	Commercial	Valley Muffler Shop	533	Main St W	A PW Staff member observed an employee of the business using a hose to wash off the building exterior late the previous day. The discharge entered the street and storm drain inlet.	The business owner was contacted on site and instructed to cease using water to clean or to impliment the necessary BMPs to prevent a discharge,	Yes	Verbal	Yes
35	10/27/11	Residential		716	Broadway	There is a large pile of soil in the drieway from trenching job.	The apartment manager was contacted on site and advised to remove the soil piles or protect them.	Yes	Verbal	Yes
36	10/27/11	Residential		549	Graves Ave	The apartment manager rinsed sewage into the gutter from a sewer pipe burst in a garage.	The was no evidence of a discharge found during a site inspection; however the manager was contacted and advised to contact the city in the event of any future discharges. Reporting info was advised.	No	N/A	N/A
37	10/31/11	Residential		922	Coleen Ct	Trash from neighboring property being thrown into concrete drainage ditch.	No trash was found in the concrete ditch that runs along the west side of the property and discharges to Broadway. No other storm water issues were noted. The complainant was contacted and advised of the Citys findings.	No	N/A	N/A
38	10/31/11	Residential	Village Green Apartments	743	Magnolia S	City public works day crew members notified the storm water department of a sewage overflow into the street. The discharge entered the storm drain inlet at Washington. The property owner was also observed by city staff using a hose to wash debris into the	The property owner and manager were contacted on site and instructed to inspect the sewer system and to cease using water to clean any paved surfaces. Storm water educational materials were issued.	Yes	First	Yes
39	11/01/11	Commercial	7 Eleven Store	1021	Washington Ave W	Sewer spill occurred on property with no discharge to the strom water drainage system.	The property owner was contacted and instructed to inspect and video the sewer lateral.	Yes	Verbal	Yes
40	11/01/11	Residential		1026	Dennistedt Ct	The resident has a vehicle that constantly drain fluid onto the street.	Storm water staff inspected the site and found evidence of recent fluid spill but no vehicle. An informal follow up will continue to locate the vehicle in question.	Yes	Verbal	Yes
41	11/02/11	Residential		662	Tyrone St	A large amount of water is flowing in the drain box near the complainant's residence. No rain event in progress.	An investigation and inspection of the area found that pipes leading into the box are from Helix Water tanks located above the complainants property.	No	N/A	N/A
42	11/02/11	Commercial	Sagmani's Restaurant	478	Douglas St W	Complaint that the bsuiness is draining grease directly into the city sewer.	During a site inspection and a meeting with the business owner, it was determined that there are no grease producing appliances in the restaurant.	No	Verbal	N/A
43	11/03/11	Residential		760	Carlow Ct	Water from this neighboring property is ruining the asphalt in front of his residence.	A site inspection found that the water is from irrigation. No obvious storm water violations were noted.	No	N/A	N/A
44	11/04/11	Residential		1150	Hardin Dr	Complaint of dog feces being dumped into drainage easement. And neighbors encroachement into the easement.	When contacted to view the easement, the complainant stated that the matter had been resolved and no further action from the city was necessary.	No	N/A	N/A

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45	11/08/11	Commercial	Home Town Buffet	390	Main St W	A recent discharge of grease to the rear alley and catch basin was observed by the street crew.	The restaurant manager was contacted and instructed to cease all grease dumping. A full FOG inspection was conducted.	Yes	First	Yes
46	11/07/11	Residential		907	Avocado Ave	Water pooling in the driveway from uphill sources and not from recent rains.	An inspection of the site found no storm water issues. This is a ground water problem possibly involving other properties.	No	N/A	N/A
47	11/14/11	Residential		990	Aster Ave	City staff referred a complaint that oil was dumped into drain and discharged to the street and storm drain inlet over the weekend	Storm water inspected the site on 11-14-11 finding no evidence of oil dumping on the property. There is oil residue in the street and curbline near a curb drain. The property owner, contacted on site, stated that he did not pour oil into any drain and has no idea of how the oil gotinto the street. He was advised to improve his housekeeping for engine repair work done in the garage. No	Yes	Verbal	Yes
48	11/14/11	Residential		1456	Wagner	Automotive fluids being washed down the driveway.	Storm water staff inspected the site finding no evidence of a discharge. Zoning enforcement will follow up for continued auto repair business at this residence.	No	Verbal	N/A
49	11/16/11	Residential		357	Westwind Dr	Sediment and rock discharge to the street and storm drian inlet from unvegetated, unprotected front yard.	Storm water staff contacted the property owner who ws instructed to sweep all paved areas and install BMPs to prevent any further erosion and discharge.	Yes	Verbal	Yes
50	11/18/11	Construction		1041 thru 97	Broadway	Lot resurfacing and drain restructuring with no building permit, no BMPs in place to prevent sediment discharge to street.	The contractor was contacted on site and instructed to cease all construction until permits obtained and to immediately install BMPs. 11-21-11, Plans were submitted for review. It was determined that no permit required because no change in flow pattern for access driveway.	Yes	Verbal	Yes
51	11/21/11	Residential		154	Westwind Dr	A berm or barior was eliminated when the driveway was resurfaced and now storm water discharges to a neighboring property.	Following a site inspection by storm water staff it was determined that there are no storm water issues or violations noted. The driveway does not appear to have been resurfaced.	No	N/A	N/A
52	11/28/11	Residential		1341	Dove St	PW crew member contacted the storm water dept. regarding a private lateral overflow in the front yard.	Storm water staff inspected the site and found the discharge from an open cleanout in the driveway. The discharge did not enter a storm drain inlet. Absorbent material was applied in the curbline. Storm water educational materials were issued. The property owner was instructed to clean the area and contact a plumbing service.	Yes	Verbal	Yes
53	11/30/11	Municipal			Raleigh St--County Ditch	Business employee observed graffiti and open paint cans in the concrete channel.	Public works crew was contacted. The channel graffiti was painted over and all paint materials removed.	No	N/A	N/A
54	12/06/11	Residential		1223	Eastside Dr	Discharge of pool filter back flush into the street.	Storm water staff inspected the site finding diatomaceous earth residue in the curbline from a under curb discharge pipe. Storm water educational materials were left at the door.	Yes	Verbal	Yes
55	12/08/11	Residential		955	Wilson Ave	Washing of commercial on residential property.	A site inspection of the property revealed no evidence of storm water violations. The complainant later reversed complaint.	No	N/A	N/A

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56	12/12/11	Construction	Weiland Dev Co		Birchwood Ln.	A large amount of sediment was discharged into the storm water drainage system during a major rain event. Required BMPs were not installed.	A monetary citation was issued. Also, an approved erosion control plan for the last phase of the construction ws issued that same day.	Yes	Second	Yes
57	12/19/11	Residential		889	Brockton Ave	Front yard soil bare for relandscaping. No BMPs in place to prevent soil discharge.	Storm water staff contacted the landscape contractor and left storm water educational materials for the proerty owner.	No	Verbal	N/A
58	12/22/11	Residential	Shady Lane Trailer Park	244	Shady Ln	During heavy rains, flooding occurs in parking lot due to an elevation change on the neighboring property.	Pending review of public works staff. Most likely a private matter.	No	N/A	N/A
59	01/03/12	Residential		568	El Cajon Blvd	A white Cadillac with a tan roof (lic# 852ZOZ) is leaking oil into the storm drain.	Storm water staff was unable to locate the vehicle or noticable oil stains on the pavement in the area in question.	No	N/A	N/A
60	01/10/12	Construction	Inland Kenworth---Lord Constructors Inc.	440-554	Johnson Ave N	Discharge of sediment to the roadway surface(tracking) and failure to maintain the required construction BMPs.	Storm water staff contacted the project superintendent and instructed him to maintain the BMPs as the project progressed.	Yes	Warning	Yes
61	01/09/12	Residential		1707	Gustavo Ave	Neighbor blocking the storm drain to prevent pet access causing flooding on complainant's property.	A site inpection of the site found a concrete channel between the properties has wire mesh and fencing over it at the discharge point. It is on private property. The matter was referred to the PW crew for any possible easements.	No	N/A	N/A
62	01/10/12	Residential		765	Alveda Ave	Neighbor dug up yard yard with trenches and no protection.	An inspection of the site found that the front yard has been dug up and trenched with no BMPs in place to prevent sediment discharge. The resident was instructed to install silt fencing or fiber rolls. Storm water educational materials were issued.		Verbal	N/A
63	01/17/12	Residential		636	Medford	Raw sewage in rear yard from garage discharge pipe.	An inspection of the site revealed no evidence of a sewage discharge. Zoning enforcement was also notified of the possible occupied garage.	No	N/A	N/A
64	01/18/12	Residential		1720	Horizon Heights Cir	Large piles of soil dumped in the driveway, grading without a permit. No BMPs installed for exposed soils.	The site was inspected by storm water and zoning enforcement staff. There was a large pile of soil in the driveway with no BMPs and a large amount of various debris dumped on the rear slope. The propert owner was contacted and advised to install protection for the soil pile and cease any frther dumping. The matter was referred to the planned development staff for further action	No	Verbal	N/A
65	01/19/12	Residential		863	Mollison Ave S	Pipe in driveway discharging unknown liquid to the storm drain in the driveway.	Storm water staff conducted a site inspection and found what appears to be a ground water discharge pipe near the trash enclosure. There were no violations noted.	No	N/A	N/A
66	01/19/12	Residential		213	El Cajon Blvd	The trailer park owner has failed to remove sewage under the trailer of the complainant.	When contacted by storm water staff, the complainant stated that the owner removed the sewage just after he filed the complaint.	No	N/A	N/A

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67	01/23/12	Municipal			Wing Ave S. of Denny Wa	Junk fruniture and debris dumped into the drainage ditch.	It was determined that the location falls within the County jurisdiction and the matter referred.	N/A	N/A	N/A
68	01/23/12	Commercial	Amvets	171	First St	Rain event-- White foamy liquid discharging from roof drains.	An inspection of the site found the roof drains operationg correctly with no illegal discharge noted. The initial discharge was the first flush of debis off of the roof.	N/A	N/A	N/A
69	02/13/12	Residential		679	McClure St	Lateral overflow in driveway flowing to the street and storm drain inlet.	Storm water staff responded finding that a small amount of the sewage discharge entered the storm drain. A plumbing service was on site to affect repairs and the property owner was notified.	Yes	Verbal	Yes
70	02/21/12	Residential		630	Naranca Ave	Resident using a hose to wash sediment down the driveway and into the street.	Storm water staff inspected the site and found recent landscaping work in the front and side yards. There was evidence of sediment discharged to the street and extending west in the curb line. The disdharge did not enter the storm drain inlet. The resident was given storm water educational materials and instructed to cease using water to clean the paved areas.	Yes	Verbal	Yes
71	02/27/12	Construction	Weiland Dev Co		Birchwood Ln.	Rain event--No BMPS install and maintained causing a discharge of sediment to the storm water conveyance system.	The contractors on site were advised to install BMPS and a third administrative citation was issued to the developer.	Yes	Third	Yes
72	02/29/12	Commercial	Cajon Valley School District (Vacant Lot)	189	Roanoke Rd	After a significant rain event, sediment was being tracked onto roadway surface by tree trimming company working for the school district.	The school district was contacted and advised to sweep all paved areas and prohibit access to the lot until the soil is dry or BMPs are installed to prevent sediment tracking.	Yes	Verbal	Yes
73	03/01/12	Residential		1527	Melody Ln	Unknown type white liquid discharging from a clean out in the driveway.	A site inspection was conducted and white residue was found in the driveway and curb. The pool filter had been cleaned by the new owner. Storm water educational materials were issued.	Yes	Verbal	Yes
74	03/01/12	Residential		956	Wiggins Wy	Oil in street from a green van that parks there daily.	Storm water staff conducted an inspection finding a moderate size oil stain on the street in front of the complainants residence. The resident was contacted on site and advised to apply absorbent and to place adrip pan under the vehicle in question. The vehicle was not present during the inspection.	Yes	Verbal	Yes
75	03/05/12	Residential		203	Orlando St	Open sewer cap in front yard, occasional overflow of sewage.	A site inspection was conducted. There was evidence of a recent sewage overflow from the clean out located in front of the house. There was no threat of a discharge to the storm water conveyance system.	No	Verbal	Yes
76	03/06/12	Commercial	New Business	910	El Cajon Blvd	Currently vacant building. Discharge of concrete cutting residue from pipe repair into the street.	The contractor was contacted on site and advised to clean the area and to cease all discharges.	Yes	Verbal	Yes
77	03/06/12	Residential		1196	Rathmoor	Large amounts of soil being tracked into the street from landscaping work.	the contractor was contacted on site and advised to sweep all paved areas and to install BMPs to prevent further tracking.	Yes	Verbal	Yes
78	03/07/12	Industrial	Precision Metal Procucts	850	Bradley	Sediment tracking, failure to install and maintain the required BMPs.	During scheduled annual storm water inspection, violations were found.	Yes	Written	Yes

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79	03/08/12	Residential		1832	Lavala Ln	Concrete saw cutting residue flowing into the street. No BMPs.	Storm water staff inspected the site finding the sidewalk and curb cut. The contractor's employee was contacted on site and advised to clean the residue in the street and to cease all discharges. Further investigation found that there was no encroachement permit on file. The matter was referred to private development. Storm water materials were left at the door with instructions for the property ower to contact the public works department.	Yes	Verbal	Yes
80	03/15/12	Residential		1527	Melody Ln	Discharge of pool filter back flush into the street.	PW Staff inspected the site and instructed the resident cease all pool backflush discharges.	Yes	Verbal	Yes
81	03/26/12	Construction		1140	Naranca Ave	Construction of single family dwelling with no BMPs in place.	Contractor was contacted on site and advised to install BMPs in accordance with the approved erosion control plans for the site. There was minor transport of sediment.	Yes	Verbal	Yes
82	03/26/12	Construction		1180	Naranca Ave	Demo and rebuild of burned building with no BMPs in place. Minor tracking from the unfinished driveway. Street is unfinished.	The contractor was contacted on site and advised to install BMPs to prevent pollutant discharges from the site.	No	Verbal	N/A
83	03/23/12	Residential	Foothills Christian Church	2321	Dryden Rd	Private lateral overflow.	The city offices were closed and the spill was reported by the public works crew. The pollutant did not reach the storm drain inlet. Repairs were made and educational materials were issued.	Yes	Verbal	Yes
84	3-39-12	Residential		1163	Marline Ave	Discharge of white residue to the street. Resident hosing down the driveway.	Storm water staff inspected the site and contacted the resident. Concrete residue was observed in the driveway and street. The tenant was advised to cease all discharges and storm water educational materials were issued.	Yes	Verbal	Yes
85	04/03/12	Mobile	Mobile Auto Detailing and Car Wash	1827	Gillespie Way	Mobile carwash with minor discharge to street.	The business owner was contacted on site and advised to reclaim all wash water. Mobile business BMP materials were issued	Yes	Warning	Yes
86	04/05/12	Industrial	El Cajon Plating Co.	1835	John Towers	Failure to install BMPs for materials stored outdoors, failure to obtain a NOI	These violations were addressed with the business owner during the annual storm water industrial/commercial inspections.	No	Warning	N/A
87	04/06/12	Industrial	Aerowind Corp	1959	John Towers	Failure to install BMPs for materials stored outdoors, failure to obtain a NOI	These violations were addressed with the business owner during the annual storm water industrial/commercial inspections.	No	Warning	N/A
88	04/09/12	Commercial	Bedco Truck and Equipment	1174	Pioneer Way	Vehicle washing in truck storage lot and discharging to street.	The business owner was contacted and advised to cease vehicle washing on site or to install proper recovery system.	Yes	Warning	Yes
89	04/17/12	Commercial	East County Tire pros Auto Repair	844	Johnson Ave N	Failure to install BMPs, to cover materials stored outdoors, provide secondary containment for all liquid containers stored outdoors. This was the result of an annual inspection.	The business owner was contacted on site and advised to cover materials and provide secondary containment.	No	Warning	N/A
90	04/20/12	Commercial	Motel	461	Magnolia Ave N	Employees of the business power washing the parking lot with no BMPs in place to prevent the discharge to the storm water conveyance system.	The business manager instructed the employees to cease the activity prior to storm water staff arrival. Stom water educational materials were issued to the employee.	Yes	Verbal	Yes
91	05/01/12	Residential	La Paloma Apartments	421	Mollison Ave S	Sewage discharge from clean out in driveway flowed to the the street and entered the storm drain.	City crew responded and notified storm water staff. A plumbing service was on site affecting repairs and sewage was being removed.	Yes	First	Yes
92	05/01/12	Commercial	Bagdad Market	733	Main St E	PW staff member observed power washing activity in the parking lot with no BMPs I place to prevent the discharge from entering the street.	Storm water staff inspected the site finding power washing still in progress. The employee of the business was contacted and advised to cease all power washing activity unless proper BMPs are implemented. Storm water educational materials were issued.	Yes	Verbal	Yes
93	05/01/12	Residential		992	Aster ave	Neighbor complaining that his front yard is constantly wet. Concerned that neighbor is overwatering.	Storm water staff inspected the site finding ground water seeping from various location in the vacinity of the complainant's property. No further actions were taken. The complainant was notified.	No	N/A	N/A
94	05/07/12	Commercial	Eldorado Care Center	510	Washington Ave E	Sewer lateral overflow from cleanout in driveway entered the street. City crew was notified by the facility staff.	The discharge was contained and reclaimed bythe city crew. A plumbing service was on site affecting repairs.	Yes	First	Yes
95	05/07/12	Commercial		944	Broadway	Sediment discharge from ground work lot washing. Large amount of debris in gutter.	The property owner was contacted on site and advised to clean the curbline using a dry method. Stom water educational materials were issued.	Yes	Verbal	Yes

	Date	Component	Business Name	Address Number	Street/Location	Complaint/ Observations	City Action	Valid Discharge	Enforcement Action	Was IC/ID Eliminated
96	05/08/12	Industrial	Triumph Fabrications	203	Johnson Ave N	Storm water staff observed water discharging from the northwest wall of the building to the street and entering the storm drain inlet. The water was clear and odorless.	After contacting the business it was found that the discharge was from the fire prinkler system.	Yes	verbal	Yes
97	05/08/12	Residential		1249	La Sombra Ct	Possible construction drainage and grading issues.	Storm water staff met with the complainant on site and determined that there were no storm water violations or concerns.	No	N/A	N/A
98	05/14/12	Residential		789	Hacienda Dr	Grading activity with no BMPs in place to prevent sediment tracking onto the roadway surface.	The excavating contractor was contacted on site and advised to cease all grading until the property owner is cleared throught the city for the work.	Yes	Verbal	N/A
99	05/15/12	Residential		301	Chambers Ave	Planned joint inspection with P.D and zoning enforcement. Possible storm water violations regarding storgae of containers in rear yard.	No storm water issues noted.	N/A	N/A	N/A
100	05/18/12	Industrial	In House Solutions	1574	Fayette St	Employees of the business washing out concrete residue at the rear of the building discharging to the street and storm drain inlet.	The business owner and property owner were contacted on site and instructed to cease all discharges and to clean the remaining residue using the proper BMPs. Storm water educational materials were issued.	Yes	Verbal	Yes
101	05/21/12	Residential		1681	Mollison Ave N	Tenants dumped oil on the street prior to vacating the residence	City storm wter staff referred the matter to the public works street crew to apply absorent; which was done.	Yes	N/A	Yes
102	05/22/12	Commercial	Dutch Touch Tattoo	798	Second St N	White residue being washed out into the street from a new business.	The business owner was contacted on site and advised to cease all discharge and to remove the remaining residued using a dry method. Stomr water educational materials were issued.	Yes	Verbal	Yes
103	05/29/12	Commercial	Quality Inn & Suites	1250	El Cajon Blvd	Hotel employees using soap and water to clean the vehicle parking spaces under the building with no BMPs in place.	The hotel manager was contacted onsite and advised to cease all lot washing and to use a dry method. Storm water educational materials were issued.	Yes	Verbal	Yes
104	05/30/12	Residential		1115	Cloverleaf Dr	Pool Draining flooding neighbor's yards	The storm water staff conducted an inspedtion of the site and found no evidence of a discharge. The was determined to be a civil matter	No	N/A	N/A
105	05/31/12	Municipal	Tuttle Park		Chase Ave	Members of baseball league dumped grease into the dumpster and it flowed into the parking lot.	The city REC department will contact the league to clean the dumpster area and the dumpster will be changed out.	Yes	Verbal	Pending
106	06/04/12	Residential		1366	Coker Way	Pool water draining across the sidewalk and ito the street	A site inspection was conducted. The residence is being rennovated. There was no current discharge. The contractor on site stated that the pool was on third full when discharged and the water was dechlorinated.	No	N/A	N/A
107	06/05/12	Residential		524	Westwind Dr	There is a barrel half full of liquid at the edge of the driveway.	Storm water staff inspected the site and left a door tag, the PW Crew will be removing the drum.	No	Verbal	N/A
108	06/16/12	Residential		1153	Goresline	Resident washing large area rugs in the driveway with soapy water flowing down the street compromising road work in progress.	The property owner was contaced on site and advised to cease wasing in driveway. Storm water educational materials were issued.	Yes	Verbal	Yes
109	06/25/12	Construction	Walgreens	1306	Broadway	Failed construction entrance, sediment tracking onto roadway surface.	The contruction surperintendent was contacted on site and advised to correct the entrance and to sweep daily.	Yes	Written	Yes
110	06/27/12	Residential		1727	Woodburn Ave	The storm water department received an anonymous complaint regarding a possible discharge from a pool back flush.	Storm water staff inspected the site and found evidence of a recent pool filter discharge. The property owner responded to a door tag stating that her son cleaned the filter and will clean the remaining residue.	Yes	Verbal	Yes

Appendix B.2

High Priority **Municipal Facilities Inspected** **2011-2012**

	FACILITY NAME	ADDRESS	Inspection Date
1	Fleet Maintenance	1060 Vernon Way	01/31/12
2	Parks Dept. Storage Yard/Maint.	1060 Vernon way	01/31/12
3	Public Works Maintenance Yard	1050 VernonWay	01/31/12
4	John F. Kennedy Park	1675 E. Madison	01/30/12
5	Wells Park Rec./Maint./Police	1153 E. Madison	01/18/12
6	Abert Van Zanten Park	1495 Greenfield Dr	01/30/12
7	Hillside Park and Recreation Center	840 Buena Vista Terrace	01/30/12
8	Fire Station #7 and Park	695 Tyrone St	01/30/12
9	Judson Park	Magnolia Ave at Park Ave	01/10/12
10	Civic Center Plaza And City Hall	200 Civic Center Way	01/24/12
11	El Cajon Performing Arts Center	110 E Main St	01/24/12
12	Cajon Valley Middle School Park	750 Park Ave	01/24/12
13	Renette Park and Recreation Center	935 Emerald Ave	01/12/12
14	Fletcher Hills Park, Pool and Recreation Center	2345 Center Pl	01/17/12
15	Bill Beck Park	Pierce St at Wagner Dr	01/24/12
16	Fire Station #9 and Training Facility	1301 N. Marshall Ave	01/18/12
17	PresCott Promenade Park	200 Blk of E. Main St	01/24/12

Municipal Facilities Inspected

	FACILITY NAME	ADDRESS	Inspection Date
18	Bostonia Park and Recreation Center	1049 Bostonia St	01/24/12
19	Ronald Regan Community Center	195 E. Douglas Ave	01/24/12
20	Tuttle Park	379 W Chase	01/18/12
21	Knox Hotel Museum	280 N. Magnolia	01/10/12
22	Community Social Services Center	1034 N. Magnolia	01/24/12
23	Pistol Range	100 Reuben Fleet Dr	01/18/12
24	El Cajon Public Safety Center	100 Civic Center Way	01/24/12
25	Fire Station # 8	1470 E Madison Ave	01/30/12
26	Police Department	1035 Pioneer Way	01/17/12
27	Police Administration	100 Fletcher Parkway	01/13/12
28	Animal Control	1275 N. Marshall Ave	01/18/12
29	Chamber of Commerce	201 N. Magnolia Ave	01/26/12

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
1	AJM PACKAGING CORPORATION	1160		VERNON	Industrial	High		Manufacturing
2	TOMMYS ITALIAN DELI	1190	N	SECOND	Commercial	High	5812	Eating/Drinking Establishments
3	PREMIER METAL PROCESSING INC	971		VERNON	Industrial	Medium	3599	Manufacturing, Misc
4	CERTIFIED METAL CRAFT INC	877		VERNON	Industrial	HIGH	3999	Manufacturing, Misc
5	FABCOM	781		VERNON	Industrial	Medium	3599	Manufacturing, Equipment
6	East County Metal Supply	755		Vernon	Industrial	High	3449	Manufacturing, Fabricated Metal
7	GROVE MOTORCYCLE	687		El Cajon			5571	Motorcycle Parts
8	AUTOBAHN	444		VERNON	Industrial	High		Recycling
9	LEGEND AUTO GROUP	457	W	Douglas	Commercial		5012	Vehicle Dealers
10	APRO #20	710	N	SECOND	Commercial	Medium	5541	Fueling
11	VALLEY TRANSMISSION & AUTO	1158	N	SECOND	Commercial	Medium	7537	Auto Repair
12	TRICK TRUCKS, INC.	777	N	SECOND	Commercial	Low	7539	Auto Repair
13	2ND ST GAS AND MINI	725	N	SECOND	Commercial	Medium	5541	Fueling
14	ALTURDYNE	660		STEELE	Industrial	HIGH	3621	Manufacturing, Equipment
15	OMNI PACIFIC	505		RALEIGH	Industrial	Medium	3999	Manufacturing, Misc
16	DOETSCH ENTERPRISES	515		RALEIGH	Industrial	Medium	3999	Manufacturing, Misc
17	RUSSELL'S METALFAB CO	549		RALEIGH	Industrial	Medium	3499	Manufacturing, Primary Metal
18	CIRCLEMASTER INC	495		RALEIGH	Industrial	Medium	3999	Manufacturing, Misc
19	CAJON VALLEY UNION SCH DIST.	777	E	PARK	Industrial	HIGH	4151	Ground Transportation
20	SANDMAR ENTERPRISES	1991		FRIENDSHIP	Industrial	Medium	3999	Manufacturing, Misc
21	EL CAJON SMOG AND AUTO REPAIR	720		BROADWAY	Commercial	Medium	7539	Auto Repair
22	COUNTYWIDE METAL FAB & FINISH INC	1348		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
23	USA TOWING AND RECOVERY	1416		PIONEER	Commercial			
24	REYES MACHINING	1364		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
25	AMETEK ROTRON	474		RALEIGH	Industrial	Medium	3564	Manufacturing, Equipment
26	HI TECH CUSTOMS, INC.	1575		PIONEER	Commercial	High		Auto Repair
27	GARVIN INDUSTRIES	316		MILLAR	Industrial	Medium	3999	Manufacturing, Misc
28	HIGH PRECISION GRINDING & MACHINING, INC.	1130		PIONEER	Industrial	Medium	3999	Manufacturing, Misc
29	LIVESAY MARINE	1250		PIONEER	Industrial	Medium	3999	Manufacturing, Misc
30	WASHINGTON ARCO	1092	E	WASHINGTON	Commercial	Medium	5541	Fueling
31	DIRECT SHEETMETAL	1423		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
32	WATERDOG PRODUCTS, INC.	1148		PIONEER	Industrial	Medium	3999	Manufacturing, Misc
33	JIM WOLF TECHNOLOGY INC	212		MILLAR	Industrial	Medium	3999	Manufacturing, Misc

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
34	M. I. T. DRIVE TRAIN SPECIALISTS	1112		PIONEER WAY	commercial			
35	MOLLISON GAS AND MINI AM/PM	593	N.	MOLLISON	commercial			
36	SOUTH BAY WELDING	781		O'CONNOR	Industrial	HIGH	3441	Manufacturing, Structural Steel
37	B. J. RENTALS	1717	E.	MAIN	commercial			
38	C STOP GAS #5427	398		EL CAJON	commercial			
39	DENNY'S RESTAURANT #6392	665	N	MOLLISON	Commercial	High	5812	Eating/Drinking Establishments
40	ATLANTIC AUTO REPAIR	1318		BROADWAY	Commercial	Low	7539	Auto Repair
41	AMERICAN RECYCLING	210		EL CAJON	Industrial	Medium	5093	Recycling
42	MD AUTO GROUP	110		EL CAJON	Commercial			
43	EXPRESS AUTO REPAIR AND TIRES	1316		BROADWAY	Commercial	Low	7539	Auto Repair
44	EL CAJON FORD	1595	E	MAIN	Commercial	Low	5511	Vehicle Dealers
45	SUN AUTO REPAIR	953		BROADWAY	Commercial	Low	7539	Auto Repair
46	TIPTON HONDA	889		ARNELE	Commercial	Low	5013	Auto Supplies
47	BROADWAY TIRE AND AUTOMOTIVE	1105		BROADWAY	Commercial	Medium	7538	Auto Repair
48	TNT AUTO SALES	1419		BROADWAY	commercial		5511	
49	LEXUS	1000		ARNELE	commercial			
50	SUBARU EL CAJON	900		ARNELE	commercial			
51	ARCO	201		BROADWAY	commercial			
52	WS AUTO SALES	1403		BROADWAY	Commercial	Low	5599	Vehicle Dealers
53	DIXIELINE LUMBER	1262	E	MAIN	Industrial	HIGH	5211	Building Materials
54	PLANT HOUSE NURSERY	1163	N	SECOND	Commercial	High	0181	Nurseries/Greenhouses
55	A&J METAL FINISHING	1080	W	BRADLEY	Industrial	Medium	3599	Manufacturing, Equipment
56	Rod's Automotive	1313	N	SECOND	Commercial	Low	7538	Auto Repair
57	KARADA MARKET, INC.	575	E	MAIN	commercial			
58	GROSSMONT UNION H.S. DISTRICT	1100		MURRAY	Industrial	HIGH	4151	Ground Transportation
59	USA STATION #63042	700		AVOCADO	commercial			
60	Mis Dos Gallos Taqueria Fruit & Deli	1088		Estes St	Commercial	High	5812	Eating/Drinking Establishments
61	Outback Steakhouse	722		Jamacha Rd	Commercial	High	5812	Eating/Drinking Establishments
62	JUANBERTO'S MEXICAN FOOD	1104	E	Washington Ave	Commercial	High	5812	Eating/Drinking Establishments
63	SAGMANI'S RESTAURANT	478	W.	DOUGLAS	commercial			
64	MILLER'S TOWING	301		CYPRESS	Commercial	Low	7549	Auto Repair
65	POR FAVOR, INC.	148	E	MAIN	Commercial	High	5812	Eating/Drinking Establishments
66	DOWNTOWN CAFE	182	E	MAIN	Commercial	High	5812	Eating/Drinking Establishments

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
67	USA GAS STATION #63098	978	N	CUYAMACA	Commercial			
68	INTERNATIONAL HOUSE OF PANCAKES	1286		OAKDALE	Commercial	High	5812	Eating/Drinking Establishments
69	ALI BABA RESTAURANT	421	E	MAIN	Commercial	High	5812	Eating/Drinking Establishments
70	SANTANA'S MEXICAN GRILL, INC.	291	W	MAIN	Commercial	Medium	5812	Eating/Drinking Establishments
71	SIZZLER RESTAURANT	1030		FLETCHER	Commercial	High	5812	Eating/Drinking Establishments
72	TEAM KIA OF EL CAJON	541	N	JOHNSON	commercial			
73	USA STATION # 63112	1484	E	Washington			5541	Fueling
74	ALLIED CASTINGS INC	983		VERNON	Industrial	HIGH	3271	Manufacturing, Concrete
75	THE BARKING LOT	486		RALEIGH	Commercial			
76	TORO AGRICULTURAL IRRIGATION	1588	N	MARSHALL	Industrial	HIGH	3999	Manufacturing, Misc
77	CHEVRON USA INC #92779	696	N	MOLLISON	Commercial	Medium	5541	Fueling
78	PULLTARPS	1404	N	MARSHALL	Industrial	Medium		Manufacturing, Misc
79	THUNDERBIRD PRODUCTS	1148	N	MARSHALL	Industrial	Medium	3999	Manufacturing, Misc
80	LITE STONE CONCRETE	1105	N	MARSHALL	Industrial	High	3272	Manufacturing, Concrete
81	BAGHDAD MARKET	733	E	MAIN	commercial			
82	CALIFORNIA SHEET METAL	1020	N	MARSHALL	Industrial	Medium		Manufacturing, Misc
83	RDI, LLC. CASINO CONNECTION	385	S.	MARSHALL	Commercial	High		Transpotation Facility
84	CALIFORNIA METALS	297-333	S	MARSHALL	Industrial	HIGH	3599	Manufacturing, Equipment
85	CALIFORNIA METALS	636		FRONT	Industrial	HIGH	3599	Manufacturing, Equipment
86	TRUST AUTO REPAIR	537	W	MAIN	Commercial	Medium	7538	Auto Repair
87	VALLEY MUFFLER SHOP	533	W	MAIN	Commercial	Medium	7539	Auto Repair
88	JULIO CESAR CHAVEZ AUTO GROUP	464	W.	MAIN	Commercial	High		Auto Sales
89	BIG DADDYS OIL - ARCO #9577	495	W	MAIN	Commercial	High		Fueling
90	JC AUTO REPAIR	1492	E	MAIN	Commercial	High		Eating/Drinking Establishments
91	EAST COUNTY AUTO COLLISION	1375	E	MAIN	Commercial	Medium	5511	Vehicle Dealers
92	DE LA FUENTE CADILLAC	1385	E	MAIN	Commercial	Medium	5511	Vehicle Dealers
93	E&M AUTO PARTS	1647	E	MAIN	Commercial	Medium	5531	Auto Supplies
94	RILEY AUTOMOTIVE	1665	E	MAIN	Commercial	Medium	7539	Auto Repair
95	AUTO CITY SALES	400	N	JOHNSON	commercial			
96	AMERICAN SCISSOR LIFT, INC.	400	N	JOHNSON	Commercial	High		Rental Equipment
97	DECKER AUTO SERVICE	1492	E	MAIN	Commercial	Medium	7538	Auto Repair
98	CUMMINS CAL PACIFIC L.L.C.	310	N	JOHNSON	Commercial	Medium	7538	Auto Repair

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
99	J & S TRANSMISSIONS and AUTOMOTIVE	462		Vernon			7537	Auto Repair
100	DRAGON FIRE	797	N	SECOND	Commercial	Medium	7539	Auto Repair
101	LUCHNER TOOL ENGINEERING	788		GREENFIELD				
102	SPIRAL ASSEMBLY SYSTEMS, INC.	460		CYPRESS	Commercial			
103	RSR AUTOSPORT	1985		FRIENDSHIP				
104	MACHINE TOOL SERVICE	1381	N	CUYAMACA				
105	MBCNC	1452		FAYETTE				
106	EAST COUNTY TIRE PROS	844	N	JOHNSON	Commercial	High	7534	Auto Repair
107	STATE STONE WORKS	1370		HILL	Industrial		3281	Manufacturing, Stone/Glass
108	EL CAJON VALLEY VETERINARY HOSPITAL	560	N	JOHNSON	Commercial	High		Animal Facilities
109	S&D PRECISION MACHINE SHOP	1390		HILL	Industrial	Medium	3549	Manufacturing, Equipment
110	CERTIFIED TIRE AND SERVICE CENTERS	790	N.	JOHNSON	commercial			
111	COMBO CABINETS INC.	1100	N	JOHNSON	Industrial	Medium	3999	Manufacturing, Misc
112	Tackett Machine	1050		Pioneer			3599	Manufacturing, Misc
113	MASTER HALCO, INC.	485		RALEIGH	Commercial			
114	BEAR MACHINE INC	1044		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
115	TOP NOTCH MANUFACTURING INC	1488		PIONEER	Industrial	Medium	3599	Manufacturing, Equipment
116	PACIFIC TRANS ENVIRONMENTAL SVC INC	1452	N	JOHNSON	Industrial	Medium	4953	Waste Management
117	T B S IRRIGATION PRODUCTS INC	1532	N	JOHNSON	Industrial	Medium	3999	Manufacturing, Misc
118	SUPERSTITION MOTORS, LTD.	606	S	MARSHALL	commercial			
119	AUTO REPAIR FOR LESS	1189	E	MAIN	Commercial	Low	7538	Auto Repair
120	Ramirez Transmission Tire & Auto Repair	259	N	MARSHALL	commercial			
121	SO CAL SUSPENSION	227	N	MARSHALL	commercial			
122	S & R Auto Repair	227	N	Marshall	Commercial		7538	Auto Repair
123	Goldfield Stage	795		Gable	commercial			
124	WELDMAC MFG CO	1533	N	JOHNSON	Industrial	Medium	3999	Manufacturing, Equipment
125	TRIUMPH FABRICATIONS - SAN DIEGO, INC	203	N	JOHNSON	Industrial	HIGH	3999	Manufacturing, Misc
126	J & B MATERIALS, INC.	1165	N	JOHNSON	Commercial	High		Building Materials
127	CONCORD AUTO SALES	1035	E	MAIN	commercial			
128	T & R AUTO	605	W	LEXINGTON	commercial		7538	Auto Repair
129	AAMCO TRANSMISSION	355	N	Johnson	Commercial	Medium	7539	Auto Repair
130	JEROME'S	333	N	JOHNSON	Commercial	Medium	5021	Wholesale/Storage/Warehousing
131	BEDCO INC.	1174		PIONEER	Industrial		3714	Manufacturing, Equipment
132	San Diego Ultimate RV	1338	E	Main	commercial		5561	Vehicle Dealers

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
133	AUTO PAWN CO.	713	E	MAIN	Commercial			
134	TEAM KIA OF EL CAJON	541	N	JOHNSON	commercial			
135	Gorges Tire Shop	405	N	Magnolia	Commercial		5531	Auto Repair
136	A & A Smog Test Only	935	W	Main	commercial		7549	Auto Repair
137	MICRO-MODE PRODUCTS INC	1870		JOHN TOWERS	Industrial	Medium	3999	Manufacturing, Misc
138	AEROWIND CORPORATION	1959		JOHN TOWERS	Industrial	Medium	3599	Manufacturing, Equipment
139	EL CAJON PLATING CO	1835		JOHN TOWERS	Industrial	Medium	3599	Manufacturing, Equipment
140	TURBINE AVIATION	1865		JOHN TOWERS	Industrial	Medium	3999	Manufacturing, Misc
141	CHROMALLOY SAN DIEGO	1071		INDUSTRIAL	Industrial	Medium	3999	Manufacturing, Misc
142	VALERO STATION #3738	785		JAMACHA	Commercial	Medium	5541	Fueling
143	RUSSO TILE & MARBLE INC	635		FRONT	Industrial	HIGH	3281	Manufacturing, Stone/Glass
144	M & M Off Road	1935		Friendship	commercial		7699	Motorcycle Repair
145	VISION SYSTEMS INC	1895		GILLESPIE	Industrial	Medium	3999	Manufacturing, Misc
146	Precision Concepts	1935		FRIENDSHIP	Commercial	Low	5013	Auto Supplies
147	LEGACY CARS	920		EL CAJON	Commercial	Low	5511	Vehicle Dealers
148	RAMCO PETROLEUM #7	2410		FLETCHER	Commercial			
149	7 STAR AUTO GLASS	1100		EL CAJON	Commercial			
150	AUTO PROZ	920		EL CAJON	Commercial			
151	CUSTOM AUTO SHINE	919		EL CAJON	commercial			
152	TIGER AUTO SALES	410		EL CAJON	Commercial	High	5013	Auto Supplies
153	PERFORMANCE CHOPPERS	444		EL CAJON	commercial			
154	CHEM-TRONICS INC	1150	W	BRADLEY	Industrial	HIGH	3999	Manufacturing, Misc
155	VERIDIAM	1717	N	CUYAMACA	Industrial	HIGH	3999	Manufacturing, Misc
156	GARDNER POOL PLASTERING	801		GABLE	Commercial	HIGH	1742	Painting/Coating
157	DECCO CASTINGS INC	1596		PIONEER	Industrial	HIGH	3365	Manufacturing, Primary Metal
158	ZUMMAY CUSTOM CABINETRY	594		FRONT	Industrial	Medium		Manufacturing, Misc
159	Evergreen Environmental Services	412		Front	Industrial	Low	4226	Wholesale/Storage/Warehousing
160	Ghiloni Granite Design	594		Front	Industrial		1743	Manufacturing, Stone/Glass
161	KITCHEN CRAFTERS	500		FRONT	Industrial	Medium		Manufacturing, Misc
162	SAN DIEGO WELDING AND FORMING INC.	1327		Fayette				
163	ALPHA POWDER COATING CO	440		FRONT	Industrial	Medium	3999	Manufacturing, Misc
164	Atlas Radiator Shop	580		El Cajon	Commercial	Low	7539	Auto Repair
165	SENIOR AEROSPACE, KETEMA	790		GREENFIELD	Industrial	HIGH	3999	Manufacturing, Misc
166	FIRST TRANSIT	800		FESLER	Industrial	High		Transportation Service

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS			FACILITY TYPE	TTWQ	SIC	CATEGORY
167	LAYFIELD ENVIRONMENTAL SYSTEMS CORP.	1166		FESLER	Industrial	Medium	3081	
168	EL CAJON MITSUBISHI	247		EL CAJON	Commercial	Medium	5511	Vehicle Dealers
169	CAR 1234	982		BROADWAY	Commercial			
170	ARTIMEX IRON CO., INC.	315		CYPRESS	Industrial	HIGH	1791	Other Contractor
171	STINE GAME TABLES	920		FESLER	Industrial	Medium		Manufacturing, Misc
172	DELSTAR TECHNOLOGIES, INC	1306		FAYETTE	Industrial	Medium	3599	Manufacturing, Equipment
173	WASTE MANAGEMENT	1001	W	BRADLEY	Industrial	Medium	4953	Waste Management
174	SERRANOS SUPER SALSA	795		ARNELE	Commercial	High	5812	Eating/Drinking Establishments
175	East County Tire and Brake	616		Broadway	Commercial	High	7538	Auto Repair
176	SIDS AUTO BODY INC	1129		BROADWAY	Commercial	Medium	7538	Auto Repair
177	SUPER STAR #2	1090		BROADWAY	Commercial	Medium	5541	Fueling
178	SID'S AUTO BODY, INC.	1129		BROADWAY	Commercial	High		Auto Repair
179	SUPER STAR #1	1110	E	MAIN	Commercial	Low	5541	Fueling
180	AUTO ELECTRIC NANCHE	640		GARFIELD	Commercial			
181	FINEST THAI	354		BROADWAY	Commercial			
182	PRECISION METAL PRODUCTS, INC	850	W	BRADLEY	Industrial	HIGH	3599	Manufacturing, Equipment
183	TOYOTA OF EL CAJON	965		ARNELE	Commercial	High		Vehicle Dealers
184	ON THE GO GAS	500	N	SECOND	Commercial			
185	NAPA AUTO PARTS	1220		BROADWAY	Commercial			
186	7-ELEVEN #25302F	711		JAMACHA	Commercial			
187	HAPPY'S PIZZA	388	E	MAIN	Commercial			
188	7-ELEVEN #13658	375	W	MADISON	commercial			
189	THE PALMS RESTAURANT & BANQUET HALL	143	E	MAIN	Commercial			
190	ULTIMATE CHAMPION OF TIRES	445	W	MAIN	Commercial	Medium	5531	Auto Supplies
191	EL CAJON BREWING CO.	110	N	MAGNOLIA	commercial			
192	7-ELEVEN #34048A	1021	W	WASHINGTON	Commercial	Medium	5812	Eating/Drinking Establishments
193	HOMETOWN BUFFET INC #722	390	W	MAIN	Commercial	Medium	5812	Eating/Drinking Establishments
194	TACO BELL #25494	335	N	SECOND	commercial			
195	ARBYS RESTAURANT #231	325	N	SECOND	Commercial	Medium	5812	Eating/Drinking Establishments
196	HIS AUTO	279		EL CAJON BLVD.	Commercial	Medium		Auto Sales
197	APPLEBEES NEIGHBORHOOD GRILL/BAR	107		FLETCHER	Commercial	Medium	5812	Eating/Drinking Establishments
198	JACK IN THE BOX	350	E	CHASE	Commercial	Medium	5812	Eating/Drinking Establishments
199	JACK IN THE BOX #3064	1700	E	MAIN	Commercial	High	5812	Eating/Drinking Establishments

City of El Cajon
Inventory of Commercial and Industrial Facilities Inspected

ID	FACILITY NAME	FACILY ADDRESS	FACILITY TYPE	TTWQ	SIC	CATEGORY
200	MENCHIE'S	1710 E MAIN	Commercial			
201	SUBWAY SANDWICHES #2285	762 N JOHNSON	Commercial	High	5812	Eating/Drinking Establishments
202	NEW BRUNSWICK INDUSTRIES	1850 GILLESPIE	Industrial	Medium	3999	Manufacturing, Misc
203	THREE T MOTORS	1131 BROADWAY	Commercial			
204	GREEK TOWN RESTAURANT BUFFET	345 W MAIN	Commercial	Medium	5812	Eating/Drinking Establishments
205	ARMSTRONG GARDEN CENTERS INC	1755 E MAIN	Commercial	High	0181	Nurseries/Greenhouses
206	BAIN KITCHEN CRAFTERS INC.	500 FRONT				
207	SOMBRERO MEXICAN FOOD	1501 E WASHINGTON	Commercial	Medium	5812	Eating/Drinking Establishments
208	Thai Time	762 N Johnson Ave	Commercial	High	5812	Eating/Drinking Establishments

City of El Cajon
Inspections Conducted at Construction Sites Permit Year 2011-12

	Description	Address or Location	WD ID#	SUSMP	SUSMP Trigger	Construction Priority	Site Size (acres) (*=disturbed area <1 acre)	Tributary to ESA	Assessor's Parcel Number	Wet Season Inspection Totals	Wet Season Weeks Active	Wet Season Weeks Inactive	Dry Season Inspection Totals	Dry Season Weeks Active Total	Dry Weeks Season Inactive Total	'11-'12 Year Inspection Totals	'11-'12 Year Weeks Active Totals	'11-'12 Year Weeks Inactive Totals
1	Ballantyne Glenn (Birchwood Lane)	823 Ballantyne Street	9 37C347110	Yes	>10 Unit Subdivision	High	2.60	No	5110143400	**12**	**31**	**0**	**4**	**21**	**0**	**16**	**52**	**0**
2	Solterra	131-151 Chambers St.		Yes	>10 Unit Residential Development	High		No	48718009-14, 48719114-15	**4**	**4**	**27**	**1**	**8**	**13**	**5**	**12**	**40**
3	Public Safety Center	100 Civic Center Way	937C351777	Yes	Commercial >1 acre, Parking Redevelopment >5,000 sf	High	8.39	Yes	4880724200	**5**	**5**	**26**	**12**	**13**	**8**	**17**	**18**	**34**
4	Inland Kenworth Truck Sales & Service	440-500 N. Johnson Ave.	937C361392	Yes	Commercial >1 acre, Parking >5,000 sf, Tributary to ESA, Auto service	High	2.57	Yes	4871214300, 4822503200	**18**	**31**	**0**	**2**	**11**	**10**	**20**	**42**	**10**
HIGH PRIORITY TOTALS =										**39**	**71**	**53**	**19**	**53**	**31**	**58**	**124**	**84**

Appendix B.3

Enforcement Actions

2011-2012

	Citation Date	Business Name	Address Number	Street Name	Citation Number	Type of Administrative Citation	Component	Violations	Disposition
1	7/1/2011	Leo's Market	635	El Cajon Blvd	PW 0262	Warning	Commercial	Pavement washing with no BMPs in place.	Corrected
2	7/27/2011	Westcoast Air	550	Park Ave	PW 0263	Warning	Construction	Tracking onto roadway, failure to intall and maintain minimum BMPs.	Corrected
3	8/19/2011	The Barking Lot	486	Raleigh	PW 0264	Warning	Commercial	Discharge from dog enclosure to the storm drain system.	Corrected
4	9/22/2011	Whiting-Turner contracting	2800	Fletcher Parkway	PW 0265	Warning	Construction	Pavement washing with no BMPs in place.	Corrected
5	9/26/2011	Westcoast Air	550	Park Ave	PW 0267	First	Construction	Sediment tracking, failure to install and maintain BMPs	Corrected
6	9/28/2011	Talavera Apartments	575	Graves Ave	PW 0266	Warning	Residential	Private lateral discharge	Corrected
7	10/31/2011	Village Green Apartments	743	Magnolia Ave	PW 0268	First	Residential	Private lateral discharge, hosing debris into drain	Corrected
8	11/8/2011	HomeTown Buffet	390	Main St	PW 0269	First	Commercial	Discharge of grease into the storm drain.	Corrected
9	1/10/2012	Lord Constructors	440-554	Johnson Ave	PW 0271	Warning	Construction	Tracking onto roadway, failure to intall and maintain minimum BMPs.	Corrected
10	12/14/2011	Weiland Development Co		Birchwood Ln	PW 0270	Second	Construction	Sediment discharge, failure to maintain entrance and other required BMPs	Corrected

Enforcement Actions

	Citation Date	Business Name	Address Number	Street Name	Citation Number	Type of Administrative Citation	Component	Violations	Disposition
11	3/7/2012	Weiland Development Co		Birchwood Ln	PW 0274	Third	Construction	Sediment discharge, failure to maintain entrance and other required BMPs	Corrected
12	3/1/2012	Gordon-Prill Inc	1100	Murray Dr	PW 0272	Warning	Construction	Sediment tracking, failure to install and maintain BMPs	Corrected
13	3/7/2012	Precision Metal Products	850	Bradley	PW 0273	Warning	Industrial	Discharge of pollutants, failure to install BMPs.	Corrected
14	4/9/2012	Bedco Inc	1174	Pioneer Wy	PW 0276	Warning	Commercial	Discharge of vehicle wash water to the storm drain.	Corrected
15	4/16/2012	El Cajon Plating Co	1835	John Towers	PW 0280	Warning	Industrial	Failure to cover materials stored outdoors, failure to obtain NOI	Pending
16	4/16/2012	Aerowind Corp	1959	John Towers	PW 0275	Warning	Industrial	Failure to cover materials stored outdoors, failure to obtain NOI	Pending
17	4/17/2012	East CountyTire Pros	844	Johnson Ave	PW 0277	Warning	Commercial	Failure to install BMPs to cover materials.	Corrected
18	5/17/2012	La Paloma Apts	421	Mollison Ave	PW 0281	First	Commercial	Private Lateral Discharge	Corrected
19	6/14/2012	Eldorado Care Center	510	Washington Ave	PW 0284	First	Commercial	Private lateral discharge	Corrected
20	6/26/2012	Walgreens- Savant Constr.	1306	Broadway	PW 0282	Warning	Construction	Sediment tracking, failure to maintain BMPs	Corrected

Appendix C.1

El Cajon Storm Water Program Contact List (PY5)

Department	Contact Name	E-mail Address	Phone Number	Fax Number	Example of Responsibilities
Public Works	Dennis Davies	ddavies@cityofelcajon.us	(619) 441-1661	(619) 579-5254	Oversees Public Works, Land Development process. Coordinates Implementation of
Storm Water Manager	Jaime Campos	jcampos@cityofelcajon.us	(619) 441-5554	(619) 579-5254	Generally oversees the assessment process and facilitates updates and changes to the URMP.
Planning Department	Manjeet Ranu	MRanu@cityofelcajon.us	(619)441-1771		Implementation of the land use component and facilitation of public education in regards to new. development.
Finance	Joyce Nevarez	jnevarez@cityofelcajon.us	(619)441-1543		Identify and secure sources of funds for implementation of the URMP.
Code Enforcement/Inspection/ Education	Craig Bonner	cbonner@cityofelcajon.us	(619) 441-1663	(619) 579-5254	Code enforcement activities, inspections, public outreach programs and education activities
Land Development and SUSMP Plan Review/Code Enforcement	Blake Behringer	bbehringer@cityofelcajon.us	(619) 441-1666	(619) 579-5254	Code enforcement activities and land development SUSMP plan reviews for City projects and Private Development Contracts
Erosion Control Plan Review/Monitoring	Jessie Powell	jpowell@cityofelcajon.us	(619) 441-1704	(619) 579-5254	Monitoring and Plan Reviews

APPENDIX D

Appendix D.1

CHAPTER 5 - -OPERATIONS AND MAINTENANCE

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5. OPERATIONS AND MAINTENANCE

The City shall properly manage, operate and maintain all parts of the sanitary sewer system owned or operated by the City and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills and abilities.

The SSMP must include those elements listed below that are appropriate and applicable to the enrollee's system:

(A) Maintain an up-to-date map of the sanitary sewer system showing all gravity line segments and manholes, and applicable stormwater conveyance facilities,

(B) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) Program should have a system to document scheduled and conducted activities, such as work orders,

(C) Develop a rehab and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;

(D) Provide training for staff on a regular basis in sanitary sewer system operations and maintenance, require contractors to be appropriately trained; and

(E) Provide equipment and replacement part inventories including identification of critical replacement parts.

5.1 Mapping

The requirement for this section is to maintain an up-to-date map of the collection system showing all gravity line segments and manholes, and storm water conveyance facilities.

5.1.1 Compliance Summary

As part of the City's Sewer System Master Plan Updated in 2008, the City's consultant prepared a new GIS atlas book of the City's collection system integrating basin, parcel and address layers. The new book is in distribution with a set protocol for noting inaccuracies and changes. Books will be collected once annually and updates will include any new or reconstructed facilities as well as corrections to older data. The protocol for book distribution and periodic collection along with standardized notations to be used by field and office personnel to note pending revisions to the GIS model, is:

1. How many sewer books to be distributed?

   A. Three City Hall copies: front counter, Private Development, extra copy

   B. Seven Maintenance/Operation copies: **DM, MS, AND 5** maintenance positions/vehicles

2. All books to be numbered and assigned a unique number to each user.

   It's most important to have an audit trail to demonstrate to the Regional Board that all people that meet and deal with the public and are involved in the SSOPP and SSORP have the most up-to-date information possible. This issue will be addressed in the next Storm Water Program audit.

3. No unauthorized reproductions. If someone needs a book, that person needs to order one from the GIS Administrator. All changes made to the master document are to be coordinated with the GIS Administrator.

4. All notations and corrections are to be noted in numbered books only. Maintenance crews will provide their comments to the maintenance supervisor who will keep a running record of field changes in his book. Senior Engineering Tech will make notations from processed as-builts on the master book and on the GIS sewer layer as CIP or private development projects are completed. Books will be collected, updated and redistributed periodically. New map books will be provided to all parties at the beginning of the system maintenance cycle or on an annual basis.

5. The GIS Administrator **(ET)** will keep a log of users and book numbers; establish frequency of updating, procedures for editing books, printing and redistributing sewer books.

6. Each book shall have a title page showing the book number and the date of publication. Inclusion of revised pages, per comment No. 6, will be hand-written on the title page of each book. **ET** will also develop a legend to illustrate how to record changes to the system or annotation.

7. Counter Book No. 1 will be the master copy to track comments and changes noted by counter personnel. **ET** will place the revised pages in Counter Book No. 1 so that it will be an up-to-date living document. Minor revisions may be distributed to Maintenance/Operations if significant projects are completed during

the system maintenance cycle or significant corrections are made. Minor revision pages will be stapled over the older pages in the sewer map books.

The City has no pump stations, force mains or valves to maintain so the collection system reflects gravity flow facilities only including 14 gravity siphons throughout the City. Future enhancements to the sewer atlas will be to integrate scans of as-built plans and CCTV inspection video as attributes to each pipeline segment. GIS users can assess as-built construction data and pipeline conditions on the fly. In 2009, the City will be completing a master plan for MS4 facilities including a new GIS based storm drain atlas book similar to the sewer atlas. Once this task is completed, the sewer atlas book will have a new layer reflecting location of all drainage structures. This will replace the paper map storm drain atlas book currently used by the City in conjunction with the new sewer atlas.

5.1.1 Compliance Documents

The documents supporting compliance with the requirements for mapping are as follows:

- The GIS based sewer atlas book is contained in Vol. 2, Appendix 5-1.
- The existing storm drain atlas book is in Vol. 2, Appendix 5-2.

5.1.2 Roles and Responsibilities

The roles and responsibilities of staff supporting compliance with the mapping requirement of the Operations and Maintenance Program are as follows:

Engineering and maintenance staffs are allowed to make notations in the various numbered atlas books distributed to personnel for that purpose. Notations are made according to the standards and procedures noted above and developed for that purpose.

The only individual allowed to make changes to the GIS database is the City's GIS Administrator, who will collect the books annually to record the noted changes received from staff. New books with revision dates will be re-distributed.

5.2 City of El Cajon Sewer Collection System

Preventive Maintenance Program (PMP)

5.2.1 Introduction

A City Maintenance Program consists of the O&M practices the City utilizes to maintain all of its facilities including routine line cleaning and inspection (CCTV and visual), and hot spot or trouble spot identification and maintenance. The maintenance program also describes how complaints, service calls and alarm conditions are responded to. Additionally, the maintenance program should have a means of scheduling and tracking

maintenance needs and activities as well as evaluating the effectiveness of the maintenance performed.

Background

This Preventive Maintenance Program (PMP) document is submitted as required by the Regional Water Quality Control Board's (RWQCB) Waste Discharge Requirements (WDR) Order R9-2006-0003, Page 11 of 20, Section (IV) Operation and Maintenance Program, Part (b).

The City of El Cajon Preventive Maintenance Program (PMP) covers the assets we manage in our sanitary sewer system and is one component of our overall Sewer System Management Plan (SSMP). The PMP is based on an approach that combines preventive, predictive and corrective maintenance strategies and established best management practices.

Overview

The City of El Cajon manages roughly 200 miles of gravity sewer system comprising of manhole structures and their connecting pipeline segments. As of January 2009, we operate and maintain 14 inverted sewer siphons as part of the overall pipeline system. Our Engineering Department is currently engaged in a sewer mapping project and the exact mileage numbers may change, as data is refined.

The City of El Cajon does not own or maintain any portion of the sewer laterals (upper or lower laterals) that drain each privately owned parcel or property up to the point of connection to the local sewer; therefore, they are not a part of this plan nor are they catalogued.

We use both staff and/or contractors to perform the planned maintenance tasks at scheduled frequencies as part of our Preventive, Predictive and Corrective Program. Frequencies are established based on experience and attribute information to minimize risk of blockages or equipment failures that could possibly lead to a sanitary sewer overflow (SSO).

5.2.2 Compliance Summary

Preventive and Predictive Maintenance Program

Maintenance classified as preventive is proactive and is defined by a programmed, systematic approach to maintenance activities. This type of maintenance results in improved system performance, except in the case where major chronic problems are the result of design and/or construction flaws that cannot be completely corrected by O&M activities. Proactive maintenance is performed on a periodic (preventive) basis or an as needed (predictive) basis. Preventive maintenance can be scheduled on the basis of specific criteria such as known problem areas (e.g., a siphon that often gets clogged, a low point that is often first to overflow in a storm event, or even an area prone to blockages), equipment operating time since the last maintenance was performed, or passage of a certain amount of time (calendar period).

Preventive Maintenance (PM) Tasks

We have developed and continue to develop asset-specific maintenance tasks for the care of each asset throughout its life cycle.

Major PM task groupings are:

- Sewer inspection and condition assessment (performed concurrently with maintenance activities)
- Sewer cleaning, including flushing and rodding maintenance
- Siphon and trouble spot maintenance
- Problem manhole inspection and maintenance

PM Frequencies

As described above, the frequencies for preventive maintenance tasks are assigned to each asset or group of assets, as follows:

Table 5-1: – "Summary of Sewer Maintenance System Preventive Tasks"

Document Name	Maintenance Type	Length of Maintenance Cycle	Remarks
System Flushing and Routine Maintenance Task	Flushing	Goal to complete system cycle within 18 months	Not explicitly scheduled unless needed. Complete system cycle usually completed in 12 months
Siphons and Trouble Spots Task	Flushing, Descaling, Degreasing	3-month cycle	Issued quarterly in February, May, August and November
Monthly Rodding Task	Rodding	6- or 12-month cycle	Issued each month
Problem Manholes with Roots Task	Rodding and Debris Removal	3-month cycle	Mostly problem manholes with roots. Issued quarterly in February, May, August and November
Delinquent Rodding List	Follow-up to Scheduled Rodding	N/A	Issued each month. Used to correct errors in performed maintenance and data entry.

System Flushing and Routine Maintenance Task

Prior to the acquisition of modern high pressure cleaning equipment in the late 1970's,

much of the City's sewer system had never been inspected or cleaned and the City experienced numerous complaints along with over 100 stoppages per year. A stoppage is a clogged sewer line, which can cause backups and odors and can possibly result in flooded homes and other property damage. The current on-going City preventive maintenance program has reduced complaints and stoppage incidences to less than five per year on average.

The City sewer flushing crew (equipment operator and maintenance worker) services the sewer mains in an upstream-to-downstream, basin-by-basin sequence. A flushing log is updated daily allowing the CMMS to track which mains have been serviced and how many feet have been cleaned and flushed each day. Although the goal is to completely flush all targeted sewer mains every 18 months, one complete cycle of cleaning and flushing is typically completed within 12 months. Upon completion of the flushing and cleaning cycle a new cycle of flushing and cleaning is immediately initiated. Total servicing mileage for July 1, 2007 through June 30, 2008 was approximately 219 miles in a collection system totaling 195 miles in length.

Sewer Root Removal Program

Another maintenance effort involves the removal of tree roots from sanitary sewers. Tree roots can be a real menace, damaging sewers and causing sewers to plug. Tree roots seek the moisture and nutrients offered by leaky pipe joints usually found in the older and sometimes cracked or broken sewer pipes. Current root removal methods are limited to mechanical rodding with several styles of rotating bits, which may prove ineffective in dense root areas. Our City is investigating the control of roots through the application of mild herbicidal foam, applied from within the sanitary sewer, which kills the roots in a confined area, within and around, the sanitary sewer while not harming the tree. This herbicidal method is approved by the EPA as an acceptable root control best management practice, and does not interfere with the wastewater treatment processes.

The City maintains a list of problem sewer main segments with roots called the “Monthly Rodding Task” and services each segment on a three, six or twelve-month schedule. The City also maintains a list of “Problem Manholes With Roots” and services these manholes on a three-month schedule during February, May, August and November. The mechanical rodding crew consists of a truck-mounted continuous mechanical rodder, an equipment operator and a maintenance worker.

Sewer Trouble Spot and Siphon Program

As summarized in Section “PM Frequencies” above, the City maintains a list of sewer main segments with known flow problems, including City siphon segments, and cleans and flushes these segments on a three-month schedule. Our City is currently moving to install high and low-level flow alarms in our sanitary sewer siphons that will notify the City through text messaging and email in the event of a high or low-level flow event at one of the siphons.

Predictive Maintenance Tasks

Predictive Maintenance **(PD)** tasks (a subset of **PM**) are inspection and condition-assessment type tasks. These are performed to determine if the planned preventive

maintenance task should be done as scheduled or rescheduled to a forward date if preventive maintenance, rehabilitation or replacement is not needed. Predictive Maintenance tasks are therefore performed based on asset condition and need rather than a strict time interval when maintenance may not be required. Predictive Maintenance tasks include but are not limited to the following:

- Closed Circuit TV (CCTV) video inspection of piping
- Visual inspection of the manhole structures and their flow channels
- Trending of flow monitoring data
- Inspection of inverted siphons during preventive maintenance
- Ground surface inspection of rights-of-way and easements over the gravity sewers.
- Odor and corrosion assessment and monitoring programs
- CCTV Sewer Inspections

One of the critical components of the predictive maintenance program involves internal inspection of sanitary sewers using a TV camera. A sealed TV camera is mounted on a device similar to a small-wheeled sled, which is guided through the sanitary sewer. As the T.V. camera is pulled through the sanitary sewer and viewed by inspection personnel above ground, sewer defects are recorded for future reference and repair. A computerized ranking system analyzes the defects found in many individual sewer line segments and systematically prioritizes repairs for City sewer main repair crews.

Along with finding sewer system deficiencies and prioritizing maintenance activities, the T.V. crew is also responsible for inspecting all newly constructed sanitary sewers before they are put into service.

The Predictive Maintenance program will continue to develop as technology expands.

Corrective Maintenance Tasks

Corrective maintenance (CM) tasks are performed in response to a failure of an asset, component or part, or a critical utility outage. Low-risk items, such as light bulbs, pressure gauges, sensors, and small non-critical valves, are planned for run-to-failure, and as such, are not part of the PM Program. These items are replaced when they fail. When managed assets critical to the process fail they are scheduled for CM on an urgent or routine basis on a priority schedule. Some of these repairs may be capitalized as a follow-up activity depending on asset cost and life expectancy. These types of CM repairs include but are not limited to:

- Emergency cleaning to eliminate a pipe blockage
- Spot repair or replacement of a failed pipe
- Replacing a rattling or failed manhole cover
- Repairing damage caused by construction or failure of another utility (e.g., water or gas main breakage)
- Respond to, investigate and mitigate customer complaints and sewer overflows
- Repair of earthquake damage
- Repair after vandalism
- Staff documents CM tasks on paper at the time of the event. The event may be documented in the CMMS database, if appropriate.

CCTV or other failure analysis may also be done by staff as a CM task after a problem occurs in an effort to diagnose the cause of the problem and recommend changes, if indicated.

Findings may lead to a spot repair of the pipe, root cutting, re-cleaning for grease, or debris removal on a periodic preventive basis, or scheduling a manhole-to-manhole pipe replacement or rehabilitation in an urgent or lower priority planned manner. Major replacement or rehabilitation may be capitalized outside of the annual operating budget.

5.2.3 Compliance Documents

Hardcopy data files and paper records not recorded in our Computerized Maintenance Management System (CMMS) are available for review and audit. Standard Operating Procedures (SOPs) and Standard Maintenance Procedures (SMPs) ensure consistency. These are available for some maintenance tasks and are continuing to be developed for others. Mobile assets such as service trucks, generators, and other equipment are not covered by this PMP but are covered by plans developed by the maintenance program of our Public Works Department.

Sewer Asset Inventory and Attribute Data

Capital assets, minor components and their parts are catalogued in our paper records or the CMMS. Source or attribute data for each of these items is obtained from record drawings, sewer maps, plans and specifications and/or supplier data. Levels of care for each item are described in the tasks and frequencies information as catalogued in the CMMS or, in the interim, on lists, spreadsheets or annotated maps until the full CMMS implementation is completed.

Documents prepared through queries of the CMMS supporting the preventive maintenance servicing task of the sewer asset are summarized more completely in Table 1: “Summary of Sewer Maintenance System Preventive Tasks” in the Compliance Summary Section. A short summary of compliance documents is as follows:

- Sewer map layer in El Cajon Geographic Information System (GIS). The map contains special information that is used in developing maps used in operations & maintenance and spill response, Vol. 2, Appendix 5-1.
- El Cajon Sewer Maintenance System (CMMS), Vol. 2, Appendix 5-3. Used to track preventative maintenance and prepare work orders from monthly maintenance. It is anticipated that the CMMS will be integrated with the GIS in the near future. Monthly and quarterly work orders are prepared as follows:
- Flushing Report (monthly), 2008, Vol. 2, Appendix 5-4
- Mechanical rodding maintenance (monthly), 2008, Vol. 2, Appendix 5-5
- Delinquent mechanical rodding maintenance (monthly), Vol. 2, Appendix 5-6
- Siphon and Trouble Spot maintenance (quarterly), Vol. 2, Appendix 5-7
- Problem manhole maintenance (quarterly), Vol. 2, Appendix 5-8

5.2.4 Roles and Responsibilities

The staff positions and their responsibilities for the City's Preventive Maintenance Program are as follows:

The Preventive Maintenance Program is staffed by the following positions

- Deputy Director, **(DM)** (1)
- Public Works Supervisor **(MS)** (1)
- Equipment Operator, **(EO)** (2)
- Maintenance Worker, **(MW)** (2)
- Maintenance Crew Leader **(MCL)** (1)
- Associate Engineer **(AE)** (1)
- Senior Technician **(ET)** (1)
- Storm Water Code Enforcement Officer **(CEO)** (1)

Staff time budgeted for the Preventive Maintenance Program is summarized in the following table:

Table 2 – Staffing Time for Various Sewer Preventive Maintenance Tasks

Task (Top/Right) -→ Position (Left/Down)	Sewer Flushing	Sewer Roding	Sewer CCTV	SSO Response	Program Support	Position Totals
Equipment Operator	2.00	0.50	0.50	0.20		3.20
Maintenance Worker	2.00	0.50	0.50	0.20		3.20
Maintenance Crew Leader			0.50	0.50		1.00
Public Works Supervisor	0.20	0.20	0.20	0.20	0.20	1.00
Deputy Director					0.25	0.25
Associate Engineer			0.15		0.25	0.40
Senior Technician			0.10	0.25	0.50	0.85
Storm Water Code Compliance				0.10		0.10
Task Totals	4.20	1.20	1.95	1.45	1.20	10.00

The Equipment Operators and Maintenance Workers perform the day-to-day work summarized by tasks in Table 1: "Summary of Sewer Maintenance System Preventive Tasks" in the Compliance Summary Section.

Monitoring, Measurement and Program Modifications

Findings related to scheduled or non-scheduled tasks and work order tracking will continue to be evaluated by staff to improve reliability and system performance. In assessing the success of the PMP, changes in frequency or task activities, spare parts or recommended stock levels will be reviewed by the Maintenance Supervisor and approved by the Deputy Director. Database changes and/or new instructions to contractors will follow.

Items recommended for rehabilitation or replacement through our Capital Improvement Program (CIP) will be sent by Deputy Director **(DM)** to the **AE** for funding and planning by the Division or forwarded to our Engineering Department for action in the agency wide CIP.

Our goal is to have a staff-driven process for improving our PMP. This process may be further explained and refined, as deemed necessary, in future revisions to our SSMP.

5.3 Rehabilitation and Replacement Plan

The Order requires the City to develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes and a system for ranking the condition of sewer pipes and scheduling rehabilitation. The rehabilitation and replacement plan should include a capital improvement plan (CIP) that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short-term and long-term plans plus a schedule for developing the funds needed for the capital improvement plan

5.3.1 Compliance Summary

In 2008, the City embarked on a system-wide cleaning and CCTV inspection program to survey the entire system over a 5-year period. Phase 1-2008 was performed by an outside contractor, National Plant Services, and included 52,000 feet of pipeline, 18" through 42" diameter pipelines representing 10 miles and 84 manholes including the City's sewer interceptor and trunk system from Main Street to Mission Gorge Road.

This portion of the system was last cleaned 25 years ago and several problem pipe segments were identified for annual cleaning and inspection. Others were identified and earmarked for repairs and will be included in the next annual CIP for rehabilitation. Interestingly, the manholes were found to be in very good condition in spite of their age suggesting that the City does not have a manhole corrosion problem.

The inspection contractor utilized NASSCO's pipe condition assessment codes (PCAP) for condition assessment and provided the City a complete database for entry into the City's planned CMMS (DBA Master Series) computerized maintenance system. The completed work represented a move by the City to inspect and clean every pipe segment in the City by the end of the 2013 fiscal year and rank each pipe for

rehabilitation by a priority assignment generated by the CMMS system. When completed the City will have cleaned and inspected over 200 miles of pipeline and 4,800 manholes.

Video of each segment inspected will be characterized for defects and ranked by priority and included in the rehabilitation portion of the CIP. The City plans to spend one-half

million dollars each year for the next ten (10) years to systematically rehab all at-risk pipe segments and manholes.

The City also plans to spend 1.4 million dollars over the next four years to inspect and code each pipe segment and manhole in the City (Phases 2 through 5) using the pipe condition assessment process to identify and prioritize the system for rehabilitation if needed.

In 2009, the City plans to purchase a computerized maintenance management system (CMMS) to management the CCTV inspection database containing pipe condition assessment codes for prioritizing pipe rehabilitation. Using the data gathered, the City will include on a priority basis a portion of the most compromised pipe segments for repair or rehab utilizing a $500,000 dollar annual allowance in the CIP. Over the next ten (10) years the City will inspect, clean, code and prioritize the entire system for rehab if needed.

Also in 2009, the City will pass a new ordinance requiring the periodic inspection and repair of all private laterals and private collection systems. Single-family residential properties will be exempted unless a spill occurs or evidence of a problem exists during the City's systematic inspection of the public portion of the system.

Funding for the inspection and rehab effort will come from allocated funds from the City's wastewater enterprise fund. Rates for the fund will be examined for adjustment in the future.

5.3.2 Compliance Documents

The documents supporting compliance with the rehabilitation and replacement plan requirements are as follows:

- Phase 1- 2007 CCTV Inspection Report, on file in the Office of Public Works
- Phase 2-2008 CCTV Inspection Report, on file in the Office of Public Works
- Asset Management System -Pipe Rehab and Maintenance Management System, Vol. 2, Appendix 5-3
- 5-Year CIP Pipe Rehab and Lining and Replacement Plan, Vol. 2, Appendix 5-9
- NASSCO's Pipe Condition Assessment Program (PCAP), Vol. 2, Appendix 5-10
- Engineering/Construction and Maintenance Staff Organization Chart, Vol. 2, Appendix 3-1

5.3.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with

the rehabilitation and replacement plan requirements are as follows:

Deputy Director of Public Works (DE) supervises the engineering staff responsible for planning and executing pipeline assessment and the 5-year CIP for rehabilitation and replacement (Design & Construction).

Associate Engineer-Chairman and Project Manger (AE) is responsible for organizing and managing the preparation of the Management Plan (SSMP), directing the pipeline condition assessment program, design and preparation of construction contract documents for both CCTV inspection, rehab and replacement, also new construction for both existing and future pipeline deficiencies.

Deputy Director of Public Works (DM) is responsible for directing and managing the maintenance staff in charge of routine, preventative maintenance, assessing the need for engineering solutions to solve maintenance issues and limited pipeline CCTV inspections.

Maintenance Supervisor (MS) is responsible for planning, scheduling CCTV assessments, maintaining equipment, training and supervising maintenance staff.

Maintenance Crew Leader (MCL) is responsible for operation of the City's CCTV van, cataloging video files, assessing pipe conditions and data basing Wincan PCAP codes.

5.4 Training Program

The City is required to provide training on a regular basis for staff in sanitary sewer system operations and maintenance and to require contractors to be appropriately trained.

5.4.1 Compliance Summary

The City of El Cajon has endorsed the certification program for collection system maintenance workers as prescribed by the California Water Environment Association. It is the goal of this plan that maintenance supervisors and maintenance workers will collectively be certified to their respective level of experience and education, Collection Systems Workers Grades 1, 2, 3 & 4 as prescribed by the California Water Environment Association (CWEA). The certification program assures that each worker has demonstrated the skill and knowledge necessary to work at the prescribe levels of competence.

Ethics in the workplace and in the daily work activities is an essential requirement of maintenance workers that maintain the City's collection system and are certified by the CWEA. Each worker and supervisor is expected to adhere to the Code of Ethics as set forth by the CWEA and provide assurance to the public that the health and welfare of the community is a primary concern of the maintenance staff.

All maintenance workers are required to receive training in the Traffic Control safety practices through the Southern California Chapter of the "American Public Works Association. The "WATCH Manual" (Work Area Traffic Control Handbook) is required

reading for all maintenance workers in a work crew lead position. Each crew leader must demonstrate skills using the manuals guidelines for work area traffic control safety.

Each maintenance worker, regardless of rank, is required to take a course in confined space entry and pass certification for safe entries into confined areas that could contain hazardous air.

Maintenance workers that perform video inspection of pipelines must perform the pipeline condition assessment using standardized Pipeline Condition Assessment Codes (PACP) as trained and certified by the National Association of Sewer Serving Companies (NASSCO). NASSCO conducts periodic 2-day training courses for workers seeking certification in the pipeline condition assessment technology.

The City of El Cajon requires any contractor performing inspection or maintenance on the collection system to have its workers properly trained and certified in the area of application. All inspection work is performed using NASSCO PACP pipe assessment codes that are unitized with the City's computerized maintenance management system (CMMS).

All cleaning work performed by contractors using "Rodders" or "Vactors" are required to have individual personnel and supervisors trained and certified in collections system maintenance as prescribed by the CWEA and be trained in confined space entry.

5.4.2 Compliance Documents

The following documents demonstrate the type of training provided to staff and the training requirements required of contractors:

- Training records for each collections system maintenance worker employed by the City are collected and maintained at the field operations office for the Department of Public Works with duplicate files kept at the City's Department of Human Resources. Certification records are maintained respectively by CWEA and NASSCO and a master list of certified workers are listed on-line respectively at each organization's web site. Copies of certifications are filed in the Department of Human Resources.

- Contract administrators in the Department of Public Works prepare specifications and Special Provisions for each maintenance contract issued to perform work on the collections system. Standardized specifications relating to training requirements are contained in Volume 2, Appendix 5-115 Year CIP Pipe Rehab and Lining and Replacement Plan, Vol. 2, Appendix 5-9.

5.4.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with the staff and contractor training requirements are as follows:

The Deputy Director of Public Works-Maintenance (DM)

Manages the maintenance activities for the Department of Public Works. The collection system maintenance team working under the direction of the Deputy Director is supervised by the Public Works Supervisor **(MS)** who manages the day-to-day activities of the maintenance crew, including schedule maintenance, overflow response, overflow cleanup and CCTV inspection of pipelines. The maintenance supervisor directs all training, including scheduling, oversight and maintenance of training records. A training log is maintained at the operations office. An annual training budget is prepared and approved each year to satisfy the training requirements of the department. Training for maintenance workers and supervisors for Wastewater Collection Systems workers are planned to begin 2009 with the maintenance supervisors first. Training for pipe condition assessment is also planned for 2009. Training of all staff will be a function of the budget and may span several years.

The Deputy Director of Public Works-Engineering (DE)

Administers the engineering and construction department that includes the preparation of all contract documents for CCTV inspection activities, rehab and replacement of pipelines. On a project-by-project basis assigns a staff level Associate Engineer as project manager to prepare the contract documents which include standard special provisions setting forth the training qualifications for employees employed by the contractor. Each contractor performing maintenance or inspection for the City must provide training documentation to demonstrate competence for any employee working on the collections system prior to beginning work.

5.5 Equipment and Parts Inventories

Each City is required to provide equipment and replacement part inventories, including identification of critical replacement parts for the operation and maintenance of its sewer collection system.

5.5.1 Compliance Summary

The City in the past has maintained an inventory of equipment for asset management purposes and to plan for life cycling and replacement of equipment needed to maintain the sewer system. In 2008, the City started compiling an inventory of all spare parts including a list of critical parts needed for equipment to be utilized for emergency situations.

The compiled list will be used to input onto the new CMMS maintenance management system to be implemented in 2009. The list will become an integral part of the asset and maintenance management activities including an annual audit of parts and equipment used to facilitate the sewer maintenance program.

The City also has a mutual aide agreement with all other Cities in the Metro system including its immediate neighbors, Santee, La Mesa Padre Dam, and the City and County of San Diego. Among other sharing responsibilities and compensation schedules, the agreement provides for sharing of spare parts and equipment should individual inventories fall short.

5.5.2 Compliance Documents

The documents supporting compliance with the requirement to maintain an inventory of equipment and parts including identification of critical parts are as follows:

- Equipment and parts inventory (12-19-2008), Vol. 2, Appendix 5-12
- Sewer maintenance list of critical parts- 2008, Vol. 2, Appendix 5-13

5.5.3 Roles and Responsibilities

The staffed positions and their roles and responsibilities in supporting compliance with maintaining an inventory of equipment and parts including critical parts are as follows:

The Deputy Director of Public Works-Maintenance (DM)

Manages the maintenance activities for the Department of Public Works. The collection system maintenance team working under the direction of the Deputy Director is supervised by the Maintenance Supervisor **(MS)** who manages the day-to-day activities of the maintenance crew including schedule maintenance, overflow response, overflow cleanup and CCTV inspection of pipelines.

Maintenance Supervisor (MS)

Responsible for work orders for equipment maintenance, offering parts, providing tracking data to the Administrative Secretary or crew leader for entry into the asset management system.

Administrative Secretary

Responsible for data entry tracking equipment and parts numbers through an inventory control tool within the asset management system

Appendix D.2

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
10	57		10	58		1-Jul-2011	179	JM	12	179
10	58		10	59		1-Jul-2011	73	JM	12	73
29	43		29	45		5-Jul-2011	381	FM		381
17	4		17	5		5-Jul-2011	223	FM		223
17	5		17	8		5-Jul-2011	260	FM		260
17	7		17	8		5-Jul-2011	250	FM		250
18	11		18	13		6-Jul-2011	160	FM		160
18	12		18	13		6-Jul-2011	173	FM		173
18	13		18	14		6-Jul-2011	100	FM		100
18	14		18	17		6-Jul-2011	254	FM		254
18	15		18	16		6-Jul-2011	116	FM		116
18	16		18	17		6-Jul-2011	163	FM		163
18	17		18	18		6-Jul-2011	301	FM		301
18	18		18	19		6-Jul-2011	299	FM		299
18	19		18	21		6-Jul-2011	175	FM		175
18	20		18	21		6-Jul-2011	60	FM		60
19	1		19	210		7-Jul-2011	62	FM		62
19	2		19	3		7-Jul-2011	171	FM		171
19	2		19	210		7-Jul-2011	188	FM		188
19	3		19	4		7-Jul-2011	136	FM		136
19	4		19	5		7-Jul-2011	278	FM		278
19	5		19	7		11-Jul-2011	163	FM		163
19	8		19	191		11-Jul-2011	477	FM		477
29	90		29	114	J	12-Jul-2011	180	FM		180
29	96		29	114	T	12-Jul-2011	243	FM		243
18	50		18	52		19-Jul-2011	312	FM		312
18	51		18	52		19-Jul-2011	89	FM		89
25	95		25	190		21-Jul-2011	24	FM		24
25	112		25	113		26-Jul-2011	250	FM		250
19	155		19	158		27-Jul-2011	254	FM		254
29	22		29	23		5-Aug-2011	352	JM	12	352
8	173		9	60		5-Aug-2011	199	JM	12	199
9	24		9	25		5-Aug-2011	191	JM	12	191
9	36		9	37		5-Aug-2011	200	JM	12	200
9	46		9	47		5-Aug-2011	121	JM	12	121
9	47		9	48		5-Aug-2011	106	JM	12	106
9	49		9	50		5-Aug-2011	303	JM	12	303
9	54		9	55		5-Aug-2011	258	JM	12	258
9	57		9	58		5-Aug-2011	354	JM	12	354
9	60		9	61		5-Aug-2011	132	JM	12	132
9	63		9	64		5-Aug-2011	362	JM	12	362
9	64		9	65		5-Aug-2011	78	JM	12	78
9	66		9	68		5-Aug-2011	360	JM	6	720
9	69		9	70		5-Aug-2011	357	JM	12	357
9	70		9	71		5-Aug-2011	295	JM	12	295
9	72		9	73		5-Aug-2011	177	JM	12	177
19	44		19	45		23-Aug-2011	350	FM		350
19	45		19	46		23-Aug-2011	350	FM		350
19	50		19	51		23-Aug-2011	338	FM		338
19	70		19	71		24-Aug-2011	206	FM		206

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
19	23	M	19	197		25-Aug-2011	227	FM		227
19	31		19	196		25-Aug-2011	21	FM		21
19	208		20	150		25-Aug-2011	116	FM		116
3	40		3	41		7-Sep-2011	173	FM		173
3	66		3	67		8-Sep-2011	268	FM		268
3	65		3	67		8-Sep-2011	100	FM		100
13	195		20	7		12-Sep-2011	265	FM		265
3	5		3	6		12-Sep-2011	192	FM		192
12	91		12	92	M	14-Sep-2011	323	FM		323
12	91		13	188		14-Sep-2011	327	FM		327
12	92	M	12	93		14-Sep-2011	283	FM		283
13	183		13	188		14-Sep-2011	353	FM		353
13	184		13	188		14-Sep-2011	250	FM		250
13	184		13	203	D	14-Sep-2011	250	FM		250
12	95	P	12	96		14-Sep-2011	235	FM		235
12	96		12	97		14-Sep-2011	257	FM		257
12	97		12	98		14-Sep-2011	320	FM		320
12	55		12	56		15-Sep-2011	330	FM		330
12	56		12	57		15-Sep-2011	325	FM		325
12	56		19	101		15-Sep-2011	350	FM		350
12	57		12	82		15-Sep-2011	305	FM		305
12	82		12	89		15-Sep-2011	300	FM		300
12	98		12	99		15-Sep-2011	320	FM		320
12	87		12	88		15-Sep-2011	320	FM		320
12	88		12	89		15-Sep-2011	200	FM		200
12	90		12	99		15-Sep-2011	270	FM		270
32	31		32	49		20-Sep-2011	338	FM		338
28	5		28	6		22-Sep-2011	320	JM	12	320
26	160		26	161		28-Sep-2011	327	FM		327
32	51		33	31		1-Oct-2011	325	JM	12	325
33	29		33	30		1-Oct-2011	200	JM	12	200
25	170		26	7		1-Oct-2011	175	JM	12	175
24	83		24	84		1-Oct-2011	240	JM	12	240
24	89		24	91		1-Oct-2011	257	JM	12	257
25	60		25	61		1-Oct-2011	303	JM	12	303
15	51		15	52		1-Oct-2011	180	JM	12	180
15	52		15	70		1-Oct-2011	152	JM	12	152
15	71		15	72		1-Oct-2011	234	JM	12	234
15	73		15	74		1-Oct-2011	284	JM	12	284
15	74		15	75		1-Oct-2011	243	JM	12	243
10	82		10	83		1-Oct-2011	160	JM	12	160
10	84		10	85		1-Oct-2011	194	JM	12	194
15	12		15	13		1-Oct-2011	167	JM	12	167
14	75		14	76		1-Oct-2011	160	JM	12	160
14	76		14	77		1-Oct-2011	158	JM	12	158
9	21		9	135	C	1-Oct-2011	200	JM	12	200
3	2	C	3	3		1-Oct-2011	225	JM	12	225
3	3		3	4		1-Oct-2011	270	JM	12	270
3	7		3	8		1-Oct-2011	280	JM	12	280
3	8		3	9		1-Oct-2011	280	JM	12	280

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
3	13	C	3	14		1-Oct-2011	115	JM	12	115
4	88		4	89		1-Oct-2011	265	JM	12	265
27	91		28	35		4-Oct-2011	136	FM		136
28	3		28	4		5-Oct-2011	309	FM		309
28	37		28	38		10-Oct-2011	101	FM		101
27	5		27	9		10-Oct-2011	279	FM		279
27	6		27	7		10-Oct-2011	283	FM		283
27	7		27	8		10-Oct-2011	276	FM		276
27	8		27	9		10-Oct-2011	185	FM		185
27	9		27	13		12-Oct-2011	225	FM		225
27	10		27	11		12-Oct-2011	233	FM		233
27	10		27	177	D	12-Oct-2011	20	FM		20
27	11		27	12		12-Oct-2011	236	FM		236
27	12		27	13		12-Oct-2011	226	FM		226
27	13		27	14		12-Oct-2011	96	FM		96
27	14		27	15		12-Oct-2011	240	FM		240
27	15		27	17		12-Oct-2011	301	FM		301
27	16		27	17		12-Oct-2011	128	FM		128
27	17		27	18		12-Oct-2011	188	FM		188
27	18		27	21		12-Oct-2011	188	FM		188
27	19		27	20		12-Oct-2011	225	FM		225
27	20		27	21		12-Oct-2011	235	FM		235
27	24		27	25		12-Oct-2011	226	FM		226
27	25		27	27		12-Oct-2011	197	FM		197
27	26		27	27		12-Oct-2011	112	FM		112
27	27		27	28		12-Oct-2011	130	FM		130
27	28		27	32		12-Oct-2011	238	FM		238
27	29		27	30		12-Oct-2011	145	FM		145
27	30		27	31		12-Oct-2011	291	FM		291
27	31		27	32		12-Oct-2011	78	FM		78
27	32		27	33		12-Oct-2011	237	FM		237
27	36		27	37		12-Oct-2011	315	FM		315
27	37		27	39		12-Oct-2011	256	FM		256
27	38		27	39		12-Oct-2011	317	FM		317
21	106		21	108		12-Oct-2011	131	FM		131
21	107		21	108		12-Oct-2011	245	FM		245
21	107		27	44		12-Oct-2011	240	FM		240
27	42		27	43		12-Oct-2011	320	FM		320
27	43		27	44		12-Oct-2011	248	FM		248
26	178		26	179		13-Oct-2011	300	FM		300
26	179		26	180		13-Oct-2011	297	FM		297
26	180		26	181		13-Oct-2011	297	FM		297
26	168		26	169		17-Oct-2011	91	FM		91
26	168		26	187		17-Oct-2011	47	FM		47
26	187		26	188		17-Oct-2011	59	FM		59
26	188		26	189		17-Oct-2011	119	FM		119
26	151		26	189		17-Oct-2011	75	FM		75
26	151		26	190		17-Oct-2011	107	FM		107
26	169		26	170		17-Oct-2011	272	FM		272
26	170		26	171		17-Oct-2011	279	FM		279

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
26	171		27	22		17-Oct-2011	210	FM		210
27	21		27	23		17-Oct-2011	326	FM		326
27	22		27	23		17-Oct-2011	103	FM		103
27	23		27	34		17-Oct-2011	110	FM		110
27	33		27	34		17-Oct-2011	217	FM		217
27	34		27	35		17-Oct-2011	317	FM		317
27	35		27	40		17-Oct-2011	145	FM		145
27	39		27	40		17-Oct-2011	278	FM		278
27	40		27	41		17-Oct-2011	177	FM		177
21	111		27	41		17-Oct-2011	318	FM		318
26	71		26	172		17-Oct-2011	250	FM		250
26	71		26	173		17-Oct-2011	36	FM		36
26	171		26	172		17-Oct-2011	282	FM		282
4	65		4	160		18-Oct-2011	267	FM		267
27	93		27	94		19-Oct-2011	300	FM		300
27	93		28	53		19-Oct-2011	80	FM		80
22	54		22	55		19-Oct-2011	236	FM		236
22	55		22	56		19-Oct-2011	234	FM		234
22	58		22	59		19-Oct-2011	348	FM		348
22	63		22	64		19-Oct-2011	200	FM		200
22	64		22	65		19-Oct-2011	276	FM		276
22	65		22	66		19-Oct-2011	45	FM		45
22	66		22	67		19-Oct-2011	272	FM		272
22	67		22	68		19-Oct-2011	230	FM		230
20	10		21	112		20-Oct-2011	221	FM		221
20	10		26	181		20-Oct-2011	297	FM		297
21	108		21	109		20-Oct-2011	205	FM		205
21	109		21	110		20-Oct-2011	322	FM		322
21	110		21	113		20-Oct-2011	329	FM		329
21	111		21	113		20-Oct-2011	313	FM		313
21	112		21	113		20-Oct-2011	213	FM		213
21	113		21	115		20-Oct-2011	266	FM		266
21	114		21	115		20-Oct-2011	201	FM		201
26	152		27	140	M	21-Oct-2011	293	FM		293
26	150		26	153		21-Oct-2011	235	FM		235
26	152		26	153		21-Oct-2011	100	FM		100
26	153		26	154		21-Oct-2011	316	FM		316
26	154		26	155		21-Oct-2011	301	FM		301
26	155		26	166		21-Oct-2011	256	FM		256
26	164		26	165		21-Oct-2011	319	FM		319
26	165		26	166		21-Oct-2011	52	FM		52
26	166		26	167		21-Oct-2011	270	FM		270
21	115		21	116		21-Oct-2011	65	FM		65
21	116		21	119		21-Oct-2011	182	FM		182
21	117		21	118		21-Oct-2011	64	FM		64
21	118		21	119		21-Oct-2011	236	FM		236
21	119		21	120		21-Oct-2011	130	FM		130
21	98		21	100		21-Oct-2011	127	FM		127
21	99		21	100		21-Oct-2011	165	FM		165
21	100		21	102		21-Oct-2011	263	FM		263

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
21	101		21	102		21-Oct-2011	167	FM		167
20	11		20	154		21-Oct-2011	118	FM		118
20	12		20	154		21-Oct-2011	162	FM		162
20	154		20	155		21-Oct-2011	266	FM		266
21	10		21	11		21-Oct-2011	300	FM		300
20	24		20	33		24-Oct-2011	183	FM		183
22	56		22	57		24-Oct-2011	118	FM		118
22	57		22	60		24-Oct-2011	309	FM		309
22	57		22	93	D	24-Oct-2011	190	FM		190
22	59		22	60		24-Oct-2011	265	FM		265
22	60		22	62		24-Oct-2011	192	FM		192
22	61		22	62		24-Oct-2011	350	FM		350
22	62		22	69		24-Oct-2011	99	FM		99
22	68		22	69		24-Oct-2011	347	FM		347
22	10		22	47		24-Oct-2011	40	FM		40
22	10		22	48		24-Oct-2011	110	FM		110
22	46		22	47		24-Oct-2011	275	FM		275
22	48		22	49		24-Oct-2011	272	FM		272
20	22		20	23		24-Oct-2011	225	FM		225
20	25		20	149		24-Oct-2011	182	FM		182
26	79		26	80		24-Oct-2011	100	FM		100
26	80		26	81		24-Oct-2011	262	FM		262
26	81		26	82		24-Oct-2011	359	FM		359
27	52		27	78		25-Oct-2011	195	FM		195
27	77		27	78		25-Oct-2011	348	FM		348
27	78		27	79		25-Oct-2011	305	FM		305
27	79		27	80		25-Oct-2011	290	FM		290
27	80		27	82		25-Oct-2011	158	FM		158
27	81		27	82		25-Oct-2011	307	FM		307
27	82		27	83		25-Oct-2011	83	FM		83
27	83		27	85		25-Oct-2011	254	FM		254
27	84		27	85		25-Oct-2011	285	FM		285
27	85		27	86		25-Oct-2011	314	FM		314
22	69		22	70		25-Oct-2011	303	FM		303
22	70		22	71		25-Oct-2011	300	FM		300
22	71		22	72		25-Oct-2011	171	FM		171
22	72		22	73		25-Oct-2011	193	FM		193
22	73		22	74		25-Oct-2011	276	FM		276
21	73		21	74		25-Oct-2011	313	FM		313
21	74		21	75		25-Oct-2011	275	FM		275
21	75		21	76		25-Oct-2011	214	FM		214
21	76		21	79		25-Oct-2011	250	FM		250
21	76		22	53		25-Oct-2011	262	FM		262
21	77		21	78		25-Oct-2011	348	FM		348
21	78		21	79		25-Oct-2011	346	FM		346
21	79		21	80		25-Oct-2011	167	FM		167
21	80		21	81		25-Oct-2011	260	FM		260
22	49		22	50		25-Oct-2011	234	FM		234
22	50		22	51		25-Oct-2011	300	FM		300
22	51		22	52		25-Oct-2011	255	FM		255

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
22	52		22	53		25-Oct-2011	232	FM		232
21	90		21	92		26-Oct-2011	317	FM		317
21	90		27	89		26-Oct-2011	262	FM		262
21	91		21	92		26-Oct-2011	192	FM		192
27	86		27	87		26-Oct-2011	318	FM		318
27	87		27	89		26-Oct-2011	55	FM		55
27	88		27	89		26-Oct-2011	244	FM		244
21	60		21	146		26-Oct-2011	63	FM		63
21	60		21	61		26-Oct-2011	300	FM		300
21	62		21	63		26-Oct-2011	279	FM		279
21	62		22	80		26-Oct-2011	282	FM		282
21	63		21	64		26-Oct-2011	232	FM		232
21	64		21	66		26-Oct-2011	231	FM		231
21	65		21	66		26-Oct-2011	212	FM		212
21	65		22	79		26-Oct-2011	179	FM		179
21	66		21	67		26-Oct-2011	257	FM		257
21	67		21	68		26-Oct-2011	215	FM		215
21	68		21	140		26-Oct-2011	230	FM		230
21	69		21	140		26-Oct-2011	125	FM		125
21	89		22	77		26-Oct-2011	279	FM		279
22	74		22	75	S	26-Oct-2011	144	FM		144
22	76	S	22	78		26-Oct-2011	63	FM		63
22	77		22	78		26-Oct-2011	318	FM		318
22	78		22	79		26-Oct-2011	37	FM		37
21	61		21	70		27-Oct-2011	305	FM		305
21	69		21	70		27-Oct-2011	285	FM		285
21	70		21	71		27-Oct-2011	303	FM		303
21	71		21	72		27-Oct-2011	300	FM		300
21	72		21	83		27-Oct-2011	292	FM		292
21	82		21	83		27-Oct-2011	300	FM		300
21	83		21	84		27-Oct-2011	253	FM		253
21	84		21	85		27-Oct-2011	252	FM		252
21	85		21	86		27-Oct-2011	310	FM		310
20	39		21	88		27-Oct-2011	317	FM		317
21	86		21	87		27-Oct-2011	289	FM		289
21	87		21	135		27-Oct-2011	230	FM		230
21	88		21	136		27-Oct-2011	22	FM		22
20	39	M	20	40		27-Oct-2011	300	FM		300
20	40		20	41		27-Oct-2011	300	FM		300
26	167		26	174		31-Oct-2011	244	FM		244
21	92		21	93		31-Oct-2011	330	FMA		330
21	93		21	94	M	31-Oct-2011	341	FM		341
21	94	M	21	96		31-Oct-2011	335	FM		335
21	95		21	96		31-Oct-2011	265	FM		265
21	95		21	146		31-Oct-2011	197	FM		197
21	96		21	97		31-Oct-2011	222	FM		222
21	97		21	103		31-Oct-2011	179	FM		179
21	102		21	103		31-Oct-2011	264	FM		264
20	16		20	17		31-Oct-2011	287	FM		287
20	17		20	18		31-Oct-2011	267	FM		267

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
20	18		20	20		31-Oct-2011	263	FM		263
20	20		20	21		31-Oct-2011	105	FM		105
20	20		21	122		31-Oct-2011	222	FM		222
21	121		21	123		31-Oct-2011	291	FM		291
21	122		21	123		31-Oct-2011	46	FM		46
20	12		20	13		31-Oct-2011	284	FM		284
20	13		20	14		31-Oct-2011	337	FM		337
20	13		26	177		31-Oct-2011	338	FM		338
20	14		20	15		31-Oct-2011	333	FM		333
20	15		20	28		31-Oct-2011	334	FM		334
20	21		20	26		31-Oct-2011	211	FM		211
20	23		20	26		31-Oct-2011	305	FM		305
20	25		20	26		31-Oct-2011	298	FM		298
20	26		20	27		31-Oct-2011	114	FM		114
20	27		20	28		31-Oct-2011	325	FM		325
26	173		26	174		31-Oct-2011	289	FM		289
26	174		26	175		31-Oct-2011	239	FM		239
26	175		26	176		31-Oct-2011	339	FM		339
26	176		26	177		31-Oct-2011	350	FM		350
21	103		21	104		1-Nov-2011	292	FM		292
21	104		21	105		1-Nov-2011	323	FM		323
21	105		21	124		1-Nov-2011	326	FM		326
21	120	M	21	124		1-Nov-2011	300	FM		300
21	123		21	124		1-Nov-2011	261	FM		261
21	124		21	125		1-Nov-2011	280	FM		280
21	125		21	126		1-Nov-2011	280	FM		280
21	126		21	127		1-Nov-2011	280	FM		280
21	128		21	129		1-Nov-2011	233	FM		233
21	129		21	130	P	1-Nov-2011	235	FM		235
20	43		20	44		1-Nov-2011	333	FM		333
20	43		26	89		1-Nov-2011	372	FM		372
20	44		20	45		1-Nov-2011	332	FM		332
20	45		20	46		1-Nov-2011	331	FM		331
20	46		20	47		1-Nov-2011	335	FM		335
20	47		20	48		1-Nov-2011	323	FM		323
20	48		20	49		1-Nov-2011	328	FM		328
20	49		20	50		1-Nov-2011	330	FM		330
26	82		26	89		1-Nov-2011	201	FM		201
26	83		26	84		1-Nov-2011	296	FM		296
26	84		26	85		1-Nov-2011	234	FM		234
26	85		26	86		1-Nov-2011	168	FM		168
26	86		26	87		1-Nov-2011	170	FM		170
26	87		26	88		1-Nov-2011	288	FM		288
26	88		26	89		1-Nov-2011	318	FM		318
16	15		16	16		1-Nov-2011	216	JMR	12	216
16	16		16	17		1-Nov-2011	87	JMR	12	87
16	17		16	19		1-Nov-2011	323	JMR	12	323
16	19		16	20		1-Nov-2011	145	JMR	12	145
16	20		16	21		1-Nov-2011	276	JMR	12	276
16	21		16	22		1-Nov-2011	128	JMR	12	128

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
16	22		16	23		1-Nov-2011	195	JMR	12	195
15	172		15	173		1-Nov-2011	305	JMR	12	305
8	30		8	31		1-Nov-2011	120	JMR	12	120
21	127		21	133		2-Nov-2011	275	FM		275
20	32		20	34		2-Nov-2011	202	FM		202
20	32		21	134		2-Nov-2011	323	FM		323
20	33		20	34		2-Nov-2011	280	FM		280
20	34		20	35	M	2-Nov-2011	120	FM		120
20	35	M	20	148		2-Nov-2011	27	FM		27
20	36		20	148		2-Nov-2011	200	FM		200
21	133		21	134		2-Nov-2011	324	FM		324
20	38		20	42		2-Nov-2011	287	FM		287
20	41		20	42		2-Nov-2011	300	FM		300
20	42		20	52		2-Nov-2011	75	FM		75
20	28		20	29		2-Nov-2011	273	FM		273
20	29		20	30		2-Nov-2011	286	FM		286
20	30		20	31		2-Nov-2011	281	FM		281
20	31		20	36		2-Nov-2011	282	FM		282
20	36		20	37		2-Nov-2011	283	FM		283
20	37		20	38		2-Nov-2011	287	FM		287
20	50		20	51		2-Nov-2011	329	FM		329
20	51		20	52		2-Nov-2011	331	FM		331
10	50		10	51		15-Nov-2011	243	FM		243
10	50		10	88	D	15-Nov-2011	207	FM		207
10	51		10	52		15-Nov-2011	230	FM		230
10	52		10	53		15-Nov-2011	241	FM		241
10	81		15	7		16-Nov-2011	357	FM		357
10	82		10	83		16-Nov-2011	158	FM		158
10	83		10	84		16-Nov-2011	50	FM		50
10	84		10	85		16-Nov-2011	200	FM		200
10	85		15	12		16-Nov-2011	130	FM		130
15	9		15	10		16-Nov-2011	353	FM		353
15	12		15	13		16-Nov-2011	163	FM		163
15	13		15	14		16-Nov-2011	172	FM		172
10	75		10	76		16-Nov-2011	315	FM		315
10	75		10	87	C	16-Nov-2011	62	FM		62
10	6		10	7		16-Nov-2011	80	FM		80
10	7		10	8		16-Nov-2011	150	FM		150
10	8		10	9		16-Nov-2011	197	FM		197
10	31	C	10	32		16-Nov-2011	102	FM		102
10	32		10	33		16-Nov-2011	358	FM		358
10	33		10	35		16-Nov-2011	120	FM		120
10	34		10	35		16-Nov-2011	50	FM		50
10	35		10	36		16-Nov-2011	250	FM		250
10	36		10	86		16-Nov-2011	170	FM		170
10	37		10	38		16-Nov-2011	97	FM		97
10	37		10	86		16-Nov-2011	97	FM		97
10	38		10	40		16-Nov-2011	317	FM		317
10	39		10	40		16-Nov-2011	100	FM		100
10	40		10	41		16-Nov-2011	140	FM		140

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
10	53		10	66		16-Nov-2011	217	FM		217
10	54	C	10	55		16-Nov-2011	44	FM		44
10	55		10	56		16-Nov-2011	294	FM		294
10	56		10	57		16-Nov-2011	355	FM		355
10	57		10	58		16-Nov-2011	177	FM		177
10	58		10	59		16-Nov-2011	73	FM		73
10	59		10	66		16-Nov-2011	431	FM		431
10	60		10	62		16-Nov-2011	270	FM		270
10	62		10	63		16-Nov-2011	300	FM		300
10	63		10	64		16-Nov-2011	300	FM		300
10	64		10	65		16-Nov-2011	233	FM		233
10	65		10	66		16-Nov-2011	62	FM		62
15	14		15	15		17-Nov-2011	235	FM		235
15	15		15	16		17-Nov-2011	350	FM		350
15	16		15	17		17-Nov-2011	225	FM		225
9	130		10	11		17-Nov-2011	275	FM		275
9	130		10	12		17-Nov-2011	325	FM		325
10	9		10	10		17-Nov-2011	9	FM		9
10	10		10	11		17-Nov-2011	250	FM		250
10	13		10	14		17-Nov-2011	150	FM		150
10	14		10	15		17-Nov-2011	200	FM		200
10	15		10	19		17-Nov-2011	200	FM		200
10	16		10	17		17-Nov-2011	165	FM		165
10	17		10	18		17-Nov-2011	110	FM		110
10	18		10	19		17-Nov-2011	50	FM		50
10	19		10	20		17-Nov-2011	380	FM		380
10	20		10	21		17-Nov-2011	240	FM		240
10	21		10	22		17-Nov-2011	450	FM		450
10	22		10	23		17-Nov-2011	50	FM		50
10	23		10	24		17-Nov-2011	75	FM		75
10	24		10	25		17-Nov-2011	165	FM		165
10	25		10	26		17-Nov-2011	60	FM		60
10	26		10	27		17-Nov-2011	100	FM		100
10	27		10	28		17-Nov-2011	200	FM		200
10	28		10	29		17-Nov-2011	60	FM		60
10	29		10	30		17-Nov-2011	80	FM		80
10	30		10	42		17-Nov-2011	100	FM		100
10	41		10	42		17-Nov-2011	600	FM		600
15	128		15	129		18-Nov-2011	180	FM		180
15	129		15	131		18-Nov-2011	200	FM		200
15	130		15	131		18-Nov-2011	175	FM		175
15	131		15	132		18-Nov-2011	90	FM		90
15	132		15	133		18-Nov-2011	300	FM		300
15	133		15	134		18-Nov-2011	330	FM		330
15	134		15	135		18-Nov-2011	300	FM		300
15	135		15	176		18-Nov-2011	299	FM		299
15	136		15	176		18-Nov-2011	14	FM		14
15	142		15	143		18-Nov-2011	305	FM		305
15	142		15	177		18-Nov-2011	341	FM		341
15	177		15	178		18-Nov-2011	250	FM		250

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
15	178		15	179		18-Nov-2011	116	FM		116
15	179		15	210		18-Nov-2011	225	FM		225
10	12		10	44		18-Nov-2011	175	FM		175
10	42		10	43		18-Nov-2011	165	FM		165
10	43		10	44		18-Nov-2011	135	FM		135
10	44		10	45		18-Nov-2011	300	FM		300
10	45		10	46		18-Nov-2011	281	FM		281
10	46		10	47		18-Nov-2011	351	FM		351
10	47		10	48		18-Nov-2011	175	FM		175
10	48		10	49		18-Nov-2011	92	FM		92
10	49		10	67		18-Nov-2011	150	FM		150
10	66		10	67		18-Nov-2011	350	FM		350
15	22		15	28		22-Nov-2011	118	FM		118
15	22		16	4		22-Nov-2011	161	FM		161
15	23		15	24		22-Nov-2011	153	FM		153
15	23		16	2		22-Nov-2011	100	FM		100
15	24		15	25		22-Nov-2011	100	FM		100
15	25		15	26		22-Nov-2011	150	FM		150
15	26		15	27		22-Nov-2011	210	FM		210
15	27		15	28		22-Nov-2011	80	FM		80
15	28		15	29		22-Nov-2011	147	FM		147
15	29		15	30		22-Nov-2011	102	FM		102
15	30		15	31		22-Nov-2011	115	FM		115
15	31		15	37		22-Nov-2011	223	FM		223
15	32		15	33		22-Nov-2011	178	FM		178
15	33		15	34		22-Nov-2011	124	FM		124
15	34		15	35		22-Nov-2011	35	FM		35
15	35		15	36		22-Nov-2011	153	FM		153
15	36		15	37		22-Nov-2011	265	FM		265
15	37		15	38		22-Nov-2011	171	FM		171
15	38		15	41		22-Nov-2011	313	FM		313
15	39		15	40		22-Nov-2011	136	FM		136
15	40		15	41		22-Nov-2011	170	FM		170
15	41		15	42		22-Nov-2011	144	FM		144
15	42		15	46		22-Nov-2011	157	FM		157
15	43		15	44		22-Nov-2011	206	FM		206
15	44		15	45		22-Nov-2011	212	FM		212
15	45		15	46		22-Nov-2011	100	FM		100
15	46		15	47		22-Nov-2011	87	FM		87
15	47		15	48		22-Nov-2011	180	FM		180
15	48		15	49		22-Nov-2011	188	FM		188
15	49		15	50		22-Nov-2011	140	FM		140
15	50		15	52		22-Nov-2011	270	FM		270
15	51		15	52		22-Nov-2011	173	FM		173
15	51		15	197	C	22-Nov-2011	85	FM		85
15	71		15	72		22-Nov-2011	240	FM		240
15	72		15	73		22-Nov-2011	312	FM		312
15	73		15	74		22-Nov-2011	274	FM		274
16	1		16	2		22-Nov-2011	100	FM		100
16	3		16	4		22-Nov-2011	188	FM		188

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
15	52		15	70		23-Nov-2011	149	FM		149
15	53		15	54		23-Nov-2011	85	FM		85
15	54		15	205		23-Nov-2011	86	FM		86
15	55		15	61		23-Nov-2011	230	FM		230
15	55		15	205		23-Nov-2011	125	FM		125
15	56		15	57		23-Nov-2011	246	FM		246
15	57		15	59		23-Nov-2011	133	FM		133
15	58		15	59		23-Nov-2011	186	FM		186
15	59		15	204		23-Nov-2011	60	FM		60
15	60		15	61		23-Nov-2011	325	FM		325
15	60		15	204		23-Nov-2011	236	FM		236
15	61		15	67		23-Nov-2011	122	FM		122
15	62		15	63		23-Nov-2011	155	FM		155
15	63		15	64		23-Nov-2011	203	FM		203
15	64		15	65		23-Nov-2011	300	FM		300
15	65		15	66		23-Nov-2011	100	FM		100
15	66		15	67		23-Nov-2011	28	FM		28
15	67		15	68		23-Nov-2011	232	FM		232
15	68		15	69		23-Nov-2011	326	FM		326
15	68		15	198	C	23-Nov-2011	91	FM		91
15	69		15	70		23-Nov-2011	285	FM		285
15	69		15	202	D	23-Nov-2011	52	FM		52
15	70		15	75		23-Nov-2011	198	FM		198
15	74		15	75		23-Nov-2011	232	FM		232
15	75		15	77		23-Nov-2011	246	FM		246
15	205		15	206		23-Nov-2011	90	FM		90
15	206		15	207		23-Nov-2011	120	FM		120
15	207		15	208		23-Nov-2011	115	FM		115
15	76		15	77		23-Nov-2011	300	FM		300
15	76	A	15	199	C	23-Nov-2011	270	FM		270
15	77		15	80		23-Nov-2011	308	FM		308
15	78		15	79		23-Nov-2011	329	FM		329
15	79		15	80		23-Nov-2011	214	FM		214
15	80		15	81		23-Nov-2011	229	FM		229
9	134		10	80		23-Nov-2011	300	FM		300
10	72		10	73		23-Nov-2011	89	FM		89
14	43		14	44		23-Nov-2011	290	FM		290
14	43		14	196	C	23-Nov-2011	34	FM		34
9	126		9	127		23-Nov-2011	330	FM		330
9	126		10	67		23-Nov-2011	9126	FM		9126
9	127		9	128		23-Nov-2011	330	FM		330
9	128		9	129		23-Nov-2011	335	FM		335
9	129		14	31		23-Nov-2011	300	FM		300
14	33		14	34		23-Nov-2011	350	FM		350
14	33		14	210		23-Nov-2011	360	FM		360
14	34		14	35		23-Nov-2011	100	FM		100
14	35		14	213		23-Nov-2011	256	FM		256
9	132		14	36		28-Nov-2011	320	FM		320
10	80		15	5		28-Nov-2011	312	FM		312
15	8		15	11		30-Nov-2011	235	FM		235

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
15	10		15	11		30-Nov-2011	353	FM		353
15	11		15	18		30-Nov-2011	217	FM		217
15	17		15	18		30-Nov-2011	240	FM		240
15	18		15	19		30-Nov-2011	204	FM		204
15	19		15	21		30-Nov-2011	205	FM		205
15	20		15	21		30-Nov-2011	269	FM		269
15	21		15	83		30-Nov-2011	180	FM		180
15	81		15	82		30-Nov-2011	215	FM		215
15	82		15	83		30-Nov-2011	48	FM		48
9	133		14	37		30-Nov-2011	390	FM		390
10	73		10	74		30-Nov-2011	199	FM		199
10	74		10	78		30-Nov-2011	299	FM		299
10	76		10	77		30-Nov-2011	254	FM		254
10	77		10	78		30-Nov-2011	87	FM		87
10	78		10	79		30-Nov-2011	180	FM		180
14	36		14	42		30-Nov-2011	153	FM		153
14	37		14	38		30-Nov-2011	276	FM		276
14	38		14	40		30-Nov-2011	290	FM		290
14	39		14	40		30-Nov-2011	300	FM		300
14	39		15	6		30-Nov-2011	300	FM		300
14	40		14	41		30-Nov-2011	325	FM		325
14	41		14	42		30-Nov-2011	310	FM		310
15	3		15	4		30-Nov-2011	51	FM		51
15	4		15	6		30-Nov-2011	250	FM		250
15	5		15	6		30-Nov-2011	383	FM		383
15	83		15	84		1-Dec-2011	150	FM		150
15	84		15	85		1-Dec-2011	150	FM		150
14	46		14	47		1-Dec-2011	300	FM		300
14	46		15	90		1-Dec-2011	300	FM		300
14	47		14	48	M	1-Dec-2011	287	FM		287
15	85		15	87		1-Dec-2011	250	FM		250
15	85		15	98		1-Dec-2011	60	FM		60
15	86		15	87		1-Dec-2011	145	FM		145
15	87		15	89		1-Dec-2011	250	FM		250
15	88		15	89		1-Dec-2011	145	FM		145
15	89		15	90		1-Dec-2011	202	FM		202
14	42		14	45		1-Dec-2011	327	FM		327
14	44		14	45		1-Dec-2011	364	FM		364
14	45		14	48	M	1-Dec-2011	333	FM		333
14	35		14	52		1-Dec-2011	331	FM		331
14	48	M	14	52		1-Dec-2011	300	FM		300
14	49		14	51		1-Dec-2011	200	FM		200
14	50		14	51		1-Dec-2011	120	FM		120
14	51		14	52		1-Dec-2011	135	FM		135
14	52		14	53		1-Dec-2011	350	FM		350
14	56		14	57		1-Dec-2011	323	FM		323
14	57		15	92		1-Dec-2011	317	FM		317
15	91		15	92		1-Dec-2011	372	FM		372
15	93		15	97		1-Dec-2011	345	FM		345
15	94		15	95		1-Dec-2011	280	FM		280

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
15	95		15	96		1-Dec-2011	300	FM		300
15	96		15	97		1-Dec-2011	294	FM		294
15	98		15	99		1-Dec-2011	295	FM		295
15	99		15	100		1-Dec-2011	327	FM		327
15	97		15	102		1-Dec-2011	272	FM		272
15	100		15	102		1-Dec-2011	278	FM		278
15	101		15	102		1-Dec-2011	193	FM		193
15	102		15	105		1-Dec-2011	267	FM		267
15	103		15	105		1-Dec-2011	280	FM		280
15	104		15	105		1-Dec-2011	195	FM		195
15	171		15	172		2-Dec-2011	300	FM		300
15	172		15	173		2-Dec-2011	300	FM		300
14	57		14	58		2-Dec-2011	285	FM		285
14	60		14	61		2-Dec-2011	130	FM		130
14	60		15	109		2-Dec-2011	134	FM		134
14	61		14	62		2-Dec-2011	253	FM		253
14	61		15	108		2-Dec-2011	252	FM		252
14	59		14	62		2-Dec-2011	333	FM		333
14	62		14	63		2-Dec-2011	175	FM		175
14	63		14	64		2-Dec-2011	264	FM		264
15	105		15	108		2-Dec-2011	269	FM		269
15	107		15	203	D	2-Dec-2011	136	FM		136
15	106		15	108		2-Dec-2011	280	FM		280
15	107		15	108		2-Dec-2011	193	FM		193
16	5		16	6		5-Dec-2011	350	FM		350
16	6		16	7		5-Dec-2011	351	FM		351
16	10		16	11		5-Dec-2011	225	FM		225
16	11		16	12		5-Dec-2011	83	FM		83
16	15		16	16		5-Dec-2011	220	FM		220
16	16		16	17		5-Dec-2011	90	FM		90
16	17		16	19		5-Dec-2011	319	FM		319
16	18		16	19		5-Dec-2011	252	FM		252
16	19		16	20		5-Dec-2011	145	FM		145
16	20		16	21		5-Dec-2011	275	FM		275
16	21		16	22		5-Dec-2011	134	FM		134
16	24		16	25		5-Dec-2011	265	FM		265
16	25		16	26		5-Dec-2011	293	FM		293
16	26		16	27		5-Dec-2011	150	FM		150
16	27		16	28		5-Dec-2011	150	FM		150
16	28		16	29		5-Dec-2011	122	FM		122
16	31		23	13		5-Dec-2011	200	FM		200
16	33		16	34		5-Dec-2011	139	FM		139
16	36		16	37		5-Dec-2011	113	FM		113
16	36		23	10		5-Dec-2011	202	FM		202
23	3		23	4		5-Dec-2011	84	FM		84
23	4		23	5		5-Dec-2011	256	FM		256
23	5		23	6		5-Dec-2011	152	FM		152
23	7		23	8		5-Dec-2011	194	FM		194
23	8		23	10		5-Dec-2011	303	FM		303
23	9		23	10		5-Dec-2011	367	FM		367

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
23	11		23	13		5-Dec-2011	160	FM		160
23	12		23	13		5-Dec-2011	185	FM		185
23	14	C	23	17		5-Dec-2011	134	FM		134
23	15		23	16		5-Dec-2011	250	FM		250
23	16		23	17		5-Dec-2011	303	FM		303
25	22		25	23		5-Dec-2011	349	JM	12	349
7	118		7	121		5-Dec-2011	292	JM	12	292
7	120		7	121		5-Dec-2011	396	JM	12	396
8	50		8	51		5-Dec-2011	192	JM	12	192
22	81		23	2		6-Dec-2011	140	FM		140
22	81		22	82		6-Dec-2011	123	FM		123
22	82		22	83		6-Dec-2011	175	FM		175
22	83		22	84		6-Dec-2011	110	FM		110
22	83		22	85		6-Dec-2011	115	FM		115
22	85		22	86		6-Dec-2011	115	FM		115
22	86		22	88		6-Dec-2011	43	FM		43
22	87		22	88		6-Dec-2011	165	FM		165
22	88		22	89		6-Dec-2011	190	FM		190
22	89		22	90		6-Dec-2011	186	FM		186
22	90		22	91		6-Dec-2011	121	FM		121
23	1		23	2		6-Dec-2011	102	FM		102
22	1		22	2		6-Dec-2011	267	FM		267
22	2		22	9		6-Dec-2011	350	FM		350
22	3		22	4		6-Dec-2011	342	FM		342
22	4		22	7		6-Dec-2011	122	FM		122
22	5		22	6		6-Dec-2011	133	FM		133
22	6		22	7		6-Dec-2011	290	FM		290
22	6		22	94	D	6-Dec-2011	105	FM		105
22	7		22	8		6-Dec-2011	161	FM		161
22	8		22	9		6-Dec-2011	262	FM		262
22	9		22	12		6-Dec-2011	337	FM		337
22	11		22	12		6-Dec-2011	244	FM		244
22	11		22	96		6-Dec-2011	82	FM		82
22	12		22	15		6-Dec-2011	303	FM		303
22	13		22	14		6-Dec-2011	245	FM		245
22	14		22	15		6-Dec-2011	307	FM		307
22	15		22	18		6-Dec-2011	200	FM		200
22	16		22	17		6-Dec-2011	344	FM		344
22	16		22	92	D	6-Dec-2011	54	FM		54
22	17		22	18		6-Dec-2011	60	FM		60
22	18		22	19		6-Dec-2011	252	FM		252
22	19		22	20		6-Dec-2011	278	FM		278
22	96		22	97		6-Dec-2011	170	FM		170
22	97		22	98		6-Dec-2011	40	FM		40
22	98		22	99		6-Dec-2011	124	FM		124
8	195		13	1		6-Dec-2011	356	FM		356
13	1		13	2		6-Dec-2011	350	FM		350
13	2		13	3		6-Dec-2011	321	FM		321
13	3		13	212	C	6-Dec-2011	245	FM		245
14	209	D	14	218		6-Dec-2011	45	FM		45

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
14	31		14	32		7-Dec-2011	362	FM		362
14	32		14	33		7-Dec-2011	109	FM		109
21	28		22	33		7-Dec-2011	155	FM		155
21	28		21	29		7-Dec-2011	342	FM		342
21	29		21	30		7-Dec-2011	270	FM		270
21	30		21	31		7-Dec-2011	346	FM		346
21	31		21	32		7-Dec-2011	340	FM		340
22	24		22	25		7-Dec-2011	180	FM		180
22	25		22	26		7-Dec-2011	275	FM		275
22	26		22	27		7-Dec-2011	275	FM		275
22	28		22	29		7-Dec-2011	347	FM		347
22	27		22	31		7-Dec-2011	220	FM		220
22	29		22	31		7-Dec-2011	347	FM		347
22	30		22	31		7-Dec-2011	216	FM		216
22	31		22	33		7-Dec-2011	320	FM		320
22	32		22	33		7-Dec-2011	185	FM		185
21	44		21	45		7-Dec-2011	310	FM		310
21	44		22	45		7-Dec-2011	308	FM		308
21	45		21	46		7-Dec-2011	309	FM		309
21	46		21	47		7-Dec-2011	40	FM		40
21	47		21	48		7-Dec-2011	289	FM		289
22	39		22	40		7-Dec-2011	332	FM		332
22	40		22	41		7-Dec-2011	339	FM		339
22	41		22	42		7-Dec-2011	200	FM		200
22	42		22	100		7-Dec-2011	130	FM		130
22	43		22	100		7-Dec-2011	112	FM		112
22	43		22	101		7-Dec-2011	130	FM		130
22	44		22	45		7-Dec-2011	310	FM		310
22	44		22	101		7-Dec-2011	190	FM		190
21	15		22	38		8-Dec-2011	294	FM		294
21	15		21	16		8-Dec-2011	293	FM		293
21	16		21	17		8-Dec-2011	292	FM		292
21	17		21	20		8-Dec-2011	222	FM		222
21	17		21	143	D	8-Dec-2011	224	FM		224
21	18		22	36		8-Dec-2011	287	FM		287
21	18		21	19		8-Dec-2011	284	FM		284
21	19		21	20		8-Dec-2011	318	FM		318
21	20		21	21		8-Dec-2011	79	FM		79
21	21		21	22		8-Dec-2011	175	FM		175
21	22		21	23		8-Dec-2011	176	FM		176
21	23		21	24		8-Dec-2011	92	FM		92
22	34		22	35		8-Dec-2011	112	FM		112
22	35		22	36		8-Dec-2011	287	FM		287
22	37		22	38		8-Dec-2011	292	FM		292
21	25		21	26		12-Dec-2011	300	FM		300
21	24		21	27		12-Dec-2011	140	FM		140
21	26		21	27		12-Dec-2011	120	FM		120
21	7		21	33		12-Dec-2011	375	FM		375
21	27		21	33		12-Dec-2011	350	FM		350
21	32		21	33		12-Dec-2011	333	FM		333

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
21	49		21	50		12-Dec-2011	320	FM		320
21	50		21	51		12-Dec-2011	200	FM		200
21	48		21	52		12-Dec-2011	342	FM		342
21	51		21	52		12-Dec-2011	300	FM		300
21	33		21	34		14-Dec-2011	350	FM		350
21	34		21	35		14-Dec-2011	315	FM		315
21	35		21	38		14-Dec-2011	310	FM		310
21	36		21	144		14-Dec-2011	191	FM		191
21	37		21	38		14-Dec-2011	352	FM		352
21	37		21	144		14-Dec-2011	160	FM		160
21	38		21	39		14-Dec-2011	310	FM		310
21	39		21	40		14-Dec-2011	300	FM		300
21	52		21	53		14-Dec-2011	262	FM		262
21	53		21	54		14-Dec-2011	266	FM		266
21	54		21	145		14-Dec-2011	210	FM		210
21	55		21	57		14-Dec-2011	79	FM		79
21	55		21	145		14-Dec-2011	125	FM		125
21	56		21	57		14-Dec-2011	350	FM		350
21	57		21	58		14-Dec-2011	247	FM		247
21	58		21	59		14-Dec-2011	330	FM		330
20	134		21	59		14-Dec-2011	350	FM		350
20	134		20	135		14-Dec-2011	360	FM		360
20	135		20	136	M	14-Dec-2011	80	FM		80
20	136	M	21	43		14-Dec-2011	300	FM		300
21	41		21	42		14-Dec-2011	250	FM		250
21	42		21	43		14-Dec-2011	283	FM		283
20	136	M	20	137		14-Dec-2011	463	FM		463
20	137		21	40		14-Dec-2011	300	FM		300
16	7		16	8		15-Dec-2011	83	FM		83
16	8		16	9		15-Dec-2011	200	FM		200
16	9		16	13		15-Dec-2011	200	FM		200
16	12		16	13		15-Dec-2011	201	FM		201
16	13		16	14		15-Dec-2011	327	FM		327
16	14		16	23		15-Dec-2011	299	FM		299
16	22		16	23		15-Dec-2011	194	FM		194
16	23		16	30		15-Dec-2011	240	FM		240
16	23		23	17		15-Dec-2011	148	FM		148
16	29		16	30		15-Dec-2011	125	FM		125
16	30		16	32		15-Dec-2011	343	FM		343
16	31		16	32		15-Dec-2011	50	FM		50
14	96		14	97		15-Dec-2011	161	FM		161
14	96		15	127		15-Dec-2011	317	FM		317
14	97		14	101		15-Dec-2011	21	FM		21
14	98		14	99		15-Dec-2011	95	FM		95
14	99		14	100		15-Dec-2011	106	FM		106
14	99		14	190	D	15-Dec-2011	30	FM		30
14	100		14	101		15-Dec-2011	257	FM		257
14	101		14	102		15-Dec-2011	330	FM		330
14	102		14	103		15-Dec-2011	330	FM		330
14	103		14	104		15-Dec-2011	328	FM		328

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
14	104		14	110		15-Dec-2011	36	FM		36
14	105		14	106		15-Dec-2011	307	FM		307
14	107		14	109		15-Dec-2011	285	FM		285
15	125		15	126		15-Dec-2011	200	FM		200
15	125		15	209	D	15-Dec-2011	106	FM		106
15	126		15	127		15-Dec-2011	322	FM		322
14	119		14	120		16-Dec-2011	155	FM		155
14	115		14	116		16-Dec-2011	309	FM		309
14	115		14	195	C	16-Dec-2011	192	FM		192
14	116		14	117	P	16-Dec-2011	415	FM		415
14	120		14	121		16-Dec-2011	140	FM		140
14	121		14	216		16-Dec-2011	262	FM		262
14	122		14	123		16-Dec-2011	389	FM		389
14	122		14	216		16-Dec-2011	101	FM		101
13	41		13	42		16-Dec-2011	250	FM		250
13	42		13	43		16-Dec-2011	293	FM		293
13	43		13	46		16-Dec-2011	313	FM		313
13	45		13	46		16-Dec-2011	300	FM		300
16	32		16	35		19-Dec-2011	343	FM		343
16	34		16	35		19-Dec-2011	102	FM		102
16	35		16	41	D	19-Dec-2011	97	FM		97
15	136		15	140		19-Dec-2011	300	FM		300
15	137		15	139		19-Dec-2011	150	FM		150
15	138		15	139		19-Dec-2011	215	FM		215
15	139		15	140		19-Dec-2011	195	FM		195
15	140		15	141		19-Dec-2011	130	FM		130
15	141		15	180		19-Dec-2011	141	FM		141
15	143		15	148		19-Dec-2011	350	FM		350
15	144		15	145		19-Dec-2011	300	FM		300
15	145		15	147		19-Dec-2011	355	FM		355
15	146		15	147		19-Dec-2011	313	FM		313
15	147		15	148		19-Dec-2011	350	FM		350
15	148		15	180		19-Dec-2011	212	FM		212
14	138		14	139		19-Dec-2011	245	FM		245
14	138		15	153		19-Dec-2011	350	FM		350
15	152		15	153		19-Dec-2011	351	FM		351
13	46		13	47		19-Dec-2011	325	FM		325
15	162		15	163		20-Dec-2011	298	FM		298
15	163		15	164		20-Dec-2011	332	FM		332
15	164		15	165		20-Dec-2011	70	FM		70
15	165		15	166		20-Dec-2011	301	FM		301
15	166		15	167		20-Dec-2011	296	FM		296
15	165		22	91		20-Dec-2011	100	FM		100
16	35		16	38		20-Dec-2011	146	FM		146
16	37		16	38		20-Dec-2011	50	FM		50
16	37		23	6		20-Dec-2011	160	FM		160
16	38		16	39		20-Dec-2011	241	FM		241
16	39		16	40		20-Dec-2011	198	FM		198
15	162		16	40		20-Dec-2011	290	FM		290
15	110		15	111		20-Dec-2011	172	FM		172

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
15	111		15	112		20-Dec-2011	200	FM		200
15	113		15	114		20-Dec-2011	200	FM		200
15	112		15	115		20-Dec-2011	66	FM		66
15	114		15	115		20-Dec-2011	50	FM		50
14	64		14	78		3-Jan-2012	347	FM		347
14	65		14	66		3-Jan-2012	291	FM		291
14	66		14	67		3-Jan-2012	170	FM		170
14	66		15	124		3-Jan-2012	330	FM		330
14	67		14	68		3-Jan-2012	325	FM		325
14	68		14	77		3-Jan-2012	351	FM		351
14	69		14	70		3-Jan-2012	247	FM		247
14	70		14	71		3-Jan-2012	145	FM		145
14	72		14	73		3-Jan-2012	350	FM		350
14	71		14	73		3-Jan-2012	145	FM		145
14	73		14	75		3-Jan-2012	266	FM		266
14	74		14	75		3-Jan-2012	263	FM		263
14	75		14	76		3-Jan-2012	155	FM		155
14	76		14	77		3-Jan-2012	156	FM		156
14	77		14	201	S	3-Jan-2012	145	FM		145
15	123		15	124		3-Jan-2012	261	FM		261
14	79		14	217		3-Jan-2012	195	FM		195
14	81	S	14	217		3-Jan-2012	65	FM		65
26	122		26	123		3-Jan-2012	276	JM	12	276
25	145		25	146		3-Jan-2012	256	JM	12	256
24	112		24	113		3-Jan-2012	115	JM	12	115
24	113		24	114		3-Jan-2012	355	JM	12	355
24	114		24	115		3-Jan-2012	199	JM	12	199
19	67		19	68		3-Jan-2012	377	JM	12	377
24	156		24	157		3-Jan-2012	177	JM	12	177
19	91		19	92		3-Jan-2012	347	JM	12	347
15	157		15	158		3-Jan-2012	220	JM	12	220
15	158		15	161		3-Jan-2012	265	JM	12	265
15	159		15	160		3-Jan-2012	268	JM	12	268
15	160		15	161		3-Jan-2012	273	JM	12	273
14	102		14	103		3-Jan-2012	332	JM	12	332
14	103		14	104		3-Jan-2012	334	JM	12	334
10	32		10	33		3-Jan-2012	400	JM	6	800
10	36		10	86		3-Jan-2012	180	JM	6	360
10	53		10	66		3-Jan-2012	207	JM	6	414
10	56		10	57		3-Jan-2012	384	JM	6	768
13	151		13	152		3-Jan-2012	302	JM	12	302
9	117		9	118		3-Jan-2012	299	JM	12	299
9	119		9	121		3-Jan-2012	336	JM	12	336
8	187		8	188		3-Jan-2012	400	JM	6	800
3	115		7	18		3-Jan-2012	152	JM	6	304
7	16		7	17		3-Jan-2012	92	JM	6	184
7	17		7	18		3-Jan-2012	287	JM	6	574
6	78		6	79		3-Jan-2012	291	JM	12	291
7	19		7	20		3-Jan-2012	78	JM	6	156
4	81		4	82		3-Jan-2012	248	JM	6	496

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
4	82		4	124	C	3-Jan-2012	186	JM	6	372
3	44		3	45		3-Jan-2012	90	JM	6	180
3	82		4	89		3-Jan-2012	400	JM	6	800
14	53		14	54		4-Jan-2012	360	FM		360
14	54		14	55		4-Jan-2012	330	FM		330
14	83		14	84		4-Jan-2012	322	FM		322
14	84		14	86		4-Jan-2012	318	FM		318
14	85		14	86		4-Jan-2012	352	FM		352
14	85		14	208	D	4-Jan-2012	268	FM		268
14	86		14	87		4-Jan-2012	161	FM		161
14	87		14	89		4-Jan-2012	160	FM		160
14	88		14	197		4-Jan-2012	268	FM		268
14	88		14	89		4-Jan-2012	352	FM		352
14	89		14	198		4-Jan-2012	279	FM		279
14	55		14	90		4-Jan-2012	330	FM		330
14	89		14	90		4-Jan-2012	175	FM		175
14	90		14	91		4-Jan-2012	330	FM		330
14	91		14	222		4-Jan-2012	138	FM		138
14	92		14	93		4-Jan-2012	332	FM		332
14	92		14	222		4-Jan-2012	195	FM		195
14	93		14	94		4-Jan-2012	323	FM		323
7	1		7	2		9-Jan-2012	220	FM		220
15	167		15	168		13-Jan-2012	74	FM		74
15	168		15	169		13-Jan-2012	241	FM		241
15	169		15	170		13-Jan-2012	246	FM		246
15	170		15	175		13-Jan-2012	254	FM		254
15	173		15	174		13-Jan-2012	127	FM		127
15	148		15	149		13-Jan-2012	354	FM		354
15	149		15	150		13-Jan-2012	350	FM		350
15	150		15	151		13-Jan-2012	314	FM		314
14	140		15	151		13-Jan-2012	342	FM		342
14	143		14	144		13-Jan-2012	308	FM		308
14	143		14	203	C	13-Jan-2012	293	FM		293
14	144		14	204		13-Jan-2012	284	FM		284
14	140		14	141		17-Jan-2012	285	FM		285
14	141		14	142		17-Jan-2012	22	FM		22
14	142		14	145		17-Jan-2012	298	FM		298
14	142		14	214	C	17-Jan-2012	301	FM		301
14	144		14	145		17-Jan-2012	3	FM		3
14	145		14	146	M	17-Jan-2012	332	FM		332
14	157		14	160		17-Jan-2012	277	FM		277
14	157		15	161		17-Jan-2012	300	FM		300
14	158		14	159		17-Jan-2012	286	FM		286
14	159		14	160		17-Jan-2012	291	FM		291
14	160		14	162		17-Jan-2012	160	FM		160
14	161		14	162		17-Jan-2012	343	FM		343
14	161		14	193	C	17-Jan-2012	314	FM		314
14	163		14	164		17-Jan-2012	339	FM		339
14	163		14	192	C	17-Jan-2012	214	FM		214
14	164		14	165		17-Jan-2012	165	FM		165

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
14	165		14	167		17-Jan-2012	320	FM		320
14	165		14	194		17-Jan-2012	343	FM		343
14	166		14	167		17-Jan-2012	300	FM		300
14	167		14	168		17-Jan-2012	28	FM		28
15	154		15	155		17-Jan-2012	210	FM		210
15	155		15	156		17-Jan-2012	270	FM		270
15	156		15	157		17-Jan-2012	145	FM		145
15	157		15	158		17-Jan-2012	130	FM		130
15	158		15	161		17-Jan-2012	225	FM		225
15	159		15	160		17-Jan-2012	291	FM		291
15	160		15	161		17-Jan-2012	280	FM		280
14	94		14	95		17-Jan-2012	200	FM		200
12	5		12	138	D	17-Jan-2012	13	FM		13
14	124		14	125		18-Jan-2012	525	FM		525
14	125		14	126		18-Jan-2012	390	FM		390
14	126		14	127		18-Jan-2012	350	FM		350
14	128		14	129		18-Jan-2012	182	FM		182
14	129		14	130		18-Jan-2012	293	FM		293
14	130		14	131		18-Jan-2012	362	FM		362
14	131		14	132		18-Jan-2012	357	FM		357
14	133		14	134		18-Jan-2012	182	FM		182
14	134		14	135		18-Jan-2012	293	FM		293
14	135		14	136		18-Jan-2012	380	FM		380
14	136		14	137		18-Jan-2012	407	FM		407
13	89		13	95		18-Jan-2012	260	FM		260
13	89		14	189		18-Jan-2012	325	FM		325
13	90		13	95		18-Jan-2012	290	FM		290
13	93		13	94		18-Jan-2012	300	FM		300
13	94		13	96		18-Jan-2012	175	FM		175
13	96		13	97		18-Jan-2012	260	FM		260
14	177		14	178		18-Jan-2012	287	FM		287
14	178		14	179		18-Jan-2012	280	FM		280
14	179		14	180		18-Jan-2012	200	FM		200
14	180		14	181		18-Jan-2012	200	FM		200
14	181		14	182		18-Jan-2012	280	FM		280
13	93		14	182		18-Jan-2012	255	FM		255
14	183		14	184		18-Jan-2012	81	FM		81
14	184		14	185		18-Jan-2012	132	FM		132
14	185		14	186		18-Jan-2012	350	FM		350
14	186		14	187		18-Jan-2012	180	FM		180
14	187		14	211		18-Jan-2012	275	FM		275
14	187		14	188		18-Jan-2012	175	FM		175
14	188		14	189		18-Jan-2012	373	FM		373
22	20		22	21		19-Jan-2012	280	FM		280
15	175		22	21		19-Jan-2012	150	FM		150
21	1		21	2		19-Jan-2012	331	FM		331
21	2		21	142		19-Jan-2012	360	FM		360
21	1		22	23		19-Jan-2012	360	FM		360
21	2		21	3		19-Jan-2012	308	FM		308
21	3		21	4		19-Jan-2012	310	FM		310

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
21	4		21	5		19-Jan-2012	320	FM		320
22	21		22	22		19-Jan-2012	350	FM		350
22	22		22	23		19-Jan-2012	350	FM		350
20	122		20	123		19-Jan-2012	350	FM		350
20	123		20	124		19-Jan-2012	400	FM		400
20	124		20	125		19-Jan-2012	150	FM		150
20	126		20	147		19-Jan-2012	70	FM		70
20	126		20	127		19-Jan-2012	250	FM		250
20	127		20	128		19-Jan-2012	226	FM		226
20	128		20	129		19-Jan-2012	250	FM		250
20	125		20	130		19-Jan-2012	125	FM		125
20	129		20	130		19-Jan-2012	150	FM		150
8	117		8	120		19-Jan-2012	218	FM		218
6	80		6	84		19-Jan-2012	344	FM		344
6	81		6	82		19-Jan-2012	120	FM		120
6	82		6	83		19-Jan-2012	251	FM		251
6	83		6	84		19-Jan-2012	225	FM		225
6	86		6	87		19-Jan-2012	178	FM		178
6	87		6	88		19-Jan-2012	288	FM		288
6	88		6	89		19-Jan-2012	100	FM		100
20	114		20	115		23-Jan-2012	300	FM		300
20	115		20	116		23-Jan-2012	300	FM		300
20	116		20	117		23-Jan-2012	274	FM		274
20	117		20	145	D	23-Jan-2012	142	FM		142
20	117		20	118		23-Jan-2012	400	FM		400
20	130		20	131		23-Jan-2012	178	FM		178
20	131		20	132		23-Jan-2012	125	FM		125
20	132		20	133		23-Jan-2012	277	FM		277
7	97		7	98		23-Jan-2012	346	FM		346
7	98		7	99		23-Jan-2012	138	FM		138
7	99		7	100		23-Jan-2012	180	FM		180
7	100		7	101		23-Jan-2012	66	FM		66
7	101		7	210		23-Jan-2012	59	FM		59
7	210		7	211		23-Jan-2012	91	FM		91
7	211		7	212		23-Jan-2012	20	FM		20
14	168		14	170		24-Jan-2012	314	FM		314
14	169		14	215		24-Jan-2012	161	FM		161
14	169		21	6		24-Jan-2012	322	FM		322
14	170		14	171		24-Jan-2012	370	FM		370
14	170		14	215		24-Jan-2012	184	FM		184
13	56		14	176		24-Jan-2012	250	FM		250
14	171		14	199		24-Jan-2012	240	FM		240
14	172		14	173		24-Jan-2012	280	FM		280
14	172		14	199		24-Jan-2012	248	FM		248
14	173		14	174		24-Jan-2012	203	FM		203
14	174		14	175		24-Jan-2012	204	FM		204
14	175		14	176		24-Jan-2012	284	FM		284
20	137		20	138	P	24-Jan-2012	350	FM		350
21	6		21	7		24-Jan-2012	51	FM		51
20	118		20	121		24-Jan-2012	369	FM		369

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
20	9	C	20	119		24-Jan-2012	140	FM		140
20	119		20	120		24-Jan-2012	302	FM		302
20	120		20	121		24-Jan-2012	310	FM		310
20	133		20	140	P	24-Jan-2012	433	FM		433
6	85		6	92		24-Jan-2012	225	FM		225
6	89		6	92		24-Jan-2012	247	FM		247
6	90		6	91		24-Jan-2012	218	FM		218
6	91		6	92		24-Jan-2012	308	FM		308
6	92		6	97		24-Jan-2012	205	FM		205
6	93		6	94		24-Jan-2012	298	FM		298
6	94		6	97		24-Jan-2012	202	FM		202
6	95		6	96		24-Jan-2012	350	FM		350
6	96		6	97		24-Jan-2012	275	FM		275
6	97		6	98		24-Jan-2012	195	FM		195
6	98		6	101		24-Jan-2012	120	FM		120
6	100		6	101		24-Jan-2012	300	FM		300
6	101		6	102		24-Jan-2012	123	FM		123
6	103		6	104		24-Jan-2012	352	FM		352
6	105		7	193	C	24-Jan-2012	256	FM		256
6	102		6	106		24-Jan-2012	47	FM		47
6	104		6	106		24-Jan-2012	421	FM		421
6	105		6	106		24-Jan-2012	352	FM		352
7	102		7	103		24-Jan-2012	350	FM		350
7	102		7	212		24-Jan-2012	140	FM		140
6	95		7	115		24-Jan-2012	190	FM		190
20	141		21	14		25-Jan-2012	300	FM		300
20	141	M	20	142		25-Jan-2012	330	FM		330
21	7		21	9		25-Jan-2012	160	FM		160
21	8		21	9		25-Jan-2012	240	FM		240
21	12		21	137	C	25-Jan-2012	144	FM		144
21	13		21	14		25-Jan-2012	350	FM		350
20	121		20	144		25-Jan-2012	106	FM		106
13	88		13	91		25-Jan-2012	33	FM		33
13	92	T	13	98		25-Jan-2012	512	FM		512
13	97		13	98		25-Jan-2012	93	FM		93
13	98		13	99		25-Jan-2012	510	FM		510
13	99		13	100		25-Jan-2012	418	FM		418
13	131		13	207	D	25-Jan-2012	45	FM		45
13	133		13	134		25-Jan-2012	128	FM		128
13	135		13	136		25-Jan-2012	286	FM		286
13	134		13	137		25-Jan-2012	22	FM		22
13	136		13	137		25-Jan-2012	288	FM		288
9	107		9	138	D	25-Jan-2012	3	FM		3
14	146	M	14	147		26-Jan-2012	354	FM		354
14	147		14	148		26-Jan-2012	178	FM		178
14	148		14	171		26-Jan-2012	175	FM		175
13	58		14	154		26-Jan-2012	200	FM		200
14	148		14	149		26-Jan-2012	350	FM		350
14	149		14	151		26-Jan-2012	304	FM		304
14	151		14	152		26-Jan-2012	300	FM		300

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
14	152		14	153		26-Jan-2012	300	FM		300
14	153		14	154		26-Jan-2012	300	FM		300
13	55		13	57		26-Jan-2012	175	FM		175
13	56		13	57		26-Jan-2012	210	FM		210
13	57		13	60		26-Jan-2012	223	FM		223
13	59		13	60		26-Jan-2012	119	FM		119
13	60		13	61		26-Jan-2012	327	FM		327
13	61		13	62		26-Jan-2012	199	FM		199
13	61		14	137		26-Jan-2012	392	FM		392
13	62		13	63		26-Jan-2012	189	FM		189
13	63		13	64		26-Jan-2012	186	FM		186
13	64		13	65		26-Jan-2012	226	FM		226
13	64		14	127		26-Jan-2012	383	FM		383
13	65		13	66		26-Jan-2012	200	FM		200
13	54	M	13	68		26-Jan-2012	100	FM		100
13	66		13	67		26-Jan-2012	325	FM		325
13	66		14	123		26-Jan-2012	383	FM		383
13	67		13	68		26-Jan-2012	100	FM		100
14	58		14	59		26-Jan-2012	330	FM		330
13	53		13	54	M	26-Jan-2012	310	FM		310
13	101		13	103		26-Jan-2012	370	FM		370
13	103		13	105		26-Jan-2012	367	FM		367
13	126		13	127		26-Jan-2012	305	FM		305
13	127		13	128		26-Jan-2012	305	FM		305
13	128		13	129		26-Jan-2012	275	FM		275
13	128		13	211		26-Jan-2012	360	FM		360
6	69		6	70		26-Jan-2012	325	FM		325
6	70		6	71		26-Jan-2012	375	FM		375
6	106		6	111		26-Jan-2012	175	FM		175
6	107		6	108		26-Jan-2012	315	FM		315
6	108		6	109		26-Jan-2012	311	FM		311
6	110		7	114		26-Jan-2012	300	FM		300
6	109		6	111		26-Jan-2012	311	FM		311
6	110		6	111		26-Jan-2012	338	FM		338
6	112		7	113		26-Jan-2012	309	FM		309
7	112		7	113		26-Jan-2012	305	FM		305
6	114		7	96		26-Jan-2012	290	FM		290
6	116		7	93		26-Jan-2012	254	FM		254
7	92		7	93		26-Jan-2012	270	FM		270
7	94		7	95		26-Jan-2012	246	FM		246
7	95		7	96		26-Jan-2012	307	FM		307
7	103		7	105		26-Jan-2012	205	FM		205
7	104		7	105		26-Jan-2012	265	FM		265
7	105		7	107		26-Jan-2012	170	FM		170
7	106		7	107		26-Jan-2012	145	FM		145
7	107		7	108		26-Jan-2012	300	FM		300
7	108		7	109		26-Jan-2012	280	FM		280
7	109		7	110		26-Jan-2012	146	FM		146
7	111		7	112		26-Jan-2012	250	FM		250
7	110		7	112		26-Jan-2012	153	FM		153

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
13	100		13	106		27-Jan-2012	372	FM		372
13	84		13	106		27-Jan-2012	185	FM		185
13	70		13	72		27-Jan-2012	184	FM		184
13	70		13	209	D	27-Jan-2012	50	FM		50
13	71		13	72	P	27-Jan-2012	439	FM		439
13	72	P	13	74		27-Jan-2012	387	FM		387
13	73		13	74		27-Jan-2012	405	FM		405
13	74		13	75		27-Jan-2012	185	FM		185
13	76		13	77		27-Jan-2012	385	FM		385
13	77		13	78		27-Jan-2012	32	FM		32
13	68		13	69		30-Jan-2012	250	FM		250
13	78		13	79		30-Jan-2012	222	FM		222
13	79		13	82		30-Jan-2012	181	FM		181
13	81		13	82		30-Jan-2012	25	FM		25
13	82		13	83		30-Jan-2012	348	FM		348
13	85		13	107		30-Jan-2012	180	FM		180
13	80		13	81		30-Jan-2012	408	FM		408
13	83		13	86		30-Jan-2012	27	FM		27
13	85		13	86		30-Jan-2012	361	FM		361
13	69		13	87		30-Jan-2012	350	FM		350
13	87		13	110		30-Jan-2012	100	FM		100
13	107		13	121		30-Jan-2012	157	FM		157
13	121		13	122		30-Jan-2012	137	FM		137
13	122		13	123		30-Jan-2012	362	FM		362
13	124		13	125		30-Jan-2012	300	FM		300
13	124		13	197	C	30-Jan-2012	120	FM		120
13	123		13	125		30-Jan-2012	163	FM		163
13	125		13	130		30-Jan-2012	300	FM		300
13	129		13	130		30-Jan-2012	283	FM		283
13	137		13	138		30-Jan-2012	245	FM		245
13	138		13	205		30-Jan-2012	105	FM		105
13	138		13	139		30-Jan-2012	295	FM		295
13	139		13	140		30-Jan-2012	150	FM		150
13	140		13	141		30-Jan-2012	95	FM		95
13	141		13	142		30-Jan-2012	100	FM		100
13	142		13	143		30-Jan-2012	240	FM		240
13	143		13	144		30-Jan-2012	223	FM		223
13	144		13	145		30-Jan-2012	336	FM		336
13	147		13	148		30-Jan-2012	305	FM		305
13	151		13	152		30-Jan-2012	304	FM		304
13	110		13	111		31-Jan-2012	300	FM		300
13	111		13	112		31-Jan-2012	48	FM		48
13	112		13	113		31-Jan-2012	58	FM		58
13	113		13	114		31-Jan-2012	150	FM		150
13	102		13	117		31-Jan-2012	200	FM		200
13	102		13	118		31-Jan-2012	250	FM		250
13	114		13	115		31-Jan-2012	188	FM		188
13	115		13	116		31-Jan-2012	234	FM		234
13	116		13	117		31-Jan-2012	72	FM		72
13	118		13	119		31-Jan-2012	600	FM		600

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
13	130		13	146		31-Jan-2012	326	FM		326
13	146		13	149		31-Jan-2012	141	FM		141
13	148		13	149		31-Jan-2012	295	FM		295
13	149		13	150		31-Jan-2012	288	FM		288
13	150		13	153		31-Jan-2012	122	FM		122
13	152		13	153		31-Jan-2012	300	FM		300
13	153		13	162		31-Jan-2012	186	FM		186
13	154		13	155		31-Jan-2012	180	FM		180
13	155		13	156		31-Jan-2012	214	FM		214
13	156		13	158		31-Jan-2012	300	FM		300
13	156		13	182		31-Jan-2012	47	FM		47
13	157		13	158		31-Jan-2012	265	FM		265
13	158		13	200	S	31-Jan-2012	253	FM		253
13	159	S	13	215		31-Jan-2012	130	FM		130
13	160		13	161		31-Jan-2012	280	FM		280
13	160		13	215		31-Jan-2012	30	FM		30
13	161		13	162		31-Jan-2012	277	FM		277
13	163		13	164		31-Jan-2012	302	FM		302
13	164		13	165		31-Jan-2012	288	FM		288
13	162		13	166		31-Jan-2012	306	FM		306
13	165		13	166		31-Jan-2012	140	FM		140
12	32		12	33		31-Jan-2012	212	FM		212
12	32		12	142	C	31-Jan-2012	93	FM		93
12	33		12	34		31-Jan-2012	180	FM		180
14	80	S	14	81	S	1-Feb-2012	52	FM	3	208
13	120		13	168		1-Feb-2012	332	FM		332
13	49		13	167	P	1-Feb-2012	9	FM		9
12	38		13	168		1-Feb-2012	590	FM		590
12	34		12	37		1-Feb-2012	345	FM		345
12	35		12	36		1-Feb-2012	372	FM		372
12	36		12	37		1-Feb-2012	213	FM		213
12	38		12	39		1-Feb-2012	102	FM		102
12	39		12	40		1-Feb-2012	12040	FM		12040
12	40		12	41	S	1-Feb-2012	300	FM		300
12	132		12	133	P	1-Feb-2012	460	FM		460
12	133	P	12	134		1-Feb-2012	275	FM		275
12	134		12	135		1-Feb-2012	415	FM		415
20	50		20	51		1-Feb-2012	322	JM	12	322
8	72		9	1		1-Feb-2012	355	JM	12	355
9	2		9	3		1-Feb-2012	204	JM	12	204
9	4		9	5		1-Feb-2012	237	JM	12	237
9	36		10	1		1-Feb-2012	304	JM	6	608
9	61		9	62		1-Feb-2012	160	JM	6	320
9	62		9	63		1-Feb-2012	350	JM	6	700
9	65		9	66		1-Feb-2012	200	JM	12	200
7	20		8	33		1-Feb-2012	274	JM	6	548
3	94	C	3	97		1-Feb-2012	170	JM	6	340
3	18		3	19		1-Feb-2012	350	JM	6	700
12	42	S	12	108		2-Feb-2012	42	FM		42
12	43		12	44		2-Feb-2012	200	FM		200

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
12	43	S	12	108		2-Feb-2012	53	FM		53
12	44		12	145		2-Feb-2012	127	FM		127
12	129		12	145		2-Feb-2012	153	FM		153
12	45		12	129		2-Feb-2012	320	FM		320
12	45		12	46		2-Feb-2012	240	FM		240
12	46		12	47		2-Feb-2012	300	FM		300
12	47		12	48		2-Feb-2012	256	FM		256
12	48		12	49		2-Feb-2012	375	FM		375
12	49		12	113		2-Feb-2012	600	FM		600
12	104		12	144		2-Feb-2012	143	FM		143
12	104		12	106	M	2-Feb-2012	275	FM		275
12	106	M	12	107	M	2-Feb-2012	415	FM		415
12	99		12	144		2-Feb-2012	335	FM		335
12	107	M	12	111		2-Feb-2012	405	FM		405
12	111		12	112		2-Feb-2012	80	FM		80
12	112		12	113		2-Feb-2012	480	FM		480
8	5	P	8	6	P	6-Feb-2012	116	FM	3	464
8	6	P	8	7	P	6-Feb-2012	100	FM	3	400
8	7	P	8	8	P	6-Feb-2012	241	FM	3	964
4	74	P	4	139	P	6-Feb-2012	175	FM	3	700
4	75	P	4	139	P	6-Feb-2012	120	FM	3	480
4	75	P	4	77	P	6-Feb-2012	125	FM	3	500
4	76	P	4	147	C	6-Feb-2012	81	FM	3	324
4	76	P	4	77	P	6-Feb-2012	102	FM	3	408
4	76	P	4	156	C	6-Feb-2012	102	FM	3	408
4	77	P	4	78	P	6-Feb-2012	90	FM	3	360
4	78	P	4	81		6-Feb-2012	85	FM	3	340
3	101		3	102		6-Feb-2012	102	FM	3	408
3	105	P	4	32	P	6-Feb-2012	350	FM	3	1400
4	32		4	33		6-Feb-2012	280	FM	3	1120
4	33		4	35		6-Feb-2012	338	FM	3	1352
2	37		2	38		7-Feb-2012	228	FM		228
2	38		2	40		7-Feb-2012	243	FM		243
2	39		2	40		7-Feb-2012	281	FM		281
2	40		2	41		7-Feb-2012	273	FM		273
2	41		2	42		7-Feb-2012	318	FM		318
2	42		2	43		7-Feb-2012	180	FM		180
2	43		2	44		7-Feb-2012	400	FM		400
2	49		2	50		7-Feb-2012	155	FM		155
2	49		6	19		7-Feb-2012	300	FM		300
2	50		2	51		7-Feb-2012	200	FM		200
1	6		5	109		7-Feb-2012	363	FM		363
1	6		1	8		7-Feb-2012	359	FM		359
1	7		1	8		7-Feb-2012	105	FM		105
1	8		1	9		7-Feb-2012	150	FM		150
1	9		1	11		7-Feb-2012	200	FM		200
1	10		5	103		7-Feb-2012	309	FM		309
1	10		1	11		7-Feb-2012	211	FM		211
1	11		1	12		7-Feb-2012	200	FM		200
2	73		2	74		7-Feb-2012	300	FM		300

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
5	99		5	100		7-Feb-2012	258	FM		258
5	100		5	101		7-Feb-2012	305	FM		305
5	101		5	102		7-Feb-2012	265	FM		265
5	102		5	103		7-Feb-2012	294	FM		294
5	104		5	106		7-Feb-2012	298	FM		298
5	105		5	106		7-Feb-2012	115	FM		115
5	106		5	107		7-Feb-2012	350	FM		350
5	107		5	108		7-Feb-2012	350	FM		350
5	108		5	109		7-Feb-2012	250	FM		250
6	5		6	6		7-Feb-2012	350	FM		350
6	6		6	152	C	7-Feb-2012	62	FM		62
6	6		6	7		7-Feb-2012	45	FM		45
6	7		6	8		7-Feb-2012	141	FM		141
6	8		6	9		7-Feb-2012	85	FM		85
6	7		6	148	C	7-Feb-2012	175	FM		175
6	9		6	10		7-Feb-2012	275	FM		275
6	10		6	11		7-Feb-2012	130	FM		130
6	11		6	14		7-Feb-2012	247	FM		247
6	12		6	13		7-Feb-2012	270	FM		270
6	13		6	14		7-Feb-2012	301	FM		301
6	14		6	17		7-Feb-2012	268	FM		268
6	15		6	16		7-Feb-2012	343	FM		343
6	15		6	149	C	7-Feb-2012	140	FM		140
6	16		6	17		7-Feb-2012	289	FM		289
6	17		6	18		7-Feb-2012	295	FM		295
2	73		6	18		7-Feb-2012	314	FM		314
12	113		12	114		8-Feb-2012	475	FM		475
2	13		3	127		8-Feb-2012	200	FM		200
2	13		2	14		8-Feb-2012	300	FM		300
2	51		2	53		8-Feb-2012	175	FM		175
2	52		2	53		8-Feb-2012	65	FM		65
2	53		2	54		8-Feb-2012	250	FM		250
2	54		2	55		8-Feb-2012	219	FM		219
2	55		2	58		8-Feb-2012	274	FM		274
2	56		2	57		8-Feb-2012	200	FM		200
2	57		2	58		8-Feb-2012	174	FM		174
2	58		2	61		8-Feb-2012	267	FM		267
2	59		2	60		8-Feb-2012	157	FM		157
2	60		2	61		8-Feb-2012	200	FM		200
2	61		2	62		8-Feb-2012	200	FM		200
2	62		2	63		8-Feb-2012	325	FM		325
2	63		2	65		8-Feb-2012	205	FM		205
2	64		2	65		8-Feb-2012	112	FM		112
2	65		2	66		8-Feb-2012	350	FM		350
2	66		2	67		8-Feb-2012	100	FM		100
3	125		3	126		8-Feb-2012	186	FM		186
3	126		3	127		8-Feb-2012	265	FM		265
3	161		3	162	D	8-Feb-2012		FM		
3	162		3	164		8-Feb-2012	125	FM		125
3	164		3	165		8-Feb-2012	325	FM		325

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
3	165		3	166		8-Feb-2012	300	FM		300
1	14		5	111		8-Feb-2012	350	FM		350
1	14		1	15		8-Feb-2012	332	FM		332
1	15		1	16		8-Feb-2012	355	FM		355
1	16		1	17		8-Feb-2012	175	FM		175
1	18		1	19		8-Feb-2012	320	FM		320
2	79		2	80		8-Feb-2012	225	FM		225
2	80		2	81		8-Feb-2012	200	FM		200
2	81		2	82		8-Feb-2012	350	FM		350
2	82		2	83		8-Feb-2012	353	FM		353
5	110		6	1		8-Feb-2012	330	FM		330
5	110		5	111		8-Feb-2012	239	FM		239
12	79	P	12	81	P	10-Feb-2012	330	FM	3	1320
2	11		2	12		13-Feb-2012	200	FM		200
2	11		3	163		13-Feb-2012		FM		
2	14		2	15		13-Feb-2012	318	FM		318
2	12		2	15		13-Feb-2012	236	FM		236
2	15		2	16		13-Feb-2012	306	FM		306
2	16		2	17		13-Feb-2012	293	FM		293
2	17		2	18		13-Feb-2012	150	FM		150
2	18		2	36		13-Feb-2012	200	FM		200
2	19		2	20		13-Feb-2012	124	FM		124
2	20		2	21		13-Feb-2012	200	FM		200
2	21		2	22		13-Feb-2012	200	FM		200
2	22		2	23		13-Feb-2012	61	FM		61
2	23		2	24		13-Feb-2012	127	FM		127
2	25		2	26		13-Feb-2012	175	FM		175
2	24		2	26		13-Feb-2012	200	FM		200
2	26		2	85	D	13-Feb-2012	100	FM		100
2	26		2	27		13-Feb-2012	200	FM		200
2	27		2	29		13-Feb-2012	250	FM		250
2	28		2	29		13-Feb-2012	220	FM		220
2	29		2	30		13-Feb-2012	250	FM		250
2	30		2	31		13-Feb-2012	250	FM		250
2	31		2	32		13-Feb-2012	150	FM		150
2	31		2	87	C	13-Feb-2012	75	FM		75
2	32		2	33		13-Feb-2012	125	FM		125
2	33	P	2	34		13-Feb-2012	100	FM		100
2	34		2	35		13-Feb-2012	115	FM		115
2	35		2	36		13-Feb-2012	150	FM		150
2	36		2	45		13-Feb-2012	100	FM		100
2	44		2	45		13-Feb-2012	200	FM		200
2	45		2	46		13-Feb-2012	175	FM		175
2	46		2	47		13-Feb-2012	337	FM		337
3	140		3	141		13-Feb-2012	194	FM		194
3	139		3	159		13-Feb-2012	149	FM		149
3	140		3	159		13-Feb-2012	156	FM		156
3	153		3	154	C	13-Feb-2012	123	FM		123
3	155		3	156	C	13-Feb-2012	136	FM		136
3	152		3	153		13-Feb-2012	174	FM		174

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
3	152		3	155		13-Feb-2012	136	FM		136
3	140		3	142		13-Feb-2012	345	FM		345
3	142		3	152		13-Feb-2012	161	FM		161
3	150		3	151		13-Feb-2012	208	FM		208
3	149		3	150		13-Feb-2012	108	FM		108
3	148		3	149		13-Feb-2012	106	FM		106
3	147		3	148		13-Feb-2012	104	FM		104
3	146		3	147		13-Feb-2012	119	FM		119
3	145		3	146		13-Feb-2012	108	FM		108
3	144		3	145		13-Feb-2012	106	FM		106
3	143		3	144		13-Feb-2012	107	FM		107
3	142		3	143		13-Feb-2012	101	FM		101
3	142		3	160		13-Feb-2012	206	FM		206
3	157		3	158	D	13-Feb-2012	25	FM		25
3	157		3	160		13-Feb-2012	120	FM		120
3	157		3	161		13-Feb-2012	135	FM		135
3	157		3	163		13-Feb-2012	105	FM		105
6	42		6	43		14-Feb-2012	300	FM		300
6	43		6	44		14-Feb-2012	239	FM		239
6	44		6	45		14-Feb-2012	355	FM		355
6	45		6	46		14-Feb-2012	52	FM		52
6	46		6	47		14-Feb-2012	83	FM		83
6	48		6	50		14-Feb-2012	263	FM		263
6	49		6	50		14-Feb-2012	250	FM		250
6	50		6	51		14-Feb-2012	250	FM		250
6	51		6	52		14-Feb-2012	200	FM		200
6	51		6	150	C	14-Feb-2012	115	FM		115
6	52		6	54		14-Feb-2012	317	FM		317
6	53		6	54		14-Feb-2012	150	FM		150
6	54		6	55		14-Feb-2012	366	FM		366
6	55		6	56		14-Feb-2012	105	FM		105
6	56		6	57		14-Feb-2012	225	FM		225
6	57		6	58		14-Feb-2012	135	FM		135
6	58		6	151		14-Feb-2012	200	FM		200
1	20		1	21		14-Feb-2012	353	FM		353
1	20		2	84		14-Feb-2012	359	FM		359
1	21		1	22		14-Feb-2012	245	FM		245
1	22		1	23		14-Feb-2012	300	FM		300
1	19		1	23		14-Feb-2012	355	FM		355
1	23		1	25		14-Feb-2012	298	FM		298
1	24		1	25		14-Feb-2012	221	FM		221
1	23		2	83		14-Feb-2012	354	FM		354
2	84		6	4		14-Feb-2012	350	FM		350
2	89		2	90		14-Feb-2012	70	FM		70
2	90		2	91		14-Feb-2012	600	FM		600
2	91		2	92		14-Feb-2012	250	FM		250
2	92		2	93		14-Feb-2012	83	FM		83
2	93		2	94		14-Feb-2012	110	FM		110
2	94		2	95		14-Feb-2012	360	FM		360
6	2		6	3		14-Feb-2012	300	FM		300

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
6	3		6	4		14-Feb-2012	354	FM		354
1	29		1	30		14-Feb-2012	300	FM		300
1	31		1	32		14-Feb-2012	200	FM		200
1	32		1	33		14-Feb-2012	353	FM		353
1	33		1	120		14-Feb-2012	203	FM		203
1	34		1	35		14-Feb-2012	348	FM		348
1	34		1	120		14-Feb-2012	128	FM		128
1	35		1	38		14-Feb-2012	342	FM		342
1	36		1	37		14-Feb-2012	350	FM		350
1	36		1	114	C	14-Feb-2012	176	FM		176
1	37		1	38		14-Feb-2012	272	FM		272
1	38		1	39		14-Feb-2012	320	FM		320
1	30		1	39		14-Feb-2012	204	FM		204
1	39		1	40		14-Feb-2012	200	FM		200
6	47		6	59		15-Feb-2012	350	FM		350
6	58		6	59		15-Feb-2012	271	FM		271
6	59		6	60		15-Feb-2012	200	FM		200
6	60		6	67		15-Feb-2012	200	FM		200
6	61		6	62		15-Feb-2012	333	FM		333
6	62		6	63		15-Feb-2012	200	FM		200
6	63		6	64		15-Feb-2012	341	FM		341
6	64		6	65		15-Feb-2012	375	FM		375
6	65		6	66		15-Feb-2012	240	FM		240
6	66		6	67		15-Feb-2012	156	FM		156
6	67		6	68		15-Feb-2012	200	FM		200
6	71		6	72		15-Feb-2012	321	FM		321
6	68		6	72		15-Feb-2012	200	FM		200
6	72		6	74		15-Feb-2012	320	FM		320
6	73		6	74		15-Feb-2012	315	FM		315
6	74		6	76		15-Feb-2012	260	FM		260
6	75		6	76		15-Feb-2012	350	FM		350
6	76		6	77		15-Feb-2012	325	FM		325
6	77		6	78		15-Feb-2012	300	FM		300
6	78		6	79		15-Feb-2012	300	FM		300
6	79		6	121		15-Feb-2012	300	FM		300
6	111		6	113		15-Feb-2012	325	FM		325
6	112		6	113		15-Feb-2012	310	FM		310
6	114		6	115		15-Feb-2012	297	FM		297
6	113		6	115		15-Feb-2012	265	FM		265
6	115		6	117		15-Feb-2012	261	FM		261
6	116		6	117		15-Feb-2012	238	FM		238
6	118		7	91		15-Feb-2012	320	FM		320
6	117		6	119		15-Feb-2012	350	FM		350
6	118		6	119		15-Feb-2012	320	FM		320
6	119		6	120		15-Feb-2012	200	FM		200
6	120		6	121		15-Feb-2012	200	FM		200
7	88		7	89		15-Feb-2012	212	FM		212
7	89		7	90		15-Feb-2012	220	FM		220
7	90		7	91		15-Feb-2012	276	FM		276
7	90		7	194	C	15-Feb-2012	75	FM		75

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
2	47		2	48		15-Feb-2012	300	FM		300
2	48		2	68		15-Feb-2012	300	FM		300
2	67		2	68		15-Feb-2012	277	FM		277
2	68		2	69		15-Feb-2012	344	FM		344
1	4		1	5		15-Feb-2012	60	FM		60
1	4		2	69		15-Feb-2012	330	FM		330
1	25		1	26		15-Feb-2012	133	FM		133
1	26		1	27		15-Feb-2012	150	FM		150
1	5		1	27		15-Feb-2012	300	FM		300
1	27		1	28		15-Feb-2012	242	FM		242
1	28		1	40		15-Feb-2012	300	FM		300
1	5		2	10		15-Feb-2012	200	FM		200
2	10		2	89		15-Feb-2012	325	FM		325
1	40		1	41		15-Feb-2012	375	FM		375
1	41		1	42		15-Feb-2012	223	FM		223
1	42		1	43		15-Feb-2012	267	FM		267
1	43		1	44		15-Feb-2012	142	FM		142
1	45		1	46		15-Feb-2012	88	FM		88
1	46		1	47		15-Feb-2012	88	FM		88
1	47		1	48		15-Feb-2012	233	FM		233
1	48		1	49		15-Feb-2012	232	FM		232
1	50		1	51		15-Feb-2012	68	FM		68
1	51		1	52		15-Feb-2012	99	FM		99
1	52		1	53		15-Feb-2012	120	FM		120
1	53		1	54		15-Feb-2012	90	FM		90
1	54		1	55		15-Feb-2012	102	FM		102
1	55		1	56		15-Feb-2012	152	FM		152
1	56		1	57		15-Feb-2012	136	FM		136
1	49		1	58		15-Feb-2012	225	FM		225
1	57		1	58		15-Feb-2012	155	FM		155
1	58		1	60		15-Feb-2012	179	FM		179
1	59		1	60		15-Feb-2012	140	FM		140
1	61		1	62		15-Feb-2012	98	FM		98
1	62		1	63		15-Feb-2012	220	FM		220
1	60		1	64		15-Feb-2012	226	FM		226
1	63		1	64		15-Feb-2012	76	FM		76
1	64		1	65		15-Feb-2012	100	FM		100
1	65		1	66		15-Feb-2012	75	FM		75
7	82		7	83		16-Feb-2012	230	FM		230
7	83		7	84		16-Feb-2012	240	FM		240
7	84		7	85		16-Feb-2012	253	FM		253
7	85		7	86		16-Feb-2012	290	FM		290
12	1	C	12	2		16-Feb-2012	270	FM		270
12	2		12	3		16-Feb-2012	292	FM		292
1	44		1	67		16-Feb-2012	50	FM		50
1	66		1	67		16-Feb-2012	85	FM		85
1	67		1	68		16-Feb-2012	401	FM		401
1	82		1	83		16-Feb-2012	157	FM		157
1	86		1	87		16-Feb-2012	230	FM		230
1	87		1	88		16-Feb-2012	297	FM		297

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
1	88		1	89		16-Feb-2012	200	FM		200
1	89		1	91		16-Feb-2012	100	FM		100
1	90		1	91		16-Feb-2012	91	FM		91
1	91		1	92		16-Feb-2012	256	FM		256
1	92		1	93		16-Feb-2012	304	FM		304
1	93		1	94		16-Feb-2012	232	FM		232
1	94		1	95		16-Feb-2012	190	FM		190
1	95		1	96		16-Feb-2012	152	FM		152
1	68		1	69		16-Feb-2012	50	FM		50
1	69		1	70		16-Feb-2012	360	FM		360
1	70		1	71		16-Feb-2012	325	FM		325
6	121		6	123		21-Feb-2012	300	FM		300
6	122		6	123		21-Feb-2012	280	FM		280
6	123		6	124		21-Feb-2012	300	FM		300
6	124		6	125		21-Feb-2012	300	FM		300
6	126		7	87		21-Feb-2012	300	FM		300
6	126		6	127		21-Feb-2012	300	FM		300
7	86		7	87		21-Feb-2012	300	FM		300
11	52		11	53		21-Feb-2012	190	FM		190
11	53		11	54		21-Feb-2012	295	FM		295
11	53		12	3		21-Feb-2012	300	FM		300
11	55		11	56		21-Feb-2012	195	FM		195
11	56		11	57		21-Feb-2012	195	FM		195
11	54		11	58		21-Feb-2012	300	FM		300
11	57		11	58		21-Feb-2012	110	FM		110
11	58		11	59		21-Feb-2012	300	FM		300
12	118		12	119		21-Feb-2012	310	FM		310
1	73	C	1	117		21-Feb-2012	15	FM		15
1	74		1	117		21-Feb-2012	100	FM		100
1	72		1	75		21-Feb-2012	115	FM		115
1	74		1	75		21-Feb-2012	150	FM		150
1	75		1	76		21-Feb-2012	102	FM		102
1	76		1	77		21-Feb-2012	95	FM		95
1	77		1	78		21-Feb-2012	182	FM		182
1	78		1	79		21-Feb-2012	180	FM		180
1	79		1	80		21-Feb-2012	212	FM		212
1	80		1	81		21-Feb-2012	216	FM		216
1	81		1	84		21-Feb-2012	216	FM		216
1	83		1	84		21-Feb-2012	171	FM		171
1	84		1	85		21-Feb-2012	118	FM		118
1	96		1	97		21-Feb-2012	150	FM		150
1	85		1	98		21-Feb-2012	224	FM		224
1	97		1	98		21-Feb-2012	28	FM		28
1	98		1	99		21-Feb-2012	198	FM		198
1	99		1	100		21-Feb-2012	87	FM		87
1	117		1	118	C	21-Feb-2012	140	FM		140
1	71		1	102		21-Feb-2012	325	FM		325
1	100		1	101		21-Feb-2012	335	FM		335
1	101		1	102		21-Feb-2012	272	FM		272
1	102		1	115		21-Feb-2012	52	FM		52

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
1	103		1	115		21-Feb-2012	342	FM		342
1	103		1	104		21-Feb-2012	374	FM		374
1	104		1	105		21-Feb-2012	300	FM		300
1	105		1	106		21-Feb-2012	306	FM		306
1	106		1	107		21-Feb-2012	355	FM		355
1	107		1	108		21-Feb-2012	344	FM		344
34	1		35	1		22-Feb-2012	315	FM		315
34	1		35	2		22-Feb-2012	250	FM		250
35	2		35	4		22-Feb-2012	275	FM		275
35	3		35	4		22-Feb-2012	176	FM		176
35	4		35	5		22-Feb-2012	230	FM		230
35	5		35	12		22-Feb-2012	350	FM		350
35	6		35	7		22-Feb-2012	352	FM		352
35	7		35	10		22-Feb-2012	345	FM		345
35	8		35	9		22-Feb-2012	317	FM		317
35	9		35	10		22-Feb-2012	300	FM		300
35	10		35	11		22-Feb-2012	174	FM		174
35	11		35	12		22-Feb-2012	222	FM		222
35	12		35	13		22-Feb-2012	323	FM		323
35	13		35	15		22-Feb-2012	210	FM		210
35	14		35	15		22-Feb-2012	310	FM		310
35	15		35	16		22-Feb-2012	124	FM		124
35	16		35	17		22-Feb-2012	320	FM		320
35	17		35	18		22-Feb-2012	320	FM		320
35	18		35	36		22-Feb-2012	320	FM		320
35	19		35	20		22-Feb-2012	230	FM		230
35	20		35	22		22-Feb-2012	235	FM		235
35	21		35	22		22-Feb-2012	340	FM		340
35	22		35	23		22-Feb-2012	225	FM		225
35	23		35	31		22-Feb-2012	125	FM		125
35	24		35	25		22-Feb-2012	297	FM		297
35	25		35	26		22-Feb-2012	303	FM		303
35	26		35	27		22-Feb-2012	187	FM		187
35	27		35	28		22-Feb-2012	350	FM		350
35	28		35	29		22-Feb-2012	225	FM		225
35	29		35	30		22-Feb-2012	150	FM		150
35	30		35	31		22-Feb-2012	159	FM		159
35	31		35	34		22-Feb-2012	110	FM		110
35	32		35	33		22-Feb-2012	350	FM		350
35	33		35	34		22-Feb-2012	340	FM		340
35	34		35	35		22-Feb-2012	270	FM		270
35	35		35	36		22-Feb-2012	275	FM		275
35	35		35	40		22-Feb-2012	40	FM		40
35	36		35	37		22-Feb-2012	125	FM		125
35	37		35	38		22-Feb-2012	250	FM		250
35	38		35	43		22-Feb-2012	125	FM		125
35	39		35	43		22-Feb-2012	125	FM		125
35	40		35	41		22-Feb-2012	118	FM		118
35	41		35	42		22-Feb-2012	349	FM		349
35	43		35	44		22-Feb-2012	133	FM		133

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
35	44		35	45	C	22-Feb-2012	162	FM		162
6	125		6	128		22-Feb-2012	290	FM		290
6	127		6	128		22-Feb-2012	300	FM		300
6	128		6	129	M	22-Feb-2012	206	FM		206
6	129	M	6	130		22-Feb-2012	200	FM		200
6	131		11	68		22-Feb-2012	188	FM		188
6	131		6	153	D	22-Feb-2012	292	FM		292
11	68		11	69		22-Feb-2012	45	FM		45
6	130		11	70		22-Feb-2012	237	FM		237
11	69		11	70		22-Feb-2012	115	FM		115
11	69		11	71		22-Feb-2012	250	FM		250
11	71		11	72		22-Feb-2012	215	FM		215
12	119		12	120		22-Feb-2012	300	FM		300
12	114		12	120	M	22-Feb-2012	414	FM		414
12	117	P	12	120	M	22-Feb-2012	15	FM	3	60
11	60		12	120		22-Feb-2012	405	FM		405
11	61		11	80	D	22-Feb-2012	85	FM		85
11	60		11	62		22-Feb-2012	183	FM		183
11	61		11	62		22-Feb-2012	360	FM		360
11	62		11	63		22-Feb-2012	220	FM		220
11	63		11	64		22-Feb-2012	146	FM		146
11	64		11	65		22-Feb-2012	400	FM		400
11	65		11	66		22-Feb-2012	350	FM		350
11	66		11	81		22-Feb-2012	398	FM		398
11	67		11	82		22-Feb-2012	235	FM		235
11	81		11	82		22-Feb-2012	169	FM		169
11	72		11	73	M	22-Feb-2012	185	FM		185
11	73	M	11	74		22-Feb-2012	221	FM		221
11	74		11	75		22-Feb-2012	130	FM		130
11	75		11	76		22-Feb-2012	363	FM		363
30	21		30	22		23-Feb-2012	185	FM		185
30	22		31	2		23-Feb-2012	326	FM		326
31	1		31	2		23-Feb-2012	190	FM		190
31	3		31	4		23-Feb-2012	338	FM		338
31	3		35	39		23-Feb-2012	250	FM		250
31	3		35	46		23-Feb-2012	78	FM		78
31	4		31	6		23-Feb-2012	151	FM		151
31	5		31	6		23-Feb-2012	294	FM		294
31	6		31	7		23-Feb-2012	172	FM		172
31	7		31	9		23-Feb-2012	175	FM		175
31	8		31	9		23-Feb-2012	300	FM		300
31	9		31	10		23-Feb-2012	125	FM		125
31	10		31	37		23-Feb-2012	140	FM		140
31	11		31	15		23-Feb-2012	230	FM		230
31	11		31	37		23-Feb-2012	215	FM		215
31	12		31	14		23-Feb-2012	82	FM		82
31	12		31	42		23-Feb-2012	110	FM		110
31	13		31	14		23-Feb-2012	203	FM		203
31	14		31	15		23-Feb-2012	200	FM		200
31	42		31	43		23-Feb-2012	114	FM		114

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
31	37		31	38		23-Feb-2012	190	FM		190
31	43		31	44		23-Feb-2012	173	FM		173
31	44		31	45		23-Feb-2012	202	FM		202
31	44		31	48		23-Feb-2012	165	FM		165
31	45		31	46		23-Feb-2012	300	FM		300
31	46		31	47		23-Feb-2012	350	FM		350
31	48		31	49		23-Feb-2012	276	FM		276
34	5		34	6		23-Feb-2012	72	FM		72
34	6		34	7		23-Feb-2012	70	FM		70
34	7		34	8		23-Feb-2012	125	FM		125
34	7		34	31		23-Feb-2012	55	FM		55
34	8		34	9		23-Feb-2012	181	FM		181
34	9		34	10		23-Feb-2012	133	FM		133
34	10		34	11		23-Feb-2012	160	FM		160
34	11		34	12		23-Feb-2012	161	FM		161
34	12		34	13		23-Feb-2012	161	FM		161
34	13		34	14		23-Feb-2012	86	FM		86
34	14		34	15		23-Feb-2012	54	FM		54
34	15		34	16		23-Feb-2012	81	FM		81
34	15		34	20		23-Feb-2012	158	FM		158
34	16		34	17		23-Feb-2012	215	FM		215
34	17		34	18		23-Feb-2012	155	FM		155
34	18		34	19		23-Feb-2012	147	FM		147
34	20		34	21		23-Feb-2012	207	FM		207
34	21		34	22		23-Feb-2012	156	FM		156
34	31		34	32		23-Feb-2012	255	FM		255
34	34		34	35		23-Feb-2012		FM		
34	35		34	36		23-Feb-2012		FM		
11	11		11	12		23-Feb-2012	175	FM		175
11	12		11	83		23-Feb-2012	325	FM		325
11	13		11	83		23-Feb-2012	27	FM		27
11	13		11	14		23-Feb-2012	309	FM		309
11	18		11	33		23-Feb-2012	337	FM		337
11	33		11	34		23-Feb-2012	345	FM		345
11	34		11	35		23-Feb-2012	335	FM		335
11	35		11	36		23-Feb-2012	335	FM		335
11	37		11	38		23-Feb-2012	254	FM		254
11	38		11	39		23-Feb-2012	300	FM		300
11	39		11	40		23-Feb-2012	275	FM		275
11	40		11	41		23-Feb-2012	242	FM		242
11	36		11	41		23-Feb-2012	300	FM		300
11	41		11	79		23-Feb-2012	29	FM		29
11	44		37	20		23-Feb-2012	359	FM		359
11	44		11	45		23-Feb-2012	337	FM		337
11	45		11	46		23-Feb-2012	410	FM		410
11	46		11	47		23-Feb-2012	250	FM		250
37	18		37	123	D	23-Feb-2012	350	FM		350
37	18		37	19		23-Feb-2012	408	FM		408
37	19		37	20		23-Feb-2012	331	FM		331
31	2		31	16		24-Feb-2012	211	FM		211

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
31	15		31	16		24-Feb-2012	205	FM		205
31	16		31	17		24-Feb-2012	282	FM		282
31	16		31	35		24-Feb-2012	300	FM		300
31	35		31	36		24-Feb-2012	297	FM		297
31	36		31	40		24-Feb-2012	200	FM		200
31	41		31	43		24-Feb-2012	164	FM		164
31	41		35	47		24-Feb-2012	121	FM		121
31	40		31	42		24-Feb-2012	407	FM		407
34	2		34	3		24-Feb-2012	300	FM		300
34	2		35	47		24-Feb-2012	290	FM		290
34	3		34	4		24-Feb-2012	300	FM		300
34	4		34	33		24-Feb-2012	250	FM		250
34	5		34	23		24-Feb-2012	300	FM		300
34	23		34	24		24-Feb-2012	295	FM		295
34	23		34	33		24-Feb-2012	50	FM		50
34	24		34	25		24-Feb-2012	297	FM		297
34	26		34	27		24-Feb-2012	160	FM		160
34	27		34	28		24-Feb-2012	65	FM		65
34	27		34	29		24-Feb-2012	74	FM		74
34	28		34	30		24-Feb-2012	64	FM		64
34	33		34	34		24-Feb-2012		FM		
31	17		31	18		24-Feb-2012	217	FM		217
31	18		31	19		24-Feb-2012	223	FM		223
31	19		31	50		24-Feb-2012	142	FM		142
37	5		37	6		24-Feb-2012	80	FM		80
37	5		37	22	D	24-Feb-2012	38	FM		38
37	6		37	7		24-Feb-2012	80	FM		80
37	8		37	21	D	24-Feb-2012	230	FM		230
37	8		37	9		24-Feb-2012	300	FM		300
37	9		37	10		24-Feb-2012	300	FM		300
37	10		37	11		24-Feb-2012	342	FM		342
37	11		37	12		24-Feb-2012	360	FM		360
37	7		37	13		24-Feb-2012	170	FM		170
37	12		37	13		24-Feb-2012	365	FM		365
37	13		37	28		24-Feb-2012	200	FM		200
37	26		37	27		24-Feb-2012	200	FM		200
37	27		37	28		24-Feb-2012	200	FM		200
31	19		31	20		27-Feb-2012	265	FM		265
31	20		31	21		27-Feb-2012	235	FM		235
31	21		31	22		27-Feb-2012	295	FM		295
31	22		31	23		27-Feb-2012	352	FM		352
31	23		31	24		27-Feb-2012	352	FM		352
31	24		31	25		27-Feb-2012	350	FM		350
25	170		25	202		27-Feb-2012	204	FM		204
25	170		26	7		27-Feb-2012	180	FM		180
25	171		26	5		27-Feb-2012	315	FM		315
25	172		25	173		27-Feb-2012	119	FM		119
25	172		30	23		27-Feb-2012	350	FM		350
25	173		25	176		27-Feb-2012	213	FM		213
25	174		25	175		27-Feb-2012	200	FM		200

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
25	175		25	176		27-Feb-2012	200	FM		200
25	176		25	177		27-Feb-2012	125	FM		125
25	177		25	178		27-Feb-2012	188	FM		188
25	178		26	3		27-Feb-2012	190	FM		190
25	179		25	180		27-Feb-2012	173	FM		173
25	180		25	181		27-Feb-2012	197	FM		197
25	181		25	182		27-Feb-2012	230	FM		230
25	182		26	1		27-Feb-2012	202	FM		202
25	182		30	12		27-Feb-2012	360	FM		360
30	8		30	9		27-Feb-2012	323	FM		323
30	9		30	10		27-Feb-2012	251	FM		251
30	10		30	12		27-Feb-2012	236	FM		236
30	11		30	12		27-Feb-2012	240	FM		240
30	13		30	14		27-Feb-2012	323	FM		323
30	13		30	24	C	27-Feb-2012	50	FM		50
30	14		30	15		27-Feb-2012	295	FM		295
30	15		30	16		27-Feb-2012	353	FM		353
30	16		30	17		27-Feb-2012	325	FM		325
30	17		30	18		27-Feb-2012	303	FM		303
30	18		30	19		27-Feb-2012	269	FM		269
30	19		30	20		27-Feb-2012	255	FM		255
30	20		31	27		27-Feb-2012	255	FM		255
31	25		31	26		27-Feb-2012	441	FM		441
31	26		31	27		27-Feb-2012	126	FM		126
31	27		31	28		27-Feb-2012	151	FM		151
25	162		25	163		27-Feb-2012	271	FM		271
25	163		25	166		27-Feb-2012	212	FM		212
25	164		25	166		27-Feb-2012	100	FM		100
25	165		25	166		27-Feb-2012	325	FM		325
25	166		25	167		27-Feb-2012	217	FM		217
25	167		25	168		27-Feb-2012	208	FM		208
1	110		1	111		27-Feb-2012	212	FM		212
1	111		1	112		27-Feb-2012	300	FM		300
1	112		1	113		27-Feb-2012	348	FM		348
1	113		1	116	D	27-Feb-2012	205	FM		205
1	113		5	13		27-Feb-2012	300	FM		300
5	1		5	2		27-Feb-2012	300	FM		300
5	3		5	4		27-Feb-2012	265	FM		265
5	2		5	5		27-Feb-2012	319	FM		319
5	4		5	5		27-Feb-2012	300	FM		300
5	5		5	6		27-Feb-2012	150	FM		150
5	6		5	7		27-Feb-2012	88	FM		88
5	8		5	9		27-Feb-2012	280	FM		280
5	7		5	10		27-Feb-2012	150	FM		150
5	9		5	10		27-Feb-2012	300	FM		300
5	10		5	11		27-Feb-2012	270	FM		270
5	11		5	12		27-Feb-2012	240	FM		240
5	12		5	13		27-Feb-2012	345	FM		345
5	13		5	15		27-Feb-2012	375	FM		375
5	14		5	15		27-Feb-2012	300	FM		300

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
5	15		5	17		27-Feb-2012	300	FM		300
5	16		5	17		27-Feb-2012	275	FM		275
5	17		5	19		27-Feb-2012	300	FM		300
5	18		5	19		27-Feb-2012	255	FM		255
5	19		5	20		27-Feb-2012	346	FM		346
5	20		5	22		27-Feb-2012	46	FM		46
5	21		5	22		27-Feb-2012	245	FM		245
5	22		5	152		27-Feb-2012	121	FM		121
5	23		5	152		27-Feb-2012	130	FM		130
5	149		5	150		27-Feb-2012	218	FM		218
5	150		5	151		27-Feb-2012	172	FM		172
26	1		26	2		28-Feb-2012	300	FM		300
26	2		26	4		28-Feb-2012	260	FM		260
26	2		31	30		28-Feb-2012	230	FM		230
26	3		26	4		28-Feb-2012	249	FM		249
26	4		26	6		28-Feb-2012	300	FM		300
26	5		26	6		28-Feb-2012	300	FM		300
26	6		26	8		28-Feb-2012	290	FM		290
26	7		26	8		28-Feb-2012	300	FM		300
26	8		26	9		28-Feb-2012	200	FM		200
31	28		31	29		28-Feb-2012	335	FM		335
31	29		31	30		28-Feb-2012	228	FM		228
26	20		26	21		28-Feb-2012	178	FM		178
26	21		26	22		28-Feb-2012	138	FM		138
26	22		26	23		28-Feb-2012	306	FM		306
26	23		26	24		28-Feb-2012	300	FM		300
26	24		26	25		28-Feb-2012	300	FM		300
26	27		26	28		28-Feb-2012	164	FM		164
26	30		26	31		28-Feb-2012	245	FM		245
26	31		26	32		28-Feb-2012	300	FM		300
31	31		31	52		28-Feb-2012	69	FM		69
31	52		31	53		28-Feb-2012	81	FM		81
31	53		31	54		28-Feb-2012	71	FM		71
31	54		31	55		28-Feb-2012	54	FM		54
31	55		31	56		28-Feb-2012	185	FM		185
31	56		31	57		28-Feb-2012	250	FM		250
31	57		31	58		28-Feb-2012	286	FM		286
31	58		31	59		28-Feb-2012	232	FM		232
31	59		31	60		28-Feb-2012	232	FM		232
31	60		31	61		28-Feb-2012	229	FM		229
31	61		31	62	D	28-Feb-2012	10	FM		10
25	158		25	159		28-Feb-2012	233	FM		233
25	159		25	160		28-Feb-2012	305	FM		305
25	160		26	40		28-Feb-2012	300	FM		300
25	161		25	168		28-Feb-2012	130	FM		130
25	168		25	169		28-Feb-2012	330	FM		330
25	169		26	38		28-Feb-2012	287	FM		287
5	41		5	42		28-Feb-2012	234	FM		234
5	42		5	43		28-Feb-2012	235	FM		235
5	43		5	44		28-Feb-2012	207	FM		207

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
5	132		5	133		28-Feb-2012	195	FM		195
5	133		5	134		28-Feb-2012	106	FM		106
5	134		5	135		28-Feb-2012	125	FM		125
5	135		5	136		28-Feb-2012	141	FM		141
5	136		5	137		28-Feb-2012	225	FM		225
5	137		5	138		28-Feb-2012	109	FM		109
5	42		5	138		28-Feb-2012	159	FM		159
5	121		5	123		28-Feb-2012	72	FM		72
5	121		5	147		28-Feb-2012	195	FM		195
5	123		5	124		28-Feb-2012	39	FM		39
5	124		5	125		28-Feb-2012	167	FM		167
5	125		5	126		28-Feb-2012	151	FM		151
5	126		5	127		28-Feb-2012	200	FM		200
5	127		5	128		28-Feb-2012	306	FM		306
5	128		5	129		28-Feb-2012	264	FM		264
5	128		5	146		28-Feb-2012	90	FM		90
5	129		5	130		28-Feb-2012	210	FM		210
5	130		5	131		28-Feb-2012	304	FM		304
5	141		5	142		28-Feb-2012	115	FM		115
5	141		5	154	D	28-Feb-2012	7	FM		7
5	142		5	143		28-Feb-2012	189	FM		189
5	143		5	144		28-Feb-2012	103	FM		103
5	144		5	145		28-Feb-2012	119	FM		119
5	145		5	146		28-Feb-2012	119	FM		119
5	147		5	148		28-Feb-2012	142	FM		142
26	9		26	34		29-Feb-2012	200	FM		200
26	25		26	26		29-Feb-2012	273	FM		273
26	26		26	29		29-Feb-2012	238	FM		238
26	28		26	29		29-Feb-2012	226	FM		226
26	29		26	33		29-Feb-2012	20	FM		20
26	32		26	33		29-Feb-2012	287	FM		287
26	33		26	34		29-Feb-2012	303	FM		303
26	34		26	35		29-Feb-2012	214	FM		214
26	35		26	36		29-Feb-2012	230	FM		230
26	36		26	37		29-Feb-2012	202	FM		202
26	37		26	39		29-Feb-2012	250	FM		250
26	39		26	41		29-Feb-2012	162	FM		162
26	40		26	41		29-Feb-2012	290	FM		290
26	41		26	43		29-Feb-2012	200	FM		200
26	43		26	44		29-Feb-2012	338	FM		338
26	44		26	45		29-Feb-2012	338	FM		338
26	45		26	46		29-Feb-2012	10	FM		10
26	46		26	47		29-Feb-2012	310	FM		310
26	61		26	62		29-Feb-2012	323	FM		323
26	62		26	63		29-Feb-2012	327	FM		327
26	63		26	64		29-Feb-2012	323	FM		323
26	64		26	65		29-Feb-2012	323	FM		323
26	72		26	73		29-Feb-2012	322	FM		322
26	73		26	74		29-Feb-2012	318	FM		318
26	74		26	75		29-Feb-2012	316	FM		316

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
26	75		26	76		29-Feb-2012	325	FM		325
5	44		5	45		29-Feb-2012	83	FM		83
5	45		5	46		29-Feb-2012	334	FM		334
5	47		5	48		29-Feb-2012	365	FM		365
5	48		5	49		29-Feb-2012	365	FM		365
5	49		5	50		29-Feb-2012	325	FM		325
5	50		5	51		29-Feb-2012	345	FM		345
5	51		5	52		29-Feb-2012	340	FM		340
5	52		5	53		29-Feb-2012	425	FM		425
5	46		5	54		29-Feb-2012	360	FM		360
5	53		5	54		29-Feb-2012	337	FM		337
5	74		5	161		29-Feb-2012	12	FM		12
5	158		5	159		29-Feb-2012	320	FM		320
5	159		5	160		29-Feb-2012	323	FM		323
5	160		5	161		29-Feb-2012	325	FM		325
5	161		5	162		29-Feb-2012	253	FM		253
5	162		5	163		29-Feb-2012	321	FM		321
5	163		5	164		29-Feb-2012	297	FM		297
5	77		5	78		29-Feb-2012	188	FM		188
5	78		5	79		29-Feb-2012	250	FM		250
5	79		5	88		29-Feb-2012	400	FM		400
5	88		5	89		29-Feb-2012	150	FM		150
5	23		5	24		29-Feb-2012	315	FM		315
5	24		5	151		29-Feb-2012	177	FM		177
5	24		5	153		29-Feb-2012	168	FM		168
5	25		5	26		29-Feb-2012	350	FM		350
5	25		5	153		29-Feb-2012	172	FM		172
5	26		5	120		29-Feb-2012	250	FM		250
5	114		5	115		29-Feb-2012	124	FM		124
5	115		5	116		29-Feb-2012	185	FM		185
5	116		5	117		29-Feb-2012	186	FM		186
5	117		5	118		29-Feb-2012	250	FM		250
5	118		5	119		29-Feb-2012	249	FM		249
5	119		5	120		29-Feb-2012	35	FM		35
5	114		5	122		29-Feb-2012	45	FM		45
5	122		5	123		29-Feb-2012	245	FM		245
25	145		25	146		1-Mar-2012	245	FM		245
25	146		25	147		1-Mar-2012	246	FM		246
25	147		25	150		1-Mar-2012	248	FM		248
25	148		25	150		1-Mar-2012	234	FM		234
25	149		25	150		1-Mar-2012	299	FM		299
25	149		26	182		1-Mar-2012	259	FM		259
25	150		25	151		1-Mar-2012	339	FM		339
25	151		25	152	S	1-Mar-2012	307	FM		307
25	153	S	25	154		1-Mar-2012	328	FM		328
25	138		25	139		1-Mar-2012	306	FM		306
19	169		19	170	S	1-Mar-2012	30	FM		30
19	169		25	135		1-Mar-2012	192	FM		192
19	173	S	19	175		1-Mar-2012	117	FM		117
19	174		19	175		1-Mar-2012	172	FM		172

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
19	175		19	176		1-Mar-2012	351	FM		351
19	176		19	177		1-Mar-2012	193	FM		193
25	133		25	134		1-Mar-2012	119	FM		119
25	134		25	135		1-Mar-2012	305	FM		305
26	48		26	55		5-Mar-2012	248	FM		248
26	49		26	50		5-Mar-2012	296	FM		296
26	50		26	51		5-Mar-2012	285	FM		285
26	51		26	52		5-Mar-2012	312	FM		312
26	52		26	53		5-Mar-2012	301	FM		301
26	53		26	54		5-Mar-2012	300	FM		300
26	54		26	55		5-Mar-2012	363	FM		363
26	55		26	56		5-Mar-2012	348	FM		348
26	56		26	57		5-Mar-2012	340	FM		340
26	57		26	58		5-Mar-2012	342	FM		342
19	166		20	68		5-Mar-2012	273	FM		273
19	166		25	137		5-Mar-2012	190	FM		190
19	167		19	168		5-Mar-2012	211	FM		211
19	168		20	74		5-Mar-2012	250	FM		250
20	68		26	78		5-Mar-2012	245	FM		245
25	136		25	137		5-Mar-2012	229	FM		229
25	142		25	144		5-Mar-2012	149	FM		149
25	143		25	144		5-Mar-2012	100	FM		100
26	66		26	68		5-Mar-2012	151	FM		151
26	67		26	68		5-Mar-2012	112	FM		112
19	177		19	183		5-Mar-2012	350	FM		350
19	178		19	179		5-Mar-2012	153	FM		153
19	179		19	180		5-Mar-2012	200	FM		200
19	180		19	181		5-Mar-2012	79	FM		79
19	181		19	182		5-Mar-2012	296	FM		296
19	181		20	96		5-Mar-2012	260	FM		260
19	182		19	183		5-Mar-2012	98	FM		98
19	183		19	184		5-Mar-2012	130	FM		130
19	184		19	185		5-Mar-2012	240	FM		240
19	185		19	186		5-Mar-2012	238	FM		238
19	186		19	187		5-Mar-2012	200	FM		200
19	187		19	189		5-Mar-2012	224	FM		224
19	188		19	189		5-Mar-2012	317	FM		317
19	189		20	87		5-Mar-2012	241	FM		241
20	78		20	79		5-Mar-2012	275	FM		275
20	79		20	80		5-Mar-2012	261	FM		261
20	80		20	81		5-Mar-2012	51	FM		51
20	81		20	82		5-Mar-2012	267	FM		267
20	82		20	83		5-Mar-2012	299	FM		299
20	83		20	84		5-Mar-2012	281	FM		281
5	54		5	55		5-Mar-2012	425	FM		425
5	55		5	67		5-Mar-2012	20	FM		20
5	56		5	67		5-Mar-2012	96	FM		96
5	58		5	112	C	5-Mar-2012	200	FM		200
5	58		37	4		5-Mar-2012	300	FM		300
5	58		5	59		5-Mar-2012	275	FM		275

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
5	59		5	60		5-Mar-2012	280	FM		280
5	60		5	61		5-Mar-2012	270	FM		270
5	61		5	62		5-Mar-2012	340	FM		340
5	63		5	65		5-Mar-2012	337	FM		337
5	62		5	67		5-Mar-2012	325	FM		325
5	67		37	17	M	5-Mar-2012	350	FM		350
5	65		5	66		5-Mar-2012	310	FM		310
5	65		37	1	D	5-Mar-2012	300	FM		300
5	66		5	67		5-Mar-2012	320	FM		320
37	2		37	24	D	5-Mar-2012	40	FM		40
37	2		37	3		5-Mar-2012	365	FM		365
37	3		37	4		5-Mar-2012	390	FM		390
37	13		37	14		5-Mar-2012	300	FM		300
37	14		37	15		5-Mar-2012	330	FM		330
37	15		37	16		5-Mar-2012	300	FM		300
37	16		37	17		5-Mar-2012	290	FM		290
5	26		5	27		5-Mar-2012	300	FM		300
5	27		5	28		5-Mar-2012	280	FM		280
5	28		5	93		5-Mar-2012	100	FM		100
26	75		26	76		5-Mar-2012	330	JM	6	660
24	72		24	73		5-Mar-2012	300	JM	12	300
17	20		17	21		5-Mar-2012	280	JM	12	280
19	93		19	94		5-Mar-2012	242	JM	12	242
19	140		19	141		5-Mar-2012	140	JM	12	140
19	151		19	153		5-Mar-2012	116	JM	12	116
15	55		15	61		5-Mar-2012	209	JM	12	209
15	117		15	118		5-Mar-2012	306	JM	12	306
8	63		8	64		5-Mar-2012	240	JM	6	480
8	64		8	65		5-Mar-2012	129	JM	12	129
8	68		9	8		5-Mar-2012	380	JM	12	380
7	58		7	59		5-Mar-2012	38	JM	6	76
7	59		7	60		5-Mar-2012	130	JM	6	260
8	4		8	201		5-Mar-2012	237	JM	12	237
8	4		8	5		5-Mar-2012	250	JM	6	500
8	5	P	8	6	P	5-Mar-2012	115	JM	6	230
8	6	P	8	7	P	5-Mar-2012	125	JM	6	250
8	7		8	8		5-Mar-2012	240	JM	6	480
8	9		8	204	C	5-Mar-2012	140	JM	6	280
8	10		8	205	C	5-Mar-2012	300	JM	12	300
8	10		8	11		5-Mar-2012	190	JM	12	190
4	74	P	4	139	P	5-Mar-2012	120	JM	6	240
4	75	P	4	139	P	5-Mar-2012	120	JM	6	240
4	110		4	115		5-Mar-2012	312	JM	6	624
4	110		4	140		5-Mar-2012	338	JM	12	338
4	111		4	134		5-Mar-2012	300	JM	12	300
4	112		4	113		5-Mar-2012	350	JM	6	700
4	114		4	115		5-Mar-2012	290	JM	12	290
4	115		4	116		5-Mar-2012	132	JM	12	132
26	47		26	59		6-Mar-2012	315	FM		315
25	154		25	156		6-Mar-2012	332	FM		332

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
25	155		25	156		6-Mar-2012	136	FM		136
25	156		25	157		6-Mar-2012	340	FM		340
25	157		26	59		6-Mar-2012	310	FM		310
26	58		26	59		6-Mar-2012	410	FM		410
26	59		26	60	M	6-Mar-2012	363	FM		363
26	60		26	69	M	6-Mar-2012	319	FM		319
20	68		20	69		6-Mar-2012	280	FM		280
20	69		20	70		6-Mar-2012	126	FM		126
20	69		26	77		6-Mar-2012	194	FM		194
20	70		20	75		6-Mar-2012	143	FM		143
20	74		20	75		6-Mar-2012	256	FM		256
20	75		20	76		6-Mar-2012	284	FM		284
25	139		26	70		6-Mar-2012	345	FM		345
26	69		26	70		6-Mar-2012	287	FM		287
26	70		26	77		6-Mar-2012	350	FM		350
26	76		26	77		6-Mar-2012	320	FM		320
20	76		20	77		6-Mar-2012	259	FM		259
20	77		20	85		6-Mar-2012	301	FM		301
20	84		20	85		6-Mar-2012	300	FM		300
20	85		20	86		6-Mar-2012	249	FM		249
20	86		20	88		6-Mar-2012	226	FM		226
20	87		20	88		6-Mar-2012	221	FM		221
20	88		20	89		6-Mar-2012	298	FM		298
20	89		20	90		6-Mar-2012	308	FM		308
20	90		20	91		6-Mar-2012	244	FM		244
20	91		20	94		6-Mar-2012	256	FM		256
20	92		20	93		6-Mar-2012	248	FM		248
20	93		20	94		6-Mar-2012	240	FM		240
20	60		20	61		6-Mar-2012	414	FM		414
5	29		5	30		6-Mar-2012	445	FM		445
5	29		6	147		6-Mar-2012	506	FM		506
5	30		5	31		6-Mar-2012	526	FM		526
5	56		5	64		6-Mar-2012	20	FM		20
5	64		5	140		6-Mar-2012	153	FM		153
5	140		5	165		6-Mar-2012	150	FM		150
5	67		5	68		6-Mar-2012	80	FM		80
5	68		5	69		6-Mar-2012	240	FM		240
5	69		5	70		6-Mar-2012	345	FM		345
5	70		5	165		6-Mar-2012	31	FM		31
5	71		5	165		6-Mar-2012	270	FM		270
5	71		5	72		6-Mar-2012	250	FM		250
5	72		5	73		6-Mar-2012	40	FM		40
5	155		5	156		6-Mar-2012	270	FM		270
5	156		5	157		6-Mar-2012	275	FM		275
5	89		5	90		6-Mar-2012	150	FM		150
5	89		5	91		6-Mar-2012	250	FM		250
20	64		20	66		7-Mar-2012	107	FM		107
20	94		20	95		7-Mar-2012	292	FM		292
20	52		20	53		7-Mar-2012	236	FM		236
20	53		20	54		7-Mar-2012	228	FM		228

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
20	54		20	55	M	7-Mar-2012	238	FM		238
20	54		20	153		7-Mar-2012	14	FM		14
20	55	M	20	146		7-Mar-2012	98	FM		98
20	61		20	62		7-Mar-2012	185	FM		185
20	62		20	63		7-Mar-2012	323	FM		323
20	63		20	64		7-Mar-2012	224	FM		224
20	63		20	146		7-Mar-2012	236	FM		236
20	66		20	67		7-Mar-2012	139	FM		139
20	67		20	95		7-Mar-2012	247	FM		247
20	151		20	152		7-Mar-2012	400	FM		400
20	152		20	153		7-Mar-2012	419	FM		419
11	1	D	11	2		7-Mar-2012	350	FM		350
11	2		11	3		7-Mar-2012	350	FM		350
11	3		11	4		7-Mar-2012	246	FM		246
11	4		11	5		7-Mar-2012	304	FM		304
11	5		11	6		7-Mar-2012	20	FM		20
11	6		11	7		7-Mar-2012	300	FM		300
11	7		11	8		7-Mar-2012	125	FM		125
11	8		11	9		7-Mar-2012	250	FM		250
11	9		11	10		7-Mar-2012	255	FM		255
6	132		6	133		7-Mar-2012	300	FM		300
6	133		6	135		7-Mar-2012	360	FM		360
6	134		6	135		7-Mar-2012	330	FM		330
6	135		6	136		7-Mar-2012	330	FM		330
6	136		6	141		7-Mar-2012	180	FM		180
6	137		6	138		7-Mar-2012	210	FM		210
6	138		6	139		7-Mar-2012	359	FM		359
6	139		6	140		7-Mar-2012	365	FM		365
6	140		6	141		7-Mar-2012	365	FM		365
6	141		6	142		7-Mar-2012	370	FM		370
6	142		6	146		7-Mar-2012	330	FM		330
6	143		6	144		7-Mar-2012	250	FM		250
6	144		6	145		7-Mar-2012	273	FM		273
6	145		6	146		7-Mar-2012	103	FM		103
29	103		36	22		8-Mar-2012	125	FM		125
36	15		36	16		8-Mar-2012	163	FM		163
36	16		36	17		8-Mar-2012	312	FM		312
36	20		36	21		8-Mar-2012	352	FM		352
36	20		36	30	D	8-Mar-2012	47	FM		47
36	21		36	22		8-Mar-2012	345	FM		345
36	22		36	39		8-Mar-2012	160	FM		160
36	37		36	38		8-Mar-2012	89	FM		89
36	38		36	39		8-Mar-2012	26	FM		26
29	74	C	29	75		8-Mar-2012	174	FM		174
29	75		29	83		8-Mar-2012	426	FM		426
29	79		29	80		8-Mar-2012	208	FM		208
29	82		29	83		8-Mar-2012	299	FM		299
29	83		29	84		8-Mar-2012	258	FM		258
29	84		29	110		8-Mar-2012	187	FM		187
29	85		29	110		8-Mar-2012	223	FM		223

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
29	85		29	88		8-Mar-2012	134	FM		134
29	86	C	29	87		8-Mar-2012	123	FM		123
29	87		29	88		8-Mar-2012	302	FM		302
29	88		29	89		8-Mar-2012	266	FM		266
29	89		29	90		8-Mar-2012	351	FM		351
29	90		29	96		8-Mar-2012	410	FM		410
29	90		29	104	C	8-Mar-2012	107	FM		107
29	91		29	92		8-Mar-2012	292	FM		292
29	92		29	93		8-Mar-2012	99	FM		99
29	93		29	94		8-Mar-2012	156	FM		156
29	94		29	95		8-Mar-2012	28	FM		28
29	95		29	114	T	8-Mar-2012	44	FM		44
29	96		29	97		8-Mar-2012	237	FM		237
29	97		29	98		8-Mar-2012	242	FM		242
29	110		29	111		8-Mar-2012	33	FM		33
29	111		29	112		8-Mar-2012	67	FM		67
29	112		29	113		8-Mar-2012	183	FM		183
12	152		12	153		8-Mar-2012	279	FM		279
12	153		12	154		8-Mar-2012	85	FM		85
12	123		12	124		8-Mar-2012	111	FM		111
12	121		12	122		8-Mar-2012	260	FM		260
12	122		12	123		8-Mar-2012	350	FM		350
29	37		29	109		9-Mar-2012	45	FM		45
29	36		29	39		9-Mar-2012	215	FM		215
29	36		36	14		9-Mar-2012	333	FM		333
29	37		29	38		9-Mar-2012	265	FM		265
29	38		29	39		9-Mar-2012	260	FM		260
29	41	C	29	46		9-Mar-2012	113	FM		113
29	43		36	27		9-Mar-2012	375	FM		375
29	44		29	45		9-Mar-2012	300	FM		300
29	45		29	46		9-Mar-2012	213	FM		213
29	46		29	47		9-Mar-2012	192	FM		192
29	47		29	48		9-Mar-2012	200	FM		200
36	1		36	3		9-Mar-2012	371	FM		371
36	2		36	3		9-Mar-2012	245	FM		245
36	6		36	7		9-Mar-2012	195	FM		195
36	7		36	8		9-Mar-2012	391	FM		391
36	8		36	11		9-Mar-2012	300	FM		300
36	8		36	31	C	9-Mar-2012	112	FM		112
36	9		36	10		9-Mar-2012	146	FM		146
36	10		36	11		9-Mar-2012	366	FM		366
36	11		36	13		9-Mar-2012	283	FM		283
36	12		36	13		9-Mar-2012	420	FM		420
36	13		36	14		9-Mar-2012	203	FM		203
11	21		11	22		9-Mar-2012	312	FM		312
11	22		12	126		9-Mar-2012	183	FM		183
11	22		11	23		9-Mar-2012	350	FM		350
12	124		12	125		9-Mar-2012	310	FM		310
12	125		12	126		9-Mar-2012	365	FM		365
11	42		11	79		9-Mar-2012	350	FM		350

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
11	42		11	43		9-Mar-2012	325	FM		325
29	35		29	40		12-Mar-2012	247	FM		247
29	35		36	26		12-Mar-2012	151	FM		151
29	39		29	40		12-Mar-2012	164	FM		164
29	40		29	108		12-Mar-2012	483	FM		483
29	42		29	49		12-Mar-2012	302	FM		302
29	42		29	108		12-Mar-2012	247	FM		247
29	48		29	49		12-Mar-2012	100	FM		100
29	50		29	51		12-Mar-2012	310	FM		310
29	50		36	5		12-Mar-2012	340	FM		340
29	51		29	52		12-Mar-2012	322	FM		322
29	52		29	53		12-Mar-2012	322	FM		322
29	53		29	54		12-Mar-2012	97	FM		97
29	54		29	55		12-Mar-2012	97	FM		97
29	55		29	56		12-Mar-2012	165	FM		165
29	56		29	57		12-Mar-2012	351	FM		351
29	57		29	58		12-Mar-2012	355	FM		355
36	4		36	29		12-Mar-2012	225	FM		225
36	3		36	4		12-Mar-2012	300	FM		300
36	4		36	5		12-Mar-2012	323	FM		323
36	17		36	18		12-Mar-2012	273	FM		273
36	18		36	28	C	12-Mar-2012	206	FM		206
36	18		36	40		12-Mar-2012	143	FM		143
36	19		36	25		12-Mar-2012	200	FM		200
36	19		36	40		12-Mar-2012	89	FM		89
36	25		36	32		12-Mar-2012	134	FM		134
36	26		36	32		12-Mar-2012	118	FM		118
36	32		36	33		12-Mar-2012	178	FM		178
36	33		36	34		12-Mar-2012	188	FM		188
36	34		36	35		12-Mar-2012	96	FM		96
36	35		36	36		12-Mar-2012	35	FM		35
36	36		36	37		12-Mar-2012	138	FM		138
29	59		29	60		12-Mar-2012	97	FM		97
29	60		29	61		12-Mar-2012	217	FM		217
29	61		29	62		12-Mar-2012	273	FM		273
29	62		29	63		12-Mar-2012	209	FM		209
29	63		29	64		12-Mar-2012	100	FM		100
29	64		29	65		12-Mar-2012	223	FM		223
29	65		29	66		12-Mar-2012	304	FM		304
29	66		29	67		12-Mar-2012	271	FM		271
24	25		24	26		12-Mar-2012	107	FM		107
24	26		24	27		12-Mar-2012	209	FM		209
24	27		24	28		12-Mar-2012	310	FM		310
24	28		24	30		12-Mar-2012	235	FM		235
24	30		24	31		12-Mar-2012	265	FM		265
24	31		24	32		12-Mar-2012	289	FM		289
24	32		24	33		12-Mar-2012	148	FM		148
24	39		24	40		12-Mar-2012	24040	FM		24040
24	41		24	162	D	12-Mar-2012	31	FM		31
24	46		24	49		12-Mar-2012	157	FM		157

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
24	47		24	48		12-Mar-2012	165	FM		165
24	48		24	49		12-Mar-2012	155	FM		155
24	49		24	50		12-Mar-2012	77	FM		77
24	50		24	52		12-Mar-2012	190	FM		190
24	51		24	52		12-Mar-2012	186	FM		186
24	52		24	53		12-Mar-2012	77	FM		77
24	53		24	54		12-Mar-2012	76	FM		76
24	54		24	55		12-Mar-2012	188	FM		188
24	55		24	57		12-Mar-2012	193	FM		193
24	56		24	57		12-Mar-2012	300	FM		300
24	148		24	150		13-Mar-2012	140	FM		140
24	149		24	150		13-Mar-2012	190	FM		190
24	150		29	1		13-Mar-2012	222	FM		222
24	151		29	105		13-Mar-2012	120	FM		120
29	1		29	5		13-Mar-2012	305	FM		305
29	2		29	3		13-Mar-2012	150	FM		150
29	3		29	4		13-Mar-2012	250	FM		250
29	4		29	5		13-Mar-2012	232	FM		232
29	5		29	7		13-Mar-2012	309	FM		309
29	6		29	7		13-Mar-2012	352	FM		352
29	6		29	105		13-Mar-2012	64	FM		64
29	7		29	8		13-Mar-2012	194	FM		194
29	8		29	9		13-Mar-2012	300	FM		300
29	9		29	11		13-Mar-2012	295	FM		295
29	10		29	11		13-Mar-2012	213	FM		213
29	11		29	21		13-Mar-2012	250	FM		250
29	12		29	13		13-Mar-2012	150	FM		150
29	13		29	14		13-Mar-2012	229	FM		229
29	14		29	15		13-Mar-2012	253	FM		253
29	15		29	21		13-Mar-2012	254	FM		254
29	16		29	17		13-Mar-2012	199	FM		199
29	17		29	18		13-Mar-2012	400	FM		400
29	18		29	19		13-Mar-2012	102	FM		102
29	19		29	20		13-Mar-2012	217	FM		217
29	20		29	21		13-Mar-2012	321	FM		321
24	23		24	24		13-Mar-2012	293	FM		293
24	23		24	146		13-Mar-2012	163	FM		163
24	24		24	34		13-Mar-2012	252	FM		252
24	33		24	34		13-Mar-2012	65	FM		65
24	34		24	35		13-Mar-2012	300	FM		300
24	35		24	37		13-Mar-2012	141	FM		141
24	36		24	37		13-Mar-2012	206	FM		206
24	37		24	38		13-Mar-2012	220	FM		220
24	38		24	42		13-Mar-2012	56	FM		56
24	41		24	42		13-Mar-2012	237	FM		237
24	42		24	43		13-Mar-2012	160	FM		160
24	43		24	165		13-Mar-2012	160	FM		160
24	44		24	45		13-Mar-2012	300	FM		300
24	44		24	165		13-Mar-2012	139	FM		139
24	45		24	59		13-Mar-2012	300	FM		300

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
24	57		24	58		13-Mar-2012	195	FM		195
24	58		24	59		13-Mar-2012	195	FM		195
25	11		25	205		13-Mar-2012	130	FM		130
25	12		25	17		13-Mar-2012	279	FM		279
25	12		25	205		13-Mar-2012	130	FM		130
25	13		25	16		13-Mar-2012	135	FM		135
25	14		25	15		13-Mar-2012	262	FM		262
25	15		25	16		13-Mar-2012	262	FM		262
25	17		25	21		13-Mar-2012	50	FM		50
25	18		25	19		13-Mar-2012	250	FM		250
25	19		25	20		13-Mar-2012	311	FM		311
25	20		25	21		13-Mar-2012	50	FM		50
25	21		25	22		13-Mar-2012	349	FM		349
25	22		25	23		13-Mar-2012	349	FM		349
25	23		25	24		13-Mar-2012	329	FM		329
24	152		24	153		14-Mar-2012	85	FM		85
24	153		24	154		14-Mar-2012	177	FM		177
24	154		29	23		14-Mar-2012	148	FM		148
24	155		29	24		14-Mar-2012	189	FM		189
29	21		29	27		14-Mar-2012	300	FM		300
29	22		29	23		14-Mar-2012	375	FM		375
29	23		29	24		14-Mar-2012	298	FM		298
29	24		29	25		14-Mar-2012	226	FM		226
29	25		29	26		14-Mar-2012	218	FM		218
29	26		29	27		14-Mar-2012	348	FM		348
29	30		29	31		14-Mar-2012	289	FM		289
24	83		24	84		14-Mar-2012	233	FM		233
24	84		24	87		14-Mar-2012	315	FM		315
24	85		24	86		14-Mar-2012	278	FM		278
24	86		24	87		14-Mar-2012	100	FM		100
24	87		24	88		14-Mar-2012	315	FM		315
24	88		24	91		14-Mar-2012	300	FM		300
24	89		24	91		14-Mar-2012	360	FM		360
24	90		24	91		14-Mar-2012	176	FM		176
24	91		24	92		14-Mar-2012	300	FM		300
24	112		24	113		14-Mar-2012	130	FM		130
24	112		24	161	D	14-Mar-2012	12	FM		12
24	113		24	114		14-Mar-2012	353	FM		353
24	114		24	115		14-Mar-2012	162	FM		162
24	115		24	116		14-Mar-2012	141	FM		141
24	116		24	117		14-Mar-2012	156	FM		156
24	117		24	127		14-Mar-2012	219	FM		219
24	118		24	119		14-Mar-2012	155	FM		155
24	119		24	120		14-Mar-2012	76	FM		76
24	120		24	125		14-Mar-2012	144	FM		144
24	120		24	126		14-Mar-2012	30	FM		30
24	121		24	122		14-Mar-2012	151	FM		151
24	122		24	123		14-Mar-2012	158	FM		158
24	123		24	125		14-Mar-2012	169	FM		169
24	124	C	24	125		14-Mar-2012	140	FM		140

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
24	126		24	127		14-Mar-2012	170	FM		170
24	127		24	128		14-Mar-2012	162	FM		162
24	128		24	129		14-Mar-2012	286	FM		286
24	129		24	130		14-Mar-2012	281	FM		281
24	130		24	131		14-Mar-2012	220	FM		220
24	143		24	144		14-Mar-2012	200	FM		200
24	144		24	145		14-Mar-2012	219	FM		219
24	1		24	2		14-Mar-2012	137	FM		137
24	2		24	3		14-Mar-2012	253	FM		253
24	3		24	4		14-Mar-2012	307	FM		307
24	4		24	5		14-Mar-2012	296	FM		296
24	8		24	9		14-Mar-2012	99	FM		99
24	8		24	163	D	14-Mar-2012	80	FM		80
24	9		24	10		14-Mar-2012	196	FM		196
24	9		24	166	D	14-Mar-2012	167	FM		167
24	10		24	11		14-Mar-2012	282	FM		282
24	11		24	12		14-Mar-2012	297	FM		297
24	12		24	13		14-Mar-2012	288	FM		288
24	16		24	17		14-Mar-2012	295	FM		295
24	17		24	18		14-Mar-2012	289	FM		289
24	18		24	19		14-Mar-2012	275	FM		275
24	19		24	20		14-Mar-2012	287	FM		287
24	156		24	157		14-Mar-2012	185	FM		185
24	156		24	160	D	14-Mar-2012	100	FM		100
25	24		25	25		14-Mar-2012	332	FM		332
25	25		25	26		14-Mar-2012	347	FM		347
24	93		24	94		15-Mar-2012	170	FM		170
24	92		24	95		15-Mar-2012	105	FM		105
24	94		24	95		15-Mar-2012	145	FM		145
24	95		24	96		15-Mar-2012	290	FM		290
24	96		24	98		15-Mar-2012	210	FM		210
24	97		24	98		15-Mar-2012	300	FM		300
24	98		24	104		15-Mar-2012	200	FM		200
24	99		24	101		15-Mar-2012	255	FM		255
24	100		24	101		15-Mar-2012	158	FM		158
24	101		24	102		15-Mar-2012	74	FM		74
24	102		24	103		15-Mar-2012	195	FM		195
24	103		24	104		15-Mar-2012	150	FM		150
24	104		24	133		15-Mar-2012	300	FM		300
24	105		24	106		15-Mar-2012	260	FM		260
24	105		24	158	C	15-Mar-2012	117	FM		117
24	106		24	110		15-Mar-2012	185	FM		185
24	107		24	108		15-Mar-2012	301	FM		301
24	108		24	109		15-Mar-2012	95	FM		95
24	109		24	110		15-Mar-2012	125	FM		125
24	110		24	111		15-Mar-2012	195	FM		195
24	111		24	133		15-Mar-2012	145	FM		145
24	131		24	133		15-Mar-2012	110	FM		110
24	133		24	134		15-Mar-2012	235	FM		235
24	134		24	139		15-Mar-2012	110	FM		110

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
24	135		24	136		15-Mar-2012	106	FM		106
24	135		24	159	C	15-Mar-2012	77	FM		77
24	136		24	137		15-Mar-2012	219	FM		219
24	137		24	138		15-Mar-2012	200	FM		200
24	138		24	139		15-Mar-2012	228	FM		228
24	5		24	6		15-Mar-2012	315	FM		315
24	6		24	7		15-Mar-2012	179	FM		179
24	7		24	14		15-Mar-2012	181	FM		181
24	13		24	14		15-Mar-2012	290	FM		290
24	14		24	167		15-Mar-2012	47	FM		47
24	167		24	168		15-Mar-2012	522	FM		522
24	168		24	169		15-Mar-2012	544	FM		544
24	169		24	170		15-Mar-2012	421	FM		421
24	170		25	195		15-Mar-2012	468	FM		468
25	194		25	195		15-Mar-2012	324	FM		324
24	15		24	21		15-Mar-2012	180	FM		180
24	20		24	21		15-Mar-2012	300	FM		300
24	21		24	22		15-Mar-2012	185	FM		185
24	139		24	140		19-Mar-2012	91	FM		91
24	140		24	142		19-Mar-2012	109	FM		109
24	141		24	142		19-Mar-2012	250	FM		250
24	142		24	146		19-Mar-2012	195	FM		195
24	145		24	146		19-Mar-2012	145	FM		145
24	146		24	147		19-Mar-2012	300	FM		300
24	147		25	81		19-Mar-2012	250	FM		250
25	81		25	84		19-Mar-2012	257	FM		257
25	82		25	83		19-Mar-2012	245	FM		245
25	83		25	84		19-Mar-2012	263	FM		263
25	84		25	85		19-Mar-2012	195	FM		195
29	58		29	69		20-Mar-2012	355	FM		355
29	67		29	68		20-Mar-2012	277	FM		277
24	93		29	28		20-Mar-2012	250	FM		250
29	27		29	33		20-Mar-2012	298	FM		298
29	28		29	29		20-Mar-2012	248	FM		248
29	29		29	32		20-Mar-2012	241	FM		241
29	31		29	32		20-Mar-2012	301	FM		301
29	32		29	33		20-Mar-2012	142	FM		142
29	33		29	106		20-Mar-2012	99	FM		99
29	34		29	69		20-Mar-2012	253	FM		253
29	34		29	106		20-Mar-2012	231	FM		231
29	68		29	69		20-Mar-2012	60	FM		60
29	69		29	70		20-Mar-2012	293	FM		293
29	70		29	71		20-Mar-2012	196	FM		196
29	71		29	107		20-Mar-2012	89	FM		89
29	72		29	73		20-Mar-2012	283	FM		283
29	72		29	107		20-Mar-2012	286	FM		286
29	73		30	1		20-Mar-2012	268	FM		268
30	1		30	2		20-Mar-2012	207	FM		207
29	98		29	99		20-Mar-2012	345	FM		345
29	99		29	100		20-Mar-2012	361	FM		361

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
29	100		29	101		20-Mar-2012	366	FM		366
29	101		29	102		20-Mar-2012	346	FM		346
29	102		30	3		20-Mar-2012	356	FM		356
30	2	M	30	5		20-Mar-2012	175	FM		175
30	3		30	4		20-Mar-2012	379	FM		379
30	4		30	5		20-Mar-2012	160	FM		160
30	5		30	6		20-Mar-2012	150	FM		150
24	65		24	66		20-Mar-2012	129	FM		129
24	66		24	67		20-Mar-2012	317	FM		317
24	67		24	69		20-Mar-2012	325	FM		325
24	68		24	69		20-Mar-2012	115	FM		115
24	69		24	73		20-Mar-2012	258	FM		258
24	70		24	71		20-Mar-2012	197	FM		197
24	71		24	72		20-Mar-2012	280	FM		280
24	72		24	73		20-Mar-2012	278	FM		278
24	79		24	80		20-Mar-2012	321	FM		321
24	80		24	81		20-Mar-2012	327	FM		327
25	86	M	25	87		21-Mar-2012	166	FM		166
25	86	M	30	7		21-Mar-2012	220	FM		220
25	87		25	189		21-Mar-2012	134	FM		134
25	88		25	89		21-Mar-2012	300	FM		300
25	88		25	189		21-Mar-2012	290	FM		290
25	89		25	90		21-Mar-2012	301	FM		301
30	7		30	27	D	21-Mar-2012	50	FM		50
25	85		25	90		21-Mar-2012	202	FM		202
25	90		25	190		21-Mar-2012	39	FM		39
25	91		25	92		21-Mar-2012	275	FM		275
25	92		25	93		21-Mar-2012	297	FM		297
25	93		25	94		21-Mar-2012	330	FM		330
25	190		25	191		21-Mar-2012	520	FM		520
25	191		25	192		21-Mar-2012	550	FM		550
25	192		30	25		21-Mar-2012	452	FM		452
30	6		30	26		21-Mar-2012	100	FM		100
30	25		30	26		21-Mar-2012	42	FM		42
25	59		25	60		21-Mar-2012	301	FM		301
25	59		25	201		21-Mar-2012	15	FM		15
25	60		25	61		21-Mar-2012	325	FM		325
25	61		25	62		21-Mar-2012	201	FM		201
25	62		25	63		21-Mar-2012	200	FM		200
25	63		25	64		21-Mar-2012	254	FM		254
25	201		30	28		21-Mar-2012	322	FM		322
30	28		30	29		21-Mar-2012	300	FM		300
30	29		30	30		21-Mar-2012	258	FM		258
25	54		25	55		21-Mar-2012	331	FM		331
25	55		25	56		21-Mar-2012	332	FM		332
25	56		25	57		21-Mar-2012	333	FM		333
25	57		25	58		21-Mar-2012	252	FM		252
24	22		24	60		21-Mar-2012	200	FM		200
24	60		24	61		21-Mar-2012	331	FM		331
24	61		24	63		21-Mar-2012	334	FM		334

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
24	62		24	63		21-Mar-2012	140	FM		140
24	63		24	64		21-Mar-2012	303	FM		303
24	64		25	34		21-Mar-2012	320	FM		320
25	33		25	34		21-Mar-2012	193	FM		193
25	34		25	203		21-Mar-2012	40	FM		40
25	35		25	36		21-Mar-2012	351	FM		351
25	35		25	203		21-Mar-2012	352	FM		352
24	59		24	60		21-Mar-2012	307	FM		307
24	73		24	77		21-Mar-2012	266	FM		266
24	74		24	75		21-Mar-2012	278	FM		278
24	75		24	171		21-Mar-2012	190	FM		190
24	76		24	77		21-Mar-2012	152	FM		152
24	76		24	171		21-Mar-2012	42	FM		42
24	77		24	78		21-Mar-2012	169	FM		169
24	78		24	82		21-Mar-2012	156	FM		156
24	81		24	82		21-Mar-2012	182	FM		182
24	82		25	29		21-Mar-2012	169	FM		169
25	29		25	172		21-Mar-2012	277	FM		277
25	30		25	172		21-Mar-2012	54	FM		54
25	36		25	186		21-Mar-2012	205	FM		205
25	36		25	197	D	21-Mar-2012	27	FM		27
25	94		25	95		22-Mar-2012	296	FM		296
25	95		25	96		22-Mar-2012	202	FM		202
25	96		25	97		22-Mar-2012	222	FM		222
25	97		25	98		22-Mar-2012	214	FM		214
25	98		25	100		22-Mar-2012	227	FM		227
25	99		25	100		22-Mar-2012	317	FM		317
25	100		25	101		22-Mar-2012	350	FM		350
25	101		25	102		22-Mar-2012	344	FM		344
25	102		25	103		22-Mar-2012	290	FM		290
25	107		25	199		22-Mar-2012	124	FM		124
25	103		25	105		22-Mar-2012	300	FM		300
25	108		25	199		22-Mar-2012	213	FM		213
25	104		25	105		22-Mar-2012	321	FM		321
25	105		25	106		22-Mar-2012	316	FM		316
25	106		25	107		22-Mar-2012	330	FM		330
25	97		25	109		22-Mar-2012	300	FM		300
25	109		25	110		22-Mar-2012	331	FM		331
25	110		25	111		22-Mar-2012	337	FM		337
25	111		25	113		22-Mar-2012	298	FM		298
25	113		25	114		22-Mar-2012	300	FM		300
25	114		25	115		22-Mar-2012	287	FM		287
25	115		25	116		22-Mar-2012	304	FM		304
25	58		25	67	P	22-Mar-2012	252	FM		252
25	71		25	72		22-Mar-2012	208	FM		208
25	72		25	73		22-Mar-2012	126	FM		126
25	73		25	74		22-Mar-2012	348	FM		348
25	74		25	77		22-Mar-2012	300	FM		300
25	75		25	77		22-Mar-2012	169	FM		169
25	76		25	77		22-Mar-2012	314	FM		314

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
25	77		25	78		22-Mar-2012	337	FM		337
25	78		25	79		22-Mar-2012	326	FM		326
25	79		25	80	M	22-Mar-2012	340	FM		340
25	28		25	31		22-Mar-2012	287	FM		287
25	28		25	200		22-Mar-2012	100	FM		100
25	30		25	31		22-Mar-2012	322	FM		322
25	31		25	32		22-Mar-2012	341	FM		341
25	32		25	193		22-Mar-2012	308	FM		308
25	108		25	122		26-Mar-2012	335	FM		335
25	116		25	120		26-Mar-2012	333	FM		333
25	117		25	119		26-Mar-2012	235	FM		235
25	118		25	119		26-Mar-2012	141	FM		141
25	119		25	120		26-Mar-2012	207	FM		207
25	120		25	121		26-Mar-2012	224	FM		224
25	121		25	122		26-Mar-2012	230	FM		230
25	122		25	123		26-Mar-2012	229	FM		229
25	70	P	25	71		26-Mar-2012	352	FM		352
25	124		25	125		26-Mar-2012	150	FM		150
19	43		19	47		26-Mar-2012	350	FM		350
19	44		25	47		26-Mar-2012	346	FM		346
19	46		19	47		26-Mar-2012	315	FM		315
19	47		19	48		26-Mar-2012	222	FM		222
19	48		19	52		26-Mar-2012	221	FM		221
19	49		19	50		26-Mar-2012	337	FM		337
19	49		25	53		26-Mar-2012	345	FM		345
19	51		19	52		26-Mar-2012	340	FM		340
19	52		19	53		26-Mar-2012	224	FM		224
25	42		25	43		26-Mar-2012	285	FM		285
25	43		25	44		26-Mar-2012	294	FM		294
25	44		25	45		26-Mar-2012	299	FM		299
25	45		25	47		26-Mar-2012	297	FM		297
25	46		25	47		26-Mar-2012	300	FM		300
25	48		25	49		26-Mar-2012	341	FM		341
25	49		25	50		26-Mar-2012	299	FM		299
25	50		25	51		26-Mar-2012	299	FM		299
25	51		25	53		26-Mar-2012	298	FM		298
25	52		25	53		26-Mar-2012	299	FM		299
19	59		19	60		26-Mar-2012	353	FM		353
19	26		19	28		26-Mar-2012	211	FM		211
19	27		19	28		26-Mar-2012	119	FM		119
19	28		19	29		26-Mar-2012	250	FM		250
19	29		19	31		26-Mar-2012	285	FM		285
19	29		20	97		26-Mar-2012	237	FM		237
19	30		19	31		26-Mar-2012	349	FM		349
19	32		19	33		26-Mar-2012	235	FM		235
19	32		20	98		26-Mar-2012	302	FM		302
19	33		19	36		26-Mar-2012	258	FM		258
19	33		19	196		26-Mar-2012	258	FM		258
19	34	C	19	35		26-Mar-2012	68	FM		68
19	35		19	36		26-Mar-2012	126	FM		126

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
19	36		19	37		26-Mar-2012	112	FM		112
19	77		19	78		26-Mar-2012	302	FM		302
19	78		19	79		26-Mar-2012	302	FM		302
19	79		19	192		26-Mar-2012	250	FM		250
19	80		19	81		26-Mar-2012	300	FM		300
19	80		19	192		26-Mar-2012	54	FM		54
19	81		19	82		26-Mar-2012	200	FM		200
19	192		19	193		26-Mar-2012	228	FM		228
25	123		25	125		27-Mar-2012	228	FM		228
20	150		20	151		28-Mar-2012	512	FM		512
19	54		19	55		28-Mar-2012	335	FM		335
19	54		25	132		28-Mar-2012	335	FM		335
19	55		19	56	M	28-Mar-2012	339	FM		339
25	127	S	25	128		28-Mar-2012	306	FM		306
25	128		25	129		28-Mar-2012	334	FM		334
25	129		25	130		28-Mar-2012	336	FM		336
25	130		25	132		28-Mar-2012	324	FM		324
25	131		25	132		28-Mar-2012	300	FM		300
19	53		19	58		28-Mar-2012	0	FM		0
19	56	M	19	58		28-Mar-2012	342	FM		342
19	57		19	58		28-Mar-2012	166	FM		166
19	58		19	61		28-Mar-2012	243	FM		243
19	60		19	61		28-Mar-2012	355	FM		355
19	61		19	63		28-Mar-2012	264	FM		264
19	63		19	64		28-Mar-2012	207	FM		207
19	64		19	65		28-Mar-2012	332	FM		332
19	65		19	66		28-Mar-2012	248	FM		248
19	66		19	68		28-Mar-2012	34	FM		34
19	67		19	68		28-Mar-2012	371	FM		371
19	68		19	69		28-Mar-2012	144	FM		144
19	69		19	72		28-Mar-2012	170	FM		170
19	71		19	72		28-Mar-2012	233	FM		233
19	72		19	73		28-Mar-2012	95	FM		95
19	23	M	20	95		28-Mar-2012	341	FM		341
19	24		19	25		28-Mar-2012	157	FM		157
19	24		19	197		28-Mar-2012	124	FM		124
19	25		19	38		28-Mar-2012	19	FM		19
19	37		19	38		28-Mar-2012	225	FM		225
19	207		19	208		28-Mar-2012	132	FM		132
19	73		19	74		29-Mar-2012	275	FM		275
19	38		19	39	S	29-Mar-2012	340	FM		340
19	40	S	19	207		29-Mar-2012	350	FM		350
19	41	S	19	206		29-Mar-2012	350	FM		350
19	75		19	76		29-Mar-2012	300	FM		300
19	76		19	83		29-Mar-2012	265	FM		265
19	82		19	83		29-Mar-2012	355	FM		355
19	83		19	84		29-Mar-2012	40	FM		40
19	205		19	206		29-Mar-2012	478	FM		478
7	10		7	13		29-Mar-2012	344	FM		344
2	70		2	71		29-Mar-2012	236	FM		236

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
2	71		2	72		29-Mar-2012	284	FM		284
2	72		3	34		29-Mar-2012	297	FM		297
3	34		3	37		29-Mar-2012	301	FM		301
3	35		7	13		29-Mar-2012	302	FM		302
3	35		3	36		29-Mar-2012	300	FM		300
3	36		3	37		29-Mar-2012	154	FM		154
32	50		32	51		1-Apr-2012	383	JM	6	766
24	27		24	28		1-Apr-2012	324	JM	12	324
16	24		16	25		1-Apr-2012	295	JM	12	295
16	25		16	26		1-Apr-2012	310	JM	12	310
16	26		16	27		1-Apr-2012	126	JM	12	126
16	27		16	28		1-Apr-2012	64	JM	12	64
16	28		16	29		1-Apr-2012	118	JM	12	118
16	29		16	30		1-Apr-2012	145	JM	12	145
10	85		15	12		1-Apr-2012	123	JM	6	246
8	62		8	63		1-Apr-2012	157	JM	3	628
8	42		8	43		1-Apr-2012	68	JM	6	136
8	43		8	48		1-Apr-2012	238	JM	6	476
3	62		3	63		1-Apr-2012	232	JM	12	232
3	9		3	19		1-Apr-2012	237	JM	6	474
4	95		4	136	C	1-Apr-2012	212	JM	12	212
4	96		4	97		1-Apr-2012	253	JM	12	253
4	97		4	103		1-Apr-2012	317	JM	12	317
4	105	C	4	137		1-Apr-2012	147	JM	6	294
4	107		4	108		1-Apr-2012	283	JM	12	283
4	108		4	109		1-Apr-2012	41	JM	12	41
4	113		4	114		1-Apr-2012	232	JM	6	464
4	109		4	117		1-Apr-2012	289	JM	12	289
4	89		4	93		1-Apr-2012	265	JM	6	530
19	203		19	205		2-Apr-2012	504	FM		504
3	37		3	38		2-Apr-2012	150	FM		150
3	38		3	39		2-Apr-2012	315	FM		315
3	39		3	41		2-Apr-2012	234	FM		234
3	41		3	49		2-Apr-2012	65	FM		65
3	42		3	130	C	2-Apr-2012	38	FM		38
3	42		3	43		2-Apr-2012	175	FM		175
3	43		3	44		2-Apr-2012	148	FM		148
3	44		3	45		2-Apr-2012	150	FM		150
3	45		3	46		2-Apr-2012	250	FM		250
3	46		3	47		2-Apr-2012	300	FM		300
3	47		3	48		2-Apr-2012	200	FM		200
3	48		3	49		2-Apr-2012	300	FM		300
3	49		3	50		2-Apr-2012	357	FM		357
3	50		3	51		2-Apr-2012	350	FM		350
3	51		3	53		2-Apr-2012	220	FM		220
3	52		3	53		2-Apr-2012	165	FM		165
3	52		3	168	C	2-Apr-2012	30	FM		30
3	53		3	54		2-Apr-2012	32	FM		32
3	54		3	65		2-Apr-2012	20	FM		20
3	56		3	57		2-Apr-2012	243	FM		243

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
3	57		3	58		2-Apr-2012	110	FM		110
3	58		3	138		2-Apr-2012	121	FM		121
3	55		3	59		2-Apr-2012	171	FM		171
3	59		3	138		2-Apr-2012	100	FM		100
3	59		3	60		2-Apr-2012	344	FM		344
3	60		3	61		2-Apr-2012	120	FM		120
3	62		3	63		2-Apr-2012	231	FM		231
3	63		3	64		2-Apr-2012	336	FM		336
3	61		3	65		2-Apr-2012	17	FM		17
3	64		3	65		2-Apr-2012	14	FM		14
3	66		3	136	C	2-Apr-2012	241	FM		241
3	73		3	131	C	2-Apr-2012	109	FM		109
3	73		3	74		2-Apr-2012	200	FM		200
3	74		3	75		2-Apr-2012	115	FM		115
3	75		3	76		2-Apr-2012	101	FM		101
3	76		3	77		2-Apr-2012	353	FM		353
3	77		3	132	C	2-Apr-2012	148	FM		148
3	67		3	68		3-Apr-2012	109	FM		109
3	69		3	70		3-Apr-2012	324	FM		324
3	70		3	71		3-Apr-2012	200	FM		200
3	68		3	71		3-Apr-2012	224	FM		224
3	71		3	72	M	3-Apr-2012	300	FM		300
3	77		3	82		3-Apr-2012	201	FM		201
3	78		3	79		3-Apr-2012	202	FM		202
3	79		3	80		3-Apr-2012	245	FM		245
3	80		3	81		3-Apr-2012	356	FM		356
3	81		3	82		3-Apr-2012	237	FM		237
3	82		3	83		3-Apr-2012	351	FM		351
3	83		3	84		3-Apr-2012	322	FM		322
3	1		3	3	C	3-Apr-2012	284	FM		284
3	2	C	3	3		3-Apr-2012	242	FM		242
3	3		3	4		3-Apr-2012	271	FM		271
3	4		3	6		3-Apr-2012	181	FM		181
3	6		3	8		3-Apr-2012	180	FM		180
3	7		3	8		3-Apr-2012	272	FM		272
3	8		3	9		3-Apr-2012	264	FM		264
3	10	C	3	11		3-Apr-2012	127	FM		127
3	11		3	16		3-Apr-2012	215	FM		215
3	11		3	134	C	3-Apr-2012	81	FM		81
3	12		3	16		3-Apr-2012	296	FM		296
3	12		3	135	C	3-Apr-2012	140	FM		140
3	13	C	3	14		3-Apr-2012	122	FM		122
3	14		3	15		3-Apr-2012	215	FM		215
3	15		3	16		3-Apr-2012	127	FM		127
3	16		3	17		3-Apr-2012	170	FM		170
3	17		3	18		3-Apr-2012	139	FM		139
3	18		3	19		3-Apr-2012	350	FM		350
3	9		3	19		3-Apr-2012	300	FM		300
3	19		3	167		3-Apr-2012	180	FM		180
3	19		3	20		3-Apr-2012	224	FM		224

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
3	20		3	21		3-Apr-2012	344	FM		344
3	21		3	22		3-Apr-2012	345	FM		345
3	22		3	23		3-Apr-2012	290	FM		290
3	107	C	3	108		4-Apr-2012	239	FM		239
3	108		7	22		4-Apr-2012	275	FM		275
3	108		3	109		4-Apr-2012	186	FM		186
3	109		4	69		4-Apr-2012	184	FM		184
4	69		4	155		4-Apr-2012	90	FM		90
7	21		8	2		4-Apr-2012	301	FM		301
7	21		7	22		4-Apr-2012	123	FM		123
7	21		7	208		4-Apr-2012	176	FM		176
7	208		7	209		4-Apr-2012	255	FM		255
8	1		8	2		4-Apr-2012	101	FM		101
8	1		8	210		4-Apr-2012	276	FM		276
3	92		3	93	C	4-Apr-2012	190	FM		190
3	92		3	102		4-Apr-2012	105	FM		105
3	94	C	3	97		4-Apr-2012	160	FM		160
3	95	C	3	96		4-Apr-2012	349	FM		349
3	96		3	97		4-Apr-2012	313	FM		313
3	97		3	98		4-Apr-2012	323	FM		323
3	98		3	133	D	4-Apr-2012	275	FM		275
3	99		3	137	C	4-Apr-2012	75	FM		75
3	98		3	100		4-Apr-2012	240	FM		240
3	99		3	100		4-Apr-2012	190	FM		190
3	100		3	101		4-Apr-2012	350	FM		350
3	101		3	129		4-Apr-2012	350	FM		350
3	23		3	28		4-Apr-2012	285	FM		285
3	25		3	26		4-Apr-2012	296	FM		296
3	26		3	28		4-Apr-2012	182	FM		182
3	27		3	28		4-Apr-2012	202	FM		202
7	19		7	20		5-Apr-2012	78	FM		78
7	20		8	33		5-Apr-2012	275	FM		275
8	29		8	206		5-Apr-2012	143	FM		143
8	29		8	30		5-Apr-2012	150	FM		150
8	33		8	34		5-Apr-2012	120	FM		120
8	34		8	218	C	5-Apr-2012	121	FM		121
8	34		8	35		5-Apr-2012	165	FM		165
8	35		8	36		5-Apr-2012	181	FM		181
8	36		8	40		5-Apr-2012	98	FM		98
8	37		8	38		5-Apr-2012	275	FM		275
8	37		8	207	C	5-Apr-2012	108	FM		108
8	38		8	39		5-Apr-2012	122	FM		122
8	39		8	40		5-Apr-2012	145	FM		145
8	40		8	41		5-Apr-2012	96	FM		96
8	46		8	225		5-Apr-2012	47	FM		47
8	225		8	226		5-Apr-2012	153	FM		153
8	43		8	48		5-Apr-2012	223	FM		223
8	47		8	49		5-Apr-2012	68	FM		68
8	48		8	49		5-Apr-2012	98	FM		98
8	49		8	50		5-Apr-2012	180	FM		180

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
8	44	C	8	50		5-Apr-2012	50	FM		50
8	50		8	51		5-Apr-2012	185	FM		185
8	51		8	214	D	5-Apr-2012	117	FM		117
8	51		8	215	C	5-Apr-2012	265	FM		265
8	51		8	52		5-Apr-2012	170	FM		170
3	28		3	29		5-Apr-2012	281	FM		281
3	30		3	31		5-Apr-2012	247	FM		247
3	31		3	32		5-Apr-2012	212	FM		212
3	29		3	33		5-Apr-2012	200	FM		200
3	32		3	33		5-Apr-2012	212	FM		212
7	116		7	117		6-Apr-2012	250	FM		250
7	117		7	118		6-Apr-2012	186	FM		186
7	119		7	120		6-Apr-2012	142	FM		142
7	118		7	121		6-Apr-2012	292	FM		292
7	120		7	121		6-Apr-2012	403	FM		403
7	121		7	206		6-Apr-2012	203	FM		203
7	122		7	123		6-Apr-2012	255	FM		255
7	123		7	124		6-Apr-2012	262	FM		262
7	124		7	125		6-Apr-2012	187	FM		187
7	125		7	206		6-Apr-2012	86	FM		86
7	125		7	126		6-Apr-2012	41	FM		41
7	127		7	128		6-Apr-2012	137	FM		137
7	126		7	129		6-Apr-2012	217	FM		217
7	128		7	129		6-Apr-2012	202	FM		202
7	129		7	130		6-Apr-2012	220	FM		220
7	130		7	131		6-Apr-2012	300	FM		300
4	66		4	67		9-Apr-2012	288	FM		288
4	38		4	39		9-Apr-2012	160	FM		160
4	39		4	40		9-Apr-2012	286	FM		286
4	40		4	42		9-Apr-2012	209	FM		209
4	41		4	42		9-Apr-2012	160	FM		160
4	42		4	43		9-Apr-2012	163	FM		163
4	44		4	125	C	9-Apr-2012	220	FM		220
4	44		4	45		9-Apr-2012	334	FM		334
4	45		4	126	C	9-Apr-2012	150	FM		150
4	54		4	129	C	9-Apr-2012	199	FM		199
4	54		4	55		9-Apr-2012	300	FM		300
4	55		4	148	C	9-Apr-2012	151	FM		151
4	55		4	56		9-Apr-2012	288	FM		288
4	56		4	57		9-Apr-2012	260	FM		260
4	56		4	141	C	9-Apr-2012	233	FM		233
8	3		8	203	C	10-Apr-2012	249	FM		249
8	4		8	201		10-Apr-2012	200	FM		200
8	4		8	5		10-Apr-2012	230	FM		230
8	5		8	202		10-Apr-2012	228	FM		228
8	3		8	8	P	10-Apr-2012	186	FM		186
8	8		8	27		10-Apr-2012	245	FM		245
8	9		8	11		10-Apr-2012	193	FM		193
8	9		8	204	C	10-Apr-2012	133	FM		133
8	10		8	205		10-Apr-2012	251	FM		251

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
8	10		8	11		10-Apr-2012	165	FM		165
8	11		8	12		10-Apr-2012	113	FM		113
8	12		8	13		10-Apr-2012	237	FM		237
8	13		8	221		10-Apr-2012	272	FM		272
8	14		8	15		10-Apr-2012	167	FM		167
8	14		8	221		10-Apr-2012	132	FM		132
8	15		8	27		10-Apr-2012	75	FM		75
7	132		8	16		10-Apr-2012	182	FM		182
8	16		8	17		10-Apr-2012	256	FM		256
8	17		8	18		10-Apr-2012	215	FM		215
8	17		8	213	C	10-Apr-2012	95	FM		95
8	18		8	19		10-Apr-2012	292	FM		292
8	19		8	20		10-Apr-2012	333	FM		333
8	26		8	27		10-Apr-2012	150	FM		150
4	79		4	80		10-Apr-2012	321	FM		321
3	106		4	80		10-Apr-2012	252	FM		252
4	80		4	81		10-Apr-2012	114	FM		114
4	81		4	146	D	10-Apr-2012	4	FM		4
3	72	M	3	86		10-Apr-2012	315	FM		315
3	84		3	85		10-Apr-2012	288	FM		288
3	85		3	86		10-Apr-2012	158	FM		158
3	86		3	88		10-Apr-2012	237	FM		237
3	87		3	88		10-Apr-2012	5	FM		5
4	60		4	130	C	10-Apr-2012	200	FM		200
4	60		4	61		10-Apr-2012	177	FM		177
4	61		4	63		10-Apr-2012	7	FM		7
4	62		4	63		10-Apr-2012	70	FM		70
4	63		4	64		10-Apr-2012	88	FM		88
4	81		4	82		11-Apr-2012	234	FM		234
4	82		4	124	C	11-Apr-2012	186	FM		186
3	88		3	89		11-Apr-2012	250	FM		250
3	89		4	82		11-Apr-2012	387	FM		387
3	90		3	91		11-Apr-2012	260	FM		260
3	91		3	103		11-Apr-2012	274	FM		274
3	92		3	103		11-Apr-2012	213	FM		213
3	103		4	68		11-Apr-2012	235	FM		235
3	103		3	169		11-Apr-2012	136	FM		136
3	169		3	170		11-Apr-2012	78	FM		78
4	67		4	68		11-Apr-2012	287	FM		287
4	68		4	144	C	11-Apr-2012	185	FM		185
4	57		4	58		11-Apr-2012	357	FM		357
8	20		8	25		12-Apr-2012	113	FM		113
8	22		8	23		12-Apr-2012	100	FM		100
8	23		8	24		12-Apr-2012	200	FM		200
8	24		8	25		12-Apr-2012	250	FM		250
8	25		8	222		12-Apr-2012	88	FM		88
8	222		8	223		12-Apr-2012	149	FM		149
3	104		3	105		12-Apr-2012	325	FM		325
3	104		3	170		12-Apr-2012	86	FM		86
3	33		4	32		12-Apr-2012	250	FM		250

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
4	70		8	56		16-Apr-2012	232	FM		232
8	27		8	224		16-Apr-2012	115	FM		115
8	28		8	224		16-Apr-2012	102	FM		102
8	28		8	31		16-Apr-2012	295	FM		295
8	30		8	31		16-Apr-2012	125	FM		125
8	31		8	32		16-Apr-2012	137	FM		137
8	32		8	53		16-Apr-2012	145	FM		145
8	52		8	53		16-Apr-2012	260	FM		260
8	53		8	54		16-Apr-2012	193	FM		193
8	54		8	55		16-Apr-2012	280	FM		280
8	55		8	56		16-Apr-2012	204	FM		204
8	56		8	221		16-Apr-2012	50	FM		50
8	208		8	221		16-Apr-2012	194	FM		194
8	208		8	228	D	16-Apr-2012	15	FM		15
8	223		8	224		16-Apr-2012	103	FM		103
4	70		4	71		16-Apr-2012	290	FM		290
4	71		4	72		16-Apr-2012	296	FM		296
4	71		4	155		16-Apr-2012	62	FM		62
4	72		4	154		16-Apr-2012	232	FM		232
4	35		4	36	M	16-Apr-2012	400	FM		400
4	36	M	4	37		16-Apr-2012	131	FM		131
4	43		4	51		16-Apr-2012	108	FM		108
4	45		4	48		16-Apr-2012	280	FM		280
4	46		4	47		16-Apr-2012	323	FM		323
4	46		4	127	C	16-Apr-2012	142	FM		142
4	46		4	152		16-Apr-2012	295	FM		295
4	47		4	48		16-Apr-2012	289	FM		289
4	47		4	145	C	16-Apr-2012	240	FM		240
4	48		4	49		16-Apr-2012	345	FM		345
4	49		4	50		16-Apr-2012	207	FM		207
4	50		4	51		16-Apr-2012	261	FM		261
4	51		4	52		16-Apr-2012	85	FM		85
4	37		4	53		16-Apr-2012	230	FM		230
4	52		4	53		16-Apr-2012	77	FM		77
4	53		4	59		16-Apr-2012	298	FM		298
4	58		4	59		16-Apr-2012	153	FM		153
4	59		4	65		16-Apr-2012	359	FM		359
4	64		4	65		16-Apr-2012	152	FM		152
4	152		4	153		16-Apr-2012	268	FM		268
4	153		4	154		16-Apr-2012	64	FM		64
4	8		4	9		17-Apr-2012	277	FM		277
4	9		4	10		17-Apr-2012	217	FM		217
4	10		4	25		17-Apr-2012	203	FM		203
4	11		4	12		17-Apr-2012	185	FM		185
4	12		4	13		17-Apr-2012	157	FM		157
4	13		4	14		17-Apr-2012	65	FM		65
4	15		4	16		17-Apr-2012	162	FM		162
4	14		4	17		17-Apr-2012	272	FM		272
4	14		4	151		17-Apr-2012	124	FM		124
4	16		4	17		17-Apr-2012	150	FM		150

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
4	17		4	20		17-Apr-2012	138	FM		138
4	18		4	19		17-Apr-2012	236	FM		236
4	19		4	20		17-Apr-2012	130	FM		130
4	20		4	21		17-Apr-2012	86	FM		86
4	21		4	22		17-Apr-2012	221	FM		221
4	22		4	23		17-Apr-2012	289	FM		289
4	23		4	24		17-Apr-2012	129	FM		129
4	24		4	25		17-Apr-2012	133	FM		133
4	7		4	25		17-Apr-2012	150	FM		150
4	25		4	31		17-Apr-2012	262	FM		262
4	26		4	27		17-Apr-2012	302	FM		302
4	27		4	28		17-Apr-2012	297	FM		297
4	28		4	29		17-Apr-2012	278	FM		278
4	29		4	30		17-Apr-2012	102	FM		102
4	30		4	31		17-Apr-2012	211	FM		211
4	95		4	136	C	18-Apr-2012	202	FM		202
4	94	D	4	96		18-Apr-2012	276	FM		276
4	94		4	149	C	18-Apr-2012	190	FM		190
4	95		4	96		18-Apr-2012	124	FM		124
4	96		4	97		18-Apr-2012	200	FM		200
4	97		4	103		18-Apr-2012	300	FM		300
4	98	C	4	99		18-Apr-2012	269	FM		269
4	99		8	59		18-Apr-2012	150	FM		150
4	99		4	101		18-Apr-2012	82	FM		82
4	100		4	101		18-Apr-2012	150	FM		150
4	100		4	102		18-Apr-2012	410	FM		410
4	102		4	103		18-Apr-2012	200	FM		200
4	103		4	117		18-Apr-2012	350	FM		350
4	104		4	138	C	18-Apr-2012	260	FM		260
4	104		4	142	C	18-Apr-2012	130	FM		130
4	104		4	105		18-Apr-2012	165	FM		165
4	105		4	137	C	18-Apr-2012	130	FM		130
4	105		4	107		18-Apr-2012	50	FM		50
4	106	C	4	107		18-Apr-2012	221	FM		221
4	107		4	108		18-Apr-2012	280	FM		280
4	108		4	109		18-Apr-2012	100	FM		100
4	110		4	115		18-Apr-2012	330	FM		330
4	110		4	140		18-Apr-2012	325	FM		325
4	111		4	134		18-Apr-2012	286	FM		286
4	111		4	135	C	18-Apr-2012	81	FM		81
4	111		4	112		18-Apr-2012	287	FM		287
4	112		4	113		18-Apr-2012	350	FM		350
4	113		4	114		18-Apr-2012	218	FM		218
4	114		4	115		18-Apr-2012	277	FM		277
4	115		4	116		18-Apr-2012	116	FM		116
4	116		4	117		18-Apr-2012	150	FM		150
4	109		4	117		18-Apr-2012	275	FM		275
8	53		8	212		18-Apr-2012	173	FM		173
8	57		8	58		18-Apr-2012	183	FM		183
8	57		8	209	C	18-Apr-2012	151	FM		151

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
8	58		8	59		18-Apr-2012	211	FM		211
8	58		8	212		18-Apr-2012	175	FM		175
9	36		10	1		19-Apr-2012	260	FM		260
9	36		9	37		19-Apr-2012	200	FM		200
9	37		9	38		19-Apr-2012	89	FM		89
9	38		9	41		19-Apr-2012	330	FM		330
9	39		9	40		19-Apr-2012	200	FM		200
9	40		9	41		19-Apr-2012	85	FM		85
9	42		9	43		19-Apr-2012	100	FM		100
9	41		9	43		19-Apr-2012	180	FM		180
9	43		9	44		19-Apr-2012	140	FM		140
4	117		4	120		19-Apr-2012	300	FM		300
4	118		4	119		19-Apr-2012	345	FM		345
4	119		4	120		19-Apr-2012	300	FM		300
4	120		4	121		19-Apr-2012	150	FM		150
4	121		4	122		19-Apr-2012	200	FM		200
4	83		4	84		19-Apr-2012	166	FM		166
4	84		4	85		19-Apr-2012	295	FM		295
4	85		4	86		19-Apr-2012	287	FM		287
4	86		4	87		19-Apr-2012	346	FM		346
4	87		4	89		19-Apr-2012	144	FM		144
4	88		4	89		19-Apr-2012	235	FM		235
4	88		4	131	C	19-Apr-2012	39	FM		39
4	88		4	132	C	19-Apr-2012	112	FM		112
4	89		4	133	C	19-Apr-2012	120	FM		120
4	90		4	91		19-Apr-2012	291	FM		291
4	91		4	128	C	19-Apr-2012	174	FM		174
4	91		4	92		19-Apr-2012	350	FM		350
4	89		4	93		19-Apr-2012	246	FM		246
4	92		4	93		19-Apr-2012	255	FM		255
4	93		4	150		19-Apr-2012	74	FM		74
4	122		4	123		19-Apr-2012	110	FM		110
4	123		4	150		19-Apr-2012	82	FM		82
8	69		8	70		20-Apr-2012	246	FM		246
8	70		9	4		20-Apr-2012	213	FM		213
8	71		8	72		20-Apr-2012	267	FM		267
8	72		9	1		20-Apr-2012	347	FM		347
9	1		9	2		20-Apr-2012	350	FM		350
9	2		9	3		20-Apr-2012	210	FM		210
9	3		9	5		20-Apr-2012	80	FM		80
9	4		9	5		20-Apr-2012	210	FM		210
9	5		9	6		20-Apr-2012	178	FM		178
9	6		9	7		20-Apr-2012	109	FM		109
9	23		9	25		20-Apr-2012	170	FM		170
9	24		9	25		20-Apr-2012	190	FM		190
9	25		9	26		20-Apr-2012	100	FM		100
9	26		9	27		20-Apr-2012	256	FM		256
9	27		9	29		20-Apr-2012	310	FM		310
9	28		9	29		20-Apr-2012	200	FM		200
9	29		9	30		20-Apr-2012	310	FM		310

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
9	30		9	31		20-Apr-2012	260	FM		260
9	31		9	32		20-Apr-2012	217	FM		217
9	46		9	47		20-Apr-2012	116	FM		116
9	47		9	48		20-Apr-2012	100	FM		100
8	60		8	61		23-Apr-2012	275	FM		275
8	62		8	63		23-Apr-2012	157	FM		157
8	61		8	63		23-Apr-2012	142	FM		142
8	63		8	64		23-Apr-2012	206	FM		206
8	64		8	65		23-Apr-2012	125	FM		125
8	65		8	66		23-Apr-2012	370	FM		370
8	66		8	67		23-Apr-2012	119	FM		119
8	67		8	68		23-Apr-2012	236	FM		236
8	68		9	8		23-Apr-2012	377	FM		377
9	7		9	9		23-Apr-2012	192	FM		192
9	8		9	9		23-Apr-2012	161	FM		161
9	9		9	10		23-Apr-2012	165	FM		165
9	10		9	11		23-Apr-2012	190	FM		190
9	11		9	16		23-Apr-2012	300	FM		300
9	12		9	16		23-Apr-2012	194	FM		194
9	13		9	14		23-Apr-2012	340	FM		340
9	14		9	15		23-Apr-2012	267	FM		267
9	15		9	16		23-Apr-2012	300	FM		300
9	16		9	17		23-Apr-2012	345	FM		345
9	17		9	18		23-Apr-2012	350	FM		350
9	18		9	19		23-Apr-2012	249	FM		249
9	32		9	33		23-Apr-2012	220	FM		220
9	33		9	34		23-Apr-2012	250	FM		250
9	48		9	49		23-Apr-2012	94	FM		94
9	49		9	50		23-Apr-2012	301	FM		301
9	50		9	52		23-Apr-2012	360	FM		360
9	51		9	52		23-Apr-2012	192	FM		192
9	52		9	53		23-Apr-2012	300	FM		300
9	53		9	54		23-Apr-2012	211	FM		211
9	54		9	55		23-Apr-2012	250	FM		250
9	55		9	56		23-Apr-2012	170	FM		170
9	56		9	57		23-Apr-2012	236	FM		236
9	57		9	58		23-Apr-2012	360	FM		360
9	19		9	20		24-Apr-2012	300	FM		300
9	20		9	22		24-Apr-2012	250	FM		250
9	21		9	22		24-Apr-2012	245	FM		245
9	21		9	135	C	24-Apr-2012	191	FM		191
8	171		8	172		24-Apr-2012	160	FM		160
8	172		8	173		24-Apr-2012	129	FM		129
8	173		9	60		24-Apr-2012	182	FM		182
9	22		9	35		24-Apr-2012	50	FM		50
9	34		9	35		24-Apr-2012	343	FM		343
9	35		9	45		24-Apr-2012	212	FM		212
9	44		9	45		24-Apr-2012	200	FM		200
9	58		9	59		24-Apr-2012	350	FM		350
9	45		9	59		24-Apr-2012	150	FM		150

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
9	59		9	73		24-Apr-2012	300	FM		300
9	60		9	61		24-Apr-2012	140	FM		140
9	61		9	62		24-Apr-2012	170	FM		170
9	62		9	63		24-Apr-2012	360	FM		360
9	63		9	64		24-Apr-2012	325	FM		325
9	64		9	65		24-Apr-2012	78	FM		78
9	65		9	66		24-Apr-2012	183	FM		183
9	66		9	68		24-Apr-2012	360	FM		360
9	67		9	68		24-Apr-2012	210	FM		210
9	67		9	136	C	24-Apr-2012	129	FM		129
9	68		9	69		24-Apr-2012	181	FM		181
9	69		9	70		24-Apr-2012	360	FM		360
9	70		9	71		24-Apr-2012	263	FM		263
9	71		9	72		24-Apr-2012	156	FM		156
9	72		9	73		24-Apr-2012	161	FM		161
9	73		9	74		24-Apr-2012	200	FM		200
9	74		9	75		24-Apr-2012	112	FM		112
9	98		9	99		24-Apr-2012	135	FM		135
9	99		9	100		24-Apr-2012	240	FM		240
9	100		9	101		24-Apr-2012	170	FM		170
9	95		9	96		25-Apr-2012	253	FM		253
9	96		9	97		25-Apr-2012	269	FM		269
9	101		9	102		25-Apr-2012	185	FM		185
9	97		9	103		25-Apr-2012	141	FM		141
9	102		9	103		25-Apr-2012	212	FM		212
9	103		9	112		25-Apr-2012	250	FM		250
9	104		9	105		25-Apr-2012	210	FM		210
9	105		9	106		25-Apr-2012	203	FM		203
9	106		9	110		25-Apr-2012	200	FM		200
9	107		9	108		25-Apr-2012	276	FM		276
9	108		9	109		25-Apr-2012	275	FM		275
9	109		9	110		25-Apr-2012	200	FM		200
9	110		9	111		25-Apr-2012	47	FM		47
9	111		9	112		25-Apr-2012	200	FM		200
9	112		9	113		25-Apr-2012	100	FM		100
9	113		9	114		25-Apr-2012	60	FM		60
9	114		9	115		25-Apr-2012	300	FM		300
9	115		9	118		25-Apr-2012	173	FM		173
9	116		9	117		25-Apr-2012	200	FM		200
9	117		9	118		25-Apr-2012	300	FM		300
9	118		9	119		25-Apr-2012	300	FM		300
9	119		9	121		25-Apr-2012	334	FM		334
9	120		9	121		25-Apr-2012	175	FM		175
8	174		8	176		25-Apr-2012	312	FM		312
8	175	C	8	176		25-Apr-2012	146	FM		146
8	176		8	177		25-Apr-2012	200	FM		200
8	177		8	178		25-Apr-2012	47	FM		47
8	178		8	179		25-Apr-2012	50	FM		50
8	179		8	182		25-Apr-2012	120	FM		120
8	180		8	181		25-Apr-2012	91	FM		91

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
8	181		8	182		25-Apr-2012	170	FM		170
9	125		9	137		25-Apr-2012	25	FM		25
8	184		9	125		25-Apr-2012	75	FM		75
8	184		8	185		25-Apr-2012	281	FM		281
8	185		8	186		25-Apr-2012	269	FM		269
8	182		8	183		26-Apr-2012	200	FM		200
8	183		8	187		26-Apr-2012	153	FM		153
8	186		8	187		26-Apr-2012	300	FM		300
8	187		8	188		26-Apr-2012	400	FM		400
8	188		8	190		26-Apr-2012	234	FM		234
8	190		8	191		26-Apr-2012	266	FM		266
8	191		9	124		26-Apr-2012	325	FM		325
8	158		8	159		30-Apr-2012	150	FM		150
8	159		8	160		30-Apr-2012	110	FM		110
8	160		8	161		30-Apr-2012	342	FM		342
8	161		8	166		30-Apr-2012	160	FM		160
8	162		8	166		30-Apr-2012	250	FM		250
8	163		8	164		30-Apr-2012	302	FM		302
8	164		8	165		30-Apr-2012	150	FM		150
8	165		8	166		30-Apr-2012	160	FM		160
8	166		8	167		30-Apr-2012	245	FM		245
8	73		8	74		30-Apr-2012	250	FM		250
8	74		8	75		30-Apr-2012	322	FM		322
8	75		8	76		30-Apr-2012	127	FM		127
8	76		8	80		30-Apr-2012	150	FM		150
8	77		8	216	C	30-Apr-2012	68	FM		68
8	77		8	78		30-Apr-2012	127	FM		127
8	78		8	79		30-Apr-2012	150	FM		150
8	79		8	80		30-Apr-2012	175	FM		175
8	80		8	81		30-Apr-2012	120	FM		120
8	81		8	82		30-Apr-2012	100	FM		100
8	82		8	83		30-Apr-2012	100	FM		100
8	85		8	86		30-Apr-2012	340	FM		340
8	86		8	88		30-Apr-2012	320	FM		320
8	88		8	90		30-Apr-2012	115	FM		115
8	89		8	90		30-Apr-2012	180	FM		180
8	90		8	219		30-Apr-2012	135	FM		135
8	83		8	91		30-Apr-2012	150	FM		150
8	91		8	220		30-Apr-2012	275	FM		275
8	91		8	92		30-Apr-2012	275	FM		275
8	92		8	93		30-Apr-2012	240	FM		240
8	93		8	95		30-Apr-2012	190	FM		190
8	94		8	95		30-Apr-2012	360	FM		360
8	95		8	96		30-Apr-2012	125	FM		125
8	219		8	220		30-Apr-2012	50	FM		50
22	75	S	22	76	S	1-May-2012	48	FM	3	192
21	81	P	21	82	P	1-May-2012	300	FM	3	1200
21	135	S	21	136	S	1-May-2012	48	FM	3	192
25	152	S	25	153	S	1-May-2012	48	FM	3	192
19	170	S	19	171	S	1-May-2012	9	FM	3	36

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
19	171	S	19	172	S	1-May-2012	36	FM	3	144
25	80	M	25	125		1-May-2012	330	FM	3	1320
25	125		25	126	S	1-May-2012	8	FM	3	32
25	126	S	25	127	S	1-May-2012	22	FM	3	88
25	8	S	25	9	S	1-May-2012	48	FM	3	192
19	96	S	19	97	S	1-May-2012	66	FM	3	264
19	97	S	19	98	S	1-May-2012	183	FM	3	732
19	98	S	19	99	S	1-May-2012	206	FM	3	824
12	41	S	12	42	S	1-May-2012	80	FM	3	320
12	21	S	12	22	S	1-May-2012	100	FM	3	400
19	168		20	74		1-May-2012	270	JM	12	270
19	177		19	183		1-May-2012	350	JM	12	350
16	18		16	19		1-May-2012	247	JMR	6	494
9	96		9	97		1-May-2012	272	JM	12	272
9	98		9	99		1-May-2012	135	JM	12	135
9	99		9	100		1-May-2012	250	JM	12	250
9	100		9	101		1-May-2012	91	JM	6	182
9	101		9	102		1-May-2012	154	JM	6	308
9	102		9	103		1-May-2012	215	JM	12	215
9	108		9	109		1-May-2012	277	JMR	6	554
7	167		7	171		1-May-2012	305	JMR	6	610
7	173		7	174		1-May-2012	300	JM	12	300
7	174		7	175		1-May-2012	305	JM	12	305
3	107	C	3	108		1-May-2012	239	JM	12	239
3	58		3	138		1-May-2012	110	JM	12	110
3	59		3	138		1-May-2012	110	JM	12	110
3	59		3	60		1-May-2012	345	JM	12	345
4	56		4	141	C	1-May-2012	237	JM	12	237
4	60		4	130	C	1-May-2012	205	JM	12	205
19	39	S	19	40	S	2-May-2012	25	FM	3	100
19	40	S	19	41	S	2-May-2012	65	FM	3	260
19	42	S	19	74		2-May-2012	215	FM	3	860
19	74		19	75		2-May-2012	268	FM	3	1072
18	37	S	18	40	P	2-May-2012	314	FM	3	1256
12	60	P	12	61	P	2-May-2012	305	FM	3	1220
12	61	P	12	62	P	2-May-2012	305	FM	3	1220
12	62	P	12	63	P	2-May-2012	95	FM	3	380
12	80	P	12	81	P	2-May-2012	377	FM	3	1508
12	81	P	12	82	P	2-May-2012	11	FM	3	44
12	67		12	68		2-May-2012	341	FM	3	1364
12	68		12	69		2-May-2012	344	FM	3	1376
12	69		12	72		2-May-2012	385	FM	3	1540
12	72		12	73		2-May-2012	185	FM	3	740
12	78	M	12	81		2-May-2012	316	FM	3	1264
12	79	P	12	137	D	2-May-2012	170	FM	3	680
12	80	P	12	141	D	2-May-2012	53	FM	3	212
14	200	S	14	201	S	2-May-2012	50	FM	3	200
14	78		14	82		2-May-2012	330	FM	3	1320
14	78		14	200	S	2-May-2012	127	FM	3	508
14	80	S	14	82		2-May-2012	134	FM	3	536

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
14	82		14	87	P	2-May-2012	175	FM	3	700
20	138	P	20	139	P	2-May-2012	140	FM	3	560
20	139	P	20	140	P	2-May-2012	170	FM	3	680
13	88		20	143		2-May-2012	450	FM	3	1800
13	131	P	13	132	P	2-May-2012	305	FM	3	1220
13	132	P	13	133	P	2-May-2012	310	FM	3	1240
13	159	S	13	200	S	2-May-2012	48	FM	3	192
12	37	P	12	39	P	2-May-2012	155	FM	3	620
12	110		12	111		2-May-2012	165	FM	3	660
12	110		12	140		2-May-2012	165	FM	3	660
12	8	P	12	9	P	2-May-2012	310	FM	3	1240
12	115	P	12	116	P	2-May-2012	340	FM	3	1360
12	116	P	12	117	P	2-May-2012	295	FM	3	1180
27	56		27	57		3-May-2012	265	FM	3	1060
27	57		27	58		3-May-2012	295	FM	3	1180
27	58		27	59		3-May-2012	109	FM	3	436
27	59		27	60		3-May-2012	300	FM	3	1200
25	140	P	25	141	P	3-May-2012	200	FM	3	800
25	141	P	25	144	P	3-May-2012	180	FM	3	720
25	144	P	26	68	P	3-May-2012	323	FM	3	1292
26	65	P	26	69	P	3-May-2012	333	FM	3	1332
26	68	P	26	69	P	3-May-2012	184	FM	3	736
19	172	S	19	173	S	3-May-2012	9	FM	3	36
29	76		29	77		3-May-2012	260	FM	3	1040
29	77		29	78		3-May-2012	175	FM	3	700
29	78		29	80		3-May-2012	195	FM	3	780
29	80		29	81		3-May-2012	70	FM	3	280
29	81		29	82		3-May-2012	215	FM	3	860
12	127		13	186		3-May-2012	250	FM	3	1000
13	185		13	186		3-May-2012	110	FM	3	440
13	186		13	187		3-May-2012	210	FM	3	840
13	187		13	188		3-May-2012	304	FM	3	1216
12	93	P	12	94	P	3-May-2012	293	FM	3	1172
12	94	P	12	95	P	3-May-2012	224	FM	3	896
20	140		20	143		3-May-2012	355	FM	3	1420
20	142	M	20	143		3-May-2012	310	FM	3	1240
20	143		20	144		3-May-2012	215	FM	3	860
13	196	P	20	144	P	3-May-2012	255	FM	3	1020
13	90	P	13	91	T	3-May-2012	295	FM	3	1180
13	91	T	13	92	T	3-May-2012	18	FM	3	72
13	166	P	13	167	P	3-May-2012	310	FM	3	1240
13	167	P	13	168	P	3-May-2012	18	FM	3	72
7	109		7	195		3-May-2012	220	FM		220
13	105	P	13	106	P	4-May-2012	315	FM	3	1260
13	106		13	107		4-May-2012	425	FM	3	1700
13	107		13	108		4-May-2012	303	FM	3	1212
13	108	P	13	109	P	4-May-2012	179	FM	3	716
13	109		13	110		4-May-2012	30	FM	3	120
12	100	P	12	101	P	4-May-2012	325	FM	3	1300
12	101	P	12	102	P	4-May-2012	340	FM	3	1360

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
12	102	P	12	103	P	4-May-2012	275	FM	3	1100
12	103	P	12	133	P	4-May-2012	285	FM	3	1140
1	17	P	1	18	P	4-May-2012	175	FM	3	700
26	10		26	11		7-May-2012	253	FM	3	1012
26	10		31	32		7-May-2012	267	FM	3	1068
26	11		26	12		7-May-2012	259	FM	3	1036
26	12		26	13		7-May-2012	236	FM	3	944
26	13		26	14		7-May-2012	86	FN	3	344
26	14		26	15		7-May-2012	185	FM	3	740
26	15		26	16		7-May-2012	177	FM	3	708
26	16		26	19		7-May-2012	242	FM	3	968
26	17		26	18		7-May-2012	184	FM	3	736
26	18		26	19		7-May-2012	182	FM	3	728
26	19		26	26		7-May-2012	273	FM	3	1092
31	31		31	32		7-May-2012	300	FM	3	1200
26	38	P	26	39	P	7-May-2012	315	FM	3	1260
29	49		29	56		7-May-2012	186	FM	3	744
25	67	P	25	69	P	7-May-2012	250	FM	3	1000
25	68		25	69	P	7-May-2012	180	FM	3	720
25	69	P	25	70	P	7-May-2012	50	FM	3	200
15	174		15	175		7-May-2012	327	FM	3	1308
15	145	P	15	174	P	7-May-2012	326	FM	3	1304
14	139	P	14	140	P	7-May-2012	360	FM	3	1440
14	139	P	14	212	D	7-May-2012	110	FM	3	440
14	108		14	109	P	7-May-2012	130	FM	3	520
14	109	P	14	110	P	7-May-2012	350	FM	3	1400
14	110	P	14	112	P	7-May-2012	290	FM	3	1160
14	111	P	14	112	P	7-May-2012	290	FM	3	1160
14	112	P	14	113	P	7-May-2012	84	FM	3	336
14	113	P	14	114	P	7-May-2012	168	FM	3	672
14	114	P	14	118	P	7-May-2012	250	FM	3	1000
14	117	P	14	118	P	7-May-2012	135	FM	3	540
14	117	P	14	202	P	7-May-2012	50	FM	3	200
14	118	P	14	119		7-May-2012	315	FM	3	1260
20	19	P	20	20	P	8-May-2012	350	FM	3	1400
21	130	P	21	131	P	8-May-2012	162	FM	3	648
21	131	P	21	132		8-May-2012	293	FM	3	1172
21	132	P	21	141	P	8-May-2012	111	FM	3	444
21	133	P	21	141	P	8-May-2012	185	FM	3	740
25	26	P	25	37	P	8-May-2012	344	FM	3	1376
25	37	P	25	38	P	8-May-2012	330	FM	3	1320
7	176	P	7	177	P	8-May-2012	270	FM	3	1080
7	148		8	170		14-May-2012	360	FM		360
7	148		7	149		14-May-2012	173	FM		173
7	149		7	150		14-May-2012	265	FM		265
7	150		8	169		14-May-2012	200	FM		200
7	151		7	152		14-May-2012	185	FM		185
7	150		7	153		14-May-2012	347	FM		347
7	152		7	153		14-May-2012	230	FM		230
7	153		7	154		14-May-2012	200	FM		200

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
7	154		8	167		14-May-2012	350	FM		350
7	154		7	155		14-May-2012	145	FM		145
7	155		7	156		14-May-2012	145	FM		145
8	168		8	169		14-May-2012	185	FM		185
11	20		11	24		14-May-2012	350	FM		350
11	24		11	25		14-May-2012	275	FM		275
11	25		11	26		14-May-2012	353	FM		353
11	26		11	28		14-May-2012	70	FM		70
11	27		11	28		14-May-2012	360	FM		360
11	28		11	29		14-May-2012	262	FM		262
11	30		11	78		14-May-2012	212	FM		212
11	29		11	31		14-May-2012	200	FM		200
11	30		11	31		14-May-2012	335	FM		335
11	31		11	32	M	14-May-2012	133	FM		133
11	32	M	11	48		14-May-2012	347	FM		347
11	43		11	48		14-May-2012	300	FM		300
11	47		11	48		14-May-2012	100	FM		100
11	48		11	49		14-May-2012	335	FM		335
11	49		11	50		14-May-2012	330	FM		330
11	50		11	51	M	14-May-2012	320	FM		320
6	146		11	77		14-May-2012	150	FM		150
11	51	M	11	77		14-May-2012	335	FM		335
7	133		7	134		15-May-2012	280	FM		280
7	134		7	136		15-May-2012	320	FM		320
7	135		7	136		15-May-2012	345	FM		345
7	136		7	137		15-May-2012	157	FM		157
7	137		7	138		15-May-2012	390	FM		390
7	138		7	139		15-May-2012	272	FM		272
7	140		7	141		15-May-2012	220	FM		220
7	141		7	142		15-May-2012	330	FM		330
7	142		7	143		15-May-2012	300	FM		300
7	139		7	144		15-May-2012	193	FM		193
7	143		7	144		15-May-2012	165	FM		165
7	144		7	145		15-May-2012	270	FM		270
7	145		7	146		15-May-2012	250	FM		250
7	146		7	204	D	15-May-2012	89	FM		89
7	147		7	203	D	15-May-2012	59	FM		59
7	156		7	157		15-May-2012	250	FM		250
7	157		7	158		15-May-2012	190	FM		190
7	158		7	160		15-May-2012	290	FM		290
7	159		7	160		15-May-2012	259	FM		259
7	159		7	201	D	15-May-2012	250	FM		250
7	161		7	162		15-May-2012	260	FM		260
7	161		7	202	D	15-May-2012	59	FM		59
7	160		7	162		15-May-2012	290	FM		290
7	146		7	163		15-May-2012	300	FM		300
7	147		7	163		15-May-2012	260	FM		260
7	162		7	163		15-May-2012	310	FM		310
7	163		7	167		15-May-2012	360	FM		360
7	165		7	198	C	15-May-2012	175	FM		175

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
7	165		7	166		15-May-2012	260	FM		260
7	166		7	167		15-May-2012	350	FM		350
7	164		7	167		15-May-2012	351	FM		351
7	167		7	171		15-May-2012	300	FM		300
7	168		7	205		15-May-2012	42	FM		42
7	169		7	197	C	15-May-2012	160	FM		160
7	169		7	170		15-May-2012	300	FM		300
7	168		7	171		15-May-2012	300	FM		300
7	170		7	171		15-May-2012	310	FM		310
7	171		7	175		15-May-2012	300	FM		300
7	172		7	175		15-May-2012	360	FM		360
7	173		7	174		15-May-2012	310	FM		310
7	173		7	196	C	15-May-2012	144	FM		144
7	174		7	175		15-May-2012	310	FM		310
7	175		7	176	P	15-May-2012	300	FM		300
7	184		7	192	C	16-May-2012	250	FM		250
7	184		7	185		16-May-2012	300	FM		300
7	186		7	187		16-May-2012	220	FM		220
7	187		7	188		16-May-2012	330	FM		330
7	188		8	106		16-May-2012	295	FM		295
8	45		8	126		16-May-2012	105	FM		105
8	45		8	127		16-May-2012	200	FM		200
8	96		8	97		16-May-2012	50	FM		50
8	98		8	99		16-May-2012	189	FM		189
8	99		8	100		16-May-2012	215	FM		215
8	100		8	101		16-May-2012	140	FM		140
8	101		8	102		16-May-2012	135	FM		135
8	97		8	103		16-May-2012	125	FM		125
8	102		8	103		16-May-2012	400	FM		400
8	103		8	104		16-May-2012	165	FM		165
8	104		8	105		16-May-2012	315	FM		315
8	105		8	106		16-May-2012	220	FM		220
8	107		8	108		16-May-2012	344	FM		344
8	108		8	109		16-May-2012	50	FM		50
8	109		8	110		16-May-2012	50	FM		50
8	110		8	117		16-May-2012	200	FM		200
8	111		8	112		16-May-2012	174	FM		174
8	112		8	113		16-May-2012	200	FM		200
8	113		8	114		16-May-2012	156	FM		156
8	114		8	115		16-May-2012	120	FM		120
8	115		8	116		16-May-2012	70	FM		70
8	116		8	117		16-May-2012	100	FM		100
8	118		8	119		16-May-2012	165	FM		165
8	119		8	120		16-May-2012	175	FM		175
8	120		8	121		16-May-2012	100	FM		100
8	121		8	126		16-May-2012	175	FM		175
8	122		8	123		16-May-2012	350	FM		350
8	123		8	124		16-May-2012	100	FM		100
8	124		8	125		16-May-2012	100	FM		100
8	125		8	126		16-May-2012	75	FM		75

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
8	127		8	128		16-May-2012	160	FM		160
8	128		8	129		16-May-2012	350	FM		350
8	129		8	130		16-May-2012	125	FM		125
8	130		8	131		16-May-2012	130	FM		130
8	131		8	132		16-May-2012	360	FM		360
8	132		8	133		16-May-2012	141	FM		141
8	133		8	134		16-May-2012	300	FM		300
8	134		8	189		16-May-2012	230	FM		230
8	135		8	189		16-May-2012	97	FM		97
8	135		8	136		16-May-2012	340	FM		340
7	183		7	200		17-May-2012	183	FM		183
7	188		7	189		17-May-2012	200	FM		200
7	189		7	190		17-May-2012	38	FM		38
7	190		7	191		17-May-2012	165	FM		165
7	185		7	191		17-May-2012	220	FM		220
7	191		8	137		17-May-2012	71	FM		71
8	136	P	8	138	P	17-May-2012	300	FM		300
8	137	P	8	138	P	17-May-2012	290	FM		290
8	138		8	145		17-May-2012	325	FM		325
8	139		8	140		17-May-2012	385	FM		385
8	140		8	141		17-May-2012	300	FM		300
8	141		8	142		17-May-2012	300	FM		300
8	142		8	143		17-May-2012	300	FM		300
8	143		8	145		17-May-2012	300	FM		300
7	183		8	144		17-May-2012	300	FM		300
8	144		8	145		17-May-2012	300	FM		300
8	145		8	152		17-May-2012	325	FM		325
8	146		8	147		17-May-2012	139	FM		139
8	147		8	148		17-May-2012	113	FM		113
8	148		8	149		17-May-2012	400	FM		400
8	149		8	150		17-May-2012	340	FM		340
8	150		8	151		17-May-2012	346	FM		346
8	151		8	152		17-May-2012	162	FM		162
7	182		7	199	C	17-May-2012	150	FM		150
7	182		8	153		17-May-2012	290	FM		290
8	152		8	154		17-May-2012	170	FM		170
8	153		8	154		17-May-2012	230	FM		230
13	34		13	198	C	18-May-2012	225	FM		225
13	34		13	35		18-May-2012	347	FM		347
13	35		13	36		18-May-2012	167	FM		167
13	36		13	37		18-May-2012	331	FM		331
13	44		13	45		18-May-2012	140	FM		140
12	12		12	13		18-May-2012	88	FM		88
12	13		12	14		18-May-2012	200	FM		200
12	14		12	15		18-May-2012	123	FM		123
12	15		12	16		18-May-2012	43	FM		43
12	16		12	17		18-May-2012	32	FM		32
8	154		8	155		18-May-2012	245	FM		245
8	155		8	156		18-May-2012	155	FM		155
8	156		8	157		18-May-2012	200	FM		200

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
25	65	P	25	66	P	21-May-2012	150	FM	3	600
14	184		14	219		21-May-2012	183	FM		183
14	219		14	220	D	21-May-2012	97	FM		97
14	219		14	221	D	21-May-2012	28	FM		28
25	64	P	25	66	P	22-May-2012	250	FM	3	1000
25	66	P	25	67	P	22-May-2012	90	FM	3	360
17	1		17	2		23-May-2012	260	FM		260
17	2		17	3		23-May-2012	220	FM		220
17	3		17	4		23-May-2012	215	FM		215
17	6		17	7		23-May-2012	275	FM		275
17	12		17	13		23-May-2012	98	FM		98
17	13		17	14		23-May-2012	177	FM		177
17	14		17	15		23-May-2012	165	FM		165
17	15		17	16		23-May-2012	228	FM		228
17	16		17	23		23-May-2012	266	FM		266
17	17		17	19		23-May-2012	231	FM		231
17	18		17	19		23-May-2012	264	FM		264
17	19		17	20		23-May-2012	193	FM		193
17	20		17	21		23-May-2012	320	FM		320
17	21		17	22		23-May-2012	206	FM		206
17	22		17	23		23-May-2012	205	FM		205
14	14		14	32		29-May-2012	110	FM		110
14	9		14	10		29-May-2012	235	FM		235
14	10		14	11		29-May-2012	260	FM		260
14	11		14	12		29-May-2012	260	FM		260
13	19	C	14	29		29-May-2012	296	FM		296
13	19		13	20		29-May-2012	350	FM		350
13	20		13	53		29-May-2012		FM		
13	20		13	21		29-May-2012	260	FM		260
13	21		13	22		29-May-2012	290	FM		290
13	22		13	23		29-May-2012	130	FM		130
14	14		14	15		29-May-2012	76	FM		76
14	15		14	17		29-May-2012	450	FM		450
14	16		14	17		29-May-2012	121	FM		121
14	18	C	14	19	C	29-May-2012	143	FM		143
14	17		14	20		29-May-2012	289	FM		289
14	19		14	20		29-May-2012	80	FM		80
14	20		14	21		29-May-2012	370	FM		370
14	21		14	28		29-May-2012	375	FM		375
14	22		14	23		29-May-2012	375	FM		375
14	23		14	24		29-May-2012	10	FM		10
14	24		14	25		29-May-2012	160	FM		160
14	25		14	26		29-May-2012	332	FM		332
14	26		14	27		29-May-2012	330	FM		330
14	27		14	28		29-May-2012	330	FM		330
14	28		14	29		29-May-2012	240	FM		240
8	196		8	197		29-May-2012	290	FM		290
8	197		8	198		29-May-2012	290	FM		290
8	198		8	199		29-May-2012	290	FM		290
8	199		8	200		29-May-2012	290	FM		290

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
8	200		13	41		29-May-2012	150	FM		150
8	41		8	42		29-May-2012	107	FM		107
8	42		8	43		29-May-2012	68	FM		68
8	46		8	47		29-May-2012	310	FM		310
14	3		14	4		30-May-2012	400	FM		400
14	9		14	191		30-May-2012	200	FM		200
13	23		13	25		30-May-2012	84	FM		84
13	24		13	25		30-May-2012	84	FM		84
13	25		13	26		30-May-2012	84	FM		84
13	27		13	204		30-May-2012	371	FM		371
13	26		13	28		30-May-2012	35	FM		35
13	27		13	28		30-May-2012	426	FM		426
13	28		13	29		30-May-2012	175	FM		175
13	29		13	30		30-May-2012	341	FM		341
13	49		13	50		30-May-2012	332	FM		332
13	50		13	51		30-May-2012	325	FM		325
3	110		3	128	C	31-May-2012	250	FM		250
3	110		3	111		31-May-2012	272	FM		272
3	111		3	112		31-May-2012	317	FM		317
3	112		3	113		31-May-2012	297	FM		297
3	114		7	9		31-May-2012	382	FM		382
3	113		3	114		31-May-2012	243	FM		243
6	20		6	21		31-May-2012	294	FM		294
6	21		6	22		31-May-2012	107	FM		107
6	22		6	23		31-May-2012	130	FM		130
6	23		6	26		31-May-2012	324	FM		324
6	24		6	25		31-May-2012	300	FM		300
6	25		6	26		31-May-2012	281	FM		281
6	26		6	27		31-May-2012	229	FM		229
6	27		6	28		31-May-2012	326	FM		326
6	28		6	29		31-May-2012	168	FM		168
6	29		7	1		31-May-2012	160	FM		160
7	2		7	3		31-May-2012	345	FM		345
7	3		7	4		31-May-2012	344	FM		344
7	4		7	5		31-May-2012	349	FM		349
7	5		7	6		31-May-2012	240	FM		240
7	6		7	7		31-May-2012	205	FM		205
7	7		7	8		31-May-2012	380	FM		380
7	8		7	9		31-May-2012	300	FM		300
13	192		13	214		1-Jun-2012	100	FM		100
13	172		13	174		1-Jun-2012	20	FM		20
7	177	P	7	178		1-Jun-2012	242	FM		242
7	178		7	181		1-Jun-2012	300	FM		300
7	178		12	23		1-Jun-2012	92	FM		92
7	179		8	157		1-Jun-2012	325	FM		325
7	179		7	180		1-Jun-2012	300	FM		300
7	180		7	181		1-Jun-2012	302	FM		302
12	23		12	24		1-Jun-2012	111	FM		111
12	24		12	25		1-Jun-2012	375	FM		375
12	25		12	26		1-Jun-2012	351	FM		351

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
12	26		12	27		1-Jun-2012	256	FM		256
29	5		29	7		1-Jun-2012	311	JM	12	311
24	50		24	52		1-Jun-2012	193	JM	12	193
24	51		24	52		1-Jun-2012	185	JM	12	185
16	32		16	35		1-Jun-2012	354	JM	6	708
15	40		15	41		1-Jun-2012	165	JM	12	165
15	47		15	48		1-Jun-2012	184	JM	12	184
15	50		15	52		1-Jun-2012	266	JM	6	532
14	88		14	197	C	1-Jun-2012	172	JM	12	172
14	88		14	89		1-Jun-2012	352	JM	12	352
9	9		9	10		1-Jun-2012	165	JM	6	330
8	163		8	164		1-Jun-2012	301	JM	12	301
8	84		8	85		1-Jun-2012	296	JM	12	296
3	110		3	128	C	1-Jun-2012	250	JM	6	500
3	110		3	111		1-Jun-2012	272	JM	12	272
3	111		3	112		1-Jun-2012	315	JM	6	630
3	112		3	113		1-Jun-2012	300	JM	12	300
3	113		3	114		1-Jun-2012	243	JM	12	243
8	51		8	215	C	1-Jun-2012	260	JM	6	520
3	114		3	117		4-Jun-2012	264	FM		264
3	115		7	18		4-Jun-2012	200	FM		200
3	115		3	116		4-Jun-2012	140	FM		140
3	116		3	117		4-Jun-2012	145	FM		145
3	117		7	23		4-Jun-2012	368	FM		368
7	14		7	15		4-Jun-2012	118	FM		118
7	15		7	16		4-Jun-2012	358	FM		358
7	16		7	17		4-Jun-2012	90	FM		90
7	17		7	18		4-Jun-2012	265	FM		265
7	23		7	24		4-Jun-2012	144	FM		144
7	24		7	36		4-Jun-2012	124	FM		124
7	25	C	7	26		4-Jun-2012	150	FM		150
7	26		7	29		4-Jun-2012	149	FM		149
7	27		7	28		4-Jun-2012	250	FM		250
7	28		7	29		4-Jun-2012	202	FM		202
7	29		7	34		4-Jun-2012	106	FM		106
7	30		7	31		4-Jun-2012	250	FM		250
7	31		7	32		4-Jun-2012	225	FM		225
7	32		7	33		4-Jun-2012	53	FM		53
7	33		7	34		4-Jun-2012	205	FM		205
7	34		7	35		4-Jun-2012	50	FM		50
7	35		7	36		4-Jun-2012	100	FM		100
7	39		7	40		4-Jun-2012	333	FM		333
7	40		7	41		4-Jun-2012	195	FM		195
7	41		7	42		4-Jun-2012	200	FM		200
7	42		7	43		4-Jun-2012	106	FM		106
7	43		7	44		4-Jun-2012	160	FM		160
7	44		7	45		4-Jun-2012	35	FM		35
7	45		7	46		4-Jun-2012	150	FM		150
7	46		7	47		4-Jun-2012	200	FM		200
7	47		7	48		4-Jun-2012	150	FM		150

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
7	48		7	49		4-Jun-2012	120	FM		120
7	49		7	54		4-Jun-2012	100	FM		100
7	50		7	51		4-Jun-2012	320	FM		320
7	51		7	53		4-Jun-2012	100	FM		100
7	52		7	53		4-Jun-2012	322	FM		322
7	53		7	54		4-Jun-2012	100	FM		100
7	54		7	55		4-Jun-2012	100	FM		100
17	8		17	24		5-Jun-2012	280	FM		280
17	9		17	10		5-Jun-2012	210	FM		210
17	10		17	11		5-Jun-2012	250	FM		250
17	11		17	24		5-Jun-2012	291	FM		291
17	23		17	24		5-Jun-2012	260	FM		260
17	24		18	2		5-Jun-2012	340	FM		340
18	1		18	2		5-Jun-2012	150	FM		150
18	2		18	4		5-Jun-2012	323	FM		323
18	3		18	4		5-Jun-2012	150	FM		150
18	4		18	27		5-Jun-2012	294	FM		294
18	27		18	29		5-Jun-2012	279	FM		279
18	5		18	6		5-Jun-2012	220	FM		220
18	5		18	54	D	5-Jun-2012	77	FM		77
18	6		18	7		5-Jun-2012	327	FM		327
18	7		18	9		5-Jun-2012	100	FM		100
18	8		18	9		5-Jun-2012	181	FM		181
18	9		18	10		5-Jun-2012	129	FM		129
18	10		18	24		5-Jun-2012	140	FM		140
18	21		18	22		5-Jun-2012	270	FM		270
18	22		18	23		5-Jun-2012	50	FM		50
18	23		18	24		5-Jun-2012	175	FM		175
18	24		18	25		5-Jun-2012	172	FM		172
18	25		18	27		5-Jun-2012	195	FM		195
18	26		18	27		5-Jun-2012	326	FM		326
18	28		18	29		5-Jun-2012	248	FM		248
18	29		18	30		5-Jun-2012	250	FM		250
18	30		18	32		5-Jun-2012	261	FM		261
18	31		18	32		5-Jun-2012	160	FM		160
18	32		18	33		5-Jun-2012	203	FM		203
7	36		7	37		5-Jun-2012	75	FM		75
7	37		7	38		5-Jun-2012	205	FM		205
7	55		7	58		5-Jun-2012	115	FM		115
7	56		7	57		5-Jun-2012	160	FM		160
7	57		7	58		5-Jun-2012	115	FM		115
7	58		7	59		5-Jun-2012	30	FM		30
7	38		7	60		5-Jun-2012	327	FM		327
7	59		7	60		5-Jun-2012	135	FM		135
7	60		7	61		5-Jun-2012	127	FM		127
7	61		7	62		5-Jun-2012	300	FM		300
7	62		7	63		5-Jun-2012	349	FM		349
7	63		7	64		5-Jun-2012	349	FM		349
7	64		7	65		5-Jun-2012	349	FM		349
7	65		7	66		5-Jun-2012	349	FM		349

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
7	66		7	67		5-Jun-2012	121	FM		121
18	33		18	40		6-Jun-2012	207	FM		207
18	36		18	37		6-Jun-2012	313	FM		313
18	38		18	39		6-Jun-2012	300	FM		300
18	39		18	40		6-Jun-2012	200	FM		200
18	40		18	55		6-Jun-2012	234	FM		234
18	41		18	55		6-Jun-2012	62	FM		62
18	41		18	56		6-Jun-2012	172	FM		172
18	42		18	43		6-Jun-2012	294	FM		294
18	42		18	56		6-Jun-2012	113	FM		113
18	43		18	44		6-Jun-2012	284	FM		284
18	44		19	111		6-Jun-2012	300	FM		300
19	111		19	195		6-Jun-2012	223	FM		223
19	112		19	195		6-Jun-2012	70	FM		70
19	112		19	209		6-Jun-2012	287	FM		287
19	113		19	209		6-Jun-2012	200	FM		200
19	102		19	103		6-Jun-2012	245	FM		245
19	102		19	194	D	6-Jun-2012	317	FM		317
19	103		19	104		6-Jun-2012	225	FM		225
19	104		19	106		6-Jun-2012	233	FM		233
19	105		19	106		6-Jun-2012	250	FM		250
19	106		19	107		6-Jun-2012	147	FM		147
19	107		19	108		6-Jun-2012	172	FM		172
19	108		19	109		6-Jun-2012	30	FM		30
19	109		19	110		6-Jun-2012	233	FM		233
19	110		19	113		6-Jun-2012	253	FM		253
7	67		7	68		6-Jun-2012	204	FM		204
7	68		7	69		6-Jun-2012	129	FM		129
7	69		7	70		6-Jun-2012	179	FM		179
7	70		7	71		6-Jun-2012	320	FM		320
7	71		7	72		6-Jun-2012	320	FM		320
7	72		7	73		6-Jun-2012	284	FM		284
7	74		7	75		6-Jun-2012	157	FM		157
7	73		7	76		6-Jun-2012	296	FM		296
7	75		7	76		6-Jun-2012	263	FM		263
7	76		7	77		6-Jun-2012	257	FM		257
7	77		7	78		6-Jun-2012	252	FM		252
7	78		7	79		6-Jun-2012	314	FM		314
7	79		7	80		6-Jun-2012	231	FM		231
7	80		7	81		6-Jun-2012	215	FM		215
7	81		12	4		6-Jun-2012	331	FM		331
12	4		12	9	P	6-Jun-2012	357	FM		357
12	9	P	12	10		6-Jun-2012	332	FM		332
12	5		12	6		6-Jun-2012	218	FM		218
12	6		12	7		6-Jun-2012	218	FM		218
12	7		12	8	P	6-Jun-2012	323	FM		323
12	10		12	11		6-Jun-2012	150	FM		150
32	50		32	51		7-Jun-2012	400	FM		400
32	51		33	31		7-Jun-2012	318	FM		318
33	12		33	13		7-Jun-2012	166	FM		166

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
33	13		33	14		7-Jun-2012	285	FM		285
33	14		33	15		7-Jun-2012	288	FM		288
33	29		33	30		7-Jun-2012	200	FM		200
33	30		33	31		7-Jun-2012	230	FM		230
33	31		33	32		7-Jun-2012	255	FM		255
32	45		32	46		7-Jun-2012	290	FM		290
32	45		33	11		7-Jun-2012	292	FM		292
33	6		33	7		7-Jun-2012	93	FM		93
33	7		33	8		7-Jun-2012	152	FM		152
33	8		33	9		7-Jun-2012	300	FM		300
33	9		33	10		7-Jun-2012	345	FM		345
33	10		33	11		7-Jun-2012	294	FM		294
19	113		19	114		7-Jun-2012	300	FM		300
19	114		19	115		7-Jun-2012	320	FM		320
19	115		19	116		7-Jun-2012	360	FM		360
19	116		19	117		7-Jun-2012	320	FM		320
19	117		19	118		7-Jun-2012	310	FM		310
19	118		19	119		7-Jun-2012	320	FM		320
12	58		12	59		11-Jun-2012	275	FM		275
12	58		19	119		11-Jun-2012	310	FM		310
12	59		12	63		11-Jun-2012	310	FM		310
12	63	P	12	130		11-Jun-2012	10	FM		10
12	139		19	198		11-Jun-2012	440	FM		440
18	45		18	46		11-Jun-2012	337	FM		337
18	46		18	48		11-Jun-2012	262	FM		262
18	47		18	48		11-Jun-2012	70	FM		70
18	48		18	49		11-Jun-2012	310	FM		310
18	49		18	50		11-Jun-2012	330	FM		330
12	130		12	139		11-Jun-2012	301	FM		301
12	83		12	84		11-Jun-2012	250	FM		250
12	84		12	86		11-Jun-2012	200	FM		200
12	85		12	86		11-Jun-2012	36	FM		36
12	85		12	128	C	11-Jun-2012	157	FM		157
12	86		12	87		11-Jun-2012	200	FM		200
25	1		25	2		12-Jun-2012	275	FM		275
25	3		25	187	D	12-Jun-2012	125	FM		125
25	8	S	25	188	D	12-Jun-2012	200	FM		200
12	130		12	131		12-Jun-2012	280	FM		280
12	131		12	132		12-Jun-2012	410	FM		410
9	75		9	79		12-Jun-2012	87	FM		87
9	76		9	77		12-Jun-2012	100	FM		100
9	77		9	78		12-Jun-2012	55	FM		55
9	78		9	79		12-Jun-2012	50	FM		50
9	79		9	80		12-Jun-2012	61	FM		61
9	80		9	81		12-Jun-2012	125	FM		125
9	81		9	82		12-Jun-2012	128	FM		128
9	82		9	83		12-Jun-2012	117	FM		117
9	83		9	84		12-Jun-2012	350	FM		350
9	84		9	85		12-Jun-2012	194	FM		194
9	85		9	86		12-Jun-2012	240	FM		240

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
9	86	M	9	87		12-Jun-2012	245	FM		245
9	87		9	88		12-Jun-2012	251	FM		251
9	88		9	89		12-Jun-2012	439	FM		439
9	89		9	90		12-Jun-2012	127	FM		127
9	90		9	91		12-Jun-2012	283	FM		283
9	91		9	92		12-Jun-2012	105	FM		105
9	92		9	93		12-Jun-2012	337	FM		337
9	93		9	94		12-Jun-2012	326	FM		326
8	191		8	194		12-Jun-2012	241	FM		241
8	192		8	193		12-Jun-2012	320	FM		320
8	193		8	194		12-Jun-2012	170	FM		170
25	186		25	193		13-Jun-2012	35	FM		35
19	1		25	10		13-Jun-2012	252	FM		252
25	2		25	3		13-Jun-2012	261	FM		261
25	3		25	6		13-Jun-2012	350	FM		350
25	5		25	204		13-Jun-2012	306	FM		306
25	5		25	6		13-Jun-2012	251	FM		251
25	6		25	7		13-Jun-2012	297	FM		297
25	7		25	10		13-Jun-2012	291	FM		291
25	9	S	25	10		13-Jun-2012	329	FM		329
25	183		25	184		13-Jun-2012	310	FM		310
25	184		25	185		13-Jun-2012	441	FM		441
25	185		25	186		13-Jun-2012	434	FM		434
9	94		9	122		13-Jun-2012	332	FM		332
9	121		9	122		13-Jun-2012	340	FM		340
9	122		9	123		13-Jun-2012	210	FM		210
8	194		8	195		13-Jun-2012	181	FM		181
8	195		9	123		13-Jun-2012	235	FM		235
13	1		14	6		13-Jun-2012	225	FM		225
13	5		13	6		13-Jun-2012	133	FM		133
13	6		13	7		13-Jun-2012	43	FM		43
13	3		13	7		13-Jun-2012	140	FM		140
13	8		13	9		13-Jun-2012	300	FM		300
13	9		13	10		13-Jun-2012	294	FM		294
13	3		13	10		13-Jun-2012	336	FM		336
13	10		13	11		13-Jun-2012	150	FM		150
13	10		13	14		13-Jun-2012	345	FM		345
13	7		13	11		13-Jun-2012	332	FM		332
13	11		13	15		13-Jun-2012	335	FM		335
13	12		13	13		13-Jun-2012	380	FM		380
13	13		13	14		13-Jun-2012	375	FM		375
13	14		13	15		13-Jun-2012	150	FM		150
13	14		13	18		13-Jun-2012	340	FM		340
14	1	C	14	2		13-Jun-2012	255	FM		255
14	2		14	3		13-Jun-2012	165	FM		165
14	4		14	5		13-Jun-2012	400	FM		400
9	122		14	5		13-Jun-2012	350	FM		350
14	5		14	6		13-Jun-2012	270	FM		270
14	5		14	7		13-Jun-2012	331	FM		331
14	7		14	8		13-Jun-2012	267	FM		267

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
14	7		14	13		13-Jun-2012	335	FM		335
14	7		14	218		13-Jun-2012	300	FM		300
13	8		14	8		13-Jun-2012	294	FM		294
14	12		14	13		13-Jun-2012	80	FM		80
13	12		14	13		13-Jun-2012	426	FM		426
13	16		14	30		13-Jun-2012	236	FM		236
13	16		13	17		13-Jun-2012	351	FM		351
13	17		13	18		13-Jun-2012	353	FM		353
32	42		33	34		14-Jun-2012	300	FM		300
32	42		32	43		14-Jun-2012	305	FM		305
33	15		33	28		14-Jun-2012	296	FM		296
33	16		33	17		14-Jun-2012	130	FM		130
33	17		33	18		14-Jun-2012	79	FM		79
33	18		33	20		14-Jun-2012	357	FM		357
33	19		33	20		14-Jun-2012	157	FM		157
33	20		33	21		14-Jun-2012	39	FM		39
33	21		33	27		14-Jun-2012	400	FM		400
33	22		33	24		14-Jun-2012	270	FM		270
33	23		33	24		14-Jun-2012	203	FM		203
33	24		33	26		14-Jun-2012	248	FM		248
33	25		33	26		14-Jun-2012	260	FM		260
33	26		33	27		14-Jun-2012	277	FM		277
33	27		33	28		14-Jun-2012	260	FM		260
33	28		33	33		14-Jun-2012	15	FM		15
33	32		33	33		14-Jun-2012	260	FM		260
33	33		33	34		14-Jun-2012	250	FM		250
13	15		13	31		14-Jun-2012	351	FM		351
13	30		13	31		14-Jun-2012	407	FM		407
13	18		13	31		14-Jun-2012	149	FM		149
13	31		13	32		14-Jun-2012	389	FM		389
13	32		13	33		14-Jun-2012	389	FM		389
13	33		13	38		14-Jun-2012	200	FM		200
13	37	M	13	38		14-Jun-2012	344	FM		344
13	38		13	39		14-Jun-2012	319	FM		319
13	39		13	40		14-Jun-2012	57	FM		57
13	40		13	48	M	14-Jun-2012	261	FM		261
13	47		13	48		14-Jun-2012	400	FM		400
12	17		12	18		14-Jun-2012	295	FM		295
12	18		12	19		14-Jun-2012	225	FM		225
12	18		13	52		14-Jun-2012	415	FM		415
12	19		12	20		14-Jun-2012	420	FM		420
12	20		12	21	S	14-Jun-2012	23	FM		23
13	51		13	52		14-Jun-2012	300	FM		300
13	48		13	52		14-Jun-2012	318	FM		318
12	27		12	28		14-Jun-2012	240	FM		240
12	22	S	12	28		14-Jun-2012	158	FM		158
12	28		12	29		14-Jun-2012	456	FM		456
12	29		12	30	M	14-Jun-2012	450	FM		450
19	8		19	9		15-Jun-2012	482	FM		482
19	9		19	10		15-Jun-2012	486	FM		486

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
19	10		19	11		15-Jun-2012	479	FM		479
19	11		19	12		15-Jun-2012	549	FM		549
19	190		19	191		15-Jun-2012	469	FM		469
19	190		25	183		15-Jun-2012	427	FM		427
19	120		19	121		15-Jun-2012	304	FM		304
19	121		19	123		15-Jun-2012	253	FM		253
19	122		19	123		15-Jun-2012	160	FM		160
19	123		19	124		15-Jun-2012	28	FM		28
19	124		19	127		15-Jun-2012	160	FM		160
19	125		19	126		15-Jun-2012	300	FM		300
19	126		19	127		15-Jun-2012	301	FM		301
19	127		19	129		15-Jun-2012	259	FM		259
19	128		19	129		15-Jun-2012	262	FM		262
12	30	M	12	31		15-Jun-2012	380	FM		380
12	11		12	31		15-Jun-2012	275	FM		275
27	106		32	49		18-Jun-2012	276	FM		276
32	33		32	55		18-Jun-2012	112	FM		112
32	33		32	34		18-Jun-2012	242	FM		242
32	34		32	35		18-Jun-2012	236	FM		236
32	35		32	37		18-Jun-2012	237	FM		237
32	36		32	37		18-Jun-2012	302	FM		302
32	36		32	53	D	18-Jun-2012	57	FM		57
32	37		32	41		18-Jun-2012	254	FM		254
32	38		32	39		18-Jun-2012	151	FM		151
32	39		32	40		18-Jun-2012	259	FM		259
32	40		32	41		18-Jun-2012	61	FM		61
32	41		32	44		18-Jun-2012	257	FM		257
32	43		32	44		18-Jun-2012	298	FM		298
32	44		32	47		18-Jun-2012	261	FM		261
32	46		32	47		18-Jun-2012	292	FM		292
32	47		32	49		18-Jun-2012	262	FM		262
32	48		32	49		18-Jun-2012	345	FM		345
32	48		33	5		18-Jun-2012	351	FM		351
32	58		32	59	D	18-Jun-2012	13	FM		13
32	55		32	57		18-Jun-2012	174	FM		174
32	57		32	58		18-Jun-2012	218	FM		218
33	1	C	33	3		18-Jun-2012	95	FM		95
33	2		33	3		18-Jun-2012	112	FM		112
33	3		33	4		18-Jun-2012	136	FM		136
33	4		33	5		18-Jun-2012	238	FM		238
27	106		27	107		18-Jun-2012	340	FM		340
27	104		27	105		18-Jun-2012	317	FM		317
32	7		32	9		18-Jun-2012	174	FM		174
32	8		32	9		18-Jun-2012	113	FM		113
32	12		32	13		18-Jun-2012	250	FM		250
32	12		32	56	C	18-Jun-2012	100	FM		100
32	13		32	14		18-Jun-2012	296	FM		296
32	15		32	16		18-Jun-2012	206	FM		206
32	18		32	19		18-Jun-2012	347	FM		347
32	20		32	21		18-Jun-2012	240	FM		240

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
32	23		32	24		18-Jun-2012	194	FM		194
32	25		32	26		18-Jun-2012	195	FM		195
32	29		32	30		18-Jun-2012	320	FM		320
19	12		19	22		18-Jun-2012	28	FM		28
25	38		25	39		18-Jun-2012	335	FM		335
25	39		25	40	M	18-Jun-2012	346	FM		346
19	13		25	41		18-Jun-2012	348	FM		348
25	40	M	25	41		18-Jun-2012	345	FM		345
19	13		19	14		18-Jun-2012	350	FM		350
19	14		19	15		18-Jun-2012	293	FM		293
19	15		19	16		18-Jun-2012	350	FM		350
19	16		19	17		18-Jun-2012	370	FM		370
19	18		19	19		18-Jun-2012	350	FM		350
19	17		19	18		18-Jun-2012	300	FM		300
19	19		19	20		18-Jun-2012	369	FM		369
19	20		19	21		18-Jun-2012	247	FM		247
19	21		19	22		18-Jun-2012	244	FM		244
18	52		19	95		18-Jun-2012	250	FM		250
19	91		19	92		18-Jun-2012	333	FM		333
19	92		19	93		18-Jun-2012	281	FM		281
19	93		19	94		18-Jun-2012	225	FM		225
19	94		19	95		18-Jun-2012	313	FM		313
19	95		19	96	S	18-Jun-2012	195	FM		195
19	199		19	200		18-Jun-2012	425	FM		425
19	200		19	201		18-Jun-2012	435	FM		435
19	201		19	202		18-Jun-2012	425	FM		425
19	198		19	199		18-Jun-2012	500	FM		500
27	105		27	108		19-Jun-2012	306	FM		306
27	107		27	108		19-Jun-2012	253	FM		253
27	108		32	32		19-Jun-2012	268	FM		268
27	108		27	109		19-Jun-2012	314	FM		314
27	109		27	110		19-Jun-2012	302	FM		302
27	110		27	111		19-Jun-2012	295	FM		295
27	111		27	113		19-Jun-2012	317	FM		317
27	112		27	113		19-Jun-2012	297	FM		297
32	9		32	11		19-Jun-2012	193	FM		193
32	10		32	11		19-Jun-2012	336	FM		336
32	11		32	17		19-Jun-2012	260	FM		260
32	14		32	17		19-Jun-2012	200	FM		200
32	16		32	17		19-Jun-2012	208	FM		208
32	17		32	22		19-Jun-2012	255	FM		255
32	19		32	22		19-Jun-2012	303	FM		303
32	21		32	22		19-Jun-2012	240	FM		240
32	22		32	27		19-Jun-2012	270	FM		270
32	24		32	27		19-Jun-2012	346	FM		346
32	26		32	27		19-Jun-2012	350	FM		350
32	27		32	28		19-Jun-2012	182	FM		182
32	28		32	32		19-Jun-2012	85	FM		85
32	30		32	32		19-Jun-2012	304	FM		304
32	31		32	32		19-Jun-2012	350	FM		350

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
27	162		27	163		19-Jun-2012	321	FM		321
27	162		32	6		19-Jun-2012	303	FM		303
27	163		27	164		19-Jun-2012	323	FM		323
27	164		27	165		19-Jun-2012	323	FM		323
19	84		19	85		19-Jun-2012	350	FM		350
19	22		19	85		19-Jun-2012	44	FM		44
19	85		19	203		19-Jun-2012	23	FM		23
19	86	M	19	87		19-Jun-2012	223	FM		223
19	86	M	19	203		19-Jun-2012	300	FM		300
19	87		19	89		19-Jun-2012	275	FM		275
19	88		19	89		19-Jun-2012	362	FM		362
19	89		19	90		19-Jun-2012	290	FM		290
19	90		19	99		19-Jun-2012	225	FM		225
19	99		19	100	M	19-Jun-2012	100	FM		100
19	100	M	19	101		19-Jun-2012	310	FM		310
19	129		19	130		19-Jun-2012	155	FM		155
19	130		19	132		19-Jun-2012	121	FM		121
19	131		19	132		19-Jun-2012	210	FM		210
19	132		19	133		19-Jun-2012	250	FM		250
19	133		19	139		19-Jun-2012	197	FM		197
19	134		19	135		19-Jun-2012	321	FM		321
19	135		19	136		19-Jun-2012	205	FM		205
19	136		19	137		19-Jun-2012	158	FM		158
19	137		19	138		19-Jun-2012	217	FM		217
19	138		19	139		19-Jun-2012	202	FM		202
19	139		19	141		19-Jun-2012	261	FM		261
19	140		19	141		19-Jun-2012	140	FM		140
8	84		8	85		19-Jun-2012	300	FM		300
26	90		26	91		20-Jun-2012	341	FM		341
26	90		31	34		20-Jun-2012	342	FM		342
26	91		26	94		20-Jun-2012	162	FM		162
26	92		26	93		20-Jun-2012	350	FM		350
26	93		26	94		20-Jun-2012	300	FM		300
26	94		26	95		20-Jun-2012	178	FM		178
26	185		26	186		20-Jun-2012	213	FM		213
27	141		27	142		20-Jun-2012	266	FM		266
27	141		32	2		20-Jun-2012	265	FM		265
27	142		27	143		20-Jun-2012	272	FM		272
27	143		27	160		20-Jun-2012	272	FM		272
27	144		27	145		20-Jun-2012	276	FM		276
27	144		32	5		20-Jun-2012	280	FM		280
27	145		27	147		20-Jun-2012	275	FM		275
27	146		27	147		20-Jun-2012	87	FM		87
27	147		27	150		20-Jun-2012	236	FM		236
27	148		27	149		20-Jun-2012	277	FM		277
27	148		32	4		20-Jun-2012	278	FM		278
27	149		27	150		20-Jun-2012	274	FM		274
27	150		27	153		20-Jun-2012	235	FM		235
27	151		27	152		20-Jun-2012	277	FM		277
27	151		32	3		20-Jun-2012	279	FM		279

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
27	152		27	153		20-Jun-2012	275	FM		275
27	153		27	156		20-Jun-2012	235	FM		235
27	154		27	155		20-Jun-2012	278	FM		278
27	155		27	156		20-Jun-2012	279	FM		279
27	156		27	159		20-Jun-2012	226	FM		226
27	157		27	158		20-Jun-2012	273	FM		273
27	158		27	159		20-Jun-2012	272	FM		272
27	159		27	160		20-Jun-2012	280	FM		280
31	33		31	34		20-Jun-2012	340	FM		340
32	1		32	2		20-Jun-2012	275	FM		275
26	103		26	104		20-Jun-2012	170	FM		170
26	104		26	105		20-Jun-2012	348	FM		348
26	105		26	108		20-Jun-2012	267	FM		267
26	106		26	107		20-Jun-2012	213	FM		213
26	107		26	108		20-Jun-2012	235	FM		235
12	50		12	51		20-Jun-2012	241	FM		241
12	51		12	52		20-Jun-2012	150	FM		150
12	52		12	53		20-Jun-2012	150	FM		150
12	52		19	150		20-Jun-2012	272	FM		272
12	53		12	54		20-Jun-2012	300	FM		300
12	54		12	149		20-Jun-2012	206	FM		206
12	54		19	141		20-Jun-2012	257	FM		257
12	55		12	149		20-Jun-2012	144	FM		144
19	142		19	143		20-Jun-2012	275	FM		275
19	143		19	144		20-Jun-2012	181	FM		181
19	144		19	145		20-Jun-2012	300	FM		300
19	145		19	146		20-Jun-2012	203	FM		203
19	146		19	148		20-Jun-2012	166	FM		166
19	147		19	148		20-Jun-2012	140	FM		140
19	148		19	149		20-Jun-2012	216	FM		216
19	149		19	150		20-Jun-2012	181	FM		181
19	151		19	153		20-Jun-2012	114	FM		114
19	152		19	153		20-Jun-2012	234	FM		234
19	152		20	100		20-Jun-2012	236	FM		236
19	153		19	155		20-Jun-2012	255	FM		255
19	154		19	155		20-Jun-2012	349	FM		349
19	156		19	157		20-Jun-2012	136	FM		136
19	157		19	158		20-Jun-2012	347	FM		347
19	158		19	160		20-Jun-2012	255	FM		255
19	159		19	160		20-Jun-2012	353	FM		353
19	160		19	163		20-Jun-2012	255	FM		255
19	161		19	162		20-Jun-2012	146	FM		146
19	162		19	163		20-Jun-2012	295	FM		295
27	113		27	114		21-Jun-2012	140	FM		140
27	114		27	161		21-Jun-2012	300	FM		300
26	42		26	98		21-Jun-2012	68	FM		68
26	42		26	99		21-Jun-2012	280	FM		280
26	95		26	96		21-Jun-2012	338	FM		338
26	96		26	137		21-Jun-2012	33	FM		33
26	96		27	170		21-Jun-2012	249	FM		249

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
26	97		26	98		21-Jun-2012	198	FM		198
26	97		26	137		21-Jun-2012	152	FM		152
26	99		26	100		21-Jun-2012	347	FM		347
26	100		26	101		21-Jun-2012	345	FM		345
26	101		26	102		21-Jun-2012	335	FM		335
26	137		26	185		21-Jun-2012	215	FM		215
27	160		27	170		21-Jun-2012	277	FM		277
27	161		27	166		21-Jun-2012	315	FM		315
27	165		27	166		21-Jun-2012	325	FM		325
27	166		27	167		21-Jun-2012	313	FM		313
27	167		27	168		21-Jun-2012	315	FM		315
27	168		27	169		21-Jun-2012	291	FM		291
27	169		27	170		21-Jun-2012	55	FM		55
13	193		13	194		21-Jun-2012	325	FM		325
13	193		13	201	D	21-Jun-2012	269	FM		269
13	193		20	156		21-Jun-2012		FM		
19	163		19	164		21-Jun-2012	256	FM		256
19	164		19	165		21-Jun-2012	268	FM		268
19	165		20	7		21-Jun-2012	229	FM		229
20	1		20	2		21-Jun-2012	260	FM		260
20	2		20	3		21-Jun-2012	344	FM		344
20	3		20	4		21-Jun-2012	345	FM		345
20	4		20	5		21-Jun-2012	344	FM		344
20	5		20	6		21-Jun-2012	181	FM		181
20	6		20	7		21-Jun-2012	190	FM		190
26	102		26	150		25-Jun-2012	64	FM		64
26	108		26	110		25-Jun-2012	280	FM		280
26	109		26	110		25-Jun-2012	171	FM		171
26	110		26	113		25-Jun-2012	231	FM		231
26	111		26	112		25-Jun-2012	260	FM		260
26	112		26	113		25-Jun-2012	286	FM		286
26	113		26	116		25-Jun-2012	238	FM		238
26	114		26	115		25-Jun-2012	336	FM		336
26	115		26	116		25-Jun-2012	322	FM		322
26	116		26	119		25-Jun-2012	263	FM		263
26	117		26	118		25-Jun-2012	286	FM		286
26	118		26	119		25-Jun-2012	284	FM		284
26	119		26	123		25-Jun-2012	258	FM		258
26	120		26	121		25-Jun-2012	221	FM		221
26	121		26	122		25-Jun-2012	272	FM		272
26	122		26	123		25-Jun-2012	264	FM		264
26	123		26	124		25-Jun-2012	154	FM		154
26	124		26	125		25-Jun-2012	342	FM		342
26	124		26	138		25-Jun-2012	186	FM		186
26	125		26	126		25-Jun-2012	332	FM		332
26	126		26	129		25-Jun-2012	263	FM		263
26	127		26	128		25-Jun-2012	213	FM		213
26	128		26	129		25-Jun-2012	221	FM		221
26	129		26	145		25-Jun-2012	259	FM		259
26	130		26	131		25-Jun-2012	336	FM		336

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
26	131		26	133		25-Jun-2012	255	FM		255
26	132		26	133		25-Jun-2012	265	FM		265
26	133		26	134		25-Jun-2012	163	FM		163
26	133		26	184	C	25-Jun-2012	153	FM		153
26	134		26	136		25-Jun-2012	217	FM		217
26	135		26	136		25-Jun-2012	258	FM		258
26	136		26	141		25-Jun-2012	250	FM		250
26	138		26	141		25-Jun-2012	335	FM		335
26	139		26	140		25-Jun-2012	341	FM		341
26	140		26	141		25-Jun-2012	297	FM		297
26	141		26	143		25-Jun-2012	327	FM		327
26	142		26	143		25-Jun-2012	170	FM		170
26	143		26	144		25-Jun-2012	148	FM		148
26	144		26	145		25-Jun-2012	227	FM		227
26	145		26	146		25-Jun-2012	297	FM		297
26	145		26	183	C	25-Jun-2012	77	FM		77
26	146		26	149		25-Jun-2012	267	FM		267
26	147		26	148		25-Jun-2012	180	FM		180
26	148		26	149		25-Jun-2012	156	FM		156
26	149		26	150		25-Jun-2012	252	FM		252
12	64		12	69		25-Jun-2012	327	FM		327
12	64		13	192		25-Jun-2012	327	FM		327
12	65		12	66		25-Jun-2012	335	FM		335
12	65		13	195		25-Jun-2012	330	FM		330
12	66		12	67		25-Jun-2012	40	FM		40
13	189		13	202	D	25-Jun-2012	134	FM		134
13	189		13	214		25-Jun-2012	250	FM		250
13	190		13	191		25-Jun-2012	264	FM		264
13	191		13	192		25-Jun-2012	350	FM		350
13	194		13	195		25-Jun-2012	320	FM		320
12	70		12	71		25-Jun-2012	274	FM		274
12	71		12	72		25-Jun-2012	226	FM		226
12	75		12	76		25-Jun-2012	261	FM		261
28	45		28	46		26-Jun-2012	155	FM		155
28	46		28	49		26-Jun-2012	233	FM		233
28	47		28	48		26-Jun-2012	199	FM		199
28	48		28	49		26-Jun-2012	310	FM		310
28	49		28	50		26-Jun-2012	300	FM		300
28	50		28	51		26-Jun-2012	248	FM		248
27	97		27	189		26-Jun-2012	112	FM		112
27	98		27	99		26-Jun-2012	340	FM		340
27	98		27	189		26-Jun-2012	253	FM		253
27	180		27	181		26-Jun-2012	134	FM		134
27	181		27	182		26-Jun-2012	45	FM		45
27	182		27	183		26-Jun-2012	138	FM		138
27	183		27	184		26-Jun-2012	48	FM		48
27	184		27	185		26-Jun-2012	48	FM		48
27	185		27	187		26-Jun-2012	305	FM		305
27	187		27	188		26-Jun-2012	40	FM		40
27	188		27	189		26-Jun-2012	114	FM		114

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
28	54		28	55		26-Jun-2012	302	FM		302
28	55		28	56		26-Jun-2012	169	FM		169
28	56		28	59		26-Jun-2012	85	FM		85
28	57		28	58		26-Jun-2012	154	FM		154
28	58		28	59		26-Jun-2012	250	FM		250
28	59		28	60		26-Jun-2012	175	FM		175
28	60		28	61		26-Jun-2012	75	FM		75
28	61		28	63		26-Jun-2012	365	FM		365
28	62		28	63		26-Jun-2012	306	FM		306
28	63		28	64		26-Jun-2012	261	FM		261
27	180		28	64		26-Jun-2012	372	FM		372
26	156		26	157		26-Jun-2012	326	FM		326
26	157		26	158		26-Jun-2012	320	FM		320
26	158		26	159		26-Jun-2012	350	FM		350
26	159		26	160		26-Jun-2012	330	FM		330
26	161		26	162		26-Jun-2012	201	FM		201
26	162		26	163		26-Jun-2012	120	FM		120
26	163		26	164		26-Jun-2012	283	FM		283
12	73		12	74		26-Jun-2012	285	FM		285
12	74		12	77		26-Jun-2012	287	FM		287
12	76		12	77		26-Jun-2012	320	FM		320
12	77		12	143		26-Jun-2012	288	FM		288
12	78	M	12	143		26-Jun-2012	32	FM		32
20	101		20	102		26-Jun-2012	280	FM		280
20	102		20	103		26-Jun-2012	272	FM		272
20	103		20	104		26-Jun-2012	300	FM		300
20	104		20	107		26-Jun-2012	366	FM		366
20	105		20	106		26-Jun-2012	358	FM		358
20	106		20	107		26-Jun-2012	355	FM		355
28	36		28	37		27-Jun-2012	110	FM		110
28	36		28	68		27-Jun-2012	285	FM		285
28	38		28	44		27-Jun-2012	181	FM		181
28	44		28	52		27-Jun-2012	281	FM		281
28	51		28	52		27-Jun-2012	122	FM		122
28	52		28	53		27-Jun-2012	353	FM		353
28	68		28	69		27-Jun-2012	310	FM		310
28	69		28	70		27-Jun-2012	144	FM		144
28	70		28	71		27-Jun-2012	203	FM		203
28	71		28	72		27-Jun-2012	273	FM		273
28	72		28	73		27-Jun-2012	266	FM		266
27	64		27	65		27-Jun-2012	95	FM		95
27	65		27	67		27-Jun-2012	279	FM		279
27	65		28	26		27-Jun-2012	239	FM		239
27	66		27	67		27-Jun-2012	190	FM		190
27	67		27	68		27-Jun-2012	80	FM		80
27	68		27	69		27-Jun-2012	50	FM		50
28	8		28	9		27-Jun-2012	158	FM		158
28	9		28	10		27-Jun-2012	167	FM		167
28	9		28	66		27-Jun-2012	59	FM		59
28	10		28	11		27-Jun-2012	228	FM		228

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
28	11		28	17		27-Jun-2012	229	FM		229
28	12		28	13		27-Jun-2012	284	FM		284
28	13		28	14		27-Jun-2012	314	FM		314
28	14		28	15		27-Jun-2012	167	FM		167
28	15		28	16		27-Jun-2012	289	FM		289
28	15		28	67	D	27-Jun-2012	118	FM		118
28	16		28	17		27-Jun-2012	291	FM		291
28	17		28	18		27-Jun-2012	145	FM		145
28	18		28	19		27-Jun-2012	292	FM		292
28	19		28	20		27-Jun-2012	250	FM		250
28	20		28	26		27-Jun-2012	163	FM		163
28	21		28	25		27-Jun-2012	275	FM		275
28	22		28	23		27-Jun-2012	268	FM		268
28	23		28	24		27-Jun-2012	261	FM		261
28	24		28	25		27-Jun-2012	85	FM		85
28	25		28	26		27-Jun-2012	260	FM		260
27	90		27	91		28-Jun-2012	365	FM		365
27	90		27	178	D	28-Jun-2012	50	FM		50
27	91		27	92		28-Jun-2012	145	FM		145
28	27		28	28		28-Jun-2012	371	FM		371
28	28		28	29		28-Jun-2012	239	FM		239
28	29		28	31		28-Jun-2012	75	FM		75
28	30		28	31		28-Jun-2012	387	FM		387
28	31		28	32		28-Jun-2012	154	FM		154
28	32		28	34		28-Jun-2012	138	FM		138
28	33		28	34		28-Jun-2012	380	FM		380
28	34		28	35		28-Jun-2012	151	FM		151
27	127		27	128		28-Jun-2012	288	FM		288
27	128		27	129		28-Jun-2012	160	FM		160
27	129		27	133		28-Jun-2012	313	FM		313
27	130		27	131		28-Jun-2012	128	FM		128
27	130		27	179	C	28-Jun-2012	25	FM		25
27	131		27	132		28-Jun-2012	200	FM		200
27	132		27	133		28-Jun-2012	175	FM		175
27	133		27	134		28-Jun-2012	313	FM		313
27	134		27	136		28-Jun-2012	181	FM		181
27	135		27	136		28-Jun-2012	292	FM		292
27	136		27	137		28-Jun-2012	199	FM		199
27	53		27	54		28-Jun-2012	179	FM		179
27	54		27	55		28-Jun-2012	249	FM		249
27	54		28	7		28-Jun-2012	300	FM		300
27	71		27	173		28-Jun-2012	70	FM		70
27	72		27	73		28-Jun-2012	285	FM		285
27	72		27	173		28-Jun-2012	219	FM		219
27	73		27	74		28-Jun-2012	283	FM		283
27	173		27	174		28-Jun-2012	70	FM		70
27	174		27	175	C	28-Jun-2012	137	FM		137
28	1		28	4		28-Jun-2012	87	FM		87
28	2		28	3		28-Jun-2012	247	FM		247
28	4		28	7		28-Jun-2012	189	FM		189

Maintenance Summary for El Cajon Sewers - FM = Flush/Maintenance; JM = Rodding/Maintenance

MH1 Page	MH1 Number	MH1 Type	MH2 Page	MH2 Number	MH2 Type	Maint Date	Length (ft.)	Maint Type	Cycle (Mo)	PY5 Footage
28	5		28	6		28-Jun-2012	292	FM		292
28	6		28	7		28-Jun-2012	320	FM		320
13	169		20	112		28-Jun-2012	229	FM		229
20	107		20	110		28-Jun-2012	366	FM		366
20	108		20	109		28-Jun-2012	58	FM		58
20	109		20	110		28-Jun-2012	300	FM		300
20	110		20	112		28-Jun-2012	361	FM		361
20	111		20	112		28-Jun-2012	317	FM		317
13	178		13	213		28-Jun-2012	162	FM		162
13	178		13	193		28-Jun-2012	344	FM		344
13	179		13	180		28-Jun-2012	288	FM		288
13	179		13	213		28-Jun-2012	181	FM		181
27	92		27	94		29-Jun-2012	304	FM		304
27	94		27	95		29-Jun-2012	101	FM		101
27	95		27	100		29-Jun-2012	200	FM		200
27	99		27	100		29-Jun-2012	305	FM		305
27	100		27	101		29-Jun-2012	150	FM		150
27	101		27	102		29-Jun-2012	245	FM		245
27	102		27	103	M	29-Jun-2012	201	FM		201
27	60		27	61		29-Jun-2012	291	FM		291
27	61		27	62		29-Jun-2012	282	FM		282
27	62		27	63		29-Jun-2012	188	FM		188
27	63		27	172		29-Jun-2012	138	FM		138
27	63		27	174		29-Jun-2012	380	FM		380
27	69		27	70		29-Jun-2012	396	FM		396
27	70		27	172		29-Jun-2012	138	FM		138
13	169		13	170		29-Jun-2012	330	FM		330
13	170		13	171		29-Jun-2012	40	FM		40
13	171		13	208		29-Jun-2012	201	FM		201
13	172		13	208		29-Jun-2012	200	FM		200
13	173		13	210		29-Jun-2012	65	FM		65
13	174		13	175		29-Jun-2012	340	FM		340
13	174		13	210		29-Jun-2012	200	FM		200
13	175		13	176		29-Jun-2012	340	FM		340
13	176		13	177		29-Jun-2012	330	FM		330
13	177		13	181		29-Jun-2012	268	FM		268
13	180		13	181		29-Jun-2012	293	FM		293
13	181		13	182		29-Jun-2012	52	FM		52
13	182		13	183		29-Jun-2012	244	FM		244
							Total Miles:			218.96

Appendix D.3

Summary of Features Included the City's Sewer Ordinance Update
Effective July 23, 2009

1. 13.16.010: Requires all El Cajon inhabitants to be responsible for reporting sewer spills whether public or private and to take preventive measures to minimize or contain the spill until a professional plumber or City personnel respond to the reported incident. ***This provision makes it illegal to not report a spill in compliance with Regional Water Quality control Board Order No. R9-2007-0001.***

2. 13.16.012: Allows the Public Works Director under certain circumstances to waive any requirements or responsibilities set forth in the sewer ordinance.

3. 13.16.014: All building remodels that have an increase in plumbing fixture units or an increase of 400 or more square feet in floor area will be subject to a lateral video inspection and/or repair if needed. The following may be required based on results of the video inspection:

    a. Orders to repair if deemed necessary by the City with time limitations.
    b. If structural repairs are required it will be necessary to install a double cleanout plug at the property line.
    c. A grease/sand interceptor or trap will be required if the remodel is for a food serving establishment (FSE).

4. 13.16.014: Requires the public works director to keep records and issues permits for all private sewer or satellite collection system construction.

5. 13.16.015: Requires any work performed in these provisions to be performed by a licensed contractor.

6. 13.16.016: Requires any building failing a lateral inspection to affect repairs within 70 days (30+30+10) of notification.

7. 13.16.030: Provides for violations to be deemed a "Public Nuisance" and includes legal and monetary remedies to affect repairs if ordered by the Director of Public Works. See El Cajon Municipal Code Chapter 1.16 for remedies.

8. 13.20.010: Adds new definitions to terms used with changes to the ordinance.

    a. Building Sewer Inspections
    b. Cleanout Plugs and Double Cleanout Plugs
    c. Common Interest Developments
    d. Notice to Repair
    e. Fats, Oils and Grease (FOG)

9. 13.20.060: requires the installation of a double cleanout at the property line in building sewers for new and remodel building sewers or where notices of repair may be in effect.

10. Old Chapters 13.20.070 through 13.20.080 were removed and replaced with Chapter 13-38 that establishes new controls and limitations for the disposal of fats, oils and grease (FOG).

11. 13.24.040: Was modified to modernize the requirements for the type of connection to a lower sewer lateral using a mechanical joint with a clamp.

12. New chapter 13.37- Sewer and Lateral Inspections

    a. Requires maintenance and inspection of building sewers for all land uses when any of the following occurs.
        i. At any occurrence of an overflow
        ii. Evidence that the sewer lateral has not been properly maintained
        iii. Existence of a public health threat
        iv. Addition of new plumbing fixtures
        v. Addition of 400 or more square feet of floor area
    b. Exceptions to the above are allowed under certain circumstances and the Director of Public Works may waive certain requirements.
    c. Periodic inspection required for all common interest residential and all non-residential properties every 10 years.
    d. Defines lateral defects requiring repair.
    e. Permits access to private property for the purposes of inspecting building sewer.
    f. Establishes requirements and content of Inspection Reports
    g. Establishes authority to order repairs on private laterals and sets out the procedures for such an order.
    h. Provides for administrative guideline to be used for inspection and enforcement. Guidelines are in development and have not been adopted by the City Council.

13. New Chapter 13.38 “FOG” Ordinance includes the following provisions:

    a. Affects FSE’s only
    b. Defines certain terms used in the ordinance.
    c. Requires Grease/sand Interceptors for all new construction and for remodels. Allows grease traps under certain circumstances.
    d. Establishes triggers for installation of interceptors in existing facilities.
    e. Requires removal of garbage disposals for all existing establishments by January 2010. Prohibits garbage disposals in all new establishments.
    f. Establishes design requirements for interceptors.
    g. Establishes maintenance requirements and periodic inspection requirements.
    h. Sets forth enforcement and penalty guidelines
    i. Sets out guidelines for required Best Management Practices for handling FOG.

Appendix D.4

ORDINANCE NO. 4930

AN ORDINANCE REPEALING CHAPTERS 13.16, 13.20, 13.24, AND 13.28 OF THE EL CAJON MUNICIPAL CODE AND ADDING NEW CHAPTERS 13.16, 13.20, 13.24, 13.28, 13.37, AND 13.38 TO THE EL CAJON MUNICIPAL CODE RELATED TO SEWERS AND SEWAGE DISPOSAL.

THE CITY COUNCIL OF THE CITY OF EL CAJON DOES ORDAIN AS FOLLOWS:

Section 1. Chapter 13.16 of the El Cajon Municipal Code, is hereby repealed.

Section 2. A new Chapter 13.16 of the El Cajon Municipal Code is hereby added to read as follows:

13.16 SEWERS AND SEWAGE DISPOSAL – IN GENERAL

13.16.010 Compliance.

No person shall cause, suffer or permit the disposal of sewage, human excrement or other liquid wastes in any place or manner except through or by means of an approved plumbing and drainage system and an approved sewage disposal system installed and maintained in accordance with the provisions of the California Plumbing Code and Chapters 13.16 through 13.40.

No person shall allow sewage to escape or flow from a building, building drain, building sewer, soil line, or sewer lateral. An escape of sewage from a building, building drain, building sewer, soil line, or sewer lateral shall be considered a threat to the public health and welfare and shall be deemed a nuisance.

It shall be the responsibility of all residents, business owners, employees of local businesses, and citizens of El Cajon to notify the city of any discharge of unsanitary waste from a building sewer, lateral, cleanout plug or sewer main by stoppage or other means and take all measures to prevent further discharge, contain, or clean up such a discharge until a professional plumbing company or local authority has responded to the incident.

13.16.011 Delegations of power.

Whenever a power is granted to or imposed upon the director of public works under this title, such power may be exercised or the duty may be performed by a deputy or an authorized person unless expressly provided otherwise.

13.16.012 Restrictions on allowance of variances from title.

Whenever the director of public works is permitted by this title to grant an exception to any of the requirements of this title, such exceptions shall be granted by

(Continued on Page 2)

him, only if he finds that literal compliance is impossible or impractical because of peculiar conditions, in no way the fault of the person requesting such exceptions, and that the purpose of this title may be accomplished and public health and safety secured by alternative construction or procedure, in which case the director of public works may permit such alternative construction or procedure.

13.16.013 Conformation of facilities to title – new facilities.

All new public sewers, house connection sewers, and industrial liquid wastes pre-treatment plants shall conform to the requirements of this title unless specifically excepted.

13.16.014 Conformance - remodeling.

All remodeling of existing public sewers, building sewers, and industrial liquid wastes pre-treatment plants shall conform to the requirements of this title, unless specifically excepted. All new buildings or building remodels that include an increase of plumbing fixture units are subject to the provisions of this title.

13.16.015 Records.

The director of public works shall keep a permanent record of all permits issued and all plans requiring approval under the provisions of this title. The director of public works shall establish and maintain accurate records indicating all sewers constructed with public funds and accurate records of all main line sewers constructed hereafter with private funds, and the person or properties originally benefiting from and responsible for the financing of such sewers.

13.16.016 Who may do work under title – work to be subject to inspection and approval.

All work permitted under the provisions of this title shall be constructed by a licensed contractor and shall be subject to inspection by and shall meet the approval of the director of public works.

13.16.017 Notice to remedy house connection sewer deficiency.

In the event that a building sewer or lower lateral fails to pass inspection and is subsequently placed in service, the permittee shall be given notice in writing of such failure to pass inspection and shall within ten (10) days from the date of such notice make the construction conform to the requirements of this title.

13.16.020 Certain sanitary facilities required for all buildings.

Every building shall have sinks, water closets, and other sanitary fixtures and facilities.

(Continued on Page 3)

13.16.030 Public nuisance.

The violation of any provision of this chapter is deemed to be a public nuisance and may be abated in accordance with Chapter 1.16 of this code.

Section 3. Chapter 13.20 of the El Cajon Municipal Code is hereby repealed.

Section 4. A new Chapter 13.20 of the El Cajon Municipal Code is hereby added to read as follows:

13.20 SEWERS AND SEWAGE DISPOSAL – PUBLIC SEWERS GENERALLY

13.20.010 Definitions.

For purposes of Chapters 13.20 through 13.28, the following words and phrases have the meanings respectively ascribed to them by this section:

A. "B.O.D." This term, denoting biochemical oxygen demand, means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty (20) degrees centigrade, expressed in parts per million by weight.

B. "Building drain" means that part of the lowest horizontal piping of a drainage system that receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning two (2) feet outside the inner face of the building wall.

C. "Building sewer" means the extension from the building drain, beginning two (2) feet from the outside of the building, to the public sewer or other place of disposal including the lower lateral.

D. "Cleanout" means a sewer line fitting placed on a sewer to facilitate inspection, cleaning or maintenance of the sewer.

E. "Combined sewer" means a sewer receiving both surface runoff and sewage.

F. "Double cleanout" means the horizontal piping or pipe fittings that facilitate(s) the proper cleaning, inspection and physical access to the building sewer or lower lateral in either direction, upstream or downstream from the same entry point.

G. "Garbage" means solid wastes from the preparation, cooking and dispensing of food, and from the handling, storage of food waste or the sale of produce.

(Continued on Page 4)

H. "Industrial wastes" means the liquid wastes from industrial processes, as distinct from sanitary sewage.

I. "Licensed contractor" means a contractor having a valid license issued pursuant to the California Business and Professions Code which license includes the activities listed on the permit applied for.

J. "Lot" means any piece or parcel of land bounded and defined or shown upon a plot or deed recorded in the Office of the County Recorder, as a separate or individual parcel, except that in any event any building or structure covers more than a lot, the word "lot" shall include all such pieces or parcels of land upon which such building or structure is wholly or partly located.

K. "Lower sewer lateral" means horizontal pipe and fittings forming a connection to the sewer main line for the purposes of connecting a building sewer. The lower lateral extends from the public sewer main to the edge of the public right-of-way and terminates at a double cleanout.

L. "Natural outlet" means any outlet into a watercourse, pond, ditch, lake or other body of surface water or groundwater.

M. "pH" means the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

N. "Properly shredded garbage" means the wastes from the preparation and/or cooking of food that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half (½) inch in any dimension.

O. "Public sewer" means any main line sewer constructed in any street, highway, alley, place, or right-of-way dedicated for public use. Such term shall not include building drain, building sewer, or lower lateral.

P. "Director of public works" means any official agent, branch or function of the city responsible for the design, construction, maintenance and operation of sanitary sewers in the city. It shall include all officers, agents and employees engaged in sewer services.

Q. "Sanitary sewer" means a pipeline that carries wastewater and to which stormwaters, surface waters and groundwaters are not intentionally admitted.

R. "Sewage" means a combination of wastewater – carried waters from residences, business buildings, institutions and industrial establishments, together with such groundwaters, surface waters and stormwaters as may be present.

(Continued on Page 5)

S. "Sewage treatment plant" means any arrangement of devices and structures used for wastewater treatment.

T. "Sewer" or "Sewer line" means a pipe or conduit for carrying wastewater.

U. ""Sewerage works" means all facilities for collecting, pumping, treating and disposing of wastewater.

V. "Storm sewer or storm drain" means a pipeline that carries stormwaters and surface waters and drainage, but excludes wastewater and polluted industrial wastes.

W. "Suspended solids" means solids that either float on the surface or are in suspension in water, sewage or other liquids, and which are removable by laboratory filtering.

X. "Upper sewer lateral," also known as the "building sewer," means horizontal pipe and fittings forming a connection to the sewer main line for the purposes of connecting a building drain. The upper sewer lateral extends from the edge of public right-of-way and located by a double cleanout plug to the building drain.

Y. "Watercourse" means a channel in which a flow of water occurs, either continuously or intermittently.

Z. "Building sewer inspection" means an inspection of a building sewer lateral that consists of the retention of a pre-qualified contractor by the owner in order to visually examine and inspect a building sewer lateral in the manner deemed appropriate by the director of public works. Such an inspection shall, at a minimum, include the use of a closed-circuit television inspection device for the purposes of determining whether the building sewer lateral complies with the requirements of this chapter.

AA. "Commercial property" means any real property not used for residential purposes and not a common interest development.

BB. "Common interest development" means a development characterized by apartments, individual ownership of a condominium housing unit, or a residential parcel coupled with the shared ownership of (or right to use) common areas and facilities, including, but not limited to, condominium projects, community apartment projects, stock cooperatives and planned unit developments, which contains two (2) or more dwelling units and which has a building sewer lateral shared by two (2) more dwelling units.

(Continued on Page 6)

CC. "Notice to repair" means the notice and order issued by the director of public works to the owner advising that the owner appears to be in violation of the city of El Cajon Municipal Code with respect to the owner's building sewer lateral, or in violation of the code in the manner of the building sewer lateral's connection to the city sewer system, which notice and order directs the abatement of the identified apparent violation in a timely manner or, in the alternative, proof that the conditions identified in the notice and order do not exist.

DD. "Owner" means any person, partnership, association, corporation or fiduciary having legal title (or any partial interest) in any real property situated within the city.

13.20.020 Deposit of matter that will clog or obstruct flow of sewage.

No person shall place, throw or deposit or cause or permit to be placed, thrown or deposited in any public sewer, drain, catch basin, water closet, privy vault or cesspool, any dead animal, offal or garbage, fish, fruit or vegetable waste, pharmaceuticals, sand, liquid waste of any kind containing chemicals, greases, oil, tar or gasoline or any other objectionable materials or matter which will clog, obstruct, fill or prevent the effective use of or necessitate the frequent repair, clean out or flushing of such sewer, drain or catch basin.

13.20.030 Review and approval by director of public works prior to discharge of certain wastes into public sewers – preliminary treatment facilities.

The admission into the public sewers of any waters or waste having a five (5) day B.O.D. greater than five hundred (500) parts per million by weight, or containing more than five hundred (500) parts per million by weight of suspended solids, or containing any quantity of substances having the characteristics described in section 13.20.050, or having an average daily flow greater than two percent (2%) of the average daily sewage flow of the city, shall be subject to the review and approval of the director of public works. Where necessary, in the opinion of the director of public works, the owner shall provide, at his expense, such preliminary treatment as may be necessary to reduce the B.O.D. to five hundred (500) parts per million and the suspended solids to five hundred (500) parts per million by weight, or reduce objectionable characteristics or constituents to within the maximum limits provided for in section 13.20.050, or control the quantities and rates of discharge of such waters or wastes. Plans, specifications and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the director of public works, and no construction until such approval is obtained in writing.

Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

(Continued on Page 7)

13.20.040 Discharge of storm water or surface water.

No person shall discharge or cause to be discharged any storm water, surface water, groundwater, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters into any sanitary sewer.

Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers or to a natural outlet approved by the director of public works. Industrial cooling water or unpolluted process waters may be discharged, upon approval of the director of public works, to a storm sewer, sanitary sewer or natural outlet.

13.20.050 Discharge of certain wastes into public sewer prohibited.

Except as otherwise provided in Chapters 13.20 through 13.28, no person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer:

A. Any liquid or vapor having a temperature higher than one hundred fifty degrees (150º) Fahrenheit;

B. Any water or waste, which may contain more than one hundred (100) parts per million, by weight, of fat, oil or grease;

C. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas;

D. Any garbage of any kind that has not been property shredded;

E. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works;

F. Any waters or wastes having a pH lower than 5.0 or higher than 9.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works;

G. Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals or create any hazard in the receiving waters of the sewage treatment plant;

(Continued on Page 8)

H. Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant; and

I. Any noxious or malodorous gas or substance capable of creating a public nuisance.

13.20.060 Cleanout.

Where a building sewer is constructed, modified, remodeled or replaced, and is connected or reconnected to the lower sewer lateral or double cleanout shall be installed at the outside edge of the public right-of-way to facilitate the proper cleaning and inspection of the pipeline in either direction, upstream or downstream.

The above requirements also apply to all building sewers subject to a notice to repair.

13.20.070 Repealed.

13.20.080 Repealed.

13.20.090 Sewers carrying industrial wastes – construction and maintenance of manholes.

When required by the director of public works, the owner of any property served by a building sewer carrying industrial wastes shall install a suitable control manhole in the building sewer to facilitate observation, sampling and measurement of the wastes. Such manhole, when required, shall be accessible and safely located, and shall be constructed in accordance with plans approved by the director of public works. The manhole shall be installed by the owner at his expense, and shall be maintained by him so as to be safe and accessible at all times.

13.20.100 Analyses of wastes.

All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in sections 13.20.030 and 13.20.050 shall be determined in accordance with "Standard Methods for the Examination of Water and Sewage," and shall be sampled at the control manhole provided for in Section 13.20.090, or upon suitable samples taken at such control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected.

13.20.110 Repealed.

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13.20.115 Repealed.

13.20.120 Repealed.

13.20.130 Service to areas outside city – unauthorized use.

The use of the sewage disposal system of the city by persons without the authorization of the city council for the disposition of sewage from any area not within the corporate limits of the city is prohibited.

13.20.140 Applicability of chapter to agreements for treatment of industrial wastes.

No statement contained in Chapters 13.20 through 13.28 shall be construed as preventing any special agreement or arrangement between the city and any industrial concern whereby an industrial waste of unusual strength or character may be affected by the city for treatment, subject to payment therefor by the industrial concern.

13.20.150 Public sewer fees.

Public sewer fees shall be established from time to time by resolution or ordinance of the city council.

Section 5. Chapter 13.24 of the El Cajon Municipal Code is hereby repealed.

Section 6. A new Chapter 13.24 of the El Cajon Municipal Code is hereby added to read as follows:

13.24 SEWERS AND SEWAGE DISPOSAL – PUBLIC SEWER LATERALS

13.24.010 Soil line connection.

Where the plumbing soil line or building sewer joins a lower sewer lateral, stub or wye, such joint shall be made with a mechanical joint or clamp with a double cleanout according to current industry standards, or any other method approved by the director of public works. Minimum ground cover at such joint or at the property line shall be forty-two (42) inches unless otherwise specified by the engineering department of the city. The city's wastewater department shall not be obliged to connect to a soil line that is installed at less than the required minimum depth.

(Continued on Page 10)

13.24.020 Mains and laterals as part of same construction – installation requirements.

Where laterals are being installed by a general contractor as an integral part of the construction of a complete system of sewer mains, laterals and services under supervision of an inspection by the director of public works or his agents, the provisions of this chapter shall apply.

13.24.030 Connections to existing city sewer main.

Wherever an existing sewer main is to serve several lots in a private contract for improvements in a subdivision, the specific job of boring into the main and affixing a hub shall be performed by the city's wastewater department. The contractor shall pay the city a cash fee according to the current schedule of fees established by resolution by the city council for each entry into the main in advance of performance of the work. The contractor shall excavate to the sewer main at the site of the proposed lateral, exposing the sewer main pipe for the prescribed work by the city sanitation department. When the work by the city sanitation department is complete, the contractor shall be responsible for any damage to the main as a result of excavation, and shall have the same responsibility for any lateral installed as prescribed above as he has for any lateral built entirely for himself.

Section 7. Chapter 13.28 of the El Cajon Municipal Code is hereby repealed.

Section 8. A new Chapter 13.28 of the El Cajon Municipal Code is hereby added to read as follows:

13.28 SEWERS AND SEWAGE DISPOSAL – PUBLIC SEWER CONNECTIONS

13.28.010 Definitions.

For the purposes of this chapter, the following words and phrases shall have the meanings respectively ascribed to them by this section:

A. "Apartment" means a room or suite of rooms in a building occupied or designed for occupation by one family for living or sleeping purposes.

B. "Auto court" means any area, place or tract of land where two or more single family dwellings, or a building containing two or more apartments designated, used or intended wholly or in part for the accommodation of automobile transients are located and offered for hire, rent or lease. The term shall also include any motel.

(Continued on Page 11)

C. "Building or house" means a tent, penthouse, restroom or single or multiple family dwelling. These terms include all architectural structures.

D. "Bungalow court" means a group of four or more separate buildings, nor more than one story in height, each being erected or located on a parcel of ground under a separate roof, as a family domicile or residence and facing a common court.

E. "Family" means a person living alone or a group of two or more persons occupying an apartment.

F. "Motel" means a building of not more than one story, containing six or more guest rooms or apartments or combination thereof, each of which has a separate individual entrance leading directly from the outside of the building and is designed, used or intended wholly or in part for the accommodation of automobile transients.

G. "Multiple dwelling" means a building used or designated to be used as a dwelling for three or more families living independently of each other.

H. "Trailer court or auto and trailer camp" means an area or tract of land where space is rented or held out for rent to owners or users of trailer coaches or tent campers, furnishing their own camping equipment, or where free camping is permitted owners or users of trailer coaches or tent camp equipment for the purpose of securing their trade.

13.28.020 Unauthorized connections to public sewer prohibited.

No person other than the city, its agents and employees, shall connect any pipe, drain or sewer with any public sewer, or open or penetrate any public sewer in the city, or injure, break or remove or open any portion of any manhole, flush tank, inspection pipe or any other part of or appurtenance to any public sewer. Except where otherwise specifically provided in Chapters 13.20 through 13.28, the city shall install all connections to any existing public sewers.

13.28.030 Connection permits required.

No person shall connect to the sewage disposal lines of the city or discharge sewage into the sewer lines of the city or sewage disposal plant of the city without first obtaining a connection permit from the city.

(Continued on Page 12)

13.28.031 Connection to public sewer – required when sewer available.

All plumbing that receives the waste discharge from any building, structure or place of business, shall be connected to a public sewer.

All plumbing receiving water discharge that is connected to a private disposal system shall be connected to a public sewer within one (1) year after a public sewer becomes available.

13.28.032 When sewer not available.

The connection to a public sewer required by section 13.28.032 may be dispensed with when no public sewer is available and when, in the opinion of the Health Officer of the County, a private sewage disposal system would be adequate and safe and would not constitute a menace to public health.

13.28.033 When connection to approved private sewage disposal system required.

All plumbing receiving waste discharge, which is not connected to a public sewer shall be connected to a private sewage disposal system approved by the director of public works and health officer of the county.

13.28.034 Connections letting roof or surface water into sewers.

No person shall make or maintain any connection by pipes or otherwise with any public sewer by which roof or surface water may run into any such sewer.

13.28.035 Entering, disturbing or cleaning public sewers, structures or appurtenances.

No person shall, without authorization from the director of public works, open, enter, disturb or clean any public sewer, structure or appurtenance thereto.

13.28.036 Maintenance generally not to obstruct public sewer flow.

No person shall do, or cause to be done, any maintenance that would damage or obstruct the flow of any public sewer.

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13.28.037 Maintenance of private systems.

It shall be the responsibility of each property owner whose property is connected to the city sewer system to maintain continuously and satisfactorily in operation at his own expense, any house connection sewer, building sewer, private sewage disposal system, or industrial liquid waste pre-treatment facility. Failure to maintain such a private sewer system shall be sufficient grounds for immediate revocation of private sewer operating permit or industrial liquid waste permit of the person so failing and disconnection of his premises from the public sewer. Such a private sewer system is subject to required repairs as set out in a notice to repair issued pursuant to Section 13.20.010(DD). Users of private sewer disposal systems shall keep all cleanout caps and other access ports in place and properly sealed.

13.28.038 Septic tank or cesspool to be abandoned when main line connection obtained.

When a house connection sewer is constructed connecting a main line sewer, a house sewer which previously drained to a septic tank or cesspool, the septic tank or cesspool shall be abandoned and no portion of the house sewer shall then pass through or connect to such septic tank or cesspool

13.28.039 Procedure to effect abandonment of septic tank or cesspool.

When any septic tank or cesspool is abandoned, the top of such septic tank or cesspool shall be removed and the tank or cesspool shall be drained and filled with fine earth or sand and compacted and any pipes connecting to such tank or cesspool shall be cut directly outside of the tank or cesspool and shall be plugged with concrete. The abandonment of the septic tank or cesspool shall be complete before the house connection constructed shall be considered to have completely passed inspection.

13.28.040 Connection fees.

Before a permit shall be granted to connect to the sewage disposal system of the city, a connection fee and an inspection fee shall be paid to the city. Such fees shall be set from time to time by ordinance or resolution of the city council. Inspection fees shall be paid pursuant to Section 8.36.070 of this code.

13.28.080 Additional Connection Fee.

In addition to all other fees required by this title, a fee of two hundred dollars per connection shall be paid to this city before a permit shall be granted to connect to any sewer main of this city where such sewer main was constructed by the city or state or a component of the federal government.

(Continued on Page 14)

In addition to all other fees required by this title, except the fees set forth in the above paragraph, an additional fee per connection shall be paid to the city before a permit shall be granted to connect to any sewer line of the city where such sewer main or line was constructed pursuant to an agreement with the city to serve property other than that for which permission to connect is sought. Such a fee shall be set forth in such agreement.

13.28.090 Connections to mains constructed by Cajon Valley Union School District.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of two hundred dollars shall be paid the city before a permit shall be granted to connect to the sewer main located in Second Street from Dawnridge to Pepper Drive, and in Pepper Drive from Second Street to Peerless Drive, such sewer main having been constructed by the Cajon Valley Union School District.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of two hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer main located in Anza Street from a manhole which lies five hundred sixty feet south of the centerline of Washington Avenue to a manhole approximately four hundred fifty feet south of the westerly prolongation of the north line of the Anza Street school site as set forth on Record of Survey No. 5028, such sewer main having been constructed by the Cajon Valley Union School District.

13.28.100 Connections to Bradley-Johnson sewer.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of five hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer lines located as follows:

A. The sewer line extending easterly from the sewer outfall line along the future Bradley Avenue and southerly along Johnson Avenue to Vernon Way;

B. The sewer line extended to provide future service to unincorporated areas of the city as of October 1, 1967, on Steele Avenue and Vernon Way within the North Johnson Avenue 1913 Act Improvement District boundaries.

13.28.110 Connections to Pioneer Way-Cypress Lane sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of eight hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer lines located as follows:

(Continued on Page 15)

The sewer line in Pioneer Way extending northerly from the existing city boundary a distance of four hundred nine feet to Cypress Lane, and westerly in Cypress Lane to Johnson Avenue.

Said sewer line was constructed in connection with the Pioneer Way 1913 Act Improvement District, and the above fee shall be charged for each lateral to serve parcels not assessed for sewer mains.

13.28.120 Connections to Avocado South of Chase to DeWitt Court sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of six hundred dollars shall be paid to the city before a permit shall be granted to connect to the sewer lines located as follows:

The sewer line extending southerly along Avocado from nine hundred fifty feet south of the centerline of Chase Avenue to DeWitt Court.

Said sewer line was constructed by the city in connection with the improvement of Avocado south of Chase to south of DeWitt Court.

13.28.130 Connections to Fanita Drive sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of two hundred dollars for each dwelling unit or its equivalent shall be paid to the city before a permit shall be granted to connect to the trunk line sewer in Fanita Drive to be constructed by the city, or to any other sewer line which in turn uses the capacity of the Fanita Drive trunk sewer.

13.28.135 Connections to Bermuda Place sewer main.

In addition to all other fees required by this division, except the fee set forth in section 13.28.080, a fee of one thousand nine hundred ninety three dollars and six cents shall be paid to the city before a permit shall be granted to connect Assessor's Parcel No. 507-250-17 to the sewer main located in Bermuda Place. Said sewer line was constructed by the city in connection with the Bermuda Lane, et al. 1911 Act Improvement District (Assessment § 75).

(Continued on Page 16)

13.28.150 Connections to Melody Lane sewer main – Gull Place to Granite Hills Drive.

In addition to all other fees required by this chapter, except the fee set forth is section 13.28.080, a fee of nine dollars and twenty-two cents per front foot shall be paid to the city before a permit shall be granted to connect to the sewer line located on the southerly side of Melody Lane from the easterly subdivision boundary of Rancho Milagros, easterly to Granite Hills Drive. Said sewer line was constructed by the developers of Rancho Milagros subdivision.

13.28.155 Connections to Bradley Avenue sewer main – Johnson Avenue to Magnolia Avenue.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of thirty-six dollars per front foot shall be paid to the city before a permit shall be granted to connect the sewer line located in Bradley Avenue from Johnson Avenue to Magnolia Avenue. Said sewer line was constructed in connection with the Bradley-Cypress 1911 Act Improvement District.

13.28.160 Connections to Tilling Way sewer main.

In addition to all other fees required by this chapter, except the fee set forth in section 13.28.080, a fee of three thousand seven hundred twenty-four dollars and fourteen cents shall be paid to the city before a permit shall be granted to connect Assessor's Parcel No. 492-580-17 to the sewer line located in Tilling Way; and a fee of one thousand nine hundred forty-two dollars and one cent shall be paid to the city before a permit shall be granted to connect Assessor's Parcel No. 492-580-18 to the sewer line located in Tilling Way. Said sewer line was constructed by the city in connection with the Tilling Way 1911 Act Improvement District.

13.28.165 Connection to Chase Avenue sewer main.

In addition to all other fees required by this chapter, a fee of one thousand four hundred twenty dollars shall be paid to the city before a permit shall be granted to connect to the fifty-eight foot sewer lateral on the south side of Chase Avenue, one hundred seventy feet east of Mollison Avenue. The sewer lateral was constructed by the city in connection with street improvements as shown on drawing No. 11606 on file in the engineering division

Section 9. A new Chapter 13.37 of the El Cajon Municipal Code is hereby added to read as follows:

(Continued on Page 17)

13.37 SEWERS AND SEWAGE DISPOSAL – INSPECTIONS

13.37.020 Maintenance of private building sewer.

A. Maintenance of building sewer. Each owner shall maintain his building sewer lateral(s) free of displaced joints, open joints, root intrusion, substantial deterioration of the line, cracks, leaks, inflow, or infiltration of extraneous water, root intrusion, grease and sediment deposits, or any other similar conditions, defects, or obstructions likely to cause leakage or increase the chance for blockage of the building sewer.

B. Maintenance of septic tank. Each owner shall maintain his septic tank free of deterioration, corrosion, damage, disposal failure or any other similar deficiencies or defects likely to increase failure of the septic tank.

C. General maintenance requirements. The maintenance obligation imposed by this section shall be in addition to and supplemental of the general private sewer system maintenance obligations imposed in this title.

13.37.030 Building sewer inspections – access to premises.

The director of public works, or the building official, (or any designated representative or either the director of public works or the building official) is hereby authorized to inspect any building sewer in use within the city and connected to the city sewer system for the following purposes:

A. To determine the size, depth, and location of any sewer connection.

B. To determine the end outlet of any sewer connection by depositing harmless testing materials in any plumbing fixture attached thereto and flushing the same, if necessary.

C. To determine, by measurements and samples, the quantity and nature of the sewage or wastewater being discharged into any sewer.

D. To determine the location of the roof, swimming pool, floor and surface drains, and whether or not they physically connect to a building sewer.

E. To evaluate and determine defects in a sewer lateral following an overflow incident.

Nothing herein shall be deemed to provide the director of public works, the building official or their respective designees with any right or authority to enter a building or other apparently private or interior area of a real property, except to the extent such entry is expressly authorized by state law.

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13.37.040 Mandatory building sewer inspections.

A. Health and safety basis for requiring a building sewer lateral inspection.

An owner shall have the building sewer of his real property video-inspected in accordance with the requirements of this chapter (as directed and within the time period indicated by the director of public works) upon the occurrence of any of the following events:

1. Overflow or malfunction. Whenever the director of public works has sufficient evidence (as determined by the director) that the building sewer has recently overflowed or has recently malfunctioned;

2. Building sewer failure or lack of maintenance. Whenever, based on sewer system testing conducted by the city (of either the building sewer lateral or the city's public sewer system), the director of public works finds that there is sufficient evidence to conclude that the building sewer lateral has failed, is likely to fail, or has not been properly maintained; and

3. Public health threat. Upon any other reasonable cause to believe that there is a threat to the public health, safety or welfare due to the condition of a building sewer lateral or any other conditions causing a nuisance.

B. Events requiring a building sewer lateral inspection serving residential properties.

An owner shall have the building sewer lateral of his residential property inspected in accordance with the requirements of this chapter upon the occurrence of any of the following events or any other events in paragraph (A) above:

1. Home additions or remodels. Prior to the issuance of a city building permit for a residential building addition, remodel, or new improvements on the real property in excess of four hundred (400) square feet of habitable space as that phrase is defined in the most recently adopted California Building Code.

2. New plumbing fixtures. Prior to the issuance of a city building permit for all new plumbing fixtures attached to the building sewer lateral upon the residential property. (For the purposes of this section, the phrase "new plumbing fixtures" shall refer only to an increase in the number of plumbing fixtures in use on the real property prior to the application for a building permit for the "new" plumbing fixtures.)

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C. Schedule for lateral inspections – non-residential, multi-family and common interest development real properties.

1. Non-residential properties. An owner or owners of non-residential property within the city shall have that property's building sewer lateral(s) inspected in accordance with the requirements of this chapter or on occurrence of any conditions in paragraphs (A) or (B) above, or once every ten (10) years beginning on the first date of notification following the adoption of the ordinance first enacting this chapter. Within each subsequent ten (10) year period of time, such lateral inspections shall be performed. (For the purposes of this section, a property that has a mixture of allowed residential and non-residential uses shall be considered a non-residential property with respect to its compliance with the sewer lateral inspection requirements of this section.)

2. Common interest development, condominium, or multi-family properties. The owner or owners of a common interest development, condominium, or multi-family property shall have that property's building sewer lateral(s) inspected in accordance with the requirement of this chapter or on occurrence of any conditions in paragraphs (A) or (B) above, or once every ten (10) years beginning on the first date of notification following the enactment of the ordinance first enacting this chapter. Within each ten (10) year period of time, such lateral inspections shall occur.

D. Exception to inspection for recent prior inspections and repairs.

The following are exceptions to the inspection requirements of subparagraphs (B) and (C) above:

1. Prior replacement of sewer lateral. An owner otherwise required to perform a building sewer lateral inspection under (B) or (C) hereof shall not be required to perform such an inspection if the owner (or the owner's predecessor-in-interest) has originally installed or has replaced his property's building sewer lateral within the ten (10) years prior to the date of the application for a building permit.

2. Prior inspection or repair of a building sewer lateral. An owner otherwise required to perform an inspection under (B) or (C) shall not be required to perform such an inspection if the owner has either completed a remedial inspection (conducted in accordance with the inspection requirements of this chapter) or completed a permitted repair of the building sewer lateral within the three (3) years prior to the date the inspection would have otherwise been required, or has a valid compliance certificate.

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13.37.050 Requirements for a proper building sewer lateral inspection report.

A. Inspection report standards.

The building sewer inspection reports required by this chapter shall be prepared in accordance with the following requirements and specifications:

1. The inspection report shall be prepared by a pre-qualified contractor or any other professional otherwise registered by the City of El Cajon;

2. The inspection report shall identify all of the following:

   a. Any of the following conditions: displaced joints, open joints, root intrusion, substantial deterioration of the line, sags or depressions, cracks, leaks, inflow or infiltration of extraneous water, root intrusion, grease and sediment deposits or other conditions likely to increase the chance for blockage of the building sewer.

   b. Whether any connection, by pipes or otherwise, allows rainwater or groundwater to enter the building sewer or public sewer;

   c. Whether the building sewer has an installed backwater device where any outlet or trap of the building sewer is below the level of the nearest manhole. If a backwater device is already installed, the report shall indicate whether the backwater device is functioning properly.

   d. Where the building sewer includes a septic tank, the report shall identify the extent to which the septic tank is deteriorated, corroded, damaged, whether the disposal field has failed or any other relevant deficiency.

3. The inspection report shall contain an express certification from the certified inspector that the property has been inspected for any outdoor drain connection to the city sewer system and that no such unpermitted connection is present. It shall also contain either a videotape or DVD of the video inspection of the building sewer lateral in a format acceptable to the city, as established by the city regulations, policies or procedures.

4. The inspection report shall be submitted to the city for review and analysis accompanied with a review fee in addition to any other fee required by this chapter.

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B. Compliance with regulations. The inspection report shall, in all other aspects, comply with the requirements and specifications described in the director of public works' specifications for a building sewer lateral inspection report as established by the regulations authorized under this title.

13.37.060 Required building sewer lateral repairs.

A. Notice to repair or replace.

Upon receipt of the building sewer inspection report pursuant to this chapter, the director of public works (or his designee) will determine whether it indicates any deficiencies in the operation of the building sewer lateral and, thereafter, shall provide the owner(s) with a notice to repair or replace as may be deemed appropriate by the director. The notice to repair or replace shall specifically identify the deficiencies to be corrected and shall establish a deadline within which the owner(s) shall complete the required corrective actions. The corrective action may include a requirement that the lateral be replaced altogether and also may include the installation of cleanout, grease removal devices, and backwater valves if those devices are otherwise required by this code or any uniform code adopted by the city.

B. Obligations of the owner.

The owner shall repair his building sewer lateral to the satisfaction of the director of public works, and, if a building permit is required for the repairs, the owner shall obtain a final permit inspection and approval of the city building official.

C. Repairs upon other properties not required.

If a building sewer lateral traverses private property, without easements, other than the owner's property, the owner shall only be responsible for the repairs to that portion of the building sewer lateral that are upon the owner's property and also to that portion of the building sewer within a public right-of-way.

13.37.070 Common interest developments.

The homeowners association of a common interest development shall, along with the owner, be jointly and severally liable for the duties and obligations imposed by this chapter in relation to any building sewer lateral located within a common area of the development. If no homeowners association exists, then the individual unit owners, both jointly and individually, shall be liable for the duties and obligations with respect to building sewer laterals established by this chapter.

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13.37.080 Administrative guidelines for inspections.

Within ninety (90) days of the adoption of the ordinance enacting this chapter, the director of public works shall prepare and promulgate the public administrative guidelines that shall, among other things, establish the following:

A. A certification program for pre-qualified contractors or other professionals who will be accepted by the city to perform inspections and the basis for obtaining and maintaining such a certification or for a decertification;

B. Develop a standard inspection report form and specification for building sewer inspection reports;

C. Establish a notice format and standard enforcement timelines for the notice to repair and for repair and inspection service of that notice in a manner consistent with the requirements of due process. Such administrative guidelines shall be approved by a resolution of the city council; and

D. Administrative procedures for accepting, tracking, and inspecting permits for building sewers, grease interceptors, and inspection of food serving establishments.

Section 10. A new Chapter 13.38 of the El Cajon Municipal Code is hereby added to read as follows:

13.38 SEWERS AND SEWAGE DISPOSAL – FATS, OILS AND GREASE

13.38.010 Purpose and Intent.

A. It is the purpose and intent of this chapter to establish regulations for the disposal of grease and other insoluble waste discharges from every food service establishment (an “FSE”) within the city.

B. The city council, in enacting the ordinance codified in this chapter, intends to provide for the maximum beneficial public use of the city's sewer system, to prevent blockages of that system and the accidental discharge of wastewater into the storm drain system or receiving waters of the state, to ensure the cost of maintaining the city's sewer system is equitably distributed among users, to clarify grease disposal requirements for existing food service establishments, and to promote public health and safety.

C. In the event of any conflict or inconsistency between the provisions of this chapter and the provisions of the most recently adopted California Plumbing Code, the provisions of this chapter shall govern.

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13.38.020 Definitions.

As used in this chapter, the following terms are defined:

A. "Administrative authority" shall mean the director of public works, the building official, or any other official(s) as designated by the city manager.

B. "Authorized inspector" shall mean an inspector so designated by the administrative authority.

C. "Director" shall mean the director of public works or other official as designated by the city manager.

D. "Food grinder" shall mean any device installed for the purpose of disposing food waste in the public sewer system.

E. "FSE" "Food service establishment" shall mean any food preparation establishment, restaurant, cafeteria, or any other establishment preparing food for consumption. Domestic homes are not considered food service establishments under this definition.

F. "Grease" shall mean grease, or fatty or oily substances and other insoluble waste that turns or may turn viscous or solidifies with a change in temperature or other conditions.

G. "Grease interceptor" shall mean an underground multi-compartment device installed outside a food service establishment of a size and design in compliance with the California Plumbing Code and approved by the city.

H. "Grease removal facility" shall mean any grease interceptor, trap, drain, screen, or similar device that is designed or installed to reduce the amount of grease entering the wastewater system.

13.38.030 Grease/Sand interceptors.

A. Grease/sand interceptors that are properly sized and constructed shall be required for all buildings that include an increase in plumbing fixture units, and prior to commencing business for all new food service establishments determined by the director to generate grease in quantities greater than that commonly found in domestic sewage. Where grease/sand interceptors are impossible or impractical to install, a grease trap shall be installed.

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B. Grease/sand interceptors are required for all existing establishments where one or more of the following conditions exist:

1. A notice to repair has been issued for repair of the building sewer.

2. The establishment is unable to pass annual inspection without repeated violations.

3. The establishment is unable to complete implementation of best management practices as noted in the annual inspection report.

4. The establishment has violated any waste disposal requirements contained in the Municipal Code and where evidence of substantial grease is observed downstream of the establishment.

13.38.032 Grease storage facilities.

A. All new construction or remodels subject to a new conditional use permit for an FSE shall be required to either store waste grease on the inside of the building or outside in a secured enclosure that is covered, locked, and inside a secondary containment area or device large enough to store the same volume as the primary container. All storage containers shall be designed to prevent tipping and to provide a secure closing lid that shall remain closed at all times that the container is not being accessed. All containers that are used to transfer waste grease shall have a secured lid that prevents accidental spills during transfer.

B. All existing FSEs are required to either store waste grease on the inside of the building or outside in an area secure from vehicular driveways and parking in storage containers that are designed to prevent tipping and to provide a secure closing lid that shall remain closed at all times that the container is not being accessed. All containers that are used to transfer waste grease shall have a secured lid that prevents accidental spills during transfer.

C. All FSEs shall maintain the storage area using good housekeeping techniques to prevent the accumulation of waste grease deposits on the outside of grease containers and shall have an approved emergency spill kit available in close proximity to the storage facilities.

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13.38.040 Food grinders prohibited.

A. Food grinders shall be removed from all existing food service establishments by January 1, 2010.

B. After August 1, 2009, food grinders shall be prohibited in all new food service establishments.

13.38.050 Grease interceptor design and maintenance requirements.

A. General provisions.

1. The installation of a proper interceptor shall be the responsibility of the user who applies for a permit connection and the user whose operations cause or contribute to the necessity for an interceptor.

2. Interceptors shall be installed, utilized, and properly maintained for continuous and efficient operation at all times and at the expense of the user.

3. Interceptors shall be inspected periodically to ensure compliance with these regulations.

4. The administration authority shall approve the type, capacity, and construction of all interceptors shared by multiple businesses can be utilized if specifically authorized by the director and upon evidence of legal operating and maintenance agreements between the involved property owners or users. Provisions shall provide for independent, unilateral operation by one or more parties of the agreement in the case where default by one party has occurred.

5. Interceptors no longer in use shall be abandoned in accordance with the California Plumbing Code.

B. Design.

1. Interceptors for food service establishments shall be sized and designed in compliance with the California Plumbing Code, unless otherwise specified herein.

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2. Other factors that may influence the design include, but shall not be limited to, the following:

    a. The type of facility (such as a restaurant, bakery, food processing factory, etc.);

    b. The volume of the user's business or operation (such as number of meals served, number of seats, hours of operation, etc.);

    c. The peak flow of processed wastewater discharged to the collection system;

    d. Size and nature of facilities (including kitchen facilities) based on size, type, number of fixtures, and type of processing or cooking equipment used;

    e. The type of service provided or operation undertaken (such as dine-in meal service versus carry-out meal service);

    f. The type of foods or other materials used in cooking, processing or manufacturing operations conducted within the facility;

    g. The overall potential for grease-laden discharges;

    h. The existence of devices, procedures or processes designed to minimize the amount of fats, oil or grease from entering the collection system;

    i. The location of the facility, if it is located in a known problem area; and

    j. Any prior problems with the facility, such as blockages, violations, etc.

3. All interceptors shall be certified by the International Association of Plumbing and Mechanical Officers, or another listing agency approved by the director, and be plumbed according to the California Plumbing Code.

4. All grease interceptors shall include an effluent sample box of a type and size approved by the administrative authority.

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5. Inspection by the administrative authority, or an authorized inspector, of installed interceptors and piping prior to backfilling is required. Piping shall meet the requirements of the California Plumbing Code.

6. Interceptors shall have a sanitary tee located inside the sample box on the discharge side of the sample box.

7. Interceptors shall have a cleanout installed after the sample box on the private lateral and at intervals required by the California Plumbing Code.

8. All manholes and sample boxes are to be installed a minimum of one-half inch above the finished grade with a concrete collar a minimum of eighteen (18) inches around the manhole and sample box lids.

C. Interceptor Maintenance.

1. Any user who is required by the director or the ordinance codified in this chapter to install or operate an interceptor shall be required to adequately maintain the interceptor at the user's expense, so that the interceptor is in proper working order at all times. Maintenance shall include the complete removal of all contents, including floating materials, wastewater, sludge and solids. Decanting or discharging of removed waste back into the interceptor from which the waste was removed or into any other interceptor, for the purpose of reducing the volume to be hauled is prohibited.

2. Grease interceptors shall be cleaned out completely by a permitted waste hauler as necessary to assure that the interceptor will operate as designed at all times or as otherwise specified by the administrative authority.

3. The use of additives, directly or indirectly to the plumbing or sewer system, to emulsify grease and/or oil is specifically prohibited.

4. The use of biological additives as a supplement to interceptor maintenance, including the addition of microorganisms, may be authorized by the director and approval shall be obtained in writing prior to the use of such activities.

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5. A maintenance log indicating each pumping of an interceptor for the previous twelve (12) months and any other pertinent information shall be maintained by each establishment. This log shall include, but not be limited to, date, time, amount pumped, hauler, and disposal site, and the log shall be kept in a conspicuous location for inspection by the administrative authority or an authorized inspector during normal business hours.

6. All users must sign a waste manifest form before having a waste load transported by a permitted hauler. The user shall also keep copies of the manifest form for a period of three (3) years, and make all manifest records available for inspection by the administrative authority during normal business hours.

7. All waste removed from an interceptor must be disposed at a facility permitted by the county of San Diego or applicable regulatory agencies to receive such waste. The pumpage shall not be returned to the public sewer system or manhole, any private wastewater system or storm drains.

8. All interceptors shall be located as to be readily and easily accessible for cleaning, inspection and removal of intercepted waste.

9. Any fixture connected to a grease interceptor shall have a non-removable, secured food strainer of such integrity to withstand daily operational usage.

D. Required connections to interceptors. All three-compartment sinks, scullery (preparation) sinks, floor drains, and mop sinks along a cook line, pre-wash sinks at dishwashing stations, and all other fixtures that contribute grease into the wastewater system shall be connected to an interceptor.

E. Prohibited connections or additives to interceptors.

1. Final rinse discharge from automatic dishwasher shall not be connected to the interceptor.

2. The use of any additive, such as enzymes, surfactants or chemicals shall not be connected to any type of interceptor. Chemical additives, such as chlorinated solvents, or any other additives that causes the emulsification of grease, are strictly prohibited from use in any type of interceptor.

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F. Plan review.

1. Applicants or users shall be required to submit copies of detailed facility proposed interceptors, pretreatment facilities, spill containment facilities, and operating procedures, to the community development department. Facility plans shall also include site plans, floor plans, mechanical and plumbing plans, and details to show all wastewater plumbing, spill containment, and appurtenances by size, location, and elevation. The review of the plans and procedures shall in no way relieve the user of the responsibility of modifying the facilities or discharge, and to meet the requirements of this chapter or any requirements of other regulatory agencies.

2. All submitted drawings shall be prepared by a licensed and registered professional engineer. Any false information or misleading calculations submitted shall be the responsibility of the user.

3. The design, location and procedures for operation and maintenance of a required interceptor shall be approved by the administrative authority. Such approval shall be obtained prior to the user's connection of the facility to the public wastewater system.

4. No food service establishment or other identified user shall be constructed except according to plans and specifications approved by the administrative authority.

5. Approved plans and specifications shall not be changed or altered without written approval by the administrative authority.

13.38.060 Best management practices.

Best management practices (each, a “BMP,” in any combination, “BMPs”) as listed below shall be utilized by the FSE and shall be subject to periodic verification and approval by the administrative authority. If at any time the FSE is found to be in noncompliance with this requirement with regard to all of the BMPs below, such noncompliance shall be deemed a violation.

A. Drain screens.

1. Drain screens shall be installed on all drainage pipes in food preparation areas for existing food service establishments by January 1, 2010.

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2. After August 1, 2009, drain screens shall be installed on all drainage pipes in food preparation areas for all new food service establishments deemed by the director to generate grease.

B. Waste cooking oil.

1. All waste cooking oil shall be collected and stored properly in recycling bins, barrels or drums.

2. Such recycling bins, barrels or drums shall be maintained appropriately to ensure they do not leak.

3. Licensed haulers or an approved recycling facility must be used to dispose of waste cooking oil. A log of such activities will be completed and maintained in plain visible site for inspection by the administrative authority. All manifests for disposal of waste products will be complete and inserted into the log.

C. Food waste. All food waste shall be placed in enclosed plastic bags and disposed of directly into the trash or garbage, and not in sinks.

D. Employee training.

1. Employees of the food service establishment shall be trained by March 1, 2009, and twice each calendar year thereafter, on the following subjects:

a. How to "dry wipe" pots, pans, dishware and work areas before washing to remove grease;

b. How to properly dispose of food waste and solids in enclosed plastic bags prior to disposal in trash bins or containers to prevent leaking and odors;

c. The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped, and how to use absorption products to clean if spills occur; and

d. How to properly dispose of grease or oils from cooking equipment into grease bins, barrels or drums without spilling.

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2. Training shall be documented and employee signatures retained indicating each employee's attendance and understanding of the practices.

3. Training records shall be available for review at any reasonable time by the authorized inspector.

E. Kitchen exhaust filters shall be cleaned as frequently as necessary to be maintained in good operating condition, but in no event less than one time per month.

F. All best management practices shall be posted conspicuously in the food preparation and dishwashing areas at all times.

13.38.062 Right of inspection.

Food service establishments shall be open and available for inspection by an authorized inspector at all times during normal business hours to ensure that the operation and maintenance of the food service establishment complies with the requirements of this chapter.

13.38.070 Violations for penalties – enforcement.

A. Violations of this chapter may result in fines and/or penalties.

B. Failure to comply with the provisions of this chapter may result in one or more of the following:

1. Notices of noncompliance may be issued with a specified period of correction;

2. Administrative citations may be issued for violations in the amounts and manner set forth in Chapter 1.14 of this code;

3. A criminal complaint may be filed in accordance with Chapter 1.24 of this code;

4. Sewer service may be determined a public nuisance as described in section 13.16.030, and disconnected from the City's sewerage works upon order of a court of competent jurisdiction.

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C. Appeals of fines, penalties or requirements to install grease interceptors.

1. Unless otherwise provided in this code, appeals of civil or administrative fines, penalties, or other corrective actions shall be submitted to the city manager within thirty (30) days after the food service establishment has been notified of the penalty and/or corrective actions. The decision of the city manager shall be in writing.

2. The decision of the city manager can be appealed to the city council by submitting a written request to the city clerk within fifteen (15) days of the issuance of the city manager's decision, and payment of the appropriate fee, as set by resolution of the city council.

3. Upon appeal, the appellant shall, upon written request to the city manager, be provided within fifteen (15) days of said request, at reasonable cost to the appellant, copies of all reports, data or other documentary evidence upon which the citation is based.

Section 11. This ordinance shall be published as required by law and shall take effect thirty days after adoption. The City Council finds that this activity is not a project and therefore is not subject to the California Environmental Quality Act pursuant to CEQA Guidelines Section 15060(c)(3).

PASSED AND ADOPTED by the City Council of the City of El Cajon, California at an Adjourned Regular Joint City Council/Redevelopment Agency Meeting held this 23rd day of June, 2009, by the following vote to wit:

AYES	:	Lewis, Hanson-Cox, Kendrick, McClellan, Wells
NOES	:	None
ABSENT	:	None
DISQUALIFY	:	None

MARK LEWIS
Mayor of the City of El Cajon

ATTEST:

KATHIE RUTLEDGE, CMC
City Clerk

I hereby certify that the above and foregoing is a full and true copy of Ordinance No. 4930 of the Ordinances of the City of El Cajon, California, as adopted by the City Council at the Adjourned Regular Joint Meeting of the City Council/Redevelopment Agency on the 23rd day of June, 2009.

Kathie Rutledge, CMC, City Clerk

6/23/09 (Item 14.1)

DECLARATION OF SERVICE BY EMAIL

I, the undersigned, declare as follows:

I am a resident of the County of Sacramento and I am over the age of 18 years, and not a party to the within action. My place of employment is 980 Ninth Street, Suite 300, Sacramento, California 95814.

On March 29, 2024, I served the:

- **Current Mailing List dated March 28, 2024**
- **Notice of Waiver of Procedural Requirements, Extension Request Approval, and Postponement of Hearing issued March 29, 2024**
- **Claimants' Comments on the Draft Proposed Decision and Parameters and Guidelines (Volumes 1-14) filed February 20, 2024**

  San Diego Regional Water Quality Control Board Order No. R9-2007-0001, Permit CAS0108758, Parts D.3.a.(3)(b)(iii), D.5.a.(1), D.5.a.(2), D.5.b.(1)(a), D.5.b.(1)(b)(iii-vi), D.5.b.(1)(c), D.5.b.(1)(d), D.5.b.(2), D.5.b.(3), E.2.f., E.2.g., F.1., F.2., F.3., I.1., I.2., I.5., J.3.a.(3)(c)(iv)-(viii), (x)-(xv), the first sentence of L.1. as it applies to the newly mandated activities, and L.1.a.(3)-(6), 07-TC-09-R County of San Diego, Cites of Carlsbad, Del Mar, Imperial Beach, Lemon Grove, Poway, San Marcos, Santee, Solana Beach, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, San Diego, and Vista, Claimants

by making it available on the Commission's website and providing notice of how to locate it to the email addresses provided on the attached mailing list.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this declaration was executed on March 29, 2024 at Sacramento, California.

Jill Magee

Jill Magee
Commission on State Mandates
980 Ninth Street, Suite 300
Sacramento, CA 95814
(916) 323-3562

COMMISSION ON STATE MANDATES

Mailing List

Last Updated: 3/28/24

Claim Number: 07-TC-09-R

Matter: San Diego Regional Water Quality Control Board Order No. R9-2007-0001 Permit CAS0108758 Parts D.1.d.(7)-(8), D.1.g., D.3.a.(3), D.3.a.(5), D.5, E.2.f, E.2.g, F.1, F.2, F.3, I.1, I.2, I.5, J.3.a.(3)(c)iv-viii & x-xv, and L.

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City of Chula Vista
City of Del Mar
City of Encinitas
City of Escondido
City of Imperial Beach
City of La Mesa
City of Lemon Grove
City of National City
City of Oceanside
City of Poway
City of San Diego
City of San Marcos
City of Santee
City of Solana Beach
City of Vista

TO ALL PARTIES, INTERESTED PARTIES, AND INTERESTED PERSONS:

Each commission mailing list is continuously updated as requests are received to include or remove any party or person on the mailing list. A current mailing list is provided with commission correspondence, and a copy of the current mailing list is available upon request at any time. Except as provided otherwise by commission rule, when a party or interested party files any written material with the commission concerning a claim, it shall simultaneously serve a copy of the written material on the parties and interested parties to the claim identified on the mailing list provided by the commission. (Cal. Code Regs., tit. 2, § 1181.3.)

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Volume 2, pp. 377-743	Co-Permittee 2010 Declarations
Volumes 2 – 11	JURMP Annual Reports
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Volume 13, pp. 1-10756	WURMP Annual Reports
Volume 13, pp. 10757-10784	County Fiscal Analysis Documents
Volume 13, pp. 10785-10907	Cost-Sharing Memorandums of Understanding
Volume 13, pp. 10908-10916	County Watershed Workgroup Expenditure Records
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EXECUTIVE SUMMARY

The City of Encinitas Clean Water Program has compiled this report to summarize the activities and accomplishments of the program for the reporting period of Fiscal Year 2006-07 (July 1, 2006 through June 30, 2007). This report is in response to requirements set forth by the California Regional Water Quality Control Board, San Diego Region, in Order No. 2001-01, NPDES No. CAS0108758, which describes individual tasks that must be implemented and reports that, must be submitted. This report provides a comprehensive summary of the City of Encinitas' efforts during the reporting period in accordance with Section I of Order 2001-01.

ES.1 Background

In 1987, Section 402 of the Federal Clean Water Act was amended by the United States Congress to require the Federal Environmental Protection Agency (EPA) to include regulations for non-point stormwater discharges. The regulations control pollutant discharges into State waters from municipal stormwater systems by the issuance of the National Pollutant Discharge Elimination System (NPDES) Permit. The California State Water Resources Control Board has been delegated the authority by the EPA to administer the NPDES permit for the State of California. In turn, the Regional Water Quality Control Board (RWQCB), San Diego Region, administers the permit at the local level.

On February 21, 2001, the RWQCB San Diego Region adopted Order No. 2001-01 NPDES No. CAS 0108758, *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District.* The provisions of the Order require the development and implementation of comprehensive Jurisdictional Urban Runoff Management Programs (JURMP). The Order names the County of San Diego as the "principal Copermittee" and lists the City of Encinitas as one of the 21 Copermittees.

ES.2 Overview of the City of Encinitas

The City of Encinitas is a small residential coastal community in northern San Diego County. The current population is approximately 60,000 and is generally built out. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south. These three receiving waters receive all stormwater and urban runoff from the City.

ES.3 Summary of FY 2006-07 Annual Report

The following sections summarize the activities conducted on a jurisdictional basis during this reporting period. The City also actively participates in regulatory programs on a watershed and regional basis. The jurisdictional programs are presented below and are organized to follow the outline of Order 2001-01. Watershed programs are reported in the Carlsbad Watershed Urban Runoff Management 2006-07 Annual Report and regional programs are presented in the San Diego Region 2006-07 Unified Annual Report, both submitted under separate cover.

ES.3.1 Land-Use Planning for New Development and Redevelopment

In 2003, the City of Encinitas' local Standard Urban Stormwater Mitigation Plan (SUSMP) was established in the City's Storm Water Best Management Practices Manual, Part II. The SUSMP

program aims to reduce the impact from development on receiving water quality. Since then the City has successfully integrated the SUSMP into their overall review and approval process for ministerial and discretionary projects. There has been a heavy focus on implementing the SUSMP program; requiring SUSMP best management practices (BMPs) on each project that goes through the City system, introducing the requirements at the earliest opportunity, and encouraging developers to use natural BMPs rather than concrete structural BMPs. In FY 2006-07, nearly 180 projects were conditioned with SUSMP BMPs. Of these 45 were priority projects requiring treatment BMPs.

ES.3.2 Construction Component

The City of Encinitas construction component is defined by a well developed inspection program and enforcement mechanisms. The City's Engineering Services Department employs six full time engineering inspectors. All inspectors have been trained regarding proper stormwater BMPs applications. They inspect construction sites for compliance with the City's Stormwater and Grading Ordinance, and program-required BMPs. During this reporting period, the construction inventory included a total of 134 project sites, of which 22 were considered high priority and were inspected on a weekly basis over the rainy season.

ES.3.3 Existing Development

Municipal Component
The City owns and operates approximately 51 municipal facilities, three of which are deemed high priority. These three facilities are subject to annual stormwater inspections and were all inspected in the FY 2006-07. All recommended BMPs were implemented by staff at these facilities. Publicly–owned catch basins and detention basins throughout the MS4 were cleaned, and debris and trash was removed from creeks and beaches, including several encampments. An integrated pest management program (IPM) was implemented by Community Services Department who is responsible for the maintenance of City parks and properties. Another major accomplishment is the City's continued efforts towards pollution prevention, including the use of recycling trash bins throughout the City's parks and bus stops, multiple BMPs implemented at the new Cottonwood Creek Park, including pervious pavement, open-channel drainage facilities, drought tolerant landscaping and the "daylighting" of Cottonwood Creek as it drains through the park, and the use of hybrid vehicles for City use. During this reporting period, the City completed numerous capital improvement projects to reduce future sewage spills by improving the wastewater collection system. The Moonlight Beach Pump Station Rehabilitation project serves to increase pump station reliability, 4 hour emergency storage capabilities if a complete power failure should occur and has the ability to pump creek water directly to the pump stations 188,000 gallon capacity wet well in case of a sewage spill occurring at Cottonwood Creek.

Industrial Component
There are three facilities considered to be industrial and therefore high priority in the City of Encinitas. Each of the three was inspected in FY 2006-07 (two by the City and one by the County of San Diego) for stormwater BMPs.

Commercial Component
The Clean Water Program focused efforts on three categories of facilities that are deemed to have the highest potential to generate stormwater pollution. In the current reporting period, there were 494 commercial facilities deemed high priority by the Municipal Permit, of which 239 were inspected and enforcement actions were taken at 95. In 2003 a full-time stormwater inspector was hired which has improved the program's focus on the inspection process.

Continued improvements in the stormwater GIS and data management system have improved the tracking and follow-up process. Staff now have the stormwater GIS available on their desktop computers to view facility and compliance information. The grease program continues to be implemented and during the FY 2006-07 three grease traps/interceptors were added at new and/or remodeled restaurants. This effort has reduced the amount of grease-related private lateral sewer overflows. Throughout the City there has been a notable increase in the number of BMPs implemented by restaurants and nurseries. During this reporting period, the City configured their enterprise GIS system to create and handle commercial stormwater inspections in a GIS based program called Cityworks. Cityworks is a useful tool for tracking all routine inspections, follow-ups, enforcement and education efforts.

Residential Component

The City's residential program strives to minimize the impact of discharges from residential areas through pollution prevention and BMP implementation. The City provided household hazardous waste collection, trash and recycling services, oil recycling, a compost bin sale, and implemented other structural and non-structural BMPs to achieve the goal of reducing pollutants from residential areas. The education and outreach activities for residential component included the distribution of a series of previously developed stormwater brochures at public events and to residents during inspections. The brochures (written in English and Spanish) focus on residential activities and BMPs that will reduce stormwater pollution.

ES.3.4 Illicit Discharge/Illegal Connection Component

The City's IC/ID program consisted of the dry weather monitoring program, a stormwater hotline, routine inspections, and visual inspections of the MS4. Staff monitored 52 dry weather sites in the 2007 dry season and received 156 documented complaints from the public and city staff over the course of the reporting period. The City has successfully evaluated water quality on a sub-basin level, correlating number of complaints with water quality exceedances to better understand where efforts are needed. Bacteria and nitrates have been identified as high priority constituents of concern. The areas of highest water quality exceedances and complaints in the City are the more heavily developed areas including the Old Encinitas and Leucadia sub-basins. Spill response procedures and coordination between internal departments were improved during the reporting period. During this reporting period, the City configured their enterprise GIS system to create and handle complaint driven stormwater inspections in a GIS based program called Cityworks. Cityworks is a useful tool for tracking all complaints, follow-ups, enforcement and education efforts.

ES.3.5 Education Component

The City has developed an education component that has reached a wide variety of target audiences through a broad range of educational tools. The City targeted specific audiences: employees (Public Works and San Dieguito Water District), commercial/industrial, construction, and school children. General audiences are also educated using media coverage and newsletter articles in residentially-oriented publications. The City partnered with nonprofit groups, the watershed, and regional programs to maximize educational resources.

ES.3.6 Public Participation

The City continued to provide public participation opportunities during this reporting period through conducting events and through being involved in stakeholder groups such as the

Carlsbad Watershed Network and the Escondido Creek Watershed Alliance. This year 29 public participation opportunities were provided.

ES.3.7 Assessment of JURMP Effectiveness

The City of Encinitas has complied with all the requirements of Order 2001-01 through a wide range of programs that are overseen by the Clean Water Program. Through these efforts many aspects of the City's operations have been improved as well as the actions of the community. The knowledge level of staff has continued to increase and staff has noticed an increased level of knowledge in developers and in the commercial establishment. More and more BMPs are being implemented and constructed throughout the City. The City is able to show that there is a downward trend in the percentage of exceedances of water quality action levels in the storm drain system from 2002 through 2007.

ES.3.8 Fiscal Analysis

The City of Encinitas implemented a Clean Water Fee in FY 2003-04 to offset reliance on the general fund. The fee was set at $5.00 per month per active water meter in the City. The fee was collected through the waste disposal (EDCO) bills since the spring of 2004. However, the Howard Jarvis Taxpayers Association challenged the Clean Water Fee based on Proposition 218 requirements. In FY 2004-05, the City stopped collecting the fee as part of the challenge and has been working towards putting the Clean Water Fee to a public vote. In 2005-06, the Clean Water Fee was put to vote but did not pass by a significant margin, even though pre-surveys about the vote indicated strong support. As such, 2006-2007 is marked by significant spending from the City's general fund to ensure compliance with Order 2001-01.

ES.3.9 Special Investigations

Several special investigations were performed by the Clean Water Program including: continued operation and monitoring of the Moonlight Beach Urban Runoff Treatment Facility, the San Elijo Lagoon Restoration Project, and the Regional Channel Maintenance Workgroup. Additionally, the Clean Water Program participated in several watershed and regional projects and groups including: the Escondido Creek Watershed Alliance, the Beach Water Quality Workgroup, the Regional Channel Maintenance Workgroup, the Southern California Coastal Water Research Project, and the Stakeholder Advisory Groups for TMDL development for Bacteria I (beaches and creeks) and Bacteria II (lagoons), and the Reference Beach Workgroup.

ES.4 Conclusions and Recommendations

The City of Encinitas has successfully implemented Order No. 2001-01 in FY 2006-07. This year completes the sixth year of program implementation. Overall, a great deal of effort has been expended to reduce pollutants from entering the City's waterways and the Pacific Ocean as recounted within this report. Through refined actions, functions, and direction, the City of Encinitas has begun to identify areas of programmatic success and perceptible improvements in water quality through ongoing sampling and analysis.

On January 24, 2007, the San Diego Regional Water Quality Control Board adopted Order No. 2007-0001, marking a significant transitional period for the San Diego region and the City of Encinitas Clean Water Program. Order No. 2007-0001 builds upon the provisions of Order No. 2001-001, adding considerable new requirements to be met through updated JURMP components. As such, beyond the reporting period of this report, the City of Encinitas has

endeavored upon holistic programmatic updates through as needed augmentation of existing elements and the development of new processes, procedures, and strategies to meet new permit obligations. It should be noted that while the Clean Water Program works to develop new permit compliance strategies toward compliance with Order No. 2007-0001, successful implementation of existing components has remained consistent with the activities described throughout this report.

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1.0 INTRODUCTION

The City of Encinitas is a Copermittee regulated under the San Diego County Municipal Stormwater NPDES Permit. This permit was reissued by the Regional Water Quality Control Board (RWQCB) on February 21, 2001 and is designated Order No. 2001-01, NPDES No. CAS0108758, herein referred to as the Municipal Permit. Order No. 2001-01 was issued to 18 cities, the County of San Diego, the Port of San Diego and the San Diego Airport Authority, collectively known as the Copermittees. Under this permit, the City is required to develop and implement a Jurisdictional Urban Runoff Management Program (JURMP), which establishes the activities the City will carry out to be in compliance with the Municipal Permit, but more importantly, to improve water quality in stormwater and urban runoff within its jurisdiction. Further, the City is required to prepare an Annual Report that recounts the activities performed during each year (Municipal Permit Section I). This report is the fifth annual report under the new program and covers the implementation period for Fiscal Year 2006-07 (FY 2006-07), which is July 1, 2006 through June 30, 2007.

The required Annual Report is reviewed by the RWQCB each year and comments are incorporated into a response letter or are incorporated into the subsequent JURMP Annual Report. Two comments on the City of Encinitas JURMP Annual Report for 2005-2006 were received on September 25, 2007 to be addressed in the following report for 2006-2007. The comments received from the 2005-2006 report have been addressed in the following sections of this report:

- Section 7.0 – Construction Component (Subsection 7.2.1 – 2005-06 Annual Report Comment Response)
- Appendix H-2 – 2007 Dry Weather Monitoring Report

1.1 JURMP Implementation

In the City of Encinitas, the JURMP is primarily implemented in the Engineering Department and the Public Works Department. Engineering provides program management, education, inspections and water quality assessments, and Public Works (NPDES Division) performs MS4 inspection and cleaning services. The Planning and Parks Departments also implement portions of the Clean Water Program through project conditioning and public land maintenance.

1.2 Overview of Encinitas

The City of Encinitas is a semi-arid coastal community located in the North County area of San Diego County, approximately 22 miles north of downtown San Diego. The City is fully within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and Escondido Creek Watershed to the south. The City encompasses an overall area of nearly 20 square miles and has six miles of coastline. The current population is approximately 58,000. Encinitas receives an average annual rainfall of approximately 10 inches.

The City is nearly surrounded by sensitive water bodies. Stormwater in the north drains to Batiquitos Lagoon, which is designated a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. To the south and east, stormwater drains to Escondido Creek (which drains to San Elijo Lagoon) or directly to San Elijo Lagoon. San Elijo Lagoon is a 303(d) impaired water body listed for sediment/siltation, bacteria indicators, and eutrophic conditions. In addition, it is also designated as a Critical Coastal Area. In the west, stormwater

drains to the Pacific Ocean (via Cottonwood Creek or directly). The Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for bacteria indicators due to urban runoff from Cottonwood Creek. In general the city drains to three blue-line creeks; Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. Encinitas Creek drains the north-central portion of the city, and drains into Batiquitos Lagoon. Escondido Creek drains the southern and northwest (Olivenhain) portion of the city and drains into the San Elijo Lagoon.

1.3 Organization of Annual Report

This Annual Report is organized to be consistent with the format of the JURMP and the format established by the Regional Program. A description is provided of the activities performed for each of the following components:

- Land Use Planning for New and Redevelopment (Section 6),
- Construction (Section 7),
- Existing Development (Municipal – Section 2, Industrial – Section 3, Commercial – Section 4, and Residential – Section 5),
- Education (Section 9),
- Illicit Discharge Detection and Elimination (Section 8),
- Public Participation (Section 10),
- Assessment of the JURMP Effectiveness (Section11),
- Fiscal Analysis Including the Upcoming Year's Budget (Section 12),
- JURMP Revisions (discussed I each section),
- Special Monitoring Investigations (Section 12),
- Water Quality Improvements or Degradation (Section 8 and 11), and
- Identification of Ineffective Management Measures (Section 11).

2.0 MUNICIPAL (EXISTING DEVELOPMENT) COMPONENT

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. These facilities include the streets, the storm drain system, municipally owned facilities; city buildings, maintenance yards, fire stations, parks, and open space. The updated municipal facilities inventory is included as Appendix B -1.

The pollutants of concern associated with municipal activities include oils and grease from leaking engines, litter, herbicides used for vegetation control, pesticides used for animal control, paints and solvents, battery acids from leaks, heavy metals from brake linings, green waste from roadside maintenance, and sediment from construction and earth moving.

2.1 Description of Activities

The municipal component of the City's Clean Water Program includes proper management and maintenance of the MS4, the municipally owned facilities, parks, and open space areas. The primary goals of the program are staff education, BMP implementation, and facility inspections. The following municipal activities are covered under this component: street sweeping, storm drain maintenance, litter control, capital projects (roadway repair and maintenance), parks and recreation maintenance, and public lands maintenance.

2.1.1 Pollution Prevention

Pollution prevention activities are aimed at keeping pollutants from entering the storm drain system. The primary pollution prevention activities include:

- Street Sweeping,
- Litter Control,
- Encampment Cleanup,
- Capital Projects: Drainage and Sewer;
- Municipal Facilities;
- Landscape Management of Public Areas; and
- Placement of recycle receptacles in all City Parks, beaches, and bus stops.

Street Sweeping

Street sweeping is an effective method of reducing the amount of pollutants on street surfaces that will contribute to water quality impairment. The City uses two types of street sweepers depending on the type of debris to be removed, a broom sweeper and a vacuum sweeper. Arterial streets are swept weekly, collector streets are swept bi-weekly, and residential areas are swept on a monthly basis. A total of 7,120 linear curb miles of streets are swept per year by the street sweepers. The City measures the amount of debris collected during street sweeping activities by volume. 1,456 cubic yards of debris was collected by street sweepers in FY 06-07. The density of the debris collected can vary depending on a number of factors including, which streets are being swept, the time of year, and weather conditions. Debris collected in the City of Encinitas generally consists of sediment, organic debris and some trash. Based on the California Integrated Waste Management Board's conversion chart a removal rate of 1.15 tons per cubic yard was used to convert the total volume of debris measured into an approximate

tonnage. Therefore, a estimated 1,674 tons of debris was collected by City street sweeping trucks in FY 06-07.

The City of Encinitas Public Works Department maintains publicly owned storm drain channels, pipes, detention basins, inlet boxes, and associated infrastructure on a regular basis. Public Works crews operate one Vac-con truck, which is effective in cleaning pipes and storm drain boxes while eliminating discharges associated with cleaning activities. A second Vac-con is also available in the wastewater department to assist with recovery efforts when needed. All components of the MS4 are on a routine cleaning schedule by area and all catch basins are cleaned on an annual basis.

Litter Control

Public Works crews and County probation crews collect litter in any necessary areas based on visual observations and citizen complaints. Bus stops have been identified as significant sources of litter that has the potential of entering the MS4. After studying the bus stop locations and the increase of trash that was collected by City service trucks, the City partnered with NCTD to install trash receptacles and provide maintenance, thus reducing pollutants entering our MS4. In 2004 new trash receptacles were added at thirteen locations. Several of these were recycling trash receptacles. In addition, crews collect litter in areas of known debris accumulation on a routine basis citywide. During the FY 2006-07 reporting period, Public Works (using probation and Partners with Industry (PWI) Crews removed 9,285 bags of litter from bus stops, storm drain channels/basins, and right-of-ways. Appendix B-2 illustrates the breakdown of the work orders for the NPDES division.

Recycling trash cans at bus stops

Encampment Program – Homeless and migrants tend to gather in local waterways whereby feces, urine and trash are deposited directly into the waterways. When necessary, the City employs special crews to clean up the trash and debris left behind and encourages the homeless to find other places to stay.

Beach Clean Ups – The City conducted two beach clean ups during this reporting period. These clean ups were coordinated with the Solana Center for Environmental Innovation. A total of 461 pounds of trash and recycling were removed through these beach cleanups.

Capital Projects

The Engineering Department was instrumental in completing numerous capital improvement projects that will reduce sewage spills in the future by improving the wastewater collection system. Capital Improvement Projects incorporate sewer pump station upgrades, sewer main replacements and removal of pump stations. The sewer and emergency repair projects completed or initiated during FY 2006-07 are shown in Table 2-1.

Table 2-1 Wastewater CIP Projects

Project Title	Budget	Goal	Status
Moonlight Beach Pump Station Rehabilitation*	$3.7 M	Reduce sewage spills and increase capacity.	Completed
Regal Pump Station Removal	$300,000	Reduce sewage spills & remove pump station replacing it with a new gravity sewer.	Completed
Olivenhain Pump Station Upgrades	$5M	Improve pump station reliability emergency storage capabilities added, ability to capture first flush runoff and send to the pump station wet well	In preliminary design
Hwy 101 Sewer Forcemain, Phase III	$752,000	Replace 35 year old ductile iron pipe to reduce sewage spills and leaks.	Completed

* Partially funded by Clean Beaches Initiative Grant to reduce beach closures due to overflows from old pump station.

The Moonlight Beach Pump Station Rehabilitation project virtually eliminates sewage spills through several factors of safety (redundancy) which were built into the pump station, This project serves to increase pump station reliability, 4 hour emergency storage capabilities if a complete power failure occurs and has the ability to pump creek water directly to the pump stations 188,000 gallon capacity wet well in case of a sewage spill occurring in Cottonwood Creek.

The Engineering Department was also instrumental in completing numerous drainage capital improvement projects. These projects are outlined in Table 2-2.

Table 2-2 Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Lone Jack (Stratford Knoll) Channel Improvements	$550,000	Install new storm drain	In Design Phase
4th Street Storm Drain	$750,700	Eliminate flooding and erosion of beach area	Design Complete. Waiting for additional funding for construction.
Santa Fe Drive Storm Drain	$400,000	Eliminate flooding and erosion along Santa Fe Drive from Bonita Drive to Nardo Road.	Complete
Bonita Drive Storm Drain	$265,000	Eliminate flooding and erosion along with replacing broken spillways and concrete channel on Bonita Drive from Santa Fe Drive to Melba Road.	Complete
Windsor Rd. Storm Drain	$35,000	Slip lining of a collapsing CMP pipe on Windsor Rd.	Complete
Total Cost	**$2,000,000**		

Storm Drain System Map and Information Management

The City of Encinitas has a mature GIS program in which the entire City's storm water infrastructure has been mapped in detail. The City continually updates the system as part of routine maintenance. Updates include adding new storm water improvements constructed in the City and resolving quality control issues. Quality control issues include such things as locating missing plans, standardizing the list of BMPs, capturing photographs and associating them to the GIS features, and filling in missing attribute information obtained from found plans or field verification. When necessary the City will also go into the field to GPS any storm water infrastructure– the overall spatial accuracy of the system is roughly within a 5-foot tolerance.

With such a high degree of detail available in the GIS, City staff has many new automated tools at their disposal. In most cases the data is so detailed, storm water staff can get the information they need about an infrastructure feature right from their desktop with a click of the mouse – thus saving time from having to go into the field. Additionally, specific data can be queried and reports or maps can be generated using the detailed feature attribute information in the GIS. Finally, the entire storm water GIS system has been built as a "network", which allows for on-screen network tracing. The GIS is capable of identifying all inlet locations upstream of any outfall in the City's storm drain system. This helps the City efficiently and effectively locate potential pollution sources.

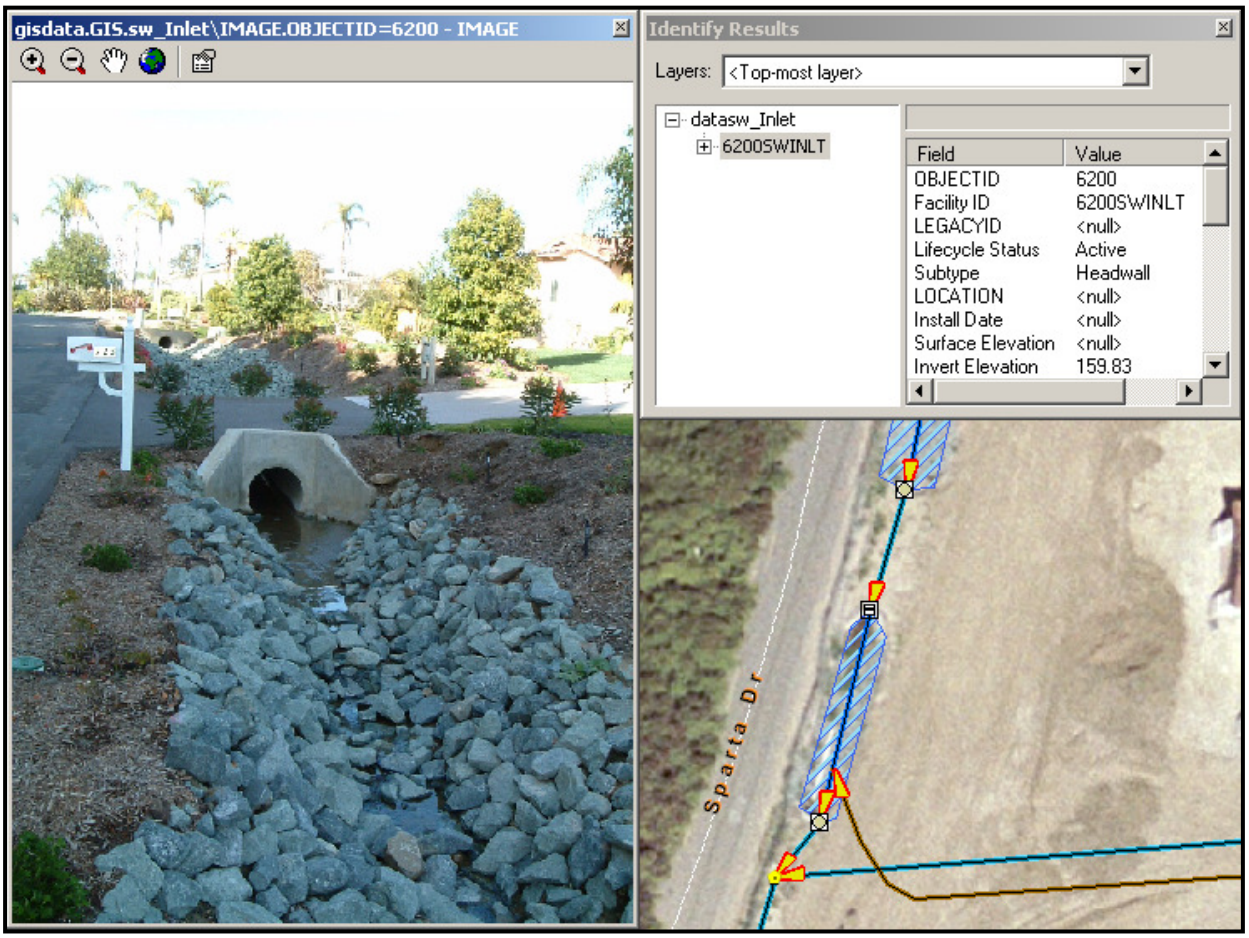

The City developed and implemented a program for inspections of storm water "commercial sites" using the City's Asset Management Software. This software is fully integrated into the City's GIS system and gives staff the ability to track routine inspections, record discharge complaints and auto generate upcoming sites that are due for an annual inspection. These inspections and complaints are all tracked in an automated system that is linked directly to the storm water GIS layers. This provides a very comprehensive means for reporting and summarizing issues and problems found.

The City of Encinitas storm water GIS is much more than "just a map". The system is a dynamic, up to date means of accessing information quickly and efficiently to solve clean water problems and facility tracking.

Municipal Facilities

The City employs a multitude of pollution prevention practices at City Hall. These practices have been expanded each year and include:

- the use of recycled paper (30%) for all copiers and printers,
- installation of an Automated Logic System (ALS) which controls the Heating, Ventilation and Air Conditioning (HVAC) system,
- implementing a 9-80 work week so that City Hall is closed every other Friday,
- installing lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- synchronizing traffic signals on four main arteries throughout the City to maintain traffic flow and reduce emissions due to braking and accelerating,
- implementing a battery collection and recycling program at City Hall,
- replacing large trash receptacles at individual desks with large recycling containers for mixed paper and cans/bottles and mini trash receptacles, thereby encouraging employees to minimize trash and maximize recycling,
- placing recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments,
- the use of three hybrid cars for City vehicles (Honda Civic, Toyota Prius, and Ford Escape Hybrid);
- the use of special recycling trash receptacles at public parks and beaches to encourage recycling,
- construction of bus stop improvements including placement of trash receptacles to reduce litter, and
- subsidizing a compost bin sale to encourage diversion of food waste from landfills.

Landscape Management of Public Areas

During the reporting period public areas were maintained using methods to minimize over watering using a computer controlled irrigation system. The system was automatically shut-off if a system leak was detected. Sensors in landscaping areas were used to shut down irrigation when rain was detected. Fertilizers were applied carefully in order to reduce spillage outside of planted areas.

2.1.2 Source Identification and Prioritization

The City of Encinitas owns, operates, and maintains 51 municipal sites within the City. All locations are visually inspected on a routine basis and any illicit discharges or illegal connections are referred to the Clean Water Program. Of these sites, three have been classified as high priority according to Section F.3.a. (3) of the Municipal Permit. The high priority sites in Encinitas include:

- Fleet Maintenance Yard, 811 Orpheus;
- Requeza Street facility, 397 Requeza;
- San Elijo Public Works Wastewater Division Yard, 2695 Manchester Avenue; and
- Calle Magdalena Public Works Facility, 160 Calle Magdalena

Appendix B-1 provides an updated municipal inventory that lists the municipal facilities in Encinitas with addresses, land uses, priority, and watershed sub-basins. Figure 2.1 illustrates the land uses and activities at the municipal sites in Encinitas.

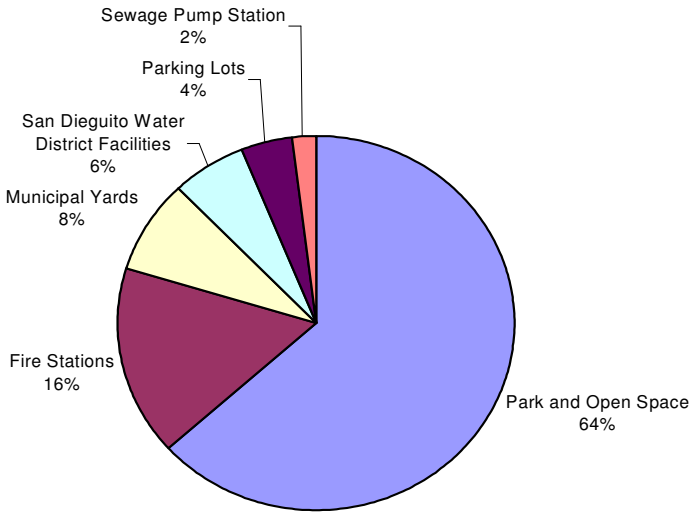

Figure 2.1 City of Encinitas Municipal Facilities Land Uses

All high, medium, and low priority municipal facilities must implement certain minimum best management practices. These include good housekeeping, litter control, employee training, waste disposal and recycling, and facility and grounds maintenance. The BMPs implemented at municipal facilities are discussed below.

2.1.3 BMP Implementation

Best management practices were identified in the JURMP for the following categories of Municipal Activities/Areas and are discussed below:

- Roads, Streets, Highways, and Parking Facilities,
- Flood Management Projects and Flood Control Devices, and
- High Priority Municipal Facilities.

During this reporting period, the City prepared a map of all the municipal BMPs; this map is included as Appendix B-3.

The City has implemented a range of BMPs for municipal facilities throughout the City including the Urban Runoff Treatment Facility located at Third and B Streets adjacent to Cottonwood Creek. This treatment facility was completed and went on-line in August 2002. The purpose of the facility is to treat bacteria in urban runoff using ultraviolet (UV) light, thereby reducing AB411 beach postings at Moonlight Beach. The treatment facility diverts 85% of Cottonwood Creek flows to a wet well and pumps it through a treatment process that consists of basket filters, multimedia filters, and two UV chambers. Bacteria in the runoff is reduced by 99% as it passes through the treatment facility and beach postings have been reduced. In FY 2005-06 reporting period, the City completed a three-year monitoring plan and prepared a Final Report to the State Water Resources Control Board. This report can be found on the City's web site at http://www.ci.encinitas.ca.us/NR/rdonlyres/5612D387-D6D9-48A7-AF7F-A9D039C78547/0/Moonlight_Beach_Urban_Runoff_030806.pdf.

"Daylighted" Cottonwood Creek

During the FY2003-04 reporting period, the City implemented additional noteworthy BMPs primarily focused around the new Cottonwood Creek Park. This park is a prime example of low impact development. The post-construction BMPs that were implemented at this site include:

- daylighting 90 feet of Cottonwood Creek (using a Wetland Recovery Grant)
- use of porous pavement for all parking and driveways, and pervious walkways
- using surface drainage through earthen-bottom open channels rather than underground pipe systems
- planting of drought tolerant plants in landscaping areas

During 2006-07 this facility was operated and maintained by the City.

Roads, Streets, Beaches, Highways, and Parking Facilities

- **Street Sweeping** - During the reporting period street sweeping occurred on residential streets monthly and arterial streets weekly.
- **Parking Surface Cleaning** - Public parking lots (City Hall Civic Center, parks and beaches) were swept on a regular basis (at a minimum of monthly).

- **Litter Control** - Public Works, Partners with Industry (PWI), and county probation crews collect litter in any necessary areas based on visual observations and citizen complaints. In addition, special crews are employed to remove encampments and litter in environmentally sensitive areas.
- **Beach Clean-ups** – The City sponsors two Beach Clean Up events per year whereby an additional 461 lbs. of trash and recycling are removed from the public beaches.
- **Employee Training** – The Streets Division of the Public Works Department discussed stormwater issues as regular staff meetings throughout the reporting period. The Clean Water Program also presented the Public Works Streets and Wastewater Divisions with stormwater management training on Feb 1, 2007 and again on June 13, 2007. The San Dieguito Water District received stormwater management training for dewatering mains on May 23, 2007.
- **Storm Drain Inserts** – The City has installed a total of 54 storm drain filter inserts in 35 inlets, throughout its jurisdiction to remove sediment, debris, oil and grease. These inserts have been installed over a period beginning in 1999 and are shown on 2-3 below. All storm drain inserts are inspected, cleaned and retrofitted on a quarterly basis. During FY 2006-07, approximately 3.473 tons of sediment and debris was removed using a vactor truck during semi-annual and quarterly maintenance performed by a specialty contractor.

Table 2-3 Storm Drain Inserts Inventory

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
2	24" X 45"		In right driveway apron @ 1470 Neptune Ave.	Grate
4	24" X 40"		AC From 1638 Neptune in grass shoulder	Grate
5		9'	1786 1/2 Highway 101	Curb
6	24" X 41"		1650 Highway 101	Grate
7	23" X 40"		Alley West of Hwy 101, North of Jasper	Grate
8	24" X 41"		Alley West of 101, Behind 918 N. 101	Grate
10	24" X 41"		Leucadia Blvd. North of Park @ Hwy 101	Grate
11	23" X 40"		In Alley behind 828 Hwy 101	Grate
12	23" X 40"		Behind building. @828 Hwy 101	Grate
13	23" X 40"		Alley West of 101 @ Europa	Grate
14	23" X 40"		129 Cadmus	Grate
15	23" X 40"		149 Basil St.	Grate
16		10'	130 Basil St.	Curb
17	23" X 40"		130 Athena	Grate
18		9'	170 Athena	Curb
19	23" X 40"		577 N. Vulcan	Grate
20		4'	Across from208 Cereus	Curb
21	23" X 40"		208 Cereus	Grate
22	23" X 40"		321 Union	Grate
23	23" X 40"		Across from 321 Union	Grate
24		7'	1750 Hwy 101	Curb
25	24" X 40"		Alley West of 2nd St. @ G St.	Grate
26	36" X 64"		364 2nd St.	Grate

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
27		10'	Encinitas Blvd. NE Corner @ Hwy 101	Curb
28		11'	102 Encinitas Blvd.	Curb
29		7'	Santa Fe South side, 120 yards. West of I-5	Curb
30		8'	Santa Fe, North side, 120 yards. West of I-5	Curb
31	24" X 40"		2560 Manchester	Grate
32	24" X 40"		2582 Manchester	Grate
ECR-1			Intersection of Via Molena & El Camino Real	Curb
ECR-2			Mountain Vista & El Camino Real	Grate
ECR-3			El Camino Real (in front of Circuit City Mall)	Curb
ECR-4			Garden View Rd./El Camino Real (East side)	Combo
ECR-5			El Camino Real/Garden View Rd., SE corner	Curb
ECR-6			El Camino Real/Garden View Rd. SW Corner	Curb
ECR-7			El Camino Real (across from Circuit City mall)	Grate
ECR-8			In front of 294 El Camino Real	Grate
ECR-9			El Camino Real in front of Block Buster Video	Curb

2.1.4 Flood Management Projects and Flood Control Devices

Routine Maintenance - BMPs implemented for Flood Management and Flood Control Devices included the cleaning of sixteen desilting basins: Fox Point, Saxony, Ocean Cove, Encinitas Boulevard (Cottonwood Creek Park), Encinitas Ranch (Lot 12), El Camino Real/Pine Branch (Lux Canyon), Cape Sebastian (Cardiff), Piraeus/Sparta, Piraeus/Olympus, Leucadia Oaks Park, Plaza II, Town Center, Leo Mullen, Garden View, Ponto Beach and La Costa Overflow Basin. Basins were cleaned during the dry season so that waste discharges generally do not occur. Gravel bags were utilized when necessary to retain sediment and minimize the release of sediment into the MS4. Specialty contractors were used to hand-clean environmentally sensitive areas. There are also numerous vegetated swale and channels throughout the City that are maintained by the public works program. Public Works NPDES crews removed 190.5 cubic yards of sediment from the detention basins, channels, and right-of-ways. Based on the 1.15 conversion factor adapted from the California Integrated Waste Management Board conversion chart for debris removal, this volume of material roughly equates to 219.8 tons of debris collected.

The City maintains the drainage channel along Highway 101 and La Costa Avenue

at Ponto State Beach. The project was completed in response to the Leucadia Drainage Plan and also serves to improve water quality along Highway 101 prior to discharge into Batiquitos Lagoon. The project has been deemed a success according to the wetlands specialist overseeing the project.

The City also maintains the newly constructed La Costa detention basin just north of La Costa Avenue and east of Saxony (see photo on previous page). This area was frequently inundated by sediment that discharged onto La Costa Avenue from the canyon to the south. The purpose of the detention basin is to control sediment before flooding the road and discharging into Batiquitos Lagoon.

Regional Channel Maintenance Workgroup – The City of Encinitas has been an active participant in the Regional Channel Maintenance Workgroup with staff from the Engineering and Public Works Departments providing information and collaboration. This workgroup was formed as a result of a Directive Regarding Channel Maintenance Activities letter from the Regional Water Quality Control Board in 2004. The RWQCB planned to determine if a region-wide, jurisdictional-specific, or project-specific permitting approach would be necessary and appropriate for maintenance activities. The Workgroup, comprised of San Diego County jurisdictions, continued to meet during this reporting period and discussed ways to collaborate on a region-wide permitting approach so cities may perform necessary channel maintenance and flood control work. The Workgroup supports a regional permit in accordance with all applicable agencies to allow channel maintenance, and would like to collaborate with the Regional Board on the proposed channel maintenance permit.

Municipal Facilities

High Priority Municipal Facilities – During the reporting period, BMPs were implemented at high priority municipal facilities in accordance with their SWPPPs. BMPs that were implemented included:

- good housekeeping practices were followed,
- proper operation and maintenance of equipment and vehicles occurred,
- hazardous waste and chemicals were properly stored (secondary containment for waste oil and fuel),
- MSDS inventories of hazardous and non-hazardous materials were updated,
- preventative maintenance was performed (fleet vehicles are inspected and maintained annually),
- spill prevention and response procedures were followed and updated, vehicle and equipment maintenance was performed indoors at the Fleet Maintenance Facility,
- vehicles were washed at an off-site carwash that recycles and treats (using a clarifier) their wash water and large equipment was washed at the San Elijo JPA facility where wash water is directed to the treatment plant headwaters,
- loading and unloading of materials was performed in designated areas with containment BMPs in place (berms or overhead coverage),
- facility and grounds maintenance was performed to clear litter and debris, public areas were dry swept and storm drain inlets, culverts and swales were kept clean and free from debris,
- landscape waste was collected and properly disposed of or temporarily stored in designated areas at the Requeza Maintenance Yard,
- native vegetation was used wherever possible (e.g. Leucadia Boulevard widening and beautification project),

- pesticide, herbicide, and fertilizer application and handling was performed in accordance with applicable federal, and state laws (Federal Pesticide, Fungicide, and Rodentcide Act and California Title 3, Division 6, Pesticide and Pest Control Operations) and all employees who handled pesticides received appropriate training, and
- employees received stormwater training as part of their "tailgate" safety meetings, staff meetings, and one-on-one education with supervisors and stormwater staff.

Medium and Low Priority Municipal Facilities – During the reporting period, BMPs were implemented at medium and low priority municipal facilities in accordance with their SWPPPs. BMPs that were implemented included:

- good housekeeping practices,
- recycling/trash receptacles were placed at beach parks and bus stops,
- employees received stormwater training as part of their "tailgate" safety meetings, staff meetings, and one-on-one education with supervisors and stormwater staff,
- hazardous waste and chemicals were properly stored (secondary containment for waste oil and fuel),
- facility and grounds maintenance was performed to clear litter and debris, public areas were dry swept and storm drain inlets, culverts and swales were kept clean and free from debris, and
- native vegetation was used wherever possible (e.g. Cottonwood Creek Park project).

2.1.5 Maintenance of MS4

MS4 maintenance activities in Encinitas are divided into above ground and below ground. Activities performed during the reporting period for these two categories are discussed below.

Above Ground Maintenance

Above ground maintenance includes the removal of sediment, litter, and debris from publicly owned creeks, rock lined channels, concrete channels, brow ditches, de-silting basins, and detention basins. Most of the maintenance is performed by the City's Public Works Department or outside crews that they supervise, such as probation crews and PWI.

Routine inspection and cleaning of concrete-lined facilities was performed in accordance to the schedule established in the JURMP. An automated NPDES Work Order Program was used to record and direct day-to-day efforts of the crews. The forms are digitally connected to a database for record keeping purposes.

Flood Management Projects and Flood Control Devices, 190.5 cubic yards of sediment, vegetation and debris were removed from the aboveground MS4 during this reporting period. In accordance with the JURMP, above ground, non-emergency maintenance (channels, creeks, brow ditches, desilting basins, and detention basins) was performed during the dry season when the facilities are dry and waste discharges generally do not occur. To reduce the potential for pollutants from reaching any receiving water body, crews utilized BMPs when there was a potential for discharge of waste or debris. For example, gravel bags may be used to retain sediment and debris, allowing settling prior to discharges reaching receiving waters. Sediment from the MS4 was transported to the Requeza Public Works Facility and stored prior to disposal by the local waste disposal contractor, EDCO.

Maintenance, such as sediment removal, in environmentally sensitive areas, such as those classified as wetlands, is generally avoided.

Environmentally Sensitive Areas

Litter and debris is removed by hand in environmentally sensitive areas of the MS4 by a specialty contractor. Often these cleanup efforts involve removal of illegal encampments and cleaning of the Cottonwood Creek pond.

Below Ground Maintenance

Between May 1 and September 30 of the reporting year, the City inspected and cleaned all known inlets and under curb drains in the MS4. Additional cleaning was performed between October 1 and April 30, if necessary. For inspection and maintenance purposes, the City is divided into ten areas. Maintenance crews routinely begin in the northernmost area and work their way south. The below ground maintenance program consisted primarily of inspecting all of the underground facilities and removing accumulated debris in inlets, catch basins, and under-curb drains. Cleaning was performed using a combination vactor (Vaccon) truck that utilizes a water recovery and vacuum unit so that disturbed sediment and debris is fully captured and can be disposed of properly according to its degree of contamination.

69.5 cubic yards of debris was removed from the underground portion of the MS4 this year. Based on the 1.15 conversion factor adapted from the California Integrated Waste Management Board conversion chart for debris removal, this volume of material roughly equates to 80 tons of debris collected. Debris removed was transported to the San Elijo Public Works Yard. The debris is disposed of regularly by the San Elijo Water Reclamation Facility along with their facility grit.

In addition, approximately 3.5 tons of debris and sediment was removed from the City's storm drain inserts by an outside contractor.

2.1.6 Management of Pesticides, Herbicides, and Fertilizers

Public Works Department

The Public Works Department is responsible for maintaining public streets and right-of-ways, including channels and detention basins. Several techniques were employed to minimize the use of pesticides, herbicides and fertilizers, including:

- mulching and mowing to control weeds rather than applying herbicides,
- restricting use of pesticides in channels,
- using less toxic aquatic herbicides, like Aquamaster, and
- requiring all employees using chemicals to be licensed applicators.

In addition, the State Department of Pesticide Regulation inspects all procedures and products used by the Public Works Department for maintenance of channels and rights-of-ways annually.

Parks and Recreation Department

The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management (see Appendix B-4). Implementation of the policy included:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

2.2 Summary of Inspections

Storm water staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. Facility inspection locations and inspection dates are summarized in Table 2-4 below.

Table 2-4 Municipal Facility Inspections

Municipal Facility	Inspection Date
Orpheus Ave. Fleet Maintenance Facility	6/4/07
Pacific View Public Works Facility (Temporary)	6/4/07
Requeza Street Public Works Yard	6/4/07
San Elijo Wastewater Division Facility	6/4/07
“A” Tank Site Public Works Facility Yard	6/4/07
Calle Magdalena Public Works Facility	6/11/07

The recommended Best Management Practices are summarized in the inspection reports included in Appendix B-5 and have been implemented by the Public Works Department.

Fleet Maintenance Facility
No violations were noted however, the following corrective actions were required:

- Pick up litter around trash area
- Cover heavy equipment

Pacific View Public Works Facility (Temporary)
No violations were noted however, the following corrective actions were required:

- Store heavy equipment under cover

All Public Works, Streets Division staff and San Dieguito Water District staff were trained in storm water management on Feb. 1, 2007 & May 23, 2007.

Requeza Street Public Works Yard
No violations were noted however, the following corrective actions were required:

- Make spill kit more accessible

- Properly store paint cans in covered area

San Elijo Wastewater Division Facility
No violations were noted. All Public Works-Wastewater Division staff were trained in stormwater management on 6/13/07.

"A" Tank Site
No violations were noted however the following corrective actions were required:.

- Clean up trash from over turned container on East side of lot
- Obtain a spill kit
- Cover heavy equipment stored outdoors

Follow up was performed on 6/18/07 to verify that all corrective actions had been completed.

Calle Magdalena Public Works Facility
No violations were noted however, the following corrective actions were required:

- Clean trash and recycle areas
- Obtain spill kits and spill prevention plans
- Store heavy equipment and vehicles under cover
- Label outdoor storage containers
- Replace worn sandbags at storm drains

Follow up was performed on 6/25/07 to verify that all corrective actions had been completed.

2.3 Compliance and Enforcement Actions

Activities performed in the operation and maintenance of municipal areas complies with all federal, state and local regulations, specifically the City's Stormwater Management Ordinance. The City Manager is the appointing authority for all department heads and uses this authority to ensure that the City complies with all applicable laws.

2.4 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

3.0 INDUSTRIAL (EXISTING DEVELOPMENT) COMPONENT

3.1 Description of Activities

3.1.1 Pollution Prevention

Industrial facilities within Encinitas were required to operate in accordance with their current SWPPPs and the appropriate local ordinance during the reporting period. The San Dieguito Union High School District (SDUHSD) Transportation Cooperative and the San Elijo Joint Powers Authority (JPA)–Water Reclamation Facility both operated under their SWPPPs and the Encinitas landfill operates under the County of San Diego Stormwater Ordinance 9518. All facilities operate under the City of Encinitas Stormwater Ordinance (EMC 20.08). The SWPPPs and ordinances require pollution prevention BMPs to be implemented. Pollution prevention BMP requirements were communicated to facilities on a one-on-one basis during site inspections as described in Section 3.2.

3.1.2 Source Identification and Priorities (Inventory)

Three industrial facilities are located in the City of Encinitas. All three facilities are covered under the State General Industrial Permit. The industrial inventory is included as Appendix C-1.

The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The second industrial facility in the City of Encinitas is the SDUHSD-Transportation Cooperative. The facility is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The third industrial facility is the Encinitas Landfill, owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected by the City of Encinitas and the Encinitas Landfill is inspected by the County. Inspection forms for each industrial facility are located in Appendix C-2.

3.1.3 BMP Implementation

The two sites inspected by the City of Encinitas Clean Water Program implement BMPs as required by their individual SWPPPs. These BMPs were found to be appropriately implemented at each facility as noted in the individual inspection reports, located in Appendix C-2. BMPs have been implemented by the County of San Diego at the County Landfill in accordance with County Codes and the Encinitas Municipal Code.

3.1.4 Monitoring of Industrial Sites

In addition to the annual inspections performed by Clean Water Program staff, monitoring is performed on an on-going basis at each facility to comply with the State General Industrial Permit as well as the facilities SWPPPs. Each responsible person monitors their facilities throughout the year, performing inspections and required water quality monitoring of the sites to ensure compliance. City staff reviewed data collected for each facility during the annual inspections. The data suggested that runoff sampled at the San Elijo JPA Water Reclamation Facility and the Encinitas Landfill contained no significant pollutant loads over the past year. However, the runoff data from the SDUHSD Transportation Cooperative indicated that their runoff exceeded four USEPA benchmark values, as a result additional BMPs were necessary to prevent future storm water pollution. Clean Water Program staff has since met with the

SDUHSD to verify that additional BMPs have been implemented to effectively address their runoff.

3.2 Summary of Inspections

Clean Water Program staff for the City of Encinitas performed the annual inspection for the San Elijo JPA-Water Reclamation Facility on May 17, 2006. The Assistant General Manager was present for the inspection. Overall, the San Elijo JPA Water Reclamation Facility was clean and orderly. Clean Water Program staff recommended better management of outdoor materials storage of unused or unwanted spare parts and properly disposing of wooden palettes located in the waste containment area. San Elijo JPA staff is aware of current stormwater regulations and keeps a constant watch for storm water concerns at this facility. In addition to the inspection conducted by the City of Encinitas, San Elijo JPA staff conducts quarterly storm water inspections at the plant, as required under the facility's general industrial permit.

Inspection of the SDUHSD Transportation Cooperative was performed on June 8, 2007. The Director of the Cooperative accompanied City staff during the inspection. Clean Water Program staff recommended the following corrective actions: replace storm drain filter and store all equipment properly. The City also reviewed the facilities Industrial Annual Report which indicated that runoff samples collected at the facility exceeded four USEPA benchmark values. The City required the SDUHSD Transportation Cooperative to implement additional BMPs to eliminate and/or improve runoff quality. A follow-up inspection on November 9, 2007 revealed that the facilities main discharge points had been placed on a regular inspection and maintenance schedule to replace storm drain filters as necessary. SDUHSD Transportation Cooperative personnel also implemented weekly sweeping and vacuuming near these areas. Cement K-rails and straw wattles were placed along the perimeter of the parking lot and areas most susceptible to erosion. Regularly scheduled sweeping by a professional company was implemented quarterly. Earthen banks were hydro-seeded with native vegetation and all equipment and materials were placed in a Tuff Shed adjacent to the bus washing area. In addition to the inspection conducted by the City of Encinitas, SDUHSD Transportation Cooperative staff conducts quarterly storm water inspections at the plant, as required under the facility's general industrial permit.

The Encinitas Landfill, which is closed and owned and operated by the County of San Diego, was inspected by the County of San Diego Department of Environmental Health. The landfill BMP requirements, as outlined in the County's Stormwater Ordinance 9518, are compatible with the City of Encinitas BMP requirements in outlined in EMC 20.08 and Best Management Practices Manual, Part II, Commercial/Industrial BMP Requirements. The County's landfill inspection form has also been reviewed and found to be compatible with the City of Encinitas Facility Inspection Report. Therefore, the City believes that inspections performed by the County are adequate and extra resources expended by the City would be redundant and should be spent on other compliance issues. Table 3-1 summarizes the inspections performed for the industrial section of the program.

Table 3-1 Summary of Industrial Inspections FY 2006-07

Date	Facility	Address
7/01/07*	Encinitas Landfill	2099 Encinitas Boulevard
6/06/07	San Elijo Water Pollution Control Facility	2695 Manchester Avenue
6/08/07	San Dieguito Union High School District Transportation Cooperative	1142 Bonita Drive

*Inspections at the Encinitas Landfill are conducted quarterly throughout the year by the County of San Diego, the results of which were summarized in an annual report completed on 7/01/07.

3.3 Compliance and Enforcement Actions

No enforcement actions were necessary for either of the industrial facilities inspected by the City of Encinitas Clean Water Program. All individual facility inspection reports are located in Appendix C-2. Each facility was in compliance with their individual SWPPPs as well as all applicable regulations, including EMC 20.08.

3.4 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

4.0 COMMERCIAL (EXISTING DEVELOPMENT) COMPONENT

The City of Encinitas commercial stormwater programs' goals are to educate and assist commercial establishments in eliminating non-stormwater discharges from their site and to reduce the amount of pollutants contained in stormwater runoff from their property. These goals are met through establishment of minimum BMPs, inspections, and enforcement.

4.1 Description of Activities

4.1.1 Pollution Prevention BMPs

Commercial facilities within Encinitas are required to implement pollution prevention BMPs outlined in the City's JURMP. The City focuses on educating businesses about pollution prevention, water quality issues, and their responsibilities under current regulations, including federal, state, and local. Pollution prevention principles that the City encourages among commercial businesses include:

- Eliminate wastewater flows
- Keep trash areas clean and dispose of wastes properly
- Maintain grease removal devices at restaurants
- Keep storage containers covered with Secondary Containment
- Change production processes to reduce waste
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Use smaller quantities of toxic materials or substitute less-toxic materials
- Obtain spill kits and develop a spill response plan and make them accessible to all employees
- Properly train all employees in stormwater management and maintain a training log

Pollution prevention BMP requirements are communicated to facilities on a one-on-one basis during site inspections and in literature presented to site representatives.

4.1.2 Source Identification and Prioritization (Inventory)

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. Records are kept in an electronic database as well as hardcopy format. The total number of commercial high priority facilities during the FY 2006-07 reporting period is 494. A review/audit of all restaurant and automotive facilities in the commercial database inventory was performed during the reporting period. As a result of the review/audit, 221 restaurants and 70 automotive facilities were identified as high priority commercial facilities. The City has also identified 102 nurseries, 28 landscaping companies, 10 pool businesses, six (6) painting businesses, seven (7) animal facilities, three (3) mobile businesses, three (3) masonry businesses, three (3) building material businesses, one (1) golf course, and one (1) botanical garden in its commercial inventory. It should be noted that commercial facilities/businesses in the city are dynamic with changes happening often. This is particularly true of the nurseries. Nurseries frequently go out of business, many of them converting their properties into residential developments. A copy of the updated inventory is included in Appendix D-1.

4.1.3 BMP Implementation

Commercial facilities are required to implement BMPs as outlined in the JURMP. These consist of nonstructural and structural BMPs depending on the activities conducted at the facility. The BMPS are outlined in the City's Best Management Practices Manual and Stormwater Ordinance, Encinitas Municipal Code Section 20.08. The BMP Manual is available to the public on the City's website at http://cwp.ci.encinitas.ca.us The Engineering Services Department counter staff refers the public to this document regularly for guidance as to required minimum BMPs for commercial establishments, as well as for other activities regulated by the City's Stormwater Ordinance.

During each storm water quality inspection and complaint investigation, educational materials are provided. The City has continued to educate facility owners and employees during the inspection process and provide additional BMP information as needed.

4.2 Summary of Inspections

Inspections of commercial facilities were divided into the following two categories: complaint driven inspections and routine facility inspections. Complaint inspections are those in response to a call on the Clean Water Hotline or staff observation. When the City receives a complaint regarding a commercial facility, an initial site visit is conducted. If the complaint is legitimate, the inspector addresses the immediate complaint/discharge and recommends corrective action or executes enforcement action, and a complaint inspection is recorded for that visit. In some instances, follow-up inspections are required to verify that compliance has been met. In addition to a complaint inspection investigation, if it is determined that the facility has not been inspected recently (approximately two years), the inspector makes an appointment to conduct a full routine facility inspection and completes a Storm Water Quality Inspection Form during the inspection. Additional recommendations and enforcement action may result from these inspections that are not necessarily related to the initial complaint.

Routine facility inspections can be initiated as a result of a complaint inspection or as part of a regular schedule of inspections.

In FY 2006-07, a total of 316 Commercial inspections were performed during the reporting period. There were a total of 79 commercial complaints which yielded 72 complaint inspections. Of those 79 complaints, two (2) complaints were phone inquiries and required no further action, 5 were referred for full routine facility inspections, while another 4 complaints required secondary or follow-up complaint inspection to verify that compliance had been met. Additionally, there was a total of 239 routine facility inspections conducted in the reporting period which also required a follow-up inspection for about half of all facilities inspected, or 141 facilities. See Table 4.1 for a brief summary of all routine inspections and Appendix D-2 for a detailed summary of the regular storm water inspections which include all of the recommended corrective actions for each facility. For a summary of complaint inspections completed in FY 06-07, refer to Appendix H-5.

Table 4.1 Summary of Commercial Inspections FY 06-07

Type of Commercial Establishment	Complaint Inspections	Follow-up Complaint Inspections	Routine Inspections	Follow-Up Routine Inspections
Restaurants	21	2	200	116
Nursery/Grower	5	0	18	7
Auto Shops/Gas Stations	8	1	18	17
Golf Course	0	0	1	1
Other (mobile businesses, contractors, commercial properties, etc.)	38	0	2	0
TOTAL	**72**	**3**	**239**	**141***

**** Multiple facilities required more than one follow up***

4.2.1 Routine Inspections

The City conducted a total of 239 routine commercial facility inspections with 141 requiring follow-up inspections to verify that compliance had been met. Of the 239 inspections and 141 follow-up inspections, 21 restaurants received NOVs for failure to comply with the City's Storm Water Ordinances.

The City continued to utilize the Storm Water Quality Commercial Inspection Access Database for tracking annual routine, follow-up, and complaint investigations for commercial establishments that was established in the FY 2004-05 reporting period. The database contains several categories to describe each facility and contains all of the data that is collected from the two-page Storm Water Quality Inspection form (Appendix D-4). A hardcopy of completed inspection forms are kept in a binder as well as electronically in the database. A procedural manual was written and delineates procedure for viewing different queries, entering, deleting, or changing facility or inspection information. Please see Appendix D-3 for a copy of the City GIS Basic Training Manual.

During the FY 2005-06, reporting period, the City developed an important element for the commercial program: a centralized Geographic Information System (GIS) based work order management application for storm water complaints, investigations, and inspections using Azteca Cityworks software. The system is capable of displaying, on a map, storm water assets such as storm drains, inlets, and outlets, as well as creating and displaying open and closed service requests and work orders for tracking commercial inspections. In addition, the system is capable of being queried to find historical complaints or inspections at any location. Reports can be produced to document all storm water related complaints and inspections for any given time period. Although the software and an accompanying user manual were not deployed until the beginning of FY 2006-07, the GIS system was designed throughout FY 2005-06. A detailed description of this program is presented in the Municipal Component on page 2-4.

The Storm Water Quality Inspection forms were updated to be more facility-specific. The restaurant form focuses on grease management, cleaning, and materials and wastes, while the other inspection form also includes sections on nurseries, landscaping, and equipment and vehicles. Copies of the inspection forms used during the commercial inspections are contained in Appendix D-4.

The primary inspection categories and the findings of the inspections during 2006-07 are presented below.

SIC Codes
During each inspection the inspector requested the business license to verify each business had the appropriate SIC code.

Grease Traps
New construction and remodel of existing restaurants require grease interceptors or traps to be installed that meet current sizing requirements. As these facilities are brought up to code and the number of grease removal devices throughout the city increases, bacteria loads from SSOs to the MS4 should be reduced. The process is ongoing. In the reporting period it was noted that many restaurants are in compliance and keeping records for the cleaning of the grease interceptors. A cleaning log was distributed to these facilities to make their record keeping easier. The presentation of a log or the receipts from a pumping company helps determine compliance and is requested during inspections. In FY 2006-07, three new grease interceptors were installed at new or improved restaurants.

Stormwater Management Training
During site inspections, inspectors handed out educational stormwater management pamphlets and required businesses to train their employees annually and keep written records of when training occurs and who has received it. Follow-up compliance for the required training will be made on future inspections in FY 2007-08.

Restaurant Pollution Prevention Manual
A City of Encinitas Storm Water Pollution Prevention Manual was created this fiscal year and handed out during annual commercial inspections at approximately 180 restaurants throughout Encinitas. The binder consisted of eight sections: General Info, Site Map, BMPs/SOPs, Training Records, Inspection Records, Maintenance Records, Municipal Code, and Other Resources. Each restaurant was provided with a packet of BMP information, a blank training log and maintenance record, the Encinitas Storm Water Municipal Code, and information on becoming a Green Business. Also included were the general storm water poster, the "What's Cookin' Guide", and the City of Encinitas Restaurant Brochure in both English and Spanish. Each binder came with a City of Encinitas Storm Water Restaurant Training CD, which gives a ten minute presentation in both English and Spanish on proper BMPs for restaurants. The binder and CD are used by restaurant managers to continuously train employees and assure that they keep records of all paperwork necessary during future annual inspections. Follow up on the use of the binder and CD will be done during annual inspections in FY 07-08.

Secondary Containment
The City issues Notices of Violation (NOV) related to the storage and containment of oil recycling containers. Each business must provide over-head coverage and an overflow container at the base to protect from overflows and runoff. Inspections during the current period revealed that some used cooking oil service providers replaced 55-gallon drums during each pick up. This has resulted in much cleaner storage areas and reduces the potential for stormwater pollution. However, the City requires coverage and containment of all used cooking oil storage areas.

Nurseries
Routine stormwater inspections were performed at 18 nurseries in FY 2006-07. Education was provided to the facility operators and the results of their inspections were discussed on site.

Many nurseries have implemented BMPs because of the City's previous educational efforts with the University of California Cooperative Extension and in most cases, additional BMPs were implemented as a result of the routine inspections.

Inspection Summary
Of the 239 routine commercial inspections, there were 109 facilities which required corrective actions. The most frequent inspection comments included directives to implement the following BMPs:

- Properly train and educate all employees on storm water management and maintain a training log
- Obtain a spill kit and make it accessible to all employees

Other requirements included:

- Properly dispose of trash
- Keep trash areas clean
- Ensure that trash lids remain closed
- Sweep and clean up spills as they occur
- Properly maintain grease traps/interceptors
- Keep grease trap/interceptor maintenance records on site
- Properly store and/or dispose of hazardous materials and wastes
- Prohibit outdoor washing (including hosing off outside areas and cleaning floor mats)

When the City requires BMP implementation based on an inspection, a follow-up date is provided to the facility manager/owner. The City follows up with these facilities to ensure that the BMP has been properly implemented. These follow-up activities do not trigger a full facility inspection; however, they do require a site visit and meeting with the facility owner/manager to verify that compliance has been met. During the FY 2006-07 reporting period, 141 follow-up inspections were performed.

4.2.2 Complaint Driven Inspections

Clean Water Program staff maintains and answers the City's Clean Water Hotline. This hotline serves as a mechanism for the public to report suspected stormwater violations. Of the 156 total complaints received by the Clean Water Program in this reporting period, 79 complaints were in regards to alleged stormwater violations occurring in or at commercial facilities. Inspections were performed at 79 facilities. Table 4.2 below illustrates the distribution of complaints concerning commercial facilities in the City.

Table 4.2 Commercial Complaints Distribution FY 2006-07

Type of Commercial Establishment	Number of Complaints
Automotive	11
Eating Places	22
Nursery/Grower	6
Other (mobile businesses, contractors, commercial properties, etc.)	38
Phone Inquiries	2
Total	**79**

Clean Water staff investigated each of the complaints received. During the FY 2006-07, the City received 16 more commercial complaints than the previous fiscal year. The City's education and outreach efforts continue to be a contributing factor in increased awareness. The 24 hour complaint line is advertised on pencils and stormwater brochures that are distributed during

outreach events. In addition, the complaint line is listed in the telephone directories as "Storm Water Pollution Hotline" under the City listings, as well as the City's website. Follow-up actions and enforcement proceedings are addressed in Section 4.3.

4.3 Summary of Enforcement Actions

During FY 2006-07, the City received a total of 79 complaints regarding commercial facilities. However, it was determined that two (2) of those complaints were phone inquiries and required no further action due to the fact that: a) illegal discharges were not observed b) observed discharges were determined to be legal; or c) the caller only requested educational information. The remaining complaints triggered many enforcement actions, ranging from education to formal citations and cost recoveries. Table 4.3 summarizes the enforcement actions resulting from complaints received by the stormwater program.

Table 4.3 Commercial Enforcement Actions - FY 2006-07

Enforcement Category	Number of Actions
Education	42
Notice of Violation	25
Citation	15
Cost Recovery	3
Total	**85**

Table 4.4 summarizes the Notices of Violation/Citations and their causes. Most were issued as a result of an illegal discharge.

Table 4.4 Causes of Notices of Violations at Commercial Facilities - FY 2006-07

Violation	Number of Occurrences
Grease discharge/storage	19
Wash Water	1
Sediment in Storm Drain	1
Trash	2
Lack of spill kit	1

Table 4.5 Citations Issued FY 2006-07

Date	Code Violation	Violation Description	Fine	Cost Recovery
7/31/06	20.08.040B	Illegal discharge of auto oil	$100.00	$1,868.88
7/31/06	20.08.040B	Illegal discharge of auto fuel	$0.00	$433.38
08/03/06	20.08.040B	Illegal discharge of concrete waste	$100.00	$0.00
08/05/06	20.08.040B	Illegal discharge of food debris and wash water	$200.00	$0.00
10/09/06	20.08.040B, 20.08.140	Grease discharge	$200.00	$0.00
10/18/06	20.08.040B	Illegal discharge of wash water	$100.00	$0.00
11/16/06	20.08.040B	Illegal discharge of antifreeze	$100.00	$0.00
11/20/06	20.08.040B	Illegal discharge of wash water	$200.00	$0.00
01/02/07	20.08.040B	Illegal discharge of wash water, food and grease	$100.00	$0.00
01/15/07	20.08.040B	Illegal discharge of paint	$100.00	$665.00
01/31/07	20.08.040B	Illegal discharge of sediment	$100.00	$0.00

Date	Code Violation	Violation Description	Fine	Cost Recovery
02/13/07	20.08.040B	Illegal discharge of grease	$100.00	$0.00
02/28/07	20.08.040B	Illegal discharge of oil and wash water	$100.00	$0.00
06/07/07	20.08.040B	Illegal discharge of wash water	$100.00	$0.00
6/21/2007	20.02.140	Lack of proper grease storage	$100.00	$0.00
		TOTAL	**$1,700.00**	**$2,967.26**

4.4 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

5.0 RESIDENTIAL (EXISTING DEVELOPMENT) COMPONENT

The overall goal of the existing residential areas element is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The implementation of this element overlaps into almost all departments within the City. The primary responsibility for disseminating information and coordination is with the Clean Water Program Staff in the Engineering Services Department.

5.1 Pollution Prevention

The City's residential pollution prevention program consists of encouraging residents to minimize the amount of pollutants they generate and therefore need to dispose of. It also includes providing acceptable and alternative methods of disposal of typical wastes generated by residential activities. An important component of this effort is educating residents about the effect of poor pollution prevention habits on the environment and water quality. Residential public education and outreach is discussed in Section 9.2.3 (Education) of this report. Following is a description of the pollution prevention activities that are employed at the City of Encinitas for residents.

(a) **Household Hazardous Waste** – In accordance with the California Integrated Waste Management Act (AB939) in 1989, the City provides Household Hazardous Waste (HHW) collection programs to residents to limit the volume of household hazardous waste going into the waste stream, being dumped into the environment, and being deposited in landfills. Household hazardous waste includes, but is not limited to, household cleaners, used oil and fuel additives, paint and paint thinners, pesticides, pool chemicals, and electronic waste.

Several options are provided to residents for the proper disposal and recycling of household hazardous waste. These include door-to-door home collection, two permanent collection facilities located in the cities of Vista and Poway, and periodic temporary collection events. The City encourages residents to use these services through advertising on the City website, billing inserts, newsletters, and at public events. Table 5-1 shows the amount of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 5-1 Household Hazardous Waste Volumes Collected (FY 2006-07)

No.	Material Type	Description	PHHWCF Weight (in pounds)		Door-to-Door Program Weight (in pounds)	
			Region	**Encinitas**	Region	**Encinitas**
1.	Flammable	Flammable solid/liquid	75,200	6,148	20,100	7,861
	& Poison	Bulked flammable liquids	53,100	4,341	0	0
		Oil-base paint	93,800	7,668	0	0
		Poison (excl. aerosols)	45,600	3,728	20,100	7,861
		Reactive and explosive	20	2	0	0
		Subtotal	**267,720**	**21,887**	**40,200**	**15,722**
2.	Acid	Inorganic & Organic acid	9,240	755	2,020	790
3.	Base	Inorganic & Organic base	7,200	589	2,020	790
4.	Oxidizer	Neutral oxidizers, Organic peroxides	3,450	282	0	0
		Subtotal	**19,890**	**1,626**	**4,040**	**1,580**
5.	PCB-containing	PCB-containing paint	0	0	0	0

No.	Material Type	Description	PHHWCF Weight (in pounds)		Door-to-Door Program Weight (in pounds)	
			Region	**Encinitas**	Region	**Encinitas**
		Other PCB waste	390	32	0	0
		Subtotal	**390**	**32**	**0**	**0**
6.	Reclaimable	Antifreeze	9,181	751	0	0
		Car batteries	0	0	0	0
		Latex paint	235,200	19,228	160,800	62,891
		Motor oil/oil products	46,497	3,801	0	0
		Oil filters	3,500	286	0	0
		Subtotal	**294,378**	**24,066**	**160,800**	**62,891**
7.	Asbestos		1,000	82	0	0
8.	Universal Waste (UW)	Mercury containing waste	80	7	*	*
		Thermostats/switches/thermometers	0	0		
		Lamps	13,800	1,128		
		Rechargeable batteries	150	12		
		Household batteries	9,900	809		
		Subtotal	**23,930**	**2,038**		
	Electronic Waste (UW)	SB20/50 video display devices	62,603	5,118	*	*
		Non SB20/50 video display devices	0	0		
		Consumer electronic devices	148,185	12,115		
		Subtotal	**210,788**	**17,233**		
	Aerosol Containers (UW)	Non-empty aerosol containers	10,200	1,292	10,050	3,931
		Other	0	0	0	0
		All UW subtotal	**250,518**	**20,563**	**10,050**	**3,931**
9.	Other HHW	Home-generated sharps	0	0	0	0
		Pharmaceutical waste	550	45	0	0
		Compressed gas cylinder	4,894	400	0	0
		Non-UW aerosol containers (corrosive, flammable, poison)	2,500	204	0	0
		Treated Wood	0	0	0	0
		Other	38,315	3,132	20,100	7,861
		Subtotal	**46,259**	**3,577**	**20,100**	**7,861**
10.		**Grand Total**	**880,155**	**71,751**	**235,190**	**91,985**

* Universal Waste collection services are provided, however, these materials are consolidated and shipped to the Vista facility and detailed data is not provided.

(b) **Trash and Recycling Services** - In the City of Encinitas, for public health purposes, the collection of solid waste is a mandatory service. All residents and businesses are liable for payment of fees for the mandatory service (reference 11.20.010, paragraph A of the Municipal Code). Residential service includes curbside green waste collection and recyclable materials collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste Recycling Services to provide solid waste collection services in Encinitas

for both residential and commercial customers. Table 5-2 provides a summary of waste diverted by the franchise hauler during the 2006 calendar year.

Table 5-2 Trash and Recycling Collected (Diverted) (2006).

TYPE	GREENWASTE (tons)	RECYCLING (tons)	TOTAL DIVERTED (tons)
Residential	11,236	18,751	29,987
Commercial	446	6,443	6,889
Roll Off	34	68	102
TOTAL			36,978

The City of Encinitas is dedicated to reducing the amount of waste that enters our landfills. The City goal is to divert 50% of the waste generated in the City. During the 2004-05 reporting period, the City completed implementation of a program to replace the residential small multiple curbside recycling bins with one large mixed recycling bin. The City of Encinitas diverted 54% of its debris from landfills in 2005.

Staff has been working with EDCO to improve the bulky item collection for Encinitas residents. In 2007 the City continued the "Self-Haul Coupon Program" consisting of the following:

- Once a year, EDCO mails a coupon to residential customers for the self-haul event. The coupon will be valid for a six-month period. This year's coupons were valid from March 3 through September 9.
- EDCO made arrangements with the Palomar Transfer Station (located at 5960 El Camino Real in Carlsbad) to allow Encinitas residents to bring one free load of trash/bulky items/yard waste (can be a carload or truckload) to the transfer station.
- Residents presented a photo I.D. and the coupon showing customer's name/address at the transfer station.
- The program is for residential customers only. Commercial loads will be charged a fee.

Benefits of the new program include:

- **Flexibility** – Residents will be able to dispose of their bulky items and other residential waste at their convenience. They can choose to go any weekend over a six-month period. The larger time window will be particularly convenient for residents who are moving during the year or are unable to make it to a single-day event.
- **Longer hours** – The transfer station is open from 7:30 to 4:00 on weekends, compared to single day event hours of 8:00 to 2:00.
- **Site locations** – The lack of a suitable site on City-owned property requires us to rely on outside agencies (Mira Costa College, school districts, etc.) for scheduling single-day collections. It is not certain that facilities will be available each year.
- **Logistics/Fiscal Impact** – The City will realize a savings in costs for event management, setup, traffic control, materials handling and cleanup.

Over the first six months of the program (March – September, 2007), 1,125 residents participated in the program. Based on the vehicle averages at the Community Clean-up day

(350 pounds per vehicle based on eight years of data), this program resulted in the disposal of 197 tons of residential waste.

(c) **Used Oil Recycling Program** - The City has a used oil recycling program that consists of a network of certified automotive waste recycling centers throughout the city, permanent Household Hazardous Waste collection facilities, and door-to-door collection. These facilities accept a range of used products including used oil, oil filters, auto batteries, and antifreeze. A big part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through solid waste fees and grants from the California Integrated Waste Management Board (CIWMB). The location of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Table 5-3 provides a summary of the City's used oil recycling program. A discussion of the door-to-door program follows.

Table 5-3 Certified Used Oil Collection Centers Data and Summary (FY 06-07)

Period	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)	Collection Type
July 2006 – June 2007	14,500.4	6,435	Certified Centers
July 2006 – June 2007	515	218	Permanent HHW Centers

Door-to-door HHW collection services offered to residents include used oil and oil filter collection. However, most residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities and use the door to door service primarily for paints and other HHW.

(d) **Sanitary Sewer System Maintenance** – Sanitary sewer service is provided by two agencies. Generally, the northern portion of the City is serviced by the Leucadia Wastewater District and the southern and eastern portions are serviced by the City of Encinitas. These agencies provide operation and maintenance services involving cleaning sewer lines, clearing stoppages, repairing breaks on a routine basis, and responding to emergencies as needed. Sewage is delivered for treatment and disposal to either the Encina Wastewater Authority in Carlsbad or to the San Elijo Water Reclamation Facility in Cardiff. Special precaution is taken at facilities adjacent to sensitive areas to prevent sewer spills. These include pump and pipeline redundancy and emergency generators to ensure that service is uninterrupted during an emergency.

(e) **Storm Drain Stenciling** – The City's Public Works Department has implemented a program to stencil all municipal storm drain inlets. Two types of stencils are used: the first is an adhesive label which says "No Dumping, Drains to Ocean", and the second is a painted stencil with a diagram of a duck and says "No Dumping, I Live Downstream".

(f) **Pollution Prevention Materials** – The City has developed and distributed printed materials to encourage residents to reduce or eliminate the generation of pollutants. The activities that have been implemented during this reporting period include:

- Distributed brochures (developed in FY2002-03) for residents to learn pollution prevention methods (Appendix E-1):

  - Automotive - Simple Things to Keep Our Waterways Clean to reduce vehicle fluids spills through proper maintenance;
  - Yard & Garden Care - Keeping Your Yard & Garden Beautiful and our Waterways Clean;
  - Diazinon - How It Affects Your Health, Your Family and the Environment; and
  - Hiring a Handy Man - Easy Instructions for the Homeowner.
- A City of Encinitas Environmental Services Guide was created this fiscal year and mailed in March 2007, to approximately 22,000 single- and multi-family residences throughout the City. It was also handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, storm water management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix E-11).

5.2 Best Management Practice (BMP) Implementation

BMPs targeted at the general population and residential areas are implemented on two levels; Jurisdictional BMPs and residential BMPs. Jurisdictional BMPs are structural BMPs that have been implemented by the City or have been required to be implemented by the City. These are typically installed as part of the SUSMP program during development of a property. Residential BMPs are non-structural BMPs targeted at reducing pollutant generating activities or minimizing the effects of these activities on urban runoff water quality. This section provides a description of these BMPs.

5.2.1 Jurisdictional BMPs

The City has a strong General Plan that works to protect water quality and open space, including riparian and wetland areas. Because of this, over the past ten years, several jurisdictional BMPs have been implemented by the City or required to be implemented throughout the City as part of new development and significant redevelopment. The goal of these projects is to improve the water quality of adjacent receiving waters. These jurisdictional BMPs generally include detention basins, storm drain inserts, daylighting of a section of Cottonwood Creek, low-flow channels, and the Moonlight UV Treatment Facility. These facilities are discussed in more detail in Section 2.1.3 and are shown in Table 5-4 and on the Encinitas BMP Map, Appendix B-3. They are broken into sub-watersheds beginning in the north and moving south.

5.2.2 Residential BMPs

Residential BMPs are nonstructural and are targeted at activities defined by the Municipal Permit as high priority. The City has revised its Storm Water Ordinance to be more direct and explicit about prohibitions on non-storm water and storm water discharges. BMPs are encouraged through the use of brochures, mailings, personal contact when applicable, workshops, City newsletter, and City website. These activities are discussed in Chapter 9 Education and Chapter 10 Public Participation.

Table 5-4 Summary of Jurisdictional BMPs

Sub-basin Served	Project Name/ Location	Purpose of BMP	Description of BMP
Leucadia	Leucadia Drainage Outfall Basin at Hwy 101 and La Costa Blvd. (Ponto Beach)	Sediment removal	Detention basin.
New Encinitas	Three basins along the El Camino Real channel at Garden View, Leo Mullen baseball field, and Town Center	Low-flow and first-flush pollutant Removal	Pollution basin designed to remove pollutants from low flows
New Encinitas	Encinitas Creek Riparian Area along Encinitas Creek from Garden View to Leucadia Blvd. (City Limits)	Water quality enhancement	Preservation of a 50 foot wide open space riparian buffer along the creek.
Leucadia	Saxony Detention Basin	Sediment removal	Detention basin.
Encinitas/ Cottonwood Creek	Moonlight Beach Urban Runoff Treatment Facility at Third and B Streets.	Bacteria Removal	Ultra-Violet treatment facility treats dry-season urban runoff. Facility was brought on-line in August, 2002, and operated since then during dry weather.
Encinitas/ Cottonwood Creek	Cottonwood Creek Park Sediment basin at Encinitas Blvd. and Vulcan Ave. (planned)	Sediment and nutrient removal	Inline wet pond designed to reduce peak storm discharge, remove sediment, and provide biological treatment of Cottonwood Creek.
Encinitas/ Cottonwood Creek	Quail Gardens Detention Facility at Quail Gardens Drive at Encinitas Ranch	Sediment removal	Detention basin designed to reduce peak storm discharge and remove sediment prior to release into Cottonwood Creek
Cardiff	Brandywine Wetland Development south of Santa Fe Drive	Nutrient removal	Wetland preservation and enhancement area.
Cardiff	Ocean Cove	Sediment removal	Detention basin.
Cardiff	Cape Sebastian	Sediment removal	Detention basin.
New Encinitas	El Camino Real Detention Basin (Pine Branch Lux Canyon)	Sediment removal	Detention basin.
Leucadia	Fox Point	Sediment removal	Detention basin.
New Encinitas	Plaza II	Sediment removal	Detention basin.
Leucadia	Piraeus/Sparta	Sediment removal	Detention basin.
Leucadia	Piraeus/Olympus	Sediment removal	Detention basin.
Leucadia	Leucadia Oaks Park	Sediment removal	Detention basin.
La Costa	La Costa Basin (new - 10/06)	Sediment removal	Detention basin.

The following is a description the BMPs that the City has been focusing on in the residential component.

(a) Automobile Repair and Maintenance (Residential)

Pollution Prevention (See Section 5.1)

(1) Encouraged residents to use routine preventative maintenance practices
(2) Encouraged and/or facilitated reductions in vehicle use:
- Changes in driving habits
- Carpooling
- Increased use of public transportation
- Biking or walking for short trips

(3) Encouraged residents to make timely vehicle repairs

Leaks and Spills

(1) Encouraged residents to prevent leaks and spills from entering the storm water conveyance system:
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter
- If working outdoors, don't do it in the rain
- Require that leaks and spills be cleaned up when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Educated residents to properly manage and dispose of automotive wastes and materials through the automotive fact sheets by:
- Proper and lawful disposal of wastes and recycling of oil and antifreeze
- Storage of materials and wastes indoor or under cover
- Use of secure and watertight containers when storing materials and wastes outside

(b) Automobile Washing (residential)

Management / Reduction of Wash Water

(1) Educated residents to use dry cleaning methods to avoid the generation of wash and rinse water in the general storm water brochure.
(2) Encouraged residents to use commercial self-serve or full-serve car washes that properly recycle their wash water
(3) Educated residents to wash vehicles over porous surfaces (grass, dirt, etc.)
(4) Encouraged the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Educated residents to properly dispose of soapy water or bucket rinse water (sanitary sewer or soak into lawn) in the general storm water brochure

***(c)* Automobile Parking (residential)**

(1) Design parking areas in residences; covered garages to be plumbed to the sewer system
(2) Educated residents to use routine preventative maintenance practices and to make timely vehicle repairs through storm water fact sheets.

***(d)* Home and Garden Care Activities and Product Use (residential)**

GARDEN AND YARD CARE

Pollution Prevention

(1) Encouraged residents to always read label instructions and follow the instructions for garden care products.
(2) Encouraged water conservation practices through our website, calendar, and water bill inserts.
(3) Encouraged the use of xeriscape gardening:
    - Encouraged the use of drip irrigation
    - Encouraged the use of soaker hoses
    - Encouraged the use of micro-spray systems
    - Encouraged the repair or adjustment of irrigation that allows excessive runoff
(4) Encouraged recycling of lawn clippings and green waste through local programs.
(5) Encouraged planting or mulching of hillsides and slopes to prevent erosion.

Leaks and Spills

(1) Educated residents to immediately cleanup spills of gardening chemicals, fertilizers, and soils.
(2) Educated residents to return spilled materials to the container for future use or proper disposal.

Materials and Waste Management

(1) Educated residents to store lawn care products in closed labeled containers and in covered areas through the storm water brochures.
(2) Discouraged the use of materials during windy or rainy days.
(3) Encouraged that stockpiles of soil, compost, or fertilizers be covered with plastic tarps to prevent dispersal by wind or rain.
(4) Required disposal of household chemicals to the household hazardous waste collection facility or at scheduled events.
(5) Encouraged dry sweeping techniques for clean up.

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Recommended product use only according to label instructions.
(2) Encouraged recycling of unused, unwanted products through storm water brochures.
(3) Encouraged the use of water based paints through the storm water brochures.

Leaks and Spills

(1) Required the cleanup of hazardous materials spills immediately.
(2) Educated residents on the use of techniques for spill cleanup and proper waste disposal.

Materials and Waste Management

(1) Educated residents about the proper storage of household hazardous materials in closed-labeled containers in a covered area.
(2) Informed residents about recycling of latex paint through community programs.
(3) Encouraged and educated the residents about the disposal of unwanted household hazardous waste through household hazardous waste collection facilities.

Restrictions

(1) Prohibited the disposal of wash waters (carpet cleaning, mop water, paint wash-up) to the street, gutter, or storm drain.

***(e)* Disposal of Pet Waste**

Waste Management / Disposal

(1) Maintained pet waste disposal bags at each Dog Park.

5.3 Compliance and Enforcement Actions

The City received 59 complaints regarding residential areas or activities. Residential complaints which comprised of 40% of all complaints received, resulted in 37 educational actions, 17 Notices of Violation, and 6 Administrative Citations. Residential issues ranged from paint, stucco, or concrete in the gutter to private lateral overflows. A complete table with all IC/ID complaint investigation dates, discharges, investigations, follow-ups and enforcement activities is included in Appendix H-5.

5.4 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

6.0 LAND-USE PLANNING FOR NEW DEVELOPMENT AND REDEVELOPMENT

Being a coastal community, environmental and water quality have been of utmost importance to the City of Encinitas since it was incorporated in 1986. This component describes the City's approach to minimizing the negative impacts of urbanization on storm water pollution control through the implementation of its General Plan and Land-Use policies. The Community Development and Engineering Services Departments within the City of Encinitas primarily administer the strong water quality protection policies reflected in the General Plan and the Land-Use element.

This component describes the City's actions during the reporting period FY 2006-07 regarding the development and redevelopment project review process, which ensures that City policies and regulations are followed. Of particular interest are the City's strides towards implementation of the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements of the Municipal Permit. The environmental review process and the revisions implemented to comply with the Municipal Permit are also discussed in this section. Finally, the City's stormwater educational efforts are described.

6.1 General Plan

During the development of the JURMP, the City performed an assessment of its General Plan and Local Coastal Program Land Use Plan (GP/LCP) to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City of Encinitas GP/LCP goals and policies are consistent with the Municipal Permit, and no amendments to the GP/LCP are required. The results of the analysis were presented in the JURMP.

The City of Encinitas General Plan and Local Coastal Program Land Use Plan (GP/LCP) currently addresses water quality and watershed protection. Included within the GP/LCP are proactive policies that pertain to water pollution and land-use decisions. Many of these policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies also restrict developmental disturbance of natural bodies of water and drainage systems and even strive to avoid developments susceptible to erosion and sediment loss. In addition, GP/LCP policy discourages unnecessary use of impervious surfaces in new development areas, thereby minimizing the transport of urban runoff and pollutants.

Because the City of Encinitas is within the coastal zone, coastal development permits were issued to all applicable projects through the Local Coastal Program (LCP).

During the FY2002-03 reporting period, the City adopted a local Standard Urban Stormwater Mitigation Plan (SUSMP) program based on the regional Model SUSMP. The final Model SUSMP developed by the Regional Copermittees was approved by the RWQCB on June 12, 2002 (Resolution R9-2002-0097). In accordance with the Municipal Permit, the City of Encinitas modified the Model SUSMP and developed a local SUSMP. The City of Encinitas' local SUSMP was established in the City's Storm Water Best Management Practices Manual, Part II, Storm Water Manual for New Development and Redevelopment; A Manual for Construction and Permanent Post Construction Storm Water Best Management Practices Requirements (BMP Manual, Part II) and adopted on December 11, 2002 (Ordinance 2002-14). On February 5, 2003, the City received a Notice of Violation (No. R9-2003-0085) for three items requiring action. These items were addressed, and necessary modifications to the Local SUSMP (BMP

Manual Part II) were made and adopted on April 9, 2003 by City Council (Resolution 2003-22). Another modification made at this time was to change the number of the Storm Water Ordinance from Chapter 64.08 to Chapter 20.08 for more consistent municipal code numbering. Copies of the BMP Manual, Part II and the Storm Water Management Ordinance are provided in Appendix F-1 and F-2, respectively.

Although the City has adopted and actively implemented the SUSMP program as outlined in the BMP Manual Part II, the Coastal Commission has not yet approved the BMP Manual, Part II. During adoption of the BMP Manual Part II, the City made minor changes to the Grading Ordinance to maintain consistency. The Grading Ordinance is contained in the City's Local Coastal Program (LCP) and must receive Coastal Commission approval of any changes. The Coastal Commission reviewed the BMP Manual Part II and required, among other modifications, inclusion of various sections of the manual into the LCP prior to approval of the Grading Ordinance. During the reporting period, the City negotiated with the Coastal Commission the request for additional inclusions in the LCP. To date, the Coastal Commission has not approved the Grading Ordinance and BMP Manual Part II. Once it is approved, the City will then go through another public review period and give final approval of the Grading Ordinance and BMP Manual Part II.

6.2 Development Project Approval Processes

The project review process has been modified in an effort to reduce the stormwater impacts of urban development and redevelopment. The Engineering Department disperses information, enforces compliance, and checks for adequacy of the proposed facilities during predevelopment meetings with project applicants, during the Development Review process, and during the plan checks that precede project approval and permit issuance. This process is applied to discretionary and ministerial permits as discussed below.

6.2.1 Discretionary Projects

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring a further ministerial permit are also subject to a plancheck review as described in the Ministerial Permit section.

The Predevelopment Process
The stormwater element of the Predevelopment Process is geared toward disseminating information on stormwater pollution control and the City of Encinitas SUSMP requirements during the preliminary design phase. During this phase, which is mandatory for larger projects and is available to any applicant requesting it, engineers and applicants are guided by City staff to provide adequate facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process results in better designed and integrated BMPs, since the facilities are included in the project design even in the earliest phases of the project.

During the predevelopment meeting, City representatives from all pertinent departments discuss project requirements with the applicants. For the Engineering Department, a primary focus of these meetings is stormwater pollution control; applicants are informed that all development projects generating a stormwater impact are required to provide standard Best Management Practice measures, regardless of the size or significance of the new development.

Priority Projects, targets for more stringent stormwater pollution control methods, are also first identified during these meetings. The categories of development falling under the Priority Project classification were identified by the Regional Water Quality Control Board and in the model SUSMP. The majority of Priority Projects processed by the City over the past year have been placed into that category because they proposed more than 5,000 square feet of new impervious area for driveways or roads. Priority Projects, which account for approximately 5% of the discretionary permit applications reviewed by the Engineering Department, learn that the BMP facilities they propose must meet numeric sizing requirements established by the City of Encinitas and the Regional Water Quality Control Board and must be maintained in working order into perpetuity. City staff discuss with the applicant and engineer of work options for meeting these numerically sized post-construction treatment requirements, including volume-based systems such as treatment ponds, wet ponds, and desilting basins, and flow-based systems such as grassy swales and stepped grass-lined channels. Because of vector control and maintenance issues, the City has begun to show a strong preference for flow-based systems. Mechanical treatment systems are discouraged and when accepted may account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

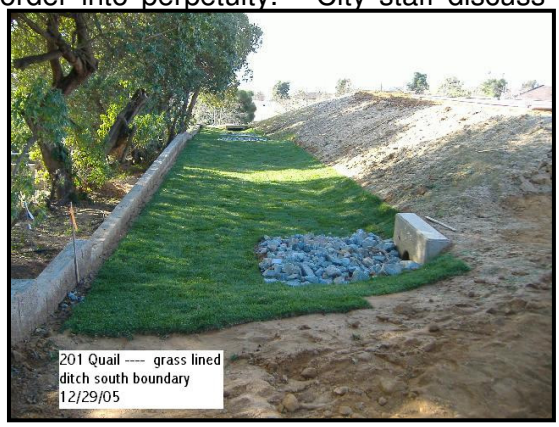

The photograph above shows a post-construction BMP, a grass-line swale along a project boundary.

Stormwater Pollution Control Checklist and Certification

During the 2004-05 reporting period, the City embarked upon a new project to assist in getting SUSMP requirements incorporated into projects at an earlier stage in project design. This project was instigated based on feedback from the Planning and Engineering staff. Applicants are now required to perform a written self-certification of the BMPs proposed with their project, and this certification is required to accompany the initial submittal of each discretionary permit application. The checklist briefly describes the clean water program and regulations. Applicants are required to:

a) Classify their projects as Priority, Standard, or Exempt
b) Present the BMPs that will be utilized on site to comply to the SUSMP requirements, and
c) Certify that they understand and will implement construction and post-construction BMPs on their site as appropriate for their project's priority.

During the 2004-05 reporting period, this checklist was implemented for all ongoing CIP projects as a test case. It was expanded to all development projects at the end of the 2005-06 reporting period and has been used throughout FY 2006-07. A copy of the Checklist is provided in Appendix F-3.

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions, which are placed on the project during the Development Review process, include construction requirements as well as post-construction standards for effective stormwater pollution control facilities. Once the predevelopment meetings are conducted and the self-certification checklist

has been completed, the Engineering Department reviews the adequacy of the proposed facilities shown on the site plan and issues conditions of development to ensure implementation of satisfactory treatment measures. The Engineering Department reviews an average of 25 projects each month submitted for Development Review, approximately 5% of which are Priority Projects. Appendix F-4 provides the typical development conditions relating to stormwater pollution control.

The Engineering Department's Conditions of Approval for a project take into account the nature of the project site and the work proposed. All projects are conditioned to comply with construction stormwater requirements, and those projects creating new impervious surface areas or otherwise having a potential impact on stormwater pollution must provide standard or priority post-construction BMPs to the satisfaction of the City Engineer.

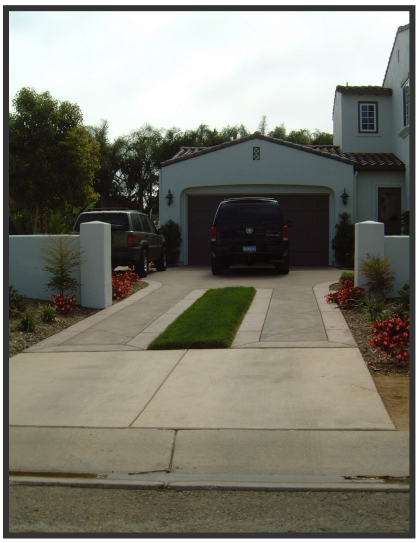

Applicants not showing adequate BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. At a minimum, stormwater pollution control facilities for standard BMP projects may be considered adequate when they include no directly connected impervious areas (DCIA). Landscape areas must be designed to receive flows from hardsurface areas, and new impervious areas should be minimized in order to reduce adverse impacts on stormwater quality. When appropriate, project applicants are required to provide grassy swales or reinforced gravel swales along their property frontage to the street for stormwater pollution control purposes.

In the Development Review process, Priority Projects must show a feasible solution for numerically-sized treatment BMPs on their project plans, and those projects with treatment areas that appear to be inadequate are asked to provide substantiating calculations with their development review resubmittal. These numerical treatment requirements are enumerated in the BMP Manual, Part II, included here as Appendix F-2 and available to all applicants through the City website.

Priority Projects, such as those listed above, are not only required to show the proposed treatment BMPs on the development review site plan, but are also issued conditions of project approval requiring they meet all of the standard post-construction BMP requirements discussed above and follow additional guidelines calling for the construction of numerically sized stormwater treatment facilities. The conditions of approval are then recorded in a covenant against the property. After the discretionary phase, those projects that enter the ministerial phase are subject to further review of the project BMPs during the plancheck process as described below.

6.2.2 Ministerial Projects

Projects requiring a ministerial permit such as a grading, improvement, or building permit are required to provide post-construction stormwater pollution control facilities on the permit plans. These facilities must be considered adequate before the plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project has been conditioned to provide specific treatment facilities. For those projects not requiring a

discretionary permit, the review of the storm water pollution control treatment facilities begins at the plancheck stage, which is described below.

During the FY 2005-06 reporting period, the City of Encinitas adopted new fees for NPDES plancheck and inspection of grading and improvement plans. The additional fees, assessed with every ministerial permit application, help to fund the increased workload brought about by more stringent storm water requirements.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater BMPs. City plancheck engineers emphasize to applicants the variety of solutions that may be used in providing stormwater pollution control. Designs that propose directly connected impervious areas (DCIA) are not permitted, and projects that allow stormwater runoff to travel maximum practicable distances over landscape and turf areas are encouraged. Project engineers are asked to ensure that roof drains will discharge onto landscape areas rather than hard surfaces, and this stipulation is clearly indicated on the project plans. Whenever possible, hard surface areas must be replaced with permeable ones and concrete ditches be replaced with grassy swales and rip-rap ditches. Excessive use of area drains in landscaped regions is discouraged. Driveways that drain towards turf areas on one or both sides or towards a grassy swale in the middle are promoted. All landscape areas for use as BMPs must be clearly marked on the plans, and project engineers are asked to include the note, "Landscape area for Best Management Practice to be privately maintained and not to be modified without a permit from City". Because the permitted drawing becomes public record, a clear record of the designated treatment areas is maintained. Engineers are also required to provide stormwater pollution control notes on the plans addressing employee stormwater education, materials storage, erosion control, and waste management (Appendix F-5). After a development drawing has been approved, Engineering Inspectors in the field ensure that the storm water pollution control treatment measures are installed per plan. During the current reporting period, approximately 180 standard grading or improvement projects were plan checked by the Engineering Department and required to implement SUSMP BMPs. A full list of these projects and the type of BMPs required is provided in Appendix F-6. Priority projects approved during this reporting period are discussed below.

Every plan in plancheck is also reviewed to determine if it meets the City's definition of a Priority Project. Priority Projects are checked to make sure that, in addition to meeting standard BMP

requirements, numerically-sized treatment facilities are provided. Design requirements include providing treatment facilities to treat at least the volume of rainfall generated by an 85th percentile storm over the entire project acreage or ensuring a treatment time of between 5 and 9 minutes within a flow-based system; these requirements are discussed further in the BMP Manual, Part II, available to all applicants on the city website and included here as Appendix F-1. All Priority Projects must comply with the numeric sizing criteria in order to be approved by the City Engineer, and plancheck engineers review the hydrology calculations to determine the adequacy of treatment system proposed. The project applicant is required to assume the maintenance responsibility or to identify the maintenance mechanism for the treatment system prior to project approval, and a covenant ensuring adequate maintenance into perpetuity is recorded against the property. In the current reporting period, 45 Priority projects were approved for issuance of grading or improvement permits. A full list of the projects that went through the Engineering plancheck process and the type of BMPs required is provided in Appendix F-6.

Table 6-1 Priority Projects Reviewed by Development Engineers (FY 2006-07)

Project Number	Approval Date	Address	BMP Type	Maintenance Agreement?
0094	06/06/07	1020 Calle Anacapa	bioswales	no
0187	11/20/06	1060 Urania Ave	mechanical/detention pit	yes
0153	08/31/06	111-125 Chesterfield	mechanical	yes
9055	12/08/06	1308-1310 El Camino Real	detention basin and bioswale	yes
0255	08/24/06	1877 Olivenhain Rd	TBD, not approved yet	yes
9057	08/08/06	201 Quail Road	bioswales	yes
0177	07/21/06	329 Lake Drive	bioswales	yes
0181	08/21/06	3342 Wildflower Valley Dr	bioswales	no
0414	01/29/07	4455 Manchester Ave	mechanical bioswales	yes
9294	10/10/06	477 N El Camino Real	underground detention basin, bioswale	yes
0462	05/22/07	70 N Coast Hwy 101 thru 90 N Coast Hwy 101	mechanical/bioswales	yes
9262	02/20/07	840 Bracero	bioswales	yes
9303	01/18/07	887 Brittany	detention basin	yes
7828	10/12/06	Lake Dr	bioswales with underground pipes	yes
0307	11/02/06	Phoebe St and Hwy 101	detention chamber	yes (HOA)
0308	11/02/06	Phoebe St and Hwy 101	detention chamber	yes (HOA)
9481	07/18/06	Quail Gardens 12 lot sub	swales and mechanical	yes (HOA)
9318	07/18/06	Santa Fe at Evergreen	bioswales	yes
1469	10/13/06	Sheilds	bioswales	yes (HOA)
6442	09/28/06	Manchester Ave	detention basin	yes
0562	06/14/07	1302 Encinitas Blvd	detention basin, grass swales	yes
0388	05/26/07	1435 Lake Dr	grass swales	yes
0372	06/13/07	1657 N Vulcan	detention basin, grass swales	yes
0437	04/28/07	200-52 El Camino Real	mechanical filter	yes
9459	07/18/06	211 Saxony Rd	bioswales; detention basin	yes
0183	11/01/06	3234 Olivenhain Farms	grass swales	yes
0087	09/28/06	354 Santa Fe	detention basin, grass swales	yes
9301	05/09/07	Halcyon Rd	grass swales	yes
0325	04/30/07	Lone Jack Rd	grass swales	yes
0276	11/07/06	Phoebe St and Hwy 101	mechanical filter	yes
9580	07/25/06	Vacant lot on Dove Hollow Ln	infiltration basin, bioswales	yes
0369	12/08/06	1415 Rainbow Ridge	bioswale	yes
9215	10/05/06	155 Quail Gardens	swale	yes
0482	02/02/07	1864 Crest Dr	bio-basin	yes

Project Number	Approval Date	Address	BMP Type	Maintenance Agreement?
6169	04/17/07	2100 N Coast Hwy	bioswale/ landscape	yes
0353	11/22/06	224 Andrew	bioswale	yes
0060	09/26/06	3275 Poppy Hills Ln	bioswale/ landscape	yes
0386	01/24/07	3535 Manchester Ave	underground storage chambers, bioswales	yes
9294	01/24/07	477 N El Camino Real	bioswale/ structural unit train	yes
0169	10/18/06	510 El Camino Real	bioswale/ inlet filters	yes
0483	02/07/07	540 La Costa	bioswale/ inlet filters	yes
9367	07/12/06	781 Gardenview Ct	bioswale	yes
0061	03/28/07	801 Orpheus Ave	bioswale/ landscape	yes
6242	08/30/06	Fortuna Ranch & Rancho Summ	roadside bioswale	yes
9318	07/06/06	Santa Fe at Evergreen	bioswale/ landscape	yes

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. Even flat building pads not scheduled to be built upon immediately must be protected with erosion control methods until construction begins. Engineering inspectors visit the project sites frequently to ensure that erosion control measures are satisfactorily installed and are in good working order. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City to guarantee successful implementation of the measures shown thereon. Such bonds are retained until the landscaping has become well established.

Plans submitted for building plancheck are also reviewed by the Engineering Department for compliance with stormwater pollution control guidelines. No directly connected impervious areas (DCIA) are permitted, and landscape areas must be designed to receive runoff from hard surfaces. Stormwater pollution control BMP treatment areas are required to be clearly indicated on the plans and to be labeled as “Landscape areas for BMP to be privately maintained and not to be modified without a permit from the City.” The building plan approval process has been modified to include a requirement for standard plan notes addressing stormwater pollution control for all projects (Appendix F-4). Building plans not providing adequate BMP facilities are required to be modified and resubmitted.

Post Construction BMP Maintenance Agreements

The Engineering Department is concerned that adequate BMPs are not only constructed but are also maintained in good working order. All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance and/or replacement of the project BMPs as necessary into perpetuity. The covenant includes an attachment depicting the specific project BMPs, so the required facilities and their location on the project site are easily identified. The maintenance agreement is then recorded against and runs with the property. In a few rare cases the maintenance requirements are outlined on the plans themselves and an agreement is not recorded. A sample Private Stormwater Treatment Maintenance Agreement is included in Appendix F-7.

6.2.3 Capital Improvement Projects

City Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are reconstruction, linear, or repair projects, often only construction BMPs are implemented. However, SUSMP qualifying projects must also install post-construction BMPs. During the 2006-07 reporting period, the only SUSMP project was the Leucadia Blvd Improvement and Roundabouts Project. Inlet filters were installed as a post-construction BMP.

6.3 Environmental Review Process

In compliance with the JURMP, the City has modified its Initial Study Checklist. A copy of this checklist can be found in Appendix F-8. The revised checklist was utilized for all CEQA Initial Study reviews performed during the reporting period.

6.4 Education Efforts Focused on New Development and Redevelopment

Education focused on new development and redevelopment during this reporting period consisted of ongoing one-on-one education during the development review process.

6.4.1 Ongoing One-on-one Education

Representatives of the Engineering Department work one-on-one with project applicants and engineers to educate them on stormwater regulations and how these requirements may be met through project design. In predevelopment meetings held for discretionary projects, engineering staff explain to project engineers the City's stormwater standards and direct them to online references, such as the Best Management Practice Manual Part II, that may provide further direction. Preliminary designs are reviewed and necessary modifications are discussed, ensuring that the best designs for meeting stormwater requirements are achieved. Project engineers receive continuing guidance through the remainder of the project to ensure an adequate design. Project engineers have further access to engineering staff throughout the plancheck process, and through the City's consistent emphasis on effective BMP methods, local engineers have provided innovative designs for stormwater pollution control.

During all phases of the development approval process, from predevelopment meetings through permit issuance, applicants and project engineers have access not only to the assistance of the Engineering Department staff in providing stormwater pollution control activities, but they are also encouraged to utilize written and online sources. The City of Encinitas has collected drawings and guidelines into a professional engineers' reference, the BMP Manual Part II. The manual helps engineers to design effective and adequate stormwater pollution control facilities and includes typical drawings for stormwater treatment basins, percolation basins, grassy swales, and stormwater discharge systems. The manual also includes guidelines for maximizing the flow of runoff over landscape, lawn, and other permeable areas.

6.4.2 Targeted Audience Education

The BMP Manual, Part II is available to the public on the City website and on CD at the Engineering and Planning counter for purchase.

6.5 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

7.0 CONSTRUCTION COMPONENT

7.1 Description of Activities

The City of Encinitas has placed a strong emphasis on its construction component. This emphasis begins with construction site BMP requirements that must be shown on grading plans, an aggressive inspection program and strong enforcement policies. The activities performed during the FY 2006-07 reporting period are discussed in the following sections.

7.1.1 Pollution Prevention

During the reporting period, pollution prevention BMPs were required on construction sites in accordance with the Encinitas Municipal Code (EMC), Chapter 20.08, the City's Stormwater Best Management Practices Manual, Part I & II, and the project's SWPPP, if applicable. In addition, grading and building plans issued included special notes requiring stormwater pollution prevention BMP implementation. These pollution prevention BMP requirements were also reiterated in the City's annual Erosion Control letter issued in September 2006 to contractors/developers operating in the City. Pollution prevention BMPs include erosion control, sediment control, materials management, and employee training programs. These BMPs were implemented on all construction sites and implementation was verified during site inspections.

7.1.2 Construction and Grading Approval Process

The City's project grading approval process has been modified to look for ways to minimize impacts of construction projects. The Engineering Department disperses information, enforces compliance, and checks for adequacy of the proposed facilities during predevelopment meetings with project applicants, during the Development Review process, and during the plan checks that precede project approval. This process is applied to ministerial and discretionary permits.

The Engineering Department has established specific Conditions of Development Approval to ensure compliance with the City's stormwater pollution control standards. These conditions, which are placed on the project during the Development Review process, include active construction requirements as well as post-construction standards for effective stormwater pollution control facilities (discussed in Section 6). The Engineering Department's Conditions of Approval for a project take into account the nature of the project site and the work proposed. All projects must comply with construction stormwater requirements. Applicants not showing adequate BMP measures on development review submittals are asked to revise their plans and resubmit.

During the plan check process, erosion control plans are carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. Even flat building pads not scheduled to be built upon immediately must be protected with erosion control methods until construction begins.

7.1.3 Source Identification

The construction inventory is included in Appendix G-1. Projects were prioritized as high or medium priority sites based on size, slope, soils, or proximity to receiving waters. A total 134 projects were included in the 2006-07 rainy season inventory; 22 of the projects were considered high priority. In addition to the inventory, the City's GIS Department created a map of the various construction projects which includes the parcel(s) under construction and receiving waters within the City. To assist with project prioritization, this map was overlaid with a map of environmentally sensitive areas (ESA) to assist in prioritizing sites. The map is included in Appendix G-2.

7.1.4 BMP Implementation

Construction BMP requirements are presented in the Encinitas Municipal Code (EMC), Chapter 20.08, the City's Stormwater Best Management Practices Manual, Part I & II, and the project's SWPPP, if applicable.

Clean Water Program staff spends a significant amount of time coordinating with the engineering inspectors with regards to stormwater management and BMP implementation on construction sites.

Clean Water Program staff constantly monitors weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are posted on a bulletin board allowing inspectors to be constantly updated on the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation may be necessary and, where necessary, they require developers to have additional BMPs in place at the end of each work-day.

The general notes for the building plans have been amended to include erosion control, sediment control, and materials management practices. The Clean Water Program also reviews SWPPPs for projects greater than five acres and sensitive projects between one and five acres. Staff reviewed and commented on Stormwater Pollution Prevention Plans for three projects between July 1, 2006 and June 30, 2007. See Table 7-1 below for a summary of SWPPP reviews. Other project reviews completed by Clean Water Program Staff as part of the permitting process were previously addressed in Section 6.0, Land-Use Planning for New Development.

Table 7-1 Storm Water Pollution Prevention Plan Reviews, 2006-07

Site Name	Address	Size (acres)	NOI?	Review Date
Rancho Summit	Fortuna Ranch Rd & Rancho Summit Dr	11.2	Yes	05/01/07
Belmont Cardiff	3535 Manchester Ave	4.4	Yes	5/16/07
Holland Residence	1415 Rainbow Ridge Ln	4.58	Yes	6/14/07

Through the review and plancheck process, staff may require additional or alternative BMPs to be implemented on individual projects. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

7.2 Summary of Inspections

The City of Encinitas Engineering Department employs six engineering inspectors to oversee construction activities in the City and verify that minimum BMPs are implemented. Four of the inspectors are under contract, while two inspectors are employed full time by the City of Encinitas. Stormwater inspections were performed regularly by engineering inspectors and occasionally by Clean Water Program staff. There were 22 sites designated as high priority during the 2006-07 wet season. High priority designations were given to sites based on proximity to receiving water, size of site, and/or existing or new slopes.

Engineering inspectors are responsible for inspections at all construction sites. Stormwater issues (compliance with the grading and stormwater ordinance) have become one of their main focuses, especially during the wet season. Engineering inspectors were onsite inspecting high priority locations on a daily basis and were constantly monitoring BMPs installed and in use by developers, so that all high priority sites were inspected on a weekly basis, at a minimum. The high priority inspections are documented weekly. Staff documented a total of 579 stormwater inspections (371 were at high priority sites and 208 were at medium and low priority sites) during the wet season, spanning October 1, 2006 to April 30, 2007.

In addition to the high priority sites, a total of 112 medium and low priority sites were identified for the rainy season. Both medium and low priority sites were inspected at least twice during the wet season for a total of 208 documented inspections at these locations. Inspectors are at all of these sites at a minimum of once a week inspecting stormwater BMPs, as well as other construction related issues.

A copy of the Construction Site Storm Water Checklist for FY 2006-07 is included in Appendix G-3.

7.2.1 2005-06 Annual Report Comment Response

RWQCB Comment: The Annual Report States that all sites were inspected at the required frequency during the rainy season. The report provides a detailed account of the number of sites (23 high and 95 medium/low priority), and number of documented inspections conducted during the rainy season (437 at high and 55 at medium/low priority sites). The report clearly explains that all required inspections were conducted but some, especially of medium/low priority sites, were not formally documented. Please be aware that the Regional Board expects the City to document completed inspections and keep the records on file. The new Municipal permit requires the Co-permittees to create written or electronic inspection reports to verify that sites are inspected at the minimum required frequencies (section D.2.d(6)(f), p. 31)

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program (JURMP) per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008. As part of this update process, the Construction component shall be developed and implemented to meet the requirements of the Permit as referenced in the comment above. Specifically, mechanisms shall be put in place to facilitate effective and efficient documentation of construction inspection activities in order to verify required inspection frequencies.

7.3 Compliance and Enforcement Actions

7.3.1 General Enforcement

Enforcement actions fall into several categories as outlined in the Jurisdictional Urban Runoff Management Plan for the City of Encinitas.

The first level of enforcement is based on education. When Clean Water Program Staff or engineering inspectors noticed a deficiency with BMPs on a construction site, the inspector attempted to contact the superintendent onsite at the time of inspection. When this approach was feasible, education was given to the superintendent in the forms of verbal advice and/or written information regarding best management practices. If the superintendent was not available, a copy of the inspection report was given to the engineering inspector for the project and discussed in detail, thereby educating the inspector and allowing him to educate the superintendent in the field.

The second level of enforcement is the issuance of a written Notice of Violation (NOV). Typically, contractors cooperated with requirements without staff issuing Notices of Violation to stop or correct work. The written NOVs are sub-divided into two categories: a Notice to Correct Work, and a Notice to Stop Work. When a Stop Work is issued, all work on the construction site must cease, with the exception of necessary erosion control, sediment control, or materials management practices. Notices of Violation are issued with a date for compliance and are followed up during future inspections.

On occasion, citations are issued for the most flagrant violations. The administrative citation process is most often used for citations, providing staff the ability to issue fines on-site when necessary.

An additional enforcement mechanism is referral to the Regional Water Quality Control Board. This occurs when a violation involves non-filing under the State General Construction Permit or when a significant sediment discharge occurs.

7.3.2 Reporting and Non-compliance

During the rainy season 2006-07, six complaints were received through the City's hotline and fifty one complaints of non-compliance were reported by the City's engineering inspectors. As a result, 51 NOVs/Notices to Correct Work and one (1) Stop Work Notice was issued. No citations were issued during FY 2006-07. With immediate oversight from the City's engineering inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance. See Table 7-2 for a summary of violations in FY 2006-07.

7.4 Construction Education

Education for construction sites performed during this reporting period are listed below and are also discussed in Section 9 of this Annual Report.

- In September 2006, the Senior Civil Engineer of Field Operations sent 111 Erosion Control letters to all grading permit holders in the City. This letter addresses BMP requirements that are the responsibility of the permit holder in regards to erosion and sediment control during the wet season. The letter reiterates sections of the City's

Grading Ordinance, Encinitas Municipal Code Section 23.24.370. A copy of this letter is included as Appendix G-4.

- Announcements at pre-construction meetings. All pre-construction meetings are attended by the Engineering Department. The BMP requirements for construction and the concepts of post-develop BMPs are introduced and SUSMP requirements are outlined.

- Coordination with construction inspectors. Staff from the Clean Water Program attended weekly inspector staff meetings to provide support and information to inspectors.

- Individual communication during inspections. Stormwater and construction inspectors provide BMP requirements and information to contractors and developers on a weekly basis in the field during inspections of stormwater protection measures.

- Printed materials were provided to contractors and developers in the form of the City's bilingual English/Spanish brochure, "Devlopers-Simple and Cost Effective Ways to Comply with Storm Water Regulations" (Appendix E-1). The City also widely distributed the North County Storm Water Program's brochure "A Pollution Prevention Guide for the Construction Industry" (Appendix E-9). During the FY 2006-07 approximately 238 brochures were distributed.

7.5 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

Table 7-2 Construction Enforcement Action FY 2006-07

Date	Site Address	Violation	Correct Work	Stop Work	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine	Complaint
10/04/06	Encinitas Blvd & Quail Gardens Dr.	Lack of BMPs		X						
10/05/06	236-238, 290 Andrews Ave.	Lack of BMPs	X							
10/05/06	1555 Bella Vista	Lack of BMPs	X							
10/05/06	Encinitas Blvd & Quail Gardens Dr.	Lack of BMPs	X							
10/05/06	201 Quail Road	Lack of BMPs	X							
10/05/06	Wildflower Valley Dr.	Lack of BMPs	X							
10/10/06	Mackinnon Ave @ Birmingham	Lack of BMPs	X							
10/10/06	201 Quail Road	Lack of BMPs	X							
10/11/06	1653 Burgundy Rd.	Lack of BMPs	X							
10/12/06	236-238, 290 Andrews Ave.	Lack of BMPs	X							
10/12/06	Wildflower Valley Dr.	Lack of BMPs	X							
10/13/06	3230 Bella Colina	Lack of BMPs	X							
10/13/06	1555 Bella Vista	Lack of BMPs	X							
10/13/06	Encinitas Blvd & Quail Gardens Dr.	Lack of BMPs	X							
10/18/06	200 block Seeman Drive	Lack of BMPs	X							
10/18/06	Wildflower Estates	Lack of BMPs	X							
10/19/06	1555 Bella Vista	Lack of BMPs	X							
10/19/06	Encinitas Blvd & Quail Gardens Dr.	Lack of BMPs	X							
10/23/06	Third and B St.	Maintenance of BMPs	X							
10/24/06	477 El Camino Real	Lack of BMPs	X							
10/25/06	3275 Poppy Hills Lane	Lack of BMPs	X							
10/26/06	Pireaus & Plato	Maintenance of BMPs	X							
11/03/06	406 La Costa	Lack of BMPs	X							
11/06/06	1521 Summit Ave	Lack of BMPs	X							
11/15/06	1555 Bella Vista	Lack of BMPs	X							
11/29/06	1555 Bella Vista	Lack of BMPs	X							
11/29/06	Wildflower Dr.	Lack of BMPs	X							
12/12/06	540 Cornish Dr,	Lack of BMPs	X							
12/14/06	1555 Bella Vista	BMP Maintenance	X							

Date	Site Address	Violation	Correct Work	Stop Work	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine	Complaint
12/19/06	1555 Bella Vista	Lack of BMPs	X							
1/04/07	1555 Bella Vista	Lack of BMPs	X							
1/04/07	Wildflower Dr.	Lack of BMPs	X							
1/15/07	1270 Rubenstein Ave.	Lack of BMPs	X							
1/18/07	1555 Bella Vista	BMP Maintenance	X							
1/18/07	Wildflower Dr.	Lack of BMPs	X							
1/23/07	406 La Costa	BMP Maintenance	X							
1/23/07	Wildflower Dr.	BMP Maintenance	X							
1/24/07	1555 Bella Vista	BMP Maintenance	X							
2/01/07	1555 Bella Vista	BMP Maintenance	X							
2/01/07	Wildflower Dr.	Maintenance of BMPs	X							
2/06/07	3358 Wildflower Valley Dr.	Maintenance of BMPs	X							
2/07/07	736 Fourth St.	Maintenance of BMPs	X							
2/08/07	1555 Bella Vista	Lack of BMPs	X							
2/14/07	Wildflower Dr.	Lack of BMPs	X							
2/22/07	1555 Bella Vista	Lack of BMPs	X							
2/27/07	293 Hillcrest Dr.	Lack of BMPs	X							
2/27/07	406 La Costa	Maintenance of BMPs	X							
2/28/07	3342 Wildflower Valley Dr.	Lack of BMPs	X							
3/05/07	1270 Rubenstein Ave	Lack of BMPs	X							
3/12/07	1450 Paseo del las Flores	Lack of BMPs	X							
4/09/07	403 Sheffield	Lack of BMPs	X							
FY 2006-07	**TOTALS**		**50**	**1**						

8.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

The Municipal Permit requires the establishment of an illicit connection/illegal discharge (IC/ID) program to actively seek and eliminate illicit connections and illegal discharges. This component describes the activities of the IC/ID program including the dry weather monitoring program, sanitary sewer overflows in the Encinitas Sanitary District/Cardiff Sanitary District (ESD/CSD) and in Leucadia Wastewater District (LWD), and public reporting of illicit discharges.

This program actively involves the municipal Clean Water Program staff, the sanitary districts (ESD/CSD, LWD), San Diego County and municipal Hazardous Materials teams, Fire Departments, Public Works, and the citizens of Encinitas. When an illicit discharge is detected in the monitoring programs or reported to the City, Clean Water Program staff investigates, inspects, eliminates, and follows up on the discharge. The City has trained and organized the municipal staff to detect and report illicit discharges and has also established an active public hotline to facilitate public reporting of illicit discharges.

8.1 Illicit Discharge and Connections Identification

8.1.1 Illicit Discharge Source Identification

The City of Encinitas incorporates four methods into source identification for illicit discharges including: dry weather monitoring, the stormwater hotline, routine inspections, and visual inspection of the Municipal Separate Storm Sewer System (MS4). These methods are discussed below.

Dry Weather Monitoring
Staff performs dry weather monitoring as required by Permit Section F.5.b, Dry Weather Analytical Monitoring. The City uses this program to better understand the water quality of its waterways and to detect illicit discharges. This program is described further in Section 8.2 of this document.

Stormwater Hotline
The second method in place to identify and eliminate illicit discharges is through the City's stormwater hotline, which receives complaints and referrals 24 hours a day. The hotline is staffed during business hours and includes a telephone number for after-hours emergencies. Staff carries an NPDES specific pager in order to respond promptly to after hours emergencies.

Routine Inspection
The third method utilized by City staff is routine inspection of businesses in order to further source illicit discharges. Industrial sites are inspected annually and are described in detail in Section 3.0, the Industrial Component, of this report. Commercial facilities deemed high priority are inspected on a routine and as-needed basis. The commercial inspections program is described in Section 4.0, the Commercial Component of this document.

Visual Inspections of the MS4
The fourth method of source identification employed by the stormwater and public works staff is through visual inspection of the MS4. When illicit discharges are observed, stormwater staff is notified and necessary measures are taken, starting with education, enforcement, and/or cleanup. Section 2.0, the Municipal Component, of this document describes the routine visual inspections performed by City staff. In FY 2006-07, 53 of the 156 total complaints were

reported by City staff as a result of visual monitoring of the MS4. These represent 34% of the total complaints received this fiscal year.

8.2 Dry Weather Analytical Monitoring

8.2.1 MS4 Map

A map of the MS4 was developed as required per the Consent Decree with Baykeepers (1999). The information is maintained in a Geographical Information System (GIS). The City of Encinitas has continued to refine and populate its GIS-based MS4 map throughout the reporting period. On a sub-basin by sub-basin basis, staff has been reviewing improvement, utility, and construction plans to verify the existing GIS maps and add storm drain features. In addition, Global Positioning System (GPS) verification has been performed for storm drains and creeks that are not shown on project plans or for which project plans are not available. The current map of the City of Encinitas MS4 and Dry Weather Monitoring Stations is located in Appendix H-1.

8.2.2 Dry Weather Analytical Monitoring Stations

Dry weather monitoring locations were selected based on adequate coverage of the MS4, allowing for characterization of flows and a better understanding of the water quality in Encinitas. This allows for the identification and tracking of exceedances, indicating the possibility of illicit discharges to the MS4. Efforts were made to cover the entire jurisdiction and isolate particular areas of the storm drain system according to factors such as land use or previous water quality data. The Dry Weather Monitoring Program for 2007 included 52 locations distributed across eight sub-basins.

8.2.3 Dry Weather Analytical Monitoring Procedures

The City's Dry Weather Monitoring Program utilizes methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittee Dry Weather Monitoring Workgroup. The elements of the dry weather program include 52 sampling locations, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Qualitative observations were made at all sample locations. Each location has a unique field data sheet noting observations such as color, clarity, odor, and biological characteristics which are featured in the appendices of the report. Each of these procedures is discussed further in the Dry Weather Monitoring Report for 2007, located in Appendix H-2.

Field tests were performed at 33 sites. Meters were used in determination of pH, conductivity, temperature, and turbidity. Ammonia, ortho-phosphate, and MBAS analysis were performed with CHEMetrics field kits. Nitrate-nitrogen was analyzed using a Hach Spectrophotometer. Where possible, flow was determined by filling a bottle of known volume using a timer and an estimation of the amount of flow captured. Flow was not able to be measured in certain locations, often due to lack of flow, but was noted as either flowing or ponded at all locations.

8.2.4 Dry Weather Data Analysis

Detailed analyses of the 2007 dry weather data are included in Appendix H-2, the Dry Weather Monitoring Assessment, May 1, 2007 – September 30, 2007.

8.3 Investigations/Inspections and Follow-up

Table 8-1 summarizes follow-up investigations performed as a result of dry weather monitoring in 2007.

Table 8-1 IC/ID Investigations in Response to Dry Weather Monitoring, 2007

Sample Location	Parameter(s) Exceeded	Suspected Cause(s)
LUC-4	Bacteria, Orthophosphate	Animal sources and over-irrigation

In addition to the investigation performed as a result of dry weather monitoring results, many source identification investigations were performed in response to complaints received via the stormwater hotline and from City staff. On February 5, 2007 Clean Water staff received a complaint regarding an illegal discharge of grease into the municipal stormwater conveyance system in the Cardiff sub-basin. The discharge impacted approximately 688 ft. of the City's main 60 inch storm drain line. Clean-up and containment efforts were initiated immediately. A $100.00 citation was issued to both responsible parties, the restaurant owner and the property management company. The property manager also contracted with Gold Coast Flood Restorations and Affordable Pipeline Services to clean the storm drain line with a final billing of $20,060.50. A follow-up sample for oil and grease and bacteria was collected downstream on February 13, 2007 and all results were below action levels. A complete table with all IC/ID complaint investigation dates, discharges, investigations, follow-ups and enforcement activities is included in Appendix H-5.

8.4 Elimination of Illicit Discharges and Connections

The City utilizes three primary methods for the identification of illicit discharges and connections. These include: complaint responses via the stormwater hotline, City staff complaints and City staff observations and detection and elimination through monitoring (primarily dry weather).

There were a total of 156 complaints filed with the Clean Water Program in FY 2006-07. All 156 complaints were investigated with sources being identified in the majority of the cases. Ten complaints were requests for information or referred to other agencies or jurisdictions. The remaining 146 complaints were investigated and resulted in a total of 159 enforcement actions which included education (82), Notice of Violations (45), Administrative Citations (29) and cost recoveries (3) for illegal discharges. Appendix H-5 identifies all 159 enforcement actions which include: complaint dates, details of substances discharged and the resulting action taken by City Staff to eliminate and prevent discharges in the future.

The most flagrant violations observed by City staff resulted in Administrative Citations and cost recoveries issued to the responsible party. Table 8.2 below summarizes the most serious of the violations and the resulting action.

Table 8-2 Citations Issued FY 2006-07

Date	Code Violation	Violation Description	Fine	Cost Recovery	Category
7/31/06	20.08.040B	Illegal discharge of auto oil	$100.00	$1868.88	Commercial
7/31/06	20.08.040B	Illegal discharge of auto fuel	$0	$433.38	Commercial
8/3/06	20.08.040B	Illegal discharge of concrete	$100.00	$0	Commercial

Date	Code Violation	Violation Description	Fine	Cost Recovery	Category
		waste			
8/5/06	20.08.040B	Illegal discharge of food debris and wash water	$200.00	$0	Commercial
10/13/06	20.08.040B	Illegal discharge of concrete waste	$100.00	$0	Residential
10/18/06	20.08.040B	Illegal discharge of wash water	$100.00	$0	Commercial
11/16/06	20.08.040B	Illegal discharge of antifreeze	$100.00	$0	Commercial
11/20/06	20.08.040B	Illegal discharge of wash water	$200.00	$0	Commercial
1/2/07	20.08.040B	Illegal discharge of wash water, food and grease	$100.00	$0	Commercial
1/15/07	20.08.040B	Illegal discharge of paint	$100.00	$665.00	Commercial
1/31/07	20.08.040B	Illegal discharge of sediment	$100.00	$0	Commercial
2/13/07	20.08.040B	Illegal discharge of grease	$100.00	$0	Commercial
2/28/07	20.08.040B	Illegal discharge of oil and wash water	$100.00	$0	Commercial
3/22/07	20.08.040B	Illegal discharge of motor oil	$100.00	$0	Residential
6/7/07	20.08.040B	Illegal discharge of wash water	$100.00	$0	Commercial
		TOTAL	**$7600.00**	**$7,360.80**	

The major illicit discharges and connections eliminated this reporting period are summarized above in section 8.3 above.

In addition to routine elimination of illicit discharges and connections through monitoring and complaint response, the program continues to address sanitary sewer overflows caused by grease blockages. The City has instituted a requirement that new restaurants or significant tenant improvements (TI) to restaurants will install a grease interceptor. Each situation is evaluated on an individual basis and specific requirements are established. Currently, through the Encinitas Municipal Code Chapter 18.04 – General Sewer Regulations, the City has the authority to require new restaurants or remodels to install grease traps or interceptors. During the reporting period, all new restaurants and those submitting plans for TI were required to install grease interceptors.

8.5 Enforce Discharge Prohibitions Ordinance

In FY 2006-07, Clean Water Program staff evaluated all reported illegal discharges and proceeded with appropriate enforcement actions as necessary. In total, City staff issued 29 Administrative Citations with 15 carrying fines of $100.00 or more and three additional notices for cost recovery. Additionally, a total of 45 Notices of Violation were issued. With appropriate education and enforcement, numerous illegal discharges and connections were eliminated. A copy of the City's Administrative Citation is included in Appendix H-4.

Figure 8.1 below illustrates the percentage of complaints related to residential, commercial, construction, and municipal activities.

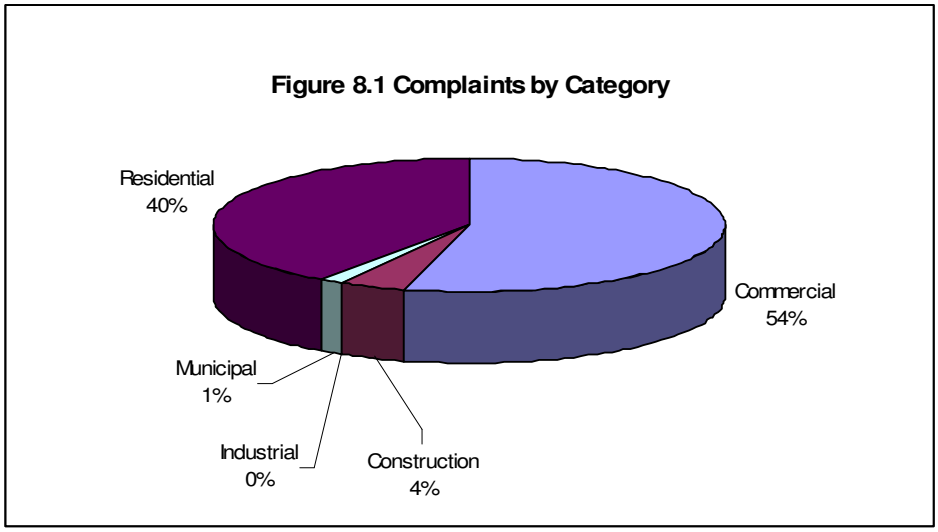

Commercial complaints which comprised of 54% of all complaints received, resulted in 42 educational actions, 27 Notice of Violation, 23 citations and three cost recovery actions. Residential complaints which comprised of 40% of all complaints received, resulted in 37 educational actions, 17 Notices of Violation and six citations. Construction complaints, which comprised of 4% of all complaints received, resulted in three educational actions and one Notice of Violation. Municipal complaints which comprised 1% of all complaints received were referred to the City's Public Works Department for immediate maintenance. There were no industrial complaints this fiscal year.

Figure 8.2 depicts the breakdown of enforcement actions per complaint category.

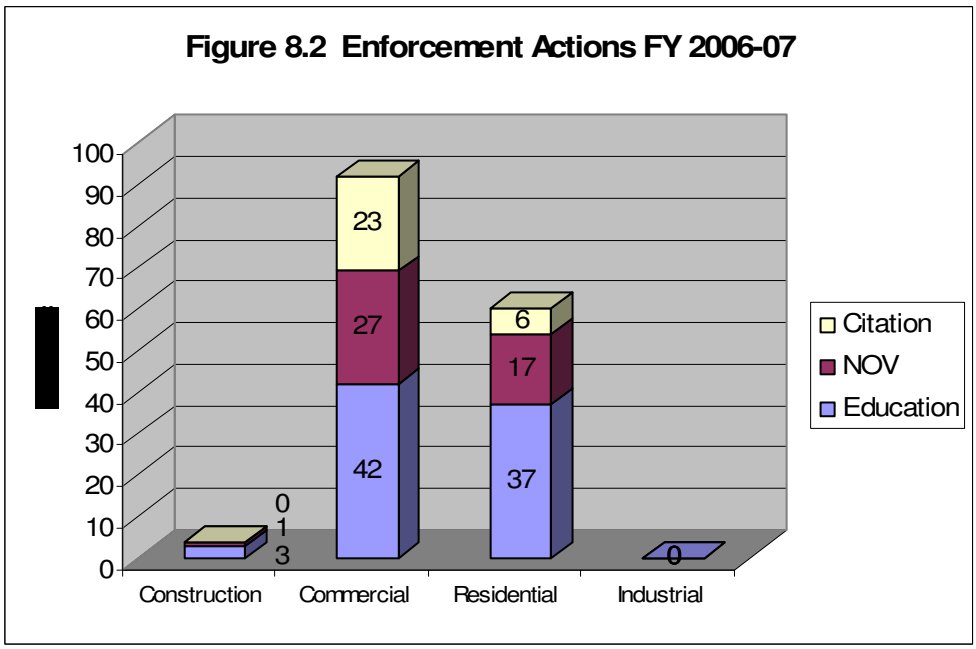

8.6 Sanitary Sewer Overflows

Two separate agencies, Leucadia Wastewater District (LWD) and Encinitas Sanitary Division/Cardiff Sanitary Division (ESD/CSD), provide sewage collection and disposal for the City of Encinitas. LWD operates in the northern half of the City and ESD/CSD services the southern half of Encinitas. Wastewater from LWD and ESD flow north to the Encina Wastewater Treatment Facility and CSD flows south the San Elijo Water Reclamation Facility.

Table 8-3 contains a summary of all sanitary sewer overflows in Encinitas in the FY 2006-07.

Table 8-3 Sanitary Sewer Overflows, FY 2006-07

Date	Agency	Location	Volume Spilled (gal)	Volume Recovered (gal)	Volume Released (gal)	Cause
8/14/06	ESD	Cottonwood Creek Park	200	0	200	Vandalism-Rocks thrown into manhole
9/5/2006	LWWD	1570 Burgundy Ln	30	0	30	Lateral blockage
12/13/06	LWWD	277 N. El Camino Real	300	150	150	Tree roots
1/2/07	LWWD	829 Hygeia Ave.	100	100	0	Lateral blockage
1/3/07	LWWD	1357 Ahlrich Ave.	20	20	0	Lateral blockage
5/21/07	LWWD	135 Avocado	30	30	30	Baby wipes

8.6.1 Other Spills

The City of Encinitas Fire Department responded to 31 Hazardous Materials Incidents in FY 2006-07. These incidents ranged from gasoline spills, gas leaks, oil spills and chemical spills. The Fire Department is equipped with containment booms, absorbent material, shovels, storm drain covers and disposal equipment. The Fire Department is typically the first responder to contain the site and will notify the Public Works Department and the Stormwater Division. The Public Works Department will respond with additional sandbags, absorbent materials a Vac-con truck and increased manpower. The Stormwater staff will provide maps and locate the extent of contamination and sites for potential recovery. Samples and pictures will be taken for potential court action and cost recovery. Figure 8.3 illustrates the distribution of HazMat incidents for FY 2006-07. The hazardous materials incident listings for the Encinitas Fire Department are included in Appendix H-6.

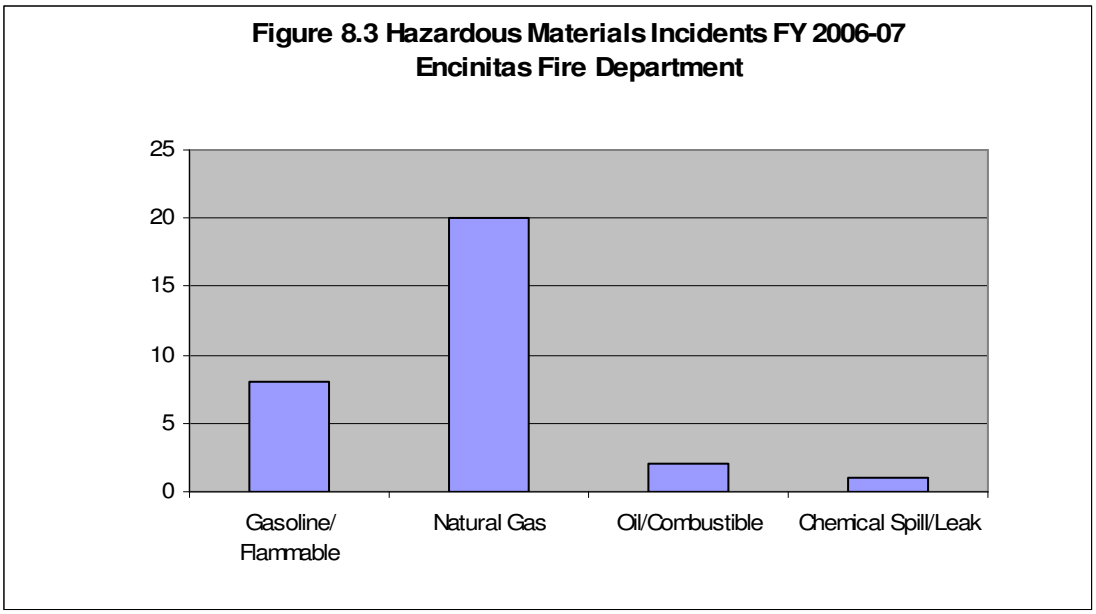

The City of Encinitas also has a contract with the Hazardous Incident Response Team (HIRT) who will respond when the chemical is unknown or hazardous.

8.7 Public Reporting of Illicit Discharges and Connections – Public Hotline

8.7.1 Methods of Reporting

Multiple opportunities are provided to facilitate public reporting of illicit discharges and connections to the City Clean Water Program Staff. Clean Water Program staff maintains a hotline available to the public for reporting stormwater discharges and public works maintains one for sewage related discharges. The public also often notifies City employees, all of whom are trained in stormwater issues and promptly notify Clean Water Program Staff.

The City of Encinitas has configured their enterprise GIS system to create and handle both commercial and complaint driven stormwater inspections in a program called Cityworks. A copy of the Cityworks training manual is included in Appendix D-3. The training manual establishes the procedures for creating service requests and work orders from complaints. The system supports the entry of service requests for citizen complaints, inspection results, ad-hoc and cyclical work orders, and report generation. All of the information stored in the system is accessible to any user through the City's standard desktop GIS application - CityGIS. The environmental inspector follows up on complaints and then determines whether an enforcement action is necessary. When a warning, citation, or Notice of Violation is issued then a case file is created in Cityworks. In the case of no violations, verbal instruction and educational materials are given. Cityworks is a useful tool for tracking all complaints, follow-ups, enforcement and education efforts.

The Clean Water Program staff received 156 complaints from two major sources this year, staff and public complaints. The complaints summary is included in Appendix H-6. Approximately 103 of the 156 complaints were reported via the stormwater hotline. City staff reported approximately 53 complaints.

Figure 8.4 shows the breakdown of the methods used to report complaints.

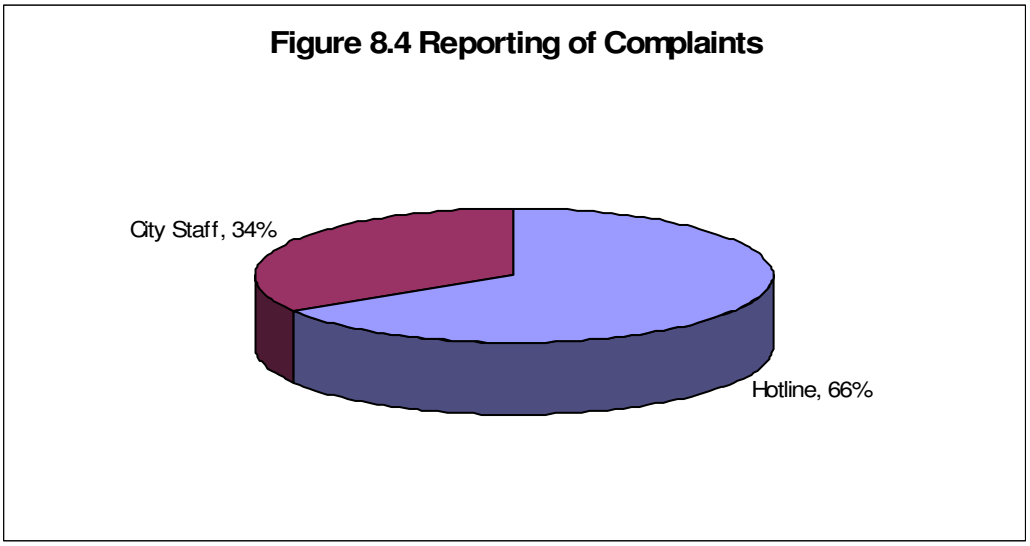

8.7.2 Categories of Complaints

This fiscal year the majority of complaints reported by the public via the stormwater hotline are primarily related to residential and commercial activities. Approximately 30% of the hotline complaints reported are residential, 30% are commercial complaints, 4% are construction complaints and the fewest hotline complaints, 1% is related to municipal activities.

Figure 8.5 illustrates the complaints distribution for the past six reporting periods.

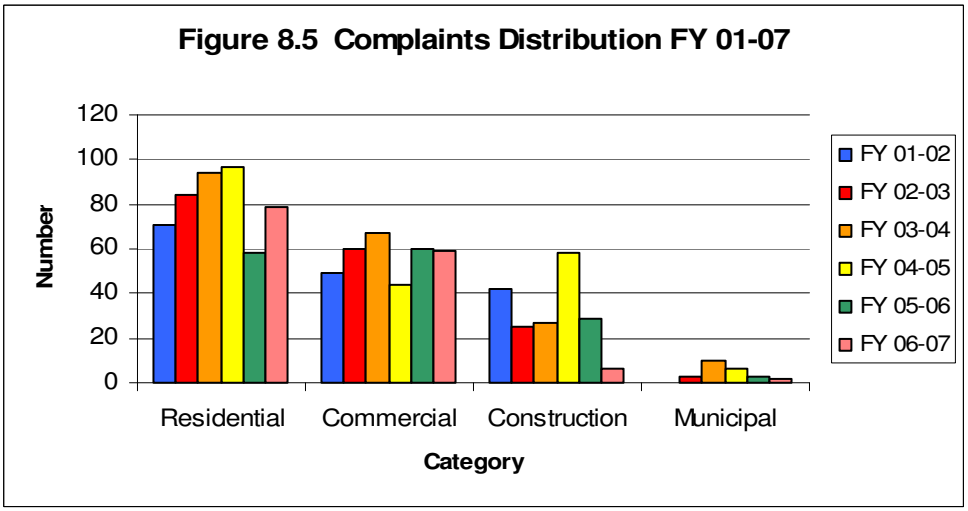

Figure 8.6 shows the percentage of complaints reported via the stormwater hotline by the category of complaint.

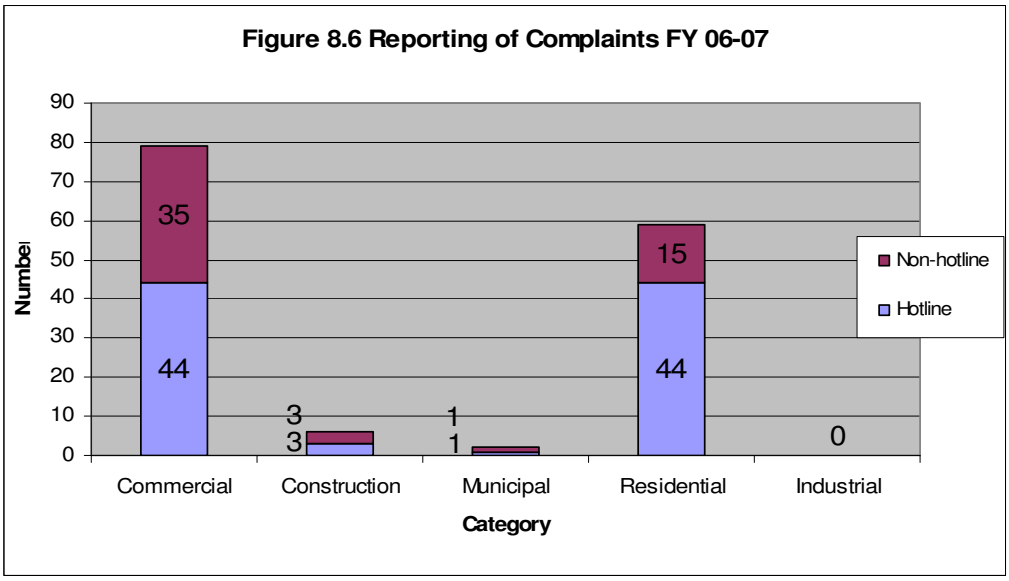

Enforcement in each category varied according to the complaint. Both commercial and residential complaints were primarily resolved with education. However, both the commercial establishments and residents received more enforcement actions than in past years. A breakdown of the enforcement actions performed per type of complaint is presented above in Figure 8.2.

8.7.3 Distribution of Complaints

The City of Encinitas is broken up into eight distinct drainage sub-basins. These sub-basins are shown on the Dry Weather Analytical and Field Screening Monitoring Stations Map, included in Appendix H-1. Of these eight sub-basins, the Encinitas Sub-basin had the largest number of reported complaints. The Leucadia and Cardiff Sub-basins had many complaints reported as well. In Figure 8.7 the numbers of complaints are compared to water quality exceedances in the sub-basins. This correlation assists the City in prioritizing sub-basins.

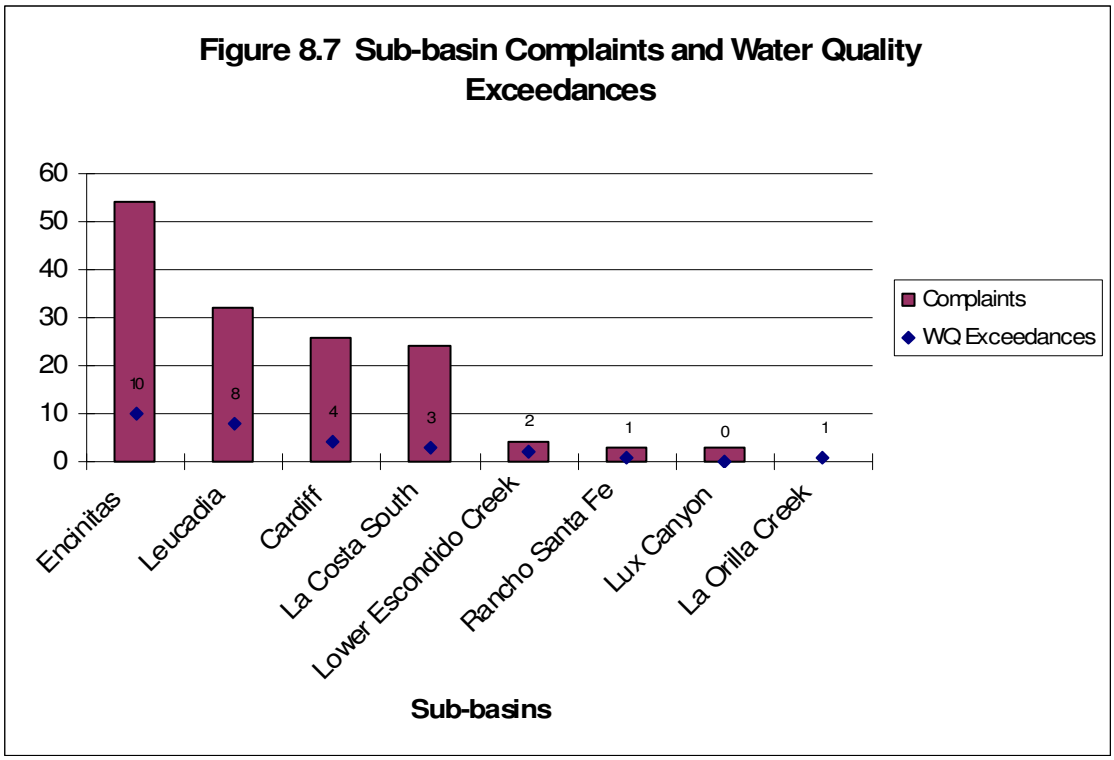

8.7.4 Hotline Utilization

Through the efforts of the education component of the Clean Water Program, the general public in the City of Encinitas has become aware of the effects of illicit discharges on the environment. Methods to report stormwater issues were continually advertised during this reporting period. As illustrated in Figure 8.8, both City staff and the public continue to actively participate in the reporting of suspected illegal discharges and illegal connections.

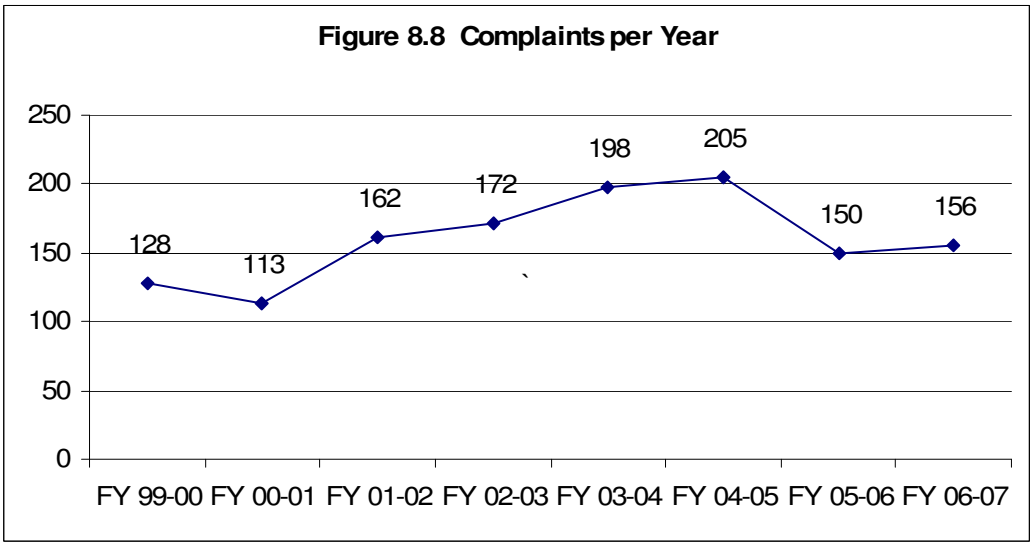

8.8 Limiting Infiltration from Sanitary Sewer to MS4

The Municipal Permit requires that jurisdictions that operate both municipal sanitary sewer system and an MS4 must implement controls and measures to limit infiltration of seepage from these sewers to their MS4.

The City performed capital projects to repair the sewer system to reduce the potential for leakage of sewage into the MS4, to improve the integrity of the MS4 to prevent infiltration of sediments and pollutants, and to repair and maintain roadways to minimize erosion and pollutants from entering the MS4. During FY 2006-07, the following sewer (Table 8-4), and MS4 repair projects (Table 8-5) were completed or initiated:

Table 8-4 Wastewater Projects

Project Name	Goal	Status
Moonlight Beach Pump Station Rehabilitation*	Reduce sewage spills and increase capacity.	Completed
Regal Pump Station Removal	Reduce sewage spills & remove pump station replacing it with a new gravity sewer.	Completed
Olivenhain Pump Station Upgrades	Improve pump station reliability emergency storage capabilities added, ability to capture first flush runoff and send to the pump station wet well	In preliminary design
Hwy 101 Sewer Forcemain, Phase III	Replace 35 year old ductile iron pipe to reduce sewage spills and leaks.	Completed
Moonlight Beach Pump Station Rehabilitation*	Reduce sewage spills and increase capacity.	Completed

Table 8-5 Stormdrain Projects

Project Name	Goal	Status
Lone Jack (Stratford Knoll) Channel Improvements	Install new storm drain	In Design Phase
4th Street Storm Drain	Eliminate flooding and erosion of beach area	Design Complete. Waiting for additional funding for construction.
Santa Fe Drive Storm Drain	Eliminate flooding and erosion along Santa Fe Drive from Bonita Drive to Nardo Road.	Complete
Bonita Drive Storm Drain	Eliminate flooding and erosion along with replacing broken spillways and concrete channel on Bonita Drive from Santa Fe Drive to Melba Road.	Complete
Windsor Rd. Storm Drain	Slip lining of a collapsing CMP pipe on Windsor Rd.	Complete

The City requires a 10-foot clearance between any sewer and storm drain facility, reducing the possibility for sewage to inflow into the MS4.

The MS4 is cleaned annually and inspected thoroughly during this cleaning by Public Works staff. This process is detailed in Section 2.0.

The City's Wastewater Collections Division purchased a Closed Circuit Television (CCTV) camera and truck in August of 2002. This equipment allows the City to televise sections of the sanitary sewer system or the MS4 in order to assess integrity or to investigate problems. If problems such as cracked pipes or illegal connections are suspected, City staff televises lines to check the integrity of pipes or to survey for illegal connections to the MS4. During FY 2006-07, wastewater collections staff televised approximately 14.3 miles of the sanitary collections system, focusing primarily on the Encinitas and Cardiff sub-basins. Staff also investigated hotspots and televised areas for preventative maintenance purposes. The CCTV equipment was also utilized on an as needed basis to televise portions of the MS4. This televising was in response to complaints regarding illegal connections to the storm drain system or in response to water quality exceedances detected through routine monitoring.

8.9 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

9.0 EDUCATION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of storm water issues, while the public participation component, discussed in Section 10, provides opportunities for the public to become involved in the process of education and reducing pollutants of concern in storm water and urban runoff. The education component is primarily implemented by the Engineering Services Department (Clean Water Program).

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of children and their parents in the community regarding storm drain pollution and ways they can help and improve their scientific understanding with real life situations.
(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment over the cycle of the Municipal Permit.

The City performed a wide variety of storm water education activities during the FY 2006-07 reporting period. Education and outreach was preformed on three levels---Jurisdictional, Watershed and Regional. The focus of this year's program was environmental education for schools and general storm water and watershed education for citizens. Section 9.2 summarizes the specific activities utilized as they relate to specific target audiences.

9.1 Outreach Tools / Approaches

Following is a list of the types of educational tools and approaches that are used in the City's educational program.

(a) Print Media. Newspaper advertisements or articles, newsletters, brochures, fact sheets and printed BMP information are used to inform and educate target audiences.

(b) Brochures/Printed Materials. Educational brochures are used to reach specific target audiences (e.g., home do-it-yourselfers, businesses, etc.) with water quality and BMP information. The City produced and disseminated several specific activity-based or trade-appropriate brochures (Appendix E-1). Printed materials were included, as much as feasible, on our City website. Contact information and referrals to other topical references were provided.

(c) Surveys. The North County Storm Water Program created a pet waste survey and a small watershed survey to be given out at public events throughout the Carlsbad watershed. The six question pet waste survey asks about the public's view on picking up pet waste and shows us how many people actually know what happens to waste that is not picked up. The two question watershed survey asks what a watershed is, and if residents think they live in a watershed or not. These surveys were given out on a trial basis at Encinitas Environment Day in June 2007. (Appendix E-10)

(d) News Media Releases. Articles and press releases are distributed for inclusion in City newsletters and local papers. Likewise, homeowners and trade and industry associations are encouraged to print articles in their newsletters. Media releases were used to announce special promotions, beach clean up days, and special events.

(e) Municipal Facilities / Public Lobbies. The City Hall Community Center public lobbies are

used for distributing posters, brochures, and other educational items. Permit counters located at City of Encinitas City Hall (construction, grading, hazardous materials, etc.) are also a primary tool for distributing trade-related materials to the business sector.

(f) **Storm Drain Stenciling**. It is the goal of the City to have all storm drain inlets stenciled with a storm water message. In FY 05-06, the City moved from painted stencils to a plaque-type stencil. The plaque is applied with glue and maintains its high quality for a longer period of time (Appendix E-3).

(g) **Promotional Items**. The City's Clean Water Program uses promotional items that are given out at community events and schools. These items are imprinted with a storm water message and the Clean Water Hotline.

(h) **Other Advertising**. The City participates in the Regional Outreach Program to explore the use of other, non-traditional advertising, including the use of slides in movie theatres, bookmarks, coupons for car washes, and messages printed on billing inserts.

(i) **Workshops/Training.** Workshops and training sessions are very effective tools for providing specific information to agency personnel and specific industries. The City uses this "hands on" approach primarily to educate internal City employees. Storm water training was given to the Public Works Streets and Waste Water Divisions, as well as to the San Dieguito Water District. The City will continue to use workshops and training opportunities for increasing awareness and knowledge, conveying complex or technical information, and instructing attendees on the use of specific best management practices and pollution prevention techniques.

(j) **Hotlines**. The City has a local hotline for storm water concerns and complaints. The hotline number is (760) 633-2787 and connects the caller directly to the staff in the Clean Water Program. An after-hours storm water hotline has been added to the daytime hotline number and is dispatched to field inspectors during evenings, weekends, and holidays. Last year the hotline was included in the Government Listings of the San Diego Directories 2006 Phone Book. There are also currently two regional storm water hotline numbers promoted within San Diego County, a toll-free Regional Storm water Hotline, 1-888-846-0800 and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines, during regular business hours, the hotlines provide a voice mail message for 24-hour public access.

(k) **Internet Websites**. The City currently has a website that includes several pages of information regarding storm water. The storm water information is easily accessible through a pull-down window on the homepage, and through links in the Engineering Services Department and Public Works pages. By clicking on "Clean Water Program" several pages can be accessed (Appendix E-4).

(l) **Community Events**. Community events such as informational booths at community fairs and family festivals provide a conduit to distribute information and resources directly to target communities. On a regional and jurisdictional level, the City participated in the North County Storm Water Programs' educational booths at four different events.

(m) **School Programs**. Education of school children is essential for promoting storm water awareness and responsibility. The Solana Center, located in Encinitas, is active in school education and promotes pollution prevention, recycling, composting, water quality and general environmental education at Encinitas schools and throughout the county. The Clean Water Program, along with the Solana Center and other City departments, participated in

Public Works Week (May 22-24, 2007), giving presentations at Cardiff Elementary School and Ocean Knoll Elementary School. The Clean Water Program is working with the Regional Outreach Workgroup to develop a Regional program to educate elementary school students.

9.2 Jurisdictional Education Activities

The Municipal Permit establishes the following six target audiences which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Operators
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and Schoolchildren
- Quasi-Governmental Agencies / Districts

This section describes how the Outreach Tools/Approaches presented in Section 9.1 were applied to all target audiences and then to each individual target audience. It should be noted that there is crossover education that occurs during the education process of each target audience. The activities were performed on a jurisdictional level, unless noted.

9.2.1 All Target Communities

- General storm water brochures were disseminated at the City Hall front desk, the Engineering Counter, employee education sessions, and public events. (Appendix E-2)
- Stencils have been placed at inlets, and as storm drain inspections note damage, they are replaced. New projects are required to install decals on projects before completion and acceptance. (Appendix E-3)
- The City of Encinitas updated the Clean Water Program website to add a shorter link to the City's website, http://cwp.ci.encinitas.ca.us, which takes one directly to the Clean Water Program section of the City's site. In addition, the website was updated to include more comprehensive information regarding the Clean Water Program (Appendix E-4), and includes:
    1. Clean Water Program summary page
    2. "Frequently Asked Questions" page
    3. JURMP summary page, with the JURMP Annual Report
    4. Clean Water Fee description page
    5. The Encinitas Storm Water Municipal codes
    6. The City of Encinitas Best Management Practices Manual for Commercial, Industrial and Municipal facilities. It also has Residential and Construction BMP requirements
- The local Clean Water Hotline number has been well advertised in all forms of education outreach (brochures, door hangers, presentations and training, newsletter articles, newspaper articles), and promotional items.
- For incidences of IC/ID and responses to complaint calls, door hangers were

disseminated by the Clean Water Program staff and Public Works personnel. (Appendix E-5)

- Thirty-six local newspaper articles and four articles in other media such as City of Encinitas Residential EDCO "Environmental Times" Newsletter, Down 2 EARTH News, and Solana Center's "The Composter" were published locally with information regarding the City's Clean Water Program and its accomplishments.
- In 2002-03, a suite of twelve brochures (six in English and six in Spanish) were developed (Appendix E-1). The City continues to use these brochures which are often disseminated at educational events and placed on the City website. The brochures consist of:

  1. Restaurants Can Help Keep Our Waterways Clean
  2. Automotive - Simple Things to Keep Our Waterways Clean
  3. Developers - Simple and Cost Effective Ways to Comply with Storm Water Regulations
  4. Diazinon - How It Affects Your Health, Your Family and the Environment
  5. Yard & Garden Care - Keeping Your Yard & Garden Beautiful and our Waterways Clean
  6. Hiring a Handy Man - Easy Instructions for the Homeowner

- General Storm water Posters (developed previously as a watershed activity) were disseminated at pubic events.
- A City of Encinitas Environmental Services Guide (Appendix E-11) was created this fiscal year and mailed to approximately 22,000 single- and multi-family residences. It is described in more detail in the Residential and General Public Section.

9.2.2 Municipal, Construction, Commercial, Industrial, and Quasi-Governmental Communities

(a) Municipal Departments and Personnel:

Clean Water Task Force. Managers from Engineering, Public Works, and the Clean Water Program met throughout FY06-07 to discuss the updated budget and new permit requirements and to assure permit compliance in all departments. The Clean Water Task Force will continue to meet on an as needed basis throughout the upcoming fiscal year.

Public Works, Streets Division. A presentation was given to the Streets Division on February 1, 2007, to discuss storm water BMPs and address how this department would be affected by the new Permit regulations. There were eleven attendees.

Public Works, Waste Water Division. On June 13, 2007, nine members of the Waste Water Division received storm water training from Clean Water Staff. A power point presentation was given to explain the importance of storm drain maintenance and show how the Waste Water Division is an important asset to the Clean Water Program.

San Dieguito Water District. Thirteen employees were given a power point presentation on May 23, 2007, to discuss proper implementation of BMPs while dewatering water mains and during unscheduled water discharge events.

(b) Construction and development:

- "A Pollution Prevention Guide for the Construction Industry" was received and distributed at public events, to engineering construction inspectors, the building department, and displayed at the City of Encinitas Engineering counter for the public. Two hundred and thirty-eight brochures (238) were disseminated during the 2006-07 fiscal year. This brochure was developed as part of the Carlsbad Watershed URMP (Appendix E-9).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by the Engineering Department. Storm water topics discussed include the required construction site BMPs along with concepts of post-development BMPs and an outline of the SUSMP requirements.
- Construction inspector storm water coordination. Staff from the Clean Water Program attended weekly inspector staff meetings to provide support and information to the City's construction inspectors.
- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers - Simple and Cost Effective Ways to Comply with Storm Water Regulations". The brochure is in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In October 2006, approximately 111 letters were mailed to local developers and contractors regarding BMP requirements for the upcoming rainy season. Letters were also hand carried by some of the inspectors to the job sites (Appendix G-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into the annual Erosion Control letter that went to contractors, developers, and job superintendents.
- The City of Encinitas co-sponsored a three-session training seminar through the Building Industry Association of San Diego County on November 30, December 5, and December 14, 2006. Topics included Storm Water Regulation and SWPPP Preparation, Monitoring, and Sampling; BMP Selection and Implementation Including Treatment Techniques; SWPPP Implementation and Compliance Techniques.

(c) Commercial/Industrial Owners and Operators:

- Individual Communication. Commercial inspections were performed at 239 commercial facilities and three industrial facilities during the 2006-07 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general storm water education and BMP requirements.

- Printed materials were provided to commercial facilities in the form of City brochures including:
  1. "Only Rain in the Storm Drain", general storm water brochures provided to all facilities.
  2. "Restaurants Can Help Keep Our Waterways Clean", provided to all restaurants.

The brochure is in Spanish and English.

3. "Automotive - Simple Things to Keep Our Waterways Clean", provided to all automotive facilities. The brochure is in Spanish and English.
4. "Yard and Garden Care - Keeping Your Yard and Garden Beautiful and Our Waterways Clean", provided to all nurseries and landscapers. The brochure is in Spanish and English.
5. A City of Encinitas Storm Water Pollution Prevention Manual was created this fiscal year and handed out during annual commercial inspections at approximately 180 restaurants throughout Encinitas. The binder consisted of eight tabs: General Info, Site Map, BMPs/SOPs, Training Records, Inspection Records, Maintenance Records, Municipal Code, and Other Resources. Each restaurant was provided with a packet of BMP information, a blank training log and maintenance record, the Encinitas Storm Water Municipal Code, and information on becoming a Green Business. Also included were the general storm water poster, the "What's Cookin' Guide", and the City of Encinitas Restaurant Brochure in both English and Spanish. Each binder came with a City of Encinitas Storm Water Restaurant Training CD, which gives a ten minute presentation in both English and Spanish on proper BMPs for restaurants. The binder and CD are used by restaurant managers to continuously train employees and assure that they keep records of all paperwork necessary during future annual inspections. Follow up on the use of the binder and CD will be done during annual inspections in FY 07-08.

- During inspections, automotive facilities and restaurants were provided with the regional "Green Wrench Guide", "What's Cookin' Guide", and the watershed-developed posters for automotive and restaurant BMPs, as well as local information regarding BMP requirements.

- Clean Water staff gave a pollution prevention training presentation to 39 employees of the Olivenhain Municipal Water District on September 6, 2006.

- Storm water management training was provided to 26 employees at El Callejon Restaurant on September 9, 2006. Topics included storm water and watershed education and the implementation of appropriate BMPs.

- A four week workshop for Spanish-speaking landscape professionals was hosted by the San Dieguito Water District. It occurred every Tuesday, from February 6-27, 2007, and there were approximately 25 attendees for each class. The workshop involved discussions on irrigation management and landscape maintenance, and how both can impact water quality.

(d) Quasi-Governmental Communities:

- None.

9.2.3 Residential, General Public, School Children Communities

(a) ***Residential and General Public:***

- The City hosted the Household Hazardous Waste Information Exchange at the Del Mar Fairgrounds on November 29, 2006. The event included speakers from all areas of the County with topics such as 'Regional Collaboration' and 'Large Venue Recycling Programs'. Seventy-five people were in attendance.

- A free Water-Wise Landscaping Workshop was hosted by the San Dieguito Water District at the Encinitas Community Center on March 10, 2007. There were 35 people in attendance. A four week Home Landscaping Workshop was also hosted at the Rancho Santa Fe Garden Club each Wednesday from September 6 through September 27, 2006. Twenty-five people attended each session. The two workshops each covered four topics: landscape design basics; California friendly plants; landscape sprinkler systems; and soils, water, and fertilizers.

- The Solana Center hosted a free hands-on Composting and Manure Management Workshop in conjunction with the County of San Diego on June 23, 2007. The workshop was held at the Elfin Valley Nursery/Costanzo Farm and 18 people were in attendance.

- A City of Encinitas Environmental Services Guide was created this fiscal year and mailed in March 2007, to approximately 22,000 single- and multi-family residences throughout the City. It was also handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, storm water management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper.

- An Earth Day presentation on storm water management was given by Clean Water staff at San Dieguito United Methodist Church on April 22, 2007. Twenty-six people were in attendance.

- The Solana Center continued to sell compost bins and worm bins to residents of Encinitas throughout FY 06-07. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City.

- Individual Communication. There were 59 Residential ICID complaint investigations in FY 06-07 and 37 of those resulted in education. During these inspections individual one-on-one education was presented to each homeowner/resident. Information presented included general storm water education, BMP requirements, pollution prevention education, as well as specific municipal code and clean water regulations.

- Media Coverage (newspaper articles, press releases, etc.): See Table 9-1 below.

Table 9-1 Summary of Media Coverage for FY 2006-07

Article Number	Article Title	Date	Source
1	E.A.R.T.H. News	Summer 2006	Solana Center
2	Environmental Times	Fall 2006	Newsletter by EDCO
3	City facing urban runoff fines	October 5, 2006	Union Tribune
4	Beacon's beach may get new look and feel	November 24, 2006	The Coast News
5	Agency explores quality-of-life tax	December 8, 2006	CA Coastal Coalition

Article Number	Article Title	Date	Source
6	City seeking grant for pollution study	December 28, 2006	Union Tribune
7	The Composter	Winter 2007	Solana Center
8	County's urban-runoff rules getting tougher	January 5, 2007	Union Tribune
9	Sick surfer sues over dirty water	January 10, 2007	Voiceofsandiego.org
10	Ailing surfer suing groups over Cardiff beach pollution	January 11, 2007	Union Tribune
11	Council to consider funding environmental team	January 15, 2007	North County Times
12	Building, restaurant officials want new storm water permit delayed	January 18, 2007	North County Times
13	Water Board toughens rules for rain runoff	January 25, 2007	Union Tribune
14	Coalition forming to oppose 'Crippling Costs' of new runoff rules	February 5, 2007	SD Business Journal
15	Del Mar council to consider water, sewer rate hikes	February 5, 2007	Union Tribune
16	Water fees should launch revolution	February 5, 2007	North County Times
17	Del Mar to place clean-water fee on ballot	February 10, 2007	North County Times
18	To pour sand, or not to pour sand- Who gets the bill for beach replenishment a key question for region	February 10, 2007	North County Times
19	Cities want help with anti-pollution cost	February 28, 2007	Union Tribune
20	Opponents, supporters contest storm water permit	March 3, 2007	North County Times
21	House OKs $1.7 billion clean-water bill	March 7, 2007	Yahoo! News
22	Oceanside official says new water rules will be costly	March 7, 2007	North County Times
23	Battle over beach replenishment leads to costly, overdue study	March 9, 2007	The Coast News
24	Support wavers for beach projects	March 18, 2007	North County Times
25	Feinstein goes to bat for beach project	March 24, 2007	North County Times
26	The Composter	Spring 2007	Solana Center
27	Encinitas group demands report on environmental progress	April 15, 2007	North County Times
28	Encinitas mulls $53.4M budget	April 24, 2007	North County Times

Article Number	Article Title	Date	Source
29	Not Cost Affected?	April 29, 2007	North County Times
30	On the edge of a solution	April 29, 2007	Union Tribune
31	Encinitas sewage station up and pumping	May 1, 2007	North County Times
32	Report challenges planned resort	May 9, 2007	North County Times
33	Rain in drain biggest pain for ocean	May 12, 2007	North County Times
34	Smoking debate resurfaces	May 12, 2007	Union Tribune
35	Most North County beaches score well in annual water-quality report; But Cardiff State Beach gets a 'D'	May 24, 2007	North County Times
36	Fighting for clean bays and clean beaches	Summer 2007	Environment California
37	Encinitas beaches shut down as fuel spill reaches shore	June 1, 2007	North County Times
38	Fuel spill off Encinitas is all but gone	June 2, 2007	Union Tribune
39	Encinitas beaches reopen after fuel spill off coast	June 5, 2007	North County Times
40	Officials confirm beach spill was diesel	June 28, 2007	North County Times

- **Residential Workshops/events:**

1. Master Composter Training – The City of Encinitas sponsored a training class for Encinitas Residents.
2. Coastal Clean-up Day – September 16, 2006
3. Home Landscaping Workshop @ RSF Garden Club – Wednesdays, September 6-27, 2006
4. Poinsettia Street Festival - November 19, 2006
5. HHW Information Exchange @ Del Mar Fairgrounds – November 29, 2006
6. Water-Wise Landscape Workshop @ Encinitas Community Center – January 27, 2007
7. Water-Wise Landscape Workshop @ Encinitas Community Center – March 10, 2007
8. Mission San Luis Rey Pepper Tree Day – April 15, 2007
9. Creek to Bay Beach Clean-up – April 28, 2007
10. San Elijo Lagoon Day – May 12, 2007
11. Encinitas Environment Day @ Cottonwood Creek Park – June 3, 2007
12. Composting & Manure Management Workshop @ Elfin Valley Nursery – June 23, 2007

(b) School Children Communities:

- The City of Encinitas Parks & Recreation Department has many summer camps for children in Encinitas. "Back to Nature Week" is one camp that takes place in July at Glen Park in Cardiff, with a watershed presentation by the Solana Center. On May 22,

and May 24, 2007, the City of Encinitas Public Works Department, San Dieguito Water District, and Encina Wastewater Treatment Facility, in conjunction with the Clean Water Program, presented to kindergarten through fifth grade classes at Ocean Knoll and Cardiff Elementary Schools. The presentations included a discussion of the importance of water quality and how activities upstream in a watershed affect downstream areas including the ocean. In addition to general storm water education, children were encouraged not to litter and to clean up after their pets. Over 400 children participated in the presentations.

- Clean Water staff gave a brief storm water presentation to the 11 members of the City's Youth Commission. The presentation was given to explain the duties of the Clean Water Program and educate on the concepts of watersheds and the difference between the sewer system versus storm drains.

Table 9-2 City of Encinitas School Based Activities in FY 2006-07

School/Group Name & Address/Location	Date of Presentation /Event	Total number reached
Public Works Week- Cardiff Elementary	5/22/07	350
Public Works Week- Ocean Knoll	5/24/07	60
	Total	**410**

The Solana Center for Environmental Innovation also participated in school based educational programs where storm water awareness was taught. See Table 9-3 below for details.

Table 9-3 Solana Center School Based Activities in FY 2006-07

School/Group Name & Address/Location	Date of Presentation /Event	Total number reached
Ocean Knoll Elementary	7/19/06	18
Park Dale Elementary	7/20/06	45
Park Dale Elementary	7/24/06	20
Seaside Summer Day Camp (Back to Nature Week)	7/25/06	66
Cardiff Elementary Environmental Club	2/26/07	35
Flora Vista Elementary	4/4/07	60
Cardiff Elementary Ocean Nights	4/4/07	60
TIP Academy	4/19/07	62
TIP Academy	4/20/07	60
YMCA	4/25/07	30
Park Dale Elementary	4/27/07	80
San Elijo Lagoon	5/12/07	200
Brain Highways	5/16/07	18
Public Works Week- Cardiff Elementary	5/22/07	350
Public Works Week- Ocean Knoll	5/24/07	60
Ocean Knoll Elementary	6/15/07	30
	Total	**1194**

9.3 Watershed Educational Activities

Important parts of the City's education program are activities generated on a watershed basis through the North County Storm Water Program, the educational arm of the Carlsbad Watershed URMP. Materials and activities are developed on a watershed basis to address the

high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities is provided in the 2006-07 Carlsbad WURMP Annual Report.

Public Awareness Surveys. To assess the general public's level of watershed and water quality awareness, a two-question watershed survey and a one-page pet waste survey were redeveloped during this reporting period to be distributed at various public events. The new surveys incorporated watershed and behavior-related questions. The City of Encinitas collected surveys at Encinitas Environment Day.

Watershed Map. A 36"x24" "We all Live in a Watershed" poster was developed giving information about the San Luis Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a map of the watershed with topographical relief, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public display.

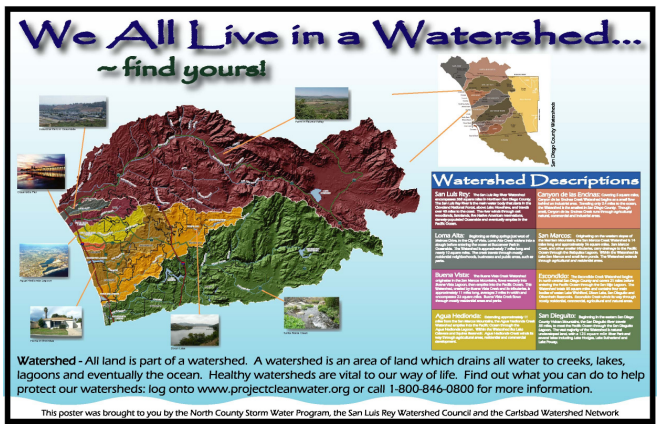

Watershed Collaboration. The City of Encinitas collaborated with other outside organizations to enhance public educational efforts to understand watershed issues, including the Carlsbad Watershed Network, Solana Center, North County Stream Team, and Escondido Creek Watershed Alliance. The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2006-07, the City participated in the following watershed outreach events:

- Coastal Cleanup Day – 9/16/06
- Mission San Luis Rey Pepper Tree Day – 4/15/07
- Creek to Bay Beach Cleanup – 4/28/07

Watershed Educational Materials. The City continues to distribute materials developed by the North County Storm Water Program in previous reporting periods, including the restaurant posters, automotive posters, "Storm Drains Lead to the Ocean" posters, general storm water brochure, and the door hangers. A new pencil was designed in FY 05-06 that states, "It's Your Watershed. Protect It!" The pencil also has the Clean Water Program phone number on it. (Appendix E-6). One hundred and nineteen pencils were distributed at public events and at local schools.

9.4 Regional Activities

On a regional basis, educational outreach activities are coordinated through the Outreach Technical Workgroup and Project Clean Water. This group is made up of all the Copermittees throughout the entire San Diego County region. The workgroup meets on a monthly basis. These meetings are open to the public and stakeholders provide informational presentations regarding activities and opportunities for partnerships. The group is funded through the regional program and operates under the Copermittees Memorandum of Understanding.

Most of the activities are coordinated and conducted regionally; however, some of the products are distributed or implemented on a jurisdictional basis. Below is a description of those activities that were specifically implemented on a local basis. A full description of regional activities is described in the Jurisdictional Unified Annual Report.

BMP Booklets. A bilingual "Green Wrench Guide" for automotive facilities and the "What's Cookin' Guide" for restaurants continues to be distributed to facilities during inspections These guides are booklets that present information about general storm water issues and regulations and BMPs to reduce pollutants at each facility. The "What's Cookin' Guide" was translated into Spanish during FY 06-07 with the help of staff from the Clean Water Program. It will be handed out at future restaurant inspections.

Watershed Map. In FY 2005-06, the regional education group printed, mounted, and framed Watershed Maps for each Copermittee Agency. The City of Encinitas continues to make use of this poster for public display at all educational events.

9.5 Partnerships

The City also pursued "crossover education" or consolidation with existing programs, such as solid waste removal, composting, recycling, household hazardous waste, used oil recycling, and water conservation. At beach cleanups the City of Encinitas partnered with "I Love a Clean San Diego", San Diego Coastkeeper, and the Solana Center to promote pollution prevention and educate the public about the destructive nature of marine debris.

- The City collaborated with the Solana Center to provide educational storm water messages in materials prepared for the used oil, household hazardous waste, recycling, conservation, and composting programs. During this reporting period, the Solana Center made the following presentations where a storm water message was presented:
    - San Marcos Street Festival (8/27/06)
    - Coastal Cleanup Day (9/16/06)
    - Escondido Street Fair (10/22/06)
    - Encinitas Poinsettia Festival (11/19/06)
    - Used Oil Filter Exchange (2/17/07)
    - Mission San Luis Rey Pepper Tree Day (4/15/07)
    - Balboa Park Earth Day Fair (4/22/07)
    - Fallbrook Avocado Festival (4/22/07)
    - "Creek to Bay" Beach Cleanup (4/28/07)
    - Encinitas Street Fair (4/29/07)
    - San Elijo Lagoon Day (5/12/07)
    - Encinitas Environment Day (6/3/07)
    - Composting and Manure Management Workshop (6/23/07)

Other Partnerships:

- An important partnership in the City of Encinitas is with the Solana Center, including collaboration on educational material development and distribution and carrying the Clean Water Program message to the public through their numerous events (some of which are sponsored by the City)

- The Clean Water Program partnered with ongoing Public Works Week activities presented at schools by the Public Works Department on May 22, and May 24, 2007.

Educational Outreach Material Totals. In FY 2006-2007, 20 outreach events and workshops were attended and/or hosted. The total number of outreach materials distributed was 3,070. This included BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed watershed pencils, construction brochures, posters, door hangers, eating establishment guides ("What's Cooking"), automotive guides ("Green Wrench"), and other informational guides. These guides related to Integrated Pest Management (UCSD Cooperative Extension), water conservation brochures from local water districts and the County Water Authority, invasive species brochures ("Don't Plant A Pest" and "NIMBY-No Invasives In My Back Yard"), "How to Hire A Landscaper"-UCSD Cooperative Extension/Scott Parker, County of San Diego Household Hazardous Waste Guides, miscellaneous storm water educational worksheets for children ("Word Finds"), and lastly, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority.

9.6 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

10.0 PUBLIC PARTICIPATION

Public participation is one of several components of the City's overall outreach program. The goal of the education component, discussed in Section 9, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff. This component is primarily implemented by the Engineering Services Department (Clean Water Program) and the Public Works Department.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, the public could help make the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the water quality of our waterways. This is evident by the results in the FY 2005-06 Baseline Public Awareness Survey and the number of complaints reported to the storm water hotline (discussed in more detail in Section 10.2.4 below and also in Section 8.7). Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2006-07 reporting period.

10.1 Public Participation Approach

The City's approach for the outreach program is to develop an understanding among its constituency of some fundamental storm water concepts. These include:

1. The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges in the storm drain system flow directly to our waterways and the beach, untreated).
2. Our beaches have high economic value and we must protect their quality.
3. An understanding of what is an illegal discharge, i.e. sidewalk and street wash down runoff, vehicle fluid (antifreeze and oil), landscape debris, soil, etc.
4. How to report a storm water violation (Storm Water Hotline).
5. The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and beaches.
6. Reducing pollutants of concern: pesticides (due to improper use and over-irrigation), eutrofication (over-fertilization), sediment (improper erosion control in landscaping and construction sites), and bacteria (pet waste).
7. Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals etc.)

The tools that are used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- Public Awareness Surveys
- Storm Water Hotline
- Community Events
- School Programs
- Printed Educational Materials
- The Enviroscape Watershed Model

The public participation program strives to include members of the following target audiences:

- Municipal Departments and Personnel
- Construction Site owners and Developers
- Commercial Owners and Operators
- Residential Community, General Public, and School Children
- Quasi Governmental Agencies/Districts

10.2 Public Participation Implementation

This section describes the specific public participation tools used during the FY 2006-07 reporting period.

10.2.1 Workshops/Training Sessions

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of education and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the storm water regulations. Table 10-1 provides a summary of the workshops/training sessions conducted where public input was given to the Clean Water Program during this reporting period.

Table 10-1 Summary of Public Workshop/Training Sessions FY 2006-07

Workshop/Training Session	Target Audience	Date	Attendance
Home Landscaping Workshop	Homeowners	9/6/07-9/27/07	25/session
Olivenhain Municipal Water District	Industrial Staff	9/6/06	39
El Callejon Restaurant Training	Restaurant Staff	9/9/06	26
HHW Information Exchange	Public	11/29/06	75
Public Works- Streets Division	City Staff	2/1/07	11
Spanish-speaking Landscapers	Public	2/6/07-2/27/07	25/session
Water-wise Landscape Workshop	Public	3/10/07	35/session
San Dieguito Water District	City Staff	5/23/07	13
Public Works- Waste Water Division	City Staff	6/13/07	9
Total			**258**

10.2.2 Public Opinion Surveys

The North County Storm Water Program created a pet waste survey and a small watershed survey to be given out at public events throughout the Carlsbad watershed. The six question pet waste survey asks about the public's view on picking up pet waste and shows us how many people actually know what happens to waste that is not picked up. The two question watershed survey asks what a watershed is, and if residents think they live in a watershed or not. These surveys were given out on a trial basis at Encinitas Environment Day in June 2007.

10.2.3 Storm Water Hotline

The City has a local hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours hotline is also available on the recorded message that is dispatched to storm water-trained City Staff. The after-hours hotline is (760) 633-2922. The hotline was placed in the Government Listings of the San Diego Directories 2006 phone book. There are also currently two regional storm water hotline numbers promoted within San Diego County, a toll-free Regional Storm water Hotline, 1-888-846-0800 and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voice mail message for 24-hour public access.

The Storm Water hotline has been heavily advertised for some time. In FY 06-07 the Clean Water Hotline received 162 calls, which is consistent with the volume of calls received in past years. The hotline is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-up, and enforcement procedures related to the hotline are presented in the IC/ID section of this annual report. As an additional feature to the hotline, Clean Water Program personnel carry a 24-hour pager that is dispatched through the 24-hour emergency citywide security system. When emergency after-hours calls come in regarding a spill or major storm water violation, trained personnel are dispatched to the site.

10.2.4 Community Events

Community events such as informational booths at community fairs and family festivals provide a conduit to distribute information and resources directly to target communities. Following are the public events that the Clean Water Program organized or participated in: See Table 10-2 below.

Table 10-2 City of Encinitas Community Events in FY 06-07

Community Events	Target Audience	Date	Attendance
Back to Nature Week Camp	Students	7/25/2006	45
Coastal Cleanup Day	Public	9/16/2006	60
Mission San Luis Rey Pepper Tree Day	Public	4/15/07	75
Creek to Bay Beach Cleanup	Public	4/28/2007	100
Encinitas Environment Day	Public	6/3/07	150
Total			**430**

10.2.5 Other Public Participation Groups

Escondido Creek Cooperative Agreement – During the previous reporting periods, the Cities of Solana Beach, Encinitas, Escondido, the County of San Diego, San Elijo Lagoon Conservancy, Escondido Creek Conservancy, and Cottonwood Creek Conservancy signed an agreement to address the issue of future planning and development in the Escondido Creek Watershed, including the San Elijo Lagoon preservation area. The terms of the agreement are:

- Notification to participants in the agreement
- Participate in quarterly meeting
- Encourage preparation and submission of joint grant applications
- Consider appropriate mitigation strategies for the watershed

The group recognizes that activities on land impact the quality and quantity of land and water. With continuing growth in San Diego County and, in particular, North County, there is an increasing need to protect open space, habitat, and water quality, while permitting responsible land development. Poorly planned development can lead to many problems including unnecessary loss of open space, fragmentation, and ultimately the loss of irreplaceable habitat, increased fire hazards, and unhealthy pollution of the waterways, lagoons, and Pacific Ocean.

During this reporting period, representatives from the signatory agencies met quarterly to help better plan for and encourage a coordinated comprehensive conservation strategy in conjunction with responsible development in the watershed. The meetings are open to the public and were publicly noticed. The Clean Water Program staff participated in all meetings and plan to be a part of future meetings as well.

Carlsbad Watershed Network - The Carlsbad Watershed Network (CWN) is a group of nonprofit foundations and conservancies, as well as public agencies within the Carlsbad Hydrologic Unit. CWN promotes the well being of the Carlsbad Watershed by providing a forum for discussion, mutual support of member activities, educational programs, and a vehicle to influence actions of all parties in the watershed. CWN prepared the Carlsbad Watershed Management Plan, dated February of 2002. The Carlsbad Watershed Management Plan consists of a description of the watershed, an overview of the important issues, and planned objectives and actions to protect the watershed.

During the reporting period, the CWN members and stakeholders met monthly to discuss watershed issues. Representatives from the Carlsbad Watershed Copermittees attended most monthly meetings, presented an update on Watershed URMP activities, and solicited input from the CWN stakeholders.

Solana Center for Environmental Innovation - The Solana Center for Environmental Innovation is a non-profit recycling advocate group operating now for over 24 years. They pioneered the first comprehensive curbside recycling program in San Diego County and one of the first community-based recycling programs in the State of California. Eleven years ago they changed their focus to community outreach, public education, and creating new markets for recycled products. Employees and volunteers of the Solana Center participate in community outreach events and often share booths with the City of Encinitas. The Solana Center offers Master Composting workshops and compost bins at one-third of the retail cost. “Vermiculture,” the process of recycling food with worms, is promoted by the Solana Center, and free worm bins and vermiculture training are offered to Encinitas school children. Free 45 minute environmental presentations are also offered to San Diego communities with a variety of topics

such as Storm Water Awareness, Pollution Prevention, Healthy Marine Ecosystems, and Household Hazardous Waste awareness. The Solana Center also offers school recycling to qualified schools. "Recycling audits" were performed in Encinitas Schools in FY 06-07 to promote recycling education and awareness. Paper recycling was implemented in all of the Encinitas elementary schools including the District offices, and most schools are also recycling bottles and cans to a degree. At the June 13th Council meeting, the Mayor of Encinitas presented super recycler awards to a teacher at Paul Ecke, the custodian at Capri Elementary, and to Paul Ecke Central Elementary School. The two individuals were recognized for their outstanding recycling efforts at their respective schools, while Paul Ecke Central was recognized for its innovative recycling programs and willingness to try new approaches to recycling. The Mayor presented the individuals with a plaque. Recycling programs in the schools are a double benefit in that the school districts save money for waste disposal costs and instill conservation in the children who then take this message home. Secondly, the City benefits through increased public awareness to reduce waste and increase sustainability.

The City of Encinitas-sponsored education can be viewed on the Solana Center website at http://www.solanacenter.org/1encinitascompost.html. Free home composting and gardening workshops, subsidized compost and worm bins/truckload bins, "The Composter" newsletter, Master Composting training courses and volunteer program, free worm bins for Encinitas schools, and many other resources are offered through the City of Encinitas sponsorship. The following Table 10-3 shows the public participation events hosted by the Solana Center for Environmental Innovation. Some of these events were in collaboration with the City of Encinitas and some were done independently; however, storm water pollution prevention, recycling, water conservation, water quality, and invasive species messages were presented.

Table 10-3 Solana Center Public Participation Events for FY 06-07

School/Group Name & Address/Location	Date of Presentation /Event	Total number reached
Ocean Knoll Elementary	7/19/06	18
Park Dale Elementary	7/20/06	45
Park Dale Elementary	7/24/06	20
San Marcos Grand Summer Festival	8/27/06	400
Coastal Cleanup Day	9/16/06	60
Escondido Street Fair	10/22/06	10
Encinitas Poinsettia Festival	11/19/2006	500
Used Oil Filter Exchange	2/17/07	50
Cardiff Elementary Environmental Club	2/26/2007	35
Flora Vista Elementary	4/4/07	60
Cardiff Elementary Ocean Nights	4/4/07	60
Mission San Luis Rey Pepper Tree Day	4/15/07	75
TIP Academy	4/19/07	62
TIP Academy	4/20/07	60
Balboa Park Earth Day Fair	4/22/07	3,000
Fallbrook Avocado Festival	4/22/07	2,500
YMCA	4/25/07	30
Park Dale Elementary	4/27/07	80
Creek to Bay Clean up	4/28/07	100
Encinitas Street Fair	4/29/2007	500
San Elijo Lagoon Day	5/12/07	200
Brain Highways	5/16/07	18
Ocean Knoll Elementary	5/16/07	30
Public Works Week – Cardiff Elementary	5/22/07	350
Public Works Week – Ocean Knoll	5/24/07	60
Encinitas Environment Day	6/3/07	150
San Diego County Fair - Composting	6/8/07 -7/4/07	5,000
Enviro Fair, San Diego County Fair, Del Mar Fairgrounds Regional HHW	6/16/2007	300
Composting Workshops 2006-2007		
Solana Center	7/18/06	12
Solana Center	8/22/06	23
Solana Center	9/6/06	7
Master Composter Program	10/06	13
Solana Center	10/4/06	12
Solana Center	11/1/06	14

School/Group Name & Address/Location	Date of Presentation /Event	Total number reached
Quail Botanical Gardens	2/17/07	27
Quail Botanical Gardens	3/17/07	21
Solana Center	4/4/07	6
Solana Center	5/23/07	9
Solana Center	6/6/07	12
Total Participants		**13,929**

Southern California Coastal Water Research Project (SCCWRP) - The City of Encinitas is an active participant in the Beach Water Quality subcommittee of SCCWRP. This involvement includes attending meetings, making presentations sharing data and ideas regarding beach water quality. The Clean Water Program receives active program input from the subcommittee involvement.

Total Maximum Daily Load (TMDL) Stakeholder Advisory Group (SAG) – The City of Encinitas Clean Water Program was instrumental in the development of the work plan and Request for Proposal to implement the Lagoon Monitoring Order No. R9-2006-076. The City has taken the leadership role as the contact administrator for multiple cities in the Carlsbad Hydrologic Unit. The City of Encinitas has also participated in the SAG for the Bacteria TMDL and written numerous comments in response to the upcoming TMDL.

10.3 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

11.0 ASSESSMENT OF JURISDICTIONAL URMP EFFECTIVENESS

11.1 Introduction

This component evaluates the progress of the City's program towards the overall goal of reducing pollutants associated with stormwater and urban runoff. The objectives of the assessment component are to assess the performance of the Clean Water Program, assess the effectiveness of improving receiving water quality, and identify changes that will increase the effectiveness of the program.

The San Diego Copermittees have been working to refine an appropriate and consistent effectiveness assessment strategy for urban runoff management programs. The Copermittees prepared a guidance document and submitted it to the RWQCB on October 16, 2003, titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs". This guideline presents a comprehensive assessment strategy that initially focuses on programmatic assessments and moves toward water quality-based assessments to determine program effectiveness. More specifically, it addresses six levels of assessment:

1. Compliance with Activity-based Permit Requirements
2. Changes in Knowledge/Awareness
3. Behavioral Changes
4. Load Reductions
5. Changes in Discharge Quality
6. Changes in Receiving Water Quality

The City has begun adopting this assessment strategy and will be adopting it more fully as the regional program strategy becomes available. This year's assessment is a combination of the strategy presented in the JURMP with the addition of elements of the new strategy. The levels of assessment are combined into four rather than six this year because of the developmental stage of the program. The first level is Level 1: Compliance with Activity-based Permit Requirements, and includes the assessment tables from the JURMP. Level 2 and 3 are combined and discuss the program strengths (accomplishment and outcomes) for each component. Level 4: Load Reductions, is not addressed this year. Level 5 and 6 are combined to present a water quality assessment.

The strategy uses both quantitative and qualitative measure of program effectiveness. Assessment Forms presented in the JURMP were modified in the Level 1 assessment to more closely reflect the appropriate activities performed for each activity and the data from the forms is presented below. This approach provides a means to track the program performance and effectiveness.

It is important to consider that the effectiveness assessment process is ongoing and inherently iterative. Subsequent reporting years will represent a more fully developed approach to long term effectiveness assessment both on a jurisdictional and regional basis, driven by provisions in Order No. 2007-0001 adopted by the RWQCB on January 24, 2007 and supported by a regionally developed long term effectiveness assessment standardization process. Further, the assessments presented below mark the conclusion of Order No. 2001-001, and shall be used as a baseline for assessment conducted under the new permit.

11.2 Level 1: Compliance with Activity-based Permit Requirements

The following table summarizes the activities that are tracked by the program to demonstrate compliance with Order No. 2001-01.

Table 11.1 Level 1: Compliance with Activity-based Permit Requirements

Permit Section	Activity	Quantity	Comments
F.1 Land Use	Number of high priority projects subjected to SUSMP projects	45	43 with maintenance agreements
F.2 Construction	Number of high priority construction sites targeted for inspection	22	
	Number of medium and low priority construction sites targeted for inspection	112	
	Number of high priority construction sites inspected weekly during the rainy season (All inspections were documented by hand and electronically)	22	
	Number of medium priority construction sites inspected twice during the rainy season (All inspections were documented by hand and electronically)	112	
	Number of facilities referred to RWQCB for enforcement of State General Construction Permit	0	
	Total number of enforcement actions taken (50 Notices to Correct Work and 1 Stop Work Order)	51	
F.3.a Municipal	Number of high priority municipal facilities;	4	
	Number of high priority municipal facilities inspected;	4	
	Quantity of debris and material removed from the municipal separate storm sewer system (MS4) or not allowed into the MS4: • Storm drain pipes, inlets, and catch basins, filter inserts • Storm drain channels and detention basins • Street sweeping • Environmentally Sensitive Areas Total	 31.5ons 76.2 tons 582 tons 0.5 tons 690.2 tons	
F.3.b Industrial	Number of high priority facilities identified	3	
	Number of high priority facilities targeted for inspection	3	
	Number of high priority facilities inspected	3	
	Number of enforcement actions taken on facilities	0	
	Number of facilities referred to Regional Water Quality Control Board (RWQCB) for enforcement of State General Industrial Permit; and Number of enforcement actions taken.	0	
F.3.c Commercial	Number of high priority commercial facilities identified	494	
	Number of high priority commercial facilities inspected	239	In addition 141 follow-up inspections were performed.
	Number of enforcement actions taken (27 NOV's, 23 citations, 3 cost recoveries, and 42 education actions)	95	

Permit Section	Activity	Quantity	Comments
F.3.d Residential	Quantity of HHW materials collected-Household Hazardous Waste Facility	36 tons	
	Quantity of HHW materials collected-Door-to-Door Collection Program	46 tons	
F.4 Education	Number of stormwater education/instructional materials/brochures	3,070	(Materials included: General Storm water brochures (English and Spanish), IPM Posters, Key chains, Pet waste Containers, Click pens, Watershed pencils, Regional commercial guides, Construction brochures, and Door hangers.
	Number of stormwater advertisements (40 newspaper articles)	40	12 Workshops/events 16 school-based events (includes Solana center events)
	Number of employees attending training events regarding stormwater principles	72	
	Total number of stormwater-related education/workshops/outreach events conducted	28	
	Total number of children educated	1,194	
F.5 IC/ID	Number of dry weather sampling locations monitored	52	
	Number of stormwater complaints/referrals received	156	
	Enforcement actions related to complaints: • Notices of Violation • Citation • Cost Recoveries • Educational Actions	 45 29 3 82	
F.6 Public Participation	Number of opportunities provided for public participation	16	Approximately 700 members of the public participated in outreach events hosted by the City of Encinitas (in addition the Solana Center reached 13,929 residents

11.3 Level 2 & 3: Changes in Knowledge/Awareness and Behavioral Changes

This section is broken into each component of the JURMP and presents a summary of the changes in knowledge/awareness and behavior changes. Each section discusses the accomplishment for the component and discusses resulting outcomes. It should be noted that this section is mostly based on observations of City staff.

11.3.1 Land-Use Planning for New Development and Redevelopment

The City has focused on implementing the SUSMP program; requiring SUSMP BMPs on each project that goes through the City system, introducing the requirements at the earliest opportunity, and encouraging developers to use natural BMPs rather than concrete or other structural or mechanical BMPs. The City has successfully integrated the SUSMP process into the overall review and approval processes for ministerial and discretionary projects. At the end of this reporting year the Stormwater Certification was rolled out for all development projects applying for discretionary permits. Developers and applicants are using the Stormwater Certification process; however, the information provided on the certification is not always transferred to the project design so that comments issued during development review and then later during plan checking are still the primary means for ensuring that SUSMP BMPs are designed into projects.

During the current reporting period, the City engineering plan checkers continue to believe that there has been an increase in knowledge and change in behavior over the past year with regard to implementing the SUSMP program. They report much more effective and creative treatment solutions being submitted from the development community. Although these are only observations, they do indicate progress in the SUSMP implementation.

11.3.2 Construction

The City focuses heavily on the construction component, including working with RWQCB staff on complaints and errant sites. This focus continued during the current reporting period, however, it was evident that the level of BMP implementation has increased. This resulted in more BMPs being implemented on construction sites. The City spent less time educating contractors and developers and more time working on details of specific BMP implementation. Improvements made to the construction inspection form have eased the formal reporting burden for inspectors resulting in increased documented inspections. The number of Notices to Correct Work increased slightly from last year, indicating that construction inspectors have continued their proactive enforcement efforts.

11.3.3 Municipal

All high priority municipal facilities were inspected and were found to be in good order indicating a change in behavior. The MS4 was cleaned including catch basins, problem pipes, channels, and detention basins have become a regular part of the Public Works Department activities. An integrated pest management program (IPM) program was implemented by Community Services Department who is responsible for the maintenance of City parks and properties.

11.3.4 Industrial

All industrial facilities' personnel were knowledgeable about stormwater issues and BMPs. Facilities were in compliance or BMPs were implemented to come into compliance.

11.3.5 Commercial

The City's full-time inspector conducted a total of 248 commercial inspections and 134 follow-up inspections. The Administrative Citation program was successfully implemented and has improved the enforcement process. Continued improvements in the stormwater GIS and data

management system have streamlined the commercial inspection process. Staff now have the stormwater GIS available on their desktop computers to view facilities and property information. The grease program continues to be implemented and several new and remodeled restaurants installed grease traps or interceptors during the current reporting period. Further, through inspection actions, existing restaurant facilities are required to have over-head coverage and secondary containment for all grease bins stored outside. This effort has reduced the amount of grease-related private lateral sewer overflows.

An assessment survey was added to the commercial inspection forms during this fiscal year. The survey includes two questions which assess the knowledge level and the extent of cleanliness and BMP implementation at the site. The assessment survey was completed during 102 of the commercial inspections this fiscal year. Figure 11.1 summarizes the results of the survey. In general, most of the commercial sites were clean and had BMPs implemented, however the majority of the commercial site managers surveyed did not have a high level of understanding of storm water or water quality concepts. This exercise showed that knowledge of storm water and water quality concepts could be improved. In future years, the City will continue to use these survey questions to assess the knowledge level and BMP implementation at commercial sites. Over the long term this should provide valuable assessment information which can be used to improve the City's Clean Water Program.

Figure 11.1 Summary of Assessment Survey

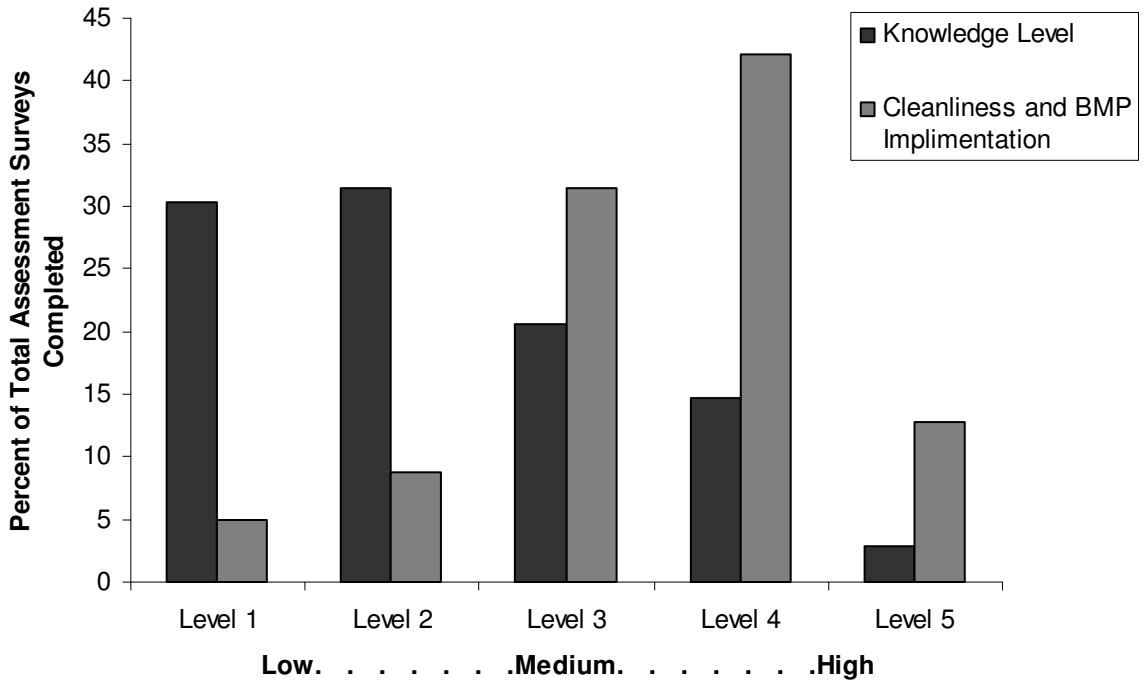

11.3.6 Residential

The City of Encinitas provides a wide range of programs for its residents to allow for convenient pollution prevention. Residents seem to be more aware of stormwater issues as complaints in

residential areas continued to increase. This awareness did not, however, translate into a willingness to pay for the Clean Water Program as evidence by the Clean Water vote in 2005.

11.3.7 Education

Approximately 1,194 students received environmental education during fiscal year 2006-07.

11.3.8 Illicit Discharge Detection and Elimination

The stormwater program continued efforts to respond to complaints and referrals in the IC/ID component. As shown in Figure 11-2 the number of complaints appears to be slightly higher than the previous fiscal year.

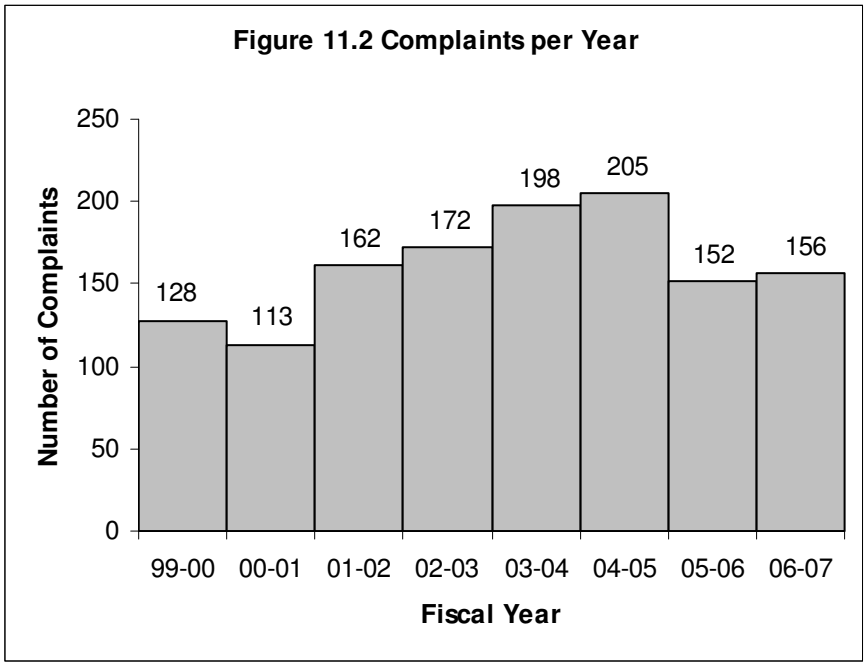

The dry weather program was performed by a consulting firm which specializes in water quality sampling and included a significant amount of testing and data analysis. The City has successfully evaluated water quality on a sub-basin level, correlating number of complaints with water quality exceedances to better understand where efforts are needed.

The City continues to have good success implementing the Administrative Citations program that reduces the administrative time involved in issuing fines for water quality violations. One major accomplishment has been that all new and major tenant improvements for restaurants are now required to install grease removal equipment (trap or interceptor). Again this year, several new and remodeled restaurants were required to install grease traps of interceptors. This program should reduce the number of private lateral overflows due to grease blockages.

11.3.9 Public Participation

The City increased its public participation opportunities during this reporting period through conducting events and through being involved in stakeholder groups such as the Carlsbad Watershed Network and the Escondido Creek Watershed Cooperative group. In addition, the

Clean Water Program participated in the first annual Encinitas Environment Day held at Cottonwood Creek in Encinitas this fiscal year.

11.3.10 Fiscal

The City examined its fiscal expenditures from the standpoint of program efficiency. Each component and its respective expenditure was reviewed and qualitatively assessed as to how effective the expenditures were, see Table 11.2. This review is subjective, but serves to focus efforts in the most effective manner.

Table 11.2 Fiscal Review for Program

Effectiveness Category	Cost 03-04	Cost 04-05	Cost 05-06	Cost 06-07	Specifics	Assessment	Comments
Municipal	67%	64%	61%	55%	staff time, PP/recycling/HHW, trash removal, inspections, inserts, storm drain replacement, MS4 and channel maintenance, and street sweeping	Improves water quality but at higher cost	Maintenance cost will continue to rise as more permits are obtained and channels are maintained
Industrial	1%	1%	1%	1%	3 sites	Overlapping program with State	Not efficient use of money, little benefit to water quality
Commercial	9%	7%	6%	4%	126 inspections were performed of the 403 total sites	Productive	Follow up reduces the total number of inspections but improves compliance
Land Use Planning	1%	1%	1%	1%	All development plans	Excellent program	Removes pollutants
Construction	4%	15%	17%	27%	Weekly inspection reports	Strong program	Maintains disturbed soil on property
IC/ID	7%	6%	6%	6%	Dry weather, investigations, UV, Special studies, coastal & lagoon	Excellent program	Discovers new and potentially threatening water quality exceedances in a timely manner
Education	3%	4%	3%	1%	Educational materials, workshops, outreach events, training	Excellent program	Educate the children while they are developing their value system.
Special Investigations	1%	1%	1%	1%	Multiple projects	Excellent studies	Would like to offset special studies with grants
WURMP	2%	1%	1%	1%	Includes each cities cost in the Carlsbad Watershed	Excellent coordination	Strong watershed approach more helpful than regional
Reporting	4%	3%	3%	3%	Includes WURMP & JURMP	Overwhelming	Needs to be streamlined
Legal Fees	2%	0%	0%	0%	Internal & external		

Effectiveness Category	Cost 03-04	Cost 04-05	Cost 05-06	Cost 06-07	Specifics	Assessment	Comments
					attorneys		

11.4 Level 4: Load Reductions

The City computed a loads assessment for the high priority constituents of concern (COCs), bacteria and sediment, from a limited number of activities for this annual report. In 2005, the City used grant funding to monitor the UV facility installed along Cottonwood Creek upstream of Moonlight Beach. The data collected during this monitoring effort was used to calculate an annual bacteria load reduction as a result of the installation of the UV facility. In fiscal year 2005-06 the annual bacteria load reduction at the UV Treatment Facility was calculated to be 4.4 e^{13} (44,000,000,000,000) (CFU/year) for Total coliform, 3.9 e^{12} (CFU/year) for fecal coliform, and 2.1 e^{12} (CFU/year) for Enterococcus based on calculations from the influent to the outlet of the UV facility. Since it's installation, the UV facility has operated and been maintained on a regular basis. Therefore, it is expected that the bacteria load reduced in FY 2006-07 would be similar to that calculated in FY 2005-06 would be similar to those that. The sediment load was reduced by 690.2 tons per year (31.0 tons from storm drain pipes, inlets, and catch basins, 76.2 tons from channels and detention basins, 0.5 tons from the Environmentally Sensitive Areas, and 3.5 tons from inlet filter inserts).

11.5 Level 5 & 6: Changes in Discharge and Receiving Water Quality

A Level 5 & 6 long-term effectiveness assessment strategy was performed on a regional basis as part of the Waste Discharge Requirements as part of the NPDES Permit re-issuance and was submitted to the RWQCB in the fall of 2005. The assessment portion was developed and reported in a document titled the Long Term Effectiveness Assessment. This document is discussed in the Regional Unified Urban Runoff Management Program Annual Report.

The City has been looking at water quality as a means to better understand the priority problems in the City and to assess its jurisdictional program effectiveness. Data available for this type of analysis includes historical dry weather monitoring data and beach posting data. The following section provides an overview of the City's water quality assessment.

11.5.1 Dry Weather Data

The City has collected dry weather data since 1992. In 2007, a total of 52 stations were monitored, including nine that have been monitored since 1992. The constituents monitored are limited in the historical data; however, the City has maintained these sites in the monitoring program so that 14 years of data have now been collected. The sites generally represent locations low in the sub-basin. The most pertinent available long-term data that can be used for assessment purposes includes MBAS and Ammonia. MBAS represents a measure of surfactants often found in soaps that may result from car washing or other general wash down operations. Ammonia is produced largely by the breakdown of organic nitrogen-containing compounds and urea (urine). The presence of high concentrations of ammonia may indicate a nitrogen source in the form of fertilizers, a wastewater source such as an illegal sewer connection, or a direct source of urine possibly from encampments or pet waste.

Figures 11.3 and 11.4 show historical data for MBAS and ammonia at three monitoring sites. CBS-2 is located on what was at one time Rossini Creek, but is now the 101 Channel, a storm

drain channel adjacent to Highway 101 near San Elijo Lagoon. CBS-2 captures flow from the residential and commercial areas of Cardiff in the southern part of Encinitas. LCS-1 is located on Encinitas Creek at Gardenview and El Camino Real. This site drains residential areas and the main commercial area of Encinitas along the El Camino Real corridor. The third site is ENC-8 located on Cottonwood Creek at Third and B Streets in the older part of Encinitas. The drainage to ENC-8 is the Cottonwood Creek sub-basin, encompassing residential and commercial land uses, and a new park.

These figures show long-term reductions of both MBAS and ammonia have occurred over the thirteen-year data period. Since these are anthropogenic pollutants, the reduction is attributable to increased public education and enforcement because of the City's active stormwater program. MBAS levels decreased from 2006 to 2007, and are well below the action levels and the overall trend is still downward.

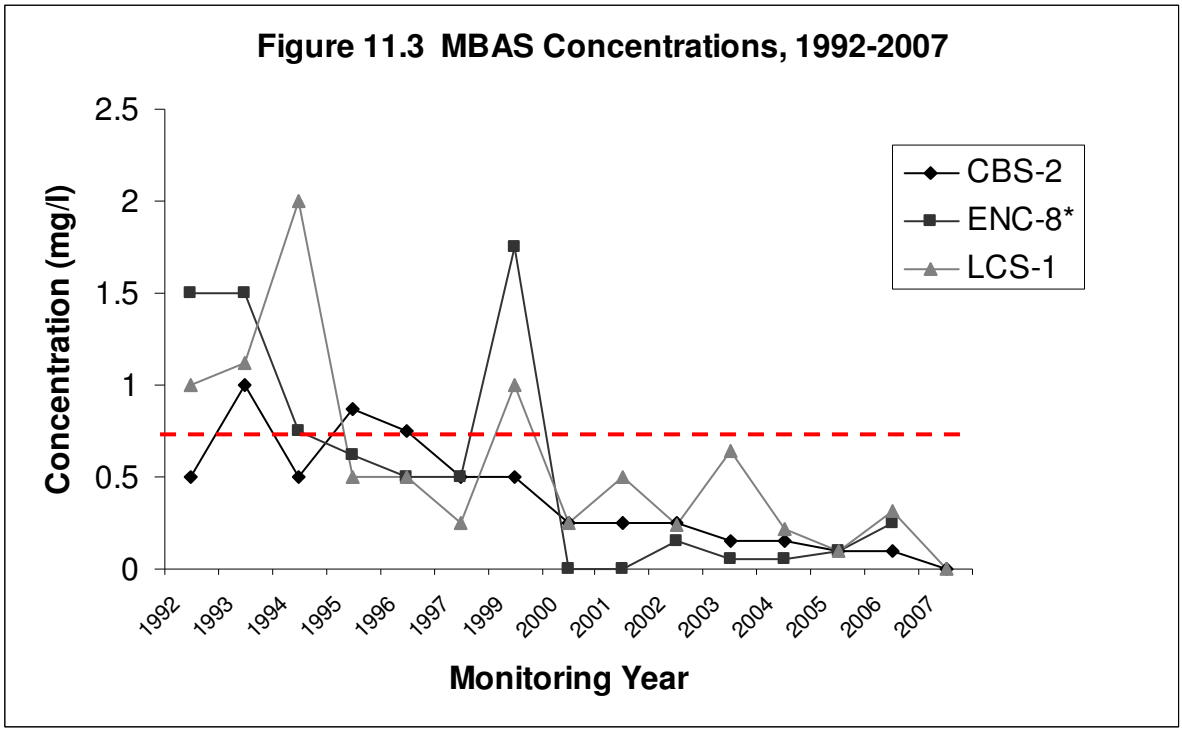

*ENC-8 was not sampled in 2000, 2001 and 2007. Data from ENC-3 (upstream of ENC-8) was used for 2000 and 2001.

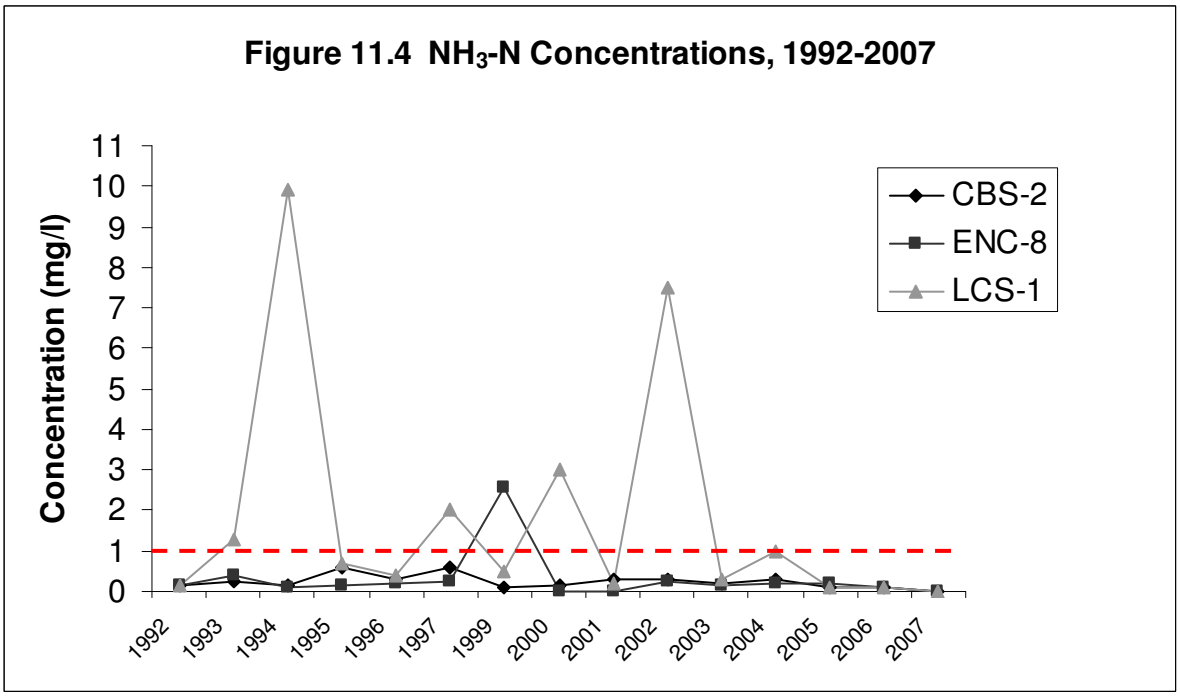

In addition this year, the City can show an overall decrease in the total percentage of exceedances in the dry weather testing as shown in Figure 11.5 for the period of compliance with Order 2001-01. Each point on the graph represents over 350 analyses.

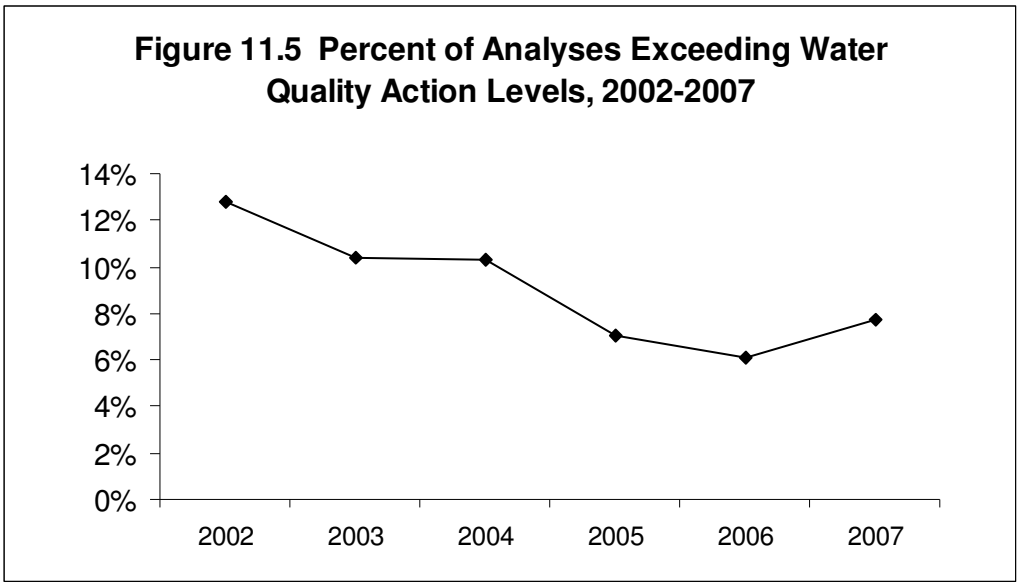

11.5.2 High Priority Constituents of Concern

Bacteria and nitrate-nitrogen remain high priority COCs in the area. Each contributes to water quality degradation in the receiving waters. This is validated by the fact that several receiving

waters in the area are 303(d) listed for bacteria and nutrients. Conductivity has increased in priority over the monitoring periods due to a rising trend in recent monitoring. COCs that have decreased in priority over the monitoring periods include ammonia-nitrogen and MBAS. Diazinon and dissolved copper were removed from the COC list because of lack of exceedances.

Based on this assessment, particular attention has been paid to bacteria and nitrates to identify and eliminate their sources. The City has focused efforts on inspection of commercial facilities and bacteria concentrations have been trending downward over the five years of data collection in the dry weather program. Although a slight increase in all indicator bacteria (total coliform, fecal coliform, and enterococcus) concentrations was measured in 2007, the six-year trend from 2002 to 2007 is showing decreasing bacteria trends in commercial areas, as shown in Figure 11.6.

Figure 11.6 Bacteria Trends in Commercial Areas, 2002-2007

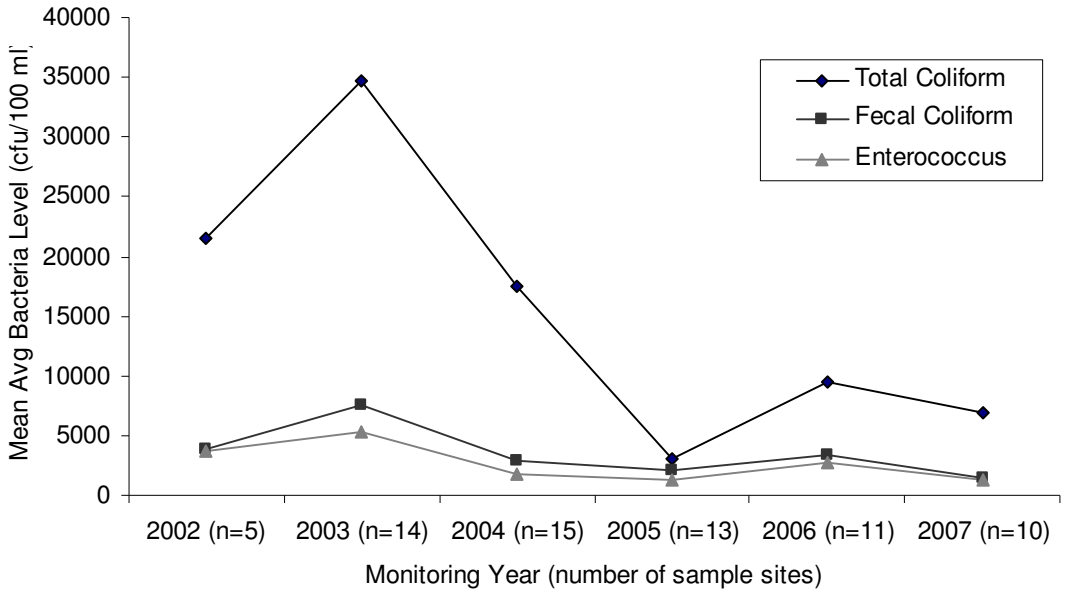

Similar trends are observed in data from residential areas, as shown in Figure 11.7. Overall decreasing trends were evident across all three indicators from 2002 to 2007. This downward trend is likely the result of public education and ICID efforts by the City.

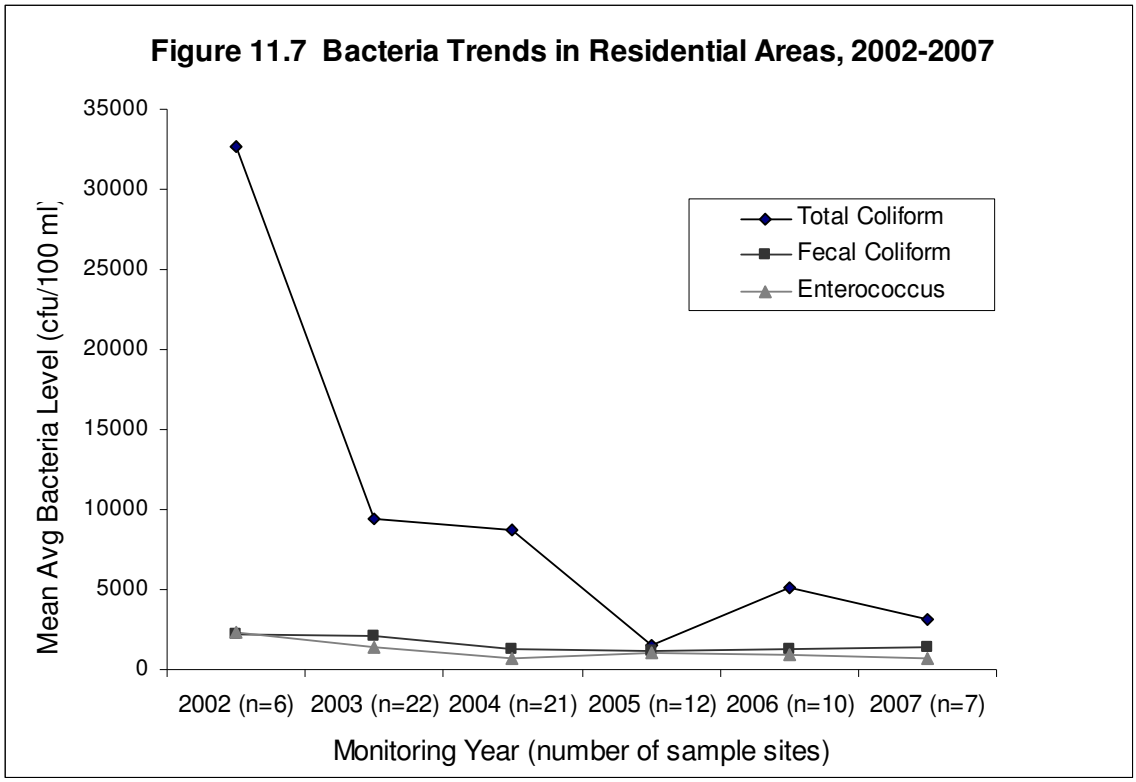

11.5.3 Watershed Sub-basins Assessment

The City of Encinitas has eight watershed sub-basins. (See Appendix H-1) Each sub-basin flows to one of three coastal water bodies: San Elijo Lagoon, Batiquitos Lagoon or the Pacific Ocean at Moonlight State Beach. With six years of enhanced dry weather monitoring data, a preliminary assessment can be made of the water quality changes that have occurred within each sub-basin. By accumulating data in each sub-basin, the City is able to follow-up on trends, report on improvements and correct exceedances at the time of sampling.

Figure 11.8 is a summary of the exceedances that occurred in each sub-basin from 2002 to 2007. On average, about 10% of the dry weather sampling results exceede program action levels. In 2007, the exceedance rates were approximately 5% showing consistent water quality improvements in the sub-basin. Exceedance percentages improved from 2006 to 2007 for the Leucadia, Lower Escondido Creek, Cardiff, La Orilla Creek, and La Costa South sub-basins. Steady improvements in the Cardiff sub-basin are evident from 2002 through 2007.

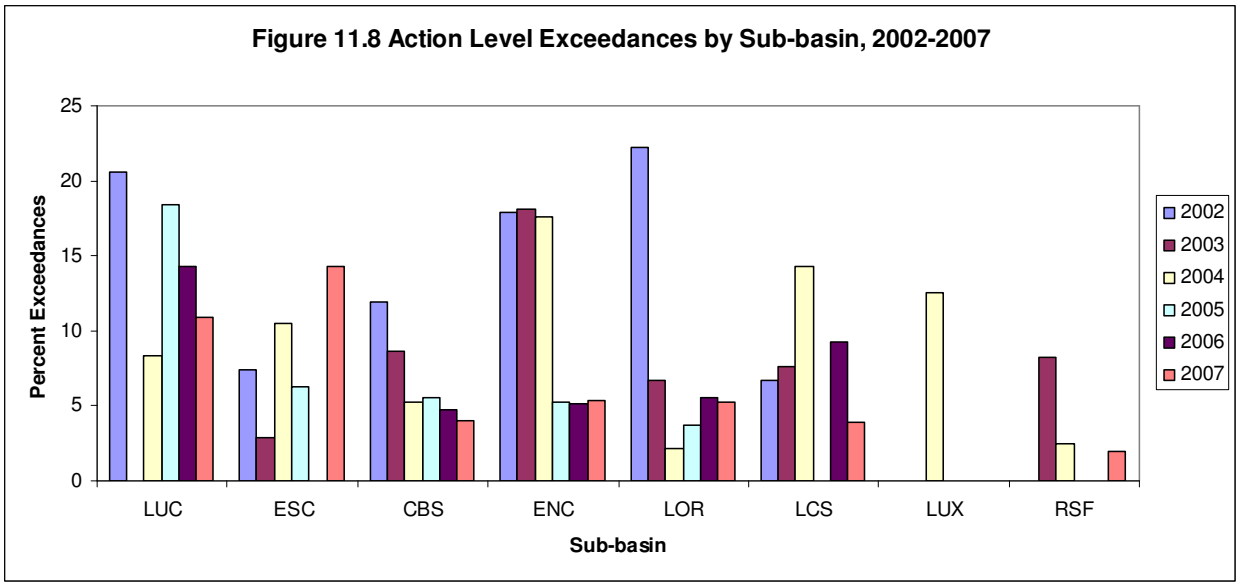

11.5.4 Coastal Water Quality

The Pacific Ocean and lagoons (Batiquitos and San Elijo) are considered to be the ultimate receiving water for the City although there are other intermediate receiving waters, such as Escondido, Cottonwood, and Encinitas Creeks. However, at this point a distinction has not been made between the creeks and the MS4 during dry weather testing. To measure the quality of the final receiving waters and assess JURMP effectiveness, the City has monitored coastal storm drain outfalls. Another measure of water quality in the City is the number of beach postings due to elevated bacteria from storm drains.

Coastal and Lagoon Storm Drain Outfalls
In the sixth year of the Coastal Monitoring Program, the Clean Water Program continued to implement the adaptive monitoring approach as designed by the Copermittee Coastal Monitoring Workgroup. This program allows the City to focus resources to improve water quality and emphasizes non-problematic areas less. During the 2006-07 reporting period, monitoring continued at six storm drains which discharge into the San Elijo Lagoon. The storm drains monitored do not appear to have a detrimental effect on the receiving waters.

A total of twelve exceedances occurred during Coastal Monitoring in FY 06-07 (see Table 11.3)

Over half of these exceedances occurred at Moonlight Beach. Follow-up samples were collected at Moonlight Beach after each exceedance. All follow-up receiving water sample results were less than AB 411 standards, suggesting a transient source of bacteria. Frequency of bacteria sampling increased and was conducted nearly every weekday during the summer of 2006 and a sample location up-current of the creek mixing zone was added to the monitoring. An ultra-violet treatment facility has been in operation at the creek mouth for over three years and is removing all bacteria and pathogenic organisms entering the mixing zone from the watershed. It has been documented that bacterial regrowth is occurring downstream of the facility which causes the creek bacteria concentrations to rise. Upstream source investigations and inspections occur on a continual basis in the drainage basin.

Many sources of bacteria have been identified and studied at the Cottonwood Creek outlet at Moonlight Beach, including: birds, wrackline, sediment, and the creek discharge itself. On several of the sampling occasions where exceedances were recorded, more than 100 birds were present at the time of sample collection. With the summer often comes increased amounts of wrackline (i.e. kelp) on the beach and in the creek mouth and this has been shown to cause elevated bacteria concentrations in the mixing zone. The kelp, coupled with nutrient rich, warm freshwater from the creek, has been shown to act as a natural incubator for bacterial amplification. Sediments and sand at the creek mouth have also been shown to be a source of bacteria and bacterial amplification and may have contributed to exceedances in the mixing zone. The creek flows also may be contributing to bacterial exceedances in the surfzone. Although at all times the bacteria concentrations in the creek were well below 95th percentile concentrations, it is possible that the creek caused exceedances in the surf zone. However, on occasion the exceedance occurred in samples up-current from the creek mouth, suggesting sources other that the creek itself.

A total of three exceedances occurred on two separate occasions at CBS-2 in FY 06-07. The Fecal Coliform exceedance that occurred on 3/22/07 was likely due to the rain event that occurred on the same day. On 4/19/07, when the Enterococcus and Fecal Coliform exceedances occurred, the San Elijo Lagoon mouth was blocked by sand and tidal flushing of the lagoon did not occur. This was likely the cause of the exceedances.

Two Fecal Coliform exceedances occurred at SEL-1 in fiscal year 2006-07, one in the storm drain and one in the receiving water on separate dates. However, on both occasions there was no evidence that storm drain flows were affecting receiving water quality. When the exceedance occurred in the storm drain on 3/22/2007 there was no corresponding receiving water exceedance. When the receiving water exceedance occurred on 4/19/07 no flow was exiting the storm drain, thus no dry weather runoff was impacting the lagoon at this location on this day.

Table 11.3 Coastal Monitoring Exceedances

Station ID	Location	Station Type	Date	Analyte	Result	Units
EH-420	Moonlight Beach	CRW	7/11/2006	Enterococcus	**106**	CFU/100ml
EH-420	Moonlight Beach	CRW	7/20/2006	Enterococcus	**122**	CFU/100ml
EH-420 (75R)	Moonlight Beach	CRW	7/28/2006	Enterococcus	**298**	CFU/100ml
EH-420 (75L)	Moonlight Beach	CRW	7/28/2006	Enterococcus	**412**	CFU/100ml
EH-420 (75L)	Moonlight Beach	CRW	8/8/2006	Enterococcus	**338**	CFU/100ml
EH-420	Moonlight Beach	CRW	8/10/2006	Enterococcus	**207**	CFU/100ml
EH-420	Moonlight Beach	CRW	8/15/2006	Enterococcus	**118**	CFU/100ml
CBS-2	Cardiff Channel @ Hwy 101	LRW	1/4/2007	Fecal Coliform	**670**	CFU/100ml
SEL-1	2560 San Elijo Ave storm drain	LSDO	3/22/2007	Enterococcus	**43500**	CFU/100ml
CBS-2	Cardiff Channel @ Hwy 101	LRW	4/19/2007	Enterococcus	**890**	CFU/100ml
CBS-2	Cardiff Channel @ Hwy 101	LRW	4/19/2007	Fecal Coliform	**1420**	CFU/100ml
SEL-1	2560 San Elijo Ave storm drain	LRW	5/23/2007	Fecal Coliform	**1020**	CFU/100ml

Beach Posting Data

The County Department of Environmental Health has monitored beach water quality for bacteria since the 1950s. This sampling is used to assess the health of the beaches. In 2000 there was a significant change in the protocol as a result of the passage of AB 411. AB 411 requires additional testing, testing of a third bacteria indicator (enterococcus), and requires the beach to

be posted when only one sample exceeds the standard. When bacteria levels exceed State standards, the County posts the beaches with advisory signs warning of contaminated water and advising the public to not go in the water. The beaches are also closed in the event of a sewage spill in the watershed that might contaminate the beach.

The City tracks the number of advisories (postings) and closures along its shoreline. Advisories (postings) and closures are generally located at Moonlight Beach at the mouth of Cottonwood Creek and at the San Elijo and Cardiff State Beach at the mouth of the San Elijo Lagoon. A graph of the postings and closures at Moonlight Beach is shown in Figure 11.9.

Figure 11.9 Beach Postings at Moonlight Beach, 1998-2007

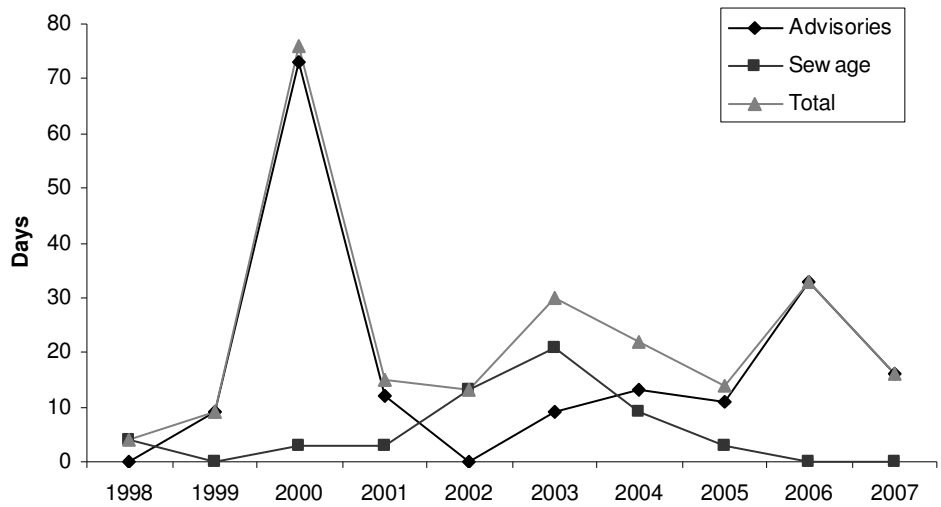

A sharp increase in the number of postings was noted in 2000 when the receiving water standards were made more stringent with the introduction of AB 411. The number of postings was reduced significantly in 2001, which was a very dry year. In 2001, monitoring procedures were also changed and samples were collected 25 yards downcurrent from the outfall, as opposed to the previous monitoring location at the point of mixing between the outfall and the receiving water. This likely contributed to the downward trend in beach advisories. In 2002 there were no advisories after the installation of the Urban Runoff Treatment Facility (UV Treatment Facility) on Cottonwood Creek, just east of Moonlight Beach. Advisories increased slightly from 2003 through 2005 and more significantly in 2006. Some possible explanations for this increase are:

- Inconsistencies in testing methodologies between agencies
- Sediment in the water sampler containers
- Increased monitoring at Moonlight Beach
- Increase in ocean and creek water temperatures
- Increase in number of shorebirds
- Regrowth in creek channel
- Kelp and trash in the high tide line

In 2007, beach postings were reduced by 50 percent from 2006, showing marked improvement in the water quality conditions at Moonlight Beach. The City of Encinitas will continue to monitor beach postings and compare this data with monitoring and IC/ID data maintained by the Clean Water Program.

12.0 FISCAL ANALYSIS

The Clean Water Program in the City of Encinitas is split into two areas: Engineering Services and Public Works. Engineering Services administers, plans, monitors, implements, enforces, inspects, and provides education related to stormwater. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4). This section outlines the budgets for these two areas.

12.1 Engineering Services Department

The City of Encinitas Clean Water Program FY 2006-2007 expenditure and FY 2007-2008 budget summaries are presented below in Table 12.1. In FY 2006-2007, the City's Clean Water Program fulfilled the Coastal Storm Drain Monitoring, Dry Weather Monitoring, IC/ID, Construction, Residential, and Commercial program requirements with a mix of internal staff and contract services.

The FY 2007-2008 budget has been prepared based upon existing and new requirements under Order No. 2007-0001 adopted by the San Diego Regional Water Quality Control Board on January 24, 2007, accounting for additional program costs. Notably, in FY 2007-2008 the Clean Water Program will include 5 full time staff, and require additional contract services for new programmatic areas of development and implementation.

Table 12.1 – Clean Water Budget Summary (Engineering Department) FY 2006-2007

CATEGORY	FY 06-07 EXPENDITURES	FY 07-08 BUDGET
Saff Costs		
Staff Salary	$ 210,618	$ 333,609
Permits & Shared Costs		
State Water Resources Discharge Permit Fee	$ 11,109	$ 11,109
San Diego Regional Stormwater Shared Costs	$ 25,327	$ 67,051
Contract Services		
IC/ID Program (MACTEC)	$ 35,713	$ 25,000
Watershed Urban Runoff Management (Ashford Engineering)*	$ 32,200	$ 9,600
Carlsbad WURMP GIS Application Development (Quartic)*	$ 1,260	$ 22,750
Post-Construction BMP Inspection (Geopacifica)**	$ -	$ 116,000
Stormwater Program Support (Ashford Engineering)	$ 37,125	*Staff Cost*
Commercial Inspection (PBS&J)	$ 19,622	*Staff Cost*
Filter Insert Maintenance (Downstream Services)	$ 11,630	*See Public Works*
Encinitas GIS Mapping & Data Management Systems (Quartic)**	$ -	$ 24,000
Lagoon TMDL Monitoring Order - QAPP & Implementation (MACTEC)**	$ -	$ 80,000
TMDL for Indicator Bacteria Project I - Beaches (Dynamic Solutions)	$ 8,000	$ 5,000
Grant Writing (PBS&J)	$ 1,083	$ -
Programmatic Costs		
Education (Jurisdictional)	$ 260	$ 5,000
Special Investigations	$ 710	$ 3,000
Legal Fees	$ -	$ 5,000
Construction Inspection	$ 150,000	$ 150,000
Coastal Monitoring Program (Equipment & Analysis Cost)	$ 14,689	
Ultraviolet (UV) Facility Maintenance	$ 550	*See Public Works*
TOTAL COSTS	**$ 559,896**	**$ 857,119**

* Carlsbad Watershed Shared Cost
** New Program Cost for 2007-2008

Table 12.2 Public Works - Operations and Maintenance

Public Works	Actual	Revenue Source	General Fund
Staff	$307,461		$289,139
Materials & Supplies	$12,272		$12,842
Contracts & Services	$215,422		$220,579
Fleet Maintenance	$12,730		$19,053
Capital Outlay	$10,000		$5,614
Lease Payments	$27,000		$27,000
Recycling/Solid Waste & Household Hazardous Waste Fund	$473,188	$473,188	0
Flood Control	$47,393		$48,898
Total Public Works	**$1,105,466**	$473,188	**$632,278**
Engineering Clean Water			**$559,896**
TOTAL COST			**$1,192,174**

Street Sweeping - The Gas Tax (TransNet) is collected by the state and allocated to local government for transportation-related work including maintenance of existing transportation systems (e.g. roadway sweeping, culvert cleaning) and construction of new transportation facilities. These funds may not be used for other purposes. The City offsets these expenditures from the Gas Tax by $121,878. The total budget in 2007-08 for Street Sweeping is $177,288.

Stormdrain/NPDES. This program includes four and a half full time staff personnel to clean catch basins, televise the storm drain system and respond to emergency operations. Complaints regarding ponding or nuisance water in the storm drain system are handled by this department. This fund also includes channel maintenance and detention basin cleaning. Equipment necessary to clean the storm drain system such as the VACCON plus staff vehicles are also included in this fund.

As more BMPs are constructed throughout the City or as part private development project, it is expected that the maintenance efforts will increase. Budgeted expenditures are based on the design of one regional treatment BMP per year, including planning, right-of-way, design, construction and maintenance cost.

Recycling/Solid Waste & Household Hazardous Waste Fund
The Household Hazardous Waste (HHW) and Recycling program includes costs associated with HHW disposal (home pickup and permanent facilities), electronic waste and recycling at public facilities. The program includes public education and City-subsidized compost bin sales. Funding for this program is derived from fees paid by the City's franchised trash hauler and grants awarded by the California Integrated Waste Management Board and the Department of Conservation

Flood Control – Concrete and miscellaneous repairs.

Public Works Total Budget

This is the actual total budget for the Public Works Department to accomplish the goals of the NPDES permit Order No. 2001-01. The Public Works Department receives grants, trash fees and gas tax revenue sources to help offset the costs to the general fund. By accounting for the offsets in revenue sources the actual cost to the general fund is **$632,278.**

12.2 Total Program Budget

The total expenditure for the Clean Water Program is **$1,192,174** for the Fiscal Year 2006-07. The total projected budget for the Clean Water Program is **$1,489,397** for the Fiscal Year 2007-08.

12.3 Program Funding

The City Council attempted to pass a Clean Water Fee in FY 2003-04, which charged $5.00 per month per water meter to the residents and businesses of Encinitas. The Howard Jarvis Taxpayers Association challenged the Clean Water Fee based on Proposition 218 requirements. The City was required to add this item to the ballot in March 2006 which was defeated. Unless a Regional approach to collecting fees is established the City of Encinitas must completely subsidize the Clean Water Program through the General Fund.

13.0 SPECIAL INVESTIGATIONS

The City of Encinitas strives to understand and improve water quality issues within its waterways. To this end, several special investigations and projects were undertaken during the reporting period.

13.1 Moonlight Beach Urban Runoff Treatment Facility

The City of Encinitas has been operating the Moonlight Beach Ultraviolet Treatment Facility since August 29th, 2002. The overall project has been a true success; the City has reduced the bacteria levels entering the Pacific Ocean at Moonlight State Beach and bacteria levels through the facility are consistently reduced by 99%. Beach postings have been reduced by an average of 90% per year for the five years that facility has been in operation.

The Moonlight Beach Urban Runoff Treatment Facility draws water from Cottonwood Creek inside an existing concrete double-box culvert. It is diverted to a wet well and pumped via two, alternating 7.5 HP, float-controlled submersible pumps to the UV treatment facility. After pre-screening at the wet well intake, a second stage of screening is provided by two basket strainers. Water is then filtered through two dual media (sand and anthracite) pressure filters. The disinfection unit consists of two UV disinfection chambers approximately 48 inches in length and 8 inches in diameter. Each chamber has four low-pressure, high intensity UV lamps.

The system is operated from a programmable logic controller (PLC). System controls are set to shut the entire system down on three operating conditions: high level in the wet well, high pump discharge pressure, and high effluent turbidity. Treated flow is returned to Cottonwood Creek inside a second portal of the concrete box culvert. The entire treatment facility is housed in a 24 feet long, 10 x 10 foot prefabricated steel enclosure.

In February 2006, the City of Encinitas completed the final report to the State Water Resource Control Board, Clean Beaches Initiative Grant. In order to monitor the effectiveness of the UV Facility two assessment methods were used: water quality monitoring and beach posting data. The City routinely monitored the concentrations of bacteria at three locations in Cottonwood Creek and in the mixing zone at the creek mouth. Samples were collected above and below the facility, and before and after project implementation. Monitoring locations include influent, effluent, the mouth of Cottonwood Creek, and the Moonlight Beach mixing zone. Approximately 160 routine sampling events occurred during the monitoring period.

Bacteria removal efficiencies through the UV Facility were calculated at >99% based on 153 pairs of influent and effluent samples. Through weekly bacteria monitoring and a special study, the City determine that additional sources of bacteria and regrowth contributed to the degradation of water quality downstream of the facility. However, the overall removal efficiency from the facility influent to the creek mouth was measured at approximately 50%. Monitoring also showed an improvement of water quality in the mixing zone as measured by changes in

exceedances of AB411 standards. AB411 exceedances were reduced from 9.4% prior to thte project to 4.8% after the project representing nearly a 50% reduction in exceedances in the mixing zone. A full copy of the report is included can be found on the Clean Water Program website at http://www.ci.encinitas.ca.us/NR/rdonlyres/5612D387-D6D9-48A7-AF7F-A9D039C78547/0/Moonlight_Beach_Urban_Runoff_030806.pdf.

In 2006-07, the City of Encinitas continued random sampling of influent and effluent from the UV facility to gauge the ongoing effectiveness and proper function of the system. A number of samples were taken at sporadic intervals and varying conditions to monitor the bacteria concentrations, affirming long term effectiveness and efficiency of the Moonlight Beach UV Treatment Facility.

13.2 San Elijo Lagoon Restoration Project

The City of Encinitas along with the City of Solana Beach and the Army Corps of Engineers have been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (1-5) North coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast project.

The goal of the study is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. This study looked specifically into the effects of varying channel widths at each opening: inlet and PCH Bridge, the SDNR system, and the I-5 freeway. Results from each simulation would be judged on its ability to reduce muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur. Work on this process continued throughout the defined reporting period of this report, most significantly with efforts conducting a data gap analysis to support necessary simulations and the evaluation of a variety of design options.

13.3 Regional Channel Maintenance

The City received a letter from the Regional Water Quality Control Board on September 29th, 2004 regarding a Directive Regarding Channel Maintenance Activities. In order to complete an assessment of the on-going and proposed maintenance activities within the waters of the State the Regional Board requested a Required Technical Report by January 2005. Based on the information the Board was going to determine if a region-wide, jurisdictional-specific, or project-specific permitting approach would be necessary and appropriate for maintenance activities**.** .A Regional Channel Maintenance Workgroup was formed to address the Regional Board letter and discuss ways to collaborate on a region-wide permitting approach so cities may perform necessary channel maintenance and flood control work. The Workgroup is supportive of a regional permit in accordance with all applicable agencies to allow channel maintenance, and would like to collaborate with the Regional Board on the proposed channel maintenance permit. The City of Encinitas has been an active participant in the Workgroup with staff from the Engineering and Public Works Departments providing information and collaboration.

The channel maintenance workgroup hired EDAW to streamline the permitting process with the resource agencies and coordinate with each city on their channel maintenance needs. This effort has continued throughout the defined reporting period of this report, and is anticipated to conclude in 2008.

14.0 CONCLUSIONS AND RECOMMENDATIONS

14.1 Introduction

This component summarizes the conclusions and recommendations for the Jurisdictional Urban Runoff Management Program (JURMP) for the reporting period of FY 2006-07. A summary of the proposed program focus for the next fiscal year is also included.

14.2 Conclusions

The City of Encinitas successfully implemented all sections of the Order No. 2001-01 in FY 2006-07. The program has progressed significantly from the time the JURMP was developed in 2002. Overall, a great deal of effort has been expended to understand and reduce pollutants from entering the City's waterways and the Pacific Ocean in the most effective manner.

The Clean Water Program continues to learn about water quality issues locally, which has allowed for a more specific approach to program implementation. Through the water quality monitoring program, the City has been able to isolate constituents and geographical areas of concern. The City has performed economic studies to determine the value of local beaches in order to more effectively educate existing development as to the importance of preserving and improving water quality. The City has a well developed inspection and enforcement program and protocols for all sectors including construction, residential, and commercial activities. The City progressively approaches land development through the application of required permanent BMPs in consideration of water quality concerns. The preceding report fully describes each of these efforts and the perceptible successes of each, as supported by the long term effectiveness analysis approach. As regionally developed effectiveness assessment strategies have become more refined, and targeted outcomes more clear, the Clean Water Program has evolved into a more effective and efficient set of program elements. The information gained each year has been applied to each of the programmatic elements described in this report resulting in informed actions, functions, and direction for the Clean Water Program.

14.3 Recommendations

On January 24, 2007, the San Diego Regional Water Quality Control Board adopted Order No. 2007-0001, marking a significant transitional period for the San Diego region and the City of Encinitas Clean Water Program. Order No. 2007-0001 builds upon the provisions of Order No. 2001-001, adding considerable new requirements to be met through updated JURMP development and implementation. As such, beyond the reporting period of this report, the City of Encinitas has endeavored upon holistic programmatic updates through as needed augmentation of existing elements and the development of new processes, procedures, and strategies to meet new permit obligations. Subsequent reporting years will be based upon newly developed and implemented program elements as required under Order No. 2007-0001.

Appendix A

A-1 RWQCB Review of JURMP Annual Report for City of Encinitas, September 25, 2007, CWU: File 10-5006.02:dwoodward

California Regional Water Quality Control Board
San Diego Region

Linda S. Adams
Secretary for Environmental Protection

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from U.S. EPA

Arnold Schwarzenegger
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4353
(619) 467-2952 • Fax (619) 571-6972
http://www.waterboards.ca.gov/sandiego

September 25, 2007

Certified Mail No. 7007 0220 000 4691 0480

Mr. Phil Cotton
City Manager
City of Encinitas
505 South Vulcan Avenue
Encinitas, CA 92024-3633

In reply refer to:
CWU: File 10-5006.02:dwoodward

SUBJECT: REVIEW OF 2005-2006 JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT FOR THE CITY OF ENCINITAS, ORDER R9-2001-01

Dear Mr. Cotton:

This is to acknowledge receipt and review of the City of Encinitas (City) Urban Runoff Management Plan Fiscal Year 2005-2006 Annual Report (Annual Report) dated January 2007. This year, the Regional Board's review focused on five components of the report: Municipal, Industrial, Commercial, Construction, and Illicit Discharges Detection and Elimination. Our comments include requests for additional information needed to fully assess program implementation and compliance during the reporting period. Some comments may also request information to help ensure program compliance for future reporting periods. For comments requesting a response, please submit your written response with next year's annual report.

The following comments reveal instances of incomplete and/or unclear reporting, in the Annual Report, of required actions and activities by your agency. If not addressed, then the identified deficiencies in your storm water program could become a basis for determining noncompliance with Order No. 2001-01. Such deficiencies may become the subject of future enforcement action by the Regional Board.

Annual Report Section 7.0 (Construction):

1. The Annual Report states that all sites were inspected at the required frequency during the rainy season. The report provides a detailed account of the number of sites (23 high and 95 medium/low priority), and number of documented inspections conducted during the rainy season (437 at high and 55 at medium/low priority sites). The report clearly explains that all required inspections were conducted but some, especially of medium/low priority sites,

were not formally documented. Please be aware that the Regional Board expects the City to document completed inspections and keep the records on file. The new Municipal Storm Water permit requires the Co-permittees to create written or electronic inspection reports to verify that sites are inspected at the minimum required frequencies (Section D.2.d(6)(f), p.31).

Annual Report Section 8.0 (Illicit Discharges Detection and Elimination):

2. The Annual Report states that the above-action level nitrate and conductivity measurements, obtained at several monitoring sites, are attributable to inflow of groundwater. In future Annual Reports, please provide data demonstrating that groundwater in the vicinity of the monitoring sites has elevated nitrate and conductivity levels. Also, indicate what the City would consider to be the 'above-groundwater' action level for these constituents, i.e., the levels that would warrant follow-up action in areas with elevated nitrate and conductivity.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence, please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

If you have any questions regarding this letter, please contact Deborah Woodward (858) 637-5586 or email: dwoodward@waterboards.ca.gov.

Respectfully,

JOHN R. ODERMATT, P.G.
Senior Engineering Geologist

cc: Ms. Kathy Weldon
City of Encinitas
505 South Vulcan Avenue
Encinitas, CA 92024-3633

Appendix B

B-1 Municipal Facilities Inventory FY 2006-07
B-2 FY 2006-07 NPDES Maintenance Work Orders Summary
B-3 Encinitas Municipal BMP Locations Map
B-4 Parks and Recreation Integrated Pest Management Program
B-5 Municipal Storm Water Quality Inspection Reports (5)

APPENDIX B-1 CITY OF ENCINITAS MUNICIPAL FACILITIES INVENTORY (2006-2007)

Facility Name	Address	Land Use/Activities	Priority	Sub-basin
CARDIFF SPORTS PARK	1623 LAKE	Sports Park/fields/landscaping	Low	Cardiff
CIVIC CENTER	505 S VULCAN AVE.	City Hall/parking lot	Low	Encinitas
COMMUNITY/SENIOR CENTER	1221 ENCINITAS	Community Center/parking lot	Low	La Costa South
D STREET VIEWPOINT PARK	450 D STREET	Park/landscaping	Low	Encinitas
E ST & 5TH ST (ATHERTON)	9999 E STREET	Vewipoint	Low	Encinitas
BEACON'S BEACH	700 NEPTUNE	Beach Access/parking lot	Low	Leucadia
COTTONWOOD CREEK PARK	95 N. VULCAN	Park/landscaping	Low	Encinitas
ENCINITAS VIEWPOINT	745 VAL SERENO DR	Park/landscaping	Low	Encinitas
LITTLE OAKS EQUESTRIAN PK	2879 LONE JACK	Park/horse corral/landscaping	Low	Lower Escondido Creek
GLEN PARK	2149 ORINDA	Park/landscaping	Low	Cardiff
GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach Access/parking lot	Low	Leucadia
H STREET VIEWPOINT PARK	498 H STREET	Park/landscaping	Low	Encinitas
HALL PROPERTY	1451 STARLIGHT DR	Future City Park	Low	Cardiff
HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaping	Low	Leucadia
I STREET VIEWPOINT PARK	4981 I STREET	Park/landscaping	Low	Encinitas
INDIAN HEAD CANYON	0 QUAIL HOLLOW	Undeveloped park site	Low	Leucadia
J STREET VIEWPOINT PARK	398 J STREET	Park/landscaping	Low	Encinitas
LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaping	Low	La Costa South
LEUCADIA OAKS PARK	1511 N. VULCAN	Park/landscaping	Low	Leucadia
LEUCADIA ROADSIDE PARK	860 COAST HIGHWAY 101	Park/landscaping	Low	Leucadia
M.MACPHERSON PARK	1045 VULCAN	Park/landscaping	Low	Encinitas
MOONLIGHT BEACH	400 B STREET	Beach/park/parking	Low	Encinitas
OAKCREST PARK	555 BALOUR	Park/landscaping	Low	Encinitas
OLD STATION #4	120 SEEMAN	Fire Station/parking	Low	Encinitas
ORPHEUS PARK	482 ORPHEUS	Park/landscaping	Low	Leucadia
PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaping	Low	Encinitas
PUMP STATION	2690 MANCHESTER	Pump station	Low	Cardiff
SAN ELIJO BLUFFS PARCELS	1400 COAST HIGHWAY 101	Undeveloped site	Low	Encinitas
SCOTTS VALLEY PARK	1602 WILLOWHAVEN	Park/landscaping	Low	La Costa South
STANDARD PACIFIC PARK SITE	OLYMPUS / PIRAEUS	Undeveloped site	Low	Leucadia
STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach/stairs	Low	Leucadia
SUN VISTA	2011 AVNDA LA POSTA	Park/landscaping	Low	La Costa South
SWAMI'S BEACH	1298 COAST HIGHWAY 101	Beach/stairs/parking	Low	Encinitas
WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaping	Low	Lower Escondido Creek/Ranch Santa Fe
CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Municipal Yard/vehicle maint./material storage	High	Encinitas
CITY FLEET MAINTENANCE YARD	811 ORPHEUS	Municipal Yard/vehicle maint./material storage	High	Leucadia
FIRE STATION #1	415 2ND	Fire Station/parking	Low	Encinitas
FIRE STATION #2	1867 MACKINNON	Fire Station/parking	Low	Cardiff
FIRE STATION #3	801 ORPHEUS AVE	Fire Station/parking	Low	Leucadia
FIRE STATION #4	2011 VILLAGE PARK	Fire Station/parking	Low	La Costa South

APPENDIX B-1 CITY OF ENCINITAS MUNICIPAL FACILITIES INVENTORY (2006-2007)

FIRE STATION #5	540 BALOUR DR	Fire Station/parking	Low	Encinitas
FUTURE STATION #6	9999 LONE JACK	Fire Station/parking	Low	Lower Escondido Creek
ENCINITAS RANCH GOLF AUTHORITY	0 QUAIL GARDENS	Golf Course/landscaping	Low	La Costa South
PACIFIC VIEW PUBLIC WORKS FACILITY	608 THIRD STREET	Vehicle Parking/PW Offices	Medium	Encinitas
SAN DIEGUITO WATER DISTRICT	1190 OAKCREST PARK	Water Reservior/water storage	Low	La Costa South/Encinitas
REQUEZA STREET FACILITY	397 REQUEZA	Municipal Yard/sediment/materials s	High	Encinitas
"A" TANK SITE	355 SANTA FE	Tank Storage Site	Medium	Encinitas
SAN DIEGUITO WATER DISTRICT	601 SANTA FE	Pressure Regulating Station/no activ	Low	Encinitas
SAN DIEGUITO WATER DISTRICT	CAMBRIDGE RD	Pressure Regulating Station/no activ	Low	Cardiff
SAN ELIJO WASTEWATER DIVISION FACILITY	2695 MANCHESTER AVE	Public Works/Wastewater DivisionY	High	Cardiff

Appendix B-2

FY 2006-07 NPDES Maintenance Work Orders

STREETS DIVISION

1,131	30 Gallon Bags of Litter removed from Bus Stops (removed by Partners With Industry)*
2,139	30 Gallon Bags of Litter removed directly from Storm Drain Channels/Basins
6,003	30 Gallon Bags of Litter and Trash removed from City Rights of Way
9,273	**Total amount of 30 gallon bags of Litter and Debris removed per N.P.D.E.S. regulations for Fiscal 2006-2007**
1,456	**Estimated Yards of Street Sweeping Debris removed per N.P.D.E.S. regulations for Fiscal 2006-2007**
107.00	Cubic Yards of Vegetation and Debris removed from Storm Drain Channels/Basins
82.50	Cubic Yards of Sediment removed from Channels and Basins by Streets/NPDES Crew
4.41	Inches of Rainfall

*Litter removed from various bus stops - without this service, trash & debris would filtrate our storm drain system

TOTAL Street Division Workorders From July 1 2006 to June 30 2007: 61

Breakdown of Events - National Pollution Discharge Elimination System

Spills	**26**
Storm Event Related-Cleanup	**0**
Standing Water Issues	**8**
Basins/Channels/Ditches	**19**
Curb & Gutter/Berm: Number Repaired/Replaced	**8**

*Last recorded date of included WOs: June 30, 2007

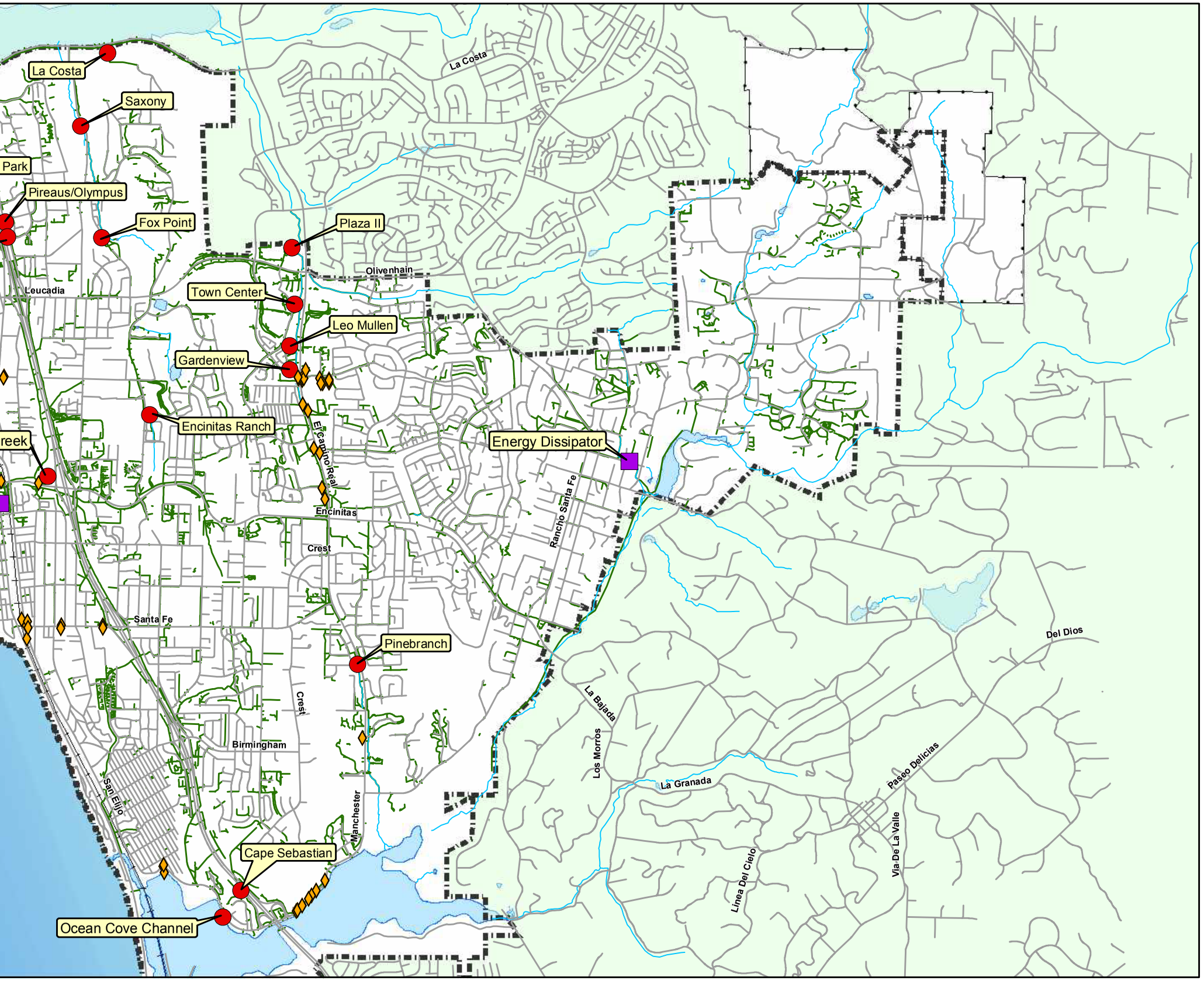

Encinitas Municipal BMP Locations

Storm Drains
Streams
Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

Proprietary information: Access to and use of this information is restricted by a sublicense agreement. No sale, transfer license, or assignment of this information is permitted.

Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: November, 2007

N

0 2,500 5,000 Feet

APPENDIX B-4

CITY OF ENCINITAS
PARK AND RECREATION DEPARTMENT

POLICY AND PROCEDURES MANUAL

Policy Title: *Integrated Pest Management Policy* Division: *Parks/Beaches Division*

Approved By: *Director of Parks and Recreation* Date: *September 30, 2003*

Originator: *Park and Beach Superintendent* Revised Date: _____

Policy Number: *PR P012*

I. POLICY STATEMENT

To protect public health and the environment, the Parks and Recreation Department desires to incorporate an Integrated Pest Management (IPM) program for all parks, beaches, streetscapes, recreational trails, and City landscaped facilities maintained by the Parks and Recreation Department with the most effective and least toxic management practices.

II. PURPOSE

Pests in the landscape can pose significant problems to people and the environment. Toxic pest control chemicals can also pose significant problems to people and the environment. Integrated Pest Management is the blending of all effective, economical, and environmentally sound pest control methods into a single but flexible approach to manage pest populations within acceptable limits. The first step of an IPM approach is to decide on the nature and the source of the pest problem, and then rely on a range of preventative and treatment strategies that can be cultural, physical, mechanical or biological. Only the least toxic chemical pesticides should be used as a last resort. IPM includes the use of pesticides, herbicides and fertilizers.

III. METHODOLGY

Parks and Recreation Integrated Pest Management Program will include the following components:

1. Education Educate staff, contractors, and the public about the Department's Integrated Pest Management policy / program.

2. Identification Identify the pests and/or the problem by site.

3. Monitoring & Recordkeeping Observe the plants, by site, for potential pest problems at regular intervals. Keep records of what is seen, decisions made, actions taken, and results.

4. Establish Thresholds Determine when the pest problem is likely to become serious enough to require some action.

5. Least Toxic Treatments In an IPM program, the object of treatment is to suppress pest populations below their injury level, but not to eradicate them. Select control strategies that are easy to carry out effectively, long-lasting, and least disruptive to the environment. The Pest Management flow chart at Exhibit 1 will be used by Department personnel as a guide to ensure Best Management Practices are selected for implementation.

6. Training Ensure that pesticide applicators are educated and trained in the use of current pesticides approved for use by the City of Encinitas, Parks and Recreation Department and that applicators follow label directions, precautions, and application regulations.

7. Evaluation Inspect after treatment action has been taken. Write down what has been learned. Has the treatment been effective? How can the whole process be improved to achieve the overall objectives of the program? The Observation Reporting Form at Exhibit 2 will be used for evaluations of sites and IPM applications.

√ RR 6/6/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name Mike Emerson

Date 6/4/07 Time 1133 AM / PM Type of Inspection: ☒ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name A TANK SITE - CITY OF ENCINITAS

Street Address 601 SANTA FE DRIVE ENCINITAS CA 92024

Mailing Address 505 S. VULCAN AVE ENCINITAS, CA 92024

Responsible Person(s) HOWARD WAITLOCK

Property Manager

Business Phone # (760) 633-2853 ext.

Property Manager's #

Business Fax # (760) 436-3592

APN Number

B. FACILITY/SITE INFORMATION

Principal activity: STORAGE LOT

SIC Code(s)

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)? New JURMP Classification?

Does facility have a current Encinitas business certificate? NA ☐ Yes ☐ No # Exp.

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☒ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☒ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☒ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: Rossini Creek to San Elijo Lagoon

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☒ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: SANTA FE DRIVE NORTHEAST CORNER OF LOT

Discharge observed: ☐ Yes ☒ No

If yes, describe:

Approximate area covered by industrial or commercial activities: square feet

Approximate % impervious surface of this area 0 %

Exposed areas of intensive outdoor activity: DIRT + LANDSCAPED

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?			X	
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?	X			
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.		X		

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		
2. Are irrigation systems programmed to minimize over-watering and runoff?	X			
3. Is reclaimed water used for irrigation?	X			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?		X	X	Large amount of Art in Middle of Site w out BMPs

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?	X			
3. Is the trash/recycling area enclosed and free of litter and debris?			X	appears that Someone turned a trash container over
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		on the EAST Side of lot
5. Are outdoor material storage areas adequate (covered area with secondary containment)?			X	all out Door
6. Are outdoor storage containers properly labeled?	X			
7. Is there an accessible spill response kit?			X	Yard is Seldom Used
8. Is there a spill response plan? If so, please provide to inspector.		X		
9. Are storage tanks equipped with secondary containment?	X			
10. Is secondary containment free of spills and rainwater?	X			
11. Are loading and unloading areas free of spills and debris?		X		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		X		
2. Are heavy equipment and vehicles stored in garages or under canopies?			X	
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?	X			
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?	X			

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?	X			
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:				
14. Where is used cleaning water discharged?				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			✓	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	✓			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.	✓			

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: _____ DATE: _____

E. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☒ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 TRASH PICK UP FROM OVER TURNED CONTAINER EAST
2 SIDE OF LOT
3 Need
4 A SPILL KIT
5 COVER HEAVY EQUIPMENT

Owner/operator has been notified of corrective actions both verbally and by: ☒ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) **DATE:** 6/18/07

COMMENTS Heavy Equipment Removed + trash was clean up

INSPECTOR NAME Mike Emerson **FACILITY CONTACT NAME (PRINT)** HOWARD G. WHITLOCK

INSPECTOR SIGNATURE Mike Emerson **FACILITY CONTACT SIGNATURE** Howard G. Whitlock

DATE 6/4/07 **DATE** June 4, 2007

I. RECOMMENDED CITY ACTIONS

FOR OFFICE USE ONLY

WO # 37944

F.U. WO # 38260

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: **1. 2. 3. 4. 5.**

Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5.**

VAR 9/8/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name MIKE EMERSON

Date 6/11/07 Time 3 AM / PM Type of Inspection: ☒ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name CITY OF ENCINITAS - Calle Magdalena YARD

Street Address 160 CALLE MAGDALENA ENCINITAS CA 92024

Mailing Address 505 S. VULCAN AVE ENCINITAS CA 92024

Responsible Person(s) HOWARD WHITLOCK

Property Manager

Business Phone # (760) 633 - 2853 ext.

Property Manager's #

Business Fax # (760) 436 - 3592

APN Number

B. FACILITY/SITE INFORMATION

Principal activity: CORP YARD - STREET DEPT, also Water operation

SIC Code(s)

Does SIC Code best represent principal activity: ☒ Yes ☐ No

What is recommended SIC Code(s)? New JURMP Classification?

Does facility have a current Encinitas business certificate? NA ☐ Yes ☒ No # Exp.

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☒ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☒ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☒ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☒ No

7/9/07 I will contact Bryce Wilson said 633 2842 for date of submittal

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: Cottonwood Creek

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☒ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: NORTH WEST CORNER

Discharge observed: ☐ Yes ☒ No

If yes, describe:

Approximate area covered by industrial or commercial activities: ≈ 4+ ACRES square feet

Approximate % impervious surface of this area 90 %

Exposed areas of intensive outdoor activity: STORAGE of Heavy Equipment

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?			X	
a. If yes, is wash water captured?	X			
b. Please provide contact name and phone number info for pressure washing company.	X			
5. Are roof downspouts directed away from areas of potential pollutants?		X		
6. How many employees do you have? 28 Are employees trained in storm water management? If so, provide a list of employees who have participated.		X X		See Engineering of Admin for P.W.

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		
2. Are irrigation systems programmed to minimize over-watering and runoff?		X		
3. Is reclaimed water used for irrigation?			X	
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?		X		

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?			X	TRASH IN DUMPSTER area
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?			X	≈ 12 BAGS of Recycle IN SE Corner
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		X		
6. Are outdoor storage containers properly labeled?			X	DON'T KNOW what LARGE PLASTIC
7. Is there an accessible spill response kit?			X	CONTAINER are filled with
8. Is there a spill response plan? If so, please provide to inspector.			X	
9. Are storage tanks equipped with secondary containment?			X	
10. Is secondary containment free of spills and rainwater?		X		
11. Are loading and unloading areas free of spills and debris?		X		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		X		
2. Are heavy equipment and vehicles stored in garages or under canopies?			X	Stored alonge West perimeter
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?		X		
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?	X			

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?		X		
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
14. Where is used cleaning water discharged? _____				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?	X			
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			X	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?		X		
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.		X		

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: _____ DATE: 6/11/07

E. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found. (Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☒ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 clean trash + Recycle areas
2 obtain spill Kit + PLAN
3 Store HEAVY EQUIPMENT + Vehicles IN GARAGE or UNDER CANOPYS
4 Label outDoor Storage Containers
5 Replace torn SAND BAG especially around Storm drains

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE: 6/25/07

COMMENTS 7/26/07 clean trash + recycle areas + SAND BAGS Removed + Replace w/ New ones

INSPECTOR NAME Mike Emerson FACILITY CONTACT NAME (PRINT) HOWARD G. WHITLOCK

INSPECTOR SIGNATURE Mike Emerson FACILITY CONTACT SIGNATURE Howard G. Whitlock

DATE 6/11/07 DATE June 12, 2007

I. RECOMMENDED CITY ACTIONS

me 1/2 hour truck 1/4 hour

FOR OFFICE USE ONLY

storm - WO# 38264
treat - FU WO # 39006

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: 1. 2. 3. 4. 5.

Level of cleanliness, BMP implementation, orderliness of site: 1. 2. 3. 4. 5.

✓ RR 6/6/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name Mike Emerson

Date 6 / 4 / 07 Time 1:47 AM (PM) Type of Inspection: ☒ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name CITY OF ENCINITAS — FLEET MAINTENANCE YARD

Street Address 801 ORPHEUS AVE ENCINITAS CA 92024 Mailing Address 505 S VULCAN AVE ENCINITAS, CA 92024

Responsible Person(s) Richard Barker Property Manager

Business Telephone # (760) 944 - 5019 ext. Property Manager's #

Business Fax # (760) 943 - 7168 APN Number

B. FACILITY/SITE INFORMATION

Principal activity: FLEET MAINTENCE

SIC Code(s)

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)? New JURMP Classification?

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No # Exp.

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☐ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☒ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☒ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☒ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: ~~COTTONWOOD CREEK~~ Batiquitos

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☒ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: ORPHEUS STREET NO DRAINS ON SITE

Discharge observed: ☐ Yes ☒ No

If yes, describe:

Approximate area covered by industrial or commercial activities: ≈ 4,500 square feet

Approximate % impervious surface of this area 50 %

Exposed areas of intensive outdoor activity: CONCRETE PAD IN FRONT OF YARD

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?			X	Some litter around trash area
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?		X		
a. If yes, is wash water captured?		X		Wash water is discharged into landscaped area
b. Please provide contact name and phone number info for pressure washing company.				2 to 3 time a year by city employees
5. Are roof downspouts directed away from areas of potential pollutants?		X		
6. Are employees trained in storm water management? If so, provide a list of employees who have participated.		X		See attached

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		
2. Are irrigation systems programmed to minimize over-watering and runoff?	X			
3. Is reclaimed water used for irrigation?	X			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?	X			

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?		X		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		X		
6. Are outdoor storage containers properly labeled?		X		
7. Is there an accessible spill response kit?		X		
8. Is there a spill response plan? If so, please provide to inspector.		X		
9. Are storage tanks equipped with secondary containment?		X		
10. Is secondary containment free of spills and rainwater?		X		
11. Are loading and unloading areas free of spills and debris?		X		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		X		
2. Are heavy equipment and vehicles stored in garages or under canopies?			X	Tractor in SE corner
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?		X		Some are conducted outside
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?			X	No drains on site

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?	X			
6. Are biodegradable soaps used for cleaning activities?	X			
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other _____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other: _____				
Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. What is the cleaning method?				
13. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
14. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other: _____				
15. Where is used cleaning water discharged?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			X	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	X			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.	X			

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: FLEET MAINTENANCE YARD DATE: 6/4/07

D.9 ADDITIONAL COMMENTS:

E. CORRECTIVE ACTIONS

Is corrective action needed? ☒ Yes ☐ No If yes, describe below.

1 PICK UP litter AROUND TRASH AREAS - NEED TO CONTACT PACES
2 COVER HEAVY EQUIPMENT
3
4
5

Owner/operator has been notified of recommended corrective actions both verbally and by: ☒ Photocopy ☐ Fax

F. Describe informational, educational or BMP information distributed:

G. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described above.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

INSPECTOR NAME Mike Emerson FACILITY CONTACT NAME (PRINT) Richard Barker

INSPECTOR SIGNATURE [signature] FACILITY CONTACT SIGNATURE [signature]

DATE 6/4/07 DATE 6-4-2007

H. RECOMMENDED CITY ACTIONS

I. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE:

COMMENTS 6/14/07 Re inspection showed lot clean of trash all corrective actions complete

FOR OFFICE USE ONLY

WO # 37948

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: **1. 2. 3. 4. 5.**

Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5.**

VKR 6/7/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name MIKE EMERSON

Date 6 / 4 / 07 Time 255 AM / PM (PM circled) Type of Inspection: ☒ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name CITY OF ENCINITAS – PACIFIC VIEW YARD

Street Address 608 3rd STREET ENCINITAS, CA 92024

Mailing Address 505 S VULCAN AVE ENCINITAS, CA 92024

Responsible Person(s) HOWARD WHITLOCK

Property Manager

Business Phone # (760) 633 - 2853 ext.

Property Manager's #

Business Fax # (760) 436 - 3592

APN Number

B. FACILITY/SITE INFORMATION

Principal activity: CORP YARD – STREET DEPT.

SIC Code(s)

Does SIC Code best represent principal activity: ☒ Yes ☐ No

What is recommended SIC Code(s)?

New JURMP Classification?

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No #_____ Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #_____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☒ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☒ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☒ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: COTTONWOOD CREEK, PACIFIC OCEAN

Approximate distance to water bodies: ☐ < 200 ft. ☒ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: F STREET

Discharge observed: ☐ Yes ☒ No

If yes, describe:

Approximate area covered by industrial or commercial activities: ≈ 2 ACRES square feet

Approximate % impervious surface of this area 50 %

Exposed areas of intensive outdoor activity: PARKING LOT

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		2 DRAINS IN YARD
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?			X	
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				25 Employees ON 5/22/07 ATTACHED
5. Are roof downspouts directed away from areas of potential pollutants?		X		
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.		X		11 Employees ON 2/1/07 DONNA Trotter has LOG COPY ATTACHED

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		
2. Are irrigation systems programmed to minimize over-watering and runoff?	X			
3. Is reclaimed water used for irrigation?	X			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?	X			

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?		X		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		X		
6. Are outdoor storage containers properly labeled?	X			
7. Is there an accessible spill response kit?		X		DRY ABSORBENT SPILL LOG
8. Is there a spill response plan? If so, please provide to inspector.			X	KEPT IN WORK TRUCKS / HISTORY
9. Are storage tanks equipped with secondary containment?	X			
10. Is secondary containment free of spills and rainwater?	X			
11. Are loading and unloading areas free of spills and debris?		X		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		X		
2. Are heavy equipment and vehicles stored in garages or under canopies?			X	TRACTORS NOT COVERED
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?		X		
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?	X			

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?		X		
D.5 Food Establishments		NA		
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____ Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
14. Where is used cleaning water discharged?				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		✓		
2. Is the site free of evidence of unauthorized releases to storm drains?		✓		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			✓	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	✓			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.	✓			

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: CITY OF ENCINITAS – PACIFIC VIEW YARD DATE: 6/4/07

E. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 STORE HEAVY EQUIPMENT UNDER COVER
2 ON School property –
3
4
5

Owner/operator has been notified of corrective actions both verbally and by: ☒ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE: _____

COMMENTS checked with clean water staff and found out that Pacific View PW site is shared w/ ENC School District, all Heavy equipment is owned + stored on School PART of lease

INSPECTOR NAME Mike Emerson FACILITY CONTACT NAME (PRINT) HOWARD G. WHITLOCK

INSPECTOR SIGNATURE Mike Emerson FACILITY CONTACT SIGNATURE Howard G. Whitlock

DATE 6/4/07 DATE June 4, 2007

I. RECOMMENDED CITY ACTIONS

_____

_____

FOR OFFICE USE ONLY

WO # 37954

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: **1. 2. 3. 4. 5.**

Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5.**

✓ RR 7/9/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name: Mike Emerson

Date: 6/4/07 Time: 1050 AM / PM Type of Inspection: ☑ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name: City of Encinitas Requeza Yard

Street Address: 397 Requeza Encinitas

Mailing Address: 505 S. Vulcan Ave Encinitas CA 92024

Responsible Person(s): Andy Bullington

Property Manager: Howard Whitlock

Business Telephone # (760) 633-2873 ext. ____

Property Manager's # ____

Business Fax # (760) 436-3592

APN Number ____

B. FACILITY/SITE INFORMATION

Principal activity: Street Maintenance Yard

SIC Code(s) ____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)? ____ New JURMP Classification? ____

Does facility have a current Encinitas business certificate? ☒ Yes ☐ No # ____ Exp. ____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID # ____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☒ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☒ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☒ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: Requeza drainage channel to Cottonwood Creek

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☒ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☒ Non-sensitive

Discharge points along perimeter: Driveway drainage channel @ Northwest Corner

Discharge observed: ☐ Yes ☒ No

If yes, describe: ____

Approximate area covered by industrial or commercial activities: ____ square feet

Approximate % impervious surface of this area 50 %

Exposed areas of intensive outdoor activity: Mostly Covered

D. BMP ASSESSMENT

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		✓		
2. Are discharge locations free of sediment and debris?		✓		
3. Are parking lots, sidewalks and streets free of sediment and debris?		✓		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?	✓			
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?	✓			
6. Are employees trained in storm water management? If so, provide a list of employees who have participated.		✓		

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		✓		
2. Are irrigation systems programmed to minimize over-watering and runoff?	✓			
3. Is reclaimed water used for irrigation?	✓			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?	✓			

D.3 Materials and Wastes

1. Are adequate trash containers provided?		✓		
2. Are adequate recycling containers provided?		✓		
3. Is the trash/recycling area enclosed and free of litter and debris?		✓		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		✓		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		✓		
6. Are outdoor storage containers properly labeled?	✓			
7. Is there an accessible spill response kit?			✓	6/18/07 yes absorbent INSIDE SOUTH SHED
8. Is there a spill response plan? If so, please provide to inspector.		✓		
9. Are storage tanks equipped with secondary containment?	✓			
10. Is secondary containment free of spills and rainwater?	✓			
11. Are loading and unloading areas free of spills and debris?		✓		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		✓		
2. Are heavy equipment and vehicles stored in garages or under canopies?		✓		
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?	✓			
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?	✓			

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?	✓			
6. Are biodegradable soaps used for cleaning activities?	✓			
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other _____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other: _____				
Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. What is the cleaning method?				
13. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
14. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other: _____				
15. Where is used cleaning water discharged?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		✓		
2. Is the site free of evidence of unauthorized releases to storm drains?		✓		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.		✓		Location of Spill Kit
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	✓			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.	✓			

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: Requeza YARD DATE: 6/4/07

D.9 ADDITIONAL COMMENTS:

E. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☐ No If yes, describe below.

1 Make Spill kit More accessible ✓
2 Properly store PAINT CANS INto covered area
3 THERE ARE 4 PAINT CONTAINERS STORED ON NORTH EAST
4 PART of YARD - see photo
5

Owner/operator has been notified of recommended corrective actions both verbally and by: ☒ Photocopy ☐ Fax

F. Describe informational, educational or BMP information distributed:

G. VIOLATIONS

☐ No violations have been noted at this time
☒ No violations have been noted, but required corrective actions are described above.
☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

INSPECTOR NAME Mike Emerson FACILITY CONTACT NAME (PRINT) HOWARD G. WHITLOCK
INSPECTOR SIGNATURE Mike Emerson FACILITY CONTACT SIGNATURE Howard G. Whitlock
DATE 6/4/07 DATE June 4, 2007

H. RECOMMENDED CITY ACTIONS

I. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE: 6/18/07

COMMENTS Found Discarded Battery + TORN TARPS ON Equipment ON SE SIDE of Shelter ON SW CORNER NEXT to Porta-Potty
6/28/07 YARD IN COMPLIANCE Mike Emerson

FOR OFFICE USE ONLY

WO # 38657
FM.WO # 38658

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: 1. 2. 3. (4.) 5.

Level of cleanliness, BMP implementation, orderliness of site: 1. 2. 3. 4. (5.)

√ TR 6/7/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name MIKE EMERSON

Date 6/4/07 Time 3 AM / PM Type of Inspection: ☒ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name WASTE WATER COLLECTION FACILITY

Street Address 2695 MANCHESTER AVE CARDIFF CA 92007

Mailing Address

Responsible Person(s) UTILITIES SUPERINTENDANT SHAWN ATHERTON

Property Manager CITY OF ENCINITAS

Business Phone # (760) 753-5018 ext.

Property Manager's #

Business Fax # (760) 753-6928

APN Number

B. FACILITY/SITE INFORMATION

Principal activity: WASTE WATER – CORP YARD

SIC Code(s)

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)? New JURMP Classification?

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No # Exp.

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☒ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☒ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☒ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: SAN ELIJO LAGOON

Approximate distance to water bodies: ☐ < 200 ft. ☒ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: MANCHESTER STORM DRAIN TO THE WEST

Discharge observed: ☐ Yes ☒ No

If yes, describe:

Approximate area covered by industrial or commercial activities: ≈ 6,000 square feet

Approximate % impervious surface of this area 90 %

Exposed areas of intensive outdoor activity: PARKING LOTS + STORAGE

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?			X	
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?		X		
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.		X		8 ARE TRAINED IN STORM Water MANAGEMENT ~~Will Email Log to me~~ Log is attached
D.2 Landscaping				
1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		
2. Are irrigation systems programmed to minimize over-watering and runoff?	X			
3. Is reclaimed water used for irrigation?	X			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?	X			
D.3 Materials and Wastes				
1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?		X		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		X		
6. Are outdoor storage containers properly labeled?	X			
7. Is there an accessible spill response kit?		X		SPILL KITS ON TRUCKS
8. Is there a spill response plan? If so, please provide to inspector.			X	UNKNOWN
9. Are storage tanks equipped with secondary containment?	✓			
10. Is secondary containment free of spills and rainwater?	✓			
11. Are loading and unloading areas free of spills and debris?		✓		
D.4 Equipment and Vehicles				
1. Are exposed parking areas free of significant spills and leaks?		✓		
2. Are heavy equipment and vehicles stored in garages or under canopies?		✓		
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?		✓		
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?	✓			

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?		X		
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:				
14. Where is used cleaning water discharged?				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			X	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	X			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.			X	

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: WASTE WATER COLLECTION FACILITY DATE: 6/4/07

E. VIOLATIONS

☒ No violations have been noted at this time

☐ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☒ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 _____

2 _____

3 _____

4 _____

5 _____

Owner/operator has been notified of corrective actions both verbally and by: ☒ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES OR NO (CIRCLE ONE) DATE: _____

COMMENTS _____

INSPECTOR NAME Mike Emerson **FACILITY CONTACT NAME (PRINT)** Shaun Atherton

INSPECTOR SIGNATURE _____ **FACILITY CONTACT SIGNATURE** _____

DATE 6/4/07 **DATE** 6-4-07

I. RECOMMENDED CITY ACTIONS

_____

FOR OFFICE USE ONLY

WO# 37956

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: **1. 2. 3. 4. 5.**

Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5**

CITY OF ENCINITAS & SAN DIEGUITO WATER DISTRICT

MEETING REPORT

Date of Meeting: 6-13-07 Department: PUBLIC WORKS

Meeting Leader (Print Clearly) MAYELA padilla, City of Encinitas environmental Specialist

Meeting Leader' s Signature: MP

Topics Discussed:

(Attach or identify all documents provided and discussed)

STORM water Employee TRAINING WORKSHOP

Personnel in Attendance

Employee Attendee Names (Print Clearly)	Employees Signatures
1) Sean Banks	
2) Lolie Trantalis	
3) John E King	
4) David Soto	
5) DON COWGILL	
6) Edward Toy	
7) Ben Taylor	
8) Kristy Rygiel	
9) Mike Emerson	
10) Shawn Atherton	

Use a second FORM 102, if space is inadequate.

Supervisor to retain the Original, and send a copy to Risk Management

FORM 102

R2-7/03

Appendix C

C-1 Industrial Inventory
C-2 Industrial Storm Water Quality Inspection Reports (2)

Appendix C-1 City of Encinitas Industrial Inventory

WDID	Operator_Owner Name	Facility_SiteName	Facility_Site Location	SIC1	Principal Product/Activity	Priority	Sub-basin
9 37S000299	SAN DIEGUITO UNION HIGH SCHOOL	TRANSPORTATION COOPERATIVE	1142 BONITA ST	4151	Transportaion Facility/vehicle maintenance	High	ENCINITAS
9 37S001545	SAN ELIJO JOINT POWERS AUTHORITY	WATER RECLAMATION FACILITY	2695 MANCHESTER AVE	4952	Treatment works treating domestic sewage	High	CARDIFF
9 37S004562	SAN DIEGO COUNTY	ENCINITAS LANDFILL	2099 ENCINITAS BLVD.	4953	Closed Landfill	High	ENCINITAS

Industrial ✓ AS 9/10/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name: Mike Emerson + M. Padilla

Date: 6/6/07 Time: _____ AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name: SAN ELIJO JPA (Water Reclamation Facility)

Street Address: 2695 MANCHESTER AVE CARDIFF, CA 92007

Mailing Address: P.O. BOX 1077 CARDIFF, CA 92007

Responsible Person(s): Patricia Berge / Holly TRYON - Associate Engineer

Property Manager: John Clark

Business Phone #: (760) 753 - 6203 ext. _____

Property Manager's #: 760-753-6203 x23

Business Fax #: (760) 753 - 5935

APN Number: _____

B. FACILITY/SITE INFORMATION

Principal activity: WASTE WATER TREATMENT

SIC Code(s): 4952

Does SIC Code best represent principal activity: ☒ Yes ☐ No

What is recommended SIC Code(s)? _____ New JURMP Classification? _____

Does facility have a current Encinitas business certificate? ☒ Yes ☐ No #_____ Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☒ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☒ Yes ☐ No WDID # 937S001545

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☒ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☒ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☒ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: SAN ELIJO LAGOON

Approximate distance to water bodies: ☒ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: STORM DRAIN CHANNEL - WEST

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities: ≈ 26 ACRES square feet

Approximate % impervious surface of this area: ~~75~~ 80 % New asphalt + PARKING AREA

Exposed areas of intensive outdoor activity: LOADING + UNLOADING AREAS

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?		X		
a. If yes, is wash water captured?		X		
b. Please provide contact name and phone number info for pressure washing company.	DONE BY STAFF			
5. Are roof downspouts directed away from areas of potential pollutants?		X		
6. How many employees do you have? 22 Are employees trained in storm water management? yes If so, provide a list of employees who have participated.		X		

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		Will revegitate Force Main
2. Are irrigation systems programmed to minimize over-watering and runoff?		X		Construction for Solana Beach
3. Is reclaimed water used for irrigation?		X		
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?		X		

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?		X		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?			X	Will cover + contain w/in 3 days
6. Are outdoor storage containers properly labeled?				
7. Is there an accessible spill response kit?		X		
8. Is there a spill response plan? If so, please provide to inspector.		X		Last updated 1/2007
9. Are storage tanks equipped with secondary containment?				
10. Is secondary containment free of spills and rainwater?				
11. Are loading and unloading areas free of spills and debris?				

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?				
2. Are heavy equipment and vehicles stored in garages or under canopies?				
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?		X		
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____ Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
14. Where is used cleaning water discharged?				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?	X			
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			X	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	X			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.		X		MISC SAND + GRAVEL BAG AS NEEDED

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: SAN ELIJO JPA DATE: 6/6/07

E. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☒ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 Provide Better Management of outDoor
2 Materials STORAGE OF UNUSED OR UNWANTED
3 PARTS LOCATED ON the SOUTHWEST PART of
4 PROPERTY (EAST of Building)
5

Owner/operator has been notified of corrective actions both verbally and by: ☒ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE: 6/20/07

COMMENTS 6/18/07 Received Email w/ Photo Showing that AREA is clear of parts + Machines. As of 6/18/07 SAN ELIJO JPA appears to be in Compliance. FINSPECTION DONE ON 6/18/07 By Mike Emerson

INSPECTOR NAME Mike Emerson FACILITY CONTACT NAME (PRINT) Holly Tryon

INSPECTOR SIGNATURE [signature] FACILITY CONTACT SIGNATURE Holly Tryon

DATE 6/6/07 DATE 6/6/07

I. RECOMMENDED CITY ACTIONS

_____

FOR OFFICE USE ONLY

WO # 37958
F.U.WO # 38262

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: 1. 2. 3. 4. 5

Level of cleanliness, BMP implementation, orderliness of site: 1. 2. 3. 4. 5

VRE 11/03

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name Mike Emerson / Mayela Padilla

Date 6/8/07 Time 2:35 AM / (PM) Type of Inspection: ☒ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name SAN DIEGUITO TRANSPORTATION

Street Address 1142 BONITA DRIVE ENCINITAS, CA 92024 Mailing Address 710 ENCINITAS BLVD. ENCINITAS CA 92024

Responsible Person(s) DANIEL J. LOVE / JOHN REDMAN Property Manager

Business Phone # (760) 753 - 8290 ext. 5052 Property Manager's #

Business Fax # (760) 633 - 1645 APN Number

B. FACILITY/SITE INFORMATION

Principal activity: BUS STORAGE + REPAIR FACILITY

SIC Code(s) 4151

Does SIC Code best represent principal activity: ☒ Yes ☐ No

What is recommended SIC Code(s)? New JURMP Classification?

Does facility have a current Encinitas business certificate? ☐ Yes ☒ No # Exp.

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☒ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☒ Yes ☐ No WDID # 937100029

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☒ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☒ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: Cotton Wood Creek

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☒ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: 3 STORM DRAINS (2 ON LOWER LOT)

Discharge observed: ☐ Yes ☐ No

If yes, describe:

Approximate area covered by industrial or commercial activities: 2.5 ACRES square feet

Approximate % impervious surface of this area 85 %

Exposed areas of intensive outdoor activity: 15

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?				
4. Is pressure washing of parking lots or sidewalks conducted at the facility?			X	Sweeper Truck Every 6 Months
a. If yes, is wash water captured?	X			
b. Please provide contact name and phone number info for pressure washing company.	X			
5. Are roof downspouts directed away from areas of potential pollutants?				
6. How many employees do you have? 70 Are employees trained in storm water management? If so, provide a list of employees who have participated.		X		@ Monthly Meeting yes, we reviewed it

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)	X			Very Little Landscaping
2. Are irrigation systems programmed to minimize over-watering and runoff?	X			
3. Is reclaimed water used for irrigation?	X			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?	X			

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?		X		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		X		
6. Are outdoor storage containers properly labeled?		X		
7. Is there an accessible spill response kit?	X	X		
8. Is there a spill response plan? If so, please provide to inspector.		X		
9. Are storage tanks equipped with secondary containment?		X		
10. Is secondary containment free of spills and rainwater?		X		
11. Are loading and unloading areas free of spills and debris?		X		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		X		
2. Are heavy equipment and vehicles stored in garages or under canopies?		X		When Not in Operation
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?		X		
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?		X		But Not covered, Drainage goes into Clarifier

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?		X		
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
14. Where is used cleaning water discharged?				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.		X		
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	X			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.	X			

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: SAN DIEGUITO TRANSPORTATION DATE: 6/8/07

E. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found. (Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☒ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 ① REPLACE STORM DRAIN FILTERS @ the BEGINING and
2 at the END of the RAINY SEASON (Sep 1 - APRIL 30)
3 ② IMPLEMENT THE RECOMONDATIONS as OUTLINED IN
4 THE 4/21/06 OEMC OWEN ENGINEERING REPORT
5 ③ CEMENT MIXER + AIR COMPRESSER to be STORED INSIDE or REMOVED

Owner/operator has been notified of corrective actions both verbally and by: ☒ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☒ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) **DATE:** 11/9/07 See Section I below

COMMENTS ① CLARIFIER WAS SERVICES BY Safety KLEEN
ON 7/25/06 ② SAMPLE ANALYSES SHOW an EXCEEDANCE
FOR CONDUCTIVITY, TSS, Cadmium, Copper, and ZINC.

INSPECTOR NAME Mike Emerson **FACILITY CONTACT NAME (PRINT)** Daniel Love

INSPECTOR SIGNATURE Mike Emerson **FACILITY CONTACT SIGNATURE** Daniel Love

DATE 6/8/07 **DATE** _____

I. RECOMMENDED CITY ACTIONS

1) Downstream INC inspected and replaced filters as required 2) Installed K rails + Straw waddles a perimeter of the parking lot 2) Implemented sweep in contract 3) Hydro-seeded EARTH BANK ④ PLACE all MOP buckets in shed. 5) Removed air compresser + cement mixer from property

FOR OFFICE USE ONLY

WO # 38030

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: 1. 2. 3. 4. (5)

Level of cleanliness, BMP implementation, orderliness of site: 1. 2. 3. (4) 5.

Appendix D

D-1 Commercial Inventory FY 2006-07
D-2 Routine Commercial Inspections Summary FY 2006-07
D-3 CityGIS Basic Training Manual
D-4 Commercial Storm Water Quality Inspection Forms (2)

Appendix D-1

BUSINESS NAME	ADDRESS	BUSINESS
100% NATURAL	918 N. COAST HWY 101	EATING PLACES
101 DINER	552 S COAST HWY 101	EATING PLACES
10-C'S LANDSCAPE ENHANCEMENTS	1301 TRABERT RANCH RD	LANDSCAPING
A FEW GOOD CREPES	1666 COTTAGE GLEN CT	EATING PLACES
A LITTLE MOORE CAFÉ	1030 N COAST HWY 101	EATING PLACES
A+ SMOG TEST ONLY CENTER	449 SECOND ST	AUTO
ABELS FLOWERS & PLANTS	710 CLARK AVE	NURSERY
ABSOLUTE PERFECTION FOUNTAIN	730 THRID ST	HANDYMAN
ADD STYLE DESIGNS	607 N. VULCAN AVENUE	CONTRACTOR
ADES & GISH NURSERIES- Growers	1492 HYMETTUS AVE	NURSERY
ADES & GISH NURSERIES- Growers	1150 MELBA ROAD	NURSERY
ADES & GISH NURSERIES- Growers	875 BALOUR	NURSERY
ALBERTSON'S #6724	134 N. EL CAMINO REAL	EATING PLACES
ALBERTSON'S #6754	479 ENCINITAS BLVD	EATING PLACES
ALL CITIES CONSTRUCTION SERVICES	729 REQUEZA ST	LANDSCAPING
ALL CITIES HAULING	937 WOODLAKE DR	HANDYMAN
AMERICAN BIODIESEL	336 ENCINITAS BLVD #130	AUTO/OTHER
AMERICAN LANDSCAPING-Landscapers	556 UNION ST	LANDSCAPING
AMICI'S	564 COAST HWY 101	EATING PLACES
AN LUXURY IMPORTS OF SAN DIEGO	1302 ENCINTIAS BLVD	AUTO
ANDY'S ORCHIDS	734 OCEAN VIEW	NURSERY
ANGELO'S BURGERS	608 S COAST HWY 101	EATING PLACES
ANTONIO MARTINEZ LANDSCAPING	341 FITZPATRICK RD	LANDSCAPING
AQUA TECH POOL CARE	233 DELPHINIUM ST	HANDYMAN
ARCO SERVICE STATION	310 ENCINITAS BLVD	AUTO
ARCO/AMPM (Gas Station/Carwash)	1580 LEUCADIA BLVD	AUTO
ARMSTRONG GARDEN CENTERS	701 N EL CAMINO REAL	NURSERY
ARNULFO MEDINA LANDSCAPING	1408 HERMES AVE. A	LANDSCAPING
AUTO ZONE	120 LEUCADIA BLVD	AUTO
B G J RESTAURANTS	345 S. COAST HWY 101 #C-2	EATING PLACES
BAJA FRESH MEXICAN GRILL	194 N EL CAMINO REAL	EATING PLACES
BAR LEUCADIAN	1542 N COAST HWY 101	EATING PLACES
BARBARA J WEBER, TRUSTEE- Growers	237 SEEMAN DR	NURSERY
BARRELS & BRANCHES	1452 SANTA FE DRIVE	NURSERY
BART FORRY	404 ENCINITAS BLD #203	HANDYMAN
BARTLETT & GISH FLOWERS- Growers	1492 HYMETTUS AVE	NURSERY
BASIL TOPS	1425 RUBENSTEIN AVE	NURSERY
BASKIN ROBBINS	441 ENCINITAS BOULEVARD	EATING PLACES
BATLEY ENTERPRISES- Growers	1415 RAINBOW RIDGE LN	NURSERY
BEACH CITY BURRITO	102 ABERDEEN DR	EATING PLACES
BEACH HOUSE RESTAURANT	2530 COAST HIGHWAY 101	EATING PLACES
BEACH TEA HOUSE 101	1076 N COAST HWY 101	EATING PLACES
BEEMER COATINGS	152 COOP CT	PAINTING
BELLA ROSA RESTAURANT	806 S COAST HWY 101	EATING PLACES
BELMAN HANDYMAN	738 SNAPDRAGON	HANDYMAN
BENNY'S GARDENING	1055 EVERGREEN DR	LANDSCAPING
BESTA WAN PIZZA HOUSE	148 ABERDEEN DR	EATING PLACES
BETY'S TACO RESTAURANT	1464 ENCINITAS BLVD	EATING PLACES
BIG JIM'S OLD SOUTH BAR BQ	190 N COAST HWY 101	EATING PLACES
BIRD HOUSE GRILL	250 N COAST HWY 101 #A	EATING PLACES
BIRD ROCK TROPICALS	221 PRINCEHOUSE LN	NURSERY
BLAKE DUFOUR HANDYMAN SERVICE	905 WOODLAKE DR	HANDYMAN
BLUE WATER OF LA JOLLA POOL SERVICE	2008 WANDERING RD	POOL

Appendix D-1

BOB'S CARPET CARE	336 SANFORD STREET	MOBILE
BORELLI'S RESTAURANT	285 N EL CAMINO REAL #106	EATING PLACES
BRADLEY ALLEN AUTO BODY	204 N COAST HWY 101	AUTO
BRADLEY LANDSCAPE DEVELOPMENT	607 N. VULCAN AVENUE	LANDSCAPING
BRAD'S FOREIGN AND DOMESTIC	565 WESTLAKE ST. #200C	AUTO
BRIAN BUILDING CORPORATION	1009 HURSTDALE AVE	CONTRACTOR
BROWNS PLANTS INC- Growers	1515 LAKE DR	NURSERY
BURGER KING	242 N EL CAMINO REAL	EATING PLACES
BURTECH PIPELINE INC.	102 SECOND ST	BUILDING MATERIAL
BYER, RICHARD- Growers	1731 CREST DR	NURSERY
C M A GROWERS	1254 URANIA AVENUE	NURSERY
C P A GROUP, INC. DBA ENCINITAS	901 SECOND ST	AUTO
CACTUS KING NURSERY	1534 CREST DRIVE	NURSERY
CAL PACIFIC PLANT FARM	1122 ORPHEUS AVE	NURSERY
CALIFORNIA PAINT & AUTO BODY	320 N EL CAMINO REAL #E,F	AUTO
CALIFORNIA ROVER	386 ENCINITAS BLVD	AUTO
CALYPSO CAFÉ	576 N COAST HWY 101	EATING PLACES
CAPTAIN KENOS	158 N. COAST HWY 101	EATING PLACES
CARDIFF CHEVRON	805 BIRMINGHAM DR	AUTO
CARDIFF CLASSICS INC	1049 S COAST HWY 101	AUTO
CARDIFF GREENHOUSES aka California Greenhouses	1753 LAKE DRIVE	NURSERY
CARDIFF PALM TREE 2	333 LISZT AVENUE	NURSERY
CARDIFF VALERO	820 BIRMINGHAM DR	AUTO
CARLS CLASSICS RESTORATION INC	107 DIANA ST	BAR
CARL'S JR	1137 REGAL RD	EATING PLACES
CHAMPAGNE FRENCH BAKERY AND CAFÉ	162 S RANCHO SANTA FE RD #E10	EATING PLACES
CHARLIE'S BY THE SEA	2526 S COAST HWY 101	EATING PLACES
CHARLIE'S FOREIGN CAR SVC	751 SECOND ST	AUTO
CHART HOUSE	2588 S COAST HWY 101	EATING PLACES
CHICKS NATURAL	191 N EL CAMINO REAL #107	EATING PLACES
CHILI'S GRILL & BAR	1004 N EL CAMINO REAL	EATING PLACES
CHINA TOWN	118 LEUCADIA BLVD	EATING PLACES
CHINO GREENHOUSES INC	1253 URANIA AVE	NURSERY
CHINO GREENHOUSES INC- Growers	1168 URANIA AVE	NURSERY
CHIN'S SZECHWAN RESTAURANT	625 ENCINITAS BLVD	EATING PLACES
CHIPOTLE MEXICAN GRILL	268 N EL CAMINO REAL	EATING PLACES
CHRISTIAN BROTHERS LANDSCAPING	636 LUECADIA BLVD	LANDSCAPING
CICCIOTTIS TRATTORIA ITALIANA	1933 SAN ELIJO AVE	EATING PLACES
CLAUDIA NELSON'S HOUSEKEEPING	1338 MACKINNON AVE	JANITORIAL
CLEAN SENSE CARPET CLEANERS	328 1/2 LA MESA	MOBILE
CLEAR CHOICE WINDOW CLEANING	138 DIANA ST	HANDYMAN
COAST BRAKE & WHEEL SVC	444 S COAST HWY 101	AUTO
COASTAL FOREIGN AUTO SVC	320 N EL CAMINO REAL #ABC	AUTO
COCO'S FAMILY RESTAURANT #881	407 ENCINITAS BLVD	EATING PLACES
COLT CONSTRUCTION & DEVELOPMENT	709 CATHY LN	CONTRACTOR
COOKIES IN BLOOM	1277 ENCINITAS BLVD	EATING PLACES
CORDOVA GARDENS	902 ENCINITAS BLVD #A	NURSERY
CORDOVA, JOE- Growers	720 BALOUR DR	NURSERY
COSGROVE CYMBIDIUM CO- Growers	1200 SAXONY RD	NURSERY
CROWN POOL AND LANDSCAPE	2126 VIA TIEMPO AVE	HANDYMAN
D STREET BAR AND GRILL	485 S COAST HWY	EATING PLACES
D. ADES INVESTMENT CORPORATION	875 BALOUR DR	NURSERY
D. BELL CONSTRUCTION, INC	1539 CAUDOR ST	CONTRACTOR
DAIRY QUEEN	1465 ENCINITAS BLVD #B	EATING PLACES

DALEY DOUBLE COCKTAIL LOUNGE	546 S COAST HWY 101	EATING PLACES
DANIEL MOJONNIER ENTERPRISES- Growers	912 URANIA	NURSERY
DANIELS CONSTRUCTION	2105 MONTGOMERY AVE	CONTRACTOR
DAN'S PRECISION ALIGNMENT	565 WESTLAKE ST #200F	AUTO
DAPHNES GREEK CAFÉ	130 N. EL CAMINO REAL #C	EATING PLACES
DAVINA'S CABO GRILL	1950 COAST HWY 101	EATING PLACES
DAVIS, ERIC- Growers	752 BRACERO RD	NURSERY
DAWGS	379 TRAILVIEW RD	ANIMAL
DE PASCALE CONSTRUCTION, INC	555 SECOND ST. #4	CONTRACTOR
DEFINITIVE MOBILE AUDIO (DMA)	126 A ST.	AUTO
DEL MAR LANDSCAPING	2016 BULRUSH LANE, CARDIFF	LANDSCAPING
DEL RANCHO POOL & SPA SUPPLY	1315 ENCINITAS BLVD	POOL
DEL TACO	130 CALLE MAGDALENA	EATING PLACES
DENNY'S RESTAURANT NO. 6828	135 ENCINITAS BLVD	EATING PLACES
DISCOUNT AUTO SERVICES	710 S COAST HWY 101	AUTO
DIVINE ORCHIDS	1015 URANIA	NURSERY
DOMINO'S PIZZA	1458 ENCINITAS BLVD	EATING PLACES
DON'S FLOWERS	924 BRACERO RD	NURSERY
DOVE HOLLOW FARM	1084 DOUBLE LL RANCH RD	ANIMAL
DR. JOE	293 N. EL CAMINO REAL	EATING PLACES
DRAMM & ECHTER INC.	1150 QUAIL GARDENS DRIVE	NURSERY
E STREET CAFÉ	128 WEST E STREET	EATING PLACES
EAST COAST PIZZA	2015 SAN ELIJO AVENUE	EATING PLACES
ECKE RANCH- Growers	441 SAXONY RD	NURSERY
EINSTEIN BROS. BAGELS	1006 N EL CAMINO REAL #B	EATING PLACES
EL CABALLO LOCO, LLC.	1951 SAN ELIJO AVE	EATING PLACES
EL CALLEJON	345 S COAST HWY 101 #C2	EATING PLACES
EL CAMINO TIRE & BRAKE	330 N EL CAMINO REAL	AUTO
EL CORTEZ MEXICAN FOOD	445 ENCINITAS BLVD.	EATING PLACES
EL NOPALITO	560 SANTA FE DR	EATING PLACES
EL POLLO LOCO	1002 N EL CAMINO REAL	EATING PLACES
El TORITO	1068 N. EL CAMINO REAL	EATING PLACES
EL TORITO MEAT MARKET	948 No. COAST HWY 101	EATING PLACES
EMERALD M. GROWERS- Growers	834 LEUCADIA BLVD	NURSERY
ENCINITAS AUTOMOTIVE REPAIR	322 N EL CAMINO REAL #A,B	AUTO
ENCINITAS CAFÉ	531 S COAST HWY 101	EATING PLACES
ENCINITAS CAR WASH	293 N. EL CAMINO REAL	AUTO
ENCINITAS CHEVRON	350 ENCINITAS BLVD	AUTO
ENCINITAS DONUTS	580 SANTA FE	EATING PLACES
ENCINITAS ENTERPRISES, LLC/DBA	1616 LAKE DRIVE	NURSERY
ENCINITAS EXXON	325 ENCINITAS BLVD	AUTO
ENCINITAS FORD	1424 ENCINITAS BLVD	AUTO
ENCINITAS FOREIGN & DOMESTIC	901 SECOND ST	AUTO
ENCINITAS GREEN HOUSES	351 UNION ST	NURSERY
ENCINITAS JAPANESE SPECIALIST	328 N. EL CAMINO REAL # A	AUTO
ENCINITAS RANCH CAFÉ & GOLF SCHOOL	1275 QUAIL GARDENS DRIVE	EATING PLACES
ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DRIVE	GOLF COURSE
ENCINITAS SMOG TEST ONLY CTR	682 S COAST HWY 101	AUTO
ENCINITAS YOGURT AND ICE CREAM	1070 N EL CAMINO REAL #C	EATING PLACES
ERWIN MOJONNIER ENTERPRISES- Growers	679 CAMINO ELDORADO	NURSERY
ETS TRANSMISSION SYSTEMS	318 N. EL CAMINO REAL #B	AUTO
EXPO DESIGN CENTER	1550 LEUCADIA BLVD	BUILDING MATERIAL
F & V Painting, Inc. DBA CERTAPRO	1340 RAVEAN CT	HANDYMAN
FELIX SANCHEZ GARDENING SERVICE	880 DEL RIO AVE	LANDSCAPING

FENDER MENDER	326 N EL CAMINO REAL	AUTO
FERNANDO J. C.	1168 ARCADIA RD	HANDYMAN
FIC SMOG	322 N EL CAMINO REAL #C	AUTO
FIESTA FLOWERS	335 SANTA FE DRIVE	NURSERY
FILIBERTO'S MEXICAN RESTAURANT	476 S COAST HWY 101	EATING PLACES
FILIPPI'S PIZZA GROTTO	1486 ENCINITAS BLVD	EATING PLACES
FINISHING TOUCH MOLDING, INC	921 HYMETUS AVE	CONTRACTOR
FIREFLY GRILL AND WINE BAR	251 N EL CAMINO REAL #B	EATING PLACES
FIRENZE TRATTORIA	162 S RANCHO SANTA FE RD #G10	EATING PLACES
FIRST MISSION AUTO BODY REPAIR	339 N EL CAMINO REAL #B	AUTO
FIRST STREET BAR	656 S. COAST HWY 101	EATING PLACES
FLOWERS OF LA COSTA	1911 SAXONY ROAD	NURSERY
FOX POINT FARMS	1657 N VULCAN AVE	NURSERY
FRANCO'S FLOWERS INC- Growers	842 LEUCADIA BLVD	NURSERY
FRAZEE PAINT AND WALL COVERING	270 N EL CAMINO REAL	PAINTING
FULANOS	145 LEUCADIA BLVD	EATING PLACES
G & J PLANTS	712 CLARK AVENUE	NURSERY
G B ENTERPRISES	1106 SECOND ST	HANDYMAN
G.K. LANDSCAPE	244 SECOND ST. #E	LANDSCAPING
GALAPACIFICA LANDSCAPE	253 MANGANO CIR	LANDSCAPING
GARDEN STATE BAGELS	191 N EL CAMINO REAL #106	EATING PLACES
GIANNI'S OF LEUCADIA	1468 N COAST HWY 101	EATING PLACES
GILL, PADAM- Growers	754 BONITA DR	NURSERY
GIOVANNI'S SANDWICH SHOP	764 S COAST HWY 101	EATING PLACES
GISH FOLIAGE	1245 LAKE DRIVE	NURSERY
GLOVER, A T- Growers	571 UNION ST	NURSERY
GOLDEN BAKED HAMS	114 N. EL CAMINO REAL	EATING PLACES
GOLDEN BOWL RESTAURANT	1337 ENCINITAS BLVD	EATING PLACES
GRANITE HOMES REQUEZA LLC- Growers	843 REQUEZA ST	NURSERY
GREEK AMERICAN FAMILY RSTRNT	392 N EL CAMINO REAL	EATING PLACES
GREENSTEIN MICHAEL CO. INC	132 N. El CAMINO REAL #P132	PAINTING
GROOT, DANA- Growers	603 UNION ST	NURSERY
GUILLERMINA'S HOUSEKEEPING	1253 ORKNEY LN	JANITORIAL
GUSTO TRATTORIA	429 ENCINITAS BLVD	EATING PLACES
H.S. SOLUTIONS	731 SNAPDRAGON ST.	HANDYMAN
HAPPY AUTO SALES	148 N COAST HWY 101	AUTO
HARRIS RADIATOR WORKS	274 COAST HWY 101	AUTO
HARVEST RANCH MARKET	162 S RANCHO SANTA FE RD	EATING PLACES
HENRY'S MARKETPLACE	1327 ENCINITAS BLVD	EATING PLACES
HOLIDAY PET HOTEL	551 UNION ST	ANIMAL
HOME DEPOT	1001 EL CAMINO REAL	BUILDING MATERIAL
HOME MAINTENANCE SERVICES	842 BONITA DR. #A	HANDYMAN
HONEY BAKED HAM	459 ENCINITAS BLVD	EATING PLACES
HONEY'S BISTRO & BAKERY	632 S COAST HWY 101	EATING PLACES
HOPULUVGARLIC	252-5 N EL CAMINO REAL	EATING PLACES
HORACE ANDERSON GREENHOUSES	375 LA COSTA AVENUE	NURSERY
HORSES AND MOORE PET CARE	1060 CALIFORNIA ST	ANIMAL
HUGOS AUTO EUROPEAN CAR SVC	110 N COAST HWY 101	AUTO
HYDRO SCAPE	750 S COAST HIGHWAY 101	NURSERY
ISLAND BROTHERS TERIYAKI	274 N EL CAMINO REAL #A	EATING PLACES
ISLANDS	1588 LEUCADIA BLVD	EATING PLACES
ISLAS JOSE L- Growers	235 LA COSTA AVE	NURSERY
ITO KIYOKO- Growers	936 EOLUS AVE	NURSERY
J & S GREENHOUSES	748 REQUEZA	NURSERY

J A LANDSCAPE	2068 BULRUSH LN	LANDSCAPING
JACK IN THE BOX #42	1967 SAN ELIJO AVE	EATING PLACES
JACK IN THE BOX #97	1439 ENCINITAS BLVD	EATING PLACES
JAM ROC	101 N COAST HWY 101	EATING PLACES
JAMBA JUICE	272 N EL CAMINO REAL #A	EATING PLACES
JAMIE'S POOL SERVICE	1265 RUBENSTEIN AVE	HANDYMAN
JAMMER'S JAVA	218 N EL CAMINO REAL #A	EATING PLACES
JAVA EXPRESS	325 ENCINITAS BLVD	EATING PLACES
JAY'S GOURMET RESTAURANT	218 N EL CAMINO REAL #B	EATING PLACES
JIFFY LUBE #1764	221 N EL CAMINO REAL	AUTO
JORGE MENDOZA	953 NARDO RD.	LANDSCAPING
JORGE'S MEXICATESSAN	267 N EL CAMINO REAL #E	EATING PLACES
JORGE'S MEXICATESSAN	417 SANTA FE #B	EATING PLACES
JOSE LOUIS ISLAS-Grower	514 LA COSTA AVE	NURSERY
JUANITAS TACO SHOP	290 N COAST HWY 101	EATING PLACES
JUICE N JAVA	168 N. EL CAMINO REAL #B	EATING PLACES
JUICY JUICE	201 S. EL CAMINO REAL #A	EATING PLACES
KAITO RESTAURANT	1476 ENCINITAS BLVD	EATING PLACES
KARINAS TACO SHOP	916 N. COAST HWY 101	EATING PLACES
KC'S TANDOOR	1070 N EL CAMINO REAL #A	EATING PLACES
KEALANI'S	137 W. D ST	EATING PLACES
KEITH'S AUTOMOTIVE & ELECTRIC	215 W. G ST	AUTO
KENTUCKY FRIED CHICKEN	266 N EL CAMINO REAL	EATING PLACES
KERCHER'S PAINT REPAIR	170 PHOEBE ST. #10	AUTO
KESSING PAINTING	261 CALIBAN CT	PAINTING
KG GROWERS	940 ORPHEUS AVE	NURSERY
KIM'S VIETNAMESE & CHINESE RESTAURANT	745 S COAST HWY 101 #103	EATING PLACES
KIS JUICE BAR AND RESTAURANT	2591 S COAST HWY 101	EATING PLACES
KOHLER POOL SERVICE & SUPPLY	368 N EL CAMINO REAL	POOL
KONA KOFFEE HUT	230 QUAIL GARDENS DR	EATING PLACES
KOTIJA JR TACO SHOP	852 N COAST HWY 101	EATING PLACES
KRAGEN AUTO PARTS	180 N EL CAMINO REAL	AUTO
KRAKEN BAR & GRILL	2531 S COAST HIGHWAY 101	EATING PLACES
L & E GREENHOUSES	712 CLARK AVENUE	NURSERY
L.B. DESIGNS	837 STRATFORD DR	LANDSCAPING
LA BONNE BOUFFE	471 ENCINITAS BLVD	EATING PLACES
LA CANTINELLA	2633 S COAST HWY 101	EATING PLACES
LA COSTA FARMS-retail fruits &vegetables	1911 SAXONY ROAD	NURSERY
LA ESPECIAL NORTE	664 N COAST HWY 101	EATING PLACES
LA SALSA RESTAURANT	219 N EL CAMINO REAL	EATING PLACES
LANDSCAPE MAINTENANCE/DAVE STEINBIS	699 N. VULCAN AVENUE #127	LANDSCAPING
LAS OLAS MEXICAN RESTAURANT	2655 S COAST HWY 101	EATING PLACES
LE PETIT CALYPSO/LE PAPAGAYO	1002 N. COAST HWY 101	EATING PLACES
LESLIE'S SWIMMING POOL SUPPLIES	270 EL CAMINIO REAL	POOL
LEUCADIA DONUTS	1604 N COAST HWY 101	EATING PLACES
LEUCADIA NURSERY/KOCHER FLOWERS	950 BRITTANY AVE	NURSERY
LEUCADIA ORCHIDS	1660 BURGUNDY ROAD	NURSERY
LEUCADIA PIZZERIA	315 S COAST HWY 101 #V	EATING PLACES
LEUCADIA SUSHI HOUSE	996 N COAST HWY 101	EATING PLACES
LIVING ART WATER GARDENS	759 MUNEVAR RD	LANDSCAPING
LOIS FLOWERS	1195 CARDIFF DRIVE	NURSERY
LOPEZ FLOWERS	440 SAXONY ROAD	NURSERY
LUI DELGADO LANDSCAPING SERVICE	1545 LAKE DRIVE	LANDSCAPING
LUIS MALDONADO	1041 SAN ANDRADE #A	LANDSCAPING

M.G. HANDY MAN WORK	2057 VILLAGE PARKWAY #204	HANDYMAN
MAC DESIGN & DEVELOPMENT	471 CHESTERFIELD	LANDSCAPING
MAISTER LANDSCAPE CONSTRUCTION	PO BOX 715, CARDIFF	LANDSCAPING
MALDONADO FLOWERS- Growers	1412 MACKINNON AVE	NURSERY
MAMA HOULI & SISTER T	423 LA MESA AVE	EATING PLACES
MAMA LULU'S PIZZA AND PASTA	191 N EL CAMINO REAL #110	EATING PLACES
MANDARIN CITY	815 BIRMINGHAM	EATING PLACES
MANHATTAN'S PIZZA GIANT	143 W. D STREET	EATING PLACES
MARIE CALLENDER'S	162 S RANCHO SANTA FE RD #B30	EATING PLACES
MARK LANGER MASONRY & LANDSCAPING	1310 SUMMIT AVENUE, CARDIFF	MASONRY
MAURICE'S HANDYMAN SERVICES	1190 ENCINITAS BLVD P167	HANDYMAN
MAY GREENHOUSES, INC	241 ANDREW AVE	NURSERY
MAY GREENHOUSES, INC- Growers	2021 SHERIDAN RD	NURSERY
MAYER POOL SERVICE	1553 PLUMTREE DR	POOL
MC DONALD'S	1271 ENCINITAS BLVD	EATING PLACES
MC DONALD'S #14229	1064 N EL CAMINO REAL	EATING PLACES
MERCEDES WEST AUTO WHOLESALE	2026 OXFORD AVE	AUTO
MERITAGE RESTAURANT & BAR	897 S COAST HWY 101 #F104	EATING PLACES
MEXICO VIEJO	1465 ENCINITAS BLVD #E	EATING PLACES
MIDAS MUFFLER SHOPS	328 N EL CAMINO REAL #C	AUTO
MIGUEL'S LANDSCAPING	1105 REGAL RD	LANDSCAPING
MILLER TIRE	759 MUNEVAR RD	AUTO
MIQUEL ESTEVEZ FLOWERS	708 DEL RIO AVENUE	NURSERY
MIRAMONTES MASONRY	3726 SAGE CANYON DR	MASONRY
MISTER SUSHI	111 N EL CAMINO REAL #B	EATING PLACES
MIYABI JAPANESE STEAK HOUSE & SUSHI	211 S EL CAMINO REAL #C	EATING PLACES
MO JOE'S COFFEE COMPANY	590 ENCINITAS BLVD	EATING PLACES
MOBILE SHINE DETAILERS	3320 CALLE SAND BLAST	MOBILE
MOJONNIER ENTERPRISES - Grower	2009 SHERIDAN RD	NURSERY
MONTANO'S HOUSECLEANING	704 REGAL RD. #C-12	HANDYMAN
MOONLIGHT GRILLE	190 N. COAST HWY 101	EATING PLACES
MOONLIGHT MOTORS	215 MELROSE AVE	AUTO
MORALES ROMERO NURSERY	805 BRACERO RD	NURSERY
MOSSY CHEVROLET - ENCINITAS	160 CALLE MAGDALENA	AUTO
MOZY CAFÉ	698 N. COAST HWY 101	EATING PLACES
MR. PAINT	404 ENCINITAS BLVD #228	PAINTING
MUHLETHALER W.F.	350 SEEMAN DRIVE	NURSERY
NATIVE SONS NURSERY	631 ORPHEUS AVENUE	NURSERY
NELSON AND SON'S POOL	PO BOX 235164, ENCINITAS	POOL
NEW LUCKY SZECHWAN	445 SANTA FE DR	EATING PLACES
NFAROOQI ENTERPRISES, LLC	1967 SAN ELIJO AVE	EATING PLACES
NIKKO ENTERPRISE CORPORATION	1327 ENCINITAS BLVD	EATING PLACES
NOODLES & COMPANY	260 N. EL CAMINO REAL #C	EATING PLACES
NORTH COAST EQUESTRIAN PARK	1877 OLIVENHAIN RD	ANIMAL
NORTH COUNTY HAULING SERVICE	1117 WOODLAKE DR	HANDYMAN
NORTH COUNTY MOTORSPORTS	111 C ST	AUTO
NRGIZE LIFESTYLE CAFÉ	201 S. EL CAMINO REAL #A	EATING PLACES
O & J GROWERS	1313 LAKE DR	NURSERY
OGATA JAPANESE CUISINE	615 S COAST HWY 101	EATING PLACES
OGGI'S PIZZA & BREW	305 ENCINITAS BLVD	EATING PLACES
ONE SWEET WORLD, LLC	148 ABERDEEN DR	EATING PLACES
ORCHID BARRON	804 CATHY LANE	NURSERY
ORCHID PLACE	829 BRACERO	NURSERY
OWENS CO.	18525 ALISO CANYON RD	HANDYMAN

OWENS, MARK N- Growers	1073 CREST DR	NURSERY
PACIFIC COAST POOL SERVICE	1439 LINDA SUE LANE	POOL
PACIFIC ROOF CLEANING	1571 AVENIDA DE LAS LILAS	HANDYMAN
PACIFIC VERDE NURSERY	556 UNION ST	NURSERY
PACIFICA FLOWERS	510 LA COSTA AVE	NURSERY
PANDA EXPRESS	262 N EL CAMINO REAL	EATING PLACES
PANDA EXPRESS	1084 N EL CAMINO REAL #E	EATING PLACES
PANNIKIN	510 N COAST HWY 101 #A	EATING PLACES
PAPA JOHN'S PIZZA #1596	337 N EL CAMINO REAL #B	EATING PLACES
PAPA TONI'S PIZZA	554 SANTA FE DR	EATING PLACES
PASSAGE TO INDIA RESTAURANT	257 N EL CAMINO REAL #K	EATING PLACES
PASTA BRAVO	1042 N EL CAMINO REAL #J05	EATING PLACES
PATRA CRUZ	351 COUNTRYWOOD LN	HANDYMAN
PATRICE ALEXANDER	2437 OXFORD AVE	HANDYMAN
PATRICK W. QUINLAN HANDYMAN	454 REQUEZA ST. #320a	HANDYMAN
PAUL'S AUTO ELECTRIC	325 MELROSE AVE	AUTO
PAYNE, PARRY- Growers	1231 BIRMINGHAM DR	NURSERY
PEI WEI ASIAN DINER	1560 LEUCADIA BLVD #A	EATING PLACES
PEP BOYS	256 N EL CAMINO REAL	AUTO
PEZ DEL INC DBA IT'S A GRIND	204 N. EL CAMINO REAL STE H	EATING PLACES
PICK UP STIX RESTAURANT	127 N EL CAMINO REAL #H	EATING PLACES
PINO'S CUCINA ITALIANA	967 S COAST HWY 101 #101	EATING PLACES
PIPES CAFÉ	121 LIVERPOOL DR	EATING PLACES
PIZZA HUT	127 N EL CAMINO REAL #G	EATING PLACES
PIZZICATO GOURMET PIZZA	252 N EL CAMINO REAL #5	EATING PLACES
PLANTRI, THE	921 URANIA AVENUE	NURSERY
POOLMASTER	PO BOX 232265, LEUCADIA	POOL
POTATO SHACK CAFÉ	120 W I STREET	EATING PLACES
PRECISION TUNE	318 N EL CAMINO REAL #A	AUTO
PRO EARTH LANDSCAPE	2210 ENCINITAS BLVD	LANDSCAPING
Q C SZECHUAN RESTAURANT	288 N EL CAMINO REAL #C	EATING PLACES
QUAIL BOTANICAL GARDENS	230 QUAIL GARDENS DR	BOTANICAL GARDEN
QUEZADA, TERESA A- Growers	1190 ISLAND VIEW LN	NURSERY
QUIZNO'S CLASSIC SUBS	337 N EL CAMINO REAL #A	EATING PLACES
R & L SKY BLUE INC.	598 PARK LANE	NURSERY
R. K. ENTERPRISES	658 SANTA FE DR	HANDYMAN
RALPHS GROCERY CO	125 N EL CAMINO REAL	EATING PLACES
RANCH AND SEA POOL CARE	1686 FALCON HILL CT, CARDIFF	POOL
RANCHO AUTO BODY	591 WESTLAKE ST #A,B,C	AUTO
RANCHO LOS AMIGOS EQUESTRIAN CENTER	3049 CAMINO DEL RANCHO	ANIMAL
RANCHO URIBE	1616 LAKE DRIVE	NURSERY
RAUL'S SHACK	490 S COAST HWY 101 #A	EATING PLACES
RCP BRICK AND BLOCK	577 N VULCAN AVE	MASONRY
RED POINT HOMES, INC	609 S. VULCAN AVE #302	CONTRACTOR
RED ROBIN BURGER & SPIRITS	294 N EL CAMINO REAL	EATING PLACES
REED MOTORS	1326 RAINBOW RIDGE LANE	AUTO
RICO'S TACO SHOP	165 S EL CAMINO REAL #L	EATING PLACES
ROADONE	1205 S COAST HWY 101	AUTO
ROBBIE'S ROADHOUSE	530 N COAST HWY 101	EATING PLACES
ROBERT TESSIERI CONSTRUCTION	1743 LE GAYE DR.	CONTRACTOR
ROBERTO'S MEXICAN FOOD	1900 N COAST HWY 101 #D	EATING PLACES
ROBERTO'S TACO SHOP	274 N EL CAMINO REAL #B	EATING PLACES
ROBERTS ENTERPRISES, LLC	215 S. EL CAMINO REAL H	EATING PLACES
ROUND TABLE PIZZA	1321 ENCINITAS BLVD	EATING PLACES

ROXY RESTAURANT	517 S COAST HWY 101	EATING PLACES
RUBIO'S FRESH MEXICAN GRILL	252 N EL CAMINO REAL #4	EATING PLACES
RUSSO'S PASTA SHOP	270 N EL CAMINO REAL #I	EATING PLACES
S & BROTHERS INC. AUTO UPHOLSTERY	322 N EL CAMINO REAL #F	AUTO
S.S. POOL SERVICE	1125 WOODLAKE DR	HANDYMAN
SAGE GRILL	1506 ENCINITAS BLVD	EATING PLACES
SAKURA-BANA SUSHI BAR	1031 S. COAST HWY 101 #101	EATING PLACES
SAN DIEGO STONE CARE	731 SNAPDRAGON ST.	HANDYMAN
SANDWICH STATION	218 N EL CAMINO REAL #A	EATING PLACES
SANTA FE BARBEQUE CO	1505 ENCINITAS BLVD	EATING PLACES
SANTA FE CAFÉ	445 SANTA FE DR	EATING PLACES
SANTA FE TRADING	417 SANTA FE #B	EATING PLACES
SANTINO'S TRATTORIA	257 N EL CAMINO REAL #D	EATING PLACES
SAVORY	267 N EL CAMINO REAL #A-B	EATING PLACES
SCOT ENTERPRISES	454 REQUEZA ST. #130C	HANDYMAN
SECRET GARDEN LANDSCAPING	1236 URANIA	LANDSCAPING
SEEDLING EXPRESS	1698 CREST DR	NURSERY
SEEDLING EXPRESS	440 SAXONY ROAD	NURSERY
SELF-REALIZATION FELLOWSHIP- Growers	1177 CORNISH DR	NURSERY
SEVEN ELEVEN	102 LEUCADIA BLVD	AUTO
SEVEN ELEVEN	2211 SAN ELIJO AVE	AUTO
SEVEN ELEVEN	1988 VILLAGE PARK WAY	AUTO
SEVEN ELEVEN	105 WEST D	EATING PLACES
SEVEN ELEVEN	592 SANTE FE DR	EATING PLACES
SEVEN ELEVEN	1446 ENCINITAS BLVD	EATING PLACES
SEVEN ELEVEN	2240 ENCINITAS BLVD #A	EATING PLACES
SHELL (ENCINITAS GAS & AUTO REPAIR)	1355 ENCINITAS BLVD	AUTO
SHELL (GAS/CAR WASH)	1060 N EL CAMINO REAL	AUTO
SHELL (LEUCADIA SHELL)	865 ORPHEUS	AUTO
SHELL QUICK SHINE CAR WASH	160 ENCINITAS BLVD	AUTO
SIAMESE BASIL RESTAURANT	527 S COAST HWY	EATING PLACES
SINCLAIR GROUNDS MAINTENANCE	454 REQUEZA ST.	LANDSCAPING
SKOPEC, FRANK- Growers	1381 SUMMIT AVE	NURSERY
SMART & FINAL	150 ENCINITAS BLVD	EATING PLACES
SMOOTH JAVA, INC DBA MAUI WOWI	165 S. EL CAMINO REAL STE A	EATING PLACES
SOFSPRA CARWASH	790 COAST HWY 101	AUTO
SOLANA SELECT PALMS/JIM RILEY	887 BRITTANY	NURSERY
SPECIMEN HOUSE	782 LEUCADIA BLVD	NURSERY
SPEEDY TUNE & BRAKE	225 N EL CAMINO REAL	AUTO
SPEERT, ELLEN- Growers	1905 CREST DR	NURSERY
SPRING LANDSCAPING	1578 N. COAST HWY 101 1	LANDSCAPING
ST GERMAINS CAFÉ	1010 S COAST HWY #12	EATING PLACES
ST TROPEZ BAKERY AND BISTRO	947 S COAST HWY 101 #D103	EATING PLACES
STATER BROTHERS	1048 N EL CAMINO REAL	EATING PLACES
STAVER, DAN- Growers	1586 CREST DR	NURSERY
SUBMAN	113 N. EL CAMINO REAL STE E	EATING PLACES
SUBMANIA	1514 ENCINITAS BLVD	EATING PLACES
SUBMANS	113 N EL CAMINO REAL #E	EATING PLACES
SUBWAY	2105 SAN ELIJO AVE	EATING PLACES
SUBWAY #27567	1560 LEUCADIA BLVD #C	EATING PLACES
SUBWAY #4442	272 N EL CAMINO REAL #C	EATING PLACES
SUN COAST POOL SYSTEMS	PO BOX 430, CARDIFF	POOL
SUNSHINE GARDENS	155 QUAIL GARDENS DR	NURSERY
SUPER DONUT #1	465 ENCINITAS BLVD	EATING PLACES

SUPER DONUT #2	252 N EL CAMINO REAL #2	EATING PLACES
SURFDOGS JAVA HUT	1126 S COAST HWY	EATING PLACES
SURFSIDE CREAMERY	2031 SAN ELIJO AVE	EATING PLACES
SUSHI BAR BLUE FIN	257 N. EL CAMINO REAL #D & E	EATING PLACES
SUSHI HOUSE	214 N EL CAMINO REAL #A-B	EATING PLACES
SUSPENSION PLUS	322 N EL CAMINO REAL #D,E	AUTO
SWAMI'S AUTOMOTIVE REPAIR	320 N. EL CAMINO REAL #D	AUTO
SWAMI'S CAFÉ	1163 S COAST HWY 101	EATING PLACES
TACO AUCTIONERS	1949 SAN ELIJO AVE	EATING PLACES
TACO BELL INC	1502 ENCINITAS BLVD	EATING PLACES
TARGET	1010 N EL CAMINO REAL	EATING PLACES
TASTES GROUP, LLC	641 S COAST HWY 101	EATING PLACES
TAYAMA GREENHOUSES INC- Growers	710 REQUEZA ST	NURSERY
TERIYAKI 101 LEUCADIA	250 N COAST HWY 101 #B	EATING PLACES
THAI PAN EXPRESS	138 N EL CAMINO REAL	EATING PLACES
THE BULLPEN	149 S. EL CAMINO REAL	EATING PLACES
THE DRAKE CENTER FOR ANIMAL HEALTH	195 N. EL CAMINO REAL	ANIMAL
THE GREENERY RAW FOOD CAFÉ	133 DAPHNE AVE	EATING PLACES
THE ORIGINAL PANCAKE HOUSE	160 S RANCHO SANTA FE RD D10	EATING PLACES
THE PALM SOURCE- Growers	1329 LAKE DR	NURSERY
THE QUICK FIX	144 ENCINITAS BLVD	EATING PLACES
THE QUICK FIX	552 SANTA FE	EATING PLACES
THRIFTY OIL CO #160	633 BIRMINGHAM DR	AUTO
TIERRA VERDE	1545 LAKE DRIVE	LANDSCAPING
TINNEY, BROOKE- Growers	1674 CREST DR	NURSERY
TODAYS PIZZA & SALAD	481 SANTA FE DRIVE	EATING PLACES
TOM, GIM- Growers	3107 MANCHESTER AVE	NURSERY
TOMIKO'S RESTAURANT	87 ENCINITAS BLVD	EATING PLACES
TRADER JOE'S	115 N EL CAMINO REAL	EATING PLACES
TRANS MASTERS	184 N COAST HWY 101	AUTO
TRANSWEST ENTERPRISES, INC	184 N. COAST HWY 101	AUTO
TRATTORIA I. TRULLI	830 S COAST HWY 101 #A	EATING PLACES
TRATTORIA POSITANO	2171 SAN ELIJO AVE	EATING PLACES
TRISH'S SECRET GARDEN	1236 URANIA AVENUE	NURSERY
TUSCAN SUN ITALIAN DELI	1070 N EL CAMINO REAL #B	EATING PLACES
TVERDOCH, R- Growers	898 HYMETTUS AVE	NURSERY
UNDERWATER ENVIRONMENTS	442 RANCHO SANTA FE	NURSERY
UNION 76 ROSANO'S	236 N EL CAMINO REAL	AUTO
V.G. DONUTS AND BAKERY	106 ABERDEEN DR	EATING PLACES
VAN SLYKE LANDSCAPE DESIGN & CONSTRUCTION	RANCHO SANTA FE ROAD, OLIVENH	LANDSCAPING
VERMA'S TOASTY, INC	337 N. EL CAMINO REAL #A	EATING PLACES
VIA ITALIA	565 SO. COAST HWY 101	EATING PLACES
VIGLUCCI'S TRATTORIA ITALIANA	505 S COAST HWY	EATING PLACES
VISTA PAINT WINDOW & WLCVRNGS	133 N EL CAMINO REAL	PAINTING
VONS #2144	262 NORTH EL CAMINO REAL	EATING PLACES
VONS #2351	453 SANTA FE DR	EATING PLACES
WAHOO'S FISH TACOS	1006 N EL CAMINO REAL #C	EATING PLACES
WALT HOEHN	1752 EOLUS AVENUE	NURSERY
WEIDNER'S GARDENS	695 NORMANDY RD	NURSERY
WEIDNER'S GARDENS	860 EOLUS	NURSERY
WEIDNER'S GARDENS- Growers	850 NORMANDY RD	NURSERY
WENDY'S RESTAURANT	102 ENCINITAS BLVD	EATING PLACES
WEST COAST WRECK CHECK	1227 VILLAGE VIEW RD	AUTO
WHALEN PERFORMANCE	1726 AVENUE MELODIA	AUTO

Appendix D-1

WHEN IN ROME	1108 S COAST HWY	EATING PLACES
WILKENS PALM TREE NURSERY	1450 MACKINNON AVENUE	NURSERY
WILLIAMSON'S PRODUCE	3111 MANCHESTER AVENUE	NURSERY
WILLOW LANE GROWERS-Growers	753 REQUEZA	NURSERY
WILMA ROMERO	870 DEVONSHIRE DRIVE	NURSERY
YOGI'S SPORTS BAR & RESTAURANT	2005 SAN ELIJO AVE	EATING PLACES
YOUNT, DAVID- Growers	1280 SANTA FE DR	NURSERY
YUMEYA	1246 COAST HWY 101	EATING PLACES
ZIBIBBO'S ITALIAN BISTRO	1560 LEUCADIA BLVD #E	EATING PLACES

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
33776	07/21/2006	SHELL OIL COMPANY	From: Request ID: 32152, 8/24/2006 2:01:20 PM DIS-OTHER WASH Discharge of other wash water Problem Details: Shell Car Wash of Encinitas (Mgr. Sonya) @ 1060 N. El Camino Real, Encinitas, CA (760) 943-9797, is power washing w/o containment. Complaint triggered routine commercial inspection on 7/21/06.	1) Contact city to make an appt for re-inspection of power washing activities. 2) Properly cover and contain haz materials stored outdoors. 3) Obtain spill kit and make accessible to employees.	Completed by MP on 8/5/06. Properly protect all storm drains prior to power washing and contain all wash water.		Gas Station
34140	09/14/2006	Moonlight Snack Shack	From: Request ID: 32308, 9/19/2006 12:56:38 PM DIS-OTHER Other discharge Problem Details: Location: Moonlight Snack Shack at Moonlight Beach Owner: Ken Davis Phone: 760-815-0608 or 760-720-7800. Trash Dumpster behind snack shack is overflowing. Complaint triggered routine commercial inspection on 9/14/06.	1) Obtain City Business License w/in 2 wks & display on-site 2) Obtain spill kit/make it accessible to employees 3) Provide sw management training to all employees/maintain a log 4) Maintain trash enclosure	Follow up call on 10/18/06. Obtained business license.		Eating/Drinking Establishment
34635	10/09/2006	RED ROBIN RESTAURANT	From: Request ID: 32863, 10/19/2006 10:33:46 AM DIS-OTHER Other discharge Problem Details: Grease investigation lead inspectors to Red Robin site. Routine commercial inspection took place on 10/9/06.	1) train employees on SW mgmt, maintain a log. 2) fax latest copy of grease interceptor maint. invoice to City. 3) Provide proper cover and containment for grease rendering bin.	Admin Citation issued on 10/9/06 for discharge of grease to storm drain. Clean up initiated on 10/10/06 in brow ditch. Work accomplished by Downstream Services.	10/9/06	Eating/Drinking Establishment
34824	10/31/2006	ENCINITAS FOREIGN AUTO	From: Request ID: 32307, 10/31/2006 11:41:03 AM DIS-ANTIFREEZE Discharge of antifreeze Problem Details: Odor reported in alley behind Encinitas Foreign & Domestic at 901 2nd St. (760)632-0830. Drains located outside rollup doors and a large basin appears to have oil & antifreeze in it.	A drive-by inspection was conducted prior to full commercial inspection on 10/31/06 to verify complaint. Train employees in SW mgmt and maintain training log.			Auto Repair/ Maintenance

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
35855	01/23/2007	Weidner's	From: Request ID: 33538, 1/23/2007 9:15:24 AM DIS-OTHER WASH Discharge of other wash water Problem Details: Caller states that the nursery next door is discharging runoff into the brow ditch adjacent to their property. They are also concerned that	Corrective Actions: Run-off collection system needs to be fully operational no later than 2/27/07. Follow-up inspection scheduled for 2/27/07.			Landscaping
36195	07/17/2006	Besta-wan Pizza		copy of inspection and Solana Center contact info mailed to property manager on 7/18/06 No violations noted, but required corrective actions are: 1. Train all employees in SW mgmt and maintain training log. 2. Make spill kit accessible to all employees			Eating/Drinking Establishment
36202	09/15/2006	Bety's Tacos		No violations, but corrective actions needed: 1. obtain spill kill, make accessible to employees. 2. properly train/educate employees in SW mgmt and maintain training log.	Faxed Solana Center and green business info to owner on 9/19/06.		Eating/Drinking Establishment
36206	07/18/2006	The Bullpen		No violations, but corrective action needed: 1. train/educate employees in SW mgmt and maintain log. 2. obtain spill kill, make accessible to employees. 3. provide proper cover/containment for outdoor grease bin (30 Days). 4. provide copy of grease trap maint. Invoice	Follow up completed on 9/1/06. Asphalt berm and lean to created to meet compliance requirements		Eating/Drinking Establishment
36208	08/16/2006	El Callejon		No violations, but corrective action: 1. obtain proper cover/containment for oil storage. 2. obtain spill kit/make accessible to employees. 3. maintain trash are litter free/sweep all food debris. 4. train/educate employees in SW mgmt & maintain log.	Storm water training provided to 26 restaurant employees on 9/9/06. Spill kit and oil storage BMPs implemented.		Eating/Drinking Establishment
36210	10/09/2006	Greek American Family Restaurant		No violations, but corrective actions: 1. train employees in SW mgmt/maintain training log. 2. install containment (drip pan) for grease bin stored outdoors.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
36212	10/11/2006	Island Brothers Teriyaki		No violations, but corrective actions: 1. obtain spill kit/make accessible to employees. 2. properly train employees in SW mgmt/maintain log. 3. copy of grease interceptor maintenance invoice to be faxed to city by 10/18/06.	Follow up by Clay Hill. All corrective actions completed.		Eating/Drinking Establishment
36216	07/13/2006	Jamba Juice		No violations, but corrective actions: 1. properly train and educate all employees in storm water management and maintain a training log.			Eating/Drinking Establishment
36218	10/26/2006	Jiffy Lube		No violations, but corrective actions: 1. provide proper containment/cover for 55 gallon drums stored outside by 11/30/06. 2. Clean up spills as they occur w/dry absorbents/mop. 3. call for extra trash pick up when trash is overflowing. 4. properly train employees in SW mgmt, and maintain a log.	Parent Work Order: 36218 follow up by Mike Emerson completed on 6/5/07. They installed cover and secondary containment for oil filter drums. performs monthly training, and will keep log.		Auto Repair/ Maintenance
36222	10/11/2006	Kentucky Fried Chicken		no violations, but corrective action: 1. properly train employees in SW mgmt/maintain log. 2. send most recent invoice of grease interceptor and bin maintenance by 10/18/06 via fax or US mail to City. 3. obtain business cert from City/post onsite			Eating/Drinking Establishment
36224	07/05/2006	The Kitchen Elves		No violations, but corrective actions: 1. obtain spill kit/make accessible to employees. 2. train/educate employees in SW mgmt and maintain training log. follow up w/ property mgmt re: waste enclosure. waste area maintained by maintenance crew for property mgmt			Eating/Drinking Establishment
36230	10/19/2006	La Salsa #94	By RYGIEL, KRISTINE: 7/19/2007 4:10:07 PM Still need training binder as of 7/19/07. Follow up completed by Mike Emerson on 7/18/07. restaurant installed overhead coverage and 2nd containment.	No violations, but corrective actions: 1. obtain current City business cert and post on-site; notify city inspector. 2. obtain proper cover/containment for 55 gal grease bin by 11/20/06. 3. spill kit/make accessible to employees. 4. properly train/educate employees in SW mgmt, maintain a log.	admin citation warning given on 6/5/07 by Clay Hill for lack of 2nd containment and overhead cover for grease bin. $100 citation issued by Clay Hill on 6/21/07 for same violation. Citation pd 7/16/07. Follow up by Mike Emerson on 7/18/07. All corrective actions complete.	6/5/07 and 6/21/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
36232	08/16/2006	Leucadia Pizzeria		No violations, but corrective actions: 1. train employees in SW mgmt, maintain log. 2. maintenance in sump pump drain- remove food debris, oil, grease, sediment weekly. 3. call for extra trash pickup when trash container is overflowing, maintain lids closed			Eating/Drinking Establishment
36234	10/11/2006	Noodles and Company		No violations, but corrective actions: 1. obtain spill kit, make accessible to employees. 2. provide most recent invoice to City regarding grease trap maintenance w/in 1 week(10/18/06). 3. train/educate employees in SW mgmt, maintain log.			Eating/Drinking Establishment
36237	10/13/2006	Pep Boys	By PADILLA, MAYELA: 9/14/2007 2:33:24 PM Follow Up Commercial Inspection Work Order#45752	no violations, but corrective actions: 1. maintain trash lids closed. 2. keep used auto parts/scrap metal stored outdoors covered. 3. maintain floor grate in garage driveway on regular basis/clean up regularly-squeegee driveway. 4. train employees in SW mgmt, keep a log	10/16/06 BMPs have been implemented.		Auto Other
36239	10/13/2006	Q.C. II Szechwan Restaurant	By PADILLA, MAYELA: 9/14/2007 2:15:03 PM Follow-Up Commercial Inspection Work Order# 45745	No violations, but corrective actions: 1. provide most recent maintenance invoice for grease bin to City by 10/16/06. 2. obtain proper cover/containment for grease rendering bin by 11/16/06. 3. train employees in SW mgmt/maintain a training log.	Spoke to Mike Hazelton at North County Grease on 10/16/06. He confirmed last pick up was on 10/4/06. He will contact Pablo to discuss containment options for outdoor grease bin.		Eating/Drinking Establishment
36241	10/17/2006	Roberto's		No violations, but corrective action: 1. fax most current invoice of grease trap maintenance to City by 10/18/06. 2. obtain cover/containment for grease bin located outdoors by 11/17/06. 3. obtain spill kit/make accessible to employees. 4. properly			Eating/Drinking Establishment
36243	10/12/2006	Roberto's		No violation, but corrective action: obtain secondary containment for grease rendering bin located outdoors w/in 2 weeks. 2. obtain spill kit/make accessible to employees. 3. train/educate employees in SW mgmt/maintain a log.	Follow up by Clay Hill. All corrective actions completed.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
36248	10/10/2006	Roxy		No violation, but corrective action: 1. maintain SW mgmt training log. 2. maintain trash lids closed, call for extra pickup when needed.			Eating/Drinking Establishment
36250	10/05/2006	Russo's Pasta		No violation, but corrective action: 1. properly train/educate employees in SW mgmt and maintain log. 2. Obtain spill kit and make accessible to employees.			Eating/Drinking Establishment
36253	10/25/2006	Sage Grill	By RYGIEL, KRISTINE: 6/21/2007 10:04:56 AM follow up completed 6/20/07 by Mike Emerson.	No violations, but corrective action: 1. obtain cover/containment for outdoor grease bin by 11/30/06. 2. properly train/educate employees in SW mgmt, maintain training log. Follow up inspection scheduled for 11/30/06.	Mike Emerson observed grease BMPs in place (overhead coverage and containment) on 6/20/07.		Eating/Drinking Establishment
36255	09/15/2006	Savory	By PADILLA, MAYELA: 9/14/2007 4:13:30 PM	No violations, but corrective actions: 1. provide cover/containment for grease bin located outdoors. 2. obtain spill kit, make accessible to employees. 3. properly train/educate employees in SW mgmt and maintain log.	Follow up completed on 11/2/06. All corrective actions complete. WO#45754		Eating/Drinking Establishment
36258	10/26/2006	Speedy Tune & Brakes		No violation, but corrective action: 1. call for extra trash pickup when trash is overflowing. 2. properly train employees in SW mgmt, maintain log.			Auto Repair/ Maintenance
36261	10/25/2006	Submania		No violation, but corrective action: 1. obtain spill kit, make accessible to employees. 2. properly train employees in SW mgmt, maintain training log.			Eating/Drinking Establishment
36268	07/12/2006	Subway		No violations, but corrective actions: train/educate employees in SW mgmt, maintain log. 2. obtain spill kit, make available to employees. Gave them What's Cooking Guide and City of Encinitas BMP Brochure.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
36270	08/15/2006	Tayama Greenhouse		No violation, but corrective action: 1. maintain silt fence and channel in front to prevent runoff. 2. maintain trash area litter free, lids closed, call for extra pick up when overflowing. 3. maintain drainage swale litter free. 4. maintain stockpile materials covered when not in use. 5.train employees and keep log.	Spoke to greenhouse president on 8/17/06- advised him of SEL Conservancy and directed him to contact Doug Gibson RE: debris on slope.		Nursery
36272	12/11/2006	Trattoria i Trulli		No violation, but corrective action: 1. sewer lateral needs to be maintained w/in 2 weeks (jetting the lateral). 2. SW inspector to be notified when plumber is on the job. 3. receipts for all work completed to be provided to City w/in 2 weeks. 4. sewer lateral to be maintained quarterly w/ invoice sent to city. 5.obtain spill kit. 6.train employees in SW mgmt, keep a log.	6/19/07 Mike Emerson followed up. issued NOV for lack of overhead cover and secondary containment to comply by 7/3/07. 8/2/07 all corrective actions complete per Mike Emerson	6/19/07	Eating/Drinking Establishment
36274	10/24/2006	Cardiff Valero		Citation given 10/16. Inspection on 10/24. Corrective actions needed: 1. provide proper containment for 55 gal drums of haz waste stored outdoors no later than 11/30/06. 2. properly train/educate all employees in SW mgmt, maintain log. 3. no water or wash water runoff leaving site at any time.	Parent Work Order: 36274 Inspector Mike Emerson completed follow up on 6/5/07. Owner Jack showed Mike how he follows BMPS, no discharges. He will discontinue use of auto shop in 2008.		Gas Station
36276	10/11/2006	Vons #2144		No violation, but corrective action: 1. fax copy of invoice for grease trap maintenance to City no later than 10/18/06. 2. maintain SW mgmt training log. 3. maintain dock area clean and swept of all litter, debris, sediment.. 4. maintain compactor area clean and properly dispose of recycled bags located outdoors.	Follow up by Clay Hill. Corrective actions not complete on 6/5/07. All corrective actions completed on 6/6/07.		Eating/Drinking Establishment
36282	11/14/2006	Vons #2351- 453 Santa Fe Drive		No violations, but corrective action: 1. Properly train/educate employees on SW mgmt, maintain log. Maintain loading/unloading area litter free especially near storm drain.			Eating/Drinking Establishment
36305	02/16/2007	Weidner's- 850 Normandy Ave.		No violations or corrective actions			Nursery

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
36307	01/31/2007	Weidners- 695 Normandy	By PADILLA, MAYELA: 9/14/2007 4:44:49 PM Follow Up Commercial Inspection Work Order# 45755	No violations, but corrective action: 1. properly train employees in SW mgmt, maintain training log by 1/31/08. 2. soil trailers to be covered during rainy season & replace straw wattle in area. 3. saw dust stockpile cover to be secured with sandbags	2/16/07 All corrective actions complete.		Nursery
36504	03/15/2007	Cicciotti's	By RYGIEL, KRISTINE: 5/8/2007 1:13:43 PM Follow up on 5/2/07 by Kathy Weldon. All corrective actions completed.	No violations, but corrective actions: 1. properly train employees in SW mgmt, maintain log. 2.obtain spill kit, make it accessible to employees. 3. provide copy of current business cert no later than 4/1/07. 4. sweep up trash enclosure area and maintain area clean. 5.provide spill palette, cover for great bin no later than 4/15/07.	5/2/07 All corrective actions complete.		Eating/Drinking Establishment
36527	02/01/2007	Quail Botanical Gardens	By RYGIEL, KRISTINE: 3/16/2007 11:01:49 AM Nursery uses different types of irrigation, including weather based controllers, recycled water. Uses controlled release fertilizers and mulch. No IPM techniques to prevent pesticide pollution.	No violations, but corrective action: 1. maintain trash area free of litter and debris. 2. properly train, educate all employees in SW mgmt and maintain training log. Botanical Gardens owned by county of SD. previously inspected by county, Dave Mart			Botanical Garden
36976	03/29/2007	Las Olas	By RYGIEL, KRISTINE: 4/16/2007 3:06:53 PM Inspection by PBS&J.	No violations or corrective actions.			Eating/Drinking Establishment
36978	03/22/2007	Super Donuts No.1	By RYGIEL, KRISTINE: 4/16/2007 3:56:47 PM Inspection by PBS&J	No violations or corrective actions			Eating/Drinking Establishment
36980	03/22/2007	Del Taco	By RYGIEL, KRISTINE: 4/16/2007 4:23:21 PM Inspection by PBS&J	No violations, but corrective actions: 1. Secondary containment for oil/grease bin located outdoors. 2.overhead coverage for oil/grease bin located outdoors. 3.old equipment should be disposed of properly off-site.	Follow up completed by Mike Emerson 7/2/07. He asked manager to obtain a larger overhead cover so that it is larger than containment.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37193	03/22/2007	Baskin Robbins	By RYGIEL, KRISTINE: 4/30/2007 9:41:03 AM Inspection by PBS&J By RYGIEL, KRISTINE: 4/30/2007 9:41:29 AM Owner is Jeff Nix, all correspondence should be directed to him.	No violations, no corrective actions, no follow up.			Eating/Drinking Establishment
37203	03/22/2007	Honey Baked Ham	By RYGIEL, KRISTINE: 4/30/2007 10:01:18 AM Inspection by PBS&J	No violations, no corrective action, no follow up.			Eating/Drinking Establishment
37220	03/22/2007	Albertsons #6754	By RYGIEL, KRISTINE: 4/30/2007 10:27:29 AM Inspection by PBS&J	No violations, no corrective actions, no follow up.			Eating/Drinking Establishment
37225	03/22/2007	Coco's Restaurant #881	By RYGIEL, KRISTINE: 4/30/2007 10:41:51 AM Inspection by PBS&J	No violations, no corrective actions, no follow up.			Eating/Drinking Establishment
37236	03/29/2007	KI's Juice Bar and Restaurant	By RYGIEL, KRISTINE: 4/30/2007 3:40:12 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/11/2007 4:00:35 PM Follow up completed on 7/11/07 by Mike Emerson. Trash area clean. Two dumpsters have lids.	No violations, but corrective action: 1. replace trash bins with broken lids. 2. proper trash receptacle enclosure-evaluate if another location is possible. Follow up inspection needed. Follow up inspection required	Follow up completed by Mike Emerson on 7/11/07. trash area clean. Two dumpsters have lids.		Eating/Drinking Establishment
37243	04/17/2007	Ralph's Supermarket	By RYGIEL, KRISTINE: 4/30/2007 4:18:43 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 10:26:29 AM Follow up completed 7/5/07 by Mike Emerson.	No violations, but corrective actions: 1. truck loading docks & trash/outdoor storage must be cleaned. 2. Conduct annual employee storm water BMP training & keep log. Follow up inspection required	Follow up completed 7/5/07 by Mike Emerson.		Eating/Drinking Establishment
37245	04/17/2007	Burger King #3528	By RYGIEL, KRISTINE: 4/30/2007 4:44:26 PM Inspection by PBS&J	No violations, but corrective actions: 1. perform annual employee storm water BMP training, keep log. 2. obtain spill kit, make accessible to employees.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37259	04/17/2007	Gusto Trattoria	By RYGIEL, KRISTINE: 5/1/2007 11:13:07 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/9/2007 3:26:37 PM Training CD mailed on 5/9/07.	No violations, but corrective actions: 1. train employees in SW mgmt and keep log. 2. wash floor mats inside. 3. don't discharge cleaning water outside. use mop sink or floor drains. 4. obtain spill kit, make accessible to employees.			Eating/Drinking Establishment
37261	04/17/2007	Good morning Coffee/Quick Fix	By RYGIEL, KRISTINE: 5/1/2007 11:29:29 AM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 2:22:24 PM Good Morning Coffee/Quick fix mailing address is 140 Encinitas Blvd, #307	No violations, but corrective action: 1. train employees in SW mgmt, keep log. Recommended City actions: inquire about encinitas business cert. contact prop. mgmt company about trash storage area maintenance and pick up schedule			Eating/Drinking Establishment
37266	04/17/2007	Pick-up-Stix	By RYGIEL, KRISTINE: 5/1/2007 1:21:44 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/25/2007 1:13:55 PM 7/24/07: Business cleaned and resealed grease oven and obtained overhead coverage and secondary containment, per Mike Emerson.	No violations but corrective action: 1. clean up grease/oil storage area 2. train employees in SW mgmt, keep log. 3 obtain secondary containment tray and overhead coverage for grease bin. Follow up inspection required.	Follow up by Mike Emerson on 7/24/07. Business cleaned and resealed grease area and obtained overhead coverage and secondary containment.		Eating/Drinking Establishment
37269	04/17/2007	Chin's Szechwan	By RYGIEL, KRISTINE: 5/1/2007 1:37:39 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/3/2007 11:52:12 AM 7/30/07 Mike Emerson followed up. no overhead cover. appears irrigation is spraying over grease to trash area. very dirty container left open	No violations, but corrective actions: 1. train employees on SW mgmt, keep log. 2. don't use water to clean outside, use broom. 3. more frequent trash pickup, or additional trash bin. 4. second grease bin needs secondary containment.	Mike Emerson issued citation to comply by 8/3/07. 11am called landlord to do work.		Eating/Drinking Establishment
37272	04/17/2007	Daphne's Greek Cafe	By RYGIEL, KRISTINE: 5/1/2007 2:09:25 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/1/2007 10:21:57 AM Follow up by Mike Emerson on 7/31/07. Issued admin warning for lack of overhead cover and secondary containment for grease.	No Violations, but corrective actions: 1. outdoor grease bin needs secondary containment and lid closed. 2. contact grease/oil rendering service for grease removal and container cleaning. Follow up inspection required	Warning citation issued 7/31/07 by Mike Emerson. Follow up by Mike Emerson on 8/20/07. business obtained overhead cover and 2nd containment for grease.	7/31/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37274	04/17/2007	Rubio's	By RYGIEL, KRISTINE: 5/1/2007 2:28:36 PM Inspection by PBS&J	No violations, but corrective actions: 1. purchase spill response kit. 2. display spill response plan for employees. 3. have Baker clean the outside of grease bin.	Sent restaurant CD and copy of inspection form on 5/2/07. Faxed inspection form to Jeanne Wilson, property manager on 5/8/07.		Eating/Drinking Establishment
37276	04/17/2007	Juice 'n Java	By RYGIEL, KRISTINE: 5/1/2007 2:57:57 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 3:11:59 PM Training CD sent on 5/9/07	No violations. Keep trash bin lids closed.			Eating/Drinking Establishment
37278	04/17/2007	Golden Baked Hams	By RYGIEL, KRISTINE: 5/1/2007 3:43:02 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 3:09:31 PM Training CD sent on 5/9/07	No violations, but corrective actions: 1. keep trash bin lids closed. 2. purchase spill response kit.			Eating/Drinking Establishment
37280	04/17/2007	Albertsons #6724	By RYGIEL, KRISTINE: 5/1/2007 4:02:13 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 3:13:41 PM Training CD sent on 5/9/07	No violations. Keep trash bin lids closed.			Eating/Drinking Establishment
37283	03/29/2007	Charlie's by the Sea	By RYGIEL, KRISTINE: 5/1/2007 4:17:51 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/6/2007 4:38:15 PM Follow up by Mike Emerson on 8/6/07. Lids closed, mats cleaned inside. wash water goes to sewer.	No violations, but corrective actions: 1. contact Chris Avalas to confirm that floor mats are washed inside. No wash water allowed to parking lot. 2. Keep trash bin lids closed. Follow up inspection required.	Follow up by Mike Emerson on 8/6/07. Lids closed, mats cleaned inside. wash water goes to sewer.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37285	03/22/2007	Oggi's Pizza	By RYGIEL, KRISTINE: 5/1/2007 4:46:02 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/1/2007 4:57:16 PM Follow up required. By RYGIEL, KRISTINE: 8/27/2007 4:35:40 PM 6/18/07: Mike Emerson issued NOV for 2nd containment of grease bin and for cigarettes and trash on site	No violations, but corrective action: 1. grease removal pick up required for full grease drum. 2. clean spilled grease around grease bin. do not wash down. 3. secondary containment tray needed for grease storage. 4. do not wash floor mats outside.	6/18/07: Mike Emerson issued NOV for 2nd containment of grease bin and for litter of cigarette butts around site and grease area. 8/23/07: restaurant has 2nd containment for grease per Mike Emerson.	6/18/07	Eating/Drinking Establishment
37315	05/02/2007	BMW Encinitas (Harloff)	By RYGIEL, KRISTINE: 5/3/2007 1:18:59 PM Kathy completed inspection	No violations, no follow up required. Corrective actions: 1. Provide asphalt berm around service bays. 2. provide containment berm around used oil. 3. provide SW training to all employees, keep training log. 4. provide invoices for clarifiers cleaning	Follow up by Mike Emerson on 10/12/07. All corrective actions complete. Two NOVs issued on 9/10/07 and 9/28/07. Signed off on 10/12/07 by Mike Emerson.	9/10/07 and 9/28/07	Auto Other
37318	04/04/2007	Jungle Music Palms & Cycads	By RYGIEL, KRISTINE: 5/3/2007 1:42:00 PM Kathy completed inspection.	No violation, no follow up, no corrective actions.			Nursery
37320	03/29/2007	Encinitas Greenhouses	By RYGIEL, KRISTINE: 5/3/2007 1:58:50 PM kathy completed inspection. By RYGIEL, KRISTINE: 6/8/2007 12:06:22 PM Follow up completed on 6/8/07 by Mike Emerson	No violations, but corrective actions: 1. Remove or recycle oil from property. 2. cover and contain paint on property. 3. provide containment for soil mixing areas.	Follow up completed on 6/8/07 by Mike Emerson. Property appears to be in compliance.		Nursery
37323	04/23/2007	Ades and Gish Nurseries	By RYGIEL, KRISTINE: 5/3/2007 3:08:26 PM Complaint came in on 4/18/07, Kathy did complaint investigation inspection on 4/23. By RYGIEL, KRISTINE: 5/3/2007 3:08:38 PM Business will most likely be moving in the next couple months	No violations, but corrective actions: 1. Secondary containment of oil storage facility. 2. Remove oil from truck on NE corner. 3. provide containment of horse manure- sand bags, etc. 4. provide soil stabilization at entrance of property. 5. maintain the sump in SW corner of property	Follow up completed by Mike Emerson on 6/7/08. Site in compliance.		Nursery

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37399	05/04/2007	Cookies in Bloom	By RYGIEL, KRISTINE: 5/9/2007 10:49:34 AM Inspection by PBS&J	No violations, but corrective actions: 1. Train employees on SW mgmt and maintain a log.			Eating/Drinking Establishment
37401	05/04/2007	Dairy Queen	By RYGIEL, KRISTINE: 5/9/2007 11:13:28 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/16/2007 12:58:04 PM received faxed grease trap service receipt 5/15/07	No violations, but corrective actions: 1. keep log of employees trained in SW mgmt. 2. fax a copy of grease trap maintenance invoice to Mayela Padilla.			Eating/Drinking Establishment
37405	05/04/2007	Harvest Ranch #175	By RYGIEL, KRISTINE: 5/9/2007 3:41:23 PM Inspection by PBS&J	No violations, but corrective action: 1. don't wash floor mats outside. wash inside, dispose of water in mop sink or floor drains. 2. train employees on SW mgmt, keep log. 3. obtain spill kit, make accessible to employees. 4. fax grease invoice to MP			Eating/Drinking Establishment
37408	05/02/2007	Jack in the Box #97	By RYGIEL, KRISTINE: 5/9/2007 4:10:34 PM Inspection by PBS&J	No violations, but corrective actions: 1. Train employees annually and keep a log. 2. Clean trash and soiled area in trash bin area, contain any water. 3. Obtain spill kit, make accessible to employees.			Eating/Drinking Establishment
37443	05/04/2007	Marie Callenders	By RYGIEL, KRISTINE: 5/11/2007 8:37:47 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 8:51:06 AM waiting for grease interceptor invoice fax By RYGIEL, KRISTINE: 5/16/2007 8:04:00 AM faxed copy of inspection on 5/15/07	No violations, but corrective actions: 1. Train all employees on SW mgmt, keep a log. 2. Fax grease interceptor invoice to Mayela Padilla.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37446	05/02/2007	Karina's Taco Shop	By RYGIEL, KRISTINE: 5/11/2007 8:58:54 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 9:22:17 AM recommended City actions: consider investigating inlets in patio/back area to verify connection to sewer or storm drain.	No violations, but corrective actions: 1. Fax receipt, proof of oil disposal by May 16, 07. 2. Obtain spill kit, make accessible to employees. 3. Keep training log on file. Consider investigating inlets in patio/back area to verify connection to sewer			Eating/Drinking Establishment
37457	05/02/2007	McDonalds #3404	By RYGIEL, KRISTINE: 5/11/2007 11:48:42 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 11:53:58 AM Consider writing violation or follow up on cleaning of trash area w/ mop and bucket and evidence of possible discharge.	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. Don't hose off outside areas. If mopping outside, contain all water. 3. secondary containment of grease bin needs to be in place.	Follow ups on 6/12/07, 6/22/07, and 6/27/07. All corrective actions complete on 6/27/07 per Mike Emerson.		Eating/Drinking Establishment
37466	05/02/2007	Mexico Viejo	By RYGIEL, KRISTINE: 5/11/2007 1:36:02 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep log. 2. obtain spill kit, make accessible to employees. 3. clean soiled area and litter in trash area.			Eating/Drinking Establishment
37470	05/02/2007	Pasta Bravo	By RYGIEL, KRISTINE: 5/11/2007 2:06:55 PM Inspection by PBS&J	No violations, but corrective actions: 1. conduct annual SW training, keep log. 2. obtain a spill kit			Eating/Drinking Establishment
37472	04/23/2007	Quiznos	By RYGIEL, KRISTINE: 5/11/2007 3:20:21 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/14/2007 10:51:04 AM training CD sent on 5/14/07	No violations, but corrective actions: 1. conduct annual SW employee training, keep log. 2. obtain spill kit, make accessible to employees.			Eating/Drinking Establishment
37474	05/02/2007	Seven-Eleven #17475	By RYGIEL, KRISTINE: 5/11/2007 3:55:50 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep log.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37486	04/25/2007	Subway	By RYGIEL, KRISTINE: 5/14/2007 8:39:45 AM Inspection by PBS&J	No violations, but corrective actions: 1. conduct annual SW employee training, keep a log. 2. cooperate with cleanup of alley (litter). City may want to follow up on possible power washing w/o BMPs (not witnessed but employee stated that she has seen it.			Eating/Drinking Establishment
37498	05/04/2007	Super Donut #2	By RYGIEL, KRISTINE: 5/14/2007 2:03:56 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/14/2007 2:15:28 PM Consider giving a citation for illegal discharge of fish tank water per Crystal Najera of PBS&J	Violation of SW ordinance was found. Corrective actions: 1. Don't empty fish tank water into parking lot. 2. Clean soiled area, pick up litter in trash bin area. 3. keep trash bin lids closed. 4. train employees in SW mgmt, keep log. 5. get spill kit			Eating/Drinking Establishment
37503	04/25/2007	VG Donut & Bakery	By RYGIEL, KRISTINE: 5/14/2007 2:38:00 PM Inspection by PBS&J	No violations or corrective actions.			Eating/Drinking Establishment
37506	04/23/2007	Baja Fresh	By RYGIEL, KRISTINE: 5/14/2007 2:57:13 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/23/2007 3:51:26 PM Received license #14203 from Cynthia Miller on 5/15/07. Expires 11/30/07.	No violations, but corrective actions: 1. perform annual SW training for employees (within 1st month of hire), keep a log. Check back on Encinitas business certificate			Eating/Drinking Establishment
37508	04/25/2007	Chart House	By RYGIEL, KRISTINE: 5/14/2007 3:08:34 PM Inspection by PBS&J	No violations, but corrective actions: 1. conduct annual employee SW training, keep log.			Eating/Drinking Establishment
37576	04/23/2007	Firefly Grill & Wine	By RYGIEL, KRISTINE: 5/16/2007 4:07:17 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/16/2007 4:14:10 PM Follow up on lack of grease trap interceptor. By RYGIEL, KRISTINE: 7/9/2007 11:50:02 AM Follow up completed by Clay Hill on 6/21/07	No violations, but corrective actions: Conduct employee SW training for all employees, not just kitchen staff. 2. Obtain a spill kit and make it accessible to employees	Follow up and corrective actions completed 6/21/07 per Clay Hill.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37578	04/23/2007	Passage to India	By RYGIEL, KRISTINE: 5/16/2007 4:23:26 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/31/2007 8:44:34 AM 7/26/07 follow up by Mike Emerson. Obtained spill kit.	No violations, but corrective actions: 1. conduct annual employee SW training. 2. clean the grease storage area of loose debris. 3. obtain spill kit, make accessible to employees.	7/26/07 follow up by Mike Emerson. Restaurant obtained spill kit.		Eating/Drinking Establishment
37580	04/23/2007	Chipotle	By RYGIEL, KRISTINE: 5/16/2007 4:44:24 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 12:48:50 PM Follow up completed 7/2/07 by Mike Emerson.	No violations, but corrective actions: 1. clean trash and oil/grease storage area. 2. provide overhead coverage and secondary containment for oil and grease bin. 3. provide annual SW BMP training, keep a log.	Follow up and corrective actions complete 7/2/07 per Mike Emerson.		Eating/Drinking Establishment
37585	04/23/2007	Papa John's #1596	By RYGIEL, KRISTINE: 5/17/2007 9:56:08 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/23/2007 4:02:39 PM Manager on duty refused to sign inspection form due to corporate rules.	No violations, but corrective actions: 1. conduct SW BMP training, keep a log. 2. obtain spill kit, make accessible to employees. Manager refused to sign inspection form due to corporate rules			Eating/Drinking Establishment
37587	04/25/2007	Jack in the Box	By RYGIEL, KRISTINE: 5/17/2007 10:18:30 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/17/2007 10:25:35 AM Follow up w/corrective actions and verify parking lot cleaning procedure.	No violations, but corrective actions: 1. clean trash storage area, clean up oil spills. 2. obtain spill kit. 3. conduct annual SW employee training, including development of spill response plan.	All corrective actions completed per Clay Hill.		Eating/Drinking Establishment
37589	04/25/2007	Kim's Vietnamese & Chinese Restaurant	By RYGIEL, KRISTINE: 5/17/2007 10:31:11 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/31/2007 9:05:30 AM Follow up 7/25/07 by Mike Emerson. Grease BMPs in place.	No violations, but corrective actions: 1. grease and oil storage bin should have secondary containment and overhead coverage. 2. wash water dumping should be directed to sanitary sewer- should be confirmed.	Follow up 7/25/07 by Mike Emerson. Grease BMPs in place.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37592	04/25/2007	Giovanni's Sandwich Shop	By RYGIEL, KRISTINE: 5/17/2007 11:04:09 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/25/2007 12:58:56 PM Follow up 7/25/07 by Mike Emerson. area clean and in compliance.	No violations, but corrective actions: 1. back side of bldg should be cleaned and trash bins closed. 2. arrange for proper storage of oil and waste, haul-off of waste. Follow up to verify that an oil/grease waste service is picking up the waste (man	follow up by Mike Emerson on 7/25/07. area clean and in compliance.		Eating/Drinking Establishment
37595	05/02/2007	Chili's Grill	By RYGIEL, KRISTINE: 5/17/2007 11:49:25 AM Inspection by PBS&J	No violations, but corrective actions: 1. conduct annual SW employee training, keep a log. 2. clean out secondary containment for grease bin. Investigate inlets in trash sump area, near grease bin for potential illegal connection. Investigate if power washing is conducted	All corrective actions completed per Clay Hill.		Eating/Drinking Establishment
37610	05/02/2007	Einstein Bros. Bagels	By RYGIEL, KRISTINE: 5/21/2007 8:45:08 AM Inspection by PBS&J By RYGIEL, KRISTINE: 9/5/2007 4:04:29 PM Mike Emerson followed up on 9/5/07. They needed a replacement copy of the restaurant binder. They obtained spill kit.	No violations, but corrective actions: 1. backside of bldg/delivery area should be swept/cleared. 2. conduct SW employee training. 3. Obtain spill response kit. Follow up on power washing procedures	9/5/07 Follow up by Mike Emerson. Restaurant obtained spill kit. Gave replacement training binder.		Eating/Drinking Establishment
37612	05/02/2007	Wahoo's Fish Tacos	By RYGIEL, KRISTINE: 5/21/2007 9:03:13 AM Inspection by PBS&J By RYGIEL, KRISTINE: 8/27/2007 2:43:47 PM Clay Hill issued NOV correct work on 5/31/07 to obtain grease bins for storing use grease, obtaining secondary containment and overhead coverage	No violations, but corrective actions: 1. clean/sweep backside of bldg, remove oil containers. 2. conduct annual employees SW training, keep a log. 3. obtain spill response kit. Follow up on pressure washing procedures.	Clay Hill issued NOV correct work on 5/31/07 to obtain grease bins for storing use grease, obtaining secondary containment and overhead cover, removing oil from back of store. 8/20/07 follow up by Mike Emerson. Restaurant has spill kit and grease is stored inside.	5/31/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37614	05/02/2007	Panda Express	By RYGIEL, KRISTINE: 5/21/2007 9:15:42 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/25/2007 2:27:12 PM 7/12/07: Has 2nd containment for grease, needs overhead cover by 7/27/07. per Mike Emerson.	No violations, but corrective actions: 1. conduct annual SW training, keep a log. 2. provide overhead coverage for trash storage area and secondary containment for oil. 3. Obtain spill kit. 4. Clean up delivery area, trash storage area. 5. Cease outdoor mat washing	7/12/07: has 2nd containment for grease, needs overhead cover by 7/27/07 per Mike Emerson. follow up on 7/24/07 by Mike Emerson, grease has overhead cover and secondary containment		Eating/Drinking Establishment
37616	05/02/2007	Round table Pizza	By RYGIEL, KRISTINE: 5/21/2007 9:27:21 AM Inspection by PBS&J	No violations, but corrective actions: Train employees on water quality mgmt, keep a log. 2. obtain spill response kit, keep accessible to employees. 3. consider installing grease trap or interceptor during kitchen remodel.			Eating/Drinking Establishment
37618	05/02/2007	Domino's #7755	By RYGIEL, KRISTINE: 5/21/2007 9:51:52 AM Inspection by PBS&J By RYGIEL, KRISTINE: 6/5/2007 1:18:13 PM Clay Hill followed up on 6/4/07. wrote letter and issued admin citation #SW06-04-07 to Summit Realty, property manager, regarding the trash	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. Thoroughly clean trash bin area, contain water and dispose of properly.	All corrective actions complete per Clay Hill.	6/4/07	Eating/Drinking Establishment
37620	05/02/2007	Taco Bell	By RYGIEL, KRISTINE: 5/21/2007 10:06:42 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/21/2007 10:15:38 AM Violation was found: pipe dripping water at NE corner of restaurant. Unknown source. 5/30/07 Kathy Weldon issued Admin Citation Warning for lack of grease bin coverage and containment..	No violations, but corrective actions: 1. remove pipe or contain water discharging at NE corner of restaurant. 2. obtain secondary containment and overhead coverage for grease bin. 3. Do SW training, maintain log. 4. Obtain spill kit, make accessible to employees	Follow up and corrective actions completed 7/10/07 per Mike Emerson. Grease BMPs in place- overhead cover and 2nd containment. water discharge is from A/C and is ok. Corp is ordering spill kits for all restaurants	5/30/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37622	05/02/2007	Pei Wei Asian Diner	By RYGIEL, KRISTINE: 5/21/2007 10:19:07 AM Inspection by PBS&J	No violations, but corrective actions: 1. possible illegal discharge of grease due to clean out of traps-cease immediately. 2. obtain spill kit. 3. conduct annual employee training. 4. prop mgr should have trash storage area cleaned. (shared area)	Follow up and all corrective actions completed on 6/20/07 per Clayton Hill.		Eating/Drinking Establishment
37624	05/02/2007	Zibibbo's	By RYGIEL, KRISTINE: 5/21/2007 10:32:14 AM Inspection by PBS&J By RYGIEL, KRISTINE: 9/13/2007 9:46:29 AM Follow up by Mike Emerson 8/20/07. issued NOV Correct work to obtain spill kit. Follow up 9/11/07, spill kit was obtained.	No violations, but corrective actions: 1. clean backside of bldg, landscaping litter/potential litter entering storm drain. 2. cover outdoor storage rack. 3. obtain spill kit 4. conduct annual SW training. 5. provide city with most recent grease trap	Follow up and all corrective actions completed on 9/11/07 per Mike Emerson.	8/20/07	Eating/Drinking Establishment
37626	05/02/2007	Islands Hamburgers	By RYGIEL, KRISTINE: 5/21/2007 10:50:28 AM Inspection by PBS&J	No violations, but corrective actions: 1. clean up/sweep trash storage area. 2. cover outdoor storage rack. 3. conduct annual SW training, keep a log.	All corrective actions completed per Clay Hill.		Eating/Drinking Establishment
37628	05/04/2007	Davina's Cabo Grill	By RYGIEL, KRISTINE: 5/21/2007 11:08:19 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 11:16:17 AM Follow up completed by Mike Emerson on 7/3/07. Grease BMPs in place.	No violations, but corrective actions: 1. provide cover, secondary containment for grease drums. 2. clean oil drum area, do not discharge wash water. 3. clean grease trap area, discharge water to grease trap. 4. fax grease trap maintenance info to City.	Follow up completed by Mike Emerson 7/3/07. Grease BMPs in place.		Eating/Drinking Establishment
37630	05/04/2007	Sushi House	By RYGIEL, KRISTINE: 5/21/2007 11:23:24 AM Inspection by PBS&J By RYGIEL, KRISTINE: 8/23/2007 9:00:09 AM 8/6/07: Business has 2nd containment but no overhead cover. business owner did not understand the overhead requirement. will comply by 8/16/07	No violation, but corrective actions: 1. clean soiled area, litter behind restaurant. 2. Obtain secondary containment and overhead coverage for grease bin. 3. train employees on SW mgmt, keep a log. 4. get spill response kit.	8/6/07: Business has 2nd containment but no overhead cover. business owner did not understand the overhead requirement. will comply by 8/16/07 per Mike Emerson. 8/20/07 Follow up showed overhead coverage		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37633	05/04/2007	Henry's #123	By RYGIEL, KRISTINE: 5/21/2007 11:49:13 AM Inspection by PBS&J	Violation and corrective actions: 1. use only dry cleaning methods, no washing off trash area or contain all wash water. 2. obtain secondary containment for grease bin, clean soiled area below bin. 3. conduct SW training, keep log. 4. send fax to MP.			Eating/Drinking Establishment
37650	05/09/2007	El Torito Market	By RYGIEL, KRISTINE: 5/21/2007 3:06:50 PM Inspection by PBS&J	No violation, but corrective action: 1. coverage for outdoor storage. 2. conduct SW employee training, keep a log. 3. move oil waste to appropriate container, provide secondary containment. 4. fax grease maintenance log and current business cert to MP.			Eating/Drinking Establishment
37652	05/09/2007	Robbie's Roadhouse	By RYGIEL, KRISTINE: 5/21/2007 3:32:17 PM Inspection by PBS&J	No violations, but corrective actions: 1. obtain spill response kit. 2. conduct annual SW employee training. 3. clean up trash storage area and delivery entrance.			Eating/Drinking Establishment
37654	05/08/2007	Denny's	By RYGIEL, KRISTINE: 5/21/2007 3:59:18 PM Inspection by PBS&J	No violations, but corrective actions: train employees on SW mgmt, keep a log. 2. fax copy of grease maintenance to MP. 3. Keep spill kit accessible to employees.			Eating/Drinking Establishment
37692	05/09/2007	Fulano's Mexican Restaurant	By RYGIEL, KRISTINE: 5/22/2007 5:07:03 PM Inspection by PBS&J	No violations, but corrective actions: 1. conduct SW employee training. 2. clean/sweep trash enclosure, keep lids closed. 3. fax/mail copy of business cert to MP.			Eating/Drinking Establishment
37704	05/09/2007	La Especial Norte	By RYGIEL, KRISTINE: 5/23/2007 2:33:56 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/10/2007 4:51:39 PM Grease BMPs in place on 7/3/07 per Mike Emerson.	No violations, but corrective actions: 1. conduct SW training, keep a log. 2. Dry Clean out trash storage area (grease on floor). 3. provide secondary containment for grease bin.	Admin citation warning issued 6/13/07 for lack of overhead coverage and secondary containment for grease bin. Follow up on 7/3/07 showed all corrective actions complete per Mike Emerson.	6/13/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37722	05/09/2007	Kotija Jr Taco Shop	By RYGIEL, KRISTINE: 5/24/2007 1:35:37 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/30/2007 8:31:05 AM 6/13/07 Mike Emerson followed up. Provide secondary containment and overhead coverage for oil and obtain spill response kit by 6/27/07.	No violations, but corrective actions: 1. conduct annual employee SW training. 2. obtain spill response kit. 3. provide secondary and overhead containment for oil.	6/13/07 Mike Emerson followed up. Provide secondary containment and overhead coverage for oil and obtain spill response kit by 6/27/07. Issued Admin Warning 6/13/07 7/26/07: grease stored properly per Mike Emerson.	6/13/07	Eating/Drinking Establishment
37724	05/08/2007	Mandarin City	By RYGIEL, KRISTINE: 5/24/2007 2:11:26 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/31/2007 8:57:43 AM Follow up calls by Mike Emerson made on 7/19/07 and 7/30/07 to north county grease, 760-749-6655, asking to remove bin located at Mandarin	No violations, but corrective actions: 1.train employees in SW mgmt, keep log. 2.remove empty oil drum, clean soiled grease near drum. 3.repair overhead coverage, keep oil containers under it. 4.keep trash bin lids closed. 5.obtain spill kit.	Follow up calls by Mike Emerson made on 7/19/07 and 7/30/07 to north county grease, 760-749-6655, asking to remove bin located at Mandarin City. They say the restaurant is not using their bin.		Eating/Drinking Establishment
37729	05/07/2007	Papa Toni's Pizza	By RYGIEL, KRISTINE: 5/24/2007 2:31:27 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep log. 2.obtain spill response kit. 3.fax copy of bus cert to MP, or obtain current bus cert within two weeks of inspection.			Eating/Drinking Establishment
37731	05/08/2007	Yogi's Sports Bar and Restaurant	By RYGIEL, KRISTINE: 5/24/2007 2:41:41 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2. obtain spill kit, make accessible. 3.keep trash bin lids close. 4. keep a record of grease trap maintenance.			Eating/Drinking Establishment
37733	05/10/2007	Meritage	By RYGIEL, KRISTINE: 5/24/2007 2:58:11 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/30/2007 8:17:57 AM 7/3/07 Issued NOV for grease BMP (overhead coverage). By RYGIEL, KRISTINE: 7/30/2007 8:18:21 AM 7/25/07 BMPs in place per Mike Emerson.	No violations, but corrective actions: 1.train employees in SW mgmt, keep log. 2.obtain overhead cover for grease bin. 3.keep trash bin lids closed. 4.obtain cover for laundry container or store indoors. 5.obtain spill kit, make accessible.	6/12/07 Still need to cover grease and laundry container by 6/26/07. also, fix leak at back of building. 7/3/07 Mike Emerson issued NOV for lack of overhead coverage 7/25/07 follow up by Mike Emerson. All corrective actions complete.	7/3/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37735	05/08/2007	East Coast Pizza	By RYGIEL, KRISTINE: 5/24/2007 3:28:02 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees in SW mgmt, keep log. 2. fax most recent grease maintenance invoice to MP. 3. Keep trash bin lids closed.			Eating/Drinking Establishment
37737	05/10/2007	Angelo's Burgers	By RYGIEL, KRISTINE: 5/24/2007 3:41:42 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:45:13 PM Copy of inspection faxed 6/18/07. Waiting for grease maintenance info. By RYGIEL, KRISTINE: 6/28/2007 10:41:39 AM Received grease maintenance info	No violations, but corrective actions: 1. train employees on SW mgmt, keep log. 2. fax most recent grease maintenance record to MP w/in two weeks.			Eating/Drinking Establishment
37739	05/07/2007	Encinitas Donuts	By RYGIEL, KRISTINE: 5/24/2007 4:18:37 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. obtain spill kit, make accessible.			Eating/Drinking Establishment
37741	05/07/2007	Carl's Jr #181	By RYGIEL, KRISTINE: 5/24/2007 4:39:38 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill kit, make accessible. 3.keep grease bin lid closed.			Eating/Drinking Establishment
37755	05/09/2007	The Kraken	By RYGIEL, KRISTINE: 5/25/2007 9:16:50 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.don't wash floor mats outside; wash inside or take to a "do it yourself" carwash.			Eating/Drinking Establishment
37757	05/09/2007	Le Papagayo	By RYGIEL, KRISTINE: 5/25/2007 9:37:32 AM Inspection by PBS&J	No violations, but corrective actions: 1.dry clean or wash (contain water) the oil stains in front of oil waste bin. 2.conduct annual SW training, keep log. 3. obtain spill kit.			Eating/Drinking Establishment
37759	05/08/2007	Pipes Cafe	By RYGIEL, KRISTINE: 5/25/2007 10:05:01 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 11:03:31 AM Grease BMPs in place per Mike Emerson 7/3/07	No violations, but corrective actions: 1.keep log of trained employees. 2. fix broken overhead containment for grease bin.	Follow up completed by Mike Emerson 7/3/07.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37761	05/07/2007	Seven-Eleven #13620	By RYGIEL, KRISTINE: 5/25/2007 10:50:37 AM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:40:01 PM Copy of inspection faxed 6/18/07	No violations, but corrective actions: 1.keep trash bin lids closed, pick up litter in trash area and behind store. 2.train employees on SW mgmt, keep a log. 3.obtain spill response kit.			Eating/Drinking Establishment
37765	05/07/2007	El Nopalito	By RYGIEL, KRISTINE: 5/25/2007 3:27:39 PM Inspection by PBS&J By RYGIEL, KRISTINE: 9/13/2007 9:21:41 AM Clayton Hill issued NOV Correct Work on 5/31/07 for lack off 2nd containment. Follow up by Mike Emerson on 8/21/07. Issued NOV correct work	No violations, but corrective actions: 1.clean soiled grease stains in back, contain all wash water. 2.obtain secondary containment and overhead cover for grease bin. 3. train employees on SW mgmt, keep a log. 4.obtain spill kit.	Clayton Hill issued NOV Correct Work on 5/31/07 for lack off 2nd containment. Follow up by Mike Emerson on 8/21/07. Issued NOV correct work for lack of overhead cover. 9/12/07 Grease BMPs in place per Mike Emerson	5/31/07 and 8/21/07	Eating/Drinking Establishment
37767	05/08/2007	Santa Fe Cafe	By RYGIEL, KRISTINE: 5/25/2007 3:35:09 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 11:27:37 AM Follow up and corrective actions complete 7/2/07 per Mike Emerson.	No violations, but corrective actions: 1.obtain overhead and secondary containment for grease bin. 2.train employees in SW mgmt, keep a log. 3.keep log of grease trap maintenance 4.obtain spill kit.	Follow up completed 7/2/07 by Mike Emerson. He asked that a more permanent BMP be constructed for grease storage.		Eating/Drinking Establishment
37769	05/10/2007	Sakura-Bana Sushi	By RYGIEL, KRISTINE: 5/25/2007 3:52:37 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 10:14:13 AM 7/3/07 Follow up and corrective actions completed per Mike Emerson.	No violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2.consider reconnecting and maintaining grease trap. 3.clean trash area, contain all wash water. 4.replace or repair grease bin. 5. obtain spill kit.	7/3/07 Grease storage and spill kit BMPs in compliance per Mike Emerson.		Eating/Drinking Establishment
37771	05/18/2007	Kaito's Sushi Restaurant	By RYGIEL, KRISTINE: 5/25/2007 4:05:20 PM Inspection by PBS&J	No violations, but corrective action: 1.train employees on SW mgmt, keep log. 2.obtain spill kit. 3. pick up trash in bin area, keep lids closed.	Follow ups by Mike Emerson on 7/12/07, delivered copy of inspection form to comply by 7/27/07. 8/1/07 11 am ME went to restaurant, no one was there, called phone number and left message to call him back re: spill kit.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37773	05/16/2007	El Torito	By RYGIEL, KRISTINE: 5/25/2007 4:21:00 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/4/2007 9:49:50 AM Follow up/All corrective actions completed on 6/4/07 per Clayton Hill.	No violations, but corrective actions: 1.conduct annual SW training, keep log. 2. obtain spill kit. 3.provide overhead coverage for any material/equipment stored outside.	Inspection by Clayton Hill All corrective actions completed 6/4/07		Eating/Drinking Establishment
37775	05/16/2007	El Pollo Loco/Foster's Freeze	By RYGIEL, KRISTINE: 5/25/2007 4:29:50 PM Inspection by PBS&J By RYGIEL, KRISTINE: 9/5/2007 4:12:01 PM Follow up inspection by Mike Emerson on 9/5/07. obtained grease BMPs and spill kit.	No violations, but corrective actions: 1.obtain spill kit. 2.dry sweep trash enclosure, provide overhead coverage for grease bin. 3. provide SW training for employees. 4.cease hosing off premises unless wash water is captured.	Follow up by Mike Emerson on 9/5/07. obtained grease BMPs and spill kit.		Eating/Drinking Establishment
37863	05/22/2007	Tomiko	By RYGIEL, KRISTINE: 6/4/2007 11:34:11 AM Inspection by PBS&J By RYGIEL, KRISTINE: 8/2/2007 9:34:08 AM 7/30/07 FU by Mike Emerson. No overhead coverage for grease. overstuffed trash bins. took photos.	Corrective actions: Train employees on SW mgmt. Fax grease log and business cert to MP. Don't discharge cleaning water to parking lot. Keep trash bin lids closed, clean soiled grease area. Get overhead coverage for grease bin. get spill kit.	7/30/07 FU by Mike Emerson. No overhead coverage for grease. overstuffed trash bins. took photos. 7/31/07 Mike Emerson spoke with owner. has overhead coverage. confirmed and took photos.		Eating/Drinking Establishment
37867	05/09/2007	Leucadian Bar	By RYGIEL, KRISTINE: 6/4/2007 12:05:58 PM Inspection by PBS&J	no violations, but corrective actions: 1. obtain spill response kit. 2. conduct SW training.			Eating/Drinking Establishment
37871	05/07/2007	Today's Piza and Salad	By RYGIEL, KRISTINE: 6/4/2007 2:32:12 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/2/2007 5:06:55 PM Business cert #16997 Exp.8/31/07 per MP.	No violations, but corrective actions: 1. train employees on SW mgmt, keep log. 2. obtain spill kit. 3. fax copy of bus cert to MP or obtain current bus. cert.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37873	05/10/2007	St. Germain's	By RYGIEL, KRISTINE: 6/4/2007 2:43:10 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:41:25 PM Copy of inspection faxed 6/18/07.	No violations, but corrective actions: 1. obtain overhead and secondary cover for grease bin. 2. keep trash bin lids closed, pick up litter in trash bin area. 3. obtain spill response kit.	Follow up 7/18/07: Mike Emerson contacted manager regarding overhead cover for grease storage by 8/18/07. 8/21/07: follow up by Mike Emerson. they obtained overhead coverage.		Eating/Drinking Establishment
37875	05/10/2007	Beach City Cafe	By RYGIEL, KRISTINE: 6/4/2007 2:55:36 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:47:34 PM Copy of inspection faxed 6/18/07.	no violations, but corrective actions: 1.purchase more absorbent material for spills.			Eating/Drinking Establishment
37877	05/15/2007	Filiberto's	By RYGIEL, KRISTINE: 6/4/2007 3:07:21 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:43:07 PM Copy of inspection faxed on 6/18/07. Waiting for grease pick up info. By RYGIEL, KRISTINE: 8/1/2007 10:25:06 AM Mike Emerson issued NOV in FY 06-07	No violations, but corrective actions: 1.train employees on SW mgmt. 2. fax grease maintenance record to MP	Mayela spoke to Nidia 8/15/07. they use North County Grease. KR mailed them grease maintenance log 8/16/07.		Eating/Drinking Establishment
37879	05/16/2007	Firenze Trattoria	By RYGIEL, KRISTINE: 6/4/2007 3:19:13 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:35:15 PM Copy of inspection faxed 6/18.	No violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2. obtain spill kit. 3. keep records of grease interceptor maintenance.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37881	05/16/2007	KC's Tandoor	By RYGIEL, KRISTINE: 6/4/2007 3:27:47 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/6/2007 4:30:13 PM Follow up by Mike Emerson 8/6/07. mesquite in storage locker. all other materials stored elsewhere.	No violations, but corrective actions: 1.conduct annual SW employee training. 2.obtain spill kit. 3.provide overhead coverage for mesquite coals, other materials stored outdoors. 3. fax grease trap maintenance log to MP.	Follow up and BMPs completed 7/3/07 per Mike Emerson.		Eating/Drinking Establishment
37890	05/16/2007	Via Italia Trattoria	By RYGIEL, KRISTINE: 6/4/2007 3:38:05 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:46:21 PM Copy of inspection faxed 6/18/07. Waiting for grease maintenance records. By RYGIEL, KRISTINE: 8/21/2007 4:53:19 PM Follow up completed	No violations, but corrective actions: 1.keep log of trained employees. 2.obtain secondary containment and overhead coverage for grease bin. 3. fax copy of grease maintenance log to MP.	follow up completed by Mike Emerson on 8/21/07. restaurant obtained Biotane container w/ overhead cover and 2nd containment.		Eating/Drinking Establishment
37897	05/18/2007	Chick's Natural	By RYGIEL, KRISTINE: 6/4/2007 4:07:07 PM Inspection by PBS&J	No violations, but corrective actions: train employees on SW mgmt, keep a log.	All corrective actions completed per Clay Hill		Eating/Drinking Establishment
37910	04/23/2007	Garden State bagels	By RYGIEL, KRISTINE: 6/5/2007 1:02:26 PM inspection by PBS&J	No violations, but corrective actions: 1.perform employee SW training, keep log. 2. keep trash enclosure clean and free of loose trash and debris. 3.obtain spill kit, make accessible to employees.	All corrective actions completed per Clay Hill		Eating/Drinking Establishment
37942	06/05/2007	Cactus King Nursery	By RYGIEL, KRISTINE: 6/6/2007 2:49:52 PM Inspection by Mike Emerson.	No violations, no corrective actions			Nursery
37944	06/04/2007	A Tank Site - City of Encinitas	By RYGIEL, KRISTINE: 6/6/2007 3:17:24 PM Inspection by Mike Emerson. By RYGIEL, KRISTINE: 6/18/2007 4:22:19 PM Follow up completed 6/18/07 by Mike Emerson	No violations, but corrective actions: 1.trash pick up from overturned container east side of lot. 2. obtain spill kit. 3. cover heavy equipment.	Follow up complete 6/18/07. All corrective actions complete.		Municipal

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37948	06/04/2007	City of encinitas- fleet maintenance yard	By RYGIEL, KRISTINE: 6/6/2007 4:07:24 PM Inspection by Mike Emerson	no violations, but corrective actions: 1.pick up litter around trash area- need to contact parks and rec. 2. cover heavy equipment.	Follow up 6/14/07 by Mike Emerson showed all corrective actions complete		Municipal
37954	06/04/2007	City of Encinitas Pacific View Yard	By RYGIEL, KRISTINE: 6/7/2007 10:04:12 AM Inspection by Mike Emerson	No violation, but corrective actions: 1. Store heavy equipment under cover on school property.	Pac View is shared w/ Enc School Dist. Heavy equip is stored on school part of lot.		Municipal
37956	06/04/2007	Waste water collection facility	By RYGIEL, KRISTINE: 6/7/2007 11:03:47 AM Inspection by Mike Emerson	No violations, no corrective actions.			Municipal
37958	06/06/2007	San Elijo Joint Powers Authority	By RYGIEL, KRISTINE: 6/7/2007 11:26:32 AM Inspection by Mike Emerson By RYGIEL, KRISTINE: 6/18/2007 4:26:47 PM Follow up completed by Mike Emerson on 6/18/07.	No violations, but corrective actions: 1.provide better management of outdoor materials storage of unused or unwanted parts located on the SW part of property (east of building).	Follow up completed by Mike Emerson on 6/18/07. all corrective actions complete.		Industrial
37960	05/21/2007	Howard Johnson	By RYGIEL, KRISTINE: 6/7/2007 11:49:31 AM Inspection by Kathy Weldon By RYGIEL, KRISTINE: 6/7/2007 11:59:44 AM Refer pipe from washing machine to Leucadia Water Dist	no violations or corrective actions.			Other
37962	05/31/2007	Barrels & Branches	By RYGIEL, KRISTINE: 6/7/2007 12:30:39 PM Inspection by Kathy Weldon	No violations or corrective actions.			Nursery
37967	06/06/2007	Expo Plant Service Inc	By RYGIEL, KRISTINE: 6/7/2007 3:42:29 PM Inspection by Mike Emerson	No violations, but corrective actions: 1.close trash container. 2.cover tools 3. discontinue wash water into storm drain- use a bucket to collect wash water. Empty into landscape area or connect to sewer.	follow up on 7/3/07 by ME. Letter from Steven Jeromes said that they installed a 250 gallon catch tank for the sink to drain. will be emptied into port a potty.		Nursery

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37969	06/06/2007	Ables Flowers and Plants	By RYGIEL, KRISTINE: 6/18/2007 4:14:11 PM Inspection by Mike Emerson	no violations or corrective actions.			Nursery
37971	06/05/2007	Andy's Orchids	By RYGIEL, KRISTINE: 6/7/2007 4:41:58 PM Inspection by Mike Emerson	no violations or corrective actions.			Nursery
37973	06/05/2007	Cordova Gardens	By RYGIEL, KRISTINE: 6/7/2007 4:53:10 PM Inspection by Mike Emerson. By RYGIEL, KRISTINE: 6/20/2007 4:53:04 PM Follow up completed by Mike Emerson on 6/20/07	No violations, but corrective actions: 1. move paint and other hazardous material into covered areas. 2.fix hose leak @ SW corner	6/20/07: all paint and hazardous materials are stored under cover (in shed) and with secondary containment. hoses appear to be repaired. Per Mike Emerson.		Nursery
37975	05/31/2007	Leucadia Nursery	By RYGIEL, KRISTINE: 6/7/2007 5:09:04 PM Inspection by Kathy Weldon	No violations, but corrective actions: 1. replace O rings or back flush valve for injector.			Nursery
38014	05/30/2007	Borrelli's Pizza Inc.	By RYGIEL, KRISTINE: 6/11/2007 12:25:37 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/11/2007 12:43:00 PM follow up required. By RYGIEL, KRISTINE: 7/17/2007 5:19:22 PM Follow up completed by Mike Emerson on 6/18/07, issued NOV for bin tray	no violations, but corrective actions: 1 train employee on SW mgmt, keep a log. 2.obtain secondary containment and overhead coverage for grease bin. 3. keep trash bin lids closed. 4.obtain spill kit.	Follow up completed by Mike Emerson on 6/18/07, issued NOV for bin tray and cover to comply by 6/27/07. Issued Admin citation #CW070207 on 7/2/07. Voided citation on 7/17/07- restaurant had already ordered containment before citation date.	6/18/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38016	05/29/2007	Surf Brother's Teriyaki	By RYGIEL, KRISTINE: 6/11/2007 2:08:31 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/11/2007 2:17:01 PM follow up required By RYGIEL, KRISTINE: 7/10/2007 4:43:36 PM follow ups on 6/18 and 7/5/07. Trash area looks clean on 7/5/07 per Mike Emerson	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2.keep bin lids closed. 3.contact property manager regarding litter in trash enclosure. follow up required.	Follow ups completed on 6/18 and 7/5/07. Trash area clean per Mike Emerson on 7/5/07.		Eating/Drinking Establishment
38018	05/18/2007	Mama Lulu's Pizza and Pasta	By RYGIEL, KRISTINE: 6/11/2007 2:32:49 PM Inspection by PBS&J	No violations, but corrective action: 1. keep a record of employee training.			Eating/Drinking Establishment
38020	05/18/2007	St. Tropez Bakery	By RYGIEL, KRISTINE: 6/11/2007 2:48:46 PM Inspection by PBS&J	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2.obtain current copy of business cert, fax copy to MP. 3. fax most recent grease trap maintenance log to MP. 4. Obtain spill kit, make accessible to employees.	Follow up completed by Mike Emerson 7/12/07. received emailed grease maintenance info 7/16/07.		Eating/Drinking Establishment
38022	05/31/2007	Kocher Flower Growers	By RYGIEL, KRISTINE: 6/11/2007 2:58:27 PM Inspection by PBS&J	No violations, but corrective actions: Replace O rings on back flush valve for injector.			Nursery
38024	06/07/2007	Bradley Allen Auto Body Painting	By RYGIEL, KRISTINE: 6/11/2007 3:46:12 PM Inspection by Mike Emerson By RYGIEL, KRISTINE: 6/13/2007 4:15:56 PM Follow up completed on 6/13/07.	No violations, but corrective actions: 1.diesel barrels secondary containment x3. 2. properly store oil drain pans under cover or indoors.	Follow up inspection completed by Mike Emerson. They performed all corrective actions listed on inspection form from 6/7/07. Provided storm water training log and assigned oil pans to each employee.		Auto Body Repair/Painting
38026	06/06/2007	A+ Smog Test	By RYGIEL, KRISTINE: 6/11/2007 4:01:01 PM Inspection by Mike Emerson.	No violations or corrective actions.			Auto Other
38028	06/07/2007	O'Brien Station aka Arco	By RYGIEL, KRISTINE: 6/11/2007 4:19:00 PM inspection by Mike Emerson	No violations, but corrective actions: 1.hazardous waste containers need secondary containment and cover.			Gas Station

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38030	06/08/2007	San Dieguito Transportation (San Dieguito Union HS District)	By RYGIEL, KRISTINE: 6/11/2007 4:34:04 PM inspection by Mike Emerson	No violations, but corrective actions: 1.replace storm drain filters at the beginning and end of rainy seasons. 2.implement recommendations as outlined in the 4/21/06 OEMC owen engineering report. 3. cement mixer & air compressor to be stored indoors			Industrial
38032	06/08/2007	City of Encinitas City hall	By RYGIEL, KRISTINE: 6/11/2007 4:45:25 PM inspection by Mike Emerson	No violations or corrective actions.			Municipal
38034	06/11/2007	Java Express (new business); Pat O'shey (old business)	By RYGIEL, KRISTINE: 6/11/2007 4:54:53 PM inspection by Mike Emerson	no violations or corrective actions.	Follow up on 9/28/07. Issued NOV for trash clean up, consider power washing. Follow up on 10/15/07 trash area clean. request power washing.	9/28/07	Eating/Drinking Establishment
38036	06/11/2007	Bird Rock Tropicals	By RYGIEL, KRISTINE: 6/11/2007 5:05:51 PM Inspection by Mike Emerson	no violations or corrective actions.			Nursery
38131	05/09/2007	Surfdog's Java Hut	By RYGIEL, KRISTINE: 6/13/2007 12:50:50 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2.keep dirty rags/laundry stored indoors. 3. obtain spill response kit, keep accessible to employees.			Eating/Drinking Establishment
38133	05/08/2007	Swami's Cafe	By RYGIEL, KRISTINE: 6/13/2007 1:06:10 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/25/2007 1:09:32 PM Grease maintenance: Affordable Grease Pumping 858-456-1102. Last maintained on 4/14/07.	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax copy of current business cert and grease trap maintenance to MP. 3.obtain spill response kit, keep accessible to employees. 4. keep trash bin lids closed.			Eating/Drinking Establishment
38142	05/10/2007	Trattoria Positano	By RYGIEL, KRISTINE: 6/13/2007 2:16:42 PM Inspection by PBS&J	No violations, but corrective action: 1.fax most recent grease maintenance invoice to MP. 2.train employees on SW mgmt, keep a log. 3.keep trash bin lids closed, pick up trash around bin. 4. obtain spill kit, make accessible to employees.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38146	05/10/2007	Surfside Creamery	By RYGIEL, KRISTINE: 6/13/2007 2:50:20 PM inspection by PBS&J	No violations, but corrective action: 1.keep a log of trained employees.			Eating/Drinking Establishment
38165	05/15/2007	Daley Double Cocktail Lounge (The Saloon)	By RYGIEL, KRISTINE: 6/13/2007 3:51:07 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill response kit, keep accessible to employees.			Eating/Drinking Establishment
38189	05/15/2007	Amici/Qero	By RYGIEL, KRISTINE: 6/13/2007 4:32:41 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/27/2007 3:17:47 PM 6/14/07 Admin citation warning issued by Mike Emerson for lack of overhead coverage and 2nd containment of grease.	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill response kit, keep it accessible to employees. 3.wor with 101 diner to obtain secondary containment and overhead cover for grease bin. 4.fax bus cert.	6/14/07 Admin citation warning issued by Mike Emerson for lack of overhead coverage and 2nd containment of grease. 8/22/07: they have proper storage of grease	6/14/07	Eating/Drinking Establishment
38203	05/15/2007	101 Diner	By RYGIEL, KRISTINE: 6/14/2007 9:47:05 AM Inspection by PBS&J By RYGIEL, KRISTINE: 8/27/2007 3:49:09 PM Mike Emerson issued Admin citation warning on 6/14/07 for lack of 2nd containment and overhead coverage on grease bin.	no violations, but corrective actions: 1.train employees in SW mgmt, keep a log. 2.obtain secondary containment and overhead coverage for grease bin. 3.obtain spill response kit, keep accessible to employees. 4. fax bus cert to MP. 5.store all trash	Mike Emerson issued Admin citation warning on 6/14/07 for lack of 2nd containment and overhead coverage on grease bin. 8/23/07: they have proper storage of grease per Mike Emerson.	6/14/07	Eating/Drinking Establishment
38205	05/15/2007	Manhattan Pizza	By RYGIEL, KRISTINE: 6/14/2007 10:59:51 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees in SW mgmt, keep a log. 2.obtain spill kit, keep accessible to employees. 3. clean floor mats and patio furniture indoors or contain all wash water outdoors.			Eating/Drinking Establishment
38207	05/14/2007	Ogata Japanese Cuisine	By RYGIEL, KRISTINE: 6/14/2007 11:27:05 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep outdoor area clean and store grease buckets indoors. 3.obtain spill response kit, keep accessible for employees. 4.get Tastes to obtain secondary containment.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38209	05/15/2007	Raul's	By RYGIEL, KRISTINE: 6/14/2007 2:09:47 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/17/2007 1:28:45 PM no current business cert. as of 6/19/07 per Cynthia Miller. KR	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.store grease containers and other materials inside or under covered area. 3.mail/fax business cert to MP. 4.obtain spill response kit, keep accessible to employees.	Mike delivered business cert application 8/2/07.		Eating/Drinking Establishment
38211	05/21/2007	Trader Joe's	By RYGIEL, KRISTINE: 6/14/2007 2:55:06 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt and keep a log. 2. keep trash area clean and bin lids closed.			Eating/Drinking Establishment
38213	05/04/2007	A little Moore Cafe	By RYGIEL, KRISTINE: 6/14/2007 3:25:54 PM Inspection by PBS&J	No violations, but corrective actions: 1. fax or mail most recent grease maintenance invoice to MP. 2. train employees on SW mgmt, keep a log.			Eating/Drinking Establishment
38223	05/20/2007	Leucadia Sushi Bar	By RYGIEL, KRISTINE: 6/18/2007 10:09:02 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/31/2007 8:38:30 AM 7/30/07 Follow up by Mike Emerson. Overhead and secondary containment of grease storage in place. No spill kit though.	No violations, but corrective actions: 1.Train employees on SW mgmt. 2.Get overhead cover and secondary containment for grease bin. 3. fax copy of grease maintenance to MP. 4. Obtain spill kit. 5.clean grease spill in trash area.	7/30/07 Follow up by Mike Emerson. Overhead and secondary containment of grease storage in place. No spill kit though.		Eating/Drinking Establishment
38226	05/16/2007	McDonald's #14229	By RYGIEL, KRISTINE: 6/18/2007 10:41:57 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 10:42:45 AM Follow up and grease BMPs completed 7/3/07 per Mike Emerson	No violations, but corrective actions: 1. conduct annual SW training and maintain a log. 2. provide overhead coverage for the grease bin.	Follow up and BMPs completed 7/3/07 per Mike Emerson.		Eating/Drinking Establishment
38228	06/04/2007	Calypso Cafe	By RYGIEL, KRISTINE: 6/18/2007 11:03:22 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/12/2007 1:32:30 PM Follow up and corrective actions completed 7/11/07 per Mike Emerson.	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.properly dispose of grease being stored in planter area, mail copy of pick up invoice to MP. 3. obtain lids for trash cans. 4. don't store open grease outside.	Business appears in compliance per Mike Emerson 7/11/07. Jonam will fax letter regarding grease disposal by 7/13/07.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38230	06/06/2007	Mandarin Oriental	By RYGIEL, KRISTINE: 6/18/2007 11:19:48 AM Inspection by PBS&J By RYGIEL, KRISTINE: 9/13/2007 9:12:15 AM Follow up by Mike Emerson on 7/30/07. no 2nd containment. issued warning citation to comply by 8/7/07.	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. obtain secondary containment and overhead coverage for grease bin. 3. store brooms indoors.	Follow up by Mike Emerson on 7/30/07. no 2nd containment. issued warning citation to comply by 8/7/07. On 9/10/07 follow up by Mike Emerson showed grease BMPs in place.	7/30/07	Eating/Drinking Establishment
38234	06/07/2007	Tastes Group, LLC	By RYGIEL, KRISTINE: 6/18/2007 11:36:59 AM Inspection by PBS&J By RYGIEL, KRISTINE: 8/2/2007 9:01:27 AM 7/30/07 FU inspection by Mike Emerson showed no 2nd containment for grease bin, no spill kit. appears they are washing mats into storm drain	No violation, but corrective actions: 1.train employees on SW mgmt, keep log. 2.do not clean floor mats outdoors. 3.if hosing outside areas, contain wash water. 4. obtain secondary containment and overhead coverage for grease bins. 5. spill kit	7/30/07 FU inspection by Mike Emerson showed no 2nd containment for grease bin, no spill kit. appears they are washing mats into storm drain. took photos. 7/31/07: owner uses biodiesel systems and keeps oil in original container inside for employee.		Eating/Drinking Establishment
38236	06/04/2007	Moonlight Grille	By RYGIEL, KRISTINE: 6/18/2007 11:51:51 AM Inspection by PBS&J By RYGIEL, KRISTINE: 10/26/2007 3:19:26 PM Follow up done 9/24/07 by Ben Taylor and Mike Emerson. Owner needs to construct proper grease storage and fix discharges to sewer connection	No violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2.obtain secondary containment and overhead coverage for grease bin. 3.contain all wash water when cleaning picnic tables.	10/30/07 Dana (GM) called and will complete work by 11/2/07. 11/05/07 Grease BMPs in place per Mike Emerson.		Eating/Drinking Establishment
38264	06/11/2007	City of Encinitas Calle Magdalena Yard	By RYGIEL, KRISTINE: 6/18/2007 5:04:05 PM Inspection by Mike Emerson By RYGIEL, KRISTINE: 7/30/2007 10:51:34 AM Follow up inspection done 7/26/07. Clean trash and recycle areas and sand bags removed and replace w/new ones. per Mike Emerson.	No violations, but corrective actions: 1.clean trash and recycle areas. 2.obtain spill kit and plan. 3.store heavy equipment and vehicles in garage or under canopy. 4.label outdoor storage containers. 5. replace torn sand bag especially near drain.	Initial inspection done by Mike Emerson on 6/11/07. Entered in Storm Water Cityworks WO#38264. 7/26/07 follow up. clean trash and recycle areas. Remove sand bags and replace with new ones.		Municipal

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38266	06/13/2007	Basil Tops	By RYGIEL, KRISTINE: 6/18/2007 5:14:47 PM Inspection by Mike Emerson.	No violations or corrective actions.			Nursery
38288	05/18/2007	Seven-Eleven #18087	By RYGIEL, KRISTINE: 6/19/2007 9:59:54 AM inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep trash bin lids closed and pick up litter in trash bin area.			Eating/Drinking Establishment
38291	05/09/2007	Cap'n Keno's	By RYGIEL, KRISTINE: 6/19/2007 11:14:56 AM Inspection by PBS&J	No violations, but corrective actions: 1. clean up outdoor storage area- move under cover or remove storage materials. 2. conduct annual employee SW training. 3.obtain spill kit.			Eating/Drinking Establishment
38294	05/09/2007	Juanita's Tacos	By RYGIEL, KRISTINE: 6/19/2007 11:58:08 AM Inspection by PBS&J	No violations, but corrective actions: 1.conduct annual SW employee training. 2.obtain spill kit. 3. clean/dry sweep trash area, keep lids closed. 4.fax/mail copy of grease trap main invoice to MP.	Follow up completed 7/19/07 by Mike Emerson. Ricardo Gonzales showed him the grease trap invoice. Diamond 760-744-7191. Acct #385675. Emptied 6/12/07.		Eating/Drinking Establishment
38296	05/10/2007	The Potato Shack	By RYGIEL, KRISTINE: 6/19/2007 12:13:32 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax most current grease trap to MP. 3. keep trash bin lids closed. 4. have Darling or kitchen staff clean grease bin.			Eating/Drinking Establishment
38311	05/21/2007	Subman	By RYGIEL, KRISTINE: 6/19/2007 4:25:16 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 4:27:42 PM Business license # 21227, expires 5/31/08 per Mike Emerson.	No violations, but corrective actions: 1.obtain current business certificate, fax copy to MP. 2.train employees on SW mgmt, keep a log.			Eating/Drinking Establishment
38313	05/21/2007	Subway #1442	By RYGIEL, KRISTINE: 6/19/2007 4:34:55 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep trash bin lids closed. 3.obtain spill kit.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38315	05/22/2007	Mozy Cafe	By RYGIEL, KRISTINE: 6/19/2007 4:51:15 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2.obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38338	05/16/2007	D Street Bar and Grill	By RYGIEL, KRISTINE: 6/20/2007 2:30:31 PM Inspection by PBS&J	No violations, but corrective actions: 1.keep trash bin lids closed, and pick up litter in trash bin area. 2.fax a copy of most recent grease trap cleaning invoice to MP. 3.obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38368	05/22/2007	Bird House Grill	By RYGIEL, KRISTINE: 6/22/2007 11:31:40 AM Inspection by PBS&J	No violations, but corrective actions: 1. keep a record of employee training. 2.remind construction crew to contain any water used during construction and not to discharge into street or storm drains.			Eating/Drinking Establishment
38371	05/22/2007	Beach Tea House 101	By RYGIEL, KRISTINE: 6/22/2007 11:44:03 AM inspection by PBS&J	no violations, but corrective actions: 1.keep a log of trained employees.			Eating/Drinking Establishment
38376	05/23/2007	Jam Roc 101	By RYGIEL, KRISTINE: 6/22/2007 1:06:13 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. keep outdoor storage area organized, picked up and clean.			Eating/Drinking Establishment
38390	05/23/2007	Leucadia Donut	By RYGIEL, KRISTINE: 6/22/2007 3:30:55 PM Inspection by PBS&J	No violations, but corrective action: 1.keep a record of trained employees			Eating/Drinking Establishment
38392	05/24/2007	Thai Pan Cuisine	By RYGIEL, KRISTINE: 6/22/2007 4:02:34 PM Inspection by PBS&J	No violations, but corrective actions:1.train employees on SW mgmt, keep log. 2.clean grease drips in front of grease bin. 3.Get spill kit. 4.keep trash bin lids closed. 5.store mops/cleaning supplies indoors. 6.send copy of bus. cert. to MP.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38441	06/11/2007	Mr. Peabody's	By RYGIEL, KRISTINE: 6/25/2007 4:48:43 PM Inspection by PBS&J	No violations, but corrective actions: 1.Store dirty laundry indoors or under cover. 2.keep trash bin lids closed and trash area free of litter/debris. 3.train employees on SW mgmt, keep a log. 4.obtain secondary tray and overhead cover for grease bin	7/31/07 follow up by Mike Emerson. manager was working on cover during inspection. issued NOV to comply by 8/8/07. Follow up 8/8 showed proper grease storage.	7/31/07	Eating/Drinking Establishment
38461	05/29/2007	Flippin' Pizza	By RYGIEL, KRISTINE: 6/26/2007 9:34:50 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. keep trash bin lids closed.			Eating/Drinking Establishment
38462	05/29/2007	It's a Grind	By RYGIEL, KRISTINE: 6/26/2007 10:18:29 AM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill kit. 3.keep trash bin area clean and free of litter.			Eating/Drinking Establishment
38463	05/29/2007	Rico's Taco Shop	By RYGIEL, KRISTINE: 6/26/2007 10:27:12 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log.			Eating/Drinking Establishment
38464	05/30/2007	Starbuck's	By RYGIEL, KRISTINE: 6/26/2007 2:11:48 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.Fax copy of business cert to MP. 3.Keep trash bin lids closed.			Eating/Drinking Establishment
38465	05/30/2007	Juice Stop	By RYGIEL, KRISTINE: 6/26/2007 2:59:56 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/10/2007 4:12:35 PM No business certificate as of 7/10/07 per Cynthia Miller. KR.	No violations, but corrective actions: 1. train employees on sw mgmt, keep a log. 2. fax current business cert to MP.			Eating/Drinking Establishment
38469	06/25/2007	Encinitas Ranch Golf Course	By TROTTER, DONNA L: 7/11/2007 9:04:52 AM Inspection of Golf Course -initial inspection By RYGIEL, KRISTINE X: 7/18/2007 9:08:26 AM follow up completed by Mike Emerson on 7/17/07. All corrective actions taken- in compliance.	No violations, but corrective actions: 1. move soda machine away from downspout approx 1 foot. 2.consider secondary containment for stockpiles. 3.need secondary containment for new oil. 4.remove/cover equip stored outdoors. 5. cover fueling area.	follow up completed by Mike Emerson on 7/17/07. All corrective actions taken- in compliance.		Golf Course

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38483	06/21/2007	Fender Mender		No violations, but corrective actions: 1. train employees on SW regulations, keep log.			Auto Body Repair/Painting
38484	06/26/2007	SoCal Inc		No violations, but corrective actions: 1.obtain spill kit, train employees on spill response plan. 2.perform SW mgmt training, keep log.	7/26/07 Owner showed Mike Emerson training log, spill kit w/plan, and 2nd containment.		Auto/Other
38486	06/26/2007	Coastal Foreign Auto Service	By RYGIEL, KRISTINE X: 7/30/2007 9:34:36 AM 7/26/07 Follow up by Mike Emerson. obtained 2nd containment for coolant and has two more on order for oils. will FU to confirm use by 8/9/07.	No violations, but corrective actions: 1.provide secondary containment of hazardous fluids. 2.train employees on storm water mgmt, keep a log. 3. spill response plan. 4.monitor trash area and report problems to prop manager.	7/26/07 Follow up by Mike Emerson. obtained 2nd containment for coolant and has two more on order for oils. will FU to confirm use by 8/9/07.		Auto Repair/ Maintenance
38503	06/26/2007	Encinitas Japanese Car Specialist, Inc	By RYGIEL, KRISTINE X: 7/30/2007 9:18:54 AM 7/26/07 Owner showed Mike Emerson training log, spill kit w/plan, and 2nd containment.	No violations, but corrective actions: 1. train employees, keep log. 2. create spill response plan, train staff. 3.provide secondary containment for all hazardous waste and storage. 4. close trash container located outside.	7/26/07 Owner showed Mike Emerson training log, spill kit w/plan, and 2nd containment.		Auto Repair/ Maintenance
38505	06/25/2007	Hazar Inc DBA Precision Tune Auto Care	By RYGIEL, KRISTINE X: 7/30/2007 10:08:04 AM Follow up completed 7/26/07 by Mike Emerson. secondary containment ok.	No violations, but corrective actions: 1.provide secondary containment for storage tanks for oils, hazardous waste, and other liquids.	Follow up completed 7/26/07 by Mike Emerson. secondary containment ok.		Auto Repair/ Maintenance
38506	06/25/2007	Camino Transmission	By RYGIEL, KRISTINE X: 6/28/2007 12:09:02 PM business is shutting down, but hell give storm water info to new tenant	No violations, but corrective actions: 1.provide secondary containment for hazardous materials/liquids. 2.cover and provide secondary containment of air compressor. 3. train employees on SW mgmt, keep log. 4. keep trash lids closed.	Follow up completed 7/26/07 by Mike Emerson. secondary containment ok.		Auto Repair/ Maintenance
38507	06/21/2007	Franco's Flowers	By RYGIEL, KRISTINE X: 7/9/2007 12:59:46 PM Follow up complete by Mike Emerson 7/5/07. he suggested more waste and recycle containers, keep area clean.	no violations, but corrective actions: 1.provide more containers for recycling & close lids. 2.properly store trash in containers. 3.provide roof for compressor north. 4. properly store fertilizers & plants under cover and secondary containment.	Follow up completed by Mike Emerson. Suggested more waste and recycling containers, and keep area clean.		Nursery

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38657	06/04/2007	City of Encinitas Requeza Yard	By RYGIEL, KRISTINE X: 7/9/2007 1:07:26 PM Follow up 6/18/07 found discarded battery and torn tarps on equipment on SW corner next to port-a-potty. Follow up on 6/28/07 yard in compliance per Mike Emerson.	No violations, but corrective actions: 1.make spill kit accessible. 2.properly store paint cans in covered area.- there are 4 paint containers stored on NE part of yard.	6/28/07 yard in compliance per Mike Emerson		Municipal
38727	06/21/2007	El Camino Tire and Brake	By RYGIEL, KRISTINE X: 7/11/2007 1:03:51 PM they received the EPA auto body and paint shops fact sheets book By RYGIEL, KRISTINE X: 7/11/2007 1:04:57 PM Follow up completed on 7/3/07. need to check and give written notice for secondary containment	No violations, but corrective actions: 1.compressor, oil, brake fluid need overhead cover and secondary containment. 2.close trash/recycle containers. 3.train employees on SW mgmt, keep log.	7/3/07 need to check and give written notice for 2nd containment of indoor storage per Mike Emerson. 7/26/07 obtained 2nd containment, but need overhead coverage	7/26/07	Auto Repair/ Maintenance
38741	06/21/2007	Twin Star Ventures DBA Midas	By RYGIEL, KRISTINE X: 7/11/2007 2:41:43 PM 7/3/07 Need to give written notice of required secondary containment of oils and other fluids stored indoors.	No violations, but corrective actions: 1.train employees on SW regulations and keep log. 2.develop a spill response plan.	7/26/07 Owner showed Mike Emerson training log, spill kit w/plan, and 2nd containment.		Auto Repair/ Maintenance
38746	05/30/2007	Quizno's Sub	By RYGIEL, KRISTINE: 7/11/2007 5:08:45 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. keep trash bin lids closed.			Eating/Drinking Establishment
38747	06/01/2007	Jorge's	By RYGIEL, KRISTINE: 7/11/2007 5:15:07 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/11/2007 5:25:45 PM Consider contacting property manager regarding drainage that flows thru grease bin area. flow should be diverted around grease bin.	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2.obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38766	06/01/2007	Starbuck's #6546	By RYGIEL, KRISTINE: 7/12/2007 2:50:00 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/16/2007 10:20:19 AM Business Cert # 15568 Exp. 5/31/08. KR	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38767	06/01/2007	Subway#27567	By RYGIEL, KRISTINE: 7/12/2007 3:37:00 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax copy of grease interceptor cleaning invoice to MP.			Eating/Drinking Establishment
38768	06/04/2007	China Town	By RYGIEL, KRISTINE: 7/12/2007 3:52:34 PM Inspection by PBS&J	No violations, but corrective actions: 1. Train employees on SW mgmt, keep a log. 2.don't clean floor mats outside, clean inside. 3.obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38769	06/04/2007	Encinitas Yogurt & Ice Cream	By RYGIEL, KRISTINE: 7/12/2007 4:26:27 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.properly dispose of old signs and fluorescent light bulb. 3. keep trash bin lids closed.			Eating/Drinking Establishment
38771	06/07/2007	Pannikin	By RYGIEL, KRISTINE: 7/12/2007 4:49:07 PM Inspection by PBS&J	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. keep trash bin lids closed.			Eating/Drinking Establishment
38772	06/04/2007	Siamese Basil	By RYGIEL, KRISTINE: 7/12/2007 5:07:18 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38779	06/07/2007	Starbuck's #5737	By RYGIEL, KRISTINE: 7/16/2007 9:47:59 AM Inspection by PBS&J	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. make sure cleaning company does not wash floor mats outside.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38780	06/07/2007	When In Rome	By RYGIEL, KRISTINE: 7/16/2007 10:29:41 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep trash bin lids closed. 3.store all cleaning products indoors. 4.fax copy of most recent grease trap maintenance invoice to MP.			Eating/Drinking Establishment
38781	06/11/2007	Sub Palace	By RYGIEL, KRISTINE: 7/16/2007 11:04:35 AM Inspection by PBS&J	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log.			Eating/Drinking Establishment
38782	06/04/2007	Starbuck's #5391	By RYGIEL, KRISTINE: 7/16/2007 11:22:25 AM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log.	Follow up completed by Mike Emerson 7/12/07. received emailed grease maintenance info 7/16/07.		Eating/Drinking Establishment
38784	06/11/2007	Filippi's Pizza Grotto	By RYGIEL, KRISTINE: 7/16/2007 1:00:45 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.dispose of kitchen equipment outside or store inside.			Eating/Drinking Establishment
38785	06/14/2007	Jorge's Mexican Food	By RYGIEL, KRISTINE: 7/16/2007 1:11:04 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38786	06/14/2007	Sake House (Yumeya)	By RYGIEL, KRISTINE: 7/16/2007 1:28:10 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax copy of most recent grease maintenance invoice to MP. 3.get lids for recycling containers.			Eating/Drinking Establishment
38787	06/21/2007	Blue Fin Sushi	By RYGIEL, KRISTINE: 7/16/2007 1:44:24 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax copy of most recent grease maintenance invoice to MP. 3.cover mops/brooms stored outside, or store indoors.	7/26/07 follow up by Mike Emerson. Restaurant obtained spill kit.		Eating/Drinking Establishment
38791	06/15/2007	La Bonne Bouffe	By RYGIEL, KRISTINE: 7/16/2007 2:54:38 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep trash enclosure clean, bin lids closed. 3.cover laundry bin and store mop bucket indoors. 4.fix leaky hose or find source of water in trash area and repair.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38802	06/11/2007	Nrgize Lifestyle Cafe	By RYGIEL, KRISTINE: 7/16/2007 3:48:47 PM inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. keep trash bin lids closed.			Eating/Drinking Establishment
38803	06/06/2007	Beachside Grill (formerly Bella Rosa)	By RYGIEL, KRISTINE: 7/16/2007 4:00:01 PM Inspection by PBS&J	no violations, but corrective actions: 1. keep a record of trained employees			Eating/Drinking Establishment
38813	05/14/2007	Honey's Bistro	By RYGIEL, KRISTINE: 7/17/2007 9:12:43 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill kit, keep accessible to employees. 3. keep empty boxes in cardboard bin or under cover. 4.fax most recent grease trap maintenance invoice to MP			Eating/Drinking Establishment
38823	05/24/2007	Skedaddles (Target)	By RYGIEL, KRISTINE: 7/17/2007 9:46:45 AM Inspection by PBS&J	No violations, but corrective actions: 1.fax business cert and most recent grease maintenance invoice to MP. 2.train employees on SW mgmt, keep a log. 3.clean litter under trash compactor outside.	Follow up on 7/31/07 by Mike Emerson. Obtained grease pick up company info. will get business certificate info from store manager.		Eating/Drinking Establishment
38824	05/21/2007	Mister Sushi	By RYGIEL, KRISTINE: 7/17/2007 10:31:49 AM Inspection by PBS&J	No violations, but corrective actions: 1.dont dump mop water or clean floor mats outside. 2.sweep leaves outside w/ broom instead of hosing off. 3.obtain spill kit. 4. fax property manager name, phone, fax to MP. 5.obtain business certificate.	7/18/07 Mike Emerson contacted manager Yoshinori juroki and requested overhead cover and 2nd containment for grease. 8/27/07 they have grease bmps, need spill kit		Eating/Drinking Establishment
38825	05/24/2007	Stater Brothers	By RYGIEL, KRISTINE: 7/17/2007 11:15:07 AM Inspection by PBS&J	no violations, but corrective actions: 1.keep a log of trained employees. 2. fax most recent grease trap maintenance invoice to MP- Done.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38826	05/16/2007	Champagne French Bakery Cafe	By RYGIEL, KRISTINE: 7/17/2007 12:01:43 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax copy of current bus. cert and power washing company info to MP. 3.obtain spill kit, keep accessible to employees.	8/1/07 Mike Emerson contacted store manager anna montes to fax power washing info to him. 8/9/07 Mike Emerson called and requested power washing info. received via fax on 8/9/07. Ellis Enterprises 562-493-5550		Eating/Drinking Establishment
38827	05/16/2007	7-Eleven #21805	By RYGIEL, KRISTINE: 7/17/2007 1:18:26 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep spill response kit accessible to employees. 3.fax copy of current bus cert to MP.			Eating/Drinking Establishment
38828	06/20/2007	El Cortez	By RYGIEL, KRISTINE: 7/17/2007 1:32:03 PM Inspection by PBS&J	no violations, but corrective actions: 1.conduct annual storm water training for employees. 2.obtain spill kit. 3.provide City with copy of valid business license.	Mike Emerson completed follow up inspection on 8/13/07. Dropped off business certificate application.		Eating/Drinking Establishment
38855	05/14/2007	E Street Cafe	By RYGIEL, KRISTINE: 7/18/2007 2:02:13 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38858	05/16/2007	Wendy's #3015	By RYGIEL, KRISTINE: 7/19/2007 8:45:39 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/19/2007 8:53:17 AM Have inspector Mike Emerson look into overhead coverage and secondary containment.	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.clean grease on the outside of grease bin- do not allow any wash water to enter storm drain. 3.obtain spill kit, keep accessible to employees.	Follow up by Mike Emerson on 7/23/07. Informed Gabriel Lira, asst manager, that he needs overhead coverage and 2nd containment for grease storage by 8/23/07. 8/28/07 follow up showed grease BMPs in place.		Eating/Drinking Establishment
38883	05/16/2007	The Original Pancake House	By RYGIEL, KRISTINE: 7/19/2007 4:35:48 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on sw mgmt, keep a log. 2.obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38884	05/16/2007	Encinitas Cafe	By RYGIEL, KRISTINE: 7/19/2007 5:00:46 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2.get more kitty litter for spill kit.			Eating/Drinking Establishment
38885	05/24/2007	Kealani's	By RYGIEL, KRISTINE: 7/20/2007 8:28:19 AM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log.			Eating/Drinking Establishment
38886	05/24/2007	Pizzicato	By RYGIEL, KRISTINE: 7/20/2007 8:56:17 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. keep bin lids closed, trash in containers. 3.consider contacting prop manager regarding persistent trash problems in trash bin enclosure.			Eating/Drinking Establishment
38887	05/29/2007	Isabelle Briens	By RYGIEL, KRISTINE: 7/20/2007 9:31:00 AM Inspection by PBS&J	no violations, but corrective actions: 1.keep trash cans, laundry, and paint under covered area. 2.train employees on SW mgmt, keep a log.	Follow up by Mike Emerson on 7/24/07. Business cleaned and resealed grease area and obtained overhead coverage and secondary containment.		Eating/Drinking Establishment
38893	06/04/2007	Smart & Final	By RYGIEL, KRISTINE: 7/20/2007 9:55:29 AM Inspection by PBS&J	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. keep trash bin lids closed.			Eating/Drinking Establishment
38896	06/04/2007	Tuscan Sun deli	By RYGIEL, KRISTINE: 7/20/2007 10:21:05 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. get lid for small trash can or keep can indoors. 3. keep bin lids closed.			Eating/Drinking Establishment
38900	06/06/2007	Miyabi	By RYGIEL, KRISTINE: 7/20/2007 10:49:34 AM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.do not put cigarette butts or other debris down the storm drain inlet.			Eating/Drinking Establishment
38901	06/06/2007	Pino's Cucina Italiana	By RYGIEL, KRISTINE: 7/20/2007 11:20:21 AM Inspection by PBS&J	no violations, but corrective actions: 1.keep record of trained employees. 2.cover linen bin to keep dry during rain.			Eating/Drinking Establishment
38902	06/14/2007	Seaside Market	By RYGIEL, KRISTINE: 7/20/2007 11:31:14 AM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2.clean grease spill near trash compactor and litter in loading area. 3.mop up water spilled near loading area. 4.post spill response plan. 5.keep record of oil pickup.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38980	05/21/2007	Pizza Hut	By RYGIEL, KRISTINE: 7/25/2007 1:31:38 PM Inspection by PBS&J	no violations but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep trash bin lids closed, trash area clean.			Eating/Drinking Establishment

CityGIS

Basic Training

Manual

City of Encinitas

August, 2007

CityGIS Interface Components

A. This is the ***Table of Contents*** (TOC) of the application. This is where you will see which layers of GIS data are in the map.

- Layers can be turned on and off by adding a check mark in the square box next to the layer.
- Layers can be expanded and collapsed by clicking the plus sign on and off, expanding the layer reveals legend symbols or additional data layers in the group. Many layers are grouped together. You can expand a group to see all the layers it contains.

B. This is the ***Standard Map Tool Bar***.

C. This is the ***CityGIS Toolbar*** containing four menus: 1) Quick Search, 2) Theme Selector, 3) City Tools and 4) Ask GIS.

D. ***Scales*** – shows Absolute map scale and a handful of corresponding Engineering map scales.

E. ***Cityworks Toolbar*** – if you're a Cityworks user, the toolbar will appear. You need to be logged in to Cityworks for this toolbar to be active.

F. ***Data View*** – This is your working view. ***Layout View*** – this is your printing view, which defaults to a D size map (36"x24") layout. Pay attention to the scale when switching from Data View to Layout View.

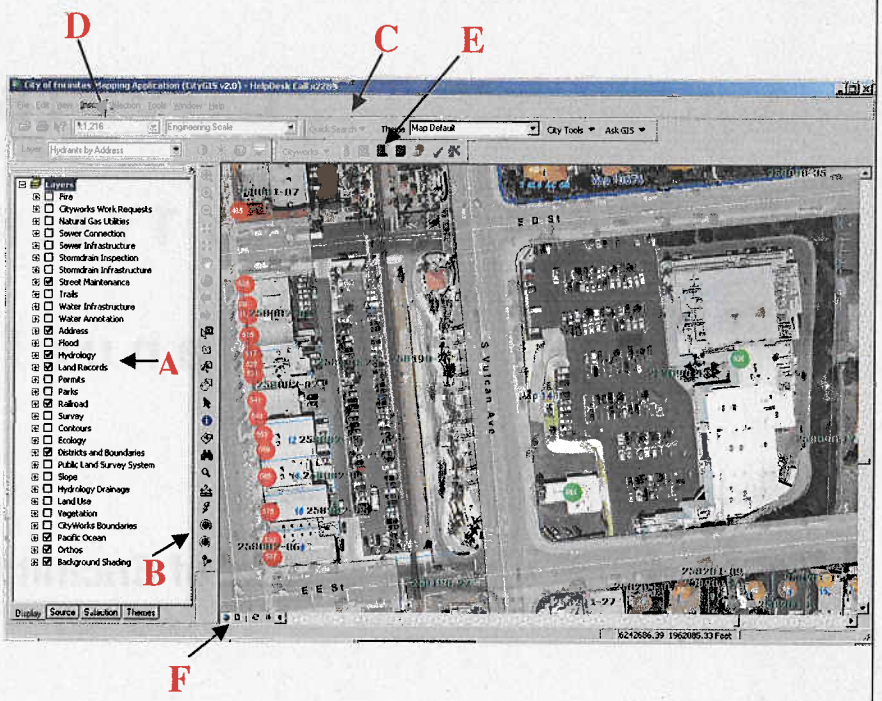

CityGIS Toolbar

The CityGIS Toolbar contains **four** menus that have been created by the GIS Division. For this training, we will review menus 1 and 2.

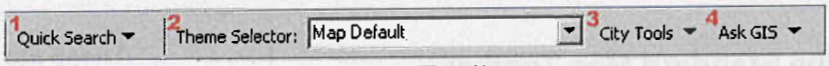

Custom Toolbar

Menu 1: Quick Search

Clicking on this button produces a drop-down menu listing items that you can search on.

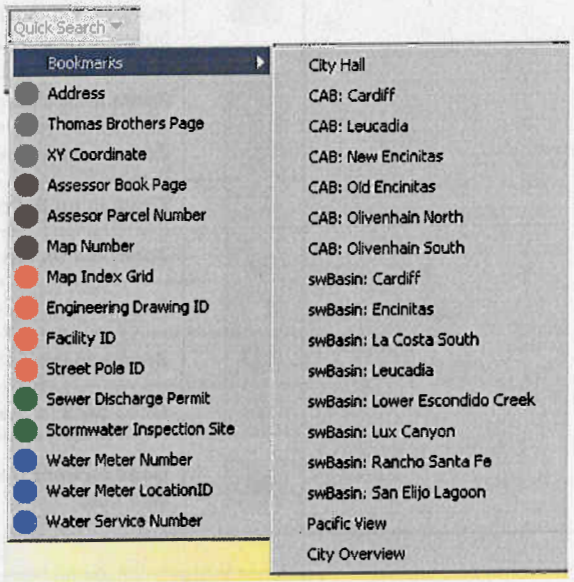

Menu 2: Theme Selector

Clicking on this button produces a drop-down menu containing themes based on the layers in the TOC.

Selecting a theme will turn on/turn off layers in the TOC based on a particular focus of interest, for example, "Utilities: All" will show all Water, Stormwater, and Sewer Infrastructure that's been mapped (input into GIS).

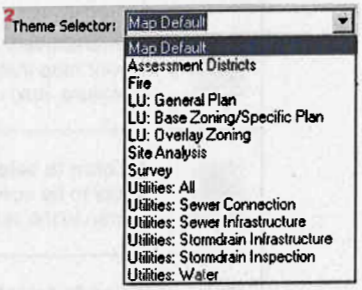

The Standard Map Toolbar

		These are some of the functions of the tool bar.
Panning and Zooming		**Continuous Zoom In/Out and Pan**. This tool allows you to zoom in or out on the map, and also allows you to pan. To zoom in or out, hold down the left mouse button and move the mouse. To pan, hold down the right mouse button and drag the map.
		Zoom in by clicking a point or dragging a box
		Zoom out by clicking a point or dragging a box
		Zoom in on the center of your map
		Zoom out on the center of your map
		Pans the data by dragging the display in any direction
		Zooms to the full extent of your data in the map
		Goes back to the previous extent of the data your were viewing in your map
		Goes forward through the sequence of extents you have been browsing in your map

Selecting and Identifying		**Unselect/clear the currently selected features** in all layers. You will need to have some features selected for this tool to be active. Click on the tool and it will clear the selected set of features.
		Interactively Selects Features geographic features belonging to layers on your map that are currently set as "selectable". To Select more than one feature, hold down the shift key while using this tool to select features.
		Zoom to selected features. You will need to have features selected for the tool to be active. Click on the tool and it will automatically pan and zoom the map to the selected features.
		Pan to selected features. You will need to have features selected for the tool to be active. Click on the tool and it will automatically pan the map to the selected features.
		Identify the feature you click on. An Identify Results box will pop up after the feature is clicked on using this tool. Make sure the correct layer to identify is listed in the "Layers" drop-down list. Any attribute information that is stored in the GIS database for the feature you identified will display in the "Identify Results" window.
		Site Profiler tool. This is similar to the Identify tool above, except that it will report back all kinds of information about the location that you clicked on using this tool.

Miscellaneous Tools		**Measure Distances** on the map. The distance is shown in the display units for the current data frame. For Encinitas, distances measured on the map are in feet.
		Find Map Coordinates on the map. Use this tool to click on a feature or location on the map. It will return x,y coordinates in Stateplane and Lat/Long Decimal Degrees.

Exercise 1: Working with the TOC

Most of the time, you should be able to choose a theme from the Theme Selector on the CityGIS toolbar to turn on the data you need. However, in some cases, you may want to turn layers on or off manually – and you can do that by finding the layer you want in the TOC (many layers are buried as you will see) and turning it on or off.

1. Change the theme to 'Utilities: Sewer & Storm Infrastructure' (Choose from the drop-down list in the Theme Selector).

2. Expand 'Pipe Infrastructure' then 'Sewer Infrastructure' in the TOC. Expand 'swr Manhole'. (click on the +)
   This shows the symbol legend for Manholes. As you can see, Manholes are symbolized by both their type and status. What's the color of active drop manholes?
3. _____

4. Turn off the Orthos

5. Turn on both the 10-ft Index Topo and the 2-ft Topo under Contours > 2005 Contour (black). (*Hint: Make sure to check on all "parent" groups).*
   Why does one draw but not the other? _____

Exercise 2: Panning and Zooming, and Changing Scale

There are several zoom and pan tools to choose from. Experiment with them and determine which ones you like to use best.

1. Go back to the City Hall extent. (*Click on 'Quick Search', then choose 'Bookmarks', then click on 'City Hall'.)*

2. Return to Map Default. (*Choose 'Map Default' at the top of the Theme drop-down list.*)

3. Zoom in to the intersection of 'D' Street and Vulcan using one of the Zoom In tools on the Standard Toolbar.

4. Change the scale to 1" = 50 ft using the Engineering scale.

5. Change the scale to 1" = 100 ft using the Absolute scale (*HINT: In Encinitas' GIS, to find the Engineering scale, absolute scale is always divided by 12, since we map everything in Stateplane NAD83 feet, so to get 1" = 100 ft, just multiply 100 x 12 and put that value in the absolute scale box). What's the value?* _____

6. Zoom out until you see Second St using on of the Zoom Out tools on the Standard Toolbar.

7. Pan the map over to the west until you see the coastline.

8. Get back to the City Hall map extent by choosing 'City Hall' from the 'Bookmarks' under the 'Quick Search' drop-down list.

Exercise 3: Changing Themes and Searching for an Address or Intersection

Some of the most important functions you will use are selecting the right theme to work in (which theme has the data you are interested in?) and searching. There are a number of different ways to get to a particular location, or to find a particular feature. We'll explore a few of the search options in this exercise.

Address and Intersection Search HINTS:

- *Make sure your map is zoomed in enough so that when the search is executed, it will be easy for you to tell where the search result is. Usually the 'City Hall' map extent is a good default to start with when searching for intersections or addresses*
- *Spell out street names (e.g. don't put 'El Cam Real')*
- *Don't worry about case – the locator is not case-sensitive (e.g. no need to capitalize the first letter)*

- *If you know the suffix – blvd, ave, st, rd, etc – include it if you want – but it's not absolutely necessary that you include it… it just helps sometimes – especially if streets have the same name, but different suffixes (e.g. Quail Gardens Dr and Quail Gardens Ln)*
- *If you type in an intersection and it's not being found, check the box 'Show all candidates'… this will improve your search*

1. Find a theme that interests you, and change the map to that Theme.

2. **Search for an Intersection.**

   a. Choose Quick Search > Address. Make sure the 'Addresses' tab is showing in the 'Find' window that pops up.

   b. Change the Address Locator to 'GIS.Street Name or Intersection'.

   c. Type in an intersection in the 'Street or Intersection' box and hit 'Enter' or click the 'Find' button. You can use any one of these 'intersection connectors' to separate the Street Names: **& | @ and at** (For example: el camino real & encinitas blvd).

   d. Once an intersection is located, it will appear in the box at the bottom (along with any other search results). Find the one that you want, right-click on it and choose 'Zoom to'.

3. **Search for an Address.** Do the same as above, but make sure the Address Locator is set to 'GIS.Address'. Type in an address, such as 1690 Wandering Rd. Once found, right-click on a search result and choose 'Zoom to'.

Exercise 4: Identifying and Selecting Features

Besides the actual features on the map, there is also a lot of 'attribute' information stored about the features – this is information that's kept in a table for each layer (also known as a 'feature class'). By using some of the tools on the Standard toolbar, you can find out more information about a particular location or feature that you are interested in. Also, selecting features is a necessary skill to learn if you will be creating work orders in Cityworks and you need to associate the work order to a particular feature or features.

1. **Get information about a particular location using the Site Profile tool.**
   The Site Profile tool is an efficient way for users to find a lot of information about a particular site.

   a. Go back to the 'Map Default' theme and the 'CAB Leucadia' extent (under Quick Search > Bookmarks).

   b. Zoom in until Parcels draw on the map.

   c. Select the 'Site Profile' tool in the Standard Toolbar.

   d. Click on a parcel with the 'Site Profile' tool. Look through the different tabs to get different information about the location.

   (General tab) How many site addresses are located on the parcel you chose? _____
   (Boundaries tab) What sewer district is the parcel in? _____
   (County Parcel tab) What's the APN? _____
   (Zoning tab) What's the General Plan zoning? _____

   e. Close the Site Profile tool (click on the 'x' in the top right corner)

2. **Get information about a particular feature using the Identify tool.**
   The Identify tool can help you get information about a particular feature – such as a pipe – that you would not be able to access using the Site Profile tool.

   a. Change the theme to 'Utilities: Water Infrastructure'.

   b. Zoom in to an intersection.

   c. Select the Identify tool on the Standard toolbar.

d. When the 'Identify Results' window pops up, choose <Visible layers> in the Layers drop-down list. Click on a water infrastructure feature, such as a valve or a pipe to see the information stored in the GIS database about that feature.

(NOTE: You can increase the size of the 'Identify Results' window by hovering over the bottom edge or corner of the window, then clicking and holding the mouse button down, and dragging the corner or edge to resize the window, or you can use the scroll bar on the side of the Identify Results window to scroll down and see additional attribute information.)

3. **Select features on the map.**
You will need to select a feature(s) when you are creating a work order in Cityworks, so that the work order is associated with a particular feature(s).

a. Close the Identify Results window. (Click on the 'x' in the top right corner)

b. Set the Engineering scale to 1" = 100'.

c. Find 'w Hydrant' in the TOC (Look under the 'Pipe Infrastructure' group, then the 'Water Infrastructure' group).

d. **Right**-click on 'w Hydrant' in the TOC and choose 'Selection > Make this the only selectable layer'.

e. Choose the 'Select Features' tool on the Standard toolbar.

f. With the tool, draw a box around a Hydrant on the map. When it's selected, it will highlight in a cyan color.

g. To clear the selected set, click on the 'Clear Selected Features' tool on the Standard toolbar.

IMPORTANT: If there are no features selected anywhere in the map, then the 'Clear Selected Features', 'Zoom to Selected Features' and 'Pan to Selected Features' tools will all be inactive (grayed out). Taking a quick look at these tools can help you determine if anything's selected... because you won't necessarily be able to tell... something could be selected on the other side of the City and you wouldn't know about it just by looking at the current map view. A good rule of thumb would be to click on the 'Clear Selected Feature(s)' tool first, before selecting what you want. That way you won't get any 'incorrect' features added to your work order.

Exercise 5: Finding Features by their FacilityID

As a Cityworks user, you may need to occasionally find a feature on a work order. When you select features and associate them with a work order, the FacilityID is listed on the work order. This will make more sense after you've taken the Cityworks training session. In any case, you can use the FacilityID Search to find a feature that's on a work order.

1. **Search for a feature by its FacilityID**

a. Change your theme to 'Utilities: Sewer & Storm Infrastructure'.

b. Get back to the City Hall map extent.

c. Choose 'FacilityID' from the 'Quick Search' drop-down list.

d. Find 'swr main public' in the Layer drop-down list of the Facility ID Search window. *(Hint: When you type the first letter of the layer name (in this case "s") you will automatically jump down to the first layer starting with "s" in the drop-down list)*

e. Type 12849 in the FacilityID box. Click Search.

f. The map will zoom to and select the sewer main that has the Facility ID of 12849SMAIN.

g. Unselect the feature using the 'Clear Selected Features' tool.

Exercise 6: Measure Distances and Get Coordinates

This exercise will get you familiar with a couple of handy tools.

1. **Measure approximate distances on the map.**

   a. Change the Theme to 'Map Default'.

   b. Click on the 'Measure' tool on the Standard toolbar.

   c. Click on the map with the tool. Measure something like the road right-of-way, or the width of a building.

   d. Drag the tool to the other side of the feature you are measuring and click again.

   What's the Segment Length? _____

   e. You can double click the tool to end the Measure session, else you can continue to measure additional segments. Double-click when you are done.

2. **Find Map Coordinates.**

   a. Click on the 'Find Map Coordinates' tool on the Standard toolbar.

   b. Click on an Intersection with the tool. A box will pop up with the coordinates of the meter you click on. *What are the State Plane coordinates (no need to write out the numbers to the right of the decimal point)?*

   _____

   What are the Lat/Long coordinates (just include 3 numbers past the decimal point)?

   _____

Congratulations! If you have successfully completed all the exercises above, you are well on your way to becoming an efficient CityGIS user!!

As a bonus – I'll let you in on one more thing.... You can click on 'Ask GIS' in the CityGIS toolbar, and select 'Submit User Request'... this will send an email to the GIS Division. We log all your requests – whether it is a bug fix, a data update, or an enhancement to the CityGIS application. We try to incorporate what we can in future releases of CityGIS.

CityWorks

Training-I

Manual

City of Encinitas

August, 2007

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Introduction

This training manual was designed to be City of Encinitas Cityworks specific, but departmentally generic. Each department or division may have its own specific task oriented procedures and may not use all documentation shown in this manual. Your personal login controls what access and privileges you have within Cityworks. All Map functionality covered here is accessible through the City's standard GIS application – CityGIS.

Getting Started

1) To access the training version of CityGIS, locate the following icon **(CityGIS_Train)** on your desktop. Double-click this icon to begin.

CityGIS_Train

a) A login screen for Cityworks is displayed. For training purposes make sure the database is set to "Cityworks", and then enter **'cwtrain'** for the User ID and **'gis'** for the Password for this training. Select the "Save Password" checkbox, and then click "OK."
*(*Note: Normal operation requires your specific Cityworks username and password)*

Cityworks Login

b) CityGIS will load and display with the default map layers and toolbars visible. Take a moment to locate the Cityworks toolbar, shown on the right.

Cityworks Toolbar

c) If the Cityworks login screen did not appear, or the toolbar is not visible, click "Tools" on the CityGIS menu bar and then "Extensions." Check the box for

2) You are ready to start using Cityworks! Let's explore the functionality of the Cityworks Toolbar:

a) ***Cityworks Dropdown Menu***: Displays additional Cityworks tools and commands.
b) ***Create & Search Service Request Tool***: Performs creation and query of service requests.
c) ***Create Work Order on Selected Feature Tool***: Performs creation of work order on selected asset.
d) ***Search Work Order on Selected Feature Tool***: Performs query of work orders on selected asset.
e) ***Cityworks Asset Identify Tool***: Returns information on selected Assets.
f) ***Identify Cityworks Event Feature Tool***: Identifies Cityworks Event Features. *Not used at this time.
g) ***Selectable Layers Tool***: Displays checkboxes for setting selectable CityGIS layers.
h) ***Move Request/Work Order Location Tool***: *Un-usable at this time.

Turning on Specific Groups of Layers

CityGIS table of contents holds all available layers. To display specific groups of layers, you can select them from the Theme drop down list.

For training classes only, there is a 'Training' Theme available.

Creating a Service Request

Documenting the Problem

1) Create a new request by clicking on the **Service Request** button on the toolbar.

2) Select the type of problem from the **problem tree** by opening a folder and selecting a problem. The request is now ready to use.

   Cityworks menus are set to save the view from the last time they were used. So, if the Problem Tree is not visible, select the "Request" button on the main toolbar, then select the tree icon and the problem tree will appear.

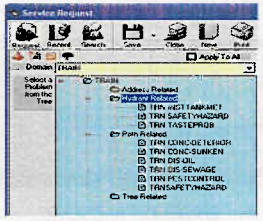

3) Change the **Priority** if necessary.

4) Select the person to **Submit** request to, from the drop down list, or accept the defaulted person if there is one.

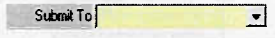

5) Select person to **Dispatch** request to, from the drop down list, or accept the default.

6) If the problem is an **emergency** click check box 'Is this incident an emergency?'

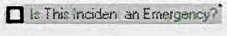

7) If the problem should be grouped with a **Project**, then use **"Attach To"** to attach it to an existing project. This pops up the project folder menu. Choose your department and the appropriate project, then click ok.

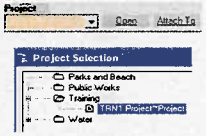

8) Enter supporting text in **'Problem Details'** window. This is limited to 256 characters.

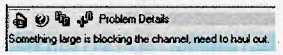

9) Any additional useful information, or information gathered at the site should be entered in the **'Work Comments'** section.

   Coast Highway 101 roads.
   b) Select the correct street
   c) Enter customer information or copy up the incident address.

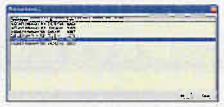

11) Associate the Service Request to an **Address or Location**

   a) Click the **red pushpin** button to spatially locate the incident on the map.
   b) If you have not filled in the house number, and are not using an intersection, you will receive a list of all valid address on the street.
   c) Click on the header of the second column to sort the list by address number.
   d) Now when you click on an address the map will pan to that location and display a red crosshairs on top of the address.
   e) Find the correct address and click the 'OK' button.
   f) Be sure to update the incident address by filling in the number.

12) Fill out any custom fields that were created for your department in the lower right pane by choosing the **Custom Data** icon if it is not already visible.

13) Choose the **GIS information** button to see the Thomas Brothers Page and Grid information in the lower right pane.

14) Complete the Service Request by clicking on the **'Save'** button at the top of the SR form.

Entering Labor (time) Information

1) Any time spent on investigating the problem can be documented clicking the **'Labor'** button and the screen at the right will appear.

2) Choose the staff from the list on the left, enter the hours and date of investigation, and

Creating a Work Order

From a Service Request

1) **Open** the proper Service Request if it is not already open.

2) **Click** on the **Red Push Pin** to spatially locate the Request.

3) **Switch to CityGIS**. You will see cross hairs indicating the location of the incident. Use the pan/zoom tools if necessary to zoom into the location. Get close enough to have the assets turn on. Use the **'Select Features'** tool to **select the proper asset**. (You may have to look at the detail information from the service request to locate the correct asset.) It will change to a cyan highlighted color once selected.

4) **Click** on the "Create WO on selected Asset" button from the Cityworks Toolbar.

5) If you have multiple types of assets selected, the form at the right will appear. Turn **OFF** the **'X'** to the left of each asset you **DO NOT** want attached to your work order.

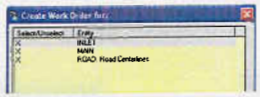

6) The system will display a form that asks if you want the new work order related to the open Service Request, and lists several pieces of information that will be transferred from the service request to the work order. Check all the check boxes and **Click 'OK'**.

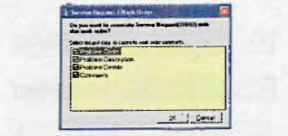

7) The system will display the form: 'Work Order'. Based on the asset selected, the form will display the Utility, selected Asset, and list the available types of Work Orders for that asset. **Double click** the type of work order needed from the right hand column.

2) **Click** on the "Create WO on selected Asset" button from the Cityworks Toolbar.

3) If you have multiple types of assets selected, the form at the right will appear. Turn **OFF** the **'X'** to the left of each asset you **DO NOT** want attached to your work order.

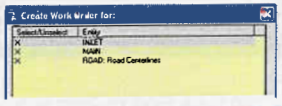

4) The system will display the form: 'Work Order'. Based on the asset selected, the form will display the Utility, selected Asset, and list the available types of Work Orders for that Asset. **Double click** the type of work order needed from the right hand column.

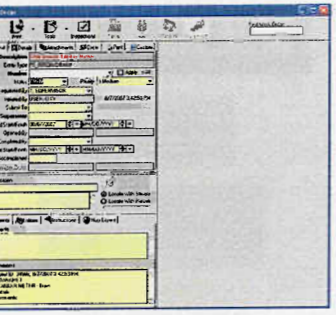

Fill out the additional required information:

1) The Work Order form will open. **Change the following fields** to the appropriate values:

   a) 'Priority' (if necessary)
   b) **'Submit To'**
   c) 'Supervisor'

2) Notice that under the **'Comments'** tab you will see the Problem Details and Problem Comments from the Service Request, if the Work Order was opened from a Service Request. You can **add additional comments at any time.**

3) If there is additional information about the location such as the name of a business, ne/se corner, or linear feet, it may be helpful to type it into the 'General Location' box right below the address. This information gets printed with the Work Order.

Save Work Order

Click the **'Save'** button to record the work order and to give it a Work Order number. No labor, material, equipment, or inspections can be entered until the Work Order is saved.

Adding Labor, Equipment, and Material to a Work Order

Open the Work Order if it is not already open.

Labor

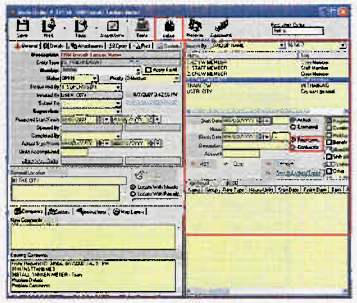

1) If you click the **'Labor'** button, the screen on the right appears.

2) If entering staff time Select **'Group Name'** under 'Search By'; then Select **'Staff'** or the appropriate group from the drop down list on the right side. This will populate the list of employees to choose from. Highlight one or more staff to add to the work order.

   If entering contractor time/cost change the option to **Contractor,** Select **'Contractor Hierarchy'** under search by, and select a contractor from the list.

3) Then fill in the **'Hours'**, **'Start Date/Time'**;' **Finish Date/Time'**. Enter 'Amount' for contractors.

4) Click the **'Add'** button to add the employee's or contractor's time and cost.

Material

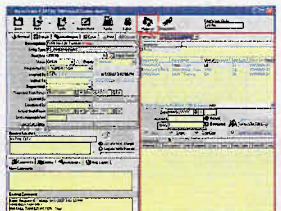

1) If you click the **'Material'** button, the screen on the right will appear.

2) To complete the materials form, click on the **'HIERARCHY'** on the search by drop-down list. You will see a screen containing folders and a list of materials similar to the one on the right.

3) Select the correct material.

Equipment/Vehicles

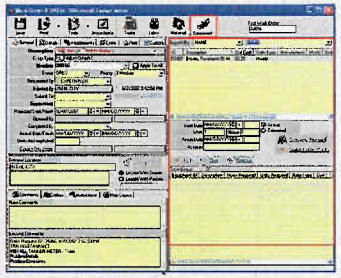

1) If you click the **'Equipment'** button, the screen on the right will appear.

2) To complete the Equipment form, click on the **'HIERARCHY'** from the search by drop-down list. You will see a screen that looks like the one on the right.

3) Find the correct equipment or vehicle and select it.

4) If the equipment is NOT provided by a contractor, fill out the **'Hours'** and click the **'Add'** button. *NOT the units.*

5) If the equipment was provided by a contractor, click on the **'Contractor Provided'** button and fill out the Contractor, Hours, Units, and Total Cost fields and click 'OK'

   Note: The rates in the system are the standardized citywide rates. Items starting with 'FR' use FEMA rates, otherwise the item uses city rates.

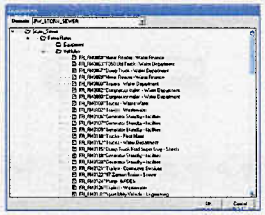

Work Order Custom Fields

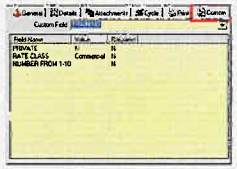

1) Fill out any custom fields that were created for your domain in the upper left pane by choosing the **'Custom'** tab. Click in the value column to enter information. Click the **'General'** tab to return to the main panel.

Entering Inspections

Open your Inspection work order if not already open.

4) **Select** the correct inspection from the 'Template' drop down list.

5) **If** inputting multiple Inspections with the same inspection date, copy the date and inspectedby information to all the assets you have in the work order by checking the **'Apply to all Entities'** box in the lower left hand corner

6) You must **save the inspection** by clicking the **'Save'** button ***PRIOR*** to filling out any 'Observations'.

7) **Click 'Yes'** when asked if you want to create a new inspection.

8) If you checked the 'Apply to all Entities' box then Click **OFF** the 'Apply to all Entities' box in the lower left hand corner.

9) Choose the asset in the ID/Type dropdown list. *Note: If you chose to 'Apply to all Entities' then drop down in the list and rechoose the first one even though it is selected.*

10) **Click** on the **'Observations'** tab.

11) **Answer** each question and click on **'Add'** after each answer. *Note: if it is a 'free form' answer, you will need to click Add twice to bypass the 'explanation' field.*

12) When you are at the end of the question list, **click** the **'Save/Update'** button to save the inspection results. Click **'Yes'** to update.

13) If you have multiple assets, return to the General tab of the Inspection form and select the next Facility ID from the ID drop down list, and repeat steps 9-12.

14) **Add** any other **desired comments** to the New Comments section on the General Tab, and click 'Save/Update'.

15) **Close** the inspection window when complete.

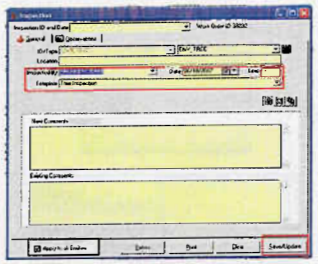

Apply to all Entities

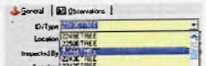

Observations

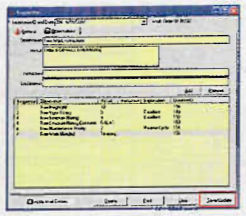

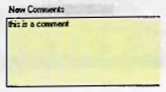

Closing a Work Order

After all inspections are completed and labor, equipment, material, costs, and comments are entered into the work order, the time period of the work should be entered and the work order closed from the **General** tab.

1) Select the staff from the **'Completed By'** drop down list.

2) **Click** on the down arrows on **'Actual Start/Finish'** dates and enter the start and finish dates for all work completed.

3) Use the blue **'Close Work Order'** button. Once closed, a work order can not be altered.

Searching

Quick Find Service Requests

1) **Click** on **'Create/Search Service Request'** button.

2) **'Search for Request Number'** field is available in the top right corner of any request screen. If you know the Request number you can type it in here and it will open.

Search for Request Number:

OR

3) The **'Recent'** button on the top request tool bar opens the following screen.
   a. Single click on any **'Display these items in Search Result'** field from the list in the upper left box will highlight it. Any highlighted field will show in the list in the lower pane.
   b. Change the number of hours in the **'List Service Requests in last __ Hours'** to show those service requests in the list at in the bottom

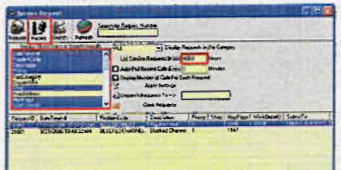

Searching Service Requests

1) **Click** on **'Create/Search Service Request'** button.

2) **Click** on **'Search'** button from the top Service Request tool bar. Then choose **'Clear'** to clear any old search criteria from the forms.

3) The form on the right appears with several tabs and choices to use in searching for Service Requests. Below are some typically used choices. Any number of choices can be used in a single search. Use the **'Clear'** button to clear all forms of all choices.

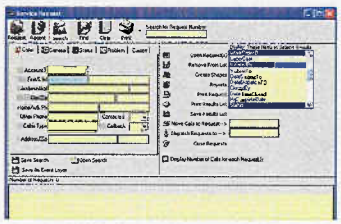

   a. **'Caller'** tab
      i. **Last Name** or **Address** to look up a specific request from a caller or location
   b. **'General'** tab
      i. **Initiated** date ranges when you know the approximate date the request was created
      ii. **Closed** date ranges when you know the approximate date the request was closed
      iii. **Initiated By, Submt To,** and **Closed By** fields to find requests related to specific staff
   c. **'Status'** tab
      i. **Status** field to limit the list to Open or Closed requests
      ii. **Category** or **Project** field to find specific groupings or types of requests
      iii. **Past Hours** similar to the **'Recent'** button.
   d. **'Problem'** tab
      i. Used to search for requests of a specific problem type
   e. **'Custom'** tab
      i. Used to search custom fields

the search will display in the lower section of the form and list information for the fields that are highlighted from the **'Display these items in Search Result'** list.

6) Double click on any Service Request in the list to open it.

7) You can print the list of Service Requests by choosing the **'Print Results List'** on the right side of the main search form. You can also save the list to a text file using the **'Save Results List'**.

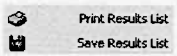

8) You can print a single request or multiple requests (the entire request) from the list by highlighting the requests in the list you wish to print, and choosing the **'Print Request'** on the right side of the main search form.

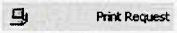

Searching Work Orders on an Asset

1) **In CityGIS** use the **'Find'** tool to locate an address or intersection in the map. Use the pan/zoom tools if necessary to zoom into the location. Use the **'Select Features'** tool to **select the proper asset**. It will change to a cyan highlighted color once selected.

2) Select the **'Search Work Orders on selected features'** button from the Cityworks menu.

3) If you have multiple types of assets selected, the form at the right will appear. Turn **OFF** the **'X'** to the left of each asset you **DO NOT** want to search for work orders on.

4) This will bring up a list of Work Orders that are related to the asset. Double click any of the work orders to open them.

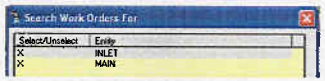

2) Select the **'Search Work Orders on selected features'** button from the Cityworks menu.

9) The form on the right appears with several tabs and choices to use in searching for Work Orders. Below are some typically used choices. The General tab for Work Order Searches contains most the regularly used search criteria. Any number of choices can be used in a single search. Use the **'Clear Search'** button in the lower right panel to clear all forms of all choices.

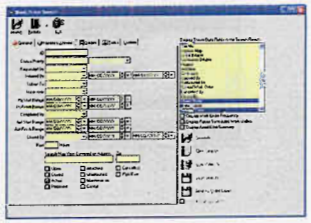

   a. **'General'** tab
      i. **ID** field to enter a known work order ID
      ii. **Status** field to limit the search to Closed or Open work orders
      iii. **Initiated By** with date ranges when you want to limit the search to the person that initiated the work order, and/or the approximate date the work order was created
      iv. **Closed By** with date ranges when you want to limit the search to the person responsible for closing the work order and/or the approximate date the work orders were closed
      v. **Actual Start/Finish** date ranges to limit the time period the work order was completed in
      vi. **Past Hours** returns work orders initiated in the past number of hours
   b. **'Facilities/Activities'** tab
      i. Allows you to limit the search to specific assets or work order types.
   c. **'Details'** tab
      i. **Project, Map Page, Tile No.** fields to retrieve groups of

10) Single click on the fields from the **'Display these items in Search Result'** list in the right side box to highlight it. Any highlighted field will show in the list of search results.

11) **Click** on **'Search'** button in the lower right portion of the form to perform the search. The Work Orders that match the search will display in a **'Results'** form and list information for the fields that are highlighted from the **'Display these items in Search Result'** list.

12) The list of Work Orders can be saved to a text file using the **'Save List'** button at the bottom of the Results screen, or each highlighted (selected) work order can be printed by using the **'Print'** button at the bottom of the Results screen.

End of Cityworks Training I

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

Appendix D-4

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Type of Inspection: ☐ Annual (Date): ☐ Follow-up (Date): ☐ Complaint Investigation

Business Name:	Size: SQ FT
Street Address:	Mailing Address:
Contact Person(s):	Property Manager:
Business Phone # :	Property Manager's Phone # :
Business Fax# :	Property Manager's Fax # :

How many employees does restaurant have? _____ Are they trained in storm water mgmt? ___Yes ___No

Does facility have a current Encinitas business certificate? Yes No # :_____ Exp: _____

Does facility have a map/sketch of the site with flow lines and storm drains? ____Yes ____No ____Unknown

Discharge observed? ____Yes ____ No If yes, describe: _____

A. Grease Management	Yes	No	N/A	Comments
1. Does facility have a grease trap or grease interceptor?				
2. Where is it located? ___Under the sink ___Outside ___Other: _____				
3. Who maintains the grease trap?	Contact Info:_____			
4. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
5. How many grease fryers are at facility?_____				
6. How often is fryer oil replaced? ___Weekly ___Monthly ___Every 6 months ___Annually ___Other_____				
7. How is used oil disposed of? ___Outside rendering service ___Sanitary sewer/sink ___Other:_____				
Company Name: _____ Phone #:_____				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				

B. Cleaning	Yes	No	N/A	Comments
11. At what time is the restaurant cleaning performed?_____				
12. How are kitchen floor mats cleaned? ___Hose off outside ___Clean inside (mop sink) ___Cleaning Service ___Other:_____				
13. Where is used cleaning water discharged? _____				
14. Does the facility hose off/pressure wash the site?				
If so, how often? _____				
Is a pressure washing company used? Yes No	Name/Number:_____			
Is wash water captured?				
15. Are storm drain inlets free of grease & other food debris?				

Comments:

C. Materials and Wastes	Yes	No	N/A	Comments
16. Is the site free of litter and debris?				
17. Are adequate trash containers provided?				
18. Are adequate recycling containers provided?				
19. Is the trash/recycling area enclosed, free of litter/debris?				
20. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				

Facility: _____ Date: _____	Yes	No	N/A	Comments
21. Are any outdoor material storage areas adequately covered and labeled?				
22. Is there an accessible spill response kit?				
23. Is there a spill response plan? (If yes, provide to inspector)				
24. Are loading and unloading areas free of spills and debris?				

Comments:

D. Other Storm Water Management	Yes	No	N/A	Comments
25. Any evidence of illicit connections and illegal discharges?				
26. Any evidence of unauthorized releases to storm drains?				
27. If yes, have the appropriate authorities been notified?				
28. Are there any other potential storm water pollution issues or concerns?				
If yes, explain: _____				
29. Are there any structural BMPs on or near the site?				
If so, how often are they maintained? _____ Provide maintenance records.				

F. Violations

___No violations have been noted at this time.	
___No violations have been noted, but required corrective actions are described below.	
___Violation of storm water ordinance or other applicable regulations were found.	

(Attach Copy of NOV or Administrative Citation)

G. Corrective Actions

Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 _____

2 _____

3 _____

4 _____

5 _____

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail

H. Describe informational, educational, or BMP information distributed:

___City of Encinitas Restaurant Brochure Eng/Span, ___County of San Diego-What's Cooking Guide Eng/Span,

___Only Rain Brochure, ___Storm Water Poster, ___Training CD, ___Other: _____

I. Follow Up Inspection? Yes or No (circle one) Date: _____

Comments:

Inspector Name _____	**Facility Contact Name (print)** _____
Inspector Signature _____	**Facility Contact Signature** _____
Date _____	**Date** _____

Recommended City Actions: _____

FOR OFFICE USE ONLY	**ASSESSMENT (circle appropriate level - "5" is a high level)**
	Level of knowledge regarding stormwater issues: 1 2 3 4 5
	Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE:
760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name_____

Street Address_____ Mailing Address_____

Email _____ _____

Responsible Person(s)_____ Property Manager_____

Business Phone # (_____) _____ - _____ext._____ Property Manager's #_____

Business Fax # (_____) _____ - _____ APN Number _____

B. FACILITY/SITE INFORMATION

Principal activity:_____

SIC Code(s)_____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)?_____ New JURMP Classification?_____

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No #_____Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☐ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #_____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____ square feet

Approximate % impervious surface of this area_____ %

Exposed areas of intensive outdoor activity: _____

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?				
2. Are discharge locations free of sediment and debris?				
3. Are parking lots, sidewalks and streets free of sediment and debris?				
4. Is pressure washing of parking lots or sidewalks conducted at the facility?				
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?				
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.				

D.2 Landscaping

7. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
8. Are irrigation systems programmed to minimize over-watering and runoff?				
9. Is reclaimed water used for irrigation?				
10. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				

D.3 Materials and Wastes

11. Are adequate trash containers provided?				
12. Are adequate recycling containers provided?				
13. Is the trash/recycling area enclosed and free of litter and debris?				
14. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
15. Are outdoor material storage areas adequate (covered area with secondary containment)?				
16. Are outdoor storage containers properly labeled?				
17. Is there an accessible spill response kit?				
18. Is there a spill response plan? If so, please provide to inspector.				
19. Are storage tanks equipped with secondary containment?				
20. Is secondary containment free of spills and rainwater?				
21. Are loading and unloading areas free of spills and debris?				

D.4 Equipment and Vehicles

22. Are exposed parking areas free of significant spills and leaks?				
23. Are heavy equipment and vehicles stored in garages or under canopies?				
24. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
25. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				

BMPs	N/A	Yes	No	Comments
26. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
D.5 Food Establishments				
27. Does facility have a grease trap or grease interceptor?				
28. Who maintains the grease trap? Company Name: Phone #				
29. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
30. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
31. How many grease fryers are at the facility? _____				
32. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
33. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone #				
34. Do oil-recycling/grease bins have overhead coverage?				
35. Do oil-recycling/grease bins have secondary containment?				
36. Are deep fryer oil-recycling drums stored properly?				
37. At what time is restaurant cleaning performed? _____				
38. Are biodegradable soaps used for cleaning activities?				
39. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
40. Where is used cleaning water discharged? _____				
41. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
42. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
43. Is the site free of evidence of illicit connections and illegal discharges?				
44. Is the site free of evidence of unauthorized releases to storm drains?				
45. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
46. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
47. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
48. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
49. Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
50. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
51. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.				

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: _____ DATE: _____

E. VIOLATIONS

☐ No violations have been noted at this time

☐ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 _____

2 _____

3 _____

4 _____

5 _____

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE: _____

COMMENTS _____

_____

_____

INSPECTOR NAME _____ FACILITY CONTACT NAME (PRINT) _____

INSPECTOR SIGNATURE _____ FACILITY CONTACT SIGNATURE _____

DATE _____ DATE _____

I. RECOMMENDED CITY ACTIONS

_____

_____

FOR OFFICE USE ONLY

Labor: ____Hours _____Mins

Vehicle#_____

Work Order # _____

Follow-up WO#_____

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding storm water issues: **1. 2. 3. 4. 5.**

Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5.**

Appendix E

E-1 Brochures (English/Spanish)
E-2 General Storm Water Brochure
E-3 Storm Drain Stenciling
E-4 Encinitas Clean Water Webpage
E-5 Door Hanger
E-6 Watershed Pencil
E-7 Restaurant Storm Water BMP Poster
E-8 Automotive Storm Water BMP Poster
E-9 NCSWP Construction Brochure
E-10 NCSWP Pet Waste and Watershed Surveys
E-11 Encinitas Environmental Services Guide

Appendix E-1

Mantenimiento
Automotriz
Automotive

Empresas Constructoras
Developers
Simple and Cost Effective Ways to Comply with Storm Water Regulations

Contratando un
Hombre Anto
Hiring a
Handy Man

DiaZinón
DiaZinon

Los Restaurantes Pueden
Ayudar a Mantener Limpias
Nuestras vías
Restaurants Can
Help Keep our
Waterways Clean

Cuidado del
Patio y del jardín
Yard & Garden
Care

Only Rain in the Storm Drain!

A Clean Environment is Important to All of Us!

One of the greatest resources we have in San Diego County is our natural waterways. Yet every year, our creeks, lagoons and ocean are degraded by pollution.

In recent years, sources of water pollution like industrial waters from factories have been greatly reduced. however, now the majority of water pollution occurs from things like cars leaking oil, fertilizers from lawns and gardens, failing septic tanks, residential car washing and pet waste washing into the storm drains and into our waterways and ocean.

All these sources add up to a pollution problem! But each of us can do small things to help prevent pollution in our waters-and that adds up to a huge pollution solution!

Why do we need a Clean Environment?

Having a clean environment is of primary importance for our health and economy. Clean waterways provide commercial opportunities, recreation, fish habitat and add beauty to our landscape. All of us benefit from clean water-and all of us have a role in making and keeping our creeks, lagoons and ocean clean.

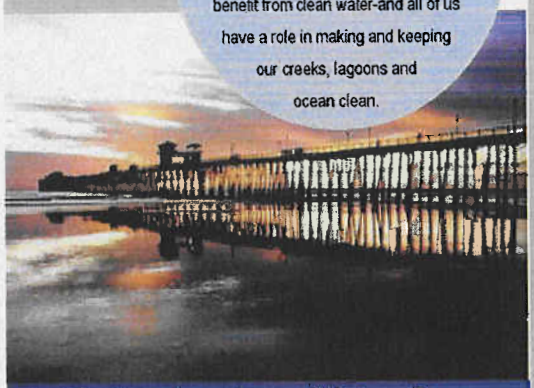

North County Storm Water Program

City of Carlsbad	760-602-2799	City of Oceanside	760-435-5800
City of Del Mar	858-755-9313	City of San Marcos	760-744-1050
City of Encinitas	760-633-2787	City of Solana Beach	858-720-2470
City of Escondido	760-839-4668	City of Vista	760-726-1340 x1686

County of San Diego 888-846-0800

Only Rain in the Storm Drain!

North County Storm Water Program
County Storm Water Hotline: 888-846-0800

Only Rain in the Storm Drain!

What YOU can do to help keep our creeks, lagoons and ocean clean...

Did you know that storm drains are **NOT** connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rain water away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into the creeks, lagoons and ocean. keep reading for suggestions on how you can help keep our creeks, lagoons and ocean clean . . .

Dispose of Yard Waste More Frequently

By disposing of grass, leaves, shrubs, and other organic matter more frequently — less will wash into storm drains.

Sweep or Rake

Sweep up debris and put it in a trash can. Do not use a hose to wash off sidewalks, parking areas and garages. Rake up yard waste and start a compost pile.

Clean up After Your Pets

Take a bag when you walk your pets and be sure to always clean up after them. Flush pet waste down the toilet or dispose of it in a sealed plastic bag and throw it in the trash.

Care for Your Cars

Fix fluid leaks immediately. When you change your oil, recycle it properly. For the recycling center nearest you, call 1-800-CLEANUP.

Reduce Use of Landscape Chemicals

Decrease the use of lawn and garden care products such as pesticides, insecticides, weed killers, fertilizers, herbicides and other chemicals. Avoid over-irrigation which washes chemicals into the gutter and storm drains.

Use Soap Sparingly

When washing your car at home, use soap sparingly, divert washwater to landscaped areas and pour your bucket of soapy water down the sink. Never wash your car in the street.

Buy Non-Toxic Products

When possible, use non-toxic products for household cleaning. If you must use a toxic cleaning product, buy small quantities, use it sparingly and properly dispose of unused portions. For the Household Hazardous Waste collection facility nearest you, call 1-800 CLEANUP.

For more information on how you can prevent the pollution of our creeks, lagoons and ocean or to report a problem, please call the County Storm Water HOTLINE at (888) 846-0800.

Information for this brochure has been provided by the North County Storm Water Program, which includes the cities of Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, Vista, San Marcos and Solana Beach and the County of San Diego.

Educational BMP Installed at all Municipal Drain Inlets

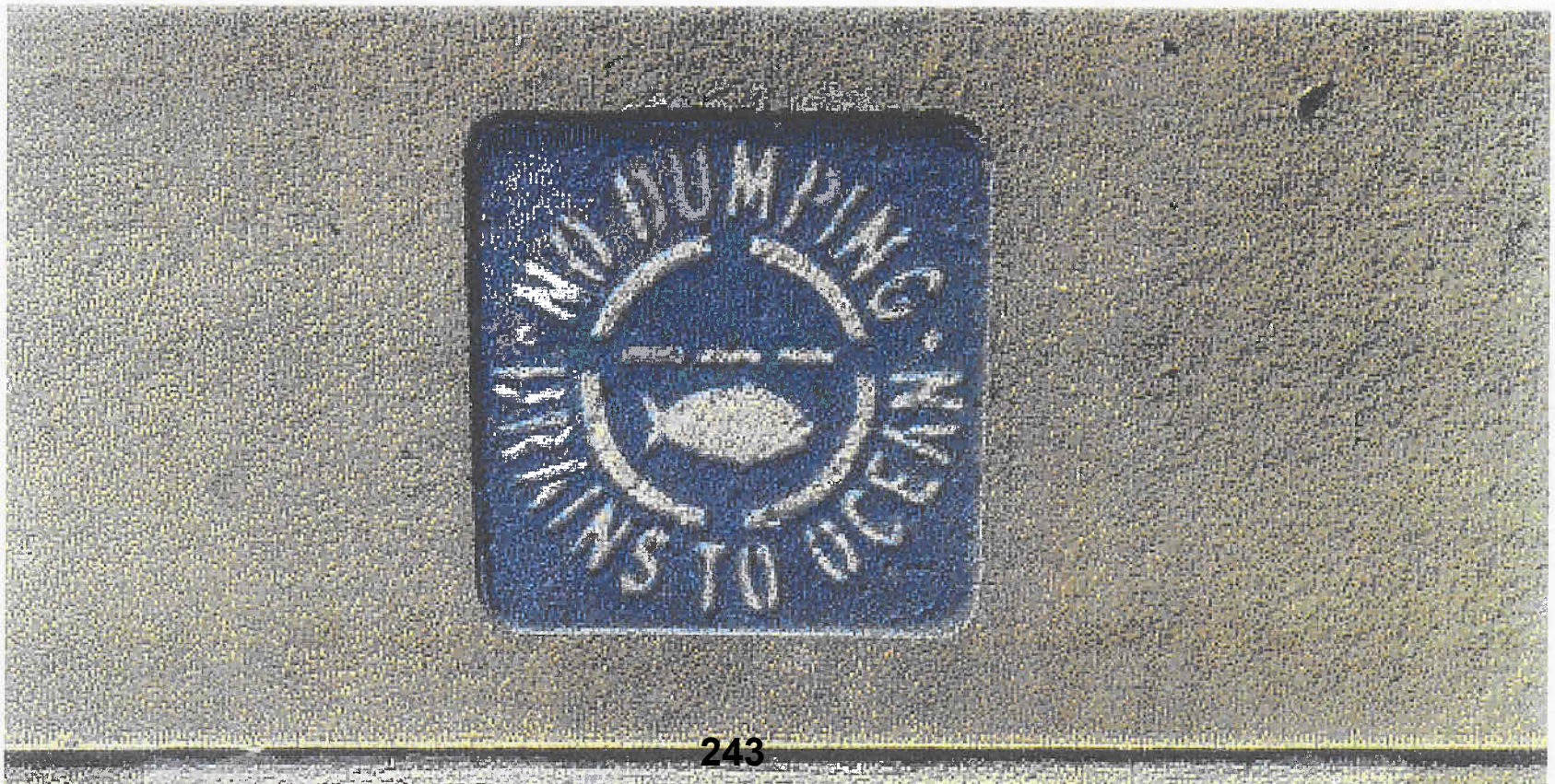

welcome to... The City of Encinitas

Search: GO

View Text Version | After Hours non-911 Emergencies call: (760)633-2922 | City Hall Open Fri. 11/23/06

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Engineering

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San Dieguito Water District

Clean Water Program

Clean Water Program Hotline (760) 633-2787

Inquiries About the Program? Call Hotline or email npdesmail@ci.encinitas.ca.us

Frequently Asked Questions About Storm Drain Pollution (PDF)

Clean Water Questions and Answers

Refund Letter

Moonlight Beach Urban Runoff Treatment Facility Final Report

UV Treatment Facility Effectiveness Assessment Presentation (ppt 11MB)

Cottonwood Creek Urban Runoff Assessment and Action Plan: Complete Document (2.23mb)
Pages 1 - 15
Pages 16 - 30
Pages 31 - 41

Swami's Beach

Program History

The NPDES permitting system was established under Section 402 of the Clean Water Act (CWA) of 1972. In 1987 the CWA was amended to require municipal storm water dischargers to effectively prohibit non-storm water discharges to their storm drain system and to implement controls to reduce pollutants in storm water to the maximum extent practicable. On January 24, 2007, the Regional Water Quality Control

Board (RWQCB), San Diego Region issued an NPDES Permit (Order No. R9-2007-0001, NPDES No. CAS0108758) to 20 jurisdictions (Copermittees) that make up the San Diego County's urbanized area. The basis of this permit was the determination by the RWQCB that: *"Urban runoff discharges from [storm drain systems] are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. As runoff flows over urban areas, it picks up harmful pollutants such as pathogens, sediment (resulting from human activities), fertilizers, pesticides, heavy metals, and petroleum products."*

Program Details

The RWQCB's Municipal Permit requires each Copermittee in the region to develop a Jurisdictional Urban Runoff Management Program (JURMP). The goal of the City of Encinitas' JURMP is to protect and improve the quality of urban runoff and storm water in order to improve the water quality of the local water bodies (Pacific Ocean and beaches of Encinitas, Batiquitos Lagoon, San Elijo Lagoon, Cottonwood Creek, Escondido Creek, and Encinitas Creek). To accomplish this goal, the City has established a **Clean Water Program**. Essential duties of the Clean Water Program include public education, inspecting, water monitoring, and enforcing activities related to compliance with the RWQCB's Municipal Permit.

Staff performs inspections of commercial and industrial facilities to ensure business-related activities do not contribute to storm drain pollution. Clean Water Program staff monitor and test runoff water for common and priority pollutants, using the data to track and identify violators. Violators of the Encinitas Storm Water Ordinances are written formal correct work notices and, in some instances, cited and taken to court.

In addition, the City has new regulations requiring new development projects and construction sites to control storm water pollution. This includes adherence to the Best Management Practices Manual Part II, which requires construction storm water quality control and post-construction controls to treat storm water runoff throughout the life of the project. Best Management Practices (BMP) Manual Part I provides compliance guidance to engineers, developers and contractors, as well as existing businesses. During construction, contractors are required to comply with the City's updated Grading Ordinance (currently being updated), which requires erosion and sediment control measures as well as material management practices to prevent contaminants from reaching our storm drains.

The goal of the Clean Water Program is to ensure our storm drain runoff does not pollute our creeks and close our beaches. Pollution-free beaches result in a stronger economy for the City of Encinitas and healthier places to live, work and play.

Moonlight Beach on 4th of July

In an effort to improve the quality of water flowing into our creeks and onto our beaches, the City began another aggressive pollution abatement program by creating the Public Works National Pollutant Discharge Elimination System (NPDES) Division. The NPDES Division works closely with the City's Clean Water Program and performs cleaning and maintenance activities on the City's storm water conveyance systems. During the dry summer months, storm drain catch basins and pipes accumulate trash, debris and other unwanted waste. Without the efforts of our crews, unmanaged waste would flow into our creeks and directly onto our beaches.

Watershed Activities

In addition to the JURMP, the Municipal Permit also requires that the City collaborate with other jurisdictions on a watershed level. A watershed is the area of land that drains to a common discharge point. Encinitas is in the Carlsbad Watershed along with seven other Copermittees including the cities of Carlsbad, Escondido, Oceanside, San Marcos, Solana Beach and Vista and the County of San Diego. These Copermittees have developed a Watershed Urban Runoff Management Program (WURMP) to collectively reduce pollutants in the water bodies throughout the watershed. The WURMP describes the collaborative plans and efforts to reduce the impacts of urban activity on receiving water quality within the Carlsbad Watershed to the maximum extent practicable (MEP). As with the JURMP, an Annual Report is required by the RWQCB.

Other Resources

- Certified Used Oil Recycling Centers
- Household Hazardous Waste Collection Sites
- Pick Up After Your Dog
- Best Management Practices (BMP)
- Manual - Parts I and II
- Storm Water Brochures
- Equestrian Related Water Quality Management

Ph. (760) 633-2600 | TDD (Hearing Impaired) (760) 633-2700 | Fax (760) 633-2627 | 505 S. Vulcan Avenue, Encinitas, CA 92024-3633
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Preventing pollution is less costly for taxpayers than cleaning up "after the fact." The following tips can help protect the health of our community and environment from pollutants.

- **Maintain your vehicle.** Fix oil leaks. Use an absorbent material, like cat litter, to clean up spills and take it to a household hazardous waste (HHW) facility. Recycle used motor oil. Call 1-800-CLEANUP for a HHW and used oil recycling center near you.
- **Use soaps sparingly.** If washing your car at home, use biodegradable soap sparingly. Try to wash on a grassy area. Use a bucket and a hose with a shut-off nozzle. Divert the dirty water onto landscaping or down a household sink.
- **Try nontoxic products.** If you must use a toxic household product, buy only what you need. Dispose of household hazardous waste properly. Call 1-800 CLEANUP.
- **Reduce use of landscaping chemicals.** If you must use fertilizers, pesticides, herbicides, etc., follow directions carefully, use them sparingly and avoid over-watering.
- **Clean up after your pets.** Flush pet waste down the toilet or seal it in a plastic bag and put it in the trash.
- **Recycle yard waste frequently.** Sweep grass clippings and other yard materials from driveways and streets and put in recycling container. Start a compost pile!
- **Sweep up debris on your sidewalk and driveway.** Prevent erosion and debris from leaving your property.
- **Throw your litter in a trash container.**

La prevención de la contaminación es menos costosa para los contribuyentes que su limpieza "después de lo ocurrido". Si usted sigue los siguientes consejos, puede ayudar a proteger la salud de nuestra comunidad y el medio ambiente.

- **Mantenga sus vehículos en buen estado.** Repare las goteras de aceite. Esparza las piedrecillas para los deshechos de gatos (cat litter) u otros materiales absorbentes sobre los derrames de aceite para limpiarlos, y luego llévelo a los lugares designados para desechar los materiales domésticos peligrosos. Recicle el aceite de motor. Llame a 1-800-CLEANUP para saber cuál es el centro de desecho de materiales domésticos peligrosos y de reciclaje de aceite de motor más cerca de su domicilio.
- **Use poca jabón.** Cuando lave su auto en casa, use poco jabón biodegradable. Use un reductor de agua. Tire el agua sucia por el drenaje sanitario interior.
- **Compre productos no tóxicos.** Si usa productos domésticos que son tóxicos, compre solo lo que necesite. Disponga de los desechos peligrosos de manera correcta. Llame a 1-800-CLEANUP.
- **Reduzca el uso de productos químicos de jardinería.** Si usted debe usar fertilizantes, pesticidas, etc., siga las instrucciones cuidadosamente y evite el regar demasiado.
- **Limpie los desechos de sus mascotas.** Tire los desechos de sus mascotas en el inodoro o póngalos en una bolsa plástica cerrada herméticamente y tírela en la basura.
- **Recicle los desechos de su jardín frecuentemente.** Barra los restos de césped y otros materiales de jardín sobre la entrada de su casa, garaje y banqueta, luego póngalos en el recipiente de reciclables. Comience un cúmulo de abono!
- **Barra la basura de su banqueta y entrada de garaje.**
- **Tire sus desechos en el basurero.**

Help!

Pollutants were found in your neighborhood storm drain.

¡Ayude!

Contaminantes fueron encontrados en las alcantarillas de su vecindario.

For more information,
please contact your agency.

City of Carlsbad	760-602-2799
City of Del Mar	858-755-9313
City of Encinitas	760-633-2787
City of Escondido	760-839-4668
City of Oceanside	760-435-5800
City of San Marcos	760-744-1050
City of Solana Beach	858-720-2470
City of Vista	760-726-1340 x1686
County of San Diego	1-888-846-0800

Para más información,
por favor llame su agencia.

Information for this brochure has been provided by the North County Storm Water Program, which includes the cities of Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, Vista and the County of San Diego.

La información para este folleto ha sido proveída por el Programa de Alcantarillas del Condado Norte (North County Storm Water Program), el cual incluye la ciudades de Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, Vista y el Condado de San Diego.

Did you know that storm drains are not connected to the sanitary sewer system or to treatment plants?

Anything that **FLOWS** into a storm drain, except rainwater, pollutes our creeks, rivers, lakes, lagoons and ocean.

Usted sabe que la alcantarilla de la calle no esta conectada con el sistema de drenaje sanitario de su casa o la planta de tratamiento de aguas negras.

Cualquier cosa que **CORRE** a la alcantarilla, con la excepción del agua de lluvia, contamina nuestros arroyos, ríos, lagos, lagunas y el mar.

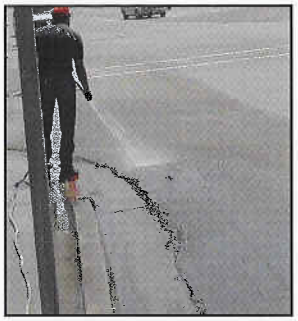

Our field staff found the following pollutant(s) spilled or dumped into a storm drain near your home:

Empleados de la ciudad encontraron los siguientes contaminantes derramados o tirados en las alcantarillas de su vecindario:

- ❑ Motor Oil (Aceite de motor)
- ❑ Grease (Grasa)
- ❑ Antifreeze/Transmission Fluids (Anticongelante/Fluido de transmisión)
- ❑ Detergents (Detergentes)
- ❑ Solvents/Degreaser (Solventes/Desengrasantes)
- ❑ Paint/Paint Products (Pintura/Productos de la pintura)
- ❑ Pesticides/Fertilizers (Pesticidas/Fertilizantes)
- ❑ Home Improvement Waste (Desechos de Renovación de la casa)
- ❑ Animal Waste (Desechos de animales)
- ❑ Yard Waste (Desechos del jardín)
- ❑ Dirt and Gravel (Lodo y grava)
- ❑ Trash (Basura)
- ❑ Other (Otro_____)

Dumping pollutants into a storm drain not only hurts our environment, but is also illegal. However, YOU can help prevent storm water pollution. Check out the prevention tips on the back…

Si tira los contaminantes en la alcantarilla no solo daña nuestro medio ambiente y también es ilegal. Sin embargo, USTED puede ayudar a prevenir la contaminación en las alcantarillas. Por favor, lea los consejos del dorso…

Appendix E-6

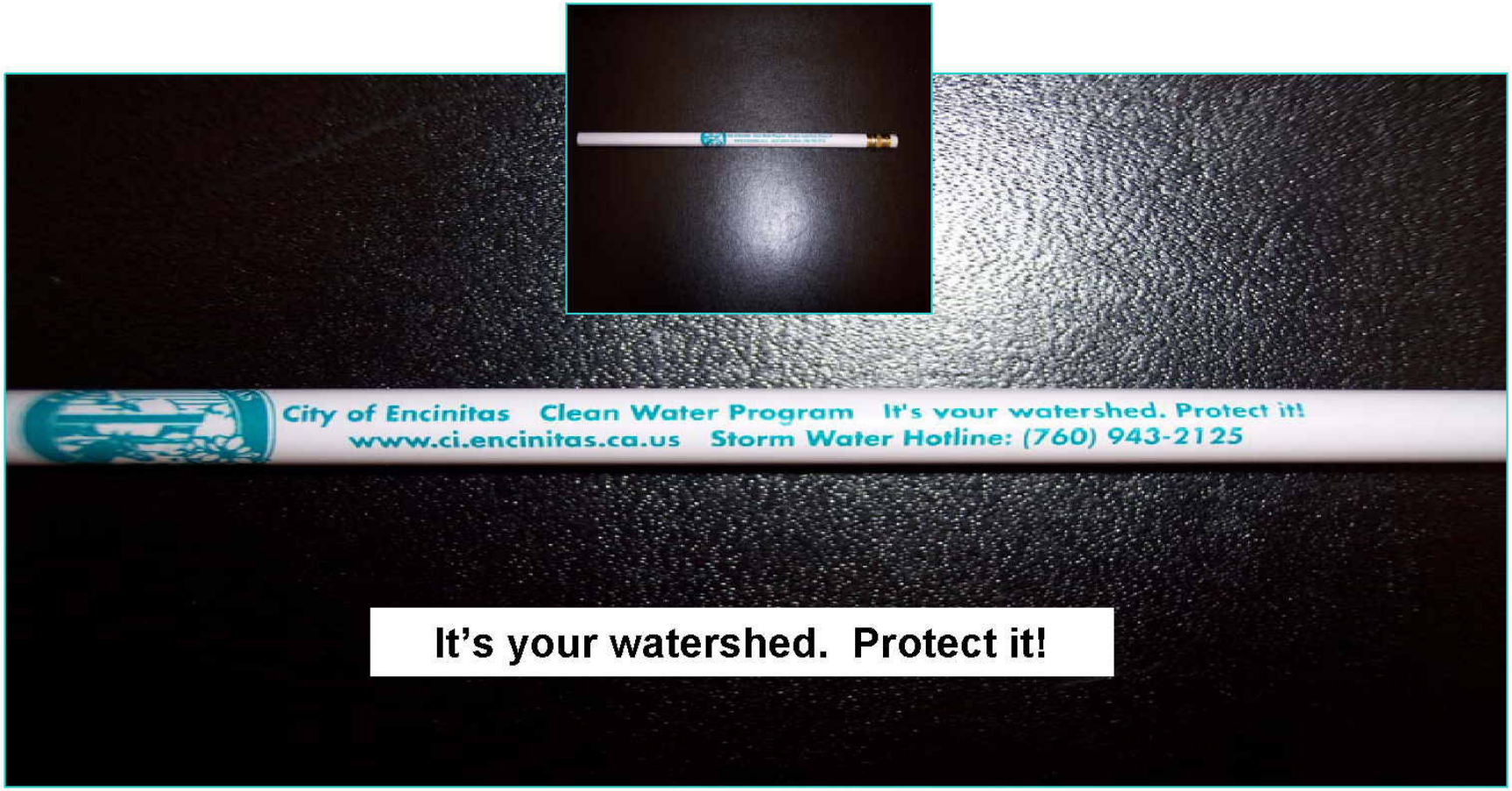
City of Encinitas Clean Water Program It's your watershed. Protect it!
www.ci.encinitas.ca.us Storm Water Hotline: (760) 943-2125
It's your watershed. Protect it!

STORM WATER PROTECTION IS IN GOOD HANDS...YOURS!

Prevent wash water from entering the storm drain. Dispose of wash water used to clean mats and outdoor/indoor areas into a mop sink, toilet or other drain connected to the sanitary sewer.

Prevenga que el agua que usa para lavar entre en las alcantarillas. Disponga del agua con que lavó las carpetas (alfombrillas) y las áreas internas/externas en el fregadero para trapos, inodoros u otras cañerías conectadas a las cloacas de los sanitarios.

Keep dumpster areas clean and lids closed. Do not fill dumpsters with liquid waste or hose them out. If dumpsters or tallow/grease bins need to be cleaned or replaced, contact the leasing company.

Mantenga las área de los basureros limpios y las tapas cerradas. No llene los basureros con agua sucia ni tampoco los limpie con la manguera. Si los basureros o los recipientes de grasa tienen que ser limpiados o reemplazados, por favor llame a la compañía de renta.

Cleanup spills using rags or absorbents and dispose in the trash. Do not hose away spills.

Limpie los derrames usando trapos o absorbentes y tírelos en la basura. No limpie los derrames con la manguera.

Dry sweep or vacuum outdoor areas. Instead of hosing, sweep or vacuum "drive-throughs", parking lots, outdoor patios, sidewalks and dumpster or tallow bin areas. If you must use water for cleaning, contain, collect and dispose of it properly.

Barra en seco o pase la aspiradora en las áreas de afuera. En vez de limpiarlas con la manguera, barra o aspire las "áreas de manejo" (drive-throughs), estacionamientos, patios externos, aceras, y basureros o áreas de recipientes de sebo/grasa. Si usted debe usar agua para limpiar, conténganlos, recoléctelo y deshágase de ellos correctamente.

Take care of grease and oil. Regularly pump grease traps and interceptors to prevent sewer overflows. Concentrated waste oil and grease must be collected in a tallow/grease bin and disposed of by a certified waste grease hauler. Never pour grease or oil into a sink, floor drain, storm drain or dumpster.

Cuide las grasas y aceites. Limpie las áreas recolectoras de grasa y los interceptores regularmente para prevenir los desbordes de las cloacas. Los deshechos de aceites y grasa concentrados deben ser recolectados en un recipiente para sebo/grasa, y recogidos por un transportador certificado de deshechos de grasa. Nunca tire grasa o aceite en el fregadero, cañerías del suelo, alcantarillas o basureros.

Storm water and the pollutants it carries flow directly into the nearest creek, river, lake or lagoon, eventually reaching the ocean. Do your part to help keep our waters clean for you, your family and our environment.

El agua de las alcantarillas y los agentes contaminadores llevan el agua directamente a arroyos, ríos, lagos y lagunas, y finalmente llegan al océano. Haga su parte ayudando a mantener nuestras aguas para usted, su familia y el medio ambiente.

This poster was brought to you by the North County Storm Water Program in cooperation with the Los Angeles Storm Water Program. Call your local agency for more information.

City of Carlsbad	760-602-2799	City of Oceanside	760-435-5800
City of Del Mar	858-755-9313	City of San Marcos	760-744-1050
City of Encinitas	760-633-2787	City of Solana Beach	858-720-2470
City of Escondido	760-839-4668	City of Vista	760-726-1340
County of San Diego	888-846-0800	www.projectcleanwater.org	

Este cartel es traído para usted por el Programa de Limpieza de Alcantarillas del Condado Norte, en cooperación con el Programa de Limpieza de Alcantarillas de Los Angeles. Llame a su agencia local para más información.

STORM WATER PROTECTION IS IN GOOD HANDS...YOURS!

Operate a clean dry shop. Sweep, mop or vacuum instead of hosing down garage floors or outdoor work areas.
Opere un negocio seco y limpio. Barra, trapee o aspire en vez de limpiar con la manguera los pisos de los garages o áreas de trabajo exteriores.

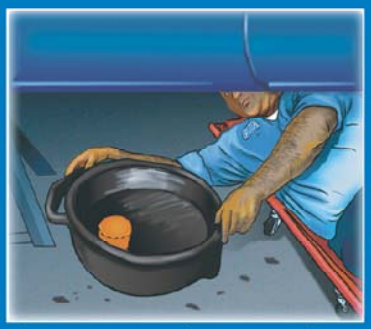

Prevent spills and leaks. Develop spill prevention and response procedures. Use drip pans and ground cloths under vehicles. Drain and recycle fluids from wrecked or leaking vehicles as soon as possible.
Prevenga los derrames y goteras. Desarrolle un plan para prevenir y responder a estos derrames. Use recipientes recolectores y trapos debajo de los vehículos. Tire y recicle los fluido de los vehículos chocados o que tengan filtraciones/ goteras tan pronto como sea posible.

Prevent wash water from entering storm drains. Use a commercial car wash facility for cleaning vehicles. Commercial car wash runoff into the storm drain is illegal.
Prevenga que el agua sucia entre por las alcantarillas. Use un negocio comercial de lavado de auto. Es ilegal que el agua usada por los negocios de lavado de auto comerciales entre en las alcantarillas.

Protect outdoor work and storage areas. Cover equipment/ materials and work/ storage areas. Place bulk fluids in secondary containment.
Proteja las áreas de trabajo y almacenamiento exteriores. Cubra los equipos y materiales y áreas de trabajo/almacenamiento. Ponga los fluidos en grandes cantidades en recipientes secundarios.

Clean parts in a self contained sink/drum unit when working with solvents. Inspect parts washing units daily for leaks and make necessary repairs immediately. Use aqueous cleaning solutions instead of solvents when possible. Recycle used solutions through a licensed hazardous waste hauler.
Limpie los repuestos en una unidad de fregadero/tambor junto cuando trabaje con líquido solventes. Inspeccione las partes de la unidad de limpieza diariamente para detectar goteras y haga los arreglos necesarios inmediatamente. Use soluciones solubles en agua, en vez de los líquidos solventes cuando sea posible. Recicle las soluciones usadas por medio de una compañía con licencia para transportar deshechos peligrosos.

Dispose of waste properly. Recycle oil, oil filters and antifreeze. Never pour liquids down the gutter or storm drain.
Disponga de los deshechos correctamente. Recicle el aceite, los filtros de aceites y los anticongelantes. Nunca debe tirar líquidos por las alcantarillas o rejillas.

Storm water and the pollutants it carries flow directly into the nearest creek, river, lake or lagoon, eventually reaching the ocean. Do your part to help keep our waters clean for you, your family and our environment.

El agua de las alcantarillas y los agentes contaminadores llevan el agua directamente a arroyos, ríos, lagos y lagunas, y finalmente llegan al océano. Haga su parte ayudando a mantener nuestras aguas para usted, su familia y el medio ambiente.

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Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad 760-602-2719

City of San Marcos 760-744-1050

City of Encinitas 760-633-2787

City of Del Mar 858-755-9313

City of Oceanside 760-435-5800

City of Solana Beach 858-720-2470

City of Vista 760-726-1340

Best Management Practices

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.

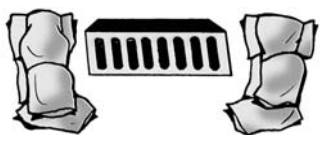

The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.

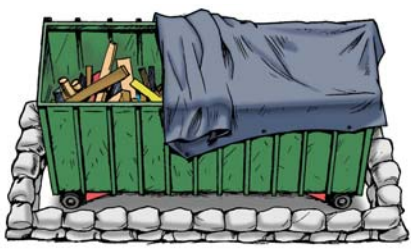

Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.

Water Quality Regulations for Construction Sites

In 1972, the Environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

A Pollution Prevention Guide for the Construction Industry

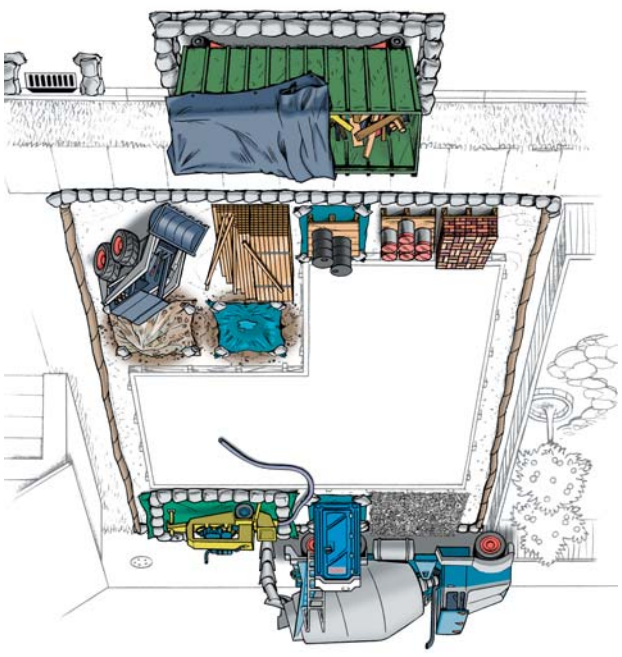

North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.

Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

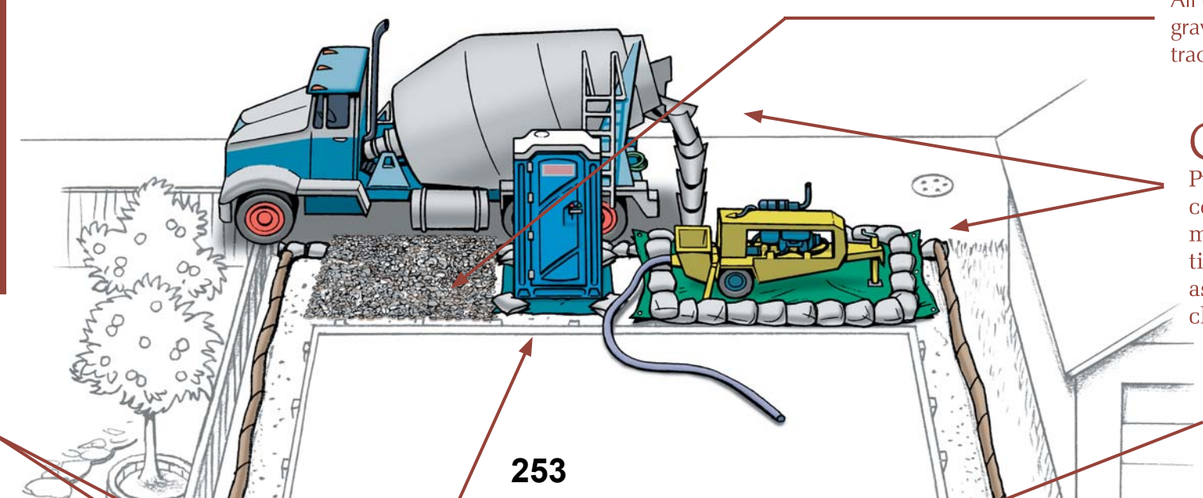

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic

NORTH COUNTY
STORM WATER PROGRAM

City of Carlsbad City of Del Mar City of Encinitas
City of Escondido City of Oceanside City of Poway
City of San Marcos City of Solana Beach City of Vista
County of San Diego

Please take our pet waste survey!

1. What is your zip code? _____

2. Where do you most often walk your dog?

- __ My neighborhood
- __ At the park
- __ At the beach
- __ I don't walk my dog
- __ Other _____

3. **What happens to the pet waste that is not picked up?**

- __ I don't know
- __ It disintegrates
- __ It fertilizes the ground
- __ It gets washed to creeks, lagoons, and the ocean
- __ Someone comes later to clean it up
- __ Other

4. **If you saw people not picking up after their pet, what would be your reaction?**

- __ I would not care
- __ I would report them to the City
- __ I would be surprised
- __ I would ask them to pick it up
- __ I don't know what I could or would do
- __ Other _____

5. **Why do you think people would not pick up after their pet? (Check all that apply)**

- __ They don't care
- __ They don't know they're supposed to
- __ There's no one around to see them
- __ They didn't bring a bag
- __ There was nowhere to throw it away
- __ They think it's gross
- __ Other

6. **What do you think the City can do or should do about the pet waste problem?**

_____

_____

NORTH COUNTY
STORM WATER PROGRAM

City of Carlsbad City of Del Mar City of Encinitas
City of Escondido City of Oceanside City of Poway
City of San Marcos City of Solana Beach City of Vista
County of San Diego

Please take our survey!

1. **What is a watershed?**
   - __ A place for us to dump our unwanted chemicals or wash water
   - __ A land area that drains to the nearest river, lake, or ocean
   - __ An area where water is treated and cleaned for our use
   - __ A large habitat for frogs
   - __ Other _____

2. **Do you live in a watershed?**
   - __ Yes
   - __ No

NORTH COUNTY
STORM WATER PROGRAM

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   - __ Other _____

2. **Do you live in a watershed?**
   - __ Yes
   - __ No

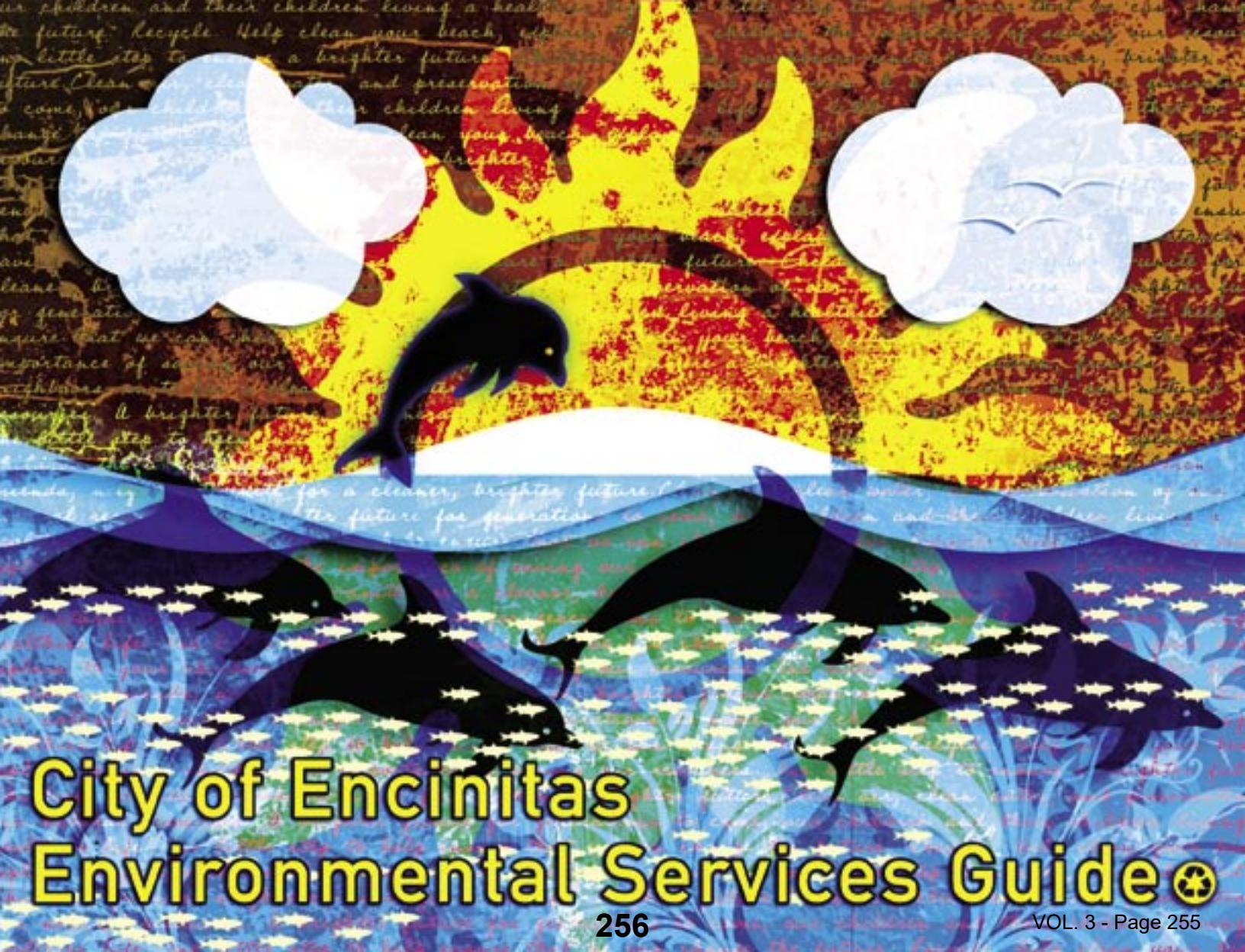

City of Encinitas Environmental Services Guide

Door-to-door HHW Pickup

"It is nice to be able to dispose of the wastes in a safe manner to protect the environment, but the fact that it is convenient is even better! Just make the call, get an appointment and put the items out front; they even give you a reminder call for your appointment."
Diane L., Olivenhain

Home Composting

"After taking the city-sponsored composting classes offered by the City of Encinitas and the Solana Center, I was set on the right track to managing my home composting bins."
Master Composter John N., New Encinitas

Buyback Centers

"Our PTA recently initiated plastic bottle recycling. In just one month we were able to collect $70 and we hope to bring in at least $800 next school year. All the money we make will be used to maintain our new garden."
Nancy K., Ocean Knoll third-grade teacher

Curbside Recycling

"By recycling all of our paper, cardboard, plastic, glass, and cans, we were surprised to learn that our family of five ended up with only two bags of trash per week. This allowed us to use the smaller of the two trash cans offered, saving our family money, while helping protect the environment."
Mike and June, Leucadia

Funded By:

City of Encinitas / California Department of Conservation
California Integrated Waste Management Board: Zero Waste—You Make It Happen!

City of Encinitas

505 S. Vulcan Ave.
Encinitas, CA 92024
(760) 633-2600
Monday – Friday, 7:00 a.m. – 6:00 p.m.
City offices are closed every other Friday.
www.ci.encinitas.ca.us

EDCO Waste and Recycling Services

224 Las Posas
San Marcos, CA 92069
(760) 436-4151
www.edcodisposal.com/services/encinitas

Holiday schedule

When a holiday falls on a weekday or a Sunday, collection will be delayed one day for the remainder of the week.

EDCO does not offer services on the following holidays:

New Year's Day	Memorial Day
Independence Day	Labor Day
Thanksgiving Day	Christmas Day

Solana Center for Environmental Innovation

137 N. El Camino Real (past the Sheriff's Station at the end of the road)
Encinitas, CA 92024
(760) 436-7986
Monday – Friday, 8:30 a.m. – 4:30 p.m.
www.solanacenter.org

Curbside collection

Place your refuse, recycling, and green waste containers at the curb prior to 6 a.m. on your collection day. They are collected once a week on the same day. Please set your containers in an unobstructed area, at street level, with the wheels against the curb, or at the edge of the roadway. Do not obstruct traffic lanes, including bike lanes and sidewalks. Always leave enough space for your postal carrier to access your mailbox.

Trash collection

Use gray waste container provided by EDCO to dispose of non-hazardous/ non-recyclable household waste.

Residential recycling

All recyclables go in the "single stream" blue bin for curbside recycling (no separation is necessary).

What is recyclable?

Glass bottles and jars: Clear and colored glass. Please rinse. No need to remove labels. Glass plates, mirrors, and light bulbs are not recyclable.

Cardboard, mixed paper, and newspapers: Includes cardboard and non-waxy paperboard (i.e., cereal boxes), all paper including magazines, newspapers, envelopes with plastic windows, junk mail, and miscellaneous coupons. Please flatten or cut boxes to a maximum size of 3 ft. x 3 ft.

Cans: Aluminum and steel cans – including dry paint cans and empty aerosol cans.

Plastic containers: Plastic bottles and jugs marked 1 or 2, and all beverage containers labeled CA Redemption Value or CA Cash Refund including:

- Food and beverage containers: Soda, water, salad dressing, cooking oil, etc.
- Jars and canisters: Peanut butter jars, mayonnaise jars, aspirin bottles, 35 mm film canisters, etc.
- Cleaning products and detergents: Empty bleach, detergent, soap, shampoo, drain cleaners, etc.
- Automotive and yard care products: Empty motor oil, antifreeze, plant food, herbicide containers, etc.

* Non-CRV plastics with recycling labels numbered 3 through 7 are not accepted.
* Reduce your trash bill by requesting a smaller trash bin and an additional recycling bin.

Did you know?

Glass takes over one million years to decompose.

Recycling a glass jar saves enough energy to light a 100-watt light bulb for four hours.

- California Department of Conservation

Yard waste recycling

Customers are required to provide their own sturdy container, not to exceed 32 gals. and 50 lbs. NEVER place yard waste in plastic bags. "Go Green" yard waste collection decals are available from EDCO, (760) 436-4151.

Yes: Grass clippings, weeds, leaves, hedge trimmings, Christmas trees (no stands or ornaments), and tree limbs. All wood debris must be cut and bundled, but should not exceed 4 ft. x 1.5 ft. in dimension.

No: Dirt, rocks, concrete, animal waste, cactus, ice plants, palm fronds, succulents, frosted or artificial Christmas trees, lumber, or construction waste.

Christmas tree recycling

EDCO offers Christmas tree pickup with the residential yard waste pick-up. Please call EDCO at (760) 436-4151 each holiday season for more information.

Recycling centers

EDCO recycling drop-off

(no redemption fees paid – drop-off only)

137 N. El Camino Real (past the Sheriff's Station)
Encinitas, CA 92024

Hours of operation: Open 24 hrs.

What is accepted?

See the "What is recyclable" section.
PLEASE NO: household hazardous waste, electronic waste, furniture, appliances, plastic bags, or plastics that are not labeled 1 or 2.

Buyback recycling centers

Buyback services including CRV materials: CRV stands for California Redemption Value. CRV is offered on most beverage containers in California. Deposits of $0.05 on containers under 24 oz. and $0.10 on containers 24 oz. and larger are refunded on beverage containers marked with "CRV." Examples include glass/plastic bottles and cans such as carbonated soft drinks, beer, wine coolers, distilled spirit coolers, carbonated and mineral water, non-carbonated water, sports drinks, coffee and tea drinks, fruit drinks, fruit juices packed in containers less than 46 oz., and vegetable juice in containers 16 oz. or less. No CRV deposits are charged on wine bottles. CRV deposits are refunded when you recycle your CRV beverage containers at one of the recycling centers listed in this section.

EDCO certified buyback center

224 S. Las Posas Road
San Marcos, CA 92069
(760) 744-2700

Hours of operation: Monday – Friday, 8 a.m. – 4 p.m.,
Saturday 8 a.m. – 3 p.m. Closed daily from noon to 1 p.m.

Buyback services include: CRV aluminum cans, plastic ♲ or ♲, and glass containers.

Recycling drop-off: Paper, cardboard, and non-CRV household containers. Computer monitors and televisions free of charge. Keyboards, computer drives, and printers accepted for a nominal fee.

Did you know?

It takes 80-100 years for an aluminum can to decompose.

Recycling one aluminum can saves enough electricity to operate a TV for three hours.

- California Department of Conservation

rePLANET recycling center

262 N. El Camino Real (behind Vons)
Encinitas, CA 92024
(877) 737-5263
www.replanetusa.com

Hours of operation: Tuesday – Saturday, 9:30 a.m. – 5 p.m. Closed from 1:00 -1:30 p.m.

Items accepted: All CRV beverage containers made from aluminum, glass, and plastic ♲ through ♲

rePLANET recycling center - Tomra North America

Miramar recycling center

5165 Convoy Street
San Diego, CA 92111
(858) 268-8971

Hours of operation: Monday – Friday, 11 a.m. – 4:30 p.m., Saturday – Sunday, 7:30 a.m. – 4:30 p.m.

Items accepted: Accepts all CRV containers for buyback. Computers, monitors, and CPUs (central processing units) are accepted for free. Printers, other computer accessories, mattresses and box springs, and appliances are accepted for a nominal fee. No HHW accepted.

Did you know?

Aluminum cans are recycled into soda cans, license plates, pie plates, aluminum foil, and more.
- www.myclearwater.com

Waste Management

Locations:

2265 Jimmy Durante Blvd.
Del Mar, CA 92014

5960 El Camino Real
Carlsbad, CA 92008
(800) DUMPSTER
(800) 386-7783

Buyback: All CRV materials such as beverage containers made from aluminum, glass, and plastic ♳ through ♴

Drop–off: Mixed paper including cardboard, catalogs, magazines, and newspaper. Non-CRV containers such as tin cans, glass containers, plastic ♳ or ♲, and household batteries.

Other acceptable items: CRT's such as televisions, computer monitors, and laptops are free of charge. For all other electronics there is a nominal fee.

Hours of operation: Tuesday – Saturday, 8:00 a.m. – 4:00 p.m.
Closed daily from 1:00 – 1:40 p.m.

Household Hazardous Waste

Household Hazardous Waste (HHW) includes products labeled Dangerous, Caution, Flammable, Poison, Toxic, or Corrosive and should be disposed of properly. It is dangerous, and illegal, to discard HHW into the trash, into the storm drain, or down the sewer drain. Chemicals disposed of in illegal hazardous waste containers can be released into the environment and contaminate our air, water, and possibly the food we eat. HHW also includes electronic and universal waste.

• Aerosols • Asbestos • All purpose cleaners • Antifreeze • Auto fluids • Disinfectants
• Drain openers • Fertilizers • Furniture polishes • Gasoline • Insecticides • Kerosene
• Lighter fluid • Latex paint • Oven cleaner • Oil-based paint • Pesticides • Pool chemicals
• Solvents • Thinners • Used oil and oil filters • Varnishes

Electronic Waste and Universal Waste

Electronic waste, or E-Waste, is a popular, informal name for electronic products nearing or at the end of their "useful life," and includes cell phones, computers, televisions, VCRs, stereos, copiers, and fax machines which contain lead and other hazardous materials. The improper disposal of these items can be hazardous to humans and the environment. Universal waste, or U-Waste, includes rechargeable and single-use household batteries, fluorescent tubes, and mercury thermostats. See the list below for items that should never be thrown in the trash.

• Answering machines • Auto batteries • Cell phones • Computers • Copiers • Fax machines
• Computer monitors • DVD players • Fluorescent lamps and tubes • VCRs • Stereos • Radios
• Household batteries • Mercury gauges • Mercury pilot light sensors • Telephones • Televisions
• Mercury thermostats • Metal halide lamps • Microwave ovens • Sodium vapor lamps

Did you know?

Recycling a stack of newspaper just 3 ft. high can save one tree.
One tree can filter up to 60 lbs. of pollutants from the air each year.
Making recycled paper instead of new paper uses 64% less energy and uses 58% less water.

- www.resourcefulschools.org

How to properly dispose of HHW, E-Waste, and U-Waste:

Re-use the materials if possible

Ask a friend or neighbor if they could use your materials that you no longer need.

Home pickup

Door-to-door collection service is available for all Encinitas residents for a nominal collection fee. The service is free of charge for qualifying homebound elderly and disabled citizens. This service does not include pickup of regular trash, business waste, medical or biological waste, explosives, ammunition, or radioactive material.

Drop-off locations*

(HHW, E-waste, and U-Waste)

Vista HHW facility

1145 E. Taylor St.
Vista, CA 92084
(across from City of Vista Public Works Yard at Laguna Lane)

Poway HHW facility - City of Poway Materials Handling Yard

12325 Crosthwaite Circle
Poway, CA 92064
(in the South Poway Business Park)

Hours of operation for Vista and Poway facilities: 9 a.m. – 3 p.m. on Saturdays only, except holiday weekends.

For further information on home pick-ups and drop-offs (including small business waste),

Call (800) 444-4244

*It is illegal to transport more than 15 gals. or 125 lbs. of hazardous waste.

Encinitas used oil collection sites

Drop off used motor oil at the following locations and receive $0.16 per gallon. Call for hours of operation. If oil is contaminated, please refer to HHW for disposal.

Auto Zone

120 Leucadia Blvd.
(760) 942-2662

Brad's Foreign & Domestic

65 Westlake St., Suite 200-C
(760) 753-6217

Charlie's Foreign Car

751 Second St.
(760) 753-4969

Encinitas Foreign and Domestic Auto Repair*

901 Second St.
(760) 632-0830

Herman Cook Volkswagen*

1435 Encinitas Blvd.
(760) 753-6256

Jiffy Lube*

221 N. El Camino Real
(760) 632-1155

Kragen Auto Parts*

180 N. El Camino Real
(760) 753-4911

Valvoline Instant Oil Change

127 S. El Camino Real
(760) 943-1517

Pep Boys*

256 N. El Camino Real
(760) 944-7007

Did you know?

If all Americans recycled their used oil, the U.S. could save 1.3 million barrels of oil per day.
- California Integrated Waste Management Board

* Locations that also accept used oil filters.

Encinitas plastic bag recycling

Clean, dry, empty plastic grocery and newspaper bags can be deposited in designated collection bins at the following participating Encinitas grocery stores. You can also reuse your grocery bags more than once or use canvas or other non-disposable bags to help reduce waste.

Albertson's
479 Encinitas Blvd.
134 N. El Camino Real

Ralph's
125 N. El Camino Real

Vons
262 N. El Camino Real
453 Santa Fe Drive

Stater Brothers
1048 N. El Camino Real

Styrofoam peanuts and packing material

UPS Store, Postal Annex, or other mail stores will accept Styrofoam peanut packaging, non-popped bubble wrap, and other plastic and foam packing material for reuse.

Tires (small fee may apply)

Discount Tire Store
107 N. El Camino Real
Encinitas, CA 92024
(760) 634-2202

Evans Tire and Service Center
206 N. El Camino Real
Encinitas, CA 92024
(760) 942-2162

Big-O-Tires
2615 State Street
Carlsbad, CA 92008
(760) 720-5212

Discount Tire Store
685 San Rodolfo
Solana Beach, CA 92075
(858) 481-6387

Appliances

E-Z Rental (fees vary)

116 Azalea Dr.
Vista, CA 92083
(760) 734-1301
www.pickupoldappliances.com
Pick up, haul away, or drop off

Miramar Recycling Center (nominal fee)

5165 Convoy St.
San Diego, CA 92111
(858) 268-8971

Lee's Iron and Metal (free drop off)

1315 Lee Dr.
Vista, CA 92083
(760) 724-1330

Construction debris (concrete/asphalt)

Hanson Aggregates

3701 Haymar Dr.
Carlsbad, CA 92008
(858) 586-0611
Some restrictions apply. Call for details.

Construction debris
(untreated lumber, wood pallets, yardwaste)

Agri-Service

3210 Oceanside Blvd.
Oceanside, CA 92054
(760) 439-9920
Some restrictions apply. Call for details.

Scrap metal and iron

Lee's Iron and Metal

1315 Lee Dr.
Vista, CA 92083
(760) 724-1330

Ecology Auto Wrecking

1330 Airport Road
Oceanside, CA 92054
(760) 966-2866
Auto parts and appliances. Batteries and tires NOT accepted.

Bulky item pickup

EDCO will pick up large or bulky household items by special arrangement. Examples of bulky items include: refrigerators, washers, dryers, sofas, chairs, mattresses, water heaters, beds (disassembled), tables (with legs removed), or other household items too large to be picked up by your weekly trash truck. Pickups are on Fridays by appointment. Fees vary by item.

Free self haul

Each year, residential trash customers receive a coupon from EDCO which is good for free disposal of one load of bulky items and other residential waste at the Palomar Transfer Station located at 5960 El Camino Real in Carlsbad. Household Hazardous Waste is NOT accepted at the transfer station. Residents of apartment complexes and other residential properties where the trash bill is handled by a property management company will need to contact EDCO for further info.

Did you know?

Half of all the polyester carpet manufactured in the U.S. is made from recycled soda bottles.
- California Department of Conservation

Ocean protection

The ocean begins at your front door.

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.

Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.
- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.

Home composting

Composting is nature's way of recycling. It is the controlled natural decomposition of organic materials such as leaves, grass clippings, prunings, and fruit, vegetable, and grain scraps. Over time, the sun, worms, and microorganisms break down organic materials into compost. Using the finished compost in your landscaping is a great way to return nutrients to the soil and help conserve water.

The Solana Center for Environmental Innovation provides free composting workshops for City of Encinitas residents. Visit the Solana Center website for more information at www.solanacenter.org, or call (760) 436-7986 x 216 to learn more.

Home compost bins (Biostack and Wriggly Wranch worm bins) are subsidized by the City of Encinitas for Encinitas residents, and are available at the Solana Center for $35 (retail value $119), price subject to change.

Appendix F

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F-2 Storm Water Management Ordinance
F-3 Storm Water Pollution Control Checklist and Certification
F-4 Storm Water Pollution Control Standard Conditions of Approval for New Development
F-5 Storm Water Pollution Control BMP Notes
F-6 Private Development Projects and their required Post-Construction BMPs
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F-8 CEQA Initial Study Checklist

City of Encinitas
Storm Water Best Management Practices
Manual, Part II

STORM WATER MANUAL

FOR NEW DEVELOPMENT

AND REDEVELOPMENT

A Manual for Construction & Permanent Post Construction
Storm Water Best Management Practices Requirements

Introduced: November 12, 2002
Adopted: December 11, 2002
Modified: April 9, 2003

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I. INTRODUCTION

I.1. Best Management Practice Manual Part II Organization

This manual describes how to comply with the permanent improvement and construction phase storm water requirements for new development projects in the City of Encinitas. This manual further guides the project applicant through the selection, design, and incorporation of storm water BMPs into the project's design plan.

This manual groups development-related storm water BMPs into two categories:

1. *construction BMPs*, which are practices, procedures, devices or materials used to prevent the transport and introduction of pollutants both on and from a project site during construction; and
2. *permanent BMPs*, which are the site design features, source control features, and treatment control BMPs that become a permanent part of a project's design and remain functioning throughout the "use" phase of a project site. (See the definitions for site design, source control and treatment control BMPs in this appendix).

Section I, "Introduction," describes storm water pollution background information and legal or regulatory requirements associated with storm water pollution control.

Section II, "Project Review & Permitting Process," outlines the project plan review and approval process all permits. Applicants should use Section II as the roadmap to navigate through this manual and ensure storm water requirements are accurately and efficiently incorporated into their projects during project review. The remaining sections provide technical information necessary to incorporate the storm water requirements.

Section III, "Permanent Storm Water BMP Selection Procedure," lists the permanent storm water BMP requirements, which are organized into a progression intended to demonstrate a typical project planning and design process and to maximize storm water protections while minimizing project costs. Section IV, "Construction Storm Water BMP Performance Standards," describes the City's construction storm water BMP standards. Section V, "Implementation & Maintenance of Requirements," describes how the implementation and the maintenance of construction and permanent BMPs must be assured for all permits. For permanent BMPs, this section provides a process and the requirements for executing a maintenance agreement with the City. Section VI contains appendices to the Best Management Practice Manual Part II that are either necessary or designed to provide guidance in completing the storm water requirements in this manual.

I.2. Background

Urban runoff discharged from municipal storm water conveyance systems has been identified by local, regional, and national research programs as one of the principal causes of water quality problems in most urban areas. The City of Encinitas' storm water conveyance system, which collects runoff and rainwater from our streets, rooftops,

driveways, parking lots, and other impervious areas and conducts flows directly to our beaches and lagoons without receiving treatment (our storm water conveyance system is separate from our sanitary sewer system). Urban runoff potentially contains a host of pollutants like trash and debris, bacteria and viruses, oil and grease, sediments, nutrients, metals, and toxic chemicals. These contaminants can adversely affect receiving and coastal waters, associated wildlife, and public health. Urban runoff pollution is a year-round problem because of the many urban water uses that discharge runoff to the storm water conveyance system.

Storm water pollution can negatively affect human health and aquatic plant and animal life. Potentially harmful viruses and bacteria are now found in our coastal waters along with soil particles, solids/debris, litter, oil, grease, and chemical compounds. Oil and grease from parking lots, pesticides, cleaning solvents, and other toxic chemicals can contaminate storm water and these contaminants can be transported into receiving waters—the beaches, lagoons, and creeks we all enjoy. Fertilizer constituents from nurseries, lawns, and golf courses or leaking septic tanks can cause algal blooms and encourage microbial growth to create an increasing spiral of biological activity known as eutrophication. Disturbances of the soil from construction can allow silt to wash into storm channels and receiving waters making them muddy, turbid, and inhospitable to natural aquatic organisms. Many artificial surface treatments such as galvanized metal, paint, or preserved wood containing metals contribute to pollution by storm water run-on or leaching by storm water as the surfaces corrode, flake, dissolve, or decay. Heavy metals, such as copper from automobile brakes and lead and chromium from paints and primer coatings, are toxic to aquatic organisms and may bio-accumulate.

Land development and construction activities significantly alter drainage patterns and contribute pollutants to urban runoff primarily through erosion, the removal or change of existing natural vegetation during construction, and the creation of new impervious surfaces such as parking lots, which often permanently contribute pollutants throughout the “use” of the project site. When homes, work places, recreational areas, roads, parking lots, and structures are built, new impervious areas are built- creating the potential for a “double-negative” impact to water quality. First, the natural landscape’s ability to infiltrate and cleanse storm water and urban runoff is “capped” by the impervious surfaces. As impervious surfaces increase, water that normally would have percolated into the soil to be naturally filtered flows over the land surface directly to downstream wetlands, creeks, and eventually the Pacific Ocean. Accordingly, increases in impervious cover can increase the frequency and intensity of storm water flows. Second, new impervious surfaces often become a source of pollutants associated with development which include automotive fluids, cleaning solvents, toxic or hazardous chemicals, detergents, sediment, metals, pesticides, oil and grease, and food wastes. These pollutants, which are often temporarily captured on impervious surfaces, are transported to the storm water conveyance system by storm water and urban runoff. The pollutants flow untreated through the storm water conveyance system and ultimately into our creeks, rivers, beaches, and lagoons. With the growing concerns of urban runoff and storm water pollution, local, state, and federal agencies devised regulations requiring development planning and construction controls to treat storm water-related pollution from new development projects before it reaches any receiving waters.

The Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit (Municipal Permit), issued on February 21, 2001 to the City of Encinitas, the County of San Diego, the Port of San Diego, and 17 other cities in the region by the San Diego Regional Water Quality Control Board (Regional Board), requires the development and implementation of storm water regulations addressing storm water pollution issues in development planning and construction associated with private and public development projects. Specifically, private and public development projects are required to include storm water best management practices (BMPs) both during construction, and in the projects permanent design in order to reduce pollutants discharged from the project site to the maximum extent practicable (see Appendix G for a detailed description of the various types and categories of BMPs discussed in this manual).

The primary objectives of the Best Management Practice Manual Part II requirements are to:

1. Effectively prohibit non-storm water discharges; and
2. Reduce the discharge of pollutants from storm water conveyance systems to the Maximum Extent Practicable (MEP statutory standard) both during construction and throughout the use of a developed site.

To address pollutants that may be generated from new development once the site is in use, the Municipal Permit further requires that the City implement a series of permanent BMPs described in a document called the Model Standard Urban Storm Water Mitigation Plan, or SUSMP (pronounced “sue-sump”), which was approved by the Regional Board on June 12, 2002.

This manual is an uncodified ordinance adopted pursuant to the City of Encinitas Watercourse Protection, Storm Water Management and Discharge Control Ordinance codified in Chapter 20.08 of the Encinitas Municipal Code. It is Part II of the City of Encinitas Storm Water Best Practices Manual and provides instructions on the City’s construction phase and permanent BMP requirements, based on the Model SUSMP, for new projects in the City of Encinitas. It applies to all projects even if the project is currently under review or previous approvals have been obtained.

I.3. Legal Framework

The requirement to implement storm water BMP requirements for development projects is based on Section 402 (p) of the Clean Water Act. The Federal Clean Water Act amendments of 1987 established a framework for regulating storm water discharges from municipal, industrial, and construction activities under the NPDES program. Under the Federal Clean Water Act, municipalities throughout the nation are issued a Municipal NPDES Permit. The primary goal of the Municipal Permit is to stop polluted discharges from entering the storm water conveyance system and local receiving and coastal waters.

In California, the State Water Resources Control Board (SWRCB), through the nine Regional Boards, administers the NPDES storm water municipal permitting program. Based on the San Diego Municipal Permit issued by the San Diego Regional Board, the

City is required to develop and implement construction and permanent storm water BMPs addressing pollution from new private and public development projects.
In order to comply with the conditions of the Municipal Permit, the City of Encinitas adopted the City of Encinitas Watercourse Protection, Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance") codified in Chapter 20.08 of the Encinitas Municipal Code. This manual is an uncodified ordinance adopted by reference as Part II of the City of Encinitas Storm Water Best Practices Manual. The Municipal Permit requires the City to categorize and prioritize land uses in order to establish effective BMPs. The Storm Water Ordinance authorizes the City Engineer to establish Best Management Practices (BMPs), including permanent improvements, for all types of land uses.

The City Engineer may establish alternative Best Management Practices. The allowable use of alternative BMPs at a specific site shall be determined at the sole discretion of the City Engineer. The City Engineer may establish Best Management Practices for a specific site or activity if necessary to reduce Pollutants to the Maximum Extent Practicable or to comply with an order of the San Diego Regional Water Quality Control Board. The City Engineer may also establish additional Best Management Practices for a specific site if the City Engineer determines that the Best Management Practices implemented at the site have not reduced the pollutants to the Maximum Extent Practicable."

II. PROJECT REVIEW & PERMITTING PROCESS

The City of Encinitas Storm Water Management Ordinance requires that all new development and redevelopment activities comply with the storm water pollution prevention requirements per the Municipal Code Chapter 20.08 and Grading and Erosion Control Chapter 23.24. These storm water pollution prevention requirements, which are described in detail in Section III, "Permanent Storm Water Best Management Practices Selection Procedure," and Section IV, "Construction Storm Water Best Management Practices Performance Standards," are site specific and vary based on the project's potential impact on the quality of receiving waters.

The steps below describe the elements of the plan review and permitting processes for storm water best management practice (BMP) requirements. The flow chart in Figure I, "Post-Construction Storm Water Quality Review Process", demonstrates how storm water requirements are incorporated into projects requiring subdivision approvals, development permits or other discretionary actions. The flow chart in Figure II, "Construction Storm Water Quality Review Process", describes how storm water requirements are incorporated into projects during the construction permit review process.

II.1 Step 1: Determine Applicable Storm Water BMP Requirements

Prior to submittal of plan check documents, applicants must complete the "Storm Water Requirements Applicability Checklist" in Appendix A to determine if their project is subject to permanent and construction storm water best management practice (BMP) requirements. (Note: this form must be completed for all permit applications, even if previous approvals exist. Projects with previous approvals will be required to comply with the storm water requirements in this document). This checklist must be completed, signed by the responsible party for the project, and submitted with the permit application. For private projects, the project design must include all required permanent BMPs for the application package to be deemed complete.

Figure I: Post-Construction Storm Water Quality Review Process

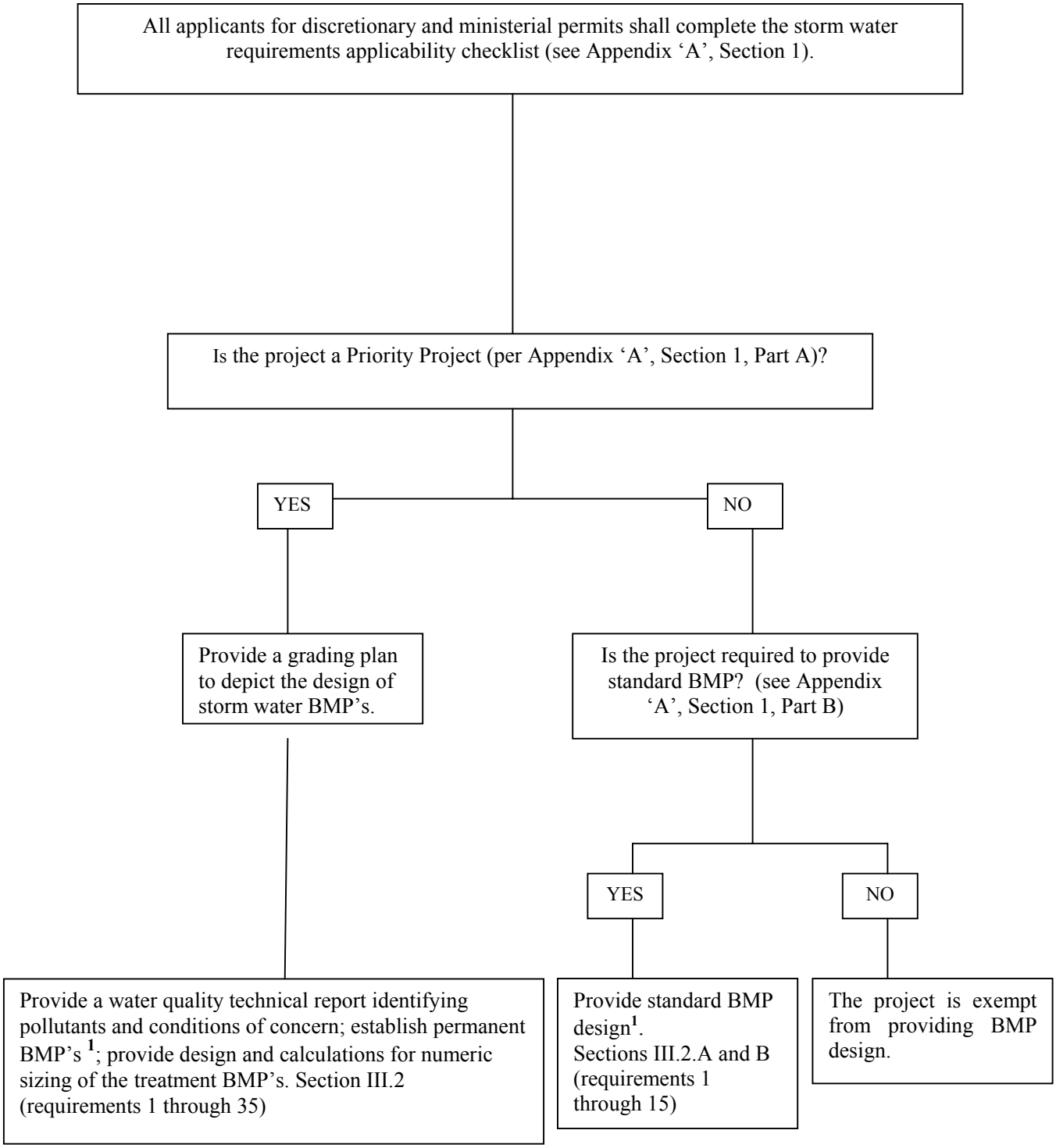

[1] ***BMP selection and design are subject to the approval of the City Engineer***

Figure II: Construction Storm Water Quality Review Process

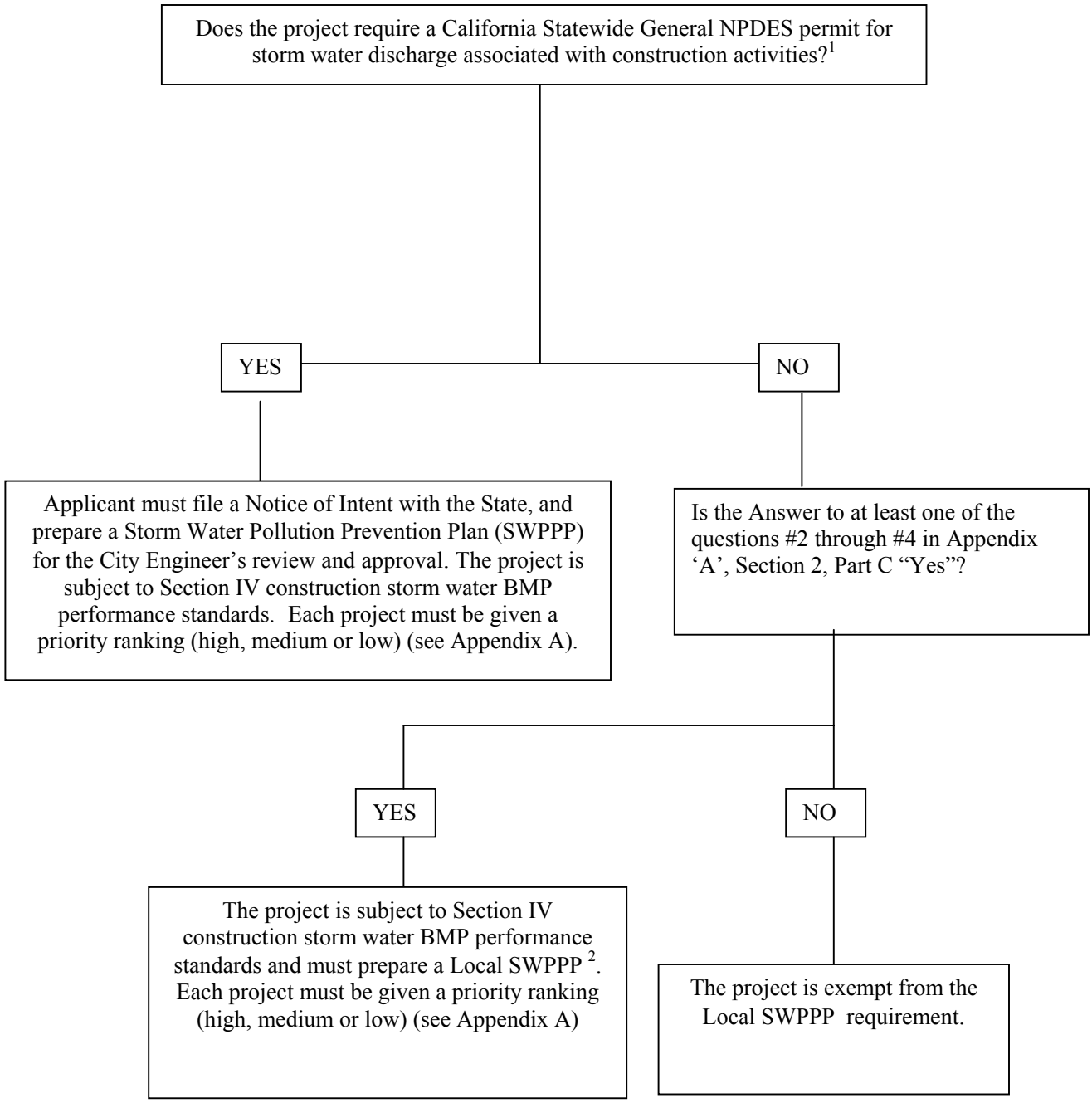

1. Projects propose land disturbance of more than 1 acre .
2. BMP selection and design are subject to the approval of the City Engineer

II.1.A. Permanent Storm Water BMP Requirements

II.1.A.i.Standard Requirements. Projects subject to standard permanent storm water requirements must incorporate the site design and source control requirements identified in Sections III.2.A and B (requirements 1 through 15) into the project (see Table 1). Refer to Step 2: "Prepare & Submit Appropriate Plans," for guidance in the BMP design process.

II.A.1.ii. Priority Project Requirements. Projects subject to priority project permanent storm water requirements must incorporate all applicable requirements in Section III.2, "Establish Permanent Storm Water Best Management Practices," (requirements 1 through 33) into the project design. The major difference between the BMP requirements for priority projects and non-priority projects (standard BMPs) is that treatment control BMPs for priority projects must be sized based on the numeric sizing criteria (Section III.2 requirement 31). Non-priority projects are not required to meet numeric sizing criteria. Priority projects BMP requirements include the site design and source control BMPs, BMPs applicable to individual priority project categories, and treatment control BMPs. If a priority project meets more than one priority project category definition, as shown in Table 1, the project is subject to all BMPs applicable to individual priority project categories. For example, if a project proposes to build 50 attached residential units and a 6,000 square foot restaurant with a 70-space surface parking lot, the project would be subject to the individual priority project category BMP requirements for "Attached Residential Development", "Restaurants", and "Parking Lots" as shown in Table 1 below. Refer to Step 2, "Prepare & Submit Appropriate Plans", for guidance in the permanent BMP design process.

Table 1. Standard Development Project & Priority Project Storm Water BMP Requirements Matrix.

			BMPs Applicable to Individual Priority Project Categories(3)										
	Site Design BMPs(1)	***Source Control BMPs(2)***	a. Private Roads	b. Residential Driveways & Guest Parking	c. Dock Areas	d. Maintenance Bays	e. Vehicle Wash Areas	f. Equipment Wash Areas	g. Outdoor Processing Areas	h. Surface Parking Areas	i. Fueling Areas	j. Hillside Landscaping	***Treatment Control BMPs(4)***
Standard Projects	R	R	O	O	O	O	O	O	O	O	O	O	O
Priority Projects:													
Detached Residential Development	R	R	R	R								R	S
Attached Residential Development	R	R	R										S
Commercial Development >100,000 ft^2	R	R			R	R	R		R				S
Automotive Repair Shop	R	R			R	R	R	R			R		S
Restaurants	R	R			R			R					S
Hillside Development >5,000 ft^2	R	R	R									R	S
Parking Lots	R	R								R(5)			S
Streets, Highways & Freeways	R	R											S

R = Required; select one or more applicable and appropriate BMPs from the applicable steps in Section III.2.A-D, or equivalent as identified in Appendix B.
O = Optional/ may be required by City staff. Applicants are encouraged to incorporate treatment control BMPs and BMPs applicable to individual priority project categories into the project design as appropriate. City staff may require one or more of these BMPs where appropriate.
S = Select one or more applicable and appropriate treatment control BMPs from Appendix B.
(1) Refer to Section III.2.A.
(2) Refer to Section III.2.B.
(3) Priority project categories must apply specific storm water BMP requirements where applicable. Priority projects are subject to the requirements of all priority project categories that apply.
(4) Refer to Section III.2.D.
(5) Applies if the paved area totals >5,000 square feet or has >15 parking spaces and is potentially exposed to urban runoff.

II.1.B. Construction Storm Water BMP Requirements

Projects subject to the construction storm water best management practices requirements must comply with the standards included in Section IV, “Construction Storm Water BMP Performance Standards”, as appropriate given site conditions, season, project design, and construction methods. Each project must be given a priority ranking (high, medium or low) for the construction phase (see Appendix A). The prioritization will determine the inspection frequency by City staff but will not change the construction BMP requirements. Refer to Step 2-B “Construction Storm Water BMPs”. .

II.2 Step 2 – Prepare & Submit Appropriate Plans.

After determining the general categories of storm water requirements that apply to the project in Step 1 (e.g., construction BMPs, standard permanent BMPs, and/or priority project permanent BMPs), refer to the instructions in this step (see below) to determine what analysis and/or specific BMP requirements in Sections III and IV of the Best Management Practice Manual Part II must be provided and/or incorporated into the project[1].

II.2.A. Permanent Storm Water BMPs

Section III, "Permanent Best Management Practices Selection Procedure", contains a process for reviewing the project site location and preliminary project design before progressively identifying and incorporating site design BMPs, source control BMPs, requirements for individual priority project types, and treatment control BMPs into the project design. The procedure is organized so that the level of analysis required is commensurate with the potential pollutant type and quantity, the location of the project relative to sensitive receiving waters, and the type of storm water requirements that apply to a particular project.

II.2.A.i.Standard Requirements. Projects subject to only standard permanent BMP requirements need only to complete the "Identify Pollutants from the Project Area" procedure (Section III.1.A) and then incorporate the requirements in Section III.2.A, "Site Design BMPs", and Section III.2.B, "Source Control BMPs" (requirements 1-15). Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. Analysis of the project's anticipated pollutants of concern must also be included with the project submittal.

II.2.A.ii. Priority Project Requirements. Projects subject to the priority project permanent BMP requirements must complete all of the analyses required in Section III.1, "Identify Pollutants and Conditions of Concern", and incorporate all of the applicable BMP requirements in Section III.2, "Establish Storm Water BMP Requirements" (requirements 1-33). Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. In addition, projects subject to priority project requirements must prepare and submit a Water Quality Technical Report in accordance with Appendix C. Analysis of the project's anticipated pollutants of concern, anticipated pollutants of concern in downstream receiving waters, and conditions of concern must also be included in the Water Quality Technical Report as part of the project submittal.

II.2.B. Construction Storm Water BMPs

Section IV, "Construction Storm Water BMP Performance Standards", describes the construction site management requirements with which contractors must comply. In

[1] Projects are only required to provide applicable BMPs. For example, an attached residential development project subject to the priority project requirements would not have to meet the "private road" requirements in this manual if no private roads were proposed. In addition, the City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable and equally effective.

addition, Section IV lists the performance standards that construction sites must meet and provides a list of erosion control, sediment control, and materials management BMPs for reference. Each project must be given a priority of high, medium or low (see Appendix A). (Note: Prioritization of construction projects will determine the inspection frequency by City staff and may be changed during the construction process based on the potential for pollutants to be discharged from the site.)

II.2.B.i.Construction Projects Over 5 Acres (until March 10, 2003 – see below). Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in Section IV, "Construction Storm Water BMP Performance Standards". If a project disturbs 5 acres or more (to be reduced to 1 acre on March 10, 2003), the applicant must provide a Storm Water Pollution Prevention Plan (SWPPP) identifying all construction BMP requirements required by Section IV, in accordance with Order No. 99-08-DWQ of the State General Permit for Storm Water Discharges Associated with Construction Activity (State General Construction Permit). Consistent with the State General Construction Permit, the City will require that BMPs be installed and maintained for all applicable projects in addition to good housekeeping and site and materials management. Appendix E provides general guidelines for preparation of a SWPPP as well as a more detailed checklist on how to meet the requirements. The City of Encinitas BMP Manual also provides general guidelines and design for construction projects. The City requires that a copy of the NOI and SWPPP be submitted with the plan check package.

II.2.B.ii. Construction Projects Under 5 Acres (until March 10, 2003 – see below). Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in Section IV, "Construction Storm Water BMP Performance Standards." For projects that disturb less than 5 acres (to be reduced to 1 acre on March 10, 2003) and are determined to have a potential to impact water quality during construction, the applicant must provide a Local SWPPP, which identifies all construction BMP requirements required by Section IV with the project submittal. The Local SWPPP shall depict the BMPs to be implemented during construction in order to reduce/eliminate discharge of pollutants into the storm drain conveyance system. The Local SWPPP shall include but not be limited to erosion and sediment control BMPs, good housekeeping measures, and site and materials management. The City of Encinitas BMP Manual also provides general guidelines and design for construction projects.

After preparing plans and supporting documents according to the requirements in this manual, submit plans to the City Engineering for review (See Step 3).

II.3 Step 3 – Determine Adequacy of Proposed Plans.

The City Engineer will review submitted plans for compliance with the applicable storm water requirements contained in this manual. The City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable

and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs and will be requested through plan check comments following the conclusion of a staff review cycle. After all storm water requirements have been approved by the City Engineer, proceed to Step 4 to assure implementation and maintenance of the approved BMPs through permit conditions, plan notes, and if necessary, maintenance agreements.

II.4 Step 4 -- Assure Implementation & Maintenance of Requirements.

Applicants must provide assurances that permanent storm water BMPs will be constructed and permanently maintained throughout the use of a developed site, and that construction BMPs will be implemented and maintained until construction is complete. The summaries below describe how construction and permanent BMP requirements must be assured during permit review processes. After the City Engineer has approved all construction and/or permanent BMPs, refer to Section V, “Implementation & Maintenance Of Requirements” to determine how construction and permanent BMP implementation and maintenance will be assured.

II.4.A. Permanent Storm Water BMPs

For all projects, permanent storm water maintenance requirements shall be incorporated into the project design and be shown on the plans. The maintenance plans for permanent BMPs shall be prepared by a registered civil engineer in the State of California and approved by the City Engineer prior to approval of the discretionary permit and/or final permits (grading, public improvements, building, or other ministerial permits). The permit approval shall include the “Permanent BMP Implementation And Maintenance Requirement” listed in Section V.3, “Implementation & Maintenance Of Requirements”. In addition, permanent BMP maintenance requirements shall be noted on the plans. No modifications of the permanent storm water BMPs are allowed unless the City Engineer has approved the modifications and a permit showing the proposed changes has been obtained from the City Engineer.

II.4.B. Construction BMPs

For projects requiring construction permits, construction BMP requirements shall be incorporated into the project design and shown on the plans prior to the issuance of any permits. Construction BMP maintenance requirements shall also be noted on the plans. Any construction BMP requirements that cannot be shown graphically must be noted on the plans.

III. PERMANENT BEST MANAGEMENT PRACTICES SELECTION PROCEDURE

All projects must complete the analysis required in the subsections of Section III.1.A. below. Priority projects should also complete sections III.1.B and III.1.C.

III.1. Identify Pollutants and Conditions of Concern

III.1.A. Identify Pollutants from the Project Area

Using Table 1, identify the project's anticipated pollutants. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern. Projects meeting the definition of more than one project category shall identify all general pollutant categories that apply.

Table 2. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Project Categories	Sediments	Nutrients	Heavy Metals	Organic Com-pounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P(1)	X
Commercial Development >100,000 ft^2	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft^2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

III.1.B. Identify Pollutants of Concern in Receiving Waters

For priority projects, Identify all the pollutants that the proposed project generates based on Table 2 and list the pollutant on the Water Quality Technical Report.

III.1.C. Identify Conditions of Concern

For priority projects, the following analysis shall be conducted and reported in the project's Water Quality Technical Report:

1. Evaluate the project's conditions of concern in a drainage study report prepared by a registered civil engineer in the State of California, with experience in the science of stream and river generated surface features (i.e., fluvial geomorphology) and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed.
2. As part of the drainage study, the applicant's civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of any future upstream development.
3. The drainage study shall compute rainfall runoff characteristics from the project area including, at a minimum, runoff peak flow rates before and after development, velocities, time of concentration, and retention volume. These characteristics shall be developed for the two-year and 10-year frequency, Type B storm, of six-hour or 24-hour duration (Based on County of San Diego Hydrology Manual, Intensity Duration Design), during critical hydrologic conditions for soil and vegetative cover[2]. The drainage study shall also report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions that minimize impacts on those downstream conditions of concern would be either improved or maintained by the proposed project, satisfactory to the City Engineer, by incorporating the permanent BMP requirements identified in Section III.2, below.

III.2. Establish Permanent Storm Water Best Management Practices

After identifying the project's pollutants of concern, and conditions of concern (for priority projects) in Section III.1, projects subject to standard or priority project requirements shall implement all applicable site design and source control BMPs listed below. Projects subject to priority project requirements must also implement the BMPs applicable to individual priority project categories as well as structural treatment control BMPs. Applicants may employ alternative comparable and equally effective site design and source control BMPs (including requirements applicable to individual priority project categories) that are satisfactory to the City Engineer.

[2]. Design storms can be found at http://www.wrcc.dri.edu/pcpnfreq.html.

Projects are encouraged to address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Mimicking a site's natural hydrologic regime can be pursued by:

- Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the storm water conveyance system, and minimizing clearing and grading.
- Providing runoff storage measures dispersed uniformly throughout a site's landscape through the use of a variety of detention, retention, and runoff practices.
- Implementing on-lot hydrologically functional landscape design and management practices.

These design principles offer an innovative approach to urban storm water management, one that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates storm water controls throughout the urban landscape. Useful resources for applying these principles, referenced in the appendix, include *Start at the Source* (1999), and *Low-Impact Development Design Strategies* (1999) (see Appendix E). Effective source controls offer another strategy to reduce a project's need for treatment. Therefore, projects shall incorporate, where applicable, storm water BMPs into the project design, in the following progression:

- Site Design BMPs
- Source Control BMPs
- BMPs for Individual Priority Project Categories (these are site design and source control BMPs)
- Treatment Control BMPs

The series of best management practices listed in Section III.2 have been organized sequentially to allow the applicant and design professional to incorporate site design BMPs, source control BMPs, and where necessary, requirements applicable to individual priority project categories and treatment control BMPs in this progression.

III.2.A. Site Design BMPs

Maintain Pre-Development Rainfall Runoff Characteristics

Control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion by applying the following concepts:

1. Minimize impervious footprint. (1) Increase building density (number of stories above or below ground); (2) construct walkways, trails, patios, overflow parking lots and alleys, and other low-traffic areas with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials; (3) construct streets, sidewalks, and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised; and (4) minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.
2. Conserve natural areas. (1) Concentrate or cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition; and (2) Use natural drainage systems to the maximum

extent practicable. Refer to the Environmentally Sensitive Lands regulations of the Land Development Code (LDC § 142.01, et. seq.) for more guidance in protecting environmentally sensitive lands.

3. Minimize Directly Connected Impervious Areas. (1) Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm water conveyance system; and (2) where landscaping is proposed, drain impervious parking lots, sidewalks, walkways, trails, and patios into adjacent landscaping.
4. Maximize canopy interception and water conservation. (1) Preserve existing native trees and shrubs; and (2) plant additional native or drought tolerant trees and large shrubs in place of non-drought tolerant exotics.

Protect Slopes and Channels

5. Convey runoff safely from the tops of slopes.
6. Vegetate slopes with native or drought tolerant vegetation.
7. Stabilize permanent channel crossings.
8. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.

III.2.B. Source Control BMPs

Design Outdoor Material Storage Areas to Reduce Pollution Introduction

9. Hazardous materials with the potential to contaminate urban runoff shall be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with rain, runoff, or spillage into the storm water conveyance system; and (2) protected by secondary containment structures such as berms, dikes, or curbs. The storage area shall be paved and sufficiently impervious to contain leaks and spills, and it shall have a roof or awning to minimize direct precipitation within the secondary containment area.

Design Trash Storage Areas to Reduce Pollution Introduction

10. Trash storage areas shall: (1) be paved with an impervious surface, designed not to allow run-on from adjoining areas, and screened or walled to prevent off-site transport of trash; ~~or~~ and, (2) contain attached lids on all trash containers that exclude rain or ~~(3)~~ contain a roof or awning to minimize direct precipitation.

Limited exclusion: detached residential homes.

Use Efficient Irrigation Systems & Landscape Design

11. Employ rain shutoff devices to prevent irrigation during and after precipitation.
12. Design irrigation systems to each landscape area's specific water requirements.
13. Use flow reducers or shutoff valves triggered by a pressure drop to control water loss

in the event of broken sprinkler heads or lines.

Limited exclusion: detached residential homes.

Provide Storm Water Conveyance System Stenciling and Signage

14. Provide concrete stamping, or the equivalent, of all storm water conveyance system inlets and catch basins within the project area with prohibitive language (e.g., “No Dumping – I Live Downstream”), satisfactory to the City Engineer. Stamping may also be required in Spanish.
15. Post signs utilizing prohibitive language and/or graphical icons prohibiting illegal dumping at public access points along channels and creeks within the project area, trailheads, parks, and building entrances.

III.2.C. BMPs Applicable to Individual Priority Project Categories

Where identified in Table 1, the following requirements shall be incorporated into applicable priority projects. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for " g. Equipment Wash Areas” and "h. Parking Areas" into the project design).

a. Private Roads

16. The design of private roadway drainage shall use at least one of the following (for further guidance, see Start at the Source [1999]): (1) rural swale system- street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, and culverts under driveways and street crossings; (2) urban curb/swale system- street sloping to the curb, periodic swale inlets drain to vegetated swale/biofilter; or (3) dual drainage system- precipitation up to 0.6” or rainfall intensity of up to 0.2 inch/hour captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder.

b. Residential Driveways & Guest Parking

17. Driveways shall have one of the following: (1) shared access; (2) wheel strips (paving only under tires); or (3) design allowing the drainage of runoff into landscaping prior to discharging to the storm water conveyance system.
18. Uncovered temporary or guest parking on private residential lots shall be: (1) paved with a permeable surface; or (2) designed to drain into landscaping prior to discharging to the storm water conveyance system.

c. Dock Areas

19. Loading/unloading dock areas shall include the following: (1) covered loading dock areas or design drainage to preclude urban run-on and runoff; and (2) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

d. Maintenance Bays

20. Maintenance bays shall include at least one of the following: (1) indoor repair/ maintenance bays ; or, (2) design to preclude urban run-on and runoff.
21. Maintenance bays shall include a repair/maintenance bay drainage system to capture all wash water, leaks, and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm water conveyance system is prohibited.

e. & f. Vehicle & Equipment Wash Areas

22. Areas for washing/steam cleaning of vehicles and areas for outdoor equipment/accessory washing and steam cleaning shall be self-contained to preclude run-on and run-off, covered with a roof or overhang, and equipped with a clarifier or other pretreatment facility, <u>or properly connected to the sanitary sewer with written permission from the local sewer district.</u>

g. Outdoor Processing Areas

23. Outdoor processing areas shall: (1) cover or enclose areas that would be the most significant source of pollutants; or,(2) slope the area toward a dead-end sump;
24. Grade or berm processing area to prevent run-on from surrounding areas.
25. Installation of storm drains in areas of equipment repair is prohibited.

h. Surface Parking Areas

26. Where landscaping is proposed in surface parking areas (both covered and uncovered), incorporate landscape areas into the drainage design.
27. Overflow parking (parking in excess of the project's minimum parking requirements) may be constructed with permeable paving.

i. Non-Retail Fueling Areas

Non-Retail fueling areas shall be designed with the following:

28. Fuel dispensing area that is: (1) paved with Portland cement concrete or equivalent smooth impervious surface (asphalt concrete is prohibited); (2) designed to extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less; (3) sloped to prevent ponding; (4) separated from the rest of the site by a grade break that prevents run-on of urban runoff; and (5) designed to drain to the project's treatment control BMP(s) prior to discharging to the storm water conveyance system.
29. Overhanging roof structure or canopy that is: (1) equal to or greater than the area within the fuel dispensing area's grade break; and (2) designed not to drain onto or across the fuel dispensing area.

j. Hillside Landscaping

30. Hillside areas disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, to the satisfaction of the

City Engineer.

III.2.D. Treatment Control BMPs

31. Where identified in Table 1, and after site design and source control BMPs have been incorporated into the project, applicants of priority projects shall design a single or combination of treatment control BMPs designed to infiltrate, filter, and/or treat runoff from the project footprint to one of the "Numeric Sizing Treatment Standards" listed in Table 3, below. Applicants must use the Structural Treatment BMP Selection Procedure outlined in Section III.2.D.i below to select appropriate treatment control BMPs. Applicants are encouraged to design projects so that runoff is treated by site design BMPs such as rooftop runoff treated in landscaping, so that it may be applied towards the numeric sizing treatment standards, satisfactory to the City Engineer. In addition, applicants are encouraged to apply a "drainage basin approach" in meeting the treatment requirements. Treating entire hydrologic sub-drainages, which often extend off-site, is an equitable, environmentally sound regional solution that applies treatment requirements to hydrologically defined areas, rather than legally defined parcels. When integrated with other projects, this approach can provide a more efficient and cost effective method of treatment by locating fewer, more effective BMPs to treat entire sub-drainages once, like pieces of a puzzle. In all instances, structural treatment BMP(s) may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following criteria:

(a) All structural treatment control BMPs shall infiltrate, filter, and/or treat the required runoff volume or flow prior to discharging to any receiving water body supporting beneficial uses, including, but not limited to, wetlands originally constructed as mitigation for habitat loss and receiving waters that contain structural BMPs. A BMP may not be constructed in these areas unless the use is approved by the Regional Water Quality Control Board;

(b) Multiple post-construction structural treatment control BMPs for a single priority project shall collectively be designed to comply with the numeric sizing treatment standards;

(c) Shared BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;

(d) Interim storm water BMPs that provide equivalent or greater treatment than is required may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

e) If mechanical facilities are proposed for structural treatment of the storm water, the applicant shall provide facilities that are easy to maintain and are capable of removing all pollutants of concerns generated by the proposed priority project. At least 50% of the required structural treatment capacity shall be provided using natural treatment media such as a grassy swale or vegetated detention pond.

Table 3. Numeric Sizing Treatment Standards.

Table 3. Numeric Sizing Treatment Standards.

Volume

1. Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) :

the volume of runoff produced from a 24-hour 85th percentile storm event. The required detention volume shall be calculated based on the following formula. The detention volume shall be designed to discharge the detained storm water in 24 to 48 hours.

Detention Volume, V = A a C P
A= Area, C= Co-efficient of Runoff, P=0.6 inch 85th percentile precipitation event

i. Regression constant, a = 1.299 [WEF, Tbl 5.4, p.177]

OR

Flow

2.

Natural filtration system shall be designed to effectively treat storm water and prevent erosion. WEF Manual of Practice No. 23 / ASCE Manual and Report on Engineering Practice No. 87 should be used for sizing of natural filtration system. City Engineer may approve other flow based design approach at his/her own discretion.

i. Natural filtration systems such as grassy swales, desilting ponds, wet ponds, and other bio-filtration systems should be used for storm water treatment. Natural storm water treatment systems are normally capable of removing a wider range of pollutants than mechanical systems. Natural systems are also less prone to failure and require less maintenance. If mechanical filtration is proposed, the filtration system must be capable of removing all pollutants generated by the proposed project and at least 50 percent of the required treatment capacity shall be provided using a natural filtration system. The City Engineer may waive the minimum 50 percent natural filtration requirement for redevelopment projects and road construction projects.

III.2.D.i. Structural Treatment BMP Selection Procedure

Priority projects shall select a single or combination of treatment BMPs from the categories in Table 4 that maximize pollutant removal for the particular pollutant(s) of concern. Any pollutants the project is expected to generate should be given top priority in selecting treatment BMPs.

To select a structural treatment BMP using the Structural Treatment Control BMP Selection Matrix (Table 4), each priority project shall implement a single or combination of structural treatment BMPs from Table 4 that are effective for pollutant removal of the identified pollutants of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 1).

Alternative storm water BMPs not identified in Table 4 may be approved at the discretion of the City Engineer, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 4.

Table 4. Structural Treatment Control BMP Selection Matrix.

Pollutant of Concern	***Treatment Control BMP Categories***						
	Biofilters	Detention Basins	Infiltration Basins(1)	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separator Systems(2)
Sediment	M	H	H	H	L	H	M
Nutrients	L	M	M	M	L	M	L
Heavy Metals	M	M	M	H	L	H	L
Organic Compounds	U	U	U	U	L	M	L
Trash & Debris	L	H	U	U	M	H	M
Oxygen Demanding Substances	L	M	M	M	L	M	L
Bacteria	U	U	H	U	L	M	L
Oil & Grease	M	M	U	U	L	H	L
Pesticides	U	U	U	U	L	U	L

(1) Including trenches and porous pavement.
(2) Also known as hydrodynamic devices and baffle boxes.

L: Low removal efficiency
M: Medium removal efficiency
H: High removal efficiency
U: Unknown removal efficiency

Sources: *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (1993), *National Stormwater Best Management Practices Database* (2001), and *Guide for BMP Selection in Urban Developed Areas* (2001).

III.2.D.ii. Restrictions on the Use of Infiltration Treatment BMPs

32. Treatment control BMPs that are designed to primarily function as infiltration devices shall meet the following conditions (these conditions do not apply to treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices, such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.): (1) urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants such as sedimentation or filtration prior to infiltration; (2) all dry weather flows shall be diverted from infiltration devices except for those non-storm water discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to storm water conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and de-chlorinated swimming pool discharges; (3) pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used; (4) the vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet. Where groundwater does not support beneficial uses,

this vertical distance criterion may be reduced, provided groundwater quality is maintained; (5) the soil through which infiltration is to occur shall have physical and chemical characteristics that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses; (6) the horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as determined appropriate by the City Engineer.

*III.2.D.*iii. *Restrictions on the Use of Mechanical Treatment BMPs*

33. Biofilters, desilting ponds, wet ponds, and other natural storm water treatment and filtration systems should be used for storm water pollution control. Natural storm water treatment systems are normally capable of removing a wider range of pollutants than to mechanical systems. Natural filtration facilities are also less prone to failure and require less maintenance than mechanical systems. If mechanical treatment is proposed the system must be capable of removing all pollutants generated by the proposed project and at least 50 percent of the required treatment capacity shall be provided using a natural treatment system. City Engineer may waive the minimum 50 percent natural treatment requirement at his/her own discretion if the project proponent demonstrate proven adequacy of the proposed mechanical treatment system. Engineer may require a testing, monitoring and reporting program for mechanical treatment systems secured with adequate material and performance bond, in order to assure proper performance and eliminate the potential for downstream impact.

<u>Structural Treatment Limited Exclusions</u>

(a.) Proposed restaurants where the land area for development or redevelopment is less than 5,000 square feet are excluded from the numerical sizing criteria requirements listed in Table 3.

(b.) Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to priority project requirements, the numeric sizing criteria apply only to the addition, not to the entire development.

IV. CONSTRUCTION STORM WATER BMP PERFORMANCE STANDARDS

Those projects that have been determined to require construction BMPs in Steps 1 and 2 of Section II, must identify the construction BMPs to be implemented in accordance with the performance standards in this section. The construction BMPs must be identified in a Storm Water Pollution Prevention Plan or Local SWPPP for projects disturbing more than or less than 5 acres, respectively (to be reduced to 1acre on March 10, 2003). These plans must be prepared in accordance with the guidelines in Appendix D.

It is the responsibility of the property owner and/or contractor to select, install, and maintain appropriate BMPs. A list of construction BMPs is provided for reference in Appendix E. BMPs must be installed in accordance with an industry recommended standard or in accordance with the requirements of the State General Construction Permit. More information about BMPs is provided in the Model Construction Program for San Diego Copermittees, the City of Los Angeles "Reference Guide for Storm water Best Management Practices", State Storm Water BMP Manuals, and Caltrans Standard BMP handbook.

This section of the BMP Manual establishes the minimum BMPs for construction sites in the City of Encinitas. These minimum BMPs are established as directed in the City's Storm Water Municipal NPDES Permit, issued by the Regional Water Quality Control Board (Order No. 2001-01). In response to the Municipal NPDES Permit, the City has revised the Storm Water Ordinance (Storm Water Management Ordinance, EMC Chapter 64.08) and the Grading Ordinance (Grading, Erosion, and Sediment Control Ordinance, EMC Chapter 23.24). All sites must, at all times, comply with the requirements of both of these ordinances.

Best management practices are to be shown on building plans, grading plans, and improvement plans. They are generally presented in the form of erosion and sediment control plans. The following section presents the minimum BMPs that must be included in these plans. In addition, the City requires that either a certification of compliance with the California General Permit for construction Activities (NOI) or a Storm Water Management Plan Checklist be submitted for all projects. This requirement is presented in Section 3 below. Plans will be reviewed by Engineering staff during plan check and construction sites will be inspected in order to verify compliance with the minimum BMPs outlined herein, in the Grading Ordinance, and in the Storm Water Management Ordinance. Failure to comply with these regulations can result in Notice of Violations, Stop Work Orders, Citations, and fines.

BMP requirements differ between the wet season (Oct. 1 – Apr. 30) and the dry season (May 1 – Sept. 30), the type of the project and topography of the site, as described below.

IV.1. Site Management Requirements

Construction is a dynamic operation where changes are expected. Storm water BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain effectiveness and may require relocation, revision, and re-installation, particularly as project grading progresses. Therefore, owner/contractor self-inspections are required. They shall be performed by the owner's/contractor's Qualified Contact Person specifically

trained in storm water pollution prevention site management and storm water BMPs, including the installation and maintenance of sediment and erosion control measures. Additional qualified persons may assist with the inspection activities under the direction of the Qualified Contact Person. A Qualified Contact Person is required for all sites during both wet and dry weather conditions.

There are four primary purposes of the self-inspections conducted by owners and contractors:

- To ensure that the owners/contractors take full responsibility for managing storm water pollution caused by their activities.
- To ensure that storm water BMPs are properly documented and implemented and are functioning effectively.
- To identify maintenance (e.g., sediment removal) and repair needs.
- To ensure that the project proponents implement their storm water management plans.

A self-inspection checklist, noting date, time, conditions, and inspection date, must be kept on-site and made available for inspection, if requested. Self-inspections must be performed by a Qualified Contact Person according to the following schedule:

- Daily forecasting at all times
- At 24-hour intervals during extended rainfall events
- Daily evaluations as earth moving/grading is being conducted during the wet season
- Weekly (every 7 days) in the dry season as earth moving/grading is progressing

Storm water pollution prevention site management requirements include:

A. A qualified person who is trained and competent in the use of BMPs shall be on site daily, although not necessarily full time, to evaluate the conditions of the site with respect to storm water pollution prevention. This qualified contact person shall represent the contractor/ owner on storm water issues.
B. The qualified person shall implement the conditions of the Storm Water Pollution Prevention Plan, contract documents and/or local ordinances with respect to erosion and sediment control and other waste management regulations. They shall be kept on site and available to the City inspector at all times.
C. The qualified person is responsible for monitoring the weather and implementation of any emergency plans as needed. The weather shall be monitored on a 5-day forecast plan and a full BMP protection plan shall be activated when there is a 40% chance of rain.
D. The qualified person is responsible for overseeing any site grading and operations and evaluating the effectiveness of the BMPs. This person shall modify the BMPs as necessary to keep the dynamics of the site in compliance. This person or other qualified persons are responsible for checking the BMPs routinely for maintenance and documenting the BMPs being implemented.

IV.2. Performance Standards

The City Engineer will evaluate the adequacy of the owner's/contractor's site management for storm water pollution prevention, inclusive of BMP implementation, on construction sites based on performance standards for storm water BMPs. Poor BMP practices shall be challenged. Performance standards shall include:

A. No measurable increase of pollution (including sediment) in runoff from the site.
B. No slope erosion.
C. Water velocity moving offsite must not be greater than pre-construction levels and shall be discharged in a fashion that will not increase erosion potential downstream.

A site will be considered inactive if construction activities have ceased for a period of 7 or more consecutive calendar days. At any time of year, an inactive site must be fully protected from erosion and discharges of sediment. It is also the owner's/contractor's responsibility at both active and inactive sites to implement a plan to address all potential non-storm water discharges.

Regardless of any inspections conducted by the City, property owners or contractors are required to prevent any construction-related materials, wastes, spills or residues from entering a storm water conveyance system.

IV.3. Minimum Best Management Practices

Construction sites are placed in a category of high, medium and low depending on their threat to water quality to local receiving water bodies. These categories are established based primarily on soil erosion potential, site slope, site size and type, the sensitivity of receiving waters and proximity to environmentally sensitive areas. Each site's category is established by City staff based on a review of the plans, the site, or site location.

Required minimum BMPs have been established for each construction site category. If particular minimum BMPs are infeasible at any specific site, the City will require the implementation of other equivalent BMPs. The City may also require additional site specific BMPs as necessary to comply with the Municipal Permit, Storm Water Management Ordinance, and the Grading Ordinance.

<u>IV.3.A. Dry Season Requirements (May 1 through September 30):</u>
Medium and Low Priority Sites:

A. Perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
B. Sediment control BMPs must be installed and maintained to comply with performance standards (above).
C. BMPs to control sediment tracking must be installed and maintained at entrances/exits to comply with performance standards (above).
D. Material needed to install standby BMPs necessary to completely protect the exposed portions of the site from erosion and to prevent sediment discharges, must be stored on site. Areas that have already been protected from erosion using physical stabilization or established vegetation stabilization BMPs as described below are not considered to be "exposed" for purposes of this

requirement.

E. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted, 40% chance of rain). On request, the owner/contractor must provide proof of this capability that is acceptable to the City Engineer.

F. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
The area that can be cleared or graded and left exposed at one time is limited to the amount of acreage that the owner/contractor can adequately protect prior to a predicted rainstorm. Requirement "G" will require grading to be phased at larger sites. For example, it may be necessary to deploy erosion and sediment control BMPs in areas that are not completed but are not actively being worked before additional grading is done.

High Priority Sites (<u>in addition</u> to A. through G.):

G. Site specific BMPs that:
   1. remove pollutants from the construction site discharge,
   2. maintain or reduce the peak flow from the site during a rain event, and
   3. comply with BMPs outlined in the project SWPPP, if applicable.

<u>IV.3.B Rainy Season Requirements (October 1 through April 30):</u>

Medium and Low Priority Sites:

A. Perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
B. Sediment control BMPs must be installed and maintained to comply with performance standards (above).
C. BMPs to control sediment tracking must be installed and maintained at site entrances/exits to comply with performance standards (above).
D. Material needed to install standby BMPs necessary to completely protect the exposed portions of the site from erosion, and to prevent sediment discharges, must be stored on site. Areas that have already been protected from erosion using physical stabilization or established vegetation stabilization BMPs as described below are not considered to be "exposed" for purposes of this requirement.
E. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted, 40% chance of rain). On request, the owner/contractor must provide proof of this capability that is acceptable to the City Engineer.
F. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The

owner/contractor may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

G. The area that can be cleared or graded and left exposed at one time is limited to the amount of acreage that the owner/contractor can adequately protect prior to a predicted rainstorm.
H. Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
I. Perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
J. Adequate physical or vegetation erosion control BMPs must be installed and established for all graded areas prior to the start of the rainy season. These BMPs must be maintained throughout the rainy season. If a selected BMP fails, it must be repaired and improved, or replaced with an acceptable alternate as soon as it is safe to do so. The failure of a BMP shows that the BMP, as installed, was not adequate for the circumstances in which it was used and shall be corrected or modified as necessary. Repairs or replacements must therefore put a more effective BMP in place.
K. All vegetation erosion control must be established prior to the rainy season to be considered as a BMP.
L. The amount of exposed soil allowed at one time shall not exceed that which can be adequately protected by deploying standby erosion control and sediment control BMPs prior to a predicted rainstorm.
M. A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for 7 or more calendar days. The ability to deploy standby BMP materials is not sufficient for these areas. BMPs must actually be deployed.

High Priority Sites (<u>in addition</u> to A. through M.):

N. Site specific BMPs that:
   1. remove pollutants from the site discharge for priority project
   2. maintain or reduce the peak flow from the construction site during a rain event for priority projects, and
   3. comply with BMPs outlined in the project SWPPP, if applicable.

V. IMPLEMENTATION & MAINTENANCE OF REQUIREMENTS

After all project BMPs have been approved by the City Engineer, applicants must ensure implementation and maintenance of the BMPs according to the processes outlined in the applicable sections for projects requesting any development permits. In addition, any project that will require a "General NPDES Permit for Storm Water Discharges Associated with Industrial Activities" shall include the following note on the plans and condition in the permit/approval:

Industrial NPDES Permit Requirement

"The Permittee or designee (or contractor for public projects) shall provide evidence of coverage under the General Industrial National Pollutant Discharge Elimination System Permit, in the form of a Notice of Intent (NOI) filed with the State Water Resources Control Board, prior to the issuance of any construction permits."

V.1. Post Construction BMPs, SUSMP

V.1.i. Permanent BMP Requirements. Applicants proposing projects that include permanent BMPs must prepare a maintenance agreement, satisfactory to the City Engineer and in conformance with the program outlined in the "Permanent Storm Water BMP Maintenance Agreement Requirements". Storm Water BMP Maintenance Agreement shall be approved prior to the issuance of any permits. The permanent BMPs shall be graphically shown on the plans where possible, and made a condition of the project's permit/approval. The permanent BMPs operation and maintenance requirements (O & M plan discussed below) shall also be noted on the plans and made a condition of the project's permit/approval.

V.2. Construction Permits

V.2.i. Construction Permits for Projects Under 5 Acres (to be reduced to 1 acre on March 10, 2003). Projects proposing to disturb less than 5 acres (1 acre on March 10, 2003) during construction shall include construction requirements, where possible, on the plans. Any remaining construction BMPs that cannot be shown graphically on the plans shall be either noted on, or stapled to, the plans (Local SWPPP) and made a condition of the permit. The project's construction priority ranking (see Appendix D) must also be noted on the construction plans. The applicant and contractor are responsible to maintain the construction BMPs throughout the construction and any construction stoppage period. Construction BMPs maintenance as well as implementation of the SWPPP and Local SWPPP shall continue until construction is completed and post construction BMPs are well established.

V.2.ii. Construction Permits for Projects Over 1 Acre. Projects proposing to disturb more than 1 acre during construction shall include all construction BMPs in a Storm Water Pollution Prevention Plan, prepared in accordance with Appendix D, "Storm Water Pollution Prevention Plan Guidelines." The construction BMPs shall also be shown on the plans, where possible. Any remaining construction BMPs that cannot

be shown graphically on the plans shall be either noted or stapled to the plans and made a condition of the permit. The project's construction priority ranking (see Appendix D) must also be noted on the construction plans. The applicant and contractor are responsible to maintain the construction BMPs throughout the construction and any construction stoppage period. Construction BMPs maintenance as well as implementation of the SWPPP and Local SWPPP shall continue until construction is completed and post construction BMPs are well established.

V.3. Permanent BMP Maintenance Agreement Requirements

Applicants shall propose a maintenance agreement assuring all permanent BMPs will be maintained throughout the "use" of a project site, satisfactory to the City Engineer (see Appendix G for a list of potential mechanisms). For discretionary projects, the City-approved method of permanent BMP maintenance shall be incorporated into the project's permit and shall be consistent with permits issued by resource agencies before decision-maker approval of discretionary actions. For projects requiring only ministerial permits, the City-approved method of permanent BMP maintenance shall be incorporated into the permit conditions before the issuance of any construction permits. In all instances, the applicant shall provide proof of execution of a City-approved method of maintenance repair and replacement before the issuance of construction approvals.

For all properties, the verification mechanism will include the project proponent's signed statement, as part of the project application, accepting responsibility for all permanent BMP maintenance, repair and replacement.

The maintenance agreement shall include the following:

1. Operation & Maintenance (O&M) Plan: The applicant shall include an Operation & Maintenance (O&M) plan, prepared satisfactory to the City Engineer, with the approved maintenance agreement, which describes the designated responsible party to manage the storm water BMP(s), employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities (including maintenance of storm water conveyance system stamps), copies of resource agency permits, and any other necessary activities. At a minimum, maintenance agreements shall require the applicant to provide inspection and servicing of all permanent treatment BMPs on an annual basis. The project proponent or City-approved maintenance entity shall complete and maintain O&M forms to document all maintenance requirements. Parties responsible for the O&M plan shall retain records for at least 5 years. These documents shall be made available to the City Engineer for inspection upon request at any time.

2. Access Easement/Agreement: As part of the maintenance mechanism selected below, the applicant shall execute an access easement that shall be binding on the land throughout the life of the project, until such time that the permanent treatment BMP requiring access is replaced, satisfactory to the City Engineer.

VI. RESOURCES & REFERENCES

APPENDIX A

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the following checklist to determine your project's permanent and construction storm water best management practices requirements. This form must be completed and submitted with your permit application.

Section 1. Permanent Storm Water BMP Requirements:
If any answers to Part A are answered "Yes," your project is subject to the "Priority Project Permanent Storm Water BMP Requirements," and "Standard Permanent Storm Water BMP Requirements" in Section III, "Permanent Storm Water BMP Selection Procedure" in the *Best Management Practice Manual Part II*. If all answers to Part A are "No," and any answers to Part B are "Yes," your project is only subject only to the Standard Permanent Storm Water BMP Requirements. If every question in Part A and B is answered "No," your project is exempt from permanent storm water requirements.

Part A: Determine Priority Project Permanent Storm Water BMP Requirements.

Does the project meet the definition of one or more of the priority project categories?*	**Yes**	**No**
1. Detached residential development of 10 or more units		
2. Attached residential development of 10 or more units		
3. Commercial development greater than 100,000 square feet		
4. Automotive repair shop		
5. Restaurant		
6. Steep hillside development greater than 5,000 square feet		
7. Project discharging to receiving waters within Environmentally Sensitive Areas		
8. Parking lots greater than or equal to 5,000 ft^2 or with at least 15 parking spaces, and potentially exposed to urban runoff		
9. Streets, roads, driveways, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater		
* Refer to the definitions section in the *Storm Water Standards* for expanded definitions of the priority project categories.		
Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if one or more of the criteria in Part A is met. If all answers to Part A are "No", continue to Part B.		

Part B: Determine Standard Permanent Storm Water Requirements.

Does the project propose:	**Yes**	**No**
1. New impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks.		
2. Reconstruction of the existing impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks in excess of 1000 square feet.		
3. Permanent structures within 100 feet of any natural water body?		
4. Trash storage areas?		
5. Liquid or solid material loading and unloading areas?		
6. Vehicle or equipment fueling, washing, or maintenance areas?		

Does the project propose:	Yes	No
7. Require a General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except construction)?*		
8. Commercial or industrial waste handling or storage, excluding typical office or household waste?		
9. Any grading or ground disturbance during construction?		
10. Any new storm drains, or alteration to existing storm drains that reduces natural storm water treatment?		
*To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/stormwtr/industrial.html		

Section 2. Construction Storm Water BMP Requirements:

If the answer to question 1 of Part C is answered "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Storm Water Pollution Prevention Plan (SWPPP). If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Local SWPPP . If every question in Part C is answered "No," your project is exempt from any construction storm water BMP requirements. If any of the answers to the questions in Part C are "Yes," complete the construction site prioritization in Part D, below.

Part C: Determine Construction Phase Storm Water Requirements.

Would the project meet any of these criteria during construction?	Yes	No
1. Is the project subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities?		
2. Does the project propose grading or soil disturbance?		
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?		
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as, paints, solvents, concrete, and stucco)?		

Part D: Determine Construction Site Priority

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans, and included in the SWPPP or Local SWPPP. Indicate the project's priority in one of the check boxes using the criteria below, and existing and surrounding conditions of the project, the type of activities necessary to complete the construction and any other extenuating circumstances that may pose a threat to water quality. The City reserves the right to adjust the priority of the projects both before and during construction. [Note: The construction priority does NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority does affect the frequency of inspections that will be conducted by City staff. See Section IV.1 for more details on construction BMP requirements.]

☐ *A) High Priority*

1) Projects where the site is 50 acres or more and grading will occur during the wet season
2) Projects 5 acres or more and tributary to an impaired water body for sediment (e.g., San Elijo Lagoon)
3) Projects 5 acres or more within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an environmentally sensitive area
4) Projects, active or inactive, adjacent or tributary to sensitive water bodies

☐ *B) Medium Priority*

1) Capital Improvement Projects where grading occurs, however a Storm Water Pollution Prevention Plan (SWPPP) is not required under the State General Construction Permit (i.e., water and sewer replacement projects, intersection and street re-alignments, widening, comfort stations, etc.)
2) Permit projects in the public right-of-way where grading occurs, however SWPPPs are not required, such as installation of sidewalk, substantial retaining walls, curb and gutter for an entire street frontage, etc.
3) Permit projects on private property where grading permits are required (i.e., cuts over 5 feet, fills over 3 feet), however, Notice Of Intents (NOIs) and SWPPPs are not required.

☐ *C) Low Priority*

1) Capital Projects where minimal to no grading occurs, such as signal light and loop installations, street light installations, etc.
2) Permit projects in the public right-of-way where minimal to no grading occurs, such as pedestrian ramps, driveway additions, small retaining walls, etc.
3) Permit projects on private property where grading permits are not required, such as small retaining walls, single-family homes, small tenant improvements, etc.

APPENDIX B

EXAMPLE PERMANENT STORM WATER BEST MANAGEMENT PRACTICES

The following are a list of BMPs may be used to minimize the introduction of pollutants of concern that may result in significant impacts to receiving waters. Other BMPs approved by the City Engineer as being equal or more effective in pollutant reduction than comparable BMPs identified below are acceptable. All BMPs must comply with local zoning and building codes and other applicable regulations.

Site Design BMPs

<u>Minimizing Impervious Areas</u>

- Reduce sidewalk widths
- Incorporate landscaped buffer areas between sidewalks and streets.
- Design residential streets for the minimum required pavement widths

- Minimize the number of residential street cul-de-sacs and incorporate landscaped areas to reduce their impervious cover.
- Use open space development that incorporates smaller lot sizes
- Increase building density while decreasing the building footprint
- Reduce overall lot imperviousness by promoting alternative driveway surfaces and shared driveways that connect two or more homes together
- Reduce overall imperviousness associated with parking lots by providing compact car spaces, minimizing stall dimensions, incorporating efficient parking lanes, and using pervious materials in spillover parking areas

Increase Rainfall Infiltration

- Use permeable materials for private sidewalks, driveways, parking lots, and interior roadway surfaces (examples: hybrid lots, parking groves, permeable overflow parking, etc.)
- Direct rooftop runoff to pervious areas such as yards, open channels, or vegetated areas, and avoid routing rooftop runoff to the roadway or the urban runoff conveyance system

Maximize Rainfall Interception

- Maximizing canopy interception and water conservation by preserving existing native trees and shrubs, and planting Additional native or drought tolerant trees and large shrubs.

Minimize Directly Connected Impervious Areas (DCIAs)

- Draining rooftops into adjacent landscaping prior to discharging to the storm water conveyance system
- Draining parking lots into landscape areas co-designed as biofiltration areas
- Draining roads, sidewalks, and impervious trails into adjacent landscaping

Slope and Channel Protection

Use of natural drainage systems to the maximum extent practicable

- Stabilized permanent channel crossings
- Planting native or drought tolerant vegetation on slopes
- Energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined Channels

Maximize Rainfall Interception

- Cisterns
- Foundation planting

Increase Rainfall Infiltration

- Dry wells

Source Control BMPs

- Storm water conveyance system stenciling and signage
- Outdoor material and trash storage area designed to reduce or control rainfall runoff
- Efficient irrigation system

Treatment Control BMPs

Biofilters
- Grass swale
- Grass strip
- Wetland vegetation swale
- Bioretention

Detention Basins
- Extended/dry detention basin with grass lining
- Extended/dry detention basin with impervious lining

Infiltration
- Infiltration basin
- Infiltration trench

Pervious Paving
- Porous asphalt
- Porous concrete
- Porous modular concrete block

Wet Ponds and Wetlands
- Wet pond (permanent pool)
- Constructed wetland

Drainage Inserts
- Catch basin/storm drain inserts
- Catch basin screens

Filtration Systems
- Media filtration
- Sand filtration

Hydrodynamic Separation Systems

- Swirl concentrator
- Cyclone separator
- Baffle boxes

APPENDIX C

WATER QUALITY TECHNICAL REPORT GUIDELINES

Purpose

To describe the permanent storm water Best Management Practices (BMPs) that will be incorporated in the project to mitigate the impacts of urban runoff due to the development.

Minimum Requirements

- Prepared by Registered Civil Engineer

Organization & Content

Table of Contents
Vicinity Map
Project Description
- Narrative of project activities

Site Map
- Entire property included on one map (use key map if multi-sheets)
- Drainage areas and direction of flow
- Private storm drain system(s)
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing and proposed storm water controls
- Location of “impervious” areas- paved areas, buildings, covered areas
- Locations where materials would be directly exposed to storm water
- Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)
- Areas of potential soil erosion (including areas downstream of project)

Pollutants and Conditions of Concern
- Project located in which Watershed
- Impaired water bodies downstream of the project and impairment
- Impacts to hydrologic regime
- Pollutants based upon land use

Types of BMPs:

Site Design BMPs
- Reduce impervious surfaces
- Conserve natural Areas
- Minimize directly connected areas
- Protect slopes and channels

Source Control BMPs

- Inlet stenciling and signage
- Materials Storage
- Trash storage
- Efficient irrigation
- Other controls (as applicable)

Structural Treatment BMPs

- Basis for selection (include targeted pollutants, justification, and alternative analysis)
- Design criteria (include calculations)
- Pollutant removal information (other than vendor specifications)
- Literature References

Maintenance (i.e. identify the responsible parties who will implement the Best Management Practices)

- Maintenance schedule
- Maintenance Costs
- Qualifications of maintenance personnel

Drainage Study

APPENDIX D

STORM WATER POLLUTION PREVENTION PLAN/LOCAL SWPPP GUIDELINES

At a minimum, the Storm Water Pollution Prevention Plan (SWPPP) or Local SWPPP, whichever is required, must cover the areas listed below. These requirements do not relieve the owner of the state SWPPP requirement; owners should also follow all applicable state SWPPP guidelines. The SWPPP must be kept on site and made available upon request of a representative of the City of Encinitas. Projects that are also required to obtain a general construction National Pollutant Discharge Elimination System (NPDES) Permit are encouraged to visit the State Water Resource Control Board's website for permit application instructions, NOI and NOT forms and guidance in preparing a Storm Water Pollution Prevention Plan (go to: www.swrcb.ca.gov/stormwtr/docs/constpermit).

Planning and Organization

- Identify the pollution prevention team members who will maintain and implement the SWPPP or Local SWPPP.
- If applicable, incorporate or reference the appropriate elements of other regulatory requirements.

Site Map

Features displayed on the map must include:

- An outline of the entire property
- Drainage areas on the property and direction of flow
- Areas of soil erosion
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing storm water controls (oil/ water separators, sumps, etc.)
- Location of "impervious" areas- paved areas, buildings, covered areas
- Locations where materials are directly exposed to storm water
- Locations where toxic or hazardous materials have spilled in the past
- Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)

List of Significant Materials

List materials stored and handled at the site. Include the location and typical quantities.

Description of Potential Pollutant Sources

- Provide a narrative description of the site's activities and list the potential pollutant sources and the potential pollutants that could be discharged in storm water discharges from each activity.
- List non-storm water discharges including the source, quantity, frequency, and characteristics of the discharges and drainage area.

Assessment of Potential Sources

Describe which activities are likely to be sources of pollution in storm water and which pollutants are likely to be present in storm water discharges.

Best Management Practices

Describe the BMPs that will be implemented at the site for each potential pollutant and its source.

APPENDIX E

EXAMPLE CONSTRUCTION BEST MANAGEMENT PRACTICES

An effective storm water management plan is one in which all potential pollutants are recognized and a plan to control/prevent them is designed. The plan must include a combination of BMPs to target each potential pollutant. This should include the following control measures.

a) Planning and scheduling
b) Erosion Control
c) Flow Control
d) Sediment Control
e) Waste Management

A) Planning and Scheduling

Grading and clearing should be phased to reduce the amount and the duration of sediment exposure. If possible schedule grading during the dry season (Mid-April through October) particularly avoiding December through February.

Consult with the National Weather Service at (619) 289-1212 to determine the forecast during the wet season. Plan to have erosion control methods in place 24 hours prior to a rain event.

B) Erosion Control

1) Physical Stabilization

a) Geotextiles/Mats – Used for temporary or permanent soil stabilization, and are especially effective on steep slopes and channels. Geotextiles and mats are used to reduce erosion from rainfall impact, hold soil in place, and absorb and hold moisture near the soil surface.

b) Hydraulic Mulch –. Hydraulic mulching is an erosion control measure that consists of applying a mixture of shredded wood fiber and tackifier with hydromulching equipment. Mulches protect the soil from rainfall impact or wind.

c) Soil Binders – Soil binding consists of applying and maintaining polymeric or lignin sultanate soil stabilizers. Soil binders typically are applied to disturbed areas requiring temporary protection from erosion.

d) Hydroseeding – Hydroseeding consists of applying a mixture of wood fiber, seed, fertilizer and stabilizing emulsion with hydromulch equipment. It is typically applied to disturbed areas requiring temporary protection against erosion.

2) Vegetation Stabilization

a) Preservation of existing vegetation
b) Seeding and planting
c) Establish permanent landscaping

C) Flow Controls

Earth Dikes– These are structures that intercept, divert, and convey surface runoff, generally sheet flow, to a sediment-trapping device or stabilized outlet.

Drainage Swales & Lined Ditches – Divert off-site runoff around the construction site, divert runoff from stabilized areas around disturbed areas, and direct runoff into sediment basins or traps.

Outlet Protection/Velocity Dissipation Devices – Physical devices composed of rock, grouted riprap, or concrete rubble placed at pipe outlets to prevent scour and reduce the velocity and/or energy of exiting storm water flows. Outlet protection is needed where discharge velocities and energies at the outlets of culverts, conduits or channels are sufficient to erode the immediate downstream reach

Slope Drains – A slope drain is a temporary pipe or lined channel to drain the top of a slope to a stable discharge point at the bottom. Slope drains are usually lined ditches used to intercept and direct surface flow away from slope areas to protect cut or fill slopes. The slope drain is applicable for any construction site where concentrated surface runoff can accumulate and must be conveyed down the slope in order to prevent erosion.

D) Sediment Control

Storm Drain Inlet Protection – Devices used at storm drain inlets to detain and/or filter sediment-laden runoff to allow sediment to settle and/or to filter sediment.

Silt Fence – A silt fence is a temporary barrier of permeable fabric designed to intercept and slow the flow of sediment-laden sheet flow runoff from exposed, erodible soil. Silt fences may be used for perimeter control, placed upstream of the point(s) of discharge of sheet flow from a site. They may also be used as interior controls below disturbed areas where runoff may occur in the form of sheet or rill erosion, and perpendicular to minor swales or ditch lines.

Sandbag Barrier – A sandbag barrier is a temporary sediment barrier consisting of stacked sandbags designed to intercept and slow the flow of sediment-laden sheet flow runoff. Sandbag barriers allow sediment to settle from runoff before water leaves the construction site.

Fiber Rolls – A fiber roll consists of materials rolled or bound into a roll and placed on a slope to intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide some removal of sediment from the runoff.

Gravel Bag Berm – A gravel bag consists of gravel bags that are installed end-to-end to form a barrier across a slope to intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide some removal of sediment from the runoff.

Check Dam – A check dam is a small device constructed of rock or sandbags placed across a natural or man-made channel or drainage ditch. Restricting the velocity of flow in the ditch reduces erosion of the drainage ditch.

Desilting Basin – Sediment-laden runoff is directed to a designed temporary basin that allows sediment to settle out before the runoff is discharged. A desilting basin is generally less extensive than a Sediment Basin.

Sediment Trap – A sediment trap is a small temporary ponding area with a controlled release structure formed by excavating or constructing an earthen embankment across a waterway or low drainage area. Its purpose is to collect and store sediment from sites cleared and/or graded during construction for a *short* period of time (6 months).

Sediment Basin – A sediment basin is designed with controlled release structures and is constructed by excavating or constructing an earthen embankment across a ditch or low drainage area. Its purpose is to collect and store sediment from sites cleared and graded during construction for *extended* periods of time before reestablishment of permanent vegetation and/or construction of permanent drainage structures. They should be located at the storm water outlet for the site, but not in any natural or undisturbed steam.

Off-Site Sediment Tracking

a) Stabilized construction entrances/exits – Stabilized entrance to reduce the tracking of mud and dirt onto public roads by construction vehicles.

b) Construction road stabilization – A temporary access road connecting existing public roads to a remote construction area. It is designed for the control of dust and erosion created by vehicular tracking.

E) Waste Management

Below are some methods to manage construction wastes to prevent runoff into the drainage system.

a) Spill Prevention and Control
b) Solid Waste Management
c) Hazardous Waste Management
d) Concrete Waste Management
e) Liquid Waste Management

Spill Prevention and Control

Each contractor must have a spill prevention and control plan in place prior to grading operations. The plan will include:

- Contact phone numbers, emergency and after-hours of responsible parties.
- Coordination with the City of Encinitas Public Works, Fire and Storm Water Department. Ability to control runoff through berms, gravel bags, sandbags or storm drain covers.
- Maintain absorbent material on site.

Basic Guidelines:

- Spills shall not be buried or washed with water.
- Water used for cleaning and decontamination shall not be allowed to enter storm drains or watercourses.
- Water overflow or minor water spillage shall be contained and shall not be allowed to discharge into drainage facilities.
- Proper storage, clean up and spill reporting instructions for hazardous materials stored or used on the project site shall be posted at all times.

Minor Spills

- Use absorbent materials and do not hose down or bury the material.
- Remove the absorbent material and dispose of properly.

Semi-Significant Spills

- Contain the spill.
- Notify the Inspector.
- Clean up with dry methods.
- If the spill occurs in dirt areas, contain the spill with an earthen dike.
- Dig up and properly dispose of the material.
- If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant Spills

- Notify the Inspector immediately and follow up with a report
- Notify 911
- Notifications to external agencies will require a phone call and a written report.
- Obtain the services of a Haz-Mat team immediately. Construction personnel shall not attempt to clean up the job site.

Solid Waste Management

This is the practice to minimize or eliminate the discharge of pollutants resulting from the creation of stockpiling, and removal of construction waste.

- Place trash cans on construction sites
- Prevent storm water run-on and run-off through the use of berms, dikes and temporary diversion structures.
- Solid waste storage areas shall be located at least 15 m from drainage facilities and watercourses and shall not be located in areas prone to flooding or ponding.
- Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.
- Have hazardous waste hauled to an appropriate disposal and/or recycling facility.

Hazardous Waste Management

This is the practice to minimize or eliminate the discharge of pollutants from construction site hazardous waste to the storm drain system or to watercourses.

Hazardous waste on construction projects is generated from the use of:

Petroleum products	Asphalt products
Concrete curing compounds	Pesticides
Palliatives	Acids

Septic Waste	Paints
Stains	Solvents
Wood Preservatives	Roofing Tar

Or any material deemed a hazardous waste in California, Title 22.

Major components of the hazardous waste management are education, proper storage and disposal procedures, maintenance and inspection.

Concrete Waste Management

This is the practice to minimize or eliminate the discharge of pollutants of concrete waste materials to the storm drain system. The discharge of pollutants to storm water from concrete waste can be prevented. Some ways to reduce concrete wastes in storm water are:

- Store dry and wet materials under cover
- Avoid mixing excess amounts of fresh concrete on-site
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams
- Perform the washout of concrete trucks off-site or in designated areas
- Do not allow excess concrete to be dumped on-site, except in designated areas
- On-site washout areas should be located at least 50 ft. from storm drains, creeks, ditches.
- Do not wash out slurries generated from saw-cutting, coring, grinding, grooving, and hydro-concrete demolition into the storm drain or drainage course.
- Educate employees, subcontractors and suppliers on concrete waste management
- Once concrete wastes are washed into the designated areas and allowed to harden, the concrete shall be broken up, removed, and disposed of.
- Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be back-filled and repaired.
- Inspect weekly.

Liquid Waste Management

This is the practice to prevent discharge of pollutants to the storm drain system as a result of the creation, collection, and disposal of non-hazardous liquid waste.

Some ways to reduce liquid waste in storm water are:

- Employee, subcontractor and suppliers training
- Contain liquid waste in a controlled area, such as a holding pit, sediment basin or portable tank.
- Capture all liquid waste running off a surface, which has the potential to affect the storm drain system.
- Do not allow liquid wastes to flow or discharge uncontrolled.
- Inspect employees and subcontractors to ensure appropriate practices.
- Inspect containment areas.

APPENDIX F

SUGGESTED RESOURCES

SUGGESTED RESOURCES	HOW TO GET A COPY
Better Site Design: A Handbook for Changing Development Rules in Your Community (1998) Presents guidance for different model development alternatives.	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 www.cwp.org
California Urban runoff Best Management Practices Handbooks (1993) for Construction Activity, Municipal, and Industrial/Commercial Presents a description of a large variety of Structural BMPs, Treatment Control, BMPs and Source Control BMPs	Los Angeles County Department of Public Works Cashiers Office 900 S. Fremont Avenue Alhambra, CA 91803 626-458-6959
Caltrans Urban runoff Quality Handbook: Planning and Design Staff Guide (Best Management Practices Handbooks (1998) Presents guidance for design of urban runoff BMPs	California Department of Transportation P.O. Box 942874 Sacramento, CA 94274-0001 916-653-2975
Design Manual for Use of Bioretention in Stormwater Management (1993) Presents guidance for designing bioretention facilities.	Prince George's County Watershed Protection Branch 9400 Peppercorn Place, Suite 600 Landover, MD 20785
Design of Stormwater Filtering Systems (1996) by Richard A. Claytor and Thomas R. Schuler Presents detailed engineering guidance on ten different urban runoff-filtering systems.	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323
Development Planning for Stormwater Management, A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), (May 2000)	Los Angeles County Department of Public Works http://dpw.co.la.ca.us/epd/ or http://www.888cleanLA.com
Florida Development Manual: A Guide to Sound Land and Water Management (1988) Presents detailed guidance for designing BMPs	Florida Department of the Environment 2600 Blairstone Road, Mail Station 3570 Tallahassee, FL 32399 850-921-9472
Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (1993) Report No. EPA–840-B-92-002. Provides an overview of, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.	National Technical Information Service U.S. Department of Commerce Springfield, VA 22161 800-553-6847
Guide for BMP Selection in Urban Developed Areas (2001)	ASCE Envir. and Water Res. Inst. 1801 Alexander Bell Dr. Reston, VA 20191-4400 (800) 548-2723

SUGGESTED RESOURCES	HOW TO GET A COPY
Low-Impact Development Design Strategies - An Integrated Design Approach (June 1999)	Prince George's County, Maryland Department of Environmental Resource Programs and Planning Division 9400 Peppercorn Place Largo, Maryland 20774 *http://www.co.pg.md.us/Government/DER/PPD/pgcounty/lidmain.htm*
Maryland Stormwater Design Manual (1999) Presents guidance for designing urban runoff BMPs	Maryland Department of the Environment 2500 Broening Highway Baltimore, MD 21224 410-631-3000
National Stormwater Best Management Practices (BMP) Database, Version 1.0 Provides data on performance and evaluation of urban runoff BMPs	American Society of Civil Engineers 1801 Alexander Bell Drive Reston, VA 20191 703-296-6000
National Stormwater Best Management Practices Database (2001)	Urban Water Resources Research Council of ASCE Wright Water Engineers, Inc. (303) 480-1700
Operation, Maintenance and Management of Stormwater Management (1997) Provides a thorough look at storm water practices including, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.	Watershed Management Institute, Inc. 410 White Oak Drive Crawfordville, FL 32327 850-926-5310
Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration	Report No. EPA/600/R-94/051, USEPA (1994).
Preliminary Data Summary of Urban runoff Best Management Practices (August 1999) EPA-821-R-99-012	*http://www.epa.gov/ost/stormwater/*
Reference Guide for Stormwater Best Management Practices (July 2000)	City of Los Angeles Urban runoff Management Division 650 South Spring Street, 7th Floor Los Angeles, California 90014 *http://www.lacity.org/san/swmd/*
Second Nature: Adapting LA's Landscape for Sustainable Living (1999) by Tree People Detailed discussion of BMP designs presented to conserve water, improve water quality, and achieve flood protection.	Tree People 12601 Mullholland Drive Beverly Hills, CA 90210 (818) 623-4848 Fax (818) 753-4625
Start at the Source (1999) Detailed discussion of permeable pavements and alternative driveway designs presented.	Bay Area Stormwater Management Agencies Association 2101 Webster Street Suite 500 Oakland, CA 510-286-1255

SUGGESTED RESOURCES	HOW TO GET A COPY
Stormwater Management in Washington State (1999) Vols. 1-5 Presents detailed guidance on BMP design for new development and construction.	Department of Printing State of Washington Department of Ecology P.O. Box 798 Olympia, WA 98507-0798 360-407-7529
Stormwater, Grading and Drainage Control Code, Seattle Municipal Code Section 22.800-22.808, and Director's Rules, Volumes 1-4. (Ordinance 119965, effective July 5, 2000)	City of Seattle Department of Design, Construction & Land Use 700 5th Avenue, Suite 1900 Seattle, WA 98104-5070 (206) 684-8880 *http://www.ci.seattle.wa.us/dclu/Codes/sgdccode.htm*
Texas Nonpoint Source Book – Online Module (1998)www.txnpsbook.org Presents BMP design and guidance information on-line	Texas Statewide Urban Runoff Quality Task Force North Central Texas Council of Governments 616 Six Flags Drive Arlington, TX 76005 817-695-9150
The Practice of Watershed Protection by Thomas R. Shchuler and Heather K. Holland	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 www.cwp.org
Urban Storm Drainage, Criteria Manual – Volume 3, Best Management Practices (1999) Presents guidance for designing BMPs	Urban Drainage and Flood Control District 2480 West 26th Avenue, Suite 156-B Denver, CO 80211 303-455-6277

APPENDIX G

POTENTIAL PERMANENT TREATMENT BMP MAINTENANCE MECHANISMS

1. Project proponent agreement to maintain storm water BMPs: The City may enter into a contract with the project proponent obliging the project proponent to maintain, repair and replace the storm water BMP as necessary into perpetuity. Security may be required.
2. Assessment districts: The City may approve an Assessment District or other funding mechanism created by the project proponent to provide funds for storm water BMP maintenance, repair and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.
3. Lease provisions: In those cases where the City holds title to the land in question, and the land is being leased to another party for private or public use, the City may assure storm water BMP maintenance, repair and replacement through conditions in the lease.
4. Public entity maintenance: The City may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the permanent treatment BMP. Unless acceptable to the City, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed, (e.g., through a trust fund, assessment district fees, bond, letter of credit or similar means). In addition, the City may seek protection from liability by appropriate releases and indemnities. The City shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The City shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions; and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the facilities. The City must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

The City may accept alternative maintenance mechanisms if such mechanisms are as protective as those listed above.

APPENDIX H

DEFINITIONS

"Attached Residential Development" means any development that provides 10 or more residential units that share an interior/exterior wall. This category includes, but is not limited to: dormitories, condominiums and apartments.

"Automotive Repair Shop" means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

“Best Management Practices” see: Municipal Code Section 20.08.030 Definitions

"Commercial Development" means any development on private land that is not exclusively heavy industrial or residential uses. The category includes, but is not limited to: mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses, hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, and other light industrial complexes.

"Commercial Development greater than 100,000 square feet" means any commercial development that with a project footprint of at least 100,000 square feet.

"Detached Residential Development" means any development that provides 10 or more freestanding residential units. This category includes, but is not limited to: detached homes, such as single-family homes and detached condominiums.

"Directly Connected Impervious Area (DCIA)" means the area covered by a building, impermeable pavement, and/ or other impervious surfaces, which drains directly into the storm water conveyance system without first flowing across permeable vegetated land area (e.g., lawns).

"Environmentally Sensitive Areas" see: Municipal Code Section 20.08.030 Definitions.

"Hillside" means lands that have a natural gradient of 25 percent (4 feet of horizontal distance for every 1 foot of vertical distance) or greater and a minimum elevation differential of 50 feet, or a natural gradient of 200 percent (1 foot of horizontal distance for every 2 feet of vertical distance) or greater and a minimum elevation differential of 10 feet.

"Hillside development greater than 5,000 square feet" means any development that would create more than 5,000 square feet of impervious surfaces in hillsides with known erosive soil conditions.

"Infiltration" means the downward entry of water into the surface of the soil.

"Maximum Extent Practicable (MEP)" see: Municipal Code Section 20.08.030 Definitions.

"New Development" means land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces; and land subdivision.

"Parking Lot" means land area or facility for the temporary parking or storage of motor vehicles used personally, or for business or commerce.

"Projects Discharging to Receiving Waters within Environmentally Sensitive Areas" means all development and significant redevelopment that would create 2,500 square feet of impervious surfaces or increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition, and either discharge urban runoff to a receiving water within an environmentally sensitive area (where any portion of the project footprint is located within 200 feet of the environmentally sensitive area), or discharge to a receiving water within an environmentally sensitive area without mixing with flows from adjacent lands (where the project footprint is located more than 200 feet from the environmentally sensitive area).

"Project Footprint" means the limits of all grading and ground disturbance, including landscaping, associated with a project.

"Receiving Waters" see Municipal Code Section 20.08.030 Definitions. The definition of receiving waters shall not be construed to prohibit the use or maintenance of ~~constructed wetlands (in contrast to naturally occurring wetlands)~~ wetlands which were originally constructed as a Best Management Practice.

"Residential Development" see: Municipal Code Section 20.08.030 Definitions means any development on private land that provides living accommodations for one or more persons. This category includes, but is not limited to: single-family homes, multi-family homes, condominiums, and apartments.

"Restaurant" means a stand-alone facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812).

"Significant Redevelopment" see: Municipal Code Section 20.08.030 Definitions means development that would create or add at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to: the expansion of a building footprint; addition to or replacement of a structure; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots; new sidewalk construction, pedestrian ramps, or bikelane on existing roads; and replacement of damaged pavement.

"Site Design BMP" means any project design feature that reduces the creation or severity of potential pollutant sources or reduces the alteration of the project site's natural flow regime. Redevelopment projects that are undertaken to remove pollutant sources (such as existing surface parking lots and other impervious surfaces) or to reduce the need for new roads and other impervious surfaces (as compared to conventional or low-density new development) by incorporating higher densities and/or mixed land uses into the project

design, are also considered site design BMPs.

"Source Control BMP (both structural and non-structural)" means land use or site planning practices, or structures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff. Examples include roof structures over trash or material storage areas, and berms around fuel dispensing areas.

"Storm Water Best Management Practice (BMP)" see: Municipal Code Section 20.08.030 Definitions.

"Storm Water Conveyance System" see: Municipal Code Section 20.08.030. Definitions.

"Streets, Roads, Highways, and Freeways" means any project that is not part of a routine maintenance activity, and would create a new paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles and other vehicles. For the purposes of SUSMP requirements, Streets, Roads, Highways and Freeways do not include trenching and resurfacing associated with utility work; applying asphalt overlay to existing pavement; new sidewalk, pedestrian ramps, or bikelane construction on existing roads; and replacement of damaged pavement.

"Treatment Control (Structural) BMP" means any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

CHAPTER 20.08
STORM WATER MANAGEMENT
(Ordinance 2002-14)

20.08.010 Title. This Chapter shall be known as the "City of Encinitas Watercourse Protection, Storm Water Management and Discharge Control Ordinance".

20.08.020 Purpose and Intent. The purpose of this Chapter is to protect the health, safety and welfare of the public by regulating all discharges into the Storm Water Conveyance System and the Waters of the State in order to preserve and enhance water quality for beneficial uses by:

(A Prohibiting non-storm water discharges to the Storm Water Conveyance System;

(B) Eliminating pollutants in Storm Water to the Maximum Extent Practicable, including pollutants from both point and non-point sources;
(C) Prohibiting activities which cause, or contribute to, exceedance of state and federal Receiving Water quality objectives.
(D) Protecting Watercourses from disturbance and pollution.

The intent of this Chapter is to use the police power of the city to regulate water quality in a manner which complies with all applicable laws related to water quality, including the federal Clean Water Act, the state Porter-Cologne Water Quality Control Act, and the conditions of any NPDES permit issued to the city.

20.08.030 Definitions.
For purposes of this Chapter, only the terms below have the following meaning:

Beneficial Uses means uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals. "Beneficial Uses" of the Waters of the State that may be protected against include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that
were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. Beneficial Uses are equivalent to Designated Uses under federal law. [California Water Code Section 13050(f)].

Best Management Practices or "BMPs" means schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, operation and maintenance procedures, and

other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to Storm Water, Receiving Waters, or the Storm Water Conveyance System. BMPs may be structural or non-structural. Best Management Practices include, but are not limited to, site design, source control, treatment control, natural design methods, low flow diversions to the sewer, and structures such as infiltration basins, clarifiers, , oil and grease separators and filters. BMPs may include any type of pollution prevention and pollution control measure the can help to achieve compliance with this Chapter.

Clean Water Act Section 303(d) Impaired Water Body or Impaired Water Body means an impaired water body in which water quality does not meet applicable water quality standards and/or is not expected to meet water quality standards, even after the application of technology based pollution controls required by the Clean Water Act. The discharge of urban runoff to these water bodies is significant because these discharges can cause or contribute to violations of applicable water quality standards.

Discharge when used as a verb, means to allow pollutants to directly or indirectly enter Storm Water, or to allow Storm Water or non-storm water to directly or indirectly enter the Storm Water Conveyance System or Receiving Waters, from an activity or operations. When used as a noun, "Discharge" means the pollutants, Storm Water and/or non-storm water that is discharged.

Discharger means any person engaged in activities or operations, or owning facilities, which may result in pollutants entering Storm Water, the Storm Water Conveyance System or Receiving Waters. "Dischargers" include, but are not limited to, real and personal property owners, occupants, tenants, lessees, contractors, developers, managers and employees.

Environmentally Sensitive Areas include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other similar environmentally sensitive areas which have been identified by the City Engineer. "Directly adjacent" means situated within 200 feet of the Environmentally Sensitive Area. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

Illegal Connection means a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City; or a permitted connection which conveys Illegal Discharges.

Illegal Discharge is any discharge to the Storm Water Conveyance System that is not composed entirely of Storm Water or is not discharged in compliance with this Chapter

Impervious Surface means constructed or modified surfaces that cannot effectively infiltrate rainfall such as building rooftops, pavement, sidewalks, driveways, etc.

Impervious Surface Area means the ground area covered or sheltered by an impervious surface, measured in plan view, i.e., as if from directly above. For example, the "impervious surface area" for a pitched roof is equal to the ground area it shelters, rather than the surface area of the roof itself.

Maximum Extent Practicable or MEP refers to the standard established by Congress in Clean Water Act section 402(p)(3)(B)(iii) that municipal dischargers of Storm Water must meet; MEP is an acceptability standard for Best Management Practices based on a level of pollutant reduction that can be achieved by the most effective set of BMPs that can be implemented and still remain practicable; MEP generally emphasizes pollution prevention and source control BMPs as the first line of defense in combination with treatment methods as a backup.

Non Point Source refers to diffuse, widespread sources of pollution. These sources may be large or small, but are generally numerous throughout a watershed. Non Point Sources include but are not limited to urban, agricultural, or industrial areas, roads, highways, construction sites, communities served by septic systems, recreational boating activities, timber harvesting, mining, livestock grazing, as well as physical changes to stream channels, and habitat degradation. Non Point Source Pollution can occur year round any time rainfall, snow melt, irrigation, or any other source of water runs over land or through the ground, picks up pollutants from these numerous, diffuse sources and deposits them into rivers, lakes, and coastal waters or introduces them into ground water.

Non-Storm Water consists of all discharges to and from a Storm Water Conveyance System that do not originate from precipitation events, i.e., all discharges from a conveyance system other than Storm Water. Non-storm water includes illegal discharges, non-prohibited discharges, and NPDES permitted discharges.

NPDES Permit means a National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency, the State Water Resources Control Board ("SWRCB"), or the California Regional Water Quality Control Board for the San Diego Region ("RWQCB").

Person means an individual, corporation, partnership, limited liability company, joint venture, non-profit organization, trust, association or governmental agency.

Pollutant is broadly defined as any agent that may cause or contribute to the degradation of water quality such that a condition of pollution or contamination is created or aggravated, including but not limited to, dredged spoil, rock, sand, or silt (excluding sediment, silt, or substances in quantities which would enter Storm Water from a natural undeveloped watershed); solid waste, animal waste, sewage, garbage, or medical waste; wrecked or discarded equipment; radioactive materials; industrial waste; any organic or inorganic contaminant; fecal coliform, fecal streptococcus, and enterococcus bacteria and other pathogens that pose a threat to human health; volatile organic carbon, surfactants, oil and grease, petroleum hydrocarbons, total organic carbon, lead, copper, chromium, cadmium, silver, nickel, zinc, cyanides, phenols, and biocides; any contaminant which can significantly degrade the quality of Receiving Waters by altering pH, total suspended or settleable solids, biochemical oxygen demand, chemical oxygen demand, nutrients, or temperature.

Pollution is the alteration of the quality of the Receiving Waters to a degree that unreasonably affects the Beneficial Use of the Receiving Waters or the facilities that serve the beneficial uses. "Pollution" also includes contamination which creates a hazard to the public health through poisoning or the spread of disease.

Point Source means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged.

RWQCB means the California Regional Water Quality Control Board for the San Diego Region.

Receiving Waters means all waters that are "Waters of the State" within the scope of the State Water Code, including but not limited to, natural streams, creeks, rivers, reservoirs, lakes, ponds, water in vernal pools, lagoons, estuaries, bays, the Pacific Ocean, and ground water.

Significant Redevelopment means the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant Redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces.

State General Construction Storm Water Permit means NPDES Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities, and any amendments thereto.

State General Industrial Storm Water Permit means NPDES Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities, and any amendments thereto.

Storm Water means runoff which originates from precipitation events. "Storm Water" is that portion of precipitation that flows across a surface to the storm drain system or Receiving Waters. Examples of this phenomenon include: the water that flows off a building's roof when it rains (runoff from an impervious surface); the water that flows into streams when snow on the ground begins to melt (runoff from a semi-pervious surface); and the water that flows from a vegetated surface when rainfall is in excess of the rate at which it can infiltrate into the underlying soil (runoff from a pervious surface). During precipitation events in urban areas, rain water picks up and transports pollutants through Storm Water Conveyance Systems, and ultimately to Receiving Waters.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains. Historic and current development make use of natural drainage patterns and features as conveyances for urban runoff. Urban streams used in this manner are part of the Storm Water Conveyance System regardless of whether they are natural, man-made, or partially modified features. In these cases, the urban stream is both a Storm Water Conveyance System and a Receiving Water.

Structural BMP means a BMP that relies on either a physical condition (other than an entirely natural and undisturbed condition), or on a constructed or installed device to reduce or prevent pollutants in stormwater discharges and exempt non storm water discharges. Constructed or enhanced BMPs that depend on natural materials and processes (e.g., constructed drainage swales or buffers, or constructed wetlands), that require periodic maintenance to function as designed, are Structural BMPs.

SWRCB means the State Water Resources Control Board.

Watercourse means any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, arroyo or wash, in which surface waters flow in a definite direction or source, either continuously or intermittently, and which has a definite channel and a bed or banks. A channel is not limited to land covered by minimal or ordinary flow, but also includes land covered during times of high water.

Waters of the State means any water, surface or underground, including saline waters within the boundaries of California. The definition of the "Waters of the State" is broader than that for the "Waters of the United States" in that all water in the State is considered to be a

"Waters of the State" regardless of circumstances or condition. Under this definition, a municipal storm sewer system (MS4) is always considered to be a "Waters of the State". [California Water Code Section 13050 (e)].

<u>Waters of the United States</u> means water subject to the regulatory jurisdiction of the United States under the Federal Clean Water Act and applicable case law. In general, this includes "navigable" waters, waters tributary to "navigable" waters, and adjacent wetlands. [40 Code of Federal Regulations section 122.2.]

<u>Wet season</u> means October 1 thru April 30.

<u>20.08.040 Illegal Discharges.</u>

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

C. Exemptions.

1 Separately Permitted Discharges. Storm Water discharges regulated under a valid facility-specific NPDES permit or facility specific RWQCB Waste Discharge Requirements permit are exempt from discharge prohibitions established by this Chapter, provided compliance with all relevant permit conditions is maintained to the satisfaction of the RWQCB and the City Engineer. Facilities and activities whose Storm Water discharges are regulated under a general permit, including the State General Industrial Storm Water Permit, State General Construction Storm Water Permit and the State General De-Watering Permit, are not exempted from this Chapter.

2 Categorically Exempt Discharges. The following categories of non-storm water discharges are exempt from discharge prohibitions established by this Chapter, if all required BMPs are installed, implemented and maintained:

a. air conditioning condensation;
b. discharges from potable water sources other than water main breaks;
c. diverted stream flows (provided required permits are obtained);
d. flows from emergency fire fighting activities;
e. flows from riparian habitats and wetlands;
f. foundation drains (not including active groundwater dewatering systems);
g. individual residential washing of vehicles;

h. irrigation water;
i. landscape irrigation;
j. lawn watering;
k. rising ground water;
l. springs;
m. swimming pool discharges (if dechlorinated to less than one PPM chlorine);
n. uncontaminated ground water infiltration to storm drains;
o. uncontaminated pumped ground water;
p. water from crawl space pumps;
q. water from footing drains (not including active groundwater dewatering systems);
r. water line flushing.

3. Public Health and Safety Exemptions. Discharges determined by the City Engineer to be necessary to protect public health and safety are exempt from discharge prohibitions established by this Chapter, provided any conditions on such discharges imposed by the City Engineer are satisfied and the City Engineer makes written findings supporting the exemption.

4. On-Site Wastewater Systems. Discharges to the subsurface from properly functioning permitted site waste water systems are not prohibited by this Chapter.

5. Exemptions Not Absolute. Any exempt discharge described above which the City Engineer determines is a significant source of pollutants to Receiving Waters shall be prohibited unless the Discharger complies with additional BMPs imposed by the City Engineer to reduce pollutants in the discharge to the Maximum Extent Practicable and the BMPs are effective. Such prohibitions shall take effect after written notice to the Discharger by the City Engineer containing a schedule for compliance based on the necessity to protect public health and safety or the environment.

20.08.050 Notification and Mitigation of Illegal Discharges.

A Discharger shall immediately notify the City Engineer of an Illegal Discharge and take immediate action to control and contain the Illegal Discharge. The Discharger shall also mitigate any damage caused by the Illegal Discharge.

The City Engineer may order the Discharger to prepare and implement an approved mitigation plan with a time schedule for completion.

20.08.060 Illegal Connections. No person shall establish, use, or maintain an Illegal Connection to the Storm Water Conveyance System or the Receiving Waters.

20.08.070 Littering and Sweeping.

No person shall throw, deposit, leave, maintain, keep or permit to be thrown, deposited, placed, left or maintained, any refuse, pet waste, rubbish, garbage, or other discarded or abandoned objects, in or upon any street, alley, parking lot, sidewalk, curb, gutter, storm drain, catch basin, conduit, or other drainage structure or lot except in receptacles maintained for the regular disposal of garbage. Impervious surfaces which drain directly or indirectly into the Storm Water Conveyance System shall be kept free of dirt and debris by regular sweeping. The sweepings shall be placed in garbage receptacles and shall not be allowed to enter the Storm Water Conveyance System.

20.08.080 Compliance with Best Management Practices.

No Discharger shall fail to implement, install, use or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

20.08.090 Conclusive Determination of Maximum Extent Practicable.

The Best Management Practices established by the City Engineer shall reduce pollutants from the use or activity to the Maximum Extent Practicable. For purposes of enforcement of this Chapter, the City Engineer's determination of the Maximum Extent Practicable shall be conclusive.

20.08.100 Establishment and Prioritization of Best Management Practices For Construction Activities, New Development, Significant Redevelopment and Existing Development.

A. The City Engineer shall establish written Best Management Practices for the following uses:

1. Construction Activities
2. New Development and Significant Redevelopment
3. Existing Industrial Development
4. Existing Commercial Development
5. Existing Residential Development.
6. Existing Municipal Areas and Activities
7. Agricultural Activities
8. Any other use if it is necessary to reduce Pollutants entering receiving waters to the Maximum Extent Practicable.

The document containing the Best Management Practices established by the City Engineer shall be entitled the "The City of Encinitas Storm Water Best Management Practices Manual" and shall be considered an appendix to this Chapter. The appendix may be adopted by Resolution of the City Council. (Ord. 2002-01).

B. The City Engineer shall establish priorities for implementation and enforcement of Best Management Practices based on the threat to water quality for each use described in the subsection above.

1. Each site of Construction Activities shall be categorized as a high, medium, or low priority threat to water quality by considering the following:

a. soil erosion potential;
b. site slope;
c. project size and type;
d. sensitivity of receiving water bodies;
e. proximity to receiving water bodies;
f. non-storm water discharges;
g. any other relevant factors.

2. Each site of New Development or Significant Redevelopment in the following list shall be categorized as a high priority threat to water quality:

a. Home subdivisions of 100 housing units or more. This category includes single-family homes, multi-family homes, condominiums, and apartments.
b. Home subdivisions of 10-99 housing units. This category includes single-family homes, multi-family homes, condominiums, and apartments.
c. Commercial developments greater than 100,000 square feet. This category is defined as any development on private land that is not for heavy industrial or residential uses where the land area for development is greater than 100,000 square feet. The category includes, but is not limited to: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; commercial airfields; and other light industrial facilities.
d. Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

e. Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet.

f. All hillside development greater than 5,000 square feet. This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.

g. Environmentally Sensitive Areas: All development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (where discharges from the development or redevelopment will enter Receiving Waters within the environmentally sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition.

h. Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff. Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

i. Street, roads, highways, and freeways. This category includes any paved surface which is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

Natural BMPs such as constructed wetlands, grassed swales, biofilters, wet ponds, and vegetated filter strips, shall be utilized whenever practicable for all New Development and Significant Redevelopment.

3. Each site of Existing Industrial Development shall be categorized as a high, medium, or low priority threat to water quality by considering the following:

a. type of industrial activity (SIC Code);
b. materials used in industrial processes;
c. wastes generated;
d. pollutant discharge potential;
e. non-storm water discharges;
f. size of facility;
g. proximity to receiving water bodies;
h. sensitivity of receiving water bodies;

i. whether the industrial site is subject to the statewide General Industrial Permit;
j. any other relevant factors.

At a minimum the high priority industrial sites shall include the following:

a. industrial facilities that are subject to section 313 of Title III of the Superfund amendments and Reauthorization Act of 1986 (SARA);
b. industrial facilities tributary to a Clean Water Act Section 303(d) Impaired Water Body, where a facility generates pollutants for which the water body is impaired;
c. industrial facilities within or directly adjacent to or discharging directly to coastal lagoons or other Receiving Waters within Environmentally Sensitive Areas;
d. facilities subject to the statewide General Industrial Permit;
e. all other industrial facilities that the City Engineer determines are contributing significant pollutant loading to its Storm Water Conveyance System, regardless of whether such facilities are covered under the statewide General Industrial Permit or other NPDES permit.

4. Each site of Existing Commercial Development in the following list shall be categorized as a high priority threat to water quality:

a. Automobile mechanical repair, maintenance, fueling, or cleaning;
b. Airplane mechanical repair, maintenance, fueling, or cleaning;
c. Boat mechanical repair, maintenance, fueling, or cleaning;
d. Equipment repair, maintenance, fueling, or cleaning;
e. Automobile and other vehicle body repair or painting;
f. Mobile automobile or other vehicle washing;
g. Automobile (or other vehicle) parking lots and storage facilities;
h. Retail or wholesale fueling;
i. Pest control services;
j. Eating or drinking establishments;
k. Mobile carpet, drape or furniture cleaning;
l. Cement mixing or cutting;
m. Masonry;
n. Painting and coating;
o. Botanical or zoological gardens and exhibits;
p. Landscaping;
q. Nurseries and greenhouses;
r. Golf courses, parks and other recreational areas/facilities;

s. Cemeteries;
t. Pool and fountain cleaning;
u. Marinas;
v. Port-a-Potty servicing;
w. Other commercial sites or sources that the City Engineer determines may contribute a significant pollutant load to the Storm Water Conveyance System;
x. Any commercial site or source tributary to a Clean Water Act section 303(d) impaired water body, where the site or source generates pollutants for which the water body is impaired;
y. Any commercial site or source within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an Environmentally Sensitive Area.

5. The City Engineer shall identify residential areas and activities which are a high priority threat to water quality. At a minimum, these shall include:

a. Automobile repair and maintenance;
b. Automobile washing;
c. Automobile parking;
d. Home and garden care activities and product use (pesticides, herbicides, and fertilizers);
e. Disposal of household hazardous waste (e.g., paints, cleaning products);
f. Disposal of pet waste;
g. Disposal of green waste;
h. Any other residential source that the City Engineer determines may contribute a significant pollutant load to the Storm Water Conveyance System;
i. Any residence tributary to a Clean Water Act Section 303(d) Impaired Water Body, where the residence generates pollutants for which the water body is impaired;
j. Any residence within or directly adjacent to or discharging directly to a coastal lagoon or other Receiving Waters within an Environmentally Sensitive Area.

6. Each Existing Municipal Area or Activity shall be categorized as a high, medium, or low threat to water quality by considering the following:

a. type of municipal area or activity;
b. materials used;
c. wastes generated;
d. pollutant discharge potential;
e. non-storm water discharges;
f. size of facility or area;

g. proximity to receiving water bodies;

h. sensitivity of receiving water bodies;
i. any other relevant factors.

At a minimum, the high priority municipal areas and activities shall include the following:

(1) Roads, streets, highways, and parking facilities.
(2) Flood management projects and flood control devices.
(3) Areas and activities tributary to a Clean Water Act Section 303(d) Impaired Water Body, where an area or activity generates pollutants for which the water body is impaired.
(4) Areas and activities within or adjacent to or discharging directly to coastal lagoons or other Receiving Waters within Environmentally Sensitive Areas.
(5) Municipal waste facilities such as active or closed municipal landfills; publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems; municipal separate storm sewer systems; incinerators; solid waste transfer facilities; land application sites; uncontrolled sanitary landfills; corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles; sites for disposing and treating sewage sludge; and hazardous waste treatment, disposal, and recovery facilities.
(6) Municipal airfields.
(7) Other municipal areas and activities that the City Engineer determines may contribute a significant pollutant load to the Storm Water Conveyance System.

7. All agricultural activities are subject to this Chapter, including activities that are not subject to a grading permit. The BMPs established by the City Engineer for agricultural activities shall be in addition to the BMPs established for the activity in another category such as Construction Activities, Existing Commercial, New Development or Significant Redevelopment

<u>20.08.110 Site Specific Best Management Practices</u>.

The City Engineer may establish written Best Management Practices for a specific site or activity if necessary to reduce pollutants to the Maximum Extent Practicable or to comply with an order of the San Diego Regional Water Quality Control Board.

20.08.120 Alternative Best Management Practices.

The City Engineer may establish written alternative Best Management Practices. The allowable use of alternative BMPs at a specific site shall be determined at the sole discretion of the City Engineer.

20.08.130 Additional Best Management Practices.

The City Engineer may establish additional written Best Management Practices for a specific site if the City Engineer determines that the Best Management Practices implemented at the site have not reduced the pollutants to the Maximum Extent Practicable.

20.08.140 Minimum Best Management Practices.

All Dischargers shall install, implement and maintain at least the following minimum Best Management Practices:

A. Eroded soils. Prior to the rainy season, Dischargers must remove or secure any significant accumulations of eroded soils from slopes previously disturbed by clearing or grading, if those eroded soils could otherwise enter the Storm Water Conveyance System or Receiving Waters during the rainy season. Slopes more than five feet in height, more than 250 square feet in total area, and steeper than 3:1 (run-to-rise) that have been disturbed at any time by clearing, grading, or landscaping, shall be continuously protected from erosion.

B. Parking Lots. Dischargers with parking lots or impervious surfaces used for similar purposes shall clean the surfaces frequently and thoroughly in a manner that does not cause non-storm water discharge to the Storm Water Conveyance System. In most cases, this will require dry cleaning methods such as sweeping and removal of dirt and debris. The dirt and debris shall be disposed of in a manner which prevents it from entering the Storm Water Conveyance System or the Receiving Waters. At least one cleaning shall be completed in September of each year.

C. Storage of Materials and Wastes. All materials and wastes with the potential to pollute urban runoff shall be stored in a manner that either prevents contact with rainfall and Storm Water, or contains contaminated runoff for treatment and disposal.

D. Use of Materials. All materials with the potential to pollute urban run off, including but not limited to, cleaning and maintenance products used outdoors, fertilizers, pesticides and herbicides, shall be used in accordance with label directions. If a label cautions against use of a product where it may enter water or waterways, or cautions that the product may be toxic or have toxic effects, the product may not be disposed of or rinsed into Receiving Waters or the Storm Water Conveyance System.

E. Self Inspection for Illegal Discharges. All Dischargers, except residential single family home Dischargers, shall inspection their facilities, activities, operations and procedures at least annually to detect illegal connections and illegal discharges. The self inspection shall be documented in records kept on the premises for at least five years

F. Inspection, Maintenance, Repair and Upgrading of BMPs. Structural BMPs must be inspected by the Discharger before predicted rain events and following actual rain events. These BMPs must be maintained so that they continue to function as designed. Structural BMPs which fail must be repaired as soon as it is safe to do so. If the failure of a structural or nonstructural BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances. All sediment and debris in catch basins must be removed prior to the wet season and disposed of in a manner which prevents it from entering the Storm Water Conveyance System or the Receiving Waters.

<u>20.08.150 Discharger Sampling, Testing, Monitoring, and Reporting.</u>

The City Engineer may require Dischargers to perform sampling, testing, monitoring and reporting of results as a Best Management Practice. In addition, the City Engineer may order a Discharger to conduct testing or monitoring and to report the results to the City if

1. the city Engineer determines that testing or monitoring is needed to determine whether BMPs are effectively preventing or reducing pollutants in Storm Water to the Maximum Extent Practicable, or to determine whether the facility is a significant source of contaminants to Waters of the State; or

2. the City Engineer determines that testing or monitoring is needed to assess the impacts of an illegal discharge on health, safety or the environment; or

3. an Illegal Discharge has not been eliminated after written notice by the City Engineer; or

4. the Discharger is in violation of any provision of this Chapter; or the Regional Water Quality Control Board requires the City to provide information on the Discharger's activities.

Testing and monitoring ordered pursuant to this section may include the following:

1. Visual monitoring of dry weather flows, wet weather erosion, or BMPs;
2. Visual monitoring of premises for spills or discharges;

3. Laboratory analyses of Storm Water or non-storm water discharges for Pollutants;
4. Background or baseline monitoring or analysis; and
5. Monitoring of Receiving Waters or sediments that may be affected by Pollutant discharges by the Discharger.

The City Engineer may direct the time and manner in which the results of required testing and monitoring are reported, and shall determine when required sampling, testing or monitoring may be discontinued. The sampling, testing, monitoring and reporting shall be at the expense of the Discharger.

20.08.160 City Authority to Sample, Inspect and Monitor.

A. Regulatory Inspections. The City Engineer or his designee may inspect the premises of any Discharger at reasonable times and in a reasonable manner to carry out the purposes of this Chapter. If a Discharger refuses to allow entry for an inspection, an inspection warrant shall be obtained prior to inspection.

B. Scope of Inspections. Inspections may include all actions necessary to determine whether any Illegal Discharges or Illegal Connections exist, whether the BMPs installed and implemented are adequate to comply with this Chapter, whether those BMPs are being properly maintained, and whether the Discharger complies with other requirements of this Chapter. This may include sampling, metering, monitoring, visual inspections, and records review. Where samples are collected the Discharger may request and receive split samples. Records, reports, analyses, or other required information may be inspected and copied, and photographs taken for purposes of enforcement of this Chapter.

C. Installation of Sampling Devices. As part of the inspection, the City Engineer may authorize the installation of sampling or metering devices.

20.08.170 Establishment of a Fee.

The City Council may establish a fee by resolution to recover the cost of inspection, sampling, metering or monitoring by the City Engineer.

20.08.180 Local Storm Water Pollution Prevention Plan.

The City Engineer may require a Discharger to prepare and submit a Local Storm Water Pollution Prevention Plan (Local SWPPP) for approval as a Best Management Practice (BMP). In addition, the City Engineer may require a Discharger to prepare and submit a Local SWPPP for approval if (1) the Discharger is not in compliance with this Chapter; or (2) the facility or activity is a significant source of pollutants to the Receiving Waters despite

compliance with this Chapter. Any Discharger required to submit and to obtain approval of a Local SWPPP shall install, implement and maintain the BMPs specified in the approved Local SWPPP.

The Local SWPPP shall identify the BMPs that will be used by the Discharger to prevent or control pollutants in Storm Water to the Maximum Extent Practicable. If the facility is an industrial facility, the Local SWPPP submitted to the City shall at a minimum meet the requirements of the State NPDES General Industrial Storm Water Permit. If the activity at issue is a construction or land disturbance activity, the Local SWPPP submitted to the City shall at a minimum meet the requirements of the State NPDES General Construction Storm Water Permit.

Additional minimum Local SWPPP requirements are;

1. An inventory of all materials on site that may adversely affect Storm Water quality.
2 A description of measures which will be taken to reduce the possibility of accidental spillage resulting from equipment failure or employee error.
3. A description of onsite spill control procedures and equipment to prevent pollutants from entering the Storm Water Conveyance System.
4. A site map showing all building structures, materials and waste storage areas, outdoor equipment storage areas, vehicle service areas, paved areas, areas of existing and potential erosion, storm drain inlets, points of discharge to the Storm Water Conveyance System, and an estimate of the size of the facility and the size of the Impervious Surface Area.
5. A description of the Storm Water monitoring program conducted on the site, if any.
6. A documented employee training program which includes, but is not limited to, the following topics:

a. Laws, regulations and local ordinances relating to Storm Water pollution prevention, and an overview of the potential impacts of pollutants in Storm Water on the Receiving Waters.
b. Proper handling of all materials and wastes to prevent spillage.
c. Proper mitigation of spills, including spill response, containment and cleanup procedures.
d. Visual monitoring of all effluent streams to ensure that no Illegal Discharges enter the Storm Water Conveyance System.
e. Discussion of the differences between the Storm Water Conveyance System and the sanitary sewer system.
f. Identification of all onsite connections to the Storm Water Conveyance System.

g. Preventative maintenance and good housekeeping procedures.
h. Material management practices employed by the facility to reduce or eliminate pollutant contact with Storm Water.

Training materials shall be kept onsite and records of attendance shall be retained for at least five years.

<u>20..08.190 Violation of a State NPDES Permit.</u> A violation of a State NPDES General Construction Storm Water Permit , a State NPDES General Industrial Storm Water Permit or a State General De Watering Permit shall also be considered a violation of this Chapter and may be enforced as such.

<u>20.08.200 Watercourse Protection.</u>

A. Every person owning or occupying real property through which a Watercourse passes shall keep and maintain the Watercourse within the property free of trash, debris, excessive vegetation, and other obstacles which would pollute, contaminate or retard the flow of water through the Watercourse; shall maintain the private structures on the property in a manner which will prevent the structures from interfering with the use, maintenance and physical integrity of the Watercourse; shall not remove vegetation in a manner which will increase erosion or remove more healthy vegetation than is necessary for maintenance of the flow.

B. No person shall commit, or cause to be committed, the following acts, unless a written permit has been obtained from the City Engineer and the appropriate state and federal agencies:

1. Discharge pollutants into or connect any pipe or channel to a Watercourse;
2. Modify the natural flow of water in a Watercourse;
3. Carry out development within fifty feet of any Receiving Water;
4. Deposit in, plant in, remove any material from a Watercourse, including its banks, except as required for ordinary and necessary maintenance;
5. Construct, alter, enlarge, connect to , change, or remove any structure in a Watercourse; or
6. Place any loose or unconsolidated material (including animal manure) along side of or within a Watercourse so as to cause a diversion of the flow, or to allow the material to be carried away by Storm Water.
7. A grading permit or building permit may satisfy the requirements of this subsection at the discretion of the City Engineer. Any City permit does not affect the permit requirements of state or federal agencies.

20.08.210 Permits and Approvals.

Compliance with this Chapter shall be a condition of every permit or approval granted or issued by the City. Failure to comply with this Chapter shall be grounds for revocation of any such permit or approval.

20.08.220 Violation is a Nuisance.

The City Council hereby declares that any violation of this Chapter is a public nuisance.

20.08.230 Enforcement of this Chapter.

A. Misdemeanor Violation. Notwithstanding any other provision of this Code, a violation of this Chapter is a misdemeanor punishable by a fine of not more than one thousand dollars ($1,000) or imprisonment in the County Jail for a period of not more than six months or both fine and imprisonment. Any such violation may be charged as an infraction at the discretion of the City Attorney . Any person convicted of an infraction under the provisions of this Chapter shall be punishable by a fine not to exceed two hundred fifty dollars ($250) for a first or second offense in one year, and not to exceed five hundred dollars ($500) for a third violation in one year.

B. Orders of the City Engineer. The City Engineer is authorized to issue Cease and Desist Orders or Stop Work Orders to any person who is in violation of this Chapter. Failure to comply with a written order of the City Engineer shall be a violation of this Chapter and shall be grounds for the imposition of the civil penalties described in this section.

C. Civil Penalties. Any person who violates a provision of this Chapter may be assessed a civil penalty not to exceed one thousand dollars ($1,000) for each violation, for each day the violation is committed, continued, permitted or maintained. The civil penalties may be imposed by the City Manager after written notice and a hearing before the City Manager or his designee at which the person may present evidence and cross examine the witnesses in support of the charges. Civil penalties may also be assessed by the court in a civil action filed by the City to enforce the provisions of this Chapter.

D. Abatement. Any violation of this Chapter may be abated as a public nuisance and costs of abatement may be recovered by the City as allowed by law.

E. Administrative Fines. Any violation of this Chapter is subject to administrative fines as provided by this Code.

F. Judicial Action. This Chapter is enforceable by any judicial action allowed by law, including, but not limited to, injunctive relief.

G. Liens. Costs of enforcement of this Chapter, including but not limited to, costs of investigation, sampling and monitoring costs, and unpaid administrative fines and civil penalties, shall constitute a lien against the real property on which the violation occurs and on the real property of any person who violates this Chapter until such lien is satisfied. The lien may be recorded and executed in the same manner as a judgment lien. Prior to the recordation of the lien, the property owner shall be given written notice of the lien and an opportunity to contest the validity of the lien and the amount at a hearing held by the City Manager or his designee.

H. Remedies Not Exclusive. Remedies under this Chapter shall be in addition to each other, and in addition to any other legally available remedy, and do not limit or supersede any other enforcement action, civil, criminal or administrative.

<u>20.08.240 Severability.</u> If any section, subsection, or part of this Chapter is declared invalid by a court of competent jurisdiction, the remaining provisions shall continue to be valid and enforceable so as to effectuate the purpose and intent of this ordinance.

SW

APPENDIX F-3
CITY OF ENCINITAS
STORM WATER POLLUTION CONTROL CHECKLIST AND CERTIFICATION

All projects within the City of Encinitas are required to implement storm water Best Management Practices (BMPs), consisting of both construction phase BMPs and permanent post-construction BMPs. Construction phase BMPs, discussed in Section IV of the City of Encinitas Best Management Practice Manual, Part II, consist of temporary erosion and sediment control measures. In contrast permanent, post-construction BMPs are designed to treat storm water and urban runoff for the life of the project and are to be maintained in good working order by the property owner(s). These permanent post-construction BMPs are required through the Standard Urban Stormwater Mitigation Program (SUSMP) mandated by the State of California and the City of Encinitas. The City of Encinitas regulates storm water discharges under the Municipal Code, Chapter 20.08, Storm Water Management, and the City of Encinitas BMP Manual, Part II, which can be found at the following website: (http://www.ci.encinitas.ca.us/Government/CityD/EngineeringSDL/Clean+Water+Program/Clean+Water+Program.htm). **Construction phase and post-construction BMPs are both necessary (and required) to help reduce the pollution in our streams, lagoons, and oceans.**

This checklist is designed to guide applicants in the selection and incorporation of BMPs that are acceptable to the City of Encinitas. It is focused on permanent post-construction BMPs, which must be incorporated into the site design of projects during the conceptual phases of project planning. The final design for post-construction BMPs shall be incorporated into the grading plan and building site plan. To determine the BMPs required for your project, fill out the checklists below.

STEP 1: PROJECT TYPE IDENTIFICATION
Complete Table 1 and 2 below to determine if your project is a Priority, Standard or Exempt project. This category will dictate the BMPs that are required at your site. A more thorough explanation of the selection criteria and required BMPs can be obtained from the City's BMP Manual, Part II.

Table 1: Determine PRIORITY PROJECT Category.

Does the project meet the definition of one or more of the priority project categories?	Yes	No
1. Detached residential development of 10 or more units		
2. Attached residential development of 10 or more units		
3. Commercial development greater than 100,000 square feet		
4. Automotive repair shop		
5. Restaurant		
6. Steep hillside development greater than 5,000 square feet		
7. Project discharging to receiving waters within Environmentally Sensitive Areas		
8. Parking lots greater than or equal to 5,000 ft^2 or with at least 15 parking spaces, and potentially exposed to urban runoff		
9. Streets, roads, driveways, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater		
Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if one or more of the criteria in Part A are met.		

Table 2: Determine STANDARD PROJECT Category.

Does the project propose?:	Yes	No
1. New impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks.		
2. Reconstruction of the existing impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks in excess of 1000 square feet.		
3. Permanent structures within 100 feet of any natural water body?		
4. Trash storage areas?		
5. Liquid or solid material loading and unloading areas?		
6. Vehicle or equipment fueling, washing, or maintenance areas?		

Does the project propose?:	**Yes**	**No**
7. Require a General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except construction)?		
8. Commercial or industrial waste handling or storage, excluding typical office or household waste?		
9. Any grading or ground disturbance during construction?		
10. Any new storm drains, or alteration to existing storm drains that reduces natural storm water treatment?		

Priority Projects: If your answer to any question in Table 1 is "Yes", your project is a "Priority Project". If all answers to Table 1 are "No", continue to Table 2.

Standard Projects: If all answers to Table 1 are "No", but the answer to any question in Table 2 is "Yes", your project is a "Standard Project".

Exempt Projects: If all answers to Table 1 and Table 2 are "No", your project is "Exempt". Exempt projects shall implement construction phase BMPs as required.

Designate Project Category (check appropriate box)

☐ **Priority Project** ☐ **Standard Project** ☐ **Exempt**

STEP 2: DETERMINE BMP REQUIREMENTS

Fill out the BMP Checklist below for your project type to guide you in the BMP selection process.

Priority Projects: Priority Projects shall incorporate Priority and Standard Project Post-construction BMPs[1], in addition to meeting the applicable construction phase BMPs. All Priority Projects must include a numerically-sized flow-based, volume-based, or approved alternative storm water treatment system. In addition, projects falling into the groups described in Items (d) - (f) of Table 3 below must provide the specific treatment BMPs noted.

Table 3: PRIORITY PROJECT Post-construction BMP Checklist

	Yes	**No**
a) Will a flow-based system be used to treat runoff? i) grassy/ gravel swale _____ ii) other: _____ Please note that the flow-based system must meet all of the following criteria: i) minimum travel time of 9 minutes _____ ii) maximum velocity of .9 ft/sec _____ iii) maximum flow depth of 2"_____ iv) maximum slope for treatment of 2% _____ v) design based upon a rainfall intensity of .2 in/hr over entire site acreage _____ vi) runoff from all hardscape areas routed to the flow-base system _____		

[1] BMP requirements are more completely described in the City of Encinitas Best Management Practice Manual, Part II

Table 3 (cont.): PRIORITY PROJECT Post-construction BMP Checklist	**Yes**	**No**
b) Will a volume-based system be used to treat runoff? i) detention basin _____ ii) manufactured underground storage/infiltration _____ iii) other:_____ Please note that the volume-based system must meet all of the following design criteria: i) a retention time of not less than 24 hours and not more than 48 hours _____ ii) a volume determined using .6□of precipitation over the entire site acreage _____ iii) an overflow/ bypass design for volume exceedance _____ iv) runoff from all hardscape areas routed to the detention basin _____		
c) Will an approved alternate system be utilized for numerically sized treatment? Please specify: _____		
d) Gas stations, automotive centers, and parking lots, shall install fossil fuel/ hydrocarbon filters in all storm drain inlets. Are filters planned for the project? (Use N/A not applicable)		
e) Trash enclosures shall be covered and surface runoff directed away from the enclosures. Is this requirement planned into project design? (Use N/A if no trash enclosures are proposed)		
f) New roads shall include measures to treat the roadway runoff. Does the project design include treatment for proposed roadway runoff? (Use N/A if no new roads are proposed)		

Standard Project: Standard Projects shall incorporate Standard Project Post-construction BMPs in addition to meeting the applicable construction phase BMPs. All Standard Projects must provide biofiltration meeting at least one of the standards listed under Item (c) below, and the site must be designed such that the answers to Items (a), (b), and (c) below are □Yes□

Table 4: STANDARD PROJECT Post-construction BMP Checklist

	Yes	**No**
a) Is runoff from hardsurface areas such as roofs and driveways routed over natural treatment areas (grass, gravel, non-erosive landscape) prior to discharge from the site?		
b) Does runoff from **all** proposed hardsurface areas receive biofiltation (no Directly Connected Impervious Areas [DCIA])?		
c) Will all trash enclosures be covered and surface runoff directed away from the enclosures (if trash enclosures are proposed)?		
d) Is biofiltration implemented for runoff? Check applicable method below: i) grassy or gravel swale at a maximum slope of 2□ and minimum width of 3 ft. ____ ii) relatively flat landscape or turf areas ____ iii) driveway grass strip at least 1 foot wide ____ iv) pervious pavement and/or pavers with at least 50□ opening ____ v) underground gravel filtration/ percolation system ____ vi) other (list):		

<u>Storm Water Certification</u>
(To be completed for all project categories)

I hereby acknowledge that both construction and permanent post-construction storm water BMPs are required for this project and will be designed and constructed in accordance with the City of Encinitas BMP Manual, Part II. I certify that the information provided above is complete and correct.

_____
Owner or Engineer Signature Print Name Date

APPENDIX F-4

Stormwater Condition Excerpts:

EG1 Grading Conditions

EG10 In accordance with Section 23 .24.370 (A) of the Municipal Code, no grading permit shall be issued for work occurring between October 1st of any year and April 15th of the following year, unless the plans for such work include details of protective measures, including desilting basins or other temporary drainage or control measures, or both, as may be deemed necessary by the field inspector to protect the adjoining public and private property from damage by erosion, flooding, or the deposition of mud or debris which may originate from the site or result from such grading operations.

ED1 Drainage Conditions

ED2 The owner shall exercise special care during the construction phase of this project to prevent any offsite siltation. The owner shall provide erosion control measures and shall construct temporary desiltation/detention basins of type, size and location approved by the Engineering Services Director. The basins and erosion control measures shall be shown and specified on the grading plan and shall be constructed to the satisfaction of the Engineering Services Director prior to the start of any other grading operations. Prior to the removal of any basins or facilities so constructed, the area served shall be protected by additional drainage facilities, slope erosion control measures, and other methods required or approved by the Engineering Services Director. The owner shall maintain the temporary basins and erosion control measures for a period of time satisfactory to the Engineering Services Director and shall guarantee their maintenance and satisfactory performance by cash deposit and bonding in amounts and types suitable to the Engineering Services Director.

ED2A An erosion control system shall be designed and installed onsite during all construction activity. The system shall prevent discharge of sediment and all other pollutants onto adjacent streets and into the storm drain system. The City of Encinitas Best Management Practice Manual shall be employed to determine appropriate storm water pollution control practices during construction.

ED2M The developer shall exercise special care during the construction phase of this project to prevent any offsite siltation. The developer shall provide erosion control measures and shall construct temporary desiltation/detention basins of type, size and location as approved by the Engineering Services Director. The basins and erosion control measures shall be shown and specified on the grading plan and shall be constructed to the satisfaction of the Engineering Services Director prior to the start of any other grading operations. Prior to the removal of any basins or facilities so constructed the area served shall be protected by additional drainage facilities, slope erosion control measures and other methods required or approved by the Engineering Services Director. The developer shall maintain the temporary basins

and erosion control measures for a period of time satisfactory to the Engineering Services Director and shall guarantee their maintenance and satisfactory performance through cash deposit and bonding in amounts and types suitable to the Engineering Services Director.

ESW1 Storm Water Pollution Control Conditions

ESW2 Grading projects with a disturbed area of greater than 1 acre must also meet additional requirements from the State Water Resources Control Board (SWRCB). Those additional requirements include filing a Notice of Intent (NOI) and preparing a Stormwater Pollution Prevention Plan (SWPPP).

ESW3 Best Management Practice shall be utilized for storm water pollution control to the satisfaction of the City Engineer. The surface run off shall be directed over grass and landscaped areas prior to collection and discharge onto the street and/or into the public storm drain system. If pipes are used for area drainage, inlets shall be located to allow maximum flow distance over grass and non-erodable landscape areas. A grass lined ditch, reinforced with erosion control blanket, or a rip-rap lined drainage ditch shall be used instead of a concrete ditch where feasible. Hardscaped areas and driveways shall be sloped toward grassy and landscaped areas. Driveways with a grass- or gravel-lined swale in the middle can be used if the site topography does not allow for the discharge of driveway runoff over landscaped areas. The **Grading Plan Tentative Map Permit Site Plan** shall identify all landscape areas designed for storm water pollution control (SWPC). A note shall be placed on the plans indicating that the modification or removal of the SWPC facilities without a permit from the City is prohibited.

ESW4 Priority Projects shall implement a single or a combination of storm water Best Management Practice methods in order to reduce to the maximum extent practicable the quantity of pollutants entering the public storm drain system or any receiving body of water supporting beneficial uses. All Priority Projects shall construct and implement a structural treatment control BMP, such as natural bio-filtration system or a treatment detention basin, designed to infiltrate, filter, or treat a quantity of storm runoff equal to or greater than the volume generated by a 0.6 precipitation storm event in a duration of twenty-four hours or the maximum flow rate produced by a rainfall of 0.2 inches during each hour of a storm event. The filtration system shall be designed based upon best management practice standards and must be approved by the City Engineer. A covenant approved by the City shall be recorded against the property to ensure the professional maintenance, repair, and replacement of the storm water quality BMP as necessary into perpetuity. The covenant shall also detail the funding mechanism for the required maintenance. An IOD for a public storm drain easement shall be offered to the City and shall cover all storm water treatment facilities and additional areas needed for maintenance and access. A **Grading Plan Tentative Map Permit Site Plan** identifying all landscape areas designed for storm water pollution control (SWPC) and Best Management Practice shall be submitted to

the City for Engineering Services Department approval. A note shall be placed on the plans indicating that the modification or removal of the SWPC facilities without a permit from the City is prohibited.

ESW5 The project must meet storm water quality and pollution control requirements. The applicant shall design and construct landscape and/or turf areas and ensure that all flows from impervious surfaces are directed across these areas prior to discharging onto the street. A **Grading Plan Tentative Map Permit Site Plan** identifying all landscape areas designed for storm water pollution control (SWPC) and Best Management Practice shall be submitted to the City for Engineering Services Department approval. A note shall be placed on the plans indicating that the modification or removal of the SWPC facilities without a permit from the City is prohibited.

ESW6 Storm Water Pollution Control (SWPC) facilities shall be designed and approved by the City Engineer and secured with a performance bond prior to the issuance of a **grading building** permit for this project.

ESW7 For storm water pollution control purposes, a grassy swale reinforced with City-approved geosynthetic fabric shall be provided along the pavement edge. A covenant approved by the City shall be recorded against the property to ensure the property owners will be responsible for the maintenance, repair, and replacement of the grassy swale as necessary into perpetuity.

ESW8 For storm water pollution control purposes, a decomposed granite (DG) swale reinforced with a City-approved geosynthetic fabric shall be provided along the pavement edge. A covenant approved by the City shall be recorded against the property to ensure the property owners will be responsible for the maintenance, repair, and replacement of the DG swale as necessary into perpetuity.

ESW9 For storm water pollution control purposes, all runoff from all roof drains shall discharge onto grass and landscape areas prior to collection and discharge onto the street and/or into the public storm drain system. Grass and landscape areas designated for storm water pollution control shall not be modified without a permit from the City. A note to this effect shall be placed on the **Grading Permit Site** plan.

ESW10 The design of drainage for private roadways and other impervious surfaces shall incorporate Best Management Practices for storm water pollution control. Private roadway drainage for this project shall incorporate one or more of the following:

A) A rural swale system to direct street sheet flows into a vegetated swale or stabilized decomposed granite (DG)/gravel shoulder and includes curbs at corners and culverts under driveways and at street crossings;

B) An urban curb and gutter system with periodic inlets to collect and direct flows into a vegetated swale/biofilter;

C) A dual drainage system in which precipitation of up to .6 or a rainfall intensity of

up to .2 inches per hour is captured into street catch basins and discharged into an adjacent vegetated swale or gravel shoulder.

Additional Conditions (excerpts)

Grassy Swale

A minimum 6-foot wide grassy swale reinforced with City-approved geosynthetic mat fabric shall be provided along the pavement edge.

Detention/ Infiltration Basin for Runoff Mitigation

Runoff from this property drains to the adjacent property. The applicant shall design and construct an underground infiltration basin to receive all site runoff discharging onto the adjacent property. The infiltration basin shall be an underground storage basin filled with □ □crushed rock and lined with a City-approved filter fabric. The surface runoff shall enter the crushed rock filled storage through a grate inlet and disperse via a 4□perforated pipe running laterally through the crushed rock. The detention/infiltration basin shall be designed consistent with Engineering Standard Condition ED8 in order to ensure that the impact of the runoff on the adjacent property is less than or equal to the predevelopment condition.

APPENDIX F- 5
Stormwater Pollution Control BMP Notes
Relative to Construction Activities

Concrete Washout

- Contractor shall establish and use an adequately sized concrete washout area to contain washout wastes on site. It is illegal to wash concrete, slurry, mortar, stucco, plaster and the like into the stormwater conveyance system or any receiving water. Contractor shall post a sign designating the washout location.

Construction Site Access

- A stabilized construction site access shall be provided for vehicles egress and ingress to prevent tracking dirt off site. This shall include using material such as gravel and/or corrugated steel panels/plates.

Construction Vehicles

- A specific area away from gutters and stormdrain shall be designated for construction vehicles parking, vehicle refueling, and routine equipment maintenance. All major repairs shall be made off-site.

Erosion Control

- Erosion control must be provided for all erosive surfaces. Sloped surfaces especially shall be protected against erosion by installing erosion resistant surfaces such as erosion control mats, adequate ground cover vegetation, and bonded fiber matrix.

- No excavation and grading activities are allowed during wet weather.

- Diversion dikes shall be constructed to channel runoff around the construction site. Contractor shall protect channels against erosion using permanent and temporary erosion control measures.

- Remove existing vegetation only when absolutely necessary. Large projects shall be conducted in phases to avoid unnecessary removal of the natural ground cover. Do not remove trees or shrubs unnecessarily; they help decrease erosion.

- Temporary vegetation must be planted on slopes or where construction is not immediately planned for erosion control purposes. Erosion shall be prevented by planting fast-growing annual and perennial grasses to shield and bind the soil.

- Plant permanent vegetation as soon as possible, once excavation and grading activities are complete.

- Water usage for dust control shall be minimized.

On-site Construction Material Storage

- Stored materials shall be contained in a secure place to prevent seepage and spillage. Contractor shall store these products where they will stay dry out of the rain. Contractor shall provide secondary containment for all fuel stored on-site.

- Eliminate or reduce pollution of stormwater from stockpiles kept on-site. Stockpiles may include soil, paring materials, asphalt concrete, aggregate base, etc. Stockpiles shall be located away from concentrated stormwater flows and stormdrain inlets. Stockpiles shall be covered or protected with soil stabilization measures and provided with a temporary sediment barrier around the perimeter at all times.

Training

- Contractors' employees who perform construction in the City of Encinitas shall be trained to be familiar with the City of Encinitas stormwater pollution control requirements. These BMP notes shall be available to everyone working on site. The property owner(s) and the prime contractor must inform subcontractors about stormwater requirements and their own responsibilities.

Waste Management

- Contractor shall be responsible for properly disposing of all waste and unused construction materials. Dumping of unused or waste products on the ground, where water can carry them into the conveyance system is strictly prohibited.

- No seepage from dumpsters shall be discharged into stormwater. Berms/dikes shall be placed around dumpsters to divert the natural storm runoff. Dumpsters shall be checked frequently for leaks. Dumpster lids shall remain closed at all times. Dumpsters without lids shall be placed within structures with impervious roofing or covered with tarps in order to avoid rain contact with any trash material.

- Many construction materials, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation can be recycled. Non-recyclable materials must be taken to an appropriate landfill or disposed of as hazardous waste. For information on disposal of hazardous material, call the **Hazardous Waste Hotline** toll free at (800) 714-1195. For information on landfills and to order dumpsters call **EDCO** at (760) 436-4151.

- Pollutants shall be kept off exposed surfaces. Place trash cans and recycling receptacles around the site.

- Portable toilets must be in good working order and checked frequently for leaks. Contractor shall provide secondary containment and locate portable toilets away from stormdrain inlets on pervious surfaces.

- All construction debris shall be kept away from the street, gutter, and stormdrain. Contractor must routinely check and clean up material that may have traveled away from construction site

APPENDIX F-6: Development Projects Reviewed by Plancheck During FY 2006-07

Project Number	Approval Date	Address	Project Description	Priority	Maintenance Agreement?	BMP Type
0096	07/05/06	2010-2012 Cambridge	05-090 Ferlito	no	no	grass swales
9318	07/06/06	Santa Fe at Evergreen	04-040 Bluewater	yes	yes	bioswale/ landscape
9180	07/07/06	1610 Neptune	03-157 Brem	no	no	landscape
0184	07/07/06	2271 Montgomery	04-045 Etemad	no	no	landscape
0138	07/07/06	727 Dewitt Ave	05-151 Gaines, Campbell	no	no	landscape
0011	07/10/06	1521 Summit	05-063 1521 Summit LLC	no	yes	grass swales
9264	07/12/06	2896 Lone Jack (Jackie Ln)	Kron	no	no	grass swales
9367	07/12/06	781 Gardenview Ct	04-185 Lemara Holdings	yes	yes	bioswale
9080	07/13/06	1531 San Elijo	Alkhas 04-007	no	no	landscape
0116	07/13/06	348 Horizon Dr	Chabot	no	no	landscape
0125	07/17/06	361 Birmingham	05-211 Wilson	no	no	landscape
9481	07/18/06	Quail Gardens 12 lot sub	03-104 Barratt American	yes	yes (HOA)	swales and mechanical
9318	07/18/06	Santa Fe at Evergreen	04-040 Bluewater	yes	yes	bioswales
0112	07/18/06	1174 Hymettus	05-245 Werner	no	no	detention basin, grass swales
9459	07/18/06	211 Saxony Rd	04-059 hebrew hms	yes	yes	bioswales; detention basin
0126	07/18/06	2009-2011 Manchester	05-194 Wilson	no	no	landscape
0177	07/21/06	329 Lake Drive	04-187 Kunewalder	yes	yes	bioswales
0172	07/24/06	819 Saxony	Haunert	no	no	*retaining wall, no BMPs required*
9580	07/25/06	Vacant lot on Dove Hollow Ln	Robinson, Chuck	yes	yes	infiltration basin, bioswales
0501	07/26/06	2159 Glasgow	Venrick	no	no	grass swales
0127	08/02/06	2335 Manchester Ave	05-150 Cooley	no	no	landscape area
0224	08/03/06	1739 Freda Ln	Rodriguez	no	no	grass swale
6391	08/04/06	Traebert Ranch	00-032 Emmet	no	no	vegetated swales
9053	08/07/06	1396 Rubenstein	Wilder	no	no	landscape
0148	08/07/06	2274 Edinburg Ave	05-006 Grayeb	no	no	landscape
9057	08/08/06	201 Quail Road	02-217	yes	yes	bioswales
9267	08/09/06	1926 Oxford Ave	04-139 Murphy Res	no	no	landscape
0266	08/09/06	735 Del Rio Ave	Berry	no	no	landscape
1565	08/10/06	104 Neptune	02-245 Finn	no	no	landscaped area, grass swales
0249	08/15/06	3645 Copper Crest Rd	Davis	no	no	bioswale
0218	08/16/06	640 Rancho Santa Fe	Poole	no	no	grass swales
0152	08/17/06	1219 Neptune Ave	05-275, Yousko	no	no	landscape
0261	08/18/06	1945 Lake Dr	Good	no	no	bioswales
0142	08/18/06	946-950 Woodgrove	Park Place HOA	no	no	*slope repair, no BMPs required*
0181	08/21/06	3342 Wildflower Valley Dr	Stehly	yes	no	bioswales
0157	08/21/06	2309-2311 Oxford	05-189 Del Mar	no	no	landscape
9005	08/23/06	175 La Costa	02-013 Campbell	no	no	detention basin
9356	08/23/06	3442 Fortuna Ranch	Watkins	no	no	landscaped area
0255	08/24/06	1877 Olivenhain Rd	Garner	yes	yes	*TBD, not approved yet*
0195	08/24/06	388 Hillcrest	Winter	no	no	*TBD, not approved yet*
0064	08/24/06	1817 Sheridan Rd	Stahovich	no	no	landscape
6242	08/30/06	Fortuna Ranch & Rancho Summ 264	89-031	yes	yes	roadside bioswale
0153	08/31/06	111-125 Chesterfield	Ford-DWO, L.P.	yes	yes	mechanical
0135	08/31/06	487 Bristol	05-134, Struthers	no	no	*sewer main extension, no BMPs required*
0246	09/01/06	4036 Manchester Ave	Pegel Family Trust	no	no	detention basin, bioswales
0051	09/05/06	Hillcrest Dr	05-120 Najar	no	no	bioswales

APPENDIX F-6: Development Projects Reviewed by Plancheck During FY 2006-07

Project Number	Approval Date	Address	Project Description	Priority	Maintenance Agreement?	BMP Type
0065	09/12/06	1441 Hygeia	05-252 Penwarden	no	no	grass swales
0061	09/13/06	1552 Summit	04-246 Walsh	no	yes	grass swales
0275	09/13/06	427 Naiad	Markoff 05-035	no	no	bioswales
9576	09/13/06	843 San Dieguito	04-143 Erwin, Bill & Julie	no	no	bioswales
0088	09/18/06	175 Florita St	06-021, 06-022 Gray	no	no	bioswales
0100	09/19/06	1646 Somerset	05-196 Bilski	no	no	grass swales
0060	09/26/06	3275 Poppy Hills Ln	99-207 Sides	yes	yes	bioswale/ landscape
0186	09/28/06	1019 Oldham Way	Jamison	no	no	bioswales
0279	09/28/06	3430 Via Monte Verde	Dunham	no	no	bioswales
9067	09/28/06	Lake Drive	Geyser	no	no	bioswales
6442	09/28/06	Manchester Ave	98-039 Enc Country Day	yes	yes	detention basin
0087	09/28/06	354 Santa Fe	05-127 Scripps Health	yes	yes	detention basin, grass swales
0313	10/03/06	2339 11th St	Saber	no	no	bioswales
9215	10/05/06	155 Quail Gardens	04-244 Martin, Sunshine Nursery	yes	yes	swale
0299	10/05/06	202 Lindsey Ln	Gerkin	no	no	landscape
9294	10/10/06	477 N El Camino Real	03-235 North Coast Medical	yes	yes	underground detention basin, bioswale
1412	10/11/06	Lone Jack Rd	00-186 Decarion	no	no	bioswales
0070	10/11/06	1275 Quail Gardens	04-239 Enc Ranch Golf	no	no	grass swales
9512	10/11/06	422 Andrew	05-129 Camargo	no	no	infiltration basin, grass swales
7828	10/12/06	Lake Dr	01-090 Best in West	yes	yes	bioswales with underground pipes
1469	10/13/06	Sheilds	01-301 1555 Bella Vista	yes	yes (HOA)	bioswales
0169	10/18/06	510 El Camino Real	Christian Fellowship Church	yes	yes	bioswale/ inlet filters
9350	10/23/06	364 Liverpool	03-247 Avazian	no	no	landscape
0331	10/24/06	171 Kilkenny	05-099 Kayajanian	no	no	landscape
0289	10/31/06	216 N Coast Hwy 101	03-258, Net Leased Real Properties	no	no	landscape
0183	11/01/06	3234 Olivenhain Farms	Helmbacher	yes	yes	grass swales
0220	11/01/06	430 Andrew	Haggblom	no	no	landscaped area
0307	11/02/06	Phoebe St and Hwy 101	Sawtooth 04-219	yes	yes (HOA)	detention chamber
0308	11/02/06	Phoebe St and Hwy 101	Sawtooth 04-220	yes	yes (HOA)	detention chamber
9477	11/06/06	728 Dewitt Ave	04-100 Eisman	no	no	bioswales
9577	11/07/06	175 N Vulcan Ave	04-251 Miller	no	yes	bioswales
0276	11/07/06	Phoebe St and Hwy 101	Sawtooth 04-219, 04-220	yes	yes	mechanical filter
0250	11/08/06	271 Delphinium	Shelton	no	no	bioswales
0178	11/08/06	1330 Bello Mar	Bonanno	no	no	landscape
0199	11/14/06	402 Sheffield	04-281 Toth, Erturk	no	no	swales
0365	11/15/06	4305 Manchester	Byron homes, MPP San Diego LLC	no	no	treatment basin
0187	11/20/06	1060 Urania Ave	05-007 TPM Petersen	yes	yes	mechanical/detention pit
0052	11/20/06	1320 Summit	1320 Summit LLC, Sheriff	no	no	bioswales
0353	11/22/06	224 Andrew	04-286 Eaton Beach McCarter	yes	yes	bioswale
0286	11/27/06	2265 Manchester Ave	05-205 Lee	no	no	landscaped area
0345	11/28/06	943 Arden	Alvarez	no	no	landscaped area
0269	11/30/06	519 Arden	Petrucci/Pham	no	no	landscaped area
0377	12/04/06	3474 Dove Hollow Rd	Mundy	no	no	sewer plan
0235	12/07/06	361 Rancho Santa Fe Rd	Karen Stephen	no	no	grass swales
9055	12/08/06	1308-1310 El Camino Real	01-239 Berryman	yes	yes	detentiaon basin and bioswale
0354	12/08/06	1713 Gascony	Skyloft	no	no	*slope repair, no BMPs required*

APPENDIX F-6: Development Projects Reviewed by Plancheck During FY 2006-07

Project Number	Approval Date	Address	Project Description	Priority	Maintenance Agreement?	BMP Type
0369	12/08/06	1415 Rainbow Ridge	05-273 Holland	yes	yes	bioswale
0375	12/26/06	748 Rancho Santa Fe	Nava	no	no	infiltration basin, grass swales
0419	12/27/06	1972 Crest	Shipper	*TBD*	*TBD*	*TBD, not approved yet*
9058	12/28/06	1616 Neptune	Refold	no	no	*approved before FY 06-07*
9019	12/28/06	Rothenberg 02-282	289 Hillcrest	no	no	landscape
0407	01/09/07	554 Neptune	05-059 Gault	no	no	*no BMPs required*
0405	01/10/07	2297 Newcastle	06-148 Jones	no	no	swales and vegetation
0423	01/17/07	399 Hillcrest Dr	06-087 Nunez	no	no	grass swale
9303	01/18/07	887 Brittany	04-112 Riley	yes	yes	detention basin
9209	01/19/07	268 Sunset	Ragone 03-067	no	no	bioswale
0047	01/23/07	1133 Hermes	06-184 Calvo / Edwards	no	no	bioswales
0386	01/24/07	3535 Manchester Ave	05-148 Belmont Corp	yes	yes	underground storage chambers, bioswales
9294	01/24/07	477 N El Camino Real	03-235 North Coast Medical	yes	yes	bioswale/ structural unit train
9263	01/24/07	Burgundy Rd	Galiley	no	no	landscape
0427	01/25/07	S Vulcan and Vist del Rey	Hacienda de la Playa	no	no	none required (retaining wall)
0414	01/29/07	4455 Manchester Ave	Rite Aid 05-027	yes	yes	mechanical bioswales
0413	01/30/07	651 Quail Gardens	Cole	no	no	landscaping
0394	01/31/07	282 Neptune	05-161 Zagara	no	yes	filter inserts and landscaping
9332	02/02/07	234 Rancho Santa Fe	Richard Sinnett related 502-CS, 9332-I	no	no	*retaining wall, no BMPs required*
502	02/02/07	Rancho Santa Fe Rd	Nava	no	no	*sewer main extension, no BMPs required*
0482	02/02/07	1864 Crest Dr	05-270 Woods	yes	yes	bio-basin
0106	02/07/07	Wildflower Valley	Franklin	no	no	bioswales
0483	02/07/07	540 La Costa	01-292 Chevron	yes	yes	bioswale/ inlet filters
9167	02/13/07	Hygeia	04-110 Beltran	no	no	infiltration basin, grass swales
0245	02/13/07	Lilac Summit	Killion	no	no	grass swales
9602	02/14/07	Lone Hill Lane	06-009 Gish	no	no	bioswales
9253	02/15/07	701-721 S Vulcan Ave	03-029 Beach Town Bungalows	no	no	landscape
9170	02/16/07	Oxford at Kilkenny	03-227 Weekes preferred property	no	no	landscape
9262	02/20/07	840 Bracero	03-018 JDSK Invest	yes	yes	bioswales
0278	02/26/07	3403 Bumann Rd	Somers	no	no	rock swales
0226	02/28/07	1319 Lux Canyon Dr	03-099 Lux	no	no	bioswales
0287	02/28/07	140 Range St	Finkbiner	no	no	grass swales
577	03/02/07	Bristol Avenue	Malone	no	no	*sewer main extension, no BMPs required*
0198	03/02/07	Somerset and Caretta Way	Galloway	no	yes	grass swales
0429	03/07/07	3592 Jasmine Crest	Weber	no	no	landscaping
9479	03/12/07	1338 Rubenstien	Moss	no	no	*approved before FY 06-07*
0385	03/13/07	1575 Crest Dr	Griffith	no	yes	grass swales
0010	03/16/07	160 Fourth	05-139 Winship	no	no	landscaping, bioswales
0202	03/20/07	411 Bristol	05-115 Zinkich	no	no	swales
0475	03/22/07	986 Hygeia	Lavia	no	no	*TBD, not approved yet*
9228	03/22/07	3230 Bella Colina	Kootchick	no	no	bioswale
9283	03/23/07	267 Sanford	03-128 Newman-Buch, LLC	no	yes	bioswales
0306	03/27/07	2351 San Elijo	05-185 Chesnut	no	no	grass swales
0061	03/28/07	801 Orpheus Ave	City of Encinitas	yes	yes	bioswale/ landscape
1508	03/28/07	Basil Street	02-236 Knafou	no	no	bioswale
0474	03/30/07	763 Second St	06-097 CWK Properties LLC	no	no	grass swales

APPENDIX F-6: Development Projects Reviewed by Plancheck During FY 2006-07

Project Number	Approval Date	Address	Project Description	Priority	Maintenance Agreement?	BMP Type
0185	04/02/07	1423 Rainbow Ridge Ln	Batley Enterprises	no	no	grass swales
0302	04/13/07	1405-1407 San Elijo	06-053 Schroeder	no	no	grass swales
9286	04/17/07	2477 Oxford	04-064, MOURAO	no	no	grass swales
6169	04/17/07	2100 N Coast Hwy	Encinitas Beach Resort	yes	yes	bioswale/ landscape
0214	04/18/07	301 Cantle Ln	Watts	no	no	grass swales
0280	04/26/07	368 E Glaucus St	Newby 05-258	no	yes	landscaped areas; bioswales
0476	04/26/07	501 Chesterfield	06-059 Maasen & Clark	no	no	landscape
0296	04/27/07	907-911 Bracero	04-186 Stanton	no	yes	bioswales
0389	04/27/07	554 Stratford	Samuelson	no	no	landscape
0437	04/28/07	200-52 El Camino Real	05-121 WRI El Camino LP	yes	yes	mechanical filter
0497	04/30/07	681 2nd St	06-043 Harrison	no	no	grass swales
0325	04/30/07	Lone Jack Rd	05-202 Rimmer	yes	yes	grass swales
0494	05/01/07	1025 Arcadia Rd	Radakovich	no	no	*TBD, not approved yet*
0366	05/01/07	742-744 Dewitt	05-201 Mosberg	no	no	landscape
9561	05/02/07	303 Santa Fe Drive	05-044 Santa Fe Dr Properties	no	yes	grass swale, mechanical/structural, SD filter
9301	05/09/07	Halcyon Rd	04-216, Holland	yes	yes	grass swales
214	05/10/07	301 Cantle Ln		no	no	bioswales
0528	05/10/07	402-404 Second St	06-050 Kopion Group	no	*TBD*	*TBD, not approved yet*
0442	05/16/07	1925 Cambridge Ave	06-032 Murray	no	yes	detention basin, landscaping
0493	05/17/07	Vulcan Ave	02-225 Bagley	no	no	grass swales
0364	05/22/07	115 Princehouse Ln	04-049 Cordova	no	no	bioswales
0462	05/22/07	70 N Coast Hwy 101 thru 90 N Coas	05-108 Encinitas Artist Lofts	yes	yes	mechaical/bioswales
0388	05/26/07	1435 Lake Dr	05-265 Cavanaugh & Deering	yes	yes	grass swales
0396	05/29/07	1408 Summit	06-090 Butler	no	no	detention basin, grass swales
0324	05/29/07	525 Birmingham	Strebe	no	no	none required
1453	05/30/07	1069 Double LL	McComas	no	no	detention basin, bioswales
0443	05/31/07	1066 Gardena	04-259 Red Point Homes	no	yes	grass swales
0094	06/06/07	1020 Calle Anacapa	04-010 Hughes	yes	no	bioswales
0315	06/06/07	3740 Fortuna Ranch Rd	04-010 Hughes	no	no	bioswales
0395	06/07/07	520 Fourth St	06-229 GEIERMAN	no	no	grass swales
0215	06/07/07	Brighton and Rossini	04-075 Fuller	no	yes	grass swales
0572	06/08/07	135 Daphne St	Dewald	no	no	landscape
0563	06/12/07	3637 Copper crest	Berg	*TBD*	*TBD*	*TBD, not approved yet*
9300	06/13/07	Calle Margatita	Talbot/Jones	no	no	swales
0372	06/13/07	1657 N Vulcan	03-090 Shea Homes, Coral Cove	yes	yes	detention basin, grass swales
0562	06/14/07	1302 Encinitas Blvd	03-205 HARLOFF	yes	yes	detention basin, grass swales
0551	06/14/07	243 Glaucus	05-079 LACKRITZ	no	yes	grass swales
0580	06/14/07	Rancho Santa Fe Rd	Sinnett	no	no	*sewer main extension, no BMPs required*
7967	06/18/07	Megan Lane	Brown	no	no	*approved before FY 06-07*
0409	06/22/07	3364 Calle Margarita	Bertha	no	no	rock swales
0465	06/22/07	1045 Via De Felicita	Wilson	no	no	landscape area

APPENDIX F-7

Recording Requested By:)
)
City Engineer)
)
When Recorded Mail to:)
City Clerk)
City of Encinitas)
505 South Vulcan Avenue)
Encinitas, CA 92024) SPACE ABOVE FOR RECORDER'S USE ONLY

PRIVATE STORM WATER TREATMENT
MAINTENANCE AGREEMENT

Assessor's Parcel No.[redacted] Project No.: [redacted]
W.O. No.: [redacted]

THIS AGREEMENT for the periodic maintenance and repair of that certain private storm water treatment facilities, the legal description and/or plat of which is set forth in Exhibit "B" attached hereto and made a part hereof, is entered into by [redacted], a California Corporation which shall include the Developer to the extent the Developer retains any ownership interest in any land covered by this agreement.

WHEREAS, this Agreement is required as a condition of approval by the City of Encinitas of Grading Permit [redacted]; and

WHEREAS, Developer is the owner of certain real property described in Exhibit "A" that will use and enjoy the benefit of said storm water treatment facilities(s) (Said real property is hereinafter referred to as the "property"); and

WHEREAS, it is the desire of the Developer that said private storm water treatment system be maintained in a safe and usable condition by the owners; and

WHEREAS, it is the desire of the Developer to establish a method for the periodic maintenance and repair of said private storm water treatment facilities and for the apportionment of the expense of such maintenance and repair among existing and future owners; and

WHEREAS, there exists a benefit to the public the private storm water facilities be adequately maintained on a regular and periodic basis; and

WHEREAS, it is the intention of the Developer that this Agreement constitute a covenant running with the land, binding upon each successive owner of all or any portion of the property.

NOW THEREFORE, IT IS HEREBY AGREED AS FOLLOWS:

1. The property is benefited by this Agreement, and present and successive owners of all or any portion of the property are expressly bound hereby for the benefit of the land.

2. The cost and expense of maintaining the private storm water treatment facilities shall be paid by the owner of the heirs, assigns and successors in interest of each such owner.

3. In the event any of the herein described parcels of land are subdivided further, the owners, heirs, assigns and successors in interest of each such newly created parcel shall be liable under this Agreement for their then pro rata share of expenses and such pro rata shares of expenses shall be computed to reflect such newly created parcels.

4. The repairs and maintenance to be performed under this Agreement shall be limited to the following: reasonable and improvements and maintenance work to adequately maintain said private storm water treatment facilities to permit access to said facilities. Repairs and maintenance under this Agreement shall include, but are not limited to, repairing access roadbeds, repairing and maintaining drainage structures, removing debris, if any, and other work reasonably necessary and proper to repair and preserve the private storm water treatment facilities for their intended purposes.

5. If there is a covenant, agreement, or other obligation imposed as a condition of the development, the obligation to repair and maintain the private storm water treatment facilities as herein set forth shall commence when improvements have been completed and approved by the City.

6. Any extraordinary repair required to correct damage to said storm water treatment facilities that results from action taken or contracted for by the owners or their successors in interest shall be paid for by the party taking action or party contracting for work which caused the necessity for the extraordinary repair. The repair shall be such as to restore the storm water treatment facilities to the condition existing prior to said damage.

7. Any liability of the owners for personal injury to an agent hereunder, or to any worker employed to make repairs or provide maintenance under this Agreement, or to third persons, as well as any liability of the owners for damage to the property of agent, or any such worker, or of any third persons, as a result of or arising out of repairs and maintenance under this Agreement, shall be borne, by the owners as they bear the costs and expenses of such repairs and maintenance. Owners shall be responsible for and maintain their own insurance, if any. By this Agreement, the Developer does not intend to provide for the sharing of liability with respect to personal injury or property damage other than that attributable to the repairs and maintenance undertaken under this Agreement.

8. Owners shall jointly and severally defend and indemnify and hold harmless City, City's engineer and its consultants and each of its officials, directors, officers, agents and employees from and against all liability, claims, damages, losses, expenses, personal injury and other costs, including costs of defense and attorney's fees, to the agent hereunder or to any owner, any contractor, any subcontractor, any user of the storm water treatment facilities, or to any other third persons arising out of or in any way related to the use of, repair or maintenance of, or the failure to repair or maintain the private storm water treatment facilities.

Nothing in the Agreement, the specifications or other contract documents or City's approval of the plans and specifications or inspection of the work is intended to include a review, inspection acknowledgement of a responsibility for any such matter, and City, City's engineer and its consultants, and each of its officials, directors, officers, employees and agents, shall have no responsibility or liability therefore.

11. The foregoing covenants shall run with the land and shall be deemed to be for the benefit of the land of the owners and each and every person who shall at anytime own all or any portion of the property referred to herein.

12. It is understood and agreed that the covenants herein contained shall be binding on the heirs, executors, administrators, successors, and assignees of each of the owners.

13. It is the purpose of the signatories hereto that this instrument be recorded to the end and intent that the obligation hereby created shall be and constitute a covenant running with the land and any subsequent purchaser of all or any portion thereof, by acceptance of delivery of a deed and/or conveyance regardless of form, shall be deemed to have consented to and become bound by these presents, including without limitation, the right of any person entitled to enforce the terms of this Agreement to institute legal action as provided in Paragraph 8 hereof, such remedy to be cumulative and in addition to other remedies provided in this Agreement and to all other remedies at law or in equity.

14. The terms of this Agreement may be amended in writing upon majority approval of the owners and consent of the City.

15. This Agreement shall be governed by the laws of the State of California. In the event that any of the provisions of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the validity, and enforceability of the remaining provisions shall not be affected thereby.

16. If the Property constitutes a "Common Interest Development" as defined in California Civil Code Section 1351(c) which will include membership in or ownership of an "Association" as defined in California Civil Code Section 1351(a), anything in this Agreement to the contrary notwithstanding, the following provisions shall apply at and during such time as (i) the Property is encumbered by a "Declaration" (as defined in California Civil Code Section 1351(h), and (ii) the Common Area of the property (including the private storm water treatment facilities) is managed and controlled by an Association:

(a) The Association, through its Board of Directors, shall repair and maintain the private storm water treatment facilities and shall be deemed the "agent" as referred to in Paragraph 7 above. The Association, which shall not be replaced except by amendment to the Declaration, shall receive no compensation for performing such duties. The costs of such maintenance and repair shall be assessed against each owner and his subdivision interest in the Property pursuant to the Declaration. The assessments shall be deposited in the Association's corporate account.

(b) The provisions in the Declaration which provide for assessment liens in favor of the Association and enforcement thereof shall supersede Paragraph 8 of the Agreement in its entirety. No individual owners shall have the right to alter, maintain or repair any of the Common Area (as defined in California Civil Code Section 1351(b) in the Property except as may be allowed by the Declaration.

(c) This Agreement shall not be interpreted in any manner, which reduces or limits the Association's rights and duties pursuant to its Bylaws and Declaration.

IN WITNESS WHEREOF, the parties have executed this Agreement
This_____day of_____, 2005.

Developer:

_____

_____
Print Name and Title

Signature of DEVELOPER must be notarized. Attach the appropriate acknowledgement.

APPENDIX F-8
CEQA Initial Study Checklist (Water Quality Section Only)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☐
b) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems?	☐	☐	☐	☐
c) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☐
d) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☐
e) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☐
f) Expose people or structures to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☐
g) Substantially conflict with city-adopted water quality standards or waste discharge requirements?	☐	☐	☐	☐
h) Substantially alter the existing drainage pattern of the site or area, including the alteration of a stream or river course, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☐
i) Result in a substantial degradation of receiving water quality during construction activities?	☐	☐	☐	☐
j) Propose a land use or an on-site activity that would substantially degrade receiving water quality?	☐	☐	☐	☐
k) Substantially increase any pollutant for which a tributary water body is listed on the Clean Water Act Section 303(d) list?	☐	☐	☐	☐
l) Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?	☐	☐	☐	☐
m) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☐
n) Substantially degrade groundwater quality?	☐	☐	☐	☐

Appendix G

G-1 Construction Inventory FY 2006-07
G-2 Map of Construction Sites FY 2006-07
G-3 FY 2006-07 Construction Site Storm Water Checklist
G-4 Sample of 2007 Erosion Control Letter

Inspector	Permit #	Site Address	Site Street Name	APN	Priority
Ben Oliver	9117 GI	236-238	Andrew Ave	216-052-0900	HIGH
Ben Oliver	9336 GI	290	Andrew Ave	216-052-0800	HIGH
Ben Oliver	9156 GI	736	Fourth Ave	258-153-0500	HIGH
Ben Oliver	9048 GI	235	La Costa Ave	216-052-71-00	HIGH
Ben Oliver	9370 GI	406	La Costa Ave	216-030-5200	HIGH
Ben Oliver	9512 GI	422	Andrew Ave	216-063-1800	LOW
Ben Oliver	220 GI	430	Andrew Ave	216-063-3300	LOW
Ben Oliver	269-GI	519	Arden Dr	258-103-02	LOW
Ben Oliver	19 GI	1316	Bello Mar Dr	216-500-0600	LOW
Ben Oliver	1537 GI	2015-2025	Cambridge Avenue	260-391-0300	LOW
Ben Oliver	9177 GI	740	Cornish Drive	258-211-18-00	LOW
Ben Oliver	72 GI	1604	Crest Dr	262-031-0100	LOW
Ben Oliver	47 GI	1133	Hermes	254-252-5700	LOW
Ben Oliver	9212 GI	376	Hillcrest Drive	216-081-3700	LOW
Ben Oliver	7800 GI	3542	Jasmine Crest	264-540-0100	LOW
Ben Oliver	7628 GI	225	La Costa Ave	216-052-2700	LOW
Ben Oliver	7628GI	235	La Costa Ave	216-052-2700	LOW
Ben Oliver	299 GI	202	Lindsey	258-420-0500	LOW
Ben Oliver	0127 GI	2335	Manchester	2610910700	LOW
Ben Oliver	215-GI	427	Naiad St	256-242-47	LOW
Ben Oliver	9285 GI	330	Neptune Avenue	256-352-0100	LOW
Ben Oliver	9170 GI		Oxford and Kilkenny	261-113-1800	LOW
Ben Oliver	9021 GI	1450	Paseo De Las Flores	254-614-0700	LOW
Ben Oliver	9575-GI	1270	Rubenstein Ave	260-071-2700	LOW
Ben Oliver	9253 GI	701-721	S Vulcan Ave	258-214-1200	LOW
Ben Oliver	9080 GI	1455	San Elijo Avenue	260-620-5400	LOW
Ben Oliver	9283 GI	267	Sanford	254-111-5800	LOW
Ben Oliver	64-GI	1817	Sheridan Rd	216-071-16	LOW
Ben Oliver	9103 GI	115	Verdi Ave	260-266-1100	LOW
Ben Oliver	0103 SG	1079	Vulcan Ave	252-324-4600	LOW
Nick Deile	7893 GI		Pireaus and Plato	254-144-0200	HIGH
Nick Deile	345 GI	943	Arden	258-233-1800	LOW
Nick Deile	9303 GI	887	Brittany	254-362-1500	LOW
Nick Deile	9434 GI	1055	Eolus	254-392-1000	LOW
Nick Deile	0010 GI	160	Fourth St.	258-021-0800	LOW
Nick Deile	9301 GI	191	Halcyon	256-301-1300	LOW
Nick Deile	1533 GI	1098	Hymettus Ave	254-262-2200	LOW
Nick Deile	9360 GI	754	Hymettus Avenue	256-253-3200	LOW
Nick Deile	9128 GI	240	La Veta	256-361-2200	LOW
Nick Deile	9350 GI	364	Liverpool	260-384-2200	LOW
Nick Deile	7958 GI	1815	MacKinnon	260-317-0200	LOW

Appendix G-1 Construction Inventory 2006-07

Nick Deile	9419 GI	871	Neptune Avenue	260-121-7000	LOW
Nick Deile	9488 GI	2416	Newport	261-101-2900	LOW
Nick Deile	9267 GI	1926	Oxford Avenue	260-362-1400	LOW
Nick Deile	0172 SG	819	Saxony Rd	256-236-0300	LOW
Nick Deile	199 GI	403	Sheffield	260-283-1200	LOW
Nick Deile	9054 GI	93	Sunset Drive	256-420-2000	LOW
Nick Deile	07-198		ECR Demo	259-121-18-00	MEDIUM
Nick Deile	495EX		Orpheus Ave Sewer	256-121-4100	MEDIUM
Peter Hall	9150 GI	3113	Camino Del Rancho	264-270-0800	HIGH
Peter Hall	9356 GI	3442	Fortuna Ranch Road	264-291-0400	HIGH
Peter Hall	9482 GI	1635	Gascony Road	254-172-0300	HIGH
Peter Hall	9489 GI	3515	Jasmine Crest	264-540-0700	HIGH
Peter Hall	183 GI	3234	Olivenhain Farms Rd	264-091-2000	HIGH
Peter Hall	9341 GI	454	Bristol Street	260-282-1500	LOW
Peter Hall	9564 GI	710	Cole Ranch Road	265-352-0400	LOW
Peter Hall	0266 GI	735	Del Rio	2561641700	LOW
Peter Hall	6291 GI	1747	Noma Lane	2161003200	LOW
Peter Hall	9529 GI	125	Avocado Street	254-054-6500	MEDIUM
Peter Hall	125-GI	361	Birmingham	260-382-4800	MEDIUM
Peter Hall	7601-GI	1255	Birmingham	260-430-6700	MEDIUM
Peter Hall	9300-GI	3373	Calle Margarita	264-240-1400	MEDIUM
Peter Hall	96-GI	2010-2012	Cambridge	260-384-4400	MEDIUM
Peter Hall	9522 GI	2150	Cambridge Avenue	260-404-2800	MEDIUM
Peter Hall	138 GI	727	Dewitt Avenue	258-211-1100	MEDIUM
Peter Hall	9580 GI		Dove Hollow Lane	264-232-2700	MEDIUM
Peter Hall	1563 GI	3701	Fortuna Ranch Road	264-451-1000	MEDIUM
Peter Hall	112 GI	1174	Hymettus Avenue	254-262-0600	MEDIUM
Peter Hall	126-GI	2009	Manchester	260-382-4400	MEDIUM
Peter Hall	7967-GI		Megan Ln	264-222-0500	MEDIUM
Peter Hall	9180 GI	1610	Neptune Avenue	264-040-2700	MEDIUM
Peter Hall	9486 GI	560/566	Neptune Avenue	256-084-1100	MEDIUM
Peter Hall	235-GI	361	Rancho Santa Fe Rd	259-023-3700	MEDIUM
Peter Hall	218-GI	640	Rancho Santa Fe Rd	265-355-0700	MEDIUM
Peter Hall	287-G	140	Range St.	254-054-60-00	MEDIUM
Peter Hall	9442 GI	1416	Summit Avenue	260-620-7300	MEDIUM
Ron Brady	9278 GI		Lone Hill Lane= 2 Lots	264-450-0500	HIGH
Ron Brady	9289 GI		Lone Jack & Jackie Lane	264-160-1600	HIGH
Ron Brady	9563 CN		Moonlight Beach Sewer Pump Station @ 3rd & B Street	254-000-0000	HIGH
Ron Brady	9294 GI	477	N. El Camino Real	257-470-0400	HIGH
Ron Brady	9215 GI		Quail Gardens & Encinitas Blvd.	258-130-3200	HIGH
Ron Brady	7095 GI	1060 & 1064	Wiegand St	264-240-0800	HIGH
Ron Brady	70 GI		Encinitas Ranch Club HS	254-612-0600	LOW

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Ron Brady	9286 GI	2477 & 2483	Oxford Avenue	261-113-1600	LOW
Ron Brady	1508 GI	122	Basil St	256-082-0700	MEDIUM
Ron Brady	1583 GI	417	Bridoon Terrace	264-391-2100	MEDIUM
Ron Brady	9193 GI	421	Bridoon Terrace	264-391-2000	MEDIUM
Ron Brady	9477 GI	728	Dewitt Avenue	258-214-0400	MEDIUM
Ron Brady	88 GI	175	Florita	256-391-1300	MEDIUM
Ron Brady	9367 GI	781	Gardenview Ct	257-470-1100	MEDIUM
Ron Brady	7791 GI	1766	N. Coast Hwy 101- Mobile Gas Station (formerly Arco Gas)	254-060-0400	MEDIUM
Ron Brady	1565 GI	104	Neptune Avenue	256-371-0900	MEDIUM
Ron Brady	152 GI	1219	Neptune Avenue	254-230-0600	MEDIUM
Ron Brady	9579 CN	1403	Neptune Avenue	254-221-0700	MEDIUM
Ron Brady	9058 GI	1616	Neptune Avenue	254-040-1000	MEDIUM
Ron Brady	186 G	1019	Oldham Ct	254-551-0200	MEDIUM
Ron Brady	9164 GI		Quail Gardens Drive	257-020-0100	MEDIUM
Ron Brady	9028 GI	1050	Regal Rd	258-240-3000	MEDIUM
Ron Brady	9501 GI	1350	S. Coast Hwy 101	260-030-0200	MEDIUM
Ron Brady	9459 GI	211	Saxony Rd	256-340-3400	MEDIUM
Ron Brady	61 GI	1552	Summit Avenue	260-630-4600	MEDIUM
Ron Brady	9521 GI	203-213	Third St	258-051-1300	MEDIUM
Ron Brady	73 GI	760	Third St	258-152-0800	MEDIUM
Ron Brady	279 GI & SG	3430	Via Monte Verde	264-241-1900	MEDIUM
Todd B	1469 GI	1555	Bella Vista	216-122-1600	HIGH
Todd B	0055 GI	540	Cornish Drive	258-090-1500	HIGH
Todd B	9057 GI	201	Quail Road	258-111-1900	HIGH
Todd B	1412 GI	3354	Wildflower Estates	264-091-1300	HIGH
Todd B	1412 GI		Wildflower Estates	264-270-17-2100	HIGH
Todd B	9228 GI	3230	Bella Colina	264-090-3200	LOW
Todd B	178 GI	1330	Bello Mar Dr	216-500-0500	LOW
Todd B	9262 GI	900	Blk Bracero Rd	258-370-52	LOW
Todd B	9263 GI	1653	Burgundy Rd	254-171-3900	LOW
Todd B	1604 GI	125	Chesterfield	261-041-1700	LOW
Todd B	250 GI	271	Delphinium St	257-090-4901	LOW
Todd B	0058 GI	1638	Edilee Drive	260-552-0400	LOW
Todd B	9601 GI	293	Hillcrest Drive	254-102-5900	LOW
Todd B	65-GI	1441	Hygeia Ave.	254-112-2800	LOW
Todd B	331 GI	172	Kilkenny Dr	261-102-1700	LOW
Todd B	245 GI	3351	Lilac Summit	264-091-3500	LOW
Todd B	9456 GI	2015	MacKinnon Avenue	260-394-0800	LOW
Todd B	9577 GI	175	N. Vulcan	256-400-2100	LOW
Todd B	60 GI	3275	Poppy Hills Lane	264-091-9000	LOW
Todd B	9576 GI	843	San Dieguito Drive	258-232-1100	LOW
Todd B	9140 GI	1951-53	San Elijo Avenue	260-351-0500	LOW

Appendix G-1 Construction Inventory 2006-07

Todd B	7909 GI	355	Seeman Drive	259-130-7300	LOW
Todd B	7962 GI	200	Seeman Drive	259-131-5400	LOW
Todd B	0100 GI	1646	Somerset	2603041000	LOW
Todd B	9034 GI	1470	Summit Avenue	260-620-7600	LOW
Todd B	0011 GI	1521	Summit Avenue	260-083-0500	LOW
Todd B	9209 GI	268	Sunset Drive	256-400-1000	LOW
Todd B	181-GI	3342	Wildflower Valley Dr.	264-091-7100	LOW
Todd B	0106 GI	3358	Wildflower Valley Drive	264-091-8600	LOW
Todd B	87 GI	354	Santa Fe Dr	258-240-4600	MEDIUM

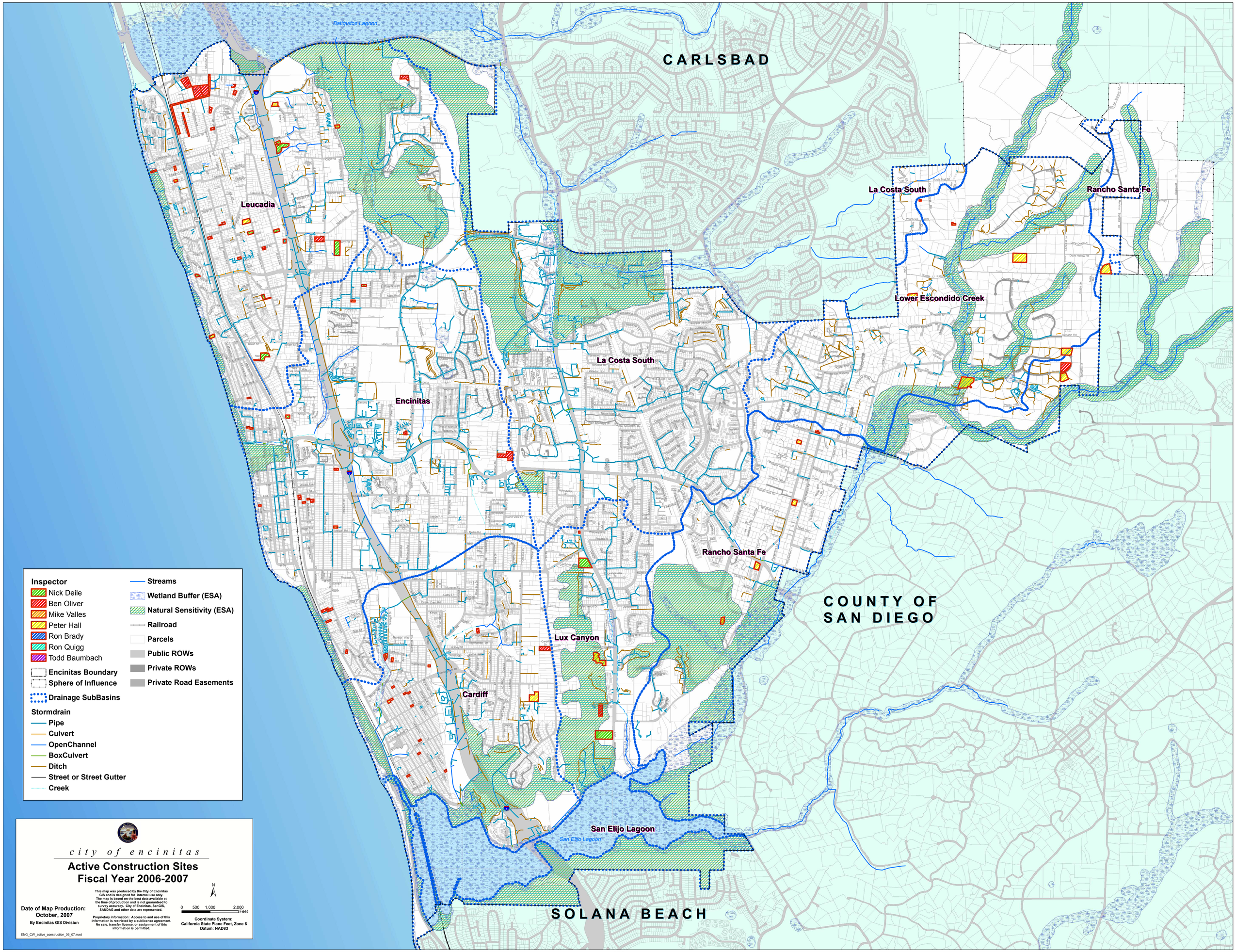
CARLSBAD
Batiquitos Lagoon
Leucadia
Encinitas
La Costa South
La Costa South
Rancho Santa Fe
Rancho Santa Fe
Lower Escondido Creek
Lux Canyon
Cardiff
San Elijo Lagoon
San Elijo Lagoon
COUNTY OF SAN DIEGO
SOLANA BEACH
Inspector
Nick Deile
Ben Oliver
Mike Valles
Peter Hall
Ron Brady
Ron Quigg
Todd Baumbach
Encinitas Boundary
Sphere of Influence
Drainage SubBasins
Stormdrain
Pipe
Culvert
OpenChannel
BoxCulvert
Ditch
Street or Street Gutter
Creek
Streams
Wetland Buffer (ESA)
Natural Sensitivity (ESA)
Railroad
Parcels
Public ROWs
Private ROWs
Private Road Easements
city of encinitas
Active Construction Sites
Fiscal Year 2006-2007
Date of Map Production:
October, 2007
By Encinitas GIS Division
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N
0 500 1,000 2,000 Feet
Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83
ENG_CW_active_construction_06_07.mxd

City of Encinitas

Construction Site Storm Water Inspection Checklist

Property Address:	**Date Inspected:**
Contact Person:	**Permit No:**
Phone No:	**APN:**
Inspector:	**Size:**

Site Priority: ☐ High ☐ Medium ☐ Low

(reason for "High" designation_____**)**

Covered under State General Construction Permit? ☐ YES ☐ NO If yes, is SWPPP on-site? ☐YES ☐ NO

Erosion Control BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Preserving Existing Vegetation
- ☐ Hydroseeding
- ☐ Soil Binders, Hydraulic Mulch, Bonded Fiber Matrix
- ☐ Geotextiles, Plastic Covers, Erosion Control Blankets/Mats
- ☐ Permanent Landscaping
- ☐ Diversion Channel for Run-on
- ☐ Other _____

Sediment Control BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Perimeter Protection: ☐ gravel bags, ☐ silt fencing, ☐ fiber rolls, ☐ other _____
- ☐ Slope Protection: ☐ silt fencing, ☐ fiber rolls, ☐ slope drains, ☐ other_____
- ☐ Resource Protection (environmentally sensitive areas and waterways)
- ☐ Sediment Capture: ☐ detention basin, ☐ desilting basin ☐other_____
- ☐ Velocity Reduction: ☐ check dams, ☐ rip rap, ☐ other_____
- ☐ Off Site Sediment Tracking: ☐ gravel entrance, ☐ Temp. Construction road, ☐ other_____
- ☐ Inlet Protection: ☐ gravel bags, ☐ gravel rolls, ☐ other_____
- ☐ Other _____

Materials Management BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Spill prevention and control program (employee education and training)
- ☐ Fuel/chemicals stored on Site: ☐ secondary containment, ☐ leak detection, ☐ other____
- ☐ Equipment Related Wastes: ☐ covered, ☐ secondary containment, ☐ other_____
- ☐ Stockpile on Site (Solids): ☐ covered, ☐ secondary containment, ☐ other_____
- ☐ Trash/Litter on Site: ☐ receptacles provided, ☐ covered, ☐ secondary containment, ☐ other _____
- ☐ Concrete Waste: ☐ designated washout area, ☐ secondary containment, ☐ other_____
- ☐ Sanitary Waste: ☐ secondary containment, ☐ located away from inlets, ☐ other_____

Enforcement: ☐ Correct Work (see Comments) ☐ Stop Work/NOV ☐ Citation (#_____)

Comments:

_____

_____

_____

_____

Signatures: City of Encinitas: _____ Date: _____

TEL 760-633-2787 / FAX 760-633-2818 505 S. Vulcan Avenue, Encinitas, California 92024-3633 TDD 760-633-2700

City of Encinitas

Appendix G-4

September 28, 2007

RE: **EROSION CONTROL**

Dear Permit Holder:

Please be advised that as of October 1, the City will enter into the wet season. The wet season brings with it a responsibility for erosion control pursuant to **23.24.370 - Wet Season Work** of the City Code. This section states the following:

A. No grading permit shall be issued for work occurring between October 1st of any year and April 15th of the following year, unless the plans for such work include details of protective measures, including desilting basins or other temporary drainage or control measures, or both, as may be deemed necessary by the field inspector to protect adjoining public and private property from damage by erosion, flooding, or the deposition of mud or debris which may originate from the site or result from such grading operations.

B. If grading is begun prior to October 1st, all protective measures shall be installed prior to October 1st. If grading is begun on or after October 1st, all protective measures shall be installed before grading is begun. All protective measures shall be maintained in good working order until April 15th of the succeeding year, where grading is done between October 1st and December 31st, or until April 15th of the same year where grading is done between January 1st and April 15th, unless their removal at an earlier date is approved by the City Engineer.

C. Where a grading permit is issued and the work is commenced after April 15th and before September 15th of any year, and the permit was issued without an Interim Erosion and Sediment Control Plan, and it appears that the grading and installation of the permanent drainage devices as authorized by the permit will not be completed prior to October 1, then on or before September 15th, the owner of the site on which the grading is being performed shall file or cause to be filed with the City Engineer an Interim Erosion and Sediment Control Plan as provided for in this Chapter and shall implement the measures contained in the approved plan by October 1. The plan check fee for the Interim Erosion and Sediment Control Plan shall be paid at the time of plan submittal and shall be in the amount provided for in this Chapter.

D. For continuation of grading activities, other than installation, maintenance, or repair of measures on the Erosion Control Plans, during the wet season, Permittee must apply for and receive, every seven days, special permission to proceed.

E. The City Engineer shall grant permission under this section on the basis of weather forecasts, site conditions, experience and other pertinent factors which indicate the activity may commence or continue without excessive erosion occurring.

F. Should the Permittee fail to submit the plans, fail to provide the protective measures or fail to obtain permission for wet season activities as required by this Chapter by the dates specified therein, it shall be deemed that a default has occurred under the conditions of the grading permit security. Thereupon the City Engineer may enter the property for the purpose of installing, by City forces or by other means, the drainage and erosion control devices

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

shown on the approved plans, or if there are not approved plans, as he may deem necessary to protect adjoining property from storm damage, or the City Engineer may cause the owner of the site to be prosecuted as a violator of this code, or he may take both actions.

G. The City Engineer shall have the authority to require implementation of all erosion control systems and requirements at any time of the year.

23.24.380 - Erosion Control System.

A. The faces of cut and fill slopes and project site shall be prepared and maintained to control against erosion in accordance with this Chapter. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted upon approval by the City Engineer.

B. Paved streets, sidewalks, and other improvements shall be maintained in a neat and clean condition free of loose soil, construction debris and trash. Street sweeping or other equally effective means shall be used on a regular basis to prevent storm flows from carrying sediment and debris outside the project boundaries. Watering shall not be used to clean streets except for fine material not otherwise removed by sweeping or other mechanical means.

C. The registered civil engineer who prepared the grading plan and designed the erosion control devices shall be responsible for modification of the design of devices, as necessary, during the rainy season.

D. Desilting facilities shall be provided at drainage outlets from the graded site.

E. Desilting basins shall be designed in accordance with City standards. Permanent desilting facilities shall be designed and constructed as to be aesthetically compatible with the surrounding development and terrain.

F. Desilting basins constructed of compacted earth shall be compacted to a relative compaction of ninety (90) percent of maximum density. A soil engineering report, prepared by the soil engineer, which includes the type of field testing performed, location and results of testing shall be submitted to the City Engineer for approval upon completion of the desilting basins.

G. Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available onsite and stockpiled at convenient locations to facilitate rapid construction of temporary device when rain is imminent.

H. Erosion protection shall consist of effective planting of all cut slopes in excess of five (5) feet high and fill slopes more than three (3) feet high unless otherwise approved by the City Engineer. Slopes exceeding five (5) feet high will require an approved sprinkler system, as determined by the City Engineer.

I. Protection for the slopes shall be installed as soon as practicable which may be prior to rough grade approval. Effective planting shall be installed, fully germinated and effectively cover the required slopes prior to final approval unless otherwise approved by the City Engineer.

J. The erosion control provisions shall take into account drainage patterns during the current and future phases of grading throughout the rainy season.

K. All removable protective devices shown shall be in place at the end of each working day when the five (5) day rain probability forecast exceeds forty (40) percent.

L. Unvegetated slopes shall be protected in accordance with the guidelines set forth by the Erosion and Sediment Control Manual or in accordance with other requirements set forth by the City Engineer.

23.24.390 - Erosion Control Maintenance.

A. After each rainstorm exceeding 1/4-inch in a 12 hour period, silt and debris shall be removed from all temporary check berms and desilting basins and the basins pumped dry. The requirement to clean and pump permanent desilting basins will be addressed on a case by case basis.

B. After each rainstorm, the performance of the erosion control system shall be evaluated and revised and repaired as necessary.

C. Devices shall not be moved or modified without the approval of the City Engineer.

D. The contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a threat to public health, safety and welfare.

E. The contractor and Permittee or project owner shall be responsible for continual maintenance of the devices during the rainy season. In the event of failure or refusal by the contractor, Permittee, or project owner to properly maintain the devices, the City Engineer may cause emergency maintenance work to be done to protect adjacent private and public property. The cost shall be charged to the owner and shall include an initial mobilization cost plus the cost of doing the work as provided for in this Chapter.

F. In the event the City Engineer must cause emergency maintenance work to be done, he may revoke the grading permit in writing. The permit shall not be renewed until an erosion control system approved by the City Engineer is installed and a fee of one-half the amount required for the original permit paid by the owner. The City Engineer may waive installation of an erosion control system after April 15.

G. If any grading subject to the provisions of this Chapter has commenced on private property without a valid grading permit, the property owner will be required to prepare and implement an erosion control plan which has been approved by the City Engineer. In the event of failure by the property owner to install an approved erosion control system, the City Engineer may cause emergency work to be done to protect adjacent private and public property.

The full text of the Municipal Code can be accessed on the City's website at http://ci.encinitas.ca.us/.

Please address any questions regarding this work to your inspector.

Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

cc: Inspector
File

Appendix H

H-1 2007 MS4 and Dry Weather Monitoring Stations Map
H-2 2007 Dry Weather Monitoring Report
H-3 Dry Weather Monitoring Field Data Sheet
H-4 Administrative Citation Form
H-5 Complaints Inspection Summary FY 2006-07
H-6 Hazardous Materials Incident Listings, Encinitas Fire Department

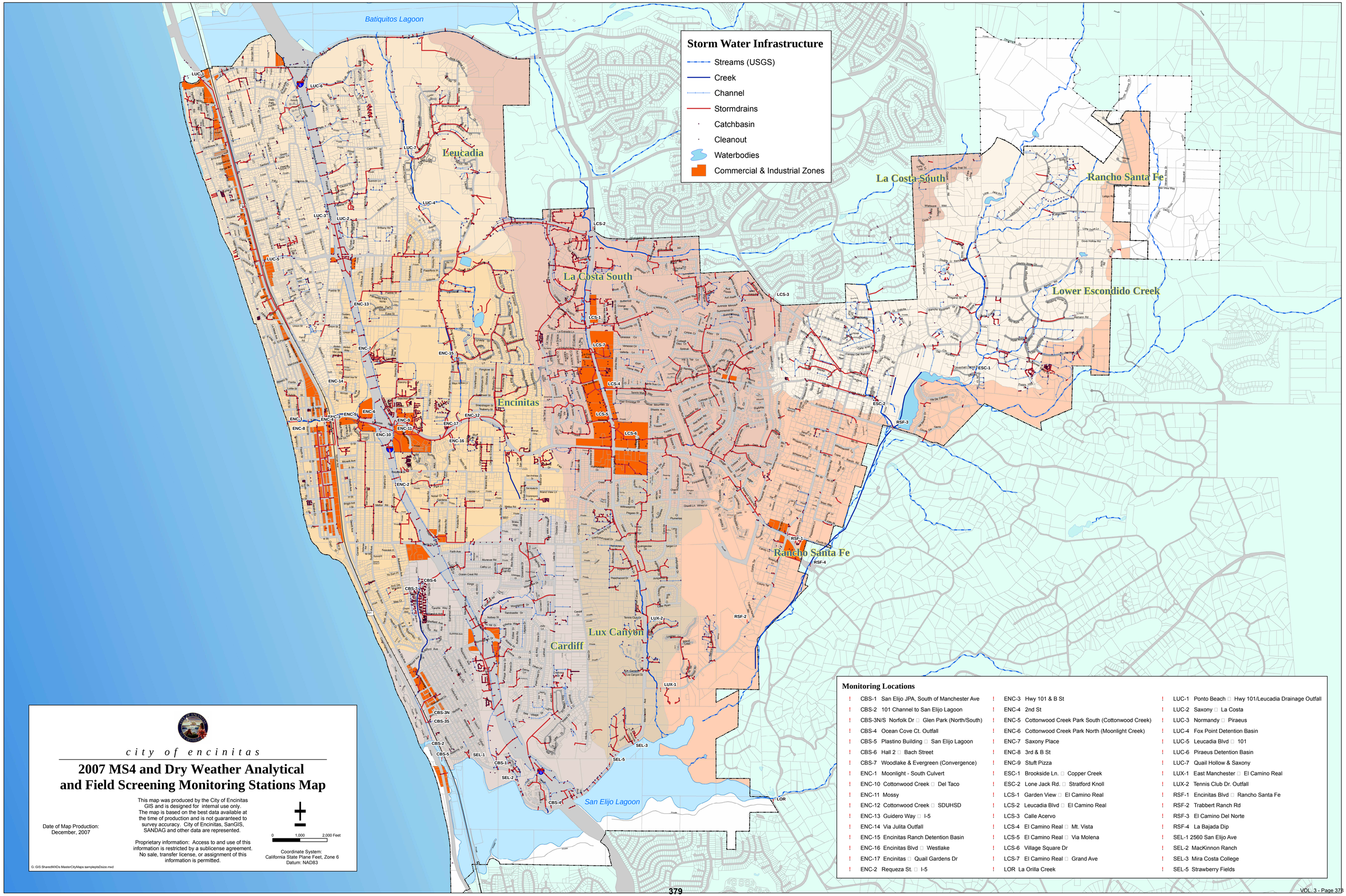

city of encinitas

2007 MS4 and Dry Weather Analytical and Field Screening Monitoring Stations Map

Date of Map Production:
December, 2007

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0 1,000 2,000 Feet

Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

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Monitoring Locations

- CBS-1 San Elijo JPA, South of Manchester Ave
- CBS-2 101 Channel to San Elijo Lagoon
- CBS-3N/S Norfolk Dr □ Glen Park (North/South)
- CBS-4 Ocean Cove Ct. Outfall
- CBS-5 Plastino Building □ San Elijo Lagoon
- CBS-6 Hall 2 □ Bach Street
- CBS-7 Woodlake & Evergreen (Convergence)
- ENC-1 Moonlight - South Culvert
- ENC-10 Cottonwood Creek □ Del Taco
- ENC-11 Mossy
- ENC-12 Cottonwood Creek □ SDUHSD
- ENC-13 Guidero Way □ I-5
- ENC-14 Via Julita Outfall
- ENC-15 Encinitas Ranch Detention Basin
- ENC-16 Encinitas Blvd □ Westlake
- ENC-17 Encinitas □ Quail Gardens Dr
- ENC-2 Requeza St. □ I-5
- ENC-3 Hwy 101 & B St
- ENC-4 2nd St
- ENC-5 Cottonwood Creek Park South (Cottonwood Creek)
- ENC-6 Cottonwood Creek Park North (Moonlight Creek)
- ENC-7 Saxony Place
- ENC-8 3rd & B St
- ENC-9 Stuff Pizza
- ESC-1 Brookside Ln. □ Copper Creek
- ESC-2 Lone Jack Rd. □ Stratford Knoll
- LCS-1 Garden View □ El Camino Real
- LCS-2 Leucadia Blvd □ El Camino Real
- LCS-3 Calle Acervo
- LCS-4 El Camino Real □ Mt. Vista
- LCS-5 El Camino Real □ Via Molena
- LCS-6 Village Square Dr
- LCS-7 El Camino Real □ Grand Ave
- LOR La Orilla Creek
- LUC-1 Ponto Beach □ Hwy 101/Leucadia Drainage Outfall
- LUC-2 Saxony □ La Costa
- LUC-3 Normandy □ Piraeus
- LUC-4 Fox Point Detention Basin
- LUC-5 Leucadia Blvd □ 101
- LUC-6 Piraeus Detention Basin
- LUC-7 Quail Hollow & Saxony
- LUX-1 East Manchester □ El Camino Real
- LUX-2 Tennis Club Dr. Outfall
- RSF-1 Encinitas Blvd □ Rancho Santa Fe
- RSF-2 Trabbert Ranch Rd
- RSF-3 El Camino Del Norte
- RSF-4 La Bajada Dip
- SEL-1 2560 San Elijo Ave
- SEL-2 MacKinnon Ranch
- SEL-3 Mira Costa College
- SEL-5 Strawberry Fields

Dry Weather Monitoring Assessment

May 1, 2007-September 30, 2007

Prepared for

City of Encinitas
Clean Water Program
505 South Vulcan Avenue
Encinitas, CA 92024

Prepared by

MACTEC Engineering and Consulting, Inc.
9177 Sky Park Court, Suite A
San Diego, CA 92123-4341

January 2008

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J Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Dry Weather Analytical Monitoring

1.0 Introduction

The California Regional Water Quality Control Board, San Diego Region, requires the Copermittees to implement a Dry Weather Storm Drain Monitoring Program annually, beginning May 2002. The program is a requirement of Order No. 2001-01, NPDES No. CAS0108758, Section F.5.b and Attachment E.

This section of the Municipal Permit requires the City of Encinitas to implement a dry weather analytical monitoring program for the detection and elimination of illicit discharges and connections to the City's Municipal Separate Storm Sewer System (MS4). The goal of this program is to actively seek and eliminate illicit connections and illegal discharges as well as to characterize dry weather flows.

An illicit discharge is a point source discharge of pollutants to the MS4 that is not comprised entirely of storm water, not exempted by the City's Storm Water Ordinance, or not authorized by an NPDES Permit. The backbone of this program is the establishment of discharge prohibitions in the City's Municipal Code, Chapter 20.08 (Storm Water Management).

Dry weather monitoring of the MS4 is performed by establishing monitoring locations throughout the City to adequately cover the entire storm drain system. The program encompassed 52 monitoring locations in 2007. Monitoring of these locations includes recorded observations, field screening where flow is present, and analytical laboratory testing at selected locations, at a minimum of 25% of the locations with flow.

The City of Encinitas conducted dry weather monitoring during the period of May 1, 2007 to September 30, 2007. The analysis of the dry weather monitoring results for 2007 is contained herein.

2.0 Dry Weather Analytical Monitoring Stations

A storm drain map has been developed by the City of Encinitas in a geographical information system (GIS). The storm drain GIS is maintained in an ArcInfo platform and maintained by the City's Information Technology Division. The map is continually updated to include new additions to the MS4 as validation continues. Dry weather monitoring locations were selected based on adequate coverage of the MS4, allowing for detection of illicit discharges, characterization of flows, and a better understanding of the water quality in Encinitas. This allows for the identification and tracking of exceedances in water quality parameters, indicating the possibility of illicit discharges to the MS4. Efforts were made to cover the entire jurisdiction and isolate particular areas of the storm drain system according to factors such as drainage sub-basins, land use, previous water quality data, areas of historic illegal discharges, and environmentally sensitive areas.

3.0 Dry Weather Analytical Monitoring Procedures

The City's dry weather program uses methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittee Dry Weather Monitoring Workgroup. The elements of the dry weather program include sampling locations, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Each of these procedures is discussed below.

Dry weather monitoring was conducted once at each selected location during the period May 1 – September 30, 2007. The City monitored 52 sites. As in the previous years, site CBS-3 was split into two sampling locations labeled North and South.

Of the 52 locations monitored, flowing or ponded water was observed at 33 sites, triggering field analysis at all 33 locations. Of the 33 locations, ponded water was observed at 8 of the locations, leaving 25 flowing sample sites. Thirty percent of the monitoring locations with water were sent for full laboratory analysis, totaling ten samples, therefore the minimum requirement of 25% was met. Twenty-two of 33 locations sampled including the 10 samples sent for full laboratory analysis were analyzed for total and fecal coliform, and enterococcus, in order to further characterize bacteria concentrations throughout the City's MS4. Bacteria is one of the high priority water quality problems in the City and watershed and therefore is analyzed more frequently.

Qualitative observations were made at all sample locations. Each location has a unique field data sheet noting observations such as color, clarity, odor, and biological characteristics. The observation and data collection sheet is included as Appendix A-H.

Field tests were performed by MACTEC Engineering and Consulting, Inc. Meters were used in determination of pH, conductivity, temperature, and turbidity. Ammonia, ortho-phosphate, nitrate, and MBAS analysis were performed with Chemetrics field kits. Where possible, flow was determined by filling a bottle of known volume using a timer and an estimation of the amount of flow captured. Flow was not able to be measured in many locations but was always noted as flowing or ponded. Action levels for the field analysis were determined by the Copermittee Monitoring Workgroup and are shown in Table 3.0. Follow-up investigations for exceedances detected in field screening were performed as soon as possible after the detected exceedance, typically within 24 hours.

Ten samples of 33 were collected for a full laboratory analysis in order to further characterize the water quality at specific locations throughout the City. When feasible, laboratory testing was performed as far down in the watershed as possible to assess water quality prior to discharge to a receiving water. Methods for laboratory analysis are based on EPA approved methods described in the Standard Methods for the Examination of Water and Wastewater, 18th edition. Follow-up investigations for exceedances detected in laboratory analyses were performed as soon as possible after receipt of data from the laboratory. The field and analytical results for each monitoring station are provided in Appendix I.

Table 3.0 Action Levels for Field Screening and Laboratory Analytical Parameters		
Field Screening Analytes	**Action Levels[1]**	**Source□Notes**
pH	□6.5 or 9.0	Basin plan, w/ allowance for elevated pH due to excessive photosynthesis.
ortho-Phosphate (mg/L) as P	2.0	USEPA Multi-sector GP
nitrate-N (mg/L)	10.0	Basin plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Workgroup experience, may also consider unionized ammonia fraction
Turbidity (NTU)	Best Professional Judgment	USEPA Multi sector general permit level-5 NTU. Typical levels are substantially higher. Base judgment on channel type and bottom
Temperature	Best Professional Judgment	Base judgment on season, air temp., channel type, shade, etc.
Conductivity (□mhos/cm) or TDS (mg/L)	Best Professional Judgment □City of Encinitas considers 5.00mS/cm (umhos/cm) an exceedance	EC may be highly elevated in some regions due to high TDS/groundwater exfiltration to surface water, mineral dissolution and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Also consider investigating unusually low EC (□800 umhos/cm) accompanied by unusual flows.
Laboratory Analytes	**Action Levels**	**Source/Notes**
MBAS (mg/L)	1.0	Basin plan, w/ allowance based on Workgroup field experience and possible field reagent interferences
Oil and Grease (mg/L)	15	USEPA multi-sector General Permit
Diazinon (□g/L)	.5	Response to diazinon and chlorpyrifos levels above 0.5 □g/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (□g/L)	.5	
Dissolved Cadmium	California Toxics Rule	Use CTR Table, 1-hour criteria to determine action level for sample.
Dissolved Copper	California Toxics Rule	
Dissolved Lead	California Toxics Rule	
Dissolved Zinc	California Toxics Rule	
Total Coliform (cfu/100 ml)	50000	Action levels are based on upper 90□ confidence level of Copermittees 2002 dry weather analytical monitoring data.
Fecal Coliform (cfu/ 100 ml)	20000	
Enterococcus (cfu/100 ml)	10000	

Notes:

(1) The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within site and between site sample variability

4.0 Dry Weather Data Analysis

Data analysis is based on three methods of data interpretation. The numeric action levels in Table 3.0 (determined by the Copermittee Monitoring Workgroup), is the primary method for determining when a follow-up sample is necessary in the field screening. In determining the necessity of follow-up, these action levels are used in conjunction with best professional judgment, the second method of data interpretation. Best professional judgment accounts for historical data, as well as characteristics of a sample location, which may affect sample data and not be considered an illicit discharge. An example of best professional judgment is considering previous groundwater characterizations to eliminate the need for follow-up investigations where nitrate concentrations and conductivity measurements exceeded predetermined action levels. The third method of determining exceedances in the dry weather data interpretation is through a statistical confidence interval test using the 90th-percentile confidence interval. The 90-percentile confidence interval was calculated using the data submitted by the San Diego Copermittees for the 2002 dry weather monitoring. The upper limit was used to determine outliers in bacteria data.

The following subsections contain analyses of the dry weather data collected for each of the eight sub-basins within Encinitas.

4.1 Cardiff Sub-basin

The dry weather monitoring locations include 12 sites in the Cardiff Sub-basin. All monitoring locations in the Cardiff Sub-basin drain to San Elijo Lagoon. Land use in the sub-basin is primarily residential with some commercial and agricultural uses in the upper reaches of the sub-basin. CBS-3 was divided into two locations, CBS-3 North and South, as previously described. Six of the 12 locations were field screened, as water was either flowing or ponded. Ponded water was observed at two of the 12 locations. As in years past, CBS-2 was selected for full laboratory analysis for the 2007 monitoring period. CBS-2 is an open channel that discharges directly to San Elijo Lagoon and drains commercial and residential areas.

Of the six locations where field screening was performed, four of the sites sampled had results exceeding the action levels for conductivity. Four of the sites were analyzed for bacteria and none exceeded action levels for total coliform, fecal coliform, or enterococcus.

Table 4.0 summarizes the action levels exceeded in the Cardiff Sub-basin.

Table 4.0 Cardiff Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
CBS-2	6/12/07	Flowing	Conductivity	5.81	mS/cm	5
CBS-4	6/11/07	Flowing	Conductivity	7.76	mS/cm	5
SEL-3	5/24/07	Ponded	Conductivity	5.48	mS/cm	5
SEL-2	5/29/07	Ponded	Nitrate (NO3-N)	15	mg/L	10

CBS-2

The water at the sample location at CBS-2 contained elevated conductivity. There were no other exceedances at this location; all were below action levels. The field team concluded that there were no illicit discharges or connections upstream. Land use upstream is primarily commercial and residential. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

CBS-4

The water at CBS-4 contained elevated conductivity. There were no other exceedances at this location; all were below action levels. The water at CBS-4 was flowing out of the Cape Sebastian detention basin and was clear and colorless. Land use upstream is primarily residential with some agricultural nurseries interspersed. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

SEL-2

The water at SEL-2 contained elevated nitrates. There were no other exceedances at this location; all were below action levels. The water was ponded in a natural channel and originated from a small drainage area consisting of residential area. The field team conducted a cursory investigation upstream in the drainage basin, and no obvious sources were observed.

SEL-3

The water at SEL-3 contained elevated conductivity. There were no other exceedances at this location; all were below action levels. The water was ponded in a natural channel and originated from a small drainage area consisting of residential areas, a school, and a church. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

Although several water quality exceedances are typical for the Cardiff sub-basin, water quality has been improving over the last five years of dry weather monitoring. Figure 4.1 illustrates a downward trend in water quality exceedances in Cardiff based on dry weather data collected from 2002 to 2007.

Figure 4.1 Action Level Exceedance Ratio Trend in the Cardiff Sub-basin, 2002-2007

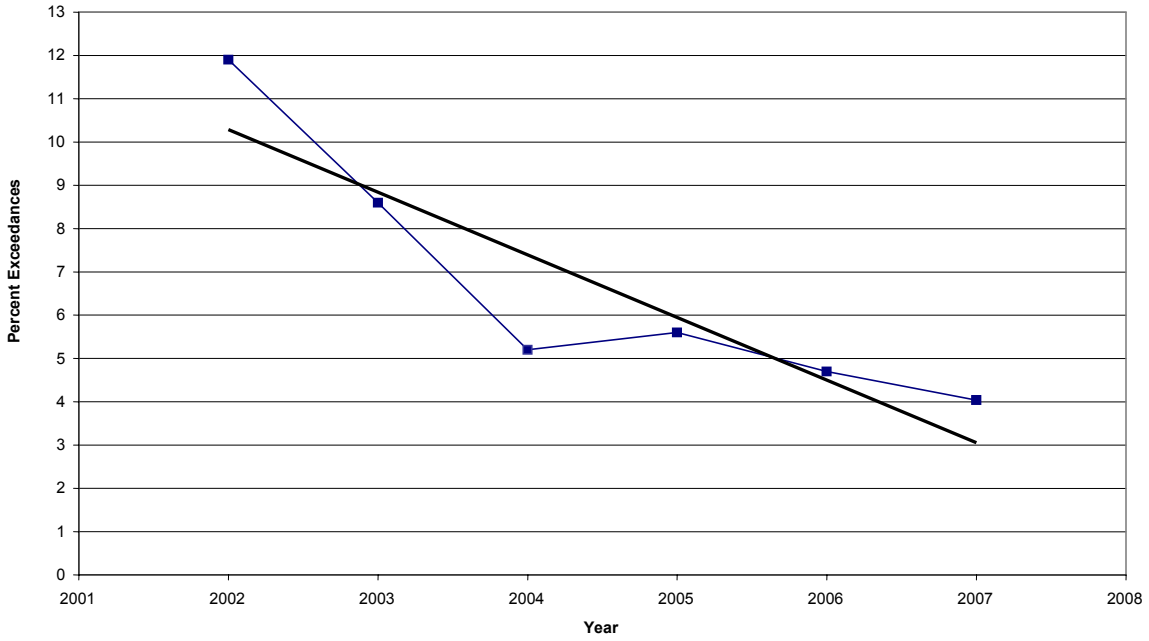

Data collected in the Cardiff Sub-basin during the 2007 Dry Weather Monitoring Program is included in Appendix A. Figure 4.2 illustrates the Cardiff Sub-basin.

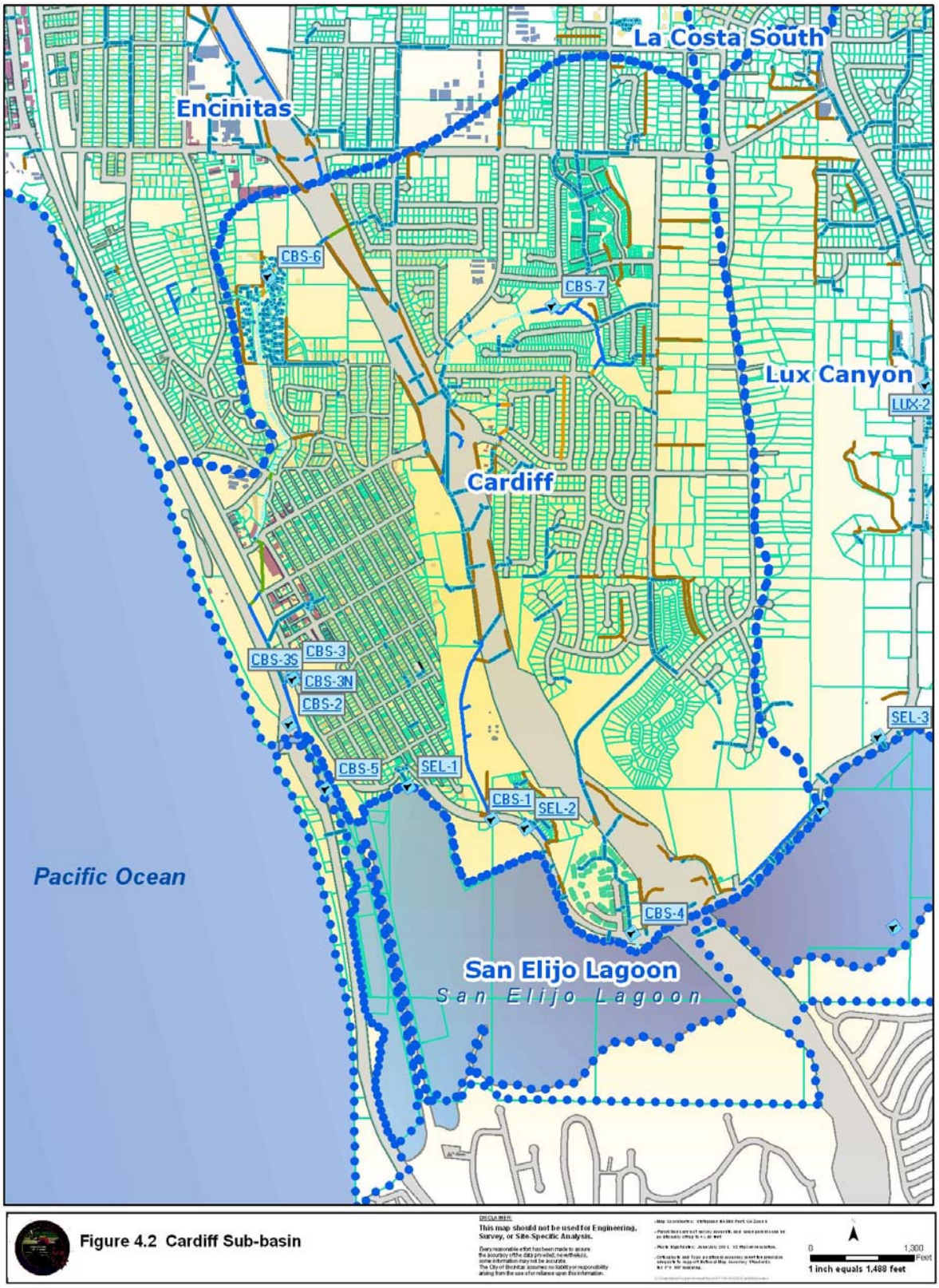

Figure 4.2 Cardiff Sub-basin

4.2 Lower Escondido Creek Sub-basin

Two monitoring locations in the Lower Escondido Creek Sub-basin were selected in natural, open channels. The land uses in this area are residential and open space with limited commercial establishments interspersed.

Table 4.1 summarizes the action levels exceeded in the Cardiff Sub-basin.

Table 4.1 Lower Escondido Creek Sub-Basin Action Level Exceedances

StationID	Date	Water Flow	Analyte	Result	Unit	Action Level
ESC-1	5/25/07	Flowing	Conductivity	8.02	mS/cm	5
ESC-2	5/25/07	Flowing	Conductivity	6.94	mS/cm	5

ESC-1 is located on Copper Creek, a tributary of Escondido Creek, ultimately leading to San Elijo Lagoon. There were no other exceedances at this location; all were below action levels. Land use upstream is primarily residential with open land. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

ESC-2 is located in an open channel adjacent to a residential area along Escondido Creek. There were no other exceedances at this location; all were below action levels. Land use upstream is primarily residential. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

The historical frequency of exceedances is variable in this sub-basin. Figure 4.3 illustrates water quality exceedance trends in the Lower Escondido Creek sub-basin based on dry weather data collected from 2002 to 2007.

Figure 4.3: Action Level Exceedance Ratio Trend in the Lower Escondido Creek, 2002-2007

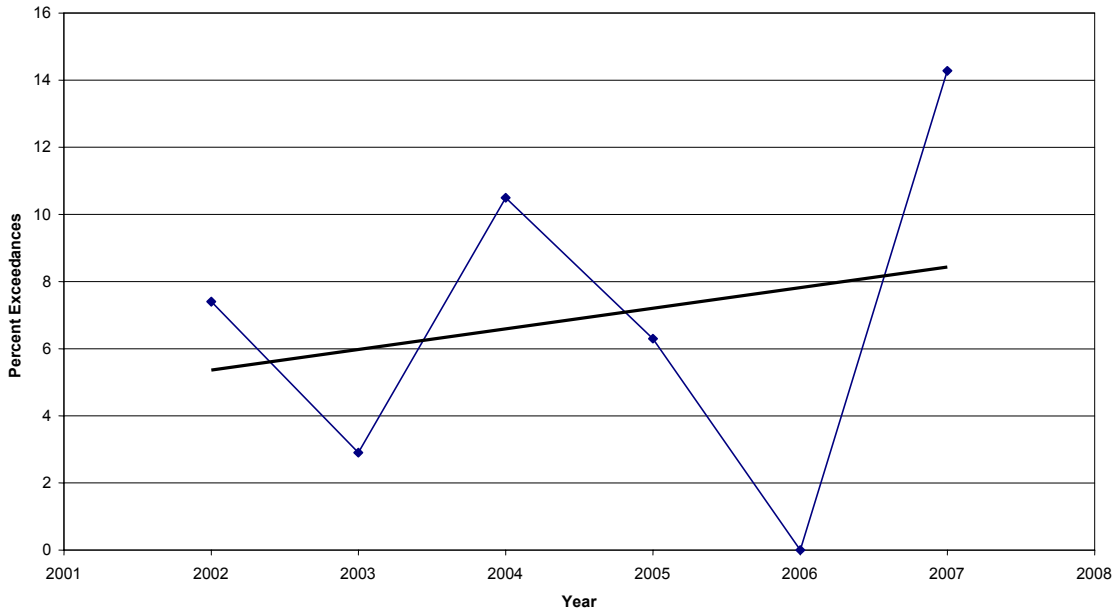

Appendix B contains all data collected for the Lower Escondido Creek Sub-basin as part of the 2005 Dry Weather Monitoring Program. Figure 4.4 illustrates the Lower Escondido Creek Sub-basin.

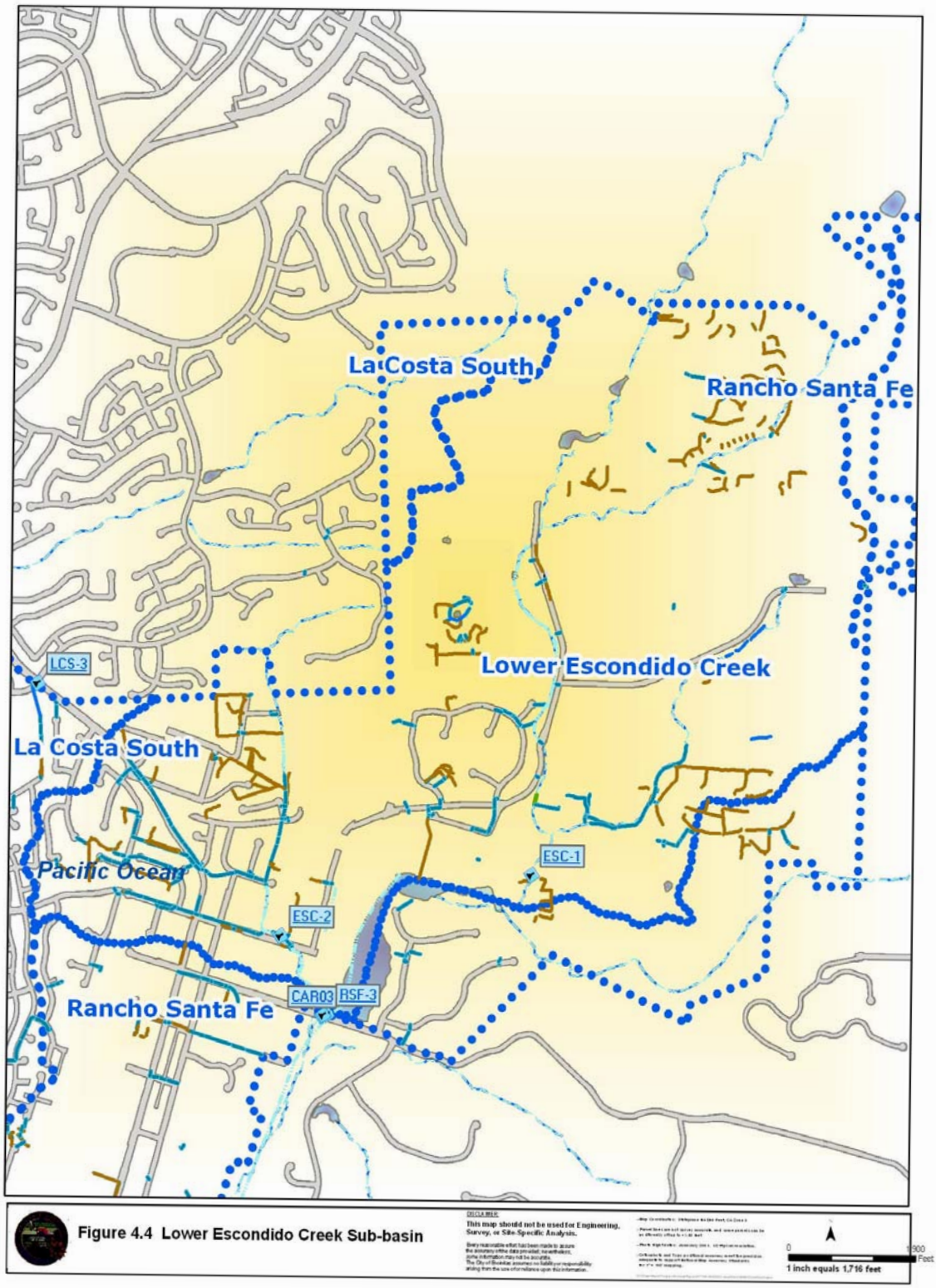

Figure 4.4 Lower Escondido Creek Sub-basin

4.3 La Orilla Creek Sub-basin

One monitoring location is routinely monitored in the dry weather program at La Orilla Creek, at the east end of San Elijo Lagoon. The location was selected based on the previous dry weather location. The majority of the contributing watershed is located within the County of San Diego, encompassing mostly residential areas and a golf course.

In 2007, the elevated conductivity persisted as in previous years. The conductivity is persistent and appears to be associated with endemic total dissolved solids (TDS) levels in the region. A full laboratory analysis was performed at LOR and no analyte concentrations exceeded established action levels.

Table 4.2 presents exceedances detected in water quality in 2002 and tracks the values year to year up to the 2007 dry weather monitoring season. Parameters previously exceeding action levels, including turbidity and dissolved copper, have declined over the monitoring periods. Conductivity has remained consistently elevated. No follow-up actions were taken in 2007.

Table 4.2 Water Quality Values Obtained in La Orilla Creek, 2002-2007

Analyte	Action Level	2002	2003	2004	2005	2006	2007
Turbidity (NTU)	BPJ	56	4.79	2.91	2.7	3.13	2.65
Conductivity (uS/cm)	5	6.65	8.43	8.05	6.01	8.13	8.12
Dissolved Cu(□g /l)	CTR	42	42	31	□10.0	□.0	0.37
Hardness (mg/lCaCO3)	None	280	1780	2680	1990	2430	1982.9
Fecal Coliform (cfu/100ml)	2000	7100	1000	200	1975	1250	120

Figure 4.5 illustrates water quality exceedance trends in La Orilla Creek based on dry weather data collected from 2002 to 2007. Overall, the trend of water quality exceedances is down over the monitoring period, indicating improvements in water quality in the sub-basin.

Figure 4.5: Action Level Exceedance Ratio Trend in the La Orilla Creek Sub-basin, 2002-2007[1]

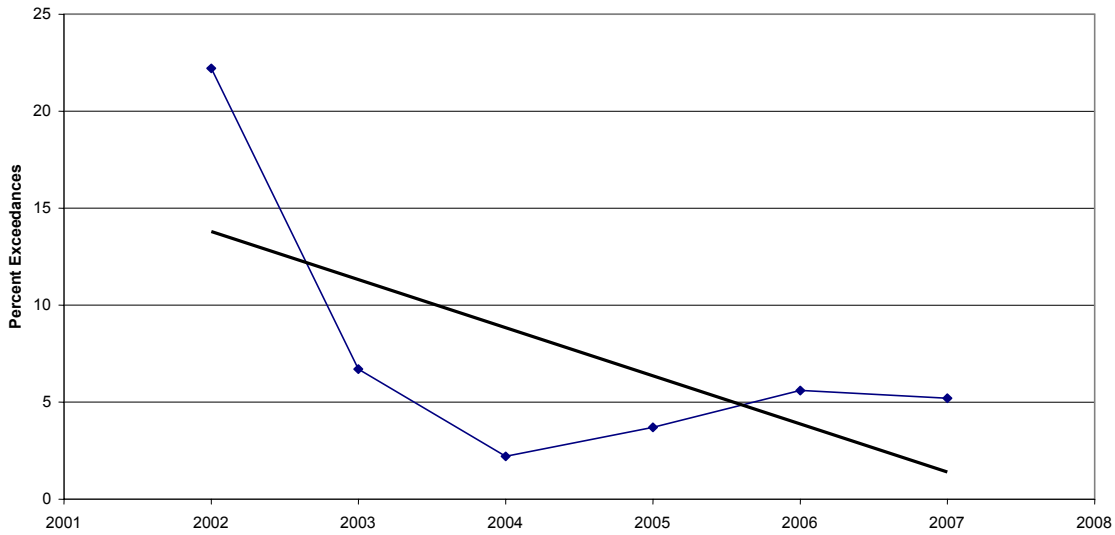

Note:
[1] Exceedance ratios vary based on total analyses; only one exceedance was recorded for each of the years for 2003-2007 for conductivity

Appendix C contains all data collected for the La Orilla Creek Sub-basin as part of the 2007 Dry Weather Monitoring Program.

4.4 La Costa South Sub-basin

Seven locations were selected for dry weather monitoring in the La Costa South Sub-basin. This sub-basin drains to Encinitas Creek flowing north into the City of Carlsbad en route to Batiquitos Lagoon. Land use in this sub-basin is largely commercial and residential. Monitoring locations for the City of Encinitas program were all located within the City of Encinitas. All seven locations were monitored in 2007. Of the seven locations, four had flowing and three had ponded water. All locations were field screened. Additionally, two were sampled for a full laboratory analysis (LCS-1 and LCS-5) and one location (LCS-6) was analyzed in the laboratory for bacteria only.

There were four water quality exceedances in this sub-basin in 2007. Table 4.3 summarizes the action level exceedances in the La Costa Sub-basin.

Table 4.3 La Costa Sub-Basin Action Level Exceedances

StationID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-1	5/30/07	Ponded	Nitrate (NO3-N)	20	mg/L	10
LCS-5	5/30/07	Flowing	Nitrate (NO3-N)	25	mg/L	10
LCS-7	5/25/07	Flowing	Conductivity	16.49	mS/cm	5

LCS-1

The water at LCS-1 contained elevated nitrates. There were no other exceedances at this location. The water was ponded in a natural channel. Land Use in this sub-basin is primarily commercial. There was evidence of irrigation runoff upstream in the drainage basin.

LCS-5

The water at LCS-5 contained elevated nitrates. There were no other exceedances at this location. Land Use in this sub-basin is primarily commercial. There was evidence of irrigation runoff upstream in the drainage basin.

LCS-6

There was a trickle flow at LCS-6. There were no exceedances at this location.

LCS-7

The water at LCS-7 contained elevated conductivity. There were no other exceedances at this location. Land Use in this sub-basin is primarily commercial. The field team conducted a cursory investigation upstream in the drainage basin, and no obvious sources were observed.

Figure 4.6 illustrates water quality exceedance trends in the La Costa South Sub-basin based on dry weather data collected from 2002-2007. Overall, the trend of water quality exceedances is variable in this Sub-basin, with higher values in 2004 and 2006 when investigations located and abated two significant illegal discharges.

Figure 4.6: Action Level Exceedance Ratio Trend in the La Costa South Sub-basin, 2002-2007

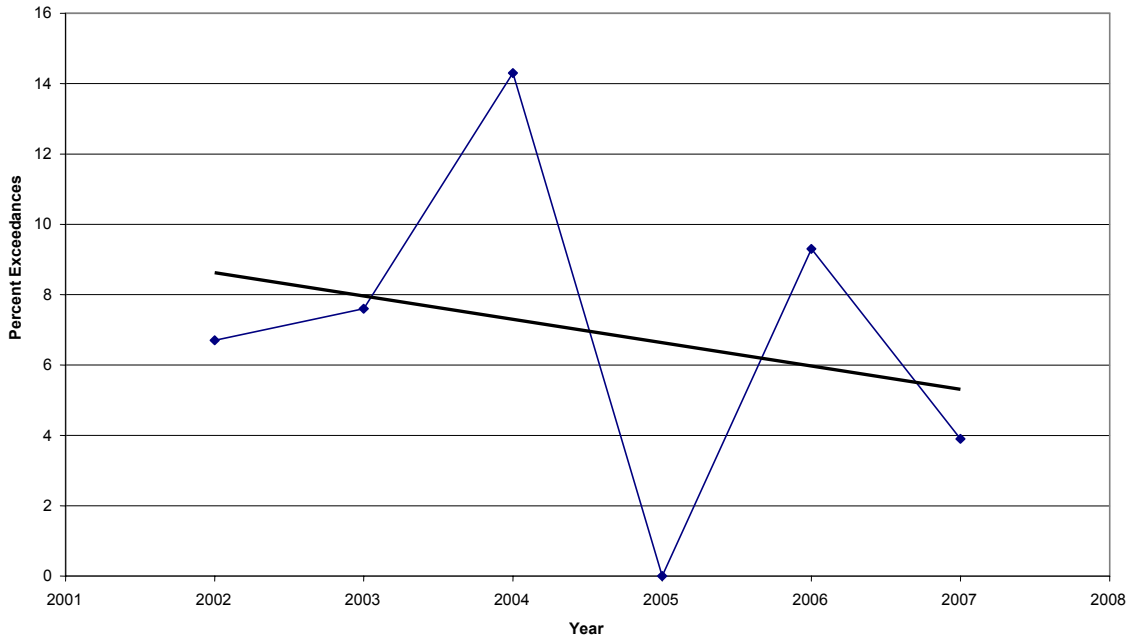

Appendix D contains all data collected for the La Costa South Sub-basin as part of the 2007 Dry Weather Monitoring Program. Figure 4.7 illustrates the La Costa South Sub-basin.

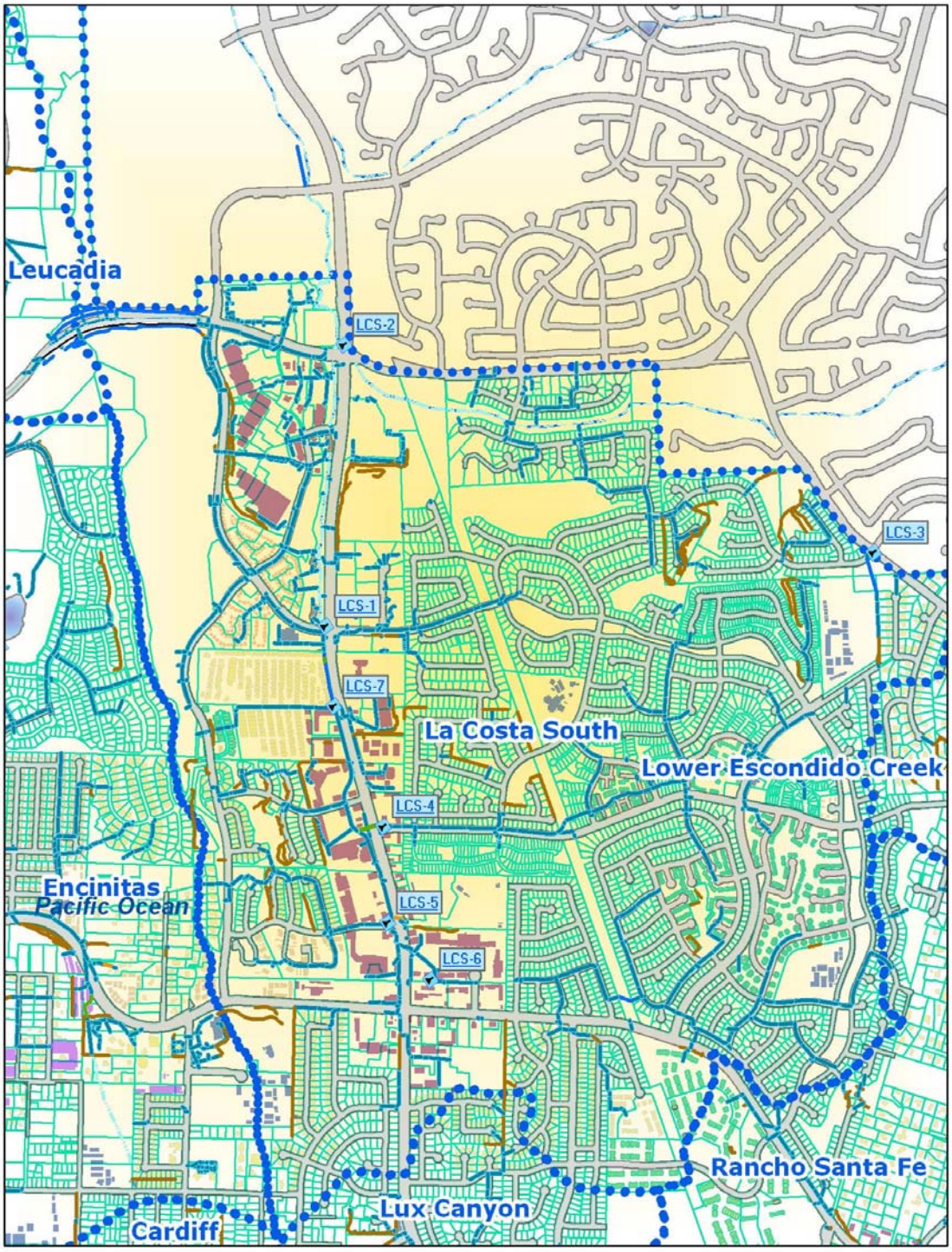

Figure 4.7 La Costa South Sub-basin

DISCLAIMER:
This map should not be used for Engineering, Survey, or Site-Specific Analysis.

Every reasonable effort has been made to assure the accuracy of the data provided, nevertheless, some information may not be accurate. The City of Encinitas assumes no liability nor responsibility arising from the use of or reliance upon this information.

0 1,500 Feet
1 inch equals 1,489 feet

4.5 Leucadia Sub-basin

Dry weather monitoring in the Leucadia Sub-basin included monitoring of seven locations, covering distinct drainage areas throughout the basin. Land uses in the area include residential and commercial with significant, albeit decreasing, numbers of commercial growers. Of the seven locations, four sites had water to sample at the time of monitoring, two were flowing and two had ponded water (LUC-1 and LUC-6). LUC-1, 3, 4, and 6 were field screened this year. At LUC-4 a sample was collected to be analyzed in a laboratory for bacteria. Due to a general lack of water quality exceedances in the past, no samples were collected for a full laboratory analysis in this sub-basin. Water quality exceedances for 2007 are listed in Table 4.4.

Table 4.4 Leucadia Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-1	6/20/07	Ponded	Nitrate (NO3-N)	16	mg/L	10
LUC-3	6/20/07	Flowing	pH	9.3	pH	9
LUC-4	6/21/07	Flowing	Orthophosphate (PO4-P)	4	mg/L	2
LUC-4	6/21/07	Flowing	Enterococcus	11750	cfu/100 ml	10000
LUC-4	6/21/07	Flowing	Total Coliform	55000	cfu/100 ml	50000
LUC-6	6/20/07	Ponded	Conductivity	6.64	mS/cm	5
LUC-6	6/20/07	Ponded	pH	9.5	pH	9

LUC-1

Nitrate exceedances persisted at LUC-1 as in previous years of dry weather monitoring. This monitoring location is low in the sub-basin and the majority of the flow appears to be groundwater containing elevated nitrate-nitrogen concentrations. Because the flow was ponded, there was no source to track upstream and an investigation was not performed.

LUC-3

The water at LUC-3 contained elevated pH and temperature as a result of low flow conditions in a concrete channel. There were no other exceedances at this location; all were below action levels. Land use upstream is primarily residential and commercial. No obvious residential or commercial sources of elevated pH were observed upstream in the drainage basin.

LUC-4

The monitoring location at LUC-4 was field screened and analyzed for bacteria in 2007. The site is located at the end of a pipe entering an isolated detention basin in a canyon. The water entering the basin is only a trickle flow during dry weather and no water leaves the basin. There was one field analysis exceedance of orthophosphate. The field team conducted a cursory investigation upstream in the adjacent residential area and observed irrigation runoff entering a catch basin from St. Albans Pl. The results of samples

collected for total coliform and enterococcus analyses were above action levels. Upon receipt of the bacteria results, the field team returned to re-sample. A confirmation sample for bacteria was collected and field analysis were conducted at the LUC-4 and at a residential curb and drain on St. Albans Pl.

Despite an exceedance for total coliform and enterococcus on the first sampling event, the follow-up samples were below the action levels and, therefore, did not confirm the exceedances, indicating a transient nature of bacteria source. In past visits to the site, animal tracks and scat were observed at the sample location. No obvious residential, commercial, or industrial sources were found during follow-up investigations. The data from the follow-up investigation is listed below in Table 4.5.

Table 4.5 Leucadia Sub-basin Follow-up Investigation

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-4	6/26/07	Flowing	Ammonia	0.8	ml	1
LUC-4	6/26/07	Flowing	Chlorine	1	ml	NA
LUC-4	6/26/07	Flowing	MBAS	0.5	ml	1
LUC-4	6/26/07	Flowing	Enterococcus	4750	cfu/100 ml	10000
LUC-4	6/26/07	Flowing	Fecal Coliform	24350	cfu/100 ml	20000
LUC-4	6/26/07	Flowing	Total Coliform	32800	cfu/100 ml	50000
St. Albans Pl	6/26/07	Flowing	Ammonia	0.5	ml	1
St. Albans Pl	6/26/07	Flowing	Chlorine	1	ml	NA
St. Albans Pl	6/26/07	Flowing	MBAS	0.25	ml	1
1028 St. Albans Pl	6/26/07	Flowing	Enterococcus	□100	cfu/100 ml	10000
1028 St. Albans Pl	6/26/07	Flowing	Fecal Coliform	600	cfu/100 ml	20000
1028 St. Albans Pl	6/26/07	Flowing	Total Coliform	1000	cfu/100 ml	50000
(drain)1027 St. Albans Pl	6/26/07	Flowing	Enterococcus	100	cfu/100 ml	10000
(drain)1027 St. Albans Pl	6/26/07	Flowing	Fecal Coliform	200	cfu/100 ml	20000
(drain)1027 St. Albans Pl	6/26/07	Flowing	Total Coliform	3000	cfu/100 ml	50000
(curb)1027 St. Albans P	6/26/07	Flowing	Enterococcus	400	cfu/100 ml	10000
(curb)1027 St. Albans P	6/26/07	Flowing	Fecal Coliform	200	cfu/100 ml	20000
(curb)1027 St. Albans P	6/26/07	Flowing	Total Coliform	800	cfu/100 ml	50000

LUC-6

The water at LUC-6 contained elevated pH and conductivity, slightly over the action levels of 9.0 pH units and 5.00 mS/cm. The ponded water sampled was conveyed over an open concrete channel. The elevated pH may have been a result of high temperature and low flow conditions in the concrete channel. The elevated conductivity is likely attributable to the groundwater in the area and/or the concrete conveyance, or some combination of the two. Because the flow was ponded, there was no source to track upstream and an investigation was not performed. Water quality at this location was improved over last year.

Figure 4.8: Action Level Exceedance Ratio Trend in the Leucadia Sub-basin, 2002-2006

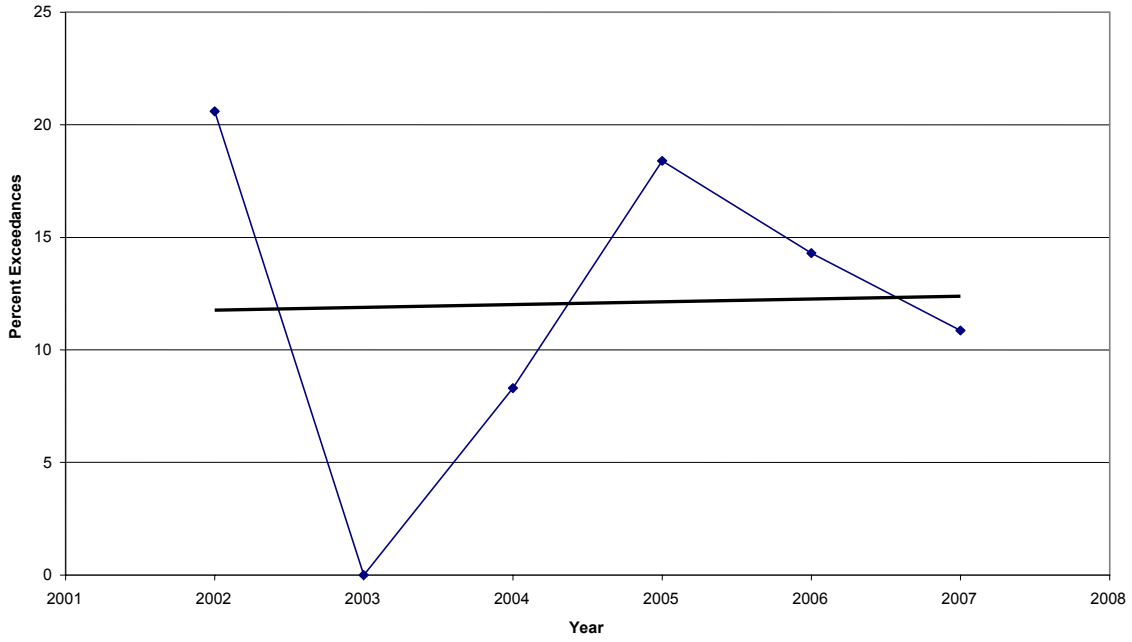

Appendix E contains all data collected for the Leucadia Sub-basin as part of the 2007 Dry Weather Monitoring Program. Figure 4.9 illustrates the Leucadia Sub-basin.

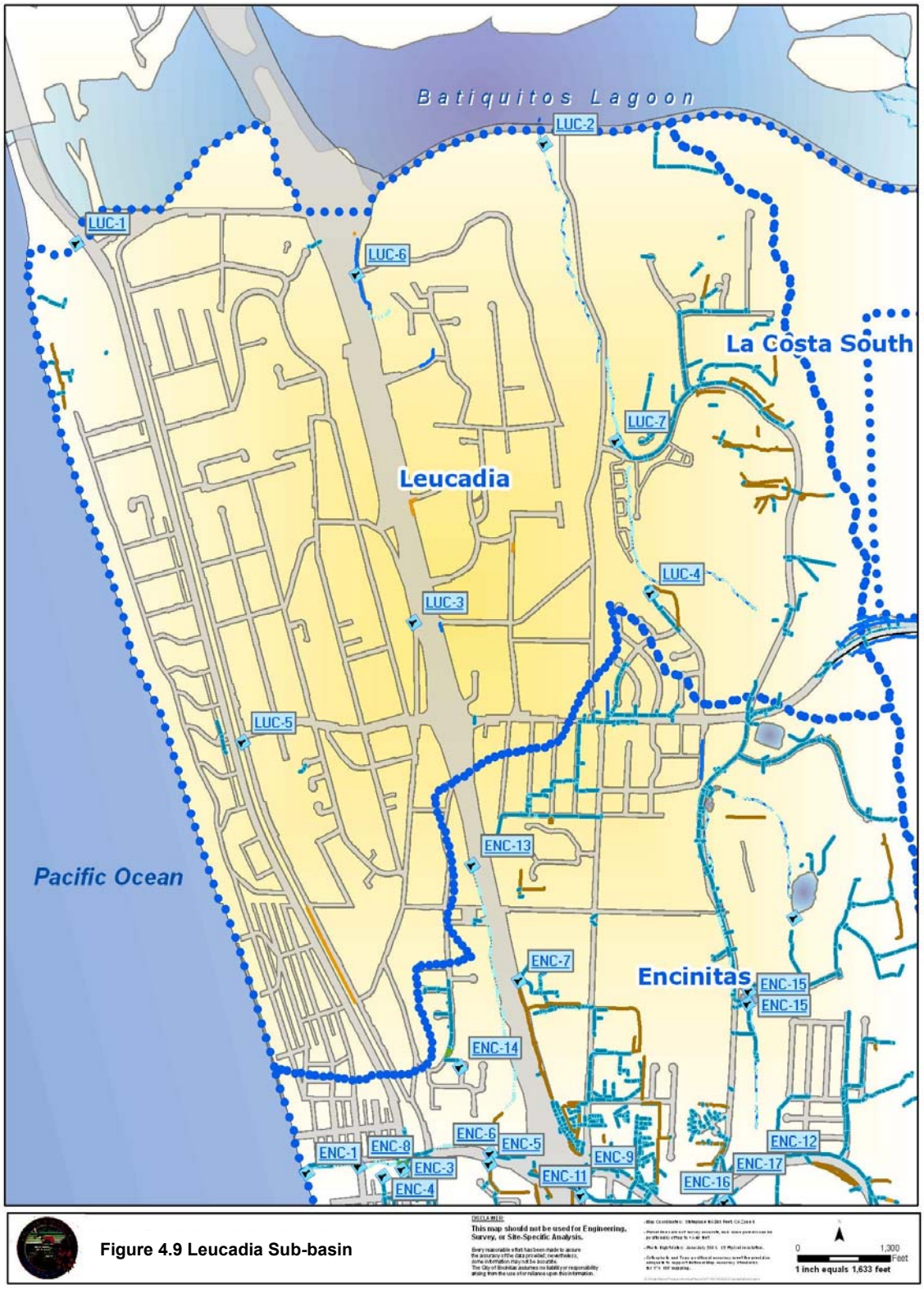

Figure 4.9 Leucadia Sub-basin

4.6 Encinitas Sub-basin

Dry weather monitoring in the Encinitas Sub-basin included 17 locations. This sub-basin has the most monitoring locations as it has historically had the most water quality exceedances. Sample locations were based on previous sampling points established in dry weather programs and special studies. This sub-basin covers the oldest area of development in the city and consists of residential and commercial land uses, including nurseries. The established sampling points isolate these specific land uses. Many of the monitoring locations were established in the Cottonwood Creek Urban Runoff Assessment and Action Plan (City of Encinitas, March 2002). The locations monitored lie along Cottonwood Creek and on tributaries of Cottonwood Creek. Of the 17 locations, 10 had water to sample, with ponded water at one location (ENC-4) and flowing water at all other locations. All 10 locations with water were field screened. Four locations were collected for full laboratory analysis, while five locations were only analyzed for bacteria at the laboratory. Of the 10 locations sampled and tested, eight of those samples exceeded water quality standards. Table 4.6 contains 2007 water quality exceedances in the sub-basin.

Table 4.6 Encinitas Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Action Level	Unit
ENC-1	5/31/07	Flowing	Conductivity	5.14	mS/cm	5
ENC-10	6/13/07	Flowing	Orthophosphate (PO4-P)	2.5	mg/L	2
ENC-10	6/13/07	Flowing	Enterococcus	10,900	cfu/100 ml	10000
ENC-11	6/14/07	Flowing	Nitrate (NO3-N)	20	mg/L	10
ENC-11	6/14/07	Flowing	Conductivity	8.36	mS/cm	5
ENC-17	6/19/07	Flowing	Orthophosphate (PO4-P)	3.5	mg/L	2
ENC-3	5/31/07	Flowing	Conductivity	5.17	mS/cm	5
ENC-5	6/14/07	Flowing	Nitrate (NO3-N)	15	mg/L	10
ENC-6	6/13/07	Flowing	Nitrate (NO3-N)	18	mg/L	10
ENC-8	6/13/07	Flowing	Conductivity	5.05	mS/cm	5

ENC-1

The water at ENC-1 contained slightly elevated conductivity. There were no other exceedances at this location; all were below action levels. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. Elevated conductivity may have been a result of the previous high tide causing residual saltwater at the mouth of the pipe.

ENC-3

The water at ENC-3 contained slightly elevated conductivity. There were no other

exceedances at this location; all were below action levels. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. Elevated conductivity may have been a result of groundwater infiltration (see the following groundwater discussion).

ENC-5

The water at ENC-5 contained elevated nitrates. There were no other exceedances at this location; all were below action levels. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. However, elevated nitrates may have been a result of a combination of irrigation runoff and groundwater infiltration at this site (see the following groundwater discussion).

ENC-6

The water at ENC-6 contained elevated nitrates. There were no other exceedances at this location; all were below action levels. Land use upstream is primarily residential. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed. However, elevated nitrates may have been a result of groundwater infiltration (see the following groundwater discussion).

ENC-8

The water at ENC-8 contained elevated conductivity. There were no other exceedances at this location; all were below action levels. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. However, elevated conductivity may have been a result of groundwater infiltration (see the following groundwater discussion).

ENC-10

The water at ENC-10 contained elevated orthophosphates and entercoccus . There were no other exceedances at this location. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. There was evidence of encampments in the immediate vicinity of the outlet.

ENC-11

The water at ENC-11 contained elevated nitrates and conductivity. There were no other exceedances at this location; all were below action levels. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. Elevated nitrates and conductivity appear to be a result of groundwater infiltration; (see the following groundwater discussion).

ENC-17

The water at ENC-17 contained elevated orthophosphates. There were no other exceedances at this location. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation.

Groundwater in the Encinitas Sub-basin

Historically, a significant source of nitrate and conductivity exceedances in this sub-basin appears to have been groundwater. It appears that groundwater also caused the exceedances for ENC-5, ENC-6 and ENC-11 in 2007. A detailed discussion of nitrate and conductivity exceedances is included in Appendix J of this report.

The seven water quality exceedances for conductivity and for nitrate-nitrogen (four exceedances for conductivity and three exceedances for nitrate-nitrogen) appear to be attributable to groundwater flows in the sub-basin. The locations of the conductivity exceedances are persistent from year to year and have been detected at the primary groundwater tributaries in the sub-basin: ENC-6 and ENC-11. The conductivity exceedances have been consistently accompanied by elevated levels of nitrate-nitrogen. The three additional nitrate-nitrogen exceedances are downstream of the confluence of the groundwater tributaries and the other flows in the creek. All three stations, ENC-1, 3, and 8, are west of Pacific Coast Highway 101 and samples at these locations are collected within 1,500 feet of each other. Nitrate-nitrogen concentrations remain consistent in this reach, an open channel, and a natural creek.

Figure 4.10 illustrates the parameters in which water quality criteria were exceeded in the Encinitas Sub-basin in 2002, 2003, 2004, 2005, 2006, and 2007. From this figure, it is evident that the exceedances in 2007 for most constituents are declining, with the exception of conductivity, which appears to be influenced by groundwater and is relatively consistent from year to year, and a spike in orthophosphate concentrations.

Figure 4.10: Constituents of Concern (COC) in Encinitas Sub-basin 2002-2007

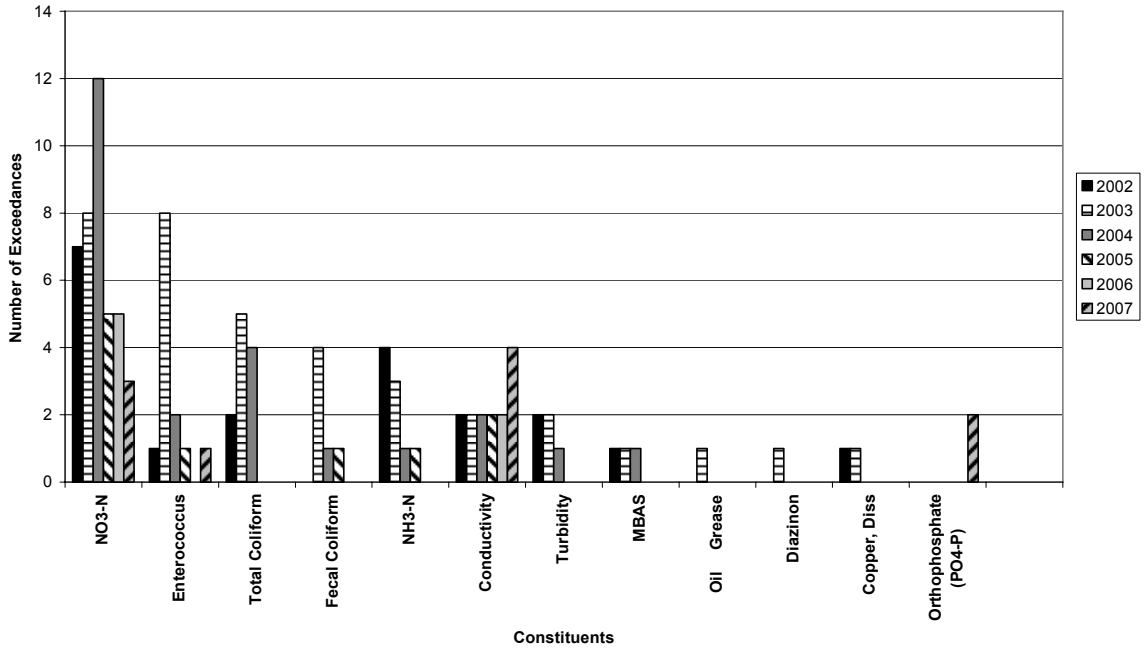

Figure 4.11 illustrates water quality exceedance trends in the Encinitas Sub-basin based on dry weather data collected from 2002-2007. Overall, the trend of water quality exceedances is down over the monitoring period, indicating improvements in water quality in the sub-basin.

Figure 4.11: Action Level Exceedance Ratio Trend in the Encinitas Sub-basin, 2002-2007

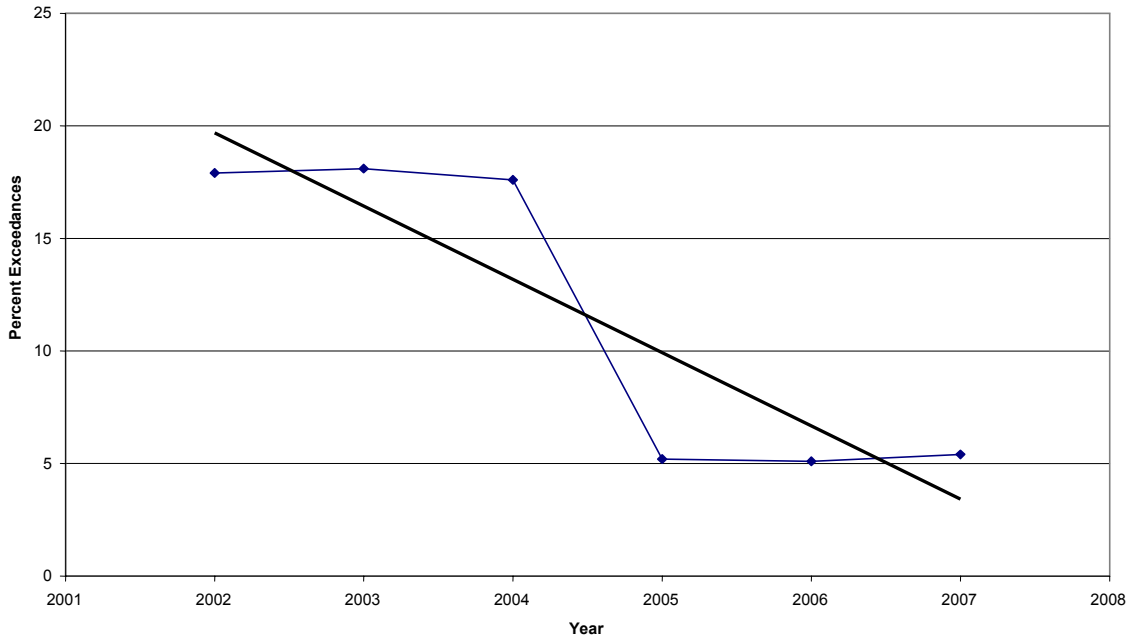

Appendix F contains all data collected in the Encinitas Sub-basin for the 2007 Dry Weather Monitoring Program. Figure 4.12 illustrates the Encinitas Sub-basin.

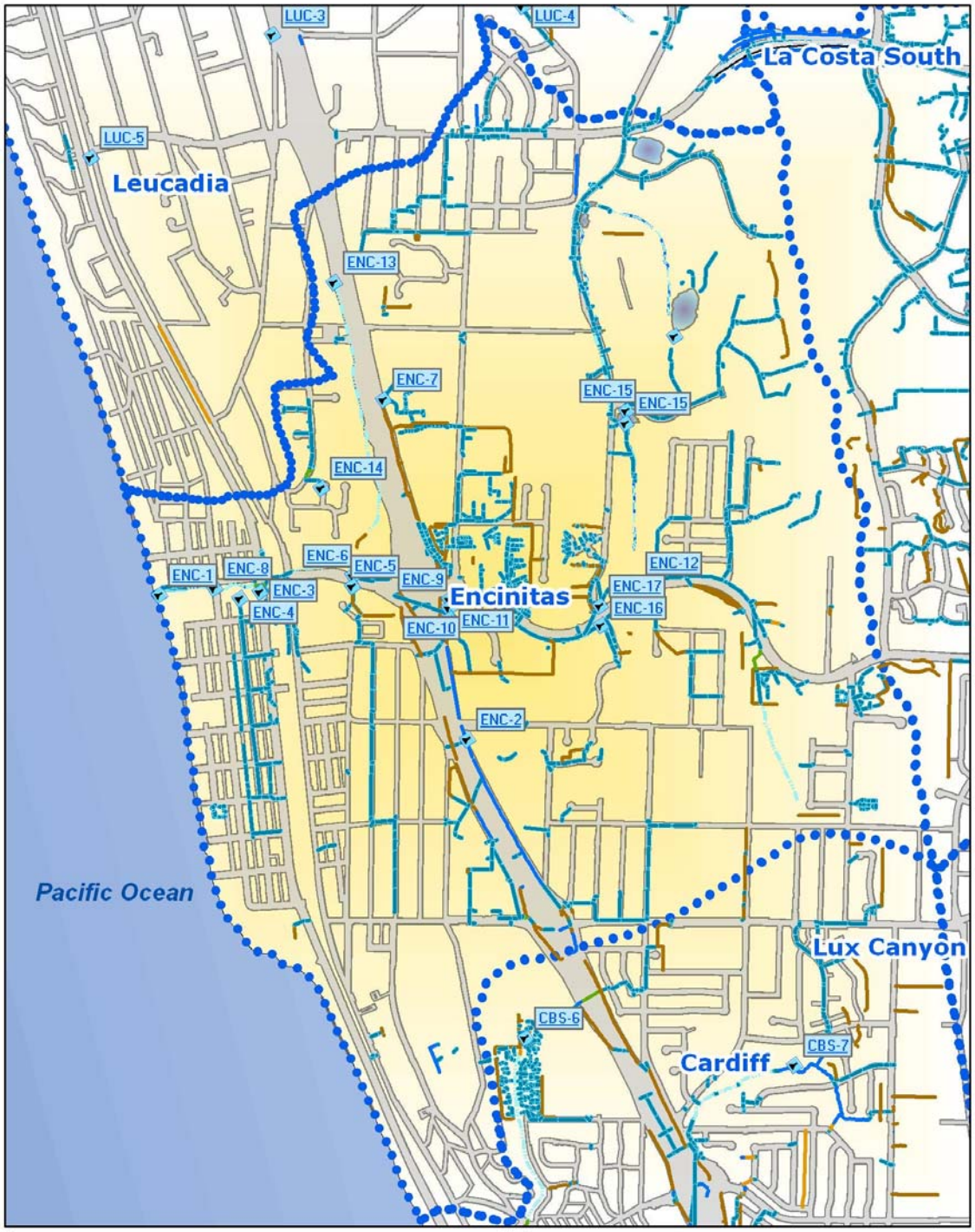

Figure 4.12 Encinitas Sub-basin

4.7 Rancho Santa Fe Sub-basin

Four locations in the Rancho Santa Fe Sub-basin are routinely monitored. RSF-1, located on a tributary to Escondido Creek at the intersection of Rancho Santa Fe Road and Encinitas Boulevard, had water ponded in a concrete energy dissipater box. This location was subject to field screening; no samples were collected for laboratory analysis. RSF-2, at Trabert Ranch Road, was dry for this monitoring season and, therefore, no samples were collected. Two of the locations, RSF-3 and RSF-4, are on the main channel of Escondido Creek at Camino del Norte and La Bajada Dip, respectively. Both of these locations were field screened and samples were collected for full laboratory analysis. Table 4.7 summarizes the action levels exceeded in the Rancho Santa Fe sub-basin.

Table 4.7 Rancho Santa Fe Sub-Basin Action Level Exceedances

StationID	Date	Water Flow	Analyte	Result	Unit	Action Level
RSF-4	5/23/07	Flowing	Conductivity	6.2	mS/cm	5

RSF 4

The water at RSF-4 contained elevated conductivity. Land use is primarily residential. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

Figure 4.13 illustrates water quality exceedance trends in the Rancho Santa Fe Sub-basin based on dry weather data collected from 2002 to 2007. The trend of water quality exceedances decreased from 2003 to 2006 but experienced an increase in 2007.

Figure 4.13: Action Level Exceedance Ratio Trend in the Rancho Santa Fe Sub-basin in 2002-2007

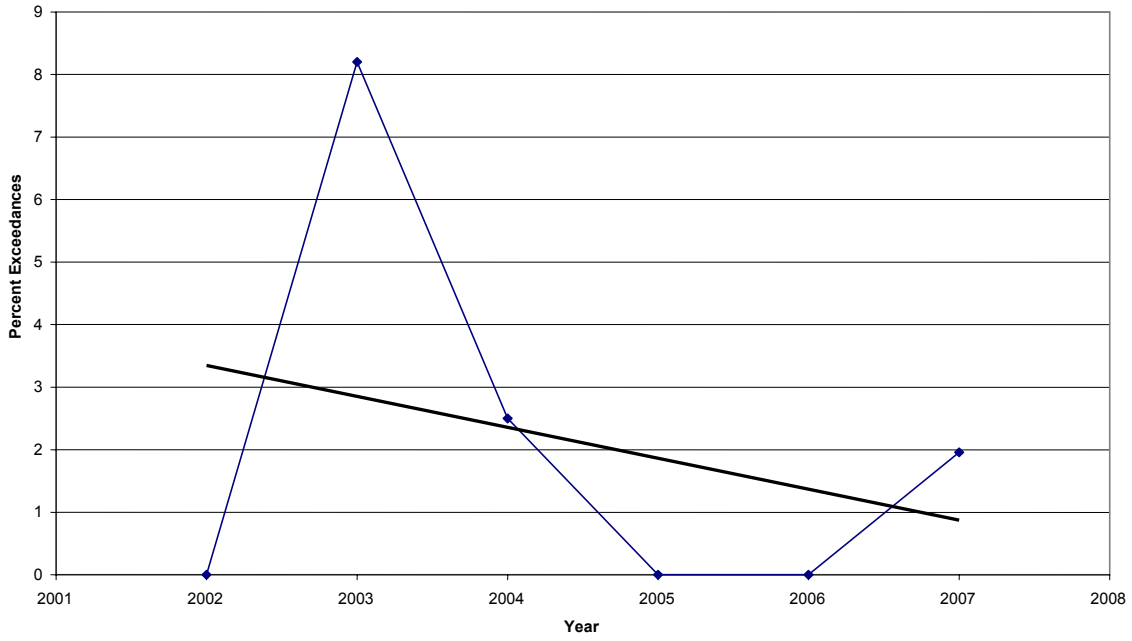

Appendix G contains all data collected in the Rancho Santa Fe Sub-basin for the 2007 Dry Weather Monitoring Program. Figure 4.14 illustrates the Rancho Santa Fe Sub-basin.

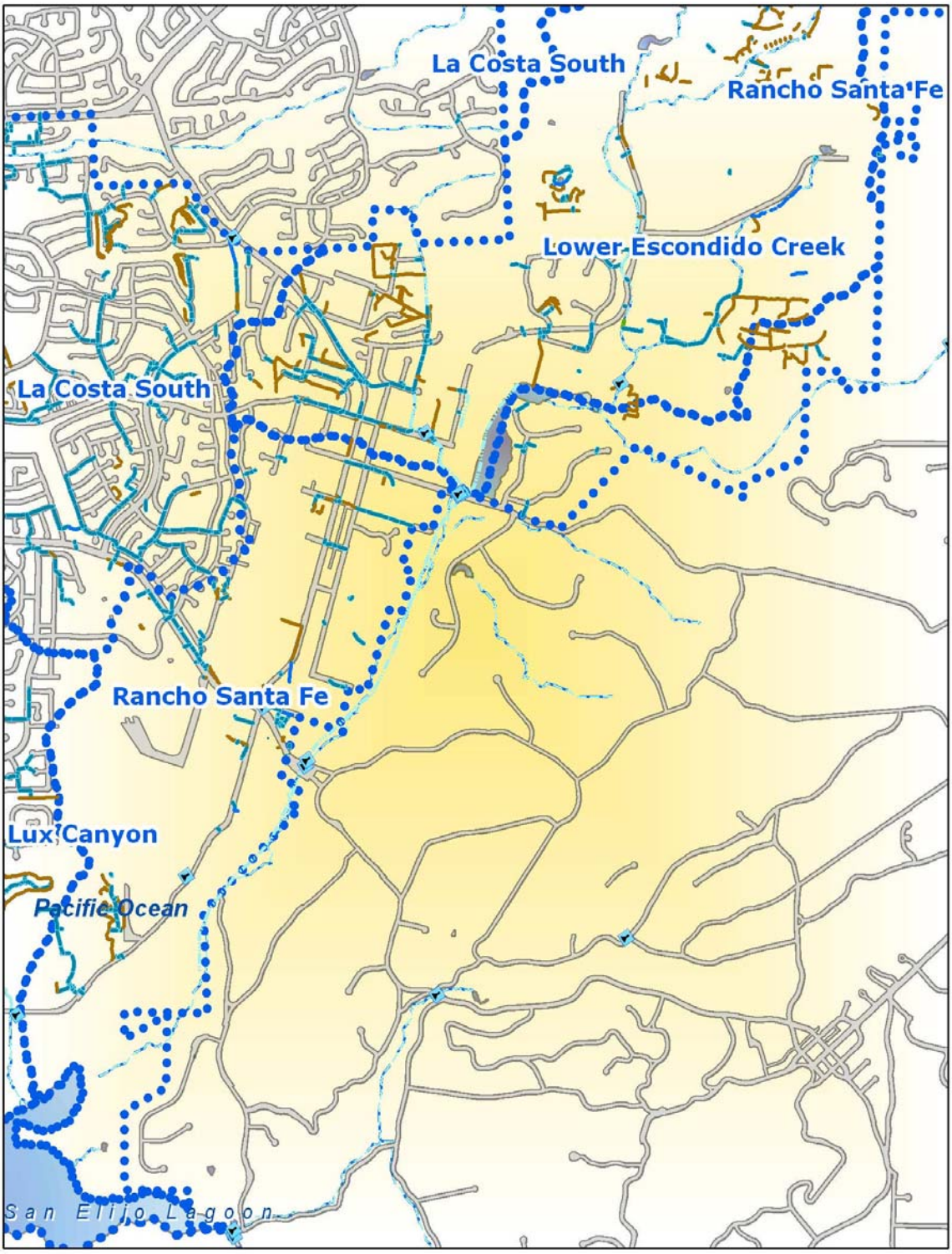

Figure 4.14 Rancho Santa Fe Sub-basin

DISCLAIMER:
This map should not be used for Engineering, Survey, or Site-Specific Analysis.

Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

0 2,700 Feet
1 inch equals 2,287 feet

4.8 Lux Canyon Sub-basin

Two locations are monitored in the Lux Canyon Sub-basin. LUX-1 had no flow this season and LUX-2, which is located at the Sage Canyon Drive, although flowing in years past, was also dry this monitoring season. No samples were collected at either location. Figure 4.15 illustrates water quality exceedance trends in the Lux Canyon Sub-basin based on dry weather data collected from 2002 to 2007.

Figure 4.15: Action Level Exceedance Ratio Trend in the Lux Canyon Sub-basin, 2002-2007

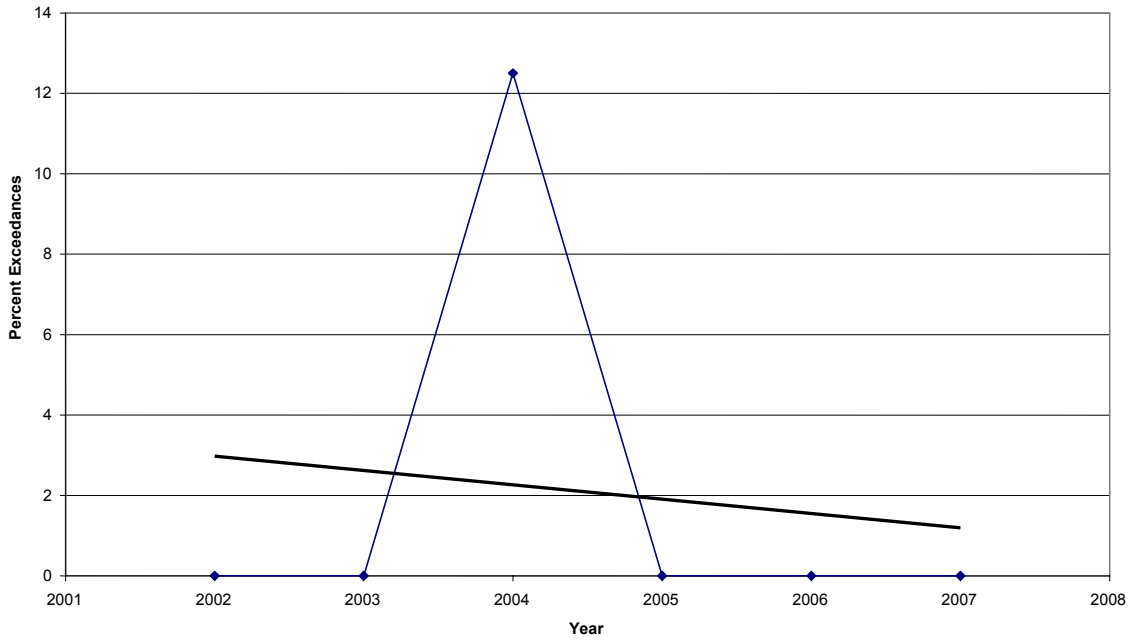

Appendix H contains all data collected in the Lux Canyon Sub-basin as part of the 2007 Dry Weather Monitoring Program. Figure 4.16 illustrates the Lux Canyon Sub-basin.

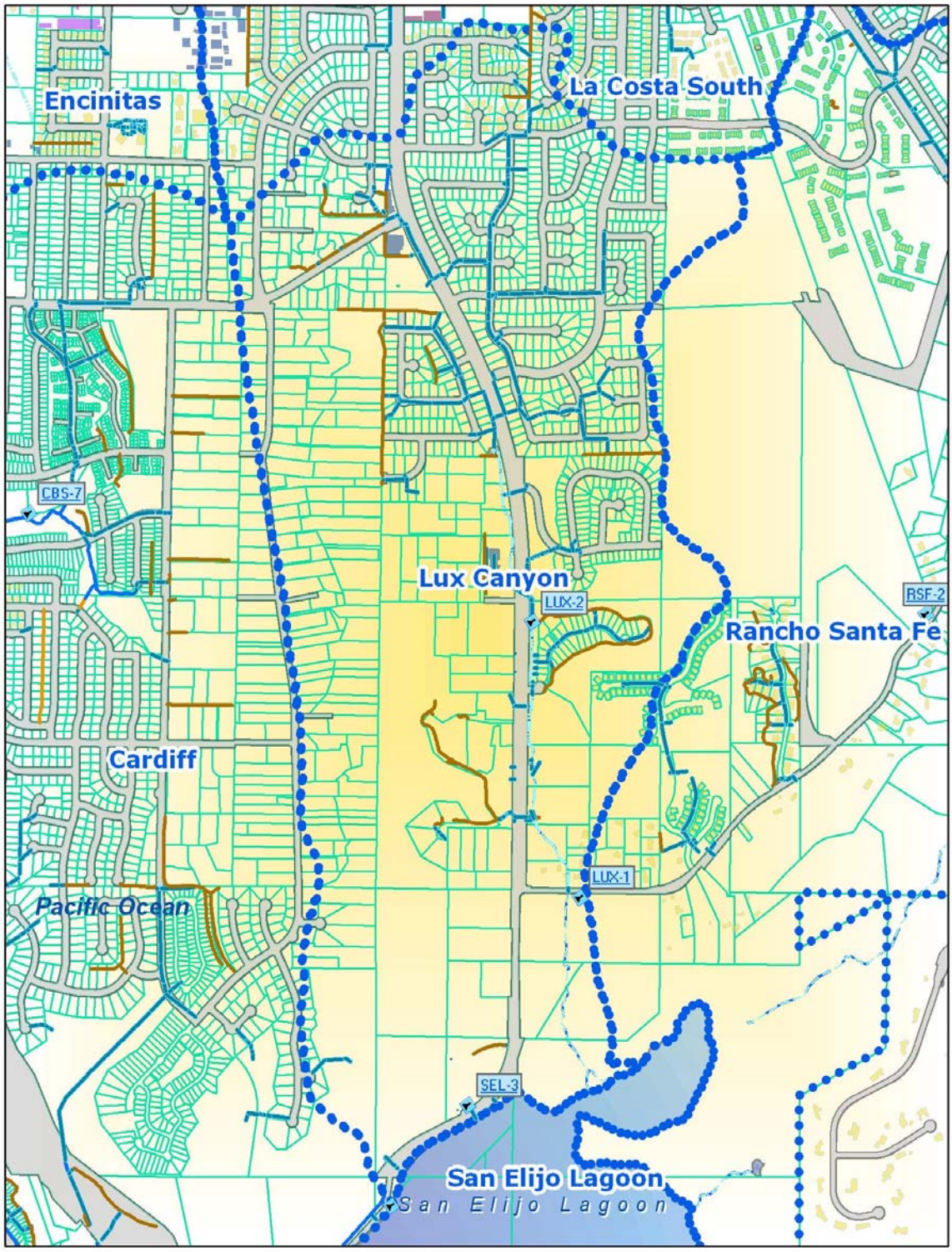

Figure 4.16 Lux Canyon Sub-basin

DISCLAIMER:
This map should not be used for Engineering, Survey, or Site-Specific Analysis.

Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

0 1,100 Feet
1 inch equals 1,117 feet

5.0 Summary

The comprehensive water quality monitoring performed as part of the Municipal Storm Water Permit Order 2007-01 allows the City to monitor local storm drains and creeks for illicit connections and illicit discharges. In addition, the data collected allows for characterization of the water quality in the City and subsequent prioritization of sub-basins in the watershed and pollutants of concern in those sub-basins. This section presents a summary of dry weather monitoring results for 2002-2007.

5.1 Water Quality Exceedances and Trends

Encinitas can be sub-divided into eight distinct drainage sub-basins as detailed below in Figure 5.0. According to exceedances of established water quality parameters, these sub-basins have been ranked from worst in water quality to best. Figure 5.0 illustrates the percent of analytes exceeding action levels in each sub-basin according to data collected in 2002 through 2007.

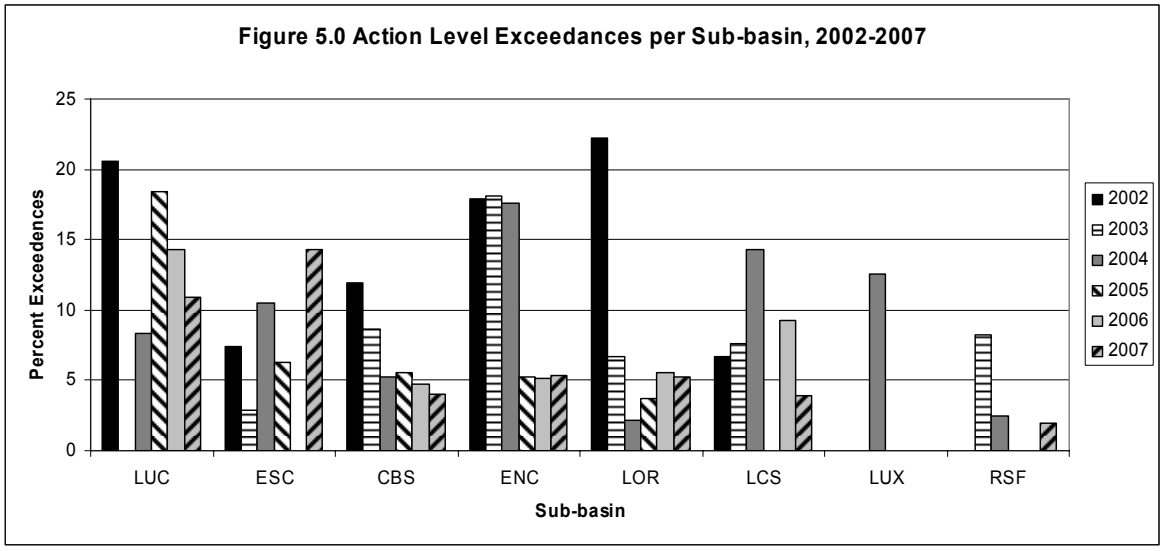

Data from Figure 5.0 illustrates that the Encinitas Sub-basin (ENC) had water quality exceedances in over 15 of the analyses in previous dry weather monitoring. In 2005 through 2007, the exceedance rates averaged 5 , showing improvements in water quality in the sub-basin. Steady improvements in water quality are also evident in the Cardiff Sub-basin (CBS) and the Rancho Santa Fe Sub-basin (RSF). The La Orilla Creek Sub-basin (LOR) has had only one exceedance in each of the past three years, however, due to the decreased number of analyses at this site; the exceedance rate is slightly higher in recent years. In 2007, there were no exceedances in the Lux Canyon Sub-basin (LUX). Rancho Santa Fe Sub-basin (RSF) and Lower Escondido Creek Sub-basin (ESC) have increased in exceedance rates in 2007 as a result of elevated conductivity levels. The La Costa South Sub-basin (LCS) has decreased to an exceedance rate of 4 this year after several illicit connections were abated and mitigated last year. Exceedance rates over 10 in Leucadia (LUC) appear to be caused by groundwater seeping into the MS4.

Overall, the trend in water quality exceedances is decreasing over the five year monitoring period as indicated in Figure 5.1.

Figure 5.1 Percent of Analysis Exceeding Water Quality Action Levels, 2002-2007

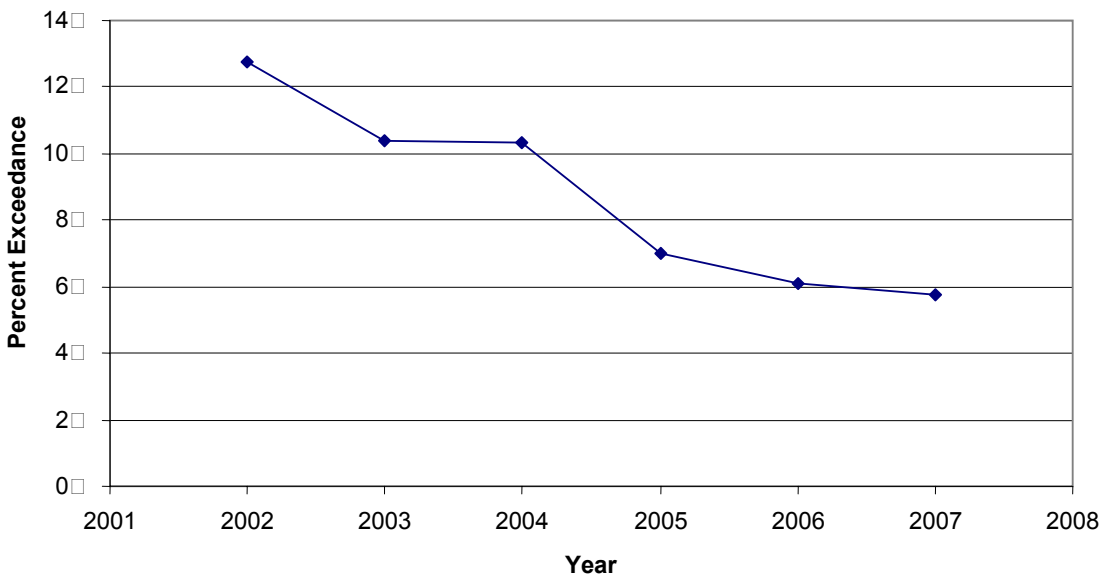

5.2 Prioritization of Constituents of Concern (COCs)

Figure 5.2 Illustrates water quality exceedances for each sub-basin in 2007. All exceedances are included in Figure 5.2

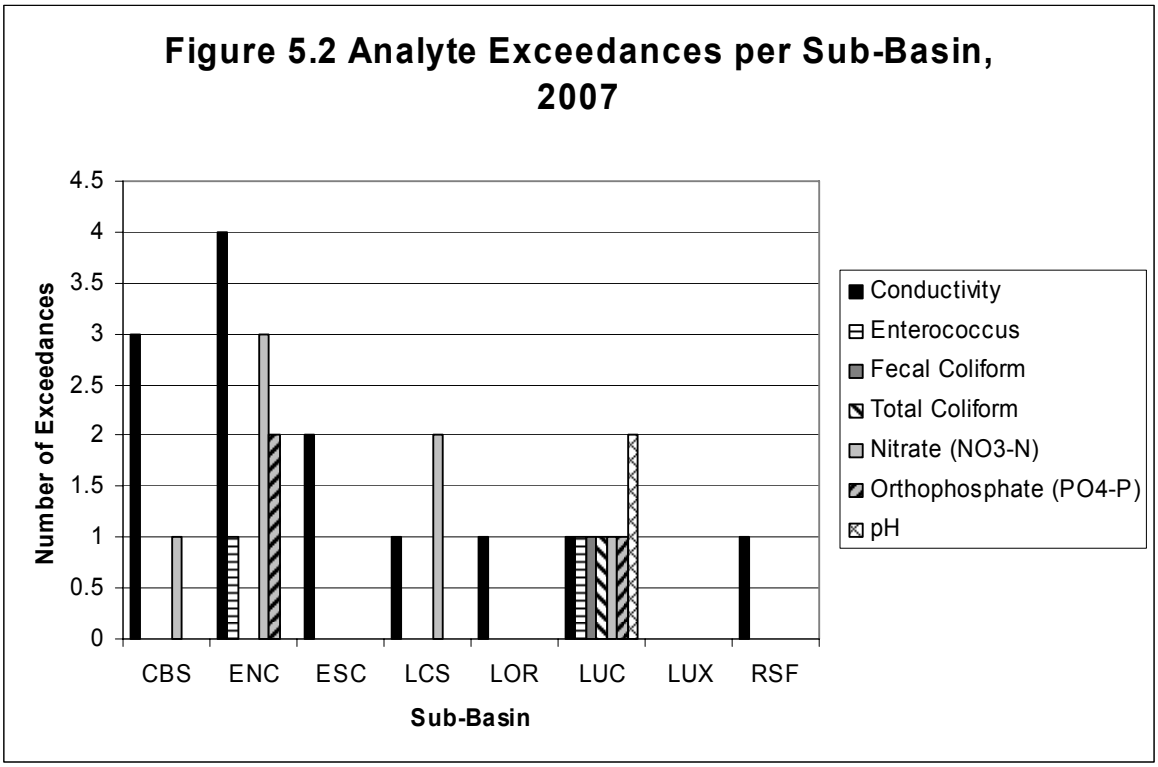

The COCs are sub-divided to further prioritize water quality issues in the sub-basins. Exceedances per COC in 2007 are illustrated in Figure 5.3.

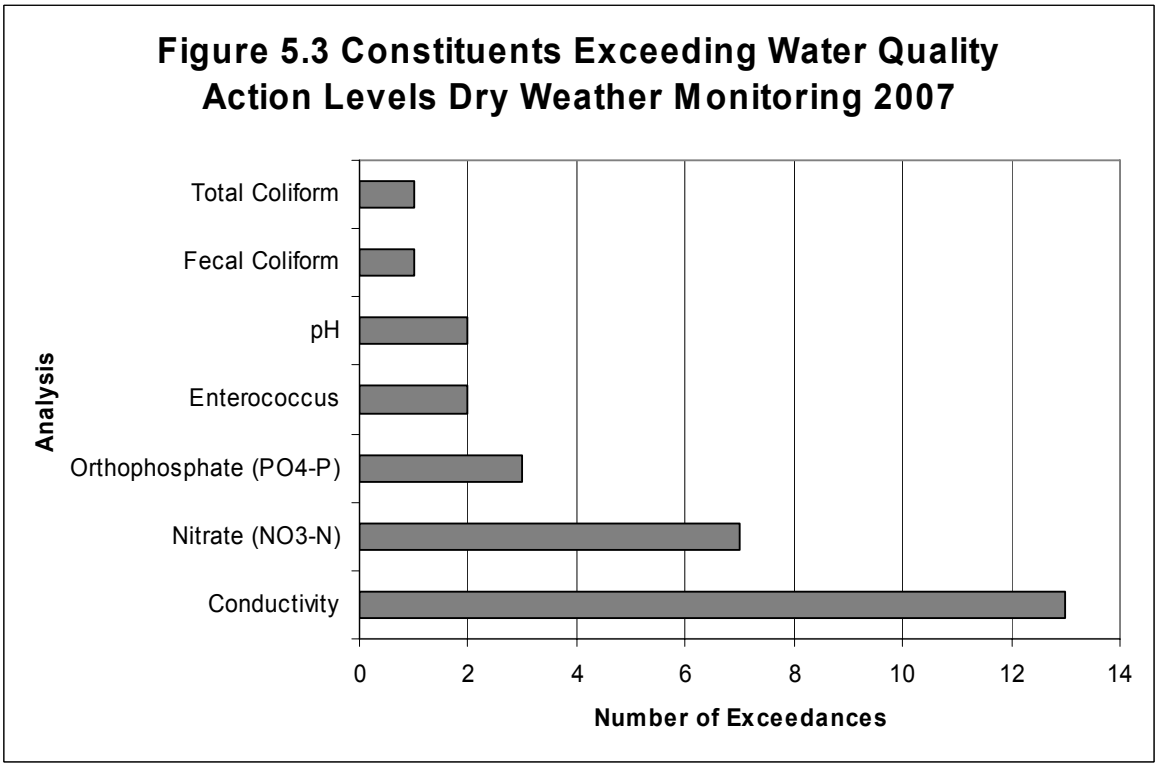

The COCs are divided into three priority categories based on criteria established as part of the 2003 Dry Weather Program. The criteria were modified in 2004 to better address COCs and their frequency of occurrence. Table 5.0 is a matrix of criteria for selecting COC priorities.

Table 5.0 Constituents of Concern Prioritization Criteria

	Criteria	Priority	Resulting Action
I	Exceedance Ratio 10 and trends are not increasing	Low	Continue routine monitoring and place COC on watch list.
II	Exceedance Ratio greater than 10 , less than 50	Medium	Increase Monitoring Frequency in Following Dry Weather Program
III	Persistent Exceedances	Medium	Increase Monitoring Frequency in Following Dry Weather Program
IV	Impacting Receiving Waters, 303d listed	High	Special Study, ICID Investigations, BMP implementation
V	Exceedance Ratio 50	High	Special Study/Investigations
VI	II and III	High	Special Study/Investigations

unless best professional judgment indicates otherwise

In order to lower the priority for a constituent from one year to the next, the COC must qualify for the lower category according to the criteria listed above and not show an increasing trend over the data collected. A constituent may only decrease one step per year and may be removed from the list if the constituent was ranked low last year and had no exceedances in monitoring for the current year. Figure 5.4 below illustrates the exceedance ratios per COC in the 2007 monitoring period. The exceedance ratio is calculated by x/y 100 where x total number of exceedances for selected COC and y total number of analyses for the COC. This method allows for a comparison of the exceedance rates for each indicator. For 2007, exceedance ratios for conductivity were higher than ratio of the other constituents, with ratios for nitrate-nitrogen and bacterial indicators ranking second and third. The indicator exceedance ratios support the ranks assigned to each constituent.

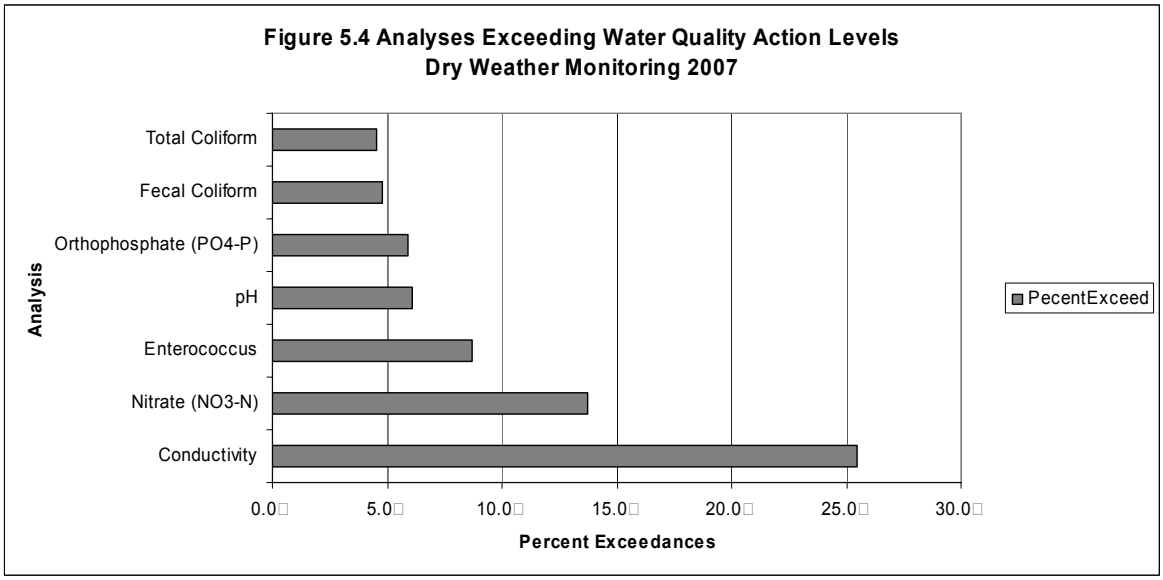

The COCs for the City are presented below in Table 5.1. These COCs were selected and prioritized according to criteria in Table 5.0.

Table 5.1 Constituents of Concern Prioritization, 2007

COC	Priority	Action Plan
Bacteria Total Coliform Fecal Coliform Enterococcus	High	Continuing encampment removals BMP implementation (grease removal equipment, coverage/containment for grease bins, kelp removal) Urban Runoff Treatment Facility (UV) and follow-up studies Assessment of bacteria data by land use and by conveyance type
Nitrate-nitrogen	High	Number of nitrate-nitrogen exceedances have declined in 2005, however, San Elijo Lagoon is on 303(d) list of impaired water bodies for nutrients Focus on education targeting irrigation runoff and inspections of nurseries. Proceed with TMDL Investigation Order examining nutrients in San Elijo Lagoon
Conductivity	Medium	Continue routine monitoring and groundwater characterizations. Follow-up to identify sources where groundwater is not suspected. Follow-up research in areas of TDS and loading associated with sedimentary geology in area.
Turbidity	Low	Increased priority partially due to illicit discharge of grease at LCS-1, which was located and abated. Sources likely commercial related, not sediment. Continue routine monitoring.
Oil and Grease	Low	Investigate where detected in monitoring. Continue to focus on grease storage and removal at restaurants and increase enforcement of BMPs.

The justification for 2007 prioritization and the reasons supporting any changes are listed in Table 5.2 below.

Table 5.2 Annual Prioritization of Constituents of Concern, 2003-2007

Constituent	2003 Priority	2004 Priority	2005 Priority	2006 Priority	2007 Priority	Reason for Change
Conductivity	None	Low	Medium	Medium	Medium	Conductivity exceedances 10□ and the exceedances are persistent from year to year at the same locations. However, criteria in evaluating conductivity exceedances are based on best professional judgment and elevated values of conductivity where groundwater is confirmed are not considered problematic from an IC/ID standpoint. Because this persistence is likely due to a constant source of groundwater flow in many locations, conductivity remains a medium priority (see Figure 4.12).
Oil and Grease	None	None	None	Low	None	Placed on watch list due to exceedance at LCS-1. Due to only 9 total analyses for Oil and Grease (meeting the 25□ requirement), one exceedance is 10□ and the constituent is placed on the watch list. There were no oil and grease exceedances in 2007 and the constituent has been removed from the list.
Ammonia-nitrogen	High	Medium	Low	None	None	Only exceeded action levels in 2 of 36 samples in 2004 (exceedance ratio □ 5.6□), 1 of 43 times in 2005 (exceedance ratio □ 2.3□), and there were no exceedances in 2006. No NH3-N exceedances were detected in the San Elijo Lagoon watershed (within Encinitas jurisdiction). A clear downward trend is evident and NH3-N has been removed from the list of Constituents of Concern.
MBAS	Medium	Medium	Low	None	None	Only exceeded action levels in 1 of 43 samples (exceedance ratio □ 2.3□) in 2005 monitoring, and there were no exceedances in 2006 monitoring. A downward trend is clear for MBAS over the five year monitoring period and MBAS is no longer listed as a COC.

Table 5.2 Annual Prioritization of Constituents of Concern, 2003-2007 (continued)

Constituent	2003 Priority	2004 Priority	2005 Priority	2006 Priority	2007 Priority	Reason for Change
pH	None	None	Low	None	Low	In 2005 monitoring, 2 exceedances for pH were attributable to concrete channels and increased temperature and the constituent was placed on watch list. There were no exceedances in 2006 and pH has been removed from the list of COCs. In 2007, there were two exceedances for pH, both attributable to concrete channels and increased temperature. The constituent has been placed on watch list.
Temperature	None	None	Low	None	None	Similar to pH, the exceedances in 2005 were due to concrete channels and temperature was placed on watch list. There were no exceedances in 2006 and temperature has been removed from the list of COCs.
Orthophosphate				None	Low	There were no exceedances in 2006 and orthophosphate has been removed from the list of COCs. In 2007, there were two exceedances for orthophosphate and the constituent has been placed on the watch list.

Bacteria and nitrate-nitrogen remain high priority COCs. Conductivity has increased in priority over the preceding monitoring periods. After factoring in all potential sources, groundwater is the most prevalent; therefore, conductivity remains a medium priority. pH and orthophosphates were raised in priority this year, as a result of two exceedances. COCs that have decreased in priority over the monitoring periods include: ammonia-nitrogen, MBAS, diazinon, temperature, and dissolved copper. Oil and Grease was added to the watch list last year; however, with no exceedances in 2007 monitoring, it was lowered in rank and dropped from the watch list this year.

5.3 Bacteria Indicator Exceedances

Extensive bacteria data has been collected for the past five dry weather seasons, allowing for a better overall characterization of bacteria sources and loading in the City. Enough data has been collected to attempt to characterize bacteria concentrations based on land use. The additional data collection also allows for long term trend assessments of bacteria concentrations in the City.

The two major land uses in Encinitas are commercial and residential and are often not distinct to a drainage basin but are mixed. The assessment of bacteria loading from these areas is based on primary land use as listed in the data set. Figure 5.5 illustrates the geometric mean concentrations of total and fecal coliform and enterococcus based on land use. According to the data collected from 2002 to 2007, the commercial areas

contribute more bacteria to the receiving waters for all three indicators, as calculated based on concentration only, which is not indicative of overall loading. The total coliform concentrations are approximately 45 higher, fecal coliform are approximately 57 higher, and enterococcus concentrations are approximately 58 higher in commercial areas. The differences between commercial and residential areas are illustrated in Figure 5.5.

Figure 5.5 Bacteria Geometric Mean Data by Land Use, 2002-2007

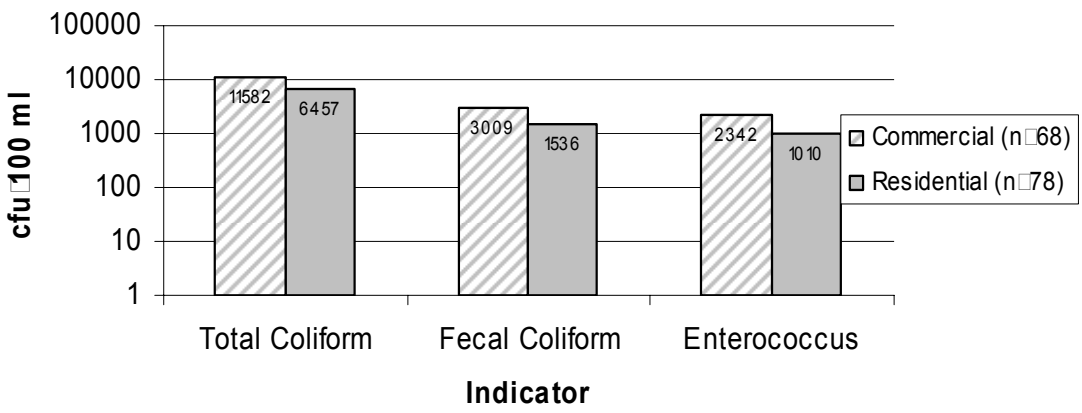

The City has focused efforts on inspection of commercial facilities and bacteria concentrations have been trending downward over the five years of data collected from 2003 to 2007. From 2002 to 2007, concentrations of bacteria have decreased in commercial areas; however, concentrations for all three indicators are higher in 2006 monitoring, partially a result of an illicit discharge of grease to the conveyance at LCS-1. This discharge was located and abated, and bacteria concentrations at the location fell. The follow-up data is not included in the analysis; therefore the 2006 data may be skewed as a result of the discharge. The bacteria concentrations decreased in 2007. Figure 5.6 depicts this overall decreasing bacteria trend in commercial areas since 2002.

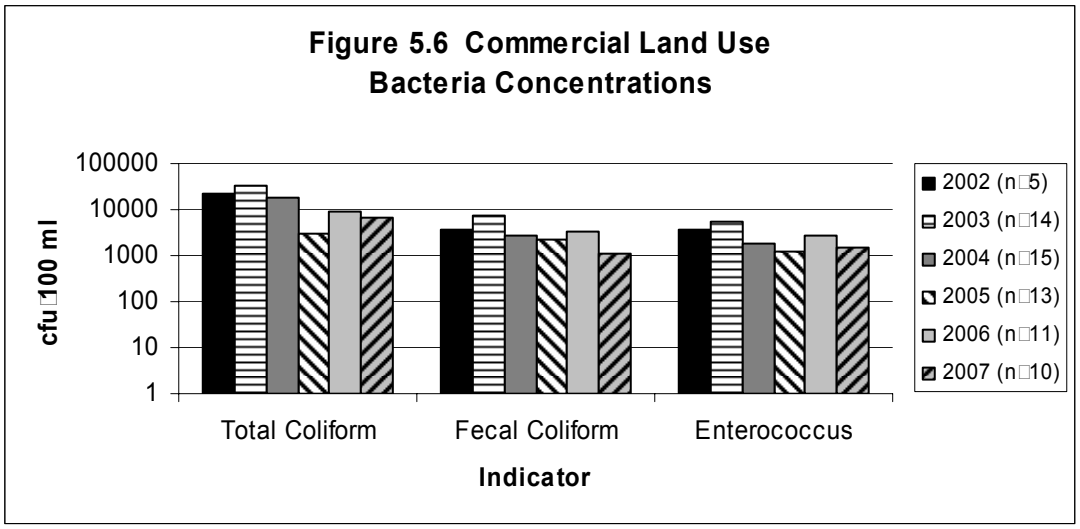

Similar trends are observed in the residential data. Decreasing trends were evident across all three indicators from 2002 to 2005, however, in 2006, elevated bacteria concentrations were detected in Leucadia, which were attributed to wildlife in the storm drain system. Figure 5.7 shows the bacteria trends in residential areas of Encinitas.

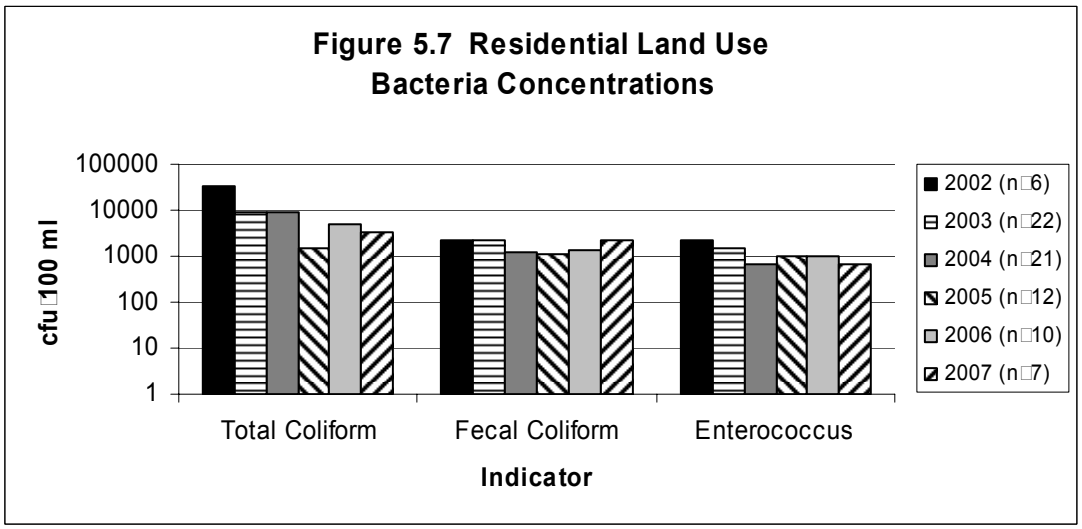

Figure 5.7 depicts an overall decreasing bacteria trend in residential areas since 2002.

5.4 Nitrate-nitrogen Exceedances

The exceedance rates for nitrate-n decreased from 17 in 2006 to 14 in 2007. Overall, exceedances for nitrate-nitrogen have declined from 2004 to 2007 across all sub-basins. Exceedance rates for nitrate-nitrogen for all five years of dry weather monitoring are illustrated in Figure 5.8.

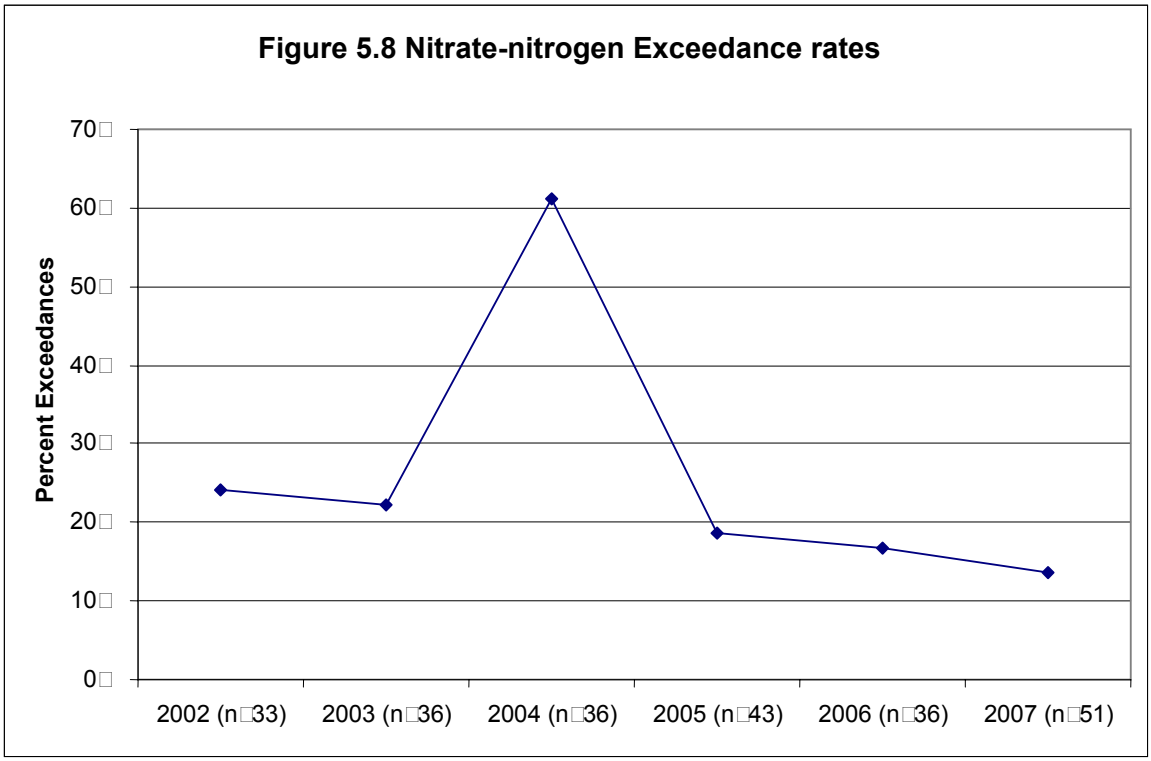

Over the five years of monitoring, groundwater remains a constant source of dry weather flow within two tributaries, ENC-6 and ENC-11 of the Encinitas Sub-basin. There are six monitoring locations within the ENC-6 and ENC-11 reaches. Each year, these locations have exceedances for nitrate-nitrogen, often accompanied by elevated conductivity. These tributaries then contribute to elevated nitrate-nitrogen concentrations downstream in Cottonwood Creek to the mouth of the creek at the Pacific Ocean, at sites ENC-1, 3, and 8. Over the monitoring periods, other nitrate-nitrogen exceedances have been present on occasion, most notably in 2004. Reasons for the increase in nitrate-nitrogen exceedances in 2004 are unknown. Many of these are likely due to residential and nursery runoff affecting nutrient concentrations. Concentrations of pollutants are usually consistent at locations influenced primarily by groundwater, including elevated levels of conductivity. In contrast, irrigation runoff may have higher concentrations of ammonia and orthophosphate, lower conductivity, and higher bacteria levels, and concentrations of these constituents are variable.

Most of the nitrate-nitrogen exceedances in the Encinitas Sub-basin appear to be a result of groundwater in the region. The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. Also, It is common to find elevated nitrates in groundwater in regions of agriculture and it is likely that the sources of nitrogen in the groundwater in Encinitas are from historical land uses such as nurseries. It should be noted, however, that local water authorities do not consider Encinitas groundwater a viable source of drinking water because it is subject to sea water intrusion therefore, there is little groundwater quality data specific to Encinitas.

Table 5.3 contains all sites with nitrate-nitrogen exceedances in the dry weather monitoring within 2002 through 2007 and suspected source of nitrogen.

Table 5.3 Nitrate-nitrogen Exceedances, 2002-2007

Site	NO3-N Exceedances						Suspected Source
	2002	2003	2004	2005	2006	2007	
CBS-1			X				Groundwater
CBS-2				X			Combination
CBS-3N			X				Irrigation
CBS-3S			X				Irrigation
SEL-2						X	Combination
SEL-5	NS	NS	NS	X	NS		Irrigation
LUC-1	NS	NS	X	X	X	X	Groundwater
LUC-7			X	NS	NS		Groundwater
ENC-1	X	X	X	X	X		Groundwater
ENC-3	X	X	X	X	X		Groundwater
ENC-4			X				Irrigation
ENC-5	X	X	X			X	Combination
ENC-6	X	X	X	X	X	X	Groundwater
ENC-8	X	X	X	X	X		Groundwater
ENC-9			X		NS		Irrigation
ENC-10	X		X				Irrigation
ENC-11	X	X	X	X	X	X	Groundwater
ENC-12		X			NS		Irrigation
ENC-14			X		NS		Irrigation
ENC-15		X	X				Irrigation
ENC-17		X	X				Irrigation
ESC-1			X				Groundwater
ESC-2			X				Irrigation
LUX-2			X		NS	NS	Irrigation
LCS-1			X			X	Irrigation
LCS-2			X				Irrigation
LCS-5						X	Irrigation

1. NS No sample
2. Combination Groundwater and Irrigation

The sites with nitrate-nitrogen exceedances attributable to groundwater are typically not causing water quality problem in the receiving waters. These locations do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils. In 2007, all nitrate-nitrogen exceedances except two locations (LCS-1 and LCS-5) appeared to be attributable to groundwater. A detailed discussion of nitrate and conductivity exceedances is included in Appendix J of this report.

5.5 Receiving Waters

Finally, the sub-basins can be divided by receiving waters. All of Encinitas drains either north to Batiquitos Lagoon, south to San Elijo Lagoon, or west to the Pacific Ocean at Moonlight Beach.

Table 5.4 shows the sub-basins and their associated receiving water.

Table 5.4 Receiving Waters and Associated Sub-basins

Batiquitos Lagoon	Pacific Ocean	San Elijo Lagoon
Leucadia	Encinitas	Cardiff
La Costa South		Lux Canyon
		Lower Escondido Creek
		La Orilla Creek
		Rancho Santa Fe

In dividing the City of Encinitas into receiving water drainage areas, general conclusions as to the water quality entering these waters can be drawn. In order to compare the water quality across these three drainage areas, a ratio of the number of water quality exceedances to analytes tested is calculated. Figure 5.9 presents the ratios calculated for the three drainage areas over the five years of dry weather monitoring.

Figure 5.9 General Trends in Water Quality Exceedances by Receiving Water

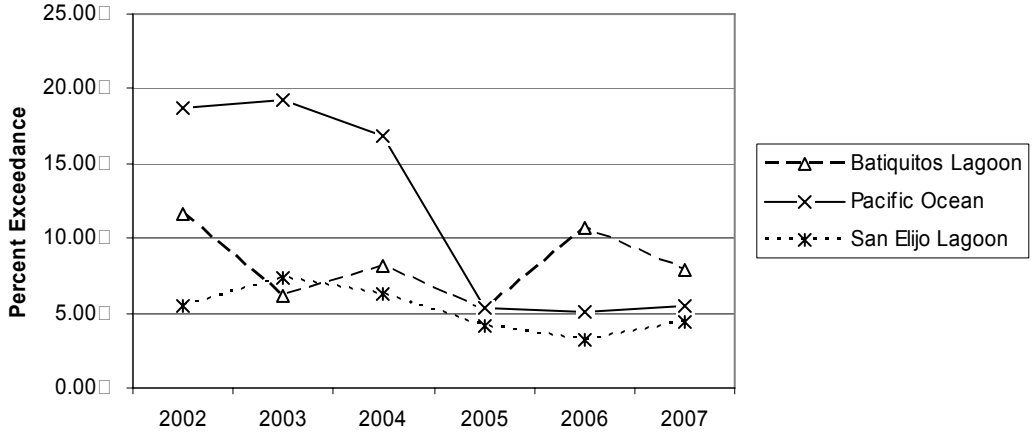

According to these ratios, the waters flowing to the Batiquitos Lagoon exceeded action levels greater extent than flows to other receiving waters in Encinitas. The primary COCs in the creek continue to be bacteria and conductivity. The exceedances in the Batiquitos basin were higher in 2006, most likely a result of illicit discharges located (and abated) in the La Costa South Sub-basin. In 2007 the percent exceedances decreased.

The primary COCs draining to the Pacific Ocean continue to be bacteria and nitrogen. The bacteria are mitigated by an Urban Runoff Treatment Facility which utilizes ultra-violet light to reduce bacteria in the creek discharge. The BMP is located near the mouth of Cottonwood Creek and effectively eliminates bacteria in the treated creek water, approximately 85 of the flows in the creek. In 2007, all of the nitrate-nitrogen exceedances in the sub-basin appeared to be attributable to groundwater or irrigation run-off.

The numbers indicate that the sub-basins draining to San Elijo Lagoon continue to exhibit a relatively low exceedance ratio under 5 .

6.0 Conclusions

Through five years of dry weather monitoring under Order 2001-01, the City of Encinitas has succeeded in identifying major water quality COCs. The sources of these COCs have been identified and eliminated where possible. Continued monitoring allows for trend assessments over the dry weather monitoring periods. These trends can be observed in overall exceedance numbers broken down by sub-basin and by land use.

Using the COC prioritization method described in Table 5.0, City staff has evaluated and ranked water quality concerns in the City, which will allow appropriate attention in the upcoming year. The City of Encinitas Clean Water Program intends to focus on illicit discharges and connections as a means to improve water quality. The dry weather monitoring program assists the City in focusing efforts targeting specific pollution problems throughout the City. Efforts, including targeting specific audiences for education, enforcement activity, and BMP implementation, have expanded as result of the water quality characterization gained from the Dry Weather Monitoring Program.

The high priority COCs in Encinitas are bacteria indicators (total and fecal coliform and enterococcus) and nitrate-nitrogen. High bacteria levels occur most often in commercial land use areas. Sources for bacteria have been identified in several instances and have included natural loading from wildlife, regrowth in the MS4, and various illegal connections to the MS4. Commercial washing is also a concern and is addressed aggressively in the City s inspection program. Bacteria indicators in the MS4 have been trending downward since 2003 for residential and commercial areas in Encinitas.

It is not known if the elevated nitrates is human induced. Sources of nitrate-nitrogen have been identified as primarily groundwater and fertilizer-containing nursery and residential irrigation run-off. With the exception of 2004, nitrate-nitrogen exceedances appear to be groundwater and have been relatively consistent. In 2007, 5 out of 7 nitrate exceedances appear to be groundwater. In these locations, the high nitrate concentrations are accompanied by elevated conductivity and no other COC exceedances. Nitrate is a constituent of concern for the groundwater in the San Diego region and historical land uses, such as nurseries are likely sources of nitrogen in the groundwater in Encinitas. The elevated conductivity may be from various minerals entering the groundwater from the

sedimentary soils or seawater intrusion in the region. A detailed discussion of nitrate and conductivity exceedances is included in Appendix J of this report. The program will focus on education targeting irrigation runoff and inspections of nurseries. A study of groundwater in the watershed is needed to identify the quantity and quality of groundwater in the lower reaches of the watershed.

Overall, exceedance rates in the MS4 have been trending downward over the five years of monitoring. In assessing the exceedance trends by the ultimate downstream receiving water (i.e. the Pacific Ocean, Batiquitos Lagoon, and San Elijo Lagoon), consistent improvements in water quality are evident for each drainage area (see Figure 5.9.) Loading of pollutants to these receiving waters has been reduced.

Two recommendations for future dry weather monitoring include:

1. In-depth pollutant source tracking and identification focusing on TMDL-impacted receiving waters.

2. A comprehensive assessment of all dry weather monitoring data within the watershed to compare dry weather constituents of concern across the Carlsbad Hydrologic Unit and develop appropriate BMPs as a watershed group.

3. Re-evaluation of the number and location of dry weather monitoring locations to adjust to possible new requirements in the upcoming new municipal permit. New programs in that permit, including trash and MS4 monitoring, may require adjusting site locations and an evaluation may show that some sites need not be monitored any longer.

With the on-set of TMDLs in the Pacific Ocean at Cottonwood Creek and the pending sediment, nutrient, and bacteria TMDLs for San Elijo Lagoon, it is recommended that resources be shifted to investigations in these areas. New bacteria source tracking methods should be employed to definitively identify and eliminate bacteria sources in the MS4. The City is moving forward with watershed based funding mechanisms to implement Investigative Order No. 2007-076 for the lagoons in the watershed. This monitoring program will be designed in the upcoming year and monitoring is projected to begin in the fall of 2007. Both of these studies will provide detailed information on the pollutants described above and their effects on receiving waters, namely the Pacific Ocean at Cottonwood Creek and San `Elijo Lagoon in Encinitas.

Much time and effort has been expended in identifying COCs in the watershed. Now that these have been identified, it is prudent to allocate efforts to those pollutants in an adaptive monitoring approach. Many of the analysis in the dry weather program have not been productive over the five years of testing. Due to the analytical timeframes necessary for metals, oils and grease, and pesticides, these analytes have not yielded significant results in IC/ID investigations. However, the field screening parameters and bacteria analysis have been productive in source tracking and investigations and must continue to be a part of the program. A comprehensive assessment of all dry weather data in the watershed is recommended. This will result in consistent COC identification and lead to an adaptive monitoring plan for the dry weather program. The adaptive monitoring will focus efforts on high priority COCs with TMDL implementation plans in mind and may reduce monitoring of constituents that have not been identified as problematic.

APPENDIX A

CARDIFF SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-1	Latitude	33.013611111111	**Watershed**	
Location	SEJPA	Longitude	117.27305555556	Hydrologic Unit	904.61
Date	06/11/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	10:24	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3158 3159

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	20.1	NH3-N (mg/L)	0.4	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.3
pH	8.0	Turbidity (NTU)	1.18	Cond (mS/cm)	4.82		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	2	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.75, Bacteria only

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-2	Latitude	33.016666666667	**Watershed**	
Location	Highway 101 Channel	Longitude	117.28138888889	Hydrologic Unit	904.61
Date	06/12/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	10:45	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☑ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3169,3170,3171

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	28	NH3-N (mg/L)	0.4	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.1
pH	8.3	Turbidity (NTU)	8.08	Cond (mS/cm)	5.81		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	1	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.5

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-3N	Latitude	33.018611111111	**Watershed**	
Location	Norfork Dr. @ Glen Park (North Pipe)	Longitude	117.28111111111	Hydrologic Unit	904.61
Date	06/11/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	11:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3161

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: NO FLOW-DRY

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-3S	Latitude	33.018611111111	**Watershed**	
Location	Norfolk Dr. @ Glen Park (South Pipe)	Longitude	117.28111111111	Hydrologic Unit	904.61
Date	06/11/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	11:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3160

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: NO FLOW-DRY

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-4	Latitude	33.009722222222	**Watershed**	
Location	Cardiff Cove at Cape Sebastian	Longitude	117.26722222222	Hydrologic Unit	904.61
Date	06/11/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	12:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3162, 3163, 3164

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	23.2	NH3-N (mg/L)	0.3	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.1
pH	8.1	Turbidity (NTU)	0.98	Cond (mS/cm)	7.76		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	1.5	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.5, Bacteria only

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-5	Latitude	33.014444444444	**Watershed**	
Location	Plastino Building	Longitude	117.27972222222	Hydrologic Unit	904.61
Date	05/29/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	10:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: No flow-no samples collected.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-6	Latitude	33.031944444444	**Watershed**	
Location	Hall 2 at Bach Street	Longitude	117.2825	Hydrologic Unit	904.61
Date	06/11/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	13:16	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: CHANNEL DRY-NO FLOW - no samples collected

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-7	Latitude	33.031111111111	**Watershed**	
Location	Woodlake and Evergreen	Longitude	117.2825	Hydrologic Unit	904.61
Date	05/30/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	13:15	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	24.3	NH3-N (mg/L)	0.1	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	0.6
pH	7.62	Turbidity (NTU)	4.61	Cond (mS/cm)	1.78		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	3.2	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.5, Bacteria only

APPENDIX B

LOWER ESCONDIDO CREEK SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ESC-1	Latitude	33.053888888889	**Watershed**	
Location	Brookside Lane @ Copper Creek	Longitude	117.21638888889	Hydrologic Unit	904.61
Date	05/25/07	TB Page	1148	Hydrologic Area	Carlsbad
Time	10:32	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☑ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 1, 2, 3

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	18.7	NH3-N (mg/L)	0.2	NO3-N (mg/L)	0.25	Ortho-PO4(mg/L)	1.0
pH	8.0	Turbidity (NTU)	4.01	Cond (mS/cm)	8.02		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	100	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 2.5

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ESC-2	Latitude	33.051388888889	**Watershed**	
Location	Lonejack Road @ Stratford Knoll	Longitude	117.22861111111	Hydrologic Unit	904.61
Date	05/25/07	TB Page	1148	Hydrologic Area	Carlsbad
Time	10:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	20.4	NH3-N (mg/L)	0.6	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	0.2
pH	7.59	Turbidity (NTU)	0.51	Cond (mS/cm)	6.94		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	118	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.75

APPENDIX C

LA ORILLA CREEK SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LOR	Latitude	33.010555555556	**Watershed**	
Location	La Orilla Creek	Longitude	117.24	Hydrologic Unit	904.61
Date	06/12/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	9:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☑ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.3	NH3-N (mg/L)	0.2	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	0.2
pH	7.6	Turbidity (NTU)	2.65	Cond (mS/cm)	8.12		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.5

APPENDIX D

LA COSTA SOUTH SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-1	Latitude	33.058611111111	Hydrologic Unit	904.51
Location	Garden View @ El Camino Real	Longitude	117.26305555556	Hydrologic Area	Carlsbad
Date	05/30/07	TB Page	1147	Hydrologic Subarea	
Time	9:07	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☑ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☑ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	19.9	NH3-N (mg/L)	0.4	NO3-N (mg/L)	20	Ortho-PO4(mg/L)	0.6
pH	7.62	Turbidity (NTU)	5.10	Cond (mS/cm)	1.113		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.5. Oily sheen, no potential source was observed upstream in the drainage basin. There was evidence of irrigation runoff upstream in drainage basin.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-2	Latitude	33.068055555556	**Watershed**	
Location	Leucadia Boulevard @ El Camino Real	Longitude	117.26222222222	Hydrologic Unit	904.51
Date	05/25/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:45	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	19.8	NH3-N (mg/L)	0.2	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	0.3
pH	7.64	Turbidity (NTU)	5.72	Cond (mS/cm)	4.10		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	200	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: 0.50 MBAS

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-3	Latitude	33.061111111111	**Watershed**	
Location	Calle Acervo	Longitude	117.24055555556	Hydrologic Unit	904.51
Date	05/25/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	9:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☑ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	17.4	NH3-N (mg/L)	0.4	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	2
pH	7.00	Turbidity (NTU)	3.29	Cond (mS/cm)	1.416		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: NO FLOW 0.25 MBAS

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-4	Latitude	33.051944444444	**Watershed**	
Location	Mountain Vista @ El Camino Real	Longitude	117.26055555556	Hydrologic Unit	904.51
Date	05/25/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	13:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.4	NH3-N (mg/L)	1	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	1
pH	7.28	Turbidity (NTU)	8.81	Cond (mS/cm)	1.620		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: NO FLOW MBAS 1.0

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-5	Latitude	33.048888888889	**Watershed**	
Location	Via Molena @ El Camino Real	Longitude	117.26027777778	Hydrologic Unit	904.51
Date	05/30/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:14	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	20.3	NH3-N (mg/L)	0.6	NO3-N (mg/L)	25	Ortho-PO4(mg/L)	1.0
pH	7.46	Turbidity (NTU)	7.32	Cond (mS/cm)	1.618		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	No data	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: mbas 0.5. There was evidence of irrigation runoff upstream in drainage basin.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-6	Latitude	33.046944444444	**Watershed**	
Location	Village Square Drive	Longitude	117.25861111111	Hydrologic Unit	904.51
Date	05/30/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	13:50	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	23.1	NH3-N (mg/L)	0.6	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	0.4
pH	8.01	Turbidity (NTU)	18.6	Cond (mS/cm)	3.04		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	no data	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: mbas 1.0, Bacteria only, trickle flow - unable to measure flow

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-7	Latitude	33.055833333333	Hydrologic Unit	904.51
Location	Grand Avenue @ El Camino Real	Longitude	117.2625	Hydrologic Area	Carlsbad
Date	05/25/07	TB Page	1147	Hydrologic Subarea	
Time	14:20	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☑ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	21.2	NH3-N (mg/L)	0.8	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	0.4
pH	7.81	Turbidity (NTU)	2.19	Cond (mS/cm)	16.49		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	61	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: 0.75 MBAS

APPENDIX E

LEUCADIA SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-1	Latitude	33.082777777778	**Watershed**	
Location	Ponto Detention Basin	Longitude	117.30944444444	Hydrologic Unit	904.51
Date	06/20/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	9:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3222,3223

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	20.1	NH3-N (mg/L)	0.2	NO3-N (mg/L)	16	Ortho-PO4(mg/L)	0.2
pH	7.6	Turbidity (NTU)	3.14	Cond (mS/cm)	1.841		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: NO FLOW -DETENTION POND. MBAS 0.25. Nitrates from groundwater.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-2	Latitude	33.068333333333	**Watershed**	
Location	Saxony @ La Costa	Longitude	117.2925	Hydrologic Unit	904.51
Date	06/21/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:15	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☑ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3236,3237

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: DRY-NO SAMPLES

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-3	Latitude	33.068611111111	**Watershed**	
Location	Normandy @Pireaus	Longitude	117.29388888889	Hydrologic Unit	904.51
Date	06/20/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	12:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	28.9	NH3-N (mg/L)	0.3	NO3-N (mg/L)	6	Ortho-PO4(mg/L)	0.1
pH	9.3	Turbidity (NTU)	9.52	Cond (mS/cm)	0.703		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	0.05	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.1 FLOW - LOW SLOW TRICKLE. pH and temp. are high because of low flow in concrete channel.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-4	Latitude	33.07	**Watershed**	
Location	Fox Point Detention Basin	Longitude	117.28305555556	Hydrologic Unit	904.51
Date	06/21/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☑ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☑ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☐ No ☑ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3240,3241

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	20.3	NH3-N (mg/L)	1	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	4
pH	7.8	Turbidity (NTU)	9.20	Cond (mS/cm)	1.360		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	0.05	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: DETENTION BASIN-VERY SLOW TRICKLE FLOW- MBAS0.75. Followed up with an investigation from last years findings of irrigation runoff findings of 1027 and 1028 Albans Pl. Area drain was overflowing in front yard of 1028. Photos taken:

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☑ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-4	Latitude	33.07	**Watershed**	
Location	Fox Point Detention Basin	Longitude	117.28305555556	Hydrologic Unit	904.51
Date	06/26/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☑ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☐ No ☑ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)		NH3-N (mg/L)	.8	NO3-N (mg/L)		Ortho-PO4(mg/L)	
pH		Turbidity (NTU)		Cond (mS/cm)			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: Trickle Flow could not be measured. Bacteria, Chlorine, Ammonia sampled. Chlorine = 1 MBAS = 0.5

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☑ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-4	Latitude	33.07	**Watershed**	
Location	Fox Point Detention Basin	Longitude	117.28305555556	Hydrologic Unit	904.51
Date	06/26/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:45	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☑ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☐ No ☑ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)		NH3-N (mg/L)	0.5	NO3-N (mg/L)		Ortho-PO4(mg/L)	
pH		Turbidity (NTU)		Cond (mS/cm)			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: Trickle flow. Samples were collected from 1027 and 1028 St. Albans Pl. Bacteria #1028- front Yard area Drain. Bacteria # 1027 - Drain pipe w/release valve. Bacteria #1027 - curb Drain. Chlorine = 1 MBAS = 0.25

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-5	Latitude	33.064166666667	**Watershed**	
Location	Leucadia Boulevard @ Highway 101	Longitude	117.30166666667	Hydrologic Unit	904.51
Date	06/20/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:15	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3224,3225,3226

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: DAMP -NO FLOW-NO SAMPLES

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-6	Latitude	33.081666666667	**Watershed**	
Location	Pireaus Detention Basin	Longitude	117.29666666667	Hydrologic Unit	904.51
Date	06/20/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3230,3231

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	31.0	NH3-N (mg/L)	1	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.1
pH	9.5	Turbidity (NTU)	3.46	Cond (mS/cm)	6.64		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.75. High temperature and pH is a result of ponded water in concrete channel.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-7	Latitude	33.075555555556	**Watershed**	
Location	Quail Hollow @ Saxony	Longitude	117.28472222222	Hydrologic Unit	904.51
Date	06/21/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☑ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3238

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: DRY-NO SAMPLES.

APPENDIX F

ENCINITAS SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-1	Latitude	33.048055555556	**Watershed**	
Location	Moonlight Beach, Cottonwood Creek	Longitude	117.29861111111	Hydrologic Unit	904.51
Date	05/31/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:36	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☑ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☑ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.4	NH3-N (mg/L)	0.1	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.15
pH	8.04	Turbidity (NTU)	1.60	Cond (mS/cm)	5.14		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	30	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: seaweed rack, mbas 0.75

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-10	Latitude	33.047777777778	**Watershed**	
Location	Cottonwood Creek Channel @Del Taco	Longitude	117.28583333333	Hydrologic Unit	904.51
Date	06/13/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	9:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3178,3177,3176,3175,3172,3173

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	19.8	NH3-N (mg/L)	1.0	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	2.5
pH	7.5	Turbidity (NTU)	9.68	Cond (mS/cm)	1.36		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	7.5	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.75, evidence of encampments.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-11	Latitude	33.047222222222	Hydrologic Unit	904.51
Location	Requeza Channel @ Mossy Chevrolet	Longitude	117.28583333333	Hydrologic Area	Carlsbad
Date	06/14/07	TB Page	1147	Hydrologic Subarea	
Time	11:00	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3193,3194,3197

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	23.5	NH3-N (mg/L)	0.2	NO3-N (mg/L)	20	Ortho-PO4(mg/L)	0.1
pH	7.7	Turbidity (NTU)	6.18	Cond (mS/cm)	8.36		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	2	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.75, Bacteria only

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-12	Latitude	33.048611111111	Hydrologic Unit	904.51
Location	Cottonwood Creek Channel @ SDUHSD	Longitude	117.27777777778	Hydrologic Area	Carlsbad
Date	06/14/07	TB Page	1147	Hydrologic Subarea	
Time	13:00	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3199,3200

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: DRY--no samples collected

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-13	Latitude	33.059722222222	**Watershed**	
Location	Guidero Way	Longitude	117.29111111111	Hydrologic Unit	904.51
Date	06/14/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	13:43	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3201

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: DRY - no samples collected

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-14	Latitude	33.051944444444	Hydrologic Unit	904.51
Location	Via Julita	Longitude	117.29166666667	Hydrologic Area	Carlsbad
Date	06/19/07	TB Page	1147	Hydrologic Subarea	
Time	10:40	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3214,3215

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: DAMP-NO FLOW TO SAMPLE

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-15	Latitude	33.055	**Watershed**	
Location	Encinitas Ranch Detention Basin 2X60"	Longitude	117.27833333333	Hydrologic Unit	904.51
Date	05/31/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.1	NH3-N (mg/L)	0.3	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	2
pH	7.88	Turbidity (NTU)	6.35	Cond (mS/cm)	3.25		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	8.2	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.5

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-16	Latitude	33.047222222222	Hydrologic Unit	904.51
Location	Westlake	Longitude	117.27916666667	Hydrologic Area	Carlsbad
Date	06/19/07	TB Page	1147	Hydrologic Subarea	
Time	10:54	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3216

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: DAMP-NO FLOW FOR SAMPLE.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-17	Latitude	33.047777777778	**Watershed**	
Location	Sunshine Nursery (NE corner ENC/QGD)	Longitude	117.27833333333	Hydrologic Unit	904.51
Date	06/19/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3217,3218

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	21.7	NH3-N (mg/L)	0.6	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	3.5
pH	8.4	Turbidity (NTU)	6.55	Cond (mS/cm)	1.474		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	NO DATA	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.25 - TRICKLE FLOW, MAN HOLE 20FT. DEEP,CONFINED SPACE ,UNKNOWN FLOW.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-2	Latitude	33.042777777778	**Watershed**	
Location	Requeza @ Rancho Coastal Humane	Longitude	117.285	Hydrologic Unit	904.51
Date	06/19/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	12:50	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3219

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: PIPE DRY- NO SAMPLES

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-3	Latitude	33.048333333333	Hydrologic Unit	904.51
Location	Hwy 101 and B Street	Longitude	117.29416666667	Hydrologic Area	Carlsbad
Date	05/31/07	TB Page	1147	Hydrologic Subarea	
Time	11:00	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☑ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	21.7	NH3-N (mg/L)	0.4	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.2
pH	7.64	Turbidity (NTU)	2.67	Cond (mS/cm)	5.17		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	125	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: mbas 1.0, Bacteria only

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-4	Latitude	33.048055555556	**Watershed**	
Location	Second Street	Longitude	117.295	Hydrologic Unit	904.51
Date	06/13/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☑ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3181,3180,3179

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	21.1	NH3-N (mg/L)	0.8	NO3-N (mg/L)	3	Ortho-PO4(mg/L)	1.0
pH	7.8	Turbidity (NTU)	6.42	Cond (mS/cm)	0.877		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.5, NO FLOW PONDED

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-5	Latitude	33.048611111111	Hydrologic Unit	904.51
Location	Cottonwood Creek Park South	Longitude	117.29	Hydrologic Area	Carlsbad
Date	06/14/07	TB Page	1147	Hydrologic Subarea	
Time	10:15	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☐ No ☑ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3192

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.3	NH3-N (mg/L)	0.3	NO3-N (mg/L)	15	Ortho-PO4(mg/L)	0.1
pH	7.6	Turbidity (NTU)	3.28	Cond (mS/cm)	4.86		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	10	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: Bacteria samples were collected from upstream and downstream locations. MBAS 0.5, Fish were also present.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-6	Latitude	33.048888888889	Hydrologic Unit	904.51
Location	Moonlight Creek	Longitude	117.29	Hydrologic Area	Carlsbad
Date	06/13/07	TB Page	1147	Hydrologic Subarea	
Time	12:15	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3188,

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	23.8	NH3-N (mg/L)	0.4	NO3-N (mg/L)	18	Ortho-PO4(mg/L)	0.1
pH	7.8	Turbidity (NTU)	1.29	Cond (mS/cm)	4.76		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	10	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: Bacteria only. MBAS 0.75

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-7	Latitude	33.055277777778	Hydrologic Unit	904.51
Location	Saxony Place	Longitude	117.28888888889	Hydrologic Area	Carlsbad
Date	06/14/07	TB Page	1147	Hydrologic Subarea	
Time	12:37	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3198

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: NO FLOW-DAMP - No samples collected

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-8	Latitude	33.048333333333	Hydrologic Unit	904.51
Location	Third and B Street	Longitude	117.29611111111	Hydrologic Area	Carlsbad
Date	06/13/07	TB Page	1147	Hydrologic Subarea	
Time	11:35	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3187

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	23.9	NH3-N (mg/L)	0.3	NO3-N (mg/L)	10	Ortho-PO4(mg/L)	0.2
pH	7.6	Turbidity (NTU)	2.19	Cond (mS/cm)	5.05		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	50	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.75. Bacteria only.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-9	Latitude	33.048055555556	**Watershed**	
Location	Enc Blvd @ Saxony/Oggi's Pizza	Longitude	117.28583333333	Hydrologic Unit	904.51
Date	06/12/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	14:10	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: NO FLOW-DAMP - no samples scollected

APPENDIX G

RANCHO SANTA FE SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	RSF-1	Latitude	33.0375	**Watershed**	
Location	Encinitas Blvd @ Rancho Santa Fe	Longitude	117.23861111111	Hydrologic Unit	904.61
Date	05/24/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	11:25	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height ____ ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other ____

Photo Taken ☑ Yes ☐ No Photo # ____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.0	NH3-N (mg/L)	0.6	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	2
pH	8.25	Turbidity (NTU)	1.96	Cond (mS/cm)	0.810		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: TRICKLE FLOW, MBAS 0.25

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	RSF-2	Latitude	33.028611111111	Hydrologic Unit	904.61
Location	Trabbert Ranch Road	Longitude	117.24333333333	Hydrologic Area	Carlsbad
Date	05/24/07	TB Page	1167	Hydrologic Subarea	
Time	12:30	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☑ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments:

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	RSF-3	Latitude	33.048333333333	**Watershed**	
Location	Camino del Norte	Longitude	117.22611111111	Hydrologic Unit	904.61
Date	05/23/07	TB Page	1148	Hydrologic Area	Carlsbad
Time	12:08	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☑ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☑ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	19.5	NH3-N (mg/L)	0.2	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	0.2
pH	7.83	Turbidity (NTU)	4.41	Cond (mS/cm)	1.777		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	no data	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.5, rural residential

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	RSF-4	Latitude	33.034444444444	**Watershed**	
Location	La Bajada Dip	Longitude	117.23583333333	Hydrologic Unit	904.61
Date	05/23/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	13:15	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	19.2	NH3-N (mg/L)	0.2	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	0.2
pH	7.86	Turbidity (NTU)	5.08	Cond (mS/cm)	6.20		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)	no data	Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments: MBAS 0.25

APPENDIX H

LUX CANYON SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUX-1	Latitude	33.021666666667	Hydrologic Unit	904.61
Location	East Manchester @ El Camino Real	Longitude	117.25361111111	Hydrologic Area	Carlsbad
Date	05/24/07	TB Page	1147	Hydrologic Subarea	
Time	14:30	Observer	ACJ	Discharge Area	

Watershed

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments:

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUX-2	Latitude	33.028333333333	**Watershed**	
Location	Sage Canyon Drive	Longitude	117.25527777778	Hydrologic Unit	904.61
Date	05/24/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	14:45	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert		Filling a Bottle or Known Volume		Flowing Pipe	
Width (ft.)		Volume (mL		Diamete (ft.)	
Depth (ft.)		Time (sec)		Depth (ft.)	
Velocity (ft/sec)		Flow (gpm)		Velocity (ft/sec)	
Flow (gpm)				Flow (gpm)	

Comments:

APPENDIX I

2007 ANALYTICAL EXCEEDANCES

Appendix I
Analytical Exceedances, 2007

StationID	Date	Analyte	Qualifier	Result	Unit	fFieldBenchmark	Year	Comments
CBS-2	12-Jun-07	Conductivity		5.81	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
CBS-4	11-Jun-07	Conductivity		7.76	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
ENC-1	31-May-07	Conductivity		5.14	mS/cm	5	2007	Groundwater
ENC-10	13-Jun-07	Orthophosphate (PO4-P)		2.5	mg/L	2	2007	The water was free of other pollutants and there was no evidence of overland flow but there was some evidence of encampments. MBAS field analysis was below benchmark. Last year it was 4.0.
ENC-11	14-Jun-07	Conductivity		8.36	mS/cm	5	2007	Groundwater
ENC-11	14-Jun-07	Nitrate (NO3-N)		20	mg/L	10	2007	Groundwater
ENC-17	19-Jun-07	Orthophosphate (PO4-P)		3.5	mg/L	2	2007	The water was free of other pollutants. It was difficult to collect a sample because it was a trickle flow in concrete storm water conveyance,and the manhole was 25' deep. Last year it was 3.0.
ENC-3	31-May-07	Conductivity		5.17	mS/cm	5	2007	Groundwater
ENC-5	14-Jun-07	Nitrate (NO3-N)		15	mg/L	10	2007	Groundwater
ENC-6	13-Jun-07	Nitrate (NO3-N)		18	mg/L	10	2007	Groundwater
ENC-8	13-Jun-07	Conductivity		5.05	mS/cm	5	2007	Groundwater
ESC-1	25-May-07	Conductivity		8.02	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
ESC-2	25-May-07	Conductivity		6.94	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
LCS-1	30-May-07	Nitrate (NO3-N)		20	mg/L	10	2007	Observed an oily sheen - Conducted a cursory investigation and did not see any sources in the drainage basin -- Lab results for Oil and Grease were below benchmark. Nitrates -- it is a natural creek and irrigation runoff upstream.
LCS-5	30-May-07	Nitrate (NO3-N)		25	mg/L	10	2007	The water was free of other pollutants. There was evidence of irrigation upstream in drainage basin.
LCS-7	25-May-07	Conductivity		16.49	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
LOR	12-Jun-07	Conductivity		8.12	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.

LUC-1	20-Jun-07	Nitrate (NO3-N)		16	mg/L	10	2007	groundwater - historical Nitrate exceedances
LUC-3	20-Jun-07	pH		9.3	pH	9	2007	Since the water was free of other pollutants, an upstream
LUC-4	21-Jun-07	Orthophosphate (PO4-P)		4	mg/L	2	2007	Bacteria exceedances as well. IC/ID investigation followed.
LUC-6	20-Jun-07	Conductivity		6.64	mS/cm	5	2007	groundwater
LUC-6	20-Jun-07	pH		9.5	pH	9	2007	ponded - high temperature recorded as well.
RSF-4	23-May-07	Conductivity		6.2	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
SEL-2	29-May-07	Nitrate (NO3-N)		15	mg/L	10	2007	Thick vegetation, low flow and suspected irrigation upstream but no overland flow was observed.
SEL-3	24-May-07	Conductivity		5.48	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.

APPENDIX J

DISCUSSION OF NITRATE-NITROGEN AND CONDUCTIVITY EXCEEDANCES

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

On September 25, 2007 the City of Encinitas received comments on the 2005-2006 Jurisdictional Urban Runoff Management Program Annual Report. This appendix has been prepared as a formal response to the following comment:

The Annual Report states that the above action-level nitrate and conductivity measurements, obtained at several monitoring sites, are attributable to inflow of groundwater. In future Annual Reports please provide data demonstrating that groundwater in the vicinity of the monitoring sites has elevated nitrate and conductivity levels. Also, indicate what the City would consider to be the 'above-groundwater' action level for these constituents, i.e., the levels that would warrant follow-up action in areas with elevated nitrate and conductivity.

This following discussion describes the information and data used by the City of Encinitas to identify the inflow of groundwater as a likely source for the action level exceedances of nitrate and conductivity measurements at six dry weather monitoring stations. The information presented includes background information, data collected throughout the course of the Dry Weather Program, historical land use data, and regional data. Sources of nitrate-nitrogen have been identified as primarily groundwater and fertilizer-laden nursery and residential irrigation run-off.

Background Information

The City of Encinitas has implemented a Dry Weather Monitoring Program for 6 consecutive years. The dry weather program includes field screening and sampling throughout the storm water conveyance system to identify illicit connections and the need for follow-up investigations. Dry weather monitoring is conducted annually at each selected location during the period from May 1 to September 30. The City monitors 52 sites within its jurisdiction. In addition to the dry weather monitoring in 2002, the city conducted an urban runoff water quality assessment of the Cottonwood Creek watershed. This project consisted of three consecutive weeks of sampling at ten sites that coincided with sampling at the dry weather monitoring stations. This assessment was performed to better characterize dry weather flows in the Cottonwood Creek Watershed.

Of the 52 monitoring sites monitored in 2007, 6 locations exceeded nitrate and/or conductivity action levels that were attributed to groundwater (2 other sites with exceedances were attributed to irrigation). Of these six locations, one is located in the Leucadia Sub-basin and the remaining five are located in the Cottonwood Creek watershed of the Encinitas Sub-basin. All monitoring stations are located near the topographic low point (near the coast) within their respective sub-basins.

The monitoring station in the Leucadia Sub-basin is located at the Ponto Beach detention basin. The Ponto Beach detention basin contributes flow to Batiquitos Lagoon. Typically, there is water present at this location throughout the year. For the past 6 dry seasons, water was present and nitrate consistently exceeded the action level at the monitoring station at Ponto Beach detention basin. Field records show water was ponded or flowing at the monitoring station but no overland flow was observed. Based upon follow-up investigations, the flow could not be directly connected with a human-induced source and, considering the hydrology and historical data of this monitoring station, the City determined that groundwater in the region was a most-likely source.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Runoff from the Cottonwood Creek watershed enters Cottonwood Creek, which discharges into the Pacific Ocean at Moonlight State Beach. Cottonwood Creek is a perennial stream comprised of groundwater and urban runoff during the dry season. In the Cottonwood Creek Urban Runoff Assessment and Action Plan in 2002, the average dry weather flow was approximated at 100 gallons per minute (gpm) near the mouth of Cottonwood Creek as it passed beneath Third Street (City of Encinitas, 2002). Continual flow monitoring was performed at this location for a one-week period in November of 2001. During the 2001 monitoring, measured dry weather flows averaged approximately 65 gpm. The flow data was generally consistent and did not show diurnal fluctuations. A strong diurnal pattern may be indicative of urban runoff associated with early morning or evening over-irrigation. The absence of a diurnal pattern strongly suggests that groundwater makes up a significant portion of the creek flows. Groundwater extrusion on the slopes above the channel (along Hwy 101) also supports that groundwater is present in the creek (Pacific Southwest Biological Services, 2000).

For the past 6 dry seasons, water was present and nitrate and/or conductivity concentrations consistently exceeded the action levels at the monitoring stations located in the Cottonwood Creek watershed. Field records show water was ponded or flowing at the monitoring stations but no overland flow was observed. The flow could not be directly connected with a human-induced source and, considering the hydrology and historical data of this monitoring station, it was determined that groundwater in the region was a probable source. The Cottonwood Creek Urban Runoff Assessment also reported nitrate and conductivity measurements exceeding the action levels throughout the sampling period. This comprehensive and focused study distinguished groundwater as a likely source of these exceedances.

Summary of Detailed Analysis in 2004 Dry Weather Monitoring Report

In the 2004 Dry Weather Monitoring Report, the City discussed the nitrate-nitrogen and conductivity exceedances in detail. This discussion is summarized in the following paragraphs.

The nitrate-nitrogen exceeded water quality action levels in 22 of the 36 total analyses performed in 2004, 61%, as part of the 2004 monitoring. The majority of the exceedances were in the Encinitas Sub-basin, accounting for 12 of the 22, with other scattered in all other sub-basins except La Orilla Creek and Rancho Santa Fe. Much of the nitrate-nitrogen was attributed to groundwater in the region. This groundwater is typically rich in nitrate-nitrogen and low in other nutrients and metals. Groundwater usually has elevated conductivity levels and low bacteria concentrations. In contrast, irrigation water, often laden with fertilizer, contains elevated concentrations of ammonia and ortho-phosphate, has low conductivity, and typically higher bacteria levels. Using these parameters and knowledge of the conveyances and land uses around monitoring locations, it is possible to characterize the sources of nitrate-nitrogen exceedances in the City. Of the 22 exceedances, 9 appeared to be attributable to irrigation runoff in the drainage areas, 10 associated with groundwater influence, and three sites seemed to be influenced by a combination of both sources. In these three sites, the water quality data was uncharacteristic of pure groundwater or irrigation. The following tables and figures are taken directly from the 2004 Dry Weather Monitoring Report. Table 5.5 lists the sites with data and land use supporting the characterization of the nitrate-nitrogen exceedances.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Table 5.5 Suspected Sources of Nitrate-nitrogen at Sites with Nitrate-nitrogen Exceedances

Groundwater	Irrigation
ENC-1	ENC-4
ENC-3	ENC-9
ENC-5	ENC-10
ENC-6	ENC-14
ENC-8	ENC-15
ENC-11	ENC-17
CBS-1	CBS-3 N
LUC-1	CBS-3 S
LUC-7	ESC-2
ESC-1	LUX-2
	LCS-1
	LCS-2

Figures 5.4, 5.5, and 5.6 are scatter plots containing water quality data used to characterize the sources of nitrate-nitrogen exceedances.

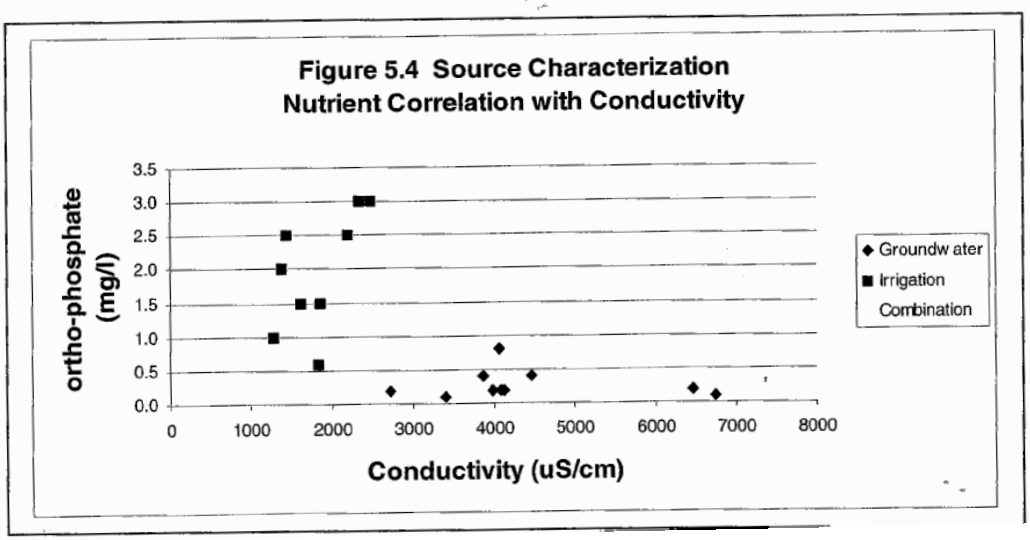

Figure 5.4 illustrates the relationship between ortho-phosphate concentrations and conductivity values. Results of the scatter show two distinct groups where water samples with conductivity measurements greater than 3000 uS/cm have ortho-phosphate concentrations below 1.0 mg/l. This is characteristic of groundwater, having high conductivity and low nutrients. The second grouping of samples shows those with conductivity below 3000 uS/cm containing ortho-phosphate concentrations ranging from 0.6 to 3.0 mg/l. Where higher nutrient levels are coupled with lower conductivity, irrigation is suspected to be a major contributor to water quality concerns.

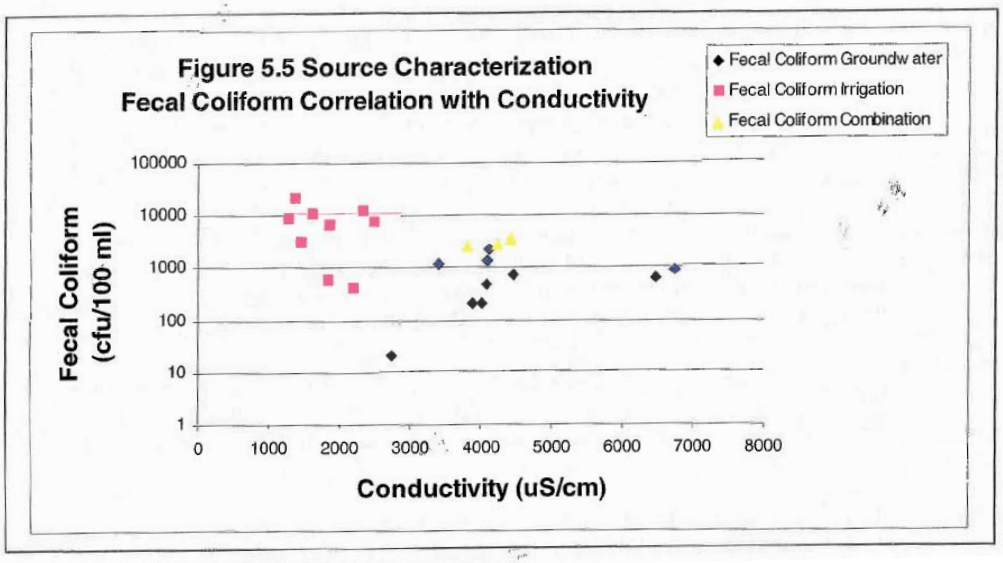

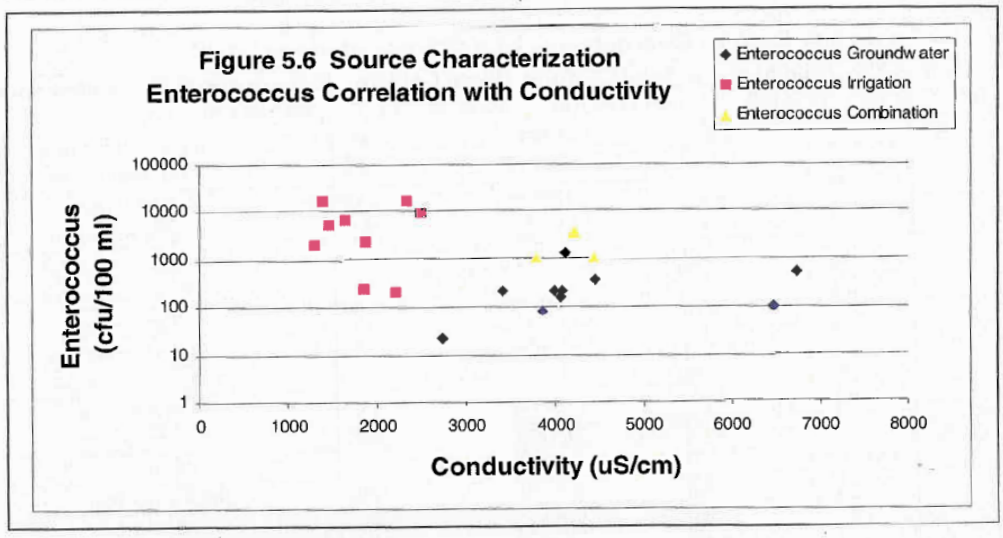

Figures 5.5 and 5.6 reflect similar groupings of the sites when comparing bacteria levels to conductivity measurements. As with the first grouping in Figure 5.4, the first grouping in Figure 5.5 and 5.6 have conductivity measurements greater than 3000 uS/cm and both have low bacteria concentrations, typical of groundwater. Conversely, in group two, the conductivity values are generally less than 3000 uS/cm with bacteria ranging from approximately 200-20, 000 cfu/100ml, indicative of irrigation runoff influencing the water quality at these locations.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Table 5.6 lists the locations where nitrate-nitrogen exceeded the action level and depicts the data used to identify the suspected source.

Table 5.6 Data to Characterize NO_3-N Exceedances, 2004

Location	NO_3-N (mg/l)	NH_3-N (mg/l)	o-PO_4 (mg/l)	Conductivity (uS/cm)	Total Coliform (cfu/100 ml)	Fecal Coliform (cfu/100 ml)	Enterococcus (cfu/100 ml)	Suspected Source
ENC-1	25.0	0.1	0.2	4080	15000	1400	200	Groundwater
ENC-3	30.0	0.1	0.2	3990	4000	200	200	Groundwater
ENC-5	15.0	0.1	0.4	3860	18000	200	80	Groundwater
ENC-6	60.0	0.2	0.2	6470	7000	600	100	Groundwater
ENC-8	25.0	0.2	0.2	4120	47000	2200	1200	Groundwater
ENC-11	25.0	0.1	0.1	6740	12000	900	500	Groundwater
CBS-1	10.0	0.2	0.4	4450	2400	700	340	Groundwater
LUC-1	20.0	0.1	0.2	2730	100	20	20	Groundwater
LUC-7	10.0	0.2	0.8	4060	2200	450	150	Groundwater
ESC-1	15.0	0.2	0.1	3400	8000	1200	200	Groundwater
ENC-4	10.0	3.0	1.0	1293	75000	8200	2000	Irrigation
ENC-9	15.0	0.3	2.5	1459	11000	3000	5400	Irrigation
ENC-10	10.0	0.6	3.0	2490	27000	7200	9800	Irrigation
ENC-14	20.0	0.4	2.0	1388	82000	20800	16600	Irrigation
ENC-15	25.0	0.4	1.5	1876	13000	6200	2200	Irrigation
ENC-17	20.0	0.6	3.0	2340	100000	12000	16000	Irrigation
CBS-3N	15.0	0.1	0.2	3790	54000	2575	1100	Irrigation/Groundwater
CBS-3S	10.0	0.4	0.6	1850	2200	550	225	Irrigation
ESC-2	20.0	0.1	0.6	4230	29000	2800	3600	Irrigation/Groundwater
LUX-2	25.0	0.2	2.5	2210	11000	400	200	Irrigation
LCS-1	15.0	1.0	1.5	1633	57000	10400	6600	Irrigation
LCS-2	10.0	0.1	0.6	4430	8400	3400	1100	Irrigation/Groundwater

*shaded areas denote other action levels that were exceeded in the same sample

Regional Groundwater Data Showing Elevated Nitrate and Conductivity Levels

After discussions with the San Diego County Water Authority, Municipal Water District, San Diego County Department of Environmental Health, and Olivenhain Municipal Water District, it was determined that there is little groundwater quality data specific to Encinitas because the local water authorities do not consider Encinitas groundwater a viable source of drinking water. However, several studies and reports indicate elevated concentrations of nitrates and conductivity in groundwater basins throughout the San Diego region.

Elevated Nitrates in the Region

Encinitas has historically been home to growers and continues to support many nurseries throughout the City. The Leucadia sub-basin supports a number of commercial growers. The number of growers has decreased over the years and, although the nitrates continue to exceed the action levels, the concentrations have decreased. In the 2002 Cottonwood Creek Urban Runoff Assessment and Action Plan, agriculture-related land uses were found to comprise 17□ of the Encinitas sub-basin. According to the article, □The ABCs of Water Quality Assessment in Georgia□published in the Stormwater Journal in March/April 2002, it is common to find elevated nitrates in groundwater in regions of agriculture and it is likely fertilizers and over irrigation are primary sources of nitrogen in the groundwater. In the publication, Nonpoint Sources of Pollution in Irrigated Agriculture by the University of California in partnership with Natural Resources Conservation Service, the following sources of nutrients were found from agricultural practices: fertilizers, biodegradation of crop residues, agricultural and municipal wastes applied to land, and waste generated directly by animals. This study concluded that irrigated agriculture is a significant source of surface and groundwater

non-point source pollution in California.

The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. According to the 2007 Groundwater Basin Reports, San Diego County groundwater basins have a range of nitrate levels above and below the drinking water standard of 10 mg/L. The Batiquitos Lagoon Basin and San Elijo Valley Basin were not discussed in detail in the groundwater basin reports because of limited available data. The San Luis Rey River Valley Basin, San Dieguito, and Lower Santa Margarita River Basins are located in the vicinity of the Batiquitos Lagoon and San Elijo Valley basins. The San Luis Rey River Valley Basin did not specifically list concentrations for nitrate, but did list nitrate as a constituent of concern. The San Dieguito River Basin had nitrate concentrations that ranged from 0.2 mg/L to 385 mg/L. The Lower Santa Margarita River Basin had nitrate concentrations within the drinking water standard. The dry weather monitoring stations in exceedance of the action levels had nitrate concentrations that range from 4.4 mg/L to 64 mg/L. This appears consistent with the aforementioned concentrations reported in nearby groundwater basins with agricultural-related land uses within their watersheds.

Additionally, the sites with nitrate-nitrogen exceedances attributable to groundwater have not been found to cause water quality problems in the receiving waters, as they do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils.

The City will continue to monitor these sample locations as a part of the Dry Weather Program. As standard procedure, the City conducts a cursory investigation to locate the source(s) of any exceedance. The City investigates each exceedance in the attempt to identify a human-induced source of the exceedance. The City's educational and commercial programs target irrigation runoff and include regular inspections of nurseries.

<u>Elevated Conductivity in the Region</u>

The elevated conductivity may be from various minerals entering the groundwater from the sedimentary soils in the region or seawater intrusion as a result of its proximity to the ocean. In the publication, Nonpoint Sources of Pollution in Irrigated Agriculture by the University of California in partnership with Natural Resources Conservation Service, it states that the amount of salt in the water depends on its source and groundwater that leaches through alluvial sediments derived from sedimentary rocks, which often occur along California's coast range, collects many minerals and have a much higher salt content.

The San Diego region has elevated concentrations of dissolved material (as measured by TDS) in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. According to the 2007 Groundwater Basin Reports, San Diego County groundwater basins have TDS above the drinking water standard of 500 mg/L. The Batiquitos Lagoon Basin and San Elijo Valley Basin were not discussed in detail in the groundwater basin reports because of limited available data. The San Luis Rey River Valley Basin, San Dieguito, and Lower Santa Margarita River Basins are located in the vicinity of the Batiquitos Lagoon and

San Elijo Valley basins. The San Luis Rey River Valley Basin had TDS concentrations that ranged from 168 mg/L to 3,400 mg/L. The San Dieguito River Basin had TDS concentrations that ranged from 320 mg/L to 27,000 mg/L. It was reported that the San Dieguito River Basin was subject to seawater intrusion and, therefore, experienced increased salinity levels in the groundwater. The Lower Santa Margarita River Basin had TDS concentrations that ranged from 325 mg/L to 1,260 mg/L.

The amount of dissolved material (as measured by TDS) in a sample correlates to electrical conductivity. The following calculation is derived from the 20th edition of the Standard Methods for the Examination of Water and Wastewater; TDS □ SC □0.65 (TDS in mg/l and SC in um/cm). Based on converting conductivity measurements to TDS concentrations, the City of Encinitas dry weather monitoring stations with exceedances of the action level had TDS values that ranged from 1,523.6 mg/L to 4,628 mg/L. This appears consistent with the aforementioned concentrations reported in nearby groundwater basins subject to seawater intrusion.

Conclusion

In consideration of information summarized above including historic monitoring trends, constituent and geographically focused studies, background information, and literature and report reviews, the City of Encinitas has reasoned various nitrate and conductivity exceedances to groundwater influences. Notably, this deduction has not precluded the City from taking source determination actions to identify the likely contributor to an exceedance of nitrate or conductivity. As such, the City will continue to monitor the various sample locations as part of the ongoing Dry Weather Monitoring Program, and conduct cursory investigations to determine the source(s) of any exceedance, and conduct follow-up actions as warranted. The information presented and considered in this discussion will be used as the premise for determination of follow-up actions in the future if no conclusive source of nitrate or conductivity can be identified.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

Routine Investigation **IC/ID Follow-Up For _____**

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID		**Latitude**	(e.g., 33.41174)	**Watershed**	**Hydrologic Unit**	(e.g., 7.00)
Location		**Longitude**	(e.g., -117.35213)		**Hydrologic Area**	(e.g., 7.10)
Date		**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time		**Observer**			**Discharge Area** (Optional)	

Land Use (Primary) (Check one only)	Residential	Commercial	Industrial	Agricultural	Parks	Open	
Land Use (Secondary) (Optional, greater than 10%)	Residential	Commercial	Industrial	Agricultural	Parks	Open	None
Conveyance (Check one only)	Manhole	Catch Basin	Outlet	Concrete Channel	Natural Creek	Earthen Channel	Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	Overcast	Fog		
Tide	N/A	Low	Incoming	High	Outgoing	**Tide Height:**_____ft.
Last Rain	> 72 hours	< 72 hours				
Rainfall	None	< 0.1”	> 0.1”			

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage	Other		
Color	None	Yellow	Brown	White	Gray	Other		
Clarity	Clear		Slightly Cloudy	Opaque	Other			
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other		
Deposits	None	Sediment/Gravel	Fine Particulates	Stains	Oily Deposits	Other		
Vegetation	None	Limited	Normal	Excessive	Other			
Biology	None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No N/A

Evidence of Overland Flow? Yes No Irrigation Runoff Other: _____

Photo Taken Yes No **Photo #** _____

Field Screening Samples Collected? Yes No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)			

Analytical Lab Samples Collected? **Yes** **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

Citation No._____

City of Encinitas

Administrative Citation

Date: _____ Time (Violation Observed)): _____

❍ **WARNING** ❍ 1st Citation $100 ❍ 2nd Citation $200 ❍ 3rd Citation $500 (and each subsequent violation within 12 months)

Payment of $_____is due no later than _____ (see reverse side for payment information)

Correction of the violation indicated below must be completed by: Date:_____

If you fail to correct the violation by this date, the next level citation may be issued or other enforcement action may occur.

Person Cited: Last First Middle	❍ **Property Owner**	❍ **Tenant**
	❍ **Business Owner**	❍ **Other**
Mailing Address: City State Zip Code	**Business Name (if applicable)**	
Violation Address:	**Assessor's Parcel Number**	

Code Section Violated	**Description of Violation**

Corrections Required:

Enforcing Officer: (Print Please)	**Phone Number**	**Signature:**	**Date:**
Person Cited: (Print Please)		**Acknowledgement of Receipt-Signature:**	**Date:**

Citation Served By:

❍ **In Person** ❍ **Posted on Property** ❍ **By Mail** ❍ **Other**

White: CODE ENFORCEMENT Canary: FINANCE Pink: FILE Goldenrod: VIOLATOR

Appendix H-5 **FY 2006-2007**

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
33073	10/31/06	Residential	Over-irrigation runoff		OMWD		Lower Escondido Creek
33617	2/6/07	Commercial	No discharge	Property owner calling about regulations for power washing- Outside Encinitas jurisdiction		Power Washing Regulations	NA
33751	2/22/07	Municipal	No discharge	Part of a boat washed up on shore. Construction materials sitting on rocks by seawall	Encinitas Lifeguards		Leucadia
33752	2/23/07	Residential	Over-irrigation runoff	Possible broken water line	San Dieguito Water District		Leucadia
33782	2/28/07	Residential	No discharge	Mosquitos have inhabited storm channel next to house	County Vector Control Program		Leucadia
34226	5/2/07	Residential	Over-irrigation runoff		San Dieguito Water District		Encinitas
34449	5/29/07	Commercial	Water	Large amounts of water flowing down hill from unknown source	San Dieguito Water District		Encinitas
34483	5/31/07	Municipal	Tar/Oil	Tar noticed while walking beach near Moonlight	US Coast Guard		Encinitas
34495	6/4/07	Residential	Gas smell	First call regarding fuel spill off the coast	US Coast Guard		Leucadia
34535	6/7/07	Commercial	Sewage	Outside Encinitas jurisdiction	County of San Diego		NA

Appendix H-5 **FY 2006 - 2007**

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
31995	7/19/06	Residential	Paint wash water	NO		Discharge of paint - Mike Valles reported grey colored water discharge from s/d		WO#33308 : Origin of discharge is unknown.	None	Leucadia
31998	7/19/06	Residential	Sewer odor, no discharge	NO		Other discharge - sewer odor behind house, along creek; WWC has been on-site, City sewer system OK, met Michelle on-site 15:30, no odor, NH3-N<0.1		WO#33309 7/20/2006 10:55:58 AM Met Michelle on-site 15:30, no odor, NH3-N<0.1	None	Lower Escondido Creek
32010	7/21/06	Commercial	Over irrigation and grey water	NO		Discharge of water - Over Irrigation and Grey Water flooding the alley behind N COAST HWY 101 located near "F" Street Bookstore and La Especial Norte.		WO#33593 : 1/3/2008 8:21:51 AM No illegal discharges observed. Possible over irrigation only.	None	Leucadia
32011	7/19/06	Residential	Sewer odor, no discharge	NO		Odor in Storm Drain - sewer odor reported to Shawn Atherton, investigated with Eddie Foy and Sylvino Ruiz		WO#33320 : No discharge found at site.	None	Lower Escondido Creek
32024	7/21/06	Residential	Acoustic ceiling debris and water	NO		Discharge of construction debris		WO#33336 : Issued NOV 7/21/06 for immediate clean up.	NOV, Education	La Costa South
32044	7/14/06	Residential	White paint	NO		Accidental discharge of paint		WO#33609 : Clean up was completed at 8pm	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32063	8/1/06	Residential	White powder residue	NO		Other discharge - Caller states that there is some sort of pollution runoff at the top of Foxglove Street and rolling down to Coneflower Street.		WO#33612 : Exact source unknown. Follow up message left with resident on 8/10/06.	None	Encinitas
32071	7/31/06	Commercial	Oil	YES	COTTON-WOOD CREEK	Discharge of oil. - Chevron tanker truck hit a light pole in Albertsons parking lot, crank case oil leaked onto pavement, 11 gallons max, estimated that 5 gallons were discharged to MS4 and Cottonwood Creek, raining lightly at the time, Cottonwood Creek flowing	Y	WO#33482 : 8/2/2006 5:04:55 PM Investigated creek at Third Street and at MLB and observed no evidence of oil, MLB posted as a result of bacteria indicator exceedances on Sat, July 29, 2006, signs up during incident. 8/8/2006 10:49:08 AM Citation Issued for $100, CW-080306 and cost recovery billed for $1868.88. Reported verbally to RWQCB on August 1, 2006 and in writing August 7, 2006.	Citation, NOV, Cost Recovery	Encinitas
32072	7/31/06	Commercial	Gasoline	YES	COTTON-WOOD CREEK	Discharge of liquid fuels. - Ford F150 P/U on freeway, tie down strap wrapped under vehicle and ruptured gas tank, pulled off I-5 at Santa Fe and into 7-11 parking lot, gasoline to storm drain	N	WO#33483 : 8/8/2006 10:51:40 AM Cost recovery billed for $433.38. Reported verbally to RWQCB on August 1 and in writing August 7, 2006.	NOV, Cost Recovery	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32074	8/3/06	Commercial	Concrete	YES	ENCINITAS CREEK	Discharge of concrete waste. - Reported driveway/sidewalk being paved & landscaped. Concrete & landscaping waste being washed into storm drain.	N	WO#33489 : 8/3/2006 1:59:25 PM Set up meeting with owner of company, M&W Landscaping 8/3/2006 2:01:17 PM M&W Landscaping, Naomi and William Stein, 3339 Silver Oak Ln, Vista, CA 92084, (760) 927-0113, (760) 727-0113, (760) 945-3443 8/9/2006 2:47:02 PM Met on-site with Bill (owner) and Brad (project manager) on Monday, Aug 7, 2006. Educational material and citation issued ($100) CW-080706.	Citation, Education	La Costa South
32076	8/1/06	Commercial	Sewage seep	NO		Other discharge - City Staff noticed leakage on their way to lunch at Leucadia Pizzeria. Noticed sewage pipe that connects to another fixture is dripping greywater/sewage into small puddle near storm drain at rear end of NCTD Parking lot and SE end of Moonlight Plaza.		WO#33585 : 8/9/2006 1:36:58 PM Photos taken on 08/01/06. Paul Hartman contacted Rancho Pacific Property Management on 8/03/06. 8/9/2006 1:40:53 PM Photos taken on 8/1/06. Inspector followed-up with Dennis French, Rancho Pacific Management manager for Moonlight Plaza on 8/3/06. 8/9/2006 2:55:26 PM Spoke with Dennis French, property manager, on 8/3/06 and leak has been repaired.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32078	8/3/06	Commercial	Tar/asphalt.	NO		Other discharge - Black topping-overlaying the asphalt in the Encinitas Ranch Towne Center without BMP at around 7:00 AM on 8/3/2006. Rain started and sand bags were placed around storm drains		WO#33552 : 8/8/2006 4:11:36 PM Dennis Thompson 619-871-4393 Magnum Sealing & Paving PO BOX 181588 Coronado, CA 93178 Sealing and striping until 8/14/06. Superintendent: Mike Advised Dennis to properly train all employees in storm water management and use appropriate BMPs at all storm drains. Sent Notice to Correct Work letter w/ 2 Construction, only rain educ. brochures to Dennis on 8/9/06. Also discussed BMPs with Sandy at Zelman Development.	NOV, Education	La Costa South
32110	8/9/06	Commercial	Soap & detailing materials for Mobile Car washing	NO		Discharge of vehicle wash water - Mobile Car washer detailing with no BMPs near the Gifted Preschool off Encinitas Blvd. near Rancho Santa Fe Road.		WO#33627 : Spoke to personnel at Century 21; advised that all future car washing required the appropriate implementation of BMPs	NOV, Education	Rancho Santa Fe
32114	8/4/06	Commercial	Cement washout	NO		Discharge of concrete waste. - Caller: Scott Masters, 619-995-5040, San Elijo Ave south of Swami's (overlook area), truck dumping cement onto R/R right of way, 4:00 (?) p.m.		WO#33960 : Rinsing outside of concrete truck. Minimal amount of rinsewater. No evidence of concrete in water. Spoke with homeowner, informed him of regulations.	Education	Encinitas
32126	07/11/06	Commercial	Wash water & oil down drains	NO		Discharge of water – Wash water discharge from equipment rental business located on N. Coast Hwy 101. Rebel Rents @ 1-888-887-3235.		WO#34613 : No discharge observed at time of inspection. Business has designated wash water area where water is recycled.	Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32130	6/22/06	Municipal	Odor in Storm Drain	NO		Other discharge - Odor complaint from Storm Drain insert referred from Public Works department. No discharge observed by inspector Padilla. No insert present.		WO#52940 :	None	Encinitas
32131	7/27/06	Commercial	Green liquid	NO		Other discharge - Illegal discharge of wash water		WO#33639 : Biodegradable cleaner being used	Citation Warning	Cardiff
32132	08/13/06	Residential	Unknown	NO		Other discharge - Complainant states that Sunday evening of 8/13/2006 someone dumped "something" in the road/gutter. Mr. McCabe states that there is "stuff" everywhere and also at the end of his driveway- discharge starts @ 147 Camino de Las Flores.		WO#33678 : 9/14/2006 6:01:07 PM Follow-up Inspection on 9/13/06 to make sure debris had been properly cleaned from curb line and gutter and no further discharges taking place.	NOV, Education	La Costa South
32135	7/20/06	Residential	Construction debris	NO		Discharge of construction debris - Mr. & Mrs. McDonald are renovating their driveway and creating a lot of debris and broken concrete. The construction debris has been left out uncovered on a sloped driveway that leads to the storm water conveyance system. Lack of proper BMPs.		WO#33644 : 8/14/06: Follow-up phone call with Ms. McDonald RE: NOV. BMPs were properly implemented and home owner has been verbally educated.	NOV, Education	Encinitas
32136	7/6/06	Residential	Water	YES	SAN ELIJO LAGOON	Discharge of water - Blown water meter. Potable Water.		WO#33948 :	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32152	7/11/06	Commercial		NO		Discharge of other wash water - Shell Car Wash of Encinitas (Mgr. Sonya) @ 1060 N. El Camino Real, Encinitas, CA (760) 943-9797 is power washing into storm drains.		WO#53742 : 12/31/2007 11:27:20 AM Full routine commercial inspection initiated on 7/21/06 due to complaint. 1/2/2008 10:57:06 AM See work orders 33776 and 33777 for routine inspection info.	None	La Costa South
32155	7/19/06	Residential	Construction debris	NO		Discharge of construction debris -		WO#33682 : NOV letter sent 7/21/06	Education, NOV	Encinitas
32156	8/5/06	Commercial	food, debris, wash water	NO		Discharge of food waste. - El Torito Restaurant at 1068 N. El Camino Real in Encinitas was caught discharging food and wash waters directly into the storm drain after they were told not to.		WO#34052 : 10/3/2006 4:31:32 PM Sent NOV on 8/17/06. Restaurant response letter received on 10/02/06.	Citation	La Costa South
32157	8/5/06	Commercial	Trash, ash, & debris.	NO		Other discharge - K.C. Tandoor had left a container of ash near the storm drain.		WO#33762 : Notice to Correct Work requiring a 30 day response letter due by 09/22/06. NTC response letter received via fax on 10/18/06	NOV	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32161	8/18/06	Commercial	Wash water	NO		Discharge of other wash water - Vons Store #2144 hired "Specialized" power washing company to clean the shopping carts and they may have not captured the wash water by the pictures taken. Store manager Steven Ko assured us that they know the codes & hire companies that abide also.		WO#34013 : 9/11/2006 12:17:35 PM Spoke to Specialized Cleaning Services, Office Manager, Jeff Stark at (800)996-2963. 7065 Thomas St., Buena Park, CA 90621. Specialized checked their invoices and stated that they did not clean the carts for Vons on that date and time. 9/11/2006 12:19:53 PM Notice to Correct Work Letter mailed to Vons Store #2144 on 9/11/06.	NOV, Education	La Costa South
32164	8/20/06	Residential	Paint	NO		Discharge of paint - 11:15 am on Sunday 8/20/06 complainant witnessed white paint being washed down the storm drain on Azure Way (private condo development) down to Clear Valley Way.		WO#33763 : Door hangers posted on 27 condos in the Vida Pacific Community Association.	Education	La Costa South
32183	8/24/06	Residential	Wash water?	NO		Discharge of construction debris - Kathy Weldon-City Staff noticed an illegal discharge at Jupiter & Neptune. Masih Maher & Inspector Padilla.		WO#33775 : 8/24/2006 1:20:48 PM Followed up with tenant, sent educational info.	Education	Leucadia
32187	8/24/06	Commercial	Smelly grease pit and trash area.	NO		Other discharge - City Staff was told by the Transit Police Officer at the "D" Street Coaster Station that many have commented on the stench coming from the trash & grease storage area.		WO#52936 : Spoke to Manager, Thomas over the phone on 8/29/06. Advised him to schedule an extra pick up with EDCO.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32221	8/29/06	Commercial	Trash	NO		Other discharge - Sandy Garay-Property Manager for Encinitas Ranch Towne Center has called the City Inspector for assistance with two of their tenants; Zibibbo Italian Bistro and KCs Tandoor Restaurant. The Security Guard on site noticed the mess behind trash area.		WO#34044 : 9/12/2006 11:38:41 AM Notice To Correct letter sent with a 30 day notice to clean up outdoor area. Follow up Inspection scheduled for 10/09/06 Follow Up: Parent Work order: 34044 12/6/2006 3:07:44 PM 30 day follow-up inspection to verify compliance regarding NOV sent to business owner on 9/07/06. All corrective actions have been met to clean up back area. 30 day response letter was not received.	NOV, Citation	La Costa South
32223	8/29/06	Commercial	Food & trash.	NO		Other discharge - Trash area needs to be kept clean at all times!		WO#34049 : 9/12/2006 12:17:33 PM Notice To Correct Work Letter sent on 09/05/06. Follow-up inspection to verify compliance scheduled for 10/09/06. 9/12/2006 12:19:37 PM Response letter due from restaurant no later than 10/09/06 9/27/2006 12:20:08 PM 30 day response letter received on September 27, 2006	NOV	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32225	8/29/06	Commercial	WATER	NO		Discharge of water - Investigation of proper BMPs. Excessive water.		WO#34053 : Research of Hansens Boardroom BMPs. (760) 753-6595. Sweeping rain water down street. Rep told to use a wet vac.	Education	Encinitas
32226	8/29/06	Commercial	Concrete discharge	YES	PACIFIC OCEAN	Discharge of concrete waste. - PBC @ 1340 Descanso Avenue, San Marcos, CA 92069 Ph (760) 510-1251 Fax (760) 510-1254 www.PBC-online.com Daniel Cortez Homeowner= Mr. Simpson	N	WO#34055 : 12/6/2006 3:54:10 PM Owner, Jack Saldate asked for an extension regarding response letter on 10/04/06. Extension granted to 10/26/06. Chamomile followed-up with Mr. Saldate on 10/31/06 he again stated he would send the letter. As of 12/06/06 letter has never been received.	Citation Warning, Education	Leucadia
32237	8/29/06	Commercial	White pasty substance.	NO		Other discharge - Jack Shawley phoned @ 5:52 pm on Tuesday evening to report an illegal dumping/discharge from a drainage pipe that drains to his property. He thinks it may be either Paul Ecke Nursery or the City recently relining corrugated pipe for rust prevention.		WO#33928 : 11/2/2006 1:07:40 PM Shading compound discharge located in storm drain conveyance system south of Paul Ecke Poinsettia Ranch. 11/2/2006 1:09:17 PM On-site meeting with home owner to investigate discharge.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32307	9/5/06	Commercial	Anti-freeze/oil	NO		Discharge of antifreeze - Odor reported in alley behind Encinitas Foreign & Domestic at 901 2nd St. (760)632-0830. Drains located outside rollup doors and a large basin drain appears to have oil & antifreeze in it.		WO#53751 : 12/31/2007 12:02:40 PM A drive-by inspection was conducted on 9/5/06. No illegal discharge observed. A full commercial inspection was scheduled for 10/31/06 based on the findings that no antifreeze was observed in the outdoor trench drain located in the alley. 12/31/2007 12:05:30 PM Full routine commercial inspection initiated on 10/31/06 and captured in WO# 34824. -MP	None	Encinitas
32341	9/1/06	Commercial	5-8 gallons of diesel fuel	NO		Discharge of liquid fuels. - 5-8 Gallons of diesel fuel spill in Target parking lot at Encinitas Towne Center from a Sysco semi truck on Friday, September 1, 2006 at approx. 5:25pm.	Y	WO#34041 : 9/11/2006 10:24:43 AM Cost recovery needed by Streets & Fire Departments for absorbent pads and kitty litter spill kits. 9/12/2006 8:39:58 AM Fire Department observed and responded to accidental diesel spill. City Streets Dept and Clean Water Program notified. Spill contained and cleaned up with use of absorbent pads in storm drain box and kitty litter on the pavement. No discharges to the pipe.	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32343	9/7/06	Residential	Chemicals; fertilizers & pesticides etc.	NO		Other discharge - Drainage problems from Nursery to homeowner. Irrigation along with chemicals i.e. fertilizers/pesticides flow into a brow ditch behind 1223 Crestview. Possibly Browns Plants @1212 Lake Drive. Complainant states water/chemicals flow off property.		WO#34875 : 2/27/2007 5:22:01 PM NOV Letter sent to Mr. Kovach on 11/13/06 was never received. NOV letter was re-sent on 1/22/07.	NOV, Education	Cardiff
32345	9/5/06	Commercial		NO		Discharge of other wash water - Complainant called @ 5:10 PM on 9/5/2006 to report large amounts of oil being dumped into storm drain; pictures taken. Caller phoned the next morning, 9/6/2006 @ 7:59 AM to retract complaint because it was only soap from a mobile dog groomer.		WO#34095 : 9/14/2006 5:51:10 PM Homeowner called regarding the door hanger this afternoon. Explained the City's storm water codes to him and asked him to call us to report any future discharges or more information on the mobile dog groomer.	Education	Leucadia
32346	9/7/06	Residential	Stucco residue	NO		Discharge of construction debris - Caller states that homeowner hired a contractor to stucco outside of house. Contractor washes stucco residue down the street. Caller also believes that there are several illegal storm drains?/outfall pipes? on Loch Lommond.		WO#34548 : NOV letter sent to resident	NOV, Education	Cardiff
32348	9/11/06	Residential	Rats & Glass.	NO		Other discharge - Caller states that neighbor is putting glass and rats in storm drain. Caller also has video footage of incident.		WO#34549: Upon inspection, nothing out of the ordinary observed in storm drain. Due to past history of mental incompetence, responsible party was not approached. Referred to Code Enforce.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32356	9/7/06	Residential	Pesticides/ Fertilizers = green & white discharge.	NO		Other discharge - Caller states neighbor is applying chemicals to lawn and garden and then watering profusely with significant runoff that is colored green and white. Chemicals have stained street. Continuous over-irrigation observed by caller.		WO#34624 : Over irrigation letter sent via certified mail to homeowner, Mr. Barry Pedler on 10/18/06.	Education	Leucadia
32357	9/12/07	Residential	Liquid/ construction debris	NO		Other discharge - Complainant states that 1055 Eolus has pipes (French Drains?) that pour out into the street. Complainant is not sure exactly what is coming out of the pipes.		WO#34145 : : 32357, 9/19/2006 1:56:28 PM Asked Construction Inspector to inform contractor or home owner that construction stockpiles and materials need to be covered up at the end of the day.	Education	Leucadia
32358	9/12/06	Residential	Dirt, trash, concrete, lumber, etc.	NO		Discharge of construction debris - Complainant states that had been a recent build of a fire pit & a waterfall and the home owners have left large piles of dirt, trash, concrete, and lumber around their property since last April.		WO#34138 : currently remodeling home but there were no discharges evident. She is also in the pre-construction phase of building on an adjacent lot. Construction materials and stockpiles present but they are located within property boundaries	Education	Leucadia
32359	9/12/06	Construction	Sediment	NO		Discharge of construction debris - Problem with a discharge line.		WO#53105: Construction company failed to implement appropriate BMPs at construction site. Issues resolved immed.	Education	Encinitas
32436	9/14/06	Commercial	Wash Water	NO		Discharge of other wash water - VIGILUCCIS TRATTATORIA had a milky substance flowing into their storm drain.		WO#34147 : Full inspection completed 9/15/06. Storm drain was cleaned out.	Citation Warning	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32442	9/15/06	Commercial	Wash water	NO	COTTON-WOOD CREEK	Discharge of vehicle wash water - Complainant refused to leave his name and states that Terry has been performing mobile car detailing at Westlake & Enc. Blvd. all week and not capturing the wastewater.		WO#34107 : Containment and business license required prior to resuming work	Citation Warning, Education	Encinitas
32658	9/25/06	Residential	Groundwater, sub-surface irrigation runoff	NO		No storm water issues. Small amount of water seeping into planter box sub-surface. Likely from irrigation next door or possibly washing machine discharge. County has previously inspected for		WO#34420 : 10/2/2006 11:07:34 AM No storm water issues. Civil matter. County has previously inspected for greywater issues and is aware of possible problem	None	Encinitas
32663	10/2/06	Residential	Water	YES	COPPER CREEK	Discharge of irrigation water - City Staff noticed water in the brow ditch. Olivenhain Municipal Water District to be notified.	N	WO#34629 : 12/7/2006 2:41:00 PM 11/01/06-Irrigation Discharge is not an illegal discharge however, the discharge has ceased.	Education	Lower Escondido Creek
32693	10/9/06	Commercial	Water & mud	NO		Discharge of water - Complainant states that next door neighbor has drainage problem or broken sprinkler or pipe. Large amounts of water and mud in the street and on his property @ 227.		WO#36496 : 3/14/2007 3:31:28 PM 2/9/07: Inspector spoke to complainant, old him over-irrigation was a civil matter, would refer his complaint to property owner next door. 3/9/07: Complainant wants to know if inspector had contacted property owner. 3/13/07: Inspector called properly owner and left message. He called back, gave him complainant's contact info.	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32714	10/11/06	Residential	Unknown; oily, rust colored substance.	YES	ENCINITAS CREEK	Other discharge - Caller states neighbor has strange odorous substance discharging from sidewalk drain into street and subsequently the nearby storm drain. Substance is oily and rust colored.	N	WO#34550 : Discharge ceased. Discharge similar to some groundwater observed in the area on past complaints. Homeowner was home sick, could not talk to inspector. Left doorhanger and business card.	Education	La Costa South
32726	10/12/06	Residential	Concrete/Cement	Unknown	SAN ELIJO LAGOON	Discharge of concrete waste. - Concrete is in the street @ Southeast corner of Mackinnon and Ocean Crest. Someone got carried away with cement on the Southeast corner of Mackinnon and Ocean Crest. It is running down the street. It would appear they are washing off their waste in the street.		WO#34555 : 10/12/2006 8:48:15 AM Concrete discharge observed from backyard drain. Work in backyard area including recent concrete work observed, new patio, fire pit, BBQ, etc. Observed power washing residual in driveway.	NOV, Citation, Education	Cardiff
32777	10/3/06	Commercial	Water and sediment.	NO		Accidental discharge of sediment and water.		WO#34551 : Prompted immediate inspection of construction site	None	Encinitas
32778	10/9/06	Commercial	Sediment	NO		Other discharge - Piles of dirt collected near environmentally sensitive area at Rancho Coastal Humane Society, 389 Requeza Street. #(760) 753-6413 Director= Jim Silveira #(619) 820-0455		WO#53107 : Illegal fill being added to the property. Fill was removed over a two week period. Responsible Party worked with Construction Inspector to make sure that compliance was met.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32833	10/15/06	Residential	Sewage	NO		Discharge of sewage - Caller noticed sewage leaking from neighbor's sewer cleanout pipe that leads to street. Toilet paper and such is in the middle of the street where water typically drains to.		WO#34631 : 10/16/2006 3:41:28 PM Caller notified neighbor that they had a leak in their sewer pipe and a plumber was called. When the plumber came out to tighten the pipe, the caller believes that the plumber accidentally opened up the pipe more. Issues resolved on 10/17/06.	None	Cardiff
32862	10/16/06	Commercial	Vehicle wash waters	NO		Discharge of vehicle wash water - City Staff noticed soapy vehicle wash waters coming from Valero Gas Station and discharging out into the street and into the storm drain.		WO#34633 : 12/19/2007 5:13:33 PM Valero Citation paid on 10/24/06 and all BMPs have been implemented. Case closed on 10/24/06.	Citation	Cardiff
32996	10/24/06	Municipal	Debris. Wood, rusty nails, etc.	NO		Other discharge - Pedestrian bridge that crosses drainage culvert for NCTD has been destroyed and debris has been left behind; wood pieces, rusty nails, etc.		WO#53108 : 10/25/2006 2:43:31 PM Investigated and referred to Streets Division of PW, for clean-up of debris in channel. Upon inspection on 9/21/06 all debris had been removed and channel was clean.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32997	10/23/06	Construction	No discharge, concerns about perimeter controls	NO		Discharge of construction debris - No discharge occurring but demo in progress and met with superintendent yesterday to get some erosion control measures in place. Need to document.		WO#53138 : 10/25/2006 2:23:01 PM Met with contractor and erosion control specialist 10/ 23. Site needs BMPs during demolition. Re-inspection on 10/24, perimeter controls have been implemented as requested. Check dams (gravel bags) are in drainage ditch along north property line.	Education	Leucadia
33037	10/26/06	Commercial	Vehicle Wash waters	NO		Discharge of vehicle wash water - Caller phoned the Clean Water Program's inspector to notify of Mobile Car washer discharging for a second time.		WO#34827 : No discharge observed at time of inspection	None	Encinitas
33038	10/26/06	Commercial	Vehicle Wash waters	NO		Discharge of vehicle wash water - Mobile Car washer also complained about discharge.		WO#34830 : 10/31/2006 2:49:46 PM No discharges observed at time of inspection.	None	Encinitas
33039	10/26/06	Commercial	Sidewalk & Building wash waters	NO		Discharge of building or sidewalk wash water - Inspector driving by and noticed owner of El Torito Meat Market washing down driveway into street.		WO#34874 : Spoke to owner on site regarding implementation of appropriate BMPs. Administrative Citation # CW-102606 given on 10/26/06. Sent NOV on 11/2/06.	Citation, NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33056	10/30/06	Residential	Yard waste & buckets of "Something"	NO		Discharge of yard waste - Complainant states that her and her husband have witnessed neighbors empty cans and buckets of "stuff" into storm drain.		WO#36257 : 10/30/2006 4:46:04 PM Drain in front of 2038 Bulrush is being used for disposal. Yard waste and buckets of debris etc. 2/20/2007 4:05:38 PM NOV Letter sent certified mail on 02/07/07. NOV Letter received by Ms. Dorothy Fortman on 02/09/07	Education, NOV	Cardiff
33075	11/1/06	Residential	Trash, Debris, Sediment	NO		Discharge of construction debris - Call referred to construction Inspector assigned to the project. Storm water to also drive-by to double check job site.		WO#36083 : 2/7/2007 3:39:16 PM Site has been cleaned up per Construction inspector. Grading Permit # 9283GI.	None	Leucadia
33130	11/3/06	Residential	Septic tank fluid	NO		Discharge of sewage - Anonymous caller phoned on the Friday off, November 3, 2006 at 7:48 AM. No name or number left to verify report or location. Report of someone dumping septic tank into street.		WO#34920 : 11/9/2006 9:27:56 AM No discharge observed along the 700 block of Requeza. 10/16/2007 9:11:17 AM ENC sub basin	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33140	11/8/06	Commercial	Sewage overflow	NO		Discharge of sewage - Sewer overflow in Vons parking lot at 453 Santa Fe Drive. Grease trap blockage -most probable cause.		WO#34943 : 11/9/2006 9:33:21 AM 9:10 AM Vactor Truck-Shut Down Water 11/13/2006 11:31:53 AM Public Works Dept on site to clean overflow. Vons contractor, CSC Construction Services serviced the clogged drain on-site.	Citation Warning	Encinitas
33141	11/9/06	Commercial	Vehicle Wash Waters	NO		Discharge of vehicle wash water - Call came in Thursday, November 9, 2006 at approx. 11:45 PM reporting of mobile car washer not capturing water & soap. Runoff is running down street to storm drain.		WO#34950 : Mobile Detailer had BMPs deployed but they were not properly implemented.	NOV, Education	Encinitas
33170	11/16/06	Commercial	Antifreeze	NO		Discharge of antifreeze - Inspector drive-by caught Moonlight Motors discharging antifreeze into storm water conveyance system.		WO#35191 : $100 Citation issued 11/16/06. Routine commercial inspection scheduled for 11/28/06.	Citation, Education	Leucadia
33174	11/16/06	Residential	Construction waste/debris	NO		Discharge of construction debris Storm water inspector drove by during Lagoon Monitoring and saw large pile of construction debris near lagoon waters.		WO#53139 : Follow-up on 12/08/06 revealed that all corrective actions have been implemented.	Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33177	11/20/06	Commercial	Sidewalk wash waters & automotive wash water	NO		Discharge of other wash water - Caller states that neighborhood business is polluting. Others in her neighborhood have also noticed and have not called. Inspector to phone caller for more information.		WO#35195 : 4/18/2007 11:25:03 AM $300.00 Check received on 11-27-06	Citation, NOV, Education	Leucadia
33201	11/22/06	Residential	Water	NO		Discharge of water - Caller informed the City that large amounts of water are running down the street @ Hillcrest Drive in Leucadia. Cross street is Vulcan.		WO#52934 : De-chlorinated pool water. No illegal discharge.	None	Leucadia
33222	11/28/06	Construction	Sediment	NO		Discharge of construction debris - Inspector drive-by noticed lack of proper BMPs on construction site. Engineering Construction inspector was directed to site and conducted an inspection.		WO#35188 : Lack of BMPs was corrected.	None	Leucadia
33224	12/7/06	Commercial	Sewage	NO		Discharge of sewage - Private sewer lateral has broken. Public Works has cleaned up mess.		WO#53140 : Jaime Fernandez (760) 482-5024 from AMERICAN PLUMBING phoned in at 10:10 am to explain that a floor in office building at 580 Second Street flooded w/sewage. They are waiting there with cameras to televise line. Indoor discharge only.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33242	11/28/06	Construction	Construction debris	NO		Discharge of construction debris - Caller phoned to report a construction site problem. Storm water referred to Construction Inspector in Engineering		WO#53149 : 11/30/2006 4:19:01 PM Eng. Inspector contacted owner of sire and required cleaning on ll/28/06 @ 2:00 pm. Re-inspection construction inspector. on 11/29/06, cleanup complete.	None	Encinitas
33291	12/5/06	Commercial	Pressure Washing	YES	COTTON-WOOD CREEK	Discharge of other wash water - Call from SDWD, 12/5/06 at 1530. NE Corner of 101 and B Street/Enc Blvd, pressure washing.	N	WO#35190 :12/7/2006 4:32:34 PM Power washing parking lot with no BMPs. Issued NOV and warning on 12/7/06 and 12/5/06.	Citation Warning, Education, NOV	Encinitas
33294	12/5/06	Residential	Vehicle wash water	NO		Discharge of vehicle wash water - Water District (SDWD) phoned to inform us of discharger at Third and "J" Street who is washing out large RV with soap and bleach.		WO#35169 : Determined to be residential car washing. No violation.	Education	Encinitas
33315	11/21/06	Commercial	Wash water with car grease & fluids	NO		Discharge of other wash water - Caller phoned on 11/21/2006 regarding business washing grease/sludge down street and it is coagulating in front of her house and driveway. Caller requested special street clean.		WO#35942 : 1/31/2007 9:30:36 AM Special sweep request sent to Streets on 11/28/06 at 13:12pm. 1/31/2007 9:47:07 AM No new complaint inspection was initiated because complaint had been dealt with on SR# 33170 & SR# 33177.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33318	12/8/06	Commercial	Water	NO		Discharge of water – Caller phoned to alert us that many gallons of water are running down Saxony Road from Saxony and Seacrest Lane at a fire vent.		WO#52933 : Potable water; SDG&E on site to address discharge immediately	None	Encinitas
33336	12/13/06	Commercial	Sewage	NO		Discharge of sewage - At approximately 11:30 am on Wednesday Morning, the Clean Water Hotline received a call from a Construction Inspector that a private sewer lateral on El Camino Real & Mtn. Vista had busted and sewage leaked onto street.		WO#53435 : 12/14/2006 9:13:06 AM Contacted Leucadia Wastewater District and they were already on the scene. 12/18/2007 11:28:23 AM 12/13/06 Leucadia Wastewater cleaned sewage with Vac-con. Encinitas Wastewater cleaned out the 6" and 24" storm drains on the east side of N. El Camino Real. 12/14/06 Pacific Drain Services jetted the sewer lines. Shopping Center placed on quarterly sewer maintenance schedule. RWQCB notified of spill and cleanup in writing on 12/13/06.	Citation Warning, NOV	La Costa South
33337	12/14/06	Residential	Paint	NO		Discharge of paint - Caller left insufficient message with the Code Enforcement Department regarding his neighbor that dumped paint on driveway and into the street. 12/28/06 caller finally gave address of incident.		WO#36975 : Resident failed to implement BMPs. Sent NOV letter with educational info.	Education, NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33338	11/22/06	Residential	Pool Water	NO		Discharge of water - Caller, wanted to notify the Clean Water Program that large amounts of water are running down the street.		WO#52934 : De-chlorinated pool water. No illegal discharge. See SR 33201.	None	Leucadia
33356	12/10/06	Residential	Sediment	NO		Other discharge - Caller, Pat, states that neighbors have been discharging landscape materials and dirt/sediment into storm drain near Piraeus. Caller & other neighbors have been shoveling the dirt away from drain. Pat also thinks storm drain goes to canyon.		WO#53170 : Resident failed to implement erosion control BMPs. Follow up investigation 1/30/07. All corrective actions have been implemented.	Citation Warning, NOV, Education	Leucadia
33441	1/3/07	Commercial	Soapy vehicle wash water	NO		Discharge of vehicle wash water - Mobile Car washer, was caught washing cars without containing soapy wash water		WO#52931 : Verbal warning given on phone; references provided via email on 1/23/07.	Education	Encinitas
33452	1/5/07	Residential	Sump Pump Water	NO		Other discharge - Caller stated that the 2nd house on the left on Lower Lake Court was under construction and has been ongoing for a while. SUMP Pump discharging large amounts of water and sediment directly into the street drain.		WO#52929 : Left door hanger. Resident was pumping out groundwater.	Education	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33499	1/15/07	Commercial	Paint	NO		Discharge of paint - Complainant contacted the after hours storm water hotline to notify City of discharge.		WO#35762 : 1/17/2007 9:50:44 AM Public Works responded and supplied sandbags to restaurant employees. Spill was contained and cleaned up by 1:30 p.m. 2/20/2007 11:55:23 AM Spoke to Beach City Burrito Owner at 9:42 am. she inquired about cost recovery fees and agreed to send a check postmarked on 2/20/07 to the City of Encinitas. 2/20/2007 3:54:19 PM Storm Water training log received via fax on 2/20/07. 12/26/2007 10:52:10 AM Pmt received 2/22/07.	Citation, Cost Recovery, Education	Cardiff
33538	1/17/07	Commercial	Irrigation Runoff	NO		Discharge of other wash water - Caller states that the nursery next door is discharging runoff into the brow ditch adjacent to their property. They are also concerned that they have seen individuals in haz mat suits near the brow ditch.		WO#35854 : Annual commercial inspection performed 1/23/07. No illegal discharges found.	None	Leucadia
33543	1/15/07	Residential	Sediment	NO		Discharge of yard waste -		WO#35873 : Sediment from landscaping activities in the curb line.	Education	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33626	1/30/07	Residential	Swimming pool water	NO		Discharge of water - Failure to implement BMPs. discharged swimming pool into neighbor's yard.		WO#52906 : 11/28/2007 11:22:34 AM Swimming Pool Discharge Letter mailed to residents on 2/12/07.	NOV, Education	Lower Escondido Creek
33627	1/30/07	Commercial	Mobile car detailers	Unknown	COTTON-WOOD CREEK	Discharge of vehicle wash water - Failure to implement appropriate BMPs.		WO#53188 : Spoke to property manager at Colliers Int'l	Education	Encinitas
33628	1/30/07	Commercial	Possible antifreeze or propylene glycol	NO		Other discharge - Leaking into street and gutter		WO#53007 : 12/5/2007 11:26:24 AM NOV letter sent 2/7/07.	NOV, Education	Encinitas
33670	2/5/07	Commercial	Grease	YES	SAN ELIJO LAGOON	Other discharge – Plumber contacted us regarding grease being dumped into drain in trash enclosure.	N	WO#52910 : Immediate mitigation required. Follow up cleanup completed 2/14/07. Nortified RWQCB.	Citation, Education, NOV	Cardiff
33685	2/15/07	Commercial	Water	NO		Discharge of water - Broken pipe- water draining into the street		WO#53244 : No illegal discharges observed, potable water discharge from broken water pipe. Pipe was fixed same day.	None	Cardiff
33726	2/17/07	Residential	Silt/Sediment	NO		Discharge of construction debris - Silt barrier failed during rain at home construction site- silt leaking onto street.		WO#36491 : 3/14/2007 11:30:32 AM Complaint referred to Construction Inspector. Silt fence re-established 3/2/07. Silt removed from pavement and drainage way.	None	Rancho Santa Fe
33728	2/20/07	Commercial	Oil/water mixture	NO		Discharge of oil. - Resident is pumping oil/water mixture into street.		WO#36375 : Failure to implement BMPs. Discharge stopped/cleaned up immediatelv.	Citation, NOV, Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33760	2/26/07	Commercial	Water/Dirt	NO		Discharge of water - Men working on Ki's sprinkler system, dirt falling into street.		WO#52905 : Ki's called to say it has been taken care of and the men cleaned it up.	None	San Elijo Lagoon
33761	2/26/07	Residential	Tile slurry	NO		Other discharge - Home construction- tile slurry discharging near SE Lagoon.		WO#36362 : Resident called to say it is now cleaned up.	Education	Cardiff
33809	3/5/07	Commercial	No discharge- Request for grease rendering info	NO		Other discharge - Temple Solel events coordinator called to get grease rendering info.		WO#36490 : 3/14/2007 11:03:53 AM Sent Events Coordinator a fax with references to grease renderers and spill containment vendors on 03/05/07. 03/06/07: Message received stating that Atlas pumping will provide grease bin. 03/14/07: follow-up phone call received, stating Events Coordinator obtained spill palette from Home Depot.	Education	Lux Canyon
33810	3/5/07	Commercial	Water	NO		Discharge of water – Complainant lives at 800 Leucadia Blvd. Water runoff coming into her yard from grower's property, eroding ground. Manager said he'd connect directly to culvert, but never did.		WO#53506 : 12/19/2007 3:04:23 PM Met with complainant at 800 Leucadia Blvd to investigate complaint on 3/5/07. Responsible Party at 834 Leucadia Blvd. was not available. Complaint was resolved on 12/19/07 (FY 07-08). A Follow-up service request to be completed for FY 07-08.	None	Encinitas
33813	3/5/07	Residential	Paint	NO		Discharge of paint wash water		WO#39376 :	Citation Warning, NOV, Education	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33821	3/7/07	Residential	Concrete/granite dust mixed with water	NO		Discharge of construction debris - construction waste, concrete-like dust mixing with water, running down Fourth St. into Moonlight.		WO#52705 : 11/8/2007 9:53:01 AM Called Construction Inspector to investigate. He spoke to workers, discharge cleaned up. Verbal warning.	Education	Encinitas
33846	3/13/07	Commercial	Grayish-greenish and smelly	NO		Other discharge - Wastewater called in reporting line of discharge coming from Trattoria and foul odor coming from storm drain. grayish liquid visible in storm drain		WO#52904 : : 33846, Routine commercial inspection scheduled for 3/15/07. Discharge possibly coming from next door construction project.	None	Cardiff
33850	3/13/07	Residential	Black chunky water	NO		Discharge of water - Swimming pool installation. black chunky water running down street. house is at the top of the horseshoe on Orange Blossom.		WO#52701 : Discharge stopped, homeowner notified of regulations.	Education	La Costa South
33875	3/16/07	Residential	pool water	YES	BATIQUITOS LAGOON	Discharge of water - draining pool water into the street.	N	WO#36536 : No illegal discharge.	Education	Leucadia

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33900	3/20/07	Residential	Diatomaceous Earth	NO		Discharge of water - Pool construction/maintenance. Water/diatomaceous earth running into Park Place Property, down Evergreen Drive.		WO#36846 : 4/5/2007 10:53:24 AM Sent NOV letter on 3/22/07 to Resident. Letter returned undelivered. 8/17/2007 2:45:40 PM NOV Letter dated on 5/14/07 was hand delivered to home on 5/29/07.	NOV, Education	Cardiff
33908	3/20/07 3pm	Commercial	Sediment	NO		Other discharge – Complaint about discharge of sediment into storm drain. Construction Inspector for the site will investigate.		WO#53008 : 12/5/2007 11:54:50 AM Construction inspector spoke with owner on 3/20/07. He graded the land between curb and sidewalk. Turned on sprinklers to wet soil before planting sod. Timer ended up being set for 4 hours, instead of 4 minutes like he thought, so dirt began running down street. he will have it cleaned up by the end of the day.	None	Encinitas
33951	3/22/07	Residential	Motor oil	NO		Discharge of oil. - Resident changed oil and dumped it down private drain in his backyard. It discharged into street and ran down Sprucewood, down Willowspring. Water may have been poured down drain as well, which helped oil travel so far.		WO#36848 : 4/5/2007 11:28:52 AM Discharge stopped. Vactor truck responded, discharge cleaned up. Received $100.00 citation payment on 3/22/07.	Citation, NOV, Education	Lux Canyon

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33972	3/29/07	Commercial	Water	NO		Discharge of water - Power washing in front of Yogi's complex early AM. Drive by showed nothing, but there was water in the street.		WO#52908 : 11/28/2007 2:37:32 PM 3/29/07- Called property manager to alert him about the situation. He said they hire a company (GMI) to do the pressure washing correctly. There was no cleaning scheduled for today, and they usually do it at night. Asked him to let us know how the situation is handled. 11/28/2007 2:39:12 PM 3/29/07 email from Property Manager states that GMI was doing the pressure washing, but they were correctly capturing the water via wet vac. Yogi's was not affiliated, so no follow up action was taken with them. No proof of illegal discharge.	Education	Cardiff
33973	3/29/07	Commercial	Soapy water	NO		Discharge of water –Received call from City Employee saying Jack in the Box is washing out kitchen area and pushing it out to the curb. Complainant took a picture with his cell phone. Drive by showed water in the street, but the washing was over.		WO#36847 : 4/5/2007 11:13:48 AM Sent NOV letter on 3/29/07, received receipt confirmation.	Education, NOV	Cardiff
33974	3/29/07	Commercial	Wash water	NO		Discharge of water – Complainant called in that power washers are washing cars w/out containment. called back to say they were getting hostile. Our inspector was out on another call, and the power washers left.		WO#53239 : NOV sent to property manager. Storm water regs sent to all tenants from property manager on 4/2/07.	NOV, Education	Encinitas

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34003	3/30/07	Residential	Unknown solid and liquid items	NO		Other discharge - Neighbor put debris in front of house in the street. Not the first time.		WO#36843 : 4/5/2007 9:12:01 AM 3/30: Inspector went to investigate and found nothing wrong. Some construction debris may enter street, but it was clear when she was there.	None	Leucadia
34057	3/29/07	Commercial	Dirty water, concrete saw cuttings	NO		Discharge of construction debris –Discharge noticed during routine inspections of surrounding restaurants.		WO#53009 : 12/5/2007 12:05:45 PM Inspector talked to worker, he cleaned up liquid using wet vac and swept up saw cuttings. Contractor was alerted, and was told to be more careful. Sent NOV letter to owner on 4/13/07.	Education, NOV	San Elijo Lagoon
34087	4/11/07	Commercial	Soapy water from car washing	NO		Discharge of other wash water - Mobile car washers		WO#50163 : Went to investigate and found no car washers. Some water in street, cone and hose in driveway. No citations were issued. Phone contact made w/ owner of mobile detailer to discuss storm water regs.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34154	4/18/07	Commercial	Oil	NO		Discharge of oil - Dept of Agriculture reported Nursery with large containers of oil, leaking onto ground. It is out of his jurisdiction so he called us.		WO#37323 : 7 3:14:28 PM Routine inspection done at same time of complaint inspection. 6/8/2007 12:14:44 PM Follow up completed on 6/7/08. business will be moving within a few months. 12/27/2007 1:36:33 PM See routine commercial inspection work order 53715 and follow up 37994.	Education	La Costa South
34186	4/24/07	Construction	Muddy water from construction project	NO		Discharge of other wash water - Construction project next door to complainant pumping muddy water into storm drain. Has called about this before. Construction inspector will investigate.		WO#50164 : Basement filled with water, and it was being pumped into street. Construction inspector spoke with superintendant on site. Discharge stopped immediately.	Education	Cardiff
34228	5/3/07	Commercial	Soapy water	NO		Discharge of vehicle wash water – Mobile detailer		WO#50162 : Inspector went to site and saw Vacuum BMP in place. Told them to get sandbags as well. No citation issued. Sprinklers on property causing runoff. Tell property manager.	Education	Encinitas
34328	5/9/07	Commercial	Soapy wash water	NO		Discharge of other wash water - Inspector saw sidewalk washing w/o containment. Spoke with man doing the washing, told him it was illegal, need BMPs. man said he'd take care of it, but later that day the discharge was still occurring.		WO#53010 : 12/5/2007 12:39:42 PM NOV and Admin Citation warning issued on 5/14/07. Received letter from Manager saying how the restaurant will correct this issue.	Citation Warning, NOV	Leucadia

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34336	1/31/07	Residential	Irrigation run off	NO		Discharge of water - over irrigation causing water to leave the property and enter the street. Sent letter via certified mail with educational info.		WO#53057 :	Education	La Costa South
34337	5/11/07	Commercial	No discharge-request for info on mobile car washing	NO		Discharge of water – Email asking for clarification on our ordinance regarding car washing in her work's parking lot. Boss used to have his car washed there; they've been informed that it is against their property manager's rules.		WO#50160 : Spoke to caller Re: Commercial Car Washing regulations in the City of Encinitas. Explained that all discharges had to be captured or contained and disposed of properly.	Education	Encinitas
34405	5/21/07	Residential	Sewage	NO		Discharge of sewage - estimated 30 gallon private lateral spill. Overflow on did not reach storm drain.		WO#38640 : Received follow up letter from Property Manager on 5/31/07.	Citation Warning, NOV, Education	Leucadia
34419	5/22/07	Residential	Dust from construction site	NO		Discharge of construction debris - A lot of dust being produced at construction site. Notified inspector.		WO#38678 : He said they are grading for a driveway and he would drive over to check out the complaint and make sure they are cleaning up the mess. Home owner cleaned up mess same day.	Education	Leucadia
34420	5/22/07	Residential	Sewage	NO		Discharge of sewage - sewer line is clogged		WO#50159 : Roto Rooter responded same day to make repairs. Discharge cleared.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34428	5/24/07	Commercial	Wash water	NO		Discharge of other wash water - Caller reported power washing incident. Passed information on to the construction inspector		WO#50158 : Inspector visited site and saw no illegal discharges.	None	Leucadia
34436	5/25/07	Residential	Pool water	NO		Discharge of water - Caller says pool water from house behind her is being piped onto her property and causing erosion marks on her property down to the brow ditch.		WO#50134 : Spoke to discharger on phone, asked him to re-direct his pipes to existing storm drain infrastructure.	Education	Lux Canyon
34450	4/24/07	Residential	Muddy water	NO		Discharge of other wash water - construction project is (currently) pumping muddy water into the storm drain. Caller has called about this before. Construction Inspector was sent to investigate.		WO#50131 : 10/15/2007 3:39:08 PM Contractor was pumping out the basement after a rain event. Inspector told him if he was to do it again, use a pump truck, don't outlet it into the street.	Education	Cardiff
34484	5/3/07	Commercial	Dirty water	NO		Discharge of water – Inspector saw employee dumping dirty water on driveway next to the Flower Shop in the Taco Bell parking lot.		WO#50132 : Inspector gave verbal warning and education.	Education	La Costa South
34513	6/5/07	Commercial	BBQ wash water	NO		Discharge of other wash water - Resident complained that a business in the building behind him was washing out a BBQ grill in the alleyway behind his house.		WO#50133 : 10/15/2007 3:52:21 PM 6/5/07- Inspector arrived at site after activities were done. Some water puddled in street, small path to storm drain. No further actions can be taken because we don't know who was doing the washing.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34517	6/5/07	Commercial	Grease	NO		Other discharge – A business called in saying next door business is continually dumping grease down the drain. Now drain is clogged and backing up, and caller had to shut down his business for the day.		WO#53011 : Inspector did follow up inspection from original commercial inspection done on 10/12/06. All corrective actions complete. Found no sign of grease discharge. We never received photos from caller, so case closed.	None	La Costa South
34519	5/31/07	Commercial	Vehicle wash water	NO		Discharge of vehicle wash water – Inspector was out on an inspection and saw Enterprise washing their cars.		WO#38728 : Issued a correct work to branch rental manager.	NOV, Education	La Costa South
34520	6/6/07	Residential	Water from RV	NO		Discharge of water - Email from code enforcement saying Sheriffs dept saw major runoff that is possibly coming from RV on property. Officer told resident it's a violation, so he cleaned it up. Inspector sent to investigate.		WO#50108 : Inspector did not see any illegal discharges.	None	Leucadia
34521	6/6/07	Construction	Saw cutting runoff	NO		Discharge of concrete cutting slurry or wash water. - Complainant called to say that saw cutting runoff at corner of Encinitas Blvd and Vulcan is going towards Cottonwood Creek.		WO#38514 : Construction inspector investigated. he said they are using containment measures. At 11:45am another caller said some runoff is still escaping. Contractor laid out straw wattle in gutter to catch any excess runoff.	NOV Stop Work	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34523	5/23/07	Residential	Dirty, gray-blue water	NO		Other discharge - Jim Broyles contacted us again. the drainage ditch in his backyard now has white substance running through. dog is getting sick. Appears to be coming from north of property. Inspector Mike Emerson sent to investigate.		WO#38515 : First investigation 5/29/07. Sample taken and tested for nitrates, came back negative. 2nd investigation 6/6/07. Could not determine source of discharge.	None	Cardiff
34524	6/6/07	Residential	Hot tub water	NO		Discharge of water – Caller says neighbor is draining his hot tub water onto his property and causing his trees and yard to die. Caller is also concerned that neighbor is building a drainage ditch in his backyard that ends right at a tree in caller's yard.		WO#50126 : Inspector went to site. No illegal activities noted. Discharger is in the process of tying in existing rain gutters to new area drain system out falls to public R.O.W.	Education	Leucadia
34527	6/5/07	Commercial	Mop water	NO		Discharge of other wash water - Inspector saw employees discharging mop water into storm drain at back of restaurant. took photo, reminded kitchen staff that its illegal to dump down storm drain.		WO#39335 : 8/16/2007 3:48:33 PM $100.00 citation paid on 06/19/07. Copy of NOV and Citation also sent to property manager.	Citation, NOV, Education	La Costa South
34534	6/8/07 4pm	Commercial	Water- Request for info	NO		Discharge of water - YMCA employee says the Y leaves the hose on all day for children's water slide. water runs off into street all day long.		WO#50107 : sent employee "Save Water Now", "Only Rain in the Storm Drain", and a copy of the Municipal Code Exemptions to share w/ Y.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34538	6/12/07	Residential	Concrete waste	NO		Discharge of concrete cutting slurry or wash water. concrete waste on ground, trucks driving thru.		WO#50084 : Construction inspector witnessed Immediate cleanup in progress	Education	Leucadia
34557	6/12/07	Commercial	Wash water	NO		Discharge of water - Email complaint showing pictures of power washing at Seven-Eleven. No containment is seen in pictures. Inspection form from 5/18/07 says wash water is contained.		WO#50165 : 10/16/2007 12:48:29 PM Email sent to owner of 7-11 on 6/18/07. Inspector spoke to pressure washer on 6/18, he assured her a wet vac was being used during power washing. Informational letter was sent to power washer along with an Only Rain brochure and the San Diego BMPs for pressure washing brochure.	Notice to Correct Work, Education	Encinitas
34564	6/14/07	Commercial	Colorless, odorless liquid; sediment	NO		Discharge of water – Construction Inspector saw illegal discharge from tank located on drilling rig on Vulcan just north of RCP. Clean Water inspector went to site, took photos.		WO#50156 : observed an illegal discharge of water from an abandoned drilling rig on Vulcan Ave. north of RCP; however, it was not possible to determine the Responsible Party.	None	Leucadia
34572	6/18/07	Residential	Colored concrete	NO		Discharge of concrete waste. – Complainant called Code Enforcement, they forwarded to Clean Water. Workers washing colored cement down the street. Julian told them it goes straight to ocean, they ignored him and kept dumping. Left msg for inspector to investigate		WO#53505 : 12/19/2007 1:29:01 PM Inspector responded to discharge. No illegal discharge observed. Contractors are no longer on site. Home owners are not home.	None	Rancho Santa Fe

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34589	6/19/07	Commercial	Pool water	NO		Discharge of pool water		WO#50271 : Inspector responded at 2:30pm, spoke with discharger on site and established that the pool discharge was well below the water quality standard (1ppm)	None	Encinitas
34593	6/20/07	Commercial	Wash water	NO		Discharge of other wash water - Cleaning company dumping wash water into street.		WO#38834 : Restaurant manager was contacted, will relay to cleaning crew to dump in sink.	Citation Warning, Education, NOV	Encinitas
34623	5/2007	Residential	Grey water/wash water	NO		Discharge of other wash water - washing machine water going into street for a month now. Inspector spoke to homeowner on 6/22 @ 5:15pm, sump pump is pumping excess irrigation into street. Inspector to respond.		WO#38511 : Sump pump verified on 6/26/07. Over irrigation pumped to curb from sump pump. No illegal discharge.	None	Encinitas
34628	6/13/07	Residential	Cement debris	NO		Discharge of concrete waste. - Inspector saw cement debris in street while in the field.		WO#38466 : left card telling workers to clean up the mess. went back on 6/20 and site was cleaned.	Education	Cardiff
34635	6/26/07	Commercial	Power washing discharge	NO		Discharge of building or sidewalk wash water – Clean Water Staff witnessed sidewalks being power washed without containment.		WO#38719 : Spoke with manager, told him water must be contained, not allowed down drain or into street. Water was swept away from drain into landscaped area.	NOV, Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34642	6/28/07	Residential	Heavy flow of water	NO		Discharge of water - Complainant said there is a heavy flow of water going into PBS&J's property on Calle Magdalena. Looks to be coming from the Summerview Court area.		WO#38614 : 7/6/2007 1:30:29 PM Inspector unable to determine source of discharge. 6/28/07 at 4:00p.m. referred to San Dieguito Water District to determine if it is a broken water line. SDWD concluded discharge was due to swimming pool/jacuzzi draining in residential neighborhood.	None	Encinitas
48346	1/31/07	Commercial	Sediment	NO		Other discharge - discharge of sediment to storm drain. from work being done on Lynwood dr.		WO#53013 : 12/5/2007 2:39:55 PM Sent NOV letter and Admin Citation to landscaping company on 2/1/07. Mail was returned. Resent letter and citation 3/13/07. citation was paid 3/23/07. Received letter from owner saying how company is working to correct problem and training employees. Sent copy of first NOV letter and gave Admin citation warning to resident as well. 12/5/2007 2:52:45 PM See also work order 53014	Citation, Education, NOV	Encinitas
48377	11/29/06	Residential	Sewage	NO		Sewage blockage/overflow in alley behind property		WO#53180 : Received fax on 8/20/07 indicating that private sewer lateral had been replaced 6/15/07.	Citation Warning, NOV	Encinitas
48400	1/30/07	Commercial	Sediment	NO		Other discharge – Sediment runoff		WO#53419 : All corrective actions were implemented as of 2/05/07.	Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48405	5/3/07	Commercial	Wash water	NO		Discharge of vehicle wash water		WO#53354 : 12/12/2007 4:49:47 PM Inspector went to site. Brand new large Ford truck being washed. BMPs are in place- vacuum, but they need sandbags as secondary. No citation issued. Sprinklers on property are causing runoff and could use maintenance. Referred to property manager	Education	Encinitas
48488	12/18/06	Commercial	Wash water/food and grease debris	NO		Discharge of other wash water - Business washing off hams behind restaurant. no containment of wash water. Inspector to follow up.		WO#39337 : Citation paid 2/8/07. Training log received 3/07.	Citation, Education, NOV	Encinitas

Incident Listing

Saturday July 1, 2006 through Saturday June 30, 2007

411 - Gasoline or other flammable liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002611	000	07/31/2006 08:41:03	411	2	592 Santa Fe Dr	X	X	
0002664	000	08/04/2006 07:42:59	411	2	I-5 Sb	X	X	
0002953	000	08/25/2006 10:37:45	411	4	3258 Avenida De Sueno	X	X	
0003040	000	09/01/2006 15:58:02	411	N	1010 N El Camino Real	X	X	
0003178	000	09/11/2006 17:18:58	411	N	On Santa Fe Dr at Regal Rd	X	X	
0003581	000	10/14/2006 11:13:16	411	N	224 Village Run East	X	X	
0003781	000	10/29/2006 12:56:11	411	N	633 Birmingham Dr	X	X	
0001642	000	05/07/2007 12:53:49	411	N	1549 N Vulcan Ave	X	X	

End of Report

Incident Listing

Saturday July 1, 2006 through Saturday June 30, 2007

412 - Gas leak (natural gas or LPG)

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002418	000	07/17/2006 11:21:50	412	2	732 Glen Arbor Dr	X	X	
0002633	000	08/01/2006 15:14:06	412	N	1833 Oxford Ave	X	X	
0002868	000	08/19/2006 11:02:53	412	N	764 COLE RANCH Rd	X	X	
0003026	000	08/31/2006 17:46:21	412	N	25 E E street	X	X	
0003057	000	09/02/2006 19:28:19	412	4	7244 Ponto Dr	X	X	
0003170	000	09/11/2006 10:25:58	412	N	800 REGAL Rd	X	X	
0003227	000	09/15/2006 15:25:25	412	N	1243 Calle Christopher	X	X	
0003336	000	09/25/2006 08:24:50	412	4	7104 SAN BARTOLO	X	X	
0003455	000	10/04/2006 10:10:01	412	4	16087 San Dieguito Rd	X	X	
0003631	000	10/18/2006 13:30:06	412	N	2011 Countryhaven Ct	X	X	
0003936	000	11/08/2006 15:23:09	412	N	3428 Camino Largo	X	X	
0004267	000	11/30/2006 01:48:52	412	N	1025 Elmview Dr	X	X	
0004307	000	12/03/2006 09:22:09	412	2	1208 Orchard Glen Cr	X	X	
0004332	000	12/05/2006 08:23:06	412	N	259 Delphinium St	X	X	
0004666	000	12/27/2006 16:02:44	412	N	1245 Lake Dr	X	X	
0004728	000	12/31/2006 10:32:20	412	N	1140 Oakcrest Park	X	X	
0000283	000	01/22/2007 11:41:19	412	N	817 Cole Ranch Rd	X	X	
0001502	000	04/26/2007 08:22:23	412	N	411 Delage Dr	X	X	
0001802	000	05/20/2007 11:29:16	412	N	887 Brittany Rd	X	X	
0001831	000	05/22/2007 17:20:08	412	N	855 Saxony Rd	X	X	

End of Report

Incident Listing

Saturday July 1, 2006 through Saturday June 30, 2007

413 - Oil or other combustible liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002607	000	07/31/2006 05:28:29	413	N	Adjacent to 479 Encinitas Bl	X	X	
0004262	000	11/29/2006 16:24:32	413	N	150 yrds, west of El Camino Real	X	X	

End of Report

Incident Listing

Encinitas Fire Department

Saturday July 1, 2006 through Saturday June 30, 2007

422 - Chemical spill or leak

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002288	000	07/08/2006 08:17:14	422	N	400 W C St	X	X	

End of Report

Jurisdictional Urban Runoff Management Program Annual Report

FY 2007-08

City of Encinitas

CITY OF ENCINITAS

Jurisdictional Urban Runoff Management Program Annual Report FY 2007-2008

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EXECUTIVE SUMMARY

Section I of Water Quality Order No. 2001-001 and Section J.3 of Water Quality Order No. 2007-0001, adopted January 24, 2007, requires the City of Encinitas to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of each respective Order. The following report covers the implementation period for Fiscal Year (FY) 2007-2008 with a defined reporting period from July 1, 2007 through June 30, 2008. This reporting period is marked by a shift in compliance standards from the 2001 Permit to the compliance standards established in the 2007 Permit. Unless otherwise noted, reporting for this annual report has been prepared in compliance with standards established in Water Quality Order No. 2007-0001. This report is presented in the standardized annual reporting format developed collectively by the Copermittees and is based upon the most current information available at the time of document preparation.

The defined reporting period of this report is characterized by significant program evaluation, development, and implementation strategies and actions. As noted above, this report captures the activities required of two permits, and reflects ongoing implementation of programs in compliance with existing permit standards established under Order No. 2001-001 in parallel with the development and implementation of new programmatic elements established within Order No. 2007-0001.

Most notably during this reporting period, the City of Encinitas submitted, as required by Order No. 2007-0001, an updated JURMP on March 24, 2008. The updated JURMP serves as the City's foundational program management tool, capturing newly developed process, procedure, and implementation strategies for overall program effectiveness and compliance. As part of the JURMP update process, the following list of objectives was established to set baseline guidance for overall program success:

- Develop programmatic elements to ensure compliance with regulatory standards and provisions mandated in Order No. 2007-001.
- Establish management processes and procedures to ensure accountability for program actions and activities.
- Establish and support a set of effective and efficient strategies to address Encinitas water quality concerns.
- Build program elements around integrated assessment approaches in order to evaluate overall performance and effectiveness of program components.

Programmatic reporting, represented in this document, has been prepared and evaluated in consideration of the objectives established in the updated JURMP document as presented above. Through goal setting, the City of Encinitas can more broadly gauge overall efficiency and effectiveness of program elements. In correlation, more precise outcome measures shall be assessed through formal long term

effectiveness evaluation in this report through the identification of significant program activities, and further refined in successive annual reports.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton, City Manager
City of Encinitas

9-24-08
Date

1.0 INTRODUCTION

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollution such as urban runoff, and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issued to local governments and other agencies.

In 2002, the City of Encinitas (City) developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01 (2001 Permit). On January 24, 2007, Order No. 2007-0001 (Order, Permit, 2007 Permit or Municipal Stormwater Permit), was adopted by the RWQCB, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and the incorporated Cities of San Diego County, including the City of Encinitas (Copermittees). Under the requirements of Order No. 2007-0001, the City prepared and submitted on March 24, 2008 an updated JURMP document describing enhancements to existing programs, as well as newly developed programmatic elements to meet the provisions of the adopted permit.

Section I of Water Quality Order No. 2001-001 and Section J.3 of Water Quality Order No. 2007-0001, adopted January 24, 2007, requires the City to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of each respective Order. The following report covers the implementation period for Fiscal Year 2007-2008 with a defined reporting period from July 1, 2007 through June 30, 2008.

1.1 BACKGROUND

The City of Encinitas encompasses an overall area of nearly 20 square miles and is located along six miles of Pacific coastline in northern San Diego County. The City is characterized by coastal beaches, cliffs, flat-topped coastal areas, steep mesa bluffs and rolling hills. Incorporated in 1986, drawing together the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain and Leucadia, the City has an approximate population of 60,000. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south.

The City of Encinitas is situated entirely within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and the Escondido Creek Watershed to the south. The City is naturally divided by eight (8) distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon. Encinitas receives an average annual rainfall of approximately ten inches.

The City owns and maintains improved and open storm water channel, underground pipes of varying material, storm water detention basins, catch basins and a variety of other MS4 facilities.

In general, the City drains to three blue-line creeks: Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. In 2006, Cottonwood Creek was 303(d) listed for DDT, phosphorous, and sediment toxicity stressors. Further, the Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for bacteria indicators due to urban runoff from Cottonwood Creek. Encinitas Creek drains the north-central portion of the City, and drains into Batiquitos Lagoon, which is designated as a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. In 2006, Encinitas Creek was 303(d) listed for phosphorous impairments. Escondido Creek, listed in 2006 for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids, drains the southern and northwest (Olivenhain) portion of the City and drains into San Elijo Lagoon. San Elijo Lagoon is 303(d) listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic conditions.

1.2 PURPOSE AND OBJECTIVES

The purpose of the FY 2007-2008 JURMP Annual Report is to provide a comprehensive account of programmatic activities conducted by the City of Encinitas to meet the requirements of the Water Quality Order No(s). 2001-001 and 2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. Notably, a comprehensive program update occurred through the JURMP update process in 2008, therefore, only significant augmentation of program elements or planned changes will be captured in the following annual report. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

Being a coastal community, environmental protection and water quality is of utmost importance to the City of Encinitas. As a result, the City has established strong water quality protection policies which are reflected in development planning documents and procedures. Through the implementation of the Development Planning Component of the City's JURMP and other related planning documents, the City aims to reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP) to protect receiving water bodies, and manage increases in runoff and erosion from development projects.

This section will describe the City's actions during FY 2007-08 which contributed to the successful implementation of the City's Development Planning Component. Included in this section is a summary of recent updates made to land use policies and procedures, a description of the ongoing development of the Standard Urban Stormwater Mitigation Plan (SUSMP), the development of the San Diego region Hydromodification Management Plan, a review of the development projects approved in the past fiscal year, and an explanation of the new BMP installation, verification, and inspection programs.

2.2 LAND USE PLANNING

The City's land use planning process facilitates (1) the reduction of development project discharges of pollutants from the MS4 to the MEP, (2) the prevention of development project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) management of increases in runoff discharge rates and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

The City's land use planning process consists of development and implementation of the following documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- Watercourse Protection, Storm Water Management and Discharge Control Ordinance (Municipal Code Chapter 20.08)
- Storm Water Best Management Practices Manual II

The utilization and regular update of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections will describe the City's land use planning process and the four planning documents in more detail.

2.2.1 BACKGROUND

The City of Encinitas was incorporated in 1986, drawing together the towns of Cardiff-By-The-Sea, Leucadia, Olivenhain, and old and new Encinitas. The City's General Plan was adopted in 1989 and is amended on a limited, as needed basis. The City's JURMP, the Storm Water Ordinance, and the Storm Water BMP Manual II were each originally developed in 2002 as required by Order 2001-01. Each of these documents were reviewed and updated as needed this fiscal year as part of the JUMRP update process and as required by the new Municipal Permit.

2.2.2 SOURCE CHARACTERIZATION

The City addresses seven major land use categories in its General Plan: residential, office professional, commercial, industrial, public/semi-public, transportation, and ecological / open space / parks. Each of these land uses is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their designated sections within this document.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Storm Water Ordinance, Grading Ordinance, and BMP Manual II, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During FY 2007-08, the City of Encinitas updated its land use planning BMPs as required by Order 2007-0001. As part of the 2008 JURMP update process, these BMPs were incorporated into Storm Water BMP Manual II (the City's local interim Standard Urban Stormwater Mitigation Plan(SUSMP)). The most current version of the City's BMP Manual can be accessed through the Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us. The City also actively participated in the review and update of the region's Model SUSMP. For more detail regarding the development and adoption of the City's interim SUSMP and the regional Model SUSMP refer to Section 2.2.4.4 and 2.4.4.1.

2.2.4 PROGRAM IMPLEMENTATION

2.2.4.1 GENERAL PLAN

As a component of the 2008 JURMP update (conducted during FY 2007-08, an assessment of the City of Encinitas General Plan was conducted to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City's General Plan goals and policies are consistent with the Municipal Permit, and no amendments to the General Plan were required as a result of the JURMP update.

The City of Encinitas General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural bodies of water and drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The General Plan also discourages the use of large amounts of impervious surfaces in new development areas, minimizing the transport of urban runoff and pollutants. The breadth of the City's General Plan polices are such that they cross reference each other and comprehensively comply with the required Municipal Permit.

The City's General Plan document serves as the blueprint for the long-range, orderly, physical development of the City and contains stated community goals and policies designed to protect its environmental, social, cultural and economic resources as the City develops. The General Plan consists of an integrated and internally-consistent set of goals, policies and standards that address a number of issue areas which include land use, circulation, housing, noise, safety, recreation, conservation and open space.

Portions of the General Plan also encompass the City's Local Coastal Program (LCP) Land Use Plan, which guides development in the City's Coastal Zone pursuant to the Coastal Act. As a result, the City's General Plan and LCP are a combined single document.

The General Plan is a legally binding document that has been adopted by the City Council, and the City is required to abide by its policies. The General Plan includes a number of water quality and watershed protection principles and policies which direct land use decisions and require implementation of consistent water quality protection measures for development projects.

The City implements the policies in the General Plan using a variety of resources; including the JURMP, Municipal Code, the Storm Water BMP Manual II, Development Agreements, and other various land use plans and permits. Section 2.4 of this document describes how the water quality and watershed policies are implemented through the City's development planning process.

2.2.4.2 JURMP

In compliance with the new Municipal Permit, the City's JURMP document underwent a major update during FY 2007-08. The JURMP document serves as the City's foundational storm water program management tool, capturing the developed process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Encinitas.

2.2.4.3 WATERCOURSE PROTECTION, STORM WATER MANAGEMENT AND DISCHARGE CONTROL ORDINANCE (STORM WATER ORDINANCE)

As required by section J.a.(3)(b)iii of the new Municipal Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance *(EMC Chapter 20.08)* was updated during FY 2007-08 to comply with the Municipal Permit. The Storm Water Ordinance sets up the legal framework which enables the City to enforce the water quality and watershed protection principles established in the General Plan and the JURMP. The Storm Water Ordinance also references the City's Storm Water BMP Manual II and enables the City to enforce the minimum BMPs and SUSMP requirements that are outlined in the manual. The ordinance is periodically reviewed and updated on an as needed basis to ensure that potential discharges of pollutants may be addressed appropriately.

Notably, as a part of the 2008 JURMP update and Stormwater Ordinance update processes, the City updated the Grading, Erosion and Sediment Control Ordinance *(EMC Chapter 23.24).* The Grading Ordinance update further supports the City's legal authority in meeting the provisions of the Municipal Permit and is described in more detail in Section 3.3.

2.2.4.4 STORM WATER BMP MANUAL II (LOCAL SUSMP)

As part of the 2008 JURMP update, Storm Water BMP Manual II was also updated; the City's revised SUSMP and regionally adopted Interim Hydromodification Criteria were incorporated into the Storm Water BMP Manual II as required by the Municipal Permit, during FY 2007-08. The City has integrated new SUSMP provisions into local land use planning and development process and procedure as outlined in the updated BMP Manual II.

Notably, BMP Manual II updates incorporated during FY 2007-08 were driven by both the Stormwater Ordinance and Grading Ordinance amendments. As such, the City's BMP Manual II, as it relates to the Grading Ordinance, is contained in the City's Local Coastal Program (LCP), and must receive Coastal Commission approval of any changes. As part of this broader update of associated ordinances and manuals, the City is working with the Coastal Commission to ensure adequate inclusions in the LCP.

The City originally created the Storm Water BMP Manual II in 2002 to be used by individuals involved with development projects within the City. The Storm Water BMP Manual II is a compilation of all requirements related to water quality with respect to development projects, including the City's SUSMP requirements, permanent BMP requirements, construction BMP requirements (which are further discussed in Section 3), implementation requirements, and maintenance requirements. The Storm Water BMP Manual II also includes various tables to help identify which requirements are applicable to each unique development project.

Standard Urban Storm Water Mitigation Plan (SUSMP)

As required by the Municipal Permit, the City of Encinitas participated in the collective review and update of the Model SUSMP developed under Order No. 2001-001 and approved by the RWQCB in 2002. The original Model SUSMP was developed to address post-construction urban runoff pollution from development projects and defines the minimum required Low Impact Development (LID), source control and treatment control BMPs. The City of Encinitas has incorporated the updated Model SUSMP into the Storm Water BMP Manual II through formal action taken by City Council.

Additional updates, as required by the Municipal Permit, of the Model SUSMP are planned for the future and were being developed at the end of FY 2007-08. Details about the completed and planned updates can be found in Section 2.4.4.1. Any new updates to the Model SUSMP will be incorporated into the City's Storm Water BMP Manual II.

A complete copy of the Storm Water BMP Manual II is available on the City's website, http://cwp.ci.encinitas.ca.us.

2.3 ENVIRONMENTAL REVIEW PROCESS

As part of the 2008 JURMP update, the City's environmental review staff evaluated the City's environmental review process and confirmed that the current process accurately evaluates water quality and cumulative impacts and identifies appropriate measures to avoid, minimize and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality. In compliance with the Municipal Permit, additional questions have been provided in the initial study checklist, a tool utilized to evaluate the environmental effects of a project. To evaluate potential water quality impacts of projects requiring discretionary review, the following questions have been included as part of the initial study checklist:

Would the project:

- *Substantially conflict with city-adopted water quality standards or waste discharge requirements?*
- *Substantially alter the existing drainage pattern* of *the site or area, including the alteration* of a *stream or river course, in* a *manner which would result in substantial erosion or siltation on- or offsite?*
- *Result in* a *substantial degradation of receiving water quality during construction activities?*
- *Propose* a *land use or an on-site activity that would substantially degrade receiving water quality?*
- *Substantially increase any pollutant for which* a *tributary water body is listed on the Clean Water Act Section 303(d) list?*

- *Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?*
- *Substantially degrade groundwater quality?*

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

As discussed in the previous sections, the City of Encinitas has an established multi-departmental review process for all new development and redevelopment projects. Through the application of the City's Storm Water Ordinance, Storm Water BMP Manual II and development project review process, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP.

Each proposed discretionary and ministerial project is subject to the City's Development Project Approval and Verification Process. The following sections describe this process in detail.

2.4.2 SOURCE CHARACTERIZATION

As discussed in Section 2.2.2, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP (Storm water BMP Manual II), which was updated as required during FY 2007-08, describes specific categories for Priority Projects and indicates common pollutants associated with each category (see Table 2-1). A Priority Project must identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

In the City of Encinitas, all development projects, including standard projects (projects not subject to SUSMP standards), are required to meet the minimum BMP requirements, which are discussed in the following Section 2.4.3.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are summarized here and are included in the City's Storm Water BMP Manual II. All development projects are required to implement the following principles, where applicable:

- Source control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed material and trash storage areas, and use of efficient irrigation systems.
- LID BMPs that maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary.
- Provide buffer zones or other buffers for natural water bodies.
- Grading and construction activities must implement all requirements outlined in Section 5 (Construction) of the City's 2008 JURMP.
- Submittal of proof of a mechanism for ongoing long-term maintenance of all structural post-construction BMPs.

SUSMP Priority Projects must submit a grading plan, which includes identification of potential pollutants from the projects, proposed LID, source control and treatment control BMPs, calculations for sizing the treatment control BMPs, and an attached maintenance agreement. The grading plan must also address how the project will manage increases in runoff discharge rates and durations associated with the project, where such increases could cause erosion downstream of the project.

Table 2-1
Anticipated and Potential Pollutants Generated by Land Use Type

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >1 acre	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry /Industrial Development	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft²	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site
(2) A potential pollutant if the project includes uncovered parking areas
(3) A potential pollutant if land use involves food or animal waste products
(4) Including petroleum hydrocarbons
(5) Including solvents

2.4.3.1 HYDROMODIFICATION MANAGEMENT PLAN AND INTERIM HYDROMODIFICATION CRITERIA

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order No. 2007-0001 the City is currently collaborating with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP).

The final HMP is not expected to be complete until the middle of 2009; however, in FY 2007-08 the City established Interim Hydromodification Criteria that will be in effect until the final HMP is approved. The City requires all Priority Projects disturbing 50 or more acres to comply with the Interim Hydromodification Criteria, except for those sites that are considered exempt as described in Section D.1.(g)(6) of the Municipal Permit. The details of the Interim Hydromodification Criteria are presented in the City's Storm Water BMP Manual II, and are consistent with the regionally adopted interim Hydromodification standards. A time table for development of the final HMP can be found in Section 2.4.4.1 and Table 2-2.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to a development project's proposed storm water BMPs during project construction must be approved by the City before being implemented.

2.4.4 PROGRAM IMPLEMENTATION

As required by the Municipal Permit, the City of Encinitas has implemented a program to ensure that development and redevelopment projects comply with post-construction Best Management Practice (BMP) requirements, including Low Impact Development, source control, and treatment control BMPs. The Municipal Permit further requires that the City ensure proper installation of treatment control BMPs and their maintenance into perpetuity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following section provides an overview of the City's SUSMP implementation (including project tracking) during FY 2007-08.

2.4.4.1 MODEL AND LOCAL SUSMP UPDATES

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the new Municipal Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into Storm Water BMP Manual II (see Section 2.2.4.4). In compliance with the interim SUSMP update standards established in Order No. 2007-0001, the following tasks were performed during the review and interim update of the SUSMP:

- Priority Project categories were updated.
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained.

- LID requirements and additional source control requirements were added to meet or exceed Municipal Permit requirements.
- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly.
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary.

In addition to the changes discussed above, a comprehensive Model SUSMP update was completed by a regional workgroup during FY 2007-08. The comprehensive Model SUSMP update includes the following as required by the Municipal Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Municipal Permit.
- Establishment of siting, design, and maintenance criteria for each LID and treatment control BMP listed in the Model SUSMP.
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the Model SUSMP is applicable and feasible.
- Addition of a requirement for Priority Projects with low traffic areas and appropriate soil conditions to use permeable surfaces.
- Addition of any necessary restrictions for infiltration BMPs from Priority Projects that generate high levels of pollutants.

Once the Model SUSMP is accepted by the Regional Board as described in Section D.1.d(8)(b) of the Municipal Permit, the City will update its Local SUSMP within one year to include requirements at least as stringent as those in the newly adopted Model SUSMP. Additionally, the City's Local SUSMP will include a review process to verify all proposed BMPs for Priority Projects meet the criteria designated in the updated Local SUSMP.

As required by Order No. 2007-0001 the City will also incorporate a Hydromodification Management Plan (HMP) into the City's Local SUSMP. The HMP is currently being developed by a consultant and regional workgroup and the draft HMP is projected to be completed in January 2009.

All necessary SUSMP updates described above and their projected completion dates are presented in Table 2-2.

Table 2-2
Time Schedule for Model and Local SUSMP Updates

SUSMP Update	Time Schedule	Status
Model SUSMP update	July 2008	Completed
Local SUSMP update	July 2009	In Process
HMP Progress Report	July 2008	Completed
Draft HMP	January 2009	In Process
Final HMP	180 days after receiving	--

SUSMP Update	Time Schedule	Status
	comments on draft the HMP from the RWQCB	
Adoption of HMP into local SUSMP	180 days after RWQCB approval of the final HMP	--

2.4.4.2 DEVELOPMENT PROJECT APPROVAL PROCESS

The following section includes a summary of the City's current development review process.

DISCRETIONARY PROJECTS

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring an additional, ministerial permit are also subject to engineering plancheck review as described in the Ministerial Project section.

Predevelopment Process

The stormwater element of the predevelopment process is geared toward disseminating information on stormwater pollution control and the City's SUSMP requirements. During this preliminary design phase, engineers and applicants are guided by City staff to provide adequate post-construction BMP facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process results in better designed and integrated post-construction BMPs, since the facilities are included in the project design even in the earliest phases of the project.

Priority Projects, which require more stringent stormwater pollution control methods, are first identified during the predevelopment process. The categories of development falling under the Priority Project classification can be found in the City's Storm Water BMP Manual II and are consistent with the requirements of the Municipal Permit. During the predevelopment meeting, applicants proposing Priority Projects learn that they must implement LID and source control BMPs and must install treatment control BMPs which meet the numeric sizing criteria required by the Municipal Permit. City staff also inform applicants at the predevelopment meeting that installed post-construction BMP facilities must be maintained in good working order into perpetuity. City staff and the applicant and/or engineer discuss options for meeting the numerical post-construction treatment requirements, including volume-based systems such as treatment ponds, wet ponds, detention basins, and flow-based systems such as grassy swales and stepped grass-lined channels. In Encinitas, mechanical treatment systems are discouraged and when accepted may only account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

Stormwater Pollution Control Checklist and Certification

All development project applicants are required to complete a written self-certification of the post-construction BMPs proposed with their project. This certification is required to accompany the initial submittal of each discretionary permit application. The checklist briefly describes the Clean Water Program and the City's storm water regulations. Applicants are required to:

- Classify their projects as Priority, Standard, or Exempt from SUSMP
- Present the LID, source control and treatment control BMPs that will be installed or implemented on site to comply to the SUSMP requirements, and
- Certify that they understand and will implement post-construction BMPs on their site as appropriate for their project's priority.

This checklist must be completed by the party responsible for the development project and submitted with the project's permit applications. A copy of the checklist is provided in the Storm Water BMP Manual II.

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions include construction requirements as well as post-construction BMP standards for effective stormwater pollution control facilities. Once the predevelopment meetings are conducted and the self-certification checklist has been completed, the Engineering Department reviews the adequacy of the project's proposed facilities shown on the site plan and issues Conditions of Approval to ensure implementation of satisfactory LID, source control and treatment control BMP measures. The Conditions of Approval take into account the nature of each project site and the work proposed. The Conditions of Approval are then recorded in a covenant against the property.

Applicants not showing adequate construction or post-construction BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. Stormwater pollution control facilities for Standard projects must meet the minimum requirements established in the City's Storm Water BMP Manual II. Priority Projects must additionally show LID, source control and treatment control BMPs on the project plans. In addition, their project plans must show a feasible solution for numerically-sized treatment control BMPs. Projects with treatment areas that appear to be inadequate are asked to resubmit with substantiating calculations for the proposed treatment control BMPs. These numeric treatment requirements are listed in the City's Storm Water BMP Manual II and available to all applicants through the City website.

MINISTERIAL PROJECTS

Projects requiring a ministerial permit such as a grading, improvement, or building permit are also required to include post-construction stormwater pollution control facilities in the project design. These BMP facilities must be considered adequate before the project's

plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project is already conditioned to provide specific treatment facilities. For those projects not requiring a discretionary permit, the review of the storm water pollution control treatment facilities begins at the plancheck stage.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater construction and post-construction BMPs. City plancheck engineers emphasize to applicants the variety of solutions that may be used in providing stormwater pollution control. All landscape areas used as post-construction BMPs must be clearly marked on the project plans along with the following associated note, "Landscape area for Best Management Practice to be privately maintained and not to be modified without a permit from City". The permitted drawing will become public record; therefore documentation of the designated treatment areas is maintained. Engineers are also required to provide stormwater pollution control notes on the plans addressing employee stormwater education, materials storage, erosion control, and waste management in order to meet the minimum SUSMP requirements.

Every plan in plancheck is also reviewed to determine if it meets the City's definition of a Priority Project. In addition to meeting standard BMP requirements, Priority Projects must provide LID, source control and numerically-sized treatment control BMPs as required by the Municipal Permit and the City's SUSMP. These requirements are discussed in detail in the City's Storm Water BMP Manual II.

All Priority Projects must comply with the numeric sizing criteria for treatment control BMPs in order to be approved by the City Engineer. Plancheck engineers review the project's hydrology calculations to determine the adequacy of the treatment system proposed. The project applicant is required to assume the maintenance responsibility or to identify the maintenance mechanism for the treatment system prior to project approval. A covenant ensuring adequate maintenance into perpetuity is recorded against the property. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City to guarantee successful implementation of the measures shown thereon. Such bonds are retained until the landscaping has become fully established.

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. For more information regarding temporary construction BMPs, refer to Section 3 of this document.

Post-Construction BMP Maintenance Agreements

All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance and/or replacement of permanent BMPs as necessary into perpetuity. The covenant includes an attachment depicting the specific project BMPs, so that the required facilities and their location on the project site are easily identified. The maintenance agreement is then recorded against and runs with the property. In a few cases the maintenance requirements are outlined on the plans themselves and a recorded agreement is not required.

CAPITAL IMPROVEMENT PROJECTS

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear, or repair projects, often only construction BMPs are necessary. However, SUSMP qualifying projects must also install post-construction BMPs. Priority CIP Projects are designed to incorporate the City's SUSMP requirements and LID, source control and treatment control BMPs will be implemented. The City takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.4.4.3 SUSMP PROJECT APPROVAL

During the planning process and prior to project review, the fourteen projects listed in Table 2-3 were identified as Priority SUSMP Projects and approved during FY 2007-08. All applicable SUSMP BMP requirements specified in the City's local SUSMP were applied to each of the projects in Table 2-3. Under no circumstances was any priority project permitted to implement treatment control BMPs with low pollutant removal efficiency ratings. In addition, all of the development projects approved in FY 2007-08 were less than fifty acres in size; therefore none of the projects were required to meet Interim Hydromodification Standards. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2007-08. Depending on the date in which the project was reviewed and approved, the conditional SUSMP requirements may vary as a result of the migration to the new Municipal Permit requirements and the required adoption of the new local SUSMP.

Table 2-3
SUSMP Priority Projects approved in FY 2007-08

Permit No.	Permit Issue Date	Project Site Address
372 GI	8/15/2007	1657 N Vulcan Ave
437 GI	8/31/2007	200-52 El Camino Real
562 GI	9/6/2007	1302 Encinitas Blvd
483 GI	9/10/2007	540 La Costa Ave
570 GI	11/27/2007	3557 Lone Hill Ln
325 GI	12/10/2007	Lone Jack Rd
9561 GI	12/10/2007	303 Santa Fe Dr
388 GI	12/31/2007	1435 Lake Dr
789 GI	1/15/2008	2011-89 San Elijo Rd
369 GI	1/22/2008	1415 Rainbow Ridge Ln
692 GI	4/2/2008	1435 Rainbow Ridge Ln
704 GI	4/21/2008	230 Quail Gardens Dr
482 GI	5/1/2008	1864 Crest Dr
716 GI	6/20/2008	662 Encinitas Blvd

The four lot subdivision at 1415 Rainbow Ridge Lane provides a good example of the typical Priority SUSMP projects that are permitted by the City of Encinitas. The proposed project consisted of the subdivision of a 3.71 acre parcel into four smaller lots and the construction of four single family homes. The proposed development will add more than 5,000 square feet of impervious area to the Leucadia sub-basin. The majority of the impervious surface to be constructed as a result of the project consists of the grading and paving of an access road for the new homes. As a result, a six foot wide bioswale, constructed over a large infiltration pit was required to be designed into the proposed project. Smaller bioswales will also be installed on each individual lot to treat roof and driveway runoff. In addition, as part of the low impact design, the four lots were clustered on the westerly side of the parcel and a large, eastern portion of the original parcel was preserved as open space.

2.4.4.4 SUSMP PROJECT AND TREATMENT CONTROL BMP TRACKING

Over the past fiscal year, Clean Water Program staff worked assiduously with GIS staff to implement a comprehensive watershed-based SUSMP tracking system. The GIS data management system was designed to track the SUSMP Priority Projects and the long-term maintenance of all approved treatment control BMPs installed at development sites. As required by the Municipal Permit, the database is capable of tracking the following information:

- Type of treatment control BMP

- Location of the BMP
- Watershed within which the BMP is located[1]
- Date of construction of the BMP
- The party responsible for maintenance of the BMP
- Maintenance certifications or verifications
- Inspection findings
- Any corrective actions issued

During FY 2007-08 a beta version of the GIS tracking system was put into use. Since the initial debut, the City has been working to continually refine this database. Database improvements are a result of a thorough review of plans for proposed and built projects, a quality check of the existing data, and coordination with the GIS department. A hardcopy version of the most current inventory of treatment Control BMPs in the City's SUSMP Project and Treatment Control BMP Database is available in Appendix A-1. The inventory includes all operational treatment control BMPs installed at SUSMP priority projects.

With the aid of the City's Treatment Control BMP Inspection Priority flowchart (see Appendix A-2), all development projects with approved treatment control BMPs were prioritized as high, medium, or low Threat to Water Quality (TTWQ) during the 2008 JURMP update, as required by the Permit. The following criteria were used to determine the TTWQ:

- Type of project
- Sensitivity of the receiving water body
- Proximity to ESAs
- Size of the BMP
- Recommended maintenance frequency
- Likelihood of operational and maintenance issues associated with the BMP(s)
- Location of the BMP(s)
- Other pertinent factors

The BMP Inspection Priority flow chart addresses basic site and treatment control BMP characteristics that can influence a site's TTWQ such as receiving water body sensitivity and the removal efficiencies of the installed treatment controls. Note that not all development projects and treatment control BMPs are the same; each may have unique water quality risks associated with it. The City considered additional relevant factors beyond those included in the flow chart as necessary.

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[1] The entire City of Encinitas is within the Carlsbad watershed. In order to more accurately define the local hydrology, the City has delineated hydrologic sub-basins within its jurisdiction. The sub-basins divide the Regional Board defined hydrolologic subareas within Encinitas into smaller watersheds. The sub-basins allow City staff to more accurately characterizes the area in which the treatment control BMPs is located. The treatment control BMPs are identifiable by sub-basin in the City's GIS data management system and the treatment control inventory.

2.4.4.5 BMP INSTALLATION VERIFICATION

Beginning in January 2008, the City of Encinitas began tracking the verification of post-construction BMPs that were installed on projects throughout the City. Upon project completion, the engineering inspector now requires that the project engineer submit a grading certification letter to the City verifying that all the Low Impact Development, Source Control and Treatment Control Best Management Practices, as shown on the project plans and required by the Storm Water BMP Manual II, were constructed and are operational, together with the required maintenance covenant(s).

A sample grading certification letter is provided as Appendix A-3. Table 2-4 provides a list of the BMP verifications conducted for development projects completed in FY 2007-08.

Table 2-4
BMP Verifications for Development Projects
Completed in FY 2007-08

Permit No.	Project Name
289 GI	Bonanno
437 G	El Camino Promenade
354 G	Skyloft Homeowners
276 GI	Lewis/Fairchild/Sammis
9419 G	Holland
9486 G	Quatro
7771 G	Lux Art Institute
125 G	Wilson
126 G	Wilson
9212 G	Erlander
1563 G	Samples
183 G	Helmbacher
9580 G	Robinson
65 G	Penwarden
414 GI	Rite-Aid/ Halferty Development
819 I	Omsted

Subsequent to the submittal of the grading certification letter, engineering inspection staff inspect the project site to verify that LID, source control, and treatment control BMPs proposed for the project were constructed in compliance with all approved plans, City permits and ordinances. Inspections of Priority Project sites prior to occupancy allow the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied site are generated. Engineering inspectors also check to ensure that BMPs have been built according to plans before signing off on each stage of construction. The

inspectors use the project's grading plans to identify any missing or incorrectly installed BMPs and deny approval for sites with observed problems. If the engineering inspector is satisfied that the post-construction BMPs were installed as required, the inspector verifies the project engineer's letter with initials and a date. Hardcopies of these signed and certified verification letters are retained by the Clean Water Program.

2.4.4.6 ANNUAL TREATMENT CONTROL BMP OPERATION AND MAINTENANCE VERIFICATION

As required by the new Municipal Permit, all treatment control BMPs installed at development projects must be inspected annually and maintained in perpetuity by a responsible party. As part of the JURMP update, the City of Encinitas established a Treatment Control BMP Operation and Maintenance Verification Program. Because implementation of the City's JURMP did not begin until January 24, 2008, the first year of operation and maintenance verifications will be required in FY 2008-09, prior to the rainy season commencing on October 1, 2008. Results of these inspections will be reported in the City's 2008-09 JURMP Annual Report.

During FY 2007-08, Clean Water Program staff prepared the essential elements of the Treatment Control BMP Operation and Maintenance Verification Program. First, a comprehensive list of mailing addresses for completed projects with treatment control BMPs was pulled from the newly developed SUSMP Project and Treatment Control BMP GIS Database. Then, a formal letter was developed to notify property owners of their verification responsibility. An informative Treatment Control BMP brochure was also created to help property owners identify the BMPs that were installed as a part of their development project. Finally, a self verification form was developed for responsible parties to use to report annual verification of Operation and Maintenance of their treatment control BMPs. An example of the verification letter, brochure, and form can be found in Appendices A-4, A-5, and A-6.

Beginning in FY 2008-09, the City will initiate its Treatment Control BMP Operation and Maintenance Verification Program and require annual verification of proper maintenance of all treatment control BMPs by the party responsible for maintenance prior to the start of each rainy season. The City will mail annual verification letters to the responsible party for each development site with treatment control BMPs in the City's treatment control BMP inventory. The verification package will include the letter, brochure, and operation and maintenance form, and a self addressed stamped envelope.

In the first year of implementation, the City anticipates a significant amount of information gathering and validation. Through initial contacts with responsible parties, the City will refine its inventories as well as methodologies to effectively assure proper maintenance and management of BMPs.

2.4.4.7 TREATMENT CONTROL BMP OPERATION AND MAINTENANCE INSPECTIONS

As required by the new Municipal Permit, all treatment control BMPs installed at development projects are scheduled to be inspected by the City's Engineering inspection staff prior to the rainy season. Because implementation of the City's JURMP did not begin until January 24, 2008, the first year of inspections will be conducted in FY 2008-09, prior to the rainy season commencing on October 1, 2008. Results of these inspections will be reported in the City's 2008-09 JURMP Annual Report.

During FY 2007-08, Clean Water Program staff developed the City's new Treatment Control BMP Operation and Maintenance Inspection Program. New inspection forms were created and the Treatment Control BMP inventory database was designed and quality checked. For a detailed description of the development of the GIS-based Treatment Control BMP Inventory and Tracking system refer to Section 2.4.4.4. City staff also conducted cursory inspections to assess the new inspection form and get an idea of the general condition of some of the existing BMPs. Notably, unique to the City of Encinitas and the development dynamic of the City, a large number of inventoried BMPs exist on private single-family residential lots. As such, it is anticipated that individual service may be required for identified responsible parties to assure overall effectiveness of this program element. As a result of these preliminary surveys, the inspection form was modified from its original format presented in the 2008 JURMP Update. A copy of the new form is provided as Appendix A-7.

When inspections are conducted in FY 2008-09, inspection frequencies will be based on the project's assigned TTWQ priority as determined by the criteria outlined in Section 2.4.4.4 of this document. Table 2-5 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 2-5
Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Inspection Frequency
High	Annually (prior to start of rainy season)
Medium	Every two years
Low	As needed

As required by the Municipal Permit, a minimum of 20% of the total number of projects with approved treatment controls and a maximum of 200% of the average number of projects with treatment control BMPs approved per year will be inspected annually.

Inspections will include examination of all treatment control BMPs at the site to verify that each treatment control BMP is working, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings will be documented by the inspector using the Treatment Control BMP Inspection Form (Appendix A-7). If

any deficiencies in operation and maintenance are noted during the inspection, the responsible party will be notified and appropriate enforcement actions will be taken (as described in Section 2.4.4.8 of this document) to achieve compliance.

Inspection findings and follow-up actions for each development site with installed treatment controls will be captured in the City's treatment control BMP tracking GIS data management system.

Treatment control BMPs that are operated and maintained by the City are considered part of the City's MS4 and are maintained and inspected by Public Works staff on an annual basis. For more information regarding the maintenance and inspection of the City's MS4 refer to Section 4 of this document.

2.4.4.8 ENFORCEMENT MEASURES FOR DEVELOPMENT SITES

Since the City's Treatment Control BMP Operation and Maintenance Verification and Inspection Programs did not commence in FY 2007-08, no enforcement action was required. Verifications and inspections will be completed as required prior to the rainy season (October 1, 2008) and any subsequent enforcement action will be tracked and reported in the next Annual Report.

The City will use a variety of escalating enforcement methods to implement storm water requirements for all development projects within the City's jurisdiction. Generally, enforcement methods include verbal and written warnings, notices of violation, monetary penalties, and denial of permits. A more detailed description of the different enforcement measures used by the City to enforce its storm water regulations and their legal basis can be found in Section 2 of the 2008 JURMP update document.

2.4.4.9 NOTABLE ACTIVITIES

Several notable activities were conducted as part of the Development Planning Component during FY 2007-08. Notable activities included:

- Comprehensive review and update of the City's JURMP
- Collaborative review and development of the regional Model SUSMP
- Update of Storm Water BMP Manual II (City's Local SUSMP) to include regional interim Model SUSMP requirements
- Development and implementation of the BMP Installation Verification Program
- Development of the treatment Control BMP Operation and Maintenance Verification and Inspection Program.
- Design of the GIS-based SUSMP Priority Project and Treatment Control BMP Tracking System

For a detailed description of each of these activities please refer to the appropriate sections within the Development Planning Component of this Annual Report.

3.0 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site BMPs, inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Municipal Permit as outlined in Section D.2.

3.2 SOURCE CHARACTERIZATION

3.2.1 SITE INVENTORY

Within the defined reporting period of this report, the City of Encinitas has compiled, maintained, and updated a watershed-based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2007-08 included a total of 149 construction sites. During this period, there were 20 high priority sites, 45 medium priority sites and 63 low priority sites identified. The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of all construction projects. The GIS inventory includes details on each construction site, including project name, location, sub-basin, type of construction permit, date of permit issuance, inspection prioritization, and the assigned storm water inspector. Beginning January 24, 2008, the City's Clean Water Program staff in coordination with the City's IT department designed a technical solution in GIS to inventory and prioritize all construction projects as permits are approved. A more detailed description of the prioritization process is provided below in section 3.2.2. A fully prioritized construction inventory can be found in Appendix B-1 in addition to a map of all active construction sites located in Appendix B-2.

3.2.2 INVENTORY UPDATES

As required by Section D.2.a of the Municipal Permit the City's watershed-based inventory of construction sites is updated weekly by the Engineering department as new grading permits are approved. The Engineering department shares all approved permit information with the City's IT Department which also maintains an updated inventory of all active construction projects in a GIS database. As part of the 2008 JURMP update process, and to ensure monthly construction inventory management, a construction specific GIS Script was developed by the City's GIS staff in ESRI's ArcMap for prioritizing approved construction permits. This mechanism is accessible via desktop to Clean Water Program staff to execute the GIS script and review the prioritization on a monthly basis. Regular updates to the inventory include the addition of new construction projects, the removal of completed construction projects, and re-assignment of inspection frequencies of active construction sites as determined by the City's Clean Water Program staff. A flow-chart that outlines the process by which the inspection frequency of construction projects is determined in GIS can be found in Appendix B-3.

3.3 ORDINANCE UPDATES

As required by Section D.2.a of the Municipal Permit, applicable City documents and ordinances were updated on March 12, 2008 by the City of Encinitas City Council to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code Section 20.08, the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, including construction specific provisions. Through a parallel update of the City's grading ordinance, the following provisions for storm water pollution control have been incorporated into the City's grading ordinance:

- All grading permits shall comply with the provisions of the City's Best Management Practices (BMP) Manual Part II which provides design, construction, and operation requirements for minimizing storm water pollution (§ 23.24.071).
- Any removal of BMPs that were required for a priority project will require a grading permit for corrective or other action. A requirement may be imposed to replace the BMP with equivalent water quality protection (§ 23.24.080).
- Priority projects for storm water pollution control cannot be exempted from obtaining a grading permit (§ 23.24.090.I).
- Any project creating over 500 square feet of new impervious area has to obtain a construction permit and adhere to all standards in the City's BMP Manual Part II (§ 23.24.105).
- All grading plans shall contain the location, design, detail, and cross section of all erosion control and post construction BMPs (§ 23.24.140).
- If the approved grading plan does not show post construction BMPs in sufficient detail, a precise grading plan for development projects is required to include and accurately depict post construction BMPs for review and approval of the City Engineer. (§ 23.24.126).
- Both Interim and Final Erosion and Sediment Control Plans are required (§ 23.24.150, 23.24.160).
- A waste management plan is required to be submitted with all interim erosion control plans. The management of the waste on the construction site must be graphically and verbally described on the grading plan (§ 23.24.150F).

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

3.4.1 UPDATED BMP REQUIREMENTS

Through the JURMP Update process completed in March 2008, the City reviewed and updated a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and

erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the MEP. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm water Best Management Practices Manual, Part I and II, and the City of Encinitas' 2008 JURMP Update.

3.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are different for the wet season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). The City's Storm Water Manual Parts I and II provide a detailed list of dry and wet season requirements for all construction sites. Prior to the beginning of the wet season, in September 2007, the City sent 127 Erosion Control letters to all property owners with active and inactive construction sites reminding them of the City's minimum BMP requirements .

3.5 PROGRAM IMPLEMENTATION

3.5.1 CONSTRUCTION AND GRADING APPROVAL PROCESS

The City has an established and thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards, obstructs a waterway, or occurs over an area of 10,000 square feet. All other projects require a building permit. Both permits require that plans be submitted and approved by the City. The City's grading ordinance requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a citywide data management system called HTE.

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As a part of this approval process, the City's Clean Water Program staff also review the grading plans to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Plans are checked by both the Engineering and Clean Water Program staff. Engineering staff reviews the plans for overall compliance with the grading ordinance. Clean Water Program staff checks the plans for specific compliance with the Storm Water Management Ordinance and Federal and State regulations. If the site falls under jurisdiction of the State's General Construction Permit, staff follows up with the developer

to ensure that a SWPPP is properly prepared and submitted. In addition, the SWPPP is reviewed and approved by the Clean Water Program staff prior to final approval of the project grading plans. The City also requires proof that a Notice of Intent (NOI) has been submitted for sites that are subject to the General Construction Permit.

Prior to issuing construction and grading permits, the City's Engineering Department verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP.

3.5.2 BMP IMPLEMENTATION

Clean Water Program staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the City Engineering Inspectors. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm Water Best Management Practices Manual, Parts I & II.

Clean Water Program staff constantly monitors weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all Engineering Inspectors to inform them of the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation may be necessary, and where necessary, they require developers to have additional BMPs in place at the end of each work-day.

It is notable that the general notes for the building plans have been amended to include erosion control, sediment control, and materials management practices. The Clean Water Program also reviews SWPPPs for all projects greater than five acres and sensitive projects between one and five acres. Staff reviewed and commented on Storm Water Pollution Prevention Plans for nine projects between July 1, 2007 and June 30, 2008. See Table 7-1 below for a summary of SWPPP reviews.

Other project reviews completed by Clean Water Program staff as part of the permitting process are addressed in more detail in Section 2.0, Development Planning.

Table 3-1 Storm Water Pollution Prevention Plan Reviews, 2007-08

Site Name	Address	Size (acres)	NOI?	Review Date
Woods Residence	1864 Crest	1.16	Yes	7/05/07
City of Encinitas Fire Station #3	801 Orpheus Ave.	1.6	Yes	7/25/07
Harloff BMW	1302 Encinitas Blvd	4.58	Yes	08/31/07
Encinitas Beach Resort	2100 N. Coast Highway 101	7.15	Yes	9/12/07
Leucadia Blvd. Street Improvements	Leucadia Blvd. east of I-5 to Pacific Coast Highway	2.27	Yes	9/12/07
Eckstein Horse Ranch	3557 Lone Hill Ln.	5.4	Yes	11/13/2007
Quail Botanical Gardens Center	230 Quail Gardens Dr.	4.5	Yes	12/19/07
Rainbow Ridge	1435 Rainbow Ridge	3.52	Yes	1/24/08
Pacific Station	687 S. Coast Highway 101	2.01	Yes	6/23/08

Through the review and plancheck process, staff may require additional or alternative BMPs to be implemented on individual projects. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

3.5.3 CONSTRUCTION SITES REQUIRING ADVANCED TREATMENT

There were no sites in FY 2007-08 that required advanced treatment. For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined that a project site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat To Water Quality (TTWQ), advanced treatment will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are included in the City's Storm Water BMP Manual II.

3.5.4 INSPECTIONS & BMP VERIFICATION

The City has an established inspection program to evaluate compliance with storm water regulations at all construction sites within the City's jurisdiction. The City of Encinitas' Engineering Department employs six Engineering Inspectors who are responsible for inspections at all construction sites in the city. Storm water issues such as compliance with the grading and storm water ordinances in the Municipal Code have become one of their main focuses, especially during the wet season.

On January 24, 2008, the RWQCB adopted the 2007 Municipal permit. Inspection activities for the construction program were updated and implemented at that time to meet the new Municipal permit requirements as outlined in Order No. R9-2007-0001. As a result, all construction inspection frequencies from July 1, 2007 to January 24, 2008 were in conformance with the Municipal permit requirements of 2001, and the construction inspection activities from January 24, 2008 to June 30, 2008 met the Municipal permit requirements for 2007. During the fiscal year, City staff documented a total of 445 storm water inspections. The prioritization of sites from July 1, 2007 through January 24, 2008 included the following: 36 high priority, 19 medium priority, and 90 low priority sites. The prioritization of sites from January 24, 2008 through June 30, 2008 included the following: 24 high priority, 50 medium priority, and 75 low priority sites. Appendix B-1 details the complete Construction Inventory for FY 07-08, the construction site prioritization under both municipal permits, and the number of inspections conducted at each site.

As part of the 2008 JURMP update process, and codified through BMP Manual II, the City of Encinitas established a maximum disturbed area for grading at 50 acres. Additionally, through this process, the City established advanced treatment criteria for construction activities. Within the defined reporting period of this report, no construction projects in the City of Encinitas were subject to maximum disturbed area or advanced treatment requirements.

The Engineering Inspectors captured all construction inspections on a form titled "Construction Site Storm Water Inspection Checklist", included in Appendix B-4. The inspection form contains questions to ensure all the inspection components required by Section D.2.d.6 of the Municipal Permit are addressed. The form lists the minimum construction BMPs required by the City and includes boxes to document if BMPs are adequate or inadequate and require maintenance. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 3.5.5 below are taken.

3.5.5 COMPLIANCE AND ENFORCEMENT ACTIONS

3.5.5.1 GENERAL ENFORCEMENT

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites in its jurisdiction. Enforcement for construction projects is administered by the Engineering Inspectors and other City staff with inspection and enforcement authority.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may be applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to be corrected, and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's storm water regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop / Correct Work Notice. The NOV and Correct Work Notice will provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City are reported to the RWQCB per the reporting requirements of the Municipal Permit.

Civil penalties for violations of the Encinitas Municipal Code (EMC) are established in EMC Chapter 1.08, and determined violations of storm water regulations may be subject to administrative citations and associated administrative fines. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector.

3.5.5.2 REPORTING AND NON COMPLIANCE

During the FY 2007-08, 47 construction related complaints were received through the City's hotline. After all complaints were investigated there were 18 instances in which educational information was disseminated, **18 instances in which Notice of Violations** (NOV) were issued, and **7 instances in which citations** were issued. Additionally routine City inspections at construction sites throughout the year revealed that there were 46 individual correct work actions. With immediate oversight from the City's Engineering Inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance and avoid further enforcement. Appendix B-6 features a summary of all violations and enforcement actions in FY 2007-08.

4.0 MUNICIPAL

4.1 INTRODUCTION

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, the storm drain system, and municipally owned facilities, which includes 18 public parks, six beach access areas, four beach parking lots, five fire stations, five public works yards, four administration buildings, one golf course, and four open space areas. The updated municipal facilities inventory is included as Appendix C-1. The City also conducts high Threat to Water Quality (TTWQ) activities, as defined by the Municipal Stormwater Permit, such as power washing and other mobile activities including street and sidewalk repair, building cleaning, painting, graffiti cleaning, and fleet vehicle maintenance. Other prominent water quality related activities include street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel and landscaping contractors, annual MS4 maintenance, and regular upkeep of the sanitary sewer system to prevent overflows.

Due to the large expanse of municipal areas, activities, and functions, City staff must carefully manage pollution prevention measures and BMPs to reduce or potentially eliminate the discharge of pollutants into the MS4 from municipal areas and activities. To comply with the Municipal Stormwater Permit, the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas, activities, and functions

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 BACKGROUND

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.2.2 SOURCE CHARACTERIZATION

The City of Encinitas maintains approximately 145 miles of roads, streets, and highways and four City-owned and operated parking facilities. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included in Appendix C-1.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's BMP Manual Part I and the CASQA Municipal Handbook to choose applicable BMPs to implement for roads, streets, highways, and parking facilities within the City. Street sweeping and cleaning is the main BMP that is implemented for road, street, highway, and parking facilities (both stand-alone and those associated with a municipal facility) maintenance. Treatment control BMPs are used for all road sections which are subject to SUSMP requirements, described in more detail in Section 2.0. The City implements additional controls for roads, streets, highways, and parking facilities adjacent to or tributary to ESAs when determined to be necessary.

4.2.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2007-08 to require and verify the implementation of designated BMPs for all City maintained roads, streets, highways, parking areas, and related activities as outlined in the Municipal Permit Section D.3.a.(5)(a-c).

In compliance with street sweeping standards established in Order 2007-0001, the City implemented an aggressive sweeping schedule for roads, streets, highways, and parking facilities.

The frequency of street sweeping is as follows:

- All arterial roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris are swept weekly.
- All collector streets and parking facilities identified as consistently generating moderate volumes of trash and/or debris are swept bi-monthly.
- All residential (publicly owned) and parking facilities identified as generating low volumes of trash and/or debris are swept annually.

In FY 2007-08, a total distance of **11,380 curb miles** was swept, and a total of **1,378.5 tons of debris** was collected.

The City also maintains four parking facilities adjacent to four local beaches. During the summer months the parking lots produce a moderate volume of trash, sediment, and debris, and have been assigned a sweeping prioritization of medium priority. These facilities are swept weekly from April through September to address the increased traffic, and monthly from October through March. In FY 2007-08, a total of **22.5 tons** of debris was collected from beach parking lots.

The City's Public Works Department and Partners with Industry (PWI) removed 1,068 30-gallon bags of litter from the City's bus stops. Additionally, the City's Public Works Department in coordination with San Diego County probation crews collected 11,425 30-gallon bags of over-grown vegetation from City Right of Ways based on visual observations and citizen complaints.

4.3 FIXED FACILITIES

4.3.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities that have been grouped in this section because these facilities receive formal inspections as part of the municipal program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreational Facilities
- Public Works Facilities
- Potable Water Facilities
- Fire Stations
- Other Fixed Facilities

4.3.2 SOURCE CHARACTERIZATION

The Municipal Permit requires Copermittees to inspect high priority municipal areas and activities annually according to D.3.a.(7)(a). High priority facilities include Parks and recreational facilities and other municipal areas and activities that the Copermittee determines may contribute a significant pollutant load to the MS4.

As part of the JURMP Update process in March 2008, all municipal facilities were assigned an inspection priority based on the Municipal Permit requirements and an evaluation of their threat to water quality. Each site and activity has been evaluated based on a variety of site-specific factors including size, location, type of activity, waste generated, pollutant discharge potential, non-storm water discharges, proximity to receiving water bodies, and any other relevant factors deemed appropriate. Using these criteria, a complete prioritized, watershed based inventory was developed and is included in Appendix C-1.

The City of Encinitas owns, operates, and maintains 50 fixed facilities within the City. Of these facilities, 29 have been designated with a high priority inspection priority and 21 were designated a low inspection priority. All high priority facilities are formally inspected on an annual basis and described further in Section 4.3.4. Both high and low priority facilities are visually inspected on a routine basis. Any illicit discharges or illegal connections are immediately referred to the Clean Water Program. All fixed municipal facilities are included in the City's inventory located in Appendix C-1. Figure 4.1 illustrates the various municipal fixed facilities and their associated activities within the City of Encinitas.

Parks and Recreation Facilities

The City maintains 21 parks, 7 beach access areas, 7 viewpoints, 35.5 acres of trails, and 94.93 acres of open space. All landscape maintenance activities are performed through the use of a private contractor. Parks Division Supervisors are responsible for monitoring contract activities for landscaping; implementing BMPs for pesticide, herbicide, and fertilizer usage; waste removal and control; and maintenance at all municipal parks and recreation facilities.

Public Works Operations Facilities

Public Works operations facilities are important in maintaining the functionality of many publicly offered services. The City of Encinitas maintains a total of five public works facilities, which include three public works yards, one vehicle maintenance facility, and a wastewater collection facility (Appendix C-1).

Potable Water Facilities

The means to provide residents of the City with potable water is an essential activity conducted by the City of Encinitas' San Dieguito Water District. The City maintains several underground fixed facilities which includ pressure regulating stations as well as two water reservoir/water storage facilities. The City also maintains an above ground water recycling reservoir.

Fire Stations

Fire fighting capability is an essential element of municipal activities conducted in the City. The City of Encinitas maintains five fire stations, which are included in the municipal inventory (Appendix C-1). Two fire stations within the City, stations #3 and #4, have fueling stations on site.

Other Fixed Facilities

Other fixed municipal facilities include a community center, an administrative building, a sewage pump station, and a UV treatment facility. All of these facilities are considered a low priority because many of the activities at these facilities are conducted indoors and do not correspond with activities that are considered a high threat to water quality.

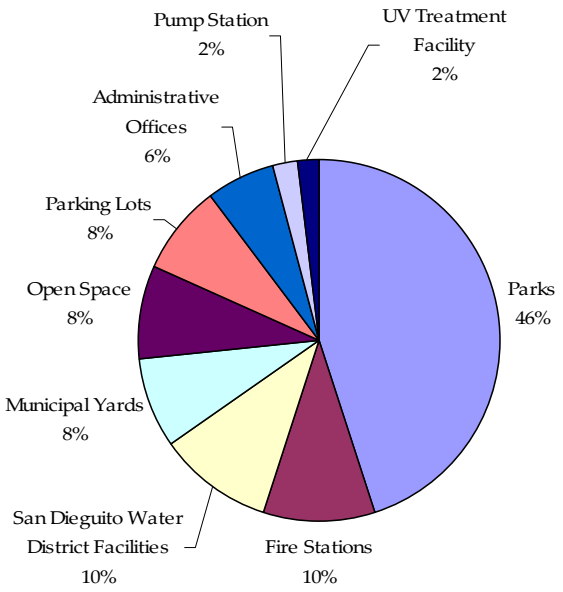

Figure 4.1 City of Encinitas Fixed Facilities

4.3.3 BEST MANAGEMENT PRACTICES

4.3.3.1 UPDATED BMPS

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP Update and the City's BMP Manual Part I. The City also references the CASQA Municipal BMP Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2007-08 the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas. City personnel implemented general waste management BMPs, and patrons of the facilities were encouraged to recycle and properly dispose of trash and pet waste. Notable activities during the fiscal year included the maintenance of 17 doggie bag dispensers at three public parks and along two trails. The City also posted 12 recycling signs along with trash and recycling bag dispensers at 8 beaches on July 4 and September 3, 2007, and collected 342 30-gallon bags of trash and 180 30-gallon bags of recycling.

City staff continued operation and maintenance of post-construction BMPs at Cottonwood Creek Park. The park is a prime example of low impact development and includes the following post-construction BMPs: 90 feet of day lighting Cottonwood Creek, porous pavement for all parking areas and driveways, pervious walkways, surface drainage through earthen-bottom open channels, and drought tolerant plants in landscaping areas.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: (1) runoff from improper irrigation after application; (2) application of chemicals during or prior to storm events; (3) use of chemicals that do not properly absorb to soil or plants; and (4) overspray from chemical applications that may eventually enter the MS4. The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management. Implementation of the policy includes:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The regulations generally include: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs.

In FY 2007-08, the following BMPs were implemented at all municipal parks and recreation facilities, public streets, channels, and right of ways to reduce pollutants from pesticides, herbicides, and fertilizers:

- Whenever practicable, integrated pest management techniques that rely on non-chemical solutions are implemented.
- City personnel who participate in the application of pesticides are trained and licensed (Qualified Applicator License) and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- City staff records the applications of all chemical agents by noting the locations, types, and quantities of chemicals used. Records are reported monthly to the Department of Agriculture.
- Pesticide, fertilizer, and herbicide handling and safety refresher sessions are provided to City personnel involved with application.
- The use of fertilizers is minimized as much as possible; compost and soil amendments are used in place of fertilizer, where applicable.
- Employees are trained to handle pesticides, herbicides, and fertilizers properly.
- All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides, and fertilizers are applied only when necessary (typically during growing seasons) and not during or prior to anticipated storm events.
- Pesticides are not sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- The City maintains compliance with federal and state reporting law for pesticide use.
- Weeds, grass, and brush are cleared from building perimeters and fence lines to reduce the need for pesticides and herbicide use, when applicable.
- Native plants are used in landscaping, where applicable.
- Diseased plants are removed, and infected parts of plants are removed to minimize the need for pesticide and herbicide use, where applicable.
- Several weather stations throughout the City are used to monitor microclimates to properly set irrigation systems for different areas of the City and reduce the potential of over-irrigation.
- Flow sensors and master valves prevent water loss in the event of a break in any of the main lines.

- Two bilingual training sessions for private landscaping contractors were conducted by Clean Water Program staff during the fiscal year. There were 31 participants at the training session on November 6, 2007 and 25 participants at the training session on March 11, 2008.

Public Works Operations Facilities

City personnel implement appropriate BMPs for all activities that take place at public works facilities. Storm Water Pollution Prevention Plans (SWPPPs) have been developed for all five of the City's main operations facilities, which include the San Elijo Wastewater Division Collections Facility, Pacific View Public Works Facility, Requeza Street Facility, the "A" Tank Site, and the newly established Calle Magdalena Public Works Facility. The SWPPPs include a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs are maintained at each facility, and all of the facilities are inspected by Clean Water Program staff on an annual basis. Additionally, all Public Works employees are annually trained in storm water management by Clean Water Program.

Potable Water Facilities

City personnel implement appropriate BMPs for all activities that take place at potable water facilities when deemed appropriate. All San Dieguito Water District employees are trained in storm water management on an annual basis.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (#3 and #5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. More detailed information regarding non-emergency fire fighting flows can be found in Section 13 of this document.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management, as discussed in the City's BMP Manual Part I and the CASQA Municipal Handbook.

The City employs a number of pollution prevention practices at City Hall. These practices have been expanded in recent years to include:

- roof replacement and an energy efficiency improvement project which consists of installation of solar photo voltaic panels, a high efficiency air conditioning system, and day lighting the building in certain areas.
- the use of recycled paper (30%) for all copiers and printers,
- installation of an Automated Logic System (ALS) which controls the heating and ventilation
- implementing a 9-80 work week so that City Hall is closed every other Friday,
- installing lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- implementing a battery collection and recycling program at City Hall,
- replacing large trash receptacles at each individual desk with mini size trash receptacles and providing large recycling containers for mixed paper and cans/bottles.
- placing recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments,
- the use of five hybrid cars for City vehicles.

4.3.3.2 Additional Controls for Municipal Areas and Activities

Fertilizers which are used on landscaped areas in municipal parks and public right of way areas are considered a pollutant of concern for the San Elijo Lagoon and its larger drainage area. To mitigate potential discharges of nutrients to the Lagoon from Municipal activities, the City requires that the City's landscaping contractors implement an extensive fertilizer management program as described earlier in section 4.3.3.1. In FY 2007-08, Clean Water staff conducted annual bilingual storm water management training for all City landscaping contractors. The City will continue to monitor the fertilizer management program, and if the existing measures are found to be deficient, the City will adjust the BMP implementation to achieve a higher level of pollutant reduction.

Similarly, if the City identifies any potential sources of other constituents for which water bodies in the City are 303(d) listed that could be the result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no other municipal fixed facilities that have been determined to be a source of pollutants for which water bodies within the City are on the 2006 Clean Water Act 303(d) list.

4.3.4 Program Implementation

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and if necessary, enforcement actions. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.3.4.1 MAINTENANCE

In FY 2007-08, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot, and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular maintenance activities.

The City maintains a regular maintenance schedule for fixed facilities in the City. As previously discussed, City personnel are trained to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly, and to report illegal discharges/illicit connections as they may come across them during normal work activities.

4.3.4.2 TRAINING AND EDUCATION

Municipal personnel are trained in implementing appropriate BMPs and preventing non-storm water discharges. In FY 2007-08, Clean Water Program staff conducted training for the following municipal departments: Public Works, Fire, Parks and Recreation, and Engineering. Additionally, the Streets Division of the Public Works Department discussed storm water issues at regular weekly staff meetings throughout the reporting period. A detailed description of the municipal education program can be found in Section 8 of this document.

4.3.4.3 MUNICIPAL INSPECTIONS

City staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. As part of the FY 2007-08 program City staff performed a total of 29 high priority inspections. The fixed facility inspection locations and inspection dates are summarized in Table 4-1 below.

Table 4-1
Fixed Facility Inspections

No.	Facility Name	Inspection Date
1.	"A" Tank Site Public Works Yard	6/0508
2.	Calle Magdalena Public Works Yard	6/03/08
3.	City of Encinitas Civic Center	6/26/08
4.	Pacific View Public Works Facility (Temporary)	6/0308
5.	Requeza Street Public Works Yard	6/03/08
6.	San Elijo Wastewater Division Facility	6/06/08
7.	Beacon's Beach	7/02/08
8.	Cardiff Sports Park	6/20/08
9.	Cottonwood Creek Park	6/19/08

No.	Facility Name	Inspection Date
10.	Encinitas Viewpoint Park	6/23/08
11.	Glen Park	6/20/08
12.	Grandview Beach	7/02/08
13.	H St. Viewpoint	7/02/08
14.	Hawkview Park	6/24/08
15.	J St. Viewpoint	7/02/08
16.	Las Verdes Park	6/26/08
17.	Leo Mullen Sports Park	6/26/08
18.	Leucadia Oaks Park	6/25/08
19.	Leucadia Roadside Park	7/02/08
20.	Little Oaks Equestrian	6/19/08
21.	Mildred Macpherson Park	6/20/08
22.	Moonlight Beach	6/23/08
23.	Oakcrest Community Park	6/26/08
24.	Orpheus Park	6/20/08
25.	Paul Ecke Sports Park	6/23/08
26.	Scott Valley Park	6/23/08
27.	Sun Vista Park	6/19/08
28.	Swami's Beach	7/02/08
29.	Wiro Park	6/19/08

The recommended Best Management Practices and corrective actions are summarized in the City's Routine Inspection Summary located in Appendix D-5. Of the 29 sites inspected, a total of 10 facilities required corrective actions and follow-up inspections. All 10 facilities have implemented appropriate BMPs, and the Public Works and Parks and Recreations Departments have verified that the corrective actions have been completed. There were no enforcement actions for any of the Municipal fixed facilities during the FY 2007-08 .

Potable Water Facilities

All of these facilities are considered a low priority and do not receive formal inspections because the activities associated with these facilities are located underground and do not involve any other activities on site.

4.4 MS4

4.4.1 BACKGROUND

The primary functions of municipal separate storm sewer systems are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consist of streets, curbs, catch basins, inlets, pipes of varying materials, natural creeks and streams, natural channels, concrete channels, culverts, desilting basins, and detention basins. The City also maintains a number of treatment control BMPs such as filter inserts and a UV treatment facility, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City of Encinitas regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the MEP.

4.4.2 SOURCE CHARACTERIZATION

The City maintains a variety of MS4 facilities which includes 2,762 catch basins and inlets, 96 miles of storm drain pipe, 6.32 miles of open channels, 16 desilting basins, and one UV Urban Runoff Treatment Facility located throughout its jurisdiction. The MS4, as one complete entity, is included in the municipal inventory located in Appendix C-1.

4.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.4.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction, and new development. In FY 2007-08, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste from entering the MS4 system as well as ensuring that waste which is collected during maintenance of the City's MS4 does not re-enter the system.

The 2007 Municipal Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City of Encinitas does not own or operate any flood management projects or flood control devices that may be retrofitted. However, in FY 2007-08 the City did maintain 16 detention basins throughout the City that serve pollutant removal, particularly for sediment and associated pollutants bound to the sediment. These facilities are inspected on an annual basis and cleaned of debris and sediment as needed. A Municipal BMP map that depicts all of the City's structural BMPs, detention basins and fossil filter locations can be found in Appendix C-3.

4.4.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS/ACTIVITIES

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined to be necessary.

4.4.4 PROGRAM IMPLEMENTATION

The City's MS4 management program includes responding to complaints received by the City's Clean Water Hotline {(760) 633-2787}; detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, and by flushing the pipes; by repairing and/or replacing damaged or failing MS4 structures; and by stenciling signs on storm drain inlets warning of effects of illegal dumping. The City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a vactor truck during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance.

On January 24, 2008, the RWQCB adopted the 2007 Municipal permit. Maintenance activities, frequencies, and methodologies were updated and implemented at that time to meet the new Municipal permit requirements as outlined in Order No. R9-2007-0001. As a result, all maintenance activities from July 1, 2007 to January 24, 2008 were in conformance with the Municipal Permit requirements of 2001, and the municipal maintenance activities from January 24, 2008 to June 30, 2008 met the Municipal permit requirements for 2007. Appendix C-2 details all of the 2001 and 2007 Municipal Permit Reporting requirements for municipal activities that occurred during the defined reporting period.

4.4.4.1 MAINTENANCE

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year is included below:

- Within the defined reporting period of this report, approximately **55.95 tons** and **4, 748 - 30 gallon bags** of waste and litter were removed from the MS4. Waste and litter was removed from these facilities annually/year round as required by the Municipal Permit. Any MS4 facilities observed to be collecting relatively high volumes of trash were cleaned between May 1 and September 30th.

- Within the defined reporting period of this report, **2,374 - 30 gallon bags** of litter and vegetation were removed from open channels by hand. Cleaning the open channels is conducted annually/year round or more often when necessary. The City responds to observations or reports of anthropogenic litter in channels in a timely manner.

- Within the defined reporting period of this report the City cleaned **1,657** catch basins and removed a total of **26.4** tons of waste and litter. Storm drain inlets and catch basins that City personnel have identified as gathering a greater amount trash and debris as compared to other areas of the City are re-inspected throughout the year and cleaned if

necessary. All inlets and catch basins within the City are cleaned on an annual basis, which is sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris. Cleaning/inspection schedules are subject to change based on observations and records of City personnel.

- The City maintains a total of 38 storm drain filter inserts in 38 inlets located throughout its jurisdiction to remove sediment, debris, oil, and grease from the MS4. From July 1, 2007 through June 30, 2008, **3.148 tons** of sediment and litter were removed from all 38 inlets. These inserts were installed in 1999 and are maintained on a quarterly basis by a specialty contractor. Table 4-2 below outlines the complete filter insert inventory and their locations can be found in Appendix C-3 on the "Municipal BMP Map."

- Inspection and removal of silt after sufficient accumulation from creeks, desilting basins, detention basins, and rock lined channels occurred throughout the fiscal year between June 15 to October 15th. In FY 2007-08, **256.4** tons of silt, vegetation, and litter were removed.

- The UV Urban Runoff Treatment Facility underwent considerable maintenance and conditioning. Administratively, the City of Encinitas entered into a formal maintenance agreement with the San Elijo JPA. The scope of the agreement ensures daily monitoring and inspection, startup and shutdown of the facility as dictated by rain events, and preventative and regular maintenance. In FY 2007-08, over $10,000 was spent on the preventative and regular maintenance of the facility including roof repair, pump replacement, control screen and software updates, and other electronic equipment and parts. The UV treatment facility provides the City with a vital treatment function, and ongoing operations and maintenance activities are critical to ensure optimum performance and pollutant removal.

A complete report of all MS4 operation and maintenance activities can be found in Appendix C-2.

Table 4-2
Storm Drain Inserts Inventory

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
2	24" X 45"		In right driveway apron @ 1470 Neptune Ave.	Grate
4	24" X 40"		AC From 1638 Neptune in grass shoulder	Grate
5		9'	1786 1/2 Highway 101	Curb
6	24" X 41"		1650 Highway 101	Grate

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
7	23" X 40"		Alley West of Hwy 101, North of Jasper	Grate
8	24" X 41"		Alley West of 101, Behind 918 N. 101	Grate
10	24" X 41"		Leucadia Blvd. North of Park @ Hwy 101	Grate
11	23" X 40"		In Alley behind 828 Hwy 101	Grate
12	23" X 40"		Behind building. @828 Hwy 101	Grate
13	23" X 40"		Alley West of 101 @ Europa	Grate
14	23" X 40"		129 Cadmus	Grate
15	23" X 40"		149 Basil St.	Grate
16		10'	130 Basil St.	Curb
17	23" X 40"		130 Athena	Grate
18		9'	170 Athena	Curb
19	23" X 40"		577 N. Vulcan	Grate
20		4'	Across from208 Cereus	Curb
21	23" X 40"		208 Cereus	Grate
22	23" X 40"		321 Union	Grate
23	23" X 40"		Across from 321 Union	Grate
24		7'	1750 Hwy 101	Curb
25	24" X 40"		Alley West of 2nd St. @ G St.	Grate
26	36" X 64"		364 2nd St.	Grate
27		10'	Encinitas Blvd. NE Corner @ Hwy 101	Curb
28		11'	102 Encinitas Blvd.	Curb
29		7'	Santa Fe South side, 120 yards. West of I-5	Curb
30		8'	Santa Fe, North side, 120 yards. West of I-5	Curb
31	24" X 40"		2560 Manchester	Grate
32	24" X 40"		2582 Manchester	Grate
ECR-1			Intersection of Via Molena & El Camino Real	Curb
ECR-2			Mountain Vista & El Camino Real	Grate

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
ECR-3			El Camino Real (in front of Circuit City Mall)	Curb
ECR-4			Garden View Rd./El Camino Real (East side)	Combo
ECR-33			El Camino Real/Garden View Rd., SE corner	Curb
ECR-34			El Camino Real/Garden View Rd. SW Corner	Curb
ECR-35			El Camino Real (across from Circuit City mall)	Grate
ECR-8			In front of 294 El Camino Real	Grate
ECR-9			El Camino Real in front of Block Buster Video	Curb

In 2007-2008, the Engineering Department was instrumental in conceptualizing and designing capital improvement projects to reduce future sewage spills by improving both the wastewater collection and the storm drain system. Sewer and emergency repair projects initiated during FY 2007-08 are shown below in Table 4-3.

Table 4-3
Wastewater CIP Projects

Project Title	Budget	Goal	Status
Olivenhain Sewer Pump Station	$ 4.5 M	Reduce sewage spills and increase capacity	In preliminary design

The Engineering Department was also instrumental in designing numerous drainage related capital improvement projects during the fiscal year. These projects are outlined in Table 4-4 below.

Table 4-4
Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Stratford Knoll Drainage Improvements	$1 M	Replace existing storm drain channel and increase capacity.	In design

Urania Ave. and Windsor Dr. Storm Drain Improvements	$ 200,000	Replace old pipe with new reinforced concrete pipe and add new catch basins to eliminate future flooding.	In design
Project Title	**Budget**	**Goal**	**Status**
Cardiff Alley Improvements	$200,000	Build a perforated sub-drain to improve drainage in area.	In design

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City of Encinitas conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.5.2 SOURCE CHARACTERIZATION

The City maintains approximately 120 miles of public sanitary sewer collection pipes.

4.5.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.5.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction and new development. In FY 2007-08, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and

emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.5.3.2 Additional Controls for Municipal Areas and Activities

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program that minimizes sanitary sewer overflows (SSO) and is described in more detail below.

4.5.4 Program Implementation

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediating existing sewer lines as necessary, and proper disposal of hazardous waste.

4.5.4.1 Maintenance

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2007-08, the entire sewer system was cleaned, and known trouble spots were cleaned on a more frequent basis. The City seeks to reduce and eliminate the amount of seepage from the sanitary sewer system to the MS4 through routine preventative maintenance of both the sanitary sewer and the MS4 systems. Preventative maintenance of both systems allows City officials to detect and eliminate active seepage points before they become a larger problem, and also to repair areas of the system that have a high possibility of becoming a seepage point.

In FY 2007-08, the City took the following measures to reduce the seepage from the sanitary sewer system to the MS4:

- Flow metering was conducted at specific locations throughout the City's sanitary sewer system to monitor flow depths and potential capacity concerns
- Use of video cameras in sewer lines to check pipe conditions
- Rehabilitation program for aged sewer pipes and use of polyvinyl chloride (PVC) pipes for new construction

Other notable activities include the development of a Sewer System Management Plan (SSMP), which is a program to ensure that the sewer system is functioning properly, and that necessary maintenance is conducted. Full implementation of the SSMP is required by May 2009. The SSMP will include a spill response plan that establishes standard procedures for immediate response to a sanitary sewer system overflow (SSO). City personnel are trained in detecting, reporting, and responding to SSOs.

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.6.2 SOURCE CHARACTERIZATION

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- Power washing, including graffiti removal
- Street and sidewalk repair and maintenance
    - Street striping/painting
    - Pothole repair
- Landscape maintenance

4.6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.6.3.1 UPDATED BMP REQUIREMENTS

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities discussed above. In FY 2007-08, the City established minimum BMPs which were described in the City's 2008 JURMP Update. The JURMP Update directs city staff to utilize the City's BMP Manual Part I and the CASQA Municipal Handbook to choose applicable BMPs to implement for municipal areas and activities, including mobile activities. BMPs similar to those implemented for the management and maintenance of parks and landscaped areas are implemented for landscape maintenance in landscaped City right-of-way areas such as medians.

4.6.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined to be necessary. Presently, City related mobile activities have not been determined to be a source of pollutants for which water bodies within the City are on the 2006 CWA 303(d) list. Present BMP implementation activities have been evaluated as effectively reducing pollutant discharge to all receiving waters in the City to the MEP.

4.6.4 PROGRAM IMPLEMENTATION

In FY 2007-08, City field crews were actively trained to implement BMPs during all mobile activities. The Public Works Department received training from the Clean Water staff to discuss storm water BMPs on August 2, 2007 and the Public Works Department also initiated their own spill prevention training on May 8, 2008. City field crews were trained to properly contain, control, and capture any discharge that was generated by a mobile activity. City field crews were also trained to use mobile equipment properly to ensure all wastewater is collected and that the equipment continues to function properly.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City of Encinitas hosts a variety of special events in the City. These events included festivals, fairs, events for various charitable causes, and special occasions. Special events have the potential to generate significant trash and litter caused by the patrons and activities of the special event. The City utilizes many of the controls listed in the Municipal Permit (D.3(2)(f). These BMPs are described in more detail below and are implemented during and/or after special events, where applicable.

4.7.2 SOURCE CHARACTERIZATION

The City hosts a variety of special events which are located throughout the City at parks, beaches, and along Pacific Coast Highway 101.

4.7.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.7.3.1 UPDATED BMP REQUIREMENTS

In FY 2007-08, the City considered and implemented many of the controls specific to special events as listed in the Municipal Permit (D.3(2)(f). The City has chosen the following BMPs as most effective and efficient for City needs.

Before any special event permits are approved, applicants must fill out the City's "Special Events Permit P2 Questionnaire" (Appendix C-4) to assess the most appropriate BMPs for their event. In addition to the BMPs that are implemented by the applicant, the City of Encinitas implements the following BMPs during and/or after special events, where applicable.

- Proper management of trash and litter, including temporary trash receptacles for trash
- Street sweeping following the special event
- Post clean-up activities, such as catch basin cleaning, when necessary
- Other BMPs, as included in the Municipal Permit, when deemed necessary by City personnel

The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.7.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary. Presently, special events have not been determined to be a significant source of pollutants for which water bodies within the City are on the 2006 CWA 303(d) list.

4.7.4 PROGRAM IMPLEMENTATION

In FY 2007-08, there were 15 special events. For each special event, the event sponsor was required to fill out a City of Encinitas special events permit application to identify the storm water BMPs they were going to implement. At a minimum, these events were required to provide extra trash and recycling containers, proper disposal of grease if food preparation was involved, and proper secondary containment for port-a-potties.

During the events, City personnel were encouraged to ensure that the event remained free of illegal discharges and/or illicit connections to the MS4. City personnel were made available for the duration of the special events for immediate trash removal and to notify the appropriate personnel if a problem was observed.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4. The City of Encinitas has implemented a program that aims to reduce and prevent industrial and commercial pollution discharges from the MS4 to the MEP, to protect local receiving water bodies, and to comply with the Municipal Permit.

Commercial facilities within the City of Encinitas include a wide range of service oriented businesses from restaurants to nurseries. There are five main commercial areas within the City. The largest areas are downtown Old Encinitas and the Leucadia business district, along Highway 101 from Swami's Beach to La Costa Boulevard. This area contains many different commercial businesses ranging from restaurants to automotive outlets and is the oldest portion of Encinitas. Three industrial facilities are also located in the City: the San Dieguito Union School District school bus terminal, the San Elijo Water Pollution Control Facility, and the inactive Encinitas Landfill.

Throughout the last FY the City's Clean Water staff has worked diligently to fulfill the requirements of Order 2001-01 and the new Order 2007-0001. The City's JURMP was updated and submitted the Regional Board in March 2008 and the City initiated conformance to Order 2007-0001 in January 2008. During the process of updating the City's JURMP the City's GIS-based commercial inventory was updated and prioritized based on the new requirements of Order 2007-0001. The City's FY 07-08 commercial and industrial facility inspections were based on this new prioritization scheme and the new inspection frequencies outlined in Order 2007-0001. Inspections, follow-up, and enforcement actions were tracked using CityWorks, the City's existing GIS-based Work Order tracking system. In addition, the City participated in the regional development of a program to regulate mobile commercial businesses. The following section will demonstrate the City's successful implementation of the requirements of the Industrial and Commercial Section of Order 2007-0001 (Section D.3.b) during FY 2007-08.

5.2 INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The Clean Water Program emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Municipal Permit.

For the rest of Section 5.2, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial site/sources component is described in Section 5.3.

5.2.2 SOURCE CHARACTERIZATION

A watershed-based inventory of the industrial and commercial sites/sources within the City's jurisdiction was compiled as part of the 2008 JURMP update. As required by the Municipal Permit, the inventory includes the following information for each site/source: facility name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired); and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. Inventories of industrial and stationary commercial facilities within the City of Encinitas are included in Appendix D-1. Because mobile commercial businesses do not have a fixed address at which they operate, they are tracked within a separate, non-spatial database (refer to Section 5.3).

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. The GIS department and the Clean Water Program both receive a monthly summary of new and renewed business registrations from the City Clerk's Department. Upon receipt of the monthly summary, a GIS Analyst updates the spatial facility database, and a Clean Water Program staff member updates the storm water inspection information for each business. In addition, the Clean Water Program identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered with the City. When this occurs, these facilities are added to the inventory. Additionally, when Clean Water staff conducts annual commercial and industrial inspections, inspectors have the opportunity to identify new or closed businesses and update the inventory with these findings.

FY 2007-08 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the JUMRP update and transition to complying with the new Municipal Permit a new process to determine high priority facilities was formalized using GIS and put into effect in January of 2008. Section 5.2.4.1 provides a detailed description of the City's prioritization process for commercial facilities. As a result of this process, there were **92** commercial facilities identified and inspected as high priority. Types of high priority facilities were broken down as follows: (1) animal facility, (8) auto repair shops, (68) eating/drinking facilities, (9) gas stations, and (6) nurseries/greenhouses. Notably, the City of Encinitas' commercial inventory is dominated by eating/drinking facilities as well as a large number of greenhouses and nurseries. As such, it is worth noting that the commercial facilities/businesses in the City are dynamic, with changes happening often. Therefore, the City is constantly working to maintain and prioritize the commercial facilities inventory to dictate effective and efficient commercial inspection actions citywide.

Three industrial facilities are located in the City of Encinitas. All three facilities are covered under the State General Industrial Permit. The industrial inventory is included as Appendix D-

2. The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The second industrial facility in the City of Encinitas is the SDUHSD-Transportation Cooperative. The facility is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The third industrial facility is the Encinitas Landfill, owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected by the City of Encinitas, and the Encinitas Landfill is inspected by the County. Completed industrial facility inspection forms are available upon request.

As part of the 2008 JURMP update and the development of the interim SUSMP, the City collaborated with copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-1 lists the pollutants that may be generated by each category of business. The pollutants that may be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in Appendix D-1 with the category in Table 5-1 and its corresponding pollutants. Waste Discharge Identification Number (WDID) is also included for sites that are covered under the State of California Industrial General Permit (General Industrial Permit). The TTWQ prioritization of each facility is also included in the inventories. Prioritization was assigned via the process described in Section 5.2.4.1.

As required by Section D.3.b(1) of the Permit, all industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair, or painting
- Mobile automobile or other vehicle washing[1]
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling

[1] Mobile commercial businesses are discussed in more detail in Section 5.3.

Table 5-1
Pollutant Loading Potentials of Industrial and Commercial Sources

Site/Source Type	Heavy Metals*	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Body Repair	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair/Maintenance	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical Garden	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Mobile Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	PO	L	L	PO	PO	PO
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nursery/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Auto Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Mobile Auto Washing	PO	L	PO	PO	UL	UL	PO	UL	PO
Contractor (Mobile)	PO	PO	PO	PO	UL	UL	PO	UL	PO
Handyman (Mobile)	UL	PO	PO	UP	UL	UL	PO	UL	PO
Landfill	PO	PO	PO	L	PO	PO	L	L	L
Wastewater Treatment	UL	UL	L	PO	UL	L	L	L	PO

Notes

L = Likely, PO = Possible, UL= Unlikely

* Heavy metals are a possible pollutant for any facility that has a parking lot.

This table is based on the field experience of D-MAX Engineering and on tables in the Copermittees' Baseline LTEA. D-MAX has conducted more than 1,000 industrial and commercial inspections during which it assessed the pollutant discharge potentials of the inspected facilities.

- Pest control services
- Eating or drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning[1]
- Cement mixing or cutting[1]
- Masonry[1]
- Painting and coating[1]
- Botanical or zoological gardens and exhibits
- Landscaping[1]
- Nurseries and greenhouses
- Golf courses, parks, and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning[1]
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services[1]

Both Industrial and Commercial facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e., within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA).
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.2.3.1 UPDATED BMP REQUIREMENTS

As required by section D.3.b.(2) of the Permit, during the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sites and incorporated these into the City's BMP Manual. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's BMP Manual. The BMP Manual can be accessed through the Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP and

implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are based on a review of the site's SWPPP and site inspections.

5.2.3.2 ADDITIONAL CONTROLS

As required by section D.3.b.(2)(e), the City of Encinitas requires the implementation of additional controls for industrial and commercial sites and sources that are 1) tributary to CWA Section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired) or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

Clean Water Program staff utilizes a geographic information system to maintain the commercial and industrial inventory and has the ability to spatially locate facilities relative to receiving waters and ESAs. Clean Water inspection staff are provided a hard copy map to use as a field reference to make appropriate determinations in consideration of these factors. Clean Water Program staff prescribed additional controls during inspections of commercial and industrial facilities, as needed, depending on the proximity of the facility to the water body and the observed potential of the site to be a significant source of pollutants that may threaten the downstream water body as necessary and appropriate.

5.2.4 PROGRAM IMPLEMENTATION

This section describes the steps employed by Clean Water Program staff to require and verify the implementation of designated BMPs for stationary industrial and commercial sources. During FY 2007-08, the City of Encinitas updated its industrial and commercial program as required by the new Municipal Permit; provided education and outreach through inspection actions so that regulated businesses were aware of the City's storm water requirements; inspected inventoried businesses to evaluate compliance with established minimum BMP requirements and the local stormwater ordinance; and took enforcement action as necessary to bring violators into compliance.

5.2.4.1 INVENTORY PRIORITIZATION

Since the new Municipal Permit no longer requires industrial and commercial facilities to be prioritized as high, medium, or low priority, during the 2008 JURMP update, the City prioritized both industrial and commercial businesses as either high priority or non-priority.

As required by section D.3.b(1)(b), when evaluating threat to water quality, the City of Encinitas considered the following attributes of each industrial and commercial business to determine priority or non-priority status:

i. Type of activity (SIC code);
ii. Materials used at the facility;
iii. Wastes generated;

iv. Pollutant discharge potential;
v. Non-storm water discharges;
vi. Size of facility;
vii. Proximity to receiving water bodies;
viii. Sensitivity of receiving water bodies;
ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
xi. Facility design;
xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
xiii. The facility's compliance history; and
xiv. Any other relevant factors.

Although not specifically required by the new Municipal Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City's GIS data management system was used to prioritize commercial businesses based upon the following spatially referenced TTWQ criteria:

- proximity to a 303(d) listed water body
- pollutant potential of the facility type
- stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. For example, if the facility is tributary to the San Elijo Lagoon and received a Notice of Violation from the City in the past, the facility would be considered high priority based upon the additional criteria that the City has established in determining TTWQ. In addition, if during the City's commercial inspection process or based on institutional knowledge, it was determined that additional sites that would otherwise have a lower priority should be classified as high priority industrial or commercial facilities based on the Permit criteria, they were noted as such in the inventory and inspected as required.

The City's commercial inventory was updated and prioritized during the 2008 JURMP update and will be prioritized a least once per year prior to conducting annual inspections.

As a result of the City's threat to water quality analysis during the 2008 JURMP update, approximately 23% of the industrial and commercial facilities were identified as high priority. The identified high priority facilities generally included all three industrial facilities and many of the City's restaurants and auto repair shops. For a complete list of prioritized facilities refer to Appendices D-1 and D-2.

5.2.4.2 INSPECTION FREQUENCY

FY 2007-08 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the

JURMP update and transition to complying with the new Municipal Permit a new process to determine high priority facilities was formalized using GIS and put into effect in January of 2008. To determine which industrial and commercial sites were inspected in FY 2007-08, the following steps were taken:

1. Confirm that the current industrial and commercial inventories are up-to-date
2. Prioritize each facility based on the prioritization process described in section 5.2.4.1 of this document
3. Review the list of facilities that were inspected the previous year
4. Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with standards established in section D.3.b.(3)(b) of the Permit, in FY 2007-08, the City inspected over 50 percent of all the stationary industrial and commercial facilities inventoried as high TTWQ and over 20 percent of all stationary inventoried sites. Consistent with the Permit, mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Municipal Permit were met.

During the 2008 JURMP update, the City identified the businesses that would be inspected as part of the 2007-08 reporting year. At that time, the City's industrial and stationary commercial inventories included a total of **405** facilities, of which **93** facilities were identified as having a high TTWQ (**91** stationary commercial facilities and **two** industrial facilities[2]). Rounding to the nearest whole number, 20 percent of the stationary industrial/commercial inventory would be 81 sites, and 50 percent of the high TTWQ facilities would be 47 sites.

During the first year of implementation, the City planned to inspect and complete inspections for all high priority facilities identified on the industrial/commercial facility inventory. During FY 2007-08 City of Encinitas stormwater inspectors actually conducted **two** industrial and **167** commercial site inspections, of which **93** were high priority facilities. Therefore, the City of Encinitas went well beyond the minimum inspection requirements and inspected **100 percent** of all the high TTWQ facilities and **41 percent** of all stationary sites in the industrial commercial facility inventory.

5.2.4.3 ROUTINE FACILITY INSPECTIONS

As required by section D.3.b.(3) of the Permit, commercial and industrial facilities in Encinitas are routinely inspected by the City's Clean Water Program staff. Inspections are intended to:

- identify facilities that are not in compliance with the City's Storm Water Management Ordinance and the Municipal Permit;

[2] The Encinitas Landfill is regulated and inspected by San Diego County.

- provide facilities with information regarding the City's Clean Water Program;
- provide guidance in complying with storm water regulations (City's Storm Water Management Ordinance, Municipal Permit, etc.); and
- validate and manage the inventory.

During FY 2007-08 City of Encinitas stormwater inspectors conducted **2** industrial and **167** commercial site inspections for compliance with its ordinances, permits, and this Order. All inspections included, as applicable:

i. Review of BMP implementation plans, if the site uses or is required to use such a plan;
ii. Review of facility monitoring data, if the site monitors its runoff;
iii. Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
iv. Assessment of compliance with Copermittee ordinances and permits related to urban runoff;
v. Assessment of BMP implementation, maintenance and effectiveness;
vi. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
vii. Education and training on storm water pollution prevention, as conditions warrant.

Based on the results of each site evaluation, the City's inspectors completed a City of Encinitas Storm Water Quality Inspection Form, a blank copy of which is included as Appendix D-3. Since restaurants have such unique pollutant sources, the City of Encinitas also maintains and utilizes a restaurant-specific Storm Water Quantity Inspection Form, a copy of which is included as Appendix D-4. Each of these forms allows the inspectors to document the above listed inspection steps, as applicable, to determine full compliance.

Inspectors generally work with site contacts to provide examples of BMP solutions that could be implemented. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the inspector is at the site. The responsible party is always provided a copy of the inspection findings after the inspection.

For a complete summary and confirmation that the designated BMPs were implemented (or required to be implemented) for industrial and commercial sites inspected in FY 2007-08 see the routine inspections summary in Appendix D-5. This summary table describes, in detail, actions taken by inspectors to confirm or require that BMPs were implemented at each industrial and commercial site inspected. In addition, this table and the associated inspection forms completed for each routine inspection confirms that all inspections conducted in FY 2007-08 addressed all the required inspection steps.

Inspection Tracking

Complaint and inspection documentation is filed in the City's GIS database and is kept up-to-date on a regular basis. The GIS database is also used to track the number of inspections conducted for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that sites/sources are inspected at least the minimum frequencies listed in section D.3.b.(3)(b) and D.3.b.(3)(c) of the Municipal Permit. Clean Water Program staff also has the ability to reference the inspection data in the GIS to assist in preparing for annual inspections, follow-up inspection, or IDDE investigations.

Third Party Inspections

All commercial inspections conducted in FY 2007-08 were completed by City of Encinitas Clean Water Program staff. The City has one full-time stormwater inspector (and three backup inspectors) dedicated to conducting routine commercial and industrial inspections and following up on stormwater complaint calls. A third party was not employed to conduct inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting storm water compliance inspections and enforcement of industrial and commercial facilities are trained regularly on inspection and enforcement procedures, BMP implementation, and assessment of monitoring data. City inspectors attend available workshops for inspectors, and the inspectors regularly receive training through staff meetings and direction from the Clean Water Program Manager. Further, Clean Water staff actively collaborate with inspection staff throughout the region to share methodologies and approaches that may be beneficial region wide.

Inspection Follow-up and Enforcement

Clean Water Program staff conducted follow-up inspections at all facilities that were directed to implement corrective actions. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. A total of **107** follow-up investigations were conducted as part of the 2007-08 routine inspection program. Depending on the severity of the infraction requiring corrective action, inspectors may elect to issue a Notice of Violation and/or monetary citation. For more information regarding enforcement of industrial and commercial facilities see section 5.2.4.5 of this document.

5.2.4.4 NOTIFICATION

As required by section D.3.b.(2)(c) of the Permit, the City of Encinitas will notify each inventoried industrial or commercial business of the City's updated BMP requirements that are applicable to the site/source. Notification will occur within the first three years of implementation of the updated JURMP. During FY 2007-08, the City initiated notification as part of routine facility inspections. All industrial and commercial facilities inspected in FY 2007-08 were notified of the BMP requirements applicable to their site/source. City of Encinitas stormwater inspectors conduct thorough inspections with the owner/operator of each facility. During each inspection the stormwater inspector discusses the applicable BMP requirements in detail with the owner/operators.

5.2.4.5 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all commercial and industrial facilities as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2007-08, there were 99 stationary commercial and zero industrial ICID complaint calls. Eight (8) of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **91** stationary commercial complaint investigations conducted, **19** resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In FY 2007-08, **24** follow-up investigations, **18** Notices of Violation, **six** citations, and **one** cost recovery bill were issued as a result of complaint investigations. In addition, of the **167** routine inspections performed in FY 2007-08, **107** follow-up investigations were conducted and **eight** Notices of Violation were issued in order to confirm that BMPs were installed and/or verify that compliance was achieved.

A summary of the commercial complaints, violations, and enforcement actions occurring in FY 2007-08 is available for review in Appendix H-1. The routine inspection summary (Appendix D-5) documents details of the eight NOVs issued during routine inspections. The tabular summaries include a brief discussion, which includes the follow-up actions, taken for each violation. Both tables demonstrate that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in each table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

For more detail regarding complaint investigation procedures, refer to Section 7, Illicit Discharge and Detection Elimination.

Reporting of Industrial Non-Filers

The City of Encinitas did not identify any industrial sites that may require coverage under the General Industrial Permit but which, to the City's knowledge, did not file NOIs.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City of Encinitas and do not maintain a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 SOURCE CHARACTERIZATION OF MOBILE SOURCES

The mobile businesses known to operate within the City's jurisdiction are listed on an inventory separate from the stationary commercial inventory in Appendix D-6. This inventory was comprehensively reviewed and updated during FY 2007-08 as a part of the update of the City's JURMP. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades
  - Cement mixing or cutting
  - Masonry
  - Painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile businesses that the City determines to have a significant threat to water quality will be added to the inventory. Because not all mobile businesses have obtained business licenses in the City or have a base of operations outside the City, Clean Water Program staff is continually refining and updating the mobile commercial inventory. Sources for such inventory updates include reported incidents, general observations by City staff, and available business licenses. In addition, the City will participate in the development of a regional inventory and/or tracking system for mobile businesses.

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 UPDATED BMP REQUIREMENTS FOR MOBILE SOURCES

All BMPs required for stationary sources, described in Section 5.2.3.1 of this document and listed in detail in the City's BMP Manual, are also required for mobile businesses, where

applicable. The most important BMPs for most mobile businesses are typically those that address non-storm water discharge control and spill prevention, control, and cleanup.

5.3.3.2 ADDITIONAL CONTROLS FOR MOBILE SOURCES

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. If the City finds that the activities of a mobile business are contributing pollutants of concern to a CWA section 303(d) impaired water body segments or are negatively impacting ESAs, additional controls will be required for those activities as applicable. Further, if the City has reason to believe that any mobile business is generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more regularly visit those areas and/or take other actions to address the illegal discharges.

5.3.4 PROGRAM IMPLEMENTATION

5.3.4.1 EDUCATION/OUTREACH AND NOTIFICATION OF MOBILE SOURCES

The City of Encinitas will provide information and outreach regarding storm water quality to mobile business owners and operators. Businesses will be given educational materials outlining pollution prevention methods and other related BMPs if businesses are found to be in violation of the City's storm water ordinance or Municipal Permit. Clean Water staff will also give recommendations to businesses, where appropriate.

Because the mobile businesses program is a new element of the industrial and commercial program for this revised JURMP, it is anticipated that some mobile businesses are not aware of storm water requirements and that education will be a significant portion of the program. The educational program is described in more detail in Section 8 of this document.

The City of Encinitas will coordinate with the regional Education and Outreach Workgroup to notify the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three (3) years of implementation of the updated JURMP.

5.3.4.2 INTER-JURISDICTIONAL COOPERATION

During FY 2007-08, the City of Encinitas participated with other Copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

A consultant may be hired to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this

strategy. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

5.3.4.3 INSPECTIONS

The inspections for mobile businesses generally follow the same procedure described in Section 5.2.4.3 of this document. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, Clean Water staff work directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.3.4.4 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to section 5.2.4.5.

In FY 2007-08, there were **15** mobile commercial ICID complaint calls. Of the fifteen mobile complaint investigations conducted, **five** resulted in dissemination of educational information to the homeowner or resident. In FY 2007-08, **eight** Notices of Violation and two citations were also issued as a result of complaint investigations. Refer to Table 5-2 for a summary of the mobile commercial complaints and associated enforcement actions.

A detailed list of the commercial complaints, violations, and enforcement actions occurring in FY 2007-08 is available for review in Appendix H-1. This table includes complaint response to discharges from mobile businesses, and discusses each violation and the follow-up actions taken. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

For more detail regarding complaint investigation procedures, refer to Section 7.

Table 5-2
Enforcement Actions Taken as a Result of
Mobile Commercial Discharges in FY 2008-09

Work Order	Complaint Location	Mobile Business Type	Enforcement Action(s)
68189	170 Calle Magdalena	Auto Detailing	Education, NOV
41556	172 Neptune Ave	Pressure Washing	NOV
53405	102 Leucadia Blvd	Janitorial Service	Citation, NOV
68040	336 Encinitas Blvd	Auto Detailing	No discharge found
68166	322 Encinitas Blvd	Auto Detailing	Citation, Education
68220	328 Encinitas Blvd	Auto Detailing	No discharge found

45871	1409 San Elijo Ave	Painting	Education, NOV
52932	143 W D St	Janitorial Service	No discharge found
74747	1916 Leucadia Scenic Ct	Landscaping	Education, NOV
52700	200 Saxony Rd	Home Maintenance	No discharge found
53473	3505 Manchester Blvd	Catering	No discharge found
68227	829 Requaza St	Pool Repair	NOV
53400	Calle De Madera and Hygeia Ave	Home Maintenance	No discharge found
53963	125 N El Camino Real	Carpet Cleaning	Education, NOV
54116	946 Woodgrove Dr	Pet Grooming	NOV

6.0 RESIDENTIAL

6.1 INTRODUCTION

Approximately 80 percent of the City's 19.4 square mile area is designated as residential in the City's General Plan map. Residential land use comprises a large area of the City, and residential activities can have a considerable effect on the water quality of receiving waters. The City's residential component of the Clean Water Program aims to reduce pollutant runoff from residential areas and activities to the MEP.

The overall goal of the Program is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 07-08 that contributed to the successful implementation of the City's Residential Component.

6.2 SOURCE CHARACTERIZATION

This section identifies the high threat to water quality residential areas and activities that were focused on during FY 2007-08. The new Municipal Permit (Order R9-2007-0001), which went into effect on January 24, 2008, requires each Copermittee to identify and provide a list of the residential areas and activities within its jurisdiction that have been identified as having a high threat to water quality. The high threat to water quality areas and activities within the City of Encinitas were identified during the 2008 JURMP update process and are described in detail in City's 2008 JURMP. The following section will briefly summarize this process.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

In consideration of the minimum required *high threat to water quality* residential activities listed in section D.3.c.(1) of Order R9-2007-0001, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

Section D.3.c.(1) of Order R9-2007-001, requires that Copermittees identify all *high threat to water quality* residential areas. During the 2008 JURMP update, the City identified *high threat to water quality* residential areas using the following criteria (as defined in the Municipal Permit):

- Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in Attachment C of the Municipal Permit).

The City of Encinitas has several Section 303(d) impaired water bodies and coastal lagoons within or directly adjacent to the City's boundaries. The 303(d) impaired water bodies within the City of Encinitas include Cottonwood Creek, Encinitas Creek, Escondido Creek, San Elijo Lagoon, and the Pacific Ocean at Moonlight State Beach and the San Elijo Lagoon Outlet.

Based on the definition in Attachment C of the Municipal Permit, Environmentally Sensitive Areas within the City of Encinitas include those areas identified as Natural Resource Sensitive areas in the City's General Plan and the City's Wetland buffer layer. The City does not contain any Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, or areas designated as preserves in the Multi Species Conservation Program.

In the process of drafting the Regional Residential Education Program, the Regional Outreach Workgroup identified the major pollutants of concern from residential sources for the San Diego region. The major pollutants of concern for residential areas include: bacteria, nutrients, sediment, pesticides, and trash.

In consideration of identified 303(d) listed water bodies, the City's ESAs, and the primary pollutants of concern, Clean Water Program staff employed GIS analysis to determine the location of *high threat to water quality* residential areas. Based on this analysis the following residential areas within the City of Encinitas were identified as *high threat to water quality* residential areas:

- All residential areas within 500 feet of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to, or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

Appendix E-1 includes a map of residential areas. The map that was developed for Clean Water Program staff to utilize in the office and in the field when identifying residential discharges or activities which could pose a threat to water quality due to their proximity to receiving water bodies and ESAs.

6.2.3 EVALUATION OF OVERSIGHT OF RESIDENTIAL AREAS AND ACTIVITIES

The City of Encinitas is planning to conduct a formal evaluation of the methods used for oversight of residential areas and activities during the permit cycle of Order No. 2007-0001. The

evaluation will coincide with the City's effectiveness assessment for the Residential Component. Since the methods used for residential oversight were recently updated within this last fiscal year (as part of the 2008 JURMP update), City staff determined that it would be most appropriate to evaluate the success of these methods in subsequent fiscal years.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

This section describes the updates made to the City's minimum BMPs that were implemented during FY 2007-08. The minimum BMPs for residential *high threat to water quality* activities were established in the City's 2002 JURMP. As part of the City's 2008 JURMP update, the minimum BMPs were reviewed and updated based on the requirements in the new Municipal Permit.

6.3.1 POLLUTION PREVENTION

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for *high threat to water quality* areas and activities.

6.3.2 LIST OF MINIMUM BMPS

As part of the City's 2008 JURMP update, the City designated the following minimum BMPs for *high threat to water quality* residential activities and activities. The minimum BMPs are primarily nonstructural and are targeted at activities specified in Section 6.2 as having a *high threat to water quality*. Pollution prevention methods were incorporated into this set of BMPs, where appropriate. The list of minimum BMPs can also be found in the City's Storm Water BMP Manual I. The manual can be accessed through the City's Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us.

(a) Automobile Repair and Maintenance

Pollution Prevention

(1) Employ routine preventative maintenance practices
(2) Reduce vehicle use, whenever possible
- Change driving habits
- Carpool
- Increase the use of public transportation
- Bike or walk for short trips

(3) Make timely vehicle repairs

Leaks and Spills

(1) Prevent leaks and spills from contacting stormwater
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter

- If working outdoors, don't work in the rain
- Immediately contain and clean up leaks and spills when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Properly manage and dispose of automotive wastes and materials
- Properly drain fluids from automobiles
- Dispose of wastes properly and lawfully and recycle used oil and antifreeze
- Store materials and wastes indoors or under cover
- Use secure and watertight containers when storing materials and wastes

(b) Automobile Washing

Management / Reduction* of *Wash Water

(1) Whenever possible, use commercial self-serve or full-serve car washes that properly dispose or recycle their wash water
(2) When washing a vehicle at a residence:
- Wash vehicles over porous surfaces (grass, dirt, etc.) whenever possible
- Use dry cleaning methods to avoid the generation of wash and rinse water
- Turn off the water when not in use or use a controllable spray nozzle
- Encourage the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Properly dispose of soapy water or bucket rinse water to the sanitary sewer or soak into a landscaped area
(2) Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing (e.g., remove grease or brake dust using towels, etc.)
(3) Refrain from degreasing or cleaning of engine parts in areas other than those designated for such purposes

(c) Automobile Parking

(1) Use routine preventative maintenance practices and make timely vehicle repairs to prevent leaks of automotive fluids
(2) Design and construct parking areas to minimize storm water impacts; covered garages should be plumbed to the sewer system

(d) Home and Garden Care Activities and Product Use

GARDEN AND YARD CARE

Pollution Prevention

(1) Use safe substitutes and alternative methods when gardening:
- Use integrated pest management techniques and biological controls
- Use native plants and drought tolerant species to reduce water use and green waste produced
- Implement planting techniques that attract beneficial insects
- Consider composting, vermiculture and yard waste recycling
- Recommend and encourage practical purchasing practices for pesticides and fertilizers
- Identify "pests" before attempting to eliminate them

(2) Always read label instructions and follow the instructions for garden care products
(3) Implement water conservation practices, whenever possible
(4) Consider xeriscape gardening, including: drip irrigation, soaker hoses, and micro-spray systems
(5) Repair and maintain irrigation systems to reduce excessive runoff
(6) Recycle lawn clippings and green waste through local programs
(7) Plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills

(1) Immediately cleanup spills of gardening chemicals, fertilizers and soils
(2) Return spilled materials to the container for future use or proper disposal

Materials and Waste Management

(1) Store lawn care products in closed labeled containers and in covered areas
(2) Refrain from using hazardous materials during windy or rainy days
(3) Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain
(4) Dispose of household chemicals to the household hazardous waste collection facility or scheduled drop-off events
(5) Utilize dry sweeping techniques for clean up

Restrictions on Activities

(1) Do not hose off paved surfaces to the street or gutter
(2) Do not dispose of hazardous waste to the trash, landfill or storm drain

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Utilize purchasing practices that reduce waste
(2) Use safe substitutes for home cleaning and maintenance
(3) Read and follow product labels
(4) Recycle unused or unwanted products
(5) Use water based paints when possible
(6) Recycle unwanted appliances and household equipment

Leaks and Spills

(1) Clean up hazardous materials spills immediately
(2) Properly dispose of waste from spill cleanup materials

Materials and Waste Management

(1) Store household hazardous materials in closed labeled containers and in a covered area
(2) Recycle latex paint through community programs
(3) Dispose of unwanted household hazardous waste through household hazardous waste collection facilities
(4) Dispose of trash in provided trash cans or shared dumpsters and keep dumpster and trash can lids closed when not in use

Restrictions

(1) Do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter or storm drain

***(e)* Disposal of Pet Waste**

Pollution Prevention

(1) Spay or neuter pets to reduce feral populations

Waste Management / Disposal

(1) Clean up after pets when walking them in public places
(2) If pets are allowed to defecate outside, clean up feces from yards
(3) Properly dispose of pet feces in the toilet or trash

Pet Management (Dogs and Cats)

(1) Whenever possible, do not allow pets to run free in residential neighborhoods

Manure Management (Horses and Other Large Animals)

(1) Properly manage manure (including the preparation of manure management plans when appropriate)
(2) Compost or properly dispose of manure
(3) Cover manure stockpiles with plastic tarp to prevent contact with rain

6.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2007-08 to require and verify the implementation of designated BMPs for residential areas and activities.

6.4.1 OUTREACH AND TRAINING

The City has a comprehensive Education Program, which is a component of the City's jurisdictional program. A significant element of this program consists of educating residents about ways in which they can minimize their impact on local waterways. Education of the

citizens who reside in the City of Encinitas contributes to the implementation of the Residential Component of the City's Clean Water Program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between MS4s and sanitary sewers
- Pollution prevention and safe alternatives
- Household hazardous waste collection and recycling
- BMP implementation and BMP maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment, and recovery
- Water conservation

During FY 2007-08, Clean Water program staff conveyed these messages to the public through a variety of mechanisms, including:

- Clean Water Program website
- Production and distribution of brochures and promotional items
- Public participation in community events, workshops, and trainings
- Presentations at local schools
- Media coverage
- Response to residential complaints (Clean Water Hotline or email)

Implementation of these mechanisms by the Clean Water Program helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the Clean Water Program can be found in the Section 8.

6.4.2 USED OIL AND HHW COLLECTION SERVICES

The City of Encinitas facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City offers its residents door-to-door home collection, two permanent collection facilities, and periodic, temporary collection events for all HHW. In addition, the City requires weekly curbside garbage, recycling, and yard waste pick-up for all residents. The various components of the solid waste and hazardous waste collection services provided by the City are described in detail below.

HHW Home Collection Program **-** Door-to-door home collection service is available to all residents of the City of Encinitas. Qualifying homebound, elderly, and disabled citizens may request pickup at no charge. Residents not qualifying for free pickup service are charged a nominal fee of $10 for home collection. Materials accepted via the HHW Home Collection Program include:

- **Household Cleaners:** Drain openers, oven cleaners, wood and metal polish / cleaners, toilet bowl cleaners, and disinfectants
- **Automotive Products:** Oil and fuel additives, grease and rust solvents, carburetor and fuel injector cleaners, air conditioning refrigerants, starter fluid, lubricating fluids, radiator fluids and additives, waxes, polishes, cleaners, and transmission additives
- **Home Maintenance and Improvement Products:** Paint thinners, paint strippers, adhesives, paints, stains, varnishes, sealants, and wood preservatives
- **Lawn and Garden Products:** Pesticides, herbicides, and fungicides (poisons)
- **Miscellaneous:** Batteries, fingernail polish removers, pool and photo chemicals

Poway and Vista Permanent HHW Collection Facilities - In an agreement with the Cities of Vista and Poway, residents of the City of Encinitas may also drop off household hazardous waste at the Vista or Poway collection centers. The Vista collection center is located at 1145 East Taylor Street, at Laguna Lane. The Poway collection center is located in the South Poway Business Park, at 12325 Crosthwaite Circle off of Stowe Drive. These regional, permanent collection centers are open every Saturday (except holiday weekends) from 9:00am to 3:00pm. No fee is charged to Encinitas residents and no appointments are necessary. Waste collected is separated, packaged, secured, and temporarily stored at the permanent facilities. It is then removed on a regular basis for proper recycling or disposal. Material accepted at the Poway and Vista facilities are the same as those accepted through the Home Collection Program.

Used Oil Recycling Program - The City's used oil recycling program consists of a network of certified automotive waste recycling centers throughout the city. These facilities accept a range of used automobile products including used oil, oil filters, batteries, and antifreeze. A significant part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through grants from the California Integrated Waste Management Board (CIWMB). A list of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Residents may also opt to use the City's door-to-door HHW collection service to recycle their used oil and oil filters. However, most residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities.

Trash and Recycling Services - For public health purposes, the City of Encinitas requires that all residents participate in the City's solid waste collection service. All residents and businesses are liable for payment of fees for the mandatory service (reference 11.20.010, paragraph A of the Municipal Code). Residential service includes curbside green waste collection and recyclable materials collection in addition to regular garbage collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste Recycling Services to provide solid waste collection services in Encinitas for both residential and commercial customers.

Detailed information regarding used oil, HHW, and solid waste disposal is made available to residents through the City's website, ECDO's website, and other various environmental websites. In addition, brochures about household hazardous waste disposal options are

available at outreach events staffed by the Clean Water Program, the Solana Center, and EDCO Waste Recycling Services. Brochures and information regarding HHW disposal are also available upon request at the City's main office.

Table 6-1 provides a summary of the used oil collected via the City's used oil recycling program. Table 6-2 identifies types and amounts of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 6-1

Used Oil Collected in FY 2007-08

Collection Type	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)
Certified Centers	13,424	2,485
Permanent HHW Centers	5,228	109
Total	**18,652**	**2,594**

Table 6-2
Household Hazardous Waste Collected in FY 2007-08

Material Type	Description	HHW Collection Facilities*	Door-to-Door Program*
Flammable	Flammable solid/liquid	5,441	10,185
& Poison	Bulked flammable liquids	3,333	0
	Oil-base paint	7,645	15,938
	Poison (excl. aerosols)	2,298	3,926
	Reactive and explosive	2	2
	Subtotal	**18,719**	**30,049**
Acid	Inorganic & Organic acid	738	1,244
Base	Inorganic & Organic base	612	1,127
Oxidizer	Neutral oxidizers, Organic peroxides	238	102
	Subtotal	**1588**	**2,473**
PCB-containing	PCB-containing paint	0	0
	Other PCB waste	0	0
	Subtotal	**0**	**0**
Reclaimable	Antifreeze	1,037	1,672
	Car batteries	0	0
	Latex paint	14,895	24,101
	Motor oil/oil products	4,357	5,947
	Oil filters	91	70
	Subtotal	**20,380**	**31,790**
Asbestos		308	241
Universal Waste (UW)	Mercury containing waste	2	2
	Thermostats/switches/thermometers	0	0
	Lamps	1,215	1,399
	Rechargeable batteries	154	101
	Household batteries	1,414	1,224
	Subtotal	*2,785*	*2,276*
Electronic Waste (UW)	SB20/50 video display devices	9,056	6,824
	Non SB20/50 video display devices	538	0
	Consumer electronic devices	11,310	7,815
	Subtotal	*20,904*	*14,639*
Aerosols (UW)	Non-empty aerosol containers	1,651	8,218
	Other	0	0
	All UW Subtotal	**1,651**	**8,218**
Other HHW	Home-generated sharps	0	0
	Pharmaceutical waste	0	0
	Compressed gas cylinder	402	312
	Non-UW aerosol containers	0	0
	Treated Wood	0	0
	Other	2,500	496
	Subtotal	**2902**	**808**
Grand Total		**45,548**	**73,579**

*Waste measured in pounds.

6.4.3 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by section D.3.c.(3) of the Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all residential areas and activities as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2007-08, there were **157** Residential ICID complaint calls in FY 2007-08. Thirty-four of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **123** residential complaint investigations conducted, thirty-two resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In addition to education, FY 2007-08 complaint investigations resulted in **23** Notices of Violation, **five** citations, and **one** cost recovery effort.

A summary of the residential violations and enforcement actions occurring in FY 2007-08 is available for review in Appendix H-1. The tabular summary includes a brief discussion, which includes the follow-up actions taken, for each violation. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

For more detail regarding complaint investigation procedures, refer to Section 7, Illicit Discharge and Detection Elimination.

6.4.4 REGIONAL RESIDENTIAL EDUCATION PROGRAM

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. This Plan contains recommended strategies for the development and implementation of the Regional Residential

Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-7.

The first major collaboration on a regional level was promotion of residential storm water BMPs at the San Diego County Fair. The Copermittees combined funds to pay for a Fair sponsorship, which included a booth display, materials distribution, signage, and advertisements at several locations in the fairgrounds throughout the duration of the fair. Booth staffers promoted the Think Blue message and presented storm water educational materials to all Fair attendees. Details of the educational messages and materials distributed at the Fair can be found in Section 8.3.4 of this annual report.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Encinitas will submit the entire FY 2007-08 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2008.

8.0 EDUCATION

8.1 INTRODUCTION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of storm water issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in storm water and urban runoff. The education component is primarily implemented by the Engineering Services Department, Clean Water Division.

The Municipal Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience.

(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The City performed a wide variety of storm water education activities during the FY 2007-08 reporting period. Education and outreach was preformed on three levels—Jurisdictional, Watershed, and Regional.

8.2 MUNICIPAL STAFF TRAINING

Public Works, Streets Division. A presentation was given to the Streets Division on August 2, 2007, by Clean Water staff to discuss storm water BMPs and address Clean Water Program regulations. There were nine attendees. Additional FY 2007-08 storm water training was provided to the Streets Division during regular weekly staff meetings on the following dates:

- January 10, 2008, Smart Cover Training (Large pumps & detection), 4 attendees
- May 8, 2008, NPDES Spill Prevention SC-11, 8 attendees
- June 6, 2008, NPDES Storm Water Training SC-43 (Parking/Storage Area Maintenance), 9 attendees

City of Encinitas Fire Department. Storm water training workshops were given to the Fire Department on three separate occasions within the defined reporting period of this report. On

October 1, 2007, 15 fire personnel were in attendance; 16 fire personnel attended the training on October 2; and 17 fire personnel were at the October 3 training. Fire Department personnel from all five Encinitas Fire Stations were invited to attend.

City of Encinitas Landscape Contractors. The City contracts with multiple landscaping companies to maintain our parks, beaches, and other public landscaped areas. In collaboration with the City's Parks and Recreation Department, landscaper training was given in Spanish to 31 City landscape contractors on November 6, 2007, and to 25 landscape contractors on March 11, 2008.

Engineering Department. In addition to regular stormwater related discussion topics, the Clean Water Program staff presented the "Clean Water Challenge" storm water training game during the June 2008, Engineering staff meeting. Topics included Low Impact Development, Priority versus Non-Priority SUSMP projects, proper construction BMPs, impaired water bodies, storm water violations, and potential sources of pollutants. Approximately 30 people were in attendance.

Clean Water Program, Engineering Department. Clean Water Program staff regularly attend trainings and workshops related to stormwater management. This fiscal year staff attended the following trainings/workshops:

- California Non-Point Source Conference
- HAZWOPER Refresher Course
- Confined Space Training

In addition to formal training, Clean Water Program staff are regularly informed of new water resources regulations and storm water science and technology through regional meetings and coordination, subscription to relevant scientific journals, and individual research.

8.3 EDUCATIONAL OUTREACH

This section describes education efforts conducted for each target community during FY 2007-08.

8.3.1 UNDERSERVED TARGET AUDIENCES, HIGH-RISK BEHAVIORS, AND "ALLOWABLE" BEHAVIORS AND DISCHARGES

Underserved Target Audiences - Bilingual Education

For those that work in the City, and for segments of the community that do not speak English as their first language, the City provided bilingual (English/Spanish) brochures at all outreach events. The Clean Water Program utilized the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures include information about Best Management Practices for Yard and Garden Care, Restaurants, Home Improvement, Pesticides, Developers, and Automotive Care. Further, the bilingual Clean Water staff provided training and responded to complaint calls as needed in various community sectors.

High Risk Behaviors - Regional Mobile Business Outreach and Education Plan

During FY 2007-08, the City of Encinitas participated with other copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees chose to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory development and maintenance;
- Establishment of minimum BMP requirements; and
- Outreach and education (including business notifications).

A consultant may be hired to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

8.3.2 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to the new development and construction communities.

- "A Pollution Prevention Guide for the Construction Industry" was distributed at public events, to engineering construction inspectors, the building department, and displayed at the City of Encinitas Engineering counter for the public. Three hundred were disseminated during the 2007-08 fiscal year. This brochure was developed as part of the Carlsbad Watershed Urban Runoff Management Plan workgroup (Appendix F-2).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by Engineering Department inspectors. Storm water topics discussed include the required construction site BMPs, post-development BMPs and SUSMP requirements.
- Construction inspector storm water coordination. Staff from the Clean Water Program attended weekly inspector staff meetings to provide support and information to the City's construction inspectors.
- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers – Simple and Cost Effective Ways to Comply with Storm Water Regulations" (Appendix F-3). The brochure is available in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In September 2007, the City mailed 127 letters to local developers and contractors regarding BMP requirements for the upcoming rainy season (Appendix B-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into the annual Erosion Control letter that went to contractors, developers, and job superintendents.

- The City of Encinitas co-sponsored a three-session training seminar through the Building Industry Association of San Diego County on November 6, November 8, and November 13, 2007. Topics included preparation of a SWPPP and sampling program, SWPPP implementation and compliance techniques, and the new draft preliminary construction storm water permit.

8.3.3 COMMERCIAL/INDUSTRIAL OWNERS AND OPERATORS

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to commercial and industrial sectors of the community:

- A Water Quality Runoff Management & Agricultural Waiver Workshop for Nurseries & Agricultural Businesses was held on March 27, 2008, at the San Diego County Farm Bureau. The event was organized by the City of Oceanside, with invitations sent out to nurseries and growers throughout the County. Three Encinitas businesses were in attendance.
- Commercial inspections were performed at 167 commercial facilities and two industrial facilities during the FY 2007-08 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general storm water quality information and BMP requirements.

8.3.4 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential, community, and school audiences:

a. Residential Community and General Public

- A four week Home Landscaping Workshop was hosted by the San Dieguito Water District at the Rancho Santa Fe Garden Club each Thursday from October 18 through November 8, 2007. A free Water-Wise Landscaping Workshop was also hosted by SDWD at the Encinitas Community Center on March 8, 2008. There were 31 people in attendance. The two workshops each covered four topics: landscape design basics; California friendly plants; landscape sprinkler systems; and soils, water, and fertilizers. A California Friendly Landscape Training Series was held every Monday, February 4 through February 25, 2008, and addressed irrigation principles and adjustments & repair, irrigation system troubleshooting, controller programming, irrigation scheduling, and plant identification.
- A City of Encinitas Environmental Services Guide was created in FY 2006-07. It continues to be handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling,

storm water management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix F-4).

- Three new giveaway items were developed in FY 2007-08, including a Bags on Board pet waste bag dispenser, a Clean Water Program magnet, and a Clean Water Program mood pencil (Appendix F-5). Each item is labeled with the Clean Water Program website and the Clean Water Hotline. They were distributed at all events attended by the Clean Water Program. In addition, the Bags on Board dispensers were distributed by the Parks and Recreation Department at this year's Pet Health Expo at City Hall.
- The Solana Center continued to sell compost bins and worm bins to residents of Encinitas throughout FY 2007-08. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City. Bin sales in FY 2007-08 increased by 43% from FY 2006-07.
- Individual Communication. There were 157 Residential ICID complaint calls in FY 2007-08. Thirty-four of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the 123 residential complaint investigations conducted, 32 resulted in education. During these inspections educational information was distributed to each homeowner/resident. Materials distributed included general storm water education, BMP requirements, pollution prevention education, as well as specific municipal code and clean water regulations.
- Media Coverage (newspaper articles, press releases, etc.): See Table 8-1 below.

Table 8-1
Summary of Media Coverage in FY 2007-08

No.	Title	Date	Source
1	City survey OK'd sans smoke ban question	July 6, 2007	The Coast News
2	The Composter	August 2007	Solana Center
3	Study shows pollution closes record number of U.S. beaches	August 8, 2007	Environmental News Network
4	State beaches continue on bum record	August 8, 2007	Los Angeles Times
5	City to help pay for study on water pollutants	August 16, 2007	SignonSanDiego.com
6	7 cities in watershed will share study cost	August 19. 2007	SD Union Tribune
7	Environmental Times	Summer 2007	Edco
8	A summer of clean beaches for county	September 27, 2007	SignonSanDiego.com
9	Encinitas takes steps toward ban on smoking	October 5, 2007	The Coast News

No.	Title	Date	Source
10	Encinitas to form environmental panel	October 12, 2007	North County Times
11	Demolition of tanks to bring lagoon into full view	November 8, 2007	SignonSanDiego.com
12	$5.6M nature center to be 'green' building	November 21, 2007	North County Times
13	Encinitas bans smoking on beaches	February 21, 2008	10News.com
14	Olivenhain MWD recognizes water conservation efforts of customer	February 28, 2008	BC Water News
15	Local water district awards savvy conservationists	March 7, 2008	The Coast News
16	Part of beach bluff collapses near duplex	March 13, 2008	SignonSanDiego.com
17	Revised storm drain ordinance on agenda	March 19, 2008	North County Times
18	Cities, county rush to complete stormwater plans	March 20, 2008	North County Times
19	Encinitas levies fines on beach smokers	March 21, 2008	The Coast News
20	Encinitas 'green' committee takes root	April 11, 2008	North County Times
21	Group finds 6 million pounds of trash on world's beaches	April 15, 2008	Yahoo! News
22	6th Annual Creek to Bay Clean Up	April 23, 2008	SignonSanDiego.com
23	Region: Huge waterways cleanup set for Saturday	April 23, 2008	North County Times
24	6th Annual Creek to Bay Clean Up	April 24, 2008	Craigslist.com
25	Encinitas: Wonders of San Elijo Lagoon on display Saturday	May 8, 2008	North County Times
26	Eye on the coast, Clean beach…	May 15, 2008	The Coast News
27	Region: Local beaches score well in report card	May 21, 2008	North County Times
28	San Diego beaches rank high in cleanliness survey	May 21, 2008	SignonSanDiego.com
29	Encinitas: Plastic bag ban gets community support	June 14, 2008	North County Times
30	The Creek Reeks	June 25, 2008	San Diego Reader
31	Encinitas: Sand tax headed for November ballot	June 26, 2008	North County Times

- **Workshops and events attended/hosted by the Solana Center and/or the City of Encinitas in FY 2007-08:**

1. Fall Master Composter Training Course – Mondays, September 10-October 8, 2007
2. Coastal Clean-up Day – September 15, 2007

3. Home Landscaping Workshop at Rancho Santa Fe Garden Club – Thursdays, October 18—November 8, 2007
4. Encinitas Poinsettia Festival - November 18, 2007
5. California Friendly Landscape Training- Mondays, February 4 through 25, 2008, and March 24, 2008
6. Water-Wise Landscape Workshop at Encinitas Community Center – March 8, 2008
7. Creek to Bay Beach Clean-up – April 26, 2008
8. Encinitas Street Fair – April 27, 2008
9. Encinitas Garden Festival – May 3, 2008
10. Encinitas Environment Day VIP Party – June 6, 2008
11. Environmental Film Festival, La Paloma Theater – June 7, 2008
12. Encinitas Environment Day at Cottonwood Creek Park – June 8, 2008
13. San Diego County Fair – June 14 through July 6, 2008
14. North County Storm Water Program Day at the San Diego County Fair – June 21, 2008

b. School Children

- The Splash Lab presentation was given by the San Diego County Office of Education at three Encinitas schools:
  - El Camino Creek Elementary, September 13, 2007, 119 students in attendance
  - La Costa Heights Elementary, November 19, 2007, 94 students in attendance
  - Mission Estancia Elementary, February 12, 2008, 82 students in attendance
- School Worm Bin Composting- The Solana Center monitors large worm bins at Capri Elementary, Paul Ecke Elementary, and Olivenhain Pioneer Elementary, and a small worm bin at Mission Estancia Elementary. Solana Center has trained volunteer master composters to give composting/vermicomposting presentations at schools throughout Encinitas.
- The Solana Center for Environmental Innovation also participated in school based educational programs where storm water awareness was taught. See Table 8-2 for details.

Table 8-2
Watershed Presentations in FY 2007-08

School/Group Name and Address	Date of Presentation	Number of Presentations	# of Students in Attendance
Encinitas Family Enrichment Program	7/30/2007	3	45
Ocean Knoll Elementary- Encinitas	8/22/2007	2	40
Ocean Knoll Elementary- Encinitas	8/23/2007	2	40
Sycamore Ridge Elementary- San Diego	10/1/2007	3	60
Carmel Del Mar Elementary- San Diego	10/30/2007	2	40
Carmel Del Mar Elementary- San Diego	11/2/2007	2	40
Paul Ecke Central- Encinitas	12/12/2007	1	28
Paul Ecke Central- Encinitas	1/16/2008	1	25

School/Group Name and Address	Date of Presentation	Number of Presentations	# of Students in Attendance
Solana Santa Fe Elementary- Rancho Santa Fe	1/30/2008	3	50
Paul Ecke Central-Encinitas	1/30/2008	1	28
Encinitas Family Enrichment Program	3/18/2008	1	40
Gabi Fuad's Brownie Troop- Del Mar	3/26/2008	1	15
Santa Fe Montessori School- Solana Beach	4/16/2008	2	48
Ocean Air School-San Diego	4/17/2008	4	80
Girl Scout Troop- Solana Beach	4/21/2008	1	15
Ada Harris Elementary School- Cardiff	4/23/2008	3	60
Cardiff Elementary School- Cardiff	4/30/2008	4	66
La Colonia Park- Solana Beach	5/5/2008	1	17
Boys and Girls Club- Solana Beach	5/12/2008	1	15
La Colonia Park- Solana Beach	5/19/2008	1	15
Solana Beach Community Ctr Ecology Camp	6/27/2008	1	22
	Total	**40**	**789**

c. Watershed Educational Activities

Important components of the City's education program include activities generated on a watershed basis through the North County Storm Water Program, the educational arm of the Carlsbad Watershed URMP. Materials and activities are developed on a watershed basis to address the high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities will be provided in the FY 2007-08 Carlsbad WURMP Annual Report.

- **Public Opinion Surveys**- The North County Storm Water Program created a pet waste survey to be given out at public events throughout the Carlsbad watershed. The six-question pet waste survey asked those surveyed their view on picking up pet waste. Results of the survey estimate the percentage of people who actually understand what happens to waste that is not disposed of properly. This survey was given out at two events throughout Encinitas during FY 2007-08. Appendix F-6 includes a copy of the survey and a summary of the results.

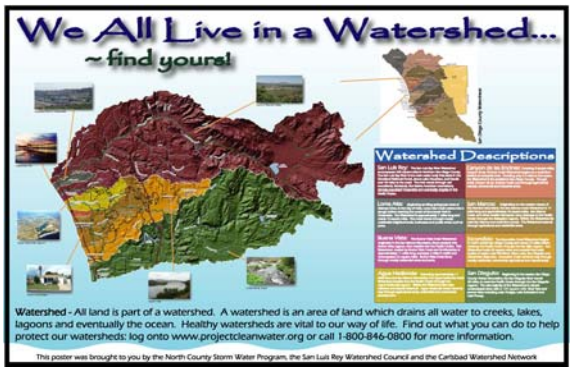

- **Watershed Map**- A 36"x 24" "We all Live in a Watershed" poster was developed giving information about the San Luis

Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a topographic map of the watershed, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public displays.

- **Watershed Collaboration**- The City of Encinitas collaborated with other outside organizations, including the Carlsbad Watershed Network, Solana Center, and Escondido Creek Watershed Alliance, to enhance public educational efforts and understand watershed issues. The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2007-08, the City participated in the following watershed outreach events:
    - Coastal Cleanup Day – 9/15/07
    - Kids' Day at the Carlsbad Flower Fields – 3/29/08
    - Creek to Bay Beach Cleanup – 4/26/08
    - North County Storm Water Program Day at the San Diego County Fair – 6/21/08
- **Watershed Educational Materials**- The City continues to distribute materials developed by the North County Storm Water Program in previous reporting periods, including the restaurant posters, automotive posters, "Storm Drains Lead to the Ocean" posters, general storm water brochures, and the door hangers.

d. Regional Residential Education Plan

The City of Encinitas collaborated with other jurisdictions in the Residential Sources and Outreach Workgroup to develop the Regional Residential Education Plan. This plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-7.

The first major collaboration on a regional level was the San Diego County Fair. The San Diego Regional Storm Water Copermittees sponsored the San Diego County Fair (Fair) in 2008 as an education and outreach activity. The sponsorship was a joint effort between the City of San Diego's Think Blue program and the regional Copermittees, with each entity contributing a portion of the overall cost. The Fair was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental message. The Residential Sources and Outreach Workgroup (Outreach Workgroup) was responsible for overseeing sponsorship activities and the City of San Diego lead coordination and implementation efforts.

The 2008 Fair was held June 14th through July 6th, 2008, spanning two fiscal years. The attendance for the fair was estimated at 1,235,698 people over the 21 days the event

occurred. Sponsorship for the Fair included staffing an outreach booth for 11 days, in which the majority of the jurisdictions provided staffing support. The outreach booth served as the primary method for educating the public about watershed protection and pollution prevention. The Outreach Workgroup elected to promote Integrated Pest Management (IPM) as the primary theme and collaborated on the distribution of IPM materials in both English and Spanish. Individual jurisdictions were invited to distribute their own materials in addition to the IPM materials. Details about the materials distributed during the event will be detailed in the FY 2008-09 Annual Report. The Copermittees received credit as both a Flower & Garden Show sponsor and an Enviro-Fair sponsor.

Think Blue was used as the branding label for the copermittees during the event and signage demarking the symbol included banners, planter box displays, and recycle bin stickers. Signage was visible at over 500 locations throughout the fairgrounds. Media exposure included TV, radio, and press releases. The sponsorship was printed in both the Fair program and included on the Fair map. Other promotions included newspaper advertisements, electronic messaging over the Jumbo-tron, website logos and links, and PA system announcements in both English and Spanish.

The City of San Diego developed an event survey in order to assess the effectiveness of the copermittees' Fair participation. Over 1,200 survey cards were completed during the 11 days the booth was staffed. The questions focused on understanding the public's general storm water knowledge and awareness. The results are being tabulated and will be reported in FY 2008-09.

Educational Outreach Materials Distributed. In FY 2007-08, a total of 2,904 outreach materials were distributed by the Clean Water Program. This includes BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed watershed pencils, magnets, "Bags on Board" dispensers, construction brochures, posters, door hangers, eating establishment guides ("What's Cooking"), automotive guides ("Green Wrench"), and other informational guides. These guides related to Integrated Pest Management (UCSD Cooperative Extension), water conservation brochures from local water districts and the County Water Authority, invasive species brochures ("Don't Plant A Pest" and "NIMBY-No Invasives In My Back Yard"), "How to Hire A Landscaper"-UCSD Cooperative Extension/Scott Parker, County of San Diego Household Hazardous Waste Guides, miscellaneous storm water educational worksheets for children, and lastly, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the quality of our waterways. This is evident by the attendance and participation at community events and workshops and the number of complaints reported to the storm water hotline (discussed in more detail in Section 9.3.5 below and also in Section 8.3.4(a)). Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2007-08 reporting period.

9.2 PUBLIC PARTICIPATION APPROACH

The City's approach for the outreach program is to develop an understanding among its residents and businesses of some fundamental storm water concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches, untreated).
- The economic value of our beaches and the importance of protecting them.
- An understanding illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a storm water violation (Clean Water Hotline or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and ocean.
- Reducing pollutants of concern.
- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals, etc.).

The tools that are used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- City of Encinitas Environmental Advisory Committee
- Public Outreach Events
- Public Opinion Survey
- Public Reporting Methods
- Pet Waste Dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- Public Participation in JURMP Update

9.3 PROGRAM IMPLEMENTATION

This section describes the specific public participation tools used during the FY 2007-08 reporting period.

9.3.1 WORKSHOPS/TRAINING SESSIONS

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of storm water education and/or water conservation and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the storm water regulations. Table 9-1 provides a summary of the FY 2007-08 workshops/training sessions conducted.

Table 9-1 City of Encinitas Workshops/Training Sessions FY 2007-08

Workshop/Training Session	Target Audience	Date	Attendance
Public Works- Streets Division	City Staff	8/2/07, 1/10/08, 5/8/08, 6/6/08	30
Fire Department	City Staff	10/1/07-10/3/07	48
Home Landscaping Workshop	Homeowners	10/18/07-11/8/07	20
Spanish-speaking Landscapers	City Staff and Contractors	11/6/07 & 3/11/08	55
CA-Friendly Landscape Training	Public	2/4/08-2/25/08 & 3/24/08	20
Water-wise Landscape Workshop	Public	3/8/07	31
Water Quality Ag Workshop for Nurseries and Growers	Commercial Owners/Operators	3/27/08	3

Workshop/Training Session	Target Audience	Date	Attendance
Engineering Department Meeting	City Staff	6/4/08	30
		Total	**237**

9.3.2 CITY OF ENCINITAS ENVIRONMENTAL ADVISORY COMMITTEE

The City of Encinitas' City Council created an Environmental Advisory Committee (EAC) that provides policy advice and recommendations to the City Council on issues related to environmental stewardship and sustainability. The Committee assesses the City's current environmental efforts in relation to specified areas of interest and creates and recommends strategies to enhance City activities that promote conservation and sustainable practices.

During the defined reporting period of this report, the Committee worked toward finalizing the initial draft of a city-wide Environmental Policy to serve as a guide for operational, programmatic, and development planning as it pertains to sustainability, resource management, and care for the environment in the City of Encinitas. On May 8, 2008, the Clean Water Program Manager provided a formal presentation to the EAC describing the core functions and activities of the Clean Water Program. Current program review for City Council consideration is a recommendation on options for reducing the impact of single-use plastic bags in our environment.

9.3.3 PUBLIC OUTREACH EVENTS

The Clean Water Program participated in many outreach events during FY 2007-08:

1. Coastal Clean-up Day – September 15, 2007, 111 volunteers
2. Kids' Day at the Carlsbad Flower Fields – March 29, 2008, 100 booth visitors
3. Creek to Bay Beach Clean-up – April 26, 2008, 101 volunteers
4. Encinitas Garden Festival – May 3, 2008, 58 booth visitors
5. Encinitas Environment Day @ Cottonwood Creek Park – June 8, 2008, 1000 attendees
6. North County Day at the San Diego County Fair – June 21, 2008, Attendance not yet available

Solana Center for Environmental Innovation. Outreach to the general public and school children is also provided through the Solana Center for Environmental Innovation via workshops and presentations involving storm water, household hazardous waste, composting, and recycling. The Solana Center works closely with the City for many of these workshops and presentations. See the tables below for a description of all of Solana Center's attended events and workshops.

Table 9-2 Composting Workshops FY 2007-08

Workshop schedule	Location	Attendance
July 11, 6 – 8pm	Solana Center	13
Master Composter Training Course, Mondays, September 10 - October 8, 2007	Quail Botanical Gardens	21
September 22, 10am – 12pm	Quail Botanical Gardens	23
October 13, 10am – 12pm	Quail Botanical Gardens	11
October 27, 1 – 3pm	Yoga Swami Studio & Garden (San Diego county wild fires occurred week prior to workshop, explaining low attendance; workshop rescheduled for spring)	4
November 3, 1 – 3pm	Quail Botanical Gardens	11
February 16, 1 – 3pm	Quail Botanical Gardens (vermicomposting)	55
March 1, 1 – 3pm	Quail Botanical Gardens	38
April 26, 10am – 12pm	Quail Botanical Gardens	40
May 3, 12 – 2pm	Yoga Swami Studio & Garden	19
	Total	**235**

Table 9-3 Household Hazardous Waste Presentations FY 2007-08

School/Group Name and Address	Date of Presentation	Number of Presentations	Total number of students reached
Encinitas YMCA Studio 3	1/14/2008	1	22
Encinitas Senior Center	2/20/2008	1	4
	Totals	**2**	**26**

Table 9-4 Used Oil Collection Events FY 2007-08

Encinitas Used Oil Events	Date	Total Attendance
Encinitas Poinsettia Festival	11/18/2007	500
Encinitas Street Fair	4/27/2008	1000

Used Oil Filter Event, Kragen Auto Parts Encinitas	01/12/08	38
	Total	**1538**

Table 9-5 Watershed Presentations FY 2007-08

School/Group Name and Address	Date of Presentation	Number of Presentations	# of students reached
Encinitas Family Enrichment Program	7/30/2007	3	45
Ocean Knoll Elementary- Encinitas	8/22/2007	2	40
Ocean Knoll Elementary- Encinitas	8/23/2007	2	40
Sycamore Ridge Elementary- San Diego	10/1/2007	3	60
Carmel Del Mar Elementary- San Diego	10/30/2007	2	40
Carmel Del Mar Elementary- San Diego	11/2/2007	2	40
Paul Ecke Central- Encinitas	12/12/2007	1	28
Paul Ecke Central- Encinitas	1/16/2008	1	25
Solana Santa Fe Elementary- Rancho Santa Fe	1/30/2008	3	50
Paul Ecke Central-Encinitas	1/30/2008	1	28
Encinitas Family Enrichment Program	3/18/2008	1	40
Gabi Fuad's Brownie Troop- Del Mar	3/26/2008	1	15
Santa Fe Montessori School- Solana Beach	4/16/2008	2	48
Ocean Air School-San Diego	4/17/2008	4	80
Emily Gilmore's Girl Scout Troop- Solana Beach	4/21/2008	1	15
Ada Harris Elementary School- Cardiff	4/23/2008	3	60
Cardiff Elementary School- Cardiff	4/30/2008	4	66
La Colonia Park- Solana Beach	5/5/2008	1	17
Boys and Girls Club- Solana Beach	5/12/2008	1	15
La Colonia Park- Solana Beach	5/19/2008	1	15
Solana Beach Community Center Ecology Camp	6/27/2008	1	22
	Totals	**40**	**789**

Table 9-6 Other Outreach Events FY 2007-08

Event	Date	Attendance
Encinitas Environment Day - VIP Party	6/6/2008	75
Enviro Film Festival - La Paloma Theatre	6/7/2008	75
Encinitas Environment Day - Cottonwood Creek Park	6/8/2008	1000
	Total	**1150**

9.3.4 PUBLIC OPINION SURVEY

The North County Storm Water Program created a pet waste survey in FY 2006-07 to be given out at public events throughout the Carlsbad watershed. The six question pet waste survey asks about the public's view on picking up pet waste and shows us how many people actually know what happens to waste that is not picked up. This survey was given out at multiple events throughout Encinitas in FY 2007-08. See Appendix F-6 for the pet waste survey and results.

9.3.5 PUBLIC REPORTING METHODS

The City has a local hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours hotline [(760) 633-2922] is available for after-hours emergencies and connects the caller with the City's answering service. The appropriate City Staff person will then be dispatched. There are also currently two regional storm water hotline numbers promoted within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800, and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voice mail message for 24-hour public access.

The Clean Water Hotline has been heavily advertised for some time. In FY 2007-08 the Clean Water Hotline received **329** calls, which is two times the volume of calls received in the last fiscal year. The hotline is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-ups, and enforcement procedures related to the hotline are presented in Appendix H-1.

The Clean Water Program has a specific webpage (http://cwp.ci.encinitas.ca.us) that provides information, as well as the general NPDES email address which can also be used to report storm water violations. Each method of contact can also be used for general questions relating to storm water.

9.3.6 PET WASTE DISPENSERS

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier, 17 doggie bag dispensers are located at parks and trails throughout

the City. Trash cans are also available in these areas. Both the trash cans and bag dispensers are maintained by the City's Parks and Recreation Department. In addition, individual Bags on Board pet waste bag dispensers were developed and distributed in FY 2007-08 at all jurisdictional events (Appendix F-5).

9.3.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

City of Encinitas residents can bring their HHW and Electronic Waste to drop off facilities in Vista and Poway, free of charge. There is also a home pick up available for a small fee; however, the fee is waived for elderly and disabled residents. Used oil collection events were organized through the Solana Center at local automotive supply stores, and free used oil containers were available for pick up from the Center to encourage oil recycling. Please refer to Section 6.4 and Tables 9-3 and 9-4 in Section 9.3.3 for a detailed description of HHW and Used Oil events and collection totals.

9.3.8 PUBLIC PARTICIPATION IN JURMP UPDATE

The Clean Water Program welcomed comments and suggestions during FY 2007-08 from residents to improve the quality of the Program. The following paragraph was posted on the home page of the City's website to encourage residents to submit input during our JURMP Update process:

"The City is updating its storm water pollution prevention program and requires your help. Pollutants that flow into our storm water drainage system may negatively impact the quality of water in our local creeks, lagoons, and beaches. Our staff is soliciting public input as we revise and shape a new program document. To find out more information, please visit http://www.ci.encinitas.ca.us/Resident/Environment/CleanWP/. To submit your suggestions, please contact npdesmail@cityofencinitas.org."

In further support of public participation in the JURMP Update, the City actively engaged the public in the update process of the Stormwater Ordinance, Grading Ordinance, and BMP Manual. Through a series of public announcements, community participation meetings, and required council actions, the City received valuable input and feedback on the development of these critical elements.

10.0 FISCAL ANALYSIS

The Clean Water Program and associated functions and activities in the City of Encinitas are split between two departments: Engineering Services and Public Works. Engineering Services administers plans, monitors, implements, enforces, inspects, and provides education related to stormwater and water quality. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4) including channel maintenance, street sweeping, facility inventories, and facility inspection. This section outlines the expenditures for the defined reporting period and associated fiscal year, FY 07-08, and the FY 08-09 budgets for these two departments to support Clean Water functions.

10.1 ENGINEERING SERVICES DEPARTMENT

The City of Encinitas Clean Water Program FY 2007-2008 expenditure and 2008-2009 budget summaries are presented below in Table 10.1. In FY 2007-2008 the City's Clean Water Program Coastal Storm Drain Monitoring, Dry Weather Monitoring, IDDE, Construction, Residential and Commercial program elements were accomplished with a mix of internal staff and contract services. FY 2007-2008 expenditures include 5 full time staff and a number of consultant services needed to support the development of new programmatic elements including data management strategies, inspection actions, and JURMP document preparation. These one-time costs were incurred in the 2008 fiscal year to meet new provisions mandated by Order No. 2007-0001.

The 2008-2009 Clean Water Program Budget has been prepared in consideration of Water Quality Order No. 2007-0001 as well as other regulatory mandates placed upon the City of Encinitas. Further, the 2009 budget supports the level of service provided by the Clean Water Program in addressing water quality concerns specific to Encinitas through response to citizen complaints, education, enforcement, monitoring and testing.

Table 10-1
Engineering / Clean Water Program FY 07-08 Expenditure and FY 08-09 Budget Summary

OUTLAY CATEGORY	FY 07-08 EXPENDITURES	FY 08-09 BUDGET
Saff Costs		
Staff Salary	360,988	353,410
Permits Shared Costs		
State Water Resources Discharge Permit Fee	11,109	11,109
San Diego Regional Stormwater Shared Costs	56,461	60,051
Carlsbad Watershed Cost Share	2,774	3,000
Contract Services		
IDDE Program (Dry Weather Monitoring)	12,968	*Programmatic Cost (See Below)*
Carlsbad WURMP GIS Application Development (Quartic)	18,200	*Contract Complete*
Post-Construction BMP Inspection (Geopacifica)	73,173	116,312
Stormwater Program Support (Ashford Engineering)	8,010	*Staff Cost*
Encinitas GIS Mapping & Data Management Systems (Quartic)	19,335	*Contract Complete*
Lagoon TMDL Monitoring Order - QAPP & Implementation (MACTEC)	65,801	80,000
JURMP Update Support (D-Max Engineering)	9,917	17,000
Programmatic Costs		
Education (Jurisdictional Only)	836	1,000
Legal Fees	-	5,000
Construction Inspection (Geopacifica)	150,000	150,000
Dry Weather Monitoring (Equipment & Analysis Cost)	2,028	
Coastal Monitoring Program (Equipment & Analysis Cost)	8,904	25,000
Lagoon TMDL Monitoring Order (Storm Drain Sampling & Analysis)	625	
Vehicle Purchase - Clean Water Program (Ford Escape Hybrid)	26,000	-
TOTAL FY 07-08 EXPENDITURE BUDGET DATA	827,129	821,882

10.2 PUBLIC WORKS DEPARTMENT

The City of Encinitas Public Works Department FY 2007-2008 expenditures and FY 2008-2009 budget are presented above in Table 10-2. As previously mentioned, the Public Works Department performs essential operations and maintenance functions of the City's municipal separate stormwater conveyance system, drainage facilities, and channels. Additionally, recycling, solid waste, and hazardous waste disposal programs are all managed by the Public Works Department.

In response to program enhancements required by Order No. 2007-0001, expenditures for associated Public Works functions experienced an increase in FY 07-08. Increased channel maintenance and inspection activities and associated staffing and equipment resource expenses all contributed to the increase in FY 07-08 expenditures. In FY 07-08, the Public Works Department formally took responsibility for the ongoing maintenance and operation of the City's UV Urban Runoff Treatment Facility located along Cottonwood Creek near Moonlight Beach. Lastly, the City's street sweeping contracts were augmented to support compliance as well as to assure consistent data tracking of debris collection.

The FY08-09 budget was prepared in consideration of the requirements of Order No. 2007-0001, and in anticipation of additional resources needed to meet minimum standards established in the Order.

Table 10-2
Public Works / Clean Water Program FY 07-08 Expenditure
and FY 08-09 Budget Summary

OUTLAY CATEGORY - PUBLIC WORKS	FY07-08 Expenditures	FY08-09 Budget
Staff Salary	274,205	355,996
Materials & Supplies	55,901	45,076
Contracts & Services	201,813	212,638
Fleet Maintenance	15,742	13,600
Capital Outlay	-	-
Lease Payments	40,000	40,000
Recycling/Solid Waste & Household Hazardous Waste Fund	498,409	498,409
Flood Control	138,562	194,863
TOTAL COST	1,224,632	1,360,582

10.3 CLEAN WATER PROGRAM SUMMARY

The total FY 2007-2008 expenditures for the Clean Water Program (Engineering & Public Works Departments) was **$2,052,671**. The FY 2008-2009 budget for the Clean Water Program (Engineering & Public Works) is **$2,182,464**.

10.4 PROGRAM FUNDING

In FY 2003-2004, the City Council attempted to pass a Clean Water Fee, which charged $5.00 per month per water meter to the residents and businesses in the City of Encinitas. The Howard Jarvis Taxpayers Associated challenged the fee based upon

Proposition 218 requirements. The City was required to add this item to the ballot in March 2006 which was defeated. As a result, the City of Encinitas must completely subsidize the Clean Water Program through the General Fund.

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City of Encinitas began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs to evaluate program effectiveness. Due to a variety of complications on a regional level, that standardization process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures modeled after conventionalized strategies and calibrated to evaluate "significant" program activities as required in Order No. 2007-0001.

Since the submittal of the JURMP in March 2008, no additional progress has been made on regionally standardized approaches to program effectiveness assessment. It is anticipated that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will undertake the issue of standardized assessment metrics and procedures in the near future. The City is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's storm water program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities unique to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP Annual Report, can be found in Appendix G-1.

Levels 2 and 3

Tables 11-3 through 11-10 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City of Encinitas within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the San Diego Regional Water Quality Control Board adopted Addendum 2 to Order No. 2007-0001, effectively extending the annual due date of the Illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City of Encinitas that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City of Encinitas, and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. Further, two new significant program elements were in production and in early stages of implementation within the defined reporting period of this report; both new programs are demonstrating positive trends. BMP installation verification and BMP operation and maintenance verification efforts, while not wholly implemented at the time of report production, have resulted in the establishment of programs that will support long term effectiveness assessment measures for development planning. *(See Table 11-3)*

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures *(See Table 11-4).* It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue.

Municipal

The defined reporting period of this report is marked by significant expansion of municipal operations and maintenance activities to meet the standards established in Order No. 2007-0001. Enhanced stormwater conveyance, drainage facility, channel maintenance and inspection and street sweeping activities, were developed and implemented, equating to the removal of salient volumes of debris. Effective operations and maintenance activities are demonstrated in the

Table 11-5 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will support the efficacy of municipal activities.

Industrial and Commercial

Clean Water Program activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City of Encinitas has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (*See Table 11-6)* through the gathering of critical statistics, including a knowledge and BMP assessment scoring system presented in Tables 11-1 and 11-2. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Encinitas.

Education

Education effectiveness is assessed for a variety of program elements as presented in the Table 11-9 below. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success.

Public Participation

The City of Encinitas provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however the assessment measures identified in Table 11-10 are focused on success of the venues and outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, Clean Water Hotline calls, and volumes of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 PROGRAM REVIEW AND MODIFICATION

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-3
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify High Efficiency Treatment BMPs are Approved	Internal The City's Engineering Department staff is well versed in treatment BMPs and pollutant removal efficiencies.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify Proposed BMPs are Implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects installing / implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions (program element to be fully implemented in FY 2008-09)	See Section 2	
Verify BMPs are Properly Maintained	External N/A, verification letters were not sent out until 2008/2009. Internal N/A, verification letters were prepared by the City's consultant.	Percent of sites properly maintaining BMPs	To Be Determined	Additional load reduction could be achieved through improved BMP maintenance.
		Resolution status of enforcement actions (program element to be fully implemented in FY 2008-09)	See Section 2	
		Percent of sites submitting proper verification forms	N/A	
		Percent of sites certifying proper maintenance	N/A	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify Planned BMP Implementation - Review Proposed Plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects must meet minimum requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify Proposed BMPs are Implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of inspection actions resulting in Corrective Action	10%	
		Percent of inspection actions resulting in a Notice of Violation (NOV)	> 1%	
		Number of dry weather monitoring exceedances traced to construction sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify Proposed BMPs are Implemented at Facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep Streets and Parking Facilities		N/A, streets and parking facilities are swept as determined necessary and in compliance with Municipal Stormwater Permit standards.		Amount of sediment and debris removed per length of street swept (weight or vol per curb mi)	1,378.5 tons/ 11380 curb mi (0.12 tons/mi)
Maintain and Clean MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume)	56 tons and 4,748 30-gal bags of debris
Maintain Sanitary Sewer System		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons)	480 gal
Maintain Municipal Treatment Control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment BMPs	3.148 tons
				BMP effectiveness studies	N/A
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP Implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Percent of inspected sites in compliance with BMP requirements (inspections that did NOT require follow-up actions)	36%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of inspection related enforcement actions	98%		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	To Be Determined	Number of IC/IDs eliminated through enforcement actions taken as a result of routine inspection OR complaint investigations. (NOVs & Citations)	42
		Based on the results of individual facility assessment surveys, most facilities inspected have a good general understanding of BMPs and implement BMPs as required. See Figure 11-1 and 11-2.			
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores, FY 2007-2008 Inspections

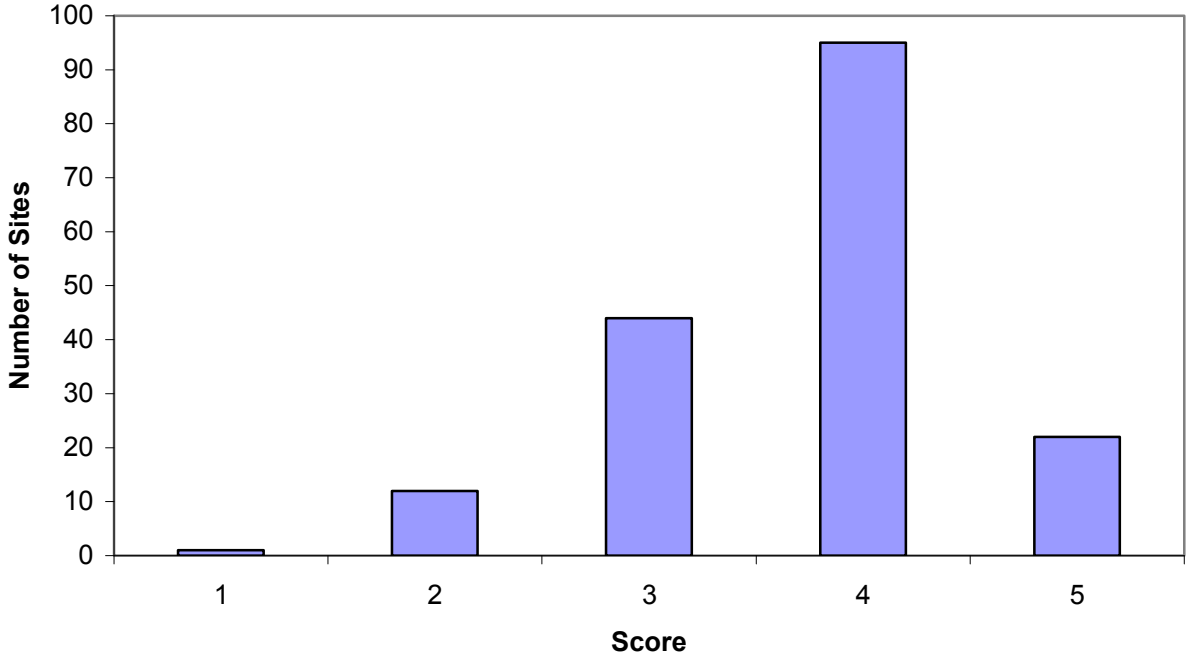

Figure 11-2
BMP Assessment Scores, FY 2007-2008 Inspections

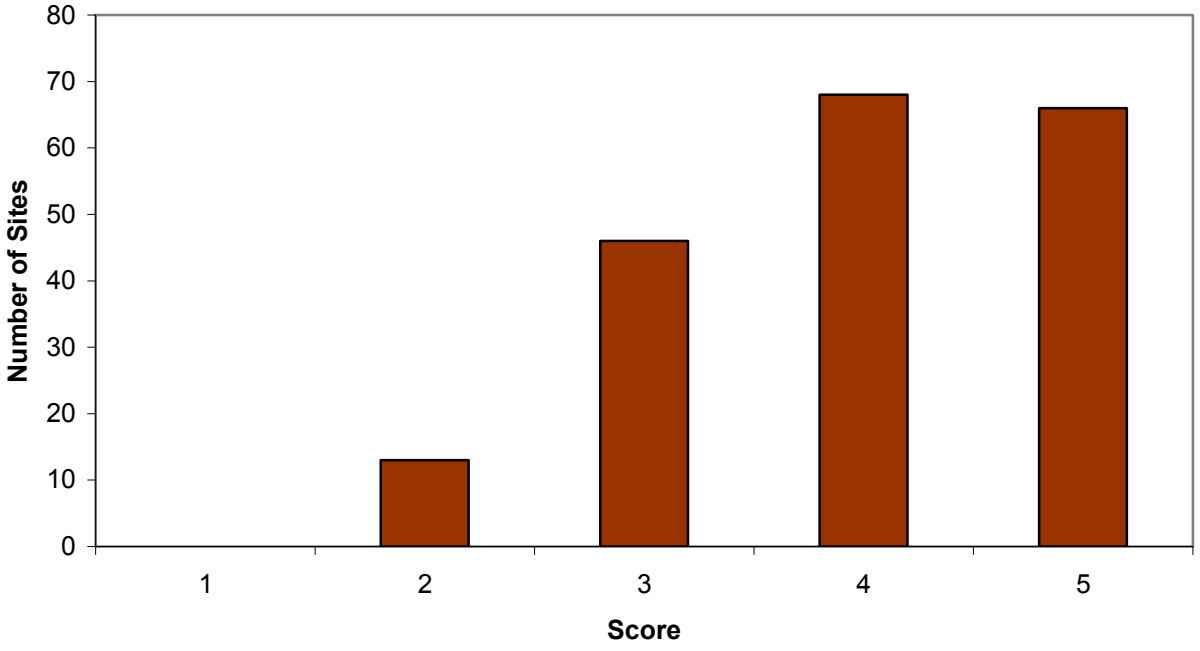

Table 11-7
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP Implementation	External Residents were educated in variety of ways in 2007/2008; see sections 6 and 8 for details. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Number of residential incidents reported to storm water hotline	157	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution status of residential related enforcement actions	98%	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	Clean Water Program staff executes the City's Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were eliminated, so a reliable estimate of load reduction cannot be made.
Respond to Incidents Reported to Clean Water Hotline	Dedicated Engineering and Public Works staffs are trained to respond to reported incidents.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 7 are likely to have resulted a pollutant loading reduction.
Respond To and Clean up SSOs	Dedicated Public Works staffs are trained to respond to reported SSO incidents.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems.	The City responded to two SSO events in 2007-2008, and was able to recover discharge prior to reaching the MS4.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2007-08.
	Estimated number of impressions made*	4,100		
	Estimated number of educational materials distributed to various community sectors	2,904		
Provide storm water education to City staff & contractors	Internal The City provides staff and contractors w/ regular stormwater training. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2007-08.
	Number of Staff and Contractors trained	163		

Notes:
Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Impressions are based upon the number of interactions with public at education events.

Table 11-10
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Number of attendees at events	3,058	Amount of trash and debris collected at cleanup events	508.7 lbs
		Number of calls received to the Clean Water Hotline*	329	Amount of HHW collected	119,127 lbs of HHW 2,594 oil filters 18,652 gal of oil

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The sum total of calls to the Clean Water Hotline related to all Community Sectors.

12.0 SPECIAL INVESTIGATIONS

The City of Encinitas is currently engaged in a number of ongoing and long-term investigations to support reasoned and informed management actions to address local water quality concerns and threats.

12.1 MOONLIGHT BEACH URBAN RUNOFF TREATMENT FACILITY

The City of Encinitas has been operating the Moonlight Beach Ultraviolet Treatment Facility since August 29th, 2002. The overall project has been a true success; the City has reduced the bacteria levels entering the Pacific Ocean at Moonlight State Beach and bacteria levels through the facility are consistently reduced by 99%. Beach postings have been reduced by an average of 90% per year for the six years that facility has been in operation.

The Moonlight Beach Urban Runoff Treatment Facility draws water from Cottonwood Creek inside an existing concrete double-box culvert. It is diverted to a wet well and pumped via two, alternating 7.5 HP, float-controlled submersible pumps to the UV treatment facility. After pre-screening at the wet well intake, a second stage of screening is provided by two basket strainers. Water is then filtered through two dual media (sand and anthracite) pressure filters. The disinfection unit consists of two UV disinfection chambers approximately 48 inches in length and 8 inches in diameter. Each chamber has four low-pressure, high intensity UV lamps.

The system is operated from a programmable logic controller (PLC). System controls are set to shut the entire system down on three operating conditions: high level in the wet well, high pump discharge pressure, and high effluent turbidity. Treated flow is returned to Cottonwood Creek inside a second portal of the concrete box culvert. The entire treatment facility is housed in a 24 feet long, 10 x 10 foot prefabricated steel enclosure.

In February 2006, the City of Encinitas completed the final report to the State Water Resource Control Board, Clean Beaches Initiative Grant. In order to monitor the effectiveness of the UV Facility two assessment methods were used: water quality monitoring and beach posting data. The City routinely monitored the concentrations of bacteria at three locations in Cottonwood Creek and in the mixing zone at the creek mouth. Samples were collected above and below the facility, and before and after project implementation. Monitoring locations include influent, effluent, the mouth of Cottonwood Creek, and the Moonlight Beach mixing zone. Approximately 160 routine sampling events occurred during the monitoring period.

Bacteria removal efficiencies through the UV Facility were calculated at >99% based on 153 pairs of influent and effluent samples. Through weekly bacteria monitoring and a special study, the City determine that additional sources of bacteria and regrowth contributed to the degradation of water quality downstream of the facility. However, the overall removal

efficiency from the facility influent to the creek mouth was measured at approximately 50%. Monitoring also showed an improvement of water quality in the mixing zone as measured by changes in exceedances of AB411 standards. AB411 exceedances were reduced from 9.4% prior to the project to 4.8% after the project representing nearly a 50% reduction in exceedances in the mixing zone.

In fiscal year 2007-08, the City of Encinitas continued random sampling of influent and effluent from the UV facility to gauge the ongoing effectiveness and proper function of the system. A number of samples were taken at sporadic intervals and varying conditions to monitor the bacteria concentrations, affirming long term effectiveness and efficiency of the Moonlight Beach UV Treatment Facility. While the facility has been in operation for a number of years, the City of Encinitas has recognized the importance of ongoing investigations to ensure the long-term success of this project and to provide valuable data both locally and throughout the state to evaluate the efficacy of such a device.

12.2 San Elijo Lagoon Restoration

The City of Encinitas along with the City of Solana Beach, the Army Corps of Engineers, and various other stakeholders has been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (1-5) North Coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast Project.

The goal of the study is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. This study looked specifically into the effects of varying channel widths at each opening: inlet and Pacific Coast Highway bridge, the San Diego Northern Railway system, and the I-5 freeway. Results from each simulation would be judged on its ability to reduce muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur. Work on this process continued throughout the defined reporting period of this report, most significantly with efforts conducting a data gap analysis to support necessary simulations and the evaluation of a variety of design options. In fiscal year 2007-08 this project continued to move forward marked by large-scale data gathering and coordination among diverse public, private, and non-governmental agencies.

12.3 Restaurant Binder Assessment

In fiscal year 2006-2007, the City of Encinitas distributed a Stormwater Pollution Prevention Manual to restaurant facilities throughout the City. Approximately 180 binders were distributed during routine restaurant inspection activities. Each binder included a site map, BMP information specific to restaurant operations, and sections to record training, inspection, maintenance activities. The intent of the binder is to support restaurant owners and staff to ensure that proper BMPs are utilized to eliminate non-stormwater discharges.

Within the defined reporting period of this report, City inspection staff endeavored upon an evaluation of the overall success and effectiveness of the restaurant binder program. Commercial facility inspection forms were augmented to capture answers to questions aimed at evaluating the utility and use of the information provided the previous year. While the data gathered during the reporting period have not been fully evaluated at the time of report production, it is anticipated that this investigation will provide the City with valuable information to drive future education and support tools to restaurants and other community sectors.

13.0 NON-EMERGENCY FIRE FIGHTING

13.1 INTRODUCTION

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (No. 3 and No. 5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. Following is a detailed description of the program developed by the City to reduce pollutants from non-emergency fire fighting flows.

13.2 PROGRAM FOR NON-EMERGENCY FIRE FIGHTING FLOWS

In consideration of BMPs associated with non-emergency fire fighting activities, the City of Encinitas has identified a number of potential discharge sources including maintenance of fire and emergency vehicles and equipment, training exercises, and facility maintenance. It is important to recognize, and make provision for the post-emergency rehabilitation of response equipment including tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency, as this equipment must be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for subsequent response actions. As such, the use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified, and will be performed in a manner that minimizes discharges to the MEP. In consideration of the non-emergency activities listed above, the City's fire personnel utilized the following BMPs to address discharge generated from such activities during fiscal year 2007-08:

- Whenever possible, practice drills were performed in areas where runoff was contained. When practice drills were performed in an area where runoff could potentially leave the site, the site was surveyed by the officer-in-charge prior to training activities to ensure that debris would not enter the storm drain system as a result of the drill.
- As determined feasible, runoff from training drills or other non-emergency activities, was directed to landscaped areas.
- Areas that have debris that could potentially enter the storm drain system as a result of the drill activities were not used for training until the debris had been removed.
- Live fire training activities were pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
- Runoff from live fire training activities was contained and recovered with the City's Vac-con truck so that runoff did not discharge to the storm drain system or receiving waters.
- Good housekeeping and dry cleanup practices were utilized as part of standard facility maintenance procedures.

13.2.1 EDUCATIONAL METHODS

Details of the City's educational programs, including fire fighting personnel education, are provided in Section 8 of this document.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 in response to new Municipal Permit requirements. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes to the JURMP made since the overall JURMP update in the spring of 2008 would be discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 CONCLUSIONS & RECOMMENDATIONS

During the FY 2007-2008 reporting period, the City of Encinitas updated its JURMP, which was finalized and submitted to the RWQCB on March 24, 2008. As captured in this first JURMP Annual Report under Order No. 2007-0001, the City has begun implementing the new and revised programs presented in its updated JURMP. The Copermittees have created several new regional workgroups to facilitate sharing of information and to provide regional guidance on standardized implementation where applicable. The City will work collaboratively with the other Copermittees in this process and continue to refine its program implementation as needed to improve its ability to reduce or eliminate pollutant discharges and meet regulatory requirements.

Appendix A

Development Planning

A-1 Treatment Control BMP Inventory

A-2 Treatment Control BMP Inspection Priority Flowchart

A-3 Sample Grading Certification BMP Verification Letter

A-4 Treatment Control BMP Operation and Maintenance Verification Letter

A-5 Treatment Control BMP Operation and Maintenance Verification Brochure

A-6 Treatment Control BMP Operation and Maintenance Verification Form

A-7 Treatment Control BMP Operation and Maintenance Inspection Form

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-40/MP-40 Media Filter	1302 Encinitas Blvd	unk
TC-40/MP-40 Media Filter	200 to 52 El Camino Real	unk
TC-40/MP-40 Media Filter	Encinitas Country Day School	9/17/2004
TC-40/MP-40 Media Filter	Encinitas Country Day School	9/17/2004
TC-40/MP-40 Media Filter	Encinitas Country Day School	9/17/2004
TC-32 Bioretention	1396 Rubenstein Ave	11/2/2005
TC-30 Vegetated Swale	Requeza St	unk
TC-30 Vegetated Swale	Sheridan Ln	unk
TC-30 Vegetated Swale	1302 Encinitas Blvd	unk
TC-30 Vegetated Swale	131 Princehouse Ln	unk
TC-30 Vegetated Swale	133 Rosebay Dr	unk
TC-30 Vegetated Swale	175 La Costa Ave	unk
TC-30 Vegetated Swale	2112 Oxford Ave	unk
TC-30 Vegetated Swale	290 Andrew Ave	unk
TC-30 Vegetated Swale	3275 Poppy Hills Ln	unk
TC-30 Vegetated Swale	Lake Dr	unk
TC-30 Vegetated Swale	1926 Oxford Avenue	3/1/2004
TC-30 Vegetated Swale	429 Fulvia Street	6/11/2004
TC-30 Vegetated Swale	740 Cornish Drive	11/30/2004
TC-30 Vegetated Swale	1371 San Elijo Avenue	12/8/2004
TC-30 Vegetated Swale	2455 San Elijo Avenue	12/8/2004
TC-30 Vegetated Swale	700 Garden View Court	12/8/2004
TC-30 Vegetated Swale	1032 Orpheus	12/20/2004
TC-30 Vegetated Swale	1032 Orpheus Avenue	12/20/2004
TC-30 Vegetated Swale	1032 Orpheus Avenue	12/20/2004

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-30 Vegetated Swale	115 Verdi	12/20/2004
TC-30 Vegetated Swale	1470 Summit Avenue	12/21/2004
TC-30 Vegetated Swale	Oxford & Kilkenny	1/19/2005
TC-30 Vegetated Swale	360 Dollimore Drive	3/8/2005
TC-30 Vegetated Swale	3695 Lone Dove Lane	3/15/2005
TC-30 Vegetated Swale	Camino Del Rancho	3/24/2005
TC-30 Vegetated Swale	East F Street	4/19/2005
TC-30 Vegetated Swale	701 S Vulcan Ave	4/19/2005
TC-30 Vegetated Swale	721 N Vulcan Ave	4/19/2005
TC-30 Vegetated Swale	268 Sunset Drive	5/10/2005
TC-30 Vegetated Swale	1616 Neptune Avenue	5/13/2005
TC-30 Vegetated Swale	1270 Rubenstein Ave	6/22/2005
TC-30 Vegetated Swale	1972 Lake Drive	6/22/2005
TC-30 Vegetated Swale	290 Andrew Avenue	6/22/2005
TC-30 Vegetated Swale	477 N El Camino Real	6/22/2005
TC-30 Vegetated Swale	1174 Hymettus Ave	7/6/2005
TC-30 Vegetated Swale	1423 Rainbow Ridge Ln	7/6/2005
TC-30 Vegetated Swale	1653 Burgandy	7/6/2005
TC-30 Vegetated Swale	2009 and 2011 Manchester	7/6/2005
TC-30 Vegetated Swale	2600 Montgomery Avenue	7/6/2005
TC-30 Vegetated Swale	3364 Calle Margarita	7/6/2005
TC-30 Vegetated Swale	651 Quail Gardens Dr	7/6/2005
TC-30 Vegetated Swale	742 and 744 Dewitt Ave	7/6/2005
TC-30 Vegetated Swale	946 and 950 Woodgrove Dr	7/6/2005
TC-30 Vegetated Swale	754 Hymettus Ave	9/19/2005

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-30 Vegetated Swale	3430 Via Monte Verde	9/25/2005
TC-30 Vegetated Swale	3373 Calle Margarita	9/26/2005
TC-30 Vegetated Swale	1332 1332-1338 Rubenstein Ave	11/2/2005
TC-30 Vegetated Swale	1396 Rubenstein Ave	11/2/2005
TC-30 Vegetated Swale	3230 Bella Colina	11/2/2005
TC-30 Vegetated Swale	454 Bristol Road	11/2/2005
TC-30 Vegetated Swale	754 Hymettus Avenue	11/2/2005
TC-30 Vegetated Swale	1403 Neptune Ave	11/22/2005
TC-30 Vegetated Swale	1416 Summit Avenue	12/1/2005
TC-30 Vegetated Swale	477 N. El Camino Real	12/7/2005
TC-30 Vegetated Swale	942 Stratford Drive	12/12/2005
TC-30 Vegetated Swale	3515 Jasmine Crest	1/10/2006
TC-30 Vegetated Swale	267 Sanford Street	1/17/2006
TC-30 Vegetated Swale	1319 Lux Canyon Drive	1/26/2006
TC-30 Vegetated Swale	3065 Wildflower Drive	1/26/2006
TC-30 Vegetated Swale	3351 Lilac Summit	1/26/2006
TC-30 Vegetated Swale	406 La Costa Ave	1/30/2006
TC-30 Vegetated Swale	1055 Eolus Ave	2/23/2006
TC-30 Vegetated Swale	293 Hillcrest Dr	4/12/2006
TC-30 Vegetated Swale	122 Basil St	4/20/2006
TC-30 Vegetated Swale	Dove Hollow Lane	5/26/2006
TC-30 Vegetated Swale	1219 Neptune Ave.	8/16/2006
TC-30 Vegetated Swale	1635 Gascony Road	8/17/2006
TC-30 Vegetated Swale	1019 Oldham Way	9/1/2006
TC-30 Vegetated Swale	354 Santa Fe Dr	9/28/2006

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-30 Vegetated Swale	422 Andrew Ave.	10/11/2006
TC-30 Vegetated Swale	1552 Summit ave.	10/18/2006
TC-30 Vegetated Swale	3234 Olivenhain Road.	11/1/2006
TC-30 Vegetated Swale	175 Vulcan Ave.	11/7/2006
TC-30 Vegetated Swale	403 Sheffield Ave.	11/9/2006
TC-30 Vegetated Swale	311 Princehouse Lane	12/8/2006
TC-30 Vegetated Swale	311 Princehouse ln	12/8/2006
TC-30 Vegetated Swale	728 Dewitt Avenue	12/15/2006
TC-30 Vegetated Swale	1521 Summit Ave	12/21/2006
TC-30 Vegetated Swale	1739 Freda Ln	12/21/2006
TC-30 Vegetated Swale	2477 and 2483 Oxford Ave	12/21/2006
TC-30 Vegetated Swale	301 Cantle Ln	12/21/2006
TC-30 Vegetated Swale	4036 Manchester Ave	12/21/2006
TC-30 Vegetated Swale	843 San Dieguito Dr	12/21/2006
TC-30 Vegetated Swale	1133 Hermes Ave.	1/24/2007
TC-30 Vegetated Swale	Evergreen Dr	2/16/2007
TC-30 Vegetated Swale	Evergreen Dr	2/16/2007
TC-30 Vegetated Swale	140 Range Street	2/28/2007
TC-30 Vegetated Swale	887 Brittany Avenue	3/8/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-30 Vegetated Swale	368 E. Glaucus St	5/10/2007
TC-30 Vegetated Swale	1408 Summit Ave	5/29/2007
TC-22 Extended Detention Basin	1302 Encinitas Blvd	unk
TC-22 Extended Detention Basin	1588 Leucadia Blvd.	unk
TC-22 Extended Detention Basin	175 La Costa Ave	unk
TC-22 Extended Detention Basin	3275 Poppy Hills Ln	unk
TC-22 Extended Detention Basin	Requeza & Beach St	unk
TC-22 Extended Detention Basin	3616 Manchester	9/17/2004
TC-22 Extended Detention Basin	1868 Crest Drive	9/24/2004
TC-22 Extended Detention Basin	3213 Bella Collina	2/4/2005
TC-22 Extended Detention Basin	268 Sunset Drive	5/10/2005
TC-22 Extended Detention Basin	1150 Quail Gardens Dr	6/22/2005
TC-22 Extended Detention Basin	1348 Hymettus Avenue	6/22/2005
TC-22 Extended Detention Basin	477 El Camino Real	7/6/2005
TC-22 Extended Detention Basin	3230 Bella Colina	11/2/2005
TC-22 Extended Detention Basin	Dove Hollow Lane	5/26/2006
TC-22 Extended Detention Basin	354 Santa Fe Dr	9/28/2006
TC-22 Extended Detention Basin	887 Brittany Ave	3/8/2007
TC-22 Extended Detention Basin	1408 Summit Ave	5/29/2007
TC-21/MP20 Constructed Wetland	San Elijo Lagoon Conservancy	unk
TC-21/MP20 Constructed Wetland	Requeza St	unk
TC-11 Infiltration Basin	1270 Rubenstein Ave	6/22/2005
TC-11 Infiltration Basin	267 Sanford Street	1/17/2006
TC-11 Infiltration Basin	271 Delfinium	12/13/2006
TC-11 Infiltration Basin	2477 and 2483 Oxford Ave	12/21/2006

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-11 Infiltration Basin	368 E. Glaucus St	5/10/2007
TC-10 Infiltration Trench	Sheridan Ln	unk
TC-10 Infiltration Trench	131 Princehouse Ln	unk
TC-10 Infiltration Trench	133 Rosebay Dr	unk
TC-10 Infiltration Trench	195 La Mesa	unk
TC-10 Infiltration Trench	3275 Poppy Hills Ln	unk
TC-10 Infiltration Trench	Lake Dr	unk
TC-10 Infiltration Trench	1174 Hymettus Ave	7/6/2005
TC-10 Infiltration Trench	1521 Summit Ave	12/21/2006
TC-10 Infiltration Trench	843 San Dieguito Dr	12/21/2006
TC-10 Infiltration Trench	368 E. Glaucus St	5/10/2007
SD-32 Trash Storage Areas	4455 Manchester Ave	5/10/2007
SD-20 Pervious Pavement	290 Andrew Ave	unk
SD-20 Pervious Pavement	93 Sunset Drive	6/22/2005
SD-20 Pervious Pavement	2009 and 2011 Manchester	7/6/2005
SD-20 Pervious Pavement	742 and 744 Dewitt Ave	7/6/2005
SD-20 Pervious Pavement	290 Andrew Avenue	11/2/2005
SD-20 Pervious Pavement	1350 S. Coast Hwy, 101	12/21/2006
SD-20 Pervious Pavement	1455 San Elijo Ave	12/21/2006
SD-20 Pervious Pavement	4036 Manchester Ave	12/21/2006
SD-20 Pervious Pavement	2271 Montgomery Ave	3/22/2007
SD-20 Pervious Pavement	1408 Summit Ave	5/29/2007
SD-11 Roof Runoff Controls	Mackinnon Ave	7/6/2005
SD-11 Roof Runoff Controls	175 Florita	7/6/2005
SD-11 Roof Runoff Controls	2009 and 2011 Manchester	7/6/2005

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
SD-11 Roof Runoff Controls	1350 S. Coast Hwy, 101	12/21/2006
SD-11 Roof Runoff Controls	1455 San Elijo Ave	12/21/2006
SD-11 Roof Runoff Controls	1521 Summit Ave	12/21/2006
SD-11 Roof Runoff Controls	2477 and 2483 Oxford Ave	12/21/2006
SD-11 Roof Runoff Controls	2477 and 2483 Oxford Ave	12/21/2006
SD-11 Roof Runoff Controls	301 Cantle Ln	12/21/2006
SD-11 Roof Runoff Controls	1408 Summit Ave	5/29/2007
SD-10 Site Design / Landscape Planning	Phoebe St. & Hwy 101	unk
SD-10 Site Design / Landscape Planning	290 Andrew Ave	unk
SD-10 Site Design / Landscape Planning	762 Sparta Drive	unk
SD-10 Site Design / Landscape Planning	740 Cornish Drive	11/30/2004
SD-10 Site Design / Landscape Planning	1968 Park Crest Drive	12/7/2004
SD-10 Site Design / Landscape Planning	1470 Summit Avenue	12/21/2004
SD-10 Site Design / Landscape Planning	1550 Orange View	6/22/2005
SD-10 Site Design / Landscape Planning	2416 Newport Ave	6/22/2005
SD-10 Site Design / Landscape Planning	3442 Fortuna Ranch Rd	6/22/2005
SD-10 Site Design / Landscape Planning	376 Hillcrest Dr	6/22/2005
SD-10 Site Design / Landscape Planning	Mackinnon Ave	7/6/2005
SD-10 Site Design / Landscape Planning	1174 Hymettus Ave	7/6/2005
SD-10 Site Design / Landscape Planning	2009 and 2011 Manchester	7/6/2005
SD-10 Site Design / Landscape Planning	3364 Calle Margarita	7/6/2005
SD-10 Site Design / Landscape Planning	651 Quail Gardens Dr	7/6/2005
SD-10 Site Design / Landscape Planning	Mackinnon Ave	7/6/2005
SD-10 Site Design / Landscape Planning	364 Liverpool	8/2/2005
SD-10 Site Design / Landscape Planning	2351 Cambridge Ave	8/5/2005

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
SD-10 Site Design / Landscape Planning	871 Neptune	8/30/2005
SD-10 Site Design / Landscape Planning	871 Neptune Avenue	8/30/2005
SD-10 Site Design / Landscape Planning	1638 Edilee Dr	11/2/2005
SD-10 Site Design / Landscape Planning	2150 Cambridge Ave	11/2/2005
SD-10 Site Design / Landscape Planning	454 Bristol Rd	11/2/2005
SD-10 Site Design / Landscape Planning	760 Third Street	11/2/2005
SD-10 Site Design / Landscape Planning	125 Avocado St	12/5/2005
SD-10 Site Design / Landscape Planning	203 213 3rd Street	1/10/2006
SD-10 Site Design / Landscape Planning	1604 Crest Drive	2/17/2006
SD-10 Site Design / Landscape Planning	Mackinnon Ave	2/27/2006
SD-10 Site Design / Landscape Planning	841 859 Second Street	3/6/2006
SD-10 Site Design / Landscape Planning	1441 Hygia Ave.	9/12/2006
SD-10 Site Design / Landscape Planning	354 Santa Fe Dr	9/28/2006
SD-10 Site Design / Landscape Planning	1817 Sheridan Road	10/13/2006
SD-10 Site Design / Landscape Planning	172 Kilkenny Drive	12/6/2006
SD-10 Site Design / Landscape Planning	1455 San Elijo Ave	12/21/2006
SD-10 Site Design / Landscape Planning	2265 Manchester Ave	12/21/2006
SD-10 Site Design / Landscape Planning	2335 Manchester Ave	12/21/2006
SD-10 Site Design / Landscape Planning	2477 and 2483 Oxford Ave	12/21/2006
SD-10 Site Design / Landscape Planning	301 Cantle Ln	12/21/2006
SD-10 Site Design / Landscape Planning	4036 Manchester Ave	12/21/2006
SD-10 Site Design / Landscape Planning	727 Dewitt Ave	12/21/2006
SD-10 Site Design / Landscape Planning	519 Arden Drive	1/17/2007
SD-10 Site Design / Landscape Planning	Evergreen Dr	2/16/2007
SD-10 Site Design / Landscape Planning	2271 Montgomery Ave	3/22/2007

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
SD-10 Site Design / Landscape Planning	3592 Jasmine Crest	4/5/2007
SD-10 Site Design / Landscape Planning	Ocean Bluff Way	4/30/2007
SD-10 Site Design / Landscape Planning	Ocean Bluff Way	4/30/2007
SD-10 Site Design / Landscape Planning	Ocean Bluff Way	4/30/2007
SD-10 Site Design / Landscape Planning	Ocean Bluff Way	4/30/2007
SD-10 Site Design / Landscape Planning	4455 Manchester Ave	5/10/2007
SD-10 Site Design / Landscape Planning	4455 Manchester Ave	unk
Other	290 Andrew Ave	unk
Other	427 Bristol Ave	unk
Other	2476 Oxford	8/26/2004
Other	2455 San Elijo Avenue	12/8/2004
Other	560 Neptune Ave	6/22/2005
Other	566 Neptune Ave	6/22/2005
Other	Cambridge Ave	8/5/2005
Other	406 La Costa Ave	1/30/2006
Other	160 Fourth Street	2/13/2006
Other	950 3rd St	4/13/2006
Other	1552 Summit ave.	10/18/2006
MP-52 Drain Inserts	Phoebe St. & Hwy 101	unk
MP-52 Drain Inserts	Lake Dr	unk
MP-52 Drain Inserts	Phoebe St & Hwy 101	unk
MP-52 Drain Inserts	Cantebria Senior Homes	unk
MP-52 Drain Inserts	Cantebria Senior Homes	unk
MP-52 Drain Inserts	Cantebria Senior Homes	unk
MP-52 Drain Inserts	477 N El Camino Real	6/22/2005

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
MP-52 Drain Inserts	Mackinnon Ave	7/6/2005
MP-52 Drain Inserts	477 N. El Camino Real	12/7/2005
MP-52 Drain Inserts	354 Santa Fe Dr	9/28/2006
MP-52 Drain Inserts	727 Dewitt Ave	12/21/2006
MP-52 Drain Inserts	4455 Manchester Ave	5/10/2007
MP-50 Wet Vault	Phoebe St & Hwy 101	unk

Notes:

Note 1: Responsible party information is maintained within the City's data management systems specific to this program area. In consideration of the sensitivity of private property ownership information, this data is not included in the inventory presented in Appendix A-1.

Note 2: Since the Operation and Maintenance Verification and Inspection Programs are not scheduled to commence until Fiscal year 2008-09 (as required by Order 2007-0001), the following information was not included in the FY 2007-08 inventory:

- Maintenance certifications or verifications
- Inspections
- Inspection findings
- Corrective actions

Treatment Control BMP Inspection Priority

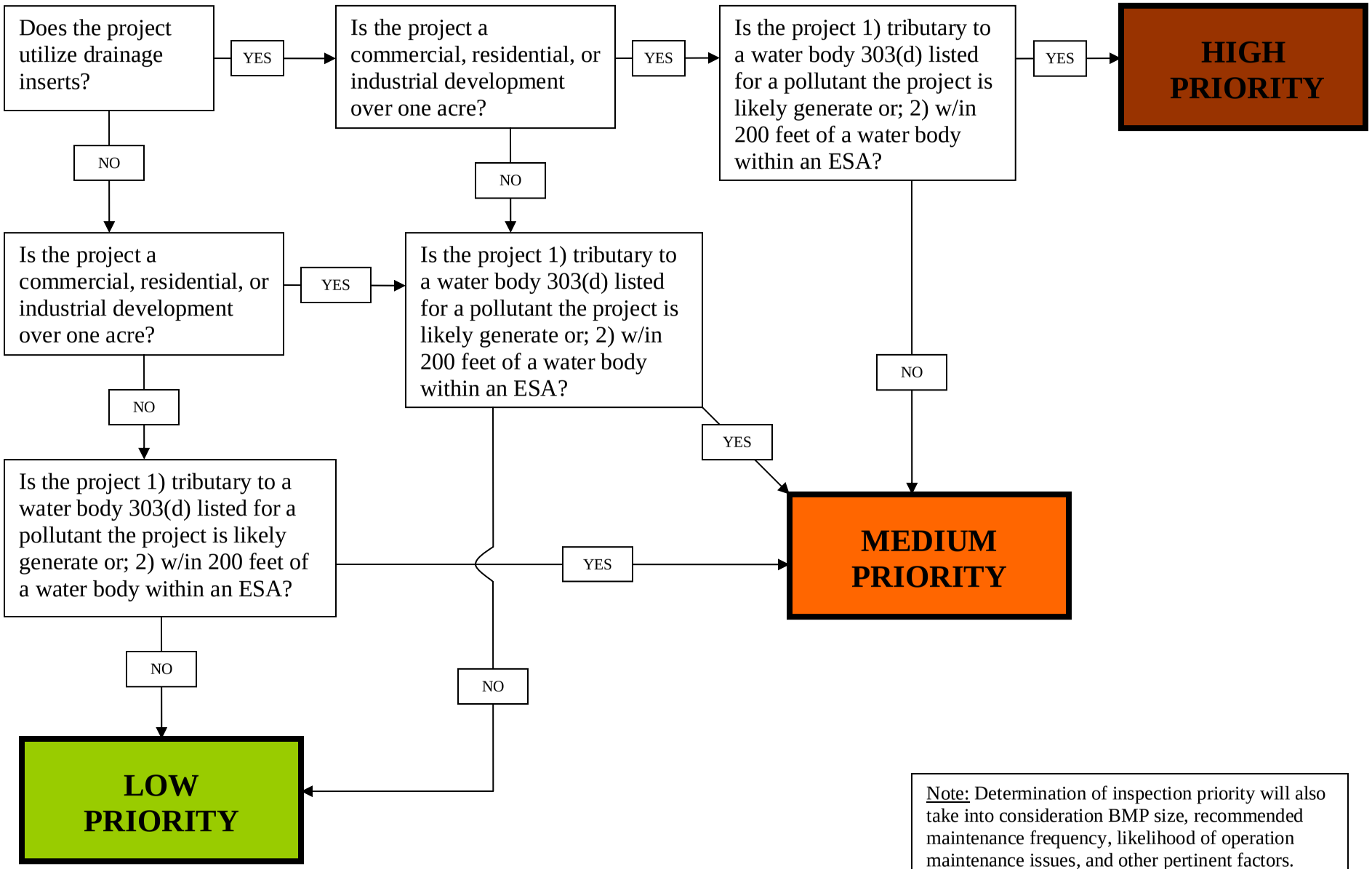

Note: Determination of inspection priority will also take into consideration BMP size, recommended maintenance frequency, likelihood of operation maintenance issues, and other pertinent factors.

SAMPLE

Date: _____

City of Encinitas
Engineering Services Permits
505 South Vulcan Ave.
Encinitas, CA 92024

Re: **Engineer's Final Grading Certification for Project No. 99-001 TM and Grading Permit Number XXXX - G.**

The grading under permit number XXXX has been performed in substantial conformance with the approved grading plan or as shown on the attached "As Graded" plan.

Final grading inspection has demonstrated that lot drainage conforms with the approved grading plan and that swales drain at a minimum of 1% to the street and/or an appropriate drainage system.

All the Low Impact Development, Source Control and Treatment Control Best Management Practices as shown on the drawing and required by the Best Management Practice Manual Part II were constructed and are operational, together with the required maintenance covenant(s).

Engineer of Record _____ (signed & sealed)

Dated _____

Verification by the Engineering Inspector of this fact is done by the Inspector's signature hereon and will take place only after the above is signed and stamped and will not relieve the Engineer of Record of the ultimate responsibility:

Engineering Inspector: _____

Dated:_____

The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.

City of Encinitas

TO: City of Encinitas Property Owner

RE: Treatment Control Best Management Practices (BMP) Verification Program

The City of Encinitas, in response to requirements in the San Diego Municipal Stormwater Permit, as regulated by the San Diego Regional Water Quality Control (RWQCB), is undertaking a new program to protect our local waterways and beaches.

The purpose of this program is to verify the operation and maintenance of treatment control best management practices (BMPs) installed as a condition of development on projects constructed since January of 2003.

As you may be aware, specific projects within the City of Encinitas are required to install BMPs to treat and improve the quality of water discharged from a development site. It is important to recognize that the treatment control BMPs at your facility or on your property provide a critical function, and that ongoing maintenance and preservation of treatment control BMPs is necessary for proper operation and to maximize water quality benefit. The proper maintenance and operation of treatment control BMPs is required per City of Encinitas Municipal Code (EMC) Section 20.08 as well as property related legal agreements and/or covenants.

As the treatment control BMP operation and maintenance program is introduced, the City of Encinitas would like your cooperation to verify the following:

- ☑ Responsible Party Information *(HOA, Property Owner, Etc…)*
- ☑ Verification of the Type of Treatment Control BMPs *(See Enclosed Information)*
- ☑ Proper Operation and Maintenance of Treatment Control BMPs.

Enclosed with this letter, you will find information that will aid in gathering, documenting, and providing this information to the City of Encinitas. Please be advised that the City is also required to conduct assessments of a specific number of locations throughout the City to support this program.

Please Provide the Requested Information By: <u>October 1, 2008</u>

Your assistance in this effort is greatly appreciated. Please contact the City of Encinitas Clean Water Program at (760) 633-2787 or npdesmail@cityofencinitas.org for any questions or assistance.

Peter Cota-Robles, P.E
Director of Engineering

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

Frequently Asked Questions

1. Why does the City of Encinitas require that Treatment Control BMPs be maintained?

As stated in the Municipal Stormwater Permit (issued by the San Diego Regional Water Quality Control (RWQCB)), the City must verify that treatment control BMPs installed on private property are adequately maintained. Proper operation and regular maintenance of permanent treatment control BMPs ensures that the facility reduces the amount of pollutants which end up in our creeks, lagoons, and beaches. These BMPs help to improve water quality and minimize human and environmental health risks.

2. What should I do if I am unsure how to complete my self-inspection form or cannot locate the treatment control BMPs on my property?

Contact Clean Water Program staff as soon as possible. We can provide assistance in understanding the self-verification form, identifying the location of BMP(s) on your property, and determining operation and maintenance needs of your BMP(s). Staff can be reached via phone: 760-633-2787, or email: npdesmail@cityofencinitas.org

3. What happens during the City's inspection of Treatment Control BMPs on my property?

If requested or as required due to repudiation, a City inspector will visit the property to validate the existence, proper maintenance, and function of treatment control BMPs. Inspection actions will be documented with an inspection report form and photos of specific BMPs. If access is limited or located on private property, the City inspector will call the responsible party to schedule an inspection.

FAQs continued…

4. What happens if I don't certify that my Treatment Control BMP(s) have been maintained?

The Treatment Control BMP Self Verification process has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of these facilities, and to help the City meet State mandated requirements. The San Diego Regional Water Quality Control Board requires the City to verify the proper function of treatment control BMPs through a Municipal Stormwater Permit. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. The City does maintain the authority to ensure the existence and proper maintenance and function of treatment facilities, and failure to provide adequate information may constitute a violation of the City ordinance as well as property related agreements or covenants.

City of Encinitas
Clean Water Program
505 S. Vulcan Avenue
Encinitas, CA 92024

For questions relating to
Treatment Control BMPs,
please call: 760-633-2787
or e-mail: npdesmail@cityofencinitas.org

Printed on recycled paper

City of Encinitas
Clean Water Program

Operation and Maintenance Guide for your Treatment Control Best Management Practices (BMPs)

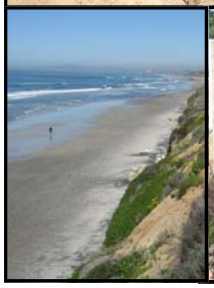

Thanks for helping us keep our creeks, lagoons, and ocean clean!

What is a Treatment Control BMP?

Treatment Control BMPs are drainage devices, structures, or areas designed to remove pollutants from storm water runoff, or minimize the quantity of runoff ultimately discharged from a development site. These facilities are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. They are also frequently referred to as Stormwater Best Management Practices or BMPs.

The following BMPs are commonly incorporated into development projects throughout the City of Encinitas:

Vegetated Swales / Grassy Swales are open, shallow channels or depressions with vegetation or grass covering the side slopes and bottom that collect, infiltrate, and slowly convey runoff water. Rock lined swales are also commonly used.

Bioretention Areas consist of a planted or vegetated depression area designed to pond during a rain event. It is common to find multiple bioretention areas located throughout a development area.

Infiltration Trenches or **Basins** temporarily store runoff in shallow basins or linear depressions lined with sandy soil or gravel to enhance infiltration of water into the ground.

Storm Drain Filter Inserts are manufactured filters or fabric placed in a storm drain inlet to remove sediment, debris, oil, or other pollutants.

Other BMPs include Rock-Lined Swales, Terraced Swales, Detention Basins, Subsurface Infiltration Systems, Constructed Wetlands, Media Filters, Storm Water Storage Systems, and Vortex Separators.

Please note that each of the BMPs may vary in design size, shape, or materials from the descriptions above. City staff is available to help you determine the location of BMPs located on your property.

For more information on Treatment Control BMPs, refer to the City's Storm Water Best Management Practices Manual, Part II which can be accessed via the Clean Water Program webpage:

http://cwp.ci.encinitas.ca.us

How to locate Treatment Control BMPs on your property:

1. Refer to your approved grading or improvement plans. The plans will show the location of Treatment Control BMPs.
2. Walk your property to look for defined drainage areas such as channels, depressions, or basins.
3. Typical treatment control BMPs may look similar to traditional landscaped areas. Look for areas that have been graded in a concave, swale, or linear shape to capture and infiltrate storm water.
4. Structural treatment control devices such as an inlet filter may be located within a curb inlet or underground. *Please contact the City of Encinitas if you have a structural control located on your property with limited access.

Minimum Operation and Maintenance Requirements:

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

- ☑ On an annual basis, or as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair.
- ☑ Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, etc.
- ☑ Remove any accumulated trash and debris.
- ☑ Take photos of all BMPs on the property.
- ☑ Complete Operation and Maintenance Self-Verification Form and submit the form to the City's Clean Water Program.

Return this form no later than:
October 1, 2008

City of Encinitas
Storm Water Treatment Control Best management Practices (BMPs) Operation and Maintenance Self-Verification Form

Step 1 Records Verification

Property Address:

Responsible Party and/or Property Owner:

_____
Responsible Party Company or HOA (if applicable) Address, City, State, ZIP

Treatment Control BMPs on your property:
(Please Indicate the Quantity of Each BMP in the Applicable Box Below)

- ☐ **Grassy / Vegetated Swale** ____
- ☐ **Rock Lined Swale** ____
- ☐ **Infiltration Trench / Basin** ____
- ☐ **Proprietary Treatment Device** ____
- ☐ **Bioretention Area** ____
- ☐ **Storm Drain Filter Insert(s)** ____
- ☐ **Detention Basin** ____
- ☐ **Other (*Describe Below*)** ____

_____

If you require assistance with BMP identification, please contact City Staff at (760) 633-2787

Step 2 Self-Verification of BMPs

Date(s) that the BMP(s) were self-evaluated: _____

Self Evaluation Results (check the box that applies):

☐ A. All BMPs are maintained and in good working order
☐ B. All or some BMP(s) needed maintenance and/or cleaning
☐ C. Other results (explain):_____

If you checked B or C, please describe maintenance that was performed in order to maintain proper function of BMP(s):

_____

_____

Maintenance Date: _____ *(As applicable, include any maintenance records with your submittal)*

Number of photos taken: _____ **Date the photo(s) were taken:** _____
(Include all photos with your submittal)

Step 3 Certification

I, _____, hereby certify that the above information is correct to the best of my knowledge.

Signature _____

Date_____

See reverse for Submittal options.

Return this form no later than:
October 1, 2008

OPERATION AND MAINTENANCE SELF-VERIFICATION FORM

Step 4 SUBMITTAL OPTIONS

1. **Mail** completed form, copies of maintenance records, and photos to:

   City of Encinitas
   Clean Water Program
   505 S Vulcan Ave
   Encinitas, CA 92024

2. **Email** electronic copies of completed form, maintenance records, and photos to:

   npdesmail@cityofencinitas.org

3. Any combination of mail and email submission of the necessary documents will also be accepted. For example, you may **mail** the form and maintenance records and **email** photos.

CITY OF ENCINITAS

Treatment Control BMP Inspection Form

Inspection Type: ☐ Annual ☐ Follow-Up ☐ Complaint ☐ Other:_____

Inspector Name:_____ Date: _____ Time: _____

A. PROJECT INFORMATION

Permit No. _____ Permit Type: _____

Project Type: ☐ Private ☐ City ☐ Other Public

SUSMP Priority: ☐ Priority ☐ Standard

Inspection Priority: ☐ High ☐ Medium ☐ Low ☐ Unknown

Property Access: ☐ Open ☐ Limited ☐ None

Property Address(es):_____

B. TREATMENT CONTROL BMP ASSESSMENT

Treatment Control BMP	Observations	Address ☐BMP Location	Comments
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		

Add additional BMPs on reverse side.

PHOTO(S) TAKEN? ☐ **YES** ☐ **NO**

ADDITIONAL COMMENTS:

_____

_____

C. FOLLOW UP NEEDED? ☐ Yes ☐ No **ACCESS REQUIRED FOR FOLLOW UP?** ☐ Yes ☐ No

Follow Up Actions:_____

_____

D. ENFORCEMENT ACTIONS ☐ None ☐ Warning ☐ Notice of Violation ☐ Citation

Corrective Actions:_____

_____

B. TREATMENT CONTROL BMP ASSESSMENT (CONTINUED)

ADDITIONAL BMPS:

Treatment Control BMP	Observations	Location Description	Comments
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		

ADDITIONAL COMMENTS:

_____

_____

_____

_____

Form Revised: 8/2008

Appendix B

Construction

B-1	Construction Inventory
B-2	Prioritized Construction Sites
B-3	Flow Chart for Inspection Frequencies
B-4	Construction Inspection Form
B-5	Erosion Control Letter
B-6	Construction Enforcement Actions

				Requirements of Permit R9-2001-0001		Requirements of Permit R9-2007-0001					
Permit	**Site Address**	**Site Street Name**	**APN**	**Inspection priority from July 1, 2007- January 24, 2008**	**Total Number of Inspections from July 1, 2007 - Jan 24, 2008**	**Inspection priority from January 24- June 30, 2008**	**Total Number of Inspections from January 24- June 30, 2008**	**Total Number of Weeks Active During the Wet Season**	**Total Number of Inspections Conducted During the Wet Season**	**Total Number of Inspections Conducted During the Dry Season**	**Total Number of Inspections Conducted from July 1, 2007 - June 30, 2008**
100 GI	1646	Sommerset	260-304-1000	Low	0	Low	1	28	1	0	1
103 GI	1079	Vulcan Ave	252-324-4600	Low	0	Low	2	30	2	0	2
106 GI	3358	Wildflower Valley Dr.	264-091-8600	Low	0	High	5	12	5	0	5
112 GI	1174	Hymettus	254-262-0600	Low	1	Low	1	30	2	0	2
125 GI	361	Birmingham	260-382-4800	Low	1	Low	0	2	1	0	1
127 GI	2335	Manchester	261-091-0700	Low	2	Low	0	10	2	0	2
138 GI	727	Dewitt	258-211-1100	Low	1	Low	1	30	2	0	2
1438 GR	420	La Veta	256-271-1800	Low	1	Low	0	7	1	0	1
1469 GI	1555	Bella Vista	216-122-4400	High	9	Medium	5	30	14	0	14
1502 GI	3592	Jasmine Crest	264-540-0300	Low	1	Medium	1	30	2	0	2
152 GI	1219	Neptune Ave	254-230-0600	Medium	5	Low	1	30	6	0	6
1533 GI	1098	Hymettus	254-262-2200	Low	1	Low	1	30	2	0	2
1537 GI	2015	Cambridge	260-391-03	Low	0	Low	1	17	1	0	1
169 GI	510	ECR Christian Fellowship	259-560-7900	Medium	4	Medium	3	30	7	0	7
17 GI	859-63	Second St	258-181-0900	Low	0	Low	1	28	1	0	1
178 GI	1330	Bello Mar Dr	216-500-0500	High	9	High	1	18	10	0	10
181 GI	3342	Wildflower Valley Dr.	264-091-7100	Medium	2	Medium	3	30	5	0	5
183 GI	3234	Olivenhain Farms Rd	264-091-2000	High	7	High	8	30	15	0	15
184 SG	2271	Montgomery	261-073-1400	Low	2	Low	1	30	3	0	3
185 GI	1423	Rainbow Ridge	254-181-0300	High	9	Medium	6	30	15	0	15
187 GI	1060	Urania Ave	254-363-0400	Low	0	Medium	3	30	3	0	3
199 GI	403	Sheffield Ave	260-283-1200	Low	1	Low	1	23	2	0	2
202 GI	411	Bristol	260-283-1300	Low	2	Low	0	7	2	0	2
214 GI	301	Cantle Lane	264-390-1100	Medium	4	Medium	2	23	6	0	6
215 GI	424	Brighton Dr.	260-283-0500	Low	0	Low	2	30	2	0	2
218 GI	640	Rancho Santa Fe	265-355-0700	Low	0	Low	2	30	2	0	2
220 GI	430	Andrew	216-063-3300	Low	0	Low	2	30	2	0	2
226 GI	1319	Lux Canyon Dr.	262-160-2500	High	9	Medium	5	30	14	0	14
235 GI	361	Rancho Santa Fe	259-023-3700	Low	1	Low	0	3	1	0	1
245 GI	3351	Lilac Summit	264-091-3500	Low	0	Medium	3	30	3	0	3
246 GI	4036	Manchester	262-061-6900	High	1	High	0	2	1	0	1
250 GI	271	Delphinium St	257-090-4901	Low	0	Low	2	30	2	0	2
266 G	735	Del Rio	256-164-1700	Low	1	Medium	1	30	2	0	2
269 GI	519	Arden Dr.	258-103-0200	Low	0	Low	2	30	2	0	2
275 GI	427	Naiad	256-242-4700	Low	0	Low	2	30	2	0	2
276 GI		Phoebe St N. Hwy 101	254-230-1800	Medium	4	Low	2	30	6	0	6
278 GI	3403	Bumann Rd.	264-292-2300	High	8	High	7	30	15	0	15
279 GI	3438	Via Monteverde	Pool	Medium	1	Medium	1	19	2	0	2
280 GI	368	E. Glaucus St	254-261-1400	Low	0	Low	2	30	2	0	2
286 GI	2265	Manchester	261-072-1500	Low	0	Low	2	30	2	0	2
287 GI	140	Range St	254-054-6000	Low	1	Low	0	3	1	0	1
289 GI	216	N. Coast Hwy 101	256-363-0200	Medium	4	Medium	2	30	6	0	6
302 GI	1405	San Elijo Ave	260-620-8500	Low	1	Low	1	30	2	0	2
306 GI	2351	San Elijo Ave	261-051-4100	Low	0	Medium	3	30	3	0	3
331 GI	172	Kilkenny Dr	261-102-1700	Low	0	Medium	1	25	1	0	1
345 GI	943	Arden Dr.	258-233-1800	Low	1	Low	0	8	1	0	1
354 GI	1713	Gascony	216-331-2400	Low	0	Low	2	20	2	0	2
364 GI	115	Princehouse Ln	259-131-2700	Low	0	Medium	1	30	1	0	1
366 GI	742-744	Dewitt	258-214-1500	Low	0	Low	2	30	2	0	2
369 GI	1415	Rainbow Ridge	254-181-0400	High	0	High	8	16	8	0	8
372 GI	1657	N. Vulcan Ave	254-061-01	low	1	Medium	2	30	3	0	3
386 GI	3535	Manchester Belmont Village	261-150-4500	High	7	Medium	5	30	12	0	12
388 GI	1435	Lake Dr.	260-222-1600	Low	0	Medium	3	19	3	0	3
395 GI	520	Fourth St	258-073-4300	High	9	High	0	16	9	0	9
396 GI	1408	Summit Ave	260-620-8600	Low	1	Low	1	30	2	0	2
407 GI	554	Neptune Ave	256-084-0800	High	1	High	0	1	1	0	1
409 GI	3364	Calle Margarita	264-240-2000	Medium	4	Medium	3	30	7	0	7
413 GI	651	Quail Gardens Lane	257-011-2400	High	3	High	0	6	3	0	3
414 GI	4455	Manchester	259-190-4600	Low	1	Low	0	3	1	0	1

Appendix B-1

Permit	Site Address	Site Street Name	APN	Inspection priority from July 1, 2007- January 24, 2008	Total Number of Inspections from July 1, 2007 - Jan 24, 2008	Inspection priority from January 24- June 30, 2008	Total Number of Inspections from January 24- June 30, 2008	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections Conducted from July 1, 2007 - June 30, 2008
419 SG	1972	Crest	262-041-1200	NA	0	Medium	2	13	2	0	2
423 GI	399	Hillcrest Dr.	216-082-6000	Low	0	Low	2	30	2	0	2
437 GI	204/220	ECR- Grading	259-121-1800	Low	2	Medium	3	30	5	0	5
443 GI	1066	Gardena Rd.	258-272-6700	Low	0	Low	2	10	2	0	2
462 GI	70-90	A Street	253-034-0100	High	9	Medium	6	30	15	0	15
465 GI	1045	Via Di Felicita	264-151-2500	Low	1	Medium	2	30	3	0	3
47 GI	1133	Hermes	254-252-5700	Low	0	Low	2	30	2	0	2
474 GI	763	Second ST	258-163-0900	Low	0	Low	2	30	2	0	2
475 GI	986	Hygeia	254-325-1300	Low	1	Low	2	30	3	0	3
483 GI	540	La Costa Ave	216-030-5100	High	4	High	5	18	9	0	9
493 GI	201	N. Vulcan Ave	256-400-6800	Low	0	Low	2	30	2	0	2
501 GI	2159	Glasgow	260-413-32	Low	0	Low	2	30	2	0	2
524 GI	192	Pacific View Lane	256-431-1500	Low	0	Low	1	23	1	0	1
525 SG	1530	Summit Ave	260-630-1100	Low	0	Low	2	14	2	0	2
54 GI		Birmingham & Mackinnon	260-394-0800	Low	0	Low	3	30	3	0	3
55 GI	540	Cornish	258-090-1500	High	9	Medium	3	23	12	0	12
5609 GI	1299	Urania Ave	254-351-2700	Low	0	Medium	1	25	1	0	1
562 GI	1302	Encinitas Blvd	259-121-2900	Medium	4	Medium	2	30	6	0	6
570 GI	3557	Lone Hill Lane	264-450-0360	Medium	1	Medium	3	23	4	0	4
573 GI	408	Chesterfield	260-411-3800	Low		Low	2	15	2	0	2
58 GI	1638	Edilee Dr	260-552-0400	Low	0	Low	2	30	2	0	2
587 GI		101 Sewer Force Main III	258-000-0000	Medium	1	Medium	0	1	1	0	1
61 GI	1552	Summit Ave	260-630-4600	Medium	3	Low	0	30	3	0	3
61 SI	801	Orpheus	256-121-4100	Medium	2	Medium	4	25	6	0	6
624 GI	NA	Lone Hill Lane	264-232-1100	Medium	1	Medium	3	24	4	0	4
635 GI	921	Hymettus	256-242-2600	Low	1	Low	1	22	2	0	2
6391 GI	1365	Trabert Ranch Rd	259-200-3400	High	7	Low	7	30	14	0	14
64 GI	1817	Sheridan	216-071-1600	Low	0	Low	2	30	2	0	2
65 GI	1441	Hygeia	254-112-2800	Low	0	Low	1	30	1	0	1
653 SG	860	Nardo	258-251-0900	Low	0	Low	2	10	2	0	2
669 SG	1033	Monterey Vista Way	259-050-8400	Low	0	Low	1	25	1	0	1
675 GI	1719	San Elijo Ave	260-275-1900	Low	0	Low	2	16	2	0	2
692 GI	1435	Rainbow Ridge	254-181-0200	NA	0	High	3	8	3	0	3
705 GI	3354	Wildflower Valley Dr.	264-091-7300	NA	0	High	5	10	5	0	5
726 GI	1596	Ave de los Lirios	259-920-1200	Low	0	Low	2	17	2	0	2
760 GI	825	Dewitt	258-212-1100	Low	0	Low	2	14	2	0	2
7601 GI	1255	Birmingham	260-430-6700	Low	0	Medium	2	30	2	0	2
7604 GI	125	Chesterfield	261-041-1700	Low	0	Low	2	30	2	0	2
7628 GI	235	La Costa Ave	216-052-2700	High	9	High	7	30	16	0	16
7771 GI	1550	El Camino Real	261-160-1500	Low	1	Low	0	4	1	0	1
7791 GI	1766/9	N. Coast Hwy 101	254-060-0400	Medium	1	Medium	0	4	1	0	1
7800 GI	3542	Jasmine Crest	264-540-0100	Low	0	Medium	3	30	3	0	3
789 GI	2011-89	San Elijo Ave.	260-370-2600	NA	0	Medium	2	16	2	0	2
7893 GI		Piraeus & Plato	254-144-0200	High	8	Medium	6	30	14	0	14
7909 GI	355	Seeman Dr	259-130-7300	Low	0	Medium	1	25	1	0	1
7958 GI	1815	Mackinnon	260-315-0200	Low	3	Low	1	24	4	0	4
7962 GI	200	Seeman Dr	259-131-5400	Low	0	Low	1	18	1	0	1
88 GI	175	Florita	256-391-1300	Medium	1	Medium	0	1	1	0	1
9021 GI	1450	Paseo de las Flores	254-614-03/07	High	4	High	0	6	4	0	4
9048 GI	235	La Costa Ave	216-052-2700	High	9	Medium	6	30	15	0	15
9080 GI	1455	San Elijo Ave	260-620-5400	Low	0	Low	2	30	2	0	2
9102 GI	950	Third St	258-172-0801	Medium	2	Medium	0	19	2	0	2
9103 GI	115	Verdi Ave	260-266-1100	Low	0	Low	2	30	2	0	2
9106 GI	Vacant Lot	N. Vulcan Ave	256-100-3800	Medium	4	Medium	3	30	7	0	7
9117 GI	236-238	Andrew	216-052-0900	High	8	Medium	5	30	13	0	13
9126 GI	3400	Jasmine Crest	264-091-3800	Low	0	Medium	1	25	1	0	1
9128 GI	240	La Veta	256-361-2200	Low	0	Low	1	25	1	0	1
9150 GI	3113	Camino Del Rancho	264-270-0800	High	1	High	0	2	1	0	1
9156 GI	736	Fourth St	258-153-0500	High	9	Medium	5	30	14	0	14
9177 GI	740	Cornish	258-211-1800	Low	0	Low	2	30	2	0	2

Permit	Site Address	Site Street Name	APN	Inspection priority from July 1, 2007- January 24, 2008	Total Number of Inspections from July 1, 2007 - Jan 24, 2008	Inspection priority from January 24- June 30, 2008	Total Number of Inspections from January 24- June 30, 2008	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections Conducted from July 1, 2007 - June 30, 2008
9180 GI	1610	Neptune	264-040-2700	High	7	Low	7	30	14	0	14
9212 GI	376	Hillcrest Dr.	216-081-3700	Low	0	Low	2	30	2	0	2
9262 GI	800	Blk Bracero Rd	258-370-5200	Low	0	Medium	3	30	3	0	3
9263 GI	1653	Burgundy Rd.	254-171-3900	Low	0	Low	2	30	2	0	2
9267 GI	1926	Oxford	260-362-1400	Low	3	Low	1	24	4	0	4
9278 GI	NA	Off Lone Hill Ln	264-450-0500	High	9	Medium	6	30	15	0	15
9285 GI	330	Neptune Ave	256-352-0100	High	2	High	0	2	2	0	2
9286 GI	2477 & 2483	Oxford	261-113-1600	Low	0	Low	2	30	2	0	2
9294 GI	477	N El Camino Real	257-470-0400	High	1	High	0	1	1	0	1
9300 GI	3373	Calle Margarita	264-240-1400	Low	1	Medium	2	30	3	0	3
9301 GI	191	Halcyon	256-301-1300	Low	3	Low	1	20	4	0	4
9303 GI	887	Brittany	254-362-1500	Low	1	Medium	1	30	2	0	2
9336 GP	290	Andrew	216-052-0800	High	8	Medium	5	30	13	0	13
9356 GI	3442	Fortuna Ranch Rd	264-291-0400	High	1	High	0	2	1	0	1
9367 GI	781	Gardenview Ct.	257-470-1100	High	1	High	0	1	1	0	1
9419 GI	871	Neptune	260-012-1700	Low	1	Low	0	13	1	0	1
9481GI		Quail Gardens DR	258-130-8500	High	9	High	6	30	15	0	15
9482 GI	1635	Gascony	254-172-0300	High	8	Low	6	30	14	0	14
9486 GI	560/566	Neptune	256-084-1100	High	5	High	0	10	5	0	5
9488 GI	2416	Newport	261-101-2900	Low	0	Medium	2	30	2	0	2
9489GI	3515	Jasmine Crest	264-540-0700	High	4	High	0	8	4	0	4
9501 GI	1350	S Coast Hwy 101	260-030-0200	High	8	High	0	14	8	0	8
9512 GI	422	Andrew	216-063-1800	Low	1	Low	0	30	1	0	1
9521 CN	201-213	Third St	258-051-1300	Medium	2	Medium	0	5	2	0	2
9529 GI	125	Avocado	254-054-6500	Low	1	Low	0	4	1	0	1
9561 GI	303	Santa Fe Dr	260-072-3500	Low	0	Low	1	21	1	0	1
9576 GI	843	San Dieguito Dr.	258-232-1100	Low	0	Low	2	30	2	0	2
9580 GI	3451	Dove Hollow	264-232-2700	Low	1	Low	0	3	1	0	1
96 GI	2010-2012	Cambridge	260-384-4400	Low	1	Low	0	3	1	0	1
CMS00D CIP/49 SI		Leucadia Roundabouts	NA	High	9	High	5	26	14	0	14

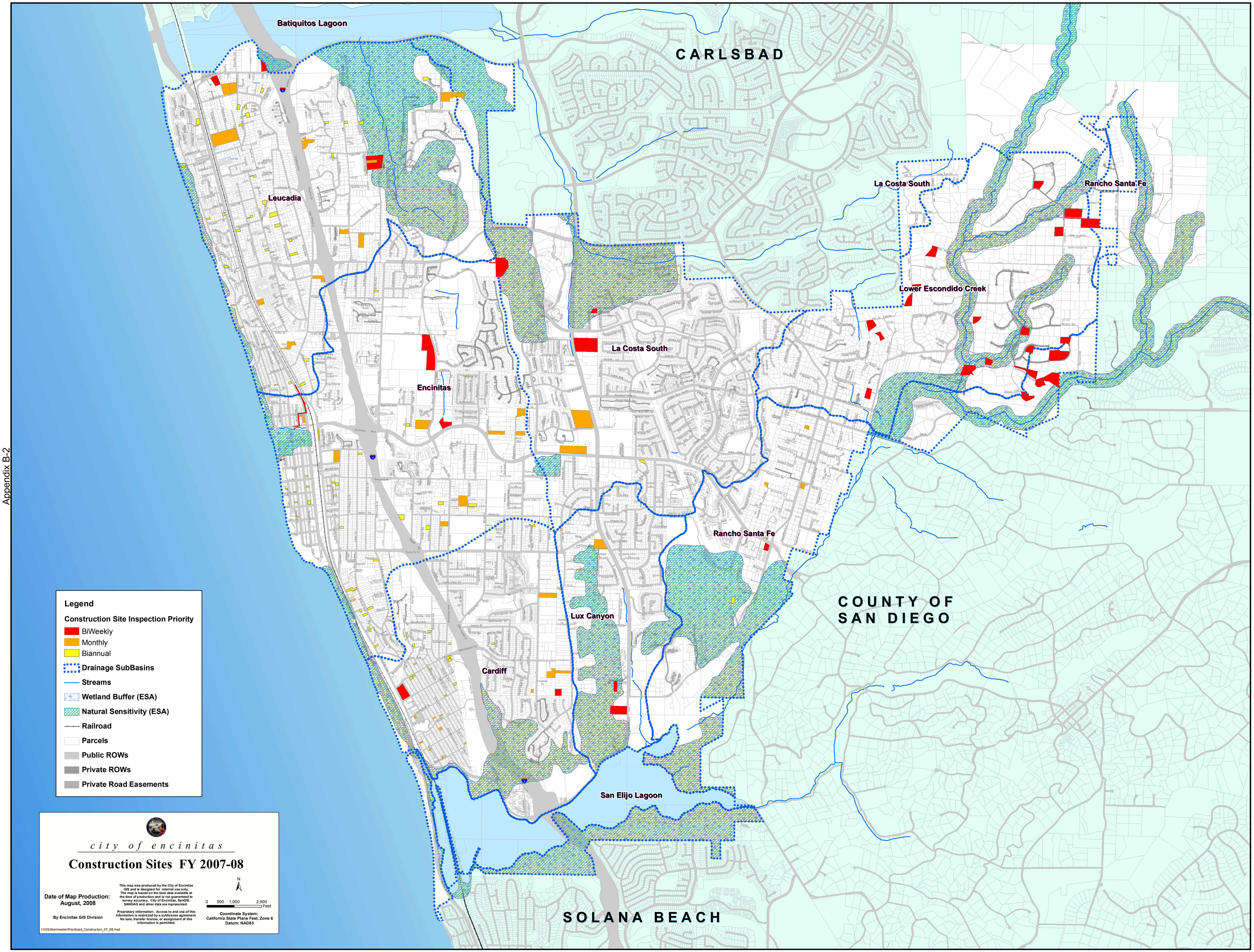
Batiquitos Lagoon
CARLSBAD
Leucadia
La Costa South
Rancho Santa Fe
Lower Escondido Creek
La Costa South
Encinitas
Rancho Santa Fe
COUNTY OF
SAN DIEGO
Lux Canyon
Cardiff
San Elijo Lagoon
SOLANA BEACH
Legend
Construction Site Inspection Priority
BiWeekly
Monthly
Biannual
Drainage SubBasins
Streams
Wetland Buffer (ESA)
Natural Sensitivity (ESA)
Railroad
Parcels
Public ROWs
Private ROWs
Private Road Easements
city of encinitas
Construction Sites FY 2007-08
Date of Map Production:
August, 2008
By Encinitas GIS Division
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0 500 1,000 2,000 Feet
Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83
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GIS Script Process for Determining Construction Project Inspection Frequencies

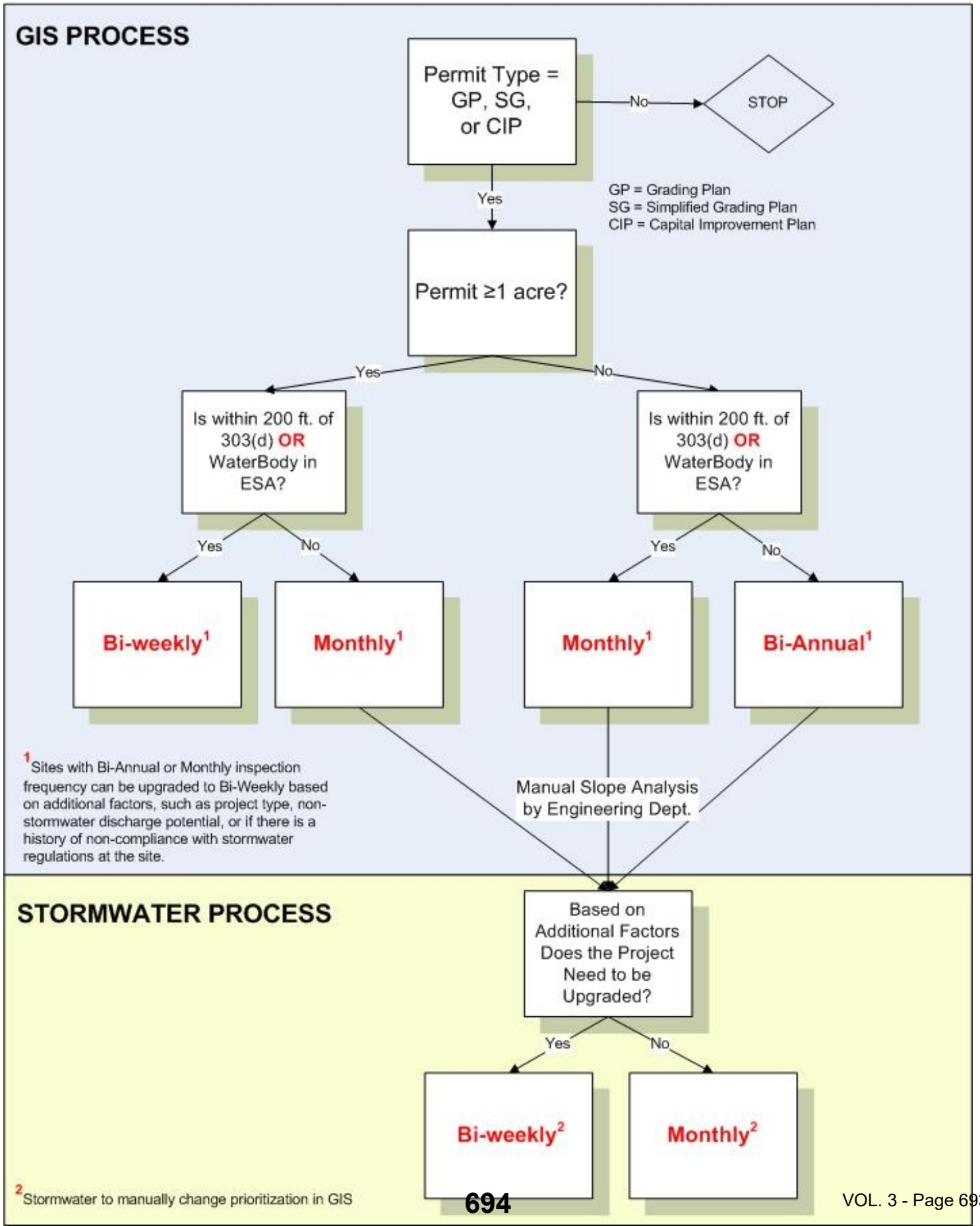

City of Encinitas

Construction Site Storm Water Inspection Checklist

Property Address:	**Date Inspected:**
Contact Person:	**Permit No:**
Phone No:	**APN:**
Inspector:	**Size:**

Inspection Priority: ☐ Biweekly ☐ Monthly ☐ Biannual

Covered under State General Construction Permit? ☐ YES ☐ NO If yes, is SWPPP on-site? ☐YES ☐ NO

Erosion Control BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Preserving Existing Vegetation
- ☐ Hydroseeding
- ☐ Soil Binders, Hydraulic Mulch, Bonded Fiber Matrix
- ☐ Geotextiles, Plastic Covers, Erosion Control Blankets/Mats
- ☐ Permanent Landscaping
- ☐ Diversion Channel for Run-on
- ☐ Other _____

Sediment Control BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Perimeter Protection: ☐ gravel bags, ☐ silt fencing, ☐ fiber rolls, ☐ other _____
- ☐ Slope Protection: ☐ silt fencing, ☐ fiber rolls, ☐ slope drains, ☐ other_____
- ☐ Resource Protection (environmentally sensitive areas and waterways)
- ☐ Sediment Capture: ☐ detention basin, ☐ desilting basin ☐other_____
- ☐ Velocity Reduction: ☐ check dams, ☐ rip rap, ☐ other_____
- ☐ Off Site Sediment Tracking: ☐ gravel entrance, ☐ Temp. Construction road, ☐ other_____
- ☐ Inlet Protection: ☐ gravel bags, ☐ gravel rolls, ☐ other_____
- ☐ Other _____

Materials Management BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Spill prevention and control program (employee education and training)
- ☐ Fuel/chemicals stored on Site: ☐ secondary containment, ☐ leak detection, ☐ other____
- ☐ Equipment Related Wastes: ☐ covered, ☐ secondary containment, ☐ other_____
- ☐ Stockpile on Site (Solids): ☐ covered, ☐ secondary containment, ☐ other_____
- ☐ Trash/Litter on Site: ☐ receptacles provided, ☐ covered, ☐ secondary containment, ☐ other _____
- ☐ Concrete Waste: ☐ designated washout area, ☐ secondary containment, ☐ other_____
- ☐ Sanitary Waste: ☐ secondary containment, ☐ located away from inlets, ☐ other_____

Enforcement: ☐ Correct Work (see Comments) ☐ Stop Work/NOV ☐ Citation (#_____)

Comments:

_____

_____

_____

_____

Signatures: City of Encinitas: _____ Date: _____

TEL 760-633-2787 / FAX 760-633-2818 505 S. Vulcan Avenue, Encinitas, California 92024-3633 TDD 760-633-2700

City of Encinitas

September 28, 2007

RE: **EROSION CONTROL**

Dear Permit Holder:

Please be advised that as of October 1, the City will enter into the wet season. The wet season brings with it a responsibility for erosion control pursuant to **23.24.370 - Wet Season Work** of the City Code. This section states the following:

A. No grading permit shall be issued for work occurring between October 1st of any year and April 15th of the following year, unless the plans for such work include details of protective measures, including desilting basins or other temporary drainage or control measures, or both, as may be deemed necessary by the field inspector to protect adjoining public and private property from damage by erosion, flooding, or the deposition of mud or debris which may originate from the site or result from such grading operations.

B. If grading is begun prior to October 1st, all protective measures shall be installed prior to October 1st. If grading is begun on or after October 1st, all protective measures shall be installed before grading is begun. All protective measures shall be maintained in good working order until April 15th of the succeeding year, where grading is done between October 1st and December 31st, or until April 15th of the same year where grading is done between January 1st and April 15th, unless their removal at an earlier date is approved by the City Engineer.

C. Where a grading permit is issued and the work is commenced after April 15th and before September 15th of any year, and the permit was issued without an Interim Erosion and Sediment Control Plan, and it appears that the grading and installation of the permanent drainage devices as authorized by the permit will not be completed prior to October 1, then on or before September 15th, the owner of the site on which the grading is being performed shall file or cause to be filed with the City Engineer an Interim Erosion and Sediment Control Plan as provided for in this Chapter and shall implement the measures contained in the approved plan by October 1. The plan check fee for the Interim Erosion and Sediment Control Plan shall be paid at the time of plan submittal and shall be in the amount provided for in this Chapter.

D. For continuation of grading activities, other than installation, maintenance, or repair of measures on the Erosion Control Plans, during the wet season, Permittee must apply for and receive, every seven days, special permission to proceed.

E. The City Engineer shall grant permission under this section on the basis of weather forecasts, site conditions, experience and other pertinent factors which indicate the activity may commence or continue without excessive erosion occurring.

F. Should the Permittee fail to submit the plans, fail to provide the protective measures or fail to obtain permission for wet season activities as required by this Chapter by the dates specified therein, it shall be deemed that a default has occurred under the conditions of the grading permit security. Thereupon the City Engineer may enter the property for the purpose of installing, by City forces or by other means, the drainage and erosion control devices shown on the approved plans, or if there are not approved plans, as he may deem necessary to protect adjoining

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

property from storm damage, or the City Engineer may cause the owner of the site to be prosecuted as a violator of this code, or he may take both actions.

G. The City Engineer shall have the authority to require implementation of all erosion control systems and requirements at any time of the year.

23.24.380 - Erosion Control System.

A. The faces of cut and fill slopes and project site shall be prepared and maintained to control against erosion in accordance with this Chapter. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted upon approval by the City Engineer.

B. Paved streets, sidewalks, and other improvements shall be maintained in a neat and clean condition free of loose soil, construction debris and trash. Street sweeping or other equally effective means shall be used on a regular basis to prevent storm flows from carrying sediment and debris outside the project boundaries. Watering shall not be used to clean streets except for fine material not otherwise removed by sweeping or other mechanical means.

C. The registered civil engineer who prepared the grading plan and designed the erosion control devices shall be responsible for modification of the design of devices, as necessary, during the rainy season.

D. Desilting facilities shall be provided at drainage outlets from the graded site.

E. Desilting basins shall be designed in accordance with City standards. Permanent desilting facilities shall be designed and constructed as to be aesthetically compatible with the surrounding development and terrain.

F. Desilting basins constructed of compacted earth shall be compacted to a relative compaction of ninety (90) percent of maximum density. A soil engineering report, prepared by the soil engineer, which includes the type of field testing performed, location and results of testing shall be submitted to the City Engineer for approval upon completion of the desilting basins.

G. Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available onsite and stockpiled at convenient locations to facilitate rapid construction of temporary device when rain is imminent.

H. Erosion protection shall consist of effective planting of all cut slopes in excess of five (5) feet high and fill slopes more than three (3) feet high unless otherwise approved by the City Engineer. Slopes exceeding five (5) feet high will require an approved sprinkler system, as determined by the City Engineer.

I. Protection for the slopes shall be installed as soon as practicable which may be prior to rough grade approval. Effective planting shall be installed, fully germinated and effectively cover the required slopes prior to final approval unless otherwise approved by the City Engineer.

J. The erosion control provisions shall take into account drainage patterns during the current and future phases of grading throughout the rainy season.

K. All removable protective devices shown shall be in place at the end of each working day when the five (5) day rain probability forecast exceeds forty (40) percent.

L. Unvegetated slopes shall be protected in accordance with the guidelines set forth by the Erosion and Sediment Control Manual or in accordance with other requirements set forth by the City Engineer.

23.24.390 - Erosion Control Maintenance.

City of Encinitas

A. After each rainstorm exceeding 1/4-inch in a 12 hour period, silt and debris shall be removed from all temporary check berms and desilting basins and the basins pumped dry. The requirement to clean and pump permanent desilting basins will be addressed on a case by case basis.

B. After each rainstorm, the performance of the erosion control system shall be evaluated and revised and repaired as necessary.

C. Devices shall not be moved or modified without the approval of the City Engineer.

D. The contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a threat to public health, safety and welfare.

E. The contractor and Permittee or project owner shall be responsible for continual maintenance of the devices during the rainy season. In the event of failure or refusal by the contractor, Permittee, or project owner to properly maintain the devices, the City Engineer may cause emergency maintenance work to be done to protect adjacent private and public property. The cost shall be charged to the owner and shall include an initial mobilization cost plus the cost of doing the work as provided for in this Chapter.

F. In the event the City Engineer must cause emergency maintenance work to be done, he may revoke the grading permit in writing. The permit shall not be renewed until an erosion control system approved by the City Engineer is installed and a fee of one-half the amount required for the original permit paid by the owner. The City Engineer may waive installation of an erosion control system after April 15.

G. If any grading subject to the provisions of this Chapter has commenced on private property without a valid grading permit, the property owner will be required to prepare and implement an erosion control plan which has been approved by the City Engineer. In the event of failure by the property owner to install an approved erosion control system, the City Engineer may cause emergency work to be done to protect adjacent private and public property.

The full text of the Municipal Code can be accessed on the City's website at http://ci.encinitas.ca.us/.

Please address any questions regarding this work to your inspector.

Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

cc: Inspector
File

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

FY 2007-08 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
10/9/2007	1555 Bella Vista	Lack of BMPs	X						X	
10/9/2007	1330 Bello Mar Drive	Lack of BMPs	X						X	
10/10/2007	540 Cornish Dr.	Lack of BMPs	X						X	
10/10/2007	736 Fourth Street	Maintain BMPs	X						X	
10/10/2007	235 La Costa Avenue	Maintain BMPs	X						X	
10/10/2007	235 La Costa Avenue	Maintain BMPs	X						X	
10/10/2007	Leucadia Roundabouts	Lack of BMPs	X						X	
10/10/2007	651 Quail Gardens Lane	Lack of BMPs	X						X	
10/24/2007	1555 Bella Vista	Lack of BMPs	X						X	
10/24/2007	540 Cornish	Lack of BMPs	X						X	
10/24/2007	Leucadia Roundabouts	Lack of BMPs	X						X	
10/24/2007	651 Quail Gardens Lane	Lack of BMPs	X						X	
11/7/2007	540 Cornish	Lack of BMPs	X						X	
11/7/2007	Leucadia Roundabouts	Lack of BMPs	X						X	
11/8/2007	1555 Bella Vista	Lack fo BMPs	X						X	
11/8/2007	1330 Bello Mar Drive	Lack of BMPs	X						X	
11/28/2007	1330 Bello Mar Drive	Maintain BMPs	X						X	
11/29/2007	540 Cornish	Lack of BMPs	X						X	
12/5/2007	422 Andrew Avenue	Lack of BMPs	X						X	
12/5/2007	Leucadia Roundabouts	Lack of BMPs	X						X	

Appendix B-6

FY 2007-08 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
12/5/2007	801 Orpheus Avenue	Lack of BMPs	X						X	
12/6/2007	1405 San Elijo Avenue	Lack of BMPs	X						X	
12/6/2007	1408 Summit Avenue	Lack of BMPs	X						X	
12/10/2007	2335 Manchester Avenue	Lack of BMPs	X						X	
12/10/2007	2271 Montgomery Avenue	Lack of BMPs	X						X	
12/12/2007	2271 Montgomery Avenue	Illegal Discharge		X		X	CW-121207B			X
12/12/2007	2335 Manchester Avenue	Illegal Discharge		X		X	CW-121207C			X
12/13/2007	887 Brittany	Illegal Discharge		X						X
12/31/2007	3342 Wildflower Valley Drive	Maintain BMPs	X						X	
1/3/2008	1330 Bello Mar Drive	Lack of BMPs	X						X	
1/3/2008	540 Cornish	Lack of BMPs	X						X	
1/3/2008	Leucadia Roundabouts	Lack of BMPs	X						X	
1/22/2008	1330 Bello Mar Drive	Lack of BMPs	X						X	
1/23/2008	540 Cornish	Lack of BMPs	X						X	
1/24/2008	3535 Manchester Avenue	Maintain BMPs	X						X	
1/24/2008	3342 Wildflower Valley Drive	Lack of BMPs	X						X	
2/5/2008	1653 Burgundy Road	Lack of BMPs	X						X	

Appendix B-6

FY 2007-08 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
2/5/2008	2351 San Elijo Ave	Illegal Discharge		X						X
2/6/2008	2265 Manchester Avenue	Lack of BMPs	X						X	
2/12/2008	3351 Lilac Summit	Lack of BMPs	X						X	
2/12/2008	3358 Wildflower Valley Drive	Lack of BMPs	X						X	
2/13/2008	201 N Vulcan Avenue	Lack of BMPs	X						X	
2/14/2008	1550 Summit	IllegalDischarge		X						X
2/14/2008	2271 Montgomery Avenue	Illegal Discharge		X						X
2/14/2008	1393/1405 San Elijo Ave	Illegal Discharge		X						X
2/15/2008	2351 San Elijo Ave	Illegal Discharge		X		X	CW-021508B			X
2/15/2008	2271 Montgomery Avenue	Illegal Discharge				X	CW-021508A			X
2/20/2008	1405 San Elijo Ave	Illegal Discharge				X	CW-022008			X
2/21/2008	1555 Bella Vista	Maintain BMPs	X						X	
2/21/2008	540 Cornish	Lack of BMPs	X						X	
2/21/2008	Leucadia Roundabouts	Lack of BMPs	X						X	
3/28/2008	2011-89 San Elijo Avenue	Maintain BMPs	X						X	

Appendix B-6

FY 2007-08 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
4/3/2008	3535 Manchester Avenue	Lack of BMPs	X						X	
4/17/2008	3351 Lilac Summit	Lack of BMPs	X						X	
4/30/2008	1415 Rainbow Ridge	Maintain BMPs	X						X	
4/30/2008	1435 Rainbow Ridge	Maintain BMPs	X						X	
FY 2007-2008	**TOTALS**		**46**	**8**	**0**	**5**		**0**	**46**	**10**

Appendix C

Municipal

C-1 **Municipal Inventory**

C-2 **Municipal Activities Report**

C-3 **Municipal BMP Map**

C-4 **Special Events Permit P2 Questionnaire**

CITY OF ENCINITAS MUNICIPAL FACILITIES INVENTORY AND PRIORITIZATION

Facility Name	Address	Land Use/Activities	Tributary to a 303(d) Impaired Water Body	Inspection Priority	Sub-basin
"A" TANK SITE	355 SANTA FE	Tank storage site/municipal yard	NOT TRIBUTARY	High Priority	Encinitas
BEACON'S BEACH	700 NEPTUNE	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Administrative offices/municipal yard/vehicle maintenance/materials storage	NOT TRIBUTARY	High Priority	Encinitas
CARDIFF SPORTS PARK	1623 LAKE	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
COTTONWOOD CREEK PARK	95 N. VULCAN	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DR	Golf course	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
ENCINITAS VIEWPOINT	CORNISH DRIVE & D STREET	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
GLEN PARK	2149 ORINDA	Park/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
H STREET VIEWPOINT	498 H STREET	Vista point	NOT TRIBUTARY	High Priority	Encinitas
HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
J STREET VIEWPOINT	398 J STREET	Vista point/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
LAS VERDES PARK	PASEO DE LAS VERDES & QUAIL GARDENS DR.	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
LEUCADIA OAKS PARK	1511 N. VULCAN	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
LEUCADIA ROADSIDE PARK	860 COAST HIGHWAY 101	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
LITTLE OAKS EQUESTRIAN PARK	2879 LONE JACK	Park/horse corral/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek
MILDRED MACPHERSON PARK	1045 VULCAN	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
MOONLIGHT BEACH	400 B STREET	Beach access/park/landscaped area/parking lot	TRIBUTARY TO PACIFIC OCEAN SHORELINE	High Priority	Encinitas
MS4	CITY WIDE	MS4	TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
OAKCREST PARK	555 BALOUR	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
ORPHEUS PARK	482 ORPHEUS	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
PACIFIC VIEW PUBLIC WORKS FACILITY	608 THIRD STREET	Administrative offices/vehicle parking	NOT TRIBUTARY	High Priority	Encinitas
PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
REQUEZA STREET FACILITY	397 REQUEZA	Municipal yard/sediment/materials storage	NOT TRIBUTARY	High Priority	Encinitas
ROADS, STREETS AND HIGHWAYS	CITY WIDE		TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
SAN ELIJO WASTEWATER COLLECTIONS DIVISION FACILITY	2695 MANCHESTER AVE	Municipal yard	NOT TRIBUTARY	High Priority	Cardiff
SCOTTS VALLEY PARK	1602 WILLOWHAVEN	Park/landscaped areas	TRIBUTARY TO ENCINITAS CREEK	High Priority	La Costa South
SPECIAL EVENTS	CITY WIDE	Recreational facilities, parks, landscaped areas, roads, streets and highways	MAY BE TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
SUN VISTA	2011 AVNDA LA POSTA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
SWAMI'S BEACH	1298 COAST HIGHWAY 101	Beach access/parking lot	NOT TRIBUTARY	High Priority	Encinitas
WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek/Ranch Santa Fe
CIVIC CENTER	505 S VULCAN AVE.	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	Encinitas
COMMUNITY/SENIOR CENTER	1221 ENCINITAS	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	La Costa South
D STREET VIEWPOINT	450 D STREET	Beach access and vista point	TRIBUTARY TO PACIFIC OCEAN SHORELINE	Low Priority	Encinitas
FIRE STATION 1	415 2ND	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
FIRE STATION 2	1867 MACKINNON	Fire station	NOT TRIBUTARY	Low Priority	Cardiff
FIRE STATION 3	801 ORPHEUS AVE	Fire station	NOT TRIBUTARY	Low Priority	Leucadia
FIRE STATION 4	2011 VILLAGE PARK	Fire station	NOT TRIBUTARY	Low Priority	La Costa South
FIRE STATION 5	540 BALOUR DR	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
HALL PROPERTY	1451 STARLIGHT DR	Undeveloped park site	NOT TRIBUTARY	Low Priority	Cardiff
I STREET VIEWPOINT	4981 I STREET	Vista point	NOT TRIBUTARY	Low Priority	Encinitas
INDIAN HEAD CANYON	0 QUAIL HOLLOW	Undeveloped park site	NOT TRIBUTARY	Low Priority	Leucadia
PUMP STATION	2690 MANCHESTER	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
SAN DIEGUITO WATER DISTRICT		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
SAN DIEGUITO WATER DISTRICT		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	Encinitas
SAN DIEGUITO WATER DISTRICT		Water recycling reservoir	NOT TRIBUTARY	Low Priority	Encinitas
SAN DIEGUITO WATER DISTRICT		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Encinitas
SAN DIEGUITO WATER DISTRICT		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Cardiff
SAN ELIJO BLUFFS PARCELS	1400 COAST HIGHWAY 101	Undeveloped site	NOT TRIBUTARY	Low Priority	Encinitas
STANDARD PACIFIC PARK SITE	OLYMPUS / PIRAEUS	Undeveloped site	NOT TRIBUTARY	Low Priority	Leucadia
STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach access and vista point	NOT TRIBUTARY	Low Priority	Leucadia
UV TREATMENT FACILITY	THIRD ST. AND B ST.	UV Treatment Facility	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas

***Note: The San Diegito Water District's facility addresses have been omitted for security purposes.**

FY 2007-08 Municipal Activities Report

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
1.	No	Report on updates to the municipal inventory and prioritization (D.3.(3)(c)i).	July 1, 2007-June 30, 2008		See Appendix C-1
2.	No	Confirmation that the designated BMPs were implemented, or required to be implemented for: municipal areas and activities (D.3.(3)(c)ii).	July 1, 2007-June 30, 2008		See Sections 4.2.3, 4.3.3, 4.4.3, 4.5.3 and 4.6.3
3.	Yes	Confirmation that the designated BMPs were implemented, or required to be implemented for: special events (D.3.(3)(c)ii).	**Jan 24, 2008-June 30, 2008**		See Sction 4.7.3
4.	Yes	A description of inspections and maintenance conducted for municipal treatment controls-Municipal Filter Inserts (D.3.(3)(c)iii).	July 1, 2007-June 30, 2008		See Section 4.4.4.1
5.	Yes	A description of inspections and maintenance conducted for municipal treatment controls-UV Treatment Facility (D.3.(3)(c)iii).	**Jan 24, 2008-June 30, 2008**		See Section 4.4.4.1
6.	Yes	Identification of the total number of catch basins and inlets (D.3.(3)(c)iv).	July 1, 2007-June 30, 2008		2762
7.	Yes	Identification of the number of catch basins and inlets **inspected** (D.3.(3)(c)iv).	**Jan 24, 2008-June 30, 2008**		1657
8.	Yes	Identification of the number of catch basins and inlets found with accumulated waste exceeding 33% of design capacity (D.3.(3)(c)iv).	**Jan 24, 2008-June 30, 2008**	All inlets and catch basins within the City are cleaned on an annual basis, which is sufficient in ensuring that they remain free of trash and debris.	0

Appendix C-2
FY 2007-08 Municipal Activities Report

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
9.	Yes	Identification of the number of catch basins and inlets **cleaned** (D.3.(3)(c)iv).	**Jan 24, 2008-June 30, 2008**		1657
10.	Yes	Identification of total distance (miles) of the MS4 (D.3.(3)(c)v).	July 1, 2007-June 30, 2008		96 miles of pipe
11.	Yes	Identification of distance of the MS4 **inspected (D.3.(3)(c)v).**	**Jan 24, 2008-June 30, 2008**		57.6 miles of pipe
12.	Yes	Idenitification of distance of the MS4 found with accumulated waste exceeding cleaning criteria (D.3.(3)(c)v).	**Jan 24, 2008-June 30, 2008**		0
13.	Yes	Identification of distance of the MS4 **cleaned (D.3.(3)(c)v).**	**Jan 24, 2008-June 30, 2008**		4.8 miles of pipe
14.	Yes	Identification of total distance (miles) of open channels (D.3.(3)(c)vi).	July 1, 2007-June 30, 2008		6.32 miles
15.	Yes	Identification of distance of open channels **inspected** (D.3.(3)(c)vi).	**Jan 24, 2008-June 30, 2008**		6.32 miles
16.	Yes	Identification of distance of open channels found with anthropogenic litter (D.3.(3)(c)vi).	**Jan 24, 2008-June 30, 2008**		1.1 miles

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
17.	Yes	Identification of distance of open channels **cleaned** (D.3.(3)(c)vi).	**Jan 24, 2008-June 30, 2008**		1.1 miles
18.	Yes	Amount of waste and litter (tons) removed from catch basins (D.3.(3)(c)vii).	**Jan 24, 2008-June 30, 2008**		26.4 tons
19.	Yes	Amount of waste and litter (tons) removed from inlets (D.3.(3)(c)vii).	**Jan 24, 2008-June 30, 2008**		1.574 tons
20.	No	Amount of waste and litter (tons) removed from the MS4 (D.3.(3)(c)vii).	July 1, 2007-June 30, 2008		Approximately 55.95 tons in addition to 4,748- 30 gallon bags
21.	Yes	Amount of waste and litter (tons) removed from the open channels (D.3.(3)(c)vii).	**Jan 24, 2008-June 30, 2008**		2374 -30 gallon bags
22.	Yes	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification of the finding (D.3.(3)(c)viii).	**Jan 24, 2008-June 30, 2008**		None
23.	No	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented or required to be implemented for municipal areas and activities (D.3.(3)(c)ix).	July 1, 2007-June 30, 2008		See Section 4.3.3.1
24.	Yes	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating the **highest** volumes of trash and/or debris (D.3.(3)(c)x).	**Jan 24, 2008-June 30, 2008**		41 curb miles

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
25.	Yes	Identification of frequency of sweeping conducted for such roads, streets and highways (D.3.(3)(c)x).	**Jan 24, 2008-June 30, 2008**	See Section 4.2.4	Weekly
26.	Yes	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **moderate** volumes of trash and/or debris (D.3.(3)(c)xi).	**Jan 24, 2008-June 30, 2008**		60.8 curb miles
27.	Yes	Identification of frequency of sweeping conducted for such roads, streets and highways (D.3.(3)(c)xi).	**Jan 24, 2008-June 30, 2008**	See Section 4.2.4	Semi-Weekly
28.	Yes	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **low** volumes of trash and/or debris (D.3.(3)(c)xii).	**Jan 24, 2008-June 30, 2008**		241 curb miles
29.	Yes	Identification of frequency of sweeping conducted for such roads, streets and highways (D.3.(3)(c)xii).	**Jan 24, 2008-June 30, 2008**	See Section 4.2.4	Monthly
30.	No	Identification of the total distance of cub-miles swept (D.3.(3)(c)xiii).	July 1, 2007-June 30, 2008		Approximately 11,380 curb miles
31.	Yes	Identification of the number of municipal parking lots (D.3.(3)(c)xiv).	**Jan 24, 2008-June 30, 2008**		4
32.	Yes	Identification of the number of municipal parking lots swept (D.3.(3)(c)xiv).	**Jan 24, 2008-June 30, 2008**		4

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
33.	Yes	Identification of the frequency of sweeping (D.3.(3)(c)xiv).	**Jan 24, 2008-June 30, 2008**	All beach parking lots are swept once per week April through September and once per month October through March.	See Section 4.2.4
34.	Yes	Amount of material (tons) collected from street and parking lot sweeping (D.3.(3)(c)xv).	**Jan 24, 2008-June 30, 2008**		1,379 tons
35.	No	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 (D.3.(3)(c)xvi)	July 1, 2007-June 30, 2008		See Section 4.5.4.1
36.	No	Identification of the number of fixed municipal sites requiring inspections (D.3.(3)(c)xvii).	July 1, 2007-June 30, 2008		29
37.	No	Identification of the number of sites inspected (D.3.(3)(c)xvii).	July 1, 2007-June 30, 2008		29
38.	No	Identification of the frequency of inspections (D.3.(3)(c)xvii).	July 1, 2007-June 30, 2008		Annual
39.	No	A description of the general results of the inspections (D.3.(3)(c)xviii).	July 1, 2007-June 30, 2008		See Appendix D-5
40.	No	Confirmation that the inspections conducted addressed all the required inspection steps and follow-ups to determine full compliance (D.3.(3)(c)xix).	July 1, 2007-June 30, 2008		See Appendix D-5

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
41.	No	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken (D.3.(3)(c)xx).	July 1, 2007-June 30, 2008		0
42.	Yes	A description of notable activities conducted to manage urban runoff from municipal areas and activities (D.3.(3)(c)xxi).	July 1, 2007-June 30, 2008		See Sections 4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4 and 4.7.4

See Appendix D-5

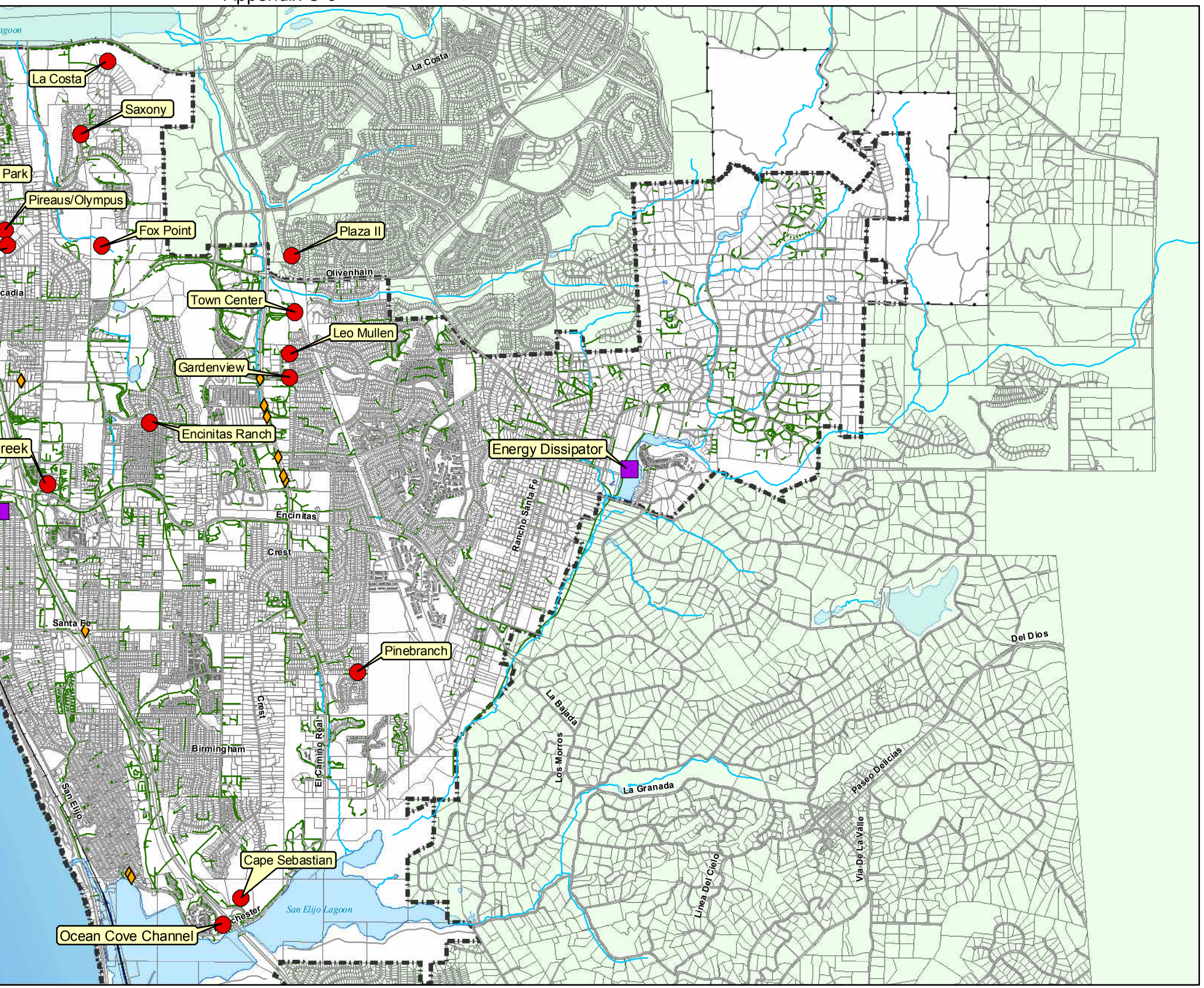

Storm Drains
Streams
Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

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Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: September, 2008

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N

0 2,500 5,000 Feet

POLLUTION PREVENTION
(Does not apply to Special Ceremonies)

Storm drains are not connected to the City's sewer system. All pollutants allowed to enter the storm drain system flow directly to our beaches, ocean, lagoons and other waterways without being treated. The City of Encinitas is required by the San Diego Regional Water Quality Control Board to report on pollution prevention measures taken at special events held throughout the City.

In the area provided on the next page or on a separate sheet of paper, please complete the following questions and describe methods of pollution prevention that will be implemented at your proposed event.

1. Describe how trash, recycling, and debris will be managed (i.e. extra bins, temporary fencing, etc.)

2. If your event will include food production/distribution, describe how excess oil and grease will be disposed of. These materials cannot be dumped into the streets or storm drain system

3. Please identify any other pollutant generating activities that may take place.

For questions, please call the City's Clean Water Program at (760) 633-2787.

Appendix D

Industrial and Commercial

D-1 Stationary Commercial Inventory

D-2 Industrial Inventory

D-3 Storm Water Quality Inspection Form

D-4 Storm Water Quality Inspection Form for Restaurants

D-5 Routine Inspections Summary Table

D-6 Mobile Commercial Inventory

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Deborah Ptashne Grooming	2013 San Elijo Ave	Cardiff	Animal Facility	0753	Pet grooming service	no	low
Dove Hollow Farm	1084 Double Ll Ranch Rd	Lower Escondido Creek	Animal Facility	0752	Horse training, boarding	no	low
Drake Center for Animal Health	195 N El Camino Real	La Costa South	Animal Facility	0742	Veterinary care	no	low
Holiday Pet Hotel	551 Union St	Encinitas	Animal Facility	0752	Pet boarding	no	high
Horses and Moore Pet Care	1060 California St	La Costa South	Animal Facility	0752	Horse boarding	no	low
North Coast Equestrian Park	1877 Olivenhain Rd	La Costa South	Animal Facility	0752	Horse boarding and training	no	low
Rancho Los Amigos Equestrian Center	3049 Camino Del Rancho	Lower Escondido Creek	Animal Facility	752	Horse boarding and training	no	low
Bradley Allen Auto Body	204 N Coast Highway 101	Leucadia	Auto Body Repair	7532	Auto body repair	no	low
Custom Cycle Creations, Inc.	324 N El Camino Real, Unit B	La Costa South	Auto Body Repair	7549	Installation of interior auto parts	no	low
Fender Mender	324 N El Camino Real, Unit A	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
Fender Mender	328 N El Camino Real, Unit B	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
Fender Mender	326 N El Camino Real	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
First Mission Auto Body Repair	339 N El Camino Real, Unit B	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
Rancho Auto Body	591 Westlake St, Unit A-C	Encinitas	Auto Body Repair	7532	Auto body repair	no	low
S & Brothers Inc. Auto Upholstery	322 N El Camino Real, Unit F	La Costa South	Auto Body Repair	7532	Auto upholstery repair	no	low
SoCal Custom	328 N El Camino Real	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
West Coast Wreck Check	1227 Village View Rd	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
World Auto Body	140 N Coast Highway 101	Encinitas	Auto Body Repair	7532	Auto body repair	no	low
A+ Test Only Center	449 Second St	Encinitas	Auto Repair/Maintenance	7549	Auto diagnostic testing center	no	low
Absolute Saab	371 Second St	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Ace Cars & Vans	1244 N Coast Highway 101	Leucadia	Auto Repair/Maintenance	7514	Auto rental, car washing	no	low
All Car CTR	140 N Coast Highway 101, Rear	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Auto Zone	120 Leucadia Blvd	Leucadia	Auto Repair/Maintenance	5103	Auto parts supply used oil and used battery collection	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Brad's Foreign & Domestic	565 Westlake St, Unit A-E & 200C	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
California Rover (Rover Repairs, Inc)	386 Encinitas Blvd	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Cardiff Classic	1049 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7549	Auto sales and cleaning	no	low
Charles Foreign Car Sales	710 Second St	Encinitas	Auto Repair/Maintenance	5511	Auto sales and repair	no	low
Charlie's Foreign Car	751 Second St	Encinitas	Auto Repair/Maintenance	7538	Auto sales and maintenance	no	high
Coast Brake & Wheel	444 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Coastal Foreign Auto	320 N El Camino Real, Unit A-C	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Dan's Precision Alignment	565 Westlake St, Unit 200F	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Definitive Mobile Audio (DMA)	126 A St	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Discount Auto Service	710 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Discount Tire	107 N El Camino Real, Unit A	La Costa South	Auto Repair/Maintenance	5103	Auto repair and maintenance	no	low
El Camino Tire & Brake	330 N El Camino Real	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Encinitas Automotive Repair	322 N El Camino Real, Unit A-B	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Encinitas Car Wash	293 N El Camino Real	La Costa South	Auto Repair/Maintenance	7542	Car wash	no	low
Encinitas Ford	1424 Encinitas Blvd	La Costa South	Auto Repair/Maintenance	7538	Auto sales, repair and cleaning	no	low
Encinitas Foreign Auto	901 Second St	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Encinitas Japanese Car Specialists	328 N El Camino Real, Unit A	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Encinitas Smog Test Only Center	682 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7549	Auto diagnostic testing center	no	low
FIC Smog	322 N El Camino Real, Unit C	La Costa South	Auto Repair/Maintenance	7549	Auto diagnostic testing center	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Happy Auto Sales	148 N Coast Highway 101	Encinitas	Auto Repair/Maintenance	5511	Auto sales and cleaning	no	low
Harloff BMW	1302 Encinitas Blvd	La Costa South	Auto Repair/Maintenance	5511	Auto sales, repair and cleaning	no	low
Harris Radiator	274 N Coast Highway 101	Leucadia	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Hugo's European Car	110 N Coast Highway 101	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Instant Oil Change	127 S El Camino Real, Unit A	La Costa South	Auto Repair/Maintenance	7549	Lubrication service	no	low
Jiffy Lube #1764	221 N El Camino Real	La Costa South	Auto Repair/Maintenance	7549	Lubrication service	no	high
K & B Auto Service & Repair	320 N El Camino Real, Unit D	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Keith's Auto Electrical	215 W G St	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Kragen Auto Parts	180 N El Camino Real	La Costa South	Auto Repair/Maintenance	5103	Auto parts	no	low
Midas Mufflers	328 N El Camino Real, Unit C	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Miller Tire	759 Munevar Rd	Cardiff	Auto Repair/Maintenance	5103	Auto parts, minor maintenance	no	low
Moonlight Motors	215 Melrose Ave	Leucadia	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Napa Auto Parts	523 Encinitas Blvd, Unit 100-101	Encinitas	Auto Repair/Maintenance	5103	Auto parts, used battery and used oil collection	no	low
North County Jet Ski	111 C St	Encinitas	Auto Repair/Maintenance	5511	Personal watercraft sales and repair	no	low
Paul's Auto Electric	325 Melrose Ave	Leucadia	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Pep Boys Manny Moe & Jack	256 N El Camino Real	La Costa South	Auto Repair/Maintenance	5103	Auto parts sales and used battery and used oil collection	no	low
Precision Tune	318 N El Camino Real, Unit A	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Ray's Automotive	1051 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Road One	1205 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7549	Auto towing and storage of towed cars	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Scott's Automotive	1508 N Coast Highway 101	Leucadia	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Softspra Carwash	790 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7542	Car wash	no	low
Speedy Tune & Brake	225 N El Camino Real	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Suspension Plus	322 N El Camino Real, Unit D-E	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Swami's Automotive Repair	320 N El Camino Real, Unit C-D	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Trans Masters Transmissions	184 N Coast Hwy 101	Leucadia	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Home Depot	1001 N El Camino Real	La Costa South	Building Materials	5211		no	low
Home Expo Design Center	1550 Leucadia Blvd	La Costa South	Building Materials	5211	Retail sales of lumber, brick, paint, and other building supplies	no	low
RCP Block Company	577 N Vulcan Ave	Leucadia	Building Materials	5211	Sales of brick, rock and other masonry supplies.	no	low
100% Natural	918 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
101 Diner, The	552 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
1st Street Bar	656 S Coast Highway 101	Encinitas	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	low
7-Eleven	1446 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
7-Eleven	2240 Encinitas Blvd, Unit A	Rancho Santa Fe	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
7-Eleven (Moonlight)	105 W D St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
7-Eleven Food Store	592 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Albertson's	479 Encinitas Blvd	Encinitas	Eating/Drinking	5411	Grocery store	no	high
Albertsons (Redbox Automated Retail, LLC)	134 N El Camino Real	La Costa South	Eating/Drinking	5411	Grocery store	no	low
All American Deli & Ice Cream	130 N El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Amici Bakery	564 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Angelo's Burgers	608 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Auggie's House of Crab	1468 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Baja Fresh	194 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Bar Leucadian	1542 N Coast Highway 101	Leucadia	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	low
Baskin Robbins	441 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Beach City Cafe	102 Aberdeen Dr	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Beach House Restaurant	2530 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Beach Tea House	1076 N Coast Highway 101, Unit A	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Bella Rosa	806 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Besta Wan (One Sweet World, LLC)	148 Aberdeen Dr	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Bety's Mexican Restaurant	1464 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Bird House Grill	250 N Coast Highway 101, Unit A	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Blue Fin Sushi	257 N El Camino Real, Unit D-E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Borelli's Restaurant	285 N El Camino Real, Unit 106-108	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Boston's	294 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Burger King (J. S. Foods)	242 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Cabo Grill	1950 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Calypso Cafe	576 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Captain Keno's	158 N Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Carl's Jr. #181	1137 Regal Rd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Champagne Bakery	162 S Rancho Santa Fe Rd, Unit E10	Rancho Santa Fe	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Charlie's By The Sea	2526 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
Chart House, The	2588 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Chick's Natural	191 N El Camino Real, Unit 107	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Chili's Bar & Grill	1004 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Chinatown Restaurant	118 Leucadia Blvd	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Chin's Restaurant	625 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Chipotle	268 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Cicciotti's Trattoria Italiana	1933 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Coco's #881	407 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Cookies In Bloom	1277 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
D Street Bar & Grill	485 S Coast Highway 101	Encinitas	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	high
Dairy Queen	1465 Encinitas Blvd, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Daley Double Saloon	546 S Coast Highway 101	Encinitas	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Daphne's Greek Cafe	130 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Del Taco	130 Calle Magdalena	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Denny's Restaurant	135 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Dippin Dots	260 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Domino's Pizza	1458 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Duke's Bar	107 Diana St	Leucadia	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	low
E St Cafe	128 W E St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
East Coast Pizza (A & M Investment, Inc)	2015 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Einstein Brothers Bagels	1006 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
El Callejon	345 S Coast Highway 101, Unit C	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
El Cortez	445 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
El Nopalito	560 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
El Pollo Loco	1002 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
El Torito Meat Market	948 N Coast Highway 101	Leucadia	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	high
El Torito Restaurant	1068 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Encinitas Cafe	531 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Encinitas Donut Shop	580 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Encinitas Ranch Café	1275 Quail Gardens Drive	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Encinitas Yogurt & Ice Cream	1070 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Filiberto's Mexican Food	476 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Filippi's Pizza Grotto	1486 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Firefly Grill & Wine Bar	251 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Firenze Trattoria	162 S Rancho Santa Fe Rd, Unit G10	Rancho Santa Fe	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Flippin Pizza, New York Style	215 S El Camino Real, Unit H	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Fulanos	145 Leucadia Blvd	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Garden State Bagels	191 N El Camino Real, Unit 106	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Giovanni's Sandwich Shop	764 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Golden Baked Hams	114 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Greek American Family Restaurant	392 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Gusto Trattoria	429 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Harvest Ranch Market	162 S Rancho Santa Fe Rd, Unit E50	Rancho Santa Fe	Eating/Drinking	5411	Grocery store	no	low
Henrys Farmers Market	1327 Encinitas Blvd	La Costa South	Eating/Drinking	5411	Grocery store	no	high
Honey Baked Ham	459 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Honey's Bistro & Bakery	632 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Island Brother's Teriyaki	274 N El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Islands	1588 Leucadia Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Its A Grind Coffee House (Pez Del, Inc)	204 N El Camino Real, Unit H	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jack In The Box	1439 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jack in the Box (Nfarooqi Enterprises, LLC)	1967 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Jam Roc 101	101 N Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jam Roc 101 (Hacker, DB and Co)	101 N Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jamba Juice	272 N El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Java Express	325 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Jay's Gourmet Restaurant	218 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jorge's Mexicatessen	267 N El Camino Real, Unit E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jorge's Mexicatessen	417 Santa Fe Dr, Unit B	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Juanita's Taco Shop	290 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Juice N Java	168 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
K C'S Tandoor	1518 Vivaldi St, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Kaito	1476 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Karina's Taco Shop	916 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Kealani's	137 W D St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Kentucky Fried Chicken	266 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Kim's Vietnamese & Chinese Restaurant	745 S Coast Highway 101, Unit 103	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Ki's Juice Bar	2591 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Kotija Jr. Taco Shop	852 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Kraken	2531 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
La Bonne Bouffe	471 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
La Especial Norte	664 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
La Salsa Fresh Mexican Grill	219 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Las Olas	2655 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
Le Moulin Rouge Bakery	828 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Le Petite Calypso	1002 N Coast Highway 101, Unit 2	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Leucadia Donut Shop	1604 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Leucadia Pizzeria	315 S Coast Highway 101, Unit V	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
Leucadia Sushi Bar	996 N Coast Highway 101, Unit D-F	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Little Caesars Pizza	118 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Little Moore, A	1030 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mama Houli and Sister T	423 La Mesa Ave	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mama Lulu's Pizza and Pasta	191 N El Camino Real, Unit 110	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mandarin City	815 Birmingham Dr	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mandarin Oriental	1337 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Manhattan Pizza	143 W D St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Marie Callendar's	162 S Rancho Santa Fe Rd, Unit C	Rancho Santa Fe	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
McDonald's	1271 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
McDonald's	1064 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Meritage Restaurant & Bar	897 S Coast Highway 101, Unit F104	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mexico Viejo	1465 Encinitas Blvd, Unit E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mira Costa College Cafeteria (Premier Food Services)	3333 Manchester Ave	Lux Canyon	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Mister Sushi	111 N El Camino Real, Unit A-B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Miyabi's Japanese Restaurant	211 S El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Mo Joe's Coffee Company	590 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Moonlight Grille	190 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Moonlight Snack Shack	400 B St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
Mozy	698 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mr. Peabody's Steakhouse	136 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Noodles & Company	260 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Nrgize Lifestyle Cafe	201 S El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Ogata Japanese Cuisine	615 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Oggis Pizza & Brew	305 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Panda Express	1084 N El Camino Real, Unit E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Pannikin Coffee & Tea	510 N Coast Highway 101, Unit A-B	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Papa John's Pizza #1596	337 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Papa Toni's Pizza	554 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Passage to India	257 N El Camino Real, Unit K	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Pasta Bravo	1042 N El Camino Real, Unit J05 & E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Pei Wei Asian Diner	1560 Leucadia Blvd, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Pick Up Stix	127 N El Camino Real, Unit H	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Pino's	967 S Coast Highway 101, Unit 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Pipes	121 Liverpool Dr	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Pizza Hut	127 N El Camino Real, Unit G	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Pizzicato Gourmet Pizza	252 N El Camino Real, Unit 5	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Potato Shack Cafe	120 W I St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Quick Fix	552 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Quizno's Classic Subs	337 N El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Ralphs	125 N El Camino Real	La Costa South	Eating/Drinking	5411	Grocery store	no	high
Raul's Taco Shop	490 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Rico's Taco Shop	165 S El Camino Real, Unit L	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Rite Aid (Ice Cream)	439 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Robbie's Restaurant	100 Athena St	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Roberto's Mexican Food	1900 N Coast Highway 101, Unit D	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Roberto's Taco Shop	274 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Round Table Pizza	1321 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Roxy Restaurant	517 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Rubio's	252 N El Camino Real, Unit 4	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Russo's Pasta Shop	270 N El Camino Real, Unit I	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Sage Grill	1506 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Sake House	1246 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Sakura-Bana Sushi Bar	1031 S Coast Highway 101, Unit 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Sandwich Station	218 N El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Santa Fe Cafe	445 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Savory Restaurant	267 N El Camino Real, Unit A-B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Scripps Memorial Hospital (Food Services)	354 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Siamese Basil Restaurant	527 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Silk Asian Tapas	288 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Smart & Final	150 Encinitas Blvd	Encinitas	Eating/Drinking	5411	Grocery store	no	low
St Germain's Cafe	1010 S Coast Highway 101, Unit 112	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
St Tropez Bakery & Bistro	947 S Coast Highway 101, Unit D103	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Stater Brothers	1048 N El Camino Real	La Costa South	Eating/Drinking	5411	Grocery store	no	low
Subman	113 N El Camino Real, Unit E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
SubMania	1514 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Subway	2105 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Subway #27567	1560 Leucadia Blvd, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Subway Sandwiches & Salads	272 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Super Donut #1	465 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Super Donut #2	252 N El Camino Real, Unit 2	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Surf Dog Records	1126 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Surfside Creamery	2031 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Sushi House	214 N El Camino Real, Unit A-B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Swami's Cafe	1163 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Taco Bell	1502 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Target	1010 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Tastes Group, LLC	641 S Coast Highway 101	Encinitas	Eating/Drinking	5813	Sells prepared drinks for consumption on site	no	low
Thai Pan Express	138 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
The Bullpen	149 S El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
The Greenery Raw Food Cafe	133 Daphne Avenue	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
The Original Pancake House	160 S Rancho Santa Fe Rd, Unit D10	Rancho Santa Fe	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
The Quick Fix	144 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Today's Pizza	481 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Tok Subs, Inc	138 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Tomiko	87 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Trader Joe's	115 N El Camino Real	La Costa South	Eating/Drinking	5411	Grocery store	no	low
Trattoria	2171 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Trattoria I Trulli	830 S Coast Highway 101, Unit A	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Tuscan Sun Italian Deli	1070 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
VG Donuts & Bakery	106 Aberdeen Dr	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Via Italia	565 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Vigilucci's	505 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Von's Grocery	453 Santa Fe Dr	Encinitas	Eating/Drinking	5411	Grocery store	no	high
Von's Grocery	262 N El Camino Real	La Costa South	Eating/Drinking	5411	Grocery store	no	high
Wahoo's Fish Tacos	1006 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Wendy's Hamburgers	102 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
When In Rome	1108 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Yogi's Sports Bar & Restaurant	2633 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
Zibibbo	1560 Leucadia Blvd, Unit E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Rebel Rents	1900 N Coast Highway 101, Unit A	Leucadia	Equipment Repair	7359	Equipment rental	no	low
7-Eleven Food Store	2211 San Elijo Ave	Cardiff	Fueling	5541	Gas station, food store	no	high

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
7-Eleven Store, #13627D-2111	102 Leucadia Blvd	Leucadia	Fueling	5541	Gas station, food store	no	high
7-Eleven Store, #24335D-2111	1988 Village Park Way	La Costa South	Fueling	5541	Gas station, food store	no	low
AM/PM Gas Station	1580 Leucadia Blvd	La Costa South	Fueling	5541	Gas station	no	low
ARCO 9598/Dba Senan F. Naoum	633 Birmingham Dr	Cardiff	Fueling	5541	Gas station	no	high
Cardiff 76	3085 Manchester Ave	Cardiff	Fueling	5541	Gas station	no	high
Chevron Encinitas	350 Encinitas Blvd	Encinitas	Fueling	5541	Gas station	no	high
Chevron Food Mart	805 Birmingham Dr	Cardiff	Fueling	5541	Gas station, food store	no	low
Encinitas Exxon	325 Encinitas Blvd	Encinitas	Fueling	5541	Gas station	no	high
Encinitas Gas	310 Encinitas Blvd	Encinitas	Fueling	5541	Gas station	no	low
Leucadia Shell	865 Orpheus Ave	Leucadia	Fueling	5541	Gas station, service station	no	high
Rosano's Unocal 76	236 N El Camino Real	La Costa South	Fueling	5541	Gas station	no	low
Seaside Autohaus (Cardiff Valero)	820 Birmingham Dr	Cardiff	Fueling	5541	Gas station	no	high
Shell Oil	160 Encinitas Blvd	Encinitas	Fueling	5541	Gas station, car wash	no	low
Shell Oil Company	1060 N El Camino Real	La Costa South	Fueling	5541	Gas station	no	low
Shell Station	1355 Encinitas Blvd	La Costa South	Fueling	5541	Gas station	no	high
Encinitas Ranch Golf Course	1275 Quail Gardens Dr	Leucadia	Golf Course	0782	Golf course/landscape maintenance and a variety of lawn and garden services	no	low
Bradley Landscape Development, Inc	607 N Vulcan Ave	Leucadia	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.	no	low
Christian Brothers Landscaping	636 Leucadia Blvd	Leucadia	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting	no	low
Del Mar Landscaping	2016 Bulrush Ln	Cardiff	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting	no	low
Lui Delgado Landscaping Service and Tierra Verde	1545 Lake Dr	Cardiff	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting	no	low
MAC Design and Development	471 Chesterfield Dr	Cardiff	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting	no	low
Mark Lanager Masonry & Landscaping	1310 Summit Ave	Encinitas	Masonry	1741	Special trade contractor primarily engaged in masonry work, stone setting, and garden planting.	no	low
Abels Flowers & Plants	710 Clark Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Ades & Gish Nurseries - Growers	1492 Hymettus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Ades & Gish Nurseries - Growers	1150 Melba Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Anderson, H Greenhouse	375 La Costa Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Andy's Orchids	734 Ocean View Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Armstrong Garden Center	701 N El Camino Real	La Costa South	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Barbara J Weber, Trustee - Growers	237 Seeman Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Barrels & Branches	1452 Santa Fe Dr	Lux Canyon	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Basil Tops	1425 Rubenstein Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Batley Enterprises - Growers	1415 Rainbow Ridge Ln	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Bird Rock Tropicals	221 Princehouse Ln	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Browns Plants Inc - Growers	1515 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Byer, Richard - Growers	1731 Crest Dr	Lux Canyon	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
C M A Growers - Growers	1254 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cactus King Nursery	1534 Crest Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cal Pacific Orchid Farm	1122 Orpheus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cardiff Palm Tree 2	333 Liszt Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cardiff/California Greenhouses	1753 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Chino Greenhouses Inc - Growers	1168 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Chino Greenhouses Inc - Growers	1253 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cordova Gardens	902 Encinitas Blvd, Unit A	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cordova, Joe - Growers	720 Balour Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cosgrove Cymbidium Co - Growers	1200 Saxony Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
D. Ades Investment Corporation	875 Balour Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Daniel Mojonnier	912 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Davis, Eric - Growers	752 Bracero Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Divine Orchids	1015 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Don's Flowers	924 Bracero Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Dramm & Etcher	1150 Quail Gardens Dr	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Ecke, Paul Ranch	441 Saxony Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Ecke, Paul Ranch	1051 Summer Holly Ln	Lower Escondido Creek	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Emerald M. Growers, Inc.	834 Leucadia Blvd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Encinitas Green Houses - Nursery	351 Union St	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Erhardt's Tropicals (Morales Romero)	805 Bracero Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Erwin Mojonnier Enterprises	2009 Sheridan Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Erwin Mojonnier Enterprises - Growers	679 Camino El Dorado	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Fiesta Flowers, LLC	335 Santa Fe Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Flowers of La Costa	1911 Saxony Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Franco's Flowers Inc - Growers	842 Leucadia Blvd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Gill, Padam - Growers	754 Bonita Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Gish Foliage	1255 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Glover, A T - Growers	571 Union St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Granite Homes Requeza LLC - Growers	843 Requeza St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Greens & Things, Inc.	950 Brittany Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Groot, Dana - Growers	603 Union St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Hydroscape Products, Inc	750 S Coast Highway 101	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Islas Jose L - Growers	235 La Costa Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Ito Kiyoko - Growers	936 Eolus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
J & S Green Houses	748 Requeza St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Jose Louis Islas	514 La Costa Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
KG Growers	940 Orpheus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
L & E Greenhouses/G&J Plants	712 Clark Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
La Costa Farms	1911 Saxony Road	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
La Costa Flower Shop and Nursery (Gish Foliage)	1245 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Leucadia Orchids	1660 Burgundy Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Lois Flowers	1195 Cardiff Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Lois' Flowers	1616 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Lopez Flowers	440 Saxony Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Maldonado Growers	1412 Mackinnon Ave	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
May Greenhouse, Inc	241 Andrew Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
May Greenhouses, Inc - Growers	2021 Sheridan Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Miquel Estevez Flowers	708 Del Rio Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Miraflor Agriproducts	495 Leucadia Blvd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Mojonnier, Todd - Growers	201 Quail Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Native Sons Nursery	631 Orpheus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Orchid Barron	804 Cathy Ln	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Orchid Place	829 Bracero Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Owens, Mark N - Growers	1073 Crest Dr	Lux Canyon	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Pacific Verde Nursery	556 Union St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Pacifica Flowers	510 La Costa Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Payne, Parry - Growers	1231 Birmingham Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Quezada, Teresa A - Growers	1190 Island View Ln	La Costa South	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
R & L Sky Blue Inc - Nursery	598 Park Ln	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Seaside Farms - Growers	754 Plato Pl	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Secret Garden	1236 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Seedling Express	440 Saxony Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Seedling Express	1698 Crest Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Self-Realization Fellowship - Growers	1177 Cornish Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Skopec, Frank - Growers	1381 Summit Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Solana Select Palms / Jim Riley	887 Brittany Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Specimen House	782 Leucadia Blvd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Speert, Ellen - Growers	1905 Crest Dr	Lux Canyon	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Staver, Dan - Growers	1586 Crest Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Sunshine Gardens	155 Quail Gardens Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Tayama Greenhouse	710 Requeza St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
The Palm Source - Growers	1329 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
The Plantri - Nursery	921 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Tinney, Brooke - Growers	1674 Crest Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Tom, Gim - Growers	3107 Manchester Ave	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Tutuli Floral (O&J Growers)	1313 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Tverdoch, R - Growers	898 Hymettus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
W.F. Muhlethaler - Nursery	350 Seeman Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Walt Hoehn	1752 Eolus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Weidner's Gardens	860 Eolus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Weidner's Gardens	695 Normandy Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Weidner's Gardens - Growers	850 Normandy Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Wilkens Palm Tree Nursery	1450 Mackinnon Ave	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Williamson's Produce	3111 Manchester Ave	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Wilma Romero - Nursery	870 Devonshire Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Zalinda Farms - Growers	501 Ocean Bluff Way	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Frazee Paint	270 N El Camino Real, Unit B-E	La Costa South	Painting/Coating	5231	Store selling primarily paint and other liquid building products to the general public	no	low
Vista Paint Corporation	133 N El Camino Real	La Costa South	Painting/Coating	5231	Store selling primarily paint and other liquid building products to the general public	no	low

INDUSTRIAL INVENTORY

All sites are in the Carlsbad Watershed

Name	Address	Sub-Basin	Type	SIC	Description	Tributary	Priority
San Dieguito Union High School District Transportation Cooperative	1142 Bonita Dr	Encinitas/Cardiff	Vehicle Storage	4151	Vehicle storage and transportation services for students	no	high
San Elijo Water Pollution Control Facility	2695 Manchester Ave	Cardiff	Wastewater Treatment	9511	Treatment of wastewater for use a recycled water	no	high
Encinitas Landfill*	2099 Encinitas Blvd	Lux Canyon/Rancho Santa Fe	Closed Landfill	4953	Closed solid waste collection facility	no	NA

*The Encinitas Landfill is regulated and inspected by San Diego County.

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

CLEAN WATER HOTLINE:
760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name_____

Street Address_____ Mailing Address_____

Email _____ _____

Responsible Person(s)_____ Property Manager_____

Business Phone (□□□□□□) _____ - □□□□□□□□□ext._____ Property Manager□s _____

Business Fax (□□□□□□) _____ - □□□□□□□□□□ APN Number _____

B. FACILITY□SITE INFORMATION

Principal activity:_____

SIC Code(s)_____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)?_____ New JURMP Classification?_____

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No _____Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☐ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID _____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____

Approximate distance to water bodies: ☐ □200 ft. ☐ 200 □1000 ft. ☐ 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate □ impervious surface of this area_____□

Exposed areas of intensive outdoor activity: _____

D. BMP ASSESSMENT

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?				
2. Are discharge locations free of sediment and debris?				
3. Are parking lots, sidewalks and streets free of sediment and debris?				
4. Is pressure washing of parking lots or sidewalks conducted at the facility?				
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?				
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.				
D.2 Landscaping				
7. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
8. Are irrigation systems programmed to minimize over-watering and runoff?				
9. Is reclaimed water used for irrigation?				
10. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				
D.3 Materials and Wastes				
11. Are adequate trash containers provided?				
12. Are adequate recycling containers provided?				
13. Is the trash/recycling area enclosed and free of litter and debris?				
14. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
15. Are outdoor material storage areas adequate (covered area with secondary containment)?				
16. Are outdoor storage containers properly labeled?				
17. Is there an accessible spill response kit?				
18. Is there a spill response plan? If so, please provide to inspector.				
19. Are storage tanks equipped with secondary containment?				
20. Is secondary containment free of spills and rainwater?				
21. Are loading and unloading areas free of spills and debris?				
D.4 Equipment and Vehicles				
22. Are exposed parking areas free of significant spills and leaks?				
23. Are heavy equipment and vehicles stored in garages or under canopies?				
24. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
25. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				

BMPs	N/A	Yes	No	Comments
26. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
D.5 Food Establishments N/A ☐				
27. Does facility have a grease trap or grease interceptor?				
28. Who maintains the grease trap? Company Name: Phone				
29. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
30. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
31. How many grease fryers are at the facility? _____				
32. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
33. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone				
34. Do oil-recycling/grease bins have overhead coverage?				
35. Do oil-recycling/grease bins have secondary containment?				
36. Are deep fryer oil-recycling drums stored properly?				
37. At what time is restaurant cleaning performed? _____				
38. Are biodegradable soaps used for cleaning activities?				
39. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
40. Where is used cleaning water discharged? _____				
41. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
42. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
43. Is the site free of evidence of illicit connections and illegal discharges?				
44. Is the site free of evidence of unauthorized releases to storm drains?				
45. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
46. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
47. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
48. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
49. Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
50. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
51. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.				

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: _____ DATE: _____

E. VIOLATIONS

- ☐ No violations have been noted at this time
- ☐ No violations have been noted, but required corrective actions are described below.
- ☐ Violation of storm water ordinance or other applicable regulations were found.
  (Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 _____

2 _____

3 _____

4 _____

5 _____

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ City of Encinitas Yard and Garden, ☐ County of San Diego-Green Wrench Guide English/Spanish.
OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE: _____

COMMENTS _____

_____

_____

INSPECTOR NAME _____ **FACILITY CONTACT NAME (PRINT)** _____

INSPECTOR SIGNATURE _____ **FACILITY CONTACT SIGNATURE** _____

DATE _____ **DATE** _____

I. RECOMMENDED CITY ACTIONS

_____

_____

FOR OFFICE USE ONLY

Labor: ____Hours _____Mins

Vehicle _____

Work Order _____

Follow-up WO _____

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding storm water issues: **1. 2. 3. 4. 5.**

Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5.**

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM- Restaurant
CLEAN WATER HOTLINE: 760-633-2787
http://cwp.ci.encinitas.ca.us

Revised 5/08

Type of Inspection: ☐ Annual (Date):_____ ☐ Follow-up (Date):_____ ☐ Complaint Investigation

Business Name:	Size: SQ FT SIC Code: 5812
Street Address:	Mailing Address:
Contact Person(s):	Property Manager:
Business Phone/Fax :	PM Phone/Fax :
Business Email:	PM Email :

How many employees does restaurant have? _____ Are they trained in storm water mgmt? __Yes __No Log? ____(Y/N)

Does facility have a current Encinitas business certificate? Yes No :_____ Exp: _____

Does facility have a map/sketch of the site with flow lines and storm drains? ____ Yes ____No ____Unknown

Discharge observed? ____Yes ____No If yes, describe: _____

Are downspouts directed away from areas of potential pollutants? ____Yes ____No

A. Grease Management	Yes	No	N/A	Comments
1. Does facility have a grease trap or grease interceptor?				
2. Where is it located? ___Under the sink ___Outside ___Other: _____				
3. Who maintains the grease trap/intcptr?	Contact Info:_____			
4. When was the last time the grease trap/intcptr was maintained? _____(Please provide copy of invoice)				
5. How many grease fryers are at facility?_____				
6. How often is fryer oil replaced? ___Weekly ___Monthly ___Every 6 months ___Annually ___Other_____				
7. How is used oil disposed of? ___Outside rendering service ___Sanitary sewer/sink ___Other:_____				
Company Name: _____Phone :_____last maintained				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Is oil-recycling bin area clean?				

B. Cleaning	Yes	No	N/A	Comments
11. At what time is the restaurant cleaning performed?_____				
12. How are kitchen floor mats cleaned? ___Hose off outside ___Clean inside (mop sink) ___Cleaning Service				
Other:_____				
13. Where is used cleaning water discharged? _____				
14. Does the facility hose off/pressure wash the site?				
If so, how often? _____				
Is a pressure washing company used? Yes No	Name/Number:_____			
Is wash water captured?				
15. Are storm drain inlets free of grease & other food debris?				

Landscaping (Erosion Control, Over-irrigation Runoff, Reclaimed Water use, Stockpiles)

C. Materials and Wastes	Yes	No	N/A	Comments
16. Is the site free of litter and debris?				
17. Are adequate trash containers provided?				
18. Are adequate recycling containers provided?				
19. Is the trash/recycling area under cover or bin lids closed?				
20. Is timely service and removal provided to prevent				___ Weekly ___Bi-weekly Day:_____
waste containers and sanitary facilities from overflowing?				

Facility: Date:	Yes	No	N/A	Comments
21. Are any outdoor material storage areas adequately				
covered and labeled?				
22. Is there an accessible spill response kit?				
23. Is there a spill response plan? (If yes, provide to inspector)				
24. Are loading and unloading areas free of spills and debris?				
D. Other Storm Water Management	**Yes**	**No**	**N/A**	**Comments**
25. Any evidence of illicit connections and illegal discharges?				
26. Any evidence of unauthorized releases to storm drains?				
27. If yes, have the appropriate authorities been notified?				
28. Are there any other potential storm water pollution				
issues or concerns?				
If yes, explain:_____				
29. Are there any structural BMPs on or near the site?				
If so, how often are they maintained? _____ Provide maintenance records.				

F. Violations

___No violations have been noted at this time.

___No violations have been noted, but required corrective actions are described below.

___Violation of storm water ordinance or other applicable regulations were found.

(Attach Copy of NOV or Administrative Citation)

G. Corrective Actions Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

_____

_____

_____

_____

_____

_____

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail ☐ Email

I. Follow Up Inspection? Yes or No (circle one) Date:

Comments:

H. Describe informational, educational, or BMP information distributed:

___City of Encinitas Restaurant Brochure Eng/Span, ___County of San Diego-What's Cooking Guide Eng/Span,

___Only Rain Brochure, ___Storm Water Poster, ___Training CD, ___Other:_____

Inspector Name	**Facility Contact Name (print)**
Inspector Signature	**Facility Contact Signature**
Date	**Date**

FOR OFFICE USE ONLY

Binder at facility? ☐ Yes ☐ No	Binder used? ☐ Yes ☐ No	CD used? ☐ Yes ☐ No

Did manager find binder / CD useful? ☐ Yes ☐ No Mgr Comments: _____

Binder / CD Assessment Comments:

ASSESSMENT (circle appropriate level - "5" is highest level)

Level of knowledge regarding stormwater issues: 1 2 3 4 5

Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5

Routine Commercial Municipal Industrial Inspection Summary **FY 2007 - 2008**

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38708	07/10/2007	Mac design and development		No violations, no corrective actions.			Commercial
38712	07/06/2007	Encinitas Automotive Inc.	7/11/2007 They received the EPA's auto body and paint shops fact sheets book.	No violations, but corrective actions: 1.label spill kit, create and post response plan. 2. Recommendation to provide secondary containment for oils, antifreeze, and other hazardous fluids.			Commercial
38726	07/05/2007	Encinitas Golf Course Restaurant		No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. maintain trash area free of litter and debris. 3. store paint and painting supplies indoors			Commercial
38804	07/16/2007	Swami's Automotive Foreign and Domestic		no violations, but corrective actions: 1.train and keep log on SW regulations. 2.provide spill response plan.			Commercial
38838	07/16/2007	Suspension Plus of Encinitas		No violations, no corrective actions.			Commercial
38839	07/16/2007	F.I.C. Smog test only station		No violations or corrective actions.			Commercial
39002	07/06/2007	California Body and Paint	7/18/07 Called LWD, they will check sewer connection and call CWP back. 7/26/07 owner has rags for spills and is training employees.	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill kit, and create spill response plan.	Follow up completed 7/18/07. secondary containment ok.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
39116	08/03/2007	Seven Eleven		No violations, but corrective actions: 1.keep records of storm water training			Commercial
39122	08/06/2007	Auto Zone 5657		no violations, but corrective actions: 1. close trash container lids. 2.train employees in SW regulations and keep log.			Commercial
39204	08/09/2007	Encinitas Promenade Gas and Oil Change		no violations, but corrective actions: 1.trash pick up on south east side. contact P.M. regarding trash to the north. 2.provide recycle containers.			Commercial
39327	08/14/2007	Brown's Plants		No violations, but corrective actions: 1.continue to clean west curb from dirt. 2.remove neighbor overgrowth on south side of prop. 3.properly store or remove misc auto parts, oils, and other fluids. 4.train employees on SW mgmt, spill response plan.	10/3/07 all corrective actions were taken. Owner said he will disconnect pipe w/in a week (10/10/07). 10/11/07 Owner called, has cut all pipes but one. he asked for another week and will call when pipe is cut. 11/13/07 all pipes cut. no discharge.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
39328	08/14/2007	S & L Oil Shell Leucadia		no violations, but corrective actions: 1.train and keep log for SW regulations and spill response plan. 2.provide recycling containers. 3.cover outdoor lift when not doing repairs to prevent run-off when it rains.			Commercial
39378	08/15/2007	Encinitas Exxon 1020		no violations, but corrective actions: 1.provide recycle containers. 2.provide name and phone of power washer. 3.train employees on SW mgmt, keep log. 4. Dry clean, pressure wash trash area, capture all wash water.	Follow up on 9/28/07. Issued NOV for trash clean up, consider power washing. Follow up on 10/15/07 trash area clean. request power washing.	9/28/2007	Commercial
39388	08/15/2007	Chevron Stations Inc 1967		no violations, but corrective actions: 1.provide recycle containers for customers. 2. remove or cover outdoor items. 3. direct roof downspouts away from trash area. 4.train & keep records for SW training and spill response plan.	10/03/07 Follow up completed. All corrective actions complete.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
39397	08/15/2007	Olson's Hand Car Wash		no violations, but corrective actions: 1.train and keep log regarding storm water regulations and spill response plan.			Commercial
41445	08/21/2007	Scott's Automotive		no violations, but corrective actions: 1.keep records of training in SW mgmt and spill response plan. 2. properly store outdoor materials. 3.perform vehicle maintenance indoors or under cover.	9/28/07 issued NOV for antifreeze, outdoor storage, and outdoor lifts action plan, to comply by 10/23. Follow up on 10/29/07 shows all corrective actions done. Outdoor lifts will be covered by next annual inspection.	9/28/2007	Commercial
41446	08/22/2007	Camino Encinitas Plaza. Kurtin Properties	Inspection with property manager for 318-322 El Camino Real	no violations, but corrective actions: 1.cover or remove outdoor lift behind midas. 2.provide overhead cover or roof for compressor at el camino tire. 3.proivde spill kits for all oil recycle storage. 4.provide label for oil storage units.			Commercial
41476	08/21/2007	Jimmy Mac's	Inspector faxed copy of inspection form to Merle on 8/21 Business cert 20416, exp.7/31/08 per City Hall front desk	no violations but corrective actions: 1.train employees, keep log for SW mgmt and spill response plan. 2.store grease under cover w/ 2nd containment. 3.properly store outdoor materials.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
41535	08/29/2007	Seven Eleven Food Store 25766B		no violations but corrective actions: 1.provide recycling containers			Commercial
41536	08/29/2007	Cardiff 76	Business cert 14679	Violation of storm water ordinance: Antifreeze in parking lot. Corrective actions: 1.train, keep log for employee training. 2. clean up antifreeze- see NOV comply by noon. 3.clean out storm drain inlets. Correction: should be business 14679	10/08/07 Follow up completed. All corrective actions complete.	8/29/2007	Commercial
41537	08/28/2007	Rosano's Unocal 76		no violations or corrective actions.			Commercial
41538	08/27/2007	Encinitas Gasoline and auto service (Shell)		no violations, but corrective actions: 1.train, keep log for employees on SW mgmt and spill response plan. 2.provide recycle containers. 3.extend overhead coverage to cover all drums and pallets. 4.remove oil from 2nd containment. 5. cover outdoor lift	Follow up completed on 10/4/07. NOV issued for overhead cover and maintaining trash. Follow up 10/15/07 shows all corrective actions complete.	10/14/2007	Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
41552	08/23/2007	Chevron Encinitas/Kihack Management LLC		no violations, but corrective actions: 1.train employees on SW regs, spill response, keep log. 2.provide more recycling containers. 3.clean trash area, use dry methods. if water, capture wash water. 4.remove old car parts and other machinery outdoors	Follow up completed on 10/12/07 showed all corrective actions complete. misc auto parts removed. Signed off on NOV that was issued on 9/27/07.	9/27/2007	Commercial
41574	08/30/2007	CNG Inc (Shell)		No violations, but corrective actions: 1.remove, properly store gas tester in trash area. 2.provide recycle containers. 3.clean SE storm drain. 4.train and keep log required for SW training and spill response plan.			Commercial
43661	08/31/2007	Duru Inc/San Dieguito Towing/DBA Road One	Absorbent was swept up before end of inspection.	No violations, but corrective actions: 1.Sweep up cat litter/absorbent after use. 2. train employees on SW regs and spill response plan, keep log. 3. keep/store fork lift and/or cover and fix leak.			Commercial
43666	09/04/2007	North County Kawasaki/Motorsports		no violations, but corrective actions: 1.train, keep log of employees on SW regulations and spill response plan. 2. properly store batteries with cover and 2nd containment			Commercial
43667	08/29/2007	Rover Repairs LLC DBA California Rover		no violations, but corrective actions: 1.train employees and keep log on SW regs. 2.provide recycle containers. 3.remove outdoor storage material. 4.clean trash dumpster area.	10/8/07 follow up completed. all corrective actions complete.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45669	09/04/2007	Hugo's European Car Service		no violations, but corrective actions: 1.train all employees, keep log regarding SW regs and spill response plan. 2.cover, consider removing outdoor left, and remove or cover old engines in NW corner. 3.provide 2nd containment for antifreeze storage.	Follow up completed on 9/28/07. All corrective actions complete.		Commercial
45672	09/04/2007	Rays Automotive Services		no violations, but corrective actions: 1.train employees, keep log regarding SW regs and spill response plan. 2.move oil filter containers away from south downspout. 3.properly store outdoor materials- move inside or cover. 4. provide 2nd containment	All corrective actions completed 9/28/07.		Commercial
45673	09/04/2007	Cardiff Classics, Inc		no violations, but corrective actions: 1.train employees, keep log for SW regs and spill response plan			Commercial
45674	09/04/2007	Keith's Automotive	Great storage of antifreeze, oils, and other liquids.	no violations, but corrective actions: 1.train and keep log on SW regs and spill response plan			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45678	09/06/2007	Dan's Precision Alignment Center		no violations, but corrective actions: 1.train, keep log for employees on SW regs and spill response plan. 2.cover or remove outdoor parts on west side.	10/8/07 Follow up completed. Outdoor storage removed. keep green wrench for training and spills response plan. all corrective actions complete.		Commercial
45679	09/11/2007	Rancho Auto Body	Reason for outdoor storage is to recycle scrap metal and cardboard.	no violations, but corrective actions: 1.cover outdoor storage (scrap metal). 2.train employees on SW regs. 3.provide recycle containers.	11/15/07 All corrective action complete.		Commercial
45681	09/06/2007	Brad's Foreign and Domestic		No violations, but corrective actions: 1.train employees, keep log on SW regs and spill response plan. 2.properly store outdoor storage inside or under cover. 3. provide 2nd containment for antifreeze.	10/8/07 Follow up. All corrective actions complete.		Commercial
45682	09/11/2007	Encinitas car wash	Consider using biodegradable soaps.	no violations, but corrective actions: 1.train employees on SW regs and spill response plan. 2.provide recycle containers.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45683	09/10/2007	BMW Encinitas/An Luxury Imports of san diego inc.	NOV Stop work issued on 9/10 for lack of BMPs while spraying/washing vehicles on lot. NOV issued on 9/28/07 to fix irrigation leak	Violation and corrective actions: 1.train,keep log of employees regarding SW regs and spill response plan. 2.dont overload trash containers, keep lids closed. 3.remove/store under cover old gas tanks and other materials. 4.collect wash water 5. fix irrigation leak.	Follow up on 10/12/07. All corrective actions complete. Two NOVs issued on 9/10/07 and 9/28/07. Signed off on 10/12/07. 8/19/08 site inspection contacted employees at Dent masters. I requested that the owner of their business give me a call so that i can explain the storm water regulations. 5/27/08 all corrective actions complete except for the rotors in storage area. The rotors to be covered w/in two weeks or by 6/11/08 8/11/08 rotors stored in a tray See original WO 69617	9/10/2007 & 9/28/07	Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45844	08/22/2007	Camino encinitas plaza. Kurtin Properties.	Prop manager has been working with her properties to improve the car washing area. The bump to hold water still leaks. They are to complete the work on a Sunday so that they do not interrupt the businesses. She will give me a call when work is complete	No violations, but corrective actions: 1.cover outdoor lift behind midas. 2.provide overhead cover for compressor at el camino tire. 3.provide spill kits for all oil recycle storage. 4.provide label for oil storage units. 5.maintain vehicle wash area	5/9/08 site inspection- overhead coverage in place for Fender Mender. All other corrective actions have been completed. See FU WO 70211. See original WO 45844		Commercial
45845	09/12/2007	Happy Auto Sales		No violations, but corrective actions: 1.train employees and keep log on SW regs and spill response plan. 2.obtain spill kit.			Commercial
45846	09/13/2007	All cars Center		no violations, but corrective actions: 1.train, keep log for employee regarding SW regs. 2.remove or cover all outdoor storage area and misc auto parts. 3.perform vehicle maint inside or under cover. cover outdoor lifts when not in use.	10/3/07 Follow up completed. all corrective actions complete. Require action plan of how to make cover over outdoor lifts by 11/3/07. Action plan was delivered 11/13/07.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45847	09/13/2007	World Auto Body		no violations, but corrective actions: 1.train employees on SW regs and spill response plan. 2.do vehicle maint inside, cover outdoor lift. 3.repair cover on wash area, consider using biodegradable soap. 4.sweep sanding dust in SE corner & cat litter	10/3/07 follow up. All corrective actions complete.		Commercial
45848	09/13/2007	Valvoline Instant oil Change		no violations or corrective actions. consider providing recycle containers for patrons.			Commercial
45849	09/12/2007	Ace cars and vans		no violations, but corrective actions: 1.train, keep log for employees on SW regs and spill response plan. 2.obtain spill kit. 3.provide recycle containers. 4.remove or properly store misc auto parts.	10/9/07 follow up. all corrective actions completed. received written spill response plan.		Commercial
45850	09/18/2007	Encinitas Ford		no violations, but corrective actions: 1.train employee on SW regs, keep log. 2. repair sump pump on south east repair bay and fax invoice to city.			Commercial
45851	09/18/2007	Discount Tire Company		no violations, but corrective actions: 1.train employees on SW regs, keep log. 2.create written spill response plan, make it accessible to employees. 3.clean trash and recycle area, keep lids closed.			Commercial
45852	09/14/2007	Noodles and Company		no violations, but corrective actions: 1. train employees on sw regs and spill response plan. 2.provide most recent grease service invoice.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45853	09/17/2007	ARCO 9598/DBA Senan F. Naoum		no violations, but corrective actions: 1.train and keep log for employees regarding SW regs and spill response plan. 2.keep dumpster lids closed.			Commercial
45854	09/17/2007	Charlie's Foreign Car 197		no violations, but corrective actions: 1.train and keep log for employees regarding SW regs and spill response plan.			Commercial
45858	09/19/2007	Kragen Auto Parts 1686		no violations, but corrective actions: 1.train employees on SW regs , keep log. 2.create written spill response plan, make it accessible to employees			Commercial
45859	09/19/2007	Transmasters Transmissions		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.provide 2nd containment for antifreeze. 3.create spill response plan. 4.provide overhead cover for vehicle maint.	Follow up on 10/29/07. All corrective actions complete. Provided action plan to obtain canopies within a year.		Commercial
45860	09/20/2007	Harris Radiator Works, Inc.		no violations, but corrective actions: 1.cover or remove old radiators on north side of property asap. 2.construct a cover for outdoor lift or cover when not in use.	4/2/08 Received fax stating that outdoor lift will be used for inspections only. See follow up WO 69348		Commercial
45863	09/20/2007	Seven eleven 2111-24335D		no violations, but corrective actions: 1.clean up trash around site and in trash area. 2.train employees on SW regs and keep log. 3. create spill response plan, make it accessible to employees.			Commercial
45864	09/24/2007	Coast Brake and Wheel		no violations or corrective actions.			Commercial

Appendix D-5

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
46023	09/24/2007	Encinitas Smog Test Only Center		No violations, but corrective actions: 1.train employees on sw regs, keep log. 2. create written spill response plan. 3. clean up around trash area.			Commercial
46025	09/25/2007	Discount Auto		no violations, but corrective actions: 1.train employees on sw regs, keep log. 2. create spill response plan, make accessible to employees. 3.provide overhead cover & 2nd containment for liquid storage, batteries, and old radiators.	Follow up completed on 10/29/07. all corrective actions complete.		Commercial
46027	09/26/2007	S & Brothers Upholstry		no violations, but corrective actions: 1.train employees on SW regs, keep log. 2. create spill response plan.			Commercial
46028	09/26/2007	K & B Auto Services and repair		no violations, but corrective actions: 1.train employees on SW regs and create spill response plan.			Commercial
46029	09/26/2007	XATV		no violations, but corrective actions: 1.train employees, keep log regarding sw regs, spill response plan.			Commercial
46032	10/01/2007	Vigilucci's		Violation and corrective actions: 1.immediate maintenance of outdoor storm drain required. 2.sweep up used cat litter around grease storage area. 3.clean grease storage area. 4.obtain spill kit.	10/9/07 follow up. all corrective actions completed.		Commercial
48037	10/09/2007	Pacific Verde Nursery, Inc.		No violations, but corrective actions: 1.train employees on SW mgmt. 2.create spill response plan in writing.			Commercial
50287	10/10/2007	Bradley Landscape Development		No violations, but corrective actions: 1.train employees, keep log.2.create spill response plan.3.properly store or remove outdoor storage of oils, batteries, paints.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
50359	10/11/2007	L & E Greenhouses/G & J Plants		no violations, but corrective actions: 1.train employees on SW regs and keep log. 2. create spill response plan and make it accessible.			Commercial
50360	10/15/2007	Chino Greenhouse		no violations, but corrective actions: 1.store batteries inside.			Commercial
50363	10/17/2007	Daniel Mojonnier Enterprises- Growers	site looks really clean. good BMPs!	no violations, but corrective actions: 1.train employees in SW regs, keep log. 2. create spill response plan, make accessible. 3. keep dumpster lids closed.			Commercial
50364	10/17/2007	Divine Orchids		no violations or corrective actions. is used for residential uses only. no commercial use.			Commercial
50365	10/16/2007	Ades and Gish Nurseries		no violations, but corrective actions: 1. clean storm drain north side of greenhouses. 2.clean area around dumpster. 3. remove or cover old colder.	follow up completed 10/29/07. all corrective actions complete. monitor storm drain for erosion problems, weekly or during and after rain event.		Commercial
50366	10/18/2007	Cal Pacific Plant Farm		no violations but corrective actions: 1.train employees on SW regs, keep log. 2.create spill response plan and kit, make accessible to employees.			Commercial
50367	10/18/2007	Flowers of La Costa Farms		no violations, but corrective actions: 1.train employees on SW regs, keep log. 2. create spill kit and response plan, make accessible to employees. 3. store paint cans inside or cover.	Follow up completed on 10/29/07. all corrective actions complete.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
50377	10/18/2007	La Costa farms		no violations but corrective actions: 1.train employees on SW regs and keep log. 2.create spill response plan, make accessible to employees.			Commercial
52612	10/29/2007	Emerald M. Growers		no violations, but corrective actions: 1.train employees on SW regs and spill response plan, keep log. 2.create spill response plan. 3. obtain business cert.	12/19/07: Site inspection observed drainage swale on the West side of property. respondent connected dirt drainage to cement swale that connect to storm drain on NW corner of property. Respondent also fixed/connected property to the north to the storm drain. See service request 33810 and original work order 53506.		Commercial
52662	11/01/2007	Cordova Greenhouses (Joe Cordova)		no violations, but corrective actions: 1.train employees on SW regs and keep log. 2. create spill response plan.			Commercial
52723	11/05/2007	Dramm and Echter		corrective actions: 1.clean/remove debris from storm drains. 2.train employees on SW regs. 3.keep trash container lids closed or store in garage. 4.label all storage containers. 5.create spill response plan, make accessible to all employees. 6. properly store heavy equipment in garages or under cover. 7.cover fueling area. 8.keep records of BMP maint. 9.replumb bucket washing area to sewer. 10.label hand washing sinks. 11.cap 2nd containment in Nitro room. 12.cover steam pipes & batteries	See original WO 52723. All corrective actions complete 5/1/08. Follow up WO 69775		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
52821	09/25/2007	Sofspra carwash	11/15/07 Owner is out of town/country and will sign inspection form when he gets back.	No violations, but corrective actions: 1.train employees on SW regs. 2.create spill response plan and kit, make accessible to employees.	11/15/07 received information from out of town owner via email to complete the inspection form Inspector met with owner to get signature on 12/18/07.		Commercial
52822	11/15/2007	Shell at Santa Fe	Property manager needs to clean up storm drain north of shell and needs to clean north of north building. SR was created	Started inspection on 9/6/07 and completed the inspection on 11/15/07. no violations or corrective actions.			Commercial
52823	11/09/2007	Cosgrove Cymbidium Co Growers		Corrective actions 1 Train employees on Storm Water regulations and keep log. 2 Create a spill response kit and plan and make it accessible to all employees 3 Keep trash area clean			Commercial
52824	11/09/2007	Willow Lane Growers		Corrective actions 1 Train employees on Storm Water regulations and keep log. 2 Create a spill response kit and plan and make it accessible to all employees 3 Keep trash area clean			Commercial
53535	12/04/2007	Fox Point Farm	Routine inspection was done because of a complaint on 11/30/07. Erosion occurring during rain event. See Service Request 48300. Follow up scheduled for 1/5/07.	no violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2.label fertilizers. 3.obtain spill kit and create response plan. 4.cover or store indoors spray machine and tractor equip. 5.clean/remove silt from west and north side.	See original WO 53535 Follow up WO 69774. All corrective actions complete 5/1/08.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
53622	12/11/2007	Mojonnier Growers		no violations, but corrective actions: 1.train employees on storm water regulations, keep log. 2.create spill response plan, make accessible to employees. 3.cover old equip and storage tanks and label. 4.pick up/clean trash west side.	12/18/07 all corrective actions complete. See original inspection work order 53622		Commercial
53661	12/18/2007	Mojonnier Enterprises		no violations, but corrective actions: 1.train employees on sw regs, keep log. 2.create spill response kit and plan, make accessible to employees.			Commercial
53664	12/18/2007	Horace Anderson Greenhouses		no violations, but corrective actions: 1.train employees on sw regs, keep log. 2.cover old water heater on NW corner. 3.label fertilizers off la costa. 4.create spill response plan and kit, make accessible to employees.			Commercial
53673	11/20/2007	Lois' Flowers		no violations, but corrective actions: 1.train employees on SW regs, keep log. 2.create spill response plan, make accessible to employees. 3.cover or store sprayer in garage.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
53682	11/20/2007	Rancho Verde		no violations, but corrective actions: train employees on SW regs, keep log. 2.create spill response plan and kit. 3.label outdoor storage.			Commercial
53683	11/29/2007	Cardiff Greenhouses	Very clean site, good BMPs.	no violations, but corrective actions: 1.train employees on sw regs, keep log. 2.create spill response kit and plan, make accessible to employees. 3.cover or store sprayer inside.			Commercial
54358	01/31/2008	O & J Growers		no violations, but corrective actions: 1.train employees on SW regs. 2.Clean trash area; consider recycle containers. 3.create spill kit and response plan. 4.cover/remove heavy equipment. 5.remove oil buckets on North side of driveway.	3/3/08 All corrective actions completed except for training log and spill response plan. Emailed copy of red dye letter to Jose.		Commercial
54359	01/29/2008	Tierra Verde Resources Inc.		No violations, but corrective actions: 1.remove paint cans or store inside. 2.create spill response plan for pesticides.			Commercial
54361	01/31/2008	La Costa Flower Shop and Nursery (Gish Foliage)		No violations, but corrective actions: 1.label fertilizer tank 2.cover old equipment.			Commercial
54399	01/31/2008	Brown's Plants		No violations or corrective actions			Commercial
56686	02/01/2008	LLM Landscape Inc.		No violations, but corrective actions: 1.train employees on SW regs. 2.create spill response kit and plan. 3.remove or cover lawn mowers, other equipment. 4.Remove or store all oils under cover w/containment.	See follow up work order 56687 Follow up site inspection. All corrective actions complete. original wo 56686		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
56688	02/06/2008	Land-Works		No violations, but corrective actions: 1.train employees on SW regs. 2. Create spill kit and response plan.			Commercial
56690	02/11/2008	New Way Landscape and Tree Service		No violations, but corrective actions: 1.train employees on SW regs, keep a log. 2. Create spill kit and response plan.			Commercial
56691	02/01/2008	CM Landscape		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.create spill kit and plan. 3.pick up litter/trash. 4.lawn mover and other tools.	Original wo 56691 See follow up work order 56692 FU site inspection. corrective actions complete.		Commercial
56693	02/13/2008	Moonlight Motors	Consider power washing w/ containment once or twice a year, as needed.	No violations, but corrective actions: 1.remove or cover chain driven above ground rack. 2.create SOP for lift use and send to City w/in 30 days.			Commercial
68051	03/12/2008	Blue Fin Sushi	This commercial inspection was initiated because of complaints regarding this row of restaurants.	No violations, but corrective actions: 1.train employees on SW regs, keep a log. 2. Create spill response plan.			Commercial
69349	03/13/2008	Passage to India		No violations, but corrective actions: 1.Don't wash or rinse off vehicles unless wash water is collected. 2.Create spill response plan, make accessible to employees. 3.train employees on SW regs, keep log. 4.Dont hose off alley behind restaurant.	All corrective actions complete. See follow up wo 79005. See original WO 69349		Commercial
69350	03/27/2008	Calypso Cafe		No violations, but corrective actions: 1.Obtain spill kit & response plan, make accessible to employees.2.Properly store used wash rags under cover or inside. 3.keep log of employee training.			Commercial
69351	03/11/2008	Rubio's	NOV issued for grease discharge near trash enclosure. Employee was sent to clean the area same day of inspection. NOV signed off on 3/25/08. NOV attached to complaint investigation, not commercial inspection. See SR 53091 and work orders 68096 and 68173	Violation and Corrective actions: 1.train employees on SW regs, keep log. 2.obtain spill kit, spill response plan.3.clean around trash. 4.clean grease from container on outside and in driveway.	3/25/08 Grease cleanup complete. log completed. obtained spill kit. will create spill response plan by 4/1/08. Rubio's inspection was prompted by complaint of grease discharge (SR 53091). They were already on the high priority inspection list though.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
69360	02/12/2008	SRF Produce Garden (Self Realization Center)		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.create spill response kit, plan. 3.install BMPs at drainage locations x2.	All corrective actions complete, except training log and spill response plan- to be done by 4/4/08.		Commercial
69552	03/12/2008	Fire Fly Grill & Wine Bar		Corrective actions are: 1 Keep log of employee training on storm water regulation 2 Create a spill response plan and make it accessible to all employees			Commercial
69554	03/28/2008	7-Eleven 13620		Corrective actions are: 1 Keep log of employee training on storm water regulation 2 Create a spill response plan and make it accessible to all employees			Commercial
69555	04/01/2008	The Chart house		Corrective actions are: 1 Keep log of employee training on storm water regulation 2 Create a spill response plan and make it accessible to all employees 3 clean outside of grease storage area 4 Clean spill in parking lot	4/16/08: all corrective action completed except for the spill response plan requested a sample See original WO 69555		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
69557	04/16/2008	Beach City Cafe		Corrective actions are: 1 Purchase additional Kitty litter 2 Create a spill response plan and make it accessible to all employees (to be faxed from City)			Commercial
69689	04/23/2008	Chin's Szechwan		No violations, but corrective actions: 1.Train employees on SW regs and keep log. 2.obtain spill response kit and plan. 3.clean grease storage area. 4.contact edco to install lid for trash container.	See Original WO 69689 All corrective actions complete 4/30/08 per Inspector. See FU Work order 69691		Commercial
69694	04/30/2008	Del Taco		No violations or corrective action.			Commercial
69695	04/24/2008	Daphne's Greek Cafe		No violations, but corrective actions: 1. train employees on sw regs and keep log. 2.obtain spill kit.			Commercial
69773	05/07/2008	Paul Ecke Ranch	Follow up to be completed in FY 08-09	No violations, but corrective actions: 1.cover/remove old tractor and misc parts. 2.Replace sand bags □ west entrance/exit. 3.Cover 20yard trash containers. 4.cover/remove gas tanks, provide 2nd containment for vehicles being fueled. 5.erosion NE corner			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
69776	05/01/2008	Home Depot		No violations, but corrective actions: 1.pick up/clean misc trash around perimeter. 2.train employees on SW regs, keep log. 3.capture wash water while power washing.			Commercial
69777	05/01/2008	Las Olas		No violation or corrective actions.			Commercial
70212	04/24/2008	D street bar and grill		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.obtain spill kit, response plan. 3.clean trash around trash area. 4.provide overhead coverage and 2nd containment for grease storage.	See original WO 70212. All corrective actions complete on 5/14/08. See FU WO 70213		Commercial
70214	04/30/2008	Oggi's Pizza		No violations, but corrective actions: 1.obtain spill kit. 2.training log. 3.grease service contact info. atlas pumping.	See original WO 70214. All corrective actions complete 5/15/08.		Commercial
70216	04/01/2008	Charlie's by the Sea		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.clean grease bin and provide 2nd containment. 3.clean trash & debris from trash area, keep lids closed. 4.obtain spill kit and response plan.	See original WO 70216. All corrective actions complete 5/5/08.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
70218	04/23/2008	Carl's JR. 181		No violations, but corrective actions: 1. keep log of trained employees (use binder). 2.obtain spill kit and response plan. 3.provide overhead coverage and 2nd containment for grease storage.	6/25/08 Received call from regional manager of M&M Foods stating that they are to construct a grease interceptor on 7/30/08. Gave time extension to 8/15/08 with NOV. See original WO 70218 and follow ups 74832 and 79340 8/25/08 All corrective actions complete.	6/25/2008	Commercial
70219	05/05/2008	Yogi's Sports Bar		No violations, but corrective actions: 1.train employees, keep log. 2.obtain spill kit. 3. Provide overhead cover & 2nd containment for grease. 4.provide maint records for interceptor and grease bin. 5.business license cert.	6/25/08 Site inspection- 2 of 5 corrective actions complete. Issued NOV for others to be completed by 8/1/08. Note- construction of overhead coverage almost complete. See original WO 70219 and follow ups 74835 and 79213 All corrective actions complete.		Commercial
70225	05/06/2008	The Beach House		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.provide 2nd containment. 3.clean grease from grease storage area. 4.clean trash/recycle area. 5.obtain spill kit. 6.provide grease maint records.	7/28/08 site inspection area cleaned All corrective actions complete 7/28/08. See follow up WO 75496. See original WO 70225.		Commercial
70226	05/08/2008	The Kraken		No violations or corrective actions.			Commercial
70227	05/08/2008	Pipes Cafe		No violations or corrective actions.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
70231	05/08/2008	Wendy's 3015		No violations, but corrective actions: 1.obtain spill kit. 2.train employees on SW regs using binder. 3.grease maint information.	All corrective actions complete. See follow up WO 75309 See original WO 70231		Commercial
70233	05/08/2008	Mr. Peabody's	Follow up to be completed in FY 08-09	No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.provide overhead cover for grease. 3.clean grease storage area, capture all wash water. 4.obtain spill kit.			Commercial
70268	05/12/2008	Jack in the Box		No violations, but corrective actions: 1.obtain spill kit. 2.train employees on SW regs, keep log. 3.Clean 2nd tray for grease.	All corrective actions complete. See original WO70268. See follow up WO 75317.		Commercial
70269	05/13/2008	Burger King 3528	Follow up to be completed in FY 08-09. NOV issued in FY 08-09.	No violations, but corrective actions: 1.provide overhead and 2nd containment for grease. 2.clean grease storage area, capture all wash water. 3.train employees on SW regs, keep log.	Business completed corrective actions 3 and 4. Issued NOV to comply by 8/25/08 for 1 and 2, roof and tray for grease storage per ME.		Commercial

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WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
70270	05/13/2008	La Salsa 94		No violations, but corrective actions: 1.obtain spill kit. 2.train employees on SW regs, and keep log.	All corrective actions complete. See follow up WO 75315 See original WO70270		Commercial
70271	05/20/2008	El Nopalito		No violations, but corrective actions: 1.provide overhead and 2nd containment to all grease bins. 2.obtain spill kit. 3.train employees on SW regs, keep log.	All corrective actions complete. See follow up WO 75313 See original WO 70271		Commercial
70416	06/05/2008	Holiday Pet Hotel		No violations, but corrective actions: 1.Train employees on SW regs, keep log. 2. Obtain spill kit, make accessible to employees.			Commercial
70417	06/04/2008	Scripps Memorial Hospital Encinitas		No violations, but corrective actions: 1.Provide overhead cover & 2nd containment for grease. 2.properly store paints & other misc items. 3.provide cover for chemicals for evaporation tower. 4.properly store misc items in gas cage.	All corrective actions complete. See follow up WO 79409 See original WO 70417		Commercial
70418	05/29/2008	Taco Bell		No violations, but corrective actions: 1.train employees, keep log. 2. obtain spill kit.	All corrective actions complete. See FU WO 70419 See original WO 70418		Commercial
70421	06/02/2008	Filiberto's		No violations, but corrective actions: 1.Remove/cover with 2nd containment old grease bins. 2.obtain spill kit.	All corrective actions complete. See follow up WO 79341 See original WO 70421		Commercial
70425	06/02/2008	KC's Tandoor		No violations, but corrective actions: 1.obtain spill response kit. 2. train employees on SW regs.	All corrective actions complete. See follow up WO 75319 See original WO 70425		Commercial
70429	05/05/2008	El Camino Tire		no violations or corrective actions			Commercial
70430	05/06/2008	Ki's Juice Bar and Restaurant		No violations or corrective actions			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
70431	05/09/2008	Encinitas Japanese Car Specialists		No violations, but corrective actions: 1. use tray for 2nd containment of all liquids.			Commercial
70432	05/12/2008	Cardiff Valero		No violations, but corrective actions: 1. store is under construction/remodel. All construction debris to be removed by 8/6/08.	7/2/08 site inspection area cleaned and BMPs redone All corrective actions complete. See follow up WO 75484 All drainage runs through clarifier. See original WO 70432		Commercial
70433	05/13/2008	Jiffy Lube		No violations, but corrective actions: 1.Obtain spill kit.	All corrective actions complete. See follow up WO 75320 See original WO 70433		Commercial
70434	05/13/2008	Kaito Sushi Restaurant		No violations, but corrective actions: 1.Obtain spill kit. 2. Train employees, keep log.	All corrective actions complete See follow up WO 75314 See original WO 70434		Commercial
70435	05/19/2008	Speedy Tune and Brakes		No violations, but corrective actions: 1. obtain spill kit. 2.train employees, keep log.	All corrective actions complete. See follow up WO 79211 See original WO 70435		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
70439	05/20/2008	EL Pollo Loco/Fosters Freeze		No violations, but corrective actions: 1. clean trash from dumpster area. 2. train employees on sw regs, keep log.			Commercial
70444	05/21/2008	Panda Express	NOV issued during FY 08-09.	No violations, but corrective actions: 1.obtain spill kit. 2. grease information- last time serviced. 3.address outdoor storage items.	7/14/08 issued NOV for all 3 corrective actions to be completed by 7/20/08. See original wo 70444. See follow up 2 wo 75321 All corrective actions complete. See original WO 70444 and follow up 1 WO 75034		Commercial
70446	05/21/2008	El Torito Market		No violations, but corrective actions: 1.train employees, keep log. 2.obtain spill kit. 3.provide overhead cover and 2nd containment for grease bins. 4.fax most recent grease trap maintenance invoice.	All corrective actions complete. See follow up WO 75312 See original WO 70446		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
70447	05/21/2008	El Torito		No violations, but corrective actions: 1.Train employees, keep log. 2. fax most recent grease maint info.			Commercial
70448	05/22/2008	Wahoo's fish taco		No violations, but corrective actions: 1. train employees on SW regs, keep log. 2. obtain spill kit.	7/14/08 all corrective actions complete. Manager would like a copy of training CD. See follow up wo 75035 See original wo 70448		Commercial
70449	05/22/2008	Islands Fine Burgers and Drinks		No violations, but corrective actions: 1.train employees, keep log. 2.obtain spill kit.	7/14/08 All corrective actions complete. See follow up work order 75032 See Original WO 70449		Commercial
70450	05/23/2008	Kotija Jr Taco Shop		No violations, but corrective actions: 1.obtain spill kit. 2.train employees, keep log.	6/25/08 All corrective actions complete. use shop vac in drain to clean drive way. all was water collected. See FU WO 74838. See original WO 70450		Commercial
70451	05/28/2008	Sazio Ristorante		No violations or corrective actions.			Commercial
70452	05/29/2008	Pei Wei Asian Diner		No violations, but corrective actions: 1.remove old oil left outside. 2.remove/cover used towel storage. 3.pick up/clean area behind business. 4.obtain spill kit	7/14/08 all corrective actions complete. need to contact property manager to clean storm drain. See follow up wo 75033 See original WO 70452.		Commercial
72489	05/29/2008	Mister Sushi		No violations, but corrective actions: 1.obtain spill kit 2.Provide training log to inspector. 3.provide grease maint info.	All corrective actions complete. See follow up WO 75310 See original WO 72489		Commercial
74495	05/29/2008	Sushi House		No violations, but corrective actions: 1.Obtain spill kit. 2.train employees, keep log. 3.Provide business cert and exp date.	All corrective actions complete. See follow up WO 75311. See original WO 74495		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
74496	06/02/2008	Sage Grill		No violations or corrective actions.			Commercial
74837	06/09/2008	Honey Baked Ham		No violations, but corrective actions: 1.Train employees on SW regs and keep log. 2. Keep waste and recycling container lids closed.			Commercial
74839	06/09/2008	Vons 2351		No violations or corrective actions.			Commercial
74841	06/09/2008	Moonlight Snack Shack		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2. obtain spill kit, make accessible to employees. 3.obtain current bus. cert.	Inspection completed by P&R. All corrective actions complete. See follow up 79036 See original WO 75015.		Commercial
74844	06/10/2008	Flora Bunda Nursery		No violations, but corrective actions: 1.train employees, keep log. 2.obtain spill kit, make accessible to employees. 3.Provide 2nd containment for fertilizer. 4.take steps to address seepage on SE side. 5.keep trash container lids closed.	7/23/08 All corrective actions and recommendations complete, all records kept in water quality notebook. See follow up WO 75307 See original WO 74844		Commercial
74845	06/11/2008	Manhattan Pizza		No violations, but corrective actions: 1.obtain spill kit. 2.train employees, keep log.	All corrective actions complete See follow up WO 79210 See original WO 74845		Commercial
74846	06/16/2008	San Dieguito Transportation		No violations, but corrective actions: 1.Properly store fork lift under cover or indoors. 2.Berm fueling area for unloaded fuel.	7/21/08 Site inspection, all corrective actions complete. See follow up WO75308 See original WO74846		Industrial
74847	06/11/2008	Leucadia Pizzeria		No violations, but corrective actions: 1.train employees. 2.obtain spill kit. 3.clean east storm drain- wood, cig butts. 4.provide 2nd containment and overhead cover for grease bin.	All corrective actions complete. See follow up WO 79344 See original WO 74847		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
74848	06/18/2008	San Elijo JPA (Water reclamation facility)		No violations, but corrective actions: 1.Address possible erosion from pipe construction off of "barn". 2.cover or remove micro turbine. 3.address roof drain on boiler room (east building).	Received email from JPA with photos attached showing that all corrective actions have been completed. See follow up WO 75583 See original WO 74848		Industrial
74849	06/19/2008	Henry's 123	NOV issued in FY 08-09.	No violations, but corrective actions: 1.train employees, keep log. 2.clean storm drain grate in loading area.3.dry clean/wash and capture water in trash compactor area.4.cover outdoor machines, misc parts.5.provide overhead cover for grease bin.	All corrective actions taken except overhead coverage for grease storage. Issued NOV to comply by 8/29/08. See follow up work orders79457 and 79458. See original WO 74849		Commercial
74859	06/19/2008	Little Oaks Equestrian Park	Inspection by P&R	No violations or corrective actions.			Municipal
74860	06/19/2008	Cottonwood Creek Park	Inspection by P&R	No violations or corrective actions.			Municipal
74923	06/19/2008	Sun Vista Park	Inspection by P&R.	No violations or corrective actions.			Municipal
74944	06/19/2008	Wiro Park	Inspection by P&R.	No violations or corrective actions.			Municipal
74945	06/20/2008	Cardiff Sports Park	Inspection by P&R.	No violations or corrective actions.			Municipal
74949	06/20/2008	Cardiff S.P. Expansion	Inspection by P&R.	No violations, or corrective actions.			Municipal
74951	06/23/2008	Lopez Flowers		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.obtain spill kit. 3.cover or store inside all tractors & machine parts. 4.spread out or cover stock piles of soil.	All corrective actions complete. See follow up WO 75482 See original WO 74951.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
74955	06/23/2008	Juanita's Tacos		No violations, but corrective actions:1.don't allow wash water to discharge off site. 2.clean outside of grease bin cover (using dry methods or containing wash water).3.obtain spill kit.4.Train employees.5.fax copy of grease intercept maint. to City.	All corrective actions complete. See follow up WO 79212 See original WO 74955		Commercial
74956	06/23/2008	Seedling express, Inc.		No violations, but corrective actions: 1.train employees.2.obtain spill kit.3.provide 2nd containment for port-a-potty.4.clean storm drain inlets.5.cover or remove machines and machine parts.	All corrective actions complete. See follow up WO 75483 See original WO 74956		Commercial
74958	06/23/2008	Ralph's Supermarket		No violations, but corrective action: 1.keep trash dumpster lids closed.			Commercial
74959	06/23/2008	Via Italia trattoria		No violations, but corrective actions:1. fax most recent grease inter cleaning receipt to city. 2.train employees on SW regs, keep a log. 3. obtain spill kit.	All corrective actions complete. See follow up WO 79343 See original WO 74959		Commercial
74963	06/24/2008	Mira costa college	Follow up to be completed in FY 08-09	No violations, but corrective actions: 1.Provide overhead cover and 2nd containment for grease storage.2.cover/store inside tractors, forklifts, and other misc part and metals. 3.provide 2nd containment for port-a-potty. 4.replace sandbags sw corner.			Commercial
75004	06/03/2008	City of Encinitas Calle Magdalena Yard- Public Works	Inspection by PW- Streets.	No violations, but corrective actions: 1.store heavy equipment & vehicles under cover. 2.label storage containers. 3.replace BMPs around inlets.	All corrective actions complete. See follow up WO 79410 See original WO 75004		Municipal
75005	06/03/2008	City of Encinitas Pacific View Yard- Public Works	Inspection by PW- Streets	No violations or corrective actions. Clean Water to provide training logs/education. City will be moving from yard in 30 days.			Municipal

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
75006	06/03/2008	City of Encinitas Requeza Yard- Public Works	Inspection by PW- Streets.	No violations, but corrective actions: 1.cover metal guard rail. 2.remove/cover hydrants/AC pipe. 3.2nd containment on port-a-potty. 4.remove barrels.	All corrective actions complete. See follow up WO 79411 See original WO 75006		Municipal
75009	06/05/2008	City of Encinitas A Tank Site- Public Works	Inspection by PW- Streets.	No violations, but corrective actions: 1.pick-up trash. 2.cover metal/equipment. 3.obtain spill kit.	All corrective actions complete. See follow up WO 79412 See original WO 75009		Municipal
75010	06/06/2008	City of Encinitas Wastewater Collection Facility	Inspection by PW- Streets.	No violations, but corrective actions: 1.cover all metal.	All corrective actions complete. See follow up WO 79413 See original WO 75010		Municipal
75011	06/20/2008	Orpheus Park	Inspection by P&R.	No violations, but corrective action: Clean sediment out of landscape drains around playground.	All corrective actions complete. See follow up WO 79616. See original WO 75011		Municipal
75012	06/20/2008	Mildred Macpherson Park	Inspection by P&R.	No violation or corrective actions.			Municipal
75014	06/20/2008	Glen Park	Inspection by P&R.	No violations or corrective actions.			Municipal
75015	06/23/2008	Moonlight Beach	Inspection by P&R. No address point for MLB, so inspection is attached to the Snack Shack.	No violations, but corrective actions: 1.make sure litter collected and removed. 2.storm drain cleaning referred to Clean Water/Wastewater.	Inspection completed by P&R. All corrective actions complete. See follow up WO 79615 See original WO 75015.		Municipal

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WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
75020	06/24/2008	Vons 2144		No violations or corrective actions.			Commercial
75021	06/24/2008	La Especial Norte		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.Complete spill kit. 3.post spill response plan.			Commercial
75022	06/24/2008	Le Papagayo		No violations, but corrective actions: 1.train employees, keep log. 2.clean grease on ground near bin. 3.obtain spill kit. 4.carry grease to bin in a sealed container. 5.obtain grease interceptor cleaning company.	Some corrective actions complete. Issued NOV to obtain spill kit, empty grease storage bin, and provide grease container information. NOV is attached to complaint work order 79348. See follow ups 79345 and 79346 8/21/2008 All corrective actions complete. See original WO 75022		Commercial
75023	06/25/2008	Williamson Produce		No violations, but corrective actions: 1.obtain spill kit. 2.cover/remove old parts, machines, other metals. 3.label fertilizer containers. 4.train employees, keep log. 5.fix leak on water filter.	All corrective actions complete. See follow up WO 75023 See original WO 75023		Commercial
75024	06/26/2008	Trattoria i Trulli		No violations or corrective actions.			Commercial
75025	06/26/2008	Robbie's Roadhouse		No violations, but corrective actions: 1.provide coverage for ash trays in rear. 2.obtain spill kit.	Site inspection still need spill kit. See follow up WO 79342 See original WO 75025		Commercial
75026	06/26/2008	Nrgize Lifestyle Cafe		No violations or corrective actions.			Commercial
75027	06/26/2008	Miyabi		No violations, but corrective actions: 1.obtain spill kit. 2.train employees on SW regs, keep log.	6/30/08 Received kitty litter receipt.		Commercial
75028	06/26/2008	City of Encinitas City Hall		No violations or corrective actions. Currently under construction, to be completed within 30 days.			Municipal
75029	06/26/2008	Kealani's		No violations or corrective actions.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
75036	06/26/2008	Mandarin Oriental		No violations or corrective actions.			Commercial
75298	06/23/2008	Encinitas Viewpoint Park	Inspection by P&R.	No violations or corrective actions.			Municipal
75299	06/23/2008	Scott Valley Park	Inspection by P&R and CWP Inspector. Dripping water fountain.	No violations or corrective actions.			Municipal
75301	06/24/2008	Hawkview Park	Inspection by P&R	No violations or corrective actions.			Municipal
75302	06/25/2008	Leucadia Oaks Park	Inspection done by P&R	No violations or corrective actions.			Municipal
79445	06/23/2008	Paul Ecke Sports Park		No violations, but corrective actions: 1.maintain trash enclosure area free of litter/debris, keep lids closed. 2.obtain spill kit. 3.clean sediment/debris out of storm drains. 4.reduce over-irrigation on north slope behind ball fields.	Follow up inspection completed by P&R 8/28/08. All corrective actions complete. See follow up WO 79454 See original WO 79445.		Municipal
79455	06/26/2008	Oakcrest Park		No violations, but corrective actions: 1.provide appropriate BMPs for sediment stockpile in park. 2.clean up litter and debris in picnic area. 3. obtain spill kit for outdoor storage area.	Follow up inspection completed by P&R on 8/28/08. All corrective actions complete. See follow up WO 79456 See original WO 79455.		Municipal
79621	06/26/2008	Leo Mullen Sports Park		No violations, but corrective actions: 1.Erosion BMPs on hillside located in between soccer field and baseball fields needs to be replaced prior to wet season.	Inspection completed by P&R. Planting is in progress on bank between fields and will be complete before 10/1/08. See follow up WO 79622 See original WO 79621		Municipal
79623	06/26/2008	Las Verdes Park		No violations, but corrective actions: 1.clean out storm drains that have sediment and debris.	Inspection completed by P&R. Storm drains have been cleaned and are cleaned weekly and as needed. See follow up WO 79624 See original WO 79623		Municipal
Total:	**193**						

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
DAWGS	379 Trailview Rd	Animal Facilities	0752	Pet grooming
Deborah Ptashne Grooming	2013 San Elijo Ave	Animal Facilities	0752	Pet grooming
Mobile Pet Grooming	34189 Pacific Coast Hwy, Dana Point, CA	Animal Facilities	0752	Pet grooming
Your Fairy Dogmother	946 Woodgrove Dr	Animal Facilities	0752	Pet grooming
L. Wicks	804 Saxony Rd	Auto Repair/Maintenance	7538	Auto repair and maintenance
Mercedes West Auto Wholesale	2026 Oxford Ave	Auto Repair/Maintenance	5511	Auto sales and maintenance
Reed Motors	1326 Rainbow Ridge Ln	Auto Repair/Maintenance	7538	Auto repair and maintenance
Wallace Courier	523 Samuel Ct	Auto Repair/Maintenance	4215	Transport services and auto maintenance
Whalen Performance	1726 Avenida Melodia	Auto Repair/Maintenance	7538	Auto repair and maintenance
Add Style Designs	607 N Vulcan Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
All Cities Construction Services	729 Requeza St	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Beeson Squared Construction	1572 Caudor St	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Brian Building Corporation	1009 Hurstdale Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
C.E. Wylie Construction Company	3777 Ruffin Rd, San Diego 92123	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Colt Construction & Development	709 Cathy Ln	Contractor	1521	General contractor primarily engaged in construction single-family houses.
CTM	1553 Avenida De Las Lilas	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Custom Builders	1347 Summit Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
D. Bell Construction, Inc.	1539 Caudor St	Contractor	1521	General contractor primarily engaged in construction single-family houses.
D.H. Construction	477 Delage Ct	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Daniels Construction	2105 Montgomery Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
De Pascale Construction, Inc.	555 Second St #4	Contractor	1521	General contractor primarily engaged in construction single-family houses.

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
Dry Wall Doctor (Tom Penna Construction)	476 La Mesa Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Eragon Restoration	unknown	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Finishing Touch Molding, Inc.	921 Hymetus Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Peruvian Builders	349 Village Run East	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Red Point Homes, Inc.	609 S. Vulcan Ave #302	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Robert Tessieri Construction	1743 Le Gaye Dr	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Roof Rite	1216 Tower Dr (not in Encinitas)	Contractor	1521	General contractor primarily engaged in construction single-family houses.
The Crest Company	1265 Rubenstein Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Van Veen Team	1145 Aloha Dr	Contractor	1521	General contractor primarily engaged in construction single-family houses.
VCI Telcom	1921 W 11th St, Upland, CA 91786	Contractor	1521	General contractor primarily engaged in construction single-family houses.
West Coast Comfort	4709 Morning Canyon Rd	Contractor	1521	General contractor primarily engaged in construction single-family houses.
William B. Hannon General Construction	1748 Lake Dr	Contractor	1521	General contractor primarily engaged in construction single-family houses.
All Cities Hauling	937 Woodlake Dr	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Bart Forry	404 Encinitas Blvd #203	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Belman Handyman	738 Snapdragon St	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Blade Dufour Handyman Service	905 Woodlake Dr	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
California Maids Home Services	885 Del Rio	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Coast Transportation	1990 Country Grove Ln	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Encinitas Handyman Biz	1555 Bella Vista	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
Fernando J.C.	1168 Arcadia Rd	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
G B Enterprises	1106 Second St	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Gary Wesley Handyman	1813 N Vulcan Ave	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
H.S. Solutions	731 Snapdragon St	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Home Maintenance Services	842 Bonita Dr #A	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Jorge Mendoza	953 Nardo Rd	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
M H S Works	1008 Cottage Way	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
M.G. Handyman Work	2057 Village Pkwy #204	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Maria Zavala	961 Melba Rd	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Maurice's Handyman Services	1190 Encinitas Blvd P167	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Michael E. Greiff	1448 Caminito Septimo	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Mike Hidalgo, Inc.	119 Europa St	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
North County Hauling Service	1117 Woodlake Dr	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Owens Co.	18525 Aliso Canyon Rd	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Pacific Roof Cleaning	1571 Avenida De Las Lilas	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Patra Cruz	351 Countrywood Ln	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Patrice Alexander	2437 Oxford Ave	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Patrick W. Quinlan Handyman	454 Requeza St #320a	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Phil's Handyman Service	1726 Old Mill Rd	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
R. K. Enterprises	658 Santa Fe Dr	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Salo Custom Woodwork	1549 N Vulcan Ave #54	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Scot Enterprises	454 Requeza St #130C	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Short People Services	116 Quail Gardens #137	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
10-C'S Landscape Enhancements	1301 Trabert Ranch Rd	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Alfonso Rey Landscape Maintenance	351 Sprucewood Dr	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Arnulfo Medina Landscaping	1408 Hermes Ave, Ste A	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Benny's Gardening	1055 Evergreen Dr	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Carrillo Tree Maintenance	794 Clark Ave	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Coco's Landscape and Maintenance	1939 Playa Riviera Dr	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Dave Steinbis Landscape Maintenance	699 N Vulcan Ave, Ste 127	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Felix Sanchez Gardening Service	880 Del Rio Ave	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
G. K. Landscape	244 Second St, Ste E	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Galapacifica Landscape	253 Mangano Cir	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Greg Stone Landscape Architects	69 Mcneill Ave	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Gresham Gardens & Consulting	1734 Noma Ln	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
Hauling And Landscaping.Com	1133 Gardena Rd	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
J A Landscape	2068 Bulrush Ln	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
L.B. Designs	837 Stratford Dr	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Luis Maldonado	1041 San Andrade Dr, Ste A	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Miguel's Landscaping	1105 Regal Rd	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Mijangos Landscaping	1608 Charro St	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Mike Hirsch	753 Requeza St	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
pacific View Landscapes	2444 Manchester Ave	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Sinclair Grounds Maintenance	454 Requeza St	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
U P E Resources / Tree Elements	1624 Olmeda St	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Miramontes Masonry	3726 Sage Canyon Dr	Masonry	1741	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
San Diego Stone Care/H.S. Solutions	731 Snapdragon St	Masonry	1741	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
American Auto Detailing	3016 Azahar St, Carlsbad 92009	Mobile Auto Washing	7542	Mobile auto washing and detailing
Herbie Auto Mobile Detailing	141 Grandview St, Apt 13	Mobile Auto Washing	7542	Mobile auto washing and detailing
Mobile Shine Detailers	3320 Calle Sand Blast	Mobile Auto Washing	7542	Mobile auto washing and detailing
Santa Fe Detailing	1280 Santa Fe Dr	Mobile Auto Washing	7542	Mobile auto washing and detailing
A & M Window Cleaning	1125 N Vulcan Ave #26	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
All In Carpet Cleaning	720 Devonshire Dr	Mobile Cleaning	7217	Cleaning of interior retail or residential spaces.
Anonymous Window Cleaning	1727 Le Gaye Dr	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Aztech Cleaning Services	1627 Valleda Ln	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Beyond Industrial Cleaning	945 Woodgrove Dr	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
Bob's Carpet Care	336 Sanford St	Mobile Cleaning	7217	Cleaning of interior retail or residential spaces.
Carpet Cleaning	Vista, Ca	Mobile Cleaning	7217	Cleaning of interior retail or residential spaces.
Claudia Nelson's Housekeeping	1338 Mackinnon Ave	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Clean Sense Carpet Cleaners	328 1/2 La Mesa	Mobile Cleaning	7217	Cleaning of interior retail or residential spaces.
Clear Choice Window Cleaning	138 Diana St	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Encinitas Janitorial Service	699 N Vulcan Ave	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Gilbert's Janitorial Service	PO Box 1877, Oceanside 92054	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Guillermina's Housekeeping	1253 Orkney Ln	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Montano's House Cleaning	704 Regal Rd #C-12	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Rug Doctor	9630 Black Mountain Rd, Ste K, San Diego 92126	Mobile Cleaning	7217	Cleaning of interior retail or residential spaces.
Sunny Window Cleaning	404 Encinitas Blvd #345	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Terry's Cleaning Service	2157 Pleasant Grove Dr	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Velasquez Maintenance, LLC	1902 Paxton Way	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Beemer Coatings	152 Coop Ct	Painting/Coating	1721	Painting of interior and/or exterior buildings
F & V Painting, Inc. DBA Certapro	1340 Ravean Ct	Painting/Coating	1721	Painting of interior and/or exterior buildings
Kessing Painting	261 Caliban Ct	Painting/Coating	1721	Painting of interior and/or exterior buildings
Mr. Paint	404 Encinitas Blvd, Ste 228	Painting/Coating	1721	Painting of interior and/or exterior buildings
Absolute Perfection Fountain	730 Third St	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Aqua Tech Pool Care	233 Delphinium St	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Blue Water of La Jolla Pool Service	2008 Wandering Rd	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Crown Pool and Landscape	2126 Via Tiempo	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Del Rancho Pools	1315 Encinitas Blvd	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Jamie's Pool Service	1265 Rubenstein Ave	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Kohler Pool Service & Supply	368 N El Camino Real	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Leslie's Pool Supply	270 N El Camino Real, Ste G & H	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Mayer Pool Service	1553 Plumtree Dr	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Pacific Coast Pool Service	1439 Linda Sue Ln	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
Ranch and Sea Pool Care	1686 Falcon Hill Ct	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
S.S. Pool Service	1125 Woodlake Dr	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Wilson Pools Plus	1530 Burgundy Rd	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance

Appendix E

Residential

E-1 Map of High Threat to Water Quality Residential Areas

City of Encinitas

High Threat to Water Quality Residential Areas

High Threat to Water Quality Residential Areas in the City of Encinitas include:

- All residential areas within 500ft of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

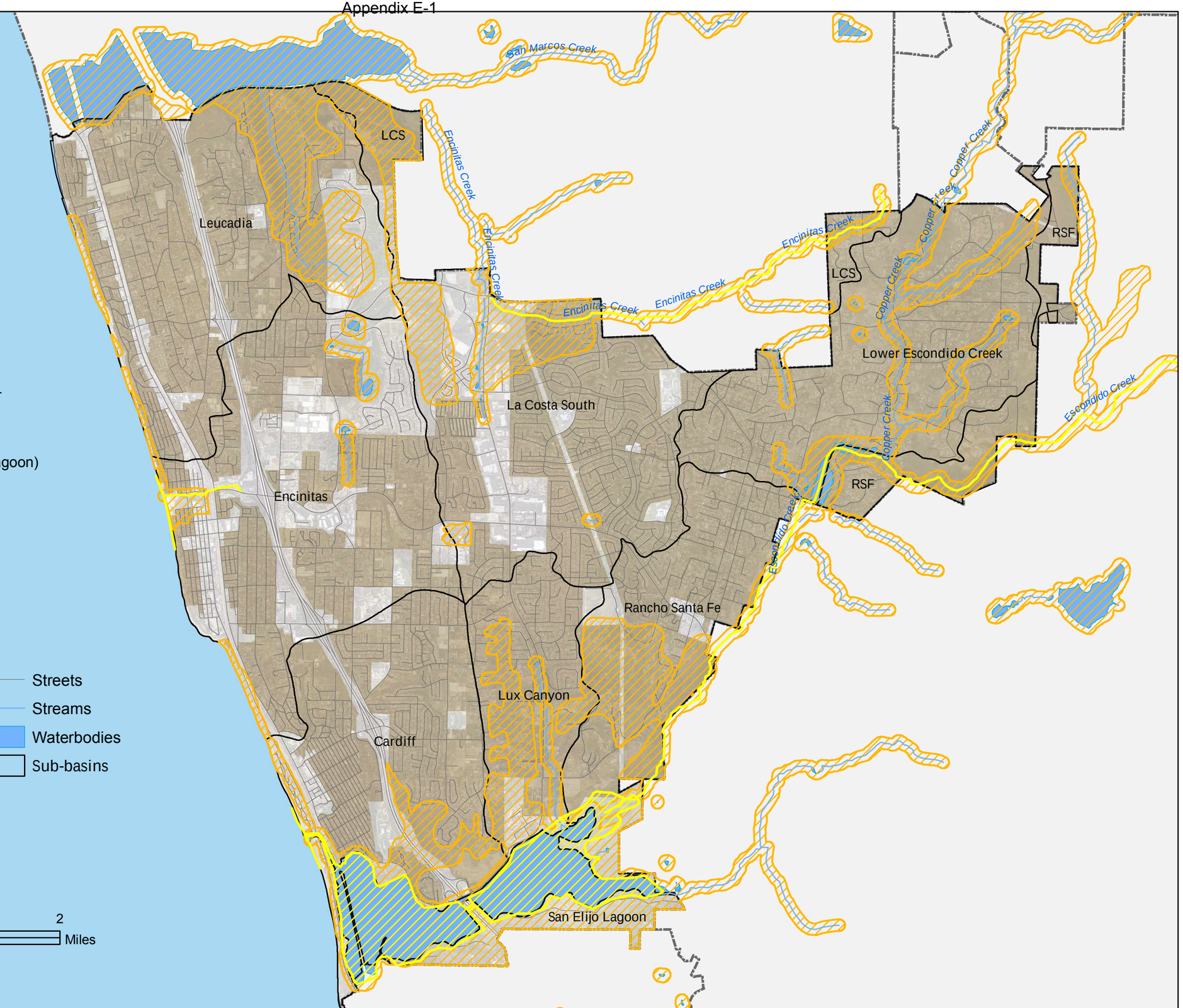

Residential Areas
303(d) listed streams
303(d) listed waterbodies
Environmentally Sensitive Areas
Streets
Streams
Waterbodies
Sub-basins

0 0.5 1 2 Miles

Appendix F

Education

F-1 Regional Mobile Business Outreach and Education Plan

F-2 NCSWP Construction Brochure

F-3 City of Encinitas Brochures (English Spanish)

F-4 Encinitas Environmental Services Guide

F-5 New giveaway items developed for FY 2007-08

F-6 NCSWP Pet Waste Survey and Results

F-7 Regional Residential Education Plan

Regional URMP Attachment 5.0

Regional Mobile Business Outreach and Education Strategy

FINAL - March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

This document describes a **Regional Mobile Business Outreach and Education Program** to be collaboratively conducted by the Copermittees of NPDES Order No. R9-2007-0001 (Permit). It was developed by the Mobile Business Subcommittee of the Copermittees' Outreach Workgroup. Permit section D.3.b.(4)(a) requires that each Copermittee develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP. Section D.3.b.(4)(b) further states "if they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education." Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy. It addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy.

2.0 SOURCE CHARACTERIZATION

Mobile businesses provide services at offsite locations rather than from fixed bases of operation. Services may be provided at, but are not limited to, residential, industrial, municipal, and commercial areas. Permit Section D.3.b.(1), identifies 12 categories of mobile business types that will be addressed as part of this regional Strategy. Table 1 identifies these businesses types and the potential pollutants associated with each. Additional characterization and description of these sources will be conducted during the development and implementation of the regional program elements described in Section 2.0

Table 1 – Identification of Mobile Business Types and Associated Pollutants-of-Concern

Source Type	Bacteria	Metals	Pesticides	Sediment	Trash	Nutrients	Organics	Oil/Grease
1. Auto Repair, Maintenance, Fueling, Cleaning		X		X	X		X	X
2. Equipment repair, maintenance, fueling, or cleaning		X		X	X		X	X
3. Mobile automobile or other vehicle washing		X		X	X		X	X
4. Pest control services		X	X				X	
5. Mobile carpet, drape or furniture cleaning							X	
6. Cement mixing or cutting				X		X	X	
7. Masonry				X		X	X	
8. Painting and coating		X			X		X	
9. Landscaping	X	X	X	X		X	X	
10. Pool and fountain cleaning		X		X		X	X	
11. Portable sanitary services	X				X	X	X	
12. Power washing services	X	X	X	X	X	X	X	X

3.0 REGIONAL PROGRAM ELEMENTS

The Regional Mobile Business Outreach and Education Program will consist of several elements to be developed and implemented by June 2010.

3.1 Inventory Development and Maintenance

Permit section D.3.b.(1) requires that each Copermittee keep as part of its commercial sources inventory a listing of mobile businesses known to operate within its jurisdiction, and section D.3.b.(4)(b) encourages Copermittees to share these inventories. In addition to sharing inventory information, the Copermittees have determined that the collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses, and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications. The Copermittees

intend to utilize a consultant to compile this inventory. It is expected to be completed by June 2009. Prior to the completion of a shared inventory, the Copermittees will continue to meet the requirements of section D.3.b.(4)(b) by individually maintaining and updating as necessary their existing jurisdictional mobile business inventories. These will be used as a starting point for the development of a consolidated inventory. The consultant will also be tasked with researching other information sources such as unlicensed mobile businesses operating within the County, as well as with managing updates to the inventory in subsequent years.

3.2 Establishment of Minimum BMP Requirements

Permit section D.3.b.(4)(a)i requires that Copermittees develop and implement minimum standards and BMPs to be required for each of the various types of mobile businesses. The Copermittees also intend to collaborate in the development of a minimum set of BMP standards for each type of mobile business addressed through the regional effort. Existing resources such as jurisdictional minimum BMPs, the Project Clean Water Clean Water Tool Box (http://www.projectcleanwater.org/bmp/) and the Think Blue website (http://www.sandiego.gov/thinkblue) will be reviewed by the Copermittees in developing these common standards. A consultant may also be utilized for BMP development support. This task is expected to be completed by June 2009.

3.3 Outreach and Education Strategy

Permit section D.3.b.(4)(a)iv requires that Copermittees develop and implement an outreach and education strategy for mobile businesses. A variety of educational methods and approaches will likely be utilized in complying with this requirement. These will be determined by the Copermittees during the development of this task. The centerpiece of the Copermittees' education strategy will be business notifications. This element is described further below.

3.4 Business Notifications

Permit section D.3.b.(4)(a)iii requires that, within the first three years of implementation of the updated JURMP, each Copermittee must notify the owner/operator of each

inventoried mobile business their minimum standards and BMP requirements and local ordinances. The Copermittees will collaboratively develop and implement a regional notification strategy to inform mobile businesses of their obligation to comply with the local ordinances of the jurisdictions where they operate. In addition to assisting in the development of this strategy, the consultant will be tasked with notifying businesses and tracking when and how they were notified. Potential notification options include mailing, emailing, workshops, and website posting. This task will be completed no later than March 24, 2011, but is targeted for completion by March 2010.

3.5 Implementation Schedule

Implementation of the Regional Mobile Business Outreach and Education Program will begin during FY 08/09, with all major tasks targeted for completion by the end of FY 2009/10. The consultant may also be retained for future management of the inventory and other tasks as needed. Major milestones are summarized below.

FY 2008/09

- Consultant selection by Subcommittee
- Completion and maintenance of regional inventory by consultant
- Development of regional minimum BMPs

FY 2009/10

- Notification of businesses by consultant (by January 2010)
- Final report including status of notifications submitted to Copermittees

4.0 INDIVIDUAL COPERMITTEE RESPONSIBILITIES

Although many of the specific requirements of Permit section D.3.b.(4)(a) will be collaboratively addressed through the completion and implementation of the Regional Mobile Business Outreach and Education Program, the responsibility for ensuring individual Permit compliance ultimately remains with each Copermittee. These responsibilities are briefly discussed below.

4.1 Inspections and Enforcement

Permit section D.3.b.(4)(a)ii requires that Copermittees develop and implement an enforcement strategy which specifically addresses the unique characteristics of mobile businesses operating within their jurisdictions. Section D.3.b.(4)(a)v further requires that Copermittees conduct inspections of mobile businesses as needed (e.g., on a complaint basis). The Regional Mobile Business Outreach and Education program will not address inspections or enforcement of mobile businesses; these responsibilities are retained individually by each Copermittee.

4.2 Education and Outreach

Copermittees are expected to participate as requested in the development of the Education and Outreach Strategy described in Section 3.3 above. Individual Copermittees may also have specific needs or requirements not addressed through this effort. Each jurisdiction retains the responsibility for developing additional education programs or strategies in accordance with their own needs, and as necessary to ensure their own Permit compliance.

4.3 Inventory Updates

As described in Section 3.1 above, individual Copermittee mobile business inventories will initially be used as a starting point for the development of a consolidated regional inventory. Copermittees are expected to make their inventories available as requested, and to provide updated information as determined necessary for future updates.

4.4 BMP Requirements

Copermittees are expected to make their jurisdictional BMPs and requirements available as requested during the development of regional standards and program content. The Regional Mobile Business Outreach and Education Program will emphasize standardized, common content. In the event that an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad 760-602-2719

City of San Marcos 760-744-1050

City of Encinitas 760-633-2787

City of Del Mar 858-755-9313

City of Oceanside 760-435-5800

City of Solana Beach 858-720-2470

City of Vista 760-726-1340

Best Management Practices

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.

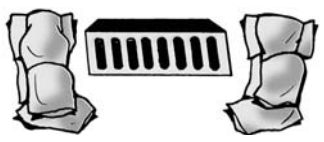

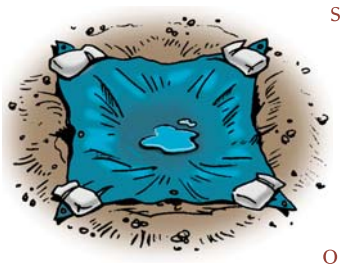

The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.

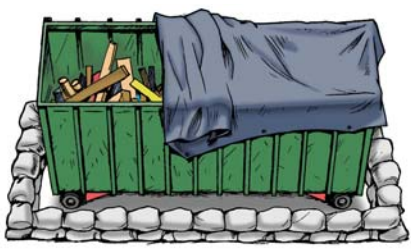

Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.

Water Quality Regulations for Construction Sites

In 1972, the Environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

A Pollution Prevention Guide for the Construction Industry

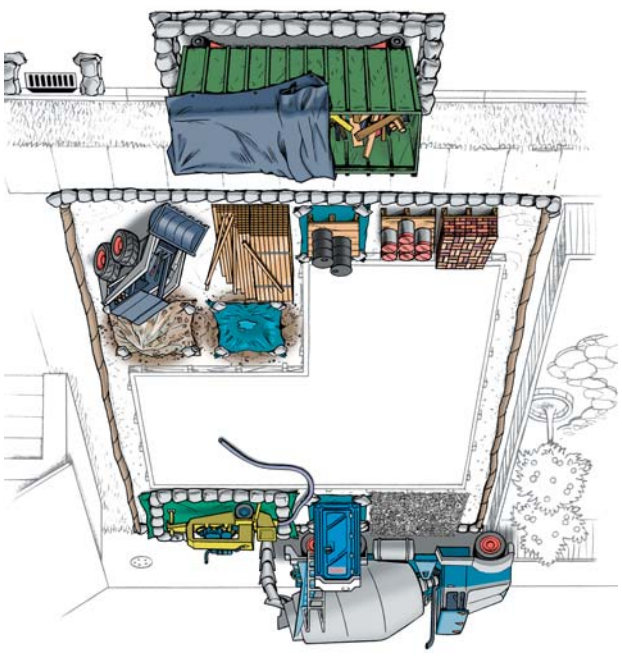

North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.

Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

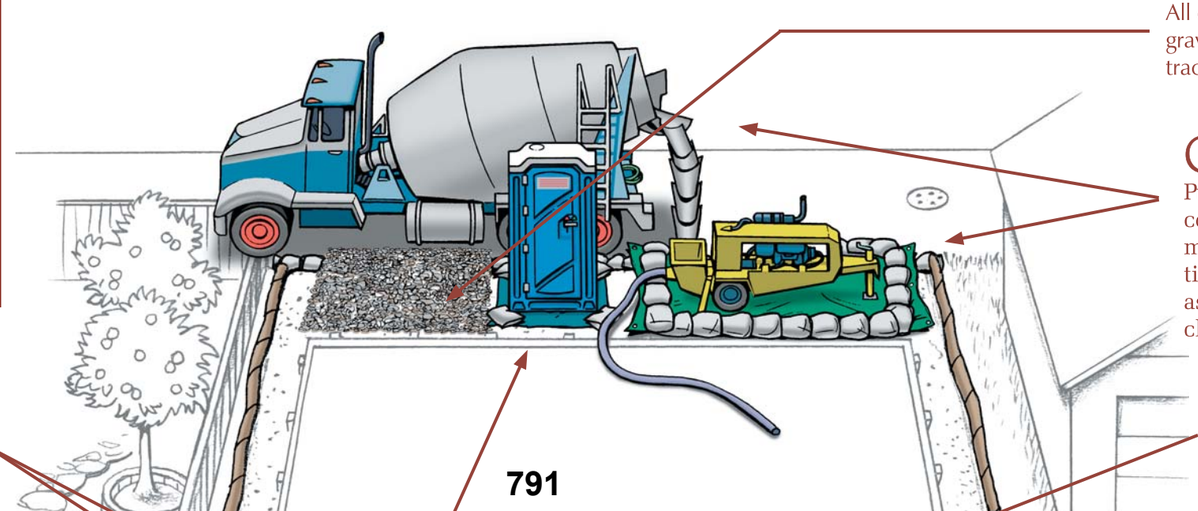

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic

Mantenimiento
Automotriz
Automotive

Empresas Constructoras
Developers

Hiring a
Handy Man

DiaZinón
DiaZinon

Restaurants Can
Help Keep our
Waterways Clean

Cuidado del
Patio y del jardín
Yard & Garden
Care

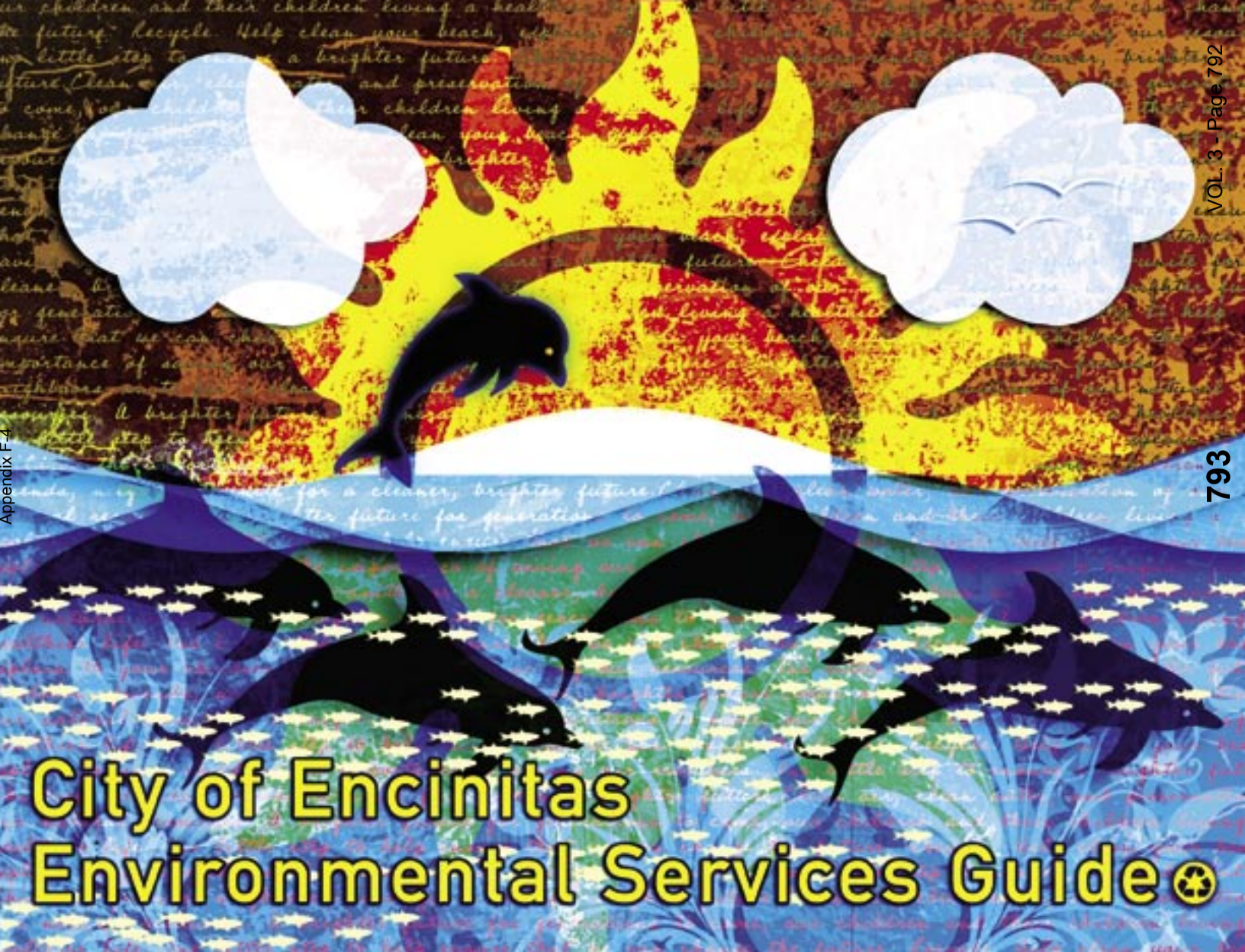
City of Encinitas
Environmental Services Guide

Ocean protection

The ocean begins at your front door.

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.

Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.

- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.

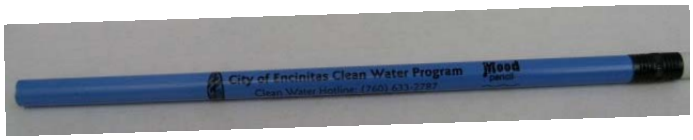

Color Changing Mood Pencil

Bags on Board Pet Waste Bag Dispenser

Clean Water Magnet

NORTH COUNTY
STORM WATER PROGRAM

Carlsbad Vista Encinitas Escondido Oceanside
Solana Beach San Marcos County of San Diego

1. What is your zip code? _____

2. Where do you most often walk your dog?
   __ My neighborhood
   __ At the park
   __ At the beach
   __ I don't walk my dog
   __ Other _____

3. What happens to the pet waste that is not picked up?
   __ I don't know
   __ It disintegrates
   __ It fertilizes the ground
   __ It gets washed to creeks, lagoons, and the ocean
   __ Someone comes later to clean it up
   __ Other _____

4. If you saw people not picking up after their pet, what would be your reaction?
   __ I would not care
   __ I would report them to the City
   __ I would be surprised
   __ I would ask them to pick it up
   __ I don't know what I could or would do
   __ Other _____

5. Why do you think people would not pick up after their pet? (Check all that apply)
   __ They don't care
   __ They don't know they're supposed to
   __ There's no one around to see them
   __ They didn't bring a bag
   __ There was nowhere to throw it away
   __ They think it's gross
   __ Other _____

6. What do you think the City can do or should do about the pet waste problem?
   _____
   _____

Thank you!

Printed on Recycled Paper

Pet Waste Survey Answers
Encinitas Garden Festival
23 5/3/08

1. What is your zip code?

11	92024
1	92672
1	92078
2	92009
2	92075
1	92007
1	90831
1	92027
1	92054
1	92105
1	92008

2. Where do you most often walk your dog?

21	My neighborhood		
2	At the park		
7	At the beach		
0	I don't walk my dog		
4	Other	open space	dog park
		san elijo lagoon	

3. What happens to the pet waste that is not picked up?

2	I don't know
1	It disintegrates
4	It fertilizes the ground
17	It gets washed to creeks, lagoons, and the ocean
2	Someone comes later to clean it up
	Other

4. If you saw people not picking up after their pet, what would be your reaction?

1	I would not care		
0	I would report them to the City		
1	I would be surprised		
17	I would ask them to pick it up		
2	I don't know what I could or would do		
5	Other	I'd pick it up myself	I try to pick it up or suggest to pick up,
		Offer them one of my bags	but honestly tend to avoid confrontation

5. Why do you think people would not pick up after their pet? (Check all that apply)

18	They don't care
5	They don't know they're supposed to
15	There's no one around to see them
16	They didn't bring a bag
7	There was nowhere to throw it away
10	They think it's gross
	Other

Pet Waste Survey Answers
Encinitas Garden Festival
5/3/08

6. What do you think the City can do or should do about the pet waste problem?

Keep getting people educated and rally the team!
Encourage pet waste pick up thru more education!
Fine people
I don't know
Let people know that it can contaminate the ocean
Educate
More bag dispensers
Create a fine if you do not pick up poo
Put up bag dispensers (ask for donation)
More info
Put up garbage cans to put the waste in
Fine neighborhoods- HOAs
Fine people who don't pick up their pet waste
Dispensers w/ bags
Educate and place cans and bags! Post signs with good looking people picking up after their pet. Ha!
Plastic bags
Just education
Provide more containers for waste disposal- place article in papers
More bag stations and waste receptacles
Put out more bag dispensers
Ticket people who don't pick up after their pets!

Pet Waste Survey Answers
Encinitas Garden Festival
5/3/08

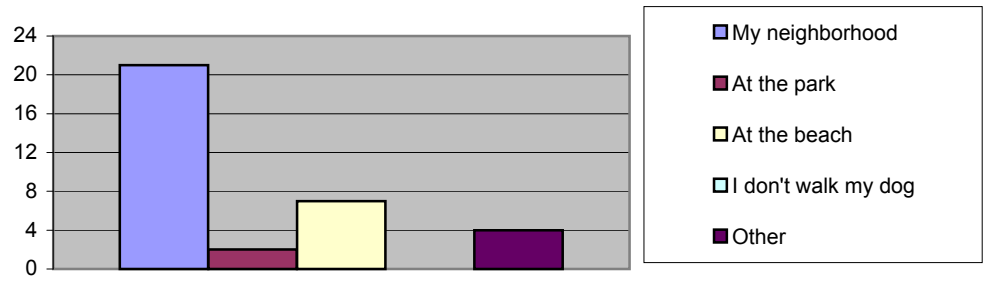

2. Where do you most often walk your dog?

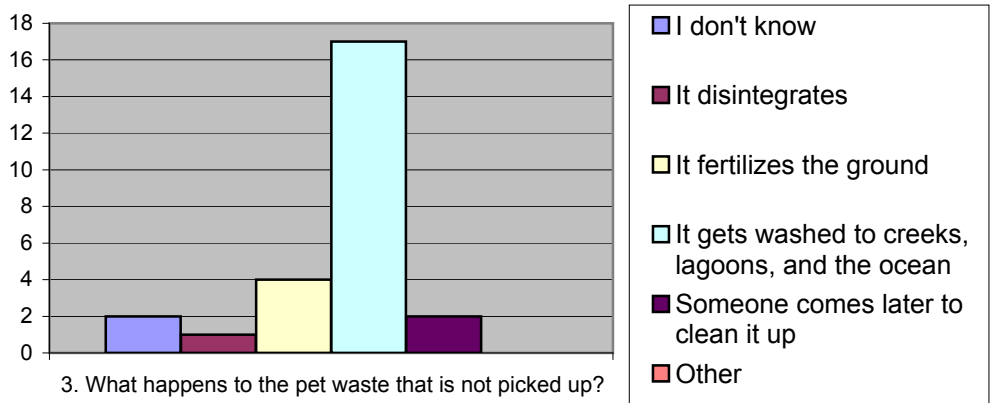

3. What happens to the pet waste that is not picked up?

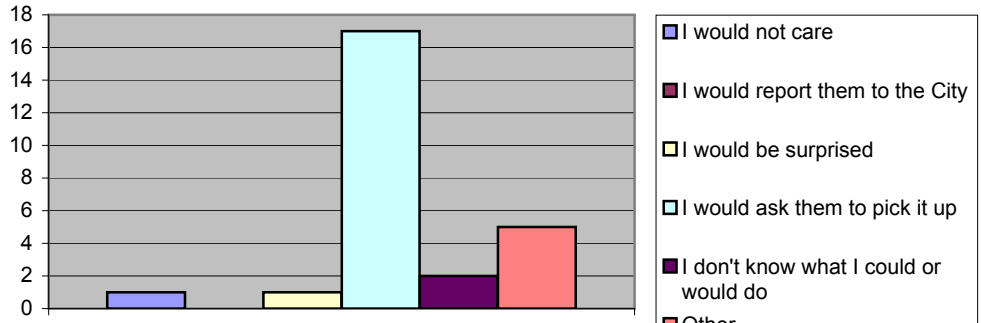

4. If you saw people not picking up after their pet, what would be your reaction?

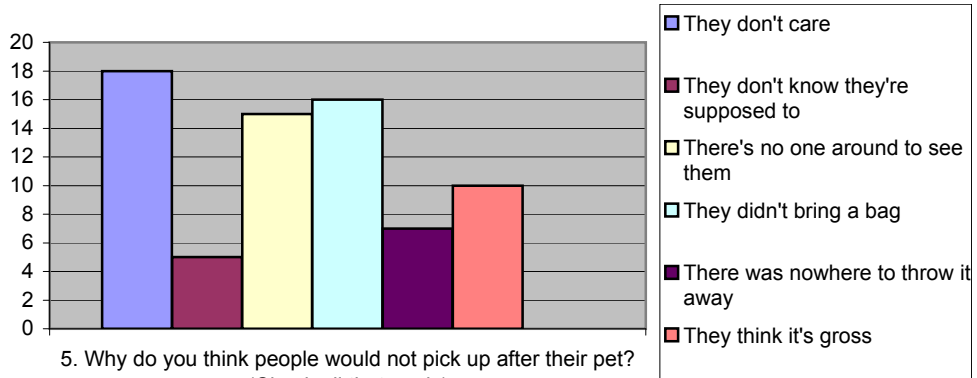

5. Why do you think people would not pick up after their pet? (Check all that apply)

Pet Waste Survey Answers
Encinitas Environment Day
06/08/08

1. What is your zip code?

10	92024	15
1	92011	
1	92075	
1	92026	
1	92019	
1	92010	

2. Where do you most often walk your dog?

13	My neighborhood	
2	At the park	
5	At the beach	
0	I don't walk my dog	
1	Other	his litterbox

3. What happens to the pet waste that is not picked up?

2	I don't know		
2	It disintegrates		
2	It fertilizes the ground		
13	It gets washed to creeks, lagoons, and the ocean		
0	Someone comes later to clean it up		
2	Other	Someone steps on it	People step in it- eww

4. If you saw people not picking up after their pet, what would be your reaction?

0	I would not care		
1	I would report them to the City		
0	I would be surprised		
13	I would ask them to pick it up		
1	I don't know what I could or would do		
2	Other	I'd pick it up	Sometimes pick up myself

5. Why do you think people would not pick up after their pet? (Check all that apply)

13	They don't care		
3	They don't know they're supposed to		
7	There's no one around to see them		
7	They didn't bring a bag		
3	There was nowhere to throw it away		
8	They think it's gross		
3	Other	They think that everyone else does so no harm with one little duke.	
		They are selfish	LAZY!

6. What do you think the City can do or should do about the pet waste problem?

Maybe install trash can w/baggie and sign
Easy way to report violators like traffic littering
Fine people
Bag dispenser and trash bins are very helpful and convenient
Put pet waste bag holders along hwy 101 now that we have sidewalks
Fine people- at minimum post pet bags like Carlsbad
Educate, make bags available at parks and other high traffic areas
Fine, enforce, educate
Add more poop bag dispensers
Education, more bag stations
Fine any pet owner NOT picking up. There are NO excuses!

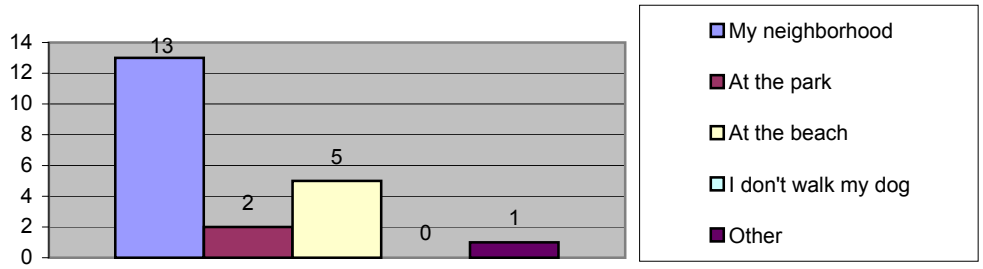

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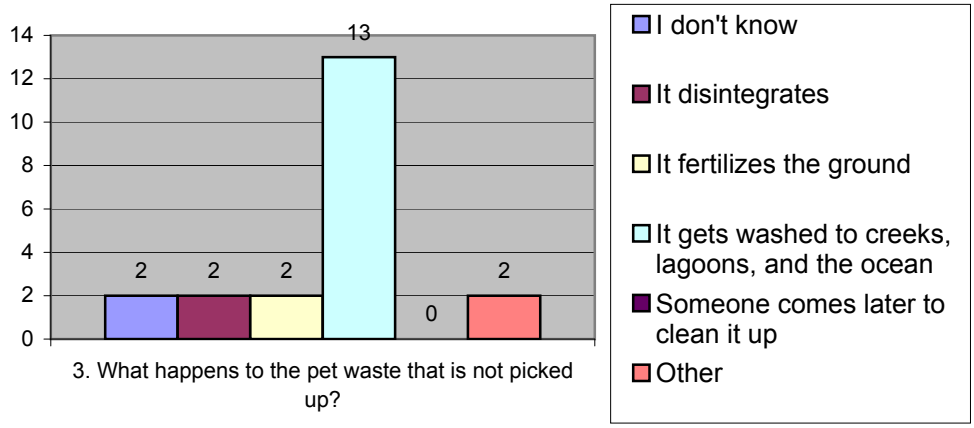

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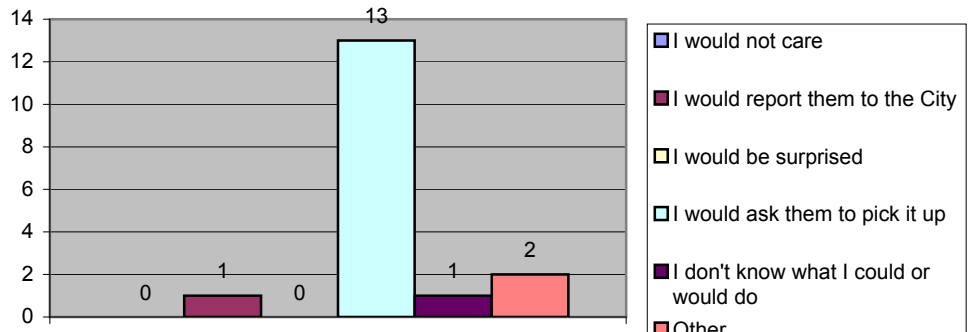

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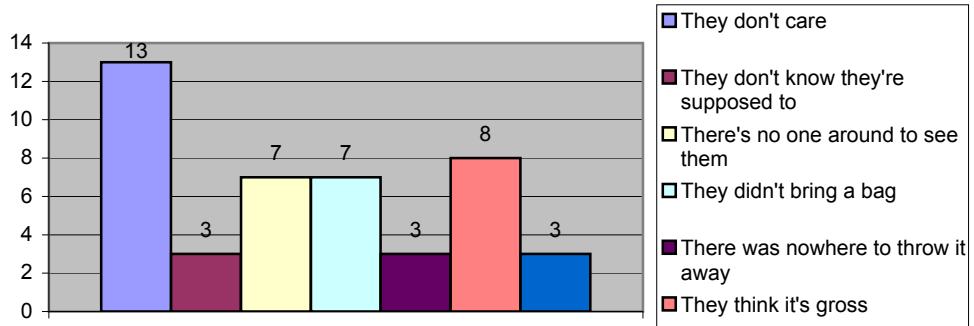

5. Why do you think people would not pick up after their pet? (Check all that apply)

Regional URMP Attachment 2.0

Regional Residential Education Plan

FINAL March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

The Regional Residential Education Program is a joint effort by the Copermittees of the Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES No. CAS0108758). The Regional Residential Education Plan (Plan) contains recommended strategies for the successful development and implementation of the Regional Residential Education Program. Per section F.1 of the Permit, as amended by Addendum No. 1 on December 12, 2007, this program must be collaboratively developed and implemented by March 24, 2008.

In the past, Copermittees have been limited in their ability to pursue strategies which may have a much greater potential to influence knowledge and behavioral change in residential populations. There are several benefits to implementing an enhanced regional program to target residential sources of stormwater pollution. First, it will encourage the development of consistent messages throughout the region. Second, a regional approach will enable Copermittees to better leverage resources and utilize economies of scale. Finally, stormwater and urban runoff pollution frequently cross jurisdictional boundaries, making collaborative approaches a necessity. While the regional program will be coordinated extensively among the Copermittees, it is not meant to supplant the jurisdictional and watershed programs.

The overall goals of the program are to increase awareness and knowledge, improve attitudes toward stormwater pollution and provide a foundation for changing behaviors that contribute to stormwater pollution. Based on extensive input from the Copermittee Regional Stormwater Management Committee (RMC) and the Education & Residential Sources Workgroup, as well as an independent analysis of existing educational efforts, the following objectives were developed to support these goals:

1. Maintain a consistent image, message, and brand
2. Use positive messages to increase knowledge and awareness, and ultimately change behavior
3. Develop community partnerships to leverage resources

4. Develop assessment strategies for program effectiveness

The Regional Education & Residential Sources Workgroup advises the RMC on regional shared outreach activities as necessary to support the requirements of the Permit. The Education & Residential Sources Workgroup plans, develops, and implements the various aspects of the stormwater education program. Education & Residential Sources Workgroup participants have traditionally combined efforts to reach business, industrial, and residential communities across the San Diego region. However, in accordance with the most recent NPDES Permit, this Plan represents a distinct effort to target residential sources of stormwater pollution.

Messages developed by the Education & Residential Sources Workgroup are designed to increase knowledge and awareness of regional stormwater issues and encourage positive changes in behavior. Assessment methods and measures have also been developed to evaluate the effectiveness of these messages and the strategies used to deliver them. Program evaluation methods and strategies will evolve as various program elements are implemented. Regional assessment methods will measure knowledge, awareness, and attitudes of residents. Program elements that are determined to be ineffective or least effective will be replaced by more effective elements or improved upon as needed. The regional program will also facilitate the measurement of changes in pollutant generating behaviors by the jurisdictional and watershed programs.

As a basis for developing this Regional Residential Education Plan, the Copermittees contracted with TRG & Associates to develop *Recommended Options for the San Diego Regional Stormwater Educational Program*. This document contains a number of recommended strategies for the successful development and implementation of a regional residential education program. It includes an extensive literature review, an analysis of existing educational programs in San Diego, and a comprehensive list of public awareness surveys. The literature review outlines other programs in the State that have

successfully implemented regional residential stormwater education programs. The document also summarizes the strengths and weaknesses of existing residential education efforts, provides suggestions for how they can be improved, provides a brief analysis of baseline public awareness surveys that have been implemented locally within the last five years, and offers recommendations for improving assessment methods and survey instruments.

2.0 SOURCE CHARACTERIZATION

The San Diego region occupies 4,261 square miles with a population of approximately 3 million people. Estimates for the year 2007 indicate that the San Diego regional population is 29% Hispanic and 71% non-Hispanic. Non-Hispanic persons include African Americans, American Indians, Native Hawaiians, Asians, and persons of a multitude of races, ethnicities, and cultures. SANDAG currently estimates that the median household income in the San Diego region is $68,388. According to the US Census Bureau in 2004 only 10.9% of San Diego's population was living below the poverty level, compared to 13.2% Statewide. Other estimates indicate that as much as 25% of California's population is living below the poverty level. Much of the region's quality of life revolves around the water resources.

Residential areas have been shown to be a prevalent source of urban runoff in the San Diego region, although less than ten percent of the region is developed as residential land. Most of the urban activity is clustered in the western third of the county, near coastal areas. However; residential land–based activities throughout the entire region contribute to polluted stormwater runoff.

The Regional Residential Education Program will focus efforts on high priority residential pollution sources that are common throughout the San Diego region. Water quality monitoring data and source characterization studies have provided the Copermittees with useful information in determining regional residential sources of stormwater pollution and constituents of concern. Regional threats to water quality were initially outlined in the Report of Waste Discharged and finalized in the Permit. Section

F.1.a of the Permit describes the process for determining which pollutants will be addressed by the program.

2.1. Regional Constituents of Concern

The following constituents of concern were determined to be the primary pollutants from residential sources for the San Diego region:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

Some jurisdictions may have additional high priority pollutants. Each jurisdiction will be individually responsible for addressing additional pollutants and their sources. The pollutants listed above will remain the focus of the Regional Residential Education Program.

2.2. Pollutant-generating Activities and Constituents of Concern

Table 1 outlines residential pollutant generating activities and associated constituents of concern generated by residential areas in the San Diego region.

Table 1) Pollutant Generating Activities

Pollutant Generating Activities	Priority Constituents				
	Bacteria	Nutrients	Pesticides	Sediments	Trash
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	X	X			
• Over-irrigation • Improper irrigation and system maintenance	X	X	X	X	
• Fertilizer use • Pesticide use • Landscaping activities	X	X	X	X	
• Cleaning outdoor impervious surfaces (i.e., driveways and patios)	X	X		X	X
• Improper waste disposal	X	X	X	X	X

2.3. Target Audiences

As described above, this program is intended to address the entire residential community of the San Diego region. This residential audience will be further described in terms of two specific target audiences in order to design more effective education and outreach strategies. The target audiences for the Regional Residential Education Program have been identified based on information gathered by the consultant (TRG and Associates), who utilized data from market research conducted by the County and City of San Diego and surveys gathered from other case studies. Although there may be other smaller groups of target audiences, regional outreach must realistically target the highest priority demographics in order to effectively utilize program funds. The following describes the target audiences for the campaign:

1. Primary Target Audience- English speaking residents and homeowners
2. Underserved Target Audience- Spanish speaking communities and Low Socio-Economic Status (SES)

One of the challenges of program implementation will be to develop messages that appeal to these communities. While creating content and developing materials for the primary target audience may be relatively straightforward, methods and approaches will need to be modified in order to engage the Underserved Target Audience. For example; some messages will be more conducive to translation into the Spanish language than others. Once translated, Spanish language media will be used to disseminate these messages.

According to the US Census Bureau, 33% of San Diego County residents speak a language other than English at home (2000). The same data indicates that 26.7 % of the regional population is Hispanic or Latino. Although this number varied within jurisdictions from 49.5% in Chula Vista to 11.7% in Carlsbad, it is clear that every jurisdiction in the region has significant populations of Hispanic or Latino residents. Therefore, although there are many languages spoken in San Diego, Spanish speaking communities are likely the most common throughout the region.

Research indicates that the motivating factors in Spanish speaking communities are 1) health and commitment to family, 2) children, and 3) finances. Similar priorities are found within the low SES communities. Hence, some messages will resonate more strongly with the communities among the Underserved Target Audience. Other messages may need to be modified in order to create a more appealing campaign. Low SES in California is defined as household annual income less than $25,000. Low SES residents tend to obtain information and resources from different sources than the residents within the Primary Target Audience. Again, message delivery becomes a key issue. In order to address all of these issues, specific outreach strategies will need to be developed in order to effectively reach the Underserved Target Audience.

3.0 TARGETED CHANGES TO KNOWLEDGE, AWARENESS AND BEHAVIOR

The overall goals of the Regional Residential Education Program are to raise the levels of knowledge and awareness with regards to stormwater pollution among residents, while encouraging changes to behaviors that are harmful to San Diego's waterways. The program will generally educate residents on 1) The difference between stormwater conveyance systems and sanitary sewer systems 2) the connection of storm drains to local waterways and 3) common residential sources of urban run-off. These are the general knowledge and awareness concepts upon which more specific messages will be built.

Recent research indicates that many residents do not understand that storm drains and sanitary sewer systems are completely separate. While sewage is treated, everything that goes down a storm drain goes directly to a creek, bay, or the ocean. The City of San Diego conducted a public opinion survey in 2007 in which 91% of respondents said they had heard the term "storm drain" before. However, only 46% knew that the water entering storm drains is not treated. This is a fundamental stormwater pollution prevention issue and general awareness concept. Awareness of the stormwater conveyance system is the first step towards understanding pollution prevention. Increasing knowledge and awareness that the system leads directly to local waterways will help residents to understand that urban sources of pollution have a direct effect on water quality. The awareness and knowledge of these issues are precursors to adjustments in attitudes (i.e.: increased concern for preventing this type of pollution).

Ultimately, it is anticipated that the program's targeting increased awareness and knowledge of these concepts will lead to positive changes in attitude. Furthermore, improved attitudes toward the importance of stormwater issues can provide motivation for changing pollutant generating behaviors.

In keeping with the program goals, the Copermittees have agreed on a number of positive behavior outcomes for each stormwater issue presented to the target audience. Pollutant generating activities are listed in Table 2, along with the knowledge required to understand the significance of the stormwater impacts. Also listed are numerous examples of desired behavior outcomes. Since it may not be feasible to craft messages that address each of the desired behavior outcomes listed in Table 2, some behaviors may be considered primary and targeted before others. Secondary behaviors will be targeted only if the initial efforts are determined to be unsuccessful. It is important to recognize that the Copermittees agreed on these issues and the associated behaviors, and some may wish to further utilize the concepts listed in Table 2 in their jurisdictional and/or watershed programs.

Table 2) Pollutant Generating Activities and Examples of Positive Behavior

Pollutant Generating Activities	Knowledge/Awareness	Examples of Desired Behavior Outcomes
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	Pet waste left in the yard and streets may introduce solids, bacteria, and nutrients to the storm drain and/or receiving water bodies.	• **Pick up pet waste during walks** • Pick up pet waste around home • **Properly dispose of pet waste in trash can or bin**
• Over-irrigation • Improper irrigation and system maintenance	Over-irrigation causes water and pollutants in its path to run into the storm drain and/or receiving water bodies.	• **Reduce over-irrigation** • Use irrigation controller technology to reduce the amount of over-watering • **Inspect and maintain irrigation system regularly** • Adjust irrigation schedule according to seasonal changes
• Fertilizer use • Pesticide use • Landscaping activities	Fertilizers and pesticides become pollutants that can be harmful to natural ecosystems when entering receiving water bodies. Soil, sediment, and yard waste can clog storm drains and/or receiving water bodies.	• Use plants that reduce the need for fertilizers (i.e.: native plants) • Apply chemical fertilizers and pesticides only as needed and at the appropriate time • **Use organic or slow-release fertilizers** • **Use Integrated Pest Management** • Store chemicals inside in a shed or storage cabinet where they are protected from rainfall • **Collect grass clippings and yard waste** • **Dispose of grass clippings and yard waste in the proper containers** • Protect exposed soil from rain with a tarp, vegetation, and/or mulch
• Cleaning outdoor impervious surfaces (i.e.: driveways and patios)	When it rains, trash, dirt, and chemicals that have built up on these surface can run into the street, the storm drain, and eventually local waterways.	• **Clean driveways, walkways, and patios by sweeping instead of hosing** • Direct wash water to soak in to lawn or garden
• Improper waste disposal	Litter and debris dropped on the ground will be washed into storm drains and local water bodies.	• **Put litter and cigarette butts in trash cans or bins** • Keep lids closed on trash cans or bins

Although many positive behaviors have been identified that may be encouraged by the messages developed in this program, the following have been selected as the primary desired behaviors to result from the changes to knowledge, awareness, and attitudes:

- Pick up pet waste and properly dispose of in trash can or bin
- Reduce over-irrigation by regularly inspecting and maintaining irrigation systems
- Reduce fertilizer use by applying chemical fertilizer only as needed and using organic or slow-release fertilizers
- Reduce chemical pesticide use through Integrated Pest Management
- Collect grass clippings and yard waste and place them in the appropriate disposal container in order to prevent them from entering the storm drain systems
- Sweep up outside areas such as driveways, walkways, and patios instead of hosing them down
- Put litter and cigarette butts in trash cans or bins

Specific messages will be designed to increase knowledge and awareness, and therefore encourage the behaviors listed above. Regional messages will be initially developed to address only the primary targeted behaviors. Once a baseline is established and program implementation is underway, Copermittees will have the opportunity to evaluate the knowledge, awareness, and willingness of the residential target audiences to adopt these behaviors. Other positive behaviors from Table 2 may also be substituted, if necessary.
It can reasonably be expected that the regional program will be able to measure success in terms of increasing knowledge and awareness, and improving attitudes, of residents.

Knowledge describes the accuracy of one's beliefs and awareness indicates recognition of the severity of the issues whereas attitude can be described as an individual's evaluation of it (favorable or unfavorable).

As a result of the regional efforts, Copermittees expect to see an increase in the general awareness of storm drain systems and their connection to local waterways, as well the sources of urban run-off. Specifically, residents should understand the difference between the stormwater conveyance system and sanitary sewer systems. They should become aware that water entering storm drains flows untreated to local waterways. Residents should also be able to accurately identify sources of stormwater pollution (i.e.: pet waste). Attitudes toward stormwater pollution should also improve. Ideally, there will be an increase in the numbers of households or individuals engaging in the desired behavior outcomes as a result of their increased knowledge and awareness. These targets will be measured using the assessment methods described in Section 6.0.

The primary assessment tool will be the public opinion surveys. A baseline regional residential telephone survey will be conducted in 2008 and, ideally, at one other point during the current permit cycle. The numeric objectives for survey results are set so that they exceed the statistical margin of error of 2.5 percent (assuming a sample size of 1000) so that if they are achieved, they will be statistically significant. In addition, the objectives are intentionally set high, with the understanding that they are intended as a point of reference rather than a pass/fail measure. With that in mind, Copermittees have set a target of a 10% change in knowledge that storm drains are separate from sanitary sewer systems, a 10% increase in the awareness that all storm drains are connected to local waterways, and a 15% increase in the number of participants who can identify residential sources of stormwater pollution.

4.0 EDUCATIONAL METHODS AND APPROACHES

A variety of methods and approaches will be utilized to implement the program objectives. As described above, the Regional Residential Education Program objectives are 1) to maintain a consistent image and brand 2) use positive messages to change behavior 3) develop community partnerships and 4) develop strategies to assess program effectiveness. The following regional program elements are designed to meet these objectives:

- Standardized Regional Brand (Think Blue)
- Regional Think Blue Website
- Mass Media (Broadcast and Outdoor)
- Regional Outreach Materials (Development and Distribution)
- Regional Outreach Event
- Partnerships
- Regional Stormwater Hotline
- Public Relations

Some of the elements are designed for program management whereas others are outreach methods. Program management elements include standardizing the Think Blue brand, message and material development, and partnership development. The program will have a multi-faceted outreach approach utilizing a regional website, mass media (broadcast and outdoor), public relations, printed materials and promotional items, and regional outreach such as a community event. Implementation of all the recommendations is dependent on funding for each year. Therefore, some activities may be feasible only if sufficient or additional funds are available in a given year.

4.1 Standardized Regional Brand (Think Blue)

The Think Blue campaign has created a locally recognizable brand that has demonstrated effectiveness in stormwater outreach. Expanding the brand to the regional program has obvious benefits for all of the Copermittees. With a consistent look and brand, the Copermittees can continue to conduct their own outreach; however they can use the Think Blue brand in conjunction with their materials for consistency. There will be a Think Blue Graphic Standards Guide that provides the correct fonts, colors and standards to be used for all outreach materials. This will help reinforce the Think Blue brand and provide standards for its use in messages and materials. Messages and materials may need to be continuously revised in order to keep current and effectively reach target audiences.

4.2 Regional Think Blue Website

A regional Think Blue website will help build upon and reinforce the branding strategy. The Internet is a powerful means of communication. Web sites can reach large audiences with relatively minimal effort. The regional website will be developed and maintained by a contractor. It could contain easy to download, user friendly information sheets, links to Copermittees websites, and short surveys or quizzes. The regional web site, along with the new logo and slogan, will increase program visibility.

4.3 Mass Media

Although the website is an important component of the outreach efforts, many residents still get the great bulk of their environmental messages from more traditional venues such as the television and radio (broadcast media). Public Service Announcements (PSA) and advertisements are the most common forms of broadcast media. Some PSAs have already been developed under the Think Blue campaign and through the combined efforts of the Copermittees. The Copermittees can utilize funds to expand or complement the existing Think Blue campaign. The public relations component will involve news coverage such as news stories, interviews, and event coverage. Public relations provide

valuable outreach opportunities that will be sought whenever possible. Outdoor media such as bus placards and billboards can also be utilized for outreach. The location of outdoor media advertisements will need to be carefully placed in order to reach the regional target audience.

4.4 Regional Outreach Materials and Community Events

Print materials and promotional items are critical items for successful outreach. Materials include items like fact sheets, brochures, flyers, booklets, coupon booklets, posters, and doorknob hangers. These materials are easily created and the target audience can refer to them repeatedly. Promotional materials are good for promoting the regional brand, increasing knowledge and awareness, and encouraging simple actions to prevent stormwater pollution. They will be designed to also serve as visual prompts that remind people to choose behaviors that protect and improve water quality.

A regional outreach event can be an energizing and successful venue for distributing outreach messages. Careful attention should be given to participating in a community event so that the effort reaches residents from the entire region. Extensive planning, material or display development, coordination, and marketing will be necessary in order to prepare for one successful regional outreach event. This is an endeavor that will involve identifying events that reach the entire region as well as coordinating, funding, and staffing the selected event. The Copermittees expect to participate in up to two regional events over the duration of this permit cycle. Some examples of regional events that may be considered are the San Diego County Fair, the Miramar Air Show, or a local sports venue.

4.5 Partnerships

Partnerships are both a management and outreach element of the program. A partnership is a voluntary collaboration of agencies, organizations, or other groups or individuals that have joined to work toward a common goal. The Copermittees can maximize resources through the use of partnerships. The potential for partnerships is immense for the

Copermittees. Potential partnerships include local water districts (combine conservation and pollution prevention messages), hardware stores and nurseries, pet stores, and Homeowner's Associations and Property Management Companies. Initial development of partnerships with businesses and business organizations, nonprofits, other government agencies, will be necessary before the full benefits can be realized. Copermittees may then encourage partners to distribute materials or spread messages through signage, advertising and websites. Partnerships will require time to develop and may not be fully recognized until later in the permit cycle.

4.6 Regional Stormwater Hotline

Although a regional stormwater hotline is already in place, successful outreach may lead to an increase in hotline calls. The regional hotline can also help the public gain access to information quickly and easily. The hotline will be promoted through the website, media advertising and other promotional venues. The number of calls to the hotline can be tabulated to help gauge whether some advertising is effective (if the call to action is a hotline call). Since the hotline will also be an important measure of program success, careful consideration will be given to managing the hotline as the program implementation moves forward.

4.7 Behavior Specific Outreach Methods

Table 3 lists the primary target behaviors for the program during this permit cycle. The table indicates which of the outreach methods described above may be utilized to deliver messages designed for each behavior. These were selected as the primary targets because they have current appeal. Primary target behaviors may be updated as program evaluation progresses. If necessary, resources may be reallocated to address the other (secondary) target behaviors previously listed in Table 2.

Table 3) Applicability of Outreach Methods to Primary Target Behaviors

Primary Target Behaviors	Potential Methods of Outreach						
	Website	Mass Media Broadcast	Mass Media Outdoor	Public Relations	Material Distribution	Partnerships	Regional Community Events
Pick up pet waste and dispose of in trash bin	X	X	X	X	X	X	
Reduce over-irrigation by regularly inspecting and maintaining irrigation systems	X			X	X	X	X
Apply chemicals to lawn and garden only as needed	X	X		X	X	X	X
Use organic or slow-release fertilizers	X	X		X	X	X	X
Collect grass clippings and dispose of them in the proper container	X				X		
Employ Integrated Pest Management	X	X	X		X	X	X
Sweep outside areas instead of hosing them down	X		X		X		
Put litter and cigarette butts in trash cans or bins	X			X	X	X	X

Specific messages will be developed to increase knowledge and awareness that will lead to each desired behavior outcome

4.8 Program Implementation

While the overall goals of the program are to educate the general public in order promote knowledge and awareness and decrease pollutant generating behaviors, a successful program will also require coordination among the Copermittees. Program planning and message development are key components of the program that will precede full implementation. Message delivery will be ongoing. Subsequently, as results from assessments are reviewed, messages and delivery methods will need to be revised. Therefore, there are essentially three steps in the program implementation process 1)

development, 2) implementation, and 3) assessment. For the purposes of this report, the development phase includes planning projects as well as developing materials and messages. Implementation includes initiating a program element (such as media outreach) as well as maintaining the ongoing nature of the element once it is in place. Assessment includes all levels of determining the effectiveness of program elements, as well as making revisions that reflect the knowledge gained through assessment.

Table 4 charts the schedule of program implementation over the 5-year permit cycle. Strategies to achieve these objectives will be implemented over the 5-year permit cycle. Because some upfront planning and development is necessary, the first year will focus on standardizing a regional brand, developing messages, and determining the most appropriate methods for disseminating messages on a regional scale (i.e.: a regional website). Copermittees may also begin fostering partnerships in the initial years of the program. Subsequent years will build on this foundation. Copermittees may decide to refine messages and could begin leveraging resources through partnerships.

Table 4) Projected General Implementation Schedule

Program Elements	Year 1: 2007-08	Year 2: 2008-09	Year 3: 2009-10	Year 4: 2010-11	Year 5: 2011-12
Branding	D	D, I, A	I, A	I, A	I,
Regional Website	D	D, I, A	I, A	I, A	I,
Regional Hotline	D	D, I	I, A	I, A	I,
Mass Media	D	D, I	I, A	D, A	I,
Regional Outreach (Marketing and Community Events)	D	D, I	I, A	D, A	I,
Materials Development & Distribution	D	D, I, A	D, I, A	D, A	D, I
Public Relations	D	D, I	I, A	D, A	I,
Market Research & Assessment Tools	D, I, A	D, I, A	D, I, A	D, I, A	D, I,
Partnerships	D, I	D, I,	I, A	I, A	I

Development (D), Implementation (I), Assessment (A)

4.9 Social Marketing Approaches

In all of the aforementioned efforts, a variety of social marketing approaches will be utilized whenever possible. There are so many techniques described as social marketing that it is not possible to utilize them all, especially with limited staff and budgets. Social marketing uses many of the principles of social psychology and marketing techniques to bring about behavior change. Rather than being product oriented, social marketing focuses on people and their behaviors. All social marketing approaches use audience research to learn how to motivate an audience to change one or more recurring actions.

Social marketing consists of several basic components that result in delivering messages that will increase knowledge and awareness, thereby prompting people to change certain behaviors. The challenge is to present the new behavior in a positive way and emphasize the benefits to adopting a new behavior. Forming strategic partnerships with community resources can help to achieve the end goal of behavior change. Social marketing campaigns deliver messages that are strategically created and positioned to give people a compelling reason to adopt a new behavior. In order to overcome the barriers to action it is necessary to understand what the barriers are and why they exist. Researching and understanding the audience is a critical step in developing a social marketing campaign. Messages are conveyed through advertising, websites, materials and other communications. Messages should be simple, memorable and easy to follow. There should be one simple message for each of the targeted areas of knowledge and awareness. Each message needs to be used consistently in communications.

Community Based Social Marketing (CBSM) is a type of social marketing. It has gained popular appeal among the environmental community as an effective alternative to traditional information-based marketing approaches. CBSM packages basic principles of behavior change and social science research in a way that provides a usable framework for practitioners working to promote positive behavior change.

A key element of the CBSM approach is to pilot test the program with a small representative segment of the community, and compare the results to a control group. For example, a small jurisdiction may implement a project that essentially serves as a pilot for the regional program. If the pilot is not successful, the strategy should be refined and then pilot tested again. If the pilot is successful at changing behavior, the strategy can be implemented more broadly throughout the community or on a regional level. Once the successful pilot program has been widely implemented CBSM requires that the program be carefully evaluated at several points to measure continued success.

The Copermittees have agreed that CBSM offers a solid foundation for developing an effective program. However, it may not always be feasible to utilize the CBSM approach on a regional scale, hence the need for a combined approach that uses traditional social marketing techniques as well as CBSM. Some methods will lend themselves more readily to developing CBSM based approaches. When implementing each of the methods, a CBSM approach will be pursued whenever feasible.

5.0 RELATIONSHIP OF REGIONAL, WATERSHED, AND JURISDICTIONAL OUTREACH

The Regional Residential Education Program is designed to meet the Permit requirements for residential education based on regional needs and issues. The first step in meeting these requirements is to establish a regional brand and consistent image. The City of San Diego's regionally recognized Think Blue logo will be utilized as the Regional Residential Education Program's brand. During the implementation phase of the permit cycle the Copermittees will work collaboratively with the City of San Diego to update and standardize the Think Blue brand. A Graphics Standards Manual will be developed by the City of San Diego and adopted by the Copermittees in order to facilitate ease of material development and ensure a consistent regional image. Existing jurisdictional programs may also choose to use the Think Blue brand, maintain individuality, or

combine both programs for maximum impact. In a similar manner, watershed activities may be coordinated under the Think Blue brand, so long as the standards are adhered to.

Copermittees will hire a contractor to build and maintain a regional Think Blue website. The website may include links to jurisdictional program, watershed program websites, and other regional websites such as Project Clean Water. The regional Think Blue website will provide user friendly information for the public in a single location, thereby promoting consistency and coordination among the regional, jurisdictional, and watershed programs.

In addition, the Education & Residential Sources Workgroup provides a platform for integration of regional, jurisdictional, and watershed messages. The Education & Residential Sources Workgroup also coordinates activities between non-profit organizations, private institutions, and governmental agencies providing environmental and water quality education. Regular meetings will continue to provide a forum for educators, trainers, and public information officers to collaborate, share methods and materials, and seek policy level support and direction.

Watershed and jurisdictional programs should look to the Regional Residential Education Program when designing residential educational activities. The Regional Residential Education Program can thereby serve as a basis for developing these other programs. Some specific watershed or jurisdictional issues may not be covered by the Regional Residential Education Program, and must still be met by the individual or Watershed Copermittees as required by the Permit. These issues will be addressed in the watershed or jurisdictional programs. In this manner, the watershed and jurisdictional programs can supplement the Regional Residential Education Program in order to ensure that all requirements are met. As a result, each jurisdictional program may be unique in some respects and elements of the watershed programs may go beyond those in the regional program.

While the regional program may play a role in encouraging behavior changes, it is more feasible for jurisdictional programs to be able to measure actual behavioral changes resulting from increased knowledge and awareness because of their ability to implement pilots on a small scale. The broad based regional program will be implementing methods and utilizing assessment tools that most accurately gauge attitudes, knowledge, and awareness. Positive changes in attitudes and awareness are generally accepted as precursors to behavior change. Therefore, due to the difficulty of assessing behavior change on a regional level, demonstrating behavior change will therefore reside with the jurisdictional and watershed programs. In order to facilitate the assessment of jurisdictional and watershed programs, the Plan outlines assessment tools for measuring changes in knowledge and awareness through the regional program. These measures can also be tailored to meet the needs of the jurisdictional and watershed programs that implement CBSM pilots or focused outreach efforts, which provide excellent opportunities to assess behavior change. Section 6.0 describes assessment tools in further detail.

6.0 ASSESSMENT OF REGIONAL EDUCATION ACTIVITIES

In order to evaluate whether the various components of the program are resulting in the targeted knowledge and awareness outcomes, a number of assessment methods may be utilized. A random digit dial telephone survey will be the primary tool for measuring changes resulting from implementation of the regional program. Different types of assessment methods will be employed in order to gauge the outcomes of each activity and thereby determine effectiveness. Copermittees will review and assess existing survey data while developing the new regional baseline survey. Public opinion surveys will be alternated with other assessment methods to adequately assess the overall effectiveness of the Regional Residential Education Program. Copermittees have agreed to work cooperatively on funding and conducting market research and surveys. Measurement tools outlined in the Plan may be modified somewhat to correspond with different program elements. The Plan basically provides a model for program effectiveness

assessment. Specific assessment methods will depend on the type of outreach or education activity conducted and other constraints.

Copermittees will work with the City of San Diego to conduct a county-wide random digit dial telephone survey in order to obtain baseline information on knowledge, awareness, attitudes, and behaviors pertaining to stormwater. Results of the survey will guide further adaptation of the program objectives. Ideally, another public opinion survey will be conducted later in the permit cycle to assess any changes resulting from program implementation. Once the baseline is established, future permit cycles may involve one or more public opinion surveys. Additional evaluation methods may be utilized once specific media, promotions, and outreach activities are implemented. Results will enable Copermittees to determine the most effective outreach methods and make modifications to the programs as needed.

Outcome levels used in this program are based on the Hierarchy of Targeted Outcomes Pyramid referred to in the NPDES Permit, which includes outcome levels 1-6. Outcome levels 1-3 will be most applicable to educational and outreach activities. Table 5 illustrates potential assessment methods that may be utilized for each of the activities being considered. Level 1 outcomes indicate compliance with permit based activities. This is the most basic means of assessing program effectiveness. Measuring Level 2 outcomes will indicate changes in attitudes, knowledge and awareness. Surveys and quizzes provide the most common means for measuring Level 2 outcomes. Level 3 outcomes provide an opportunity to measure behavioral changes and implementation of Best Management Practices (BMPs). This can be accomplished through observations and program specific counts. For example, tracking sales of less toxic pesticides in a store where IPM information is available may indicate changes in the behavior of consumers. Level 4 outcomes indicate actual load reduction, and are more practical for activities such as clean up events or Household Hazardous Waste collection activities, which are sometimes associated with outreach activities.

Table 5) Potential Program Element Assessment Measures

Activity Level		Type of Assessment Measure

Branding

1	Updating materials to reflect new regional brand.
2	Count number of survey respondents who are aware of brand/program.
3	N/A
4	N/A

Website

1	Count number of hits to website, interactive use/quizzes taken, etc.
2	Administer survey/quiz to assess attitude/knowledge of web users.
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data. Downloads of informational brochures.
4	N/A

Mass Media Public Service Announcement (PSA) Public Relations

1	Count number of household/individuals reached.
2	Administer survey/quiz to assess attitude/knowledge of PSA recipients.
3	Comments and feedback received regarding PSA via the hotline or website.
4	N/A

Outreach Materials (i.e.: fact sheets and brochures)

1	Count number of fact sheet/brochures handed out.
2	Administer survey/quiz to assess attitude/knowledge of fact sheet/brochure recipients
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4	N/A

Regional Outreach Event

1	Count number of visitors to booths, brochures handed out, surveys/quizzes completed, etc.
2	Count number of mail-in cards, number of volunteers to organization, number of persons who attended community event. Administer survey/quiz to assess attitude/knowledge of visitors
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4	N/A

Partnerships

1	Count number of incentives distributed, participants in the program.
2	Survey or quiz to assess attitude/knowledge of volunteers pre- and post- participation
3	Administer survey to assess behavior change in program participants or count observable behavior of program participants and compare to pilot data, historical data, and/or control group. Count number of mail-in cards, number of volunteers to organization, or number of persons who signed a petition directed from incentive program.
4	Count amount of load reduction in targeted residential area or count amount of load removed from targeted area

Hotline

1	Count number of calls to hotline.
2	Administer survey/quiz to assess attitude/knowledge of hotline users.
3	Administer survey to assess behavior change of participants in program and compare to pilot, historical, or control data, count observable behavior of participants in program and compare to pilot data and/or control group.
4	N/A

7.0 CONCLUSIONS AND RECOMMENDATIONS

The San Diego region has widely diverse socio-economic, ethnic, biological, and physical characteristics. These characteristics create the region's appeal and present many challenges to the entities charged with developing and implementing an effective Regional Urban Runoff Management Program (RURMP).

The Regional Residential Education Program is a component of the San Diego RURMP. This program is designed to increase knowledge and awareness of stormwater issues and potentially change pollutant generating behaviors. Research indicates that these are attainable goals under a well-funded, long term, multi-faceted and strategic public outreach campaign.

In order to implement program goals, the Copermittees have agreed on general objectives: 1) maintain a consistent image, message and brand 2) use positive messages to increase knowledge and awareness, thereby increasing the likelihood of behavior change 3) develop community partnerships and 4) develop strategies to assess program effectiveness. In order to efficiently accomplish these objectives, Copermittees have agreed to adopt Think Blue as the regional flagship brand. In addition, strong and

focused outreach messages will be selected to increase knowledge and awareness and ultimately target the primary pollutant generating behaviors from residential activities.

The basic program elements include an array of methods and approaches that will be utilized for program management, message delivery, and effectiveness assessment. Over time, the Regional Residential Education Program will be adapted to utilize the most effective outreach and education strategies practicable while maintaining a clear focus for the entire region. Annual reports will summarize progress and provide an opportunity to reflect on the year's successes and shortcomings. At the end of the 5-year permit cycle, Copermittees will be able to assess of the program's progress and develop more effective regional outreach strategies.

Appendix G

JURMP Annual Report Requirements Checklist

G-1 Requirements Checklist

Appendix G-1
JURMP Annual Report Requirements Checklist

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Section In Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.4, 2.3, 2.4.4.1, 2.4.4.2
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2, 2.4.4.3, 2.4.4.4
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.3, Table 2-3
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.3, 2.4.4.4
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.3 (N/A)
vii. An updated treatment control BMP inventory.	2.4.4.4, Appendix A-1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.7 (N/A)
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.6 (N/A)
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.5
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.3 (N/A)
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.3 (N/A)
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.3.1, 2.4.4.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.3 (N/A)
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.3

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Section In Report
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.3 (N/A)
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.4.4.9

3.0 Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	Section in Report
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.1
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2.2, Appendix B-3
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4.1
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.4 (N/A)
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.3, 3.5.4 (N/A)
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Appendices B-1 and B-2
viii. A description of the general results of the inspections.	3.5.5.2
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.5.1

x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.5.2, Appendix B-6
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.2.2, 3.3

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Section in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix C-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4.1, Appendix C-2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4.1, Appendix C-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Appendix C-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	Appendix C-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4.1, Appendix C-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.3.3.1
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Section in Report**
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xiii. Identification of the total distance of curb-miles swept.	4.2.4, Appendix C-2
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.2.4, Appendix C-2
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.2.4, Appendix C-2
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4.1
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.3.2, 4.3.4.3, Appendix C-2
xviii. A description of the general results of the inspections.	4.3.4.3, Appendix D -5
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.3.4.3, Appendix D -5
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Appendix D-5
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.2.4, 4.3.3.2, 4.4.4.1, 4.5.4.1, 4.7.3.1, 4.7.4

5.0 Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Section in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2,
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4.5, 5.3.4.4, Appendices D-5 & H-1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4.4, 5.3.4.1
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.2
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4.1
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.3, 5.2.4.5
vii. Identification of the number of third party inspections conducted.	5.2.4.3 (N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.3 (N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.5, 5.3.4.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.5
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.2.4, 5.3.4

6.0 Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Section in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3, 6.4.3, Appendix H-1
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.2
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.2
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.2.3
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.3, Appendix H-1
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Section in Report**
To be included in FY 2007-08 Illicit Discharge Detection and Elimination Component on December 15, 2008.	N/A

8.0 Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	**Section in Report**
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3.1
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.4

9.0 Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Section in Report
i. A description of public participation efforts conducted.	9.3

10.0 Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Section in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order. (For 2007-2008, the requirements that apply are essentially the same as those found in Order No. 2001-01)	10.0

Same as old Permit for 2007-2008

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Section in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.0

12.0 Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Section in Report
i. A description of any special investigations conducted.	12.0

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	Section in Report
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.0

14.0 JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	Section in Report
i. A description of any proposed revisions to the JURMP.	14.0

Appendix H

Complaint Response

H-1 **Complaint Response Summary**

Complaint Response Summary

FY 2007 - 2008

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Actions Follow up Actions Taken	Enforcement	Sub Basin
34609	6/22/07	Municipal	soapy wash water	NO		Discharge of other wash water - Someone saw men spraying off the sidewalk and brushing water into the parking lot. Another witness saw the parking lot lined with water marks draining down to Vulcan and puddles of soapy water in parking lot.		WO 50441 : Sent email to P&R with Plaza and Sidewalk Cleaning BMPs. He responded that he will see that the contractors change their ways.	None	Encinitas
34637	6/26/07	Construction	concrete/construction dust	NO		Discharge of concrete cutting slurry or wash water. Owner of restaurant called saying the workers in front of his restaurant appear to be done working in a certain area, but haven't cleaned up the mess. dust continues to blow up onto his restaurant every time a car goes by.		WO 38830 : Inspector visited site on 7/11/07- found that street sweeper completely cleaned area. No further action necessary.	None	La Costa South
34724	7/7/2007	Residential	Latex paint	NO		Discharge of paint - Received complaint regarding paint dumped into gutter line/and worked its way to the storm drain box. Need to inspect condition and notify responsible party.		WO 39092 : 8/6/2007 Re-inspection by inspector showed sidewalk was stained, but no further cleanup to be done.	None	Lux Canyon
34773	7/11/07	Commercial	H2O colorless and odorless	NO		Discharge of water - Received a complaint from Starbucks manager about continuous water drainage down the driveway, for the last 3 days.		WO 39090 : called property manager and emailed photos to her 7/12/07 received a call stating that source had been found. Barns and Noble was using a mister for their A/C unit. Water has been shut off and property manager will follow up with the business owner 7/23/07 received an email from property manager stating that they have shut off the valve to the pipe and that Starbucks and Barns and Noble are reviewing their water usage. She will email me when they find a solution but the water is turned off	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34780	7/16/07	Municipal	unknown	NO		Discharge of water - A citizen walks regularly, and noticed in the rain on Windsor and Munevar that some type of water residue runs down the gutter line, and it's very rusty looking. Check it out.		WO 39008 : 7/19/07 Inspected storm drain outlet in front of 1294 Munevar that showed some seepage draining onto the street (Munevar). Investigated the storm drain upstream east side of Windsor road and found a brick in the storm drain. Removed the brick and took photos. Also observed a constant flow coming out of the storm drain on the north side of Munevar between 846 and 860. Took photos. 7/20/2007 No name or number to contact to relay information. Need to get a manhole puller and open the drain, check inside. 8/6/2007 Received closed work order from PW- Streets regarding vegetation on street.	None	Cardiff
34820	7/23/07	Commercial	Sidewalk wash water	NO		Discharge of building or sidewalk wash water - Report of sidewalk washing. 7/23/2007 - will call complainant to verify location, and will make site visit.		WO 38916 : 7/23/2007 Site inspection, storm drain west of 927 S Coast Hwy 101 needs to be cleaned. Took photos. Restaurant manager contacted, and she said the property mgr cleans the tables every Tuesday, and he is contact.	None	Encinitas
34843	7/23/07	Residential	concrete mixing	NO		Discharge of concrete waste. - Streets asked Clean Water Program to check a mixing job in the street.		WO 38981 : 7/23/07 issued NOV to clean the street no wash down dry cleaning only. 7/24/07 re-inspected area. appears in compliance. signed off NOV	Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34848	7/26/07	Residential	Big pile of dirt in street	NO		Other discharge - Big pile of dirt in the right of way. Blocking the bike lane -traffic obstruction		WO 39007 : 7/26/07 Contacted resident and he informed me that the delivery guy spilled in the street by accident. Issued an NOV to clean up the street by 7/27/07 12 noon. 7/30/07 re inspected area, the street was clean. took photos	NOV	Lux Canyon
34849	7/6/07	Commercial	power washing runoff	NO		Discharge of other wash water - NCTD is power washing the depot without capturing the wash water. Mike Emerson responded, they were actually capturing the wash water. no violation, case closed.		WO 41558 : NCTD is power washing the depot without capturing the wash water. Mike Emerson responded, they were actually capturing the wash water. no violation. case closed.	None	Encinitas
34903	8/1/07	Commercial	Debris, food, particles	NO		Discharge of food waste. - Witnessing on drive in each morning, coffee shop on N Coast Hwy 101 n/o Jasper (west side), the crew members are sweeping the area where their chairs & tables are set. They are brooming from sidewalk, to asphalt walkway into the gutter		WO 39065 : 8/1/07 contacted the owner of the business and requested that she discontinue sweeping debris into the gutter and to collect the debris and put it in the trash	None	Leucadia
34930	8/2/07	Commercial	Detailing water	NO		Discharge of water - A citizen driving by on Saxony Rd- heading northbound, noticed a detailing truck cleaning trucks in the parking lot of 211 Saxony Rd (Businesses). The water is not being captured, it is running down the driveway into the city street.		WO 45956 : 8/2/2007 Inspector is out of office this morning. PW- Streets responded, did not see any discharge or washing of vehicles	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34935	8/2/07	Residential	trash, "muck"	NO		Other discharge - complainant called in about multiple neighbors dumping trash into storm drain by her house. storm drain on canyon side is clogged with muck/trash. wants to know if/when there will be a camera run thru line and when it will be cleaned.		WO 39108 : 8/2/07 contacted complainant, took photos of storm drain inlet and outlet into the canyon. Need to get storm drain cleaned and video taped 8/3/07 sent email to Streets regarding trees 8/6/07 sent email to Streets regarding clearing and video taping the storm drain 8/13/2007 2:29:32 PM received email from Streets that Wastewater had done the work: the storm drain was cleaned and televised on Tuesday 8/7/07. We did remove some debris from the box. Also, when televised, we found two small holes in the pipe. We have added this drain to our list of those to be slip lined. 8/20/2007 8:49:25 AM Ok to close	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34936	8/2/07	Residential	standing water	NO		Discharge of water - association mgr for Park Place HOA in Cardiff called to report standing water in front of 1423-1430 Big Canyon Terrace. Water drains off hill and has nowhere to go.		WO 39099 : 8/3/07 inspected storm drain adjacent to 1423 Big Canyon Terrace (SW of property). There is a section that has standing water. took photos and was contacted by the owner of 1423. She stated that the contractor had promised to fix the drainage problem after they complete the street resealing. Resident reported that the problem was never fixed. 8/6/07 emailed request to Streets to use the Bobcat sweeper to clear the standing water and then re inspect area in two weeks after sweep 8/8/2007 10:46:23 AM Streets reported that a crew went out and hand swept the standing water and will have an engineer shoot or survey the site for future improvements 8/8/2007 10:47:56 AM called resident and informed her of the actions that were taken 8/8/2007 3:18:57 PM Streets said they would contact HOA Association Manager to let her know what happened.	None	Cardiff
34937	8/3/07	Residential	pool water	NO		Discharge of water - Jim said the water is draining from the hill behind him down the culvert to the left side of his driveway. ongoing for about 2 hours now. Discharge was white-ish at first, now clear. cannot access violation address from Jim's property.		WO 39182 : 8/8/2007 1:25:03 PM did inspection, the owners of 1110 Hymettus discharged some jacuzzi water that was de-chlorinated	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34951	8/6/07	Construction	concrete wash	NO		Discharge of concrete waste. - I received a call from Rocco stating that his contractor dumped concrete wash into his lawn and into the storm drain		WO 39131 : 8/7/2007 7:53:10 AM Complainant stated that the contractor that he hired poured concrete waste down the storm drain and on to his vegetation 8/7/2007 9:38:01 AM Met the property owner/complainant on site. He showed me what his contractor had done and where he drained the concrete wash out. Took photos on the dirt and debris in the street. Received the contractor's information issued an NOV to the contractor to clean the street by 8/14/07 12 noon and to call me when the street is clean 8/13/2007 1:53:54 PM Inspected area. it appeared clean. took photos. contacted owner and signed off NOV	Education, NOV	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34953	8/4 & 8/5	Residential	Water- irrigation run-off from neighbor's yard	NO		Discharge of water - Neighbor has been over watering, and the water is traveling through his yard, and then to city right of way. Standing water accumulates all the time. He talked with county, but county referred him to the city.		WO 39154 : Wishes a drive-by and discussion on how to rectify the situation. Neighbor vs Neighbor 8/7/2007 2:02:29 PM I met the owner of 910 Sidonia, He showed me the run off and stated that he is a certified vector site and needs to be treated every three weeks. He gave me County vector control environment inspector's contact. called and left a message to confirm that it is a vector site. Streets stated that if it is a vector site then we can contact the owners of 920 Sidonia and require them to discontinue over watering. 8/8/2007 7:39:25 AM I received a call from County Environmental Specialist confirming that the water in front of 910 Sidonia is a site that needs to be treated every three weeks. 8/8/2007 11:16:13 AM Received call from complainant/respondent stating the drain is clogged on his side of the property. Updated him on the vector control issue and informed him that i would inform the PW streets person. Sent email to streets. 8/13/2007 2:01:08 PM I received an email from the county health tech verifying treatment, mosquito breeding, and need for site monitoring. 8/8/07 sent email to streets to inform about email from County Vector	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								8/31/2007 12:00:41 PM Streets informed me that they cleaned out the pipe 8/27/07 the water district will put door hanger on 920 Sidonia and Streets will monitor drainage. Informed complainant that pollutants must be leaving the property as a result of over-irrigation runoff to be a violation Ok to close.		
34964	8/7/07	Residential	Dirt in street	NO		Other discharge - I received a call from Chris Hicks 436-3560 stating that her neighbors are leaving dirt in the street and adding more land to their property.		WO 39155 : 8/7/2007 2:33:29 PM contacted the resident and he informed me that the landlord had placed the dirt on the side of his property. gave the resident my card and asked that the owner of the property give me a call and an action plan 8/7/07 called and left a message with complainant 8/27/07 I have not received a call from the landlord. Need to go and contact resident to get landlord's information 8/30/07 met with owner. He promised to clean up dirt by 10-1-07. sent him an nov and warning citation 10/3/07 site inspection. observed loose sediment in right-of-way with some cement rocks around the base. Took photos and left a card requiring the respondent to call me. Site does not appear to be in compliance.	Citation, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								10/4/2007 10:42:45 AM Met will Streets and it was agreed that a citation should be issued for sediment in storm drain and lack of BMPs. NOV and Administrative citations were drafted and sent out Cert and regular mail 10/30/07 site inspection observed that the sediment was removed. Took photos. Contacted the respondent about BMPs and how he was going to keep all of the sediment on the bank. He said he was delayed by the fire storms but was planning on installing jute-matting and some plants by 11/14/07 12/13/2007 12:05:34 PM See follow up work order 53399. Follow Up: 11/29/07 contacted respondent and thanked him for installing the min BMPs took photos OK to close case		
34967	8/7/07	Commercial	driveway wash water	NO		Discharge of other wash water - Received call from Streets regarding wash water from power washer.		WO 41556: Inspector investigated, contacted owner, issued NOV for not properly implementing BMPs. Owner will power wash and collect for the rest of the site.	NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34970	8/7/07	Residential	dirt and dry cement	NO		Other discharge - 8/7/07 received a call regarding dirt and other debris in storm drain south of 705 L Mirada Ave.		WO 39166 : 8/7/07 contacted owner and showed him the piles of dirt and dry cement and asked that he remove them from the storm drain and give me a call when it is clean. took photos 8/8/2007 9:38:39 AM Keep open until respondent calls me for re-inspection 8/13/2007 1:46:42 PM Received an email from respondent stating that he had cleaned up the street. 8/13/2007 1:47:02 PM Inspected area- it was clean. OK to close	None	Encinitas
34977	8/5/07	Commercial	paint wash water	NO		Discharge of paint - Email from complainant: on Sunday i had breakfast at the potato shack cafe. yoga studio on the corner that just painted deep blue trim. residual blue paint in gutter, flowed across street to west and ponded on other street corner.		WO 39201 : 8/9/2007 3:27:13 PM contacted the worker and business owner and issued nov took photos.	Education, NOV	Encinitas
34979	8/8/07	Residential	diatomaceous earth	NO		Discharge of other wash water - Inspector saw diatomaceous earth in street gutter while he was out doing another service request. spoke to woman at house, she said her husband will call Inspector back.		WO 39185 : 8/9/2007 8:18:45 AM received a call from the respondent on 8/8/07. He told me that he had asked his new pool maintenance contractor to not empty the diatomaceous earth into the storm drain. He said he would sweep it up. He asked how to discharge i informed him to drain it through a pillow case. 8/8/07 received another voice mail call from respondent stating that he had swept up all of the discharge 8-9-07 re inspected area. appeared clean. OK to close	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34980	8/8/07	Residential	oil	NO		Discharge of oil - Citizen lives next door to 1267 Calle Christopher, her neighbor drives a black ford ranger. The ranger is leaking oil, and he parks in the same place, and then the vehicle leaks oil, and he keeps putting down kitty litter.		WO 39200 : 8-9-07 site inspection observed dark blue ford truck with kitty litter under it. took photos. issued nov to mother in-law to comply by 8/16/07. Gave education fliers 8/22/2007 1:11:53 PM re inspected area. Street was cleaned and a pan was placed under vehicle. signed off nov. OK to close	NOV, Education	Lux Canyon
34988	8/8/07	Residential	diatomaceous earth from pool	NO		Discharge of water - White powder (diatomaceous earth) outside the curb drain between 282 and 276 Cerro. pool located at 282 Cerro. line of white down street to storm drain.		WO 39238 : 8/13/07 Took photos contacted resident. left my card for husband to give me a call. received a call from the husband stating that he will do a better job cleaning his pool. He had an accident with the pool filters	None	La Costa South
35006	8/16/07	Commercial	na	NO		Other discharge - Inspector received call. Inspected Nursery, found no evidence of discharge. Inspectors will go test water in storm drains around nursery. See attached email.		WO 43663 : 8/16/07 11am observed discharge took photos and collected sample from the south west corner of lot 9/12/2007 9:31:59 AM Received and attached several emails from complainant 9/10/07 received call from owner stating that they are working on the corrections 9/12/07 NOV and citation sent 10-2-07 Program Mgr and Inspector met with complainant to listen to her concerns and inform her that we were investigating the run off from the nursery. She informed us that her daughter has a brain tumor, along with two other people that live there.	Citation, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								10-3-07 Program Mgr and Inspector met with nursery owner. he showed us where the water was running off the property and how they will fix the run off problem-cut the pipe so that it drains into a seepage pit. He will call me when all of the pipes are cut. 10-12-07 received a call from owner stating that he needed more time to cut the last pipe. He needed to get a crane to open the lip to cut the pipe. He said it would be done by 10-19-07 11/12/07 Received a call from owner stating that all of the pipes have been cut call to schedule re-inspection 11/13/07 All pipes cut. no discharge.		
35016	7/24/07	Commercial	sidewalk wash water	NO		Discharge of building or sidewalk wash water - Email from complainant with pictures showing that restaurant had washed off their front patio without containment. 2nd offense.		WO 52928 : 8/15/07 Referred complaint to inspector in clean water 11/29/2007 9:41:36 AM NOV letter/Admin Citation sent to restaurant manager and to corporate headquarters. Citation paid on 9/17/07.	Citation, NOV	Cardiff
35064	7/25/07	Commercial	pet waste	NO		Other discharge □ Clean Water staff saw large amounts of dog waste on the ground West of Liverpool, east of train tracks, north of bridge. See attached emails for communication regarding this issue. Bacteria sampling results were higher than average in the area.		WO 75378 : 8/1/2008 2:00:10 PM Emails were sent to the Encinitas Chamber of Commerce and there were phone calls to the North County Transit District (NCTD). NCTD agreed to have a security guard patrol the area more frequently to discourage trespassers.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
35073	8/21/07	Residential	water, over-irrigation	NO		Discharge of water - over-irrigation near 752 Bracero Rd. going into storm drain.		WO 46030 : 10/10/2007 8:26:47 AM Inspector's field investigation revealed that there was no illegal discharge at any point on Bracero Rd.	None	Encinitas
35076	8/21/07	Municipal	power washing wash water	NO		Discharge of building or sidewalk wash water - Power washing at City Hall. Inspector spoke with employee, saw that BMPs weren't properly being implemented. Wash water going down Vulcan. Drains in City Hall courtyard not connected to sewer. contact P&R or Facilities Maintenance to discuss.		WO 41447 : 8/21/07 took photos and called P&R and he informed me that the roofing contractor was hired by Facilities maint. Facilities Maint called me and gave me the name of the contractor. Contractor said he had a bad forman and has corrected the BMP problem. 8/22/07 re inspection showed that the contractor was using the correct BMPs OK to close	None	Encinitas
37084	8/22/07	Commercial	Building wash water	NO		Discharge of building or sidewalk wash water - Inspector received a call from PW Streets stating that a contractor was washing a building and not capturing the waste water		WO 41427 : I contacted contractor at 9am on 8/22/07 and informed him that he had to capture the wash water. I took photos and suggested that he sweep the wash water into the pervious area to the north of the building. Issued nov to comply by 12 noon 8/22/2007 3:18:46 PM re inspection showed that contractor is in compliance	NOV	Leucadia
37086	8/22/07	Commercial	water	NO		Discharge of building or sidewalk wash water - Received call from PW saying that business was washing bird poop off building and stairs. Water was going down street to Vulcan and into storm drain.		WO 41559 : Inspector visited site, no discharge.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
37097	8/22/07	Residential	diatomaceous earth from pool	NO		Discharge of other wash water - complaint call from County to Streets regarding cement-like substance dumped in gutter.		WO 41561 : Inspector visited site, turned out to be diatomaceous earth. Issued NOV to dry clean site and comply in 1 week. 8/31/07 site inspection showed street clean OK to close	NOV	Cardiff
37098	8/21/07	Residential	water	NO		Discharge of water □Streets called Hotline regarding water rushing down street..		WO 41554 : Inspector contacted homeowner, she said she was watering her garden. Inspector saw no signs of water on the street	None	Encinitas
37168	8/28/07	Residential	sewage	NO		Discharge of sewage - Resident lives in mobile home park in Leucadia. open sewage lines draining onto properties. prop manager uncapping sewage lines looking for leaks.		WO 50071 : Citation of □100.00 was paid on 9/19/07. Case closed letter mailed to responsible party on 10/12/07.	Citation, NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
37170	8/28/07	Residential	water gathering in front of her house. green and moldy	NO		Discharge of water - Diane called in concerned about puddle of water that is always in front of her house. Nowhere for it to drain, worried about mosquitos. can something be done to improve drainage? test for west nile virus?		WO 41514 : 8/28/07 Site inspection observed some wetness in street. took photos and called complainant. The complainant will monitor area and send photos when the drainage is really bad. sent an email with photos to Streets. 8/29/2007 9:14:53 AM Keep open for 30 days to monitor 9/5/07 after speaking with Streets the complainant was called. Left a message that the street sweeper comes every third Thursday. The complainant was advised to keep vehicles off the street on that day. Also to sweep that area when the pooling is created. Informed her to contact her neighbors regarding irrigation run-off and vegetation in the storm drain. CC only wanted street sweeping done once a month 9/5/2007 8:44:29 AM OK to close	None	La Costa South
37232	8/30/07	Commercial	power washing wash water	NO		Discharge of building or sidewalk wash water □ Program Mgr saw power washers washing without containment in front of restaurant.		WO 52932 : Inspector spoke to power washer, asked him to sweep water into landscaping and wet vac water in street. 11/29/2007 10:56:48 AM Admin Citation Warning CW-100307 sent via certified mail. returned. re-sent via regular mail. also sent copies to restaurant	Citation	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
37233	8/30/07	Residential		NO		Discharge of oil □Gas smell and dark substance in curb line leading to storm drain. Inspector to investigate.		WO 41534 : Resident said they were cleaning jacuzzi. saw no discharge. but heavy gasoline smell. Husband said he washed off a tractor. Fire dept washed street, containing water with VacCon. see attached email. 9/4/2007 7:36:37 AM Completed cost recovery and sent email to HR to get cost of fire crew. 9/5/07 issued NOV, cost recovery (□752.70), and administrative citation (□100)	Citation, NOV	La Costa South
37244	8/31/07	Municipal	wash water	NO		Discharge of other wash water □Clean Water staff saw public works washing down □ vulcan and the condo development at vista del rey dr. looked like water was running down vulcan to cottonwood creek.		WO 41560 : 8/31/2007 11:02:13 AM Staff stopped to talk to Wastewater, he said they always capture the water, but when she drove by it looked like water was going down to cottonwood creek. one man was hosing it off, the other was just standing there, and the vaccon was not in use. 8/31/2007 11:24:17 AM Staff spoke to Wastewater Manager, he will talk to his guys.	None	Encinitas
37250	8/31/07	Residential	silt	NO		Discharge of Silt or Sediment - Water drainage down from 372 Dollimore Rd, flooding the park -where the city host lives. Cotton wood creek park.		WO 45793 : 10/9/07 Re inspected area in compliance took photos and thanked respondent	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
39306	9/11/07	Commercial	water	NO		Discharge of other wash water - Wastewater called to report water coming from Henry's trash compactor/dumpster area. Inspector to investigate.		WO 43662 : 9/11/07 site inspection took photos of puddles around trash compaction area. contacted Assistant Manager. He informed me that they were watering the plants and not cleaning the trash area. The trash area is cleaned by the janitor with a scrubber and he contains all the wash water. Manager said he would water the plants in the cooler so the excess water flows into the sewer.	None	La Costa South
41347	8/31/07	Residential	wash water from auto detailing	NO		Discharge of vehicle wash water Email forwarded from RWQCB regarding auto detailer not containing wash water. Not many details in complainant's original email.		WO 50153 : 9/10/07 Sent email to complainant requesting more info about the auto detailer and frequency of the violations. No response as of 9/13/07. The phone number provided goes to La Costa chiropractic, and there is no Gail there. 9/18/07 Sent email to RWQCB at the EPA to say we've tried contacting complainant, and if there is any other complaints for Encinitas she can forward them to Hotline or npdes email. 10/15/07: site inspection by Mike Emerson. no discharge observed.	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
41356	9/13/07	Residential	wash water	NO		Discharge of other wash water - Streets called to report wash water discharge at intersection of Stafford and Montgomery. Inspector to investigate.		WO 45692 : 8/12/2008 9:13:40 AM No illegal discharge observed. Looks like residential car-washing in the driveway. Residents were not home. 8/12/2008 9:17:59 AM See follow up WO 75529 Follow Up: 11/6/07 site inspection contacted property manager to route drainage to sewer 8/12/2008 9:15:30 AM See original WO 45692	None	Encinitas
41385	9/17/07	Residential	muddy water	NO		Discharge of water - Complainant reported dumping muddy water in great volumes on Bracero Rd.		WO 45774 : 9/17/07 3pm site inspection observed water in street across from 752 Bracero Road coming out of cement outlet drain. Observed dirt and sediment in the street. Met with complainant who believes there is a low point next to the outlet that does not allow the water to flow. Not enough slope. Appears that the 2nd house east of Bracero, where they are doing construction work, may have dirt and debris in the drainage ditch. Contacted residents at 843 Requeza, regarding over watering and runoff. The gardener will fix the timer and look into pumping the water back out to Requeza. The residents also complained about the dust from the construction at 829 Requeza blowing onto their property. Contacted the owner of 829 Requeza and requested that she instruct the workers to clean out the drainage ditch. She said her husband had already complained about the ditch and that it will be cleaned up ASAP. took photos of the street	NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								9/18/2007 12:00:16 PM sent email construction inspector handling the permit for this site. 9/20/07 Eng. Const. inspector visited site. identified problem. requested brow ditch cleaned out and line edge with BMP's either sand bags or silt fence. 9/27/07 Returned to site to verify direction from 9/20/07 was followed. Brow ditch was clean, and (2) silt fences were placed adjacent to it to ensure no more erosion into it. took photo 10/3/07 I called the complainant and informed him of the actions that were taken for this address and that more would be taken for the drainage. Follow Up: 3/28/08 site inspection area cleaned up signed off NOV case closed 4/16/2008 1:50:20 PM See SR 63213 and Original WO 68227		
41393	9/18/07	Commercial	sewage from port-a-potties	NO		Discharge of sewage □ Staff member□s husband with the County called to let her know of port-a-potties flowing into storage tanks. the tanks are overflowing. Inspector to investigate.		WO 45857 : 9/20/07 Met with contact regarding the bathrooms and the sewage storage tank in the north side of the playground. Toilets were flowing all Labor Day weekend. Now they will pump the storage tank three times week. 9/25/2007 9:17:36 AM Former Program Mgr informed me that the health department is requiring sewer hook up within 30 days	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
41407	9/19/2007	Residential	Some type of pesticide from the plants on the property	NO		Discharge of yard waste - You will need to watch the resident listed at 1257 to witness their cleaning of the plant, and allowing the pesticide chemical to enter the curb & gutter line.		WO 45939 : 9/19/2007 9:46:11 AM standing water issue. check out the aesthetics of the area, and make recommendation to either visit one time per week and clean gutter line, or recommend something through the Engineering dept. Also check the debris behind the mail box, lots of debris. There are cans of spray near this area. 9/19/07 Site inspection observed some white power like substance in the street. Took photos left card at front door Follow Up: 6/12/08 site inspection BMP in place (gravel at the end of pipe took photo 8/12/2008 9:22:17 AM See original WO 75385 and 1st follow up 75386	None	Cardiff
41431	9/19/07	Commercial	power washing wash water	NO		Discharge of building or sidewalk wash water - email from complainant detailing violations, with pictures. Inspector to investigate.		WO 53012 : Sent NOV Letter 10/8/07 to business with mobile business pressure washing info.	NOV	Encinitas
41434	9/19/07	Construction	sediment	NO		Discharge of construction debris - construction stie with lack of BMPs. sediment running down H Street. Inspector to investigate.		WO 75418 : 8/4/2008 1:38:47 PM Inspector visited site, spoke with owner, told him to clean it up by end of 9/20/07. he hung up on her. called back to apologize. Forwarded case to Construction Inspector. 8/4/2008 1:45:19 PM See follow up WO 75419 Follow Up: 8/4/2008 1:42:36 PM Construction inspector called and left message with contractor. Contractor cleaned up street on 9/27/07.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
41448	9/25/07	Residential	Power washing	NO		Discharge of building or sidewalk wash water -		WO 45871 : 9/25/2007 3:58:47 PM Contacted workers and supervisor issued nov took photos and gave educational materials and advice of how to capture the water	Education, NOV	Encinitas
41507	10/1/07	Municipal	Window Washing water	NO		Discharge of other wash water - city hall personnel witnessed the window washer dumping his waste from his buckets into the drain in the city hall complex.		WO 45944 : 10/1/07 received complaint observed wash water in storm drain grate with a cleaning odor. Took photos. 10/8/2007 9:16:19 AM Inspector contacted contractor, he said they use biodegradable soaps and will dump wash water into planter boxes from now on.	None	Encinitas
41508	10/1/2007	Municipal	Trash & human waste	NO		Discharge of sewage - Complainant called to complain about the encampment behind the AM/Pm at Leucadia Blvd & El Camino Real, trash and other human waste going into the creek.		WO 45967 : 10/1/07 site inspection took photos of trash and encampment. Met with supervisor- it was agreed that the case should go to code enforcement. 10/2/07 sent email to code and dropped off photos.	None	La Costa South
41509	9/28/07	Commercial	the drain is clogged and has maggots	NO		Discharge of food waste. - the storm drain behind a restaurant is full of stuff/clogged and is full of maggots. Time to be cleaned out.		WO 45932 : 10-1-07 issued NOV for grease in storm drain. Ordered to clean grease area and street 10/2/2007 1:50:33 PM to keep open until follow inspection shows area cleaned up	NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
41515	10/2/07	Residential	Flurries from the white brick that is being cut	NO		Discharge of construction debris - Contractor is cutting brick and the flurries are flying into the street.		WO 45940 : swept up area. Hose was used to control the dust from the cutting. Took photos of the street. Informed home owners of best management practices and gave them four educational flyers and suggested that they sweep up the street once it has dried. They asked that the property management be informed. property management was informed abouit BMPs for this job and the actions that the property owners will take (sweep street). Suggested that the PM inform the HOA in next newsletter or meeting and to send a street sweeper to this job.	Education	Leucadia
41519	10/3/07	Residential		NO		Discharge of oil - Email regarding complaint from Code Enforcement Violator has a vehicle parked in the street since 9/27/2007 that is dripping oil onto city street. Yard is full of junk too.		WO 45955 : 10/3/07 site inspection street in front of house was clear. Took photos of house and vehicle across the street. Ford 2dr truck 10/4/07 contacted complainant. Site inspection left card at respondent s door and on the truck. Waiting for a call back 10/15/07 site inspection truck no longer at site. case closed	None	Lux Canyon

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
41546	10/26/07	Commercial	H20 wash off	YES	COTTON-WOOD CREEK	Discharge of building or sidewalk wash water - restaurant washing down sidewalks, windows and the parking lot into the city storm drain system		WO 50455 : 10/26/2007 3:20:25 PM site inspection contacted general manager took photos and issued nov	NOV	Encinitas
41573	10/3/2007	Commercial	water from mobile business dumped into drain	NO		Discharge of other wash water - Reporting mobile business truck dumping into the storm drain in the vicinity of Calle de Madera and Jason St at noon today (parked on Hygeia) She went to the window and was told by the drivers "they always do this, etc".		WO 53400 : 12/13/07 call to company. Woman on phone will have a supervisor call me back	None	Leucadia
45614	10/11/2007	Residential	concrete	NO		Discharge of concrete waste. Construction inspector is reporting wet concrete in the curb and gutter line along Calle magdalena in front of the church. He suspects its comng from the Pelican Ridge Development, but not sure, please check out.		WO 50064 : 10/11/07 10:50 aml contacted respondent/owner on site. informed him how to clean a pool filter so that it does not discharge white substance (Diatomaceous Earth) into storm drain. He said he would inform his pool guy. I requested that he dry sweep up the street when the liquid dries. took photos. 10/11/07 received another complaint call from stating that there was a white substance in the road way in front of the PW facility. I inspected Calle Magdelena and villa Blanca and observed a neighbor hosing down the street in front of her driveway (417 villa blanca) I asked her to discontinue washing down the street. I contacted the tile worker who said it was not them .	Education, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Called the GC He met me on site and said he would get the street cleaned up. Resident arrived home and signed the NOV and promised that her husband would clean up(dry sweep the street) before 12 noon 10/12/07. 10/12/07 re-inspection showed area cleaned sign off on NOV OK to close		
45650	10/15/07	Residential	diatomaceous earth from pool discharge	NO		Other discharge - Staff saw large trail of white substance leading from drain hole in curb to storm drain. Inspector to investigate.		WO 50218 : 10/16/07 Site inspection observed white substance/stain in street leading up to 1611 Calle Plumerias. Took photos and contacted resident. She informed me that her husband was cutting tile and putting the tile debris in a drain in the back yard. She said he is done cutting tile. Issued NOV to discontinue discharge and gave her educational information (construction and help flyers)	Education, NOV	Lux Canyon
45687	10/19/07	Residential	Not sure	NO		Other discharge - Information came from the hotline in Code Enforcement, that someone in this vicinity was dumping a substance into the storm drain system. alley behind 2337 Newcastle ave, and the incident address was coming 2128 Manchester Ave. Check it out.		WO 50440 : 10/25/07 11am site inspection. Did not observe any discharge or stains in the street or the alley behind 2337 Newcastle Ave. Checked behind 2328 Manchester and found a white stain in the alley. Contacted the respondents and showed them the discharge stain. They said they had received a letter from the City and were trying not to use the sink that discharges into the alley 10/25/07 The respondent showed me the sink and i suggested that they use a bucket with a hole in the top to let the clear water out the top and the sediment will stay in the bucket	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
45708	10/24/07	Residential	driveway wash	NO		Discharge of other wash water Staff saw neighbors spraying off their driveway after the fires without containing the wash water.		WO 50443 : 10/25/07 site inspection did not observe any discharge. Left doorhanger.	None	Lux Canyon
45709	10/24/07	Residential	over-irrigation water	NO		Discharge of water - Over-irrigation water running down street on multiple occasions.		WO 50452 : 10/25/07 site inspection observed water running off property. Contacted resident she turned off the water at site inspection	None	Lux Canyon
45710	10/24/07	Residential	car washing wash water and sidewalk wash water running down street into storm drain	NO		Discharge of vehicle wash water - Car washing and sidewalk washing wash water running down street. During fires when water is needed elsewhere.		WO 50453 : 10-25-07 contacted owner of property. He admitted to washing his car but said that he did not wash off the sidewalk. Gave him a door hanger and requested that he conserve water during the emergency.	None	Lux Canyon
45717	10/25/07	Residential	driveway wash water	NO		Discharge of other wash water - Homeowner hosing off his driveway after fires, sweeping all water and chunks into storm drain next to driveway. Inspector to investigate.		WO 52491 : 10/25/07 8:30 am site inspection did not observe any discharge	None	Encinitas
45726	10/26/07	Commercial	Water	NO		Discharge of water - Citizen called to say that the parking lot where restaurant is located, there is a company power washing the entire parking lot, and the H20 is running into curb and gutter line		WO 52487 : 10/26/07 Contacted property owner who showed me that they were capturing all the wash water except for the area next to the drive way where some wash water left the site. Issued an nov to collect all wash water	NOV	Encinitas
45728	10/26/07	Commercial	Wash water	YES	COTTON WOOD CREEK	Discharge of water - Washing water down the storm drains.		WO 50454 : 10/26/07 Site inspection contacted Days Inn GM issued NOV and took photos. Also gave GM ash clean up info from RWQCB.	NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
47750	10/28/07	Residential	paint chips/ash	NO		Discharge of paint - Owner of 2533 and 2531 Manchester was seen washing paint chips and ash down street with no containment. close proximity to lagoon. owner is from Arizona, doesn't live in these houses.		WO 52747 : 11/13/07 Left card to give me a call regarding washing paint chips into the storm drain	None	Cardiff
47800	10/31/07	Commercial	parking lot wash water	NO		Discharge of building or sidewalk wash water - Power washers in old Yogi's parking lot power washing. containment measures in place, but not necessarily in use. Inspector to investigate.		WO 52619 : 10/31/07 site inspection did not observe any discharge. Contacted contractor who informed me that he was capturing all of the waste water. He showed me the vacuum on his truck	None	Cardiff
47801	10/31/07	Commercial	wash water	YES	OCEAN	Discharge of water - Staff saw a man power washing Pacific View parking lot this morning.		WO 52616 : 10-31-07 site inspection observed school worker spraying off pavement into storm drain. I asked and he did create a berm so that the wash water would go into the dirt/gravel instead of the strom drain. I gave him a copy of the ash clean up tips from the regional board. I also gave him 6 sandbags to put around the south drain.	Education	Encinitas
47802	11/1/2007	Residential	Paint	NO		Discharge of paint - A contractor is dumping gals of paint into the storm drain system. Need to check out status		WO 52645 : 11/1/07 930am contacted owner of property 11/1/07 9:40 property owner indicated that it was a mistake and that he was washing out dirt off the paint bucket and one bucket had a very little amount of paint in it. He showed me where the washout pits were located on his property. He felt it was unfair to issue a citation for a mistake. After calling my supervisor it was agreed that an NOV should be issued to clean up the street and gutter by 1pm. If it is not cleaned to satisfaction of the inspector then a citation would then be issued.	Education, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								11/5/2007 7:33:58 AM Re-inspection showed area clean signed off NOV Follow Up: 11/1/07 follow up inspection to make sure all paint was removed from street 12/24/2007 1:20:25 PM See service request 47802 and original work order 52645		
47806	10/18/07	Residential	over-irrigation water	NO		Discharge of water - complaining that neighbor waters yard 3 times a day. over-irrigation runoff drains down hill to complainant's yard, causing damage to hillside and driveway.		WO 52664 : 11/1/07 Contacted complainant and took photos of drainage on the street. appears to be irrigation runoff. Complainant was informed that the clean water program manager needed to be consulted on the SOP for over irrigation runoff and that he is out of town until 11/13/07 11/6/07 contacted respondent. she agreed to have her landscaper meet with me. He will give me a call. 11/8/07 met with complainant, her neighbors, and the respondent's landscaper on site on 11/8/07. Landscaper gave his cell phone to the complainant and turned off all the irrigation for the area of complaint. Complainants are to monitor the drainage/runoff and make direct contact with Landscaper if they feel there is a runoff problem. I let the complainants know that I would keep the case open only until the street drainage stopped.	Education	Lower Escondido Creek

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
47807	11/1/07	Residential	vehicle wash water	YES	COTTON-WOOD CREEK	Discharge of water - Complaint from code enforcement. mobile washer on Saxony that has been there a couple hours- water running into storm drain. Inspector to investigate		WO 52663 : 11/1/07 site inspection contacted worker to stop washing drive way	None	Encinitas
47831	11/5/07	Residential	Water from the pool, the pool is constantly filling up, and overflowing into neighbors yard, and into city street curb and gutter line	NO		Discharge of water - Neighbor at 624 Faith Ave- her backyard is flooded due to the resident at 630 Faith Ave - allowing his pool to overflow all the time. The water comes out into her backyard, and overflows into city street. Please stop this from happening.		WO 52665 : 11/5/07 Site inspection did not observe any discharge. Left card and think blue fact sheet for discharging swimming pools	Education	Cardiff
47849	11/6/07	Residential	Soapy water	YES	OCEAN	Discharge of water - Noticed hose coming from home, discharging soapy water into city right of way. Need to check intermittently - to verify the discharge, and notify homeowner not to continue		WO 52741 : 11/6/07 site inspection took photos left card Follow Up: 11/6/08 site inspection contacted property manager to route drainage to sewer 8/12/2008 9:15:30 AM See original WO 45692	None	Leucadia
47865	11/6/07	Residential	pile of dirt	NO		Discharge of Silt or Sediment - large pile of dirt in front of residence, located directly in front of storm drain. Inspector to investigate.		WO 52740 : 11/6/07 contacted respondent Ward Mac and requested that the dirt pile be removed from the street 11/6/07 contacted respondent took photos, 11/8/07 contacted respondent issued nov to comply by 11/9/07 12 noon. 11/13/07 signed off NOV	NOV	La Costa South
47876	11/7/07	Commercial	Vegetation from leaf blower into storm drain	NO		Discharge of yard waste -		WO 52700 : 11/7/07 site inspection observed vegetation in storm gutter. Contacted Landscaper. Requested that his crew clean up the gutter line	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
47917	11/13/07	Residential	swimming pool	NO		Discharge of water Complainant called in regarding neighbor s pool discharge. Inspector to investigate and follow up with Complainant after speaking with neighbor.		WO 52799 : 11/15/07 site inspection left card for respondent to give me a call. Inspected easement for drainage erosion from pool discharge. Observed some stains took photos. I called complainant and left message. 11/19/07 received voice messages from both the respondent and the complainant. I spoke with the respondent. He informed me that he is splitting the lot and needed to show how the lot drains. I left a message with the complainant 11/19/07 received a call from the complainant stating that the problem occurs three or four times a month. Complainant agreed to monitor the drainage for sediment and call me when it occurs 11/9/07 called respondent and requested that he clean the sediment off the street and monitor his discharge so there is no sediment in it. He said he would clean the street and give me a call when complete. He also stated that his neighbor to the north irrigates quite often so that run off occurs. Follow Up: 3/24/08 site inspection observed rock BMP took photo case closed 3/25/2008 10:57:10 AM See SR 48554 and original WO 54257	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
47925	11/15/07	Commercial	Water from green houses	NO		Discharge of water - Runoff from the green houses on Woodlake Dr. and also from the Mormon Church. Inspector to investigate.		WO 52880 : 11/20/07 preformed storm water quality inspection on two green houses at 1616 Lake. Also contacted property owner of east lot 11/29/2007 3:08:22 PM Inspector will perform inspections on other surrounding properties and Mormon Church. 11/29/2007 3:09:41 PM one of the inspections was Lois' flowers	None	Cardiff
47983	11/20/07	Residential	pool water	YES	ESCON-DIDO CREEK	Discharge of water - Call from an OMWD customer about neighbor discharging pool water into creek. unsure whether water had been de-chlorinated or not.		WO 52943 : 11/27/07 left card at door 11/28/07 received voice mail from neighbor that they tested the water before discharge and inspected path of drainage	None	Lower Escondido Creek
47985	11/21/07	Commercial	trash dumpster	NO		Other discharge - trash dumpster behind wamu overflowing and on a slant leading to the storm drain.		WO 52883 : 11/21/07 contacted back manager and took photo of overflowing dumpster. Manager said they had just completed their storage area for their trash. He will move the dumpster to that area	None	La Costa South
47986	10/31/07	Residential	irrigation water	YES	COTTTON-WOOD CREEK	Discharge of water - Ms. Barth walks every Wednesday morning with her group and noticed a considerable amount of water pooling at the end of neptune		WO 52865 : 11/9/07 contacted SDWD regarding water use at 452 Neptune. It appeared to be excessive. The water meter was tested and had no leaks 11/21/07 gave card at door and water conservation programs to resident	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
47988	11/22/07	Residential	driveway wash water	NO		Discharge of other wash water - Anonymous caller reported neighbor power washing driveway, letting wash water flow down street into storm drain. Caller stated that neighbor usually does this on days when City Hall is closed. send information letter.		WO 52879 : 11/26/2007 3:48:14 PM Mailed informational letter and Clean Water Toolbox BMPs from Project Clean Water website to resident at 1129 bonita dr. Follow Up: 5/19/08 site inspection area cleaned up case closed 5/20/2008 10:27:43 AM See SR 64499 and original WO 70201	Education	Cardiff
48021	11/13/07	Residential	H2O	NO		Discharge of water -		WO 52875 : 11/15/07 contacted neighbor at 842 Bonita regarding the drainage issues in the alley. She informed me that when the construction was done south of the driveway the large trucks sunk the driveway. She said the water pools right in front of her house and that her husband has to dig out the drainage regularly.	None	Encinitas
48022	11/15/07	Commercial	1. Debris in storm drain 2 Old tv monitors 3.misc building materials	NO		Discharge of construction debris - While doing an inspection for Shell, the storm drain north of Shell needed to be cleaned.		WO 52876 : 11/15/07 site inspection observed violations of storm drain maintenance and outdoor storage violations. Contacted property manager to clean it up.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48023	11/15/07	Commercial	water	NO		Discharge of water - Observed a large amount of water draining into the street.		WO 52877 : 11/15/07 Site inspection contacted workers. They were washing off the roof of the green houses. It appeared that their pump was broken. They turned off the water. The owner called me the next day stating that he replaced the pump.	None	Encinitas
48024	11/16/07	Residential	white concrete like	NO		Discharge of building or sidewalk wash water - Received a call stating that there is concrete building waste washing onto Bracero From a back yard on Requeza		WO 52878 : 11/19/07 site inspection took photos contacted complainant and respondent. Respondent will dry clean drainage area. Follow Up: 3/28/08 site inspection area cleaned up signed off NOV case closed See SR 63213 and Original WO 68227	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48027	11/19/07	Residential	water	NO		Discharge of water - 11/20/07 received a call from PW Director saying that City Manager has observed a lot of water in the street of 1300 north coast hwy 101. Inspector to investigate.		WO 52881 : 11/20/07 Left card at 188 Jason irrigation still going and contacted 1405 Coop and 1354 north coast hwy for over-irrigation/runoff	None	Leucadia
48030	11/20/07	Residential	mud/dirt debris	NO		Discharge of Silt or Sediment Streets received a call from traffic stating that mud has entered the street at the sharp corner on Lone jack. A motorcyclist lost control after hitting the debris		WO 52882 : Site inspection on 11/20 and 11/21/07 took photos and reported back to Streets. It appears to need a street sweeper. Also over-irrigation may have made the cliff fail	None	Lower Escondido Creek
48031	11/1/07	Commercial	Building power washing wash water	NO		Discharge of building or sidewalk wash water Email from complainant: Steam cleaning front of building, they have done this before, always in the middle of the night. The storm drains were not bermed. I went to bed at 0230 and he was still working. I have a picture of the man working. see attached email		WO 53439 : 12/3/07 Contacted California Bank & trust property manager. 12/4 called and left message 12/4 emailed copy of complainant email and photos with name of complainant removed 12/6/07 sent email to prop manager-Thank you for the email and contact person Hi Martha, I need to make sure that the wash water is not discharged into the storm drain. Please let me know that you have contacted the power washer contractor or give me their information so that I can inform them to	None	Encinitas

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								capture all wash water and dispose it legally. Thanks Please note that the City of Encinitas is required to report all complaints and the corrective actions to the regional water quality control board annually. Corrective actions can be clean up activities or (in this case) educating the contractor to comply with the clean water laws and Best Management Practices (BMPs) 12/6/07 Inspector received email from property manager: Our contractor is aware of the law and she does not use equipment that does not absorb the water. I have called him and informed him of your message and am waiting to talk to him. His company has been in business for quite a few years and services quite a few of our shopping centers. I will let you know what I find out. Thanks.		
48033	11/19/07	Residential	trash	NO		Discharge of yard waste - Code had asked clean water to ride along on their inspection and to look at the storm drain		WO 52884 : 11/19/07 site inspection showed storm drain fairly clear. Code will follow up with all of the other violations and make sure that the storm drains clear. Follow Up: 2/11/08 site inspection took photos of BMPs at driveway case closed	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48034	11/21/07	Residential	h2o	NO		Discharge of water - received call regarding over-irrigation every other or every third morning creating puddles in the street		WO 52944 : 11/29/07 contacted property owner. He said he sets his sprinklers to seven minutes. He will take a look to see if there is any runoff. He wanted to know when the cracked light post will be fixed. Referred him to Streets. He had concerns about the drainage north of his property. I took photos and will pass on to Streets	None	Leucadia
48035	11/21/07	Commercial	h2o	NO		Discharge of water - Over-irrigation		WO 52945 : 11/29/07 contacted school to discontinue over irrigation	None	Leucadia
48070	11/27/08	Residential	gray water	NO		Discharge of other wash water - gray water is draining into storm drain. Inspector to investigate		WO 53440 : 12/4/07 contacted resident and informed him that there was a complaint. He said he had done some construction and the drains come from his back yard and the neighbors also drain through his yard.	None	Encinitas
48236	11/30/07	Municipal	sediment	NO		Discharge of construction debris - Leucadia off Orpheus. Bad erosion control at fire station construction, mud running down street. Construction to investigate.		WO 53056 : Per construction inspector: contractor in process of grading, installing underground utilities; visqueen, wattles, and gravel bags in place. However BMPs were overflown by runoff, steep driveway □/- 8□ . HAR construction is contractor on site. Foreman wrote email regarding BMPs and the company's approach at handling the upcoming rains.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48238		Commercial	silt/sediment	NO		Discharge of construction debris -		WO 53473 : 12/3/07 contacted Steve on site. He informed me that he had dug a ditch to drain the water that had pooled in front of his business. Observed dirt and silt in the street. Took photos. PW streets to clean up area next to Mira Costa. Requested that Steve install some Min BMPs	None	Lux Canyon
48300	11/30/07	Commercial	silt/sediment	NO		Discharge of Silt or Sediment - large amount of silt laden water running off property and into City stormdrain		WO 53485 : 12/3/07 site inspection took photos 12/4/07 contacted workers on site and preformed storm water inspection 12/21/2007 3:52:35 PM See Routine Inspection work order number 53535	None	Lux Canyon
48325	12/4/07	Commercial	silt/sediment	NO		Discharge of Silt or Sediment - Wastewater noticed silt/sediment coming from nursery, most likely due to rain event. Bad erosion control. Routine Inspection was completed on 5/31/07.		WO 53038 : 12/6/07 contacted Manager of Leucadia Nursery. He said he would clean street and will maintain drainage from green house Follow Up: 12/11/07 follow up inspection showed correcetive action taken See SR 48325 and original work order 53038.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48335	11/30/07	Construction	muddy water/silt and sediment runoff	NO		Discharge of construction debris - Clean Water staff witnessed large amounts of muddy water running off intersection of Leucadia Blvd and Vulcan Ave. appeared to be coming from roundabout construction.		WO 53006 : 12/5/2007 10:03:20 AM Per construction inspector: every rainstorm for last 18 years i have been with the City caused large amounts of silt to enter intersection at Vulcan and 101 at Leucadia. after this record breaking storm, less silt accumulated than normal. contractor will continue to monitor and maintain BMPs.	None	Leucadia
48336	11/30/07	Municipal	silt/sediment	NO		Discharge of construction debris - sediment runoff during rain event. From Library construction site onto road behind City Hall. referred to construction inspector		WO 53005 : Per construction inspector: spoke to job foreman Monday 12/3/07. he immediately had a laborer scoop up silt. the rest of the week, slope repair and BMPs will be installed above the wall in time for next rain event.	None	Encinitas
48344	12/5/07	Commercial	silt	NO		Discharge of Silt or Sediment - Resident filled out complaint form. sand is leaving neighbor's property (during rain event) and ending in her silt catch basin. abnormal amount will cause her to flood. not sure of neighbor's exact address. Rancho santa fe rd, south and west of 7th st.		WO 53418 : 12/7/07 Contacted resident at 2423 Fifth street. She showed me where the drainage concern was located on their property observed silt coming off vacant lot across from 2243 Ranch view. Needs BMPs. Appears that 2276, 2230, & 2234 Windword all need min BMPs. Contacted 230 RSF regarding hose in gutter.	Education	Rancho Santa Fe

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								12/11/07 site inspection with owner of 2276 Windword road. Identified three other property owners that need min BMPs 12/17/07 received call from complainant asking for an update. Informed her that the property owners were being contacted to install min BMPs. she wants to know what is going on with the street improvements. I informed her that either the street Superintendent or I would give her a call back. Sent email to Streets. 12/21/07 met with owner of grove maintaining company. showed him where Min BMPs area required and requested that no more sediment leave the properties. See follow up work order 54019 1/17/2008 9:01:29 AM Violation address is actually 2276 Woodwind Follow Up: 8/13/08 SITE INSPECTION ALL BMPS IN PLACE See original WO 54021 and SR 48584		

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48352	12/5/07	Municipal	silt and water	YES	COTTON-WOOD CREEK	Discharge of water Clean Water staff noticed a pipe burst at a construction site at 2nd and A St. No BMPs in place.		WO 53544 : 12/6/07 contacted SDWD regarding the lack of BMPs. He said it was an emergency and that he will clean up all of the silt that washed into the street. took photos	None	Encinitas
48353	12/4/07	Construction	silt	NO		Discharge of Silt or Sediment - rain event caused silt runoff at construction site. Inspector to investigate.		WO 53681 : 12/5/07 Site inspection observed discharge from construction site on Urania. took photos and contacted complainant and resident. They wanted the silt to stop from entering their property at 775 Normandy from the construction site (1060 Urania). 12/26/07 called complainant to follow up on clean up. He said he was very happy with the actions that the City and the Contractor have taken. The contractor could not clean the pipe and will replace it with in 30 days from today (I will call to confirm work is done. Construction Inspector inspected the construction site and confirmed that the BMPs were in place on 12/18/07. Need to re-inspect within 30 days-on calendar 1/18/08 called complainant regarding clean up from silt spill. He said the contractor wants to wait until after the rainy season. Complainant said he was fine with that but that he would not sign off with the city. Called complainant and explained that the construction inspector assigned to the construction site should be his contact person.	Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48354	12/6/07	Commercial	silt	NO		Discharge of Silt or Sediment - silt runoff occurred during rain event. need to fix BMPs. mike emerson to investigate.		WO 53422 : 12/11/07 Inspector contacted manager of the Faith Community Church. 12/14/07 received voice mail from Church requesting that we meet on site. 12/17/07 Met contact on site- showed him the area that needs better BMPs. He asked to put out sand bags along the street next to the bank. We walked the site there appears to be some work the city could do for the storm drain at the corner of Urania and Normandy. 12/18/07 OK to close. Sent email to Streets regarding the storm drain and scheduled a follow up inspection on outlook for 1/3/07 □ 2 weeks See follow up work order 54251 Follow Up: BMPs in place on 1/16/08 See SR 48354 and WO 53422	Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48355	11/21/07	Commercial	wash water	NO		Discharge of water - 621B Second St. Power washing without containment. Inspector to investigate.		WO 53685 : 11/21/07 contacted manager regarding cleaning off patios and side walks. Showed him how to wash the area and capture the wash water. I will inform and show his son how to capture all the wash water	None	Encinitas
48356	12/4/07	Residential	silt	NO		Discharge of Silt or Sediment Construction Inspector reported erosion control problems at vacant lot at 837 orpheus. Inspector to investigate.		WO 53699 : 12/3/07 site inspection took photos of dirt and sediment in street without any BMPs. 12/11/07 site inspection showed Min BMPs in place-sand bags. Streets superintendent stated that the contractor constructing the upgrades at the fire station needed access over the vacant lot and removed the tree.12/12 Nick informed me that the contractor did not need that site but had installed some BMPs.	None	Leucadia
48360	11/29/07	Construction	TVs, old paint stored outdoors	NO		Other discharge Clean Water staff noticed illegal outdoor storage while doing inspection at Shell Station.		WO 53708 : 12/27/07 called property manager stating that there is misc building materials stored on north side of north building that need BMPs needed name and phone of contractor 12/27/07 site inspection observed discharge took photos and contacted lead stucco worker. He turned off hose and called his boss. Boss said he would clean up the site or he would call me. 12/27 received call with general contractor s contact info. Left message. Received message from Gen Contractor stating that he will install all BMP tomorrow.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								See follow up work order 54005. Follow Up: From: Request ID: 48360, 1/7/08 after phone calls to the contractor, he installed adequate BMPs See SR 48360 and original WO 53708		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48361	11/29/07	Commercial	wash water	NO		Discharge of other wash water Construction inspector noticed wash water coming from white pipe that may be coming from nursing home on corner of santa fe and bonita dr.		WO 53415 : 12/11/07 Site inspection, took photos. Appears to be old sewer pipe. Contacted Maintenance supervisor and showed him the drainage. He will investigate and call me with completed corrective actions	None	Cardiff
48362	12/6/07	Residential	liquid from hoses	NO		Discharge of other wash water - hoses coming from 502 e glaucus. looks like they're draining something. Inspector to investigate.		WO 53411 : 12/7/07 did not observe any discharge left card to call me	None	Leucadia
48363	12/7/07	Residential	wash water	NO		Discharge of other wash water - caller reported power washing w/out containment on easement at 1129 Bonita Dr. Incident is over, caller had no pictures or proof. i told him we could send an educational letter, but no violation or citation. Inspector to investigate.		WO 53719 : Caller was adamant about sending citation to violator, but i told him we couldn't enforce without proof. he wouldn't give me any other info and said he was going to follow up at the federal level. Inspector will go to address to speak with office manager and distribute educational info. 11/22 sent education letter. 12/12/07 site inspection contacted owner of property. He said he power washed his driveway after the fire storms in early November. the other discharges may be from illegal garage units that are not hooked up to the sewer. He will call me when the discharge is occurring. Follow Up: 5/19/08 site inspection area cleaned up See SR 64499 and original WO 70201	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48365	12/5/07	Construction	silt from construction site	NO		Discharge of Silt or Sediment - Silt coming off construction site. Inspector to investigate		WO 53718 : 12/5/07 contacted contractors- requested BMP reinforcement 12/6/07 showed work is complete	Education	Encinitas
48375	12/9/07	Commercial	wash water	NO		Discharge of building or sidewalk wash water Clean Water staff witnessed power washing at 7-11 with no containment. sudsy water running down street.		WO 53405 : 12/12/07 called 7/11 and spoke to owner. He informed me that the area is power washed every other sunday. 12/13/07 spoke to power washer and informed him to capture all wash water. Mailed NOV letter and Citation on 12/18/07. 1/22/2008 9:37:36 AM Payment received from 7-Eleven manager. Also sent a letter saying it wasn't fair that he had to pay, and that he should have gotten a warning first. Inspector spoke to owner saying the NOV and Citation were addressed to power washer, and that 7-Eleven wasn't responsible for paying. Owner said he would pay anyway, on behalf of power washer. Case closed letters mailed on 1/22/08.	Citation, NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48376	12/10/07	Construction	muddy water	NO		Discharge of construction debris - Complainant emailed pictures. Erosion control failures during recent rain events.		WO 53519 : Construction inspector performed inspection at site, issued correct work. Clean Water inspector issued citation CW-121207C for 200 due to severity of discharge. Payment received 12/19/07 with a letter from property owner describing how issue was corrected and how runoff will be prevented in the future.	Citation, Education, NOV	Cardiff
48378	12/10/07	Construction	muddy water	NO		Discharge of construction debris - Complainant emailed pictures. Erosion control failures during rain event.		WO 54215 : NOV letter and Citation 121207B sent 12/12/07. Payment and written response letter received 1/9/08. Better erosion control measures were implemented.	Citation, Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48398	12/11/07	Construction	sediment	NO		Discharge of construction debris - Anonymous neighbor, who wants to remain anonymous, called to report the construction at 1435 Rainbow Ridge Ln, saying there is sediment runoff. Construction inspector to investigate.		WO 53449 : Per construction inspector 12/17/07: no open permit at 1435. developer in process. told of problem and installed silt fence across front of all 3 properties.	None	Cardiff
48403	12/12/07	Construction	sediment	NO		Other discharge □ Clean Water staff noticed a silt fence that wasn't very sturdy. Sediment had run off property during previous rain events. Send informational letter with BMPs.		WO 53344 : Certified letter mailed to home owner on 12/13/07. See follow up WO 53771 Follow up completed 12/31/07 by construction inspector. Follow Up: See original SR 48403 and WO 53344	Education, NOV	Leucadia
48409	12/13/07	Commercial	storm water runoff	NO		Other discharge - County Vector Inspector found large puddle at 1616 Lake Dr., possibly caused by runoff at Lois' Flowers or Browns' Plants. Inspector to investigate.		WO 53720 : 11/20 & 11/29 preformed commercial inspections on three greenhouses in the area see work order s Lois's Flowers 53673, Rancho Verde growers 53682 & Cardiff green houses 53683 Follow Up: 5/19/08 site inspection area cleaned up See SR 64499 and original WO 70201	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48416	12/13/07	Construction	over-irrigation/rain	NO		Other discharge □ Complainant called to report the erosion occurring on the hills behind and around her house. Due to rain events and over-irrigation. Please call her early next week to set up a time to come take a look.		WO 53722 : 12/17 site inspection took photos, left card with complainant. Contacted contractor to the east. said that he cleaned up all the silt that drained onto 539 Hermes. The silt is coming the adjacent property to the south 544 Hygeia 12/19 received call from complainant requesting that we call before we come over. Contractor came to her site when she was not home. 12/21 & 12/27 called complainant and LM. 12/27/07 sent email to Streets to fix berm on street	None	Leucadia
48418	12/17/07	Residential	trash	NO		Other discharge - Complainant called to report his neighbor dumping trash into the storm drain. This is not the first time. Inspector to investigate.		WO 53724 : 12/17/07 site inspection took photos issued NOV Follow up 12/27 showed site was clean. Follow Up: 1/22/08 site inspection trash removed See SR 48641 and WO 54222	NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48421	12/17/07	Construction	water runoff	NO		Discharge of construction debris - Complainant called in from Divine Orchids (residence only now) to complain about water erosion from construction behind her house. Drainage paths may have been changed during construction, and she wants to know when they will be fixed.		WO 53605 : Construction inspector met with complainant, appears that developer fence fell over in Oct. Runoff spilled on to owner's property. Repairs made 12/14/07. See original SR 48403 and WO 53344	None	Leucadia
48436	12/18/07	Construction	lack of erosion control	NO		Discharge of construction debris Construction inspector saw demo site with lack of erosion control. no Eng permit, building only. building inspectors don't enforce erosion control. Inspector to investigate.		WO 53725 : 12/18 site inspection took photos call contractor left message to reinforce BMPs 12/19 site inspection took photos call contractor 12/27 received call from contractor stating that he will do the required work on 12/28. Inspect on 12/31/07 See Follow up work order 54003. 1/9/08 After meeting with the contractor he installed adequate BMPs and moved the port-a-potty out of the drainage path See SR 48436 and original WO 53725	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48461	12/20/07	Commercial	wash water	NO		Discharge of other wash water - Complainant saw mobile pet grooming business dumping wash water into street. See attached pictures.		WO 54116 : NOV Letter sent 1/4/08. Certified return receipt received on 1/10/08.	NOV	Encinitas
48463	12/12/07	Commercial	sediment	NO		Discharge of Silt or Sediment - Sediment entering street from SDG&E's easement. Public works has cleaned up sediment, but SDG&E is responsible for BMPs. Inspector to investigate. See attached emails.		WO 53726 : 12/20 contacted SDG&E after speaking to the complainant we agreed to meet out on site on 12/21/07 with her crew 12/21/07 site inspection BMPs in place	None	La Costa South
48492	12/12/07	Residential	trash	NO		Other discharge □Director of public works alerted Clean Water staff to trash and debris in the storm drain. Inspector to investigate.		WO 53723 : 12/12/07 contacted respondent. We informed her to keep the storm drain clean and to keep the trash screened. Site inspection issued NOV for trash in storm drain. 12/12 received and return two calls Follow Up: 1/22/08 site inspection trash removed See SR 48641 and WO 54222	NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48494	12/29/07	Residential	white masonry stain on gutter	NO		Discharge of concrete cutting slurry or wash water. Clean Water staff saw white stain in gutter leading to storm drain. Inspector to investigate.		WO 54006 : 12/31/07 site inspection took photos and left card Received call from house sitter. Will pass BMP info on to owner.	Education	Leucadia
48495	12/29/07	Construction	sediment	NO		Discharge of construction debris - Report of dirt in street in front of driveway. Possibly from construction at 1441 Hygeia. Construction Inspector to investigate.		WO 53874 : Construction inspector issued correction notice at 10am on 1/3/08. Follow up by construction inspector on 1/4/08, 9am- contractor cleaned and placed BMPs. See before and after photos.	NOV	Leucadia
48523	12/31/07	Construction	sediment	NO		Discharge of Silt or Sediment - sediment runoff in street possibly coming from construction at 665 Orpheus. No construction inspector assigned to site. Inspector to investigate.		WO 53872 : 12/31/07 site inspection contacted owner of property and explained areas where silt/dirt could leave the property. He will make the required improvements. Took photos Drive by follow up inspection showed proper BMPs in place.	Education	Leucadia
48531	12/31/07	Residential	smelly runoff	NO		Discharge of water Complainant received complaint at Park Place HOA board meeting on 11/13/07 or 12/11/07 of smelly runoff coming from houses on Lake Dr. Inspector to investigate.		WO 54028 : 12/31/08 put door hangers at 1602, 1608, 1610, and 1612 Lake Dr. 1/3/08 received a call back from 1602 Lake Drive reporting no spills or discharge off his property No other contacts made as of 1/10/07	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48534	1/2/08	Commercial	wash water	NO		Discharge of other wash water Clean Water staff saw power washing evidence at YMCA. Inspector to investigate.		WO 53840 : 1/2/08 Site inspection contacted employees regarding power washing and capturing all the wash water. Gave them BMP information and list of power washers that capture wash water	Education	Encinitas
48536	1/2/08	Commercial	wash water/gasoline	NO		Discharge of liquid fuels. - Strong gasoline smell at Stonesteps. Excel Landscaping employees hosing off steps with large amount of water. One employee holding gas can. Complainant was very concerned with safety going up and down stairs with all the water. And what was the gas for?		WO 53862 : 1/4/08 forwarded voice message to Parks and Rec. with a message that storm water/clean water will do an inspection today and on Wednesday. Informed P&R that the Excel landscaping company has recently been educated clean water staff. 1/4/08 10am site inspection did not observe any smells or spills spoke to locals at scene and nearby construction sites and they did not observe any violation. 1/4/07 received call from Parks and recreation stating that there was some tough graffiti and the maintenance crew used gasoline to remove it. The crews have been told not to use it in the future.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48543	1/3/08	Residential	water, possibly over-irrigation runoff	NO		Discharge of water - there is water constantly draining to gutter near complainant's house. Puddle of water is growing algae and leaving calcium deposits. possible breeding ground for mosquitos. Inspector to investigate.		WO 54016 : 1/4/08 site inspection contacted complainant and took photos of drainage. Left door hangers at all the properties above that could drain into bottlebrush. 1/10/08 sent email to Streets to review street and contacted complainant and sent water usage request to Olivenhain water district. 1/4/08 the houses that were given door hangers are 218,222,226,230,234,238 Meadow Vista Way. 1/9/08 received call from 226 meadow Vista way stating that drain has been bad since he moved in 12 years ago. He stated about 5 years ago the owner of 2115 Bottlebrush Place had constructed a retaining wall with a sump pump to reduce the flooding that was occurring in the kitchen. No other contacts made as of 1/10/08	None	La Costa South
48544	1/4/08	Commercial	grease	NO		Other discharge - Complainant reported large amount of grease that was dumped on the SE and NE corner of Marcheta and Melrose. Inspector to investigate.		WO 54029 : area was cleaned ok to close WO and SR See follow up work order 54030. See SR 48544 and original WO 54029	NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48545	1/4/08	Residential	degreaser/wash water	NO		Other discharge - Police called Fire. Fire called hotline to report resident degreasing parts in driveway. wash water into street. Fire had set up barricade. Inspector to investigate.		WO 53989 : 1/4/08 site inspection observed white liquid in storm drain. Met with Fire department and they stated that the entire driveway was filled with white degreaser foam. Took photos. Issued citation and explained how to clean up. Dry clean only and shop-vac oils and dispose of properly See Follow up work order 53990. site inspection area cleaned up took photos. Gave receipt for citation See SR 48545 and original WO 53989	Citation, Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48548	1/7/07	Commercial	carpet cleaning wash water	NO		Discharge of other wash water Complainant witnessed Rug Doctor employees discharging soapy water from van and equipment into Ralph's parking lot. He told them it was illegal, and they were very rude and didn't listen. Inspector to investigate.		WO 53963 : 1/7/08 site inspection observed hair in parking lot contacted complainant. He showed me where the discharge was located and that the respondent was in Ralph's. Issued NOV to employee to clean area. Sent NOV letter to main office on 1/10/07. Included Project Clean Water's Carpet Cleaning Dos and Don'ts Fact Sheet in the NOV letter.	NOV, Education	La Costa South
48553	1/5/08	Municipal	brown water	NO		Discharge of construction debris - Email from Streets reporting chocolate water from 801 Orpheus (Fire Station 3) on Saturday during rain. Construction Inspector to investigate.		WO 53950 : Contractor to install straw bale barrier per caltrans SC9. Note: Sediment also flowing from upstream property. Clean Water is looking into sediment from upstream property.	None	Leucadia
48554	1/3/08	Residential	untreated water from koi pond	NO		Discharge of water - Owner is discharging significant amounts of untreated water form koi pond from underground pipe at the NW corner of his property, which travels down to Complainant's private road. Inspector to investigate.		WO 54257 : 1/9/08 called waste water and asked about draining pond into the sewer. He said he was only concerned about the flow rate but the code requires automation from City manager or engineer.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								1/24/2008 6:08:02 PM 1/18/08 contacted owner of pond. He said he drains his koi pond into the sewer but he will place some rock at the discharge points to prevent more silt from draining down the private drive within a week. Inspector to do follow up inspection 2/11/08 site inspection showed that BMPs are not in place. Complainant informed me that there was discharge this AM. Called pond owner and left a message to call me back. called self realization fellowship 3/3/08 received complaint call from SRF regarding discharge. Called and requested that he implement BMPs at drainage points. Set to inspect on 3/17/08 3/18/08 site inspection no BMPs in place took photos 3/19/08 left message with pond owner to get BMPs in place or more formal action will take place See follow up work order 68142 Follow Up: 3/24/08 site inspection observed rock BMP took photo case closed See SR 48554 and original WO 54257		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48555	1/8/08	Commercial	Chunky, possibly sewage	NO		Discharge of sewage - Crystal reported chunky discharge coming from the Jack in the Box drains. Possibly sewage. Inspector to investigate.		WO 53952 : 1/8/08 Site inspection observed and took photos of what appeared to be sewage. I contacted the lead worker at Jack in the box and asked that she shut off the water supply and call a plumber. I showed her where the sewage flow was draining off the property 1/8/08 called waste water and asked that the vactor truck be dispatched to help clean up. installed spill kit with the help of the water crew. Vactor crew washed and captured waste water Owner was informed about the cost recovery and the citation. He will monitor water use until plumber arrives. 12:20 pm received voicemail call from owner that it was a sewer leak and the plumber has fixed it. 1/8/08 email information to Streets regarding cost recovery NOV letter and □200 Admin Citation sent to owner on 1/18/07. Get cost recovery amount from Streets. Received □200 payment 1/29/08. Cost recovery of □634.47 sent out by PW on 1/31/08.	Citation, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48562	1/7/08	Residential	silt	NO		Other discharge - Streets complained about the silt bar in the street at Orpheus and Vulcan Ave. Inspector to investigate		WO 53937 : Contacted owner of property and requested that he upgrade BMPs took photos	Education	Leucadia
48564	1/8/07	Residential	sediment	NO		Discharge of construction debris - Woman called in to report sediment on road near 1349. Her previous call was for 1423, and more barriers were put up; however, more sediment is present.		WO 54004 : 1349 no active grading. Residential area producing some sediment. Left North County Construction brochure in mailbox- Per Construction Inspector 1/9/08.	Education	Leucadia
48567	1/7/08	Residential	sediment	NO		Other discharge - Streets complained about the siltbar at orpheus and vulcan. Inspector to investigate.		WO 53931 : 1/7/08 contacted owner of property and informed her that the City is having a problems with the silt bars off V8ulcan at Orpheus Owner will look into her sprinkler system and make sure erosion is not occurring.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48572	1/7/08	Residential	silt	NO		Other discharge - 1/7/08 received complaint from Streets about a silt bar at orpheus. Inspector to investigate		WO 53986 : 1/9/08 site inspection contacted owner regarding silt in street and concerns about stagnate pond on the south side of property. She informed me that her husband had built a retaining wall to hold all of the dirt on the property and has CA Jumping frogs in her pond CA Jumping frogs are used to prevent mosquitoes. no issue with pond. no more silt from property is running into street.	None	Leucadia
48573	1/7/08	Residential	silt	NO		Other discharge - 1/7/08 Streets complained about the amount of silt in the street at Orpheus and Vulcan. Inspector to investigate		WO 53987 : 1/9/08 Site inspection. observed area where dirt and silt could leave property and enter the storm water conveyance system. left card and door hanger to call me 2/4/08 appeared that most of silt was coming from 403 Orpheus AVE. see SR 48574	None	Leucadia
48574	1/7/08	Commercial	silt/dirt	NO		Other discharge - 1/7/08 Streets reported a large silt bar on Orpheus at Vulcan. Inspector to investigate.		WO 53988 : 1/7/08 site inspection took photos left card in door hanger 1/9/08 site inspection contacted worker at 403 Orpheus. He informed me that this was a new green house called Palm Company. He said the owner lives at 395 Sunset Drive 1/9/08 contacted owner of 403 Orpheus at 395 Sunset and requested that BMPs be installed on 403 Orpheus (especially the drive) to prevent silt/dirt discharge	Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								See follow up 75725 Follow Up: 2/4/08 site inspection BMPs in place See original wo 53988		
48584	1/7/08	Commercial	silt/dirt	NO		Discharge of other wash water - 1/7/08 while on site visit Inspector observed erosion from 2276 Woodwind road. Mike to contact leasee		WO 54021 : 1/10/08 called Badger & Sons and left message regarding erosion control at 2276 Woodwind Drive This is another service request issued due to the lack of erosion controls at 2276 woodwind and surrounding properties. Badger and Sons is responsible for maintaining the orange groves at 2276, 2230, and 2234 Woodwind Dr. They fixed BMPs once, but after another rain event, erosion was still occurring, prompting this new SR and WO. See follow up WO 75582	None	Rancho Santa Fe

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48587	1/8/08	Construction	concrete cutting waste	NO		Discharge of concrete cutting slurry or wash water. - Shawn from waste water reported saw cutting of cement without containment. Inspector to investigate		WO 54031 : 1/8/08 11am site inspection observed cement cutting without containment took photos issued NOV to comply by 3pm 1/8/08 Follow up inspection showed clean up complete. See Follow up Work order 54032 Follow Up: 1/8/08 site inspection area cleaned up sign off NOV See SR 48587 and Original WO 54031.	Education, NOV	Cardiff
48604	1/14/08	Commercial	horse manure	NO		Other discharge - Complaint from Code Enforcement. Horse manure left outside of dumpsters- when it rains, drains into protected creek. Inspector to investigate. In Woodridge Farms Estates, LLC		WO 54255 : 1/16/08 site inspection observed manure outside of dumpster. Called owner of stable. She said she would have her guys clean it up ASAP and to take another look that same afternoon See Follow up work order 54256 Follow Up: 1/17/08 site inspection showed area cleaned See SR 48604 and Work Order 54255	Education	Lower Escondido Creek

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48616	1/16/08	Residential	water	YES	COTTON-WOOD CREEK	Discharge of water - Excessive water coming from sidewalk drain near 120-123 5th Street. Inspector to investigate.		WO 54238 : received call from Miller stating that he has walked the property twice for irrigation problems and his pool guy reported no pool problems but has found the leak. 1/22/08 Miller reported that leak is at a resident where the tenant is in Hawaii and will return in a few days. The water line is shared with another tenant so the water will flow until the tenant returns. See follow up work order 54415 Follow Up: 2/4/08 site inspection confirmed that water had stopped flowing case closed See SR 48616 and original work order 54238	None	Encinitas
48618	1/16/07	Residential	wash water	NO		Discharge of vehicle wash water - Neighbor complaint at front counter about washing off equipment in driveway and power washing without containment. Previous violation occurred on 1/4/08. Inspector to investigate.		WO 54253 : 1/16/08 site inspection observed drainage of green liquid under parked car west of 845 LA MIRADA. took photos and contacted resident. showed him where the discharge was located and asked him to clean without discharging wash water. Issued NOV to clean up by 5pm 1/16/08 See follow up work order 54254	Education, NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48622	1/14/08	Commercial	Standing water, grease	NO		Discharge of water - Standing, smelly water, possibly grease, from shopping center at 251 el camino. possibly poor drainage. Inspector to investigate.		WO 54239 : 1/17/08 site inspection observed drainage took photos called property manager on 1/18/08 to clean area. He said he would contact the property owner and the restaurant owners and get the area clean ASAP 1/22/08 site inspection observed no clean up took photos 1/23/08 received information from Engineering that the structure built for trash was not permitted and is in the drainage course. Sent email to Code to get status on Code case 1/24/08 site inspection with Leucadia Waste Water, He confirmed that it was not sewage water. Payment and letter of correction received 2/10/08. case closed. Follow Up: 2/28/08 site inspection all required BMPs in place took photos case closed Original work order 56765 and SR 51034	Citation, NOV	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48641	1/18/08	Residential	trash	NO		Other discharge - Resident at 1956 Lahoud is dumping trash into storm drain again. Inspector to investigate.		WO 54222 : 1/18/08 site inspection observed two plastic trash bags in the storm drain. Took photos and contacted respondent and requested that she remove the trash from the storm drain. She said she would clean it up. See follow up WO 54223 Follow Up: 1/22/08 site inspection trash removed See SR 48641 and WO 54222	None	Cardiff
48657	1/23/08	Commercial	wash water	NO		Discharge of building or sidewalk wash water - parking lot is washed every Wednesday early am		WO 54236 : 1/23/08 site inspection observed drainage took photos and contacted owner. He said he understands that the wash water goes into the ocean and that it is against the law. He will discontinue practice.	None	Cardiff
48658	1/18/08	Residential	sediment	NO		Other discharge - inspector noticed sediment in curb line while inspecting another case. construction was done at residence, and dirt was left behind.		WO 54230 : 1/22/08 site inspection observed dirt in storm drain east of 1964 LaHoud 1/23/08 called respondent and requested that he clean up storm drain in front of his home. He stated that the dirt was washed down the storm drain by his neighbor. He will produce a video showing nieghbor washing down the storm drain	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48659	1/22/08	Municipal	concrete wash	NO		Discharge of concrete waste. - Inspector noticed concrete wash out area next to storm drain. Will notify Public Works.		WO 54225 : 1/22/08 site inspection observed washout next to storm drain. took photos 1/23/08 sent email to Public Works with photos and gave him construction flyer See follow up work order 54305 Follow Up: 1/29/08 site inspection area cleaned up. PW informed that the workers were washing off their tools in that area. Ok to close case See SR 48659 and WO 54225	Education	Encinitas
48660	1/23/08	Commercial	Unknown white power substance	NO		Other discharge - Mysterious white powdery substance piled down Summit every 50 feet. Caller is unsure what it is or where it came from.		WO 54258 : 1/23/08 site inspection observed piles of chalk or white substance took photos contacted complainant and PW streets. Complainant started that her neighbor observed a white VW van placing the piles out on the street at 10am. Received email from SDA see below:	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Re: White power on streets I contacted our Athletic Director, who in turn contacted our Cross Country coach. He assured us that their team is green, the chalk was in fact, flour. I am confident that this won't happen again, and am reassured to know that our community's citizen's are proactively protecting our ocean. Thank you for your excellent work. Please contact me if I can be of further assistance. -Physical Education Department San Dieguito High School Academy Note that this work order is not GEO coded because it is on the streets		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48691	1/28/08	Construction	silt	NO		Discharge of construction debris - Construction Inspector asked Mike to go out and take a look at erosion control measures. Inspector to investigate.		WO 56724 : 1/28/08 site inspection observed some sediment leaks and took photos and contacted construction inspector. Case was handled by Construction Inspector.	None	Cardiff
48692	1/28/08	Residential	silt	NO		Other discharge - Dirt driveway runs into storm drain during rains. Resident says landlord won't fix it. Inspector to investigate.		WO 56471 : 1/28/08 Site inspection took photos. 1/29/08 site inspection contacted complainant and took more photos 2/12/08 site inspection observed sand bags and no discharge case closed	Education	Encinitas
48693	1/28/08	Municipal	silt/mud	NO		Other discharge -Contractor is tracking dirt into street. Large puddle with no BMPs.		WO 56742 : 1/28/08 sent email to Streets and SDWD. see below: I noticed that there is a big puddle at the A tank site. I am not sure who is in charge of the contractor that are using that site. Can you please contact the contractor and request that he stop tracking into the street. Either stop drive through the mud puddle and/or put some gravel down at the entrance/exit. Thanks 3/4/08 received additional emails from SDWD to P&R: Please emphasize the importance to your Park & Rec contractors to not track any dirt/rock into the paved Right of Way. Obviously we need to be in compliance by utilizing BMPs, but also want to be a good neighbor. Appreciate your assistance on this matter.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Email from Streets to P&R: Gents Please make sure that our contractors adhere to sweeping this area and keeping it clean especially when we have inclement weather. SDWD and Streets have made a concerted effort to fill in the hole with class II and add rock at the entrance to help mitigate the mud and dirt being tracked out onto Santa Fe Dr. Thanks for the help. Follow Up: Email from CWP to Streets and SDWD: Thanks for getting the rock out at the A tank site. I took a look on Friday and attached these photos and a tracking BMP detail. The contractor using this site should be sweeping the pavement between the rock and Santa Fe Drive. Thanks for your help in keeping our ocean clean. See Original Work Order 56742 and SR 48693		

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48694	1/28/08	Commercial	silt	NO		Other discharge Clean Water staff noticed drainage coming from orange trees. Puddle forming at bottom of Cornish. Orange trees may belong to Self-Realization Fellowship? Inspector to follow up.		WO 56725 : Follow Up: 2/12/08 conducted storm water quality inspection with SRF See original work order 56725 and SR 48694	None	Encinitas
48715	1/29/08	Commercial	dirt in street and storm drain	NO		Other discharge - Dirt tracking into street from driveway and falling into gutter and storm drain. Lack of BMPs. Inspector to investigate.		WO 68106 : 1/30/08 site inspection took photos of tracking onto street contacted three businesses (Pacific Verde, CM Landscaping and New way landscaping) that are using driveway. Issued NOV (PV & CM to clean storm drain-by 2/1/08 and stop tracking-install BMPs at entrance/exit-by 2/13/08, New way to clean up trash-by 2/1/08 and to stop track-install BMPs at entrance/exit by 2/13/08. also preformed formal Storm water Quality inspections at five businesses (Pacific Verde, New Way, Landworks , CM landscaping and LLM Landscape Inc.) Needs follow up. See follow up work orders 68107 and 68108 Follow Up: 2/11/08 site inspection took photos of BMPs at driveway case closed	Education, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48737	2/1/08	Commercial	water	YES	SAN ELIJO LAGOON	Discharge of water - Call about water being pumped onto street. Possible potable water dewatering. Inspector to investigate.		WO 56447 : 2/1/08 Site inspection took photos and met with construction inspector. He issued an NOV to provide test results and to contact other construction inspector regarding traffic control. 2/4/08. Construction inspector reported that they have a permit and that he will take care of the discharge. OK to close	Education, NOV	Lux Canyon
48742	2/3/08	Residential	pool water	NO		Discharge of water - Complaint from Code Enforcement. water running down street- potential pool draining. Inspector to investigate.		WO 56470 : 2/4/08 site inspection no discharge called complainant to confirm address took photos	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48745	2/4/08	Municipal	wash water	NO		Discharge of building or sidewalk wash water - Library contractors washing off front area. Unsure if BMPs are in place. Inspector will contact Construction Inspector		WO 54397 : Per Construction inspector 2/4/08: visited site 11am. no visible signs of discharge from site. building is being washed down in order to apply sealant. 95 of building is adjacent to dirt planters. only front section drains onto sidewalk and parking lot. not enough water was used for runoff to make it to the storm drain system or street. Case closed.	None	Encinitas
48765	2/4/08	Construction	brown water	YES	SAN ELIJO LAGOON	Discharge of other wash water - Brown water being pumped from construction site. Construction Inspector Ben Oliver to investigate.		WO 54398 : Per construction inspector 2/4/08: I talked to the new workers on the job site. they need to run any pumped water through their de-silter drums before outletting onto street. they were not aware of the requirements. I also called the job site super and left a message with him. Case closed.	None	Cardiff
50815	2/8/08	Residential	water	NO		Discharge of water Complainant working on 2265 Manchester, says water is leaking into the alley behind property. tried shutting off water meter for 2265, but water kept leaking from across street. Inspector to investigate.		WO 56530 : 2/11/08 per construction inspector: spoke with contact at site. There was a water leak at property across street. SDWD will be on site to repair today. Case closed.	None	Cardiff
50830	2/5/08	Residential	wash water	NO		Discharge of building or sidewalk wash water Complainant noticed power washing at address without any containment. Inspector to investigate.		WO 56736 : 2/5/08 site inspection contacted home owner and took photos. Gave owner BMP information and informed him to collect all wash water	Education	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50831	2/11/08	Commercial	wash water	NO		Discharge of other wash water Clean Water staff noticed trail of water coming from trash enclosure behind hospital leading to storm drain. Inspector to investigate.		WO 56495 : 2/11/08 site inspection observed drainage from trash compactor site. Took photos and contacted worker. he said he would discontinue discharging wash water and will capture in the future.	Education, NOV	Encinitas
50833	2/5/08	Construction	brown water	YES	OCEAN	Discharge of construction debris - Construction site found pumping brown water from basement for the second time. They are bypassing the filtering unit. Inspector to investigate.		WO 68104 : 2/5/08 site inspection took photos of silt discharge from construction site. Issued NOV to discontinue silt discharge and to only discharge clear water.	Education, NOV	Cardiff
50835	1/27/08	Construction	water	NO		Discharge of water - waste water received a call regarding the trailer park discharging		WO 68105 : 1/28/08 site inspection took photos and contacted construction inspector. He informed me that he will speak to contractor to discontinue discharge and that BMPs will be in place per plan.	None	Leucadia
50842	2/13/08	Commercial	unknown white substance	NO		Other discharge Complainant noticed man from nursery dumping two 55 gallon drums full of white substance into parking area/street on la costa side. Inspector to investigate.		WO 68111 : 2/13/08 site inspection did not observe any discharge. Called business and LM to call me back. Business owner stated that he will contact all of his employees and teach them the proper deposal methods. He believes that someone illegally dumped at his business.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50843	2/13/08	Residential	water/dirt	NO		Discharge of water - 2nd call regarding over-irrigation. also complaining of runoff. sdwd will check into over irrigation. Inspector will investigate erosion.		WO 68109 : 2/13/08 site inspection observed a broken sprinkler head contacted and informed tenant. Tenant will contact landlord sent email to the water department	None	Leucadia
50846	2/13/08	Residential	water/oil mixture	NO		Discharge of vehicle wash water - Puddle of water in front of driveway, looks to have oil in it. Neighbor at 1257 is always working on car in street and has oil containers in yard. Inspector to investigate.		WO 68112 : 2/13/08 site inspection did not observe any discharge. Took photos of puddles that were along the curb line south of 1257 LOCH LOMMOND. Left door hanger at 1257 LOCH LOMMOND Follow Up: 6/12/08 site inspection BMP in place (gravel at the end of pipe) took photo See original WO 75385 and 1st follow up 75386	None	Lux Canyon
50851	2/14/08	Residential	oil	NO		Discharge of oil. - call came to Fire dept about leaching oil containers located at 1702. Inspector to investigate.		WO 56539 : 2/14/08 SITE INSPECTION OBSERVED OLD OIL STORED OUTSIDE TOOK PHOTOS ISSUED NOV TO COMPLY BY 2/20/08 See follow up work order 68198 Follow Up: 2/20/08 site inspection contacted resident to clean up remaining oil pans that were stored outside. case closed See original work order 56539	Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50870	2/16/08	Commercial	warm soapy water	YES	OCEAN	Discharge of other wash water - Maintenance man dumping (possible) hot tub water into storm drain. Inspector to investigate.		WO 56595 : 2/19/08 site inspection spoke to neighbors and they confirmed that 952 Neptune does drain their hot tub every week. The tenants gave me the same email address. Sent email with think blue pool draining guidelines	Education	Leucadia
50871	2/13/08	Residential	dirt and trash	NO		Other discharge - Forwarded from Code Enforcement. Resident spilled dirt and "gunk" under dumpster. Inspector to investigate.		WO 56583 : 2/19/08 site inspection observed dumpster in street and work on tire in street. Took photos issued NOV left on door-needs follow up inspection. See follow up work order 68213 Follow Up: Trailer removed 3/20/08 case closed See original work order 56583	Education, NOV	Encinitas
50872	2/19/08	Construction	concrete	NO		Discharge of concrete waste. - Forwarded from Code Enforcement. Concrete in gutter along Edilee. Inspector to investigate.		WO 56722 : 2/27/08 sent citation and NOV to business and a CC to property owner 2/19/08 site inspection observed sediment and cement discharge took photos and contacted worker to clean up streets See follow up wo 56723 Follow Up: See original wo 56722 8/12/08 received and sent email regarding payment of fine see below	Citation, Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Thanks for getting back to me. To clarify the city's position, the discharge was cleaned up to the satisfaction of the City therefore there is no need for additional fines to obtain a clean storm drain. The contractor was fined for discharge and no control devices (BMPs) in place while he did his work. The citation is in the contactor's name. If it is not paid then it will be forwarded to collections. I am not sure what happens next but you are NOT responsible for his non payment. You and your property are not in violation. There will be a note attached to your property that a discharge occurred and the contractor was issued a citation. Call me if you have additional questions Email from property owner: I can't get in contact with the contractor, seems like the dropped off the face of the earth. While I hope the contractor pays since they caused the runoff I don't want to put any liability or additional fines on my residence. I wanted to confirm that the city is still going after the contractor. Email to property owner: No Limits Contracting has not paid their citation. They've been issued a □100 delinquency notice, and I believe the Finance Department will turn them over to collections if they continue to avoid payment.		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50879	2/19/08	Construction	concrete	NO		Discharge of concrete waste. - Inspector noticed concrete trail leading from driveway to storm drain. Inspector to investigate.		WO 68110 : 2/19/08 site inspection took photos of white dried stream along curb line. Contacted resident who gave me contractor's phone . Called contractor and requested that area be cleaned up ASAP or no later than 2/21/08 See follow up 68172 Follow Up: 2/26/08 site inspection area cleaned up case closed See SR 50879 and original WO 68110	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50880	2/19/08	Residential	dirt	NO		Other discharge - inspector noticed dirt in street. Inspector to investigate.		WO 68195 : 2/19/08 site inspection observed dirt in street and took photos and contacted resident and issued Nov to comply by 2/21/08 see follow up wo 68197 Follow Up: 2/26/08 site inspection dirt removed case closed See original wo 68195	Education, NOV	Encinitas
50881	2/14/08	Construction	silt	NO		Other discharge - lack of erosion control during rain event.		WO 56620 : Issued NOV on site to stop silt discharge, improve BMPs, and remove trash. Issued Admin Citation on 2/20/08 and Cc'd owners. clean water staff referred case to construction inspectors	Citation, Education, NOV	Encinitas
50882	2/14/08	Residential	silt	NO		Other discharge - Removed driveway, lack of erosion control during rain event.		WO 68218 : 2/14/08 site inspection issued nov took photos See Follow up WO 68219 Follow Up: 2/20/08 site inspection BMPs in place took photos close case See SR 50882 and original WO 68218	Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50884	2/14/08	Construction	silt	YES	OCEAN	Other discharge - lack of erosion control during rain event.		WO 68216 : 2/14/08 site inspection observed silt discharge took photos and issued NOV to Owner See Follow up WO 68217 Follow Up: site inspection BMPs in place only clear discharge See SR 50884 and original WO 68216	NOV	Encinitas
50886	2/14/08	Construction	SILT	YES	OCEAN	Other discharge - Lack of erosion control during rain event		WO 70286 : 2/14/08 site inspection contacted worker and issued NOV. Referred case to construction inspector	NOV	Encinitas
50892	2/14/08	Construction	silt	YES	OCEAN	Other discharge - lack of erosion controls during rain event.		WO 56596 : 2/14/08 site inspection observed silt and dirt discharge too photos. searched the web for owner information and phone 2/20/08 ISSUED CITATION see follow up wo 68194 Follow Up: original work order 56596	Citation, Education, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50898	9/14/07	Residential	surface water	NO		Discharge of water - forwarded from code enforcement. during construction, unwanted berm was built to channel water onto property. Inspector to investigate.		WO 57819 : took photos of 908 to 876. Reviewed plans at City Hall and did not see a drainage detail for 876 Bonita	None	Encinitas
50920	2/14/08	Construction	silt	YES	SAN ELIJO LAGOON	Other discharge - lack of erosion control during rain event. second offense.		WO 56628 : large amounts of silt and brown water leaving site during rain event. workers were on site trying to stop discharge. issued NOV on site. issued admin citation later for □400 because this is second offense. Citation paid 3/17/08 with pictures and letter showing how they corrected the BMPs.	Citation, NOV	Cardiff
50922	2/20/08	Residential	oil, antifreeze	NO		Discharge of vehicle wash water - Neighbor always working on cars in driveway, hoses off into street w/o containment. Mike Emerson to investigate.		WO 56694 : Inspector visited site, saw no signs illegal discharge. Spoke to woman resident. Left Auto brochure in Eng and Span, doorhanger, and card.	Education	Leucadia
50943	2/21/08	Residential	household hazardous waste	NO		Other discharge - Box labeled "toxic waste" outside on the curb. Neighbor is concerned.		WO 56614 : called the HHW hotline number to see if there is a pickup scheduled at this residence today. Clean Harbors said that it is generally their procedure to have residents place box of waste in driveway and that they are up in the Encinitas area today. Called complainant back to let him know and told him that if the box isn't gone by this afternoon, please call us back.	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50944	2/14/08	Construction	silt	YES	SAN ELIJO LAGOON	Other discharge - lack of erosion control during rain event		WO 56625 : admin citation issued 2/15/08. illegal pumping of brown water during rain event. spoke with contractor on site. he turned off one pump, but brown water was still leaving site 10 minutes later from another area. Citation hasn't been paid as of 8/14/08. Finance has forwarded to Collections.	Citation, Education, NOV	Cardiff
50947	2/21/08	Residential	radiator fluid	NO		Discharge of vehicle wash water - Neighbor working on car, dumping radiator fluid in street.		WO 56630 : Site inspection showed wet driveway/road, but no evidence of illegal discharge. Inspector told resident on scene that nothing can be washed down storm drain, and if we get another call a notice of violation will be issued. Send Spanish automotive brochure to resident. site is in Park Place HOA	Education	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50990	2/22/08	Municipal	gas/oil	YES	COTTON-WOOD CREEK AND OCEAN	Discharge of liquid fuels. - Caller complaining about gas and oil substance floating on Cottonwood creek. Inspector to investigate.		WO 56661 : 2/25/08: Site inspection, smelled some gas/diesel. Fire dept said there was an event on I-5 and HazMat responded. left message with lifeguard to find out more info about what happened. we were not alerted to the problem by any city or county departments. 2/27/08 Lifeguard informed me that there was a fuel spill on I-5 at 330am on 2/22/08 and that he contacted the coast guard and hazmat was on scene. Sent an email requested that his staff contact the clean water hotline for spills Subject: FW: please contact the clean water hotline for spills Thank you very much for all the information that you provided me regarding the recent fuel spill off the freeway. As a matter of procedure for future events, please notify the Clean Water Program about spills through the established hotline at (760) 633-2787 or email npdesmail ci.encinitas.ca .us as we are required to report significant spills to the Regional Water Quality Control Board. A more formal coordination effort will be initiated by the Clean Water Program in the near future for any parties that may be involved in a spill event. Thanks again for all of your help. 3/3/08 received email from the Fire Department	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Chiefs, On February 22, at approximately 345am, 2311, 2312, and medic 2395 responded to a traffic collision, southbound 5 on Encinitas Blvd bridge. Upon arriving on scene, a 52ft tractor and trailer was jack-knifed in the number 1 lane and the shoulder. It was noted that the 100gal tank on the driver's side on the tractor had been ruptured and diesel fuel was actively leaking. The call was ungraded to a full hazmat response, with truck 2375, 2313, and 2304 along with 2306 responding. The fuel leak was stopped using plug n dike, and attempted to be contained with a dam. The driver informed that he topped off 300 miles ago, so estimated loss of fuel was around 30-40gallons. San Diego hazmat, County health, Coastguard, and Caltrans were notified and responded to assist with efforts. The freeway lane 1 was reopened at approximately 7am. No injuries were reported during this incident. All units cooperated to mitigate the hazard and were released at the time of reopening. Any more questions please feel free to contact me,			

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50997	2/25/08	Residential	water	NO		Discharge of water - possible illegal drainage into neighbor's yard. inspection scheduled at complainant's home for 2/28/08 at 9am.		WO 56760 : 2/28/08 site inspection at 715 Nardo. Inspectors were contacted by neighbor She showed us the water in the backyard and how she is constructing pipes to move the water out to the street. She is going to write letter the City regarding drainage/flooding and get neighbor to sign it too. Her neighbor to the north will do the same. We cautioned them to not create a slip hazard. We investigated upstream/slope to find origin of water. We were unable to find water source. 3/13/08 Inspectors informed Senior Civil Engineer of the water problem in that area.	None	Cardiff
50998	2/25/08	Commercial	sudsy water	NO		Discharge of vehicle wash water - Power washing in front of Public Works Yard without containment.		WO 68189 : 2/25/08 site inspection observed auto detailing without containment. Took photos and contacted the worker. He had no idea that he needed to capture the wash water because he was using biodegradable soap. He now understands that any wash water (if soap is use or not) needs to be captured. Issued him and NOV	Education, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
51034	2/27/08	Construction	silt	NO		Discharge of construction debris - Construction to fix trash enclosure at site is causing illegal discharge of silt and water and tracking onto Mountain Vista.		WO 56765 : 2/27/08 site inspection observed discharge took photos contacted worker and issued NOV to comply by 2/28/08 1115am. They stopped discharge temporarily with a pile of dirt. The workers said they were rebuilding the trash structure to 6/30/08 plan See follow up work order 56768 Follow Up: 2/28/08 site inspection all required BMPs in place took photos case closed Original work order 56765 and SR 51034	Education, NOV	La Costa South
51036	2/28/08	Residential	sudsy water	NO		Discharge of building or sidewalk wash water - Power washing w/o containment. 2nd offense. Inspector to investigate.		WO 56759 : 2/28/08 Site inspection did not observe any discharge of power wash water but there was sand, silt, dirt and mulch down stream from the property. The property owner showed me how he was power washing his drive way. He was shown where the sand bags did not completely stop the wash water debris from entering the storm drain. He said he would use a shop vac and/or contact a professional power washer to clean his driveway area	NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
51037	2/28/08	Residential	water	NO		Discharge of water - Complaint from P&R. Woman lives next to Sun Vista Park has excess water problem on her property. Sometimes runoff is muddy, sometimes oily. Inspector to investigate.		WO 57809 : 3/3/08 site inspection contacted complainant. She has been having this problem since the park was constructed four years ago. Appears curb on RSF road needs reinforcement or reconstruction. Sent copies of photos to Streets department and Senior Civil Engineer capital improvement. Called the water department and checked the area and did not find anything unusual. He thought it is over-irrigation. Email to Streets: Subject: Possible curb maintenance on RSF When you get a chance can you or your outstanding crew please take a look at the curb line along RSF west side between Morning Star Drive and Avenida La Posta. I received a complaint from 949 Springwood lane. She feels that the street (RSF) is seeping into her yard (she backs up to the street). See photos (1 and 2 are at her house the rest show RSF. 3/5/08 received an email (with photos) and phone call from complainant stating that there was drainage coming up from the water meter. Saved photos to file 3/13/08 discussed issue with Senior Civil Engineer and sent him photos via email 3/14/08 received call from complainant requesting guidance, sent email below	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Subject: Drainage at 949 Springwood Ln. I received a call this morning from the owner/resident of 949 Springwood Ln. stating that she is still having problems with the drainage going through her property and killing/flooding her vegetation/trees. She believes the City may be responsible because the problems started occurring shortly after the park was constructed. She wanted to know if anyone from the City wanted to see her dying trees before she removes them. She is desperate for a solution. She said she had Streets, P&R, and Engineering out at her property. I have attached a couple of photos of the drainage going across her driveway. Thanks for your time OK to close WO as there are no additional actions that the clean water program can take		
51038	2/29/08	Residential	water	NO		Discharge of water - Neighbor called in AGAIN saying water still leaking from 120 Daphne . SDWD investigation could not find source. Inspector to investigate.		WO 57818 : 3/3/08 received call from complainant stating that the over-irrigation is occurring at 4am and there is a gushing sound. 2/29/08 site inspection took photos and left card, called and left message with complaint.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
53077	3/6/08	Residential	unknown	NO		Discharge of other wash water - Resident left very vague message saying there is an infraction on Guildford Ct. and that it's being tracked into driveways. No contact info. Inspector to investigate.		WO 57889 : Inspector went to street, found dried white substance in the gutter on the west side of the road. possibly plaster wash water. no sign of construction done at any house on the block. unclear where the discharge started. left doorhangers at houses along west side.	Education	Leucadia
53078	3/6/08	Construction	wash water/sediment	NO		Discharge of building or sidewalk wash water - Power washing library wall behind City Hall.		WO 57890 : Clean Water staff spoke to washer on site, told him to contain water and that no water could go into storm drain. He said he would talk to his foreman. CWP Manager spoke to construction inspector and left a message for Assistant to the City Manager. Building maintenance man also spoke with contractor to let him know storm water requirements.	None	Encinitas
53089	3/7/08	Residential	white wash water/plaster	NO		Discharge of concrete cutting slurry or wash water. - Staff noticed large trail of dried white substance leading from driveway to storm drain. second offense. Inspector to investigate.		WO 68063 : NOV letter and C□100 Citation sent to homeowner. Payment received 3/17/08.	Citation, Education, NOV	Leucadia
53090	3/7/08	Commercial	wash water	NO		Discharge of building or sidewalk wash water - Staff noticed evidence of patio washing outside Pizzicato. Inspector to investigate.		WO 68042 : NOV letter was sent to owner of restaurant on 3/11/08 with BMP info from the Project Clean Water toolbox website and a picture of the wet ground next to patio.	NOV, Education	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
53091	3/7/08	Commercial	Grease	NO		Other discharge - Staff noticed trail of grease coming from trash enclosure behind Rubio's. Also, puddles of wash water at storm drain by Rubio's door. Unknown source. Inspector to investigate.		WO 68096 : 3/11/08 site inspection observed some grease spilling out of containment area too photos and contacted Manager and showed him the photos and issued an NOV to clean area by 3/25/08. A complete Storm Water Quality Inspection was done with follow up items. Needs follow up inspection See follow up work order 68173	Education, NOV	La Costa South
53097	3/10/08	Construction	water	YES	OCEAN	Discharge of water - Complaint at front counter regarding constant flow of water from unknown source across San Elijo Ave into channel just south of Chesterfield. Possible over-irrigation. Inspector to investigate.		WO 68067 : 3/11/08 site inspection showed that water was coming from construction site. sent email to clean water manager to pass on to construction inspector see below Subject: complaint regarding constant run off from 2351 San Elijo I received a Service Request regarding constant water flow along the 2300 blk. of San Elijo (attached). I traced it back to the construction site at 2351 San Elijo Ave. I have visited this site many times and the contractor informed me that he is pumping out ground water. He indicated that this pumping will occur forever. I also took the attached photos.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63103	3/11/08	Construction	white construction waste	NO		Discharge of construction debris - Staff noticed white line of construction debris wash leading into storm drain. Most likely from construction occurring at site. Inspector to investigate.		WO 68079 : 3/11/08 site inspection observed spill of white paint or concrete mix, took photos contacted PW to contact contractor to clean area and sent email Subject: Photos of spill at 160 Calle Magdalena Here are the photos from 3/11/08. The date is correct on the photos but not the titles. Can you give me contact information so that I can give them educational information or I could give it to you to give to them? thanks for getting on them. See Follow up work order 68080	None	Encinitas
63104	3/11/08	Commercial	grease	NO		Other discharge - Property owner called about his restaurants dumping grease in alley behind building. Inspector to investigate.		WO 68043 : 3/11/08 site inspection observed grease discharge contacted owner who informed me that the cook from the fire fly dumped food into the dumpster without using a bag. The food fell out when the dumpster was unloaded. contacted fire	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								fly and the food was cleaned up 3/13/08 called PM and updated him on the inspections that were completed (Blue Finn Sushi, Fire Fly and Passage to India) He was informed that he has the ultimate responsibility to ensure compliance with the storm water ordinance and BMP manual. 3/17/08 sent email to property manager. see below Thanks for taking the time to speak with me yesterday. Attached are some of the issues that we discussed. I will list the areas of concern below: 26 shows washing of the Passage to India van without containment please note that even if only water is used to clean, the wash water is considered a pollutant and must be captured 21 shows a mop dripping into storm drain Please ensure that your tenants comply with our ordinance and discontinue discharge and dumping into the storm water conveyance system. Thank you 3/17/08 Prop Mgr will send a memo which all the restaurant tenants signed regarding complying with city storm water codes Ok to close add memos to service request hard copy See follow up work order 68065		

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63105	3/11/08	Construction	silt	NO		Discharge of construction debris - Silt/water mixture in construction zone. Looks like a truck drove through and traced discharge to storm drain. Construction Inspector to investigate.		WO 68021 : Per Construction inspector 3/12/08: New curb island hit by semi-truck delivering to existing businesses. all sediment contained by Contech System underground. No discharge left site. Parking lot cleaned by HBI.	None	La Costa South
63119	3/13/08	Residential	paint	NO		Discharge of paint - Neighbor claims neighbor dumped paint and scraped paint chips into the street. Inspector to investigate.		WO 68041 : 3/13/08 site inspection observed over-irrigation from 1956 Lahoud and a slight sheen look to it. It appeared to be coming off the neighbor to the north 1948 lahoud he informed me that nieghbor often dumps trash over the fence and maybe some irrigation wash over the trash. He will check his drains. Referred neighbor dispute to code enforcement and over-irrigation to SDWD	None	Cardiff
63120	3/13/08	Commercial	wash water	NO		Discharge of vehicle wash water - Email regarding auto detailing without containment at business park. Inspector to investigate.		WO 68040 : 3/13/08 sent emails to complainant requesting more information location time... 3/13/08 left message stating that the car wash operator must capture all wash water. OK to close	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63127	3/14/08	Municipal	oil	NO		Discharge of oil. - Resident says someone poured some oil into storm drain near his house. Looks to be oil residue on the grate. Inspector to investigate.		WO 68058 : 3/14/08 site inspection observed some grease in storm drain and took photos. Called wastewater to advise him. After discussing spill it was determined to wait until Monday to clean storm drain 3/17/08 sent email below to waste water Here are the photos that I took. It appears that someone dumped a saucepan of cooking oil into the storm drain just south of 1015/13 Regal. FYI this resident also called the hotline at 6:30pm on Friday requesting the this storm drain be sucked before the rain hits on Sunday. He also alleges that the storm drain is plugged or was plugged. When you get a chance can you let me know what actions you took if any. Thanks. Note I need to change the time on my camera this occurred at 17:24 not 16:24 Email from Wastewater: We need to discuss this situation. I didn't realize when you called me on Friday, but this guy called us about a week before this complaining that the drain was plugged. We went out and cleaned the drain and showed him all was clear. Now, he's calling about some cooking grease. If we continue to get calls from this guy, we may have to start some kind of investigation and documentation process. We cleaned the oil up with some oil absorbent today (3/17/08) at 1:30pm.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63128	3/16/08	Residential	dog urine and feces	NO		Discharge of other wash water - Neighbor washes dog urine and feces from concrete on side of house into street on a daily basis. Inspector to investigate.		WO 68062 : 3/17/08 site inspection observed pet feces in storm drain took photos contacted owner who stated that his gardener has been washing the pet waste down the storm drain. he received educational information and the code section. He refused the NOV. Called complainant at 305pm no answer after 15 rings.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63136	3/18/08	Residential	water	YES	OCEAN	Discharge of water - During rain, water runs north and overtakes the very small beaten up curb and runs down embankment. Drains cannot handle that much street water. Inspector to investigate.		WO 68087 : 3/18/08 site inspection met complainant and took photos of drainage on Dublin, Montgomery, and at 2342 Montgomery. Observed photos that the complainant had taken on 1/17/08 which were emailed to me, forwarded them to Streets, Engineering. Email from complainant: Subject: Fwd: Rain water overflow issue 2342 Montgomery Cardiff CA 92007 photos from 1/17/08 It happens every rain falls Main concern is front berm over flows during all rain events. 3/19/08 sent email to Streets and Engineering: Subject: Drainage complaint along the 2300 blk. Of Montgomery I received a complaint about drainage along the 2300 blk Montgomery Rd. west side. Complainant lives at 2342 Montgomery. he believes the curb is not high enough on the west side of Montgomery at 2350, 2348, 2342, and 2336. He sent me an email with photos showing rain drainage through his property on 1/17/08. I took photos yesterday of Dublin and Montgomery (Complainant thinks the drainage from Dublin flows to Montgomery) the other photos show his front area along Montgomery and how it flows through his property. Photo 25 shows the alley west of his house (that was recently repaired for a water meter and now is sinking and creating pot holes) that he would like to be resurfaced.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Streets, can you please call him and let him know what you can do-he is a nice guy and is expecting a call from you- I did not promise him any improvements. Eng, please be aware of this concern the next time a CIP is in this area Thanks for your time and let me know if you need any other information		
63159	3/21/08	Residential	wash water	NO		Discharge of vehicle wash water - Wanted to know if we send notices to people washing cars. Inspector to investigate.		WO 68163 : 3/24/08 site inspection contacted resident and i was informed that the resident had washed his car on Friday and was not an auto detailer. The resident was given auto washing educational information.	Education	Cardiff
63160	3/20/08	Residential	oil	NO		Discharge of oil. - complaint forwarded from Code Enforcement. Van parked in driveway, leaking oil. Inspector to investigate. See attached email.		WO 68161 : 3/24/07 site inspection took photos and contacted respondent. They informed me that the van has stopped leaking oil/hydraulic fluid. They said they would clean driveway case closed	None	Encinitas
63161	3/20/08	Commercial	wash water	NO		Discharge of vehicle wash water - Power washing in business park without containment. Inspector to investigate.		WO 68166 : By EMERSON, MIKE: 3/25/2008 10:07:41 AM 3/20/08 site inspection observed discharge took photos and issued citation	Citation, Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63162	3/24/08	Residential	construction wash water	NO		Discharge of construction debris - House with construction may be washing waste down street to storm drain. Inspector to investigate.		WO 68158 : 3/24/08 Site inspection took photos issued NOV to clean white substance from street by 5pm 3/25/08. Sent email to Streets regarding EP and street improvements. see below Subject: erosion and public improvements on KilKenny I received a complaint about building waste at 327 KilKenny. I contacted the owner and he will discontinue discharge and clean up the mess he made. he would like to repave his side of the road as it is eroding pretty badly. He does not want to have to redo it. So I asked him to speak with you and then obtain an Encroachment Permit (EP). He has got a bid for □2,000. Can you please guide him to the correct material and the process to get an EP? Also the resident across the street wanted the city to do some improvements to her bank. She said that the City widened the street for fire access and promised her to replant the bank. Can you please call her and give her the process or answers to her questions. Thanks and I promised nothing. Here are some photos. See FU Wo 68229 Follow Up: 3/28/08 site inspection area cleaned up took photos case closed See SR 63162 and WO 68158	Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63174	3/23/08	Commercial	wash water	NO		Discharge of building or sidewalk wash water - Restaurant employee washing off front eating area and sidewalk with no containment. Inspector to investigate.		WO 68174 : 3/25/08 site inspection no discharge observed gave educational information regarding sidewalk cleaning to Amanda with my card to call me if there are any questions	Education	Encinitas
63175	3/25/08	Residential	Unknown dark substance	NO		Discharge of yard waste - Neighbor poured something onto his own yard, and it's draining onto complainant's property. Inspector to investigate.		WO 68183 : 3/25/08 site inspection contacted complainant and observed what appeared to be cooking oil dumped on 199 Pacific View lane and seeped into 201 Pacific View Lane. Took photos left card at 199 to call me regarding spill on north side of property.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63200	3/27/08	Commercial	wash water	NO		Discharge of vehicle wash water - Power washing at business complex, possibly without containment. Inspector to investigate.		WO 68220 : Minimal BMPs in place. No NOV or Citation issued. Send letter to property manager letting her know of situation.	None	Encinitas
63201	3/27/08	Commercial	wash water	NO		Discharge of water - City staff witnessed power washing trash enclosures without containment. no soap being used.		WO 68214 : Spoke to property manager in rental office about proper BMPs and that no runoff can leave property or enter storm drain. She will get shop vac and instruct power washer how to property was out trash enclosure.	None	Encinitas
63213	3/28/08	Commercial	cement-laden water	NO		Discharge of concrete cutting slurry or wash water. - Complaint of cement-laden runoff down street. Inspector to investigate.		WO 68227 : 3/28/08 site inspection observed discharge took photos contacted contractor cleaning up street. He informed me that he had an accident and was cleaning it up. I issued NOV to clean street using dry methods by 3/31 5pm See Follow up work order 68228 Follow Up: 3/28/08 site inspection area cleaned up signed off NOV case closed See SR 63213 and Original WO 68227	NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63215	3/31/08	Commercial	paint	NO		Discharge of paint - White paint dumped into curb line somewhere along 900 block. Inspector to investigate.		WO 68226 : 3/31/08 site inspection observed white powder in storm drain took photos, Contacted company, spoke to employee who informed me that someone painting a fence is responsible for the white discharge. His worker was using a beige color. I contacted a landscaper he made a call and said it will be cleaned up today. Need a follow up inspection. See follow up WO 68235 Follow Up: See SR 63215 and original WO 68226	None	Leucadia
63217	3/31/08	Residential	sewage	NO		Discharge of sewage - 2nd call regarding overflowing septic tank. first call from LWD said sewage was not going into street, so referred to County DEH. Inspector to investigate.		WO 68225 : 3/31/08 site inspection no discharge observed left card at door to call me	None	Leucadia
63219	3/31/08	Construction	dirt	NO		Discharge of construction debris - Trucks tracking dirt onto road near entrance to fire station. Construction Inspector to investigate.		WO 69413 : Per Construction inspector: Active hauling operation 3/31/08-4/3/08. Will street sweep roadway each night.	None	Leucadia
63220	3/31/08	Municipal	water	NO		Discharge of water - Call regarding work being done on B Street. Water running down street, no BMPs.		WO 68236 : 3/31/08 site inspection no discharge observed case closed	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63221	3/31/08	Residential	water	NO		Discharge of water - Forwarded from SDWD. Runoff possibly from neighbor's property causing mold and mildew. Inspector to investigate.		WO 68237 : 4/1/08 site inspection observed discharge from drain in front of 1180 Kildeer ct. Took photos and left card at door to call me regarding discharge.	None	Leucadia
63233	4/2/08	Residential	water, possibly dirt	NO		Discharge of water - Neighbor to north hosed down yard/driveway. Silt runoff into street.		WO 69422 : 4/2/08 site inspection took photos called owner and requested that he remove dirt/silt from storm drain curb line in front of his house and the neighbors to the south (1257, 1263, and 1271 Loch Lomond See follow up WO 69425 Follow Up: 6/12/08 site inspection BMP in place (gravel at the end of pipe took photo See original WO 75385 and 1st follow up 75386	None	Cardiff
63234	4/1/08	Commercial	water	NO		Discharge of water - Constant flow of water from retirement home. Inspector to investigate.		WO 68252 : 4/1/08 site inspection observed water flowing out of property contacted SDWD on site. We determined that the water was ground water and that an encroachment permit would be required to lay a pipe under the sidewalk. Case closed	None	Lux Canyon

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63237	4/2/08	Residential	horse manure	NO		Other discharge - Horse manure being dumped into City Park. inspector to investigate.		WO 68253 : 4/2/08 site inspection observed large amount horse manure. took photos and contacted horse owner on site. sent email at 5pm see below I think you had the best solution to remove the Manure by using our waste hauler. Please give them a call and get a container that they will pick up. Otherwise you can compost on private property. I guess the lot across the street is owned by the City. To compost on City property will require an encroachment permit. Please remove all manure from the city lot by 4/17/08. If you have any questions please contact me. Thank you. Below is some more BMP (best management practices) to help you manage manure on private property. 4/15/08 called respondent and left message on status of clean up set up inspection on 4/17/08 4/15/08 received time extension request from 4/17/08 to 4/22/08. A follow up inspection was set up for 4/22/08 2pm See FU WO 69551 Follow Up: SR 63237 and original WO 68253	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63238	4/2/08	Residential	water, silt	NO		Discharge of water - Possible over-irrigation causing silt in street. inspector to investigate.		WO 69356 : 4/2/08 site inspection observed discharge and erosion from what appeared to be an irrigation problem. took photos and left educational information. See follow up WO 69441 Follow Up: 4/16/08 site inspection no discharge observed case closed See SR 63238 and original WO 69356	Education	La Costa South
63254	4/4/08	Residential	water	NO		Discharge of water □Council member called in about excessive water leaving property at 294 Neptune. Inspector to investigate.		WO 68308 : Inspector followed up at address on 4/8/08. Took photos along street and in front of property and at the beach. No evidence of a discharge occurring. Possible illegal drain pipe (4") extending to beach from the property. No evidence of significant erosion due to the pipe. No complaints recorded with SDWD, water usage historically low. Called and left msg with OMWD letting her know we followed up.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63260	4/4/08	Commercial	over-irrigation runoff	NO		Discharge of water - Over-irrigation water running through parking lot going to storm drain. Inspector to investigate.		WO 68279 : Wastewater went to site, spoke to manager who said he'd put in a work order to repair the broken irrigation pipe. Inspector will follow up next week. 4/15/08 called to set up inspection for storm water quality See follow up work order 69710	None	La Costa South
63266	4/07/08	Residential	water	NO		Discharge of water - Forwarded from Code Enforcement. Water running down street, possible pipe break. Inspector to investigate.		WO 69392 : 4/14/08 site inspection no discharge observed during inspection	None	Cardiff
63295	4/9/08	Residential	water	NO		Discharge of water - Neighbor put valve on end of drain pipe at Oxford and Liverpool, causing backup and constant water in street. Possible source of water is swimming pool nearby. Inspector to investigate.		WO 69361 : 4/11/08 site inspection met complainant who showed me the flooding concerns. The cement box on the SW corner of 2057 Oxford is constantly flowing. I took photos of the clear water running into the pipe that daylights at the curb on the NW corner of Oxford and Liverpool. The owner of 324 Liverpool Drive has allegedly capped the outlet pipe and uses the water to irrigate his property. The capped pipe creates back up to the cement box (sw corner of 2057 oxford).	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								NO back up or drainage observed. The complainant stated that the water department has been out several times to locate where the water is coming from. SDWD was unable to locate source of water. Sent email to water department. See below Subject: Water use/drainage on Oxford at Liverpool Here is some background information On 4/11/08 I preformed site inspection met complainant who showed me his flooding concerns. The cement box on the SW corner of 2057 Oxford is constantly flowing (according the complainant). I took photos of the clear water running into the pipe that daylights at the curb on the NW corner of Oxford and Liverpool. The owner of 324 Liverpool Drive has allegedly capped the outlet pipe and uses the water to irrigate his property. The capped pipe creates back up to the cement box (sw corner of 2057 oxford). NO back up or surface drainage was observed during this inspection. The complainant stated that the water department has been out several times to locate the water source. He stated that SDWD was unable to locate source of water. The only pool in the area appears to be located at 2032 Cambridge. can you please look up water use in that area specifically 2032 Cambridge and 2057 Oxford and homes to the east on Cambridge (2054-2060)?			

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								4/14/08 Streets informed me that there was a big problem in that area for years until a contactor was hired to place a pipe under the street to shoot the ground water to Liverpool 4/11/08 I asked complainant to call me when the cement box overflows and I will perform a follow up inspection within two weeks. No discharge at follow up inspection will close case 4/28/08 sent email to Engineering Inspector: Subject: FW: Chronic flooding on Oxford Ave. in Cardiff I received a complaint from resident of 2075 Oxford Ave. I responded to the site. He showed me how his neighbor (324 Liverpool Drive) has plugged the street drainage (to use the water to irrigate his property) and created drainage and seepage problems for the complainant. Please advise		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Email from complainant: Subject: Chronic flooding on Oxford Ave. in Cardiff I found my camera and took some photos to document the severity of the flooding problem you came to investigate after my call to the water district. As we discussed this wasn't the first such call. In fact, the problem has persisted for years and the water district is well aware of the issue with the neighbor at the corner of Oxford and Liverpool having blocked the city installed drain, coupling it to a self installed sprinkler system (see attached photos). I was very pleased to have someone from the city at last take notice of this issue which I believe to be eroding the foundation of my home. In light of this, I trust you understand just how serious this matter has now become. A recent inspection of the crawlspace under my house indicates that I can no longer tolerate this problem. I have saturated soil as well as several piers which must be replaced. This aside from the plague of insects I am looking forward to from last summer's example. Having found the proper contact within the city I now urge you to take prompt actions.			

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63296	4/7/08	Commercial	oil, other unknown substances	NO		Discharge of oil. - Possible storage of unknown materials in large steel drums. Some drums have been tipped over. Citizen is concerned. Inspector to investigate.		WO 69368 : 4/14/08 site inspection with fire observed old grease, oil and oil filters. Some containers are turned over and grease and oils are seeping into the ground. Took photos. . Called property manager and left message to call me ASAP 4/14/08 drafted NOV 4/15/08 received voicemail from property manager. returned her call and left message. 4/16/08 received call and email address from prop manager. She will respond to my email and get the property properly cleaned up. See email below Subject: 797/225 Quail Gardens Drive Thank you for getting back to me. I have attached some of the photos I took on Monday 4/14/08 and I will give you a call. Subject: List of Haz Waste Haulers Here is a list of authorized hazardous waste haulers from the County of San Diego. It is strongly recommended that you use one of these companies or at a minimum have one of them evaluate the containers. Also please provide an email explaining how & when you are going to remove the oil and grease and their containers and provide a receipt. Once this area is cleaned up a follow up inspection will be completed. Thank you for your prompt attention to this matter	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								4/28/08 received and sent email to respondent see below Subject: RE: List of Haz Waste Haulers.pdf I met with Safety Kleen out on site and they will be performing the site clean up of the Hazardous Waste on Quail Meadows project. We are hopeful that they will be able to obtain our EPA early next week. We should be able to have the site cleaned up in approximately 1 week. As soon as I have a firm date, I will let you know. Subject: RE: List of Haz Waste Haulers.pdf Thank you for the update. Please let me know when the work is complete so I can inspect and close the case. I am very pleased that you are using a professional to properly clean this property. See FU WO 70202 FYI - As of yesterday afternoon (05/14/08), the below referenced Request for Assistance (RFA) from a concerned citizen, was successfully resolved thanks to a collaborative effort between Clean Water and Fire. A considerable amount of contaminated material was found on the property at 225 Quail Gardens Drive across from the Quail Botanical Gardens. In coordination with the property management company and City Staff, all of this material was removed by a certified hazardous waste hauler. The attached before and after pictures tell the whole story. This site contained significant conditions of concern which were successfully abated through these efforts. See SR 63296 and original WO 69368		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64313	4/11/08	Construction	water/dirt	NO		Discharge of construction debris - Removal of retaining wall caused erosion control and drainage issues for next door neighbor. Inspector to investigate.		WO 69400 : 4/14/08 site inspection took photos and called complainant regarding retaining wall removal creating erosion 4/15/08 received VM from complainant to call her.. Called back and LM at both ph s at 145pm 4/15/08 4/15/08 received call from complainant and informed respondent where the erosion was occurring. Contractor said he would take care of it ASAP. Need to do follow up in one week 4/22 See follow up WO 69445 Follow Up: 4/16/08 site inspection workers installing BMP on south side of property case closed See SR 64313 and original WO 69400	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64323	4/14/08	Commercial	trash	NO		Other discharge - Trash overflow in dumpster behind Mar Vista Liquor/Subway complex. Inspector to investigate.		WO 69391 : 4/14/08 site inspection took photo of approximately 15-20 trash bags outside of locked dumpster (all dumpsters appear to be locked). Called property manager of commercial Facilities and informed her of the trash problem. She said she would call Subway to get it cleaned up. Needs follow up inspection 4/15/08. called complainant and reported action taken See follow up WO 69402	None	Cardiff
64327	4/12/08	Municipal	water	NO		Discharge of water - Anonymous message about a broken pipe. No details were given. Inspector to investigate.		WO 69401 : 4/15/08 site inspection. the water department stopped to inform me that the Fire department had shut off the water and Parks and Rec. had fixed the pipe.	None	Encinitas
64355	4/21/08	Commercial	na	NO		Other discharge - Illegal connection found at corner of Piraeus and Normandy during dry weather monitoring preparations. Inspector to investigate.		WO 69545 : 4/22/08 Waste water reported that the Pipe used to serve the green houses but now it does not go anywhere or no drainage travels though it. Case closed	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64373	4/11/08	Residential	wash water	NO		Discharge of building or sidewalk wash water - Power washing w/o containment at 2520. GIS will not locate this exact address. Inspector to investigate		WO 69558 : 4/22/08 site inspection observed no discharge left educational information and a door hanger	None	Cardiff
64386	4/24/08	Commercial	silt/dirt	NO		Other discharge - Heavy erosion. Sand dumped on next door lot. Silt/dirt in storm drain. Inspector to investigate.		WO 69617 : 4/24/08 site inspection observed erosion and colored drainage from the BMW auto dealership. Took photos. Contacted owner and showed him all of the violations. He requested that I email him photos of the violations. We agreed that the contractor would remove the drip pans and the oil pans and reels by 5/5/08 and complete the landscaping by 5/28/08. The drainage from the vehicle washing was stopped immediately. See emails below Subject: Photos from 4-24-08 Here are the photos from yesterday. Here is the link to all different kinds of erosion control methods that will help stabilize the slope on the north east side of the property. Please make sure to capture all vehicle wash water so that it does not enter the storm drain. Make sure that no paint of dust leaves your painting area. Please remove or cover all outdoor storage. As we discussed contact your contractor to remove all of the drainage containers and other miscellaneous pans and reels. If you have questions please call me See follow up work order 75569	Education	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64387	4/24/08	Construction	dirt	NO		Other discharge - Pile of dirt in parking lot at new facility. Inspector to investigate.		WO 69607 : 4/24/08 site inspection observed stock pile of dirt without any BMPs took photo. PM informed me that it was left over dirt from the grease interceptor construction for Santa Fe Grill. Called other restaurant on Santa fe and left message. needs follow up inspection 5/1/08 Site inspection issued NOV to Contractor remodel and gave it to the head contractor to comply by 5/9/08 3pm See FU WO70234 Follow Up: 5/12/08 Site inspection dirt was loaded into plastic bags and stored on a pallets Case closed See SR 64387 and Original WO 69607	NOV	La Costa South
64394	4/25/08	Commercial	na	NO		Discharge of construction debris - Improperly stored containers full of liquid. Construction Inspector to investigate.		WO 69616 : Construction inspector said site just had water line and sewer installed. OMWD was testing water, using 5 gallon buckets. Site cleaned up at 3:30pm on 4/25/08.	None	Lower Escondido Creek

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64417	5/5/08	Construction	brick/concrete wash water	NO		Discharge of concrete waste. - Building a brick wall, washing concrete waste into street/storm drain. Inspector to investigate.		WO 69734 : 5/5/08 site inspection met Wastewater who informed me that there was building waste going into the storm drain. Issued an NOV to comply by 5pm by dry cleaning sweeping the area clean. Took photos See Follow up work order 69735 Follow Up: 5/6/08 site inspection area cleaned and BMPs in place Case closed signed off NOV and took photos See SR 64417 and original WO 69734	Education, NOV	Cardiff
64421	5/5/08	Residential	trash	NO		Other discharge - Alleged dumping of trash in gutter/storm drain. Neighbor/complainant says he has video of her dumping trash. Inspector to investigate.		WO 69736 : 5/5/08 site inspection observed some water in front of 1956 LaHoud. Took photos and called complainant. Informed the complainant that there was not any discharge or trail leading from 1956 LaHoud. She said the wind had blown the toilet paper away. Observed some recycles in a vehicle in front of 1956 and in the front yard of 1956. Knocked on door --no answer no discharge observed from 1956 case closed	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64492	5/12/08	Construction	construction debris/concrete	NO		Discharge of construction debris - Large pile of materials from Encinitas overlay project is unprotected on North side of Encinitas blvd, between Quail Gardens Dr and old Albertsons shopping area. Construction inspector to investigate.		WO 70121 : Construction Inspector said that the contractor will be hauling away the stockpile tonight.	None	Encinitas
64494	5/12/08	Construction	dirt	NO		Other discharge - Re-constructing sidewalk in front of St. Germaine's. Large pile of dirt unprotected on side of road. Inspector to investigate.		WO 70175 : Drive by at site showed that pile of dirt had been cleaned up. No illegal discharge.	None	Encinitas
64495	5/13/08	Residential	water	NO		Discharge of water - Resident hosing off driveway with no containment. Inspector to investigate.		WO 70200 : 5/13/08 site inspection contacted resident informed her that the City's storm water ordinance does not allow washing down drive ways and gave her a door hanger and a business card.	Education	Encinitas
64499	5/13/08	Residential	wood chips/mulch	NO		Discharge of yard waste - Neighbor is transporting large amounts of wood chips/mulch from driveway and placing them all along Private Dr. off Bonita Dr. No protection from running off. Inspector to investigate.		WO 70201 : 5/14/08 site inspection took photos of wood chips in close proximity to the storm drain. Left card at door to call or email me See FU WO 70238 Follow Up: 5/19/08 site inspection area cleaned up case closed See SR 64499 and original WO 70201	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64512	5/14/08	Residential	soapy water	NO		Discharge of other wash water - Wastewater DIV is on Parkwood LN which is off of Eolus and there is a residential drain line dumping directly into the storm drain. soap suds in the pipe. Has been problem in past. No sewer in the area.		WO 70199 : 5/14/08 site inspection took photos of what appeared to be waste water. Left card at door requesting a call or email 6/6/08 called and left messge 8/7/08 left message to call me 8/14/08 sent NOV to comply by 8/28/08. NOV will count towards FY 08-09 totals. Received email from CWP inspector after testing downstream: Subject: Dry Weather Monitoring Results for LUC-9 As you suspected, there were some water quality exceedances at LUC-9 (the manhole located in Leucadia Village). Are you able to join me around 9:00 am?... I'll send you an appointment in another email. Even though I will not get the bacteria results back from the lab until tomorrow afternoon, I am still required to confirm the results for the exceedances in Ammonia, Nitrate, Ortho-Phosphate and MBAS within two business days. Inspection is ongoing into FY 08-09.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64517	5/15/08	Residential	water, sediment	NO		Discharge of water - Complainant's dog is getting sick from drinking water running off of 855. Wants water tested. Inspector to investigate.		WO 70220 : 5/15/08 site inspection took photos of drainage and spoke to complainant. He requested that the water be tested for pollutants. He was informed that the clean water program first attempts to stop the source of the water so that there is no need to test it. Left a card at the residence. 5/15/08 received call from respondent. He informed me that the drainage was coming from above and adjacent properties and his landscaping and back flushing of the Koi pond (monthly). I sent him an email with the BMP link for pools and fountains and requested that he drain his pond filter into a pervious surface. sent email to streets with photos regarding the erosion: Subject: Erosion along Sidonia I received a complaint about drainage on the south side of Sidonia east and west of Eugenie. I contacted the discharger and requested that he limit his runoff and review his irrigation. Anyway it appears that some erosion occurred on the south side of Sidonia. Can you please review this area and proceed as you desire	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64518	5/15/08	Construction	sand/concrete cutting	NO		Discharge of concrete cutting slurry or wash water. - Inspector noticed white substance going down street from construction of driveway at 841. Will investigate.		WO 70221 : 5/15/08 site inspection observed white concrete drainage from property. contacted workers to sweep street no wash down See FU WO 70230 Follow Up: 5/19/08 site inspection appeared that debris was swept up Case closed See SR 64518 and original WO 70221	Education	Encinitas
64606	5/21/08	Construction	water, sediment	YES	COTTON-WOOD CREEK	Discharge of water - Construction caused broken water pipe, discharge to Moonlight Beach. Construction inspector to investigate.		WO 74548 : Contractor cleaned up silt from broken waterline, A St, 2nd St, B Street to Moonlight Beach per Construction Inspector 6/22/08.	None	Encinitas
64608	5/22/08	Construction	broken gravel bags at storm drain inlets, lack of BMPs at stockpiles	NO		Discharge of construction debris - Lack of BMPs during Encinitas overlay project. Construction inspectors to investigate.		WO 74746 : Per construction inspector 6/20/08: Approx. 40 cloth basins along the 3 mile overlay project were bagged and filter cloth was placed at each opening so gravel would not fall inside. So if there was an occasional gravel bag broken, gravel was not getting inside. A small pile of dirt (less than 1 yd) was left overnight but was picked up the next night.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64609	5/21/08	Commercial	grease	NO		Discharge of food waste. - Grease discharge in alley behind restaurant. Inspector to investigate.		WO 70299 : 5/22/08 site inspection contacted owner of Filiberto's and took photos of kitty litter in street. Walked the length of the alley with the owner. I requested additional kitty litter on the SE and NE corners of 2nd and C Street. Called wastewater and requested that the vactor truck vacuum the corners of 2nd and C Street. Advised owner to contact a clean up or power washing contractor to clean area from the restaurant to 2nd and C. Kitty litter was in place within 2 hours (at the corner) and the alley was swept up. Called owner and thanked her for the clean up and that it was OK to sweep up all of the kitty litter especially the pile at the se corner of 2nd and C. See FU Work Order 70320 Follow Up: 5/27/08 site inspection area cleaned up case closed See SR 64609 and Original WO 70299	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64621	5/23/08	Residential	Wash water	NO		Discharge of other wash water - Washer/dryer moved into garage, no sewer hookup, wash water flows from underground pipe into driveway. See complaint from from Code Enforcement. Inspector to investigate.		WO 75490 : 5/23/08 site inspection took photos and left card received call back that the drain is for landscaping.	None	Cardiff
64622	5/22/08	Commercial	soapy wash water	NO		Discharge of building or sidewalk wash water - Washing parking lot/patio with no BMPs. Soapy water running into street. Inspector to investigate.		WO 75491 : 5/22/08 SITE INSPECTION TOOK PHOTOS AND CONTACTED BUSINESS OWNER TO DISCONTINUE DISCHARGE 5/23/08 issued citation 6/26/08 paid citation Paid □100 on 6/26/08. On 6/30/08, called owner and ok'd only □100 payment and required that no runoff occur while cleaning and to spend □on additional BMPs.	Citation, Education	Leucadia
64624	5/22/08	Commercial	Vacuum cleaner residue	NO		Other discharge - Inspector noticed litter and debris from vacuum cleaner dumped behind store while doing routine inspection next door.		WO 70322 : 5/22/08 site inspection observed waste and contacted store manager who confirmed that it was their trash and will clean it up asap See follow up WO 73492 Correction: See follow up WO 75492 Follow Up: 5/28/08 site inspection area cleaned See original WO 70322	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64626	5/22/08	Residential	white construction waste	NO		Discharge of construction debris - Home remodel- white construction materials being dumped into street. Inspector to investigate.		WO 70321 : 5/23/08 site inspection no discharge observed left card and took photos. 5/27/08 site inspection no discharge or storage violations case closed	None	La Costa South
64636	5/28/08	Commercial	unknown	NO		Other discharge - Call about a discharge at the Cardiff town center. No info on what or where discharge is. Inspector to investigate.		WO 75455 : 5/28/08 site inspection called PM and left message. He will be out of town until 6/2/08. I requested that he call me back ASAP as the discharge appears to be from washing down the patios and side walks . 6/2/08 Received call from property manager stating that he will speak to his cleaning crew.	None	Cardiff
64637	5/28/08	Residential	motor oil, kitty litter	NO		Discharge of oil. - Car leaking oil onto street, kitty litter used for cleanup is left on the ground. Inspector to investigate.		WO 70332 : 5/28/08 site inspection observed oil and kitty litter in street took photos and left card at door requesting a call or email regarding debris in street to be re-inspected by 6/4/08 See Follow up work orders 74749 and 74753 Follow Up: 6/5/08 site inspection took photos and issued NOV to comply by 6/12/08 See original WO 70332 and Follow up 74753	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64640	5/29/08	Residential	wash water/silt	NO		Discharge of other wash water - Washing machine is discharging next to complainant's driveway and causing some erosion. Inspector to investigate.		WO 70342 : 5/29/08 site inspection left card at door to call me regarding wash water discharge. Called complainant who informed me that the wash water only discharges when someone is home doing laundry in the late afternoon or early evening. Another inspection is scheduled for next week. See follow ups 75454, 75460, 75832. Follow Up: 8/15/08 site inspection drainage was restored to original pattern. Washer was correctly attached to the sewer See work orders 70342, 75454, 75460	None	Encinitas
64657	5/29/08	Municipal	soapy wash water	NO		Discharge of vehicle wash water - City vehicle washing at Public Works yard with no containment. Inspector to investigate.		WO 75390 : Contacted PW to discontinue discharge and contain all wash water in the future.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64658	5/29/08	Commercial	Sediment	NO		Other discharge - Prop Manager of HOA called to report runoff in parking lot coming from adjacent palm tree nursery. Also, sprinklers are causing fence to erode. Inspector to investigate.		WO 74613 : 6/5/08 site inspection contacted resident. We inspected the south west corner of his property and discussed solutions. He agreed to install some perimeter BMPs to prevent silt discharge 6/11-17/08 received complaint calls from John La Blanc requesting a meeting with the residents Follow Up: 6/26/08 received letter from Instant Jungle representative 8/6/08 Called complainant and respondent and received permission to forward the 6/26/08 letter to the complainant. requested a compliance inspection from the respondent. I called complainant and informed her that I had emailed a copy of the 6/26/08 letter but that I was still seeking a compliance inspection. The owner of the property is to call me back to set up an inspection 8/26/08 called property owner and set up compliance inspection for 9/3/08 11am see 2nd follow up	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64703	5/30/08	Municipal	Sudsy wash water	NO		Discharge of vehicle wash water - Fire Dept flushing sudsy water out of engines onto street with no containment. Inspector to investigate.		WO 75486 : 5/30/08 emailed Fire. he informed me that it was the B shift and that they would not be working until 6/7/08 6/11/08 received call from Fire stating that it was class A foam and the crew did not realize it was draining into the storm drain. They stopped their operation and tried to capture all the wash water. no inspection was preformed	None	Cardiff
64705	6/2/08	Residential	paint wash water	NO		Discharge of paint - Resident cleaning out paint supplies, no containment, wash water in street. Inspector to investigate.		WO 75488 : 6/2/08 site inspection contacted resident to clean the white substance in the street See follow up 75489 Follow Up: 6/9/08 site inspection discharge removed See original WO 75489	None	Leucadia
64718	6/5/08	Residential	water	NO		Discharge of water - Neighbors behind complainant cemented area between 2 houses, possibly w/o permit, causing excess water runoff into complainant's property/drain. Inspector to investigate.		WO 75449 : Site inspection- no discharge, left door hanger.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64724	6/6/08	Residential	dirty water	NO		Discharge of water - Resident complaining that neighbor is doing something illegal to make dirty water/unknown substance pool in front of her driveway. Site has been inspected before. Inspector to investigate.		WO 75385 : By RYGIEL, KRISTINE: 8/4/2008 9:53:27 AM Site Inspection. Contacted resident who gave me landlord s . Resident agreed to sweep area around storm drains to clear away dirt and silt. Complainant contacted me and requested to know my actions. I said I would return with a Spanish speaker to speak with landlord. Complainant would like a call back. See follow ups 75386 and 75450	None	Cardiff
64735	6/9/08	Residential	paint	NO		Discharge of paint - Possible illegal body/mechanical shop in house, spraying auto paint outside. Inspector to investigate.		WO 75384 : Site inspection. No discharge observed. left card to call me. Received call back stating that they do not discharge. Sent educational info via US Mail.	Education	Cardiff
64755	6/10/08	Residential	water, moss	NO		Discharge of water - Resident says there is a constant puddle of water in gutter between her house and house to the north. Causing moss buildup, mosquitoes. Unsure of source. Inspector to investigate.		WO 75388 : Site inspection, took photos of puddled water. Followed flow upstream, but did not find source. Appears that it is overirrigation. Forwarded to SDWD.	None	Leucadia
64759	6/10/08	Commercial	water	NO		Discharge of water - Runoff from underneath building. Water district has been to site. Can't find source. Possibly groundwater. Inspector to investigate.		WO 75389 : Site inspection appears to be ground water. Referred to SDWD.	None	Lux Canyon

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64760	6/10/08	Residential	Sewage/water	NO		Discharge of sewage - Sewage stagnant in yard, over-irrigation causes flooding, overflow. Unsure of who is responsible. Inspector to investigate.		WO 75487 : 6/11/08 site inspection with program manager. contacted residents in the area and returned complainant's call. We informed all that this is not a clean water issue as it is not draining off the property and to contact their HOA and or their landscaping company.	None	Cardiff
68768	6/12/08	Commercial	water	NO		Discharge of water - Hotel hosing off parking lot/sidewalk. No containment. Inspector to investigate.		WO 75383 : Site inspection. contacted owner regarding discharge and gave her construction education info.	Education	Leucadia
68773	6/12/08	Residential	unknown liquids	NO		Other discharge - People living in RV parked in front of residence. Dumping things into storm drain. Inspector to investigate.		WO 75381 : Site inspection- no discharge observed. Left business card with teenager at the residence.	None	Leucadia
68783	6/11/08	Residential	water	NO		Discharge of water - Discharge of pool water. Inspector to investigate whether water is dechlorinated or not.		WO 75387 : Site inspection. Contacted workers regarding discharge. Received call that pool was dechlorinated.	None	Lower Escondido Creek
68784	6/9/08	Construction	gravel bags, rocks	NO		Discharge of construction debris - Construction site BMPs are breaking. Inspector to investigate.		WO 75451 : 6/9/08 Site inspection took photos contacted construction inspector See follow up WO 75452 Follow Up: the construction company no longer exists. I called and informed complainant that our streets division will be contacted to clean street and that he needed to contact code enforcement to address vacant lot complaint. I sent email to Streets requesting street cleaning site inspection area cleaned See original WO 75451	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
68785	6/14/08	Commercial	wash water	NO		Discharge of water - Clean Water Staff observed restaurant hosing off front patio into street. No containment.		WO 74513 : Sent NOV letter with Project Clean Water BMPs	NOV, Education	Encinitas
68792	6/12/08	Construction	sediment	NO		Discharge of construction debris - Sediment from construction site is being carried onto road. site is located to the north of 2626 Lone Jack. Construction Inspector to investigate.		WO 74560 : Construction inspector talked to contractor. Sediment will be cleared from road.	None	Lower Escondido Creek
68795	6/17/08	Commercial	water	NO		Discharge of water - Drain at Santa fe just east of Lake by curb. possibly comes from a nursery on Lake- it has a pump on it- not sure if they are pumping chemicals or just water. Inspector to investigate.		WO 75459 : 6/25/08 no discharge observed	None	Encinitas
68798	6/17/08	Commercial	Sewage smell	NO		Discharge of sewage - Strong sewage smell coming from drain in front of Vons. Mgr had grease inspector checked, can't find a problem anywhere. Inspector to investigate.		WO 75456 : 6/18/08 site inspection no discharge observed contacted store manager and I was informed that a contractor was called to service their grease interceptor. I requested that the last invoices be faxed to me. received copies of invoices dated 6/17/08 and 6/18/08	None	Encinitas
68800	6/17/08	Commercial	water, dirt	NO		Discharge of water - Landscaping Co. hosing off driveway into street. Inspector to investigate.		WO 74627 : Instructed landscaper to stop hosing off driveway. Educated landscaper on the permitted ways to clean a driveway: dry cleaning method, hosing off and collecting wash water and discharge water. See follow up WO 75382. Follow Up: Site inspection. Contacted owner, she will contact her workers. See original WO 74627	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
68806	6/18/08	Commercial	red paint	NO		Discharge of paint - Neighbors discharged red paint into gutter- it ran down 11th St and puddled at 11th and Jacquelene. Inspector to investigate.		WO 74761 : 6/18/08 site inspection observed reddish substance in street took photos and contacted resident. The resident informed me that their roof had just been power washed. She asked me to call her father. Called and left message. The complainant was contacted and informed of the discharge material. She requested a call back. 6/24/08 received call back from power washer- set up meeting at site on 6/25/07. he called on 6/25/08 and stated that he is at the site and will sweep up what he can and will return on 7/15/08 to finish the house washing job and power wash the street and capturing all the wash water. 6/30/08 left message with complainant regarding city action and clean up schedule site inspection area appeared to be cleaned up See follow up WO 75528 See original WO 74761	None	Lower Escondido Creek

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
68829	6/20/08	Construction	dirt and hydraulic fluid in street	NO		Discharge of liquid fuels. - Dirt and hydraulic fluid in street in front of neighbor's house. inspector to investigate.		WO 74747 : 6/20/08 site inspection took photos issued NOV to comply by 6/24/08 See follow up WO 74748 Follow Up: 6/24/08 site inspection street clean and BMP in place See original WO 74747	Education, NOV	La Costa South
68867	6/25/08	Commercial	Grease	NO		Other discharge - Inspector noticed grease dumped in and spilled on trash dumpster and surrounding areas.		WO 74755 : 6/25/08 site inspection took photos and issued NOV See follow up WO 75493 Follow Up: 7/28/08 site inspection area cleaned See original WO 74755	Education, NOV	San Elijo Lagoon
68870	6/23/08	Commercial	water	NO		Discharge of water - Hosing off sidewalk w/o containment.		WO 74694 : NOV letter and Project Clean Water BMP sheet sent 6/23/08. Bird House called to discuss the letter on 6/24/08. Staff told her why she needs to contain the wash water and went over BMPs she can use.	NOV, Education	Leucadia
68873	6/25/08	Commercial	soapy water	NO		Discharge of building or sidewalk wash water - Washing off parking lot w/ failing BMPs. Inspector to investigate.		WO 74760 : 6/25/08 site inspection requested that they slow down washing so that they can collect all wash water.	None	Leucadia
68874	6/26/08	Municipal	gasoline	NO		Discharge of liquid fuels. - Gas spill from truck in City Hall parking lot.		WO 75374 : 6/26/08 Gas can tipped in truck bed, small puddle spilled into parking lot. Owner of vehicle could not be located. Inspectors cleaned up spill, left card on truck.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin

Commercial Total:	**91**
Residential Total:	**123**
Construction Total:	**46**
Municipal Total:	**20**
Total:	**280**

Summary of Complaint Referrals or Requests for Info **FY 2007 - 2008**

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
34725	7/9/07	Residential	polluted water run-off	Other discharge - A call came in from County resident. She had a notice of violation issued to her home for polluted water run-off from her horse ranch. She would like to discuss.	County of San Diego		
34798	7/11/07	Residential	over--irrigation runoff	Discharge of water Property manager called, saying HOA is discharging water onto east side of property at 227 n. el camino real in back parking lot. Alerted the HOA prop manager about over-irrigation. Referred case to OMWD.	OMWD		LCS
37151	7/25/07	Municipal	debris/construction waste in concrete channel	Other discharge - Clean Water Staff out sampling saw debris and waste in concrete channel that discharges into Lagoon mouth. south of Chesterfield, east side of 101. Inspector spoke to Streets, see attached email/pictures.	Streets		CBS
37268	9/4/07	Residential	pool discharge inquiry	Discharge of water - Resident called in with a pool discharge inquiry. Inspector gave him the info he wanted.		pool drainage info	CBS
41441	9/5/07	Residential	car washing discharge	Discharge of vehicle wash water - Resident is asking about city ordinance against residential car washing. Inspector to respond. Flair Encinitas HOA. Clean Water staff spoke to woman from HOA board in July, gave her brochures to hand out to all residents.		car washing regulations	LCS
47878	11/7/07	Commercial	question regarding pressure washing house	Discharge of building or sidewalk washwater Business owner wants to do power washing business in Encinitas, called to ask about our regulations. Sent him Power Washing BMP info.		Power washing	
47886	11/7/07	Commercial	na	Discharge of vehicle wash water Business owner called in to get mobile detailing BMP info. Inspector spoke to him and gave him necessary info.		power washing	

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
47984	11/20/07	Commercial	na	Other discharge - Woman from Latitude 33 called in regarding Encinitas Storm Water requirements and if there would be any updates occurring. Clean Water staff directed her to the BMP manuals and storm water ordinance online. Woman would like Inspector to caller her back.		Enc. storm water regulations/updates	
48115	11/28/07	Residential	pool water inquiry	Discharge of water - Resident called in to ask about discharging pool water. told her less than 1ppm chlorine, slowly empty into street/storm drain. or use on landscaping.		how to discharge pool water	CBS
48337	12/4/07	Municipal	sediment	Discharge of Silt or Sediment - Sediment from hill in front of City Hall eroded across driveway and onto Vulcan ave. Caused by rain event on 11/30.	Streets		ENC
48343	12/4/07	Commercial	na	Other discharge Code enforcement received a question at Honey's regarding a styrofoam ban at restaurants. Owner wants to know if it's going to happen in Encinitas. please call her back.		styrofoam ban at restaurants?	ENC
48351	12/6/07	Commercial	na	Other discharge - Employee saw our Auto and Restaurant BMP posters on our website. Wanted a hard copy of each. Mailed 12/7/07.		Auto and Restaurant BMP posters	RSF
48358	11/29/07	Residential	wash water	Discharge of vehicle wash water - resident was washing car in street. Inspector gave educational info.		car washing BMPs	ENC
48359	11/28/07	Residential	vegetation, wood, trash on sidewalk and in storm drain	Other discharge -	Code Enforcement		CBS
48405	5/3/07	Commercial	wash water	Discharge of vehicle wash water - power washing at 169 saxony	Prop Mgr		ENC
48417	11/13/07	Residential	sediment	Discharge of construction debris -	Code Enforcement		ENC

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
48532	1/2/08	Construction	water	Discharge of water Clean Water staff noticed water running off from construction at Leucadia and Vulcan construction. Pipe broke during work. Inspector to investigate.	SDWD		LCD
48535	1/2/08	Residential	pool/spa water	Discharge of water - Wastewater noticed pool discharge, stopped to talk with resident. No chlorine had been added for 2 weeks prior to draining. No violation.		pool discharge requirements	ENC
48566	1/9/07	Residential	dark liquid, possibly oil	Other discharge - Resident called about this before. neighbor discharging something that is puddling in front of her driveway at 1263 Loch Lommond. looks to have oil in it. Inspector to investigate. Also wants to know if car washing in street is legal b/c neighbors do		Car washing in street legal?	CBS
48627	1/17/08	Residential	Water	Discharge of water - Sprinklers may be broken. They are always running and causing puddles in alley. SDWD will contact complainant for more info.	SDWD		LCD
48702	1/29/08	Residential	pool water	Discharge of water - Resident called regarding proper pool drainage procedures. He was prompted to call when a passerby on a bike expressed concern over the discharge.		pool drainage procedures	ENC
48800	2/6/08	Residential	trash	Other discharge - Resident came to front engineering counter requesting info to hand out in her neighborhood regarding litter and why it shouldn't be left in the streets. Neighborhood is around Regal from Requeza to Santa Fe.		Litter information	ENC
50945	2/21/08	Residential	trash	Other discharge - Citizen called in concerned with the trash that blows into the Lagoon. not from one in particular area. advised him to call Streets Dept for clean up and told him about beach cleanup coming up on April 26. gave him clean water hotline number.		trash cleanup info	SEL

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
50993	2/25/08	Residential	na	Discharge of vehicle wash water - Complainant called in to find out what happened with 1251 Evergreen. Clean Water informed him that inspector went to site, couldn't see any illegal discharge, sent Spanish auto information in mail.		what happened with complaint at 1251 Evergreen?	CBS
51011	2/26/08	Residential	water	Discharge of water - Resident called in to report sinkhole on his property and large amounts of water on neighbor's property and Windsor Ave.	Eng, Public Works, SDWD		CBS
51015	2/27/08	Residential	water	Discharge of water - Over-irrigation concers from neighbor. Possibly another broken sprinkler. SDWD to investigate.	SDWD		LCD
53068	3/5/08	Municipal	wash water from stairs	Discharge of other washwater - Citizen concerned with water being wasted to wash stairs at Stonesteps. Also concerned with pollutants such as vomit and urine being washed to beach. why can't they sweep sand off stairs?	Parks and Rec		LCD
53069	3/5/08	Residential	water	Discharge of water - Resident called to report over-irrigation again. Inspector went to site previously and left doorhanger regarding broken sprinkler. Referred this call to SDWD.	SDWD		LCD
53074	3/5/08	Residential	leaves, trash, debris?	Other discharge - Private street drain in Olivenhain built to run street water into creek. Drain is not being maintained, and now it's clogged. Sent to Streets Dept for investigation.	Streets Dept.		LEC
53079	3/6/08	Residential	na	Discharge of water - Resident concerned with drinking water quality and the "toilet to tap" plan. Clean Water staff explained that we don't handle drinking water and referred her to SDWD or OMWD.	SDWD/OMWD		CBS

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
63107	3/11/08	Residential	na	Discharge of building or sidewalk washwater - Resident called in wanting power washing BMPs. Interested in washing the driveway at his apt/condo complex. Sent him Project Clean Water BMPs, City code section 20.08.040, and list of complying power washers.		Power washing BMPs/requirements	
63137	3/18/08	Residential	na	Discharge of water - President of Village Park Rec Club 2 called to verify pool discharge regulations. Told him to dechlorinate water and discharge to landscaped area.		pool discharge regulations	LCS
63164	3/24/08	Residential	wash water	Discharge of vehicle wash water - Resident of HOA emailed to ask for car washing requirements. Sent Think Blue info. See attached email.		Car washing requirements	
63216	3/31/08	Residential	sewage	Discharge of sewage - Call from LWD, residential septic tank overflows on occasion. Discharge confined to yard, not in street. Referred to County Dept of Health.	County DEH 858-495-5579		LCD
63236	4/2/08	Commercial	na	Discharge of food waste. - David called in to find out if there are requirements for mobile food carts. Sent him BMP info from Project Clean Water Toolbox.		Mobile food facility regulations	
63246	4/3/08	Residential	na	Discharge of vehicle wash water - HOA sent newsletter to residents saying that residential car washing is illegal in Encinitas. Resident calling to find out if that is true. Told her HOA may have special rules against it, but Encinitas does not.		car washing regulations	
63259	4/7/08	Residential	na	Discharge of vehicle wash water - President of HOA called to confirm car washing regulations because her residents are calling us to ask whether it is legal or not. she thinks it used to be illegal, but it has always been an exemption. Program Manager to respond.		Car washing regulations	LCS

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
64310	4/10/08	Residential	clogged storm drain	Other discharge - Resident says drain on her private street is clogged. Who is responsible for cleaning it? Wastewater to investigate.	Encinitas Wastewater		LEC
64322	4/10/08	Residential	brown/orange water	Discharge of water - Call about brown/orange water drying out skin. Referred to SDWD. Unknown if caller meant to call Encinitas. SDWD was unable to make contact with complainant.	SDWD		
64340	4/10/08	Residential	na	Other discharge - Question about renewing NOI for vacant lot next to his house. Inspector called him back and sent him State Water Resources Control Board info.		Rules for renewing NOI	CBS
64341	4/17/08	Residential	water	Discharge of water - Complaint about over-irrigation forwarded from Code Enforcement. No mention of pollutant runoff. Referred to SDWD.	SDWD		ENC
64366	4/22/08	Municipal	dead dog	Other discharge - Dead dog at beach near Campground/San Elijo Cliffs. Referred to Lifeguard Supervisor.	Lifeguards		CBS
64414	5/5/08	Residential	water	Discharge of water - Possible broken sprinkler or over-irrigation coming down hillside from Kildeer Ct onto Quail Hollow Dr. No erosion occurring. Referred to SDWD.	OMWD		LCD
64623	5/19/08	Residential	na	Discharge of water - Caller wanted to know regulations on pool draining because her neighbor was doing it.		Pool draining requirements	LCS
64625	5/22/08	Residential	bubbly water	Discharge of water - Large amount of water draining and puddling in front of 701-721 Vulcan Ave. Inspector to investigate.	SDWD		ENC
64702	5/31/08	Commercial	Wash water	Discharge of other washwater - Carlsbad resident called to report illegal dumping from carpet cleaner. Referred to Carlsbad Storm Water Program.	City of Carlsbad Storm Water		

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
64723	6/5/08	Municipal	NA- Clogged drain	Other discharge - Vector Control called in clogged drain at Bottlebrush and Willowspring. Referred to Wastewater for cleanout.	Wastewater		LCS
68836	6/23/08	Municipal	na- no safety bar on storm drain	Other discharge - Resident called to report missing safety bar on storm drain in front of her house. Referred to Streets Division.	Street Maintenance		LCS
68883	6/30/08	Residential	pool water	Discharge of water - Resident calling to ask about pool drainage requirements. Done.		Pool drainage requirements.	RSF

Commercial Total:	**8**
Residential Total:	**34**
Construction Total:	**1**
Municipal Total:	**6**
Total:	**49**

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton, City Manager
City of Encinitas

12-8-08
Date

EXECUTIVE SUMMARY

On March 24, 2008, the City of Encinitas finalized an updated Jurisdictional Urban Runoff Management Program (JURMP) as required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit). The updated JURMP serves as the City's foundational program management tool, capturing newly developed process, procedure, and implementation strategies for overall program effectiveness and compliance. Within the updated JURMP document, the City of Encinitas also details the City's comprehensive update of the Illicit Discharge Detection and Elimination (IDDE) and Dry Weather Field Screening and Analytical Monitoring (Dry Weather Monitoring) programs.

As required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit), on September 30, 2008 the City of Encinitas submitted its 2007-2008 JURMP Annual Report to the San Diego Regional Water Quality Control Board (RWQCB). Preceding this submittal, on September 10, 2008, the RWQCB adopted Addendum 2 to Order No. 2007-0001 (Addendum 2) titled:

AN ADDENDUM EXTENDING THE DUE DATE FOR THE ILLICIT DISCHARGE DETECTION AND ELIMINATION REPORTING REQUIREMENT AND CHANGING THE BIOASSESSMENT MONITORING PROGRAM FOR ORDER NO. R9-2007-0001

Addendum 2 effectively extended the deadline for submittal of the JURMP Annual Report Section 7.0 – Illicit Discharge Detection and Elimination (IDDE) to December 15 of each year, and established a separate submittal requirement. The following report culminates newly developed IDDE elements and supporting monitoring components to meet the standards established in Order No. 2007-0001 and the provisions of Addendum 2. This report covers IDDE program implementation for fiscal year 2007-2008, and Dry Weather Monitoring from May 1, 2008 – September 30, 2008, and details all reporting, response and enforcement actions related to illicit discharges and illicit connections to the City's MS4, Dry Weather Field Screening and Analytical Monitoring, follow-up investigations, sewer maintenance and spill prevention activities, and sewer spill response actions. Notably, the 2008 Dry Weather Monitoring program initiated a new trash assessment component to evaluate the presence of trash and debris in receiving waters and urban runoff at each dry weather location.

IDDE reporting and Dry Weather Monitoring results and analysis presented in the following report have been prepared in consideration of regulatory standards as well as a means to further advance programmatic elements in support of overall stormwater and water quality management in the City of Encinitas.

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A GIS Storm Water Complaints Service Request

B Hazardous Materials Incidents

C 2008 Dry Weather Monitoring Assessment Report

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D Administrative Citation Form

E JURMP Annual Report Requirements Checklist

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

The Municipal Permit requires the establishment of an Illicit Discharge Detection and Elimination (IDDE) Program to actively seek and eliminate illicit connections and discharges into the MS4.

This component describes the IDDE program developed by the City of Encinitas to seek and eliminate illicit connections and discharges. Eliminating illicit connections and discharges helps minimize potentially negative impacts of human activities on receiving water bodies. Illicit connections and illicit discharges can be defined as the following:

- An *illicit connection* is a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City; or a permitted connection which conveys Illegal Discharges.

- An *illicit discharge* is any discharge to the Storm Water Conveyance System that is not composed entirely of storm water or is not discharged in compliance with the City's Storm Water Management Ordinance (Municipal Code Chapter 20.08).

The City of Encinitas uses its municipal personnel to assist in actively seeking, identifying and reporting illicit connections and discharges during their daily activities. Detection, prevention, and elimination of illicit connections and discharges is achieved by

1. Operating a public hotline and responding to complaints;
2. Inspecting commercial, industrial and municipal facilities;
3. Conducting the Dry Weather Monitoring Program;
4. Maintaining municipal MS4 and sewer systems; and
5. Educating the local community.

The City investigates, inspects, and appropriately follows-up on every illicit connection and discharge that is reported or detected to identify the source(s) of the discharge. Voluntary compliance and escalating enforcement mechanisms are implemented to immediately eliminate the illicit connection and discharge once the source has been identified. Educational materials are distributed to help prevent future illicit connection and discharge occurrences. This program involves the City's Clean Water Program staff, two Sanitary Districts (Leucadia Wastewater District and the City of Encinitas Wastewater Division), the City's Fire Department, Public Works Department, the Engineering Department, and County Hazardous Incident Response Team, (HIRT) as well as the public.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

7.2.1 METHODS OF REPORTING

To support the identification and notification of illicit discharges, the City actively promotes public and City staff reporting of all suspected illicit connections and discharges. Multiple opportunities are provided to facilitate public reporting of illicit discharges and connections to the City's Clean Water Program staff, and reporting of non-storm water discharges can be received from the public, City staff, or outside agencies. Clean Water Program staff maintains a 24 hour, bilingual Clean Water Hotline for reporting storm water discharges at (760) 633-2787. Additionally, the Public Works Wastewater Collection Division accepts calls at (760) 753-5018 for sewage related discharges. The public can also notify any City employee (the City Lifeguards are often notified of spills), who will promptly notify the appropriate staff in the Clean Water Program or Public Works Department. In cases of incidents occurring after working hours, the City provides a hotline number (760) 633-2922 where the public can call and report emergency cases of illicit discharges. Alternatively, a regional public reporting hotline is provided by the County of San Diego at (888) 846-0800. The County hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides a voice mail message for 24-hour public access in both English and Spanish.

7.2.2 STORM WATER COMPLAINT RECEIPT PROCEDURES

All calls to the City's Clean Water Hotline are documented and investigated in a timely manner. The City of Encinitas has configured its enterprise Geographic Information System (GIS) to document and track all complaints as well as complaint driven storm water inspections in a spatially-based program called Cityworks. This system supports the entry of service requests for educational inquiries, citizen complaints, inspection results, ad-hoc and cyclical work orders, and report generation. All of the information stored in the system is accessible to any City user through the City's standard desktop GIS application – CityGIS. Refer to Appendix A for a copy of the "Storm Water Complaints Service Request Form." Clean Water Program staff responds immediately, investigates each case, and takes appropriate action to educate the responsible party and/or enforce the City's Storm Water Management Ordinance when applicable. When a warning, Administrative Citation, or Notice of Violation is issued, this information is added to the case file created in Cityworks. The City's GIS system is a useful tool for tracking all complaints, follow-ups, enforcement, and education efforts, and to spatially locate potential problem areas throughout the City.

For each complaint investigation, Clean Water staff is prepared to run field screening analysis, sample for laboratory analysis, and document the discharge for enforcement proceedings as deemed necessary. If immediate clean up actions are required, the City's Public Works Department maintenance crews are equipped with absorbent materials, vacuum trucks, and other equipment to contain large volumes of illegal discharge and/or cleanup of large spills. If the violation or accident involves hazardous materials, the Fire Department is informed and responds immediately. When necessary, the Fire Department calls other responsible agencies

or contractors for cleanup and handling of hazardous materials, including the County of San Diego Department of Environmental Health (DEH).

During the defined reporting period of this report, the Clean Water Program received a total of 329 complaints from City staff and the general public. Detailed summaries of all complaint cases that were reported and closed (illegal discharge abated) in FY 2007-08 are included in Appendix H-1 of the City of Encinitas JURMP Annual Report FY 2007-08. Clean Water Program staff documented receipt of 159 complaints via the Clean Water Hotline, and 170 complaints were reported by City staff. Figure 7-1 shows the percentage of complaints that were reported via the hotline and by City staff in FY 2007-08.

Figure 7-1 Reporting of Complaints FY 2007-08

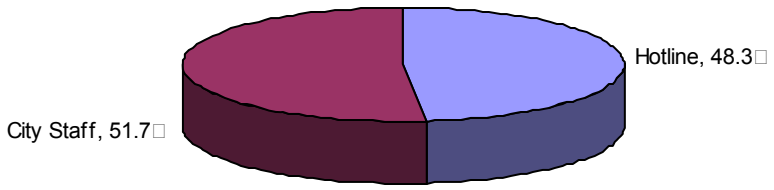

7.2.3 CATEGORIES OF COMPLAINTS

In FY 2007-08, the majority of complaints reported to the Clean Water Hotline were primarily related to residential and commercial activities. In total, 47.7% of the hotline complaints reported were related to residential activities, 30.1% were related to commercial activities, 14.3% were related to construction activites, and 7.9% were related to municipal activities. Figure 7-2 shows the percentage of complaints by category.

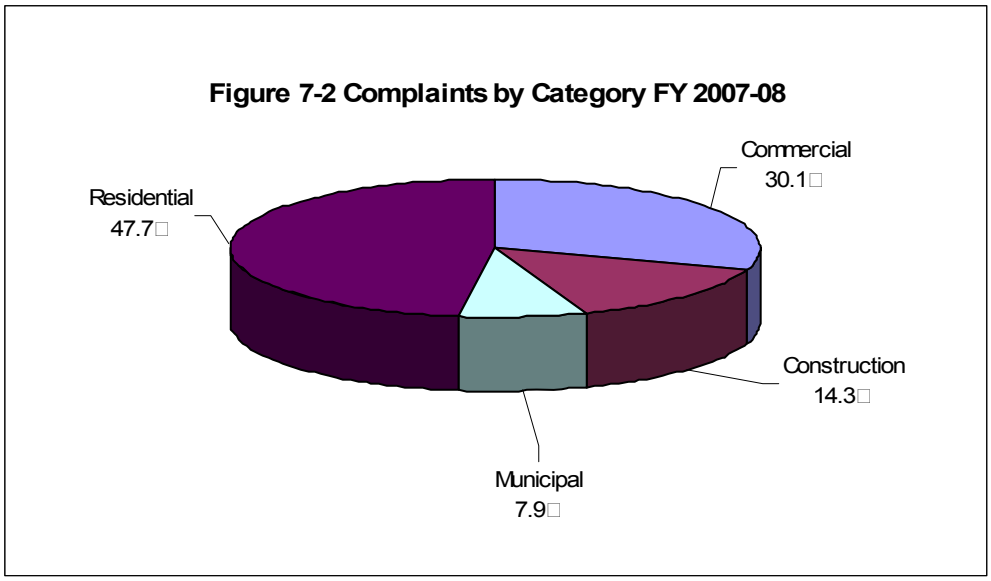

Figure 7-3 illustrates the complaints distribution over the past seven reporting periods. Although there were more complaints this fiscal year than in any other year, the complaint distribution remains consistent across categories with residential and commercial sectors receiving the most complaints.

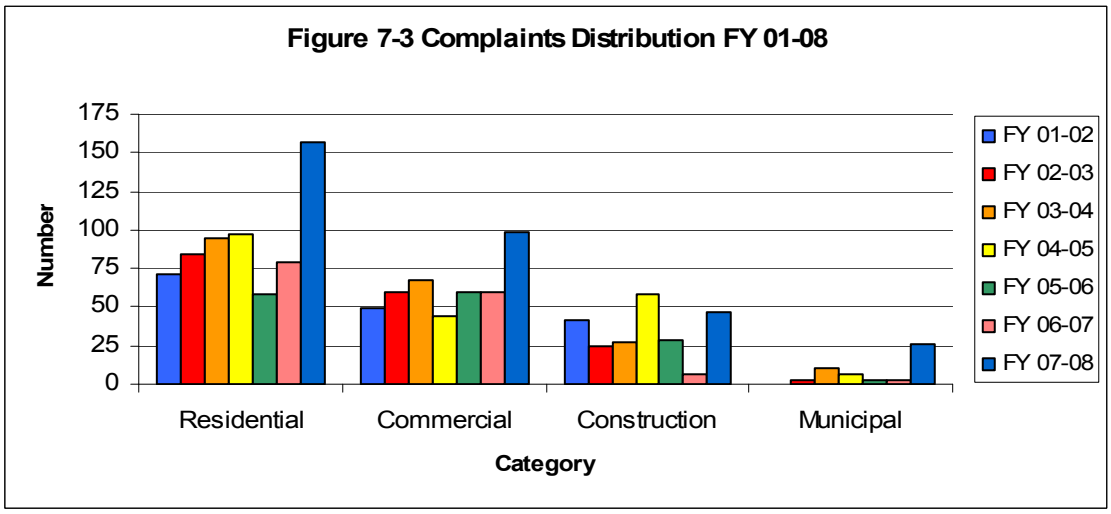

Clean Water Program staff provides education and training to City employees and City contractors on applicable storm water regulations to assure that proper storm water management practices are applied in all areas of the City. The City of Encinitas tracks all complaint calls received on the Clean Water Hotline and records whether each call is from the public or the from City staff. Figure 7-4 below shows the breakdown of reported complaints by the public and City staff for each category.

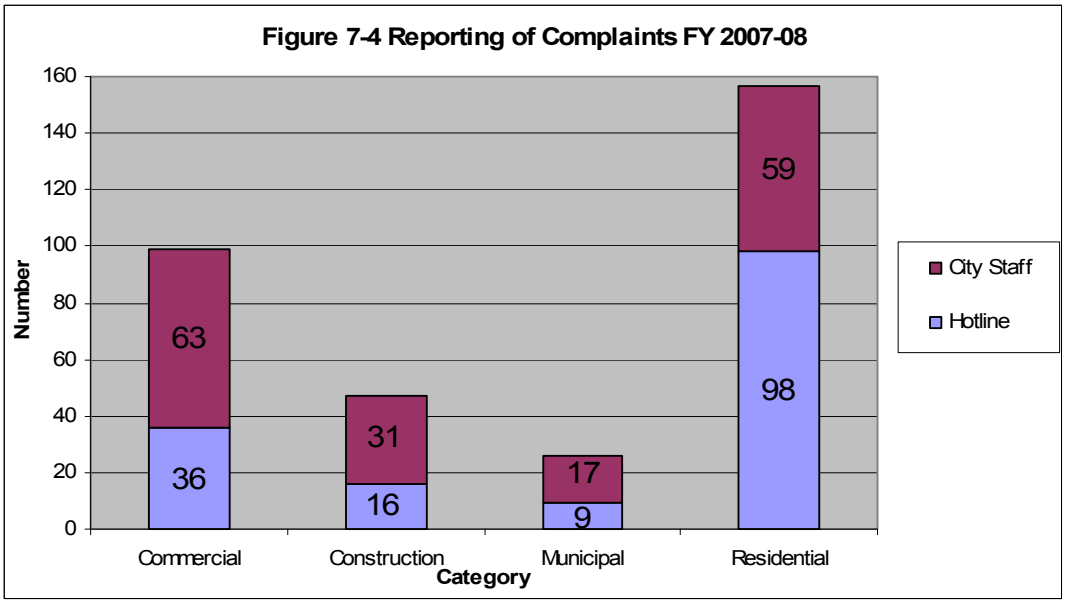

7.2.4 DISTRIBUTION OF COMPLAINTS BY SUB-BASIN

The City of Encinitas is broken up into seven distinct drainage sub-basins which include the Cardiff sub-basin (CBS), Encinitas sub-basin (ENC), Escondido sub-basin (ESC), La Costa South sub-basin (LCS), Leucadia sub-basin (LUC), Lux Canyon sub-basin (LUX) and Rancho Santa Fe sub-basin (RSF). Detailed maps of each of these sub-basins can be found in the 2008 Dry Weather Monitoring Assessment Report in Appendix C. A full map of the entire city that outlines each of the sub-basins can be found in Appendix C-1. Of the City's seven sub-basins, the Encinitas Sub-basin had the largest number of reported complaints followed by the Cardiff sub-basin and the Leucadia sub-basin. In Figure 7-6 below the numbers of complaints are compared to water quality exceedances in the sub-basins. This correlation helps the City prioritize inspection activities in specific sub-basins.

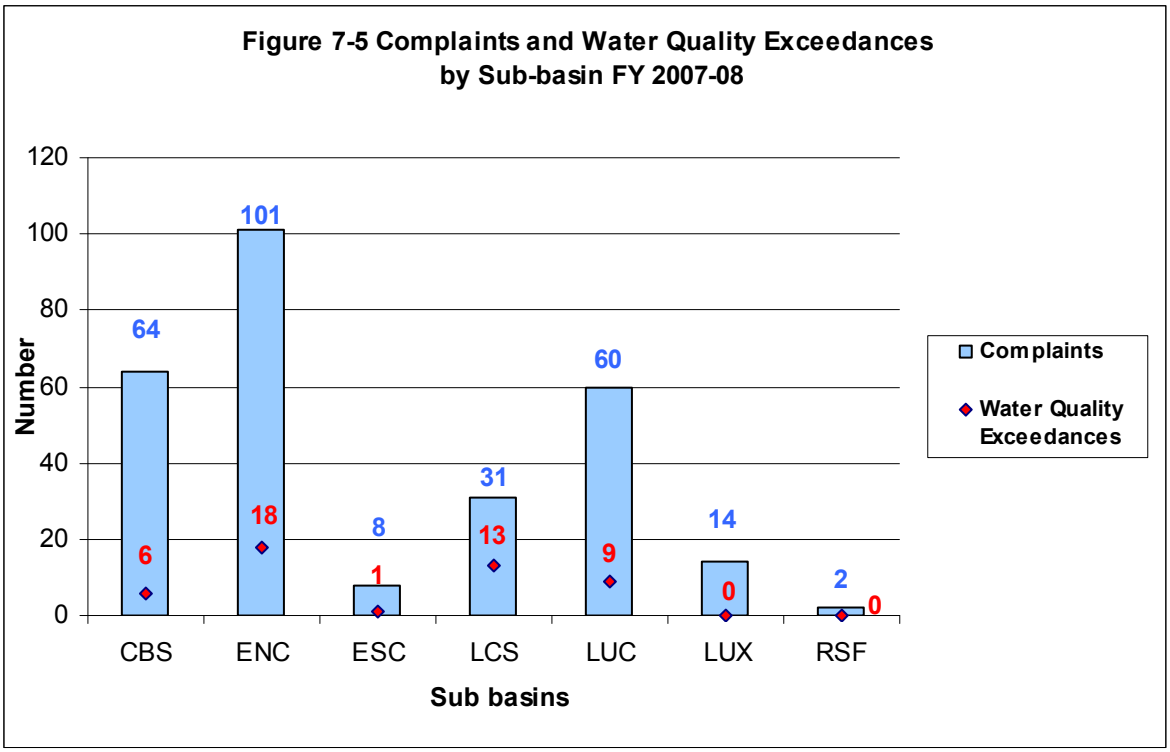

7.2.5 HOTLINE UTILIZATION

Through the ongoing education efforts of the Clean Water Program staff, both the general public and the City of Encinitas staff have become increasingly aware of the effects of illicit discharges on the environment, as well as what to look out for in identifying potential illicit discharges and connections. Methods to report storm water issues were continually publicized throughout the FY 2007-08 reporting period. The hotline number can be found on inspection forms, the City's website, and was also publicized in various newsletters, storm water brochures, the City's Environmental Services Guide, on product giveaways, and at all Clean Water Program presentations. In FY 2007-08, 329 complaints were filed with the Clean Water Program. A summary of the types of calls, follow-ups, and enforcement procedures related to the hotline are presented in Appendix H-1 of the City of Encinitas JURMP Annual Report FY 2007-08. As illustrated in Figure 7-7 below, both City staff and the public continue to actively participate in the reporting of suspected illegal discharges and illicit connections.

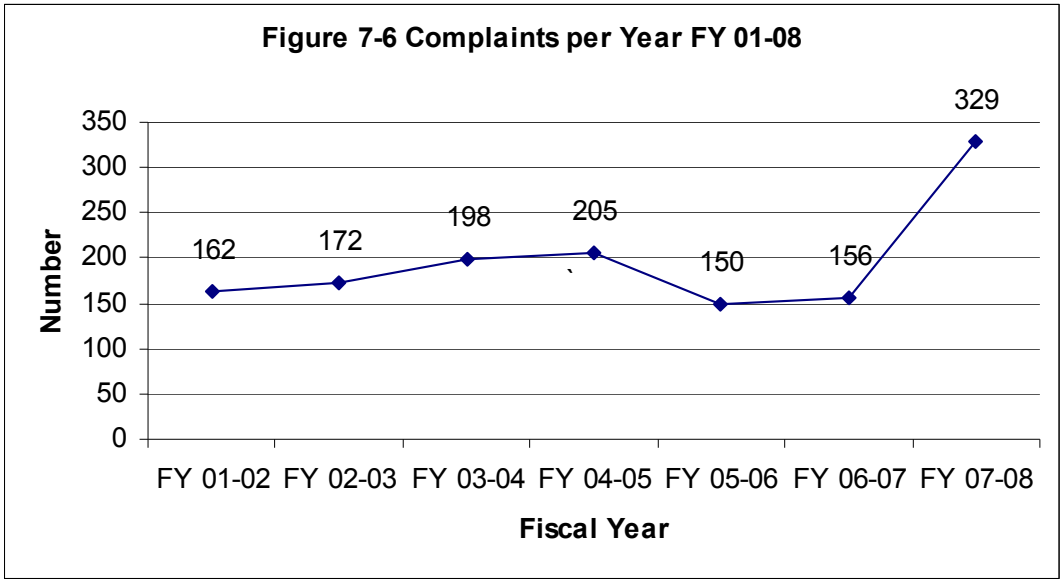

7.3 SPILL PREVENTION, RESPONSE, AND REPORTING

The City implements spill prevention, spill response, and reporting mechanisms to prevent, respond to, contain, and clean up all sewage and other spills that discharge to its MS4 from any source.

7.3.1 SEWAGE SPILL PREVENTION

The spill prevention measures outlined below were implemented in FY 2007-08 to prevent overflows, spills, and infiltration of seepage from sanitary sewer systems to the MS4.

Preventive Maintenance Activities

The City of Encinitas' sewage collection system consists of over 120 miles of pipeline. The City actively maintains its sewer collection system and MS4 by ensuring that the following measures are implemented:

- Sanitary sewer inspections
- MS4 inspections
- Thorough, routine preventive maintenance of both systems (annual cleaning of entire sanitary sewer system, and "high priority" sewer lines cleaned at least every three months)
- Dry Weather Monitoring
- Data tracking and management of all complaints in Cityworks GIS
- Video inspection of underground systems (televise sewer mains to visually detect any potential problems)
- Replacement and upgrade of sewer pipes as needed
- GIS mapping of sewer and MS4 intersects
- Alarm system at sewage pump stations

Sewer System Management Plan (SSMP)

An effort has been underway since November 2, 2006 to bring the City's sewer regulations into compliance with new State Water Resources Control Board (SWRCB) Order No. 2006-003-DWQ. This new permit describes the applicable set of regulations for sewer system maintenance and reporting with respect to Sanitary Sewer Overflows (SSOs). These regulations are met mainly through the development and implementation of a Sewer System Management Plan (SSMP). Many of the program requirements of the SSMP are currently being met or exceeded by the City, and the City will implement the SSMP by May 1, 2009, as required by SWRCB Order No. 2006-003-DWQ.

The City will continue to maintain a Sanitary Sewer Overflow Prevention Plan (SSOPP), and a Capacity, Management, Operations, and Maintenance (CMOM) program, which will be included as sections within the SSMP. The SSOPP has been designed to prevent or minimize the potential for SSOs. The CMOM describes how the City maintains and operates its sanitary sewer system, as follows:

- Manage, operate, and maintain at all times the parts of the collection system that the City owns or over which it has operational control
- Provide adequate capacity using citywide sewage flow monitoring programs to convey base flows and peak flows
- Take all feasible steps to stop and mitigate the impact of SSOs
- Provide notification to parties with a reasonable potential to exposure to pollutants associated with the overflow event through the County of San Diego
- Keep records of all maintenance activities

The City of Encinitas currently has a comprehensive Fats, Oil, and Grease (FOG) program. The primary purpose of this program is to reduce the amount of FOG introduced into the sanitary sewer system by consumers and businesses. The City's Municipal Code states that all Food Service Establishments (FSE) which discharge fats, greases, and waxes to the sewer system are required to install a grease pre-treatment device on the sewer lateral, which connects their facility to the City's wastewater collection system. The City is currently evaluating options to enhance existing FOG program elements which will include implementing a multi-phased process of information gathering, education, and targeted code enforcement.

The Municipal Permit also requires all sewage discharges caused by blockages or other problems within a privately owned lateral or failing septic systems to be dealt with appropriately. If a spill from a private sewer lateral is not being contained and the responsible party fails to take action to repair the lateral, the City can take necessary action to contain the spill, make necessary repairs to the lateral, and/or contact a contractor for appropriate maintenance and bill the responsible party. The City's Clean Water Program staff is tasked with handling all illicit connection and discharge citations. If there are sewage spills due to failing septic systems at private residences, the County Department of Environmental Health (DEH) is responsible for responding to these complaints.

7.3.2 SEWAGE SPILL RESPONSE

Spills from the sanitary sewer entering the MS4 may be discovered during routine maintenance activities or observed and reported to the City by the public. All Municipal personnel field crews call the Clean Water Hotline or report sewage spills to the Public Works Wastewater Collection Division. When spills occur, the appropriate agencies (as described in Table 7-1 below) are informed of all sewer related spills and are responsible for control, containment, and clean up of all reported discharges.

Table 7-1 Responsible Agency for Sewage Spills

Source	Responsible Agency
Leaks and spills from publicly owned collection system	City of Encinitas
Private residence (failing septic systems)	County DEH
Any spill reaching MS4	City of Encinitas

Both the City's Public Works Wastewater Collection Division and the City's Clean Water Program accept complaint calls for commercial lateral discharges. For any incidents that may occur after hours, callers are directed to contact the City's answering service at (760) 633-2922. Based on the urgency, City crews are dispatched immediately, work orders are prepared, and each case is tracked in the City's GIS based system. The City also provides a 24- hour, on-call City staff member with the ability to call additional resources or other appropriate agencies if necessary.

The City of Encinitas' Wastewater Collection Division has implemented the following remedial actions to the extent that they are applicable to any discharges:

- Interception and rerouting of sewage flows around the sewage line failure
- Vacuum truck recovery of SSOs and wash down water
- Cleanup of debris of sewage origin at the overflow site
- Inform the responsible party to cease and desist, clean and abate, and repair the problem to ensure that the incident will not occur again.

7.3.3 SEWAGE SPILL REPORTING

The City reports all SSOs online using the California Integrated Water Quality Management System (CIWQS) database, as required by SWRCB Order No. 2006-003-DWQ. Initial reports are sent to the CIWQS within three days, and final, certified reports are sent within 15 days. The City will report all SSOs that are at least 1,000 gallons and SSOs that cause a beach closure (regardless of volume) to the CIWQS within 2 hours. All illicit connections and discharges will be reported annually in the City of Encinitas JURMP Annual Report, which will include specific illicit connections and discharges and their resolution, inspections conducted, and enforcement

actions taken. If a Notice of Violation is issued by the Clean Water Program, copies of all NOVs will be sent to the Regional Board.

As required in the Municipal Permit, the City of Encinitas will provide oral notification to the Regional Water Quality Control Board (RWQCB) of all Illicit connections and discharges within its jurisdiction that are determined to pose a threat to human or environmental health within 24 hours of the discovery of non-compliance. Oral notification will be followed up by a written report to the RWQCB within five days of the incidence of non-compliance.

All sewage spills of at least 1,000 gallons, or any spills to surface waters are required to be reported to the RWQCB within 24 hours by fax or telephone. Surface waters include rivers, streams, ephemeral streams, lagoons, the ocean, dry arroyos, and storm drains. In all instances, the City must fax a Sanitary Sewer Overflow (SSO) Report Form to the RWQCB within five days of the spill. The completed SSO form must also be faxed to the County DEH. A quarterly report of all sewage spills, including those not meeting the criteria stated above, will also be submitted electronically to the RWQCB, as required.

In FY 2007-08, the City complied with the sewage spill reporting requirements outlined in Table 7-2.

Table 7-2 Summary of Sewage Spill Reporting Requirements

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
Any	Spills to waters of the State	SWRCB online RWQCB DEH	Immediate, but no later than 2 hours after becoming aware of the discharge
Any	Municipal Permit non-compliance threatening human or environmental health	RWQCB SWCRB	24 hours verbal and 5 days written 3 days (initial)
Any	Mitigated spills (absorbed, cleaned up, or captured)	DEH	24 hours
Any	Unmitigated spills to areas with potential public contact	DEH	Immediate, but no more than 2 hours after becoming aware of the discharge
Any	Unmitigated spills to areas without potential public contact	DEH	24 hours

Table 7-2 Summary of Sewage Spill Reporting Requirements

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
>1000 gallons	Anywhere	Office of Emergency Services (OES) RWQCB DEH SWRCB online	2 hours 2 hours 2 hours 3 days (initial)

Table 7-3 below contains a summary of all SSOs in Encinitas in FY 2007-08.

Table 7-3 Sanitary Sewer Overflows, FY 2007-08

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
7/02/2007	City of Encinitas Wastewater Division	3049 Camino Del Rancho	330	100	230	Private sewer lateral pipe fell into the main sewer causing the blockage	SWRCB Online DEH

Table 7-3 Sanitary Sewer Overflows, FY 2007-08

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
2/10/2007	City of Encinitas Wastewater Division	989 Sidonia	345	100	245	A piece of 8″ plastic sewer pipe was found causing the blockage. It is suspected that the plastic pipe came from a nearby constructio n project.	SWRCB Online DEH

7.3.4 OTHER SPILL PREVENTION AND MITIGATION PROCEDURES

The City coordinates spill prevention, containment, and response activities throughout all appropriate departments, programs, and agencies so that maximum water quality protection is available at all times.

Spills are prevented and mitigated through the implementation and enforcement of minimum BMPs. These BMPs are described in the City of Encinitas 2008 JURMP update in the Development Planning, Municipal, Construction, Industrial and Commercial, and Residential components located in sections 4, 5, 6, 7, and 8 and in the City's BMP Manual Part I and II.

In FY 2007-08, the City of Encinitas Fire Department responded to a total of 43 hazardous materials incidents. These incidents included gasoline spills, gas leaks, oil spills, and chemical spills. The Fire Department is equipped with containment booms, absorbent material, shovels, storm drain covers, and disposal equipment. When hazardous material incidents occur, the City's Fire Department is typically the first responder. They are equipped to capture and contain most discharges on site and will notify the Public Works Department and the Clean Water Program for additional help when it is warranted. The Public Works Department is available to respond with additional sandbags, absorbent materials, and increased manpower. Clean Water Program staff is notified to document the incident and to issue any enforcement

actions that may be necessary. If warranted, storm drain samples and pictures are taken for potential court action and cost recovery. The City of Encinitas also has a contract with the County of San Diego Hazardous Incident Response Team (HIRT) who will respond when the chemical is unknown or is determined to be hazardous. Figure 7-8 below illustrates the distribution of hazardous materials incidents for FY 2007-08. All hazardous materials incidents that occurred in the City of Encinitas were documented by the Fire Department and are included in Appendix B.

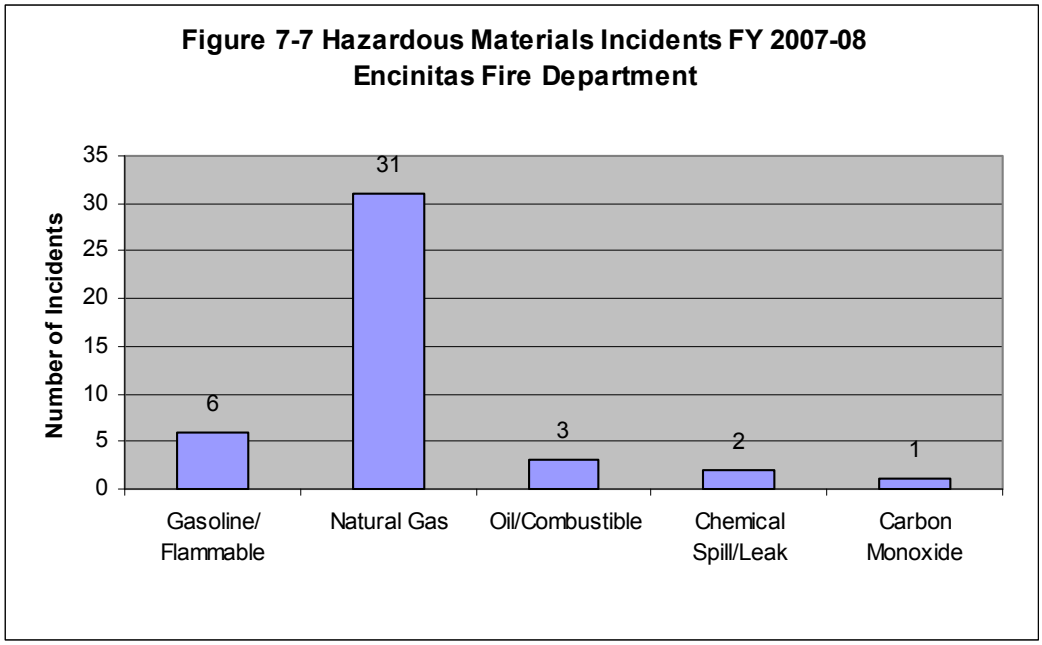

7.4 URBAN RUNOFF MONITORING

The Urban Runoff Monitoring Program incorporates MS4 outfall monitoring, source identification monitoring, and the Dry Weather Monitoring Program.

7.4.1 MS4 OUTFALL MONITORING

Regional guidance for the MS4 outfall monitoring program was developed by the Copermittees, which characterizes pollutant discharges from MS4 outfalls in each watershed during wet and dry weather. The MS4 Outfall Monitoring program includes the following:

- Rationale and criteria for selection of outfalls
- Type of samples collected, including pollutants causing or contributing to violations of water quality standards within the watershed

The MS4 Outfall Monitoring Program is a new regional Urban Runoff Monitoring requirement as outlined in the Receiving Waters and Urban Runoff Monitoring and Reporting Program (2007-0001). In FY 2007-08, the Copermittees developed and submitted a final MS4 Outfall Monitoring Program workplan to the RWQCB for review. In FY 2007-08, the County of San

Diego conducted sampling in each watershed to meet permit compliance. The City of Encinitas will continue MS4 outfall monitoring within the City's jurisdiction during the FY 2008-09 monitoring year.

7.4.2 SOURCE IDENTIFICATION MONITORING

Regional guidance for the source identification monitoring program was developed by the Copermittees, which aims to identify sources of discharges of pollutants causing the priority water quality problems within each watershed. This program includes the following:

- Focused monitoring which moves upstream into each watershed as necessary to identify sources.
- Use of source inventories and "Threat to Water Quality" assessment to guide monitoring efforts

The Source Identification Monitoring Program is a new regional Urban Runoff Monitoring requirement as outlined in the Receiving Waters and Urban Runoff Monitoring and Reporting Program (2007-0001). In FY 2007-08, the Copermittees developed and submitted a final Source Identification Monitoring Program workplan to the RWQCB for review. The Municipal Permit requires a monitoring program to be implemented within each watershed and to begin no later than the 2008-2009 monitoring year. The City of Encinitas will commence monitoring in the Carlsbad Watershed during the FY 2008-09 monitoring year.

7.4.3 DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING

The Dry Weather Field Screening and Analytical Monitoring Program is a crucial part of the City's Urban Runoff Monitoring Program (Dry Weather Monitoring Program). The City of Encinitas has been conducting dry weather monitoring since 1996. The City's previously established Dry Weather Monitoring Program included selecting city-wide monitoring stations, creating a map of the MS4 in GIS, developing dry weather monitoring program procedures, conducting field sampling, testing and follow-up investigations.

The updated requirements of the Dry Weather Monitoring Program component as outlined in the Municipal Permit (Order No. 2007-0001) are very similar to those in the previous Municipal Permit (Order No. 2001-01). However, the new Municipal Permit includes the following additional requirements: a trash assessment component and follow-up sampling conducted within two business days of receiving results which exceed identified action levels. The City of Encinitas 2008 Dry Weather Monitoring Assessment Report can be found in Appendix C.

There are four main components to the City's existing Dry Weather Monitoring Program:

- Field observations (site description and qualitative observations)
- Field screening monitoring (testing of sample while at site and flow estimation)
- Analytical monitoring (performing further tests of sample later at a laboratory)
- Follow-up and investigations of all field screening and analytical exceedances

As described in the City of Encinitas JURMP Update, dated March 24, 2008, the City revised its Dry Weather Monitoring Program in FY 2007-08 to meet all of the requirements that were established in the Municipal Permit (Order No. 2007-0001). Field screening and analytical lab results from the 2008 Dry Weather Monitoring Assessment Program are included in Appendix C of this section.

7.4.3.1 MS4 MAP

The City has developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations, and drainage basins. When field staff finds inaccuracies in the map during dry weather monitoring, the inaccuracies are reported to the City's GIS Department so that updates can be made. Making updates to the City's MS4 map is assessed at least annually. The current map of the City of Encinitas MS4 and 2008 Dry Weather Monitoring Stations is located in the 2008 Dry Weather Monitoring Assessment Report in Appendix C-1.

7.4.3.2 DRY WEATHER ANALYTICAL MONITORING STATIONS

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to establish long-term trend analysis and select additional sites to facilitate a better understanding of the water quality in Encinitas. The City removed and added new dry weather monitoring locations based on adequate coverage of the MS4, characterization of flow, land use, previous water quality data, areas of historic illegal discharges, and environmentally sensitive areas. The Dry Weather Monitoring Program for 2008 included 39 primary sites and 16 alternate sites distributed across seven sub-basins.

7.4.3.3 DRY WEATHER ANALYTICAL MONITORING PROCEDURES

The City's Dry Weather Monitoring Program utilizes methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittee Dry Weather Monitoring Workgroup. The elements of the City's dry weather program include established sampling locations, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Qualitative observations were made at all sample locations. Each location had a unique field data sheet noting observations such as color, clarity, odor, and biological characteristics. In 2008, all monitoring sites were field screened and 28% of those locations (11 of 39 sites) were also analyzed in the lab. Meters were used in the field to determine pH, conductivity, temperature, and turbidity. Ammonia, nitrate, ortho-phosphate, and MBAS analyses were performed with CHEMetrics field kits. Oil and grease, Diazinon, Chlorpyrifos, dissolved Cadmium, dissolved Copper, dissolved Lead, dissolved Zinc, total coliform, fecal coliform, and enterococcus were all analyzed in the laboratory.

7.4.3.4 DRY WEATHER DATA ANALYSIS

Detailed analyses of the 2008 dry weather data are included in the Dry Weather Monitoring Assessment Report, May 1, 2008 – September 30, 2008 in Appendix C.

7.5 FOLLOW-UP AND ENFORCEMENT

7.5.1 INVESTIGATIONS/INSPECTIONS AND FOLLOW-UP

All potential illicit connections and discharges are investigated and eliminated in a timely manner after the City is notified of their occurrence. Illicit connections and discharges are mainly identified through public complaints; referrals; routine inspections of municipal, industrial, and commercial business facilities; and the Dry Weather Monitoring Program.

If an illicit connection and discharge is discovered as a result of the Dry Weather Monitoring Program, investigation are required to be conducted within two business days of receiving dry weather field screening and/or analytical laboratory data. All sampling results are compared to the regionally developed dry weather monitoring numeric action levels to determine if follow-up investigations/inspections are warranted. The numeric action levels (determined by the Regional Copermittee's Dry Weather Monitoring Workgroup), is the primary approach for interpreting pH, orthophosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliform, fecal coliform, and enterococcus analytical results. The California Toxics Rule (CTR) is used to establish an action level for dissolved trace metals, including Cadmium, Copper, Lead, and Zinc. In general, best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the Clean Water Program field staff due to their familiarity with the City's Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters.

There were three main illicit connection and discharge investigations in response to Dry Weather Monitoring in 2008. These investigations took place in the La Costa South sub-basin, Leucadia sub-basin and the Encinitas sub-basin. A more detailed discussion including sample locations, parameters exceeded, follow-up sampling and investigation results can be found in the 2008 Dry Weather Monitoring Assessment report (Appendix C) in Sections 4.3, 4.4 and 4.5.

A complete table with all illicit connection and discharge complaints reported to the Clean Water Program which includes investigation dates, sources of discharge, investigation actions, follow-ups, and enforcement activities can be found in the City of Encinitas FY 2007-08 JURMP Annual Report, Appendix H-1.

7.5.2 ELIMINATION OF ILLICIT DISCHARGES AND CONNECTIONS

The City utilizes the following primary methods for the identification of illicit discharges and connections: complaint responses via the Clean Water Hotline, City staff complaints and observations, and detection and elimination through monitoring (primarily dry weather).

Action is taken to eliminate all detected illicit discharges and connections and their sources as soon as possible after detection. Illicit discharges and connections that pose a serious threat to public health or the environment are eliminated immediately. Illicit discharges and connections that are not deemed to pose serious threats to public health or the environment are eliminated through an escalating series of enforcement actions.

Remove Illicit Connections

The City ensures that the violator takes appropriate action to disconnect, block, stop, or divert drainage facilities and pipe connections that are determined to discharge pollutants to the MS4. Appropriate actions may include the following:

- Plug sinks and drains that are discharging illicit materials to the storm drain system
- Disconnect all drainage pipes found to discharge illicit pollutants to the storm drain system
- Dispose of illicit materials via the sanitary sewer or other appropriate disposal or storage methods
- Divert illicit discharges to the sanitary sewer or treat on-site

In some cases, special permits from the local wastewater authority are needed before material can be discharged to the sanitary sewer system.

Discontinue Illicit Discharges

As applicable to each individual circumstance, the City ensures that responsible parties implement the procedures outlined below to eliminate discharges that transport pollutant materials to the MS4.

- Eliminate the source of the discharge
- Remove pollutant materials from the site
- Prevent pollutant materials from coming in contact with the discharge
- Contain potential illicit discharges on site for treatment or proper disposal

In FY 2007-08, the Clean Water Program received a total of 329 complaints. A total of 49 complaints involved issues that were referred to other departments/agencies or requests for information only (requests related to the City's storm water regulations such as car washing and power washing requirements or general questions about the City's Storm Water Ordinance). In 2007-08, there were 280 complaints investigated. 114 complaints were determined to be unsubstantiated. The remaining 166 complaints resulted in enforcement actions including; 75 education actions, 67 Notice of Violations, 22 Administrative Citations, and 2 cost recoveries for illegal discharges. Clean Water Program staff responded to each complaint in a timely manner. In total there were 166 illicit discharges and connections eliminated in FY 2007-08 via follow-up and enforcement activities. Appendix H-1 in the FY 2007-08 City of Encinitas JURMP Annual Report identifies all complaints received by the hotline and includes incident dates, details of substances discharged, and the resulting actions taken by City Staff to eliminate and prevent discharges in the future.

The most serious violations observed by City staff resulted in Administrative Citations and cost recoveries issued to the responsible party. Table 7.5 below summarizes the violations and the resulting actions that occurred in FY 2007-08.

Table 7-4 Citations Issued FY 2007-08

Date	Encinitas Municipal Code Violation	Violation Description	Fine	Cost Recovery	Category
7/3/2007	20.08.140	Illegal storage of grease	$100.00	$0.00	Commercial
8/16/2007	20.08.040B	Illicit discharge of wash water	$100.00	$0.00	Commercial
9/10/2007	20.08.040, 20.08.110	Illicit connection	$100.00	$0.00	Commercial
10/3/2007	20.080.040B	Illegal discharge of wash water	Warning	$0.00	Commercial
12/18/2007	20.08.040B	Illicit discharge of wash water	$100.00	$0.00	Commercial
1/18/2008	20.08.040B	Illicit discharge of sewage	$200.00	$634.47	Commercial
1/29/2008	20.08.040B, 20.08.110	Illicit discharge of grease	$200.00	$0.00	Commercial
3/20/2008	20.08.040 & 20.08.140	Illicit discharge of wash water	$100.00	$0.00	Commercial
5/23/2008	20.08.040B & 20.08.140	Illicit discharge of wash water	$200.00	$0.00	Commercial
12/12/2007	20.08.040B, 20.08.080	Illicit discharge of sediment	$200.00	$0.00	Construction
12/12/2007	20.08.040B, 20.08.080	Illicit discharge of sediment	$200.00	$0.00	Construction
2/15/2008	20.08.040B, 20.08.080	Illicit discharge of sediment	$200.00	$0.00	Construction
2/15/2008	20.08.040B, 20.08.080	Illicit discharge of sediment	$400.00	$0.00	Construction
2/20/2008	20.08.040B, 20.08.080	Illicit discharge of sediment	$200.00	$0.00	Construction
2/20/2008	20.08.040B, 20.08.080	Illicit discharge of sediment	$200.00	$0.00	Construction

Table 7-4 Citations Issued FY 2007-08					
Date	**Encinitas Municipal Code Violation**	**Violation Description**	**Fine**	**Cost Recovery**	**Category**
2/27/2008	20.08.040B	Illicit discharge of construction debris	$100.00	$0.00	Construction
7/11/2007	20.08.040 & 20.08.140	Illicit discharge of antifreeze	$200.00	$0.00	Residential
8/28/2007	20.08.040B	Illicit discharge of sewage	$100.00	$0.00	Residential
9/5/2007	20.08.040B	Illicit discharge of oil/gas	$100.00	$752.60	Residential
10/4/2007	20.08.040B	Illicit discharge of sediment	$100.00	$0.00	Residential
1/4/2008	20.08.040B	Illicit discharge of degreaser	$100.00	$0.00	Residential
3/11/2008	20.08.040B	Illicit discharge of construction debris	$100.00	$0.00	Residential
		TOTAL	**$3,300.00**	**$1,387.07**	

7.5.3 ENFORCING THE DISCHARGE PROHIBITIONS ORDINANCE

The City implements and enforces its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Many illicit connections and illegal discharges can be eliminated through voluntary compliance. Most violators are willing to change their behaviors when they learn that their actions are detrimental to the environment and local waterways. The City utilizes a variety of options under a flexible and graduated system of enforcement actions, emphasizing voluntary compliance when possible. Voluntary compliance may be used for first-time, minor violations, whereas more serious violations or continued non-compliance may warrant a more aggressive and enforcement oriented approach. Increased enforcement actions are taken until compliance is achieved or the illicit connection or illegal discharge is otherwise eliminated.

In cases where further enforcement is needed, the typical progressive enforcement procedures that the City can implement are as follows: verbal warnings and education, written warnings (Stop/Correct Work notice or a Notice of Violation), and administrative citations. A copy of the City's Administrative Citation can be found in Appendix D. The nature of the City's enforcement approach is determined on a case-by-case basis and is based on factors such as the severity of the violation, the threat to human or environmental health, site-specific circumstances, and past compliance history. If the situation is determined to pose an immediate risk to public health or the environment, the City may coordinate with other agencies or teams that are specially trained to assess and mitigate emergency situations (e.g., those involving hazardous wastes/materials, etc.).

In FY 2007-08, enforcement in each category varied according to the complaint. Residential complaints were primarily resolved with education while commercial complaints received more NOVs. Construction complaints were resolved with education and NOV actions equally; however, there were also seven citations issued. All of the municipal complaints were resolved internally with the Public Works Department except for one formal education action given to a City contractor. A breakdown of the enforcement actions performed per category of complaint is presented below in Figure 7-5.

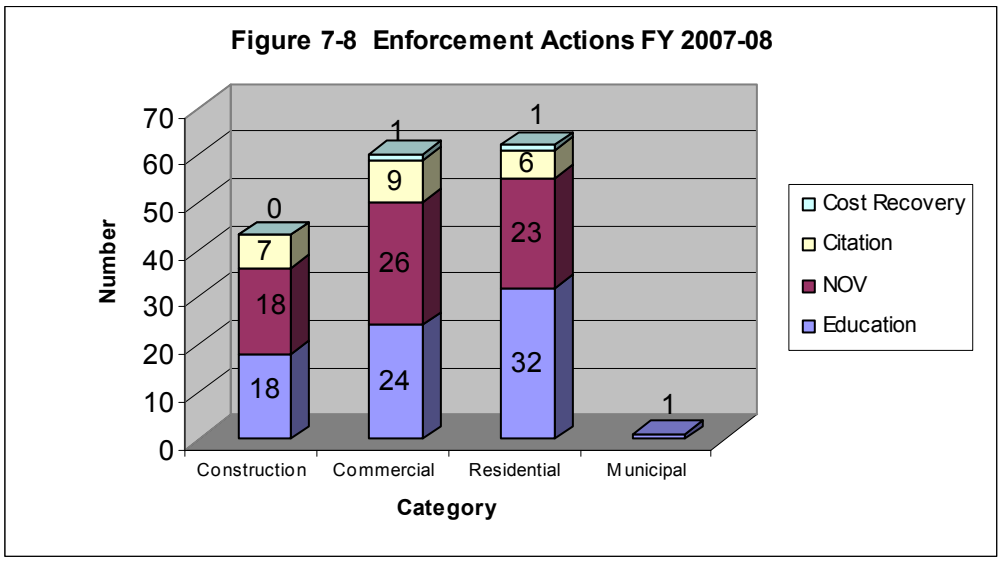

Commercial complaints totaled 30.1% of all complaints received and resulted in 24 educational actions, 26 Notices of Violation, nine citations, and one cost recovery action. Residential complaints accounted for 47.7% of all complaints received and resulted in 32 educational actions, 23 Notices of Violation, and six citations. Construction complaints totaled 14.3% of all complaints received and resulted in 18 educational actions, 18 Notices of Violation, and seven citations. Municipal complaints accounted for 7.9% of all complaints received and were mostly referred to the City's Public Works Department for immediate maintenance; however, one Municipal complaint resulted in an educational action issued directly to a Public Works contractor. There were no industrial complaints this fiscal year.

In FY 2007-08, Clean Water Program staff evaluated all reported illegal discharges and proceeded with appropriate enforcement actions as necessary. In total, Clean Water Program staff issued a total of 67 Notice of Violations, 22 Administrative Citations with 21 carrying fines of $100.00 or more and two additional notices for cost recovery totaling $1,387.07. With appropriate education and enforcement, numerous illegal discharges and connections were eliminated in 2008.

Storm Water Complaints Cityworks GIS Service Request Form

Service Request

Request | Recent | Search | Save | Close | New | Print | Tools | Labor

Search for Request ID

Recently Opened

Apply To All

Code:

Description

ID/Status | OPEN

Priority/Category

Initiated By RYGIEL, KRISTINE

Submit To

Opened By

Dispatched To

Opened By

Prj Comp. Date MM/DD/YYYY :

Closed By

Is the Investigation Complete?

Is This Incident an Emergency?

Is a Work Order Needed?

Cancel

Work Order

Open WO | Attach To | Create

WO Description

Proj Start/Finish Date

Actual Start/Finish Date

Project

Open | Attach To

Problem Details

Incident Address

Locate Using Streets Parcels

City/Zip

Date/Time

Account

Mr Ms

First Name

Last

Address

City

Zip

Home Phone

Work

Other Phone

Type

Email

Caller Information

Is Caller a Resident Within the Service Area?

Is This a Follow-up Call?

Customer Contacted on Site?

Customer Contacted Afterwards?

Custom Field Name	Value	Required

Incident Listing

Sunday July 1, 2007 through Monday June 30, 2008

411 - Gasoline or other flammable liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0003041	000	08/15/2007 05:16:47	411	N	I-5 Nb	X	X	
0003414	000	09/05/2007 09:25:54	411	N	510 Santa Fe Dr	X	X	
0003830	000	10/08/2007 10:01:44	411	N	I-5 Nb	X	X	
0000115	000	01/08/2008 14:12:18	411	N	1686 Villa Cardiff Dr	X	X	
0000789	000	02/26/2008 14:08:16	411	N	805 Birmingham Dr	X	X	
0001319	000	04/10/2008 22:34:07	411	N	354 Santa Fe Dr	X	X	

End of Report

Incident Listing

Sunday July 1, 2007 through Monday June 30, 2008

412 - Gas leak (natural gas or LPG)

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002370	000	07/02/2007 07:10:42	412	4	518 N Rios Ave	X	X	
0002371	000	07/02/2007 08:54:38	412	N	1144 Orpheus Ave	X	X	
0002651	000	07/21/2007 14:34:35	412	N	233 Melrose Ave	X	X	
0002719	000	07/26/2007 10:02:55	412	N	On E F St at Cornish Dr	X	X	
0002846	000	08/02/2007 19:46:58	412	N	743 NARDO Rd	X	X	
0003244	000	08/25/2007 18:01:18	412	N	467 Encinitas Bl	X	X	
0003322	000	08/31/2007 08:28:28	412	N	288 N El Camino Real	X	X	
0003332	000	08/31/2007 23:32:36	412	3	2112 Ocean Front	X	X	
0003583	000	09/18/2007 14:57:08	412	N	467 Encinitas Bl	X	X	
0003594	000	09/19/2007 00:24:49	412	N	485 S Coast Highway 101	X	X	
0004354	000	11/11/2007 12:29:21	412	N	1050 Regal Rd	X	X	
0004435	000	11/17/2007 15:23:33	412	2	1006 N El Camino Real	X	X	
0004482	000	11/21/2007 17:24:49	412	2	1225 Rancho Encinitas Dr	X	X	
0004838	000	12/20/2007 10:25:23	412	N	581 Hygeia Ave	X	X	
0004864	000	12/22/2007 16:50:54	412	4	8011 Paseo Aliso	X	X	
0004897	000	12/24/2007 15:13:43	412	N	1134 Wild Canary Ln	X	X	
0000049	000	01/04/2008 09:48:16	412	N	325 ENCINITAS BL	X	X	
0000054	000	01/04/2008 13:16:00	412	4	137 Chesterfield Dr	X	X	
0000332	000	01/26/2008 09:54:13	412	4	1309 Camino Del Mar	X	X	
0000878	000	03/04/2008 06:16:23	412	N	236 N El Camino Real	X	X	
0001038	000	03/18/2008 14:03:08	412	N	2529 Meadowmist Ln	X	X	
0001057	000	03/19/2008 18:36:55	412	N	1375 Trabert Ranch Rd	X	X	
0001316	000	04/10/2008 15:32:12	412	2	3472 Calle Margarita	X	X	
0001379	000	04/15/2008 10:52:09	412	N	508 Leucadia Village Ct	X	X	
0001423	000	04/17/2008 11:42:48	412	2	3705 Fortuna Ranch Rd	X	X	
0001457	000	04/19/2008 16:12:30	412	N	1735 TATTENHAM Rd	X		
0001530	000	04/25/2008 20:48:37	412	N	878 CLARK Ave	X		
0001791	000	05/15/2008 14:36:42	412	N	858 Del Rio Ave	X		
0001841	000	05/18/2008 12:57:57	412	N	1769 Village Run	X		
0002225	000	06/16/2008 14:50:23	412	N	1735 TATTENHAM Rd	X		
0002314	000	06/21/2008 17:49:36	412	N	101 Rodney Ave	X		

End of Report

Incident Listing

Sunday July 1, 2007 through Monday June 30, 2008

413 - Oil or other combustible liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0003297	000	08/29/2007 14:03:49	413	N	1610 Tucker Ln	X	X	
0003766	000	10/03/2007 12:31:46	413	N	410 Neptune Ave	X	X	
0002000	000	05/31/2008 12:08:39	413	N	608 S Coast Highway 101	X		

End of Report

Incident Listing

Sunday July 1, 2007 through Monday June 30, 2008

422 - Chemical spill or leak

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002649	000	07/21/2007 13:10:30	422	N	On Peartree Ct at Sprucewood Dr	X	X	
0000133	000	01/10/2008 13:08:16	422	2	200 SAXONY Rd	X	X	

_____ End of Report _____

Incident Listing

Encinitas Fire Department

Sunday July 1, 2007 through Monday June 30, 2008

424 - Carbon monoxide incident

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002573	000	07/17/2007 06:44:40	424	N	705 West Bluff Dr	X	X	

_____ End of Report _____

Dry Weather Monitoring Assessment

May 1, 2008 - September 30, 2008

Prepared by:

City of Encinitas
Clean Water Program
505 South Vulcan Avenue
Encinitas, CA 92024

December 2008

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Dry Weather Analytical Monitoring

1.0 Introduction

The Dry Weather Monitoring Program is a crucial part of the City of Encinitas' Urban Runoff Monitoring Program. Since May 2002, the California Regional Water Quality Control Board, San Diego Region (Regional Board), has required the San Diego County Copermittees to implement an annual Dry Weather Storm Drain Monitoring Program (Dry Weather Program). On January 24, 2007, a new storm water permit, Order No. R9-2007-0001 (Municipal Permit), was adopted by the Regional Board, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego and the incorporated Cities of San Diego County, including the City of Encinitas. The updated requirements of the Dry Weather Monitoring Program can be found in Section II.B.3 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program of the Municipal Permit.

Order No. 2007-0001 requires the City of Encinitas to implement a dry weather analytical monitoring program for the detection and elimination of illicit discharges and connections to the City's Municipal Separate Storm Sewer System (MS4) in addition to including a trash assessment component. The purpose of this program is to actively seek and eliminate illicit connections and illegal discharges, to characterize dry weather flows and trash assessments throughout the City's MS4.

An illicit connection is defined as a point source discharge of pollutants to the MS4 that is not comprised entirely of storm water, not exempted by the City's Storm Water Ordinance, or not authorized by an NPDES Permit. The regulatory backbone of this program is the establishment of discharge prohibitions in the City's Municipal Code, Chapter 20.08 (Storm Water Management).

Dry weather monitoring of the MS4 is performed by establishing monitoring locations throughout the City to adequately cover the entire storm drain system. In 2008, the City of Encinitas' Dry Weather Program encompassed 39 primary monitoring locations and 16 alternate monitoring locations throughout the city. Monitoring of these locations included recorded observations, field screening where flow was present and analytical laboratory testing at selected locations.

The City of Encinitas conducted dry weather monitoring during the period of May 1, 2008 to September 30, 2008. The analysis of the dry weather monitoring results for 2008 is documented in the following report.

2.0 Dry Weather Analytical Monitoring Stations

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the

revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to support long-term trend analysis, select additional sites to facilitate a better understanding of the water quality in Encinitas, and to ensure compliance with Dry Weather Monitoring program standards established in Order No. 2007-0001.

Under the previous Municipal Permit (2001-01), the City of Encinitas conducted dry weather field screening at an average of 37 sites per year. On average, the City also visited another 13 dry sites per year, with the total number of sites visited varied from 48 to 52 sites per year. To make more efficient use of its resources, the City adjusted its Dry Weather Monitoring Program in 2008 to include 39 primary sites and 16 alternate sites. As part of the monitoring site evaluation, sites that had never had ponded or flowing water were removed from the monitoring site list. Sites that were regularly dry but had ponded or flowing water at least once during previous monitoring years were changed to alternate sites. The City also assessed whether any existing sites should be relocated and whether any new sites were necessary to provide better coverage of key areas of the MS4. This process relied on reviewing historical data from past monitoring programs and reviewing the MS4 and land use data. GIS data files of the City's drainage system, watersheds, major water bodies, environmentally sensitive areas, existing dry weather monitoring locations, and approximate locations of potential sources of pollutants were all evaluated to assist in this process. The City's Clean Water Program staff, accompanied by Public Works maintenance staff familiar with the storm drain conveyance system, conducted field visits to assess the suitability of 29 potential new sites. This process included locating appropriate access points and then checking for the presence of ponded or flowing water, assessing accessibility, and recording GPS coordinates or the GIS ID name of the relevant storm water facility. As a result of this assessment, 12 suitable locations were identified and added to the City's lists of dry weather monitoring sites. A more complete discussion of the process and rationale for monitoring site selection has been included in the City of Encinitas JURMP document dated March 24, 2008.

Revisions of the dry weather monitoring sites within each sub-basin should be considered in the evaluation of the action level exceedance ratio trend graphs presented throughout Section 4.0 of this report. For this monitoring period, only one out of seven sub-basins retained the same primary sites from the previous monitoring period. The vertical dashed line in each of the graphs indicate the point at which the program was revised.

A storm drain (MS4) database has been developed by the City of Encinitas in a geographical information system (GIS). The storm drain database in GIS is maintained in an ArcInfo platform by the City's Information Technology Division. The database is continually updated to include new additions to the MS4 as validation is ongoing. The City has also developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations and drainage basins. A copy of the revised dry weather monitoring map for 2008 can be found in Appendix C-1.

3.0 Dry Weather Analytical Monitoring Procedures

The City's dry weather monitoring program uses methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittee Dry Weather Monitoring Workgroup. The elements of the dry weather program include sampling sites, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Each of these procedures is outlined in detail below.

Dry weather monitoring was conducted at 39 primary sites and 2 alternate sites throughout Encinitas during the period May 1 – September 30, 2008. Of the 41 locations monitored, flowing water was observed at 30 sites, ponded water was observed at 9 sites and 2 sites were observed to be dry. Field analysis was conducted at all 39 sites with flowing or ponded water. A total of 11 monitoring locations or 28% of all 39 sites were sampled for full laboratory analysis to meet the minimum 25% requirement as established in the Municipal Permit. An additional 11 sites were analyzed for total coliform, fecal coliform, and enterococcus in order to further characterize bacteria concentrations throughout the City's MS4.

As required by the Municipal Permit, a trash assessment was conducted at 39 primary sites and 2 alternate sites throughout the City to provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present. A more detailed analysis and results of the trash assessment program can be found in Section 7.0 of this report. All of the 2008 Trash Assessment forms can be found in Appendix C-4.

Qualitative observations were made at all sample locations. A field data sheet noting observations such as color, clarity, odor, and biological characteristics was recorded at each monitoring site. The 2008 Dry Weather Monitoring Field Datasheets for each monitoring site are included in Appendix C-2.

Field tests were performed by Clean Water Program staff at all monitoring locations with flowing or ponded water. Field meters were used in determination of pH, conductivity, temperature, and turbidity. Ammonia, ortho-phosphate, nitrate, and MBAS analysis were performed with Chemetrics field kits. Where possible, flow was determined by filling a bottle of known volume using a timer and an estimation of the amount of flow captured. For the locations (such as manholes) in which flow was not able to be measured, these sites were always noted as flowing or ponded on the Dry Weather Monitoring Datasheets. Action levels for the field analysis were determined by the Copermittee Monitoring Workgroup and are shown in Table 3.0. Follow-up sampling for exceedances detected in field screening were performed within two business days of receiving the results that exceeded action levels as required in section D.4.d of the Municipal Permit.

Source investigation actions are initiated based upon field screening and analytical

monitoring results that have exceeded established action levels during initial testing and follow-up testing. Source investigation actions may include field investigations and/or formal facility inspection activities based upon a variety of considerations which are described in each of the sub-basin evaluations in Section 4.0.

There were 11 samples collected for full laboratory analysis in order to further characterize the water quality at specific locations throughout the City. When feasible, laboratory testing was performed as far down in the watershed as possible to assess water quality prior to discharging into a receiving water. Methods for laboratory analysis were based on EPA approved methods described in the *Standard Methods for the Examination of Water and Wastewater, 18th edition.* Follow-up sampling for exceedances detected in laboratory analyses were performed within two business days after receipt of data from the laboratory. The field and analytical results for each monitoring station are provided in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3.

Table 3.0 Action Levels for Field Screening and Laboratory Analytical Parameters		
Field Screening Analytes	**Action Levels[1]**	**Source Notes**
pH	6.5 or 9.0	Basin plan, w/ allowance for elevated pH due to excessive photosynthesis.
Ortho-Phosphate (mg/L) as P	2.0	USEPA Multi-sector GP
Nitrate-N (mg/L)	10.0	Basin plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Workgroup experience, may also consider unionized ammonia fraction
Turbidity (NTU)	Best Professional Judgment	USEPA Multi sector general permit level-5 NTU. Typical levels are substantially higher. Base judgment on channel type and bottom
Temperature	Best Professional Judgment	Base judgment on season, air temp., channel type, shade, etc.
Conductivity (mhos/cm) or TDS (mg/L)	Best Professional Judgment City of Encinitas considers 5.00mS/cm (umhos/cm) an exceedance	EC may be highly elevated in some regions due to high TDS/groundwater exfiltration to surface water, mineral dissolution and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Also consider investigating unusually low EC (800 umhos/cm) accompanied by unusual flows.
Laboratory Analytes	**Action Levels**	**Source/Notes**
MBAS (mg/L)	1.0	Basin plan, w/ allowance based on Workgroup field experience and possible field reagent interferences
Oil and Grease (mg/L)	15	USEPA multi-sector General Permit
Diazinon (g/L)	.5	Response to diazinon and chlorpyrifos levels above 0.5 g/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (g/L)	.5	
Dissolved Cadmium	California Toxics Rule	Use CTR Table, 1-hour criteria to determine action level for sample.
Dissolved Copper	California Toxics Rule	
Dissolved Lead	California Toxics Rule	
Dissolved Zinc	California Toxics Rule	
Total Coliform (cfu/100 ml)	50,000	Action levels are based on upper 90 confidence level of Copermittees 2002 dry weather analytical monitoring data.
Fecal Coliform (cfu/ 100 ml)	20,000	
Enterococcus (cfu/100 ml)	10,000	

Notes: (1) The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within site and between site sample variability

4.0 Dry Weather Data Analysis

Data analysis is based on three methods of data interpretation: numeric action levels, California Toxics Rule and best professional judgment.

The numeric action levels in Table 3.0 (determined by the San Diego Municipal Stormwater Copermittee's Dry Weather Monitoring Workgroup), is the primary approach for interpreting pH, orthophosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliform, fecal coliform and enterococcus analytical results. A 90th-percentile statistical confidence interval test which was developed by the Copermittees in 2002 is used to determine exceedances for bacteria indicators.

The California Toxics Rule (CTR) is used to establish an action level for dissolved trace metals, including Cadmium, Copper, Lead and Zinc. The CTR equations provide benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases.

Best professional judgment is used as the primary approach for interpreting turbidity, conductivity and water temperature. Best professional judgment is also the secondary approach for interpreting the results of all other field and laboratory analyses. Best professional judgment accounts for historical data, as well as characteristics of a sample location, which may determine that sample data exceedances do not require follow-up or further investigation.

The following subsections contain analyses of the dry weather data collected for each of the seven sub-basins within the City of Encinitas.

4.1 Cardiff Sub-basin

The dry weather monitoring locations included eight primary sites and four alternate sites in the Cardiff sub-basin (CBS). Land use in the sub-basin is primarily residential with some commercial and agricultural uses in the upper reaches of the sub-basin. All runoff in the Cardiff sub-basin drains to the San Elijo Lagoon.

The changes that were implemented during the 2008 monitoring period included adding two new primary sites (CBS-8 and CBS-9) to provide additional coverage of the areas upstream of existing sites (CBS-1 and CBS-4). Three original locations (CBS-3N, CBS-3S and CBS-5) were all re-designated as alternate sites because they were ponded or dry during previous years of monitoring. One site (CBS-6) was removed from the program completely because it had been dry for every visit since 2003. Overall, 50% of the original primary sites in this sub-basin were retained from previous monitoring years.

Of the eight designated locations for routine monitoring in 2008, six locations were observed to have flowing water and two locations had ponded water. All eight locations

were field screened and analytical lab samples were collected at two locations (CBS-2 and SEL-2). These sites were both selected for full laboratory analysis to assure continuity from previous years of monitoring and to help establish long-term trend analyses. CBS-2 is an open channel that discharges directly to San Elijo Lagoon and drains both commercial and residential areas. SEL-2 is an open channel that drains residential areas and discharges directly to the San Elijo Lagoon.

Of the eight locations where routine field screening was performed, four of the sites sampled had results exceeding the action levels for conductivity. One site exceeded for pH and one site exceeded the action levels for nitrates. There were six sites analyzed for bacteria and none exceeded action levels for total coliform, fecal coliform, or enterococcus. Table 4.0 summarizes the action levels exceeded in the Cardiff sub-basin.

Table 4.0 Cardiff Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
CBS-2	7/1/08	Flowing	Conductivity	5.32	mS/cm	5
CBS-4	7/29/08	Flowing	Conductivity	7.55	mS/cm	5
CBS-7	7/29/08	Flowing	pH	9.38	pH	6.5 or 9.0
CBS-8	7/29/08	Flowing	Nitrate	15	mg/L	10
SEL-2	7/23/08	Ponded	Conductivity	5.63	mS/cm	5
SEL-3	8/13/08	Ponded	Conductivity	5.11	mS/cm	5

CBS-2

The water at CBS-2 contained slightly elevated conductivity. No other constituents analyzed at this site exceeded action levels. Land use upstream is primarily commercial and residential. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

CBS-4

The water at CBS-4 contained elevated conductivity. No other constituents analyzed at this site exceeded action levels. The water at CBS-4 was flowing out of the Cape Sebastian detention basin and was clear and colorless. Land use upstream is primarily residential with some agricultural nurseries interspersed. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

CBS-7

The water at CBS-7 contained elevated pH and temperature as a result of low flow

conditions in the concrete channel. A confirmation sample for pH was collected the next business day and was below the action level.

CBS-8

The water at CBS-8 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. A confirmation sample for nitrates was collected the next business day and was below the action level.

SEL-2

The water at SEL-2 contained slightly elevated conductivity. No other constituents analyzed at this site exceeded action levels. The water was ponded in a natural channel and originated from a small drainage area within a residential area. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

SEL-3

The water at SEL-3 contained slightly elevated conductivity. No other constituents analyzed at this site exceeded action levels. The water was ponded in a natural channel and originated from a small drainage area consisting of residential areas, a school, and a church. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

Although several water quality exceedances have been typical for the Cardiff sub-basin, water quality has been improving over the last six years of dry weather monitoring. Figure 4.0 illustrates a downward trend in water quality exceedances in Cardiff based on dry weather data collected from 2002 to 2008.

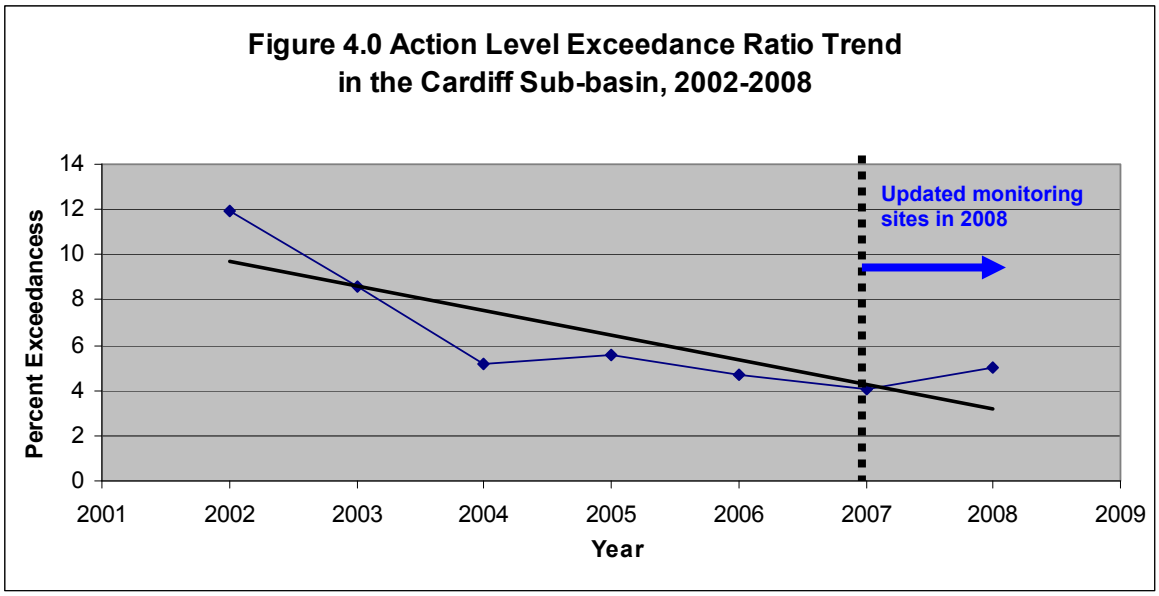

Data collected in the Cardiff sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.1 illustrates the Cardiff sub-basin.

Figure 4.1

LUX-3
CBS-7
CBS-8
LUX-2
CARDIFF
CBS-9
CBS-3N
CBS-3S
CBS-2
SEL-3
SEL-5
CBS-5
CBS-1
SEL-2
CBS-4
San Elijo Lagoon
Encinitas Map
Cardiff Sub-basin
This map should not be used for Engineering, Survey, or Site-Specific Analysis.
1 inch equals 1,361 feet

4.2 Lower Escondido Creek Sub-basin

The dry weather monitoring locations included three primary sites and two alternate sites in the Lower Escondido Creek sub-basin (ESC). The land uses consist primarily of residential and open space areas with a few commercial establishments interspersed throughout the sub-basin. All runoff in the Lower Escondido Creek Sub-basin drains to the San Elijo Lagoon.

The changes that were implemented during the 2008 monitoring period included adding one new primary site (ESC-5) to provide additional coverage of the area upstream of an existing site (ESC-2). Two new original locations (ESC-3 and ESC-4) were added as alternate sites to provide additional coverage of the sampling sites upstream. Overall, 100% of the original primary sites in this sub-basin were retained from previous monitoring years.

Of the three designated locations for routine monitoring in 2008, all three locations were observed to have flowing water. All three locations were field screened only. One of the sites (ESC-5) sampled had results exceeding the action levels for conductivity.

Table 4.1 summarizes the action levels exceeded in the Cardiff Sub-basin.

Table 4.1 Lower Escondido Creek Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ESC-5	8/18/08	Flowing	Conductivity	5.03	mS/cm	5

ESC-5

The water at the sample location at ESC-5 contained slightly elevated conductivity. No other constituents analyzed at this site exceeded action levels. The sample from ESC-5 was drawn from a manhole location adjacent to a residential area. This monitoring site is in the lower reaches of the sub-basin nearest to the San Elijo Lagoon. Land use upstream is primarily residential. Elevated conductivity due to groundwater has been observed in other low reaches of the sub-basin at site ESC-1 in previous monitoring years. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

The historical frequency of exceedances in this sub-basin is variable. Figure 4.2 below illustrates water quality exceedance trends in the Lower Escondido Creek sub-basin based on dry weather data collected from 2002 to 2008. With 100% of the primary sites in this sub-basin remaining the same in the updated monitoring program, there was a marked improvement in water quality when compared to the previous year.

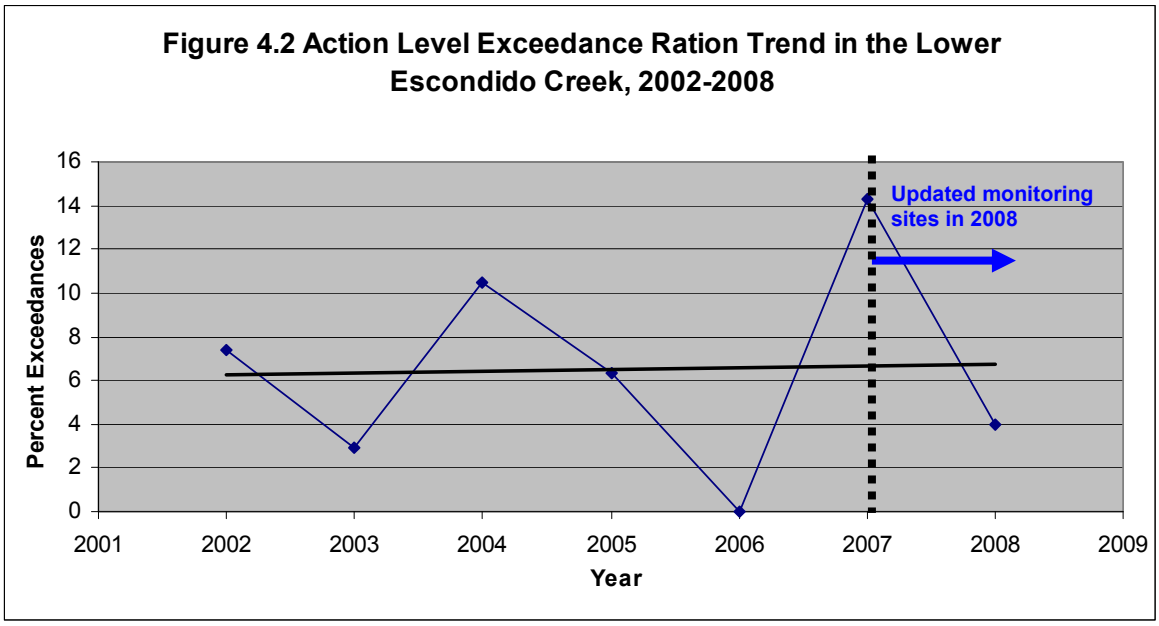

Data collected in the Lower Escondido Creek sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.3 illustrates the Lower Escondido Creek sub-basin.

Figure 4.3

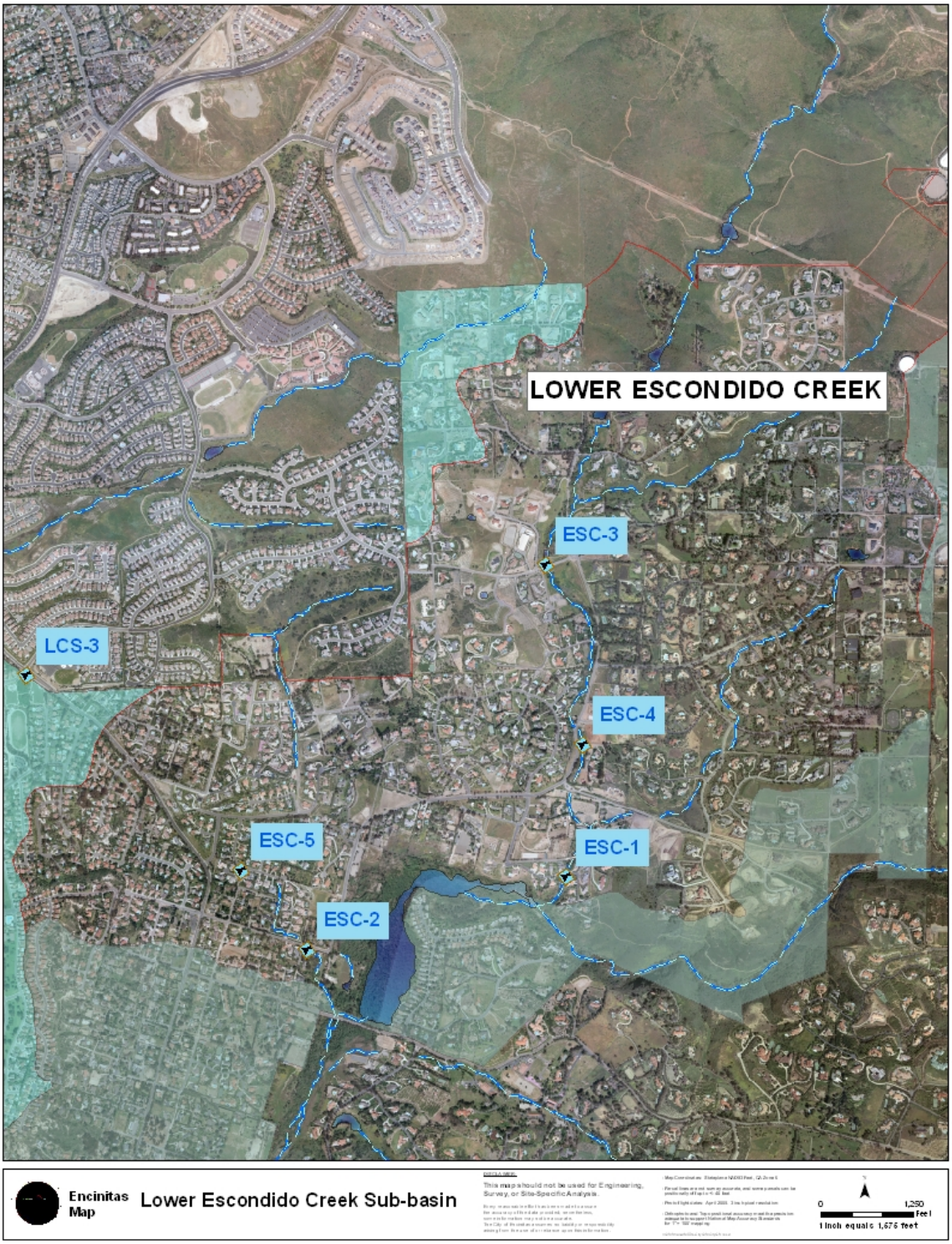
LOWER ESCONDIDO CREEK
ESC-3
LCS-3
ESC-4
ESC-5
ESC-1
ESC-2
Encinitas Map
Lower Escondido Creek Sub-basin
0
1,250
Feet
1 inch equals 1,675 feet

4.3 La Costa South Sub-basin

The dry weather monitoring locations include six primary sites and two alternate sites in the La Costa South sub-basin (LCS). Land use in this sub-basin is largely commercial and residential. All runoff in the La Costa South sub-basin drains to Encinitas Creek. Encinitas Creek flows north into Batiquitos Lagoon in the City of Carlsbad. Monitoring locations in the La Costa South sub-basin were all located within the City of Encinitas.

The changes that were implemented during the 2008 monitoring period included removing LCS-6 from the program and adding a new primary site (LCS-8) which is located further east along the same storm drain line. The location for LCS-8 was chosen to more effectively isolate flows from upstream residential areas more effectively. Overall, 71% of the original primary sites in this sub-basin were retained from previous monitoring years.

Of the six designated locations for routine monitoring in 2008, five locations were observed to have flowing water and one location had ponded water. All six locations were field screened and two were sampled for a full laboratory analysis (LCS-1 and LCS-5) to assure continuity from previous years of monitoring and to retain long-term trend analysis. One location (LCS-2) was analyzed in the laboratory for bacteria indicators as a possible illicit connection and discharge follow-up for the bacteria exceedances at LCS-1 and LCS-5.

There were five routine monitoring water quality exceedances in the La Costa South sub-basin in 2008. These results were validated through five follow-up monitoring results, and three additional monitoring results. Table 4.2 summarizes the action levels exceeded in the La Costa sub-basin during routine monitoring.

Table 4.2 La Costa South Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-1	7/10/08	Ponded	Ammonia	1.0	mg/L	1.0
LCS-1	7/10/08	Ponded	Total Coliform	67,000	cfu/100 ml	50,000
LCS-5	7/10/08	Flowing	MBAS	1.0	mg/L	1.0
LCS-5	7/10/08	Flowing	Enterococcus	16,500	cfu/100 ml	10,000
LCS-5	7/10/08	Flowing	Fecal Coliform	47,000	cfu/100 ml	20,000

LCS-1

The water at LCS-1 was field screened and sampled for full laboratory analysis. The samples at LCS-1 contained elevated ammonia and total coliform bacteria. The water was sampled from ponded water in a natural channel. The surrounding land use in this sub-basin is primarily commercial. A follow-up sample for ammonia was analyzed on 7/14/08 and the result was below the action level. A follow-up sample for bacteria indicators was also analyzed on 7/15/08, both Enterococcus and Fecal Coliforms exceeded the action levels.

Table 4.3 LCS-1 Follow-up Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-1	7/15/08	Ponded	Enterococcus	24,000	cfu/100 ml	10,000
LCS-1	7/15/08	Ponded	Fecal Coliform	40,000	cfu/100 ml	20,000

Follow-up sampling upstream of LCS-5 occurred on 7/15/08. Since this site exceeded action levels for fecal coliform and Enterococcus during routine monitoring and follow-up monitoring, the field team immediately conducted a field investigation upstream. After thorough investigation, the field team did not find any obvious sources.

As part of follow-up investigation actions for LCS-5 exceedances, on 7/30/08 the Clean Water Program field team conducted follow-up sampling downstream for bacteria analysis at LCS-2 and LCS-7. Refer to discussions of LCS-2 and LCS-7 below for a more detailed discussion of these sites.

Upon receipt of the exceedance results from the confirmation samples at LCS-1, LCS-5 and LCS-7, the Clean Water Program's storm water inspector was notified of the exceedances and potential sources in the area. A total of eight storm water inspections at nearby residential areas and commercial facilities were later initiated to try and identify potential bacteria sources in the La Costa South sub-basin. Table 4.4 includes a complete list of the inspections that were performed.

Table 4.4 LCS-1 and LCS-5 Investigation Activities			
Name	**Address**	**Date of Inspection**	**Results**
United States Post Office	1150 Garden View	10/10/08	No violations noted.
Park Encinitas HOA	444 N. El Camino Real	10/10/08	No violations noted.
Little Oaks Plaza	352-398 N. El Camino Real	10/10/08	No violations noted.
Green Valley Mobile Estates	350 N. El Camino Real	10/10/08	No violations noted.
Boston Pizza	294 N. El Camino Real	10/13/08	Corrective action required however, no violations noted.
Q.C. Szechwan	288 N. El Camino Real	10/13/08	Corrective action required however, no violations noted.
Burger King	242 N. El Camino Real	7/22/08 10/06/08	Corrective action required however, no violations noted.
Brett s BBQ	1505 Encinitas Blvd	10/14/08	Corrective action required however, no violations noted.

LCS-2

The water at LCS-2 was initially field screened on 6/11/08 and re-sampled for laboratory analysis of bacteria on 7/30/08 in response to bacteria exceedance results at LCS-1 and LCS-5. LCS-2 is located in a natural creek, flows freely at approximately 200 gpm and is located at the furthest point downstream in the La Costa South sub-basin.

The sampling results from 6/11/08 revealed that all constituents were well below action levels. The follow-up sample which was analyzed for bacteria on 7/30/08 revealed that all constituents were again well below action levels. Additional bacteria analysis was conducted upstream at LCS-7 on 7/30/08 to try track the source upstream. See LCS-7 below for a more detailed discussion of this site.

LCS-5

The water at LCS-5 was sampled from flowing water in a manhole. It was field screened and sampled for full laboratory analysis on 7/10/08. The field team observed over-irrigation coming from a nearby shopping center during sampling. Land use in this sub-basin is primarily commercial. The initial sample at LCS-5 on 7/10/08 contained elevated MBAS, enterococcus and fecal coliform. A confirmation sample for MBAS and bacteria was taken on 7/15/08 and the results contained elevated total coliform, fecal coliform and enterococcus

bacteria as indicated in Table 4.5 below.

Table 4.5 LCS-5 Follow-up Investigation

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-5	7/15/08	Flowing	Total Coliform	86,000	cfu/100 ml	50,000
LCS-5	7/15/08	Flowing	Fecal Coliform	47,000	cfu/100 ml	20,000
LCS-5	7/15/08	Flowing	Enterococcus	73,000	cfu/100 ml	10,000

Follow up investigations and commercial facility inspections as described above in the LCS-1 discussion were performed near LCS-2 and LCS-7 which are downstream of LCS-5. The goal of this follow-up investigation was to identify the magnitude of the exceedances and attempt to identify a source.

LCS-7

The water at LCS-7 was field screened and sampled for laboratory analysis of bacteria on 7/30/08. This site was not originally designated for additional laboratory analysis however, a laboratory analysis of bacteria was added to try and better isolate the source(s) of bacteria in this sub-basin. LCS-7 is located in between sites LCS-5 (located a half mile upstream) and LCS-1 (located one fifth of a mile downstream) which had both previously exceeded action levels for bacteria. The analytical results for LCS-7 on 7/30/08 exceeded action levels for total coliform, fecal coliform and enterococcus as indicated in Table 4.6 below.

Table 4.6 LCS-7 Follow-up Investigation

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-7	7/30/08	Flowing	Total Coliform	78,000	cfu/100 ml	50,000
LCS-7	7/30/08	Flowing	Fecal Coliform	38,000	cfu/100 ml	20,000
LCS-7	7/30/08	Flowing	Enterococcus	65,000	cfu/100 ml	10,000

Since LCS-7 was sampled as part of a follow-up investigation for exceedances occurring at LCS-1 and LCS5 and therefore not re-sampled; alternatively the Clean Water Program initiated both informal and formal investigations in the immediate area to try and identify a source. A complete list of formal investigations is included in the discussion of LCS-1 above.

Figure 4.4 below illustrates water quality exceedance trends in the La Costa South sub-basin based on dry weather data collected from 2002-2008. Overall, the trend of water quality exceedances is variable in this Sub-basin. Higher values were observed in 2004 and 2006 when dry weather monitoring investigations located and abated two significant illegal

discharges in this sub-basin. It is also important to note that the percent exceedance values include routine, follow-up and investigative monitoring results. The high percent exceedance value is reflective of the significant amount of additional monitoring that was conducted as a result of initial exceedances occurring during routine monitoring.

Although sites LCS-7 and LCS-1 did not exceed action levels for nitrates or phosphates, the field team observed excessive algal growth along the creek at both locations. Water flow at LCS-1 was significantly constrained due to excessive vegetation and organic matter decay at this site and was mostly ponded at this site. Both field investigations and formal commercial inspection activities performed upstream were unable to determine any specific sources. It should also be noted that while there were many bacteria exceedances in this sub-basin, both field screening and laboratory analytical samples from LCS-2 (the furthest site downstream in the channel) were all below the action levels when screened on two separate occasions.

Figure 4.4 Action Level Exceedance Ratio Trend in the La Costa South Sub-basin, 2002-2008

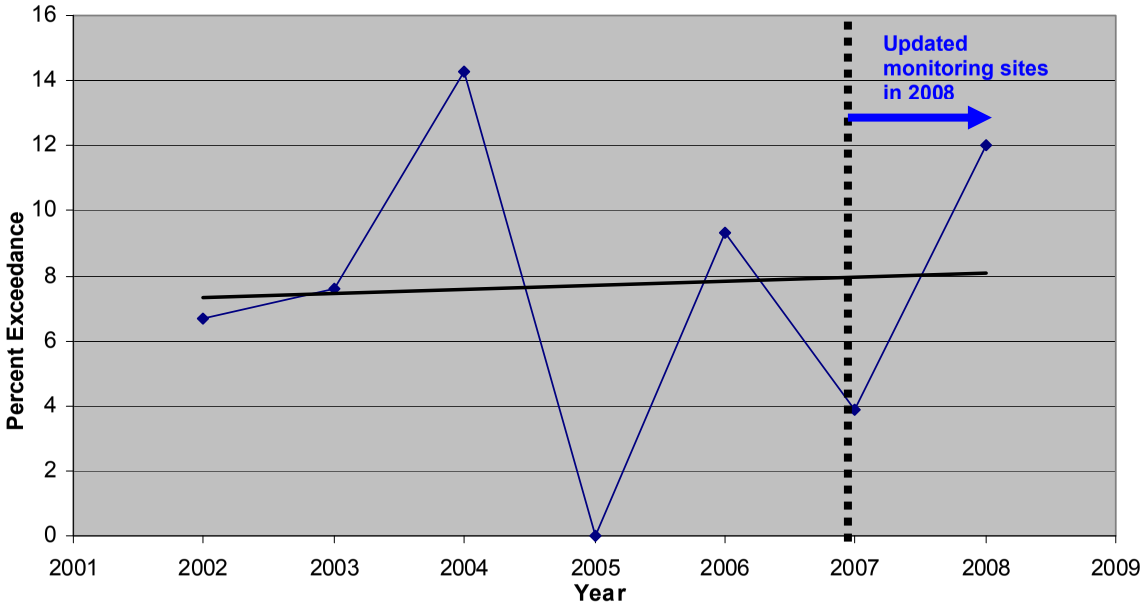

Data collected in the La Costa South sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.5 illustrates the La Costa South sub-basin.

Figure 4.5

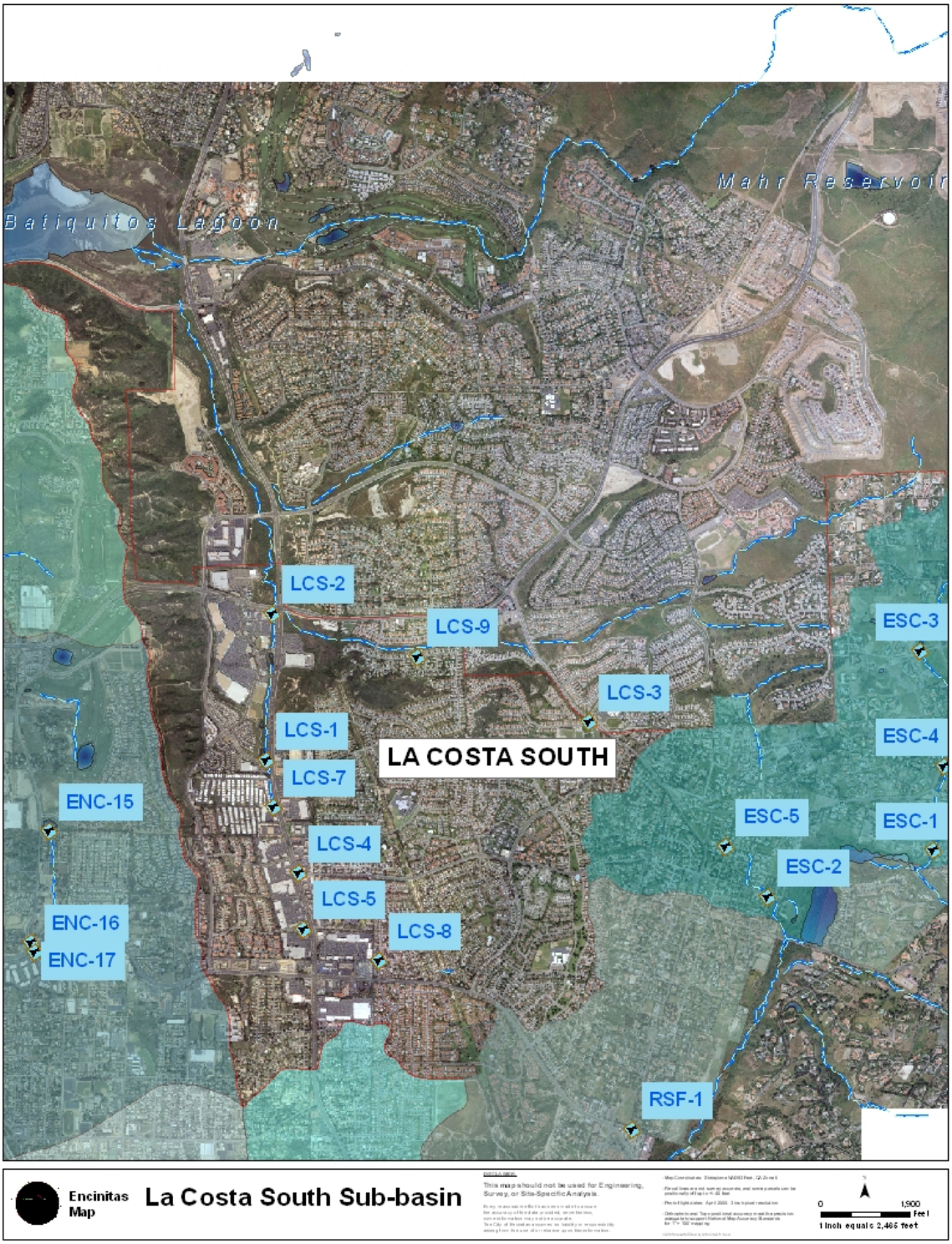
Batiquitos Lagoon
Mahr Reservoir
LCS-2
LCS-9
LCS-3
LCS-1
LCS-7
LA COSTA SOUTH
LCS-4
LCS-5
LCS-8
ENC-15
ENC-16
ENC-17
ESC-3
ESC-4
ESC-5
ESC-1
ESC-2
RSF-1
Encinitas Map
La Costa South Sub-basin
This map should not be used for Engineering, Survey, or Site-Specific Analysis.
0
1,900
Feet
1 inch equals 2,466 feet

4.4 Leucadia Sub-basin

The dry weather monitoring locations included six primary sites and three alternate sites in the Leucadia sub-basin (LUC). Land uses in this area include both residential and commercial with significant, albeit decreasing, numbers of commercial nurseries and growers. All flow where monitoring sites are located in the Leucadia sub-basin drain to the Batiquitos Lagoon.

The changes that were implemented during the 2008 monitoring period included adding two new primary sites (LUC-8 and LUC-10) to replace two original dry sites (LUC-5 and LUC-7). Another site, LUC-9 was added as a new alternate site to provide additional coverage of the MS4 if determined to be necessary. Two original locations (LUC-4 and LUC-7) were re-designated as alternate sites because they were observed to be ponded or dry most years. Two sites (LUC-2 and LUC-5) were removed from the monitoring program because they had been dry for every monitoring visit since 2003. Overall, 43% of the original primary sites in this sub-basin were retained from previous monitoring years.

Dry weather monitoring in the Leucadia sub-basin included monitoring a total of six locations (five primary sites and one alternate location). These sites all covered distinct drainage areas throughout the basin. Four of the six sample locations had water to sample at the time of monitoring, one primary location was ponded and one was dry. Alternate site LUC-9 was monitored as a substitute for the primary dry site at LUC-6. All five locations with water were field screened. One sample at LUC-8 was collected for full laboratory analysis and LUC-9 was analyzed for bacteria as a possible illicit connection and discharge follow-up.

Of the six locations where routine field screening was performed the resulting exceedances were variable. Three of the sample sites (LUC-1, LUC-9 and LUC-10) had elevated nitrates. Only one site, LUC-8 had elevated total coliform, fecal coliform and enterococcus bacteria. LUC-9 had elevated ammonia, orthophosphate and MBAS in addition to nitrates, as mentioned above.

Table 4.7 below summarizes the action levels exceeded in the Leucadia sub-basin.

Table 4.7 Leucadia Sub-basin Action Level Exceedances						
Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-1	8/18/08	Ponded	Nitrate (NO3-N)	15	mg/L	10
LUC-8	7/10/08	Flowing	Total Coliform	143,000	cfu/100 ml	50000
LUC-8	7/10/08	Flowing	Fecal Coliform	98,000	cfu/100 ml	20,000
LUC-8	7/10/08	Flowing	Enterococcus	28,000	cfu/100 ml	10,000
LUC-9	8/13/08	Flowing	Ammonia	1.5	mg/L	1.0
LUC-9	8/13/08	Flowing	Nitrate (NO3-N)	37.5	mg/L	10
LUC-9	8/13/08	Flowing	Orthophosphate (PO4-P)	10	mg/L	2
LUC-9	8/13/08	Flowing	MBAS	1.0	mg/L	1.0
LUC-10	8/18/08	Flowing	Nitrate (NO3-N)	12	mg/L	10

LUC-1

The water at LUC-1 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. LUC-1 is located in the lowest elevations of the Leucadia sub-basin and the majority of the flow in this area appears to be groundwater containing elevated nitrate concentrations. A follow-up investigation on the next business day concluded that nitrate concentrations were below action levels. Because the flow was ponded, there was no source to track upstream and further investigations were not performed.

Table 4.8 LUC-1 Follow-up Results						
Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-1	8/19/08	Ponded	Nitrate (NO3-N)	5	mg/L	10

LUC-8

The water at LUC-8 contained elevated bacteria. No other constituents analyzed at this site exceeded action levels. This site was added as a new primary site to the Dry Weather Monitoring program in 2008 to isolate flows from this area in the sub-basin more effectively. The land use upstream consists of a golf course, residential area and an open space park area.

Despite an exceedance for total coliform, fecal coliform and enterococcus on the first

sampling event, the confirmation samples on 7/15/08 were significantly below the initial sampling results and the action levels indicating a transient nature of the bacteria source. No obvious residential, golf course or park related activities were found to be contributing to the initial exceedance during the confirmation investigation.

Table 4.9 LUC-8 Follow-up Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-8	7/15/08	Flowing	Total Coliform	22,000	cfu/100 ml	50000
LUC-8	7/15/08	Flowing	Fecal Coliform	11,000	cfu/100 ml	20,000
LUC-8	7/15/08	Flowing	Enterococcus	8,000	cfu/100 ml	10,000

LUC-9

This site was designated as an alternate site in the 2008 Dry Weather Monitoring Program and was field screened and analyzed for Total coliform, Fecal coliform and Enterococcus bacteria based on a complaint of an illegal discharge upstream. The water at LUC-9 had elevated ammonia, nitrate, orthophosphate and MBAS. The water was sampled from a manhole location with minimal flow. Confirmation of the exceedances for bacteria, ammonia, nitrate, orthophosphate and MBAS were unable to be determined because this site was completely dry the next business day.

The Clean Water Program's storm water inspector was notified of the monitoring results and exceedances. The following inspection activities were initiated to mitigate the non-stormwater discharge observed at this site.

Table 4.10 LUC-9 Follow-Up Investigation Activities			
Name	**Address**	**Date of Inspection**	**Results**
Private Residence	450 Parkwood Lane	8/12/08	Observed gray water and debris at storm drain adjacent to property.
Dry Weather Monitoring downstream at LUC-9	Near Rockport Ct. and Nantucket St.	8/13/08	Sample exceeded action levels for bacteria, ammonia, nitrate, orthophosphate and MBAS.
Open storm drains leading to LUC-9	Near Rockport Ct. and Nantucket St.	8/14/08	Inspected open storm drains that connect to LUC-9 and found no additional evidence of drainage from other locations.
Private Residence	450 Parkwood Lane	8/14/08	NOV issued to responsible party to comply by 8/28/08
Private Residence	450 Parkwood Lane	8/28/08	Follow-up inspection revealed all corrective actions have been implemented. Case closed-

LUC-10

The water at LUC-1 contained elevated nitrates. There were no other exceedances at this location; all other results were below action levels. This site was added as a new primary site to the Dry Weather Monitoring program in 2008 to isolate flows from this area in the sub-basin more effectively and to replace an existing dry site. A follow-up investigation on the next business day concluded that nitrate-nitrogen concentrations were below action levels. Since there were no other exceedances, an upstream investigation for the elevated nitrates was not warranted and was not performed.

Table 4.11 LUC-10 Follow-up Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
LUC-10	8/19/08	Flowing	Nitrate (NO3-N)	7.5	mg/L	10

Figure 4.6 illustrates water quality exceedance trends in the Leucadia sub-basin based on dry weather data collected from 2002-2008. Overall, the trend of water quality exceedances has been decreasing since 2005 and remains consistent with last year's levels.

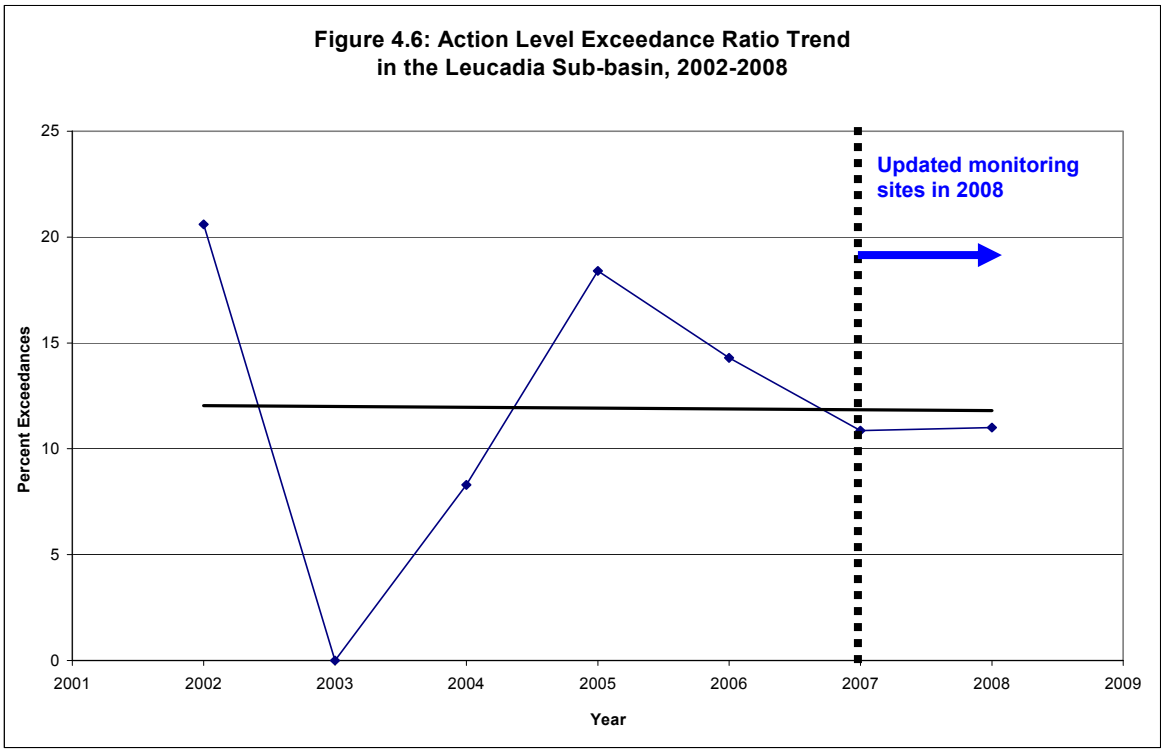

Data collected in the Leucadia sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.7 illustrates the Leucadia sub-basin.

Figure 4.7

Batiquitos Lagoon
LUC-1
LUC-6
LEUCADIA
LUC-9
LUC-10
LUC-8
LUC-7
LUC-4
LUC-3
ENC-18
ENC-7
ENC-15
ENC-14
Encinitas Map
Leucadia Sub-basin
This map should not be used for Engineering, Survey, or Site-Specific Analysis.
0
1,250
Feet
1 inch equals 1,667 feet

4.5 Encinitas Sub-basin

The dry weather monitoring locations included thirteen primary sites and four alternate sites in the Encinitas sub-basin (ENC). All runoff in the Encinitas sub-basin drains to the Pacific Ocean via Cottonwood Creek. This sub-basin covers the oldest area of development in the city and consists primarily of residential and commercial land uses including many nurseries. The established sampling points isolate these specific land uses. Many of the monitoring locations were established in 2002 when the Cottonwood Creek Urban Runoff Assessment and Action Plan was developed. The locations monitored in this sub-basin are primarily located along Cottonwood Creek with a few sites located on tributaries to Cottonwood Creek.

The changes that were implemented during the 2008 monitoring period included adding one new primary site (ENC-18) and re-designating four original primary sites (ENC-2, ENC-7, ENC-14 and ENC-16) to alternate sites. One original primary site (ENC-13) was removed completely because it was observed to be dry for every monitoring site visit since 2003. Overall, 71% of the original primary sites in this sub-basin were retained from previous monitoring years.

Dry weather monitoring in the Encinitas sub-basin included monitoring a total of fourteen locations (thirteen primary sites and one alternate location). This sub-basin has the most monitoring locations as it has historically had the most water quality exceedances. Sample locations were based on previous sampling points established in dry weather programs and other special studies. Of the 13 primary locations, 12 had water to sample, with ponded water at one location (ENC-4) and flowing water at all other locations. One alternate site in this sub-basin was also sampled as a replacement for routine monitoring of a primary site in another sub-basin that was not able to be sampled because it was dry. All 14 locations with water were field screened. Four locations were collected for full laboratory analysis, while five locations were only analyzed for bacteria indicators at the laboratory. Of the 14 locations sampled and tested, seven of those samples exceeded water quality standards for various field screened analytes. In total, two of the sample sites (ENC-6 and ENC-11) had elevated conductivity, three sites (ENC-3, ENC-6 and ENC-8) had elevated nitrates and three sites (ENC-7, ENC-15 and ENC-17) had elevated orthophosphates, ENC-7 also exceeded for ammonia and MBAS. Table 4.12 below summarizes the action levels exceeded in the Encinitas sub-basin.

Table 4.12 Encinitas Sub-basin Action Level Exceedances						
Station ID	Date	Water Flow	Analyte	Result	Action Level	Unit
ENC-3	9/2/08	Flowing	Nitrate (NO3-N)	20	mg/L	10.0
ENC-6	9/2/08	Flowing	Conductivity	7.06	mS/cm	5.00
ENC-6	9/2/08	Flowing	Nitrate (NO3-N)	45	mg/L	10.0
ENC-7	6/2/08	Ponded	Ammonia	10	mg/L	1.0
ENC-7	6/2/08	Ponded	MBAS	1	mg/L	1.0
ENC-7	6/2/08	Ponded	Orthophosphate (PO4-P)	4.5	mg/L	2.0
ENC-8	9/2/08	Flowing	Nitrate (NO3-N)	15	mg/L	10
ENC-11	7/15/08	Flowing	Conductivity	8.17	mS/cm	5.00
ENC-15	7/15/08	Flowing	Orthophosphate (PO4-P)	10	mg/L	2.0
ENC-17	9/3/08	Flowing	Orthophosphate (PO4-P)	3	mg/L	2.0

ENC-3

The water at ENC-3 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Land use in this sub-basin is primarily commercial however, no explicit sources were observed during a field investigation. Follow-up sampling on the next business day concluded that nitrate concentrations still exceeded action levels at this site. It is believed that elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate Exceedances for a more detailed discussion of groundwater).

Table 4.13 ENC-3 Follow-up Results						
Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-3	9/3/08	Flowing	Nitrate (NO3-N)	13	mg/L	10

ENC-6

The water at ENC-6 contained elevated conductivity and nitrates. No other constituents analyzed at this site exceeded action levels. Land use upstream is primarily residential. A follow-up investigation on the next business day concluded that nitrate concentrations still exceeded action levels at this site. These results are consistent with elevated conductivity and nitrate results at this site in previous monitoring years (Refer to Table 5.3). It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate exceedances for a more detailed

discussion of groundwater). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed

Table 4.14 ENC-6 Follow-up Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-6	9/3/08	Flowing	Nitrate (NO3-N)	75	mg/L	10

ENC-7

This site was designated as an alternate site in the 2008 Dry Weather Monitoring Program and was field screened to replace a dry monitoring site at LUC-6. ENC-7 was field screened from a sample of ponded water. The sample contained elevated ammonia, MBAS and orthophosphate. All other field screened constituents were below action levels. Land uses near this site include both residential and commercial with significant, albeit decreasing, numbers of commercial nurseries and growers directly adjacent to the site. Field crews noted that this site was near a nursery, a pet hotel, adjacent to a residential dog park and also received flow from the Encinitas YMCA sport fields. A follow-up investigation on the next business day concluded that ammonia and orthophosphate concentrations still exceeded action levels at this site.

Table 4.15 ENC-7 Follow-up Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-7	6/3/08	Ponded	Ammonia	10	mg/L	1.0
ENC-7	6/3/08	Ponded	Orthophosphate (PO4-P)	5.5	mg/L	2.0

Upon receipt of the exceedance results from the confirmation samples at ENC-7 the Clean Water Program's storm water inspector was notified of the exceedances and potential sources in the area. A total of two informal inspections were conducted at the Saxony at Encinitas Ranch HOA residential dog park and the Magdalena Ecke Family YMCA sport fields, two formal storm water inspections were also conducted at nearby commercial facilities to try and identify the potential sources of ammonia, orthophosphates and MBAS observed at this site. Table 4.16 includes a complete list of the inspections that were performed.

Table 4.16 ENC-7 Inspections and Investigation Activities			
Name	**Address**	**Date of Inspection**	**Results**
Saxony at Encinitas Ranch HOA/Residential Dog Park and Storm Drain Channel	Saxony Dr	06/02/08, 06/03/08	Accumulation of sediment and irrigation run-off in the concrete storm drain channel immediately adjacent to ENC-7. Sediment was completely removed from storm drain channel on 6/23/08.
Magdalena Ecke Family YMCA Sport Fields	200 Saxony Dr.	06/03/08	Corrective action required to minimize over-irrigation from City maintained right of way near the sports fields however, no violations noted.
Holiday Pet Hotel	551 Union St.	6/5/08	Corrective action required however, no violations noted.
Flora Bunda Nursery	603 Union St.	6/10/08	Corrective action required however, no violations noted.

Re-sampling at ENC-7 was scheduled on 7/7/08 after all inspections and corrective actions had been completed at the four locations listed in table 4.16 above. As a result of the inspections, all four locations had eliminated all runoff from their sites. When Clean Water Program staff returned to re-sample ENC-7, the site was completely dry and the adjacent storm drain channel was also documented as clean and dry. No further follow-up was conducted.

ENC-8

The water at ENC-8 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Land use in this sub-basin is primarily commercial however, no commercial sources were observed to be contributing to the exceedance of nitrates during the cursory investigation. A follow-up investigation on the next business day concluded that nitrate concentrations still exceeded action levels at this site and conductivity results from the follow-up sampling also slightly exceeded action levels.

Table 4.17 ENC-8 Follow-up Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
ENC-8	9/3/08	Flowing	Nitrate (NO3-N)	18	mg/L	10
ENC-8	9/3/08	Flowing	Conductivity	5.05	mS/cm	5.00

These results are consistent with elevated conductivity and nitrate results at this site in previous monitoring years. Since there were no other exceedances, an upstream investigation for the elevated nitrate and conductivity was not performed. It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate-nitrogen exceedances for a more detailed discussion of groundwater).

ENC-11

The water at ENC-11 contained elevated conductivity. No other constituents analyzed at this site exceeded action levels. Elevated conductivity and nitrate results at this site are consistent with documented exceedances for these constituents in previous monitoring years. It is has been well reasoned that the elevated conductivity is a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate-nitrogen exceedances for a more detailed discussion of groundwater). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed

ENC-15

The water at ENC-15 was sampled from the Encinitas Ranch Detention Basin and contained elevated orthophosphates. No other constituents analyzed at this site exceeded action levels. Land uses near this site include residential areas, a golf course and significant, albeit decreasing, numbers of commercial nurseries and growers. A follow-up investigation within two business days concluded that orthophosphate concentrations still exceeded action levels at this site.

Table 4.18 ENC-15 Follow-up Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-15	7/17/08	Flowing	Orthophosphate (PO4-P)	10	mg/L	2.0

Upon receipt of the exceedance results from the confirmation samples at ENC-15 the Clean Water Program's storm water inspector was notified of the exceedances and potential sources in the area. One drive-by inspection in the nearby residential neighborhood was conducted, one informal inspection was conducted at the nearby golf course and one formal storm water inspection was also conducted at a nearby commercial nursery to try and identify the potential sources of orthophosphates. Table 4.19 includes a complete list of the inspections that were performed.

Table 4.19 ENC-15 Inspection and Investigation Acitivites			
Name	**Address**	**Date of Inspection**	**Results**
Open storm drains connected to ENC-15	Quail Gardens Drive	7/17/08	Inspected all open drains connected to ENC-15 and found no evidence of illegal discharges.
Encinitas Ranch Neighborhood	Quail Gardens Drive	7/17/08	Run-off traced to a home upstream with new landscaping. Homeowner stated that landscaping had not yet been fertilized. No violations noted.
Encinitas Ranch Golf course	1253 Paseo De Las Flores	7/17/08	Minor corrective action required however, no violations noted.
Dramm & Echter	1150 Quail Gardens Dr.	7/17/08	Observed run-off coming from the nursery. Drainage system pump was broken. Corrective action required however, no violations noted.
Dramm & Echter	1150 Quail Gardens Dr.	7/23/08	Follow up site inspection confirmed that discharge had ceased -case closed.

ENC-17

The water at ENC-17 contained elevated orthophosphates. No other constituents analyzed at this site exceeded action levels. Land uses near this site include residential areas, a golf course and significant, albeit decreasing numbers of commercial nurseries and growers. A follow-up investigation the next business day concluded that orthophosphate concentrations still exceeded action levels at this site.

Table 4.20 ENC-17 Follow-up Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
ENC-17	9/4/08	Flowing	Orthophosphate (PO4-P)	2.5	mg/L	2.0

Upon receipt of the exceedance results from the confirmation samples at ENC-17 the Clean Water Program's storm water inspector was notified of the exceedances and potential sources in the area. One drive-by inspection in the nearby residential neighborhood was conducted and one formal commercial inspection was conducted at the nearby golf course to try and identify the potential sources of orthophosphates. There were no violations

observed through the follow-up actions, and no explicit source was identified,

Groundwater in the Encinitas Sub-basin

Historically consistent nitrate and conductivity exceedances in the Encinitas sub-basin support a groundwater source. As such, in 2008 it has been reasoned that groundwater flows are the cause for the six exceedances in nitrate at ENC-3, ENC-6 and ENC-8 and the three exceedances of conductivity at ENC-6, ENC-8 and ENC-11. The locations of the conductivity exceedances are persistent from year to year and have been detected at the primary groundwater tributaries in the sub-basin: ENC-6 and ENC-11. A historical analysis of ENC-3 and ENC-8 show that these sites have exceeded for nitrates 86% in six out of seven analyses since 2002. ENC-6 has exceeded for nitrates 100% in seven out of seven analyses since 2002. The conductivity exceedances have been consistently accompanied by elevated levels of nitrate. The six nitrate exceedances are all located downstream of the confluence of the groundwater tributaries and the other flows in Cottonwood Creek. All three stations, ENC-3, ENC-6, and ENC-8, are all located west of Pacific Coast Highway 101 and samples at these locations are collected within 1,500 feet of each other. All of these sampling locations are near the topographic low point in this sub-basin near the coast. Nitrate concentrations remain consistent in this reach along an open channel, and a natural creek. Further discussion of nitrate and conductivity exceedances is located in Section 5.3 and more detailed analysis was included in Appendix J of the 2007 Dry Weather Monitoring Assessment and included as reference in Appendix C-5 of this report. Figure 4.8 illustrates the parameters in which water quality criteria were exceeded in the Encinitas Sub-basin from 2002-2008.

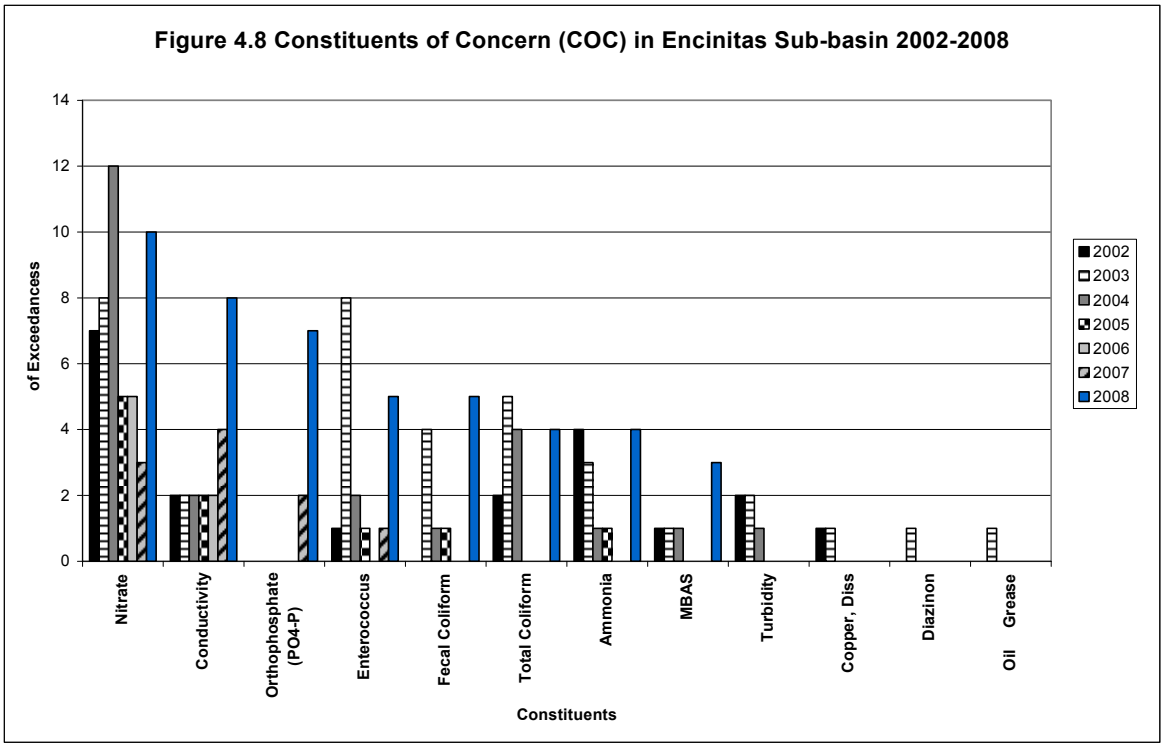

Figure 4.9 below illustrates water quality exceedance trends in the Encinitas Sub-basin based on dry weather data collected from 2002-2008. Although several water quality exceedances have been typical for the Encinitas sub-basin, overall water quality has been improving over the last six years of dry weather monitoring (Figure 4.9). The increase in the 2008 exceedance ratio can be attributed to the increase in the overall number of samples collected. There were 22 more samples collected and analyzed in this sub-basin than in previous monitoring years.

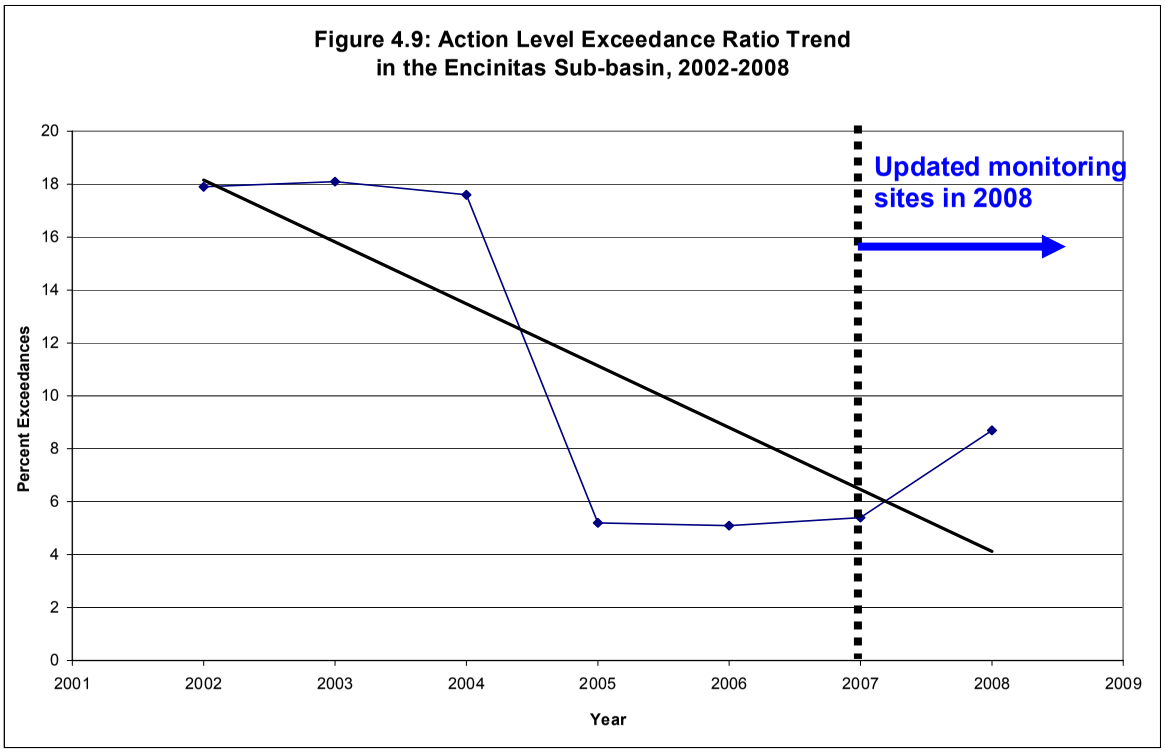

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Data collected in the Encinitas sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.10 illustrates the Encinitas sub-basin.

Figure 4.10

LUC-3
ENC-18
ENCINITAS
ENC-7
ENC-15
ENC-14
ENC-6
ENC-5
ENC-1
ENC-8
ENC-4
ENC-3
ENC-9
ENC-11
ENC-10
ENC-12
ENC-16
ENC-17
ENC-2
CBS-7
CBS-8
Encinitas Map
Encinitas Sub-basin
This map should not be used for Engineering, Survey, or Site-Specific Analysis.
0
1,250
Feet
1 inch equals 1,829 feet

4.6 Rancho Santa Fe Sub-basin

The dry weather monitoring locations included two primary sites in the Rancho Santa Fe sub-basin. All runoff in this sub-basin drains to Escondido Creek which feeds into the San Elijo Lagoon. Land use in this area is primarily residential with few commercial facilities also located in the sub-basin.

In March 2008, two primary sites (RSF-2 and RSF-3) were removed from the monitoring program. RSF-2 was removed because it had been completely dry during each dry weather monitoring site visit since 2003. RSF-3 was removed because it is located outside of the City of Encinitas' jurisdiction and is also being maintained as a monitoring location by the County of San Diego. Overall, 50% of the original primary sites in this sub-basin were retained from previous monitoring years.

Of the two designated locations for routine monitoring in 2008, one location (RSF-4) was observed to have flowing water and one location (RSF-1) had ponded water. Both locations were field screened however; analytical lab samples were only collected at RSF-4. There were no water quality exceedances in this sub-basin in 2008.

Although there have been some water quality exceedances in the Rancho Santa Fe sub-basin in the past, water quality has been improving over the last six years of dry weather monitoring. Figure 4.11 illustrates a downward trend in water quality exceedances in the Rancho Santa Fe sub-basin based on dry weather data collected from 2002 to 2008.

Figure 4.11: Action Level Exceedance Ratio Trend in the Rancho Santa Fe Sub-basin in 2002-2008

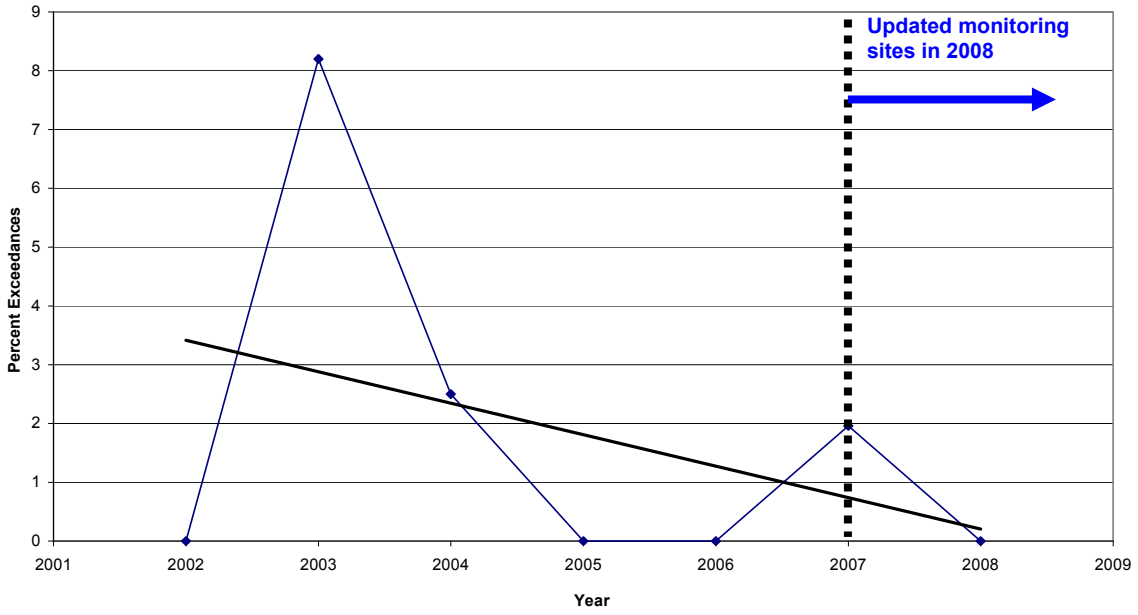

Data collected in the Rancho Santa Fe sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.12 illustrates the Rancho Santa Fe Sub-basin.

Figure 4.12

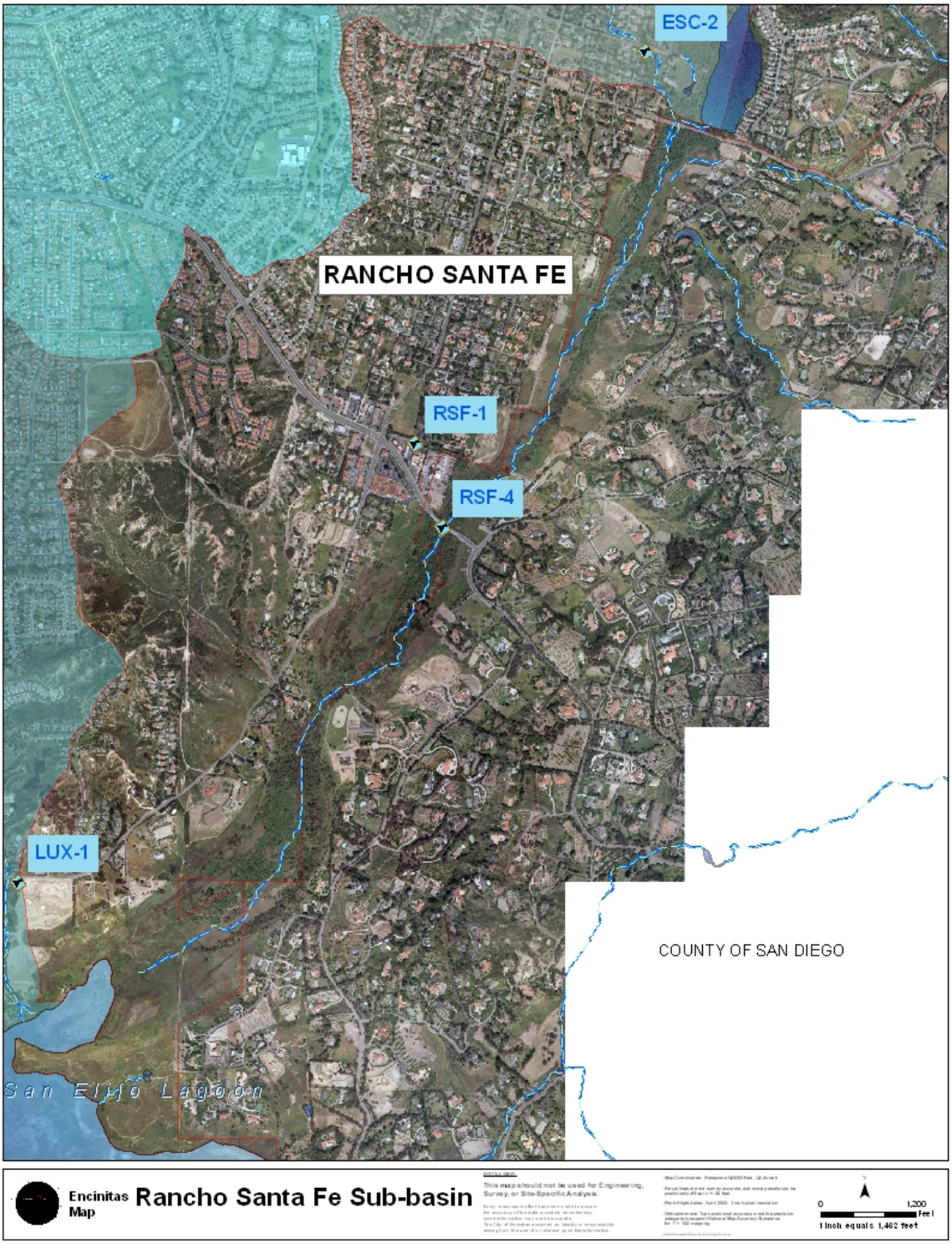
ESC-2
RANCHO SANTA FE
RSF-1
RSF-4
LUX-1
COUNTY OF SAN DIEGO
San Elijo Lagoon
Encinitas Map
Rancho Santa Fe Sub-basin
This map should not be used for Engineering, Survey, or Site-Specific Analysis.
0
1,200
Feet
1 inch equals 1,462 feet

4.7 Lux Canyon Sub-basin

The dry weather monitoring locations included two primary sites in the Lux Canyon sub-basin (LUX). All runoff in this sub-basin drains to the San Elijo Lagoon. Land use in this area is primarily residential with a few commercial facilities located in the sub-basin.

In March 2008, one new primary site (LUX-3) was added to provide additional coverage to another primary site (LUX-2) upstream. LUX-1 an original primary site for this sub-basin, (LUX-1) was designated as an alternate site because it had been dry during most dry weather monitoring site visits since 2003. Overall, 50% of the original primary sites in this sub-basin were retained from previous monitoring years.

Of the two designated locations for routine monitoring in 2008, LUX-2 had ponded water and LUX-3 was completely dry. There were no analytical lab samples collected in this sub-basin, LUX-2 was only field screened. There were no water quality exceedances in this sub-basin in 2008.

Figure 4.15 illustrates a downward trend in water quality exceedances in the Lux Canyon Sub-basin based on dry weather data collected from 2002 to 2008.

1046

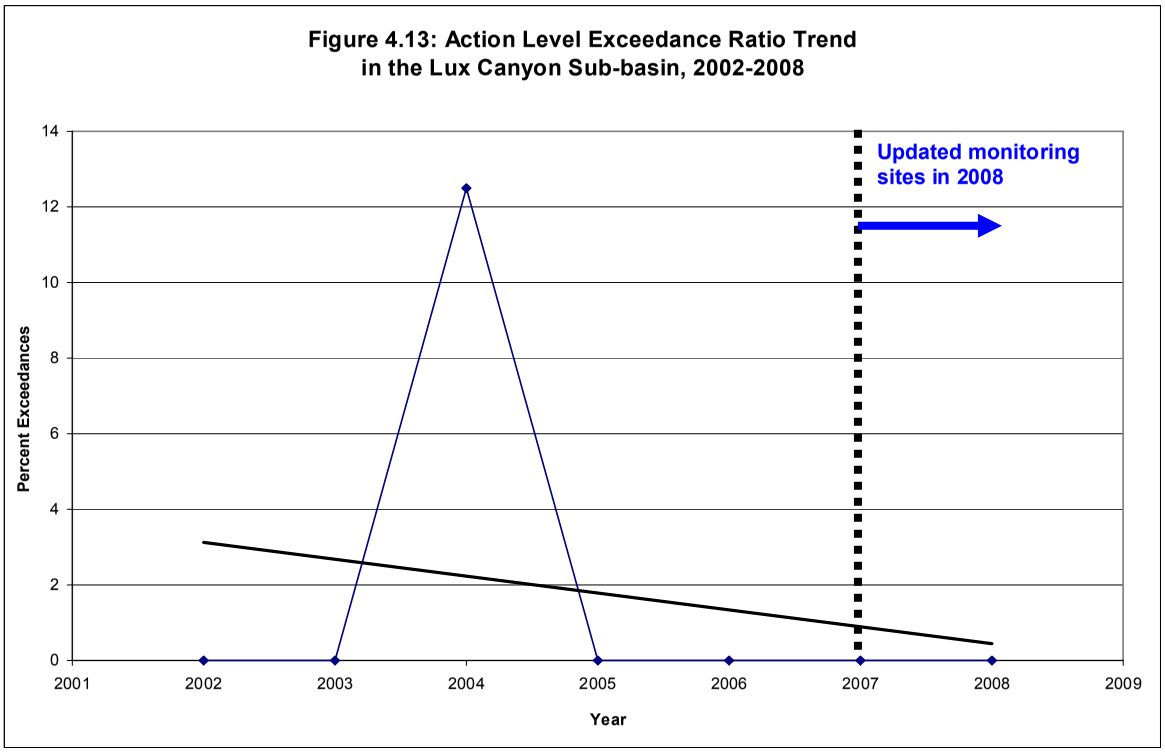

Data collected in the Lux Canyon sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.14 illustrates the Lux Canyon sub-basin.

Figure 4.14

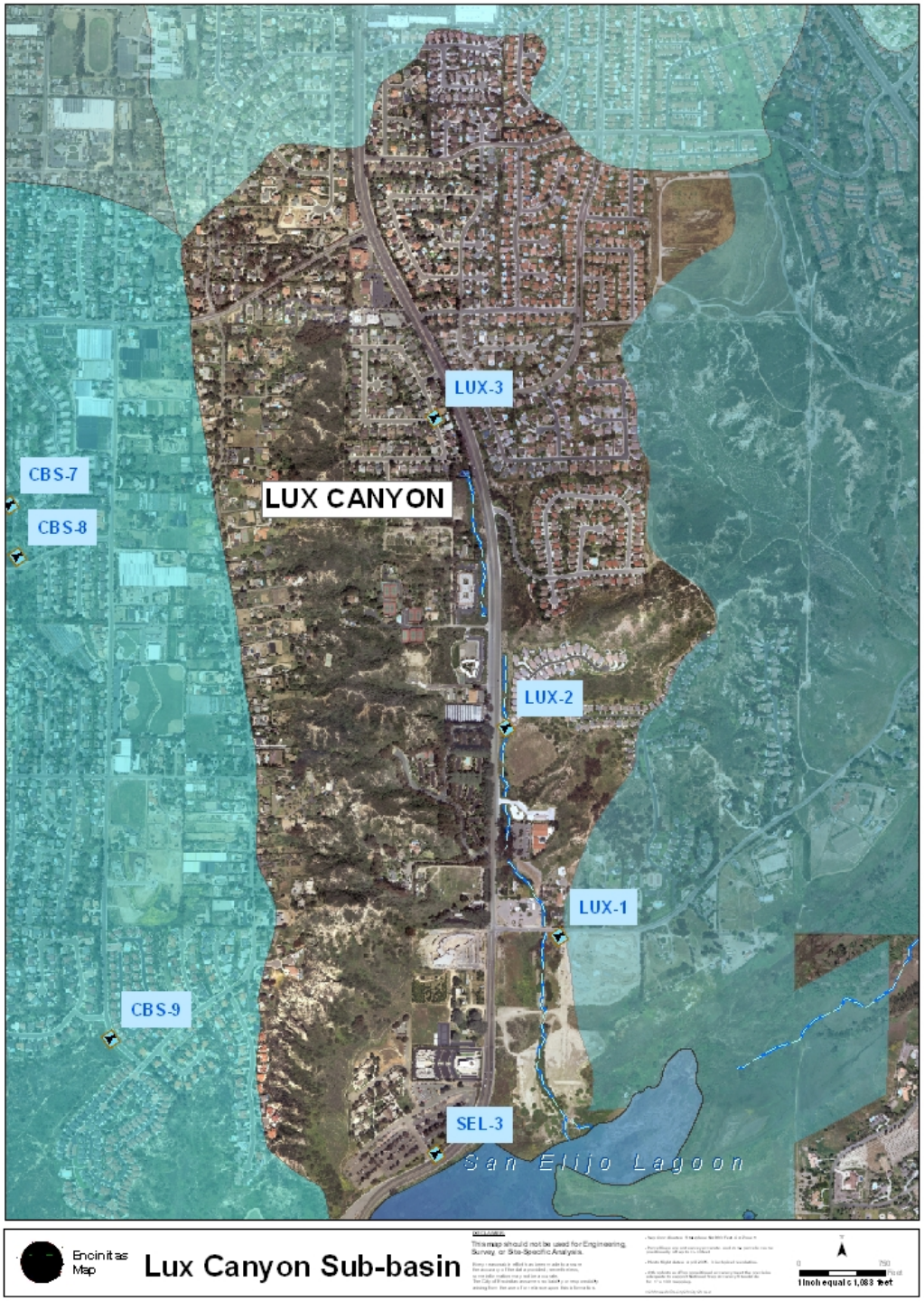
LUX-3
CBS-7
LUX CANYON
CBS-8
LUX-2
LUX-1
CBS-9
SEL-3
San Elijo Lagoon
Encinitas Map
Lux Canyon Sub-basin
1 inch equals 1,083 feet

5.0 Summary

The City's comprehensive dry weather water quality monitoring per
all of the Dry Weather Monitoring requirements as established in
Water Permit (Order 2007-01) in section II.B.3 of the Receiving Wat
Monitoring and Reporting Program. The data that was collected se
storm drain facilities and creeks for illicit connections and illicit c
characterization of the water quality in the City and subsequent prior
in the watershed and pollutants of concern in those sub-basins. T
summary of all the dry weather monitoring results for 2002-2008.

5.1 Water Quality Exceedances and Trends

The City of Encinitas can be sub-divided into seven distinct drainage
below in Figure 5.0. According to the number of exceedances of esta
parameters between 2002 and 2008 these sub-basins have been ranke
quality to best. Figure 5.0 illustrates the percent of analytes exceedin
sub-basin according to data collected from 2002 through 2008.

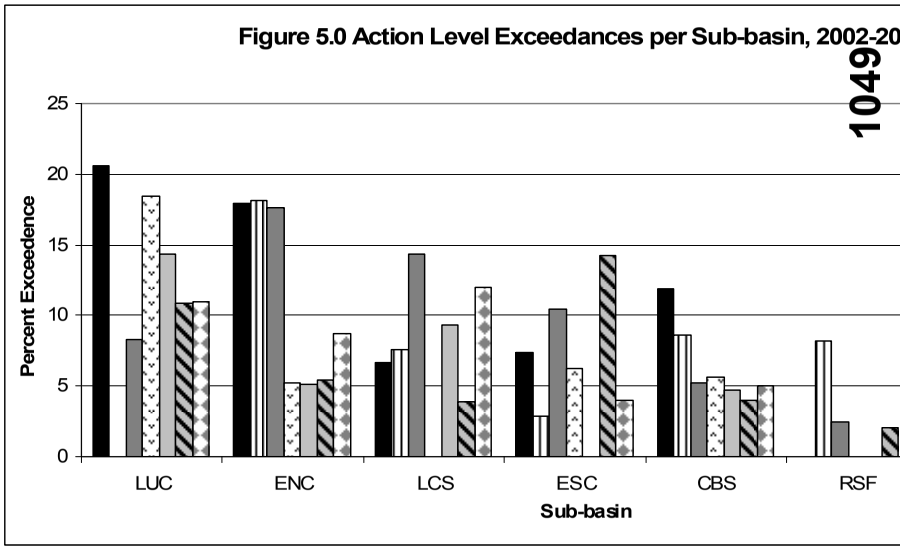

Data from Figure 5.0 illustrates that despite some increasing exceedar
last year, water quality on the whole has been improving since 200
higher exceedance ratios in many sub-basins in 2008, steady improver
are evident in all the sub-basins throughout Encinitas. There were
Lux Canyon Sub-basin (LUX) and the Rancho Santa Fe Sub-basin (RS
Creek Sub-basin (ESC) increased in exceedance rates in 2007 as
conductivity levels, however has dropped to an exceedance ratio of 4
the La Costa South Sub-basin (LCS) had an exceedance rate of 12% du
results. The Encinitas Sub-basin (ENC) has had water quality excee

the analyses in previous dry weather monitoring. In 2005 through 2007, the exceedance rates averaged 5%, showing overall improvements in water quality in the sub-basin. An increase in the overall exceedance rate of 8.7% in 2008 is attributable to the increased sampling efforts and the elevated conductivity and nitrates from suspected groundwater in the Encinitas sub-basin.

Figure 5.1 illustrates the total exceedance rate for all sites sampled during each Dry weather monitoring year. The 2008, the total exceedance rate was 8.7%, an increase when compared to years past. This increase is most likely attributable to the increased sampling efforts and the elevated conductivity and nitrates from suspected groundwater in the Encinitas sub-basin.

During the 2008 monitoring period, the City's Dry Weather Monitoring program was revised to include fewer primary sites than in years past. Because the primary sites were carefully chosen to include only sites with flowing or ponded water, 95% of all primary sites were analyzed, and two alternate sites were sampled in lieu of dry primary sites. Overall, there were more samples analyzed and an average of 17% more water quality analyses were conducted than had been done in years past. As indicated in Figure 5.1, although there were more samples which exceeded action levels in 2008, water quality exceedances have generally been decreasing in the City of Encinitas since dry weather monitoring began in 2002.

Figure 5.1 Percent of Analysis Exceeding Water Quality Action Levels, 2002-2008

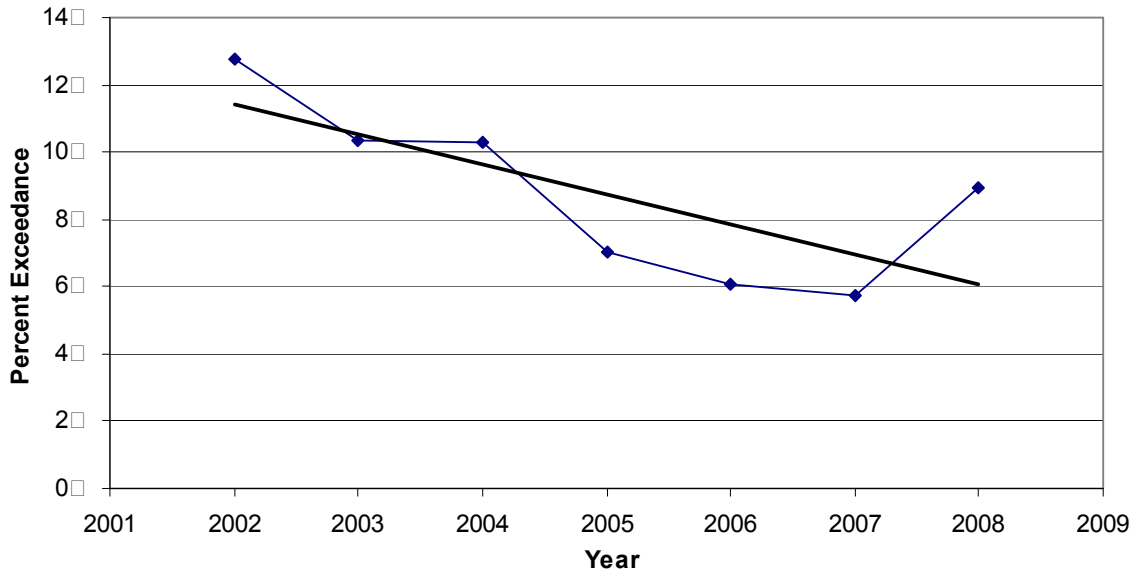

5.2 Prioritization of Constituents of Concern (COCs)

Figure 5.2 illustrates all water quality exceedances for each sub-basin in 2008.

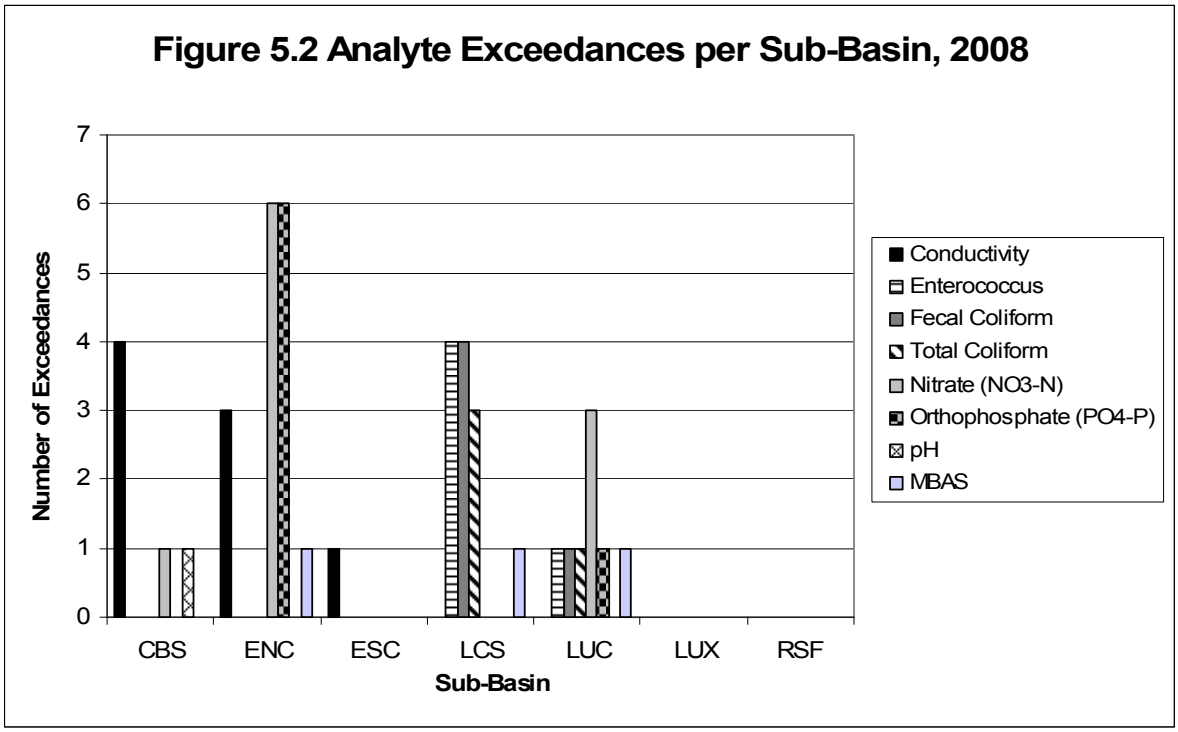

To further prioritize water quality issues in the sub-basins, the COCs were stratified by exceedances per COC in 2008 as illustrated in Figure 5.3.

Figure 5.3 Constituents Exceeding Water Quality Action Levels During Dry Weather Monitoring in 2008

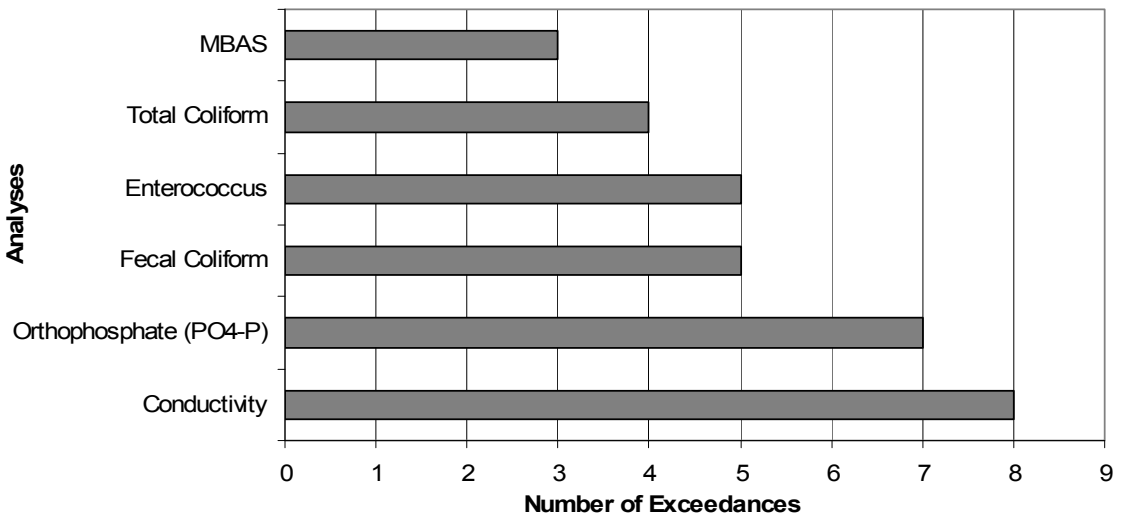

The COCs can be divided into three priority categories based on criteria established as part of the 2003 Dry Weather Program. The criteria were modified in 2004 to better address COCs and their frequency of occurrence. Table 5.0 is a matrix of criteria for selecting COC priorities.

Table 5.0 Constituents of Concern Prioritization Criteria

	Criteria	Priority	Recommended Action
I	Exceedance Ratio 10 and trends are not increasing	Low	Continue routine monitoring and place COC on watch list.
II	Exceedance Ratio greater than 10 , less than 50	Medium	Increase Monitoring Frequency in Following Dry Weather Program
III	Persistent Exceedances	Medium	Increase Monitoring Frequency in Following Dry Weather Program
IV	Impacting Receiving Waters, 303d listed	High	Special Study, ICID Investigations, BMP implementation
V	Exceedance Ratio 50	High	Special Study/Investigations
VI	II and III	High	Special Study/Investigations

unless best professional judgment indicates otherwise

In order to lower the priority for a constituent from one year to the next, the COC must

qualify for the lower category according to the criteria listed above and not show an increasing trend over the data collected. A constituent may only decrease one step per year and may be removed from the list if the constituent was ranked low the previous year and had no exceedances in monitoring for the current year. Figure 5.4 below illustrates the exceedance ratios per COC in the 2008 monitoring period. The exceedance ratio is calculated by the following formula:

$$E=x/y*100$$

where,

E = exceedance ratio
x = total number of exceedances for selected COC
y = total number of analyses for the COC

This method allows for a comparison of the exceedance rates for each indicator. For 2008, exceedance ratios for nitrate were higher than the exceedance ratios of the other constituents. The exceedance ratios for bacteria indicators ranked second and third. The indicator exceedance ratios in Figure 5.4 define the ranks assigned to each constituent.

Figure 5.4 Analyses Exceeding Water Quality Action Levels
Dry Weather Monitoring 2008

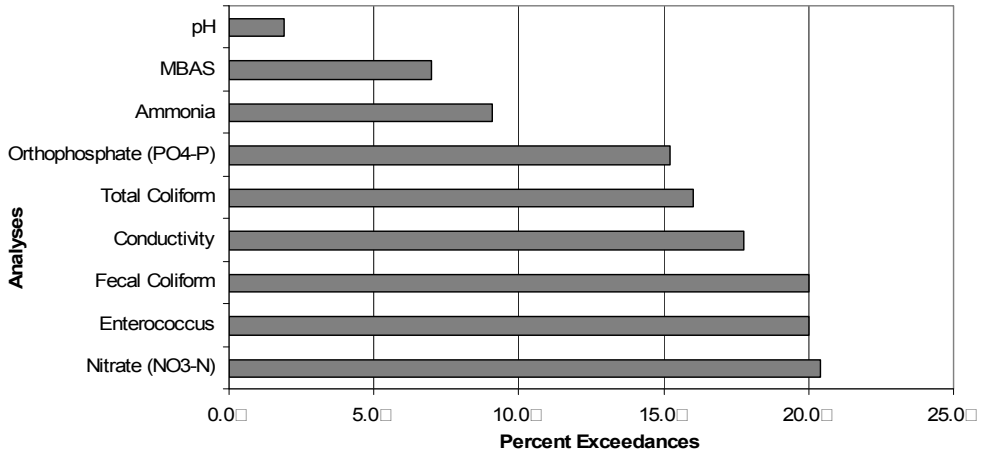

The City of Encinitas COCs were selected and prioritized according to criteria in Table 5.0 and the data presented in Figure 5.4. The COCs are presented below in Table 5.1.

Table 5.1 2008 High Priority Constituents of Concern		
COC	**Priority**	**Action Plan**
Bacteria Total Coliform Fecal Coliform Enterococcus	High	Continuing encampment removals BMP implementation (grease removal equipment, coverage/containment for grease bins) Maintain the Ultra Violet Treatment Facility Continue to assess bacteria data by land use and by conveyance type
Nitrate-nitrogen	High	Number of nitrate exceedances have been trending downward since 2002, however, San Elijo Lagoon is on 303(d) list of impaired water bodies for nutrients Focus on education targeting irrigation runoff and inspections of nurseries. Proceed with TMDL Investigation Order examining nutrients in San Elijo Lagoon

The justification for the 2008 COC prioritization and the reasons supporting any changes are listed in Table 5.2 below.

Table 5.2 Annual Prioritization of Constituents of Concern, 2003-2008							
Constituent	**2003 Priority**	**2004 Priority**	**2005 Priority**	**2006 Priority**	**2007 Priority**	**2008 Priority**	**Reason for Change**
Conductivity	None	Low	Medium	Medium	Medium	Medium	Conductivity exceedances 10 and the exceedances are persistent from year to year at the same locations. However, criteria in evaluating conductivity exceedances are based on best professional judgment and high values of conductivity where groundwater is confirmed are not considered problematic from an illicit discharge and connection standpoint. Because this persistence is likely due to a constant source of groundwater flow in many locations, conductivity remains a medium priority.
Oil and Grease	None	None	None	Low	None	None	There were no exceedances for oil and grease during the past two monitoring years, therefore this constituent is being removed from the list of COCs.

Table 5.2 Annual Prioritization of Constituents of Concern, 2003-2008							
Ammonia	High	Medium	Low	None	None	Low	Ammonia exceeded action levels 4 out of 44 analyses and has an exceedance ratio of 9 in 2008. The constituent will be routinely monitored and has been placed on the COC watch list.
MBAS	Medium	Medium	Low	None	None	Low	MBAS exceeded action levels 3 out of 43 analyses and has an exceedance ratio of 7 in 2008. The constituent will be routinely monitored and has been placed on the COC watch list.
pH	None	None	Low	None	Low	Low	In 2008 monitoring, there was one exceedance for pH which was attributable to increased temperature in a concrete channel. The constituent will be routinely monitored and remains on the COC watch list.
Temperature	None	None	Low	None	None	None	There were no exceedances for temperature during the past two monitoring years, therefore this constituent is being removed from the list of COCs.
Orthophosphate				None	Low	Medium	In 2008, there were seven exceedances for orthophosphate, The constituent has been elevated from low to medium priority and will be monitored more frequently in the following dry weather program.
Turbidity					Low	None	There were no exceedances for turbidity during the past two monitoring years, therefore this constituent is being removed from the list of COCs.

Bacteria and nitrate remain high priority COCs. Conductivity has increased in priority over the preceding monitoring periods. After factoring in all potential sources, groundwater is the most prevalent; therefore, conductivity remains a medium priority. Ammonia, MBAS and orthophosphates were raised in priority this year, as a result of 14 exceedances. The COCs that have decreased in priority over the 2008 monitoring period includes temperature and oil and grease. There were no exceedances for temperature during the past two monitoring years and it has been removed from the list of COCs. Oil and grease was added to the watch list in 2006; however, with no exceedances in the 2007 and 2008 monitoring periods, it was lowered in rank and removed from the list of COCs

this year.

5.3 Bacteria Indicator Exceedances

Extensive bacteria data has been collected for the past six dry weather seasons, allowing for a better overall characterization of bacteria sources and loading in the City. Enough data has been collected to attempt to characterize bacteria concentrations based on land use. The additional data collection at 11 sites located throughout the City also allows for long term trend assessments of bacteria concentrations in the City.

The two major land uses in Encinitas are commercial and residential and are often not distinct to a drainage basin but are mixed. The assessment of bacteria loading from these areas is based on primary land use as listed in the data set. Figure 5.5 illustrates the geometric mean concentrations of total coliform, fecal coliform and enterococcus based on land use. According to the data collected from 2002 to 2008, the commercial areas contribute more bacteria to the MS4 for all three indicators, as calculated based on concentration only, which is not indicative of overall loading. The total coliform concentrations are approximately 49% higher, fecal coliform are approximately 51% higher, and enterococcus concentrations are approximately 59% higher in commercial areas. The differences between commercial and residential areas are illustrated in Figure 5.5.

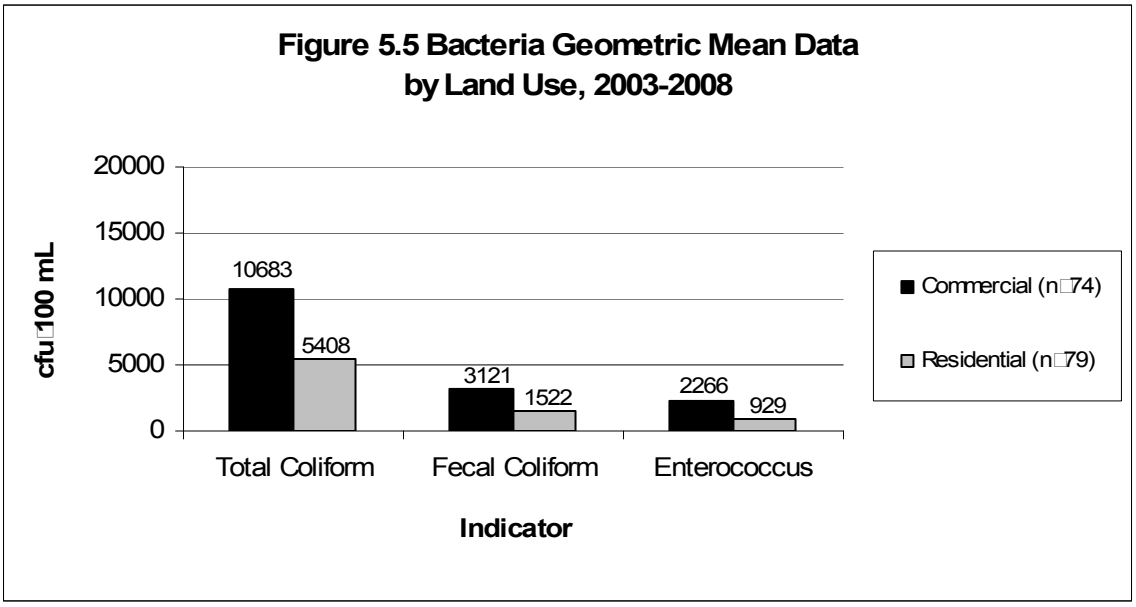

5.4 Nitrate Exceedances

The exceedance rates for nitrate increased from 14% in 2007 to 20% in 2008. Overall, the exceedance rates for nitrate have declined from 2004 to 2008 across all sub-basins. Exceedance rates for nitrate for all six years of dry weather monitoring are illustrated in Figure 5.8.

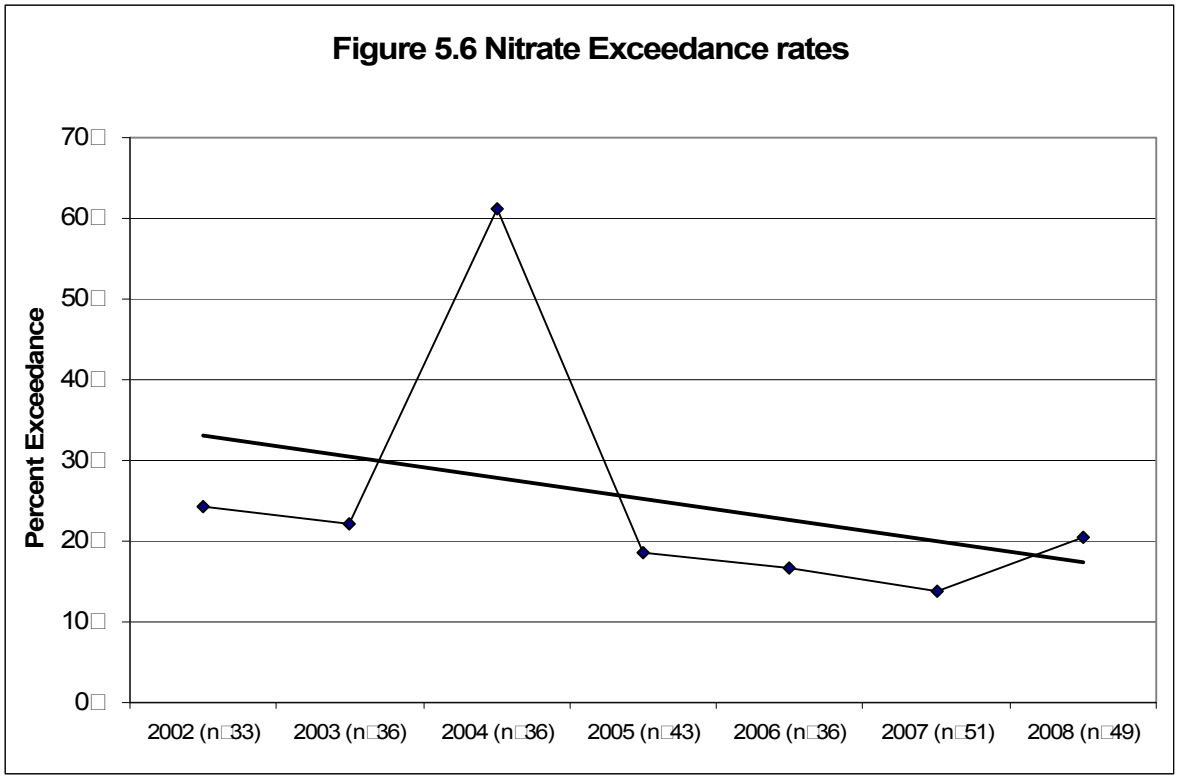

Over the five years of monitoring, groundwater remains a constant source of dry weather flow within Moonlight Creek and Cottonwood Creek in the Encinitas Sub-basin. There are six monitoring locations in the City's dry weather monitoring program that are located within this geographical area. Since 2002, five primary monitoring sites, ENC-1, ENC-3, ENC-6, ENC-8 and ENC-11 have consistently exceeded for nitrates and are often accompanied by elevated conductivity. Over the monitoring periods, other nitrate exceedances have been present on occasion, most notably in 2004. Reasons for the increase in nitrate exceedances in 2004 are unknown. The spike in exceedances that year may have been likely due to residential and nursery runoff affecting nutrient concentrations. Often concentrations of pollutants are consistent at locations with irrigation runoff from nurseries. It is more common to find elevated concentrations of ammonia, orthophosphate and nitrate with low conductivity and higher bacteria levels in the samples.

Most of the nitrate exceedances in the Encinitas sub-basin are consistent with elevated nitrate results from previous years of monitoring and have been reasoned to be a result of

groundwater in the region. The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. It is common to find elevated nitrates in groundwater in regions of agriculture and it is likely that the sources of nitrogen in the groundwater in Encinitas are from historical land uses such as nurseries. It should be noted, however, that local water authorities do not consider Encinitas groundwater a viable source of drinking water because it is subject to sea water intrusion. As a result, there is little groundwater quality data specific to Encinitas. Table 5.3 contains all sites with nitrate exceedances in the dry weather monitoring within 2002 through 2008 and suspected source of nitrogen.

Table 5.3 Nitrate Exceedances, 2002-2008

Site	Nitrate Exceedances							Suspected Source
	2002	2003	2004	2005	2006	2007	2008	
CBS-1			X					Groundwater
CBS-2				X				Combination
CBS-3N			X					Irrigation
CBS-3S			X					Irrigation
CBS-8							X	Groundwater
ENC-1	X	X	X	X	X			Groundwater
ENC-3	X	X	X	X	X		X	Groundwater
ENC-4			X					Irrigation
ENC-5	X	X	X			X		Combination
ENC-6	X	X	X	X	X	X	X	Groundwater
ENC-8	X	X	X	X	X		X	Groundwater
ENC-9			X		NS			Irrigation
ENC-10	X		X					Irrigation
ENC-11	X	X	X	X	X	X		Groundwater
ENC-12		X			NS			Irrigation
ENC-14			X		NS			Irrigation
ENC-15		X	X					Irrigation
ENC-17		X	X					Irrigation
ESC-1			X					Groundwater
ESC-2			X					Irrigation
LCS-1			X			X		Irrigation
LCS-2			X					Irrigation
LCS-5						X		Irrigation
LUC-1	NS	NS	X	X	X	X	X	Groundwater
LUC-7			X	NS	NS			Groundwater
LUC-9							X	Groundwater
LUC-10							X	Groundwater
LUX-2			X		NS			Irrigation
SEL-2						X		Combination
SEL-5	NS	NS	NS	X	NS			Irrigation

NS No sample, Combination Groundwater and Irrigation, New site Added in 2008

The sites with nitrate exceedances attributable to groundwater are typically not causing water quality problems in the receiving waters. These locations do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils. In 2008, all nitrate exceedances except two locations (LCS-1 and LCS-5) appeared to be attributable to groundwater. A more detailed discussion of nitrate and conductivity exceedances was included in Appendix J of the 2007 Dry Weather Monitoring Assessment and has been provided for reference in Appendix C-5 of this report.5.5 Receiving Waters

Finally, the sub-basins can be divided by respective receiving waters. Runoff in the City of Encinitas drains either north to Batiquitos Lagoon, south to San Elijo Lagoon, or west to the Pacific Ocean at Moonlight Beach.

Table 5.4 shows the sub-basins and their associated receiving water.

Table 5.4 Receiving Waters and Associated Sub-basins

Batiquitos Lagoon	Pacific Ocean	San Elijo Lagoon
Leucadia	Encinitas	Cardiff
La Costa South		Lux Canyon
		Lower Escondido Creek
		La Orilla Creek
		Rancho Santa Fe

In dividing the City of Encinitas into receiving water drainage areas, general conclusions as to the water quality entering these waters can be inferred. In order to compare the water quality across these three drainage areas, a ratio of the number of water quality exceedances to analytes tested is calculated. Figure 5.9 presents the ratios calculated for the three drainage areas over the five years of dry weather monitoring.

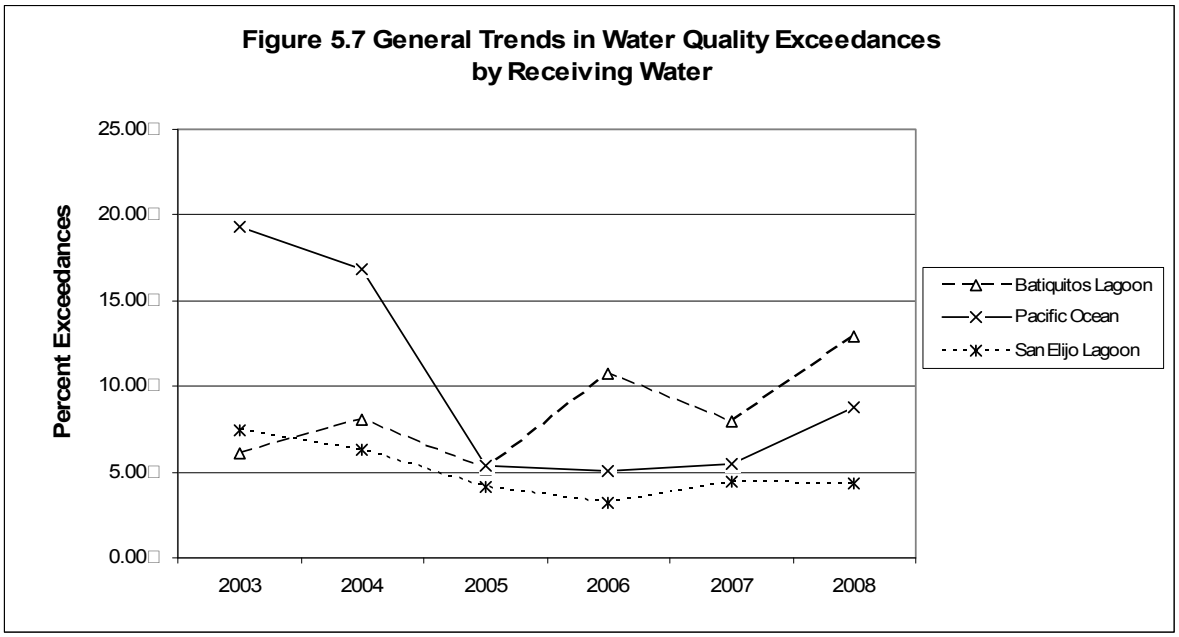

According to these ratios, the waters flowing north to the Batiquitos Lagoon exceeded action levels more than flows to the Pacific Ocean or the San Elijo Lagoon. The primary COCs in this area continue to be bacteria. The sub-basin exceedances that drain into the Batiquitos Lagoon have been variable from year to year. Exceedances were higher in 2006, as a result of illicit discharges which were identified and abated in the La Costa South Sub-basin. Exceedances increased again in 2008 due to high bacteria indicators although no known sources were identified.

The primary COCs draining to the Pacific Ocean continue to be bacteria and nitrates. The bacteria are mitigated by an Urban Runoff Treatment Facility which utilizes ultra-violet light to reduce bacteria in the creek discharge. This facility is located near the mouth of Cottonwood Creek and effectively eliminates bacteria from 85% of the creek flow volume. In 2008, all of the nitrate exceedances in the sub-basin appeared to be attributable to groundwater.

The sub-basins draining to San Elijo Lagoon continue to exhibit a relatively low exceedance ratio under 5%.

6.0 Conclusions

Throughout the six years of dry weather monitoring the City of Encinitas has succeeded in identifying jurisdictionally significant water quality COCs. The sources of these COCs have been identified and eliminated where possible. Ongoing monitoring for the Dry Weather Monitoring Program will allow for continuous trend assessments within each of the sub-basins and the receiving waters in future years. Currently, these trends are captured in the exceedance ratios which are delineated by sub-basin and by land use.

The high priority COCs in Encinitas are bacteria indicators (total and fecal coliform and enterococcus) and nitrates. High bacteria levels occur most often in commercial land use areas throughout the City of Encinitas. Sources for bacteria have been identified in several instances in years past and have included natural loading from wildlife, regrowth in the MS4, and various illegal connections to the MS4. Commercial washing is also a concern and is addressed aggressively in the City's inspection program. Bacteria indicators in the MS4 have been trending downward since 2003 for both residential and commercial areas in Encinitas.

It is not known if the elevated nitrates observed throughout Encinitas are entirely from anthropogenic sources. The possible sources of nitrates have been identified as groundwater, nursery irrigation run-off and residential irrigation run-off containing fertilizers. With the exception of a few nitrate exceedance in 2004, most exceedances appear to be groundwater and have been relatively consistent. In 2008, 5 out of 7 nitrate exceedances were determined to be groundwater. In these locations, the high nitrate concentrations are accompanied by elevated conductivity and no other COC exceedances. Nitrate is a constituent of concern for the groundwater in the San Diego region and historical land uses, such as nurseries are likely sources of nitrogen in the groundwater in Encinitas. The elevated conductivity may be from various minerals entering the groundwater from the sedimentary soils or seawater intrusion in the region. A detailed discussion of nitrate and conductivity exceedances is included in Appendix J of the 2007 Dry Weather Monitoring Report and provided for reference in Appendix C-5 of this report. The program will continue to focus on education targeting irrigation runoff and inspections of nurseries.

Using the COC prioritization method described in Table 5.0, City staff has evaluated and ranked water quality concerns in the City, which will allow appropriate attention in the upcoming year. The City of Encinitas Clean Water Program shall continue to focus on illicit discharges and connections as a means to improve water quality. The dry weather monitoring program assists the City in focusing efforts targeting identifiable pollution problems throughout the City. Efforts, including targeting specific audiences for education, enforcement activity, and Best Management Plan (BMP) implementation, have expanded as a result of the water quality characterization gained from the Dry Weather Monitoring Program.

In 2008, the City of Encinitas initiated two notable activities that in combination with the dry weather monitoring program have served to better manage illicit discharges and connections. First, a commercial restaurant binder pilot program was implemented to properly educate restaurant employees on appropriate storm water BMPs. Secondly, the City of Encinitas, collaborated with the Carlsbad Watershed copermittees assessed all dry weather monitoring data across the Carlsbad Hydrologic Unit in order to improve the development of appropriate watershed-based stormwater BMPs.

Since restaurants have been targeted as a probable source of COCs in past monitoring years, the City of Encinitas developed a pilot education and outreach program to distribute a Stormwater Pollution Prevention Manual to restaurant facilities throughout the City in FY 2006-07. The intent of the binder and CD is to support restaurant owners and staff to ensure that proper BMPs are utilized to eliminate non-stormwater discharges. Approximately 180 binders were distributed during routine restaurant inspection activities. Each binder included a site map of each facility, BMP information specific to restaurant operations, and sections to record training, inspection, maintenance activities. In addition, each binder included an educational video related to storm water BMPs which could be used to train employees.

During FY 07-08 commercial inspections, the year following the distribution of the binder/CD, Clean Water Program staff evaluated the overall success and effectiveness of the restaurant binder/CD program. Commercial facility inspection forms were augmented to capture answers to questions aimed at evaluating the utility and use of the information provided the previous year. After conducting the survey, City of Encinitas evaluated the overall effectiveness of the binder/CD distribution using three assessment measures, 1) a targeted binder/CD use survey, 2) a knowledge level comparison from FY 06-07 to FY 07-08 and 3) BMP implementation comparison from FY 06-07 to 07-08. In general, the assessment showed that although the restaurant manager survey demonstrated marginal utilization of the binder and CD, marked improvements in stormwater knowledge and BMP implementation from FY 06-07 to FY 07-08 suggest that distribution of the binder/CD were a beneficial endeavor which could improve water quality. In future years, encouraging restaurant managers to utilize their binder and CD is likely to result in further water quality benefits.

To address comprehensive assessment of all dry weather monitoring data within the Carlsbad watershed, the Carlsbad WURMP copermittees designed and implemented a web-based GIS data warehousing application in FY 2007-08. Copermittees are able to compare dry weather constituents of concern across the Carlsbad Hydrologic Unit. Each jurisdiction provided pollutant source inventories and historical dry weather data. The data was processed and integrated into the interactive mapping application. The GIS mapping application is the platform by which the assessment of dry weather monitoring data can be analyzed within the watershed. The final product was presented to the Carlsbad WURMP group in August of 2008. Some of the mapping application's tools include, zooming in and out, turning different layers on and off for display, selecting features, exporting data and creating maps of selected views. This mapping application provides the Carlsbad WURMP group with the practical means to assess the source of water quality impacts within the watershed and provides a platform from which to develop appropriate BMPs to minimize impacts to receiving water bodies.

Overall, exceedance rates in the MS4 have been trending downward over the six years of monitoring. By assessing the exceedance trends based on the ultimate downstream receiving waters (i.e. the Pacific Ocean, Batiquitos Lagoon, and San Elijo Lagoon), consistent improvements in water quality are evident for each drainage area (see Figure 5.9.) Loading of pollutants to these receiving waters has been reduced.

In 2008, the following recommendations for future dry weather monitoring include:

1. Consider recommended follow-up actions identified in Section 5.2 – Prioritization of Constituents of Concern.

2. Assess the TMDL monitoring data collected in FY 2007-08 to support adaptive management of our Dry Weather Monitoring Program.

3. Continued assessment of all dry weather monitoring data within the watershed to compare dry weather constituents of concern across the Carlsbad Hydrologic Unit and develop appropriate BMPs and watershed activities as a group.

With the on-set of TMDLs in the Pacific Ocean at Cottonwood Creek and the TMDLs for San Elijo Lagoon, it is recommended that resources be shifted to investigations in these areas. During the FY 2007-08, a TMDL monitoring program for the watershed lagoons was developed and monitoring of the lagoons commenced in the Fall of 2007. Results from this study will help to provide detailed information on sediment, nutrient and bacteria and their effects on the receiving waters throughout the Carlsbad watershed, and more specifically in Encinitas, the Pacific Ocean at Cottonwood Creek and San Elijo Lagoon.

Much time and effort has been expended in identifying COCs in the larger Carlsbad Hydrologic Unit. Now that these have been identified, it is prudent to allocate efforts to those pollutants in an adaptive monitoring approach. Many of the analysis in the dry weather program have not been productive over the six years of testing. Due to the analytical timeframes necessary for metals, oils and grease, and pesticides, these analytes have not yielded significant results in IC/ID investigations. However, the field screening parameters and bacteria analysis have been productive in source tracking and investigations and must continue to be a part of the program. A comprehensive assessment of all dry weather data in the watershed is recommended. This will result in consistent COC identification and lead to an adaptive monitoring plan for the dry weather program. The adaptive monitoring will focus efforts on high priority COCs with TMDL implementation plans in mind and may reduce monitoring of constituents that have not been identified as problematic.

7.0 Trash Assessment

7.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather field screening site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

7.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form (Appendix C-4) to document the amount and extent of trash and the threat to human and aquatic health. The first page is completed at every site. The second page, which includes information about the types, prevalence, potential routes, and sources of trash, is also completed at sites where a larger amount of trash is observed.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although numbers of trash pieces are also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g., medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).
- *Threat to Aquatic Health* – Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Forms, included in Appendix C-4.

If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

7.3 Trash Assessment Results

Trash assessments were conducted at 39 primary dry weather monitoring sites and 2 alternate dry weather monitoring sites throughout the monitoring period (May 1, 2008 – September 30, 2008). Table 5-1 and Graph 5-1 summarize the trash assessment results. Figure 5-1 provides a map of sampling sites and their corresponding trash assessment.

TABLE 7.1 TRASH ASSESSMENT RESULTS				
Optimal (35 sites)	**Suboptimal** (3 sites)	**Marginal** (2 sites)	**Submarginal** (0 site)	**Poor** (1 site)
CBS-1 CBS-4 CBS-7 CBS-8 CBS-9 SEL-2 SEL-3 ENC-3 ENC-4 ENC-5 ENC-6 ENC-7 ENC-8 ENC-9 ENC-11 ENC-12 ENC-15 ENC-17 ENC-18 LCS-1 LCS-2 LCS-4 LCS-5 LCS-8 LUC-1 LUC-3 LUC-6 LUC-8 LUC-9 LUC-10 ESC-1 ESC-2 ESC-5 LUX-2 LUX-3	CBS-2 LCS-7 RSF-4	ENC-1 RSF-1	None	ENC-10

Figure 7.1

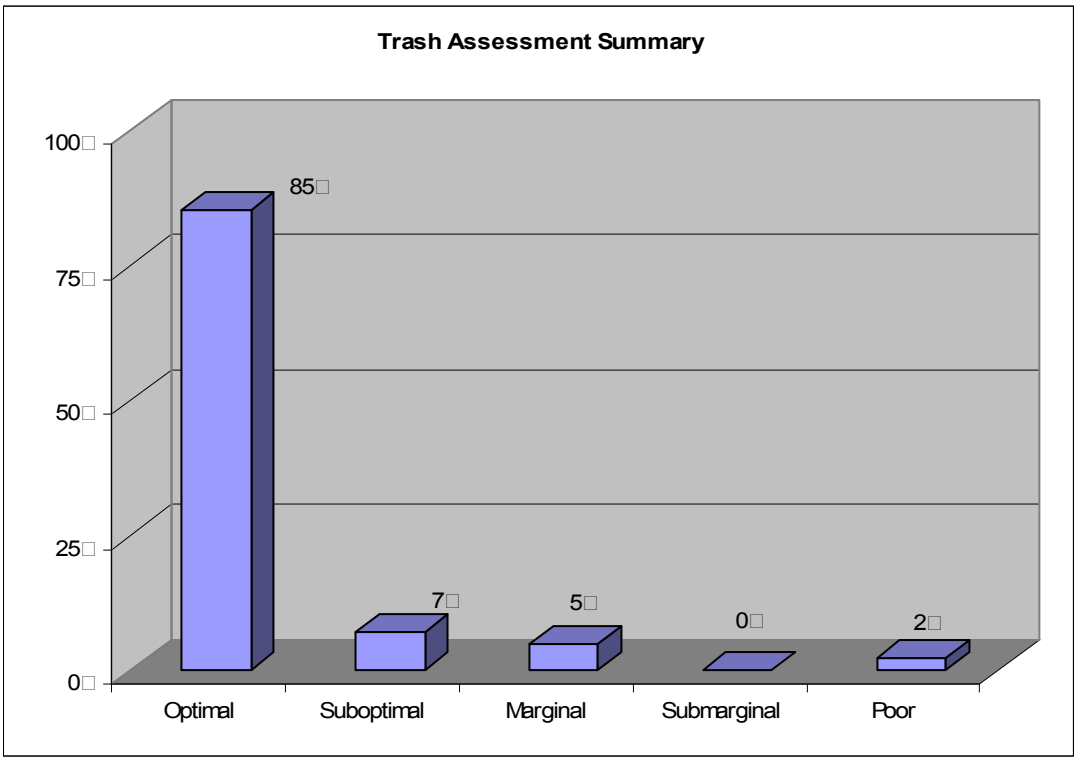

7.3.1 Threat to Human or Aquatic Health

In FY 2007-08, there were two sites (ENC-1 and ENC-10) that were identified as a threat to aquatic health. ENC-1 is an outfall location on Moonlight Beach with a conveyance that is comprised of three metal pipes that each measure 5 ft x 6 ft. This conveyance carries an estimated 200 gpm of treated runoff from the UV Treatment Facility onto Moonlight Beach. The land uses that drain to this area is primarily commercial with residential areas interspersed throughout the sub-basin. There is also a municipally maintained park, Moonlight Beach Park which is adjacent to ENC-1. The beach at ENC-1 is regularly impacted by tidal intrusions and sea wrack which often constricts the water flow coming out of ENC-1. ENC-1 was given a trash assessment rating of "marginal" for having low to medium levels of trash (51-100) pieces at first glance. It was also rated as a "threat to human health" due to the abundant pieces of small plastic debris and small styrofoam pieces that were observed on site. These small floatable pieces are considered persistent once they are a released into the environment, can be transported long distances and may resemble food.

ENC-10 is a 72 inch concrete pipe outfall that discharges into a natural creek area just east of Interstate 5 in the Encinitas sub-basin. The runoff from this location is conveyed directly into Cottonwood Creek which ultimately flows into the Pacific Ocean at Moonlight Beach.

The land uses that drain to this area is primarily commercial with residential areas interspersed throughout the sub-basin. ENC-10 was given a "poor" trash rating and was evaluated as a "threat to aquatic health" for being significantly impacted by trash from a homeless encampment. This site has been identified as a problem area for encampments in the past and the City maintains this area on an as needed basis. Most of the observed trash items at this location were food packaging, cigarette butts, toilet paper and human waste due to use of the site by transients.

7.3.2 Trash Assessment - Poor Sites

Table 7.2 Breakdown of Poor Sites

Site	Types of Trash	Ranking	Potential Route 1	Potential Route 2	Potential Source 1	Potential Source 2
ENC-10	Household	1	Littering	Dumping	Transient	Commercial
	Food Packaging	2	Littering	Dumping	Transient	Commercial
	Cigarette Butts	3	Littering	Dumping	Transient	--

Figure 7.2

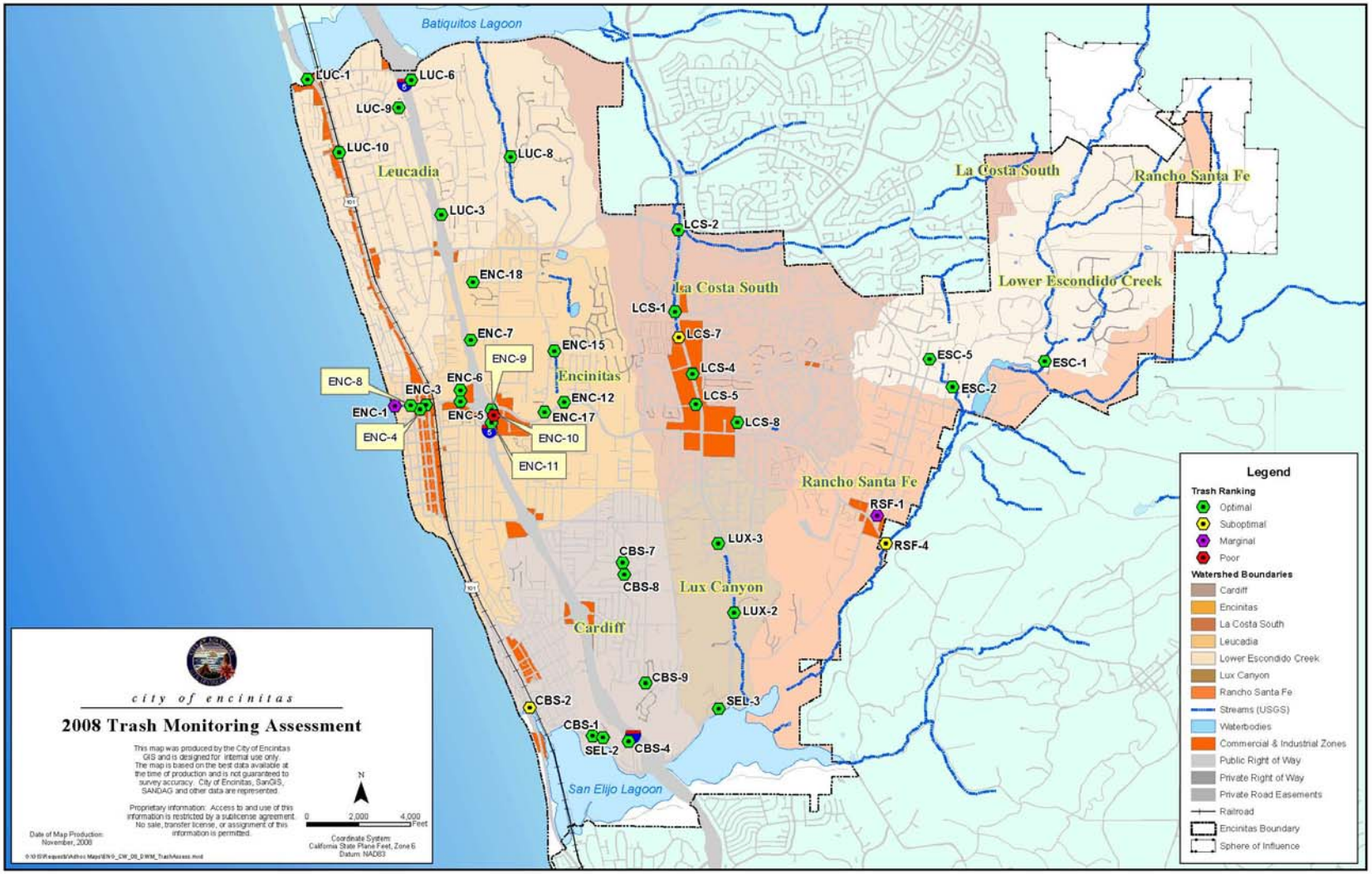
Batiquitos Lagoon
LUC-1
LUC-6
LUC-9
LUC-10
LUC-8
Leucadia
LUC-3
LCS-2
La Costa South
Rancho Santa Fe
Lower Escondido Creek
ENC-18
La Costa South
LCS-1
LCS-7
ENC-7
ENC-15
ENC-9
ENC-8
ENC-6
ENC-3
Encinitas
LCS-4
LCS-5
ENC-12
ENC-1
ENC-5
ENC-17
ENC-4
ENC-10
LCS-8
ENC-11
ESC-5
ESC-1
ESC-2
Rancho Santa Fe
RSF-1
RSF-4
LUX-3
CBS-7
CBS-8
Lux Canyon
LUX-2
Cardiff
CBS-9
CBS-2
SEL-3
CBS-1
SEL-2
CBS-4
San Elijo Lagoon
city of encinitas
2008 Trash Monitoring Assessment
This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.
Proprietary information: Access to and use of this information is restricted by a publicense agreement. No sale, transfer license, or assignment of this information is permitted.
Date of Map Production: November, 2008
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Coordinate System: California State Plane Feet, Zone 6 Datum: NAD83
Legend
Trash Ranking
Optimal
Suboptimal
Marginal
Poor
Watershed Boundaries
Cardiff
Encinitas
La Costa South
Leucadia
Lower Escondido Creek
Lux Canyon
Rancho Santa Fe
Streams (USGS)
Waterbodies
Commercial & Industrial Zones
Public Right of Way
Private Right of Way
Private Road Easements
Railroad
Encinitas Boundary
Sphere of Influence

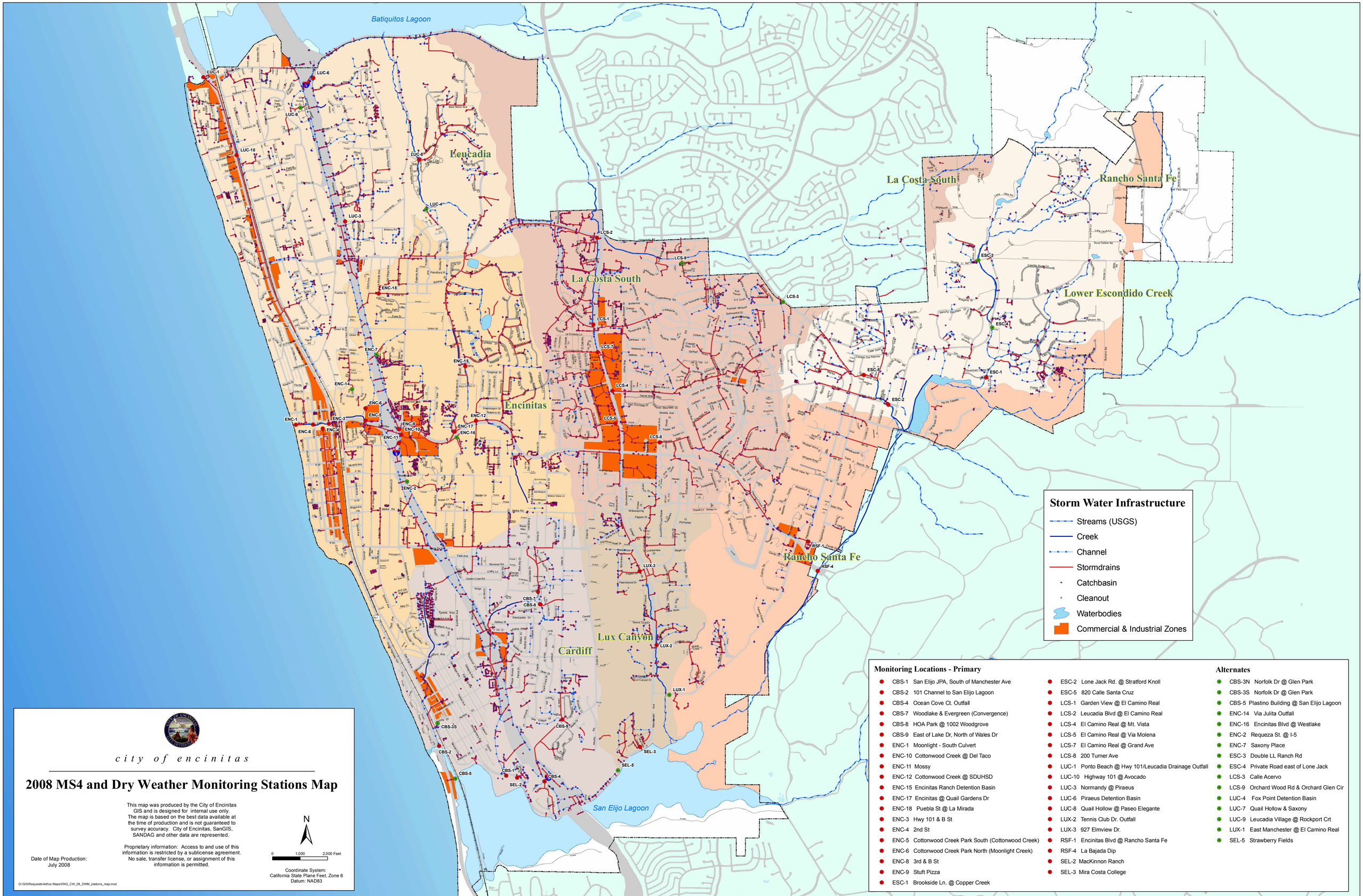
Batiquitos Lagoon
Leucadia
Encinitas
La Costa South
Cardiff
Lux Canyon
Rancho Santa Fe
Lower Escondido Creek
San Elijo Lagoon
Storm Water Infrastructure
Streams (USGS)
Creek
Channel
Stormdrains
Catchbasin
Cleanout
Waterbodies
Commercial & Industrial Zones
Monitoring Locations - Primary
CBS-1 San Elijo JPA, South of Manchester Ave
CBS-2 101 Channel to San Elijo Lagoon
CBS-4 Ocean Cove Ct. Outfall
CBS-7 Woodlake & Evergreen (Convergence)
CBS-8 HOA Park @ 1002 Woodgrove
CBS-9 East of Lake Dr, North of Wales Dr
ENC-1 Moonlight - South Culvert
ENC-10 Cottonwood Creek @ Del Taco
ENC-11 Mossy
ENC-12 Cottonwood Creek @ SDUHSD
ENC-15 Encinitas Ranch Detention Basin
ENC-17 Encinitas @ Quail Gardens Dr
ENC-18 Puebla St @ La Mirada
ENC-3 Hwy 101 & B St
ENC-4 2nd St
ENC-5 Cottonwood Creek Park South (Cottonwood Creek)
ENC-6 Cottonwood Creek Park North (Moonlight Creek)
ENC-8 3rd & B St
ENC-9 Stuft Pizza
ESC-1 Brookside Ln. @ Copper Creek
ESC-2 Lone Jack Rd. @ Stratford Knoll
ESC-5 820 Calle Santa Cruz
LCS-1 Garden View @ El Camino Real
LCS-2 Leucadia Blvd @ El Camino Real
LCS-4 El Camino Real @ Mt. Vista
LCS-5 El Camino Real @ Via Molena
LCS-7 El Camino Real @ Grand Ave
LCS-8 200 Turner Ave
LUC-1 Ponto Beach @ Hwy 101/Leucadia Drainage Outfall
LUC-10 Highway 101 @ Avocado
LUC-3 Normandy @ Piraeus
LUC-6 Piraeus Detention Basin
LUC-8 Quail Hollow @ Paseo Elegante
LUX-2 Tennis Club Dr. Outfall
LUX-3 927 Elmview Dr.
RSF-1 Encinitas Blvd @ Rancho Santa Fe
RSF-4 La Bajada Dip
SEL-2 MacKinnon Ranch
SEL-3 Mira Costa College
Alternates
CBS-3N Norfolk Dr @ Glen Park
CBS-3S Norfolk Dr @ Glen Park
CBS-5 Plastino Building @ San Elijo Lagoon
ENC-14 Via Julita Outfall
ENC-16 Encinitas Blvd @ Westlake
ENC-2 Requeza St. @ I-5
ENC-7 Saxony Place
ESC-3 Double LL Ranch Rd
ESC-4 Private Road east of Lone Jack
LCS-3 Calle Acervo
LCS-9 Orchard Wood Rd & Orchard Glen Cir
LUC-4 Fox Point Detention Basin
LUC-7 Quail Hollow & Saxony
LUC-9 Leucadia Village @ Rockport Crt
LUX-1 East Manchester @ El Camino Real
SEL-5 Strawberry Fields
city of encinitas
2008 MS4 and Dry Weather Monitoring Stations Map
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Date of Map Production: July 2008
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Coordinate System: California State Plane Feet, Zone 6 Datum: NAD83
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San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-1	**Latitude**	(e.g., 33.41174) 33.013611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	SEJPA Outfall	**Longitude**	(e.g., -117.35213) -117.27305555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/29/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:10 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.8	NH_3-N (mg/L)	0	NO_3-N (mg/L)	5	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.76	TURB (NTU)	0.97	COND (mS/cm)	4.519	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-2	**Latitude**	(e.g., 33.41174) 33.016666666667	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Highway 101 Channel	**Longitude**	(e.g., -117.35213) -117.28138888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/01/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:45 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.6	NH_3-N (mg/L)	0.2	NO_3-N (mg/L)	5	Ortho-PO_4 (mg/L)	**0**
pH (pH units)	8.91	TURB (NTU)	11.2	COND (mS/cm)	5.32	MBAS (mg/L)	**.25**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Nearby construction project is de-watering their site

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-4	**Latitude**	(e.g., 33.41174) 33.009722222222	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Cardiff Cove	**Longitude**	(e.g., -117.35213) -117.26722222222		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/29/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:08	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.5	NH_3-N (mg/L)	0	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0**
pH (pH units)	8.07	TURB (NTU)	1.22	COND (mS/cm)	7.55	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-7	**Latitude**	(e.g., 33.41174) 33.031111111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Woodlake and Evergreen	**Longitude**	(e.g., -117.35213) -117.2825		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/29/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:07	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.2	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	2.0	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	9.38	TURB (NTU)	1.22	COND (mS/cm)	3.030	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Water was trickling through the storm drain channel**
1:1 dilution on NH3-N

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** ___pH_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-7	**Latitude**	(e.g., 33.41174) 33.031111111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Woodlake and Evergreen	**Longitude**	(e.g., -117.35213) -117.2825		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:45	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **pH Only**

Water Temp (°C)	25.3	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.70	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Water was trickling through the storm drain channel**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-8	**Latitude**	(e.g., 33.41174) 33.03062	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	HOA Park at 1002 Woodgrove	**Longitude**	(e.g., -117.35213) -117.26909		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/29/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:35	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.5	NH_3-N (mg/L)	0.8	NO_3-N (mg/L)	15.0	Ortho-PO_4 (mg/L)	**0.4**
pH (pH units)	7.54	TURB (NTU)	10.6	COND (mS/cm)	4.46	MBAS (mg/L)	**0.75**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Investigated flow upstream saw a lot of algae/plant growth in storm drain channel leading to nursery.**
1:1 dilution on NH3-N

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _Nitrate_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-8	**Latitude**	(e.g., 33.41174) 33.03062	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	HOA Park at 1002 Woodgrove	**Longitude**	(e.g., -117.35213) -117.26909		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:15	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)		NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	
pH (pH units)	7.12	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Clean Water Program inspector to investigate possible source of over-fertilization and over-irrigation from Rancho Verde Nursery located upstream.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-9	**Latitude**	(e.g., 33.41174) 33.08005	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Lake Dr. and Wales	**Longitude**	(e.g., -117.35213) -117.29813		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/18/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:10 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.6	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	0	Ortho-PO_4 (mg/L)	**0.9**
pH (pH units)	7.86	TURB (NTU)	2.73	COND (mS/cm)	1.257	MBAS (mg/L)	**0.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-1	**Latitude**	(e.g., 33.41174) 33.04805	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Beach	**Longitude**	(e.g., -117.35213) -117.29861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/1/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:18	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☑ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other	
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other	
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other	**Organic matter**
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	17.1	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	7.5	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	8.06	TURB (NTU)	2.43	COND (mS/cm)	4.787	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	30	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-10	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek @ Del Taco	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:20 p.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.3	NH_3-N (mg/L)	0.2	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.62	TURB (NTU)	21.0	COND (mS/cm)	3.225	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	7.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Evidence of encampments including trash, used toilet paper and human feces.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-11	**Latitude**	(e.g., 33.41174) 33.047222222222	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Requeza Channel – West of Public Works Yard	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:46 p.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☑ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.7	NH_3-N (mg/L)	0.2	NO_3-N (mg/L)	7.5	Ortho-PO_4 (mg/L)	**0**
pH (pH units)	8.26	TURB (NTU)	1.00	COND (mS/cm)	8.17	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Excessive algae observed at this site.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-12	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek Channel @ SDUHSD	**Longitude**	(e.g., -117.35213) -117.27777777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/03/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:25 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**1.5**
pH (pH units)	7.86	TURB (NTU)	5.28	COND (mS/cm)	1.978	MBAS (mg/L)	**.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-15	**Latitude**	(e.g., 33.41174) 33.055	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Ranch Detention Basin	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:40 p.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	27.7	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	7.5	Ortho-PO_4 (mg/L)	**> 10**
pH (pH units)	8.06	TURB (NTU)	2.23	COND (mS/cm)	4.044	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	8.2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** ___Orthophosphate___ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-15	**Latitude**	(e.g., 33.41174) 33.055	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Ranch Detention Basin	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/17/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	16:45 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.0	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	**> 10**
pH (pH units)	7.81	TURB (NTU)	3.74	COND (mS/cm)	3.010	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	8.2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Continued exceedance of orthophosphate. Clean Water Program inspector to conduct investigation upstream. Investigate residential areas and conduct full commercial inspections of nurseries and golf course upstream.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-17	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Sunshine Nursery (NE Corner of Enc. Blvd. and Quail Gardens Dr.)	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/03/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:03 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.8	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	3	Ortho-PO_4 (mg/L)	**3**
pH (pH units)	7.96	TURB (NTU)	10.1	COND (mS/cm)	2.796	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Trickle flow, manhole 20 ft. deep, confined space with unknown flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For Ortho-PO_4** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-17	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Sunshine Nursery	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/4/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	16:09 p.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **Phosphate Only**

Water Temp (°C)	26.9	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	**2.5**
pH (pH units)	7.90	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Trickle flow, manhole 20 ft. deep, confined space with unknown flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-18	**Latitude**	(e.g., 33.41174) 33.06155	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Puebla St. and La Mirada St.	**Longitude**	(e.g., -117.35213) -117.28860		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/03/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:33 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	3	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.87	TURB (NTU)	5.68	COND (mS/cm)	1.642	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Trickle flow, manhole > 20 ft. deep, confined space with unknown flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	**ENC-3**	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	**Pacific Coast Highway and B St.**	**Longitude**	(e.g., -117.35213) -117.29416666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	**9/2/08**	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:06 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.3	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	20	Ortho-PO_4 (mg/L)	**0.1**
pH (pH units)	7.17	TURB (NTU)	4.35	COND (mS/cm)	4.705	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	125	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **1 Coke bottle floating in the water**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	**ENC-3**	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	**Pacific Coast Highway and B St.**	**Longitude**	(e.g., -117.35213) -117.29416666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	**9/3/08**	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:46 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **Nitrate Only**

Water Temp (°C)	23.3	NH_3-N (mg/L)		NO_3-N (mg/L)	13	Ortho-PO_4 (mg/L)	
pH (pH units)	7.36	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	125	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-4	**Latitude**	(e.g., 33.41174) 33.048055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Second St.	**Longitude**	(e.g., -117.35213) -117.295		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/1/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:30	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☑ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	12.7	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**1.5**
pH (pH units)	7.66	TURB (NTU)	5.16	COND (mS/cm)	1.354	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Cannot determine the flow at site because it is ponded.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	ENC-5	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek South	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:25 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	7.5	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	7.19	TURB (NTU)	2.88	COND (mS/cm)	4.386	MBAS (mg/L)	**0.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	ENC-6	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Creek	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:54 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☑Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.9	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	45	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	7.18	TURB (NTU)	5.56	COND (mS/cm)	7.05	MBAS (mg/L)	**0.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	**ENC-6**	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	**Moonlight Creek**	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	**9/3/08**	**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:06 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☑ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **Nitrate Only**

Water Temp (°C)	23.6	NH_3-N (mg/L)		NO_3-N (mg/L)	75	Ortho-PO_4 (mg/L)	
pH (pH units)	7.22	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-7 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.055277777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Saxony Place	**Longitude**	(e.g., -117.35213) -117.28888888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	3:50 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	10.0	NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	**4.5**
pH (pH units)	7.41	TURB (NTU)	31.1	COND (mS/cm)	2.238	MBAS (mg/L)	**1.0**

Analytical Lab Samples Collected? ☐ **Yes** ☑**No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0 (Ponded Water)	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Exceedances of Nitrate, Orthophosphate and MBAS. This site is near a nursery, adjacent to an HOA dog park and receives flow from Encinitas YMCA sport fields.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-7 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.055277777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Saxony Place	**Longitude**	(e.g., -117.35213) -117.28888888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:50 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☑ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☑ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	10.0	NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	**4.5**
pH (pH units)	7.41	TURB (NTU)	31.1	COND (mS/cm)	2.238	MBAS (mg/L)	**1.0**

Analytical Lab Samples Collected? ☐ **Yes** ☑**No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0 (Ponded Water)	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Exceedances of Nitrate, Orthophosphate and MBAS. This site is near a nursery, adjacent to an HOA dog park and receives flow from Encinitas YMCA sport fields.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For: Nitrate, Orthophosphate & MBAS** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-7 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.055277777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Saxony Place	**Longitude**	(e.g., -117.35213) -117.28888888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/3/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:32 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.3	NH_3-N (mg/L)	10.0	NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	**5.5**
pH (pH units)	7.78	TURB (NTU)	22.4	COND (mS/cm)	2.381	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Continued exceedances for Nitrates and Orthophosphates. Follow-up with community HOA to clean out adjacent concrete channel and reduce run-off irrigation from hillside, nearby nursery and Ecke YMCA sports park. Ask Clean Water Program inspector to conduct full commercial inspections at adjacent nursery and pet hotel.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For: Nitrate, Orthophosphate & MBAS** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-7 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.055277777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Saxony Place	**Longitude**	(e.g., -117.35213) -117.28888888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/3/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:32 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.3	NH_3-N (mg/L)	10.0	NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	**5.5**
pH (pH units)	7.78	TURB (NTU)	22.4	COND (mS/cm)	2.381	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0 (Ponded Water)	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Continued exceedances for Nitrates and Orthophosphates. Follow-up with community HOA to clean out adjacent concrete channel and reduce run-off irrigation from hillside, nearby nursery and Ecke YMCA sports park. Ask Clean Water Program inspector to conduct full commercial inspections at adjacent nursery and pet hotel.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☐ **Confirmation For:** _____ ☑ **IC/ID Follow-Up For:** Nitrate & Orthophosphate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-7 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.055277777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Saxony Place	**Longitude**	(e.g., -117.35213) -117.28888888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/7/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:45 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Site was dry-no flow or ponded water to sample. Follow-up actions included verifying appropriate maintenance of adjacent concrete channel on 6/24/08 and conducting full inspections of two nearby businesses to address run-off concerns.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	ENC-8	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Third St. and B St.	**Longitude**	(e.g., -117.35213) -117.29611111111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:20 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☑Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.2	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	15	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	6.87	TURB (NTU)	4.63	COND (mS/cm)	4.396	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐**No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	50	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	**ENC-8**	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	**Third St. and B St.**	**Longitude**	(e.g., -117.35213) -117.29611111111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	**9/3/08**	**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:35	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☑ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **Nitrate Only**

Water Temp (°C)	24.3	NH_3-N (mg/L)		NO_3-N (mg/L)	18	Ortho-PO_4 (mg/L)	
pH (pH units)	7.45	TURB (NTU)		COND (mS/cm)	5.05	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	50	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-9	**Latitude**	(e.g., 33.41174) 33.048055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Enc. Blvd. & Saxony Rd./Behind Oggi's Pizza	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/3/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:01 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☑ Other **Organic matter**

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	28.1	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	2	Ortho-PO_4 (mg/L)	**1.2**
pH (pH units)	7.87	TURB (NTU)	1.76	COND (mS/cm)	1.715	MBAS (mg/L)	**.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-1	**Latitude**	(e.g., 33.41174) 33.05388	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Brookside Ln.	**Longitude**	(e.g., -117.35213) -117.21638		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:24 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.5	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	0	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	7.89	TURB (NTU)	4.13	COND (mS/cm)	2.875	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	100	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-2	**Latitude**	(e.g., 33.41174) 33.05138	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Lone Jack Rd. @ Stratford Knoll	**Longitude**	(e.g., -117.35213) -117.22861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:45 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.5	NH_3-N (mg/L)	0	NO_3-N (mg/L)	1.0	Ortho-PO_4 (mg/L)	0.4
pH (pH units)	7.33	TURB (NTU)	2.94	COND (mS/cm)	4.429	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	118	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-5	**Latitude**	(e.g., 33.41174) 33.05334	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Calle Santa Cruz	**Longitude**	(e.g., -117.35213) -117.22926		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/18/08	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:13 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.1	NH_3-N (mg/L)	0.0	NO_3-N (mg/L)	0.0	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	7.58	TURB (NTU)	0.57	COND (mS/cm)	5.03	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	LCS-1	**Latitude**	(e.g., 33.41174) 33.058611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.288605555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/10/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:19 p.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☑ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	1	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.27	TURB (NTU)	10.0	COND (mS/cm)	2.174	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For __Ammonia_____** ☐ **IC/ID Follow-Up For _____**

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	LCS-1	**Latitude**	(e.g., 33.41174) 33.058611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.288605555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/14/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:55 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☑ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	0.6
pH (pH units)	7.62	TURB (NTU)	8.76	COND (mS/cm)	1.879	MBAS (mg/L)	.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Sample has a yellow color. Run a 1:1 to dilution for ammonia.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** __Bacteria_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	LCS-1	**Latitude**	(e.g., 33.41174) 33.058611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.288605555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:25 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	0.6
pH (pH units)	7.62	TURB (NTU)	8.76	COND (mS/cm)	1.879	MBAS (mg/L)	.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	LCS-2	**Latitude**	(e.g., 33.41174) 33.068055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Leucadia Blvd. @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26222222222		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/11/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:15 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	0.2	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.46	TURB (NTU)	0.59	COND (mS/cm)	2.118	MBAS (mg/L)	**.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	200	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☐ **Confirmation For** _____ ☑ **IC/ID Follow-Up For:** **Bacteria exceedance at LCS-1**

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	LCS-2	**Latitude**	(e.g., 33.41174) 33.068055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Leucadia Blvd. @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26222222222		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:16 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.44	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	200	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Bacteria sample results received on 7/31/08 are: Total Coliform = 7800, Fecal Coliform = 3200 and Entero = 2300**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-4	**Latitude**	(e.g., 33.41174) 33.051944444444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real (NE Corner of Intersection)	**Longitude**	(e.g., -117.35213) -117.26055555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/11/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:50 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.5	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**1**
pH (pH units)	7.28	TURB (NTU)	5.68	COND (mS/cm)	3.788	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Trickle flow, manhole > 20 ft. deep, confined space with unknown flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-5	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Via Molena @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26027777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/10/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:55 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.4	NH_3-N (mg/L)	0.8	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.71	TURB (NTU)	16.2	COND (mS/cm)	3.223	MBAS (mg/L)	**1.0**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Over-irrigation from shopping mall across the street. No flow data available -manhole > 20 ft. deep, confined space. Analytical sample results received on 7/14/08 indicated a bacteria exceedance at this location. Conduct re-sample to confirm results on 7/14/08.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** __**MBAS and Bacteria**__ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-5	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Via Molena @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26027777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:45 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.1	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0.6**
pH (pH units)	7.53	TURB (NTU)	13.9	COND (mS/cm)	2.231	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow data available -manhole > 20 ft. deep, confined space. Continued bacteria exceedances at this site. Clean Water Program staff to conduct full commercial inspections of businesses in this area.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-7	**Latitude**	(e.g., 33.41174) 33.055833333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	El Camino Real (South of La Entrada Lane)	**Longitude**	(e.g., -117.35213) -117.2625		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:47 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☑ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.1	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	2.0	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	7.53	TURB (NTU)	21.9	COND (mS/cm)	2.691	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	61	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Analytical sample results received on 7/31/08 indicated a bacteria exceedance at this location.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-8	**Latitude**	(e.g., 33.41174) 33.04693	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	200 Turner Ave.	**Longitude**	(e.g., -117.35213) -117.25507		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/18/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:41 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	0.0	Ortho-PO_4 (mg/L)	**0.5**
pH (pH units)	7.07	TURB (NTU)	15.1	COND (mS/cm)	2.363	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow data available -manhole > 20 ft. deep, confined space.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-1	**Latitude**	(e.g., 33.41174) 33.082777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Ponto Beach Detention Basin	**Longitude**	(e.g., -117.35213) -117.30944444444		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/18/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:02 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☑ Other **Organic Matter**

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☑Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)	0.0	NO_3-N (mg/L)	15	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	7.23	TURB (NTU)	0.61	COND (mS/cm)	2.657	MBAS (mg/L)	**0.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow –detention pond.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _Nitrate_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-1	**Latitude**	(e.g., 33.41174) 33.082777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Ponto Beach Detention Basin	**Longitude**	(e.g., -117.35213) -117.30944444444		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/19/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	09:30 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☑ Other **Organic Matter**

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☑Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other Crawdad

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.8	NH_3-N (mg/L)		NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	
pH (pH units)	7.26	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow –detention pond.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-10	**Latitude**	(e.g., 33.41174) 33.07522	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Avocado and Highway 101	**Longitude**	(e.g., -117.35213) -117.30565		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/18/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:30 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.0	NO_3-N (mg/L)	12.0	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	6.96	TURB (NTU)	0.29	COND (mS/cm)	2.626	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For: Nitrate** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-10	**Latitude**	(e.g., 33.41174) 33.07522	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Avocado and Highway 101	**Longitude**	(e.g., -117.35213) -117.30565		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/19/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:05 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)		NO_3-N (mg/L)	7.5	Ortho-PO_4 (mg/L)	
pH (pH units)	6.94	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-3	**Latitude**	(e.g., 33.41174) 33.068611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Piraeus and Normandy	**Longitude**	(e.g., -117.35213) -117.29388888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:45 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.4	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	**0**
pH (pH units)	7.77	TURB (NTU)	3.54	COND (mS/cm)	1.168	MBAS (mg/L)	**0**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-6	**Latitude**	(e.g., 33.41174) 33.081666666667	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Piraeus Detention Basin	**Longitude**	(e.g., -117.35213) -117.29666666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:15 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No sample collected. Site was completely dry.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-8	**Latitude**	(e.g., 33.41174) 33.07496	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr.	**Longitude**	(e.g., -117.35213) -117.28397		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/10/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:29 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.0	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	5	Ortho-PO_4 (mg/L)	0.4
pH (pH units)	7.82	TURB (NTU)	2.76	COND (mS/cm)	4.160	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Manhole >20 ft. deep, confined space cannot determine the flow. Bacteria sample results received on 7/11/08 are: Total Coliform = 143,000, Fecal Coliform = 98,000 and Entero = 28,000.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** __Bacteria____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-8	**Latitude**	(e.g., 33.41174) 33.07496	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr.	**Longitude**	(e.g., -117.35213) -117.28397		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	8:47 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-9 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.08005	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Leucadia Village (Between Rockport Ct. and Nantucket)	**Longitude**	(e.g., -117.35213) -117.29814		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/13/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:08 a.m.	**Observer**	MP/KR/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	1.5	NO_3-N (mg/L)	37.5	Ortho-PO_4 (mg/L)	> 10
pH (pH units)	7.38	TURB (NTU)	1.80	COND (mS/cm)	1.718	MBAS (mg/L)	1.0

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For: Ammonia, Nitrate, Orthophosphate and MBAS** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-9 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.08005	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Leucadia Village (Between Rockport Ct. and Nantucket)	**Longitude**	(e.g., -117.35213) -117.29814		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/14/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:45 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No water to sample, box is completely dry.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-2	**Latitude**	(e.g., 33.41174) 33.02833	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Sage Canyon Dr.	**Longitude**	(e.g., -117.35213) -117.25527		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/13/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:00 p.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	1.0	Ortho-PO_4 (mg/L)	**0.1**
pH (pH units)	8.34	TURB (NTU)	17.2	COND (mS/cm)	4.361	MBAS (mg/L)	**0.75**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-3	**Latitude**	(e.g., 33.41174) 33.03404	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	927 Elmview Dr.	**Longitude**	(e.g., -117.35213) -117.25972		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/13/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:30 p.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow to sample. Storm drain is completely dry.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	RSF-1	**Latitude**	(e.g., 33.41174) 33.0375	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Peppertree Lane	**Longitude**	(e.g., -117.35213) -117.23861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:30 p.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	29.5	NH_3-N (mg/L)	0.2	NO_3-N (mg/L)	0	Ortho-PO_4 (mg/L)	**0.6**
pH (pH units)	8.74	TURB (NTU)	3.51	COND (mS/cm)	1.475	MBAS (mg/L)	**0.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **There was a trickle flow at this site.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	RSF-4	**Latitude**	(e.g., 33.41174) 33.03444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	La Bajada Dip	**Longitude**	(e.g., -117.35213) -117.23583		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:30 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	0	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	7.86	TURB (NTU)	10.3	COND (mS/cm)	2.497	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Difficult to determine flow. Water was ponded at sample location.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	SEL-2	**Latitude**	(e.g., 33.41174) 33.01333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	McKinnon Ranch	**Longitude**	(e.g., -117.35213) -117.27167		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:25 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.4	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	0	Ortho-PO_4 (mg/L)	**0.1**
pH (pH units)	7.40	TURB (NTU)	20.3	COND (mS/cm)	5.63	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Water is ponded at this location.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	SEL-3	**Latitude**	(e.g., 33.41174) 33.01639	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Mira Costa College Detention Basin	**Longitude**	(e.g., -117.35213) -117.25694		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/13/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:15 p.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☑ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.4	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	1.0	Ortho-PO_4 (mg/L)	**0**
pH (pH units)	8.60	TURB (NTU)	44.4	COND (mS/cm)	5.11	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow- detention pond.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

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   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

Appendix C-3 2008 Dry Weather Monitoring Analytical Results

Station ID	Sample Date	Ammonia (mg/L)	Conductivity (mS/cm)	MBAS (mg/L)	Nitrate (mg/L)	Orthophosphate (mg/L)	pH (pH)	Water Temperature (°C)	Turbidity (NTU)	Cadmium (□g/L)	Copper (□g/L)	Lead (□g/L)	Zinc (□g/L)	Oil & Grease (mg/L)	Chlorpyrifos (ng/L)	Diazinon (ng/L)	Hardness, Total (mg/L)	Enterococcus (cfu/100 ml)	Fecal Coliform (cfu/100 ml)	Total Coliform (cfu/100 ml)
CBS-1	7/29/2008	0	4.519	0.5	5	0.8	7.76	23.8	0.97	NT	NT	NT	NT	NT	NT	NT	NT	1650	1200	E 1200
CBS-2	7/1/2008	0.2	**5.32**	0.25	5	0	8.91	26.6	11.2	ND	ND	ND	ND	ND	ND	ND	620	1890	790	E 790
CBS-4	7/29/2008	0	**7.55**	0.75	5	0	8.07	24.5	1.22	NT	NT	NT	NT	NT	NT	NT	NT	1050	800	800
CBS-7	7/29/2008	0.6	3.03	0.75	2	0.2	**9.38**	26.2	1.22	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-7	7/30/2008	NT	NT	NT	NT	NT	7.7	25.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	6450	2900	4200
CBS-8	7/29/2008	0.8	4.46	0.75	**15**	0.4	7.54	24.5	10.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-8	7/30/2008	NT	NT	NT	3	NT	7.12	22.9	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-9	8/18/2008	0.6	1.257	0.25	0	0.9	7.86	24.6	2.73	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-1	7/1/2008	0.6	4.787	0.5	7.5	0.2	8.06	17.1	2.43	ND	ND	ND	ND	ND	ND	ND	1040	200	3400	7200
ENC-10	7/15/2008	0.2	3.225	0.75	5	0.8	7.62	25.3	21	ND	0.021	ND	0.027	ND	ND	ND	680	4000	11000	9000
ENC-11	7/15/2008	0.2	**8.17**	0.75	7.5	0	8.26	26.7	1	ND	0.012	ND	ND	ND	ND	ND	1760	4000	1000	1000
ENC-12	9/3/2008	0.4	1.978	0.25	5	1.5	7.86	24	5.28	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-15	7/15/2008	0.3	4.044	0.5	7.5	**10**	8.06	27.7	2.23	ND	0.018	ND	0.074	ND	ND	ND	980	2000	4000	10000
ENC-15	7/17/2008	NT	3.01	NT	NT	**10**	7.81	26	3.74	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-17	9/3/2008	0.3	2.796	0.5	3	**3**	7.96	23.8	10.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-17	9/4/2008	NT	NT	NT	NT	**2.5**	7.9	26.9	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-18	9/3/2008	0.4	1.642	0.5	3	0.8	7.87	23	5.68	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-3	9/2/2008	0.3	4.705	0.75	**20**	0.1	7.17	21.3	4.35	NT	NT	NT	NT	NT	NT	NT	NT	1600	4000	4800
ENC-3	9/3/2008	NT	NT	NT	**13**	NT	7.36	23.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-4	7/1/2008	0.6	1.354	0.5	5	1.5	7.66	12.7	5.16	ND	ND	ND	0.069	ND	ND	ND	340	200	1200	8200
ENC-5	9/2/2008	0.3	4.386	0.75	7.5	0.2	7.19	22	2.88	NT	NT	NT	NT	NT	NT	NT	NT	1600	2400	6000
ENC-6	9/2/2008	0.6	**7.05**	0.75	**45**	0.2	7.18	20.9	5.56	NT	NT	NT	NT	NT	NT	NT	NT	800	10000	22000
ENC-6	9/3/2008	NT	NT	NT	**75**	NT	7.22	23.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-7	6/2/2008	**10**	2.238	**1**	3	**4.5**	7.41	23.9	31.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-7	6/3/2008	**10**	2.381	0.5	3	**5.5**	7.78	18.3	22.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-7	7/7/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ENC-8	9/2/2008	0.4	4.396	0.75	**15**	0.2	6.87	23.2	4.63	NT	NT	NT	NT	NT	NT	NT	NT	600	3000	9400
ENC-8	9/3/2008	NT	**5.05**	NT	**18**	NT	7.45	24.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-9	9/3/2008	0.4	1.715	0.25	2	1.2	7.87	28.1	1.76	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-1	7/30/2008	0.3	2.875	0.25	0	0.2	7.89	20.5	4.13	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-2	7/30/2008	0	4.429	0.5	1	0.4	7.33	22.5	2.94	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-5	8/18/2008	0	**5.03**	0.25	0	0.2	7.58	23.1	0.57	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-1	7/10/2008	**1**	2.174	0.5	5	0.8	7.27	23.9	10	ND	0.013	ND	ND	ND	ND	0.0529	800	5600	5000	**67000**
LCS-1	7/14/2008	0.3	1.879	0.25	5	0.6	7.62	23.3	8.76	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-1	7/15/2008	0.3	1.879	0.25	5	0.6	7.62	23.3	8.76	NT	NT	NT	NT	NT	NT	NT	NT	**24000**	**40000**	37000
LCS-2	6/11/2008	0.2	2.118	0.25	5	0.8	7.46	22.8	0.59	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-2	7/30/2008	NT	NT	NT	NT	NT	7.44	22.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	2300	3200	7800
LCS-4	6/11/2008	0.5	3.788	0.5	5	1	7.28	24	5.68	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-5	7/10/2008	0.8	3.223	**1**	5	0.8	7.71	24.4	16.2	ND	0.012	ND	0.024	ND	ND	ND	720	**16500**	**47000**	48000
LCS-5	7/15/2008	0.4	2.231	0.5	5	0.6	7.53	24.1	13.9	NT	NT	NT	NT	NT	NT	NT	NT	**73000**	**47000**	**86000**
LCS-7	7/30/2008	0.4	2.691	0.5	2	0.2	7.53	24.1	21.9	NT	NT	NT	NT	NT	NT	NT	NT	**65000**	**38000**	**78000**
LCS-8	8/18/2008	0.3	2.363	0.5	0	0.5	7.07	23.4	15.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	8/18/2008	0	2.657	0.25	**15**	0.2	7.23	22.9	0.61	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	9/19/2008	NT	NT	NT	5	NT	7.26	21.8	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-10	8/18/2008	0	2.626	0.5	**12**	0.2	6.96	23	0.29	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-10	8/19/2008	NT	NT	NT	7.5	NT	6.94	22	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-3	6/2/2008	0.4	1.168	0	3	0	7.77	22.4	3.54	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-6	6/2/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LUC-8	7/10/2008	0.6	4.16	0.5	5	0.4	7.82	25	2.76	ND	0.012	ND	0.029	ND	ND	ND	720	**28000**	**98000**	**143000**
LUC-8	7/15/2008	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	8000	11000	22000
LUC-9	8/13/2008	**1.5**	1.718	**1**	**37.5**	**10**	7.38	23.4	1.8	NT	NT	NT	NT	NT	NT	NT	NT	7000	6800	17200
LUC-9	8/14/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LUX-2	8/13/2008	0.4	4.361	0.75	1	0.1	8.34	24	17.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUX-3	8/13/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RSF-1	7/23/2008	0.2	1.475	0.25	0	0.6	8.74	29.5	3.51	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
RSF-4	7/23/2008	0.3	2.497	0.25	0	0.2	7.86	22.2	10.3	ND	0.012	ND	ND	ND	ND	ND	740	680	1350	4200
SEL-2	7/23/2008	0.4	**5.63**	0.5	0	0.1	7.4	21.4	20.3	ND	0.012	ND	ND	ND	ND	ND	2000	200	190	1000
SEL-3	8/13/2008	0.6	**5.11**	0.5	1	0	8.6	24.4	44.4	NT	NT	NT	NT	NT	NT	NT	NT	600	8600	7200

Notes :	ND	Indicates Analyte was Not Detected above the reporting limit
	NS	Indicates No Sample was taken
	NT	Indicates analyte was Not Tested at that site
	J	Indicates associated value is an estimated quantity
	E	Indicates associated value is an estimate
	Bold	Indicates value exceeded Action Levels

Trash Assessment Form

SITE ID: CBS-1 **DATE:** 7/29/08

LOCATION: SEJPA OUTFALL **TIME:** 11:10

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: **CBS-2** **DATE:** **7 1 08**

LOCATION: **HWY 101 CHANNEL** **TIME:** **10:55**

OBSERVER: **MP**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **N A**

ESTIMATED AREA OF ASSESSMENT L X W (FT): **40X10**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: **CBS-4** **DATE:** **7/29/08**

LOCATION: **CARDIFF COVE** **TIME:** **12:08**

OBSERVER: **MP/KR**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **N/A**

ESTIMATED AREA OF ASSESSMENT L X W (FT): **20X20**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Cigarette butts, fabric/clothing, and food packing present

Trash Assessment Form

SITE ID: CBS-7 **DATE:** 7/29/08

LOCATION: WOODLAKE AND EVERGREEN **TIME:** 13:07

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: CBS-8 **DATE:** 7/29/08

LOCATION: HOA PARK / 1002 WOODGROVE **TIME:** 13:35

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: **CBS-9** **DATE:** **8/18/08**

LOCATION: **LAKE DR WALES** **TIME:** **11:10**

OBSERVER: **MP/CN**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **N/A**

ESTIMATED AREA OF ASSESSMENT L x W (FT): **10X10**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-1 **DATE:** 7 1 08

LOCATION: MOONLIGHT BEACH **TIME:** 14:18

OBSERVER: MP

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☑ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Abundant pieces of small plastic and Styrofoam.

Trash Assessment Form

SITE ID: ENC-10 **DATE:** 7/15/08

LOCATION: COTTONWOOD CREEK / DEL TACO **TIME:** 12:20

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20X20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☑ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☑ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts	3	☑	☑								☑	
Construction												
Fabric/Clothing												
Food Packaging	2	☑	☑								☑	
Food Waste												
Household	1	☑	☑								☑	
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: There was evidence of a recent encampment at site. Trash included food packaging, cigarette butts, human waste, and toilet paper.

Trash Assessment Form

SITE ID: ENC-11 **DATE:** 7/15/08

LOCATION: REQUEZA CHANNEL **TIME:** 12:46

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20X20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-12 **DATE:** 9/3/08

LOCATION: COTTONWOOD CREEK CHANNEL / SDUHSD **TIME:** 11:25

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-15 **DATE:** 7/15/08

LOCATION: ENC RANCH DETN BASIN **TIME:** 13:40

OBSERVER: MP

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-17 **DATE:** 9/3/08

LOCATION: SUNSHINE NURSERY **TIME:** 13:03

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-18 **DATE:** 9/3/08

LOCATION: PUEBLA ST. LA MIRADA **TIME:** 09:33

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-3 **DATE:** 9/2/08

LOCATION: COAST HWY B ST **TIME:** 10:06

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-4 **DATE:** 7/1/08

LOCATION: 2ND STREET **TIME:** 13:35

OBSERVER: MP

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: **ENC-5** **DATE:** **9/2/08**

LOCATION: **COTTONWOOD CREEK PARK SOUTH** **TIME:** **10:25**

OBSERVER: **MP/KR**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **N/A**

ESTIMATED AREA OF ASSESSMENT L X W (FT): **50X30**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-6 **DATE:** 9/2/08

LOCATION: MOONLIGHT CREEK **TIME:** 10:54

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-7 (ALT) **DATE:** 6/2/08

LOCATION: SAXONY PLACE **TIME:** 15:50

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20X20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-8 **DATE:** 9/2/08

LOCATION: 3RD ST B ST **TIME:** 11:20

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-9 **DATE:** 9/3/08

LOCATION: ENC. BLVD SAXONY **TIME:** 12:01

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 40X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ESC-1 **DATE:** 7/30/08

LOCATION: BROOKSIDE LN **TIME:** 10:24

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ESC-2 **DATE:** 7/30/08

LOCATION: LONE JACK RD / STRATFORD KNOLL **TIME:** 10:45

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50X20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ESC-5 **DATE:** 8/18/08

LOCATION: CALLE SANTA CRUZ **TIME:** 10:13

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LCS-1 **DATE:** 7/10/08

LOCATION: GARDEN VIEW / ECR **TIME:** 13:19

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: **LCS-2** **DATE:** **6/11/08**

LOCATION: **LEUCADIA BLVD ECR** **TIME:** **15:15**

OBSERVER: **MP/CN**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **N/A**

ESTIMATED AREA OF ASSESSMENT L x W (FT): **20X20**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc.). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LCS-5 **DATE:** 7/10/08

LOCATION: VIA MOLENA / ECR **TIME:** 11:55

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 2X2 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LCS-7 **DATE:** 7/30/08

LOCATION: ECR (SOUTH OF LA ENTRADA LN) **TIME:** 11:47

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 100x20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: food packaging waste on site

Trash Assessment Form

SITE ID: LCS-8 **DATE:** 8/18/08

LOCATION: TURNER AVE **TIME:** 10:41

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUC-1 **DATE:** 8/18/08

LOCATION: PONTO BEACH DETN BASIN **TIME:** 13:02

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUC-10 **DATE:** 8/18/08

LOCATION: HWY 101 AVOCADO **TIME:** 09:30

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: **LUC-3** **DATE:** **6/2/08**

LOCATION: **PIRAEUS NORMANDY** **TIME:** **13:45**

OBSERVER: **MP/CN**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **N/A**

ESTIMATED AREA OF ASSESSMENT L x W (FT): **100X10**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: **LUC-6** **DATE:** **6/2/08**

LOCATION: **PIRAEUS DETN BASIN** **TIME:** **13:15**

OBSERVER: **MP/CN**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **N/A**

ESTIMATED AREA OF ASSESSMENT L x W (FT): **100X10**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUC-8 **DATE:** 7/10/08

LOCATION: QUAIL HOLLOW DR **TIME:** 10:29

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 2X2 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUC-9 **DATE:** 8/13/08

LOCATION: LEUCADIA VILLAGE **TIME:** 10:08

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUX-2 **DATE:** 8/13/08

LOCATION: SAGE CANYON DR **TIME:** 13:00

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50X50

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUX-3 **DATE:** 8/13/08

LOCATION: 927 ELMVIEW DR **TIME:** 12:30

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: RSF-1 **DATE:** 7/23/08

LOCATION: PEPPERTREE LANE **TIME:** 13:40

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50X20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Food packaging waste and cigarette butts observed at site.

Trash Assessment Form

SITE ID: RSF-4 **DATE:** 7/23/08

LOCATION: LA BAJADA DIP **TIME:** 13:30

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20x50

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ **MS4** ☑ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Food packaging, fabric/clothing, and an abandoned bicycle found on site.

Trash Assessment Form

SITE ID: SEL-2 **DATE:** 7/23/08

LOCATION: MACKINNON RANCH **TIME:** 10:25

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: SEL-3 **DATE:** 8/13/08

LOCATION: MIRA COSTA COLLEGE DETN **TIME:** 13:15

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Discussion of Nitrate-Nitrogen and Conductivity Exceedances

On September 25, 2007 the City of Encinitas received comments on the 2005-2006 Jurisdictional Urban Runoff Management Program Annual Report. This appendix has been prepared as a formal response to the following comment:

The Annual Report states that the above action-level nitrate and conductivity measurements, obtained at several monitoring sites, are attributable to inflow of groundwater. In future Annual Reports please provide data demonstrating that groundwater in the vicinity of the monitoring sites has elevated nitrate and conductivity levels. Also, indicate what the City would consider to be the 'above-groundwater' action level for these constituents, i.e., the levels that would warrant follow-up action in areas with elevated nitrate and conductivity.

This following discussion describes the information and data used by the City of Encinitas to identify the inflow of groundwater as a likely source for the action level exceedances of nitrate and conductivity measurements at six dry weather monitoring stations. The information presented includes background information, data collected throughout the course of the Dry Weather Program, historical land use data, and regional data. Sources of nitrate-nitrogen have been identified as primarily groundwater and fertilizer-laden nursery and residential irrigation run-off.

Background Information

The City of Encinitas has implemented a Dry Weather Monitoring Program for 6 consecutive years. The dry weather program includes field screening and sampling throughout the storm water conveyance system to identify illicit connections and the need for follow-up investigations. Dry weather monitoring is conducted annually at each selected location during the period from May 1 to September 30. The City monitors 52 sites within its jurisdiction. In addition to the dry weather monitoring in 2002, the city conducted an urban runoff water quality assessment of the Cottonwood Creek watershed. This project consisted of three consecutive weeks of sampling at ten sites that coincided with sampling at the dry weather monitoring stations. This assessment was performed to better characterize dry weather flows in the Cottonwood Creek Watershed.

Of the 52 monitoring sites monitored in 2007, 6 locations exceeded nitrate and/or conductivity action levels that were attributed to groundwater (2 other sites with exceedances were attributed to irrigation). Of these six locations, one is located in the Leucadia Sub-basin and the remaining five are located in the Cottonwood Creek watershed of the Encinitas Sub-basin. All monitoring stations are located near the topographic low point (near the coast) within their respective sub-basins.

The monitoring station in the Leucadia Sub-basin is located at the Ponto Beach detention basin. The Ponto Beach detention basin contributes flow to Batiquitos Lagoon. Typically, there is water present at this location throughout the year. For the past 6 dry seasons, water was present and nitrate consistently exceeded the action level at the monitoring station at Ponto Beach detention basin. Field records show water was ponded or flowing at the monitoring station but no overland flow was observed. Based upon follow-up investigations, the flow could not be directly connected with a human-induced source and, considering the hydrology and historical data of this monitoring station, the City determined that groundwater in the region was a most-likely source.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Runoff from the Cottonwood Creek watershed enters Cottonwood Creek, which discharges into the Pacific Ocean at Moonlight State Beach. Cottonwood Creek is a perennial stream comprised of groundwater and urban runoff during the dry season. In the Cottonwood Creek Urban Runoff Assessment and Action Plan in 2002, the average dry weather flow was approximated at 100 gallons per minute (gpm) near the mouth of Cottonwood Creek as it passed beneath Third Street (City of Encinitas, 2002). Continual flow monitoring was performed at this location for a one-week period in November of 2001. During the 2001 monitoring, measured dry weather flows averaged approximately 65 gpm. The flow data was generally consistent and did not show diurnal fluctuations. A strong diurnal pattern may be indicative of urban runoff associated with early morning or evening over-irrigation. The absence of a diurnal pattern strongly suggests that groundwater makes up a significant portion of the creek flows. Groundwater extrusion on the slopes above the channel (along Hwy 101) also supports that groundwater is present in the creek (Pacific Southwest Biological Services, 2000).

For the past 6 dry seasons, water was present and nitrate and/or conductivity concentrations consistently exceeded the action levels at the monitoring stations located in the Cottonwood Creek watershed. Field records show water was ponded or flowing at the monitoring stations but no overland flow was observed. The flow could not be directly connected with a human-induced source and, considering the hydrology and historical data of this monitoring station, it was determined that groundwater in the region was a probable source. The Cottonwood Creek Urban Runoff Assessment also reported nitrate and conductivity measurements exceeding the action levels throughout the sampling period. This comprehensive and focused study distinguished groundwater as a likely source of these exceedances.

Summary of Detailed Analysis in 2004 Dry Weather Monitoring Report

In the 2004 Dry Weather Monitoring Report, the City discussed the nitrate-nitrogen and conductivity exceedances in detail. This discussion is summarized in the following paragraphs.

The nitrate-nitrogen exceeded water quality action levels in 22 of the 36 total analyses performed in 2004, 61%, as part of the 2004 monitoring. The majority of the exceedances were in the Encinitas Sub-basin, accounting for 12 of the 22, with other scattered in all other sub-basins except La Orilla Creek and Rancho Santa Fe. Much of the nitrate-nitrogen was attributed to groundwater in the region. This groundwater is typically rich in nitrate-nitrogen and low in other nutrients and metals. Groundwater usually has elevated conductivity levels and low bacteria concentrations. In contrast, irrigation water, often laden with fertilizer, contains elevated concentrations of ammonia and ortho-phosphate, has low conductivity, and typically higher bacteria levels. Using these parameters and knowledge of the conveyances and land uses around monitoring locations, it is possible to characterize the sources of nitrate-nitrogen exceedances in the City. Of the 22 exceedances, 9 appeared to be attributable to irrigation runoff in the drainage areas, 10 associated with groundwater influence, and three sites seemed to be influenced by a combination of both sources. In these three sites, the water quality data was uncharacteristic of pure groundwater or irrigation. The following tables and figures are taken directly from the 2004 Dry Weather Monitoring Report. Table 5.5 lists the sites with data and land use supporting the characterization of the nitrate-nitrogen exceedances.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Table 5.5 Suspected Sources of Nitrate-nitrogen at Sites with Nitrate-nitrogen Exceedances	
Groundwater	**Irrigation**
ENC-1	ENC-4
ENC-3	ENC-9
ENC-5	ENC-10
ENC-6	ENC-14
ENC-8	ENC-15
ENC-11	ENC-17
CBS-1	CBS-3 N
LUC-1	CBS-3 S
LUC-7	ESC-2
ESC-1	LUX-2
	LCS-1
	LCS-2

Figures 5.4, 5.5, and 5.6 are scatter plots containing water quality data used to characterize the sources of nitrate-nitrogen exceedances.

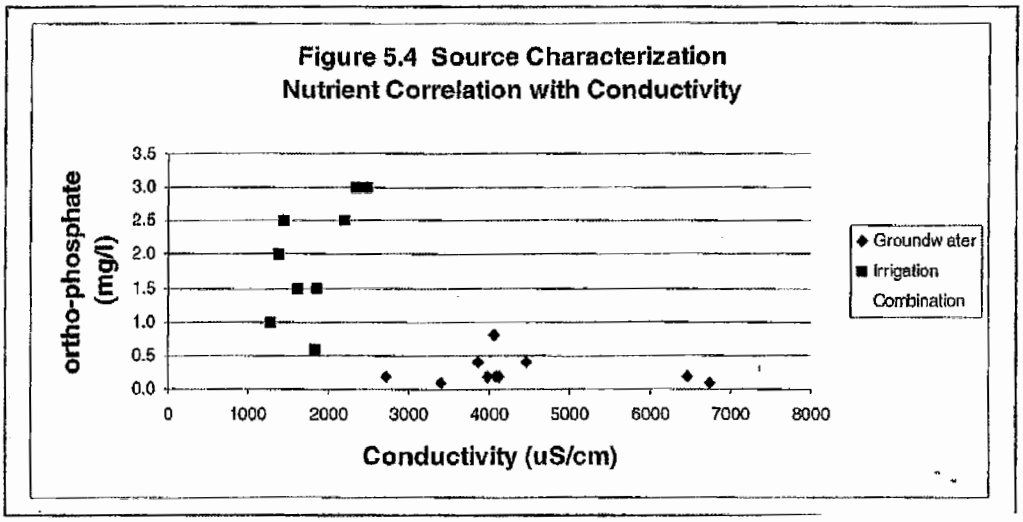

Figure 5.4 illustrates the relationship between ortho-phosphate concentrations and conductivity values. Results of the scatter show two distinct groups where water samples with conductivity measurements greater than 3000 uS/cm have ortho-phosphate concentrations below 1.0 mg/l. This is characteristic of groundwater, having high conductivity and low nutrients. The second grouping of samples shows those with conductivity below 3000 uS/cm containing ortho-phosphate concentrations ranging from 0.6 to 3.0 mg/l. Where higher nutrient levels are coupled with lower conductivity, irrigation is suspected to be a major contributor to water quality concerns.

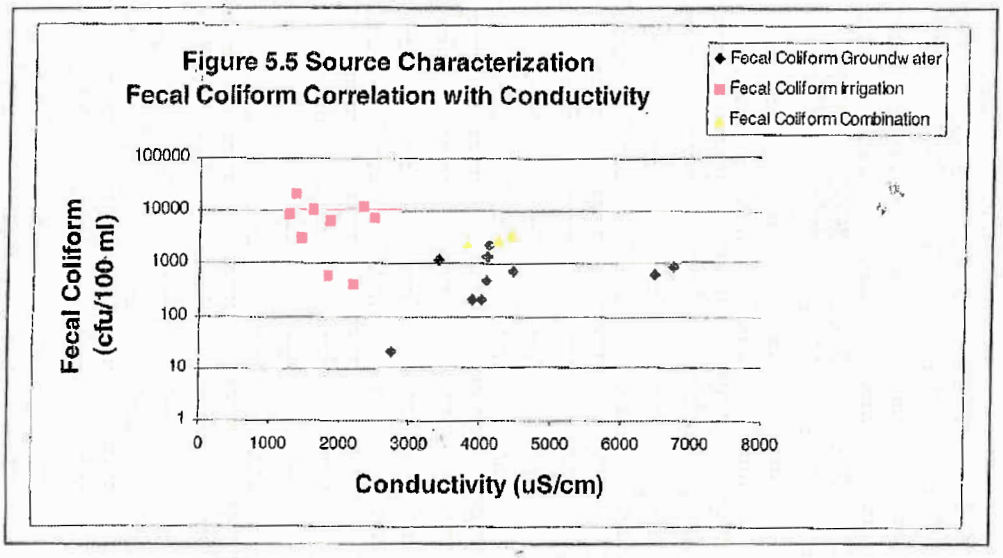

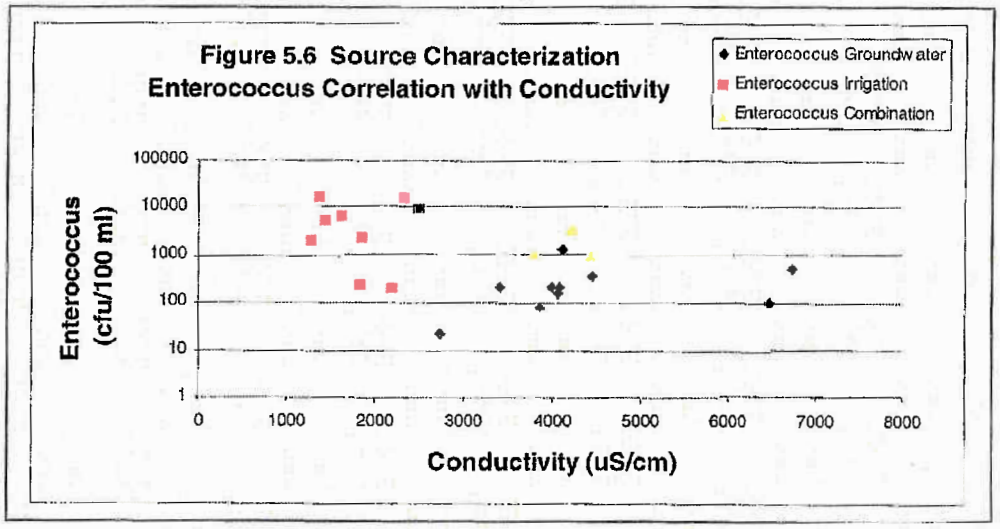

Figures 5.5 and 5.6 reflect similar groupings of the sites when comparing bacteria levels to conductivity measurements. As with the first grouping in Figure 5.4, the first grouping in Figure 5.5 and 5.6 have conductivity measurements greater than 3000 uS/cm and both have low bacteria concentrations, typical of groundwater. Conversely, in group two, the conductivity values are generally less than 3000 uS/cm with bacteria ranging from approximately 200-20, 000 cfu/100ml, indicative of irrigation runoff influencing the water quality at these locations.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Table 5.6 lists the locations where nitrate-nitrogen exceeded the action level and depicts the data used to identify the suspected source.

Table 5.6 Data to Characterize NO_3-N Exceedances, 2004

Location	NO_3-N (mg/l)	NH_3-N (mg/l)	o-PO_4 (mg/l)	Conductivity (uS/cm)	Total Coliform (cfu/100 ml)	Fecal Coliform (cfu/100 ml)	Enterococcus (cfu/100 ml)	Suspected Source
ENC-1	25.0	0.1	0.2	4080	15000	1400	200	Groundwater
ENC-3	30.0	0.1	0.2	3990	4000	200	200	Groundwater
ENC-5	15.0	0.1	0.4	3860	18000	200	80	Groundwater
ENC-6	60.0	0.2	0.2	6470	7000	600	100	Groundwater
ENC-8	25.0	0.2	0.2	4120	47000	2200	1200	Groundwater
ENC-11	25.0	0.1	0.1	6740	12000	900	500	Groundwater
CBS-1	10.0	0.2	0.4	4450	2400	700	340	Groundwater
LUC-1	20.0	0.1	0.2	2730	100	20	20	Groundwater
LUC-7	10.0	0.2	0.8	4060	2200	450	150	Groundwater
ESC-1	15.0	0.2	0.1	3400	8000	1200	200	Groundwater
ENC-4	10.0	0.0	1.0	1293	75000	8200	2000	Irrigation
ENC-9	15.0	0.3	2.5	1459	11000	3000	5400	Irrigation
ENC-10	10.0	0.6	3.0	2490	27000	7200	9800	Irrigation
ENC-14	20.0	0.4	2.0	1388	92000	20800	13600	Irrigation
ENC-15	25.0	0.4	1.5	1876	13000	6200	2200	Irrigation
ENC-17	20.0	0.6	3.0	2340	190000	12000	16000	Irrigation
CBS-3N	15.0	0.1	0.2	3790	24000	2575	1100	Irrigation/Groundwater
CBS-3S	10.0	0.4	0.6	1850	2200	550	225	Irrigation
ESC-2	20.0	0.1	0.6	4230	29000	2800	3600	Irrigation/Groundwater
LUX-2	25.0	0.2	2.5	2210	11000	400	200	Irrigation
LCS-1	15.0	0.0	1.5	1633	57000	10400	6600	Irrigation
LCS-2	10.0	0.1	0.6	4430	8400	3400	1100	Irrigation/Groundwater

*shaded areas denote other action levels that were exceeded in the same sample

Regional Groundwater Data Showing Elevated Nitrate and Conductivity Levels

After discussions with the San Diego County Water Authority, Municipal Water District, San Diego County Department of Environmental Health, and Olivenhain Municipal Water District, it was determined that there is little groundwater quality data specific to Encinitas because the local water authorities do not consider Encinitas groundwater a viable source of drinking water. However, several studies and reports indicate elevated concentrations of nitrates and conductivity in groundwater basins throughout the San Diego region.

Elevated Nitrates in the Region

Encinitas has historically been home to growers and continues to support many nurseries throughout the City. The Leucadia sub-basin supports a number of commercial growers. The number of growers has decreased over the years and, although the nitrates continue to exceed the action levels, the concentrations have decreased. In the 2002 Cottonwood Creek Urban Runoff Assessment and Action Plan, agriculture-related land uses were found to comprise 17% of the Encinitas sub-basin. According to the article, "The ABCs of Water Quality Assessment in Georgia" published in the Stormwater Journal in March/April 2002, it is common to find elevated nitrates in groundwater in regions of agriculture and it is likely fertilizers and over irrigation are primary sources of nitrogen in the groundwater. In the publication, Nonpoint Sources of Pollution in Irrigated Agriculture by the University of California in partnership with Natural Resources Conservation Service, the following sources of nutrients were found from agricultural practices: fertilizers, biodegradation of crop residues, agricultural and municipal wastes applied to land, and waste generated directly by animals. This study concluded that irrigated agriculture is a significant source of surface and groundwater

non-point source pollution in California.

The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. According to the 2007 Groundwater Basin Reports, San Diego County groundwater basins have a range of nitrate levels above and below the drinking water standard of 10 mg/L. The Batiquitos Lagoon Basin and San Elijo Valley Basin were not discussed in detail in the groundwater basin reports because of limited available data. The San Luis Rey River Valley Basin, San Dieguito, and Lower Santa Margarita River Basins are located in the vicinity of the Batiquitos Lagoon and San Elijo Valley basins. The San Luis Rey River Valley Basin did not specifically list concentrations for nitrate, but did list nitrate as a constituent of concern. The San Dieguito River Basin had nitrate concentrations that ranged from 0.2 mg/L to 385 mg/L. The Lower Santa Margarita River Basin had nitrate concentrations within the drinking water standard. The dry weather monitoring stations in exceedance of the action levels had nitrate concentrations that range from 4.4 mg/L to 64 mg/L. This appears consistent with the aforementioned concentrations reported in nearby groundwater basins with agricultural-related land uses within their watersheds.

Additionally, the sites with nitrate-nitrogen exceedances attributable to groundwater have not been found to cause water quality problems in the receiving waters, as they do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils.

The City will continue to monitor these sample locations as a part of the Dry Weather Program. As standard procedure, the City conducts a cursory investigation to locate the source(s) of any exceedance. The City investigates each exceedance in the attempt to identify a human-induced source of the exceedance. The City's educational and commercial programs target irrigation runoff and include regular inspections of nurseries.

Elevated Conductivity in the Region

The elevated conductivity may be from various minerals entering the groundwater from the sedimentary soils in the region or seawater intrusion as a result of its proximity to the ocean. In the publication, Nonpoint Sources of Pollution in Irrigated Agriculture by the University of California in partnership with Natural Resources Conservation Service, it states that the amount of salt in the water depends on its source and groundwater that leaches through alluvial sediments derived from sedimentary rocks, which often occur along California's coast range, collects many minerals and have a much higher salt content.

The San Diego region has elevated concentrations of dissolved material (as measured by TDS) in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. According to the 2007 Groundwater Basin Reports, San Diego County groundwater basins have TDS above the drinking water standard of 500 mg/L. The Batiquitos Lagoon Basin and San Elijo Valley Basin were not discussed in detail in the groundwater basin reports because of limited available data. The San Luis Rey River Valley Basin, San Dieguito, and Lower Santa Margarita River Basins are located in the vicinity of the Batiquitos Lagoon and

San Elijo Valley basins. The San Luis Rey River Valley Basin had TDS concentrations that ranged from 168 mg/L to 3,400 mg/L. The San Dieguito River Basin had TDS concentrations that ranged from 320 mg/L to 27,000 mg/L. It was reported that the San Dieguito River Basin was subject to seawater intrusion and, therefore, experienced increased salinity levels in the groundwater. The Lower Santa Margarita River Basin had TDS concentrations that ranged from 325 mg/L to 1,260 mg/L.

The amount of dissolved material (as measured by TDS) in a sample correlates to electrical conductivity. The following calculation is derived from the 20th edition of the Standard Methods for the Examination of Water and Wastewater; TDS = SC * 0.65 (TDS in mg/l and SC in um/cm). Based on converting conductivity measurements to TDS concentrations, the City of Encinitas dry weather monitoring stations with exceedances of the action level had TDS values that ranged from 1,523.6 mg/L to 4,628 mg/L. This appears consistent with the aforementioned concentrations reported in nearby groundwater basins subject to seawater intrusion.

Conclusion

In consideration of information summarized above including historic monitoring trends, constituent and geographically focused studies, background information, and literature and report reviews, the City of Encinitas has reasoned various nitrate and conductivity exceedances to groundwater influences. Notably, this deduction has not precluded the City from taking source determination actions to identify the likely contributor to an exceedance of nitrate or conductivity. As such, the City will continue to monitor the various sample locations as part of the ongoing Dry Weather Monitoring Program, and conduct cursory investigations to determine the source(s) of any exceedance, and conduct follow-up actions as warranted. The information presented and considered in this discussion will be used as the premise for determination of follow-up actions in the future if no conclusive source of nitrate or conductivity can be identified.

City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024
TELEPHONE NO.: (760) 633-2600
FAX NO: (760) 633-2818
www.ci.encinitas.ca.us

Citation CW-

Administrative Citation

Date of Violation:

☐ **WARNING** ☐ 1st Citation □100 per violation ☐ 2nd Citation □200 per violation
☐ 3rd Citation □500 (per violation and each subsequent violation within a 12-month period)

Payment of □0.00 is due no later than (see reverse side for payment and appeal information)

This citation prohibits the continuation or repeated occurrence of the violation described below. Payment of the fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

Violation Address	**Assessor□s Parcel Number**
Person Cited	**Relationship of person being cited**
Mailing Address	**Business (if applicable)**

Code Section Violated	**Description of Violation**

As per the City of Encinitas Municipal Code Section 20.08.110 the following corrective actions must be implemented:

Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

Enforcing Officer	**Phone Number** **(760) □**	**Signature**	**Date issued**
Person Cited (Print Please)		**Acknowledgement of Receipt-Signature**	**Date**

Method of Delivery
☐ **In Person** ☐ **Posted on Property** ☐ **By Mail** ☐ **Certified Mail** ☐ **Other**

CC:

ADMINISTRATIVE CITATIONS

Encinitas Municipal Code Chapter 1.08.080 provides for the issuance of an administrative citation for violations of the Code. There are four levels of citations that may be issued progressively for a violation. The levels, as indicated on the front of the citation, are a Warning, a 100 First Citation, a 200 Second Citation, and a 500 Third and subsequent Citations. These fines are per violation and are cumulative. A warning, if issued, does not incur a fine and, therefore, cannot be appealed.

A. RIGHTS OF APPEAL

You have the right to appeal this citation within 15 calendar days from the date the citation was issued. An appeal must be made in writing, including a return address, a basis for the appeal in detail must be included, and be accompanied by the fine amount. An appeal will result in an administrative hearing.

Failure of any person to properly file a written appeal within 15 calendar days shall constitute a waiver of his or her right to an administrative hearing and adjudication of the citation or any portion thereof and the total amount of the fine.

B. HOW TO PAY FINE

The amount of the fine is indicated on the front of the administrative citation and is due within 30 calendar days of the issue date of the citation. You may pay by mail or in person. Payment should be made by credit card, personal check, cashier's check, or money order payable to the City of Encinitas. Payment should be made at the address below. Please write the citation number on your check or money order.

City of Encinitas
505 S. Vulcan Ave.
Encinitas, CA 92024
Attention: Finance Department / Administrative Citations

If the fine is not paid within 30 calendar days of the issue date of the citation, you will receive a Delinquent Notice from the Finance Department and there will be a 100 penalty fee assessed in addition to the original fine.

Payment of any fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

C. CONSEQUENCES FOR FAILURE TO PAY THE FINE

The failure of any person to pay the fine assessed by a citation within 30 calendar days of the issuing date of the citation or the due date on a Delinquent Notice may result in turning the account over to a collection agency, filing a claim with Small Claims Court, a lien against your property, or any other available legal remedy to collect such money. The City has the authority to collect all costs associated with the filing of such actions.

D. CONSEQUENCES OF FAILURE TO CORRECT VIOLATIONS

There are numerous other enforcement options that may be used to encourage correction of violations. These options include, but are not limited to: criminal prosecution, civil litigation, abatement, recording the violation with the County Recorder, and forfeiture of certain benefits for substandard residential rental property.

If you need further information about the violation and/or how to comply, please call the officer designated on the front of the citation.

Appendix E
JURMP Annual Report Requirements Checklist

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4.3.1, Appendix C (Section 2.0) Appendix C-1
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	Appendix C
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	N/A
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	Appendix C
v. The number and brief description of illicit discharges and connections identified.	7.5.2
vi. The number of illicit discharges and connections eliminated.	7.5.2
vii. Identification and description of all spills to the MS4 and response to the spills.	Appendix H-1
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3.1, 7.3.4
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.2.1
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2.5
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2.5
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5.3
xiii. A description of notable activities conducted to manage illicit discharges and connections.	Appendix C (Section 6.0)

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Appendix C
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	Appendix C
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	Appendix C (Section 3.0), Appendix C-2
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	Appendix C (Section 3.0)
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	Appendix C, Appendix C-3
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	Appendix C, Appendix C-3
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	Appendix C
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	Appendix C

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	Appendix C (Section 7.0), Appendix C-4
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	Appendix C (Table 5.0)
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	Appendix C (Section 3.0)
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5.2
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	Appendix C (Section 1.0)

Jurisdictional Urban Runoff Management Program Annual Report

FY 2008-09

City of Encinitas

Photograph by Kristy Rygiel

CITY OF ENCINITAS

Jurisdictional Urban Runoff Management Program Annual Report FY 2008-2009

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EXECUTIVE SUMMARY

Section J.3 of Water Quality Order No. R9-2007-0001, adopted January 24, 2007, requires the City of Encinitas to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2008-2009 with a defined reporting period from July 1, 2008 through June 30, 2009. This reporting period is marked by the application and refinement of newly developed program elements, and the assimilation of core components for a broadly effective and efficient set of actions. Reporting for this annual report has been prepared in compliance with standards established in Water Quality Order No. 2007-0001, and is based upon the most current information available at the time of document preparation. This report is presented in the standardized annual reporting format developed collectively by the San Diego Region Municipal Stormwater Copermittees.

On March 24, 2008, the City of Encinitas submitted, as required by Order No. 2007-0001, an updated JURMP. The JURMP was prepared as a foundational program document to detail programs, process, procedure, and implementation strategies employed by the City to improve and protect the quality of local surface and receiving waters. As part of the JURMP update process, the following list of objectives was established to set baseline guidance for overall program success:

- Develop programmatic elements to ensure compliance with regulatory standards and provisions mandated in Order No. R9-2007-001.
- Establish management processes and procedures to ensure accountability for program actions and activities.
- Establish and support a set of effective and efficient strategies to address Encinitas water quality concerns.
- Build program elements around integrated assessment approaches in order to evaluate overall performance and effectiveness of program components.

Programmatic reporting, represented in this document, serves as a critical self assessment tool in consideration of the objectives outlined above. However, it should be noted that the value added outcomes, both to the program and to the community of Encinitas, of each program area are in constant review as local, regional, and discipline specific technical and scientific knowledge advances. It is important to recognize the iterative nature of stormwater and surface water quality management, as such programs are comprehensive in nature, and each individual component contributes to the overall effectiveness of program actions. The information presented in this report captures the development and implementation of program components within the defined reporting period, and represents the state of program elements as defined by that period. Future reporting years will provide opportunity to express refinement and acuity of program

features and the City's overall progression in the field of stormwater and surface water quality management.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton, City Manager
City of Encinitas

9-21-09
Date

1.0 INTRODUCTION

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollution such as urban runoff, and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issued to local governments and other agencies.

In 2002, the City of Encinitas (City) developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01 (2001 Permit). On January 24, 2007, Order No. R9-2007-0001 (Order, Permit, 2007 Permit or Municipal Stormwater Permit), was adopted by the RWQCB, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and the incorporated cities of San Diego County, including the City of Encinitas (Copermittees). Under the requirements of Order No. R9-2007-0001, the City prepared and submitted on March 24, 2008 an updated JURMP document describing enhancements to existing programs, as well as newly developed programmatic elements to meet the provisions of the adopted permit.

Section J.3 of Water Quality Order No. R9-2007-0001, requires the City to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2008-2009 with a defined reporting period from July 1, 2008 through June 30, 2009 (FY 2008-09).

1.1 BACKGROUND

The City of Encinitas encompasses an overall area of nearly 20 square miles and is located along six miles of Pacific coastline in northern San Diego County. The City is characterized by coastal beaches, cliffs, flat-topped coastal areas, steep mesa bluffs and rolling hills. Incorporated in 1986, drawing together the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain and Leucadia, the City has an approximate population of 60,000. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south.

The City of Encinitas is situated entirely within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and the Escondido Creek Watershed to the south. The City is naturally divided by eight (8) distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon sub-basins. Encinitas receives an average annual rainfall of approximately ten (10) inches.

The City owns and maintains improved and open storm water channels, underground pipes of varying material, storm water detention basins, catch basins and a variety of other MS4 facilities.

In general, the City drains to three blue-line creeks: Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. In 2006, Cottonwood Creek was 303(d) listed for DDT, phosphorous, and sediment toxicity stressors. Further, the Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for bacteria indicators due to urban runoff from Cottonwood Creek. Encinitas Creek drains the north-central portion of the City, and drains into Batiquitos Lagoon, which is designated as a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. In 2006, Encinitas Creek was 303(d) listed for phosphorous impairments. Escondido Creek, listed in 2006 for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids, drains the southern and northwest (Olivenhain) portion of the City and drains into San Elijo Lagoon. San Elijo Lagoon is 303(d) listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic conditions.

1.2 PURPOSE AND OBJECTIVES

The purpose of the 2008-2009 JURMP Annual Report is to provide a comprehensive account of programmatic activities conducted by the City of Encinitas to meet the requirements of the Order No. 2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. Notably, a comprehensive program update occurred through the JURMP update process in 2008; therefore, only significant augmentation of program elements or planned changes will be captured in the following annual report. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

On December 4, 2008, City of Encinitas and California Regional Water Quality Control Board, San Diego Region staff met to discuss the City of Encinitas 2008 JURMP and 2007-2008 JURMP Annual Report. Specific comments received by RWQCB staff focused on reporting consistencies and techniques, and have been appropriately addressed in the preparation of the following annual report.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

Being a coastal community, environmental protection and water quality is of utmost importance to the City of Encinitas. As a result, the City has established strong water quality protection policies which are reflected in development planning documents and procedures. Through the implementation of the Development Planning Component of the City's JURMP and other related planning documents, the City aims to reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP) to protect receiving water bodies, and manage increases in runoff and erosion from development projects.

This section describes the City's actions during FY 2008-09 which contributed to the successful implementation of the City's Development Planning Component. Included in this section is a summary of recent updates made to land use policies and procedures, a description of the ongoing development of the Standard Urban Stormwater Mitigation Plan (SUSMP), the development of the San Diego region Hydromodification Management Plan, a review of the development projects approved in the reporting year, and a summary of the first complete year of implementation of the new BMP installation, verification, and inspection programs.

2.2 LAND USE PLANNING

The City's land use planning process facilitates (1) the reduction of development project discharges of pollutants from the MS4 to the MEP, (2) the prevention of development project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) management of increases in runoff discharge volumes, rates, and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

The City's land use planning process fundamentally structured around the following planning, guidance, and enforcement documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- Watercourse Protection, Storm Water Management and Discharge Control Ordinance (Municipal Code Chapter 20.08)
- Storm Water Best Management Practices Manual II (Local SUSMP)

The consistent application and regular update, as required or necessary, of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections will describe the City's land use planning process and the four core documents in more detail.

2.2.1 BACKGROUND

The City of Encinitas was incorporated in 1986, drawing together the towns of Cardiff-By-The-Sea, Leucadia, Olivenhain, and old and new Encinitas. The City's General Plan was adopted in 1989 and is amended on a limited, as needed basis. The City's JURMP, the Storm Water Ordinance, and the Storm Water BMP Manual II were each originally developed in 2002 as required by Order 2001-01. Each of these documents were reviewed and updated as needed in fiscal year 2007-08 as part of the JURMP update process and as required by the new Municipal Permit.

2.2.2 SOURCE CHARACTERIZATION

The City addresses seven major land use categories in its General Plan: residential, office professional, commercial, industrial, public / semi-public, transportation, and ecological / open space / parks. Each of these land uses is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their designated sections within this document.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Storm Water Ordinance, Grading Ordinance, and BMP Manual II, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During FY 2007-08, the City of Encinitas updated its land use planning BMPs as required by Order 2007-0001. As part of the 2008 JURMP update process, these BMPs were incorporated into Storm Water BMP Manual II (the City's local interim Standard Urban Stormwater Mitigation Plan (SUSMP)). The most current version of the City's BMP Manual II can be accessed through the Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us. Over the past two years, the City has actively participated in the review and update of the region's Model SUSMP. In FY 2008-09, Clean Water Program staff began the process of updating our local SUSMP to meet the minimum standards established in the newly approved regional Model SUSMP. For more detail regarding the development and adoption of the City's interim SUSMP and the regional Model SUSMP refer to Section 2.2.4.4 and 2.4.4.1.

2.2.4 PROGRAM IMPLEMENTATION

2.2.4.1 GENERAL PLAN

The City of Encinitas General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural bodies of water and drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The General Plan also discourages the use of large amounts of impervious surfaces in new development areas, minimizing the transport of urban runoff and pollutants. The breadth of the City's General Plan policies are such that they cross reference each other and have been determined to comprehensively comply with the Municipal Permit.

The City's General Plan document serves as the blueprint for the long-range, orderly, physical development of the City and contains stated community goals and policies designed to protect its environmental, social, cultural and economic resources as the City develops. The General Plan consists of an integrated and internally-consistent set of goals, policies and standards that address a number of issue areas which include land use, circulation, housing, noise, safety, recreation, conservation and open space.

Portions of the General Plan also encompass the City's Local Coastal Program (LCP) Land Use Plan, which guides development in the City's Coastal Zone pursuant to the Coastal Act. As a result, the City's General Plan and LCP are a combined single document.

The City implements the policies in the General Plan using a variety of resources including: the JURMP, Municipal Code, the Storm Water BMP Manual II, Development Agreements, and other various land use plans and permits. Section 2.4 of this document describes how the water quality and watershed policies are implemented through the City's development planning process.

As a component of the 2008 JURMP update (conducted during FY 2007-08) an assessment of the City of Encinitas General Plan was conducted to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City's General Plan goals and policies are consistent with the Municipal Permit, and no amendments to the General Plan were required as a part of the JURMP update.

Notably, in FY 2008-09 the City of Encinitas initiated a Comprehensive General Plan (CGPU) Update process that is anticipated to take approximately 2-3 years. In February 2009, the City released a request for proposal (RFP), inviting proposals from professional planning and design firms to provide services associated with the General Plan Update. The scope of the RFP included direction to address new policy issues such as sustainable communities, healthy communities, climate change, green building, surface water quality,

and stormwater management. As part of the selection process, and to represent water quality, stormwater management, and interrelated disciplines, the Clean Water Program Manager was invited to participate as an interview panel member. This effort is significant both to the City of Encinitas and the Clean Water Division, as it will provide opportunity to shape and marry citywide policy as it directly relates to water quality and stormwater management in the City of Encinitas.

2.2.4.2 JURMP

In compliance with the new Municipal Permit, the City's JURMP document underwent a major update during FY 2007-08. The JURMP document serves as the City's foundational storm water program management tool, capturing the development process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Encinitas.

2.2.4.3 WATERCOURSE PROTECTION, STORM WATER MANAGEMENT AND DISCHARGE CONTROL ORDINANCE (STORM WATER ORDINANCE)

As required by section J.a.(3)(b)iii of the Municipal Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance *(EMC Chapter 20.08)* was updated during FY 2007-08 to comply with the Municipal Permit. The Storm Water Ordinance sets up the legal framework which enables the City to enforce the water quality and watershed protection principles established in the General Plan and the JURMP. The Storm Water Ordinance also references the City's Storm Water BMP Manual II and enables the City to enforce the minimum BMPs and SUSMP requirements that are outlined in the manual. The ordinance is periodically reviewed and updated on an as needed basis to ensure that potential discharges of pollutants may be addressed appropriately.

In addition, the grading ordinance was thoroughly reviewed and updated in the last fiscal year and approved by City Council on February 25, 2009. The update largely addressed engineering related revisions, but also included some updates which serve to further strengthen the City's legal authority in meeting the provisions of the Municipal Permit. Specifically, the grading ordinance was updated to require that all Priority Projects acquire a grading permit, and that any project proposing 500 square feet or more of impervious surface is reviewed for conformance with City stormwater regulations.

2.2.4.4 STORM WATER BMP MANUAL II (LOCAL SUSMP)

As part of the 2008 JURMP update, Storm Water BMP Manual II was also updated; the City's revised SUSMP and regionally adopted Interim Hydromodification Criteria were incorporated into the Storm Water BMP Manual II as required by the Municipal Permit, during FY 2007-08. The City has also integrated the interim SUSMP provisions into local

land use planning and development process and procedure as outlined in the updated BMP Manual II.

Notably, BMP Manual II updates incorporated during FY 2007-08 were driven by both the Stormwater Ordinance and Grading Ordinance amendment processes. As such, the City's BMP Manual II, as it relates to the Grading Ordinance, is contained in the City's Local Coastal Program (LCP), and must receive Coastal Commission approval of any changes. As part of this broader update of associated ordinances and manuals, the City has worked with the Coastal Commission to ensure adequate inclusions in the LCP.

The City originally created the Storm Water BMP Manual II in 2002 to be used by individuals involved with development projects within the City. The Storm Water BMP Manual II is a compilation of all requirements related to water quality with respect to development projects, including the City's SUSMP requirements, permanent BMP requirements, construction BMP requirements (which are further discussed in Section 3), implementation requirements, and maintenance requirements. The Storm Water BMP Manual II also includes various tables to help identify which requirements are applicable to each unique development project.

Standard Urban Storm Water Mitigation Plan (SUSMP) Update

Within the defined reporting period of this report, the City of Encinitas actively participated in the collective review and update of the San Diego regional Model SUSMP. The revised Model SUSMP was developed to address post-construction urban runoff pollution from development projects and defines the minimum required Low Impact Development (LID), source control and treatment control BMPs. Details about the completed update to the Model SUSMP and planned Local SUSMP updates can be found in Section 2.4.4.1. As required by Order No. 2007-001, all new updates to the San Diego Regional Model SUSMP will be incorporated into the City's local SUSMP and land development process and procedures by March 24, 2010.

2.3 ENVIRONMENTAL REVIEW PROCESS

As part of the 2008 JURMP update, the City's environmental review staff evaluated the City's environmental review process and confirmed that the current process accurately evaluates water quality and cumulative impacts and identifies appropriate measures to avoid, minimize and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality. In compliance with the Municipal Permit, additional questions have been provided in the initial study checklist, a tool utilized to evaluate the environmental effects of a project. To evaluate potential water quality impacts of projects requiring discretionary review, the following questions have been included as part of the initial study checklist:

Would the project:

- *Substantially conflict with city-adopted water quality standards or waste discharge requirements?*
- *Substantially alter the existing drainage pattern* of *the site or area, including the alteration* of a *stream or river course, in* a *manner which would result in substantial erosion or siltation on- or offsite?*
- *Result in* a *substantial degradation of receiving water quality during construction activities?*
- *Propose* a *land use or an on-site activity that would substantially degrade receiving water quality?*
- *Substantially increase any pollutant for which* a *tributary water body is listed on the Clean Water Act Section 303(d) list?*
- *Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?*
- *Substantially degrade groundwater quality?*

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

As discussed in the previous sections, the City of Encinitas has an established multi-departmental review process for all new development and redevelopment projects. Through the application of the City's Storm Water Ordinance, Storm Water BMP Manual II and development project review process, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP.

Each proposed discretionary and ministerial project is subject to the City's Development Project Approval and Verification Process. The following sections describe this process in detail.

2.4.2 SOURCE CHARACTERIZATION

As discussed in Section 2.2.2, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive

repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP (Storm water BMP Manual II), which was updated as required during FY 2007-08, describes specific categories for Priority Projects and indicates common pollutants associated with each category (see Table 2-1). A Priority Project must identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

In the City of Encinitas, all development projects, including standard projects (projects not subject to SUSMP standards), are required to meet the minimum BMP requirements, which are discussed in the following Section 2.4.3.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are summarized here and are included in the City's Storm Water BMP Manual II. All development projects are required to implement the following principles, where applicable:

- Source control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed material and trash storage areas, and use of efficient irrigation systems.
- LID BMPs that maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary.
- Provide buffer zones or other buffers for natural water bodies.
- Grading and construction activities must implement all requirements outlined in Section 5 (Construction) of the City's 2008 JURMP.
- Submittal of proof of a mechanism for ongoing long-term maintenance of all structural post-construction BMPs.

SUSMP Priority Projects must submit a grading plan, which includes identification of potential pollutants from the projects proposed LID, source control and treatment control BMPs, calculations for sizing the treatment control BMPs, and an attached maintenance agreement. The grading plan must also address how the project will manage increases in runoff discharge rates and durations associated with the project, where such increases could cause erosion downstream of the project.

Table 2-1
Anticipated and Potential Pollutants Generated by Land Use Type

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >1 acre	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry /Industrial Development	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft²	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site
(2) A potential pollutant if the project includes uncovered parking areas
(3) A potential pollutant if land use involves food or animal waste products
(4) Including petroleum hydrocarbons
(5) Including solvents

2.4.3.1 HYDROMODIFICATION MANAGEMENT PLAN AND INTERIM HYDROMODIFICATION CRITERIA

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order No. 2007-0001 the City is currently collaborating with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP).

In FY 2007-08 and FY 2008-09 the Copermittees—in cooperation with a Technical Advisory Committee, the Southern California Coastal Water Research Project and the Regional Board—were actively involved in conducting scientific research and gathering the necessary data in order to prepare the final HMP. The final draft HMP will be submitted to the Regional Board for review and approval in December 2009. However, in FY 2007-08 the City established Interim Hydromodification Criteria that will be in effect until the final HMP is approved. The City requires all Priority Projects disturbing 50 or more acres to comply with the Interim Hydromodification Criteria, except for those sites that are considered exempt as described in Section D.1.(g)(6) of the Municipal Permit. The details of the Interim Hydromodification Criteria are presented in the City's Storm Water BMP Manual II, and are consistent with the regionally adopted interim Hydromodification standards. A time table for development of the final HMP can be found in Section 2.4.4.1 and Table 2-2.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to a development project's proposed storm water BMPs during project construction must be approved by the City before being implemented.

2.4.4 PROGRAM IMPLEMENTATION

As required by the Municipal Permit, the City of Encinitas has implemented a program to ensure that development and redevelopment projects comply with post-construction Best Management Practice (BMP) requirements, including Low Impact Development, source control, and treatment control BMPs. The Municipal Permit further requires that the City ensure proper installation of treatment control BMPs and their maintenance into perpetuity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following section provides an overview of the City's SUSMP implementation (including project tracking) during FY 2008-09.

2.4.4.1 MODEL AND LOCAL SUSMP UPDATES

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the new Municipal Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into Storm Water BMP Manual II (see Section 2.2.4.4). In compliance with the interim SUSMP update

standards established in Order No. 2007-0001, the following tasks were performed during the review and interim update of the SUSMP:

- Priority Project categories were updated.
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained.
- LID requirements and additional source control requirements were added to meet or exceed Municipal Permit requirements.
- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly.
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary.

In addition to the changes discussed above, a comprehensive regional Model SUSMP update was completed by the copermittees during FY 2008-09 and submitted to the Regional Board for approval on January 26, 2009. After incorporation of revisions based on Regional Board comments the Model SUSMP was approved by the Regional Board on March 24, 2009. The comprehensive Model SUSMP update includes the following as required by the Municipal Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Municipal Permit.
- Establishment of site, design, and maintenance criteria for each LID and treatment control BMP listed in the Model SUSMP.
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the Model SUSMP is applicable and feasible.
- Addition of a requirement for Priority Projects with low traffic areas and appropriate soil conditions to use permeable surfaces.
- Addition of any necessary restrictions for infiltration BMPs from Priority Projects that generate high levels of pollutants.

The City is in the process of updating its Local SUSMP to meet the requirements established in the regional Model SUSMP. The local update will be completed no later than March 24, 2010, one year after the adoption of the Model SUSMP. The City's Local SUSMP will include a review process to verify all proposed BMPs for Priority Projects meet the criteria designated in the updated Local SUSMP.

As required by Order No. 2007-0001 the City will also incorporate a Hydromodification Management Plan (HMP) into the City's Local SUSMP. The final HMP is currently being developed regionally by a consultant and regional workgroup and is projected to be completed and submitted to the Regional Board for approval in December 2009.

All necessary SUSMP updates described above and their projected completion dates are presented in Table 2-2.

Table 2-2
Time Schedule for Model and Local SUSMP Updates

SUSMP Update	Time Schedule	Status
Final Model SUSMP update	January 2009 (submitted) March 2009 (RB Approved)	Completed
Local SUSMP update	March 2010	In Process
HMP Progress Report	July 2008	Completed
Draft HMP	January 2009	Completed
Final HMP	December 2009	In Process
Adoption of HMP into Local SUSMP	180 days after RWQCB approval of the final HMP	--

2.4.4.2 DEVELOPMENT PROJECT APPROVAL PROCESS

The following section includes a summary of the City's current development review process.

DISCRETIONARY PROJECTS

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring an additional, ministerial permit are also subject to engineering plancheck review as described in the Ministerial Project section.

Predevelopment Process

The stormwater element of the predevelopment process is geared toward disseminating information on stormwater pollution control and the City's SUSMP requirements. During this preliminary design phase, engineers and applicants are guided by City staff to provide adequate post-construction BMP facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process results in better designed and integrated post-construction BMPs, since the facilities are included in the project design even in the earliest phases of the project.

Priority Projects (defined by the City of Encinitas as those projects subject to SUSMP requirements), which require more stringent stormwater pollution control methods, are first identified during the predevelopment process. The categories of development falling under the Priority Project classification can be found in the City's Storm Water BMP Manual II and are consistent with the requirements of the Municipal Permit. During the predevelopment meeting, applicants proposing Priority Projects learn that they must implement LID and source control BMPs and must install treatment control BMPs which

meet the numeric sizing criteria required by the Municipal Permit. City staff also inform applicants at the predevelopment meeting that installed post-construction BMP facilities must be maintained in good working order into perpetuity. City staff and the applicant and/or engineer discuss options for meeting the numerical post-construction treatment requirements, including volume-based systems and flow-based systems. In Encinitas, mechanical treatment systems are discouraged and when accepted may only account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

Stormwater Pollution Control Checklist and Certification

All development project applicants are required to complete a written self-certification of the post-construction BMPs proposed with their project. This certification is required to accompany the initial submittal of each discretionary permit application. The checklist briefly describes the Clean Water Program and the City's storm water regulations. Applicants are required to:

- Classify their projects as Priority, Standard, or Exempt from SUSMP
- Present the LID, source control and treatment control BMPs that will be installed or implemented on site to comply to the SUSMP requirements, and
- Certify that they understand and will implement post-construction BMPs on their site as appropriate for their project's priority.

This checklist must be completed by the party responsible for the development project and submitted with the project's permit applications. A copy of the checklist is provided in the Storm Water BMP Manual II.

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions include construction requirements as well as post-construction BMP standards for effective stormwater pollution control facilities. Once the predevelopment meetings are conducted and the self-certification checklist has been completed, the Engineering Department reviews the adequacy of the project's proposed facilities shown on the site plan and issues Conditions of Approval to ensure implementation of satisfactory LID, source control and treatment control BMP measures. The Conditions of Approval take into account the nature of each project site and the work proposed. The Conditions of Approval are then recorded in a covenant against the property.

Applicants not showing adequate construction or post-construction BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. Stormwater pollution control facilities for Standard projects must meet the minimum requirements established in the City's Storm Water BMP Manual II. Priority Projects must additionally show LID, source control and treatment control BMPs on the project plans. Their project plans must also show a feasible solution for numerically-sized treatment control BMPs. Projects with treatment areas that appear to be inadequate are

asked to resubmit with substantiating calculations for the proposed treatment control BMPs. These numeric treatment requirements are listed in the City's Storm Water BMP Manual II and available to all applicants through the City website.

MINISTERIAL PROJECTS

Projects requiring a ministerial permit such as a grading, improvement, or building permit are also required to include post-construction stormwater pollution control facilities in the project design. These BMP facilities must be considered adequate before the project's plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project is already conditioned to provide specific treatment facilities. For those projects not requiring a discretionary permit, the review of the storm water pollution control treatment facilities begins at the Engineering plancheck stage.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater construction and post-construction BMPs. City plancheck engineers emphasize to applicants the variety of natural solutions that may be used in providing stormwater pollution control. All landscape areas used as post-construction BMPs must be clearly marked on the project plans along with the following associated note, "Landscape area for Best Management Practice to be privately maintained and not to be modified without a permit from City". The permitted drawing will become public record; therefore documentation of the designated treatment areas is maintained. Engineers are also required to provide stormwater pollution control notes on the plans addressing stormwater education, materials storage, erosion control, and waste management in order to meet the minimum SUSMP requirements.

Every plan in plancheck is also reviewed to determine if it meets the City's definition of a Priority Project. In addition to meeting standard BMP requirements, Priority Projects must provide LID, source control and numerically-sized treatment control BMPs as required by the Municipal Permit and the City's SUSMP. These requirements are discussed in detail in the City's Storm Water BMP Manual II.

All Priority Projects must comply with the numeric sizing criteria for treatment control BMPs in order to be approved by the City Engineer. Plancheck engineers review the project's hydrology calculations to determine the adequacy of the treatment system proposed. The project applicant is required to assume the maintenance responsibility or to identify the maintenance mechanism for the treatment system prior to project approval. A covenant ensuring adequate maintenance into perpetuity is recorded against the property. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City

to guarantee successful implementation of the measures shown thereon. Such bonds are retained until the landscaping has become fully established.

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. For more information regarding temporary construction BMPs, refer to Section 3 of this document.

Post-Construction BMP Maintenance Agreements

All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance and/or replacement of permanent BMPs as necessary into perpetuity. The maintenance agreement or covenant includes an attachment depicting the specific project BMPs, so that the required facilities and their location on the project site are easily identified. The agreement is then recorded against and runs with the property. In a few cases the maintenance requirements are outlined on the plans themselves and a recorded agreement is not required.

CAPITAL IMPROVEMENT PROJECTS

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear, or repair projects, often only construction BMPs are necessary. However, SUSMP qualifying projects must also install post-construction BMPs. Priority CIP Projects are designed to incorporate the City's SUSMP requirements and LID, source control and treatment control BMPs will be implemented. The City takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.4.4.3 SUSMP PROJECT APPROVAL

During the planning process and prior to project review, the six projects listed in Table 2-3 were identified as Priority SUSMP Projects and approved during FY 2008-09. All applicable SUSMP BMP requirements specified in the City's local SUSMP were applied to each of the projects in Table 2-3. Under no circumstances was any priority project permitted to implement treatment control BMPs with low pollutant removal efficiency ratings. In addition, all of the development projects approved in FY 2008-09 were less than fifty acres in size; therefore none of the projects were required to meet Interim Hydromodification Criteria. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2008-09.

Table 2-3
SUSMP Priority Projects approved in FY 2008-09

Permit No.	Location	Approval Date
718 G	687 South Coast Hwy	8/28/2008
883 G	1076 Hymettus Ave	10/22/2008
983 G	1320 Encinitas Blvd	10/28/2008
943 G	211 Saxony Rd	1/14/2009
947 G	Bella Vista Ct	5/26/2009
10187 G	1603 Crest Dr	5/27/2009

The four-lot subdivision at 1076 Hymettus Ave provides a good example of the typical Priority SUSMP projects that are permitted by the City of Encinitas. The proposed project consisted of the construction of three single family homes (with one existing home to remain). The proposed development will add more than 5,000 square feet of impervious paved surface used for vehicular access to the new homes and therefore was identified as a priority project, and subject to SUSMP requirements. As a result, two infiltration basins (each 8 feet wide by 15 feet long by 5 feet deep) were designed to treat runoff from roofs and driveways in the proposed development. Eight smaller bioswales were also proposed on the lots to treat and direct runoff to the infiltration basins. In addition, pervious drivable surfaces were proposed in-lieu of traditional pavement for parallel parking in the right of way along Hymettus Ave and a portion of the driveway leading to the rear homes.

2.4.4.4 SUSMP PROJECT AND TREATMENT CONTROL BMP TRACKING

Over the past fiscal year, Clean Water Program staff worked with GIS staff to implement a comprehensive watershed-based SUSMP tracking system. The GIS data management system was designed to track the SUSMP Priority Projects and the long-term maintenance of all approved treatment control BMPs installed at development sites. As required by the Municipal Permit, the database is capable of tracking the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located[1]
- Date of construction of the BMP
- The party responsible for maintenance of the BMP
- Maintenance certifications or verifications
- Inspection findings
- Any corrective actions issued

[1] The entire City of Encinitas is within the Carlsbad watershed.

During FY 2007-08 a beta version of the GIS tracking system was put into use. Since the initial introduction, the City has been working to continually refine this database and new projects with treatment control BMPS are added to the database on a routine basis. Database improvements are a result of a thorough review of plans for proposed and built projects, a quality check of the existing data, and coordination with the GIS department. A hardcopy version of the most current inventory of treatment Control BMPs in the City's SUSMP Project and Treatment Control BMP Database is available in Appendix A-1. The inventory includes all operational treatment control BMPs installed at SUSMP priority projects. For a map of all the SUSMP Priority Development Projects approved within the City of Encinitas, refer to Appendix A-2.

With the aid of the City's Treatment Control BMP Inspection Priority flowchart (see Appendix A-3), all development projects with approved treatment control BMPs were prioritized as high, medium, or low Threat to Water Quality (TTWQ) during the 2008 JURMP update, as required by the Permit. In addition, prioritization of each BMP was further refined during FY 07-08 Operation and Maintenance Inspections. For new projects with treatment control BMPs that are added to the inventory, prioritization of the project occurs during the first treatment control BMP inspection. When the construction of a new project with treatment control BMPs is completed, the City requires that the treatment control BMP(s) are inspected within the first year, and prior to the next rainy season in order to determine prioritization for future inspection frequency. This allows the City to determine TTWQ based on a visual inspection of the project as well as the following criteria:

- Type of project
- Sensitivity of the receiving water body
- Proximity to ESAs
- Size of the BMP
- Recommended maintenance frequency
- Likelihood of operational and maintenance issues associated with the BMP(s)
- Location of the BMP(s)
- Other pertinent factors

The BMP Inspection Priority flow chart addresses basic site and treatment control BMP characteristics that can influence a site's TTWQ such as receiving water body sensitivity and the removal efficiencies of the installed treatment controls. Note that not all development projects and treatment control BMPs are the same; each may have unique water quality risks associated with it. The City considered additional relevant factors beyond those included in the flow chart as necessary.

2.4.4.5 BMP INSTALLATION VERIFICATION

Beginning in January 2008, the City of Encinitas began tracking the verification of post-construction BMPs that were installed on projects throughout the City. Upon project

completion, the engineering inspector now requires that the project engineer submit a grading certification letter to the City verifying that all the Low Impact Development, Source Control and Treatment Control Best Management Practices, as shown on the approved project plans and required by the Storm Water BMP Manual II, were constructed and are operational, together with the required maintenance covenant(s).

A sample grading certification letter is provided as Appendix A-4. Table 2-4 provides a list of the BMP verifications conducted for priority development projects completed in FY 2008-09.

Table 2-4
BMP Verifications for Priority Development Projects
Completed in FY 2008-09

Permit No.	Location	Construction Date
562 G	1302 Encinitas Blvd	8/4/2008
7628 G	215 La Costa Ave	11/4/2008
106 G	3358 Wildflower Valley Dr	11/18/2008
7300 G	760 Garden View Ct	12/22/2008
7791 G	1766 N Coast Hwy 101	12/30/2008
9367 G	781 Garden View Court	1/14/2009
789 G	2011-2089 San Elijo Ave	3/23/2009
181 G	3342 Wildflower Valley Dr	4/6/2009
462 G	70 thru 90 N Coast Hwy 101	4/6/2009
386 G	3535 Manchester Ave	4/9/2009
9301 G	187 Halcyon Rd	4/14/2009
9180 G	1610 Neptune Avenue	5/21/2009

Subsequent to the submittal of the grading certification letter, engineering inspection staff inspect the project site to verify that LID, source control, and treatment control BMPs proposed for the project were constructed in compliance with all approved plans, City permits and ordinances. Inspections of Priority Project sites prior to occupancy allow the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied site are generated. Engineering inspectors also check to ensure that BMPs have been built according to plans before signing off on each stage of construction. The inspectors use the project's grading plans to identify any missing or incorrectly installed BMPs and deny approval for sites with observed problems. If the engineering inspector is satisfied that the post-construction BMPs were installed as required, the inspector verifies the project engineer's letter with their signature and a date and takes photos of the

completed BMP installation. Hardcopies of these signed and certified verification letters and the photos of the BMPs are retained by the Clean Water Program.

2.4.4.6 ANNUAL TREATMENT CONTROL BMP OPERATION AND MAINTENANCE VERIFICATION

As required by the new Municipal Permit, all treatment control BMPs installed at development projects must be self inspected annually and maintained in perpetuity by a responsible party. As part of the JURMP update, the City of Encinitas established a Treatment Control BMP Operation and Maintenance Verification Program.

During FY 2007-08, Clean Water Program staff prepared the essential elements of the Treatment Control BMP Operation and Maintenance Verification Program. First, a comprehensive list of mailing addresses for completed projects with treatment control BMPs was pulled from the newly developed SUSMP Project and Treatment Control BMP GIS Database. Then, a formal letter was developed to notify property owners of their verification responsibility. An informative Treatment Control BMP brochure was also created to help property owners identify the BMPs that were installed as a part of their development project. Finally, a self verification form was developed for responsible parties to use to report annual verification of Operation and Maintenance of their treatment control BMPs. An example of the verification letter, brochure, and form can be found in Appendices A-5a, A-6, and A-7, respectively. In some cases additional notifications were required; with these letters, finaled grading plans were also included in order to assist responsible parties in identifying the location of BMPs.

Beginning in FY 2008-09, the City initiated its Treatment Control BMP Operation and Maintenance Self Verification Program and required annual verification of proper maintenance of <u>all</u> treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. The City mailed annual self verification notifications to each party responsible for the maintenance of treatment control BMPs constructed within the City of Encinitas. The notification package included a letter informing the responsible party of their inspection and maintenance obligation, a brochure explaining the new program and providing examples of common BMPs, a blank inspection / maintenance verification form (to be completed and returned to the City), and a self addressed stamped envelope.

Self-Verification Results and Findings

In the first year of implementation, the City anticipated a significant amount of information gathering and validation. The goal of initial contacts with responsible parties was to refine the City's BMP inventory based on information gathered as well as better define methodologies to effectively assure proper maintenance and management of BMPs. Since this was the first year of implementation, for a large number of facilities, it took several notification attempts for self-verifications to be returned (see Table 2-5). Copies of the three BMP Operation and Maintenance notifications issued to responsible parties in FY 08-09 may be found in Appendix A-5a, A-5b and A-5c.

Table 2-5
Summary of Notifications Sent and Self-Verification Forms Returned

Number of forms returned after **1 notification**[2]**:**	41
Number of forms returned after **2 notifications**[3]**:**	22
Number of forms returned after **3 notifications**[4]**:**	9
Number of Forms **Not** Returned (even after 3 notification attempts):	(10)
Notifications Sent to Undeliverable Addresses:	(8)
Total Number of Self-Verification Forms Returned:	72

Upon receipt of a self-verification packet from responsible parties, City staff reviewed the completed form and the required photos and maintenance documentation (if any). Staff determined whether the information was complete or if any further maintenance was required. Of the self-verifications forms returned, several included incomplete or incorrect information. In some cases BMPs were not identified correctly or were not noted on the self-inspection form at all. In addition, several self-verification packets were returned without the accompaniment of photo documentation. In order to assure BMPs were inspected and maintained as required, City staff either requested additional information or conducted a formal inspection by City staff (see Table 2-6). Depending on the potential threat to water quality, inspections were either immediately conducted after receipt of an incomplete self-verification form or recommended to be conducted in the next fiscal year as part of the City's required annual Treatment Control BMP Operation and Maintenance Inspections (see Section 2.4.4.7). For a detailed summary of the results and findings of FY 2008-09 treatment control BMP inspections see Appendix A-8. Appendix A-8 includes more detailed information about each project, such as, project location, inspection dates, inspection results and additional City action. As a result of the Self-verification program and in combination with the Operation and Maintenance Inspection Program (Section 2.4.4.7) a total of three properties with treatment control BMPs warranted enforcement action. For a summary of enforcement action, refer to section 2.4.4.8.

The defined reporting period of this report represents the initial implementation year of the permanent BMP self verification program. As described in Tables 2-5 and 2-6, the City's implementation process was generally successful. However, in efforts to continually

[2] The first notification included a letter (Appendix A-5a), the BMP Operation and Maintenance Brochure, the Self-Verification Form, and a self addressed, stamped envelope (SASE).

[3] The second notification included a letter (Appendix A-5b), a copy of the first notification letter, a copy of the grading plan which identified the location and detail of the required BMP, the BMP Operation and Maintenance Brochure, the Self-Verification Form and a SASE.

[4] The final notice included a letter (Appendix A-5c) explaining that since this was the third notification attempt, the responsible party's BMPs would be inspected by City staff in FY 2009-10.

improve process and procedure related to this program area, it is anticipated that future implementation of this program will be improved by providing responsible parties with additional mechanisms for supplying required information to the City, such as an electronic data submittal form through the City's website. Further, communication between responsible parties and the City will be improved as BMP inventories and contact information are validated and responsible party knowledge and awareness of operation, maintenance, and data submittal requirements is enhanced.

Table 2-6
Summary of Self-Verification Results and City Actions

Self-Verification Results	Frequency
Unresponsive Owner	10
Verification Received	72
Contact Info Invalid	8

City Actions	Frequency
City Inspected	11
Information Validated	48
Incomplete Submittal. FY 09-10 Inspection Recommended.	20
Maintenance Required. Enforcement action taken.	3
Validate Contact Info. FY 09-10 Inspection Recommended.	7

2.4.4.7 TREATMENT CONTROL BMP OPERATION AND MAINTENANCE INSPECTIONS

During FY 2007-08, Clean Water Program staff developed the City's new Treatment Control BMP Operation and Maintenance Inspection Program. New inspection forms were created and the Treatment Control BMP inventory database was designed and quality checked. For a detailed description of the development of the GIS-based Treatment Control BMP Inventory and Tracking system refer to Section 2.4.4.4. In FY 07-08, City staff also conducted cursory inspections to assess the new inspection form and get an idea of the general condition of some of the existing BMPs. Notably, unique to the City of Encinitas and the development dynamic of the City, a large number of inventoried BMPs exist on private single-family residential lots. Therefore, the City of Encinitas Treatment Control BMP Operation and Maintenance Inspection program was developed with these conditions in mind.

In FY 2008-09 implementation of the City's BMP Inspection Program was closely aligned with the implementation of the Self-Verification Program. Since this was the first year of implementation, validating the City's current BMP inventory was the primary focus of

inspections and self-verification tracking. In light of this goal, in FY 2008-09, all properties with treatment control BMPs were required to complete the self-verification process as well as undergo a City inspection. In combination, the inspection and self-verification programs allowed City stormwater staff to individually assess each treatment control BMP in detail to establish prioritization and identify potential threats to water quality. As required by the new Municipal Permit, all treatment control BMPs installed at development projects were inspected by the City's inspection staff prior to the rainy season. As the program progressed, each BMP was verified and given a priority status of either "High", "Medium" or "Low".

In an effort to validate and characterize the City's permanent BMP inventory, and establish baseline programmatic needs, City staff inspected all projects with treatment control BMPs in FY 2008-09. A total of 39 projects (34 private and 5 municipal) with approved and constructed treatment control BMPs were inspected. As of July 1, 2008 there were a total of 39 constructed projects on the City's treatment control inventory (See Appendix A-1). An annual average of 10.75 projects with treatment control BMPs were completed since permanent BMPs were first required on Priority Development Projects in 2003 (see Table 2-7). Therefore, as required by Order No. 2007-0001, **100%** of the total number of projects with approved treatment controls and **363%** of the average number of projects treatment control BMPs approved per year were inspected in FY 2008-09. In addition, **100%** of the projects with drainage inserts were inspected in FY 2008-09.

Table 2-7
Average Number of Constructed Projects with Treatment Control BMPs

Fiscal Year	Completed Projects
2004-05	6
2005-06	8
2006-07	14
2007-08	15
Average	10.75

When inspections are conducted in future years, inspection frequencies will be based on the project's assigned TTWQ priority as determined by City staff in FY 2008-09, and the criteria outlined in Section 2.4.4.4 of this document. In addition to the established criteria, staff will apply baseline data gathered through initial inspection actions taken in 2008-2009. Table 2-8 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 2-8
Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Inspection Frequency
High	Annually (prior to start of rainy season)
Medium*	50% annually
Low	As needed

*Drainage insert controls are considered medium priority BMPs

As required by the Municipal Permit, a minimum of 20% of the total number of projects with approved treatment controls and a maximum of 200% of the average number of projects with treatment control BMPs approved per year will be inspected annually.

FY 2008-09 inspections included an examination of all treatment control BMPs at the site to verify that each treatment control BMP was working, being maintained properly, and was in compliance with all applicable City ordinances and permits. Inspection findings were documented by the inspector using the Treatment Control BMP Inspection Form (Appendix A-9). If any deficiencies in operation and maintenance were noted during the inspection, the responsible party was notified and appropriate enforcement actions were taken (as described in Section 2.4.4.8 of this document) to achieve compliance.

Because the majority of the treatment control BMPs installed in the City of Encinitas are on single-family residential lots, during implementation of the first year of this program, great care was taken to educate homeowners of their maintenance, inspection and self verification obligations. As noted in section 2.4.4.6, packages mailed to responsible parties included information detailing the new BMP operation and maintenance program and the location and type of treatment control BMPs that were installed on their property.

In the process of conducting inspections and issuing self-verification notices, it became quite apparent that homeowners were often unaware that treatment control BMPs existed on their property that must be preserved in place and maintained as necessary in order to protect water quality. When working with homeowners, City stormwater staff devoted personal, specialized assistance as warranted in order to improve knowledge and awareness and achieve compliance. As a result, in FY 2008-09 a significant amount of staff time was dedicated to reviewing the results of inspections and self-verifications and addressing the operation and maintenance concerns that posed the greatest potential threat to downstream water quality.

For a detailed summary of the results and findings of the FY 2008-09 treatment control BMP inspections see Appendix A-10. Appendix A-10 includes more detailed information about each project, such as, project location, inspection dates, inspection results and additional City action. Depending on the findings during the course of initial inspections, follow-up inspections were conducted and enforcement action was taken as necessary. For a detailed summary of enforcement action taken as part of the treatment control BMP inspection program, refer to section 2.4.4.8.

Treatment control BMPs that are operated and maintained by the City are considered part of the City's MS4 and are maintained and inspected by Public Works staff on an annual basis. BMPs that are located in specialized public facilities such as parks and libraries may be inspected by City stormwater staff and maintained as necessary by Public Works staff. For more information regarding the maintenance and inspection of the City's MS4 refer to Section 4 of this document.

2.4.4.8 ENFORCEMENT MEASURES FOR DEVELOPMENT SITES

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all development projects and permanent BMPs as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. A more detailed description of the different enforcement measures used by the City to enforce its storm water regulations and their legal basis can be found in Section 2 of the 2008 JURMP update document.

As a result of post-construction treatment BMP verification inspections and self-verification results, the City determined that **four** out of 39 inspected projects were partially or totally deficient in the installation and or maintenance of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, all four projects were brought into compliance through a combination of written orders to correct and/or verbal warnings.

3.0 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site Best Management Practices (BMPs), inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Municipal Permit as outlined in Section D.2.

3.2 SOURCE CHARACTERIZATION

3.2.1 SITE INVENTORY

Within the defined reporting period of this report, the City of Encinitas has compiled, maintained, and updated a watershed-based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2008-09 included a total of **140** construction sites. During this period, there were **21** high priority sites that were inspected biweekly, **45** medium priority sites that were inspected monthly and **74** low priority sites that were inspected on a biannual basis. The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of all construction projects. The GIS inventory includes details on each construction site, including project name, location, sub-basin, type of construction permit, date of permit issuance, inspection prioritization, and the assigned storm water inspector. Beginning January 24, 2008, the City's Clean Water Program staff in coordination with the City's IT department designed a technical solution in GIS to inventory and prioritize all construction projects as permits are approved. A more detailed description of the prioritization process is provided below in section 3.2.2. A fully prioritized construction inventory can be found in Appendix B-1 in addition to a map of all active construction sites located in Appendix B-2.

3.2.2 INVENTORY UPDATES

As required by Section D.2.b of the Municipal Permit the City's watershed-based inventory of construction sites is updated weekly by the Engineering department as new grading permits are approved. The Engineering department shares all approved permit information with the City's IT Department which also maintains an updated inventory of all active construction projects in a GIS database. As part of the 2008 JURMP update process, and to ensure monthly construction inventory management, a construction specific GIS script was developed by the City's GIS staff in ESRI's ArcMap for prioritizing approved construction permits. This mechanism is accessible via desktop to Clean Water Program staff to execute the GIS script and review the prioritization on a monthly basis. Regular updates to the inventory include the addition of new construction projects, the removal of completed construction projects, and re-assignment of inspection frequencies of active construction sites as determined by the City's Clean Water Program staff.

A flow-chart that outlines the process by which the inspection frequency of construction projects is determined in GIS can be found in Appendix B-3.

3.3 ORDINANCE UPDATES

As required by Section D.2.a of the Municipal Permit, applicable City documents and ordinances were updated on March 12, 2008 by the City of Encinitas City Council to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive Jurisdictional Urban Runoff Management Plan (JURMP) update completed in March 2008, the City also updated Municipal Code Section 20.08, the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, including construction specific provisions. Within the defined reporting period of this report, it is also notable that the City Grading Ordinance, EMC Section 23.24, was approved by the California Coastal Commission and adopted by City Council on February 25, 2009. The following provisions for storm water pollution control have been incorporated into the City's updated grading ordinance:

- All grading permits shall comply with the provisions of the City's Best Management Practices (BMP) Manual Part II which provides design, construction, and operation requirements for minimizing storm water pollution (§ 23.24.071).
- Any removal of BMPs that were required for a priority project will require a grading permit for corrective or other action. A requirement may be imposed to replace the BMP with equivalent water quality protection (§ 23.24.080).
- Priority projects for storm water pollution control cannot be exempted from obtaining a grading permit (§ 23.24.090.I).
- Any project creating over 500 square feet of new impervious area has to obtain a construction permit and adhere to all standards in the City's BMP Manual Part II (§ 23.24.105).
- All grading plans shall contain the location, design, detail, and cross section of all erosion control and post construction BMPs (§ 23.24.140).
- If the approved grading plan does not show post construction BMPs in sufficient detail, a precise grading plan for development projects is required to include and accurately depict post construction BMPs for review and approval of the City Engineer. (§ 23.24.126).
- Both Interim and Final Erosion and Sediment Control Plans are required (§ 23.24.150, 23.24.160).

- A waste management plan is required to be submitted with all interim erosion control plans. The management of the waste on the construction site must be graphically and verbally described on the grading plan (§ 23.24.150F).

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

3.4.1 UPDATED BMP REQUIREMENTS

Through the JURMP Update process completed in March 2008, the City reviewed and updated a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the Maximum Extent Practicable (MEP). Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm water Best Management Practices Manual, Part I and II, and the City of Encinitas' 2008 JURMP Update.

3.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are different for the wet season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). The City's Storm Water Manual Parts I and II provide a detailed list of dry and wet season requirements for all construction sites. Prior to the beginning of the wet season, in September 2008, the City sent 76 Erosion Control letters (See Appendix B-5) to all property owners with active and inactive construction sites reminding them of the City's minimum BMP requirements. Additionally, the City also included a copy of the letter dated August 25, 2008, from the Executive Officer of the San Diego Regional Water Quality Control Board (RWQCB) titled *Regional Preparation for San Diego Rain Season* was to reinforce regional stormwater management requirements as they relate to construction activities.

3.5 PROGRAM IMPLEMENTATION

3.5.1 CONSTRUCTION AND GRADING APPROVAL PROCESS

The City has an established and thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards, obstructs a waterway, or occurs over an area of 10,000 square feet. All other projects require a building permit. Both permits require that plans be submitted and approved by the City. The City's grading ordinance

requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a citywide data management system called, "HTE".

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As a part of this approval process, the City's Clean Water Program staff also review the grading plans to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Plans are checked by both the Engineering and Clean Water Program staff. Engineering staff reviews the plans for overall compliance with the grading ordinance. Clean Water Program staff checks the plans for specific compliance with the Storm Water Management Ordinance and Federal and State regulations. If the site falls under jurisdiction of the State's General Construction Permit, staff follows up with the developer to ensure that a Storm Water Pollution Prevention Plan (SWPPP) is properly prepared and submitted. In addition, the SWPPP is reviewed and approved by the Clean Water Program staff prior to final approval of the project grading plans. The City also requires proof that a Notice of Intent (NOI) has been submitted for sites that are subject to the General Construction Permit.

Prior to issuing construction and grading permits, the City's Engineering Department verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP.

3.5.2 BMP IMPLEMENTATION

Clean Water Program staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the City Engineering Inspectors. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08 and the City's Storm Water Best Management Practices Manual, Parts I & II.

Clean Water Program staff constantly monitor weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all Engineering Inspectors to inform them of the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation, maintenance, or replacement should take place, and where necessary, they require responsible parties to have additional BMPs in place at the end of each work day.

It is notable that the general notes for the building plans have been amended to include erosion control, sediment control, and materials management practices. The Clean Water Program also

reviews SWPPPs for all projects greater than five acres and sensitive projects between one and five acres. Staff reviewed and commented on SWPPPs for three projects between July 1, 2008 and June 30, 2009. See Table 3-1 below for a summary of SWPPP reviews.

Table 3-1 Storm Water Pollution Prevention Plan Reviews, 2008-09

Site Name	Address	Size (acres)	Notice of Intent	Review Date
Walgreens	1320 Encinitas Blvd.	2.20	Yes	9/26/08
Private Residence	3645 Copper Crest Rd.	1.15	Yes	11/12/08
La Costa Slope Repair	Corner of La Costa Ave. and Vulcan Ave.	< 1 acre	Yes	4/21/09

Through the review and plancheck process, and supported by the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, staff maintains the authority to require additional or alternative BMPs to be implemented on individual projects as determined necessary. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

3.5.3 CONSTRUCTION SITES REQUIRING ADVANCED TREATMENT

There were no sites in FY 2008-09 that required advanced treatment. For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined that a project site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat To Water Quality (TTWQ), advanced treatment will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are included in the City's Storm Water BMP Manual II.

3.5.4 INSPECTIONS & BMP VERIFICATION

The City has an established inspection program to evaluate compliance with storm water regulations at all construction sites within the City's jurisdiction. The City of Encinitas' Engineering Department employs six Engineering Inspectors who are responsible for inspections at all construction sites in the city. Storm water issues such as compliance with the grading and storm water ordinances in the Municipal Code have become one of their main focuses, especially during the wet season.

On January 24, 2008, the RWQCB adopted the 2007 Municipal Permit. Inspection activities for the construction program were updated and implemented at that time to meet the new Municipal Permit requirements as outlined in Order No. R9-2007-0001. During Fiscal Year 2008-09, consistent with required inspection frequencies as outlined in Sections 2.d.1-3 of the Municipal Permit, City staff conducted a total of **440** storm water inspections. Appendix B-1 details the complete Construction Inventory for FY 2008-09, the construction site prioritizations, and the number of inspections conducted at each site.

As part of the 2008 JURMP update process, and codified through BMP Manual II, the City of Encinitas established a maximum disturbed area for grading at 50 acres. Additionally, through this process, the City established advanced treatment criteria for construction activities. Within the defined reporting period of this report, no construction projects in the City of Encinitas were subject to maximum disturbed area or advanced treatment requirements, and therefore no required inspections related to this standard were completed.

The Engineering Inspectors captured all construction inspections on a form titled "Storm Water Quality Inspection for Construction Activities", included in Appendix B-4. The inspection form contains questions to ensure all the inspection components required by Section D.2.d.6 of the Municipal Permit are addressed. The form lists the minimum construction BMPs required by the City and includes boxes to document if BMPs are adequate or inadequate and/or require maintenance. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 3.5.5 below were taken.

3.5.5 COMPLIANCE AND ENFORCEMENT ACTIONS

3.5.5.1 GENERAL ENFORCEMENT

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites within its jurisdiction. Inspection and enforcement for construction projects is administered by the Engineering Inspectors and other City staff with inspection and enforcement authority.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure

may be applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to be corrected, and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's storm water regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop / Correct Work Notice. The NOV and Correct Work Notice provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City are reported to the RWQCB per the reporting requirements of the Municipal Permit.

Civil penalties for violations of the Encinitas Municipal Code (EMC) are established in EMC Chapter 1.08, and determined violations of storm water regulations may be subject to administrative citations and associated administrative fines, including those at construction sites. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector.

3.5.5.2 REPORTING AND NON COMPLIANCE

During the FY 2008-09, **41** construction related complaint calls were received through the City's Clean Water hotline. A total of 40 complaints were investigated and one call was referred to another department for further action. Of the 40 complaints investigated by Clean Water Program Staff, there were **31** violations. This resulted in **27** instances in which educational information was disseminated, **7** instances in which Correct Work notices were issued, **3** instances in which citations were issued. A complete summary of all construction related complaints can be found in Appendix H-1.

There were an additional **62** correct work notices as a result of the routine City inspections at construction sites throughout the fiscal year. With immediate oversight from the City's Engineering Inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance and avoid further enforcement. Appendix B-6 features

a summary of all violations and enforcement actions for all regularly inspected construction sites in FY 2008-09.

4.0 MUNICIPAL

4.1 INTRODUCTION

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, the storm drain system, and municipally owned facilities, which includes 18 public parks, 6 beach access areas, 4 beach parking lots, 5 fire stations, 5 public works yards, 4 administration buildings, 1 golf course, and 4 open space areas. The updated municipal facilities inventory is included as Appendix C-1. The City also conducts high Threat to Water Quality (TTWQ) activities, as defined by the Municipal Stormwater Permit, such as power washing and other mobile activities including street and sidewalk repair, building cleaning, painting, graffiti cleaning, and fleet vehicle maintenance. Other prominent water quality related activities include street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel and landscaping contractors, annual Municipal Separate Storm Sewer System (MS4) maintenance, and regular upkeep of the sanitary sewer system to prevent overflows.

Due to the large expanse of municipal areas, activities, and functions, City staff must carefully manage pollution prevention measures and Best Management Practices (BMPs) to reduce or potentially eliminate the discharge of pollutants into the MS4 from municipal areas and activities. To comply with the Municipal Stormwater Permit, the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas, activities, and functions

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 BACKGROUND

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.2.2 SOURCE CHARACTERIZATION

The City of Encinitas maintains approximately 145 miles of roads, streets, and highways and 11 City owned and operated parking facilities. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included in Appendix C-1.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's BMP Manual Part I and the California Stormwater Quality Association (CASQA) Municipal Handbook to choose applicable BMPs to implement for roads, streets, highways, and parking facilities within the City. Street sweeping and cleaning is the main BMP that is implemented for road, street, highway, and parking facilities (both stand-alone and those associated with a municipal facility) maintenance. Treatment control BMPs are used for all roadway projects determined to be priority projects and subject to Standard Urban Storm Water Mitigation Plan (SUSMP) standards, described in more detail in Section 2.0. The City implements additional controls for roads, streets, highways, and parking facilities adjacent to or tributary to Environmentally Sensitive Areas (ESAs) when determined to be necessary.

4.2.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2008-09 to require and verify the implementation of designated BMPs for all City maintained roads, streets, highways, parking areas, and related activities as outlined in the Municipal Permit Section D.3.a.(5)(a-c).

In compliance with street sweeping standards established in Order 2007-0001, the City implemented an aggressive sweeping schedule for roads, streets, highways, and parking facilities.

The frequency of street sweeping is as follows:

- All arterial roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris are swept weekly.
- All collector streets and parking facilities identified as consistently generating moderate volumes of trash and/or debris are swept bi-monthly.
- All residential (publicly owned) and parking facilities identified as generating low volumes of trash and/or debris are swept annually.

The City also maintains parking facilities at six local parks, four local beaches and the Encinitas Community Center. Four parking facilities at the local parks have been identified as generating low volumes of trash, sediment, and debris and are swept monthly from March through September. The remaining parking lots have been identified as generating moderate volumes of trash, sediment, and debris, and have been assigned a sweeping prioritization of medium priority. Each of these facilities is swept on a monthly basis throughout the year. The parking facilities at the beaches are swept every week from April through September to address the increased traffic, and monthly from October through March. In FY 2008-09, a total of **70.9 tons** of debris was collected from all City maintained parking lots.

In FY 2008-09, a total distance of **9,936 curb miles** was swept, and a total of **1,449 tons of debris** was collected.

Additionally, in FY 2008-09, the City's Public Works Department through coordinated efforts with Partners with Industry (PWI) collected and removed **447** 30-gallon bags of litter from all of

the City's bus stops. The City also partnered with San Diego County probation crews to collect and remove **8,661** 30-gallon bags of over-grown vegetation from City right-of-ways based on visual observations and citizen complaints.

4.3 FIXED FACILITIES

4.3.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities that have been grouped in this section because these facilities receive formal inspections as part of the municipal program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreational Facilities
- Public Works Facilities
- Potable Water Facilities
- Fire Stations
- Other Fixed Facilities

4.3.2 SOURCE CHARACTERIZATION

The Municipal Permit requires Copermittees to inspect high priority municipal areas and activities annually according to D.3.a.(7)(a). High priority facilities include parks and recreational facilities and other municipal areas and activities that the City determines may contribute a significant pollutant load to the MS4.

As part of the JURMP Update process in March 2008, all municipal facilities were assigned an inspection priority based on the Municipal Permit requirements and an evaluation of their threat to water quality. Each site and activity has been evaluated based on a variety of site-specific factors including size, location, type of activity, waste generated, pollutant discharge potential, non-storm water discharges, proximity to receiving water bodies, and any other relevant factors deemed appropriate. Using these criteria, a complete prioritized, watershed based inventory was developed and is included in Appendix C-1.

The City of Encinitas owns, operates, and maintains 50 fixed facilities within the City. Of these facilities, 28 have been designated with a high priority inspection priority and 21 were designated a low inspection priority. All high priority facilities are formally inspected on an annual basis and described further in Section 4.3.4. Both high and low priority facilities are visually inspected on a routine basis by City staff. Any illicit discharges or illegal connections are immediately referred to the Clean Water Program. All fixed municipal facilities are included in the City's inventory located in Appendix C-1. Figure 4.1 illustrates the various municipal fixed facilities and their associated activities within the City of Encinitas.

Parks and Recreation Facilities

The City maintains 21 parks, 7 beach access areas, 7 viewpoints, 40 miles of trails, and 70 acres of open space. All landscape maintenance activities are performed through the use of private

contractors. Parks Division Supervisors are responsible for monitoring contract activities for landscaping; implementing BMPs for pesticide, herbicide, and fertilizer usage; waste removal and control; and maintenance at all municipal parks and recreation facilities.

Public Works Operations Facilities

Public Works operations facilities are important in maintaining the functionality of many publicly offered services. The City of Encinitas maintains a total of four public works facilities, including two public works yards, a vehicle maintenance facility, and a wastewater collection facility (Appendix C-1).

Potable Water Facilities

The means to provide residents of the City with potable water is an essential activity conducted by the City of Encinitas' San Dieguito Water District. The City maintains several underground fixed facilities which include pressure regulating stations as well as two water reservoir/water storage facilities. The City also maintains an above ground water recycling reservoir.

Fire Stations

Fire fighting capability is an essential element of municipal activities conducted in the City. The City of Encinitas maintains five fire stations, which are included in the municipal inventory (Appendix C-1). Two fire stations within the City, stations #3 and #4, have fueling stations on site.

Other Fixed Facilities

Other fixed municipal facilities include a community center, an administrative building, a sewage pump station, and an Ultra Violet Urban Runoff Treatment Facility (UV Facility). All of these facilities are considered a low priority because many of the activities at these facilities are conducted indoors and do not correspond with activities that are considered a high threat to water quality.

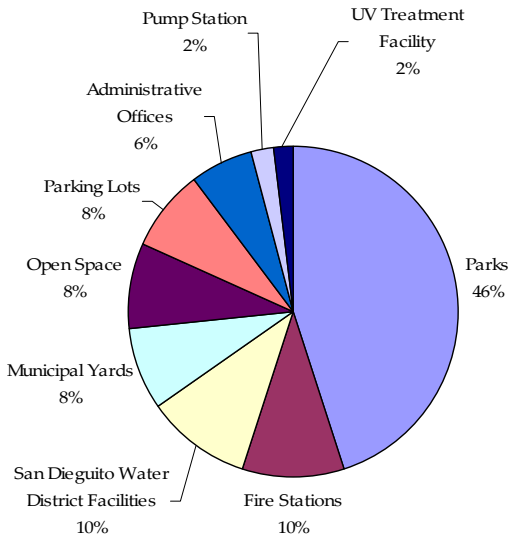

Figure 4.1 City of Encinitas Fixed Facilities

4.3.3 BEST MANAGEMENT PRACTICES

4.3.3.1 UPDATED BMPS

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP Update and the City's BMP Manual Part I. The City also references the CASQA Municipal BMP Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2008-09, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas. City personnel implemented general waste management BMPs, and patrons of the facilities were encouraged to recycle and properly dispose of trash and pet waste. Notable activities during the fiscal year included the maintenance of 17 doggie bag dispensers at three public parks and along several trails.

City staff continued operation and maintenance of post-construction BMPs at Cottonwood Creek Park. The park is a prime example of low impact development and includes the following post-construction BMPs: 90 feet of day lighting Cottonwood Creek, porous pavement

for all parking areas and driveways, pervious walkways, surface drainage through earthen-bottom open channels, and drought tolerant plants in landscaping areas.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: (1) runoff from improper irrigation after application; (2) application of chemicals during or prior to storm events; (3) use of chemicals that do not properly absorb to soil or plants; and (4) overspray from chemical applications that may eventually enter the MS4. The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management. Implementation of the policy includes:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The regulations generally include: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs.

In FY 2008-09, the following BMPs were implemented at all municipal parks and recreation facilities, public streets, channels, and right of ways to reduce pollution from pesticides, herbicides, and fertilizers:

- Whenever practicable, integrated pest management techniques that rely on non-chemical solutions are implemented.
- City personnel who participate in the application of pesticides are properly trained, maintain Qualified Applicator Certifications and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- City staff records the applications of all chemical agents by noting the locations, types, and quantities of chemicals used. Records are reported monthly to the Department of Agriculture.
- Pesticide, fertilizer, and herbicide handling and safety refresher sessions are provided to City personnel involved with application.
- The use of fertilizers is minimized as much as possible; compost and soil amendments are used in place of fertilizer, where applicable.
- Employees are trained to handle pesticides, herbicides, and fertilizers properly.

- All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides, and fertilizers are applied only when necessary (typically during growing seasons) and not during or prior to anticipated storm events.
- Pesticides are not sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- The City maintains compliance with federal and state reporting law for pesticide use.
- Weeds, grass, and brush are cleared from building perimeters and fence lines to reduce the need for pesticides and herbicide use, when applicable.
- Native plants are used in landscaping, where applicable.
- Diseased plants are removed, and infected parts of plants are removed to minimize the need for pesticide and herbicide use, where applicable.
- Several evapotranspiration gauges located throughout the City are used to monitor microclimates to properly set irrigation systems for different areas of the City and reduce the potential of over-irrigation.
- Flow sensors and master valves prevent water loss in the event of a break in any of the main lines.
- One bilingual training session for the City's private landscaping contractors was conducted by Clean Water Program staff during the fiscal year. There were 25 participants at the training session on June 11, 2009.

Public Works Operations Facilities

City personnel implement appropriate BMPs for all activities that take place at public works facilities. Storm Water Pollution Prevention Plans (SWPPPs) have been developed for all four of the City's main operations facilities, which include the San Elijo Wastewater Division Collections Facility, Requeza Street Facility, the "A" Tank Site, and the newly established Calle Magdalena Public Works Facility. The SWPPPs include a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs are maintained at each facility, and all of the facilities are inspected by City staff on an annual basis. Additionally, all Public Works employees are annually trained in storm water management by the Clean Water Program.

Potable Water Facilities

City personnel implement appropriate BMPs for all activities that take place at potable water facilities when deemed appropriate. San Dieguito Water District employees are trained in storm water management on an annual basis.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (#3 and #5) have permanent treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to

washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. More detailed information regarding non-emergency fire fighting flows can be found in Section 13 of this document.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management, as discussed in the City's BMP Manual Part I and the CASQA Municipal Handbook.

The City employs a number of pollution prevention practices at City Hall. These practices have been expanded in recent years to include:

- roof replacement and an energy efficiency improvement project which consists of installation of solar photo voltaic panels, a high efficiency air conditioning system, and day lighting the building in certain areas.
- the use of recycled paper (30%) for all copiers and printers,
- installation of an Automated Logic System (ALS) which controls the heating and ventilation
- implementing a 9-80 work week so that City Hall is closed every other Friday,
- installing lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- implementing a battery collection and recycling program at City Hall,
- replacing large trash receptacles at each individual desk with mini size trash receptacles and providing large recycling containers for mixed paper and cans/bottles,
- placing recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments,
- the use of seven alternative fuel vehicles.

4.3.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

Fertilizers which are used on landscaped areas in municipal parks and public right of way areas are considered a pollutant of concern for the San Elijo Lagoon and its larger drainage area. To mitigate potential discharges of nutrients to the Lagoon from Municipal activities, the City requires that the City's landscaping contractors implement an extensive fertilizer management program as described earlier in section 4.3.3.1. In FY 2008-09, Clean Water staff conducted their annual bilingual storm water management training for all City landscaping contractors. The City will continue to monitor the fertilizer management program, and if the existing measures are found to be deficient, the City will adjust the BMP implementation to achieve a higher level of pollutant reduction.

Similarly, if the City identifies any potential sources of other constituents for which water bodies in the City are 303(d) listed that could be the result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no other municipal fixed facilities that have been determined to be a source of pollutants for which water bodies within the City are on the 2006 Clean Water Act (CWA) 303(d) list.

4.3.4 PROGRAM IMPLEMENTATION

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and if necessary, enforcement actions. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.3.4.1 MAINTENANCE

In FY 2008-09, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot, and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular maintenance activities.

The City maintains a regular maintenance schedule for fixed facilities in the City. As previously discussed, City personnel are trained to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly, and to report illegal discharges/illicit connections as they may come across them during normal work activities.

4.3.4.2 TRAINING AND EDUCATION

Municipal personnel are trained in implementing appropriate BMPs and preventing non-storm water discharges. In FY 2008-09, Clean Water Program staff conducted training for the following municipal departments: Building, Code Enforcement, Engineering, Fire, Parks and Recreation, Planning, Public Works and the San Dieguito Water District. Additionally, the Streets Division of the Public Works Department discussed storm water issues at regular staff meetings throughout the reporting period. A detailed description of the municipal education program can be found in Section 8.0 of this document.

4.3.4.3 MUNICIPAL INSPECTIONS

City staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. As part of the FY 2008-09 program City staff performed a total of **28** high priority inspections. The fixed facility inspection locations and inspection dates are summarized in Table 4-1 below.

Table 4-1
Fixed Facility Inspections

No.	Facility Name	Inspection Date
1.	"A" Tank Site Public Works Yard	4/20/09
2.	Calle Magdalena Public Works Yard	4/20/09
3.	Requeza Street Public Works Yard	4/20/09
4.	San Elijo Wastewater Division Facility	4/20/09
5.	Beacon's Beach	6/17/09
6.	Cardiff Sports Park	6/10/09
7.	Cardiff Sports Park Expansion	6/10/09
8.	Cottonwood Creek Park	5/20/09
9.	Encinitas Viewpoint Park	6/8/09
10.	Glen Park	6/10/09
11.	Grandview Beach	6/17/09
12.	H St. Viewpoint	6/16/09
13.	Hawkview Park	6/23/09
14.	J St. Viewpoint	6/16/09
15.	Las Verdes Park	6/15/09
16.	Leo Mullen Sports Park	6/8/09
17.	Leucadia Oaks Park	6/23/09
18.	Leucadia Roadside Park	6/10/09
19.	Little Oaks Equestrian	6/3/09
20.	Mildred Macpherson Park	6/11/09
21.	Moonlight Beach	6/16/09
22.	Oakcrest Community Park	6/8/09
23.	Orpheus Park	6/10/09
24.	Paul Ecke Sports Park	6/3/09
25.	Scott Valley Park	6/15/09
26.	Sun Vista Park	6/3/09
27.	Swami's Beach	6/11/09

No.	Facility Name	Inspection Date
28.	Wiro Park	6/3/09

The recommended Best Management Practices and corrective actions are summarized in the City's Routine Inspection Summary located in Appendix C-6. Of the 28 sites inspected, a total of **3** facilities required corrective actions and follow-up inspections. As a result, all **3** facilities have implemented appropriate BMPs, and the Public Works and Parks and Recreations Departments have verified that the corrective actions have been completed. There were no enforcement actions for any of the Municipal fixed facilities during the FY 2008-09.

Potable Water Facilities

All of these facilities are considered a low priority and do not receive formal inspections because the activities associated with these facilities are located underground and do not involve any other activities on site.

4.4 MS4

4.4.1 BACKGROUND

The primary functions of municipal separate storm sewer systems are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consist of streets, curbs, catch basins, inlets, pipes of varying materials, natural creeks and streams, natural channels, concrete channels, culverts, desilting basins, and detention basins. The City also maintains a number of treatment control BMPs such as storm drain filter inserts and a UV treatment facility, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City of Encinitas regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the Maximum Extent Practicable (MEP).

4.4.2 SOURCE CHARACTERIZATION

The City maintains a variety of MS4 facilities which includes 1,632 catch basins and inlets, 61 miles of storm drain pipe, 3.35 miles of open channels, 14 desilting basins, and one UV Urban Runoff Treatment Facility located throughout its jurisdiction. The MS4, as one complete entity, is included in the municipal inventory located in Appendix C-1.

The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of the MS4. The GIS MS4 inventory includes inlets (i.e. catch basins, curb inlets, grate/inlet combos, etc.), outlets (i.e. curb outlets, headwalls, etc.), manholes, pumps, ditches, channels, storm drain pipes, and detention basins. To ensure that the City's GIS inventory is current and accurate, the MS4 inventory continually undergoes data (feature and attribute) review, quality control and validation by City staff from multiple departments.

GIS staff also maintains storm infrastructure data by mapping new infrastructure through a combination of field work and Engineering Plans.

In support of ongoing efforts to validate the MS4 inventory of facilities, within the defined reporting period of this report, the City established funding and initiated the first phase of the Channel Maintenance and Environmental Permitting project. This effort has been prioritized by the City in order to validate the city's inventory of basins, channels, and ditches, and to acquire required permits to support ongoing and critical maintenance of these facilities.

4.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.4.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction, and new development. In March 2008, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste from entering the MS4 system as well as ensuring that waste which is collected during maintenance of the City's MS4 does not re-enter the system.

The 2007 Municipal Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City of Encinitas does not own or operate any flood management projects or flood control devices that may be retrofitted. However, in FY 2008-09 the City did maintain 14 detention basins throughout the City that serve pollutant removal, particularly for sediment and associated pollutants bound to the sediment. These facilities are inspected on an annual basis and cleaned of debris and sediment as needed. A Municipal BMP map that depicts all of the City's structural BMPs, detention basins and storm drain filter locations can be found in Appendix C-3.

4.4.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS/ACTIVITIES

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined to be necessary.

4.4.4 PROGRAM IMPLEMENTATION

The City's MS4 management program includes responding to complaints received by the City's Clean Water Hotline {(760) 633-2787}; detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, and by flushing the pipes; by repairing and/or replacing damaged or failing MS4 structures; and by stenciling signs on storm drain inlets warning of effects of illegal dumping. The City trains field staff on

implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a vactor truck during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance. City staff report on the maintenance of the MS4 through an industry standard asset inventory and a work management system that integrates with the City's GIS system. Maintenance is performed on the storm drain infrastructure and captured through work orders that are attached to the storm drain features represented in GIS. Any changes or updates to the MS4 inventory will be reported in future JURMP Annual Reports.

All maintenance activities this fiscal year met the Municipal Permit requirements as outlined in Order No. R9-2007-0001. The FY 2008-09 annual results for all municipal activities are summarized below and reported in detail in Appendix C-2.

4.4.4.1 MAINTENANCE

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year is included below:

- Within the defined reporting period of this report, approximately **290 tons** of waste and litter were removed from the entire MS4. This included the removal of **64.4 tons** from the catch basins and inlets, **2.8 tons** from the City's storm drain filter inserts, and **223.02 tons** from open channels. All MS4 facilities observed to be collecting relatively high volumes of trash were cleaned between May 1 and September 30.

- Within the defined reporting period of this report, **223.02 tons** of litter and vegetation were removed from open channels by hand. Cleaning the open channels is conducted annually/year round or more often when necessary. The City responds to observations or reports of anthropogenic litter in channels in a timely manner.

- Within the defined reporting period of this report the City inspected and cleaned **1,547** catch basins and inlets and removed a total of **64.4** tons of waste and litter. Storm drain inlets and catch basins that City personnel have identified as gathering a greater amount of trash and debris as compared to other areas of the City are inspected throughout the year and cleaned if necessary. The City's inspection and cleaning activities are sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris. Inspection and cleaning schedules are subject to change based on observations and records of City personnel.

- The City maintains a total of 57 storm drain filter inserts in 35 inlets (some larger inlets may contain more than one filter insert) located throughout its jurisdiction to remove sediment, debris, oil, and grease from the MS4. From July 1, 2008 through June 30, 2009, **2.8 tons** of sediment and litter were removed from all 35 inlets. These inserts are maintained on a quarterly basis by a specialty contractor. Table 4-2 below outlines the

complete filter insert inventory. A Municipal BMP map that depicts all of the City's storm drain filter locations can be found in Appendix C-3.

- The City of Encinitas has a formal maintenance agreement with the San Elijo Joint Powers Authority to maintain the UV Facility. The scope of the agreement ensures daily monitoring and inspection, startup and shutdown of the facility as dictated by rain events, and preventative and regular maintenance. In FY 2008-09, $5,300 was spent on the preventative and regular maintenance of the facility including, pump replacement, control screen and software updates, and other electronic equipment and parts. The UV Facility provides the City with a vital treatment function, and ongoing operations and maintenance activities are critical to ensure optimum performance and pollutant removal.

A complete report of all MS4 operation and maintenance activities can be found in Appendix C-2.

Table 4-2
Storm Drain Filter Inserts Inventory

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
2	24" X 45"		1470 Neptune Ave. in driveway apron	Grate
4	24" X 40"		1638 Neptune in grass shoulder	Grate
5		9'	1786 1/2 Highway 101	Curb
6	24" X 41"		1650 Highway 101	Grate
7	23" X 40"		970 Hwy 101 in alley, north of Jasper	Grate
8	24" X 41"		918 N. Hwy 101 in alley	Grate
10	24" X 41"		914 Hwy 101 in alley @ Leucadia Blvd. north of the park	Grate
12	23" X 40"		828 Hwy 101 in alley, behind building	Grate
13	23" X 40"		802 Hwy 101 in alley, west of Europa St.	Grate
14	23" X 40"		129 Cadmus	Grate
15	23" X 40"		149 Basil St.	Grate
16		10'	130 Basil St.	Curb
17	23" X 40"		130 Athena	Grate
18		9'	170 Athena	Curb

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
19	23" X 40"		577 N. Vulcan	Grate
21	23" X 40"		208 Cereus across from Hygeia St.	Grate
22	23" X 40"		321 Union	Grate
23	23" X 40"		321 Union across from Hygeia St.	Grate
24		7'	1750 Hwy 101	Curb
25	24" X 40"		750 G St. @ Second St. Alley	Grate
26	36" X 64"		364 2nd St.	Grate
27		10'	247 Hwy 101 NE corner of Encinitas Blvd.	Curb
28		11'	102 Encinitas Blvd.	Curb
29		7'	485 Santa Fe Dr., west of I-5.	Curb
30		8'	485 Santa Fe Dr., north side of street, west of I-5	Curb
31	24" X 40"		2560 Manchester	Grate
32	24" X 40"		2582 Manchester	Grate
ECR-1			194 El Camino Real @ Via Molena	Curb
ECR-2			245 El Camino Real @ Mountain Vista	Grate
ECR-3			337 El Camino Real, in front of Circuit City Mall	Curb
ECR-4			501 El Camino Real, east side @ Garden View Rd.	Combo
ECR-33			499 El Camino Real, SE corner @ Garden View Rd.	Curb
ECR-34			398 El Camino Real, SW Corner @ Garden View Rd.	Curb
ECR-35			398 El Camino Real, across from Circuit City mall	Grate
ECR-9			204 El Camino Real, in front of Block Buster Video	Curb

In FY 2008-2009, the Engineering Department was instrumental in conceptualizing and designing numerous drainage related capital improvement projects. These projects are outlined in Table 4-3 below.

Table 4-3
Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Stratford Knoll Drainage Improvements	$1 M	Replace existing storm drain channel and increase capacity.	In Design Phase
Urania Ave. and Windsor Dr. Storm Drain Improvements	$ 200,000	Replace old pipe with new reinforced concrete pipe and add new catch basins to eliminate future flooding.	Complete
Cardiff Alley Improvements	$200,000	Build a perforated sub-drain to improve drainage in area.	Under Construction
Parking Lot B	$1,200,000	Implement Low Impact Designs (LIDs) including dry wells and flow through planters to treat storm water.	In Design Phase

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City of Encinitas conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce

or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.5.2 SOURCE CHARACTERIZATION

The City of Encinitas Public Works Wastewater Division maintains approximately 120 miles of public sanitary sewer collection pipes.

4.5.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.5.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction and new development. In March 2008, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.5.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program that minimizes sanitary sewer overflows (SSO) and is described in more detail below.

4.5.4 PROGRAM IMPLEMENTATION

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediating existing sewer lines as necessary and proper disposal of hazardous waste.

4.5.4.1 MAINTENANCE

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2008-09, the entire sewer system was cleaned, and known trouble spots were cleaned on a more frequent basis. The City seeks to reduce and eliminate the amount of seepage from the sanitary sewer system to the MS4 through routine preventative maintenance of both the sanitary sewer

and the MS4 systems. Preventative maintenance of both systems allows City officials to detect and eliminate active seepage points before they become a larger problem, and also to repair areas of the system that have a high possibility of becoming a seepage point.

In FY 2008-2009, the Engineering Department was instrumental in conceptualizing and designing capital improvement projects to prevent sewage spills by improving the wastewater collection system. Sewer and emergency repair projects initiated during FY 2008-09 are shown below in Table 4-4.

Table 4-4
Wastewater CIP Projects

Project Title	Budget	Goal	Status
Olivenhain Sewer Pump Station	$ 4.5 M	Reduce sewage spills and increase capacity	In Design Phase

In FY 2008-09, the City took the following measures to reduce the seepage from the sanitary sewer system to the MS4:

- Over 13 miles of the sewer system was televised to check pipe conditions,
- 207 miles of sewer lines were cleaned,
- 15 upgrades and repairs were made to aging sewer pipes.

City staff report on the maintenance of the sewer system through an industry standard asset inventory and work order management system that integrates with the City's GIS system. Maintenance is performed on the sewer infrastructure and captured through work orders that are attached to the features represented in GIS. Any changes or updates to the sewer system inventory will be reported in future JURMP Annual Reports.

Other notable activities during this fiscal year included the development and implementation of a Sewer System Management Plan (SSMP). The SSMP is a program that ensures that the sewer system is functioning properly, and that necessary maintenance is conducted. Full implementation of the SSMP occurred on August 8, 2009. The SSMP includes a spill response plan that establishes standard procedures for immediate response to all sanitary sewer system overflows (SSOs). City personnel are continually trained in detecting, reporting, and responding to SSOs.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.6.2 SOURCE CHARACTERIZATION

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- Power washing, including graffiti removal
- Street and sidewalk repair and maintenance
    - Street striping/painting
    - Pothole repair
- Landscape maintenance

4.6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.6.3.1 UPDATED BMP REQUIREMENTS

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities discussed above. In March 2008, the City established minimum BMPs which were described in the City's 2008 JURMP Update. The JURMP Update directs city staff to utilize the City's BMP Manual Part I and the CASQA Municipal Handbook to choose applicable BMPs to implement for municipal areas and activities, including mobile activities. BMPs similar to those implemented for the management and maintenance of parks and landscaped areas are implemented for landscape maintenance in landscaped City right-of-way areas such as medians.

4.6.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined to be necessary. Presently, City related mobile activities have not been determined to be a source of pollutants for which water bodies within the City are on the 2006 CWA 303(d) list. Present BMP implementation activities have been evaluated as effectively reducing pollutant discharge to all receiving waters in the City to the MEP.

4.6.4 PROGRAM IMPLEMENTATION

In FY 2008-09, City field crews were trained to implement BMPs during all mobile activities. On July 9, 2008, the Public Works Department received training from the Clean Water staff on storm water BMPs as they relate to mobile cleaning activities. City field crews were trained to properly contain, control, and capture any discharge that was generated by a mobile activity. City field crews were also trained to use mobile equipment properly to ensure all wastewater is collected and that the equipment continues to function properly.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City of Encinitas hosts a variety of special events throughout the city. These events may include, but are not limited to, festivals, fairs, events for charitable causes, and special occasions. The City recognizes that many special events have the potential to generate significant trash and litter caused by the patrons and the associated activities that occur at the special events. The City has considered the controls that are described in the Municipal Permit and has chosen the BMPs listed in Section 4.7.3.1 below as most effective and efficient for the City's needs. These BMPs are implemented during and/or after special events, where applicable.

4.7.2 SOURCE CHARACTERIZATION

The City of Encinitas hosts a variety of special events at various locations throughout the city; including City sanctioned events and venues, as well as privately managed events. According to the Encinitas Municipal Code Chapter 6.12, any organized event coordinated for 25 people or more requires an Operations Permit (Special Events Permit). For the purpose of Special Event source characterization, events that require an Operations Permit (as defined by Encinitas Municipal Code Section 6.12) by the City have been identified as priority events.

4.7.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.7.3.1 UPDATED BMP REQUIREMENTS

The City has considered many of the controls specific to special events listed in the Municipal Permit. Before any special event permits are approved, applicants must fill out the City's "Special Events Permit P2 Questionnaire" (Appendix C-4) to assess the most appropriate BMPs for their event, and all applications must be reviewed by Clean Water Program Staff. Applications are evaluated to ensure that event organizers select an effective combination of BMPs to prevent trash or other pollutants from entering the storm drain system. The City has chosen the following BMPs as most effective and efficient for City needs. Notably, the City may require additional, event specific BMPs at any time as determined necessary.

Inlet Protection:

- Identify all storm drain inlets with appropriate signage and prohibitive language to deter illegal dumping and / or discharge.
- Protect all storm drains identified on their site plans. Fabric filters, gravel bags, or other approved inlet protection device over the drain opening are recommended.
- Visually inspect and clean, if necessary, all identified storm drain inlets impacted by the Special Event activities.

Trash and Debris:

- Adequate trash and recycling containers must be provided throughout the event venue, including at the exit and entry points.
- Regular collection of loose trash and debris must be applied as needed.
- Temporary fencing will be required to be put into place if the event, or any portion thereof, is determined to pose a threat of wind blown debris into any water bodies.
- Post event sweeping of the entire venue area and related staging areas is required.

Temporary Portable Restrooms:

- All temporary portable restrooms will be placed away from all storm drain inlets, drainage swales, water bodies, and any other locations that have the potential to impact the storm drain system.
- All temporary portable restrooms are required to have a secondary containment pan or additional BMPs in place around the stations for possible overflows.
- The contact information for the company responsible for the restrooms clearly marked on or around the restrooms.

In addition to the BMPs that are implemented by the applicant, The City of Encinitas implements the following during and/or after special events, where applicable.

- Proper management of trash and litter, including temporary trash receptacles for trash
- Street sweeping following the special event
- Other BMPs, as included in the Municipal Permit, when deemed necessary by City personnel
- Other post clean-up activities, such as catch basin cleaning, when necessary

The City may also set up storm water informational booths with educational handouts and watershed maps, which demonstrate the impacts of pollution on a watershed. The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.7.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary. Presently, special events have not been determined to be a significant source of pollutants for which water bodies within the City are on the 2006 CWA 303(d) list. Present BMP implementation activities have been evaluated for effectiveness in reducing pollutant discharge to all receiving waters in the City to the MEP.

4.7.4 PROGRAM IMPLEMENTATION

Events which require a discretionary Special Events Permit from the City, and completion of the BMP specific Special Events Permit P2 Questionnaire (Appendix C-4), must meet minimum pollution control standards as described above, and receive permit approval from the Clean Water Program. More refined event characterization as defined in Section 4.7.2 above, and

improved event tracking enhanced the overall efficiency and effectiveness of Special Event oversight. In FY 2008-09, there were **46** special event applications processed by the Clean Water Program (see Appendix C-5).

The Clean Water Hotline is advertised on all Special Events Permit Applications and can be used to report spills during normal business hours. Additionally, the City has an after hours phone number that can be used to report any large or hazardous spills during special events that may occur on weekends or when the City offices are closed. City personnel are on call to respond to any emergency situations that may arise. During City sponsored events, trained City personnel are on hand to ensure that the event remains free of illegal discharges and/or illicit connections to the MS4.

In addition, the City maintains the authority to charge the applicant a Clean-up Fee and Deposit, depending on the size, location, and type of event. Following permitted events, post-event inspections are conducted by City staff, and the location of the event must be returned to pre-event conditions in order for the applicant to receive a full refund of deposited monies. If the City determines that more clean-up is necessary, the deposit will be used as reimbursement for City time and cleanup efforts including street and parking lot sweeping, and the event sponsors or organizers may be charged any excess clean-up fees the City may encounter beyond the amount of the deposit. In FY 2008-09, the City collected $900.00 in clean-up deposits (see Appendix C-5).

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4. The City of Encinitas has implemented a program that aims to reduce industrial and commercial pollution discharges from the MS4 to the MEP, prevent industrial and commercial discharges from the MS4 from causing or contributing to a violation of water quality standards, protect local receiving water bodies, and to comply with the Municipal Permit.

Commercial facilities within the City of Encinitas include a wide range of service oriented businesses from restaurants to nurseries. There are five main commercial areas within the City. The largest areas are downtown Old Encinitas and the Leucadia business district, along Highway 101 from Swami's Beach to La Costa Boulevard. This area contains many different commercial businesses ranging from restaurants to automotive outlets and is the oldest portion of Encinitas. Three industrial facilities are also located in the City: the San Dieguito Union School District school bus terminal, the San Elijo JPA Water Reclamation Facility, and the inactive Encinitas Landfill.

Within the defined reporting period of this report, Clean Water staff worked diligently to fulfill the requirements of the Order 2007-0001 related to commercial and industrial sectors. The City's GIS-based commercial inventory was updated and prioritized based on the new requirements of Order 2007-0001 and the guidelines established in the City's 2008 JURMP. FY 2008-09 commercial and industrial facility inspections were based on this prioritization scheme and the new inspection frequencies outlined in Order 2007-0001. Inspections, follow-up, and enforcement actions were tracked using CityWorks, the City's existing GIS-based Work Order tracking system. In addition, the City participated in the regional industrial/commercial workgroup and subgroups, and helped to shape the mobile commercial businesses database and inspection standards. The following section demonstrates the City's successful implementation of required programmatic activities related to the Industrial and Commercial Section of Order 2007-0001 (Section D.3.b) during FY 2008-09.

5.2 INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The Clean Water Program emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Municipal Permit.

For the rest of Section 5.2, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial site/sources component is described in Section 5.3.

5.2.2 SOURCE CHARACTERIZATION

A watershed-based inventory of the industrial and commercial sites/sources within the City's jurisdiction was compiled as part of the 2008 JURMP update. As required by the Municipal Permit, the inventory includes the following information for each site/source: facility name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired); and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. Inventories of industrial and commercial facilities within the City of Encinitas are included in Appendix D-1 and D-2. Mobile commercial businesses do not have a fixed address at which they operate; they are tracked within a separate, non-spatial database (refer to Section 5.3).

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. The GIS department and the Clean Water Program both receive a monthly summary of new and renewed business registrations from the City Clerk's Department. Upon receipt of the monthly summary, a GIS Analyst updates the spatial facility database, and a Clean Water Program staff member updates the storm water inspection information for each business. In addition, Clean Water staff identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered with the City. When this occurs, these facilities are added to the inventory. Additionally, when Clean Water staff conducts annual commercial and industrial inspections, they have the opportunity to identify new or closed businesses and update the inventory with these findings.

In FY 2007-08 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the JURMP update and transition to complying with the current Municipal Permit, a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. Section 5.2.4.1 provides a detailed description of the City's prioritization process for commercial facilities. As a result of this process, there were **114** commercial facilities identified as high priority and inspected in FY 2008-09. High priority facilities identified in FY 2008-09 included: (2) animal facilities, (8) auto repair shops, (83) eating/drinking establishments, (9) gas stations, (5) nurseries/greenhouses/landscapers, (3) industrial facilities, (2) masonry businesses, (1) building material supplier and (1) golf course. Notably, the City of Encinitas' commercial inventory is dominated by eating/drinking facilities. As such, it is worth noting that the commercial businesses inventory in the City is dynamic, with considerable business turnover. Consequently, the City is constantly working to maintain and prioritize the commercial facilities inventory to dictate effective and efficient commercial inspection actions citywide.

Three industrial facilities are located in the City of Encinitas—the San Elijo JPA Water Reclamation Facility, San Dieguito Union High School District (SDUHSD) Transportation Cooperative, and the Encinitas Landfill. All three facilities are covered under the Industrial

Storm Water General Permit Order 97-03-DWQ. The industrial inventory is included as Appendix D-2. The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The SDUHSD Transportation Cooperative is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The Encinitas Landfill is owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected by the City of Encinitas, and the Encinitas Landfill is inspected by the County of San Diego. Completed industrial facility inspection forms are available upon request.

As part of the 2008 JURMP update and the development of the SUSMP, the City collaborated with copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-1 lists the pollutants that may be generated by each category of business. The pollutants that may be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in Appendix D-1 with the category in Table 5-1 and its corresponding pollutants. Waste Discharge Identification Number (WDID) is also included for sites that are covered under the State of California Industrial General Permit (General Industrial Permit). The TTWQ prioritization of each facility is also included in the inventories. Prioritization was assigned via the process described in Section 5.2.4.1.

As required by Section D.3.b(1) of the Permit, all industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair, or painting
- Mobile automobile or other vehicle washing[1]
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling

[1] Mobile commercial businesses are discussed in more detail in Section 5.3.

Table 5-1
Pollutant Loading Potentials of Industrial and Commercial Sources

Site/Source Type	Heavy Metals*	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Body Repair	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair/Maintenance	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical Garden	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Mobile Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	PO	L	L	PO	PO	PO
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nursery/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Auto Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Mobile Auto Washing	PO	L	PO	PO	UL	UL	PO	UL	PO
Contractor (Mobile)	PO	PO	PO	PO	UL	UL	PO	UL	PO
Handyman (Mobile)	UL	PO	PO	UP	UL	UL	PO	UL	PO
Landfill	PO	PO	PO	L	PO	PO	L	L	L
Wastewater Treatment	UL	UL	L	PO	UL	L	L	L	PO

Notes

L = Likely, PO = Possible, UL= Unlikely

* Heavy metals are a possible pollutant for any facility that has a parking lot.

This table is based on the field experience of D-MAX Engineering and on tables in the Copermittees' Baseline LTEA. D-MAX has conducted more than 1,000 industrial and commercial inspections during which it assessed the pollutant discharge potentials of the inspected facilities.

- Pest control services
- Eating or drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning[1]
- Cement mixing or cutting[1]
- Masonry[1]
- Painting and coating[1]
- Botanical or zoological gardens and exhibits
- Landscaping[1]
- Nurseries and greenhouses
- Golf courses, parks, and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning[1]
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services[1]

Both Industrial and Commercial facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e., within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA).
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.2.3.1 UPDATED BMP REQUIREMENTS

As required by section D.3.b.(2) of the Permit, during the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sites and incorporated these into the City's BMP Manual I. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's BMP Manual I. The BMP Manual I can be accessed through the Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP and

implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are determined based upon a review of the site's SWPPP and site inspections.

5.2.3.2 ADDITIONAL CONTROLS

As required by section D.3.b.(2)(e), the City of Encinitas requires the implementation of additional controls for industrial and commercial sites and sources that are 1) tributary to CWA Section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired) or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

Clean Water Program staff utilizes a geographic information system (GIS) to maintain the commercial and industrial inventory and has the ability to spatially locate facilities relative to receiving waters and ESAs. Clean Water inspection staff is provided a hard copy map to use as a field reference to make appropriate determinations in consideration of these factors. Clean Water Program staff may prescribe additional controls during inspections of commercial and industrial facilities, as needed, in consideration of the proximity of the facility to the water body and the observed potential of the site to be a significant source of pollutants that may threaten the downstream water body as necessary and appropriate.

5.2.4 PROGRAM IMPLEMENTATION

This section describes the steps employed by Clean Water Program staff to require and verify the implementation of required designated BMPs for industrial and commercial sources. During FY 2008-09, the City of Encinitas implemented the following industrial and commercial program elements:

- provided education and outreach through inspection actions so that regulated businesses were aware of the City's storm water requirements;
- inspected inventoried businesses to evaluate compliance with established minimum BMP requirements and the local stormwater ordinance;
- conducted follow-up inspections as necessary to ensure facility compliance with minimum BMP standards;
- and took enforcement action as necessary to bring violators into compliance.

5.2.4.1 INVENTORY PRIORITIZATION

As required by section D.3.b(1)(b), when evaluating threat to water quality, the City of Encinitas considered the following attributes of each industrial and commercial business to determine priority status (high or low):

i. Type of activity (SIC code);
ii. Materials used at the facility;

iii. Wastes generated;
iv. Pollutant discharge potential;
v. Non-storm water discharges;
vi. Size of facility;
vii. Proximity to receiving water bodies;
viii. Sensitivity of receiving water bodies;
ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
xi. Facility design;
xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
xiii. The facility's compliance history; and
xiv. Any other relevant factors.

Although not specifically required by the Municipal Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City's GIS data management system was used to prioritize commercial businesses based upon the following spatially referenced TTWQ criteria:

- proximity to a 303(d) listed water body
- pollutant potential of the facility type
- stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. For example, if the facility is tributary to the San Elijo Lagoon and received a Notice of Violation from the City in the past the facility would be considered high priority based upon the additional criteria that the City has established in determining TTWQ. In addition, if during the City's commercial inspection process or based on institutional knowledge, it was determined that additional sites that would otherwise have a low priority should be classified as high priority industrial or commercial facilities and they were added to the inventory and were inspected.

The City's commercial inventory was updated and prioritized during the defined reporting period of this report and will be prioritized a least once per year prior to conducting annual inspections.

As a result of the City's threat to water quality analysis during FY 08-09, **26%** of the industrial and commercial facilities were identified as high priority. The identified high priority facilities included all three industrial facilities and many of the City's restaurants and auto repair shops. For a complete list of prioritized facilities refer to Appendices D-1 and D-2.

5.2.4.2 INSPECTION FREQUENCY

FY 2008-09 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the

2008 JURMP update and transition to complying with the current Municipal Permit a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. The following steps were taken to determine which industrial and commercial sites were inspected:

1. Confirm that the current industrial and commercial inventories are up-to-date
2. Prioritize each facility based on the prioritization process described in section 5.2.4.1 of this document
3. Review the list of facilities that were inspected the previous year
4. Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with standards established in section D.3.b.(3)(b) & (c) of the Permit, in FY 2008-09, the City inspected 100% of the industrial and commercial facilities inventoried as high TTWQ and over 25% of all inventoried sites. Consistent with the Permit, mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Municipal Permit were met.

In FY 2008-09, the City's industrial and stationary commercial inventories included a total of **439** facilities, of which **114** facilities were identified as having a high TTWQ (**111** stationary commercial facilities and **three** industrial facilities[2]). Rounding to the nearest whole number, 25% of the stationary industrial/commercial inventory would be 110 sites, and 100 percent of the high TTWQ facilities would be 114 sites.

During FY 2008-09, the City completed inspections for all high priority facilities identified on the industrial/commercial facility inventory. City of Encinitas stormwater specialists conducted **two** industrial and **116** commercial site inspections, of which **two** were high priority industrial facilities and **111** were high priority commercial facilities. Therefore, the City of Encinitas met the minimum inspection requirements established in Order 2007-0001 and inspected **100%** of all the high TTWQ facilities and **26%** of all facilities in the industrial and commercial stationary facility inventories.

[2] The Encinitas Landfill is regulated and inspected by the County of San Diego.

Table 5-2
Summary of Facility Prioritization and Inspections Conducted in FY 2008-09

TTWQ Prioritization	Number of Facilities	Order 2007-0001 Inspection Requirements	Inspections Completed	
			Total	Percent
High priority	114	100% (114)	114	100%
Low priority	325	as needed	5	1%
Total	439	25% (110)	119*	26%

*Total includes one industrial inspection conducted by the County of San Diego.

5.2.4.3 ROUTINE FACILITY INSPECTIONS

As required by section D.3.b.(3) of the Permit, commercial and industrial facilities in Encinitas are routinely inspected by the City's Clean Water Program staff. Inspections are intended to:

- identify facilities that are not in compliance with the City's Storm Water Management Ordinance and the Municipal Permit;
- provide facilities with information regarding the City's Clean Water Program;
- provide guidance in complying with storm water regulations (City's Storm Water Management Ordinance, Municipal Permit, etc.); and
- validate and manage the inventory.

During FY 2008-09 City of Encinitas stormwater specialists conducted **2** industrial and **116** commercial site inspections for compliance with its ordinances, permits, manuals and this Order. All inspections included, as applicable:

i. Review of BMP implementation plans, if the site uses or is required to use such a plan;
ii. Review of facility monitoring data, if the site monitors its runoff;
iii. Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
iv. Assessment of compliance with Copermittee ordinances and permits related to urban runoff;
v. Assessment of BMP implementation, maintenance and effectiveness;
vi. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
vii. Education and training on storm water pollution prevention, as conditions warrant.

Specialists use two Storm Water Quality Inspection Forms to document inspection activities--one detailed form that is specific to industrial activities (see Appendix D-3) and one detailed form for commercial inspections (see Appendix D-4). The specialized forms allow the staff to document the above listed inspection steps, as applicable, to determine full compliance for each type of facility. In FY 2008-09 staff designed a new triplicate form called Commercial and Industrial Stormwater Quality Inspection Summary form, which is used in addition to the

detailed industrial and commercial inspection forms. The new form summarizes the corrective actions that are required as a result of the detailed inspection and acts as the responsible party's record of receipt upon completion of the inspection. This customer friendly form more effectively summarizes the inspection results, making corrective action requirements very clear to the business operation owner/manager. The form lists the most common corrective actions and requires a completion date to be met via the signature of the manager/owner. Further, the form effectively aids in the owner's understanding of stormwater regulations and compliance with current and future inspection actions. A copy of this new form is included in Appendix D-7. When conducting inspections, specialists worked with site contacts to provide examples of BMP solutions that could be implemented when corrective actions were necessary to minimize threat to water quality. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. For example a restaurant may be required to provide overhead coverage and secondary containment for outdoor grease storage. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the specialist was at the site. The responsible party was always provided a copy of the inspection summary form, and a complete copy of the detailed inspection report are always available upon request.

For a complete summary and confirmation that the designated BMPs were implemented (or required to be implemented) for industrial and commercial sites inspected in FY 2008-09 see the routine inspections summary in Appendix D-5. This Appendix describes, in detail, actions taken by specialists to confirm or require that BMPs were implemented at each industrial and commercial site inspected. Appendix D-5 and the associated inspection forms completed for each routine inspection confirms that all inspections conducted in FY 2008-09 addressed all the required inspection steps. Completed forms are available upon request.

Inspection Tracking

Complaint and inspection documentation is filed in the City's GIS database and is kept up-to-date on a daily basis. The GIS database is also used to track the number of inspections conducted for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that sites/sources are inspected at the minimum frequencies listed in section D.3.b.(3)(b)& (c) of the Municipal Permit. Clean Water Program staff reference the inspection data in the GIS to assist in preparing for annual inspections, follow-up inspections, or IDDE investigations.

Third Party Inspections

All commercial inspections conducted in FY 2008-09 were completed by City of Encinitas Clean Water Program staff. The City has one full-time stormwater specialist (and three backup specialists) dedicated to conducting routine commercial and industrial inspections and following up on stormwater complaint calls. A third party was not employed to conduct commercial and industrial inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staffs responsible for conducting storm water compliance inspections and enforcement of industrial and commercial facilities are trained regularly on inspection and enforcement procedures, BMP implementation, and assessment of monitoring data. Clean Water specialists attend available workshops, and regularly receive training through staff meetings and direction from the Clean Water Program Manager. Further, Clean Water staffs actively collaborate with inspection staff throughout the San Diego region to share methodologies and approaches that may be beneficial to each jurisdiction.

Inspection Follow-up and Enforcement

Clean Water Program staff conducted follow-up inspections at all facilities where deficiencies were identified and corrective actions were required. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. A total of **52** follow-up investigations were conducted as part of the FY 2008-09 routine inspection program. Depending on the severity of the infraction requiring corrective action, inspectors may elect to issue a Notice of Violation and/or monetary citation. In FY 2008-09, **five** Notices of Violation (NOVs) were issued to obtain compliance after the follow up inspections. Appendix D-5 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

5.2.4.4 NOTIFICATION

As required by section D.3.b.(2)(c) of the Permit, the City of Encinitas will notify each inventoried industrial or commercial business of the City's updated BMP requirements that are applicable to the site/source. Notification will occur within the first three years of implementation of the updated JURMP. During FY 2007-08, the City continued notification efforts as part of routine facility inspections. All industrial and commercial facilities inspected in FY 2008-09 were notified of the BMP requirements applicable to their site/source. City of Encinitas stormwater specialists conduct thorough inspections with the owner/operator of each facility. During each inspection the stormwater specialist discusses the applicable BMP requirements in detail with the owner/operators.

5.2.4.5 COMPLAINT INVESTIGATIONS (VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE)

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge involving a commercial facility, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigations typically include stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all commercial and industrial facilities as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2008-09, there were **54** stationary commercial and **zero** industrial ICID complaint investigations. Of those investigations, **29** required follow-up assessments, **12** NOVs and **three** monetary citations were issued in order to achieve compliance. A summary of the commercial complaints, violations, and enforcement actions occurring in FY 2008-09 is available for review in Appendix H-1. As a component of complaint investigations, educational information is commonly provided to the owner/operator of commercial facilities to improve knowledge and awareness of stormwater regulations. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. During **43** investigations educational information was provided to the business owner/operator by the Clean Water specialist.

Appendix H-1 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2009.

Reporting of Industrial Non-Filers

The City of Encinitas did not identify any industrial sites that may require coverage under the General Industrial Permit but which, to the City's knowledge, did not file NOIs.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City of Encinitas and do not maintain a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 SOURCE CHARACTERIZATION OF MOBILE SOURCES

The mobile businesses known to operate within the City's jurisdiction are listed on an inventory separate from the stationary commercial inventory in Appendix D-6. This inventory was comprehensively reviewed and updated during FY 2008-09 as a part of the update of the City's JURMP. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades
  - Cement mixing or cutting
  - Masonry
  - Painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile business that the City determines to have a significant threat to water quality will be added to the inventory. Because not all mobile businesses have obtained a City of Encinitas business registration certificate or have a base of operations outside the City of Encinitas, Clean Water Program staff is continually refining and updating the mobile commercial inventory. Sources for such inventory updates include reported incidents, general observations by City staff, and available business registration certificates.

Within the defined reporting period of this report, the City participated in the development of a regional inventory and tracking system for mobile businesses. The industrial/commercial workgroup worked with a consultant who specializes in database design to create and maintain a mobile businesses database for the region. Figure 5-1 depicts the online form used by copermittees to enter a new business into the regional mobile business database. It is anticipated that this regionally updated and shared database will aid in collaborative enforcement of stormwater violations caused by mobile businesses.

Figure 5-1
Mobile Business Database New Business Entry Form

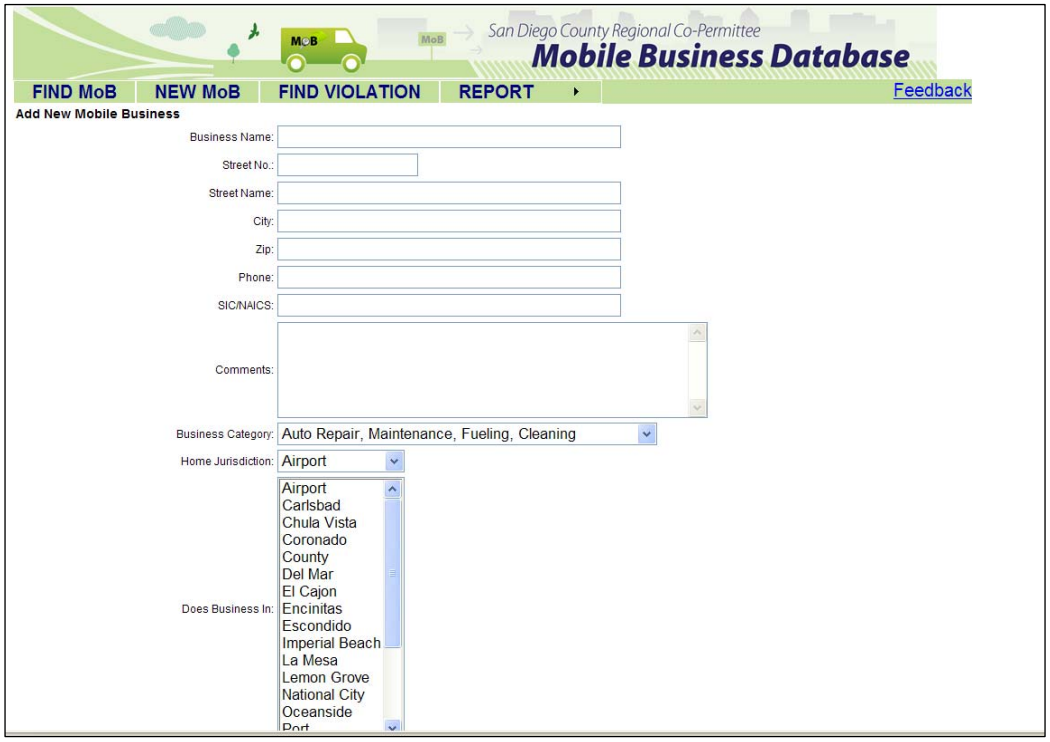

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 UPDATED BMP REQUIREMENTS FOR MOBILE SOURCES

All BMPs required for stationary sources, described in Section 5.2.3.1 of this document and listed in detail in the City's BMP Manual, are also required for mobile businesses, where applicable. The most important BMPs for most mobile businesses are typically those that address non-storm water discharge control and spill prevention, control, and cleanup.

5.3.3.2 ADDITIONAL CONTROLS FOR MOBILE SOURCES

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. If the City finds that the activities of a mobile business are contributing pollutants of concern to a CWA section 303(d) impaired water body segment or are negatively impacting ESAs, additional controls will be required for those activities as applicable. Further, if the City has reason to believe that any mobile business is generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more frequently visit those areas and/or take other actions to address the illegal discharges.

5.3.4 PROGRAM IMPLEMENTATION

5.3.4.1 EDUCATION/OUTREACH AND NOTIFICATION OF MOBILE SOURCES

In FY 2008-09 the City of Encinitas provided information and outreach regarding storm water quality to mobile business owners and operators that were contacted as a result of a complaint call *(See Section 5.3.4.4 below for a summary or complaint calls related to mobile business activities)*. Contacted businesses were given educational materials with detailed pollution prevention methods and other related BMPs to aid in their compliance with the City's storm water ordinance and the Municipal Permit.

Because the mobile businesses program is a new element of the industrial and commercial program for this revised JURMP, it is anticipated that some mobile businesses are not aware of storm water requirements and that education will be a significant portion of the program.

The City of Encinitas will coordinate with the regional Industrial and Commercial Workgroup to notify the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three (3) years of implementation of the updated JURMP.

5.3.4.2 INTER-JURISDICTIONAL COORDINATION

During FY 2007-08, the City of Encinitas participated with other Copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

As described above, in FY 2008-09 a consultant was obtained to develop and launch a mobile business database to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy. See Appendix F-1 for the complete Regional Mobile Business Strategy.

5.3.4.3 INSPECTIONS

The inspections for mobile businesses generally follow the same procedure described in Section 5.2.4.3 of this document. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, Clean Water staff work directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.3.4.4 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to section 5.2.4.5.

In FY 2008-09, there were **37** mobile complaint investigations conducted. Thirty-two resulted in dissemination of educational information to the business owner/operator; **14** Notices of Violation and **seven** citations were issued. Refer to Table 5-3 for a summary of the mobile commercial complaints and associated enforcement actions. This table includes complaint response to discharges from mobile businesses, and discusses each violation and the follow-up actions taken. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance. Appendix H-1 also includes a summary of violations and enforcement actions resulting from complaints about mobile businesses occurring in FY 2008-09.

Complaint investigation procedures, including those related to mobile business operations, will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report, which will be completed and submitted the RWQCB as required by December 15, 2009.

Table 5-3
FY 2008-09 Mobile Commercial Complaints and Enforcement Actions

WO#	Complaint Location	Mobile Business Type	Enforcement Action(s)
79941	425 Villa Blanca Ct	Pool	Education
79909	2211 Newcastle	Mobile Auto Detailer	Education
79350	1302 Encinitas Blvd	Mobile Auto Detailer	NOV
79585	2533 S Coast Hwy 101	Mobile Auto Detailer	No Violation
79879	503 Forrest Bluff	Landscapers	Education
79862	160 Jupiter	Trash Hauler	None
80127	1401 Bella Azul Ct	Trash Hauler	None
80175	505 S Vulcan Ave	Power Washing	None
80254	160 Calle Magdalena	Power Washing	Education
81147	548 Fourth St	Contractor	Education, Citation
81141	1750 N Coast Hwy 101	Contractor	Education, NOV, Citation
81093	448 Zarina	Landscaping	Education, NOV
81144	110 Hillcrest Dr	Contractor	Education
81439	1549 N Vulcan Ave	Plumber	Education, NOV
81682	1754 Lake Dr	Utility Provider	Education
81678	1041 Monterey Vista Wy	Landscapers	Education, NOV, Citation
82113	161 Townwood Wy	Painters	Education, NOV
82419	1190 Encinitas Blvd	Carpet Cleaners	Education, NOV, Citation
82947	275 Mangano Cir	Trash Hauler	Education
83825	1327 Encinitas Blvd	Vehicle Towing	Education
83001	267 Dublin Dr	Mobile Auto Detailer	Education
83823	327 West I St	Contractor	Education, Citation
83994	951 Via Cantebria	Contractor	Education, NOV
84332	2217 Coolngreen Wy	Pool	Education
84669	222 Cerro St	Pool	Education, NOV
84726	190 Athena	Carpet Cleaners	Education
88289	1742 Aspen Glow	Janitorial	Education
87931	517 Ocean Bluff Wy	Contractor	Education, Citation
88280	325 Encinitas Blvd	Power Washing	Education, NOV
88276	447 Encinitas Blvd	Carpet Cleaners	Education, NOV
88036	1349 Rainbow Ridge Dr	Utility Provider	Education
88246	160 Encinitas Blvd	Vehicle Towing	Education
88254	750 S Coast Hwy 101	Equipment Sales	Education, NOV
39393	1415 Pegaso	Landscapers	Education
92471	102 Leucadia Blvd	Power Washing	Education, NOV, Citation
88379	1750 N Coast Hwy 101	Landscapers	Education
88382	2227 Cambridge Ave	Carpet Cleaners	Education, NOV

6.0 RESIDENTIAL

6.1 INTRODUCTION

Approximately 80 percent of the City's 19.4 square mile area is designated as residential in the City's General Plan map. Residential land use comprises a large area of the City, and residential activities can have a considerable effect on the water quality of receiving waters. The City's residential component of the Clean Water Program aims to reduce pollutant runoff from residential areas and activities to the MEP, and prevent residential discharges from the MS4 from causing or contributing to a violation of water quality standards.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2008-09 that contributed to the successful implementation of the City's Residential Component.

6.2 SOURCE CHARACTERIZATION

Residential high threat to water quality areas and activities within the City of Encinitas were identified during the 2008 JURMP update process and are described in detail in City's 2008 JURMP. The following section identifies the high threat to water quality residential areas and activities that were focused on during FY 2008-09. The Municipal Permit (Order R9-2007-0001) requires each Copermittee to identify and provide a list of the residential areas and activities within its jurisdiction that have been identified as having a high threat to water quality. The following section briefly summarizes this process.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

In consideration of the minimum required *high threat to water quality* residential activities listed in section D.3.c.(1) of Order No 2007-0001, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

Section D.3.c.(1) of Order No 2007-001, requires that Copermittees identify all *high threat to water quality* residential areas. During the 2008 JURMP update, the City identified *high threat to water quality* residential areas using the following criteria (as defined in the Municipal Permit):

- Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in Attachment C of the Municipal Permit).

The City of Encinitas has several Section 303(d) impaired water bodies and coastal lagoons within or directly adjacent to the City's jurisdictional boundary. The 303(d) impaired water bodies within the City of Encinitas include Cottonwood Creek, Encinitas Creek, Escondido Creek, San Elijo Lagoon, and the Pacific Ocean at Moonlight State Beach and the San Elijo Lagoon Outlet.

Based on the definition in Attachment C of the Order No 2007-0001, Environmentally Sensitive Areas within the City of Encinitas include those areas identified as Natural Resource Sensitive areas in the City's General Plan and the City's Wetland buffer layer. The City does not contain any Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, or areas designated as preserves in the Multiple Species Conservation Program.

In the process of drafting the Regional Residential Education Program, the Regional Outreach Workgroup identified the major pollutants of concern from residential sources for the San Diego region. The major pollutants of concern for residential areas include: bacteria, nutrients, sediment, pesticides, and trash.

In consideration of identified 303(d) listed water bodies, the City's ESAs, and the primary pollutants of concern, Clean Water Program staff employed GIS analysis to determine the location of *high threat to water quality* residential areas. Based on this analysis the following residential areas within the City of Encinitas were identified as *high threat to water quality* residential areas:

- All residential areas within 500 feet of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to, or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

Appendix E-1 includes a map of residential areas. The map was developed for Clean Water Program staff to utilize in the office and in the field to help identify residential discharges or

activities which could pose a threat to water quality due to their proximity to receiving water bodies and ESAs.

6.2.3 EVALUATION OF OVERSIGHT OF RESIDENTIAL AREAS AND ACTIVITIES

The City of Encinitas is planning to conduct a formal evaluation of the methods used for oversight of residential areas and activities during the permit cycle of Order No. 2007-0001. The evaluation will coincide with the City's effectiveness assessment for the Residential Component. Since the methods used for residential oversight were recently updated as part of the 2008 JURMP update, City staff determined that it would be most appropriate to evaluate the success of these methods in subsequent fiscal years. Through an evaluation of effectiveness assessment measures as part of this report, it has been reasoned that the City has achieved overall success as it related to the oversight of residential areas. Hotline complaint calls received, compliance achievement, and dry weather monitoring exceedances as they relate to residential sources all support this assessment. Continual evaluation in subsequent reporting years will be vital to assessing the overall efficacy of oversight related to residential activities.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

This section describes the updates made to the City's minimum BMPs that were implemented during FY 2007-08. The minimum BMPs for residential *high threat to water quality* activities were established in the City's 2002 JURMP. As part of the City's 2008 JURMP update, the minimum BMPs were reviewed and updated based on the requirements in Order No 2007-0001.

6.3.1 POLLUTION PREVENTION

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for *high threat to water quality* areas and activities.

6.3.2 LIST OF MINIMUM BMPS

As part of the City's 2008 JURMP update, the City designated the following minimum BMPs for *high threat to water quality* residential activities. The minimum BMPs are primarily nonstructural and are targeted at activities specified in Section 6.2 as having a *high threat to water quality*. Pollution prevention methods were incorporated into this set of BMPs, where appropriate. The list of minimum BMPs can also be found in the City's Storm Water BMP Manual I. The manual can be accessed through the City's Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us.

(a) Automobile Repair and Maintenance

Pollution Prevention

(1) Employ routine preventative maintenance practices
(2) Reduce vehicle use, whenever possible
- Change driving habits
- Carpool
- Increase the use of public transportation
- Bike or walk for short trips

(3) Make timely vehicle repairs

Leaks and Spills

(1) Prevent leaks and spills from contacting stormwater
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter
- If working outdoors, don't work in the rain
- Immediately contain and clean up leaks and spills when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Properly manage and dispose of automotive wastes and materials
- Properly drain fluids from automobiles
- Dispose of wastes properly and lawfully and recycle used oil and antifreeze
- Store materials and wastes indoors or under cover
- Use secure and watertight containers when storing materials and wastes

(b) Automobile Washing

Management / Reduction* of *Wash Water

(1) Whenever possible, use commercial self-serve or full-serve car washes that properly dispose or recycle their wash water
(2) When washing a vehicle at a residence:
- Wash vehicles over porous surfaces (grass, dirt, etc.) whenever possible
- Use dry cleaning methods to avoid the generation of wash and rinse water
- Turn off the water when not in use or use a controllable spray nozzle
- Encourage the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Properly dispose of soapy water or bucket rinse water to the sanitary sewer or soak into a landscaped area
(2) Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing (e.g., remove grease or brake dust using towels, etc.)

(3) Refrain from degreasing or cleaning of engine parts in areas other than those designated for such purposes

(c) Automobile Parking

(1) Use routine preventative maintenance practices and make timely vehicle repairs to prevent leaks of automotive fluids
(2) Design and construct parking areas to minimize storm water impacts; covered garages should be plumbed to the sewer system

(d) Home and Garden Care Activities and Product Use

GARDEN AND YARD CARE

Pollution Prevention

(1) Use safe substitutes and alternative methods when gardening:
- Use integrated pest management techniques and biological controls
- Use native plants and drought tolerant species to reduce water use and green waste produced
- Implement planting techniques that attract beneficial insects
- Consider composting, vermiculture and yard waste recycling
- Recommend and encourage practical purchasing practices for pesticides and fertilizers
- Identify "pests" before attempting to eliminate them

(2) Always read label instructions and follow the instructions for garden care products
(3) Implement water conservation practices, whenever possible
(4) Consider xeriscape gardening, including: drip irrigation, soaker hoses, and micro-spray systems
(5) Repair and maintain irrigation systems to reduce excessive runoff
(6) Recycle lawn clippings and green waste through local programs
(7) Plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills

(1) Immediately cleanup spills of gardening chemicals, fertilizers and soils
(2) Return spilled materials to the container for future use or proper disposal

Materials and Waste Management

(1) Store lawn care products in closed labeled containers and in covered areas
(2) Refrain from using hazardous materials during windy or rainy days
(3) Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain
(4) Dispose of household chemicals to the household hazardous waste collection facility or scheduled drop-off events
(5) Utilize dry sweeping techniques for clean up

Restrictions on Activities

(1) Do not hose off paved surfaces to the street or gutter
(2) Do not dispose of hazardous waste to the trash, landfill or storm drain

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Utilize purchasing practices that reduce waste
(2) Use safe substitutes for home cleaning and maintenance
(3) Read and follow product labels
(4) Recycle unused or unwanted products
(5) Use water based paints when possible
(6) Recycle unwanted appliances and household equipment

Leaks and Spills

(1) Clean up hazardous materials spills immediately
(2) Properly dispose of waste from spill cleanup materials

Materials and Waste Management

(1) Store household hazardous materials in closed labeled containers and in a covered area
(2) Recycle latex paint through community programs
(3) Dispose of unwanted household hazardous waste through household hazardous waste collection facilities
(4) Dispose of trash in provided trash cans or shared dumpsters and keep dumpster and trash can lids closed when not in use

Restrictions

(1) Do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter or storm drain

***(e)* Disposal of Pet Waste**

Pollution Prevention

(1) Spay or neuter pets to reduce feral populations

Waste Management / Disposal

(1) Clean up after pets when walking them in public places
(2) If pets are allowed to defecate outside, clean up feces from yards
(3) Properly dispose of pet feces in the toilet or trash

Pet Management (Dogs and Cats)

(1) Whenever possible, do not allow pets to run free in residential neighborhoods

Manure Management (Horses and Other Large Animals)

(1) Properly manage manure (including the preparation of manure management plans when appropriate)
(2) Compost or properly dispose of manure
(3) Cover manure stockpiles with plastic tarp to prevent contact with rain

6.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2008-09 to require and verify the implementation of designated BMPs for residential areas and activities.

6.4.1 OUTREACH AND TRAINING

The City has a comprehensive set of Education and Public Participation Programs, which are a component of the City's jurisdictional program. A significant element of these programs consists of educating and engaging residents about ways in which they can minimize their impact on local waterways. Education of the citizens who reside in the City of Encinitas contributes to the implementation of the Residential Component of the City's Clean Water Program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between MS4s and sanitary sewers
- Pollution prevention and safe alternatives
- Household hazardous waste collection and recycling
- BMP implementation and BMP maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment, and recovery
- Water conservation

During FY 2008-09, Clean Water program staff conveyed these messages to the public through a variety of mechanisms, including:

- Clean Water Program website
- Production and distribution of brochures and promotional items
- Public participation in community events, workshops, and trainings
- Presentations at local schools
- Media coverage
- Response to residential complaints (Clean Water Hotline or email)

Implementation of these mechanisms by the Clean Water Program helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the Clean Water Program can be found in the Section 8.

6.4.2 USED OIL AND HHW COLLECTION SERVICES

The City of Encinitas facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City offers its residents door-to-door home collection, two permanent collection facilities, and periodic, temporary collection events for all HHW. In addition, the City requires weekly curbside garbage, recycling, and yard waste pick-up for all residents. The various components of the solid waste and hazardous waste collection services provided by the City are described in detail below.

HHW Home Collection Program - Door-to-door home collection service is available to all residents of the City of Encinitas. Qualifying homebound, elderly, and disabled citizens may request pickup at no charge. Residents not qualifying for free pickup service are charged a nominal fee of $10 for home collection. Materials accepted via the HHW Home Collection Program include:

- **Household Cleaners:** Drain openers, oven cleaners, wood and metal polish / cleaners, toilet bowl cleaners, and disinfectants
- **Automotive Products:** Oil and fuel additives, grease and rust solvents, carburetor and fuel injector cleaners, air conditioning refrigerants, starter fluid, lubricating fluids, radiator fluids and additives, waxes, polishes, cleaners, and transmission additives
- **Home Maintenance and Improvement Products:** Paint thinners, paint strippers, adhesives, paints, stains, varnishes, sealants, and wood preservatives
- **Lawn and Garden Products:** Pesticides, herbicides, and fungicides (poisons)
- **Miscellaneous:** Batteries, fingernail polish removers, pool and photo chemicals

Poway and Vista Permanent HHW Collection Facilities - In an agreement with the Cities of Vista and Poway, residents of the City of Encinitas may also drop off household hazardous waste at the Vista or Poway collection centers. The Vista collection center is located at 1145 East Taylor Street, at Laguna Lane. The Poway collection center is located in the South Poway Business Park, at 12325 Crosthwaite Circle off of Stowe Drive. These regional, permanent collection centers are open every Saturday (except holiday weekends) from 9:00am to 3:00pm. No fee is charged to Encinitas residents and no appointments are necessary. Waste collected is separated, packaged, secured, and temporarily stored at the permanent facilities. It is then removed on a regular basis for proper recycling or disposal. Material accepted at the Poway and Vista facilities are the same as those accepted through the Home Collection Program.

Used Oil Recycling Program - The City's used oil recycling program consists of a network of certified automotive waste recycling centers throughout the city. These facilities accept a range of used automobile products including used oil, oil filters, batteries, and antifreeze. A significant part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through grants from the California Integrated Waste Management Board (CIWMB). A list of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Residents may also opt to use the City's door-to-door HHW collection service to recycle their used oil and oil filters. However, most

residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities.

Trash and Recycling Services - For public health purposes, the City of Encinitas requires that all residents participate in the City's solid waste collection service. All residents and businesses are liable for payment of fees for the mandatory service (see Municipal Code section 11.20.010, paragraph A). Residential service includes curbside green waste collection and recyclable materials collection in addition to regular garbage collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste Recycling Services to provide solid waste collection services in Encinitas for both residential and commercial customers.

Detailed information regarding used oil, HHW, and solid waste disposal is made available to residents through the City's website, ECDO's website, and other various environmental websites. In addition, brochures about household hazardous waste disposal options are available at outreach events staffed by the Clean Water Program, the Solana Center, and EDCO Waste Recycling Services. Brochures and information regarding HHW disposal are also available upon request at the City's main office.

Table 6-1 provides a summary of the used oil collected via the City's used oil recycling program. Table 6-2 identifies types and amounts of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 6-1
Used Oil Collected in FY 2008-09

Collection Type	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)
Certified Centers	13,894	1,344
Permanent HHW Centers	479	69
Total	**14,373**	**1,413**

Table 6-2
Household Hazardous Waste Collected in FY 2008-09

Material Type	Description	HHW Collection Facilities*	Door-to-Door Program*
Flammable	Flammable solid/liquid	8,269	15,528
& Poison	Bulked flammable liquids	1,992	0
	Oil-base paint	7,880	11,618
	Poison (excl. aerosols)	939	11
	Reactive and explosive	8	4
	Subtotal	**19,088**	**27,161**
Acid	Inorganic & Organic acid	691	1,431
Base	Inorganic & Organic base	591	1,038
Oxidizer	Neutral oxidizers, Organic peroxides	262	209
	Subtotal	**1,544**	**2,678**
PCB-containing	PCB-containing paint	0	0
	Other PCB waste	21	0
	Subtotal	**21**	**0**
Reclaimable	Antifreeze	823	44
	Car batteries	2,683	944
	Latex paint	11,595	34,775
	Motor oil/oil products	4,071	55
	Oil filters	103	2
	Subtotal	**19,275**	**35,820**
Asbestos		**54**	**165**
Universal Waste (UW)	Mercury containing waste	0	16
	Thermostats/switches/thermometers	7	4
	Fluorescent Lamps	632	864
	Rechargeable batteries	267	134
	Household batteries	1,154	1,400
	Subtotal	*2,060*	*2,418*
Electronic Waste (UW)	SB20/50 video display devices	11,258	8,820
	Non SB20/50 video display devices	0	0
	Consumer electronic devices	10,435	6,026
	Subtotal	*21,693*	*14,846*
Aerosols (UW)	Non-empty aerosol containers	172	3,715
	Other	0	0
	All UW Subtotal	**23,925**	**20,979**
Other HHW	Home-generated sharps	180	0
	Pharmaceutical waste	0	0
	Compressed gas cylinder	935	241
	Non-UW aerosol containers	1,655	0
	Treated Wood	0	0
	Other	2,873	0
	Subtotal	**5,643**	**241**
Grand Total		**69,550**	**87,044**

*Waste measured in pounds.

6.4.3 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by section D.3.c.(3) of Order No 2007-0001, and depending on the severity of the violation, the City enforces its storm water ordinance for all residential areas and activities as necessary to maintain compliance. Enforcement may include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2008-09 there were **126** residential ICID complaint calls. Of these calls, **25** were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **101** residential complaint investigations conducted, **78** resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In addition to education, FY 2008-09 complaint investigations resulted in **19** Notices of Violation and **four** monetary citations.

A summary of the residential violations and enforcement actions occurring in FY 2008-09 is available for review in Appendix H-1. The tabular summary includes a brief discussion, which includes the follow-up actions taken, for each violation. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2009.

6.4.4 REGIONAL RESIDENTIAL EDUCATION PROGRAM

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. This Plan contains recommended strategies for the development and implementation of the Regional Residential

Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-7.

The first major collaboration on a regional level was promotion of residential storm water BMPs at the San Diego County Fair. The Copermittees combined funds to pay for a Fair sponsorship, which included a booth display, materials distribution, signage, and advertisements at several locations in the fairgrounds throughout the duration of the fair. Booth staffers promoted the Think Blue message and presented storm water educational materials to all Fair attendees. Details of the educational messages and materials distributed at the Fair can be found in Section 8.3.4 of this annual report.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Encinitas will submit the entire FY 2008-09 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2009.

8.0 EDUCATION

8.1 INTRODUCTION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the Engineering Services Department, Clean Water Division.

The Municipal Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience.

(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The City conducted or participated in a wide variety of stormwater education activities during the FY 2008-09 reporting period. Education and outreach activities and opportunities are organized and implemented on three levels—Jurisdictional, Watershed, and Regional. For ease of reporting, activities occurring on all levels have been captured below.

8.2 MUNICIPAL STAFF TRAINING

As required by Municipal Permit section 5.b.1(d), activity specific training opportunities were provided to City staff. The summary below outlines departmental training activities conducted during the defined reporting period of this report.

Notably, in FY 2007-08, the Clean Water Division developed the "Clean Water Challenge" stormwater training game. This training element was created to address topics specifically identified in the Municipal Stormwater Permit, as well as activity and department specific topics. In FY 2008-09, the Clean Water Challenge was utilized extensively for municipal training activities as described below. The Clean Water Challenge has been well received by City staff and provides a competitive and informative format for training various departments on a wide range of topics including low impact development, SUSMP standards, activity

specific BMPs, impaired water bodies, stormwater code violations, potential sources of pollutants, and other department specific concepts.

Public Works, Streets Division. FY 2008-09 stormwater training was provided to the Streets Division during regular weekly staff meetings on the following dates:

- September 11, 2008; Best Management Practices for Street Sweeping, Litter Control, Roadway and Bridge Maintenance, Parking Surface Cleaning, and Housekeeping Practices; 13 attendees
- September 25, 2008; Road and Street Maintenance SC-70, 13 attendees
- October 9, 2008; Plaza and Sidewalk Cleaning SC-71; 12 attendees
- October 23, 2008; Landscape Maintenance SC-73; 13 attendees
- November 6, 2008; Drainage System Maintenance SC-74; 13 attendees
- January 15, 2009; Building and Grounds Maintenance SC-41; 11 attendees

Public Works, Wastewater Division. The Clean Water Program works closely with the Wastewater division to prevent illegal discharges from entering the City's waterways. Seven staff members from the Wastewater division were trained by Clean Water Program staff on July 9, 2008 using the Clean Water Challenge stormwater training game.

City of Encinitas Fire Department. Within the defined reporting period of this report, stormwater training workshops were given to the Fire Department on three separate occasions using the Clean Water Challenge stormwater training game. On June 11, 2009, 17 fire personnel were in attendance; 10 fire personnel attended the training on June 15; and 9 fire personnel were at the June 23 training.

City of Encinitas Landscape Contractors. The City contracts with multiple landscaping companies to maintain our parks, beaches, and other public landscaped areas. In collaboration with the City's Parks and Recreation Department, training was given in Spanish to 25 staff from the City's landscape contractors on June 11, 2009. Topics of this training included activity specific BMPs, City Stormwater regulations, and proper materials management.

Engineering Department. Staff from the Clean Water Program and other divisions of the Engineering Department attended trainings in the following areas:

- Model SUSMP – June 1, 2009
- Hydrological Simulation Program-Fortran – June 8-10, 2009

The Model SUSMP training was open to all copermittees and was designed to inform attendees about the details of the recently updated and RWQCB approved San Diego Regional Model SUSMP. The training was hosted by Brown and Caldwell and Dan Cloak and Associates, the two consultants who assisted in the drafting of the Model SUSMP. The training was well attended by all copermittees. The City of Encinitas staff in attendance included two development review engineers, one CIP engineer, two stormwater division staff, and one construction inspector.

The Hydrological Simulation Program-Fortran (HSPF) training included a 1-day lecture and 2-day computer lab, "hands on" training. Two stormwater staff attended the 1-day lecture and 2 development plan check engineers attended the 1-day lecture and the 2-day lab. The lecture consisted of a detailed summary and design of the HSPF software, including appropriate application of the software for Hydromodification Management design and calculation and TMDL development and implementation. The lab consisted of step-by-step computer tutorial and simulation of real-world examples.

Clean Water Program, Engineering Department. Clean Water Program staff regularly attend trainings, workshops, and conferences related to stormwater management. This fiscal year staff attended the following:

- 8-hour HAZWOPER Refresher Course – July 25, 2008
- National Beach Conference (EPA) – April 20-22, 2009

In addition to formal training, Clean Water Program staff are regularly informed of new water resources regulations and stormwater science and technology through regional meetings and coordination, subscription to relevant scientific journals, and individual research.

Multiple City Departments. Greywater Action (formerly the Greywater Guerrillas) is an organization dedicated to educating people about greywater system design and construction. The group gave a presentation on February 19, 2009, that included information on greywater regulations, installation, and maintenance to staff from Engineering, Planning, Wastewater, San Dieguito Water District, and the Environmental Commission. This training opportunity was coordinated in response to increased public inquiry on the viability of installing greywater systems in order to comply with water conservation restrictions.

Also, two Permanent BMP Preservation trainings were given by the Engineering Department to staff from Engineering, Planning, Building, Public Works, San Dieguito Water District, Fire, Parks and Recreation, and Code Enforcement. The trainings were on April 30 and May 18, 2009, and a total of 46 people were in attendance. There were three primary objectives engineering staff focused on during these training sessions. First, fundamental, scientific reasoning for requiring and implementing permanent BMPs was explained to the trainees. Watershed processes and the benefits of Low-Impact Development were key components of this discussion. Second, proper design of stormwater treatment facilities was detailed through engineering schematics and examples of BMPs implemented throughout the city. Finally, the importance of gaining assistance from all departments to preserve these BMPs in place was emphasized. For this last objective, the City's GIS-based BMP tracking system was introduced to staff in the trainings. Training presenters showed how using the BMP tracking system would eliminate the potential of BMPs being modified or removed through the approval of additional building or other City permits where existing BMPs are located.

8.3 EDUCATIONAL OUTREACH

The following section describes education efforts conducted for each target community, as identified in the Permit and summarized above, during FY 2008-09.

8.3.1 UNDERSERVED TARGET AUDIENCES, HIGH-RISK BEHAVIORS, AND "ALLOWABLE" BEHAVIORS AND DISCHARGES

Underserved Target Audiences - Bilingual Education

For those that work in the City, and for segments of the community that do not speak English as their first language, the City provided bilingual (English/Spanish) brochures at all outreach events. The Clean Water Program utilized the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures include information about Best Management Practices for Yard and Garden Care, Restaurants, Home Improvement, Pesticides, Developers, and Automotive Care. Further, a bilingual Clean Water Program staff resource provided training and responded to complaint calls as needed in various community sectors.

High Risk Behaviors - Regional Mobile Business Outreach and Education Plan

During FY 2007-08, the City of Encinitas participated with other copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. The Industrial/Commercial Workgroup will be overseeing the implementation of that Strategy throughout the permit cycle. A complete description of the education and outreach of mobile businesses and inter-jurisdictional coordination of notifications can be found in section 5.3. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

8.3.2 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to the new development and construction communities.

- "A Pollution Prevention Guide for the Construction Industry" was distributed at public events, to engineering construction inspectors, the building department, and displayed at the City of Encinitas Engineering counter for the public. One hundred and thirty were disseminated during the 2008-09 fiscal year. This brochure was developed as part of the Carlsbad Watershed Urban Runoff Management Plan workgroup (Appendix F-2).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by Engineering Department inspectors and Clean Water staff as determined necessary. For all projects, stormwater topics including required construction site BMPs, general site management, post-development BMP construction, and other relevant SUSMP requirements are discussed.
- Construction inspector stormwater coordination. Staff from the Clean Water Program attended inspector staff meetings to provide support and information to the City's construction inspectors.

- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers – Simple and Cost Effective Ways to Comply with Stormwater Regulations" (Appendix F-3). The brochure is available in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In September 2008, the City mailed 76 letters to local developers and contractors regarding BMP requirements for the upcoming rainy season (Appendix B-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into the annual Erosion Control letter that went to contractors, developers, and job superintendents.

8.3.3 COMMERCIAL/INDUSTRIAL OWNERS AND OPERATORS

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to commercial and industrial sectors of the community:

- The ninth annual Integrated Pest Management training for landscape professionals was held at the Port of San Diego on May 19, 2009. The IPM Training Seminar offered insight into identification of landscape pests and diseases and cultural practices for improved plant health. There were also presentations on water quality and irrigation. City staff and one Encinitas business were in attendance.

- The San Dieguito Water District hosted a Professional Landscape Series every Wednesday from February 4 - 25 and March 24, 2009. Topics included irrigation systems and scheduling, plant identification, and water use requirements. Approximately 35-40 people attended each class.

- A compliance workshop for restaurant operators was held in Escondido on March 10, 2009. Stormwater regulations and green business requirements were discussed. One Encinitas restaurant was in attendance.

- Commercial inspections were performed at 116 commercial facilities and two industrial facilities during the FY 2008-09 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general stormwater quality information and BMP requirements.

8.3.4 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential, community, and school audiences:

a. Residential Community and General Public

- A California Friendly Landscape Training was held on Thursday, October 2, 2008, and addressed water efficient landscaping, irrigation systems, fertilizers, and turf replacement. There were approximately 30 attendees.
- A four week Home Landscaping Workshop was hosted by the San Dieguito Water District at the Rancho Santa Fe Garden Club on October 10, 18, and 25, and November 1. Twenty-five to thirty people attended each class. A free Water-Wise Landscaping Workshop was also hosted by SDWD at the Encinitas Community Center on March 8, 2008. There were 31 people in attendance. The two workshops each covered four topics: landscape design basics; California friendly plants; landscape sprinkler systems; and soils, water, and fertilizers.
- A mini residential landscape workshop took place on Saturday, March 7, 2009, and covered garden design, California-friendly and native plants, and irrigation systems. The class was held at the Rancho Santa Fe Garden Club and sponsored by the San Dieguito Water District. There were approximately 50 attendees.
- A City of Encinitas Environmental Services Guide was created in FY 2006-07. It continues to be handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, stormwater management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix F-4).
- The City of Encinitas Parks and Recreation Department hosted "A Day with Dad on the Trail" on June 20, 2009, at Las Verdes Park. Families were encouraged to participate in the 20-question scavenger hunt along the trail. There were five stormwater related questions, including information on pet waste, low impact development, erosion control, water runoff, and pollutants. Ten completed forms were turned in at the end of the event.
- The Solana Center for Environmental Innovation continued to sell compost bins and worm bins to residents of Encinitas throughout FY 2008-09. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City. Bin sales in FY 2008-09 increased by 40.7% from FY 2007-08. (486 bins sold in 07-08, 684 bins sold in 08-09).
- Individual Communication. There were 126 residential ICID complaint calls in FY 2008-09. Twenty-five of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the 101 residential complaint investigations conducted, 78 resulted in education. During these inspections educational information was distributed to each homeowner/resident. Materials distributed included general stormwater education, BMP requirements,

pollution prevention education, as well as specific municipal code and clean water regulations.

- Media Coverage (newspaper articles, press releases, etc.): See Table 8-1 below.

Table 8-1
Summary of Media Coverage in FY 2008-09

No.	Title	Date	Source
1	Study finds lowest beach sand since 2001	July 7, 2008	North County Times
2	Sands shift for funding beach effort	July 13, 2008	North County Times
3	Report says county beaches less contaminated in 2007	July 29, 2008	North County Times
4	Encinitas prepares ban on plastic bags	September 19, 2008	The Coast News
5	Program to check beaches curtailed	September 25, 2008	SD Union Tribune
6	Encinitas beaches earn high water quality	Fall 2008	Encinitas Now! Newsletter
7	Stopgap funding OD'd to monitor water quality	November 5, 2008	SignonSanDiego.com
8	Sand gift will help replenish beaches	January 9, 2009	SignonSanDiego.com
9	Encinitas mayor delivers State of the City	February 12, 2009	SignonSanDiego.com
10	Water testing left high and dry	February 22, 2009	SignonSanDiego.com
11	A drop in the bucket	March 15, 2009	SignonSanDiego.com
12	City to celebrate 'earth month'	March 23, 2009	North County Times
13	County finds way to fund coastal-water testing	March 24, 2009	SignonSanDiego.com
14	Greening community is intent of programs	March 28, 2009	SignonSanDiego.com
15	Budget threatens coast water testing	April 4, 2009	SignonSanDiego.com
16	BioBlitz to tally San Elijo Lagoon's diversity	May 10, 2009	North County Times
17	Report card: S.D. beaches not so great in wet weather	May 20, 2009	SignonSanDiego.com
18	Local beaches get good grades	May 20, 2009	North County Times
19	Cleanup efforts make difference at beaches	May 21, 2009	SignonSanDiego.com
20	Multiple headlines	May 21, 2009	BC Water News
21	Trash cans are MIA, so beach users asked to keep area clean	June 10, 2009	SignonSanDiego.com

Workshops and events attended/hosted by the City of Encinitas and/or the Solana Center in FY 2008-09:

1. San Diego County Fair – June 14 through July 6, 2008
2. Fall Master Composter Training Course – Thursdays, September 11-October 16, 2008
3. Coastal Clean-up Day @ Swami's – September 20, 2008
4. Encinitas Poinsettia Festival - November 23, 2008
5. Cardiff Green Awareness Expo - December 7, 2008
6. Creek to Bay Beach Clean-up @ Moonlight Beach – April 25, 2009
7. Encinitas Garden Festival – April 25, 2009
8. Encinitas Street Fair – April 26, 2009
9. San Elijo Lagoon Day – May 16, 2009
10. Public Works Week @ Cardiff Elementary – May 22, 2009
11. Encinitas Environment Day – June 7, 2009
12. A Day with Dad on the Trail – June 20, 2009
13. San Diego County Fair Enviro Fair Day – June 20, 2009

b. School Children

- The Green Machine presentation was given by the San Diego County Office of Education at Capri Elementary School in Encinitas on April 21, 2009. Four classrooms, with a total of 95 students, were in attendance.
- School Worm Bin Composting- Solana Center provided large worm bins in FY 08-09 to Ocean Knoll Elementary and Encinitas Country Day School. Each school paid for their bin and worms. Solana Center provided composting assemblies and operating education and support. They have ongoing master composter support at Ocean Knoll and have added master composter support for Flora Vista Elementary. Flora Vista is composting garden and lunch waste with Biostacks. Solana Center trained the custodian at Capri Elementary to compost lunch room scraps in the school's worm bin and Biostack. Solana continues to monitor and provide support for Capri, Paul Ecke, Olivenhain Pioneer, and Mission Estancia.
- The Solana Center for Environmental Innovation also participated in school based educational programs where stormwater awareness was taught. See Table 8-2 for details.

Table 8-2
Watershed Presentations in FY 2008-09

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Boys and Girl Club- Solana Beach	7/23/08	2	49
Encinitas Country Day School- Encinitas	7/25/08	1	12
Magdalena Ecke YMCA- Encinitas	8/5/08	1	15

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Del Mar Library- Del Mar	8/27/08	1	15
Paul Ecke Central- Encinitas	9/16/08	5	100
Tipp Academy- Encinitas	9/23/08	1	25
Encinitas Country Day School- Encinitas	10/17/08	1	21
Girl Scouts at Solana Center- Encinitas	10/18/08	4	69
Encinitas Country Day School- Encinitas	10/21/08	1	31
Encinitas Country Day School- Encinitas	10/30/08	1	16
Solana Beach Library- Solana Beach	11/4/08	1	8
Brownie Troop at Encinitas Library- Encinitas	11/7/08	1	10
Paul Ecke Central- Encinitas	12/16/08	1	40
Torrey Hills School- Del Mar	1/8/09	3	94
Solana Beach Library- Solana Beach	1/13/09	1	23
Solana Vista Elementary School- Solana Beach	2/3/09	1	21
St. John's School- Encinitas	2/19/09	1	9
Fletcher Cove- Solana Beach	2/27/09	4	150
Innovation Centre Charter School- Encinitas	3/16/09	2	18
Torrey Hills School- Del Mar	3/23/09	3	57
Cardiff Elementary School- Encinitas	3/31/09	5	150
Ada Harris Elementary School- Encinitas	4/1/09	3	56
Sycamore Ridge Elementary School- San Diego	4/13/09	3	53
Ocean Air School- San Diego	4/16/09	4	82
Torrey Hills School- Del Mar	4/20/09	2	40
Santa Fe Montessori School- Solana Beach	4/28/09	1	20
Sandy Hill Preschool- Solana Beach	5/1/09	2	31
San Diego United Methodist Youth Group	5/17/09	1	25
Oak Crest School Career Day	5/19/09	6	180
Public Works Week @ Cardiff Elementary	5/22/09	1	375
Santa Fe Montessori School- Solana Beach	5/27/09	1	24
Rancho Encinitas Academy- Encinitas	6/1/09	1	85
Kids Kore Camp- Solana Beach	6/24/09	1	37
Cardiff Extended Day Care- Encinitas	6/30/09	2	60
	Total	**69**	**2001**

c. Watershed Educational Activities

Important components of the City's education program include activities generated on a watershed basis through the North County Stormwater Program, the educational arm of the Carlsbad Watershed URMP. Materials and activities are developed on a watershed basis to address the high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities will be provided in the FY 2008-09 Carlsbad WURMP Annual Report.

- **Public Opinion Surveys**- The North County Stormwater Program created a pet waste survey to be given out at public events throughout the Carlsbad watershed. The six-question pet waste survey asked those surveyed their view on picking up pet waste. Results of the survey estimate the percentage of people who actually understand what happens to waste that is not disposed of properly. This survey was given out at five events throughout Encinitas during FY 2008-09. Appendix F-6 includes a copy of the survey and a summary of the results.

- **Watershed Map**- A 36"x 24" "We all Live in a Watershed" poster was developed giving information about the San Luis Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a topographic map of the watershed, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public displays throughout the reporting year.

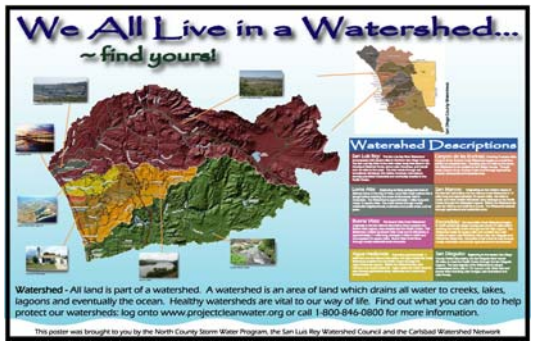

- **Watershed Collaboration**- The City of Encinitas collaborated with other outside organizations, including the Carlsbad Watershed Network, Solana Center, and Escondido Creek Watershed Alliance to enhance public educational efforts and understand watershed issues. The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2008-09, the City participated in the following watershed outreach events:
    - Coastal Cleanup Day – 9/20/08
    - Creek to Bay Beach Cleanup – 4/25/09

- **Watershed Educational Materials**- The City continues to distribute materials developed by the North County Stormwater Program in previous reporting periods, including the

restaurant posters, automotive posters, "Storm Drains Lead to the Ocean" posters, general stormwater brochures, and the door hangers.

d. Regional Residential Education Plan

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan in FY 07-08. This plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-7.

The first major collaboration on a regional level was the San Diego County Fair. The San Diego Regional Stormwater Copermittees sponsored the San Diego County Fair (Fair) in 2008 as an education and outreach activity. The sponsorship was a joint effort between the City of San Diego's Think Blue program and the regional Copermittees, with each entity contributing a portion of the overall cost. The Fair was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental message. The Education and Residential Sources (ERS) Workgroup was responsible for overseeing sponsorship activities and the City of San Diego lead coordination and implementation efforts.

The 2008 Fair was held June 14th through July 6th, 2008, spanning two fiscal years. The attendance for the fair was estimated at 1,235,698 people over the 21 days the event occurred. Sponsorship for the Fair included staffing an outreach booth for 11 days, in which the majority of the jurisdictions provided staffing support. The outreach booth served as the primary method for educating the public about watershed protection and pollution prevention. The ERS Workgroup elected to promote Integrated Pest Management (IPM) as the primary theme and collaborated on the distribution of IPM materials in both English and Spanish. Individual jurisdictions were invited to distribute their own materials in addition to the IPM materials. The Copermittees received credit as both a Flower & Garden Show sponsor and an Enviro-Fair sponsor.

Think Blue was used as the branding label for the copermittees during the event and signage demarking the symbol included banners, planter box displays, and recycle bin stickers. Signage was visible at over 500 locations throughout the fairgrounds. Media exposure included TV, radio, and press releases. The sponsorship was printed in both the Fair program and included on the Fair map. Other promotions included newspaper advertisements, electronic messaging over the Jumbo-tron, website logos and links, and PA system announcements in both English and Spanish.

The City of San Diego developed an event survey in order to assess the effectiveness of the copermittees' Fair participation. Over 1,200 survey cards were completed during the 11 days the booth was staffed. The questions focused on understanding the public's

general stormwater knowledge and awareness. The results are being tabulated and will be reported in the FY 08-09 Regional URMP Annual Report.

The ERS Workgroup also participated in the Enviro Fair Day at the San Diego County Fair on June 20, 2009. Eight Copermittees were represented at the event, with a total of 11 staff members throughout the day. The outreach booth was located at the entrance to the Flower and Garden Pavilion in O'Brien Hall. Copermittees were able to supply their own giveaways and literature during their individual shifts, but the main Regional giveaways were IPM Tip Card Packets, Think Blue towels, and regional pet waste bag dispensers. There were 218 Think Blue surveys completed; results will be reported in the FY 08-09 Regional URMP. Total Fair attendance for the day was 58,045.

Educational Outreach Materials Distributed. In FY 2008-09, a total of 2,290 outreach materials were distributed by the Clean Water Program. This includes BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed pencils, magnets, "Bags on Board" dispensers, construction brochures, posters, door hangers, eating establishment guides ("What's Cooking"), automotive guides ("Green Wrench"), flyers printed from the Project Clean Water Toolbox, and other informational guides. These guides related to Integrated Pest Management (UCSD Cooperative Extension), water conservation brochures from local water districts and the County Water Authority, invasive species brochures ("Don't Plant A Pest" and "NIMBY-No Invasives In My Back Yard"), "How to Hire A Landscaper"-UCSD Cooperative Extension/Scott Parker, County of San Diego Household Hazardous Waste Guides, miscellaneous stormwater educational worksheets for children, and lastly, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the quality of our waterways. This is evident by the attendance and participation at community events and workshops and the number of complaints reported to the storm water hotline (discussed in more detail in Section 9.3.5 below and also in Section 8.3.4(a)). Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2008-09 reporting period.

9.2 PUBLIC PARTICIPATION APPROACH

The City's approach for the outreach program is to develop an understanding among its residents and businesses of fundamental storm water and pollution prevention concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches, untreated).
- The economic value of our beaches and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a storm water violation (Clean Water Hotline or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and ocean.
- Reducing pollutants of concern.

- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals, etc.).

Within the defined reporting period of this report, the tools that have been used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- City of Encinitas Environmental Advisory Commission
- Public Outreach Events
- Public Opinion Survey
- Public Reporting Methods
- Pet Waste Dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- Permanent Best Management Practices (BMP) Self Verification & Inspection Programs

9.3 PROGRAM IMPLEMENTATION

This section describes the specific public participation tools used during the FY 2008-09 reporting period.

9.3.1 WORKSHOPS/TRAINING SESSIONS

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of storm water education and/or water conservation and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the storm water regulations. Table 9-1 provides a summary of the FY 2008-09 workshops/training sessions conducted.

Table 9-1
City of Encinitas Workshops/Training Sessions FY 2008-09

Workshop/Training Session	Target Audience	Date	Attendance
Public Works- Streets Division	City Staff	9/11/08, 9/25/08, 10/9/08, 10/23/08, 11/6/08, 1/15/09	75
Public Works- Wastewater	City Staff	7/9/08	7
Fire Department	City Staff	6/11/09, 6/15/09, 6/23/09	36
Spanish-speaking Landscapers	City Staff and Contractors	6/11/09	25

Workshop/Training Session	Target Audience	Date	Attendance
Permanent BMP Preservation	City Staff	4/30/09, 5/18/09	46
		Total	**189**

9.3.2 CITY OF ENCINITAS ENVIRONMENTAL ADVISORY COMMISSION

The Environmental Advisory Commission (EAC) provides policy advice and recommendations to the City Council on issues related to environmental stewardship and sustainability. The Commission assesses the City's current environmental efforts in relation to specified areas of interest and creates and recommends strategies to enhance City activities that promote conservation and sustainable practices. The Clean Water Program staff provide technical expertise to the commission on matters related to water quality, pollution prevention, and stormwater regulations.

During the defined reporting period, the EAC presented their first "Greening Our Community" series of community outreach activities, which included the following presentations: Impacts of Plastics in Our Waterways and Oceans (by noted North Pacific Gyre researcher Captain Charles Moore, Algalita Marine Research Foundation); Climate Change in Our Local Community; a Film Documentary on Water – "FLOW"; a Tree Stewardship Walk and Talk; and Reusable Bag Reminder Promotions. The Commission is also drafting an Environmental Action Plan (EAP) that will include short- to long-term action item recommendations. The EAP includes a variety of areas, such as waste prevention, water and energy conservation, green house gas emissions reductions, green building, habitat preservation, walk-ability, clean air, and clean water.

9.3.3 PUBLIC OUTREACH EVENTS

The Clean Water Program participated in the following outreach events during FY 2008-09:

1. San Diego County Fair- June 14 – July 6, 2008
2. Coastal Clean-up Day- September 20, 2008; 263 volunteers
3. Cardiff Green Awareness Expo- December 7, 2008; 65 booth visitors
4. Creek to Bay Beach Clean-up- April 25, 2009; 178 volunteers at two sites
5. Encinitas Garden Festival- April 25, 2009; 1,000 attendees
6. San Elijo Lagoon Day- May 16, 2009; 100 booth visitors
7. Public Works Week @ Cardiff Elementary- May 22, 2009; 375 students
8. Encinitas Environment Day @ Cottonwood Creek Park- June 7, 2009; 121 booth visitors
9. Enviro Fair Day at the San Diego County Fair- June 20, 2009; 58,045 Fair attendees
10. A Day with Dad on the Trail, June 20, 2009; 50 attendees

Solana Center for Environmental Innovation. Outreach to the general public and school children is also provided through the Solana Center for Environmental Innovation via workshops and presentations involving storm water, household hazardous waste, composting, and recycling. The Solana Center works closely with the City for many of these workshops and

presentations. See the tables below for a description of Solana Center's attended events and workshops.

Table 9-2
Composting Workshops/Presentations FY 2008-09

Workshop schedule	Location	Attendance
7/26/08	Quail Botanical Gardens	66
Master Composter Training Course, Thursdays, September 11 - October 16, 2008	Quail Botanical Gardens	23
9/18/08	Paul Ecke Central School	35
9/20/08	Quail Botanical Gardens	20
10/4/08	Yoga Swami Studio and Garden	21
11/15/08	Quail Botanical Gardens	17
1/24/09	Quail Botanical Gardens	44
2/21/09	Quail Botanical Gardens	29
4/22/09	Bethlehem Community EC Center	58
5/30/09	Quail Botanical Gardens	60
	Total	**373**

Table 9-3
Household Hazardous Waste Presentations FY 2008-09

School/Group Name and Address	Date of Presentation	Number of Presentations	Total number of students reached
Encinitas YMCA	9/17/2008	1	25
Cardiff Elementary	10/16/08	1	26
	Totals	**2**	**51**

Table 9-4
Used Oil Collection Events FY 2008-09

Encinitas Used Oil Events	Date	Total Attendance
Used Oil Filter Event, Kragen Auto Parts Encinitas	2/28/09	67
	Total	**67**

Table 9-5
Watershed Presentations FY 2008-09

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Boys and Girl Club- Solana Beach	7/23/08	2	49
Encinitas Country Day School- Encinitas	7/25/08	1	12
Magdalena Ecke YMCA- Encinitas	8/5/08	1	15
Del Mar Library- Del Mar	8/27/08	1	15
Paul Ecke Central- Encinitas	9/16/08	5	100
Tipp Academy- Encinitas	9/23/08	1	25
Encinitas Country Day School- Encinitas	10/17/08	1	21
Girl Scouts at Solana Center- Encinitas	10/18/08	4	69
Encinitas Country Day School- Encinitas	10/21/08	1	31
Encinitas Country Day School- Encinitas	10/30/08	1	16
Solana Beach Library- Solana Beach	11/4/08	1	8
Brownie Troop at Encinitas Library- Encinitas	11/7/08	1	10
Paul Ecke Central- Encinitas	12/16/08	1	40
Torrey Hills School- Del Mar	1/8/09	3	94
Solana Beach Library- Solana Beach	1/13/09	1	23
Solana Vista Elementary School- Solana Beach	2/3/09	1	21
St. John's School- Encinitas	2/19/09	1	9
Fletcher Cove- Solana Beach	2/27/09	4	150
Innovation Centre Charter School- Encinitas	3/16/09	2	18
Torrey Hills School- Del Mar	3/23/09	3	57
Cardiff Elementary School- Encinitas	3/31/09	5	150
Ada Harris Elementary School- Encinitas	4/1/09	3	56
Sycamore Ridge Elementary School- San Diego	4/13/09	3	53
Ocean Air School- San Diego	4/16/09	4	82
Torrey Hills School- Del Mar	4/20/09	2	40
Santa Fe Montessori School- Solana Beach	4/28/09	1	20
Sandy Hill Preschool- Solana Beach	5/1/09	2	31
San Diego United Methodist Youth Group	5/17/09	1	25
Oak Crest School Career Day	5/19/09	6	180
Public Works Week @ Cardiff Elementary	5/22/09	1	375
Santa Fe Montessori School- Solana Beach	5/27/09	1	24
Rancho Encinitas Academy- Encinitas	6/1/09	1	85
Kids Kore Camp- Solana Beach	6/24/09	1	37

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Cardiff Extended Day Care- Encinitas	6/30/09	2	60
	Total	**69**	**2001**

Table 9-6
Other Outreach Events FY 2008-09

Event	Date	Booth Visitors
Encinitas Poinsettia Festival	11/23/08	100
Encinitas Street Fair	4/26/09	375
	Total	**475**

9.3.4 PUBLIC OPINION SURVEY

The North County Storm Water Program created a pet waste survey in FY 2006-07 to be given out at public events throughout the Carlsbad watershed. The six question pet waste survey asks about the public's view on picking up pet waste and shows us how many people actually know what happens to waste that is not picked up. This survey was given out at multiple events throughout Encinitas in FY 2008-09. See Appendix F-6 for the pet waste survey and results specific to Encinitas. Results gathered from throughput the Carlsbad Watershed are assimilated and presented in the Carlsbad Watershed Urban Runoff Management Plan (WURMP) annual report.

9.3.5 PUBLIC REPORTING METHODS

The City has a local Clean Water Hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours number [(760) 633-2922] is available for after-hours emergencies and connects the caller with the City's external answering service which takes in calls and contacts the appropriate City staff to determine appropriate response actions. There are also currently two regional storm water hotline numbers promoted within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800, and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voicemail message for 24-hour public access.

The Encinitas Clean Water Hotline has been in service for over 9 years. In FY 2008-09, the Clean Water Hotline received **289** calls. The hotline is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-ups, and enforcement actions related to the hotline are presented in Appendix H-1.

The Clean Water Program has a specific website URL (http://cwp.ci.encinitas.ca.us) that provides information, as well as the general NPDES email address which can also be used to report storm water violations. Each method of contact can also be used for general questions relating to storm water.

9.3.6 PET WASTE DISPENSERS

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier, 17 doggie bag dispensers are located at parks and trails throughout the City. Trash cans are also available in these areas. Both the trash cans and bag dispensers are maintained by the City's Parks and Recreation Department. In addition, individual Bags on Board pet waste bag dispensers were developed in FY 2007-08 and continued to be distributed at all jurisdictional events during FY 2008-09 (Appendix F-5).

9.3.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

City of Encinitas residents can bring their HHW and Electronic Waste to drop off facilities in Vista and Poway, free of charge. There is also a home pick up available for a small fee; however, the fee is waived for elderly and disabled residents. Used oil collection events were organized through the Solana Center at local automotive supply stores, and free used oil containers were available for pick up from the Center to encourage oil recycling. Please refer to Section 6.4 and Tables 9-3 and 9-4 in Section 9.3.3 for a detailed description of HHW and Used Oil events and collection totals.

9.3.8 PERMANENT BEST MANAGEMENT PRACTICE (BMP) SELF-VERIFICATION AND INSPECTION PROGRAMS

FY 2008-09 was the first year of implementation of the Permanent BMP Self-Verification and Inspection Programs. These programs provide a valuable opportunity for residents and business owners to be actively involved in protecting stormwater quality. Residents and business owners with treatment control BMPs on their private property are responsible for the successful operation and routine maintenance of these facilities. The City's Self-Verification and Inspection Programs aim to make residents and owners aware of their operation and maintenance obligations through formal notification campaigns and one-on-one communication. Notification campaigns consisted of three rounds of notices mailed to the residents and business owners responsible for BMP maintenance. The notification packages consisted of a combination of the following materials: notification/program introduction letter, Treatment Control BMP brochure, grading plan identifying the location of BMPs, and forms and self addressed stamped envelopes necessary to complete self-verifications. As part of the self-verification and inspection processes, City staff also offered one-on-one assistance with identifying BMPs, conducting BMP inspections, and determining maintenance needs. City staff were available to answer questions regarding the self-verification and inspection programs both over the phone and on-site as requested by the responsible party. As the programs progress in

future years, it is anticipated that public knowledge and awareness of permanent BMPs and required operation and maintenance activities will continually improve. For more information regarding the Permanent BMP Self-Verification and Inspection Programs refer to Section 2 of this report.

10.0 FISCAL ANALYSIS

The Clean Water Program and associated functions and activities in the City of Encinitas are organizationally shared by two departments: Engineering Services and Public Works. Engineering Services is responsible for the overall administration of the Clean Water Program and develops and implements core program elements including water quality monitoring; development oversight (SUSMP implementation); inspection and enforcement; and education, outreach and training related to stormwater and water quality. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4) including channel maintenance, sewer maintenance, street sweeping, facility inventories, and facility inspections. This section outlines the expenditures for the defined reporting period and associated fiscal year, FY 2008-09, and the FY 09-10 budgets for these two departments to perform Clean Water functions.

On January 29, 2009, the San Diego Region Stormwater Copermittees submitted the *Standardized Fiscal Analysis Method and Format* as required by municipal permit Sections G, J.1.a(3)(k), and J.1.c(1)(d). Although the application of fiscal analysis methodologies presented in the referenced document are not required until 2010, it is important to recognize that the regional standardized methodologies were prepared as a theoretical approach and the application of described process and procedure will require integration through future reporting years. The following information has been prepared in anticipation of future application of these methodologies, but also to test the practical application of a standardized reporting approach.

10.1 ENGINEERING SERVICES DEPARTMENT

The City of Encinitas Clean Water Program FY 2008-2009 expenditure and FY 2009-2010 budget summaries are presented below in Table 10-1. In FY 2008-2009 the City's Clean Water Program's Coastal Storm Drain Monitoring, Dry Weather Monitoring, IDDE, Construction, Residential and Commercial program elements were accomplished primarily through the use of internal staff resources. FY 2008-2009 expenditures include 5 full-time Clean Water Program staff representing the bulk of labor related costs. Consultant service costs in FY 2008-2009 were reduced overall; however, consultant services needed to support construction and permanent BMP inspection activities were incurred. Programmatic costs captured below are primarily non-labor costs including materials, supplies, equipment and services in support of various program elements. Also included in Table 10-1 are special project costs associated with the Carlsbad Watershed Lagoon TMDL and the City's Programmatic Environmental Permit Project.

The FY 2009-2010 Clean Water Program budget has been prepared in consideration of Order No. 2007-0001 as well as other regulatory mandates placed upon the City of Encinitas. Despite significant budget constraints due to widespread economic downturns, the FY 2009-2010 budget supports the historic level of service provided by the Clean Water Program in addressing water quality concerns specific to Encinitas

through response to citizen complaints, education, inspection, enforcement, monitoring and development oversight. FY 2009-2010 budgeting represents the City's ongoing commitment to this program and the community that it serves.

TABLE 10-1 – Engineering / Clean Water Program FY 2008-2009 Expenditure and FY 2009-2010 Budget Summary

OUTLAY CATEGORY	FY 08-09 EXPENDITURES	FY 09-10 BUDGET
JURISDICTIONAL PROGRAM		
Labor Costs *(Staff Salaries)*		
Engineering Services *(5 Full-Time Staff)*	317,634	335,410
Programmatic Costs *(Non-Labor, Including Materials, Supplies, Equipment & Services*		
Water Quality Monitoring *(Equipment & Analysis)*	17,189	25,000
Education & Public Participation	455	5,000
Field Operations *(Supplies, Equipment, Forms, Apparel, Fuel, Phone)*	6,097	7,500
Contract Services		
GIS Mapping & Data Management Services	4,550	21,500
Construction and Post Construction BMP Inspection Services	110,767	110,312
TMDL Special Projects		
Lagoon TMDL	69,565	80,000
Citywide Channel Maintenance & Environmental Permitting Project	5,545	151,000
Permits Fees		
State Water Resources Control Board (SWRCB) Discharge Permit Fee	13,499	13,499
WATERSHED PROGRAM		
Carlsbad Watershed Cost Share	2,947	6,500
REGIONAL PROGRAM		
San Diego Regional Stormwater Shared Costs	51,687	52,000
TOTAL FY 07- 08 EXPENDITURE BUDGET DATA	599,935	807,721

10.2 PUBLIC WORKS DEPARTMENT

The City of Encinitas Public Works Department FY 2008-2009 expenditures and FY 2009-2010 budget are presented below in Table 10-2. As previously mentioned, the Public Works Department performs essential operations and maintenance functions of the City's municipal separate stormwater conveyance system, drainage facilities, and channels. Additionally, recycling, solid waste, and hazardous waste disposal programs are all managed by the Public Works Department.

TABLE 10-2 – Public Works / Clean Water Program FY 2008-09 Expenditure and FY 2009-2010 Budget Summary

OUTLAY CATEGORY - PUBLIC WORKS	FY07-08 Expenditures	FY08-09 Budget
Staff Salary	239,472	374,385
Materials & Supplies	16,267	30,936
Contracts & Services	175,297	226,398
Fleet Maintenance	15,910	14,280
Capital Outlay	-	-
Lease Payments	40,000	40,000
Recycling/Solid Waste & Household Hazardous Waste Fund	449,629	449,629
Flood Control	193,452	190,776
TOTAL COST	1,130,027	1,326,404

In response to program enhancements required by Order No. 2007-0001, expenditures for associated Public Works functions were augmented, and in subsequent years have remained somewhat consistent as reflected in Table 10-2.

10.3 CLEAN WATER PROGRAM SUMMARY

The total FY 2008-2009 combined expenditures for the Clean Water Program (Engineering & Public Works Departments) was **$1,729,962**. The FY 2009-2010 combined budget for the Clean Water Program (Engineering & Public Works) is **$2,134,125**.

10.4 PROGRAM FUNDING

In FY 2003-2004, the City Council attempted to pass a Clean Water Fee, which charged $5.00 per month per water meter to the residents and businesses in the City of Encinitas. The Howard Jarvis Taxpayers Associated challenged the fee based upon Proposition 218 requirements. Subsequently, the City was required to add this item to the ballot in March 2006 which was defeated by voters. As a result, the City of Encinitas must completely subsidize the Clean Water Program through the General Fund.

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City of Encinitas began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs to evaluate program effectiveness. Due to a variety of complications on a regional level, that standardization process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures modeled after conventionalized strategies and calibrated to evaluate "significant" program activities as required in Order No. 2007-0001.

Since the submittal of the JURMP in March 2008, no additional progress has been made on regionally standardized approaches to program effectiveness assessment. It is anticipated that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will undertake the issue of standardized assessment metrics and procedures in the near future. The City is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's storm water program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities unique to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP Annual Report, can be found in Appendix G-1.

Levels 2 and 3

Tables 11-3 through 11-10 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City of Encinitas within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the San Diego Regional Water Quality Control Board adopted Addendum 2 to Order No. 2007-0001, effectively extending the annual due date of the Illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City of Encinitas that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City of Encinitas, and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. Further, two new significant program elements were in the first year of implementation within the defined reporting period of this report; initial assessment indicates a generally successful first year. Continued refinement of this program area will support long term effectiveness assessment measures for development planning. *(See Table 11-3)*

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures *(See Table 11-4).* It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue.

Municipal

Enhanced stormwater conveyance, drainage facility, channel maintenance and inspection and street sweeping activities, were developed and implemented, equating to the removal of salient volumes of debris in FY 2008-09. Effective operations and maintenance activities are demonstrated in the Table 11-5 below, and it is anticipated that this continued level of service as

well as enhancements in data gathering methods will support the efficacy of municipal activities.

Industrial and Commercial

Clean Water Program activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City of Encinitas has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (*See Table 11-6)* through the gathering of critical statistics, including a knowledge and BMP assessment scoring system presented in Tables 11-1 and 11-2. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Encinitas.

Education

Education effectiveness is assessed for a variety of program elements as presented in the Table 11-9 below. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success.

Public Participation

The City of Encinitas provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however, the assessment measures identified in Table 11-10 are focused on success of the venues and outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, Clean Water Hotline calls, and volumes of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 PROGRAM REVIEW AND MODIFICATION

While no significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document, Clean Water Staff have met periodically throughout the reporting period of this report to evaluate effectiveness assessment measures as they relate to specific program elements. The purpose of this effort has been to keep the issue of effectiveness assessment in the forefront of program implementation

strategies, and to conduct ongoing effectiveness assessment, and augment program areas as deemed necessary. While effectiveness assessments conducted on an annual basis are helpful, a critical first step in the process is to identify significant activities and to evaluate value added benefits both to the program and to the community of Encinitas throughout the implementation period.

Table 11-3
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify High Efficiency Treatment BMPs are Approved	Internal The City's Engineering Department staff is well versed in treatment BMPs and pollutant removal efficiencies.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify Proposed BMPs are Implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects installing / implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	N/A	
Verify BMPs are Properly Maintained	External N/A, verification letters were not sent out until 2008/2009. Internal N/A, verification letters were prepared by the City's consultant.	Percent of responsible parties submitting complete verification documentation	67%	Additional load reduction could be achieved through improved BMP maintenance.
		Number of responsible parties that did not submit self-verification documentation	10	
		Number of sites with BMPs requiring repair or maintenance	4	
		Resolution status of repair/maintenance	All Complete	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify Planned BMP Implementation - Review Proposed Plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects must meet minimum requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify Proposed BMPs are Implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs.	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of inspection actions resulting in Corrective Action.	14%	
		Percent of inspection actions resulting in a Notice of Violation (NOV).	< 1%	
		Number of dry weather monitoring exceedances traced to construction sources.	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify Proposed BMPs are Implemented at Facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep Streets and Parking Facilities		N/A, streets and parking facilities are swept as determined necessary and in compliance with Municipal Stormwater Permit standards.		Amount of sediment and debris removed per length of street swept (weight or volume per curb mile).	1,449 tons/ 11,380 curb mi (0.13 tons/mi)
Maintain and Clean the MS4 (catch basins, inlets and open channels).		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume).	290 tons
Maintain Sanitary Sewer System		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons).	Data will be included in Section 7.0 for the 12/15/09 submittal.
Maintain Municipal Treatment Control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from storm drain filter inserts.	2.8 tons
				BMP effectiveness studies	N/A
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP Implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Percent of inspected sites in compliance with BMP requirements (inspections that did NOT require follow-up actions)	62%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of inspection related enforcement actions	98%		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	To Be Determined	Number of IC/IDs eliminated through enforcement actions taken as a result of routine inspection OR complaint investigations. (NOVs & Citations)	41
		Based on the results of individual facility assessment surveys, most facilities inspected have a good general understanding of BMPs and implement BMPs as required. See Figure 11-1 and 11-2.			
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores, FY 2008-2009 Inspections

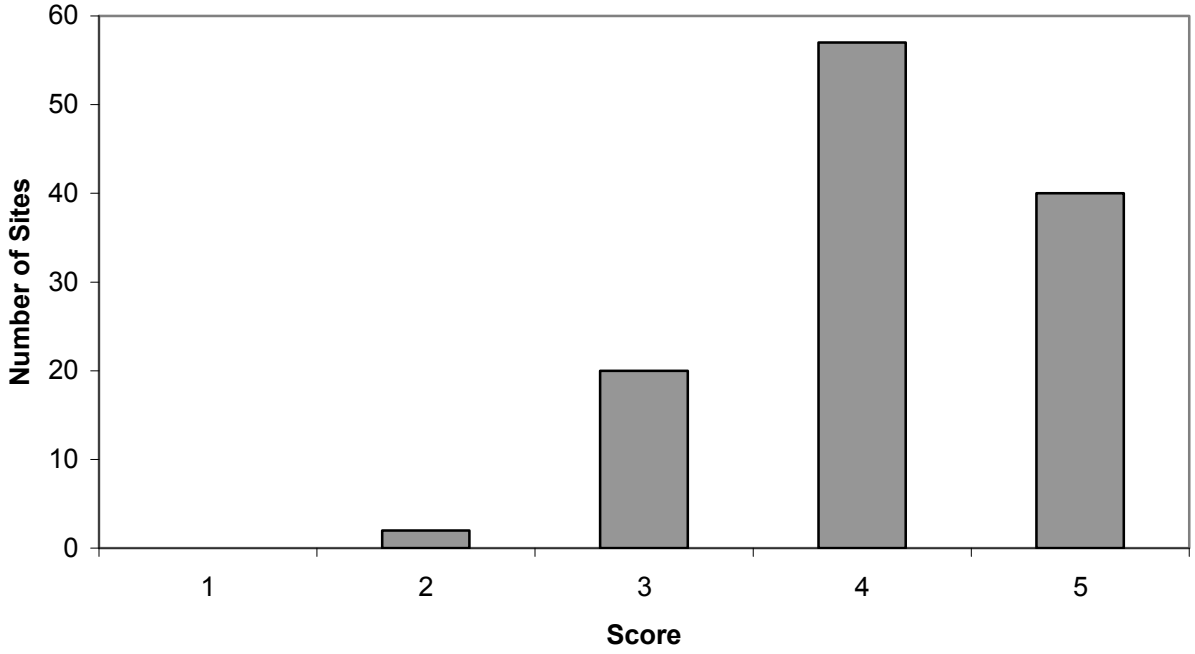

Figure 11-2
BMP Assessment Scores, FY 2008-2009 Inspections

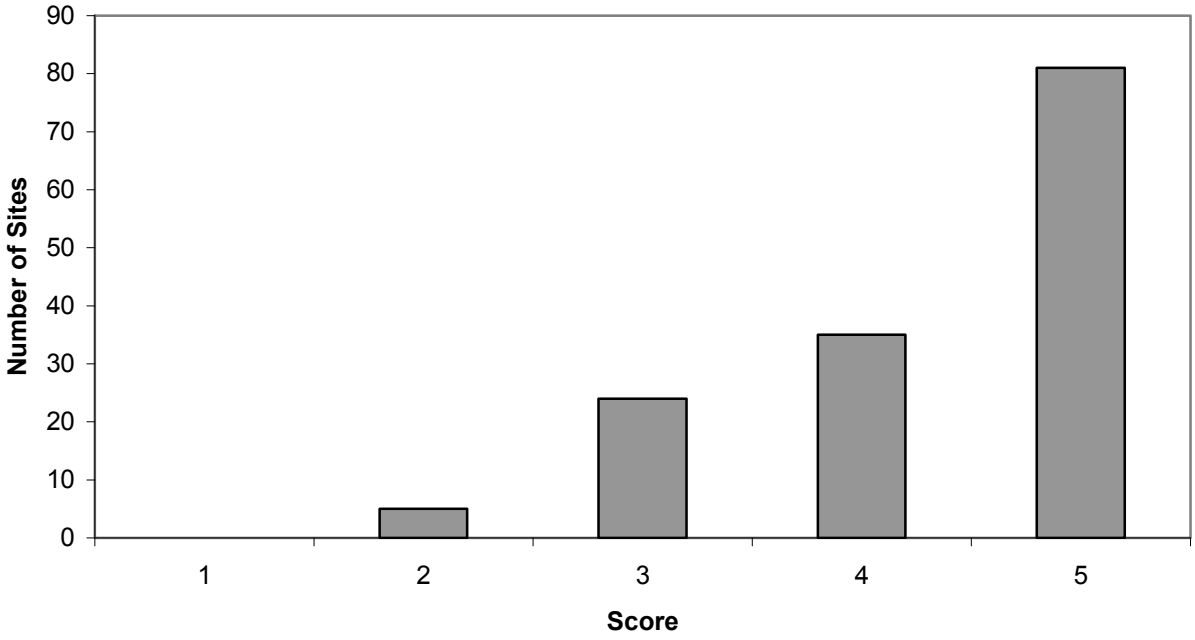

Table 11-7
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP Implementation	External Residents were educated in variety of ways in 2008/2009; see sections 6 and 8 for details. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Number of residential incidents reported to storm water hotline	126	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution status of residential related enforcement actions	100%	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	Clean Water Program staff executes the City's Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2009.
Respond to Incidents Reported to Clean Water Hotline	Dedicated Engineering and Public Works staffs are trained to respond to reported incidents.	N/A, personnel respond to incidents as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2009.
Respond To and Clean up SSOs	Dedicated Public Works staffs are trained to respond to reported SSO incidents.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2009.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2008-09.
	Estimated number of impressions made*	5,052		
	Estimated number of educational materials distributed to various community sectors	2,290		
Provide storm water education to City staff & contractors	Internal The City provides staff and contractors w/ regular stormwater training. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2008-09.
	Number of Staff and Contractors trained	189		

Notes:
Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Impressions are based upon the number of interactions with public at education events.

Table 11-10
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Estimated number of attendees at events	2,694	Amount of trash, recycling, and debris collected at cleanup events	538.9 lbs
		Number of calls received to the Clean Water Hotline*	289	Amount of HHW collected	156,594 lbs of HHW 1,413 oil filters 14,373 gal of oil

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The sum total of calls to the Clean Water Hotline related to all Community Sectors.

12.0 SPECIAL INVESTIGATIONS

The City of Encinitas is currently engaged in a variety of ongoing and long-term investigations to support reasoned and informed management actions to address local water quality concerns and threats.

12.1 SAN ELIJO LAGOON RESTORATION PROJECT

For a number of years, the City of Encinitas along with numerous agencies including the Army Corps of Engineers, San Elijo Lagoon Conservancy, Caltrans, SANDAG, SDRWQCB, California Coastal Commission, Department of Fish & Game and NCTD, have been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (1-5) North Coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast project.

The goal of the study and ultimate project is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. Related studies have looked specifically into the effects of varying channel widths at each opening: inlet and PCH Bridge, the SDNR system, and the I-5 freeway. Various alternatives have been identified based upon complex system simulations and evaluated on effects to reduce tidal muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur.

Work on this project continued throughout the defined reporting period of this report, most significantly with efforts to formalize agency agreements, initiate environmental review, conduct hydraulic modeling, and start initial design. Notably, this is a multi-agency effort, and far-reaching coordination has been critical and remains key to the long-term success of this effort.

12.2 CARLSBAD HYDROLOGIC UNIT LAGOON TMDL MONITORING

The San Diego Regional Water Quality Control Board (RWQCB) issued Investigation Order (IO) No. R9-2006-076 to the dischargers to the creeks and lagoons in San Diego County that are 303(d) listed for bacteria, total dissolved solids (TDS), sediment, and nutrients. The IO required collection of monitoring data for the development of Total Maximum Daily Loads (TMDLs) as authorized by the Clean Water Act (CWA). According to the IO, the coastal lagoons in Southern California are heavily influenced by their urbanized watersheds. Runoff from these watersheds, coupled with reduced tidal influence from restricted inlets, has resulted in beneficial use impairments within Agua

Hedionda Lagoon, Buena Vista Lagoon, Loma Alta Slough, and San Elijo Lagoon. All four lagoons and Agua Hedionda Creek are listed as impaired water bodies (303(d) list) for at least one of the following constituents: indicator bacteria, nutrients, sediment/siltation, TDS (Agua Hedionda Creek only), and/or eutrophic conditions. Pursuant to CWA section 303(d), TMDLs must be developed for the critical constituents in each of the lagoons.

To comply with the IO, from January 2008 to October 2008 the Carlsbad Hydrologic Unit's dischargers collected data in four lagoons: Aqua Hedionda Lagoon, Buena Vista Lagoon, Loma Alta Slough, and San Elijo Lagoon. The data were collected to support the development of TMDLs in one or more of these lagoons for bacteria, eutrophic conditions, and sedimentation. Additionally, data for TDS were collected for Aqua Hedionda Creek. Data collected during this monitoring program may be utilized in future efforts to develop TMDLs for these lagoons. A final data report was submitted to the RWQCB on June 30, 2009.

13.0 NON-EMERGENCY FIRE FIGHTING

13.1 INTRODUCTION

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (No. 3 and No. 5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis by Clean Water Staff. Following is a detailed description of the program developed by the City to reduce pollutants from non-emergency fire fighting flows.

13.2 PROGRAM FOR NON-EMERGENCY FIRE FIGHTING FLOWS

The City of Encinitas has identified a number of potential discharge sources including maintenance of fire and emergency vehicles and equipment, training exercises, and facility maintenance. It is important to recognize and make provision for the post-emergency rehabilitation of response equipment including tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency, as this equipment must be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for subsequent response actions. As such, the use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified and will be performed in a manner that minimizes discharges to the MEP. In consideration of the non-emergency activities listed above, the City's fire personnel utilized the following BMPs to address discharge generated from such activities during fiscal year 2008-09:

- Whenever possible, practice drills were performed in areas where runoff was contained. When practice drills were performed in an area where runoff could potentially leave the site, the site was surveyed by the officer-in-charge prior to training activities to ensure that debris would not enter the storm drain system as a result of the drill.
- As determined feasible, runoff from training drills or other non-emergency activities, was directed to landscaped areas.
- Areas that have debris that could potentially enter the storm drain system as a result of the drill activities were not used for training until the debris had been removed.
- Live fire training activities were pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
- Runoff from live fire training activities was contained and recovered with the City's Vac-con truck so that runoff did not discharge to the storm drain system or receiving waters.
- Good housekeeping and dry cleanup practices were utilized as part of standard facility maintenance procedures.

13.2.1 EDUCATIONAL METHODS

Details of the City's educational programs, including fire fighting personnel education, are provided in Section 8 of this document.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 as required by Water Quality Order No. 2007-0001. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes made to the JURMP since the comprehensive JURMP update in the spring of 2008 would be detailed in the preceding sections of this JURMP Annual Report. Revisions include, but are not limited to, required inventory updates, necessary process and procedure changes, and programmatic modifications to improve efficiency and effectiveness.

15.0 CONCLUSIONS & RECOMMENDATIONS

During the 2007-2008 reporting period, the City of Encinitas updated its JURMP, which was finalized and submitted to the RWQCB on March 24, 2008. As captured in the preceding FY 2008-2009 JURMP Annual Report, the City of Encinitas has continued to refine newly developed program elements, and standardize core program components. Further, the City has and will continue to participate and collaborate with other Copermittees in the collective development and implementation of regional programs. As compliance standards evolve based upon defined timeframes in Order No. 2007-0001, the City of Encinitas will continue to augment and update programs as necessary to comply with regulatory requirements, and evaluate the overall efficacy of program elements against value added outcomes to assure focused and refined implementation protocols.

Appendix A

Development Planning

A-1 Treatment Control BMP Inventory

A-2 SUSMP Priority Project Map

A-3 Treatment Control BMP Inspection Priority Flowchart

A-4 Sample Grading Certification BMP Installation Verification Letter

A-5 Treatment Control BMP Operation and Maintenance Self-Verification Letter

A-6 Treatment Control BMP Operation and Maintenance Brochure

A-7 Treatment Control BMP Operation and Maintenance Self-Verification Form

A-8 Treatment Control BMP Operation and Maintenance Self-Verification Results and Findings

A-9 Treatment Control BMP Operation and Maintenance Inspection Form

A-10 Treatment Control BMP Operation and Maintenance City Inspection Results and Findings

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
55	I	540 Cornish Dr	TC-30 Vegetated Swale		9/27/2005	PRP/UC	Encinitas Other		Low
55	I	540 Cornish Dr	TC-30 Vegetated Swale		9/27/2005	PRP/UC	Encinitas Other		Low
60	G	3275 Poppy Hills Ln	Other	rock-lined swale	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	TC-22 Extended Detention Basin	detention basin	1/1/2003	1/15/2008	Private		Medium
61	CN	801 Orpheus Ave	Other	flow-through planter "bio-swale"	10/15/2007	PRP/UC			TBD
61	CN	801 Orpheus Ave	Other	flow-through planter "bio-swale"	10/15/2007	PRP/UC	Encinitas Other		TBD
61	CN	801 Orpheus Ave	SD-20 Pervious Pavement	gravel parking area	10/15/2007	PRP/UC			TBD
87	G	354 Santa Fe Dr	MP-52 Drain Inserts	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	MP-52 Drain Inserts	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	MP-52 Drain Inserts	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	MP-52 Drain Inserts	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	TC-22 Extended Detention Basin	detention basin	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	TC-30 Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	TC-30 Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	TC-30 Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
106	G	3358 Wildflower Valley Dr	TC-30 Vegetated Swale	min. 100' long priority stormwater BMP grass swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
106	G	3358 Wildflower Valley Dr	TC-30 Vegetated Swale	treatment swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
153	I	125 Chesterfield	Interceptor (sewer)	traffic rated oil seperator	8/31/2006	2/13/2007	Private		Medium
153	I	125 Chesterfield Dr	MP-52 Drain Inserts	Flo-Gard FF-RF24D	8/31/2006	2/13/2007	Private		Medium
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
183	G	3234 Olivenhain Farms Rd	Other	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Other	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	TC-30 Vegetated Swale	bio-swale for post BMP treatment	11/1/2006	5/13/2008	Private	2006-0764616	Low
187	G	1060 Urania Ave	TC-11 Infiltration Basin	mechanical/detention pit	3/22/2007	PRP/UC	Private		Medium
187	G	1060 Urania Ave	TC-30 Vegetated Swale	mechanical/detention pit	3/22/2007	PRP/UC	Private		Medium
276	G	Phoebe St & Hwy 101	MP-50 Wet Vault	stormwater collection vault	4/19/2007	6/19/2008	Private		High
276	G	Phoebe St. & Hwy 101	MP-52 Drain Inserts	stormfilter chamber by contech	4/19/2007	6/19/2008	Private		High
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
369	G	1415 Rainbow Ridge Ln	TC-10 Infiltration Trench	60'x5'x9' underground infiltration system	9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-22 Extended Detention Basin		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-22 Extended Detention Basin		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
372	G	1657 N Vulcan Ave	TC-11 Infiltration Basin	"grassy swale"	8/9/2007	PRP/UC	Private	2007-0615430	Medium
372	G	1657 N Vulcan Ave	TC-22 Extended Detention Basin	detention basin, grass swales	8/9/2007	PRP/UC	Private		Medium
372	G	1657 N Vulcan Ave	TC-30 Vegetated Swale	detention basin, grass swales	8/9/2007	PRP/UC	Private		Medium
385	G	1555 Crest Dr	Other	gravel/sand filter	8/31/2007	7/13/2009	Private	2007-0611836	Low
385	G	1555 Crest Dr	TC-30 Vegetated Swale	BMP landscape swale	8/31/2007	7/13/2009	Private	2007-0611836	Low
386	G	3535 Manchester Ave	MP-52 Drain Inserts	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	MP-52 Drain Inserts	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	MP-52 Drain Inserts	katchall curb outlet filter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	TC-11 Infiltration Basin	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	TC-11 Infiltration Basin	stormtech detention	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	TC-22 Extended Detention Basin	deterntion system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	TC-30 Vegetated Swale	flow-based system for BMP	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	TC-50 Water Quality Inlet	bio-clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 manchester Ave	TC-50 Water Quality Inlet	bio-clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
388	G	1435 Lake Dr	TC-30 Vegetated Swale	6' X 28'L Bioswale	12/17/2007	PRP/UC	Private		Medium
388	G	1435 Lake Dr	TC-30 Vegetated Swale	203' long grass-lined swale	12/17/2007	PRP/UC	Private		Medium
388	G	1435 Lake Dr	TC-30 Vegetated Swale	6'W X 20'L Bioswale	12/17/2007	PRP/UC	Private		Medium
414	G	4455 Manchester Ave	MP-52 Drain Inserts	'storm filter' (Contech Stormwater Solutions)	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	TC-30 Vegetated Swale	grassy swale	5/10/2007	2/20/2008	Private	2007-0317169	Medium
437	G	200 to 52 El Camino Real	TC-50 Water Quality Inlet	Storm Screen Unit	8/31/2007	5/22/2008	Private	2007-0571994	Medium
462	G	70 thru 90 N Coast Hwy 101	MP-52 Drain Inserts	kristar inlet filter	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	MP-52 Drain Inserts	kristar inlet filter	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-10 Infiltration Trench	flow well stormwater leaching system	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-10 Infiltration Trench	flow well stormwater leaching system	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-30 Vegetated Swale	bmp swale	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-30 Vegetated Swale	mechaical/bioswales	7/6/2007	4/6/2009	Private		Medium
462	G	70 thru 90 N Coast Hwy 101	TC-30 Vegetated Swale	bmp swale	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-30 Vegetated Swale	bmp swale	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-30 Vegetated Swale	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-50 Water Quality Inlet	mechaical/bioswales	7/6/2007	4/6/2009	Private		Medium
482	G	1864 Crest Dr	TC-22 Extended Detention Basin	Detention basin	3/28/2008	PRP/UC	Private	2007-0495449	TBD
482	G	1864 Crest Dr	TC-30 Vegetated Swale	4' wide grass lined treatment swale w/ rip-rap entrance	3/28/2008	PRP/UC	Private	2007-0495449	TBD
482	G	1864 Crest Dr	TC-30 Vegetated Swale	4' wide grass lined treatment swale w/ rip-rap entrance	3/28/2008	PRP/UC	Private	2007-0495449	TBD
483	G	540 La Costa Ave	Interceptor (sewer)	wastewater sump	9/10/2007	PRP/UC	Private	2007-0637421	Medium
483	G	540 La Costa Ave	MP-52 Drain Inserts	filter insert	9/10/2007	PRP/UC	Private	2007-0637421	Medium
483	G	540 La Costa Ave	MP-52 Drain Inserts	filter insert	9/10/2007	PRP/UC	Private	2007-0637421	Medium
483	G	540 La Costa Ave	TC-30 Vegetated Swale	bio-swale	9/10/2007	PRP/UC	Private	2007-0637421	Medium
562	G	1302 Encinitas Blvd	MP-52 Drain Inserts	flogard lopro hydrocarbon absorbant filter	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	TC-11 Infiltration Basin	infiltration basin	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	TC-30 Vegetated Swale	4' wide landscaped swale	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	TC-30 Vegetated Swale	8' wide treatment swale with 6' wide bottom	8/21/2007	8/4/2008	Private		Medium
570	G	489 Latigo Row	TC-10 Infiltration Trench		11/20/2007	PRP/UC	Private		TBD
570	G	489 Latigo Row	TC-10 Infiltration Trench		11/20/2007	PRP/UC	Private		TBD
692	G	1435 Rainbow Ridge	TC-30 Vegetated Swale	6' BMP treatment swale	3/27/2008	PRP/UC	Private	2008-0029728	TBD
704	G	230 Quail Gardens Dr	TC-30 Vegetated Swale	Vegetated BMP swale and 2 energy dissipators	4/17/2008	PRP/UC	Private	2008-0162733	TBD
705	G	3354 Wildflower Valley Dr	Other	rock-lined swale	1/14/2008	PRP/UC	Private	2008-0106026	TBD
705	G	3354 Wildflower Valley Dr	Other	rock-lined swale	1/14/2008	PRP/UC	Private	2008-0106026	TBD
705	G	3354 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	1/14/2008	PRP/UC	Private	2008-0106026	TBD
716	G	662 Encinitas Blvd	MP-52 Drain Inserts	stormfilter catch basin by contech	6/2/2008	PRP/UC	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	SD-20 Pervious Pavement	grasspave2 by Invisible Structures, Inc.	6/2/2008	PRP/UC	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	TC-30 Vegetated Swale	3' wide grass lined treatment swale	6/2/2008	PRP/UC	Private	2008-0243901	TBD
718	G	687 South Coast Hwy	Interceptor (sewer)	320 gal. sand-oil interceptor	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD

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718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	TC-50 Water Quality Inlet	6' X 12' precast stormfilter by Contech	8/28/2008	PRP/UC	Private	2008-0440635	TBD
765	G	2234 Encinitas Blvd	MP-52 Drain Inserts	stormfilter	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	TC-30 Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	TC-30 Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	TC-30 Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	TC-30 Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	TC-50 Water Quality Inlet	1-cartridge stormfilter per Contech	4/1/2008	PRP/UC	Private		TBD
789	G	2011-2089 San Elijo Ave	Interceptor (sewer)	grease interceptor	1/9/2008	3/23/2009	Private	2008-0609543	TBD
789	G	2011-2089 San Elijo Ave	SD-20 Pervious Pavement	porous concrete	1/9/2008	3/23/2009	Private	2008-0609543	TBD
883	G	1076 Hymettus Ave	SD-20 Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	PRP/UC	Private		TBD
883	G	1058 Hymettus Ave	SD-20 Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	PRP/UC	Private		TBD
883	G	1058 Hymettus Ave	SD-20 Pervious Pavement	modular reinforced turf area	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-10 Infiltration Trench	15' X 8' X 5' infiltration basin	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	TC-10 Infiltration Trench	15' X 8' X 5' infiltration basin	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
943	G	211 Saxony Rd	TC-30 Vegetated Swale	vegetated swale	1/14/2009	PRP/UC	Private	2009-0016310	TBD
943	G	211 Saxony Rd	TC-50 Water Quality Inlet	6' X 12' Filterra unit	1/14/2009	PRP/UC	Private	2009-0016310	TBD
947	G	Bella Vista Ct	MP-52 Drain Inserts	Kristar Lo-pro drain filter	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	MP-52 Drain Inserts	Kristar Lo-pro drain filter	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	PRP/UC	Private	2009-0134165	TBD
983	G	1320 Encinitas Blvd	TC-50 Water Quality Inlet	Contech Stormfilter	10/28/2008	PRP/UC	Private	2008-0522122	TBD
1365	G	311, 310, 314 and 318 Hana Ct	Other	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	315 and 311 Hana Ct	Other	rock swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 315, 319, 323, and 327 Hana Ct	TC-30 Vegetated Swale	vegetated swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1389	G	Requeza St and Beach St	TC-22 Extended Detention Basin	stormwater detention treatment basin	1/5/2004	8/2/2005	Private	2003-1503915	High
1457	G	200 Saxony Rd	TC-30 Vegetated Swale	grass-lined swale	5/6/2004	4/6/2006	Private		TBD
1469	G	1414 Bella Azul Ct	TC-30 Vegetated Swale	Grass Swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1401 Bella Azul Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1414 Bella Azul Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1428 Bella Vista Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1428 Bella Azul Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1442 Bella Azul Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	Bella Azul Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1401 Bella Azul Ct	TC-30 Vegetated Swale	Grass Swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1509	G	521 Ocean View Ave	TC-30 Vegetated Swale	vegetation stabilization, vegetated swale	7/7/2004	PRP/UC	Private		Low
1519	G	200 Saxony Rd	MP-52 Drain Inserts	flogard□plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	MP-52 Drain Inserts	flogard□plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium

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1532	GR	1320 Summit Ave	TC-22 Extended Detention Basin	detention basin	4/28/2004	PRP/UC	Private		Low
1532	GR	1320 Summit Ave	TC-30 Vegetated Swale	grass swale	4/28/2004	PRP/UC	Private		Low
1563	G	3701 Fortuna Ranch Rd	TC-30 Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		TBD
1563	G	3701 Fortuna Ranch Rd	TC-30 Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		TBD
1600	G	1588-1590 Leucadia Blvd	Interceptor (sewer)	grease trap	6/14/2004	7/6/2005	Private		Medium
1600	G	1588 Leucadia Blvd	TC-22 Extended Detention Basin	Detention Basin	6/14/2004	7/6/2005	Encinitas Street Maintenance		Medium
5814	G	2112 Oxford Ave	TC-30 Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2108 Oxford Ave	TC-30 Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
6402	G	311 Princehouse Lane	TC-30 Vegetated Swale	Grass Swale 275 feet by 4 feet wide	7/18/2005	12/8/2006	Private	2004-0576710	Medium
6442	G	3616 Manchester Ave	MP-52 Drain Inserts	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	MP-52 Drain Inserts	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester	TC-22 Extended Detention Basin	Football field is a detention basin with a filtration sytem under it There are two 2000 gallon sand-oil interceptors	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	TC-50 Water Quality Inlet	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	TC-50 Water Quality Inlet	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6813	G	155 Saxony Rd	Other	drain inlet with seepage pit	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	TC-30 Vegetated Swale	grass swale/infiltration basin	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	TC-30 Vegetated Swale	grass swale	9/5/2003	7/23/2009	Private		Low
6816	G	Piraeus St & Sparta Drive	TC-22 Extended Detention Basin	water quality basin	5/3/2001	4/21/2004	Encinitas Street Maintenance		Medium
6816	G	Piraeus St & Sparta Dr	TC-22 Extended Detention Basin	water quality basin	5/3/2001	4/21/2004	Encinitas Street Maintenance		Medium
7005	G	510 Camino De Orchidia	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	507 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	509 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	517 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	521 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	525 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	513 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	558 Camino De Orchidia	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	532 Camino De Orchidia	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	526 Camino De Orchidia	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	518 Camino De Orchidia	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	503 Ocean Bluff Way	TC-30 Vegetated Swale	vegetated swale around the home	9/4/2002	4/30/2007	Private		Medium
7054	G	645 Via Cantebria	MP-52 Drain Inserts	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	MP-52 Drain Inserts	fossil filter insert	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	MP-52 Drain Inserts	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	MP-52 Drain Inserts	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7300	G	760 Garden View Ct	TC-30 Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		TBD
7300	G	740 Garden View Ct	TC-30 Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		TBD
7305	G	131 Princehouse Ln	Other	3-ft wide gravel swale	1/10/2003	4/7/2004	Private		Low
7305	G	131 Princehouse Ln	TC-10 Infiltration Trench	3-ft diameter absorption pit, 4-ft deep w/ 3/4" rock	1/10/2003	4/7/2004	Private		Low
7374	I	Vulcan Ave & Encinitas Blvd	Other	rock lined swale	1/30/2003	10/16/2006	Encinitas Parks		TBD
7374	I	Vulcan Ave & Encinitas Blvd	Other	grass pavers	1/30/2003	10/16/2006	Encinitas Parks		TBD
7374	I	Vulcan Ave & Encinitas Blvd	SD-20 Pervious Pavement	pervious pavement parking lot	1/30/2003	10/16/2006	Encinitas Parks		TBD
7374	I	Vulcan Ave & Encinitas Blvd	SD-20 Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		TBD
7374	I	Vulcan Ave & Encinitas Blvd	SD-20 Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		TBD
7374	I	Vulcan Ave & Encinitas Blvd	TC-22 Extended Detention Basin	detention basin	1/30/2003	10/16/2006	Encinitas Street Maintenance		TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4120-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD

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7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	TC-30 Vegetated Swale	grass lined swale	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	TC-30 Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	TC-30 Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7628	G	215 La Costa Ave	TC-30 Vegetated Swale	Grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	221-223 La Costa Ave	TC-30 Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	TC-30 Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	TC-30 Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	TC-30 Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	TC-30 Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7702	G	Chopin Way and Rubenstein Ave	TC-22 Extended Detention Basin	stormwater detention vault	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	315 Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	329 Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	322 and 336 Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	301 Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7732	G	175 La Costa Ave	Other	DG-lined swale	12/30/2003	5/15/2006	Private		Medium
7732	G	175 La Costa Ave	TC-22 Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	183 La Costa Ave	TC-22 Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	TC-22 Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	TC-22 Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7771	G	1550 S El Camino Real	SD-20 Pervious Pavement	pervious pavemnet "gravel pave" by Invisible Structures	10/28/2003	2/4/2008	Private		TBD
7771	G	1550 S El Camino Real	TC-22 Extended Detention Basin	desiltation basin	10/28/2003	2/4/2008	Private		TBD
7780	G	133 Rosebay Dr	TC-10 Infiltration Trench	rock-lined infiltration trench	8/4/2003	4/29/2005	Private		Low
7780	G	133 Rosebay Dr	TC-30 Vegetated Swale	vegetated swale, terraced drain	8/4/2003	4/29/2005	Private		Low
7780	G	133 Rosebay Dr	TC-32 Bioretention	terraced stormwater drainage area	8/4/2003	4/29/2005	Private		Low
7791	G	1766 N Coast Hwy 101	Interceptor (sewer)	grease interceptor	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	MP-52 Drain Inserts	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	MP-52 Drain Inserts	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-11 Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-11 Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-30 Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-30 Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-32 Bioretention	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-32 Bioretention	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-32 Bioretention	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-32 Bioretention	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-50 Water Quality Inlet	sand/oil interceptor	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7828	G	Lake Dr and Crestview Dr	MP-52 Drain Inserts	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	Lake Dr and Crestview Dr	MP-52 Drain Inserts	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1219 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1945 Lake Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1216 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1208 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1200 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7847	G	2300 8th St	TC-11 Infiltration Basin	filtration/desiltation pond	8/12/2003	7/23/2009	Private		Low
7852	G	3430 Via Monte verde	TC-11 Infiltration Basin	rip rap lined infiltration basin (does not conform to plan)	1/1/2003	10/24/2005	Private		Medium
7852	G	3430 Via Monte Verde	TC-30 Vegetated Swale	Grass lined Swale	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	TC-30 Vegetated Swale	landscape area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	TC-30 Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	TC-30 Vegetated Swale	grass lined vegation cleansing area	1/1/2003	10/24/2005	Private		Medium

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
7852	G	3411 Via Monte Verde	TC-30 Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	TC-30 Vegetated Swale	landscaped area for BMP	1/1/2003	10/24/2005	Private		Medium
9023	G	427 Bristol Ave	SD-20 Pervious Pavement	pathway filtration	10/20/2004	10/5/2006	Private		Low
9034	G	1470 Summit Avenue	Other	DG Swale	12/21/2004	12/3/2007	Private		Medium
9034	G	1462 & 1462 Summit Avenue	TC-22 Extended Detention Basin	detention filtration basin	12/21/2004	12/3/2007	Private		Medium
9057	G	192 Pacific View Ln	TC-30 Vegetated Swale	7.8 ft wide terraced treatment swale	1/26/2005	1/22/2007	Private		Medium
9071	G	3317 Poppy Hills Ln	Other	rock swale	11/9/2004	7/3/2006	Private	2004-0955312	TBD
9071	G	3317 Poppy Hills Ln	TC-30 Vegetated Swale	vegetated swale	11/9/2004	7/3/2006	Private	2004-0955312	TBD
9106	G	vacant lot N Vulcan Ave	TC-11 Infiltration Basin	vegetated infiltration basin w/ gravel pit	12/21/2006	PRP/UC	Private		High
9106	G	vacant lot N Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	12/21/2006	PRP/UC	Private		High
9134	G	0 Block 94 of Map 326	TC-30 Vegetated Swale	Priority Project in 2002-03	11/23/2004	4/6/2006	Private		Low
9150	G	3113 Camino Del Rancho	Other	Rock lined swale	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	Other	Rock lined swale	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	TC-32 Bioretention	flat area for stormwater treatment covered with grass	3/24/2005	9/11/2007	Private		Medium
9245	GR	3140 Dusty Trail	TC-30 Vegetated Swale	Grass Swale, Drainage Easement	3/2/2004	PRP/UC	Private		TBD
9253	G	701 S Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	703 S Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	719 S Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	721 N Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	717 S Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	715 S Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9262	G	860 Bracero Rd	MP-52 Drain Inserts	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	Medium
9262	G	886 Bracero Rd	MP-52 Drain Inserts	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	Medium
9262	G	890 Bracero Rd	MP-52 Drain Inserts	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	MP-52 Drain Inserts	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	Medium
9262	G	874, 896 & 900 Bracero Road	TC-30 Vegetated Swale	7' wide grass lined treatment channel	12/1/2005	PRP/UC	Private	2005-0972175	Medium
9278	G	0 Lone Hill Lane	TC-22 Extended Detention Basin	Detention areas on each parcel, Rip Rap	12/27/2005	PRP/UC	Private		Medium
9278	G	Lone Hill Ln	TC-22 Extended Detention Basin	detention area	12/27/2005	PRP/UC	Private		Medium
9283	G	267 Sanford St & 1440 Hygeia Ave	Other	rock swale	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	265 Sanford Street	TC-11 Infiltration Basin	Infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St	TC-11 Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	1440 Hygeia Ave	TC-11 Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9289	G	2934 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Road	TC-30 Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Road	TC-30 Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Road	TC-30 Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Road	TC-30 Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 & 2934 Lone Jack Road	TC-30 Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	TC-30 Vegetated Swale	grass-lined channel for BMP	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 El Camino Real	TC-50 Water Quality Inlet	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9301	G	189 Halcyon Rd	SD-20 Pervious Pavement	Grasscrete	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	187 Halcyon Rd	TC-30 Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9301	G	187 Halcyon Rd	TC-30 Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9303	G	869 Brittany Road	TC-22 Extended Detention Basin	40' □/- detention area	6/7/2005	PRP/UC	Private	2005-0496885	TBD
9303	G	869, 875, 881, 887 Brittany Road	TC-30 Vegetated Swale	landscape filtration strip	6/7/2005	PRP/UC	Private	2005-0496885	TBD
9318	G	1176 & 1173 Kava Ct	Other	6.5 ft wide gravel swale w/ 3" river rock	8/16/2005	2/16/2007	Private		Medium
9318	G	1169 & 1165 Kava Ct	Other	gravel Swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1160, 1164, 1168, 1172, 1169, 1165 Kava Ct	TC-30 Vegetated Swale	vegetated swale along Kava Ct	8/16/2005	2/16/2007	Private		Medium
9336	I	290 Andrew Ave	Other	Landscaped Area, Gravel Pave Swale, Grass Pave Swale	6/19/2006	PRP/UC	Private		Low
9336	I	290 Andrew Ave	SD-20 Pervious Pavement	Gravel Pave and Grass Pave	6/19/2006	PRP/UC	Private		Low
9336	I	290 Andrew Ave	TC-30 Vegetated Swale	Landscaped Area, Gravel Pave Swale, Grass Pave Swale	6/19/2006	PRP/UC	Private		Low
9367	G	781 Garden View Ct	TC-30 Vegetated Swale	grass lined swale	7/10/2006	1/14/2009	Private		Medium
9370	G	406 La Costa Ave	Other	4 ft diameter dual pump lift station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft X 4ft X 2.5 ft Jenson precast sump station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	SD-20 Pervious Pavement	Orco block pavers	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	TC-30 Vegetated Swale	4-ft wide grass swale	1/30/2006	8/14/2007	Private	2006-0071959	High
9419	G	871 Neptune	SD-20 Pervious Pavement	Grasscrete grass block	8/30/2005	2/6/2008	Private		Low
9459	G	211 Saxony Rd	SD-20 Pervious Pavement	Grass Pave	6/12/2006	9/10/2007	Private - HOA		Medium
9459	G	211 Saxony Rd	TC-22 Extended Detention Basin	Landscaped Area (detention basin)	6/12/2006	9/10/2007	Private - HOA		Medium
9561	G	303 Santa Fe Drive	TC-30 Vegetated Swale	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9561	G	303 Santa Fe Drive	TC-30 Vegetated Swale	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9561	G	303 Santa Fe Drive	TC-30 Vegetated Swale	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9561	G	303 Santa Fe Drive	TC-30 Vegetated Swale	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9561	G	303 Santa Fe Drive	TC-30 Vegetated Swale	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9561	G	303 Santa Fe Drive	TC-40/MP-40 Media Filter	stormfilter system	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9580	G	3451 Dove Hollow Lane	TC-10 Infiltration Trench	Dry Well Storm Water Retention	5/25/2006	2/6/2008	Private		Medium
9580	G	3451 Dove Hollow Lane	TC-30 Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Medium
9580	G	3451 Dove Hollow Lane	TC-30 Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Medium
9580	G	3451 Dove Hollow Lane	TC-30 Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Medium
9580	G	3451 Dove Hollow Lane	TC-30 Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Medium
10187	G	1603 Crest Dr	TC-10 Infiltration Trench	2' wide BMP gravel/sand filter	5/27/2009	PRP/UC	Private	2009-0280381	TBD

Definitions:
PRP□UC: Project proposed or under construction, BMP installation is not complete.
TBD: BMP inspection priority To Be Determinined. After construction is complete, all BMPs on the project are inspected prior to start of the next rainy season.
BMP inspection priority is established during this initial Operation and Mainenance Inspection.
HOA: Homeowner's Association

Note:
Responsible party information is maintained within the City□s data management systems specific to this program area. In consideration of the sensitivity of private property ownership information, this data is not included in the inventory presented.

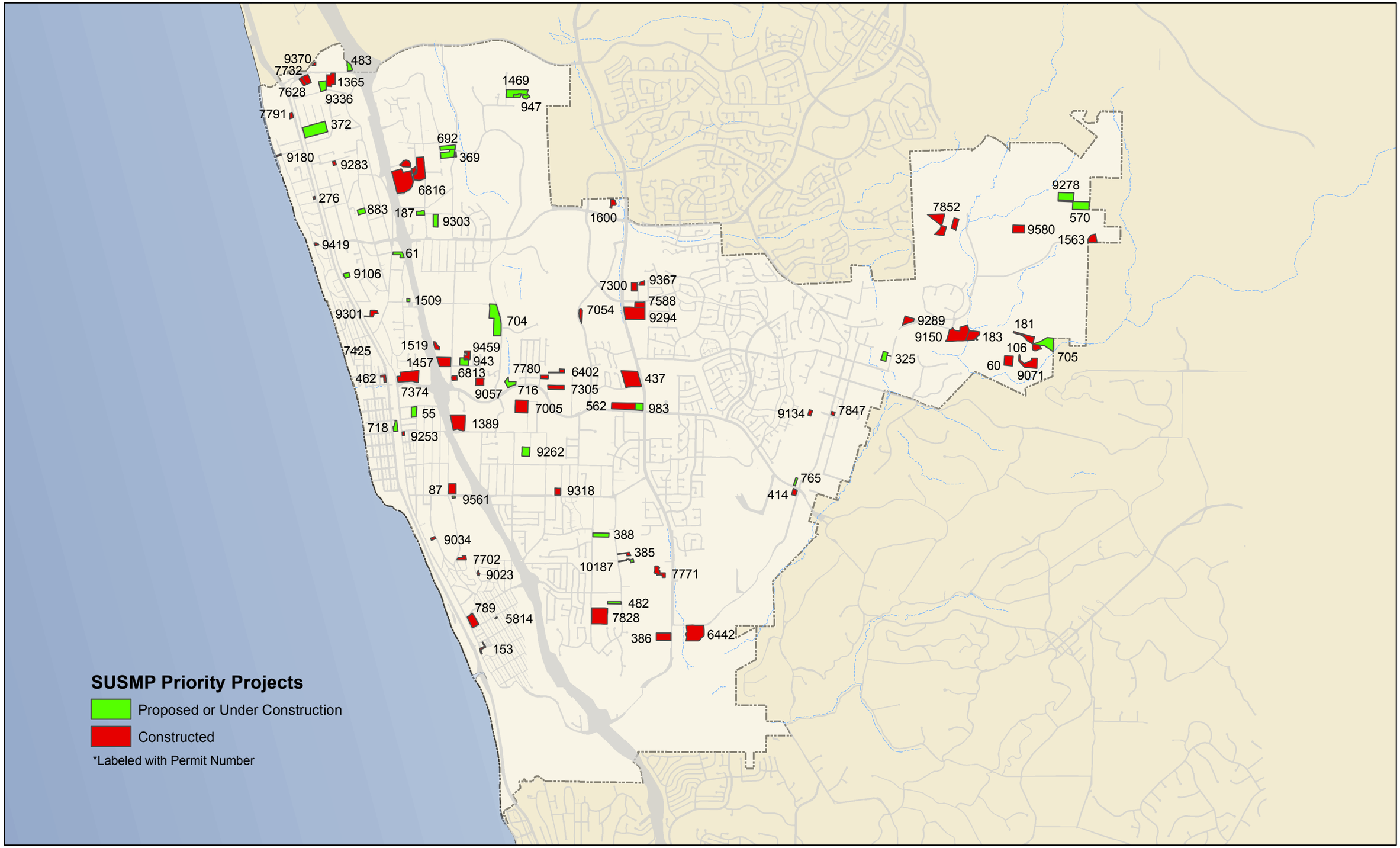

Appendix A-2

SUSMP Priority Projects with Treatment Control BMPs

DISCLAIMER:

This map should not be used for Engineering, Survey, or Site-Specific Analysis.

Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

- Map Coordinates: Stateplane NAD83 Feet, CA Zone 6
- Parcel lines are not survey accurate, and some parcels can be positionally off up to +/- 40 feet
- Photo flight dates: April 2005. 3 inch pixel resolution.
- Orthophoto and Topo positional accuracy meet the precision adequate to support National Map Accuracy Standards for 1" = 100' mapping.

I:/GIS/SharedMXDs/CityGIS/CityGIS.mxd

N

0 5,900 Feet

1 inch = 3,700 feet

Treatment Control BMP Inspection Priority

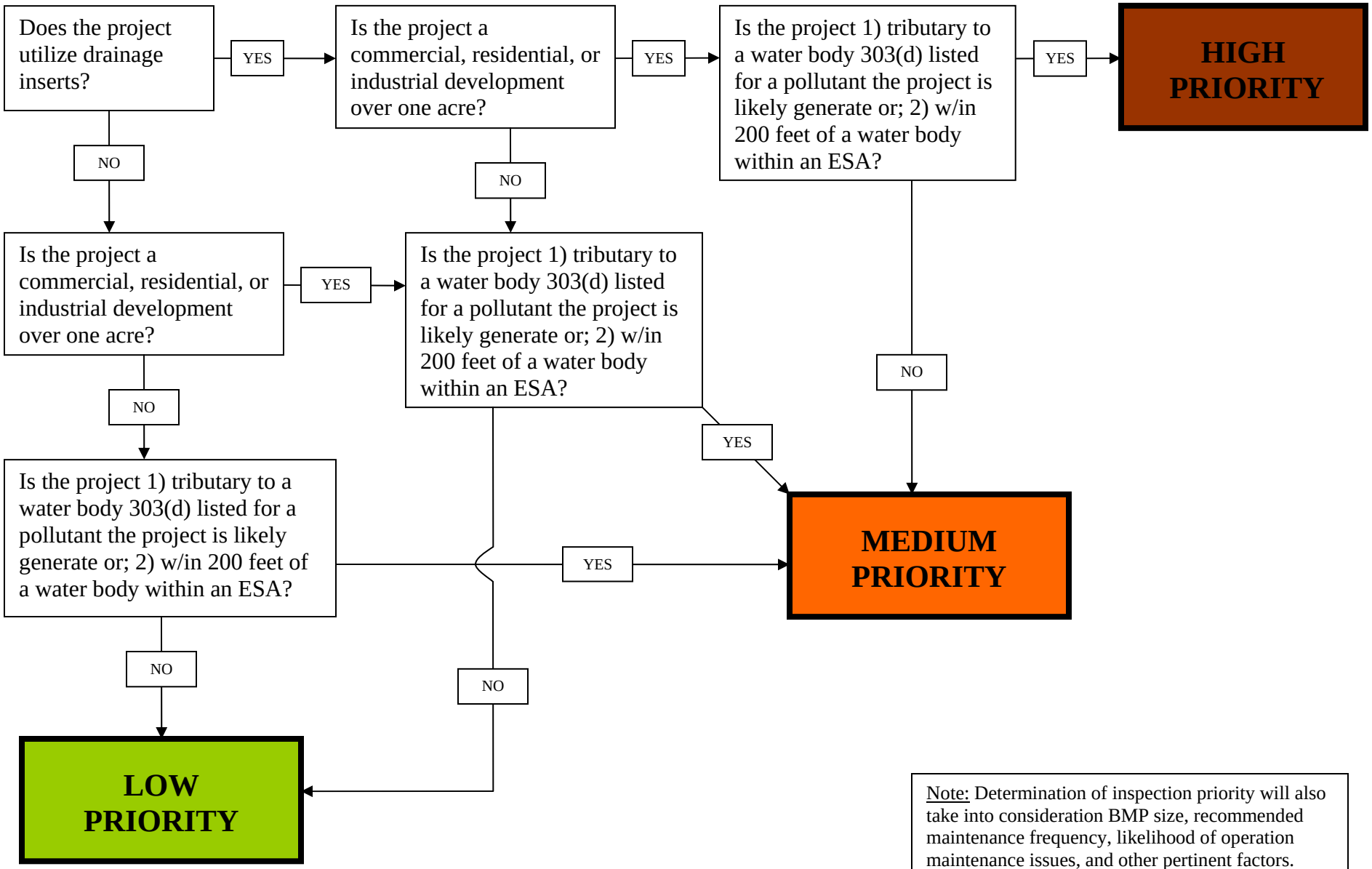

Note: Determination of inspection priority will also take into consideration BMP size, recommended maintenance frequency, likelihood of operation maintenance issues, and other pertinent factors.

SAMPLE

Date: _____

City of Encinitas
Engineering Services Permits
505 South Vulcan Ave.
Encinitas, CA 92024

Re: **Engineer's Final Grading Certification for Project No. 99-001 TM and Grading Permit Number XXXX - G.**

The grading under permit number XXXX has been performed in substantial conformance with the approved grading plan or as shown on the attached "As Graded" plan.

Final grading inspection has demonstrated that lot drainage conforms with the approved grading plan and that swales drain at a minimum of 1% to the street and/or an appropriate drainage system.

All the Low Impact Development, Source Control and Treatment Control Best Management Practices as shown on the drawing and required by the Best Management Practice Manual Part II were constructed and are operational, together with the required maintenance covenant(s).

Engineer of Record _____ (signed & sealed)

Dated _____

Verification by the Engineering Inspector of this fact is done by the Inspector's signature hereon and will take place only after the above is signed and stamped and will not relieve the Engineer of Record of the ultimate responsibility:

Engineering Inspector: _____

Dated:_____

The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.

City of Encinitas

September 2, 2008

TO: City of Encinitas Property Owner

RE: Treatment Control Best Management Practices (BMP) Verification Program

The City of Encinitas, in response to requirements in the San Diego Municipal Stormwater Permit, as regulated by the San Diego Regional Water Quality Control (RWQCB), is undertaking a new program to protect our local waterways and beaches.

The purpose of this program is to verify the operation and maintenance of treatment control best management practices (BMPs) installed as a condition of development on projects constructed since January of 2003.

As you may be aware, specific projects within the City of Encinitas are required to install BMPs to treat and improve the quality of water discharged from a development site. It is important to recognize that the treatment control BMPs at your facility or on your property provide a critical function, and that ongoing maintenance and preservation of treatment control BMPs is necessary for proper operation and to maximize water quality benefit. The proper maintenance and operation of treatment control BMPs is required per City of Encinitas Municipal Code (EMC) Section 20.08 as well as property related legal agreements and/or covenants.

As the treatment control BMP operation and maintenance program is introduced, the City of Encinitas would like your cooperation to verify the following:

- ☑ Responsible Party Information *(HOA, Property Owner, Etc…)*
- ☑ Verification of the Type of Treatment Control BMPs *(See Enclosed Information)*
- ☑ Proper Operation and Maintenance of Treatment Control BMPs.

Enclosed with this letter, you will find information that will aid in gathering, documenting, and providing this information to the City of Encinitas. Please be advised that the City is also required to conduct assessments of a specific number of locations throughout the City to support this program.

Please Provide the Requested Information By: <u>October 1, 2008</u>

Your assistance in this effort is greatly appreciated. Please contact the City of Encinitas Clean Water Program at (760) 633-2787 or npdesmail@cityofencinitas.org for any questions or assistance.

Peter Cota-Robles, P.E
Director of Engineering

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

City of Encinitas

SECOND NOTICE

TO: <RESPONSIBLE PARTY>
<123 STREET>
<City, State, Zip>

January 13, 2009

RE: <ENCINITAS PROPERTY ADDRESS>

In response to provisions in the San Diego Municipal Stormwater Permit (administered by the San Diego Regional Water Quality Control Board), the City of Encinitas is required to verify the operation and maintenance of treatment control best management practices (BMPs) installed as a condition of development on projects constructed since January 2003.

In a letter dated September 2, 2008, the City of Encinitas requested your cooperation to verify and submit information relating to the BMPs on your property. In that letter (*copy included)* the City requested information regarding the responsible party (Property Owner, Manager, HOA etc.), verification of the type of BMPs on site, and verification that required maintenance has been conducted. To date, records indicate that the City has not received this information.

The intent of this second notice is to provide an additional opportunity to a) submit the required information or b) inform the City of updated / revised responsible party information (i.e. change in ownership) for future correspondence regarding the Treatment Control BMP Self Verification process.

The Treatment Control BMP Self Verification process has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of BMP facilities, and to help the City meet State mandated requirements. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. However, please be advised that the City does maintain the authority to ensure the existence and proper maintenance and function of treatment facilities; failure to provide adequate information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

Through attempts to solicit necessary information, this correspondence has been sent to the contact identified above. If the contact information above is **incorrect**, please indicate this on the enclosed self verification form. Otherwise, please validate the responsible party information and provide the required operation and maintenance verification information as described on the form.

Please Provide the Requested Information No Later Than: February 13, 2009

Your assistance in this effort is greatly appreciated. Please feel free to contact the Clean Water Program at (760) 633-2787 or npdesmail@cityofencinitas.org with any questions or assistance.

Sincerely,

Erik Steenblock
Clean Water Program Manager

Enc: Self Verification Form
Copy of Final Grading Plan (selected sheets)
Copy of Original Letter dated September 2, 2008
Operation and Maintenance Guide

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

City of Encinitas

FINAL NOTICE

TO: <RESPONSIBLE PARTY>
<123 STREET>
<City, State, Zip>

April 8, 2009

RE: <ENCINITAS PROPERTY ADDRESS>

In response to provisions in the San Diego Municipal Stormwater Permit (administered by the San Diego Regional Water Quality Control Board), the City of Encinitas is required to verify the operation and maintenance of treatment control best management practices (BMPs) installed as a condition of development on projects constructed since January 2003.

Since September 2008, the City of Encinitas has made multiple attempts to get your cooperation in verifying and submitting information related to the BMPs on your property. In letters, dated September 2, 2008, and January 13, 2009, the City requested information regarding the responsible party (Property Owner, Manager, HOA, etc.), verification of the type of BMPs on site, and verification that required maintenance has been conducted. To date, records indicate that the City has not received this information.

The intent of this final notice is to inform you that, in lieu of self-verification methods, City staff will pursue formal inspection actions to assess BMPs on your property as part of 2009-2010 compliance activities. This annual inspection will 1) verify the location of BMPs that were installed as part of the grading phase of your development project, and 2) determine whether any maintenance activities may be necessary. Inspection actions will take place between July 1, 2009, and September 30, 2009.

It is the goal of the City to minimize the burden on property owners to fulfill these requirements. However, please be advised that failure to provide adequate information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

Through prior attempts to solicit necessary information, this correspondence has been sent to the contact listed above. If the contact information above is **incorrect**, please notify the Clean Water Program via email or in writing. Correspondence may be submitted to:

City of Encinitas
Clean Water Program
505 S Vulcan Ave
Encinitas, CA 92024

or emailed to: **npdesmail@cityofencinitas.org**

Your assistance in this effort is greatly appreciated. Please feel free to contact the Clean Water Program at (760) 633-2787 or npdesmail@cityofencinitas.org with any questions or for assistance.

Sincerely,

Erik Steenblock
Clean Water Program Manager

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

Frequently Asked Questions

1. Why does the City of Encinitas require that Treatment Control BMPs be maintained?

As stated in the Municipal Stormwater Permit (issued by the San Diego Regional Water Quality Control (RWQCB)), the City must verify that treatment control BMPs installed on private property are adequately maintained. Proper operation and regular maintenance of permanent treatment control BMPs ensures that the facility reduces the amount of pollutants which end up in our creeks, lagoons, and beaches. These BMPs help to improve water quality and minimize human and environmental health risks.

2. What should I do if I am unsure how to complete my self-inspection form or cannot locate the treatment control BMPs on my property?

Contact Clean Water Program staff as soon as possible. We can provide assistance in understanding the self-verification form, identifying the location of BMP(s) on your property, and determining operation and maintenance needs of your BMP(s). Staff can be reached via phone: 760-633-2787, or email: npdesmail@cityofencinitas.org

3. What happens during the City's inspection of Treatment Control BMPs on my property?

If requested or as required due to repudiation, a City inspector will visit the property to validate the existence, proper maintenance, and function of treatment control BMPs. Inspection actions will be documented with an inspection report form and photos of specific BMPs. If access is limited or located on private property, the City inspector will call the responsible party to schedule an inspection.

FAQs continued…

4. What happens if I don't certify that my Treatment Control BMP(s) have been maintained?

The Treatment Control BMP Self Verification process has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of these facilities, and to help the City meet State mandated requirements. The San Diego Regional Water Quality Control Board requires the City to verify the proper function of treatment control BMPs through a Municipal Stormwater Permit. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. The City does maintain the authority to ensure the existence and proper maintenance and function of treatment facilities, and failure to provide adequate information may constitute a violation of the City ordinance as well as property related agreements or covenants.

City of Encinitas
Clean Water Program
505 S. Vulcan Avenue
Encinitas, CA 92024

For questions relating to
Treatment Control BMPs,
please call: 760-633-2787
or e-mail: npdesmail@cityofencinitas.org

Printed on recycled paper

City of Encinitas
Clean Water Program

Operation and Maintenance Guide

for your

Treatment Control Best Management Practices (BMPs)

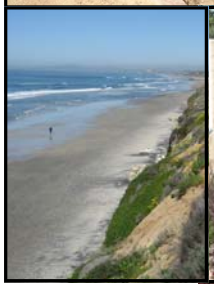

Thanks for helping us keep our creeks, lagoons, and ocean clean!

What is a Treatment Control BMP?

Treatment Control BMPs are drainage devices, structures, or areas designed to remove pollutants from storm water runoff, or minimize the quantity of runoff ultimately discharged from a development site. These facilities are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. They are also frequently referred to as Stormwater Best Management Practices or BMPs.

The following BMPs are commonly incorporated into development projects throughout the City of Encinitas:

Vegetated Swales / Grassy Swales are open, shallow channels or depressions with vegetation or grass covering the side slopes and bottom that collect, infiltrate, and slowly convey runoff water. Rock lined swales are also commonly used.

Bioretention Areas consist of a planted or vegetated depression area designed to pond during a rain event. It is common to find multiple bioretention areas located throughout a development area.

Infiltration Trenches or **Basins** temporarily store runoff in shallow basins or linear depressions lined with sandy soil or gravel to enhance infiltration of water into the ground.

Storm Drain Filter Inserts are manufactured filters or fabric placed in a storm drain inlet to remove sediment, debris, oil, or other pollutants.

Other BMPs include Rock-Lined Swales, Terraced Swales, Detention Basins, Subsurface Infiltration Systems, Constructed Wetlands, Media Filters, Storm Water Storage Systems, and Vortex Separators.

Please note that each of the BMPs may vary in design size, shape, or materials from the descriptions above. City staff is available to help you determine the location of BMPs located on your property.

For more information on Treatment Control BMPs, refer to the City's Storm Water Best Management Practices Manual, Part II which can be accessed via the Clean Water Program webpage:

http://cwp.ci.encinitas.ca.us

How to locate Treatment Control BMPs on your property:

1. Refer to your approved grading or improvement plans. The plans will show the location of Treatment Control BMPs.
2. Walk your property to look for defined drainage areas such as channels, depressions, or basins.
3. Typical treatment control BMPs may look similar to traditional landscaped areas. Look for areas that have been graded in a concave, swale, or linear shape to capture and infiltrate storm water.
4. Structural treatment control devices such as an inlet filter may be located within a curb inlet or underground. *Please contact the City of Encinitas if you have a structural control located on your property with limited access.

Minimum Operation and Maintenance Requirements:

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

- ☑ On an annual basis, or as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair.
- ☑ Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, etc.
- ☑ Remove any accumulated trash and debris.
- ☑ Take photos of all BMPs on the property.
- ☑ Complete Operation and Maintenance Self-Verification Form and submit the form to the City's Clean Water Program.

Return this form no later than:
October 1, 2008

City of Encinitas
Storm Water Treatment Control Best management Practices (BMPs) Operation and Maintenance Self-Verification Form

Step 1 Records Verification

Property Address:

Responsible Party and/or Property Owner:

_____
Responsible Party Company or HOA (if applicable) Address, City, State, ZIP

Treatment Control BMPs on your property:
(Please Indicate the Quantity of Each BMP in the Applicable Box Below)

- ☐ **Grassy / Vegetated Swale** ____
- ☐ **Rock Lined Swale** ____
- ☐ **Infiltration Trench / Basin** ____
- ☐ **Proprietary Treatment Device** ____
- ☐ **Bioretention Area** ____
- ☐ **Storm Drain Filter Insert(s)** ____
- ☐ **Detention Basin** ____
- ☐ **Other (*Describe Below*)** ____

_____

If you require assistance with BMP identification, please contact City Staff at (760) 633-2787

Step 2 Self-Verification of BMPs

Date(s) that the BMP(s) were self-evaluated: _____

Self Evaluation Results (check the box that applies):

☐ A. All BMPs are maintained and in good working order
☐ B. All or some BMP(s) needed maintenance and/or cleaning
☐ C. Other results (explain):_____

If you checked B or C, please describe maintenance that was performed in order to maintain proper function of BMP(s):

_____

_____

Maintenance Date: _____ *(As applicable, include any maintenance records with your submittal)*

Number of photos taken: _____ **Date the photo(s) were taken:** _____
(Include all photos with your submittal)

Step 3 Certification

I, _____, hereby certify that the above information is correct to the best of my knowledge.

Signature _____

Date_____

See reverse for Submittal options.

Step 4 SUBMITTAL OPTIONS

1. **Mail** completed form, copies of maintenance records, and photos to:

   City of Encinitas
   Clean Water Program
   505 S Vulcan Ave
   Encinitas, CA 92024

2. **Email** electronic copies of completed form, maintenance records, and photos to:

   npdesmail@cityofencinitas.org

3. Any combination of mail and email submission of the necessary documents will also be accepted. For example, you may **mail** the form and maintenance records and **email** photos.

Appendix A-8: FY 2008-09 Treatment Control BMP Operation and Maintenance Self Verification Results and Findings

Permit		Location	Notices Sent	Self-Verification Form Information - Provided by Responsible Party													Summary of Results/Findings	City Action
				Grass Swale	Rock Swale	Infilt Basin	Prop Treat	Bio-Ret	SD Filter	Det Basin	Other	BMP Eval Date	Self-Eval	Date of Maint	Certification Date	Photos		
60	G	3275 Poppy Hills Ln	3	2						1		4/9/2009	A	N/A	4/11/2009	4	Verification Received	Information Validated
87	G	354 Santa Fe Dr	1	3					3	1		12/5/2008	A	12/4/2008	12/5/2008	8	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
183	G	3234 Olivenhain Farms Rd	2	1	3							1/25/2009	A	N/A	1/27/2009	3	Verification Received	Information Validated
276	G	1218-1228 N Coast Hwy 101	3													0	Unresponsive Owner	City Inspected
414	G	4455 Manchester Ave	2	X								3/10/2009	A	N/A	3/12/2009	2	Verification Received	Information Validated
437	G	204-252 N El Camino Real	1									8/19/2008	A	8/6/2008	9/8/2008	0	Verification Received	Maintenance Required. Enforcement action taken.
562	G	1302 Encinitas Blvd	2	X		X	X	X	X	X		8/3/2009	A and B	8/3/2009	8/3/2009	0	Verification Received	Maintenance Required. Enforcement action taken.
1365	G	310 Hana Ct	1								no BMPs				9/29/2008	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
1365	G	311 Hana Ct	3													0	Unresponsive Owner	City Inspected
1365	G	314 Hana Ct	2	X								2/6/2009	A	N/A	2/6/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
1365	G	315 Hana Ct	2	X								1/15/2009	A	N/A	1/15/2009	0	Verification Received	Information Validated
1365	G	318 Hana Ct	1								no BMPs	9/10/2008	A	N/A	9/10/2008	2	Verification Received	Information Validated
1365	G	319 Hana Ct	2	X								1/21/2009	A	N/A	1/21/2009	0	Verification Received	Information Validated
1365	G	323 Hana Ct	1	X								none listed	A	N/A	9/4/2008	3	Verification Received	Information Validated
1365	G	327 Hana Ct	3	X								2/10/2009	A	N/A	2/10/2009	0	Verification Received	Information Validated
1389	G	Beach St	3													0	Unresponsive Owner	City Inspected
5814	G	2108 Oxford Ave	3													0	Unresponsive Owner	City Inspected
5814	G	2112 Oxford Ave	2	X				X				3/26/2009	A and C	3/26/2009	3/26/2009	2	Verification Received	Information Validated
6402	G	311 Princehouse Ln	1	X							X	9/2/2008	A	11/1/2008	11/1/2008	5	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
6442	G	3616 Manchester Ave	2								sand interceptor	6/3/08, 1/22/09	A and B	6/3/2008, 1/22/2009	1/23/2009	2	Verification Received	Information Validated
7005	G	503 Ocean Bluff Way	1	X		X			X			9/15/2008	A	9/15/2008	9/29/2008	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7005	G	507 Ocean Bluff Way	1													0	Verification Received	City Inspected
7005	G	509 Ocean Bluff Way	1	X								9/24/2008	A	weekly	9/25/2008	3	Verification Received	Information Validated
7005	G	510 Camino De Orchidia	1													0	Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
7005	G	513 Ocean Bluff Way	1													0	Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
7005	G	517 Ocean Bluff Way	1													0	Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
7005	G	518 Camino De Orchidia	2									none listed	A		1/21/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7005	G	521 Ocean Bluff Way	3														Unresponsive Owner	City Inspected
7005	G	525 Ocean Bluff Way	2	1								2/10/2009	B	2/10/2009	2/10/2009	3	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7005	G	526 Camino De Orchidia	1	X								9/3/2008	A		9/4/2008	0	Verification Received	Information Validated
7005	G	532 Camino De Orchidia	3	X				X					A		2/2/2009	0	Verification Received	Information Validated
7005	G	558 Camino De Orchidia	2	1								2/8/2009	A	2/8/2009	2/8/2009	3	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7054	G	645 Via Cantebria	3														Unresponsive Owner	City Inspected
7305	G	131 Princehouse Ln	1	2	3	5		3				all the time	A		9/8/2008	0	Verification Received	Information Validated
7702	G	301 Chopin Way	3														Unresponsive Owner	City Inspected
7702	G	315 Chopin Way	3														Unresponsive Owner	City Inspected
7702	G	322 Chopin Way	1	X								9/11/2008	A		9/11/2008	0	Verification Received	Information Validated
7702	G	329 Chopin Way	1														Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
7702	G	336 Chopin Way	1	X								9/21/2008	A		9/21/2008	0	Verification Received	Information Validated
7732	G	175 La Costa Ave	1							X		9/5/2008	A		9/6/2008		Verification Received	Information Validated
7732	G	183 La Costa Ave	1	X				X				"1 yr ago by	A		9/9/2008	3	Verification Received	Information Validated
7732	G	191 La Costa Ave	3								X- landscape	3/6/2009	A		4/1/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7780	G	121-153 Rosebay Dr	1	X (90	X (10□)							9/11/2008	A		9/11/2008	2	Verification Received	Information Validated
7828	G	1200 Crestview Dr	1	X	X	X				X		9/8/2008	B	9/8/2008	9/8/2008	5	Verification Received	Information Validated
7828	G	1207 Crestview Dr	2		1							1/21/2009	A	1/21/2009	1/21/2009	12	Verification Received	Information Validated
7828	G	1208 Crestview Dr	2													3	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7828	G	1216 Crestview Dr	1		1							9/9/2008	A		9/7/2008	1	Verification Received	Information Validated
7828	G	1219 Crestview Dr	3			1						1/14/2009	A	1/14/2009	1/14/2009	3	Verification Received	Information Validated
7828	G	1223 Crestview Dr	1			X						not listed	A	6/1/2008	9/5/2008	0	Verification Received	Information Validated
7828	G	1945 Lake Dr	1			X						monthly	A		9/10/2008	2	Verification Received	Information Validated
7828	G	Lake Dr & Crestview Dr	1														Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
7852	G	3411 Via Monte Verde	1	1	1							8/1/2008	A		9/12/2008	0	Verification Received	Information Validated
7852	G	3430 Via Monte Verde	2									1/21/2009			1/21/2009	0	Verification Received	Maintenance Required. Enforcement action taken.

Appendix A-8: FY 2008-09 Treatment Control BMP Operation and Maintenance Self Verification Results and Findings

Permit		Location	Notices Sent	Self-Verification Form Information - Provided by Responsible Party													Summary of Results/Findings	City Action
				Grass Swale	Rock Swale	Infilt Basin	Prop Treat	Bio-Ret	SD Filter	Det Basin	Other	BMP Eval Date	Self-Eval	Date of Maint	Certification Date	Photos		
7852	G	3445 Via Monte Verde	1	2	1						Planted slopes	9/15/2008	A	weekly	9/17/2008	0	Verification Received	Information Validated
9023	G	427 Bristol Ave	1								Infilt System	9/4/2008	A		9/5/2008	0	Verification Received	Information Validated
9034	G	1462 Summit Ave	3	2	1							6/1/2009	A		6/1/2009	14	Verification Received	Information Validated
9034	G	1464 Summit Ave	1	1						1		12/11/2008	A	none given	12/11/2008	8	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9034	G	1470 Summit Ave	2		X							1/27/2009	A	1/23/2009	1/27/2009	3	Verification Received	Information Validated
9057	G	192 Pacific View Ln	1	1								9/1/2008	A				Verification Received	Information Validated
9134	G	2150 Whisper Wind Ln	1														Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
9150	G	3113 Camino Del Rancho	1														Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
9253	G	701 S. Vulcan Ave	2	X								none listed	A		did not date	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9253	G	703 S. Vulcan Ave	3		X						X	1/18/2009	A		5/13/2009	3	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9253	G	715 S Vulcan Ave	2	X								none listed	A		did not date	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9253	G	717 S Vulcan Ave	2	X	X				X			10/25/2008	A	10/25/2008	2/8/2009	0	Verification Received	Information Validated
9253	G	719 S. Vulcan Ave	3														Unresponsive Owner	City Inspected
9253	G	721 S. Vulcan Ave	3	X	X							5/14/2009	A	5/9/2009	5/9/2009	2	Verification Received	Information Validated
9283	G	1440 Hygeia Ave	1			1						12/3/2008	A		12/3/2008	5	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9283	G	265 Sanford St	1														Contact Info Invalid	Validate Contact Info. Recommend for BMP Inspection in
9283	G	267 Sanford St	1		(X)	X						11/24/2008	A		11/24/2008	10	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9289	G	2914 Lone Jack Rd	3														Unresponsive Owner	City Inspected
9289	G	2932 Lone Jack Rd	2	X								3/1/2009	B		3/1/2009	0	Verification Received	Information Validated
9289	G	2934 Lone Jack Rd	2								1	2/4/2009	A		2/4/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9289	G	2944 Lone Jack Rd	1		X							9/6/2008	A		9/6/2008	2	Verification Received	Information Validated
9294	G	477 N El Camino Real	1	1					7		2 - ADS water quality units	12/6/2008	A and B	yes	12/6/2008	18	Verification Received	Information Validated
9318	G	1154 Evergreen Dr	1	X	X							9/4/2008	A		9/9/2008	2	Verification Received	Information Validated
9318	G	1156 Kava Ct	1	X								9/23/2008	A		9/24/2008	1	Verification Received	Information Validated
9318	G	1158 Evergreen Dr	1		2							9/3/2008	A		9/3/2008	4	Verification Received	Information Validated
9318	G	1160 Kava Ct	1	X	X			X				9/5/2008	A		9/5/2008	5	Verification Received	Information Validated
9318	G	1164 Kava Ct	1	X	X							9/5/2008	A		9/5/2008	4	Verification Received	Information Validated
9318	G	1165 Kava Ct	1	X	X							9/5/2008	A		9/5/2008	4	Verification Received	Information Validated
9318	G	1168 Kava Ct	3								X	4/13/2009	A		4/13/2009	1	Verification Received	Information Validated
9318	G	1169 Kava Ct	2	X								1/20/2009	A		1/20/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9318	G	1172 Kava Ct	1	X	X							9/4/2008	A		9/5/2008		Verification Received	Information Validated
9318	G	1173 Kava Ct	1	X	X							9/5/2008	A		9/5/2008	4	Verification Received	Information Validated
9318	G	1176 Kava Ct	1	X	X							no date	A		9/29/2008	4	Verification Received	Information Validated
9370	G	406 La Costa Ave	1	X	X						Dual sump lift station	10/1/2008	A		10/1/2008	5	Verification Received	Information Validated
9419	G	871 Neptune Ave	1	X	X							9/3/2008	A		9/4/2008	2	Verification Received	Information Validated
9459	GI	211 Saxony	1									no date	"N/A"		9/10/2008	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9580	G	3451 Dove Hollow Rd	2	3	2	1						1/1/2009	A		1/22/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.

Appendix A-9

CITY OF ENCINITAS

Treatment Control BMP Inspection Form

Inspection Type: ☐ Annual ☐ Follow-Up ☐ Complaint ☐ Other:_____

Inspector Name:_____ Date: _____ Time: _____

A. PROJECT INFORMATION

Permit No. _____ Permit Type: _____

Project Type: ☐ Private ☐ City ☐ Other Public

SUSMP Priority: ☐ Priority ☐ Standard

Inspection Priority: ☐ High ☐ Medium ☐ Low ☐ Unknown

Property Access: ☐ Open ☐ Limited ☐ None

Property Address(es):_____

B. TREATMENT CONTROL BMP ASSESSMENT

Treatment Control BMP	Observations	Address ☐BMP Location	Comments
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		

Add additional BMPs on reverse side.

PHOTO(S) TAKEN? ☐ **YES** ☐ **NO**

ADDITIONAL COMMENTS:

_____

_____

C. FOLLOW UP NEEDED? ☐ Yes ☐ No ACCESS REQUIRED FOR FOLLOW UP? ☐ Yes ☐ No

Follow Up Actions:_____

_____

D. ENFORCEMENT ACTIONS ☐ None ☐ Warning ☐ Notice of Violation ☐ Citation

Corrective Actions:_____

_____

B. Treatment Control BMP Assessment (Continued)

Additional BMPs:

Treatment Control BMP	Observations	Location Description	Comments
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		

Additional Comments:

_____

_____

_____

_____

Form Revised: 8/2008

Appendix A-10: FY 2008-09 Treatment Control BMP Operation and Maintenance City Inspection Results and Findings

Permit No.	Permit Type	Location	Inspection Date	Inspection Results Findings	City Action
60	G	3275 Poppy Hills Ln	9/30/2008	Gated Community, need access code	Based on self-verification submittal BMPs are maintained and in compliance. Acquire access code for future inspections.
87	G	354 Santa Fe Dr	9/16/2008	fossil filters need to be cleaned, grass swales and detention basin in good condition	Follow-up inspection with RP conducted 6/2/2009
183	G	3234 Olivenhain Farms Rd	9/30/2008	BMPs in backyard, aceess permission needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire access code for future inspections.
276	G	1218-1228 N Coast Hwy 101	8/20/2008	stormwater collection vault in good condition, no maintenance necessary	None necessary
414	G	4455 Manchester Ave	8/27/2008	grass swale in good condition, no maintenance necessary	Filter insert overlooked, place on inspection list for FY 09-10
437	G	204-252 N El Camino Real	9/10/2008	StormScreen unit appears in good condtion, but need to have RP pull cover to inspect	RP provided maintenance invoices with self-verification documentation
562	G	1302 Encinitas Blvd	8/20/2008	flo-gard needs to be looked at, detention basin needs debris removal, grass swale needs to be vegetated	After numerous contacts/site visits with RP, BMP maint completed to City satisfaction on 8/3/2009
1365	G	310 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	311 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	314 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	315 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	318 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	319 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	323 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	327 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1389	G	Beach St	8/12/2008	BMP maint needed: remove sediment from detention basin, repair perforated riser flow restriction, re-install turf in swale, repair broken sprinkler	After numerous contacts/site visits with RP, BMP maint completed to City satisfaction on 5/11/2009. Self-Verification form never submitted
5814	G	2108 Oxford Ave	9/17/2008	Need yard access	Self-verification not submitted, place on inspection list for FY09-10 and gain access for inspection
5814	G	2112 Oxford Ave	9/17/2008	Need yard access	Worked with RP to replant vegetaed swale, self-verification photos show completed maintenance
6402	G	311 Princehouse Ln	9/18/2008	grass swale may need to be re-designed (slopes towards street)	Review plans construction inspection records. May have been designed or constructed. Educate plan checkers and construction inspectors.
6442	G	3616 Manchester Ave	9/24/2008	detention basin appears to be in good condition. RP needs to pull cover to conduct inspection.	Self-verification included maintenance records and photos. Facility maintained every 6 months.
7005	G	503 Ocean Bluff Way	9/30/2008	Backyard access needed	Photos not submitted with self-verification, place on inspection list for FY 09-10.
7005	G	507 Ocean Bluff Way	9/30/2008	Backyard access needed	Site inspection with homeowner on 12/3/2008. Pool permitted after grading permit. Existing BMPs OK.

Permit No.	Permit Type	Location	Inspection Date	Inspection Results Findings	City Action
7005	G	509 Ocean Bluff Way	9/30/2008	Backyard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7005	G	510 Camino De Orchidia	9/30/2008	Backyard access needed	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
7005	G	513 Ocean Bluff Way	9/30/2008	Backyard access needed	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
7005	G	517 Ocean Bluff Way	9/30/2008	Backyard access needed	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
7005	G	518 Camino De Orchidia	9/30/2008	Backyard access needed	On self-verification RP claimed no BMPs. RP may be unsure of what to inspect. Consider placing property on FY 09-10 inspection list
7005	G	521 Ocean Bluff Way	9/30/2008	Backyard access needed	No self-verification received. Consider placing on FY 09-10 inspection list.
7005	G	525 Ocean Bluff Way	9/30/2008	Backyard access needed	Self-verification hand delivered, photos show swale with brown grass. Recommeneded irrigation of the swale
7005	G	526 Camino De Orchidia	9/30/2008	Backyard access needed	Photos not submitted with self-verification, consider placing on inspection list for FY 09-10.
7005	G	532 Camino De Orchidia	9/30/2008	Backyard access needed	Photos not submitted with self-verification, consider placing on inspection list for FY 09-10.
7005	G	558 Camino De Orchidia	9/30/2008	Backyard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7054	G	645 Via Cantebria	10/1/2008	Landscaped areas in good condition, filter inserts not inspected	Follow-up inspection with RP conducted 5/20/2009. Filter inserts need to be installed prior to the beginning of the next wet season.
7305	G	131 Princehouse Ln	7/21/2008	All BMPs in good condition, no maintenance necessary, additional infiltration features added by homeowner	None necessary
7702	G	301 Chopin Way	8/20/2008	Backyard access needed	Self-verification not returned, place on inspection list for FY 09-10
7702	G	315 Chopin Way	8/20/2008	Backyard access needed	Self-verification not returned, place on inspection list for FY 09-10
7702	G	322 Chopin Way	8/20/2008	Backyard access needed	Photos not submitted with self-verification, place on inspection list for FY 09-10.
7702	G	329 Chopin Way	8/20/2008	Backyard access needed	Self-verification letter returned, update RP contact information and place property on FY 09-10 inspection list
7702	G	336 Chopin Way	8/20/2008	Backyard access needed	Photos not submitted with self-verification, place on inspection list for FY 09-10.
7702	C	Chopin Way	8/20/2008	filter insert in good condition	None necessary
7732	G	175 La Costa Ave	7/31/2008	Detention basin in good condition. Need yard access to inspect DG-lined swale.	Photos not submitted with self-verification, place on inspection list for FY 09-10.
7732	G	183 La Costa Ave	7/31/2008	Backyard access needed	Photos of DG swale not submitted with self-verification, place on inspection list for FY 09-10.
7732	G	191 La Costa Ave		Backyard access needed	Photos not submitted with self-verification, place on inspection list for FY 09-10.

Permit No.	Permit Type	Location	Inspection Date	Inspection Results Findings	City Action
7780	G	121-153 Rosebay Dr	7/21/2008	All BMPs in good condition	None necessary
7828	G	1200 Crestview Dr	7/31/2008	Backyard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7828	G	1207 Crestview Dr	7/31/2008	Backyard access needed	Based on self-verification, permeable deck covering BMP, OK. BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7828	G	1208 Crestview Dr	7/31/2008	Infiltration basin in good condition, no maintenance needed	None necessary
7828	G	1216 Crestview Dr	7/31/2008	Infiltration basin in good condition, no maintenance needed	None necessary
7828	G	1219 Crestview Dr	7/31/2008	Infiltration basin in good condition, no maintenance needed	None necessary
7828	G	1223 Crestview Dr	7/31/2008	Backyard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7828	G	1945 Lake Dr	7/31/2008	Backyard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7852	G	3411 Via Monte Verde	9/30/2008	Gated Community, need access code	Photos not submitted with self-verification, place on inspection list for FY 09-10.
7852	G	3430 Via Monte Verde	9/30/2008	Gated Community, need access code	Inspected site with RP access on 2/11/2009, discovered aquestrian pollution potential. Required BMPs. RP solution: remove horses (source) from property.
7852	G	3445 Via Monte Verde	9/30/2008	Gated Community, need access code	Photos not submitted with self-verification, place on inspection list for FY 09-10.
9023	G	427 Bristol Ave	8/20/2008	Resident requested notification prior to inspection	Photos not submitted with self-verification, place on inspection list for FY 09-10.
9034	G	1462 Summit Ave	9/29/2008, 10/28/2008	Detention basin covered with permeable deck, in good condition, no maintenance necessary	None necessary
9034	G	1464 Summit Ave	9/29/2008, 10/28/2008	Detention basin temporarily removed for construction of deck.	Required RB to reinstall detention basin.
9034	G	1470 Summit Ave	9/29/2008, 10/28/2008	DG swale in good condition, no maintenance necessary	None necessary
9057	G	192 Pacific View Ln	9/30/2008	Vegetated infiltration area in good condition, no maintenance necessary	None necessary
9134	G	2150 Whisper Wind Ln	9/30/2008	Access needs to be requested from RP	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
9150	G	3113 Camino Del Rancho	9/30/2008	Access needs to be requested from RP	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
9253	G	701 S. Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary
9253	G	703 S. Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary
9253	G	715 S Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary
9253	G	717 S Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary

Permit No.	Permit Type	Location	Inspection Date	Inspection Results Findings	City Action
9253	G	719 S. Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary
9253	G	721 S. Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary
9283	G	1440 Hygeia Ave	8/20/2008	Inspector could not locate infiltration basin	Based on self-verification submittal BMPs are maintained and in compliance. Acquire yard access for future inspections.
9283	G	265 Sanford St	8/20/2008	Inspector could not locate infiltration basin	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
9283	G	267 Sanford St	8/20/2008	Inspector could not locate infiltration basin	Based on self-verification submittal BMPs are maintained and in compliance. Acquire yard access for future inspections.
9289	G	2914 Lone Jack Rd	9/30/2008	All treatment swales are in good condition, no maintenance required	None necessary
9289	G	2932 Lone Jack Rd	9/30/2008	All treatment swales are in good condition, no maintenance required	None necessary
9289	G	2934 Lone Jack Rd	9/30/2008	1 swale missing	Self verification submitted without photos, plance on inspection list for FY 09-10
9289	G	2944 Lone Jack Rd	9/30/2008	All treatment swales are in good condition, no maintenance required	None necessary
9294	G	477 N El Camino Real	9/10/2008	Curb inlet filter full of debris, needs maintenance all other BMPs in good condition	Based on self-verification submittal (incl photos and maintenance invoice) BMPs are maintained and in compliance. Acquire yard access for future inspections.
9318	G	1154 Evergreen Dr	8/27/2008	Yard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire yard access for future inspections.
9318	G	1156 Kava Ct	8/27/2008	No BMPs	None necessary
9318	G	1158 Evergreen Dr	8/27/2008	Yard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire yard access for future inspections.
9318	G	1160 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009
9318	G	1164 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009
9318	G	1165 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009
9318	G	1168 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009
9318	G	1169 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009

Appendix A-10: FY 2008-09 Treatment Control BMP Operation and Maintenance City Inspection Results and Findings

Permit No.	Permit Type	Location	Inspection Date	Inspection Results Findings	City Action
9318	G	1172 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009
9318	G	1173 Kava Ct	8/27/2008	rock swale in good condition	None necessary
9318	G	1176 Kava Ct	8/27/2008	rock swale in good condition	None necessary
9370	G	406 La Costa Ave	8/20/2008	Yard access needed	Based on self-verification submittal BMPs are maintained and in compliance.
9419	G	871 Neptune Ave	9/23/2008	Vegetated swale missing	Contact RP regarding missing BMP.
9459	GI	211 Saxony	10/6/2008	All BMPs in good condition, no maintenance necessary	None necessary
9580	G	3451 Dove Hollow Rd	9/29/2008	Gated drive, access needed	Self verification submitted without photos, plance on inspection list for FY 09-10

Note: Refer to Appendix A-1 (Permanent BMP Inventory) for a complete list of the BMP facilities at each inspection location.

Appendix B

Construction

B-1	Construction Inventory
B-2	Prioritized Construction Sites
B-3	Flow Chart for Inspection Frequencies
B-4	Construction Inspection Form
B-5	Erosion Control Letter
B-6	Construction Enforcement Actions

Permit		Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2008-June 30, 2009
17	GI	859-63	SECOND ST	Biannual	8	0	0	0
47	GI	1133	HERMES	Biannual	0	3	0	3
54	GI		BIRMINGHAM & MACKINNON	Biannual	0	1	0	1
58	GI	1638	EDILEE DR	Biannual	5	0	0	0
61	SI	801	ORPHEUS FIRE STA 3	Biweekly	12	8	0	8
61	SI	801	ORPHEUS FIRE STA 3	Monthly	31	6	0	6
61	GI	1552	SUMMIT AVE	Biannual	9	0	0	0
64	GI	1817	SHERIDAN	Biannual	8	1	0	1
73	GI	760	THIRD AVE	Monthly	0	0	0	0
100	GI	1646	SOMMERSET	Biannual	0	0	0	0
103	SG	1079	VULCAN	Biannual	31	2	0	2
106	GI	3358	WILDFLOWER VALLEY DR	Biweekly	6	3	0	3
112	SG	1174	HYMETTUS	Biannual	0	0	0	0
152	GI	1219	NEPTUNE AVE	Biannual	0	0	0	0
169	GI	510	ECR CHRISTIAN FELLOWSHIP	Monthly	13	3	0	3
181	GI	3342	WILDFLOWER VALLEY DR	Monthly	14	3	0	3
184	SG	2271	MONTGOMERY AVE	Biannual	31	4	0	4
185	SG	1423	RAINBOW RIDGE	Biannual	0	1	0	1
187	GI	1060	URANIA AVE	Monthly	20	6	0	6
215	GI	424	BRIGHTON AVE	Biannual	31	2	0	2
218	GI	640	RANCHO SANTA FE RD.	Biannual	0	0	0	0
220	GI	430	ANDREW	Biannual	15	0	0	0
226	GI	1319	LUX CANYON DR	Monthly	21	5	0	5
245	GI	3351	LILAC SUMMIT	Monthly	31	7	0	7
250	GI	271	DELPHINIUM ST	Biannual	31	2	0	2
266	G	735	DEL RIO	Biannual	31	3	0	3
269	SG	519	ARDEN DR.	Biannual	27	1	0	1
278	GI	3403	BUMANN RD.	Biweekly	31	15	0	15
280	GI	368	E. GLAUCUS STREET	Biannual	0	0	0	0
286	GI	2265	MANCHESTER AVE.	Biannual	0	0	0	0
302	GI	1405	SAN ELIJO AVE	Biannual	0	0	0	0
306	GI	2351	SAN ELIJO	Monthly	31	8	0	8
325	GI		LONE JACK RD	Biweekly	31	15	0	15
364	GI	115	PRINCEHOUSE LANE	Monthly	0	0	0	0
366	GI	742-744	DEWITT	Biannual	0	1	0	1
369	GI	1415	RAINBOW RIDGE	Biweekly	0	3	0	3
372	GI	1657	N. VULCAN AVE.	Monthly	0	1	0	1
385	GI	1555	CREST DRIVE	Biannual	31	2	0	2
386	GI	3535	MANCHESTER BELLMONT VILL.	Monthly	14	4	0	4
388	GI	1435	LAKE DR.	Monthly	31	8	0	8
396	GI	1408	SUMMIT AVE	Biannual	25	2	0	2
409	GI	3364	CALLE MARGARITA	Monthly	0	0	0	0
419	SG	1972	CREST	Monthly	31	7	0	7
423	GI	399	HILLCREST DRIVE	Biannual	31	2	0	2
437	GI	437	ECR - Promanade	Monthly	0	0	0	0
443	GI	1066	GARDENIA ROAD	Biannual	31	2	0	2
462	GI	70-90	A STREET	Biweekly	27	17	0	17
465	GI	1045	VIA DI FELICITA	Monthly	31	7	0	7
474	GI	763	SECOND STREET	Biannual	0	0	0	0
475	SG	986	HYGEIA	Biannual	0	1	0	1
482	GI	1864	CREST DRIVE	Monthly	31	7	0	7
483	GI	540	LA COSTA	Biweekly	0	1	0	1
493	GI	201	N. VULCAN AVE.	Biannual	0	0	0	0
497	GI	681	SECOND STREET	Biannual	31	2	0	2
501	GI	2159	GLASGOW	Biannual	0	0	0	0
538	GI	554	NEPTUNE AVE	Biannual	31	2	0	2
562	GI	1302	ENCINITAS BLVD	Monthly	0	0	0	0
563	GI	3637	COPPERCREST RD	Biweekly	18	10	0	10
570	GI	3557	LONE HILL LANE	Monthly	31	9	0	9
573	GI	408	CHESTERFIELD	Biannual	31	3	0	3
583	SG	2898	LONE JACK ROAD	Biweekly	0	3	0	3
590	GI	2126	WOODWIND Dr.	Monthly	31	8	0	8
624	GI	N / A	LONE HILL LANE	Monthly	31	7	0	7
632	GI	842	THIRD STREET	Biannual	31	5	0	5
635	GI	921	HYMETTUS	Biannual	17	1	0	1
653	SG	860	NARDO ROAD	Biannual	0	1	0	1
674	GI	3220	BELLA COLINA	Biweekly	31	15	0	15
675	GI	1719	SAN ELIJO	Biannual	31	2	0	2
679	SG	1627	CAUDOR	Biannual	31	2	0	2
692	GI	1435	RAINBOW RIDGE	Biweekly	0	3	0	3
698	GI	1075	CORNISH DRIVE	Biannual	31	5	0	5
704	GI	230	QUAIL GARDENS	Biweekly	31	19	0	19
705	GI	3354	WILDFLOWER VALLEY DR	Biweekly	31	15	0	15
713	GI	3003	WILDFLOWER VALLEY DR	Biweekly	31	15	0	15
716	GI	662	ENCINITAS BLVD. QUAIL GARDEN	Biweekly	30	19	0	19
718	GI	687	S. COAST HIGHWAY 101	Biweekly	31	16	0	16
719	GI	389	REQUEZA STREET	Monthly	7	1	0	1
726	SG	1596	AVE DE LOS LIRIOS	Biannual	26	1	0	1
760	GI	825	DEWITT	Biannual	0	0	0	0
762	II	1077	CREST DRIVE	Biannual	0	0	0	0

Permit		Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2008-June 30, 2009
765	GI	2234	ENCINITAS BLVD	Monthly	0	1	0	1
767	GI	911	CORNISH DRIVE	Biannual	31	3	0	3
779	SG	3180	NARCISSUS SUMMIT	Biweekly	0	0	0	0
789	GI	2011-89	SAN ELIJO AVE	Monthly	5	3	0	3
819	II	1349	RAINBOW RIDGE	Biannual	0	0	0	0
831	GI	365	SUNSET DRIVE	Biannual	31	2	0	2
842	GI	2416	MONTGOMERY AVE	Monthly	31	7	0	7
857	SG	1252	RUBENSTEIN	Biannual	31	2	0	2
877	GI	816	WOOD DR.	Biannual	31	2	0	2
883	GI	1058/1076	HYMETTUS	Monthly	31	6	0	6
886	GI	1084 & 1086	NEPTUNE AVE	Monthly	31	7	0	7
926	SG	234	RANCHO SANTA FE RD.	Monthly	0	2	0	2
927	GI	1566	RUBENSTEIN	Biannual	31	2	0	2
943	GI	211	SAXONY RD	Monthly	15	3	0	3
952	GI	1866	SHERIDAN	Biannual	31	2	0	2
973	SG	838	FOURTH STREET	Biannual	31	2	0	2
983	GI	1320	ENCINITAS BLVD	Monthly	31	7	0	7
1001	GI	342	HILLCREST DRIVE	Biannual	31	2	0	2
1015	SG	3255	FORTUNA RANCH ROAD	Biannual	31	2	0	2
1469	GI	1555	BELLA VISTA	Monthly	14	7	0	7
1533	GI	1098	HYMETTUS	Biannual	31	2	0	2
6391	GI	1365	TRABERT RANCH ROAD	Biannual	0	1	0	1
7601	GI	1255	BIRMINGHAM	Monthly	0	7	0	7
7604	GI	125	CHESTERFIELD	Biannual	0	0	0	0
7628	GI	235	LA COSTA	Biweekly	3	1	0	1
7791	GI	1769	ARCO GAS 1769 HWY 101	Biannual	14	0	0	0
7800	GI	3542	JASMINE CREST	Monthly	0	2	0	2
7893	GI	600	PIRAEUS &PLATO	Monthly	0	1	0	1
9028	GI	1050	REGAL RD	Biannual	0	0	0	0
9048	GI	235	LA COSTA	Monthly	7	1	0	1
9080	GI	1455	SAN ELIJO	Biannual	25	1	0	1
9103	GI	115	VERDI AVE	Biannual	31	2	0	2
9106	GI	Vacant lot	NORTH VULCAN AVE	Monthly	0	1	0	1
9117	GI	236/268	ANDREW	Monthly	0	2	0	2
9126	GI	3400	JASMINE CREST	Monthly	0	0	0	0
9128	GI	240	LA VETA	Biannual	0	0	0	0
9137	GI	907	BRACERO RD	Biannual	21	0	0	0
9156	GI	736	FOURTH	Monthly	0	0	0	0
9164	GI		HERITAGE - see 6287	Biweekly	0	0	0	0
9177	GI	740	CORNISH	Biannual	2	0	0	0
9180	GI	1610	NEPTUNE	Biannual	10	1	0	1
9262	GI	800	BLK BRACERO RD	Monthly	0	1	0	1
9263	GI	1655	BURGUNDY ROAD	Biannual	6	0	0	0
9267	GI	1926	OXFORD	Biannual	0	1	0	1
9278	GI		OFF LONE HILL LN	Monthly	31	7	0	7
9286	GI	2477 & 2483	OXFORD	Biannual	26	1	0	1
9300	GI	3373	CALLE MARGARITA	Monthly	7	3	0	3
9303	GI	887	BRITTANY	Monthly	0	1	0	1
9336	GI	290	ANDREW	Monthly	0	1	0	1
9367	GI	781	GARDENVIEW CT	Biannual	0	0	0	0
9435	GI	614	OCEAN VIEW AVE	Biannual	31	2	0	2
9481	GI	500	QUAIL GARDENS	Biweekly	0	2	0	2
9482	GI	1635	GASCONY	Biannual	31	3	0	3
9488	GI	2414/2416	NEWPORT	Monthly	0	0	0	0
9512	GI	422	ANDREW AVE.	Biannual	0	0	0	0
9561	GI	303	SANTA FE DR	Biannual	31	2	0	2
9576	GI	843	SAN DIEGUITO DRIVE	Biannual	0	2	0	2
10015	GI	1309-1311	CORNISH DRIVE	Biannual	31	2	0	2
10056	GI	2898	LONE JACK RD	Biannual	0	0	0	0
49-SI/CMS00D	CIP		LEUCADIA BLVD ROUNDABOUTS	Biweekly	0	0	0	0
			FY 2008-09 TOTAL INSPECTIONS			**440**	**0**	**440**

Appendix B-2 Prioritized Construction Sites

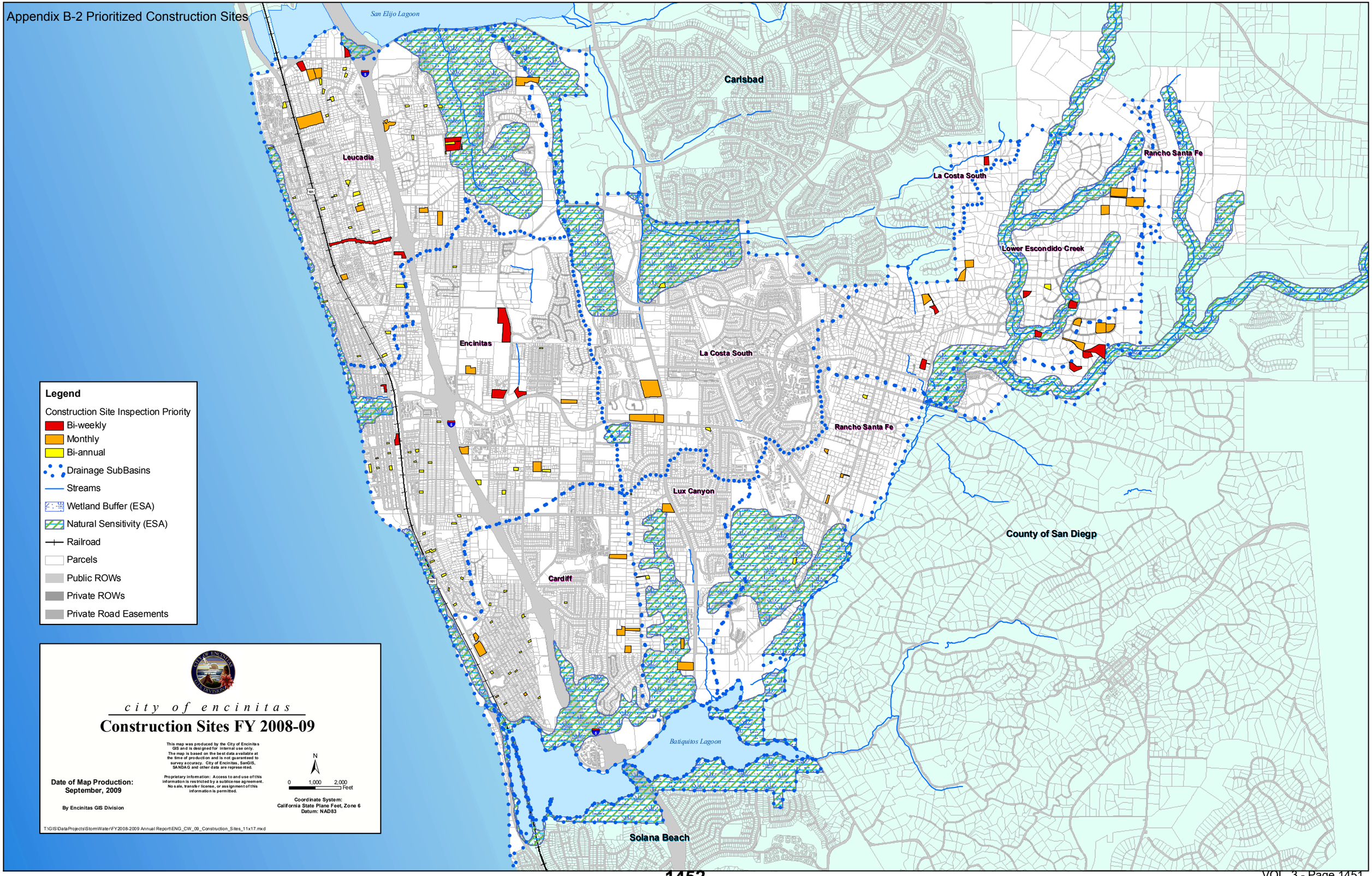

GIS Script Process for Determining Construction Project Inspection Frequencies

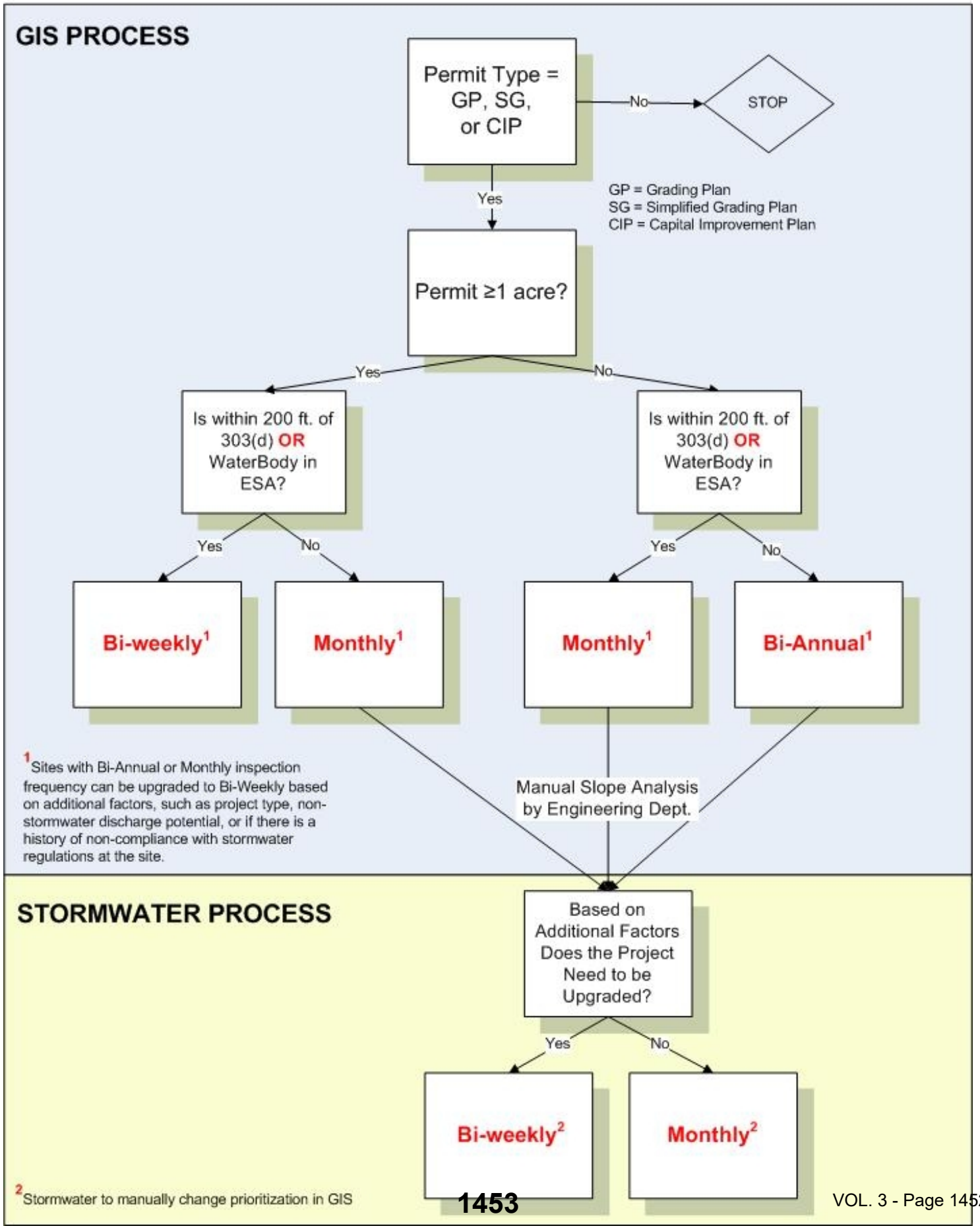

CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Construction Activities

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

Property Address: _____ Inspection Date: _____

Contact Person: _____ Permit No: _____

Phone Number: _____ Project Size: _____

Site Status: ❒ Active ❒ Inactive ❒ First Inspection ❒ Final Sign-Off Date ___/___/___

Inspection Frequency: ❒ Bi-Weekly ❒ Monthly ❒ Bi-Annual ❒ Post-Rain Event

State General Construction Permit? ❒ Yes ❒ No WDID _____

Is Project SWPPP on Site? ❒ Yes ❒ No SWPPP Maintenance Required? ❒ Yes ❒ No

MINIMUM BEST MANAGEMENT PRACTICE (BMP) REQUIREMENTS		BMP INSTALLATION REQUIRED	BMP REQUIRES MAINTENANCE	OTHER CORRECTIVE ACTIONS REQUIRED
A. Erosion Control BMPs				
1	Slope ☐Soil Stabilization			
2	Silt Fencing			
3	Check Dams ☐Rip Rap			
4	Fiber Rolls			
5	Permanent Landscaping			
6	Preserving Existing Vegetation			
7	Diversion Channel for Run-On			
8	Other:			
B. Sediment Control BMPs				
1	Storm Drain Inlet Protection			
2	Detention Basin ☐Desilting Basin			
3	Perimeter Protection			
4	Stabilized Construction Entrance ☐Exit			
5	Other:			
C. Materials Management BMPs				
1	Stockpile Management			
2	Material Washout Area			
3	Equipment Storage			
4	Trash, Litter, Debris Management			
5	Designated Washout Area(s)			
6	Sanitary Waste Area Management			
7	Fuel ☐Chemical Storage			
8	Other:			

Corrective Actions: ❒ Correct Work (*See Comments*) ❒ No Follow-Up Actions Required

❒ Referred to the Clean Water Program ❒ Stop Work/NOV

Comments:_____

_____

_____

_____

Corrective Actions identified above must be addressed, to the satisfaction of the City Inspector, within _____ days from the date above OR prior to the next predicted rain event. Failure to comply by this date may result in further enforcement action by the City of Encinitas.

Inspector (Signature) _____ Date ___/___/___

Received By (Signature) _____ Date ___/___/___

COPY DISTRIBUTION White – Responsible Party Yellow – City Inspector Pink – File REVISED 10/01/08

City of Encinitas

September 18, 2008

RE: **SEDIMENT AND EROSION CONTROL**

City of Encinitas Permit Holder:

Please be advised that starting October 1, 2008, and continuing through April 30, 2009, the City will enter into the official wet season as defined by the State Water Resources Control Board. As such, all construction projects (active or inactive) are required to implement sediment and erosion control Best Management Practices (BMPs) to prevent the discharge of sediment and non-stormwater into the stormwater conveyance system and local water bodies.

Attached please find a letter issued by the San Diego Regional Water Quality Control Board (SDRWQCB) which identifies the need for rainy season preparation through the installation of appropriate sediment and erosion control measures and general site cleanup. Further note the intent of this regulatory agency to enhance monitoring and evaluation of construction activities throughout the San Diego Region, including the City of Encinitas.

Ultimately, for permit holders within the City of Encinitas, the wet season brings with it a responsibility for erosion and sediment control pursuant to **Section 23.24.370 - Wet Season Work** of the City of Encinitas Municipal Code. This section states the following:

A. No grading permit shall be issued for work occurring between October 1st of any year and April 30th of the following year, unless the plans for such work include details of protective measures, including desilting basins or other temporary drainage or control measures, or both, as may be deemed necessary by the field inspector to protect adjoining public and private property from damage by erosion, flooding, or the deposition of mud or debris which may originate from the site or result from such grading operations.

B. If grading is begun prior to October 1st, all protective measures shall be installed prior to October 1st. If grading is begun on or after October 1st, all protective measures shall be installed before grading is begun. All protective measures shall be maintained in good working order until April 30th of the succeeding year, where grading is done between October 1st and December 31st, or until April 30th of the same year where grading is done between January 1st and April 30th, unless their removal at an earlier date is approved by the City Engineer.

C. Where a grading permit is issued and the work is commenced after April 30th and before September 15th of any year, and the permit was issued without an Interim Erosion and Sediment Control Plan, and it appears that the grading and installation of the permanent drainage devices as authorized by the permit will not be completed prior to October 1, then on or before September 15th, the owner of the site on which the grading is being performed shall file or cause to be filed with the City Engineer an Interim Erosion and Sediment Control Plan as provided for in this Chapter and shall implement the measures contained in the approved plan by October 1. The plan check fee for the Interim Erosion and Sediment Control Plan shall be paid at the time of plan submittal and shall be in the amount provided for in this Chapter.

D. For continuation of grading activities, other than installation, maintenance, or repair of measures on the Erosion Control Plans, during the wet season, Permittee must apply for and receive, every seven days, special permission to proceed.

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

E. The City Engineer shall grant permission under this section on the basis of weather forecasts, site conditions, experience, and other pertinent factors which indicate the activity may commence or continue without excessive erosion occurring.

F. Should the Permittee fail to submit the plans, fail to provide the protective measures, or fail to obtain permission for wet season activities as required by this Chapter by the dates specified therein, it shall be deemed that a default has occurred under the conditions of the grading permit security. Thereupon the City Engineer may enter the property for the purpose of installing, by City forces or by other means, the drainage and erosion control devices shown on the approved plans, or if there are not approved plans, as he may deem necessary to protect adjoining property from storm damage, or the City Engineer may cause the owner of the site to be prosecuted as a violator of this code, or he may take both actions.

G. The City Engineer shall have the authority to require implementation of all erosion control systems and requirements at any time of the year.

23.24.380 - Erosion Control System.

A. The faces of cut and fill slopes and project site shall be prepared and maintained to control against erosion in accordance with this Chapter. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted upon approval by the City Engineer.

B. Paved streets, sidewalks, and other improvements shall be maintained in a neat and clean condition free of loose soil, construction debris and trash. Street sweeping or other equally effective means shall be used on a regular basis to prevent storm flows from carrying sediment and debris outside the project boundaries. Watering shall not be used to clean streets except for fine material not otherwise removed by sweeping or other mechanical means.

C. The registered civil engineer who prepared the grading plan and designed the erosion control devices shall be responsible for modification of the design of devices, as necessary, during the rainy season.

D. Desilting facilities shall be provided at drainage outlets from the graded site.

E. Desilting basins shall be designed in accordance with City standards. Permanent desilting facilities shall be designed and constructed as to be aesthetically compatible with the surrounding development and terrain.

F. Desilting basins constructed of compacted earth shall be compacted to a relative compaction of ninety (90) percent of maximum density. A soil engineering report, prepared by the soil engineer, which includes the type of field testing performed, location, and results of testing shall be submitted to the City Engineer for approval upon completion of the desilting basins.

G. Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available onsite and stockpiled at convenient locations to facilitate rapid construction of temporary device when rain is imminent.

H. Erosion protection shall consist of effective planting of all cut slopes in excess of five (5) feet high and fill slopes more than three (3) feet high unless otherwise approved by the City Engineer. Slopes exceeding five (5) feet high will require an approved sprinkler system, as determined by the City Engineer.

I. Protection for the slopes shall be installed as soon as practicable which may be prior to rough grade approval. Effective planting shall be installed, fully germinated, and effectively cover the required slopes prior to final approval unless otherwise approved by the City Engineer.

J. The erosion control provisions shall take into account drainage patterns during the current and future phases of grading throughout the rainy season.

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K. All removable protective devices shown shall be in place at the end of each working day when the five (5) day rain probability forecast exceeds forty (40) percent.

L. Unvegetated slopes shall be protected in accordance with the guidelines set forth by the Erosion and Sediment Control Manual or in accordance with other requirements set forth by the City Engineer.

23.24.390 - Erosion Control Maintenance.

A. After each rainstorm exceeding 1/4-inch in a 12 hour period, silt and debris shall be removed from all temporary check berms and desilting basins and the basins pumped dry. The requirement to clean and pump permanent desilting basins will be addressed on a case by case basis.

B. After each rainstorm, the performance of the erosion control system shall be evaluated and revised and repaired as necessary.

C. Devices shall not be moved or modified without the approval of the City Engineer.

D. The contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a threat to public health, safety, and welfare.

E. The contractor and Permittee or project owner shall be responsible for continual maintenance of the devices during the rainy season. In the event of failure or refusal by the contractor, Permittee, or project owner to properly maintain the devices, the City Engineer may cause emergency maintenance work to be done to protect adjacent private and public property. The cost shall be charged to the owner and shall include an initial mobilization cost plus the cost of doing the work as provided for in this Chapter.

F. In the event the City Engineer must cause emergency maintenance work to be done, he may revoke the grading permit in writing. The permit shall not be renewed until an erosion control system approved by the City Engineer is installed and a fee of one-half the amount required for the original permit paid by the owner. The City Engineer may waive installation of an erosion control system after April 30.

G. If any grading subject to the provisions of this Chapter has commenced on private property without a valid grading permit, the property owner will be required to prepare and implement an erosion control plan which has been approved by the City Engineer. In the event of failure by the property owner to install an approved erosion control system, the City Engineer may cause emergency work to be done to protect adjacent private and public property.

The full text of the Municipal Code can be accessed on the City's website at http://www.cityofencinitas.org.

Please address any questions regarding this work to your City of Encinitas Engineering Inspector.

Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

Cc: City of Encinitas Engineering Inspectors

Encl: SDRWQCB letter to all San Diego County Copermittees on August 25, 2008

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

Appendix B-6 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
10/7/08	1045 Via Di Felicita	BMP Maintenance Required	X						X	
10/7/08	1319 Lux Canyon	BMP Maintenance Required	X						X	
10/7/08	1972 Crest Dr.	BMP Installation Required	X						X	
10/7/08	2351 San Elijo Ave	BMP Installation & Maintenance Req	X						X	
10/7/08	Off Lone Jack Rd.	BMP Installation Required	X						X	
10/8/08	1415 Rainbow Ridge	BMP Installation Required	X						X	
10/8/08	1435 Rainbow Ridge	BMP Installation Required	X						X	
10/8/08	2126 Woodwind Dr	BMP Installation Required	X						X	
10/8/08	3220 Bella Colina	BMP Installation Required	X						X	
10/8/08	510 S El Camino Real	BMP Installation Required	X						X	
10/8/08	687 S Coast Hwy 101	BMP Installation Required	X						X	
10/13/08	1408 Summit	BMP Installation & Maintenance Req	X						X	
10/16/08	1435 Lake Dr.	BMP Installation Required	X						X	
10/21/08	3342 Wildflower Valley Dr	BMP Installation Required	X						X	
10/21/08	3351 Lilac Summit	BMP Installation Required	X						X	
10/22/08	3220 Bella Colina	BMP Installation Required	X						X	
10/22/08	3358 Wildflower Valley Dr	BMP Installation Required	X						X	
10/23/08	1084-1086 Neptune Ave	BMP Installation & Maintenance Req	X						X	
10/23/08	1555 Bella Vista	BMP Installation & Maintenance Req	X						X	
10/23/08	3535 Manchester Ave	BMP Maintenance Required	X						X	
10/24/08	2416-2424 Montgomery	BMP Installation Required	X						X	
11/6/08	1320 Encinitas Blvd	BMP Installation Required	X						X	
11/6/08	1415 Rainbow Ridge	BMP Installation Required	X						X	
11/6/08	1435 Rainbow Ridge	BMP Installation Required	X						X	
11/19/08	1555 Bella Vista	BMP Installation & Maintenance Req	X						X	
11/19/08	687 S Coast Hwy 101	BMP Installation Required	X						X	
11/24/08	2416-2424 Montgomery	BMP Maintenance Required	X						X	
11/25/08	1084-1086 Neptune Ave	BMP Maintenance Required	X						X	
11/25/08	408 Chesterfield Dr.	BMP Maintenance Required	X						X	
12/4/08	687 S Coast Hwy 101	BMP Maintenance Required	X						X	
12/17/08	816 Wood Dr	BMP Installation Required	X						X	
12/23/08	1320 Encinitas Blvd	BMP Maintenance Required	X						X	
12/29/08	742-744 Dewitt	BMP Installation Required	X						X	
12/30/08	3535 Manchester Ave	BMP Maintenance Required	X						X	
12/30/08	801 Orpheus Ave	BMP Installation Required	X						X	
1/13/09	2271 Montgomery Ave	BMP Maintenance Required	X						X	
1/21/09	2271 Montgomery Ave	BMP Installation & Maintenance Req	X						X	
1/29/09	1320 Encinitas Blvd	BMP Maintenance Required	X						X	
1/29/09	687 S Coast Hwy 101	BMP Maintenance Required	X						X	
2/3/09	1066 Gardena Rd.	BMP Maintenance Required	X						X	

Appendix B-6 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
2/4/09	271 Delphinium St.	BMP Installation Required	X						X	
2/5/09	1079 Vulcan Ave	BMP Installation Required	X						X	
2/5/09	801 Orpheus Ave	BMP Installation & Maintenance Req	X						X	
2/9/09	303 Santa Fe Dr	BMP Installation Required	X						X	
2/9/09	365 Sunset Dr	BMP Installation & Maintenance Req	X						X	
2/13/09	801 Orpheus Ave	BMP Installation Required	X						X	
2/18/09	687 S Coast Hwy 101	BMP Maintenance Required	X						X	
2/26/09	1320 Encinitas Blvd	BMP Maintenance Required	X						X	
2/26/09	801 Orpheus Ave	BMP Installation Required	X						X	
3/11/09	1320 Encinitas Blvd	BMP Maintenance Required	X						X	
3/12/09	687 S Coast Hwy 101	BMP Maintenance Required	X						X	
4/7/09	2416-2424 Montgomery	BMP Maintenance Required	X						X	
4/7/09	3220 Bella Colina	BMP Installation Required	X						X	
4/7/09	687 S Coast Hwy 101	BMP Installation Required	X						X	
4/8/09	1320 Encinitas Blvd	BMP Maintenance Required	X						X	
4/8/09	801 Orpheus Ave	BMP Installation Required	X						X	
4/23/09	1320 Encinitas Blvd	BMP Installation Required	X						X	
4/23/09	801 Orpheus Ave	BMP Maintenance Required	X						X	
4/27/09	1566 Rubenstein	BMP Maintenance Required	X						X	
12/18/09	3220 Bella Colina	BMP Maintenance Required	X						X	
12/30/09	Birmingham & Mackinnon	BMP Installation Required	X						X	
2/19/09	687 S Coast Hwy 101	BMP Maintenance Required	X						X	
7/1/08	820 Birmingham	BMP Maintenance Required	X							X
11/26/08	1307 Cornish Dr.	BMP Installation Required	X							X
11/26/08	408 Chesterfield Dr.	BMP Installation Required	X			X	CW112608			X
12/15/08	801 Orpheus Ave	BMP Installation Required	X							X
1/7/09	90 N Coast Hwy 101	BMP Installation Required	X							X
1/22/09	2271 Montgomery Ave	BMP Maintenance Required	X							X
2/27/09	801 Orpheus Ave	BMP Installation Required	X			X	CW022709			X
12/17/08	801 Orpheus Ave	BMP Installation Required				X	CW121708			X
		Totals	**69**			**3**			**62**	**8**

Appendix C

Municipal

C-1 Municipal Inventory

C-2 Municipal Activities Report

C-3 Municipal BMP Map

C-4 Special Events Permit P2 Questionnaire

C-5 Approved Special Events in FY 08-09

C-6 Routine Inspections Summary Table

	Facility Name	Address	Land Use/Activities	Tributary to a 303(d) Impaired Water Body	Inspection Priority	Sub-basin
1	"A" TANK SITE	355 SANTA FE	Tank storage site/municipal yard	NOT TRIBUTARY	High Priority	Encinitas
2	BEACON'S BEACH	700 NEPTUNE	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
3	CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Administrative offices/municipal yard/vehicle maintenance/materials storage	NOT TRIBUTARY	High Priority	Encinitas
4	CARDIFF SPORTS PARK	1623 LAKE	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
5	CARDIFF SPORTS PARK EXPANSION	1623 LAKE	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
6	COTTONWOOD CREEK PARK	95 N. VULCAN	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
7	ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DR	Golf course	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
8	ENCINITAS VIEWPOINT	CORNISH DRIVE & D STREET	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
9	GLEN PARK	2149 ORINDA	Park/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
10	GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
11	H STREET VIEWPOINT	498 H STREET	Vista point	NOT TRIBUTARY	High Priority	Encinitas
12	HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
13	J STREET VIEWPOINT	398 J STREET	Vista point/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
14	LAS VERDES PARK	PASEO DE LAS VERDES & QUAIL GARDENS DR.	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
15	LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
16	LEUCADIA OAKS PARK	1511 N. VULCAN	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
17	LEUCADIA ROADSIDE PARK	860 COAST HIGHWAY 101	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
18	LITTLE OAKS EQUESTRIAN PARK	2879 LONE JACK	Park/horse corral/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek
19	MILDRED MACPHERSON PARK	1045 VULCAN	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
20	MOONLIGHT BEACH	400 B STREET	Beach access/park/landscaped area/parking lot	TRIBUTARY TO PACIFIC OCEAN SHORELINE	High Priority	Encinitas
21	MS4	CITY WIDE	MS4	TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
22	OAKCREST PARK	555 BALOUR	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
23	ORPHEUS PARK	482 ORPHEUS	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
24	PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
25	REQUEZA STREET FACILITY	397 REQUEZA	Municipal yard/sediment/materials storage	NOT TRIBUTARY	High Priority	Encinitas
26	ROADS, STREETS AND HIGHWAYS	CITY WIDE		TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
27	CITY OF ENCINITAS WASTEWATER COLLECTIONS DIVISION MUNICIPAL YARD	2695 MANCHESTER AVE	Municipal yard	NOT TRIBUTARY	High Priority	Cardiff
28	SCOTTS VALLEY PARK	1602 WILLOWHAVEN	Park/landscaped areas	TRIBUTARY TO ENCINITAS CREEK	High Priority	La Costa South
29	SPECIAL EVENTS	CITY WIDE	Recreational facilities, parks, landscaped areas, roads, streets and highways	MAY BE TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
30	SUN VISTA	2011 AVNDA LA POSTA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
31	SWAMI'S BEACH	1298 COAST HIGHWAY 101	Beach access/parking lot	NOT TRIBUTARY	High Priority	Encinitas
32	WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek/Ranch Santa Fe
33	CARDIFF PUMP STATION	2690 MANCHESTER	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
34	CIVIC CENTER	505 S VULCAN AVE.	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	Encinitas
35	COMMUNITY/SENIOR CENTER	1140 OAKCREST PARK DR	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	La Costa South
36	D STREET VIEWPOINT	450 D STREET	Beach access and vista point	TRIBUTARY TO PACIFIC OCEAN SHORELINE	Low Priority	Encinitas
37	FIRE STATION 1	415 2ND	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
38	FIRE STATION 2	1867 MACKINNON	Fire station	NOT TRIBUTARY	Low Priority	Cardiff
39	FIRE STATION 3	801 ORPHEUS AVE	Fire station	NOT TRIBUTARY	Low Priority	Leucadia
40	FIRE STATION 4	2011 VILLAGE PARK	Fire station	NOT TRIBUTARY	Low Priority	La Costa South
41	FIRE STATION 5	540 BALOUR DR	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
42	HALL PROPERTY	1451 STARLIGHT DR	Undeveloped park site	NOT TRIBUTARY	Low Priority	Cardiff
43	HIGHWAY 101 PUMP STATION	S. COAST HIGHWAY 101	Pump station		Low Priority	
44	I STREET VIEWPOINT	4981 I STREET	Vista point	NOT TRIBUTARY	Low Priority	Encinitas
45	INDIAN HEAD CANYON	0 QUAIL HOLLOW	Undeveloped park site	NOT TRIBUTARY	Low Priority	Leucadia
46	OLIVENHAIN PUMP STATION	MANCHESTER/I-5	Pump Station		Low Priority	
47	PUMP STATION	2690 MANCHESTER	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
48	SAN DIEGUITO WATER DISTRICT		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
49	SAN DIEGUITO WATER DISTRICT		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	Encinitas
50	SAN DIEGUITO WATER DISTRICT		Water recycling reservoir	NOT TRIBUTARY	Low Priority	Encinitas
51	SAN DIEGUITO WATER DISTRICT		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Encinitas
52	SAN DIEGUITO WATER DISTRICT		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Cardiff
53	SAN ELIJO BLUFFS PARCELS	1400 COAST HIGHWAY 101	Undeveloped site	NOT TRIBUTARY	Low Priority	Encinitas
54	STANDARD PACIFIC PARK SITE	OLYMPUS / PIRAEUS	Undeveloped site	NOT TRIBUTARY	Low Priority	Leucadia
55	STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach access and vista point	NOT TRIBUTARY	Low Priority	Leucadia
56	UV TREATMENT FACILITY	305 THIRD ST.	UV Treatment Facility	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas

***Note: The San Diegito Water District's facility addresses have been omitted for security purposes.**

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
1.	Report on updates to the municipal inventory and prioritization (J.3.a.(3)(c)i).	July 1, 2008-June 30, 2009		See Appendix C-1
2.	Confirmation that the designated BMPs were implemented, or required to be implemented for: municipal areas and activities (J.3.a.(3)(c)ii).	July 1, 2008-June 30, 2009		See Sections 4.2.3, 4.3.3, 4.4.3, 4.5.3 and 4.6.3
3.	Confirmation that the designated BMPs were implemented, or required to be implemented for: special events (J.3.a.(3)(c)ii).	July 1, 2008-June 30, 2009		See Section 4.7.3
4.	A description of inspections and maintenance conducted for municipal treatment controls-Municipal Filter Inserts (J.3.a.(3)(c)iii).	July 1, 2008-June 30, 2009		See Section 4.4.4.1
5.	A description of inspections and maintenance conducted for municipal treatment controls-UV Treatment Facility (J.3.a.(3)(c)iii).	July 1, 2008-June 30, 2009		See Section 4.4.4.1
6.	Identification of the total number of catch basins and inlets (J.3.a.(3)(c)iv).	July 1, 2008-June 30, 2009		1632
7.	Identification of the number of catch basins and inlets **inspected** (J.3.a.(3)(c)iv).	July 1, 2008-June 30, 2009		1547

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
8.	Identification of the number of catch basins and inlets found with accumulated waste exceeding 33% of design capacity ((J.3.a.(3)(c)iv).	July 1, 2008-June 30, 2009	All inlets and catch basins within the City are inspected on an annual basis, which is sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris.	0
9.	Identification of the number of catch basins and inlets **cleaned** (J.3.a.(3)(c)iv).	July 1, 2008-June 30, 2009		1547
10.	Identification of total distance (miles) of the MS4 (J.3.a.(3)(c)v).	July 1, 2008-June 30, 2009		61 miles of pipe
11.	Identification of distance of the MS4 **inspected** (J.3.a.(3)(c)v)**.**	July 1, 2008-June 30, 2009		57.6 miles of pipe
12.	Idenitification of distance of the MS4 found with accumulated waste exceeding cleaning criteria (J.3.a.(3)(c)v).	July 1, 2008-June 30, 2009		0
13.	Identification of distance of the MS4 **cleaned** (J.3.a.(3)(c)v)**.**	July 1, 2008-June 30, 2009		4.8 miles of pipe
14.	Identification of total distance (miles) of open channels (J.3.a.(3)(c)vi).	July 1, 2008-June 30, 2009		3.35 miles

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
15.	Identification of distance of open channels **inspected** (J.3.a.(3)(c)vi).	July 1, 2008-June 30, 2009		6.32 miles
16.	Identification of distance of open channels found with anthropogenic litter (J.3.a.(3)(c)vi).	July 1, 2008-June 30, 2009		0
17.	Identification of distance of open channels **cleaned** (J.3.a.(3)(c)vi).	July 1, 2008-June 30, 2009		.24 miles
18.	Amount of waste and litter (tons) removed from catch basins (J.3.a.(3)(c)vii).	July 1, 2008-June 30, 2009	This result includes the amount of waste and litter removed from both catch basins and inlets by the City's Public Works Department.	64.4 tons
19.	Amount of waste and litter (tons) removed from inlets (J.3.a.(3)(c)vii).	July 1, 2008-June 30, 2009	This result includes the amount of waste and litter removed from the 57 storm drain filter inserts that are located within 35 inlets and are maintained by a City contractor.	2.8 tons
20.	Amount of waste and litter (tons) removed from the open channels (J.3.a.(3)(c)vii).	July 1, 2008-June 30, 2009		223.02 tons
21.	Amount of waste and litter (tons) removed from the MS4 (J.3.a.(3)(c)vii).	July 1, 2008-June 30, 2009	This includes the total amount of waste and litter removed from City's catch basins, inlets and open channels.	290.22 tons

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
22.	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification of the finding (J.3.a.(3)(c)viii).	July 1, 2008-June 30, 2009		None
23.	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented or required to be implemented for municipal areas and activities (J.3.a.(3)(c)ix).	July 1, 2008-June 30, 2009		See Section 4.3.3.1
24.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating the **highest** volumes of trash and/or debris (J.3.a.(3)(c)x).	July 1, 2008-June 30, 2009		84 curb miles
25.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)x).	July 1, 2008-June 30, 2009	See Section 4.2.4	Weekly
26.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **moderate** volumes of trash and/or debris (J.3.a.(3)(c)xi).	July 1, 2008-June 30, 2009		92 curb miles
27.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xi).	July 1, 2008-June 30, 2009	See Section 4.2.4	Twice a month
28.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **low** volumes of trash and/or debris (J.3.a.(3)(c)xii).	July 1, 2008-June 30, 2009		280 curb miles

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
29.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xii).	July 1, 2008-June 30, 2009	See Section 4.2.4	Monthly
30.	Identification of the total distance of curb-miles swept (J.3.a.(3)(c)xiii).	July 1, 2008-June 30, 2009		9,936 miles
31.	Identification of the number of municipal parking lots (J.3.a.(3)(c)xiv).	July 1, 2008-June 30, 2009		11
32.	Identification of the number of municipal parking lots swept (J.3.a.(3)(c)xiv).	July 1, 2008-June 30, 2009		11
33.	Identification of the frequency of sweeping (J.3.a.(3)(c)xiv).	July 1, 2008-June 30, 2009		See Section 4.2.4
34.	Amount of material (tons) collected from street and parking lot sweeping (J.3.a.(3)(c)xv).	July 1, 2008-June 30, 2009		1,449
35.	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 (J.3.a.(3)(c)xvi).	July 1, 2008-June 30, 2009		See Section 4.5.4.1

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
36.	Identification of the number of fixed municipal sites requiring inspections (J.3.a.(3)(c)xvii).	July 1, 2008-June 30, 2009	Refer to Appendix C-1 list of all High Priority Municipal Facilities	28
37.	Identification of the number of sites inspected (J.3.a.(3)(c)xvii).	July 1, 2008-June 30, 2009		28
38.	Identification of the frequency of inspections (J.3.a.(3)(c)xvii).	July 1, 2008-June 30, 2009		Annual
39.	A description of the general results of the inspections (J.3.a.(3)(c)xviii).	July 1, 2008-June 30, 2009		See Appendix C-6
40.	Confirmation that the inspections conducted addressed all the required inspection steps and follow-ups to determine full compliance (J.3.a.(3)(c)xix).	July 1, 2008-June 30, 2009		See Appendix C-6
41.	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken (J.3.a.(3)(c)xx).	July 1, 2008-June 30, 2009		0
42.	A description of notable activities conducted to manage urban runoff from municipal areas and activities (J.3.a.(3)(c)xxi).	July 1, 2008-June 30, 2009		See Sections 4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4 and 4.7.4

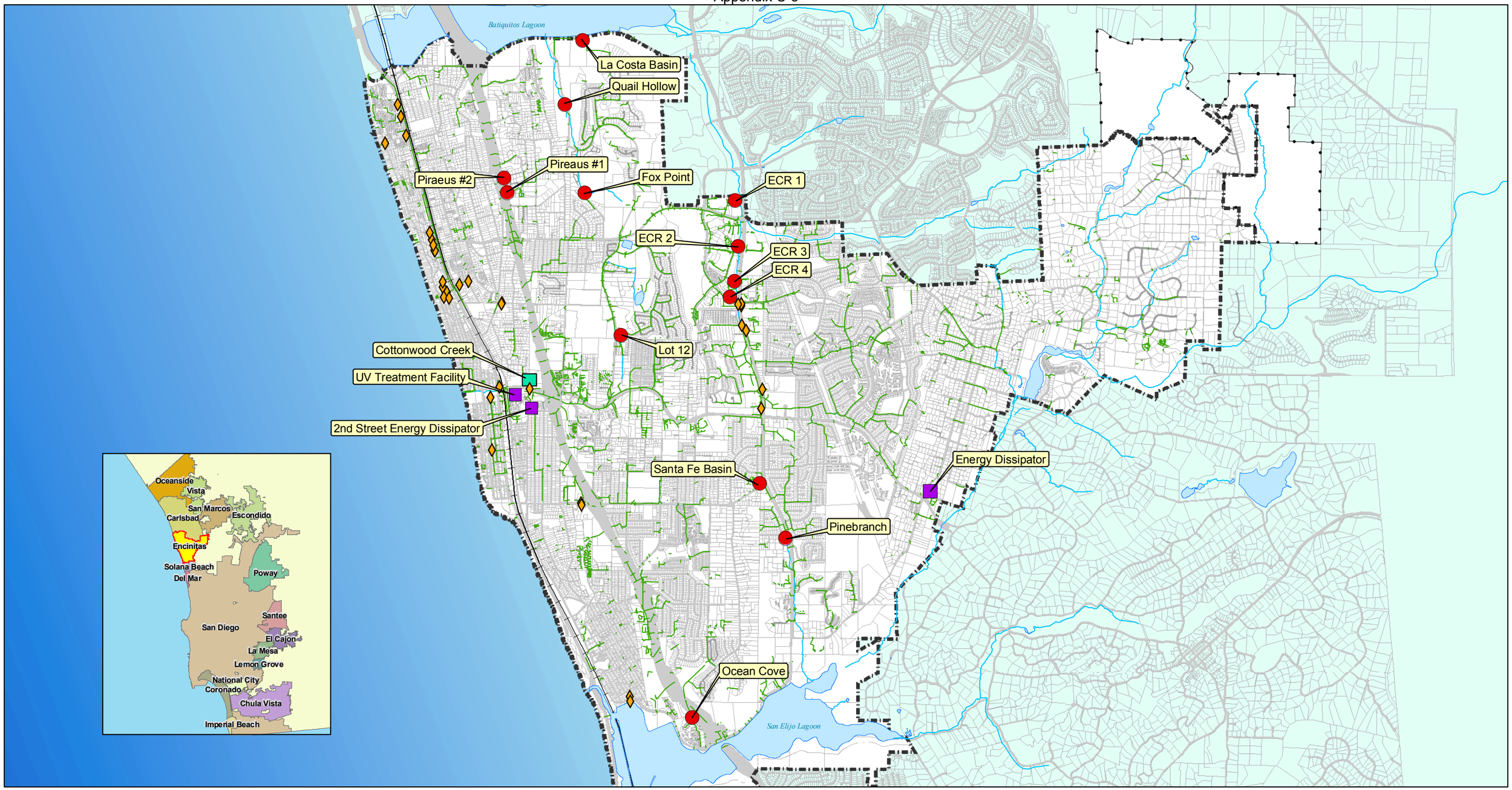

FY 2008-2009 Encinitas Municipal BMP Locations

- Storm Drain Inlet Filters
- Detention Basin
- Structural BMP
- Detention Basin, Pervious Pavement, Rock Swale, and Naturalized Channel
- Storm Drains
- Streams
- Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

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Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: September, 2009

N

0 2,500 5,000 Feet

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☐ POLLUTION PREVENTION

Storm drains are not connected to the City's sewer system. All pollutants allowed to enter the storm drain system flow directly to our beaches, ocean, lagoons, and other waterways without being treated. The City of Encinitas is required by the San Diego Regional Water Quality Control Board to report on pollution prevention measures taken at special events held throughout the City.

In the area provided on the next page or on a separate sheet of paper, please complete the following questions and describe methods of pollution prevention that will be implemented at your proposed event.

1. Describe how trash, recycling, and debris will be managed (i.e. extra bins, temporary fencing, etc.)
2. If your event will include food production, describe how excess oil and grease will be disposed of. These materials cannot be dumped into the streets or storm drain system
3. Please identify any other pollutant generating activities that may take place (i.e. portable toilets).

For questions, please call the City's Clean Water Program at (760) 633-2787.

Appendix C-5 Approved Special Events in FY 08-09

	Event	Date	Time	Location	Estimated Attendance	Clean-up Deposit required?
1	Rods and Woodies	July 17, Aug 21, Sept 18	5:30-7:30pm	Moonlight Beach (MLB)	1000	
2	Six Step House 4th of July Picnic	7/4/08	8am-5pm	Oakcrest Park	250	
3	Go Team Rally	7/13/08		Oakcrest Park	80	
4	Volcom's Blowfish Surf Series	7/19/08	8am-6:30pm	MLB/D Street	75	
5	Picnic/Rally for Judge Brandenburg	7/26/08	12-4pm	Oakcrest Park	150	
6	Solana Beach Triathlon & Duathlon	7/27/08		Hwy 101	1300	
7	Dog Day of Summer	8/9/08	10am-2pm	Aberdeen btwn Newcastle and San Elijo Ave.	1000	
8	St. John's Fiesta de las flores	Aug 15-17, 2008		1001 Encinitas Blvd	7000	
9	Taste of Main St.	8/21/08	6-9pm	Encinitas Blvd- K Street	1,000	
10	Leucadia Art Walk	8/31/08	8am-6pm	Leucadia Roadside Park	3000	
11	Challenge Walk MS	Sept 5-7, 2008		Beacon's Park, MLB, Swami's, Cardiff State Beach	350	
12	Seaside Surf Contest	9/6/08		Seaside Beach	50	
13	Wavecrest Woodies	Sept 19-20, 2008		MLB Parking lot	7500	
14	Coastal Cleanup Day	9/20/09	9am-12pm	Swami's	100	
15	Oktoberfest	9/21/08	10am-6pn	Mountain Vista Dr.	25000	□300.00
16	Kiwanis Luau Fundraiser	10/4/08		MLB	100	
17	Fire Prevention Week expo	10/4/08		MLB Parking lot	200	
18	National Scholastic Surfing Association	Oct 4-5, 2008	7am-6pm	MLB/D Street	300	
19	Leucadia Nights	10/11/08	6-9pm	Hwy 101	200	
20	Bike MS Bay to Bay Tour	Oct 11-12, 2008		Hwy 101	500	
21	MLB Run- Boys & Girls Club	10/30/08	2:30-6:30pm	MLB	400	
22	Safe Trick or Treat	10/31/008	4-9pm	Hwy 101 from D Street to K Street	2500	
23	Interscholastic Surfing Federation	Nov 1; Dec 13-14, 20-21, 2008	6am-5pm	MLB/D Street	350	
24	18th Annual Fall Festival	11/23/08	9am-4pm	Hwy 101, D to J Streets	40,000	
25	2008 Encinitas Holiday Parade	12/6/08	5-9pm	Hwy 101, D to J Streets	25000	
26	National Scholastic Surfing Association	Feb 7-8, 2009	7am-6pm	MLB	200	
27	Encinitas Chamber of Commerce Sidewalk sale	2/21/09		Citywide	1500	
28	3rd Annual Community Garage Sale	3/21/09	8am-12pm	Community Center Parking Lot	500	
29	Tour de Cure	4/18/09	6am-4pm	Mira Costa College	1,200	
30	Creek to Bay Cleanup	4/25/09	9am-12pm	MLB	100	
31	Encinitas Garden Festival	4/25/09	9am-5pm	1888 Montgomery Ave.	1,200	
32	26th Annual April Street Fair	April 25-26, 2009	9am-5pm	Hwy 101, D to J Streets	40,000	□300.00
33	Encinitas Surf Festival/Surf Contest	4/26/09	7am-5pm	D Street	180	
34	San Dieguito Alumni Event	5/9/09	8am-3pm	D Street	50	
35	Encinitas 5K/1K	5/16/09	8am	MLB	1,500	
36	S.D. Centry Bike Tour	5/16/09	6am-6pm	Mira Costa College	1,250	
37	San Dieguito Heritage Museum BBQ	5/16/09	8am-5pm	450 Quail Gardens Dr.	350	
38	MLB Paddle & Swim	May 16-17, 2009	8am	MLB	300	
39	Encinitas Sprint Triathlon	5/17/09	6:45-10:30am	MLB	1,000	□300.00
40	K-5 Surf Classic	5/23/09	8am-5pm	D Street/MLB	100	
41	Law Enforcement Torch Run	6/3/09	6-9am	Coast Hwy 101	100	
42	Encinitas Environment Day	6/7/09	10am-4pm	Cottonwood Creek Park	1,300	
43	Pet Health Expo	6/7/09	8am-1pm	City Hall Courtyard	100	
44	Encinitas Classic Car Night	6/18/09	5:30-7:30pm	682 S Coast Hwy 101	1000	
45	A Day with Dad on the Trail	6/20/09	9am-12pm	Las Verdes Park	300	
46	5th Annual Switchfoot Bro-Am	6/26/09 & 6/27/09	7am-5pm	MLB	5,000	

Appendix C-6 Routine Municipal Inspection Summary FY 2008-09

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
1	**87880**	4/20/09	City of Encinitas Requeza yard		No Corrective Actions Required			
2	**87881**	4/20/09	City of Encinitas Public Works Yard		No Corrective Actions Required			
3	**87882**	4/20/09	City of Encinitas Wastewater Collections Facility		No Corrective Actions Required			
4	**87883**	4/20/09	City of Encinitas A Tank Site		Obtain spill kit, post spill response plan See Follow up work order 87884	NO. Completed: 4/21/2009		
5	**97021**	6/8/09	Oakcrest Park		Remove leaf debris from concrete swale and DI northeast of picnic area. Clean up Excel yard- remove nursery cans, excess unused items. See Follow up work order 97025	NO. Completed: 6/18/2009		
6	**97026**	6/3/09	Paul Ecke Sports Park		No Corrective Actions Required			
7	**97027**	6/8/09	Encinitas Viewpoint Park		No Corrective Actions Required			
8	**97028**	6/8/09	Leo Mullen Sports Park		No Corrective Actions Required			
9	**97029**	6/15/09	Las Verdes Park		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
10	**97031**	6/15/09	Scott Valley Park		No Corrective Actions Required			
11	**97033**	5/20/09	Cottonwood Creek Park		Sweep dumpster enclosure per Supervisor's directions. See Follow up work order 97037	NO. Completed: 6/10/2009		
12	**97067**	6/23/09	Hawkview Park		No Corrective Actions Required			
13	**97068**	6/23/09	Leucadia Oaks Park		No Corrective Actions Required			
14	**97069**	6/10/09	Cardiff Sports Park		No Corrective Actions Required			
15	**97070**	6/10/09	Cardiff S.P. Expansion		No Corrective Actions Required			
16	**97071**	6/3/09	Little Oaks Equestrian Parks		No Corrective Actions Required			
17	**97072**	6/3/09	Wiro Park		No Corrective Actions Required			
18	**97073**	6/3/09	Sun Vista Park		No Corrective Actions Required			
19	**97074**	6/17/09	Grandview Beach		No Corrective Actions Required			
20	**97075**	6/10/09	Glen Park		No Corrective Actions Required			
21	**97076**	6/10/09	Orpheus Park		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
22	**97077**	6/10/09	Leucadia Roadside Park		No Corrective Actions Required			
23	**97078**	6/11/09	Mildred Macpherson Park		No Corrective Actions Required			
24	**97079**	6/11/09	Swami's Beach		No Corrective Actions Required			
25	**97080**	6/16/09	Moonlight Beach		No Corrective Actions Required			
26	**97081**	6/16/09	J STreet Viewpoint		No Corrective Actions Required			
27	**97082**	6/16/09	H Street Viewpoint		No Corrective Actions Required			
28	**97083**	6/17/09	Beacon's Beach		No Corrective Actions Required			

Total Municipal Inspections: 28 **Total Follow ups: 3** **Total NOVs: 0**

Appendix D

Industrial and Commercial

D-1 Stationary Commercial Inventory

D-2 Industrial Inventory

D-3 Industrial Inspection Form

D-4 Commercial Inspection Form

D-5 Routine Inspections Summary Table

D-6 Mobile Commercial Inventory

D-7 Inspection Summary Triplicate Form

No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
1	Cardiff Animal Hospital	2159 San Elijo Ave		Animal	742	Veterinary care	no	Low
2	Companion Pet Care Professionals	1466 Encinitas Blvd		Animal	753	Pet grooming service	no	Low
3	D A W G S	379 Trailview Rd		Animal	753	Pet grooming service	no	Low
4	DEBORAH PTASHNE GROOMING	2013 San Elijo Ave		Animal	753	Pet grooming service	no	Low
5	Dove Hollow Farm	1084 Double Ll Ranch Rd		Animal	752	Horse training, boarding	no	Low
6	Drake Center for Animal Health	195 N El Camino Real		Animal	742	Veterinary care	no	Low
7	GRATEFUL DOG	802 N Coast Highway 101		Animal	753	Pet grooming service	no	Low
8	Holiday Pet Hotel	551 Union St		Animal	752	Pet boarding	no	Low
9	Horses and Moore Pet Care	1060 California St		Animal	752	Horse boarding	no	Low
10	Moonlight Pet Sitting	152 N Coast Highway 101	21	Animal	752	Pet boarding	no	Low
11	North Coast Equestrian Park	1877 Olivenhain Rd		Animal	752	Horse boarding and training	yes	High
12	Puppy Love Pet Grooming	191 N El Camino Real	211	Animal	753	Pet grooming service	no	Low
13	Rancho Los Amigos Equestrian Center	3049 Camino Del Rancho		Animal	752	Horse boarding and training	no	Low
14	Santa Fe Animal Clinic	301 Santa Fe Dr	A	Animal	742	Veterinary care	no	Low
15	SIT AND STAY AWHILE PET CARE	251 Calle De Madera		Animal	742	Veterinary care	no	Low
16	Sunnybrook Farm Holistic Pet Care	812 Bracero Rd		Animal	752	Pet boarding	no	Low
17	SWEET PANDA PET CARE	1786 N Coast Highway 101	11	Animal	752	Pet boarding	no	Low
18	Sylvia's In-Home Pet Sitting	2210 Encinitas Blvd	W	Animal	752	Pet boarding	no	Low
19	The Animal Keeper	155 Saxony		Animal	752	Pet boarding	no	High
20	The Contented K-9	1711 Old Mill Ct		Animal	753	Pet grooming service	no	Low
21	The Pet Pals	3250 Country Rose Cir		Animal	753	Pet grooming service	no	Low
22	Underwater Environments	442 Rancho Santa Fe Rd		Animal	5999	Pet sales	no	Low
23	V C A North Coast Animal Hospital	414 Encinitas Blvd		Animal	742	Veterinary care	no	Low
24	Bradley Allen Auto Body	204 N Coast Highway 101		Auto Body Repair/Painting	7532	Auto body repair	no	High
25	California Body & Paint	320 N El Camino Real	F	Auto Body Repair/Painting	7532	Auto body repair	no	Low
26	Custom Cycle Creations, Inc.	304 N El Camino Real	B	Auto Body Repair/Painting	7549	Installation of interior auto parts	no	Low
27	Ding King	591 Westlake St	D	Auto Body Repair/Painting	7532	Auto body repair	no	Low
28	Fender Mender	326 N El Camino Real		Auto Body Repair/Painting	7532	Auto body repair	no	High
29	First Mission Auto Body Repair	339 N El Camino Real	B	Auto Body Repair/Painting	7532	Auto body repair	no	Low
30	Rancho Auto Body	591 Westlake St	A	Auto Body Repair/Painting	7532	Auto body repair	no	Low
31	S & Brothers Inc. Auto Upholstery	322 N El Camino Real	F	Auto Body Repair/Painting	7532	Auto upholstery repair	no	Low
32	SoCal Custom	328 N El Camino Real		Auto Body Repair/Painting	7532	Auto body repair	no	low
33	World Auto Body	140 N Coast Highway 101		Auto Body Repair/Painting	7532	Auto body repair	no	High
34	A□ Test Only Center	449 Second St		Auto Other	7549	Auto diagnostic testing center	no	Low
35	Encinitas Smog Test Only Ctr	682 S Coast Highway 101		Auto Other	7549	Auto diagnostic testing center	no	Low
36	FIC Smog	322 N El Camino Real	C	Auto Other	7549	Auto diagnostic testing center	no	Low
37	Johnathan Davis	543 Encinitas Blvd	121	Auto Other	557	Motorcycle parts retail	no	Low
38	Moonlight Auto Sales	140 N Coast Highway 101	C	Auto Other	5521	Motor vehicle dealer	no	Low
39	Road One	1205 S Coast Highway 101		Auto Other	7549	Auto towing and storage of towed cars	no	Low
40	SandToyZ 4 Less, Inc.	184 N Coast Highway 101		Auto Other	5521	Motor vehicle dealer	no	Low
41	Toolshed Equipment Rental/Rebel Rents	1900 N Coast Highway 101	A	Auto Other	7359	Equipment rental	no	High
42	Ace Cars & Vans	1244 N Coast Highway 101		Auto Repair/Maintenance	7514	Auto rental, car washing	no	Low
43	All Car CTR	140 N Coast Highway 101	Rear	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
44	Auto Zone	120 Leucadia Blvd		Auto Repair/Maintenance	5103	Auto parts supply used oil and used battery collection	no	Low
45	Boone & Associates	215 W G St		Auto Repair/Maintenance	5103	Auto repair and maintenance		Low
46	Brad's Foreign & Domestic	565 Westlake St	200C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
47	CALIFORNIA ROVER	386 Encinitas Blvd		Auto Repair/Maintenance	7538	Auto sales and maintenance	no	Low
48	Cardiff Classic	1049 S Coast Highway 101		Auto Repair/Maintenance	7549	Auto sales and cleaning	no	Low
49	Charlie's Foreign Car	751 Second St		Auto Repair/Maintenance	7538	Auto sales and maintenance	no	High

Note: All facilities are in the Carlsbad Watershed.

No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
50	Coast Brake & Wheel	444 S Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
51	Coastal Foreign Auto	320 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
52	Dan's Precision Alignment	565 Westlake St	200F	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
53	Dave's Automotive Services	591 Westlake St	E	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
54	Definitive Mobile Audio (DMA)	126 A St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
55	DISCOUNT AUTO	710 S Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
56	Discount Tire	107 N El Camino Real	A	Auto Repair/Maintenance	5103	Auto repair and maintenance	no	Low
57	El Camino Tire & Brake	330 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
58	Encinitas Automotive Repair	322 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
59	Encinitas Car Wash	293 N El Camino Real		Auto Repair/Maintenance	7542	Car wash	no	Low
60	Encinitas Ford	1424 Encinitas Blvd		Auto Repair/Maintenance	7538	Auto sales, repair and cleaning	no	Low
61	ENCINITAS FOREIGN AUTO	901 Second St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
62	Encinitas Japanese Car Specialists	328 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
63	FURGERSONS GARAGE	807 Second St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
64	HAPPY AUTO SALES	148 N Coast Highway 101		Auto Repair/Maintenance	5511	Auto sales and cleaning	no	Low
65	Harloff BMW	1302 Encinitas Blvd		Auto Repair/Maintenance	5511	Auto sales, repair and cleaning	no	High
66	Harris Radiator	274 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
67	HUGO'S EUROPEAN CAR SERVICE	110 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
68	Instant Oil Change	127 S El Camino Real	A	Auto Repair/Maintenance	7549	Lubrication service	no	Low
69	JIFFY LUBE	221 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
70	K & B Auto Service & Repair	320 N El Camino Real	D	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
71	Kragen Auto Parts	180 N El Camino Real		Auto Repair/Maintenance	5103	Auto parts	no	Low
72	Midas Mufflers	328 N El Camino Real	C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
73	Miller Tire	759 Munevar Rd		Auto Repair/Maintenance	5103	Auto parts, minor maintenance	no	Low
74	Moonlight Motors	215 Melrose Ave		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	High
75	Napa Auto Parts	523 Encinitas Blvd	100	Auto Repair/Maintenance	5103	Auto parts, used battery and used oil collection	no	Low
76	North County Jet Ski	111 C St		Auto Repair/Maintenance	5511	Personal watercraft sales and repair	no	Low
77	Olson's Hand Car Wash	127 S El Camino Real	B	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
78	Paul's Auto Electric	325 Melrose Ave		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
79	Pep Boys Manny Moe & Jack	256 N El Camino Real		Auto Repair/Maintenance	5103	Auto parts sales and used battery and used oil collection	no	Low
80	Precision Tune	318 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
81	Ray's Automotive	1051 South Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
82	Scott's Automotive	1508 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	High
83	Softspra Carwash	790 S Coast Highway 101		Auto Repair/Maintenance	7542	Car wash	no	Low
84	Speedy Tune & Brake	225 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
85	Suspension Plus	322 N El Camino Real	D	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
86	Swami's Automotive Repair	320 N El Camino Real	C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
87	Transmasters Transmissions	184 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
88	Quail Botanical Gardens	230 Quail Gardens Dr		Botanical Garden	5361	Retail garden	no	Low
89	Home Depot	1001 N El Camino Real		Building Material	5211	Retail lumber, brick, paint, and other building supplies	no	High
90	101 Diner, The	552 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
91	1st Street Bar	656 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
92	7- Eleven 18087/Moonlight Partners Inc.	105 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
93	7-11	1446 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
94	7-Eleven	2240 Encinitas Blvd	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
95	7-Eleven Food Store	592 Santa Fe Dr		Eating/Drinking Establishment	5541	Gas station, food store	no	High
96	A & M Investment/ Dba East Coast Pizza	2015 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
97	Amici Bakery	564 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
98	Angelo's Burgers	608 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High

Note: All facilities are in the Carlsbad Watershed.

No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
99	Auggies House of Crab	1468 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
100	Baja Fresh	194 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
101	Bar Leucadian	1542 N Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
102	Baskin Robbins	441 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
103	Beach City Cafe	102 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
104	Beach Grass Cafe	1476 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
105	Beach House Restaurant	2530 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
106	Beach Tea House	1076 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
107	Beachside Bar and Grill	806 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
108	Bety's Mexican Restaurant	1464 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
109	Bird House Grill	250 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
110	Blue Fin Sushi	257 N El Camino Real	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
111	Borelli's Restaurant	285 N El Camino Real	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
112	Boscinitas, Inc. (Boston's)	294 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
113	Bretts B B Q	1505 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site		High
114	Bubby's	937 S Coast Highway 101	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
115	Calypso Cafe	576 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
116	Captain Keno's	158 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
117	Cardiff Seaside Market	2087 San Elijo Ave		Eating/Drinking Establishment	5411	Grocery store	no	Low
118	Carl's Jr. 181	1137 Regal Rd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
119	Champagne Bakery	162 S Rancho Santa Fe Rd	E10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
120	Chart House, The	2588 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
121	Chick's Natural	191 N El Camino Real	107	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
122	Chili's Bar & Grill	1004 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
123	Chinatown Restaurant	118 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
124	Chin's Restaurant	625 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
125	Chipotle	268 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
126	Chuao Chocolatier	937 S Coast Highway 101	C109	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site		Low
127	Cicciotti's Trattoria Italiana	1933 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
128	Coco's 881	407 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
129	D Street Bar & Grill	485 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	High
130	Dairy Queen	1465 Encinitas Blvd	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
131	DALEY DOUBLE	546 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
132	Daphne's Greek Cafe	130 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
133	Del Taco	130 Calle Magdalena		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
134	Denny's Restaurant	135 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
135	Dippin Dots	260 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
136	Dollshie Coffee	345 S Coast Highway 101	O-2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
137	Domino's Pizza	1458 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
138	Duke's Bar	107 Diana St		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
139	E St Cafe	128 W E St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
140	Einstein Brothers Bagels	1006 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
141	El Callejon	345 S Coast Highway 101	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
142	El Nopalito	560 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
143	El Pollo Loco	1002 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
144	El Torito Market	948 N Coast Highway 101	C	Eating/Drinking Establishment	5411	Grocery store	no	High
145	El Torito Restaurant	1068 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
146	Encinitas Cafe	531 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
147	Encinitas Donut Shop	580 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
148	Encinitas Ranch Cafe & Golf School	1275 Quail Gardens Drive		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
149	Encinitas Swirls, Inc.	204 N El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
150	Encinitas Yogurt & Ice Cream	1070 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
151	Filiberto's Mexican Food	476 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
152	Firefly Grill & Wine Bar	251 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
153	FIRENZE TRATTORIA	162 S Rancho Santa Fe Rd	G10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
154	Flippin Pizza, New York Style	215 S El Camino Real	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
155	French Pastry Cafe	127 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
156	Fulanos	145 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
157	Garden State Bagels	191 N El Camino Real	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
158	Giovanni's Sandwich Shop	764 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
159	Golden Baked Hams	114 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
160	Greek American Family Restaurant	392 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
161	Gusto Trattoria	429 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
162	Harvest Ranch Market	162 S Rancho Santa Fe Rd	E50	Eating/Drinking Establishment	5411	Grocery store	no	Low
163	HENRYS FARMERS MARKET	1327 Encinitas Blvd		Eating/Drinking Establishment	5411	Grocery store	no	Low
164	Honey Baked Ham	459 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
165	Honey's Bistro & Bakery	632 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
166	Island Brother's Teriyaki	274 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
167	Islands	1588 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
168	Its A Grind Coffee House	1920 Paxton Way	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
169	J. S. Foods/Dba Burger King	242 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
170	Jack In The Box	1439 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
171	Jam Roc 101	101 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
172	Jamba Juice	272 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
173	Java Express	325 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
174	Jorge's Mexicatessan	267 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
175	Jorge's Mexicatessen	417 Santa Fe Dr	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
176	Juanita's Taco Shop	290 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
177	Juice N Java	168 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
178	Juice Stop	1042 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
179	Just Peachy	1354 N Coast Highway 101		Eating/Drinking Establishment	5411	Grocery store	no	High
180	K C'S Tandoor	1070 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
181	Kaito Restaurant	130 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
182	Karina's Taco Shop	916 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
183	Kealani's	137 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
184	Kentucky Fried Chicken	266 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
185	Kim's Vietnamese & Chinese Restaurant	745 S Coast Highway 101	103	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
186	Ki's Juice Bar	2591 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
187	Kona Coffee Hut	230 Quail Gardens Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
188	Kotija Jr. Taco Shop	852 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
189	Kraken	2531 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
190	L & L Hawaiian Barbeque Encinitas	215 S El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
191	LA BONNE BOUFFE	471 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
192	La Especial Norte	664 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
193	La Salsa Fresh Mexican Grill	219 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
194	Las Olas	2655 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
195	Le Petite Calypso	1002 N Coast Highway 101	2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
196	Leucadia Donut Shop	1604 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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197	Leucadia Pizzeria	315 S Coast Highway 101	V	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
198	Leucadia Sushi Bar	996 N Coast Highway 101	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
199	Lil Jungle Java	1500 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
200	LITTLE CAESARS PIZZA	118 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
201	Little Moore, A	1030 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
202	Lumberyard Tavern & Grill	967 S Coast Highway 101	101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
203	LUXUS 101 - BISTRO GRILL	1044 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
204	Mama Lulu's Pizza and Pasta	191 N El Camino Real	110	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
205	MANDARIN CITY	815 Birmingham Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
206	Mandarin Oriental	1337 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
207	Manhattan Pizza	143 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
208	Mc Donald's	1271 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
209	McDonald's	1064 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
210	Mexico Viejo	1465 Encinitas Blvd	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
211	Mister Sushi	111 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
212	Miyabi's Japanese Restaurant	211 S El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
213	Moonlight Grille	190 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
214	Moonlight Snack Shack	400 B St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
215	Mozy	698 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
216	Mr. Peabody's Steakhouse	136 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
217	Nfarooqi Enterprises, L L C	1967 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
218	Noodles & Company	260 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
219	Nrgize Lifestyle Cafe	201 S El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
220	Ogata Japanese Cuisine	615 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
221	Oggis Pizza & Brew	305 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
222	One Sweet World, L L C (Besta Wan)	148 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
223	PACIFIC Q BILLARDS, INC.	1454 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
224	Panda Express	1084 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
225	Pannikin Coffee & Tea	510 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
226	Papa John's Pizza 1596	337 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
227	Papa Toni's Pizza	554 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
228	Passage to India	257 N El Camino Real	K	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
229	Pasta Bravo	1042 N El Camino Real	J05	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
230	Pei Wei Asian Diner	1560 Leucadia Blvd	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
231	Pick Up Stix	127 N El Camino Real	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
232	Pipes	121 Liverpool Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
233	Pizza Hut	127 N El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
234	Pizzicato Gourmet Pizza (Hopuluvgarlic)	252 N El Camino Real	5	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
235	Potato Shack Cafe	120 W I St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
236	Premier Food Services at MiraCosta College	3333 Manchester Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
237	Quick Fix	552 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
238	QUICKIE FOOD STORE	233 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site		Low
239	Quizno's Classic Subs	337 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
240	Quizno's Subs	1042 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
241	R M C, L L C	2031 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
242	Ralphs	125 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	High
243	Raul's Taco Shop	490 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
244	REDBOX (Albertsons)	134 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
245	Rico's Taco Shop	165 S El Camino Real	L	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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246	Rite Aid	439 Santa Fe Dr		Eating/Drinking Establishment	5411	Grocery store	no	Low
247	Robbie's Ristorante & Pizzaria	534 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
248	Robbie's Road House Grill	530 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
249	Roberto's Mexican Food	1900 N Coast Highway 101	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
250	Roberto's Taco Shop	274 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
251	Round Table Pizza	1321 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
252	Roxy Restaurant	517 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
253	Rubio's	252 N El Camino Real	4	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
254	Russo's Pasta Shop	270 N El Camino Real	I	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
255	Sage Grill	1506 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
256	Sake House	1246 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
257	Sakura-Bana Sushi Bar	1031 S Coast Highway 101	101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
258	Sandwich Station	218 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
259	Santa Fe Cafe	120 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
260	Santa Fe Cafe	445 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
261	Savory Restaurant	267 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
262	Scripps Memorial Hospital	354 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
263	Siamese Basil Restaurant	527 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
264	Siilk Asian Tapas	288 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
265	Smart & Final	150 Encinitas Blvd		Eating/Drinking Establishment	5411	Grocery store	no	High
266	St Germain's Cafe	1010 S Coast Highway 101	112	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
267	St Tropez Bakery & Bistro	947 S Coast Highway 101	D103	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
268	Starbuck's Coffee	947 S Coast Highway 101	D101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
269	Starbuck's Coffee	258 N El Camino Real	B2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
270	Starbuck's Coffee	1040 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
271	Starbuck's Coffee	1560 Leucadia Blvd	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
272	Stater Brothers	1048 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
273	Sub Palace	810 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
274	Subman	113 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
275	SubMania	1514 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
276	Subway	765 S Coast Highway 101	104	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
277	Subway	2105 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
278	Subway 27567	1560 Leucadia Blvd	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
279	Subway Sandwiches & Salads	272 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
280	Sunny Sub., L L C	252 N El Camino Real	1	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
281	Super Donut 2	252 N El Camino Real	2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
282	Super Donuts 1	465 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
283	Surf Dog Records	1126 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
284	Sushi House	214 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
285	Swami's Cafe	1163 South Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
286	T M P Restaurant Group, L L C	162 S Rancho Santa Fe Rd	C10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
287	Taco Bell 25497	1502 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
288	TARGET T - 1029	1010 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
289	Tastes Group, L L C	641 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
290	Thai Pan Express	138 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
291	The 3rd Corner Wine Shop & Bistro	897 S Coast Highway 101	F104	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
292	The Bullpen	149 S El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
293	The Greenery Raw Food Cafe	133 Daphne Avenue		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
294	The Original Pancake House	160 S Rancho Santa Fe Rd	D10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

Note: All facilities are in the Carlsbad Watershed.

No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
295	The Quick Fix	144 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
296	Todays Pizza	481 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
297	TOK Subs, Inc. aka Subway	138 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
298	Tomiko	87 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
299	Trader Joe's	115 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
300	Trattoria	2171 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
301	Trattoria I Trulli	830 S Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
302	Treats By Teresa	1277 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
303	Tuscan Sun Italian Deli	1070 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
304	VG Donuts & Bakery	106 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
305	Via Italia	565 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
306	Vigilucci's	505 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
307	Von's Grocery	262 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	High
308	Von's Grocery	453 Santa Fe Dr		Eating/Drinking Establishment	5411	Grocery store	no	Low
309	Wahoo's Fish Tacos	1006 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
310	Wendy's Hamburgers	102 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
311	When In Rome	1108 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
312	Wine Steals	1953 San Elijo Avenue	100	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
313	Yogi's Sports Bar & Restaurant	2633 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
314	Zi Bibbo	1560 Leucadia Blvd	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
315	7-Eleven Food Store	2211 San Elijo Ave		Gas Station	5812	Sells prepared food for consumption on site	no	High
316	7-Eleven Store, 13627D-2111	102 Leucadia Blvd		Gas Station	5541	Gas station, food store	no	High
317	7-Eleven Store, 24335D-2111	1988 Village Park Way		Gas Station	5541	Gas station, food store	no	Low
318	AM/PM Gas Station	1580 Leucadia Blvd		Gas Station	5541	Gas station	no	Low
319	Cardiff 76	3085 Manchester Ave		Gas Station	5541	Gas station	yes	High
320	Chevron Encinitas	350 Encinitas Blvd		Gas Station	5541	Gas station	no	High
321	Chevron Food Mart	805 Birmingham Dr		Gas Station	5541	Gas station, food store	no	Low
322	Chevron Station 1943	540 La Costa Ave		Gas Station	5541	Gas station	no	High
323	DREAM PETROLEUM, INC. (ARCO 9598)	633 Birmingham Dr		Gas Station	5541	Gas station	no	Low
324	Encinitas Gas	310 Encinitas Blvd		Gas Station	5541	Gas station	no	Low
325	Leucadia Shell	865 Orpheus Ave		Gas Station	5541	Gas station, service station	no	Low
326	Rosano's Unocal 76	236 N El Camino Real		Gas Station	5541	Gas station	no	Low
327	SEASIDE AUTOHAUS (Cardiff Valero)	820 Birmingham Dr		Gas Station	5541	Gas station	no	High
328	Shell Oil	160 Encinitas Blvd		Gas Station	5541	Gas station, car wash	yes	High
329	Shell Oil Company	1060 N El Camino Real		Gas Station	5541	Gas station	no	Low
330	Shell Station	1355 Encinitas Blvd		Gas Station	5541	Gas station	no	High
331	Valero Of Encinitas	325 Encinitas Blvd		Gas Station	5541	Gas station	no	High
332	Encinitas Ranch - Golf Building	1253 Paseo De Las Flores		Golf Course	7997	Golf Course	yes	High
333	Lui Delgado Landscaping and Tierra Verde	1545 Lake Dr		Landscaping	782	Lawn and garden services, turf installation, garden planting	no	High
334	Mark Lanager Masonry & Landscaping	1310 Summit Ave		Masonry	1741	Masonry work, stone setting, garden planting.	no	High
335	RCP Block Company	577 N Vulcan Ave		Masonry	5211	Sales of brick, rock and other masonry supplies.	no	High
336	A & M Farms	1534 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
337	Able's Flowers	710 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
338	Ades & Gish Nurseries - Growers	1150 Melba Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
339	Ades & Gish Nurseries - Growers	1492 Hymettus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
340	Anderson, H Greenhouse	375 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
341	Andy's Orchids	734 Ocean View Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
342	Armstrong Garden Center	701 N El Camino Real		Nursery	5193	Production of ornamental plants, nursery products	no	Low
343	Barrels & Branches	1452 Santa Fe Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low

Note: All facilities are in the Carlsbad Watershed.

No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
344	Basil Tops	1425 Rubenstein Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
345	Bird Rock Tropicals	221 Princehouse Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
346	Browns Plants Inc- Growers	1515 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
347	Byer, Richard- Growers	1731 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
348	C M A Growers- Growers	1254 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
349	CAL GRO (Expo Plant Service)	710 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
350	Cal Pacific Orchid Farm	1122 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
351	Cardiff Palm Tree 2	333 Liszt Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
352	Cardiff/California Greenhouses	1753 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
353	Chino Greenhouses	1168 & 1253 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
354	Cordova Gardens	902 Encinitas Blvd	A	Nursery	5193	Production of ornamental plants, nursery products	no	Low
355	Cordova, Joe- Growers	720 Balour Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
356	Cosgrove Cymbidium Co- Growers	1200 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
357	D. Ades Investment Corporation	875 Balour Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
358	Daniel Mojonnier	912 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
359	Davis, Eric- Growers	752 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
360	Divine Orchids	1015 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
361	DONS FLOWERS	924 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
362	Dramm & Echter	1150 Quail Gardens Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
363	Ecke, Paul Ranch	Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
364	EMERALD M. GROWERS, INC.	834 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
365	Encinitas Green Houses - Nursery	351 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
366	Erhardt's Tropicals (Morales Romero)	805 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
367	ERIN VOLPI	887 Brittany Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
368	ERWIN MOJONNIER ENT.	2009 Sheridan Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
369	Erwin Mojonnier Enterprises- Growers	679 Camino El Dorado		Nursery	5193	Production of ornamental plants, nursery products	no	Low
370	Fiesta Flowers, L L C	335 Santa Fe Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
371	Flowers of La Costa	1911 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
372	Franco's Flowers Inc- Growers	842 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
373	Gill, Padam- Growers	754 Bonita Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
374	Gish Foliage	1255 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
375	Glover, A T- Growers	571 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
376	Granite Homes Requeza LLC- Growers	843 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
377	GREENS & THINGS, INC.	950 Brittany Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
378	Groot, Dana- Growers	603 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
379	Hydro Scape Products, Inc	750 S Coast Highway 101		Nursery	5193	Production of ornamental plants, nursery products	no	High
380	Islas Jose L- Growers	231 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
381	Ito Kiyoko- Growers	936 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
382	J & S Green Houses	748 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
383	Jose Louis Islas	514 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
384	L & E Greenhouses/G&J Plants	712 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
385	La Costa Farms	1911 Saxony Road		Nursery	5193	Production of ornamental plants, nursery products	no	Low
386	La Costa Flower Shop/Nursery (Gish Foliage)	1245 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
387	LEUCADIA GROWERS	940 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
388	Leucadia Orchids	1660 Burgundy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
389	Lois' Flowers	1195 Cardiff Dr & 1616 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
390	Lopez Flowers	440 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	High
391	Maldonado Growers	1412 Mackinnon Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
392	Manatee Inc- Growers	1500 Somerset Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low

Note: All facilities are in the Carlsbad Watershed.

No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
393	May Greenhouse Inc	241 Andrew Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
394	May Greenhouses, Inc- Growers	2021 Sheridan Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
395	Miquel Estevez Flowers	708 Del Rio Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
396	Native Sons Nursery	631 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
397	O&J Growers	1313 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
398	Orchid Barron	804 Cathy Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
399	Orchid Place	829 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
400	Owens, Mark N- Growers	1073 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
401	Pacific Verde Nursery	556 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	High
402	Pacifica Flowers	510 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
403	Payne, Parry- Growers	1231 Birmingham Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
404	Quezada, Teresa A- Growers	1190 Island View Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
405	R & L Sky Blue Inc. - Nursery	598 Park Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
406	Rancho Uribe	1616 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
407	Seaside Farms- Growers	754 Plato Pl		Nursery	5193	Production of ornamental plants, nursery products	no	Low
408	Secret Garden	1236 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
409	Seedling Express	1698 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
410	Seedling Express	440 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
411	Self-realization Fellowship - Growers	1177 Cornish Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
412	Skopec, Frank- Growers	1381 Summit Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
413	Speciman House	782 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
414	Speert, Ellen- Growers	1905 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
415	Staver, Dan- Growers	1586 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
416	Tayama Greenhouse	710 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
417	The Palm Source- Growers	1329 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
418	The Plantri - Nursery	921 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
419	Tinney, Brooke- Growers	1674 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
420	Tom, Gim- Growers	3107 Manchester Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
421	Tverdoch, R- Growers	898 Hymettus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
422	Twigs By Teri	155 Quail Gardens Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
423	W.F. Muhlethaler - Nursery	350 Seeman Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
424	Walt Hoehn	1752 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
425	Weidner's Gardens	860 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
426	Weidners' Gardens	695 Normandy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
427	Weidner's Gardens- Growers	850 Normandy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
428	Wilkens Palm Tree Nursery	1450 Mackinnon Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
429	Williamson's Produce	3111 Manchester Ave		Nursery	5193	Production of ornamental plants, nursery products	yes	High
430	Wilma Romero - Nursery	870 Devonshire Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
431	Zalinda Farms - Growers	501 Ocean Bluff Way		Nursery	5193	Production of ornamental plants, nursery products	no	Low
432	Frazee Paint	270 N El Camino Real	B	Painting	5231	Retail paint and other liquid building products	no	Low
433	The Sherwin-Williams Company 8557	208 N El Camino Real		Painting	5231	Retail paint and other liquid building products	no	Low
434	Vista Paint Corporation	133 N El Camino Real		Painting	5231	Retail paint and other liquid building products	no	Low
435	Del Rancho Pools	1315 Encinitas Blvd		Pool	1799	Pool supply	no	Low
436	Leslie's Pool Supply	270 N El Camino Real	G	Pool	1799	Pool supply	no	Low

Note: All facilities are in the Carlsbad Watershed.

No	Name	Address	Type	SIC	Description	Tributary	Priority
1	San Dieguito Union High School District Transportation Cooperative	1142 Bonita Dr	Vehicle Storage	4151	Vehicle storage and transportation services for students	no	High
2	San Elijo Water Pollution Control Facility	2695 Manchester Ave	Wastewater Treatment	9511	Treatment of wastewater for use a recycled water	no	High
3	Encinitas Landfill	2099 Encinitas Blvd	Closed Landfill	4953	Closed solid waste collection facility	no	NA

The Encinitas Landfill is regulated and inspected by the County of San Diego.
All sites are in the Carlsbad Watershed.

Appendix D-3

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

CLEAN WATER HOTLINE:
760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name_____

Street Address_____ Mailing Address_____

Email _____ _____

Responsible Person(s)_____ Property Manager_____

Business Phone (☐☐☐☐☐☐) _____ - ☐☐☐☐☐☐☐☐☐ext._____ Property Manager☐s _____

Business Fax (☐☐☐☐☐☐) _____ - ☐☐☐☐☐☐☐☐☐☐ APN Number _____

B. FACILITY☐SITE INFORMATION

Principal activity:_____

SIC Code(s)_____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)?_____ New JURMP Classification?_____

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No _____Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☐ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID _____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____

Approximate distance to water bodies: ☐ ☐200 ft. ☐ 200 ☐1000 ft. ☐ 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate ☐ impervious surface of this area_____☐

Exposed areas of intensive outdoor activity: _____

D. BMP ASSESSMENT

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?				
2. Are discharge locations free of sediment and debris?				
3. Are parking lots, sidewalks and streets free of sediment and debris?				
4. Is pressure washing of parking lots or sidewalks conducted at the facility?				
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?				
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.				
D.2 Landscaping				
7. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
8. Are irrigation systems programmed to minimize over-watering and runoff?				
9. Is reclaimed water used for irrigation?				
10. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				
D.3 Materials and Wastes				
11. Are adequate trash containers provided?				
12. Are adequate recycling containers provided?				
13. Is the trash/recycling area enclosed and free of litter and debris?				
14. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
15. Are outdoor material storage areas adequate (covered area with secondary containment)?				
16. Are outdoor storage containers properly labeled?				
17. Is there an accessible spill response kit?				
18. Is there a spill response plan? If so, please provide to inspector.				
19. Are storage tanks equipped with secondary containment?				
20. Is secondary containment free of spills and rainwater?				
21. Are loading and unloading areas free of spills and debris?				
D.4 Equipment and Vehicles				
22. Are exposed parking areas free of significant spills and leaks?				
23. Are heavy equipment and vehicles stored in garages or under canopies?				
24. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
25. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				

BMPs	N/A	Yes	No	Comments
26. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
D.5 Food Establishments N/A ☐				
27. Does facility have a grease trap or grease interceptor?				
28. Who maintains the grease trap? Company Name: Phone				
29. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
30. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
31. How many grease fryers are at the facility? _____				
32. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
33. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone				
34. Do oil-recycling/grease bins have overhead coverage?				
35. Do oil-recycling/grease bins have secondary containment?				
36. Are deep fryer oil-recycling drums stored properly?				
37. At what time is restaurant cleaning performed? _____				
38. Are biodegradable soaps used for cleaning activities?				
39. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
40. Where is used cleaning water discharged? _____				
41. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
42. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
43. Is the site free of evidence of illicit connections and illegal discharges?				
44. Is the site free of evidence of unauthorized releases to storm drains?				
45. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
46. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
47. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
48. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
49. Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
50. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
51. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.				

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: _____ DATE: _____

E. VIOLATIONS

- ☐ No violations have been noted at this time
- ☐ No violations have been noted, but required corrective actions are described below.
- ☐ Violation of storm water ordinance or other applicable regulations were found.
  (Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 _____

2 _____

3 _____

4 _____

5 _____

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ City of Encinitas Yard and Garden, ☐ County of San Diego-Green Wrench Guide English/Spanish.
OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE: _____

COMMENTS _____

_____

_____

INSPECTOR NAME _____ **FACILITY CONTACT NAME (PRINT)** _____

INSPECTOR SIGNATURE _____ **FACILITY CONTACT SIGNATURE** _____

DATE _____ **DATE** _____

I. RECOMMENDED CITY ACTIONS

_____

_____

FOR OFFICE USE ONLY

Labor: ____Hours _____Mins

Vehicle _____

Work Order _____

Follow-up WO _____

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding storm water issues: **1. 2. 3. 4. 5.**

Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5.**

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION REPORT

Appendix D-4

CLEAN WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Revised 3/09

Type of Inspection:	☐ Annual (Date):	☐ Complaint Investigation (Date):	
Business Name:		Size: Sq.Ft.	SIC Code:
Street Address:		Mailing Address:	
Contact Person(s):		Property Manager (PM):	
Business Phone/Fax:		PM Phone/Fax:	
Business Email:		PM Email :	
Does facility have a current Encinitas business certificate?	☐Yes ☐No :	Exp:	

A. Training **Number of Employees:**

1. Are employees trained? ☐Yes ☐No a. Training log at facility? ☐Yes ☐No Last time trained:

B. Liquid Storage (Oil, Grease, Antifreeze) ☐NA

2. ☐Trap- Last Maintained(LM): ☐Interceptor- LM: By: Every ____ months

3. ☐Bin- LM: ☐Clarifier- LM: By: Every ____ months

a. Is there secondary containment? ☐Yes ☐No b. Overhead Coverage? ☐Yes ☐No

4. Are other outdoor items adequately stored/covered? ☐Yes ☐No ☐NA

5. Does facility have a spill kit? ☐Yes ☐No a. Posted spill response plan? ☐Yes ☐No

C. Cleaning Activities

6. Does facility conduct any of the following activities?:

Washing Floor Mats: ☐Y ☐N Vehicle Washing/Fueling: ☐Y ☐N Hosing Off / Power Washing Site: ☐Y ☐N

a. Is wash water contained and disposed of properly? ☐Y ☐N

D. Waste Management	**Yes**	**No**	**N/A**	**Comments**
7. Are the storm drains and site free of litter and debris?				
8. Downspouts directed away from areas of potential pollutants?				

9. Does trash/recycling storage area meet the following requirements?:

Receptacle Lids Closed: ☐Y ☐N Clean/Well Maintained: ☐Y ☐N Are bins overflowing?: ☐Y ☐N

10. Does the facility properly maintain the following landscape/maintenance issues: ☐NA

Erosion Control: ☐Y ☐N Over-irrigation Runoff: ☐Y ☐N Reclaimed Water Use: ☐Y ☐N Stockpiles: ☐Y ☐N

E. Other Storm Water Management

11. Is the site free of any evidence of illicit connections and illegal discharges? ☐Yes ☐No

F. Corrective Actions Needed? ☐Yes ☐No If yes, see Inspection Summary

G. Follow Up Inspection? ☐Yes ☐No Date: If yes, see Inspection Summary

H. Education or Best Management Practice (BMP) Information Distributed:

☐Restaurant Brochure Eng/Span ☐What's Cooking Guide Eng/Span ☐Auto Brochure Eng/Span ☐Green Wrench Guide Eng/Span ☐Only Rain ☐10 Simple Ways ☐Yard and Garden Care Eng/Span ☐Doorhanger ☐Business card ☐Green Business ☐Spill Response Guide ☐Other:

Inspector Name: **Signature:** **Date:**

Notes:

FOR OFFICE USE ONLY

ASSESSMENT (circle appropriate level - "5" is highest level)		
Level of knowledge regarding stormwater issues: 1 2 3 4 5		WO :
Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5		Follow Up WO

Appendix D-5 Routine Commercial Inspection Summary FY 2008-09

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
1	**39392**	6/3/09	The Original Pancake House		Obtain spill kit and post plan, Provide Training, and 2nd containment for grease storage	NO. Completed: 6/24/2009		
2	**79459**	8/28/08	Tomiko	Started inspection 6/26/08, but didn't finish until 8/28/08.	No violations or corrective actions.	NO. Completed: 4/7/2009		
3	**80581**	10/23/08	La Especial Norte		1.Post spill response plan. 2. Train employees, keep log. 3. clean litter and debris from site, trash area, and/or storm drain. No follow up required.			
4	**80590**	10/9/08	Subway		No corrective actions required.			
5	**80591**	10/8/08	Toolshed Equipment Rentals		No corrective actions required.			
6	**80592**	10/8/08	Subway		No corrective actions required.			
7	**80593**	10/9/08	Little Caesars Pizza		No corrective actions required.			
8	**80615**	10/16/08	Encinitas Ranch Golf Course		No corrective actions required. Pesticides & Fertilizers are kept indoors w/ 2nd containment.			
9	**80616**	10/22/08	The Greenery Raw Food Cafe		1.Obtain spill kit, 2..Post spill response plan. 3.Train employees, keep log. No follow up required.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
10	**80617**	10/22/08	Santa Fe Cafe		1.Obtain spill kit. 2.post spill response plan. 3.train employees, keep log. 4.keep trash lids closed. No follow up required.			
11	**80619**	10/22/08	3rd Corner Wine Shop and Bistro		1.obtain spill kit.2.post spill response plan.3.train employees, keep log.4.fax/email copy of training log.5.Recommend P.M. power wash transit area, contain wash water.6.keep trash bin lids closed.	No. Completed: 10/22/2008		
12	**80620**	10/24/08	Domino's		No corrective actions required.			
13	**80621**	10/24/08	Pacific Q Billiards		1.post spill response plan. 2.train employees, keep log. No follow up required.			
14	**80622**	10/24/08	Kaito Sushi		No corrective actions required.			
15	**80623**	10/24/08	Golden Baked Hams and Sandwiches		No corrective actions required.			
16	**80624**	10/24/08	Daphne's Greek Cafe		1.post spill response plan. 2.train employees, keep log. No follow up required.			
17	**80625**	10/24/08	Fillippi's Pizza		1.Train employees, keep log. 2.provide 2nd containment and overhead coverage. No follow up required.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
18	**81644**	10/13/08	QC Szechwan/Siilk Asian Tapas	QC Szechwan going out of business. New restaurant will be Siilk Asian Tapas. 10/14/08 called Property manager to get info on power washing and status of business. 10/21/08 Called property manager regard	Provide 2nd containment and overhead cover or remove outdoor liquid storage. clean littler and debris from site and remove outdoor misc equip.	NO. Completed: 12/5/2008		
19	**81646**	10/14/08	Brett's BBQ	See follow up WO 81647	1.obtain spill kit, post spill response plan. 2.train employees, keep log. 3.Provide 2nd containment and overhead cover for outdoor liquid storage.	NO. Completed: 12/5/2008		
20	**81648**	10/15/08	Beach Grass Cafe	See follow up WO 81649.	1.Obtain spill kit, post spill response plan. 2.train employees, keep log. 3.Provide 2nd containment and overhead cover for outdoor liquid storage. 3.Clean littler/debris from trash area.	NO. Completed: 11/12/2008		
21	**81650**	10/24/08	Bety's	See follow up WO 81651.	1.Obtain spill kit, post spill response plan. 2.Train employees, keep a log. 3.Clean litter and debris from trash area.	NO. Completed: 12/19/2008		
22	**81652**	10/27/08	Flippin Pizza		1.train employees, keep a log. No follow up required.			
23	**81653**	10/27/08	L & L Hawaiian BBQ		1.post spill response plan. 2. train employees, keep a log. No follow up required.			
24	**81654**	11/24/08	Valero		1.Clean litter and debris from trash area. 2. Paint chips left from contractor painting station need to be cleaned up. No follow up required.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups?	NOV Date
25	**81655**	12/2/08	Angelo's Burgers	See follow up 81656.	1.obtain spill kit, post spill response plan. 2.train employees, keep a log. 3.Clean litter from site (ATM trash).	NO. Completed: 12/11/2008		
26	**82918**	5/6/09	The Animal Keeper		post spill plan, training, provide containment for play yard	NO. Completed: 6/15/2009		
27	**83058**	10/13/08	Boston's Pizza	See follow up 83086	Obtain spill kit, post spill response plan, train employees and keep log, provide 2nd containment and overhead cover for outdoor liquid storage.	NO. Completed: 1/5/2009		
28	**83099**	1/15/09	Kraken		No Corrective actions. Monitor and clean when needed east lagoon bank of cigarette butts.			
29	**83118**	1/15/09	Ki's		No corrective actions required.			
30	**83121**	1/15/09	Las Olas		No corrective actions required. Consider additional/larger cigarette container.			
31	**83174**	1/15/09	Yogi's		No corrective actions. Consider repaving parking lot and smaller 2nd containment tray for grease storage. Keep mop buckets covered.			
32	**83181**	1/16/09	Chart House		No corrective actions. Consider cigarette waste container north of building.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
33	**83182**	1/16/09	The Beach House		No corrective actions. Keep trash container lids closed and area clean at all times.			
34	**83514**	1/21/09	Beach City Cafe		No corrective actions required.			
35	**83529**	1/21/09	7-Eleven		No corrective actions required.			
36	**83547**	1/22/09	Juanita's		No corrective actions required.			
37	**83548**	1/22/09	Trattoria Positano		No corrective actions required.			
38	**83907**	2/5/09	Cardiff 76 (Rosano's)		No corrective actions required. Remove hazardous waste containers from site per hazardous waste procedures on or no later than 7/1/09.			
39	**83908**	2/3/09	Encinitas Golf Course Cafe		No corrective actions required. Request email of photo of the issue of dumpster enclosure.			
40	**83928**	2/10/09	KC's Tandoor		No corrective actions required.			
41	**83972**	2/12/09	Williamson Produce		No corrective actions required.			
42	**84234**	2/25/09	Dollshie Coffee		No corrective actions required.			
43	**84235**	1/21/09	Leucadia Pizzeria	See follow up work order 84236	Clean litter and debris from trash area- need lid.	NO. Completed: 2/25/2009		
44	**84237**	2/25/09	El Callejon		Provide employee training- What's Cookin Guide. No follow up required.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
45	**84356**	2/24/09	World Auto Body		No corrective actions required.			
46	**84358**	2/24/09	Bradley Allen Auto Body		No corrective actions required.			
47	**84359**	2/24/09	Bird House Grill		No Corrective Actions Required			
48	**84360**	10/23/08	Mozy Cafe	See work orders 84361, 84362	Obtain spill kit, post spill response plan, train employees & keep log, Provide 2nd containment and overhead coverage for grease and other outdoor storage.	Yes: Provide 2nd containment for grease storage. Issued NOV.	No. Completed: 2/19/09	1/7/2009
49	**84363**	1/22/09	Kotija Jr. Taco Shop	See work order 84363	Provide 2nd containment for excess grease storage buckets. Empty/replace grease barrels.	NO. Completed: 2/19/2009		
50	**84365**	1/22/09	Jack in the Box	See work orders 84366, 84367	Clean debris from trash area, clean/maintain outdoor storage areas. Also, remove items behind or east of trash area.	Yes: Remove grease storage container in trash area. Issued NOV.	No. Completed: 3/4/09	2/23/2009
51	**84368**	3/5/09	Hydro-scape Products		No violations or corrective actions.			
52	**84369**	3/5/09	D street bar and grill	See work order 84370	clean litter and debris from trash area, consider replacing 2nd containment tray for grease storage.	NO. Completed: 3/5/2009		
53	**84371**	3/10/09	Beachside Bar and Grill		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
54	**84447**	3/11/09	Trattoria i Trulli		1. Post spill response plan. 2.Provide and document employee training. 3.Grease info- last time it was maintained and by whom- bin and trap. Call inspector with info. No follow up required.			
55	**84448**	3/5/09	Vigilucci's	See work order 84448.	1.Provide and document employee training. 2.clean litter and debris from trash area. 3.empty grease storage unit, sweep up kitty litter.	NO. Completed: 3/13/2009		
56	**84450**	3/13/09	Luxus 101 Bistro and Grill		Post spill response plan; provide and document employee training. No follow up required.			
57	**84541**	3/17/09	Just Peachy		Clean litter from trash area. Keep lids closed. No follow up required.			
58	**84542**	3/19/09	Manhattan Giant Pizza		No Corrective Actions Required			
59	**84544**	3/19/09	Kealani's		No Corrective Actions Required			
60	**84548**	3/24/09	Burger King 3528		No Corrective Actions Required			
61	**84603**	3/26/09	Java Express		No Corrective Actions Required			
62	**84604**	3/26/09	Vons #2144		No Corrective Actions Required			
63	**84605**	3/24/09	Pizzicato		Use what's cooking guide for training log. No follow up required.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
64	**84606**	3/23/09	Rubio's		No Corrective Actions Required			
65	**84607**	3/25/09	Passage to India		PM will remove old grease or cover w/plastic. No follow up required.			
66	**84608**	3/25/09	Firefly Grill & Wine Bar		No Corrective Actions Required			
67	**84609**	3/25/09	Blue Fin Sushi		No Corrective Actions Required			
68	**84610**	3/17/09	El Torito Market	See work order 84610	Provide or remove outdoor storage of liquid waste. Clean litter from site, trash areas, and/or storm drain.	NO. Completed: 3/27/2009		
69	**84612**	3/27/09	Wahoo's Fish Taco		Property manager needs to clean outside landscaped area from trash.			
70	**84613**	3/25/09	Mama Lulu's Pizza & Pasta		No Corrective Actions Required			
71	**84679**	3/23/09	Ralph's	See work order 84679	Clean litter from trash area.	NO. Completed: 3/27/2009		
72	**84681**	3/30/09	Tuscan Sun Deli		No Corrective Actions Required			
73	**84682**	3/30/09	Encinitas Yogurt & Ice Cream		No Corrective Actions Required			
74	**84683**	3/30/09	El Torito		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
75	**84684**	3/30/09	Fender Mender		No Corrective Actions Required			
76	**84685**	4/2/09	Borrelli's Pizza Inc		No Corrective Actions Required			
77	**84753**	3/31/09	Tomiko	See work order 84754	Obtain Spill kit, provide and document employee training, clean litter from trash area and grease storage area.	NO. Completed: 4/7/2009		
78	**84755**	3/13/09	St. Germain's	See work order 84756	Provide and document employee training, provide 2nd containment for grease, clean litter from trash area and keep lids closed.	NO. Completed: 4/14/2009		
79	**84757**	4/8/09	Shell Oil (CNG Inc)		No Corrective Actions Required			
80	**84758**	4/8/09	The Quick Fix		No Corrective Actions Required			
81	**84759**	4/2/09	Smart and final	See work order 84760	Provide and document employee training, clean litter and debris from trash area.	NO. Completed: 4/8/2009		
82	**84806**	3/30/09	Home Depot/Hot Dog Trailer	See work order 84807	Clean litter and debris from storm drain around perimeter south and east sides. Hot dog stand to provide 2nd containment.	NO. Completed: 4/16/2009		
83	**84808**	3/31/09	Wendy's	See work order 84808	Provide and document employee training.	NO. Completed: 4/16/2009		

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
84	**84810**	4/16/09	Honey Baked Ham		No Corrective Actions Required			
85	**86825**	4/21/09	Chin's		No Corrective Actions Required			
86	**86828**	4/15/09	Moonlight Snack Shack	See work order 86830	Obtain spill kit, post spill response plan, provide and document employee training.	NO. Completed: 4/22/2009		
87	**86831**	3/13/09	Sakura-Bana	See work order 86831	Provide and document employee training, clean litter and debris from trash area. Obtain dumpster with lid.	NO. Completed: 4/21/2009		
88	**87906**	3/17/09	Scott's Automotive	See work order 87907	Provide coverage for exposed equipment and/or parts.	NO. Completed: 4/24/2009		
89	**87908**	4/24/09	Chevron Extra Mile		No Corrective Actions Required			
90	**87944**	4/28/09	7-Eleven		No Corrective Actions Required			
91	**87945**	4/28/09	Carl's Jr. # 181		No Corrective Actions Required			
92	**87946**	4/28/09	Mr. Peabody's		No Corrective Actions Required			
93	**88059**	4/23/09	7-Eleven	See follow up 88061	Clean litter and debris from site-computer monitor, keyboard behind store.	NO. Completed: 5/12/2009		

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
94	**88062**	4/22/09	Taco Bell	See follow up 88063	Post spill response plan, provide and document employee training, provide 2nd containment for outdoor storage of liquid waste, provide grease interceptor info- last time serviced, by whom, how often.	NO. Completed: 5/13/2009		
95	**88251**	5/20/09	North Coast Equestrian Park		No. recommendations only: Document employee training, provide cover for tractors and NW corner. No follow up required.			
96	**88372**	6/15/09	Holiday Pet Hotel		Train employees and provide plumbing receipts for sump pump and broken pipe. No follow up required.			
97	**88375**	6/18/09	Encinitas green house nursery		No Corrective Actions Required			
98	**92399**	5/22/09	Lopez Flowers		No Corrective Actions Required			
99	**92400**	5/6/09	Moonlight Motors		Post spill response plan and provide and document employee training. No follow up required.			
100	**92402**	4/24/09	Bentley's Steak and Chop House		Obtain spill kit, post spill response plan, provide and document employee training. Consider cleaning area around grease storage area- capture all wash water.	NO. Completed: 6/2/2009		
101	**92404**	4/27/09	Sazio Ristorante Italiano		Post spill response plan, provide and document employee training.	NO. Completed: 6/3/2009		

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
102	**92406**	4/29/09	Wine Steals Cardiff		Post spill response plan, provide and document employee training.	NO. Completed: 6/2/2009		
103	**92408**	4/2/09	Denny's		Obtain spill kit; post spill response plan; Provide/document employee training; Provide 2nd containment and overhead cover for outdoor liquid storage; clean litter and debris from site, trash area, and/or storm drain- or order new dumpster.	Yes: Provide 2nd containment for outdoor liquid storage.	No. Completed: 6/8/09	
104	**92503**	5/8/09	RCP Block		Post spill plan; provide 2nd containment for fluid/liquid waste; clean litter and debris from storm drain; clean oil stains; Recommend downspout redirected away from vending machines, check maintenance records for flow guard in storm drain downstream	NO. Completed: 6/9/2009		
105	**92507**	5/8/09	Mark Lanager Masonry		Post spill response plan; provide overhead coverage and 2nd containment for fluid/liquid waste; clean/maintain outdoor storage areas	NO. Completed: 6/9/2009		
106	**92509**	12/19/08	Calypso Fish House		Obtain spill kit; Provide 2nd containment and overhead coverage for outdoor liquid storage	NO. Completed: 6/11/2009		
107	**92511**	4/29/09	Elizabethan Desserts		Post spill response plan; provide and document employee training	NO. Completed: 6/3/2009		

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
108	**92544**	5/26/09	Pacific Verde Nursery		Post spill response plan; provide employee training; provide 2nd containment for port-a-potty; provide cover for exposed equip or parts; clean litter and debris from storm drain; disconnect drain from sink.	NO. Completed: 6/16/2009		
109	**92700**	4/21/09	Shell Station		Provide coverage for exposed equipment or parts; clean oil stains from site.	NO. Completed: 6/17/2009		
110	**92702**	6/2/09	Scripps Memorial Hospital		Provide 2nd containment for liquid waste in universal waste area; Provide coverage for used cooking oil in loading area.	NO. Completed: 6/24/2009		
111	**92780**	5/28/09	Tierra Verde Resources Inc.		2nd containment for port-a-potty and herbicide; provide coverage for exposed stock pile of dirt.	NO. Completed: 6/25/2009		
112	**96887**	3/31/09	Panda Express		Obtain spill kit, post spill response plan, provide and document employee training, provide 2nd containment for outdoor liquid storage, clean litter from trash area outside backdoor. Also, provide grease maintenance info.	Yes: obtain spill kit, post spill response plan, provide and document employee training, provide 2nd containment, clean litter from trash area, provide grease maintenance info. Issued NOV.	Yes: Obtain 2nd containment, clean trash area, clean/replace dumpsters, provide grease maintenance records. NO. Completed: 7/7/09	5/7/2009

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
113	**97230**	4/27/09	Pipes Cafe		Provide and document employee training, provide 2nd containment for grease bins, consider replacing old dumpsters, consider power washing grease storage area-collect all wash water.	Yes: Provide 2nd containment tray for all grease storage. Consider removing 2nd grease barrel Issued NOV.	NO. Completed: 7/22/09	6/25/2009
114	**97233**	5/7/09	Charlie's Foreign Car Service		Post spill response plan, provide and document employee training, provide 2nd containment and overhead cover for oil bin-blue, provide cover for SE area, clean litter from east side, clean outdoor storage area on east side	Yes: Provide 2nd containment and overhead cover for outdoor oil storage, Cover or remove old parts and other items. Issued NOV.	NO. Completed: 7/22/09	6/8/2009
115	**97728**	4/24/09	Encinitas BMW		Provide and document employee training; provide cover or remove items on north side; clean litter and debris from trash areas, replace lid. check landscaping for overwatering.	NO. Completed: 9/9/2009		
116	**97796**	4/16/09	Chevron Encinitas	Corrective actions/follow up to be completed in FY 09-10.	Provide 2nd containment for gasoline storage; clean litter and debris from storm drain; replace cement berm or install temp BMP; plant area at end of down spout.			

Total Commercial Inspections: 116 **Total Follow ups: 51** **Total NOVs: 5**

Appendix D-5 Routine Industrial Inspection Summary FY 2008-09

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up 1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
1	**92698**	5/21/09	San Elijo JPA		Post spill response plan; Provide 2nd containment for polymer liquid in barn; Clean litter and debris from 4th inlet east of barn; provide maintenance records for rock swale and silt w See work order 92699.	NO. Completed: 6/19/2009		
2	**97795**	5/21/09	San Dieguito Transportation	Corrective actions/Follow up Inspection to be completed in FY 09-10.	Provide erosion control on NE corner of lot- maintain or replace BMPs- straw waddles, sand/gravel bags.			

Total Industrial Inspections: 2 **Total Follow ups: 1** **Total NOVs: 0**

	Facility Name	Address	Type	SIC	Acitivity Description
1	DEBORAH PTASHNE GROOMING	2013 SAN ELIJO AVE	ANIMAL	0752	Pet Grooming/Training
2	DOG BEHAVIOR 101	2142 MONTGOMERY AVE, F	ANIMAL	0752	Pet Grooming/Training
3	EVANS MOBILE VETERINARY CARE	2354 OXFORD AVE, A	ANIMAL	0752	Pet Grooming/Training
4	MOBILE PET GROOMING	34189 PACIFIC COAST HWY	ANIMAL	0752	Pet Grooming/Training
5	PET BUTLER	2800 UNIVERSITY AVE 280	ANIMAL	0752	Pet Grooming/Training
6	SPAWTIQUE MOBILE PET GROOMING	1237 Hermes Ave	ANIMAL	0752	Pet Grooming/Training
7	UNDERDOG PET SITTING	2439 CAMINITO OCEAN COVE	ANIMAL	0752	Pet Grooming/Training
8	YOUR FAIRY DOGMOTHER	946 WOODGROVE	ANIMAL	0752	Pet Grooming/Training
9	CARDIFF LIMOUSINE	844 BONITA DR	AUTO	4111	Local and Suburban Transit
10	DONALD LEE MAGGARD	617 CATHY LN	AUTO	5511	Auto Sales and Maintenance
11	L. WICKS	804 SAXONY RD	AUTO	7538	Auto Repair and Maintenance
12	LEUCADIA TOWING	371 SECOND ST	AUTO	7549	Automotive services, except repairs and carwashes
13	LEUCADIA TOWING	905 ORPHEUS AVE	AUTO	7549	Automotive services, except repairs and carwashes
14	LUCAS' CAB	1410 VIA TERRASSA	AUTO	4111	Local and Suburban Transit
15	MERCEDES WEST AUTO WHOLESALE	2026 OXFORD AVE	AUTO	5511	Auto Sales and Maintenance
16	MILLER TIRE & WHEELS, INC.	248 LA VETA	AUTO	7538	Auto Repair and Maintenance
17	REED MOTORS aka Rent Sport Racing	1326 RAINBOW RIDGE LANE	AUTO	7538	Auto Repair and Maintenance
18	WALLACE COURIER	523 SAMUEL CT	AUTO	4215	Transport Services
19	WHALEN PERFORMANCE	1726 AVENUE MELODIA	AUTO	7538	Auto Repair and Maintenance
20	AFFORDABLE DETAIL GUYS	560 HERMES AVE	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
21	AMERICAN AUTO DETAILING	3016 AZAHAR ST.	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
22	COLOR SOLUTIONS AUTO TWO	126 TRITON CIR	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
23	CONNER DETAIL	1721 RED BARN RD	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
24	DANIEL TULCAN	Unknown	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
25	DETAIL ON US	1660 S EL CAMINO REAL G103	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
26	FOCUSED AUTO DETAILING	3660 CATALINA DR.	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
27	HERBIE AUTO MOBILE DETAILING	141 GRANDVIEW ST, APT 13	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
28	KIK'S MOBILE DETAILING	Unknown	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
29	LA COSTA AUTO DETAIL	740 AVENIDA CODORNIZ	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
30	MOBILE SHINE DETAILERS	3320 CALLE SAND BLAST	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
31	P.A.D (Professional Auto Detailing)	Unknown	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
32	SANTA FE DETAILING	1280 SANTA FE DR	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
33	ALBERTA SANTIAGO	1020 ALOHA DR.	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces

	Facility Name	Address	Type	SIC	Acitivity Description
34	AROUND TOWN PRESSURE WASHING	1100 N CUYAMACA ST	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
35	BEST CLEANING DBA ANAGO	1543 VILLA CARDIFF DR	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
36	BEYOND INDUSTRIAL CLEANING	945 WOODGROVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
37	BOB'S CARPET CARE	336 SANFORD STREET	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
38	BUDGET WINDOW CLEANING	PO BOX 231606	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
39	CARPET CLEANING	Unknown	CLEANING/JANITORIAL	7217	Cleaning of interior retail or residential spaces
40	CLAUDIA NELSON'S HOUSEKEEPING	1338 MACKINNON AVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
41	CLEAN SENSE CARPET CLEANERS	328 1/2 LA MESA	CLEANING/JANITORIAL	7217	Cleaning of interior retail or residential spaces
42	CLEANINIG LADY ELMORR	2134 CAROL VIEW DR. 311	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
43	DAVID RIVERA CLEANING SERVICES	1743 OLD MILL RD.	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
44	DIAMOND ENVIRONMENTAL SERVICES, LLC	807 E. MISSION RD	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
45	DRENIE'S HOUSECLEANING	225 ROSEBAY DR	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
46	ENCINITAS JANITORIAL SERVICE	699 N. VULCAN AVE.	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
47	FAVORITE MAID	404 ENCINITAS BLVD 258	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
48	GILBERT'S JANITORIAL SERVICE	PO BOX 1877	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
49	GORILLA SERVICE INDUSTRIES, IN	Unknown	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
50	GUILLERMINA'S HOUSEKEEPING	1253 ORKNEY LN	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
51	INTEGRITY PRESSURE WASH	1508 GLACIER, RD	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
52	JASON CARDOZA GENERAL MAINTENANCE	884 DEL RIEGO AVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
53	JUST US CLEANING AND HOUSE SITTING	1066 GUILDFORD CT	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
54	KAMIN'S CLEANING SERVICES	170 PHOEBE ST, 11	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
55	LETTY BOOPS HOUSEKEEPING	407 REQUEZA ST, E10	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
56	LORENA'S CLEANING	1125 N VULCAN 11	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
57	MARIA LOPEZ PROFESSIONAL CLEANING	282 ASPENWOOD LN	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
58	MAVERICK CARPET CLEANING	14276 PEBBLE BEACH WAY	CLEANING/JANITORIAL	7217	Cleaning of interior retail or residential spaces
59	MONCARCA CARPET CLEANING	Unknown	CLEANING/JANITORIAL	7217	Cleaning of interior retail or residential spaces
60	NAYELI KIM DBA ANAGO OF SAN DIEGO	1015 GUADALAJARA DR	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
61	PACIFIC COAST MAINTENANCE	981 N VULCAN AVE 8	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
62	RITA'S CLEANINIG SERVICES	796 CLARK AVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
63	ROSANA'S HOME CLEANING SERVICES	1100 GARDEN VIEW RD. 129	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
64	ROTO ROOTER	Unknown	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
65	RUG DOCTOR	9630 Black Mountain Rd, Ste K	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
66	SEASIDE JANITORIAL SERVICE	1019 1/2 HERMES AVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces

	Facility Name	Address	Type	SIC	Acitivity Description
67	SOUTHERN LIGHTING AND GRAPHICS	10370 REGIS CT	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
68	SPANKY'S PORTABLE SERVICES	555 ENTERPRISE STREET	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
69	TERRY'S CLEANING SERVICE	2157 PLEASANT GROVE DR.	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
70	THE RESCUE MAIDS	1305 MACKINNON AVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
71	VELASQUEZ MAINTENANCE, LLC	1902 PAXTON WAY	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
72	A C ENERGY SYSTEMS, INC	224 BIRMINGHAM DR. 1 A 2	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
73	A.P. COTTAM CO	123 JAPSER ST, 12	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
74	ADD STYLE DESIGNS	607 N. VULCAN AVENUE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
75	ALL INTEGRITY PLUMBING	1062 GOLDEN RD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
76	APP TEK COMMERCIAL, INC	171 SAXONY RD, 202	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
77	ARCHIBALD SHEET METAL	125 A STREEET	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
78	ARTISAN TEXTURES AND DRYWALL	909 WOODLAKE DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
79	BEESON SQUARED CONSTRUCTION	1572 CAUDOR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
80	BLT CONSTRUCTION	1923 LAHOUD DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
81	BRIAN BUILDING CORPORATION	1009 HURSTDALE AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
82	C T M	1553 AVENIDA DE LAS LILAS	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
83	C.E. WYLIE CONSTRUCTION CO.	3777 RUFFIN RD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
84	CALIBER DRYWALL	1253 N VULCAN AVE, 3	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
85	COASTAL CONSTRUCTION GROUP	742 NEPTUNE AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
86	COLT CONSTRUCTION & DEVELOPMENT	709 CATHY LN	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
87	CONCRETE HERITAGE, INC	825 DEL RIO AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses

	Facility Name	Address	Type	SIC	Acitivity Description
88	CREATIVE GARAGE DOOR SYSTEMS	1665 ORANGE BLOSSOM WAY	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
89	CUSTOM BUILDERS	1347 SUMMIT AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
90	D. BELL CONSTRUCTION, INC	1539 CAUDOR ST	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
91	D.H. CONSTRUCTION	477 DELAGE CT.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
92	DANIELS CONSTRUCTION	2105 MONTGOMERY AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
93	DE PASCALE CONSTRUCTION, INC	555 SECOND ST. 4	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
94	DELANY CONSTRUCTION COMPANY	112 LA VETA AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
95	DROLET CONSTRUCTION	PO BOX 1175	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
96	E.L. HEWITT CONSTRUCTION	825 S VULCAN AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
97	ELKEN CONTRACTING	1540 Pioneer Way	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
98	FINISHING TOUCH MOLDING, INC	921 HYMETUS AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
99	HAR CONSTRUCTION	1480 W FRONTAGE RD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
100	HAUSER HOUSES	1452 SANTA FE DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
101	J. BRYANT CONCEPTS	565 REQUEZA ST.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
102	JOHN BLAND CONSTRUCTION	812 PALARO DR.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
103	KHAVARI CONSTRUCTION	4550 Kearny Villa Rd	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
104	LANGTREE WOODWORKING	301 HORIZON DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
105	MRB CONSTRUCTION	1265 N VULCAN AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses

	Facility Name	Address	Type	SIC	Acitivity Description
106	PACIFIC CUSTOM BUILDERS	146 W GLAUCUS ST.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
107	PACIFIC HORIZON CONSTRUCTION CO	773 HYMETTUS AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
108	PATRIOT CONCRETE INC	2591 S. SANTA FE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
109	PETRONELLA CORPORATION	2626 NEWPORT BLVD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
110	QUALITY FIRST CONCRETE	930 LAWRENCE ST	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
111	R. D. T. CONSTRUCTION	1527 AVENIDA DE LOS LIRIOS	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
112	R.A. BOOKER BUILDERS, INC	3451 TOSCANO CT	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
113	RED POINT HOMES, INC	609 S. VULCAN AVE 302	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
114	RICHARD MELTON CONSTRUCTION, INC	1570 LAKE DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
115	RICHARD THAISZ CONSTRUCTION	1403 CAMINITO SEPTIMO	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
116	ROBERT R. LOVCI	1236 RUBENSTEIN AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
117	ROBERT TESSIERI CONSTRUCTION	1743 LE GAYE DR.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
118	ROOF RITE	1216 TOWER DR.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
119	SAHBA JAVEDANI	624 FAITH AVE.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
120	SO CAL DEMOLITION	1918 AZURE WAY	CONTRACTOR	1795	Wrecking and Demolition Work
121	STEFFEN ENTERPRISES, INC	1008 SAXONY RD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
122	SUN CAL SOLAR INCORPORATED	745 WINDING WAY	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
123	TITAN WOODWORKS	1131 BONITA DR, B	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses

	Facility Name	Address	Type	SIC	Acitivity Description
124	TOM PENNA CONSTRUCTION/DBA DRY WALL D	476 LA MESA AVE.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
125	TOM PORTER ROOFING	310 S TWIN OAKS VALLEY RD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
126	TURN KEY CONSTRUCTION HANDYMAN	444 N EL CAMINO REAL, 87	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
127	VALVETTE SYSTEMS	23262 OXNARD ST	CONTRACTOR	508	Water Conservation Products
128	VAN VEEN TEAM	1145 ALOHA DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
129	VCI Telcom	1921 W. 11th St.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
130	W O A BUILDERS INC	110 REQUEZA ST	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
131	WEST COAST COMFORT	4709 MORNING CANYON RD.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
132	WILLIAM B. HANNON GENERAL	1748 LAKE DR	CONTRACTOR	1521	single-family houses
133	WILLOWEN BUILDERS	3410 ADAMS RUN RD	CONTRACTOR	1521	single-family houses
134	CARDIFF CARNIVORES	1285 BLUE SKY DR.	EXTERMINATOR	7342	Disinfecting and Pest Control Services
135	DAVE DE JOUR	2080 MONTGOMERY AVE	FOOD	5813	Sells prepared drink for consumption
136	GREEN GENERATION GREASE COLLECTION	2035 SEA VILLAGE CIR	FOOD	5813	Sells prepared drink for consumption
137	MOBILE CONCESSIONS AND CATERING	Unknown	FOOD	5813	Sells prepared drink for consumption
138	SHOURI SUSHI ENTERPRISE CORP	1404 VIA TERRASSA	FOOD	5813	Sells prepared drink for consumption
139	VICTORIA WIT	616 CYPRESS HLLS DR.	FOOD	5813	Sells prepared drink for consumption
140	101 WINDOW CLEANING	910 HERMES AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
141	A& M WINDOW CLEANING	1125 N VULCAN AVE 26	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
142	ABSOLUTE PERFECTION FOUNTAIN	730 THIRD ST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
143	ALL CITIES HAULING	937 WOODLAKE DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
144	ALL IN CARPET CLEANING	720 DEVONSHIRE DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
145	ANONYMOUS WINDOW CLEANING	1727 LEGAYE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
146	AQUA TECH POOL CARE	233 DELPHINIUM ST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.

	Facility Name	Address	Type	SIC	Acitivity Description
147	AZTECH CLEANING SERVICES	1627 VALLEDA LN	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
148	BART FORRY	404 ENCINITAS BLD 203	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
149	BELMAN HANDYMAN	738 SNAPDRAGON	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
150	BLADE DUFOUR HANDYMAN SERVICE	905 WOODLAKE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
151	BOUCHE CONSTRUCTION	1438 VIA TERRASSA	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
152	BRIGHT VISIONS WINDOW WASHING	616 LYNWOOD DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
153	C C A R E	1399 RANCH RD	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
154	CALIFORNIA MAIDS HOME SERVICES	885 DEL RIO	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
155	CLEAN SWEEP	1252 MACKINNON AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
156	CLEAR CHOICE WINDOW CLEANING	138 DIANA ST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
157	COAST TRANSPORTATION	1990 COUNTRY GROVE LN	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
158	CROWN POOL AND LANDSCAPE	2126 VIA TIEMPO	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
159	DESIGNS BY THE SEA	1511 CALLE TULIPANES	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
160	ED'S HANDYMAN SERVICE	1372 HYMETTUS AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
161	ENCINITAS HANDYMAN BIZ	1555 BELLA VISTA	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
162	F & V Painting, Inc. DBA CERTAPRO	1340 RAVEAN CT	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
163	FERNANDO J. C.	1168 ARCADIA RD	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
164	FIRST PLACE FINISH CARPENTRY	556 THIRD ST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
165	FRAZIER WINDOWS	1017 HYGEIA AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
166	G B ENTERPRISES	1106 SECOND ST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
167	GARY WESLEY HANDYMAN	1813 N. VULCAN AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.

	Facility Name	Address	Type	SIC	Acitivity Description
168	GAUL REMODELING	126 JASPER ST, 404 B	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
169	H.S. SOLUTIONS	731 SNAPDRAGON ST.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
170	HEAVENLY VIEWS WINDOW CLEANING	1905 SOMERSET AVE.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
171	HOME MAINTENANCE SERVICES	842 BONITA DR. A	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
172	JESUS FUENTES	2039 SHADOW GROVE WAY	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
173	JOHN'S WINDOW CLEANING	1201 N VULCAN AVE, 25	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
174	KENS HANDYMAN SERVICE	152 N COAST HWY 101 19	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
175	M H S- WORKS	1008 COTTAGE WAY	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
176	M.G. HANDY MAN WORK	2057 VILLAGE PARKWAY 204	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
177	MADRIGAL HANDYMAN SERVICE	513 S. WILLOWSPRING	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
178	MARIA ZAVALA	961 MELBA RD	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
179	MAURICE'S HANDYMAN SERVICES	1190 ENCINITAS BLVD P167	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
180	MAURILIO HERNANDEZ HANDYMAN	339 MARCOS ST, 129	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
181	MCGOWANS HOME MAINTENANCE	949 WOODGROVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
182	MICHAEL E. GREIFF	1448 CAMINITO SEPTIMO	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
183	MIKE HIDALGO, INC	119 EUROPA	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
184	MONTANO'S HOUSECLEANING	704 REGAL RD. C-12	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
185	NORTH COUNTY HANDY MAN	1270 AVENIDA MIGUEL	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
186	NORTH COUNTY HAULING SERVICE	1117 WOODLAKE DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
187	OWENS CO.	18525 ALISO CANYON RD	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
188	PACIFIC ROOF CLEANING	1571 AVENIDA DE LAS LILAS	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.

	Facility Name	Address	Type	SIC	Acitivity Description
189	PATRA CRUZ	351 COUNTRYWOOD LN	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
190	PATRICE ALEXANDER	2437 OXFORD AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
191	PATRICK W. QUINLAN HANDYMAN	454 REQUEZA ST. 320a	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
192	PERUVIAN BUILDERS	349 VILLAGE RUN EAST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
193	PHIL'S HANDYMAN SERVICE	1726 OLD MILL RD.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
194	PROFESSIONAL CLEANING & ERRANDS	1099 REGAL RD.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
195	R. K. ENTERPRISES	658 SANTA FE DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
196	REVA HYDRO JETTING	1056 LARK SONG LN	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
197	REYES HANDYMAN	1143 GARDENA RD.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
198	ROMEO GODINEZ HANDYMAN	1159 GARDENA RD	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
199	RUSTY TREE SERVICE	1144 WOODLAKE DR.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
200	S.M.H. HANDYMAN SERVICE	1009 HERMES AVE. A	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
201	SALO CUSTOM WOODWORK	1549 N VULCAN AVE 54	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
202	SAMMY'S HANDYMAN PLUMBING	110 S KITTRIDGE LN	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
203	SAN DIEGO STONE CARE	731 SNAPDRAGON ST.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
204	SCOT ENTERPRISES	454 REQUEZA ST. 130C	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
205	SHORT PEOPLE SERVICES	116 QUAIL GARDENS 137	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
206	SPARKLE WINDOW CLEANING	2427 NEWCASTLE AVE.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
207	SUNNY WINDOW CLEANING	404 ENCINITAS BLVD 345	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
208	WILLIAM BRADY HANDYMAN	923 MELBA RD.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
209	WORLD MAINTENANCE	1829 FORRESTDALE DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.

	Facility Name	Address	Type	SIC	Acitivity Description
210	10-C'S LANDSCAPE ENHANCEMENTS	1301 TRABERT RANCH RD	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
211	ALFONSO REY LANDSCAPE MAINTENANCE	351 SPRUCEWOOD DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
212	ALL CITIES CONSTRUCTION SERVICES	729 REQUEZA ST	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
213	ANGUIANO LANDSCAPING	471 COLE RANCH RD	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
214	ARNULFO MEDINA LANDSCAPING	1408 HERMES AVE. A	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
215	BENNY'S GARDENING	1055 EVERGREEN DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
216	CARESCAPE LAWNS	174 S WILLOWSPRING	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
217	CARILLO TREE MAINTENANCE	794 CLARK AVE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
218	COCO'S LANDSCAPE AND MAINTENANCE	1939 PLAYA RIVIERA DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
219	D & I GARDENING & LANDSCAPING	1743 OLD MILL RD.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
220	DEL MAR LANDSCAPING	2016 BULRUSH LANE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
221	ENRIQUE LANDSCAPING	1020 ALOHA DR.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
222	FELIX SANCHEZ GARDENING SERVICE	880 DEL RIO AVE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
223	FLORES LANDSCAPING	647 SAN DIEGUITO DR. 3	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
224	G.K. LANDSCAPE	244 SECOND ST. E	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
225	GALAPACIFICA LANDSCAPE	253 MANGANO CIR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
226	GREG STONE LANDSCAPE ARCHITECTS	69 MC NEILL AVE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
227	GRESHAM GARDENS & CONSULTING	1734 NOMA LANE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
228	HAULING AND LANDSCAPING.COM	1133 GARDENA	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
229	HERNANDEZ LANDSCAPING	PO BOX 1630	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
230	IBANEZ MAINTENANCE	Unknown	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.

	Facility Name	Address	Type	SIC	Acitivity Description
231	INNOVATIVE CONCRETE DESIGN	270 FRAXINELLA	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
232	J A LANDSCAPE	2068 BULRUSH LN	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
233	JEAN NORDSTROM	2156 MOUNTAIN VISTA DR.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
234	JESUS AGUSTIN AMEZCUA LANDSCAPE	213 HICKORYHILL DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
235	JORGE MENDOZA	953 NARDO RD.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
236	L & P LANDSCAPE/TREE SERVICE	309 VILLAGE RUN, E	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
237	L.B. DESIGNS	837 STRATFORD DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
238	LANDSCAPE DESIGNS/LANDSCAPE	944 HERMES AVE.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
239	LANDSCAPE MAINTENANCE/DAVE STEINBIS	699 N. VULCAN AVENUE 127	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
240	LATTIN	564 UNION ST	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
241	LIVING ART WATER GARDENS	759 MUNEVAR RD	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
242	LLM LANDSCAPE, INC	675 REQUEZA ST	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
243	LUIS MALDONADO	1041 SAN ANDRADE A	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
244	MAISTER LANDSCAPE CONSTRUCTION	PO BOX 715	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
245	MIGUEL'S LANDSCAPING	1105 REGAL RD	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
246	MIJANGOS LANDSCAPING	1608 CHARRO ST	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
247	MIKE HIRSCH	753 REQUEZA	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
248	PACIFIC VIEW LANDSCAPES	2444 MANCHESTER AVE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
249	PRO EARTH LANDSCAPE	2210 ENCINITAS BLVD	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
250	REEGAN RAY DESIGN	734 SAN DIEGUITO	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
251	SECRET GARDEN LANDSCAPING	1236 URANIA	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.

	Facility Name	Address	Type	SIC	Acitivity Description
252	SINCLAIR GROUNDS MAINTENANCE	454 REQUEZA ST. 316A	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
253	STEVE'S WEEKLY LANDSCAPING	Unknown	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
254	THE URBAN GARDENER	591 HYGEIA AVE, A	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
255	TIERRA VERDE	LAKE DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
256	TREE ELEMENTS	1624 OLMEDA ST.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
257	U P E RESOURCES	1624 OLMEDA ST.	LANDSCAPING	0782	Includes turf installation and garden planting.
258	VELASQUEZ LANDSCAPING	2036 SHADY TREE LN.	LANDSCAPING	0782	Includes turf installation and garden planting.
259	CRAFTSMAN STONE AND TILE	1014 SAN ABELLA	MASONRY	1741	work, stone setting, and other stone work.
260	G.S. CUSTOM PAINTING	Unknown	PAINTING	1721	Painting of interior and/or exterior buildings
261	RUSSELL HANDY PAINTING	2056 BULRUSH LANE	PAINTING	1721	Painting of interior and/or exterior buildings
262	A PLUS POOL AND SPA SERVICE	1190 ENCINITAS BLVD, c252	POOL	7389	Swimming pool and fountain cleaning and maintenance
263	BISHOP POOL SERVICE AND REPAIR	744 FOXGLOVE ST	POOL	7389	Swimming pool and fountain cleaning and maintenance
264	BLUE WATER OF LA JOLLA POOL SERVICE	2008 WANDERING RD	POOL	7389	Swimming pool and fountain cleaning and maintenance
265	C D POOLS	1265 RUBENSTEIN AVE	POOL	7389	Swimming pool and fountain cleaning and maintenance
266	CIELO POOLS	708 OAKBRANCH	POOL	7389	Swimming pool and fountain cleaning and maintenance
267	DISTINGUISHED POOLS	14320 MOUNTAIN RD.	POOL	7389	Swimming pool and fountain cleaning and maintenance
268	LIQUID POOL AND SPA SERVICE	16 E I STREET	POOL	7389	Swimming pool and fountain cleaning and maintenance
269	MALLORY'S POOL & SPA MAINTENANCE	140 ENCINITAS BLVD, 183	POOL	7389	Swimming pool and fountain cleaning and maintenance
270	MAYER POOL SERVICE	1553 PLUMTREE DR	POOL	7389	Swimming pool and fountain cleaning and maintenance
271	NELSON AND SON'S POOL	PO BOX 235164	POOL	7389	Swimming pool and fountain cleaning and maintenance
272	PACIFIC COAST POOL SERVICE	1439 LINDA SUE LANE	POOL	7389	Swimming pool and fountain cleaning and maintenance
273	PALISADES POOL AND SPA SERVICE	230 GLOXINA ST	POOL	7389	Swimming pool and fountain cleaning and maintenance
274	POOLMASTER	PO BOX 232265	POOL	7389	Swimming pool and fountain cleaning and maintenance

	Facility Name	Address	Type	SIC	Acitivity Description
275	PRECISION POOL TILING	1991 FRIENDSHIP DR, STE F	POOL	7389	Swimming pool and fountain cleaning and maintenance
276	RANCH AND SEA POOL CARE	1686 FALCON HILL CT	POOL	7389	Swimming pool and fountain cleaning and maintenance
277	RANCHO SANTA FE POOL SERVICE	2039 WILLOWWOOD	POOL	7389	Swimming pool and fountain cleaning and maintenance
278	S.S. POOL SERVICE	1125 WOODLAKE DR	POOL	7389	Swimming pool and fountain cleaning and maintenance
279	SUN COAST POOL SYSTEMS	PO BOX 430	POOL	7389	Swimming pool and fountain cleaning and maintenance
280	THE POOL PROS	1190 ENCINITAS BLVD, 124	POOL	7389	Swimming pool and fountain cleaning and maintenance
281	UNDERWATER UNLIMITED LLC	281 1/2 HILLCREST DR	POOL	7389	Swimming pool and fountain cleaning and maintenance
282	WILSON POOLS PLUS	1530 BURGUNDY RD	POOL	7389	Swimming pool and fountain cleaning and maintenance
283	ERAGON RESTORATION	Unknown	Unknown	Unk	Unknown

CITY OF ENCINITAS

Commercial Industrial

STORMWATER QUALITY INSPECTION SUMMARY

(760) 633-2787 ◆ FAX (760) 633-2818 ◆ npdesmail cityofencinitas.org

ISSUED TO:

SITE ADDRESS:

PHONE : ( )

❒ **NO CORRECTIVE ACTIONS REQUIRED**

REQUIRED CORRECTIVE ACTIONS

ALL REQUIRED CORRECTIVE ACTIONS IDENTIFIED BELOW MUST BE COMPLETED AND REPORTED TO THE CITY BY THE FOLLOWING DATE:

❒ **Obtain Spill Kit**

❒ **Post Spill Response Plan**

❒ **Provide and Document Employee Training**

❒ **Provide Secondary Containment for Outdoor Storage of Fluid Liquid Waste**

❒ **Provide Coverage for Outdoor Storage of Fluid Liquid Waste**

❒ **Provide Coverage for Exposed Equipment and or Parts**

❒ **Clean Litter and Debris From Site, Trash Areas, and or Storm Drain**

❒ **Clean Maintain Outdoor Storage Areas**

Other Corrective Actions Comments:

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.110. Failure to comply with minimum Best Management Practice (BMP) Standards may result in further enforcement action by the City of Encinitas.

Inspector (Signature) **Date**

Responsible Party (Signature) **Date**

FOLLOW UP INSPECTION

❒ **All Corrective Actions Completed**

❒ **Corrective Actions Not Complete Enforcement Action Required**

Inspector Sign-Off **Date**

Appendix E

Residential

E-1 Map of High Threat to Water Quality Residential Areas

Appendix E-1

City of Encinitas

High Threat to Water Quality Residential Areas

High Threat to Water Quality Residential Areas in the City of Encinitas include:

- All residential areas within 500ft of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

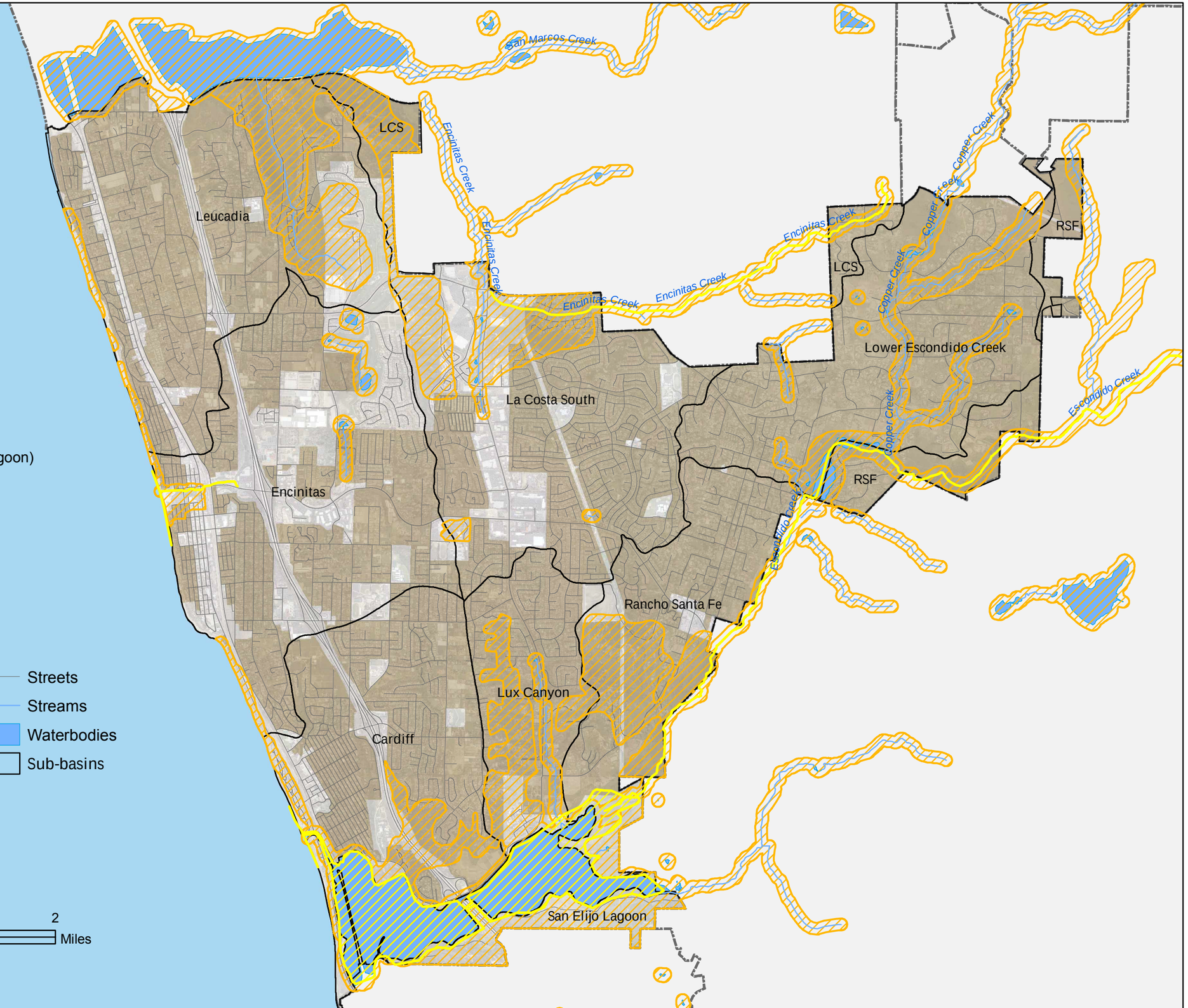

Residential Areas
303(d) listed streams
303(d) listed waterbodies
Environmentally Sensitive Areas
Streets
Streams
Waterbodies
Sub-basins

0 0.5 1 2 Miles

Appendix F

Education

F-1	Regional Mobile Business Outreach and Education Plan
F-2	NCSWP Construction Brochure
F-3	City of Encinitas Brochures (English Spanish)
F-4	Encinitas Environmental Services Guide
F-5	Giveaway items developed in FY 2007-08
F-6	NCSWP Pet Waste Survey and Results
F-7	Regional Residential Education Plan

Regional URMP Attachment 5.0

Regional Mobile Business Outreach and Education Strategy

FINAL - March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

This document describes a **Regional Mobile Business Outreach and Education Program** to be collaboratively conducted by the Copermittees of NPDES Order No. R9-2007-0001 (Permit). It was developed by the Mobile Business Subcommittee of the Copermittees' Outreach Workgroup. Permit section D.3.b.(4)(a) requires that each Copermittee develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP. Section D.3.b.(4)(b) further states "if they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education." Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy. It addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy.

2.0 SOURCE CHARACTERIZATION

Mobile businesses provide services at offsite locations rather than from fixed bases of operation. Services may be provided at, but are not limited to, residential, industrial, municipal, and commercial areas. Permit Section D.3.b.(1), identifies 12 categories of mobile business types that will be addressed as part of this regional Strategy. Table 1 identifies these businesses types and the potential pollutants associated with each. Additional characterization and description of these sources will be conducted during the development and implementation of the regional program elements described in Section 2.0

Table 1 – Identification of Mobile Business Types and Associated Pollutants-of-Concern

Source Type	Bacteria	Metals	Pesticides	Sediment	Trash	Nutrients	Organics	Oil/Grease
1. Auto Repair, Maintenance, Fueling, Cleaning		X		X	X		X	X
2. Equipment repair, maintenance, fueling, or cleaning		X		X	X		X	X
3. Mobile automobile or other vehicle washing		X		X	X		X	X
4. Pest control services		X	X				X	
5. Mobile carpet, drape or furniture cleaning							X	
6. Cement mixing or cutting				X		X	X	
7. Masonry				X		X	X	
8. Painting and coating		X			X		X	
9. Landscaping	X	X	X	X		X	X	
10. Pool and fountain cleaning		X		X		X	X	
11. Portable sanitary services	X				X	X	X	
12. Power washing services	X	X	X	X	X	X	X	X

3.0 REGIONAL PROGRAM ELEMENTS

The Regional Mobile Business Outreach and Education Program will consist of several elements to be developed and implemented by June 2010.

3.1 Inventory Development and Maintenance

Permit section D.3.b.(1) requires that each Copermittee keep as part of its commercial sources inventory a listing of mobile businesses known to operate within its jurisdiction, and section D.3.b.(4)(b) encourages Copermittees to share these inventories. In addition to sharing inventory information, the Copermittees have determined that the collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses, and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications. The Copermittees

intend to utilize a consultant to compile this inventory. It is expected to be completed by June 2009. Prior to the completion of a shared inventory, the Copermittees will continue to meet the requirements of section D.3.b.(4)(b) by individually maintaining and updating as necessary their existing jurisdictional mobile business inventories. These will be used as a starting point for the development of a consolidated inventory. The consultant will also be tasked with researching other information sources such as unlicensed mobile businesses operating within the County, as well as with managing updates to the inventory in subsequent years.

3.2 Establishment of Minimum BMP Requirements

Permit section D.3.b.(4)(a)i requires that Copermittees develop and implement minimum standards and BMPs to be required for each of the various types of mobile businesses. The Copermittees also intend to collaborate in the development of a minimum set of BMP standards for each type of mobile business addressed through the regional effort. Existing resources such as jurisdictional minimum BMPs, the Project Clean Water Clean Water Tool Box (http://www.projectcleanwater.org/bmp/) and the Think Blue website (http://www.sandiego.gov/thinkblue) will be reviewed by the Copermittees in developing these common standards. A consultant may also be utilized for BMP development support. This task is expected to be completed by June 2009.

3.3 Outreach and Education Strategy

Permit section D.3.b.(4)(a)iv requires that Copermittees develop and implement an outreach and education strategy for mobile businesses. A variety of educational methods and approaches will likely be utilized in complying with this requirement. These will be determined by the Copermittees during the development of this task. The centerpiece of the Copermittees' education strategy will be business notifications. This element is described further below.

3.4 Business Notifications

Permit section D.3.b.(4)(a)iii requires that, within the first three years of implementation of the updated JURMP, each Copermittee must notify the owner/operator of each

inventoried mobile business their minimum standards and BMP requirements and local ordinances. The Copermittees will collaboratively develop and implement a regional notification strategy to inform mobile businesses of their obligation to comply with the local ordinances of the jurisdictions where they operate. In addition to assisting in the development of this strategy, the consultant will be tasked with notifying businesses and tracking when and how they were notified. Potential notification options include mailing, emailing, workshops, and website posting. This task will be completed no later than March 24, 2011, but is targeted for completion by March 2010.

3.5 Implementation Schedule

Implementation of the Regional Mobile Business Outreach and Education Program will begin during FY 08/09, with all major tasks targeted for completion by the end of FY 2009/10. The consultant may also be retained for future management of the inventory and other tasks as needed. Major milestones are summarized below.

FY 2008/09

- Consultant selection by Subcommittee
- Completion and maintenance of regional inventory by consultant
- Development of regional minimum BMPs

FY 2009/10

- Notification of businesses by consultant (by January 2010)
- Final report including status of notifications submitted to Copermittees

4.0 INDIVIDUAL COPERMITTEE RESPONSIBILITIES

Although many of the specific requirements of Permit section D.3.b.(4)(a) will be collaboratively addressed through the completion and implementation of the Regional Mobile Business Outreach and Education Program, the responsibility for ensuring individual Permit compliance ultimately remains with each Copermittee. These responsibilities are briefly discussed below.

4.1 Inspections and Enforcement

Permit section D.3.b.(4)(a)ii requires that Copermittees develop and implement an enforcement strategy which specifically addresses the unique characteristics of mobile businesses operating within their jurisdictions. Section D.3.b.(4)(a)v further requires that Copermittees conduct inspections of mobile businesses as needed (e.g., on a complaint basis). The Regional Mobile Business Outreach and Education program will not address inspections or enforcement of mobile businesses; these responsibilities are retained individually by each Copermittee.

4.2 Education and Outreach

Copermittees are expected to participate as requested in the development of the Education and Outreach Strategy described in Section 3.3 above. Individual Copermittees may also have specific needs or requirements not addressed through this effort. Each jurisdiction retains the responsibility for developing additional education programs or strategies in accordance with their own needs, and as necessary to ensure their own Permit compliance.

4.3 Inventory Updates

As described in Section 3.1 above, individual Copermittee mobile business inventories will initially be used as a starting point for the development of a consolidated regional inventory. Copermittees are expected to make their inventories available as requested, and to provide updated information as determined necessary for future updates.

4.4 BMP Requirements

Copermittees are expected to make their jurisdictional BMPs and requirements available as requested during the development of regional standards and program content. The Regional Mobile Business Outreach and Education Program will emphasize standardized, common content. In the event that an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad 760-602-2719

City of San Marcos 760-744-1050

City of Encinitas 760-633-2787

City of Del Mar 858-755-9313

City of Oceanside 760-435-5800

City of Solana Beach 858-720-2470

City of Vista 760-726-1340

Best Management Practices

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.

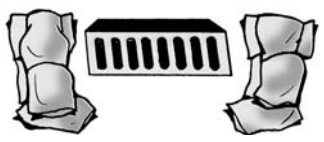

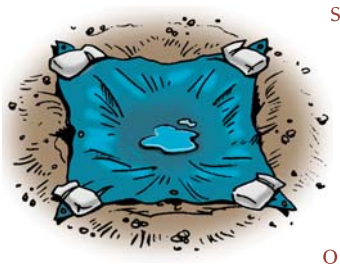

The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.

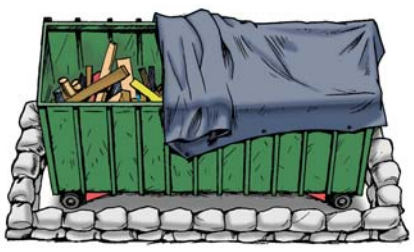

Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.

Water Quality Regulations for Construction Sites

In 1972, the Environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

A Pollution Prevention Guide for the Construction Industry

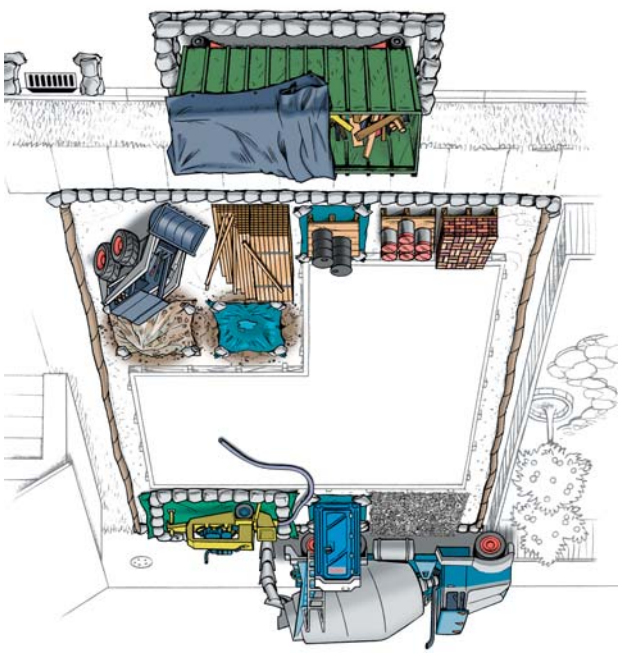

North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.

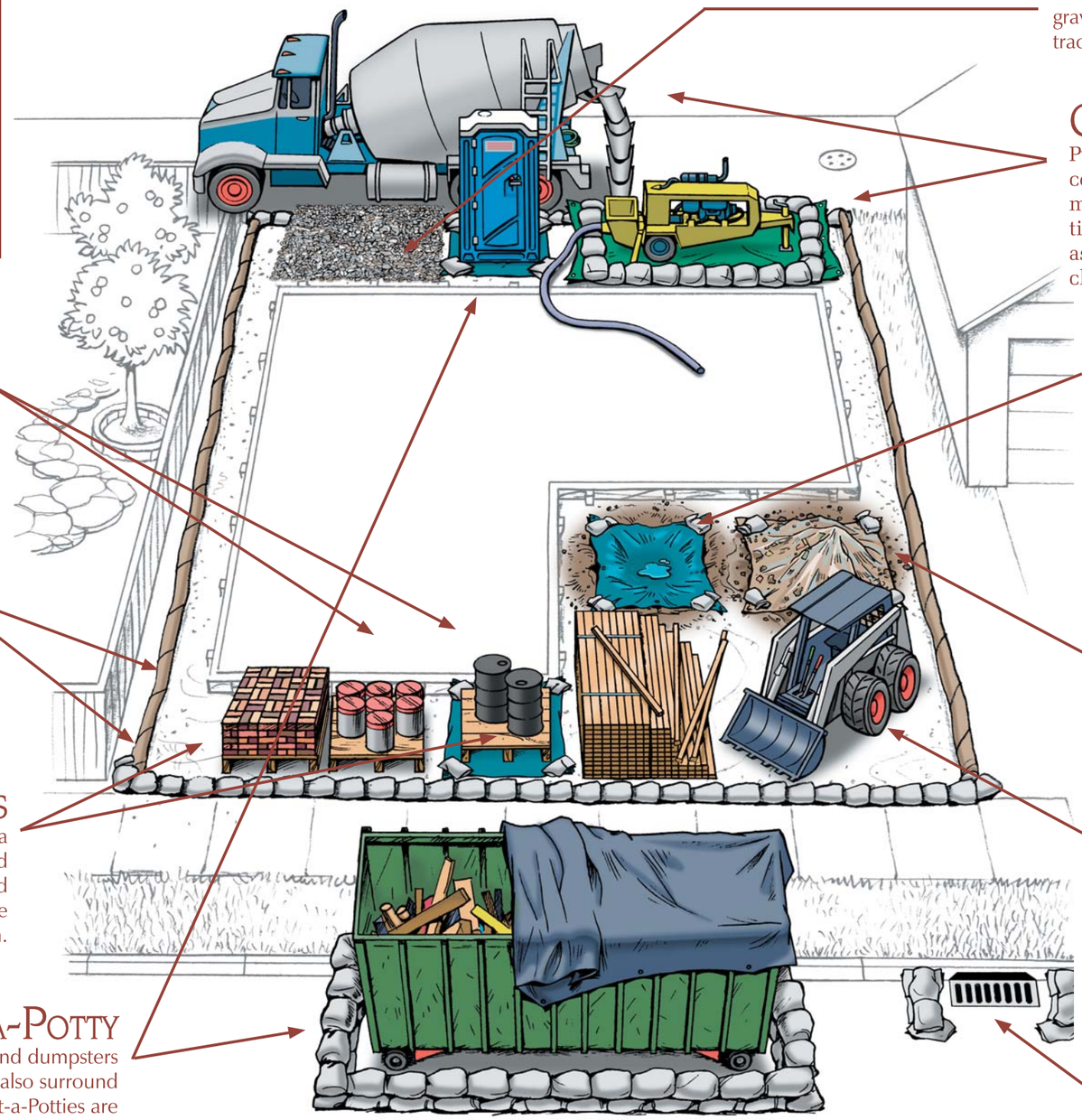

Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Perimeter controls

Gravel bags, silt fences, and straw wattles are acceptable perimeter controls, and must be used to surround the entire site to control run-on and run-off. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Keep extra absorbent materials and/or a wet/dry vacuum on site to quickly pick up unintended spills. Sites must also be checked and maintained daily.

Building materials/staging areas

Construction materials must be stored on site at all times unless a right-of-way permit has been obtained. Building materials should always be covered when not in use to prevent run-off caused by wind or rain. To apply for a right-of-way permit, contact the appropriate department of your local jurisdiction.

Dumpsters/Port-a-Potty

Always cover dumpsters with a rollback tarp. Areas around dumpsters should be swept daily. Perimeter controls should also surround dumpsters and all Port-a-Potties. If dumpsters or Port-a-Potties are kept on the street, right-of-way permits are needed.

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic sheet to collect and contain liquids and prevent run-off in nearby areas. The washout area must be checked and maintained daily to ensure compliance. Washout liquids must be disposed of properly.

Dirt and grading

Mounds of dirt or gravel should be stored on site. These materials should also be covered each day with a tarp, coconut mat, or other form of protection. Visqueen and/or tarps must be available and on site to cover 125% of exposed areas during the rainy season (October – April).

Earthmoving equipment

All earthmoving equipment should be stored on site. Maintenance should also be conducted on the site, and tracks and trails left by equipment leading to and from the site should be cleaned up immediately.

Storm drains

Storm drains must be protected at all times with perimeter controls, such as gravel bags or straw wattles. Sediment accumulation should be removed frequently.

Appendix F-2

These guidelines are generalized. Please check specific requirements with your local jurisdiction.

Mantenimiento
Automotriz
Automotive

Empresas Constructoras
Developers
Simple and Cost Effective Ways to Comply with Storm Water Regulations

Contratando un
Hombre Anto
Hiring a
Handy Man

DiaZinón
DiaZinon

Los Restaurantes Pueden
Ayudar a Mantener Limpias
Nuestras vías
Restaurants Can
Help Keep our
Waterways Clean

Cuidado del
Patio y del jardín
Yard & Garden
Care

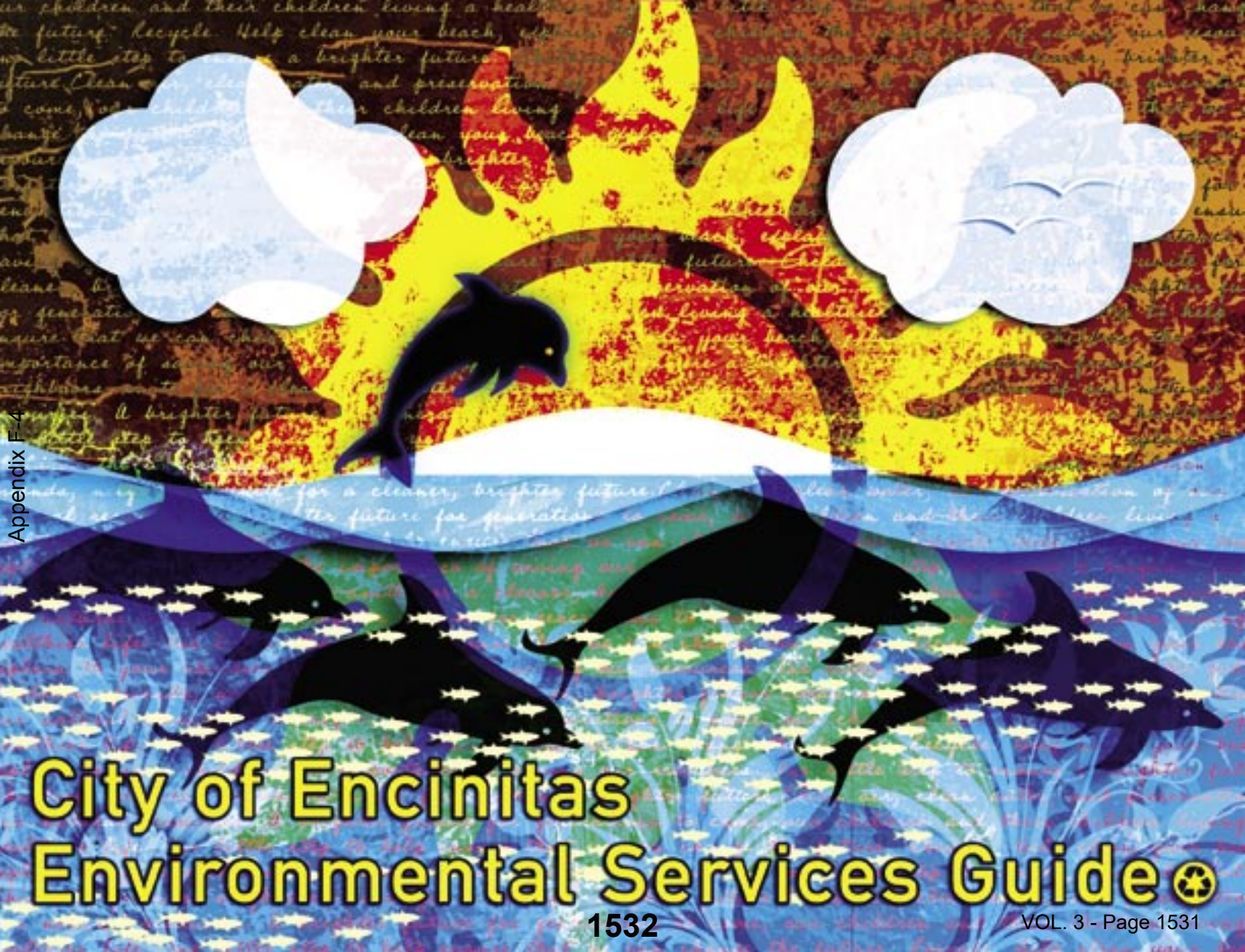
City of Encinitas
Environmental Services Guide

Ocean protection

The ocean begins at your front door.

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.

Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.
- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.

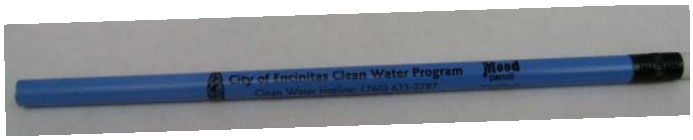

Color Changing Mood Pencil

Bags on Board Pet Waste Bag Dispenser

Clean Water Magnet

NORTH COUNTY
STORM WATER PROGRAM

Carlsbad Vista Encinitas Escondido Oceanside
Solana Beach San Marcos County of San Diego

1. What is your zip code? _____

2. Where do you most often walk your dog?
   __ My neighborhood
   __ At the park
   __ At the beach
   __ I don't walk my dog
   __ Other _____

3. What happens to the pet waste that is not picked up?
   __ I don't know
   __ It disintegrates
   __ It fertilizes the ground
   __ It gets washed to creeks, lagoons, and the ocean
   __ Someone comes later to clean it up
   __ Other _____

4. If you saw people not picking up after their pet, what would be your reaction?
   __ I would not care
   __ I would report them to the City
   __ I would be surprised
   __ I would ask them to pick it up
   __ I don't know what I could or would do
   __ Other _____

5. Why do you think people would not pick up after their pet? (Check all that apply)
   __ They don't care
   __ They don't know they're supposed to
   __ There's no one around to see them
   __ They didn't bring a bag
   __ There was nowhere to throw it away
   __ They think it's gross
   __ Other _____

6. What do you think the City can do or should do about the pet waste problem?
   _____
   _____

Thank you!

Printed on Recycled Paper

Coastal Cleanup Day
9/20/08

1. What is your zip code?
   - 3 92064
   - 3 92024
   - 2 92054

2. Where do you most often walk your dog?
   - 5 My neighborhood
   - At the park
   - 3 At the beach
   - I don't walk my dog
   - 1 Other don't own pet

3. What happens to the pet waste that is not picked up?
   - I don't know
   - 1 It disintegrates
   - It fertilizes the ground
   - 7 It gets washed to creeks, lagoons, and the ocean
   - Someone comes later to clean it up
   - Other

4. If you saw people not picking up after their pet, what would be your reaction?
   - I would not care
   - I would report them to the City
   - 1 I would be surprised
   - 7 I would ask them to pick it up
   - I don't know what I could or would do
   - 1 Other report to property mgmt

5. Why do you think people would not pick up after their pet? (Check all that apply)
   - 7 They don't care
   - 4 They don't know they're supposed to
   - 5 There's no one around to see them
   - 4 They didn't bring a bag
   - 3 There was nowhere to throw it away
   - 4 They think it's gross
   - Other

6. What do you think the City can do or should do about the pet waste problem?
   - More bags
   - Education
   - Educate the people
   - Make a law, put more signs
   - Provide pet stations- fine owners if found
   - Provide pet stations
   - More places for dog

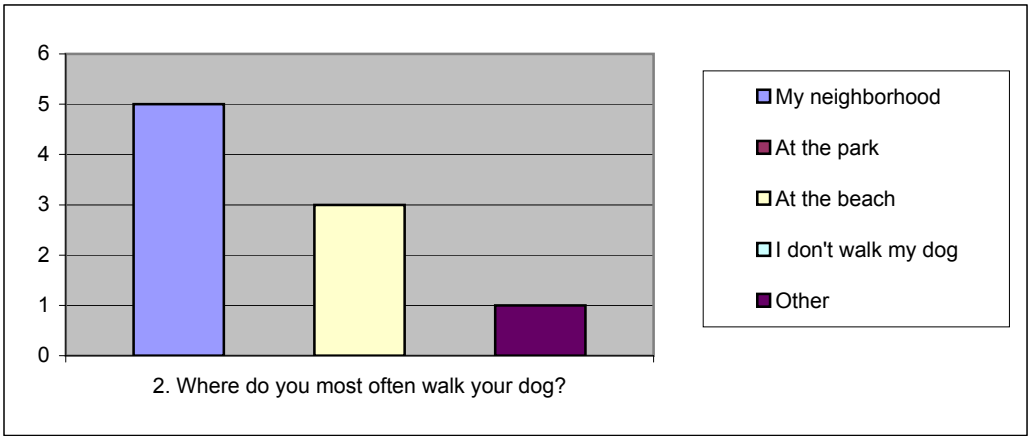

2. Where do you most often walk your dog?

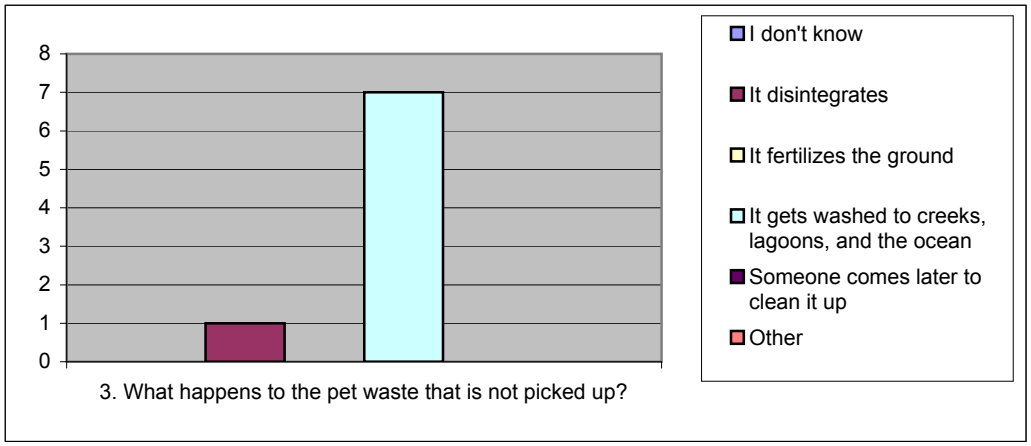

3. What happens to the pet waste that is not picked up?

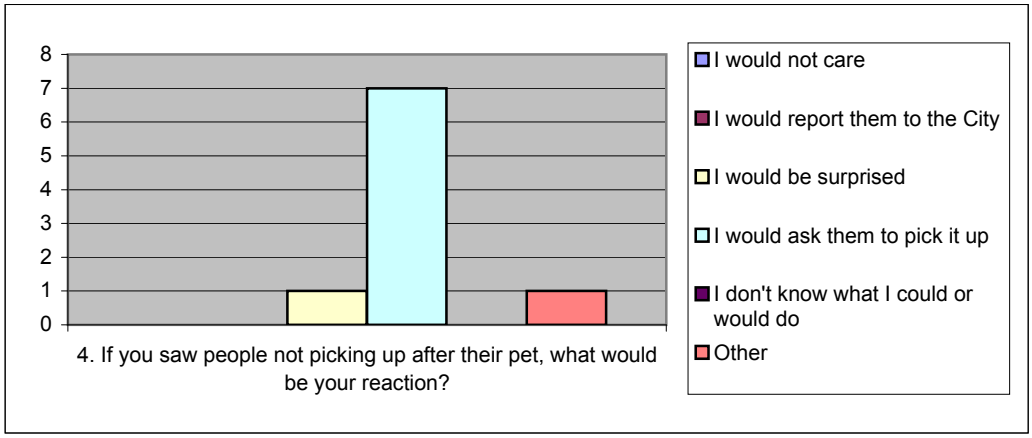

4. If you saw people not picking up after their pet, what would be your reaction?

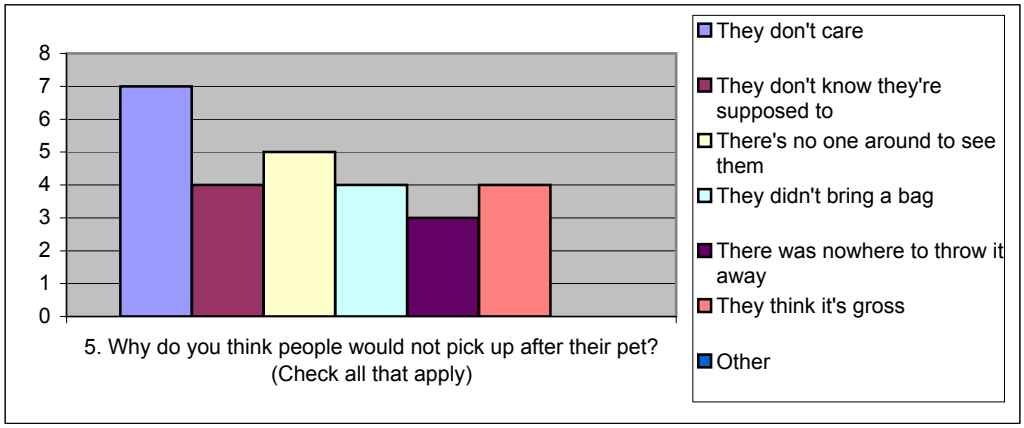

5. Why do you think people would not pick up after their pet? (Check all that apply)

Cardiff Green Expo
12/7/08

1. What is your zip code?

6	92024
6	92007
1	92130

2. Where do you most often walk your dog?

13	My neighborhood
3	At the park
3	At the beach
	I don't walk my dog
	Other

3. What happens to the pet waste that is not picked up?

1	I don't know
	It disintegrates
1	It fertilizes the ground
11	It gets washed to creeks, lagoons, and the ocean
2	Someone comes later to clean it up
	Other

4. If you saw people not picking up after their pet, what would be your reaction?

	I would not care
	I would report them to the City
	I would be surprised
12	I would ask them to pick it up
1	I don't know what I could or would do
	Other

5. Why do you think people would not pick up after their pet? (Check all that apply)

10	They don't care
3	They don't know they're supposed to
5	There's no one around to see them
9	They didn't bring a bag
4	There was nowhere to throw it away
4	They think it's gross
2	Other Lazy Didn't notice

6. What do you think the City can do or should do about the pet waste problem?

Wow, that's an interesting question. Education?
Make it an enforceable litter violation
Have more bag stands
Start issuing fines!
Inflict fines on the perps
Education campaign and more pooper scooper bags
Educate- have bags available in key locations
More bags on park and local streets and trails
If there isn't an ordinance already, the council should write one.
Fine people that are caught not picking up after their dog

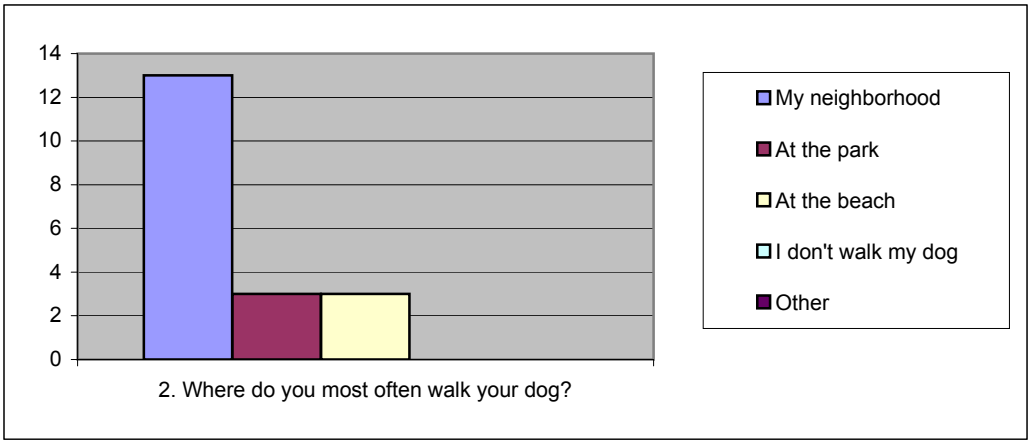
14
12
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My neighborhood
At the park
At the beach
I don't walk my dog
Other
2. Where do you most often walk your dog?

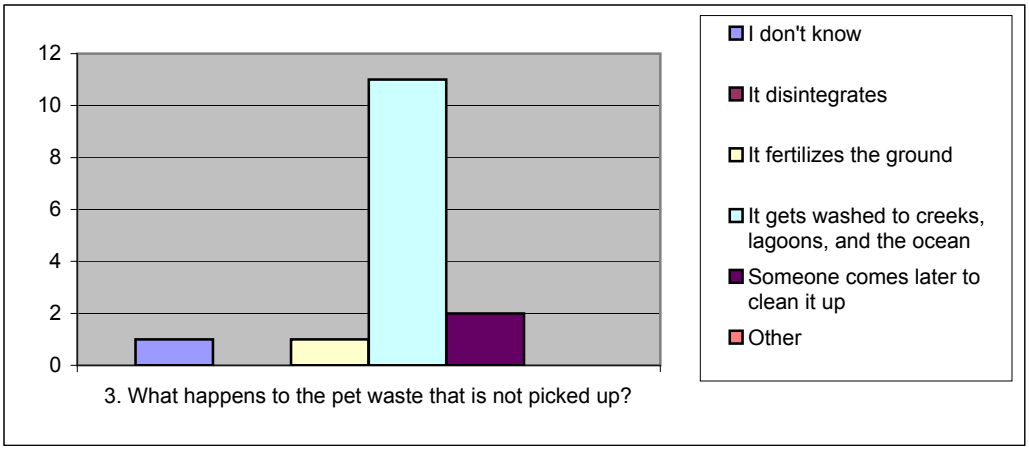
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I don't know
It disintegrates
It fertilizes the ground
It gets washed to creeks, lagoons, and the ocean
Someone comes later to clean it up
Other
3. What happens to the pet waste that is not picked up?

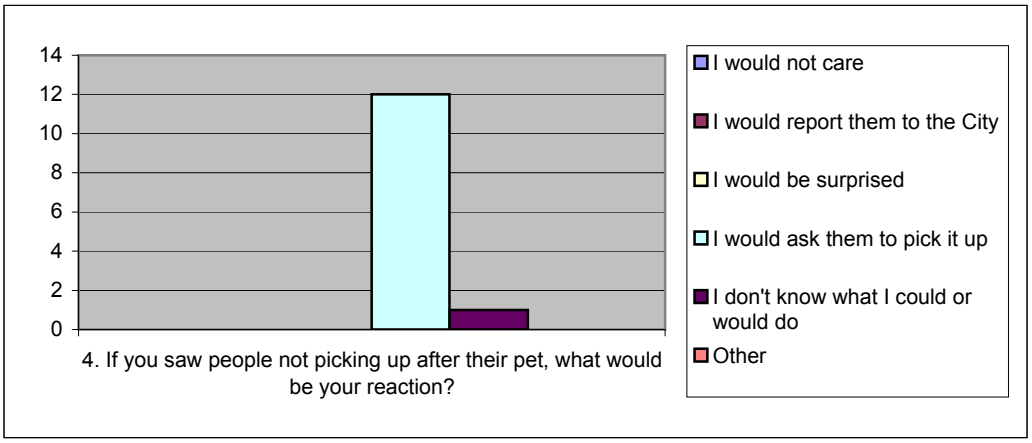
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I would not care
I would report them to the City
I would be surprised
I would ask them to pick it up
I don't know what I could or would do
Other
4. If you saw people not picking up after their pet, what would be your reaction?

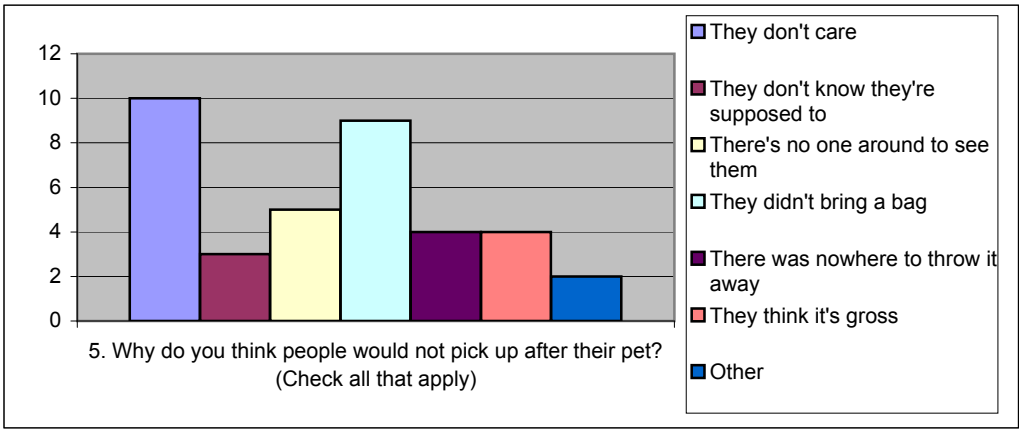
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4
2
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They don't care
They don't know they're supposed to
There's no one around to see them
They didn't bring a bag
There was nowhere to throw it away
They think it's gross
Other
5. Why do you think people would not pick up after their pet? (Check all that apply)

Encinitas Garden Fest
4/25/09

1. What is your zip code?

7	92007
1	92009
1	92011
1	92014
10	92024
3	92054
1	92071
1	92075
3	92078
2	92117
1	92124
1	92128
1	92129
1	92139
1	92584
1	94114

2. Where do you most often walk your dog?

31	My neighborhood		
7	At the park		
7	At the beach		
1	I don't walk my dog		
2	Other	Trails	Park trails/mountains

3. What happens to the pet waste that is not picked up?

1	I don't know
7	It disintegrates
6	It fertilizes the ground
30	It gets washed to creeks, lagoons, and the ocean
1	Someone comes later to clean it up
1	Other We give out bags on our grounds

4. If you saw people not picking up after their pet, what would be your reaction?

	I would not care
1	I would report them to the City
5	I would be surprised
28	I would ask them to pick it up
2	I don't know what I could or would do
4	Other Offer them a baggie. Pick it up. I would pick it up. I would be annoyed, but I don't think I'd say anything.

5. Why do you think people would not pick up after their pet? (Check all that apply)

25	They don't care
11	They don't know they're supposed to
22	There's no one around to see them
27	They didn't bring a bag
13	There was nowhere to throw it away
16	They think it's gross
3	Other Irresponsible citizens 1 reason Lazy Selfish

6. What do you think the City can do or should do about the pet waste problem?

Make disposal and bags more available.
More containers and bag stations
Education. I like the stations at San Elijo Lagoon!
Education
Waste bags available at parks- common areas pets walked.

Educate! Encinitas Garden Fest 4/25/09

Buy some small 8-10 gallon trash cans w/lids and work w/ PADS to have these placed in front of people's houses in a "test" neighborhood. See if we can lead by example and encourage folks to dispose of their pet waste responsibly.

Bring to attention. Bag dispensers are great.

People should take personal responsibility and go out prepared to clean up after their pet. The City does provide bags in parks and strategic public places. The City shouldn't have to do a lot else beside education.

Place disposal cans throughout neighborhood

Pet waste bag stations at prominent dog walk areas (along railroad track paths)

Keep doing things like this

Bag stations and trash bins

Offer "free" pet waste bags at designated locations

Along the beach in Carlsbad there are dog bag dispensers that work great and lot of trash cans

Display more signs, have baggie dispensers

Put up more poop bag stations. Fine people

Educate, make litter laws public!

More education

Put out post stations where bags can be given and trash dispensers to throw out the waste.

Make people more aware that it is against code not to pick up waste.

Info

Give doggie bag station

More available bag stations

Provide bags to pick up

Fine people big time

Install waste and dog bags around parks and trails, educating the people.

Put pet waste stations on common dog walking areas with trash cans and signs to say pick up after your pet.

Heavy fines for offenders

Encinitas Garden Fest
4/25/09

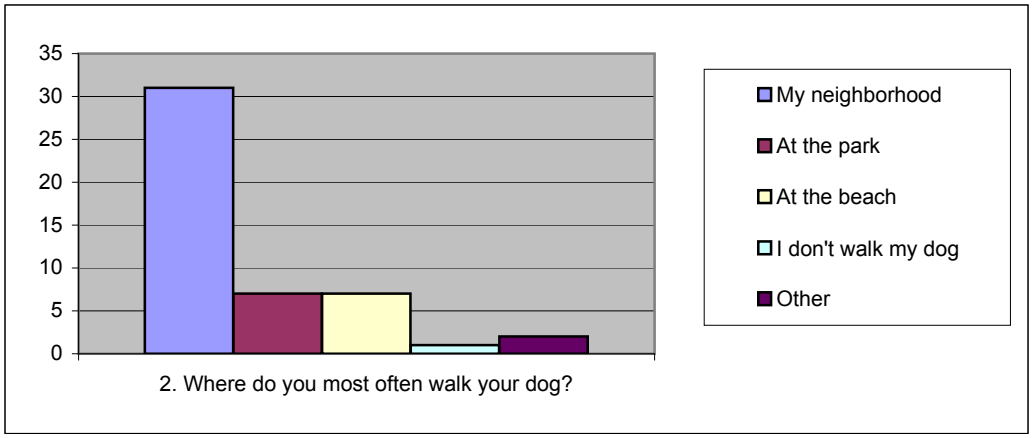

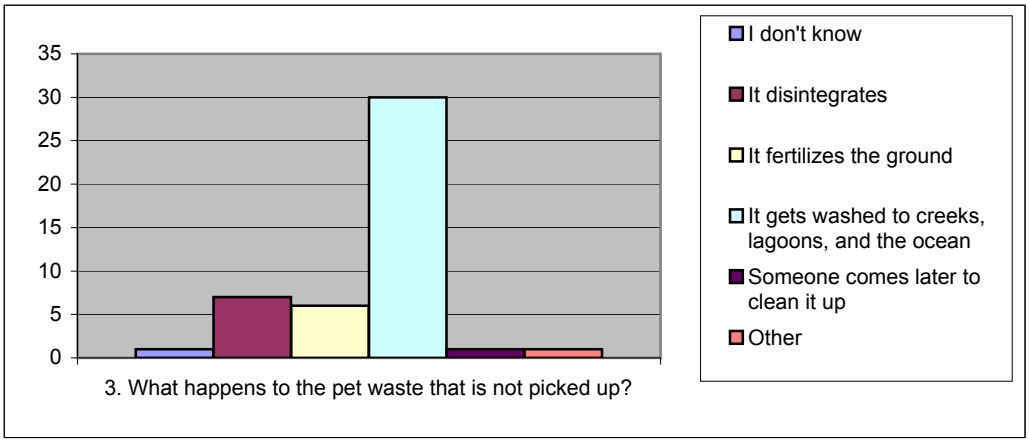

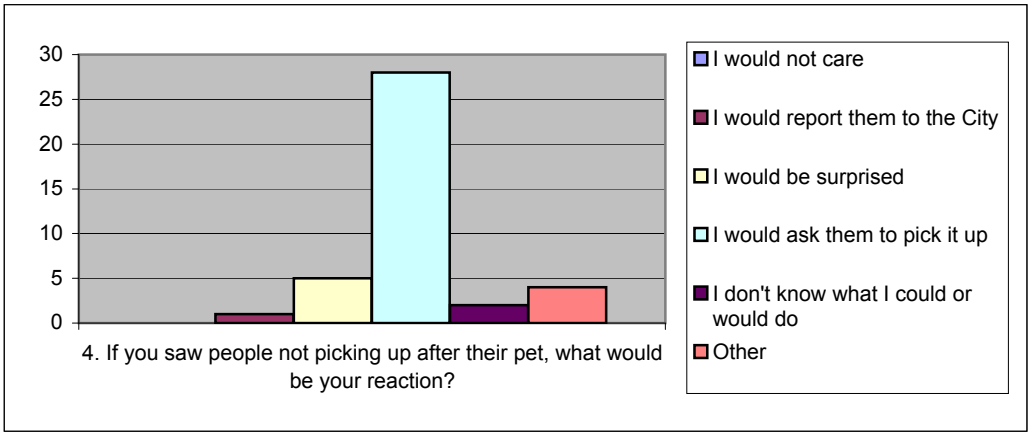

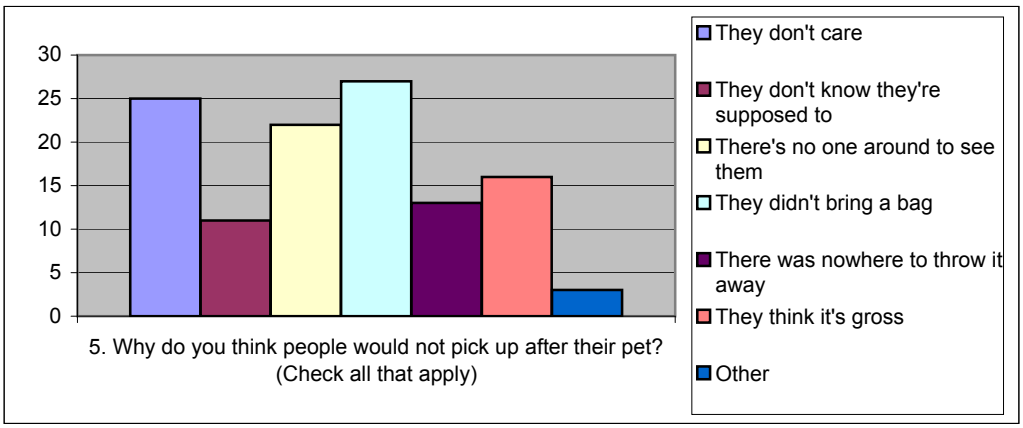

San Elijo Lagoon Day
5/16/09

1. What is your zip code?

1	91941
4	92007
1	92008
1	92009
1	92010
1	92011
2	92014
1	92020
8	92024
1	92037
1	92067
1	92075
1	92130

2. Where do you most often walk your dog?

20	My neighborhood			
3	At the park			
	At the beach			
1	I don't walk my dog			
6	Other	Off leash areas		Trails (lagoon)
		Lagoon	Trails	SEL Lagoon
		Campground		

3. What happens to the pet waste that is not picked up?

1	I don't know	
1	It disintegrates	
1	It fertilizes the ground	
20	It gets washed to creeks, lagoons, and the ocean	
1	Someone comes later to clean it up	
2	Other	Breeds flies

4. If you saw people not picking up after their pet, what would be your reaction?

	I would not care			
	I would report them to the City			
	I would be surprised			
15	I would ask them to pick it up			
4	I don't know what I could or would do			
5	Other	I would pick it up.	Offer them a bag.	Pick it up.
		Pick up myself or offer them a bag.		

5. Why do you think people would not pick up after their pet? (Check all that apply)

18	They don't care	
4	They don't know they're supposed to	
11	There's no one around to see them	
11	They didn't bring a bag	
9	There was nowhere to throw it away	
11	They think it's gross	
1	Other	They don't know how much it harms the environment.

6. What do you think the City can do or should do about the pet waste problem?

Make a rule that everyone pick up after their pets.
They should make a rule or law to pick up waste.
Make a law.
More signs
Install dispensers (there's one just recently installed in our neighborhood. Yeah!)
Provide more bags, put up more signs

Provide more trash cans along the walk not just at the beginning or end.
Promote use of bags and install more trash cans
Enforce the law
Educate
Fines
Make cops patrol dog parks
Make people pick up after pet
Keep post around parks w/ bags for waste and trash can.
Make a law to stop people who carelessly leave poop wherever pets poop.

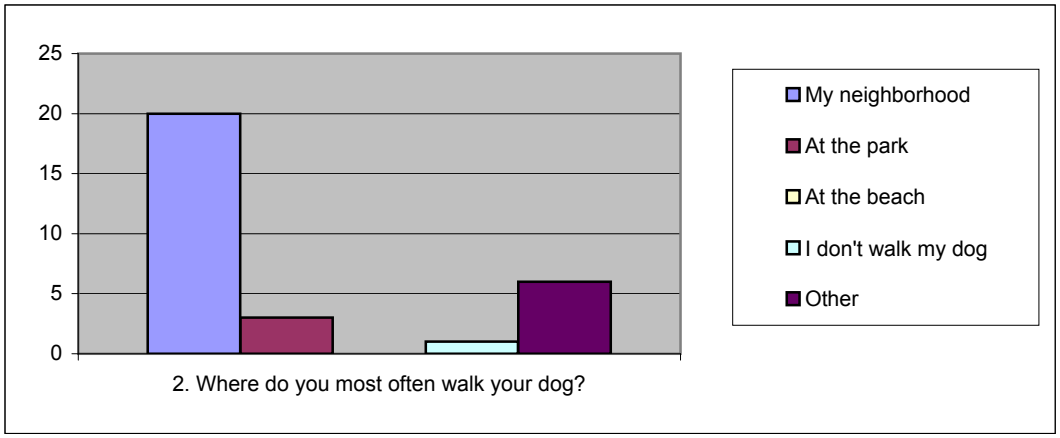
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My neighborhood
At the park
At the beach
I don't walk my dog
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2. Where do you most often walk your dog?

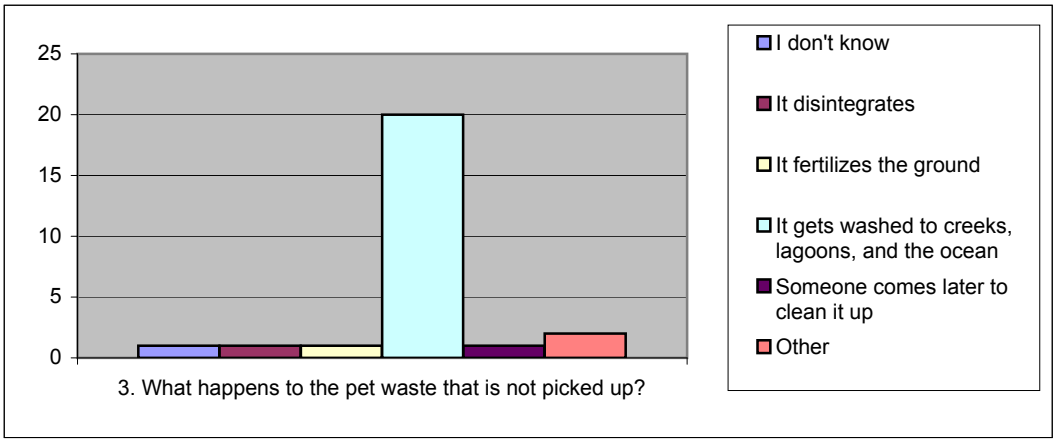
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15
10
5
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I don't know
It disintegrates
It fertilizes the ground
It gets washed to creeks, lagoons, and the ocean
Someone comes later to clean it up
Other
3. What happens to the pet waste that is not picked up?

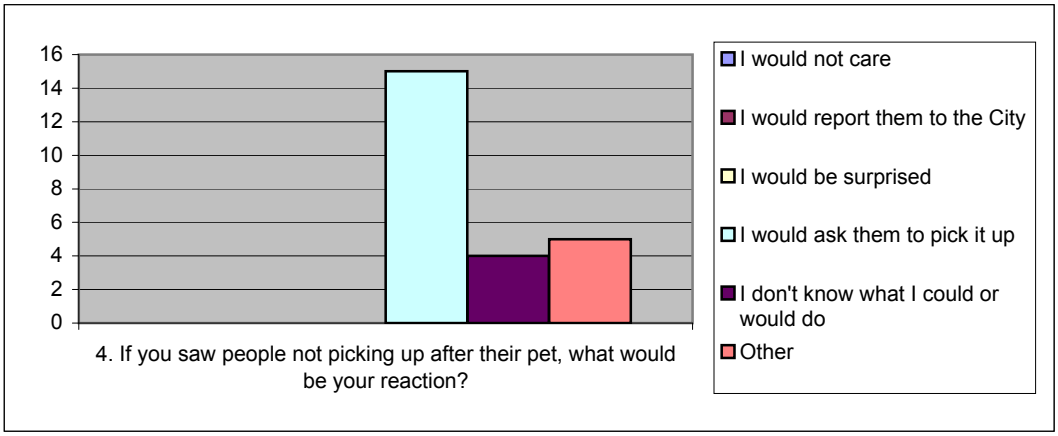
16
14
12
10
8
6
4
2
0
I would not care
I would report them to the City
I would be surprised
I would ask them to pick it up
I don't know what I could or would do
Other
4. If you saw people not picking up after their pet, what would be your reaction?

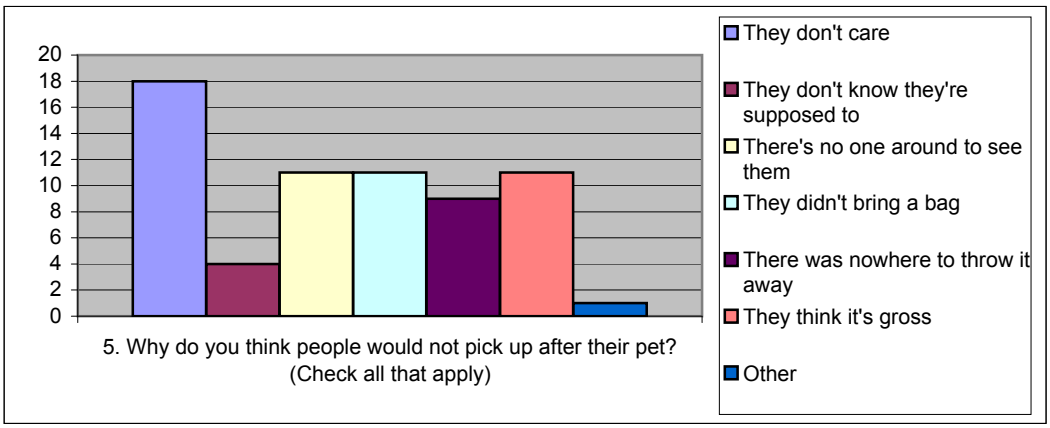
20
18
16
14
12
10
8
6
4
2
0
They don't care
They don't know they're supposed to
There's no one around to see them
They didn't bring a bag
There was nowhere to throw it away
They think it's gross
Other
5. Why do you think people would not pick up after their pet? (Check all that apply)

Encinitas Environment Day
6/7/09

1. What is your zip code?

4	92007
13	92024
1	92105
1	92058
1	92084
1	92054
1	92067
1	92111
1	92107

2. Where do you most often walk your dog?

20	My neighborhood
4	At the park
4	At the beach
2	I don't walk my dog
	Other

3. What happens to the pet waste that is not picked up?

2	I don't know
2	It disintegrates
1	It fertilizes the ground
20	It gets washed to creeks, lagoons, and the ocean
1	Someone comes later to clean it up
2	Other

4. If you saw people not picking up after their pet, what would be your reaction?

	I would not care		
2	I would report them to the City		
2	I would be surprised		
18	I would ask them to pick it up		
1	I don't know what I could or would do		
5	Other	I'd pick it up myself.	Sometimes I don't want to be confrontational.
		Offer a bag.	

5. Why do you think people would not pick up after their pet? (Check all that apply)

18	They don't care		
5	They don't know they're supposed to		
14	There's no one around to see them		
13	They didn't bring a bag		
6	There was nowhere to throw it away		
10	They think it's gross		
2	Other	They are morons.	Smelly.

6. What do you think the City can do or should do about the pet waste problem?

Provide waste bag depots like Del Mar.
They don't have an ordinance already?
Education of the public
More scoop your poop bags
More bag dispensers, signs like "Heal the Bay" campaign: "This goes to the bay."
More education of dangers.
Continue providing bags, refuse containers, and reminder signs
Perhaps have bags and cans for disposal in parks.
Enforce litter and pet waste laws and continue education efforts!
Puppy bag stations along neptune
More signage, more trash cans!
Pet poop bags at all places dogs might be and trash bins for poop.

Incentive to pick up.
Fine them
Ticketing dog patrol
City/County law advertised on newspaper or on news to remind pet owners.
Educate
Very hard to control humans that are stupid.

Encinitas Environment Day
6/7/09

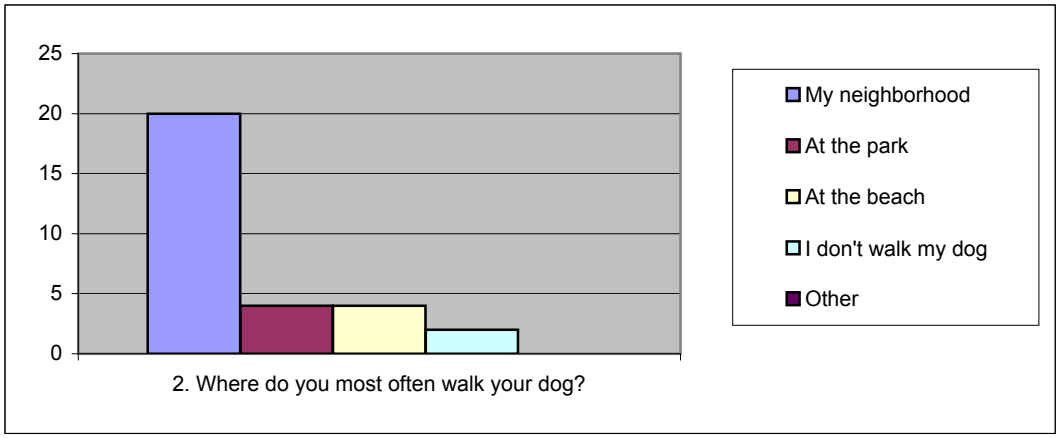

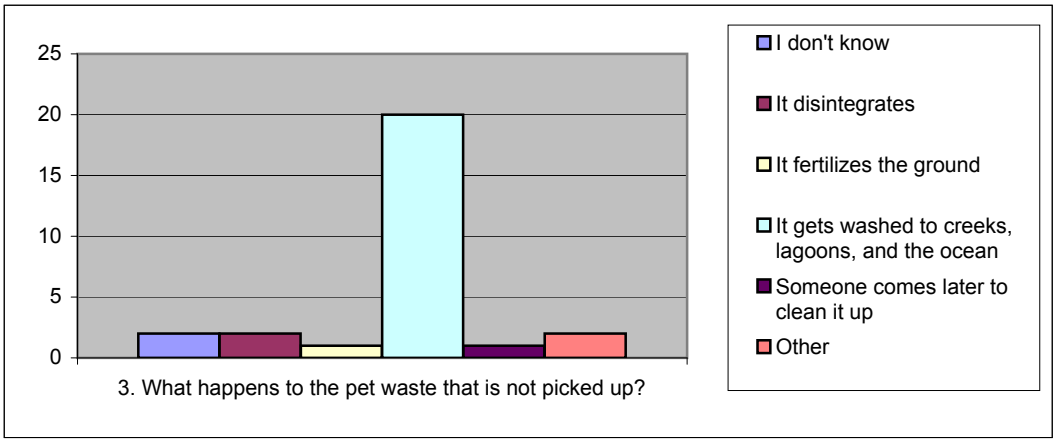

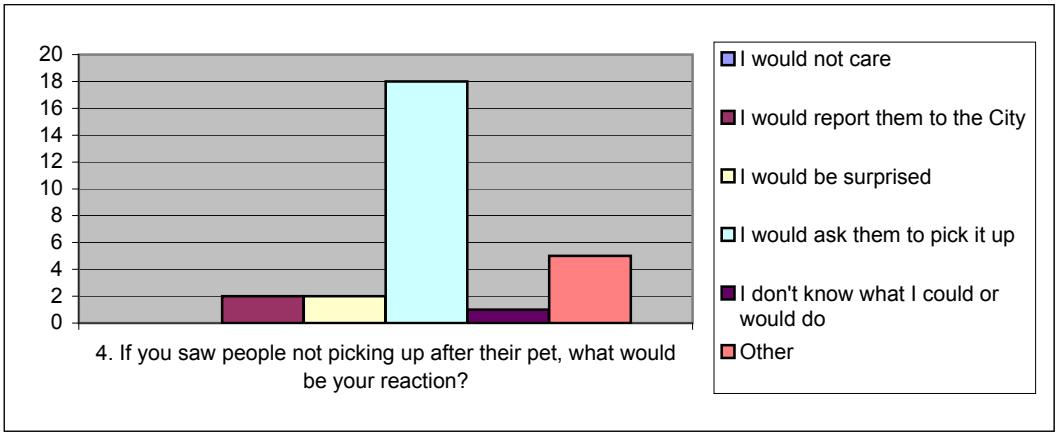

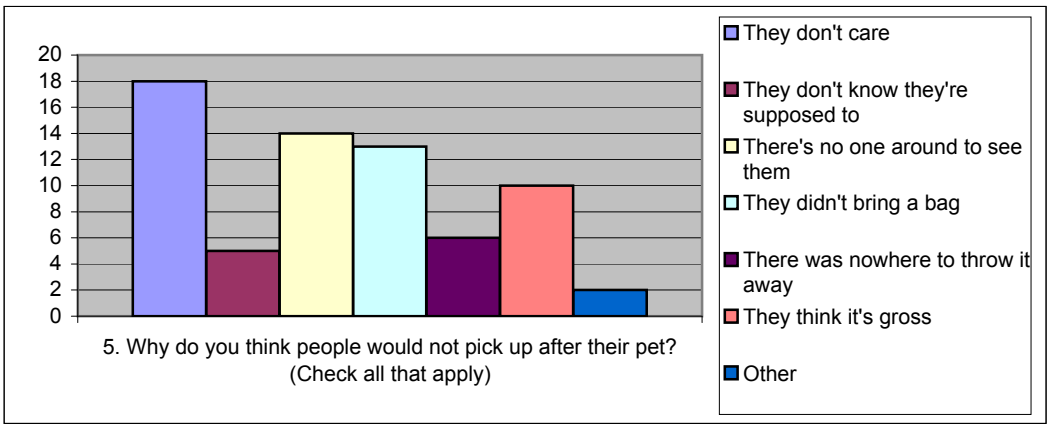

Regional URMP Attachment 2.0

Regional Residential Education Plan

FINAL March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

The Regional Residential Education Program is a joint effort by the Copermittees of the Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES No. CAS0108758). The Regional Residential Education Plan (Plan) contains recommended strategies for the successful development and implementation of the Regional Residential Education Program. Per section F.1 of the Permit, as amended by Addendum No. 1 on December 12, 2007, this program must be collaboratively developed and implemented by March 24, 2008.

In the past, Copermittees have been limited in their ability to pursue strategies which may have a much greater potential to influence knowledge and behavioral change in residential populations. There are several benefits to implementing an enhanced regional program to target residential sources of stormwater pollution. First, it will encourage the development of consistent messages throughout the region. Second, a regional approach will enable Copermittees to better leverage resources and utilize economies of scale. Finally, stormwater and urban runoff pollution frequently cross jurisdictional boundaries, making collaborative approaches a necessity. While the regional program will be coordinated extensively among the Copermittees, it is not meant to supplant the jurisdictional and watershed programs.

The overall goals of the program are to increase awareness and knowledge, improve attitudes toward stormwater pollution and provide a foundation for changing behaviors that contribute to stormwater pollution. Based on extensive input from the Copermittee Regional Stormwater Management Committee (RMC) and the Education & Residential Sources Workgroup, as well as an independent analysis of existing educational efforts, the following objectives were developed to support these goals:

1. Maintain a consistent image, message, and brand
2. Use positive messages to increase knowledge and awareness, and ultimately change behavior
3. Develop community partnerships to leverage resources

4. Develop assessment strategies for program effectiveness

The Regional Education & Residential Sources Workgroup advises the RMC on regional shared outreach activities as necessary to support the requirements of the Permit. The Education & Residential Sources Workgroup plans, develops, and implements the various aspects of the stormwater education program. Education & Residential Sources Workgroup participants have traditionally combined efforts to reach business, industrial, and residential communities across the San Diego region. However, in accordance with the most recent NPDES Permit, this Plan represents a distinct effort to target residential sources of stormwater pollution.

Messages developed by the Education & Residential Sources Workgroup are designed to increase knowledge and awareness of regional stormwater issues and encourage positive changes in behavior. Assessment methods and measures have also been developed to evaluate the effectiveness of these messages and the strategies used to deliver them. Program evaluation methods and strategies will evolve as various program elements are implemented. Regional assessment methods will measure knowledge, awareness, and attitudes of residents. Program elements that are determined to be ineffective or least effective will be replaced by more effective elements or improved upon as needed. The regional program will also facilitate the measurement of changes in pollutant generating behaviors by the jurisdictional and watershed programs.

As a basis for developing this Regional Residential Education Plan, the Copermittees contracted with TRG & Associates to develop *Recommended Options for the San Diego Regional Stormwater Educational Program*. This document contains a number of recommended strategies for the successful development and implementation of a regional residential education program. It includes an extensive literature review, an analysis of existing educational programs in San Diego, and a comprehensive list of public awareness surveys. The literature review outlines other programs in the State that have

successfully implemented regional residential stormwater education programs. The document also summarizes the strengths and weaknesses of existing residential education efforts, provides suggestions for how they can be improved, provides a brief analysis of baseline public awareness surveys that have been implemented locally within the last five years, and offers recommendations for improving assessment methods and survey instruments.

2.0 SOURCE CHARACTERIZATION

The San Diego region occupies 4,261 square miles with a population of approximately 3 million people. Estimates for the year 2007 indicate that the San Diego regional population is 29% Hispanic and 71% non-Hispanic. Non-Hispanic persons include African Americans, American Indians, Native Hawaiians, Asians, and persons of a multitude of races, ethnicities, and cultures. SANDAG currently estimates that the median household income in the San Diego region is $68,388. According to the US Census Bureau in 2004 only 10.9% of San Diego's population was living below the poverty level, compared to 13.2% Statewide. Other estimates indicate that as much as 25% of California's population is living below the poverty level. Much of the region's quality of life revolves around the water resources.

Residential areas have been shown to be a prevalent source of urban runoff in the San Diego region, although less than ten percent of the region is developed as residential land. Most of the urban activity is clustered in the western third of the county, near coastal areas. However; residential land–based activities throughout the entire region contribute to polluted stormwater runoff.

The Regional Residential Education Program will focus efforts on high priority residential pollution sources that are common throughout the San Diego region. Water quality monitoring data and source characterization studies have provided the Copermittees with useful information in determining regional residential sources of stormwater pollution and constituents of concern. Regional threats to water quality were initially outlined in the Report of Waste Discharged and finalized in the Permit. Section

F.1.a of the Permit describes the process for determining which pollutants will be addressed by the program.

2.1. Regional Constituents of Concern

The following constituents of concern were determined to be the primary pollutants from residential sources for the San Diego region:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

Some jurisdictions may have additional high priority pollutants. Each jurisdiction will be individually responsible for addressing additional pollutants and their sources. The pollutants listed above will remain the focus of the Regional Residential Education Program.

2.2. Pollutant-generating Activities and Constituents of Concern

Table 1 outlines residential pollutant generating activities and associated constituents of concern generated by residential areas in the San Diego region.

Table 1) Pollutant Generating Activities

Pollutant Generating Activities	Priority Constituents				
	Bacteria	Nutrients	Pesticides	Sediments	Trash
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	X	X			
• Over-irrigation • Improper irrigation and system maintenance	X	X	X	X	
• Fertilizer use • Pesticide use • Landscaping activities	X	X	X	X	
• Cleaning outdoor impervious surfaces (i.e., driveways and patios)	X	X		X	X
• Improper waste disposal	X	X	X	X	X

2.3. Target Audiences

As described above, this program is intended to address the entire residential community of the San Diego region. This residential audience will be further described in terms of two specific target audiences in order to design more effective education and outreach strategies. The target audiences for the Regional Residential Education Program have been identified based on information gathered by the consultant (TRG and Associates), who utilized data from market research conducted by the County and City of San Diego and surveys gathered from other case studies. Although there may be other smaller groups of target audiences, regional outreach must realistically target the highest priority demographics in order to effectively utilize program funds. The following describes the target audiences for the campaign:

1. Primary Target Audience- English speaking residents and homeowners
2. Underserved Target Audience- Spanish speaking communities and Low Socio-Economic Status (SES)

One of the challenges of program implementation will be to develop messages that appeal to these communities. While creating content and developing materials for the primary target audience may be relatively straightforward, methods and approaches will need to be modified in order to engage the Underserved Target Audience. For example; some messages will be more conducive to translation into the Spanish language than others. Once translated, Spanish language media will be used to disseminate these messages.

According to the US Census Bureau, 33% of San Diego County residents speak a language other than English at home (2000). The same data indicates that 26.7 % of the regional population is Hispanic or Latino. Although this number varied within jurisdictions from 49.5% in Chula Vista to 11.7% in Carlsbad, it is clear that every jurisdiction in the region has significant populations of Hispanic or Latino residents. Therefore, although there are many languages spoken in San Diego, Spanish speaking communities are likely the most common throughout the region.

Research indicates that the motivating factors in Spanish speaking communities are 1) health and commitment to family, 2) children, and 3) finances. Similar priorities are found within the low SES communities. Hence, some messages will resonate more strongly with the communities among the Underserved Target Audience. Other messages may need to be modified in order to create a more appealing campaign. Low SES in California is defined as household annual income less than $25,000. Low SES residents tend to obtain information and resources from different sources than the residents within the Primary Target Audience. Again, message delivery becomes a key issue. In order to address all of these issues, specific outreach strategies will need to be developed in order to effectively reach the Underserved Target Audience.

3.0 TARGETED CHANGES TO KNOWLEDGE, AWARENESS AND BEHAVIOR

The overall goals of the Regional Residential Education Program are to raise the levels of knowledge and awareness with regards to stormwater pollution among residents, while encouraging changes to behaviors that are harmful to San Diego's waterways. The program will generally educate residents on 1) The difference between stormwater conveyance systems and sanitary sewer systems 2) the connection of storm drains to local waterways and 3) common residential sources of urban run-off. These are the general knowledge and awareness concepts upon which more specific messages will be built.

Recent research indicates that many residents do not understand that storm drains and sanitary sewer systems are completely separate. While sewage is treated, everything that goes down a storm drain goes directly to a creek, bay, or the ocean. The City of San Diego conducted a public opinion survey in 2007 in which 91% of respondents said they had heard the term "storm drain" before. However, only 46% knew that the water entering storm drains is not treated. This is a fundamental stormwater pollution prevention issue and general awareness concept. Awareness of the stormwater conveyance system is the first step towards understanding pollution prevention. Increasing knowledge and awareness that the system leads directly to local waterways will help residents to understand that urban sources of pollution have a direct effect on water quality. The awareness and knowledge of these issues are precursors to adjustments in attitudes (i.e.: increased concern for preventing this type of pollution).

Ultimately, it is anticipated that the program's targeting increased awareness and knowledge of these concepts will lead to positive changes in attitude. Furthermore, improved attitudes toward the importance of stormwater issues can provide motivation for changing pollutant generating behaviors.

In keeping with the program goals, the Copermittees have agreed on a number of positive behavior outcomes for each stormwater issue presented to the target audience. Pollutant generating activities are listed in Table 2, along with the knowledge required to understand the significance of the stormwater impacts. Also listed are numerous examples of desired behavior outcomes. Since it may not be feasible to craft messages that address each of the desired behavior outcomes listed in Table 2, some behaviors may be considered primary and targeted before others. Secondary behaviors will be targeted only if the initial efforts are determined to be unsuccessful. It is important to recognize that the Copermittees agreed on these issues and the associated behaviors, and some may wish to further utilize the concepts listed in Table 2 in their jurisdictional and/or watershed programs.

Table 2) Pollutant Generating Activities and Examples of Positive Behavior

Pollutant Generating Activities	Knowledge/Awareness	Examples of Desired Behavior Outcomes
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	Pet waste left in the yard and streets may introduce solids, bacteria, and nutrients to the storm drain and/or receiving water bodies.	• **Pick up pet waste during walks** • Pick up pet waste around home • **Properly dispose of pet waste in trash can or bin**
• Over-irrigation • Improper irrigation and system maintenance	Over-irrigation causes water and pollutants in its path to run into the storm drain and/or receiving water bodies.	• **Reduce over-irrigation** • Use irrigation controller technology to reduce the amount of over-watering • **Inspect and maintain irrigation system regularly** • Adjust irrigation schedule according to seasonal changes
• Fertilizer use • Pesticide use • Landscaping activities	Fertilizers and pesticides become pollutants that can be harmful to natural ecosystems when entering receiving water bodies. Soil, sediment, and yard waste can clog storm drains and/or receiving water bodies.	• Use plants that reduce the need for fertilizers (i.e.: native plants) • Apply chemical fertilizers and pesticides only as needed and at the appropriate time • **Use organic or slow-release fertilizers** • **Use Integrated Pest Management** • Store chemicals inside in a shed or storage cabinet where they are protected from rainfall • **Collect grass clippings and yard waste** • **Dispose of grass clippings and yard waste in the proper containers** • Protect exposed soil from rain with a tarp, vegetation, and/or mulch
• Cleaning outdoor impervious surfaces (i.e.: driveways and patios)	When it rains, trash, dirt, and chemicals that have built up on these surface can run into the street, the storm drain, and eventually local waterways.	• **Clean driveways, walkways, and patios by sweeping instead of hosing** • Direct wash water to soak in to lawn or garden
• Improper waste disposal	Litter and debris dropped on the ground will be washed into storm drains and local water bodies.	• **Put litter and cigarette butts in trash cans or bins** • Keep lids closed on trash cans or bins

Although many positive behaviors have been identified that may be encouraged by the messages developed in this program, the following have been selected as the primary desired behaviors to result from the changes to knowledge, awareness, and attitudes:

- Pick up pet waste and properly dispose of in trash can or bin
- Reduce over-irrigation by regularly inspecting and maintaining irrigation systems
- Reduce fertilizer use by applying chemical fertilizer only as needed and using organic or slow-release fertilizers
- Reduce chemical pesticide use through Integrated Pest Management
- Collect grass clippings and yard waste and place them in the appropriate disposal container in order to prevent them from entering the storm drain systems
- Sweep up outside areas such as driveways, walkways, and patios instead of hosing them down
- Put litter and cigarette butts in trash cans or bins

Specific messages will be designed to increase knowledge and awareness, and therefore encourage the behaviors listed above. Regional messages will be initially developed to address only the primary targeted behaviors. Once a baseline is established and program implementation is underway, Copermittees will have the opportunity to evaluate the knowledge, awareness, and willingness of the residential target audiences to adopt these behaviors. Other positive behaviors from Table 2 may also be substituted, if necessary.
It can reasonably be expected that the regional program will be able to measure success in terms of increasing knowledge and awareness, and improving attitudes, of residents.

Knowledge describes the accuracy of one's beliefs and awareness indicates recognition of the severity of the issues whereas attitude can be described as an individual's evaluation of it (favorable or unfavorable).

As a result of the regional efforts, Copermittees expect to see an increase in the general awareness of storm drain systems and their connection to local waterways, as well the sources of urban run-off. Specifically, residents should understand the difference between the stormwater conveyance system and sanitary sewer systems. They should become aware that water entering storm drains flows untreated to local waterways. Residents should also be able to accurately identify sources of stormwater pollution (i.e.: pet waste). Attitudes toward stormwater pollution should also improve. Ideally, there will be an increase in the numbers of households or individuals engaging in the desired behavior outcomes as a result of their increased knowledge and awareness. These targets will be measured using the assessment methods described in Section 6.0.

The primary assessment tool will be the public opinion surveys. A baseline regional residential telephone survey will be conducted in 2008 and, ideally, at one other point during the current permit cycle. The numeric objectives for survey results are set so that they exceed the statistical margin of error of 2.5 percent (assuming a sample size of 1000) so that if they are achieved, they will be statistically significant. In addition, the objectives are intentionally set high, with the understanding that they are intended as a point of reference rather than a pass/fail measure. With that in mind, Copermittees have set a target of a 10% change in knowledge that storm drains are separate from sanitary sewer systems, a 10% increase in the awareness that all storm drains are connected to local waterways, and a 15% increase in the number of participants who can identify residential sources of stormwater pollution.

4.0 EDUCATIONAL METHODS AND APPROACHES

A variety of methods and approaches will be utilized to implement the program objectives. As described above, the Regional Residential Education Program objectives are 1) to maintain a consistent image and brand 2) use positive messages to change behavior 3) develop community partnerships and 4) develop strategies to assess program effectiveness. The following regional program elements are designed to meet these objectives:

- Standardized Regional Brand (Think Blue)
- Regional Think Blue Website
- Mass Media (Broadcast and Outdoor)
- Regional Outreach Materials (Development and Distribution)
- Regional Outreach Event
- Partnerships
- Regional Stormwater Hotline
- Public Relations

Some of the elements are designed for program management whereas others are outreach methods. Program management elements include standardizing the Think Blue brand, message and material development, and partnership development. The program will have a multi-faceted outreach approach utilizing a regional website, mass media (broadcast and outdoor), public relations, printed materials and promotional items, and regional outreach such as a community event. Implementation of all the recommendations is dependent on funding for each year. Therefore, some activities may be feasible only if sufficient or additional funds are available in a given year.

4.1 Standardized Regional Brand (Think Blue)

The Think Blue campaign has created a locally recognizable brand that has demonstrated effectiveness in stormwater outreach. Expanding the brand to the regional program has obvious benefits for all of the Copermittees. With a consistent look and brand, the Copermittees can continue to conduct their own outreach; however they can use the Think Blue brand in conjunction with their materials for consistency. There will be a Think Blue Graphic Standards Guide that provides the correct fonts, colors and standards to be used for all outreach materials. This will help reinforce the Think Blue brand and provide standards for its use in messages and materials. Messages and materials may need to be continuously revised in order to keep current and effectively reach target audiences.

4.2 Regional Think Blue Website

A regional Think Blue website will help build upon and reinforce the branding strategy. The Internet is a powerful means of communication. Web sites can reach large audiences with relatively minimal effort. The regional website will be developed and maintained by a contractor. It could contain easy to download, user friendly information sheets, links to Copermittees websites, and short surveys or quizzes. The regional web site, along with the new logo and slogan, will increase program visibility.

4.3 Mass Media

Although the website is an important component of the outreach efforts, many residents still get the great bulk of their environmental messages from more traditional venues such as the television and radio (broadcast media). Public Service Announcements (PSA) and advertisements are the most common forms of broadcast media. Some PSAs have already been developed under the Think Blue campaign and through the combined efforts of the Copermittees. The Copermittees can utilize funds to expand or complement the existing Think Blue campaign. The public relations component will involve news coverage such as news stories, interviews, and event coverage. Public relations provide

valuable outreach opportunities that will be sought whenever possible. Outdoor media such as bus placards and billboards can also be utilized for outreach. The location of outdoor media advertisements will need to be carefully placed in order to reach the regional target audience.

4.4 Regional Outreach Materials and Community Events

Print materials and promotional items are critical items for successful outreach. Materials include items like fact sheets, brochures, flyers, booklets, coupon booklets, posters, and doorknob hangers. These materials are easily created and the target audience can refer to them repeatedly. Promotional materials are good for promoting the regional brand, increasing knowledge and awareness, and encouraging simple actions to prevent stormwater pollution. They will be designed to also serve as visual prompts that remind people to choose behaviors that protect and improve water quality.

A regional outreach event can be an energizing and successful venue for distributing outreach messages. Careful attention should be given to participating in a community event so that the effort reaches residents from the entire region. Extensive planning, material or display development, coordination, and marketing will be necessary in order to prepare for one successful regional outreach event. This is an endeavor that will involve identifying events that reach the entire region as well as coordinating, funding, and staffing the selected event. The Copermittees expect to participate in up to two regional events over the duration of this permit cycle. Some examples of regional events that may be considered are the San Diego County Fair, the Miramar Air Show, or a local sports venue.

4.5 Partnerships

Partnerships are both a management and outreach element of the program. A partnership is a voluntary collaboration of agencies, organizations, or other groups or individuals that have joined to work toward a common goal. The Copermittees can maximize resources through the use of partnerships. The potential for partnerships is immense for the

Copermittees. Potential partnerships include local water districts (combine conservation and pollution prevention messages), hardware stores and nurseries, pet stores, and Homeowner's Associations and Property Management Companies. Initial development of partnerships with businesses and business organizations, nonprofits, other government agencies, will be necessary before the full benefits can be realized. Copermittees may then encourage partners to distribute materials or spread messages through signage, advertising and websites. Partnerships will require time to develop and may not be fully recognized until later in the permit cycle.

4.6 Regional Stormwater Hotline

Although a regional stormwater hotline is already in place, successful outreach may lead to an increase in hotline calls. The regional hotline can also help the public gain access to information quickly and easily. The hotline will be promoted through the website, media advertising and other promotional venues. The number of calls to the hotline can be tabulated to help gauge whether some advertising is effective (if the call to action is a hotline call). Since the hotline will also be an important measure of program success, careful consideration will be given to managing the hotline as the program implementation moves forward.

4.7 Behavior Specific Outreach Methods

Table 3 lists the primary target behaviors for the program during this permit cycle. The table indicates which of the outreach methods described above may be utilized to deliver messages designed for each behavior. These were selected as the primary targets because they have current appeal. Primary target behaviors may be updated as program evaluation progresses. If necessary, resources may be reallocated to address the other (secondary) target behaviors previously listed in Table 2.

Table 3) Applicability of Outreach Methods to Primary Target Behaviors

Primary Target Behaviors	Potential Methods of Outreach						
	Website	Mass Media Broadcast	Mass Media Outdoor	Public Relations	Material Distribution	Partnerships	Regional Community Events
Pick up pet waste and dispose of in trash bin	X	X	X	X	X	X	
Reduce over-irrigation by regularly inspecting and maintaining irrigation systems	X			X	X	X	X
Apply chemicals to lawn and garden only as needed	X	X		X	X	X	X
Use organic or slow-release fertilizers	X	X		X	X	X	X
Collect grass clippings and dispose of them in the proper container	X				X		
Employ Integrated Pest Management	X	X	X		X	X	X
Sweep outside areas instead of hosing them down	X		X		X		
Put litter and cigarette butts in trash cans or bins	X			X	X	X	X

Specific messages will be developed to increase knowledge and awareness that will lead to each desired behavior outcome

4.8 Program Implementation

While the overall goals of the program are to educate the general public in order promote knowledge and awareness and decrease pollutant generating behaviors, a successful program will also require coordination among the Copermittees. Program planning and message development are key components of the program that will precede full implementation. Message delivery will be ongoing. Subsequently, as results from assessments are reviewed, messages and delivery methods will need to be revised. Therefore, there are essentially three steps in the program implementation process 1)

development, 2) implementation, and 3) assessment. For the purposes of this report, the development phase includes planning projects as well as developing materials and messages. Implementation includes initiating a program element (such as media outreach) as well as maintaining the ongoing nature of the element once it is in place. Assessment includes all levels of determining the effectiveness of program elements, as well as making revisions that reflect the knowledge gained through assessment.

Table 4 charts the schedule of program implementation over the 5-year permit cycle. Strategies to achieve these objectives will be implemented over the 5-year permit cycle. Because some upfront planning and development is necessary, the first year will focus on standardizing a regional brand, developing messages, and determining the most appropriate methods for disseminating messages on a regional scale (i.e.: a regional website). Copermittees may also begin fostering partnerships in the initial years of the program. Subsequent years will build on this foundation. Copermittees may decide to refine messages and could begin leveraging resources through partnerships.

Table 4) Projected General Implementation Schedule

Program Elements	Year 1: 2007-08	Year 2: 2008-09	Year 3: 2009-10	Year 4: 2010-11	Year 5: 2011-12
Branding	D	D, I, A	I, A	I, A	I,
Regional Website	D	D, I, A	I, A	I, A	I,
Regional Hotline	D	D, I	I, A	I, A	I,
Mass Media	D	D, I	I, A	D, A	I,
Regional Outreach (Marketing and Community Events)	D	D, I	I, A	D, A	I,
Materials Development & Distribution	D	D, I, A	D, I, A	D, A	D, I
Public Relations	D	D, I	I, A	D, A	I,
Market Research & Assessment Tools	D, I, A	D, I, A	D, I, A	D, I, A	D, I,
Partnerships	D, I	D, I,	I, A	I, A	I

Development (D), Implementation (I), Assessment (A)

4.9 Social Marketing Approaches

In all of the aforementioned efforts, a variety of social marketing approaches will be utilized whenever possible. There are so many techniques described as social marketing that it is not possible to utilize them all, especially with limited staff and budgets. Social marketing uses many of the principles of social psychology and marketing techniques to bring about behavior change. Rather than being product oriented, social marketing focuses on people and their behaviors. All social marketing approaches use audience research to learn how to motivate an audience to change one or more recurring actions.

Social marketing consists of several basic components that result in delivering messages that will increase knowledge and awareness, thereby prompting people to change certain behaviors. The challenge is to present the new behavior in a positive way and emphasize the benefits to adopting a new behavior. Forming strategic partnerships with community resources can help to achieve the end goal of behavior change. Social marketing campaigns deliver messages that are strategically created and positioned to give people a compelling reason to adopt a new behavior. In order to overcome the barriers to action it is necessary to understand what the barriers are and why they exist. Researching and understanding the audience is a critical step in developing a social marketing campaign. Messages are conveyed through advertising, websites, materials and other communications. Messages should be simple, memorable and easy to follow. There should be one simple message for each of the targeted areas of knowledge and awareness. Each message needs to be used consistently in communications.

Community Based Social Marketing (CBSM) is a type of social marketing. It has gained popular appeal among the environmental community as an effective alternative to traditional information-based marketing approaches. CBSM packages basic principles of behavior change and social science research in a way that provides a usable framework for practitioners working to promote positive behavior change.

A key element of the CBSM approach is to pilot test the program with a small representative segment of the community, and compare the results to a control group. For example, a small jurisdiction may implement a project that essentially serves as a pilot for the regional program. If the pilot is not successful, the strategy should be refined and then pilot tested again. If the pilot is successful at changing behavior, the strategy can be implemented more broadly throughout the community or on a regional level. Once the successful pilot program has been widely implemented CBSM requires that the program be carefully evaluated at several points to measure continued success.

The Copermittees have agreed that CBSM offers a solid foundation for developing an effective program. However, it may not always be feasible to utilize the CBSM approach on a regional scale, hence the need for a combined approach that uses traditional social marketing techniques as well as CBSM. Some methods will lend themselves more readily to developing CBSM based approaches. When implementing each of the methods, a CBSM approach will be pursued whenever feasible.

5.0 RELATIONSHIP OF REGIONAL, WATERSHED, AND JURISDICTIONAL OUTREACH

The Regional Residential Education Program is designed to meet the Permit requirements for residential education based on regional needs and issues. The first step in meeting these requirements is to establish a regional brand and consistent image. The City of San Diego's regionally recognized Think Blue logo will be utilized as the Regional Residential Education Program's brand. During the implementation phase of the permit cycle the Copermittees will work collaboratively with the City of San Diego to update and standardize the Think Blue brand. A Graphics Standards Manual will be developed by the City of San Diego and adopted by the Copermittees in order to facilitate ease of material development and ensure a consistent regional image. Existing jurisdictional programs may also choose to use the Think Blue brand, maintain individuality, or

combine both programs for maximum impact. In a similar manner, watershed activities may be coordinated under the Think Blue brand, so long as the standards are adhered to.

Copermittees will hire a contractor to build and maintain a regional Think Blue website. The website may include links to jurisdictional program, watershed program websites, and other regional websites such as Project Clean Water. The regional Think Blue website will provide user friendly information for the public in a single location, thereby promoting consistency and coordination among the regional, jurisdictional, and watershed programs.

In addition, the Education & Residential Sources Workgroup provides a platform for integration of regional, jurisdictional, and watershed messages. The Education & Residential Sources Workgroup also coordinates activities between non-profit organizations, private institutions, and governmental agencies providing environmental and water quality education. Regular meetings will continue to provide a forum for educators, trainers, and public information officers to collaborate, share methods and materials, and seek policy level support and direction.

Watershed and jurisdictional programs should look to the Regional Residential Education Program when designing residential educational activities. The Regional Residential Education Program can thereby serve as a basis for developing these other programs. Some specific watershed or jurisdictional issues may not be covered by the Regional Residential Education Program, and must still be met by the individual or Watershed Copermittees as required by the Permit. These issues will be addressed in the watershed or jurisdictional programs. In this manner, the watershed and jurisdictional programs can supplement the Regional Residential Education Program in order to ensure that all requirements are met. As a result, each jurisdictional program may be unique in some respects and elements of the watershed programs may go beyond those in the regional program.

While the regional program may play a role in encouraging behavior changes, it is more feasible for jurisdictional programs to be able to measure actual behavioral changes resulting from increased knowledge and awareness because of their ability to implement pilots on a small scale. The broad based regional program will be implementing methods and utilizing assessment tools that most accurately gauge attitudes, knowledge, and awareness. Positive changes in attitudes and awareness are generally accepted as precursors to behavior change. Therefore, due to the difficulty of assessing behavior change on a regional level, demonstrating behavior change will therefore reside with the jurisdictional and watershed programs. In order to facilitate the assessment of jurisdictional and watershed programs, the Plan outlines assessment tools for measuring changes in knowledge and awareness through the regional program. These measures can also be tailored to meet the needs of the jurisdictional and watershed programs that implement CBSM pilots or focused outreach efforts, which provide excellent opportunities to assess behavior change. Section 6.0 describes assessment tools in further detail.

6.0 ASSESSMENT OF REGIONAL EDUCATION ACTIVITIES

In order to evaluate whether the various components of the program are resulting in the targeted knowledge and awareness outcomes, a number of assessment methods may be utilized. A random digit dial telephone survey will be the primary tool for measuring changes resulting from implementation of the regional program. Different types of assessment methods will be employed in order to gauge the outcomes of each activity and thereby determine effectiveness. Copermittees will review and assess existing survey data while developing the new regional baseline survey. Public opinion surveys will be alternated with other assessment methods to adequately assess the overall effectiveness of the Regional Residential Education Program. Copermittees have agreed to work cooperatively on funding and conducting market research and surveys. Measurement tools outlined in the Plan may be modified somewhat to correspond with different program elements. The Plan basically provides a model for program effectiveness

assessment. Specific assessment methods will depend on the type of outreach or education activity conducted and other constraints.

Copermittees will work with the City of San Diego to conduct a county-wide random digit dial telephone survey in order to obtain baseline information on knowledge, awareness, attitudes, and behaviors pertaining to stormwater. Results of the survey will guide further adaptation of the program objectives. Ideally, another public opinion survey will be conducted later in the permit cycle to assess any changes resulting from program implementation. Once the baseline is established, future permit cycles may involve one or more public opinion surveys. Additional evaluation methods may be utilized once specific media, promotions, and outreach activities are implemented. Results will enable Copermittees to determine the most effective outreach methods and make modifications to the programs as needed.

Outcome levels used in this program are based on the Hierarchy of Targeted Outcomes Pyramid referred to in the NPDES Permit, which includes outcome levels 1-6. Outcome levels 1-3 will be most applicable to educational and outreach activities. Table 5 illustrates potential assessment methods that may be utilized for each of the activities being considered. Level 1 outcomes indicate compliance with permit based activities. This is the most basic means of assessing program effectiveness. Measuring Level 2 outcomes will indicate changes in attitudes, knowledge and awareness. Surveys and quizzes provide the most common means for measuring Level 2 outcomes. Level 3 outcomes provide an opportunity to measure behavioral changes and implementation of Best Management Practices (BMPs). This can be accomplished through observations and program specific counts. For example, tracking sales of less toxic pesticides in a store where IPM information is available may indicate changes in the behavior of consumers. Level 4 outcomes indicate actual load reduction, and are more practical for activities such as clean up events or Household Hazardous Waste collection activities, which are sometimes associated with outreach activities.

Table 5) Potential Program Element Assessment Measures

Activity Level		Type of Assessment Measure

Branding

1	Updating materials to reflect new regional brand.
2	Count number of survey respondents who are aware of brand/program.
3	N/A
4	N/A

Website

1	Count number of hits to website, interactive use/quizzes taken, etc.
2	Administer survey/quiz to assess attitude/knowledge of web users.
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data. Downloads of informational brochures.
4	N/A

Mass Media Public Service Announcement (PSA) Public Relations

1	Count number of household/individuals reached.
2	Administer survey/quiz to assess attitude/knowledge of PSA recipients.
3	Comments and feedback received regarding PSA via the hotline or website.
4	N/A

Outreach Materials (i.e.: fact sheets and brochures)

1	Count number of fact sheet/brochures handed out.
2	Administer survey/quiz to assess attitude/knowledge of fact sheet/brochure recipients
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4	N/A

Regional Outreach Event

1	Count number of visitors to booths, brochures handed out, surveys/quizzes completed, etc.
2	Count number of mail-in cards, number of volunteers to organization, number of persons who attended community event. Administer survey/quiz to assess attitude/knowledge of visitors
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4	N/A

Partnerships

1	Count number of incentives distributed, participants in the program.
2	Survey or quiz to assess attitude/knowledge of volunteers pre- and post- participation
3	Administer survey to assess behavior change in program participants or count observable behavior of program participants and compare to pilot data, historical data, and/or control group. Count number of mail-in cards, number of volunteers to organization, or number of persons who signed a petition directed from incentive program.
4	Count amount of load reduction in targeted residential area or count amount of load removed from targeted area

Hotline

1	Count number of calls to hotline.
2	Administer survey/quiz to assess attitude/knowledge of hotline users.
3	Administer survey to assess behavior change of participants in program and compare to pilot, historical, or control data, count observable behavior of participants in program and compare to pilot data and/or control group.
4	N/A

7.0 CONCLUSIONS AND RECOMMENDATIONS

The San Diego region has widely diverse socio-economic, ethnic, biological, and physical characteristics. These characteristics create the region's appeal and present many challenges to the entities charged with developing and implementing an effective Regional Urban Runoff Management Program (RURMP).

The Regional Residential Education Program is a component of the San Diego RURMP. This program is designed to increase knowledge and awareness of stormwater issues and potentially change pollutant generating behaviors. Research indicates that these are attainable goals under a well-funded, long term, multi-faceted and strategic public outreach campaign.

In order to implement program goals, the Copermittees have agreed on general objectives: 1) maintain a consistent image, message and brand 2) use positive messages to increase knowledge and awareness, thereby increasing the likelihood of behavior change 3) develop community partnerships and 4) develop strategies to assess program effectiveness. In order to efficiently accomplish these objectives, Copermittees have agreed to adopt Think Blue as the regional flagship brand. In addition, strong and

focused outreach messages will be selected to increase knowledge and awareness and ultimately target the primary pollutant generating behaviors from residential activities.

The basic program elements include an array of methods and approaches that will be utilized for program management, message delivery, and effectiveness assessment. Over time, the Regional Residential Education Program will be adapted to utilize the most effective outreach and education strategies practicable while maintaining a clear focus for the entire region. Annual reports will summarize progress and provide an opportunity to reflect on the year's successes and shortcomings. At the end of the 5-year permit cycle, Copermittees will be able to assess of the program's progress and develop more effective regional outreach strategies.

Appendix G

JURMP Annual Report Requirements Checklist

G-1 Requirements Checklist

Appendix G
JURMP Annual Report Requirements Checklist

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location In Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.4, 2.3, 2.4.4.1, 2.4.4.2
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2, 2.4.4.3, 2.4.4.4
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.3, Table 2-3
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.3, 2.4.4.4
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.3 (N/A)
vii. An updated treatment control BMP inventory.	2.4.4.4, Appendix A-1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.7
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.6
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.5
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.3 (N/A)
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.3 (N/A)
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.3.1, 2.4.4.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.3 (N/A)
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.3

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.3 (N/A)
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.4.3.1, 2.4.4.1, 2.4.4.4, 2.4.4.6, 2.4.4.7

3.0 Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.1
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2.2, Appendix B-3
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4.1
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.4 (N/A)
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.3, 3.5.4 (N/A)
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Appendix B-1 and B-2
viii. A description of the general results of the inspections.	3.5.5.2
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.5.1
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.5.2, Appendix B-6 and H-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.2.2, 3.3

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix C-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4.1, Appendix C-2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4.1, Appendix C-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Appendix C-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	Appendix C-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4.1, Appendix C-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.3.3.1
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xiii. Identification of the total distance of curb-miles swept.	4.2.4, Appendix C-2
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.2.4, Appendix C-2
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.2.4, Appendix C-2
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4.1
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.3.2, 4.3.4.3, Appendix C-2
xviii. A description of the general results of the inspections.	4.3.4.3, Appendix C -6
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.3.4.3, Appendix C -6
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Appendix C-6 and H-1
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.2.4, 4.3.3.2, 4.4.4.1, 4.5.4.1, 4.7.3.1, 4.7.4

5.0 Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2,
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4.5, 5.3.4.4, Appendix D-5 and H-1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4.4, 5.3.4.1
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.2
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4.1
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.3, 5.2.4.5
vii. Identification of the number of third party inspections conducted.	5.2.4.3 (N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.3 (N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.5, 5.3.4.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.5
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.2.4, 5.3.4

6.0 Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3, 6.4.3, Appendix H-1
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.2
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.2
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.2.3
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.3, Appendix H-1
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Location in Report**
To be included in FY 2007-08 Illicit Discharge Detection and Elimination Component on December 15, 2009.	N/A

8.0 Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	**Location in Report**
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3.1
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.4

9.0 Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	**Location in Report**
i. A description of public participation efforts conducted.	9.3

10.0 Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	**Location in Report**
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order. (For 2007-2008, the requirements that apply are essentially the same as those found in Order No. 2001-01)	10.1, 10.2

Same as old Permit for 2007-2008

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	**Location in Report**
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.2, 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	**Location in Report**
i. A description of any special investigations conducted.	12.1, 12.2

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.2

14.0 JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14.0

Appendix H

Complaint Response

H-1 Construction Summary
Municipal Summary
Commercial Summary
Residential Summary
Referrals or Requests for Info Summary

Appendix H-1 Construction Complaint Response Summary FY 2008-09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	68896	7/1/08	GRAVEL	Discharge of construction debris - Broken gravel bags, silt in street at construction site at gas station.	7/1/08 Site inspection took photos of broken gravel bags. Contacted contractor (for Valero's construction-Max Raja 619 518 2936) to clean gravel bag areas and replace broken bags though NOV to comply by 7/2/08 12 noon See follow up WO 79378 Follow Up: 7/2/08 site inspection area cleaned and BMPs redone See original WO 74807	Yes	Yes	7/1/2008				CBS	7/2/08
2	68899	7/2/08	SAND	Discharge of construction debris - Construction waste at residence. Complainant would like a call back.	7/2/08 site inspection called contractor regarding removal and replacement sandbags and white substance that worker is spraying on Stucco. Contractor indicated that they were applying the stucco applicant according to the label and that he will remove the sandbags from the street ASAP	Yes	No		Yes			LUC	10/14/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
3	69278	8/13/08	SILT	Other discharge - Silt in street at construction site.	8/13/08 site inspection contact owner and requested that he install Min BMPs. took photos Follow Up: 8/13/08 site inspection showed that BMPs are in place took photos	Yes	No		Yes			ENC	8/13/08
4	69279	8/13/08	cement wash water	Discharge of concrete cutting slurry or washwater. - Company washing down cement pump into street.	8/13/08 site inspection no discharge observed 8/13/08 contacted lead worker and explained that no discharge can leave the site.	No	No		Yes			ESC	10/15/08
5	69423	8/29/08	CEMENT WASTE	Discharge of concrete cutting slurry or washwater. - Tile slurry/concrete dumped into street.	8/29/08 site inspection observed fresh cement in storm drain south of 2297 New Castle. Contacted lead worker and showed him cement debris. He said he would clean it up ASAP	Yes	No		Yes			CBS	10/15/08
6	69484	9/10/08	SEDIMENT	Discharge of construction debris - Resident complaining about mud being tracked into street from neighbor's backyard excavating. Construction inspector to investigate. Please keep complainant's information anonymous.	Per construction inspector: due to lack of proper permits, the project was stopped w/ stop work notice. Area cleaned up by contractor on 9/11 and 9/12.	Yes	No					CBS	10/15/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
7	69698	10/16/08	WATER	Discharge of construction debris - Contractor hit a water line. BMPs were not adequate, water and sediment flowing down B Street.	10/16/08 site inspection took photos contacted superintendant and requested that he clean all the streets and comply with inspector's direction.	Yes	Yes		Yes		OCEAN	ENC	10/21/08
8	69745	10/28/08	SILT	Discharge of construction debris - Lack of BMPs at site with building permit only. No construction inspector assigned to site.	10/28/08 site inspection observed failing silt fences and erosion from run on from north drive way. Took photos and called property owner and contractor. Contractor to do work within 7-10 days or within 24hrs of a 40 rain forecast. Needs follow up inspection. See follow up WO 80765 Follow Up: 12/31/08 site inspection new straw waddles installed case closed See WO 81556	Yes	No		Yes			ENC	12/31/08
9	69896	11/26/08	SILT	Discharge of construction debris - Sediment runoff from site after rain event.	11/26/08 930am site inspection observed silt discharge took photos (on phone) informed worker of the violation and how to cure it. See follow up WO 80937	Yes	No	11/26/2008	Yes			ENC	12/19/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
10	69897	11/26/08	SILT	Discharge of construction debris - Sediment runoff from site after rain event.	11/25/08 site inspection took photos of inadequate BMPs See follow up WO 80939	Yes	No	11/26/2008		11/26/2008	OCEAN	CBS	12/19/08
11	69919	12/8/08	SILT	Discharge of construction debris - Construction site at Encinitas Blvd and El Camino Real discharging sand into storm drain. 300 lbs of sand were cleaned out of closest storm drain on 12/8/08 during routine filter maintenance.	Per construction inspector 12/9/08: Walked job with superintendent. Onsite desilting basin fitted w/ filter fab failed under load, rain creating runoff; also noted breach in project silt fence. Storm drain cleanout cleaned. Fab filter reinstalled. Two rows of boundary silt fence installed by subcontractor. Site appears ready for additional rain. Site and drainage system to be monitored and cleaned during building construction. Super is aware that negligence by any subcontractors may result in fines levied against general contractor and/or permittee. Grading continues. Follow Up: 12/22/08 site inspection area cleaned up case closed See original WO 81408	Yes	Yes		Yes			LCS	12/22/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
12	69959	12/15/08	SILT, WATER	Discharge of construction debris - Contractor at Fire Station pumping silty water into street without containment.	Per construction inspector 12/16/08: Notified 9am, contacted construction company, issued notice to correct, work continued. When water tank arrived, street subgrade, water pumped into tank and spread onsite through rock filter.	Yes	Yes	12/15/2008	Yes	12/17/2008		LUC	12/19/08
13	69967	12/16/08	wash water	Discharge of other washwater - Washing off equipment at Lofts without containment. Construction inspector to investigate.	Per construction inspector 12/16/08: I did not see any discharge at site. Contractor was unaware of any equipment being hosed off. Case closed.	No	Yes					ENC	12/22/08
14	69968	12/15/08	Sediment	Discharge of construction debris - Brown water coming from construction site during rain event. Construction inspector to follow up.	Per construction inspector 12/15/08: Erosion control was installed per plan. called contractor and requested more check dams down the driveway. he was already doing it as I called. No follow up action required. Case closed.	No	Yes		Yes			LUC	12/19/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
15	69969	12/15/08	sediment/ water	Discharge of construction debris - Brown water coming from construction site during rain event. Construction inspector to follow up.	Per construction inspector 12/15/08: I did not see any illegal discharge. BMPs are installed. Case closed.	No	Yes					ENC	12/22/08
16	70000	12/18/08	SILT	Discharge of other washwater - Silt discharge after rain event.	12/18/08 site inspection took photos of silt discharge. contacted and thanked worker cleaning up discharge into neighboring property. Worker expressed concern for run on from 1302 Enc Blvd. See follow up 81431 Follow Up: 12/22/08 site inspection area cleaned up case closed See original WO 81408	Yes	Yes		Yes			LCS	12/22/08
17	70004	12/18/08	SILT	Discharge of other washwater - Pumping silt water into street.	12/18/08 site inspection took photos of pump and hose in alley with sediment water draining into storm drain that leads to Manchester. Contacted worker regarding pumping to storm drain. 12/23/08 sent email to construction inspector case closed	Yes	Yes		Yes		SAN ELIJO LAGOON	CBS	1/2/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
18	70005	12/18/08	SILT	Discharge of other washwater - Pumping out silt water from site into street.	12/18/08 site inspection appeared silt water was discharged onto side walk. Took photos of discharge. No workers on site 12/22/08 contacted construction inspector 12/23/08 sent email with photos to construction inspector Construction inspector spoke with site superintendent and gave verbal warning.	Yes	Yes		Yes		OCEAN	CBS	1/2/09
19	70006	12/18/08	SILT	Discharge of other washwater - Silt discharge after rain event, uncovered stockpiles.	12/18/08 site inspection took photos of dirt pile in street and run off. Contacted resident and worker to cover dirt pile ASAP See follow up WO 82014 Follow Up: 12/24/08 site inspection took photo of area clean up case closed See original WO 81446	Yes	No		Yes			CBS	12/24/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
20	70007	12/18/08	SILT	Discharge of other washwater - Dumping buckets of water and silt into street.	12/18/08 took photos of silt discharge from construction worker. Contacted worker to discontinue discharge and to use vegetation areas	Yes	Yes		Yes			CBS	1/2/09
21	70008	12/18/08	SILT	Discharge of other washwater - Silt runoff after rain event, lack of BMPs.	12/18/08 site inspection observed failing BMPs took photos. 12/23/08 emailed construction inspector with photos Construction inspector met with site superintendent and gave verbal warning.	Yes	No		Yes			CBS	1/2/09
22	70009	12/08/08	SILT	Discharge of other washwater - Silt runoff after rain event, failing BMPs.	12/18/08 site inspection BMPs failing took photos sent email to inspector on 12/23/08 See follow up WO 82038 Follow Up: 1/12/09 site inspection silt fence reinstalled case closed See original WO 81449	Yes	No		Yes			CBS	1/12/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
23	70011	12/18/08	SILT	Discharge of other washwater - Construction of undergrounding complete, but silt erosion occurring after rain event.	took photos of erosion See follow up 82117 Follow Up: 12/31/08 area cleaned up case closed See work order 82116	Yes	Yes					ENC	12/31/08
24	70012	12/18/08	SILT	Discharge of construction debris - Silt runoff after rain event, lack of BMPs.	12/18/08 site inspection took photos of failing BMPs called owner and contractor no answer 12/29/08 called owner and LM contacted contractor to maintain BMPs. Contractor said he contacted the owner and will inspect and fix the site with the owner and give me a call when it is complete and ready for a follow up inspection See follow up WO 82115 12/31/08 site inspection new straw waddles installed case closed	Yes	No		Yes			ENC	1/22/09
25	70013	12/18/08	SILT	Discharge of other washwater - Silt draining from underground boxes into street.	12/18/08 site inspection took photos 12/29/08 contacted PW to repair road drainage via email	Yes	Yes					ENC	12/31/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					See follow up 82156 Follow Up: 12/31/09 site inspection area cleaned up case closed See WO 82155								
26	70015	12/18/08	SILT	Discharge of other washwater - Constructing retaining wall, silt discharge after rain event.	1/15/2009 9:55:05 AM 12/1808 site inspection took photos contacted lead worker regarding clean up of silt. He was very cooperative. See follow up 82147 Follow Up: 12/31/09 site inspection area cleaned up case closed See wo 82126	Yes	Yes		Yes			ENC	12/31/08
27	70022	12/19/08	mud/erosion	Discharge of other washwater - Construction being done at neighboring property, causing erosion and mud onto complainant's property.	12/19/08 site inspection took photos of site did not see any discharge. Contacted Construction inspector case closed	No	No					ENC	12/19/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
28	70030	12/18/08	SILT	Discharge of construction debris - Sediment discharge, BMP maintenance needed.	12/18/08 site inspection took photos of failing BMPs. 12/22/08 contacted construction inspector and sent email with photos. Inspector reported that contractor/owner performed maintenance on BMPs over the weekend to ensure no run on or run off. Need to do follow up inspection. 12/24/08 site inspection took photos of fortified BMPs case closed	Yes	No		Yes			ENC	1/2/09
29	70094	1/7/09	WASH WATER	Discharge of building or sidewalk washwater. Power washing roof at Moonlight Lofts without containment.	1/7/09 site inspection took photos from discharge into creek to source at north building power washing the roofs. Received call from general contractor informing me that the discharge was filtered though a fossil filter. I explained that all information should come through the city construction inspector but even though a filter it is still not an allowed discharge. After discussing case with construction inspector an NOV was sent to the roofer with copies to be delivered by the inspector. Called contractor and informed him of the NOV and that all info would come though the inspector. Sent copies of the notice with photos, the storm water ordinance and a copy of the permit to the inspector.	Yes	Yes	1/7/2009	Yes		COTTONWOOD CREEK	ENC	1/16/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
30	70145	1/15/09	WATER	Discharge of water - Water running from construction site at 687 S Coast Hwy 101. Dewatering in progress.	1/15/09 site inspection traced water back to Pacific Station. 1/16/09 contacted city staff to get water quality report. 1/20/09 sent email requesting water quality report. received copy of water testing report stating that water quality was below the action level case closed	No	No				COTTONWOOD CREEK AND OCEAN	ENC	2/25/09
31	70155	1/22/09	lack of BMPs and erosion control	Discharge of construction debris - Referred from Construction Inspector. Site needs better trash management and siltation control maintenance. See inspection forms.	1/22/09 site inspection took photos contacted GC to fix/replace BMPs. Issued NOV to worker on site to comply by 1/22/09 3pm See follow up 84106 Follow Up: 1/22/09 site inspection BMP in good shape case closed See work order 84105	Yes	No	1/22/2009	Yes			CBS	1/22/09
32	70209	2/2/09	SAND/ SEDIMENT	Discharge of sediment. Trucks transporting sand from Pacific Station are tracking dirt onto Vulcan in front of City Hall and north on Vulcan. Construction Inspector to investigate.	Per construction inspector 2/2/09: Street sweeper runs 2-3 times per day. All sand tracked onto street will be cleared before operations end for the day.	Yes	Yes					ENC	2/12/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Issue was forwarded to the Senior Civil Engineer who oversees Construction Inspectors.								
33	70243	2/9/09	OIL	Discharge of construction debris - Oil spilled on street and other construction issues. Will be addressed by construction inspector assigned to site. Please see complaint forwarded form Code Enforcement.	Per Construction Inspector 2/10/09: Oil spill appears 1-2 weeks old. Only stain exists. Advised contractor to catch it in time in the future and clean up properly.	No	No					ENC	2/10/09
34	70244	2/9/09	DIRT/SILT	Discharge of water - Construction occurring on site, water running onto neighbor's property at 1641. No permit for 340.	2/10/09 site inspection took photos of failing BMPs contacted worker obtain ph and called GC to address BMPs by 2/12/09 See follow up 84022 Follow Up: 2/12/09 met GC on site BMPs redone took photos case closed See work order 84021	Yes	Yes		Yes			LUC	2/12/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
35	70257	2/10/09	SEDIMENT	Discharge of sediment - Failing BMPs and sediment on sidewalk at old Barratt job site at Quail Point Lane and Quail Gardens Dr.	Per construction inspector 2/10/09: Senior Civil Engineer and Construction Inspector sent a letter to Barratt and the bank calling on the bonds. Bank is due to contact City by 2/12/09 to discuss usage of funds to maintain erosion control measures in place.	Yes	No					ENC	2/10/09
36	70316	2/17/09	Lack of BMPs	Discharge of construction debris - Complaint form resident, who lives adjacent to an abandoned nursery at 754 Bonita. The nursery has recently been demolished and the site cleared. Code enforcement forwarded complaint. The site is greater than 2 acres. No BMPs on site.	2/17/09 site inspection contacted owners took photos. Appears that some minor grading would create a silt basin. 2/18/09 emailed engineering regarding contact information and erosion control.	No	No		Yes			ENC	2/18/09
37	70320	2/19/09	SILT	Discharge of construction debris - Referred from Construction Inspector. Site needs to replace gravel bags and filter fabric at inlet. Also, install locks on fence off vallies to filter system to prevent homeless and/or vandals from altering system.	2/18/09 received call from inspector preformed site inspection took photos of discharge. Inspector reported that the discharge was a result of a transient had vandalized the filtering system. The inspector wrote a correction notice to replace BMPs and fence off valve controls. 2/19/09 inspector reported that corrective actions have been completed case closed	Yes	No		Yes		COTTONWOOD CREEK	ENC	3/5/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
38	70371	2/26/09	CONCRETE WASH WASTE FROM POWER WASHING	Discharge of building or sidewalk washwater - Complainant said there is white runoff coming from Fire Station site. Possibly from power washing building.	2/26/09 site inspection took photos of discharge met with contractor and inspector regarding discharge violation. Informed contractor that this was the second discharge violation and that the fine amount would be discussed with program manager. After speaking with the manager the contractor was informed that the second level citation would be issued. He said he understood and will pay the fine.	Yes	No	2/27/2009	Yes	2/27/2009		LUC	3/5/09
39	70490	3/18/09	AC pavement/s oil	Discharge of construction debris - Complainant called about stockpiles and other construction debris without proper BMPs at a site located at La Costa Blvd and Hwy 101.	3-16-09 - 3-17-09 Contractor crew working night shift to replace LWWD MH 101 sewer. 3-18-09 Complaint of "no BMPs" received. Construction inspector contacted contractor PM about containing AC rubble and soil. Two man crew sent to cover stockpiles until they can be removed. 3-18-09 - 3-19-09 Stockpiles covered. LWWD inspector said sewer FM broke during the night. Spill was contained in the ditch line. Flowed to new 24" sewer, discharged to lift station. NO LOSS of sewage to environment. 3-23-09 Stockpiles removed by 2- end dumps to landfill.	Yes	Yes		Yes			LUC	3/26/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
40	78063	6/30/09	water	Discharge of water - Engineer received complaint from his dentist about water running down San Elijo Avenue for many days at a time. Source is south of Chesterfield. Blue house	6/30/09 site inspection took photos of red hose at 2351 San Elijo no discharge case closed	No	No					CBS	6/30/09
Construction Totals:		**40**			**Follow Ups: 15**	**31**	**18**	**7**	**27**	**3**			

Appendix H-1 Municipal Complaint Response Summary FY 2008-09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	68898	7/1/08	OIL	Discharge of oil. - Puddle of oil dumped in street behind Cardiff Towne Center.	7/1/08 site inspection took photos and contacted streets to clean up See follow up WO 79955 Follow Up: 7/15/08 site inspection area cleaned up case closed See original WO 79954	Yes	No					CBS	7/15/08
2	69132	7/21/08	oil	Discharge of oil. - Oil spilled on dirt area east of tracks, west of Vulcan, north of Encinitas Blvd about 2 months ago.	7/28/08 site inspection observed stains and referred it to construction inspector for Encinitas road repaving	Yes	No					ENC	10/14/08
3	69199	8/1/08	green water	Discharge of water - Green water in alley behind VG's Donuts.	8/5/08 site inspection contacted commercial owner of 116 Aberdeen. She indicated that the water has been there for 14 years ever since she moved in.	No	No					CBS	10/15/08
4	69686	10/15/08	GUTTER WATER	Discharge of water - Cleaning out gutters with Vactor truck. Not collecting water. Water pooling on Vulcan.	10/15/08 received complaint regarding large puddle out of	Yes	No		Yes			ENC	10/16/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					west drain at or in front of 505 S VULCAN AVE. Took photos and contacted janitor and informed him what the legal discharges are and requested that he contact the contractor doing the discharge to implement BMPs. Janitor indicated that the work has concluded but will capture all wash water next time this cleaning occurs.								
5	70053	12/30/08	SILT	Other discharge - Need to reinstall silt fence along Encinitas Blvd.	12/30/08 site inspection took photos of failing silt fence called Parks & rec. 1/2/09 received call from Parks and Rec. that they area meeting with the contractor to fix fence by Monday 1/5/09 See follow up WO 82015 and 82041 Follow Up: 1/12/09 site inspection took photos of correctly installed Silt fence Case closed See WO 81685 and 82015	Yes	No		Yes			LCS	1/12/09
6	73701	5/7/09	h2o	Discharge of antifreeze - People working on white truck near Phoebe and Hwy 101. Green liquid has been poured into gutter.	5/7/08 site inspection took photos of green puddle in street east of 1340 Coast hwy 101.	No	No		Yes			LUC	5/28/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Shop owner stated that the street does not drain and the Hydrants were just drained. 5/12/09 sent emails to vector control and public works streets division.								
Municipal Totals:		**6**			**Follow Ups: 3**	**4**	**0**	**0**	**3**	**0**			

Appendix H-1 Commercial Complaint Response Summary FY 2008-09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	68890	6/30/08	wash water	Discharge of building or sidewalk washwater - Clean Water Staff witnessed gas station hosing off and scrubbing parking lot with no containment.	Discharge of building or sidewalk washwater Problem Details: Clean Water Staff witnessed gas station hosing off and scrubbing parking lot with no containment. Inspector to investigate storm drain or it is considered a violation. Issued an NOV to comply immediately. Follow Up: 7/2/08 site inspection area cleaned and BMPs redone	Yes	No	7/1/2008				CBS	7/2/08
2	68895	7/1/08	White Substance	Discharge of other washwater - Salt water pool drainage/cleaning. Trail of white substance down street.	7/1/08 site inspection took photos of white discharge. Left card at door 7/2/08 received call back from respondent stating that they will clean up the streets and gave me the pool guys information. Called pool guy and informed him that any colored discharge is a violation of the storm water permit--- case closed	Yes	Yes		Yes			CBS	10/14/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
3	68897	7/1/08	SILT	Other discharge - Broken sprinkler shooting into pile of silt.	7/1/08 site inspection See follow up WO 79377 Follow Up: 7/2/08 site inspection area cleaned OK to close	Yes	No		Yes			CBS	7/2/08
4	68905	7/2/08	VEHICLE WASH WATER	Discharge of vehicle wash water - Auto detailer washing cars w/o containment in parking lot at Erickson Electric.	7/2/08 site inspection contacted business owners and explained the law in washing vehicles. They said they would comply. Note that the person washing the company vehicles ran away when he saw me coming. The owners could not find him but will educate him when they do. They will also ask him not to run from clean water inspectors in the future.	Yes	Yes		Yes			LCS	10/15/08
5	69002	7/16/08	WHITE MILKY WATER	Discharge of building or sidewalk washwater - Restaurant hoses off outdoor patio with bleach every morning w/o containment.	7/17/08 site inspection, observed no discharge off patio. There was discharge in front of the business. I contacted Sergio regarding illegal discharge. I then spoke to the business owner and it appeared that	No	No					ENC	7/30/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					the discharge originated at 830 S. Coast HWY 101 from irrigation. Took photos and contacted resident who gave me Property Manager's info. 7/21/08 LM for Property Manager to call me back regarding possible irrigation discharge.								
6	69127	7/17/08	wash water	Discharge of building or sidewalk washwater - Restaurant hosing off sidewalk out front.	7/28/08 Site inspection no discharge business closed	No	No					ENC	10/14/08
7	69157	7/30/08	WASH WATER	Discharge of building or sidewalk washwater - Inspector witnessed line of sudsy water coming from back door of salon. Will follow up with NOV letter.	Discussed incident with Salon Manager on 7/30/2008. Sent NOV letter and education info on 7/31/2008.	Yes	No	7/31/2008	Yes			ENC	8/4/08
8	69171	7/29/08	water	Discharge of water - Inspector noticed concrete channel overgrown with plants/algae, leading down to a dry weather sampling site. Runoff coming from nursery drains into this channel. Will follow up.	Site inspection appears to be ground water could not find the source but the water runs around the business. Case closed	No	No					CBS	6/1/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
See	69228	8/7/08	GREASE	Discharge of food waste. - Improper grease storage, trash under dumpster, possibly washing off mats behind restaurants. Inspector to investigate and contact property manager.	11/12/08 took photos of grease storage and called PM. See work orders 81334, 81339, 84224.	Yes	No		Yes			LCS	3/5/09
10	69240	8/11/08	VEHICLE WASH WATER	Discharge of vehicle wash water - Car washing without containment.	8/11/08 site inspection issued NOV to Dent Masters through Karl at BMW to clean storm drain and stop wash discharge took photos See follow up WO 79351 8/19/08 site inspection contacted employees at Dent masters . I requested that the owner of their business give me a call so that i can explain the storm water regulations.	Yes	Yes	8/11/2008			ENCINITAS CREEK	LCS	10/13/08
11	69254	8/10/08	SEWAGE	Discharge of sewage - After hours sewage overflow at apartment complex. Wastewater responded. Inspector to follow up.	8/12/08 called property Manager regarding the sewer spill. She informed me of the owner and maintenance supervisor. I requested that their sewer lines be video taped and that they start a maintenance schedule to inspect and routinely clean at least once a year. 8/25/08 received call from Property Manager stating that they have scheduled an inspection and cleaning for 8/29/08 at 8am. Discussed case with program manager, and we agreed that a citation should be issued for discharge and BMP maintenance (if records proving self inspection are not submitted.	Yes	No	9/10/2008		9/10/2008	COTTONWOOD CREEK	ENC	9/10/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					8/26/08 called Maintenance Supervisor and left message requesting sewer maintenance records. I spoke to Property manager and requested records from her and briefly explained the enforcement of this spill. Called waste water and to meet with me and the plumber on Friday. Drafted NOV and admin cite. See follow up 80044 Follow Up: 8/29/08 site inspection with waste water, property manager, maintenance supervisor and their contractor Drain Patrol w/ video. Drain patrol indicated that they could not provide a tape. Waste water indicated that Seacrest may need to jet their lines two or four times a year. Dropped off grease usage flyer to the PM. Exchanges info see inspection tab 10/7/08 called respondent regarding citation and NOV requirements. Respondent seemed to understand requirements 10/13/08 received email dated 10/10/08 stating the actions that they have completed (sewer inspection and jetting) and that they have contracted with a plumber to inspect and clear the line three times a year. They are getting bids for the pipes to be inspected for replacement. Forwarded email to supervisor and waste water for review and comments. Finance reported that fine and cost recovery was paid (post marked 10/10/08)								

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
12	69275	8/13/08	GREASE	Discharge of food waste. - Full grease bin with no lid.	8/14/08 site inspection observed grease spilling onto ground and next to storm drain took photos and issued NOV to comply by 8/21/08 See follow up WO 79349 Follow Up: 8/21/08 site inspection area cleaned up OK to close	Yes	No	8/14/2008	Yes			LUC	8/21/08
13	69284	8/14/08	wash water	Discharge of other washwater - Business washing off carts, letting wash water run down street.	8/14/08 site inspection I observed very little discharge contacted Manager. He informed me that they are washing off the carts that they used to go to the storage units. I explained that the wash water cannot go into the storm drain and gave him some educational materials.	Yes	No		Yes		COTTONWOOD CREEK	ENC	10/15/08
14	69400	8/26/08	wash water	Discharge of vehicle wash water - Forwarded from Code Enforcement: Complaint regarding rental place. Complainant said that the business is washing down the equipment and the water is running into the street and ground. She stated that there is oil and grime being washed into street	8/27/08 site inspection no drainage discharge observed contacted manager who demonstrated how they clean their equipment without any discharge. sent emails for fueling, cleaning and storage BMPs	No	No		Yes			LUC	10/15/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
15	69479	9/10/08	vehicle wash water	Discharge of vehicle wash water - Auto detailer washing cars without capturing wash water.	Site visit showed no vehicle washing or evidence of discharge.	No	Yes					SEL	9/10/08
16	69529	9/15/08	water/ sediment	Discharge of water - Over-irrigation water/sediment flowing into HOA parking lot to storm drain. Possibly coming from YMCA or West Hampton Cove irrigation.	9/15/08 Contacted Maintenance fro YMCA and sent him a GIS photo of the sediment runoff location. He checked his irrigation and believes the runoff is a combination of the YMCA and West Hampton Cove HOA. He would like a meeting with CWP inspector and an HOA representative. 10/6/08 called HOA to meet on 10/16/08 at 1pm called and LM with YMCA 10/16/08 site inspection with representatives from Hampton Cove HOA and the YMCA both groups tested their irrigation and did not find any run off. Hampton HOA rep thought that there is a large amount of ground water in the area and believes that the parking only floods silt after a rain event. Both groups will monitor area. Hampton HOA would like the complainant to contact them directly. Hampton was requested to label their storm drains, close trash container lids and post signs advising the same. Gave them ph of ILACSD 619-291-0103 to help with labeling.	No	No		Yes			ENC	10/21/08
17	69555	9/22/08	SOAKING WATER	Discharge of water - Rancid smelling water coming from unknown source, running down Melrose behind Leucadia Glass.	9/22/08 site inspection contact business owner and gave him my card. He said the discharge was from soaking mats and that the water had	Yes	No		Yes			LUC	10/15/08

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					soaked for too long. He said he will discharge into a vegetated or landscaped area.								
18	69556	9/22/08	Vegetation Debris	Discharge of yard waste - Forwarded message from Councilmember. Resident noticed tree trimming service blowing leaves and debris from tree trimming into storm drain. Tree trimming being done in HOA.	9/23/08 site inspection met contractor on scene explained that all leaves and debris need to be pick up and mot blown into storm drain. He will clean again. Did not observe any discharge into storm drain.	No	Yes		Yes			LUC	10/15/08
19	69569	9/11/08	Messy storage area behind bulidings	Other discharge - Improper grease storage and overall lack of good housekeeping behind shopping complex.	9/25/08 site inspection no discharge observed	No	No					LCS	10/14/08
20	69571	9/22/08	SILT	Other discharge - Complaint of over-irrigation causing silt to run over sidewalk.	9/23/08 site inspection at side walk west of 625 Encinitas blvd. Took photos of drainage and silt discharging across sidewalk See follow up WO 79884 Follow Up: 9/25/08 site inspection area cleaned up took photos	Yes	No		Yes		COTTONWOOD CREEK	ENC	9/25/08

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21	69590	9/25/08	Oil or Hydraulic Fluid	Discharge of liquid fuels. - Some sort of old fuel spill on street appears to be from trash pick up, possibly from neighbor's trash.	9/25/08 site inspection took photos of oil spots in the street and complainant's driveway. Contacted worker at construction site to the west who informed me that the recycle truck had a broken hose. The complaint informed me that trash day was Monday. Called Edco. Supervisor to return call. 9/26/08 supervisor for Edco inspected the site and will have clean up company clean the oil marks off the street. Complainant informed me that the clean up was occurring and they were collecting all the wash water.	Yes	Yes					LUC	10/15/08
22	69598	9/29/08	DIRT	Other discharge - Trail of mud running down Grandview to Pacifica Apartment Complex on Hwy 101. Caller said mud is coming from Seabluff.	9/29/08 site inspection observed mud on sidewalk and in street took photos contacted community manager to clean up ASAP See follow up WO 80070 Follow Up: site inspection area cleaned case closed	Yes	No	12/9/2008	Yes			LUC	8/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
23	69660	10/9/08	SOAK WATER	Discharge of other washwater - 2nd complaint about smelly water discharging from samurai place running down Melrose behind Leucadia Glass.	10/09/08 site inspection observed discharge issued citation took photos gave educational information and discuss flowing the discharge into the landscaped area so that no discharge enters the storm drain. Respondent to move soaking trough north in front of bamboo area.	Yes	No		Yes	10/9/2008		LUC	10/14/08
24	69668	10/10/08	OIL	Discharge of oil. - EDCO truck spilled small amount of oil in front of 1555 Bella Vista Dr/Bella Azul Ct. Power washing company is being called to site to properly clean oil from street.	10-10-08 site inspection observed spill and absorb all on spill area I requested contractor to use traffic cones to discontinue vehicle traffic. took photos See follow up 80173 Follow Up: 10-13-08 site inspection area cleaned up case closed took photos	Yes	Yes					LCS	10/13/08
25	69677	10/13/08	WASH WATER	Discharge of building or sidewalk washwater - Power washing roof, BMPs not working properly.	10-14-08 received complaint on voice mail. Called contractor to clean up the sand bags and cones ASAP.	Yes	Yes				OCEAN	ENC	10/21/08

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					Site inspection showed BMPs not adequate. Called contractor and informed him that he needed to sweep up the street in addition to removing the BMPs. If more roof cleaning is required better BMPs need to be implemented See follow up 80357 10/14/08 site inspection area clean up case closed								
26	69685	10/15/08	WASH WATER	Discharge of building or sidewalk washwater - Power washing building at Calle Magdalena without containment.	10/15/08 site inspection observed power washing to clean buildings before painting without capturing the wash water. Placed sandbags in storm drain to prevent discharge and contacted contractor. Contractor will have street sweeper clean all surface areas as the power wash drainage has evaporated. Took photos. Case closed	Yes	Yes		Yes			ENC	10/16/08
27	69697	10/16/08	wash water	Discharge of building or sidewalk washwater - Power washing, unknown if they are using containment. Some runoff coming from driveway onto Encinitas Blvd.	10/16/08 site inspection observed water from power washing going into sump and then pumped to clean out. Contacted worker and informed him that the waste water must be contacted when discharging into sewer.	No	No		Yes			ENC	10/21/08

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28	69817	11/13/08	PAINT	Discharge of paint - Gas station scraping old paint off building, leaving paint chips on ground.	11/17/08 site inspection no discharge observed contacted owners who showed me where the painting took place and indicated that all of the paint was cleaned up on 11/12-13/08	No	No		Yes			ENC	11/25/08
29	69900	11/28/08	LEAVES, DIRT, AND DEBRIS	Discharge of yard waste - Clean Water Staff witnessed employee hosing off driveway debris (leaves, branches) into storm drain at approximately 12:50pm. Driveway is at the corner of Saxony and Union.	12/1/08 site inspection took photos of leaves and debris in the storm drain need to call Maintenance chief to clean storm drain See follow up WO 81341 Follow Up: 12/2/08 site inspection area storm drain cleaned of leaves and debris took photo	Yes	No		Yes			ENC	12/2/08
30	69905	12/2/08	Concrete, Dirt, and Water	Discharge of concrete waste. - Concrete discharge into gutter/storm drain at 4th and E streets.	12/2/08 site inspection took photos of concrete and dirt discharge. Contacted contractor and showed him the discharge and requested that he clean it up and that I was issuing a citation for concrete/dirt discharge into the storm drain.	Yes	Yes		Yes	12/2/2008		ENC	12/2/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					See follow up WO81148 Follow Up: 12/2/08 site inspection area cleaned up installed three sandbags. Citation paid on 12/9/08---case closed								
31	69906	12/2/08	bleach wash water	Discharge of building or sidewalk washwater - Restaurant hoses off floor with bleach on a nightly basis around 8 or 9 pm and lets wash water go into street.	12/2/08 conducted formal storm water quality inspection. no discharge case closed	No	No		Yes			ENC	12/19/08
32	69907	12/2/08	SILT DIRT	Other discharge - Concern of sediment/lack of erosion control in dirt lot behind Ocean Knoll School on Bonita Dr.	12/2/08 site inspection took photos of erosion. Called Operations and Facilities director and left message. Received call from Director stating that he will look at erosion on 12/3/08. See follow ups 81112, 81169, 81170. Follow Up: 12/24/09 site inspection area cleaned up case closed See WO 82158	Yes	No	12/4/2008	Yes			ENC	12/24/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
33	69913	12/2/08	Hand Degreaser	Discharge of other washwater - Complaint forwarded from the San Diego RWQCB. Liquid substance seeping under wall towards storm drain. Inspector to investigate.	12/2/08 site inspection took photos of milky discharge. Contacted contractor who showed me where the discharge source was located. Appeared that the white milky fluid was created from hand washing that drained into the storm drain. Issued citation. Needs follow up inspection. See follow up WO 81142	Yes	Yes	12/9/2008	Yes	12/2/2008		LUC	12/19/08
34	69917	12/5/08	CEMENT AND DIRT	Discharge of concrete waste. - Concrete being washed into street.	12/5/08 site inspection observed cement and sediment discharge no one home tools still out left card to call me. One hour later contacted owner's son requested that his parents give me a call back issued NOV. See follow up WO 81094 Follow Up: 12/8/08 site inspection area cleaned up case closed	Yes	Yes	12/5/2008	Yes			LCS	12/8/08

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35	69927	12/9/08	WASH WATER	Discharge of water - Restaurant possibly hosing off sidewalk without containment.	12/9/08 site inspection took photos of wet sidewalks and patios and contacted worker who indicated that it could have been the person that waters the plants. Plant soil not wet and it appears that washing off tables on the north side. Called owner to investigate. Owner stated that all of his employees are trained not to discharge any water into the lagoon. He will contact all of his employees again to make sure no discharge had occurred---case closed	Yes	No		Yes			SEL	12/19/08
36	69928	12/9/08	Concrete Dust	Discharge of concrete cutting slurry or washwater. - Contractor cutting concrete, dust blowing, no containment.	12/9/08 site inspection took photos of worker cutting concrete with/out any BMPs. Contacted worker and he stopped working immediately. See follow up WO 81145 Follow Up: 12/9/08 site inspection area cleaned up case closed .	Yes	Yes		Yes			LUC	12/9/08

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37	69966	12/13/08	wash water/urine	Discharge of building or sidewalk washwater - Business washing off sidewalk without containment.	1/7/09 Site inspection contacted worker at store and gave educational information and possible solution using sandbags and a wet vac. Gave four sandbags.	Yes	No		Yes			LUC	1/21/09
38	69980	12/17/08	SILT	Discharge of other washwater - Silt coming from growing fields going into natural channel.	12/17/08 site inspection took photos of silt draining off property. Called business operator and requested that he address runoff ASAP--needs follow up See follow ups82017, 82037, 83833 Follow Up: 1/28/09 site inspection property and BMPs in compliance case closed See WO 81225, 82017, 82037	Yes	No	1/12/2009	Yes		SAN ELIJO LAGOON	CBS	1/28/09
39	70001	12/18/08	Silt, dirt, and water	Discharge of other washwater - Silt discharge after rain event, clogged desilting basin.	12/18/08 site inspection observed erosion and silt discharge took photos. 12/23/08 called Property Manager to meet regarding temporary and permanent BMPs	Yes	No					LCS	5/21/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					See work orders 81255, 82092, 84386, 87943								
40	70002	12/18/08	DIRT	Discharge of other washwater - Silt discharge after rain event.	12/18/08 site inspection took photos workers still cleaning up discharge into street. 12/23/08 LM for Samantha to call me back See follow up wo 81683 Follow Up: 12/30/08 site inspection met with business owner of Barrels & Branches and thanked him for the clean up. He showed me the source of the discharge on the property to the north. I made some suggestions to prevent run on but that the street was clean case closed	Yes	No		Yes			LUX	12/30/08
41	70003	12/18/08	SILT	Discharge of other washwater - Silt discharge after rain event.	12/18/08 site inspection took photos of discharge contacted worker to work on discharge clean up.	Yes	No		Yes			CBS	12/24/08

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					See follow up WO 82016 Follow Up: 12/24/08 site inspection took photos of new sandbags and gravel at the entrance/exit case closed								
42	70010	12/18/08	silt	Discharge of other washwater - Silt runoff after rain event. possibly coming from greenhouse.	conducted storm water quality inspection which showed no discharge from this business. there are two other businesses that were possibly responsible for the rainy season discharge. The other businesses were to be added to the inspection inventory. Conducted storm water quality inspection which showed no discharge from this business. There are two other businesses that were possibly responsible for the rainy season discharge. The other businesses were to be added to the inspection inventory.	No	No		Yes			LUC	7/2/09

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43	70016	12/18/08	SILT	Discharge of other washwater - Lack of erosion control in empty lot behind school. Failed BMPs.	12/18/08 site inspection took photos of failing BMPs See follow up 82159	Yes	No					ENC	1/22/09
44	70032	12/19/08	WASH WATER	Discharge of building or sidewalk washwater - Restaurant employee hosing off sidewalk without containment.	12/19/08 site inspection took photos of worker washing down sidewalk. issued NOV. Need to do complete formal storm water inspection added business to inventory list case closed	Yes	No	12/19/2008	Yes			ENC	1/2/09
45	70035	12/22/08	WASH WATER	Discharge of other washwater - Plumbing truck emptying equipment into street.	Called trailer park to get plumbing company's phone number. Called plumbing company and spoke with office manager. He referred me to man that was onsite during illegal discharge. Spoke to employee on site, informed him of the illegal discharge and that we would be sending an NOV Letter. Also informed him of proper BMPs, and he will bring up this issue at the next safety meeting. Case closed.	Yes	Yes	12/23/2008	Yes			LUC	12/23/08
46	70039	122408	WASH WATER	Discharge of building or sidewalk washwater - Clean Water staff witnessed property management employee washing off cart storage area in front of vons without containment.	12/24/08 site inspection took photos and contacted worker discharging into the storm drain as a result of washing out the cart area. Called and left message	Yes	No	1/8/2009	Yes			LCS	1/16/09

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					1/5/09 called LM 1/6/09 called LM 1/7/09 received call back and contact information 1/8/09 sent NOV								
47	70051	12/30/08	water	Discharge of water - At&t installing new cable, pumping out water into street.	12/30/08 site inspection no discharge observed contacted worker who stating that AT&T is replacing a phone cable and that pump out potable water when required	No	Yes		Yes			CBS	1/16/09
48	70052	12/30/08	SILT	Discharge of construction debris - Construction at residence, muddy water running down street to Balour.	12/30/08 site inspection issued citation took photos of silt discharge See follow ups 81679, 81681, and 81684 Follow Up: 1/02/09 site inspection area cleaned up to the satisfaction of the city took photos case closed See work orders 81678, 81679, 81681	Yes	Yes	12/31/2008	Yes	12/30/2008		CBS	1/2/09
49	70095	1/07/09	SILT	Other discharge - Silt discharge, lack of erosion control at park.	1/7/09 site inspection took photos of erosion and unmaintained permanent BMPs. We were contacted by K & R landscaping company employees.	Yes	No		Yes			ENC	3/10/09

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					They informed us that they were contracted to maintain the improved park area but not the paths. We informed them what we were requesting the association to do (remove silt and fix erosion.) 1/8/09 Clean water staff reviewed plans and determined that the City did not accept offered easements therefore maintenance responsibilities are of the property owners/managers. Follow Up: site inspection erosion issues addressed case closed								
50	70118	1/13/08	DRYWALL DEBRIS	Discharge of paint - Painters working on Townwood Way are dumping blue paint into street.	1/13/09 site inspection took photos w/ phone issued NOV to dry clean street ASAP. Worker accidentally discharge dry wall debris See follow up 82114 Follow Up: 1/13/09 site inspection area cleaned case closed See WO 82113	Yes	Yes	1/13/2009	Yes			RSF	1/13/09

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51	70143	1/16/09	Wash Water	Discharge of other washwater - White discharge coming from carpet cleaner's van.	1/16/09 site inspection took photos of white drainage in curb line. Contacted worker and issued citation for 100 and clean up by 2pm See follow up 82569 Follow Up: 1/20/09 site inspection area cleaned up retrieved san bags case closed See WO 82419	Yes	Yes	1/20/2009	Yes	1/16/2009		LCS	1/20/09
52	70162	1/24/08	paint	Discharge of paint - Renovations being done at Taco Bell. Paint and construction waste in gutter.	1/26/2009 3:31:02 PM 1/26/09 per Clean Water Program inspector: spoke to manager at restaurant, no renovations in progress. Paint may have spilled from a work truck in the parking lot, unrelated to Taco Bell. No evidence of discharge. Case closed. See work order 82954. Follow Up: ck. I took photos of the truck bed with paint stains	No	No		Yes			LCS	1/27/09

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					case closed See work order 82885.								
53	70163	1/23/08	Hydraulic Fluid from truck	Discharge of oil. - Edco truck leaked fluid onto condo complex driveway. Spots of discharge all around complex.	1/26/09- Called field supervisor to let him know of spills. He said power washers would be out that day to clean the driveway. Drive-by on 1/27/09 showed driveway clean. Case closed.	Yes	Yes		Yes			ENC	1/27/09
54	70174	1/26/08	OIL	Discharge of oil. - Spill of motor oil in front of Rancho Park Pharmacy, 1331 Encinitas Blvd. Complainant said it looks like someone attempted to clean it up, but there is still residue on the ground.	1/27/09 site inspection took photos of oil spill. Contacted cleaners business and they indicated that a Volvo was picked up by AAA on 1/26/09 See FU 83826 Follow Up: 1/28/09 site inspection took photos of area cleaned up. Thanked Henry's manager and gave him handout on power washing See WO 83825	Yes	Yes		Yes			LCS	7/29/09

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55	70175	1/27/09	WASH WATER	Discharge of vehicle wash water - Mobile car washers on Dublin washing a Porsche without containing wash water. Near Dublin and Oxford.	1/27.09 site inspection observed drainage and wet area in front of 267 Dublin Drive. Contacted resident of 251 Dublin who witnessed the discharge. He said the residents at 267 Dublin do not own a Porsche but the detailer just uses that area to clean cars. I gave him my card and asked him to call the hotline when he witnesses illegal discharges case closed	Yes	Yes		Yes			CBS	2/2/09
56	70228	2/4/09	CEMENT CUTTING WASTE	Discharge of concrete cutting slurry or washwater. - Concrete cutting at W. I Street and Sea Lane Dr. Not containing wash water.	2/4/09 site inspection took photos of cement drainage, worker and worker's vehicle. Contacted worker and issued citation for illegal discharge with a requirement to clean up discharge by 5pm. Placed sandbags before storm drain and cones in street 2/5/09 PW reported that clean up was adequate - --- case closed	Yes	Yes		Yes	2/4/2009		ENC	2/4/09
57	70235	2/5/09	SILT	Discharge of sediment - Erosion/sediment runoff from northwest corner of parking lot occurring during rains.	2/9/09 site inspection took photos 2/17/09 called PM to clean up area and install BMPs to prevent run off	Yes	No		Yes			ENC	6/1/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Follow Up: 4/1/09 site inspection took photos of silt leading to storm drain. Appeared to be a problem with the irrigation. called Barrett PM to fix problem								
58	70256	2/10/09	Concrete Dust and Debris	Discharge of concrete cutting slurry or washwater. - Concrete cutting at Leo Mullen Sports Park without containment.	2/10/09 site inspection issued NOV to clean sidewalk debris took photos See work order 83995 Follow Up: 2/10/08 site inspection area cleaned up case closed See work order 83994	Yes	Yes	2/12/2009	Yes			LCS	2/10/09
59	70274	2/13/09	SILT AND TRASH	Other discharge - The open space area east of the AM/PM gas station is occupied by homeless encampments. The trail and adjacent drainage swale is littered with trash and debris.	2/17/09 site inspection took photos of dirt in storm drain contacted PM and sent email with photos 3/2/09 site inspection area not cleaned 3/3/09 sent email to PM	Yes	No		Yes			LCS	3/19/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					See follow up 84625 Follow Up: 3/19/09 site inspection took photos of cleaned drainage swale Case closed See work order 84019								
60	70348	2/24/09	STUCCO	Discharge of construction debris - Stucco debris left on ground after construction.	2/23/09 site inspection took photos of stucco construction waste debris in storm drain. Contacted manager at Leucadia pizzeria to notify PM to clean ditch. See work order 84120 Follow Up: 2/25/09 site inspection area was not cleaned up. Contacted owner of Leucadia Pizzeria. He sent his workers out to clean up the spill. area was clean up with in 30 min case closed	Yes	No		Yes			ENC	2/25/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
61	70352	On-going	Leaking oil	Discharge of oil. - Staff from Trattoria I Trulli parking their white Toyota 4-Runner which is leaking oil next to a storm drain.	3/11/09 site inspection did not observe any discharge requested that owner check with their employees to get the oil leak fixed.	No	No		Yes			ENC	4/13/09
62	70372	2/26/09	silt	Discharge of other washwater - Complainant says water is running down to his street, possibly originating from nursery on Lake Dr.	2/26/09 Site inspection. Took photos. Appears discharge is from Brown's or construction site at 1403 Caminito Septimo. Left card at Caminito Septimo. Talked with worker at Brown's nursery. Received call from 1403 Caminito Septimo and Brown's Plants. Browns Plants indicated they had a broken pipe and it was fixed. Streets removed silt in street/drain by hand.	Yes	No		Yes			CBS	4/13/09
63	70406	3/3/09	SEWAGE	Discharge of sewage - Sewage overflow coming from cleanout in parking lot.	3/3/09 1615 site inspection observed discharge from clean out just east of side walk. took photos and contact lead worker to shut off water and call a plumber as there is sewage discharge into the street. Called PW to have the Vaccon unit responded and sucked up discharge. Plumber arrived and cleared the line. See work order 84384. Follow Up: submit sewer line maintenance information within a week or 3/11/09 to avoid BMP violation on citation.	Yes	No	3/12/2009	Yes	3/12/2009		CBS	3/4/09

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64	70408	3/4/09	SILT	Discharge of sediment - Erosion in drainage ditch causing silt in parking lot.	3/4/09 received call from PW regarding large erosion and silt discharge issues. Site inspection took photos of erosion and silt discharge into parking lot of Days Inn. Left card at front desk. Met with PW gave me further information on drainage. Reviewed GIS and it appears drainage swale is to be maintained by private property owner. informed complainant that this is a civil issue and to speak to engineering if they had additional questions Follow Up: 4/2/09 site inspection area cleaned up case closed	Yes	No		Yes			ENC	4/2/09
65	70435	3/10/09	POOL WATER	Discharge of water - Pool water running down street, unsure of level of chlorine.	3/10/09 site inspection contacted contractor who informed me that the pool has not been	No	Yes		Yes			ESC	3/16/09

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					chlorinated for 2 or 3 months. After observing the green color of the pool the contractor was allow to continue discharging the pool water into the storm drain.								
66	70441	3/11/09	Water	Discharge of building or sidewalk washwater - Neighbor of Pet Hotel says water flow is constant, sometimes sudsy, and eroding driveway.	3/12/09 CW Staff performed site inspection did not observe any drainage or discharge called complainant to get additional information. Contacted planning and code enforcement to get complainant info called a left message.	No	No		Yes			ENC	4/16/09
67	70444	3/12/09	sudsy wash water	Discharge of building or sidewalk washwater - Complainant says this new store was washing and sweeping something from their parking area on 3/10/09, and there may have been suds in the curb.	3/12/09 site inspection contacted owner and advised him of the complaint and allowable discharges. Gave him educational information and a list of approved power washers. Case closed	No	No		Yes			CBS	3/16/09
68	70472	3/16/09	water, clogged storm drain	Discharge of water - Private storm drain clogged with sediment, causing flooding in restaurant drive thru. Property manager contacted plumber. He wants to know if it's possible to install a sump pump in the storm drain.	3/16/09 took photos of storm drains around the restaurant and called the PM (Zelman) to request that their contractor (Downstream) clear the drain. 3/18/09 met with PM who indicated that she will have Downstream clear the drain. 3/19/09 sent email to PM requesting Downstream contact info.	No	No		Yes			LCS	9/10/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Note that this restaurant was placed on the inventory Follow Up: 8/12/09 site inspection area cleaned up signed off NOV case closed								
69	70478	3/17/09	drainage/ effluent	Discharge of water - Complaint forwarded from Engineering. Drainage exits from drain on site and flows northward up the east side of Eolus ave. Dirt and gravel in drainage path. See complaint form.	3/17/09 site inspection no drainage observed Case closed Note to put it on inventory	No	No					LUC	6/1/09
70	70494	3/19/09	wash water	Discharge of building or sidewalk washwater - Gas station scrubbing stains from concrete without containing wash water. complainant to send photos.	3/19/09 site inspection no discharge observed Case closed	No	No					LCS	4/13/09
71	70518	3/25/09	trash, light pole, and silt	Other discharge - Trash and debris in storm drain swale.	3/27/09 site inspection	Yes	No		Yes			LCS	4/14/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					took photos of trash area, NE storm drain and run-off from sprinkler next to trash area. 3/31/09 Called property manager and explained issues. He will clean up the storm drain and the trash area and review the irrigation to make sure there is no run-off. He said he needed five days will give a reminder call in two weeks if no contact Follow Up: 4/14/09 site inspection area cleaned up case closed								
72	70559	4/2/09	pool filter debris	Discharge of paint - Construction in the backyard, with hose draining the waste into the street. Possibly paint, puddling in front of 114.	4/2/09 site inspection took photos of white discharge down to Encinitas Blvd. contacted construction workers on site. They stated that the pool guy was just there clean out the filters. Contractor gave their phone . Called pool contractor and requested clean up ASAP no wash down. See WO 84670	Yes	Yes	4/2/2009	Yes			LCS	4/9/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
73	70565	4/2/09	trash	Other discharge - Clean water staff observed trash, dog food and other waste in trash area	4/2/09 site inspection took photos of trash and other debris. Contacted manager and requested that she have the area cleaned up. 4/2/09 received photos showing area cleaned up case closed	Yes	No		Yes			ENC	4/13/09
74	70572	4/7/09	carpet cleaning wash water	Discharge of other washwater - Resident said the carpet cleaners she hired dumped the waste water into the storm drain after they were done cleaning her carpets. She waited a week to report the incident because she wanted to remain anonymous.	Called company to get address of local business office. Sent educational info on 4/7/09. Received returned letter (addressee unknown) on 4/10/09. Correct contact info unknown. Attempted to send information via email on 4/13/09.	No	Yes		Yes			LUC	4/13/09
75	70610	4/15/09	trash	Other discharge - Trash area in back of complex is dirty, with trash outside of dumpsters.	4/14/09 site inspection took photos of trash areas contacted PM to clean trash areas Follow Up: 6/1/09 took photos of trash in A/C area called PM to clean	Yes	No		Yes			ENC	6/8/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
76	70626	4/20/09	h2o	Discharge of water - Water coming from resident's backyard causing erosion and asphalt problems.	4/22/09 site inspection took photos of over irrigation runoff contacted landscaper to fix problem Case closed	No	Yes		Yes			LCS	6/1/09
77	72644	4/22/09	Wash water	Discharge of other washwater - Complainant said the dry cleaner was washing or cleaning something outdoors 4/21 at 5:30pm and letting wash water run down driveway. Complainant reported water to Vons; employee from Vons said they could not clean it up because it wasn't theirs.	4/23/09 site inspection no discharge observed contacted worker who stated "we had a plumber fix the leak that day and it was clean water that was discharging" case closed.	No	No		Yes			LCS	5/6/09
78	73681	4/29/09	drive way cleaning wash water	Discharge of building or sidewalk washwater - Red clay/silt material running down street from driveway. BMPs in place are not adequate.	4/29/09 site inspection observed discharge of brown driveway wash water running down the storm drain gutter. Took photos and contacted workers, home owner and contractor in charge to clean up immediately. Issued citation for illegal discharge. See work order 87932 Follow Up: 5/4/09 site inspection area cleaned case closed called and informed contractor that no further clean up is required	Yes	Yes		Yes	4/29/2009		ENC	5/4/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
79	73705	5/7/09	wash water	Discharge of building or sidewalk washwater - Gas station power washing pumping area.	5/7/09 site inspection took photos of workers power washing outside of gas station issued NOV.	Yes	Yes	5/7/2009	Yes			ENC	6/1/09
80	73728	5/8/09	carpet cleaning wash water	Discharge of other washwater - Carpet cleaning- no containment for wash water.	5/13/09 site inspection took photos of discharge from carpet cleaners issued NOV respondent to clean area 5/8/09 was the inspection and 5/13/09 was the follow up inspection Follow Up: 5/13/09 site inspection- area cleaned up case closed took photos	Yes	Yes	5/8/2009	Yes			ENC	5/13/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
81	73730	5/12/09	wash water, improper storage	Discharge of building or sidewalk washwater - Restaurant washing off site without containment. And improper storage of outdoor items.	5/8/09 site inspection contacted employees to store items inside	Yes	No		Yes			ENC	6/1/09
82	73742	5/12/09	sediment	Discharge of sediment - Neighbor called to report dirt in street. At&t hit a water main. it was repaired by SDG&E, but there was dirt left in the street. Correction: Repaired by SDWD.	Per construction inspector: Inspected site-additional street sweeping recommended. Emailed SDWD for action. Cost recovery bill to At&t.	Yes	Yes		Yes			LUC	5/14/09
83	73816	5/22/09	oil and kitty litter	Discharge of oil. - Tow truck spilled some fluid from a car onto the ground when towing it away. Put kitty litter down, but didn't clean it up.	5/22/09 Site inspection took photos of absorbs all/kitty litter in driveway. Contacted manager of Shell and he indicated the Leucadia Towing picked up a vehicle on 5/21/09. The manager said he would clean it up with his staff. Contacted Chris of Leucadia towing and informed her of the mess. She said she would train her staff not to leave any debris in street after a pick up. See work order 88247 Follow Up: 5/22/09 site inspection area cleaned up took photos and thanked manager of Shell.	Yes	Yes		Yes			ENC	5/22/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
84	73831	5/27/09	water	Discharge of water - Water conservation demonstration without BMPs. water running down street.	5/27/09 site inspection took photos of discharge of water from sprinkler display. Contacted salesman/business owner and explained that he needed to discontinue discharge and installed some BMPs. He immediately stopped and installed some sand bags and swept the puddles of water into a landscaped area. Issued NOV. Follow Up: 5/27/09 site inspection area cleaned up case closed	Yes	Yes	5/27/2009	Yes			ENC	5/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
85	73854	6/1/09	oil	Discharge of oil. - Construction Inspector noticed a spill of an oil like substance in the parking lot of the Post Office. Looks like someone may have tried to clean it up.	6/1/09 site inspection took photos of oil spill with kitty litter on it. Contacted business owner and requested call back after area is cleaned capturing all wash water/debris. Follow Up: 6/5/09 site inspection took photo of cleaned up area case closed.	Yes	No		Yes			LUC	6/5/09
86	73855	6/1/09	wash water from cleaning tile saw	Discharge of concrete cutting slurry or washwater. - Disposing of cement in gutter/storm drain. cutting concrete blocks w/out dust control. discharge in curb line reaches storm drain at Oakbranch Dr.	6/1/09 site inspection took photos of drainage stains to the storm drain. Contacted owner who wanted to know who the complainant was or he would not cooperate. He was shown the discharge but would not give contractor information or received an NOV. Contractor's sign and trailer had ph . Called and Left message for business owner.	Yes	Yes		Yes			LUX	6/17/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
87	75890	6/1/09	sewage	Discharge of sewage - LWD notified us of a sewer overflow at 1450 Encinitas Blvd.	Email from LWD on 6/1/09: We responded to a private Lateral spill on Friday the 29th at 1450 Encinitas Blvd. at approximately 4:40 pm. The crew discovered lateral for 1450 Encinitas overflowing. The overflow was approximately 25 Gallons of which only 5 gallons reach storm drain. The crew contained spill and Property Management called Plumber to relieve stoppage. NOV letter mailed 6/5/09.	Yes	No	6/5/2009				LCS	6/5/09
88	77943	6/11/09	wash water	Discharge of building or sidewalk washwater - Clean Water Program staff witnessed company power washing without containment.	Clean Water Program staff spoke with discharger to let him know that no water was allowed to leave site. Took photos. Company has been cited before. Mailed NOV Letter and Citation 6/15/09.	Yes	Yes	6/15/2009	Yes	6/15/2009		ENC	6/15/09
89	77989	6/22/09	trash and leaves	Discharge of yard waste - Complaint forwarded from SDWD and Code Enforcement. Residents washing cards in emergency fire lanes on 6/2 and 6/4. Also, gardeners blowing trash and leaves near storm drain.	6/23/09 site inspection left card and garden information with guard	Yes	Yes		Yes			LUC	7/2/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
90	78052	6/28/09	wash water	Discharge of building or sidewalk washwater - Restaurant washing off items behind store without containment. Complainant tried talking to restaurant, but they continue to discharge.	6/30/09 site inspection took photos of discharge water and contacted worker issued NOV	Yes	No	6/30/2009	Yes			ENC	7/2/09
91	78056	6/30/09	carpet cleaning wash water after filter	Discharge of building or sidewalk washwater - Carpet cleaners dumping waste into street.	6/30/09 site inspection took photos and issued NOV contractor indicated that it was clean water. He was informed that it is not an allowed discharge. He understood and will comply in the future.	Yes	Yes	6/30/2009	Yes			CBS	7/2/09
Commercial Totals:	**91**				**Follow Ups:**	**45**	**67**	**37**	**26**	**75**	**10**		

Appendix H-1 Residential Complaint Response Summary FY 2008-09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	34887	7/10/07	private landscape drain connected to public storm drain.	Other discharge - Neighbors found private landscape drain connection to a public storm drain.	8/7/08 CWP Manager and I went to property knocked on door, no answer, left card to call me 8/12/08 Wastewater and i entered the storm drain area from the gated community below the property. We observed the illegal hook up and took photos. It appeared that a tree limb had broken off and landed on top of the illegal hook up. We removed the limb and took photos. A resident of the home owners association informed us that the limb has been there for over 2 months. I informed the resident that we would forward the fire hazard/complaint to the Fire prevention officer and gave her my card and asked that she call me if she sees anyone working around the storm drain pipe or any other storm drain violations. 8/14/09 received correspondence from the property owner indicating that the prior owner is responsible for the construction and they are currently in a Civil dispute to resolve the connection issue. 11/26/08 No permits submitted 12/1/08 LM with owner 1/14/09 Received call from current owner stating that he is moving forward and meeting with his realtor and get back to the City by 1/31/09	Yes	7/6/2009	Yes		BATIQUITOS LAGOOON	LUC	7/17/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					1/14/09 received call from Buyers realtor requesting city cost to permit legal drainage and repair of pipe. Engineering staff said a minor plan check is 900. It was agreed that the cost may be doubled. Informed realtor that the cost estimate would be 2000 or under unless changes occurred before submittal. 3/10/09 Spoke to seller's realtor she will call owner for update and get back to the city. 6/9/09 seller's realtor is waiting for call from owner. It was agreed that if no call by 6/11/09 then call realtor and owner. Owner may want to sell house and will have to disclose drainage violation. 6/16/09 contacted realtor who stated that she is meeting with the owner on 6/18/09 and will call the city on 6/19/09 with the results of the meeting. 6/24/09 received fax of email buyer intends to send seller. Clean water manager & I discussed the case and it was decided to uphold the original NOV requirements to get a grading permit. Called and informed the property owner that an NOV will be sent out in early July. 7/6/09 sent NOV to comply by 8/7/09 Engineering Dept to follow up.							

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
2	64704	6/2/08	NA- Wet soil in backyard, some sewer smell	Discharge of sewage - Resident complaining about constant wet soil in backyard. Dead tree pulled from ground smells like sewer. Ongoing problem.	8/7/08 site inspection did not observe any discharge or sewer smells on 406 Jolina Way. Did produce a service request for 257 N. El Camino Real Villa Encinitas Plaza for grease and trash storage	No					LCS	8/11/08
3	68808	6/18/08	WATER	Discharge of water - Neighbor's sump pump pumping water into dirt alley 3-4x per week. Possibly causing erosion.	7/1/08 Site inspection observed no discharge. Called complainant, she informed me that the hosing off has stopped, but the water still comes up from the ground. Complainant will call when she sees runoff and would like a call after contact is made. Set to inspect Tuesday 7/8/08. See follow up WO 75376 Follow Up: Site inspection- Left card and door hanger.	No					CBS	7/7/08
4	68872	6/25/08	White Sheetrock Material	Discharge of concrete cutting slurry or washwater. - White sheetrock material appears to have been dumped in/near storm drain at Passiflora and Sidonia, going south on Leucadia.	7/2/08 Site inspection- could not find discharge.	No					ENC	8/1/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
5	68889	6/30/08	WHITE CLAY WASH WATER	Discharge of concrete cutting slurry or washwater. - Trail of dried white substance leading from shed in alley to storm drain.	7/1/08 Site inspection- took photos, contacted resident/owner. She will take care to use buckets of water to prevent colored discharge.	No					CBS	8/1/08
6	68909	7/2/08	Red Hydraulic Fluid	Discharge of liquid fuels. - Staff noticed red fluid lining curb after hours. Traced it back to equipment inside abandoned house. .	7/2/08 site inspection took photos left card at door. City Staff used kitty litter to clean up fluid. 7/8/07 site inspection no one there took photos. 7.9.08 drafted NOV. 7/10/08 sent NOV via cert mail with photos and educational materials. Received undelivered certified mail on 8/5/08. Resent via regular mail 8/6/08.	Yes	7/10/2008	Yes			CBS	8/5/08
7	68910	7/3/08	Diatomaceous Earth/ pool filter	Discharge of water - Neighbor is emptying pool and causing erosion into the street, causing complainant to have to sweep in front of his house. Inspector to investigate. Please call complainant back.	7/9/08 site inspection contacted owner regarding discharge of pool water. He showed me where the pool man fixed the pump and said there may have been some discharge. I called the complainant back and asked if he wanted to call the respondent. He declined but requested that I inform the pool owner that there is a discharge pipe that creates erosion when the pool discharges from the SW corner of the lot.	No					LUX	7/30/08
8	68921	7/6/08	water	Discharge of water - Neighbor is watering incessantly, flooding alley between Oxford and Montgomery. Possibly washing off dog waste as well.	7/7/08 site inspection left door hanger and business card. No discharge was observed	No		Yes			CBS	10/14/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
9	68924	7/7/08	TILE WASTE DEBRIS	Discharge of concrete cutting slurry or washwater. - Neighbor washing white residue from home remodel into storm drain. Inspector to investigate. Please call complainant back after investigation.	7/7/08 site inspection observed discharge took photos and issued NOV See follow up 79925 Follow Up: 7/9/08 site inspection area cleaned up case closed	Yes	7/7/2008	Yes			LCS	7/9/08
10	68928	7/7/08	yard waste	Discharge of yard waste - Neighbor washing leaves and yard waste into street and cul-de-sac.	7/8/08 SITE INSPECTION TOOK PHOTOS left card and door hanger no discharge observed	No		Yes			CBS	10/14/08
11	68938	7/8/08	POOL WATER	Discharge of water - Constant flow of water down street all morning. Possibly from pool drainage.	7/8/08 site inspection, contacted home owner Terry Ash 760 436-6002. He stated that the pool has not been chlorinated for three weeks and that he had a cracked pool. Called and informed the complainant that this is an allowed discharge	No				OCEAN	LUC	7/30/08
12	68943	7/8/08	Diatomaceous Earth	Discharge of water - Dried white trail, possibly diatomaceous earth, running down street.	7/9/08 site inspection took photos of white substance in street. Left door hanger and card to call me. 7/9/08 called Daniel Giroux 942-8460. A French speaking person requested that I call back the next day 7/14/08 Called and left message See follow up WO 79972 Follow Up: FOLLOW UP SHOWED AREA CLEANED	Yes	7/16/2008	Yes	7/16/2008		CBS	7/21/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
13	69126	7/17/08	water	Discharge of water - Water running down street from a blue hose in the driveway. Possible pool or waterbed draining.	7/28/08 site inspection no discharge observed	No					ENC	10/14/08
14	69130	7/23/08	sewage	Discharge of sewage - RV parked in front of house. Overflow tank & sewage has been leaking into street.	7/28/08 site inspection did not observe any discharge left card at RV door Follow Up: that the oil was contaminated and that they needed HHW phone number to get the waste picked up. Called property owner and gave her the phones 800 444-4244 and asked that she get a receipt and give a copy to me or Code after it is picked up.	No		Yes			ENC	10/20/08
15	69131	7/27/08	red tinted water	Discharge of building or sidewalk washwater - Drainage water with red tint coming from Morning Sun Dr. Unsure of source or discharge.	7/28/08 site inspection observed red dye in street left card to call me. property owner returned call and will contact roof cleaner	Yes		Yes			LCS	10/14/08
16	69255	8/11/08	concrete slurry	Discharge of concrete cutting slurry or washwater. - Concrete slurry entering street.	8/12/08 site inspection no discharge observed gave contractor educational materials	No		Yes			CBS	10/15/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
17	69282	8/14/08	GRANITE CUTTING DEBRIS	Other discharge - Contractor at residence installing new countertops. Cuttings going into street.	8/14/08 site inspection observed discharge too photos and issued NOV to comply by 8/14/08 5:30 pm See follow up WO 79353 Follow Up: 8/15/08 site inspection showed area cleaned up---OK to close	Yes	8/14/2008	Yes			LUX	8/15/08
18	69300	8/15/08	WASH WATER	Discharge of building or sidewalk washwater - Resident power washing roof without containment.	8/15/08 site inspection contacted a home owner washing off his roof. Bill understood and discontinued the discharge immediately. OK to close	Yes		Yes			LUX	10/15/08
19	69301	8/18/08	cleaning wash water	Discharge of other washwater - Residents discharging cleaning wash water to street.	8/18/08 site inspection did not observe any discharge but i did see where the drainage comes off the lot. I left card to call me regarding drainage. I received call back from Luis stating that he will address the possible erosion control and that the drainage was from over-irrigation.	Yes		Yes			ENC	10/29/08
20	69302	8/18/08	White Substance	Discharge of paint - Resident dumping paint into storm drain.	8/18/08 site inspection observed white substance in street. Took photos and left door hanger. sent NOV to comply by 8/25/08 needs follow up	Yes	8/18/2008	Yes			LUX	8/25/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					See follow up WO 79312 Follow Up: 8/25/08 received call requesting a compliance inspection at 4p today. Site inspection showed that area was cleaned up ok to close							
21	69419	8/29/08	wash water	Discharge of other washwater - Forwarded from Code Enforcement. Outdoor shower not connected to sewer. Water drainage causing structural damage. Inspector to investigate. Code Enforcement will require permit for outdoor shower.	9/4/08 site inspection with code enforcement observed outdoor shower took photos respondent agreed to remove structure rather than applying for a permit. 9/30/08 code reported that shower was removed Case closed	Yes					ENC	10/15/08
22	69420	8/28/08	Discharge of water	Discharge of water - Resident installing pipe to carry water from back structure to street. Inspector will visit site to assure storm water compliance.	8/29/08 site inspection contacted workers and was informed that the drainage is for rain water and irrigation.	No		Yes			ENC	10/15/08
23	69434	9/2/08	white wash water	Discharge of construction debris - Construction on condo. Contractor doing work outside next to storm drain, using water to wash off area.	9/3/08 site inspection contacted owner and gave card and const. flyer no discharge observed	No		Yes			ENC	10/14/08
24	69440	9/3/08	cement, plastic, soil	Discharge of concrete waste. - Email from CWP website. Abandoned construction project, materials left out, uncovered, blowing into storm drain.	9/3/08 site inspection left card & construction flyer. No discharge observed took photos of building materials	No		Yes			LCS	10/14/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
25	69471	9/3/08	OPEN OUTDOOR USED OIL STORAGE	Discharge of oil. - Open/outdoor storage of oil and batteries.	9/4/08 site inspection with code enforcement. Observed open storage of used oil and batteries took photos contacted residents to properly dispose of the items See follow up 80174 Follow Up: 10/20/08 code informed me that the oil was contaminated and that they needed HHW phone number to get the waste picked up. Called property owner and gave her the phones 800 444-4244 and asked that she get a receipt and give a copy to me or Code after it is picked up.	Yes		Yes			ENC	10/20/08
26	69474	9/9/08	Pine sol	Discharge of other washwater - Complaint of pine sol-like substance being hosed into street.	9/9/08 left card at residence to call me. Received call from resident stating that he will work on the erosion problem.	Yes		Yes			ENC	10/15/08
27	69495	9/11/08	Diatomaceous Earth	Discharge of other washwater - White creamy substance was washed to storm drain.	9/11/08 Inspector saw illegal discharge of diatomaceous earth from swimming pool cleaning activities. Issued warning citation to clean up within 24 hours. Follow Up: Drive by follow up at 4:15pm. Site has been properly cleaned. Sent case closed letter to resident 9/15/08.	Yes		Yes	9/11/2008		ENC	9/12/08
28	69502	9/12/08	PAINT	Discharge of paint - Garbage bag full of paint cans is spilling into swale and down street.	12-15 gallons of paint in curb. 1 bag ripped open and leaking into curb line and gutter. Streets maintenance responded to clean up spill in front of 2033 shady tree ln. Approx. 20 door hangers distributed to addresses 2002-2041.	Yes		Yes			LCS	10/15/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
29	69503	9/11/08	Pine sol smelling water	Discharge of other washwater - Pine sol smell coming from resident's backyard, draining out and seeping into ground. Not running onto sidewalk. Inspector has visited site before.	9/23/08 site inspection observed no discharge	No					ENC	10/15/08
30	69504	9/10/08	outdoor shower wash water	Discharge of other washwater - Newly constructed outdoor shower drains to street. 2260 not showing on GIS map, may be new address.	10/2/08 site inspection no discharge observed no one home	No					CBS	10/14/08
31	69519	9/16/08	White Construction Runoff	Discharge of paint - Painting being done on 1700 block of Gascony. Discharge of materials leading down to Burgundy.	NOV Letter sent to residents at 1704, 1708, 1710, 1714, 1716, 1718, 1720, 1722 Gascony Rd. and to HOA mgmt company. Received call 9/22 from 1704 saying it wasn't them. Received call 9/24 from 1716 saying they weren't responsible and that the HOA hired the contractor. Received letter from HOA mgmt company 10/7/08 stating that the Board will be informing homeowners and construction vendors of the community about the incident and will educate to prevent any future violations.	Yes	9/18/2008	Yes			LUC	10/13/08
32	69554	9/19/08	UNKNOWN	Discharge of other washwater - Resident says someone dumped petrochemicals into puddle at the corner of La Mesa and N El Portal.	9/22/08 site inspection took photos and contacted PW and complainant. 9/23 site inspection left door hangers at adjacent addresses (438, 462, 460, 476, 482 La Mesa, 210 N. El Portal and on vehicle red truck	Yes		Yes			LUC	9/25/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					exp 9/08) that would drain into the puddle. Emailed Engineering, PW and Vector control. Updated complainant on actions taken. Need to re inspect and advise PW of when and how to clean up. See follow up WO 79905 Follow Up: 9/25/08 site inspection area cleaned took photo							
33	69567	9/23/08	CEMENT DEBRIS	Discharge of water - Resident says a white residue is in the puddle of water at the end of her driveway. Claims that it's coming from her neighbor's property. Has called numerous times about this before, but it usually ends up being a non-issue.	9/23/08 site inspection observed puddle in front of complainant's house took photos and investigated upstream and found some cement debris in front of 603 faith Ave. Updated complainant See follow up WO 80046 Follow Up: 10/7/08 site inspection area cleaned up case closed	Yes		Yes			CBS	10/7/08
34	69572	9/20/08	construction wash water	Discharge of construction debris - Resident washing off construction tools in driveway without containment.	9/23/08 site inspection contacted resident and gave her power washing handout. no discharge or stains on the driveway	No		Yes			CBS	10/15/08

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35	69573	9/21/08	White Construction Debris	Discharge of concrete cutting slurry or washwater. - Contractor washing out equipment, dumping wash water into drain in grass.	9/25/08 site inspection observed drainage took photos left handyman flyer and construction handout with business card at door.	Yes		Yes			ENC	10/15/08
36	69596	9/29/08	OIL	Other discharge - If you walk by 1345 Greenlake Drive in Cardiff by the Sea, there is a white Ford Bronco that has an oil slick under it and on top of it, the guy sits in his truck and throws cigarettes out into the gutter next to his truck.	10/2/08 site inspection took photos and was contacted by neighbor who confirmed that the resident at 1345 Greenlake Drive owns a white ford bronco. Left door hanger at site. See follow up 80096 Follow Up: Drive stating that he does not own a white ford bronco and to stop leaving notices at his door10/20 site inspection vehicle GOA case closed	Yes		Yes			CBS	10/9/08
37	69597	9/27/08	DIESEL FUEL	Discharge of liquid fuels. - Accidental diesel spill over weekend. Streets responded to emergency cleanup. No discharge to storm drain. Inspector to check out site with Fire Chief to make sure no more cleanup is needed.	9/29/08 site inspection w/ FD took photos observed stained roadway and dirt. there was a great odor of diesel fumes. We contacted responsible party and referred them to hazardous waste clean up companies. Hand derived list of contractors. Respondent wanted their daughter to be informed of the requirements. received call from daughter and explained that the city needs a written plan of action and for that plan to be implemented asap. 9/30/08 received email with action plan from respondent's daughter See follow ups 80042, 80349, 80350, 80351. Follow Up: By EMERSON, MIKE: 10/20/2008 1:02:39 PM 10/15/08 site inspection work no completed took photos	Yes		Yes			ENC	10/20/08

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38	69603	9/29/08	water	Discharge of water - Complaint about water running from Oxford and pooling in alley between Oxford and Montgomery, causing slime, mud, and smell. Groundwater-engineering issue. We have received complaints on this before; inspector has been to site.	Complainant would like call back. 10/2/08 clean water program met with senor civil engineer and contacted complainant and informed her of the process to connect the surface drainage to underground drainage and the CIP process and priorities of CIPs. Complainant requested and was given Public Works and Engineering phone s. Complainant made reference to an adjacent property owner (324 Liverpool drive) with whom the City has taken encroachment violation actions against in recent months, suggesting that the adjacent property owners actions had resolved the problem, but the City forced the property owner to cease and desist actions. Further, complainant suggested diversion of drainage into the right of way easement, as a means of "aquifer recharge" and was explained that this is not a viable option in consideration of legal constraints, and that this would not resolve surface drainage issues. Engineering issue, not Clean Water Program issue.	No				OCEAN	CBS	10/14/08

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39	69607	9/30/08	GRAY BUILDING DEBRIS	Discharge of water - Another call regarding a puddle of water with a sheen on it in front of complainant's driveway.	By EMERSON, MIKE: 9/30/2008 3:07:02 PM 9/30/08 site inspection observed some gray particles in the storm drain took photos and was contacted by the complainant stating that she will keep complaining when she sees non storm water in drain. Contacted respondent and showed him the violation and requested that the discharge be discontinued and to sweep up the debris that settled in the storm drain and call me back for a follow up inspection See follow up WO 80043 10/2/08 site inspection area appeared to be cleaned up took photos.	Yes					CBS	10/14/08
40	69627	10/2/08	water	Discharge of water - Swimming pool discharge coming from neighbor's house is potentially causing runoff in front of complainant's house.	10/02/08 site inspection no discharge observed □□no violation	No					LUX	10/14/08
41	69642	10/7/08	water	Discharge of water - Complaint forwarded from Code Enforcement. Complainant is concerned with neighbor's pool discharge causing erosion along side of road.	10/7/08 site inspection no discharge observed□□□no violation. CW manager spoke with complainant and explained that pool discharge is not a violation as long as it's dechlorinated and not causing erosion. The inspector verified that erosion is not occurring as a result of the pool discharge. CW updated Code Enforcement.	No					LUX	10/14/08

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42	69669	10/10/08	Pine sol/ water	Discharge of building or sidewalk washwater - Another complaint regarding Pine sol smell coming from backyard. Cleaning something without containing wash water. Discharge is coming out where the gate is.	10/15/08 met with respondent informed him that washing down the patios so that the discharge flowed into the storm drain was a violation. He understood and will use biodegradable soaps and contain all wash water on site..	No		Yes			ENC	10/21/08
43	69676	10/13/08	WATER/ SOOT	Discharge of other washwater - Ash/soot being washed down street, coming from storm drain on Townwood Way. Possibly coming from burned house near Digueno Middle School.	Inspector went to site, saw wet area on Townwood Way near storm drain outlet. Could not find source of discharge on Meadow Vista Way. Called to inform complainant. he said the flow was stronger earlier in the day. case closed.	No					RSF	10/14/08
44	69678	10/13/08	OIL	Discharge of oil. - Oil residue from car on driveway.	10/14/08 site inspection contacted owner who indicated that it was her workers vehicles that are leaking oil. left card and door hanger See follow up 80402 Follow Up: 10/20/08 site inspection oil drips appeared to be cleaned up	Yes		Yes			LUX	10/20/08

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45	69696	10/16/08	water	Discharge of water - Complainant is concerned with neighbor's pool water draining down street and dissipating into pavement. Worried there may be an underlying erosion problem under the pavement.	10/20/08 site inspection. Observed no drainage or trails of drainage. Resident informed me that the pool drainage disappeared into the street took photos and informed the resident that I would forward this concern to the street division of the PW department. 10/21/08 sent email to PW with photos.	No		Yes			LUC	10/21/08
46	69699	10/16/08	WASH WATER	Discharge of building or sidewalk washwater - Resident hosing off driveway into storm drain adjacent to Moonlight Beach.	10/16/08 site inspection observed worker hosing off patio into storm drain. Informed worker that washing patios is a violation and to sweep it up. He understood and complied case closed	Yes		Yes			ENC	10/21/08
47	69842	11/18/08	sewage	Discharge of sewage - Sewage overflows in yard. Sump pump alarm goes off, cap is being left off.	Clean Water and Wastewater staff visited site, spoke to responsible party. He assured them that no sewage had gone into street or storm drain. the alarm on the pump is malfunctioning. Staff told him he needs to maintain his pump to make sure no discharges occur. Staff also spoke to complainant's wife and let her know no discharge was seen, told her to call Hotline if any discharges occur.	No		Yes			ESC	11/19/08
48	69843	11/17/08	SAND AND DIRT	Discharge of other washwater - Resident cleaned out garage and hosed dirt and sand into parking lot. trail of white leading to storm drain.	11/17/08 site inspection took photos of stains from a white substance that had been washed into the storm drain. I contacted the owner and informed him that washing out his dirt and sand from his garage is not an allowed discharge and is a violation of our storm drain ord. He said in the future he will sweep it up and not wash it into the storm drain	Yes	11/19/2008	Yes			ENC	11/25/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
[illegible]	69844	11/17/08	PAINT-WHITE	Discharge of paint - Contractor spilled white paint on sidewalk, hosed it into bushes where there is a drain. Other substance was used to get paint off sidewalk, and that was also washed into the drain in the bushes.	11/19/08 site inspection observed some white stains in landscaped area next to drain took photos and contacted resident who indicated that the worker was an employee of the PM. Called PM and left messages on 11/19 and 11/21/08. No reply as of 11/24 See follow up 81178. Follow Up: 12/2/08 sent NOV letter to PM 12/11/08 received call from PM stating that they have sent a letter to all of the residents regarding discharge and will mail a copy to the City	Yes	12/2/2008	Yes		NO	ENC	12/2/08
50	69845	11/19/08	WASH WATER	Discharge of building or sidewalk washwater - Clean Water Staff saw power washer washing a deck that faced the ocean.	Clean Water staff went to house, spoke with homeowner. She let them in the backyard to speak with the power washer. all wash water was draining into landscaping. no violation. Sent informational letter with handyman brochure to resident.	No		Yes			ENC	11/19/08
51	69901	11/26/08	DIRT	Discharge of water - Call from Wastewater about possible illegal connection to storm drain between 1702 and 1703.	12/1/08 site inspection took photos of dirt coming out of storm drain. Contacted residents at 1703 and 1702 Sienna Canyon Drive. 1703 said he would clean storm drain out. I said I would call both 1702 and 1703 back after I spoke to wastewater complainant. Called waste water to get more info. See follow up WO 81348 Follow Up: 12/10/08 site inspection area cleaned case closed	Yes		Yes			RSF	12/10/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
52	69914	12/3/08	STUCCO WASTE	Discharge of construction debris - White substance, possibly plaster or paint, coming from outlet in street between 507 and 509. Construction is at 503.	12/4/08 took photos of discharge in storm drain at 503 Ocean bluff and on the street around the corner. Contacted worker and showed him where the discharge was coming from and that he needs to clean it up collecting all of the washwater. also told him to use the wash out pit to clean his tools. See follow up 81096 Follow Up: 12/5/08 site inspection area cleaned up contacted PO gave her bus card	Yes	12/4/2008	Yes			ENC	12/5/08
53	69930	12/9/08	Sewage	Discharge of sewage - Call from Leucadia Wastewater District regarding possibly blocked sewer lateral.	12/9/08 site inspection took photos of exposed sewage issued NOV left at door See follow up WO 81366 Follow Up: 12/10/08 site inspection two roto rooter vehicles on site reported that they cleared the line last night (12/9/08) at 8pm. Contacted the owner and signed off the NOV	Yes	12/9/2008	Yes			LUC	12/10/08
54	69961	12/10/08	VEHICLE WASH WATER	Discharge of liquid fuels. - Complainant says neighbor is power washing some sort of oil/gas mixture into the street without containment.	12/10/08 site inspection took photos contacted owner and worker regarding discharge. Worker immediately started clean up See follow up WO 81403 12/11/08 site inspection area cleaned up---case closed	Yes		Yes			LUC	1/2/09

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55	69994	12/18/08	dirt	Discharge of concrete waste. - Pond built in yard, concrete waste dumped over fence on bank of Batiquitos Lagoon.	12/18/08 site inspection took photos of work site contacted worker and directed him to clean up and discontinue discharge. Follow Up: 12/22/08 took photo area cleaned up area	Yes		Yes			LUC	12/22/08
56	70014	12/18/08	SILT	Other discharge - Lack of BMPs, failed block wall.	12/18/09 site inspection observed bricks in road and some silt discharge left card at door. See follow up WO 82044 Follow Up: 1/7/09 site inspection area cleaned up case closed	Yes		Yes			ENC	1/7/09
57	70018	12/19/08	SILT	Discharge of other washwater - Erosion, sediment runoff after rain event.	1/13/09 site inspection took photos of run on to 1223 Crest View drive from three different properties. Met with clean water manager regarding residential run off/on. Received call from owner of 1934 Crest drive indicating that he would do what is necessary to comply. He was informed that he needed to make sure that his property stayed on his site. No sediment should leave his property from a rain event or over irrigation. 1/30/09 received complaint call from owner of 1223 Crestview drive. discussed case with engineering grading enforcement staff and it was determined to be a civil issue but that clean water staff would give education to land owners regarding erosion and BMPs. Informed complainant that it was considered a civil issue between neighbors	Yes		Yes			CBS	2/9/09

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					Follow Up: 2/9/09 site inspection took photos of BMPs at discharge point and it appeared to be working after a rain event. Case closed							
58	70043	12/29/08	SILT	Other discharge - Sediment runoff in street, possibly coming from house on corner or Piraeus and Olympus.	12/29/08 site inspection took photos of dirt discharge. contacted owner to clean up See follow up 81622 Follow Up: 12/29/08 site inspection area cleaned up took photos. Emailed street sweeper schedule and emailed streets to do an extra sweep.	Yes		Yes			LUC	12/29/08
59	70054	12/30/08	SILT	Other discharge - Silt discharge in street from landscaping activities.	12/30/08 site inspection took photos of dirt in street left card at door to call me. See follow up 81698 Follow Up: 1/2/09 site inspection contacted owner and took photos of clean up	Yes		Yes			CBS	1/2/09

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60	70055	12/30/08	SILT	Other discharge - Silt discharge in street.	12/30/08 site inspection at neighbor's construction site took photos of drainage into shared drain that is draining silt into street.	Yes		Yes			CBS	1/16/09
61	70067	12/31/08	SILT	Other discharge - Silt discharge into street and lack of BMPs.	12/31/08 site inspection contacted owner regarding erosion control See follow up 81695 Follow Up: 1/5/09 site inspection driveway complete and erosion control at the drainage points called and thanked owner	Yes		Yes			ENC	1/5/09
62	70073	1/4/08	BEACH SAND	Discharge of other washwater - Trail of unknown white substance leading from driveway at or near 230 Fourth St.	1/5/09 site inspection took photos of white stain. It appeared to be beach sand from an outdoor shower. Left card at door case closed	No		Yes			ENC	1/16/09
63	70110	1/12/09	detergent smelling water	Discharge of building or sidewalk washwater - Resident walking by house on corner of El Camino del Norte and Edelweiss smelled Tide detergent coming from drain.	1/12/09 site inspection observed no discharge or any trails of discharge	No					RSF	1/21/09
64	70146	1/20/09	Sewage	Discharge of sewage - Pumping out septic tank into adjacent property.	1/20/09 site inspection with waste water. Took photos of discharge and gave card to resident to have owner call me ASAP. Discussed case with supervisor and it was decided that DEH should be	Yes	1/21/2009	Yes	1/21/2009		ENC	1/22/09

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					contacted. Registered a complaint with DEH and sent photos to inspector. Inspector cautioned that it could take up to 30 days to get the discharge to stop. Called waste water to update. Wastewater cleaned up all discharge with vactor truck.							
65	70171	1/26/09	PAINT	Discharge of paint - Resident says his neighbors dumped paint into storm drain. He confronted them about it and they denied it, but the paint is the same color that they just painted their house.	No discharge observed. Will mail education letter on 1/27/09 to resident/owner. Complainant wishes to be contacted if contact with responsible party occurs. Case closed.	No		Yes			LUX	1/26/09
66	70253	2/9/09	SILT	Discharge of water - Drain on north end of property gets filled with debris and water overflows into complainant's back yard.	2/12/09 site inspection took photos contacted upstream neighbor (2323 Camino Del Rancho) regarding maintenance of storm drain. He said he cleans it every 6 months. Additionally he believes that he owns to the middle of the storm drain. I called and informed the complainant his neighbor believes that the swale is owned by both property owners equally the maintenance can be done to the middle of the swale.	No		Yes			ESC	2/25/09
67	70267	2/11/09	Yard Waste	Discharge of yard waste - Complainant witnessed a man blowing leaves and other debris into the storm drain with a leaf blower on 2/8/09. Forwarded from Code Enforcement.	2/12/09 site inspection left card at door. Received a call back from the resident. Educated her that leaves and debris cannot be deposited into the storm drain. She understood and will not do it again. Case closed	No		Yes			CBS	2/17/09

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68	70323	2/19/09	Possible auto fluids and paint	Other discharge - Forwarded from Code Enforcement. Auto body & mechanic work in driveway again. Prepping an RV for painting.	2/23/09 site inspection no discharge or RV observed on site contacted resident who stated that they were washing the vehicle. CASE CLOSED	No		Yes			CBS	3/5/09
69	70380	2/9/09	SILT	Discharge of sediment - Sediment discharge, inadequate BMPs causing erosion.	2/9/09 site inspection took photos of silt discharge into permanent BMP See WO 84159 Follow Up: ion or construct the BMPs to the MEP. He understood and will be on site to ensure that the silt is staying on his property during the next rain events. 2/17/09 received call from complainant stating that the BMPs (cement structures were working well. case closed	Yes		Yes			CBS	2/12/09
70	70387	2/27/09	water	Discharge of vehicle wash water - Complainant says neighbor is letting water and other wash run down street. He had the hood of his car open and a towel in the gutter line to try and catch the runoff, but it wasn't working.	2/27/09 SITE INSPECTION did not observed any discharge took photos and contacted resident gave him education flyers	No		Yes			CBS	3/5/09
71	70407	3/4/09	OIL	Discharge of oil. - Illegal storage and discharge of motor oil.	3/4/09 site inspection took photos oil storage in alley. Left Door hangers in alley and at front walk requesting a call and placed NOV at the alley garage. Neighbor's worker indicated that the garage appeared to be rented out. They	Yes	3/4/2009	Yes			ENC	3/5/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					will monitor and call the hotline if there is a discharge. See follow up 84286 Follow Up: 3/5/09 site inspection oil storage removed took photos Case closed							
72	70414	3/5/09	WASTE PAPER DEBRIS	Discharge of sewage - Cleaning out sewage lateral, overflow into street.	3/5/09 site inspection took photos of what appeared to be dried toilet paper coming out of sewer clean out. Contacted the resident to clean it up ASAP without any discharge. See follow up 84328 Follow Up: 3/9/09 site inspection took photo of area that was cleaned up Case closed	Yes		Yes			ENC	3/9/09
73	70438	3/11/09	water	Discharge of water - Complainant said that a large City truck was dumping water from the truck into the storm drain near Sheridan Rd and La Costa Ave. Not sure which department.	3/11/09 Contacted City of Encinitas Wastewater and Street Maintenance Divisions, San Dieguito Water District, and Leucadia Wastewater. None had trucks in the area this morning. Encinitas Wastewater drove to area of complaint and saw no evidence of illegal discharge. Construction at La Costa Ave and Hwy 101 in progress- could have possibly been one of their trucks. Informed resident to call asap if he sees it again. Case closed.	No					LUC	3/16/09

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74	70473	3/16/09	water and white powdery substance	Discharge of water - Complainant says that a white power substance has been applied at 1257 and can be seen on the ground and in the storm drain. She is concerned that it is poisonous and harming her landscaping.	3/16/09 site inspection did not observe any discharge took photos of storm drain left card at door	No		Yes			CBS	4/13/09
75	70476	3/16/09	WATER	Discharge of water - Possible illegal connection to storm drain system, causing erosion and flooding.	3/16/09 site inspection observed some discharge into commercial property to the west. Contacted owner and it appeared to be over-irrigation. The owner directed his landscaper to dig up the three irrigation lines and replace the valves. No violation case closed	No		Yes			LCS	4/13/09
76	70491	3/18/09	OIL AND KITTY LITTER	Other discharge - Bag of kitty litter left at the corner of Santa Fe Dr and Evergreen, possibly left over from an oil spill.	3/18/09 took photos of kitty litter in street with some oil visible. Left door hanger and called realtor. 3/19/09 called PW to clean up street emailed photos. See work order 84624 Follow Up: 3/27/09 site inspection area cleaned up case closed	Yes		Yes			CBS	3/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
77	70560	4/2/09	clean out waste	Discharge of sewage - Possible Illegal connection to the storm drain. Grey water draining from house.	4/2/09 site inspection with waste water appears a clean out cap was not connected. 4/6/09 called owner to get clean out pipe reconnected. 5/5/09 called and spoke to property owner and she understands what she needs to do. Need to call her back within two weeks. Follow Up: 5/28/09 received invoice from plumber showing clean out redirected to the roof.	Yes		Yes			ENC	5/28/09
78	70585	4/8/09	vehicle wash water	Discharge of vehicle wash water - Forwarded from Code Enforcement. Complainant believes neighbor is running a vehicle washing business out of his home. Wash water runs down street into storm drain.	4/14/09 site inspection left card at door. Received call back stating that he was washing his private vehicles. He was requested to capture all wash water.	No		Yes			LCS	7/1/09
79	70599	4/10/09	possibly detergents, oils, gasoline	Discharge of other washwater - Complainant says neighbor routinely dumps oils, detergents, and gasoline down her driveway and into the street. He has called multiple times about this before.	4/14/09 site inspection no discharge took photos case closed	No					CBS	6/1/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
80	70611	4/15/09	sand	Discharge of sediment - Neighbor has large pile of uncovered dirt in street.	4/15/09 site inspection took photo of dirt in street contacted owner to remove. Follow Up: 5/13/09 completed follow up inspection area cleaned case closed	Yes		Yes			CBS	5/13/09
81	70617	4/16/09	water	Discharge of water - Owner of local business called to report neighbor's continuous flow of water from hole in curb. Also, leaves in street gutter cause backup of water and provide breeding ground for mosquitoes. Will forward over-irrigation complaint to SDWD.	4/20/09 site inspection drainage appeared to be clean water colorless and odorless case closed	No					CBS	4/21/09
82	70625	4/19/09	paint	Discharge of paint - Forwarded from County: Occupants of the house were cleaning paint brushes and dumping paint into the gutter at their driveway.	4/20/09 site inspection took photos of paint stains in street. Contacted owner of house she informed me that she was directed by her paint store to wash the paint brushes at the curb. Contacted business to give out correct information and added them to our inventory. Respondent was directed to sweep up street to storm drain via NOV to comply by 4/21/09 12 noon. See work order 84811 Follow Up: 4/21/09 site cleaned up NOV signed off	Yes	4/20/2009	Yes			LCS	4/21/09

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83	70629	4/20/09	sewage	Discharge of sewage - HOA reported sewage spill. Plumber is on site to address the issue, but sewage may have gone into street.	Sewage spilled from cleanout when plumber opened it for maintenance. Wastewater Division responded to scene. 1-2 gallons of sewage spilled into a private drain. No residual sewage in storm drain downstream on Hygeia. Plumber had cleaned most of spill when it happened. Case closed.	No					LUC	4/21/09
84	73696	5/6/09	h2o	Discharge of other washwater - Neighbor washing something into street w/out containment.	5/6/09 site inspection took photos of drainage streaks from 2512 San Elijo. Neighbors confirmed that he was washing down his driveway. respondent stated that he was emptying his water feature no violation case closed.	No		Yes			CBS	6/1/09
85	73729	5/12/09	h20	Discharge of water - Heavy water flowing from apartment complex. Possible broken sprinkler. SDWD couldn't get into site.	5/12/09 site inspection took photos of discharge appears to be a broken sprinkler/over irrigation. Called PM he will look into it case closed	No		Yes		Ocean	ENC	6/1/09
86	73735	5/13/09	Diatomaceous earth	Discharge of other washwater - Pool drainage, diatomaceous earth in street.	5/13/09 site inspection took photos of discharge contacted resident to inform pool service to discontinue practice.	Yes		Yes			LCS	6/2/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
87	73783	5/20/09	wash water	Discharge of vehicle wash water - Neighbor's workers power washing driveway without containment of wash water.	Mailed educational letters with BMP info to residents at 395 and 399. Shared driveway made it unclear who was doing the power washing. Case closed.	Yes		Yes			LUC	5/26/09
88	73818	5/26/09	oil	Discharge of oil. - Forwarded from Code Enforcement. Oil spill in street from gold station wagon in front of residence. See attached complaint form.	5/26/09 site inspection took photos of old oil stains in street. left card to call me. It appears that the oil drips occurred months ago. no clean up needed case closed	No		Yes			ENC	5/27/09
89	73848	5/29/09	trash	Discharge of trash - Neighbor dumping trash (toilet paper and glass) into the storm drain. Complainant says she was doing it while he was calling the hotline.	6/1/09 site inspection took photos left card at door requesting a call back	No		Yes			CBS	6/5/09
90	73889	6/25/09	dirt	Discharge of sediment. over irrigation and sediment runoff	6/25/09 left a card and took photo. I received a call back from resident. She said it was a one time thing. They were using a hose to chase a snake out of their yard. case closed	Yes		Yes			LUC	7/2/09
91	75889	6/5/09	trash and water	Discharge of trash - Neighbor dumping trash into storm drain. Broken glass, newspaper, and a dead rat.	6/5/09 took photos of trash in street cleaned it up and issued NOV to discontinue discharge and cover outdoor storage immediately.	Yes	6/5/2009				CBS	6/5/09
92	77892	6/4/09	Wash water	Discharge of other washwater - Resident rinsing out buckets into curb line. water running down gutter.	6/3/09 site inspection observed discharge contacted resident/owner informed him of the correct disposal of wash water and gave him a business card. Case Closed	Yes		Yes			LUX	6/8/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
93	77936	6/11/09	Sealer	Discharge of paint - Painters washing off painting supplies. Puddle of brown paint pooling in the dip on Saxony Rd.	site inspection issued nov to comply by 6/12/09 5pm by cleaning gutter and containing all wash water.	Yes	6/11/2009	Yes			ENC	6/18/09
94	77940	6/12/09	trash	Discharge of trash - Neighbor complaining of trash and yard waste being dumped into storm drain.	Site inspection took photos of street and storm drain no discharge or evidence of discharge observed Case closed	No					CBS	6/17/09
95	77956	6/16/09	appears to be drywall dust	Discharge of other washwater - Unknown white chalky substance coming from drain line, dried in street. Discharge was first noticed a few weeks ago.	6/16/09 site inspection spoke to resident at 1445 caminito septimo she said she could not find the source I left card at 1455 caminito septimo and took photos of what appears to be dry wall dust	No		Yes				7/1/09
96	77960	6/16/09	diatomaceous earth	Discharge of concrete cutting slurry or washwater. - Possible concrete/drywall discharge flowing down gutter into storm drain.	6/16/09 site inspection took photos and contacted owner appears to be diatomaceous earth from pool maintenance. Owner will contact pool contactor and have street cleaned and call when complete	Yes		Yes			ENC	7/1/09
97	78002	6/22/09	gray water	Discharge of other washwater - House car disposing of grey water into the street	6/22/09 site inspection took photos of drainage sheriff community service officer ran plates to get address of RV owner 6/24/09 sent citation and NOV. 6/25/09 received call from respondent stating that he wanted to pay for cost recovery but not a fine forwarded it to wastewater and clean water program manager	Yes	6/24/2009	Yes	6/24/2009		LUC	6/23/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Follow Up: 6/23/09 site inspection area clean up took photos case closed							
98	78007	6/19/09	wash water and improper storage of batteries	Discharge of building or sidewalk washwater - Lack of containment of wash water and improper outdoor storage of batteries.	6/19/09 site inspection with code enforcement and Sheriff's deputies. Took photos of battery storage. Code will ensure that the site is in compliance with storm water codes	Yes					CBS	7/1/09
99	78009	6/23/09	erosion from water runoff	Discharge of sediment - SDWD saw erosion occurring from runoff going into storm drain. Water has been turned off.	6/23/09 site inspection no discharge left card	No		Yes			CBS	7/21/09
100	78046	6/29/09	white dust from pool filter	Discharge of concrete cutting slurry or washwater. - Construction last Friday- concrete cutting and wash water left in street and gutter.	6/30/09 site inspection took photos of discharge contacted resident and issued NOV to dry clean street capturing all cleaning debris. Follow Up: 6/30/09 site inspection area cleaned case closed	Yes	6/30/2009	Yes			ENC	6/30/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
101	78047	6/29/09	sewage	Discharge of sewage - Received call from Wastewater about sewage spill.	6/25/09 site inspection with waste water. took photos and contacted PM and service contractor. They informed me that they are going to replace the line. Follow Up: 6/30/09 site inspection area cleaned took photos. Met Property west employee. He stated that they are going to TV all of the lines and send the city photos of the clean up activities capturing all of the wash water	Yes	6/30/2009	Yes		San Elijo Lagoon	CBS	6/30/09
Residential Totals: 101					**Follow Ups: 38**	**55**	**19**	**78**	**4**			

Appendix H-1 Referrals or Requests for Info FY 2008-09

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
1	68906	7/2/08	Residential	water	Discharge of water - Inspector noticed broken sprinkler leaking into road. Resident said someone was on the way to fix it. Referred to SDWD.	SDWD		CBS	7/2/2008
2	68913	7/3/08	Municipal	sewer smell, no discharge	Discharge of sewage - Resident complaining of sewer smell coming from storm drain in front of his house. Referred to wastewater for cleanout.	Wastewater Division		ENC	7/7/2008
3	68914	7/3/08	Residential	NA- wanted info on capturing rainwater	Discharge of water - Contact forwarded from Think Blue booth at County Fair. Encinitas resident wanted info on capturing rainwater. Forwarded him info from SDWD and gave him SDWD's phone number for further info.	SDWD	Capturing rainwater	CBS	7/3/2008
4	68930	7/7/08	Construction	ground water draining from site	Discharge of construction debris - Construction site is discharging ground water again. Per construction inspector BO, water is clear and clean. See attached email.	Construction Inspector		CBS	7/7/2008
5	68989	7/15/08	Residential	water	Discharge of water - Cracks in home foundation. Concerned about possible leak in storm drain/sewer lines. Bathroom erupted w/overflow 7/14/08. See attached complaint form. Referred to wastewater for pipe inspection.	Wastewater		CBS	7/16/2008
6	69128	7/23/08	Residential	water	Discharge of water - Report of broken sprinkler head. Forwarded message to SDWD.	SDWD		ENC	7/28/2008
7	69177	8/1/08	Residential	Discharge of water	Discharge of water - Resident called in to find out pool draining requirements.		Pool draining regulations	RSF	8/1/2008
8	69195	8/4/08	Residential	wash water/trash	Discharge of building or sidewalk washwater - Complainant says his neighbor washes out gas cans in her driveway and hoses off driveway w/ no containment. Also has a lot of trash around yard and in street. Numerous similar complaints on this address. Inspector to investigate.	Code Enforcement		CBS	8/4/2008
9	69204	8/5/08	Commercial	water	Discharge of water - Drainage coming from adjoining commercial property, across parking lot, ruining asphalt. Forwarded from Code Enforcement.	OMWD		LCS	12/23/2008
10	69226	8/7/08	Residential	Discharge of water	Discharge of water - Resident at 3451 Dove Hollow Rd. asking how to properly drain jacuzzi.		Spa draining regulations.	ESC	8/7/2008

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
11	69303	8/18/08	Residential	water	Discharge of water - Report of broken sprinkler head constantly running. Referred to SDWD.	SDWD		ENC	8/18/2008
12	69376	8/25/08	Commercial	Discharge of building or sidewalk washwater	Discharge of building or sidewalk washwater - Contractor calling to find out power washing requirements before power washing buildings.		power washing requirements	LCS	8/25/2008
13	69415	8/28/08	Commercial	Discharge of building or sidewalk washwater	Discharge of building or sidewalk washwater - Requesting power washing requirements. Inspector went and showed how to properly direct wash water to landscaped areas.		power washing BMPs	ENC	8/28/2008
14	69472	9/3/08	Municipal	na- blocked storm drain	Other discharge - Complaint of blocked storm drain west of 7-11 on Encinitas blvd by Pet People. Referred to Wastewater.	Waste water		RSF	9/9/2008
15	69473	9/8/08	Commercial	water	Discharge of water - Call about over-irrigation from the Arco. Referred to SDWD.	SDWD		CBS	9/9/2008
16	69505	9/8/08	Municipal	na- clogged storm drain	Discharge of water - Clogged drain causing pool of water in street. Referred to wastewater. Wastewater cleaned the drain from Balour to Monterey Vista way cul-de-sac	Wastewater		CBS	9/12/2008
17	69514	9/15/08	Residential	water	Discharge of water - Councilmember called in about water running over a sidewalk and into the street. Program Manager determined that it is an encroachment violation. Forwarded to Engineering.	Engineering		LCS	9/16/2008
18	69564	9/18/08	Residential	water	Discharge of water - Water constantly running down street, green slime in front of everyone's houses. Referred to OMWD.	OMWD		LCS	9/23/2008
19	69565	9/23/08	Residential	water	Discharge of water - Broken sprinkler heads and over-irrigation causing flooding on dirt road. Referred to SDWD.	SDWD		CBS	9/23/2008
20	69594	9/26/08	Municipal	water	Discharge of water - Storm drain at corner of Balour and San Andrade- water leaking out of drain, puddling at end of road. Referred to wastewater.	Wastewater		LCS	9/26/2008
21	69643	10/7/08	Residential	diesel fuel	Discharge of liquid fuels. - Complainant calling to follow up about fuel spill. Information about spill has been captured already in SR 69597 and WOs 79904 and 80042.		Details about fuel spill on Stratford	ENC	10/7/2008
22	69662	10/9/08	Residential	water	Discharge of water - Over-irrigation causing puddle at Avenida De San Clemente and San Andrade, algae growing, slip hazard. Forwarded to SDWD.	SDWD		ENC	10/9/2008

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
23	69705	10/20/08	Municipal	unknown yellow substance	Other discharge - Complaint about artist using rock salt and unknown yellow substance to create sand art at Stonesteps. Referred to Lifeguards. This is a recurring situation and they are working on enforcement.	Lifeguards		LUC	10/20/2008
24	69717	10/21/08	Municipal	na- clogged drain	Other discharge - Complaint about clogged storm drain inlet in Lahoud Drive cul-de-sac. Referred to Wastewater for clean out.	Wastewater		CBS	10/21/2008
25	69761	10/29/08	Residential	water	Discharge of water - Complaint about pool drainage running down Fourth St. Site is under supervision of construction inspector. Residents neutralized water before discharging. Called complainant to let him know.	Construction Inspector		ENC	10/30/2008
26	69772	11/2/08	Residential	unknown- brown mushy substance	Other discharge - Unknown brown mushy substance in plastic bag in gutter along street. Referred to Streets Dept for cleanup.	Streets Dept		CBS	11/3/2008
27	69779	11/4/08	Municipal	Water back up from clogged storm drain	Discharge of water - Resident called about clogged storm drain in the cul-de-sac. Water is backing up into her driveway and yard. Referred to Wastewater for cleanout.	Wastewater		ENC	11/4/2008
28	69803	11/12/08	Municipal	na- clogged drain	Other discharge - Clogged drain 100ft east of intersection of El Camino del Norte and Cole Ranch Rd. Referred to Wastewater.	Wastewater		RSF	11/12/2008
29	69815	11/13/08	Residential	over-irrigation water	Discharge of water - Complaint of neighbor's over-irrigation causing problems in street. Referred to OMWD.	OMWD		LUC	11/13/2008
30	69816	11/13/08	Commercial	over-irrigation water	Discharge of water - Complaint of over-irrigation behind the new Staples and Vons shopping centers on El Camino Real. Referred to SDWD.	SDWD		LCS	11/13/2008
31	69841	11/17/08	Residential	NA- Request for greywater info only	Other discharge - Request for greywater system requirements. Crystal gave caller number for County Dept of Environmental Health and SD County Water Authority.		Greywater system requirements		11/19/2008
32	69881	11/18/08	Municipal	water	Discharge of water - Inquiry regarding water being pumped onto E Street from construction site. Construction Inspector informed caller that SDWD is flushing out their system (scheduled maintenance).		Source of water on E Street	ENC	11/24/2008
33	69918	12/8/08	Commercial	water	Discharge of water - Over-irrigation complaint about restaurant. Forwarded to SDWD.	SDWD		CBS	12/8/2008

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
34	69958	12/15/08	Residential	water	Discharge of water - Complainant says water is running off street and flooding her driveway. Forwarded to Streets.	Streets		ENC	12/16/2008
35	69975	12/11/08	Residential	NA- algae growth	Other discharge - Resident slipped and fell on algae that is growing on Liverpool in standing water. Forwarded to Engineering and Streets.	Engineering and Streets		CBS	12/17/2008
36	69981	12/17/08	Municipal	Discharge of water	Discharge of water - President of Beach Walk Condos called to report clogged storm drain near corner of Hwy 101 and W Glaucus St. Referred to Wastewater.	Wastewater		LUC	12/17/2008
37	70029	12/22/08	Commercial	water	Discharge of water - Operator of green house says someone promised him that a drain would be installed into the storm drain pipe at the rear of his property. Heavy rain is causing his property to flood without the drain. Forwarded to 2 senior engineers.	Engineering		CBS	12/22/2008
38	70034	12/22/08	Municipal	NA- cap on sidewalk washed away	Other discharge - Resident called to report that the cap on the sidewalk in front of his house had washed away in the rains. Possibly the manhole cover? Forwarded to Streets.	Streets Division		LCS	12/22/2008
39	70090	1/6/09	Residential	water	Discharge of water - Resident called to ask about draining pool water. Would not give address or phone number.		pool draining requirements		1/6/2009
40	70130	1/14/09	Municipal	plastic sheeting	Other discharge - Someone dumped some plastic sheeting over the bridge on El Camino del Norte. Message forwarded from Parks & Rec to us and Public Works. Public Works will take care of clean up.	Public Works		RSF	1/14/2009
41	70368	2/25/09	Municipal	cement mix	Discharge of concrete waste. - One bag of cement mix fell off vehicle on westbound side of Leucadia Blvd, just east of Saxony. Referred to Streets Division.	Streets Division		ENC	2/25/2009
42	70422	3/9/09	Commercial	Discharge of building or sidewalk washwater	Discharge of building or sidewalk washwater - Question about the requirements for power washing/hosing at commercial facilities.		Power washing requirements	ENC	3/9/2009
43	70504	3/23/09	Residential	bleach water	Discharge of other washwater - Mosquitoes breeding in fountain water- resident poured bleach to kill them, but some have survived. Gave her Vector Control's number and advised her how to properly discharge water from fountain.		Vector Control contact and how to empty fountain water		3/25/2009

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
44	70536	3/23/09	Residential	woodchips	Discharge of yard waste - Resident called concerned about a pile of woodchips that had been left next to the canyon on Sea Village Way between Sea Village Drive and Lake Dr. She was concerned that it is a fire hazard. Referred to Parks & Rec and PW Streets Division. case closed	P&R and PW Streets Division		CBS	3/31/2009
45	70613	4/15/09	Municipal	urine from Rest Room	Discharge of sewage - Received complaint regarding drainage of urine in SW Men's rest room. Complainant believes an increased slope will fix the problem. Received complaint regarding drainage of urine in SW Men's rest room at Moonlight Beach. Complainant believes an increased slope will fix the problem.	Parks and Rec		ENC	4/16/2009
46	70623	4/18/09	Residential	wash water	Discharge of vehicle wash water - Neighbor washing motor home near Moonlight Beach. Suds running down street. LIC 4CLV466. Called complainant back to let him know that residential vehicle washing is not an illegal discharge.		Residential car washing	ENC	4/20/2009
47	70630	4/21/09	Municipal	na- clogged storm drain	Other discharge - Request for storm drain cleanout. Referred to Wastewater.	Wastewater		CBS	4/21/2009
48	73651	4/23/09	Residential	over-irrigation runoff	Discharge of water - Complaint of over-irrigation and broken sprinklers. Forwarded to OMWD.	OMWD		LUC	4/23/2009
49	73748	5/18/09	Municipal	NA- uncovered manhole	Other discharge - Resident called to report a tree limb lying across a sidewalk and an uncovered manhole. Forwarded the message to Streets for tree removal and to Wastewater to get cover for manhole.	Street Maintenance and Wastewater		LCS	5/18/2009
50	73879	6/4/09	Residential	NA- request for info	Discharge of building or sidewalk washwater - Apt complex called to get info on power washing. Gave verbal education and faxed them Project Clean Water Toolbox info.		Power washing requirements	LCS	6/4/2009
51	78051	6/29/09	Commercial	NA- request for info	Discharge of building or sidewalk washwater - Request for list of power washers that properly collect wash water. Request for list of power washers that properly collect wash water. Sent via email 6/30/09.		Power washing companies	ENC	6/30/2009

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date

Commercial Total:	**9**
Residential Total:	**25**
Construction Total:	**1**
Municipal Total:	**16**
Total Referrals or Requests for Info:	**51**

Jurisdictional Urban Runoff Management Program FY 2008-2009 Annual Report

Section 7.0
Illicit Discharge Detection and Elimination Component

December 15, 2009

City of Encinitas

Photograph by Kristy Rygiel

CITY OF ENCINITAS

Jurisdictional Urban Runoff Management Program
Annual Report

Section 7.0
Illicit Discharge Detection and Elimination Component

FY 2008-2009

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CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton, City Manager
City of Encinitas

12-8-09
Date

EXECUTIVE SUMMARY

On March 24, 2008, the City of Encinitas finalized an updated Jurisdictional Urban Runoff Management Program (JURMP) as required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit). The updated JURMP serves as the City's foundational program management tool, capturing newly developed process, procedure, and implementation strategies for overall program effectiveness and compliance. Within the updated JURMP document, the City of Encinitas also details the City's comprehensive update of the Illicit Discharge Detection and Elimination (IDDE) and Dry Weather Field Screening and Analytical Monitoring (Dry Weather Monitoring) programs.

As required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit), on September 30, 2009, the City of Encinitas submitted its 2008-2009 JURMP Annual Report to the San Diego Regional Water Quality Control Board (RWQCB). September 10, 2008, the RWQCB adopted Addendum 2 to Order No. 2007-0001 (Addendum 2) titled:

AN ADDENDUM EXTENDING THE DUE DATE FOR THE ILLICIT DISCHARGE DETECTION AND ELIMINATION REPORTING REQUIREMENT AND CHANGING THE BIOASSESSMENT MONITORING PROGRAM FOR ORDER NO. R9-2007-0001

Addendum 2 effectively extended the deadline for submittal of the JURMP Annual Report Section 7.0 – Illicit Discharge Detection and Elimination (IDDE) to December 15 of each year and established a separate submittal requirement. The following report culminates newly developed IDDE elements and supporting monitoring components to meet the standards established in Order No. 2007-0001 and the provisions of Addendum 2. This report covers IDDE program implementation for fiscal year 2008-2009, and Dry Weather Monitoring from May 1, 2009 – September 30, 2009, and details all reporting, response, and enforcement actions related to illicit discharges and illicit connections to the City's MS4, Dry Weather Field Screening and Analytical Monitoring, follow-up investigations, sewer maintenance and spill prevention activities, and sewer spill response actions.

IDDE reporting and Dry Weather Monitoring results and analysis presented in the following report have been prepared in consideration of regulatory standards as well as a means to further advance programmatic elements in support of overall stormwater and water quality management in the City of Encinitas.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

The Municipal Permit requires the establishment of an Illicit Discharge Detection and Elimination (IDDE) Program to actively seek and eliminate illicit connections and discharges into the MS4.

This component describes the IDDE program developed by the City of Encinitas to seek and eliminate illicit connections and discharges. Eliminating illicit connections and discharges helps minimize potentially negative impacts of human activities on receiving water bodies. Illicit connections and illicit discharges can be defined as the following:

- An *illicit connection* is a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City, or a permitted connection which conveys Illegal Discharges.

- An *illicit discharge* is any discharge to the Storm Water Conveyance System that is not composed entirely of storm water or is not discharged in compliance with the City's Storm Water Management Ordinance (Municipal Code Chapter 20.08).

The City of Encinitas uses its municipal personnel to assist in actively seeking, identifying, and reporting illicit connections and discharges during their daily activities. Detection, prevention, and elimination of illicit connections and discharges is achieved by

1. Operating a public hotline and responding to complaints;
2. Inspecting commercial, industrial and municipal facilities;
3. Conducting an annual Dry Weather Monitoring Program;
4. Maintaining municipal MS4 and sewer systems; and
5. Educating the local community.

The City investigates, inspects, and appropriately follows-up on every illicit connection and discharge that is reported or detected to identify the source(s) of the discharge. Voluntary compliance and escalating enforcement mechanisms are implemented to immediately eliminate the illicit connection and discharge once the source has been identified. Educational materials are distributed to help prevent future illicit connection and discharge occurrences. This program involves the City's Clean Water Program staff, two Sanitary Districts (Leucadia Wastewater District and the City of Encinitas Wastewater Division), the City's Fire Department, Public Works Department, the Engineering Department, and County Hazardous Incident Response Team (HIRT), as well as the public.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

7.2.1 METHODS OF REPORTING

To support the identification and notification of illicit discharges, the City actively promotes public and City staff reporting of all suspected illicit connections and discharges. Multiple opportunities are provided to facilitate public reporting of illicit discharges and connections to the City's Clean Water Program staff, and reporting of non-storm water discharges can be received from the public, City staff, or outside agencies. Clean Water Program staff maintains a 24 hour, bilingual Clean Water Hotline for reporting storm water discharges at (760) 633-2787. Additionally, the Public Works Wastewater Collection Division accepts calls at (760) 753-5018 for sewage related discharges. The public can also notify any City employee (the City Lifeguards are often notified of spills), who will promptly notify the appropriate staff in the Clean Water Program or Public Works Department. In cases of incidents occurring after working hours, the City provides a hotline number (760) 633-2922 where the public can call and report emergency cases of illicit discharges. Alternatively, a regional public reporting hotline is provided by the County of San Diego at (888) 846-0800. The County hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides a voice mail message for 24-hour public access in both English and Spanish.

7.2.2 STORM WATER COMPLAINT RECEIPT PROCEDURES

All calls to the City's Clean Water Hotline are documented and investigated in a timely manner. The City of Encinitas has configured its enterprise Geographic Information System (GIS) to document and track all complaints as well as complaint driven storm water inspections in a spatially-based program called Cityworks. This system supports the entry of service requests for educational inquiries, citizen complaints, inspection results, ad-hoc and cyclical work orders, and report generation. All of the information stored in the system is accessible to any City user through the City's standard desktop GIS application – CityGIS. Refer to Appendix A for a copy of the "Storm Water Complaints Service Request Form." Clean Water Program staff responds immediately, investigates each case, and takes appropriate action to educate the responsible party and/or enforce the City's Storm Water Management Ordinance when applicable. When a warning, Administrative Citation, or Notice of Violation is issued, this information is added to the case file created in Cityworks. The City's GIS system is a useful tool for tracking all complaints, follow-ups, enforcement, and education efforts, and to spatially locate potential problem areas throughout the City.

For each complaint investigation, Clean Water staff is prepared to run field screening analysis, sample for laboratory analysis, and document the discharge for enforcement proceedings as deemed necessary. If immediate clean up actions are required, the City's Public Works Department maintenance crews are equipped with absorbent materials, vacuum trucks, and other equipment to contain large volumes of illegal discharge and/or cleanup of large spills. If the violation or accident involves hazardous materials, the Fire Department is informed and responds immediately. When necessary, the Fire Department calls other responsible agencies

or contractors for cleanup and handling of hazardous materials, including the County of San Diego's Hazardous Incident Response Team.

7.2.3 HOTLINE UTILIZATION

Through the ongoing education efforts of the Clean Water Program staff, both the general public and the City of Encinitas staff have become increasingly aware of the effects of illicit discharges on the environment, and what to look out for in identifying potential illicit discharges and connections. Methods to report storm water issues were continually publicized throughout the FY 2008-09 reporting period. The hotline number can be found on inspection forms, the City's website, and was also publicized in various newsletters, storm water brochures, the City's Environmental Services Guide, on product giveaways, and at all Clean Water Program presentations.

In FY 2008-09, there were 289 complaints filed with the Clean Water Program. Detailed summaries of all complaint cases that were reported and closed (illegal discharge abated) in FY 2008-09 are included in Appendix H-1 of the City of Encinitas' FY 2008-09 JURMP Annual Report. Clean Water Program staff documented receipt of 130 complaints from the public via the Clean Water Hotline, and an additional 159 complaints were reported to the hotline by City staff. Figure 7-1 shows the percentage of complaints that were reported to the Clean Water Hotline by the public and city staff in FY 2008-09.

Figure 7-1 Clean Water Hotline Complaints in FY 2008-09

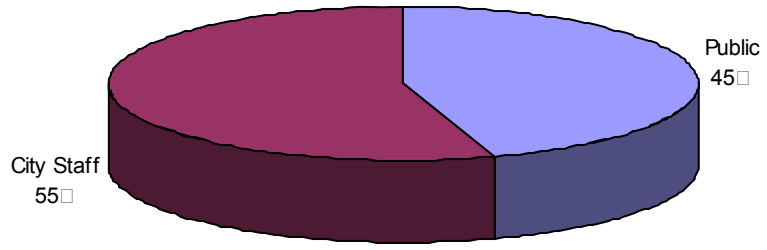

As illustrated in Figure 7-2, both City staff and the public continue to actively participate in the reporting of suspected illegal discharges and illicit connections throughout the City of Encinitas.

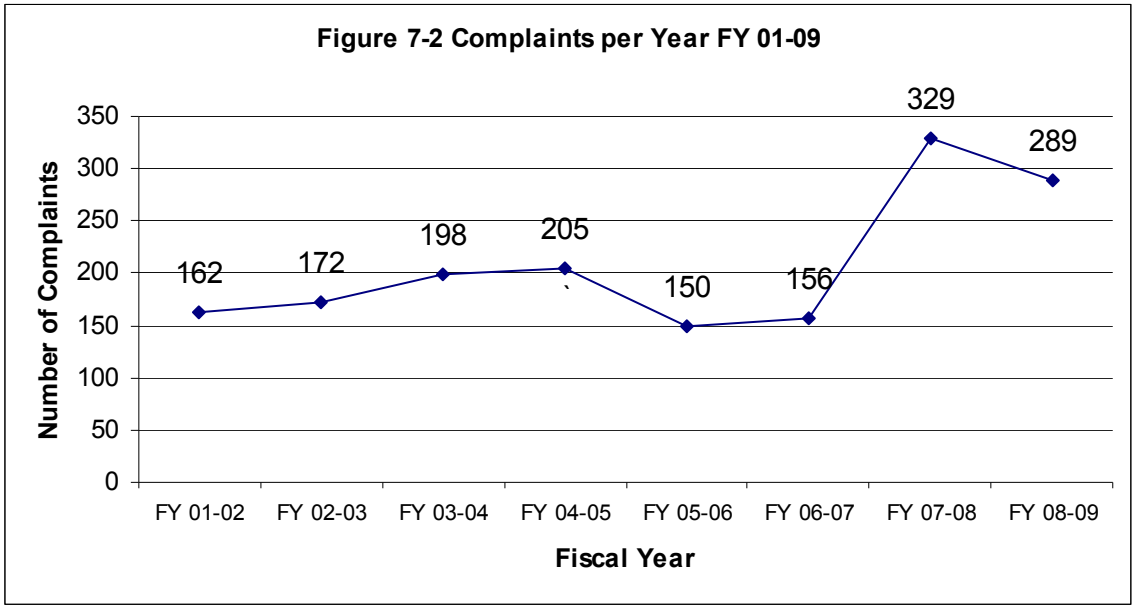

7.2.4 CATEGORIES OF COMPLAINTS

In FY 2008-09, the majority of complaints reported to the Clean Water Hotline were primarily related to residential and commercial activities. In total, 43.6% of the hotline complaints reported were related to residential activities, 34.6% were related to commercial activities, 14.2% were related to construction activities, and 7.6% were related to municipal activities. Figure 7-3 shows the percentage of complaints by source category.

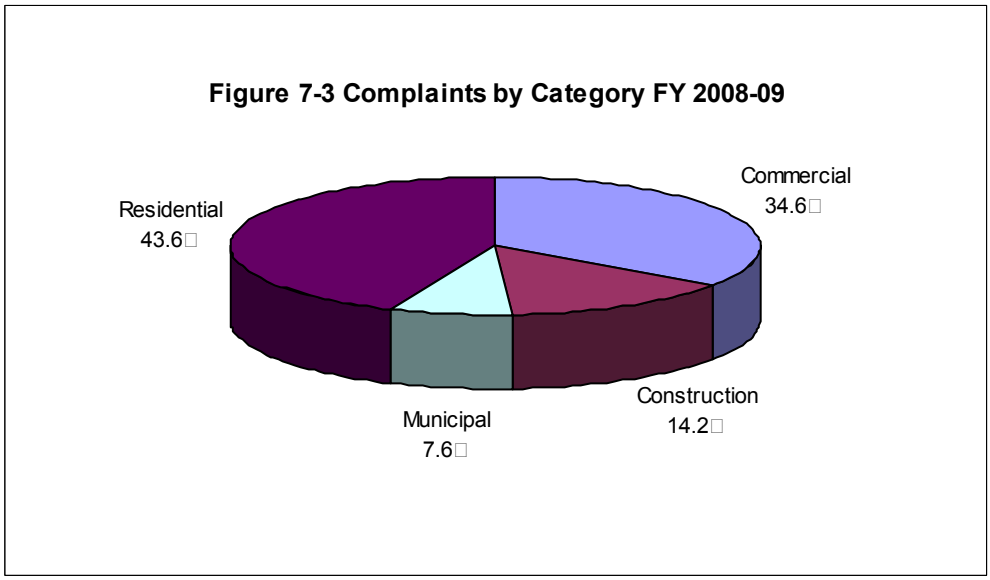

Figure 7-4 below illustrates the complaints distribution over the past eight reporting periods. The complaint distribution remains consistent across categories with residential and commercial sectors receiving the most complaints.

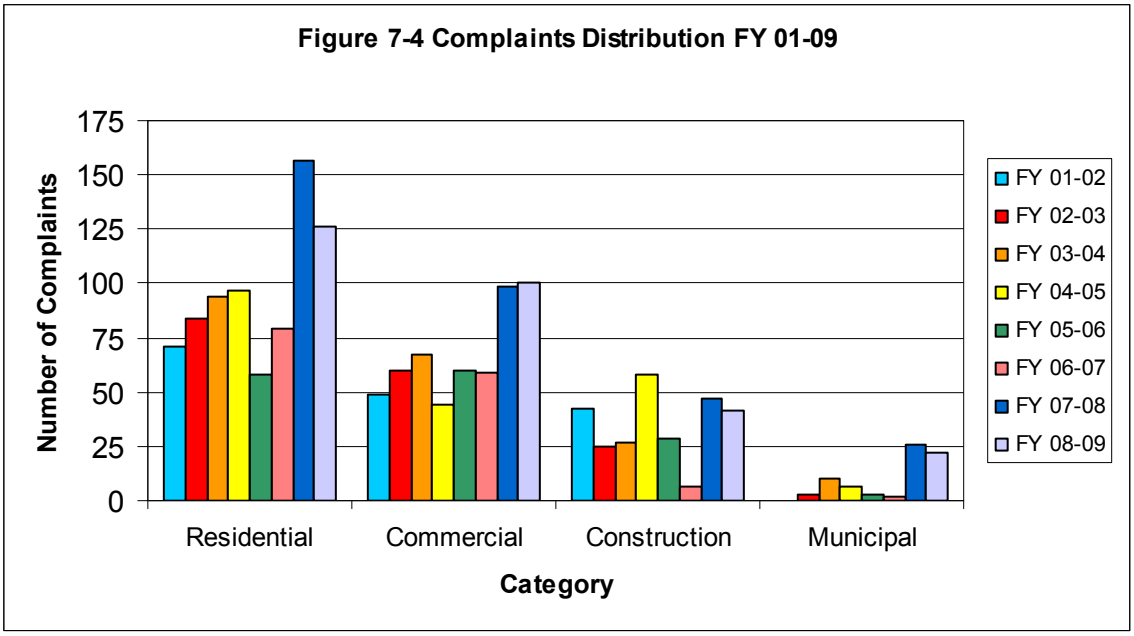

Clean Water Program staff provides annual education and training to City employees and City contractors on applicable storm water regulations to assure that proper storm water management practices are applied in all areas of the City. The City of Encinitas tracks all complaint calls received on the Clean Water Hotline and records whether each call is from the public or the from City staff. Figure 7-5 below shows the breakdown of reported complaints by the public and City staff for each category.

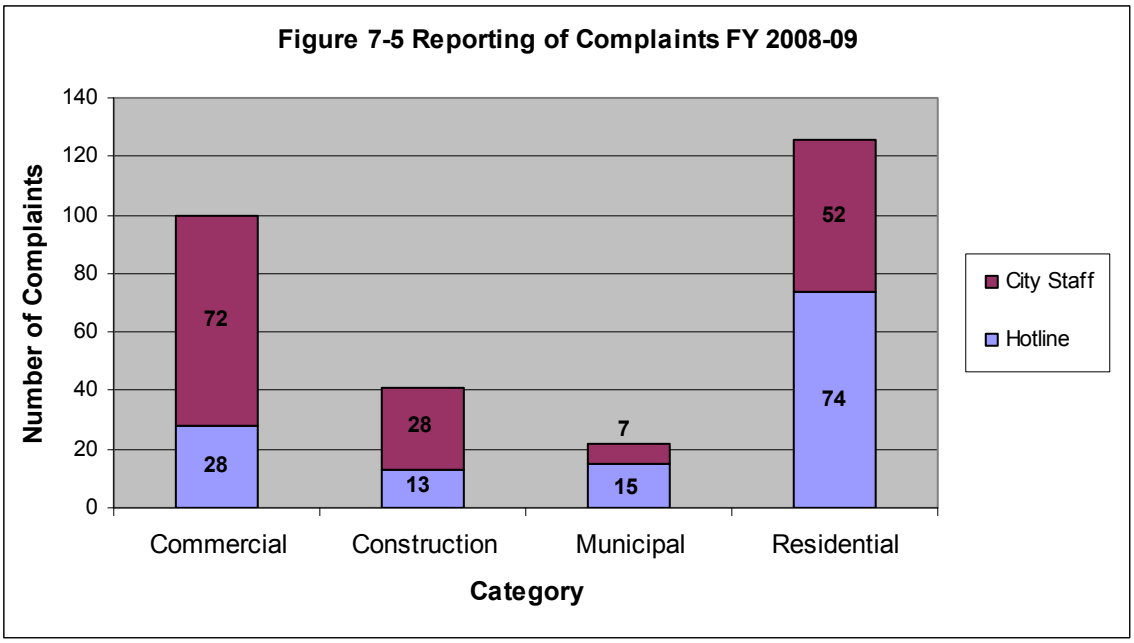

7.2.5 DISTRIBUTION OF COMPLAINTS BY SUB-BASIN

The City of Encinitas is broken up into seven distinct drainage sub-basins which include the Cardiff sub-basin (CBS), Encinitas sub-basin (ENC), Escondido sub-basin (ESC), La Costa South sub-basin (LCS), Leucadia sub-basin (LUC), Lux Canyon sub-basin (LUX) and Rancho Santa Fe sub-basin (RSF). Detailed maps of each of these sub-basins can be found in the 2009 Dry Weather Monitoring Assessment Report in Appendix C. A full map of the entire city that outlines each of the sub-basins can be found in Appendix C-1. Of the City's seven sub-basins, the Encinitas Sub-basin had the largest number of reported complaints followed by the Cardiff sub-basin and the Leucadia sub-basin. In Figure 7-6 below the numbers of complaints are compared to water quality exceedances in the sub-basins. This correlation helps the City prioritize inspection activities in specific sub-basins.

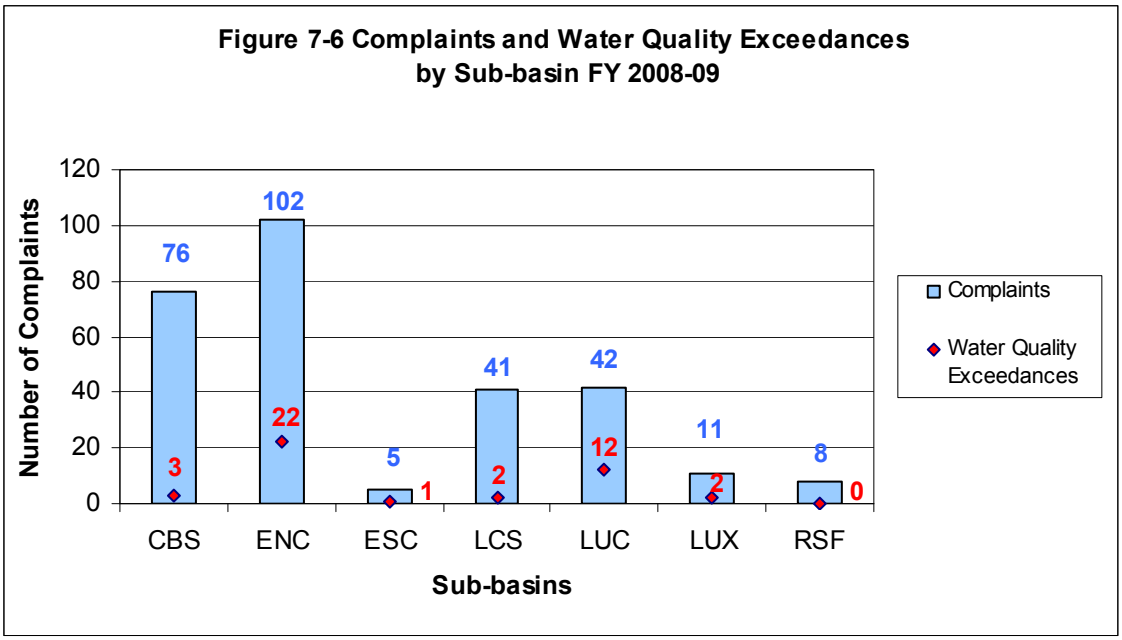

7.3 SPILL PREVENTION, RESPONSE, AND REPORTING

The City implements spill prevention, spill response, and reporting mechanisms to prevent, respond to, contain, and clean up all sewage and other spills that may discharge to its MS4 from any source.

7.3.1 SEWAGE SPILL PREVENTION

The spill prevention measures outlined below were implemented in FY 2008-09 to prevent overflows, spills, and infiltration of seepage from sanitary sewer systems to the MS4.

Preventive Maintenance Activities

The City of Encinitas' sewage collection system consists of over 120 miles of pipeline. The City actively maintains its sewage collection system and MS4 by ensuring that the following measures are implemented:

- Sanitary sewer inspections
- MS4 inspections
- Thorough, routine preventive maintenance of both systems (annual cleaning of entire sanitary sewer system, and "high priority" sewer lines cleaned at least every three months)
- Dry Weather Monitoring
- Data tracking and management of all complaints in Cityworks GIS
- Video inspection of underground systems (televise sewer mains to visually detect any potential problems)
- Replacement and upgrade of sewer pipes as needed
- GIS mapping of sewer and MS4 intersects
- Alarm system at sewage pump stations

Sewer System Management Plan (SSMP)

In FY 2008-09, the City of Encinitas fully implemented a Sewer System Management Plan (SSMP) in order to comply with the new sewer regulations set forth by the State Water Resources Control Board (SWRCB) Order No. 2006-003-DWQ. This new permit describes the applicable set of regulations for sewer system maintenance and reporting with respect to Sanitary Sewer Overflows (SSOs). These regulations are met mainly through the development and implementation of a Sewer System Management Plan (SSMP). However, the City also continues to maintain a Sanitary Sewer Overflow Prevention Plan (SSOPP), and a Capacity, Management, Operations, and Maintenance (CMOM) program, which have been incorporated into the City's SSMP. The SSOPP has been designed to prevent or minimize the potential for SSOs. The CMOM describes how the City maintains and operates its sanitary sewer system, as follows:

- Manage, operate, and maintain at all times the parts of the collection system that the City owns or over which it has operational control
- Provide adequate capacity using citywide sewage flow monitoring programs to convey base flows and peak flows
- Take all feasible steps to stop and mitigate the impact of SSOs
- Provide notification to parties with a reasonable potential to exposure to pollutants associated with the overflow event through the County of San Diego
- Keep records of all maintenance activities

The City of Encinitas also has a Fats, Oil, and Grease (FOG) ordinance, EMC Section 18.04. The primary purpose of this ordinance is to reduce the amount of FOG introduced into the sanitary sewer system by residents and businesses. This ordinance requires all Food Service Establishments (FSE) which discharge fats, greases, and waxes to the sewer system to install a grease pre-treatment device on the sewer lateral, which connects their facility to the City's wastewater collection system. The City is currently evaluating options to enhance existing FOG program elements which will include implementing a multi-phased process of information gathering, education, and targeted code enforcement.

The Municipal Permit also requires all sewage discharges caused by blockages or other problems within a privately owned lateral or failing septic systems to be dealt with appropriately. If a spill from a private sewer lateral is not being contained and the responsible party fails to take action to repair the lateral, the City can take necessary action to contain the spill, make necessary repairs to the lateral, and/or contact a contractor for appropriate maintenance and bill the responsible party. The City's Clean Water Program staff is tasked with handling all illicit connection and discharge citations. If there are sewage spills due to failing septic systems at private residences, the County Department of Environmental Health (DEH) is responsible for responding to these complaints.

7.3.2 SEWAGE SPILL RESPONSE

Spills from the sanitary sewer entering the MS4 may be discovered during routine maintenance activities or observed and reported to the City by the public. All Municipal personnel field crews call the Clean Water Hotline or report sewage spills to the Public Works Wastewater Collection Division. When spills occur, the appropriate agencies (as described in Table 7-1 below) are informed of all sewer related spills and are responsible for control, containment, and clean up of all reported discharges.

Table 7-1
Responsible Agency for Sewage Spills

Source	Responsible Agency
Leaks and spills from publicly owned collection system	City of Encinitas
Private residence (failing septic systems)	County DEH
Any spill reaching MS4	City of Encinitas

Both the City's Public Works Wastewater Collection Division and the City's Clean Water Program accept complaint calls for commercial lateral discharges. For any incidents that may occur after hours, callers are directed to contact the City's answering service at (760) 633-2922. Based on the urgency, City crews are dispatched immediately, work orders are prepared, and each case is tracked in the City's GIS based system. The City also provides a 24- hour, on-call City staff member with the ability to call additional resources or other appropriate agencies if necessary.

The City of Encinitas' Wastewater Collection Division has implemented the following remedial actions to the extent that they are applicable to any discharges:

- Interception and rerouting of sewage flows around the sewage line failure
- Vacuum truck recovery of SSOs and wash down water
- Cleanup of debris of sewage origin at the overflow site
- Inform the responsible party to cease and desist, clean and abate, and repair the problem to ensure that the incident will not occur again.

7.3.3 SEWAGE SPILL REPORTING

The City reports all SSOs to the State Water Resources Control Board (SWRCB) online using the California Integrated Water Quality Management System (CIWQS) database, as required by SWRCB Order No. 2006-003-DWQ. Initial online reports are sent to the CIWQS within three days, and final, certified reports are sent within 15 days. The City reports all SSOs that are at least 1,000 gallons and SSOs that cause a beach closure (regardless of volume) to the CIWQS within 2 hours. All illicit connections and discharges are reported annually in the City of Encinitas JURMP Annual Report. In some cases, inspections are conducted and enforcement

actions may be taken if necessary. If a Notice of Violation (NOV) is issued by the Clean Water Program, copies of all NOVs will be sent to the Regional Board.

As required in the Municipal Permit, the City of Encinitas will provide oral notification to the Regional Water Quality Control Board (RWQCB) of all Illicit connections and discharges within its jurisdiction that are determined to pose a threat to human or environmental health within 24 hours of the discovery of non-compliance. Oral notification will be followed up by a written report to the RWQCB within five days of the incidence of non-compliance.

All sewage spills of at least 1,000 gallons, or any spills to surface waters are required to be reported to the RWQCB within 2 hours by fax or telephone. Surface waters include rivers, streams, ephemeral streams, lagoons, the ocean, dry arroyos, and storm drains. In all instances, the City must fax a Sanitary Sewer Overflow (SSO) Report Form to the RWQCB within five days of the spill. The completed SSO Report Form must also be faxed to the County DEH. A quarterly report of all sewage spills, including those not meeting the criteria stated above, will also be submitted electronically to the RWQCB, as required.

In FY 2008-09, the City complied with the sewage spill reporting requirements outlined in Table 7-2.

Table 7-2
Summary of Sewage Spill Reporting Requirements

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
Any	Spills to waters of the State	SWRCB online RWQCB DEH	Immediate, but no later than 2 hours after becoming aware of the discharge
Any	Municipal Permit non-compliance threatening human or environmental health	RWQCB SWCRB	24 hours verbal and 5 days written 3 days (initial)
Any	Mitigated spills (absorbed, cleaned up, or captured)	DEH	24 hours
Any	Unmitigated spills to areas with potential public contact	DEH	Immediate, but no more than 2 hours after becoming aware of the discharge
Any	Unmitigated spills to areas without potential public contact	DEH	24 hours

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
>1000 gallons	Anywhere	Office of Emergency Services (OES) RWQCB DEH SWRCB online	2 hours 2 hours 2 hours 3 days (initial)

Table 7-3 contains a summary of all SSOs in Encinitas in FY 2008-09.

Table 7-3
Sanitary Sewer Overflows, FY 2008-09

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
8/10/2008	City of Encinitas Wastewater Division	117 Rosebay	450	50	400	PRIVATE SPILL Cause unknown	CIWQS DEH
9/04/2008	Leucadia Wastewater Division	162 Range St.	50	50	0	Main line blocked due to roots from a lateral	CIWQS RWQCB DEH
11/04/2008	Leucadia Wastewater Division	1602 Burgundy Rd.	500	500	0	Main line blocked due to roots from a lateral	CIWQS RWQCB DEH
11/11/2008	Leucadia Wastewater Division	1540 Caudor St.	110	110	0	Main line blocked due to rags	CIWQS RWQCB DEH

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
12/04/2008	Leucadia Wastewater Division	1660 Highway 101	10	10	0	PRIVATE SPILL Cause unknown	CIWQS RWQCB DEH
12/07/08	Leucadia Wastewater Division	1600 Burgundy Rd.	15	15	0	PRIVATE SPILL Cause unknown	CIWQS RWQCB DEH
3/03/09	City of Encinitas Wastewater Division	1967 San Elijo Ave.	25	0	25	PRIVATE SPILL Cause unknown	CIWQS DEH
5/25/09	Leucadia Wastewater Division	2154 Pleasant Grove Rd.	100	0	100	Main line blocked due to roots through joint.	CIWQS RWQCB DEH
5/29/09	Leucadia Wastewater Division	1450 Encinitas Blvd.	25	20	5	PRIVATE SPILL Cause unknown	CIWQS RWQCB DEH
6/29/09	City of Encinitas Wastewater Division	2170 Carol View Dr.	375	0	375	PRIVATE SPILL Tree roots	CIWQS DEH

7.3.4 OTHER SPILL PREVENTION AND MITIGATION PROCEDURES

The City coordinates spill prevention, containment, and response activities throughout all appropriate departments, programs, and agencies so that maximum water quality protection is available at all times.

Spills are prevented and mitigated through the implementation and enforcement of minimum BMPs. These BMPs are described in the City of Encinitas 2008 JURMP update in the Development Planning, Municipal, Construction, Industrial and Commercial, and Residential components located in sections 4, 5, 6, 7, and 8 and in the City's BMP Manual Part I and II.

In FY 2008-09, the City of Encinitas Fire Department responded to a total of 24 hazardous materials incidents. These incidents included gasoline spills, gas leaks, oil spills, and chemical spills. The Fire Department is equipped with containment booms, absorbent material, shovels, storm drain covers, and disposal equipment. When hazardous material incidents occur, the City's Fire Department is typically the first responder. They are equipped to capture and contain most discharges on site and will notify the Public Works Department and the Clean Water Program for additional help when it is warranted. The Public Works Department is available to respond with additional sandbags, absorbent materials, and increased manpower. Clean Water Program staff is notified to document the incident and to issue any enforcement actions that may be necessary. If warranted, storm drain samples and pictures are taken for potential court action and cost recovery. The City of Encinitas also has a contract with the County of San Diego Hazardous Incident Response Team who will respond when the chemical is unknown or is determined to be hazardous. Figure 7-7 below illustrates the distribution of hazardous materials incidents for FY 2008-09. All hazardous materials incidents that occurred in the City of Encinitas were documented by the Fire Department and are included in Appendix B.

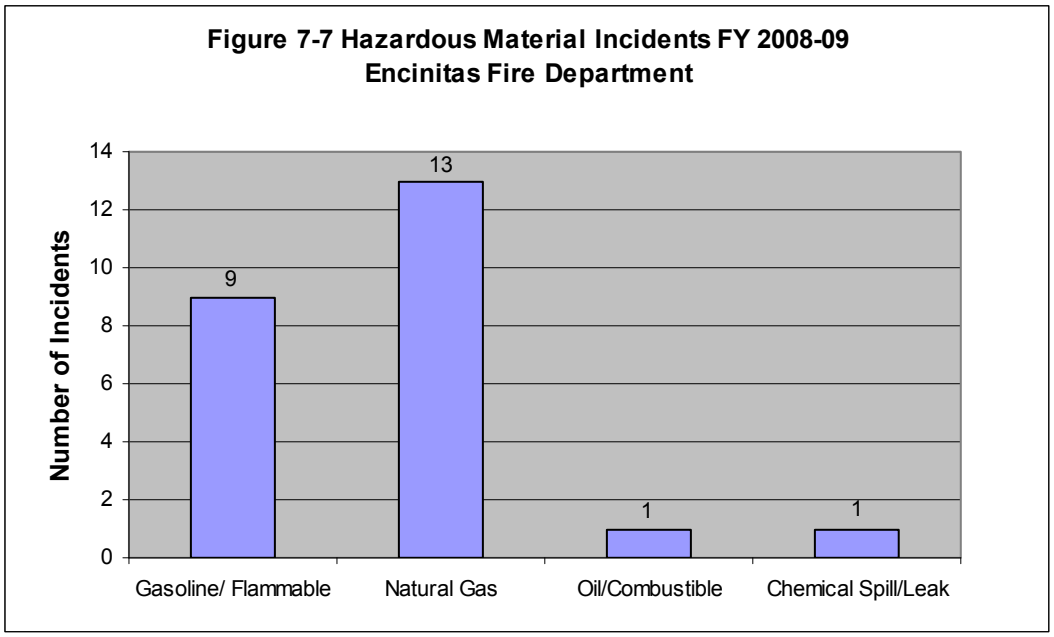

7.4 URBAN RUNOFF MONITORING

The Urban Runoff Monitoring Program incorporates MS4 Outfall Monitoring, Source Identification Monitoring, and the Dry Weather Field Screening and Analytical Monitoring Program.

7.4.1 MS4 OUTFALL MONITORING

The MS4 Outfall Monitoring Program is a new requirement of the RWQCB Order R9-2007-0001 (Section B.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program).

The purpose of the MS4 Outfall Monitoring Program is to characterize pollutant discharges from MS4 outfalls in each Watershed Management Area (WMA) during wet and dry weather.

The program was developed by the San Diego Regional Stormwater Copermittees (Copermittees) in FY 2007-08 and was designed to have four monitoring components: random dry weather, random wet weather, targeted dry weather, and targeted wet weather. The City of Encinitas is responsible for targeted dry weather sampling at four sites throughout Encinitas. A regional contractor is responsible for collecting all random dry weather, random wet weather, and targeted wet weather samples in each WMA throughout San Diego County.

Table 7-4 below presents the targeted dry weather monitoring sites the City of Encinitas visited during the 2008-09 fiscal year and the lab analytes that were assessed at each site in support of this regional monitoring effort.

Table 7-4
FY 2008-09 City of Encinitas Targeted Dry Weather Monitoring Sites

Station ID	Sample Date	Water Flow	Flow Rate (gpm)	Analysis
CBS-2	6/17/09	Flowing	1	Bacteria, TDS, TSS, Total Nitrogen-N, and Total Phosphorous-P
ESC-1	6/24/09	Flowing	100	Bacteria, TDS, TSS, Total Nitrogen-N, Total Phosphorous-P, Manganese, Selenium and Sulfates
ENC-10	6/24/09	Flowing	7.5	Bacteria, TDS, Total Nitrogen-N, and Total Phosphorous-P
LCS-1	6/24/09	Flowing	2	Bacteria, TDS, Total Nitrogen-N, and Total Phosphorous-P

To help complete the first phase of the MS4 Outfall Monitoring Program, a regional contractor for the Copermittees conducted the random dry weather and wet weather sampling in each

WMA throughout San Diego County. The targeted wet weather monitoring will be implemented in FY 2009-10.

The monitoring results for this program are presented in detail in the Copermittees' 2008-09 Urban Runoff Monitoring Report. It is anticipated that more meaningful spatial comparisons can be made as a more robust data set is developed in subsequent years for the MS4 Outfall Monitoring Program.

7.4.2 SOURCE IDENTIFICATION MONITORING

The Source Identification Monitoring Program is a new requirement of the RWQCB Order R9-2007-0001 (Section B.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program).

In FY 2008-09, a regional workplan for the source identification monitoring program was implemented by the Copermittees to identify sources of discharges of pollutants causing the priority water quality problems in select residential areas.

During FY 2008-09, the Source Identification Monitoring Program was conducted in the City of Del Mar and the City of La Mesa. The monitoring results for this program are presented in detail in the Copermittees' 2008-09 Urban Runoff Monitoring Report.

7.4.3 DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING

The Dry Weather Field Screening and Analytical Monitoring Program is a crucial part of the City's Urban Runoff Monitoring Program (Dry Weather Monitoring Program). The City of Encinitas has been conducting dry weather monitoring since 1996. The City's previously established Dry Weather Monitoring Program included selecting city-wide monitoring stations, creating a map of the MS4 in GIS, developing dry weather monitoring program procedures, conducting field sampling, testing, and follow-up investigations.

The updated requirements of the Dry Weather Monitoring Program component as outlined in the Municipal Permit (Order No. 2007-0001) are very similar to those in the previous Municipal Permit (Order No. 2001-01). However, the new Municipal Permit includes the following additional requirements: a trash assessment component and follow-up sampling conducted within two business days of receiving results which exceed identified action levels. The City of Encinitas 2009 Dry Weather Monitoring Assessment Report can be found in Appendix C.

There are four main components to the City's Dry Weather Monitoring Program:

- Field observations (site description and qualitative observations)
- Field screening monitoring (testing of sample while at site and flow estimation)
- Analytical monitoring (performing further tests of sample later at a laboratory)
- Follow-up and investigations of all field screening and analytical exceedances

As described in the City of Encinitas JURMP Update, dated March 24, 2008, the City revised its Dry Weather Monitoring Program in FY 2007-08 to meet all of the requirements that were established in the Municipal Permit (Order No. 2007-0001). Field screening and analytical lab

results from the 2009 Dry Weather Monitoring Assessment Program are included in Appendix C of this section.

7.4.3.1 MS4 MAP

The City has developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations, and drainage basins. When field staff finds inaccuracies in the map during dry weather monitoring, the inaccuracies are reported to the City's GIS Department so that updates can be made. The current map of the City of Encinitas MS4 and 2009 Dry Weather Monitoring Stations is located in the 2009 Dry Weather Monitoring Assessment Report in Appendix C-1.

7.4.3.2 DRY WEATHER ANALYTICAL MONITORING STATIONS

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to establish long-term trend analysis and select additional sites to facilitate a better understanding of the water quality in Encinitas. The City removed and added new dry weather monitoring locations based on adequate coverage of the MS4, characterization of flow, land use, previous water quality data, areas of historic illegal discharges, and environmentally sensitive areas. The Dry Weather Monitoring Program for 2009 included 39 primary sites and 16 alternate sites distributed across seven sub-basins.

7.4.3.3 DRY WEATHER ANALYTICAL MONITORING PROCEDURES

The City's Dry Weather Monitoring Program utilizes methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittees' Dry Weather Monitoring Workgroup. The elements of the City's dry weather program include established sampling locations, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting.

In 2009, all 39 primary monitoring sites were field screened along with 11 alternate monitoring sites. Twenty five percent of the primary monitoring sites (10 of 39) were also analyzed in the lab. Qualitative observations were made at all sample locations. Each location had a unique field data sheet noting observations such as color, clarity, odor, and biological characteristics of the runoff. A multiparameter meter was used in the field to determine pH, conductivity, temperature, and turbidity. Ammonia, nitrate, ortho-phosphate, and MBAS analyses were performed with CHEMetrics instrumental field kits. Oil and grease, diazinon, chlorpyrifos, dissolved cadmium, dissolved copper, dissolved lead, dissolved zinc, total coliform bacteria, fecal coliform bacteria, and Enterococcus bacteria were all analyzed in the laboratory.

7.4.3.4 DRY WEATHER DATA ANALYSIS

Detailed analyses of the 2009 dry weather data are included in the Dry Weather Monitoring Assessment Report, May 1, 2009 – September 30, 2009 in Appendix C.

7.5 FOLLOW-UP AND ENFORCEMENT

7.5.1 INVESTIGATIONS/INSPECTIONS AND FOLLOW-UP

All potential illicit connections and discharges are investigated and eliminated in a timely manner after the City is notified of their occurrence. Illicit connections and discharges are mainly identified through public complaints; referrals; routine inspections of municipal, industrial, and commercial business facilities; and the Dry Weather Monitoring Program.

If an illicit connection and discharge is discovered as a result of the Dry Weather Monitoring Program, an investigation is required to be conducted within two business days of receiving dry weather field screening and/or analytical laboratory data. All sampling results are compared to the regionally developed dry weather monitoring numeric action levels to determine if follow-up investigations/inspections are warranted. The numeric action levels (determined by the Regional Copermittees' Dry Weather Monitoring Workgroup), is the primary approach for interpreting pH, ortho-phosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliform bacteria, fecal coliform bacteria, and Enterococcus analytical results. The California Toxics Rule (CTR) is used to establish an action level for dissolved trace metals, including cadmium, copper, lead, and zinc. In general, best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the Clean Water Program field staff due to their familiarity with the City's Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters.

There were three main illicit connection and discharge investigations in response to Dry Weather Monitoring in 2009. These investigations took place in the La Costa South sub-basin, Leucadia sub-basin, and the Encinitas sub-basin. A more detailed discussion including sample locations, parameters exceeded, follow-up sampling, and investigation results can be found in the 2009 Dry Weather Monitoring Assessment report (Appendix C) in Sections 4.3, 4.4, and 4.5.

A complete table with all illicit connection and discharge complaints reported to the Clean Water Program, which includes investigation dates, sources of discharge, investigation actions, follow-ups, and enforcement activities, can be found in the City of Encinitas FY 2008-09 JURMP Annual Report, Appendix H-1.

7.5.2 ELIMINATION OF ILLICIT DISCHARGES AND CONNECTIONS

The City utilizes the following primary methods for the identification of illicit discharges and connections: complaint responses via the Clean Water Hotline, City staff complaints and observations, and detection and elimination through monitoring (primarily dry weather).

Action is taken to eliminate all detected illicit discharges and connections and their sources as soon as possible after detection. Illicit discharges and connections that pose a serious threat to public health or the environment are eliminated immediately. Illicit discharges and connections that are not deemed to pose serious threats to public health or the environment are eliminated through an escalating series of enforcement actions.

Remove Illicit Connections
The City ensures that the violator takes appropriate action to disconnect, block, stop, or divert drainage facilities and pipe connections that are determined to discharge pollutants to the MS4. Appropriate actions may include the following:

- Plug sinks and drains that are discharging illicit materials to the storm drain system
- Disconnect all drainage pipes found to discharge illicit pollutants to the storm drain system
- Dispose of illicit materials via the sanitary sewer or other appropriate disposal or storage methods
- Divert illicit discharges to the sanitary sewer or treat on-site

In some cases, special permits from the local wastewater authority are needed before material can be discharged to the sanitary sewer system.

Discontinue Illicit Discharges
As applicable to each individual circumstance, the City ensures that responsible parties implement the procedures outlined below to eliminate discharges that transport pollutant materials to the MS4.

- Eliminate the source of the discharge
- Remove pollutant materials from the site
- Prevent pollutant materials from coming in contact with the discharge
- Contain potential illicit discharges on site for treatment or proper disposal

In FY 2008-09, the Clean Water Program received a total of 289 complaints. A total of 51 complaints involved issues that were referred to other departments/agencies or requests for information only (requests related to the City's storm water regulations such as car washing and power washing requirements or general questions about the City's Storm Water Ordinance). In FY 2008-09, there were 238 complaints investigated, resulting in 183 education actions, 52 NOVs, and 17 Administrative Citations for illegal discharges. Appendix H-1 in the City of Encinitas' FY 2008-09 JURMP Annual Report identifies all complaints received by the hotline and includes incident dates, details of substances discharged, and the resulting actions taken by City Staff to eliminate and prevent discharges in the future.

The most serious violations observed by City staff resulted in Administrative Citations issued to the responsible party. Table 7-5 below summarizes the violations and the resulting actions that occurred in FY 2008-09.

Table 7-5
Citations Issued FY 2008-09

Date	Code Violation	Violation Description	Fine	Category
9/10/2008	20.08.040, 20.08.140	Illegal discharge of sewage	$200.00	Commercial
10/9/2008	20.08.040 & 20.08.110	Illegal discharge of wash water	Warning	Commercial
12/2/2008	20.08.040	Illegal discharge of wash water	$100.00	Commercial
12/2/2008	20.08.040	Illegal discharge of construction debris	$100.00	Commercial
12/30/2008	20.08.040, 20.08.140	Illegal discharge of sediment	$100.00	Commercial
1/16/2009	20.08.010	Illegal discharge of wash water	$100.00	Commercial
2/4/2009	20.08.040	Illegal discharge of construction debris	$100.00	Commercial
3/12/2009	20.08.040	Illegal discharge of sewage	$200.00	Commercial
4/29/2009	20.08.040	Illegal discharge of wash water	$100.00	Commercial
6/15/2009	20.08.040	Illegal discharge of wash water	$200.00	Commercial
11/26/2008	20.08.040 & 20.080.040B	Illegal discharge of sediment	$200.00	Construction
12/17/2008	20.08.040B, 20.08.080	Illegal discharge of sediment	$200.00	Construction
2/27/2009	20.08.040	Illegal discharge of sediment	$400.00	Construction
7/16/2008	20.08.040	Illegal discharge of wash water	Warning	Residential
9/11/2008	20.08.040B	Illegal discharge of wash water	Warning	Residential
1/21/2009	20.08.040, 20.08.060	Illegal discharge of sewage	$200.00	Residential

Date	Code Violation	Violation Description	Fine	Category
6/24/2009	20.08.040	Illegal discharge of grey water	$200.00	Residential
		TOTAL	**$2,400.00**	

7.5.3 ENFORCING THE DISCHARGE PROHIBITIONS ORDINANCE

The City implements and enforces its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Many illicit connections and illegal discharges can be eliminated through voluntary compliance. Most violators are willing to change their behaviors when they learn that their actions are detrimental to the environment and local waterways. The City utilizes a variety of options under a flexible and graduated system of enforcement actions, emphasizing voluntary compliance when possible. Voluntary compliance may be used for first-time, minor violations, whereas more serious violations or continued non-compliance may warrant a more aggressive and enforcement oriented approach. Increased enforcement actions are taken until compliance is achieved or the illicit connection or illegal discharge is otherwise eliminated.

In cases where further enforcement is needed, the typical progressive enforcement procedures that the City can implement are as follows: verbal warnings and education, written warnings (Stop/Correct Work notice or a NOV), and administrative citations. A copy of the City's Administrative Citation can be found in Appendix D. The nature of the City's enforcement approach is determined on a case-by-case basis and is based on factors such as the severity of the violation, the threat to human or environmental health, site-specific circumstances, and past compliance history. If the situation is determined to pose an immediate risk to public health or the environment, the City may coordinate with other agencies or teams that are specially trained to assess and mitigate emergency situations (e.g., those involving hazardous wastes/materials, etc.).

In FY 2008-09, enforcement in each category varied according to the complaint. Overall, construction, commercial, residential and municipal complaints were primarily resolved through education. A breakdown of the enforcement actions performed per category of complaint is presented below in Figure 7-8.

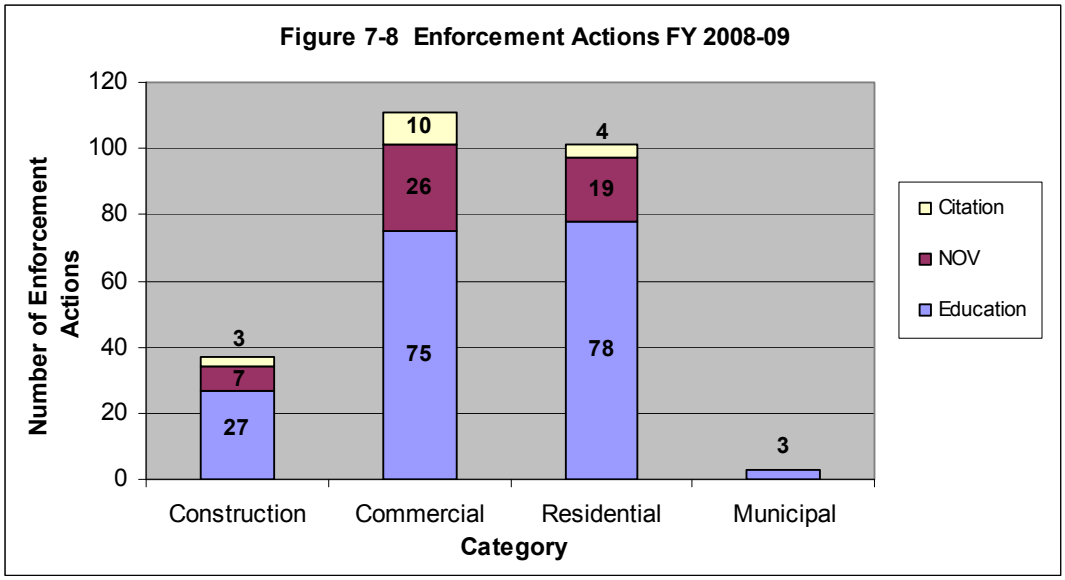

Residential complaints accounted for 43.6% of all complaints received and resulted in 78 educational actions, 19 Notices of Violation, and four citations. Commercial complaints totaled 34.6% of all complaints received and resulted in 75 educational actions, 26 Notices of Violation, and 10 citations. Construction complaints totaled 14.2% of all complaints received and resulted in 27 educational actions, seven Notices of Violation, and three citations. Municipal complaints accounted for 7.6% of all complaints received and were referred to the City's Public Works Department for immediate maintenance. There were no industrial complaints this fiscal year.

In FY 2008-09, Clean Water Program staff evaluated all reported illegal discharges and proceeded with appropriate enforcement actions as necessary. The Clean Water Program staff issued a total of 52 Notices of Violation and 17 Administrative Citations. The total amount of citations collected in FY 2008-09 was $2,400.00 (see Table 7-5). With appropriate education and enforcement, there were numerous illegal discharges and connections eliminated in FY 2008-09.

7.6 PROGRAM REVIEW AND MODIFICATION

In November 2008, the Copermittees requested the Dry Weather Monitoring Workgroup to re-evaluate the dry weather action levels that were regionally adopted in April 2003. All of the action levels were deemed appropriate except for the bacteria action levels for Total Coliform, Fecal Coliform, and Enterococcus. The Dry Weather Monitoring Workgroup contracted the services of D-Max Engineering to conduct an evaluation of all of the historical bacterial data collected from the Copermittees' dry weather monitoring programs from 2002 through 2007. Details of D-Max Engineering's data evaluation are posted on the Project Clean Water Website at:
http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf.

On May 19, 2009, the Copermittees evaluated the recommendations of the Dry Weather Monitoring Workgroup and selected the following new bacteria action levels presented in Table 7-6 below. These new action levels will become effective May 1, 2010.

Table 7-6
Bacteria Action Levels for the City of Encinitas' Dry Weather Monitoring Program

	Total Coliform (MPN/100 mL)	**Fecal Coliform (MPN/100 mL)**	**Enterococcus (MPN/100mL)**
2003-2009 Bacteria Action Levels	50,000	20,000	10,000
2010 -2012 Bacteria Action Levels	130,000	13,000	7,000

Appendix A

Cityworks GIS Service Request Form

Storm Water Complaints Cityworks GIS Service Request Form

Service Request

Request | Recent | Search | Save | Close | New | Print | Tools | Labor

Search for Request ID

Recently Opened

Apply To All

Code:

Description

ID/Status | OPEN

Priority/Category

Initiated By RYGIEL, KRISTINE

Submit To

Opened By

Dispatched To

Opened By

Prj Comp. Date MM/DD/YYYY :

Closed By

Is the Investigation Complete?

Is This Incident an Emergency?

Is a Work Order Needed?

Cancel

Work Order

Open WO | Attach To | Create

WO Description

Proj Start/Finish Date

Actual Start/Finish Date

Project

Open | Attach To

Problem Details

Incident Address

Locate Using Streets Parcels

City/Zip

Date/Time

Account

Mr Ms

First Name

Last

Address

City

Zip

Home Phone

Work

Other Phone

Type

Email

Caller Information

Is Caller a Resident Within the Service Area?

Is This a Follow-up Call?

Customer Contacted on Site?

Customer Contacted Afterwards?

Custom Field Name	Value	Required

Appendix B

Hazardous Materials Incident Reports

Incident Listing

Tuesday July 1, 2008 through Tuesday June 30, 2009

411 - Gasoline or other flammable liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0003261	000	08/26/2008 16:41:58	411	N	573 02nd St	X	X	
0003474	000	09/13/2008 18:08:12	411	2	3120-312 Manchester Ave	X	X	
0003660	000	09/27/2008 16:37:48	411	N	949 Stratford Dr	X	X	
0004483	000	11/29/2008 18:00:37	411	N	1766 N Coast Highway 101	X		
0000344	000	01/26/2009 22:02:59	411	N	1271 Encinitas Bl	X		
0001723	000	05/09/2009 17:17:29	411	N	175 N El Camino Real	X		
0001890	000	05/22/2009 17:04:27	411	N	1763 Greentree Rd	X		
0001976	000	05/30/2009 14:56:51	411	N	1334 Via Terrassa	X		
0002026	000	06/03/2009 08:58:44	411	N	540 La Costa Ave	X		

End of Report

Incident Listing

Tuesday July 1, 2008 through Tuesday June 30, 2009

412 - Gas leak (natural gas or LPG)

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0003250	000	08/25/2008 14:20:24	412	N	858 Del Rio Ave	X	X	
0003657	000	09/27/2008 14:19:25	412	N	In front of 245 Via Tierra	X	X	
0003854	000	10/12/2008 02:47:18	412	N	1820 Dora Dr	X		
0003921	000	10/17/2008 08:04:45	412	N	1646 N Coast Highway 101	X		
0004203	000	11/08/2008 09:03:30	412	N	1546 Vivaldi St	X		
0004498	000	11/30/2008 21:49:08	412	N	130 N El Camino Real	X		
0004721	000	12/16/2008 12:46:29	412	N	240 Birmingham Dr	X		
0004861	000	12/25/2008 00:34:55	412	N	701 S Vulcan Ave	X		
0000827	000	03/03/2009 10:33:32	412	N	650 02nd St	X		
0001457	000	04/19/2009 11:20:05	412	N	101 Turner Ave	X		
0001662	000	05/05/2009 10:06:31	412	N	258 Neptune Ave	X		
0002024	000	06/03/2009 04:18:46	412	N	1900 N COAST HIGHWAY 101	X		
0002204	000	06/16/2009 13:33:49	412	N	755 Stratford Dr	X		

End of Report

Incident Listing

Tuesday July 1, 2008 through Tuesday June 30, 2009

413 - Oil or other combustible liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0004192	000	11/07/2008 11:43:31	413	N	In front of 751 Snapdragon St	X		

End of Report

Incident Listing

Encinitas Fire Department

Tuesday July 1, 2008 through Tuesday June 30, 2009

422 - Chemical spill or leak

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0000305	000	01/23/2009 13:32:07	422	N	1550 Encinitas Bl	X		

End of Report

Appendix C

2009 Dry Weather Monitoring Assessment Report

Dry Weather Monitoring Assessment

May 1, 2009 - September 30, 2009

Prepared by:

City of Encinitas
Clean Water Program
505 South Vulcan Avenue
Encinitas, CA 92024

December 2009

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Dry Weather Analytical Monitoring

1.0 Introduction

The Dry Weather Monitoring Program is a crucial part of the City of Encinitas' Urban Runoff Monitoring Program. Since May 2002, the California Regional Water Quality Control Board, San Diego Region (Regional Board), has required the San Diego County Copermittees to implement an annual Dry Weather Storm Drain Monitoring Program (Dry Weather Program). On January 24, 2007, Order No. R9-2007-0001 (Municipal Permit), was adopted by the Regional Board, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego and the incorporated Cities of San Diego County, including the City of Encinitas. The updated requirements of the Dry Weather Monitoring Program can be found in Section II.B.3 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program of the Municipal Permit.

Order No. R9-2007-0001 requires the City of Encinitas to implement a dry weather analytical monitoring program for the detection and elimination of illicit discharges and connections to the City's MS4 in addition to including a trash assessment component. The purpose of the City's Dry Weather Program is to actively seek and eliminate illicit connections and illegal discharges, to characterize dry weather flows and trash assessments throughout the City's MS4.

An illicit discharge is defined as a point source discharge of pollutants to the MS4 that is not comprised entirely of storm water, not exempted by the City's Storm Water Ordinance, or not authorized by an NPDES Permit. An illicit connection is defined as a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City. The regulatory backbone of this program is the establishment of discharge prohibitions in the City's Municipal Code, Chapter 20.08 (Storm Water Management).

Dry weather monitoring of the MS4 is performed by establishing monitoring locations throughout the City to adequately cover the entire storm drain system. In 2009, the City of Encinitas' Dry Weather Program encompassed 39 primary monitoring locations and 16 alternate monitoring locations throughout the city. Monitoring of these locations included recorded observations, field screening where water was present, and analytical laboratory testing at selected locations.

The City of Encinitas conducted dry weather monitoring during the period of May 1, 2009 to September 30, 2009. The analysis of the dry weather monitoring results for 2009 is documented in the following report.

2.0 Dry Weather Analytical Monitoring Stations

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to support long-term trend analysis, select additional sites to facilitate a better understanding of the water quality in Encinitas, and to ensure compliance with Dry Weather Monitoring program standards established in Order No. 2007-0001.

Under the previous Municipal Permit (2001-01), the City of Encinitas conducted dry weather field screening at an average of 37 sites per year. On average, the City also visited another 13 dry sites per year, with the total number of sites visited varying from 48 to 52 sites per year. To make more efficient use of its resources, the City adjusted its Dry Weather Monitoring Program in 2008 to include 39 primary sites and 16 alternate sites. As part of the monitoring site evaluation, sites that had never had ponded or flowing water were removed from the monitoring site list. Sites that were regularly dry but had ponded or flowing water at least once during previous monitoring years were changed to alternate sites. The City also assessed whether any existing sites should be relocated and whether any new sites were necessary to provide better coverage of key areas of the MS4. This process relied on reviewing historical data from past monitoring programs and reviewing the MS4 and land use data. Geographic Information Systems (GIS) data files of the City's drainage system, watersheds, major water bodies, environmentally sensitive areas, existing dry weather monitoring locations, and approximate locations of potential sources of pollutants were all evaluated to assist in this process. In 2008, the City's Clean Water Program staff, accompanied by Public Works maintenance staff familiar with the storm drain conveyance system, conducted field visits to assess the suitability of 29 potential new sites. This process included locating appropriate access points and then checking for the presence of ponded or flowing water, assessing accessibility, and recording GPS coordinates or the GIS ID name of the relevant storm water facility. As a result of this assessment, 12 suitable locations were identified and added to the City's lists of dry weather monitoring sites. Only one out of seven sub-basins retained the same primary sites that existed in the City's dry weather monitoring program under the previous Municipal Permit. Consequently, only the past three years of dry weather monitoring data (2007-2009) have been compared to each other in the water quality exceedance charts throughout this report.

A storm drain (MS4) database has been developed by the City of Encinitas in a GIS and is maintained in an ArcInfo platform by the City's Information Technology Division. The database is continually updated to include new additions to the MS4 as validation is ongoing. The City has also developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations and drainage basins. A copy of the 2009 MS4 and Dry Weather Monitoring Stations Map can be found in Appendix C-1.

3.0 Dry Weather Analytical Monitoring Procedures

The City's dry weather monitoring program uses methods and procedures in collecting and analyzing data which are consistent with those developed by the San Diego Regional Copermittee's Dry Weather Monitoring Workgroup (DWM Workgroup). The elements of the dry weather program include establishing primary and alternate sampling sites, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Each of these procedures is outlined in detail below.

Dry weather field screening and analytical monitoring consists of field observations, field screening and monitoring, and analytical monitoring at selected stations. The Municipal Permit requires each Copermittee to conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present: conductivity, turbidity, pH, ortho-phosphate, nitrate-nitrogen, ammonia-nitrogen, and surfactants (MBAS). The Municipal Permit also requires that each Copermittee conduct analytical laboratory analysis of the following constituents at 25% of the dry weather monitoring stations where water is present: total hardness, oil and grease, diazinon, chlorpyrifos, cadmium (dissolved), lead (dissolved), zinc (dissolved), copper (dissolved), Enterococcus bacteria, total coliform bacteria and fecal coliform bacteria.

Dry weather monitoring was conducted at 39 primary sites and 11 alternate sites throughout Encinitas during the period of May 1 – September 30, 2009. Of the 50 locations monitored, flowing water was observed at 29 sites, ponded water was observed at 10 sites and 11 sites were observed to be dry. Field analysis was conducted at all sites with flowing or ponded water. A total of 10 monitoring locations or 25% of all 39 sites were sampled for full laboratory analysis to meet the minimum 25% requirement as established in the Municipal Permit. An additional 7 sites were analyzed for total coliform, fecal coliform, and Enterococcus in order to further characterize bacteria concentrations throughout the City's MS4.

As required by the Municipal Permit, a trash assessment was conducted at 39 primary sites and 11 alternate sites throughout the City to provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present. A more detailed analysis and results of the trash assessment program can be found in Section 7.0 of this report. All of the 2009 Trash Assessment forms can be found in Appendix C-5.

Qualitative observations were made at all sample locations. A field data sheet noting observations such as color, clarity, odor, and biological characteristics was recorded at each monitoring site. The 2009 Dry Weather Monitoring Field Datasheets for each monitoring site are included in Appendix C-2. Photographs for all dry weather monitoring sites visited in 2009 can be found in Appendix C-3.

Field tests were performed by Clean Water Program staff at all monitoring locations with flowing or ponded water. In 2009, the Clean Water Program purchased new monitoring

equipment to help create a more efficient and accurate sampling program. The new equipment included a Hydrolab Quanta multi-parameter instrument to determine pH, conductivity, temperature, and turbidity and a Chemetrics V-2000 multi-analyte photometer to analyze ammonia-nitrogen, ortho-phosphate, nitrate-nitrogen, and MBAS.

Where possible, flow was determined by filling a bottle of known volume using a timer and an estimation of the amount of flow captured. For the locations (such as manholes) in which flow was not able to be measured, these sites were always noted as flowing or ponded on the Dry Weather Monitoring Datasheets. Action levels for the field screening analysis were pre-determined by the DWM Workgroup and are shown in Table 3.0. Follow-up sampling for exceedances detected in field screening were performed within two business days of receiving the results that exceeded action levels as required in section D.4.d of the Municipal Permit.

Source investigation actions are initiated based upon field screening and analytical monitoring results that have exceeded established action levels during initial testing and follow-up testing. Source investigation actions may include field investigations and/or formal facility inspection activities based upon a variety of considerations which are described in each of the sub-basin evaluations in Section 4.0.

There were 10 samples collected for full laboratory analysis in order to further characterize the water quality at specific locations throughout the City. When feasible, laboratory testing was performed as far down in the watershed as possible to assess water quality prior to discharging into a receiving water. Methods for laboratory analysis were based on EPA approved methods described in the *Standard Methods for the Examination of Water and Wastewater, 18th edition.* Follow-up sampling for exceedances detected in laboratory analyses were performed within two business days after receipt of data from the laboratory. The field and analytical results for each monitoring station are provided in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4.

Table 3.0 Action Levels for Field Screening and Laboratory Analytical Parameters

Field Screening Analytes	Action Levels[1]	Source□Notes
pH	□6.5 or 9.0	Basin plan, w/ allowance for elevated pH due to excessive photosynthesis.
Ortho-Phosphate (mg/L) as P	2.0	USEPA Multi-sector GP
Nitrate-N (mg/L)	10.0	Basin plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Workgroup experience, may also consider unionized ammonia fraction
Turbidity (NTU)	Best Professional Judgment	USEPA Multi sector general permit level-5 NTU. Typical levels are substantially higher. Base judgment on channel type and bottom
Temperature	Best Professional Judgment	Base judgment on season, air temp., channel type, shade, etc.
Conductivity (□mhos/cm) or TDS (mg/L)	Best Professional Judgment □City of Encinitas considers 5.00mS/cm (umhos/cm) an exceedance	EC may be highly elevated in some regions due to high TDS/groundwater exfiltration to surface water, mineral dissolution and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Also consider investigating unusually low EC (□800 umhos/cm) accompanied by unusual flows.
MBAS (mg/L)	1.0	Basin plan, w/ allowance based on Workgroup field experience and possible field reagent interferences
Laboratory Analytes	**Action Levels**	**Source/Notes**
Oil and Grease (mg/L)	15	USEPA multi-sector General Permit
Diazinon (□g/L)	.5	Response to diazinon and chlorpyrifos levels above 0.5 □g/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (□g/L)	.5	
Dissolved Cadmium	California Toxics Rule	Use CTR Table, 1-hour criteria to determine action level for sample.
Dissolved Copper	California Toxics Rule	
Dissolved Lead	California Toxics Rule	
Dissolved Zinc	California Toxics Rule	
Total Coliform (cfu/100 ml)	50,000	Action levels are based on upper 90□ confidence level of Copermittees 2002 dry weather analytical monitoring data.
Fecal Coliform (cfu/ 100 ml)	20,000	
Enterococcus (cfu/100 ml)	10,000	

Notes: [(1)] The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information.

4.0 Dry Weather Data Analysis

Data analysis is based on three methods of data interpretation: numeric action levels, California Toxics Rule (CTR) and best professional judgment.

The numeric action levels in Table 3.0 are the primary approach for interpreting pH, ortho-phosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliform, fecal coliform and Enterococcus bacteria results. A 90th-percentile statistical confidence interval test, developed by the DWM Workgroup in 2003 is currently used to determine exceedances for bacteria indicators.

The CTR is used to establish an action level for dissolved trace metals, including Cadmium, Copper, Lead and Zinc. The CTR equations provide benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases.

Best professional judgment is used as the primary approach for interpreting turbidity, conductivity and water temperature. Best professional judgment is also the secondary approach for interpreting the results of all other field and laboratory analyses. The best professional judgment of Clean Water Program staff takes into account the characteristics of each sample location, and historical data to determine whether sample data exceedances require follow-up or further investigation.

In 2009, the City upgraded to using an instrumental colorimetric analysis for ammonia-nitrogen, nitrate-nitrogen and ortho-phosphate concentrations at all dry weather monitoring sites. The City purchased a Chemetrics V-2000 Multi-analyte Photometer- a portable instrumental colorimeter that automatically tests pre-programmed analytes using the Chemetrics instrumental kits which include self-filling, pre-measured ampoules. There are two instrumental kits available for use with the V-2000; the K-1503 (Direct Nesslerization method) and the K-1403 (Salicylate method). Although the methods and range concentrations for each instrumental kit are different, the process for measuring ammonia concentrations is similar for both kits. Water samples are placed into the ampoules provided in the instrumental kits to react with the reagent in the ampoule. In a strongly alkaline solution, ammonia reacts with the reagent to produce a yellow-colored complex in direct proportion to the ammonia concentration. The ampoule is then placed into the V-2000 which digitally reads the color concentrations of the ampoule and provides a digital result.

Initially, field staff used the K-1503 instrumental kit to analyze ammonia concentrations at multiple dry weather monitoring sites located throughout the city. Field staff began to suspect erroneous results after many of the analyses resulted in clouded color development within the ampoules and the majority of these tests were found to be exceeding water quality benchmark values. Three follow-up investigations were initiated in response to the ammonia exceedances determined by the K-1503 instrumental kit. These investigations took place in the La Costa South sub-basin, Leucadia sub-basin, and the Encinitas sub-basin

and the outcomes of these investigations are discussed in more detail in Sections 4.3, 4.4, and 4.5 of this report. Ultimately, 69% of all analysis for ammonia using the K-1503 method exceeded the water quality benchmarks. This finding was inconsistent when compared to prior years of sampling data in which only 9% of all ammonia samples in 2008 and 12% of all ammonia samples in 2007 exceeded water quality benchmarks.

To check the validity of the 2009 sampling data, field staff purchased a new Chemetrics Ammonia instrumental kit (K-1403) midway through the monitoring season. Field staff analyzed 14 duplicate samples with the prior kit (K-1503), the new kit (K-1403) and also conducted lab analysis for each sample. The sampling results are shown in Table 4.0 below.

Table 4.0 2009 Ammonia Sampling Results

Station ID	Date	K-1503 Ammonia Kit	K-1403 Ammonia Kit	Lab QA/QC	Ammonia Benchmark
CBS-4	9/14/2009	2.78	0.18	0.12	1.00
ESC-1	9/22/2009	1.42	0.14	0	1.00
ESC-3	9/22/2009	1.97	0.14	0.11	1.00
ESC-4	9/29/2009	1.95	0.12	0	1.00
ESC-5	9/11/2009	2.09	0.22	0.1	1.00
LCS-3	9/29/2009	1.31	0.16	0.36	1.00
LCS-7	9/16/2009	2.41	0.17	0.74	1.00
LCS-8	9/11/2009	1.55	0.3	0.27	1.00
LUC-3	9/21/2009	0.76	0.08	0.43	1.00
LCS-9	9/30/2009	NT	0.13	0.18	1.00
LUC-4	9/30/2009	NT	0.12	0.16	1.00
LUC-7	9/30/2009	NT	0.67	0.9	1.00
ENC-8	7/22/2009	4.02	NT	1.83	1.00
ENC-11	8/5/2009	1.59	NT	0.42	1.00

NT = indicates analyte was not tested at this site.

While the new kit results and the lab analysis results seemed close, field staff performed statistical analysis on the data to determine whether there was significant evidence of correlation between the new kit and the lab analysis. The linear correlation coefficient (r) between the new kit and the lab analysis data is 0.650 with 1.0 indicating perfect positive correlation and 0 indicating no correlation. At the 95% confidence level the critical value for 12 samples is 0.576. Since the test statistic 0.650 is greater than the critical value of 0.576, we can conclude that there is significant linear correlation between the new kit and the lab analysis data. Figure 4.0 below illustrates the close correlation between the new kit and the lab analysis and validates the suspected erroneous results produced by the prior instrumental kit (K-1503).

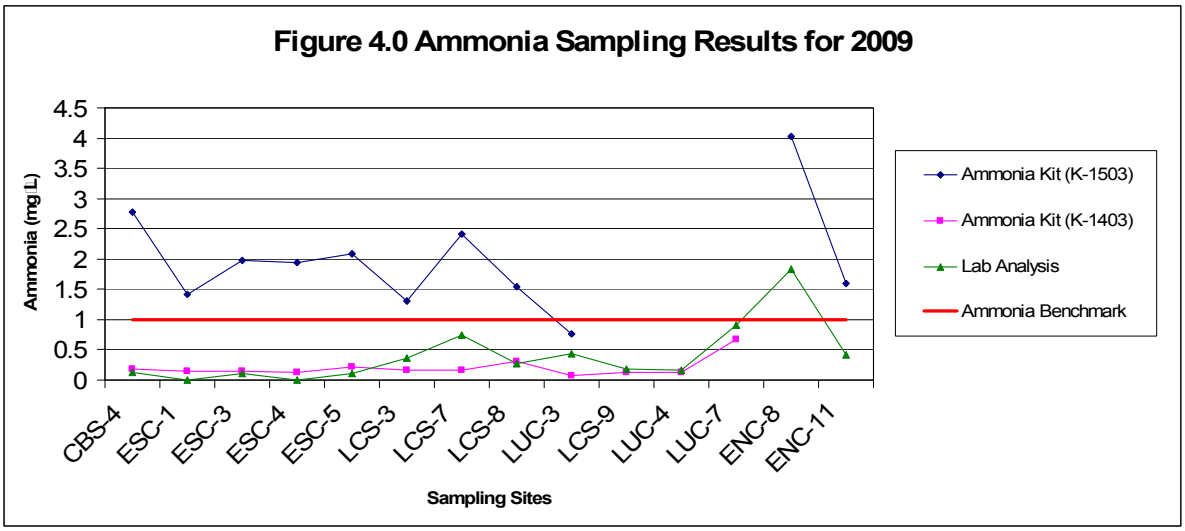

The following subsections contain analyses of the 2009 dry weather data collected for each of the seven sub-basins within the City of Encinitas.

4.1 Cardiff Sub-basin

Dry weather monitoring in the Cardiff sub-basin (CBS) included a total of eleven locations; eight primary sites and three alternate sites. Land use in the sub-basin is primarily residential with some commercial and agricultural uses in the upper reaches of the sub-basin. All run-off in the Cardiff sub-basin drains into the San Elijo Lagoon.

Of the eight designated locations for routine monitoring in 2009, three locations were observed to have flowing water, two locations had ponded water and three locations were dry. All five locations with flowing and ponded water were field screened and analytical lab samples were collected at three locations (CBS-1, CBS-2 and SEL-2). CBS-1 was selected only for bacteria analysis to help further characterize the water quality in the Cardiff sub-basin. CBS-2 and SEL-2 were both selected for full laboratory analysis to assure continuity from previous years of monitoring and to assist in long term trend analysis.

Of the eight locations where routine field screening was performed, four of the sites sampled exceeded the action levels for conductivity and two sites exceeded for turbidity. There were a total of three sites analyzed for total coliform, fecal coliform and Enterococcus bacteria; however none of the sites exceeded for any of these bacteria indicators. Table 4.1 summarizes the action levels exceeded in the Cardiff sub-basin.

Table 4.1 Cardiff Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
CBS-2	7/8/09	Flowing	Conductivity	6.93	mS/cm	5
CBS-4	9/14/09	Flowing	Conductivity	7.65	mS/cm	5
SEL-2	8/10/09	Ponded	Conductivity	7.05	mS/cm	5
SEL-2	8/10/09	Ponded	Turbidity	56.3	NTU	5
SEL-3	9/15/09	Ponded	Conductivity	9.73	mS/cm	5
SEL-3	9/15/09	Ponded	Turbidity	68.4	NTU	5

CBS-2

CBS-2 is an open channel that drains both residential and commercial areas and discharges directly to San Elijo Lagoon. CBS-2 was one of the sites selected for full analytical monitoring in 2009. The water sample at CBS-2 contained elevated conductivity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

CBS-4

CBS-4 is located in a detention basin that drains both agricultural nurseries and residential areas and discharges directly to San Elijo Lagoon. The water sample at CBS-4 was obtained from a flowing outfall in the detention basin and contained elevated conductivity. The sample was clear in clarity and colorless and no other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

SEL-2

SEL-2 is located in an open channel that drains residential areas and discharges directly to the San Elijo Lagoon. SEL-2 was one of the sites selected for full analytical monitoring in 2009. The water sample was taken from ponded water in an area with excessive vegetation that is situated at the edge of the San Elijo Lagoon. The sample contained elevated conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. A review of historical data at this site indicates that the only exceedances at this location have been for conductivity, primarily due to saltwater intrusion from the lagoon. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity or turbidity was not warranted and was not performed.

SEL-3

SEL-3 is located in a detention basin that drains a community college campus and a residential area. The water sample was taken from ponded water in an area with excessive algae. The water sample at SEL-3 contained elevated conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and turbidity was not warranted and was not performed.

Five of the eight sampling sites (CBS-1, CBS-2, CBS-4, SEL-2 and SEL-3) in this sub-basin have consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.3 illustrates the trend in water quality exceedances in the Cardiff sub-basin over the past three years based on the analysis from these sites. The increase in the percent exceedance value is reflective of the exceedances for conductivity and turbidity in this sub-basin.

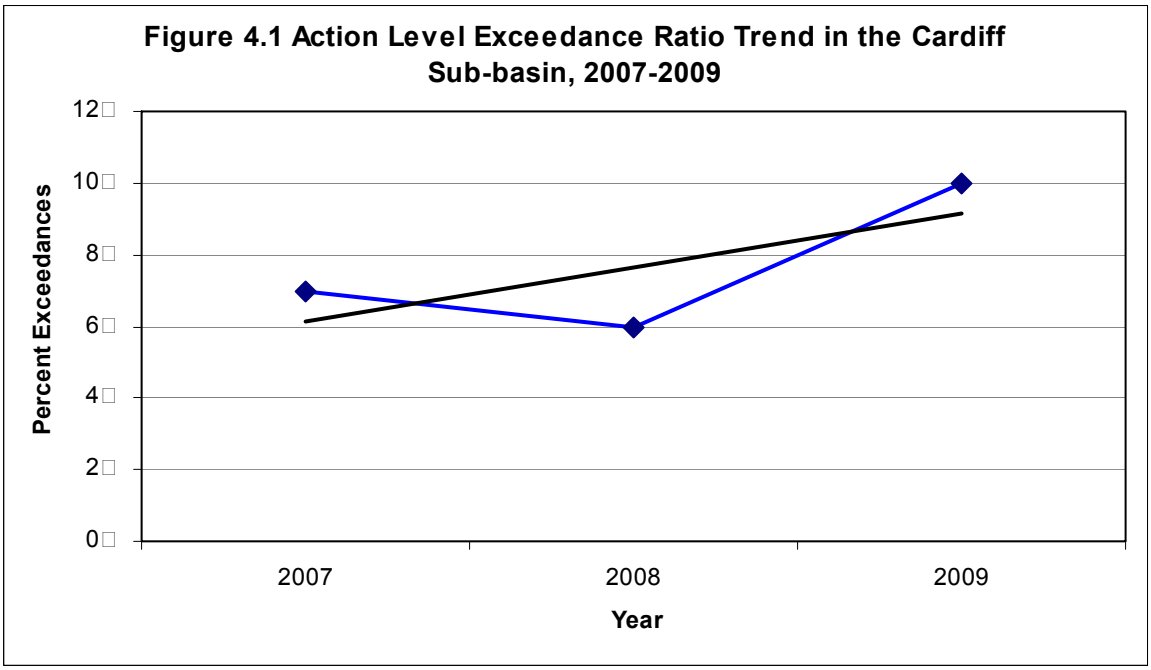

All of the monitoring data collected in the Cardiff sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.2 illustrates the dry weather monitoring stations located through out the Cardiff sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.2

Cardiff Sub-basin

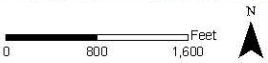

4.2 Lower Escondido Creek Sub-basin

Dry weather monitoring in the Lower Escondido sub-basin (ESC) included a total of five locations; three primary sites and two alternate sites. The land uses consist primarily of residential and open space areas with a few commercial establishments interspersed throughout the sub-basin. All run-off in the Lower Escondido Creek sub-basin drains to the San Elijo Lagoon.

Of the five designated locations for routine monitoring in 2009, all five locations were observed to have flowing water and were field screened only. One of the sites (ESC-2) sampled had results exceeding the action levels for turbidity.

Table 4.2 summarizes the action levels exceeded in the Lower Escondido Creek Sub-basin.

Table 4.2 Lower Escondido Creek Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ESC-2	9/16/09	Flowing	Turbidity	16	NTU	5

ESC-2

ESC-2 is located in an open channel adjacent to a residential area along Escondido Creek. The water sample at ESC-2 contained elevated turbidity as a result of shallow water with excessive sediment and algae at this location. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

Two of the five sampling sites (ESC-1 and ESC-2) in this sub-basin have consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.3 illustrates the trend in water quality exceedances in the Lower Escondido Creek sub-basin over the past three years based on the analysis from these sites. The historical frequency of exceedances in this sub-basin is variable. The action level exceedance ratio for this sub-basin increased six percent from 2008 to 2009 due to only one exceedance in this sub-basin. Overall, the trend of water quality exceedances is down over the three year monitoring period, indicating improvements in water quality in this sub-basin.

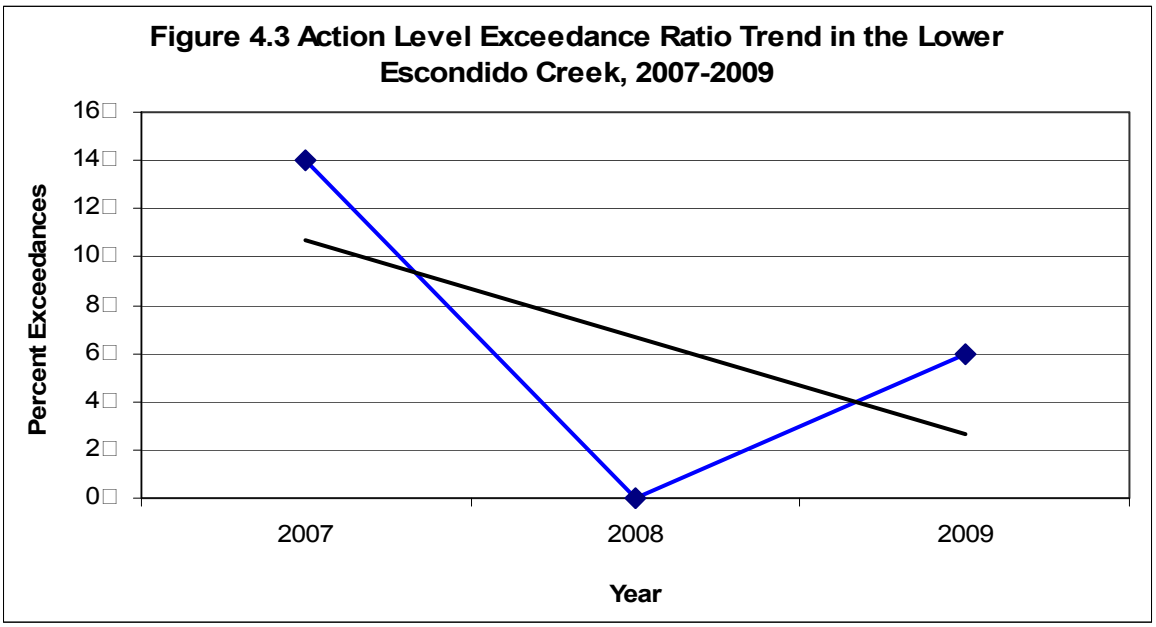

Data collected in the Lower Escondido Creek sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.4 illustrates the dry weather monitoring stations located through out the Lower Escondido Creek Sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.4

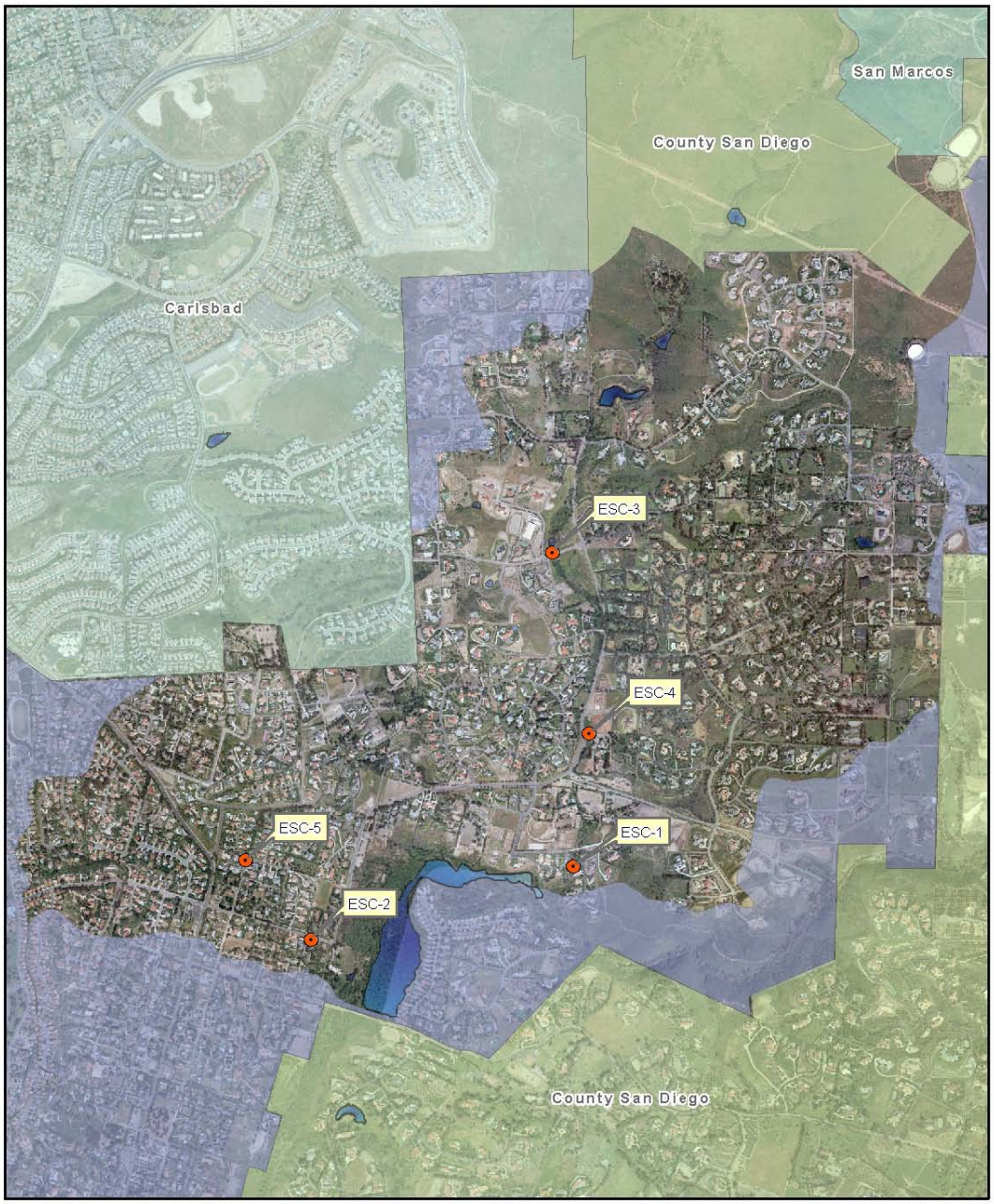

Lower Escondido Creek Sub-basin

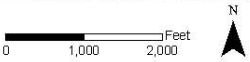

4.3 La Costa South Sub-basin

Dry weather monitoring in the La Costa South sub-basin (LCS) included a total of eight locations; six primary sites and two alternate sites. Land use in this sub-basin encompasses one of the city's largest commercial zones in addition to a significant residential area. All run-off in the La Costa South sub-basin drains to Encinitas Creek. Encinitas Creek flows north into Batiquitos Lagoon in the City of Carlsbad. Monitoring locations in the La Costa South sub-basin were all located within the City of Encinitas.

Of the eight designated locations for routine monitoring in 2009, six locations were observed to have flowing water and two locations had ponded water. All eight locations were field screened and two were sampled for a full laboratory analysis (LCS-1 and LCS-5) to assure continuity from previous years of monitoring and to retain long-term trend analysis.

There were three routine monitoring water quality exceedances in the La Costa South sub-basin in 2009. Table 4.3 summarizes the action levels exceeded in the La Costa sub-basin during routine monitoring.

Table 4.3 La Costa South Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-1	7/29/09	Ponded	Turbidity	13.6	NTU	5
LCS-4*	7/6/09	Flowing	Ammonia	3.78	mg/L	1.0
LCS-9	9/30/09	Ponded	Conductivity	23.77	mS/cm	5

*This was an erroneous exceedance due to chemistry interference in the instrumental kit (K-1503). Please refer to discussion in Section 4.0.

LCS-1

LCS-1 is located in an open channel that drains northward into Encinitas Creek. The surrounding land use in this sub-basin is primarily commercial. The water sample at LCS-1 was taken from ponded water in the channel and was field screened and sampled for full laboratory analysis. Water flow at LCS-1 was significantly constrained due to excessive vegetation and organic matter decay at this site. The sample at LCS-1 contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LCS-4

LCS-4 is located in a manhole that drains northward into Encinitas Creek. The surrounding land use at this location is primarily commercial. The water sample at LCS-4 was taken from a flowing manhole and was field screened using the original instrumental kit (K-1503)

for analyzing ammonia. A confirmation sample for ammonia was analyzed with the K-1503 kit on 7/8/09 and the result exceeded action levels again. Since this site exceeded action levels for ammonia during both the routine monitoring and confirmation monitoring, the field team immediately conducted a field investigation upstream. Follow-up sampling upstream of LCS-4 occurred on 7/9/09. The results again exceeded the action levels for ammonia. Table 4.4 below summarizes the results of the confirmation and follow-up sampling for LCS-4.

Table 4.4 LCS-4 Confirmation and Follow-up Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-4	7/8/09	Ponded	Ammonia (K-1503 Kit)	3.3	mg/L	1.0
LCS-4 (Upstream)	7/9/09	Flowing	Ammonia (K-1503 Kit)	2.85	mg/L	1.0

Upon receipt of the exceedance results from the confirmation samples at LCS-4, the Clean Water Program's storm water inspector was notified of the exceedances and the potential sources in the area. A total of one storm water inspection at a nearby commercial facility and one residential area was initiated to try and identify the ammonia source(s) upstream of LCS-4. Table 4.5 below summarizes all of the inspection activities that were performed in the area.

Table 4.5 LCS-4 Investigation Activities

Name	Address	Date of Inspection	Results
Private Residence	444 Dunsmore Ct.	7/13/09	Corrective action required. Resident washing down driveway with BEHR concrete and masonry cleaner and ZEP commercial cleaning product.
Villa Encinitas Plaza	251-257 N. El Camino Real	7/15/09	Corrective action required however, no violations noted.

Although, there were no specific sources of ammonia identified as a result of these investigations, one illicit discharge was mitigated and the commercial investigation activities have resulted in recent facility upgrades to minimize any future discharges into the City's storm drain system. The commercial facilities at 251-257 N. El Camino Real recently upgraded their outdoor trash enclosure to drain directly into the sewer system and have removed an old grease bin. They are also currently making plans to repair the concrete so that it will no longer convey irrigation/groundwater runoff into the storm drain system.

LCS-9

LCS-9 is an alternate monitoring site located in a manhole that drains west into Encinitas Creek**.** The surrounding land use at this location is residential. The water sample at LCS-9 was taken from ponded water in the manhole and was field screened only. The sample at LCS-9 contained elevated conductivity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

Five of the eight sampling sites (LCS-1, LCS-2, LCS-4, LCS-5 and LCS-7) in this sub-basin have consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.5 illustrates the trend in water quality exceedances in the La Costa South sub-basin over the past three years based on the analysis from these sites. Although several water quality exceedances have been typical for the La Costa South sub-basin, overall water quality has been improving over the past three years of dry weather monitoring.

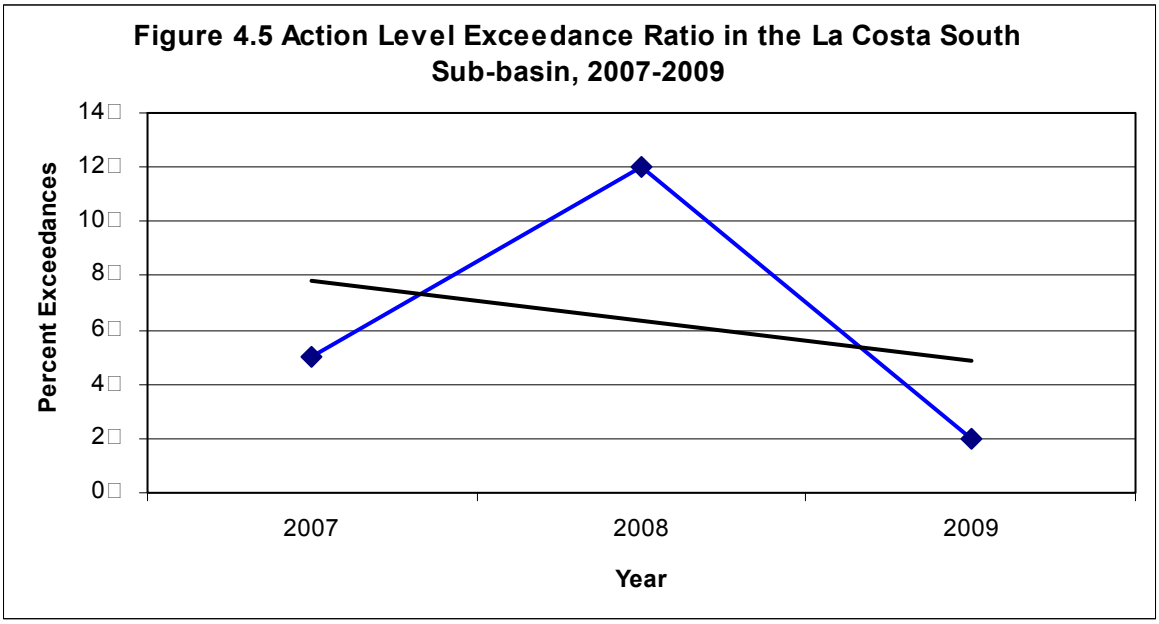

Data collected in the La Costa South sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.6 illustrates the La Costa South sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.6

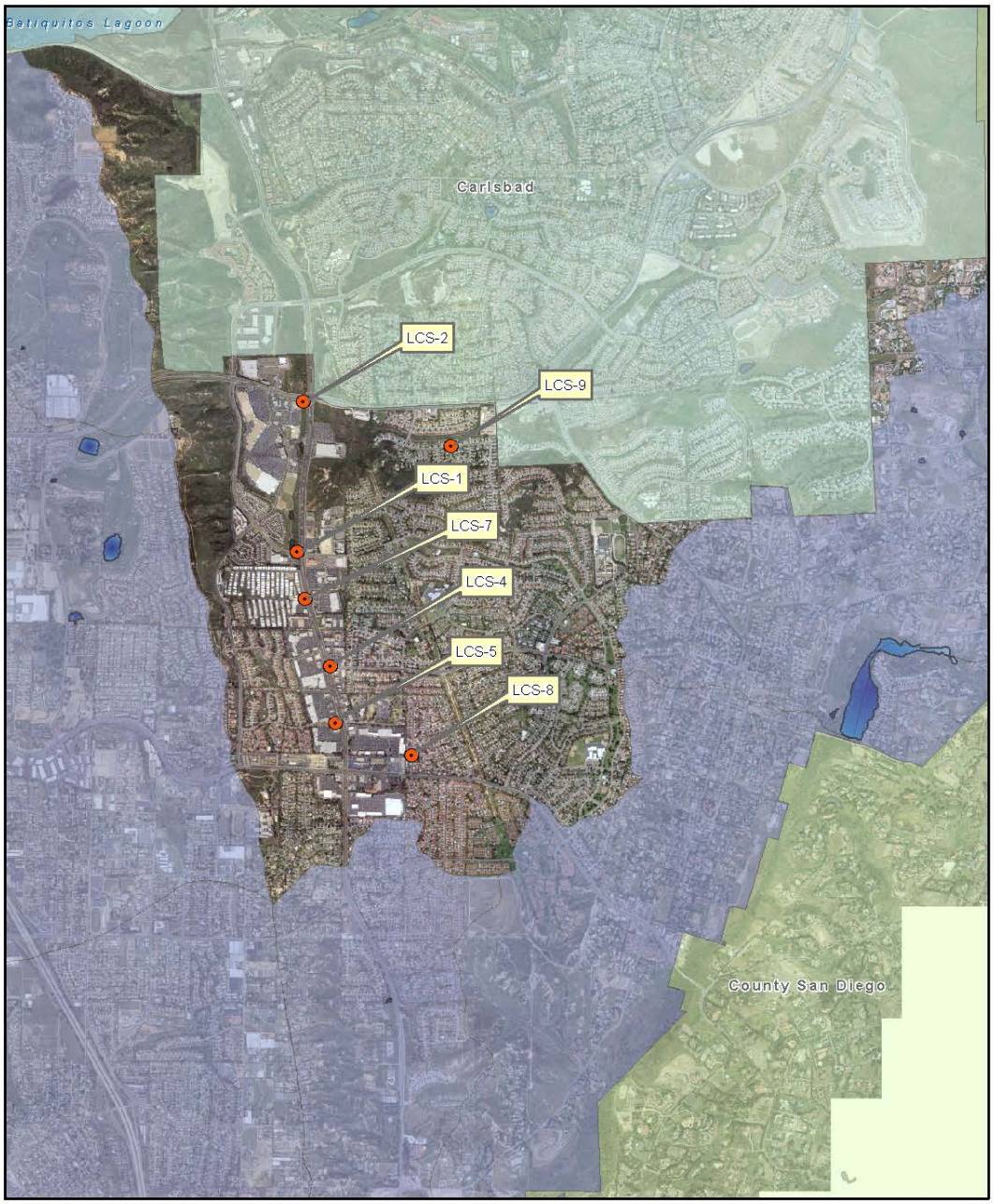

La Costa South Sub-basin

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4.4 Leucadia Sub-basin

Dry weather monitoring in the Leucadia sub-basin (LUC) included a total of seven locations; five primary sites and two alternate sites. Land uses in this area include both residential and commercial with significant, albeit decreasing, numbers of commercial nurseries and growers. All monitoring sites located in the Leucadia sub-basin drain to the Batiquitos Lagoon.

Dry weather monitoring in the Leucadia sub-basin included monitoring a total of seven locations (five primary sites and two alternate locations). These sites all covered distinct drainage areas throughout the basin. Six of the seven sample locations had water to sample at the time of monitoring, one location was dry. Alternate site LUC-4 was monitored as a substitute for the primary dry site at LUC-6. All six locations with water were field screened, one sample at LUC-8 was collected for full laboratory analysis and LUC-7 was analyzed for bacteria to assure continuity from previous years of monitoring and to retain long-term trend analysis.

Of the six locations where routine field screening was performed the resulting exceedances were variable. Two of the sample sites (LUC-1 and LUC-10) had elevated nitrates. One site, LUC-4 had elevated pH results. Two sites, LUC-7 and LUC-8 had elevated total coliform and fecal coliform results. LUC-7 also had elevated Ortho-phosphate, Turbidity and Enterococcus bacteria results.

Table 4.6 below summarizes the action levels exceeded in the Leucadia sub-basin.

Table 4.6 Leucadia Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-1	7/15/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10
LUC-4	9/30/09	Ponded	pH	9.35	pH	<6.5 or >9.0
LUC-7	9/30/09	Flowing	Ortho-phosphate	3.96	mg/L	2.0
LUC-7	9/30/09	Flowing	Turbidity	15.5	NTU	5
LUC-7	9/30/09	Flowing	Total Coliform	81,000	cfu/100 ml	50000
LUC-7	9/30/09	Flowing	Fecal Coliform	36,000	cfu/100 ml	20,000
LUC-7	9/30/09	Flowing	Enterococcus	31,000	cfu/100 ml	10,000
LUC-8	8/10/09	Flowing	Fecal Coliform	30,000	cfu/100 ml	20,000
LUC-8	8/10/09	Flowing	Enterococcus	10,000	cfu/100 ml	10,000

LUC-1

LUC-1 is located in a detention basin in the lowest elevations of the Leucadia sub-basin. The basin is located 773 feet from the Pacific Ocean Shoreline and 250 feet from Batiquitos Lagoon. The water sample at LUC-1 was taken from flowing water and was field screened. The water sample at LUC-1 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Confirmation sampling on the next business day concluded that nitrate concentrations continued to exceed action levels at this site. Concurrent monitoring of the next dry weather monitoring site upstream (LUC-10) revealed that this site also contained elevated nitrates. Table 4.7 below summarizes the results of the confirmation sampling for LUC-1.

Table 4.7 LUC-1 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-1	7/16/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10

Upon receipt of the exceedance results from the confirmation samples at LUC-1 and LUC-10, the Clean Water Program's storm water inspector was notified of the exceedances and the potential sources in the area. Refer to the discussion in LUC-10 for complete details of the investigation related to the nitrate exceedances at LUC-1 and LUC-10.

LUC-4

LUC-4 is located in a concrete detention basin in the upper reaches of the Leucadia sub-basin. The water sample at LUC-4 was taken from ponded water and was field screened. The water sample at LUC-4 contained slightly elevated pH results and a slightly elevated temperature. No other constituents analyzed at this site exceeded action levels. Because pH levels increase with rising temperature, the elevated pH was not indicative of any illicit discharges at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

LUC-7

LUC-7 is an alternate monitoring site located in a manhole that drains north into Batiquitos Lagoon**.** The land use upstream of this site consists of a golf course, residential area and an open space park. The water sample at LUC-7 was taken from flowing water and was field screened and analyzed for bacteria in order to further characterize bacteria concentrations in this sub-basin. The water sample at LUC-7 contained elevated ortho-phosphate, turbidity, total coliform, fecal coliform and Enterococcus bacteria results.

Despite an exceedance for multiple analytes on the first sampling event, the confirmation

samples on 10/01/09 were significantly below the initial sampling results and the action levels, indicating a transient nature of the source(s). No obvious residential, golf course or park related activities were found to be contributing to the initial exceedance during the confirmation investigation. Table 4.8 below summarizes the results of the confirmation sampling for LUC-7.

Table 4.8 LUC-7 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-7	10/01/09	Flowing	Ortho-phosphate	0.26	mg/L	2.0
LUC-7	10/01/09	Flowing	Turbidity	0	NTU	5
LUC-7	10/01/09	Flowing	Total Coliform	3,300	cfu/100 ml	50000
LUC-7	10/01/09	Flowing	Fecal Coliform	1,500	cfu/100 ml	20,000
LUC-7	10/01/09	Flowing	Enterococcus	1,000	cfu/100 ml	10,000

LUC-8

LUC-8 is located in a manhole that drains north into Batiquitos Lagoon**.** The land use upstream of this site consists of a golf course, residential area and an open space park area. LUC-8 was one of the sites selected for full analytical monitoring in 2009. The water sample at LUC-8 was taken from flowing water that contained elevated fecal coliform and Enterococcus bacteria results. No other constituents analyzed at this site exceeded action levels.

Despite an exceedance for two bacteria indicators on the first sampling event, the confirmation samples on 8/12/09 were significantly below the initial sampling results and the action levels, indicating a transient nature of the source(s). No obvious residential, golf course or park related activities were found to be contributing to the initial exceedance during the confirmation investigation. Table 4.9 below summarizes the results of the confirmation sampling for LUC-8.

Table 4.9 LUC-8 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-8	8/12/09	Flowing	Fecal Coliform	6,450	cfu/100 ml	20,000
LUC-8	8/12/09	Flowing	Enterococcus	5,100	cfu/100 ml	10,000

LUC-10

LUC-10 is located in a manhole that drains north into the detention basin where LUC-1 is located before ultimately draining into the Batiquitos Lagoon. The water sample at LUC-10 was taken from flowing water and was field screened. The water sample at LUC-10 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Confirmation sampling on the next business day concluded that nitrate concentrations continued to exceed action levels at this site. Concurrent monitoring of the next dry weather monitoring site downstream (LUC-1) revealed that it also had elevated nitrates. Table 4.10 below summarizes the results of the confirmation sampling for LUC-10.

Table 4.10 LUC-10 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-10	7/16/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10

Upon receipt of the exceedance results from the confirmation samples at LUC-1 and LUC-10, the Clean Water Program's storm water inspector was notified of the exceedances and the potential sources in the area. Several storm water facilities were inspected upstream to try to trace the flow of water in the storm drain system and to try and identify the nitrate source(s) upstream of LUC-10. Although much of the storm water system in this sub-basin is 30 ft underground, the inspector noted that half a mile upstream from LUC-10 the system was completely dry.

A review of historical data at LUC-1 and LUC-10 indicates that the only exceedances at these locations have been for nitrate. It has been reasoned that groundwater flows are the cause for the nitrate exceedances at these locations. In consideration of these factors and supported by best professional judgment, no further source investigations for the elevated nitrate was performed.

Five of the eight sampling sites (LCS-1, LCS-2, LCS-4, LCS-5 and LCS-7) in this sub-basin have consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.7 illustrates the trend in water quality exceedances in the La Costa South sub-basin over the past three years based on the analysis from these sites. Overall, the trend of water quality exceedances is down over the three year monitoring period, indicating improvements in water quality in this sub-basin.

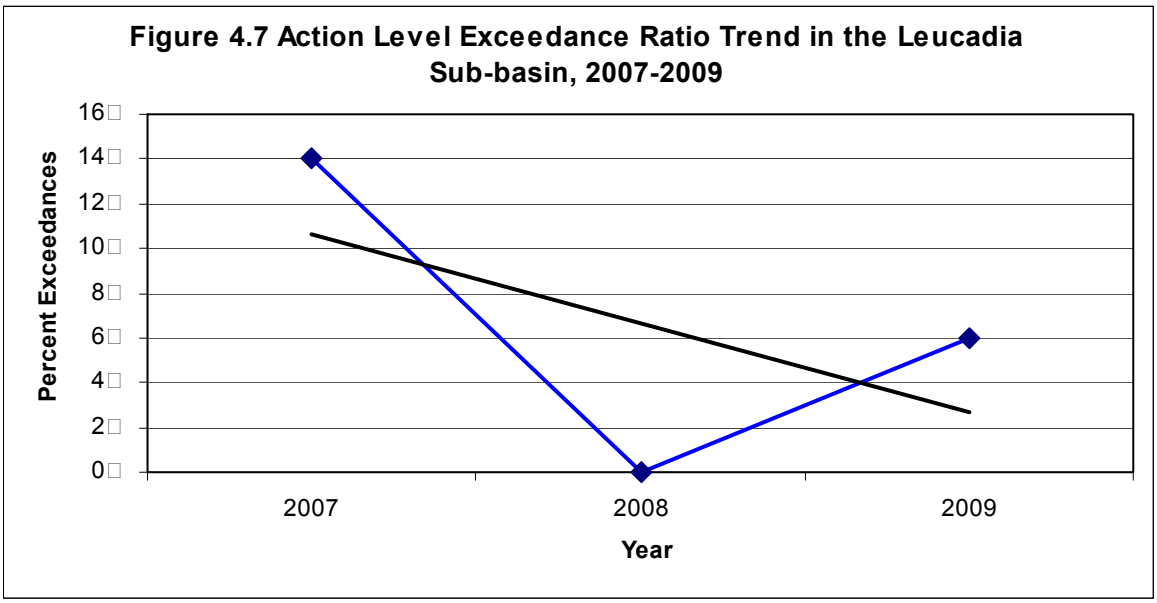

Data collected in the Leucadia sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.8 illustrates the Leucadia sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.8

Leucadia Sub-basin

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N

4.5 Encinitas Sub-basin

Dry weather monitoring in the Encinitas sub-basin (ENC) included a total of fourteen locations; thirteen primary sites and one alternate site. This sub-basin covers the oldest area of development in the city and consists primarily of residential and commercial land uses including many nurseries. This sub-basin has the most monitoring locations in the city as it has historically had the most water quality exceedances. Sample locations were chosen based on sampling sites established in the previous dry weather monitoring program and other special studies. The locations monitored in this sub-basin are primarily located along Cottonwood Creek with a few sites located on tributaries to Cottonwood Creek. All run-off in the Encinitas sub-basin drains to the Pacific Ocean via Cottonwood Creek.

Of the 13 primary locations, 10 sites had flowing water to sample, two sites had ponded water (ENC-6 and ENC-12) and one site (ENC-17) was dry. One alternate site (ENC-14) in this sub-basin was selected as a replacement for the dry site at ENC-17. All 14 locations with water were field screened. Four sites were collected for full laboratory analysis, and another four sites were analyzed for bacteria indicators at the laboratory. Of the 14 locations sampled and tested, ten of those sites exceeded water quality standards for various field screened analytes. In total, five of the sample sites had elevated conductivity, six sites had elevated nitrates, four sites had elevated ortho-phosphates, two sites had elevated ammonia, one site exceeded for turbidity and bacteria indicators and another site had elevated pH. Table 4.11 below summarizes all of the action levels exceeded in the Encinitas sub-basin during routine monitoring.

Table 4.11 Encinitas Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-1	7/20/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-3	7/22/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-3	7/22/09	Flowing	Conductivity	5.59	mS/cm	5.00
ENC-3	7/22/09	Flowing	Turbidity	19.3	NTU	5.00
ENC-5*	7/22/09	Flowing	Ammonia	1.22	mg/L	1.0
ENC-5	7/22/09	Flowing	Conductivity	5.11	mS/cm	5.00
ENC-5	7/22/09	Flowing	Nitrate (NO3-N)	10.09	mg/L	10.0
ENC-6*	7/22/09	Ponded	Ammonia	2.29	mg/L	1.0
ENC-6	7/22/09	Ponded	Conductivity	7.55	mS/cm	5.00
ENC-6	7/22/09	Ponded	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-8	7/22/09	Flowing	Nitrate (NO3-N)	23.06	mg/L	10
ENC-10	7/29/09	Flowing	Ortho-phosphate	3.73	mg/L	2.0
ENC-10	7/29/09	Flowing	Turbidity	22.1	NTU	5.00
ENC-10	7/29/09	Flowing	Total Coliform	121,000	cfu/100 ml	50000
ENC-10	7/29/09	Flowing	Fecal Coliform	110,000	cfu/100 ml	20,000
ENC-10	7/29/09	Flowing	Enterococcus	78,000	cfu/100 ml	10,000
ENC-11	8/05/09	Flowing	Conductivity	7.14	mS/cm	5.00
ENC-11	8/05/09	Flowing	Nitrate (NO3-N)	16.34	mg/L	10
ENC-12	8/03/09	Ponded	Orthophosphate	3.73	mg/L	2.0
ENC-14	8/17/09	Ponded	Conductivity	17.4	mS/cm	5.00
ENC-14	8/17/09	Ponded	Ortho-phosphate	2.14	mg/L	2.0
ENC-14	8/17/09	Ponded	pH	9.13	pH	<6.5 or >9.0
ENC-18	8/05/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10
ENC-18	8/05/09	Flowing	Ortho-phosphate	3.53	mg/L	2.0

*This was an erroneous exceedance due to chemistry interference in the instrumental kit (K-1503). Please refer to discussion in Section 4.0.

ENC-1

ENC-1 is located at an outfall that drains to the Pacific Ocean via Cottonwood Creek. ENC-1 was one of the sites selected for full analytical monitoring in 2009. The water sample was taken from a flowing outfall. The water sample at ENC-1 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Confirmation sampling on the next business day concluded that nitrate concentrations continued to exceed action levels at this site. Table 4.12 below summarizes the results of the confirmation sampling for ENC-1.

Table 4.12 ENC-1 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-1	7/21/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10

It is believed that elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate Exceedances for a more detailed discussion of groundwater). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed.

ENC-3

ENC-3 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use in this sub-basin is primarily commercial. The water sample was taken from low flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-3 contained elevated nitrates, conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. Follow-up sampling on the next business day concluded that nitrate, conductivity and turbidity concentrations still exceeded action levels at this site. Table 4.13 below summarizes the results of the confirmation sampling for ENC-3.

Table 4.13 ENC-3 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-3	7/23/08	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10
ENC-3	7/23/08	Flowing	Conductivity	5.62	mS/cm	5.00
ENC-3	7/23/08	Flowing	Turbidity	55.2	NTU	5.00

It is believed that elevated nitrates and conductivity are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate Exceedances for a more detailed discussion of groundwater).

ENC-5

ENC-5 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use in this sub-basin is primarily commercial. The water sample was taken from flowing water and it was field screened using the original instrumental kit (K-1503) for ammonia and analyzed for bacteria indicators. The water sample at ENC-5 contained elevated ammonia, conductivity and nitrates. No other constituents analyzed at this site exceeded action levels. A confirmation sample for ammonia was analyzed with the K-1503 kit on the next business day and the results exceeded action levels again. An

additional confirmation sample for conductivity and nitrate revealed that there were slightly elevated levels of conductivity levels at this site but the nitrate levels had dropped below the action level benchmark. Table 4.14 below summarizes the results of the confirmation sampling for ENC-5.

Table 4.14 ENC-5 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-5*	7/23/08	Flowing	Ammonia (K-1503 Kit)	1.23	mg/L	1.0
ENC-5	7/23/08	Flowing	Conductivity	5.34	mS/cm	5.00
ENC-5	7/23/08	Flowing	Nitrate (NO3-N)	8.95	mg/L	10

*This was an erroneous exceedance due to chemistry interference in the instrumental kit (K-1503). Please refer to discussion in Section 4.0.

Upon receipt of the continued exceedance for ammonia at ENC-5 and ENC-6, the Clean Water Program notified the Clean Water Program's storm water inspector and also contacted the City's Public Works Department to ask them about storm drain maintenance activities upstream. Refer to the discussion at the end of ENC-6 for complete details of the follow-up activities related to the ammonia exceedances at ENC-5 and ENC-6.

ENC-6

ENC-6 is located in a natural channel in Moonlight Creek that drains south toward Cottonwood Creek and ultimately drains into the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from ponded water and it was field screened using the original instrumental kit (K-1503) for ammonia and analyzed for bacteria indicators. The water sample at ENC-6 contained elevated ammonia, conductivity and nitrates. No other constituents analyzed at this site exceeded action levels. A confirmation sample for ammonia was analyzed with the K-1503 kit on the next business day and the results exceeded action levels again. Additional confirmation samples for conductivity and nitrate revealed that there were still exceedances for these analytes at this site. Table 4.15 below summarizes the results of the confirmation sampling for ENC-6.

Table 4.15 ENC-6 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-6*	7/23/09	Ponded	Ammonia (K-1503 Kit)	1.84	mg/L	1.0
ENC-6	7/23/09	Ponded	Conductivity	7.49	mS/cm	5.00
ENC-6	7/23/09	Ponded	Nitrate (NO3-N)	>11.3	mg/L	10

*This was an erroneous exceedance due to chemistry interference in the instrumental kit (K-1503). Please refer to discussion in Section 4.0.

These results for elevated conductivity and nitrate are consistent with elevated results in

prior monitoring years (Refer to Table 5.3). It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate exceedances for a more detailed discussion of groundwater). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed.

Upon receipt of the continued exceedance for ammonia at ENC-5 and ENC-6, the Clean Water Program notified the Clean Water Program's storm water inspector to initiate follow-up investigations and also contacted the City's Public Works Department to ask them about storm drain maintenance activities upstream. One informal inspection in the nearby commercial facility was conducted however there were no violations observed and no explicit sources were identified. The Public Works Department had also reported recently cleaning large amounts of trash out of the storm drain which is directly upstream of ENC-5. They reported that the trash and debris may have contained human sewage due to littering from local day laborers that visit the area on a daily basis. Since the maintenance activity had occurred within days of the sampling events at ENC-5 and ENC-6 no further investigations were performed at these sites.

Table 4.16 below summarizes all of the investigation activities that were performed in the area.

Table 4.16 Investigation Activities for ENC-5 and ENC-6

Name	Address	Date of Inspection	Results
Commercial Facility	102-160 Encinitas Blvd.	7/27/09	No violations noted.
Municipal inspection of storm drain system	135 Encinitas Blvd.	7/27/09	Removal of large amounts of trash possibly containing human sewage and other organic debris from the storm drain directly upstream of ENC-5.

ENC-8

ENC-8 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use surrounding this site is primarily commercial. The water sample

was taken from flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-8 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Follow-up sampling on the next business day concluded that nitrate concentrations still exceeded action levels at this site. Table 4.17 below summarizes the results of the confirmation sampling for ENC-8.

Table 4.17 ENC-8 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-8	7/23/08	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10

These results are consistent with elevated conductivity and nitrate results at this site in previous monitoring years. Since there were no other exceedances, an upstream investigation for the elevated nitrate and conductivity was not performed. It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate-nitrogen exceedances for a more detailed discussion of groundwater).

ENC-10

ENC-10 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use upstream from this site is comprised of both residential and commercial areas. ENC-10 was one of the sites selected for full analytical monitoring in 2009. The water sample was taken from flowing water in a naturally vegetated area. The water sample at ENC-10 contained elevated ortho-phosphate, turbidity and bacteria indicators. Follow-up sampling on the next business day concluded that the water sample contained slightly elevated turbidity. There were no other action level exceedances. Table 4.18 below summarizes the results of the confirmation sampling for ENC-10.

Table 4.18 ENC-10 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-10	7/31/08	Flowing	Ortho-phosphate	0.63	mg/L	2.0
ENC-10	7/31/08	Flowing	Turbidity	12.9	NTU	5.00
ENC-10	7/31/08	Flowing	Total Coliform	9,450	cfu/100 ml	50000
ENC-10	7/31/08	Flowing	Fecal Coliform	3,300	cfu/100 ml	20,000
ENC-10	7/31/08	Flowing	Enterococcus	7,500	cfu/100 ml	10,000

The confirmation samples for ortho-phosphate and bacteria were significantly below the initial sampling results and the action levels indicating a transient nature of the source. There were no other follow-up activities performed.

ENC-11

ENC-11 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-11 contained elevated conductivity and nitrates. No other constituents analyzed at this site exceeded action levels. A confirmation sample for conductivity and nitrate revealed that there were slightly elevated levels of conductivity levels at this site but the nitrate levels had dropped just below the action level benchmark. Table 4.19 below summarizes the results of the confirmation sampling for ENC-11.

Table 4.19 ENC-11 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-11	8/10/09	Flowing	Conductivity	6.55	mS/cm	5.00
ENC-11	8/10/09	Flowing	Nitrate (NO3-N)	9.79	mg/L	10

Elevated conductivity and nitrate results at this site are consistent with documented exceedances for these constituents in previous monitoring years. It is has been well reasoned that the elevated conductivity is a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate-nitrogen exceedances for a more detailed discussion of groundwater). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed

ENC-12

ENC-12 is located in a manhole that drains west toward the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from shallow ponded water in the storm drain and was field screened only. The water sample at ENC-12 contained elevated ortho-phosphate. No other constituents analyzed at this site exceeded action levels. When Clean Water Program field staff returned to collect a confirmation sample at ENC-12 the next business day, the site was completely dry. No further follow-up was conducted.

ENC 14

ENC-14 is located in a storm drain that drains south towards Cottonwood Creek. Land use upstream from this site is primarily residential. The water sample was taken from shallow ponded water in the storm drain and was field screened only. The water sample contained elevated ortho-phosphate. No other constituents analyzed at this site exceeded action levels. When Clean Water Program field staff returned to collect a confirmation sample at ENC-14 the next business day, the site was completely dry. No further follow-up was conducted.

ENC-18

ENC-18 is located in a manhole in the upper reaches of the Encinitas sub-basin. Land uses near this site include residential areas, a golf course and significant, albeit decreasing numbers of commercial nurseries and growers. The water sample was taken from flowing water and was field screened only. The water sample contained elevated concentrations of nitrates and ortho-phosphate. No other constituents analyzed at this site exceeded action levels. The confirmation samples were significantly below the initial sampling results and the action levels indicating a transient nature of the source(s). No obvious residential, golf course or nursery activities were found to be contributing to the initial exceedance during the confirmation investigation. Table 4.20 below summarizes the results of the confirmation sampling for ENC-18.

Table 4.20 ENC-18 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-18	8/10/09	Flowing	Nitrate	0.82	mg/L	10.0
ENC-18	8/10/09	Flowing	Ortho-phosphate	2.5	mg/L	2.0

Groundwater in the Encinitas Sub-basin

Historically consistent nitrate and conductivity exceedances in the Encinitas sub-basin support a groundwater source. As such, in 2009 it has been reasoned that groundwater flows are the cause for the exceedances in nitrate at ENC-1, ENC-3, ENC-5, ENC-6, ENC-8, and ENC-11 and ENC-18 and the exceedances of conductivity at ENC-3, ENC-5, ENC-6, ENC-11, and ENC-14. The locations of the conductivity exceedances are persistent from year to year and have been detected at the primary groundwater tributaries in the sub-basin where ENC-6 and ENC-11 are located. A historical analysis of these sites show that they have exceeded for nitrates multiple times since 2002 (refer to Table 5.3). The conductivity exceedances have been consistently accompanied by elevated levels of nitrate. The eleven nitrate exceedances are all located downstream of the confluence of the groundwater tributaries and the other flows in Cottonwood Creek. Three of these stations, ENC-1, ENC-3 and ENC-6, are all located west of Pacific Coast Highway 101 and samples at these locations are collected within 1,500 feet of each other. All of these sampling locations are near the topographic low point in this sub-basin near the coast. Nitrate concentrations remain consistent in the reach along Moonlight Creek and Cottonwood Creek. Further discussion of nitrate and conductivity exceedances is located in Section 5.3 of this report.

Figure 4.9 below illustrates the parameters in which water quality criteria were exceeded in the Encinitas Sub-basin from 2002-2009.

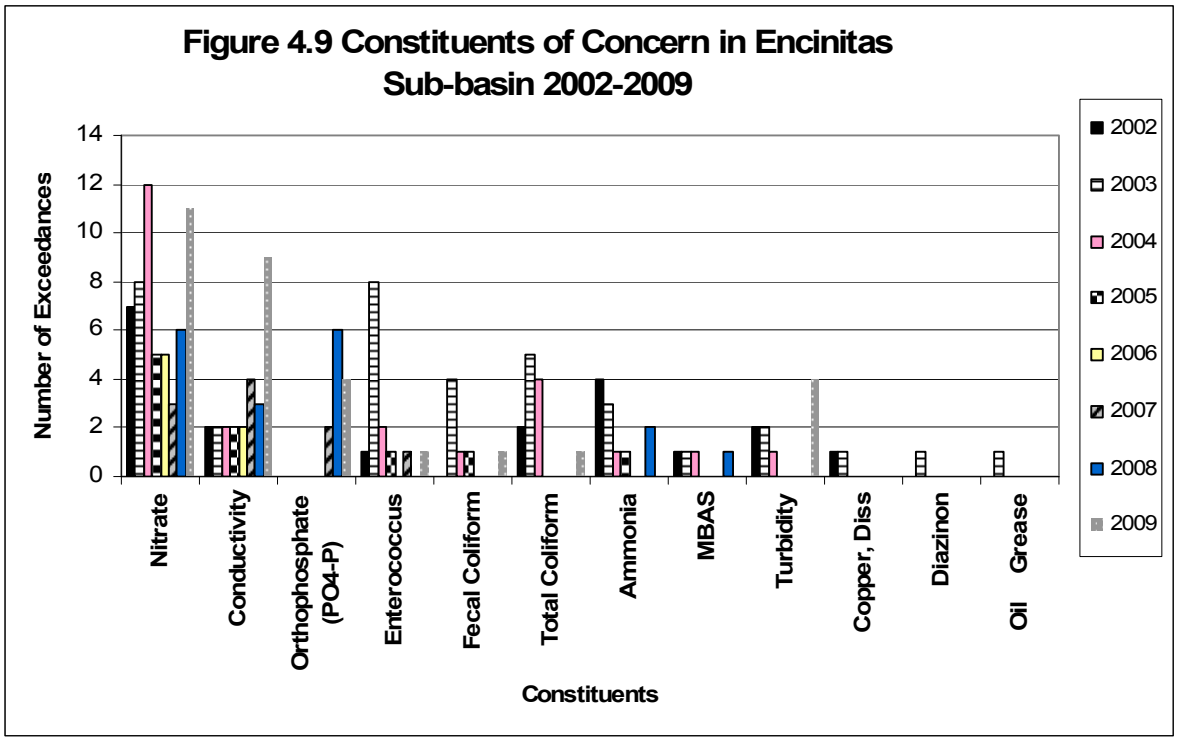

Nine of the fourteen sampling sites (ENC-1, ENC-3, ENC-4, ENC-5, ENC-6, ENC-8, ENC-10, ENC-11 and ENC-15) in this sub-basin have consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.10 illustrates the trend in water quality exceedances in the Encinitas sub-basin over the past three years based on the analysis from these sites. Although several water quality exceedances have been typical for the Encinitas sub-basin, overall water quality has been improving over the past few years of dry weather monitoring.

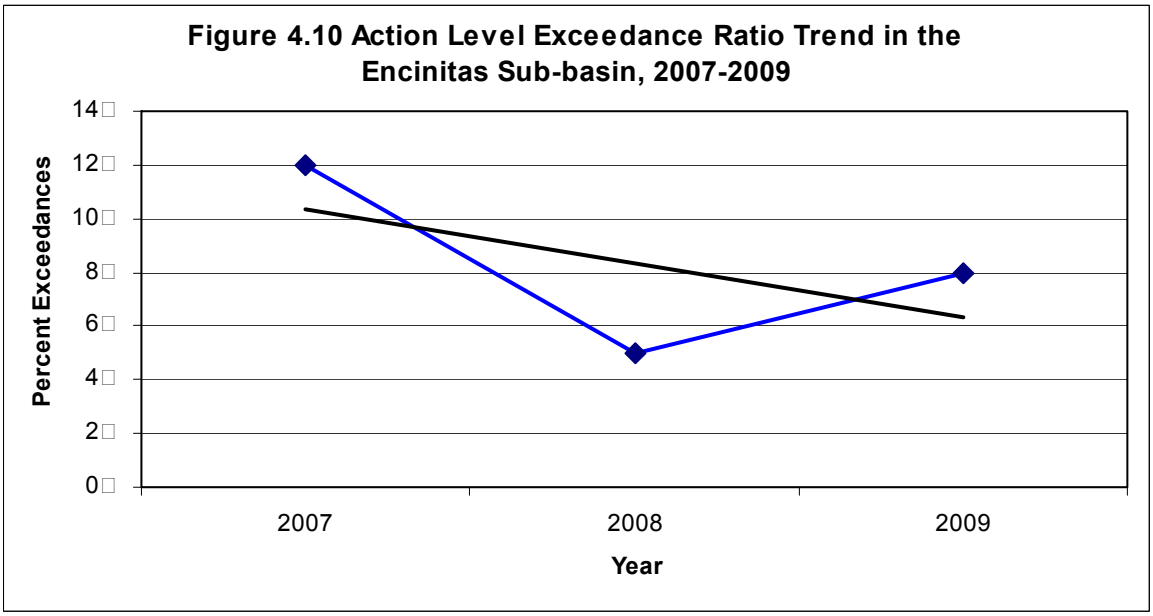

Data collected in the Encinitas sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.11 illustrates the Encinitas sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.11

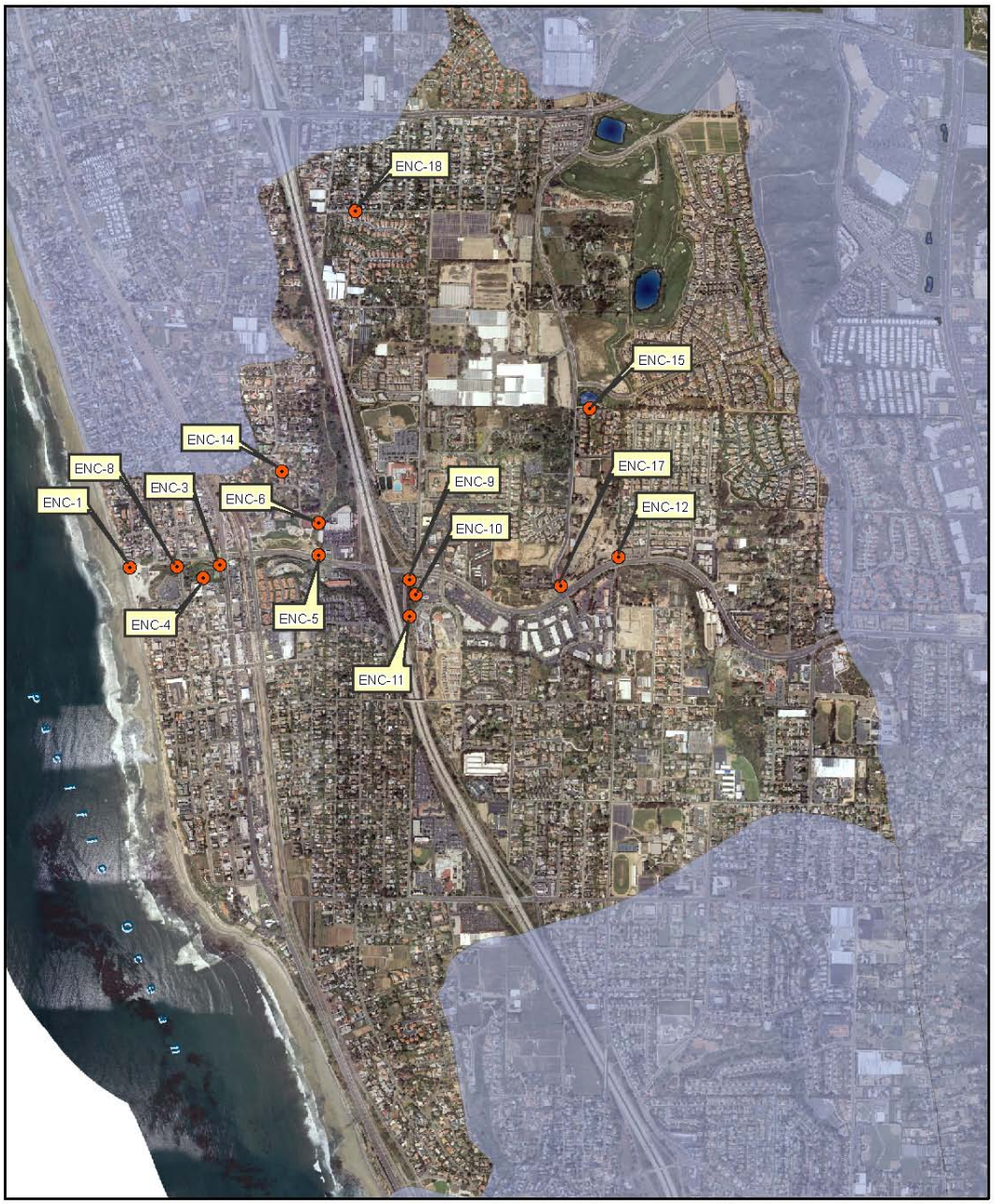

Encinitas Sub-basin

0 1,200 2,400 Feet

N

4.6 Rancho Santa Fe Sub-basin

The dry weather monitoring locations included two primary sites in the Rancho Santa Fe (RSF) sub-basin. Land use in this area is primarily residential with few commercial facilities also located in the sub-basin. All run-off in this sub-basin drain to Escondido Creek which feeds into the San Elijo Lagoon.

Of the two designated locations for routine monitoring in 2009, one location (RSF-4) was observed to have ponded water and one location (RSF-1) was dry. Both field screening and analytical lab samples were collected at RSF-4. There were no water quality exceedances in this sub-basin in 2009.

Only one of the two sampling sites (RSF-4) in this sub-basin has consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.5 illustrates a downward trend in water quality exceedances in the Rancho Santa Fe sub-basin over the past three years based on the analysis from this site.

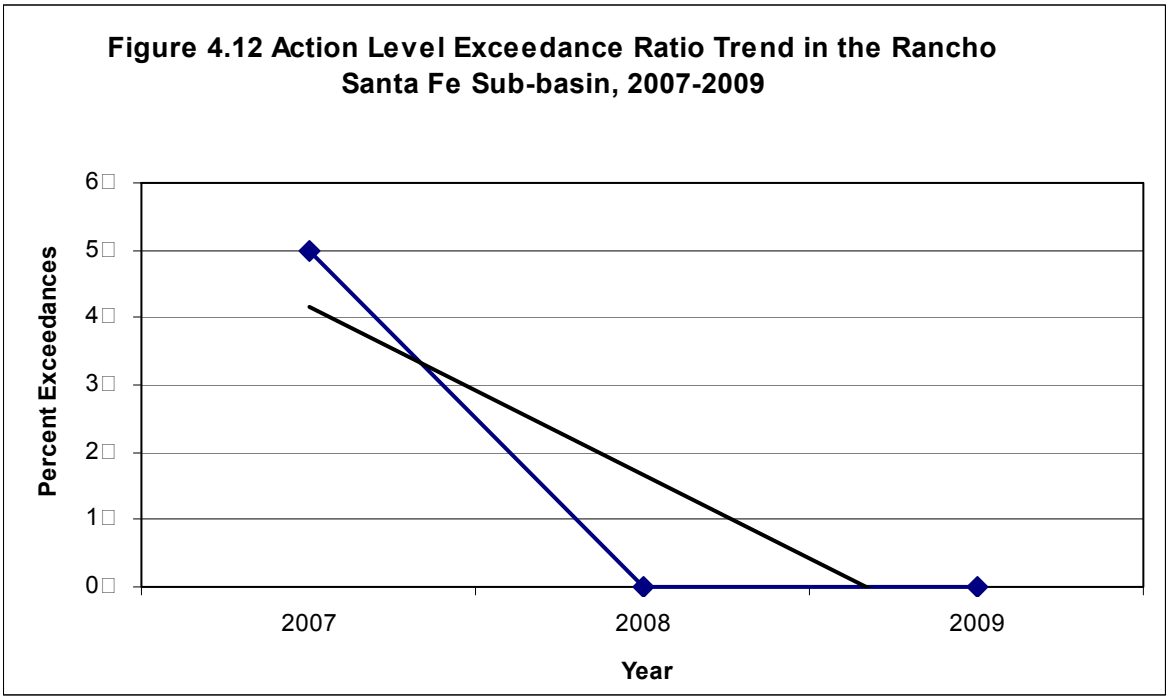

Data collected in the Rancho Santa Fe sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.13 illustrates the Rancho Santa Fe Sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.13

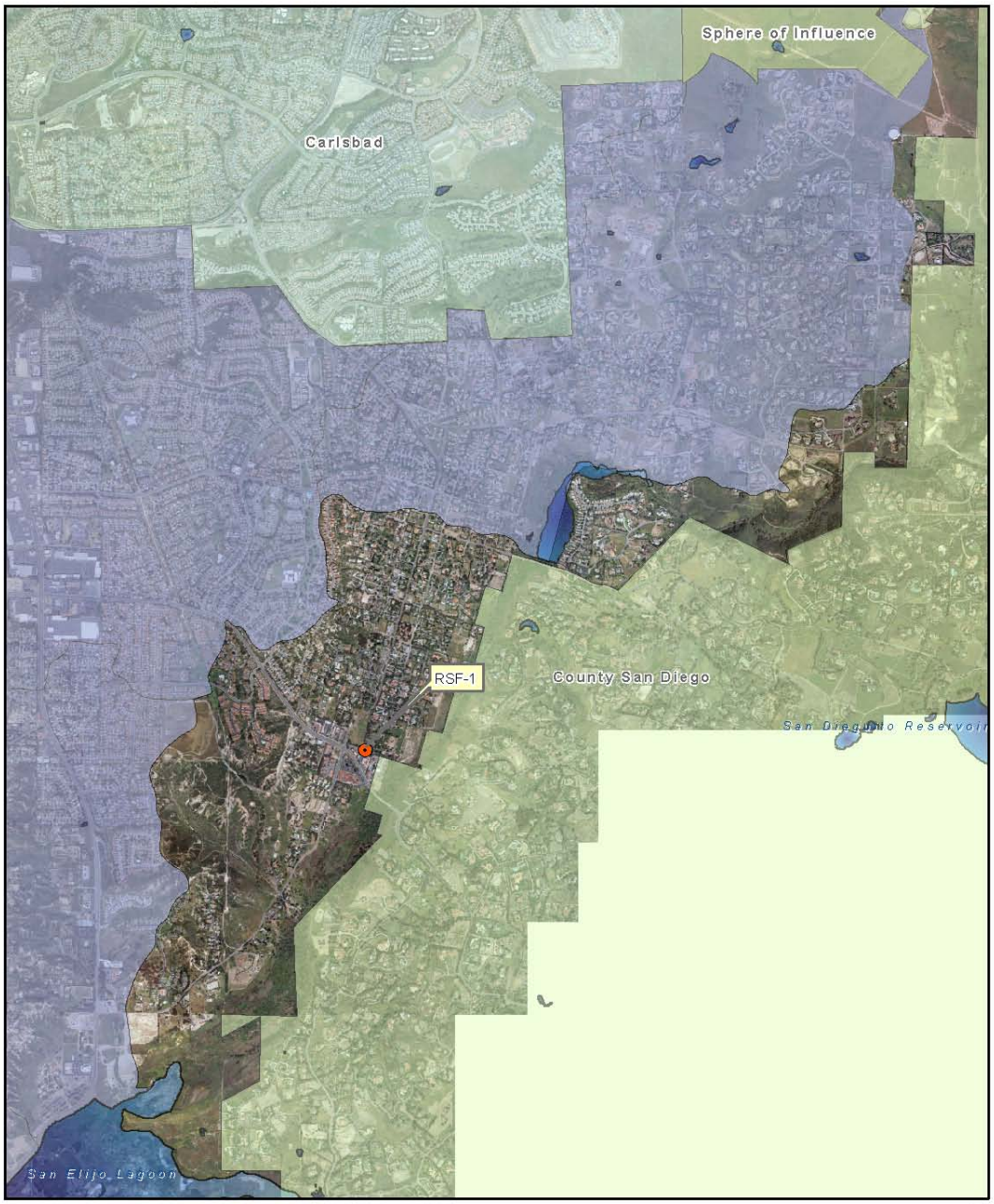

Rancho Santa Fe Sub-basin

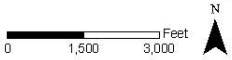

4.7 Lux Canyon Sub-basin

The dry weather monitoring locations included two primary sites and one alternate site in the Lux Canyon sub-basin (LUX). Land use in this area is primarily residential with a few commercial facilities located in the sub-basin. All run-off in the Lux Canyon sub-basin drains to the San Elijo Lagoon.

Of the three designated locations for routine monitoring in 2009, LUX-2 had ponded water and LUX-1 and LUX-3 were completely dry. There were no analytical lab samples collected in this sub-basin, LUX-2 was only field screened. Table 4.21 summarizes the action level exceedances in the LUX Canyon sub-basin.

Table 4.21 LUX Canyon Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUX-2	8/17/09	Ponded	Turbidity	27.9	NTU	5.00

LUX-2

LUX-2 is located in a natural creek in the Lux Canyon sub-basin. Land uses near this site include primarily residential areas. The water sample was taken from shallow ponded water and was field screened only. The water sample contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed. Table 4.22 below summarizes the results of the confirmation sampling for LUX-2.

Table 4.22 LUX-2 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUX-2	8/19/09	Ponded	Turbidity	27.4	NTU	5.00

Only one sampling site (LUX-2) in this sub-basin has consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.5 has been prepared to illustrate a notable trend in water quality exceedances in the Lux Canyon sub-basin over the past three years of monitoring.

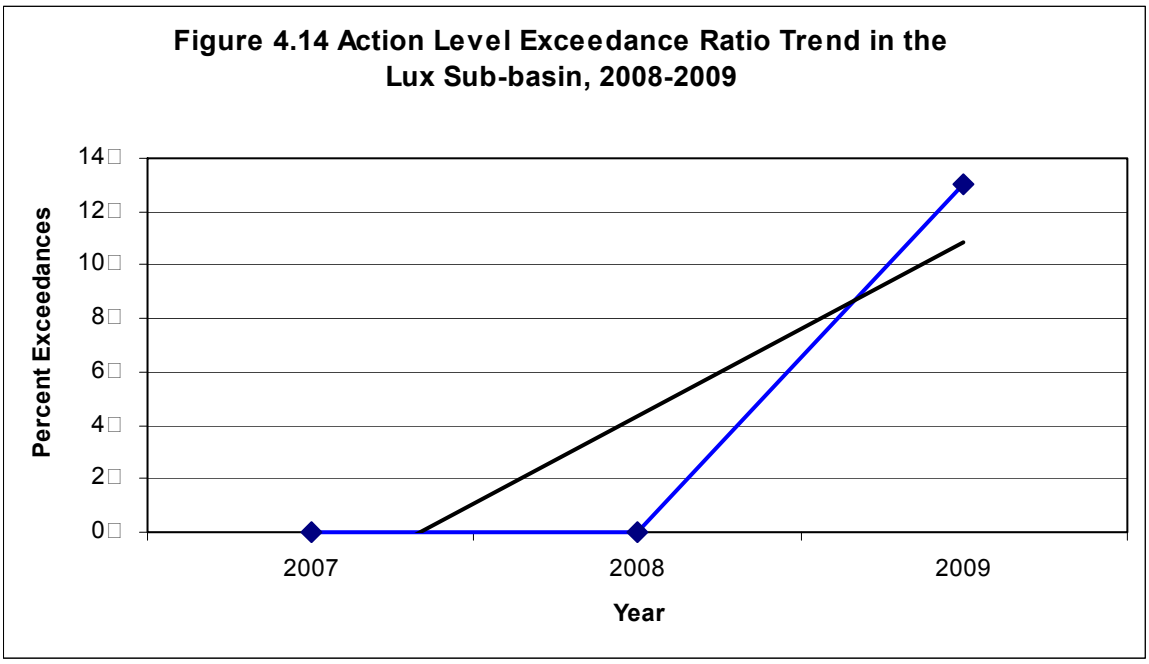

Data collected in the Lux Canyon sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.15 illustrates the Lux Canyon sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.15

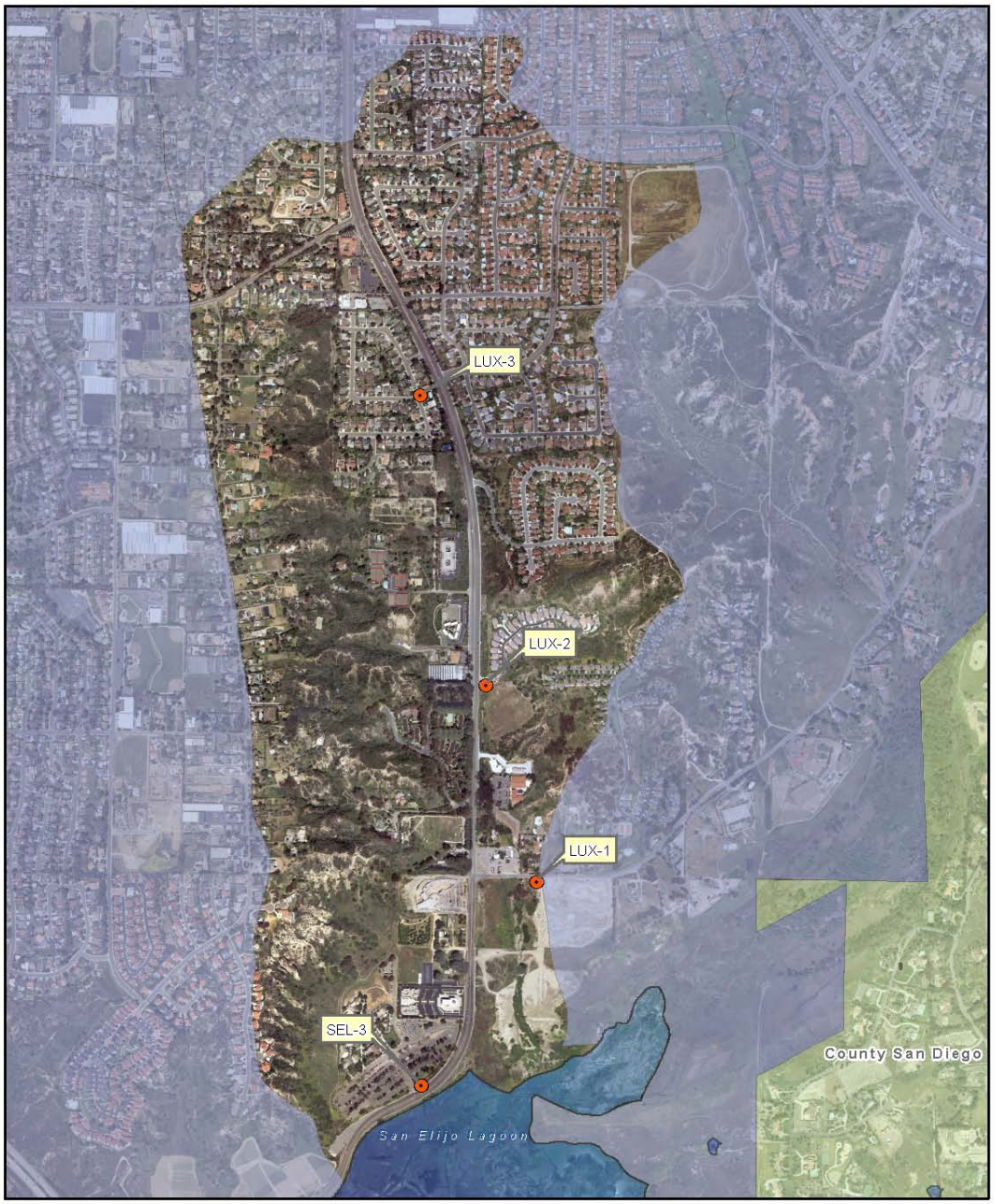

Lux Canyon Sub-basin

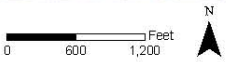

5.0 Summary

The City's comprehensive dry weather water quality monitoring conducted in 2009 meets all of the Dry Weather Monitoring requirements as established in the Municipal Storm Water Permit (Order 2007-01) in section II.B.3 of the Receiving Water and Urban Runoff Monitoring and Reporting Program. The data that was collected served to monitor local storm drain facilities and creeks for illicit connections and illicit discharges, allows for characterization of the water quality in the City and subsequent prioritization of sub-basins in the watershed and pollutants of concern in those sub-basins. This section presents a summary of all the dry weather monitoring results.

5.1 Water Quality Exceedances and Trends

The City of Encinitas can be sub-divided into seven distinct drainage sub-basins. Figure 5.0 illustrates the percent of analytes exceeding action levels in each sub-basin according to dry weather monitoring data collected from 2007 through 2009.

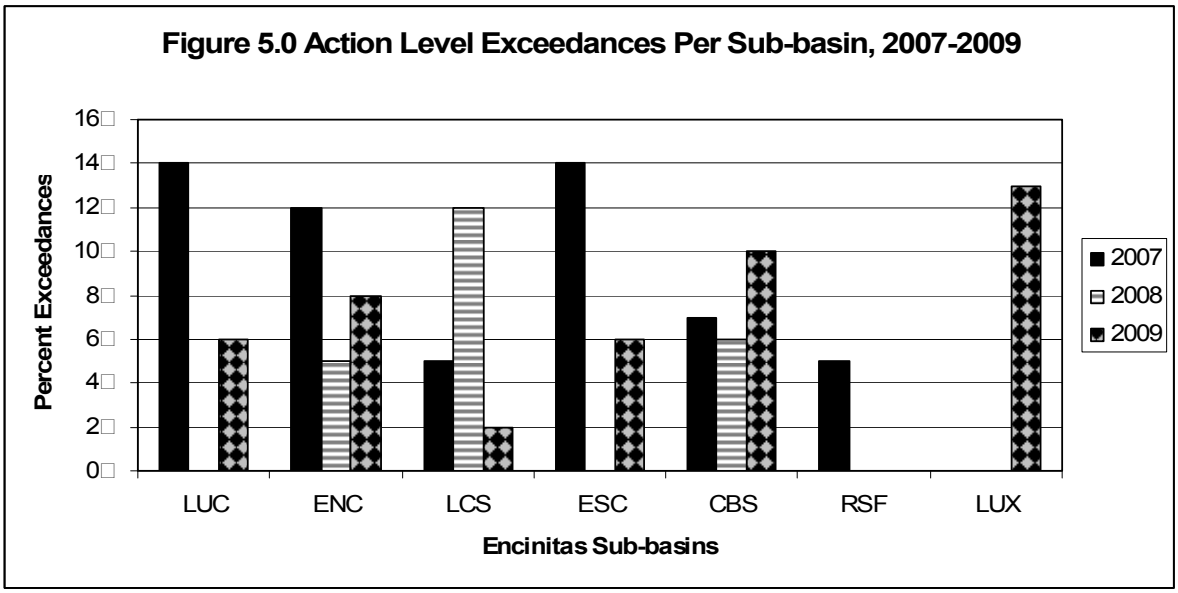

Data from Figure 5.0 illustrates that despite some increasing exceedance trends this year over last year; water quality on the whole has been improving since 2007. Steady improvements in water quality are evident in five out of seven sub-basins throughout Encinitas. In 2009, there were increasing exceedance trends in the Cardiff sub-basin (CBS) due to conductivity exceedances and in the Lux Canyon sub-basin (LUX) due to two turbidity exceedances. Notably, this year there were no exceedances in the Rancho Santa Fe Sub-basin (RSF).

Figure 5.1 illustrates the total exceedance rate for all sites sampled during each dry weather monitoring year since the inception of the Dry Weather Monitoring Program in 2002. In 2009, the total exceedance rate was 9%, a slight increase over last year. Overall, the trend of dry weather water quality exceedances city wide has been decreasing since 2002.

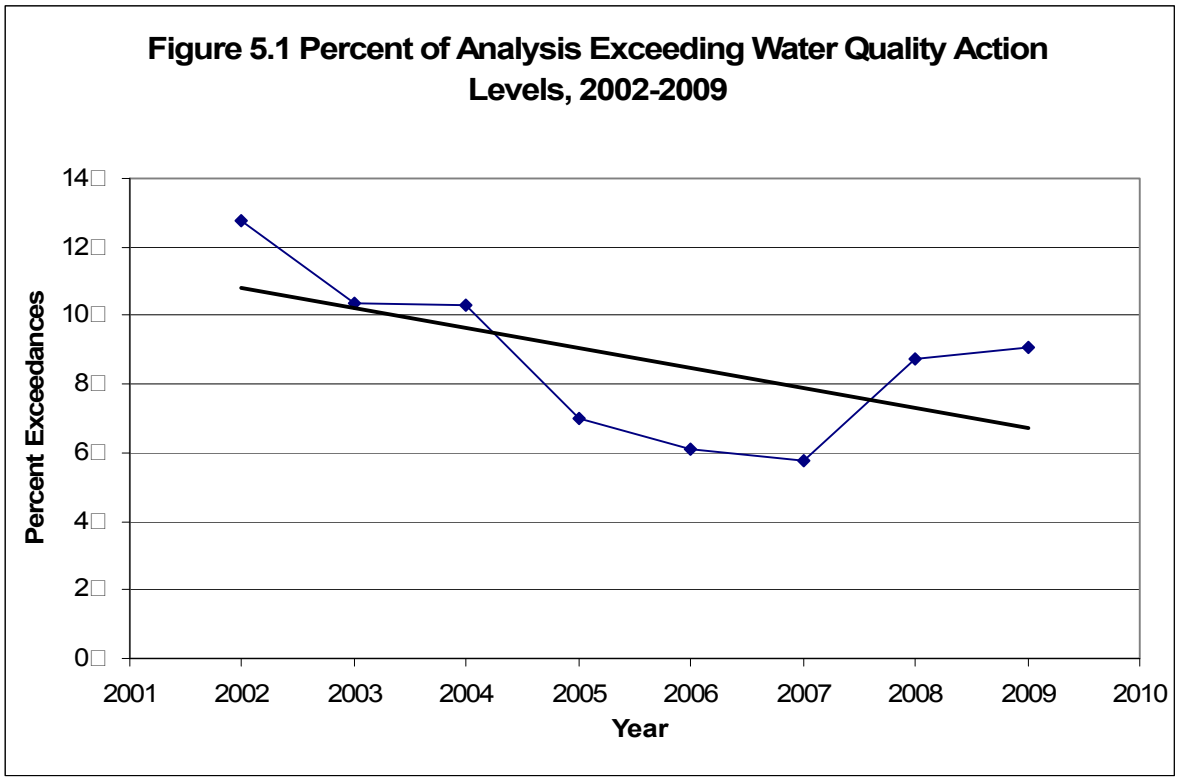
Figure 5.1 Percent of Analysis Exceeding Water Quality Action Levels, 2002-2009
Percent Exceedances
14
12
10
8
6
4
2
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

5.2 Prioritization of Constituents of Concern (COCs)

Figure 5.2 illustrates all water quality exceedances for each sub-basin in 2009.

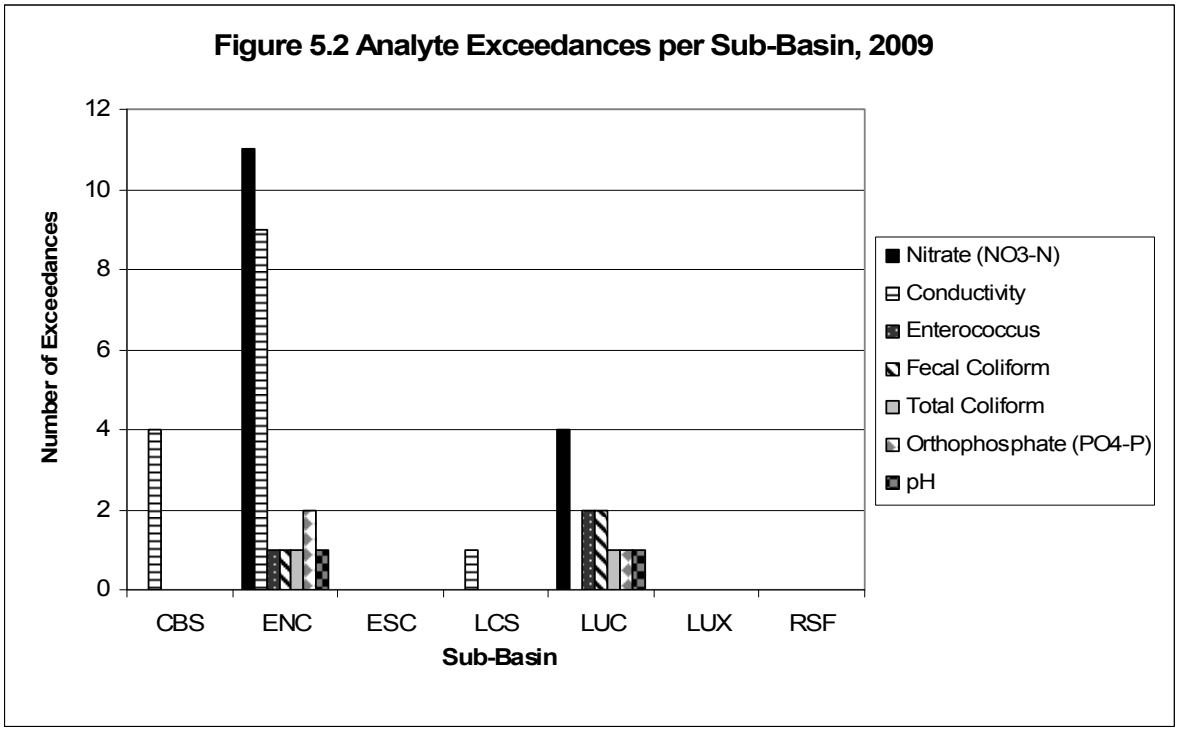

To further prioritize water quality issues in the sub-basins, the COCs were stratified by exceedances per COC in 2009 as illustrated in Figure 5.3.

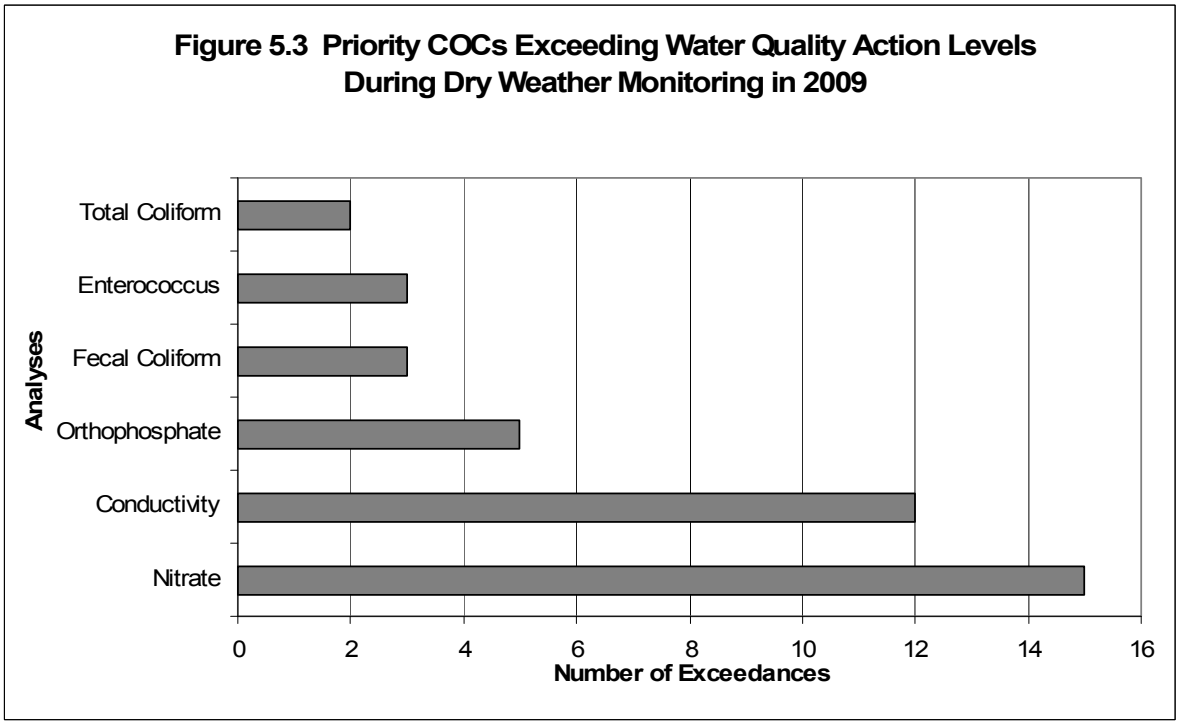

The COCs can be divided into three priority categories of low, medium and high. Table 5.0 is a matrix of criteria for selecting COC priorities.

Table 5.0 Constituents of Concern Prioritization Criteria

	Criteria	Priority	Recommended Action*
I	Exceedance Ratio <10% and trends are not increasing	Low	Continue routine monitoring and place COC on watch list.
II	Exceedance Ratio greater than 10%, less than 50%	Medium	Increase Monitoring Frequency in Following Dry Weather Program
III	Persistent Exceedances	Medium	Increase Monitoring Frequency in Following Dry Weather Program
IV	Impacting Receiving Waters, 303d listed	High	Special Study, ICID Investigations, BMP implementation
V	Exceedance Ratio >50%	High	Special Study/Investigations
VI	II and III	High	Special Study/Investigations

*Best professional judgment may indicate otherwise.

In order to lower the priority for a constituent from one year to the next, the COC must qualify for the next lower category according to the criteria listed above and not show an increasing trend in exceedances. A constituent may only decrease one step per year and may be removed from the list if the constituent was ranked low the previous year and had no exceedances in monitoring for the current year. Figure 5.4 below illustrates the exceedance ratios per COC in the 2009 monitoring period. The exceedance ratio is calculated by the following formula:

$$E=x/y*100$$

where,

E = exceedance ratio
x = total number of exceedances for selected COC
y = total number of analyses for the COC

This method allows for a comparison of the exceedance rates for each indicator. For 2009, exceedance ratios for nitrate were higher than the exceedance ratios of the other constituents. The exceedance ratios for conductivity and ortho-phosphate ranked second and third. The indicator exceedance ratios in Figure 5.4 define the prioritizations assigned to each constituent.

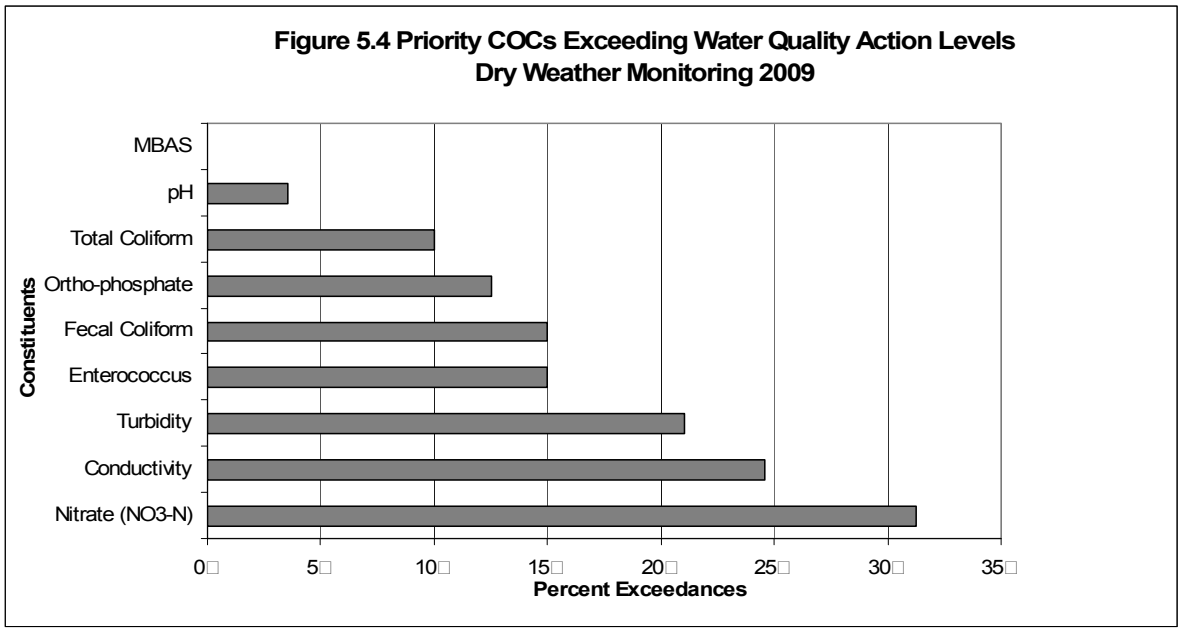

The City of Encinitas COCs were selected and prioritized according to criteria in Table 5.0 and the data presented in Figure 5.4. The high priority COCs are presented below in Table 5.1.

Table 5.1 2009 High Priority Constituents of Concern

COC	Priority	Action Plan
Bacteria •Total Coliform •Fecal Coliform •Enterococcus	High	• Continuing encampment removals • BMP implementation (grease removal equipment, coverage/containment for grease bins) • Maintain the Ultra Violet Treatment Facility • Continue to assess bacteria data by land use and by conveyance type
Nitrate-nitrogen	High	• Number of nitrate exceedances have been trending downward since 2002, however, San Elijo Lagoon is on 303(d) list of impaired water bodies for nutrients • Focus on education targeting irrigation runoff and inspections of nurseries. • Analyze the Carlsbad Watershed Lagoon TMDL monitoring data to identify activities which will lead to reduced water quality impacts in the San Elijo Lagoon.

The justification for the 2009 COC prioritization and the reasons supporting any changes are listed in Table 5.2 below.

Table 5.2 Annual Prioritization of Constituents of Concern, 2003-2009

Constituent	2003 Priority	2004 Priority	2005 Priority	2006 Priority	2007 Priority	2008 Priority	2009 Priority	Reason for Change
Conductivity	None	Low	Medium	Medium	Medium	Medium	Medium	Conductivity exceedances in 2009 were 25% and the exceedances are persistent from year to year at the same locations. However, criteria in evaluating conductivity exceedances are based on best professional judgment and high values of conductivity where groundwater is confirmed are not considered problematic from an IC/ID standpoint. Because this persistence is likely due to a constant source of groundwater flow in many locations, conductivity remains a medium priority.
Ammonia	High	Medium	Low	None	None	Low	Low	It was not possible to obtain exceedance rates for ammonia in 2009 due to the positive interference in the ammonia K-1503 instrumental kit and the erroneous results. All data for this constituent have been flagged and isolated from data assessments conducted in this report. The constituent will maintain a low priority and will be placed on the COC watch list and will be monitored in 2010.
MBAS	Medium	Medium	Low	None	None	Low	None	There were no exceedances for MBAS in 2009. This constituent is being removed from the list of COCs.
pH	None	None	Low	None	Low	Low	Low	In 2009, there were two exceedances for pH. The constituent will continue to be monitored in 2010 and remains on the COC watch list.
Orthophosphate				None	Low	Medium	Medium	Ortho-phosphate exceeded action levels 5 out of 40 analyses and has an exceedance ration of 13% in 2009. The constituent will continue to be routinely monitored and remains on the COC watch list at a medium priority.
Turbidity					Low	None	Medium	Turbidity percent exceedances increased to 21% in 2009. The constituent will continue to be monitored in 2010 and has been placed on the COC watch list.

Using the prioritization methodology described above, bacteria and nitrate remain high

priority COCs. Conductivity has increased in priority over the preceding monitoring periods. After factoring in all potential sources, groundwater is the most prevalent; therefore, conductivity remains a medium priority. Ammonia, MBAS and orthophosphates were raised in priority this year, as a result of 14 exceedances. The COCs that were removed from the list of COCs in 2009 include temperature and oil and grease. There were no exceedances for temperature during the past two monitoring years and it has been removed from the list of COCs. Oil and grease was added to the watch list in 2006; however, with no exceedances in the past three years of monitoring, it was lowered in prioritization and removed from the list of COCs this year.

5.3 Bacteria Indicator Exceedances

Extensive bacteria data has been collected for the past six dry weather seasons, allowing for a better overall characterization of bacteria sources and loading in the City. Enough data has been collected to attempt to characterize bacteria concentrations based on land use. The additional data collection at 7 sites located throughout the City also allows for long term trend assessments of bacteria concentrations in the City.

The two major land uses in Encinitas are commercial and residential and are often not distinct to a drainage basin but are mixed. The assessment of bacteria loading from these areas is based on primary land use as listed in the data set. Figure 5.5 illustrates the geometric mean concentrations of total coliform, fecal coliform and Enterococcus based on land use. According to the data collected from 2004 to 2009, the commercial areas contribute more bacteria to the MS4 for all three indicators, as calculated based on concentration only. The total coliform concentrations are approximately 45% higher, fecal coliform are approximately 47% higher, and Enterococcus concentrations are approximately 53% higher in commercial areas. The differences between commercial and residential areas are illustrated in Figure 5.5.

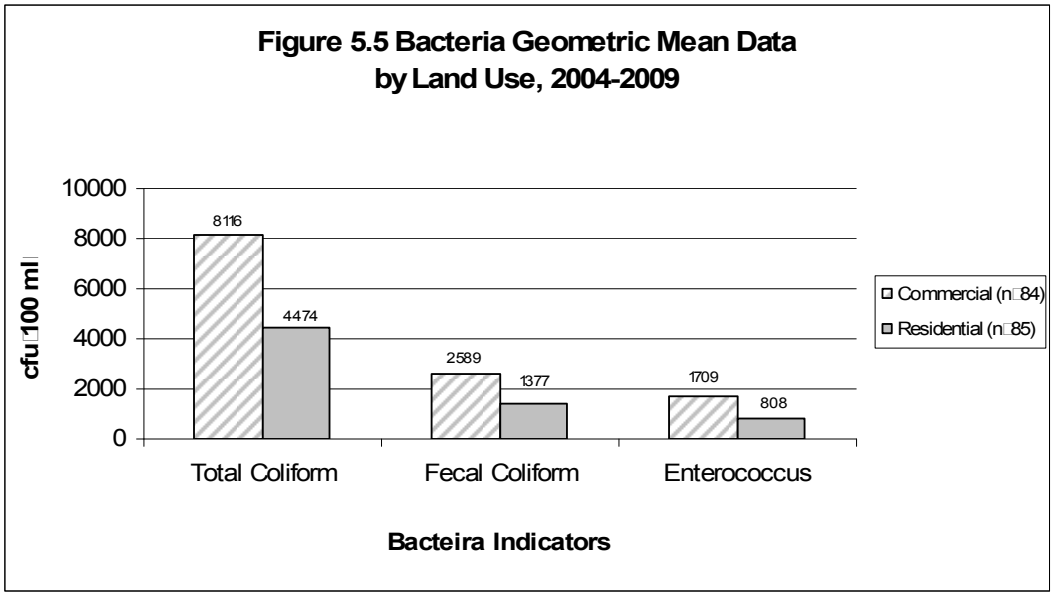

5.4 Nitrate Exceedances

The exceedance rates for nitrate increased from 20% in 2008 to 31% in 2009. Overall, the exceedance rates for nitrate have declined from 2004 to 2009 across all sub-basins. Exceedance rates for nitrate for all eight years of dry weather monitoring are illustrated in Figure 5.8.

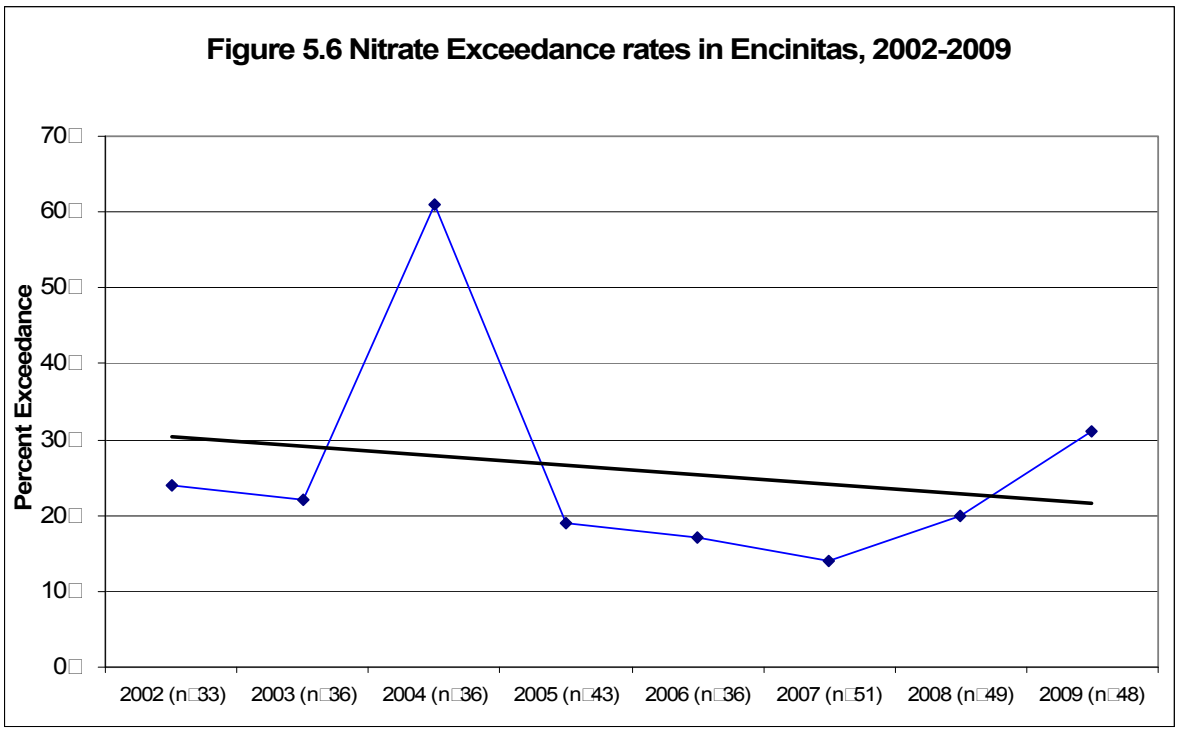

Over the five years of monitoring, groundwater remains a constant source of dry weather flow within Moonlight Creek and Cottonwood Creek in the Encinitas Sub-basin. There are six monitoring locations in the City's dry weather monitoring program that are located within this geographical area. Since 2002, five primary monitoring sites, ENC-1, ENC-3, ENC-6, ENC-8 and ENC-11 have consistently exceeded for nitrates and are often accompanied by elevated conductivity. Over the monitoring periods, other nitrate exceedances have been present on occasion, most notably in 2004. Reasons for the increase in nitrate exceedances in 2004 are unknown. The spike in exceedances that year may have been due to residential and nursery runoff affecting nutrient concentrations. Often concentrations of pollutants such as elevated concentrations of ammonia, orthophosphate and nitrate with low conductivity and higher bacteria levels are consistent at locations with irrigation runoff from nurseries.

Most of the nitrate exceedances in the Encinitas sub-basin are consistent with elevated nitrate results from previous years of monitoring and have been reasoned to be a result of groundwater in the region. The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the

Metropolitan Water District of Southern California. It is common to find elevated nitrates in groundwater in regions of agriculture and it is likely that the sources of nitrogen in the groundwater in Encinitas are from historical agricultural land uses. It should be noted, however, that local water authorities do not consider Encinitas groundwater a viable source of drinking water because it is subject to sea water intrusion. As a result, there is little groundwater quality data specific to Encinitas. Since the inception of the dry weather monitoring program, all of the dry weather monitoring sites throughout the city have been analyzed for nitrates. Table 5.3 summarizes all the sites in Encinitas with consistent exceedances for nitrates and their suspected sources.

Table 5.3 Nitrate Exceedances, 2002-2009

Site	Nitrate Exceedances								Suspected Source
	2002	2003	2004	2005	2006	2007	2008	2009	
CBS-1			X						Groundwater
CBS-2				X					Combination
CBS-3N			X					NS	Irrigation
CBS-3S			X					NS	Irrigation
CBS-8*							X	NS	Groundwater
ENC-1	X	X	X	X	X			X	Groundwater
ENC-3	X	X	X	X	X		X	X	Groundwater
ENC-4			X						Irrigation
ENC-5	X	X	X			X		X	Groundwater
ENC-6	X	X	X	X	X	X	X	X	Groundwater
ENC-8	X	X	X	X	X		X	X	Groundwater
ENC-9			X		NS				Irrigation
ENC-10	X		X						Irrigation
ENC-11	X	X	X	X	X	X		X	Groundwater
ENC-12		X			NS				Irrigation
ENC-14			X		NS				Irrigation
ENC-15		X	X						Irrigation
ENC-17		X	X					NS	Irrigation
ENC-18								X	Irrigation
ESC-1			X						Groundwater
ESC-2			X						Irrigation
LCS-1			X			X			Irrigation
LCS-2			X						Irrigation
LCS-5						X			Irrigation
LUC-1	NS	NS	X	X	X	X	X	X	Groundwater
LUC-7			X	NS	NS				Groundwater
LUC-9*							X	NS	Groundwater
LUC-10							X	X	Groundwater
LUX-2			X		NS			NS	Irrigation
SEL-2						X			Combination
SEL-5	NS	NS	NS	X	NS				Irrigation

NS=No sample, Combination = Groundwater and Irrigation, *New site Added in 2008

The sites with nitrate exceedances attributable to groundwater are typically not causing water quality problems in the receiving waters. These locations do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils. In 2009, all nitrate exceedances except one location (ENC-18) appeared to be attributable to groundwater. A more detailed discussion of nitrate and conductivity exceedances was included in Appendix J of the City of Encinitas' 2007 Dry Weather Monitoring Assessment.

5.5 Water Quality Trends in Receiving Waters

Finally, the sub-basins can be divided by respective receiving waters. Run-off in the City of Encinitas drains either north to Batiquitos Lagoon, south to San Elijo Lagoon, or west to the Pacific Ocean at Moonlight Beach.

Table 5.4 shows the all of the sub-basins in the City of Encinitas and their associated receiving water.

Table 5.4 Receiving Waters and Associated Sub-basins

Batiquitos Lagoon	Pacific Ocean	San Elijo Lagoon
Leucadia	Encinitas	Cardiff
La Costa South		Lux Canyon
		Lower Escondido Creek
		Rancho Santa Fe

In dividing the City of Encinitas into receiving water drainage areas, general conclusions as to the water quality entering these waters can be inferred. In order to compare the water quality across these three drainage areas, a ratio of the number of water quality exceedances to analytes tested is calculated. Figure 5.7 presents the exceedance ratios calculated for the three drainage areas over the past eight years of dry weather monitoring.

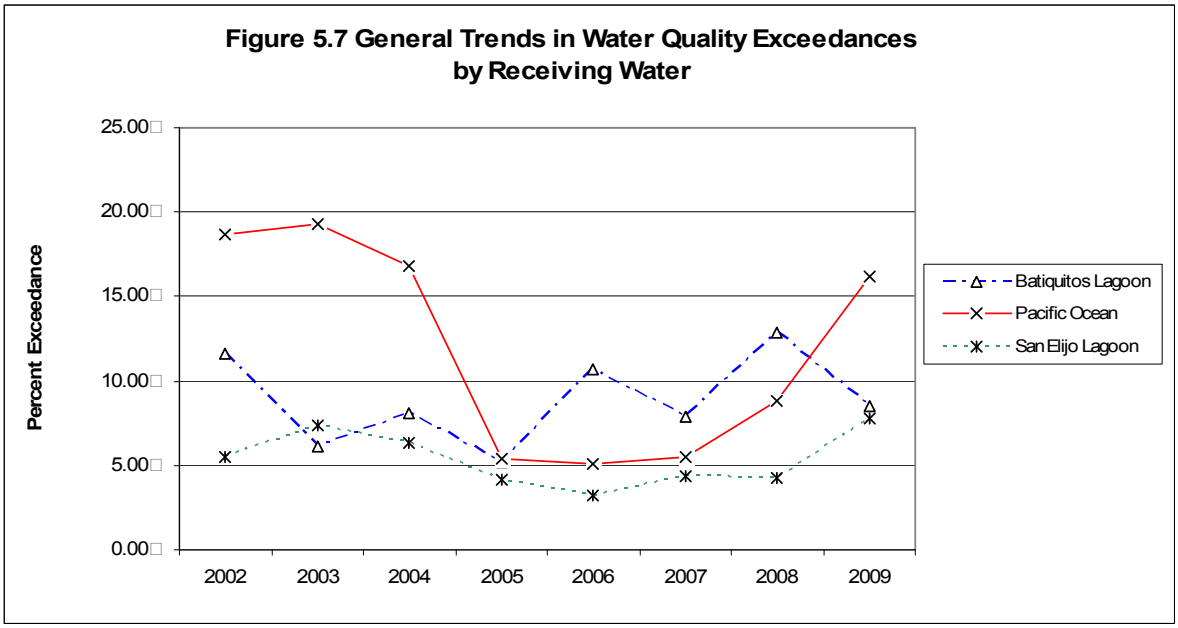

According to these ratios, the waters flowing west to the Pacific Ocean exceeded action levels more than flows to the Batiquitos Lagoon or the San Elijo Lagoon. The primary COCs draining to the Pacific Ocean continue to be nitrates, conductivity and bacteria. In 2009, all of the nitrate exceedances in the sub-basin except for one site appeared to be attributable to groundwater. The bacteria are mitigated by an Urban Runoff Treatment Facility which utilizes ultra-violet light to reduce bacteria in the creek discharge. This facility is located near the mouth of Cottonwood Creek and effectively eliminates bacteria from 85% of the creek flow volume.

6.0 Conclusions

Throughout the eight years of dry weather monitoring the City of Encinitas has succeeded in identifying jurisdictionally significant water quality COCs. The sources of these COCs have been identified and eliminated where possible. Ongoing monitoring for the Dry Weather Monitoring Program will allow for continuous trend assessments within each of the sub-basins and the receiving waters in future years. Currently, these trends are captured in the exceedance ratios which are delineated by sub-basin and by land use.

The high priority COCs in Encinitas are nitrates and bacteria indicators (total and fecal coliform and Enterococcus bacteria). High bacteria levels occur most often in commercial land use areas throughout the City of Encinitas. Sources for bacteria have been identified in several instances in years past and have included natural loading from wildlife, bacteria re-growth in the MS4, and various illegal connections to the MS4. Bacteria indicators in the MS4 have been trending downward since 2003 for both residential and commercial areas in Encinitas.

It is not known if the elevated nitrates observed throughout Encinitas are entirely from

anthropogenic sources. The most likely sources of nitrates have been identified as groundwater, nursery irrigation run-off and residential irrigation run-off containing fertilizers. With the exception of a few nitrate exceedances in 2004, most exceedances appear to be groundwater and have been relatively consistent (Refer to Figure 5.6). In 2009, 7 out of 9 nitrate exceedances were determined to be caused by groundwater intrusion. In these locations, the high nitrate concentrations are accompanied by elevated conductivity and no other COC exceedances. Nitrate is a constituent of concern for the groundwater in the San Diego region, and historical agricultural land uses in Encinitas are likely sources of nitrogen in the groundwater. The elevated conductivity may be from various minerals entering the groundwater from the sedimentary soils and in some locations in the lower reaches of the city are due to seawater intrusion. The City's Clean Water Program continues to focus on residential and commercial education targeting irrigation runoff and routine inspections of nurseries to minimize the amount of runoff to the maximum extent practicable.

Using the COC prioritization method described in Table 5.0, City staff has evaluated and ranked water quality concerns in the City, which will allow appropriate attention in the upcoming year. The City of Encinitas Clean Water Program shall continue to focus on illicit discharges and connections as a means to improve water quality, as well as broadly focused programmatic areas to protect water quality and ensure ongoing improvements. The dry weather monitoring program assists the City in focusing efforts targeting identifiable pollution problems throughout the City. Efforts, including targeting specific audiences for education, enforcement activity, and Best Management Plan (BMP) implementation, have expanded as a result of the water quality characterization gained from the Dry Weather Monitoring Program.

In 2009, the City of Encinitas initiated two notable activities that will help to better identify, prioritize and manage COCs specific to our area. First, the City collaborated with the Carlsbad Watershed Copermittees to assess all monitoring data across the Carlsbad Hydrologic Unit in order to improve the development of appropriate watershed-based stormwater BMPs. Secondly, in FY 2008-09, monitoring was conducted in the San Elijo Lagoon as part of the Carlsbad Watershed Lagoons TMDL Investigative Order (IO). With lagoon monitoring results recently becoming available for more focused analysis, and as the regulatory process evolves and TMDL priorities are identified in the region, it is anticipated that hydrologic area (watershed), hydrologic sub-area (sub-watershed), and local (sub-basins) water quality priorities will become clearer. With water quality priorities translated across watershed areas, more effective and efficient activities will evolve to better address these issues.

In 2009, the following recommendations for future dry weather monitoring include:

1. Assess the San Elijo Lagoon TMDL monitoring data collected in FY 2007-08 to support adaptive management of the City of Encinitas' Dry Weather Monitoring Program.

2. Continued assessment of all monitoring data within the watershed to compare constituents of concern across the Carlsbad Hydrologic Unit and develop appropriate BMPs and watershed activities as a group.

The Dry Weather Monitoring Program provides the City with a valuable snapshot of water quality in various drainage areas and receiving waters, and a directional mechanism to the establishment of Clean Water Program priorities. In order to maximize the full potential of these data, as various monitoring efforts, regulatory processes, and watershed priorities have evolved over the past year, it has become clearer that a collective assessment of available data sets would provide a more meaningful picture. A more complete data evaluation would enlighten the interrelationship between sources, transport mechanisms, practices to best address them, and local and watershed programmatic activities.

7.0 Trash Assessment

7.1 Regulatory Requirements

Section II.B.3.c.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather field screening site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

7.2 Procedure and Definitions

The San Diego County Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form (Appendix C-4) to document the amount and extent of trash and the threat to human and aquatic health. The first page is completed at every site. The second page, which includes information about the types, prevalence, potential routes, and sources of trash, is also completed at sites where a larger amount of trash is observed.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although numbers of trash pieces are also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Presence of more than one of, or a combination of, the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle

batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard), or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.

- *Threat to Aquatic Health* – Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of, the following items: toxic items such as vehicle batteries or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Forms.

If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are also identified on the Trash Assessment Form

7.3 Trash Assessment Results

Trash assessments were conducted at 39 primary dry weather monitoring sites and 11 alternate dry weather monitoring sites throughout the monitoring period (May 1, 2009 – September 30, 2009). In FY 2008-09, there were no sites identified as poor or a threat to aquatic health. However, there was one site (LCS-1) identified as a threat to human health (Refer to discussion in Section 7.3.1 below). Table 7.0 summarizes all of the trash assessment results for this fiscal year and Figure 7.0 compares the trash assessments with the previous year. Figure 7.1 provides a map of all the sampling sites in the City of Encinitas and their corresponding trash assessment.

TABLE 7.0 TRASH ASSESSMENT RESULTS

Optimal (41 sites)	**Suboptimal** (7 sites)	**Marginal** (1 site)	**Submarginal** (1 site)	**Poor** (0 sites)
CBS-1	CBS-2	CBS-3N	ENC-10	None
CBS-3S	ENC-6			
CBS-4	ENC-14			
CBS-5	LCS-2			
CBS-7	LCS-7			
CBS-8	RSF-1			
CBS-9	RSF-4			
ENC-1				
ENC-3				
ENC-4				
ENC-5				
ENC-8				
ENC-9				
ENC-11				
ENC-12				
ENC-15				
ENC-17				
ENC-18				
ESC-1				
ESC-2				
ESC-3				
ESC-4				
ESC-5				
LCS-1				
LCS-3				
LCS-4				
LCS-5				
LCS-8				
LCS-9				
LUC-1				
LUC-3				
LUC-4				
LUC-6				
LUC-7				
LUC-8				
LUC-10				
LUX-1				
LUX-2				
LUX-3				
SEL-2				
SEL-3				

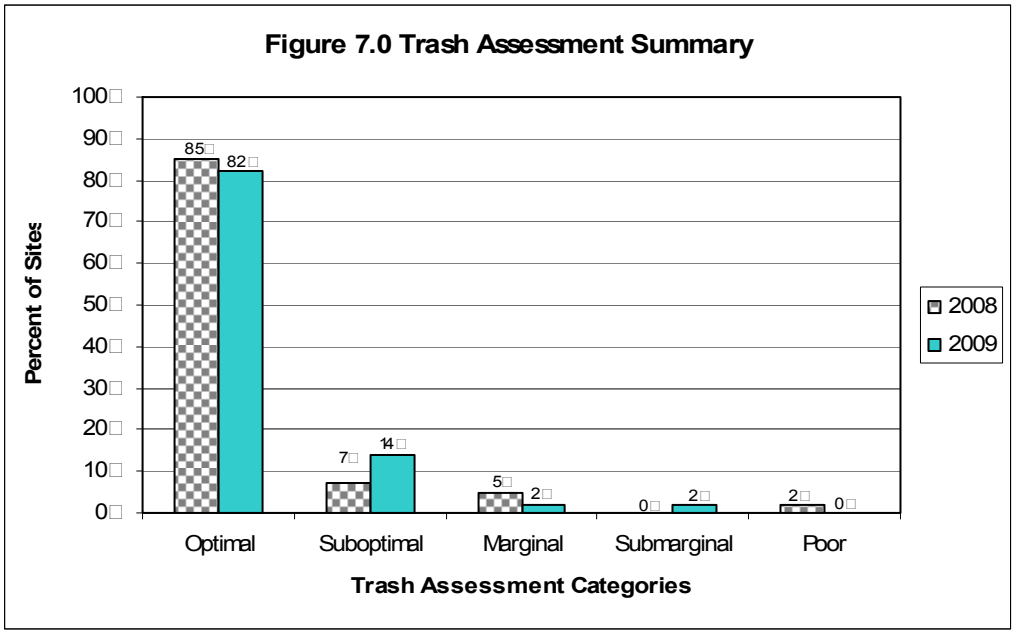

7.3.1 Threat to Human or Aquatic Health

In FY 2008-09 there was one site (LCS-2) identified as a threat to human health. LCS-1 is located in an open channel that drains northward into Encinitas Creek. Water flow at LCS-1 was significantly constrained due to excessive vegetation and organic matter decay at this site. As a result, this site was designated as a mosquito breeding site by the County of San Diego's Vector Control Program and recognized as a threat to human health for the purposes of this assessment.

7.3.2 Trash Assessment - Poor Sites

In FY 2008-09, there were no sites identified as poor.

Figure 7.1

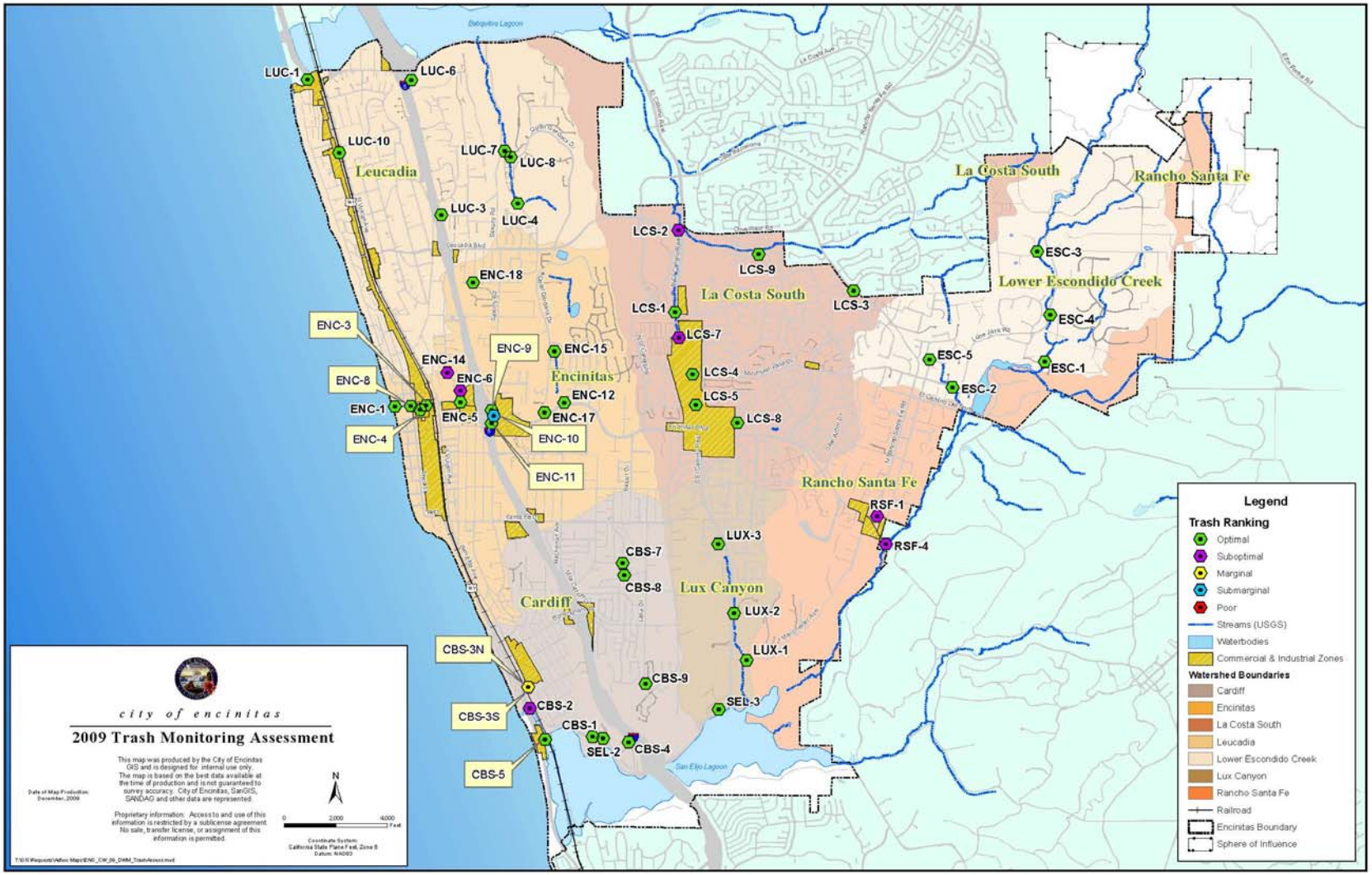
LUC-1
LUC-6
LUC-10
LUC-7
LUC-8
Leucadia
LUC-3
LUC-4
ENC-18
ENC-3
ENC-9
ENC-15
ENC-14
ENC-6
ENC-8
ENC-1
ENC-5
ENC-4
ENC-12
ENC-17
ENC-10
ENC-11
Encinitas
LCS-2
LCS-9
LCS-1
LCS-7
LCS-4
LCS-5
LCS-8
LCS-3
La Costa South
La Costa South
Rancho Santa Fe
ESC-3
Lower Escondido Creek
ESC-4
ESC-5
ESC-1
ESC-2
Rancho Santa Fe
RSF-1
RSF-4
LUX-3
CBS-7
CBS-8
Lux Canyon
LUX-2
LUX-1
Cardiff
CBS-3N
CBS-9
CBS-2
CBS-3S
CBS-1
SEL-3
SEL-2
CBS-4
CBS-5
Legend
Trash Ranking
Optimal
Suboptimal
Marginal
Submarginal
Poor
Streams (USGS)
Waterbodies
Commercial & Industrial Zones
Watershed Boundaries
Cardiff
Encinitas
La Costa South
Leucadia
Lower Escondido Creek
Lux Canyon
Rancho Santa Fe
Railroad
Encinitas Boundary
Sphere of Influence
city of encinitas
2009 Trash Monitoring Assessment
N

Appendix C-1

2009 MS4 and Dry Weather Monitoring Stations Map

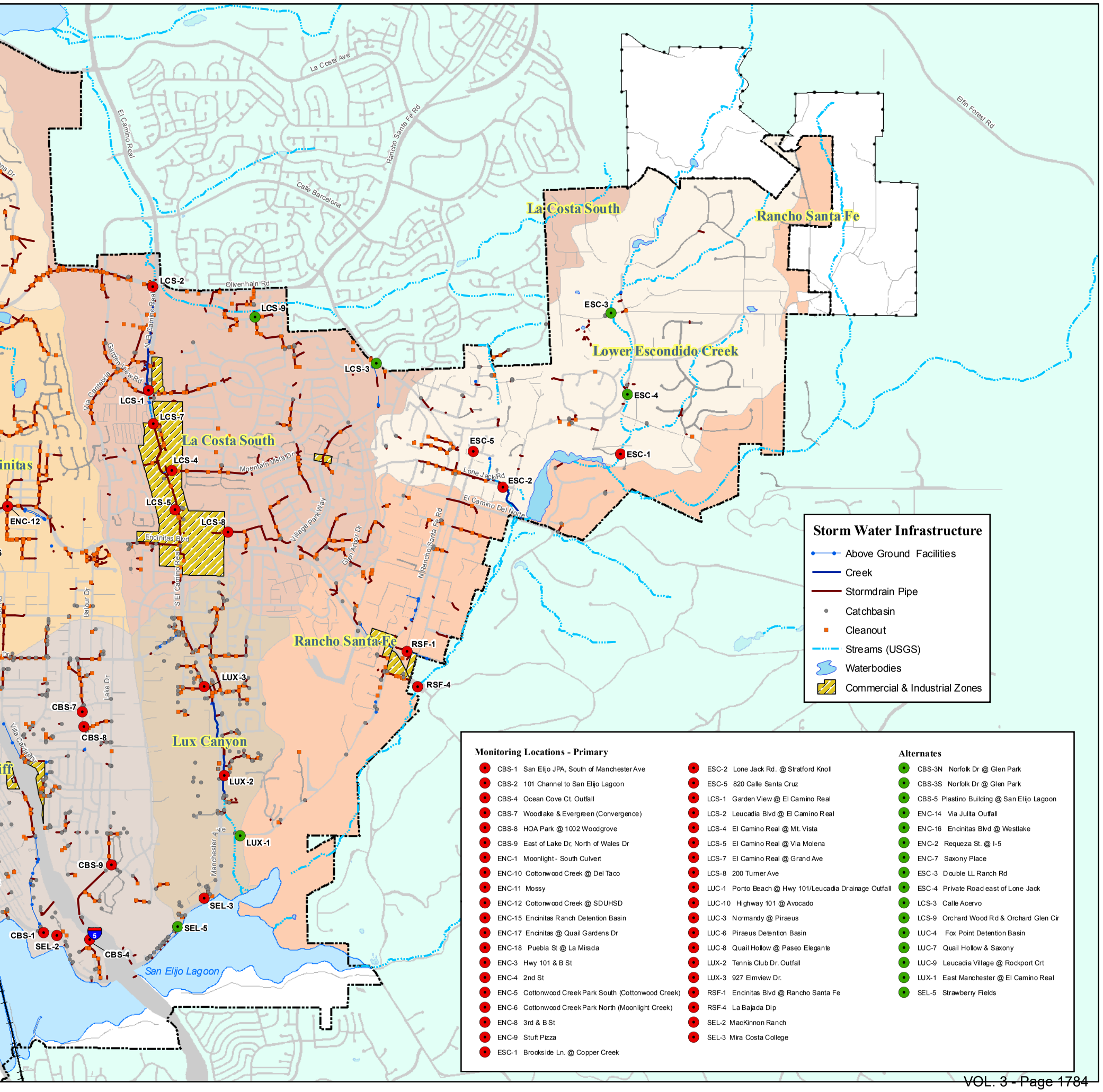
La Costa South
Rancho Santa Fe
Lower Escondido Creek
La Costa South
Rancho Santa Fe
Lux Canyon
San Elijo Lagoon
LCS-2
LCS-9
LCS-3
LCS-1
LCS-7
LCS-4
LCS-5
LCS-8
ENC-12
ESC-3
ESC-4
ESC-5
ESC-1
ESC-2
RSF-1
RSF-4
LUX-3
LUX-2
LUX-1
CBS-7
CBS-8
CBS-9
CBS-1
SEL-2
CBS-4
SEL-3
SEL-5
La Costa Ave
El Camino Real
Rancho Santa Fe Rd
Calle Barcelona
Elfin Forest Rd
Olivenhain Rd
Mountain Vista Dr
Lone Jack Rd
El Camino Del Norte
Encinitas Blvd
Village Park Way
Glen Arbor Dr
N Rancho Santa Fe Rd
S El Camino Real
Balfour Dr
Lake Dr
Manchester Ave
Storm Water Infrastructure
Above Ground Facilities
Creek
Stormdrain Pipe
Catchbasin
Cleanout
Streams (USGS)
Waterbodies
Commercial & Industrial Zones
Monitoring Locations - Primary
CBS-1 San Elijo JPA, South of Manchester Ave
CBS-2 101 Channel to San Elijo Lagoon
CBS-4 Ocean Cove Ct. Outfall
CBS-7 Woodlake & Evergreen (Convergence)
CBS-8 HOA Park @ 1002 Woodgrove
CBS-9 East of Lake Dr, North of Wales Dr
ENC-1 Moonlight - South Culvert
ENC-10 Cottonwood Creek @ Del Taco
ENC-11 Mossy
ENC-12 Cottonwood Creek @ SDUHSD
ENC-15 Encinitas Ranch Detention Basin
ENC-17 Encinitas @ Quail Gardens Dr
ENC-18 Puebla St @ La Mirada
ENC-3 Hwy 101 & B St
ENC-4 2nd St
ENC-5 Cottonwood Creek Park South (Cottonwood Creek)
ENC-6 Cottonwood Creek Park North (Moonlight Creek)
ENC-8 3rd & B St
ENC-9 Stuft Pizza
ESC-1 Brookside Ln. @ Copper Creek
ESC-2 Lone Jack Rd. @ Stratford Knoll
ESC-5 820 Calle Santa Cruz
LCS-1 Garden View @ El Camino Real
LCS-2 Leucadia Blvd @ El Camino Real
LCS-4 El Camino Real @ Mt. Vista
LCS-5 El Camino Real @ Via Molena
LCS-7 El Camino Real @ Grand Ave
LCS-8 200 Turner Ave
LUC-1 Ponto Beach @ Hwy 101/Leucadia Drainage Outfall
LUC-10 Highway 101 @ Avocado
LUC-3 Normandy @ Piraeus
LUC-6 Piraeus Detention Basin
LUC-8 Quail Hollow @ Paseo Elegante
LUX-2 Tennis Club Dr. Outfall
LUX-3 927 Elmview Dr.
RSF-1 Encinitas Blvd @ Rancho Santa Fe
RSF-4 La Bajada Dip
SEL-2 MacKinnon Ranch
SEL-3 Mira Costa College
Alternates
CBS-3N Norfolk Dr @ Glen Park
CBS-3S Norfolk Dr @ Glen Park
CBS-5 Plastino Building @ San Elijo Lagoon
ENC-14 Via Julita Outfall
ENC-16 Encinitas Blvd @ Westlake
ENC-2 Requeza St. @ I-5
ENC-7 Saxony Place
ESC-3 Double LL Ranch Rd
ESC-4 Private Road east of Lone Jack
LCS-3 Calle Acervo
LCS-9 Orchard Wood Rd & Orchard Glen Cir
LUC-4 Fox Point Detention Basin
LUC-7 Quail Hollow & Saxony
LUC-9 Leucadia Village @ Rockport Crt
LUX-1 East Manchester @ El Camino Real
SEL-5 Strawberry Fields

Appendix C-2

2009 Dry Weather Monitoring Field Datasheets

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-1	**Latitude**	(e.g., 33.41174) 33.013611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	SEJPA Outfall	**Longitude**	(e.g., -117.35213) -117.27305555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/3/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:38 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.11	NH_3-N (mg/L)	3.09	NO_3-N (mg/L)	6.02	Ortho-PO_4 (mg/L)	0.61
pH (pH units)	8.18	TURB (NTU)	3.2	COND (mS/cm)	4.42	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑**Confirmation For** _NH3-N_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-1	**Latitude**	(e.g., 33.41174) 33.013611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	SEJPA Outfall	**Longitude**	(e.g., -117.35213) -117.27305555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/5/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:34	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☑Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.85	NH_3-N (mg/L)	3.34	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	8.31	TURB (NTU)	2.5	COND (mS/cm)	1.91	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** __NH_3 - N_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-2	**Latitude**	(e.g., 33.41174) 33.01666	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Highway 101 Channel @ San Elijo Lagoon	**Longitude**	(e.g., -117.35213) -117.28138		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/9/09	**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	16:40	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)	1.03	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	
						Dissolved Oxygen (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-2	**Latitude**	(e.g., 33.41174) 33.01666	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Highway 101 Channel @ San Elijo Lagoon	**Longitude**	(e.g., -117.35213) -117.28138		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/8/09	**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:45 pm	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	32.49	NH_3-N (mg/L)	1.25	NO_3-N (mg/L)	0.88	Ortho-PO_4 (mg/L)	0.10
pH (pH units)	8.81	TURB (NTU)	4.9	COND (mS/cm)	6.93	MBAS (mg/L)	0.75
						Dissolved Oxygen (mg/L)	7.6

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-3N	**Latitude**	(e.g., 33.41174) 33.01861111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Glen Park (North Pipe)	**Longitude**	(e.g., -117.35213) -117.28111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:42	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-3S	**Latitude**	(e.g., 33.41174) 33.01861111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Glen Park (South Pipe)	**Longitude**	(e.g., -117.35213) -117.28111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:43	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-4	**Latitude**	(e.g., 33.41174) 33.009722222222	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Cardiff Cove	**Longitude**	(e.g., -117.35213) -117.26722222222		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:24 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.18	NO_3-N (mg/L)	4.54	Ortho-PO_4 (mg/L)	0.06
pH (pH units)	8.08	TURB (NTU)	0.5	COND (mS/cm)	7.65	MBAS (mg/L)	0.6

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sampled with new NH3-N 1403 kit. Old NH3-N 1503 Kit = 2.78

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-5	**Latitude**	(e.g., 33.41174) 33.01444444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Plastino Building	**Longitude**	(e.g., -117.35213) -117.27972		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/29/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:01 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☑ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Alternate location for CBS-9. Site was dry- no flow to sample.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-7	**Latitude**	(e.g., 33.41174) 33.031111111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Woodlake and Evergreen	**Longitude**	(e.g., -117.35213) -117.2825		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:15	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Not enough H2O flow to pump sample. Alternate location at CBS-3N

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-8	**Latitude**	(e.g., 33.41174) 33.03062	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	HOA Park at 1002 Woodgrove	**Longitude**	(e.g., -117.35213) -117.26909		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:20	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Not enough flow to pump sample- dry. Sample alternate location at CBS-3S.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-9	**Latitude**	(e.g., 33.41174) 33.08005	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Lake Dr. and Wales	**Longitude**	(e.g., -117.35213) -117.29813		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:00	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Dry, choose alternate. CBS-5 dry. LCS-3.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-1	**Latitude**	(e.g., 33.41174) 33.04805	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Beach	**Longitude**	(e.g., -117.35213) -117.29861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/20/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:02	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☑ Other Organic matter

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	27.00	NH_3-N (mg/L)	1.72	NO_3-N (mg/L)	> 11.3	Ortho-PO_4 (mg/L)	0.37
pH (pH units)	7.65	TURB (NTU)	2.0	COND (mS/cm)	4.88	MBAS (mg/L)	0.5
						Dissolved Oxygen (mg/L)	7.31

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	30	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH_3-N and NO_3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-1	**Latitude**	(e.g., 33.41174) 33.04805	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Beach	**Longitude**	(e.g., -117.35213) -117.29861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/2109	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:35 am	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other	
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other	
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other	Organic matter
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.48	NH_3-N (mg/L)	1.6	NO_3-N (mg/L)	> 11.3	Ortho-PO_4 (mg/L)	
pH (pH units)	7.65	TURB (NTU)	2.1	COND (mS/cm)	4.97	MBAS (mg/L)	
						Dissolved Oxygen (mg/L)	7.72

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	30	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _NH3-N, PO4_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-10	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek @ Del Taco	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/31/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:12 a.m.	**Observer**	MP/SN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.99	NH_3-N (mg/L)	0.25	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	0.63
pH (pH units)	7.06	TURB (NTU)	12.9	COND (mS/cm)	2.93	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	7.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-10	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek @ Del Taco	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/28/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:17 a.m.	**Observer**	MP/MM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☑Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.77	NH_3-N (mg/L)	>7.0	NO_3-N (mg/L)	9.26	Ortho-PO_4 (mg/L)	>8.0
pH (pH units)	7.55	TURB (NTU)	22.1	COND (mS/cm)	2.17	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	7.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sheriff escort. Active encampment found at this location. Homeless resident asked to clean up encampment and given a citation by sheriff dept.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _NH3-N, NO3-N_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-11	**Latitude**	(e.g., 33.41174) 33.047222222222	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Requeza Channel – West of Public Works Yard	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/10/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	UNK	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.6	NH_3-N (mg/L)	1.4	NO_3-N (mg/L)	9.79	Ortho-PO_4 (mg/L)	
pH (pH units)	7.79	TURB (NTU)	5.0	COND (mS/cm)	6.55	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	7.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **1:5 dilution on ammonia 0.28x5=1.4**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-11	**Latitude**	(e.g., 33.41174) 33.047222222222	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Requeza Channel – West of Public Works Yard	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/5/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:09 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.73	NH_3-N (mg/L)	1.59	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.0
pH (pH units)	7.94	TURB (NTU)	1.8	COND (mS/cm)	7.14	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **QA/QC + Bacteria**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	7.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

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   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _Ortho-PO4_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-12	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Blvd @ SDUHSD	**Longitude**	(e.g., -117.35213) -117.27777777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/5/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:20	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Small puddle at bottom of storm drain could not be sampled.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-12	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Blvd @ SDUHSD	**Longitude**	(e.g., -117.35213) -117.27777777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/3/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:20	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	28.79	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	4.51	Ortho-PO_4 (mg/L)	3.73
pH (pH units)	8.35	TURB (NTU)	11.6	COND (mS/cm)	0.452	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sampled puddle at the bottom of storm drain. Observed sediment at the bottom. Ran 1:5 dilution on NH3-N.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _Ortho-PO4_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-14	**Latitude**	(e.g., 33.41174) 33.05194444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Via Julita	**Longitude**	(e.g., -117.35213) -117.29167		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/19/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:58 a.m.	**Observer**	KR/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Site too dry to collect sample.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-14	**Latitude**	(e.g., 33.41174) 33.05194444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Via Julita	**Longitude**	(e.g., -117.35213) -117.29167		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/17/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:39 a.m.	**Observer**	CN/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.9	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	2.43	Ortho-PO_4 (mg/L)	2.14
pH (pH units)	9.13	TURB (NTU)	2.2	COND (mS/cm)	1.74	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Alternate site for Enc-17.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _NH3-N_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-15	**Latitude**	(e.g., 33.41174) 33.055	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Ranch Detention Basin	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/21/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:55 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other OM
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.98	NH_3-N (mg/L)	0.7	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	8.07	TURB (NTU)	3.4	COND (mS/cm)	4.12	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	8.0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-15	**Latitude**	(e.g., 33.41174) 33.055	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Ranch Detention Basin	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/20/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:51 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☑ Other **O+M**

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.37	NH_3-N (mg/L)	1.15	NO_3-N (mg/L)	6.65	Ortho-PO_4 (mg/L)	1.60
pH (pH units)	8.13	TURB (NTU)	4.2	COND (mS/cm)	3.68	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	8.0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-17	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Sunshine Gardens (NE Corner of Enc. Blvd. and Quail Gardens Dr.)	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/3/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:35	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Alternate site: ENC-14

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _NO3-N, PO4_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-18	**Latitude**	(e.g., 33.41174) 33.06155	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Puebla St. and La Mirada St.	**Longitude**	(e.g., -117.35213) -117.28860		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/10/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	16:15	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.92	NH_3-N (mg/L)		NO_3-N (mg/L)	0.82	Ortho-PO_4 (mg/L)	1.42
pH (pH units)	8.18	TURB (NTU)	2.1	COND (mS/cm)	1.97	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-18	**Latitude**	(e.g., 33.41174) 33.06155	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Puebla St. and La Mirada St.	**Longitude**	(e.g., -117.35213) -117.28860		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/5/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:07 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.67	NH_3-N (mg/L)	0.10	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	3.53
pH (pH units)	8.11	TURB (NTU)	3.1	COND (mS/cm)	1.78	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Trickle flow, manhole > 20 ft. deep, confined space with unknown flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	ENC-3	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Pacific Coast Highway and B St.	**Longitude**	(e.g., -117.35213) -117.29416666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/09	**TB Page**	**1147**		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:06 am	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **Nitrate Only**

Water Temp (°C)	22.91	NH_3-N (mg/L)		NO_3-N (mg/L)	> 11.3	Ortho-PO_4 (mg/L)	
pH (pH units)	6.79	TURB (NTU)	55.2	COND (mS/cm)	5.62	MBAS (mg/L)	
						Dissolved Oxygen (mg/L)	4.35

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	125	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	ENC-3	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Pacific Coast Highway and B St.	**Longitude**	(e.g., -117.35213) -117.29416666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/22/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:58.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.74	NH_3-N (mg/L)	0.7	NO_3-N (mg/L)	> 11.3	Ortho-PO_4 (mg/L)	0.11
pH (pH units)	6.84	TURB (NTU)	19.3	COND (mS/cm)	5.59	MBAS (mg/L)	.50
						Dissolved Oxygen (mg/L)	2.31

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	125	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: One Coke bottle floating in the water. Area is frequented by homeless people. An active encampment was observed nearby. Sample is yellow in color, ran a 1:5 dilution for Ammonia.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-4	**Latitude**	(e.g., 33.41174) 33.048055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Second St.	**Longitude**	(e.g., -117.35213) -117.295		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/20/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:23	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.67	NH_3-N (mg/L)	0.05	NO_3-N (mg/L)	9.56	Ortho-PO_4 (mg/L)	0.88
pH (pH units)	8.19	TURB (NTU)	0.3	COND (mS/cm)	2.21	MBAS (mg/L)	0.25
						Dissolved Oxygen (mg/L)	8.01

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Cannot determine the flow at this site because it is ponded.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Ammonia, Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	ENC-5	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek Park South	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:20	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☑ Other- Birds

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.87	NH_3-N (mg/L)	1.23	NO_3-N (mg/L)	8.95	Ortho-PO_4 (mg/L)	
pH (pH units)	7.24	TURB (NTU)	2.7	COND (mS/cm)	5.34	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	ENC-5	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek Park South	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/22/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:45	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☑ Other- Birds

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.23	NH_3-N (mg/L)	1.22	NO_3-N (mg/L)	10.09	Ortho-PO_4 (mg/L)	0.08
pH (pH units)	7.18	TURB (NTU)	3.5	COND (mS/cm)	5.11	MBAS (mg/L)	0.60

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sandblasting of the red curb.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _NH3-N, NO3-N_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-6	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Creek	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:28 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☑ Other- crawdads

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.54	NH_3-N (mg/L)	1.84	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	
pH (pH units)	7.31	TURB (NTU)	5.3	COND (mS/cm)	7.49	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-6	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Creek	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/22/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:03	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑Other- crawdads

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.31	NH_3-N (mg/L)	2.29	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.0
pH (pH units)	7.33	TURB (NTU)	3.7	COND (mS/cm)	7.55	MBAS (mg/L)	0.75

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _NH3-N, NO3-N_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑**MS4** ☐ **Receiving Water**

Site ID	ENC-8	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Third St. and B St.	**Longitude**	(e.g., -117.35213) -117.29611111111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:52 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☑Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☑ Other- birds

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.10	NH_3-N (mg/L)	4.01	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	
pH (pH units)	7.53	TURB (NTU)	6.4	COND (mS/cm)	4.7	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	50	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑**MS4** ☐ **Receiving Water**

Site ID	ENC-8	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Third St. and B St.	**Longitude**	(e.g., -117.35213) -117.29611111111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/22/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:55 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☑Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other- amphibian

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.62	NH_3-N (mg/L)	4.02	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.20
pH (pH units)	7.48	TURB (NTU)	4.5	COND (mS/cm)	4.75	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐**No** **Bacteria Only and QA/QC**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	50	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **QA/QC: NH3-N=1.83 mg/L, NO3-N=23.06, Ortho-PO4=0.05.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-9	**Latitude**	(e.g., 33.41174) 33.048055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Enc. Blvd. @ Saxony Rd	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/5/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:33 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.57	NH_3-N (mg/L)	0.45	NO_3-N (mg/L)	2.46	Ortho-PO_4 (mg/L)	0.72
pH (pH units)	8.04	TURB (NTU)	4.4	COND (mS/cm)	0.052	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-1	**Latitude**	(e.g., 33.41174) 33.05388	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Brookside Ln. @ Copper Creek	**Longitude**	(e.g., -117.35213) -117.21638		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/22/09	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:36 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.64	NH_3-N (mg/L)	0.14	NO_3-N (mg/L)	1.52	Ortho-PO_4 (mg/L)	0.14
pH (pH units)	7.49	TURB (NTU)	2.4	COND (mS/cm)	3.81	MBAS (mg/L)	0.40

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	100	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K-1503 = 1.42

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-2	**Latitude**	(e.g., 33.41174) 33.05138	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Lone Jack Rd. @ Stratford Knoll	**Longitude**	(e.g., -117.35213) -117.22861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/16/09	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:55	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☑ Other Algae

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☑ Other O + M

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.20	NH_3-N (mg/L)	0.41	NO_3-N (mg/L)	2.39	Ortho-PO_4 (mg/L)	0.28
pH (pH units)	7.83	TURB (NTU)	16	COND (mS/cm)	7.61	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	118	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K1503 = 3.69

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-3	**Latitude**	(e.g., 33.41174) 33.05138	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Double LL Ranch Rd	**Longitude**	(e.g., -117.35213) -117.22861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/22/09	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:14	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.95	NH_3-N (mg/L)	0.14	NO_3-N (mg/L)	0.91	Ortho-PO_4 (mg/L)	0.21
pH (pH units)	7.93	TURB (NTU)	1.4	COND (mS/cm)	3.00	MBAS (mg/L)	0.15

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K1503 = 1.97
Alternate location for RSF-1

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-4	**Latitude**	(e.g., 33.41174) 33.05138	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location		**Longitude**	(e.g., -117.35213) -117.22861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/29/09	**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:30 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.68	NH_3-N (mg/L)	0.12	NO_3-N (mg/L)	0.29	Ortho-PO_4 (mg/L)	0.11
pH (pH units)	8.05	TURB (NTU)	0.0	COND (mS/cm)	3.75	MBAS (mg/L)	0.15

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K1503 = 1.95 mg/L

Alternate location for LUC-6

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-5	**Latitude**	(e.g., 33.41174) 33.05334	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Calle Santa Cruz	**Longitude**	(e.g., -117.35213) -117.22926		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/11/09	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:05 a.m.	**Observer**	MP/BT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.95	NH_3-N (mg/L)	0.22	NO_3-N (mg/L)	2.10	Ortho-PO_4 (mg/L)	0.76
pH (pH units)	8.02	TURB (NTU)	1.2	COND (mS/cm)	3.72	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K-1503 = 2.09

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _NH3-N_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑**MS4** ☐ **Receiving Water**

Site ID	LCS-1	**Latitude**	(e.g., 33.41174) 33.058611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.288605555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/31/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:00 a.m.	**Observer**	MP/MM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)	0.95	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑**No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑**MS4** ☐ **Receiving Water**

Site ID	LCS-1	**Latitude**	(e.g., 33.41174) 33.058611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.288605555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/29/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:50 a.m.	**Observer**	MP/MM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.53	NH_3-N (mg/L)	1.95	NO_3-N (mg/L)	0.28	Ortho-PO_4 (mg/L)	0.52
pH (pH units)	7.31	TURB (NTU)	13.6	COND (mS/cm)	3.58	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-2	**Latitude**	(e.g., 33.41174) 33.068055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Leucadia Blvd. @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26222222222		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/6/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:20	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.43	NH_3-N (mg/L)	0.0	NO_3-N (mg/L)	0.13	Ortho-PO_4 (mg/L)	1.44
pH (pH units)	7.44	TURB (NTU)	3.4	COND (mS/cm)	2.94	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	200	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-3	**Latitude**	(e.g., 33.41174) 33.06111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Sun Vista Park	**Longitude**	(e.g., -117.35213) -117.24056		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/29/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:00 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.41	NH_3-N (mg/L)	0.16	NO_3-N (mg/L)	0.158	Ortho-PO_4 (mg/L)	0.19
pH (pH units)	5.43	TURB (NTU)	0.0	COND (mS/cm)	0.792	MBAS (mg/L)	0.30

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Very low flow- unable to determine. K-1503 Ammonia = 1.31 mg/L
Alternate location for CBS-9.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _NH3-N_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-4	**Latitude**	(e.g., 33.41174) 33.051944444444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	ECR @ Mtn. Vista (NE corner of intersection)	**Longitude**	(e.g., -117.35213) -117.26055555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/8/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	16:10	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.86	NH_3-N (mg/L)	3.30	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.01	TURB (NTU)	5.8	COND (mS/cm)	4.0	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☐ **Confirmation For** _____ ☑ **IC/ID Follow-Up For** _NH3-N_____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-4	**Latitude**	(e.g., 33.41174) 33.051944444444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	ECR @ Mtn. Vista (NE corner of intersection)	**Longitude**	(e.g., -117.35213) -117.26055555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/9/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:40	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)	2.85	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Ammonia result from location behind 257 ECR was over range. Test kit range = 0.50-7.00ppm. Drainage was observed coming up from cement. Storm drain at SE corner of ECR and Mtn. Vista was dry. Sample from NE corner of Jolina Way & Mtn. Vista @ 15:39 = 5.77mg/L. Smells of sewage #2458.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-4	**Latitude**	(e.g., 33.41174) 33.051944444444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	ECR @ Mtn. Vista (NE corner of intersection)	**Longitude**	(e.g., -117.35213) -117.26055555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/6/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:10	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.63	NH_3-N (mg/L)	3.78	NO_3-N (mg/L)	0.49	Ortho-PO_4 (mg/L)	0.41
pH (pH units)	6.96	TURB (NTU)	5.9	COND (mS/cm)	3.13	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trickle flow, manhole conveyance, confined space with unknown flow.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-5	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Via Molena @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26027777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/10/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:15	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☑Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.37	NH_3-N (mg/L)	0.35	NO_3-N (mg/L)	1.09	Ortho-PO_4 (mg/L)	0.29
pH (pH units)	7.71	TURB (NTU)	1.7	COND (mS/cm)	5.08	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Landscapers currently irrigating lawns @ commercial property site. They are using fertilizers and some over-irrigation observed in curb and gutter at time of sampling. *2nd time ammonia test run with dilution 1:5.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-7	**Latitude**	(e.g., 33.41174) 33.055833333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	El Camino Real (South of La Entrada Lane)	**Longitude**	(e.g., -117.35213) -117.2625		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/16/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:30	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.17	NH_3-N (mg/L)	0.17	NO_3-N (mg/L)	4.57	Ortho-PO_4 (mg/L)	0. 10
pH (pH units)	7.79	TURB (NTU)	8.4	COND (mS/cm)	3.41	MBAS (mg/L)	0.60

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	61	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K-1503 = 2.41.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑**Confirmation For** _Ortho-P_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-8	**Latitude**	(e.g., 33.41174) 33.04693	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	200 Turner Ave.	**Longitude**	(e.g., -117.35213) -117.25507		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time		**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.52	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	0.33
pH (pH units)	7.03	TURB (NTU)	3.4	COND (mS/cm)	4.78	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-8	**Latitude**	(e.g., 33.41174) 33.04693	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	200 Turner Ave.	**Longitude**	(e.g., -117.35213) -117.25507		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/11/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:35 a.m.	**Observer**	MP/BT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.35	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	4.89	Ortho-PO_4 (mg/L)	2.37
pH (pH units)	7.27	TURB (NTU)	1.4	COND (mS/cm)	2.46	MBAS (mg/L)	0.40

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1:5 dilution- 0.06x5=0.3
Ammonia K-1503: 0.31x5=1.55

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-9	**Latitude**	(e.g., 33.41174) 33.04693	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Orchard Wd Rd & Orchard Glenn	**Longitude**	(e.g., -117.35213) -117.25507		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/30/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:30 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☐> 72 hours ☑ < 72 hours

Rainfall ☐ None ☑ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☑ Other OM

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.77	NH_3-N (mg/L)	0.13	NO_3-N (mg/L)	0.54	Ortho-PO_4 (mg/L)	0.07
pH (pH units)	6.43	TURB (NTU)	9.9	COND (mS/cm)	4.18	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☑**Yes** ☐ **No** **Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Alternate for LUX-3

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-1	**Latitude**	(e.g., 33.41174) 33.082777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Ponto Beach Detention Basin	**Longitude**	(e.g., -117.35213) -117.30944444444		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/16/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:55 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other- Crawdads

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.56	NH_3-N (mg/L)		NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.16
pH (pH units)	7.36	TURB (NTU)	0.0	COND (mS/cm)	2.89	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-1	**Latitude**	(e.g., 33.41174) 33.082777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Ponto Beach Detention Basin	**Longitude**	(e.g., -117.35213) -117.30944444444		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:53	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☑Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other- Crawdads

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.39	NH_3-N (mg/L)	0.59	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.16
pH (pH units)	7.24	TURB (NTU)	0.0	COND (mS/cm)	2.89	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-10	**Latitude**	(e.g., 33.41174) 33.07522	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	101 @ Avocado St.	**Longitude**	(e.g., -117.35213) -117.30565		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/16/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:15 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.52	NH_3-N (mg/L)		NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	
pH (pH units)	6.58	TURB (NTU)	0.0	COND (mS/cm)	2.90	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space, cannot determine the flow**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-10	**Latitude**	(e.g., 33.41174) 33.07522	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	101 @ Avocado St.	**Longitude**	(e.g., -117.35213) -117.30565		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:25	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.70	NH_3-N (mg/L)	0.48	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.21
pH (pH units)	6.93	TURB (NTU)	0.0	COND (mS/cm)	2.89	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space, cannot determine the flow**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-3	**Latitude**	(e.g., 33.41174) 33.068611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Normandy @ Piraeus	**Longitude**	(e.g., -117.35213) -117.29388888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/21/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:32 a.m.	**Observer**	MP/PCR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.41	NH_3-N (mg/L)	0.08	NO_3-N (mg/L)	1.27	Ortho-PO_4 (mg/L)	0.02
pH (pH units)	8.04	TURB (NTU)	1.6	COND (mS/cm)	1.206	MBAS (mg/L)	0

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K-1503 = 0.76 mg/L
Possible illegal connection at this location.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-4	**Latitude**	(e.g., 33.41174) 33.068611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Fox Point Detention Basin	**Longitude**	(e.g., -117.35213) -117.29388888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/30/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:00	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☑ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☐> 72 hours ☑ < 72 hours

Rainfall ☐ None ☑ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☑ Other OM

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	32.01	NH_3-N (mg/L)	0.12	NO_3-N (mg/L)	0.21	Ortho-PO_4 (mg/L)	0.53
pH (pH units)	9.35	TURB (NTU)	0	COND (mS/cm)	4.2	MBAS (mg/L)	0.8

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Alternate for CBS-8

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-6	**Latitude**	(e.g., 33.41174) 33.081666666667	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Piraeus Detention Basin	**Longitude**	(e.g., -117.35213) -117.29666666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/21/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:00 a.m.	**Observer**	MP/PCR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Site was completely dry. Use ESC-4 as alternate.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _O-PO4 & Bacteria____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-7 Alt	**Latitude**	(e.g., 33.41174) 33.081666666667	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr (upstream)	**Longitude**	(e.g., -117.35213) -117.29666666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	10/1/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:40	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐< 72 hours

Rainfall ☑ None ☐< 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑Yes ☐ No

Water Temp (°C)	25.39	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	0.26
pH (pH units)	6.81	TURB (NTU)	0.0	COND (mS/cm)	6.79	MBAS (mg/L)	

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia & Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Cannot determine flow; manhole > 20ft deep.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-7 Alt	**Latitude**	(e.g., 33.41174) 33.081666666667	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr (upstream)	**Longitude**	(e.g., -117.35213) -117.29666666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/30/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:11 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☐ > 72 hours ☑< 72 hours

Rainfall ☐ None ☑< 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑Yes ☐ No

Water Temp (°C)	25.67	NH_3-N (mg/L)	0.67	NO_3-N (mg/L)	2.06	Ortho-PO_4 (mg/L)	3.96
pH (pH units)	7.97	TURB (NTU)	15.5	COND (mS/cm)	2.54	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia & Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Cannot determine flow; manhole > 20ft deep.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _Bacteria, NH3-N_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-8	**Latitude**	(e.g., 33.41174) 33.07496	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr.	**Longitude**	(e.g., -117.35213) -117.28397		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/12/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:34 a.m.	**Observer**	KR/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.23	NH_3-N (mg/L)	2.30	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	8.27	TURB (NTU)	1.3	COND (mS/cm)	5.49	MBAS (mg/L)	

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Manhole > 20 ft deep. Confined space- cannot determine flow.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-8	**Latitude**	(e.g., 33.41174) 33.07496	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr.	**Longitude**	(e.g., -117.35213) -117.28397		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/10/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:43 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☑ Other O.M.

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.54	NH_3-N (mg/L)	2.40	NO_3-N (mg/L)	4.81	Ortho-PO_4 (mg/L)	0.36
pH (pH units)	8.23	TURB (NTU)	2.0	COND (mS/cm)	5.80	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Exceeded for bacteria per Encina. Need to resample 8/12.
Manhole > 20 ft deep. Confined space- cannot determine flow.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-1	**Latitude**	(e.g., 33.41174) 33.02833	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	East Manchester @ ECR	**Longitude**	(e.g., -117.35213) -117.25527		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/17/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:30 a.m.	**Observer**	KR/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Dry- no sample taken.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _NH3-N, Turbidity___ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-2	**Latitude**	(e.g., 33.41174) 33.02833	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Sage Canyon Dr.	**Longitude**	(e.g., -117.35213) -117.25527		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/19/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:16 a.m.	**Observer**	KR/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☑Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.56	TURB (NTU)	27.4	COND (mS/cm)	2.71	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1:5 dilution for Ammonia. 0.06 x 5 = 0.3
QA/QC taken to Encina.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-2	**Latitude**	(e.g., 33.41174) 33.02833	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Sage Canyon Dr.	**Longitude**	(e.g., -117.35213) -117.25527		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/17/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:41 a.m.	**Observer**	KR/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☑Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	1.05	NO_3-N (mg/L)	1.73	Ortho-PO_4 (mg/L)	0.96
pH (pH units)	7.22	TURB (NTU)	27.9	COND (mS/cm)	3.47	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1:5 dilution for Ammonia. 0.21 x 5 =1.05

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-3	**Latitude**	(e.g., 33.41174) 33.03404	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	927 Elmview Dr.	**Longitude**	(e.g., -117.35213) -117.25972		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/15/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:36 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow to sample.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	RSF-1	**Latitude**	(e.g., 33.41174) 33.0375	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Peppertree Lane	**Longitude**	(e.g., -117.35213) -117.23861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/8/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:40 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Outlet was dry. Alternate site: ESC-3.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	RSF-4	**Latitude**	(e.g., 33.41174) 33.03444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	La Bajada Dip	**Longitude**	(e.g., -117.35213) -117.23583		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/8/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:12 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.33	NH_3-N (mg/L)	0.51	NO_3-N (mg/L)	4.65	Ortho-PO_4 (mg/L)	0.38
pH (pH units)	7.93	TURB (NTU)	4.8	COND (mS/cm)	2.65	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Difficult to determine flow. Water was ponded at sample location.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑**Confirmation For** _NH3-N_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	SEL-2	**Latitude**	(e.g., 33.41174) 33.01333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	MacKinnon Ranch Rd	**Longitude**	(e.g., -117.35213) -117.27167		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/12/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:59	**Observer**	KR/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.19	NH_3-N (mg/L)	2.1	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.38	TURB (NTU)	60.5	COND (mS/cm)	2.22	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1:5 dilution on ammonia. 0.42x5=2.1

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	SEL-2	**Latitude**	(e.g., 33.41174) 33.01333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	MacKinnon Ranch Rd	**Longitude**	(e.g., -117.35213) -117.27167		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/10/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:52	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.97	NH_3-N (mg/L)	1.05	NO_3-N (mg/L)	0.70	Ortho-PO_4 (mg/L)	0.22
pH (pH units)	7.25	TURB (NTU)	56.3	COND (mS/cm)	7.05	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1:5 dilution on ammonia. 0.21x5=1.05

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	SEL-3	**Latitude**	(e.g., 33.41174) 33.01639	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Mira Costa College Detention Basin	**Longitude**	(e.g., -117.35213) -117.25694		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/15/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:50 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other O + M
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.06	NH_3-N (mg/L)	0.65	NO_3-N (mg/L)	0.71	Ortho-PO_4 (mg/L)	0.42
pH (pH units)	7.67	TURB (NTU)	68.4	COND (mS/cm)	9.73	MBAS (mg/L)	0.75

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia <1.0**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **New (K-1403) ammonia kit- 1:5 dilution. 0.13x5=0.65**
Old (K-1503) ammnoia kit- 1:5 dilution. 0.67x5=3.35

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

Appendix C-3

2009 Dry Weather Monitoring Site Photos

CBS-1

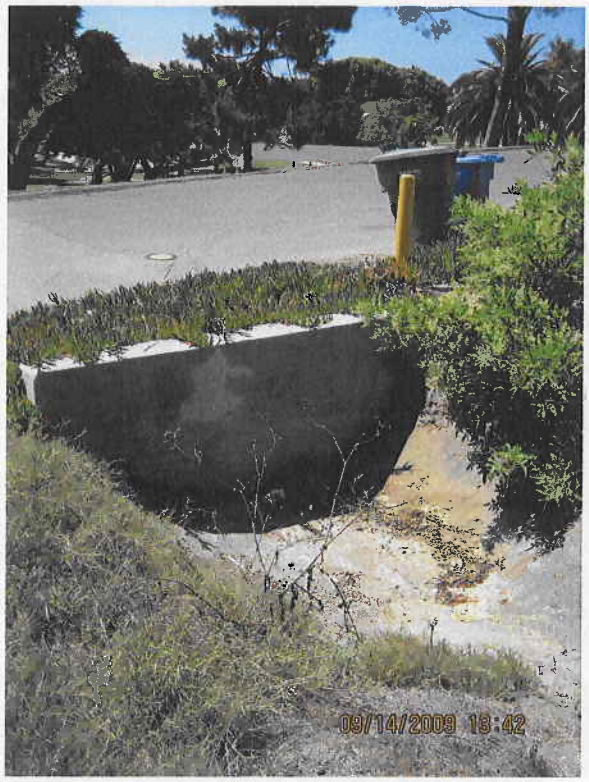

CBS-3N

CBS-2

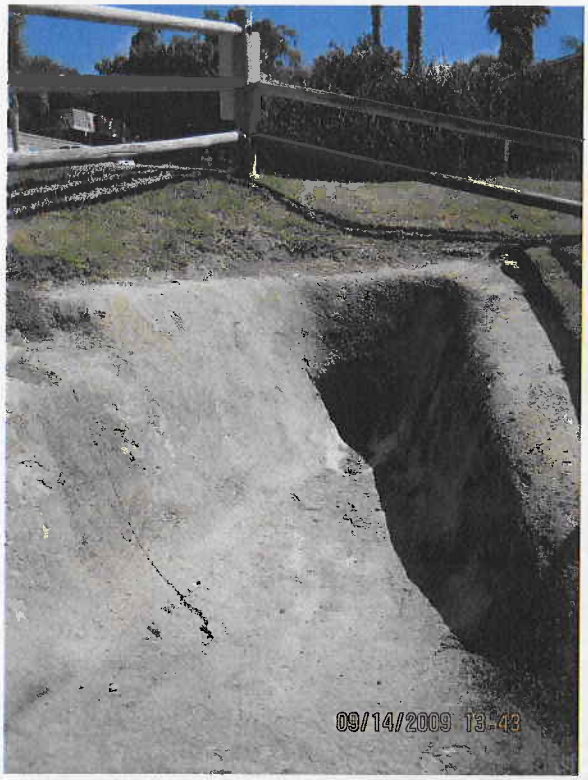

CBS-3S

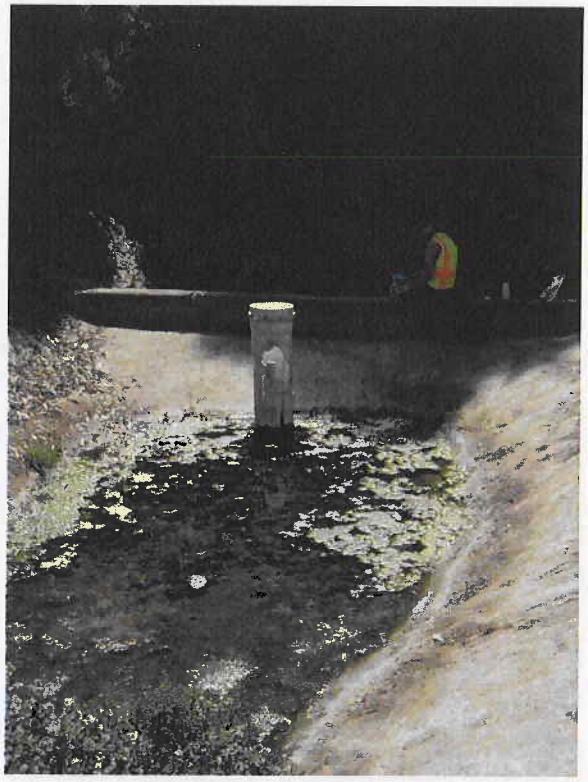

CBS-4

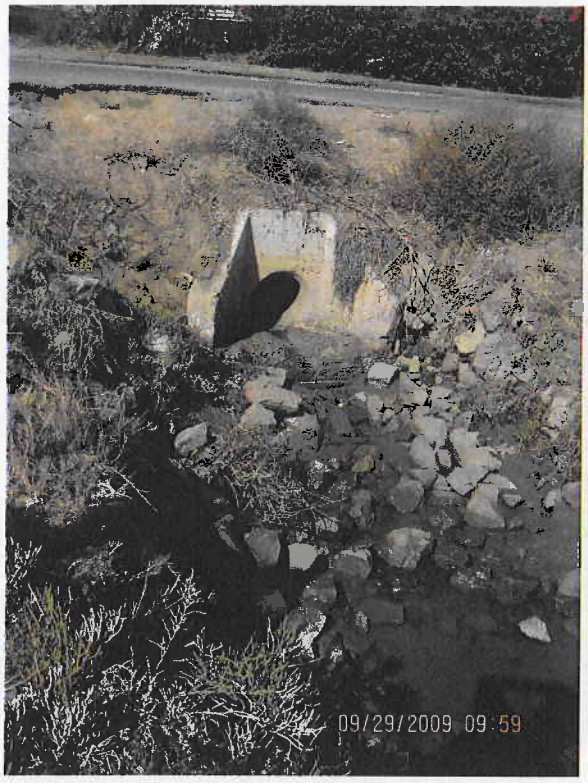

CBS-5

CBS-7

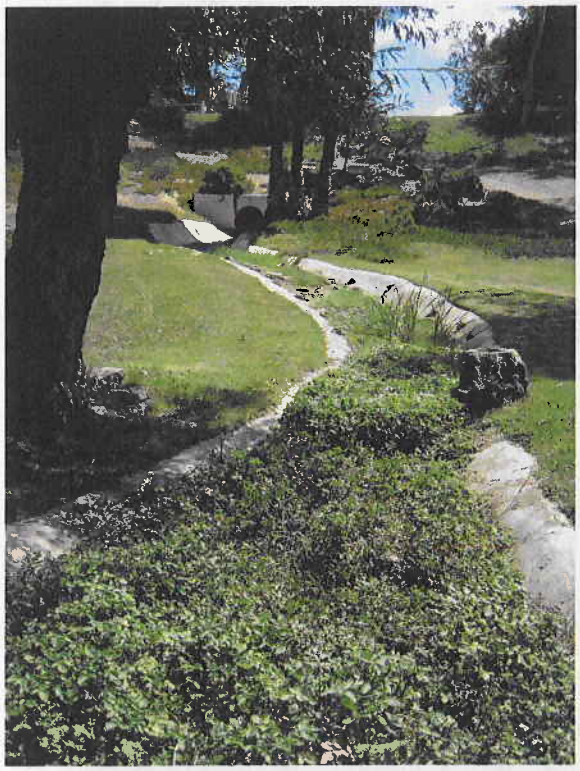

CBS-8

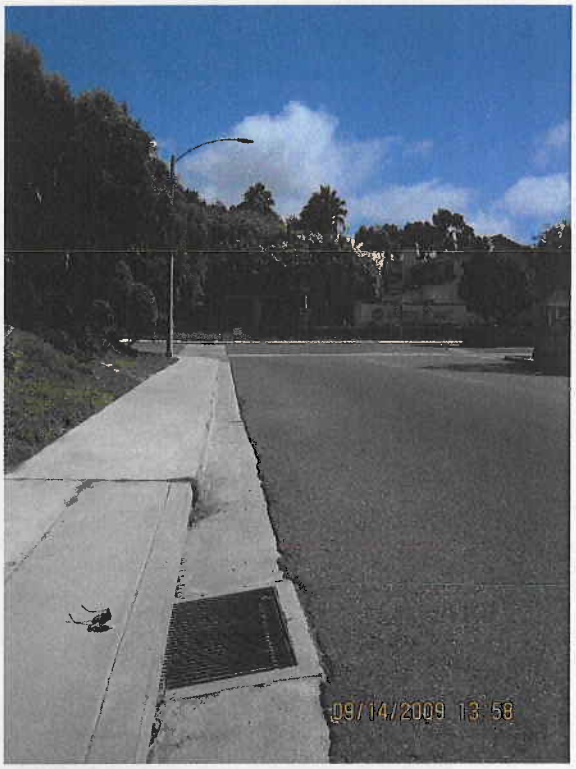

CBS-9

SEL-3

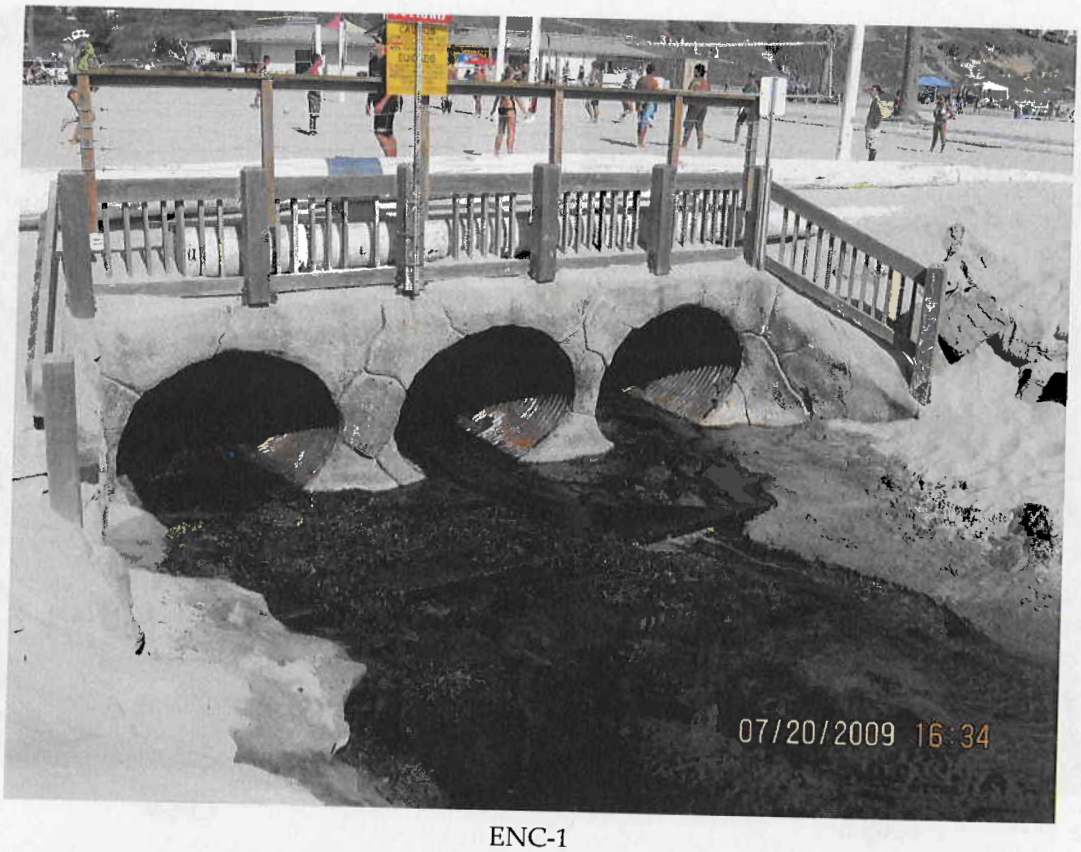

ENC-1

ENC-3

ENC-4

ENC-5

ENC-6

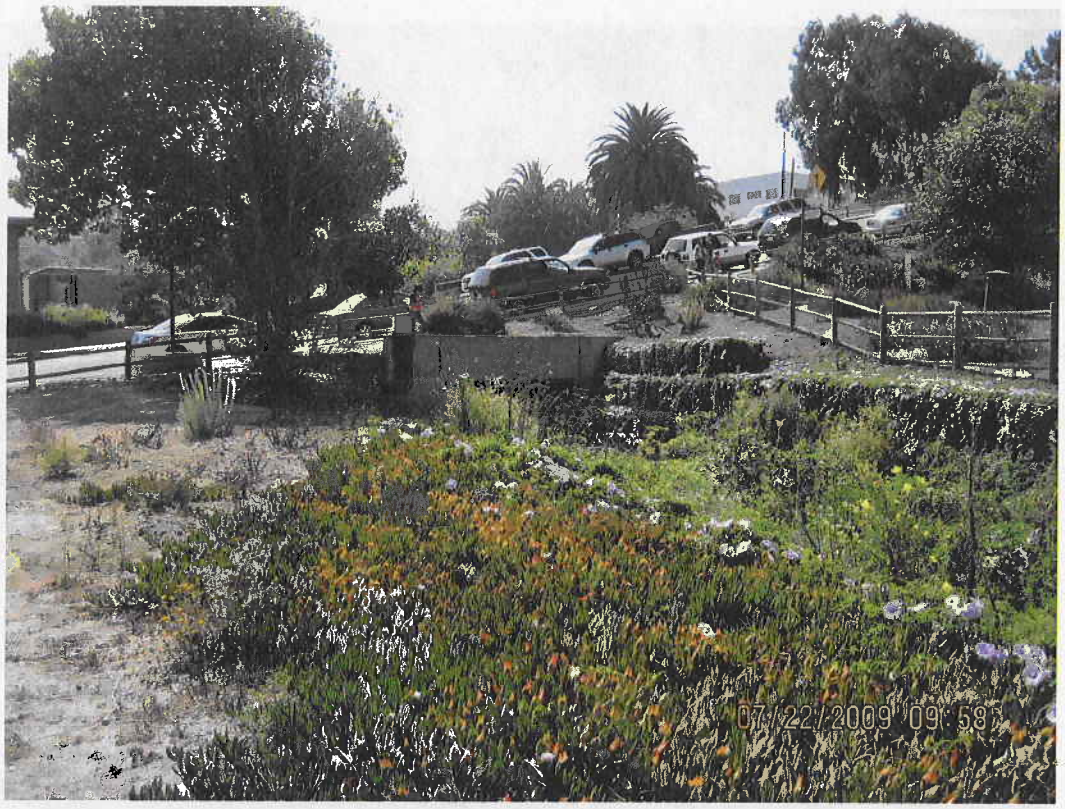

ENC-8

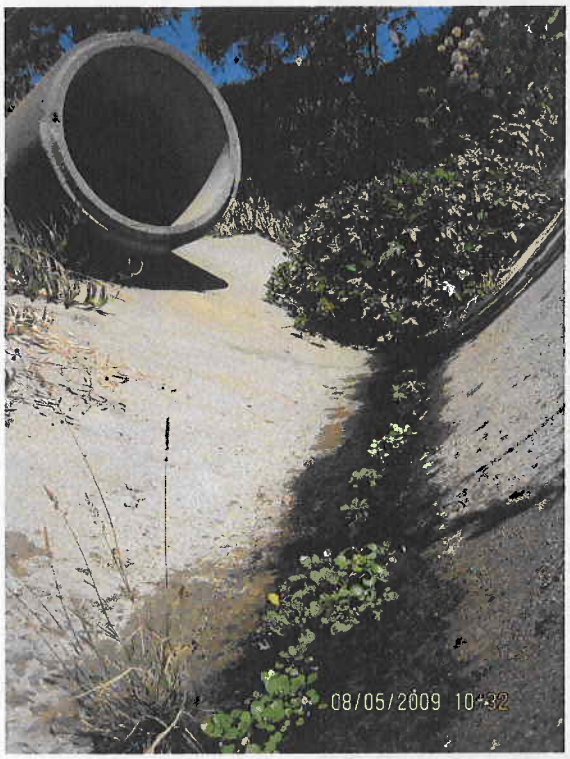

ENC-9

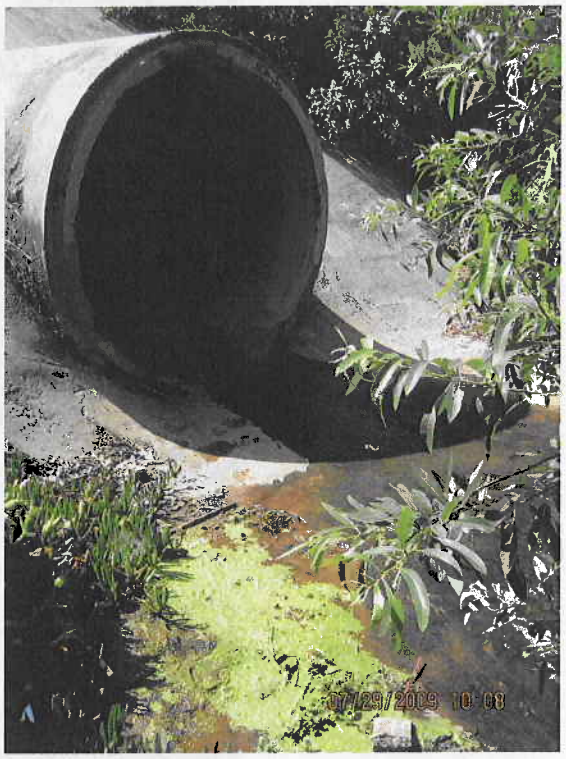

ENC-10

ENC-11

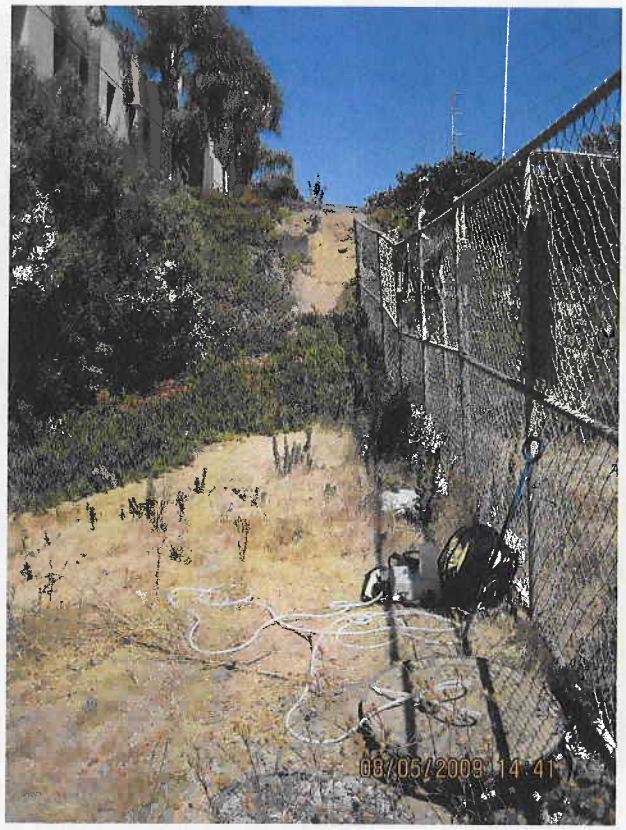

ENC-12

ENC-14

ENC-15

ENC-17

ENC-18

ESC-1

ESC-2

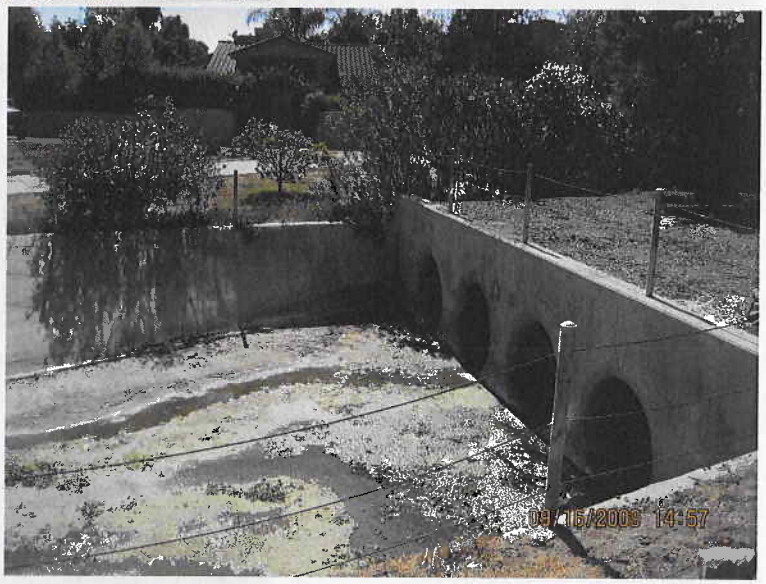

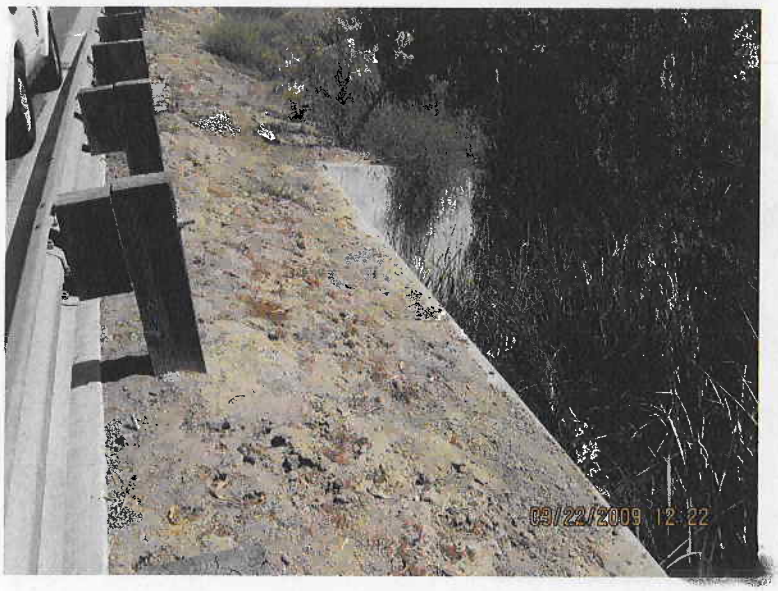

ESC-3

ESC-4

ESC-5

LCS-1

LCS-3

LCS-4

LCS-5

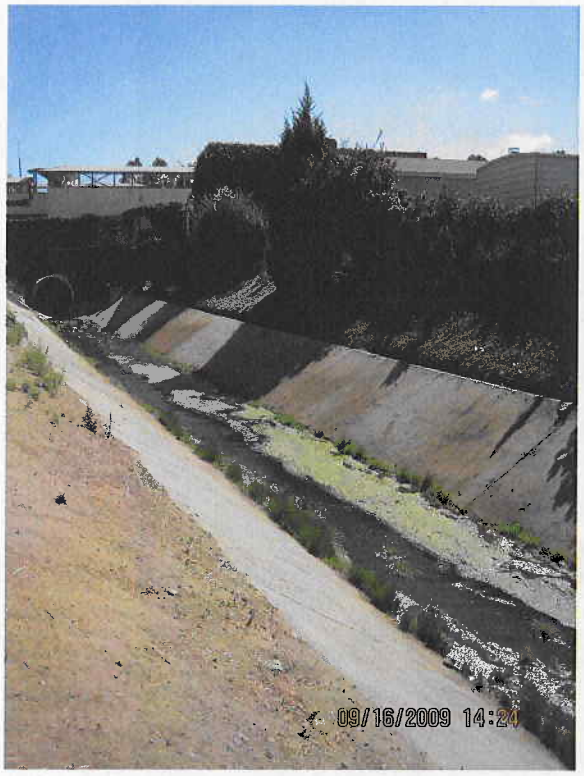

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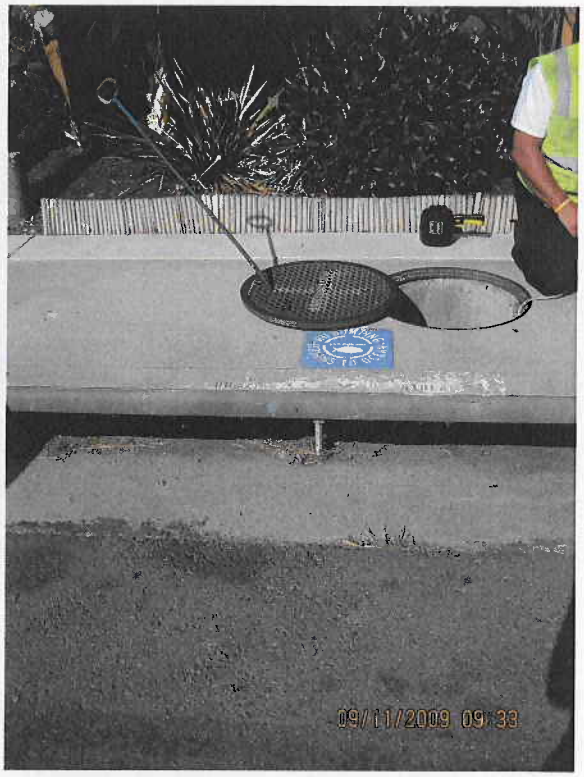

LCS-8

LCS-9

LUC-1

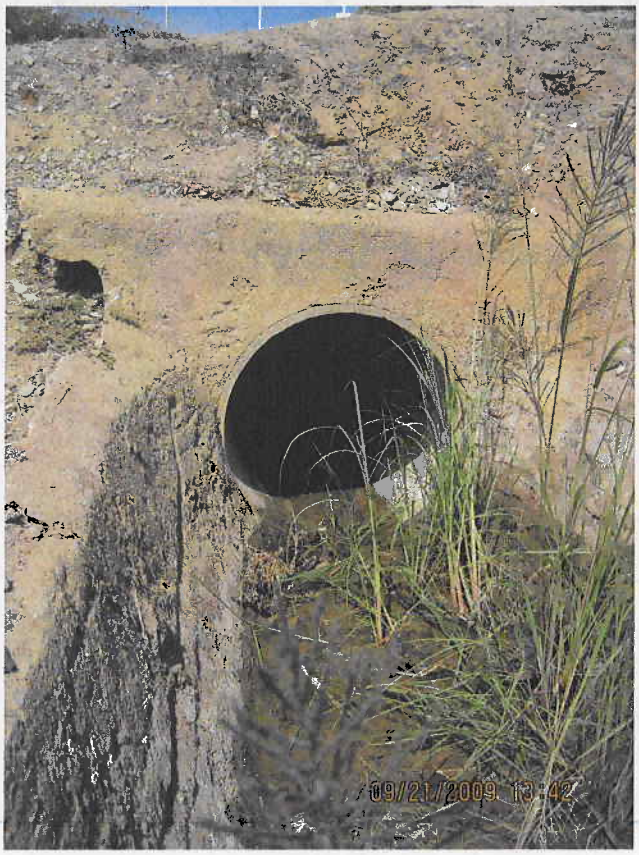

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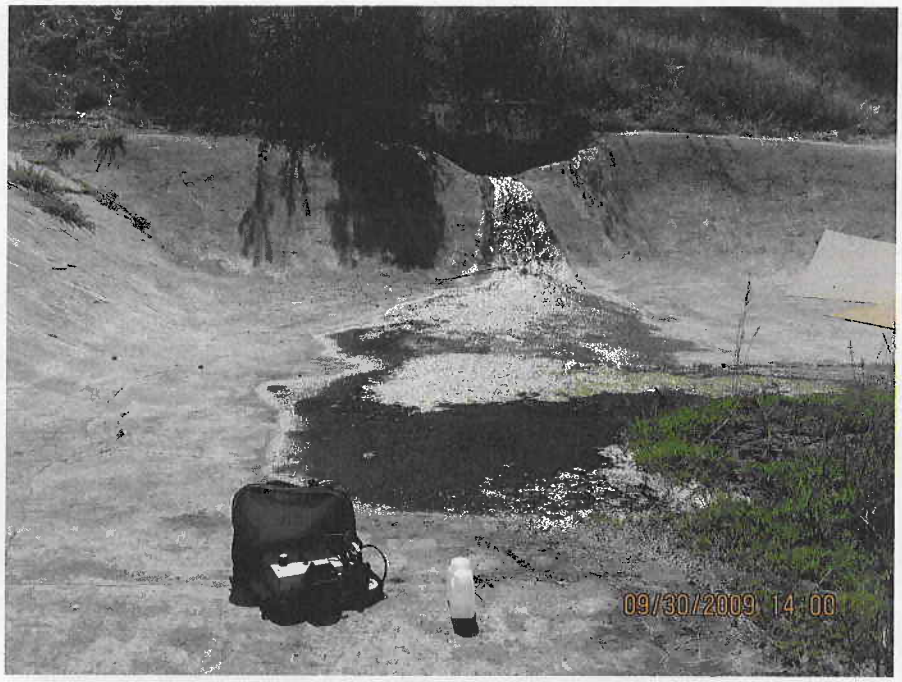

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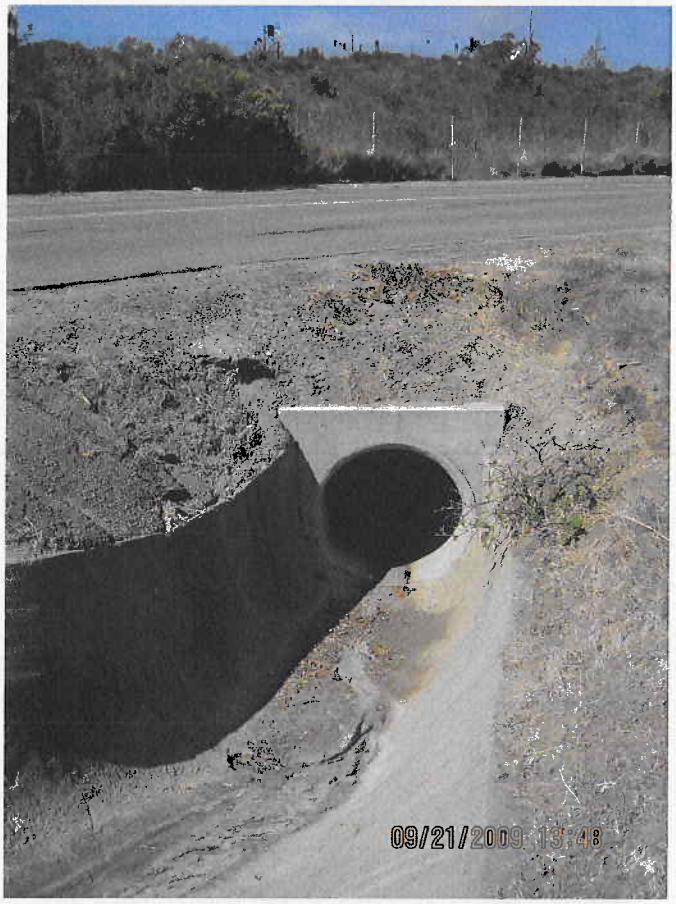

LUC-6

LUC-7

LUC-8

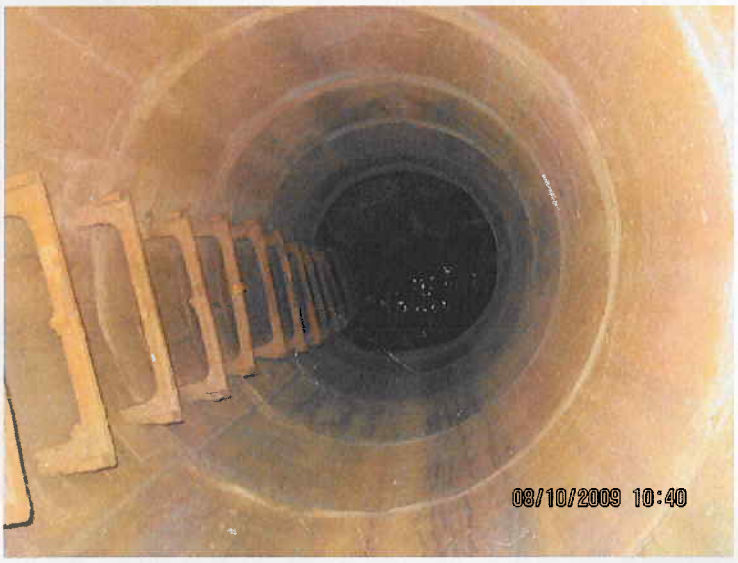

LUC-9

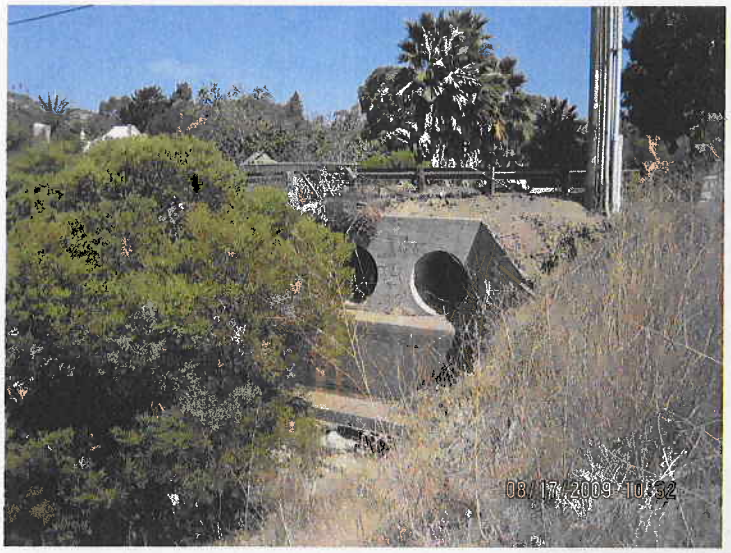

LUX-1

LUX-2

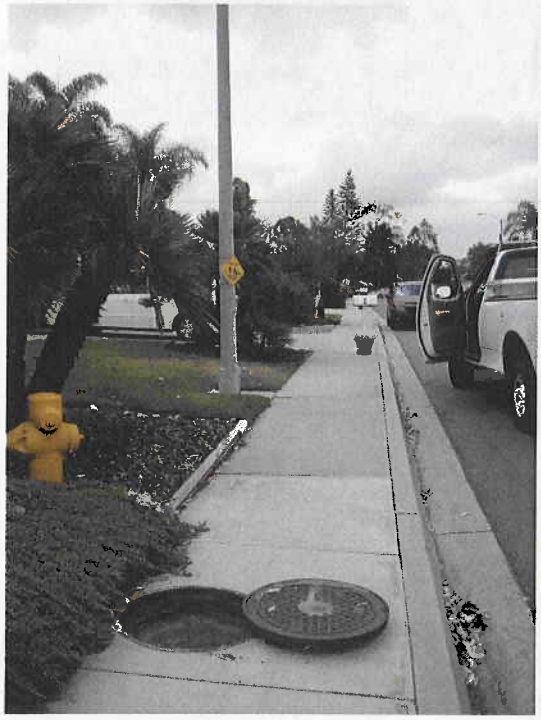

LUX-3

RSF-1

RSF-4

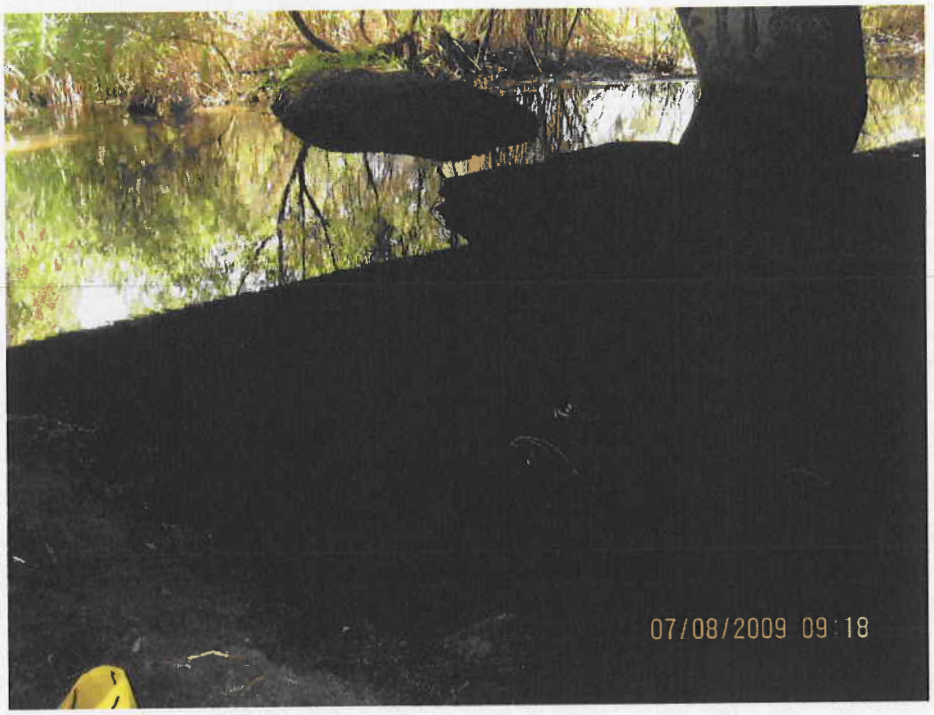

Appendix C-4

2009 Field Screening and Analytical Monitoring Results Table

Station ID	Sample Date	Ammonia (mg/L) K-1503 Old kit	Ammonia (mg/L) K-1403 New kit	QA/QC Ammonia (mg/L)	Conductivity (mS/cm)	QA/QC Conductivity (mS/cm)	MBAS (mg/L)	Nitrate (mg/L)	QA/QC Nitrate (mg/L)	Orthophosphate (mg/L)	QA/QC Orthophosphate (mg/L)	pH (pH)	QA/QC pH	Water Temperature (oC)	Turbidity (NTU)	QA/QC Turbidity (NTU)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Hardness, Total (mg/L)	Oil & Grease (mg/L)	Chlorpyrifos (ng/L)	Diazinon (ng/L)	Enterococcus (cfu/100 ml)	Fecal Coliform (cfu/100 ml)	Total Coliform (cfu/100 ml)
CBS-1	8/3/2009	**3.09**	NT	NT	4.42	NT	0.25	6.02	NT	0.61	NT	8.18	NT	25.11	3.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	1300	1400	1800
CBS-1	8/5/2009	**3.34**	NT	NT	1.91	NT	NT	NT	NT	NT	NT	8.31	NT	26.85	2.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-2	7/8/2009	**1.25**	NT	NT	**6.93**	NT	0.75	0.88	NT	0.1	NT	8.81	NT	32.49	4.9	NT	ND	ND	ND	ND	780	ND	ND	ND	1500	300	400
CBS-2	7/9/2009	**1.03**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-3N (Alt)	9/14/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBS-3S (Alt)	9/14/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBS-4	9/14/2009	**2.78**	0.18	0.12	**7.65**	NT	0.6	4.54	NT	NT	NT	8.08	NT	25.5	0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-5 (Alt)	9/29/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBS-7	9/14/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBS-8	9/14/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBS-9	9/14/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ENC-1	7/20/2009	**1.72**	NT	NT	4.88	NT	0.5	**11.3**	NT	0.37	NT	7.65	NT	27	2	NT	ND	0.004	0.002	0.02	1100	ND	ND	ND	1200	3000	8400
ENC-1	7/21/2009	**1.6**	NT	NT	4.97	NT	NT	**11.3**	NT	NT	NT	7.65	NT	24.48	2.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-10	7/29/2009	**7.0**	NT	NT	2.17	NT	0.5	9.26	NT	**8.0**	NT	7.55	NT	23.77	**22.1**	NT	ND	0.009	0.001	0.02	510	ND	ND	ND	**78000**	**110000**	**121000**
ENC-10	7/31/2009	0.25	NT	NT	2.93	NT	NT	NT	NT	0.63	NT	7.06	NT	23.99	**12.9**	NT	NT	NT	NT	NT	NT	NT	NT	NT	7500	3300	9450
ENC-11	8/5/2009	**1.59**	NT	0.42	**7.14**	7.55	0.5	**11.3**	**16.34**	0	ND	7.94	NT	24.73	1.8	1.05	NT	NT	NT	NT	NT	NT	NT	NT	700	2350	3550
ENC-11	8/10/2009	**1.4**	NT	NT	**6.55**	NT	NT	9.79	NT	NT	NT	7.79	NT	24.6	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-12	8/3/2009	0.6	NT	NT	0.452	NT	0.25	4.51	NT	**3.73**	NT	8.35	NT	28.79	11.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-12	8/5/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ENC-14 (Alt)	8/17/2009	0.3	NT	NT	**17.4**	NT	0.25	2.43	NT	**2.14**	NT	**9.13**	NT	24.9	2.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-14 (Alt)	8/19/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ENC-15	7/20/2009	**1.15**	NT	NT	3.68	NT	0.5	6.65	NT	1.6	NT	8.13	NT	25.37	4.2	NT	ND	0.01	ND	0.03	840	ND	ND	ND	900	2500	13000
ENC-15	7/21/2009	0.7	NT	NT	4.12	NT	NT	NT	NT	NT	NT	8.07	NT	24.98	3.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-17	8/3/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ENC-18	8/5/2009	0.1	NT	NT	1.78	NT	0.5	**11.3**	NT	**3.53**	NT	8.11	NT	24.67	3.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-18	8/10/2009	NT	NT	NT	1.97	NT	NT	0.82	NT	1.42	NT	8.18	NT	23.92	2.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-3	7/22/2009	0.7	NT	NT	**5.59**	NT	0.5	**11.3**	NT	0.11	NT	6.84	NT	24.74	**19.3**	NT	NT	NT	NT	NT	NT	NT	NT	NT	200	8300	17800
ENC-3	7/23/2009	NT	NT	NT	**5.62**	NT	NT	**11.3**	NT	NT	NT	6.79	NT	22.91	**55.2**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-4	7/20/2009	0.05	NT	NT	2.21	NT	0.25	9.56	NT	0.88	NT	8.19	NT	26.67	0.3	NT	ND	0.03	ND	0.03	300	ND	ND	ND	100	100	600
ENC-5	7/22/2009	**1.22**	NT	NT	**5.11**	NT	0.6	**10.09**	NT	0.08	NT	7.18	NT	23.23	3.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	800	1300	2400
ENC-5	7/23/2009	**1.23**	NT	NT	**5.34**	NT	NT	8.95	NT	NT	NT	7.24	NT	25.87	2.7	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
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ENC-6	7/23/2009	**1.84**	NT	NT	**7.49**	NT	NT	**11.3**	NT	NT	NT	7.31	NT	22.54	5.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-8	7/22/2009	**4.02**	NT	**1.83**	4.75	4.66	0.5	**11.3**	**23.06**	0.2	0.05	7.48	7.64	24.62	4.5	4.27	NT	NT	NT	NT	NT	NT	NT	NT	400	2300	2900
ENC-8	7/23/2009	**4.01**	NT	NT	4.7	NT	NT	**11.3**	NT	NT	NT	7.53	NT	23.1	6.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-9	8/5/2009	0.45	NT	NT	0.052	NT	0.25	2.46	NT	0.72	NT	8.04	NT	23.57	4.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-1	9/22/2009	**1.42**	0.14	ND	3.81	NT	0.4	1.52	NT	0.14	NT	7.49	NT	23.64	2.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-2	9/16/2009	**3.69**	0.41	ND	7.61	NT	0.5	2.39	NT	0.28	NT	7.83	NT	25.2	**16**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-3 (Alt)	9/22/2009	**1.97**	0.14	0.11	3	NT	0.15	0.91	NT	0.21	NT	7.93	NT	23.95	1.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-4 (Alt)	9/29/2009	**1.95**	0.12	ND	3.75	NT	0.15	0.29	NT	0.11	NT	8.05	NT	21.68	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-5	9/11/2009	**2.09**	0.22	0.1	3.72	NT	0.25	2.1	NT	0.76	NT	8.02	NT	23.95	1.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-1	7/29/2009	**1.95**	NT	NT	3.58	NT	0.5	0.28	NT	0.52	NT	7.31	NT	23.53	**13.6**	NT	ND	0.004	ND	0.005	740	ND	ND	ND	800	20000	46000
LCS-1	7/31/2009	0.95	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-2	7/6/2009	0	NT	NT	2.94	NT	0.25	0.13	NT	1.44	NT	7.44	NT	21.43	3.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-3 (Alt)	9/29/2009	**1.31**	0.16	0.36	0.792	NT	0.3	0.158	NT	0.19	NT	5.43	NT	21.41	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-4	7/6/2009	**3.78**	NT	NT	3.13	NT	0.5	0.49	NT	0.41	NT	6.96	NT	22.63	5.9	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-4	7/8/2009	**3.3**	NT	NT	4	NT	NT	NT	NT	NT	NT	7.01	NT	22.86	5.8	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-4	7/9/2009	**2.85**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-5	8/10/2009	0.35	NT	NT	5.08	NT	0.5	1.09	NT	0.29	NT	7.71	NT	25.37	1.7	NT	ND	0.004	ND	0.018	710	ND	NT	NT	3700	4100	9600
LCS-7	9/16/2009	**2.41**	0.17	0.74	3.41	NT	0.6	4.57	NT	0.1	NT	7.79	NT	25.17	8.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-8	9/11/2009	**1.55**	0.3	0.27	2.46	NT	0.4	4.89	NT	2.37	NT	7.27	NT	25.35	1.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-8	9/14/2009	NT	NT	NT	4.78	NT	NT	NT	NT	0.33	NT	7.03	NT	23.52	3.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-9 (Alt)	9/30/2009	NT	0.13	0.18	**23.77**	NT	0.5	0.54	NT	0.07	NT	6.43	NT	23.77	9.9	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	7/15/2009	0.59	NT	NT	2.89	NT	0.25	**11.3**	NT	0.16	NT	7.24	NT	22.39	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	7/16/2009	NT	NT	NT	2.89	NT	NT	**11.3**	NT	NT	NT	7.36	NT	22.56	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-10	7/15/2009	0.48	NT	NT	2.89	NT	0.25	**11.3**	NT	0.21	NT	6.93	NT	23.7	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-10	7/16/2009	NT	NT	NT	2.9	NT	NT	**11.3**	NT	NT	NT	6.58	NT	23.52	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-3	9/21/2009	0.76	0.08	0.43	1.21	NT	0	1.27	NT	0.02	NT	8.04	NT	25.41	1.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-4 (Alt)	9/30/2009	NT	0.12	0.16	4.2	NT	0.8	0.21	NT	0.53	NT	**9.35**	NT	32.01	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-6	9/21/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LUC-7 (Alt)	9/30/2009	NT	0.67	0.9	2.54	NT	0.25	2.06	NT	**3.96**	NT	7.97	NT	25.67	**15.5**	NT	NT	NT	NT	NT	NT	NT	NT	NT	**31000**	**36000**	**81000**
LUC-7 (Alt)	10/1/2009	NT	NT	NT	6.79	NT	NT	NT	NT	0.26	NT	6.81	NT	25.39	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	1000	1500	3300
LUC-8	8/10/2009	**2.4**	NT	NT	5.8	NT	0.5	4.81	NT	0.36	NT	8.23	NT	25.54	2	NT	ND	0.005	ND	0.029	1600	ND	NT	NT	**10000**	**30000**	48000
LUC-8	8/12/2009	**2.3**	NT	NT	5.49	NT	NT	NT	NT	NT	NT	8.27	NT	25.23	1.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	5100	6450	11050
LUX-1 (Alt)	8/17/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LUX-2	8/17/2009	**1.05**	NT	NT	3.47	NT	0.5	1.73	NT	0.96	NT	7.22	NT	23.4	**27.9**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUX-2	8/19/2009	0.3	NT	E 0.05	2.71	NT	NT	NT	NT	NT	NT	7.56	NT	22.2	**27.4**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUX-3	9/15/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RSF-1	7/8/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RSF-4	7/8/2009	0.51	NT	NT	2.65	2.46	0.25	4.65	NT	0.38	NT	7.93	NT	22.33	4.8	5.6	ND	ND	ND	ND	800	ND	ND	ND	700	800	3900
SEL-2	8/10/2009	**1.05**	NT	NT	**7.05**	NT	0.5	0.7	NT	0.22	NT	7.25	NT	22.97	**56.3**	NT	ND	0.008	0.001	0.009	2080	NT	NT	NT	100	100	600
SEL-2	8/12/2009	**2.1**	NT	NT	2.22	NT	NT	NT	NT	NT	NT	7.38	NT	22.19	**60.5**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
SEL-3	9/15/2009	**3.35**	0.65	0.32	**9.73**	NT	0.75	0.71	NT	0.42	NT	7.67	NT	23.06	**68.4**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes :

ND	Indicates Analyte was Not Detected above the reporting limit
NS	Indicates No Sample was taken
NT	Indicates analyte was Not Tested at that site
J	Indicates associated value is an estimated quantity
E	Indicates associated value is an estimate
Bold	Indicates value exceeded Action Levels

Appendix C-5

2009 Trash Assessment Forms

Trash Assessment Form

SITE ID: CBS-1 **DATE:** 8/3/09

LOCATION: SEJPA OUTFALL **TIME:** 11:38

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type □	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

□Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent □ 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Updated April 29, 2009

2009 Trash Assessment Form

SITE ID: CBS-2 **DATE:** 7/8/09

LOCATION: HIGHWAY 101 CHANNEL **TIME:** 12:45 PM

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): SUBOPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 40 X 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts	2		x			x						
Construction												
Fabric/Clothing												
Food Packaging	1		x	x		x		x				
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: CBS-3N **DATE:** 9/14/09

LOCATION: GLEN PARK (NORTH PIPE) **TIME:** 13:42

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10X40

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: CBS-3S **DATE:** 9/14/09

LOCATION: GLEN PARK (SOUTH PIPE) **TIME:** 13:43

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10X40

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: **CBS-4** **DATE:** **9/14/09**

LOCATION: **CARDIFF COVE** **TIME:** **11:24**

OBSERVER: **MP/CN**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **OPTIMAL**

ESTIMATED AREA OF ASSESSMENT L x W (FT): **20X20**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: CBS-5 **DATE:** 9/29/09

LOCATION: PLASTINO BUILDING **TIME:** 10:01

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT):

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Site was dry.

Trash Assessment Form

SITE ID: CBS-7 **DATE:** 9/14/09

LOCATION: WOODLAKE AND EVERGREEN **TIME:** 13:15

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 100X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: CBS-8 **DATE:** 9/14/09

LOCATION: HOA PARK / 1002 WOODGROVE **TIME:** 13:20

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 100X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Hand broom inside storm drain.

Trash Assessment Form

SITE ID: **CBS-9** **DATE:** **9/14/09**

LOCATION: **LAKE DR WALES** **TIME:** **14:00**

OBSERVER: **MP**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **OPTIMAL**

ESTIMATED AREA OF ASSESSMENT L X W (FT): **5X5**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Leaf litter.

Trash Assessment Form

SITE ID: ENC-1 **DATE:** 7/20/09

LOCATION: MOONLIGHT BEACH **TIME:** 13:02

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): MARGINAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: ENC-10 **DATE:** 7/29/09

LOCATION: COTTONWOOD CREEK / DEL TACO **TIME:** 10:17

OBSERVER: MP/MM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): POOR

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20X20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☑ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing	1		☑								☑	
Food Packaging	2		☑								☑	
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Evidence of active encampments at site. Trash included blankets and food packaging.

Trash Assessment Form

SITE ID: ENC-11 **DATE:** 8/5/09

LOCATION: REQUEZA CHANNEL **TIME:**

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20X20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-12 **DATE:** 8/3/09

LOCATION: ENCINITAS BLVD / SDUHSD **TIME:** 14:20

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-14 **DATE:** 8/17/09

LOCATION: VIA JULITA **TIME:** 11:39

OBSERVER: KR/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 4x2

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Styrofoam, possible sewage debris- alerted Wastewater.

Trash Assessment Form

SITE ID: ENC-15 **DATE:** 7/20/09

LOCATION: ENC RANCH DETN BASIN **TIME:** 10:51

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-17 **DATE:** 8/3/09

LOCATION: SUNSHINE GARDENS **TIME:** 14:35

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5X5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-18 **DATE:** 8/5/09

LOCATION: PUEBLA ST. LA MIRADA **TIME:** 11:07

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-3 **DATE:** 7/22/09

LOCATION: COAST HWY B ST **TIME:** 10:58

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-4 **DATE:** 7/20/09

LOCATION: SECOND ST **TIME:** 14:23

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: **ENC-5** **DATE:** **7/22/09**

LOCATION: **COTTONWOOD CREEK PARK SOUTH** **TIME:** **14:45**

OBSERVER: **MP/CN**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **OPTIMAL**

ESTIMATED AREA OF ASSESSMENT L x W (FT): **50X30**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-6 **DATE:** 7/22/09

LOCATION: MOONLIGHT CREEK **TIME:** 14:03

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Plastic bottles and tennis balls from nearby tennis courts.

Trash Assessment Form

SITE ID: ENC-8 **DATE:** 7/22/09

LOCATION: 3RD ST B ST **TIME:** 9:55

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ENC-9 **DATE:** 8/5/09

LOCATION: ENC. BLVD SAXONY **TIME:** 10:33

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 40X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ESC-1 **DATE:** 9/22/09

LOCATION: BROOKSIDE LN / COPPER CK **TIME:** 11:36

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT):

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ESC-2 **DATE:** 9/16/09

LOCATION: LONE JACK RD / STRATFORD KNOLL **TIME:** 14:55

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50X20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ESC-3 **DATE:** 9/22/09

LOCATION: DOUBLE LL RANCH RD **TIME:** 12:14

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): NA

ESTIMATED AREA OF ASSESSMENT L X W (FT):

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ESC-4 **DATE:** 9/29/09

LOCATION: PRIVATE RD (OLIVENHAIN) **TIME:** 10:30

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): NA

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: **ESC-5** **DATE:** **9/11/09**

LOCATION: **CHELSEA / CALLE SANTA CRUZ** **TIME:** **10:05**

OBSERVER: **MP/BT**

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): **OPTIMAL**

ESTIMATED AREA OF ASSESSMENT L x W (FT): **5X5**

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LCS-1 **DATE:** 7/29/09

LOCATION: GARDEN VIEW / ECR **TIME:** 10:50

OBSERVER: MP/MM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☑ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type □	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

□Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent □ 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

The County of San Diego Vector Control Program identified this site as a mosquito breeding site.

Trash Assessment Form

SITE ID: LCS-2 **DATE:** 7/6/09

LOCATION: LEUCADIA BLVD / ECR **TIME:** 15:20

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20X20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type □	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

□Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent □ 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

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Updated April 29, 2009

Trash Assessment Form

SITE ID: LCS-3 **DATE:** 9/29/09

LOCATION: SUN VISTA PARK **TIME:** 11:00

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): NA

ESTIMATED AREA OF ASSESSMENT L X W (FT):

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type □	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

□Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent □ 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

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Updated April 29, 2009

Trash Assessment Form

SITE ID: LCS-4 **DATE:** 7/6/09

LOCATION: ECR / MOUNTAIN VISTA **TIME:** 14:10

OBSERVER: MP/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type □	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

□Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent □ 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

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Updated April 29, 2009

Trash Assessment Form

SITE ID: LCS-5 **DATE:** 8/10/09

LOCATION: VIA MOLENA / ECR **TIME:** 13:15

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type □	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

□Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent □ 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

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Updated April 29, 2009

Trash Assessment Form

SITE ID: LCS-7 **DATE:** 9/16/09

LOCATION: EL CAMINO REAL (SOUTH OF LA ENTRADA LN.) **TIME:** 14:30

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT):

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type □	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

□Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent □ 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

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Updated April 29, 2009

Trash Assessment Form

SITE ID: LCS-8 **DATE:** 9/11/09

LOCATION: 200 TURNER AVE **TIME:** 9:35

OBSERVER: MP/BT

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type □	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

□Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent □ 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

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Updated April 29, 2009

Trash Assessment Form

SITE ID: LCS-9 **DATE:** 9/30/09

LOCATION: 200 TURNER AVE **TIME:** 10:30

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): NA

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type □	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

□Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent □ 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

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Updated April 29, 2009

Trash Assessment Form

SITE ID: LUC-1 **DATE:** 7/15/09

LOCATION: PONTO BEACH DETN BASIN **TIME:** 14:53

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUC-10 **DATE:** 7/15/09

LOCATION: HWY 101 AVOCADO **TIME:** 13:25

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5X5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUC-3 **DATE:** 9/21/09

LOCATION: NORMANDY / PIRAEUS **TIME:** 9:32

OBSERVER: MP/PCR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 100X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUC-4 **DATE:** 9/30/09

LOCATION: FOX POINT DETENTION BASIN **TIME:** 14:00

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): NA

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20x40

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUC-6 **DATE:** 9/21/09

LOCATION: PIRAEUS DETN BASIN **TIME:** 11:00

OBSERVER: MP/PCR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 100X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Evidence of dumping upstream along Piraeus on the east side of street.

Trash Assessment Form

SITE ID: LUC-7 **DATE:** 9/30/09

LOCATION: QUAIL HOLLOW DR (UPSTREAM) **TIME:** 11:11

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUC-8 **DATE:** 8/10/09

LOCATION: QUAIL HOLLOW DR **TIME:** 10:43

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5x5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUX-1 (ALT) **DATE:** 8/17/09

LOCATION: EAST MANCHESTER / ECR **TIME:** 10:30

OBSERVER: KR/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: LUX-2 **DATE:** 8/17/09

LOCATION: SAGE CANYON DR **TIME:** 10:41

OBSERVER: KR/CN

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50X50

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Styrofoam, paper

Trash Assessment Form

SITE ID: LUX-3 **DATE:** 9/15/09

LOCATION: 927 ELMVIEW DR **TIME:** 9:36

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5X5 MANHOLE

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: RSF-1 **DATE:** 7 8 09

LOCATION: PEPPERTREE LANE **TIME:** 10:40

OBSERVER: MP KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): MARGINAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50X20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: RSF-4 **DATE:** 7/8/09

LOCATION: LA BAJADA DIP **TIME:** 10:12

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): SUBOPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20X50

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☑ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: SEL-2 **DATE:** 8/10/09

LOCATION: MACKINNON RANCH RD **TIME:** 13:52

OBSERVER: MP/ME

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 10X10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: SEL-3 **DATE:** 9/15/09

LOCATION: MIRA COSTA COLLEGE DETN **TIME:** 9:50

OBSERVER: MP/KR

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): OPTIMAL

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30X30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

_____

_____

_____

_____

_____

_____

_____

_____

Appendix D

Administrative Citation Form

City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024
TELEPHONE NO.: (760) 633-2600
FAX NO: (760) 633-2818
www.ci.encinitas.ca.us

Citation CW-

Administrative Citation

Date of Violation:

☐ **WARNING** ☐ 1st Citation □100 per violation ☐ 2nd Citation □200 per violation
☐ 3rd Citation □500 (per violation and each subsequent violation within a 12-month period)

Payment of □0.00 is due no later than (see reverse side for payment and appeal information)

This citation prohibits the continuation or repeated occurrence of the violation described below. Payment of the fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

Violation Address	**Assessor□s Parcel Number**
Person Cited	**Relationship of person being cited**
Mailing Address	**Business (if applicable)**

Code Section Violated	**Description of Violation**

As per the City of Encinitas Municipal Code Section 20.08.110 the following corrective actions must be implemented:

Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

Enforcing Officer	**Phone Number** **(760) □**	**Signature**	**Date issued**
Person Cited (Print Please)		**Acknowledgement of Receipt-Signature**	**Date**

Method of Delivery
☐ **In Person** ☐ **Posted on Property** ☐ **By Mail** ☐ **Certified Mail** ☐ **Other**

CC:

ADMINISTRATIVE CITATIONS

Encinitas Municipal Code Chapter 1.08.080 provides for the issuance of an administrative citation for violations of the Code. There are four levels of citations that may be issued progressively for a violation. The levels, as indicated on the front of the citation, are a Warning, a 100 First Citation, a 200 Second Citation, and a 500 Third and subsequent Citations. These fines are per violation and are cumulative. A warning, if issued, does not incur a fine and, therefore, cannot be appealed.

A. RIGHTS OF APPEAL

You have the right to appeal this citation within 15 calendar days from the date the citation was issued. An appeal must be made in writing, including a return address, a basis for the appeal in detail must be included, and be accompanied by the fine amount. An appeal will result in an administrative hearing.

Failure of any person to properly file a written appeal within 15 calendar days shall constitute a waiver of his or her right to an administrative hearing and adjudication of the citation or any portion thereof and the total amount of the fine.

B. HOW TO PAY FINE

The amount of the fine is indicated on the front of the administrative citation and is due within 30 calendar days of the issue date of the citation. You may pay by mail or in person. Payment should be made by credit card, personal check, cashier's check, or money order payable to the City of Encinitas. Payment should be made at the address below. Please write the citation number on your check or money order.

City of Encinitas
505 S. Vulcan Ave.
Encinitas, CA 92024
Attention: Finance Department / Administrative Citations

If the fine is not paid within 30 calendar days of the issue date of the citation, you will receive a Delinquent Notice from the Finance Department and there will be a 100 penalty fee assessed in addition to the original fine.

Payment of any fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

C. CONSEQUENCES FOR FAILURE TO PAY THE FINE

The failure of any person to pay the fine assessed by a citation within 30 calendar days of the issuing date of the citation or the due date on a Delinquent Notice may result in turning the account over to a collection agency, filing a claim with Small Claims Court, a lien against your property, or any other available legal remedy to collect such money. The City has the authority to collect all costs associated with the filing of such actions.

D. CONSEQUENCES OF FAILURE TO CORRECT VIOLATIONS

There are numerous other enforcement options that may be used to encourage correction of violations. These options include, but are not limited to: criminal prosecution, civil litigation, abatement, recording the violation with the County Recorder, and forfeiture of certain benefits for substandard residential rental property.

If you need further information about the violation and/or how to comply, please call the officer designated on the front of the citation.

Appendix E

JURMP Annual Report Requirements Checklist

Appendix E
JURMP Annual Report Requirements Checklist

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4.3.1, Appendix C (Section 2.0), Appendix C-1
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	Appendix C
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	N/A
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	Appendix C
v. The number and brief description of illicit discharges and connections identified.	7.5.2
vi. The number of illicit discharges and connections eliminated.	7.5.2
vii. Identification and description of all spills to the MS4 and response to the spills.	Appendix H-1
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3.1, 7.3.4
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.2.1
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2.3, 7.2.4, Appendix H-1
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2.3
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5.2, 7.5.3, Appendix H-1

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Location in Report**
xiii. A description of notable activities conducted to manage illicit discharges and connections.	Appendix C (Section 6.0) Appendix H-1

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Appendix C
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	Appendix C
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	Appendix C (Section 3.0), Appendix C-2
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	Appendix C, Section 3.0
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	Appendix C, Appendix C-3
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	Appendix C, Appendix C-3
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	Appendix C
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	Appendix C

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	Appendix C (Section 7.0), Appendix C-4
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	Appendix C, Table 5.0
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	Appendix C (Section 3.0)
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5.2
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	Appendix C (Section 1.0)

CITY OF ENCINITAS

Clean Water Program

ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program Annual Report

FY 2009-10

CITY OF ENCINITAS

Clean Water Program

ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program Annual Report

FY 2009-10

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EXECUTIVE SUMMARY

Section J.3 of Water Quality Order No. R9-2007-0001, adopted January 24, 2007, requires the City of Encinitas to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2009-2010 with a defined reporting period from July 1, 2009 through June 30, 2010. This reporting period is marked by the application and refinement of newly developed program elements, and the assimilation of core components for a broadly effective and efficient set of actions. Reporting for this annual report has been prepared in compliance with standards established in Water Quality Order No. 2007-0001, and is based upon the most current information available at the time of document preparation. This report is presented in the standardized annual reporting format developed collectively by the San Diego Region Municipal Stormwater Copermittees.

On March 24, 2008, the City of Encinitas submitted, as required by Order No. 2007-0001, an updated JURMP. The JURMP was prepared as a foundational program document to detail programs, process, procedure, and implementation strategies employed by the City to improve and protect the quality of local surface and receiving waters. As part of the JURMP update process, the following list of objectives was established to set baseline guidance for overall program success:

- Develop programmatic elements to ensure compliance with regulatory standards and provisions mandated in Order No. R9-2007-001.
- Establish management processes and procedures to ensure accountability for program actions and activities.
- Establish and support a set of effective and efficient strategies to address Encinitas water quality concerns.
- Build program elements around integrated assessment approaches in order to evaluate overall performance and effectiveness of program components.

Programmatic reporting, represented in this document, serves as a critical self assessment tool in consideration of the objectives outlined above. However, it should be noted that the value added outcomes, both to the program and to the community of Encinitas, of each program area are in constant review as local, regional, and discipline specific technical and scientific knowledge advances. It is important to recognize the iterative nature of stormwater and surface water quality management, as such programs are comprehensive in nature, and each individual component contributes to the overall effectiveness of program actions. The information presented in this report captures the development and implementation of program components within the defined reporting period and represents the state of program elements as defined by that period. Future reporting years will provide opportunity to express refinement and acuity of program

features and the City's overall progression in the field of stormwater and surface water quality management.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton, City Manager
City of Encinitas

9-22-10
Date

1.0 INTRODUCTION

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollution such as urban runoff, and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issued to local governments and other agencies.

In 2002, the City of Encinitas (City) developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01 (2001 Permit). On January 24, 2007, Order No. R9-2007-0001 (Order, Permit, 2007 Permit or Municipal Stormwater Permit), was adopted by the RWQCB, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and the incorporated cities of San Diego County, including the City of Encinitas (Copermittees). Under the requirements of Order No. R9-2007-0001, the City prepared and submitted on March 24, 2008 an updated JURMP document describing enhancements to existing programs, as well as newly developed programmatic elements to meet the provisions of the adopted permit.

Section J.3 of Water Quality Order No. R9-2007-0001, requires the City to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2009-2010 (FY 2009-10) with a defined reporting period from July 1, 2009 through June 30, 2010.

1.1 BACKGROUND

The City of Encinitas encompasses an overall area of nearly 20 square miles and is located along six miles of Pacific coastline in northern San Diego County. The City is characterized by coastal beaches, cliffs, flat-topped coastal areas, steep mesa bluffs and rolling hills. Incorporated in 1986, drawing together the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain and Leucadia, the City has an approximate population of 60,000. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south.

The City of Encinitas is situated entirely within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and the Escondido Creek Watershed to the south. The City is naturally divided by eight (8) distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon sub-basins. Encinitas receives an average annual rainfall of approximately ten (10) inches.

The City owns and maintains improved and open storm water channels, underground pipes of varying material, storm water detention basins, catch basins, and a variety of other MS4 facilities.

In general, the City drains to three blue-line creeks: Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. In 2006, Cottonwood Creek was 303(d) listed for DDT, phosphorous, and sediment toxicity stressors. Further, the Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for bacteria indicators due to urban runoff from Cottonwood Creek. Encinitas Creek drains the north-central portion of the City, and drains into Batiquitos Lagoon, which is designated as a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. In 2006, Encinitas Creek was 303(d) listed for phosphorous impairments. Escondido Creek, listed in 2006 for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids, drains the southern and northwest (Olivenhain) portion of the City and drains into San Elijo Lagoon. San Elijo Lagoon is 303(d) listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic conditions.

1.2 PURPOSE AND OBJECTIVES

The purpose of the 2009-2010 JURMP Annual Report is to provide a comprehensive account of programmatic activities conducted by the City of Encinitas to meet the requirements of the Order No. 2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. Notably, a comprehensive program update occurred through the JURMP update process in 2008; therefore, only significant augmentation of program elements or planned changes will be captured in the following annual report. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

Being a coastal community, environmental protection and water quality are of utmost importance to the City of Encinitas. As a result, the City has established strong water quality protection policies which are reflected in development planning documents and procedures. Through the implementation of the Development Planning Component of the City's JURMP and other related planning documents, the City aims to reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP) to protect receiving water bodies and manage increases in runoff and erosion from development projects.

This section describes the City's actions during FY 2009-10 which contributed to the successful implementation of the City's Development Planning Component. Included in this section is a summary of recent updates made to land use policies and procedures, a description of the update of the City's Standard Urban Stormwater Mitigation Plan (SUSMP), the development of the San Diego region Hydromodification Management Plan, a review of the development projects approved in the reporting year, and a summary of the second year of implementation of the BMP installation, verification, and inspection programs.

2.2 LAND USE PLANNING

The City's land use planning process facilitates (1) the reduction of development project discharges of pollutants from the MS4 to the MEP, (2) the prevention of development project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) management of increases in runoff discharge volumes, rates, and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

The City's land use planning process is fundamentally structured around the following planning, guidance, and enforcement documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- Watercourse Protection, Storm Water Management and Discharge Control Ordinance (Municipal Code Chapter 20.08)
- Grading, Erosion and Sediment Control Ordinance (Municipal Code Chapter 23.24), adopted March 2009
- Encinitas Stormwater Manual (Local SUSMP), adopted March 2010
- Storm Water Best Management Practices Manual II , updated March 2010

The consistent application and regular update, as required or necessary, of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections describe the City's land use planning process and the documents in more detail.

2.2.1 BACKGROUND

The City of Encinitas was incorporated in 1986, drawing together the communities of Cardiff-By-The-Sea, Leucadia, Olivenhain, and old and new Encinitas. The City's General Plan was adopted in 1989 and is amended on a limited, as needed basis. The City's JURMP, the Storm Water Ordinance, and the Storm Water BMP Manual II were each originally developed in 2002 as required by Order 2001-01. Each of these documents were reviewed and updated as needed in fiscal year 2007-08 as part of the JURMP update process and as required by the new Municipal Permit. Notably, in FY 2009-10 the City of Encinitas developed and adopted the Encinitas Stormwater Manual (ESM), serving as the City's new local SUSMP document.

2.2.2 SOURCE CHARACTERIZATION

The City addresses seven major land use categories in its General Plan: residential, office professional, commercial, industrial, public / semi-public, transportation, and ecological / open space / parks. Each of these land uses is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their designated sections within this document.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Storm Water Ordinance, Grading Ordinance, BMP Manual II, and the new Encinitas Stormwater Manual, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During FY 2007-08, the City of Encinitas updated its land use planning BMPs as required by Order 2007-0001. As part of the 2008 JURMP update process, these BMPs were incorporated into Storm Water BMP Manual II. In FY 2009-10, Clean Water Program staff completed the process of updating the City's local SUSMP to meet the minimum standards established in the recently updated and approved regional Model SUSMP. The City's new local SUSMP document, titled the Encinitas Stormwater Manual, was adopted in March 2010. The most current version of the City's BMP Manual II and the Encinitas Stormwater Manual can be accessed through the Clean Water Program webpage at: http://cwp.cityofencinitas.org. For more detail regarding the development and adoption of

the Encinitas Stormwater Manual and the regional Model SUSMP refer to Section 2.2.4.4 and 2.4.4.1 below.

2.2.4 PROGRAM IMPLEMENTATION

2.2.4.1 GENERAL PLAN

The City of Encinitas General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural bodies of water and drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The General Plan also discourages the use of large amounts of impervious surfaces in new development areas, minimizing the transport of urban runoff and pollutants. The breadth of the City's General Plan policies are such that they cross reference each other and have been determined to comprehensively comply with the Municipal Permit.

The City's General Plan document serves as the blueprint for the long-range, orderly, physical development of the City and contains stated community goals and policies designed to protect its environmental, social, cultural and economic resources as the City develops. The General Plan consists of an integrated and internally-consistent set of goals, policies, and standards that address a number of issue areas which include land use, circulation, housing, noise, safety, recreation, conservation, and open space.

Portions of the General Plan also encompass the City's Local Coastal Program (LCP) Land Use Plan, which guides development in the City's Coastal Zone pursuant to the Coastal Act. As a result, the City's General Plan and LCP are a combined single document.

The City implements the policies in the General Plan using a variety of resources including: the JURMP, Municipal Code, Storm Water BMP Manual II, the Encinitas Stormwater Manual, Development Agreements, and other various land use plans and permits. Section 2.4 of this document describes how the water quality and watershed policies are implemented through the City's development planning process.

As a component of the 2008 JURMP update (prepared in FY 2007-08) an assessment of the City of Encinitas General Plan was conducted to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City's General Plan goals and policies are consistent with the Municipal Permit, and no amendments to the General Plan were required as a part of the JURMP update.

Notably, in FY 2009-10, the City of Encinitas and Clean Water Program staff have been actively involved in a Comprehensive General Plan Update (CGPU) process that is anticipated to take approximately 2-3 years. In February 2009, the City released a request

for proposal (RFP), inviting proposals from professional planning and design firms to provide services associated with the General Plan Update. The scope of the RFP included direction to address new policy issues such as sustainable communities, healthy communities, climate change, green building, surface water quality, and stormwater management. As part of the selection process, and to represent water quality, stormwater management, and interrelated disciplines, the Clean Water Program Manager was invited to participate as an interview panel member. This effort is significant both to the City of Encinitas and the Clean Water Program, as it will provide opportunity to shape and marry citywide policy as it directly relates to water quality and stormwater management in the City of Encinitas.

As the comprehensive General Plan Update process has taken shape over the past year, the Clean Water Program has capitalized on the opportunities that it has presented. Clean Water staff participated in a number of community workshop events, gaining valuable insight into community priorities and views on environmental and water quality issues throughout the community. In addition, Clean Water staff has represented program interests in the development of process summary documents and identified those areas in the existing General Plan that could be strengthened in consideration of current and emerging discipline specific trends. The various levels of participation in the process will prove valuable in the shaping of draft and ultimately final policy statements in the forthcoming City of Encinitas General Plan Update anticipated for 2012.

2.2.4.2 JURMP

In compliance with the new Municipal Permit, the City's JURMP document underwent a major update during FY 2007-08. The JURMP document serves as the City's foundational storm water program management tool, capturing the development process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Encinitas.

2.2.4.3 STORM WATER ORDINANCE AND GRADING ORDINANCE

As required by section J.a.(3)(b)iii of the Municipal Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance *(EMC Chapter 20.08)*, also called the Storm Water Ordinance, was updated during FY 2007-08 to comply with the Municipal Permit. The Storm Water Ordinance sets up the legal framework which enables the City to enforce the water quality and watershed protection principles established in the General Plan and the JURMP. The Storm Water Ordinance also references the City's Storm Water BMP Manual II and enables the City to enforce the minimum BMPs and SUSMP requirements that are outlined in BMP Manual II and extended to the Encinitas Stormwater Manual. The ordinance is periodically reviewed and updated on an as needed basis to ensure that potential discharges of pollutants may be addressed appropriately.

The Grading, Erosion, and Sediment Control Ordinance *(EMC Chapter 23.24)* was thoroughly reviewed and updated in FY 2007-08, approved by City Council on February 25, 2009, and subsequently approved by the California Coastal Commission. The update largely addressed engineering related revisions, but also included some updates which serve to further strengthen the City's legal authority in meeting the provisions of the Municipal Permit related to both construction and post-construction activities. Specifically, the grading ordinance was updated to require that all Priority Projects acquire a grading permit, and that any project proposing 500 square feet or more of impervious surface is reviewed for conformance with City stormwater regulations.

2.2.4.4 STORM WATER BMP MANUAL II AND ENCINITAS STORMWATER MANUAL (LOCAL SUSMP)

Storm Water BMP Manual II Update

As part of the 2008 JURMP update, Storm Water BMP Manual II was also updated; the City's revised SUSMP and regionally adopted Interim Hydromodification Criteria were incorporated into the Storm Water BMP Manual II as required by the Municipal Permit, during FY 2007-08. As a component of this update, the City also integrated the interim SUSMP provisions into local land use planning and development process and procedure as outlined in the BMP Manual II.

The City originally created the Storm Water BMP Manual II in 2002 to be used by individuals involved with development projects within the City. BMP Manual II prescribes minimum stormwater BMPs for Land Development and Construction activities, and is enforceable through reference by the Stormwater Ordinance and the Grading Ordinance. BMP Manual II also includes various tables to help identify which requirements are applicable to each unique development project.

Standard Urban Storm Water Mitigation Plan (SUSMP) Update

Within the defined reporting period of this report, the City of Encinitas updated the City's local SUSMP based on the recently approved San Diego Regional Model SUSMP. The revised Model SUSMP was developed to address post-construction urban runoff pollution from development projects and defines the minimum required Low Impact Development (LID), source control, and treatment control BMPs. Update of the City's local SUSMP involved significant revisions to BMP Manual II and the creation of the Encinitas Stormwater Manual (the City's new local SUSMP document). Details about the completed update to these two documents can be found in Section 2.4.4.1. As required by Order No. 2007-001, all new updates to the San Diego Regional Model SUSMP were incorporated into the City's local SUSMP and land development process and procedures before March 24, 2010. The Encinitas Stormwater Manual and the updated BMP Manual II were adopted by City Council on March 17, 2010.

2.3 ENVIRONMENTAL REVIEW PROCESS

As part of the 2008 JURMP update, the City's environmental review staff evaluated the City's environmental review process and confirmed that the current process accurately evaluates water quality and cumulative impacts and identifies appropriate measures to avoid, minimize, and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality. In compliance with the Municipal Permit, additional questions have been provided in the initial study checklist, a tool utilized to evaluate the environmental effects of a project. To evaluate potential water quality impacts of projects requiring discretionary review, the following questions have been included as part of the initial study checklist:

Would the project:

- *Substantially conflict with city-adopted water quality standards or waste discharge requirements?*
- *Substantially alter the existing drainage pattern of the site or area, including the alteration of a stream or river course, in a manner which would result in substantial erosion or siltation on- or offsite?*
- *Result in a substantial degradation of receiving water quality during construction activities?*
- *Propose a land use or an on-site activity that would substantially degrade receiving water quality?*
- *Substantially increase any pollutant for which* a *tributary water body is listed on the Clean Water Act Section 303(d) list?*
- *Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?*
- *Substantially degrade groundwater quality?*

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

As discussed in the previous sections, the City of Encinitas has an established multi-departmental review process for all new development and redevelopment projects. Through the application of the City's Storm Water Ordinance, Grading Ordinance, Storm Water BMP Manual II, Encinitas Stormwater Manual, and development project review process, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP.

Each proposed discretionary and ministerial project is subject to the City's Development Project Approval and Verification Process. The following sections describe this process in detail.

2.4.2 SOURCE CHARACTERIZATION

As discussed in Section 2.2.2, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP (Encinitas Stormwater Manual), which was developed and adopted as required during FY 2009-10, describes specific categories for Priority Projects. A Priority Project must implement Low Impact Development techniques, source control components, Treatment Control Best Management Practices, and Hydromodification Management Practices to address potential pollutants.

In the City of Encinitas, all development projects, including Standard projects (projects not subject to SUSMP standards), are required to meet the minimum BMP requirements, which are discussed below in Section 2.4.3.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are summarized here and are included in the new Encinitas Stormwater Manual. These minimum BMPs are based on BMPs established in the regional Model SUSMP. All development projects are required to include the following minimum BMPs:

- Implementation of source control BMPs as listed in Appendix A of the Encinitas Stormwater Manual.

- Inclusion of Low Impact Design (LID) features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, and retain and slow runoff. (Specific LID requirements are dependent on the type of project that is proposed.)
- Compliance with requirements for construction-phase controls on sediment and other pollutants.

SUSMP Priority Projects must submit a grading plan, which includes identification of proposed LID features, source control and treatment control BMPs, calculations for sizing the treatment control BMPs, and a maintenance agreement that will be recorded with the County. The grading plan must also address how the project will manage increases in runoff discharge rates and durations associated with the project, where such increases could cause impacts downstream of the project.

2.4.3.1 HYDROMODIFICATION MANAGEMENT PLAN AND INTERIM HYDROMODIFICATION CRITERIA

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order No. 2007-0001, during the defined reporting period of this report, the City was collaborating with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP) for the San Diego Region.

In FY 2007-08 and FY 2008-09, the Copermittees—in cooperation with a Technical Advisory Committee, the Southern California Coastal Water Research Project and the Regional Board—were actively involved in conducting scientific research and gathering the necessary data in order to prepare the final HMP. The final draft HMP was submitted to the Regional Board for review and approval in December 2009.

In FY 2007-08, the City established Interim Hydromodification Criteria that will be in effect until the final HMP is approved and ultimately incorporated in the Encinitas Stormwater Manual. The City requires all Priority Projects disturbing 50 or more acres to comply with the Interim Hydromodification Criteria, except for those sites that are considered exempt as described in Section D.1.(g)(6) of the Municipal Permit. The details of the Interim Hydromodification Criteria are presented in the Encinitas Stormwater Manual and BMP Manual II, and are consistent with the regionally adopted interim Hydromodification standards. A time table for development of the final HMP can be found in Section 2.4.4.1 and Table 2-2.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to a development project's proposed storm water BMPs during project construction must be approved by the City before being implemented.

2.4.4 PROGRAM IMPLEMENTATION

As required by the Municipal Permit, the City of Encinitas has implemented a program to ensure that development and redevelopment projects comply with SUSMP requirements, including Low Impact Development, source control, treatment control BMPs, and Hydromodification Management. The Municipal Permit further requires that the City ensure proper installation of treatment control BMPs and their maintenance into perpetuity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following section provides an overview of the City's SUSMP implementation (including project tracking) during FY 2009-10.

2.4.4.1 MODEL AND LOCAL SUSMP UPDATES

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the new Municipal Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into Storm Water BMP Manual II (see Section 2.2.4.4). In compliance with the interim SUSMP update standards established in Order No. 2007-0001, the following tasks were performed during the review and interim update of the SUSMP:

- Priority Project categories were updated.
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained.
- LID requirements and additional source control requirements were added to meet or exceed Municipal Permit requirements.
- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly.
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary.

In addition to the changes discussed above, a comprehensive regional Model SUSMP update was completed by the copermittees during FY 2008-09 and submitted to the Regional Board for approval on January 26, 2009. After incorporation of revisions based on Regional Board comments the Model SUSMP was approved by the Regional Board on March 24, 2009. The comprehensive Model SUSMP update includes the following as required by the Municipal Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Municipal Permit.
- Establishment of site, design, and maintenance criteria for each LID and treatment control BMP listed in the Model SUSMP.
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the Model SUSMP is applicable and feasible.

- Addition of a requirement for Priority Projects with low traffic areas and appropriate soil conditions to use permeable surfaces.
- Addition of any necessary restrictions for infiltration BMPs from Priority Projects that generate high levels of pollutants.

During FY 09-10, the City completed the update of its Local SUSMP (Encinitas Stormwater Manual) to meet the requirements established in the regional Model SUSMP. The local update was completed and adopted by City Council on March 17, 2010, within one year after the adoption of the Model SUSMP. Development of the Encinitas Stormwater Manual (local SUSMP) involved extensive coordination between several City departments, including Engineering, Planning, Public Works, Parks & Recreation, and the San Dieguito Water District. Involving all appropriate departments in the development of the Encinitas Stormwater Manual provided interdepartmental ownership and awareness of applicable standard and helped to ensure that implementation of the new SUSMP requirements would go smoothly. Clean Water Program staff hosted bi-weekly Stormwater Quality Workgroup sessions from July 2009 through February 2010, providing a collaborative forum for the development of the local SUSMP (Encinitas Stormwater Manual). At these workshop meetings, staff from several departments actively participated in the development of Encinitas-specific document language, implementation tools (such as the Stormwater Checklist and Certification form), template maintenance agreements, and detailed Integrated Management Practice (IMP) design guidelines. The workshop meetings were very successful and allowed for each department to be involved in the integration of the new SUSMP requirements into existing practices and procedures. After commencement of the workshop series, each department was well aware of the new SUSMP requirements and how these requirements would be presented in the Encinitas Stormwater Manual.

The City's new updated Local SUSMP is titled the Encinitas Stormwater Manual. The Encinitas Stormwater Manual serves as an implementation guide for stormwater standards to assist the professional development community and the general public in understanding the City of Encinitas SUSMP requirements. The Encinitas Stormwater Manual establishes a regionally consistent and systematic BMP design procedure intended to meet complex and overlapping water quality requirements, including stormwater treatment controls, Low Impact Development (LID) standards, control of potential pollutant sources, and control of runoff peak and duration (hydrograph management).

The Encinitas Stormwater Manual is comprised of five interrelated document sections, each supporting and defining the background, regulatory drivers, process, and procedure necessary to guide project applicants toward compliance with defined stormwater quality requirements.

Section 1 – Policies and Procedures, summarizes all City requirements and subsequent procedural elements pertaining to proposed new development and redevelopment projects.

Section 2 – Concepts & Criteria, describes the water quality science, engineering standards, and regulatory framework that form the basis of stormwater requirements for land development.

Section 3 – Preparing Your Project Submittal, details a procedure for determining applicable project requirements, and drafting and submitting associated materials required for a proposed development project.

Section 4 – Low Impact Development Design Guide, instructs applicants on how to plan, design, and size (engineer) treatment facilities and LID features to meet stormwater requirements.

Section 5 – Operation & Maintenance of Stormwater Facilities, outlines the long-term operation and maintenance requirements for stormwater treatment facilities and establishes the process by which applicants will develop an operation and maintenance agreement for the proposed stormwater facilities.

In addition, the Encinitas Stormwater Manual contains a series of appendices specific to the material presented in each of the sections outlined above, including a stormwater quality checklist and certification, design specification sheets for various facility types, and template maintenance agreements for a variety of project types. Notably, the template maintenance agreements, designed to be used as models for legal agreements between the responsible party and the City of Encinitas for long-term operation and maintenance of the proposed stormwater facilities, have been reviewed by the City's legal counsel.

The Encinitas Stormwater Manual is intended to complement the existing BMP Manual II. While BMP Manual II establishes minimum BMP standards for development projects and construction activities, the Encinitas Stormwater Manual defines implementation policy and procedure by which to plan, select, design, construct, and ultimately maintain required stormwater BMP facilities in the City of Encinitas. Complete versions of the updated BMP Manual II and the new Encinitas Stormwater Manual are available on the City's Clean Water Program webpage at http://cwp.cityofencinitas.org.

As required by Order No. 2007-0001 the City will also incorporate a Hydromodification Management Plan (HMP) into the City's Local SUSMP. Development of the final draft HMP was completed by the copermittees in FY 09-10 and submitted to the Regional Board for review in December 2009. Final Regional Board approval of the HMP occurred on July 14, 2010. All necessary SUSMP updates described above and their projected completion dates are presented in Table 2-1.

Table 2-1
Time Schedule for Model and Local SUSMP Updates

SUSMP Update	Time Schedule	Status
Final Model SUSMP update	January 2009 (submitted) March 2009 (RB Approved)	Completed
Local SUSMP update	March 2010	Completed
HMP Progress Report	July 2008	Completed
Draft HMP	January 2009	Completed
Final HMP	December 2009	Completed

SUSMP Update	Time Schedule	Status
Regional Board Approval of Final HMP	Summer of 2010	Completed
Adoption of HMP into Local SUSMP (ESM)	180 days after RWQCB approval of the final HMP	January 14, 2011

2.4.4.2 DEVELOPMENT PROJECT APPROVAL PROCESS

The following section includes a summary of the City's updated development review process which has been implemented since the adoption of the Encinitas Stormwater Manual (local SUSMP).

DISCRETIONARY PROJECTS

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring an additional, ministerial permit are also subject to engineering plancheck review as described in the Ministerial Project section.

Predevelopment Process

The stormwater element of the predevelopment process is geared toward disseminating information on stormwater pollution control and the City's SUSMP requirements. During this preliminary design phase, engineers and applicants are guided by City staff to provide adequate post-construction BMP facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process results in better designed and integrated post-construction BMPs, since the facilities are included in the project design even in the earliest phases of the project.

Priority Projects (defined by the City of Encinitas as those projects subject to SUSMP requirements), which require more stringent stormwater pollution control methods, are first identified during the predevelopment process. The categories of development falling under the Priority Project classification can be found in the Encinitas Stormwater Manual and are consistent with the requirements of the Municipal Permit. During the predevelopment meeting, applicants proposing Priority Projects learn that they must implement LID and source control BMPs and must install treatment control BMPs which meet the numeric sizing criteria required by the Municipal Permit. City staff also informs applicants at the predevelopment meeting that installed post-construction BMP facilities must be maintained in good working order into perpetuity. City staff and the applicant and/or engineer discuss options for meeting the numerical post-construction treatment requirements, including volume-based systems and flow-based systems. The applicant is also directed to follow the guidelines detailed in the Encinitas Stormwater Manual when designing post-construction BMPs and submitting plans and documents to Engineering

for review. In Encinitas, mechanical treatment systems are discouraged and when accepted may only account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

Stormwater Pollution Control Checklist and Certification

All development project applicants are required to complete a written self-certification of the post-construction BMPs proposed with their project. This certification is required to accompany the initial submittal of each discretionary permit application. The checklist walks the applicant through the process of determining whether their project is a Priority Project and outlines the minimum submittal requirements for Priority Project applicants. The checklist is designed to assist applicants in:

- Classifying their projects as Priority, Standard, or Exempt from SUSMP
- Certifying that their project will be designed, constructed, and maintained in conformance with the City's stormwater quality requirements detailed in the Encinitas Stormwater Manual.

The stormwater checklist must be completed by the party responsible for the development project and submitted with the project's permit applications. The stormwater checklist is an appendix of the Encinitas Stormwater Manual. A copy of the checklist is provided in this annual report as Appendix A-11

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions include construction requirements as well as post-construction BMP standards for effective stormwater pollution control facilities. Once the predevelopment meetings are conducted and the stormwater checklist has been completed, the applicant must follow the requirements established in the Encinitas Stormwater Manual when designing stormwater controls for the proposed project. Once the proposed plan is submitted, the Engineering Department reviews the adequacy of the project's proposed stormwater facilities shown on the site plan and issues Conditions of Approval to ensure implementation of satisfactory LID, source control, and treatment control BMP measures. The Conditions of Approval take into account the nature of each project site and the work proposed. The Conditions of Approval are then recorded in a covenant against the property.

Applicants not showing adequate construction or post-construction BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. Stormwater pollution control facilities for Standard projects must meet the minimum requirements established in the Encinitas Stormwater Manual. Priority Projects must additionally show LID, source control, and treatment control BMPs on the project plans. Within the defined reporting period of this report, if the project is greater than 50 acres, interim Hydromodification Management requirements also need to be met. The project plans must also show a feasible solution with substantiating calculations for numerically-sized treatment control BMPs. The process of designing appropriately sized

treatment control BMPs is detailed in the Encinitas Stormwater Manual, which is available to all applicants through the City website.

MINISTERIAL PROJECTS

Projects requiring a ministerial permit such as a grading, improvement, or building permit are also required to include post-construction stormwater pollution control facilities in the project design. These BMP facilities must be considered adequate before the project's plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project is already conditioned to provide specific treatment facilities. For those projects not requiring a discretionary permit, the review of the storm water pollution control treatment facilities begins at the Engineering plancheck stage.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater construction and post-construction BMPs.

Every plan in plancheck is initially reviewed to determine if it meets the City's definition of a Priority Project. In addition to meeting standard BMP requirements, Priority Projects must provide LID, source control, and numerically-sized treatment control BMPs as required by the Municipal Permit and the Encinitas Stormwater Manual (City's local SUSMP).

The Encinitas Stormwater Manual details the process which must be followed in order to design proposed stormwater treatment control facilities for Priority Projects. The manual also identifies specific design details and documents which must be submitted for review by the City's plancheck engineers. The Encinitas Stormwater Manual and City plancheck engineers emphasize to applicants the variety of natural solutions that may be used in providing stormwater pollution control. Any areas used as post-construction BMPs must be clearly marked on the project plans along with the following associated note: "Stormwater Best Management Practice to be privately maintained and not to be modified without a permit from City". The permitted drawing will become public record; therefore documentation of the designated treatment areas is maintained. Engineers are also required to complete the Sources and Source Control BMP Checklist and incorporate all of the applicable permanent controls and operational BMPs into the project plans. Potential source control BMPs may include stormwater education, materials storage, erosion control, and waste management in order to meet the minimum SUSMP requirements.

All Priority Projects must comply with the numeric sizing criteria for treatment control BMPs in order to be approved by the City Engineer. Plancheck engineers review the project's hydrology calculations to determine the adequacy of the treatment system proposed. The project applicant is required to assume maintenance responsibility and identify the maintenance mechanism for the treatment system prior to project approval. A

covenant ensuring adequate maintenance into perpetuity is recorded against the property. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City to guarantee successful implementation of the measures shown thereon. Such bonds are retained until all components of the project have been completed (including installation of treatment control BMPs) and the landscaping has become fully established.

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. For more information regarding temporary construction BMPs, refer to Section 3 of this document.

Post-Construction BMP Maintenance Agreements

All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance of permanent BMPs as necessary into perpetuity. The maintenance agreement or covenant includes an attachment depicting the location of specific project BMPs and their detailed maintenance requirements. The agreement is then recorded against and runs with the property. The City of Encinitas has developed, and included as an appendix in the new Encinitas Stormwater Manual, template maintenance agreements for a variety of project ownership scenarios including single family homeowners, Home Owners Associations (HOAs), agents, or commercial entities.

CAPITAL IMPROVEMENT PROJECTS

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear, or repair projects, often only construction BMPs are necessary. However, qualifying Priority SUSMP projects must also install post-construction BMPs. Priority CIP Projects are designed to incorporate LID, source control, and treatment control BMPs as required by the Municipal Permit and detailed in the Encinitas Stormwater Manual. The City takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.4.4.3 SUSMP PROJECT APPROVAL

During the planning process and prior to project review, the **two** projects listed in Table 2-2 were identified as Priority SUSMP Projects and approved during FY 2009-10. All applicable SUSMP BMP requirements specified in the City's local SUSMP were applied to each of the projects in Table 2-2. All of the development projects approved in FY 2009-10 were less than fifty acres in size; therefore none of the projects were required to meet Interim

Hydromodification Criteria. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2009-10.

Table 2-2
SUSMP Priority Projects approved in FY 2009-10

Permit No.	Location	Approval Date
10211 G	211 Saxony Rd	2/11/2010
94 G	1020 Calle Anacapa	4/12/2010

The extensive expansion of the assisted living facility at 211 Saxony Rd provides a good example of the typical Priority SUSMP projects that are permitted by the City of Encinitas. The proposed project consisted of the construction of more than 10 additional units of assisted living housing and was identified as a priority redevelopment project. As a result, several Integrated Management Practices (IMPs) were incorporated into the design of the project in order to meet SUSMP requirements. The IMPs that will be installed during construction include two flow-through planters (Filtera units), one underground detention system, one fossil filter, and several landscaped areas. These IMPs have been situated on the site plan to collect and treat runoff from roofs and driveways in the proposed development prior to the runoff entering the storm drain system.

2.4.4.4 SUSMP PROJECT AND TREATMENT CONTROL BMP TRACKING

In FY 2007-08, Clean Water Program staff worked with GIS staff to implement a comprehensive watershed-based SUSMP tracking system. The GIS data management system was designed to track the SUSMP Priority Projects and the long-term maintenance of all approved treatment control BMPs installed at development sites. As required by the Municipal Permit, the database is capable of tracking the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located[1]
- Date of construction of the BMP
- The party responsible for maintenance of the BMP
- Maintenance certifications or verifications
- Inspection findings
- Any corrective actions issued

During FY 2007-08, a beta version of the GIS tracking system was put into use. Since the initial introduction, the City has been working to continually refine this database, and new projects with treatment control BMPs are added to the database on a routine basis.

[1] The entire City of Encinitas is within the Carlsbad watershed.

Database improvements are a result of a thorough review of plans for proposed and built projects, a quality check of the existing data, and coordination with the GIS department. A hardcopy version of the most current inventory of treatment Control BMPs in the City's SUSMP Project and Treatment Control BMP Database is available in Appendix A-1. The inventory includes all operational treatment control BMPs installed at SUSMP priority projects as well as approved proposed treatment control BMPs which may be in various stages of construction. For a map of all the SUSMP Priority Development Projects approved within the City of Encinitas, refer to Appendix A-2.

With the aid of the City's Treatment Control BMP Inspection Priority flowchart (see Appendix A-3), all development projects with approved treatment control BMPs were prioritized as high, medium, or low Threat to Water Quality (TTWQ) during the 2008 JURMP update, as required by the Permit. In addition, prioritization of each BMP was further refined during subsequent annual Operation and Maintenance Inspections and review of Self-Verification submittals. For new projects with treatment control BMPs that are added to the inventory, prioritization of the project occurs during the first treatment control BMP inspection. When the construction of a new project with treatment control BMPs is completed, the City requires that the treatment control BMP(s) are inspected within the first year and prior to the next rainy season in order to determine prioritization for future inspection frequency. This allows the City to determine TTWQ based on a visual inspection of the project as well as the following criteria:

- Type of project
- Sensitivity of the receiving water body
- Proximity to ESAs
- Size of the BMP
- Recommended maintenance frequency
- Likelihood of operational and maintenance issues associated with the BMP(s)
- Location of the BMP(s)
- Other pertinent factors

The BMP Inspection Priority flow chart addresses basic site and treatment control BMP characteristics that can influence a site's TTWQ such as receiving water body sensitivity and the removal efficiencies of the installed treatment controls. Note that not all development projects and treatment control BMPs are the same; each may have unique water quality risks associated with it. The City considered additional relevant factors beyond those included in the flow chart as necessary.

2.4.4.5 BMP INSTALLATION VERIFICATION

Beginning in January 2008, the City of Encinitas began tracking the verification of post-construction BMPs that were installed on projects throughout the City. Upon project completion, the engineering inspector now requires that the project engineer submit a grading certification letter to the City verifying that all the Low Impact Development, Source Control,

and Treatment Control Best Management Practices, as shown on the approved project plans and required by the Encinitas Stormwater Manual, were constructed and are operational, together with the required maintenance covenant(s).

A sample grading certification letter is provided as Appendix A-4. Table 2-3 provides a list of the BMP verifications conducted for priority development projects completed in FY 2009-10.

Table 2-3
BMP Verifications for Priority Development Projects
Completed in FY 2009-10

Permit No.		Location	Construction Date
385	G	1555 Crest Dr	7/13/2009
169	G	510 S. El Camino Real	7/15/2009
705	G	3354 Wildflower Valley Dr	7/16/2009
7847	G	2300 8th St	7/23/2009
6813	G	155 Saxony Rd	7/23/2009
912	G	416 N Rancho Santa Fe Rd	9/24/2009
704	G	230 Quail Gardens Dr	10/19/2009
7800	G	3542 Jasmine Crest	11/19/2009
943	G	211 Saxony Road	1/2/2010
983	G	1320 Encinitas Blvd	2/4/2010
10187	G	1603 Crest Dr	4/13/2010
713	G	3003 Wildflower Dr	4/29/2010
61	G	801 Orpheus Ave	6/7/2010
7893	G	Christine Place	6/7/2010
9278	G	490 and 494 Latigo Row	6/17/2010

Subsequent to the submittal of the grading certification letter, engineering inspection staff inspect the project site to verify that LID, source control, and treatment control BMPs proposed for the project were constructed in compliance with all approved plans, City permits, and ordinances. Inspections of Priority Project sites prior to occupancy allow the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied site are generated. Engineering inspectors also check to ensure that BMPs have been built according to plans before signing off on each stage of construction. The inspectors use the project's grading plans to identify any missing or incorrectly installed BMPs and deny approval for sites with observed problems. If the engineering inspector is satisfied that the post-construction BMPs were installed as required, the inspector verifies

the project engineer's letter with their signature and a date and takes photos of the completed BMP installation. Hardcopies of these signed and certified verification letters and the photos of the BMPs are retained by the Clean Water Program.

2.4.4.6 ANNUAL TREATMENT CONTROL BMP OPERATION AND MAINTENANCE SELF-VERIFICATION

As required by the new Municipal Permit, all treatment control BMPs installed at development projects must be self-verified annually and maintained in perpetuity by a responsible party. As part of the JURMP update, the City of Encinitas established a Treatment Control BMP Operation and Maintenance Self-Verification Program.

During FY 2007-08, Clean Water Program staff prepared the essential elements of the Treatment Control BMP Operation and Maintenance Self-Verification Program. First, a comprehensive list of mailing addresses for completed projects with treatment control BMPs was pulled from the newly developed SUSMP Project and Treatment Control BMP GIS Database. Then, a formal letter was developed to notify property owners of their verification responsibility. An informative Treatment Control BMP brochure was also created to help property owners identify the BMPs that were installed as a part of their development project. Finally, a self-verification form was developed for responsible parties to use to report annual verification of Operation and Maintenance of their treatment control BMPs. In FY 09-10, the BMP verification letter was updated in an effort to promote a greater inspection response rate and self-verification return rate. An example of the updated verification letter, brochure, and form can be found in Appendices A-5a, A-6, and A-7, respectively. In some cases additional notifications were required; with these letters, finaled grading plans were also included in order to assist responsible parties in identifying the location of BMPs.

In FY 2009-10, the City determined that only those projects that were not designated as requiring a City inspection of their BMPs would be required to conduct a self-verification of their BMPs and submit self-verification documentation. It was reasoned that it would be redundant to require those responsible parties who were already receiving an inspection of their BMPs by City staff to also have to conduct a self-verification. When conducting an inspection, City staff thoroughly assesses the condition of all BMPs on a site and typically the responsible party is present when the inspection is conducted, providing an opportunity to educate the property owner about the function of the facilities on site and their obligations to maintain and preserve them. If deficiencies are identified, corrective actions are noted on the inspection form, and the responsible party is required to complete corrective actions by a specified deadline. Additional detail regarding the City's Treatment Control BMP Operation and Maintenance Inspection Program can be found in Section 2.4.4.7.

All required self-verifications must include an evaluation of <u>all</u> treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. Within the defined reporting period of this report, the City mailed annual self-verification

notifications to each party responsible for the maintenance of treatment control BMPs constructed within the City of Encinitas who was not scheduled to receive a City inspection. The notification package included a letter informing the responsible parties of their inspection and maintenance obligations, a brochure explaining the program and providing examples of common BMPs, a blank inspection / maintenance verification form (to be completed and returned to the City), and a self addressed stamped envelope. Responsible parties were directed to complete the self-verification form and submit photos showing that all BMPs on their property have been maintained and are in good working order.

Self-Verification Results and Findings

In the first year of implementation, the City efforts focused on information gathering and validation. In the second year of implementation, the City expected that the responsible parties would be more aware of the Treatment Control BMP inspection and maintenance program and that self-verification forms would be returned promptly. However, even after issuance of two notifications, some responsible parties still did not respond (see Table 2-4). In the event that a self-verification form was not returned, City staff made every attempt to conduct a City Inspection in lieu of a Self-Verification. A total of **12** City inspections were completed in lieu of Self-Verification. Copies of the two BMP Operation and Maintenance verification letters issued to responsible parties in FY 09-10 may be found in Appendices A-5a and A-5b.

Table 2-4
Summary of Notifications Sent and Self-Verification Forms Returned

Number of Self-Verification Notifications Issued	49
Number of forms returned after **1 notification**[1]	17
Number of forms returned after **2 notifications**[2]	14
Number of Forms **Not** Returned[3]	(15)
Total Number of Self-Verifications Completed (includes 12 in-lieu inspections)	43

Upon receipt of a self-verification packet from responsible parties, City staff reviews the completed forms and the required photos and maintenance documentation (if any). Staff determines whether the information is complete or if any further maintenance was

[1] The first notification included a letter (Appendix A-5a), the BMP Operation and Maintenance Brochure, the Self-Verification Form, and a self addressed, stamped envelope (SASE).

[2] The second notification included a letter (Appendix A-5b) explaining that since this was the final notification attempt, the responsible party's BMPs would be inspected by City staff.

[3] In the event that a self-verification for was not returned, City staff made every attempt to conduct a City Inspection in lieu of a Self-Verification. A total of **12** City inspections were completed.

required. For a detailed summary of the results and findings of FY 2009-10 treatment control BMP inspections see Appendix A-8. Appendix A-8 includes more detailed information about each project, such as project location, inspection dates, inspection results, and any City action. As a result of the Self-Verification program (Section 2.4.4.7) there were **zero** properties with treatment control BMPs that warranted enforcement action. For a summary of enforcement action, refer to section 2.4.4.8.

The defined reporting period of this report represents the second year of implementation of the Permanent BMP Self-Verification Program. In an attempt to improve efficiency and the rate of return of self-verification documentation, City staff developed an online submittal form that was offered to responsible parties as an option to submitting their self-verification documentation. This provided responsible parties with four submittal options—online, email, regular mail, and hand delivery to City Hall. The majority of self-verification forms were submitted via regular mail; however, a number of responsible parties did take advantage of the online submittal option. Since this was the second year of implementation, the BMP and Priority Project inventories were more complete due to last year's efforts to validate current contact information and inform property owners of their maintenance responsibilities and submittal requirements. As described in Tables 2-4 and 2-5, the City's implementation process was generally successful.

Table 2-5
Summary of Self-Verification Results and City Actions

Self-Verification Results	**Frequency**
Unresponsive Owner	15
Verification Received	31
Requested City Inspection	3

City Actions	**Frequency**
City Inspected	12
Information Validated	20
Incomplete Submittal. (Incorrect BMPs listed, Documents Missing)	11
Maintenance Required. Enforcement action taken.	0
Validate Contact Info. FY 10-11 Inspection Recommended.	5
Suspected Foreclosure	1

2.4.4.7 TREATMENT CONTROL BMP OPERATION AND MAINTENANCE INSPECTIONS

During FY 2007-08, Clean Water Program staff developed the City's new Treatment Control BMP Operation and Maintenance Inspection Program. New inspection forms were created, and the Treatment Control BMP inventory database was designed and

quality checked. For a detailed description of the development of the GIS-based Treatment Control BMP Inventory and Tracking system refer to Section 2.4.4.4. Notably, unique to the development dynamic of the City of Encinitas, a large number of inventoried BMPs exist on private single-family residential lots. Therefore, the City of Encinitas Treatment Control BMP Operation and Maintenance Inspection program was developed with this condition in mind.

In FY 2009-10, as required by the Municipal Permit, 100% treatment control BMPs installed at high priority development projects, at least 50% of the medium priority development projects, a minimum of 20% of the total number of projects with approved treatment controls, and a maximum of 200% of the average number of projects with treatment control BMPs approved per year were inspected by the City's inspection staff prior to the rainy season. Implementation of the City's BMP Inspection Program was very effective. The City met, and in most cases far exceeded, all the inspection requirements outlined in Section D.1.e. of the Municipal Permit.

As of July 1, 2009, there were a total of **60** constructed Priority SUSMP projects (5 high, 27 medium, and 27 low priority) on the City's treatment control inventory (See Appendix A-1). With **12** Priority SUSMP projects approved in FY 2008-09, there was annual average of **11** projects with treatment control BMPs completed since permanent BMPs were first required on Priority Development Projects in 2003 (see Table 2-6). A total of **50** projects (5 high, 22 medium, and 23 low priority) with approved and constructed treatment control BMPs were inspected in FY 2009-10. This amounted to **100%** of the high priority sites, **81%** of the medium priority sites, **85%** of the low priority sites, **83%** of the total number of constructed Priority SUSMP sites, and **454%** of the average number of projects with treatment control BMPs approved per year that were inspected in FY 2009-10 (see Table 2-7). In addition, **93%** of the projects with drainage inserts were inspected in FY 2009-10.

Table 2-6
Average Number of Constructed Projects with Treatment Control BMPs

Fiscal Year	Completed Projects
2004-05	6
2005-06	8
2006-07	14
2007-08	15
2008-09	12
Average	11

When inspections are conducted in future years, inspection frequencies will be based on the project's assigned TTWQ priority as determined by City staff in FY 2008-09 or assessed during future treatment control inspections, and the criteria outlined in Section 2.4.4.4 of

this document. Table 2-7 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 2-7
Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Permit Mandated Inspection Frequency	FY 09-10 Inspection Frequency
High	Annually (prior to start of rainy season)	100%
Medium*	50% annually	81%
Low	As needed	85%

*Drainage insert controls are considered medium priority BMPs

FY 2009-10 inspections included an examination of all treatment control BMPs at the site to verify that each treatment control BMP was working, being maintained properly, and was in compliance with all applicable City ordinances and permits. Inspection findings were documented by the inspector using the Treatment Control BMP Inspection Form (Appendix A-9). If any deficiencies in operation and maintenance were noted during the inspection, the responsible party was notified and appropriate enforcement actions were taken (as described in Section 2.4.4.8 of this document) to achieve compliance.

Because the majority of the treatment control BMPs installed in the City of Encinitas are on single-family residential lots, great care was taken to educate homeowners of their maintenance, inspection, and self-verification obligations. As noted in section 2.4.4.6, packages mailed to responsible parties included information detailing the BMP operation and maintenance program. When working with homeowners, City stormwater staff devoted personal, specialized assistance as warranted in order to improve knowledge and awareness and achieve compliance.

For a detailed summary of the results and findings of the FY 2009-10 treatment control BMP inspections see Appendix A-10. Appendix A-10 contains information about each project, such as project location, inspection dates, inspection results, and additional City action. Depending on the findings during the course of initial inspections, follow-up inspections were conducted and enforcement action was taken as necessary. For a detailed summary of enforcement action taken as part of the treatment control BMP inspection program, refer to section 2.4.4.8.

Treatment control BMPs that are operated and maintained by the City are considered part of the City's MS4 and are maintained and inspected by Public Works staff on an annual basis. BMPs that are located in specialized public facilities such as parks and libraries may be inspected by City stormwater staff and maintained as necessary by Public Works staff. For more information regarding the maintenance and inspection of the City's MS4 refer to Section 4 of this document.

2.4.4.8 ENFORCEMENT MEASURES FOR DEVELOPMENT SITES

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all development projects and permanent BMPs as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. A more detailed description of the different enforcement measures used by the City to enforce its storm water regulations and their legal basis can be found in Section 2 of the 2008 JURMP update document.

As a result of post-construction treatment BMP verification inspections and self-verification results, the City determined that **six** out of 50 inspected projects were partially or totally deficient in the installation and or maintenance of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, all **six** projects were brought into compliance through a combination of written orders to correct and/or verbal warnings.

3.0 CONSTRUCTION

3.1 INTRODUCTION

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site Best Management Practices (BMPs), inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Municipal Permit as outlined in Section D.2.

3.2 SOURCE CHARACTERIZATION

3.2.1 SITE INVENTORY

Within the defined reporting period of this report, the City of Encinitas has compiled, maintained, and updated a watershed-based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2009-10 included a total of **102** construction sites. During this period, there were **14** high priority sites that were inspected biweekly, **36** medium priority sites that were inspected monthly and **52** low priority sites that were inspected on a biannual basis. The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of all construction projects. The GIS inventory includes details on each construction site, including project name, location, sub-basin, type of construction permit, date of permit issuance, inspection prioritization, and the assigned storm water inspector. The City's Clean Water Program staff, in coordination with the City's IT department has designed a technical solution in GIS to inventory and prioritize all construction projects as permits are approved. A more detailed description of the prioritization process is provided below in Section 3.2.2. A fully prioritized construction inventory can be found in Appendix B-1 in addition to a map of all active construction sites located in Appendix B-2.

3.2.2 INVENTORY UPDATES

As required by Section D.2.b of the Municipal Permit the City's watershed-based inventory of construction sites is updated weekly by the Engineering department as new grading permits are approved. The Engineering department shares all approved permit information with the City's IT Department which also maintains an updated inventory of all active construction projects in a GIS database. As part of the 2008 Jurisdictional Urban Runoff Management Plan (JURMP) update process, and to ensure monthly construction inventory management, a construction specific GIS script was developed by the City's GIS staff in ESRI's ArcMap for prioritizing approved construction permits. This mechanism remains an efficient and effective tool in maintaining a current construction inventory, and is accessible via desktop to Clean Water Program staff to execute the GIS script and review the prioritizations on a monthly basis. Regular updates to the inventory include the addition of new construction projects, the removal

of completed construction projects, and re-assignment of inspection frequencies of active construction sites as determined by the City's Clean Water Program staff. A flow-chart that outlines the process by which the inspection frequency of construction projects is determined in GIS can be found in Appendix B-3.

3.3 ORDINANCE UPDATES

As required by Section D.2.a of the Municipal Permit, applicable City documents and ordinances were updated on March 12, 2008 by the City of Encinitas City Council to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code Section 20.08, the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, including construction specific provisions. The City's legal authority related to construction activities was further strengthened on February 25, 2009 when the City Council adopted a revised Grading Ordinance, EMC Section 23.34. Subsequently, the California Coastal Commission approved the adopted changes and the following provisions for storm water pollution control have been incorporated into the City's grading ordinance:

- All grading permits shall comply with the provisions of the City's Best Management Practices (BMP) Manual Part II which provides design, construction, and operation requirements for minimizing storm water pollution related to construction activities (§ 23.24.071).

- Any removal of BMPs that were required for a priority project will require a grading permit for corrective or other action. A requirement may be imposed to replace the BMP with equivalent water quality protection (§ 23.24.080).

- Priority projects for storm water pollution control cannot be exempted from obtaining a grading permit (§ 23.24.090.I).

- Any project creating over 500 square feet of new impervious area has to obtain a construction permit and adhere to all standards in the City's BMP Manual Part II (§ 23.24.105).

- All grading plans shall contain the location, design, detail, and cross section of all erosion control and post construction BMPs (§ 23.24.140).

- If the approved grading plan does not show post construction BMPs in sufficient detail, a precise grading plan for development projects is required to include and accurately depict post construction BMPs for review and approval of the City Engineer. (§ 23.24.126).

- Both Interim and Final Erosion and Sediment Control Plans are required (§ 23.24.150, 23.24.160).

- A waste management plan is required to be submitted with all interim erosion control plans. The management of the waste on the construction site must be graphically and verbally described on the grading plan (§ 23.24.150F).

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

3.4.1 UPDATED BMP REQUIREMENTS

Through the JURMP update process completed in March 2008, the City reviewed and updated a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the Maximum Extent Practicable (MEP). Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm water Best Management Practices Manual, Parts I and II, and the City of Encinitas' 2008 JURMP Update.

3.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are different for the wet season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). The City's Storm Water Manual Parts I and II provide a detailed list of dry and wet season requirements for all construction sites. Prior to the beginning of the wet season, in September 2009, the City sent 74 Erosion Control letters (See Appendix B-5) to all property owners with active and inactive construction sites reminding them of the City's minimum BMP requirements. Additionally, the City also included a copy of the letter dated August 24, 2009, from the Executive Officer of the San Diego Regional Water Quality Control Board (RWQCB) titled *Regional Preparations for the 2009-10 Rainfall Season Throughout the San Diego Region* which reinforces regional stormwater management requirements as they relate to construction activities.

3.5 PROGRAM IMPLEMENTATION

3.5.1 CONSTRUCTION AND GRADING APPROVAL PROCESS

The City has an established and thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards, obstructs a waterway, or occurs over an area of 10,000 square feet. All other projects require a building permit. Both grading and building permits require that plans be submitted and approved by the City.

The City's grading ordinance requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a citywide data management system called "HTE".

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As a part of this approval process, the City's Clean Water Program staff also reviews the grading plans to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Plans are checked by both the Engineering and Clean Water Program staff. Engineering staff reviews the plans for overall compliance with the grading ordinance. Clean Water Program staff checks the plans for specific compliance with the Storm Water Management Ordinance and Federal and State regulations. If the site falls under jurisdiction of the State's General Construction Permit, staff follows up with the developer to ensure that a Storm Water Pollution Prevention Plan (SWPPP) is properly prepared and submitted. In addition, the SWPPP is reviewed and accepted by the Clean Water Program staff prior to final approval of the project grading plans. The City also requires proof that a Notice of Intent (NOI) has been submitted for sites that are subject to the General Construction Permit.

Prior to issuing construction and grading permits, the City's Engineering Department verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP.

It is notable that the general notes for the building plans have been amended to include erosion control, sediment control, and materials management practices. The Clean Water Program also reviews SWPPPs for all projects greater than five acres and sensitive projects between one and five acres. Staff reviewed and commented on SWPPPs for ten projects between July 1, 2009 and June 30, 2010. See Table 3-1 below for a summary of SWPPP reviews.

Table 3-1 Storm Water Pollution Prevention Plan Reviews, 2009-10

Project Name	Address	Size (acres)	Notice of Intent	Review Date
Quail Pointe	500 Block of Quail Pointe Lane	3.75	Yes	7/22/09

Project Name	Address	Size (acres)	Notice of Intent	Review Date
Citywide Concrete Repair	Various locations throughout the City of Encinitas	< 1	N/A	10/21/09
Citywide Concrete Repair CDBG	Various locations throughout the City of Encinitas	< 1	N/A	11/10/09
Regal Rd. Sidewalk Improvements	Regal Rd. at Santa Fe Dr.	< 1	N/A	11/25/09
Seacrest Village Retirement Communities	211 Saxony Rd.	1.7	Yes	12/22/09
Scripps Health	354 Santa Fe Drive	3.5	Yes	12/22/09
Cardiff Safe Routes to School	Summit Ave./Westminister Dr.	< 1	N/A	3/8/10
Paul Ecke Safe Routes to School	Vulcan Ave.	< 1	N/A	3/10/10
Encinitas Target	1010 N. El Camino Real	9.86	Yes	5/3/10
Parking Lot B	Vulcan Ave. and E St.	< 1	N/A	5/5/10

3.5.2 BMP IMPLEMENTATION

Clean Water Program staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the City Engineering Inspectors. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08 and the City's Storm Water Best Management Practices Manual, Parts I & II.

Clean Water Program staff constantly monitor weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all Engineering Inspectors to inform them of the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation, maintenance, or replacement should take place, and where necessary, they require responsible parties to have additional BMPs in place at the end of each work day.

Through the review and plancheck process, and supported by the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, staff maintains the authority to require additional or alternative BMPs to be implemented on individual projects as determined necessary. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

3.5.3 CONSTRUCTION SITES REQUIRING ADVANCED TREATMENT

There were no sites in FY 2009-10 that required advanced treatment. For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined that a project site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat To Water Quality (TTWQ), advanced treatment will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are included in the City's Storm Water BMP Manual II.

3.5.4 INSPECTIONS & BMP VERIFICATION

The City has an established inspection program to evaluate compliance with storm water regulations at all construction sites within the City's jurisdiction. The City of Encinitas' Engineering Department employs two Engineering Inspectors and three contract Engineering Inspectors who are responsible for inspections at all construction sites in the city. Storm water issues such as compliance with the grading and storm water ordinances in the Municipal Code have become one of their main focuses, especially during the wet season.

On January 24, 2008, the RWQCB adopted the 2007 Municipal Permit. Inspection activities for the construction program were updated and implemented at that time to meet the new Municipal Permit requirements as outlined in Order No. R9-2007-0001. During Fiscal Year 2009-10, consistent with required inspection frequencies as outlined in Sections 2.d.1-3 of the Municipal Permit, City staff conducted a total of **247** storm water inspections. Appendix B-1 details the complete Construction Inventory for FY 2009-10, the construction site prioritizations, and the number of inspections conducted at each site. Notably within the defined reporting period of this report, due to widespread slowdowns in the economy and development related activity, there were fewer active construction projects and therefore fewer site inspections than reported in previous years.

As part of the 2008 JURMP update process, and codified through BMP Manual II, the City of Encinitas established a maximum disturbed area for grading at 50 acres. Additionally, through this process, the City established advanced treatment criteria for construction activities. Within the defined reporting period of this report, no construction projects in the City of Encinitas were subject to maximum disturbed area or advanced treatment requirements, and therefore no required inspections related to this standard were completed.

The Engineering Inspectors captured all construction inspections on a form titled "Storm Water Quality Inspection for Construction Activities", included in Appendix B-4. The inspection form contains questions to ensure all the inspection components required by Section D.2.d.6 of the Municipal Permit are addressed. The form lists the minimum construction BMPs required by the City and includes boxes to document if BMP installation or maintenance is required or if other corrective actions are necessary. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 3.5.5 below are taken.

3.5.5 COMPLIANCE AND ENFORCEMENT ACTIONS

3.5.5.1 GENERAL ENFORCEMENT

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites within its jurisdiction. Inspection and enforcement for construction projects is administered by the Engineering Inspectors and other City staff with inspection and enforcement authority.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may be applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to be corrected, and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's storm water regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop / Correct Work Notice. The NOV and Correct Work Notice provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City are reported to the RWQCB per the reporting requirements of the Municipal Permit.

Civil penalties for violations of the Encinitas Municipal Code (EMC) are established in EMC Chapter 1.08, and determined violations of storm water regulations may be subject to administrative citations and associated administrative fines, including those at construction sites. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector.

3.5.5.2 REPORTING AND NON COMPLIANCE

During the FY 2009-10, **15** construction related complaint calls were received through the City's Clean Water hotline. A total of 13 complaints were investigated and 2 calls were referred to another department for further action. Of the 13 complaints investigated by Clean Water Program Staff, there were **12** violations. This resulted in **10** instances in which educational information was disseminated, **3** instances in which Notice of Violations notices were issued, and **1** instance in which a citation was issued. A complete summary of all construction related complaints can be found in Appendix H-1.

There were an additional **40** correct work notices and **1** (one) citation issued as a result of the routine City inspections at construction sites throughout the fiscal year. With immediate oversight from the City's Engineering Inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance and avoid further enforcement. Appendix B-6 features a summary of all violations and enforcement actions for all regularly inspected construction sites in FY 2009-10.

4.0 MUNICIPAL

4.1 INTRODUCTION

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, the storm drain system, and municipally owned facilities, which includes 17 public parks, 11 parking lots, 6 beach access areas, 5 fire stations, 4 public works yards, 4 administration buildings, 4 open space areas, 3 viewpoints and 1 golf course. The updated municipal facilities inventory is included as Appendix C-1. The City also conducts high Threat to Water Quality (TTWQ) activities, as defined by the Municipal Stormwater Permit, such as power washing and other mobile activities including street and sidewalk repair, building cleaning, painting, graffiti cleaning, and fleet vehicle maintenance. Other prominent water quality related activities include street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel and landscaping contractors, annual Municipal Separate Storm Sewer System (MS4) maintenance, and regular upkeep of the sanitary sewer system to prevent overflows.

Due to the large expanse of municipal areas, activities, and functions, City staff must carefully manage pollution prevention measures and Best Management Practices (BMPs) to reduce or potentially eliminate the discharge of pollutants into the MS4 from municipal areas and activities. To comply with the Municipal Stormwater Permit, the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas, activities, and functions.

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 BACKGROUND

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.2.2 SOURCE CHARACTERIZATION

The City of Encinitas maintains approximately 162 miles of roads, streets, and highways and 11 City owned and operated parking facilities. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included in Appendix C-1.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's BMP Manual Part I and the California Stormwater Quality Association (CASQA) Municipal Handbook to choose applicable BMPs to implement for roads, streets, highways, and parking facilities within the City. Street sweeping and cleaning is the main BMP that is implemented for road, street, highway, and parking facilities (both stand-alone and those associated with a municipal facility) maintenance. Treatment control BMPs are used for all roadway projects determined to be priority projects and subject to Standard Urban Storm Water Mitigation Plan (SUSMP) standards, described in more detail in Section 2.0. The City implements additional controls for roads, streets, highways, and parking facilities adjacent to or tributary to Environmentally Sensitive Areas (ESAs) when determined to be necessary.

4.2.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2009-10 to require and verify the implementation of designated BMPs for all City maintained roads, streets, highways, parking areas, and related activities as outlined in the Municipal Permit Section D.3.a.(5)(a-c).

In compliance with street sweeping standards established in Order 2007-0001, the City implemented an aggressive sweeping schedule for roads, streets, highways, and parking facilities.

The frequency of street sweeping is as follows:

- All arterial roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris are swept weekly.
- All collector streets and parking facilities identified as consistently generating moderate volumes of trash and/or debris are swept bi-monthly.
- All residential (publicly owned) and parking facilities identified as generating low volumes of trash and/or debris are swept annually.

The City also maintains parking facilities at six local parks, four local beaches and the Encinitas Community Center. Four parking facilities at the local parks have been identified as generating low volumes of trash, sediment, and debris and are swept monthly from March through September. The remaining parking lots have been identified as generating moderate volumes of trash, sediment, and debris, and have been assigned a sweeping prioritization of medium priority. Each of these facilities is swept on a monthly basis throughout the year. The parking facilities at the beaches are swept every week from April through September to address the increased traffic, and monthly from October through March. In FY 2009-10, a total of **87.5 tons** of debris was collected from all City maintained parking lots.

In FY 2009-10, a total distance of **9,199 curb miles** was swept, and a total of **1,213 tons of debris** was collected. The total amount of material collected from both street and parking lot sweeping was **1,300.5 tons**.

Additionally, in FY 2009-10, the City's Public Works Department through coordinated efforts with Partners with Industry (PWI) collected and removed **106** 30-gallon bags of litter from all of the City's bus stops. The City also partnered with San Diego County probation crews to collect and remove **9,418** 30-gallon bags of over-grown vegetation from City right-of-ways based on visual observations and citizen complaints.

4.3 FIXED FACILITIES

4.3.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities that have been grouped in this section because these facilities receive formal inspections as part of the municipal program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreational Facilities
- Public Works Facilities
- Potable Water Facilities
- Fire Stations
- Other Fixed Facilities

4.3.2 SOURCE CHARACTERIZATION

The Municipal Permit requires Copermittees to inspect high priority municipal areas and activities annually according to D.3.a.(7)(a). High priority facilities include parks and recreational facilities and other municipal areas and activities that the City determines may contribute a significant pollutant load to the MS4.

As part of the (Jurisdictional Urban Runoff Management Program) JURMP Update process in March 2008, all municipal facilities were assigned an inspection priority based on the Municipal Permit requirements and an evaluation of their threat to water quality. Each site and activity has been evaluated based on a variety of site-specific factors including size, location, type of activity, waste generated, pollutant discharge potential, non-storm water discharges, proximity to receiving water bodies, and any other relevant factors deemed appropriate. Using these criteria, a complete prioritized, watershed based inventory was developed and is included in Appendix C-1.

The City of Encinitas owns, operates, and maintains 53 fixed facilities within the City. Of these facilities, 28 have been designated with a high priority inspection priority and 25 were designated a low inspection priority. All high priority facilities are formally inspected on an annual basis and described further in Section 4.3.4. Both high and low priority facilities are visually inspected on a routine basis by City staff. Any illicit discharges or illegal connections are immediately referred to the Clean Water Program. All fixed municipal facilities are

included in the City's inventory located in Appendix C-1. Figure 4.1 illustrates the various municipal fixed facilities and their associated activities within the City of Encinitas.

Parks and Recreation Facilities

The City maintains 17 public parks, 6 beach access areas, 3 viewpoints, 40 miles of trails, and 70 acres of open space. All landscape maintenance activities are performed through the use of private contractors. Parks and Recreation Department Supervisors are responsible for monitoring contract activities for landscaping which includes; implementing BMPs for pesticide, herbicide, and fertilizer usage; waste removal and control; and maintenance at all municipal parks and recreation facilities.

Public Works Operations Facilities

Public Works operations facilities are important in maintaining the functionality of many publicly offered services. The City of Encinitas maintains a total of four public works facilities, including two public works yards, a vehicle maintenance facility, and a wastewater collection facility (Appendix C-1).

Potable Water Facilities

The means to provide residents of the City with potable water is an essential activity conducted by the City of Encinitas' San Dieguito Water District. The City maintains several underground fixed facilities which include pressure regulating stations as well as two water reservoir/water storage facilities. The City also maintains an above ground water recycling reservoir.

Fire Stations

Fire fighting capability is an essential element of municipal activities conducted in the City. The City of Encinitas maintains five fire stations, which are included in the municipal inventory (Appendix C-1). Two fire stations within the City, stations #3 and #4, have fueling stations on site.

Other Fixed Facilities

Other fixed municipal facilities include a community center, three administrative buildings, five pump stations, and an Ultra Violet Urban Runoff Treatment Facility (UV Facility). All of these facilities are considered a low priority because many of the activities at these facilities are conducted indoors and do not correspond with activities that are considered a high threat to water quality.

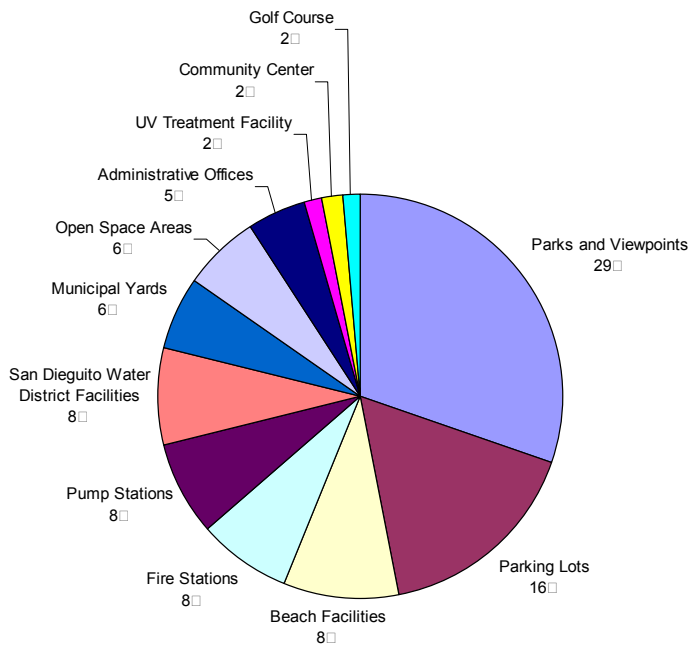

Figure 4.1 City of Encinitas Fixed Facilities

4.3.3 BEST MANAGEMENT PRACTICES

4.3.3.1 UPDATED BMPS

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP Update and the City's BMP Manual Part I. The City also references the CASQA Municipal BMP Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2009-10, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas. City personnel implemented general waste management BMPs, and patrons of the facilities were encouraged to recycle and properly dispose of trash and pet waste. Notable activities during the fiscal year included the maintenance of 20 doggie bag dispensers at three public parks and along several trails. The City also posted recycling signs along with trash and recycling bag dispensers at four beaches during peak holiday weekends throughout the reporting period.

City staff continued operation and maintenance of post-construction BMPs at Cottonwood Creek Park. The park is a prime example of low impact development and includes the following post-construction BMPs: 90 feet of day lighting Cottonwood Creek, porous pavement for all parking areas and driveways, pervious walkways, surface drainage through earthen-bottom open channels, and drought tolerant plants in landscaping areas.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: (1) runoff from improper irrigation after application; (2) application of chemicals during or prior to storm events; (3) use of chemicals that do not properly absorb to soil or plants; and (4) overspray from chemical applications that may eventually enter the MS4. The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management. Implementation of the policy includes:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The regulations generally include: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs.

In FY 2009-10, the following BMPs were implemented at all municipal parks and recreation facilities, public streets, channels, and right of ways to reduce pollution from pesticides, herbicides, and fertilizers:

- Whenever practicable, integrated pest management techniques that rely on non-chemical solutions are implemented.
- City personnel who participate in the application of pesticides are properly trained, maintain Qualified Applicator Certifications and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- City staff records the applications of all chemical agents by noting the locations, types, and quantities of chemicals used. Records are reported monthly to the Department of Agriculture.
- Pesticide, fertilizer, and herbicide handling and safety refresher sessions are provided to City personnel involved with application.

- The use of fertilizers is minimized as much as possible; compost and soil amendments are used in place of fertilizer, where applicable.
- Employees are trained to handle pesticides, herbicides, and fertilizers properly.
- All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides, and fertilizers are applied only when necessary (typically during growing seasons) and not during or prior to anticipated storm events.
- Pesticides are not sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- The City maintains compliance with federal and state reporting law for pesticide use.
- Weeds, grass, and brush are cleared from building perimeters and fence lines to reduce the need for pesticides and herbicide use, when applicable.
- Native plants are used in landscaping, where applicable.
- Diseased plants are removed, and infected parts of plants are removed to minimize the need for pesticide and herbicide use, where applicable.
- Several evapotranspiration gauges located throughout the City are used to monitor microclimates to properly set irrigation systems for different areas of the City and reduce the potential of over-irrigation.
- Flow sensors and master valves prevent water loss in the event of a break in any of the main lines.
- One bilingual training session for the City's private landscaping contractors was conducted by Clean Water Program staff during the fiscal year. There were 21 participants at the training session on June 17, 2010.

Public Works Operations Facilities

City personnel implement appropriate BMPs for all activities that take place at public works facilities. Storm Water Pollution Prevention Plans (SWPPPs) have been developed for all four of the City's main operations facilities, which include the City of Encinitas Wastewater Collection Division Facility, Requeza Street Facility, the "A" Tank Site, and the Calle Magdalena Public Works Facility. The SWPPPs include a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs are maintained at each facility, and all of the facilities are inspected by City staff on an annual basis. Additionally, all Public Works employees are annually trained in storm water management by the Clean Water Program. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Potable Water Facilities

City personnel implement appropriate BMPs for all activities that take place at potable water facilities when deemed appropriate. San Dieguito Water District employees are trained in storm water management on an annual basis. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. In FY 2009-10, Fire Station #3 was redesigned to incorporate the following storm water BMPs: bio swales, pervious pavement and a roof cover for the fueling area. Two fire stations (#3 and #5) have permanent treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. More detailed information regarding municipal staff training and non-emergency fire fighting flows can be found in Sections 8.2 and Section 13 of this document.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management, as discussed in the City's BMP Manual Part I and the CASQA Municipal Handbook.

In FY 2009-10 the following pollution prevention practices were implemented at all three administrative office buildings (City Hall, Calle Magdalena Public Works Facility and the Wastewater Collections Division Municipal Yard):

- approval and implementation of an Environmentally Preferable Purchasing policy,
- approval and implementation of a Low Impact Cleaning policy which seeks to minimize the impact of the City's cleaning products and procedures on the environment, and
- the use of 100% recycled paper for all copiers and printers.

Additionally, there were a total of ten energy efficient Dyson hand dryers installed in all of the bathrooms at City Hall, the Encinitas Community Center and the Encinitas Branch Library. Other pollution prevention practices that are maintained at City Hall include the following:

- roof replacement and an energy efficiency improvement project consisting of the installation of solar photo voltaic panels, a high efficiency air conditioning system, and day lighting the building in certain areas.
- installation of an Automated Logic System (ALS) which controls the heating and ventilation,
- implementing a 9-80 work week so that City Hall is closed every other Friday,
- installing lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- implementing a battery collection and recycling program at City Hall,

- replacing large trash receptacles at each individual desk with mini size trash receptacles and providing large recycling containers for mixed paper and cans/bottles,
- placing recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments, and
- use of seven alternative fuel vehicles.

4.3.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

Fertilizers which are used on landscaped areas in municipal parks and public right of way areas are considered a pollutant of concern for the San Elijo Lagoon and its larger drainage area. To mitigate potential discharges of nutrients to the Lagoon from Municipal activities, the City requires that the City's landscaping contractors implement an extensive fertilizer management program as described earlier in section 4.3.3.1. The City will continue to monitor the fertilizer management program, and if the existing measures are found to be deficient, the City may adjust the BMP implementation as needed to achieve a higher level of pollutant reduction.

Similarly, if the City identifies any potential sources of other constituents for which water bodies in the City are 303(d) listed that could be the result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no other municipal fixed facilities that have been determined to be a source of pollutants for which water bodies within the City are on the Clean Water Act (CWA) 303(d) list.

4.3.4 PROGRAM IMPLEMENTATION

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and if necessary, enforcement actions. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.3.4.1 MAINTENANCE

In FY 2009-10, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot, and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular maintenance activities.

The City maintains a regular maintenance schedule for fixed facilities in the City. As previously discussed, City personnel are trained to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly, and to report illegal discharges/illicit connections as they may come across them during normal work activities.

4.3.4.2 TRAINING AND EDUCATION

Municipal personnel are trained in implementing appropriate BMPs and preventing non-storm water discharges. In FY 2009-10, Clean Water Program staff conducted training for the following municipal departments: Engineering, Fire, Parks and Recreation, Planning, Public Works and the San Dieguito Water District. Additionally, the Streets Division of the Public Works Department discussed storm water issues at regular staff meetings throughout the reporting period. A detailed description of the municipal education program can be found in Section 8.2 of this document.

4.3.4.3 MUNICIPAL INSPECTIONS

City staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. As part of the FY 2009-10 program City staff performed a total of **28** high priority inspections. The fixed facility inspection locations and inspection dates are summarized in Table 4-1 below.

Table 4-1
Fixed Facility Inspections

No.	Facility Name	Inspection Date
1	"A" Tank Site Public Works Yard	4/21/2010
2	Calle Magdalena Public Works Yard	4/21/2010
3	Requeza Street Public Works Yard	4/21/2010
4	San Elijo Wastewater Division Facility	4/21/2010
5	Beacon's Beach	6/9/2010
6	Cardiff Sports Park	6/2/2010
7	Cardiff Sports Park Expansion	6/2/2010
8	Cottonwood Creek Park	6/2/2010
9	Encinitas Viewpoint Park	5/18/2010
10	Glen Park	6/8/2010
11	Grandview Beach	6/10/2010
12	H St. Viewpoint	6/9/2010
13	Hawkview Park	6/3/2010
14	J St. Viewpoint	6/9/2010
15	Las Verdes Park	5/18/2010
16	Leo Mullen Sports Park	5/18/2010

No.	Facility Name	Inspection Date
17	Leucadia Oaks Park	6/3/2010
18	Leucadia Roadside Park	6/10/2010
19	Little Oaks Equestrian	6/4/2010
20	Mildred Macpherson Park	6/10/2010
21	Moonlight Beach	6/10/2010
22	Oakcrest Community Park	5/18/2010
23	Orpheus Park	6/10/2010
24	Paul Ecke Sports Park	5/18/2010
25	Scott Valley Park	5/18/2010
26	Sun Vista Park	6/4/2010
27	Swami's Beach	6/8/2010
28	Wiro Park	6/4/2010

The recommended BMPs and corrective actions are summarized in the City's Routine Inspection Summary located in Appendix C-6. Of the 28 sites inspected, a total of **4** facilities required corrective actions and/or follow-up inspections. As a result, all **4** facilities have implemented appropriate BMPs, and the Public Works and Parks and Recreations Departments have verified that the corrective actions have been completed. There were no enforcement actions for any of the Municipal fixed facilities during FY 2009-10.

Potable Water Facilities

All of these facilities are considered a low priority and do not receive formal inspections because the activities associated with these facilities are located underground and do not involve any other activities on site.

4.4 MS4

4.4.1 BACKGROUND

The primary functions of municipal separate storm sewer systems (MS4) are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consist of streets, curbs, catch basins, inlets, pipes of varying materials, natural creeks and streams, natural channels, concrete channels, culverts, desilting basins, and detention basins. The City also maintains a number of treatment control BMPs such as storm drain filter inserts and a UV treatment facility, which are included

in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City of Encinitas regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the Maximum Extent Practicable (MEP).

4.4.2 SOURCE CHARACTERIZATION

The City maintains a variety of MS4 facilities which includes 1,591 catch basins and inlets, 61 miles of storm drain pipe, 2.25 miles of open channels, 14 desilting basins, and one UV Urban Runoff Treatment Facility located throughout its jurisdiction. The MS4, as one complete entity, is included in the municipal inventory located in Appendix C-1.

The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of the MS4. The GIS MS4 inventory includes inlets (i.e. catch basins, curb inlets, grate/inlet combos, etc.), outlets (i.e. curb outlets, headwalls, etc.), manholes, pumps, ditches, channels, storm drain pipes, and detention basins. To ensure that the City's GIS inventory is current and accurate, the MS4 inventory continually undergoes data (feature and attribute) review, quality control and validation by City staff from multiple departments. GIS staff also maintains storm infrastructure data by mapping new infrastructure through a combination of field work and Engineering Plans.

In FY 2009-10, the City in support of ongoing efforts to validate the MS4 inventory of facilities, continued through the first phase of the Channel Maintenance and Environmental Permitting project, completing an initial biological resources and constraints analysis. It is anticipated that this analysis will dictate future phases of the project, and clearly align citywide maintenance needs with related environmental permitting requirements. This effort has been prioritized by the City to support ongoing and critical maintenance of drainage facilities citywide.

4.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.4.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction, and new development. The City's JURMP also directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste from entering the MS4 system as well as ensuring that waste which is collected during maintenance of the City's MS4 does not re-enter the system.

The 2007 Municipal Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City of Encinitas does not own or operate any flood management projects or flood control devices that may be retrofitted. However, in FY 2009-10 the City did maintain 10 detention basins throughout the City that serve a pollutant removal function, particularly for sediment and associated

pollutants bound to the sediment. These facilities are inspected on an annual basis and cleaned of debris and sediment as needed. A Municipal BMP map that depicts all of the City's structural BMPs, detention basins and storm drain filter locations can be found in Appendix C-3.

4.4.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS/ACTIVITIES

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined to be necessary.

4.4.4 PROGRAM IMPLEMENTATION

The City's MS4 management program includes responding to complaints received by the City's Clean Water Hotline {(760) 633-2787}; detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, repairing and/or replacing damaged or failing MS4 structures; and by stenciling signs on storm drain inlets warning of effects of illegal dumping. The City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a combination sewer and storm drain cleaner during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance. City staff report on the maintenance of the MS4 through an industry standard asset inventory and a work management system that integrates with the City's GIS system. Maintenance is performed on the storm drain infrastructure and captured through work orders that are attached to the storm drain features represented in GIS. Any changes or updates to the MS4 inventory will be reported in future JURMP Annual Reports.

All maintenance activities this fiscal year met the Municipal Permit requirements as outlined in Order No. R9-2007-0001. The FY 2009-10 annual results for all municipal activities are summarized below and reported in detail in Appendix C-2.

4.4.4.1 MAINTENANCE

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year is included below:

- Within the defined reporting period of this report, approximately **355.9 tons** of waste and litter were removed from the entire MS4. This included the removal of **45.6 tons** from the catch basins and inlets, **2.3 tons** from the City's storm drain filter inserts, and **159 tons** from open channels. All MS4 facilities observed to be collecting relatively high volumes of trash were cleaned between May 1 and September 30.

- Within the defined reporting period of this report, **308 tons** of litter and vegetation were removed from open channels by hand. Cleaning the open channels is conducted

annually/year round or more often when necessary. The City responds to observations or reports of anthropogenic litter in channels in a timely manner.

- Within the defined reporting period of this report the City inspected and cleaned **1,659** catch basins and inlets and removed a total of **47.9** tons of waste and litter. Storm drain inlets and catch basins that City personnel have identified as gathering a greater amount of trash and debris as compared to other areas of the City are inspected throughout the year and cleaned if necessary. The City's inspection and cleaning activities are sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris. Inspection and cleaning schedules are subject to change based on observations and records of City personnel.

- The City maintains a total of 56 storm drain filter inserts in 34 inlets (some larger inlets may contain more than one filter insert) located throughout its jurisdiction to remove sediment, debris, oil, and grease from the MS4. From July 1, 2009 through June 30, 2010, **2.3 tons** of sediment and litter were removed from all 34 inlets. These inserts are maintained on a quarterly basis by a specialty contractor. Table 4-2 below outlines the complete filter insert inventory. A Municipal BMP map that depicts all of the City's storm drain filter locations can be found in Appendix C-3.

- The City of Encinitas has a formal maintenance agreement with the San Elijo Joint Powers Authority to maintain the UV Facility. The scope of the agreement ensures daily monitoring and inspection, startup and shutdown of the facility as dictated by rain events, and preventative and regular maintenance. In FY 2009-10, over $16,083 was spent on the preventative and regular maintenance of the facility including, pump replacement, control screen and software updates, and other electronic equipment and parts. The UV Facility provides the City with a vital treatment function, and ongoing operations and maintenance activities are critical to ensure optimum performance and pollutant removal.

A complete report of all MS4 operation and maintenance activities can be found in Appendix C-2.

Table 4-2
Storm Drain Filter Inserts Inventory

Inlet ID Number	Number of Filters	Location	Inlet Type
1	1	194 El Camino Real @ Via Molena	Curb
2	1	1470 Neptune Ave. in driveway apron	Grate
3	2	337 El Camino Real, in front of Circuit City Mall	Curb

Inlet ID Number	Number of Filters	Location	Inlet Type
4	1	1638 Neptune in grass shoulder	Grate
5	2	1786 1/2 Highway 101	Curb
6	1	1650 Highway 101	Grate
7	1	970 Hwy 101 in alley, north of Jasper	Grate
8	1	918 N. Hwy 101 in alley	Grate
9	2	204 El Camino Real, in front of Blockbuster Video	Curb
10	1	914 Hwy 101 in alley @ Leucadia Blvd. north of the park	Grate
12	1	828 Hwy 101 in alley, behind building	Grate
13	1	802 Hwy 101 in alley, west of Europa St.	Grate
14	1	129 Cadmus at Highway 101	Grate
15	1	149 Basil St. at Highway 101	Grate
16	4	130 Basil St. at Highway 101	Curb
17	1	130 Athena at Highway 101	Grate
18	2	170 Athena at Highway 101	Curb
19	1	577 N. Vulcan north of Union	Grate
20	1	208 Cereus at Hygeia	Curb
21	3	501 El Camino Real, east side @ Garden View Rd.	Combo
22	1	321 Union at Hygeia	Grate
23	1	321 Union across from Hygeia St.	Grate
24	1	1750 Hwy 101 at Bishope Gate	Curb
25	1	750 G St. at Second St. alley	Grate
26	3	364 2nd St. at C Street	Grate
27	5	247 Hwy 101 at NE corner of Encinitas Blvd.	Curb
28	3	102 Encinitas Blvd.	Curb
29	2	485 Santa Fe Dr., west of I-5.	Curb
30	2	485 Santa Fe Dr., north side of street, west of I-5	Curb
31	1	2560 Manchester in alley	Grate
32	1	2582 Manchester across from alley	Grate

Inlet ID Number	Number of Filters	Location	Inlet Type
33	2	499 El Camino Real, SE corner @ Garden View Rd.	Curb
34	3	398 El Camino Real, SW Corner @ Garden View Rd.	Curb
35	1	398 El Camino Real, across from Circuit City mall	Curb

In FY 2009-2010, the Engineering Department was instrumental in conceptualizing and designing numerous drainage related capital improvement projects. These projects are outlined in Table 4-3 below.

Table 4-3
Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Stratford Knoll Drainage Improvements	$650,000	Replace existing storm drain channel and increase capacity.	Under Construction
Cardiff Alley Improvements	$200,000	Build a perforated sub-drain to improve drainage in area.	Complete
Parking Lot B	$1,000,000	Implement Low Impact Designs (LIDs) including dry wells and flow through planters to treat storm water.	Under Construction
Encinitas Creek Drainage Channel	$1,100,000	Increase capacity and provide flood control	In Design
Melba Road Improvements	$250,000	Installation of drainage improvements including curb and gutter and an 8 inch storm drain.	In Design

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into

receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City of Encinitas conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.5.2 SOURCE CHARACTERIZATION

The City of Encinitas Wastewater Collection Division maintains approximately 120 miles of public sanitary sewer collection pipes.

4.5.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.5.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction and new development. In March 2008, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.5.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program that minimizes sanitary sewer overflows (SSO) and is described in more detail below.

4.5.4 PROGRAM IMPLEMENTATION

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing

damaged and leaking sewer lines, remediating existing sewer lines as necessary and proper disposal of hazardous waste.

4.5.4.1 MAINTENANCE

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2009-10, the entire sewer system was cleaned, and known trouble spots were cleaned on a more frequent basis. The City seeks to reduce and eliminate the amount of seepage from the sanitary sewer system to the MS4 through routine preventative maintenance of both the sanitary sewer and the MS4 systems. Preventative maintenance of both systems allows City officials to detect and eliminate active seepage points before they become a larger problem, and also to repair areas of the system that have a high possibility of becoming a seepage point.

In FY 2009-2010, the Engineering Department was instrumental in conceptualizing and designing capital improvement projects (CIP) to prevent sewage spills by improving the wastewater collection system. Sewer and emergency repair projects initiated during FY 2009-10 are shown below in Table 4-4.

Table 4-4
Sewer CIP Projects

Project Title	Budget	Goal	Status
Olivenhain Sewer Pump Station	$ 5,300,000	Reduce sewage spills, increase capacity and capture first flush from Interstate 5.	In Design Phase

In FY 2009-10, the City took the following measures to reduce the seepage from the sanitary sewer system to the MS4:

- 4.7 miles of the sewer system was televised to check pipe conditions,
- 214 miles of sewer lines were cleaned,
- 11 storm drain and sewer pipes were repaired.

City staff report on the maintenance of the sewer system through an industry standard asset inventory and work order management system that integrates with the City's GIS system. Maintenance is performed on the sewer infrastructure and captured through work orders that are attached to the features represented in GIS. Any changes or updates to the sewer system inventory will be reported in future JURMP Annual Reports.

On August 8, 2009, the City implemented a Sewer System Management Plan (SSMP). The SSMP is a program that ensures that the sewer system is functioning properly and that the necessary maintenance is conducted. The SSMP also includes a spill response plan that establishes standard procedures for immediate response to all sanitary sewer system overflows (SSOs). In FY 2009-10 the City of Encinitas Wastewater Collection Division personnel were trained in detecting, reporting and responding to SSOs in accordance with the SSMP.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.6.2 SOURCE CHARACTERIZATION

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- power washing, including graffiti removal,
- street and sidewalk repair and maintenance which includes street striping, street painting and pothole repair, and
- landscape maintenance

4.6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.6.3.1 UPDATED BMP REQUIREMENTS

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities discussed above. In March 2008, the City established minimum BMPs which were described in the City's 2008 JURMP Update. The JURMP Update directs city staff to utilize the City's BMP Manual Part I and the CASQA Municipal Handbook to choose applicable BMPs to implement for municipal areas and activities, including mobile activities. BMPs similar to those implemented for the management and maintenance of parks and landscaped areas are implemented for landscape maintenance in landscaped City right-of-way areas such as medians.

4.6.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined to be necessary. Presently, City related mobile activities have not been determined to be a source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated as effectively reducing pollutant discharge to all receiving waters in the City to the MEP.

4.6.4 PROGRAM IMPLEMENTATION

In FY 2009-10, City field crews were trained to implement BMPs during all mobile activities. The Public Works Department Streets Division received training on storm water BMPs as they relate to mobile cleaning activities on five separate dates throughout the reporting period.

Additionally, the Public Works Wastewater Collections Division also received training from Clean Water Program staff on June 16, 2010. City field crews were trained to properly contain, control, and capture any discharge that was generated by a mobile activity. City field crews were also trained to use mobile equipment properly to ensure all wastewater is collected and that the equipment continues to function properly. For more detail regarding municipal staff training refer to Section 8.2 of this document.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City of Encinitas hosts a variety of special events throughout the city. These events may include, but are not limited to, festivals, fairs, events for charitable causes, and special occasions. The City recognizes that many special events have the potential to generate significant trash and litter caused by the patrons and the associated activities that occur at the special events. The City has considered the controls that are described in the Municipal Permit and has chosen the BMPs listed in Section 4.7.3.1 below as most effective and efficient for the City's needs. These BMPs are implemented during and/or after special events, where applicable.

4.7.2 SOURCE CHARACTERIZATION

The City of Encinitas hosts a variety of special events at various locations throughout the city; including City sanctioned events and venues, as well as privately managed events. According to the Encinitas Municipal Code Chapter 6.12, any organized event coordinated for 25 people or more requires an Operations Permit (Special Events Permit). For the purpose of Special Event source characterization, events that require an Operations Permit (as defined by Encinitas Municipal Code Section 6.12) by the City have been identified as priority events.

4.7.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.7.3.1 UPDATED BMP REQUIREMENTS

The City has considered many of the controls specific to special events listed in the Municipal Permit. Before any special event permits are approved, applicants must fill out the City's "Special Events Permit P2 Questionnaire" (Appendix C-4) to assess the most appropriate BMPs for their event, and all applications must be reviewed by Clean Water Program Staff. Applications are evaluated to ensure that event organizers select an effective combination of BMPs to prevent trash or other pollutants from entering the storm drain system. The City has chosen the following BMPs as most effective and efficient for City needs. Notably, the City may require additional, event specific BMPs at any time as determined necessary.

Inlet Protection:

- Identify all storm drain inlets with appropriate signage and prohibitive language to deter illegal dumping and / or discharge.
- Protect all storm drains identified on their site plans. Fabric filters, gravel bags, or other approved inlet protection device over the drain opening are recommended.
- Visually inspect and clean, if necessary, all identified storm drain inlets impacted by the Special Event activities.

Trash and Debris:

- Adequate trash and recycling containers must be provided throughout the event venue, including at the exit and entry points.
- Regular collection of loose trash and debris must be applied as needed.
- Temporary fencing will be required to be put into place if the event, or any portion thereof, is determined to pose a threat of wind blown debris into any water bodies.
- Post event sweeping of the entire venue area and related staging areas is required.

Temporary Portable Restrooms:

- All temporary portable restrooms will be placed away from all storm drain inlets, drainage swales, water bodies, and any other locations that have the potential to impact the storm drain system.
- All temporary portable restrooms are required to have a secondary containment pan or additional BMPs in place around the stations for possible overflows.
- The contact information for the company responsible for the restrooms clearly marked on or around the restrooms.

In addition to the BMPs that are implemented by the applicant, The City of Encinitas implements the following during and/or after special events, where applicable.

- Proper management of trash and litter, including temporary trash receptacles for trash.
- Street sweeping following the special event.
- Other BMPs, as included in the Municipal Permit, when deemed necessary by City personnel.
- Other post clean-up activities, such as catch basin cleaning, when necessary.

The City may also set up storm water informational booths with educational handouts and watershed maps, which demonstrate the impacts of pollution on a watershed. The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.7.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary. Presently, special events have not been determined

to be a significant source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated for effectiveness in reducing pollutant discharge to all receiving waters in the City to the MEP.

4.7.4 PROGRAM IMPLEMENTATION

Events which require a discretionary Special Events Permit from the City, and completion of the BMP specific Special Events Permit P2 Questionnaire (Appendix C-4), must meet minimum pollution control standards as described above, and receive permit approval from the Clean Water Program. More refined event characterization as defined in Section 4.7.2 above, and improved event tracking enhanced the overall efficiency and effectiveness of Special Event oversight. In FY 20009-10, there were **54** special event applications processed by the Clean Water Program (see Appendix C-5).

The Clean Water Hotline is advertised on all Special Events Permit Applications and can be used to report spills during normal business hours. Additionally, the City has an after hours phone number that can be used to report any large or hazardous spills during special events that may occur on weekends or when the City offices are closed. City personnel are on call to respond to any emergency situations that may arise. During City sponsored events, trained City personnel are on hand to ensure that the event remains free of illegal discharges and/or illicit connections to the MS4.

In addition, the City maintains the authority to charge the applicant a Clean-up Fee and Deposit, depending on the size, location, and type of event. Following permitted events, post-event inspections are conducted by City staff, and the location of the event must be returned to pre-event conditions in order for the applicant to receive a full refund of deposited monies. If the City determines that more clean-up is necessary, the deposit will be used as reimbursement for City time and cleanup efforts including street and parking lot sweeping, and the event sponsors or organizers may be charged any excess clean-up fees the City may encounter beyond the amount of the deposit. In FY 2009-10, the City collected $600.00 in clean-up deposits (see Appendix C-5).

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4 (Municipal Separate Storm Sewer System). The City of Encinitas has implemented a program that aims to reduce industrial and commercial pollution discharges from the MS4 to the MEP, prevent industrial and commercial discharges from the MS4 from causing or contributing to a violation of water quality standards, protect local receiving water bodies, and comply with the Municipal Permit.

Commercial facilities within the City of Encinitas include a wide range of service oriented businesses from restaurants to nurseries. There are five main commercial areas within the City. The largest areas are downtown Old Encinitas and the Leucadia business district, along Highway 101 from Swami's Beach to La Costa Boulevard. This area contains many different commercial businesses ranging from restaurants to automotive outlets and is the oldest portion of Encinitas. Three industrial facilities are also located in the City: the San Dieguito Union High School District Transportation Cooperative, the San Elijo JPA Water Reclamation Facility, and the inactive Encinitas Landfill.

Within the defined reporting period of this report, Clean Water staff worked diligently to fulfill the requirements of the Order 2007-0001 related to commercial and industrial sectors. The City's GIS-based commercial inventory was updated and prioritized based on the new requirements of Order 2007-0001 and the guidelines established in the City's 2008 JURMP. FY 2009-10 commercial and industrial facility inspections were based on this prioritization scheme and the new inspection frequencies outlined in Order 2007-0001. Inspections, follow-up, and enforcement actions were tracked using CityWorks, the City's existing GIS-based Work Order tracking system. In addition, the City participated in the regional industrial/commercial workgroup and subgroups, and helped to shape the mobile commercial businesses database and inspection standards. The following section demonstrates the City's successful implementation of required programmatic activities related to the Industrial and Commercial Section of Order 2007-0001 (Section D.3.b) during FY 2009-10

5.2 INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The Clean Water Program emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Municipal Permit.

For the rest of Section 5.2, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial site/sources component is described in Section 5.3.

5.2.2 SOURCE CHARACTERIZATION

A watershed-based inventory of the industrial and commercial sites/sources within the City's jurisdiction was compiled as part of the 2008 JURMP update. As required by the Municipal Permit, the inventory includes the following information for each site/source: facility name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired); and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. Inventories of commercial and industrial facilities within the City of Encinitas are included in Appendices D-1 and D-2. Mobile commercial businesses do not have a fixed address at which they operate; they are tracked within a separate, non-spatial database (refer to Section 5.3).

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. The GIS department and the Clean Water Program both receive a monthly summary of new and renewed business registrations from the City Clerk's Department. Upon receipt of the monthly summary, a GIS Analyst updates the spatial facility database, and a Clean Water Program staff member updates the storm water inspection information for each business. In addition, Clean Water staff identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered with the City. When this occurs, these facilities are added to the inventory. Additionally, when Clean Water staff conducts annual commercial and industrial inspections, they have the opportunity to identify new or closed businesses and update the inventory with these findings.

In FY 2007-08, commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the JURMP update and transition to complying with the current Municipal Permit, a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. Section 5.2.4.1 provides a detailed description of the City's prioritization process for commercial facilities. As a result of this process, there were **114** commercial facilities identified as high priority and inspected in FY 2009-10. High priority facilities identified in FY 2009-10 included: (2) animal facilities, (8) auto repair shops, (83) eating/drinking establishments, (9) gas stations, (5) nurseries/greenhouses/landscapers, (3) industrial facilities, (2) masonry businesses, (1) building material supplier, and (1) golf course. Notably, the City of Encinitas' commercial inventory is dominated by eating/drinking facilities. As such, it is worth noting that the commercial businesses inventory in the City is dynamic, with considerable business turnover. Consequently, the City is constantly working to maintain and prioritize the commercial facilities inventory to dictate effective and efficient commercial inspection actions citywide.

Three industrial facilities are located in the City of Encinitas—the San Elijo JPA Water Reclamation Facility, San Dieguito Union High School District (SDUHSD) Transportation Cooperative, and the Encinitas Landfill. All three facilities are covered under the Industrial

Storm Water General Permit Order 97-03-DWQ. The industrial inventory is included as Appendix D-2. The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The SDUHSD Transportation Cooperative is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The Encinitas Landfill is owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected by the City of Encinitas, and the Encinitas Landfill is inspected by the County of San Diego. Completed industrial facility inspection forms are available upon request.

As part of the 2008 JURMP update and the development of the SUSMP, the City collaborated with copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-1 lists the pollutants that may be generated by each category of business. The pollutants that may be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in Appendix D-1 with the category in Table 5-1 and its corresponding pollutants. Waste Discharge Identification Number (WDID) is also included for sites that are covered under the State of California Industrial General Permit (General Industrial Permit). The TTWQ prioritization of each facility is also included in the inventories. Prioritization was assigned via the process described in Section 5.2.4.1.

As required by Section D.3.b(1) of the Permit, all industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing[1]
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling

[1] Mobile commercial businesses are discussed in more detail in Section 5.3.

Table 5-1
Pollutant Loading Potentials of Industrial and Commercial Sources

Site/Source Type	Heavy Metals*	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Body Repair	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair/Maintenance	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical Garden	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Mobile Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	PO	L	L	PO	PO	PO
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nursery/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Auto Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Mobile Auto Washing	PO	L	PO	PO	UL	UL	PO	UL	PO
Contractor (Mobile)	PO	PO	PO	PO	UL	UL	PO	UL	PO
Handyman (Mobile)	UL	PO	PO	UP	UL	UL	PO	UL	PO
Landfill	PO	PO	PO	L	PO	PO	L	L	L
Wastewater Treatment	UL	UL	L	PO	UL	L	L	L	PO

Notes

L = Likely, PO = Possible, UL= Unlikely

* Heavy metals are a possible pollutant for any facility that has a parking lot.

This table is based on the field experience of D-MAX Engineering and on tables in the Copermittees' Baseline LTEA. D-MAX has conducted more than 1,000 industrial and commercial inspections during which it assessed the pollutant discharge potentials of the inspected facilities.

- Pest control services
- Eating or drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning[1]
- Cement mixing or cutting[1]
- Masonry[1]
- Painting and coating[1]
- Botanical or zoological gardens and exhibits
- Landscaping[1]
- Nurseries and greenhouses
- Golf courses, parks, and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning[1]
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services[1]

Both Industrial and Commercial facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e., within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA).
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.2.3.1 UPDATED BMP REQUIREMENTS

As required by section D.3.b.(2) of the Permit, during the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sites and incorporated these into the City's BMP Manual I. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's BMP Manual I. The BMP Manual I can be accessed through the Clean Water Program webpage at: http://cwp.cityofencinitas.org.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP (Storm

Water Pollution Prevention Plan) and implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are determined based upon a review of the site's SWPPP and site inspections.

5.2.3.2 ADDITIONAL CONTROLS

As required by section D.3.b.(2)(e), the City of Encinitas requires the implementation of additional controls for industrial and commercial sites and sources that are 1) tributary to CWA Section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired) or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

Clean Water Program staff utilizes a geographic information system (GIS) to maintain the commercial and industrial inventory and has the ability to spatially locate facilities relative to receiving waters and ESAs. Clean Water inspection staff is provided a hard copy map to use as a field reference to make appropriate determinations in consideration of these factors. Clean Water Program staff may prescribe additional controls during inspections of commercial and industrial facilities, as needed, in consideration of the proximity of the facility to the water body and the observed potential of the site to be a significant source of pollutants that may threaten the downstream water body as necessary and appropriate.

5.2.4 PROGRAM IMPLEMENTATION

This section describes the steps employed by Clean Water Program staff to require and verify the implementation of required designated BMPs for industrial and commercial sources. During FY 2009-10, the City of Encinitas implemented the following industrial and commercial program elements:

- provided education and outreach through inspection actions so that regulated businesses were aware of the City's stormwater requirements;
- inspected inventoried businesses to evaluate compliance with established minimum BMP requirements and the local stormwater ordinance;
- conducted follow-up inspections as necessary to ensure facility compliance with minimum BMP standards;
- and took enforcement action as necessary to bring violators into compliance.

5.2.4.1 INVENTORY PRIORITIZATION

As required by section D.3.b(1)(b), when evaluating threat to water quality, the City of Encinitas considered the following attributes of each industrial and commercial business to determine priority status (high or low):

i. Type of activity (SIC code);
ii. Materials used at the facility;

iii. Wastes generated;
iv. Pollutant discharge potential;
v. Non-storm water discharges;
vi. Size of facility;
vii. Proximity to receiving water bodies;
viii. Sensitivity of receiving water bodies;
ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
xi. Facility design;
xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
xiii. The facility's compliance history; and
xiv. Any other relevant factors.

Although not specifically required by the Municipal Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City's GIS data management system was used to prioritize commercial businesses based upon the following spatially referenced TTWQ criteria:

- proximity to a 303(d) listed water body
- pollutant potential of the facility type
- stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. For example, if the facility is tributary to the San Elijo Lagoon and received a Notice of Violation from the City in the past the facility would be considered high priority based upon the additional criteria that the City has established in determining TTWQ. In addition, if during the City's commercial inspection process or based on institutional knowledge, it was determined that additional sites that would otherwise have a low priority should be classified as high priority industrial or commercial facilities, then they were added to the inventory and were inspected.

The City's commercial inventory was updated and prioritized during the defined reporting period of this report and will be prioritized a least once per year prior to conducting annual inspections.

As a result of the City's threat to water quality analysis during FY 09-10, 26% of the industrial and commercial facilities were identified as high priority. The identified high priority facilities included all three industrial facilities and many of the City's restaurants and auto repair shops. For a complete list of prioritized facilities refer to Appendices D-1 and D-2.

5.2.4.2 INSPECTION FREQUENCY

FY 2009-10 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the

2008 JURMP update and transition to complying with the current Municipal Permit a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. The following steps were taken to determine which industrial and commercial sites were inspected:

1. Confirm that the current industrial and commercial inventories are up-to-date
2. Prioritize each facility based on the prioritization process described in section 5.2.4.1 of this document
3. Review the list of facilities that were inspected the previous year
4. Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with standards established in section D.3.b.(3)(b) & (c) of the Permit, in FY 2009-10, the City inspected 100% of the industrial and commercial facilities inventoried as high TTWQ and over 25% of all inventoried sites. Consistent with the Permit, mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Municipal Permit were met.

In FY 2009-10, the City's industrial and stationary commercial inventories included a total of **438** facilities, of which **114** facilities were identified as having a high TTWQ (**111** stationary commercial facilities and **three** industrial facilities[2]). Rounding to the nearest whole number, 25% of the stationary industrial/commercial inventory would be **110** sites, and 100% of the high TTWQ facilities would be **114** sites.

During FY 2009-10, the City completed inspections for all high priority facilities identified on the industrial/commercial facility inventory. City of Encinitas stormwater specialists conducted **two** industrial and **138** commercial site inspections, of which **two** were high priority industrial facilities and **111** were high priority commercial facilities. Therefore, the City of Encinitas met the minimum inspection requirements established in Order 2007-0001 and inspected 100% of all the high TTWQ facilities and 32% of all facilities in the industrial and commercial stationary facility inventories.

[2] The Encinitas Landfill is regulated and inspected by the County of San Diego.

Table 5-2
Summary of Facility Prioritization and Inspections Conducted in FY 2009-10

TTWQ Prioritization	Number of Facilities	Order 2007-0001 Inspection Requirements	Inspections Completed	
			Total	Percent
High priority	114	100% (114)	114	100%
Low priority	324	as needed	27	8%
Total	438	25% (110)	141*	32%

*Total includes one industrial inspection conducted by the County of San Diego.

5.2.4.3 ROUTINE FACILITY INSPECTIONS

As required by section D.3.b.(3) of the Permit, commercial and industrial facilities in Encinitas are routinely inspected by the City's Clean Water Program staff. Inspections are intended to:

- identify facilities that are not in compliance with the City's Storm Water Management Ordinance and the Municipal Permit;
- provide facilities with information regarding the City's Clean Water Program;
- provide guidance in complying with stormwater regulations (City's Storm Water Management Ordinance, Municipal Permit, etc.); and
- validate and manage the inventory.

During FY 2009-10, City of Encinitas stormwater specialists conducted **two** industrial and **138** commercial site inspections for compliance with its ordinances, permits, manuals, and this Order. All inspections included, as applicable:

i. Review of BMP implementation plans, if the site uses or is required to use such a plan;
ii. Review of facility monitoring data, if the site monitors its runoff;
iii. Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
iv. Assessment of compliance with Copermittee ordinances and permits related to urban runoff;
v. Assessment of BMP implementation, maintenance and effectiveness;
vi. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
vii. Education and training on stormwater pollution prevention, as conditions warrant.

Specialists use a Storm Water Quality Inspection Form to document inspection activities (see Appendix D-3). The specialized form allows staff to document the above listed inspection steps, as applicable, to determine full compliance for each type of facility. In FY 2008-09, staff designed a new triplicate form called Commercial and Industrial Stormwater Quality Inspection Summary form, which is used in addition to the detailed industrial and commercial inspection form. The form summarizes the corrective actions that are required as a result of the detailed

inspection and acts as the responsible party's record of receipt upon completion of the inspection. This customer friendly form more effectively summarizes the inspection results, making corrective action requirements very clear to the business operation owner/manager. The form lists the most common corrective actions and requires a completion date to be met via the signature of the manager/owner. Further, the form effectively aids in the owner's understanding of stormwater regulations and compliance with current and future inspection actions. A copy of this form is included in Appendix D-4. When conducting inspections, specialists worked with site contacts to provide examples of BMP solutions that could be implemented when corrective actions were necessary to minimize threat to water quality. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. For example a restaurant may be required to provide overhead coverage and secondary containment for outdoor grease storage. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the specialist was at the site. The responsible party was always provided a copy of the inspection summary form, and a complete copy of the detailed inspection report is always available upon request.

For a complete summary and confirmation that the designated BMPs were implemented (or required to be implemented) for industrial and commercial sites inspected in FY 2009-10, see the routine inspections summary in Appendix D-5. This Appendix describes, in detail, actions taken by specialists to confirm or require that BMPs were implemented at each industrial and commercial site inspected. Appendix D-5 and the associated inspection forms completed for each routine inspection confirm that all inspections conducted in FY 2009-10 addressed all the required inspection steps. Completed forms are available upon request.

Inspection Tracking

Complaint and inspection documentation is filed in the City's GIS database and is kept up-to-date on a daily basis. The GIS database is also used to track the number of inspections conducted for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that sites/sources are inspected at the minimum frequencies listed in section D.3.b.(3)(b)& (c) of the Municipal Permit. Clean Water Program staff reference the inspection data in the GIS to assist in preparing for annual inspections, follow-up inspections, or IDDE investigations.

Third Party Inspections

All commercial inspections conducted in FY 2009-10 were completed by City of Encinitas Clean Water Program staff. The City has one full-time stormwater specialist (and three backup specialists) dedicated to conducting routine commercial and industrial inspections and following up on stormwater complaint calls. A third party was not employed to conduct commercial and industrial inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting stormwater compliance inspections and enforcement of industrial and commercial facilities are trained regularly on inspection and enforcement

procedures, BMP implementation, and assessment of monitoring data. Clean Water specialists attend available workshops and regularly receive training through staff meetings and direction from the Clean Water Program Manager. Further, Clean Water staff actively collaborates with inspection staff throughout the San Diego region to share methodologies and approaches that may be beneficial to each jurisdiction. Refer to Section 8.2 for a complete list of workshops, trainings, and conferences attended by Clean Water Program staff in FY 2009-10.

Inspection Follow-up and Enforcement

Clean Water Program staff conducted follow-up inspections at all facilities where deficiencies were identified and corrective actions were required. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. A total of **39** follow-up investigations were conducted as part of the FY 2009-10 routine inspection program. Depending on the severity of the infraction requiring corrective action, inspectors may elect to issue a Notice of Violation and/or monetary citation. In FY 2009-10, all inspected facilities complied with the corrective actions; therefore, **zero** Notices of Violation (NOVs) were required to obtain compliance. Appendix D-5 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

5.2.4.4 NOTIFICATION

As required by section D.3.b.(2)(c) of the Permit, in FY 2009-2010, the City of Encinitas notified all inventoried industrial and commercial business of the City's minimum BMP requirements that are applicable to the site and/or activity. A copy of the notification letters (stationary and mobile) are included in Appendices D-7 and D-8 respectively. In addition, during FY 2009-10, the City continued notification efforts as part of routine facility inspections. All industrial and commercial facilities inspected in FY 2009-10 were notified of minimum BMP requirements applicable to their site/source. City of Encinitas stormwater specialists conduct thorough inspections with the owner/operator of each facility. During each inspection the stormwater specialist discusses the applicable BMP requirements in detail with the owner/operators.

5.2.4.5 COMPLAINT INVESTIGATIONS (VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE)

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge involving a commercial facility, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigations typically include stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its stormwater ordinance for all commercial and industrial facilities as

necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2009-10, there were **58** stationary commercial and **two** industrial ICID complaint investigations. Of those investigations, **27** required follow-up assessments, **10** NOVs and **four** citations were issued in order to achieve compliance. A summary of the commercial complaints, violations, and enforcement actions occurring in FY 2009-10 is available for review in Appendix H-1. As a component of complaint investigations, educational information is commonly provided to the owner/operator of commercial facilities to improve knowledge and awareness of stormwater regulations. Materials typically distributed included general stormwater education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. During **52** investigations educational information was provided to the business owner/operator by the Clean Water specialist.

Appendix H-1 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2010.

Reporting of Industrial Non-Filers

The City of Encinitas did not identify any industrial sites that may require coverage under the General Industrial Permit but which, to the City's knowledge, did not file NOIs.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City of Encinitas and do not maintain a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 SOURCE CHARACTERIZATION OF MOBILE SOURCES

The mobile businesses known to operate within the City's jurisdiction are listed on an inventory separate from the stationary commercial inventory in Appendix D-6. This inventory was comprehensively reviewed and updated during FY 2009-10. The following business types are addressed by the mobile sources element of the City's industrial and commercial program:

- Mobile automobile or other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades
  - Cement mixing or cutting
  - Masonry
  - Painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile business that the City determines to have a significant threat to water quality will be added to the inventory. Because not all mobile businesses have obtained a City of Encinitas business registration certificate or have a base of operations outside the City of Encinitas, Clean Water Program staff is continually refining and updating the mobile commercial inventory. Sources for such inventory updates include reported incidents, general observations by City staff, and available business registration certificates.

In FY 2008-09, the City participated in the development of a regional inventory and tracking system for mobile businesses. The industrial/commercial workgroup worked with a consultant who specializes in database design to create and maintain a mobile businesses database for the region. Figure 5-1 depicts the online form used by copermittees to enter a new business into the regional mobile business database. It is anticipated that this regionally updated and shared database will aid in collaborative enforcement of stormwater violations caused by mobile businesses.

Figure 5-1
Mobile Business Database New Business Entry Form

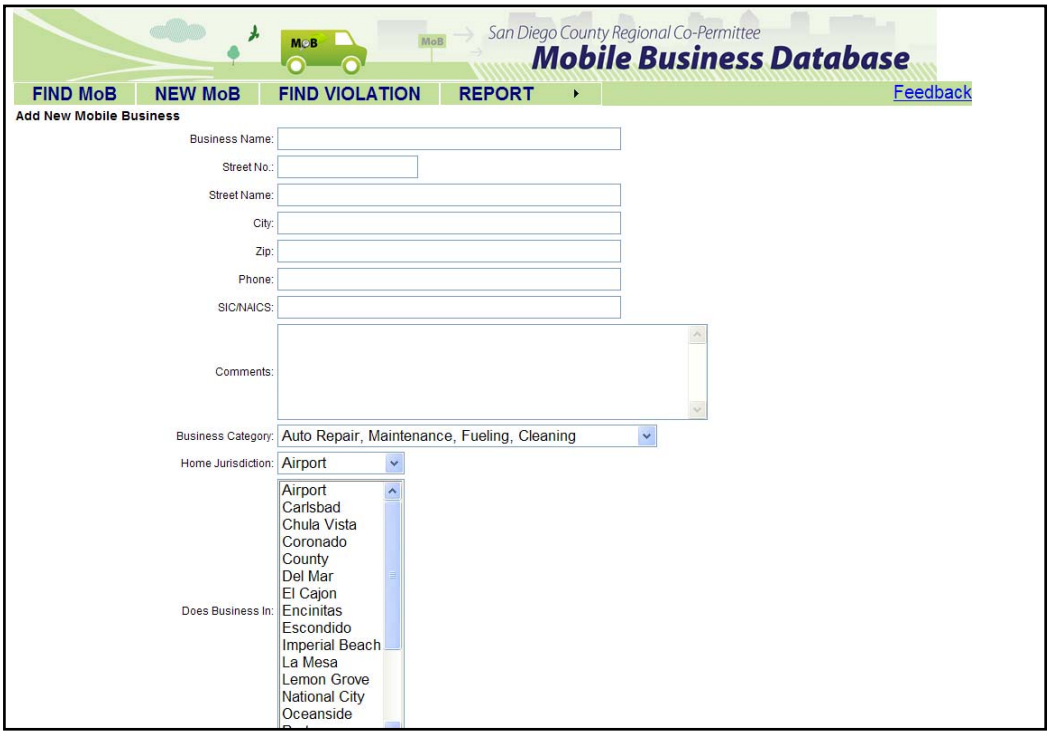

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 UPDATED BMP REQUIREMENTS FOR MOBILE SOURCES

All BMPs required for stationary sources, described in Section 5.2.3.1 of this document and listed in detail in the City's BMP Manual, are also required for mobile businesses, where applicable. The most important BMPs for most mobile businesses are typically those that address non-stormwater discharge control and spill prevention, control, and cleanup.

5.3.3.2 ADDITIONAL CONTROLS FOR MOBILE SOURCES

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. If the City finds that the activities of a mobile business are contributing pollutants of concern to a CWA section 303(d) impaired water body segment or are negatively impacting ESAs, additional controls will be required for those activities as applicable. Further, if the City has reason to believe that any mobile business is generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more frequently visit those areas and/or take other actions to address the illegal discharges.

5.3.4 PROGRAM IMPLEMENTATION

5.3.4.1 EDUCATION/OUTREACH AND NOTIFICATION OF MOBILE SOURCES

In FY 2009-10, the City of Encinitas provided information and outreach regarding stormwater quality to mobile business owners and operators that were contacted as a result of a complaint call *(See Section 5.3.4.4 below for a summary of complaint calls related to mobile business activities)*. Contacted businesses were given educational materials with detailed pollution prevention methods and other related BMPs to aid in their compliance with the City's stormwater ordinance and the Municipal Permit.

In 2009-2010, the City completed a comprehensive mail out to all inventoried mobile businesses known to operate in the City of Encinitas, disseminating minimum BMP requirements to identified proprietors. This effort leveraged upon regional and jurisdictional efforts to develop an exhaustive inventory of mobile businesses conducting a variety of activities. Based upon this well developed effort, the City of Encinitas assuredly met Municipal Permit (Section D.3.b.(2)(c)) requirement to notify inventoried businesses of minimum BMP requirements.

5.3.4.2 INTER-JURISDICTIONAL COORDINATION

During FY 2007-08, the City of Encinitas participated with other Copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

As described above, in FY 2008-09, a consultant was obtained to develop and launch a mobile business database to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy. See Appendix F-1 for the complete Regional Mobile Business Strategy.

5.3.4.3 INSPECTIONS

The inspections for mobile businesses generally follow the same procedure described in Section 5.2.4.3 of this document. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, Clean Water staff work directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.3.4.4 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to section 5.2.4.5.

In FY 2009-10, there were **33** mobile complaint investigations conducted. **30** resulted in dissemination of educational information to the business owner/operator; **nine** Notices of Violation and **five** citations were issued. Refer to Table 5-3 for a summary of the mobile commercial complaints and associated enforcement actions. This table includes complaint response to discharges from mobile businesses and discusses each violation and the follow-up actions taken. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance. Appendix H-1 also includes a summary of violations and enforcement actions resulting from complaints about mobile businesses occurring in FY 2009-10.

Complaint investigation procedures, including those related to mobile business operations, will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report, which will be completed and submitted the RWQCB as required by December 15, 2010.

Table 5-3
FY 2009-10 Mobile Commercial Complaints and Enforcement Actions

Complaint Location	Mobile Business Type	Enforcement Action(s)
451 Neptune Ave	Mobile Auto Detailer	Education
929 Woodlake Dr	Landscaper	Education
1651 Landquist	Power Washing	NOV, Education
2240 Wales Dr	Power Washing	NOV, Education
2277 Lagoon View Dr	Power Washing	Education
2311 Lagoon View Dr	Power Washing	NOV, Education, Citation
2326 Lagoon View Dr	Power Washing	No Violation
2326 Lagoon View Ct	Power Washing	NOV, Education, Citation
1302 Encinitas Blvd	Mobile Auto Detailer	Education
279 Mangano Cir	Power Washing	Education
1660 N Coast Hwy 101	Landscaper	Education
1911 Saxony Rd	Auto Maintenance	NOV, Education
675 Balour Dr	Plumber	Education
380 N Willowspring Dr	Janitorial	Education
2136 Pleasant Grove Dr	Roofer	Education
2105 San Elijo Ave	Trash Hauler	Education
633 Birmingham Dr	Contractor	Education
251 N El Camino Real	Power Washing	NOV, Education, Citation
411 Encinitas Blvd	Contractor	No Violation
210 A Street	Mobile Auto Detailer	NOV, Education
1320 Encinitas Blvd	Contractor	Education, Citation
105 N Vulcan Ave	Power Washing	Education
765 S Coast Hwy 101	Janitorial	Education
765 S Coast Hwy 101	Landscapers	Education
233 N El Camino Real	Utility Provider	Education
501 N El Camino Real	Utility Provider	Education
316 Via Julita	Contractor	NOV, Education, Citation
225 4th Street	Contractor	Education
226 N Rancho Santa Fe Rd	Utility Provider	None
285 N El Camino real	Utility Provider	Education
276 N El Camino Real	Utility Provider	Education
396 N Coast Hwy 101	Utility Provider	Education
320 E Glaucus St	Contractor	NOV, Education

6.0 RESIDENTIAL

6.1 INTRODUCTION

Approximately 80 percent of the City's 19.4 square mile area is designated as residential in the City's General Plan map. Residential land use comprises a large area of the City, and residential activities can have a considerable effect on the water quality of receiving waters. The City's residential component of the Clean Water Program aims to reduce pollutant runoff from residential areas and activities to the MEP (Maximum Extent Practicable) and prevent residential discharges from the MS4 (Municipal Separate Storm Sewer System) from causing or contributing to a violation of water quality standards.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2009-10 that contributed to the successful implementation of the City's Residential Component.

6.2 SOURCE CHARACTERIZATION

Residential high threat to water quality areas and activities within the City of Encinitas were identified during the 2008 JURMP update process and are described in detail in City's 2008 JURMP. The following section identifies the high threat to water quality residential areas and activities that were focused on during FY 2009-10. The Municipal Permit (Order R9-2007-0001) requires each Copermittee to identify and provide a list of the residential areas and activities within its jurisdiction that have been identified as having a high threat to water quality. The following section briefly summarizes this process.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

In consideration of the minimum required *high threat to water quality* residential activities listed in section D.3.c.(1) of Order No 2007-0001, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

Section D.3.c. (1) of Order No 2007-001, requires that Copermittees identify all *high threat to water quality* residential areas. During the 2008 JURMP update, the City identified *high threat to water quality* residential areas using the following criteria (as defined in the Municipal Permit):

- Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in Attachment C of the Municipal Permit).

The City of Encinitas has several Section 303(d) impaired water bodies and coastal lagoons within or directly adjacent to the City's jurisdictional boundary. The 303(d) impaired water bodies within the City of Encinitas include Cottonwood Creek, Encinitas Creek, Escondido Creek, San Elijo Lagoon, and the Pacific Ocean at Moonlight State Beach and the San Elijo Lagoon Outlet.

Based on the definition in Attachment C of the Order No 2007-0001, Environmentally Sensitive Areas within the City of Encinitas include those areas identified as Natural Resource Sensitive areas in the City's General Plan and the City's Wetland buffer layer. The City does not contain any Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, or areas designated as preserves in the Multiple Species Conservation Program.

In the process of drafting the Regional Residential Education Program, the Regional Outreach Workgroup identified the major pollutants of concern from residential sources for the San Diego region. The major pollutants of concern for residential areas include: bacteria, nutrients, sediment, pesticides, and trash.

In consideration of identified 303(d) listed water bodies, the City's ESAs (Environmentally Sensitive Areas), and the primary pollutants of concern, Clean Water Program staff employed GIS analysis to determine the location of *high threat to water quality* residential areas. Based on this analysis the following residential areas within the City of Encinitas were identified as *high threat to water quality* residential areas:

- All residential areas within 500 feet of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to, or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

Appendix E-1 includes a map of residential areas. The map was developed for Clean Water Program staff to utilize in the office and in the field to help identify residential discharges or

activities which could pose a threat to water quality due to their proximity to receiving water bodies and ESAs.

6.2.3 EVALUATION OF OVERSIGHT OF RESIDENTIAL AREAS AND ACTIVITIES

Through an evaluation of effectiveness assessment measures as part of this report (See Section 11.0), it has been reasoned that the City has achieved overall success as it related to the oversight of residential areas. Hotline complaint calls received, compliance achievement, and dry weather monitoring exceedances as they relate to residential sources all support this assessment. Continual evaluation in subsequent reporting years will be vital to assessing the overall efficacy of oversight related to residential activities.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

6.3.1 POLLUTION PREVENTION

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for *high threat to water quality* areas and activities.

6.3.2 LIST OF MINIMUM BMPS

As part of the City's 2008 JURMP update, the City designated the following minimum BMPs for *high threat to water quality* residential activities. The minimum BMPs are primarily nonstructural and are targeted at activities specified in Section 6.2 as having a *high threat to water quality*. Pollution prevention methods were incorporated into this set of BMPs, where appropriate. The list of minimum BMPs can also be found in the City's Storm Water BMP Manual I. The manual can be accessed through the City's Clean Water Program webpage at: http://cwp.cityofencinitas.org.

(a) Automobile Repair and Maintenance

Pollution Prevention

(1) Employ routine preventative maintenance practices
(2) Reduce vehicle use, whenever possible
- Change driving habits
- Carpool
- Increase the use of public transportation
- Bike or walk for short trips

(3) Make timely vehicle repairs

Leaks and Spills

(1) Prevent leaks and spills from contacting stormwater
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter
- If working outdoors, don't work in the rain
- Immediately contain and clean up leaks and spills when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Properly manage and dispose of automotive wastes and materials
- Properly drain fluids from automobiles
- Dispose of wastes properly and lawfully and recycle used oil and antifreeze
- Store materials and wastes indoors or under cover
- Use secure and watertight containers when storing materials and wastes

(b) Automobile Washing

Management / Reduction* of *Wash Water

(1) Whenever possible, use commercial self-serve or full-serve car washes that properly dispose or recycle their wash water
(2) When washing a vehicle at a residence:
- Wash vehicles over porous surfaces (grass, dirt, etc.) whenever possible
- Use dry cleaning methods to avoid the generation of wash and rinse water
- Turn off the water when not in use or use a controllable spray nozzle
- Encourage the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Properly dispose of soapy water or bucket rinse water to the sanitary sewer or soak into a landscaped area
(2) Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing (e.g., remove grease or brake dust using towels, etc.)
(3) Refrain from degreasing or cleaning of engine parts in areas other than those designated for such purposes

(c) Automobile Parking

(1) Use routine preventative maintenance practices and make timely vehicle repairs to prevent leaks of automotive fluids
(2) Design and construct parking areas to minimize storm water impacts; covered garages should be plumbed to the sewer system

(d) Home and Garden Care Activities and Product Use

GARDEN AND YARD CARE

Pollution Prevention

(1) Use safe substitutes and alternative methods when gardening:
- Use integrated pest management techniques and biological controls
- Use native plants and drought tolerant species to reduce water use and green waste produced
- Implement planting techniques that attract beneficial insects
- Consider composting, vermiculture and yard waste recycling
- Recommend and encourage practical purchasing practices for pesticides and fertilizers
- Identify "pests" before attempting to eliminate them

(2) Always read label instructions and follow the instructions for garden care products
(3) Implement water conservation practices, whenever possible
(4) Consider xeriscape gardening, including: drip irrigation, soaker hoses, and micro-spray systems
(5) Repair and maintain irrigation systems to reduce excessive runoff
(6) Recycle lawn clippings and green waste through local programs
(7) Plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills

(1) Immediately cleanup spills of gardening chemicals, fertilizers, and soils
(2) Return spilled materials to the container for future use or proper disposal

Materials and Waste Management

(1) Store lawn care products in closed labeled containers and in covered areas
(2) Refrain from using hazardous materials during windy or rainy days
(3) Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain
(4) Dispose of household chemicals to the household hazardous waste collection facility or scheduled drop-off events
(5) Utilize dry sweeping techniques for clean up

Restrictions on Activities

(1) Do not hose off paved surfaces to the street or gutter
(2) Do not dispose of hazardous waste to the trash, landfill, or storm drain

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Utilize purchasing practices that reduce waste
(2) Use safe substitutes for home cleaning and maintenance

(3) Read and follow product labels
(4) Recycle unused or unwanted products
(5) Use water based paints when possible
(6) Recycle unwanted appliances and household equipment

Leaks and Spills

(1) Clean up hazardous materials spills immediately
(2) Properly dispose of waste from spill cleanup materials

Materials and Waste Management

(1) Store household hazardous materials in closed labeled containers and in a covered area
(2) Recycle latex paint through community programs
(3) Dispose of unwanted household hazardous waste through household hazardous waste collection facilities
(4) Dispose of trash in provided trash cans or shared dumpsters and keep dumpster and trash can lids closed when not in use

Restrictions

(1) Do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter, or storm drain

***(e)* Disposal of Pet Waste**

Pollution Prevention

(1) Spay or neuter pets to reduce feral populations

Waste Management / Disposal

(1) Clean up after pets when walking them in public places
(2) If pets are allowed to defecate outside, clean up feces from yards
(3) Properly dispose of pet feces in the toilet or trash

Pet Management (Dogs and Cats)

(1) Whenever possible, do not allow pets to run free in residential neighborhoods

Manure Management (Horses and Other Large Animals)

(1) Properly manage manure (including the preparation of manure management plans when appropriate)
(2) Compost or properly dispose of manure
(3) Cover manure stockpiles with plastic tarp to prevent contact with rain

6.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2009-10 to require and verify the implementation of designated BMPs for residential areas and activities.

6.4.1 OUTREACH AND TRAINING

The City has a comprehensive set of Education and Public Participation Programs, which are a component of the City's jurisdictional program. A significant element of these programs consists of educating and engaging residents about ways in which they can minimize their impact on local waterways. Education of the citizens who reside in the City of Encinitas contributes to the implementation of the Residential Component of the City's Clean Water Program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between MS4s and sanitary sewers
- Pollution prevention and safe alternatives
- Household hazardous waste collection and recycling
- BMP implementation and BMP maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment, and recovery
- Water conservation

During FY 2009-10, Clean Water program staff conveyed these messages to the public through a variety of mechanisms, including:

- Clean Water Program website
- Production and distribution of brochures and promotional items
- Public participation in community events, workshops, and trainings
- Presentations at local schools
- Media coverage
- Response to residential complaints (Clean Water Hotline or email)

Implementation of these mechanisms by the Clean Water Program helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the Clean Water Program can be found in the Section 8.

6.4.2 USED OIL AND HHW COLLECTION SERVICES

The City of Encinitas facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City offers its residents door-to-door home collection, two permanent collection facilities, and periodic, temporary collection events for all HHW. In addition, the City requires weekly curbside garbage, recycling, and yard waste pick-up for all residents. The various components

of the solid waste and hazardous waste collection services provided by the City are described in detail below.

HHW Home Collection Program - Door-to-door home collection service is available to all residents of the City of Encinitas. Qualifying homebound, elderly, and disabled citizens may request pickup at no charge. Residents not qualifying for free pickup service are charged a nominal fee of $10 for home collection. Materials accepted via the HHW Home Collection Program include:

- **Household Cleaners:** Drain openers, oven cleaners, wood and metal polish / cleaners, toilet bowl cleaners, and disinfectants
- **Automotive Products:** Oil and fuel additives, grease and rust solvents, carburetor and fuel injector cleaners, air conditioning refrigerants, starter fluid, lubricating fluids, radiator fluids and additives, waxes, polishes, cleaners, and transmission additives
- **Home Maintenance and Improvement Products:** Paint thinners, paint strippers, adhesives, paints, stains, varnishes, sealants, and wood preservatives
- **Lawn and Garden Products:** Pesticides, herbicides, and fungicides (poisons)
- **Miscellaneous:** Batteries, fingernail polish removers, pool and photo chemicals

Poway and Vista Permanent HHW Collection Facilities - In an agreement with the Cities of Vista and Poway, residents of the City of Encinitas may also drop off household hazardous waste at the Vista or Poway collection centers. The Vista collection center is located at 1145 East Taylor Street, at Laguna Lane. The Poway collection center is located in the South Poway Business Park, at 12325 Crosthwaite Circle off of Stowe Drive. These regional, permanent collection centers are open every Saturday (except holiday weekends) from 9:00am to 3:00pm. No fee is charged to Encinitas residents and no appointments are necessary. Waste collected is separated, packaged, secured, and temporarily stored at the permanent facilities. It is then removed on a regular basis for proper recycling or disposal. Material accepted at the Poway and Vista facilities are the same as those accepted through the Home Collection Program.

Used Oil Recycling Program - The City's used oil recycling program consists of a network of certified automotive waste recycling centers throughout the city. These facilities accept a range of used automobile products including used oil, oil filters, batteries, and antifreeze. A significant part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through grants from the California Integrated Waste Management Board (CIWMB). A list of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Residents may also opt to use the City's door-to-door HHW collection service to recycle their used oil and oil filters. However, most residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities.

Trash and Recycling Services - For public health purposes, the City of Encinitas requires that all residents participate in the City's solid waste collection service. All residents and businesses are

liable for payment of fees for the mandatory service (see Municipal Code section 11.20.010, paragraph A). Residential service includes curbside green waste collection and recyclable materials collection in addition to regular garbage collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste Recycling Services to provide solid waste collection services in Encinitas for both residential and commercial customers.

Detailed information regarding used oil, HHW, and solid waste disposal is made available to residents through the City's website, ECDO's website, and other various environmental websites. In addition, brochures about household hazardous waste disposal options are available at outreach events staffed by the Clean Water Program, the Solana Center, and EDCO Waste Recycling Services. Brochures and information regarding HHW disposal are also available upon request at the City's main office.

Table 6-1 provides a summary of the used oil collected via the City's used oil recycling program. Table 6-2 identifies types and amounts of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 6-1
Used Oil Collected in FY 2009-10

Collection Type	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)
Certified Centers	9,564	726
Permanent HHW Centers	570	119
Total	**10,134**	**845**

Table 6-2
Household Hazardous Waste Collected in FY 2009-10

Material Type	Description	HHW Collection Facilities*	Door-to-Door Program*
Flammable	Flammable solid/liquid	11,010	14,751
& Poison	Bulked flammable liquids	568	0
	Oil-base paint	9,166	9,025
	Poison (excl. aerosols)	1,090	0
	Reactive and explosive	24	0
	Subtotal	**21,858**	**23,776**
Acid	Inorganic & Organic acid	615	752
Base	Inorganic & Organic base	634	348
Oxidizer	Neutral oxidizers, Organic peroxides	374	68
	Subtotal	**1,623**	**1,168**
PCB-containing	PCB-containing paint	0	0
	Other PCB waste	14	0
	Subtotal	**14**	**0**
Reclaimable	Antifreeze	986	0
	Car batteries	1,978	457
	Latex paint	17,703	31,080
	Motor oil/oil products	4,278	0
	Oil filters	179	0
	Subtotal	**25,124**	**31,537**
Asbestos		**631**	**957**
Universal Waste (UW)	Mercury containing waste	0	7
	Thermostats/switches/thermometers	14	13
	Fluorescent Lamps	1,034	155
	Rechargeable batteries	344	23
	Household batteries	2,197	2,831
	Subtotal	*3,589*	*3,029*
Electronic Waste (UW)	SB20/50 video display devices	13,484	6,636
	Non SB20/50 video display devices	0	0
	Consumer electronic devices	12,809	3,475
	Subtotal	*26,293*	*10,111*
Aerosols (UW)	Non-empty aerosol containers	0	2,528
	Other	71	0
	All UW Subtotal	**29,953**	**15,668**
Other HHW	Home-generated sharps	229	32
	Pharmaceutical waste	0	0
	Compressed gas cylinder	530	248
	Non-UW aerosol containers	1,534	0
	Treated Wood	142	0
	Other	4,030	0
	Subtotal	**6,465**	**280**
Grand Total		**85,668**	**73,386**

*Waste measured in pounds.

6.4.3 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by section D.3.c.(3) of Order No 2007-0001, and depending on the severity of the violation, the City enforces its storm water ordinance for all residential areas and activities as necessary to maintain compliance. Enforcement may include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2009-10, there were **149** residential ICID complaint calls. Of these calls, **28** were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **121** residential complaint investigations conducted, **85** resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In addition to education, FY 2009-10 complaint investigations resulted in **three** Notices of Violation and **two** citations.

A summary of the residential violations and enforcement actions occurring in FY 2009-10 is available for review in Appendix H-1. The tabular summary includes a brief discussion, which includes the follow-up actions taken, for each violation. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2010.

6.4.4 REGIONAL RESIDENTIAL EDUCATION PROGRAM

In prior reporting years, the City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. This Plan contains recommended strategies for the development and implementation of

the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6. Details of the implementation of this Plan can be found in Section 8.3.4(d) of this annual report and in the Regional Urban Runoff Management Plan (RURMP) annual report to be submitted under separate cover by the County of San Diego on behalf of the San Diego County Stormwater Copermittees.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Encinitas will submit the entire FY 2009-10 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2010.

8.0 EDUCATION

8.1 INTRODUCTION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the Engineering Services Department, Clean Water Program.

The Municipal Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience.

(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The City conducted or participated in a wide variety of stormwater education activities during the FY 2009-10 reporting period. Education and outreach activities and opportunities are organized and implemented on three levels—Jurisdictional, Watershed, and Regional. For ease of reporting, activities occurring on all levels have been captured below.

8.2 MUNICIPAL STAFF TRAINING

As required by Municipal Permit section 5.b.1(d), activity specific training opportunities were provided to City staff. The summary below outlines departmental training activities conducted during the defined reporting period of this report.

Notably, in FY 2007-08, the Clean Water Program developed the "Clean Water Challenge" stormwater training game. This training element was created to address topics specifically identified in the Municipal Stormwater Permit, as well as activity and department specific topics. In FY 2009-10, variations of the Clean Water Challenge were utilized for municipal training activities as described below. The Clean Water Challenge has been well received by City staff and provides a competitive and informative format for training various departments

on a wide range of topics including low impact development, SUSMP standards, activity specific BMPs, impaired water bodies, stormwater code violations, potential sources of pollutants, and other department specific concepts.

Public Works, Streets Division. FY 2009-10 stormwater training was provided to the Streets Division during regular weekly staff meetings on the following dates:

- July 7, 2009; Parking/Storage Maintenance, SC-43; 11 attendees
- July 22, 2009; Water & Sewer Utility Maintenance, SC-76; 12 attendees
- July 30, 2009; Building & Grounds Maintenance, SC-41; 12 attendees
- August 11, 2009; Road & Street Maintenance, SC-70; 12 attendees
- August 20, 2009; Landscape Maintenance, SC-73; 12 attendees
- September 4, 2009; Spill Prevention, Control, and Cleanup, SC-11; 12 attendees
- October 8, 2009; Plaza Sidewalk Cleaning, SC-71; 11 attendees

Public Works, Wastewater Division. The Clean Water Program works closely with the Wastewater division to prevent illegal discharges from entering the City's waterways. Seven staff members from the Wastewater division were trained by Clean Water Program staff on June 16, 2010.

San Dieguito Water District. Ten staff members from the San Dieguito Water District were trained on June 23, 2010. Topics included stormwater regulations, activity specific BMPs, and the relationship between irrigation runoff and stormwater pollution.

City of Encinitas Fire Department. Within the defined reporting period of this report, stormwater training workshops were given to the Fire Department on three separate occasions. On June 17, 2010, nine fire personnel were in attendance; 13 fire personnel attended the training on June 18, 2010; and 14 fire personnel were at the June 21, 2010 training.

City of Encinitas Landscape Contractors. The City contracts with multiple landscaping companies to maintain our parks, beaches, and other public landscaped areas. In collaboration with the City's Parks and Recreation Department, training was given in Spanish to 21 staff from the City's landscape contractors on June 17, 2010. Topics of this training included activity specific BMPs, City stormwater regulations, and proper materials management.

Engineering Department. Staff from the Clean Water Program and other divisions of the Engineering Department attended the following trainings:

- Encinitas Stormwater Manual field training for inspectors- April 19, 2010
- Bioretention Design, Installation, and Maintenance- April 21, 2010
- Construction General Permit Training- May 4, 2010
- New Construction General Permit Requirements Webcast- June 23, 2010

Clean Water Program, Engineering Department. Clean Water Program staff regularly attend trainings, workshops, and conferences related to stormwater management. This fiscal year staff attended the following:

- StormCon 2009 – August 18 & 19, 2009
- 8-hour HAZWOPER Refresher Course – August 29, 2009
- Bacteria TMDL Workshop – September 23, 2009
- CASQA Conference – November 2009
- CA Construction General Permit: Session III- Post-construction BMPs, Hydromodification, and Regulatory Strategies – November 18, 2009
- SCCWRP Symposium – January 20, 2010
- CA Construction General Permit Web Conference: Session IV- New Regulation of the Rain Event Action Plan (REAP) – January 27, 2010
- Construction General Permit Training – February 25, 2010
- EPA Inspector Training – March 23, 2010
- Construction General Permit Training – April 8, 2010
- Vector Habitat Remediation Program Workshop – April 15, 2010
- CA Construction General Permit Web Conference: Session V- Understanding the Stormwater Multi-application, Reporting, and Tracking System (SMARTS) – April 28, 2010
- New SWPPP Regulations – June 9, 2010
- Water Quality Runoff Management & Agricultural Waiver Workshop for Nurseries and Agricultural Businesses – June 24, 2010

In addition to formal training, Clean Water Program staff is regularly informed of new and emerging water quality regulations, science, and technology through regional meetings, subscription to relevant scientific journals, and individual research.

Multiple City Departments.

- LID/BMP/ESM field training for Engineering and Planning staff – May 13, 2010

8.3 EDUCATIONAL OUTREACH

The following section describes education efforts conducted for each target community, as identified in the Permit and summarized above, during FY 2009-10.

8.3.1 UNDERSERVED TARGET AUDIENCES, HIGH-RISK BEHAVIORS, AND "ALLOWABLE" BEHAVIORS AND DISCHARGES

Underserved Target Audiences - Bilingual Education

For those that work in the City, and for segments of the community that do not speak English as their first language, the City provided bilingual (English/Spanish) brochures at all outreach events. The Clean Water Program utilized the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures include information about Best Management Practices for Yard and Garden Care, Restaurants, Home Improvement, Pesticides, Developers, and Automotive Care. Further, a bilingual Clean Water Program staff resource provided training and responded to complaint calls as needed in various community sectors.

High Risk Behaviors - Regional Mobile Business Outreach and Education Plan
During FY 2007-08, the City of Encinitas participated with other copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. The Industrial/Commercial Workgroup will be overseeing the implementation of that Strategy throughout the permit cycle. A complete description of the education and outreach of mobile businesses and inter-jurisdictional coordination of notifications can be found in section 5.3. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

8.3.2 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to the new development and construction communities.

- "A Pollution Prevention Guide for the Construction Industry" was distributed at public events, to engineering construction inspectors and the building department, and displayed at the City of Encinitas Engineering counter for the public. One hundred and twenty-one were disseminated during the 2009-10 fiscal year. This brochure was developed as part of the Carlsbad Watershed Urban Runoff Management Plan workgroup (Appendix F-2).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by Engineering Department inspectors and Clean Water staff as determined necessary. For all projects, stormwater topics including required construction site BMPs, general site management, post-development BMP construction, and other relevant SUSMP requirements are discussed.
- Construction inspector stormwater coordination. Staff from the Clean Water Program attended inspector staff meetings to provide support and information to the City's construction inspectors.
- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers – Simple and Cost Effective Ways to Comply with Stormwater Regulations" (Appendix F-3). The brochure is available in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In September 2009, the City mailed 74 letters to local developers and contractors regarding BMP requirements for the upcoming rainy season (Appendix B-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into the annual Erosion Control Letter that went to contractors, developers, and job superintendents.

8.3.3 COMMERCIAL/INDUSTRIAL OWNERS AND OPERATORS

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to commercial and industrial sectors of the community:

- The tenth annual Integrated Pest Management training for landscape professionals was held at the Port of San Diego on May 27, 2010. The IPM Training Seminar offered insight into identification of landscape pests and diseases and cultural practices for improved plant health. There were also presentations on water quality and irrigation. Two Encinitas businesses and one resident were in attendance.

- The San Dieguito Water District hosted a Professional Landscape Series every Monday from January 25 through February 15, 2010. The series was taught in Spanish, and topics included irrigation systems and scheduling, plant identification, and water use requirements. Approximately 20-30 people attended each class.

- A Water Quality Runoff Management & Agricultural Waiver Workshop for Nurseries & Agricultural Businesses was held at the San Diego County Farm Bureau on June 24, 2010. Three people from Encinitas were in attendance.

- Stormwater quality inspections were performed at 138 commercial facilities and two industrial facilities during the FY 2009-10 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general stormwater quality information and BMP requirements.

8.3.4 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential, community, and school audiences:

a. Residential Community and General Public

- During FY 2009-10, San Dieguito Water District, in conjunction with Olivenhain Municipal Water District and Santa Fe Irrigation District, held four Water Conservation Classes at the Rancho Santa Fe Garden Club to help customers learn about efficient landscape design, maintenance, and irrigation technologies:

  1. Have a Green Thumb and a WaterSmart Landscape – August 15, 2009; 50 attendees.
  2. Designing with Water Smart Plants – September 14, 2009; 70 attendees.
  3. San Diego County Water Authority: Water Supply; Grangetto's Farm and Garden Supply: Irrigation Efficiency – October 7, 2009; 60 attendees.
  4. California Gardening for the Water Wise Gardener – March 13, 2010; 100 attendees.

- SDWD hosted "Water Awareness Week" from March 18- March 26, 2010 with many activities for residents, kids, and families. A Water Conservation Expo was held at the Encinitas Library on March 26. Guest speakers and vendors were on hand to provide information to residents on drought tolerant plants and sustainable gardens.
- A City of Encinitas Environmental Services Guide was created in FY 2006-07. It continues to be handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, stormwater management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix F-4).
- The Solana Center for Environmental Innovation continued to sell compost bins and worm bins to residents of Encinitas throughout FY 2009-10. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City. A total of 755 bins were sold in FY 2009-10.
- Individual Communication. There were 149 residential ICID complaint calls in FY 2009-10. Twenty-eight of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the 121 residential complaint investigations conducted, 85 resulted in education. During these inspections educational information was distributed to each homeowner/resident. Materials distributed included general stormwater education, BMP requirements, pollution prevention education, as well as specific municipal code and clean water regulations.
- Media Coverage (newspaper articles, press releases, etc.): See Table 8-1 below.

Table 8-1
Summary of Media Coverage in FY 2009-10

No.	Title	Date	Source
1	REGION: Beach cleanups produce huge haul	May 9, 2010	North County Times
2	REGION: Local beaches look good in latest water quality report	May 26, 2010	North County Times
3	Beach season is here!	Summer 2010	Encinitas NOW!

Workshops and events attended/hosted by the City of Encinitas and/or the Solana Center in FY 2009-10:

1. Rods and Woodies Car Show – July 16, 2009
2. Coastal Cleanup Day @ Swami's – September 19, 2009
3. Cardiff Green Expo – September 26 & 27, 2009
4. Oak Crest Field Study @ San Elijo Lagoon – November 19, 2009

5. Encinitas Fall Festival – November 22, 2009
6. Day Without a Bag @ Encinitas City Hall – December 17, 2009
7. Ocean Night @ Cardiff Elementary School – March 31, 2010
8. Encinitas Garden Festival – April 17, 2010
9. La Costa Canyon High School Earth Day – April 23, 2010
10. Creek to Bay Cleanup @ Moonlight Beach – April 24, 2010
11. Encinitas Street Fair – April 25, 2010
12. San Elijo Lagoon Day – May 15, 2010
13. Public Works Day – May 21, 2010
14. Encinitas Environment Day – June 6, 2010
15. Enviro Fair @ SD County Fair – June 19, 2010

b. School Children

- During Water Awareness Week, on March 23, 2010, the Splash Lab visited the Encinitas Library. Approximately 60 students were on hand to learn about the effects that pollution has on our environment.
- In the Fall of 2009, the Encinitas Union School District created a Green Team consisting of teachers, principals, parent volunteers, and environmental organizations in the community. The Green Team met once a month during the school year to discuss how to improve efficiency, reduce economic costs, and increase environmental awareness throughout the District. Topics discussed include waste management, composting, water conservation, energy use, environmental health, and stormwater pollution prevention. Clean Water Program staff attended six Green Team meetings in FY 2009-10.
- The Solana Center monitors large worm bins at Capri Elementary, Paul Ecke Elementary, Ocean Knoll Elementary, Encinitas County Day, Olivenhain Pioneer Elementary, San Dieguito Academy, Flora Vista, and a small worm bin at Mission Estancia Elementary. Solana Center has trained volunteer master composters to give composting/vermicomposting presentations at schools throughout Encinitas. School presentations are conducted both on and off site and scheduled as requested.
- The Solana Center for Environmental Innovation also participated in school based educational programs where stormwater awareness was taught. See Table 8-2 for details.

Table 8-2
Watershed Presentations FY 2009-10

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Kids Kore Camp- Solana Beach	7/8/09	1	29
Rancho Encinitas Academy	10/16/09	1	12
Solana Beach Boys and Girls Club	12/9/09	1	18
Kids for Peace- Del Mar	2/11/10	1	20

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Ocean Air Elementary- San Diego	4/12/10	3	68
Ocean Air Elementary- San Diego	4/13/10	2	44
Phoenix Learning Center- Encinitas	5/3/10	3	54
Phoenix Learning Center- Encinitas	5/5/10	3	59
Encinitas Homeschool Group	5/6/10	1	12
Encinitas Library Community Room	5/9/10	1	8
Del Mar Library	6/23/10	1	15
	Total	**18**	**339**

c. **Watershed Educational Activities-** Important components of the City's education program include materials and activities that were generated on a watershed basis to address the high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were created or performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities will be provided in the FY 2009-10 Carlsbad WURMP Annual Report.

- **Watershed Map**- A 36"x 24" "We all Live in a Watershed" poster was developed giving information about the San Luis Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a topographic map of the watershed, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public displays throughout the reporting year.

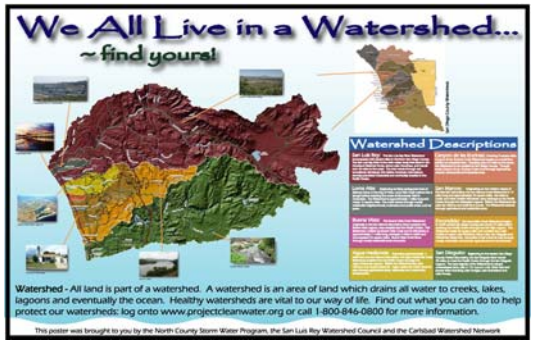

- **Watershed Collaboration**- The City of Encinitas collaborated with other outside organizations, including the Carlsbad Watershed Network, Solana Center, and Escondido Creek Watershed Alliance to enhance public educational efforts and understand watershed issues. The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2009-10, the City participated in the following watershed outreach events:
    - Coastal Cleanup Day – 9/19/09
    - Creek to Bay Beach Cleanup – 4/24/10

- **Watershed Educational Materials**- The City continues to distribute materials developed by the North County Stormwater Program in previous reporting periods, including the restaurant posters, automotive posters, "Storm Drains Lead to the Ocean" posters, general stormwater brochures, and the door hangers.

d. Regional Residential Education Plan

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources (ERS) Workgroup to develop the Regional Residential Education Plan in FY 07-08. This plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6.

The ERS Workgroup participated in Enviro Fair Day at the San Diego County Fair on June 19, 2010. Six Copermittees were represented at the event, with a total of six staff members throughout the day. The outreach booth was located at the entrance to the Flower and Garden Pavilion in O'Brien Hall. Copermittees were able to supply their own giveaways and literature during their individual shifts, but the main Regional giveaways were coloring books and crayons, reusable Chico bags, pencils, IPM Tip Card Packets, and pet waste bag dispensers. There were 351 Think Blue automotive surveys completed; results will be reported in the FY 09-10 Regional URMP. Total Fair attendance for the day was 67,356.

Program Identity. Through Citywide environmental efforts and initiatives, stormwater pollution prevention and water quality have been identified as priorities for residents and businesses in the Encinitas community. As a result, the City of Encinitas Clean Water Program staff felt that updating the program identity through a new logo would enhance awareness within the community and help identify the diverse City functions that help to protect local surface water quality in creeks, lagoons, and the ocean. A new Clean Water Program logo was developed in FY 2009-10 and is currently being used on new educational outreach materials, event giveaways, program correspondence, and staff apparel and will be used on an anticipated web site update. The new program logo has also been used on the front cover of this report.

Educational Outreach Materials Distributed. In FY 2009-10, a total of 3,051 outreach materials were distributed by the Clean Water Program. This includes BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed pencils, magnets, key chains, reusable shop towels, "Bags on Board" dispensers, construction brochures, posters, door hangers, eating establishment guides ("What's

Cooking"), automotive guides ("Green Wrench"), flyers printed from the Project Clean Water Toolbox, Think Blue Regional Calendars, Minimum Required BMP mailers, and other informational guides. These guides included information on Integrated Pest Management (UCSD Cooperative Extension), water conservation from local water districts and the County Water Authority, invasive species ("Don't Plant A Pest" and "NIMBY-No Invasives In My Back Yard"), "How to Hire A Landscaper"-UCSD Cooperative Extension/Scott Parker, County of San Diego Household Hazardous Waste, miscellaneous stormwater educational for children, and lastly, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the quality of our waterways. This is evident by the attendance and participation at community events and workshops and the number of complaints reported to the storm water hotline (discussed in more detail in Section 9.3.5 below and also in Section 8.3.4(a)). Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2009-10 reporting period.

9.2 PUBLIC PARTICIPATION APPROACH

The City's approach for the outreach program is to develop an understanding among its residents and businesses of fundamental storm water and pollution prevention concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches, untreated).
- The economic value of our beaches and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a storm water violation (Clean Water Hotline or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and ocean.
- Reducing pollutants of concern.

- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals, etc.).

Within the defined reporting period of this report, the tools that have been used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- City of Encinitas Environmental Advisory Commission
- Public Outreach Events
- Public Opinion Survey
- Public Reporting Methods
- Pet Waste Dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- Permanent Best Management Practices (BMP) Self Verification & Inspection Programs

9.3 PROGRAM IMPLEMENTATION

This section describes the specific public participation tools used during the FY 2009-10 reporting period.

9.3.1 WORKSHOPS/TRAINING SESSIONS

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of stormwater education and/or water conservation and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the stormwater regulations. Table 9-1 provides a summary of the FY 2009-10 workshops/training sessions conducted.

Table 9-1
City of Encinitas Workshops/Training Sessions FY 2009-10

Workshop/Training Session	Target Audience	Date	Attendance
Public Works- Streets Division	City Staff	7/7/09, 7/22/09, 7/30/09, 8/11/09, 8/20/09, 9/4/09, 10/8/09	82
City-wide Goal Setting Workshop for General Plan	Residents	3/8/10	71
City-wide Goal Setting Workshop for General Plan	Residents	3/9/10	51
City-wide Goal Setting Workshop for General Plan	Residents	3/11/10	98

Workshop/Training Session	Target Audience	Date	Attendance
City-wide Goal Setting Workshop for General Plan	Residents	3/22/10	104
City-wide Goal Setting Workshop for General Plan	Residents	3/23/10	80
Encinitas Stormwater Manual Field Training	City Staff	4/16/10	10
LID/BMP/ESM Field Training	City Staff	5/13/10	7
Public Works- Wastewater	City Staff	6/16/10	7
Spanish-speaking Landscapers	City Staff and Contractors	6/17/10	21
Fire Department	City Staff	6/17/10, 6/18/10, 6/21/10	36
San Dieguito Water District	City Staff	6/23/10	10
		Total	**577**

9.3.2 CITY OF ENCINITAS ENVIRONMENTAL ADVISORY COMMISSION

The Environmental Advisory Commission (EAC) provides policy advice and recommendations to the City Council on issues related to environmental stewardship and sustainability. The Commission assesses the City's current environmental efforts in relation to specified areas of interest and creates and recommends strategies to enhance City activities that promote conservation and sustainable practices. The Clean Water Program staff provide technical expertise to the Commission on matters related to water quality, pollution prevention, and stormwater regulations.

During the defined reporting period, the EAC presented its second annual series of community outreach activities in partnership with other Encinitas Environment Day activities. The series, entitled "Green Spring", included the following activities and presentations: Hydroponic Gardening; Environmental Films "Food, Inc.," "Dirt: The Movie," "Tapped," and "What's On Your Plate?"; Youth Watershed Presentation – "From Your Yard to the Beach"; Green Investing Workshop; Reusable Bag Reminder Promotions; as well as promotion of Bike to Work Day, E-Waste Collection Events, Beach Clean-Ups, and ongoing composting workshops. Additionally the Environmental Commission had been asked by the City Council to provide ongoing advice on the phase-out or ban of single-use plastic and paper bags. Despite the threat of lawsuit from a plastic bag industry association, through the Environmental Commission, the City continues to work with local businesses and residents through proactive bag give away promotions and activities. Each December the City coordinates "A Day Without a Bag," a community-wide promotion of reusable bags which includes a Mayor's press event, broad media coverage,

school presentations, and the giveaway of over 4,000 reusable bags which have been donated by all local grocers and several businesses.

9.3.3 PUBLIC OUTREACH EVENTS

The Clean Water Program participated in the following outreach events during FY 2009-10:

1. Coastal Cleanup Day @ Swami's – September 19, 2009; 182 volunteers
2. Cardiff Green Expo – September 26 & 27, 2009; 180 booth visitors
3. Oak Crest Field Study @ San Elijo Lagoon – November 19, 2009; 37 students
4. Day Without a Bag @ Encinitas City Hall – December 17, 2009
5. Encinitas Garden Festival – April 17, 2010; 1,000 attendees
6. La Costa Canyon High School Earth Day – April 23, 2010; 800 students
7. Creek to Bay Cleanup @ Moonlight Beach – April 24, 2010; 111 volunteers
8. San Elijo Lagoon Day – May 15, 2010; 60 booth visitors
9. Public Works Day – May 21, 2010; 76 attendees
10. Encinitas Environment Day – June 6, 2010; 100 booth visitors
11. Enviro Fair @ SD County Fair – June 19, 2010; 67,356 Fair attendees

Solana Center for Environmental Innovation. Outreach to the general public and school children is also provided through the Solana Center for Environmental Innovation via workshops and presentations involving stormwater, household hazardous waste, composting, and recycling. The Solana Center works closely with the City for many of these workshops and presentations. See the tables below for a description of Solana Center's attended events and workshops.

Table 9-2
Composting Workshops/Presentations FY 2009-10

Workshop schedule	Location	Attendance
8/15/09	Quail Botanical Gardens	41
Master Composter Training Course, Wednesdays, September 30- October 28	San Dieguito Academy	33
10/24/09	Quail Botanical Gardens	61
12/5/09	Yoga Swami Studio and Garden	30
1/23/10	San Diego Botanic Gardens (formerly Quail)	55
3/6/10	San Diego Botanic Gardens	29
4/28/10	Solana Center	20
5/15/10	San Diego Botanic Gardens	79
6/19/10	San Dieguito Academy	16

Total	**364**

Table 9-3
Used Oil Collection Events FY 2009-10

Encinitas Used Oil Events	Date	Total Attendance
Encinitas Foreign and Domestic	2/20/10	14
	Total	**14**

Table 9-4
Watershed Presentations FY 2009-10

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Kids Kore Camp- Solana Beach	7/8/09	1	29
Rancho Encinitas Academy	10/16/09	1	12
Solana Beach Boys and Girls Club	12/9/09	1	18
Kids for Peace- Del Mar	2/11/10	1	20
Ocean Air Elementary- San Diego	4/12/10	3	68
Ocean Air Elementary- San Diego	4/13/10	2	44
Phoenix Learning Center- Encinitas	5/3/10	3	54
Phoenix Learning Center- Encinitas	5/5/10	3	59
Encinitas Homeschool Group	5/6/10	1	12
Encinitas Library Community Room	5/9/10	1	8
Del Mar Library	6/23/10	1	15
	Total	**18**	**339**

Table 9-5
Other Outreach Events FY 2009-10

Event	Date	Booth Visitors/Attendees
Rods and Woodies Car Show	7/16/09	50
Encinitas Fall Festival	11/22/09	150
Ocean Night @ Cardiff Elementary	3/31/10	100
Encinitas Street Fair	4/25/10	400
	Total	**700**

9.3.4 PUBLIC OPINION SURVEY

The City of Encinitas joined the Think Blue San Diego Region workgroup in distributing public opinion surveys at regional events held throughout the County. In FY 2009-10, automotive surveys were given out at Enviro Fair at the San Diego County Fair. In addition, residents were asked to complete a pre-assessment survey in order to receive a Regional 2010 Stormwater Pollution Prevention Calendar. Post-assessment survey cards were included with the calendars to test whether stormwater knowledge had increased after viewing the calendar. The post-assessment survey was also available on the Think Blue San Diego Region website. Results from all regional surveys will be included in the FY 2009-10 Regional URMP.

9.3.5 PUBLIC REPORTING METHODS

The City has a local Clean Water Hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours number [(760) 633-2922] is available for after-hours emergencies and connects the caller with the City's external answering service which takes in calls and contacts the appropriate City staff to determine appropriate response actions. There are also currently two regional storm water hotline numbers promoted within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800, and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voicemail message for 24-hour public access.

The Encinitas Clean Water Hotline has been in service for over 10 years. In FY 2009-10, the Clean Water Hotline received **275** calls. The hotline is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-ups, and enforcement actions related to the hotline are presented in Appendix H-1.

The Clean Water Program has a specific website URL (http://cwp.cityofencinitas.org) that provides information, as well as the general NPDES email address which can also be used to report stormwater violations. Each method of contact can also be used for general questions relating to stormwater.

9.3.6 PET WASTE DISPENSERS

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier, 20 doggie bag dispensers are located at parks and trails throughout the City. Trash cans are also available in these areas. Both the trash cans and bag dispensers are maintained by the City's Parks and Recreation Department. In addition, individual Bags on Board pet waste bag dispensers were developed in FY 2007-08 and continued to be distributed at jurisdictional events during FY 2009-10 (Appendix F-5).

9.3.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

City of Encinitas residents can bring their HHW and Electronic Waste to drop off facilities in Vista and Poway, free of charge. There is also a home pick up available for a small fee; however, the fee is waived for elderly and disabled residents. Used oil collection events were organized through the Solana Center at local automotive supply stores, and free used oil containers were available for pick up from the Center to encourage oil recycling. Please refer to Section 6.4.2 and Table 9-3 in Section 9.3.3 for a detailed description of Used Oil events and collection totals.

9.3.8 PERMANENT BEST MANAGEMENT PRACTICE (BMP) SELF-VERIFICATION AND INSPECTION PROGRAMS

FY 2008-09 was the first year of implementation of the Permanent BMP Self-Verification and Inspection Programs. These programs provide a valuable opportunity for residents and business owners to be actively involved in protecting stormwater quality. Residents and business owners with treatment control BMPs on their private property are responsible for the successful operation and routine maintenance of these facilities. The City's Self-Verification and Inspection Programs aim to make residents and owners aware of their operation and maintenance obligations through formal notification campaigns and one-on-one communication. Notification campaigns consisted of three rounds of notices mailed to the residents and business owners responsible for BMP maintenance. The notification packages consisted of a combination of the following materials: notification/program introduction letter, Treatment Control BMP brochure, grading plan identifying the location of BMPs, and forms and self addressed stamped envelopes necessary to complete self-verifications. As part of the self-verification and inspection processes, City staff also offered one-on-one assistance with identifying BMPs, conducting BMP inspections, and determining maintenance needs. City staff was available to answer questions regarding the self-verification and inspection programs both over the phone and on-site as requested by the responsible party. As the programs progress in future years, it is anticipated that public knowledge and awareness of permanent BMPs and required operation and maintenance activities will continually improve. For more information regarding the Permanent BMP Self-Verification and Inspection Programs refer to Section 2 of this report.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

On January 29, 2009, the San Diego Region Stormwater Copermittees submitted the *Standardized Fiscal Analysis Method and Format* as required by municipal permit Sections G, J.1.a(3)(k), and J.1.c(1)(d). The defined reporting period of this report marks the first full application of the fiscal analysis methodologies developed in the document, and the information provided in this section has been prepared consistent with the standardized approach, using the best information available at the time of report preparation. The *Standardized Fiscal Analysis Method and Format* supports a greater scope of fiscal tracking, yielding a much more complete analysis of program related expenditures across a variety of City functions and departments and/or divisions that may not have been captured in previous reporting years. For consideration, using the standardized format to capture programmatic expenditures across multiple City departments that provide an array of interrelated stormwater management services has necessitated a considerable margin of approximation for various functional areas, particularly related to staff resources. In compliment to approximated figures, actual programmatic expenditures have been used as much as possible to present a refined fiscal analysis overview specific to the City of Encinitas.

10.2 GENERAL BUDGET INFORMATION

The Clean Water Program and associated functions and activities in the City of Encinitas are organizationally shared by two primary departments: Engineering Services and Public Works. Engineering Services is responsible for the overall administration of the Clean Water Program and develops and implements core program components including water quality monitoring; development oversight (SUSMP implementation) inspection and enforcement; and education, outreach, and training related to stormwater and water quality. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4) including channel maintenance, sewer maintenance, street sweeping, municipal facility inventories, and municipal facility inspections. Other City departments additionally support core program functions and needs including the Planning, Finance, Fire, and Parks & Recreation departments.

The 2010-2011 Clean Water Program and supporting Department Budgets have been prepared in consideration of Water Quality Order No. 2007-0001 as well as other regulatory mandates placed upon the City of Encinitas. Despite significant budget constraints due to widespread economic downturns, the 2010-2011 budget supports the historic level of service provided by the Clean Water Program in addressing water quality concerns specific to Encinitas through response to citizen complaints, education, inspection, enforcement, monitoring, and development oversight. 2010-2011 budgeting

represents the City's ongoing commitment to this program and the community that it serves.

10.3 FISCAL ANALYSIS METHODS

As introduced above, the information presented in this section has been prepared based upon the *Standardized Fiscal Analysis Method and Format* document that was collaboratively developed by the San Diego County Stormwater Copermittees. This document provides the Copermittees, including the City of Encinitas, with guidance and standards to analyze and report on their respective urban runoff management program expenditures, and to identify the funding sources for their programs in a uniform format. While the regionally developed methodologies greatly support reporting consistencies such as expenditure categories and reporting metrics, the *Standardized Fiscal Analysis Method and Format* does not set up stringent or prescribed accounting practices.

In order to elucidate the information presented below, it is important to identify any assumptions used to calculate expenditures related to various program elements. The following points of consideration should be noted:

- Staff Resources have been calculated as a percentage of time and associated costs applied to a specific program area.
- Staff Resources have been captured for both Engineering Services and Public Works Operations personnel.
- In order to avoid cost "overlaps" in those areas implemented across multiple departments, supporting department staff costs have not been included in the accounting below.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

The City of Encinitas Clean Water Program FY 2009-2010 Jurisdictional expenditure summary is presented below in Table 10-1. In FY 2009-2010, the City's Coastal Storm Drain Monitoring; Dry Weather Monitoring; IDDE; Construction, Education, Residential, and Commercial program elements; and overall program administration were accomplished through the use of five full time Clean Water Program staff. Land Development and Construction components utilized Engineering Services staff resources from various divisions, and Municipal activities utilized Public Works personnel. Labor related costs have been captured in the summary below based upon percentages of applicable staff resources. In addition, non-labor costs including materials, supplies, and equipment have also been included.

Table 10-2 below presents the Watershed expenditure summary specific to Encinitas, and Table 10-3 presents the Regional expenditure summary capturing the City of Encinitas share of regionally distributed costs.

10.4.2 FUNDING SOURCES

In FY 2003-2004, the City Council attempted to pass a Clean Water Fee, which charged $5.00 per month per water meter to the residents and businesses in the City of Encinitas. The Howard Jarvis Taxpayers Associated challenged the fee based upon Proposition 218 requirements. The City was required to add this item to the ballot in March 2006 which was defeated. As a result, the City of Encinitas must completely subsidize the Clean Water Program through the General Fund.

Table 10-1 – Jurisdictional Expenditure Summary

JURISDICTIONAL EXPENDITURES		
ADMINISTRATION		129,620
DEVELOPMENT PLANNING		314,307
CONSTRUCTION		154,666
MUNICIPAL		1,326,404
INDUSTRIAL AND COMMERCIAL		97,075
RESIDENTIAL		24,269
IDDE		135,287
EDUCATION		28,167
PUBLIC PARTICIPATION		12,134
SPECIAL INVESTIGATIONS		2,750
NON-EMERGENCY FIREFIGHTING		12,134
Jurisdictional Total		**2,236,812**

Table 10-2 – Watershed Expenditure Summary

WATERSHED EXPENDITURES		
CARLSBAD WATERSHED		2,947
Watershed Total		**2,947**

Table 10-3 – Regional Expenditure Summary

REGIONAL EXPENDITURES		
CITY OF ENCINITAS SHARE OF REGIONAL COSTS		58,205
Regional Total		**58,205**

TOTAL EXPENDITURES	***$***	***2,297,964***

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City of Encinitas began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs to evaluate program effectiveness. Due to a variety of complications on a regional level, that standardization process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures modeled after conventionalized strategies and calibrated to evaluate "significant" program activities as required in Order No. 2007-0001.

Since the submittal of the JURMP in March 2008, little additional progress has been made on regionally standardized approaches to program effectiveness assessment. In FY 2009-2010, the Copermittees' Fiscal, Reporting, and Assessment Workgroup initiated renewed efforts to undertake the issue of standardized assessment metrics and procedures. The City of Encinitas is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's stormwater program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities unique to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the stormwater program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP Annual Report, can be found in Appendix G-1.

Levels 2 and 3

Tables 11-3 through 11-10 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City of Encinitas within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the San Diego Regional Water Quality Control Board adopted Addendum 2 to Order No. 2007-0001, effectively extending the annual due date of the Illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City of Encinitas that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City of Encinitas and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. It is important to recognize a significant program area development that will be analyzed more closely in future reporting years, in the Encinitas Stormwater Manual adopted in March of 2010. Further, two new significant program elements were in the second year of full implementation within the defined reporting period of this report (treatment control BMP self-verification and inspection); initial assessments indicate a generally successful second year. Continued refinement of this program area will support long term effectiveness assessment measures for development planning. *(See Table 11-3)*

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures *(See Table 11-4).* It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue. Additionally, stormwater construction permitting dynamics are changing statewide in the forthcoming reporting period, and it is notable that jurisdictional programs will need to adjust to ensure ongoing and proper oversight of these activities.

Municipal

Enhanced stormwater conveyance, drainage facility, channel maintenance, and inspection and street sweeping activities were developed and implemented, equating to the removal of salient volumes of debris in FY 2009-10. Effective operations and maintenance activities are demonstrated in the Table 11-5 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will support the efficacy of municipal program activities.

Industrial and Commercial

Similar to prior reporting years, Clean Water Program activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City of Encinitas has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (*See Table 11-6)* through the gathering of critical statistics, including a knowledge and BMP assessment scoring system presented in Tables 11-1 and 11-2. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Encinitas.

Education

Education effectiveness is assessed for a variety of program elements as presented in the Table 11-9 below. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success. These measurable successes will also be enhanced by supporting items such as the Clean Water Program logo, developed in 2009-2010, which will increase program notoriety and promote consistency of educational programs and activities.

Public Participation

The City of Encinitas provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however, the assessment measures identified in Table 11-10 are focused on success of the venues and outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, Clean Water Hotline calls, and volumes

of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 PROGRAM REVIEW AND MODIFICATION

While no significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document, Clean Water Staff continued to meet periodically throughout the reporting period of this report to evaluate effectiveness assessment measures as they relate to specific program elements. The purpose of this effort has been to keep the issue of effectiveness assessment in the forefront of program implementation strategies, and to conduct ongoing effectiveness assessment, and augment program areas as deemed necessary. While effectiveness assessments conducted on an annual basis are helpful, a critical first step in the process is to identify significant activities and to evaluate value added benefits both to the program and to the community of Encinitas throughout the implementation period.

Table 11-3
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify High Efficiency Treatment BMPs are Approved	Internal The City's Engineering Department staff is well versed in treatment BMPs and pollutant removal efficiencies.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify Proposed BMPs are Implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects installing / implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	N/A	
Verify BMPs are Properly Maintained	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3Internal N/A, see Municipal section.	Percent of responsible parties submitting verification documentation	63%	Additional load reduction could be achieved through improved BMP maintenance.
		Number of responsible parties that did not submit self-verification documentation	15	
		Number of sites with BMPs requiring repair or maintenance	6	
		Resolution status of repair/maintenance	All Complete	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify Planned BMP Implementation - Review Proposed Plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects must meet minimum requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify Proposed BMPs are Implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs.	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of inspection actions resulting in Corrective Action.	15%	
		Percent of inspection actions resulting in a Notice of Violation (NOV).	< 1%	
		Percent of inspections actions resulting in a Citation.	< 1%	
		Number of dry weather monitoring exceedances traced to construction sources.	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify Proposed BMPs are Implemented at Facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep Streets and Parking Facilities		N/A, streets and parking facilities are swept as determined necessary and in compliance with Municipal Stormwater Permit standards.		Amount of sediment and debris removed per length of street swept (weight or volume per curb mile).	1,301 tons/ 9,199 curb miles (0.14 tons/curb miles)
Maintain and Clean the MS4 (catch basins, inlets and open channels).		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume).	355.9 tons
Maintain Sanitary Sewer System		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons).	Data will be included in Section 7.0 for the 12/15/10 submittal.
Maintain Municipal Treatment Control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from storm drain filter inserts.	2.99 tons
				BMP effectiveness studies	N/A
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP Implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Percent of inspected sites in compliance with BMP requirements (inspections that did NOT require follow-up actions)	69%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of inspection related enforcement actions	96%		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	Data will be included in Section 7.0 for the 12/15/10 submittal.	Number of IC/IDs eliminated through enforcement actions taken as a result of routine inspection OR complaint investigations. (NOVs & Citations)	28
		Based on the results of individual facility assessment surveys, most facilities inspected have a good general understanding of BMPs and implement BMPs as required. See Figure 11-1 and 11-2.			
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

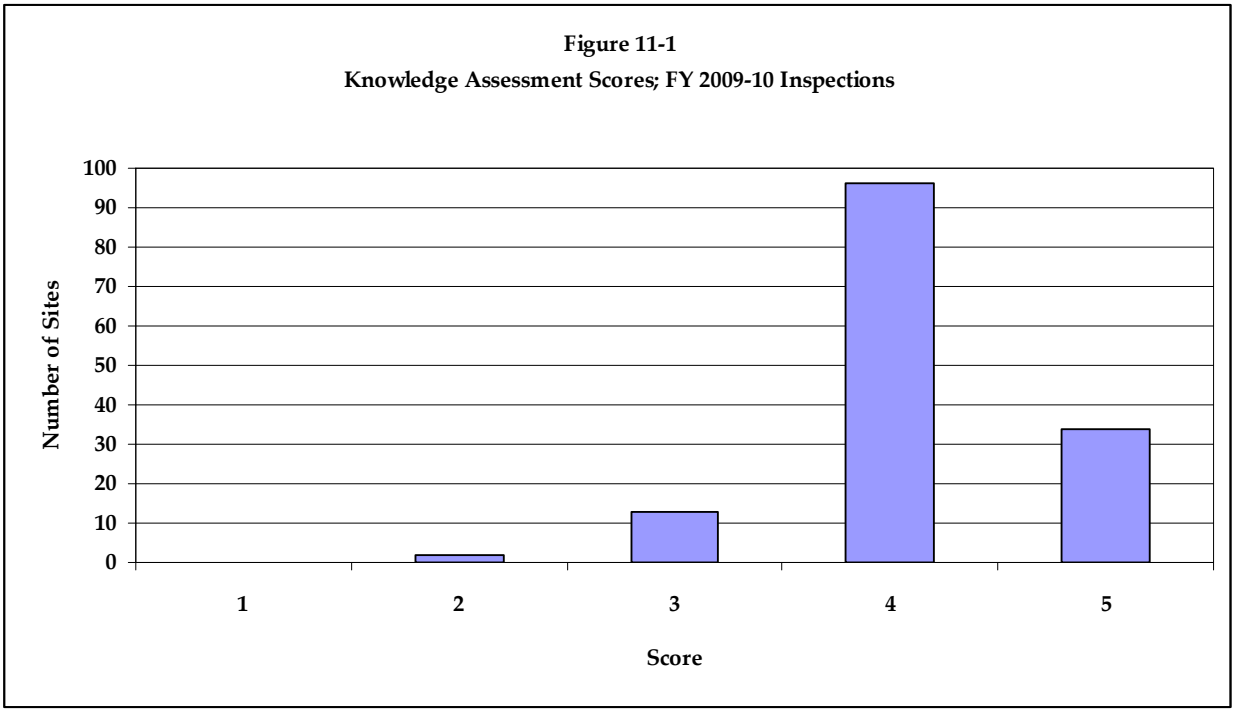
Figure 11-1
Knowledge Assessment Scores; FY 2009-10 Inspections
Number of Sites
100
90
80
70
60
50
40
30
20
10
0
1
2
3
4
5
Score

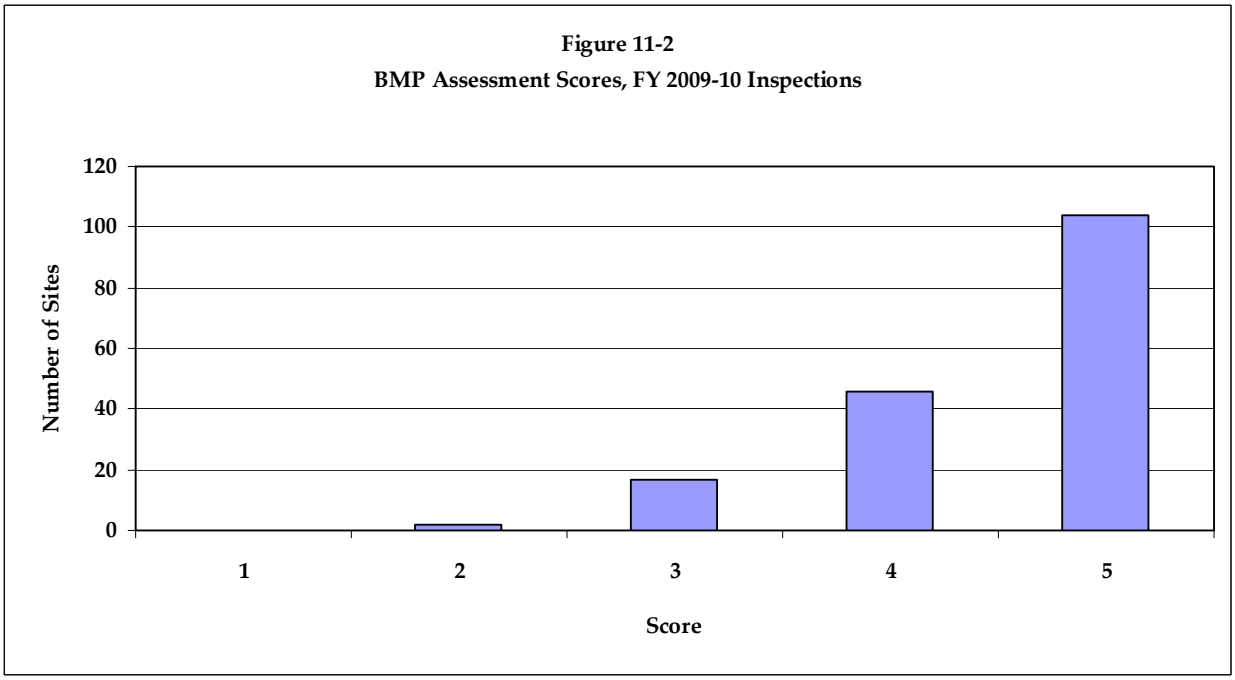
Figure 11-2
BMP Assessment Scores, FY 2009-10 Inspections
Number of Sites
120
100
80
60
40
20
0
1
2
3
4
5
Score

Table 11-7
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP Implementation	External Residents were educated in variety of ways in 2009/2010; see sections 6 and 8 for details. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Number of residential incidents reported to storm water hotline	149	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution status of residential related enforcement actions	100%	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	Clean Water Program staff executes the City's Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2010.
Respond to Incidents Reported to Clean Water Hotline	Dedicated Engineering and Public Works staffs are trained to respond to reported incidents.	N/A, personnel respond to incidents as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2010.
Respond To and Clean up SSOs	Dedicated Public Works staffs are trained to respond to reported SSO incidents.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2010.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2009-10.
	Estimated number of impressions made*	4,737		
	Estimated number of educational materials distributed to various community sectors	3,051		
Provide storm water education to City staff & contractors	Internal The City provides staff and contractors w/ regular stormwater training. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2009--10.
	Number of Staff and Contractors trained	163		

Notes:
Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Impressions are based upon the number of interactions with public at education events, workshops, and presentations.

Table 11-10
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Estimated number of attendees at events, workshops, and presentations	4,737	Amount of trash, recycling, and debris collected at cleanup events	367.5 lbs
		Number of calls received to the Clean Water Hotline*	275	Amount of HHW collected	159,054 lbs

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The sum total of calls to the Clean Water Hotline related to all Community Sectors.

12.0 SPECIAL INVESTIGATIONS

As determined necessary and appropriate, the City of Encinitas is engaged in a variety of ongoing and long-term investigations to support reasoned and informed management actions to address local water quality concerns and threats.

12.1 STORM DRAINS AS SOURCES OF ENTEROCOCCUS TO SAN DIEGO BEACHES

In FY 2009-10, in collaboration with the Regional Monitoring Workgroup and Southern California Coastal Water Research Project (SCCRWP), the City of Encinitas participated in a special study identified as *Storm Drains as Sources of Enterococcus to San Diego Beaches.* This study was developed to assess storm drains as a potential source of *Enterococcus* bacteria to San Diego's marine coastal waters during dry weather. The goals of the study include: 1) to determine if biofilms and algae that form on the surfaces of storm drains support the growth of enterococci; 2) to determine if enterococci growing on storm drain surfaces are a source of bacteria to sand and beach water; and 3) to determine if enterococci growing on storm drain surfaces may be differentiated from those of fecal origin. Enterococcal growth will be assessed using small concrete blocks (coupons) tethered to the bottom surfaces of storm drain pipes. The hypothesis is that enterococci in urban runoff will attach to the coupons located inside the storm drain pipes, form biofilm, and multiply, leading to increased densities of enterococci over time. This raises the possibility that bacterial growth within storm drains may be at least partly responsible for elevated concentrations of enterococci observed in urban runoff impacting beach water quality.

Based on historical bacterial monitoring data, the presence of continuous dry weather flow, and accessibility, both Moonlight Beach in Encinitas and a City of San Diego beach in the community of La Jolla were chosen to participate in this regional study. The site at Moonlight Beach was of particular interest because it has an urban runoff treatment facility (UV Facility) located approximately 230 yards upstream of Moonlight Beach. The UV Facility diverts 85% of the dry weather flows in Cottonwood Creek into an ultra violet treatment system designed to inactivate bacteria and viruses in the creek water. Bacteria removal efficiencies through the UV Facility have been calculated at >99%. In February 2006, the City of Encinitas published the Moonlight Beach Urban Runoff Treatment Facility Final Report which indicated that additional sources of bacteria are contributing to the degradation of water quality downstream of the UV Facility. While nearly 100% of the bacteria were removed from the treated water at the UV Facility, removal efficiencies from the effluent to the Moonlight Beach outfall were not as dramatic, indicating significant regeneration of bacteria between the UV Facility and the beach. Despite the presence of the UV Facility, samples from Moonlight Beach

occasionally exceed the *Enterococci* AB411 single sample standard of 104 MPN/100 ml. Hypotheses offered in the City's Moonlight Beach Urban Runoff Treatment Facility Final Report indicated that increases in bacteria downstream of the UV Facility could be primarily due to animals in the creek and on the beach, sediments and debris in the creek and storm drains, and the wrack line on the beach.

The *Storm Drains as Sources of Enterococcus to San Diego Beaches* study consists of a detailed study plan, field sampling, data analysis, and preparation of a final report. Within the defined reporting period of this report, sampling for this study commenced on May 19, 2010, and will continue for twenty weeks ending on October 5, 2010, outside of the defined reporting period. All study samples are being collected by City of Encinitas Clean Water Program staff in collaboration with a researcher from SCCWRP. SCCWRP is responsible for managing and analyzing all of the data from this study. The San Diego Regional Copermittees expect to present final analysis and results from this study in FY 2010-2011.

At Moonlight Beach, sampling for the study consists of collecting water samples from the following five locations: an area of the creek that bypasses the UV Facility, the UV Facility treated water, upstream of the storm drain coupons, at the outfall which is downstream of the coupons, and in the receiving water along the shoreline. The water samples upstream from the coupons and the beach water are analyzed for the following parameters: conductivity, dissolved oxygen, pH, temperature, and turbidity. Additionally, the water samples upstream from the coupons are also analyzed for the following nutrient parameters: TOC, Nitrate as N, Nitrite as N, TKN as N, Ammonia as N, Orthophosphate as P, Total Phosphate as P, and Total Nitrogen (calculated). Two coupons are collected each week and analyzed for densities of enterococci. In addition to the water and coupon samples, natural samples of plants upstream of the coupons, algae, and sea wrack located downstream of the coupons and beach sand are also being collected at Moonlight Beach and are being analyzed to determine the densities of enterococci present on each sample.

12.2 SAN ELIJO LAGOON RESTORATION PROJECT

For a number of years, the City of Encinitas along with numerous agencies including the Army Corps of Engineers, San Elijo Lagoon Conservancy, Caltrans, SANDAG, SDRWQCB, California Coastal Commission, Department of Fish & Game, and NCTD have been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (I-5) North Coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast project.

The goal of the study and ultimate project is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. Related studies have looked

specifically into the effects of varying channel widths at each opening: inlet and PCH Bridge, the SDNR system, and the I-5 freeway. Various alternatives have been identified based upon complex system simulations and evaluated on effects to reduce tidal muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur.

Work on this project continued throughout the defined reporting period of this report, most significantly with efforts to conduct a variety of modeling and engineering studies including water quality and hydraulic modeling, sea level rise, sediment characterization, and shoaling studies to evaluate the various alternatives that are being considered for the restoration project.

Notably, the San Elijo Lagoon Restoration Project is a multi-agency effort, and far-reaching coordination has been critical and remains key to the long-term success of this project. In consideration of future Lagoon specific TMDL development and the emerging lagoon restoration scenarios, on May 24, 2010, staff from the City of Encinitas, San Diego Regional Water Quality Control Board (SDRWQCB), San Elijo Lagoon Conservancy (SELC), and Moffat & Nichol (Restoration Project Consultant) convened to discuss how these efforts may meet the mutual needs of the stakeholders involved. This meeting provided a good venue to connect the collective benefits of restoration efforts with water quality improvements in the San Elijo Lagoon and to better define priorities for all parties involved.

12.3 LONE JACK POND WATER QUALITY INVESTIGATION

In October of 2009, the City of Encinitas Clean Water Program initiated the Lone Jack Pond Water Quality Investigation. This study was undertaken in response to complaints from nearby residents that a local pond had *"turned green"* and was emitting *"foul odors"*and to determine if there was a specific pollutant source contributing to the pond conditions. The Lone Jack Pond is located off of Lone Jack Road, north of Lone Hill Lane, in a rural residential area within the City of Encinitas. The pond is a man made impoundment along Copper Creek in the Carlsbad Watershed (Hydrologic Unit 904).

To assess the water quality in the pond, a combination of visual observations, field tests, and laboratory analyses were performed on water samples taken from four locations in and around the pond area. Ultimately, based upon the results of the multi-level analysis, it was reasoned that flow patterns through the pond likely leave the water in the northern half of the pond with poor circulation, leading to comparatively stagnant conditions as compared to other areas of the pond. This was based mostly upon analytical results indicating higher levels of organic nitrogen and BOD in the northern portion of the pond, and further supported by visual observations documenting accumulated decomposing algal and/or plant material in the same area. A mix of pond circulation and flow dynamics, and natural conditions and functions all contributed to

the pond "turning over", yielding a significant algal bloom, and related unpleasant odors. Notably, Dry Weather field screening downstream of this area, both recent and historic, has not indicated any water quality concerns in the study area. The complete study report can be found in Appendix I-1 of this report.

13.0 NON-EMERGENCY FIRE FIGHTING

13.1 INTRODUCTION

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (No. 3 and No. 5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis by Clean Water Staff. Following is a detailed description of the program developed by the City to reduce pollutants from non-emergency fire fighting flows.

13.2 PROGRAM FOR NON-EMERGENCY FIRE FIGHTING FLOWS

The City of Encinitas has identified a number of potential discharge sources including maintenance of fire and emergency vehicles and equipment, training exercises, and facility maintenance. It is important to recognize and make provision for the post-emergency rehabilitation of response equipment including tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency, as this equipment must be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for subsequent response actions. As such, the use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified and will be performed in a manner that minimizes discharges to the MEP. In consideration of the non-emergency activities listed above, the City's fire personnel utilized the following BMPs to address discharge generated from such activities during FY 2009-10:

- Whenever possible, practice drills were performed in areas where runoff was contained. When practice drills were performed in an area where runoff could potentially leave the site, the site was surveyed by the officer-in-charge prior to training activities to ensure that debris would not enter the storm drain system as a result of the drill.
- As determined feasible, runoff from training drills or other non-emergency activities, was directed to landscaped areas.
- Areas that have debris that could potentially enter the storm drain system as a result of the drill activities were not used for training until the debris had been removed.
- Live fire training activities were pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
- Runoff from live fire training activities was contained and recovered with the City's Vac-con truck so that runoff did not discharge to the storm drain system or receiving waters.
- Good housekeeping and dry cleanup practices were utilized as part of standard facility maintenance procedures.

13.2.1 EDUCATIONAL METHODS

Details of the City's educational programs, including fire fighting personnel education, are provided in Section 8 of this document.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 as required by Water Quality Order No. 2007-0001. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes made to the JURMP since the comprehensive JURMP update in the spring of 2008 would be detailed in the preceding sections of this JURMP Annual Report. Revisions may include, but would not be limited to, required inventory updates, necessary process and procedure changes, or programmatic modifications to improve efficiency and effectiveness.

15.0 CONCLUSIONS & RECOMMENDATIONS

During the 2007-2008 reporting period, the City of Encinitas updated its JURMP, which was finalized and submitted to the RWQCB on March 24, 2008. As captured in the preceding 2009-2010 JURMP Annual Report, the City of Encinitas has continued to refine newly developed program elements, standardize core program components, and stay current with emerging trends and technology. Further, the City has and will continue to actively participate and collaborate with other Copermittees in the development and collective implementation of regional programs. As compliance standards evolve based upon defined timeframes in Order No. 2007-0001, the City of Encinitas will continue to augment and update programs as necessary to comply with regulatory requirements, and evaluate the overall efficacy of program elements against value added outcomes to assure focused and refined implementation protocols.

Appendix A

Development Planning

A-1 Treatment Control BMP Inventory

A-2 SUSMP Priority Project Map

A-3 Treatment Control BMP Inspection Priority Flowchart

A-4 Sample Grading Certification BMP Installation Verification Letter

A-5 Treatment Control BMP Operation and Maintenance Self-Verification Letter

A-6 Treatment Control BMP Operation and Maintenance Brochure

A-7 Treatment Control BMP Operation and Maintenance Self-Verification Form

A-8 Treatment Control BMP Operation and Maintenance Self-Verification Results and Findings

A-9 Treatment Control BMP Operation and Maintenance Inspection Form

A-10 Treatment Control BMP Operation and Maintenance City Inspection Results and Findings

A-11 Stormwater Pollution Control Checklist and Certification

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
55	I	540 Cornish Dr	Vegetated Swale	vegetated swale	9/27/2005	3/17/2008	Encinitas Other		Low
55	I	540 Cornish Dr	Vegetated Swale	vegetated swale	9/27/2005	3/17/2008	Encinitas Other		Low
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Extended Detention Basin	detention basin	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Rock Swale	rock-lined swale	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	roof cover for fueling area	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Pervious Pavement	gravel parking area	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	fuel slab reservoir	10/15/2007	6/7/2010	Encinitas Other		Low
87	G	354 Santa Fe Dr	Extended Detention Basin	detention basin	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
94	I	3740 Fortuna Ranch Rd	Rock Swale	gravel swale	4/12/2010	7/16/2010	Private	2010-0170453	TBD
94	I	3740 Fortuna Ranch Rd	Rock Swale	gravel swale	4/12/2010	7/16/2010	Private	2010-0170453	TBD
106	G	3358 Wildflower Valley Dr	Vegetated Swale	min. 100' long priority stormwater BMP grass swale	6/19/2006	11/8/2008	Private	2008-0582295	Medium
106	G	3358 Wildflower Valley Dr	Vegetated Swale	treatment swale	6/19/2006	11/8/2008	Private	2008-0582295	Medium
153	I	111 Chesterfield Dr	Mechanical Filter	Flo-Gard FF-RF24D	8/31/2006	2/13/2007	Private		Medium
153	I	111 Chesterfield Dr	Interceptor (Sewer)	traffic rated oil seperator	8/31/2006	2/13/2007	Private		Medium
169	G	510 S El Camino Real	Mechanical Filter	Kristar flogard	9/23/2008	7/15/2009	Private	2007-0310771	Medium
169	G	510 S El Camino Real	Vegetated Swale	grass-lined swale	9/23/2008	7/15/2009	Private	2007-0310771	Medium
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
183	G	3234 Olivenhain Farms Rd	Vegetated Swale	bio-swale for post BMP treatment	11/1/2006	11/1/2006	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	11/1/2006	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	11/1/2006	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	5' wide x 10' long x 1' thick rip rap	11/1/2006	5/13/2008	Private	2006-0764616	Low
187	G	1060 Urania Ave	Dry Well	9' deep drywell	3/22/2007	PRP/UC	Private	2006-0898796	TBD
187	G	1060 Urania Ave	Vegetated Swale	vegetated swale	3/22/2007	PRP/UC	Private	2006-0898796	TBD
276	G	Phoebe St & Hwy 101	Vortex Separator	StormFilter chamber by Contech	4/19/2007	6/19/2008	Private		High
276	G	Phoebe St & Hwy 101	Retention/Infiltration Vault	stormwater collection vault	4/19/2007	6/19/2008	Private		High
325	G	2620 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2620 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2620 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2620, 2622, 2624 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2620, 2622, 2624 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2622 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2624 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
372	G	1657 N Vulcan Ave	Vegetated Swale	grass swale	8/9/2007	PRP/UC	Private	2007-0615430	TBD
372	G	1657 N Vulcan Ave	Extended Detention Basin	detention basin	8/9/2007	PRP/UC	Private		TBD

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372	G	1657 N Vulcan Ave	Vegetated Swale	grass swale	8/9/2007	PRP/UC	Private		TBD
385	G	1555 Crest Dr	Vegetated Swale	BMP landscape swale	8/31/2007	7/13/2009	Private	2007-0611836	Low
385	G	1555 Crest Dr	Rock Swale	gravel/sand filter	8/31/2007	7/13/2009	Private	2007-0611836	Low
386	G	3535 Manchester Ave	Mechanical Filter	Katchall curb outlet filter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Vegetated Swale	flow-based system for BMP	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	stormtech detention	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
388	G	1435 Lake Dr	Vegetated Swale	6'W X 20'L bioswale	12/17/2007	PRP/UC	Private		TBD
388	G	1435 Lake Dr	Vegetated Swale	6' X 28'L bioswale	12/17/2007	PRP/UC	Private		TBD
388	G	1435 Lake Dr	Vegetated Swale	203' long grass-lined swale	12/17/2007	PRP/UC	Private		TBD
414	G	4455 Manchester Ave	Vegetated Swale	grassy swale	5/10/2007	8/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	8/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Vortex Separator	StormFliter per Contech stormwater solutions	5/10/2007	8/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	8/20/2008	Private	2007-0317169	Medium
437	G	222 El Camino Real	Vortex Separator	StormScreen unit	8/31/2007	8/31/2007	Private	2007-0571994	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Turf Block Swale	grasscrete	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Turf Block Swale	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Interceptor (sewer)	Jensen sand and oil trap model JP50050	7/6/2007	7/6/2007	Private - HOA		Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
482	G	1864 Crest Dr	Extended Detention Basin	detention basin	3/28/2008	PRP/UC	Private	2007-0495449	Low
482	G	1864 Crest Dr	Vegetated Swale	4' wide grass lined treatment swale w/ rip-rap entrance	3/28/2008	PRP/UC	Private	2007-0495449	Low
482	G	1864 Crest Dr	Vegetated Swale	4' wide grass lined treatment swale w/ rip-rap entrance	3/28/2008	PRP/UC	Private	2007-0495449	Low
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/27/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Vegetated Swale	bio-swale	9/10/2007	7/27/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/27/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Interceptor (Sewer)	wastewater sump	9/10/2007	7/27/2010	Private	2007-0637421	Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	8' wide treatment swale with 6' wide bottom	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Mechanical Filter	flogard lopro hydrocarbon absorbant filter	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	4' wide landscaped swale	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Infiltration Basin	infiltration basin	8/21/2007	8/4/2008	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	65 l.f. gravel detention / dispersion pit	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Rock Swale	rock swale	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	6/30/2010	Private		Medium
692	G	1435 Rainbow Ridge	Vegetated Swale	6' BMP treatment swale	3/27/2008	PRP/UC	Private	2008-0029728	TBD
704	G	230 Quail Gardens Dr	Vegetated Swale	vegetated BMP swale and 2 energy dissipators	4/17/2008	10/19/2009	Private	2008-0162733	Low
704	G	230 Quail Gardens Dr	Pervious Pavement	pavers	4/17/2008	11/25/2009	San Diego County		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	1/14/2008	7/16/2009	Private	2008-0106026	Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low

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713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Landscaped Area	landscaped area	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
716	G	662 Encinitas Blvd	Vortex Separator	StormFilter catch basin by Contech	6/2/2008	PRP/UC	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	Vegetated Swale	3' wide grass lined treatment swale	6/2/2008	PRP/UC	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	Pervious Pavement	grasspave2 by Invisible Structures, Inc.	6/2/2008	PRP/UC	Private	2008-0243901	TBD
718	G	687 South Coast Hwy 101	Vortex Separator	6' X 12' precast StormFilter by Contech	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Interceptor (Sewer)	320 gal. sand-oil interceptor	8/28/2008	PRP/UC	Private	2008-0440635	TBD
765	G	2234 Encinitas Blvd	Vortex Separator	StormFilter by Contech	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	Vortex Separator	1-cartridge StormFilter per Contech	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
789	G	2005 San Elijo Ave	Interceptor (Sewer)	grease interceptor	1/9/2008	3/23/2009	Private	2008-0609543	Low
789	G	2005 San Elijo Ave	Pervious Pavement	porous concrete	1/9/2008	3/23/2009	Private	2008-0609543	Low
883	G	1058 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Infiltration Basin	15' X 8' X 5' infiltration basin	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	PRP/UC	Private		TBD
883	G	1058 Hymettus Ave	Pervious Pavement	modular reinforced turf area	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	PRP/UC	Private		TBD
883	G	1076 Hymettus Ave	Infiltration Basin	15' X 8' X 5' infiltration basin	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	2.5' wide of 6" cobbles over 12" thick pea gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	10' X 25' gravel	1/16/2009	9/24/2009	Private	2008-0609456	Medium
912	G	416 N Rancho Santa Fe Rd	Media Filter	2' diameter, 6' deep gravel pit with open bottom for BMP use	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Vegetated Swale	2' wide grass swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Vegetated Swale	vegetated swale	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Flow-Through Planter	6' X 12' Filterra unit	1/14/2009	1/2/2010	Private	2009-0016310	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1447 Bella Vista Ct	Landscaped Area	planter area	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1447 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	PRP/UC	Private	2009-0134165	TBD

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947	G	1447 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1459 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1459 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	PRP/UC	Private	2009-0134165	TBD
983	G	1320 Encinitas Blvd	Vortex Separator	Contech Stormfilter	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	2/4/2008	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	2/4/2008	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	2/4/2008	6/26/2009	Private	2008-0075668	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 315, 319, 323, and 327 Hana Ct	Vegetated Swale	vegetated swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	315 and 311 Hana Ct	Rock Swale	rock swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1389	G	302 Requeza St	Extended Detention Basin	stormwater detention treatment basin	1/5/2004	8/2/2005	Private	2003-1503915	High
1457	G	200 Saxony Rd	Vegetated Swale	grass-lined swale	5/6/2004	4/6/2006	Private		Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1442 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1509	G	521 Ocean View Ave	Vegetated Swale	vegetated swale	7/7/2004	PRP/UC	Private		Low
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach basin	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach apron	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Mechanical Filter	flogard□plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Mechanical Filter	flogard□plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1532	G	1316, 1318 Summit Ave	Vegetated Swale	grass swale and storm water "cleansing area" (detention basin)	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
5814	G	2108 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2108 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low
5814	G	2112 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low
5814	G	2112 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
6402	G	311 Princehouse Ln	Vegetated Swale	grass swale (275 ft by 4 ft)	7/18/2005	12/8/2006	Private	2004-0576710	Low
6442	G	3616 Manchaster Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchaster Ave	Mechanical Filter	fossil filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Extended Detention Basin	Football field is a detention basin with a filtration sytem under it Th	9/17/2004	10/17/2006	Private		High
6813	G	155 Saxony Rd	Vegetated Swale	grass swale	9/5/2003	7/23/2009	Private		Medium
6813	G	155 Saxony Rd	Vegetated Swale	grass swale/infiltration basin	9/5/2003	7/23/2009	Private		Medium
6813	G	155 Saxony Rd	Other	drain inlet with seepage pit	9/5/2003	7/23/2009	Private		Medium
7005	G	503 Ocean Bluff Wy	Vegetated Swale	vegetated swale around the home	9/4/2002	4/30/2007	Private		Medium
7005	G	507 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	509 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	510 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	513 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	517 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	518 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	521 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
7005	G	525 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	526 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	532 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	558 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscape area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscape area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscape area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter insert	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscape area	4/24/2003	5/18/2005	Private - HOA		Medium
7300	G	740 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7300	G	740 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7300	G	760 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7300	G	760 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7305	G	131 Princehouse Ln	Rock Swale	3-ft wide gravel swale	1/10/2003	4/7/2004	Private		Low
7305	G	131 Princehouse Ln	Infiltration Basin	3-ft diameter absorption pit, 4-ft deep w/ 3/4" rock	1/10/2003	4/7/2004	Private		Low
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement parking lot	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Rock Swale	rock lined swale	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Extended Detention Basin	detention basin	1/30/2003	10/16/2006	Encinitas Streets		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	grass pavers	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4120-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grass lined swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	3/30/2006	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	221 La Costa Ave	Vegetated Swale	landscaped area for filtration	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	235 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7702	G	301 Chopin Way	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	315 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	322, 336 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	329 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Retention/Infiltration Vault	stormwater detention vault	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7732	G	175 La Costa Ave	Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	175 La Costa Ave	Other	DG-lined swale	12/30/2003	5/15/2006	Private		Medium
7732	G	183 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7771	G	1550 S El Camino Real	Extended Detention Basin	desiltation basin	10/28/2003	2/4/2008	Private		Low
7771	G	1550 S El Camino Real	Pervious Pavement	pervious pavemnet "gravel pave" manufactured by Invisible Structu	10/28/2003	2/4/2008	Private		Low

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7780	G	133 Rosebay Dr	Infiltration Basin	rock-lined infiltration trench	8/4/2003	4/28/2005	Private		Low
7780	G	133 Rosebay Dr	Bioretention Basin	terraced stormwater drainage area	8/4/2003	4/28/2005	Private		Low
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Interceptor (Sewer)	grease interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Sand/Oil Separator (stormwater)	sand/oil interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7828	G	1200 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1200 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1208 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1216 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1219 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1945 Lake Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7847	G	2300 Eighth St	Infiltration Basin	filtration/desiltation pond	8/12/2003	7/23/2009	Private		Low
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2008	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegation cleansing area	1/1/2003	10/24/2008	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	landscaped area for BMP	1/1/2003	10/24/2008	Private		Medium
7852	G	3430 Via Monte Verde	Vegetated Swale	grass lined swale	1/1/2003	10/24/2005	Private		Medium
7852	G	3430 Via Monte verde	Infiltration Basin	rip rap lined infiltration basin (does not conform to plan)	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	Vegetated Swale	landscape area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7893	G	Christine Pl	Retention/Infiltration Vault	'Stormchamber' infiltration units (4)	1/27/2004	6/7/2010	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Flogard Plus filter insert	1/27/2004	6/7/2010	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Fflogard Plus filter insert	1/27/2004	6/7/2010	Private	2003-1457627	Medium
9023	G	427 Bristol Ave	Pervious Pavement	pathway filtration	10/20/2004	10/5/2006	Private		Low
9034	G	1464 Summit Ave	Infiltration Basin	detention filtration basin	12/21/2004	12/3/2007	Private		Low
9034	G	1470 Summit Ave	Other	DG swale	12/21/2004	12/3/2007	Private		Low
9057	G	192 Pacific View Ln	Vegetated Swale	7.8 ft wide terraced treatment swale	1/26/2005	1/22/2007	Private		Medium
9071	G	3317 Poppy Hills Ln	Vegetated Swale	vegetated swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9071	G	3317 Poppy Hills Ln	Rock Swale	rock swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9106	G	vacant lot N Vulcan Ave	Vegetated Swale	vegetated swale	12/21/2006	PRP/UC	Private		TBD
9106	G	vacant lot N Vulcan Ave	Infiltration Basin	vegetated infiltration basin w/ gravel pit	12/21/2006	PRP/UC	Private		TBD
9117	G	1902 Paxton Wy	Turf Block Swale	GravelPave swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9117	G	1905 Paxton Wy	Turf Block Swale	GravelPave swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9117	G	1908 Paxton Wy	Turf Block Swale	Gravel Pave Swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9117	G	1908 Paxton Wy	Turf Block Swale	gravel pave swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9117	G	1916 Paxton Wy	Turf Block Swale	Gravel Pave Swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9117	G	1920 Paxton Wy	Turf Block Swale	GravelPave swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9134	G	2153 Whisper Wind Ln	Vegetated Swale	grass swale	11/23/2004	4/6/2006	Private		Low
9134	G	2153 Whisper Wind Ln	Infiltration Basin	rip-rap infiltration	11/23/2004	4/6/2006	Private		Low
9150	G	3113 Camino Del Rancho	Rock Swale	Rock lined swale	3/24/2005	9/11/2007	Private		Low

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9150	G	3113 Camino Del Rancho	Rock Swale	rock lined swale	3/24/2005	9/11/2007	Private		Low
9150	G	3113 Camino Del Rancho	Bioretention Basin	flat area for stormwater treatment covered with grass	3/24/2005	9/11/2007	Private		Low
9180	G	1610 Neptune Ave	Landscaped Area	landscaped area and planters	7/20/2006	5/21/2009	Private		Low
9253	G	701 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	703 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	715 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	717 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	719 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	721 N Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9262	G	860 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	860 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	860 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	874 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	874 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	874, 896 & 900 Bracero Rd	Vegetated Swale	7' wide grass lined treatment channel	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	886 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	886 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	886 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	890 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	890 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	896 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	904 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9278	G	490 Latigo Row	Extended Detention Basin	detention area	12/27/2005	6/17/2010	Private		Low
9278	G	490, 494 Latigo Row	Turf Block Swale	turf block swale with gravel (no turf)	12/27/2005	6/17/2010	Private		Low
9278	G	494 Latigo Row	Extended Detention Basin	detention area	12/27/2005	6/17/2010	Private		Low
9283	G	1440 Hygeia Ave	Infiltration Basin	infiltration basin	1/17/2006	3/23/2007	Private	2005-0861753	Medium
9283	G	265 Sanford St	Infiltration Basin	Infiltration basin	1/17/2006	3/23/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St	Infiltration Basin	infiltration basin	1/17/2006	3/23/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St & 1440 Hygeia Ave	Rock Swale	rock swale	1/17/2006	3/23/2007	Private	2005-0861753	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2914 Lone Jack Rd	Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2914, 2934 Lone Jack Rd	Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2934 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2944 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2944 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2944 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Vegetated Swale	grass-lined channel for BMP	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Low
9301	G	187 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Low
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Low
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Low
9301	G	189 Halcyon Rd	Turf Block Swale	Grasscrete	8/3/2005	4/14/2009	Private	2005-0679467	Low
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Low
9303	G	869 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	6/7/2010	Private	2005-0496885	Low
9303	G	869 Brittany Rd	Extended Detention Basin	40' □/- detention area	6/7/2005	6/7/2010	Private	2005-0496885	Low
9303	G	869, 875, 881, 887 Brittany Rd	Vegetated Swale	landscape filtration strip	6/7/2005	6/7/2010	Private	2005-0496885	Low
9303	G	875 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	PRP/UC	Private	2005-0496885	Low
9303	G	875 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	PRP/UC	Private	2005-0496885	Low
9318	G	1154 Evergreen Dr	Landscaped Area	landscape area BMP	8/16/2005	2/16/2007	Private		Medium
9318	G	1154 Evergreen Dr	Landscaped Area	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1154, 1158 Evergreen Dr	Rock Swale	gravel swale (GravePave)	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Landscaped Area	lanscaped area BMP	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1160, 1164, 1168, 1172, 1169, 1165 Kava Ct	Vegetated Swale	vegetated swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1169 & 1165 Kava Ct	Rock Swale	gravel swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1176 & 1173 Kava Ct	Rock Swale	6.5 ft wide gravel swale w/ 3" river rock	8/16/2005	2/16/2007	Private		Medium
9336	G	1904 Sheridan Rd	Turf Block Swale	Gravel Pave Swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1904 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1904, 1938 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1938 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1950 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1957 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1957 Stewart Wy and 1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	292 Andrew Ave	Turf Block Swale	Gravel Pave Swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	292 Andrew Ave	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Low
9367	G	781 Garden View Ct	Vegetated Swale	grass lined swale	7/10/2006	1/14/2009	Private		Low
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Low
9370	G	406 La Costa Ave	Other	4 ft diameter dual pump lift station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Vegetated Swale	4-ft wide grass swale	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft X 4ft X 2.5 ft Jenson precast sump station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Pervious Pavement	Orco block pavers	1/30/2006	8/14/2007	Private	2006-0071959	High
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Turf Block Swale	Grasscrete grass block	8/30/2005	2/6/2008	Private		Low
9459	G	211 Saxony Rd	Infiltration Basin	landscaped area (detention basin)	6/12/2006	9/10/2007	Private - HOA		Low
9459	G	211 Saxony Rd	Pervious Pavement	Grass Pave	6/12/2006	9/10/2007	Private - HOA		Low
9481	I	545 Quail Point Ln	Vortex Separator	StormFilter by Stormwater Management Inc.	5/17/2009	PRP/UC	Private	2007-0353916	TBD
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	Low

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Media Filter	stormfilter system	9/18/2007	PRP/UC	Private	2007-0598500	Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Dry Well	Dry Well Storm Water Retention	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
10187	G	1603 Crest Dr	Landscaped Area	turf area BMP	5/27/2009	4/13/2010	Private	2009-0280381	Low
10187	G	1603 Crest Dr	Rock Swale	2' wide BMP gravel/sand filter	5/27/2009	4/13/2010	Private	2009-0280381	Low
10211	G	211 Saxony Rd	Mechanical Filter	filter fossil filter drain insert	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Flow-Through Planter	Filterra Unit	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Flow-Through Planter	Filterra Unit	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Extended Detention Basin	underground detention system	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD

Definitions:
PRP UC: Project proposed or under construction, BMP installation is not complete.
TBD: BMP inspection priority To Be Determinined. After construction is complete, all BMPs on the project are inspected prior to start of the next rainy season.
BMP inspection priority is established during this initial Operation and Mainenance Inspection.
HOA: Homeowner's Association

Note:
Responsible party information is maintained within the City s data management systems specific to this program area. In consideration of the sensitivity of private property ownership information, this data is not included in the inventory presented.

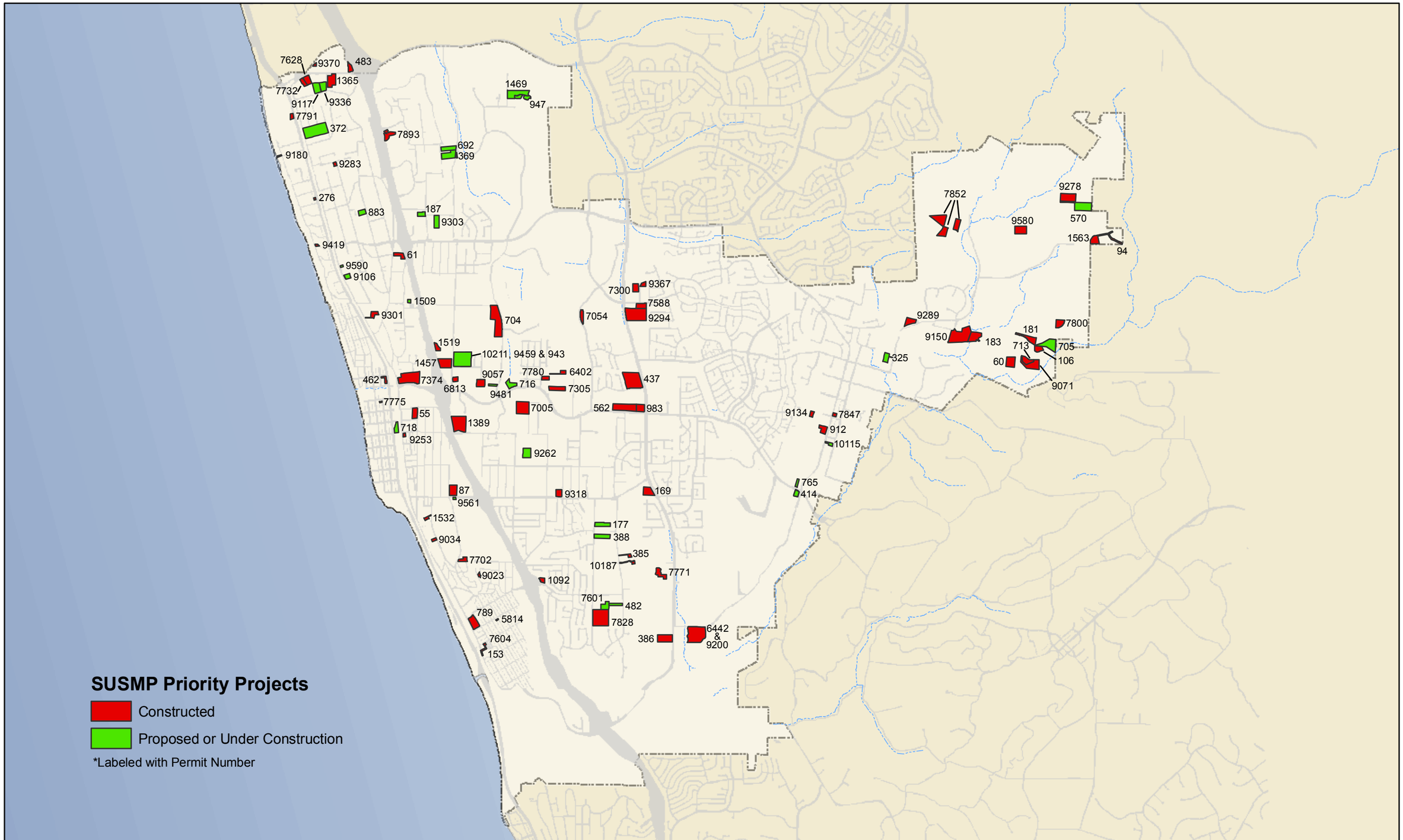

Appendix A-2

SUSMP Priority Projects with Treatment Control BMPs

DISCLAIMER: This map should not be used for Engineering, Survey, or Site-Specific Analysis.
Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

- Map Coordinates: Stateplane NAD83 Feet, CA Zone 6

N

0 6,200 Feet

1 inch = 3,700 feet

Treatment Control BMP Inspection Priority

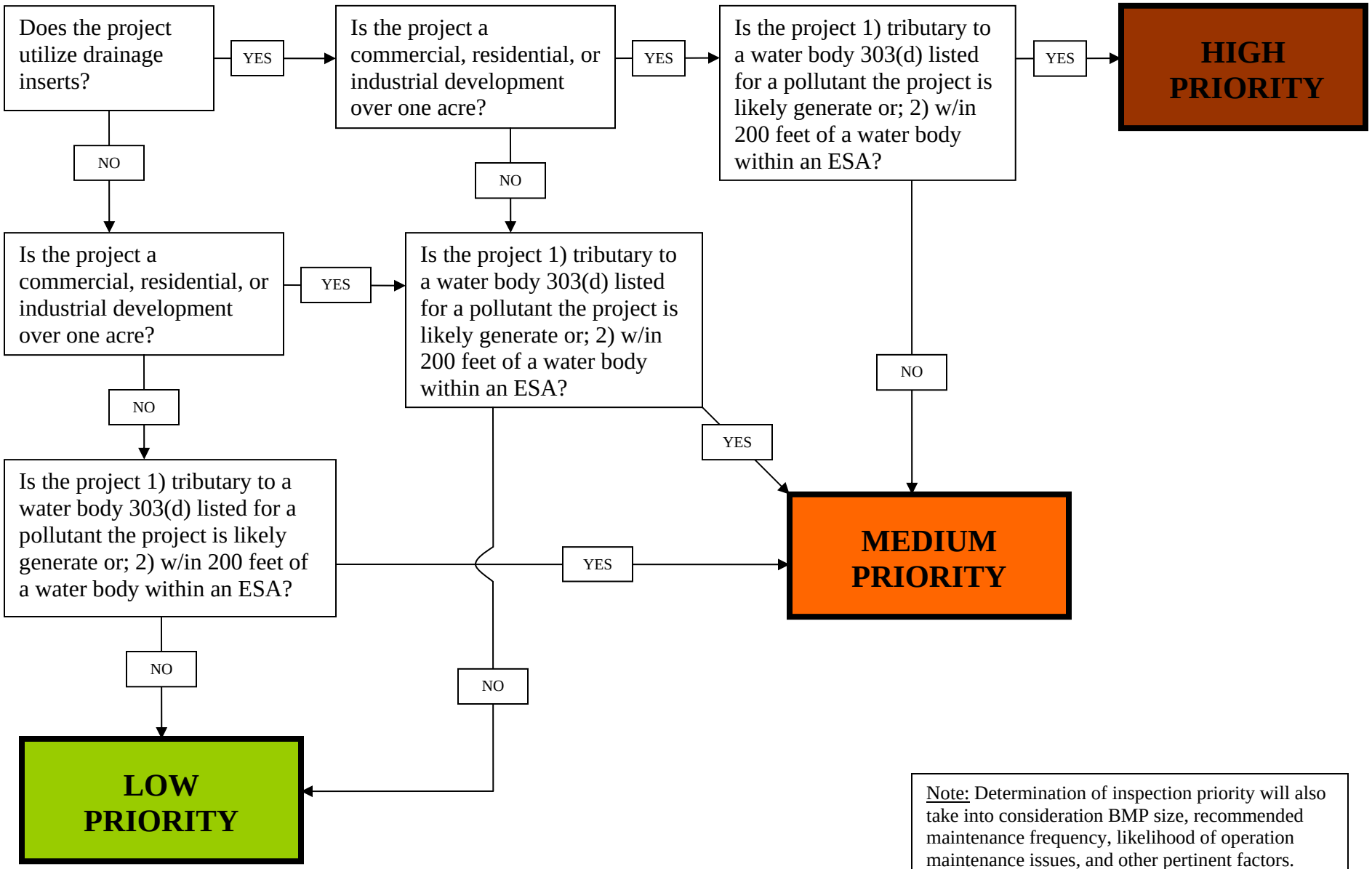

Note: Determination of inspection priority will also take into consideration BMP size, recommended maintenance frequency, likelihood of operation maintenance issues, and other pertinent factors.

SAMPLE

Date: _____

City of Encinitas
Engineering Services Permits
505 South Vulcan Ave.
Encinitas, CA 92024

Re: **Engineer's Final Grading Certification for Project No. 99-001 TM and Grading Permit Number XXXX - G.**

The grading under permit number XXXX has been performed in substantial conformance with the approved grading plan or as shown on the attached "As Graded" plan.

Final grading inspection has demonstrated that lot drainage conforms with the approved grading plan and that swales drain at a minimum of 1% to the street and/or an appropriate drainage system.

All the Low Impact Development, Source Control and Treatment Control Best Management Practices as shown on the drawing and required by the Best Management Practice Manual Part II were constructed and are operational, together with the required maintenance covenant(s).

Engineer of Record _____ (signed & sealed)

Dated _____

Verification by the Engineering Inspector of this fact is done by the Inspector's signature hereon and will take place only after the above is signed and stamped and will not relieve the Engineer of Record of the ultimate responsibility:

Engineering Inspector: _____

Dated:_____

The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.

City of Encinitas

September 3, 2009

TO: *Owner Address*

RE: Treatment Control Best Management Practices (BMP) Verification Program

As you may recall, in 2008 the City of Encinitas Clean Water Program initiated the Treatment Control BMP Operation and Maintenance Verification Program by requesting all responsible parties to verify their property specific BMPs and provide current contact information. The intent of this letter is to inform you that the 2009 operation and maintenance verification of Treatment Control BMP(s) located on your property is due no later than **September 30, 2009**. City of Encinitas records indicate that treatment control BMP(s) were constructed as a part of the grading permit at *Location*.

Since 2003, specific development projects within the City of Encinitas have been required to construct BMP drainage features to treat and improve the quality of runoff from the developed site. The treatment control BMPs at your facility or on your property provide a critical function for downstream surface and coastal water quality. Proper operation and routine maintenance of treatment control BMPs is necessary to achieve maximum water quality benefits.

Annual inspection, maintenance and operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. *Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.*

To fulfill inspection and maintenance obligations, please complete the following steps:

1) Visually inspect all Treatment Control BMPs for signs of malfunction or disrepair. (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow.)

2) Maintain/repair any damage to the BMP(s). Necessary maintenance may include removing accumulated sediment, trash or other debris; stabilizing eroded areas; replanting dead vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.

4) Take current photos of all BMPs on the property.

5) Complete the Operation and Maintenance Self-Verification Form and submit the form to the City's Clean Water Program (submittal instructions are provided on the back-side of this letter and on the enclosed Self-Verification Form).

PLEASE COMPLETE ALL INSPECTION AND MAINTENANCE ACTVITIES AND SUBMIT THE VERIFICATION FORM TO THE CLEAN WATER PROGRAM NO LATER THAN: September 30, 2009

It is the goal of the City to minimize the burden on property owners to fulfill these requirements. For more information regarding the Treatment Control BMP Operation and Maintenance Program, please refer to the enclosed brochure or call the Clean Water Hotline at 760-633-2787 for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

Operation and Maintenance Self-Verification Form Submittal Options

1. **Complete the online version** of the form and submit your photos electronically. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**

2. **Email** electronic copies of completed form, maintenance records, and photos to: **npdesmail@cityofencinitas.org** *Note: Maximum file size for email attachments is **5MB***

3. **Mail** completed form, copies of maintenance records, and photos to:

   City of Encinitas
   Clean Water Program
   505 S Vulcan Ave
   Encinitas, CA 92024

4. Any combination of online, mail, or email submission of the necessary documents will also be accepted. For example, you may **mail** the form and maintenance records and **email** photos.

City of Encinitas
Clean Water Program

FINAL NOTICE

October 19, 2009

TO: *Owner Address*

RE: Treatment Control Best Management Practices (BMP) Self-Verification Program

The intent of this letter is to inform you that the 2009 operation and maintenance self-verification of treatment control BMP(s) located on your property is **PAST DUE** as of October 1, 2009. In a letter dated September 3, 2009, the City of Encinitas requested documentation showing that treatment control BMPs located at XX have been inspected and maintained as necessary (see attached letter).

The City of Encinitas is extending you an additional opportunity to complete self-inspection and necessary maintenance activities, and submit the required self-verification form and photos no later than November 6, 2009.

To fulfill inspection and maintenance obligations, please complete the following steps:

1) Visually inspect all Treatment Control BMPs for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).

2) Maintain/repair any damage to the BMP(s). Necessary maintenance may include removing accumulated sediment, trash or other debris; stabilizing eroded areas; replanting dead vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.

4) Take current photos of all BMPs on the property.

5) Complete the Operation and Maintenance Self-Verification Form and submit the form to the City's Clean Water Program (submittal instructions are provided on the back-side of this letter and on the enclosed Self-Verification Form).

If you do not complete your self-verification obligations by the above listed date, City staff will pursue formal inspection actions to assess BMPs on your property. Stormwater treatment control BMP inspections will consist of a site visit by City staff and documentation of site features consistent with the original grading permit or other approved property specific permits or plans. Formal inspection actions will take place between November 9, 2009 and December 31, 2009.

Annual inspection (self-inspection or City staff inspection), maintenance, and operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. *Be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information constitutes a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants for which the City may opt to pursue further enforcement action.*

It is the goal of the City to minimize the burden on property owners to fulfill these requirements. If you have any questions regarding the Treatment Control BMP Operation and Maintenance Program, please call the Clean Water Hotline at 760/633-2787. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

Operation and Maintenance Self-Verification Form Submittal Options

OPTION 1: Complete the online version* of the form and submit your photos electronically. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**
***This is the preferred option.**

OPTION 2: E-mail electronic copies of completed form, maintenance records, and photos to: **npdesmail@cityofencinitas.org** *Note: Maximum file size for email attachments is **5MB***

OPTION 3: Mail completed form, copies of maintenance records, and photos to:

City of Encinitas
Clean Water Program
505 S Vulcan Ave
Encinitas, CA 92024

OPTION 4: Any combination of online, mail, or email submission of the necessary documents will also be accepted. For example, you may **mail** the form and maintenance records and **email** photos.

Frequently Asked Questions

1. Why does the City of Encinitas require that Treatment Control BMPs be maintained?

As stated in the Municipal Stormwater Permit (issued by the San Diego Regional Water Quality Control (RWQCB)), the City must verify that treatment control BMPs installed on private property are adequately maintained. Proper operation and regular maintenance of permanent treatment control BMPs ensures that the facility reduces the amount of pollutants which end up in our creeks, lagoons, and beaches. These BMPs help to improve water quality and minimize human and environmental health risks.

2. What should I do if I am unsure how to complete my self-inspection form or cannot locate the treatment control BMPs on my property?

Contact Clean Water Program staff as soon as possible. We can provide assistance in understanding the self-verification form, identifying the location of BMP(s) on your property, and determining operation and maintenance needs of your BMP(s). Staff can be reached via phone: 760-633-2787, or email: npdesmail@cityofencinitas.org

3. What happens during the City's inspection of Treatment Control BMPs on my property?

If requested or as required due to repudiation, a City inspector will visit the property to validate the existence, proper maintenance, and function of treatment control BMPs. Inspection actions will be documented with an inspection report form and photos of specific BMPs. If access is limited or located on private property, the City inspector will call the responsible party to schedule an inspection.

FAQs continued…

4. What happens if I don't certify that my Treatment Control BMP(s) have been maintained?

The Treatment Control BMP Self Verification process has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of these facilities, and to help the City meet State mandated requirements. The San Diego Regional Water Quality Control Board requires the City to verify the proper function of treatment control BMPs through a Municipal Stormwater Permit. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. The City does maintain the authority to ensure the existence and proper maintenance and function of treatment facilities, and failure to provide adequate information may constitute a violation of the City ordinance as well as property related agreements or covenants.

City of Encinitas
Clean Water Program
505 S. Vulcan Avenue
Encinitas, CA 92024

For questions relating to
Treatment Control BMPs,
please call: 760-633-2787
or e-mail: npdesmail@cityofencinitas.org

Printed on recycled paper

City of Encinitas
Clean Water Program

Operation and Maintenance Guide

for your

Treatment Control Best Management Practices (BMPs)

Thanks for helping us keep our creeks, lagoons, and ocean clean!

What is a Treatment Control BMP?

Treatment Control BMPs are drainage devices, structures, or areas designed to remove pollutants from storm water runoff, or minimize the quantity of runoff ultimately discharged from a development site. These facilities are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. They are also frequently referred to as Stormwater Best Management Practices or BMPs.

The following BMPs are commonly incorporated into development projects throughout the City of Encinitas:

Vegetated Swales / Grassy Swales are open, shallow channels or depressions with vegetation or grass covering the side slopes and bottom that collect, infiltrate, and slowly convey runoff water. Rock lined swales are also commonly used.

Bioretention Areas consist of a planted or vegetated depression area designed to pond during a rain event. It is common to find multiple bioretention areas located throughout a development area.

Infiltration Trenches or **Basins** temporarily store runoff in shallow basins or linear depressions lined with sandy soil or gravel to enhance infiltration of water into the ground.

Storm Drain Filter Inserts are manufactured filters or fabric placed in a storm drain inlet to remove sediment, debris, oil, or other pollutants.

Other BMPs include Rock-Lined Swales, Terraced Swales, Detention Basins, Subsurface Infiltration Systems, Constructed Wetlands, Media Filters, Storm Water Storage Systems, and Vortex Separators.

Please note that each of the BMPs may vary in design size, shape, or materials from the descriptions above. City staff is available to help you determine the location of BMPs located on your property.

For more information on Treatment Control BMPs, refer to the City's Storm Water Best Management Practices Manual, Part II which can be accessed via the Clean Water Program webpage:

http://cwp.ci.encinitas.ca.us

How to locate Treatment Control BMPs on your property:

1. Refer to your approved grading or improvement plans. The plans will show the location of Treatment Control BMPs.
2. Walk your property to look for defined drainage areas such as channels, depressions, or basins.
3. Typical treatment control BMPs may look similar to traditional landscaped areas. Look for areas that have been graded in a concave, swale, or linear shape to capture and infiltrate storm water.
4. Structural treatment control devices such as an inlet filter may be located within a curb inlet or underground. *Please contact the City of Encinitas if you have a structural control located on your property with limited access.

Minimum Operation and Maintenance Requirements:

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

- ☑ On an annual basis, or as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair.
- ☑ Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, etc.
- ☑ Remove any accumulated trash and debris.
- ☑ Take photos of all BMPs on the property.
- ☑ Complete Operation and Maintenance Self-Verification Form and submit the form to the City's Clean Water Program.

Return completed form no later than ***September 30, 2009***

City of Encinitas
Storm Water Treatment Control Best management Practices (BMPs)
Operation and Maintenance Self-Verification Form

Step 1 — Records Verification

Property Address: **Permit No.:**

Responsible Party and/or Property Owner: _____
Responsible Party

_____
Company or HOA (if applicable) Address, City, State, ZIP Phone Number

Treatment Control BMPs on your property:
(Please Indicate the Quantity of Each BMP in the Applicable Box Below)

Quantity	BMP Type
	Grassy / Vegetated Swale
	Rock Lined Swale
	Infiltration Trench / Basin
	Proprietary Treatment Device

Quantity	BMP Type
	Bioretention Area
	Storm Drain Filter Insert(s)
	Detention Basin
	Other (*Describe Below*)

_____

If you require assistance with BMP identification, please contact City Staff at (760) 633-2787

Step 2 — Self-Verification of BMPs

Date(s) that the BMP(s) were self-evaluated: _____

Self Evaluation Results (check the box that applies):

☐ A. All BMPs are maintained and in good working order
☐ B. All or some BMP(s) needed maintenance and/or cleaning
☐ C. Other results (explain):_____

If you checked B or C, please describe maintenance that was performed in order to maintain proper function of BMP(s):

_____

_____

Maintenance Date: _____ *(As applicable, include any maintenance records with your submittal)*

Number of photos taken: _____ **Date the photo(s) were taken:** _____
(Include all photos with your submittal)

Step 3 — Certification

I, _____, hereby certify that the above information is correct to the best of my knowledge.

Signature _____

Date_____

See reverse for Submittal options.

Return completed form no later than ***September 30, 2009***

OPERATION AND MAINTENANCE SELF-VERIFICATION FORM

Step 4 SUBMITTAL OPTIONS

1. **Complete the online version** of the form and submit your photos electronically. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**

2. **Email** electronic copies of completed form, maintenance records, and photos to: **npdesmail@cityofencinitas.org** *Note: Maximum file size for email attachments is* ***5MB***

3. **Mail** completed form, copies of maintenance records, and photos to:

   City of Encinitas
   Clean Water Program
   505 S Vulcan Ave
   Encinitas, CA 92024

4. Any combination of online, mail, and email submission of the necessary documents will also be accepted. For example, you may **mail** the form and maintenance records and **email** photos.

revised 9/2/09

Appendix A-8: FY 2009-10 Treatment Control BMP Self Verification Results and Findings

Permit		Location	Notices Sent	Verification Date	Summary of Results and Findings	City Action
60	G	3275 Poppy Hills Ln	2	10/27/2009	Verification Received	Information Validated
87	G	354 Santa Fe Dr	2	1/20/2010	Unresponsive Owner	City Inspection Conducted
183	G	3234 Olivenhain Farms Rd	2	10/14/2009	Verification Received	Information Validated
437	G	204-252 N El Camino Real	2	11/2/2009	Verification Received	Incompleted Submittal (Invoice Missing)
562	G	1302 Encinitas Blvd	1	9/30/2009	Verification Received	Information Validated
1365	G	310 Hana Ct	2	11/10/2009	Opted for City Inspection	City Inspected
1365	G	311 Hana Ct	2	11/10/2009	Unresponsive Owner	City Inspected
1365	G	314 Hana Ct	2	11/10/2009	Unresponsive Owner	City Inspected
1365	G	315 Hana Ct	2	11/10/2009	Unresponsive Owner	City Inspected
1365	G	318 Hana Ct	1	9/3/2009	Verification Received	Information Validated
1365	G	319 Hana Ct	1	9/16/2009	Verification Received	Incomplete Submittal (Photos Missing)
1365	G	323 Hana Ct	1	9/6/2009	Verification Received	Information Validated
1365	G	327 Hana Ct	1	9/10/2009	Verification Received	Incomplete Submittal (Photos Missing)
5814	G	2108 Oxford Ave	2	9/30/2009	Verification Received	Information Validated
5814	G	2112 Oxford Ave	1	9/23/2009	Verification Received	Information Validated
6402	G	311 Princehouse Ln	2	10/1/2008	Verification Received	Incomplete Submittal (Photos Missing)
7005	G	503 Ocean Bluff Way	1	9/30/2009	Verification Received	Incomplete Submittal (Incorrect BMPs Noted)
7005	G	507 Ocean Bluff Way	2		Unresponsive Owner	Validate Contact Info
7005	G	509 Ocean Bluff Way	2	10/20/2009	Verification Received	Information Validated
7005	G	510 Camino De Orchidia	1	9/17/2009	Verification Received	Incomplete Submittal (Incorrect BMPs Noted)
7005	G	513 Ocean Bluff Way	2		Unresponsive Owner	Validate Contact Info
7005	G	517 Ocean Bluff Way	2	10/29/2009	Verification Received	Incomplete Submittal (Incorrect BMPs Noted)
7005	G	518 Camino De Orchidia	1	9/17/2009	Verification Received	Incomplete Submittal (Incorrect BMPs Noted)
7005	G	521 Ocean Bluff Way	2		Unresponsive Owner	Validate Contact Info
7005	G	525 Ocean Bluff Way	2	10/30/2009	Verification Received	Information Validated
7005	G	526 Camino De Orchidia	2	10/26/2009	Verification Received	Information Validated
7005	G	532 Camino De Orchidia	2		Unresponsive Owner	Validate Contact Info
7005	G	558 Camino De Orchidia	1	9/29/2009	Verification Received	Information Validated
7305	G	131 Princehouse Ln	1	9/28/2009	Verification Received	Information Validated
7780	G	121-153 Rosebay Dr	1	9/8/2009	Verification Received	Information Validated
7852	G	3411 Via Monte Verde	1	9/14/2009	Verification Received	Incomplete Submittal (Photos Missing)
7852	G	3430 Via Monte Verde	2		Unresponsive Owner	Suspected Foreclosure
7852	G	3445 Via Monte Verde	2	10/26/2009	Verification Received	Incomplete Submittal (Incorrect BMPs Noted)
9023	G	427 Bristol Ave	2		Unresponsive Owner	Validate Contact Info. FY 10-11 Inspection
9034	G	1462 Summit Ave	2	6/1/2009	Verification Received	Information Validated
9034	G	1464 Summit Ave	1	9/30/2009	Verification Received	Information Validated

Permit		Location	Notices Sent	Verification Date	Summary of Results and Findings	City Action
9034	G	1470 Summit Ave	2	4/1/2010□	Opted for City Inspection	City Inspected
9134	G	2153 Whisper Wind Ln	1	9/30/2009	Verification Received	Information Validated
9150	G	3113 Camino Del Rancho	1	9/23/2009	Verification Received	Information Validated
9253	G	701 S Vulcan Ave	2	1/26/2010□	Unresponsive Owner	City Inspection Conducted
9253	G	703 S Vulcan Ave	2	1/26/2010□	Unresponsive Owner	City Inspection Conducted
9253	G	715 S Vulcan Ave	2	1/26/2010□	Unresponsive Owner	City Inspection Conducted
9253	G	717 S Vulcan Ave	2	1/26/2010□	Unresponsive Owner	City Inspection Conducted
9253	G	719 S Vulcan Ave	2	1/26/2010□	Unresponsive Owner	City Inspection Conducted
9253	G	721 S Vulcan Ave	2	1/10/2010	Verification Received	Information Validated
9283	G	1440 Hygeia Ave	2	12/10/2009	Verification Received	Information Validated
9283	G	265 Sanford St	2	11/16/2009□	Opted for City Inspection	City Inspected
9283	G	267 Sanford St	2	10/20/2009	Verification Received	Information Validated
9419	G	871 Neptune Ave	1	9/8/2009	Verification Received	Incomplete Submittal (Photos Missing)

□ City Inspection Date

CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Treatment Control BMPs

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

GENERAL INFORMATION

Permit No/Type _____ Property Address _____ Gate Code _____

Inspection Type: ☐ Annual ☐ Complaint Ownership: ☐ HOA ☐ Homeowner ☐ Commercial

Project Type: ☐ Private ☐ City of Encinitas SUSMP Status: ☐ Priority ☐ Standard

Inspection Priority: ☐ High ☐ Medium ☐ Low ☐ Unk Property Access: ☐ Open ☐ Limited ☐ None

TREATMENT CONTROL BMP EVALUATION

BMP Type	Location	Observations	Comments ☐Corrective Actions
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	

Photo(s) Taken: ☐ Yes ☐ No

Additional Comments:

CORRECTIVE ACTIONS

☐ None ☐ Maintenance/Repair ☐ Other _____

_____

_____

_____ Completion Due Date _____

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.140. Failure to comply with minimum Best Management Practices (BMP) Standards may result in further enforcement action by the City of Encinitas.

_____

Inspector (Print) **Signature** **Date**

_____

Responsible Party (Print) **Signature** **Date** **Contact Number**

☐ Responsible Party not present. Copy of inspection report provided to Responsible Party on _____

FOLLOW UP INSPECTION

☐ All Corrective Actions completed ☐ Corrective Actions not complete ☐ Enforcement Action required

_____

Inspector Sign-Off **Date**

COPY DISTRIBUTION White – Responsible Party Yellow – City Inspector Pink – File REVISED 9/1/09

CITY OF ENCINITAS
CLEAN WATER PROGRAM
505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

STORMWATER TREATMENT CONTROL BMP MAINTENANCE AND INSPECTION PROGRAM

Stormwater Treatment Control BMPs are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. Common Treatment Control BMPs include Vegetated Swales, Bioinfiltration Areas, Infiltration Basins or Trenches, and Storm Drain Filter Inserts.

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner, business owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

☑ **On an annual basis prior to the wet season, or more frequently as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair (i.e. overgrown vegetation, restricted water flow, excessive sediment and debris).**

☑ **Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming/mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, removing trash or other debris, etc.**

DEFINITIONS

Treatment Control Best Management Practice (BMP) means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process. Also frequently referred to as Stormwater Best Management Practices or BMPs.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains.

Wet Season means October 1 thru April 30 of each year.

EMC 20.08.140.F. • INSPECTION, MAINTENANCE, REPAIR AND UPGRADING OF BMPS

Treatment Control BMPs must be inspected by the Discharger or responsible party before the start of the wet season and following actual rain events. These BMPs must be maintained so that they continue to function as designed. Treatment BMPs which fail must be repaired as soon as it is safe to do so. If the failure of a structural or nonstructural BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances. All sediment and debris in catch basins must be removed prior to the wet season and disposed of in a manner which prevents it from entering the Storm Water Conveyance System or the Receiving Waters.

EMC 20.08.080 • COMPLIANCE WITH BEST MANAGEMENT PRACTICES

No Discharger shall fail to implement, install, use, or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

EMC 20.08.160.A. • REGULATORY INSPECTIONS

The City Engineer or his designee may inspect the premises of any Discharger at reasonable times and in a reasonable manner to carry out the purposes of this Chapter. If a Discharger refuses to allow entry for an inspection, an inspection warrant shall be obtained prior to inspection.

EMC 20.08.040 • ILLEGAL DISCHARGES

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

Permit		Location	Inspection Date	Inspection Results Findings	City Action
55	G	540 Cornish Dr	1/20/2009	All BMPs in good condition, no maintenance necessary	None necessary
87	G	354 Santa Fe Dr	1/20/2010	Maintenance required	Corrective Actions required. Completed 2/24/10
106	G	3358 Wildflower Valley Dr	11/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
153	I	111 Chesterfield	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
169	G	510 S. El Camino Real	9/4/2009	All BMPs in good condition, no maintenance necessary	None necessary
181	G	3342 Wildflower Valley Dr		No response from owner, inspection deemed low priority, pursuit of inspection halted for FY 09-10	Consider increased enforcement in FY 10-11
276	G	1218-1228 N Coast Hwy 101	9/23/2009	All BMPs in good condition, no maintenance necessary	None necessary
385	G	1555 Crest Dr	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
386	G	3535 Manchester Ave	9/23/2009	All BMPs in good condition, no maintenance necessary	None necessary
414	G	4455 Manchester Ave	9/23/2009	All BMPs in good condition, no maintenance necessary	None necessary
462	G	Moonlight Beach Lofts	10/1/2010	All BMPs in good condition, no maintenance necessary	None necessary
789	G	2011-2089 San Elijo Ave	9/23/2009	All BMPs in good condition, no maintenance necessary	None necessary
1092	EBP	820 Birmingham Dr	2/1/2010	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	310 Hana Ct	11/10/2009	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	311 Hana Ct	11/10/2009	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	314 Hana Ct	11/10/2009	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	315 Hana Ct	11/10/2009	All BMPs in good condition, no maintenance necessary	None necessary
1389	G	Beach St and Requeza St	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
1457	G	200 Saxony Rd	8/31/2009	All BMPs in good condition, no maintenance necessary	None necessary
1519	G	200 Saxony Rd	8/31/2009	Maintenance required	Corrective Actions required. Completed 9/16/09
1563	G	3701 Fortuna Ranch Rd		Non-responsive owner, unable to conduct inspection.	Consider increased enforcement in FY 10-11
6442	G	3616 Manchester Ave	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
6813	G	155 Saxony Rd	9/17/2009	Maintenance required	Corrective Actions required. Comepleted 9/17/09
7054	G	645 Via Cantebria	8/27/2009	All BMPs in good condition, no maintenance necessary	None necessary
7300	G	740 & 760 Garden View Ct	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
7374	G	Cottonwood Creek Park	6/2/2010	All BMPs in good condition, no maintenance necessary	None necessary
7588	G	1200 Garden View Rd	9/23/2009	BMP maintenance verification recevied 4/22/10	
7628	G	199 La Costa Ave	11/25/2009	Maintenance required	Findings forwarded to Development Review Dept
7628	G	207 La Costa Ave	11/16/2009	All BMPs in good condition, no maintenance necessary	None necessary

Permit		Location	Inspection Date	Inspection Results Findings	City Action
7628	G	215 La Costa Ave	11/16/2009	All BMPs in good condition, no maintenance necessary	None necessary
7628	G	223 La Costa Ave	11/25/2009	All BMPs in good condition, no maintenance necessary	None necessary
7628	G	231 La Costa Ave	4/16/2009	All BMPs in good condition, no maintenance necessary	None necessary
7702	G	301 Chopin Way		Non-responsive owner, unable to conduct inspection.	Consider increased enforcement in FY 10-11
7702	G	315 Chopin Way		Non-responsive owner, unable to conduct inspection.	Consider increased enforcement in FY 10-11
7702	G	322 Chopin Way	11/25/2009	All BMPs in good condition, no maintenance necessary	None necessary
7702	G	329 Chopin Way	11/5/2009	All BMPs in good condition, no maintenance necessary	None necessary
7702	G	336 Chopin Way	11/5/2009	All BMPs in good condition, no maintenance necessary	None necessary
7702	G	Chopin Way		Shared BMPs	HOA representative to be contacted FY 10-11
7732	G	175 La Costa Ave	9/22/2009	House in forclosure	Place on inspection list for FY 2010-11
7732	G	183 La Costa Ave	9/22/2009	Needed re-inspection to assess detention basin	Corrective Actions required. Completed 9/22/09
7732	G	191 La Costa Ave	9/22/2009	All BMPs in good condition, no maintenance necessary	None necessary
7771	G	1550 S El Camino Real	9/22/2009	All BMPs in good condition, no maintenance necessary	None necessary
7791	G	1766 N Coast Hwy 101	9/29/2009	Maintenance required	Corrective Actions required. Completed 10/2/09
7828	G	1200 Crestview Dr		Non-responsive owner, unable to conduct inspection	Consider increased enforcement in FY 10-11
7828	G	1207 Crestview Dr	11/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	1208 Crestview Dr	11/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	1216 Crestview Dr	8/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	1219 Crestview Dr	10/27/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	1223 Crestview Dr	8/31/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	1945 Lake Dr	8/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	Crestview Dr	8/17/2009	Shared BMPs	Ask PW to assume maintenance responsibility
7847	G	2300 8th St	9/29/2009	All BMPs in good condition, no maintenance necessary	None necessary
9034	G	1470 Summit Ave	4/1/2010	All BMPs in good condition, no maintenance necessary	None necessary
9034	G	1470 Summit Ave	4/1/2010	All BMPs in good condition, no maintenance necessary	None necessary
9057	G	192 Pacific View Ln	8/27/2009	All BMPs in good condition, no maintenance necessary	None necessary
9071	G	3317 Poppy Hills Ln	11/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
9180	G	1610 Neptune Ave	9/29/2009	All BMPs in good condition, no maintenance necessary	None necessary
9253	G	701 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary
9253	G	703 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary

Permit		Location	Inspection Date	Inspection Results Findings	City Action
9253	G	715 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary
9253	G	717 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary
9253	G	719 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary
9253	G	721 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary
9283	G	265 Sandford St	11/16/2009	All BMPs in good condition, no maintenance necessary	None necessary
9289	G	2914 Lone Jack Rd	9/1/2009	All BMPs in good condition, no maintenance necessary	None necessary
9289	G	2932 Lone Jack Rd	8/25/2009	All BMPs in good condition, no maintenance necessary	None necessary
9289	G	2934 Lone Jack Rd	9/29/2009	1 BMP missing, pool permit pulled, OK. No maintenance necessary	None necessary
9289	G	2944 Lone Jack Rd	8/25/2009	1 BMP missing, pool permit pulled, OK. No maintenance necessary	None necessary
9294	G	477 N El Camino Real	9/30/2009	Maintenance required	Corrective action required. Completed 4/22/10
9301	G	187 Halcyon Rd		Non-responsive owner, unable to conduct inspection	Consider increased enforcement in FY 10-11
9301	G	189 Halcyon Rd		Non-responsive owner, unable to conduct inspection	Consider increased enforcement in FY 10-11
9318	G	1154 Evergreen Dr	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1156 Kava Ct	9/17/2009	No BMPs on property	Remove from inventory
9318	G	1158 Evergreen Dr	2/17/2010	Refused inspection	Self-Verification requested, no response. Consider increased enforcement in FY 10-11
9318	G	1160 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1164 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1165 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1168 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1169 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1172 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1173 Kava Ct	8/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1176 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9367	G	781 Garden View Ct	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
9370	G	406 La Costa Ave	9/22/2009	All BMPs in good condition, no maintenance necessary	None necessary

Application No.:_____

SW

CITY OF ENCINITAS
STORMWATER QUALITY CHECKLIST AND CERTIFICATION

All development projects proposed within the City of Encinitas are required to implement stormwater quality measures in accordance with the *Encinitas Stormwater Manual*. The intent of these requirements is to promote practices and project designs that improve the quality of runoff and protect our local oceans, creeks, and lagoons from the harmful effects of polluted runoff. The *Encinitas Stormwater Manual* meets State-mandated requirements established by Regional Water Quality Control Board Order No. R9-2007-0001 (San Diego Region Municipal Stormwater Permit). For a more detailed description of the City's stormwater requirements, refer to the *Encinitas Stormwater Manual* on the City website (www.CityofEncinitas.org). The manual provides detailed, step-by-step guidelines on how to plan for, design, construct, and maintain stormwater treatment features. Other City stormwater-related resources available on the City's website include:

1. Municipal Code Chapter 20.08: Stormwater Management
2. Municipal Code Chapter 23.24: Grading, Erosion, and Sediment Control

This checklist is designed to guide applicants in the determination of the stormwater quality designation of the project and the design of appropriate stormwater quality features. Projects may be designated as 1) **Priority**, 2) **Standard**, or 3) **Exempt** projects. At a minimum, all projects are required to provide designs and employ practices that minimize the potential for discharge of pollutants into the City's storm drainage system or local receiving waters, as outlined in the *Requirements for All Development Projects* below.

Requirements for ALL Development Projects

All development projects (including Exempt Projects) must include a minimum set of control measures to reduce the discharge of stormwater pollutants to the maximum extent practicable. All projects must include:

- ☑ Implementation of Best Management Practices (BMPs) to control potential pollutant sources.
- ☑ Inclusion of Low Impact Development (LID) features that minimize the water quality impacts of the project.
- ☑ Compliance with requirements for construction-phase controls on sediment and other pollutants.

In addition, all projects must design and install drainage features so that runoff from impervious areas (such as rooftops, parking lots, and driveways) drains through pervious or vegetated areas for treatment before draining to public or private streets or storm drainage systems. No Directly Connected Impervious Area (DCIA) will be allowed on any development project (Encinitas Municipal Code Section 23.24.120). For more information about prohibited DCIA practices and the stormwater runoff requirements for all projects, refer to the Encinitas Stormwater Manual.

Beyond the minimum *Requirements for All Development Projects* listed above, the stormwater quality measures required for a particular project differ based upon the nature of the proposed development. Step 1 (Tables I and II below) is designed to assist you in determining the appropriate stormwater quality designation for your project. An overview of the method for determining the designation is included in the flowchart on the next page.

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FLOWCHART: DETERMINATION OF THE APPROPRIATE STORMWATER QUALITY DESIGNATION FOR DEVELOPMENT PROJECTS

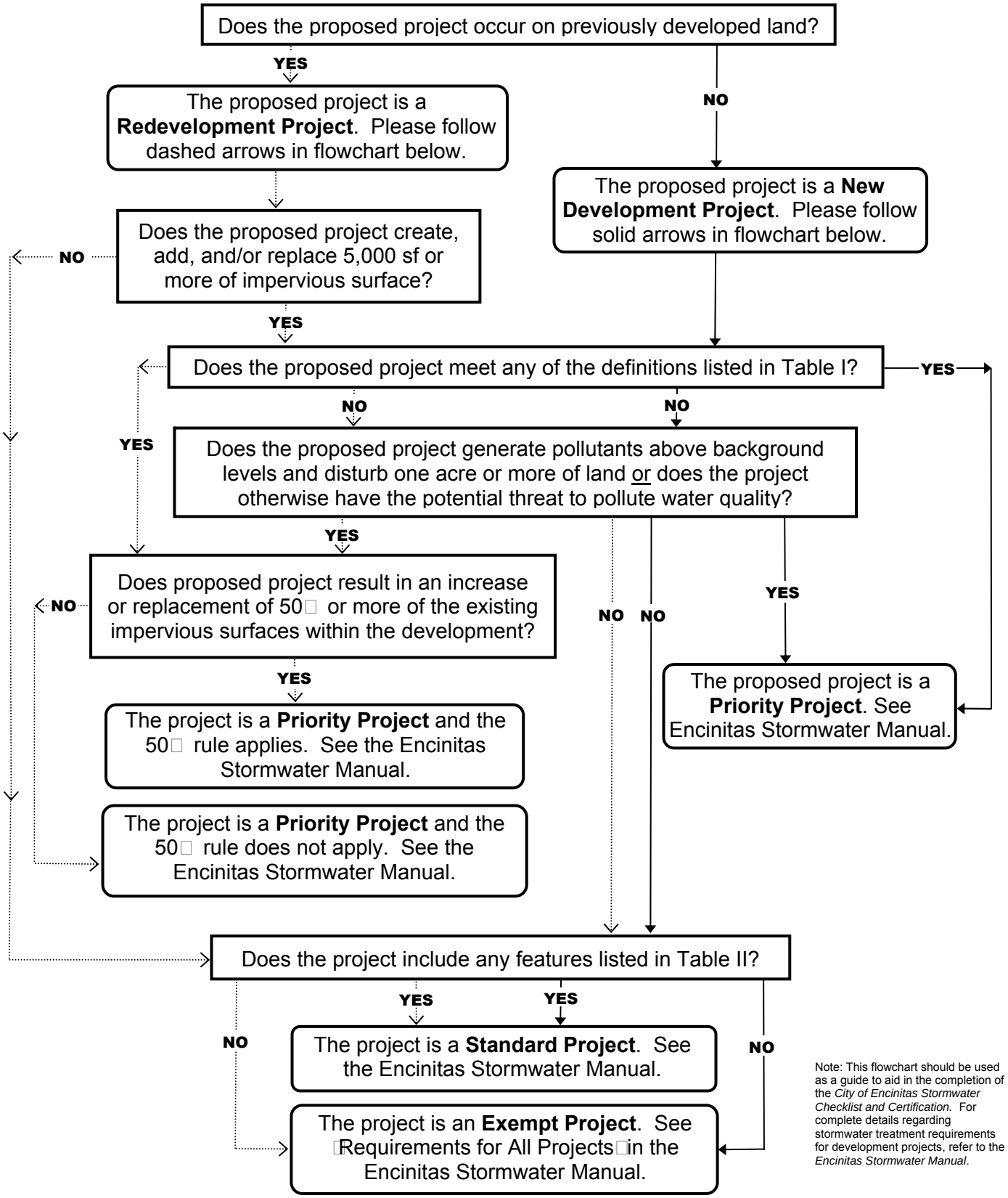

Note: This flowchart should be used as a guide to aid in the completion of the *City of Encinitas Stormwater Checklist and Certification.* For complete details regarding stormwater treatment requirements for development projects, refer to the *Encinitas Stormwater Manual*.

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STEP 1: DETERMINE STORMWATER QUALITY DESIGNATION

Step1 is designed to assist you in determining the appropriate stormwater quality designation for your project.

Step 1A: Determine Development Type and Priority Project Category Applicability

The first step in assessing the appropriate stormwater designation for your project is to determine whether it is a New Development Project or a Significant Redevelopment Project according to the definitions below.

New Development Projects are defined as projects proposing new impervious area on a previously undeveloped parcel.

Significant Redevelopment Projects are projects on previously developed land that create, add, and/or replace 5,000 square feet (s.f.) or more of impervious surface. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include interior remodels, roof or exterior surface replacement; trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair. However, other requirements, including incorporation of appropriate source controls, still apply. If your redevelopment project is exempt, the project is still obligated to meet the *Requirements for All Development Projects*, to the extent practicable. The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the Encinitas Stormwater Manual.

If your project meets one of the two definitions of development listed above, use Table I to determine if your project is a Priority Development Project.

Table I: Determine if Project is a Priority Development Project

Review each category A through J to determine whether the project meets the definition of one or more of the Priority Project categories. If any response in Table I is "Yes", the project is a **Priority Development Project**; *please continue to Step 3.* If all responses are "No", *please continue to Step 2B*.

Does the project meet the definition of one or more of the following categories?

A	**Housing subdivisions of 10 or more dwelling units**. Examples: single-family homes, multi-family homes, condominiums, and apartments.	Yes ❑	No ❑
B	**Commercial" greater than one acre of development**. Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.	Yes ❑	No ❑
C	**Heavy industry" greater than one acre of development**. Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).	Yes ❑	No ❑
D	**Restaurants**. Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.	Yes ❑	No ❑

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Table I (cont.): Does the project meet the definition of one or more of the following categories?			
E	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.	Yes ❑	No ❑
F	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 or more of its naturally occurring condition. Directly adjacent means situated within 200 feet of the ESA. Discharging directly to means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.	Yes ❑	No ❑
G	**Parking lots** 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.	Yes ❑	No ❑
H	**Streets, roads, driveways, highways, and freeways**. Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.	Yes ❑	No ❑
I	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more of development or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.	Yes ❑	No ❑
J	**Automotive repair shops**. A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.	Yes ❑	No ❑

If the answer to one or more of the categories in Table I is Yes, the project is a considered **Priority Development Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria. Proceed to Step 2 and use the Encinitas Stormwater Manual for guidance on meeting these requirements. If all answers in Table I are No, proceed to Step 1B.

Step 1B: Determine Project s Water Quality Sensitivity

Development projects have the potential to contribute pollutants that could threaten local and downstream water quality. Review the following project categories and determine whether your project meets either one of these definitions.

Pollutant Generating Project Which Disturbs One Acre or More of Land. Projects that generate pollutants at levels greater than background levels and disturb one acre or more of land are considered Priority Development Projects. In most cases linear pathway projects that are for infrequent vehicle use (such as emergency or maintenance access) or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they allow runoff to sheet flow to surrounding pervious surfaces.

All Development Projects with Potential Threat to Pollute. Some projects not meeting the definitions listed in Table I may still be designated as Priority Projects if they are found to cause a threat to water quality through excess pollution potential. The City of Encinitas has the discretion to designate a project not listed within Table I as being a Priority Project based on the project s potential impacts to stormwater quality.

If your project meets either of the categories described above, the project is a **Priority Development Project** for stormwater quality and the project will be required to install Source Control measures, LID features, and Stormwater Treatment Facilities. The City Engineer will make the final determination as to whether your project meets one of the definitions. Proceed to Step 2 and use the Encinitas Stormwater Manual for guidance on meeting these requirements.

If your project does not meet one of the two categories listed above, proceed to Step 1C to determine whether your project includes any features that are consistent with the Standard Project

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classification.

Step 2C: Determine Standard Project Feature Applicability

Table II: Determine if Project is a Standard Project To use Table II, review A through J to determine whether the proposed project includes any feature that would qualify the project as a Standard Project. If the response to any feature in A through J below is "Yes", the project is designated as a **Standard Project**. If all responses are "No", the project is an **Exempt Project**. After completion of Table II, *please proceed to Step 2.*			
Does the project include any features qualifying it as a Standard Project?			
A	**New Impervious Surface Areas totaling 500 square feet or more** combined, and including any cumulative development over the five-year period preceding the time of application. Impervious areas include improvements such as rooftops, roads, parking lots, driveways, patios, pool decks, paths, etc.	Yes ❑	No ❑
B	**Reconstruction of any Existing Impervious Surface Areas** such as rooftops, roads, parking lots, driveways, paths, and sidewalks in excess of 500 square feet, including any cumulative development over the five-year period preceding the time of application.	Yes ❑	No ❑
C	**Permanent Structures** within 100 feet of any natural water body.	Yes ❑	No ❑
D	**Trash Storage Areas**.	Yes ❑	No ❑
E	**Loading and/or Unloading Areas** for liquids and/or solid materials.	Yes ❑	No ❑
F	**Vehicle or Equipment Fueling, Washing, and/or Maintenance Areas**.	Yes ❑	No ❑
G	**General NPDES Permit Required** for storm water discharges associated with industrial activities (except for construction permits)	Yes ❑	No ❑
H	**Commercial and/or Industrial Waste** handling or storage, excluding typical office or household waste.	Yes ❑	No ❑
I	**Grading** or ground disturbance proposed during construction.	Yes ❑	No ❑
J	**Storm Drains** including new storm drains as well as alteration to existing storm drains that reduce natural storm water treatment.	Yes ❑	No ❑

If the answer to one or more of the features in Table II is "Yes", the project is a **Standard Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design Features, and some Stormwater Treatment Facilities. Proceed to Step 2 and use Chapter 4 of the Encinitas Stormwater Manual as a general guide when designing stormwater treatment facilities that will meet Standard Development Project requirements.

The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the Encinitas Stormwater Manual. If the answers to all categories in Tables I and II are "No", and the project has been determined by the City of Encinitas not to be a pollutant generating project or have the potential to pollute, the project is an **Exempt Project** for stormwater quality but is still required to meet the *Requirements for All Development Projects*. Please proceed to Step 2.

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STEP 2: DETERMINE PROJECT SUBMITTAL REQUIREMENTS

Requirements for Exempt, Standard, and Priority Projects are discussed in turn below. Engineering Services Department staff are available to answer any specific questions regarding the stormwater quality requirements.

Please check the box adjacent to the project type determined in Step 1.

- ❑ **Exempt Project:** See Step 2A below.
- ❑ **Standard Project**: See Step 2B below.
- ❑ **Priority Project**: See Step 2C below.

Step 2A: Determining Stormwater Quality Measures for an Exempt Project.

Exempt projects are not required to install new Stormwater Treatment Facilities but shall utilize existing on-site landscape and pervious areas to avoid Directly Connected Impervious Areas (DCIA) as outlined in the *Requirements for All Development Projects* section above and in the *Encinitas Stormwater Manual.* In addition, Exempt Projects, like all other projects, are required to comply with requirements for construction-phase controls on sediment and other pollutants. *Please proceed to Step 3.*

Step 2B: Determining Stormwater Quality Measures for a Standard Project.

Standard Projects are obligated to conform to the *Requirements for All Development Projects* outlined in the previous section as well to as integrate some BMP or LID features into the project proposal. BMP and LID features should be designed using Chapter 4 of the *Encinitas Stormwater Manual* as a general guide and then depicted on the plans for the permit. In addition, based on the types of BMPs or LIDs proposed, the City may require that a maintenance agreement be developed. *Please proceed to Step 3.*

Step 2C: Determine Stormwater Quality Measures for a Priority Project.

Priority Projects will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria. Please refer to the ***Encinitas Stormwater Manual*** which includes detailed guidance for the planning and design of acceptable storm water quality features and for developing your project submittal package.

The 50 Rule for Significant Redevelopment Projects Only: The requirements for Priority Redevelopment Projects differ depending upon the amount of redevelopment proposed. If the proposed project results in an increase and/or replacement of 50 or more of the previously existing impervious surfaces onsite, then the entire development must be included in the stormwater treatment design. If less than 50 of the previously existing impervious surfaces will be affected by the proposed project, then only the affected previously existing areas and the newly proposed project must be included in the stormwater treatment design.

After completing the steps outlined in the *Encinitas Stormwater Manual*, Priority Projects shall provide required documentation to the City detailing the project s compliance with Priority Project standards. All documentation shall be reviewed and approved by the City of Encinitas prior to issuance of a grading or improvement permit or prior to the issuance of any discretionary permit, at the direction of the City Engineer. At a minimum, the items below are required for stormwater facility documentation of Priority Projects. The City Engineer may pose additional requirements for certain projects. Upon review of the submittal requirements in Step 2C, *please proceed to Step 3.*

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PRIORITY PROJECT SUBMITTAL MINIMUM REQUIREMENTS

Priority Projects shall provide to the City all of the following documentation detailing the project's compliance.

I) STORMWATER QUALITY SECTION OF DRAINAGE STUDY: A Stormwater Quality discussion shall be included as a separate section within the project drainage study and shall include a **narrative** as well as an **exhibit**. Minimum requirements for the narrative and exhibit are discussed in items (a) and (b) below.

a) STORMWATER QUALITY NARRATIVE: The stormwater quality narrative in the drainage study shall discuss, at a minimum, the items listed below.

1) Tabulation of the square footage of proposed pervious areas, impervious areas, and areas draining to an IMP. Also, a tabulation of the square footage of self-treating areas, self retaining areas, and areas draining to self-retaining areas, as applicable. (Step 3)

2) Calculations of the required sizing for self-retaining and Integrated Management Practice (IMP) areas and calculations documenting the sufficiency of the facilities provided. (Step 3)

3) A table of pollutant sources identified, and the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix A of the Encinitas Stormwater Manual. (Step 4)

b) STORMWATER QUALITY EXHIBIT: The Stormwater Quality Section of the drainage study shall contain one exhibit including all of the items listed below. The Stormwater Quality Exhibit must be in conformance with the Site Plan. The Stormwater Quality Exhibit shall include the Site Plan features screened into the background for ease of confirming agreement between the Exhibit and the Site Plan.

1) Division of entire site into distinct drainage management areas (DMAs), with each drainage management area assigned a unique identifier (e.g., 1, 2, 3 or A, B, C). (Step 1)

2) Square footage and types of surfacing (e.g., roof, landscape, pavement) included in each DMA and the total DMA square footage. (Step 1)

3) Hydrologic soil group and depth to groundwater (as applicable) for each DMA. (Step 1)

4) Each DMA labeled as self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. (Step 2)

5) Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix A and corresponding required source controls. (Step 4)

II) SITE PLAN: At a minimum, the Site Plan shall include the items listed below. A copy of the Site Plan shall be included in the Stormwater Quality Section of the drainage study.

1) Existing and proposed drainage network and connections to drainage off-site. (Step 3)

2) Depiction of site design characteristics that minimize disturbance as well as building features and pavement selections that minimize the proposed imperviousness of the site. (Step 3)

3) Proposed design of each IMP feature and any Permanent Source Control features. (Step 3)

4) Title sheet standard notes for each of pollutant sources identified specifying the source control measure(s) to be used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix. (Step 4)

5) Existing natural hydrologic features such as depressions, watercourses, floodplains, relatively undisturbed areas as well as significant natural resources. (Step 1)

6) The City of Encinitas Standard Storm Water Quality Notes shall be added to the site plan.

7) Certification by a civil engineer, architect, or landscape architect on the title sheet. (Step 6)

III) MAINTENANCE AGREEMENT: In order to provide for the perpetual maintenance of the stormwater treatment facilities, the City will prepare for the property owner a Maintenance Agreement that shall record against the property. The items listed below shall be provided to the City for inclusion in the Maintenance Agreement.

1) Discussion of general maintenance needs for infiltration, treatment, and flow-control facilities. (Step 5)

2) The means by which facility maintenance will be financed and maintained into perpetuity. (Step 5)

3) Statement accepting responsibility for interim operation and maintenance of facilities. (Step 5)

4) Plat and legal description of the property.

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STEP 3: STORMWATER PROJECT CERTIFICATION

The property owner of any project (Priority, Standard, or Exempt) shall complete the following Owner's Certification. In addition, any agent completing this form on behalf of a client shall complete the Agent's Certification below.

Owner's Certification:

I hereby acknowledge that my project is subject to the stormwater quality regulations of the City of Encinitas and certify that my project will provide satisfactory stormwater quality measures both during the construction process and afterwards.

If my project is designated as a Priority or a Standard Project, I further acknowledge my understanding that the permanent stormwater treatment features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____ _____

Owner 1 Signature Date Owner 2 Signature Date

_____ _____

Printed Name of Owner 1 Printed Name of Owner 2

Agent's Certification:

I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____

Agent Signature Date

_____

Printed Name of Agent

_____

Working Capacity of Agent (architect, engineer)

_____

Company Name Place Professional Seal Above

Appendix B

Construction

B-1	Construction Inventory
B-2	Prioritized Construction Sites Map FY 2009-10
B-3	Flow Chart for Inspection Frequencies
B-4	Construction Inspection Form
B-5	Erosion Control Letter
B-6	Construction Enforcement Actions

Permit #		Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2009-June 30, 2010
54	GI		BIRMINGHAM & MACKINNON	Biannual	3	2	0	2
61	SI	801	ORPHEUS FIRE STA #3	Biweekly	0	1	0	1
103	SG	1079	VULCAN	Biannual	22	2	0	2
184	SG	2271	MONTGOMERY AVE	Biannual	14	1	0	1
185	SG	1423	RAINBOW RIDGE	Biannual	0	1	0	1
187	GI	1060	URANIA AVE	Monthly	6	3	0	3
215	GI	424	BRIGHTON AVE	Biannual	30	3	0	3
245	GI	3351	LILAC SUMMIT	Monthly	25	7	0	7
266	G	735	DEL RIO	Biannual	2	0	0	0
278	GI	3403	BUMANN RD.	Biweekly	2	1	0	1
306	GI	2351	SAN ELIJO	Monthly	15	4	0	4
325	GI		LONE JACK RD	Biweekly	2	1	0	1
366	GI	742-744	DEWITT	Biannual	2	2	0	2
369	GI	1415	RAINBOW RIDGE	Biweekly	0	1	0	1
372	GI	1657	N. VULCAN AVE.	Monthly	2	2	0	2
388	GI	1435	LAKE DR.	Monthly	2	2	0	2
419	SG	1972	CREST	Monthly	2	0	0	0
423	GI	399	HILLCREST DRIVE	Biannual	2	1	0	1
465	GI	1045	VIA DI FELICITA	Monthly	6	1	0	1
482	GI	1864	CREST DRIVE	Monthly	30	7	0	7
483	GI	540	LA COSTA	Biweekly	1	1	0	1
497	GI	681	SECOND STREET	Biannual	12	0	0	0
570	GI	489	LATIGO ROW	Monthly	0	1	0	1
578	GI	1531	SAN ELIJO AVE	Biannual	0	0	0	0
583	SG	2898	LONE JACK ROAD	Biweekly	0	1	0	1
590	GI	2126	WOODWIND Dr.	Monthly	2	1	0	1
653	SG	860	NARDO ROAD	Biannual	22	1	0	1
674	GI	3220	BELLA COLLINA	Biweekly	7	4	0	4
675	GI	1719	SAN ELIJO	Biannual	30	2	0	2
679	SG	1627	CAUDOR	Biannual	1	1	0	1
692	GI	1435	RAINBOW RIDGE	Biweekly	0	1	0	1
698	GI	1075	CORNISH DRIVE	Biannual	1	1	0	1
704	GI	230	QUAIL GARDENS	Biweekly	3	2	0	2
713	GI	3003	WILDFLOWER DR	Biweekly	30	15	0	15
716	GI	662	ENCINITAS BLVD. @ QUAIL GARDENS	Biweekly	0	1	0	1
718	GI	687	S. COAST HIGHWAY 101	Biweekly	30	15	0	15
765	GI	2234	ENCINITAS BLVD	Monthly	0	1	0	1
767	GI	911	CORNISH DRIVE	Biannual	10	1	0	1
857	SG	1252	RUBENSTEIN	Biannual	6	0	0	0
859	GI	721	Dewitt Ave	Biannual	30	3	0	3
877	GI	816	WOOD DR.	Biannual	1	2	0	2
883	GI	1058-1076	HYMETTUS	Monthly	30	7	0	7
886	GI	1084 & 1086	NEPTUNE AVE	Monthly	2	1	0	1
905	GI	1439	NEPTUNE AVE	Biannual	30	3	0	3
912	GI	416	Rancho Santa Fe Rd	Monthly	1	3	0	3
926	SG	234	RANCHO SANTA FE RD.	Monthly	11	3	0	3
943	GI	211	SAXONY RD	Monthly	9	2	0	2
944	GI	1501	NEPTUNE AVE	Biannual	8	2	0	2
952	GI	1866	SHERIDAN	Biannual	10	0	0	0
983	GI	1320	ENCINITAS BLVD	Monthly	8	2	0	2
1000	GI	272	SEEMAN DR	Biannual	9	2	0	2
1001	GI	342	HILLCREST DRIVE	Biannual	30	2	0	2

Permit #		Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2009-June 30, 2010
1010	GI	1865	N. Vulcan Ave	Biannual	25	1	0	1
1015	SG	3255	FORTUNA RANCH ROAD	Biannual	2	0	0	0
1469	GI	1555	BELLA VISTA	Monthly	30	7	0	7
1533	GI	1098	HYMETTUS	Biannual	0	0	0	0
7601	GI	1255	BIRMINGHAM	Monthly	2	1	0	1
7800	GI	3542	JASMINE CREST	Monthly	7	2	0	2
7893	GI	600	Christine Place (PIRAEUS & PLATO)	Monthly	1	2	0	2
9103	GI	115	VERDI AVE	Biannual	30	1	0	1
9106	GI	Vulcan Townhomes	NORTH VULCAN AVE	Monthly	0	1	0	1
9117	GI	236/268	ANDREW	Monthly	1	1	0	1
9177	GI	740	CORNISH	Biannual	0	0	0	0
9262	GI	800	BLK BRACERO RD	Monthly	1	1	0	1
9278	GI		OFF LONE HILL LN	Monthly	9	2	0	2
9303	GI	875	BRITTANY	Monthly	1	1	0	1
9336	GI	290	ANDREW	Monthly	2	1	0	1
9481	GI	500	QUAIL GARDENS	Biweekly	30	18	0	18
9482	GI	1635	GASCONY	Biannual	2	1	0	1
9561	GI	303	SANTA FE DR	Biannual	30	2	0	2
9576	GI	843	SAN DIEGUITO DRIVE	Biannual	1	1	0	1
10004	SG	1413	EOLUS	Biannual	15	1	0	1
10015	GI	1309-1311	CORNISH DRIVE	Biannual	20	2	0	2
10041	GI	825	Arden	Biannual	30	2	0	2
10042	GI	1450	BLUE HERON DR	Monthly	12	3	0	3
10045	GI	1660	Brahms	Biannual	30	3	0	3
10046	SG	3363	Wildflower Valley Dr	Biannual	30	2	0	2
10056	SG	2898	LONE JACK RD	Biannual	0	1	0	1
10068	GI	125	Mozart	Biannual	30	3	0	3
10071	GI	975	EOLUS	Biannual	26	2	0	2
10087	GI	237	Seeman Dr	Monthly	23	7	0	7
10090	GI	3183	Narcissus Summit	Biweekly	30	15	0	15
10115	GI	350	COLE RANCH RD	Biannual	20	2	0	2
10116	GI	2209	SERENO VIEW LANE	Biannual	22	2	0	2
10150	II	684	Requeza Street	Biannual	2	2	0	2
10172	GI	221	FLORITA STREET	Biannual	27	3	0	3
10187	GI	1603	Crest Dr	Biannual	27	1	0	1
10205	GI	3055	BROOKSIDE LANE	Monthly	20	3	0	3
10210	GI	133	W. Jason	Biannual	15	0	0	0
10211	GI	211	SAXONY RD	Monthly	12	3	1	4
10225	SG	2207	SERENO VIEW LN	Monthly	1	2	0	2
10238	SG	2211	MONTGOMERY AVE	Biannual	19	0	0	0
10252	SG	1516	Calle Pensamientos	Biannual	23	2	0	2
10305	GI	354	SANTA FE DR	Monthly	11	3	0	3
10315	GI	794	NEPTUNE AVE	Biannual	24	2	0	2
10323	GI	950	SAXONY RD	Monthly	15	3	0	3
10372	SG	304	LA COSTA AVE	Biannual	2	1	0	1
10390	GI	1015	VALLEYSIDE	Biannual	0	0	2	2
10413	GI	747	DORIS DR	Biannual	7	2	0	2
10437	GI	1491	NEPTUNE AVE	Biannual	30	3	0	3
10492	GI		SOMMERSET/SANTA FE	Monthly	10	1	1	2
10498	CN		PARKING LOT B	Biannual	0	0	1	1
			FY 09-10 TOTAL INSPECTIONS		**NA**	**242**	**5**	**247**

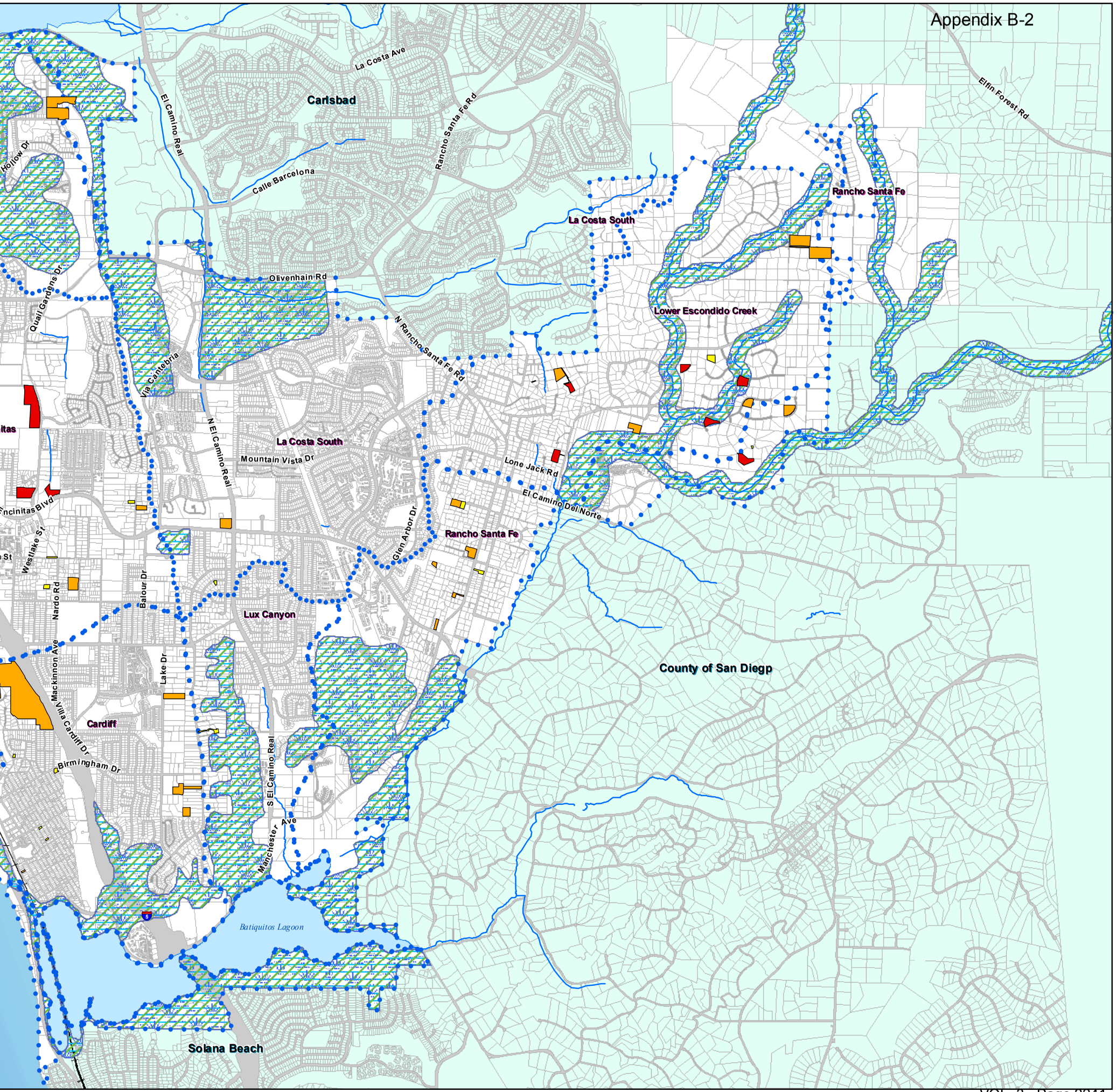
Carlsbad
La Costa Ave
El Camino Real
Rancho Santa Fe Rd
Elfin Forest Rd
Calle Barcelona
Rancho Santa Fe
La Costa South
Olivenhain Rd
Quail Gardens Dr
Lower Escondido Creek
N Rancho Santa Fe Rd
Via Cantebria
N El Camino Real
La Costa South
Mountain Vista Dr
Lone Jack Rd
El Camino Del Norte
Encinitas Blvd
Glen Arbor Dr
Rancho Santa Fe
Westlake St
Nardo Rd
Balour Dr
Lux Canyon
Mackinnon Ave
Lake Dr
County of San Diegp
Cardiff
Villa Cardiff Dr
Birmingham Dr
S El Camino Real
Manchester Ave
Batiquitos Lagoon
Solana Beach

GIS Script Process for Determining Construction Project Inspection Frequencies

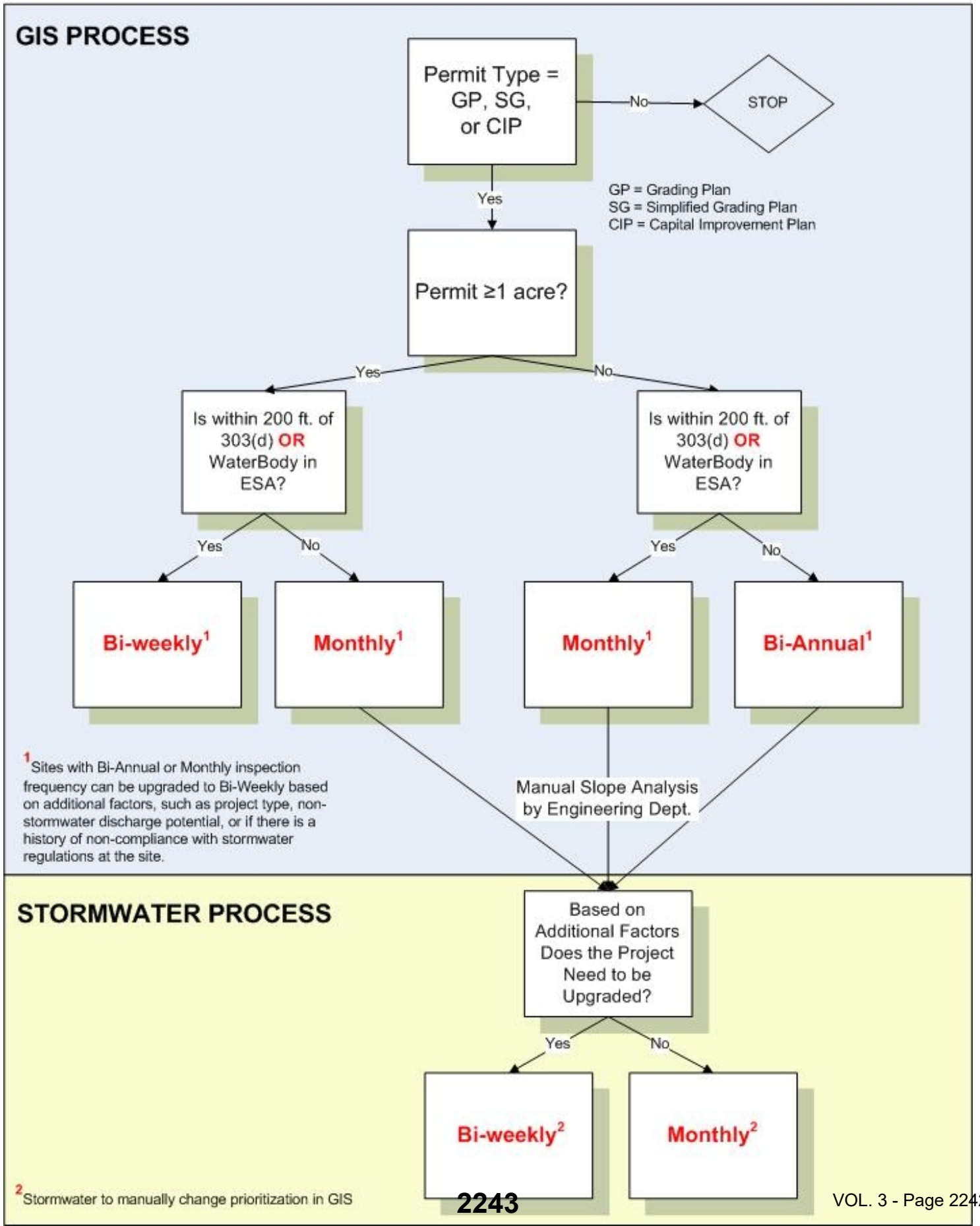

CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Construction Activities

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

Property Address: _____ Inspection Date: _____

Contact Person: _____ Permit No: _____

Phone Number: _____ Project Size: _____

Site Status: ❒ Active ❒ Inactive ❒ First Inspection ❒ Final Sign-Off Date ___/___/___

Inspection Frequency: ❒ Bi-Weekly ❒ Monthly ❒ Bi-Annual ❒ Post-Rain Event

State General Construction Permit? ❒ Yes ❒ No WDID _____

Is Project SWPPP on Site? ❒ Yes ❒ No SWPPP Maintenance Required? ❒ Yes ❒ No

MINIMUM BEST MANAGEMENT PRACTICE (BMP) REQUIREMENTS		BMP INSTALLATION REQUIRED	BMP REQUIRES MAINTENANCE	OTHER CORRECTIVE ACTIONS REQUIRED
A. Erosion Control BMPs				
1	Slope ☐Soil Stabilization			
2	Silt Fencing			
3	Check Dams ☐Rip Rap			
4	Fiber Rolls			
5	Permanent Landscaping			
6	Preserving Existing Vegetation			
7	Diversion Channel for Run-On			
8	Other:			
B. Sediment Control BMPs				
1	Storm Drain Inlet Protection			
2	Detention Basin ☐Desilting Basin			
3	Perimeter Protection			
4	Stabilized Construction Entrance ☐Exit			
5	Other:			
C. Materials Management BMPs				
1	Stockpile Management			
2	Material Washout Area			
3	Equipment Storage			
4	Trash, Litter, Debris Management			
5	Designated Washout Area(s)			
6	Sanitary Waste Area Management			
7	Fuel ☐Chemical Storage			
8	Other:			

Corrective Actions: ❒ Correct Work (*See Comments*) ❒ No Corrective Actions Required

❒ Referred to the Clean Water Program ❒ Stop Work/NOV

Comments:_____

_____

_____

_____

Corrective Actions identified above must be addressed, to the satisfaction of the City Inspector, within _____ days from the date above OR prior to the next predicted rain event. Failure to comply by this date may result in further enforcement action by the City of Encinitas.

Inspector (Signature) _____ Date ___/___/___

Received By (Signature) _____ Date ___/___/___

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City of Encinitas

September 17, 2009

RE: **SEDIMENT AND EROSION CONTROL**

City of Encinitas Permit Holder:

Please be advised that starting October 1, 2009 and continuing through April 30, 2010, the City will enter into the official wet season as defined by the State Water Resources Control Board. As such, all construction projects (active or inactive) are required to implement sediment and erosion control Best Management Practices (BMPs) to prevent the discharge of sediment and non-stormwater into the stormwater conveyance system and local water bodies.

Attached please find a letter issued by the San Diego Regional Water Quality Control Board (RWQCB) which identifies the need for rainy season preparation through the installation of appropriate sediment and erosion control measures and general site cleanup at all construction sites. Further note the intent of this regulatory agency to enhance monitoring and evaluation of construction activities throughout the San Diego Region, including the City of Encinitas.

Ultimately, for permit holders within the City of Encinitas, the wet season brings with it a responsibility for erosion and sediment control as outlined in sections 23.24.370, 23.24.380 and 23.24.390 of the City of Encinitas' Municipal Code. For your reference, a copy of these municipal code sections has been enclosed with this letter. The full text of the Municipal Code can also be accessed on the City's website at http://www.ci.encinitas.ca.us/Government/PublicD/MunicipalCode/

Please feel free to address any questions regarding this work to your City of Encinitas Engineering Inspector.

Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

Cc: City of Encinitas Engineering Inspectors

Encl:

1. North County Storm Water Program Construction Brochure
2. RWQCB letter to all San Diego County Copermittees on August 24, 2009
3. City of Encinitas Municipal Codes Sections 23.24.370, 23.24.380 and 23.24.390

505 South Vulcan Avenue, Encinitas, CA 92024, TEL: 760/633-2600 FAX: 760/633-2627 TDD: 760/633-2700

Date	Site Address	Violation	Correct Work	Stop Work/ NOV	Citation- Warning	Citation- Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
10/19/09	825 Arden Dr	BMP Installation and Maintenance Required	1						1	
12/3/09	424 Brighton Ave	BMP Installation and Maintenance Required	1						1	
3/4/10	424 Brighton Ave	BMP Maintenance Required	1						1	
3/30/10	3055 Brookside Lane	BMP Installation Required	1						1	
4/21/10	3055 Brookside Lane	BMP Installation Required	1						1	
10/6/09	1516 Calle Pensamientos	BMP Installation Required	1						1	
10/15/09	687 S Coast Hwy 101	BMP Installation Required	1						1	
11/19/09	687 S Coast Hwy 101	BMP Maintenance Required	1						1	
12/9/09	687 S Coast Hwy 101	BMP Maintenance Required	1						1	
1/7/10	687 S Coast Hwy 101	BMP Maintenance Required	1						1	
3/31/10	687 S Coast Hwy 101	BMP Maintenance Required	1						1	
11/6/09	1603 Crest Dr	BMP Installation Required	1						1	
10/6/09	721 Dewitt Ave	BMP Maintenance Required	1						1	
10/6/09	1320 Encinitas Blvd	BMP Installation Required	1						1	
12/7/09	975 Eolus Ave	BMP Installation and Maintenance Required	1						1	
10/13/09	1635 Gascony Rd	BMP Maintenance Required	1						1	
10/14/09	1058-1076 Hymettus	BMP Installation Required	1						1	
11/24/09	1058-1076 Hymettus	BMP Maintenance Required	1						1	
1/21/10	1058-1076 Hymettus	BMP Installation and Maintenance Required	1			1	CW012110		1	
10/26/09	3351 Lilac Summit	BMP Installation Required	1						1	
4/20/10	3351 Lilac Summit	BMP Installation Required	1						1	
4/12/10	125 Mozart	BMP Installation Required	1						1	
10/12/09	3183 Narcissus Summit	BMP Installation Required	1						1	
1/7/10	3183 Narcissus Summit	BMP Maintenance Required	1						1	
3/17/10	3183 Narcissus Summit	BMP Maintenance Required	1						1	
4/27/10	3183 Narcissus Summit	BMP Installation Required	1						1	
10/14/09	1084 & 1086 Neptune Ave	BMP Installation Required	1						1	
5/26/10	Parking Lot B	BMP Installation Required	1						1	
10/13/09	234 Rancho Santa Fe Rd	BMP Installation and Maintenance Required	1						1	
12/15/09	234 Rancho Santa Fe Rd	Permanent Landscaping BMP Required	1						1	
10/26/09	2351 San Elijo Ave	BMP Installation Required	1						1	
11/6/09	303 Santa Fe Dr	BMP Installation Required	1						1	
3/31/10	354 Santa Fe Dr	BMP Installation Required	1						1	
4/20/10	354 Santa Fe Dr	BMP Installation Required	1						1	
10/26/09	237 Seeman Dr	BMP Installation Required	1						1	
10/6/09	2207 Sereno View Lane	BMP Installation Required	1						1	
10/13/09	1045 Via di Felicita	BMP Installation and Maintenance Required	1						1	
10/14/09	3003 Wildflower Dr	BMP Installation and Maintenance Required	1						1	
10/29/09	3003 Wildflower Dr	BMP Installation and Maintenance Required	1						1	
3/31/10	3003 Wildflower Dr	BMP Installation Required	1						1	
		Totals	**40**	**0**	**0**	**1**	**NA**	**0**	**40**	**0**

Appendix B-6 Construction Enforcement Actions

Appendix C

Municipal

C-1 Municipal Inventory

C-2 Municipal Activities Report

C-3 Municipal BMP Map

C-4 Special Events Permit P2 Questionnaire

C-5 Approved Special Events in FY 09-10

C-6 Routine Inspections Summary

	Facility Name	Address	Land Use/Activities	Tributary to a 303(d) Impaired Water Body	Inspection Priority	Sub-basin
1	"A" TANK SITE	601 SANTA FE DR	Tank storage site/municipal yard	NOT TRIBUTARY	High Priority	Encinitas
2	BEACON'S BEACH	948 NEPTUNE AVE	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
3	CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Administrative offices/municipal yard/vehicle maintenance/materials storage	NOT TRIBUTARY	High Priority	Encinitas
4	CARDIFF SPORTS PARK	1661 LAKE DR	Recreational facilities/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
5	CARDIFF SPORTS PARK EXPANSION	1623 LAKE DR	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
6	COTTONWOOD CREEK PARK	95 N. VULCAN AVE	Park/landscaped areas/parking lot	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
7	ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DR	Golf course	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
8	ENCINITAS VIEWPOINT PARK	56 E D STREET	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
9	GLEN PARK	2149 ORINDA DR	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
10	GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
11	H STREET VIEWPOINT	498 H STREET	Vista point	NOT TRIBUTARY	High Priority	Encinitas
12	HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
13	J STREET VIEWPOINT	398 J STREET	Vista point/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
14	LAS VERDES PARK	1390 PASEO DE LAS VERDES	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
15	LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	La Costa South
16	LEUCADIA OAKS PARK	1511 N. VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
17	LEUCADIA ROADSIDE PARK	860 N COAST HIGHWAY 101	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
18	LITTLE OAKS EQUESTRIAN PARK	2879 LONE JACK RD	Park/horse corral/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek
19	MILDRED MACPHERSON PARK	1045 S VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
20	MOONLIGHT BEACH	400 B STREET	Beach access/park/landscaped area/parking lot	TRIBUTARY TO PACIFIC OCEAN SHORELINE	High Priority	Encinitas
21	MS4	CITY WIDE	MS4	TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
22	OAKCREST PARK	1219 ENCINITAS BLVD	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
23	ORPHEUS PARK	482 ORPHEUS AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
24	PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
25	REQUEZA STREET FACILITY	397 REQUEZA ST	Municipal yard/sediment/materials storage	NOT TRIBUTARY	High Priority	Encinitas
26	ROADS, STREETS AND HIGHWAYS	CITY WIDE		TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
27	WASTEWATER COLLECTIONS DIVISION MUNICIPAL YARD	2695 MANCHESTER AVE	Administrative offices/Municipal yard	NOT TRIBUTARY	High Priority	Cardiff
28	SCOTT VALLEY PARK	1602 WILLOWHAVEN	Park/landscaped areas	TRIBUTARY TO ENCINITAS CREEK	High Priority	La Costa South
29	SPECIAL EVENTS	CITY WIDE	Recreational facilities, parks, landscaped areas, roads, streets and highways	MAY BE TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
30	SUN VISTA PARK	2011 AVENIDA LA POSTA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
31	SWAMI'S BEACH	1298 S COAST HIGHWAY 101	Beach access/parking lot	NOT TRIBUTARY	High Priority	Encinitas
32	WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek/Ranch Santa Fe
33	CARDIFF PUMP STATION	2690 MANCHESTER AVE	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
34	CIVIC CENTER	505 S VULCAN AVE.	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	Encinitas
35	ENCINITAS COMMUNITY & SENIOR CENTER	1140 OAKCREST PARK DR	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	La Costa South
36	D STREET BEACH	450 D STREET	Beach access and vista point	TRIBUTARY TO PACIFIC OCEAN SHORELINE	Low Priority	Encinitas
37	FIRE STATION #1	415 2ND ST	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
38	FIRE STATION #2	1867 MACKINNON	Fire station	NOT TRIBUTARY	Low Priority	Cardiff
39	FIRE STATION #3	801 ORPHEUS AVE	Fire station	NOT TRIBUTARY	Low Priority	Leucadia
40	FIRE STATION #4	2011 VILLAGE PARK	Fire station	NOT TRIBUTARY	Low Priority	La Costa South
41	FIRE STATION #5	540 BALOUR DR	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
42	HALL PROPERTY	425 SANTA FE DR.	Undeveloped park site	NOT TRIBUTARY	Low Priority	Cardiff
43	HIGHWAY 101 PUMP STATION	S. COAST HIGHWAY 101	Pump station	NOT TRIBUTARY	Low Priority	Cardff
44	I STREET VIEWPOINT	498 I STREET	Vista point	NOT TRIBUTARY	Low Priority	Encinitas
45	INDIAN HEAD CANYON	SAXONY ROAD/QUAIL HOLLOW DR	Undeveloped park site	NOT TRIBUTARY	Low Priority	Leucadia
46	MOONLIGHT BEACH PUMP STATION	305 THIRD ST.	Pump station	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas
47	OLIVENHAIN PUMP STATION	MANCHESTER/I-5	Pump Station	NOT TRIBUTARY	Low Priority	Cardiff
48	PHOEBE PUMP STATION	1200 block of N. Coast Highway 101	Pump Station	NOT TRIBUTARY	Low Priority	Leucadia
49	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
50	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	Encinitas
51	SAN DIEGUITO WATER DISTRICT*		Water recycling reservoir	NOT TRIBUTARY	Low Priority	Encinitas
52	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Encinitas
53	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Cardiff
54	SWAMIS BLUFFS PARCELS	1400 S. COAST HIGHWAY 101	Undeveloped site	NOT TRIBUTARY	Low Priority	Encinitas
55	STANDARD PACIFIC PARK	OLYMPUS / PIRAEUS	Undeveloped site	NOT TRIBUTARY	Low Priority	Leucadia
56	STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach access and vista point	NOT TRIBUTARY	Low Priority	Leucadia
57	UV TREATMENT FACILITY	305 THIRD ST.	UV Treatment Facility	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas

***Note: The San Dieguito Water District's facility addresses have been omitted for security purposes.**

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2009-10 Annual Result
1.	Report on updates to the municipal inventory and prioritization (J.3.a.(3)(c)i).	July 1, 2009-June 30, 2010		See Appendix C-1
2.	Confirmation that the designated BMPs were implemented, or required to be implemented for: municipal areas and activities (J.3.a.(3)(c)ii).	July 1, 2009-June 30, 2010		See Sections 4.2.3, 4.3.3, 4.4.3, 4.5.3 and 4.6.3
3.	Confirmation that the designated BMPs were implemented, or required to be implemented for: special events (J.3.a.(3)(c)ii).	July 1, 2009-June 30, 2010		See Section 4.7.3
4.	A description of inspections and maintenance conducted for municipal treatment controls-Municipal Filter Inserts (J.3.a.(3)(c)iii).	July 1, 2009-June 30, 2010		See Section 4.4.4.1
5.	A description of inspections and maintenance conducted for municipal treatment controls-UV Treatment Facility (J.3.a.(3)(c)iii).	July 1, 2009-June 30, 2010		See Section 4.4.4.1
6.	Identification of the total number of catch basins and inlets (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		1,591
7.	Identification of the number of catch basins and inlets **inspected** (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		1,659
8.	Identification of the number of catch basins and inlets found with accumulated waste exceeding 33% of design capacity ((J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010	All inlets and catch basins within the City are inspected on an annual basis, which is sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris.	0
9.	Identification of the number of catch basins and inlets **cleaned** (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		1659
10.	Identification of total distance (miles) of the MS4 (J.3.a.(3)(c)v).	July 1, 2009-June 30, 2010		61 miles of pipe
11.	Identification of distance of the MS4 **inspected** (J.3.a.(3)(c)v)**.**	July 1, 2009-June 30, 2010		57.6 miles of pipe
12.	Idenitification of distance of the MS4 found with accumulated waste exceeding cleaning criteria (J.3.a.(3)(c)v).	July 1, 2009-June 30, 2010		0
13.	Identification of distance of the MS4 **cleaned** (J.3.a.(3)(c)v)**.**	July 1, 2009-June 30, 2010		4.8 miles of pipe
14.	Identification of total distance (miles) of open channels (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		2.25 miles

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2009-10 Annual Result
15.	Identification of distance of open channels **inspected** (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		4.5 miles
16.	Identification of distance of open channels found with anthropogenic litter (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		0.4
17.	Identification of distance of open channels **cleaned** (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		.41 miles
18.	Amount of waste and litter (tons) removed from catch basins (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		45.6 tons
19.	Amount of waste and litter (tons) removed from inlets (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		2.99 tons
20.	Amount of waste and litter (tons) removed from the MS4 (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		357 tons
21.	Amount of waste and litter (tons) removed from the open channels (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		307.7 tons
22.	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification of the finding (J.3.a.(3)(c)viii).	July 1, 2009-June 30, 2010		None
23.	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented or required to be implemented for municipal areas and activities (J.3.a.(3)(c)ix).	July 1, 2009-June 30, 2010		See Section 4.3.3.1
24.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating the **highest** volumes of trash and/or debris (J.3.a.(3)(c)x).	July 1, 2009-June 30, 2010		41 curb miles
25.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)x).	July 1, 2009-June 30, 2010	See Section 4.2.4	Weekly

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2009-10 Annual Result
26.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **moderate** volumes of trash and/or debris (J.3.a.(3)(c)xi).	July 1, 2009-June 30, 2010		60.8 curb miles
27.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xi).	July 1, 2009-June 30, 2010	See Section 4.2.4	Twice a month
28.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **low** volumes of trash and/or debris (J.3.a.(3)(c)xii).	July 1, 2009-June 30, 2010		241 curb miles
29.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xii).	July 1, 2009-June 30, 2010	See Section 4.2.4	Monthly
30.	Identification of the total distance of curb-miles swept (J.3.a.(3)(c)xiii).	July 1, 2009-June 30, 2010		9,199 miles
31.	Identification of the number of municipal parking lots (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010		11
32.	Identification of the number of municipal parking lots swept (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010		11
33.	Identification of the frequency of sweeping (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010	All beach parking lots are swept once per week April through September and once per month October through March.	See Section 4.2.4
34.	Amount of material (tons) collected from street and parking lot sweeping (J.3.a.(3)(c)xv).	July 1, 2009-June 30, 2010		1,301 tons
35.	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 (J.3.a.(3)(c)xvi).	July 1, 2009-June 30, 2010		See Section 4.5.4.1
36.	Identification of the number of fixed municipal sites requiring inspections (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010	Refer to Appendix C-1 list of all High Priority Municipal Facilities	28
37.	Identification of the number of sites inspected (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010		28
38.	Identification of the frequency of inspections (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010		Annual

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2009-10 Annual Result
39.	A description of the general results of the inspections (J.3.a.(3)(c)xviii).	July 1, 2009-June 30, 2010		See Appendix C-6
40.	Confirmation that the inspections conducted addressed all the required inspection steps and follow-ups to determine full compliance (J.3.a.(3)(c)xix).	July 1, 2009-June 30, 2010	All inspections conducted meet BMP requirements	See Appendix C-6
41.	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken (J.3.a.(3)(c)xx).	July 1, 2009-June 30, 2010	In FY 2009-10, there were 3 corrective actions and follow-up inspections as a result of the routine annual inspections at all high priority municipal facilities. Details of the corrective actions for all routine municipal inspections can be found in Appendix C-6. The Clean Water Program hotline also received a total of 14 municipal complaints during the reportine period. Six of those complaints were requests for info and were referred to other departments/organization. A total of 8 complaints were investigated which resulted in 5 violations, 0 NOVs, 0 citations, 4 education actions and 4 follow-up inspections.	0
42.	A description of notable activities conducted to manage urban runoff from municipal areas and activities (J.3.a.(3)(c)xxi).	July 1, 2009-June 30, 2010		See Sections 4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4 and 4.7.4

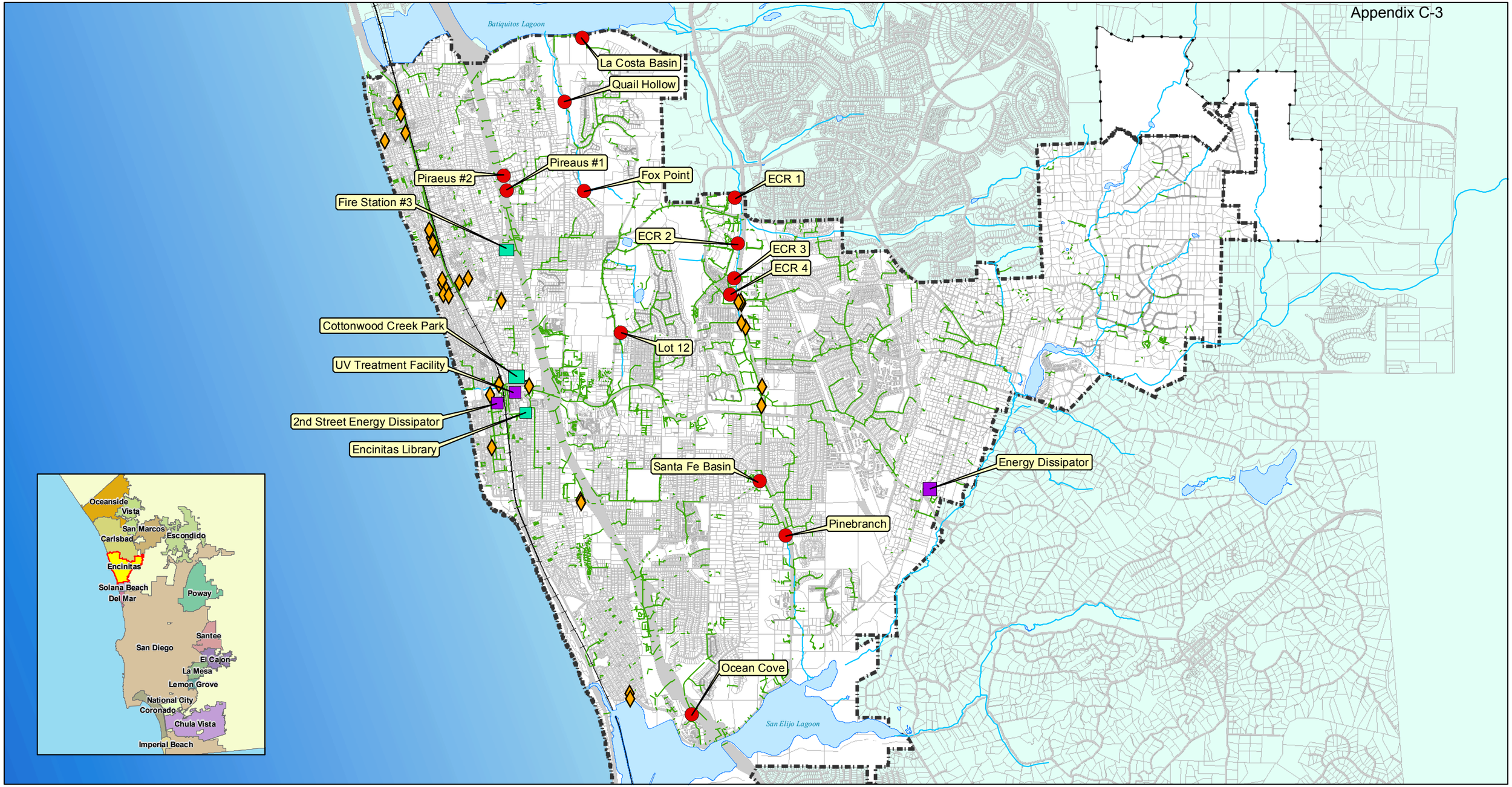

FY 2009-2010 Encinitas Municipal BMP Locations

- Storm Drain Inlet Filters
- Detention Basin
- Structural BMP
- Multiple BMPs
- Storm Drains
- Streams
- Roads

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Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: September, 2010

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N

0 2,500 5,000 Feet

POLLUTION PREVENTION
(Does not apply to Special Ceremonies)

Storm drains are not connected to the City's sewer system. All pollutants allowed to enter the storm drain system flow directly to our beaches, ocean, lagoons, and other waterways without being treated. The City of Encinitas is required by the San Diego Regional Water Quality Control Board to report on pollution prevention measures taken at special events held throughout the City.

In the area provided on the next page or on a separate sheet of paper, please complete the following questions and describe methods of pollution prevention that will be implemented at your proposed event.

1. Describe how trash, recycling, and debris will be managed (i.e. extra bins, temporary fencing, etc.)

2. If your event will include food production, describe how excess oil and grease will be disposed of. These materials cannot be dumped into the streets or storm drain system.

3. Please identify any other potential pollutant generating sources or activities that may take place (i.e. portable toilets).

For questions, please call the City's Clean Water Program at (760) 633-2787.

	Event	Date	Time	Location	Estimated Attendance	Clean-up Deposit required?
1	Summer Sunday Concerts	July 5, 19, August 2, 16	3-5pm	MLB		Extra Trash and Restroom Service
2	Encinitas Rotary Club Soccer	August 8 & 9		CSP, ECK, LMSP		Extra Trash and Restroom Service
3	Encinitas Classic Car Nights	7/16/09, 8/20/09, 9/17/09	5:30-7:30pm	682 S Coast Hwy 101	1000	
4	Volcom's Blowfish Surf Series	7/18/09	8am-6:30pm	D Street/MLB	75	
5	Solana Beach Triathlon & Duathlon	7/26/09	5:30-11am	S Coast Hwy 101 @ Las Olas	1300	
6	Dog Days of Summer	8/8/09	10am-3pm	Cardiff- Aberdeen/Newcastle/Chesterfield	3000-4000	
7	Taste of Mainstreet	8/27/09	6-9pm	Hwy 101- Encinitas Blvd to K Street	2000	
8	LeucadiART Walk	8/30/09	7am-6pm	West side of Hwy 101- Marcheta to Glaucus	3000	
9	Challenge Walk MS 2009	9/11/09-9/13/09	8am-2pm	Beacons, MLB, Swami's, Cardiff State Beach	350	
10	Coastal Cleanup Day	9/19/09	9am-12pm	Swami's	100	
11	Wavecrest Rods and Woodies	9/19/09	5:30am-3pm	MLB Parking lot	600	
12	MLB Open Water Splash	9/20/09	8am-11am	MLB	200	
13	15th Annual Encinitas Oktoberfest	9/20/09	10am-6pm	Mountain Vista Dr.btwn ECR and Wandering Rd.	25,000	$300.00
14	Fundraiser	9/26/09	6-9pm	Cardiff Towne Plaza	200-300	
15	Fire Prevention Safety Expo	10/3/09	8am-3pm	MLB Parking lot	250	
16	Encinitas Feeling Fit Festival	10/4/09	10am-2pm	Leo Mullen Sports Park	600-800	
17	Bike MS Bay to Bay Tour	10/10/09	8am-4pm	MLB Parking lot	1000	
18	Swami's Surf Contest	Oct 10 & 11	Dawn to Dusk	D Street/MLB	300	
19	ISF Surf Series	Oct 17 & 18, Feb 27 & 28	7am-4pm	D Street/MLB	350	
20	DEMA Safe Trick or Treat	10/31/09	4-9pm	Lumberyard center courtyard	2,000	
21	City of Encinitas Family Enrichment Community Garage Sale	11/7/09	8am-12pm	Community Center Parking Lot	300	
22	ISF Surf Series	11/21 and 11/22/09	7am-4pm	D Street/MLB	350	
23	Fall Festival	11/22/09	9am-4pm	Hwy 101- D Street to J Street	35,000-45,000	
24	City of Encinitas Holiday Parade	12/5/09	5pm	Downtown Encinitas	15,000	
25	Sand Labyrinth	1/1/10	10am-12pm	Btwn MLB and Stonesteps	Unknown	
26	City of Encinitas P&R Community Garage Sale	3/13/10	8am-12pm	Community Center Parking Lot	300	
27	P&R Easter Egg Hunt	4/3/10	5am-4pm	Paul Ecke Sports Park, 278 Saxony Rd	5,000	
28	Easter Service	4/4/10	6am-1pm	MLB	450	
29	March for Babies	4/10/10	8am-12pm	MLB	350	
30	Fire Engineer Promotional Exercise	4/13/10	7am-4pm	MLB Parking lot	20	
31	Tour de Cure	4/17/10	6am-4pm	Mira Costa College	1,200	
32	Encinitas Garden Festival	4/17/10	8am-5pm	Orpheus Park and neighborhood to east	1,500	
33	Creek to Bay Cleanup	4/21/10	8am-1pm	MLB and Beacons	175	
34	Encinitas Street Fair	4/24 and 4/25 2010	9am-5pm	Hwy 101- D Street to J Street	40,000/day	$300.00
35	Chelsea King Baseball Tournament	4/25/10	8am-5pm	Ecke Park Baseball Fields 2 & 3	150	
36	Encinitas Surf Festival	4/25/10	7am-4pm	MLB/D Street	150	
37	Encinitas 2035 Visioning Festival	5/1/10	7:30-2:30	Community Center Parking Lot	500	
38	Great Strides/Cystic Fibrosis Walk	5/2/10	8am-1pm	MLB	300	
39	Cottonwood Creek Environmental Film Series	5/6/10, 6/3/10	7-9pm	Pacific Station 687 S Coast Hwy 101	100	
40	San Dieguito Alumni Event	5/8/10	8am-3pm	D Street/MLB	50	
41	Encinitas Sprint Triathlon	5/9/10 & 5/16/10	6:30am-12pm	MLB	1500	
42	MLB Paddle and Swim	5/15 & 5/16/10	8-11am	MLB	400	
43	Encinitas 5K	5/15/10	8am-10am	MLB	5000	
44	7th Annual Ohana Picnic	5/16/10	10am-6pm	Oakcrest Park	125	
45	A Sporting Life: Family Health Festival	5/23/10	10am-5pm	Oakcrest Middle School- 675 Balour	5000	
46	A Sporting Life	5/23/10	10am-5pm	Oakcrest Middle School- 675 Balour	3000	
47	NSL H.S. Cup	5/25 and 5/26	3:45-7pm	D Street	45	
48	K5 Surf Klassic	5/29/10	6am-8pm	MLB	100	
49	Law Enforcement Torch Run	6/2/10	6-9am	Route throughout City	20	
50	Encinitas Environment Day	6/6/10	10am-4pm	Cottonwood Creek Park	1500	
51	Pet Health Expo	6/6/10	9am-1pm	City Hall Courtyard	200	
52	Encinitas Classic Car Nights	6/17/10	5:30-7:30pm	F Street from Hwy 101 to 2nd Street	400	
53	City of Encinitas Employee Recognition Lunch	6/18/10	9am-2pm	Encinitas Viewpoint Park	150	
54	6th Annual Switchfoot Bro-Am	6/26/10	7am-5pm	MLB	5000	

Appendix C-6 Routine Municipal Inspections Summary **FY 2009 - 2010**

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed? Follow Up #1	Corrective Actions Still Needed? Additional Follow Ups	NOV Date
1	**120163**	4/21/10	Wastewater Collections Facility		No Corrective Actions Required			
2	**120164**	4/21/10	Requeza Maintenance Yard		Remove or cover signal parts & large white tanks; Clean up Haz waste containment barrels.	No. Completed: 5/20/2010		
3	**120165**	4/21/10	"A" Tank Site		Treated wood needs to be covered.			
4	**120184**	4/21/10	City of Encinitas Public Works Yard		Clean/Maintain outdoor storage areas.	No. Completed: 5/20/2010		
5	**120187**	5/18/10	Encinitas Viewpoint Park		No Corrective Actions Required			
6	**120188**	5/18/10	Paul Ecke Sports Park		No Corrective Actions Required			
7	**120189**	5/18/10	Las Verdes Park		No Corrective Actions Required			
8	**120191**	5/18/10	Oakcrest Park		Clean Excel storage area	No. Completed: 5/18/2010		
9	**120192**	5/18/10	Leo Mullen Sports Park		No Corrective Actions Required			
10	**120194**	5/18/10	Scott Valley Park		No Corrective Actions Required			

Appendix C-6 Routine Municipal Inspections Summary

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
11	**120196**	6/9/10	Beacons Beach		No Corrective Actions Required			
12	**120197**	6/8/10	Glen Park	Central drainage channel maintained regularly. Irrigation runoff monitored regularly.	No Corrective Actions Required			
13	**120199**	6/10/10	Grandview Beach	All irrigation is drip emitter type w/ 0% runoff.	No Corrective Actions Required			
14	**120201**	6/9/10	H Street Viewpoint	Irrigation modified to reduce runoff since last inspection	No Corrective Actions Required			
15	**120203**	6/9/10	J Street Viewpoint	Irrigation modified to reduce runoff in the last 12 months.	No Corrective Actions Required			
16	**120205**	6/10/10	Leucadia Roadside Park		No Corrective Actions Required			
17	**120207**	6/10/10	Mildred MacPherson Park		No Corrective Actions Required			
18	**120273**	6/10/10	Moonlight Beach	Regular maintenance on stormwater channel daily/as needed for litter.	No Corrective Actions Required			
19	**120274**	6/10/10	Orpheus Park		No Corrective Actions Required			
20	**120275**	6/8/10	Swami's Beach Park	Irrigation modified to reduce runoff to hardscape since last inspection.	No Corrective Actions Required			
21	**120276**	6/4/10	Sun Vista Park	Excessive groundwater leaving/creating orange residue. See soils report attached to inspection form.	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
22	**120277**	6/3/10	Hawk View Park		No Corrective Actions Required			
23	**120278**	6/4/10	Wiro Park		No Corrective Actions Required			
24	**120279**	6/4/10	Little Oaks Equestrian Park		No Corrective Actions Required			
25	**120280**	6/3/10	Leucadia Oaks Park		No Corrective Actions Required			
26	**120281**	6/2/10	Cottonwood Creek Park		No Corrective Actions Required			
27	**120284**	6/2/10	Cardiff Sports Park Expansion		No Corrective Actions Required			
28	**120285**	6/2/10	Cardiff Sports Park		No Corrective Actions Required			

Total Municipal Inspections: 28 **Total Follow ups: 3** **Total NOVs: 0**

Appendix D

Industrial and Commercial

D-1 Stationary Commercial Inventory

D-2 Industrial Inventory

D-3 Industrial and Commercial Inspection Form

D-4 Inspection Summary Form

D-5 Routine Inspections Summary

D-6 Mobile Commercial Inventory

D-7 Commercial Business Notification Letter

D-8 Mobile Business Notification Letter

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
1	Cardiff Animal Hospital	2159 San Elijo Ave		Animal	742	Veterinary care	no	Low
2	Companion Pet Care Professionals	1466 Encinitas Blvd		Animal	753	Pet grooming service	no	Low
3	D A W G S	379 Trailview Rd		Animal	753	Pet grooming service	no	Low
4	DEBORAH PTASHNE GROOMING	2013 San Elijo Ave		Animal	753	Pet grooming service	no	Low
5	Dove Hollow Farm	1084 Double LI Ranch Rd		Animal	752	Horse training, boarding	no	Low
6	Drake Center for Animal Health	195 N El Camino Real		Animal	742	Veterinary care	no	Low
7	GRATEFUL DOG	802 N Coast Highway 101		Animal	753	Pet grooming service	no	Low
8	Holiday Pet Hotel	551 Union St		Animal	752	Pet boarding	no	Low
9	Horses and Moore Pet Care	1060 California St		Animal	752	Horse boarding	no	Low
10	Moonlight Pet Sitting	152 N Coast Highway 101	21	Animal	752	Pet boarding	no	Low
11	North Coast Equestrian Park	1877 Olivenhain Rd		Animal	752	Horse boarding and training	yes	High
12	Puppy Love Pet Grooming	191 N El Camino Real	211	Animal	753	Pet grooming service	no	Low
13	Rancho Los Amigos Equestrian Center	3049 Camino Del Rancho		Animal	752	Horse boarding and training	no	Low
14	Santa Fe Animal Clinic	301 Santa Fe Dr	A	Animal	742	Veterinary care	no	Low
15	SIT AND STAY AWHILE PET CARE	251 Calle De Madera		Animal	742	Veterinary care	no	Low
16	Sunnybrook Farm Holistic Pet Care	812 Bracero Rd		Animal	752	Pet boarding	no	Low
17	SWEET PANDA PET CARE	1786 N Coast Highway 101	11	Animal	752	Pet boarding	no	Low
18	Sylvia's In-Home Pet Sitting	2210 Encinitas Blvd	W	Animal	752	Pet boarding	no	Low
19	The Animal Keeper	155 Saxony		Animal	752	Pet boarding	no	High
20	The Contented K-9	1711 Old Mill Ct		Animal	753	Pet grooming service	no	Low
21	The Pet Pals	3250 Country Rose Cir		Animal	753	Pet grooming service	no	Low
22	Underwater Environments	442 Rancho Santa Fe Rd		Animal	5999	Pet sales	no	Low
23	V C A North Coast Animal Hospital	414 Encinitas Blvd		Animal	742	Veterinary care	no	Low
24	Bradley Allen Auto Body	204 N Coast Highway 101		Auto Body Repair/Painting	7532	Auto body repair	no	High
25	California Body & Paint	320 N El Camino Real	F	Auto Body Repair/Painting	7532	Auto body repair	no	Low
26	Custom Cycle Creations, Inc.	304 N El Camino Real	B	Auto Body Repair/Painting	7549	Installation of interior auto parts	no	Low
27	Ding King	591 Westlake St	D	Auto Body Repair/Painting	7532	Auto body repair	no	Low
28	Fender Mender	326 N El Camino Real		Auto Body Repair/Painting	7532	Auto body repair	no	High
29	First Mission Auto Body Repair	339 N El Camino Real	B	Auto Body Repair/Painting	7532	Auto body repair	no	Low
30	Rancho Auto Body	591 Westlake St	A	Auto Body Repair/Painting	7532	Auto body repair	no	Low
31	S & Brothers Inc. Auto Upholstery	322 N El Camino Real	F	Auto Body Repair/Painting	7532	Auto upholstery repair	no	Low
32	SoCal Custom	328 N El Camino Real		Auto Body Repair/Painting	7532	Auto body repair	no	low
33	World Auto Body	140 N Coast Highway 101		Auto Body Repair/Painting	7532	Auto body repair	no	High
34	A□ Test Only Center	449 Second St		Auto Other	7549	Auto diagnostic testing center	no	Low
35	Encinitas Smog Test Only Ctr	682 S Coast Highway 101		Auto Other	7549	Auto diagnostic testing center	no	Low
36	FIC Smog	322 N El Camino Real	C	Auto Other	7549	Auto diagnostic testing center	no	Low
37	Johnathan Davis	543 Encinitas Blvd	121	Auto Other	557	Motorcycle parts retail	no	Low
38	Moonlight Auto Sales	140 N Coast Highway 101	C	Auto Other	5521	Motor vehicle dealer	no	Low
39	Road One	1205 S Coast Highway 101		Auto Other	7549	Auto towing and storage of towed cars	no	Low
40	SandToyZ 4 Less, Inc.	184 N Coast Highway 101		Auto Other	5521	Motor vehicle dealer	no	Low
41	Toolshed Equipment Rental/Rebel Rents	1900 N Coast Highway 101	A	Auto Other	7359	Equipment rental	no	High
42	Ace Cars & Vans	1244 N Coast Highway 101		Auto Repair/Maintenance	7514	Auto rental, car washing	no	Low
43	All Car CTR	140 N Coast Highway 101	Rear	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
44	Auto Zone	120 Leucadia Blvd		Auto Repair/Maintenance	5103	Auto parts supply used oil and used battery collection	no	Low
45	Keith's Automotive	215 W G St		Auto Repair/Maintenance	5103	Auto repair and maintenance	no	Low
46	Brad's Foreign & Domestic	565 Westlake St	200C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
47	CALIFORNIA ROVER	386 Encinitas Blvd		Auto Repair/Maintenance	7538	Auto sales and maintenance	no	Low
48	Cardiff Classic	1049 S Coast Highway 101		Auto Repair/Maintenance	7549	Auto sales and cleaning	no	Low
49	Charlie's Foreign Car	751 Second St		Auto Repair/Maintenance	7538	Auto sales and maintenance	no	High
50	Coast Brake & Wheel	444 S Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
51	Coastal Foreign Auto	320 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
52	Dan's Precision Alignment	565 Westlake St	200F	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
53	Dave's Automotive Services	591 Westlake St	E	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
54	Definitive Mobile Audio (DMA)	126 A St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
55	DISCOUNT AUTO	710 S Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
56	Discount Tire	107 N El Camino Real	A	Auto Repair/Maintenance	5103	Auto repair and maintenance	no	Low
57	El Camino Tire & Brake	330 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
58	Encinitas Automotive Repair	322 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low

Note: All facilities are in the Carlsbad Watershed.

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
59	Encinitas Car Wash	293 N El Camino Real		Auto Repair/Maintenance	7542	Car wash	no	Low
60	Encinitas Ford	1424 Encinitas Blvd		Auto Repair/Maintenance	7538	Auto sales, repair and cleaning	no	Low
61	ENCINITAS FOREIGN AUTO	901 Second St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
62	Encinitas Japanese Car Specialists	328 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
63	FURGERSONS GARAGE	807 Second St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
64	HAPPY AUTO SALES	148 N Coast Highway 101		Auto Repair/Maintenance	5511	Auto sales and cleaning	no	Low
65	Harloff BMW	1302 Encinitas Blvd		Auto Repair/Maintenance	5511	Auto sales, repair and cleaning	no	High
66	Harris Radiator	274 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
67	HUGO'S EUROPEAN CAR SERVICE	110 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
68	Instant Oil Change	127 S El Camino Real	A	Auto Repair/Maintenance	7549	Lubrication service	no	Low
69	JIFFY LUBE	221 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
70	K & B Auto Service & Repair	320 N El Camino Real	D	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
71	Kragen Auto Parts	180 N El Camino Real		Auto Repair/Maintenance	5103	Auto parts	no	Low
72	Midas Mufflers	328 N El Camino Real	C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
73	Miller Tire	759 Munevar Rd		Auto Repair/Maintenance	5103	Auto parts, minor maintenance	no	Low
74	Moonlight Motors	215 Melrose Ave		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	High
75	Napa Auto Parts	523 Encinitas Blvd	100	Auto Repair/Maintenance	5103	Auto parts, used battery and used oil collection	no	Low
76	North County Jet Ski	111 C St		Auto Repair/Maintenance	5511	Personal watercraft sales and repair	no	Low
77	Olson's Hand Car Wash	127 S El Camino Real	B	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
78	Paul's Auto Electric	325 Melrose Ave		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
79	Pep Boys Manny Moe & Jack	256 N El Camino Real		Auto Repair/Maintenance	5103	Auto parts sales and used battery and used oil collection	no	Low
80	Precision Tune	318 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
81	Ray's Automotive	1051 South Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
82	Scott's Automotive	1508 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	High
83	Softspra Carwash	790 S Coast Highway 101		Auto Repair/Maintenance	7542	Car wash	no	Low
84	Speedy Tune & Brake	225 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
85	Suspension Plus	322 N El Camino Real	D	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
86	Swami's Automotive Repair	320 N El Camino Real	C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
87	Transmasters Transmissions	184 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
88	Quail Botanical Gardens	230 Quail Gardens Dr		Botanical Garden	5361	Retail garden	no	Low
89	Home Depot	1001 N El Camino Real		Building Material	5211	Retail lumber, brick, paint, and other building supplies	no	High
90	7-11	1446 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
91	101 Diner, The	552 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
92	1st Street Bar	656 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
93	7- Eleven 18087/Moonlight Partners Inc.	105 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
94	7-Eleven	2240 Encinitas Blvd	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
95	7-Eleven Food Store	592 Santa Fe Dr		Eating/Drinking Establishment	5541	Gas station, food store	no	High
96	A & M Investment/ Dba East Coast Pizza	2015 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
97	Amici Bakery	564 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
98	Angelo's Burgers	608 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
99	Auggies House of Crab	1468 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
100	Baja Fresh	194 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
101	Bar Leucadian	1542 N Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
102	Baskin Robbins	441 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
103	Beach City Cafe	102 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
104	Beach Grass Cafe	1476 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
105	Beach House Restaurant	2530 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
106	Beach Tea House	1076 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
107	Beachside Bar and Grill	806 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
108	Bety's Mexican Restaurant	1464 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
109	Bird House Grill	250 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
110	Blue Fin Sushi	257 N El Camino Real	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
111	Borelli's Restaurant	285 N El Camino Real	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
112	Boscinitas, Inc. (Boston's)	294 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
113	Bretts B B Q	1505 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
114	Bubby's	937 S Coast Highway 101	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
115	Calypso Cafe	576 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
116	Captain Keno's	158 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

Note: All facilities are in the Carlsbad Watershed.

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
117	Cardiff Seaside Market	2087 San Elijo Ave		Eating/Drinking Establishment	5411	Grocery store	no	Low
118	Carl's Jr. 181	1137 Regal Rd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
119	Champagne Bakery	162 S Rancho Santa Fe Rd	E10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
120	Chart House, The	2588 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
121	Chick's Natural	191 N El Camino Real	107	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
122	Chili's Bar & Grill	1004 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
123	Chinatown Restaurant	118 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
124	Chin's Restaurant	625 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
125	Chipotle	268 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
126	Chuao Chocolatier	937 S Coast Highway 101	C109	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
127	Cicciotti's Trattoria Italiana	1933 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
128	Coco's 881	407 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
129	D Street Bar & Grill	485 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	High
130	Dairy Queen	1465 Encinitas Blvd	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
131	DALEY DOUBLE	546 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
132	Daphne's Greek Cafe	130 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
133	Del Taco	130 Calle Magdalena		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
134	Denny's Restaurant	135 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
135	Dippin Dots	260 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
136	Dollshie Coffee	345 S Coast Highway 101	O-2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
137	Domino's Pizza	1458 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
138	Duke's Bar	107 Diana St		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
139	E St Cafe	128 W E St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
140	Einstein Brothers Bagels	1006 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
141	El Callejon	345 S Coast Highway 101	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
142	El Nopalito	560 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
143	El Pollo Loco	1002 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
144	El Torito Market	948 N Coast Highway 101	C	Eating/Drinking Establishment	5411	Grocery store	no	High
145	El Torito Restaurant	1068 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
146	Encinitas Cafe	531 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
147	Encinitas Donut Shop	580 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
148	Encinitas Ranch Cafe & Golf School	1275 Quail Gardens Drive		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
149	Encinitas Swirls, Inc.	204 N El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
150	Encinitas Yogurt & Ice Cream	1070 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
151	Filiberto's Mexican Food	476 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
152	Firefly Grill & Wine Bar	251 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
153	FIRENZE TRATTORIA	162 S Rancho Santa Fe Rd	G10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
154	Flippin Pizza, New York Style	215 S El Camino Real	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
155	French Pastry Cafe	127 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
156	Fulanos	145 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
157	Garden State Bagels	191 N El Camino Real	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
158	Giovanni's Sandwich Shop	764 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
159	Golden Baked Hams	114 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
160	Greek American Family Restaurant	392 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
161	Gusto Trattoria	429 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
162	Harvest Ranch Market	162 S Rancho Santa Fe Rd	E50	Eating/Drinking Establishment	5411	Grocery store	no	Low
163	HENRYS FARMERS MARKET	1327 Encinitas Blvd		Eating/Drinking Establishment	5411	Grocery store	no	Low
164	Honey Baked Ham	459 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
165	Honey's Bistro & Bakery	632 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
166	Island Brother's Teriyaki	274 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
167	Islands	1588 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
168	Its A Grind Coffee House	1920 Paxton Way	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
169	J. S. Foods/Dba Burger King	242 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
170	Jack In The Box	1439 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
171	Jam Roc 101	101 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
172	Jamba Juice	272 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
173	Java Express	325 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
174	Jorge's Mexicatessan	267 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

Note: All facilities are in the Carlsbad Watershed.

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
175	Jorge's Mexicatessen	417 Santa Fe Dr	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
176	Juanita's Taco Shop	290 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
177	Juice N Java	168 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
178	Juice Stop	1042 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
179	Just Peachy	1354 N Coast Highway 101		Eating/Drinking Establishment	5411	Grocery store	no	High
180	K C'S Tandoor	1070 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
181	Kaito Restaurant	130 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
182	Karina's Taco Shop	916 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
183	Kealani's	137 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
184	Kentucky Fried Chicken	266 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
185	Kim's Vietnamese & Chinese Restaurant	745 S Coast Highway 101	103	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
186	Ki's Juice Bar	2591 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
187	Kona Coffee Hut	230 Quail Gardens Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
188	Kotija Jr. Taco Shop	852 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
189	Kraken	2531 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
190	L & L Hawaiian Barbeque Encinitas	215 S El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
191	LA BONNE BOUFFE	471 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
192	La Especial Norte	664 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
193	La Salsa Fresh Mexican Grill	219 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
194	Las Olas	2655 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
195	Le Petite Calypso	1002 N Coast Highway 101	2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
196	Leucadia Donut Shop	1604 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
197	Leucadia Pizzeria	315 S Coast Highway 101	V	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
198	Leucadia Sushi Bar	996 N Coast Highway 101	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
199	Lil Jungle Java	1500 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
200	LITTLE CAESARS PIZZA	118 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
201	Little Moore, A	1030 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
202	Lumberyard Tavern & Grill	967 S Coast Highway 101	101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
203	LUXUS 101 - BISTRO GRILL	1044 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
204	Mama Lulu's Pizza and Pasta	191 N El Camino Real	110	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
205	MANDARIN CITY	815 Birmingham Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
206	Mandarin Oriental	1337 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
207	Manhattan Pizza	143 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
208	Mc Donald's	1271 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
209	McDonald's	1064 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
210	Mexico Viejo	1465 Encinitas Blvd	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
211	Mister Sushi	111 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
212	Miyabi's Japanese Restaurant	211 S El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
213	Moonlight Grille	190 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
214	Moonlight Snack Shack	400 B St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
215	Mozy	698 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
216	Mr. Peabody's Steakhouse	136 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
217	Nfarooqi Enterprises, L L C	1967 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
218	Noodles & Company	260 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
219	Nrgize Lifestyle Cafe	201 S El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
220	Ogata Japanese Cuisine	615 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
221	Oggis Pizza & Brew	305 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
222	One Sweet World, L L C (Besta Wan)	148 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
223	PACIFIC Q BILLARDS, INC.	1454 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
224	Panda Express	1084 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
225	Pannikin Coffee & Tea	510 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
226	Papa John's Pizza 1596	337 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
227	Papa Toni's Pizza	554 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
228	Passage to India	257 N El Camino Real	K	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
229	Pasta Bravo	1042 N El Camino Real	J05	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
230	Pei Wei Asian Diner	1560 Leucadia Blvd	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
231	Pick Up Stix	127 N El Camino Real	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
232	Pipes	121 Liverpool Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
233	Pizza Hut	127 N El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
234	Pizzicato Gourmet Pizza (Hopuluvgarlic)	252 N El Camino Real	5	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
235	Potato Shack Cafe	120 W I St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
236	Premier Food Services at MiraCosta College	3333 Manchester Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
237	Quick Fix	552 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
238	QUICKIE FOOD STORE	233 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
239	Quizno's Classic Subs	337 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
240	Quizno's Subs	1042 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
241	R M C, L L C	2031 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
242	Ralphs	125 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	High
243	Raul's Taco Shop	490 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
244	REDBOX (Albertsons)	134 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
245	Rico's Taco Shop	165 S El Camino Real	L	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
246	Rite Aid	439 Santa Fe Dr		Eating/Drinking Establishment	5411	Grocery store	no	Low
247	Robbie's Ristorante & Pizzaria	534 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
248	Robbie's Road House Grill	530 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
249	Roberto's Mexican Food	1900 N Coast Highway 101	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
250	Roberto's Taco Shop	274 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
251	Round Table Pizza	1321 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
252	Roxy Restaurant	517 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
253	Rubio's	252 N El Camino Real	4	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
254	Russo's Pasta Shop	270 N El Camino Real	I	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
255	Sage Grill	1506 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
256	Sake House	1246 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
257	Sakura-Bana Sushi Bar	1031 S Coast Highway 101	101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
258	Sandwich Station	218 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
259	Santa Fe Cafe	120 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
260	Santa Fe Cafe	445 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
261	Savory Restaurant	267 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
262	Scripps Memorial Hospital	354 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
263	Siamese Basil Restaurant	527 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
264	Siilk Asian Tapas	288 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
265	Smart & Final	150 Encinitas Blvd		Eating/Drinking Establishment	5411	Grocery store	no	High
266	St Germain's Cafe	1010 S Coast Highway 101	112	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
267	St Tropez Bakery & Bistro	947 S Coast Highway 101	D103	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
268	Starbuck's Coffee	947 S Coast Highway 101	D101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
269	Starbuck's Coffee	258 N El Camino Real	B2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
270	Starbuck's Coffee	1040 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
271	Starbuck's Coffee	1560 Leucadia Blvd	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
272	Stater Brothers	1048 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
273	Sub Palace	810 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
274	Subman	113 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
275	SubMania	1514 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
276	Subway	765 S Coast Highway 101	104	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
277	Subway	2105 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
278	Subway 27567	1560 Leucadia Blvd	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
279	Subway Sandwiches & Salads	272 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
280	Sunny Sub., L L C	252 N El Camino Real	1	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
281	Super Donut 2	252 N El Camino Real	2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
282	Super Donuts 1	465 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
283	Surf Dog Records	1126 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
284	Sushi House	214 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
285	Swami's Cafe	1163 South Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
286	T M P Restaurant Group, L L C	162 S Rancho Santa Fe Rd	C10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
287	Taco Bell 25497	1502 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
288	TARGET T - 1029	1010 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
289	Tastes Group, L L C	641 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
290	Thai Pan Express	138 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
291	The 3rd Corner Wine Shop & Bistro	897 S Coast Highway 101	F104	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
292	The Bullpen	149 S El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
293	The Greenery Raw Food Cafe	133 Daphne Avenue		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
294	The Original Pancake House	160 S Rancho Santa Fe Rd	D10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
295	The Quick Fix	144 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
296	Todays Pizza	481 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
297	TOK Subs, Inc. aka Subway	138 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
298	Tomiko	87 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
299	Trader Joe's	115 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
300	Trattoria	2171 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
301	Trattoria I Trulli	830 S Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
302	Treats By Teresa	1277 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
303	Tuscan Sun Italian Deli	1070 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
304	VG Donuts & Bakery	106 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
305	Via Italia	565 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
306	Vigilucci's	505 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
307	Von's Grocery	453 Santa Fe Dr		Eating/Drinking Establishment	5411	Grocery store	no	Low
308	Von's Grocery	262 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	High
309	Wahoo's Fish Tacos	1006 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
310	Wendy's Hamburgers	102 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
311	When In Rome	1108 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
312	Wine Steals	1953 San Elijo Avenue	100	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
313	Yogi's Sports Bar & Restaurant	2633 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
314	Zi Bibbo	1560 Leucadia Blvd	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
315	7-Eleven Food Store	2211 San Elijo Ave		Gas Station	5812	Sells prepared food for consumption on site	no	High
316	7-Eleven Store, 13627D-2111	102 Leucadia Blvd		Gas Station	5541	Gas station, food store	no	High
317	7-Eleven Store, 24335D-2111	1988 Village Park Way		Gas Station	5541	Gas station, food store	no	Low
318	AM/PM Gas Station	1580 Leucadia Blvd		Gas Station	5541	Gas station	no	Low
319	Cardiff 76	3085 Manchester Ave		Gas Station	5541	Gas station	yes	High
320	Chevron Encinitas	350 Encinitas Blvd		Gas Station	5541	Gas station	no	High
321	Chevron Food Mart	805 Birmingham Dr		Gas Station	5541	Gas station, food store	no	Low
322	Chevron Station 1943	540 La Costa Ave		Gas Station	5541	Gas station	no	High
323	DREAM PETROLEUM, INC. (ARCO 9598)	633 Birmingham Dr		Gas Station	5541	Gas station	no	Low
324	Encinitas Gas	310 Encinitas Blvd		Gas Station	5541	Gas station	no	Low
325	Leucadia Shell	865 Orpheus Ave		Gas Station	5541	Gas station, service station	no	Low
326	Rosano's Unocal 76	236 N El Camino Real		Gas Station	5541	Gas station	no	Low
327	SEASIDE AUTOHAUS (Cardiff Valero)	820 Birmingham Dr		Gas Station	5541	Gas station	no	High
328	Shell Oil	160 Encinitas Blvd		Gas Station	5541	Gas station, car wash	yes	High
329	Shell Oil Company	1060 N El Camino Real		Gas Station	5541	Gas station	no	Low
330	Shell Station	1355 Encinitas Blvd		Gas Station	5541	Gas station	no	High
331	Valero Of Encinitas	325 Encinitas Blvd		Gas Station	5541	Gas station	no	High
332	Encinitas Ranch - Golf Building	1253 Paseo De Las Flores		Golf Course	7997	Golf Course	yes	High
333	Lui Delgado Landscaping and Tierra Verde	1545 Lake Dr		Landscaping	782	Lawn and garden services, turf installation, garden planting	no	High
334	Mark Lanager Masonry & Landscaping	1310 Summit Ave		Masonry	1741	Masonry work, stone setting, garden planting.	no	High
335	RCP Block Company	577 N Vulcan Ave		Masonry	5211	Sales of brick, rock and other masonry supplies.	no	High
336	A & M Farms	1534 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
337	Able's Flowers	710 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
338	Ades & Gish Nurseries - Growers	1150 Melba Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
339	Ades & Gish Nurseries - Growers	1492 Hymettus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
340	Anderson, H Greenhouse	375 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
341	Andy's Orchids	734 Ocean View Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
342	Armstrong Garden Center	701 N El Camino Real		Nursery	5193	Production of ornamental plants, nursery products	no	Low
343	Barrels & Branches	1452 Santa Fe Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
344	Basil Tops	1425 Rubenstein Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
345	Bird Rock Tropicals	221 Princehouse Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low

Note: All facilities are in the Carlsbad Watershed.

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
346	Browns Plants Inc- Growers	1515 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
347	Byer, Richard- Growers	1731 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
348	C M A Growers- Growers	1254 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
349	CAL GRO (Expo Plant Service)	710 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
350	Cal Pacific Orchid Farm	1122 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
351	Cardiff Palm Tree 2	333 Liszt Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
352	Cardiff/California Greenhouses	1753 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
353	Chino Greenhouses	1168 & 1253 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
354	Cordova Gardens	902 Encinitas Blvd	A	Nursery	5193	Production of ornamental plants, nursery products	no	Low
355	Cordova, Joe- Growers	720 Balour Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
356	Cosgrove Cymbidium Co- Growers	1200 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
357	D. Ades Investment Corporation	875 Balour Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
358	Daniel Mojonnier	912 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
359	Davis, Eric- Growers	752 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
360	Divine Orchids	1015 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
361	DONS FLOWERS	924 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
362	Dramm & Echter	1150 Quail Gardens Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
363	Ecke, Paul Ranch	1051 Summer Holly Ln & 441 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
364	EMERALD M. GROWERS, INC.	834 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
365	Encinitas Green Houses - Nursery	351 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
366	Erhardt's Tropicals (Morales Romero)	805 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
367	ERIN VOLPI	887 Brittany Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
368	ERWIN MOJONNIER ENT.	2009 Sheridan Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
369	Erwin Mojonnier Enterprises- Growers	679 Camino El Dorado		Nursery	5193	Production of ornamental plants, nursery products	no	Low
370	Fiesta Flowers, L L C	335 Santa Fe Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
371	Flowers of La Costa	1911 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
372	Franco's Flowers Inc- Growers	842 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
373	Gill, Padam- Growers	754 Bonita Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
374	Gish Foliage	1255 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
375	Glover, A T- Growers	571 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
376	Granite Homes Requeza LLC- Growers	843 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
377	GREENS & THINGS, INC.	950 Brittany Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
378	Groot, Dana- Growers	603 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
379	Hydro Scape Products, Inc	750 S Coast Highway 101		Nursery	5193	Production of ornamental plants, nursery products	no	High
380	Islas Jose L- Growers	231 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
381	Ito Kiyoko- Growers	936 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
382	J & S Green Houses	748 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
383	Jose Louis Islas	514 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
384	L & E Greenhouses/G&J Plants	712 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
385	La Costa Farms	1911 Saxony Road		Nursery	5193	Production of ornamental plants, nursery products	no	Low
386	La Costa Flower Shop/Nursery (Gish Foliage)	1245 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
387	LEUCADIA GROWERS	940 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
388	Leucadia Orchids	1660 Burgundy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
389	Lois' Flowers	1195 Cardiff Dr & 1616 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
390	Lopez Flowers	440 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	High
391	Maldonado Growers	1412 Mackinnon Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
392	Manatee Inc- Growers	1500 Somerset Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
393	May Greenhouse Inc	241 Andrew Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
394	May Greenhouses, Inc- Growers	2021 Sheridan Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
395	Miquel Estevez Flowers	708 Del Rio Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
396	Native Sons Nursery	631 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
397	O&J Growers	1313 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
398	Orchid Barron	804 Cathy Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
399	Orchid Place	829 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
400	Owens, Mark N- Growers	1073 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
401	Pacific Verde Nursery	556 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	High
402	Pacifica Flowers	510 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low

Note: All facilities are in the Carlsbad Watershed.

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
403	Payne, Parry- Growers	1231 Birmingham Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
404	Quezada, Teresa A- Growers	1190 Island View Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
405	R & L Sky Blue Inc. - Nursery	598 Park Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
406	Rancho Uribe	1616 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
407	Seaside Farms- Growers	754 Plato Pl		Nursery	5193	Production of ornamental plants, nursery products	no	Low
408	Secret Garden	1236 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
409	Seedling Express	440 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
410	Seedling Express	1698 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
411	Self-realization Fellowship - Growers	1177 Cornish Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
412	Skopec, Frank- Growers	1381 Summit Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
413	Speciman House	782 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
414	Speert, Ellen- Growers	1905 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
415	Staver, Dan- Growers	1586 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
416	Tayama Greenhouse	710 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
417	The Palm Source- Growers	1329 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
418	The Plantri - Nursery	921 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
419	Tinney, Brooke- Growers	1674 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
420	Tom, Gim- Growers	3107 Manchester Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
421	Tverdoch, R- Growers	898 Hymettus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
422	Twigs By Teri	155 Quail Gardens Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
423	W.F. Muhlethaler - Nursery	350 Seeman Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
424	Walt Hoehn	1752 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
425	Weidner's Gardens	860 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
426	Weidners' Gardens	695 Normandy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
427	Weidner's Gardens- Growers	850 Normandy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
428	Wilkens Palm Tree Nursery	1450 Mackinnon Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
429	Williamson's Produce	3111 Manchester Ave		Nursery	5193	Production of ornamental plants, nursery products	yes	High
430	Wilma Romero - Nursery	870 Devonshire Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
431	Zalinda Farms - Growers	501 Ocean Bluff Way		Nursery	5193	Production of ornamental plants, nursery products	no	Low
432	Frazee Paint	270 N El Camino Real	B	Painting	5231	Retail paint and other liquid building products	no	Low
433	The Sherwin-Williams Company 8557	208 N El Camino Real		Painting	5231	Retail paint and other liquid building products	no	Low
434	Vista Paint Corporation	133 N El Camino Real		Painting	5231	Retail paint and other liquid building products	no	Low
435	Del Rancho Pools	1315 Encinitas Blvd		Pool	1799	Pool supply	no	Low

Note: All facilities are in the Carlsbad Watershed.

No	Name	Address	Type	SIC	Description	Tributary	Priority
1	San Dieguito Union High School District Transportation Cooperative	1142 Bonita Dr	Vehicle Storage	4151	Vehicle storage and transportation services for students	no	High
2	San Elijo Water Pollution Control Facility	2695 Manchester Ave	Wastewater Treatment	9511	Treatment of wastewater for use a recycled water	no	High
3	Encinitas Landfill	2099 Encinitas Blvd	Closed Landfill	4953	Closed solid waste collection facility	no	NA

The Encinitas Landfill is regulated and inspected by the County of San Diego.
All sites are in the Carlsbad Watershed.

Appendix D-2: FY 2009-10 Industrial Inventory

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION REPORT

Appendix D-3

CLEAN WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Revised 3/09

Type of Inspection:	☐ Annual (Date):	☐ Complaint Investigation (Date):	
Business Name:		Size: Sq.Ft.	SIC Code:
Street Address:		Mailing Address:	
Contact Person(s):		Property Manager (PM):	
Business Phone/Fax:		PM Phone/Fax:	
Business Email:		PM Email :	

Does facility have a current Encinitas business certificate? ☐Yes ☐No : Exp:

A. Training **Number of Employees:**

1. Are employees trained? ☐Yes ☐No a. Training log at facility? ☐Yes ☐No Last time trained:

B. Liquid Storage (Oil, Grease, Antifreeze) ☐NA

2. ☐Trap- Last Maintained(LM): ☐Interceptor- LM: By: Every ____ months

3. ☐Bin- LM: ☐Clarifier- LM: By: Every ____ months

a. Is there secondary containment? ☐Yes ☐No b. Overhead Coverage? ☐Yes ☐No

4. Are other outdoor items adequately stored/covered? ☐Yes ☐No ☐NA

5. Does facility have a spill kit? ☐Yes ☐No a. Posted spill response plan? ☐Yes ☐No

C. Cleaning Activities

6. Does facility conduct any of the following activities?:

Washing Floor Mats: ☐Y ☐N Vehicle Washing/Fueling: ☐Y ☐N Hosing Off / Power Washing Site: ☐Y ☐N

a. Is wash water contained and disposed of properly? ☐Y ☐N

D. Waste Management	**Yes**	**No**	**N/A**	**Comments**
7. Are the storm drains and site free of litter and debris?				
8. Downspouts directed away from areas of potential pollutants?				

9. Does trash/recycling storage area meet the following requirements?:

Receptacle Lids Closed: ☐Y ☐N Clean/Well Maintained: ☐Y ☐N Are bins overflowing?: ☐Y ☐N

10. Does the facility properly maintain the following landscape/maintenance issues: ☐NA

Erosion Control: ☐Y ☐N Over-irrigation Runoff: ☐Y ☐N Reclaimed Water Use: ☐Y ☐N Stockpiles: ☐Y ☐N

E. Other Storm Water Management

11. Is the site free of any evidence of illicit connections and illegal discharges? ☐Yes ☐No

F. Corrective Actions Needed? ☐Yes ☐No If yes, see Inspection Summary

G. Follow Up Inspection? ☐Yes ☐No Date: If yes, see Inspection Summary

H. Education or Best Management Practice (BMP) Information Distributed:

☐Restaurant Brochure Eng/Span ☐What's Cooking Guide Eng/Span ☐Auto Brochure Eng/Span ☐Green Wrench Guide Eng/Span ☐Only Rain ☐10 Simple Ways ☐Yard and Garden Care Eng/Span ☐Doorhanger ☐Business card ☐Green Business ☐Spill Response Guide ☐Other:

Inspector Name: **Signature:** **Date:**

Notes:

FOR OFFICE USE ONLY

ASSESSMENT (circle appropriate level - "5" is highest level)		
Level of knowledge regarding stormwater issues: 1 2 3 4 5		WO :
Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5		Follow Up WO

CITY OF ENCINITAS

Commercial Industrial

STORMWATER QUALITY INSPECTION SUMMARY

(760) 633-2787 ◆ FAX (760) 633-2818 ◆ npdesmail cityofencinitas.org

ISSUED TO:

CONTACT PERSON:

SITE ADDRESS:

PHONE : ( )

❒ **NO CORRECTIVE ACTIONS REQUIRED**

REQUIRED CORRECTIVE ACTIONS

ALL REQUIRED CORRECTIVE ACTIONS IDENTIFIED BELOW MUST BE COMPLETED AND REPORTED TO THE CITY BY THE FOLLOWING DATE:

❒ **Obtain Spill Kit**

❒ **Post Spill Response Plan**

❒ **Provide and Document Employee Training**

❒ **Provide Secondary Containment for Storage of Fluid Liquid**

❒ **Provide Coverage for Outdoor Storage of Fluid Liquid Waste**

❒ **Provide Coverage for Exposed Equipment and or Parts**

❒ **Clean Litter and Debris From Site, Trash Areas, and or Storm Drain**

❒ **Clean Maintain Outdoor Storage Areas**

Other Corrective Actions Comments:

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.110. Failure to comply with minimum Best Management Practice (BMP) Standards may result in further enforcement action by the City of Encinitas.

Inspector (Signature) **Date**

Responsible Party (Signature) **Date**

FOLLOW UP INSPECTION

❒ **All Corrective Actions Completed**

❒ **Corrective Actions Not Complete Enforcement Action Required**

Inspector Sign-Off **Date**

Appendix D-5 Routine Commercial Inspections Summary **FY 2009 - 2010**

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
1	**88390**	7/13/09	Super cuts		No Corrective Actions Required			
2	**88391**	7/13/09	Men's Warehouse		No Corrective Actions Required			
3	**88392**	7/13/09	Great Earth Vitamins		No Corrective Actions Required			
4	**88393**	7/13/09	Sprint		No Corrective Actions Required			
5	**88452**	11/5/09	Las Olas		1. Provide overhead cover and 2nd containment for 3rd grease bin.	No. Completed: 11/12/2009		
6	**88454**	1/28/10	Cardiff Valero (Seaside Autohaus		No Corrective Actions Required			
7	**99108**	11/12/09	Yogis		No Corrective Actions Required			
8	**99109**	11/12/09	Ki's juice bar & restaurant		No Corrective Actions Required			
9	**103112**	11/16/09	Kraken		No Corrective Actions Required			
10	**103113**	11/16/09	Chart House		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
11	**103115**	11/16/09	Beach House		No Corrective Actions Required			
12	**103116**	11/16/09	Beach city cafe		No Corrective Actions Required			
13	**103125**	11/18/09	Subway Cardiff	From: Request ID: 86898, 11/18/2009 11:14:19 AM DIS-TRASH Discharge of trash Problem Details: Trash dumpster over flowing	No Corrective Actions Required			
14	**103158**	11/19/09	VG donuts		No Corrective Actions Required			
15	**103159**	11/19/09	Best-a-wan		No Corrective Actions Required			
16	**107314**	11/24/09	Zenbu/Rimel's		No Corrective Actions Required			
17	**107315**	11/25/09	East Coast Pizza		No Corrective Actions Required			
18	**107338**	11/24/09	7/11 Cardiff		Pick up abandoned box of light bulbs.			
19	**107339**	11/25/09	Shanty		No Corrective Actions Required			
20	**107591**	12/30/09	Certified Transmission		No Corrective Actions Required			
21	**107600**	1/4/10	Chuao		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
22	**107665**	1/5/10	Coast Landscaping Inc		tray for Port-a-potty	No. Completed: 2/10/2010		
23	**107711**	12/1/09	Highland farms		spill kit, training, overhead coverage and 2nd containment for generator			
24	**107739**	1/5/10	CM landscape maintenance and services		2nd containment for Port-a-potty, trash overflowing and old leaking motor	No. Completed: 1/12/2010		
25	**107741**	1/7/10	Firenze Trattoria		No Corrective Actions Required			
26	**107742**	1/6/10	Garcias		No Corrective Actions Required			
27	**107844**	1/6/10	Del Rancho Pools		Provide coverage for exposed equipment and clean debris from site	No. Completed: 2/11/2010		
28	**107846**	1/6/10	Cotixan Mexican Food		spill kit, training, 2nd containment, clean trash area	No. Completed: 1/15/2010		
29	**107848**	1/15/10	Frazee Paints		No Corrective Actions Required			
30	**113222**	3/8/10	Emerald Growers		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
31	**113225**	2/18/10	Hydro-scape Products		No Corrective Actions Required			
32	**113268**	2/24/10	Sushi Do		No Corrective Actions Required			
33	**117367**	2/12/10	Angelo Burgers		Provide and document employee training, Clean litter and debris from trash area and close lids.	No. Completed: 2/26/2010		
34	**117371**	5/13/10	Naked Cafe		No Corrective Actions Required			
35	**117372**	5/13/10	Java Hut Coffee Co.		Obtain spill kit	No. Completed: 5/13/2010		
36	**117374**	5/6/10	Giant New York Pizza and Pasta		No Corrective Actions Required			
37	**117376**	4/22/10	Froots		No Corrective Actions Required			
38	**117378**	4/7/10	Swami's Cafe		No Corrective Actions Required			
39	**117382**	2/16/10	Bradley Allen Auto Body		No Corrective Actions Required			
40	**117384**	1/11/10	Islands		Post spill response plan, Provide and document employee training, Provide 2nd containment for grease bin.	No. Completed: 2/12/2010		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
41	**117391**	2/17/10	Berry Happy		No Corrective Actions Required			
42	**117392**	2/17/10	Filiberto's		No Corrective Actions Required			
43	**117393**	2/23/10	Lotus Cafe		No Corrective Actions Required			
44	**117394**	3/29/10	Global Grind Coffee		No Corrective Actions Required			
45	**119729**	2/24/10	Road One		No Corrective Actions Required			
46	**119730**	5/25/10	McDonalds		Grease trap and bin records, floor mat cleaners info.			
47	**119732**	5/25/10	Gusto Trattoria		No Corrective Actions Required			
48	**119733**	2/23/10	Lumberyard Tavern & Grill		Obtain spill kit, provide & document employee training, Provide 2nd containment & overhead cover for grease, tie trash bags closed, fix broken sprinkler	No. Completed: 5/27/2010		
49	**120330**	6/3/10	Vicky's Floral Design		No Corrective Actions Required			
50	**120333**	2/12/10	101 Pacific Coast Auto		Obtain spill kit.			
51	**120351**	6/15/10	Kamp Kanine		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
52	**120404**	6/15/10	Vons Grocery #2351		No Corrective Actions Required			
53	**120405**	6/30/10	Seedling Express Inc		No Corrective Actions Required			
54	**120406**	5/24/10	O'Brien Station		Provide 2nd containment and overhead cover for liquid storage; remove hazmat as required.	No. Completed: 6/23/2010		
55	**120422**	6/22/10	Shell, Tesoro Refining & Marketing		No Corrective Actions Required			
56	**120426**	5/17/10	El Pollo Loco #3431		Obtain spill kit; clean litter and debris from trash area.	No. Completed: 6/23/2010		
57	**120509**	6/23/10	Self Realization Fellowship		No Corrective Actions Required			
58	**120511**	6/4/10	Browns Plants		No Corrective Actions Required			
59	**120512**	5/6/10	Chick's Chicken		Provide employee training; provide 2nd containment and overhead cover for liquid storage	No. Completed: 6/23/2010		
60	**120530**	6/28/10	Dramm & Echter		Clean litter and debris from storm drain in SE corner			
61	**120531**	6/1/10	Shell Station		Obtain spill kit, provide employee training, provide 2nd containment and overhead cover for oil bins.	No. Completed: 6/22/2010		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
62	**120534**	2/23/10	Trattoria i Trulli		No Corrective Actions Required			
63	**120538**	2/16/10	Leucadia Pizzeria		No Corrective Actions Required			
64	**120539**	3/31/10	Golden Baked Hams and Sandwiches		No Corrective Actions Required			
65	**120547**	3/31/10	Pizzicato		No Corrective Actions Required			
66	**120548**	3/31/10	Burger King		No Corrective Actions Required			
67	**120549**	5/18/10	Subway		No Corrective Actions Required			
68	**120550**	5/18/10	Little Caesars		No Corrective Actions Required			
69	**120551**	5/18/10	Tomiko		Provide great interceptor and bin records			
70	**120552**	5/18/10	Wendy's #3015		No Corrective Actions Required			
71	**120554**	2/23/10	Beachside Bar and Grill		No Corrective Actions Required			
72	**120555**	2/23/10	3rd Corner Wine Shop and Bistro		No Corrective Actions Required			
73	**120556**	5/6/10	Vons #2144		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
74	**120574**	5/4/10	Flippin PIzza		No Corrective Actions Required			
75	**120575**	5/4/10	Firefly Grill and Wine Bar		No Corrective Actions Required			
76	**120577**	3/31/10	Daphne's Greek Cafe		No Corrective Actions Required			
77	**120578**	3/29/10	Kotija		No Corrective Actions Required			
78	**120579**	3/29/10	Scott's Automotive		No Corrective Actions Required			
79	**120580**	5/17/10	Fender Mender		No Corrective Actions Required			
80	**120585**	5/17/10	Home Depot		Clean litter and debris from north side storm drain			
81	**120589**	5/17/10	Wahoo's Fish Taco		No Corrective Actions Required			
82	**120591**	2/17/10	D Street Bar and Grill		No Corrective Actions Required			
83	**120594**	2/16/10	El Callejon		No Corrective Actions Required			
84	**120677**	5/17/10	Encinitas Yogurt and Ice Cream		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
85	**120678**	5/17/10	Panda Express		No Corrective Actions Required			
86	**120679**	5/20/10	Shell Oil (CNG Inc)		No Corrective Actions Required			
87	**120680**	5/21/10	Java Express		No Corrective Actions Required	No. Completed: 7/14/2010		
88	**120681**	5/21/10	The Quick Fix		No Corrective Actions Required			
89	**120692**	5/20/10	Denny's		Obtain spill kit	No. Completed: 5/24/2010		
90	**120699**	6/21/10	North Coast Equestrian Park		No Corrective Actions Required			
91	**120700**	6/9/10	Trattoria Positano		No Corrective Actions Required			
92	**120701**	6/10/10	Carl's Jr #181		No Corrective Actions Required			
93	**120702**	6/14/10	The Animal Keeper		No Corrective Actions Required			
94	**120706**	6/8/10	Moonlight Motors		No Corrective Actions Required			
95	**120708**	6/8/10	7-Eleven		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
96	**120728**	2/16/10	Bird House Grill		No Corrective Actions Required			
97	**120729**	2/16/10	Juanita's Tacos		No Corrective Actions Required			
98	**120730**	6/7/10	Cardiff 76 (Rosano's)		No Corrective Actions Required			
99	**120731**	5/25/10	KC's Tandoor		No Corrective Actions Required			
100	**120732**	5/17/10	El Torito		Obtain spill kit	No. Completed: 5/24/2010		
101	**120734**	6/2/10	Tierra Verde Resources		No Corrective Actions Required			
102	**120735**	5/25/10	Honey Baked Ham		No Corrective Actions Required			
103	**120736**	6/21/10	Encinitas Ranch Golf Course		No Corrective Actions Required			
104	**120737**	6/22/10	Moonlight Snack Shack		No Corrective Actions Required			
105	**120738**	6/23/10	Borrelli's Pizza Inc		No Corrective Actions Required			
106	**120739**	6/22/10	Passage to India		No Corrective Actions Required			
107	**120740**	6/30/10	Pacific Verde Nursery		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
108	**120741**	6/29/10	RCP Block and Brick		No Corrective Actions Required			
109	**120742**	6/28/10	Charlie's Foreign and Domestic		No Corrective Actions Required			
110	**120743**	6/8/10	Pei Wei Asian Diner		Obtain spill kit, provide and document employee training, clean litter from area behind store			
111	**120744**	6/28/10	Lopez Flowers		No Corrective Actions Required			
112	**120821**	6/1/10	Bety's		Clean litter from trash area	No. Completed: 7/14/2010		
113	**120823**	5/18/10	Mr Peabody's		Obtain spill kit, post spill response plan, provide employee training, prove 2nd containment for oil.	No. Completed: 7/19/2010		
114	**121271**	6/9/10	Pipes Cafe		Obtain spill kit; provide and document employee training; provide 2nd containment and overhead cover for outdoor storage; keep trash containers closed.	No. Completed: 7/14/2010		
115	**121273**	5/26/10	Henry's		Provide cover for grease bin	No. Completed: 7/14/2010		
116	**121275**	5/20/10	Valero		Provide 2nd containment and overhead cover for 55 gallon drum.	No. Completed: 7/14/2010		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
117	**121277**	6/14/10	Jack in the Box		Provide and document employee training			
118	**121278**	2/24/10	St Germain's		Provide and document employee training; provide cover for kitchen oil; clean litter and debris from site, trash areas, and storm drains. Consider larger 2nd containment and more sturdy overhead cover.	No. Completed: 4/1/2010		
119	**121280**	5/4/10	Ralph's		Clean littler from trash area. Close lids or construct cover.	No. Completed: 5/11/2010		
120	**121282**	2/17/10	Vigilucci's		Clean litter and debris from site, trash area, and/or storm drain; sweep up kitty litter.	No. Completed: 2/18/2010		
121	**121284**	3/29/10	El Torito market		Provide 2nd containment and overhead cover for outdoor liquid storage.	No. Completed: 5/12/2010		
122	**121286**	3/31/10	Santa Fe Cafe		Provide 2nd containment for outdoor liquid storage	No. Completed: 5/12/2010		
123	**121288**	3/31/10	Rubio's		Provide and document employee training; Clean outdoor grease storage area	No. Completed: 5/27/2010		
124	**121290**	6/2/10	Brett's BBQ		Provide and document employee training; clean litter and debris from trash area; clean grease storage area in parking lot. Please check irrigation for water in parking lot.	No. Completed: 6/2/2010		
125	**121295**	5/4/10	Blue Fin Sushi Bar		Obtain spill kit	No. Completed: 6/4/2010		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed? Follow Up #1	Corrective Actions Still Needed? Additional Follow Ups	NOV Date
126	**121297**	5/25/10	Chin's Szechwan		Clean oil on pavement in trash area- capture all wash water.	No. Completed: 6/23/2010		
127	**121299**	6/10/10	7 Eleven		Clean litter and debris from trash/storage area.	No. Completed: 6/30/2010		
128	**121301**	6/2/10	Beach Grass Cafe		Obtain spill kit; Clean litter from trash area.	No. Completed: 6/30/2010		
129	**121303**	6/17/10	Encinitas Golf Course Cafe		No Corrective Actions Required			
130	**121304**	6/16/10	Scripps memorial Hospital		Obtain spill kit; post spill response plan; provide and document employee training	No. Completed: 7/16/2010		
131	**121708**	5/13/10	Boston's Pizza		Clean litter and debris from grease tray; call in last grease interceptor service date; clean paint in trash area.	Yes- Paint has not been cleaned up.	No. Completed: 8/18/2010	
132	**121714**	6/1/10	Taco Bell		Obtain spill kit; provide and document employee training.	Yes- Obtain spill kit.	No. Completed: 8/18/2010	
133	**121719**	3/15/10	Williamson Produce		Drain ditch next to Manchester needs to be maintained; Fix leak or remove old diesel tank/liquid fuel.	No. Completed: 6/7/2010		
134	**121724**	5/21/10	Chevron Encinitas		Provide 2nd containment and overhead cover for two 55 gal bins in trash area; provide cover for batteries in trash area; Clean litter and debris from trash area and close lids. Follow up will be completed in FY 10-11.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
135	**121725**	6/28/10	Barrels and Branches		Provide and document employee training; Provide 2nd containment and overhead cover for outdoor liquid storage; Provide cover for exposed soil on east area. Follow up will be completed in FY 10-11.			
136	**121726**	6/29/10	BMW of Encinitas		Provide and document employee training for car wash and painting area; Provide 2nd containment for car wash cleaning containers; Provide cover or remove exposed computer parts and old racks; Clean white paint stain from storm drain. Follow up will be completed in FY 10-11.			
137	**121727**	6/28/10	The Palm Co		Provide 2nd containment and overhead cover for liquid storage/waste; Clean litter and debris from trash area. Follow up will be completed in FY 10-11.			
138	**121729**	6/22/10	Barracuda Fresh Grill		Obtain spill kit; Post spill response plan; Provide and document employee training; Provide 2nd containment and overhead cover for liquid storage. Follow up will be completed in FY 10-11.			

Total Commercial Inspections: 138 **Total Follow ups: 38** **Total NOVs: 0**

Appendix D-5: Routine Industrial Inspections Summary FY 2009-10

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed? Follow Up 1	Corrective Actions Still Needed? Additional Follow Ups	NOV Date
1	**120510**	6/23/10	San Dieguito Transportation Cooperative	Maintain perimeter BMPs. use wash out pits when applicable	No Corrective Actions Required			
2	**120802**	6/21/10	San Elijo Joint Powers Authority		Provide 2nd containment for gas cans	NO. Completed: 7/14/2010		

Total Industrial Inspections: 2 **Total Follow ups: 1** **Total NOVs: 0**

	Business Name	Address	Type	SIC	Activity Description
1	Cardiff Carnivores	1285 Blue Sky Dr	Mobile- Animal	752	Pet Grooming/Training
2	Coastal Canine Conditioning	711 Teaberry St	Mobile- Animal	752	Pet Grooming/Training
3	Dog Behavior 101	2142 Montgomery Ave F	Mobile- Animal	752	Pet Grooming/Training
4	Encinitas Critter Care	1527 Avenida De Los Lirios	Mobile- Animal	752	Pet Grooming/Training
5	Evans Mobile Veterinary Care	2354 Oxford Ave A	Mobile- Animal	752	Pet Grooming/Training
6	Jill's North County Pet Sitting	2538 Ocean Cove Dr	Mobile- Animal	752	Pet Grooming/Training
7	North Co. Coastal Canine Care	1549 San Elijo Ave	Mobile- Animal	752	Pet Grooming/Training
8	The Pet Pals	3250 Country Rose Cir	Mobile- Animal	752	Pet Grooming/Training
9	Underdog Pet Sitting	2439 Caminito Ocean Cove	Mobile- Animal	752	Pet Grooming/Training
10	Your Fairy Dogmother	946 Woodgrove Dr	Mobile- Animal	752	Pet Grooming/Training
11	70 Moto Parts, L L C	1873 Haymarket Rd	Mobile- Auto	7538	Auto Repair & Maintenance
12	Affordable Detail Guys	560 Hermes Ave	Mobile- Auto	7542	Mobile Washing & Detailing
13	Bryans Tropic Shield	1840 Blue Bonnet Pl	Mobile- Auto	7542	Mobile Washing & Detailing
14	Cardiff Limousine	844 Bonita Dr	Mobile- Auto	4111	Local & Suburban Transit
15	Coast Highway Taxi	815 Wood Dr	Mobile- Auto	4111	Local & Suburban Transit
16	Color Solutions Auto Two	126 Triton Cir	Mobile- Auto	7542	Mobile Washing & Detailing
17	Conner Detail	1721 Red Barn Rd	Mobile- Auto	7542	Mobile Washing & Detailing
18	D L M Motors	617 Cathy Ln	Mobile- Auto	7538	Auto Repair & Maintenance
19	Detail On Us	1660 S El Camino Real 103	Mobile- Auto	7542	Mobile Washing & Detailing
20	Elite Auto Trim	4265 Manchester Ave	Mobile- Auto	7542	Mobile Washing & Detailing
21	Herbie Auto Mobile Detailing	141 Grandview St 13	Mobile- Auto	7542	Mobile Washing & Detailing
22	L. WICKS	804 Saxony Rd	Mobile- Auto	7538	Auto Repair & Maintenance
23	Lucas' Cab	117 Rosebay Dr 21	Mobile- Auto	4111	Local & Suburban Transit
24	Mercedes West Auto Wholesale	2026 Oxford Ave	Mobile- Auto	5511	Auto Sales & Maintenance
25	Miller Tire & Wheels, Inc.	248 La Veta Ave	Mobile- Auto	7538	Auto Repair & Maintenance
26	Reed Motors	1326 Rainbow Ridge Ln	Mobile- Auto	7538	Auto Repair & Maintenance
27	So Cal Demolition	1918 Azure Way	Mobile- Auto	7538	Auto Repair & Maintenance
28	Trinity Express	1457 Pegaso St	Mobile- Auto	4111	Local & Suburban Transit
29	Wallace Courier	523 Samuel Ct	Mobile- Auto	4215	Transport Services
30	Whalen Performance	1726 Avenida Melodia	Mobile- Auto	7538	Auto Repair & Maintenance
31	A C Energy Systems, Inc.	224 Birmingham Dr 1A	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
32	A. P. Cottam Co.	123 Jasper St 12	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
33	All Integrity Plumbing	1062 Golden Rd	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
34	App Tek Commercial Inc.	171 Saxony Rd 202	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
35	Archibald Sheet Metal	125 A St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
36	Artisan Textures And Drywall	909 Woodlake Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
37	B L T Construction, Inc.	1923 Lahoud Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
38	Beeson Squared Construction	1572 Caudor St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
39	Better Homes Construction	231 Countryhaven Rd	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
40	Caliber Drywall	1253 N Vulcan Ave 3	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses

Appendix D-6: FY 2009-10 Commercial Inventory- Mobile Businesses

41	Coastal Construction Group	742 Neptune Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
42	Colt Construction & Development	709 Cathy Ln	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
43	Concrete Heritage, Inc.	825 Del Rio Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
44	Craftsman Stone And Tile	1014 San Abella Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
45	Creative Garage Door Systems	1665 Orange Blossom Way	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
46	CUSTOM BUILDERS	1347 Summit Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
47	D. Bell Construction, Inc.	1539 Caudor St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
48	D. H. Construction	477 Delage Ct	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
49	Delany Construction Company	112 La Veta Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
50	Dry Wall Doctor	476 La Mesa Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
51	E. L. Hewitt Construction	825 S Vulcan Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
52	Eric Jason Cashion, Dba: Siding Solutions	168 Coop Ct	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
53	Finishing Touch Moulding, Inc.	921 Hymettus Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
54	Green Building Squared, Inc	1572 Caudor St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
55	Hauser Houses	1452 Santa Fe Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
56	Howe Construction	125 Calle Pensamientos	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
57	J. BRYANT CONCEPTS	565 Requeza St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
58	John Bland Construction	812 Palaro Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
59	KLR Bobcat and Hauling Servies	1924 Country Grove Ln	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
60	Langtree Woodworking	301 Horizon Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
61	M R B Construction	1265 N Vulcan Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
62	Pacific Coast Glazing, Inc.	908 Nolbey St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
63	Pacific Custom Builders	146 W Glaucus St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
64	Pacific Horizon Construction Co.	773 Hymettus Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
65	Pascal Steel Corporation	555 Second St 4	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses

Appendix D-6: FY 2009-10 Commercial Inventory- Mobile Businesses

66	Paul Beeson H H P	1572 Caudor St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
67	R. A. Booker Builders, Inc.	3451 Toscano Ct	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
68	Richard Melton Constructioin Inc.	1570 Lake Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
69	Richard Thaisz Construction	1403 Caminito Septimo	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
70	Robert R. Lovci	1236 Rubenstein Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
71	Robert Tessieri Construction	1743 Legaye Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
72	Sahba Javedani	624 Faith Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
73	So - Cal Shade Sails	1009 Hurstdale Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
74	Steffen Enterprises, Inc.	1008 Saxony Rd	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
75	Sun Cal Solar Incorporated	745 Winding Way	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
76	Titan Woodworks	1131 Bonita Dr B	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
77	Van Veen Team	1145 Aloha Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
78	W O A Builders, Inc.	110 Requeza St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
79	William B. Hannon General Construction	1748 Lake Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
80	Willowen Builders	3410 Adams Run	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
81	Chucks Garden	1578 S El Camino Real	Mobile- Eating/Drinking	5812	Establishments primarily engaged in the retail sale of prepared food and drinks
82	Dave De Jour	2080 Montgomery Ave	Mobile- Eating/Drinking	5812	Establishments primarily engaged in the retail sale of prepared food and drinks
83	GREEN GENERATION GREASE COLLECTION	2035 Sea Village Cir	Mobile- Eating/Drinking	7389	Establishments primarily engaged in furnishing business services
84	Shouri Sushi Enterprise Corp.	1404 Via Terrassa	Mobile- Eating/Drinking	5812	Establishments primarily engaged in the retail sale of prepared food and drinks
85	Victoria Wit	616 Cypress Hills Dr	Mobile- Eating/Drinking	5812	Establishments primarily engaged in the retail sale of prepared food and drinks
86	101 Window Cleaning	910 Hermes Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
87	A & M Window Cleaning	1125 N Vulcan Ave 26	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
88	All Cities Hauling	937 Woodlake Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
89	Anonymous Window Cleaning	1727 Legaye Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
90	At Ease Services	842 Bonita Dr A	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
91	Aztech Cleaning Services	1627 Valleda Ln	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
92	Belman Handyman	738 Snapdragon St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
93	Blade Dufour Handyman Service	905 Woodlake Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
94	Bouche Construction	1115 Balour Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
95	Bright Visions Window Washing	616 Lynwood Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
96	C C A R E	1399 Ranch Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
97	Classy Glass	244 Camino De Las Flores	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work

Appendix D-6: FY 2009-10 Commercial Inventory- Mobile Businesses

98	Clean Air Diagnostics & Solutions	1546 Avenida La Posta	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
99	Clean Sweep	1252 Mackinnon Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
100	Coast Transportation	1990 Country Grove Ln	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
101	D V Environmental Group	1829 Forestdale Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
102	Designs By The Sea	1511 Calle Tulipanes	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
103	Ed's Handyman Service	1372 Hymettus Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
104	F & V Painting, Inc./Dba Certapro Painters	1340 Ravean Ct	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
105	First Place Finish Carpentry	556 Third St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
106	FRAZIER WINDOWS	1017 Hygeia Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
107	G B Enterprises	1106 Second St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
108	Gary Wesley Handyman	1813 N Vulcan Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
109	Gaul Remodeling	126 Jasper St 404-B	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
110	Heavenly Views Window Cleaning	1123 Gardena Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
111	Home Security Solutions	544 Crest Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
112	Jesus Fuentes	2039 Shadow Grove Way	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
113	John's Window Cleaning	1201 N Vulcan Ave 25	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
114	Ken's Handyman Service	152 N Coast Highway 101 19	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
115	Liquid Pool And Spa Service	16 E I St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
116	Lux Homes	378 Fulvia St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
117	M H S - Works	1008 Cottage Way	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
118	Madrigal Handyman Service	513 S Willowspring Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
119	Maurice's Handyman Services	1190 Encinitas Blvd A	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
120	Mc Gowans Home Maintenance	949 Woodgrove Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
121	Michael E. Greiff	1448 Caminito Septimo	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
122	Mike Hidalgo, Inc.	119 Europa St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
123	N. Otis Potter	505 Arden Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
124	North County Handy Man	1270 Avenida Miguel	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
125	North County Hauling Service	1117 Woodlake Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
126	Pacific Roof Cleaning	1571 Avenida De Las Lilas	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
127	Patrice Alexander	2437 Oxford Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
128	Patrick W. Quinlan Handyman	454 Requeza St 320	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
129	Peruvian Builders	349 Village Run East	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
130	Phil's Handyman Service	1726 Old Mill Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
131	R. K. Enterprises	658 Santa Fe Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
132	Reva Hydro Jetting	1056 Lark Song Ln	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
133	Reyes Handyman	1143 Gardena Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
134	Romeo Godinez Handyman	1159 Gardena Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
135	Rusty Tree Service	1144 Woodlake Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
136	S. M. H. Handyman Service	1009 Hermes Ave A	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
137	Salo Custom Woodwork	1549 N Vulcan Ave 54	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
138	Sammy's Handyman Plumbing	110 S Kihridge Ln	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
139	San Diego Stone Care	731 Snapdragon St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
140	Scot Enterprises	454 Requeza St 130C	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
141	Seacoast Plumbing	1334 Caminito Septimo	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
142	Short People Services	116 Quail Gardens Dr 137	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
143	Sparkle Window Cleaning	2427 Newcastle Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
144	Spectrum Builders	699 N Vulcan Ave 84	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
145	Sunny Window Cleaning	404 Encinitas Blvd 345	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
146	Supergrampa	1831 Pleasantdale Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
147	Turn Key Construction Handyman Services	444 N El Camino Real 87	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
148	Velasquez Maintenance, L L C	1902 Paxton Way	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work

Appendix D-6: FY 2009-10 Commercial Inventory- Mobile Businesses

149	William Brady Handyman	923 Melba Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
150	30 Minute Carpet	558 Beach St	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
151	All About Cleaning Services	1168 Arcadia Rd	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
152	All In Carpet Cleaing	720 Devonshire Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
153	Best Cleaning/Dba Anago	1543 Villa Cardiff Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
154	Beyond Industrial Cleaning	945 Woodgrove Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
155	Bob's Carpet Care, Inc.	336 Sanford St	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
156	California Maids Home Services	885 Del Rio Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
157	Cardiff Maintenance	2233 Lagoon View Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
158	Cifuentes Residential & Commercial Cleaning	1646 Landquist Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
159	Claudia's Housekeeping Services	1338 Mackinnon Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
160	Cleaning Lady Elmorr	2134 Carol View Dr 311	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
161	Clear Choice Window Cleaning	138 Diana St	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
162	David Rivers Cleaning Services	1743 Old Mill Rd	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
163	Doctor Playground, Inc.	123 Jasper St 46	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
164	Drenie's Housecleaning	1421 San Elijo Ave B	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
165	Elva's Housecleaning	1936 Park Dale Ln	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
166	Encinitas Janitorial Service	699 N Vulcan Ave 109	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
167	Favorite Maid	404 Encinitas Blvd 258	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
168	Guillermina's House Keeping	1253 Orkney Ln	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
169	Jason Cardoza General Maintenance	884 Del Riego Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
170	Just Us Cleaning And House Sitting	1066 Guildford Ct	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
171	Kamin's Cleaning Services	170 Phoebe St 11	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
172	Letty Boops Housekeeping	407 Requeza St E10	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
173	Lorenas Cleaning	1125 N Vulcan Ave 11	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
174	Maria Lopez Professional Cleaning	282 Aspenwood Ln	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services

Appendix D-6: FY 2009-10 Commercial Inventory- Mobile Businesses

175	Nayeli Kim Dba Anago Of San Diego	1015 Guadalajara Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
176	Pacific Coast Maintenance	981 N Vulcan Ave 8	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
177	Professiional Cleaning & Errands	1099 Regal Rd	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
178	Ranch & Coast Mortgage Group, Inc.	149 W D St	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
179	Rita's Cleaning Services	796 Clark Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
180	Romero's Carpet Cleaning	1190 Encinitas Blvd 146	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
181	Rosanas Home Cleaning Services	1100 Garden View Rd 129	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
182	Seaside Janitorial Service	1019 1/2 Hermes Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
183	Terry's Cleaning Service	2157 Pleasant Grove Rd	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
184	The Rescue Maids	1305 Mackinnon Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
185	10-C'S Landscape Enhancements	1301 Trabert Ranch Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
186	A Sinclair Ground Maintenance	454 Requeza St 316 A	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
187	Aguirre Services	347 Cerro St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
188	Alfonso Rey Landscape Maintenance	351 Sprucewood Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
189	All Cities Construction Services	729 Requeza St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
190	All Cities Hauling	280 Cottage Grove Ln	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
191	Alonzo	755 Regal Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
192	Anguiano Landscaping	471 Cole Ranch Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
193	Arnulfo Medina Landscaping	1408 Hermes Ave A	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
194	Arroyo Landscape Design	910 Nardo Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
195	Benny's Gardening	1010 Balour Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
196	Carrillo Tree Maintenance	794 Clark Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
197	Coco's Landscape And Maintenance	1744 Knollfield Way	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
198	Crown Pool And Landscape	2126 Via Tiempo	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
199	Dave Steinbis Landscape Maintenance	699 N Vulcan Ave 127	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services

200	Del Mar Landscaping	2016 Bulrush Ln	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
201	Enrique Landscaping	1020 Aloha Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
202	Falling Waters Landscape, Inc	774 Lotus Blossom St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
203	Felix Sanchez Gardening Service	880 Del Rio Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
204	Flores Landscaping	647 San Dieguito Dr 3	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
205	G. K. Landscape	244 Second St E	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
206	Galapacifica Landscape	924 Encinitas Blvd 73	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
207	Greg Stone Landscape Architects	69 Mcneill Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
208	Gresham Landscaping & Consulting	1734 Noma Ln	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
209	Hauling And Landscaping.Com	1133 Gardena Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
210	J A Landscape	2068 Bulrush Ln	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
211	Jean Nordstrom	2156 Mountain Vista Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
212	JESUS AGUSTIN AMEZCUA LANDSCAPE	213 Hickoryhill Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
213	JMD Landscape, Inc.	187 N Vulcan Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
214	John Hanna & Associates	1753 Swallowtail Rd.	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
215	L. L. M. Landscape, Inc.	675 Requeza St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
216	LANDESCAPE DESIGNS/LANDESCAPE	944 Hermes Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
217	Landscaping	1105 Regal Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
218	Lattin	246 Neptune Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
219	Luis Maldonado	1041 San Andrade Dr A	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
220	Mijangos Landscaping	1608 Charro St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
221	MIKE HIRSCH	753 Requeza Street	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
222	Mitchell Aquarium Service	591 Hygeia Ave A	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
223	Morrison Workshop	875 Del Rio Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
224	Pacific View Landscapes	2444 Manchester Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services

225	Pappas Landscape Technician	1063 Gardena Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
226	Prola Landscape Design	1333 San Elijo Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
227	REEGAN RAY DESIGN	734 San Dieguito Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
228	Sinclair Grounds Maintenance	454 Requeza St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
229	STEPHANIE C. SMULL	837 Stratford Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
230	U P E Resources/Tree Elements	1624 Olmeda St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
231	Zachary Jones Landscaping	704 Regal Rd #3	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
232	Action Painting	1443 Via Terrassa	Mobile- Painting	1721	Special trade contractors primarily engaged in painting and paper hanging.
233	Beemer Coatings	152 Coop Ct	Mobile- Painting	1721	Special trade contractors primarily engaged in painting and paper hanging.
234	Kessing Painting,Inc.	261 Caliban Ct	Mobile- Painting	1721	Special trade contractors primarily engaged in painting and paper hanging.
235	Mr. Paint	404 Encinitas Blvd 228	Mobile- Painting	1721	Special trade contractors primarily engaged in painting and paper hanging.
236	Russell Handy Painting	2056 Bulrush Ln	Mobile- Painting	1721	Special trade contractors primarily engaged in painting and paper hanging.
237	A Plus Pool And Spa Service	1190 Encinitas Blvd 247	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
238	Absolute Perfection Fountain	730 Third St	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
239	Aqua Tech Pool Care, L L C	233 Delphinium St	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
240	Aquatic Perfection	1590 Ave De Los Lirios	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
241	Bishop Pool Service And Repair	744 Foxglove St	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
242	Blue Water Of La Jolla	2008 Wandering Rd	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
243	C D Pools	1265 Rubenstein Ave	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
244	Cielo Pools	708 Oakbranch Dr	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
245	James Kandiguranis Pools	1853 N Vulcan Ave 4	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
246	Leisure Friends,	368 N El Camino Real	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
247	Mayer Pool Service & Repair	1553 Plumtree Dr	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
248	Pacific Coast Pool Service	1439 Linda Sue Ln	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
249	Palisades Pool And Spa Service	230 Gloxina St	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
250	Pro Clean Pools & Spas	1052 Arcadia Rd	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
251	Ranch And Sea Pool Care	1686 Falcon Hill Ct	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
252	Rancho Santa Fe Pool Service	2039 Willowood Ln	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
253	S. S. Pool Service	1125 Woodlake Dr	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
254	The Pool Pros	2061 Village Park Way 123	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
255	Wilson Pools Plus	185 Village Run East	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance

Appendix D-6: FY 2009-10 Commercial Inventory- Mobile Businesses

CITY OF ENCINITAS

Clean Water Program

Minimum Required

STORMWATER BEST MANAGEMENT PRACTICES

for Commercial Facilities

YOUR BUSINESS CAN MAKE A DIFFERENCE!

What is a stormwater Best Management Practice (BMP)?

The term "Best Management Practice" (BMP) refers to a combination of effective and economical practices, techniques, and/or activities that can help prevent or reduce stormwater runoff pollution. It's simple: only rain goes in the storm drain.

How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some facilities may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

See http://bmp.projectcleanwater.org for more information on Best Management Practices relating to specific commercial business activities.

To report stormwater pollution in the City of Encinitas, please call the Clean Water Hotline: (760) 633-2787

For any questions regarding the City's Clean Water Program or the information presented above, email: npdesmail@cityofencinitas.org

Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. A training log should be kept at the facility to ensure that all employees are properly trained in stormwater pollution prevention practices. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) for every activity performed on the job. (Please visit *http://bmp.projectcleanwater.org* for activity specific practices)
- Proper spill prevention and response procedures (containment, control, cleanup - do NOT hose it down)
- The location and proper use of clearly labeled spill kit and spill response guide.
- The location of all stormwater drains and inlets, and the knowledge that they all lead to the ocean.

Indoor/Outdoor Liquid Storage

Commonly stored liquids including grease, oil, and other fluids that may be kept in a container inside or outside may pose a potential threat to water quality if they can overflow, get knocked over, or leak. Properly storing these fluids is a key component to effective pollution prevention at any business. The following practices comply with minimum BMP standards for liquid storage — and will help to keep them out of the stormwater system.

- Keep containers that store fluid or liquid inside an additional container to provide secondary containment
- Provide overhead coverage for outdoor storage of fluid or liquid waste
- Schedule regular waste pick-ups to prevent spills and overflows from storage containers
- Perform regular maintenance and cleaning of storage areas

Good Housekeeping

Routine maintenance and clean-up is essential to minimizing stormwater pollution from your business. When cleaning up outdoors, it is important to keep debris and contaminants from running into the storm drain system. The following good practices should be applied to all cleanup and maintenance activities to prevent storm drain pollution:

- Dry cleaning methods (i.e. using a broom to sweep instead of a hose) will reduce water usage and lessen the potential to pollute. Also, using a mop and bucket will eliminate runoff; the wash water can then be disposed of in the sink or toilet (NOT the storm drain)
- Wash water from activities such as hosing off sidewalks and patios, vehicle washing, and cleaning floor mats should be directed toward or done over pervious areas (i.e. lawn, dirt, flower bed, shrubs, and planted areas).
- If using water as a clean-up method and it cannot be re-directed to a vegetated area, proper storm drain protection (i.e. sand bags) must be utilized to capture all washwater.

Trash/Recycling Storage and Management

Properly maintained trash, recycling, and debris containment areas are an easy way to protect the environment. Simple steps like keeping trash dumpster lids closed and immediate cleanup of spilled materials (solid or liquid) will go a long way. The following practices must also be applied to better manage trash, debris and other waste materials:

- Ensure the site, trash/recycling areas, and storm drains are free of litter and debris.
- Trash containers and dumpsters must be in good condition and free of holes.
- All receptacles must have closed lids or be placed in a covered area.

Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water

CITY OF ENCINITAS

Clean Water Program

Minimum Required

STORMWATER BEST MANAGEMENT PRACTICES

for Mobile Business Activities

YOUR BUSINESS CAN MAKE A DIFFERENCE!

What is a stormwater Best Management Practice (BMP)?

The term "Best Management Practice" (BMP) refers to a combination of effective and economical practices, techniques, and/or activities that can help prevent or reduce stormwater runoff pollution. It's simple: only rain goes in the storm drain.

How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some businesses may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

See http://bmp.projectcleanwater.org for more information on Best Management Practices relating to specific commercial business activities.

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Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) specific to mobile business activities. Please visit *http://bmp.projectcleanwater.org* for activity specific BMPs related to your business.
- Knowledge of the storm drainage system, and how to locate drains and inlets that must be protected.
- How to use appropriate and easily accessible supplies to properly control and eliminate any discharge to the storm drain system.
- Proper spill control and cleanup procedures.

Proper Waste Handling (solid, liquid, and hazardous wastes)

Before starting any job, consider the types of waste that may be generated including wash water, chemical compounds, residual construction or repair materials, paints, oil and grease, and loose trash and debris. It is important to properly control, contain, and transport these materials to prevent spills and discharge from entering the storm drain system. The following steps will help to manage waste generated from your mobile business activity:

- Do not dispose of ANY waste material in the storm drain system.
- Liquid non-hazardous wastes may be disposed of in the sanitary sewer (i.e. sinks, toilets) if appropriate, or placed in sealed containers and disposed of properly.
- Solid wastes should be removed from the worksite in waste containers with a lid and disposed of at appropriate waste sites.
- Inspect and label all hazardous material waste containers prior to removal. For details in the management, transport, and disposal of specific waste, contact the County of San Diego Hazardous Materials Division at (619) 338-2231.

Equipment Cleanup

Equipment cleanup activities should always be conducted away from storm drain inlets, and performed in a manner to prevent the release of any material into the street, curb, gutter, alley or any other conveyance facility. To ensure compliance with minimum BMP standards for equipment cleanup activities, follow these simple practices:

- Equipment cleanup should be conducted in a container such as a bucket, tub or basin to control liquids and prevent runoff.
- Alternatively, conduct equipment and material cleanup activities in an area contained by a berm or plastic liner to collect and contain all fluids.
- Dispose of waste water into a sanitary sewer drain (i.e. sink, toilet) as appropriate or into a vegetated area (i.e. lawn, flower bed, dirt area).

Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water

Appendix E

Residential

E-1 Map of High Threat to Water Quality Residential Areas

City of Encinitas

High Threat to Water Quality Residential Areas

High Threat to Water Quality Residential Areas in the City of Encinitas include:

- All residential areas within 500ft of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

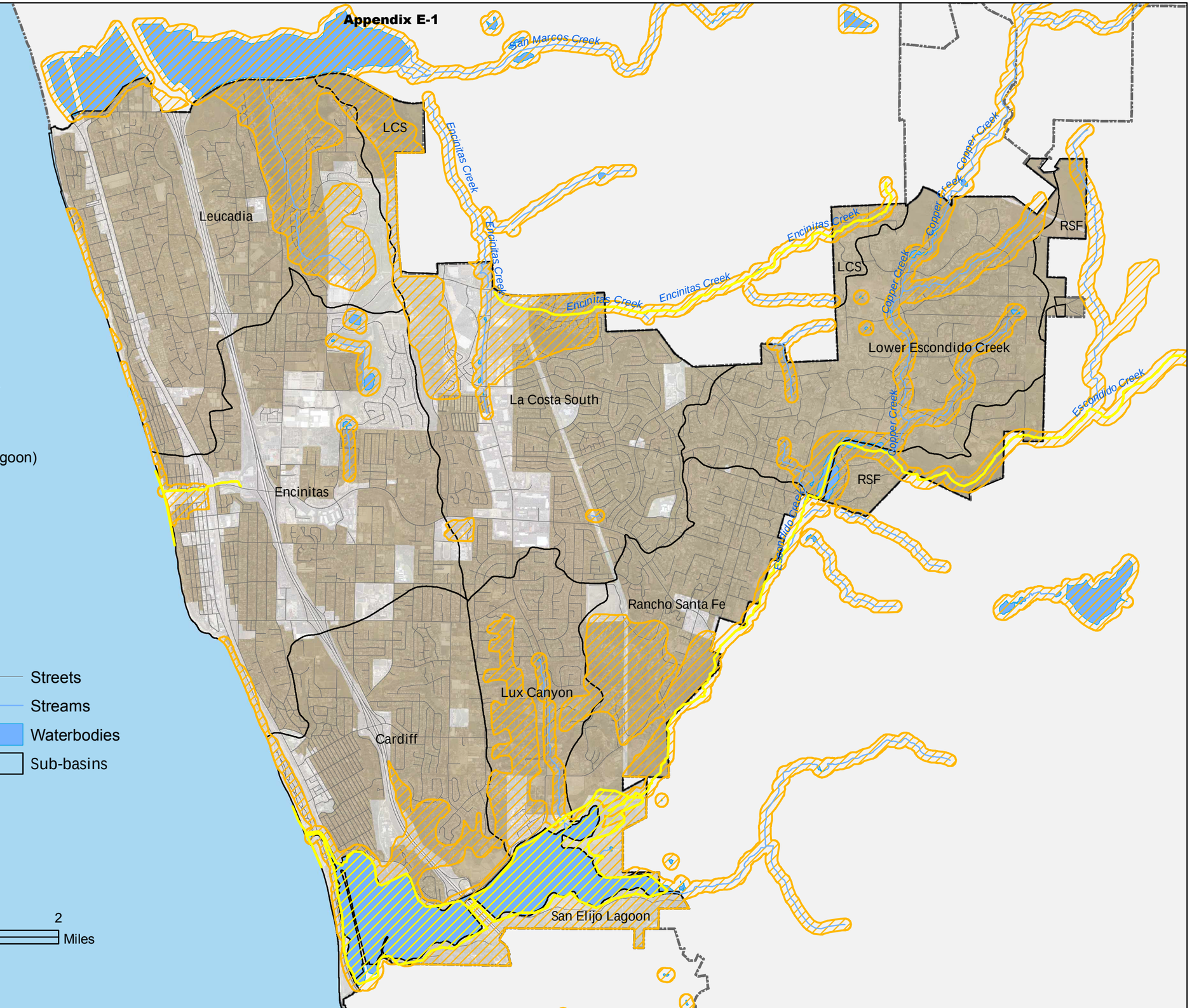

Residential Areas
303(d) listed streams
303(d) listed waterbodies
Environmentally Sensitive Areas
Streets
Streams
Waterbodies
Sub-basins

0 0.5 1 2 Miles

Appendix F

Education

F-1 Regional Mobile Business Outreach and Education Plan

F-2 NCSWP Construction Brochure

F-3 City of Encinitas Brochures (English Spanish)

F-4 Encinitas Environmental Services Guide

F-5 Giveaway items for FY 09-10

F-6 Regional Residential Education Plan

Regional URMP Attachment 5.0

Regional Mobile Business Outreach and Education Strategy

FINAL - March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

This document describes a **Regional Mobile Business Outreach and Education Program** to be collaboratively conducted by the Copermittees of NPDES Order No. R9-2007-0001 (Permit). It was developed by the Mobile Business Subcommittee of the Copermittees' Outreach Workgroup. Permit section D.3.b.(4)(a) requires that each Copermittee develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP. Section D.3.b.(4)(b) further states "if they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education." Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy. It addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy.

2.0 SOURCE CHARACTERIZATION

Mobile businesses provide services at offsite locations rather than from fixed bases of operation. Services may be provided at, but are not limited to, residential, industrial, municipal, and commercial areas. Permit Section D.3.b.(1), identifies 12 categories of mobile business types that will be addressed as part of this regional Strategy. Table 1 identifies these businesses types and the potential pollutants associated with each. Additional characterization and description of these sources will be conducted during the development and implementation of the regional program elements described in Section 2.0

Table 1 – Identification of Mobile Business Types and Associated Pollutants-of-Concern

Source Type	Bacteria	Metals	Pesticides	Sediment	Trash	Nutrients	Organics	Oil/Grease
1. Auto Repair, Maintenance, Fueling, Cleaning		X		X	X		X	X
2. Equipment repair, maintenance, fueling, or cleaning		X		X	X		X	X
3. Mobile automobile or other vehicle washing		X		X	X		X	X
4. Pest control services		X	X				X	
5. Mobile carpet, drape or furniture cleaning							X	
6. Cement mixing or cutting				X		X	X	
7. Masonry				X		X	X	
8. Painting and coating		X			X		X	
9. Landscaping	X	X	X	X		X	X	
10. Pool and fountain cleaning		X		X		X	X	
11. Portable sanitary services	X				X	X	X	
12. Power washing services	X	X	X	X	X	X	X	X

3.0 REGIONAL PROGRAM ELEMENTS

The Regional Mobile Business Outreach and Education Program will consist of several elements to be developed and implemented by June 2010.

3.1 Inventory Development and Maintenance

Permit section D.3.b.(1) requires that each Copermittee keep as part of its commercial sources inventory a listing of mobile businesses known to operate within its jurisdiction, and section D.3.b.(4)(b) encourages Copermittees to share these inventories. In addition to sharing inventory information, the Copermittees have determined that the collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses, and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications. The Copermittees

intend to utilize a consultant to compile this inventory. It is expected to be completed by June 2009. Prior to the completion of a shared inventory, the Copermittees will continue to meet the requirements of section D.3.b.(4)(b) by individually maintaining and updating as necessary their existing jurisdictional mobile business inventories. These will be used as a starting point for the development of a consolidated inventory. The consultant will also be tasked with researching other information sources such as unlicensed mobile businesses operating within the County, as well as with managing updates to the inventory in subsequent years.

3.2 Establishment of Minimum BMP Requirements

Permit section D.3.b.(4)(a)i requires that Copermittees develop and implement minimum standards and BMPs to be required for each of the various types of mobile businesses. The Copermittees also intend to collaborate in the development of a minimum set of BMP standards for each type of mobile business addressed through the regional effort. Existing resources such as jurisdictional minimum BMPs, the Project Clean Water Clean Water Tool Box (http://www.projectcleanwater.org/bmp/) and the Think Blue website (http://www.sandiego.gov/thinkblue) will be reviewed by the Copermittees in developing these common standards. A consultant may also be utilized for BMP development support. This task is expected to be completed by June 2009.

3.3 Outreach and Education Strategy

Permit section D.3.b.(4)(a)iv requires that Copermittees develop and implement an outreach and education strategy for mobile businesses. A variety of educational methods and approaches will likely be utilized in complying with this requirement. These will be determined by the Copermittees during the development of this task. The centerpiece of the Copermittees' education strategy will be business notifications. This element is described further below.

3.4 Business Notifications

Permit section D.3.b.(4)(a)iii requires that, within the first three years of implementation of the updated JURMP, each Copermittee must notify the owner/operator of each

inventoried mobile business their minimum standards and BMP requirements and local ordinances. The Copermittees will collaboratively develop and implement a regional notification strategy to inform mobile businesses of their obligation to comply with the local ordinances of the jurisdictions where they operate. In addition to assisting in the development of this strategy, the consultant will be tasked with notifying businesses and tracking when and how they were notified. Potential notification options include mailing, emailing, workshops, and website posting. This task will be completed no later than March 24, 2011, but is targeted for completion by March 2010.

3.5 Implementation Schedule

Implementation of the Regional Mobile Business Outreach and Education Program will begin during FY 08/09, with all major tasks targeted for completion by the end of FY 2009/10. The consultant may also be retained for future management of the inventory and other tasks as needed. Major milestones are summarized below.

FY 2008/09

- Consultant selection by Subcommittee
- Completion and maintenance of regional inventory by consultant
- Development of regional minimum BMPs

FY 2009/10

- Notification of businesses by consultant (by January 2010)
- Final report including status of notifications submitted to Copermittees

4.0 INDIVIDUAL COPERMITTEE RESPONSIBILITIES

Although many of the specific requirements of Permit section D.3.b.(4)(a) will be collaboratively addressed through the completion and implementation of the Regional Mobile Business Outreach and Education Program, the responsibility for ensuring individual Permit compliance ultimately remains with each Copermittee. These responsibilities are briefly discussed below.

4.1 Inspections and Enforcement

Permit section D.3.b.(4)(a)ii requires that Copermittees develop and implement an enforcement strategy which specifically addresses the unique characteristics of mobile businesses operating within their jurisdictions. Section D.3.b.(4)(a)v further requires that Copermittees conduct inspections of mobile businesses as needed (e.g., on a complaint basis). The Regional Mobile Business Outreach and Education program will not address inspections or enforcement of mobile businesses; these responsibilities are retained individually by each Copermittee.

4.2 Education and Outreach

Copermittees are expected to participate as requested in the development of the Education and Outreach Strategy described in Section 3.3 above. Individual Copermittees may also have specific needs or requirements not addressed through this effort. Each jurisdiction retains the responsibility for developing additional education programs or strategies in accordance with their own needs, and as necessary to ensure their own Permit compliance.

4.3 Inventory Updates

As described in Section 3.1 above, individual Copermittee mobile business inventories will initially be used as a starting point for the development of a consolidated regional inventory. Copermittees are expected to make their inventories available as requested, and to provide updated information as determined necessary for future updates.

4.4 BMP Requirements

Copermittees are expected to make their jurisdictional BMPs and requirements available as requested during the development of regional standards and program content. The Regional Mobile Business Outreach and Education Program will emphasize standardized, common content. In the event that an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad 760-602-2719

City of San Marcos 760-744-1050

City of Encinitas 760-633-2787

City of Del Mar 858-755-9313

City of Oceanside 760-435-5800

City of Solana Beach 858-720-2470

City of Vista 760-726-1340

Best Management Practices

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.

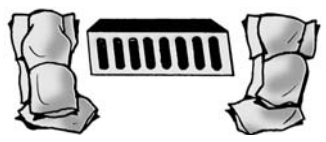

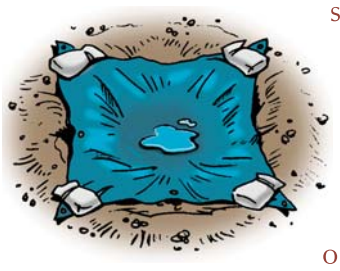

The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.

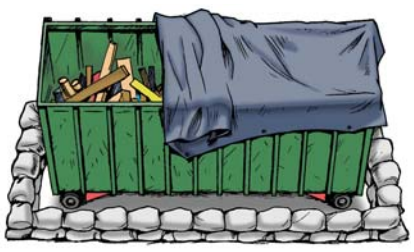

Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.

Water Quality Regulations for Construction Sites

In 1972, the Environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

A Pollution Prevention Guide for the Construction Industry

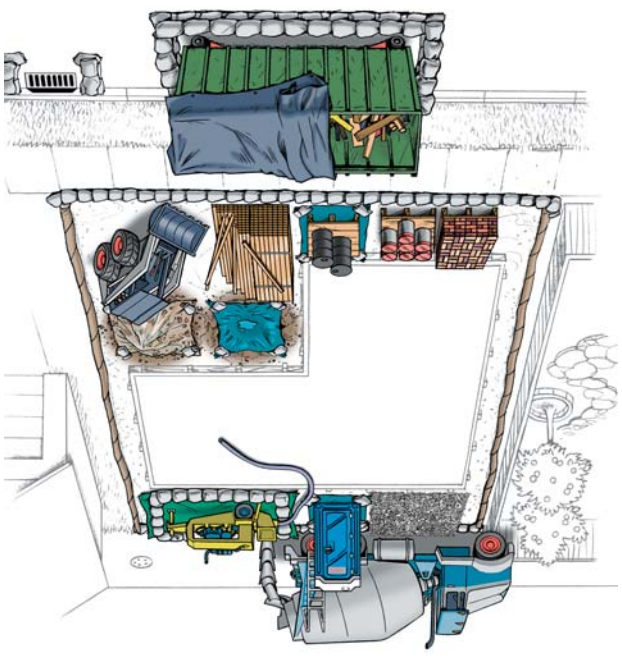

North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.

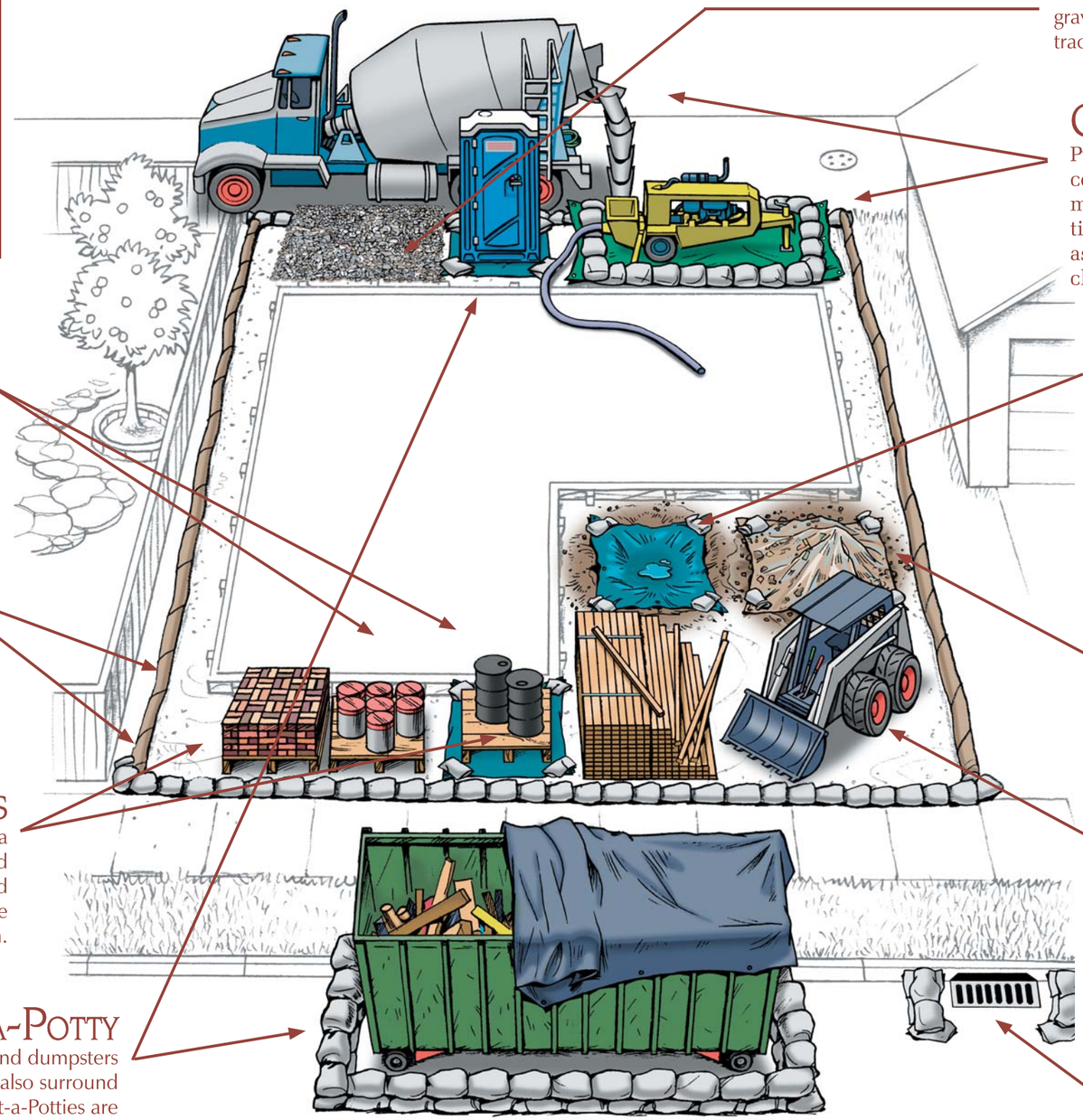

Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Perimeter controls

Gravel bags, silt fences, and straw wattles are acceptable perimeter controls, and must be used to surround the entire site to control run-on and run-off. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Keep extra absorbent materials and/or a wet/dry vacuum on site to quickly pick up unintended spills. Sites must also be checked and maintained daily.

Building materials/staging areas

Construction materials must be stored on site at all times unless a right-of-way permit has been obtained. Building materials should always be covered when not in use to prevent run-off caused by wind or rain. To apply for a right-of-way permit, contact the appropriate department of your local jurisdiction.

Dumpsters/Port-a-Potty

Always cover dumpsters with a rollback tarp. Areas around dumpsters should be swept daily. Perimeter controls should also surround dumpsters and all Port-a-Potties. If dumpsters or Port-a-Potties are kept on the street, right-of-way permits are needed.

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic sheet to collect and contain liquids and prevent run-off in nearby areas. The washout area must be checked and maintained daily to ensure compliance. Washout liquids must be disposed of properly.

Dirt and grading

Mounds of dirt or gravel should be stored on site. These materials should also be covered each day with a tarp, coconut mat, or other form of protection. Visqueen and/or tarps must be available and on site to cover 125% of exposed areas during the rainy season (October – April).

Earthmoving equipment

All earthmoving equipment should be stored on site. Maintenance should also be conducted on the site, and tracks and trails left by equipment leading to and from the site should be cleaned up immediately.

Storm drains

Storm drains must be protected at all times with perimeter controls, such as gravel bags or straw wattles. Sediment accumulation should be removed frequently.

Appendix F-2

These guidelines are generalized. Please check specific requirements with your local jurisdiction.

Mantenimiento
Automotriz
Automotive

Empresas Constructoras
Developers
Simple and Cost Effective Ways to Comply with Storm Water Regulations

Contratando un
Hombre Anto
Hiring a
Handy Man

DiaZinón
DiaZinon

Los Restaurantes Pueden
Ayudar a Mantener Limpias
Nuestras vías
Restaurants Can
Help Keep our
Waterways Clean

Cuidado del
Patio y del jardín
Yard & Garden
Care

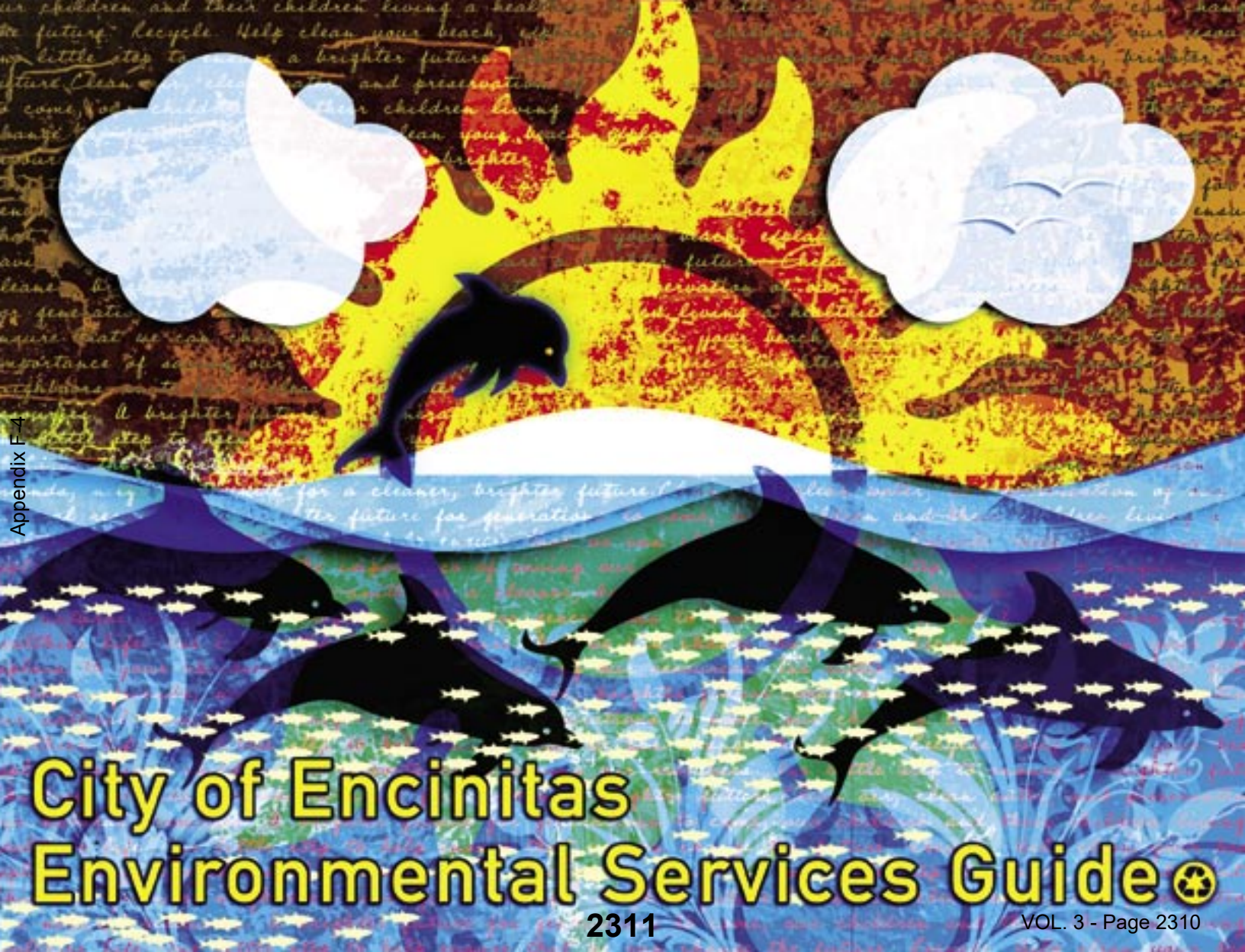
City of Encinitas
Environmental Services Guide

Ocean protection

The ocean begins at your front door.

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.

Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.
- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.

Color Changing Mood Pencil

Pet Waste Bag Dispenser

Recycled Shop Towel

Recycled Key Chain

Regional URMP Attachment 2.0

Regional Residential Education Plan

FINAL March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

The Regional Residential Education Program is a joint effort by the Copermittees of the Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES No. CAS0108758). The Regional Residential Education Plan (Plan) contains recommended strategies for the successful development and implementation of the Regional Residential Education Program. Per section F.1 of the Permit, as amended by Addendum No. 1 on December 12, 2007, this program must be collaboratively developed and implemented by March 24, 2008.

In the past, Copermittees have been limited in their ability to pursue strategies which may have a much greater potential to influence knowledge and behavioral change in residential populations. There are several benefits to implementing an enhanced regional program to target residential sources of stormwater pollution. First, it will encourage the development of consistent messages throughout the region. Second, a regional approach will enable Copermittees to better leverage resources and utilize economies of scale. Finally, stormwater and urban runoff pollution frequently cross jurisdictional boundaries, making collaborative approaches a necessity. While the regional program will be coordinated extensively among the Copermittees, it is not meant to supplant the jurisdictional and watershed programs.

The overall goals of the program are to increase awareness and knowledge, improve attitudes toward stormwater pollution and provide a foundation for changing behaviors that contribute to stormwater pollution. Based on extensive input from the Copermittee Regional Stormwater Management Committee (RMC) and the Education & Residential Sources Workgroup, as well as an independent analysis of existing educational efforts, the following objectives were developed to support these goals:

1. Maintain a consistent image, message, and brand
2. Use positive messages to increase knowledge and awareness, and ultimately change behavior
3. Develop community partnerships to leverage resources

4. Develop assessment strategies for program effectiveness

The Regional Education & Residential Sources Workgroup advises the RMC on regional shared outreach activities as necessary to support the requirements of the Permit. The Education & Residential Sources Workgroup plans, develops, and implements the various aspects of the stormwater education program. Education & Residential Sources Workgroup participants have traditionally combined efforts to reach business, industrial, and residential communities across the San Diego region. However, in accordance with the most recent NPDES Permit, this Plan represents a distinct effort to target residential sources of stormwater pollution.

Messages developed by the Education & Residential Sources Workgroup are designed to increase knowledge and awareness of regional stormwater issues and encourage positive changes in behavior. Assessment methods and measures have also been developed to evaluate the effectiveness of these messages and the strategies used to deliver them. Program evaluation methods and strategies will evolve as various program elements are implemented. Regional assessment methods will measure knowledge, awareness, and attitudes of residents. Program elements that are determined to be ineffective or least effective will be replaced by more effective elements or improved upon as needed. The regional program will also facilitate the measurement of changes in pollutant generating behaviors by the jurisdictional and watershed programs.

As a basis for developing this Regional Residential Education Plan, the Copermittees contracted with TRG & Associates to develop *Recommended Options for the San Diego Regional Stormwater Educational Program*. This document contains a number of recommended strategies for the successful development and implementation of a regional residential education program. It includes an extensive literature review, an analysis of existing educational programs in San Diego, and a comprehensive list of public awareness surveys. The literature review outlines other programs in the State that have

successfully implemented regional residential stormwater education programs. The document also summarizes the strengths and weaknesses of existing residential education efforts, provides suggestions for how they can be improved, provides a brief analysis of baseline public awareness surveys that have been implemented locally within the last five years, and offers recommendations for improving assessment methods and survey instruments.

2.0 SOURCE CHARACTERIZATION

The San Diego region occupies 4,261 square miles with a population of approximately 3 million people. Estimates for the year 2007 indicate that the San Diego regional population is 29% Hispanic and 71% non-Hispanic. Non-Hispanic persons include African Americans, American Indians, Native Hawaiians, Asians, and persons of a multitude of races, ethnicities, and cultures. SANDAG currently estimates that the median household income in the San Diego region is $68,388. According to the US Census Bureau in 2004 only 10.9% of San Diego's population was living below the poverty level, compared to 13.2% Statewide. Other estimates indicate that as much as 25% of California's population is living below the poverty level. Much of the region's quality of life revolves around the water resources.

Residential areas have been shown to be a prevalent source of urban runoff in the San Diego region, although less than ten percent of the region is developed as residential land. Most of the urban activity is clustered in the western third of the county, near coastal areas. However; residential land–based activities throughout the entire region contribute to polluted stormwater runoff.

The Regional Residential Education Program will focus efforts on high priority residential pollution sources that are common throughout the San Diego region. Water quality monitoring data and source characterization studies have provided the Copermittees with useful information in determining regional residential sources of stormwater pollution and constituents of concern. Regional threats to water quality were initially outlined in the Report of Waste Discharged and finalized in the Permit. Section

F.1.a of the Permit describes the process for determining which pollutants will be addressed by the program.

2.1. Regional Constituents of Concern

The following constituents of concern were determined to be the primary pollutants from residential sources for the San Diego region:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

Some jurisdictions may have additional high priority pollutants. Each jurisdiction will be individually responsible for addressing additional pollutants and their sources. The pollutants listed above will remain the focus of the Regional Residential Education Program.

2.2. Pollutant-generating Activities and Constituents of Concern

Table 1 outlines residential pollutant generating activities and associated constituents of concern generated by residential areas in the San Diego region.

Table 1) Pollutant Generating Activities

Pollutant Generating Activities	Priority Constituents				
	Bacteria	Nutrients	Pesticides	Sediments	Trash
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	X	X			
• Over-irrigation • Improper irrigation and system maintenance	X	X	X	X	
• Fertilizer use • Pesticide use • Landscaping activities	X	X	X	X	
• Cleaning outdoor impervious surfaces (i.e., driveways and patios)	X	X		X	X
• Improper waste disposal	X	X	X	X	X

2.3. Target Audiences

As described above, this program is intended to address the entire residential community of the San Diego region. This residential audience will be further described in terms of two specific target audiences in order to design more effective education and outreach strategies. The target audiences for the Regional Residential Education Program have been identified based on information gathered by the consultant (TRG and Associates), who utilized data from market research conducted by the County and City of San Diego and surveys gathered from other case studies. Although there may be other smaller groups of target audiences, regional outreach must realistically target the highest priority demographics in order to effectively utilize program funds. The following describes the target audiences for the campaign:

1. Primary Target Audience- English speaking residents and homeowners
2. Underserved Target Audience- Spanish speaking communities and Low Socio-Economic Status (SES)

One of the challenges of program implementation will be to develop messages that appeal to these communities. While creating content and developing materials for the primary target audience may be relatively straightforward, methods and approaches will need to be modified in order to engage the Underserved Target Audience. For example; some messages will be more conducive to translation into the Spanish language than others. Once translated, Spanish language media will be used to disseminate these messages.

According to the US Census Bureau, 33% of San Diego County residents speak a language other than English at home (2000). The same data indicates that 26.7 % of the regional population is Hispanic or Latino. Although this number varied within jurisdictions from 49.5% in Chula Vista to 11.7% in Carlsbad, it is clear that every jurisdiction in the region has significant populations of Hispanic or Latino residents. Therefore, although there are many languages spoken in San Diego, Spanish speaking communities are likely the most common throughout the region.

Research indicates that the motivating factors in Spanish speaking communities are 1) health and commitment to family, 2) children, and 3) finances. Similar priorities are found within the low SES communities. Hence, some messages will resonate more strongly with the communities among the Underserved Target Audience. Other messages may need to be modified in order to create a more appealing campaign. Low SES in California is defined as household annual income less than $25,000. Low SES residents tend to obtain information and resources from different sources than the residents within the Primary Target Audience. Again, message delivery becomes a key issue. In order to address all of these issues, specific outreach strategies will need to be developed in order to effectively reach the Underserved Target Audience.

3.0 TARGETED CHANGES TO KNOWLEDGE, AWARENESS AND BEHAVIOR

The overall goals of the Regional Residential Education Program are to raise the levels of knowledge and awareness with regards to stormwater pollution among residents, while encouraging changes to behaviors that are harmful to San Diego's waterways. The program will generally educate residents on 1) The difference between stormwater conveyance systems and sanitary sewer systems 2) the connection of storm drains to local waterways and 3) common residential sources of urban run-off. These are the general knowledge and awareness concepts upon which more specific messages will be built.

Recent research indicates that many residents do not understand that storm drains and sanitary sewer systems are completely separate. While sewage is treated, everything that goes down a storm drain goes directly to a creek, bay, or the ocean. The City of San Diego conducted a public opinion survey in 2007 in which 91% of respondents said they had heard the term "storm drain" before. However, only 46% knew that the water entering storm drains is not treated. This is a fundamental stormwater pollution prevention issue and general awareness concept. Awareness of the stormwater conveyance system is the first step towards understanding pollution prevention. Increasing knowledge and awareness that the system leads directly to local waterways will help residents to understand that urban sources of pollution have a direct effect on water quality. The awareness and knowledge of these issues are precursors to adjustments in attitudes (i.e.: increased concern for preventing this type of pollution).

Ultimately, it is anticipated that the program's targeting increased awareness and knowledge of these concepts will lead to positive changes in attitude. Furthermore, improved attitudes toward the importance of stormwater issues can provide motivation for changing pollutant generating behaviors.

In keeping with the program goals, the Copermittees have agreed on a number of positive behavior outcomes for each stormwater issue presented to the target audience. Pollutant generating activities are listed in Table 2, along with the knowledge required to understand the significance of the stormwater impacts. Also listed are numerous examples of desired behavior outcomes. Since it may not be feasible to craft messages that address each of the desired behavior outcomes listed in Table 2, some behaviors may be considered primary and targeted before others. Secondary behaviors will be targeted only if the initial efforts are determined to be unsuccessful. It is important to recognize that the Copermittees agreed on these issues and the associated behaviors, and some may wish to further utilize the concepts listed in Table 2 in their jurisdictional and/or watershed programs.

Table 2) Pollutant Generating Activities and Examples of Positive Behavior

Pollutant Generating Activities	Knowledge/Awareness	Examples of Desired Behavior Outcomes
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	Pet waste left in the yard and streets may introduce solids, bacteria, and nutrients to the storm drain and/or receiving water bodies.	• **Pick up pet waste during walks** • Pick up pet waste around home • **Properly dispose of pet waste in trash can or bin**
• Over-irrigation • Improper irrigation and system maintenance	Over-irrigation causes water and pollutants in its path to run into the storm drain and/or receiving water bodies.	• **Reduce over-irrigation** • Use irrigation controller technology to reduce the amount of over-watering • **Inspect and maintain irrigation system regularly** • Adjust irrigation schedule according to seasonal changes
• Fertilizer use • Pesticide use • Landscaping activities	Fertilizers and pesticides become pollutants that can be harmful to natural ecosystems when entering receiving water bodies. Soil, sediment, and yard waste can clog storm drains and/or receiving water bodies.	• Use plants that reduce the need for fertilizers (i.e.: native plants) • Apply chemical fertilizers and pesticides only as needed and at the appropriate time • **Use organic or slow-release fertilizers** • **Use Integrated Pest Management** • Store chemicals inside in a shed or storage cabinet where they are protected from rainfall • **Collect grass clippings and yard waste** • **Dispose of grass clippings and yard waste in the proper containers** • Protect exposed soil from rain with a tarp, vegetation, and/or mulch
• Cleaning outdoor impervious surfaces (i.e.: driveways and patios)	When it rains, trash, dirt, and chemicals that have built up on these surface can run into the street, the storm drain, and eventually local waterways.	• **Clean driveways, walkways, and patios by sweeping instead of hosing** • Direct wash water to soak in to lawn or garden
• Improper waste disposal	Litter and debris dropped on the ground will be washed into storm drains and local water bodies.	• **Put litter and cigarette butts in trash cans or bins** • Keep lids closed on trash cans or bins

Although many positive behaviors have been identified that may be encouraged by the messages developed in this program, the following have been selected as the primary desired behaviors to result from the changes to knowledge, awareness, and attitudes:

- Pick up pet waste and properly dispose of in trash can or bin
- Reduce over-irrigation by regularly inspecting and maintaining irrigation systems
- Reduce fertilizer use by applying chemical fertilizer only as needed and using organic or slow-release fertilizers
- Reduce chemical pesticide use through Integrated Pest Management
- Collect grass clippings and yard waste and place them in the appropriate disposal container in order to prevent them from entering the storm drain systems
- Sweep up outside areas such as driveways, walkways, and patios instead of hosing them down
- Put litter and cigarette butts in trash cans or bins

Specific messages will be designed to increase knowledge and awareness, and therefore encourage the behaviors listed above. Regional messages will be initially developed to address only the primary targeted behaviors. Once a baseline is established and program implementation is underway, Copermittees will have the opportunity to evaluate the knowledge, awareness, and willingness of the residential target audiences to adopt these behaviors. Other positive behaviors from Table 2 may also be substituted, if necessary.
It can reasonably be expected that the regional program will be able to measure success in terms of increasing knowledge and awareness, and improving attitudes, of residents.

Knowledge describes the accuracy of one's beliefs and awareness indicates recognition of the severity of the issues whereas attitude can be described as an individual's evaluation of it (favorable or unfavorable).

As a result of the regional efforts, Copermittees expect to see an increase in the general awareness of storm drain systems and their connection to local waterways, as well the sources of urban run-off. Specifically, residents should understand the difference between the stormwater conveyance system and sanitary sewer systems. They should become aware that water entering storm drains flows untreated to local waterways. Residents should also be able to accurately identify sources of stormwater pollution (i.e.: pet waste). Attitudes toward stormwater pollution should also improve. Ideally, there will be an increase in the numbers of households or individuals engaging in the desired behavior outcomes as a result of their increased knowledge and awareness. These targets will be measured using the assessment methods described in Section 6.0.

The primary assessment tool will be the public opinion surveys. A baseline regional residential telephone survey will be conducted in 2008 and, ideally, at one other point during the current permit cycle. The numeric objectives for survey results are set so that they exceed the statistical margin of error of 2.5 percent (assuming a sample size of 1000) so that if they are achieved, they will be statistically significant. In addition, the objectives are intentionally set high, with the understanding that they are intended as a point of reference rather than a pass/fail measure. With that in mind, Copermittees have set a target of a 10% change in knowledge that storm drains are separate from sanitary sewer systems, a 10% increase in the awareness that all storm drains are connected to local waterways, and a 15% increase in the number of participants who can identify residential sources of stormwater pollution.

4.0 EDUCATIONAL METHODS AND APPROACHES

A variety of methods and approaches will be utilized to implement the program objectives. As described above, the Regional Residential Education Program objectives are 1) to maintain a consistent image and brand 2) use positive messages to change behavior 3) develop community partnerships and 4) develop strategies to assess program effectiveness. The following regional program elements are designed to meet these objectives:

- Standardized Regional Brand (Think Blue)
- Regional Think Blue Website
- Mass Media (Broadcast and Outdoor)
- Regional Outreach Materials (Development and Distribution)
- Regional Outreach Event
- Partnerships
- Regional Stormwater Hotline
- Public Relations

Some of the elements are designed for program management whereas others are outreach methods. Program management elements include standardizing the Think Blue brand, message and material development, and partnership development. The program will have a multi-faceted outreach approach utilizing a regional website, mass media (broadcast and outdoor), public relations, printed materials and promotional items, and regional outreach such as a community event. Implementation of all the recommendations is dependent on funding for each year. Therefore, some activities may be feasible only if sufficient or additional funds are available in a given year.

4.1 Standardized Regional Brand (Think Blue)

The Think Blue campaign has created a locally recognizable brand that has demonstrated effectiveness in stormwater outreach. Expanding the brand to the regional program has obvious benefits for all of the Copermittees. With a consistent look and brand, the Copermittees can continue to conduct their own outreach; however they can use the Think Blue brand in conjunction with their materials for consistency. There will be a Think Blue Graphic Standards Guide that provides the correct fonts, colors and standards to be used for all outreach materials. This will help reinforce the Think Blue brand and provide standards for its use in messages and materials. Messages and materials may need to be continuously revised in order to keep current and effectively reach target audiences.

4.2 Regional Think Blue Website

A regional Think Blue website will help build upon and reinforce the branding strategy. The Internet is a powerful means of communication. Web sites can reach large audiences with relatively minimal effort. The regional website will be developed and maintained by a contractor. It could contain easy to download, user friendly information sheets, links to Copermittees websites, and short surveys or quizzes. The regional web site, along with the new logo and slogan, will increase program visibility.

4.3 Mass Media

Although the website is an important component of the outreach efforts, many residents still get the great bulk of their environmental messages from more traditional venues such as the television and radio (broadcast media). Public Service Announcements (PSA) and advertisements are the most common forms of broadcast media. Some PSAs have already been developed under the Think Blue campaign and through the combined efforts of the Copermittees. The Copermittees can utilize funds to expand or complement the existing Think Blue campaign. The public relations component will involve news coverage such as news stories, interviews, and event coverage. Public relations provide

valuable outreach opportunities that will be sought whenever possible. Outdoor media such as bus placards and billboards can also be utilized for outreach. The location of outdoor media advertisements will need to be carefully placed in order to reach the regional target audience.

4.4 Regional Outreach Materials and Community Events

Print materials and promotional items are critical items for successful outreach. Materials include items like fact sheets, brochures, flyers, booklets, coupon booklets, posters, and doorknob hangers. These materials are easily created and the target audience can refer to them repeatedly. Promotional materials are good for promoting the regional brand, increasing knowledge and awareness, and encouraging simple actions to prevent stormwater pollution. They will be designed to also serve as visual prompts that remind people to choose behaviors that protect and improve water quality.

A regional outreach event can be an energizing and successful venue for distributing outreach messages. Careful attention should be given to participating in a community event so that the effort reaches residents from the entire region. Extensive planning, material or display development, coordination, and marketing will be necessary in order to prepare for one successful regional outreach event. This is an endeavor that will involve identifying events that reach the entire region as well as coordinating, funding, and staffing the selected event. The Copermittees expect to participate in up to two regional events over the duration of this permit cycle. Some examples of regional events that may be considered are the San Diego County Fair, the Miramar Air Show, or a local sports venue.

4.5 Partnerships

Partnerships are both a management and outreach element of the program. A partnership is a voluntary collaboration of agencies, organizations, or other groups or individuals that have joined to work toward a common goal. The Copermittees can maximize resources through the use of partnerships. The potential for partnerships is immense for the

Copermittees. Potential partnerships include local water districts (combine conservation and pollution prevention messages), hardware stores and nurseries, pet stores, and Homeowner's Associations and Property Management Companies. Initial development of partnerships with businesses and business organizations, nonprofits, other government agencies, will be necessary before the full benefits can be realized. Copermittees may then encourage partners to distribute materials or spread messages through signage, advertising and websites. Partnerships will require time to develop and may not be fully recognized until later in the permit cycle.

4.6 Regional Stormwater Hotline

Although a regional stormwater hotline is already in place, successful outreach may lead to an increase in hotline calls. The regional hotline can also help the public gain access to information quickly and easily. The hotline will be promoted through the website, media advertising and other promotional venues. The number of calls to the hotline can be tabulated to help gauge whether some advertising is effective (if the call to action is a hotline call). Since the hotline will also be an important measure of program success, careful consideration will be given to managing the hotline as the program implementation moves forward.

4.7 Behavior Specific Outreach Methods

Table 3 lists the primary target behaviors for the program during this permit cycle. The table indicates which of the outreach methods described above may be utilized to deliver messages designed for each behavior. These were selected as the primary targets because they have current appeal. Primary target behaviors may be updated as program evaluation progresses. If necessary, resources may be reallocated to address the other (secondary) target behaviors previously listed in Table 2.

Table 3) Applicability of Outreach Methods to Primary Target Behaviors

Primary Target Behaviors	Potential Methods of Outreach						
	Website	Mass Media Broadcast	Mass Media Outdoor	Public Relations	Material Distribution	Partnerships	Regional Community Events
Pick up pet waste and dispose of in trash bin	X	X	X	X	X	X	
Reduce over-irrigation by regularly inspecting and maintaining irrigation systems	X			X	X	X	X
Apply chemicals to lawn and garden only as needed	X	X		X	X	X	X
Use organic or slow-release fertilizers	X	X		X	X	X	X
Collect grass clippings and dispose of them in the proper container	X				X		
Employ Integrated Pest Management	X	X	X		X	X	X
Sweep outside areas instead of hosing them down	X		X		X		
Put litter and cigarette butts in trash cans or bins	X			X	X	X	X

Specific messages will be developed to increase knowledge and awareness that will lead to each desired behavior outcome

4.8 Program Implementation

While the overall goals of the program are to educate the general public in order promote knowledge and awareness and decrease pollutant generating behaviors, a successful program will also require coordination among the Copermittees. Program planning and message development are key components of the program that will precede full implementation. Message delivery will be ongoing. Subsequently, as results from assessments are reviewed, messages and delivery methods will need to be revised. Therefore, there are essentially three steps in the program implementation process 1)

development, 2) implementation, and 3) assessment. For the purposes of this report, the development phase includes planning projects as well as developing materials and messages. Implementation includes initiating a program element (such as media outreach) as well as maintaining the ongoing nature of the element once it is in place. Assessment includes all levels of determining the effectiveness of program elements, as well as making revisions that reflect the knowledge gained through assessment.

Table 4 charts the schedule of program implementation over the 5-year permit cycle. Strategies to achieve these objectives will be implemented over the 5-year permit cycle. Because some upfront planning and development is necessary, the first year will focus on standardizing a regional brand, developing messages, and determining the most appropriate methods for disseminating messages on a regional scale (i.e.: a regional website). Copermittees may also begin fostering partnerships in the initial years of the program. Subsequent years will build on this foundation. Copermittees may decide to refine messages and could begin leveraging resources through partnerships.

Table 4) Projected General Implementation Schedule

Program Elements	Year 1: 2007-08	Year 2: 2008-09	Year 3: 2009-10	Year 4: 2010-11	Year 5: 2011-12
Branding	D	D, I, A	I, A	I, A	I,
Regional Website	D	D, I, A	I, A	I, A	I,
Regional Hotline	D	D, I	I, A	I, A	I,
Mass Media	D	D, I	I, A	D, A	I,
Regional Outreach (Marketing and Community Events)	D	D, I	I, A	D, A	I,
Materials Development & Distribution	D	D, I, A	D, I, A	D, A	D, I
Public Relations	D	D, I	I, A	D, A	I,
Market Research & Assessment Tools	D, I, A	D, I, A	D, I, A	D, I, A	D, I,
Partnerships	D, I	D, I,	I, A	I, A	I

Development (D), Implementation (I), Assessment (A)

4.9 Social Marketing Approaches

In all of the aforementioned efforts, a variety of social marketing approaches will be utilized whenever possible. There are so many techniques described as social marketing that it is not possible to utilize them all, especially with limited staff and budgets. Social marketing uses many of the principles of social psychology and marketing techniques to bring about behavior change. Rather than being product oriented, social marketing focuses on people and their behaviors. All social marketing approaches use audience research to learn how to motivate an audience to change one or more recurring actions.

Social marketing consists of several basic components that result in delivering messages that will increase knowledge and awareness, thereby prompting people to change certain behaviors. The challenge is to present the new behavior in a positive way and emphasize the benefits to adopting a new behavior. Forming strategic partnerships with community resources can help to achieve the end goal of behavior change. Social marketing campaigns deliver messages that are strategically created and positioned to give people a compelling reason to adopt a new behavior. In order to overcome the barriers to action it is necessary to understand what the barriers are and why they exist. Researching and understanding the audience is a critical step in developing a social marketing campaign. Messages are conveyed through advertising, websites, materials and other communications. Messages should be simple, memorable and easy to follow. There should be one simple message for each of the targeted areas of knowledge and awareness. Each message needs to be used consistently in communications.

Community Based Social Marketing (CBSM) is a type of social marketing. It has gained popular appeal among the environmental community as an effective alternative to traditional information-based marketing approaches. CBSM packages basic principles of behavior change and social science research in a way that provides a usable framework for practitioners working to promote positive behavior change.

A key element of the CBSM approach is to pilot test the program with a small representative segment of the community, and compare the results to a control group. For example, a small jurisdiction may implement a project that essentially serves as a pilot for the regional program. If the pilot is not successful, the strategy should be refined and then pilot tested again. If the pilot is successful at changing behavior, the strategy can be implemented more broadly throughout the community or on a regional level. Once the successful pilot program has been widely implemented CBSM requires that the program be carefully evaluated at several points to measure continued success.

The Copermittees have agreed that CBSM offers a solid foundation for developing an effective program. However, it may not always be feasible to utilize the CBSM approach on a regional scale, hence the need for a combined approach that uses traditional social marketing techniques as well as CBSM. Some methods will lend themselves more readily to developing CBSM based approaches. When implementing each of the methods, a CBSM approach will be pursued whenever feasible.

5.0 RELATIONSHIP OF REGIONAL, WATERSHED, AND JURISDICTIONAL OUTREACH

The Regional Residential Education Program is designed to meet the Permit requirements for residential education based on regional needs and issues. The first step in meeting these requirements is to establish a regional brand and consistent image. The City of San Diego's regionally recognized Think Blue logo will be utilized as the Regional Residential Education Program's brand. During the implementation phase of the permit cycle the Copermittees will work collaboratively with the City of San Diego to update and standardize the Think Blue brand. A Graphics Standards Manual will be developed by the City of San Diego and adopted by the Copermittees in order to facilitate ease of material development and ensure a consistent regional image. Existing jurisdictional programs may also choose to use the Think Blue brand, maintain individuality, or

combine both programs for maximum impact. In a similar manner, watershed activities may be coordinated under the Think Blue brand, so long as the standards are adhered to.

Copermittees will hire a contractor to build and maintain a regional Think Blue website. The website may include links to jurisdictional program, watershed program websites, and other regional websites such as Project Clean Water. The regional Think Blue website will provide user friendly information for the public in a single location, thereby promoting consistency and coordination among the regional, jurisdictional, and watershed programs.

In addition, the Education & Residential Sources Workgroup provides a platform for integration of regional, jurisdictional, and watershed messages. The Education & Residential Sources Workgroup also coordinates activities between non-profit organizations, private institutions, and governmental agencies providing environmental and water quality education. Regular meetings will continue to provide a forum for educators, trainers, and public information officers to collaborate, share methods and materials, and seek policy level support and direction.

Watershed and jurisdictional programs should look to the Regional Residential Education Program when designing residential educational activities. The Regional Residential Education Program can thereby serve as a basis for developing these other programs. Some specific watershed or jurisdictional issues may not be covered by the Regional Residential Education Program, and must still be met by the individual or Watershed Copermittees as required by the Permit. These issues will be addressed in the watershed or jurisdictional programs. In this manner, the watershed and jurisdictional programs can supplement the Regional Residential Education Program in order to ensure that all requirements are met. As a result, each jurisdictional program may be unique in some respects and elements of the watershed programs may go beyond those in the regional program.

While the regional program may play a role in encouraging behavior changes, it is more feasible for jurisdictional programs to be able to measure actual behavioral changes resulting from increased knowledge and awareness because of their ability to implement pilots on a small scale. The broad based regional program will be implementing methods and utilizing assessment tools that most accurately gauge attitudes, knowledge, and awareness. Positive changes in attitudes and awareness are generally accepted as precursors to behavior change. Therefore, due to the difficulty of assessing behavior change on a regional level, demonstrating behavior change will therefore reside with the jurisdictional and watershed programs. In order to facilitate the assessment of jurisdictional and watershed programs, the Plan outlines assessment tools for measuring changes in knowledge and awareness through the regional program. These measures can also be tailored to meet the needs of the jurisdictional and watershed programs that implement CBSM pilots or focused outreach efforts, which provide excellent opportunities to assess behavior change. Section 6.0 describes assessment tools in further detail.

6.0 ASSESSMENT OF REGIONAL EDUCATION ACTIVITIES

In order to evaluate whether the various components of the program are resulting in the targeted knowledge and awareness outcomes, a number of assessment methods may be utilized. A random digit dial telephone survey will be the primary tool for measuring changes resulting from implementation of the regional program. Different types of assessment methods will be employed in order to gauge the outcomes of each activity and thereby determine effectiveness. Copermittees will review and assess existing survey data while developing the new regional baseline survey. Public opinion surveys will be alternated with other assessment methods to adequately assess the overall effectiveness of the Regional Residential Education Program. Copermittees have agreed to work cooperatively on funding and conducting market research and surveys. Measurement tools outlined in the Plan may be modified somewhat to correspond with different program elements. The Plan basically provides a model for program effectiveness

assessment. Specific assessment methods will depend on the type of outreach or education activity conducted and other constraints.

Copermittees will work with the City of San Diego to conduct a county-wide random digit dial telephone survey in order to obtain baseline information on knowledge, awareness, attitudes, and behaviors pertaining to stormwater. Results of the survey will guide further adaptation of the program objectives. Ideally, another public opinion survey will be conducted later in the permit cycle to assess any changes resulting from program implementation. Once the baseline is established, future permit cycles may involve one or more public opinion surveys. Additional evaluation methods may be utilized once specific media, promotions, and outreach activities are implemented. Results will enable Copermittees to determine the most effective outreach methods and make modifications to the programs as needed.

Outcome levels used in this program are based on the Hierarchy of Targeted Outcomes Pyramid referred to in the NPDES Permit, which includes outcome levels 1-6. Outcome levels 1-3 will be most applicable to educational and outreach activities. Table 5 illustrates potential assessment methods that may be utilized for each of the activities being considered. Level 1 outcomes indicate compliance with permit based activities. This is the most basic means of assessing program effectiveness. Measuring Level 2 outcomes will indicate changes in attitudes, knowledge and awareness. Surveys and quizzes provide the most common means for measuring Level 2 outcomes. Level 3 outcomes provide an opportunity to measure behavioral changes and implementation of Best Management Practices (BMPs). This can be accomplished through observations and program specific counts. For example, tracking sales of less toxic pesticides in a store where IPM information is available may indicate changes in the behavior of consumers. Level 4 outcomes indicate actual load reduction, and are more practical for activities such as clean up events or Household Hazardous Waste collection activities, which are sometimes associated with outreach activities.

Table 5) Potential Program Element Assessment Measures

Activity Level		Type of Assessment Measure

Branding

1	Updating materials to reflect new regional brand.
2	Count number of survey respondents who are aware of brand/program.
3	N/A
4	N/A

Website

1	Count number of hits to website, interactive use/quizzes taken, etc.
2	Administer survey/quiz to assess attitude/knowledge of web users.
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data. Downloads of informational brochures.
4	N/A

Mass Media Public Service Announcement (PSA) Public Relations

1	Count number of household/individuals reached.
2	Administer survey/quiz to assess attitude/knowledge of PSA recipients.
3	Comments and feedback received regarding PSA via the hotline or website.
4	N/A

Outreach Materials (i.e.: fact sheets and brochures)

1	Count number of fact sheet/brochures handed out.
2	Administer survey/quiz to assess attitude/knowledge of fact sheet/brochure recipients
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4	N/A

Regional Outreach Event

1	Count number of visitors to booths, brochures handed out, surveys/quizzes completed, etc.
2	Count number of mail-in cards, number of volunteers to organization, number of persons who attended community event. Administer survey/quiz to assess attitude/knowledge of visitors
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4	N/A

Partnerships

1	Count number of incentives distributed, participants in the program.
2	Survey or quiz to assess attitude/knowledge of volunteers pre- and post- participation
3	Administer survey to assess behavior change in program participants or count observable behavior of program participants and compare to pilot data, historical data, and/or control group. Count number of mail-in cards, number of volunteers to organization, or number of persons who signed a petition directed from incentive program.
4	Count amount of load reduction in targeted residential area or count amount of load removed from targeted area

Hotline

1	Count number of calls to hotline.
2	Administer survey/quiz to assess attitude/knowledge of hotline users.
3	Administer survey to assess behavior change of participants in program and compare to pilot, historical, or control data, count observable behavior of participants in program and compare to pilot data and/or control group.
4	N/A

7.0 CONCLUSIONS AND RECOMMENDATIONS

The San Diego region has widely diverse socio-economic, ethnic, biological, and physical characteristics. These characteristics create the region's appeal and present many challenges to the entities charged with developing and implementing an effective Regional Urban Runoff Management Program (RURMP).

The Regional Residential Education Program is a component of the San Diego RURMP. This program is designed to increase knowledge and awareness of stormwater issues and potentially change pollutant generating behaviors. Research indicates that these are attainable goals under a well-funded, long term, multi-faceted and strategic public outreach campaign.

In order to implement program goals, the Copermittees have agreed on general objectives: 1) maintain a consistent image, message and brand 2) use positive messages to increase knowledge and awareness, thereby increasing the likelihood of behavior change 3) develop community partnerships and 4) develop strategies to assess program effectiveness. In order to efficiently accomplish these objectives, Copermittees have agreed to adopt Think Blue as the regional flagship brand. In addition, strong and

focused outreach messages will be selected to increase knowledge and awareness and ultimately target the primary pollutant generating behaviors from residential activities.

The basic program elements include an array of methods and approaches that will be utilized for program management, message delivery, and effectiveness assessment. Over time, the Regional Residential Education Program will be adapted to utilize the most effective outreach and education strategies practicable while maintaining a clear focus for the entire region. Annual reports will summarize progress and provide an opportunity to reflect on the year's successes and shortcomings. At the end of the 5-year permit cycle, Copermittees will be able to assess of the program's progress and develop more effective regional outreach strategies.

Appendix G

JURMP Annual Report Requirements Checklist

G-1 Requirements Checklist

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.4, 2.3, 2.4.4.1, 2.4.4.2
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2, 2.4.4.3, 2.4.4.4
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.3, Table 2-2
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.3, 2.4.4.4
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.3 (N/A)
vii. An updated treatment control BMP inventory.	2.4.4.4, Appendix A-1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.7
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.6
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.5
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.3 (N/A)
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.3 (N/A)
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.3.1, 2.4.4.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.3 (N/A)
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.3

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.3 (N/A)
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.4.3.1, 2.4.4.1, 2.4.4.4, 2.4.4.6, 2.4.4.7

3.0 Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.1
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2.2, Appendix B-3
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4.1
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.4 (N/A)
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.3, 3.5.4 (N/A)
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Appendix B-1 and B-2
viii. A description of the general results of the inspections.	3.5.5.2
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.5.1
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.5.2, Appendix B-6 and H-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.2.2, 3.3, 3.4.1.1

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix C-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4.1, Appendix C-2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4.1, Appendix C-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Appendix C-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	Appendix C-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4.1, Appendix C-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.3.3.1
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xiii. Identification of the total distance of curb-miles swept.	4.2.4, Appendix C-2
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.2.4, Appendix C-2
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.2.4, Appendix C-2
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4.1
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.3.2, 4.3.4.3, Appendix C-2
xviii. A description of the general results of the inspections.	4.3.4.3, Appendix C -6
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.3.4.3, Appendix C -6
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Appendix C-6 and H-1
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.2.4, 4.4.2, 4.4.4.1, 4.5.4.1, 4.7.3.1, 4.7.4

5.0 Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2,
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4.5, 5.3.4.4, Appendix D-5 and H-1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4.4, 5.3.4.1
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.2
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4.1
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.3, 5.2.4.5
vii. Identification of the number of third party inspections conducted.	5.2.4.3 (N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.3 (N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.5, 5.3.4.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.5
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.2.4, 5.3.4

6.0 Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3, 6.4.3, Appendix H-1
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.2
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.2
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.2.3
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.3, Appendix H-1
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.4, Appendix F-6
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
To be included in FY 2009-10 Illicit Discharge Detection and Elimination Component on December 15, 2010.	N/A

8.0 Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3.1
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.4

9.0 Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.3

10.0 Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.	10.1, 10.2, 10.3, 10.4

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.2, 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	**Location in Report**
i. A description of any special investigations conducted.	12.1, 12.2, 12.3

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.2

14.0 JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14.0

Appendix H

Complaint Response

H-1	Construction Summary
	Municipal Summary
	Commercial Summary
	Industrial Summary
	Residential Summary
	Referrals or Requests for Info Summary

Appendix H-1 Construction Complaint Response Summary FY 2009 - 2010

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	82586	9/21/09	cement	Discharge of concrete waste. - Contractor poured cement on west side of restaurant.	WO#88444 : By INSPECTOR1, ENG: 10/26/2009 3:23:35 PM Site inspection took photos of construction debris without required BMPs contacted owner and requested that BMPs be implemented. WO#88445 : By INSPECTOR1, ENG: 10/26/2009 3:30:49 PM Site inspection BMPs in place case closed	Yes	No		Yes			SEL	9/22/09
2	82817	10/27/09	na old BMPs	Discharge of construction debris - Complainant stated that the BMPs were not updated and need to be implemented.	WO#103127 : 11/18/2009 4:16:24 PM site inspection BMPs in place case closed WO#98923 : 10/29/2009 5:49:00 PM Site inspection took photos of old BMPs. Called property owner and requested that he fortify the BMPs so that no silt leaves the site. He said he would take a look and do what ever is needed. He asked for 10-14 days to comply unless there is a 40% or grater chance of rain then he will implement immediately.	Yes	No		Yes			ENC	11/30/09
3	82844	11/4/09	na- lack of BMPs	Discharge of construction debris - Neighbor is concerned with lack of BMPs on site next door.	WO#103129 : 11/18/2009 5:22:34 PM site inspection new waddle in place case closed	No	No					ENC	11/30/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
4	86914	11/20/09	parking lot wash	Discharge of other washwater - ne part of parking lot was wet from power washing and not collecting the wash water NW part of parking lot was wet from power washing and not collecting the wash water	WO#103164 : 11/20/2009 10:31:58 AM Site inspection contacted contractor regarding discharge into storm drain from washing parking lot. Contactor thought it was OK because the wash water was passing through a filter. He was informed that those filters are for storm water only and that he needs to capture all the wash water in the future---case closed	Yes	Yes		Yes			LCS	12/30/09
5	91049	12/14/09	uncovered stockpiles	Other discharge - Construction at facility, lack of BMPs-uncovered stockpiles.	WO#107438 : 12/22/2009 10:32:52 AM site inspection contacted contractor and gave stockpile detail	Yes	Yes		Yes			ENC	1/4/10
6	91088	12/18/09	wash water	Discharge of construction debris - Construction workers washing white liquid material into the street.	WO#107434 : 12/21/2009 5:45:10 PM Site inspection took photos issued NOV and gave info WO#107435 : 12/21/2009 5:50:14 PM Site inspection contacted worker and extended compliance time to 12/21/09 WO#107436 : 12/21/2009 5:53:51 PM site inspection area cleaned up ----case closed	Yes	Yes	12/18/09	Yes			LUC	12/21/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
7	91110	12-22-09	sediment	Discharge of sediment - Plastic cover for stock piles has blown off and needs to be replaced	WO#107444 : 12/23/2009 12:37:36 PM Site inspection took photos contacted const inspector to notify contractor to replace BMP (plastic) WO#107445 : 12/23/2009 12:40:24 PM Site inspection took photos of replaced BMP (plastic)----case closed	Yes	Yes					LUC	12/22/09
8	91263	1/21/10	sediment	Discharge of sediment - Sediment from 1076 Hymettus construction collecting in culvert near 204-260 Hygeia Ct.	WO#107842 : 1/21/2010 2:43:58 PM Will be addressed by Clean Water Program staff.	Yes	No	1/21/10		1/21/10		LUC	1/21/10
9	91265	1/21/10	sediment	Discharge of sediment - Sediment runoff from construction site during rain event.	WO#107843 : 1/21/2010 3:47:51 PM 4 rows of gravel bags and silt fence over run by runoff. Mud trapped by additional bags and straw wattles placed by contractor.	Yes	No		Yes			ENC	1/21/10
10	93575	3/4/10	Uncovered stockpiles	Discharge of construction debris - Uncovered sediment stockpile near Vulcan and Hillcrest.	WO#111804 : 3/8/2010 8:18:31 AM Per construction inspector: Stockpiles of bedding sand are covered with white plastic sheeting. Crew was on job site on Friday.	Yes	No		Yes			LUC	3/8/10
11	93735	4/5/10	Oil	Discharge of oil. - Resident concerned with the trucks parked outside his house leaking oil. Referred to construction inspector for safe route to school.	WO#113293 : 4/7/2010 10:05:48 AM Per construction inspector: Location- Hygeia west of Hymettus. 2000 gallon water truck, blown right rear axle seal. Discharge of approximately 1 quart	Yes	No		Yes			LUC	4/7/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					90 wt oil. Clean up by contractor with spill kit. Gutter flows to vegetated swale. Complainant satisfied with cleanup.								
12	93948	5/17/10	sediment	Discharge of sediment - Sediment runoff into street from 1327.	WO#119654 : 5/24/2010 1:26:46 PM Inspector met with resident from 1349, who had already cleaned up most of discharge coming from the development at 1415. Alerted construction inspector of discharge from his site at 1415.	Yes	No		Yes			LUC	5/24/10
13	96181	6/30/10	cement	Discharge of concrete waste. - Washing concrete off equipment without capturing wash water.	WO#121032 : 8/2/2010 4:51:05 PM site inspection took photos gave ed info WO#121033 : 8/2/2010 5:06:34 PM site inspection area cleaned up case closed	Yes	Yes	6/30/10	Yes			ENC	6/30/10
Construction Totals: 13					**Follow ups: 6**	**12**	**5**	**3**	**10**	**1**			

Appendix H-1 Municipal Complaint Response Summary FY 2009 - 2010

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	82222	7/27/09	kitty litter	Other discharge - Unknown substance may have spilled on La Costa I-5 bridge on south side.	WO#88399 : 7/27/2009 3:24:28 PM 7-27-09 site inspection took photos of vehicle crash debris and Kitty Litter that needs to be cleaned up. 7/27/2009 3:45:08 PM called Carlsbad they will clean up and call me back	Yes	No					LUC	7/28/09
2	82225	7/23/09	sand and red paint chips	Other discharge - PW Contractors sand blasting red curb in front on Second St at D and E Streets. PW Contractors sand blasting red curb on Second St at D and E Streets- left sand and paint chips in street.	WO#97214 : 7/28/2009 2:01:59 PM Sand and pieces of red paint chips left in street. Took photos and contacted PW Streets. Contractor will return later today to sweep. WO#97575 : 8/28/2009 5:18:25 PM 7/27/09 site inspection took photos and contacted PW to get contractor to clean up gutter and train employees 9/11/2009 2:44:59 PM 7/29/09 PW reported that they had cleaned up the street case closed	Yes	No		Yes			ENC	7/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
3	82598	9/22/09	covered storm drain causing flooding	Discharge of yard waste - Forwarded from SDWD: Customer at this address came into PW Yard and said that the cover you put on the storm drain at this location is clogging up with leaves and overflowing. Last rain caused flooding. *No record of previous work at this address.	WO#88439 : 10/26/2009 8:34:56 AM site inspection took photos of storm drain guard. Called waste water to remove WO#88440 : 10/26/2009 8:58:54 AM Site inspection guard removed case closed	No	No					CBS	10/8/09
4	82883	11/5/09	water and dirt	Discharge of water - received report of "a whole lot" water running down Vulcan & Sunset	WO#99095 : 11/12/2009 9:01:15 AM Site inspection contacted José at SDWD and asked that he get the street swept. he agreed and streets division ordered a special sweep to be charge to SDWD WO#99096 : 11/12/2009 9:04:16 AM site inspection street sweeper cleaned up mess ---case closed	Yes	No		Yes			ENC	11/6/09
5	91230	1/19/10	SILT	Discharge of sediment - Sediment runoff from driveway during rain event.	WO#107829 : 1/21/2010 10:43:15 AM Site inspection took photos. Contacted PW to clean up sediment in street and maintain BMPs of drainage ditch. WO#121752 : 8/31/2010 5:15:17 PM site inspection area cleaned PW to fix ditch case closed	Yes	No					LUX	9/7/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
6	91343	1/28/10	pet waste	Other discharge - Forwarded from County: discharge of dog excrement into the soil at Orpheus Park. This is a mixed use off-leash dog park situated above an Elementary School. A system of swales divert the runoff from animal excrement downhill, ending in the playground area of the School. Standing water is usually in these swales and other parts of the swales are choked with sludge and weeds.	WO#88455 : 1/28/2010 5:44:03 PM Site inspection with program manager. Took photos of storm drain and the flow pattern for Orpheus and Glen parks. Did not observe a water quality issue.	No	No					LUC	2/1/10
7	93627	3/15/10	smell of grease	Discharge of food waste. - Smell of grease coming from the Community Center. Possible clogged grease trap?	WO#112295 : 3/16/2010 5:37:23 PM Site inspection met with Facility technician. he informed me of all of the actions he has taken to stop the grease odor: 1/5/10-3/15/10 grease interceptor was pumped 3/15/10 pumping was observed by Facility Technician 7or8/09 more frequent pumping from 4 times a year to 6 times a year 6/09 extended vent pipes on roof and eliminated horizontal vent pipes Treats system weekly with enzymes Flushes floor drains nightly 3/17/2010 3:02:44 PM 6/16/10 Contacted building & engineering staff and sent emails to waste water and	No	No		Yes			CBS	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					another city for help to eliminate odors. 4/5/2010 3:18:41 PM Waste water and other cities reported that the interceptor looked normal and there were no corrective actions that could be taken. Left message with PM that some of the photos showed the contractor cleaning off the manholes and it appeared that it washed into the storm drain and to call the contractor or clean water to contact the contractor to discontinue washing off manhole covers into the storm drain.								
8	93701	3/12/10	silt	Discharge of sediment - Silt discharge after rain event	WO#113179 : 3/30/2010 4:17:03 PM Site inspection left info at main business office took photos 3/26/10 received call from owner stating that the discharge did not come from his business as it is cemented in on the setbacks. He said in the past his workers have cleaned u[the inlet/outlet but he only has one employee and he will get to it himself when he has a chance but it is not his violation he feels it is the city's. Sent email to PW to clean out inlet/outlet as it is a city/municipal issue.	Yes	No		Yes			CBS	4/8/10
Municipal Totals: 8					**Follow ups: 4**	**5**	**0**	**0**	**4**	**0**			

Appendix H-1 Commercial Complaint Response Summary FY 2009 - 2010

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	82104	7/9/09	none	Discharge of vehicle wash water - Mobile car washer operating without containment near corner of Neptune and N. El Portal.	WO#96870 : 7/9/2009 12:49:11 PM 7/9/09 site inspection contacted detailer regarding containment. He said it was not him. Observed no discharge Case closed	No	Yes		Yes			LUC	7/13/09
2	82140	7/15/09	yard waste	Discharge of yard waste - Complainant is concerned with neighbor's lawn maintenance crews using leaf blowers to blow yard waste into the street.	WO#97574 : 8/28/2009 5:06:56 PM 7/27.09 site inspection left card and ed info	No	Yes		Yes			CBS	8/31/09
3	82142	7/16/09	wash water	Discharge of building or sidewalk washwater - Construction inspector witnessed restaurant sweeping sidewalk wash water into street.	WO#88401 : By INSPECTOR1, ENG: 7/27/2009 4:31:54 PM 7-16-09 site inspection took photos of debris and wash water contacted owner and requested that he contact his worker and give the information that was supplied to him.	Yes	No		Yes			ENC	7/28/09
4	82156	7/15/09	wash debris	Discharge of building or sidewalk washwater - City staff saw sudsy water running into the street from restaurant on Saturday, July 11.	WO#88397 : By INSPECTOR1, ENG: 7/22/2009 4:22:21 PM 7/22/09 site inspection took photos of debris from NE gate to the storm drain contacted business owner. He said there was a sewer flow from a blocked drain in the women's RR on July 11, 2009. Observed grease storage violations. Owner had worker sweep up debris and will get grease into compliance within 2	Yes	No		Yes			LCS	7/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					weeks or 8/5/09. WO#88398 : By INSPECTOR1, ENG: 7/27/2009 3:03:53 PM 7-27-09 site inspection took photos of all corrective actions completed Case Closed								
5	82181	7/20/09	dirt	Discharge of sediment - Business park overwatering, causing sediment runoff into the concrete drainage swale along north side of Ecke Sports Park.	WO#88396 : By INSPECTOR1, ENG: 7/22/2009 1:23:13 PM 7/22/09 site inspection took photos of storm drain contacted PM to fix broken pipe to be done today. By INSPECTOR1, ENG: 8/6/2009 2:33:12 PM 8/6/09 site inspection took photos sediment still draining into storm drain called PM WO#88403 : By INSPECTOR1, ENG: 7/28/2009 10:08:45 AM 7/28/09 site inspection took photos of sediment draining off the property. Called PM will have landscaper call me to set up meeting. WO#88419 : By INSPECTOR1, ENG: 8/17/2009 2:09:17 PM 8/13/09 site inspection took photos of improvements spoke to lead landscaper case closed	Yes	No		Yes			ENC	8/13/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
6	82234	7/28/09	trash juice	Discharge of other washwater - Illegal discharge from trash compactor	WO#88406 : By INSPECTOR1, ENG: 7/28/2009 5:54:30 PM 7/28/09 site inspection took photos drainage from trash compactor draining into the storm drain. Contacted business manager to dry clean up wash debris replace leaking compactor, train employees and provide overhead coverage for outdoor storage of oil and machines. . WO#88408 : By INSPECTOR1, ENG: 7/29/2009 12:05:05 PM 7/29/09 site inspection took photos of area cleaned up case closed.	Yes	No	7/29/09	Yes	7/29/09		LCS	7/30/09
7	82237	7/28/09	roof wash water	Discharge of building or sidewalk washwater - Washing roof without containing wash water. Brown/red water running down street.	WO#88404 : By INSPECTOR1, ENG: 7/28/2009 2:23:42 PM 7/28/09 site inspection took photos of roof wash draining off the property. Contacted worker and business owner to dry clean up wash debris. Issued nov to comply by 2pm 7/29/09 WO#88407 : By INSPECTOR1, ENG: 7/29/2009 11:50:42 AM 7/29/09 site inspection took photos of area cleaned up case closed	Yes	Yes	7/28/09	Yes			LUX	7/29/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
8	82269	8/1/09	wash water	Discharge of building or sidewalk washwater - Vacation rental property pressure washes w/out containment every week. Call came in Saturday at 11:50am, and water was flowing into the street then.	WO#88412 : By INSPECTOR1, ENG: 8/6/2009 4:13:25 PM site inspection 8/6/09 need to call PM 8/28/2009 5:24:15 PM 8/11 contacted PM to discontinue discharge. PM will speak to contractor email ed info case closed	No	No		Yes			LUC	9/11/09
9	82302	8/6/09	wash water	Discharge of building or sidewalk washwater - Staff witnessed school washing off lunch area with soap and water w/out containment.	WO#88413 : By INSPECTOR1, ENG: 8/6/2009 4:23:49 PM 8/6/09 CONTACTED WORKER GAVEINFO	Yes	No		Yes			LUC	8/11/09
10	82321	8/8/09	water	Discharge of water - Flower shop dumping water from booth next to Swami's cafe	WO#97582 : 9/1/2009 11:21:15 AM 8/13/09 site inspection contacted business owner she will speak to staff gave ed info	No	No		Yes			ENC	9/11/09
11	82328	8/10/09	trash	Discharge of trash - Forwarded from Webmater. Trash bags left outside gates of dumpster and contents blowing against fence. Creek empties into Batiquitos Lagoon.	WO#88417 : By INSPECTOR1, ENG: 8/11/2009 4:30:51 PM 8/11/09 site inspection took photos of trash blowing into storm drain contacted businesses in the area to clean it up. WO#97421 : 8/17/2009 1:06:02 PM 8/12/09 site inspection area cleaned up signed off NOV case closed	Yes	No	8/11/09	Yes			LCS	9/10/09
12	82350	8/12/09	trash debris and liquid	Discharge of trash - Restaurant has overflowing trash bin.	WO#97346 : 8/13/2009 8:48:01 AM 8/12/09 site inspection	Yes	No	8/14/09	Yes			ENC	8/17/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					took photos and contacted lead worker and requested clean up and training WO#97424 : 8/17/2009 1:38:28 PM 8/14/09 site inspection took photos and contacted lead worker and requested clean up and training. Issued NOV WO#97586 : 9/1/2009 12:16:40 PM 8/17/09 site inspection area cleaned up signed off NOV case closed								
13	82369	8/17/09	roof wash water	Discharge of building or sidewalk washwater - illegal discharge to street. no containment.	WO#97583 : 9/1/2009 11:38:02 AM 8/17/09 site inspection took photos issue NOV to clean up debris in street next to property to storm drain WO#97584 : 9/1/2009 11:44:02 AM 8/19/09 site inspection area cleaned up case closed	Yes	Yes	8/17/09	Yes			CBS	8/19/09
14	82384	8/19/09	grease storage, storm drain maintenance	Discharge of building or sidewalk washwater - Resident witnessed restaurant employee hosing off kitchen mats in alley behind building w/out containment.	WO#107272 : 12/2/2009 10:42:35 AM site inspection old grease storage unit was removed case closed WO#88423 : By INSPECTOR1, ENG: 8/25/2009 3:27:02 PM 8/25/09 site inspection took photos of trash and debris flowing from storm drain contacted business owner and property manager.	Yes	No		Yes			LCS	12/4/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					9/9/2009 12:38:49 PM 9/09/09 called PM regarding drainage and removal of grease storage unit--must be covered of removed. also contacted PW Streets regarding the drainage issue encroaching onto public street mountain vista 9/10/2009 10:57:59 AM 9/10/09 called landlord he requested that the city contact the grease storage company to request removal grease storage unit and to cite the restaurant that is washing their mats into the storm drain. He will be replacing asphalt within 90 days. He stated that he is not GOD but will work with the City to stay in compliance.								
15	82390	8/19/09	roof wash water	Discharge of building or sidewalk washwater - Power washing roof w/out containment.	WO#97611 : 9/1/2009 5:58:09 PM 8/19/09 site inspection took photos of red debris in street appeared to originate from 2277 Lagoon view Drive. Contacted resident gave contractors info. Called contractor and requested clean up ASAP. Contractor indicated that his equipment was damaged and that is why there was discharge. Business owner will call when gutter is clean WO#97612 :	Yes	Yes		Yes			CBS	8/20/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					9/1/2009 6:10:50 PM 8/20/09 site inspection area is being cleaned up took photos of all wash water being captured obtained business card case closed								
16	82420	8/26/09	h2O	Discharge of water - Clogged storm drain at NE corner of parking lot between Chili's and El Pollo Loco. Privately maintained by property manager. Needs to be cleaned out.	WO#97562 : 8/26/2009 5:24:15 PM 8/26/09 site inspection took photos and contacted lead worker at El Pollo Loco and requested clean up of trash area and training. He stated that the water did not come from his business. Called PM and will meet with her on 8/27/09. Discussed case with Clean water staff and sent email to PW-streets regarding maintenance of Detention basin. Streets sent it to waste water. WO#97732 : 9/10/2009 12:57:15 PM 8/27/09 site inspection took photos met with PM and her landscaper. Discussed problem and possible solutions. PM had landscaper turn off sprinkler system and has contacted plumbers to jet line. PW and Vector control were contacted. WO#97733 : 9/10/2009 1:04:15 PM 9/1/09 site inspection with Vector control took photos detention basin and the debris clogging it. and contacted PW to clean out debris. Vector	Yes	No		Yes			LCS	9/11/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					control to make this area a treated site. WO#97734 : 9/10/2009 1:21:16 PM 9/8/09 received email from PW that the drain was cleaned out. 9/9/09 site inspection took photos of drain box appeared to be clear. PW informed me that they did not get after photos. Clean water manager wants photos and case clearly documented so that the issue can be resolved in a more expeditious manner. Private pipe maintenance by owner, basin maintenance by PW outside of pipe. WO#97739 : 9/10/2009 4:35:28 PM 9/3/09 site inspection took photos of cleaned out storm drain case closed								
17	82433	8/27/09	roof wash	Discharge of building or sidewalk washwater - Roof power washers in HOA not containing all wash water.	WO#88424 : By INSPECTOR1, ENG: 9/1/2009 10:25:56 AM 8/27/09 site inspection took photos of red roof wash debris flowing in storm drain left card with house keeper. Contacted worker and he confirmed that his business had cleaned 2311 Lagoon view Drive issued citation #1 WO#97751 : 9/11/2009 2:55:03 PM 9/8/09 site inspection area cleaned up case closed	Yes	Yes	8/28/09	Yes	8/28/09		CBS	9/8/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
18	82437	8/27/09	roof wash	Discharge of building or sidewalk washwater - Roof power washers not using containment yesterday, but it appears they are containing today.	WO#88425 : By INSPECTOR1, ENG: 9/1/2009 10:55:09 AM 8/27/09 site inspection took photos of BMPs working and preventing flows in storm drain.	No	Yes					CBS	9/14/09
19	82439	8/27/09	roof wash water	Discharge of building or sidewalk washwater - Power washing roof without containment.	WO#97579 : 8/31/2009 5:45:56 PM 8/27/09 site inspection took photos and contacted lead worker and requested clean up and training. Worker said they had cleaned 2311 lagoon view on 8/26/09 and that when he cleans the front of the house it is too much discharge for the system to handle. He will use additional secondary containment of the next job and clean up all of the gutters for these recent jobs.	Yes	Yes	8/28/09	Yes	8/28/09		CBS	9/2/09
20	82449	8/28/09	vehicle wash water	Discharge of vehicle wash water - Church car wash, no containment of wash water.	WO#97578 : 8/31/2009 5:33:40 PM 8/28/09 site inspection contacted lead worker of Faith Community Church informed him of the clean water codes he said he would comply. case closed	Yes	No		Yes			LUC	9/1/09
21	82466	9/1/09	water and sediment	Discharge of yard waste - Over-irrigation causing grass and moss to run onto the sidewalk	WO#107312 : 12/7/2009 5:06:18 PM site inspection took photos of over irrigated area case closed WO#97727 : 9/10/2009 10:11:24 AM 9/1/09 site inspection	Yes	No		Yes			LCS	12/2/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					took photos and contacted business owner to get landlord's info regarding constant drainage. 9/8/09 called water district and Landlord. 9/10/09 received call from landlord stating that the NE sprinkler value was stuck on for 24/7. Owner then contacted Cotixan to inform their gardener to fix value. PO also stated that he cleaned sidewalk and captured all was water. He wanted an inspection to verify clean up. Informed PW of progress.								
22	82495	9/4/09	wash water	Discharge of vehicle wash water - Mobile detailers washing cars without containment at BMW.	WO#97723 : 9/9/2009 4:36:02 PM 9/8/09 contacted business owner and requested information on their contractor 9/9/09 site inspection contacted contractor and requested compliance with clean water laws and gave required BMP info and obtained business card.	No	Yes		Yes			LCS	9/11/09
23	82497	9/4/09	building wash water	Discharge of building or sidewalk washwater - Power washers at complex using some sandbags, but wash water is still going around the sand bags into the storm drain.	WO#97722 : 9/9/2009 4:23:15 PM 9/8/09 contacted PM and requested information on their contractor info and called and left message requesting compliance with clean water laws and address to send required BMP info	Yes	Yes		Yes			ENC	9/11/09
24	82509	9/9/09	trash	Discharge of trash - Complaint of a mess behind the restaurant. Lack of proper trash storage.	WO#97780 : 9/14/2009 2:30:30 PM 9/10/09 site inspection took photos of trash	No	No		Yes			LCS	11/10/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					and grease storage area case closed								
25	82547	9/9/09	reclaimed water	Discharge of water - Reclaimed water leak behind Barnes and Noble.	WO#117164 : 5/5/2010 4:32:08 PM Leak fixed took photos WO#97787 : 9/14/2009 4:47:03 PM 9/10/09 site inspection took photos of leaking reclaimed irrigation box contacted PM to inform landscaper to fix box and discontinue washing off the cleaning vehicle	Yes	No		Yes			LCS	10/27/09
26	82548	9/11/09	wash water	Discharge of building or sidewalk washwater - Landscaper hosing off sidewalk debris without containment.	WO#97786 : 9/14/2009 4:20:31 PM 9/10/09 site inspection landscaper and informed him that washing off the driveway and patio is not allowed they complied case closed	Yes	Yes		Yes			LUC	11/10/09
27	82593	9/22/09	TRASH WATER	Discharge of food waste. - Construction inspector saw someone dumping grease into a dumpster behind VG's Donuts and Beach City Cafe	WO#88441 : By INSPECTOR1, ENG: 10/26/2009 2:15:11 PM Site inspection took photos of leaky open trash dumpster appeared that several businesses were using the temp dumpster. Added all businesses in the area to the inspection inventory	Yes	No					CBS	11/10/09
28	82611	9/22/09	oil	Discharge of oil. - Complaint of car leaking oil near the intersection of Bonita and Santa Fe Dr.	WO#88438 : By INSPECTOR1, ENG: 10/22/2009 5:08:56 PM site inspection no discharge observed case closed	No	No					CBS	11/10/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
29	82668	9/26/09	wash water	Discharge of building or sidewalk washwater - Employees dumping wash water bucket into concrete drainage swale. Occurred in the 11pm hour on 9/26/09.	WO#88436 : By INSPECTOR1, ENG: 10/21/2009 4:44:13 PM 10-21-09 called GM and requested that he speak to his employees and retain them to discontinue any discharge By INSPECTOR1, ENG: 10/22/2009 3:41:50 PM 10-21-09 called GM and requested staff training and informed the Manager of the date and time of discharge. He said it may another business but he will retrain his staff. Case Closed	No	No		Yes			LCS	11/10/09
30	82670	9/30/09	trash	Discharge of other washwater - Unknown drainage behind Queen Eileen's	WO#98732 : 10/13/2009 3:10:34 PM 10-7-09 site inspection took photos of old white paper next to AC drainage pipe Contacted employee who stated that someone had dumped a bucket of with paper into it. As requested he cleaned up the debris. Case Closed	Yes	No		Yes			ENC	11/10/09
31	82671	9/21/09	lack of BMPs	Other discharge - Someone working on a car on the SW corner of Saxony and La Costa Ave. No BMPs.	WO#88429 : By INSPECTOR1, ENG: 10/6/2009 6:18:30 PM 9/21/09 site inspection took photos of work without required BMPs spoke to worker he said he would clean it up and discontinue working in the location (he only worked there because that is where his car broke down WO#88430 :	Yes	Yes	9/24/09	Yes			LUC	9/25/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					By INSPECTOR1, ENG: 10/6/2009 6:31:30 PM 9/24/09 site inspection took photos of work without required BMPs spoke to worker he said he would clean it up and discontinue working in the location (he only worked there because that is where his car broke down) 11/10/2009 3:24:09 PM Issued NOV. WO#88431 : By INSPECTOR1, ENG: 10/6/2009 6:37:30 PM 9/25/09 site inspection took photos area clean it up case closed								
32	82703	10/8/09	wash water	Discharge of building or sidewalk washwater - Restaurant hosing off sidewalk and patio. Also, possibly dumping bucket full of wash water into storm drain at the corner of G and 101..	WO#88434 : By INSPECTOR1, ENG: 10/21/2009 3:31:18 PM 10-8-09 site inspection no discharge observed case closed	No	No		Yes			ENC	11/10/09
33	82733	10/14/09	silt	Discharge of sediment - Waste water reported silt discharge and dilapidated BMPs	WO#107311 : 12/7/2009 5:00:18 PM site inspection took photos area case closed WO#98748 : 10/14/2009 5:22:00 PM site inspection took photos of discharge and dilapidated BMPs left info at front door 395 Sunset Drive	Yes	No		Yes			LUC	1/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
34	82750	10/15/09	wash water from cleaning	Discharge of other washwater - 10-15-09 Clean water manager passed on a complain from city staff stating that a 55 gallon bucket was dumped directly into the storm drain	WO#98792 : : 82750, 10/20/2009 1:54:52 PM DIS-OTHER WASH Discharge of other washwater Problem Details: 10-15-09 Clean water manager passed on a complaint from city staff stating that a 55 gallon bucket was dumped directly into the storm drain 10-15-09 site inspection contacted bar owner regarding discharge complaint. He said he does not discharge and that he wants to keep the ocean clean. He was asked to review storm water regulation with his staff especially new employees. He indicated that he has not had any staff turn over and that if there is any discharge from his business to go ahead and arrest him. He agreed to clean up discharge from a south drain that was not connected to his drains and to contact the building maintenance person. 10/20/2009 3:23:45 PM 10-15-09 called Bar owner and informed him about the Patio smoking regulations. He said he understands and will gladly comply.	No	No		Yes			ENC	11/10/09
35	82751	10/20/09	patio wash water	Discharge of other washwater - 10/20/09 received complaint stating that wash water was being discharged	WO#98800 : 10/20/2009 3:39:33 PM 10-20-09 site inspection took photos and called bar owner regarding discharge complaint left message. Contacted worker and gave him restaurant flyer and explained that wash water is not allowed. exchanged voice mails with Business owner	Yes	No	10/21/09	Yes	10/21/09		ENC	11/10/09

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36	82818	10/28/09	Drain Wash water	Discharge of sediment - Complainant stated that dirt was coming out on to Balour Drive	WO#98921 : 10/29/2009 4:39:25 PM Site inspection took photos of discharge placed sand bags and cones to block discharge from entering the storm drain notified contractor that the drains were flowing onto the street gutter. WO#98922 : 10/29/2009 4:48:39 PM Site inspection took photos of clean up area. Met with Business president regarding email Muni code and permit	Yes	Yes		Yes			LCS	10/28/09
37	82831	11/2/09	sewage	Discharge of sewage - Bathroom at HOA swimming pool at Mtn Vista and Willowspring backs up, causing sewage overflow in bathroom. Unsure if discharge reaches street- caller didn't leave contact info.	WO#98970 : 11/3/2009 4:56:51 PM Site inspection sewage contained on site workers cleaning it up. They stated that they were repairing a sprinkler yesterday and someone took a photo.	No	Yes		Yes			LCS	11/10/09
38	82834	11/2/09	black tar	Other discharge - Roofer spilled liquid tar in gutter. Clean up was done, but resident wants to know if anything more should be done. Please call resident to set up a site visit.	WO#103126 : 11/18/2009 4:02:14 PM site inspection area cleaned up case closed WO#98969 : 11/3/2009 4:23:35 PM Site inspection observed chunks of tar that could be removed from the road. The resident will contact the roofer to do additional clean up 11/3/2009 4:27:13 PM In addition, contacted PW streets for guidance	Yes	Yes		Yes			RSF	11/5/09

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					on how they wanted it cleaned up								
39	86898	11/16/09	trash	Discharge of trash - Trash dumpster over flowing	WO#103117 : 11/17/2009 3:23:39 PM site inspection took photos of overflowing trash dumpster and contact local businesses and PM WO#103123 : 11/18/2009 11:04:17 AM site inspection area cleaned case closed	Yes	Yes		Yes			CBS	11/30/09
40	86912	11/20/09	concrete debris	Discharge of concrete cutting slurry or washwater. - observed a trail of white leading to the storm drain	WO#103161 : 11/20/2009 10:05:29 AM site inspection contact counter clerk who stated that the contractor used a shop vac to capture the debris	Yes	Yes		Yes			CBS	11/30/09
41	86915	11/20/09	Vehicle maintenance debris	Other discharge - appears customers are doing work on their vehicles in the parking lot without any BMPs	WO#103169 : 11/20/2009 1:42:04 PM Site inspection observed white powder over what appeared to be liquid automotive spill. Contacted counter staff regarding customers working in their parking lot. And that that activity is prohibited. They agreed and referenced their sign that states no work in parking lot. Case closed	Yes	No		Yes			LUC	11/30/09

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42	86922	11/23/09	wash water	Discharge of building or sidewalk washwater - Restaurant power washing floor mats without containing wash water.	WO#103203 : 11/24/2009 3:13:47 PM Site inspection took photos of workers washing off kitchen floor mats without containment. Workers were requested to discontinue discharge and to produce business contact information. Contacted the restaurant owner and informed him of the illegal discharge. 11/24/2009 3:14:58 PM Contacted mobile business owner and explained why his company was in violation 11/24/2009 3:17:30 PM 11/24/09 issued NOV and citation to mobile business owner via 1st class mail and cc business and restaurant managers and called Property manager.	Yes	Yes	11/24/09	Yes	11/24/09		LCS	11/30/09
43	86932	10/27/09	sewage	Discharge of sewage - No connection to sewer no sewer for workers	WO#103201 : 11/24/2009 2:56:22 PM Site inspection with county inspector. Farm user showed us the sewer hook up and where the potentially polluting items were stored. Did not observe anything going into the creek. Worker did not know the contact information for any contractors that work on the site. He gave me the owner's phone #. A complete commercial inspection will need to be completed complaint	No	No		Yes			RSF	11/30/09

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					case is closed.								
44	91040	12/10/09	appeared to be water	Discharge of concrete cutting slurry or washwater. - Truck is emptying some fluid into parking lot at Kinkos.	WO#107351 : 12/14/2009 11:05:38 AM site inspection business GOA called complainant and checked business directory no luck case closed	No	Yes					ENC	1/4/10
45	91076	12/17/09	uncovered dirt	Discharge of sediment - Approx 3 acre dirt lot, exposed soil. On Puebla, east of Saxony. Located near greenhouses.	WO#107391 : 12/18/2009 1:20:55 PM Site investigation showed no violations. Case closed.	No	No					ENC	12/18/09
46	91091	12/21/09	grease	Discharge of food waste. - Improper grease storage in alley west of 101 behind 1002.	WO#107433 : 12/21/2009 5:31:55 PM Site inspection took photos issued NOV and gave grease vendors info 12/28/2009 3:16:15 PM Received and granted time extension request to comply by 1/4/10 WO#107602 : 1/4/2010 12:45:59 PM Site inspection area cleaned up and overhead coverage installed took photos and signed off NOV Case closed	Yes	No	12/21/09	Yes			LUC	1/4/10
47	91099	12/21/09	vehicle wash water	Discharge of vehicle wash water - Auto detailer without containment	WO#107431 : 12/21/2009 5:20:27 PM Site inspection with owner issued NOV	Yes	Yes	12/21/09	Yes			ENC	1/4/10

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48	91139	12/30/09	red ready mix	Discharge of concrete waste. - Concrete truck spilled ready mix entering the parking lot	WO#107590 : 12/30/2009 2:22:47 PM Site inspection took photos of worker washing down spilled concrete into storm drain issued citation WO#107595 : 12/30/2009 5:14:50 PM Site inspection area was cleaned up case closed	Yes	Yes		Yes	12/30/09		LCS	12/30/09
49	91140	9/25/09	grease and liquid trash debris	Discharge of food waste. - grease leaking into parking lot from dumpster	WO#107592 : 12/30/2009 4:25:35 PM Site inspection took photos contacted restaurant to clean grease spill and contacted property manager to get new dumpster WO#107593 : 12/30/2009 4:31:58 PM Site inspection took photos of cleaned up area but dumpsters still leak and need to be replaced WO#107594 : 12/30/2009 4:36:10 PM site inspection took photos of new dumpsters----case closed	Yes	No	9/25/09	Yes			ENC	10/7/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
50	91170	1/11/10	wash water	Discharge of building or sidewalk washwater Referred from County Watershed Protection Prog: On the afternoon of 1/8/10, an employee was washing the front of the restaurant with soapy water and sweeping all debris and soapy water into the storm drain.	WO#107733 : 1/11/2010 5:37:09 PM Site inspection no trace of discharge contacted manager and completed total storm water quality inspection which required a posted spill response plan and employee training log.	No	No		Yes		na	LCS	2/1/10
51	91174	1/11/10	wash water	Discharge of building or sidewalk washwater - Landscapers power washing driveway w/soap and no containment.	WO#107734 : 1/11/2010 6:16:55 PM Contacted worker and showed him how to clean without discharge. Called B&B,informed them of the code and how to comply	Yes	Yes		Yes			ENC	2/1/10
52	91183	1/12/10	h20	Discharge of water - Every afternoon, water shoots out from fire check system.	WO#107744 : 1/15/2010 2:32:56 PM Site inspection observed drainage coming out of SE outlet took photos. The janitor stated that this is not their water and believes that this is ground water draining and that it has been draining for 8 years. He was already contacted by SDWD and has turned off their irrigation for 45 days. In addition, he stated that the flow was twice as strong when the green houses were operating---case closed	No	No		Yes			ENC	2/1/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
53	91290	1/21/10	water	Discharge of water - Stormwater runoff running onto complainant's property.	WO#113185 : 3/30/2010 4:36:46 PM site inspection took photos sent email to PW	No	No		Yes			LUC	4/7/10
54	91337	1/27/10	drywall dust	Discharge of concrete cutting slurry or washwater. - Concrete cutting debris left in driveway.	WO#112799 : 3/22/2010 6:10:28 PM site inspection contacted worker to sweep up dry wall debris	Yes	No		Yes			ENC	4/7/10
55	91338	1/28/10	trash wash water	Discharge of trash - Drywall waste and trash smell in storage container behind Subway.	WO#112798 : 3/22/2010 6:04:09 PM Site inspection contacted maintenance worker who said it was rain water from a trash can in the storage unit. Requested that he clean it up asap took photos. WO#112800 : 3/22/2010 6:14:22 PM site inspection area cleaned up case closed	Yes	Yes		Yes			ENC	1/27/10
56	91340	1/27/10	vegetation	Discharge of yard waste - Leaf blowing into street.	WO#112796 : 3/22/2010 5:40:40 PM site inspection contacted landscaper and requested that he clean up all of the leaf blower debris and asked him how he sweeps it up without a broom	Yes	Yes		Yes			ENC	1/27/10
57	91356	2/1/10	wash water	Discharge of building or sidewalk washwater - Restaurant's driveways were wet, possible hosing off.	WO#111909 : 3/10/2010 3:04:37 PM Site inspection took photos of discharge and trails that lead to the NW customer entrance contacted respondent	Yes	No		Yes			ENC	2/12/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					3/10/2010 3:11:15 PM 2/25/10 received call from Angelo's burger regarding drainage problem-water pools in front of NW driveway. Site inspection took photos and emailed them to PW streets. Respondent believes that the palm tree is the reason that the cement is coming up and preventing flows into the storm drain. See SR 91466.								
58	91363	2/2/10	sediment	Discharge of sediment - Former Pacific View School has sediment runoff onto sidewalks. Is this still PW's responsibility or EUSD?	WO#112795 : 3/22/2010 5:18:38 PM no discharge	No	No					ENC	4/7/10
59	91389	2/1/10	sediment	Discharge of sediment - Sediment discharge due to rain event.	WO#112794 : 3/22/2010 5:14:54 PM site inspection BMPs appear to be working case closed	No	No					LUC	4/7/10
60	91391	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#112030 : 3/11/2010 1:02:29 PM Site inspections show business cleaning up after each rain. took photos 3/08/10 met with property/business manager. He informed me that he has cleaned up the drainage ditch twice this season and is waiting for the rains to stop before he does his final clean up. Set up routine storm water inspection for 3/15/10. WO#121750 : 8/31/2010 5:00:51 PM site inspection drain	Yes	No		Yes		San Elijo Lagoon	CBS	9/7/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					cleared took photos case closed								
61	91393	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#111918 : 3/10/2010 5:26:25 PM Site inspection appears PW streets cleaned up street WO#112792 : 3/18/2010 3:19:40 PM SDG&E easement at Mountain Vista. 3/22/2010 5:01:22 PM Sent email to SDG&E to clean street and maintain/replace BMPs 3/30/2010 4:29:44 PM 3/25/10 site inspection area cleaned up case closed took photos	Yes	Yes		Yes			LCS	4/1/10
62	91394	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#111976 : 3/11/2010 10:29:44 AM site inspection took photos of discharge stains WO#112793 : 3/18/2010 3:18:28 PM SDG&E easement at	Yes	Yes		Yes			LCS	4/1/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Garden View 3/22/2010 5:06:41 PM Sent email to SDG&E to clean street and maintain/replace BMPs 3/30/2010 4:27:23 PM 3/25/10 site inspection area cleaned up took photos case closed								
63	91397	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#111913 : 3/10/2010 4:18:13 PM Placed call on 2/18/10 with PM requesting maintenance of drainage ditch 2/18/10 (took photos on 2/3/10 2/10/10 and 2/18/10) Parks and rec informed me who owns property. 3/3/10 Contacted PM to clear drainage swale and install some BMPs. 3/8/10 drain ditch clear and BMPs installed no discharge during/after rain event. Appears some additional BMPs may be needed for slope stabilization. WO#111914 : 3/10/2010 4:28:59 PM	Yes	No		Yes			LCS	3/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					3/8/10 drain ditch clear and BMPs installed. no discharge onto road								
64	91446	2/12/10	wash water	Discharge of building or sidewalk washwater - Restaurant washing off inside floor, letting wash water run into street with no containment.	WO#111909 : 3/10/2010 3:04:37 PM Site inspection took photos of discharge and trails that lead to the NW customer entrance contacted respondent 3/10/2010 3:11:15 PM 2/25/10 received call from Angelo's burger regarding drainage problem-water pools in front of NW driveway. Site inspection took photos and emailed them to PW streets. Respondent believes that the palm tree is the reason that the cement is coming up and preventing flows into the storm drain.	Yes	No	2/12/10	Yes			ENC	2/12/10
65	91451	2/15/10	sudsy water	Discharge of water - Sudsy water coming from a pipe at the corner of Lake and Woodlake.	WO#108942 : 2/17/2010 3:15:01 PM Site inspection, no sign of illegal discharge coming from any curb cutouts or pipes in the area surrounding the intersection of Lake and Woodlake. Case closed. WO#111867 : 3/9/2010 3:41:02 PM 3/1/10 and 3/9/10 site inspections took photos and contacted SDG&E	No	No					CBS	9/13/10
66	91505	2/24/10	silt	Discharge of sediment - Lack of erosion control.	WO#111880 : 3/10/2010 11:59:06 AM Site inspection with clean water manager and business owner.	Yes	No		Yes			LUC	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Requested owner to implement some BMPs to prevent silt discharge.								
67	91528	2/26/10	sediment	Discharge of sediment - Company hosing down pile of sediment into street.	WO#111864 : 3/9/2010 1:48:06 PM site inspection contacted workers and business owner to issue citation for BMP and discharge took photos	Yes	Yes	3/1/10	Yes	3/1/10		ENC	4/8/10
68	91531	2/28/10	water	Discharge of water - Resident says there is sudsy water coming from a curb outlet on Woodlake. it was occurring Sunday at 12:35pm. This is the 2nd complaint. No discharge was found the first time.	WO#111874 : 3/10/2010 11:17:08 AM Called SDG&E representative to setup inspection of volt to ensure that there are no illegal connections. Took photos and emailed them to SDG&E. 3/10/2010 2:10:51 PM 3/10/10 received call from SDG&E representative (see inspection tab for rep info) stating that they need to determine if this is a "live" box. If live then only trained personnel can enter box. Requested photos of any connection to the box. 3/16/2010 2:05:34 PM 3/12 and 3/15 received email and voicemail from SDG&E stating that they have inspected the volt and found no leaks or dirty/sudsy water in volt. Discharge excess water into MS4	No	No		Yes			CBS	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					3/18/10 received call from SDG&E stating that the volt does have a pump that pumps the water when it reaches a certain height in the volt. The pump is designed so that when it pumps it takes the water not from the top Case closed.								

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
69	93576	3/8/10	sediment	Discharge of sediment - Resident concerned with lack of erosion controls at sidewalk repair jobs on 4th street.	WO#111838 : 3/8/2010 3:32:12 PM Site inspection contacted workers and business owner to dry clean street and use BMPs in the future	Yes	Yes		Yes			ENC	4/8/10
70	93649	3/16/10	h2O	Discharge of water - Large amount of water coming from commercial building.	WO#112296 : 3/16/2010 5:55:50 PM site inspection contacted Special Hazards Manager, of a Fire Protection Co. Inc. on site. He informed me that he was flushing the emergency fire sprinklers as required by the fire code. I confirmed this requirement with fire prevention informed contractor to discharge these flushes into landscaped areas whenever practicable and to inspect their flows so that the flows do not create erosion or other safety issues	No	No		Yes		ocean	CBS	4/8/10
71	93673	3/21/10	wash water	Discharge of building or sidewalk washwater - Washing off driveway without containment.	WO#113100 : 3/24/2010 5:01:32 PM Site inspection observed discharge took photos and tried to contact employee WO#113101 :	Yes	No	3/24/10	Yes	3/24/10		ENC	3/24/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					3/24/2010 5:14:38 PM 3/22/09 159pm called respondent and informed him of the illegal discharge and asked and received his email and sent photos requesting explanation. 3/23/10 received voice mail message from the respondent/business/property owner at 751am stating that the he had talked to his employee and that the employee had washed the driveway and drive through area with clean water no soap. The employee was trained not to discharge any liquid into the storm drain. 3/24/2010 5:17:43 PM Issued citation via mail and called respondent (4pm) to offer additional training material. Met with respondent and gave him training materials and a log to document the employee training. Case closed								
72	93699	3/26/10	wash water	Discharge of building or sidewalk washwater - Restaurant washes off drive thru without containment.	WO#113218 : 4/1/2010 9:19:21 AM site inspection contacted manager gave ed info	No	No		Yes			LCS	4/8/10
73	93700	3/26/10	dirt	Discharge of sediment - Uncovered stockpile of sediment.	WO#113217 : 4/1/2010 9:13:08 AM site inspection took photos and contacted worker and gave ed info 3/31/10 received call from owner stating that	Yes	No		Yes			LUC	4/1/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					he will take care of the stock pile of dirt WO#113284 : 4/6/2010 2:39:01 PM Took photos of stock pile with BMPs in place. Case closed								
74	93704	3/12/10	silt	Discharge of sediment - Silt discharge after rain event	WO#113176 : 3/30/2010 3:39:07 PM Site inspection left info at door	Yes	No		Yes			CBS	4/8/10
75	93741	4/2/10	Kitchen waste	Discharge of building or sidewalk washwater - Restaurant hosing off floor mats without containment.	WO#113285 : 4/6/2010 2:51:12 PM site inspection contacted Manager took photos WO#113496 : 4/20/2010 3:35:54 PM received sign off employee training form and faxed NOV sign off case closed	Yes	No	4/5/10	Yes			RSF	4/20/10
76	93781	4/12/10	silt	Discharge of sediment - Silt and rocks discharge after rain event.	WO#117174 : 5/5/2010 5:18:22 PM Sent email and called bus to maintain drainage I have contacted the business maintaining the citrus groves and other home owners in this area. It appears that the road may be eroding next to the oleanders east of 2276 WOODWIND DR. Here are the photos I:\200 bLk RSF erosion of road Let me know if you need more info/work	Yes	No		Yes			RSF	6/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					from me Thanks								
77	93786	4/12/10	odor	Other discharge - Neighbor says odor is coming from greenhouse and they may be dumping something.	WO#88462 : By INSPECTOR1, ENG: 4/20/2010 1:57:27 PM Site inspection did not smell an odor contacted all properties in area no reports of discharge. Call DEH regarding septic at residence inspector to report back	No	No		Yes			CBS	6/8/10
78	93788	4/12/10	silt	Discharge of sediment - Working on utility box #225 with no BMPs. Silt runoff.	WO#117172 : 5/5/2010 5:10:44 PM site inspection area cleaned up took photos case closed WO#88460 : By INSPECTOR1, ENG: 4/20/2010 1:37:38 PM site inspection took photos contacted AT&T on 4/20/10 to check site for run on/off	Yes	Yes					RSF	4/21/10
79	93789	4/9/10	silt and water	Discharge of sediment - Car hit a fire hydrant. OMWD responded, but no BMPs were put in place. Silt discharge occurred.	WO#113494 : 4/20/2010 3:22:19 PM Site inspection OMWD did not have a shut off valve and no BMPs were being used took photos and contacted lead worker to clean silt from street WO#113495 : 4/20/2010 3:26:18 PM site inspection area cleaned case closed	Yes	Yes		Yes		Batiquitos lagoon	LCS	4/12/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
80	93807	4/18/10	H2o wash water	Discharge of water - a man was hosing off the sidewalk just west of the restaurant's driveway	WO#113492 : 4/20/2010 12:10:05 PM Site inspection spoke to worker who said he was following recommendations of the health department to wash down all patio surfaces to reduce or eliminate vectors. He showed me how he directs the wash water to the landscaped area and does not wash the parking lot	No	No		Yes			LUC	5/27/10
81	93933	5/6/10	dirt	Discharge of sediment - Brow ditches on bank of property filled with sediment, spilling out onto street.	WO#120914 : 7/27/2010 5:33:11 PM site inspection took photos of dirt in drive way called manager to clean up WO#120915 : 7/27/2010 5:45:37 PM site inspection area cleaned took photos case closed	Yes	No		Yes			LCS	5/11/10
82	93934	5/6/10	dirt	Discharge of sediment - Uncovered stock pile of dirt.	WO#120927 : 7/28/2010 2:18:48 PM SITE Inspection took photos of uncovered dirt pile contacted PM WO#120929 : 7/28/2010 2:31:11 PM site inspection area cleaned took photos case closed	Yes	No		Yes			LCS	5/11/10
83	93939	5/12/10	dirt	Discharge of sediment - Bell systems manhole on ECR near 276 has sediment discharge.	WO#120943 : 7/28/2010 2:56:51 PM site inspection took photos 5/12/10 called AT&T to clean up street	Yes	Yes		Yes			LCS	7/29/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
84	93980	5/17/10	sand	Discharge of sediment - Broken sprinkler, reclaimed water, sediment going into storm drain.	WO#120944 : 7/28/2010 3:04:11 PM site inspection took photos of broken sprinkler and contacted PM to fix	Yes	No		Yes			CBS	7/29/10
85	95993	5/21/10	wash water	Discharge of building or sidewalk washwater - Clean Water staff witnessed a man hosing off sidewalk in front of restaurant with no BMPs. When asked to stop, he declined.	WO#119653 : 5/24/2010 12:07:55 PM Sent NOV letter and Warning Citation to restaurant owner/manager.	Yes	No	5/21/10	Yes	5/21/10		ENC	5/24/10
86	96014	5/26/10	hydraulic fluid	Discharge of oil. - Business owner says SDG&E spilled an oily liquid in his private business parking lot. They power washed the spill, but some residue remains.	WO#120953 : 7/29/2010 1:36:45 PM Site inspection took photos and contacted SDG&E to contact property owner to agree on clean up areas	Yes	Yes		Yes			LUC	8/4/10
87	96069	6/2/10	cement slurry	Discharge of concrete cutting slurry or washwater. - Cement slurry discharging into street.	WO#120987 : 7/30/2010 3:30:45 PM Site inspection took photos contacted PO and worker to clean up discharge issued NOV and placed cones and sandbags in street for safety and to stop discharge from entering the storm drain system discharge from entering the storm drain system WO#120988 : 7/30/2010 3:40:12 PM site inspection area clean up signed off NOV case closed	Yes	Yes	6/2/10	Yes			LUC	6/4/10
88	96070	6/8/10	improper storage of Hazardous Waste	Other discharge - Improper storage of hazardous waste	WO#120989 : 7/30/2010 4:15:45 PM site inspection took	Yes	No		Yes			LUC	8/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					photos and contacted manager								
89	96071	6/8/10	cardboard	Discharge of trash - Improper storage and maintenance of trash and recycling area.	WO#121023 : 8/2/2010 3:46:02 PM site inspection contacted manager to use proper recycle containers case closed	Yes	No		Yes			LCS	8/4/10
90	96074	6/1/10	pond water	Discharge of building or sidewalk washwater - Washing out pond filter with detergents, no BMPs.	WO#121026 : 8/2/2010 4:00:57 PM site inspection took photos contacted worker to discontinue discharge case closed	Yes	No		Yes			CBS	8/4/10
91	96075	6/2/10	dirt	Discharge of food waste. - Wastewater found grease in drainage line and sediment in permanent BMP.	WO#121027 : 8/2/2010 4:18:29 PM site inspection with waste water checked grease interceptors and storage areas. Waste water confirmed no grease came from restaurants. Did find large amount of sediment that needs to be cleaned. Called PM to clean case closed	Yes	No		Yes			LCS	8/4/10
Commercial Totals: 91					**Follow ups: 42**	**65**	**33**	**19**	**82**	**9**			

Appendix H-1 Industrial Complaint Response Summary FY 2009 - 2010

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	82645	9/29/09	wash water	Discharge of vehicle wash water - Bus washing, dumping wash water into drain. Complainant not sure if drain was connected to clarifier or not.	WO#98638 : 10/6/2009 9:22:06 AM Received voicemail from responsible party. Discharge points were dry, and all employees said wash water was going into the filter system or sanitary sewer. No violation, case closed.	No	No					CBS	10/6/09
2	82669	9/25/09	silt/sediment	Discharge of sediment - Pile of sediment left in street after work was done on the recycled water system at SE corner of Quail Gardens Dr and Leucadia Blvd. Attached complaint to golf course at 1265 because it was nearest address point.	WO#88435 : 10/21/2009 4:07:43 PM 10-1-09 site inspection took photos called parks and rec and they said it was JPA called JPA and they cleaned it up. case closed.	Yes	No		Yes			LUC	11/10/09
Industrial Totals: 2					**Follow ups: 0**	**1**	**0**	**0**	**1**	**0**			

Appendix H-1 Industrial Complaint Response Summary

Appendix H-1 Residential Complaint Response Summary FY 2009 - 2010

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	78076	7/2/09	bag of trash	Discharge of trash - Neighbor says bag of trash has been left on his property line. Complainant says bag of trash has been left on his property line and/or in the drain in front of his neighbor's house.	WO#88389 : By INSPECTOR1, ENG: 7/13/2009 11:33:48 AM 7-13-09 site inspection observed no drainage took photos case closed 7/14/2009 4:05:56 PM inspection date is 7/9/09	Yes	No					CBS	7/14/09
2	82113	7/9/09	trash	Discharge of trash - Complainant says neighbor is dumping trash into the storm drain again, and he wants her cited.	WO#88388 : By INSPECTOR1, ENG: 7/13/2009 11:27:48 AM 7-13-09 site inspection observed no drainage took photos case closed WO#96909 : 7/14/2009 4:17:21 PM on showed small amount of sediment, trash and glass in the storm drain. Took photos before and after clean up. Clean water met with code regarding next steps. It was agreed that an NOV should be sent from Code to include EMC chapter 20.08 and clean water will continue to respond to storm water complaints and communicate with code. Area cleaned up case closed	No	No					CBS	7/14/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
3	82183	7/20/09	trash	Discharge of water - Complainant says neighbor is running water down her driveway for the past 30 minutes and often dumps trash, gas, and other pollutants into storm drain.	WO#88395 : By INSPECTOR1, ENG: 7/22/2009 12:45:09 PM 7/22/09 site inspection took photos of storm drain and picked up small amount of trash. Neighbors contacted me and were given update on city action	Yes	No		Yes			CBS	7/28/09
4	82191	7/21/09	trash	Discharge of trash - Neighbor allegedly leaving trash in street and storm drain.	WO#88394 : By INSPECTOR1, ENG: 7/22/2009 12:38:57 PM 7/22/09 site inspection took photos of storm drain and picked up small amount of trash. Neighbors contacted me and were given update on city action	Yes	No		Yes			CBS	7/28/09
5	82214	7/23/09	Paint	Discharge of paint - Referred from Leucadia Wastewater. Paint was dumped into storm drain at north corner of Mountain Vista and Whitewood.	WO#97154 : 7/23/2009 2:19:37 PM Paint was still wet in storm drain. Called Encinitas Wastewater to vacuum paint from drain, and they were able to capture it all. Case closed.	Yes	No					ESC	7/23/09
6	82216	7/23/09	cement wash water	Discharge of concrete cutting slurry or washwater. - Looks like neighbor cleaned out cement wash water into street.	WO#97184 : 7/27/2009 10:04:47 AM Dried cement lined gutter west along Tucker Lane. Contractors began scraping and sweeping up the cement with inspectors on site. Informed contractors and resident of stormwater code. Issued Admin Citation Warning. Case closed.	Yes	No		Yes	7/23/09		LCS	7/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
7	82218	7/24/09	trash	Discharge of trash - Neighbor called to report trash being left in street. Also submitted photo via email.	WO#88400 : By INSPECTOR1, ENG: 7/27/2009 4:25:02 PM 7-27-09 site inspection took photos of debris and trash picked up 23 pieces of trash/debris.	Yes	No					CBS	7/28/09
8	82236	7/28/09	Concrete wash water	Other discharge - Residue in gutter along Melba between Ocean Knoll and Balour Dr. on north side of street.	WO#88405 : By INSPECTOR1, ENG: 7/28/2009 3:09:07 PM 7/28/09 site inspection of debris draining off the property. Contacted property owner to dry clean up wash debris. WO#88410 : By INSPECTOR1, ENG: 8/6/2009 2:47:37 PM 8/6/09 site inspection area cleaned up case closed	Yes	No		Yes			ENC	8/6/09
9	82249	7/30/09	white construction wash water	Discharge of concrete cutting slurry or washwater. - trail of cement residue in street at corner of Sky Loft and Burgundy.	WO#97229 : 7/30/2009 1:59:41 PM Inspection showed dried white marks leading from construction area, down street into storm drain. Resident was unaware of contractor's name. Informed her of our municipal code, gave educational information, sent NOV and Warning Citation via Certified mail.	Yes	No	7/30/09	Yes	7/30/09		LUC	7/30/09
10	82259	7/31/09	oil/sediment	Discharge of oil. - Neighbor's contractor has oil leak from equipment in street.	WO#88411 : By INSPECTOR1, ENG: 8/6/2009 3:28:55 PM 8/6/09 site inspection took photos contacted owners will speak to contractor	Yes	No		Yes			RSF	8/11/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
11	82266	7/31/09	trash/sediment	Discharge of trash - Complainant says neighbor is breaking glass and hosing off driveway.	WO#88409 : By INSPECTOR1, ENG: 8/6/2009 1:30:21 PM 8/6/09 site inspection took photos and picked up <> 10 items of trash no discharge observed but evidence of sediment drainage trails on the north side of driveway. Case close	Yes	No					CBS	8/11/09
12	82303	8/6/09	yard waste	Discharge of yard waste - Staff witnessed landscapers using leaf blowers to blow yard waste into street.	WO#88414 : 8/11/2009 11:00:36 AM Contacted owner/resident and requested he speak to his landscaper about proper disposal of yard waste.	No	Yes		Yes			ENC	8/11/09
13	82313	8/5/09	mulch	Discharge of yard waste - Neighbors dumped out kids' pool, water took dirt and mulch into street.	WO#88418 : By INSPECTOR1, ENG: 8/12/2009 2:43:10 PM 8/6/09 site inspection took photos of mulch flowing into storm drain contacted property owner to clean it up. WO#97420 : 8/17/2009 12:53:10 PM 8/12/09 site inspection area cleaned up signed off NOV case closed	Yes	No	8/5/09	Yes			CBS	8/12/09
14	82332	8/11/09	water	Discharge of water - Large pool of water at Santa fe and nardo. source is unknown. address given by complainant doesn't exist.	WO#88416 : By INSPECTOR1, ENG: 8/11/2009 3:32:18 PM 8/11/09 site inspection no discharge observed case closed	No	No					ENC	8/26/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
15	82337	8/11/09	trash	Discharge of trash - Complainant says the whole street is littered with garbage and wants it cleaned up.	WO#97422 : 8/17/2009 1:18:17 PM 8/12/09 site inspection took photos and cleaned up trash in street next to property street sweeping is on third Tuesday case closed	Yes	No					CBS	8/25/09
16	82347	8/12/09	Trash	Discharge of trash - Complainant says there is trash up and down the street. Neighbor is littering in storm drain.	WO#97423 : 8/17/2009 1:22:50 PM 8/12/09 site inspection took photos and cleaned up trash in street next to property street sweeping is on third Tuesday case closed	Yes	No					CBS	8/25/09
17	82359	8/16/09	anti freeze	Discharge of antifreeze - van parked next to dumpster is leaking large amount of antifreeze. Puddle collecting under tire.	WO#88421 : By INSPECTOR1, ENG: 8/17/2009 3:27:22 PM 8/17/09 site inspection took photos left door hanger and other ed materials	Yes	No		Yes			ENC	8/26/09
18	82364	8/17/09	Dried white substance	Discharge of concrete cutting slurry or washwater. - Construction materials in driveway at 316, dried white residue in curb line.	WO#88420 : By INSPECTOR1, ENG: 8/17/2009 3:05:42 PM 8/17/09 site inspection took photos left door hanger	No	No		Yes			ENC	8/26/09
19	82366	8/17/09	trash	Discharge of trash - Complainant says neighbor is dumping trash into the street and storm drain. He has it on video.	WO#97534 : 8/25/2009 12:56:41 PM 8/17/09 site inspection took photos and cleaned up trash in street next to property street sweeping is on third Tuesday Contacted complainant on site	Yes	No		Yes			CBS	8/25/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
20	82412	8/25/09	trash and debris	Discharge of trash - Trash being blown under the gates of the fire lane to Seabulff Village. Also, 7 black trash bags and an oven not being properly disposed of.	WO#88422 : By INSPECTOR1, ENG: 8/25/2009 2:44:29 PM 8/25/09 site inspection took photos of trash and debris flowing from storm drain contacted property owner and landscaper to clean it up. WO#97729 : 9/10/2009 11:03:35 AM 8/27/09 site inspection took photos area cleaned up case closed	Yes	No					LUC	9/11/09
21	82418	8/20/09	unknown stain in curb line.	Discharge of other washwater - Resident said there is stain running from a curb hole into the street.	WO#97731 : 9/10/2009 12:42:06 PM 8/25/09 site inspection area appeared to have slight stain. Contacted residence and requested that they or their hired help makes sure that there is no discharge. Case closed	No	No		Yes			LUC	9/11/09
22	82459	8/30/09	Sediment/ water	Discharge of sediment - Staff noticed sediment laden water coming from curb cut on Leucadia Blvd, possibly from nearby grower.	WO#97738 : 9/10/2009 4:30:38 PM 9/3/09 site inspection took photos and contacted resident monitor discharge so that no sediment is released from property	No	No		Yes			LUC	9/11/09
23	82467	9/1/09	water	Discharge of other washwater - Unknown wash water periodically discharged from pipe on the west side of property.	WO#107313 : 12/7/2009 5:11:36 PM site inspection appeared to be clean drainage case closed WO#97726 : 9/10/2009 9:40:06 AM 9/1/09 site inspection took photos and contacted resident to get landlord's info	No	No		Yes			ENC	12/2/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					regarding constant drainage.								
24	82481	9/2/09	sewage smell	Discharge of sewage - Complainant says sewage smell comes from neighbor's property and sometimes there is leaching onto complainant's property.	WO#97785 : 9/14/2009 3:12:17 PM 9/10/09 site inspection took photos of DEH notice to repair septic no drainage or odor case closed	No	No					ESC	11/10/09
25	82492	9/3/09	sediment	Discharge of sediment - When the property owner waters the grass, dirt is flowing down the street.	WO#97724 : 9/9/2009 5:16:47 PM 9/09/09 site inspection took photos no drainage issue	No	No					ENC	9/11/09
26	82530	9/14/09	paint debris	Discharge of other washwater - Unknown substance draining into gutter causing bleaching. Complaint forwarded from Code Enforcement.	WO#88442 : By INSPECTOR1, ENG: 10/26/2009 2:38:04 PM Site inspection took photos of paint stain in street contacted owner and requested clean up WO#88443 : By INSPECTOR1, ENG: 10/26/2009 2:44:31 PM site inspection area cleaned up took photos case closed	Yes	No		Yes			LUX	9/22/09
27	82568	9/16/09	paint thinner	Discharge of paint - Neighbor dumping paint thinner on ground.	WO#88450 : By INSPECTOR1, ENG: 10/26/2009 5:25:49 PM left card at door. contacted owner and explained storm water regulations and that dumping paint thinner is illegal	No	No		Yes			ENC	11/10/09
28	82569	9/16/09	oil	Discharge of oil. - Oil spill in alley behind garage.	WO#88448 : By INSPECTOR1, ENG: 10/26/2009 5:14:15 PM Site inspection took photos of oil dumped in alley left info at possible	Yes	No		Yes			ENC	9/22/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					respondent's door Respondent called and said it was not his oil. WO#88449 : By INSPECTOR1, ENG: 10/26/2009 5:20:30 PM cleaned up site case closed								
29	82570	9/16/09	radiator water	Discharge of antifreeze - Van leaking large amount of fluid into driveway, running towards storm drain.	WO#88447 : By INSPECTOR1, ENG: 10/26/2009 5:05:09 PM Site inspection took photos of van leaking antifreeze local host resident found the owner of the van. Placed some sand bags to prevent the fluid from entering the storm drain. Owner said he will fix the van. Owner placed a drip pan under the van.	Yes	No		Yes			ENC	11/10/09
30	82583	9/17/09	erosion	Discharge of sediment - Lack of erosion control.	WO#103128 : 11/18/2009 4:29:42 PM Owner informed me that there are BMPs in place (drains under road and left vegetation in place to prevent run off. Owner stated that there has not been any run off in the last 6 years since he has owned the property case closed WO#88446 : By INSPECTOR1, ENG: 10/26/2009 4:25:17 PM Site inspection took photos of disturbed soil without required BMPs contacted owner and requested that BMPs be implemented.	Yes	No		Yes			RSF	11/5/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
31	82661	9/30/09	none	Discharge of building or sidewalk washwater - Resident washing off driveway without containment.	WO#88437 : By INSPECTOR1, ENG: 10/22/2009 5:03:07 PM 10-22-09 site inspection no discharge observed case closed	No	No					LUX	11/10/09
32	82680	10/5/09	Sewage smell coming from lake	Discharge of sewage - Complainant says there is a sewage smell coming from her neighbor's lake. Please call complainant to discuss.	WO#88428 : By INSPECTOR1, ENG: 10/6/2009 5:54:45 PM 10/5/09 site inspection took photos of lake color (milky green) contacted the reporting party and the property owner. The Lake also smelled septic. PO gave me a photo of the white slick that he observed 3 or 4 days ago (10-2/3-2009). Called DEH and Waste water. Waste water confirmed that it could not be flows from the sewer. Called and left message with DEH for possible septic leak working and preventing flows in storm drain.	No	No		Yes			ESC	9/2/10
33	82700	10/8/09	trash	Other discharge - Complainant's neighbor is using a blue plastic tarp to cover leaky roof. The tarp is disintegrating, and blue pieces are blowing into the street.	WO#88432 : By INSPECTOR1, ENG: 10/21/2009 1:35:59 PM 10/8/09 site inspection complainant showed where the pollutant was located. Took photos of blue parts of old trap on the lower northern roof. Contacted the respondent and requested that they take action to ensure that the pollutant does not enter the storm drain system. WO#88433 : By INSPECTOR1, ENG: 10/21/2009 1:48:44 PM	Yes	No		Yes			CBS	10/19/09

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					10/19/09 site inspection Took photos of blue parts of old trap on the lower northern roof. Contacted the respondent and requested that they take action to ensure that the pollutant does not enter the storm drain system. He said that the remaining parts were stuck to the roof but he will try to sweep them off and keep an eye on the storm drain---case closed								
34	82707	10/8/09	unknown substance	Other discharge - Complainant thinks her neighbor dumped some chemicals into the pond near her house. Please call complainant to get details and gain access to the property.	WO#121755 : 8/31/2010 5:20:59 PM site inspection with dudek preformed tests received report case closed WO#98733 : : 10/13/2009 5:25:32 PM 10-9-09 site inspection took photos of the pond and contacted adjacent neighbor who confirmed that the pond had changed color about a week earlier and that this had not occurred in the recent past (5yrs). Also that there was a stop work issued for grading and that other agencies were involved (fish and game and army corps of engineers)	No	No		Yes			ESC	10/14/09
35	82713	10/9/09	rocks and dirt	Discharge of trash - Complaint says neighbor is leaving garden rubbish and tissue in the street.	WO#98710 : 10/12/2009 4:57:36 PM 10/12/09 site inspection took photos swept up area case closed	No	No					CBS	11/10/09

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36	82723	10/7/09	none	Discharge of sewage - Sewer smell between 12-6am	WO#98709 : 10/12/2009 4:27:58 PM 10/8/09 site inspection with waste water checked new sewer clean outs and investigated up stream Creek water appeared to be clear and did not have an odor. Called DEH septic and they do not respond to odors they require a visual and an address to respond. Case Closed	No	No		Yes			ESC	11/10/09
37	82725	10/13/09	vegetation	Discharge of yard waste - Storing large pile of tree clippings in street for 2 weeks	WO#98903 : 10/27/2009 2:27:00 PM site inspection took photos door hanger WO#98904 : 10/27/2009 2:30:09 PM site inspection took pho of cleaned up area Case Closed	Yes	No		Yes			CBS	10/19/09
38	82749	10/15/09	pet waste	Other discharge - Complainant stated that there are dog droppings all over the neighborhood and thinks that is coming from the dog owners at NW corner of La Veta and Silvia because it was observed that the dog owners let their dogs out without a leash.	WO#98791 : 10/20/2009 1:40:30 PM 10-15-09 site inspection contacted respondent who would like to be contacted by the complainant and does not let his dogs out. 10-20-09 called complaint and left message to call me back. Informed respondent of the progress. If complainant calls then they will be given respondents phone # and respondents thoughts on clean water---case closed	No	No		Yes			ENC	11/10/09

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39	82769	10/21/09	oil	Discharge of oil. - Car dripping oil across from 185 E. D. Street	WO#98864 : 10/23/2009 4:36:02 PM site inspection took photos and left info on vehicle called sheriff for expired tabs and oil leak they said they would call the FD for the oil and the tabs have to be expired for 6 months WO#98865 : 10/23/2009 4:44:43 PM site inspection kitty litter on oil case closed	Yes	No		Yes			ENC	10/22/09
40	82821	10/26/09	cement	Discharge of concrete waste. - plants are beginning to grow in the brow ditch, concrete has been dumped into it and a few near by homes have drain lines emptying into it	WO#98913 : 10/29/2009 11:18:53 AM Site inspection took photos of drainage ditch appears to be working. GIS shows it as private no violation case closed	No	No					ESC	11/10/09
41	82837	11/3/09	dirt	Discharge of sediment - uncovered disturbed slope	WO#107310 : 12/7/2009 4:54:26 PM Contractor informed me that the erosion was cause by a leaking sprinkler and that he replace and compacted the dirt. Site inspection showed that no sediment left the site during a rain event case closed WO#98965 : 11/3/2009 3:29:40 PM site contact requested BMPs ASAP	Yes	No		Yes			ENC	12/7/09
42	82863	11/9/09	trash dirt and rocks	Discharge of trash - Complainant says neighbor is dumping trash in street and storm drain.	WO#99092 : 11/10/2009 2:59:01 PM Site inspection took photos neighbors and sheriff contacted me. I	Yes	No		Yes			CBS	11/10/09

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					picked up trash and swept up rocks and dirt. Respondent started sweeping her driveway and pick up small pieces of trash								
43	82865	11/9/09	degreaser	Discharge of vehicle wash water - resident washing engine with degreaser when asked to clean it up used a push broom to sweep the wash water into the storm drain appears that he needs some education on stormwater	WO#99098 : 11/12/2009 9:58:04 AM Site inspection took photos area looked clean left educational info at door	Yes	No		Yes			CBS	11/30/09
44	82879	11/10/09	dirt, weeds, trash and rock	Discharge of trash - washing trash into storm drain	WO#99097 : 11/12/2009 9:20:40 AM Site inspection took photos neighbor contacted me. I picked up trash and swept up rocks and large amount of weeds and dirt ---case closed	Yes	No		Yes			CBS	11/30/09
45	86894	11/16/09	trash	Discharge of trash - Neighbor is putting trash in the street and storm drain.	WO#103124 : 11/18/2009 11:10:59 AM Site inspection took photos and picked up trash and swept up rocks and dirt. Took after photos case closed	Yes	No					ENC	11/30/09
46	88942	11/24/09	over-irrigation, potholes	Discharge of water - Over-irrigation causing potholes in road.	WO#107271 : 12/1/2009 5:24:14 PM Site inspection no discharge observed. Took photos of potholes. Contacted resident who stated that had reviewed her irrigation and there is no water leaving her property. Called PW regarding potholes.	No	No		Yes			RSF	12/4/09

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47	88943	11/24/09	vegetation	Discharge of yard waste - Lack of proper coverage of vegetation stockpiles.	WO#107270 : 12/1/2009 4:59:43 PM Site inspection no discharge observed. Took photos of pile of mulch. Contacted resident who stated that someone had dumped the 2nd or northern pile. Called PW and they do not removed/retrieve dumped piles of mulch. Respondent was informed of the policy---- case closed.	No	No		Yes			ESC	12/4/09
48	88944	11/24/09	manure stockpiles	Other discharge - Lack of BMPs for manure stockpiles.	WO#107308 : 12/7/2009 4:12:21 PM Site inspection took photos contacted resident to remove poop or provide BMPs. Received call from owner asked if he needed to remove the horses from his property as they are not his. Owner will store poop so that it does not wash down into the creek ASAP WO#107309 : 12/7/2009 4:17:40 PM Poop removed case closed took photo	Yes	No		Yes			ESC	12/7/09
49	88945	11/24/09	manure	Other discharge - Lack of BMPs for goat manure, and possible illegal connection to storm drain.	WO#107267 : 12/1/2009 12:52:57 PM Site inspection no discharge observed. Took photos of flexible black tube leading to the storm drain from the goat enclosure. Left card to call me. WO#107406 : 12/21/2009 2:27:04 PM	No	No		Yes			RSF	12/21/09

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					Site inspection with owner took photos of area drain and inspected goat lodging area no discharge or illegal connection was observed---case closed								
50	88946	11/25/09	none	Other discharge - Possible illegal connection to storm drain.	WO#107269 : 12/1/2009 1:23:12 PM Site inspection no discharge observed. Left card to call me. respondent called and informed me that it is a landscaping drain---case closed	No	No		Yes			RSF	12/4/09
51	88947	11/25/09	na- tree in storm drain	Other discharge - Citizen concerned with tree growing in storm drain.	WO#107268 : 12/1/2009 1:06:26 PM Site inspection no discharge observed. Took photos of tree growing. Called County watershed protection division regarding removal of tree. Waste water would like to have the tree removed. WO#107407 : 12/21/2009 2:32:08 PM site inspection took photos of cleared drain case closed	No	No		Yes			RSF	12/21/09
52	90958	11/30/09	wash water	Discharge of vehicle wash water - Forwarded from PW Director. Complainant concerned that neighbor might be running a car detailing business at his house.	WO#107266 : 12/1/2009 12:32:20 PM Site inspection no discharge observed contacted resident and gave educational information---case closed	No	No		Yes			LUC	12/4/09

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53	90965	12/1/09	recycle debris	Discharge of trash - Neighbor putting trash in the street and washing down items in her driveway.	WO#107306 : 12/7/2009 1:34:07 PM site inspection took photos swept up area case closed	Yes	No					LCS	1/4/10
54	90979	12/3/09	sediment/erosion	Discharge of sediment - Homeowners at 1183 Wales Place have placed an open drainage pipe at the rear of their property such that the stormwater spills onto the embankment below causing erosion. This erosion spills onto property at 1177 Wales Pl.	WO#107430 : 12/21/2009 5:06:08 PM Site inspection with owner took photos of area drain and inspected vegetated bank area no discharge was observed ter case closed	No	No		Yes			CBS	1/4/10
55	90982	12/2/09	gas	Discharge of liquid fuels. - Complainant is concerned with neighbor's RV parked in driveway, leaking fluid onto driveway.	WO#107305 : 12/7/2009 1:15:31 PM Site inspection observed small amount of fluid under vehicle took photos but there was no evidence of discharge into the storm drain. Called complainant who just wanted the RV removed. Referred him to code enforcement. He wanted a call after the respondent was contacted-case closed 12/10/2009 5:29:08 PM 12/10/09 received call from complainant stating that some further work had been done on the vehicle which created additional discharge and odors WO#107348 : 12/10/2009 5:39:45 PM Site inspection observed a constant	Yes	No	12/10/09	Yes			LCS	12/14/09

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					drip of oil or other fluid dripping about every 5-10 seconds took photos place Nov at door WO#107350 : 12/14/2009 10:59:39 AM site inspection rv gone spill cleaned up took photo case closed								
56	90985	12/5/09	wash water	Discharge of building or sidewalk washwater - At 10:30 am on Sat. Dec. 5 I was walking by 790 Neptune Ave. A man was cleaning off the backyard access to the driveway and then the driveway into the storm drain with his hose. Complainant also saw mobile detailer but didn't get name or number.	WO#107304 : 12/7/2009 12:54:14 PM Site inspection contacted owner regarding discharge. She said she does not use very mach water but will contact her gardener to discontinue practice. Case closed	No	Yes		Yes			LUC	1/4/10
57	91035	12/2/09	sediment	Discharge of sediment - Irrigation work had sediment discharge	WO#107340 : 12/9/2009 5:43:26 PM Site inspection took photos of sediment water in gutter left info at door and place 3 sand bags and cone in gutter WO#107341 : 12/9/2009 5:51:09 PM site inspection area cleaned up case closed	Yes	No		Yes			CBS	12/4/09
58	91082	12/15/09	trash	Discharge of trash - Trash in storm drain	WO#107437 : 12/22/2009 10:19:54 AM site inspection took photo of clean street no violation case closed	No	No					CBS	1/4/10

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59	91094	12/18/09	h2o	Discharge of water - Received complaint call that there is constant standing water in grassy swale BMP	WO#107404 : 12/21/2009 2:08:23 PM Site inspection took photos of drainage appears to be working. No pollutants were being discharged into the storm drain----case closed	No	No					LUC	1/4/10
60	91105	12/22/09	white "soap" debris	Discharge of paint - Neighbor dumping paint in street.	WO#107446 : 12/23/2009 12:49:55 PM Site inspection took photos of white stains in street contacted resident to use BMPs to -prevent discharges into the storm drain and to dry clean (sweep) white debris in street gutter to the MEP WO#107486 : 12/28/2009 11:50:49 AM Site inspection appeared storm drain cleaned up to the MEP---case closed	Yes	No		Yes			LCS	12/23/09
61	91106	12/18/09	vegetation	Discharge of yard waste - Structure in storm drain swale catching leaves and debris that block flow.	WO#107440 : 12/23/2009 9:56:28 AM Site inspection took photos of structures in storm drain swale which is privately maintained. Appears to be partially blocked with vegetation 12/28/2009 12:05:50 PM 12/28/09 received call from hunter properties that they will clear drain and consider removing structures over storm drains. WO#107832 :	Yes	No					CBS	2/1/10

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					1/21/2010 11:10:20 AM site inspection took photos cleared storm drain ---case closed								
62	91107	12/22/09	Palm Fronds	Discharge of yard waste - Palm Fronds in unmaintained alley	WO#107441 : 12/23/2009 10:16:25 AM site inspection alley cleaned up---case closed	No	No					ENC	1/5/10
63	91108	12/22/09	dirt and rocks	Discharge of sediment - complainant says that the drive way of dirt and rocks is flowing out to the street	WO#107442 : 12/23/2009 11:05:50 AM Site inspection took photos of dirt and rocks in storm drain gutter left door hanger with request to call me back. WO#107631 : 1/5/2010 9:37:00 AM site inspection took photos swept up area case closed	Yes	No		Yes			ENC	1/5/10
64	91109	12/22/09	sediment	Discharge of sediment - Received call from building inspector stating that an unmarked truck was dumping dirt	WO#107443 : 12/23/2009 12:06:18 PM Site inspection took photos drove around area looking for construction site--no luck called PW streets to clean up WO#107597 : 12/31/2009 12:01:21 PM Site inspection posted dirt with notice sign, took photos WO#107598 : 12/31/2009 12:08:13 PM Site inspection contacted two worker removing dirt. They were working for the owner of 3433 Lone Jack Road. They were required to sweep street when completed. Took photos. WO#107601 : 1/4/2010 12:29:34 PM site inspection area cleaned up took photos	Yes	Yes		Yes			ESC	1/4/10

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65	91125	12/28/09	trash, leaves, rocks and dirt	Discharge of trash - Trash in street	WO#107491 : 12/28/2009 3:21:14 PM site inspection took photos swept up area case closed	Yes	No					CBS	1/4/10
66	91163	1/6/10	glass, trash, leaves and an old rotting pumpkin	Discharge of trash - Trash bags in storm drain	WO#107709 : 1/7/2010 4:15:27 PM site inspection took photos swept up area and was contacted by two neighbors case closed	Yes	No		Yes			CBS	1/11/10
67	91199	1/19/10	white milky liquid	Discharge of paint - White substance applied to roof washed into alley between 2nd and 3rd streets, south of I street during rain.	WO#107837 : 1/21/2010 11:57:14 AM Site inspection took photos. Contacted PO who stated that they painted "White Snow" on the roof of the garage on 1/14-10 and followed the instructions (tacky in 2hrs and dry within 24 hrs). No source that could be removed. PO will wait until there is a dry spell before painting the roof again. No corrective actions required ===case closed	Yes	No		Yes			ENC	2/1/10
68	91203	1/19/10	paint and trash	Discharge of paint - Paint and trash bags in street.	WO#107836 : 1/21/2010 11:41:57 AM site inspection took photos cleared storm drain spoke to north neighbor on site---case closed	Yes	No		Yes			CBS	2/1/10
69	91228	1/19/10	silt	Discharge of sediment - Sediment runoff during rain event.	WO#107830 : 1/21/2010 10:53:59 AM Site inspection took photos. Contacted PO(s) to clean up sediment in street and maintain BMPs at the top of slope.	Yes	No		Yes			RSF	3/8/10

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					WO#107831 : 1/21/2010 11:00:37 AM Site inspection took photos. Contacted west PO to clean up sediment in street and maintain BMPs at the top of slope. East PO installed BMPs = OK 1/27/2010 5:52:04 PM After discussing case with Clean Water Program Manager and Public Works streets, sent advisory notice and called property manager to implement BMPs to prevent discharge. 3/9/2010 10:53:03 AM 2/1/10 site inspection No BMPs in place called PM to install BMPs 3/9/2010 10:58:39 AM 3/1/10 site inspection Bmps not maintained called PM to maintain WO#111861 : 3/9/2010 12:39:24 PM 3/8/10 site inspection new bmp in place no discharge during recent rain event case closed								
70	91260	1/20/10	silt	Discharge of sediment - Sediment runoff from driveway during rain event.	WO#107828 : 1/21/2010 10:30:22 AM Site inspection took photos left card. Contacted PM will maintain and clean up BMPs	Yes	No		Yes			LUC	4/1/10

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					WO#121751 : 8/31/2010 5:09:34 PM site inspection area cleaned took photos								
71	91289	1/21/10	h20	Discharge of water - Stormwater runoff running on to complainant's property. Referred to Streets for storm drain clearing.	WO#113187 : 3/30/2010 4:43:14 PM site inspection met with PO took photos sent email to PW case closed	No	No		Yes			LUC	4/7/10
72	91316	1/25/10	feces	Discharge of trash - Bags of trash left in street.	WO#107972 : 1/27/2010 10:14:40 AM Site inspection took photos of feces on discarded furniture and in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No		Yes			CBS	2/1/10
73	91339	1/26/10	pool water	Discharge of water - Pool water running down street.	WO#112797 : 3/22/2010 5:50:38 PM site inspection contacted home owner and gave him BMP info regarding pools	No	No		Yes			LUX	4/7/10
74	91341	1/27/10	none	Discharge of sediment - Sediment discharge into street.	WO#108008 : 1/29/2010 9:54:26 AM site inspection took photos of no discharge case closed	No	No					ENC	2/1/10
75	91342	1/27/10	silt	Discharge of sediment - Sediment discharge into street.	WO#108007 : 1/29/2010 9:50:56 AM Site inspection took photos sent email to PW streets with photos. Pw indicated that the street sweeper can clean on its normal rout case closed	No	No					ENC	2/1/10

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76	91353	2/1/10	feces	Discharge of trash - Trash bags in street and on sidewalk.	WO#112036 : 3/11/2010 3:19:28 PM Site inspection took photos of feces in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	3/17/10
77	91377	2/3/10	silt	Discharge of sediment - Erosion from private property clogging City owned ditch.	WO#88456 : By INSPECTOR1, ENG: 2/10/2010 5:17:22 PM site inspection took photos of drainage ditch that requires maintenance WO#88457 : By INSPECTOR1, ENG: 2/10/2010 5:30:07 PM Site inspection appears addition silt washed into drainage ditch called association to clean ditch	Yes	No					LCS	2/10/10
78	91390	2/3/10	feces	Other discharge - Feces and trash in street	WO#112031 : 3/11/2010 1:28:11 PM Site inspection took photos of feces in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	3/17/10
79	91392	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#112018 : 3/11/2010 11:26:05 AM Site inspection contacted worker took photos	Yes	No		Yes			RSF	3/17/10

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80	91395	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#111917 : 3/10/2010 5:15:51 PM Site inspection contacted owner and took photos. Owner had installed BMPs to prevent additional silt discharge	Yes	No		Yes			ESC	3/17/10
81	91396	2/1/10	sediment	Discharge of sediment - Sediment discharge	WO#111915 : 3/10/2010 5:08:11 PM site inspection took photos of silt discharge appears vegetation is growing in no discharge observed case closed	No	No					RSF	4/7/10
82	91429	2/9/10	feces	Discharge of trash - Trash and feces left in street.	WO#111912 : 3/10/2010 3:32:47 PM Site inspection took photos of feces in plastic grocery bags in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	4/8/10
83	91451	2/15/10	sudsy water	Discharge of water - Sudsy water coming from a pipe at the corner of Lake and Woodlake.	WO#108942 : 2/17/2010 3:15:01 PM Site inspection, no sign of illegal discharge coming from any curb cutouts or pipes in the area surrounding the intersection of Lake and Woodlake. Case closed. WO#111867 : 3/9/2010 3:41:02 PM 3/1/10 and 3/9/10 site inspections took photos and contacted SDG&E	No	No					CBS	2/17/10

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84	91465	2/16/10	feces	Discharge of trash - Trash bags and feces in street.	WO#111908 : 3/10/2010 2:13:33 PM Site inspection took photos of feces in plastic grocery bags in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	4/8/10
85	91503	2/24/10	feces	Discharge of trash - Trash and feces in street.	WO#111905 : 3/10/2010 1:49:11 PM Site inspection took photos of feces in plastic grocery bags in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No		Yes			CBS	4/8/10
86	91506	2/24/10	sediment	Discharge of sediment - Lack of erosion control.	WO#111879 : 3/10/2010 11:45:26 AM Site inspection requested resident to install some BMPs to prevent sediment run off	Yes	No		Yes			LUC	4/8/10
87	91529	3/1/10	cigarette Butts	Discharge of trash - Neighbor always leaves cigarette butts on the sidewalk and in the street.	WO#111872 : 3/10/2010 10:19:39 AM Site inspection took photos of cigarette waste in street sidewalk and entryway. Left card to call me. 3/10/10 sent advisory notice.	Yes	No		Yes			LCS	4/8/10

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88	91532	3/1/10	odor complaint	Other discharge - Neighbor of greenhouse says odor comes from greenhouse on the weekends. Forwarded from wastewater for possible water testing?	WO#111873 : 3/10/2010 10:54:25 AM site inspection with PM view last cleaning of septic 11/27/09 from sunrise pumping service 760 747-5997	No	No		Yes			CBS	4/8/10
89	93552	3/2/10	feces	Discharge of trash - Trash bags in street.	WO#111865 : 3/9/2010 2:05:47 PM Site inspection took photos of feces in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	4/8/10
90	93582	3/8/10	paint wash	Discharge of paint - Observed trail of paint going down into the storm drain	WO#111837 : 3/8/2010 3:05:25 PM Site inspection took photos of paint left info at door	Yes	No		Yes			CBS	4/8/10
91	93586	3/9/10	feces	Discharge of trash - Trash in street.	WO#111862 : 3/9/2010 12:49:31 PM Site inspection took photos of feces in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	4/8/10
92	93622	3/15/10	dog feces	Discharge of trash - Trash on sidewalk and in street.	WO#112290 : 3/16/2010 2:44:24 PM Site inspection took photos of feces in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned	Yes	No		Yes			CBS	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					up case closed requested resident to use trash receptacles for her dog feces. Received voicemail requesting that the city document that the south neighbor's gardener has been leaving cuttings on her property since 2001 and the north neighbor's gardener since 2006								
93	93629	3/15/10	water and sediment	Discharge of sediment - Sediment and water running down street.	WO#112292 : 3/16/2010 3:12:19 PM site inspection contacted owner. Owner understood law and was done with project case closed	Yes	No		Yes			LUC	4/8/10
94	93696	3/25/10	Garbage	Discharge of trash - Trash in street and on sidewalk	WO#113198 : 3/31/2010 11:58:42 AM Site inspection took photos of garbage in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	4/8/10
95	93702	3/12/10	silt	Discharge of sediment - Silt discharge after rain event	WO#113178 : 3/30/2010 3:50:00 PM Site inspection spoke to resident and left info	Yes	No		Yes			CBS	4/8/10
96	93705	3/12/10	silt	Discharge of sediment - Silt discharge after rain event	WO#113174 : 3/30/2010 3:14:35 PM Site inspection left info at gate 3/26/10 received call message from owner 3/30/10 spoke to owner and will install BMPs or clean up discharge. In	Yes	No		Yes			CBS	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					addition, informed owner that the city will send out wet weather letter this fall.								
97	93706	3/12/10	silt	Discharge of sediment - Silt discharge after rain event.	WO#113175 : 3/30/2010 3:30:08 PM Site inspection spoke to owner and will install BMPs or clean up discharge. In addition, informed owner that the city will send out wet weather letter this fall. 3/30/10 contacted owner regarding chance and amount of rain	Yes	No		Yes			CBS	4/8/10
98	93732	4/2/10	h2O	Discharge of building or sidewalk washwater - Sudsy water coming from neighbor's house. Sudsy water coming from neighbor's house. 4/5/10 received call stating that discharge occurs everyday at 945am	WO#113497 : 4/20/2010 3:48:34 PM Site inspection on 4/7/10 and 4/13/10 took photos of discharge spoke to clean water program manager not a clean water issue as it drains into dirt alley. Get documentation from respondent and close case Received email stating ground water issue case closed	No	No		Yes			CBS	6/8/10
99	93737	4/1/10	silt	Discharge of sediment - Sediment runoff after rain event	WO#117169 : 4/5/2010 4:55:33 PM Wet weather letter 5/5/2010 4:47:59 PM Site inspection took photos contacted workers and gave ed info	No	No		Yes			RSF	6/8/10
100	93738	4/1/10	silt	Discharge of sediment - Sediment discharge after rain event	WO#117170 : 4/5/2010 4:56:14 PM Wet weather letter	No	No		Yes			RSF	6/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					5/5/2010 4:52:54 PM Site inspection took photos left ed info								
101	93739	4/1/10	silt	Discharge of sediment - Sediment discharge after rain event.	WO#117171 : 4/5/2010 4:56:35 PM Wet weather letter 5/5/2010 4:58:32 PM Site inspection took photos contacted owner and gave ed info	No	No		Yes			RSF	6/8/10
102	93760	4/7/10	pool water silt	Discharge of water - Pool water discharge into street, causing erosion.	WO#88465 : By INSPECTOR1, ENG: 4/20/2010 2:58:56 PM site inspection contacted resident owner and showed erosion areas and requested clean up took photos WO#88466 : By INSPECTOR1, ENG: 4/20/2010 3:03:07 PM site inspection area cleaned up took photos	Yes	No		Yes			LUX	4/7/10
103	93779	4/11/10	trash	Discharge of trash - Trash left on street and sidewalk.	WO#88464 : By INSPECTOR1, ENG: 4/20/2010 2:23:00 PM Site inspection observed no discharge took photos of storm drain and called complainant and let him know it was not a violation	No	No					CBS	6/8/10
104	93787	4/12/10	woodchips	Discharge of yard waste - Wood chips in swale.	WO#88461 : By INSPECTOR1, ENG: 4/20/2010 1:48:24 PM site inspection took photos lest ed info. Received call from owner. reported no	No	No					RSF	4/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					discharge								
105	93796	4/14/10	trash	Discharge of trash - Trash in street.	WO#120909 : 7/27/2010 5:01:16 PM site inspection took photos	No	No					CBS	7/29/10
106	93902	5/6/10	H2O	Discharge of water - Large amounts of water in street on a regular basis. Possibly draining fish ponds.	WO#120488 : 7/1/2010 4:27:38 PM Site inspection took photos and contacted owner who informed me that it was run-on from another property uphill. He indicated that he drains his ponds into his vegetation when he needs to clean. Second time clean water responded to same complaint. Case closed	No	No		Yes			ENC	7/22/10
107	93913	5/10/10	oil	Discharge of oil. - Forwarded from County: Vehicle leaking a lot of oil on the street every day. Looks like the Exxon Valdez parks on the 1900 block of Oxford Ave.	WO#120906 : 7/27/2010 4:49:09 PM Site inspection took photos left card to call me	Yes	No		Yes			CBS	7/29/10
108	93935	5/4/10	salt pool water	Discharge of water - Over-flowing salt water pool	WO#120933 : 7/28/2010 2:38:36 PM site inspection took photos and contacted realtor to stop pump	Yes	No		Yes			LCS	7/29/10
109	93937	5/3/10	smelly water	Discharge of water - Resident concerned with water smell and residue at the end of her driveway.	WO#120923 : 7/28/2010 1:21:38 PM Site inspection took photos no discharge left door hanger	No	No		Yes			CBS	9/1/10
110	93938	5/3/10	Diatomaceous earth	Other discharge - White residue in street.	WO#120936 : 7/28/2010 2:46:45 PM Site inspection	Yes	No		Yes			ENC	7/29/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					contacted residence to filter discharge when cleaning								
111	95989	5/24/10	oil	Discharge of oil. - Someone left a black plastic bag with a container of oil out on the curb. it was moved to the sidewalk and is now leaking.	WO#120947 : 7/28/2010 4:44:42 PM site inspection left door hangers from 2140A to 2140N Newcastle and 2231,2245,2229,2227,2225,2219,2217 (east side of Newcastle) and check all dumpsters for evidence of recent oil change. Call PW and observed them cleaning up the mess	Yes	No		Yes			CBS	7/29/10
112	96013	5/26/10	white, sparkly residue	Discharge of other washwater - Resident concerned with a white, sparkly residue possibly coming from her neighbor's house.	WO#120948 : 7/28/2010 5:03:57 PM site inspection observed no discharge took photos resident showed me where the discharge pipe originated (area drain for NW patio	No	Yes		Yes			CBS	8/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
113	96016	5/26/10	oil	Discharge of oil. - Vehicle leaking oil into street	WO#120955 : 7/29/2010 1:46:50 PM site inspection took photos and left door hanger	Yes	No		Yes			CBS	8/4/10
114	96023	6/1/10	oil	Discharge of oil. - A car is leaking oil in the street at 1603.	WO#120956 : 7/29/2010 1:52:26 PM Site inspection took photos and left door hanger	Yes	No		Yes			CBS	8/4/10
115	96024	6/1/10	sewage smell, flow of water	Discharge of sewage - Resident says heavy flow of water coming from greenhouse on 2 separate occasions. Strong sewage smell.	WO#120957 : 7/29/2010 2:05:30 PM site inspection upstream no source located case closed	No	No		Yes			CBS	8/4/10
116	96061	6/8/10	salt water	Discharge of water - Large amount of water coming from storm drain outlet. Resident is unsure of source.	WO#120958 : 7/29/2010 2:41:34 PM site inspection took photos of water discharge contacted resident who indicated that he was discharging salt pool water. He was informed to watch out for erosion and or nuisance	No	No		Yes		ocean	LUC	8/4/10
117	96072	6/1/10	sediment	Discharge of sediment - Sand pile on property line, causing problems for complainant's drainage.	WO#121024 : 8/2/2010 3:51:13 PM site inspection took photos of where stock pile had been located no violation contacted the resident to discontinue temp storage in alley case closed	No	No		Yes			CBS	8/4/10
118	96073	6/10/10	white substance	Discharge of concrete waste. - White power substance running down gutter, originating at 1619.	WO#121025 : 8/2/2010 3:56:24 PM site inspection took photos left info	Yes	No		Yes			LCS	8/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
119	96106	6/16/10	wash water	Discharge of building or sidewalk washwater - Wash water puddled in front of driveway smells like Pine sol	WO#121028 : 8/2/2010 4:30:01 PM site inspection no discharge or smell observed case closed	No	No		Yes			LUC	8/4/10
120	96161	6/24/10	sediment	Discharge of sediment - Runoff from dirt driveway running into the storm drain	WO#121030 : 8/2/2010 4:38:18 PM site inspection no discharge took photos contacted resident case closed	No	No		Yes			ENC	8/4/10
121	96163	6/27/10	pure fiber	Discharge of other washwater - I noticed last week a large amount of fine white sandy-like debris along the curb in front of my house. This is the second time I observed this (first was during the winter). Tracing the origin – looks like it came from 1642 Debann Rd, Cardiff.	WO#121031 : 8/2/2010 4:43:27 PM site inspection took photos of discharge contacted resident to discontinue practice	Yes	No		Yes			CBS	8/4/10
Residential Totals: 121					**Follow ups: 31**	**71**	**4**	**3**	**85**	**2**			

Appendix H-1 Referrals or Requests for Info Summary FY 2009-10

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
1	82099	7/9/09	Residential	NA- request for info	Discharge of water - Resident wanted to know if Fire Dept wants his pool water for reuse. Told him he could dechlorinate the water and reuse it on his own landscaping, or discharge it into storm drain without causing erosion.		pool draining requirements		7/9/2009
2	82141	7/15/09	Commercial	NA- request for info	Discharge of building or sidewalk washwater - Request for info- hosing off sidewalks. Provided Encinitas Municipal Code section 20.08.040 B, Project Clean Water Toolbox, and Think Blue Mobile Business BMPs.		Power washing/hosing requirements		7/15/2009
3	82151	7/16/09	Residential	water buildup	Discharge of water - VP of HOA called to report buildup of water and algae in street. Inspector did drive by and saw that it's not a storm water issue; buildup caused by over-irrigation. Referred to OMWD.	OMWD		LCS	7/17/2009
4	82163	7/17/09	Residential	water from sump pump	Discharge of water - Resident concerned with mobile home park owner pumping water from catch basin to street. Water comes from wall next to donut shop. Also concerned with discharge of rain water onto Avocado from property at the top of Avocado- faulty drain.	Engineering		LUC	8/11/2009
5	82244	7/29/09	Residential	weeds in storm drain	Discharge of yard waste - Referred from SDWD. Over-irrigation causing buildup of weeds in storm drain near corner of Eugenie and Sidonia. Not sure if cleanup should be from Streets or Wastewater.	Streets		ENC	8/11/2009
6	82252	7/30/09	Municipal	antifreeze	Discharge of antifreeze - Bottle of antifreeze left in street. Referred to Streets Division for pick up.	Streets Division		LUC	7/30/2009
7	82273	8/3/09	Residential	water	Discharge of water - Resident at 1574 says water is constantly running down Bella Azul to swampy area across from her house and causing mosquitoes. She has already called vector control. Referred to OMWD.	OMWD		LUC	8/3/2009
8	82292	8/4/09	Residential	NA- request for info	Other discharge - Resident called to find out restrictions on car washing in terms of water conservation. Forwarded to SDWD	SDWD			8/4/2009
9	82294	8/4/09	Residential	water	Discharge of water - Resident concerned with drainage from Bella Azul Ct causing buildup of water, causing smell and mosquito breeding. Referred to Engineering and gave her Vector Control number.	Engineering- Sr Civil Engineer MM.		LUC	8/4/2009

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
10	82391	8/19/09	Residential	Other discharge	Other discharge - Request for info on pet waste disposal.		Pet waste info	CBS	8/19/2009
11	82443	8/28/09	Construction	Other discharge	Other discharge - Resident has concerns with construction being done at house next door. Forwarded his questions to Construction Inspector assigned to site.	Construction Inspector TB		LUX	8/28/2009
12	82483	9/2/09	Municipal	NA- dead raccoon	Other discharge - Dead raccoon reported in storm drain near 1010 Urania Ave. Forwarded to Wastewater.	Wastewater Division		LUC	9/2/2009
13	82562	9/16/09	Commercial	Request for info	Discharge of vehicle wash water - Local business worker calling to find out requirements for commercial mobile auto detailers.		Requirements for commercial mobile auto detailers	ENC	9/16/2009
14	82589	9/22/09	Residential	NA- Request for Info	Discharge of vehicle wash water - Resident wanted to know car washing requirements.	OMWD	Car washing requirements	RSF	9/22/2009
15	82846	10/21/09	Residential	na- vector issue	Other discharge - Vector problem in vacant lot. Referred to SD Vector Control.	San Diego County Vector Control		LCS	11/4/2009
16	82848	10/14/09	Residential	na- request for info	Discharge of water - Request for pool draining requirements.		Pool Draining Requirements	ENC	11/4/2009
17	91026	12/8/09	Municipal	NA- possible clogged storm drain	Other discharge - Resident concerned that custom-made box over storm drain at corner of Princehouse Lane and Encinitas Blvd was stolen. KR spoke to Wastewater, they are aware the box was stolen, and they are monitoring drain for blockages.	City of Encinitas Wastewater		ENC	12/9/2009
18	91064	12/16/09	Residential	broken glass	Discharge of trash - Neighbor called to report broken glass in the street. Referred to Streets Division for cleanup.	Street Maintenance		CBS	12/16/2009
19	91168	1/11/10	Residential	water	Discharge of water - Resident interested in installing a drainage pipe to handle rain water from her gutters. Referred her to Engineering.	Engineering		CBS	1/11/2010
20	91259	1/21/10	Municipal	clogged storm drain	Other discharge - Clogged storm drain on D Street in alley between 2nd and 3rd streets.	City of Encinitas Wastewater		ENC	1/21/2010
21	91306	1/25/10	Residential	Other discharge	Other discharge - Request for info and test results from Copper creek out near Lone Jack Rd.		Test results	ENC	1/25/2010
22	91311	1/25/10	Municipal	NA- storm drain needs repairs	Other discharge - Tree fell over during storms- roos tore up public stormdrain that runs down to ECR. Referred to Streets and Wastewater for repairs.	Streets/Wastewater		RSF	1/25/2010

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
23	91381	2/3/10	Residential	water	Discharge of water - Resident drilled a whole into a water pipe and is unable to turn off his water. Referred to SDWD.	SDWD		ENC	2/3/2010
24	91386	2/4/10	Commercial	illegal connection, soapy water	Discharge of other washwater - Hotel has illegal connection with soapy water sometimes running out of pipe.	SDWD		LUC	2/10/2010
25	91400	2/8/10	Municipal	pet waste	Discharge of other washwater - For over 14 years heavily use as a dog park poorly maintained. Located on a west facing slope the entire runoff from the park and fecal contaminants flow onto Paul Ecke Centeral. During inspection at the Park, no stormwater violations were noted. Referred complaint to Parks and Rec, re: maintenance issues.	Parks and Rec		LUC	2/8/2010
26	91409	NA	Residential	Other discharge	Other discharge - San Diego resident called to inquire about a beach cleanup in Encinitas. Told him about Creek to Bay on April 24 and referred him to SD Coastkeeper and ILACSD for monthly cleanups.	SD Coastkeeper, ILACSD		ENC	2/8/2010
27	91467	2/17/10	Residential	water encroachment	Other discharge - Backyard drain runs over sidewalk, causing buildup of algae and slip hazard. Referred to construction inspector for encroachment violation.	Construction Inspector		LCS	2/17/2010
28	91472	2/18/10	Residential	over-irrigation	Discharge of water - Over-irrigation coming from Jacob Ln into the mobile home park. Referred to SDWD.	SDWD		LUC	2/18/2010
29	93564	3/3/10	Residential	water	Discharge of water - SDWD reported water runoff from a storm drain west of Wastewater yard. Spoke with Wastewater, no illegal discharge was seen.	Wastewater		CBS	3/3/2010
30	93580	3/8/10	Residential	na- request for info	Discharge of water - Resident was following up on a complaint regarding an over-irrigation issue. Suggested she contact OMWD, as it wasn't a water quality issue.		Follow up on irrigation complaint	ESC	3/8/2010
31	93581	1/15/10	Residential	water	Discharge of water - Forwarded from County WPP. Resident is concerned with groundwater issues on her property. Not a water quality issue. Forwarded to OMWD.	OMWD		ESC	3/8/2010
32	93613	3/9/10	Commercial	NA- Request for info	Other discharge - Teacher from Cardiff School District wanted to know if she could work with ILACSD to label storm drains around her school. Referred her to HW in Streets Division.	Streets Division		CBS	3/12/2010

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
33	93790	4/14/10	Residential	water	Discharge of water - Call from Streets Division. Resident emptying pool water into street. No sign of erosion.		Pool discharge requirements	LCS	7/27/2010
34	93932	5/12/10	Residential	NA- Request for Info	Other discharge - Resident wanted to know car washing restrictions within the City.		Car washing requirements	ENC	5/12/2010
35	93936	4/29/10	Residential	NA- request for info	Discharge of water - Requesting information on pool draining		Pool draining requirements	LUC	5/12/2010
36	93982	5/20/10	Construction	sediment	Discharge of sediment - Sediment in brow ditch on south side of development. Per construction inspector: no discharge to storm drain; brow ditch will be cleaned out within the next week.	Construction Inspector		ENC	5/20/2010
37	96007	5/26/10	Residential	trash	Discharge of trash - Trash in street	City Manager Memo dated 5/27/10		CBS	8/4/2010
38	96088	6/14/10	Residential	paint	Discharge of paint - Resident wanted to know guidelines for disposal of water-based paint.		Water-based paint disposal		6/15/2010
39	96156	6/23/10	Residential	NA- request for info	Discharge of building or sidewalk washwater - Resident asking for guidelines for hosing off his driveway.		Regulations for hosing off driveway		6/23/2010
40	96176	6/30/10	Residential	NA- Request for info	Other discharge - Resident of Las Vegas called to get water quality information for MLB in preparation for her upcoming vacation.		Water quality info	LCS	6/30/2010

Commercial Total:	**4**
Residential Total:	**28**
Construction Total:	**2**
Municipal Total:	**6**
Total:	**40**

Appendix I

Special Investigations

I-1 Lone Jack Pond Water Quality Study

Lone Jack Pond Water Quality Investigation Summary

Background

Lone Jack Pond is located off of Lone Jack Road, north of Lone Hill Lane, in a rural residential area within the City of Encinitas (City). The pond is a man-made structure along Copper Creek, in the Carlsbad Watershed (Hydrologic Unit 904). The purpose of this study was to investigate the water quality of the pond.

Sampling Locations

To assess water quality visual observations, field tests, and laboratory analyses were performed on water samples at four locations in and around the pond, summarized in Table 1. Photos of each site and a map of the locations are included at the end of this report.

Table 1 – Sample Locations

Site ID	Location	Latitude	Longitude
Point A	Northeast of pond in Copper Creek, ~50 feet north of inflow location	33.07188	-117.21281
Point B	South of pond at outflow from pond to Copper Creek	33.07088	-117.21471
Point C	Southern border of pond, next to dock	33.07122	-117.21420
Point D	Northern border of pond	33.07167	-117.21485

Field Tests and Visual Observations

A monitoring field data sheet was completed to document visual observations and field tests at each of the four monitoring locations. Field meters were calibrated according to standard procedures prior to sampling. The results of field tests conducted to assess water quality are summarized in Table 2, and the data sheets are attached to this report.

Table 2 – Field Test Results

Site ID	Temperature (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
Point A	18.5	7.8	2.51	2.25	6.46
Point B	21.0	7.3	2.58	14.14	2.10
Point C	21.4	7.8	2.55	0.04	7.23
Point D	22.1	7.2	2.58	67.7	4.74

At Point A, along the creek before it enters the pond, the water was flowing at approximately 20 gallons per minute (gpm), appeared to be clear, and lacked any notable odor. Where the water enters the east end of the pond, it falls from a short ledge and flows in a southwesterly direction. At Point C, near a small dock, water that had just entered the pond was still clear and odorless. Dense vegetation was clearly visible beneath the water's surface. On the opposite and north side of the pond, Point D, the area and the actual pond water smelled distinctly of hydrogen sulfide, an odor similar to rotten eggs. Samples of the water appeared slightly cloudy and greenish gray in color. Decaying algae and a white film were also noted on the surface. At the

pond's outflow location, Point B, a very strong hydrogen sulfide odor was observed, and the water appeared yellowish in color.

Field observations indicated that the typical path of water through the pond mainly traveled from Point A to Point B through the southern side close to Point C. The northern side of the pond close to Point D seemed to be largely bypassed and isolated from the flow through the southern side of the pond under dry season, low flow conditions like those observed at the time of the investigation.

The most notable results of the conducted field tests are the variations in turbidity and dissolved oxygen measurements between the four locations. Water samples from Point A and Point C, the two more upstream locations, had higher levels of dissolved oxygen and lower levels of turbidity than the other two samples. The water at Point D was very turbid and had low dissolved oxygen. Water at Point B, the outflow, was less turbid, but had very low dissolved oxygen. Variation in dissolved oxygen did not appear related to water temperature.

Laboratory Analytical Tests

A water sample was collected from each of the four locations using precleaned bottles obtained from EnviroMatrix Analytical, Inc. (EMA). The samples were preserved on ice and transferred to EMA using proper chain of custody procedures. The results of laboratory analyses conducted to assess water quality are summarized in Table 3, and the laboratory report is attached.

Table 3 – Laboratory Analysis Results

Site ID	Copper, Total (mg/L)	Ammonia as N (mg/L)	Biochemical Oxygen Demand (mg/L)	Nitrate/Nitrite as N (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Nitrogen (mg/L)	Sulfate as SO_4 (mg/L)
Point A	ND	ND	2.19	0.12	ND	ND	341
Point B	ND	ND	9.00	ND	3.2	3.2	281
Point C	ND	ND	2.15	ND	1.0	1.0	282
Point D	ND	0.16	12.0	ND	0.6	0.6	280
Reporting Limit	0.050	0.10	2.00	0.05	0.5	0.5	50.0
Method	EPA-200.7	SM4500 NH3 B,C	SM5210 B	SM4500 NO3 E	SM4500 N C	Calculation	SM4500 SO4 E

Note: ND = not detected at or above reporting limit

The sulfate concentration was significantly higher in the creek upstream of the pond than in the other three locations, and the BOD level was considerably higher at points B and D than at points A and C. The total nitrogen level at Point B was higher than the total nitrogen levels at the other three monitoring points, and virtually all of the total nitrogen was present as organic nitrogen. Copper was not detected at any of the four stations.

Discussion and Recommendations

The flow patterns through the pond appear likely to leave the water in the northern half of the pond with poor circulation, leading to comparatively stagnant conditions. Based on the higher levels of organic nitrogen and BOD in the northern portion of the pond, it appears that decomposing algal and/or plant material has accumulated in that area. It is unclear whether the material has accumulated via natural seasonal die-off of algae and aquatic plants, application of

algaecides or herbicides, or other factors. No detectable levels of copper, a common component in algaecides, were reported, although alternative algaecide formulations that do not include copper are also available for purchase.

When large amounts of organic material decompose in a less well-mixed water body, oxygen present in the water is depleted, resulting in high levels of activity from anaerobic bacteria to continue breaking down the organic material. Since sulfate is available, the dissolved oxygen concentration is relatively low, and decomposing organic material is abundant, conditions at Point D are favorable for the propagation of sulfate-reducing anaerobic bacteria. These naturally-occurring organisms thrive in anaerobic environments, where they degrade materials rich in cellulose and convert sulfates (SO_4) to hydrogen sulfide (H_2S). The presence of H_2S in the water leads to the creation of elemental sulfur, which increases turbidity, and the loss of H_2S to the air as a foul-smelling gas. This hypothesis is supported by the fact that the sulfate concentration upstream of the pond is much higher than that observed at the downstream locations. The conditions in the northern portion of the pond also appear to affect the dissolved oxygen, turbidity, and BOD levels at the outfall (Point B).

In order to prevent the over-activity of sulfate-reducing bacteria and reduce unpleasant odors, it is recommended that dissolved oxygen be introduced to the portions of the pond prone to anaerobic conditions. This may be done through physical alteration of the flow regime within the pond to reduce stagnation, such as through the installation of a “blade” type structure that diverts some of the main flow path toward the north, or through the use of a pond bubbler, fountain, or similar means to artificially aerate the water.

Point A

Point B

Point C

Point D

Lone Jack Pond Water Quality Investigation
Monitoring Stations

Legend

Monitoring Sites — Streams — Roads

0 170 340 Feet

Base data source: City of Encinitas

CITY OF ENCINITAS

Clean Water Program

ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program
Annual Report

Section 7.0
Illicit Discharge Detection and Elimination Component

FY 2009-10

CITY OF ENCINITAS

Clean Water Program

ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program
Annual Report

Section 7.0
Illicit Discharge Detection and Elimination Component

FY 2009-10

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B Hazardous Materials Incidents

C 2010 Dry Weather Monitoring Assessment Report

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- C-2 2010 Dry Weather Monitoring Field Datasheets and Trash Assessment Forms
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D Administrative Citation Form

E JURMP Annual Report Requirements Checklist

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton, City Manager
City of Encinitas

12-6-10
Date

EXECUTIVE SUMMARY

On March 24, 2008, the City of Encinitas finalized an updated Jurisdictional Urban Runoff Management Program (JURMP) as required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit). The updated JURMP serves as the City's foundational program management tool, capturing newly developed process, procedure, and implementation strategies for overall program effectiveness and compliance. Within the updated JURMP document, the City of Encinitas also details the City's comprehensive update of the Illicit Discharge Detection and Elimination (IDDE) and Dry Weather Field Screening and Analytical Monitoring (Dry Weather Monitoring) programs.

As required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit), on September 30, 2009, the City of Encinitas submitted its 2008-2009 JURMP Annual Report to the San Diego Regional Water Quality Control Board (RWQCB). September 10, 2008, the RWQCB adopted Addendum 2 to Order No. 2007-0001 (Addendum 2) titled:

AN ADDENDUM EXTENDING THE DUE DATE FOR THE ILLICIT DISCHARGE DETECTION AND ELIMINATION REPORTING REQUIREMENT AND CHANGING THE BIOASSESSMENT MONITORING PROGRAM FOR ORDER NO. R9-2007-0001

Addendum 2 effectively extended the deadline for submittal of the JURMP Annual Report Section 7.0 – Illicit Discharge Detection and Elimination (IDDE) to December 15 of each year and established a separate submittal requirement. The following report culminates IDDE elements and supporting monitoring components to meet the standards established in Order No. 2007-0001 and the provisions of Addendum 2. This report covers IDDE program implementation for fiscal year 2009-2010, Dry Weather Monitoring from May 1, 2010 – September 30, 2010, and details all reporting, response, and enforcement actions related to illicit discharges and illicit connections to the City's MS4, Dry Weather Field Screening and Analytical Monitoring, follow-up investigations, sewer maintenance and spill prevention activities, and sewer spill response actions.

IDDE reporting and Dry Weather Monitoring results and analysis presented in the following report have been prepared in consideration of regulatory standards as well as a means to further advance programmatic elements in support of overall stormwater and water quality management in the City of Encinitas.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

The Municipal Permit requires the establishment of an Illicit Discharge Detection and Elimination (IDDE) Program to actively seek and eliminate illicit connections and discharges into the MS4.

This component describes the IDDE program developed by the City of Encinitas to seek and eliminate illicit connections and discharges. Eliminating illicit connections and discharges helps minimize potentially negative impacts of human activities on receiving water bodies. Illicit connections and illicit discharges can be defined as the following:

- An *illicit connection* is a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City, or a permitted connection which conveys illegal discharges.

- An *illicit discharge* is any discharge to the Storm Water Conveyance System that is not composed entirely of storm water or is not discharged in compliance with the City's Storm Water Management Ordinance (Municipal Code Chapter 20.08).

The City of Encinitas uses its municipal personnel to assist in actively seeking, identifying, and reporting illicit connections and discharges during their daily activities. Detection, prevention, and elimination of illicit connections and discharges are achieved by:

1. Operating a public hotline (phone and email) and responding to complaints;
2. Inspecting commercial, industrial, and municipal facilities;
3. Conducting an annual Dry Weather Monitoring Program;
4. Maintaining municipal MS4 and sewer systems; and
5. Educating the local community.

The City investigates, inspects, and appropriately follows-up on every illicit connection and discharge that is reported or detected to identify the source(s) of the discharge. Voluntary compliance and escalating enforcement mechanisms are implemented to immediately eliminate the illicit connection and discharge once the source has been identified. Educational materials are distributed to help prevent future illicit connection and discharge occurrences. This program involves the City's Clean Water Program staff, two Sanitary Districts (Leucadia Wastewater District and the City of Encinitas Wastewater Division), the City's Fire Department, Public Works Department, the Engineering Department, and County Hazardous Incident Response Team (HIRT), as well as the public.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

7.2.1 METHODS OF REPORTING

To support the identification and notification of illicit discharges, the City actively promotes public and City staff reporting of all suspected illicit connections and discharges. Multiple opportunities are provided to facilitate public reporting of illicit discharges and connections to the City's Clean Water Program staff, and reporting of non-storm water discharges can be received from the public, City staff, or outside agencies. Clean Water Program staff maintains a 24 hour, bilingual Clean Water Hotline (760-633-2787) and email (npdesmail@cityofencinitas.org) for reporting storm water discharges. Additionally, the Public Works Wastewater Collection Division accepts calls at 760-753-5018 for sewage related discharges. The public can also notify any City employee (the City Lifeguards are often notified of spills), who will promptly notify the appropriate staff in the Clean Water Program or Public Works Department. In cases of incidents occurring after working hours, the City provides a hotline number (760-633-2922) where the public can call and report emergency cases of illicit discharges. Alternatively, a regional public reporting hotline is provided by the County of San Diego at 888-844-6525. The County hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides a voice mail message for 24-hour public access in both English and Spanish.

7.2.2 STORM WATER COMPLAINT RECEIPT PROCEDURES

All complaints to the City's Clean Water Program are documented and investigated in a timely manner. The City of Encinitas has configured its enterprise Geographic Information System (GIS) to document and track all complaints as well as complaint driven storm water inspections in a spatially-based program called Cityworks. This system supports the entry of service requests for educational inquiries, citizen complaints, inspection results, ad-hoc and cyclical work orders, and report generation. All of the information stored in the system is accessible to any City user through the City's standard desktop GIS application – CityGIS. Refer to Appendix A for a copy of the "Storm Water Complaints Service Request Form." Clean Water Program staff investigates each case in a timely manner, and takes the appropriate action to educate the responsible party and/or enforce the City's Storm Water Management Ordinance when applicable. When education, a Notice of Violation, or an Administrative Citation is issued, this information is added to the case file created in Cityworks. The City's GIS system is a useful tool for tracking all complaints, follow-ups, enforcement, and education efforts, and to spatially locate historic or potential problem areas throughout the City.

For each complaint investigation, Clean Water staff is prepared to run field screening analysis, sample for laboratory analysis, and document the discharge for enforcement proceedings as deemed necessary. If immediate clean up actions are required, the City's Public Works Department maintenance crews are equipped with absorbent materials, vacuum trucks, and other equipment to contain large volumes of illegal discharge and/or cleanup large spills. If the violation or accident involves hazardous materials, the Fire Department is informed and the appropriate response actions are initiated. When necessary, the Fire Department calls other

responsible agencies or contractors for cleanup and handling of hazardous materials, including the County of San Diego's Hazardous Incident Response Team.

7.2.3 HOTLINE AND EMAIL UTILIZATION

Through the ongoing education efforts of the Clean Water Program staff, both the general public and the City of Encinitas staff have become increasingly aware of the effects of illicit discharges on the environment and what to look out for in identifying potential illicit discharges and connections. Methods to report storm water issues were continually publicized throughout the FY 2009-10 reporting period. The hotline number and email can be found on inspection forms and the City's website and were also publicized in various newsletters, storm water brochures, the City's Environmental Services Guide, on product giveaways, and at all Clean Water Program presentations and public events.

In FY 2009-10, there were a total of 275 complaints filed with the Clean Water Program. Clean Water Program staff documented receipt of 156 complaints (57%) from the public, and an additional 119 complaints (43%) were reported by City staff. Figure 7-1 illustrates the complaints per year that have been received by the Clean Water Program since record keeping began in FY 2001-02. To date, both City staff and the public continue to actively participate in the reporting of suspected illicit discharges and connections throughout the City of Encinitas. Detailed summaries of all complaint cases that were reported and closed (illicit discharge abated) in FY 2009-10 are included in Appendix H-1 of the City of Encinitas' FY 2009-10 JURMP Annual Report.

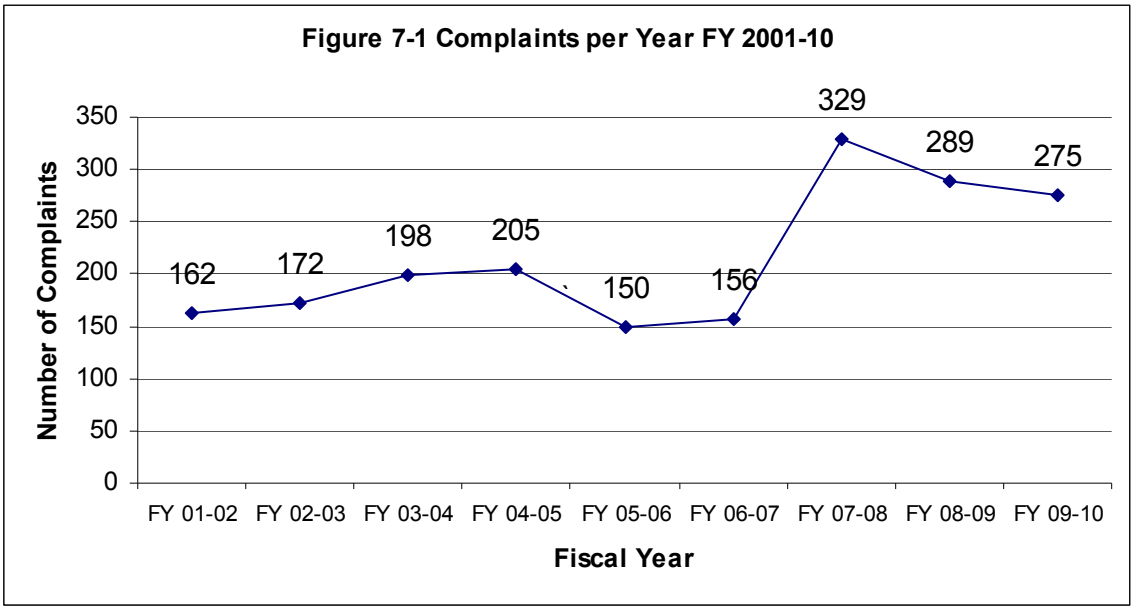

7.2.4 SOURCE CATEGORIES OF COMPLAINTS

In FY 2009-10, the majority of complaints reported to the Clean Water Hotline were related to residential and commercial activities. In total, 54% of the complaints reported were related to residential activities, 35% were related to commercial activities, 5% were related to construction activities, 5% were related to municipal activities, and 1% was related to industrial activities. Figure 7-2 shows the percentage of complaints by source category.

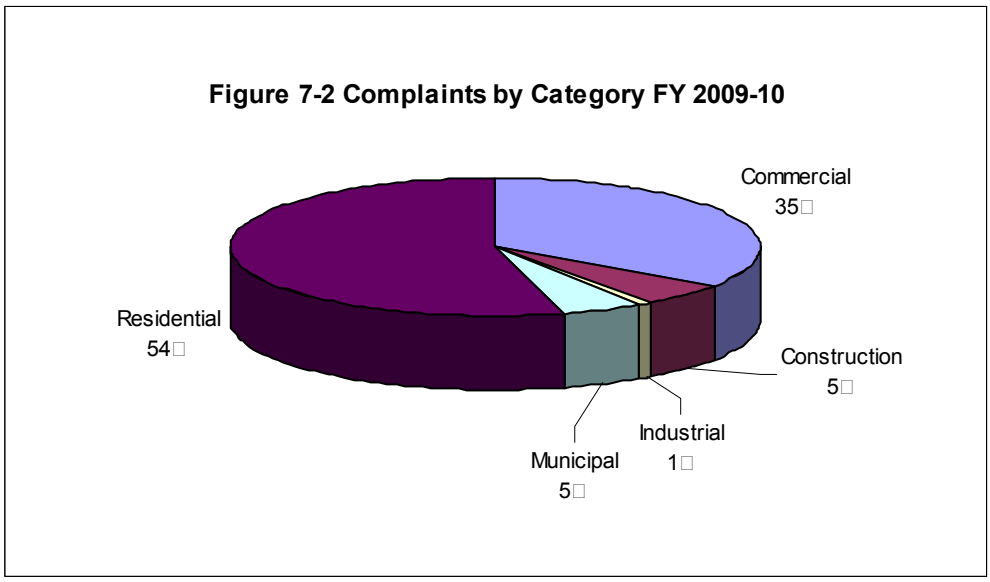

Figure 7-3 below illustrates the complaints distribution over the past nine reporting periods. The complaint distribution remains consistent across categories, with residential and commercial sectors receiving the most complaints.

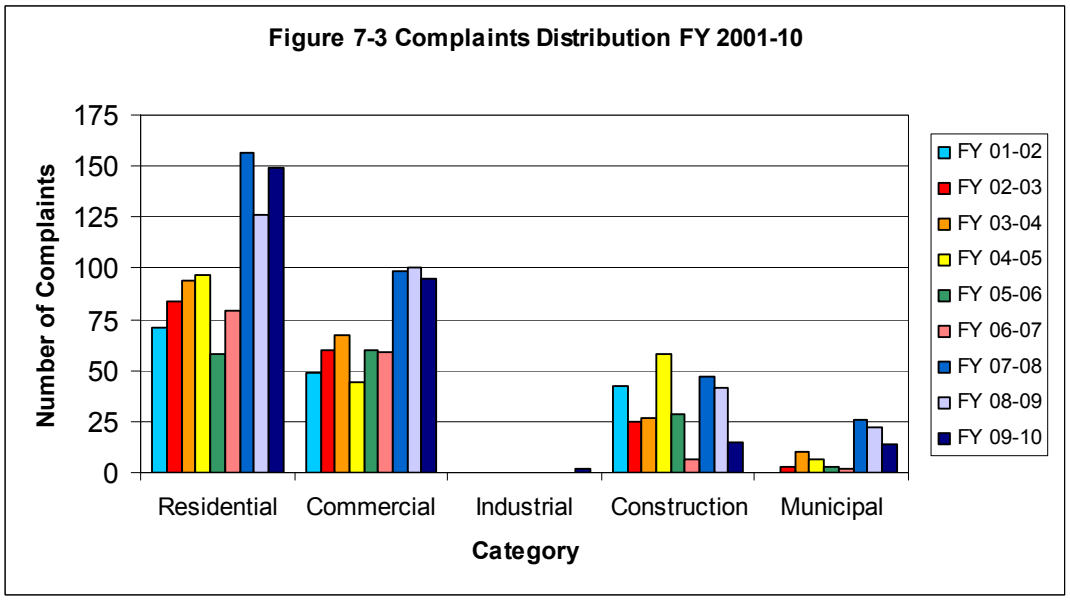

Clean Water Program staff provides annual education and training to City employees and City contractors on applicable storm water regulations to assure that proper storm water management practices are applied in all areas of the City. The City of Encinitas tracks all complaint calls or emails received and records whether each complaint is from the public or from City staff. Figure 7-4 below shows the breakdown of reported complaints by the public and City staff for each category.

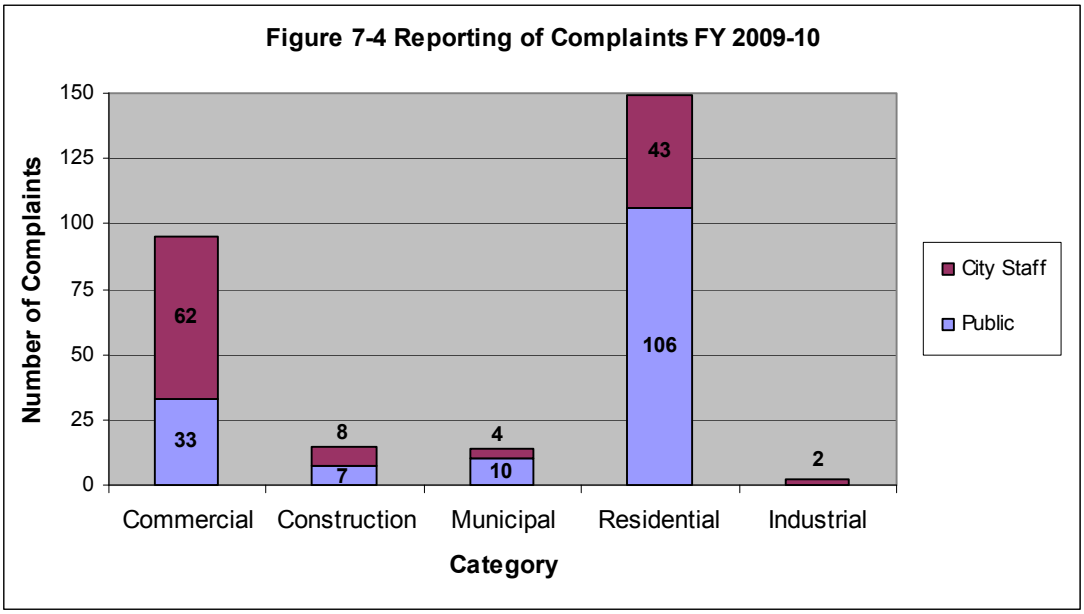

7.2.5 DISTRIBUTION OF COMPLAINTS BY SUB-BASIN

The City of Encinitas is broken up into seven distinct drainage sub-basins which include: the Cardiff sub-basin (CBS), Encinitas sub-basin (ENC), Escondido sub-basin (ESC), La Costa South sub-basin (LCS), Leucadia sub-basin (LUC), Lux Canyon sub-basin (LUX,) and Rancho Santa Fe sub-basin (RSF). Detailed maps of each of these sub-basins can be found in the 2010 Dry Weather Monitoring Assessment Report in Appendix C. A full map of the entire city that outlines each of the sub-basins can be found in Appendix C-1. Of the City's seven sub-basins, the Cardiff sub-basin had the largest number of reported complaints followed by the Encinitas sub-basin and the Leucadia sub-basin. In Figure 7-5, the numbers of complaints are compared to water quality exceedances in the sub-basins. This correlation helps the City prioritize inspection activities in specific sub-basins.

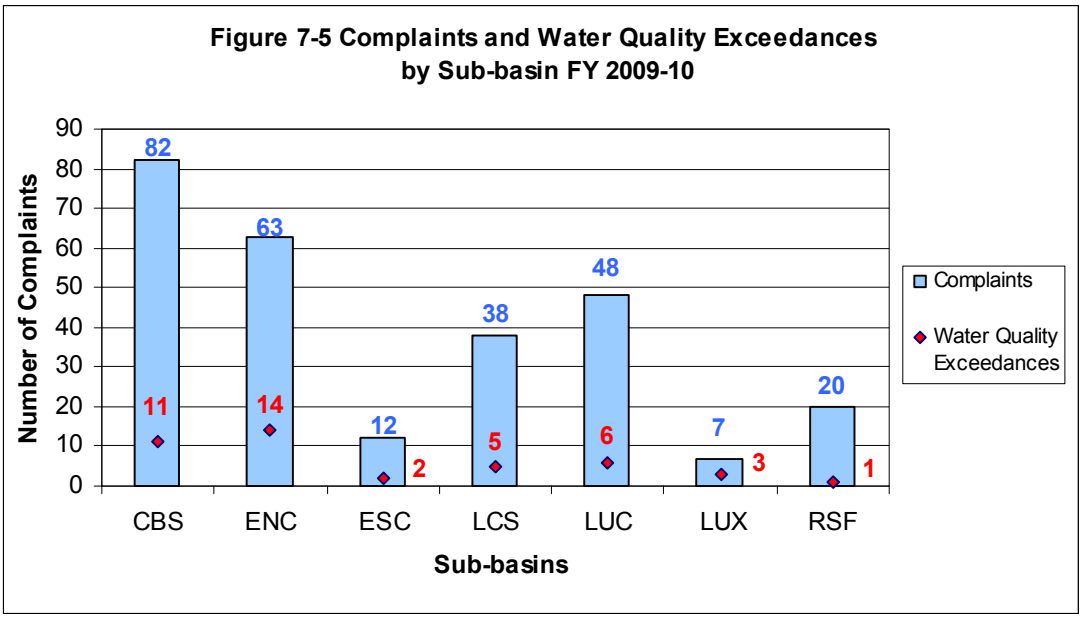

7.3 SPILL PREVENTION, RESPONSE, AND REPORTING

The City implements spill prevention, spill response, and reporting mechanisms to prevent, respond to, contain, and clean up all sewage and other spills that may discharge to its MS4 from any source.

7.3.1 SEWAGE SPILL PREVENTION

The spill prevention measures outlined below were implemented in FY 2009-10 to prevent overflows, spills, and infiltration of seepage from sanitary sewer systems to the MS4.

Preventive Maintenance Activities

The City of Encinitas' sewage collection system consists of over 120 miles of pipeline. The City actively maintains its sewage collection system and MS4 by ensuring that the following measures are implemented:

- Sanitary sewer inspections
- MS4 inspections
- Thorough, routine preventive maintenance of both systems (annual cleaning of entire sanitary sewer system, and "high priority" sewer lines cleaned at least every three months)
- Dry Weather Monitoring
- Data tracking and management of all complaints in Cityworks GIS
- Video inspection of underground systems (televise sewer mains to visually detect any potential problems)
- Replacement and upgrade of sewer pipes as needed
- GIS mapping of sewer and MS4 intersects

- Alarm system at sewage pump stations

Sewer System Management Plan (SSMP)

In FY 2008-09, the City of Encinitas fully implemented a Sewer System Management Plan (SSMP) in order to comply with the new sewer regulations set forth by the State Water Resources Control Board (SWRCB) Order No. 2006-003-DWQ. This new permit describes the applicable set of regulations for sewer system maintenance and reporting with respect to Sanitary Sewer Overflows (SSOs). These regulations are met mainly through the development and implementation of a Sewer System Management Plan (SSMP). However, the City also continues to maintain a Sanitary Sewer Overflow Prevention Plan (SSOPP), and a Capacity, Management, Operations, and Maintenance (CMOM) program, which have been incorporated into the City's SSMP. The SSOPP has been designed to prevent or minimize the potential for SSOs. The CMOM describes how the City maintains and operates its sanitary sewer system, as follows:

- Manage, operate, and maintain at all times the parts of the collection system which the City owns or has operational control over,
- Provide adequate capacity using city wide sewage flow monitoring programs to convey base flows and peak flows,
- Take all feasible steps to stop and mitigate the impact of SSOs,
- Provide notification to parties with a reasonable potential to exposure to pollutants associated with the overflow event through the County of San Diego, and
- Keep records of all maintenance activities.

The City of Encinitas also has a Fats, Oil, and Grease (FOG) ordinance, EMC Section 18.04. The primary purpose of this ordinance is to reduce the amount of FOG introduced into the sanitary sewer system by residents and businesses. This ordinance requires all Food Service Establishments (FSE) which discharge fats, greases, and waxes to the sewer system to install a grease pre-treatment device on the sewer lateral, which connects their facility to the City's wastewater collection system.

The Municipal Permit also requires all sewage discharges caused by blockages or other problems within a privately owned lateral or failing septic systems to be dealt with appropriately. If a spill from a private sewer lateral is not being contained and the responsible party fails to take action to repair the lateral, the City can take necessary action to contain the spill, make necessary repairs to the lateral, and/or contact a contractor for appropriate maintenance and bill the responsible party. The City's Clean Water Program staff is tasked with handling all illicit connection and discharge citations. If there are sewage spills due to failing septic systems at private residences, the County Department of Environmental Health (DEH) is responsible for responding to these complaints.

7.3.2 SEWAGE SPILL RESPONSE

Spills from the sanitary sewer entering the MS4 may be discovered during routine maintenance activities or observed and reported to the City by the public. All municipal personnel field crews call the Clean Water Program or report sewage spills to the Public Works Wastewater

Collection Division. When spills occur, the appropriate agencies (as described in Table 7-1 below) are informed of all sewer related spills and are responsible for control, containment, and clean up of all reported discharges.

Table 7-1
Responsible Agency for Sewage Spills

Source	Responsible Agency
Leaks and spills from publicly owned collection system	City of Encinitas
Private residence (failing septic systems)	County of San Diego Department of Environmental Health (DEH)
Any spill reaching MS4	City of Encinitas

Both the City's Public Works Wastewater Collection Division and the City's Clean Water Program accept complaint calls for commercial lateral discharges. For any incidents that may occur after hours, callers are directed to contact the City's answering service at 760-633-2922. Based on the urgency, City crews are dispatched immediately, work orders are prepared, and each case is tracked in the City's GIS based system. The City also provides a 24- hour, on-call City staff member with the ability to call additional resources or other appropriate agencies if necessary.

The City of Encinitas' Wastewater Collection Division has implemented the following remedial actions to the extent that they are applicable to any discharges:

- Interception and rerouting of sewage flows around the sewage line failure,
- Vacuum truck recovery of SSOs and wash down water,
- Cleanup of debris of sewage origin at the overflow site, and
- Inform the responsible party to cease and desist, clean and abate, and repair the problem to ensure that the incident will not occur again.

7.3.3 SEWAGE SPILL REPORTING

The City reports all SSOs to the State Water Resources Control Board (SWRCB) online using the California Integrated Water Quality Management System (CIWQS) database, as required by SWRCB Order No. 2006-003-DWQ. Initial online reports are sent to the CIWQS within three days, and final, certified reports are sent within 15 days. The City reports all SSOs that are at least 1,000 gallons and SSOs that cause a beach closure (regardless of volume) to the CIWQS within 2 hours. All illicit connections and discharges are reported annually in the City of Encinitas JURMP Annual Report. In some cases, inspections are conducted and enforcement actions may be taken if necessary. If a Notice of Violation (NOV) for a SSO is issued by the Clean Water Program, copies of all NOVs will be sent to the Regional Board.

As required in the Municipal Permit, the City of Encinitas will provide oral notification to the Regional Water Quality Control Board (RWQCB) of all illicit connections and discharges within

its jurisdiction that are determined to pose a threat to human or environmental health within 24 hours of the discovery of non-compliance. Oral notification will be followed up by a written report to the RWQCB within five days of the incidence of non-compliance.

All sewage spills of at least 1,000 gallons, or any spills to surface waters are required to be reported to the RWQCB, the DEH, and the Office of Emergency Services (OES) within 2 hours by fax or telephone. Surface waters include rivers, streams, ephemeral streams, lagoons, the ocean, dry arroyos, and storm drains. In all instances, the City must fax an SSO Report Form to the RWQCB within five days of the spill. The completed SSO Report Form must also be faxed to the County of San Diego DEH. A quarterly report of all sewage spills, including those not meeting the criteria stated above, will also be submitted electronically to the RWQCB, as required.

In FY 2009-10, the City fully complied with the sewage spill reporting requirements outlined in Table 7-2 below.

Table 7-2
Summary of Sewage Spill Reporting Requirements

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
Any	Spills to waters of the State	RWQCB DEH OES SWRCB online-(CIWQS)	Immediate, but no later than 2 hours after becoming aware of the discharge
Any	Municipal Permit non-compliance threatening human or environmental health	RWQCB SWCRB	24 hours verbal and 5 days written 3 days (initial)
Any	Mitigated spills (absorbed, cleaned up, or captured)	DEH	24 hours
Any	Unmitigated spills to areas with potential public contact	DEH	Immediate, but no more than 2 hours after becoming aware of the discharge
Any	Unmitigated spills to areas without potential public contact	DEH	24 hours

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
>1000 gallons	Anywhere	RWQCB DEH OES SWRCB online – (CIWQS)	2 hours 2 hours 2 hours 3 days (initial)

Table 7-3 contains a summary of all SSOs in Encinitas in FY 2009-10.

Table 7-3
Sanitary Sewer Overflows in FY 2009-10

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
11/11/09	Leucadia Wastewater District	247 S. El Camino Real	<100	50	<50	Private lateral spill in shopping center cleanout	RWQCB DEH CIWQS # 746741
11/16/09	City of Encinitas Wastewater Collection Division	840 Val Sereno	650	200	450	Root intrusion	RWQCB DEH CIWQS # 746771
12/03/09	Leucadia Wastewater District	1400 Pireaus St.	800	600	200	Main line blocked due to root intrusion	RWCQB DEH OES # 09-8081 CIWQS # 727303

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
02/01/10	City of Encinitas Wastewater Collection Division	989 Sidonia Street	42	15	27	Pipe structural problem/ failure	RWQCB DEH CIWQS # 748988

7.3.4 OTHER SPILL PREVENTION AND MITIGATION PROCEDURES

The City coordinates spill prevention, containment, and response activities throughout all appropriate departments, programs, and agencies so that maximum water quality protection is available at all times.

Spills are prevented and mitigated through the implementation and enforcement of minimum BMPs. These BMPs are described in the City of Encinitas' 2008 JURMP update in the Development Planning, Municipal, Construction, Industrial and Commercial, and Residential components located in Sections 4, 5, 6, 7, and 8 and in the City's BMP Manual Parts I and II.

In FY 2009-10, the City of Encinitas Fire Department responded to a total of 29 hazardous materials incidents. These incidents included gasoline spills, gas leaks, and other toxic or hazardous conditions. The Fire Department is equipped with containment booms, absorbent material, shovels, storm drain covers, and disposal equipment. When hazardous material incidents occur, the City's Fire Department is typically the first responder. They are equipped to capture and contain most discharges on site and will contact the Public Works Department and the Clean Water Program for additional help when it is warranted. The Public Works Department is available to respond with additional sandbags, absorbent materials, and increased manpower. Clean Water Program staff is notified to document the incident and to initiate any enforcement actions that may be necessary. If warranted, storm drain samples and pictures are taken for potential cost recovery and court action. The City of Encinitas also has a contract with the County of San Diego Hazardous Incident Response Team who will respond when the chemical is unknown or is determined to be hazardous. Figure 7-6 below shows a break down of the hazardous materials incidents that occurred in the City of Encinitas in FY 2009-10. All hazardous materials incidents that occurred in the City were documented by the Fire Department and are included in Appendix B - Hazardous Materials Incidents.

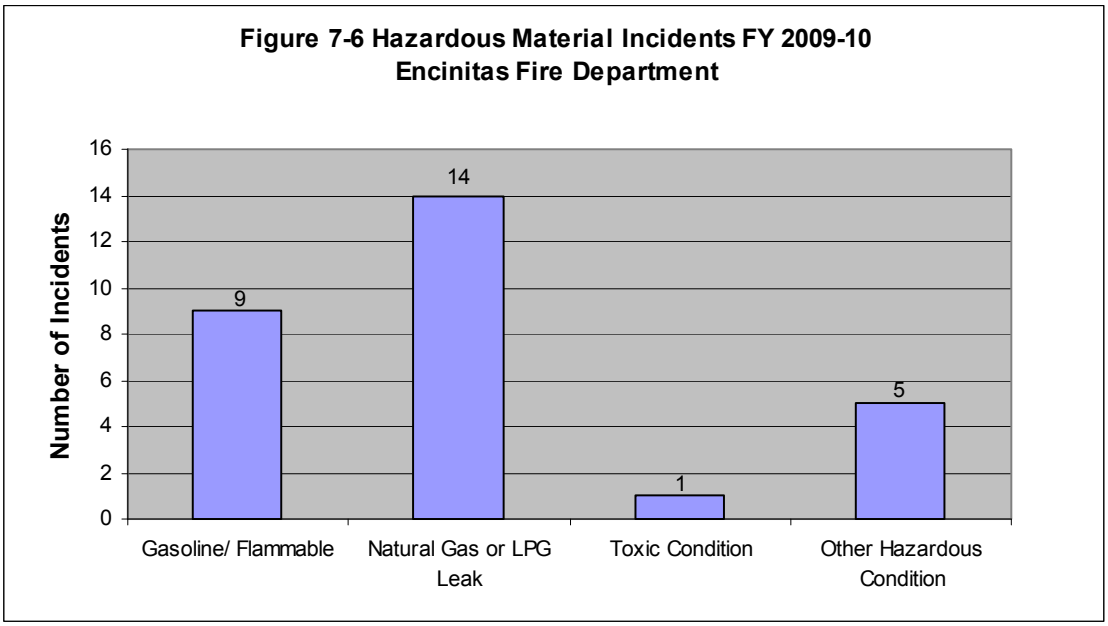

7.4 URBAN RUNOFF MONITORING

The City of Encinitas' Urban Runoff Monitoring Program incorporates MS4 Outfall Monitoring and the Dry Weather Field Screening and Analytical Monitoring Program.

7.4.1 MS4 OUTFALL MONITORING

The MS4 Outfall Monitoring Program is a new requirement of the RWQCB Order R9-2007-0001 (Section B.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program). The purpose of the MS4 Outfall Monitoring Program is to characterize pollutant discharges from MS4 outfalls in each Watershed Management Area (WMA) throughout the County of San Diego during wet and dry weather.

The program was developed by the San Diego Regional Stormwater Copermittees (Copermittees) in FY 2007-08 and was designed to have four monitoring components: random dry weather, random wet weather, targeted dry weather, and targeted wet weather. The City of Encinitas is responsible for targeted dry weather sampling at four sites throughout Encinitas. A regional contractor is responsible for collecting all random dry weather, random wet weather, and targeted wet weather samples in each WMA throughout San Diego County.

The MS4 Outfall Monitoring Program was implemented during the 2008–2009 monitoring season. Random wet outfall monitoring, random dry outfall monitoring, and targeted dry outfall monitoring were all conducted. The Targeted Wet Outfall Monitoring Program was developed during spring 2009 and was implemented by a regional contractor as part of the 2009–2010 Regional Monitoring Program. Table 7-4 below presents the targeted dry weather monitoring sites the City of Encinitas visited during the 2009-10 fiscal year and the lab analytes that were assessed at each site in support of this regional monitoring effort.

Table 7-4
FY 2009-10 City of Encinitas Targeted Dry Weather Monitoring Sites

Station ID	Sample Date	Water Flow	Flow Rate (GPM)	Analysis
CBS-2	6/07/10	Flowing	1	Bacteria, TDS, TSS, Total Nitrogen-N, and Total Phosphorous-P
ESC-1	6/07/10	Flowing	100	Bacteria, TDS, TSS, Total Nitrogen-N, Total Phosphorous-P, Manganese, Selenium and Sulfates
ENC-10	6/07/10	Flowing	3	Bacteria, TDS, Total Nitrogen-N, and Total Phosphorous-P
LCS-1	6/07/10	Flowing	2	Bacteria, TDS, Total Nitrogen-N, and Total Phosphorous-P

The monitoring results for this program are presented in detail in the Copermittees' 2009-10 Urban Runoff Monitoring Report. It is anticipated that more meaningful spatial comparisons can be made as a more robust data set is developed in subsequent years for the MS4 Outfall Monitoring Program.

7.4.2 DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING

The Dry Weather Field Screening and Analytical Monitoring Program is a crucial part of the City's Urban Runoff Monitoring Program (Dry Weather Monitoring Program). The City of Encinitas has been conducting dry weather monitoring since 1996. The City's previously established Dry Weather Monitoring Program included selecting city-wide monitoring stations, creating a map of the MS4 in GIS, developing dry weather monitoring program procedures, conducting field sampling, testing, and follow-up investigations.

The updated requirements of the Dry Weather Monitoring Program component as outlined in the Municipal Permit (Order No. 2007-0001) are very similar to those in the previous Municipal Permit (Order No. 2001-01). However, the new Municipal Permit includes the following additional requirements: a trash assessment component and follow-up sampling conducted within two business days of receiving results which exceed identified action levels. The City of Encinitas 2010 Dry Weather Monitoring Assessment Report can be found in Appendix C.

There are four main components to the City's Dry Weather Monitoring Program:

1. Field observations (site description and qualitative observations),
2. Field screening monitoring (testing samples while at site and flow estimation),
3. Analytical monitoring (performing further tests of sample later at a laboratory),
4. Follow-up and investigations of all field screening and analytical exceedances.

As described in the City of Encinitas JURMP Update, dated March 24, 2008, the City revised its Dry Weather Monitoring Program in FY 2007-08 to meet all of the requirements that were established in the Municipal Permit (Order No. 2007-0001). Field screening and analytical lab results are included in Appendix C-2 and Appendix C-4 within the 2010 Dry Weather Monitoring Assessment Report.

7.4.2.1 MS4 MAP

The City has developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations, and drainage basins. When field staff finds inaccuracies in the map during dry weather monitoring, the inaccuracies are reported to the City's GIS Department so that updates can be made. The current map of the City of Encinitas 2010 MS4 and Dry Weather Monitoring Stations is located within the 2010 Dry Weather Monitoring Assessment Report in Appendix C-1.

7.4.2.2 DRY WEATHER ANALYTICAL MONITORING STATIONS

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to establish long-term trend analysis and select additional sites to facilitate a better understanding of the water quality in Encinitas. The City removed and added new dry weather monitoring locations based on adequate coverage of the MS4, characterization of flow, land use, previous water quality data, areas of historic illegal discharges, and environmentally sensitive areas. The Dry Weather Monitoring Program for 2010 included 39 primary sites and 16 alternate sites distributed across seven sub-basins in the City of Encinitas.

7.4.2.3 DRY WEATHER ANALYTICAL MONITORING PROCEDURES

The City's Dry Weather Monitoring Program utilizes methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittees' Dry Weather Monitoring Workgroup. The elements of the City's dry weather program include established sampling locations, sampling frequencies, field screening and sampling procedures, recommended action levels and data interpretation, follow-up investigations, and reporting.

In 2010, all 39 primary monitoring sites were field screened along with 2 alternate monitoring sites. Twenty five percent of the primary monitoring sites (10 of 39) were also analyzed in the laboratory. Qualitative observations were made at all sample locations. Each location had a unique field data sheet noting observations such as color, clarity, odor, and biological characteristics of the runoff. A multiparameter meter was used in the field to determine pH, conductivity, temperature, and turbidity. Ammonia, nitrate, ortho-phosphate, and MBAS analyses were performed with CHEMetrics instrumental field kits. Oil and grease, diazinon, chlorpyrifos, dissolved cadmium, dissolved copper, dissolved lead, dissolved zinc, total coliform bacteria, fecal coliform bacteria, and Enterococcus bacteria were all analyzed in the laboratory.

7.4.2.4 DRY WEATHER DATA ANALYSIS

Detailed analyses of the 2010 dry weather data are included in the Dry Weather Monitoring Assessment Report, May 1, 2010 – September 30, 2010 in Appendix C.

7.5 FOLLOW-UP AND ENFORCEMENT

7.5.1 INVESTIGATIONS/INSPECTIONS AND FOLLOW-UP

All potential illicit connections and discharges are investigated and eliminated in a timely manner after the City is notified of their occurrence. Illicit connections and discharges are mainly identified through public complaints; referrals; routine inspections of municipal, industrial, and commercial business facilities; and the Dry Weather Monitoring Program.

If an illicit connection or discharge is discovered as a result of the Dry Weather Monitoring Program, an investigation is required to be conducted within two business days of receiving dry weather field screening and/or analytical laboratory data. All sampling results are compared to the regionally developed dry weather monitoring numeric action levels to determine if follow-up investigations/inspections are warranted. The numeric action levels (determined by the Regional Copermittees' Dry Weather Monitoring Workgroup), is the primary approach for interpreting pH, ortho-phosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliform bacteria, fecal coliform bacteria, and Enterococcus analytical results. The California Toxics Rule (CTR) is used to establish an action level for dissolved trace metals, including cadmium, copper, lead, and zinc. In general, best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the Clean Water Program field staff due to their familiarity with the City's Dry Weather Monitoring Program and their knowledge of typical results for the analytes being tested.

In the 2010 Dry Weather Monitoring season, one illicit discharge investigation was initiated in response to slightly elevated concentrations of surfactants (MBAS) that were detected at one dry weather monitoring site in the city (refer to the 2010 Dry Weather Monitoring Assessment Report in Appendix C for a more detailed discussion). Additionally, a complete table with all illicit connection and discharge complaints reported to the Clean Water Program throughout the entire FY 2009-10, which includes investigation dates, sources of discharge, investigation actions, follow-ups, and enforcement activities, can be found in the City of Encinitas FY 2009-10 JURMP Annual Report, Appendix H-1.

7.5.2 ELIMINATION OF ILLICIT DISCHARGES AND CONNECTIONS

The City utilizes the following primary methods for the identification of illicit discharges and connections: complaint responses via the Clean Water Hotline/Email, City staff complaints and observations, and detection and elimination through monitoring (primarily dry weather).

Action is taken to eliminate all detected illicit discharges and connections and their sources as soon as possible after detection. Illicit discharges and connections that pose a serious threat to public health or the environment are eliminated immediately. Illicit discharges and connections that are not deemed to pose serious threats to public health or the environment are eliminated through an escalating series of enforcement actions.

Remove Illicit Connections

The City ensures that the violator takes appropriate action to disconnect, block, stop, or divert drainage facilities and pipe connections that are determined to discharge pollutants to the MS4. Appropriate actions may include the following:

- Plug sinks and drains that are discharging illicit materials to the storm drain system
- Disconnect all drainage pipes found to discharge illicit pollutants to the storm drain system
- Dispose of illicit materials via the sanitary sewer or other appropriate disposal or storage methods
- Divert illicit discharges to the sanitary sewer or treat on-site

In some cases, special permits from the local wastewater authority are needed before material can be discharged to the sanitary sewer system.

Discontinue Illicit Discharges

As applicable to each individual circumstance, the City ensures that responsible parties implement the procedures outlined below to eliminate discharges that transport pollutant materials to the MS4:

- Eliminate the source of the discharge
- Remove pollutant materials from the site
- Prevent pollutant materials from coming in contact with the discharge
- Contain potential illicit discharges on site for treatment or proper disposal

In FY 2009-10, the Clean Water Program received a total of **275** complaints. A total of **40** complaints involved issues that were referred to other departments, other agencies, or were simple requests for information (regarding the City's Storm Water Ordinance, car washing, swimming pool discharge policies, etc.).

In FY 2009-10, there were **235** complaints investigated, resulting in **182** education actions, **25** NOVs, and **12** Administrative Citations for illegal discharges. Appendix H-1 in the City of Encinitas' FY 2009-10 JURMP Annual Report identifies all complaints received by the hotline and includes incident dates, details of substances discharged, and the resulting actions taken by City staff to eliminate and prevent discharges in the future.

The most serious violations observed by City staff resulted in Administrative Citations issued to the responsible party. Table 7-5 summarizes the violations and the resulting actions that occurred in FY 2009-10.

Table 7-5
Administrative Citations Issued FY 2009-10

Date	City Code Violation	Violation Description	Fine	Category
7/23/2009	20.08.040	Illegal discharge of construction debris	Warning	Residential
7/29/2009	20.08.040	Illegal discharge of trash wash water	$200.00	Commercial
7/30/2009	20.08.040	Illegal discharge of construction debris	Warning	Residential
8/28/2009	20.08.040	Illegal discharge of wash water	$200.00	Commercial
8/28/2009	20.08.040	Illegal discharge of wash water	$100.00	Commercial
10/21/2009	20.08.040	Illegal discharge of wash water	$200.00	Commercial
11/24/2009	20.08.040	Illegal discharge of wash water	$100.00	Commercial
12/30/2009	20.08.040	Illegal discharge of construction debris	Warning	Commercial
1/21/2010	20.08.040	Illegal discharge of sediment	$100.00	Construction
3/1/2010	20.08.040	Illegal discharge of sediment	$200.00	Commercial
3/24/2010	20.08.040	Illegal discharge of wash water	$200.00	Commercial
5/21/2010	20.08.040	Illegal discharge of wash water	Warning	Commercial
		TOTAL	**$1,300.00**	

7.5.3 ENFORCING THE DISCHARGE PROHIBITIONS ORDINANCE

The City implements and enforces its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Many illicit connections and illegal discharges can be eliminated through voluntary compliance. Most violators are willing to change their behaviors when they learn that their actions are detrimental to the environment and local waterways. The City utilizes a variety of options under a flexible and graduated system of enforcement actions, emphasizing voluntary compliance when possible. Voluntary compliance

may be used for first-time, minor violations, whereas more serious violations or continued non-compliance may warrant a more aggressive and enforcement oriented approach. Increased enforcement actions are taken until compliance is achieved or the illicit connection or illegal discharge is otherwise eliminated.

In cases where further enforcement is needed, the typical progressive enforcement procedures that the City can implement are as follows: verbal warnings and education, written warnings (Stop/Correct Work notice or a NOV), and administrative citations. A copy of the City's Administrative Citation form can be found in Appendix D. The nature of the City's enforcement approach is determined on a case-by-case basis and is based on factors such as the severity of the violation, the threat to human or environmental health, site-specific circumstances, and past compliance history. If the situation is determined to pose an immediate risk to public health or the environment, the City may coordinate with other agencies or teams that are specially trained to assess and mitigate emergency situations (e.g., those involving hazardous wastes/materials, etc.).

In FY 2009-10, enforcement in each category varied according to the complaint. Overall, construction, commercial, residential, municipal, and industrial complaints were primarily resolved through education. A breakdown of the enforcement actions performed per category of complaint is presented below in Figure 7-7.

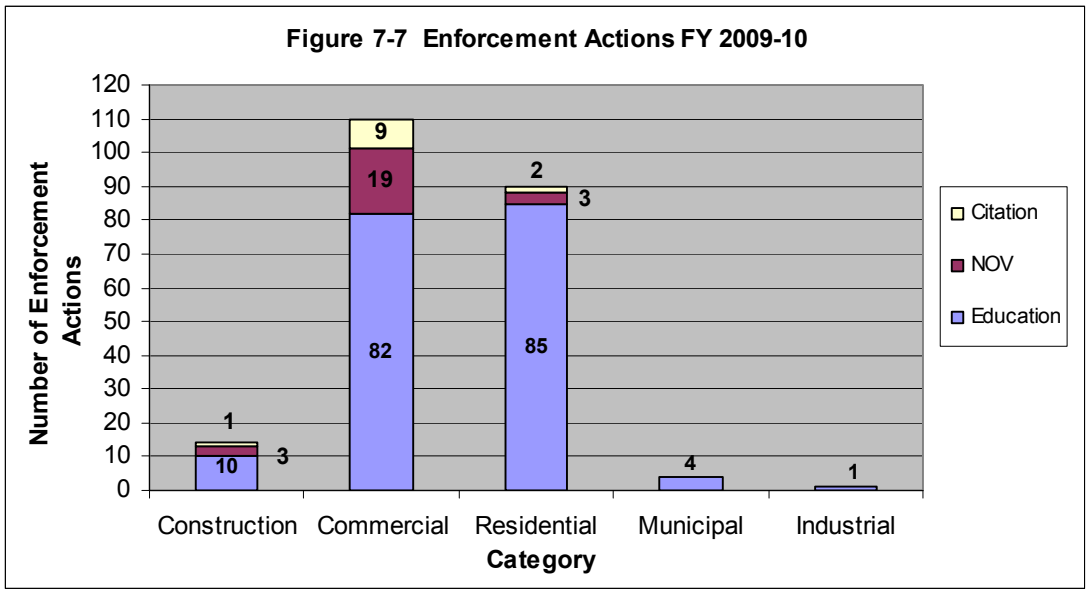

In FY 2009-10, residential complaints accounted for 54% of all complaints received and resulted in 85 educational actions, three Notices of Violation, and two citations. Commercial complaints totaled 35% of all complaints received and resulted in 82 educational actions, 19 Notices of Violation, and nine citations. Construction complaints totaled 5% of all complaints received and resulted in 10 educational actions, three Notices of Violation, and one citation. Municipal complaints accounted for 5% of all complaints received and resulted in four educational actions;

they were referred to the City's Public Works Department for immediate maintenance. Industrial complaints accounted for 1% of all complaints received and resulted in one educational action.

Clean Water Program staff evaluated all reported illegal discharges and proceeded with appropriate enforcement actions as determined necessary. Clean Water Program staff issued a total of **25** Notices of Violation and **12** Administrative Citations. The total amount of citations collected in FY 2009-10 was **$1,300.00** (see Table 7-5).

Stormwater Complaints Cityworks Service Request Form

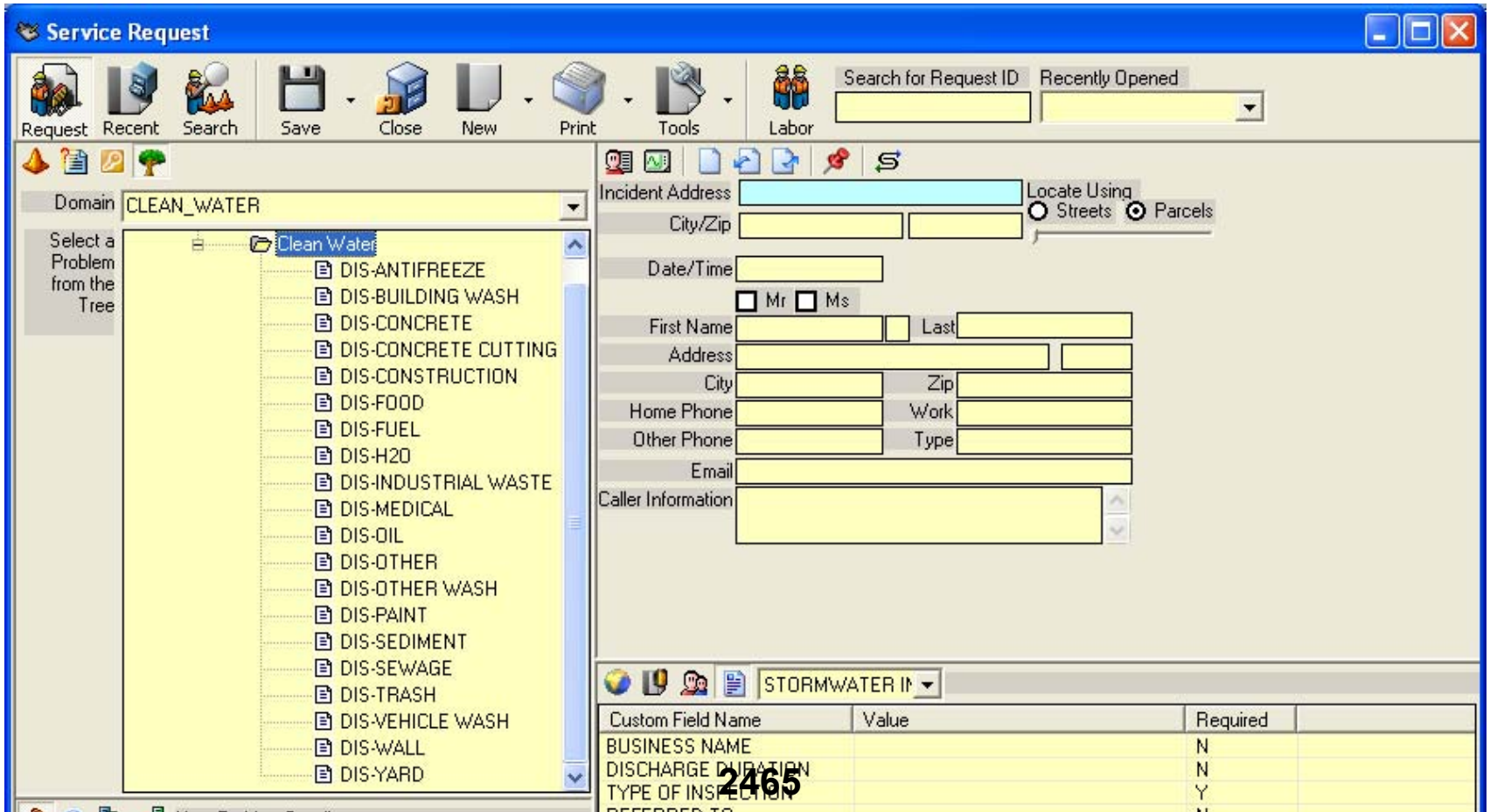

Incident Listing

Wednesday July 1, 2009 through Thursday July 1, 2010

400 - Hazardous condition, other

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002602	000	07/12/2009 15:19:09	400	N	576 S Coast Highway 101	X		
0003624	000	09/17/2009 08:20:50	400	N	6200 Avenida Encinas	X		
0004105	000	10/23/2009 07:39:59	400	N	On Piraeus St at La Costa Ave	X		
0000538	000	02/07/2010 11:16:43	400	N	948 Neptune Ave	X		
0001359	000	04/06/2010 22:30:06	400	N	1028 Evergreen Dr	X		

End of Report

Incident Listing

Encinitas Fire Department

Wednesday July 1, 2009 through Thursday July 1, 2010

410 - Flammable gas or liquid condition, other

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0000104	000	01/08/2010 12:25:51	410	N	633 Cerro St	X		
0001143	000	03/23/2010 08:47:29	410	N	447 Ocean View Ave	X		X

End of Report

Incident Listing

Wednesday July 1, 2009 through Thursday July 1, 2010

411 - Gasoline or other flammable liquid spill

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002930	000	08/04/2009 09:13:10	411	2	I-5 Sb	X		
0003226	000	08/22/2009 16:13:27	411	N	916 Bonita Dr	X		
0004136	000	10/25/2009 10:14:42	411	N	765 S Coast Highway 101	X		
0004274	000	11/04/2009 10:43:07	411	N	435 Via Malaga	X		
0004772	000	12/13/2009 10:59:58	411	N	On Manchester Ave at Via Poco	X		
0000212	000	01/16/2010 13:03:16	411	N	645 Via Cantebria	X		
0000777	000	02/25/2010 20:53:33	411	1	2655 S Coast Highway 101	X	X	

End of Report

Incident Listing

Wednesday July 1, 2009 through Thursday July 1, 2010

412 - Gas leak (natural gas or LPG)

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002736	000	07/21/2009 12:47:17	412	N	375 Ocean View Ave	X		
0003497	000	09/08/2009 15:44:44	412	N	1229 Swallowtail Ct	X		
0003644	000	09/18/2009 18:11:49	412	N	441 Saxony Rd	X		
0004049	000	10/18/2009 16:59:30	412	4	5527 El Camino Del Norte	X		
0000050	000	01/04/2010 21:45:32	412	4	17498 Los Morros	X		
0000390	000	01/26/2010 09:07:10	412	4	1818 Sea View Ave	X		
0000453	000	01/31/2010 14:18:48	412	N	1250 Meadow Wood Pl	X		
0000767	000	02/25/2010 02:43:25	412	N	494 La Veta Ave	X	X	
0000785	000	02/26/2010 14:45:59	412	N	1710 S El Camino Real	X	X	
0001347	000	04/06/2010 11:05:43	412	N	2516 El Camino Del Norte	X		
0001719	000	05/02/2010 16:57:06	412	4	12725 VIA CORTINA	X		
0001960	000	05/22/2010 14:33:53	412	4	143 S Cedros Ave	X	X	
0002079	000	05/31/2010 16:28:32	412	4	1042 N El Camino Real	X	X	
0002236	000	06/09/2010 23:31:04	412	4	6790 Embarcadero Ln	X		

End of Report

Incident Listing

Wednesday July 1, 2009 through Thursday July 1, 2010

420 - Toxic condition, other

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete Reviewed Released
0004309	000	11/07/2009 07:58:21	420	N	318 N El Camino Real	X

End of Report

Incident Listing

Encinitas Fire Department

Wednesday July 1, 2009 through Thursday July 1, 2010

421 - Chemical hazard (no spill or leak)

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete Reviewed Released
0003474	000	09/07/2009 11:41:16	421	N	2064 Shadow Grove Way	X

End of Report

Dry Weather Monitoring Assessment

May 1, 2010 - September 30, 2010

Prepared by:

City of Encinitas
Clean Water Program
505 South Vulcan Avenue
Encinitas, CA 92024

December 2010

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1.0 Introduction

The Dry Weather Monitoring Program is a crucial part of the City of Encinitas' Urban Runoff Monitoring Program. Since May 2002, the California Regional Water Quality Control Board, San Diego Region (Regional Board), has required the San Diego County Copermittees to implement an annual Dry Weather Storm Drain Monitoring Program (Dry Weather Program). On January 24, 2007, Order No. R9-2007-0001 (Municipal Permit), was adopted by the Regional Board, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego and the incorporated Cities of San Diego County, including the City of Encinitas. The updated requirements of the Dry Weather Monitoring Program can be found in Section II.B.3 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program of the Municipal Permit.

Order No. R9-2007-0001 requires the City of Encinitas to implement a dry weather analytical monitoring program for the detection and elimination of illicit discharges and connections to the City's MS4 in addition to including a trash assessment component. The purpose of the City's Dry Weather Program is to actively seek and eliminate illicit connections and illegal discharges, to characterize dry weather flows and trash assessments throughout the City's Municipal Separate Storm Sewer System (MS4).

An illicit discharge is defined as a point source discharge of pollutants to the MS4 that is not comprised entirely of storm water, not exempted by the City's Storm Water Ordinance, or not authorized by an NPDES Permit. An illicit connection is defined as a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City. The regulatory backbone of this program is the establishment of discharge prohibitions in the City's Municipal Code, Chapter 20.08 (Storm Water Management).

Dry weather monitoring of the MS4 is performed by establishing monitoring locations throughout the City to adequately cover the entire storm drain system. In 2009, the City of Encinitas' Dry Weather Program encompassed 39 primary monitoring locations and 16 alternate monitoring locations throughout the city. Monitoring of these locations included recorded observations, field screening where water was present, and analytical laboratory testing at selected locations.

The City of Encinitas conducted dry weather monitoring during the period of May 1, 2010 to September 30, 2010. The analysis of the dry weather monitoring results for 2010 is documented in the following report.

2.0 Dry Weather Monitoring Stations

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to support long-term trend analysis, select additional sites to facilitate a better understanding of the water quality in Encinitas, and to ensure compliance with Dry Weather Monitoring program standards established in Order No. 2007-0001.

Under the previous Municipal Permit (2001-01), the City of Encinitas conducted dry weather field screening at an average of 37 sites per year. On average, the City also visited another 13 dry sites per year, with the total number of sites visited varying from 48 to 52 sites per year. To make more efficient use of its resources, the City adjusted its Dry Weather Monitoring Program in 2008 to include 39 primary sites and 16 alternate sites. As part of the monitoring site evaluation, sites that had never had ponded or flowing water were removed from the monitoring site list. Sites that were regularly dry but had ponded or flowing water at least once during previous monitoring years were changed to alternate sites. The City also assessed whether any existing sites should be relocated and whether any new sites were necessary to provide better coverage of key areas of the MS4. This process relied on reviewing historical data from past monitoring programs and reviewing the MS4 and land use data. Geographic Information Systems (GIS) data files of the City's drainage system, watersheds, major water bodies, environmentally sensitive areas, existing dry weather monitoring locations, and approximate locations of potential sources of pollutants were all evaluated to assist in this process. In 2008, the City's Clean Water Program field staff, accompanied by Public Works maintenance staff familiar with the storm drain conveyance system, conducted field visits to assess the suitability of 29 potential new sites. This process included locating appropriate access points and then checking for the presence of ponded or flowing water, assessing accessibility, and recording GPS coordinates or the GIS ID name of the relevant storm water facility. As a result of this assessment, 12 suitable locations were identified and added to the City's lists of dry weather monitoring sites. Only one out of seven sub-basins retained the same primary sites that existed in the City's dry weather monitoring program under the previous Municipal Permit. Consequently, only the past four years of dry weather monitoring data (2007-2010) have been compared to each other in the water quality exceedance charts throughout this report.

A storm drain (MS4) database has been developed by the City of Encinitas in a GIS and is maintained in an ArcInfo platform by the City's Information Technology Division. The database is continually updated to include new additions to the MS4 as validation is ongoing. The City has also developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations and drainage basins. A copy of the 2010 MS4 and Dry Weather Monitoring Stations Map can be found in Appendix C-1.

3.0 Dry Weather Monitoring Program

The City's dry weather monitoring program uses methods and procedures in collecting and analyzing data which are consistent with those developed by the San Diego Regional Copermittees' Dry Weather Monitoring Workgroup (DWM Workgroup). The elements of the dry weather program include establishing primary and alternate sampling sites, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Each of these procedures is outlined in detail below.

Dry weather field screening and analytical monitoring consists of field observations, field screening and monitoring, and analytical monitoring at selected stations. The Municipal Permit requires each Copermittee to conduct field screening analysis of the following analytes at all dry weather monitoring stations where water is present: conductivity, turbidity, pH, ortho-phosphate, nitrate-nitrogen, ammonia-nitrogen, and surfactants (MBAS). The Municipal Permit also requires that each Copermittee conduct analytical laboratory analysis of the following constituents at twenty five percent of the dry weather monitoring stations where water is present: oil and grease, diazinon, chlorpyrifos, total hardness, cadmium (dissolved), lead (dissolved), zinc (dissolved), copper (dissolved), total coliform bacteria, fecal coliform bacteria and Enterococcus bacteria.

Dry weather monitoring was conducted at 39 primary sites and 2 alternate sites throughout Encinitas during the period of May 1 – September 30, 2010. Of the 41 locations monitored, flowing water was observed at 27 sites, ponded water was observed at 12 sites and 2 sites were observed to be dry. Field analysis was conducted at all sites with flowing or ponded water. A total of 10 monitoring locations or 25% of all 39 sites were sampled for full laboratory analysis to meet the minimum 25% requirement as established in the Municipal Permit. An additional 10 sites were analyzed for total coliform, fecal coliform, and *Enterococcus* in order to further characterize bacteria concentrations throughout the City's MS4.

As required by the Municipal Permit, a trash assessment was conducted at 39 primary sites and 2 alternate sites throughout the City to provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present. A more detailed analysis and results of the trash assessment program can be found in Section 7.0 of the Dry Weather Monitoring 2010 report. All of the completed 2010 Trash Assessment forms can be found in Appendix C-2.

Qualitative observations were made at all sample locations. A field data sheet noting observations such as color, clarity, odor, and biological characteristics was recorded at each monitoring site. The 2010 Dry Weather Monitoring Field Datasheets for each monitoring site are included in Appendix C-2. Photographs for all dry weather monitoring sites visited in 2010 can be found in Appendix C-3.

Field tests were performed by Clean Water Program field staff at all monitoring locations with flowing or ponded water. If the station was dry (no flowing or ponded runoff), Clean Water Program field staff recorded all applicable observations on the field data sheet and selected another station from the list of alternate stations for monitoring. Clean Water Program field staff use the following monitoring equipment to help create a more efficient and accurate sampling program: Hydrolab Quanta multi-parameter instrument to determine pH, conductivity, temperature, and turbidity, a Chemetrics V-2000 multi-analyte photometer to analyze ammonia-nitrogen, ortho-phosphate, nitrate-nitrogen, and Chemetrics visual test kits were also used to analyze Surfactants/Methylene Blue Active Substances (MBAS).

Action levels for the field screening analysis were pre-determined by the DWM Workgroup and are shown in Table 4.0. Follow-up sampling for exceedances detected in field screening were performed within two business days of receiving the results that exceeded action levels as required in section D.4.d of the Municipal Permit. In addition, all dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any analyte are also screened in subsequent years. Source investigation actions are initiated based upon field screening and analytical monitoring results that have exceeded established action levels during initial testing and follow-up testing. Source investigation actions may include field investigations and/or formal facility inspection activities as determined necessary and appropriate. There was one source investigation at ENC-6 in this reporting period.

There were 10 samples collected for full laboratory analysis in order to further characterize the water quality at specific locations throughout the City. When feasible, laboratory testing was performed as far down in the watershed as possible to assess water quality prior to discharging into a receiving water. Methods for laboratory analysis were based on EPA approved methods described in the *Standard Methods for the Examination of Water and Wastewater, 20th Edition.* Follow-up sampling for exceedances detected in laboratory analyses were performed within two business days after receipt of data from the laboratory. The field and analytical results for each monitoring station are provided in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4.

4.0 Dry Weather Monitoring Data Methods and Analysis

The following section describes the City of Encinitas Dry Weather Monitoring Program components which includes the qualitative observations at each monitoring location, monitoring methods performed during field site visits, laboratory analysis of water samples and illicit connections/illicit discharge (IC/ID) investigations.

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the field screening program. Qualitative field observations are made during each site visit where ponded or flowing water is observed and sampled. These observations are intended to provide a general assessment of the runoff and include the following parameters: odor, color, clarity, presence of floatables (e.g. trash), deposits (e.g. sediment/gravel), vegetation and the biology present at each site (i.e. aquatic life). Weather conditions are also recorded at each site.

4.2 Flow Measurement

Flow measurements can be used to estimate pollutant loading, prioritize storm drains for future monitoring or to identify significant changes in flow that may indicate an illegal release upstream. There are three field methods approved by the DWM Workgroup that may be used to estimate flow rates for different types of conveyances. Clean Water Program field staff use the velocity-area method for a creek, channel or partially filled storm drain pipe where appropriate. The velocity-area method for a creek or channel requires the physical measurement of the velocity (V), depth (D), and width (W) of flowing water. At locations where the flow was too slow or the water too shallow to measure, the velocity was estimated by timing the travel of floating debris (e.g. a leaf). The velocity of the floating object is then calculated by dividing the travel distance (feet) by the recorded travel time (seconds). For the locations (such as manholes) in which flow is not able to be measured, these sites are noted as flowing or ponded and the flow is estimated on the Dry Weather Monitoring datasheets. Each value must be converted into a common unit (i.e. centimeters, feet or inches) prior to calculations. The formula for determining the flow is as follows:

$$\text{Flow} = V \times D \times W$$

The flow value is then multiplied by a factor of 0.8 for creek measurements or 0.9 for concrete channel measurements (to account for channel roughness) to attain the proper flow rate. The resulting answer is then converted into the desired value.

The velocity-area method for a partially filled storm drain pipe also requires the physical measurement of the velocity; however it is also necessary to determine the area of the partially filled pipe in order to perform this calculation. Prior to calculations, all measurements are converted to a common unit. The depth (D) of the pipe is divided by the inside pipe diameter

(d) and the result is squared (d^2). A chart with the tabulated values (Ta) of the partially filled pipe is used to calculate the area of the cross section of a partially full circular pipe with flowing water. The formula for determining the area of the pipe is as follows:

$$A = Ta \times d^2$$

The area is then multiplied by the water velocity to obtain the total flow rate. The resulting answer is then converted into the desired value.

4.3 Field Screening Analytes

Physiochemical properties such as pH, conductivity, turbidity and temperature are all important indicators of water quality. Clean Water Program field staff uses a Hydrolab Quanta multi-parameter probe to measure the water temperature, pH, conductivity, and turbidity at each sample location where there is flowing or ponded water. In addition, Clean Water Program field staff uses a Chemetrics Photometer Model V-2000, a portable microprocessor based LED colorimeter in the field to analyze all water samples for ammonia, phosphorous and nitrate. A Chemetrics visual colorimetric analysis is also used in the field to analyze all water samples for Surfactants/ Methylene Blue Active Substances (MBAS).

Water Temperature is measured in the field immediately upon sample collection at each site. The average temperature values in the City of Encinitas range from 22.04° C to 24.49 ° C (72° F to 76° F). If a sample exceeds these temperature ranges, Clean Water Program field staff uses best professional judgment to assess water quality based on the following additional factors: air temperature, structure type (pipe or open channel) and location (open area or shaded area) to determine if further investigations are necessary.

pH measurements can indicate the alkalinity or acidity of the water sample. pH measurements can range anywhere from acidic conditions at 1.0 to basic conditions at 14.0. The DWM Workgroup has determined that a range of 6.5 to 9.0 is an acceptable range for all dry weather samples. If a sample exceeds the pH ranges, Clean Water Program field staff uses best professional judgment to assess water quality based on the following additional factors: temperature of water sample, structure type (pipe or open channel) and exceedances of additional analytes to determine if further investigations are necessary.

Conductivity is the measurement of an electric current in a water sample. Conductivity in water is affected by the presence of inorganic dissolved solids such as chloride, nitrate, sulfate and phosphate anions (ions that carry a negative charge) or sodium, magnesium, calcium, iron and aluminum cations (ions that carry a positive charge). Organic compounds (e.g. oils, phenols, alcohol and sugars) do not conduct electrical current very well and therefore have low conductivity in water. Conductivity can be affected by temperature; the warmer the water the higher the conductivity results. The Clean Water Program considers 5.00 mS/cm to be an exceedance of dry weather monitoring action levels, however due to situations where

groundwater is or is likely to be present, or the water temperature is high, Clean Water Program field staff uses their best professional judgment to determine if further investigations are necessary.

Turbidity is a measure of water clarity. The turbidity meter measures the amount of light that passes through a water sample. Higher turbidity values indicate that there is a high concentration of suspended particles in a sample. Turbidity can be a useful indicator of the effects of sediment runoff from construction, and agricultural practices. The following runoff characteristics may cause an elevated reading in turbidity: floating or suspended organic material, fine or coarse particulates, algae, and insects. The U.S. Environmental Protection Agency (EPA) Multi-sector General Permit (MSGP) considers 5.00 NTU to be a water quality exceedance. The DWM Workgroup has adopted this value as a benchmark however; Clean Water Program field staff additionally applies their best professional judgment to assess water quality at each specific site, especially in situations where the water is ponded.

Ammonia occurs naturally in the environment; however in large concentrations it can be toxic in an aquatic environment. It is a common indicator of pollution from decomposing organic matter, agricultural/ household fertilizer runoff or the presence of sewage. The DWM Workgroup action level for ammonia is 1.0 mg/L. If a routine sample exceeds the ammonia action levels, Clean Water Program field staff will re-sample at the same location within two business days to confirm the exceedance. If the confirmation sample also exceeds the action level, a split sample is sent to a water quality lab for more accurate analysis. If the exceedance results are confirmed in the lab, Clean Water Program field staff immediately initiates an IC/ID investigation.

Phosphorus is a nutrient that is naturally occurring in soil and rocks which can also be introduced into our watersheds from anthropogenic sources such as fertilizers, failing septic systems, wastewater treatment plants and disturbed land areas. A modest increase in phosphorous concentrations, under the right conditions, can set off a chain of undesirable events in fresh water systems including accelerated plant growth, algae blooms and low dissolved oxygen. The DWM Workgroup action level for ortho-phosphate is 2.0 mg/L which is based on the EPA MSGP. If a routine sample exceeds the ortho-phosphate action levels, Clean Water Program field staff will re-sample at the same location within two business days to confirm the exceedance. If the confirmation sample also exceeds the action level, a split sample is sent to a water quality laboratory for more accurate analysis. If the exceedance results are confirmed in the laboratory, Clean Water Program field staff immediately initiates an IC/ID investigation.

Nitrate is a nutrient that is naturally occurring in soil, rocks and commonly found in groundwater samples. Nitrate can also be introduced into our watersheds from anthropogenic sources such as fertilizers, failing septic systems and animal waste. The DWM Workgroup action level for nitrate is 10.0 mg/L which is based on the San Diego Region Basin Plan and drinking water standards. If a routine sample exceeds the nitrate action levels, Clean Water

Program field staff will re-sample at the same location within two business days to confirm the exceedance. Due to situations where groundwater is present or the water temperature is high, Clean Water Program field staff uses their best professional judgment to determine if further investigations are necessary. The best professional judgment of Clean Water Program field staff takes into account the characteristics of each sample location, and historical data to determine whether sample data exceedances require follow-up or further investigation.

MBAS are analyzed to detect detergent pollution from residential, commercial, or industrial washing activities. The DWM workgroup action level for MBAS is 1.0 mg/L which is based on the San Diego Region Basin Plan standards. If a routine sample exceeds the nitrate action levels, Clean Water Program field staff will re-sample at the same location within two business days to confirm the exceedance. If the confirmation sample also exceeds the action level, a split sample is sent to a water quality laboratory for more accurate analysis. If the exceedance results are confirmed in the laboratory, Clean Water Program field staff immediately initiates a formal IC/ID investigation.

4.4 Laboratory Analytes

Twenty five percent of all primary dry weather monitoring sites are required to be analyzed for oil and grease, chlorpyrifos and diazinon, dissolved metals (cadmium, copper, lead and zinc), and bacteria indicators (total coliform, fecal coliform and *Enterococcus*) in the laboratory.

Oil and Grease analysis is used to detect hydrocarbon pollution that may originate from variety of sources including vehicle washing activities, illegal discharges from commercial restaurants, automobile repair facilities and parking lots and streets. The DWM Workgroup action level for Oil and Grease is 15 mg/L which is based on the EPA MSGP. If a routine sample exceeds the Oil and Grease action levels, Clean Water Program field staff will re-sample at the same location within two business days to confirm the exceedance. If the exceedance results are confirmed, Clean Water Program field staff immediately initiates an IC/ID investigation.

Total Hardness measures the amount of polyvalent cat ions in water. Results are expressed in mg/L of $CaCO_3$. Determining the total hardness in a sample is necessary in order to properly assess the toxicity of dissolved metals. The DWM Workgroup has adopted the California Toxics Rule (CTR) for assessing exceedances for dissolved metals. The CTR applies hardness-based water quality objectives to all dissolved metals. The CTR is used to establish an action level for dissolved trace metals. The CTR equations provide benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases.

Metal concentrations are naturally occurring in the environment, but can also be introduced into our watersheds from a variety of anthropogenic sources such as automobiles, automobile repair facilities, car washing, and industrial activities. All water samples were analyzed to determine the concentration of the following dissolved metals; cadmium, copper, lead and zinc. The DWM Workgroup has adopted the California Toxics Rule (CTR) for assessing exceedances

for dissolved metals. If a routine sample exceeds the action levels for dissolved metals, Clean Water Program field staff immediately initiates an IC/ID investigation.

Chlorpyrifos and diazinon are organophosphate pesticides used to control insect pests. At this time, chlorpyrifos is only available for agricultural use. As of December 31, 2004, it became unlawful to sell outdoor, non-agricultural products containing diazinon however; it is still legal for consumers to use diazinon products purchased before this date, provided that they follow all label directions and precautions. The DWM workgroup action level for chlorpyrifos and diazinon is .5 (μg/L). If a routine sample exceeds the action levels for chlorpyrifos and diazinon, Clean Water Program field staff immediately initiates an IC/ID investigation.

Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Elevated bacteria levels can result from natural sources, stormwater pollution and sewage spills. Water containing excessive pathogens (bacteria, viruses and protozoa) can alter the aquatic habitat and create a harmful environment for humans and aquatic life. An 80th-percentile statistical confidence interval test, developed by the DWM Workgroup in 2009 is currently used to determine action level exceedances for all three bacteria indicators (total coliform, fecal coliform and *Enterococcus*). The current action levels are 130,000 MPN/100 ml for total coliform, 13,000 MPN/100 ml for fecal coliform and 7,000 MPN/100 ml for and *Enterococcus*. If a routine sample exceeds the action levels for bacteria indicators, Clean Water Program field staff will re-sample at the same location within two business days to confirm the exceedance. If the exceedance results are confirmed, Clean Water Program field staff immediately initiates an IC/ID investigation.

Table 4.0 Action Levels for Field Screening and Laboratory Analytical Parameters		
Field Screening Analytes	**Action Levels[1]**	**Source/Notes**
pH	<6.5 or >9.0	Basin plan with allowance for elevated pH due to excessive photosynthesis.
Ortho-Phosphate as P	2.0 mg/L	U.S. Environmental Protection Agency (EPA) Multi-sector General Permit (MSGP)
Nitrate-N	10.0 mg/L	Basin plan and drinking water standards.
Ammonia-N	1.0 mg/L	Dry Weather Monitoring Workgroup experience.
Turbidity (NTU)	Best Professional Judgment (BPJ)	EPA MSGP is 5 NTU. Typical levels in Encinitas are substantially higher. BPJ is considerate of structure type, natural sites with excessive vegetation and sites with ponded water.
Temperature (Celsius)	BPJ	Average temperature range in the City of Encinitas is 22.04° C to 24.49 ° C. BPJ is considerate of season, air temperature, structure type, and location.
Conductivity (mS/cm)	BPJ	Conductivity may be highly elevated in some regions due to high Total Dissolved Solids/groundwater exfiltration to surface water, mineral dissolution and seawater intrusion. Normal source identification and discharge elimination is not effective in these situations.
Surfactants/MBAS	1.0 mg/L	Basin plan with allowance based on DWM Workgroup field experience and possible field reagent interferences.
Laboratory Analytes	**Action Levels**	**Source/Notes**
Oil and Grease	15 mg/L	EPA MSGP
Chlorpyrifos	.5 (µg/L)	Highly elevated levels should be investigated aggressively as with other potential illicit connections and illicit discharges. Response to diazinon and chlorpyrifos levels above 0.5 (µg/L) should focus on education and outreach to potential dischargers in the target drainage basin.
Diazinon	.5 (µg/L)	
Dissolved Cadmium	California Toxics Rule (CTR)	Use CTR Table, 1-hour criteria to determine the appropriate action level for each sample.
Dissolved Copper		
Dissolved Lead		
Dissolved Zinc		
Total Coliform	130,000 (cfu/100ml)	Action levels are based on upper 80% confidence levels from the DWM Workgroup 2002-2007 dry weather analytical monitoring data.
Fecal Coliform	13,000 (cfu/100ml)	
Enterococcus	7,000 (cfu/100ml)	

[1]The referenced action levels are not the sole criteria for initiating a source identification investigation. Dry weather monitoring data are interpreted using a variety of available information.

5.0 Dry Weather Monitoring Results

The City of Encinitas lies on the northern coast of San Diego County, 21 miles north of the City of San Diego. The City covers approximately 19.57 square miles with a population of just over 65,171 people. The city is located entirely in the Carlsbad Watershed and is bounded to the west by the Pacific Ocean, to the north by the Batiquitos Lagoon in the City of Carlsbad, unincorporated areas of the County of San Diego and the City of San Marcos, to the east by unincorporated areas of the County of San Diego and to the south by the San Elijo Lagoon and the City of Solana Beach.

The City is comprised of the following seven sub-basins:

1. Cardiff (CBS)
2. Lower Escondido Creek (ESC)
3. La Costa South (LCS)
4. Leucadia (LUC)
5. Encinitas (ENC)
6. Rancho Santa Fe (RSF)
7. Lux Canyon (LUX)

The following subsections contain analyses of the 2010 dry weather data collected for each of the seven sub-basins located within the City of Encinitas.

5.1 Cardiff Sub-basin

Dry weather monitoring in the Cardiff sub-basin (CBS) was conducted at a total of seven primary locations. Land use in the sub-basin is primarily residential with some commercial and agricultural uses in the upper reaches of the sub-basin. All run-off in the Cardiff sub-basin drains into the San Elijo Lagoon.

Of the seven designated locations for routine monitoring in 2010, five locations were observed to have flowing water and two locations had ponded water. All seven locations with flowing and ponded water were field screened and analytical lab samples were collected at two locations (CBS-2 and SEL-2). CBS-2 and SEL-2 were both selected for full laboratory analysis to assure continuity from previous years of monitoring and to assist in long term trend analysis. CBS-1, CBS-4 and CBS -7 were selected for bacteria analysis to help further characterize the water quality in the Cardiff sub-basin.

Of the seven locations where routine field screening was performed, seven of the sites sampled exceeded the action levels for one of the following analytes: turbidity, conductivity, nitrate and fecal coliform. Table 5.0 summarizes the action levels exceeded in the Cardiff sub-basin.

Table 5.0 Cardiff Sub-Basin Action Level Exceedances						
Station ID	**Date**	**Water Flow**	**Analyte**	**Initial Result**	**Unit**	**Action Level**
CBS-1	8/11/10	Ponded	Turbidity	8.0	NTU	5.0
CBS-2	7/26/10	Flowing	Conductivity	5.04	mS/cm	5.0
CBS-2	7/26/10	Flowing	Turbidity	13.50	NTU	5.0
CBS-2	7/26/10	Flowing	Fecal Coliform	16,000	cfu/100ml	13,000
CBS-4	7/26/10	Flowing	Conductivity	7.29	mS/cm	5.0
CBS-7	7/26/10	Flowing	Turbidity	13.30	NTU	5.0
CBS-8	7/28/10	Flowing	Turbidity	13.30	NTU	5.0
CBS-9	9/28/10	Flowing	Nitrate (NO3-N	>11.3	mg/L	10.0
CBS-9	9/28/10	Flowing	Turbidity	6.40	NTU	5.0
SEL-2	8/18/10	Ponded	Conductivity	6.49	mS/cm	5.0
SEL-2	8/18/10	Ponded	Turbidity	37.50	NTU	5.0

CBS-1

CBS-1 is a concrete channel storm drain that drains both residential areas and an industrial facility into the north end of the San Elijo Lagoon. The water sample at CBS-1 contained slightly elevated turbidity due to ponding. No other constituents analyzed at this site including bacteria analysis exceeded the dry weather monitoring action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed at this site.

CBS-2

CBS-2 is an open channel that drains both residential and commercial areas into the north end of the San Elijo Lagoon. CBS-2 was one of the sites selected for full analytical monitoring in 2010. The routine water sample at CBS-2 contained elevated conductivity, turbidity and fecal coliform. While this site is continuously flowing, due to the fact that it is an open channel site, adjacent to Coast Highway 101 and an undeveloped North County Transit District Right of Way next to the train tracks, the channel is often exposed to sediment, trash and supports significant algal growth. A confirmation water sample taken within two business days at CBS-2 contained elevated conductivity, pH and turbidity; however the exceedance for fecal coliform was no longer present. The water temperature was higher than normal (27.5 degrees Celsius) which likely resulted in the pH exceedance. The exceedance for conductivity was consistent with the previous result and is believed to be attributable to the presence of groundwater in the surrounding area. The turbidity exceedance was likely a result of the algae and sediment in the storm drain channel. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation was not warranted and was not performed. Table 5.1 below summarizes the results of the confirmation sampling for CBS-2.

Table 5.1 CBS-2 Confirmation Sampling Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Confirmation Result**	**Unit**	**Action Level**
CBS-2	7/28/10	Flowing	Fecal Coliform	6,650	cfu/100ml	13,000
CBS-2	7/28/10	Flowing	Conductivity	6.54	mS/cm	5.0
CBS-2	7/28/10	Flowing	pH	9.36	pH	<6.5 or >9.0
CBS-2	7/28/10	Flowing	Turbidity	14.70	NTU	5.0

CBS-4

CBS-4 is located in a detention basin that drains both agricultural nurseries and residential areas and discharges directly to San Elijo Lagoon. The water sample at CBS-4 was obtained from a flowing outfall in the detention basin and contained elevated conductivity. The sample was clear in clarity and colorless and no other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

CBS-7

CBS-7 is a concrete channel located in an HOA park which drains both residential and commercial facilities (agricultural nurseries) that ultimately into the north end of the San Elijo Lagoon. The water sample at CBS-7 contained elevated turbidity most likely due to red clay/iron deposits located at the sampling site. Coarse particulates and insects and algae, were noted in the runoff characteristics at this site. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

CBS-8

CBS-8 is a concrete channel located in an HOA park which drains both residential and commercial facilities (agricultural nurseries) and ultimately into the north end of the San Elijo Lagoon. The water sample at CBS-8 contained elevated turbidity. Insects and algae were noted in the runoff characteristics at this site. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

CBS-9

CBS-9 is a catch basin located in a residential area that ultimately drains into the north end of the San Elijo Lagoon. This catch basin is historically dry but was noted as flowing during routine monitoring in 2010. A musty odor and yellow color, along with floating organic matter were noted in the runoff characteristics. The water sample at CBS-9 contained elevated nitrate and slightly elevated turbidity. No other constituents analyzed at this site exceeded action levels. Clean Water Program field staff drove through the residential neighborhood attempting

to find the source of the dry weather flow, but they were unable to determine the origin. Clean Water Program field staff returned to this site within one business days to confirm the sample exceedances; however they were unable to resample because the catch basin was dry. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity and nitrate was not warranted and was not performed.

SEL-2

SEL-2 is located in an open channel that drains a residential area directly into the San Elijo Lagoon. SEL-2 was one of the sites selected for full analytical monitoring in 2010. The water sample was taken from an area with excessive vegetation and ponded water. The sample contained elevated conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. Historical data at this site indicates that conductivity and turbidity exceedances at this location are common due to saltwater intrusion, and the excessive vegetation and the ponding that occurs in this area. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and turbidity was not warranted and was not performed.

All of the data results collected in the Cardiff sub-basin during the 2010 Dry Weather Monitoring Program are included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.0 shows the locations of all the dry weather monitoring stations in the Cardiff sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.0

Cardiff Sub-basin

0 800 1,600 Feet

N

5.2 Lower Escondido Creek Sub-basin

Dry weather monitoring in the Lower Escondido sub-basin (ESC) included a total of three primary locations. The land uses consist primarily of residential and open space areas with a few commercial establishments interspersed throughout the sub-basin. All run-off in the Lower Escondido Creek sub-basin drains to the San Elijo Lagoon.

Of the three designated locations for routine monitoring in 2010, two locations were observed to have flowing water and one location had ponded water. All three locations were field screened only. One of the sites (ESC-2) sampled had results exceeding the action levels for conductivity and turbidity. Table 5.2 below summarizes the action levels exceeded in the Lower Escondido Creek Sub-basin during routine monitoring.

Table 5.2 Lower Escondido Creek Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
ESC-2	7/21/10	Ponded	Conductivity	8.23	mS/cm	5.0
ESC-2	7/21/10	Ponded	Turbidity	45.70	NTU	5.0

ESC-2

ESC-2 is located in an open channel adjacent to a residential area along Escondido Creek. The water sample at ESC-2 contained elevated conductivity and turbidity as a result of shallow water with excessive sediment and algae at this location. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

All of the data results collected in the Lower Escondido Creek sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.1 shows the locations of all the dry weather monitoring stations in the Lower Escondido Creek sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.1

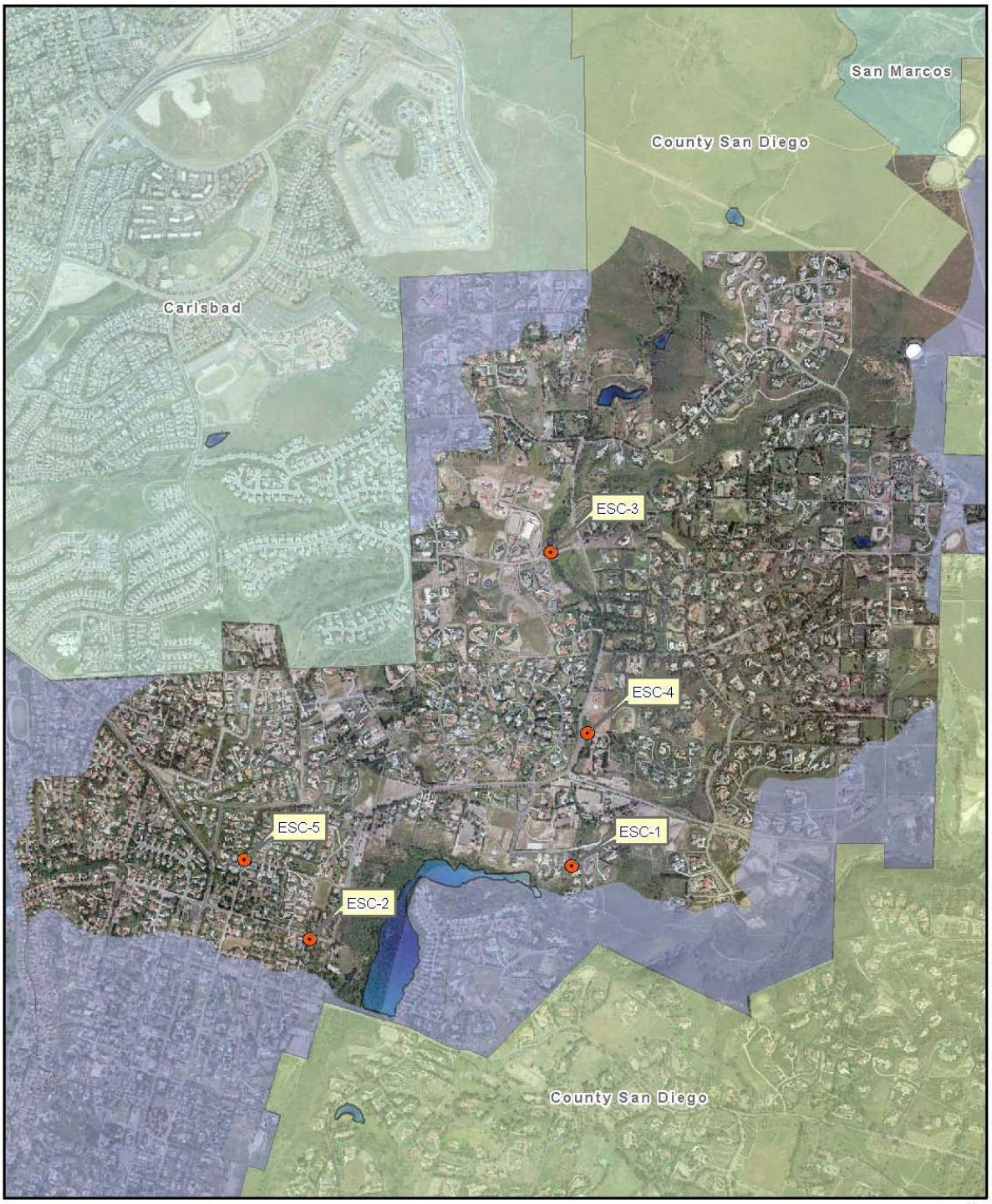

Lower Escondido Creek Sub-basin

0 1,000 2,000 Feet

N

5.3 La Costa South Sub-basin

Dry weather monitoring in the La Costa South sub-basin (LCS) included a total of six primary sites. Land use in this sub-basin encompasses one of the city's largest commercial zones in addition to a significant residential area. All runoff in the La Costa South sub-basin drains to Encinitas Creek. Encinitas Creek flows north into Batiquitos Lagoon in the City of Carlsbad. Monitoring locations in the La Costa South sub-basin were all located within the City of Encinitas.

Of the six designated locations for routine monitoring in 2010, four locations were observed to have flowing water and two locations had ponded water. All six locations were field screened and two were sampled for a full laboratory analysis (LCS-1 and LCS-5) to assure continuity from previous years of monitoring and to retain long-term trend analysis.

There were five routine monitoring water quality exceedances for turbidity in the La Costa South sub-basin in 2010. Table 5.3 summarizes the action levels exceeded in the La Costa sub-basin during routine monitoring.

Table 5.3 La Costa South Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
LCS-1	8/9/10	Ponded	Turbidity	16.40	NTU	5.0
LCS-4	9/1/10	Ponded	Turbidity	69.10	NTU	5.0
LCS-5	8/18/10	Flowing	Turbidity	21.30	NTU	5.0
LCS-7	7/16/10	Flowing	Turbidity	14.60	NTU	5.0
LCS-8	9/1/10	Flowing	Turbidity	19.80	NTU	5.0

LCS-1
LCS-1 is located in an open channel that drains northward into Encinitas Creek. The surrounding land use in this sub-basin is primarily commercial. The water sample at LCS-1 was taken from ponded water in the channel and was field screened and sampled for full laboratory analysis. Water flow at LCS-1 was significantly constrained due to excessive vegetation and organic matter decay at this site. The sample at LCS-1 contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LCS-4
LCS-4 is located in a manhole that drains northward into Encinitas Creek. The surrounding land use at this location is primarily commercial. The water sample at LCS-4 was taken from ponded water with soft mud inside the catch basin and was field screened only. The sample at LCS-1 contained elevated turbidity. No other constituents analyzed at this site exceeded action levels.

In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LCS-5

LCS-5 is located in a manhole that drains northward into Encinitas Creek. The surrounding land use at this location is primarily commercial. The water sample was taken from flowing water and was field screened and sampled for full laboratory analysis. The sample at LCS-5 contained elevated turbidity. Fine particulates and decaying organic matter, were noted in the runoff characteristics at this site. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LCS-7

LCS-7 is located in a concrete channel that drains northward into Encinitas Creek. The surrounding land use at this location is primarily commercial. The water sample was taken from flowing water and was field screened only. The sample at LCS-7 contained elevated turbidity. Insects and algae were noted in the runoff characteristics at this site. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LCS-8

LCS-8 is located in a manhole that drains west toward Encinitas Creek. The surrounding land use at this location is primarily residential. The water sample was taken from flowing water and was field screened only. The sample at LCS-8 contained elevated turbidity. The clarity of the water sample was noted as slightly cloudy in the runoff characteristics at this site. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

All of the data results collected in the La Costa South sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.2 shows the locations of all the dry weather monitoring stations in the La Costa South sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.2

La Costa South Sub-basin

0 2,000 4,000 Feet

N

5.4 Leucadia Sub-basin

Dry weather monitoring in the Leucadia sub-basin (LUC) included a total of seven locations; six primary sites and one alternate site. Land uses in this area include both residential and commercial with significant, albeit decreasing, numbers of commercial nurseries and growers. All monitoring sites located in the Leucadia sub-basin drain to the Batiquitos Lagoon. Each of the monitoring sites cover very distinct drainage areas throughout the basin. Six of the seven sample locations had flowing water and one location had ponded water. Alternate site LUC-4 was monitored as a substitute for the primary dry site in another sub-basin (LUX-2). All six locations with water were field screened; one sample at LUC-8 was collected for full laboratory analysis to assure continuity from previous years of monitoring and to retain long-term trend analysis.

Of the seven locations where routine field screening was performed the resulting exceedances were variable. Three of the sample sites (LUC-4, LUC-6 and LUC-8) had elevated turbidity. LUC-1 had elevated nitrate results, LUC-6 had elevated pH and LUC-8 had elevated Enterococcus bacteria results.

Table 5.4 below summarizes the action levels exceeded in the Leucadia sub-basin.

Table 5.4 Leucadia Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
LUC-1	7/16/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
LUC-4 (Alt)	9/30/10	Flowing	Turbidity	5.60	NTU	5.0
LUC-6	9/28/10	Ponded	pH	9.08	pH	<6.5 or >9.0
LUC-6	9/28/10	Ponded	Turbidity	60.50	NTU	5.0
LUC-8	8/18/10	Flowing	Turbidity	8.60	NTU	5.0
LUC-8	8/18/10	Flowing	Enterococcus	19,750	cfu/100 ml	10,000

LUC-1

LUC-1 is located in a detention basin in the lowest elevations of the Leucadia sub-basin. The basin is located 773 feet east of the Pacific Ocean Shoreline and 250 feet south west of Batiquitos Lagoon. The water sample at LUC-1 was taken from flowing water and was field screened. The water sample at LUC-1 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. LUC-1 has historically exceeded for nitrate seven times out of the past seven years of monitoring at this location and is identified as a site that is influenced by groundwater infiltration (refer to Table 6.3 and Section 6.4 Nitrate Exceedance for a more detailed discussion). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated nitrate was not warranted and was not performed.

LUC-4

LUC-4 is located in a concrete detention basin in the upper reaches of the Leucadia sub-basin and drains into the Batiquitos Lagoon when it is full. The water sample was taken from shallow ponded water and was field screened. The sample at LUC-4 contained slightly elevated turbidity results. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LUC-6

LUC-6 is located in a concrete detention basin in the lower reaches of the Leucadia sub-basin and drains into the Batiquitos Lagoon when it is full. The water sample at LUC-6 was taken from shallow ponded water and was field screened. The sample at LUC-6 contained elevated turbidity and slightly elevated pH results. The temperature at this location was also recorded as higher than average which had a likely effect on the elevated pH result. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity and pH result was not warranted and was not performed.

LUC-8

LUC-8 is located in a manhole that drains north into Batiquitos Lagoon**.** The land use upstream of this site consists of a golf course, residential area and an open space park area. LUC-8 was one of the sites selected for full analytical monitoring in 2010. The water sample at LUC-8 was taken from flowing water that contained elevated *Enterococcus* bacteria and slightly elevated turbidity results. No other constituents analyzed at this site exceeded action levels.

Despite an exceedance for *Enterococcus* and turbidity on the first sampling event, the confirmation sample was significantly below the initial sampling results and the action levels, indicating a transient nature of the source(s). No obvious residential, golf course or park related activities were found to be contributing to the initial exceedance during the confirmation investigation. Table 5.5 below summarizes the results of the confirmation sampling for LUC-8.

Table 5.5 LUC-8 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Confirmation Result	Unit	Action Level
LUC-8	8/19/10	Flowing	*Enterococcus*	2,800	cfu/100 ml	10,000
LUC-8	8/19/10	Flowing	Turbidity	0.60	NTU	5.00

All of the data results collected in the Leucadia sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.3 shows the locations of all the dry weather monitoring stations in the Leucadia sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.3

Leucadia Sub-basin

0 1,200 2,400 Feet N

5.5 Encinitas Sub-basin

Dry weather monitoring in the Encinitas sub-basin (ENC) included a total of thirteen primary locations. This sub-basin covers the oldest area of development in the city and consists primarily of residential and commercial land uses including many nurseries. This sub-basin has the most monitoring locations in the city as it has historically had the most water quality exceedances. Sample locations were chosen based on sampling sites established in the previous dry weather monitoring program and other special studies. The locations monitored in this sub-basin are primarily located along Cottonwood Creek with a few sites located on tributaries to Cottonwood Creek. All run-off in the Encinitas sub-basin drains to the Pacific Ocean via Cottonwood Creek.

Of the thirteen primary locations, ten sites had flowing water to sample and three sites had ponded water. All thirteen locations with water were field screened. Four sites were collected for full laboratory analysis, and another five sites were analyzed for bacteria indicators at the laboratory. Of the thirteen locations sampled and tested, nine of those sites exceeded water quality standards for various field screened analytes. In total, five of the sample sites had elevated turbidity, five sites had elevated nitrates, three sites had elevated conductivity, and one site (ENC-6) exceeded for MBAS and required an IC/ID investigation. Table 5.6 summarizes all of the action levels exceeded in the Encinitas sub-basin during routine monitoring.

Table 5.6 Encinitas Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
ENC-1	8/2/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-3	8/4/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-5	7/28/10	Flowing	Turbidity	25.90	NTU	5.0
ENC-6	7/28/10	Ponded	Conductivity	7.02	mS/cm	5.0
ENC-6	7/28/10	Ponded	MBAS	1.00	mg/L	
ENC-6	7/28/10	Ponded	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-6	7/28/10	Ponded	Turbidity	12.90	NTU	5.0
ENC-8	7/21/10	Flowing	Nitrate (NO3-N)	23.84	mg/L	10.0
ENC-10	8/16/10	Flowing	Turbidity	8.40	NTU	5.0
ENC-11	8/16/10	Flowing	Conductivity	7.62	mS/cm	5.0
ENC-11	8/16/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-17	8/30/10	Flowing	Turbidity	62.20	NTU	5.0
ENC-18	8/30/10	Flowing	Conductivity	5.71	mg/L	5.0
ENC-18	8/30/10	Flowing	Turbidity	17.90	NTU	5.0

ENC-1

ENC-1 is located at an outfall at Moonlight Beach that drains directly into to the Pacific Ocean. ENC-1 was one of the sites selected for full analytical monitoring in 2010. The water sample was taken from a flowing outfall and contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. It is has been reasoned that historic elevated nitrate levels are a result of groundwater infiltration observed in this sub-basin (refer to Table 6.3 and Section 6.4 Nitrate Exceedance for a more detailed discussion). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed.

ENC-3

ENC-3 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use in this sub-basin is primarily commercial. The water sample was taken from low flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-3 contained elevated nitrates however, no other constituents analyzed at this site exceeded action levels. It has been reasoned that the elevated nitrates are a result of groundwater infiltration that is historically observed in this sub-basin (refer to Table 6.3 and Section 6.4 Nitrate Exceedance for a more detailed discussion). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated nitrate was not warranted and was not performed.

ENC-5

ENC-5 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use in this sub-basin is primarily commercial. The water sample was taken from flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-5 contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. Fine and coarse particulates and algae were noted in the runoff characteristics at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

ENC-6

ENC-6 is located in a natural channel in Moonlight Creek that drains south toward Cottonwood Creek and ultimately drains into the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from ponded water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-6 contained elevated conductivity, nitrates, turbidity and slightly elevated MBAS. No other constituents analyzed at this site exceeded action levels. A confirmation sample for the exceedances the next business day revealed that there were still exceedances for conductivity, nitrates, turbidity and slightly elevated MBAS in addition to low pH at this site. Table 5.7 below summarizes the results of the confirmation sampling for ENC-6.

Table 5.7 ENC-6 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Confirmation Result	Unit	Action Level
ENC-6	7/30/10	Ponded	Conductivity	7.06	mS/cm	5.0
ENC-6	7/30/10	Ponded	MBAS	1.25	mg/L	1.0
ENC-6	7/30/10	Ponded	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-6	7/30/10	Ponded	pH	6.43	pH	<6.5 or >9.0
ENC-6	7/30/10	Ponded	Turbidity	13.30	NTU	5.0
ENC-6	8/2/10	Ponded	Conductivity	7.01	mS/cm	5.0
ENC-6	8/2/10	Ponded	MBAS	1.25	mg/L	1.0

It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin. In consideration of these factors and supported by best professional judgment, an upstream investigation specifically for the elevated nitrate and conductivity was not warranted and was not performed. Clean Water Program field staff did, however initiate an IC/ID investigation upstream of ENC-6 to determine the source of the slightly elevated MBAS. Table 5.12 summarizes all of the investigation activities that were performed in the area.

Table 5.8 ENC-6 IC/ID Investigation Activities

Station ID	Date of Inspection	Address/Location	Result
ENC-6	8/2/10	ENC-6	Clean Water Program staff collected a split sample at the original sampling site with ponded water. The sample was field screened with a Chemetrics MBAS test kit and resulted in a slightly elevated MBAS (1.25 mg/L). Clean Water Program field staff continued analysis further upstream.
ENC-6b	8/2/10	Upstream from ENC-6 in Moonlight Creek	Investigation sample was taken from a ponded location upstream of original site. The sample was field screened with a Chemetrics MBAS test kit and resulted in a slightly elevated MBAS (1.25 mg/L). Clean Water Program field staff continued analysis further upstream.
ENC-6c	8/2/10	Further upstream from ENC-6b in Moonlight Creek	Investigation sample was taken from a ponded location upstream of original site. The sample was field screened with a Chemetrics MBAS test kit and resulted in a slightly elevated MBAS (1.00 mg/L). The results from the field screening were inconsistent and inconclusive.

Clean Water Program field staff temporarily suspended the investigation pending the MBAS laboratory results for ENC-6. On 8/04/10, laboratory results confirmed that the MBAS results were far below the MBAS action level (refer to Table 5.13). Clean Water Program field staff also investigated possible interferences with the CHEMetrics test kit and believe that the suspected groundwater infiltration which often contains higher chloride values may have positively interfered with the test kit results. In consideration of these factors and supported by best professional judgment, continued investigation for the elevated MBAS was not warranted and was not performed. Table 5.9 summarizes the laboratory sampling results for ENC-6.

Table 5.9 ENC-6 IC/ID Laboratory Sampling Results						
Station ID	**Sample Date**	**Water Flow**	**Analyte**	**IC/ID Result**	**Unit**	**Action Level**
ENC-6	8/2/10	Ponded	MBAS	<0.04	mg/L	1.0

ENC-8

ENC-8 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use surrounding this site is primarily commercial. The water sample was taken from flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-8 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Follow-up sampling on the next business day concluded that nitrate concentrations still exceeded action levels at this site. Table 5.10 below summarizes the results of the confirmation sampling for ENC-8.

Table 5.10 ENC-8 Confirmation Sampling Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Confirmation Result**	**Unit**	**Action Level**
ENC-8	7/22/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0

It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated nitrate was not warranted and was not performed.

ENC-10

ENC-10 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use upstream from this site is comprised of both residential and commercial areas. ENC-10 was one of the sites selected for full analytical monitoring in 2010. The water sample was taken from flowing water in a naturally vegetated area. The water sample at ENC-10 contained slightly elevated turbidity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

ENC-11

ENC-11 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-11 contained elevated conductivity and nitrates. No other constituents analyzed at this site exceeded action levels. Follow-up sampling on the next business day concluded that conductivity and nitrate concentrations still exceeded action levels at this site. Table 5.11 below summarizes the results of the confirmation sampling for ENC-11.

Table 5.11 ENC-11 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Confirmation Result	Unit	Action Level
ENC-11	8/18/10	Flowing	Conductivity	7.32	mS/cm	5.0
ENC-11	8/18/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0

It is believed that the elevated conductivity and nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Table 6.3 and Section 6.4 Nitrate Exceedance for a more detailed discussion). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrate was not warranted and was not performed.

ENC-17

ENC-17 is located in a manhole that drains west toward the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from flowing water in the storm drain and was field screened only. The water sample at ENC-12 contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. Fine and coarse particulates, decaying organic matter and trash and were noted in the runoff characteristics at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

ENC-18

ENC-18 is located in a manhole in the upper reaches of the Encinitas sub-basin. Land uses near this site include residential areas, a golf course and significant, albeit decreasing numbers of commercial nurseries and growers. The water sample was taken from flowing water and was field screened only. The water sample contained elevated concentrations of conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. Fine particulates, decaying organic matter and insects were noted in the runoff characteristics at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and turbidity was not warranted and was not performed.

Groundwater in the Encinitas Sub-basin

Historically consistent nitrate and conductivity exceedances in the Encinitas sub-basin support a groundwater source. As such, in 2010 it has been reasoned that groundwater flows are the cause for the exceedances in nitrate and the high results or exceedances of conductivity at ENC-1, ENC-3, ENC-6, ENC-8, and ENC-11. The conductivity exceedances are persistent from year to year and have been consistently detected at the primary groundwater tributaries in the sub-basin where ENC-6 and ENC-11 are located. A historical analysis of these sites show that they have exceeded for nitrates multiple times since 2002 (refer to Table 6.3). The conductivity exceedances have been consistently accompanied by elevated levels of nitrate. The five nitrate

exceedances in 2010 are all located downstream of the confluence of the groundwater tributaries and the other flows in Cottonwood Creek. Three of these stations, ENC-1, ENC-3 and ENC-6, are all located west of Pacific Coast Highway 101 and samples at these locations are collected within 1,500 feet of each other. All of these sampling locations are near the topographic low point in this sub-basin near the coast. Nitrate concentrations remain consistent in the reach along Moonlight Creek and Cottonwood Creek. Further discussion of nitrate and conductivity exceedances is located in Section 6.3 of this report.

All of the data results collected in the Encinitas sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.4 shows the locations of all the dry weather monitoring stations in the Encinitas sub-basin Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.4

Encinitas Sub-basin

N
0 1,200 2,400 Feet

5.6 Rancho Santa Fe Sub-basin

The dry weather monitoring locations included two primary sites in the Rancho Santa Fe (RSF) sub-basin. Land use in this area is primarily residential with few commercial facilities also located in the sub-basin. All run-off in this sub-basin drain to Escondido Creek which feeds into the San Elijo Lagoon.

Of the two designated locations for routine monitoring in 2010, one location had flowing water (RSF-4) and one location was ponded (RSF-1). Both locations were field screening and analytical lab samples were also collected at RSF-4. Of the two sites that were sampled, there was one water quality exceedance for turbidity in this sub-basin in 2010. Table 5.12 summarizes the action level that was exceeded in the Rancho Santa Fe sub-basin during routine monitoring.

Table 5.12 Rancho Santa Fe Sub-basin Action Level Exceedance

Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
RSF-1	8/11/10	Ponded	Turbidity	7.30	NTU	5.0

All of the data results collected in the Rancho Santa Fe sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.5 shows the locations of all the dry weather monitoring stations in the Rancho Santa Fe sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.5

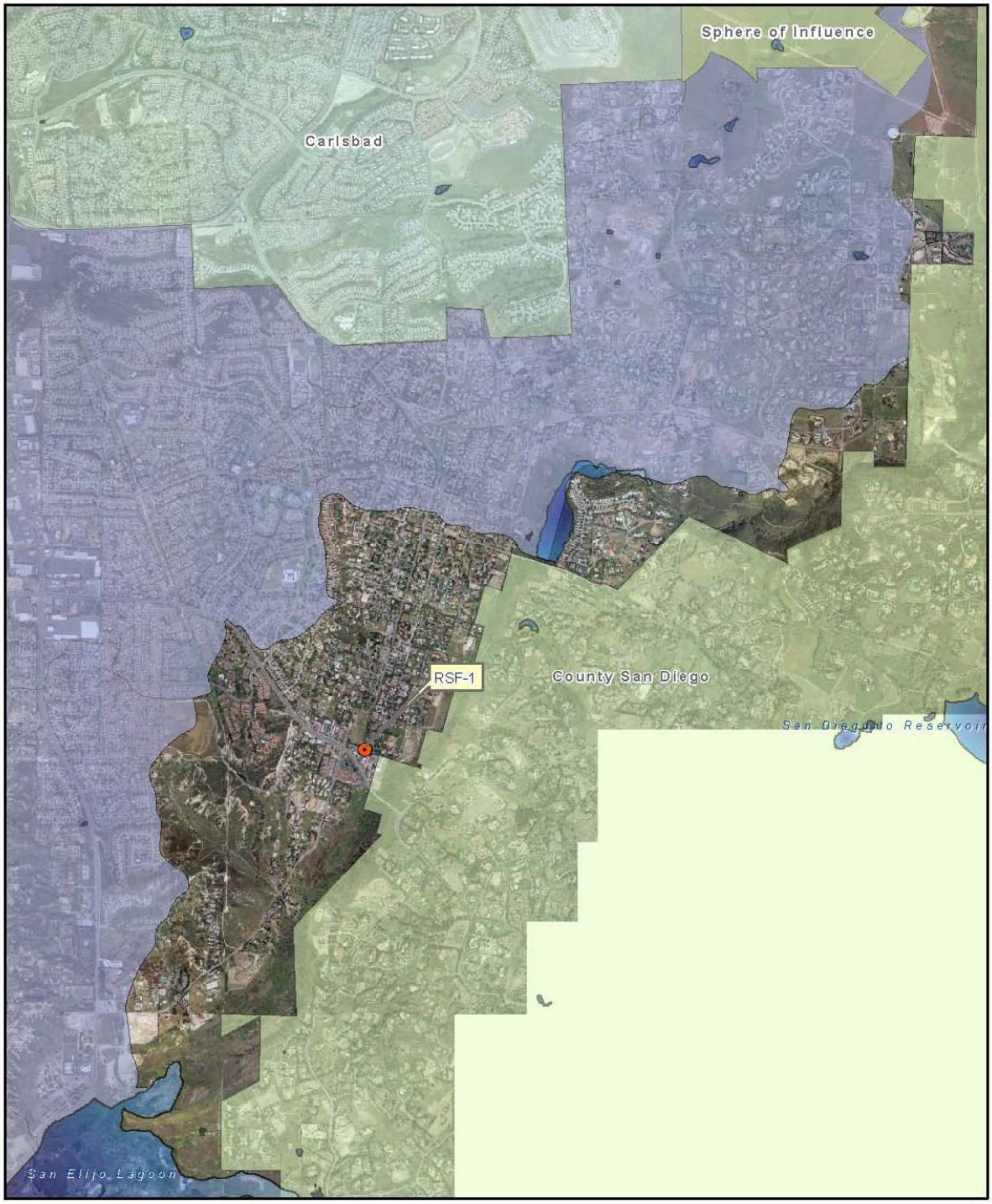

Rancho Santa Fe Sub-basin

N
Feet
0 1,500 3,000

5.7 Lux Canyon Sub-basin

The dry weather monitoring locations included three primary sites and one alternate site in the Lux Canyon sub-basin (LUX). Land use in this area is primarily residential with a few commercial facilities located in the sub-basin. All run-off in the Lux Canyon sub-basin drains to the San Elijo Lagoon.

Of the four designated locations for routine monitoring in 2010, two sites, LUX-1 and SEL-3 had ponded water, and LUX-2 and LUX-3 were completely dry. Both locations with ponded water were field screened and one of the sites (SEL-3) was analyzed for bacteria indicators at the laboratory. Table 5.13 summarizes the action level exceedances in the LUX Canyon sub-basin.

Table 5.13 Lux Canyon Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
LUX-1 (Alt)	9/28/10	Ponded	Turbidity	49.70	NTU	5.0
SEL-3	8/11/10	Ponded	Conductivity	7.20	mS/cm	5.0
SEL-3	8/11/10	Ponded	Turbidity	28.20	NTU	5.0

LUX-1
LUX-1 is a concrete channel storm drain that drains into the north east end of the San Elijo Lagoon. Land uses near this site include primarily residential areas. The water sample was taken from shallow ponded water and was field screened only. The water sample contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. Fine particulates, decaying organic matter and algae were noted in the runoff characteristics at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

SEL-3
SEL-3 is located in a detention basin that drains a community college campus and a residential area. The water sample was taken from ponded water in an area with excessive algae. The water sample at SEL-3 contained elevated conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. Fine particulates, floating algae, and biology that included; ducks, fish and insects were noted in the runoff characteristics at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and turbidity was not warranted and was not performed.

All of the data results collected in the Lux Canyon sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The

map in Figure 5.6 shows the locations of all the dry weather monitoring stations in the Lux Canyon sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.6

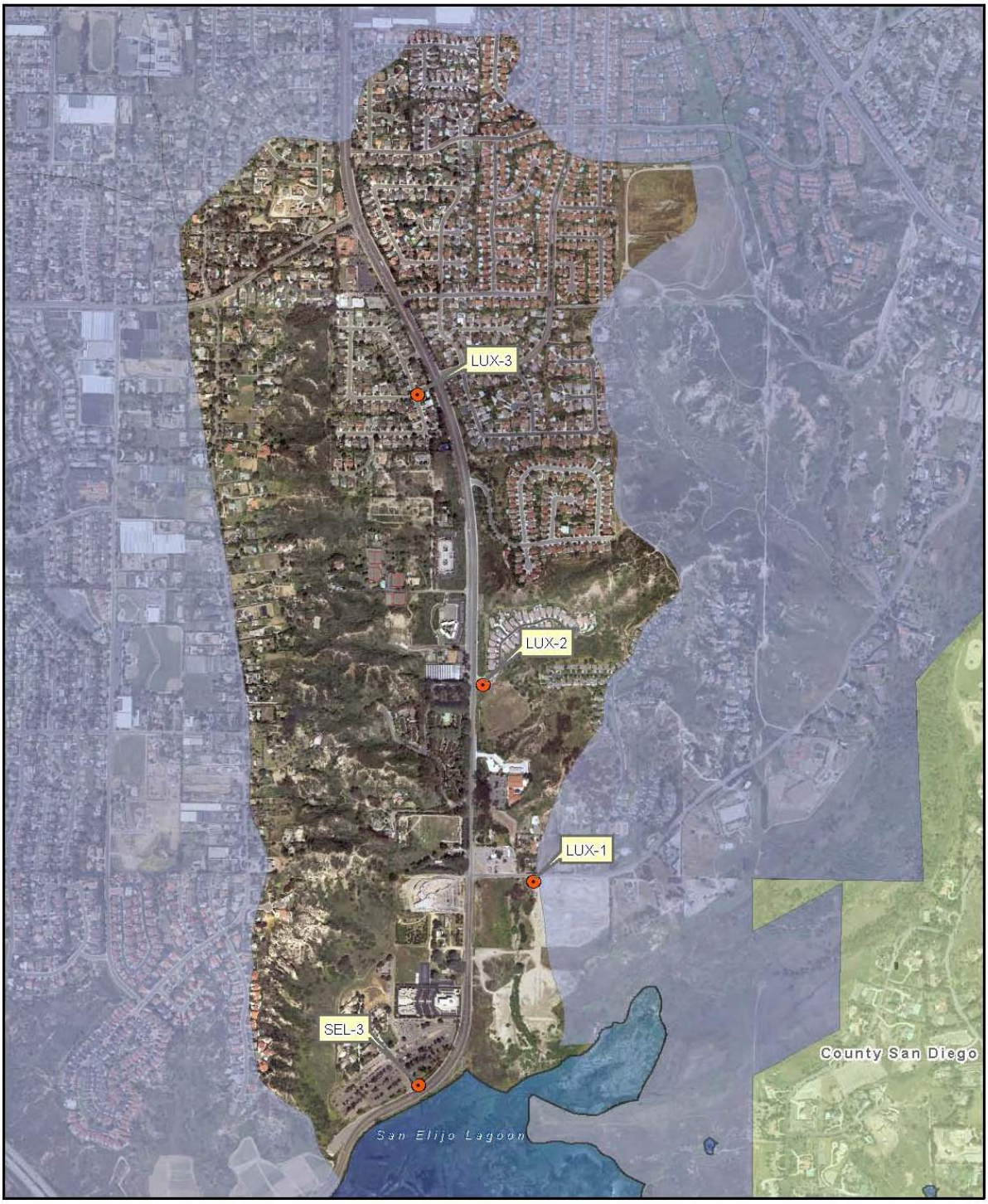

Lux Canyon Sub-basin

N
Feet
0 600 1,200

6.0 Summary

The City's comprehensive dry weather water quality monitoring conducted in 2010 meets all of the Dry Weather Monitoring requirements as established in the Municipal Storm Water Permit (Order 2007-01) in section II.B.3 of the Receiving Water and Urban Runoff Monitoring and Reporting Program. The data that was collected served to monitor local storm drain facilities and creeks for illicit connections and illicit discharges, allows for characterization of the water quality in the City and subsequent prioritization of sub-basins in the watershed and pollutants of concern in those sub-basins. This section presents a summary of all the dry weather monitoring results.

6.1 Water Quality Exceedances and Trends

The City of Encinitas can be sub-divided into seven distinct drainage sub-basins. Figure 6.0 illustrates the percent of analytes exceeding action levels in each sub-basin according to dry weather monitoring data collected from 2007 through 2010.

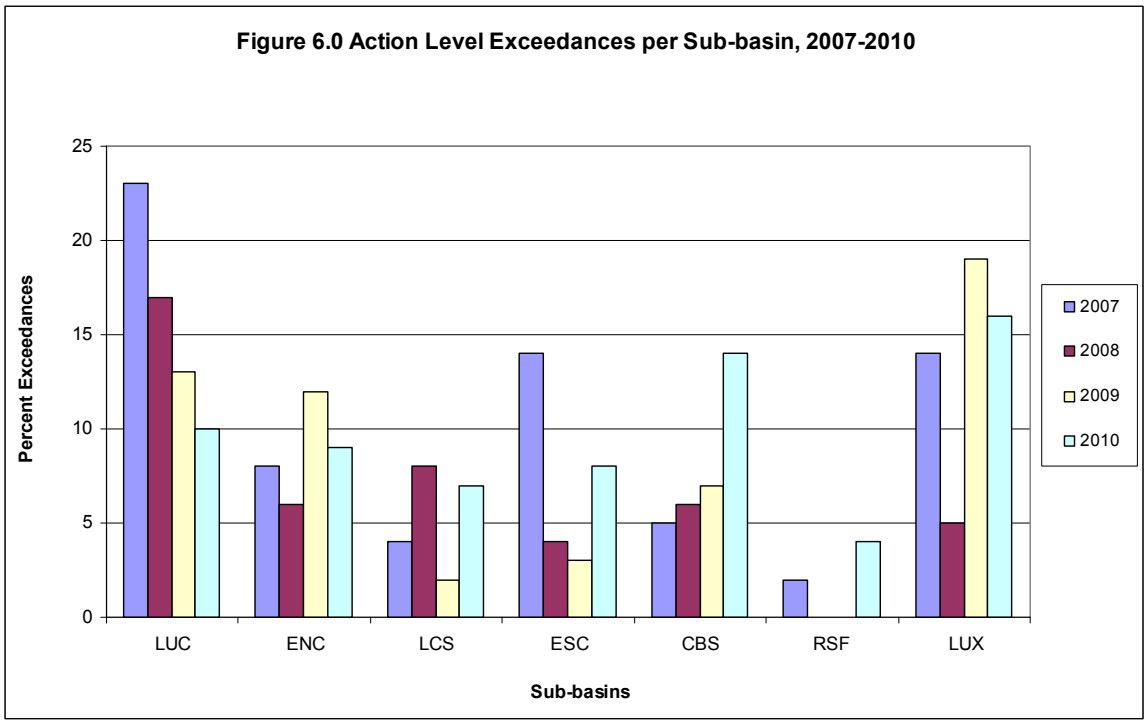

Data from Figure 6.0 illustrates that water quality results are variable from one year to the next. In 2010, there were increasing exceedance trends in the Cardiff sub-basin (CBS), Rancho Santa Fe sub-basin (RSF) and the LUX Canyon sub-basin (LUX) due primarily to exceedances in turbidity and conductivity.

Figure 6.1 illustrates the total exceedance rate for all sites sampled during each dry weather monitoring year since 2007. In 2010, the total exceedance rate for all analytes was 9.5%, a slight (1%) increase over last year. It is important to note that this increase was due primarily to the multiple exceedances for turbidity, conductivity and nitrate (which are primarily attributed to groundwater influence) and the overall exceedance rates remain low. Overall, less than 10% of all sites sampled in the Dry Weather Monitoring program in 2010 exceeded water quality action levels.

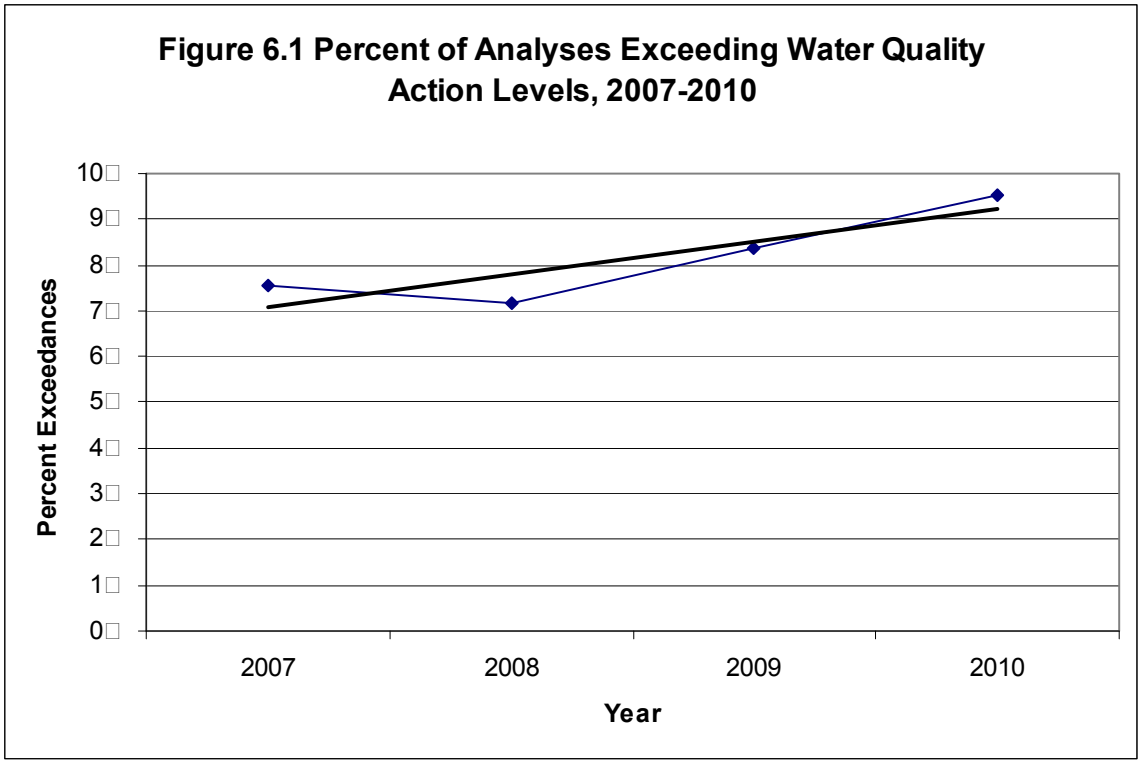

6.2 Prioritization of Constituents of Concern

The following field screened and laboratory analytes in Table 6.0 all have defined action levels and have the potential to be identified as constituents of concern in any given year depending on the exceedance ratios for each analyte.

Table 6.0 Potential Constituents of Concern	
Ortho-phosphate	Dissolved Cadmium
Nitrate	Dissolved Copper
Ammonia	Dissolved Lead
Surfactants/MBAS	Dissolved Zinc
Oil and Grease	Total Coliform
Diazinon	Fecal Coliform
Chlorpyrifos	Enterococcus

Turbidity, Temperature, Conductivity and pH are all field screened analytes which are subject to best professional judgment and are not considered in the following COC analysis.

Constituents of Concern (COCs) are identified annually in the Dry Weather Monitoring Report to help prioritize dry weather monitoring activities and inspection activities throughout the City for the following monitoring year. Figure 6.2 illustrates all water quality exceedances for each sub-basin in 2010. Nitrate and bacteria continue to be predominant constituents of concern in the Cardiff, Encinitas and Leucadia sub-basins and are consistent with what the known water quality impairments in the City of Encinitas.

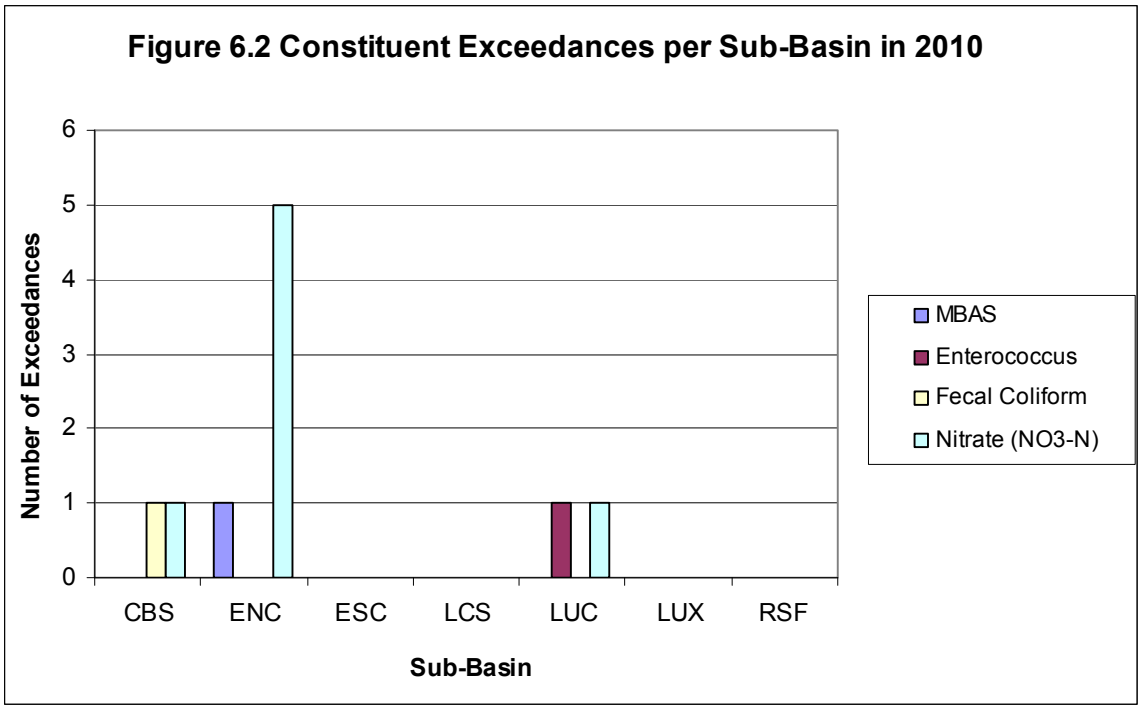

To further prioritize water quality issues in the sub-basins, COCs that exceeded most often were identified in 2010 as illustrated in Figure 6.3. There were seven exceedances for nitrate and one exceedance for MBAS, *Enterococcus* and fecal coliform. Notably, results for ortho-phosphate, ammonia, oil and grease, diazinon, chlorpyrifos, dissolved metals (cadmium, copper, lead and zinc) and total coliform bacteria were not included in the analysis for 2010 because there were no action level exceedances for any of those constituents.

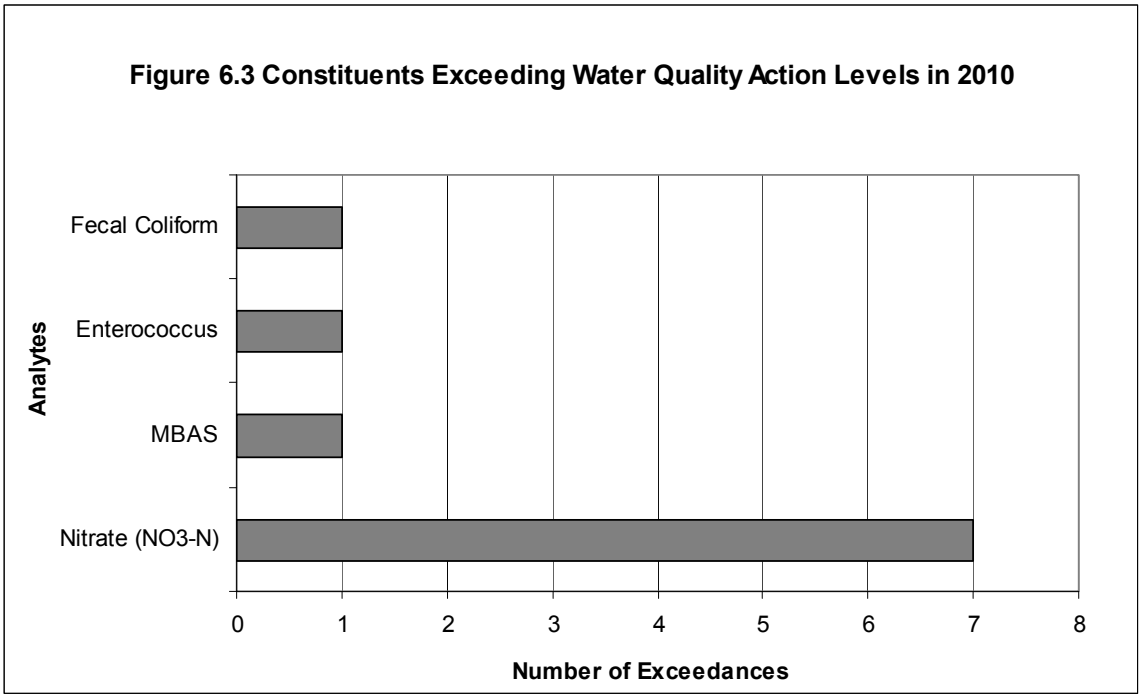

Clean Water Program staff uses the criteria presented in Table 6.1 below for assigning COC priorities. The COCs can be divided into three priority categories of low, medium and high.

Table 6.1 Constituents of Concern Prioritization Criteria

	Criteria	Priority	Recommended Action*
I	Exceedance Ratio <10% and trends are not increasing	Low	Continue routine monitoring and place COC on watch list.
II	Exceedance Ratio greater than 10%, less than 50%	Medium	Increase Monitoring Frequency in Following Dry Weather Program
III	Persistent Exceedances	Medium	Increase Monitoring Frequency in Following Dry Weather Program
IV	Impacting Receiving Waters, 303d listed	High	Special Study, ICID Investigations, BMP implementation
V	Exceedance Ratio >50%	High	Special Study/Investigations
VI	II and III	High	Special Study/Investigations

* Best professional judgment may indicate otherwise.

In order to lower the priority for a constituent from one year to the next, the COC must qualify for the next lower category according to the criteria listed above and not show an increasing

trend in exceedances. A constituent may only decrease one step per year and may be removed from the list if the constituent was ranked low the previous year and had no exceedances in monitoring for the current year. Figure 6.4 below illustrates the exceedance ratios per COC in the 2010 monitoring period. The exceedance ratio is calculated by the following formula:

$$E=x/y*100$$

where,
E = exceedance ratio
x = total number of exceedances for selected COC
y = total number of analyses for the COC

This method allows for a comparison of the exceedance rates for each indicator. For 2010, the constituents that exceeded water quality action levels the most were nitrate, *Enterococcus* and Fecal Coliform bacteria followed by MBAS. The indicator exceedance ratios in Figure 6.4 define the prioritizations assigned to each constituent in Table 6.2 and 6.3.

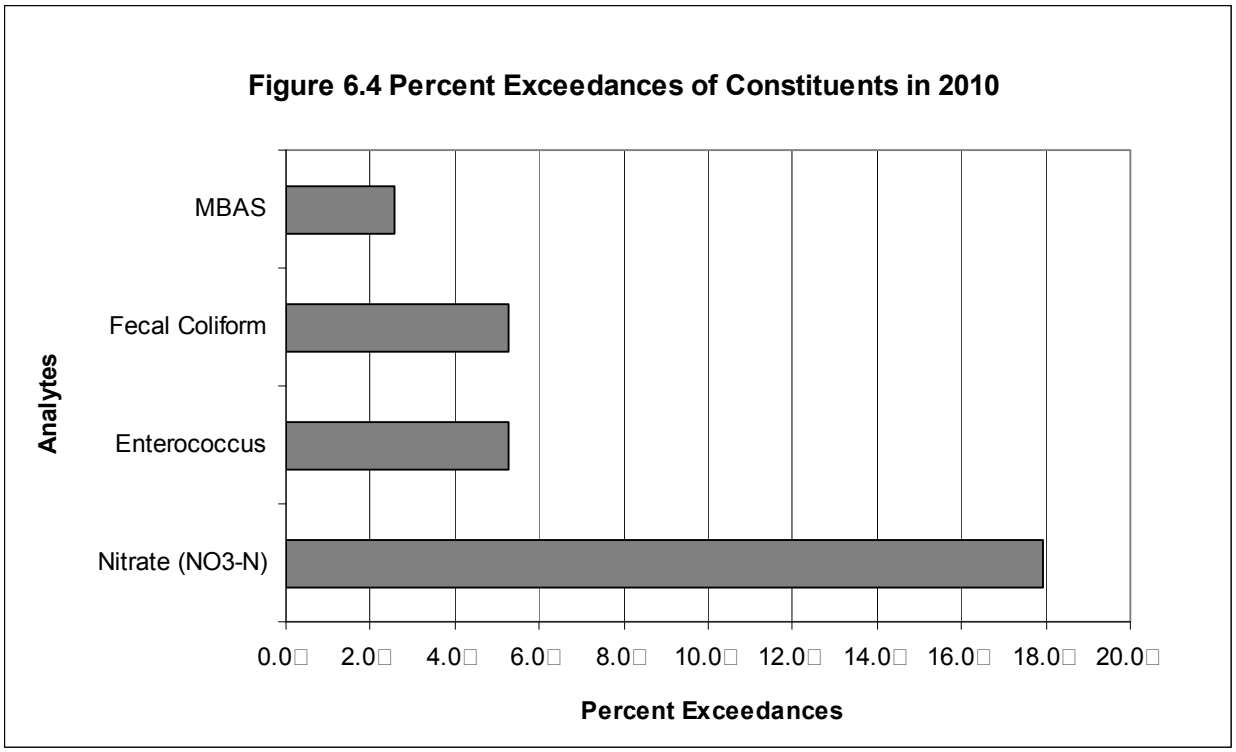

The City of Encinitas COCs were selected and prioritized according to criteria in Table 6.0 and the data that is presented in Figure 6.4. The high priority COCs identified in the 2010 monitoring season and the suggested action plan for each of those COCs is presented in Table 6.2.

Table 6.2 2010 High Priority Constituents of Concern		
COC	**Priority**	**Action Plan**
Nitrate-nitrogen	High	Although, the number of nitrate exceedances have been trending downward since 2002, the COC matrix analyses continually identifies nitrate as a high priority constituent. In sub-basins where exceedances are caused by irrigation runoff, or in sub-basins that drain directly to the San Elijo Lagoon (which is on the 303(d) list of impaired water bodies for nutrients), Clean Water Program staff will focus on education targeting irrigation runoff and increased inspections of nurseries.
Bacteria • Total Coliform • Fecal Coliform • *Enterococcus*		• Continued BMP implementation at commercial businesses (grease removal equipment and proper coverage/containment for all outdoor grease bins), • Continued maintenance of the Urban Runoff Treatment Facility located at Cottonwood Creek, • Continue to assess bacteria data by land use and conveyance type, • Analyze the data results from the 2010 *Storm Drains as Sources of Enterococcus to San Diego Beaches* study, and • Participate in the San Diego Copermittees Bacteria Reference Study • TMDL for Indicator Bacteria Project I – Twenty Beaches & Creeks in San Diego County

A complete list of all COCs identified as Medium and Low priorities along with a justification for the 2010 COC prioritization and the reasons supporting any changes are described in Table 6.3.

Table 6.3 Annual Prioritization of Medium/Low Constituents of Concern, 2007-2010					
Constituent	**2007 Priority**	**2008 Priority**	**2009 Priority**	**2010 Priority**	**Reason for Change**
MBAS	None	Low	None	Low	The exceedance ratio for MBAS is 2.6%, due to only one exceedance in 2010. MBAS has been reassigned to a low priority and Clean Water Program staff will continue with routine monitoring in 2011.
Ortho-phosphate	Low	Medium	Medium	Low	There were no exceedances for ortho-phosphate in 2010. This constituent has been reassigned to a low priority. Clean Water Program staff will continue with routine monitoring in 2011.
Ammonia	None	Low	Low	None	There were no exceedances for ammonia in 2010. This constituent is no longer considered as a COC.

Using the prioritization methodology described in Table 6.1, nitrate and bacteria remain high priority COCs, MBAS was reassigned as a low priority COC due to one exceedance and ortho-phosphate was reassigned from a medium priority COC to a low priority COC since there were no exceedances in 2010.

6.3 Bacteria Indicator Exceedances

Extensive bacteria data has been collected for the past four dry weather seasons, allowing for a better overall characterization of bacteria sources and loading in the City. Enough data has been collected to attempt to characterize bacteria concentrations based on land use. The additional data collection at 10 sites located throughout the City also allows for long term trend assessments of bacteria concentrations in the City.

The two major land uses in the City of Encinitas are commercial and residential and are often not distinct to a drainage basin, but are mixed. The assessment of bacteria loading from these areas is based on primary land use as listed in the data set. Figure 6.5 illustrates the geometric mean concentrations of total coliform, fecal coliform and *Enterococcus* based on residential and commercial land use. According to the data collected from 2007 to 2010, the commercial areas contribute more bacteria to the MS4 for all three indicators, as calculated based on concentration only. The total coliform concentrations are approximately 54% higher, fecal coliform are approximately 42% higher, and Enterococcus concentrations are approximately 45% higher in

commercial areas. The differences between commercial and residential areas are illustrated below in Figure 6.5.

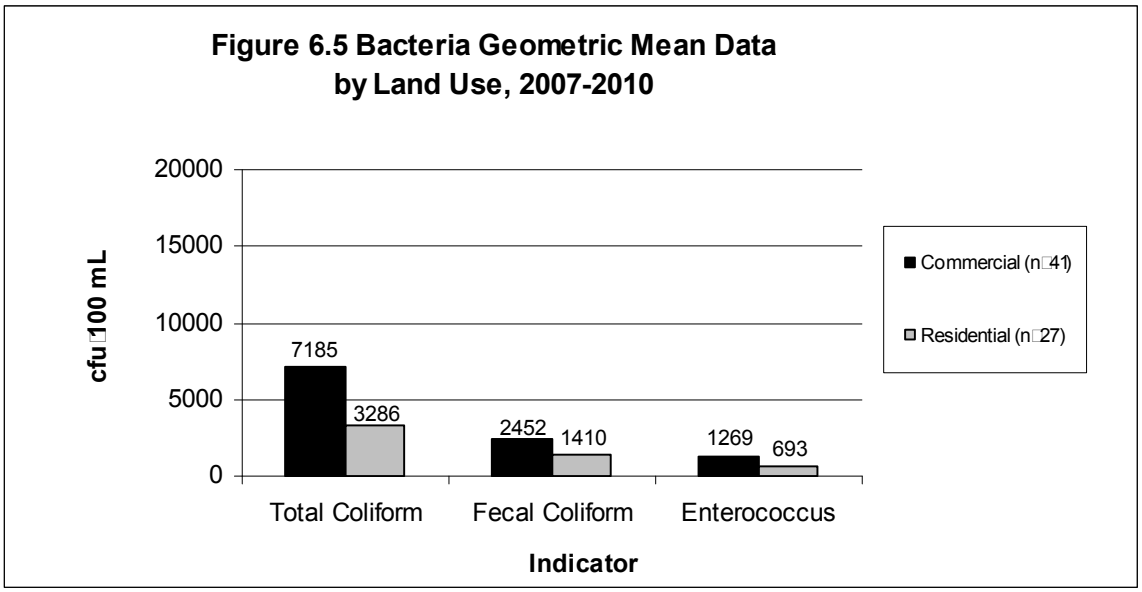

6.4 Nitrate Exceedances

The exceedance rates for nitrate decreased from 25% in 2009 to 18% in 2010. Exceedance rates for nitrate for the past four years of dry weather monitoring are illustrated below in Figure 6.6.

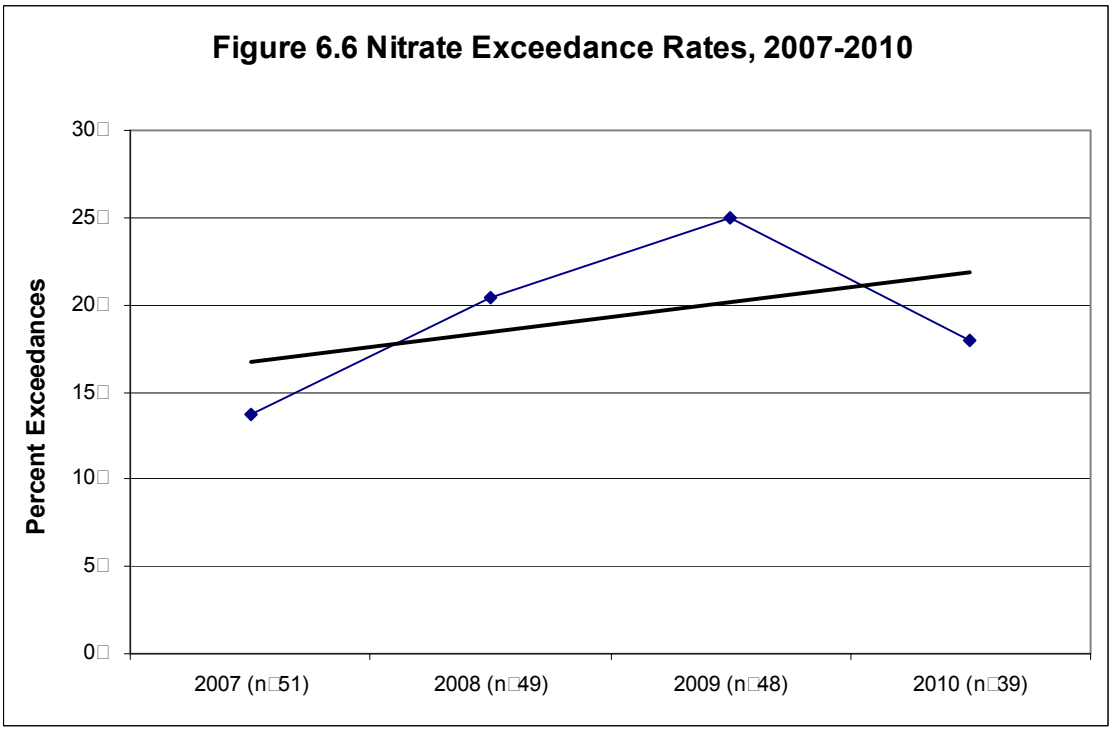

Over the four years of monitoring, groundwater remains a constant source of dry weather flow within Cottonwood Creek in the Encinitas Sub-basin. There are six monitoring locations in the City's dry weather monitoring program that are located within this geographical area. Since 2002, five primary monitoring sites, ENC-1, ENC-3, ENC-6, ENC-8 and ENC-11 have consistently exceeded for nitrates and are often accompanied by elevated conductivity. Over the monitoring periods, other nitrate exceedances have been present on occasion.

Most of the nitrate exceedances in the Encinitas sub-basin are consistent with elevated nitrate results from previous years of monitoring and have been reasoned to be a result of groundwater in the region. The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. It is common to find elevated nitrates in groundwater in regions of agriculture and it is likely that the sources of nitrogen in the groundwater in Encinitas are from historical agricultural land uses. It should be noted, however, that local water authorities do not consider Encinitas groundwater a viable source of drinking water because it is subject to sea water intrusion. As a result, there is little groundwater quality data specific to Encinitas. Since the inception of the dry weather monitoring program, all of the dry weather monitoring sites throughout the city have been analyzed for nitrates. Table 6.4 summarizes all the sites in Encinitas with consistent exceedances for nitrates and their suspected sources.

Table 6.4 Nitrate Exceedances, 2002-2010

Site	Nitrate Exceedances									Suspected Source
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
CBS-1			X							Groundwater
CBS-2				X						Combination
CBS-3N			X					NS	NS	Irrigation
CBS-3S			X					NS	NS	Irrigation
CBS-8*							X	NS		Groundwater
CBS-9									X	Irrigation
ENC-1	X	X	X	X	X			X	X	Groundwater
ENC-3	X	X	X	X	X		X	X	X	Groundwater
ENC-4			X							Irrigation
ENC-5	X	X	X			X		X		Groundwater
ENC-6	X	X	X	X	X	X	X	X	X	Groundwater
ENC-8	X	X	X	X	X		X	X	X	Groundwater
ENC-9			X		NS					Irrigation
ENC-10	X		X							Irrigation
ENC-11	X	X	X	X	X	X		X	X	Groundwater
ENC-12		X			NS					Irrigation
ENC-14			X		NS				NS	Irrigation
ENC-15		X	X							Irrigation
ENC-17		X	X					NS		Irrigation
ENC-18								X		Irrigation
ESC-1			X							Groundwater
ESC-2			X							Irrigation
LCS-1			X			X				Irrigation
LCS-2			X							Irrigation
LCS-5						X				Irrigation
LUC-1	NS	NS	X	X	X	X	X	X	X	Groundwater
LUC-7			X	NS	NS				NS	Groundwater
LUC-9*							X	NS	NS	Groundwater
LUC-10							X	X		Groundwater
LUX-2			X		NS			NS	NS	Irrigation
SEL-2						X				Combination
SEL-5	NS	NS	NS	X	NS				NS	Irrigation

The sites with nitrate exceedances attributable to groundwater are typically not causing water quality problems in the receiving waters. These locations do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils. In 2010, all nitrate exceedances except one location (CBS-9)

appeared to be attributable to groundwater. A more detailed discussion of nitrate and conductivity exceedances was included in Appendix J of the City of Encinitas' 2007 Dry Weather Monitoring Assessment.

6.5 Water Quality Trends by Receiving Waters

Finally, the sub-basins can be divided by respective receiving waters. Runoff in the City of Encinitas drains either north to Batiquitos Lagoon, south to San Elijo Lagoon, or west to the Pacific Ocean at Moonlight Beach.

Table 6.5 shows the all of the sub-basins in the City of Encinitas and their associated receiving water.

Table 6.5 Receiving Waters and Associated Sub-basins

Batiquitos Lagoon	Pacific Ocean	San Elijo Lagoon
Leucadia Sub-Basin	Encinitas Sub-Basin	Cardiff Sub-Basin
		Lux Canyon Sub-Basin
La Costa South Sub-Basin		Lower Escondido Creek Sub-Basin
		Rancho Santa Fe Sub-Basin

In dividing the City of Encinitas into receiving water drainage areas, general conclusions as to the water quality entering these waters can be inferred. In order to compare the water quality across these three drainage areas, a ratio of the number of water quality exceedances to analytes tested is calculated. Figure 6.7 presents the exceedance ratios calculated for the three drainage areas over the past four years of dry weather monitoring.

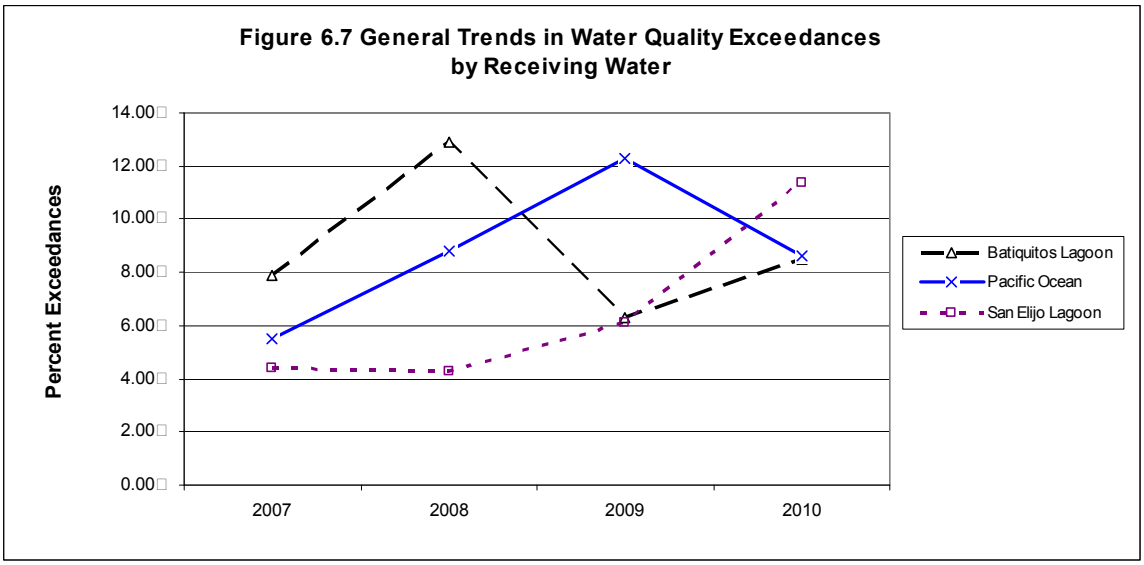

According to these ratios, the waters flowing south into San Elijo Lagoon exceeded action levels more than flows to the Pacific Ocean or the Batiquitos Lagoon in 2010. The majority of the analyte exceedances draining to the San Elijo Lagoon occurred in the Cardiff Sub-basin and were primarily for conductivity and turbidity. Of the priority COCs identified in 2010, there was also one exceedance for nitrate and fecal coliform in the Cardiff sub-basin. There were no priority COC exceedances in the Lux Canyon sub-basin, Lower Escondido sub-basin or the Rancho Santa Fe sub-basin in 2010.

7.0 Conclusions

Throughout the past eight years of dry weather monitoring the City of Encinitas has succeeded in identifying jurisdictionally significant water quality COCs. The sources of these COCs have been identified and eliminated where possible. Ongoing monitoring for the Dry Weather Monitoring Program will allow for continuous trend assessments and prioritization within each of the sub-basins and the receiving waters in future years. Currently, these trends are captured in the exceedance ratios which are delineated by sub-basin and by land use.

The high priority COCs in Encinitas continue to be nitrates followed by bacteria indicators (fecal coliform and *Enterococcus* bacteria). High bacteria levels occur most often in commercial land use areas throughout the City of Encinitas. Sources for bacteria have been identified in several instances in years past and have included natural loading from wildlife, bacteria re-growth in the MS4, and various illegal connections to the MS4. Bacteria indicators in the MS4 have been trending downward since 2007 for both residential and commercial areas in Encinitas.

It is not known if the elevated nitrates observed throughout Encinitas are entirely from anthropogenic sources. The most likely sources of nitrates have been identified as groundwater, nursery irrigation run-off and residential irrigation run-off containing fertilizers. With the exception of one nitrate exceedance in 2010, most exceedances appear to be groundwater related and have been relatively consistent (Refer to Figure 5.6). In 2010, 6 out of 7 nitrate exceedances were determined to be caused by groundwater intrusion. In these locations, the high nitrate concentrations are accompanied by elevated conductivity and no other COC exceedances. Nitrate is a constituent of concern for the groundwater in the San Diego region, and historical agricultural land uses in Encinitas are likely sources of nitrogen in the groundwater. The elevated conductivity may be from various minerals entering the groundwater from the sedimentary soils and in some locations in the lower reaches of the city are due to seawater intrusion. The City's Clean Water Program continues to focus on residential and commercial education targeting irrigation runoff and routine inspections of nurseries to minimize the amount of runoff to the maximum extent practicable.

Using the COC prioritization method described in Table 6.0, City staff has evaluated and ranked water quality concerns in the City, which will allow appropriate attention in the upcoming year. The City of Encinitas Clean Water Program shall continue to focus on illicit discharges and connections as a means to improve water quality, as well as broadly focused programmatic areas to protect water quality and ensure ongoing improvements. The dry weather monitoring program assists the City in focusing efforts targeting identifiable pollution problems throughout the City. Efforts, including targeting specific audiences for education, enforcement activity, and Best Management Plan (BMP) implementation, have expanded as a result of the water quality characterization gained from the Dry Weather Monitoring Program.

In 2010, the City of Encinitas initiated two notable activities that will help to better identify, prioritize and manage COCs specific to our area. First, the City collaborated with the Carlsbad

Watershed Copermittees to assess all monitoring data across the Carlsbad Hydrologic Unit in order to identify monitoring data gaps. This will ultimately help to improve the development of appropriate watershed-based water quality education activities and stormwater BMPs. Secondly, in FY 2009-10, the City of Encinitas participated in a regional source identification study (*Storm Drains as Sources of Enterococcus to San Diego Beaches)* at Moonlight Beach to assess storm drains as a potential source of Enterococcus into our regions receiving waters during dry weather.

In 2010, the following recommendations for future dry weather monitoring include:

1. Continued assessment of all monitoring data within the watershed to identify current data gaps, compare constituents of concern across the Carlsbad Hydrologic Area, and ultimately develop appropriate watershed activities and BMPs as a group.

2. Assess the bacteria data collected in the source identification study (*Storm Drains as Sources of Enterococcus to San Diego Beaches).*

8.0 Trash Assessment

8.1 Regulatory Requirements

Section II.B.3.c.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather field screening site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

8.2 Procedure and Definitions

The San Diego County Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form (Appendix C-2) to document the amount and extent of trash and the threat to human and aquatic health. The first page is completed at every site. The second page, which includes information about the types, prevalence, potential routes, and sources of trash, is also completed at sites where a larger amount of trash is observed.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although numbers of trash pieces are also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Presence of more than one of, or a combination of, the following items: hypodermic needles or other medical waste; used diapers, animal

waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard), or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.

- *Threat to Aquatic Health* – Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of, the following items: toxic items such as vehicle batteries or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Forms.

If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are also identified on the Trash Assessment Form.

8.3 Trash Assessment Results

Trash assessments were conducted at 39 primary dry weather monitoring sites and 2 alternate dry weather monitoring sites throughout the monitoring period (May 1, 2010 – September 30, 2010). Notably, in FY 2009-10, there were no sites identified as poor or a threat to human or aquatic health. Table 8.0 summarizes all of the trash assessment results for this fiscal year and Figure 8.0 compares the trash assessments with the previous two years of monitoring. A map of all the sampling sites in the City of Encinitas and their corresponding trash assessment is located in Appendix C-5.

Table 8.0 Trash Assessment Results

Optimal (35 sites)	Suboptimal (2 sites)	Marginal (4 sites)	Submarginal (0 sites)	Poor (0 sites)
CBS-1	ENC-12	CBS-2		
CBS-4	ENC-15	ENC-9		
CBS-7		ENC-10		
CBS-8		RSF-1		
CBS-9				
SEL-2				
SEL-3				
ENC-1				
ENC-3				
ENC-4				
ENC-5				
ENC-6				
ENC-8				
ENC-11				
ENC-17				
ENC-18				
LCS-1				
LCS-2				
LCS-4				
LCS-5				
LCS-7				
LCS-8				
LUC-1				
LUC-3				
LUC-4 (ALT)				
LUC-6				
LUC-8				
LUC-10				
ESC-1				
ESC-2				
ESC-5				
LUX-1 (ALT)				
LUX-2				
LUX-3				
RSF-4				

8.3.1 Threat to Human or Aquatic Health

In FY 2009-10 there were no sites identified as a threat to human or aquatic health.

8.3.2 Trash Assessment - Poor Sites

In FY 2009-10, there were no sites identified as sub marginal or poor.

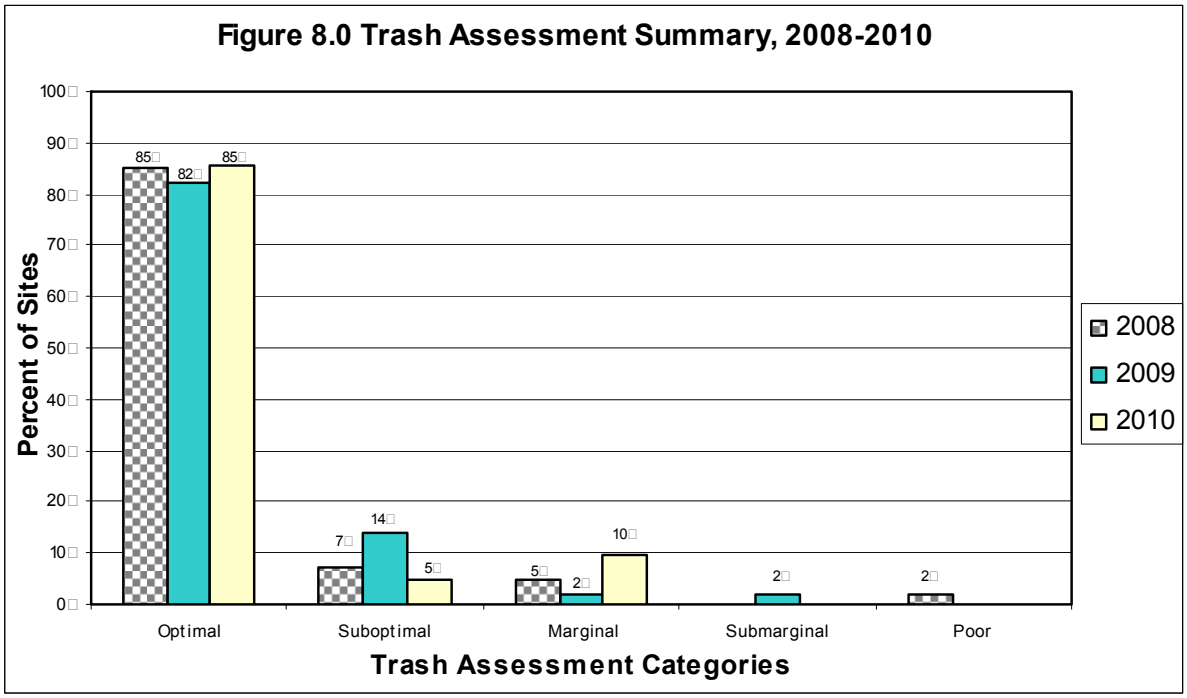

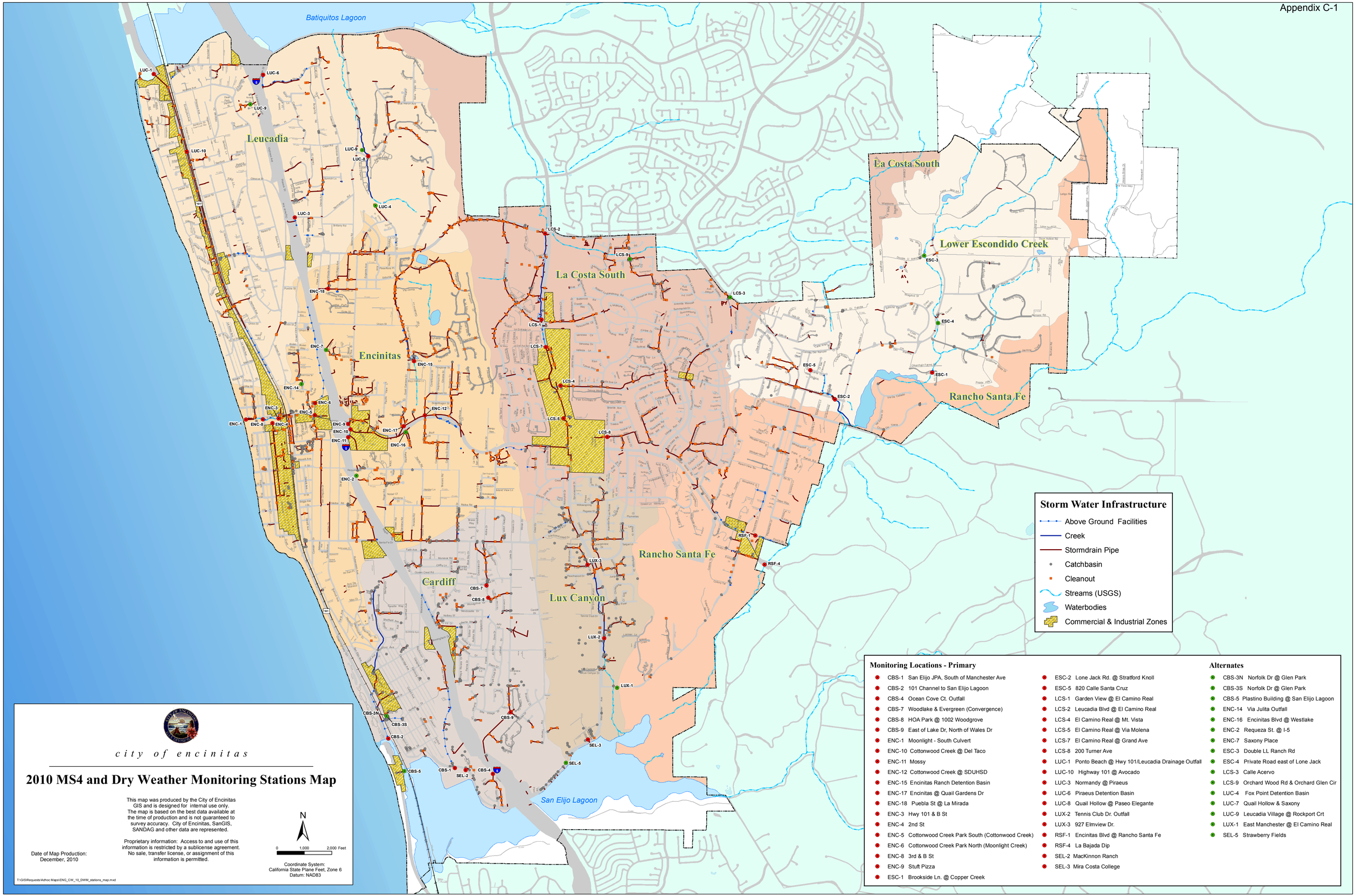
Batiquitos Lagoon
Leucadia
La Costa South
Lower Escondido Creek
Encinitas
Rancho Santa Fe
Cardiff
Lux Canyon
San Elijo Lagoon
LUC-1
LUC-6
LUC-9
LUC-10
LUC-8
LUC-4
LUC-3
LCS-2
LCS-9
LCS-3
LCS-1
LCS-7
LCS-4
LCS-5
LCS-8
ESC-3
ESC-4
ESC-5
ESC-1
ESC-2
ENC-18
ENC-7
ENC-15
ENC-14
ENC-6
ENC-3
ENC-5
ENC-1
ENC-8
ENC-4
ENC-9
ENC-10
ENC-11
ENC-12
ENC-17
ENC-16
ENC-2
RSF-1
RSF-4
LUX-3
LUX-2
LUX-1
CBS-7
CBS-8
CBS-9
CBS-3N
CBS-3S
CBS-2
CBS-5
CBS-1
SEL-2
CBS-4
SEL-3
SEL-5
Storm Water Infrastructure
Above Ground Facilities
Creek
Stormdrain Pipe
Catchbasin
Cleanout
Streams (USGS)
Waterbodies
Commercial & Industrial Zones
Monitoring Locations - Primary
CBS-1 San Elijo JPA, South of Manchester Ave
CBS-2 101 Channel to San Elijo Lagoon
CBS-4 Ocean Cove Ct. Outfall
CBS-7 Woodlake & Evergreen (Convergence)
CBS-8 HOA Park @ 1002 Woodgrove
CBS-9 East of Lake Dr, North of Wales Dr
ENC-1 Moonlight - South Culvert
ENC-10 Cottonwood Creek @ Del Taco
ENC-11 Mossy
ENC-12 Cottonwood Creek @ SDUHSD
ENC-15 Encinitas Ranch Detention Basin
ENC-17 Encinitas @ Quail Gardens Dr
ENC-18 Puebla St @ La Mirada
ENC-3 Hwy 101 & B St
ENC-4 2nd St
ENC-5 Cottonwood Creek Park South (Cottonwood Creek)
ENC-6 Cottonwood Creek Park North (Moonlight Creek)
ENC-8 3rd & B St
ENC-9 Stuft Pizza
ESC-1 Brookside Ln. @ Copper Creek
ESC-2 Lone Jack Rd. @ Stratford Knoll
ESC-5 820 Calle Santa Cruz
LCS-1 Garden View @ El Camino Real
LCS-2 Leucadia Blvd @ El Camino Real
LCS-4 El Camino Real @ Mt. Vista
LCS-5 El Camino Real @ Via Molena
LCS-7 El Camino Real @ Grand Ave
LCS-8 200 Turner Ave
LUC-1 Ponto Beach @ Hwy 101/Leucadia Drainage Outfall
LUC-10 Highway 101 @ Avocado
LUC-3 Normandy @ Piraeus
LUC-6 Piraeus Detention Basin
LUC-8 Quail Hollow @ Paseo Elegante
LUX-2 Tennis Club Dr. Outfall
LUX-3 927 Elmview Dr.
RSF-1 Encinitas Blvd @ Rancho Santa Fe
RSF-4 La Bajada Dip
SEL-2 MacKinnon Ranch
SEL-3 Mira Costa College
Alternates
CBS-3N Norfolk Dr @ Glen Park
CBS-3S Norfolk Dr @ Glen Park
CBS-5 Plastino Building @ San Elijo Lagoon
ENC-14 Via Julita Outfall
ENC-16 Encinitas Blvd @ Westlake
ENC-2 Requeza St. @ I-5
ENC-7 Saxony Place
ESC-3 Double LL Ranch Rd
ESC-4 Private Road east of Lone Jack
LCS-3 Calle Acervo
LCS-9 Orchard Wood Rd & Orchard Glen Cir
LUC-4 Fox Point Detention Basin
LUC-7 Quail Hollow & Saxony
LUC-9 Leucadia Village @ Rockport Crt
LUX-1 East Manchester @ El Camino Real
SEL-5 Strawberry Fields
city of encinitas
2010 MS4 and Dry Weather Monitoring Stations Map
This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.
Proprietary information: Access to and use of this information is restricted by a sublicense agreement. No sale, transfer license, or assignment of this information is permitted.
Date of Map Production: December, 2010
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Coordinate System: California State Plane Feet, Zone 6 Datum: NAD83
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San Diego Stormwater Copermittees

Dry Weather Monitoring Field Datasheet

Print Date: 12/8/2010

Report for Site: CBS-1

Site Description:

				Station	MS4
Location	SEJPA Outfall				
		LandUse	Residential	Copermittee	EN
Latitude	33.01	LandUse_2	Industrial		
Longitude	-117.27	Convey_Type	Concrete Channel	Watershed	904.61

Field Observation:

Date	11-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	2:21 pm	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	None	Vegetation	Normal
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Ammonia (NH3-N)	0.49	mg/L
Nitrate (NO3-N)	3.6433	mg/L
Dissolved oxygen	7.36	mg/L
Conductivity	4.4	mS/cm
Orthophosphate (PO4-P)	0.0749	mg/L
pH	8.09	pH unit
Temperature	21.4	C
Turbidity	8	NTU
MBAS	0.35	mg/L

Lab Results

Enterococcus	1,400.00	CFU/100 mL
Fecal Coliform	2,900.00	CFU/100 mL
Total Coliform	3,200.00	CFU/100 mL

Print Date: 12/8/2010

Trash Assessment:

StationID	CBS-1	**Overall Rating (Amount and Extent)**	optimal
Date	11-Aug-2010	Previous Assmet.Rating	optimal
Time	2:21 pm	Comments	
Station Type	MS4		
Estimated Area Length	10.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station CBS-1

Print Date: 12/8/2010

Report for Site: CBS-2

Site Description:

				Station	MS4
Location	Hwy 101 Channel □ San Elijo Lagoon Outlet	LandUse	Commercial	Copermittee	EN
Latitude	33.02	LandUse_2	Residential		
Longitude	-117.28	Convey_Type	Concrete Channel	Watershed	904.61

Field Observation:

Date	26-Jul-2010
Time	2:45 pm
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Overcast
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

Significant amounts of plastic debris and trash in storm drain. Ask PW to clean out.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Limited
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	1.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
pH	7.45	pH unit
Orthophosphate (PO4-P)	0	mg/L
Conductivity	5.04	mS/cm
MBAS	0.25	mg/L
Nitrate (NO3-N)	1.32	mg/L
Ammonia (NH3-N)	0.25	mg/L
Turbidity	13.5	NTU
Temperature	22.18	□C

Lab Results

Ammonia	ND	mg/L
Conductivity	5,040.00	umhos/cm
Enterococcus	800.00	CFU/100 mL
Fecal Coliform	16,000.00	CFU/100 mL
MBAS	0.10	mg/L
MBAS	0.10	mg/L
Nitrate as N	2.61	mg/L
Ortho Phosphate as PO4	ND	mg/L
Total Coliform	26,200.00	CFU/100 mL
Turbidity	1.73	NTU

Field Observation:

Date	28-Jul-2010
Time	2:45 pm
Observer	MM
SampleEventType	Confirmation

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

Significant amounts of trash in storm drain. Ask PW to clean out.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Limited
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	1.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Dissolved oxygen	7.45	mg/L
Conductivity	6.54	mS/cm
Temperature	27.53	C
Turbidity	14.7	NTU
pH	9.36	pH unit

Lab Results

Fecal Coliform	6,650.00	CFU/100 mL

Field Observation:

Date	09-Aug-2010
Time	11:00 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Sunny
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

Lab samples only

Runoff Characteristics

Odor	Deposits
Color	Vegetation
Clarity	Biology
Floatables	

Conveyance Conditions

Flow Rate	1.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
pH	8.01	pH unit
Turbidity	3.4	NTU
Conductivity	5.86	mS/cm
Dissolved oxygen	6.73	mg/L
Temperature	27.28	C

Print Date: 12/8/2010

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.02	mg/L
Diazinon	ND	ug/L
Hardness, Total as CaCO3	830.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Zinc, Diss	0.01	mg/L

Trash Assessment:

StationID	CBS-2	**Overall Rating (Amount and Extent)**	marginal
Date	26-Jul-2010	Previous Assmet.Rating	suboptimal
Time	11:00 am	Comments	
Station Type	MS4		
Estimated Area Length	40.00		
Estimated Area Width	10.00		

Threat to Human Health No Threat to Aquatic Health No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station CBS-2

Print Date: 12/8/2010

Report for Site: CBS-4

Site Description:

				Station	MS4
Location	Cardiff Cove				
		LandUse	Residential	Copermittee	EN
Latitude	33.01	LandUse_2	None		
Longitude	-117.27	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	26-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	1:45 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Coarse particulate
Color	None	Vegetation	None
Clarity	Clear	Biology	Algae
Floatables	None		

Conveyance Conditions

Flow Rate	1.50	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Turbidity	15.5	NTU
Nitrate (NO3-N)	2.9	mg/L
pH	7.88	pH unit
Orthophosphate (PO4-P)	0.06	mg/L
Dissolved oxygen	5.95	mg/L
Ammonia (NH3-N)	0.19	mg/L
Conductivity	7.31	mS/cm
MBAS	0.75	mg/L
Temperature	24.42	C

Lab Results

Ammonia	ND	mg/L
Conductivity	7,290.00	umhos/cm
Enterococcus	300.00	CFU/100 mL
Fecal Coliform	200.00	CFU/100 mL
MBAS	0.07	mg/L
MBAS	0.07	mg/L
Nitrate as N	3.92	mg/L
Ortho Phosphate as PO4	ND	mg/L
Total Coliform	2,600.00	CFU/100 mL
Turbidity	4.35	NTU

Print Date: 12/8/2010

Trash Assessment:

StationID	CBS-4	**Overall Rating (Amount and Extent)**	optimal
Date	26-Jul-2010	Previous Assmet.Rating	optimal
Time	1:45 pm	Comments	
Station Type	MS4		
Estimated Area Length	20.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station CBS-4

Print Date: 12/8/2010

Report for Site: CBS-7

Site Description:

				Station	MS4
Location	Woodlake and Evergreen				
		LandUse	Residential	Copermittee	EN
Latitude	33.03	LandUse_2	Commercial		
Longitude	-117.28	Convey_Type	Concrete Channel	Watershed	904.61

Field Observation:

Date	26-Jul-2010	**Atmospheric Conditions**	
Time	2:55 pm	Weather	Partly cloudy
Observer	MM	Tide	NA
SampleEventType	Field Screening	Last Rain	72 hours
		Rainfall	None

Comments

Visible red/iron discharge in storm drain channel.

Runoff Characteristics

Odor	Musty	Deposits	Coarse particulate
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	0.87	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Orthophosphate (PO4-P)	0.15	mg/L
pH	6.81	pH unit
Ammonia (NH3-N)	0.21	mg/L
Conductivity	2.01	mS/cm
MBAS	0.4	mg/L
Temperature	21.1	C
Turbidity	13.3	NTU
Nitrate (NO3-N)	0.11	mg/L
Dissolved oxygen	6.55	mg/L

Lab Results

Enterococcus	200.00	CFU/100 mL
Fecal Coliform	800.00	CFU/100 mL
Total Coliform	1,600.00	CFU/100 mL

Print Date: 12/8/2010

Trash Assessment:

StationID	CBS-7	**Overall Rating (Amount and Extent)**	optimal
Date	26-Jul-2010	Previous Assmet.Rating	optimal
Time	2:55 pm	Comments	
Station Type	MS4		
Estimated Area Length	100.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station CBS-7

Print Date: 12/8/2010

Report for Site: CBS-8

Site Description:

				Station	MS4
Location	HOA Park at 1002 Woodgrove				
		LandUse	Residential	Copermittee	EN
Latitude	33.03	LandUse_2	Parks		
Longitude	-117.27	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	28-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	10:52 am	Weather	Overcast	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	0.86	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Nitrate (NO3-N)	0.68	mg/L
Ammonia (NH3-N)	0.16	mg/L
Dissolved oxygen	8.52	mg/L
Conductivity	2	mS/cm
MBAS	0.25	mg/L
Orthophosphate (PO4-P)	0.76	mg/L
pH	8.03	pH unit
Turbidity	13.3	NTU
Temperature	21.14	oC

Print Date: 12/8/2010

Trash Assessment:

StationID	CBS-8	**Overall Rating (Amount and Extent)**	optimal
Date	28-Jul-2010	Previous Assmet.Rating	optimal
Time	10:52 am	Comments	
Station Type	MS4		
Estimated Area Length	100.00		
Estimated Area Width			

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station CBS-8

Print Date: 12/8/2010

Report for Site: CBS-9

Site Description:

				Station	MS4
Location	Lake Dr and Wales				
		LandUse	Residential	Copermittee	
Latitude	33.08	LandUse_2	None		
Longitude	-117.30	Convey_Type	Catch Basin	Watershed	904.61

Field Observation:

Date	28-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	2:32 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	Insects
Floatables	Other		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit
Nitrate (NO3-N)	11.3	mg/L
pH	8.54	pH unit
Ammonia (NH3-N)	0.1	mg/L
Conductivity	2.68	mS/cm
Temperature	26.81	C
Dissolved oxygen	7.43	mg/L
MBAS	0.6	mg/L
Turbidity	6.4	NTU
Orthophosphate (PO4-P)	0.5	mg/L

Print Date: 12/8/2010

Field Observation:

Date	29-Sep-2010
Time	2:32 pm
Observer	MM
SampleEventType	Confirmation

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

Storm drain box was dry. No Sample was taken.

Runoff Characteristics

Odor	Deposits
Color	Vegetation
Clarity	Biology
Floatables	

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	No
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit

Trash Assessment:

StationID	CBS-9	**Overall Rating (Amount and Extent)**	optimal
Date	28-Sep-2010	Previous Assmet.Rating	optimal
Time	2:32 pm	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station CBS-9

Print Date: 12/8/2010

Report for Site: ENC-1

Site Description:

				Station	MS4
Location	Moonlight Beach				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.30	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	02-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	1:53 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Coarse particulate
Color	None	Vegetation	None
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	30.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
MBAS	0.6	mg/L
Orthophosphate (PO4-P)	0.06	mg/L
Nitrate (NO3-N)	11.3	mg/L
Ammonia (NH3-N)	0.15	mg/L
Temperature	24.14	C
Turbidity	1.5	NTU
Dissolved oxygen	4.5	mg/L
Conductivity	5	mS/cm
pH	7.62	pH unit

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	ND	mg/L
Diazinon	ND	ug/L
Enterococcus	200.00	CFU/100 mL
Fecal Coliform	1,300.00	CFU/100 mL
Hardness, Total as CaCO3	1,180.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	4,900.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-1	**Overall Rating (Amount and Extent)**	optimal
Date	02-Aug-2010	Previous Assmet.Rating	optimal
Time	1:53 pm	Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-1

Print Date: 12/8/2010

Report for Site: ENC-10

Site Description:

				Station	MS4
Location	Cottonwood Creek □ Del Taco				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.29	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	16-Aug-2010
Time	10:16 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

Active encampments at this location- a couple living in a tent with a dog.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	7.50	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
MBAS	0.65	mg/L
Temperature	20.31	□C
Conductivity	2.73	mS/cm
Dissolved oxygen	8.54	mg/L
Ammonia (NH3-N)	0.27	mg/L
pH	7.43	pH unit
Turbidity	8.4	NTU
Nitrate (NO3-N)	□1.13	mg/L
Orthophosphate (PO4-P)	0.4596	mg/L

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	3,900.00	CFU/100 mL
Fecal Coliform	5,800.00	CFU/100 mL
Hardness, Total as CaCO3	610.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	23,000.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-10	**Overall Rating (Amount and Extent)**	Marginal
Date	16-Aug-2010	Previous Assmet.Rating	Submarginal
Time	10:16 am	Comments	
Station Type	MS4		
Estimated Area Length	40.00		
Estimated Area Width	20.00		

Threat to Human Health No Threat to Aquatic Health No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-10

Print Date: 12/8/2010

Report for Site: ENC-11

Site Description:

				Station	MS4
Location	Requeza Channel- West of PW Yard	LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	16-Aug-2010
Time	11:05 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

Excessive algal growth downstream from outfall.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	2.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Conductivity	7.62	mS/cm
pH	7.42	pH unit
MBAS	0.9	mg/L
Dissolved oxygen	8.21	mg/L
Turbidity	0.5	NTU
Orthophosphate (PO4-P)	0.0032	mg/L
Nitrate (NO3-N)	11.3	mg/L
Ammonia (NH3-N)	0.65	mg/L
Temperature	20.41	C

Lab Results

Enterococcus	200.00	CFU/100 mL
Fecal Coliform	1,500.00	CFU/100 mL
Total Coliform	3,500.00	CFU/100 mL

Print Date: 12/8/2010

Field Observation:

Date	18-Aug-2010
Time	2:30 pm
Observer	MM
SampleEventType	Confirmation

Atmospheric Conditions

Weather	Sunny
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

Historical exceedance for nitrate. Conductivity is also high at this location.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	2.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Turbidity	1	NTU
Conductivity	7.32	mS/cm
Dissolved oxygen	8.22	mg/L
Nitrate (NO3-N)	11.3	mg/L
Temperature	23.16	C
pH	7.48	pH unit

Trash Assessment:

StationID	ENC-11	**Overall Rating (Amount and Extent)**	Optimal
Date	16-Aug-2010	Previous Assmet.Rating	Optimal
Time	11:05 am	Comments	
Station Type	MS4		
Estimated Area Length	20.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-11

Print Date: 12/8/2010

Report for Site: ENC-12

Site Description:

				Station	MS4
Location	Encinitas Blvd SDUHSD				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	Commercial		
Longitude	-117.28	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	30-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	10:00 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Coarse particulate
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	Insects
Floatables	Trash Other		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Turbidity	4.3	NTU
Conductivity	1.56	mS/cm
MBAS	0.4	mg/L
Nitrate (NO3-N)	3	mg/L
Orthophosphate (PO4-P)	0.7628	mg/L
Temperature	23.29	C
Ammonia (NH3-N)	0.19	mg/L
pH	8.39	pH unit

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-12	**Overall Rating (Amount and Extent)**	Suboptimal
Date	30-Aug-2010	Previous Assmet.Rating	Optimal
Time	10:00 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-12

Print Date: 12/8/2010

Report for Site: ENC-15

Site Description:

				Station	MS4
Location	Encinitas Ranch Detention Basin				
		LandUse	Residential	Copermittee	EN
Latitude	33.06	LandUse_2	Commercial		
Longitude	-117.28	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	09-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	2:15 pm	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Normal
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	8.20	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Dissolved oxygen	5.6	mg/L
Conductivity	2.75	mS/cm
Ammonia (NH3-N)	0.21	mg/L
Orthophosphate (PO4-P)	0.7889	mg/L
Temperature	23.89	C
pH	7.56	pH unit
Nitrate (NO3-N)	0.1941	mg/L
Turbidity	1.9	NTU
MBAS	0.15	mg/L

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	600.00	CFU/100 mL
Fecal Coliform	1,200.00	CFU/100 mL
Hardness, Total as CaCO3	670.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	2,200.00	CFU/100 mL
Zinc, Diss	0.03	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-15	**Overall Rating (Amount and Extent)**	suboptimal
Date	09-Aug-2010	Previous Assmet.Rating	optimal
Time	2:15 pm	Comments	
Station Type	MS4		
Estimated Area Length	10.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-15

Print Date: 12/8/2010

Report for Site: ENC-17

Site Description:

				Station	MS4
Location	Sunshine Gardens (NE Corner of Enc Blvd and Quail Gardens Dr)	LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Commercial		
Longitude	-117.28	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	30-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	9:20 am	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Coarse
Color	Brown	Vegetation	None
Clarity	Slightly Cloudy	Biology	Insects
Floatables	Trash□Other		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
MBAS	0.75	mg/L
Turbidity	62.2	NTU
Conductivity	0.17	mS/cm
Temperature	22.01	□C
Orthophosphate (PO4-P)	1.0269	mg/L
pH	8.24	pH unit
Ammonia (NH3-N)	0.41	mg/L
Nitrate (NO3-N)	2.43	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-17	**Overall Rating (Amount and Extent)**	Optimal
Date	30-Aug-2010	Previous Assmet.Rating	Optimal
Time	9:20 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-17

Print Date: 12/8/2010

Report for Site: ENC-18

Site Description:

				Station	MS4
Location	Puebla St and La Mirada St				
		LandUse	Residential	Copermittee	EN
Latitude	33.06	LandUse_2	None		
Longitude	-117.29	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	30-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	10:45 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	None	Vegetation	None
Clarity	Clear	Biology	Insects
Floatables	Other		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
pH	7.91	pH unit
MBAS	0.9	mg/L
Conductivity	5.71	mS/cm
Orthophosphate (PO4-P)	1.1279	mg/L
Turbidity	17.9	NTU
Ammonia (NH3-N)	0.96	mg/L
Temperature	22.28	C
Nitrate (NO3-N)	4.29	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-18	**Overall Rating (Amount and Extent)**	Optimal
Date	30-Aug-2010	Previous Assmet.Rating	Optimal
Time	10:45 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-18

Print Date: 12/8/2010

Report for Site: ENC-3

Site Description:

				Station	Both
Location	Pacific Coast Hwy and B St				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	04-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	9:30 am	Weather	Overcast	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	125.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Conductivity	5	mS/cm
Ammonia (NH3-N)	0.11	mg/L
Nitrate (NO3-N)	11.3	mg/L
MBAS	0.75	mg/L
Turbidity	4.8	NTU
Orthophosphate (PO4-P)	0.0163	mg/L
pH	7.19	pH unit
Dissolved oxygen	8.44	mg/L
Temperature	20.63	C

Lab Results

Enterococcus	400.00	CFU/100 mL
Fecal Coliform	3,200.00	CFU/100 mL
Total Coliform	17,400.00	CFU/100 mL

Print Date: 12/8/2010

Field Observation:

Date	05-Aug-2010	**Atmospheric Conditions**	**Comments**
Time	9:25 am	Weather	Overcast
Observer	MM	Tide	NA
SampleEventType	Confirmation	Last Rain	72 hours
		Rainfall	None

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	125.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Turbidity	3.1	NTU
Conductivity	2.82	mS/cm
Dissolved oxygen	8.44	mg/L
pH	6.57	pH unit
Temperature	20.72	C

Trash Assessment:

StationID	ENC-3	**Overall Rating (Amount and Extent)**	optimal
Date	04-Aug-2010	Previous Assmet.Rating	optimal
Time	9:30 am	Comments	
Station Type	Both		
Estimated Area Length	50.00		
Estimated Area Width	30.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-3

Print Date: 12/8/2010

Report for Site: ENC-4

Site Description:

				Station	MS4
Location	Second St				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.30	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	02-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	2:55 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	None	Vegetation	None
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Temperature	20.9	C
pH	8.04	pH unit
Ammonia (NH3-N)	0.02	mg/L
Conductivity	1.46	mS/cm
Dissolved oxygen	8.16	mg/L
Nitrate (NO3-N)	0.93	mg/L
Orthophosphate (PO4-P)	0.22	mg/L
Turbidity	1.9	NTU
MBAS	0.4	mg/L

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	100.00	CFU/100 mL
Fecal Coliform	1,300.00	CFU/100 mL
Hardness, Total as CaCO3	410.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	8,300.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-4	**Overall Rating (Amount and Extent)**	optimal
Date	02-Aug-2010	Previous Assmet.Rating	optimal
Time	2:55 pm	Comments	
Station Type	MS4		
Estimated Area Length	10.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-4

Print Date: 12/8/2010

Report for Site: ENC-5

Site Description:

				Station	Both
Location	Cottonwood Creek Park South				
		LandUse	Commercial	Copermittee	EN
Latitude	33.02	LandUse_2	Parks		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	28-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	1:20 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Coarse & Fine
Color	Yellow	Vegetation	Limited
Clarity	Clear	Biology	Insect & Algae
Floatables	Bubbles/Foam		

Conveyance Conditions

Flow Rate	10.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
MBAS	0.5	mg/L
pH	8.07	pH unit
Dissolved oxygen	9.05	mg/L
Conductivity	1.5	mS/cm
Orthophosphate (PO4-P)	0.3	mg/L
Temperature	22.95	oC
Turbidity	25.9	NTU
Ammonia (NH3-N)	0.26	mg/L
Nitrate (NO3-N)	3.16	mg/L

Lab Results

Enterococcus	600.00	CFU/100 mL
Fecal Coliform	1,300.00	CFU/100 mL
Total Coliform	2,900.00	CFU/100 mL

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-5	**Overall Rating (Amount and Extent)**	optimal
Date	28-Jul-2010	Previous Assmet.Rating	optimal
Time	1:20 pm	Comments	
Station Type	Both		
Estimated Area Length			
Estimated Area Width			

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-5

Print Date: 12/8/2010

Report for Site: ENC-6

Site Description:

				Station	MS4
Location	Moonlight Creek				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	28-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	11:40 am	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Conductivity	7.02	mS/cm
pH	7.34	pH unit
Temperature	23.26	oC
Turbidity	12.9	NTU
Orthophosphate (PO4-P)	0.08	mg/L
Dissolved oxygen	9.29	mg/L
MBAS	1	mg/L
Ammonia (NH3-N)	0.14	mg/L
Nitrate (NO3-N)	11.3	mg/L

Lab Results

Enterococcus	400.00	CFU/100 mL
Fecal Coliform	400.00	CFU/100 mL
Total Coliform	800.00	CFU/100 mL

Field Observation:

Date	30-Jul-2010	**Atmospheric Conditions**	**Comments**
Time	9:30 am	Weather	Overcast
Observer	MM	Tide	NA
SampleEventType	Confirmation	Last Rain	72 hours
		Rainfall	None

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
MBAS	1.25	mg/L
Conductivity	7.06	mS/cm
Nitrate (NO3-N)	11.3	mg/L
Temperature	19.56	C
Turbidity	13.3	NTU
pH	6.43	pH unit
Dissolved oxygen	12.7	mg/L

Field Observation:

Date	02-Aug-2010	**Atmospheric Conditions**	**Comments**
Time	1:08 pm	Weather	Partly cloudy
Observer	MM	Tide	NA
SampleEventType	ICID	Last Rain	72 hours
		Rainfall	None

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
pH	7.03	pH unit
Temperature	20.98	C
Dissolved oxygen	6.86	mg/L
Turbidity	0.7	NTU

Print Date: 12/8/2010

Conductivity	7.01	mS/cm

Lab Results

MBAS	ND	mg/L

Trash Assessment:

StationID	ENC-6	**Overall Rating (Amount and Extent)**	optimal
Date	28-Jul-2010	Previous Assmet.Rating	suboptimal
Time	1:08 pm	Comments	
Station Type	MS4		
Estimated Area Length			
Estimated Area Width			

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-6

Print Date: 12/8/2010

Report for Site: ENC-6B

Site Description:

				Station	MS4
Location	Moonlight Creek				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.29	Convey_Type	Concrete Channel	Watershed	904.51

Field Observation:

Date	02-Aug-2010
Time	12:00 pm
Observer	MM
SampleEventType	ICID

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

ENC-6B sample was taken upstream of ENC-6 from concrete channel.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit
pH	7.19	pH unit
Conductivity	6.86	mS/cm
Turbidity	0.2	NTU
Dissolved oxygen	6.31	mg/L
Temperature	20.62	C
MBAS	1.25	mg/L

Trash Assessment:

End of Report for station ENC-6B

Print Date: 12/8/2010

Report for Site: ENC-6C

Site Description:

				Station	MS4
Location	Moonlight Creek				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	02-Aug-2010
Time	12:35 pm
Observer	MM
SampleEventType	ICID

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

ENC-6C sample was taken upstream of ENC-6B.

Runoff Characteristics

Odor	None	Deposits	None
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
MBAS	1	mg/L
Temperature	20.4	C
Dissolved oxygen	7.21	mg/L
Conductivity	6.57	mS/cm
pH	7.29	pH unit
Turbidity	10.5	NTU

Trash Assessment:

End of Report for station ENC-6C

Print Date: 12/8/2010

Report for Site: ENC-8

Site Description:

				Station	MS4
Location	Third St and B St				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.30	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	21-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	2:44 pm	Weather	Overcast	algae chunks in stormwater sample
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	0.1"	

Runoff Characteristics

Odor	Musty	Deposits	Coarse particulate
Color	None	Vegetation	Limited
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	78.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
MBAS	0.041	mg/L
Dissolved oxygen	6.04	mg/L
Temperature	21.46	C
pH	7.86	pH unit
Turbidity	2.66	NTU
Nitrate (NO3-N)	23.84	mg/L
Ammonia (NH3-N)	0.11	mg/L
Conductivity	4.94	mS/cm
Orthophosphate (PO4-P)	0.13	mg/L

Lab Results

Ammonia	ND	mg/L
Conductivity	4,940.00	umhos/cm
Enterococcus	100.00	CFU/100 mL
Fecal Coliform	ND	CFU/100 mL
MBAS	0.04	mg/L
Nitrate as N	23.84	mg/L
Ortho Phosphate as PO4	0.45	mg/L
Total Coliform	1,800.00	CFU/100 mL
Turbidity	2.66	NTU

Print Date: 12/8/2010

Field Observation:

Date	22-Jul-2010	**Atmospheric Conditions**	**Comments**
Time	2:44 pm	Weather	Overcast
		Tide	NA
Observer	MM	Last Rain	72 hours
SampleEventType	Confirmation	Rainfall	0.1"

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	78.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Temperature	21.61	C
Turbidity	1.5	NTU
pH	6.97	pH unit
Nitrate (NO3-N)	11.3	mg/L
Dissolved oxygen	5.9	mg/L
Conductivity	5.05	mS/cm

Trash Assessment:

StationID	ENC-8	**Overall Rating (Amount and Extent)**	optimal
Date	21-Jul-2010	Previous Assmet.Rating	optimal
Time	2:44 pm	Comments	
Station Type	MS4		
Estimated Area Length	50.00		
Estimated Area Width	30.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-8

Print Date: 12/8/2010

Report for Site: ENC-9

Site Description:

				Station	MS4
Location	Enc. Blvd □ Saxony Rd				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.29	Convey_Type	Concrete Channel	Watershed	904.51

Field Observation:

Date	01-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	11:00 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Coarse
Color	Yellow	Vegetation	Limited
Clarity	Clear	Biology	Insects
Floatables	Trash		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit
pH	8.16	pH unit
Orthophosphate (PO4-P)	0.39	mg/L
Turbidity	2.9	NTU
Nitrate (NO3-N)	□1.13	mg/L
MBAS	0.6	mg/L
Conductivity	1.78	mS/cm
Temperature	25.71	□C
Ammonia (NH3-N)	0.2	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-9	**Overall Rating (Amount and Extent)**	marginal
Date	01-Sep-2010	Previous Assmet.Rating	optimal
Time	11:00 am	Comments	
Station Type	MS4		
Estimated Area Length	40.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ENC-9

Print Date: 12/8/2010

Report for Site: ESC-1

Site Description:

				Station	MS4
Location	Brookside Ln □ Copper Creek				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	Open		
Longitude	-117.22	Convey_Type	Natural Creek	Watershed	904.61

Field Observation:

Date	21-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	11:35 am	Weather	Overcast	
		Tide	NA	
Observer	MM	Last Rain	□72 hours	
SampleEventType	Field Screening	Rainfall	□0.1"	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Normal
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	208.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Nitrate (NO3-N)	0.02	mg/L
MBAS	0.25	mg/L
Conductivity	3.38	mS/cm
Turbidity	2	NTU
Temperature	19.99	□C
pH	8.21	pH unit
Orthophosphate (PO4-P)	0.04	mg/L
Ammonia (NH3-N)	0.1	mg/L
Dissolved oxygen	4.66	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ESC-1	**Overall Rating (Amount and Extent)**	optimal
Date	21-Jul-2010	Previous Assmet.Rating	optimal
Time	11:35 am	Comments	
Station Type	MS4		
Estimated Area Length			
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ESC-1

Print Date: 12/8/2010

Report for Site: ESC-2

Site Description:

				Station	MS4
Location	Lone Jack Rd □ Stratford Knoll				
		LandUse	Residential	Copermittee	EN
Latitude	33.41	LandUse_2	Residential		
Longitude	-117.23	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	21-Jul-2010
Time	12:33 pm
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Overcast
Tide	NA
Last Rain	□72 hours
Rainfall	□0.1"

Comments

Sampled from a ponded area with excessive algal and plant growth.

Runoff Characteristics

Odor	Rotten eggs	Deposits	Fine particulate
Color	Brown	Vegetation	Excessive
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
pH	7.64	pH unit
Conductivity	8.23	mS/cm
Dissolved oxygen	5.53	mg/L
Nitrate (NO3-N)	0.466	mg/L
Ammonia (NH3-N)	0.6	mg/L
MBAS	0.078	mg/L
Turbidity	45.7	NTU
Temperature	22.85	□C
Orthophosphate (PO4-P)	0.11	mg/L

Lab Results

Ammonia	ND	mg/L
Conductivity	8,230.00	umhos/cm
MBAS	0.08	mg/L
Nitrate as N	0.47	mg/L
Ortho Phosphate as PO4	0.09	mg/L
Turbidity	45.70	NTU

Print Date: 12/8/2010

Trash Assessment:

StationID	ESC-2	**Overall Rating (Amount and Extent)**	optimal
Date	21-Jul-2010	Previous Assmet.Rating	optimal
Time	12:33 pm	Comments	
Station Type	MS4		
Estimated Area Length	50.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ESC-2

Print Date: 12/8/2010

Report for Site: ESC-5

Site Description:

				Station	MS4
Location	872 Chelsea				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.23	Convey_Type	Manhole	Watershed	904.61

Field Observation:

Date	01-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	9:15 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Coarse
Color	None	Vegetation	None
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	No
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
Nitrate (NO3-N)	1.13	mg/L
Turbidity	2.6	NTU
Conductivity	2.78	mS/cm
MBAS	0.15	mg/L
pH	7.16	pH unit
Ammonia (NH3-N)	0.1	mg/L
Orthophosphate (PO4-P)	0.21	mg/L
Temperature	21.61	C

Print Date: 12/8/2010

Trash Assessment:

StationID	ESC-5	**Overall Rating (Amount and Extent)**	Optimal
Date	01-Sep-2010	Previous Assmet.Rating	Optimal
Time	9:15 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station ESC-5

Print Date: 12/8/2010

Report for Site: LCS-1

Site Description:

				Station	MS4
Location	Garden View □ ECR				
		LandUse	Commercial	Copermittee	EN
Latitude	33.06	LandUse_2	Residential		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	09-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	1:04 pm	Weather	Sunny	A lot of mosquitos. Contact vector control.
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Limited
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
MBAS	0.4	mg/L
Nitrate (NO3-N)	0.6794	mg/L
Turbidity	16.4	NTU
Orthophosphate (PO4-P)	0.0619	mg/L
Temperature	20.62	□C
Ammonia (NH3-N)	0.91	mg/L
Dissolved oxygen	4.92	mg/L
Conductivity	3.55	mS/cm
pH	7.32	pH unit

Lab Results

Cadmium, Diss	0.00	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	700.00	CFU/100 mL
Fecal Coliform	1,200.00	CFU/100 mL
Hardness, Total as CaCO3	750.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	5,100.00	CFU/100 mL
Zinc, Diss	0.03	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-1	**Overall Rating (Amount and Extent)**	optimal
Date	09-Aug-2010	Previous Assmet.Rating	optimal
Time	1:04 pm	Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LCS-1

Print Date: 12/8/2010

Report for Site: LCS-2

Site Description:

				Station	MS4
Location	Leucadia Blvd □ ECR				
		LandUse	Commercial	Copermittee	EN
Latitude	33.07	LandUse_2	Commercial		
Longitude	-117.26	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	19-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	1:47 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Rotten eggs	Deposits	None
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	200.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
pH	7.55	pH unit
Orthophosphate (PO4-P)	0.25	mg/L
Turbidity	1.6	NTU
Temperature	23.07	□C
Nitrate (NO3-N)	0.64	mg/L
Conductivity	2.48	mS/cm
Ammonia (NH3-N)	0.2	mg/L
MBAS	0.35	mg/L
Dissolved oxygen	7.14	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-2	**Overall Rating (Amount and Extent)**	optimal
Date	19-Jul-2010	Previous Assmet.Rating	suboptimal
Time		Comments	
Station Type	MS4		
Estimated Area Length	20.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LCS-2

Print Date: 12/8/2010

Report for Site: LCS-4

Site Description:

				Station	MS4
Location	ECR Mtn Vista (NE corner of intersection)	LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.26	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	01-Sep-2010
Time	9:55 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Sunny
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

Soft mud inside the catch basin.

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	Yellow	Vegetation	None
Clarity	Opaque	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Temperature	22.33	C
Ammonia (NH3-N)	0.65	mg/L
Conductivity	2.37	mS/cm
Orthophosphate (PO4-P)	0.05	mg/L
pH	7.2	pH unit
Turbidity	69.1	NTU
Nitrate (NO3-N)	1.13	mg/L
MBAS	0.4	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-4	**Overall Rating (Amount and Extent)**	optimal
Date	01-Sep-2010	Previous Assmet.Rating	optimal
Time	9:55 am	Comments	
Station Type	MS4		
Estimated Area Length	10.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LCS-4

Print Date: 12/8/2010

Report for Site: LCS-5

Site Description:

				Station	MS4
Location	Via Molena □ ECR				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.26	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	18-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	11:05 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	None
Floatables	Other		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
Dissolved oxygen	7.6	mg/L
Conductivity	4.15	mS/cm
MBAS	0.6	mg/L
Nitrate (NO3-N)	1.16	mg/L
Orthophosphate (PO4-P)	□0.1	mg/L
Temperature	25.8	□C
Turbidity	21.3	NTU
pH	7.7	pH unit
Ammonia (NH3-N)	0.48	mg/L

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	4,500.00	CFU/100 mL
Fecal Coliform	2,200.00	CFU/100 mL
Hardness, Total as CaCO3	750.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	8,900.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-5	**Overall Rating (Amount and Extent)**	Optimal
Date	18-Aug-2010	Previous Assmet.Rating	Optimal
Time	11:05 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LCS-5

Print Date: 12/8/2010

Report for Site: LCS-7

Site Description:

				Station	MS4
Location	ECR (South of La Entrada Lane)				
		LandUse	Commercial	Copermittee	EN
Latitude	33.06	LandUse_2	None		
Longitude	-117.26	Convey_Type	Concrete Channel	Watershed	904.51

Field Observation:

Date	19-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	11:36 am	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Other	Deposits	None
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	Insect & Algae
Floatables	Bubbles/Foam		

Conveyance Conditions

Flow Rate	61.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Orthophosphate (PO4-P)	0.13	mg/L
MBAS	0.25	mg/L
Turbidity	14.6	NTU
Temperature	22.74	C
Nitrate (NO3-N)	1.25	mg/L
Conductivity	2.81	mS/cm
Ammonia (NH3-N)	0.38	mg/L
Dissolved oxygen	5.76	mg/L
pH	7.13	pH unit

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-7	**Overall Rating (Amount and Extent)**	optimal
Date	19-Jul-2010	Previous Assmet.Rating	suboptimal
Time	11:36 am	Comments	
Station Type	MS4		
Estimated Area Length	40.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LCS-7

Print Date: 12/8/2010

Report for Site: LCS-8

Site Description:

				Station	MS4
Location	200 Turner Ave				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	Parks		
Longitude	-117.26	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	01-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	9:40 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	Yellow	Vegetation	None
Clarity	Slightly Cloudy	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	No
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
pH	7.21	pH unit
Temperature	22.25	C
Orthophosphate (PO4-P)	0.1	mg/L
Nitrate (NO3-N)	1.13	mg/L
Turbidity	19.8	NTU
Ammonia (NH3-N)	0.86	mg/L
Conductivity	3.91	mS/cm
MBAS	0.6	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-8	**Overall Rating (Amount and Extent)**	Optimal
Date	01-Sep-2010	Previous Assmet.Rating	Optimal
Time	9:40 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LCS-8

Print Date: 12/8/2010

Report for Site: LUC-1

Site Description:

				Station	MS4
Location	Ponto Beach Detention Basin				
		LandUse	Residential	Copermittee	EN
Latitude	33.08	LandUse_2	Commercial		
Longitude	-117.31	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	19-Jul-2010	**Atmospheric Conditions**		**Comments**	
Time	3:11 pm	Weather	Overcast	Biology- Crawdads	
		Tide	NA		
Observer	MM	Last Rain	72 hours		
SampleEventType	Field Screening	Rainfall	None		

Runoff Characteristics

Odor	None	Deposits	Coarse & Fine
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Other
Floatables	None		

Conveyance Conditions

Flow Rate	275.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Temperature	24.33	C
Conductivity	2.5	mS/cm
pH	7.69	pH unit
MBAS	0.25	mg/L
Nitrate (NO3-N)	11.3	mg/L
Dissolved oxygen	7.89	mg/L
Ammonia (NH3-N)	0.18	mg/L
Orthophosphate (PO4-P)	0.08	mg/L
Turbidity	0.4	NTU

Print Date: 12/8/2010

Field Observation:

Date	20-Jul-2010
Time	3:11 pm
Observer	MM
SampleEventType	Confirmation

Atmospheric Conditions

Weather	Overcast
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

Blology- Crawdads

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Normal
Clarity	Clear	Biology	Other
Floatables	None		

Conveyance Conditions

Flow Rate	270.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Dissolved oxygen	4.92	mg/L
Conductivity	2.46	mS/cm
Turbidity	0	NTU
Temperature	22.04	C
pH	7.33	pH unit
Nitrate (NO3-N)	11.3	mg/L

Trash Assessment:

StationID	LUC-1	**Overall Rating (Amount and Extent)**	optimal
Date	19-Jul-2010	Previous Assmet.Rating	optimal
Time		Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	30.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LUC-1

Print Date: 12/8/2010

Report for Site: LUC-10

Site Description:

				Station	MS4
Location	101 Avocado St				
		LandUse	Residential	Copermittee	EN
Latitude	33.08	LandUse_2	None		
Longitude	-117.31	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	28-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	9:47 am	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	None	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
MBAS	0.6	mg/L
Orthophosphate (PO4-P)	0.1	mg/L
Conductivity	2.52	mS/cm
Nitrate (NO3-N)	9.2	mg/L
Temperature	24.5	C
Turbidity	0	NTU
Ammonia (NH3-N)	0.11	mg/L
pH	7.21	pH unit
Dissolved oxygen	5.94	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LUC-10	**Overall Rating (Amount and Extent)**	Optimal
Date	28-Sep-2010	Previous Assmet.Rating	Optimal
Time	9:47 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LUC-10

Print Date: 12/8/2010

Report for Site: LUC-3

Site Description:

				Station	MS4
Location	Normandy Piraeus				
		LandUse	Residential	Copermittee	EN
Latitude	33.07	LandUse_2	Commercial		
Longitude	-117.29	Convey_Type	Concrete Channel	Watershed	904.51

Field Observation:

Date	04-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	12:35 pm	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Limited
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	7.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Turbidity	0.5	NTU
Ammonia (NH3-N)	0.07	mg/L
Conductivity	1.25	mS/cm
Dissolved oxygen	7.73	mg/L
MBAS	0.1	mg/L
Nitrate (NO3-N)	0.1286	mg/L
pH	8	pH unit
Temperature	24.89	C
Orthophosphate (PO4-P)	0.0032	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LUC-3	**Overall Rating (Amount and Extent)**	optimal
Date	04-Aug-2010	Previous Assmet.Rating	optimal
Time	12:35 pm	Comments	
Station Type	MS4		
Estimated Area Length	100.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LUC-3

Print Date: 12/8/2010

Report for Site: LUC-4 (Alt)

Site Description:

				Station	MS4
Location	Fox Point Detention Basin				
		LandUse	Residential	Copermittee	EN
Latitude	33.07	LandUse_2	Agricultural		
Longitude	-117.29	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	30-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	10:45 am	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	0.1"	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	No
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit
Orthophosphate (PO4-P)	0.1	mg/L
pH	7.6	pH unit
Conductivity	3.76	mS/cm
Dissolved oxygen	3.65	mg/L
MBAS	0.7	mg/L
Temperature	23.6	C
Nitrate (NO3-N)	1.13	mg/L
Turbidity	5.6	NTU
Ammonia (NH3-N)	0.82	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LUC-4 (Alt)	**Overall Rating (Amount and Extent)**	Optimal
Date	30-Sep-2010	Previous Assmet.Rating	Optimal
Time	10:45 am	Comments	
Station Type	MS4		
Estimated Area Length	20.00		
Estimated Area Width	40.00		

Threat to Human Health No Threat to Aquatic Health No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LUC-4 (Alt)

Print Date: 12/8/2010

Report for Site: LUC-6

Site Description:

				Station	MS4
Location	Piraeus Detention Basin				
		LandUse	Residential	Copermittee	EN
Latitude	33.08	LandUse_2	Open		
Longitude	-117.30	Convey_Type	Concrete Channel	Watershed	904.51

Field Observation:

Date	28-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	1:55 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	None	Deposits	Fine particulate
Color	Yellow	Vegetation	None
Clarity	Slightly Cloudy	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Turbidity	60.5	NTU
Dissolved oxygen	12.43	mg/L
Nitrate (NO3-N)	1.13	mg/L
pH	9.08	pH unit
Orthophosphate (PO4-P)	0.84	mg/L
Conductivity	2.63	mS/cm
Ammonia (NH3-N)	0.24	mg/L
MBAS	0.4	mg/L
Temperature	29.65	C

Print Date: 12/8/2010

Trash Assessment:

StationID	LUC-6	**Overall Rating (Amount and Extent)**	Optimal
Date	28-Sep-2010	Previous Assmet.Rating	Optimal
Time	1:55 pm	Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LUC-6

Print Date: 12/8/2010

Report for Site: LUC-8

Site Description:

				Station	MS4
Location	Quail Hollow Dr				
		LandUse	Residential	Copermittee	EN
Latitude	33.07	LandUse_2	Parks		
Longitude	-117.28	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	18-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	2:05 pm	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
Ammonia (NH3-N)	0.21	mg/L
Nitrate (NO3-N)	1.13	mg/L
MBAS	0.4	mg/L
Orthophosphate (PO4-P)	0.1304	mg/L
Temperature	25.68	C
Dissolved oxygen	7.82	mg/L
Conductivity	2.58	mS/cm
pH	7.84	pH unit
Turbidity	8.6	NTU

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	19,750.00	CFU/100 mL
Fecal Coliform	3,550.00	CFU/100 mL
Hardness, Total as CaCO3	740.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	44,000.00	CFU/100 mL
Zinc, Diss	0.03	mg/L

Print Date: 12/8/2010

Field Observation:

Date	19-Aug-2010	**Atmospheric Conditions**	**Comments**
Time	10:43 am	Weather	Sunny
Observer	MM	Tide	NA
SampleEventType	Confirmation	Last Rain	72 hours
		Rainfall	None

Runoff Characteristics

Odor	Musty	Deposits	Coarse particulate
Color	None	Vegetation	None
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
pH	8.07	pH unit
Conductivity	5.9	mS/cm
Turbidity	0.6	NTU
Temperature	22.77	C
Dissolved oxygen	7.34	mg/L

Lab Results

Enterococcus	2,800.00	CFU/100 mL

Trash Assessment:

StationID	LUC-8	**Overall Rating (Amount and Extent)**	Optimal
Date	18-Aug-2010	Previous Assmet.Rating	Optimal
Time	10:43 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LUC-8

Print Date: 12/8/2010

Report for Site: LUX-1 (Alt)

Site Description:

				Station	MS4
Location	East Manchester □ ECR				
		LandUse	Residential	Copermittee	EN
Latitude	33.03	LandUse_2	Commercial		
Longitude	-117.26	Convey_Type	Natural Creek	Watershed	904.61

Field Observation:

Date	28-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	3:21 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	Brown	Vegetation	None
Clarity	Clear	Biology	Algae
Floatables	Other		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Conductivity	3.26	mS/cm
Ammonia (NH3-N)	0.21	mg/L
MBAS	0.15	mg/L
Orthophosphate (PO4-P)	0.38	mg/L
pH	7.6	pH unit
Temperature	25.93	□C
Turbidity	49.7	NTU
Dissolved oxygen	4.05	mg/L
Nitrate (NO3-N)	□1.13	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LUX-1 (Alt)	**Overall Rating (Amount and Extent)**	Optimal
Date	28-Sep-2010	Previous Assmet.Rating	Optimal
Time	3:21 pm	Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	30.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station LUX-1 (Alt)

Print Date: 12/8/2010

Report for Site: RSF-1

Site Description:

				Station	MS4
Location	Peppertree Lane				
		LandUse	Commercial	Copermittee	EN
Latitude	33.04	LandUse_2	Residential		
Longitude	-117.24	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	11-Aug-2010
Time	10:27 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Sunny
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

Storm drain was mostly empty of water, filled primarily with decaying tree leaves. Some ponded water in the corner was sampled for a field screening analysis.

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	Yellow	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Temperature	21.99	°C
Nitrate (NO3-N)	1.1286	mg/L
Orthophosphate (PO4-P)	0.489	mg/L
Ammonia (NH3-N)	0.09	mg/L
Conductivity	1.16	mS/cm
MBAS	0.49	mg/L
Dissolved oxygen	4.75	mg/L
Turbidity	7.3	NTU
pH	7.08	pH unit

Print Date: 12/8/2010

Trash Assessment:

StationID	RSF-1	**Overall Rating (Amount and Extent)**	marginal
Date	11-Aug-2010	Previous Assmet.Rating	suboptimal
Time	10:27 am	Comments	
Station Type	MS4		
Estimated Area Length	50.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station RSF-1

Print Date: 12/8/2010

Report for Site: RSF-4

Site Description:

				Station	Receiving
Location	La Bajada Dip				
		LandUse	Residential	Copermittee	EN
Latitude	33.03	LandUse_2	Commercial		
Longitude	-117.24	Convey_Type	Natural Creek	Watershed	904.61

Field Observation:

Date	16-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	11:35 am	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit
Dissolved oxygen	5.76	mg/L
Temperature	20.4	C
Ammonia (NH3-N)	0.27	mg/L
pH	7.8	pH unit
Conductivity	2.39	mS/cm
Orthophosphate (PO4-P)	0.1	mg/L
Turbidity	2.5	NTU
Nitrate (NO3-N)	1.13	mg/L
MBAS	0.25	mg/L

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	ND	mg/L
Diazinon	ND	ug/L
Enterococcus	100.00	CFU/100 mL
Fecal Coliform	600.00	CFU/100 mL
Hardness, Total as CaCO3	640.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	2,500.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	RSF-4	**Overall Rating (Amount and Extent)**	Optimal
Date	16-Aug-2010	Previous Assmet.Rating	Suboptimal
Time	11:35 am	Comments	
Station Type	Receiving Water		
Estimated Area Length	20.00		
Estimated Area Width	50.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station RSF-4

Print Date: 12/8/2010

Report for Site: SEL-2

Site Description:

				Station	MS4
Location	Mackinnon Ranch Rd				
		LandUse	Residential	Copermittee	EN
Latitude	33.01	LandUse_2	Residential		
Longitude	-117.27	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	18-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	1:40 pm	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	Yellow	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
pH	7.14	pH unit
Nitrate (NO3-N)	□1.13	mg/L
Turbidity	37.5	NTU
Ammonia (NH3-N)	0.65	mg/L
Conductivity	6.49	mS/cm
Orthophosphate (PO4-P)	□0.1	mg/L
Dissolved oxygen	4.63	mg/L
MBAS	0.4	mg/L
Temperature	23.08	□C

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.03	mg/L
Diazinon	ND	ug/L
Enterococcus	ND	CFU/100 mL
Fecal Coliform	100.00	CFU/100 mL
Hardness, Total as CaCO3	1,920.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	500.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	SEL-2	**Overall Rating (Amount and Extent)**	optimal
Date	18-Aug-2010	Previous Assmet.Rating	optimal
Time	1:40 pm	Comments	
Station Type	MS4		
Estimated Area Length	10.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station SEL-2

Print Date: 12/8/2010

Report for Site: SEL-3

Site Description:

				Station	MS4
Location	Mira Costa College Detention Basin	LandUse	Residential	Copermittee	EN
Latitude	33.02	LandUse_2	Parks		
Longitude	-117.26	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	11-Aug-2010
Time	11:31 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Sunny
Tide	NA
Last Rain	72 hours
Rainfall	None

Comments

This site contained many fish, insects, and algae & also served as a duck pond.

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	Yellow	Vegetation	Normal
Clarity	Slightly Cloudy	Biology	Insect & Algae &
Floatables	Algae		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Temperature	24.4	C
pH	7.89	pH unit
Orthophosphate (PO4-P)	0.0358	mg/L
Nitrate (NO3-N)	1.1286	mg/L
MBAS	0.9	mg/L
Dissolved oxygen	9.13	mg/L
Conductivity	7.2	mS/cm
Ammonia (NH3-N)	0.89	mg/L
Turbidity	28.2	NTU

Lab Results

Enterococcus	200.00	CFU/100 mL
Fecal Coliform	1,900.00	CFU/100 mL
Total Coliform	2,500.00	CFU/100 mL

Print Date: 12/8/2010

Trash Assessment:

StationID	SEL-3	**Overall Rating (Amount and Extent)**	optimal
Date	11-Aug-2010	Previous Assmet.Rating	optimal
Time	11:31 am	Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	30.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route 1	Potential Source 1	Potential Route 2	Potential Source 2

End of Report for station SEL-3

CBS-2

CBS-4

CBS-7

CBS-8

CBS-9

ENC-1

ENC-3

ENC-4

ENC-5

ENC-6

ENC-8

ENC-9

ENC-10

ENC-11

ENC-15

ESC-1

ESC-2

LCS-4

LCS-7

LUC-1

LUC-3

LUC-4

LUC-6

LUX-1

LUX-2

LUX-3

SEL-3

RSF-4

Appendix C-4 2010 Dry Weather Monitoring Analytical Results

Station ID	Sample Date	Ammonia (mg/L) K-1403	Conductivity (mS/cm)	MBAS (mg/L)	Nitrate (mg/L)	Orthophosphate (mg/L)	pH (pH)	Water Temperature (oC)	Turbidity (NTU)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Hardness, Total (mg/L)	Oil & Grease (mg/L)	Chlorpyrifos (ng/L)	Diazinon (ng/L)	Total Coliform (cfu/100 ml)	Fecal Coliform (cfu/100 ml)	Enterococcus (cfu/100 ml)
CBS-1	8/11/2010	0.49	4.40	0.35	3.64	0.07	8.09	21.40	**8.00**	NT	NT	NT	NT	NT	NT	NT	NT	3200	2900	1400
CBS-2	7/26/2010	ND	**5.04**	0.25	1.32	0.00	7.45	22.18	**13.50**	NT	NT	NT	NT	NT	NT	NT	NT	26200	**16000**	800
CBS-2	7/28/2010	NT	**6.54**	NT	NT	NT	**9.36**	27.53	**14.70**	NT	NT	NT	NT	NT	NT	NT	NT	NT	6650	NT
CBS-2	8/9/2010	NT	**5.86**	NT	NT	NT	8.01	27.28	3.40	ND	0.024	ND	0.011	830	ND	ND	ND	NT	NT	NT
CBS-4	7/26/2010	ND	**7.29**	0.07	3.92	ND	7.88	24.42	4.35	NT	NT	NT	NT	NT	NT	NT	NT	2600	200	300
CBS-7	7/26/2010	0.21	2.01	0.40	0.11	0.15	6.81	21.10	**13.30**	NT	NT	NT	NT	NT	NT	NT	NT	1600	800	200
CBS-8	7/28/2010	0.16	2.00	0.25	0.68	0.76	8.03	21.14	**13.30**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-9	9/28/2010	0.10	2.68	0.60	**11.3**	0.50	8.54	26.81	**6.40**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-9	9/29/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SEL-2	8/18/2010	0.65	**6.49**	0.40	0.17	0.01	7.14	23.08	**37.50**	ND	0.026	ND	0.019	1920	ND	ND	ND	500	100	100
SEL-3	8/11/2010	0.89	**7.20**	0.90	1.13	0.04	7.89	24.40	**28.20**	NT	NT	NT	NT	NT	NT	NT	NT	2500	1900	200
ENC-1	8/2/2010	0.15	5.00	0.60	**11.3**	0.06	7.62	24.14	1.50	ND	ND	ND	0.021	1180	ND	ND	ND	4900	1300	200
ENC-3	8/4/2010	0.11	5.00	0.75	**11.3**	0.02	7.19	20.63	4.80	NT	NT	NT	NT	NT	NT	NT	NT	17400	3200	400
ENC-3	8/5/2010	NT	2.82	NT	**11.3**	NT	6.57	20.72	3.10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-4	8/2/2010	0.02	1.46	0.40	0.93	0.22	8.04	20.90	1.90	ND	0.006	ND	0.015	410	ND	ND	ND	8300	1500	100
ENC-5	7/28/2010	0.26	1.50	0.50	3.16	0.30	8.07	22.95	**25.90**	NT	NT	NT	NT	NT	NT	NT	NT	2900	1300	600
ENC-6	7/28/2010	0.14	**7.02**	**1.00**	**11.3**	0.08	7.34	23.26	**12.90**	NT	NT	NT	NT	NT	NT	NT	NT	800	400	400
ENC-6	7/30/2010	NT	**7.06**	**1.25**	**11.3**	NT	**6.43**	19.56	**13.30**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-6	8/2/2010	NT	**7.01**	**1.25**	NT	NT	7.03	20.98	0.70	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-8	7/21/2010	0.11	4.94	0.04	**23.84**	0.13	7.86	21.46	2.66	NT	NT	NT	NT	NT	NT	NT	NT	1800	100	100
ENC-8	7/22/2010	ND	**5.05**	NT	**11.3**	0.45	6.97	21.61	1.50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-9	9/1/2010	0.20	1.78	0.60	0.84	0.39	8.16	25.71	2.90	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-10	8/16/2010	0.27	2.73	0.65	0.96	0.46	7.43	20.31	**8.40**	ND	0.007	ND	0.023	610	ND	ND	ND	23000	5800	3900
ENC-11	8/16/2010	0.65	**7.62**	0.90	**11.3**	0.003	7.42	20.41	0.50	NT	NT	NT	NT	NT	NT	NT	NT	3500	1500	200
ENC-11	8/18/2010	NT	**7.32**	NT	**11.3**	NT	7.48	23.16	1.00	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-12	8/30/2010	0.19	1.56	0.40	3.00	0.76	8.39	23.29	4.30	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-15	8/9/2010	0.21	2.75	0.15	0.19	0.79	7.56	23.89	1.90	ND	0.008	ND	0.029	670	ND	ND	ND	2200	1200	600
ENC-17	8/30/2010	0.41	0.17	0.75	2.43	1.03	8.24	22.01	**62.20**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-18	8/30/2010	0.96	**5.71**	0.90	4.29	1.13	7.91	22.28	**17.90**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-1	8/9/2010	0.91	3.55	0.40	0.68	0.06	7.32	20.62	**16.40**	0.002	0.005	ND	0.028	750	ND	ND	ND	5100	1200	700
LCS-2	7/19/2010	0.20	2.48	0.35	0.64	0.25	7.55	23.04	1.60	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-4	9/1/2010	0.65	2.37	0.40	0.48	0.05	7.20	22.33	**69.10**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-5	8/18/2010	0.48	4.15	0.60	1.16	0.07	7.70	25.80	**21.30**	ND	0.012	ND	0.017	750	ND	ND	ND	8900	2200	4500
LCS-7	7/19/2010	0.38	2.81	0.25	1.25	0.13	7.13	22.74	**14.60**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-8	9/1/2010	0.86	3.91	0.60	0.69	0.03	7.21	22.25	**19.80**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	7/16/2010	0.18	2.50	0.25	**11.3**	0.08	7.69	24.33	0.40	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	7/20/2010	NT	2.46	NT	11.30	NT	7.33	22.04	0.00	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-3	8/4/2010	0.07	1.25	0.10	0.13	0.003	8.00	24.89	0.50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-4 (Alt)	9/30/2010	0.82	3.76	0.70	0.16	0.04	7.60	23.60	**5.60**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-6	9/28/2010	0.24	2.63	0.40	0.12	0.84	**9.08**	29.65	**60.50**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-8	8/18/2010	0.21	2.58	0.40	0.83	0.13	7.84	25.68	**8.60**	ND	0.007	ND	0.031	740	ND	ND	ND	44000	3550	**19750**
LUC-8	8/19/2010	NT	**5.90**	NT	NT	NT	8.07	22.77	0.60	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	2800
LUC-10	9/28/2010	0.11	2.52	0.60	9.20	0.10	7.21	24.50	0.00	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-1	7/21/2010	0.10	3.38	0.25	0.02	0.04	8.21	19.99	2.00	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-2	7/21/2010	ND	**8.23**	0.08	0.47	0.09	7.64	22.85	**45.70**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-5	9/1/2010	0.10	2.78	0.15	0.05	0.21	7.16	21.61	2.60	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUX-1 (Alt)	9/28/2010	0.21	3.26	0.15	0.23	0.38	7.60	25.93	**49.70**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUX-2	9/28/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LUX-3	9/1/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RSF-1	8/11/2010	0.09	1.16	0.50	1.13	0.49	7.08	21.99	**7.30**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
RSF-4	8/16/2010	0.27	2.39	0.25	0.12	0.10	7.80	20.40	2.50	ND	ND	ND	0.021	640	ND	ND	ND	2500	600	100

Notes :

ND	Indicates Analyte was Not Detected above the reporting limit
NS	Indicates No Sample was taken
NT	Indicates analyte was Not Tested at that site
E	Indicates associated value is an estimate
Bold	Indicates value exceeded Action Levels

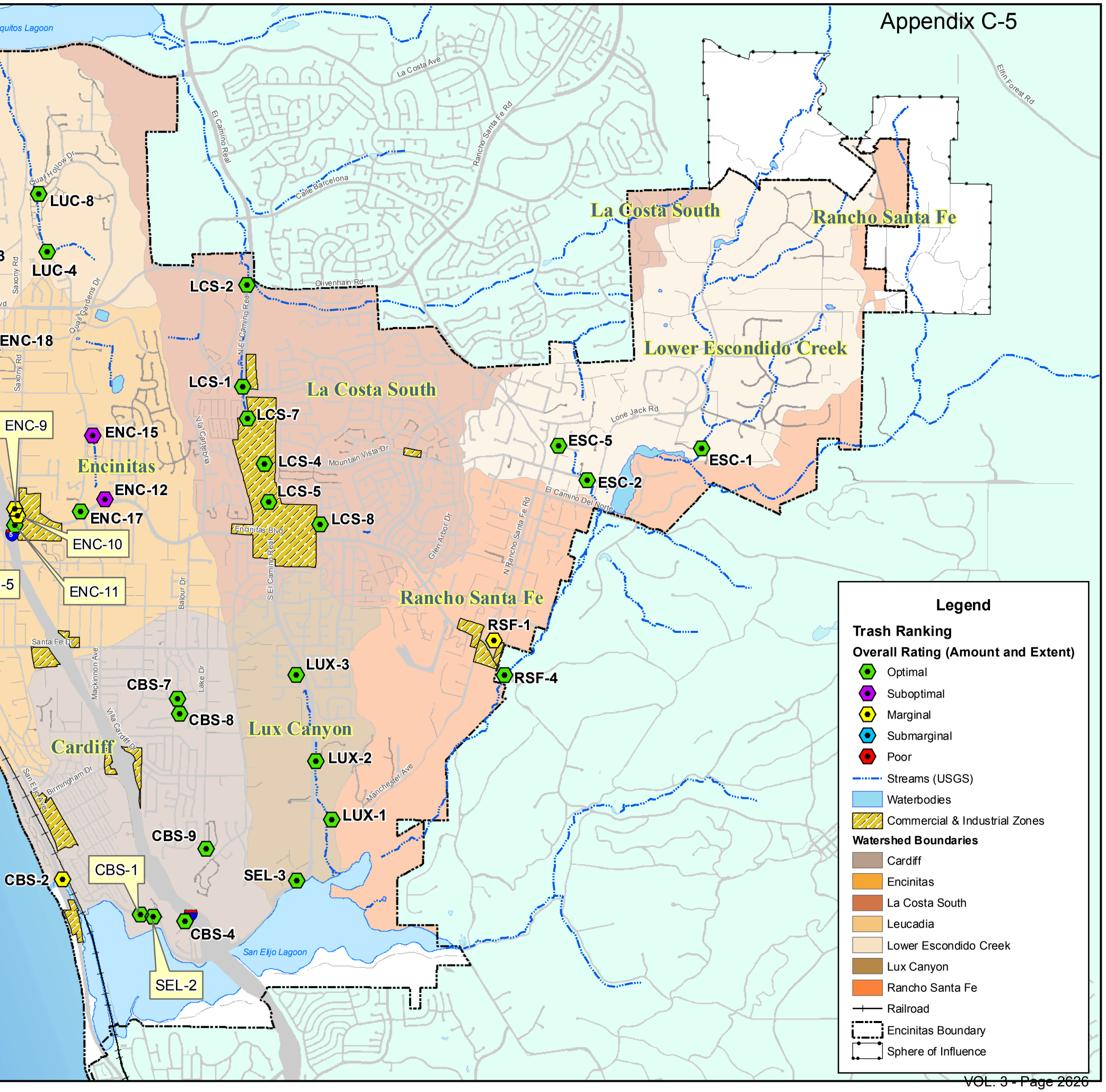
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La Costa Ave
El Camino Real
Rancho Santa Fe Rd
Calle Barcelona
Elfin Forest Rd
Quail Hollow Dr
Saxony Rd
Quail Gardens Dr
Olivenhain Rd
N El Camino Real
Lone Jack Rd
El Camino Del Norte
N Rancho Santa Fe Rd
Glen Arbor Dr
Mountain Vista Dr
Via Cantebria
Encinitas Blvd
Balour Dr
Santa Fe Dr
Mackinnon Ave
Lake Dr
Villa Cardiff Dr
San Elijo Ave
Birmingham Dr
Manchester Ave
LUC-8
LUC-4
LCS-2
LCS-1
LCS-7
LCS-4
LCS-5
LCS-8
ENC-18
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ENC-15
ENC-12
ENC-17
ENC-10
ENC-11
ESC-5
ESC-1
ESC-2
RSF-1
RSF-4
LUX-3
LUX-2
LUX-1
CBS-7
CBS-8
CBS-9
CBS-2
CBS-1
CBS-4
SEL-3
SEL-2
La Costa South
Rancho Santa Fe
Lower Escondido Creek
La Costa South
Encinitas
Rancho Santa Fe
Lux Canyon
Cardiff
San Elijo Lagoon
Legend
Trash Ranking
Overall Rating (Amount and Extent)
Optimal
Suboptimal
Marginal
Submarginal
Poor
Streams (USGS)
Waterbodies
Commercial & Industrial Zones
Watershed Boundaries
Cardiff
Encinitas
La Costa South
Leucadia
Lower Escondido Creek
Lux Canyon
Rancho Santa Fe
Railroad
Encinitas Boundary
Sphere of Influence

Citation CW-

City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024
TELEPHONE NO.: (760) 633-2600
FAX NO: (760) 633-2818
www.ci.encinitas.ca.us

Administrative Citation

Date of Violation:

☐ **WARNING** ☐ 1st Citation □100 per violation ☐ 2nd Citation □200 per violation
☐ 3rd Citation □500 (per violation and each subsequent violation within a 12-month period)

Payment of □0.00 is due no later than (see reverse side for payment and appeal information)

This citation prohibits the continuation or repeated occurrence of the violation described below. Payment of the fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

Violation Address	**Assessor□s Parcel Number**
Person Cited	**Relationship of person being cited**
Mailing Address	**Business (if applicable)**

Code Section Violated	**Description of Violation**

As per the City of Encinitas Municipal Code Section 20.08.110 the following corrective actions must be implemented:

Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

Enforcing Officer	**Phone Number** **(760) □**	**Signature**	**Date issued**
Person Cited (Print Please)		**Acknowledgement of Receipt-Signature**	**Date**

Method of Delivery
☐ **In Person** ☐ **Posted on Property** ☐ **By Mail** ☐ **Certified Mail** ☐ **Other**

CC:

ADMINISTRATIVE CITATIONS

Encinitas Municipal Code Chapter 1.08.080 provides for the issuance of an administrative citation for violations of the Code. There are four levels of citations that may be issued progressively for a violation. The levels, as indicated on the front of the citation, are a Warning, a □100 First Citation, a □200 Second Citation, and a □500 Third and subsequent Citations. These fines are per violation and are cumulative. A warning, if issued, does not incur a fine and, therefore, cannot be appealed.

A. RIGHTS OF APPEAL

You have the right to appeal this citation within 15 calendar days from the date the citation was issued. An appeal must be made in writing, including a return address, a basis for the appeal in detail must be included, and be accompanied by the fine amount. An appeal will result in an administrative hearing.

Failure of any person to properly file a written appeal within 15 calendar days shall constitute a waiver of his or her right to an administrative hearing and adjudication of the citation or any portion thereof and the total amount of the fine.

B. HOW TO PAY FINE

The amount of the fine is indicated on the front of the administrative citation and is due within 30 calendar days of the issue date of the citation. You may pay by mail or in person. Payment should be made by credit card, personal check, cashier□s check, or money order payable to the City of Encinitas. Payment should be made at the address below. Please write the citation number on your check or money order.

City of Encinitas
505 S. Vulcan Ave.
Encinitas, CA 92024
Attention: Finance Department / Administrative Citations

If the fine is not paid within 30 calendar days of the issue date of the citation, you will receive a Delinquent Notice from the Finance Department and there will be a 100□ penalty fee assessed in addition to the original fine.

Payment of any fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

C. CONSEQUENCES FOR FAILURE TO PAY THE FINE

The failure of any person to pay the fine assessed by a citation within 30 calendar days of the issuing date of the citation or the due date on a Delinquent Notice may result in turning the account over to a collection agency, filing a claim with Small Claims Court, a lien against your property, or any other available legal remedy to collect such money. The City has the authority to collect all costs associated with the filing of such actions.

D. CONSEQUENCES OF FAILURE TO CORRECT VIOLATIONS

There are numerous other enforcement options that may be used to encourage correction of violations. These options include, but are not limited to: criminal prosecution, civil litigation, abatement, recording the violation with the County Recorder, and forfeiture of certain benefits for substandard residential rental property.

If you need further information about the violation and/or how to comply, please call the officer designated on the front of the citation.

Appendix E
JURMP Annual Report Requirements Checklist

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4.2.1, Appendix C (Section 2.0), Appendix C-1
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	Appendix C
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	N/A
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	Appendix C
v. The number and brief description of illicit discharges and connections identified.	7.5.2
vi. The number of illicit discharges and connections eliminated.	7.5.2
vii. Identification and description of all spills to the MS4 and response to the spills.	Appendix H-1
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3.1, 7.3.4
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.2.1
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2.3, 7.2.4, Appendix H-1
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2.3
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5.2, 7.5.3, Appendix H-1

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Location in Report**
xiii. A description of notable activities conducted to manage illicit discharges and connections.	Appendix C (Section 7.0) Appendix H-1

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Appendix C
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	Appendix C
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	Appendix C (Section 3.0), Appendix C-2
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	Appendix C, (Section 3.0)
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	Appendix C, Appendix C-2 and C-4
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	Appendix C, Appendix C-2 and C-4
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	Appendix C (Section 3.0)
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	Appendix C (Section 4.0)

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	Appendix C (Section 8.0), Appendix C-2
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	Appendix C, (Section 3.0)
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	Appendix C (Section 3.0), (Section 4.0)
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5.2
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	Appendix C

CITY OF ENCINITAS

Clean Water Program

ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program Annual Report

FY 2010-11

CITY OF ENCINITAS

Clean Water Program

ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program Annual Report

FY 2010-11

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EXECUTIVE SUMMARY

Section J.3 of Water Quality Order No. R9-2007-0001, adopted January 24, 2007, requires the City of Encinitas to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2010-2011 with a defined reporting period from July 1, 2010 through June 30, 2011. This reporting period is defined by the ongoing implementation and refinement of program elements, and the assimilation of core components into a appropriate City functions resulting in a broadly effective and efficient set of actions. Reporting for this annual report has been prepared in compliance with standards established in Water Quality Order No. 2007-0001, and is based upon the most current information available at the time of document preparation. This report is presented in the standardized annual reporting format developed collectively by the San Diego Region Municipal Stormwater Copermittees.

On March 24, 2008, the City of Encinitas submitted, as required by Order No. 2007-0001, an updated JURMP. The JURMP was prepared as a foundational program document to detail programs, process, procedure, and implementation strategies employed by the City to improve and protect the quality of local surface and receiving waters. As part of the JURMP update process, the following list of objectives was established to set baseline guidance for overall program success:

- Develop programmatic elements to ensure compliance with regulatory standards and provisions mandated in Order No. R9-2007-001.
- Establish management processes and procedures to ensure accountability for program actions and activities.
- Establish and support a set of effective and efficient strategies to address Encinitas water quality concerns.
- Build program elements around integrated assessment approaches in order to evaluate overall performance and effectiveness of program components.

Programmatic reporting, as required and represented in this document, serves as a critical self assessment tool in consideration of the objectives outlined above. However, it should be noted that the value added outcomes, both to the program and to the community of Encinitas, of each program area are in constant review as local, regional, and discipline specific technical and scientific knowledge advances. It is important to recognize the iterative nature of stormwater and surface water quality management, as such programs are comprehensive in nature, and each individual component contributes to the overall effectiveness of program outcomes. Each reporting year provides opportunity to express refinement and acuity of programs and the City's overall progression in the field of stormwater and surface water quality management.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Lawrence A. Watt
Director of Public Works

9-26-11
Date

1.0 INTRODUCTION

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollution such as urban runoff, and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issued to local governments and other agencies.

In 2002, the City of Encinitas (City) developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01 (2001 Permit). On January 24, 2007, Order No. R9-2007-0001 (Order, Permit, 2007 Permit or Municipal Stormwater Permit), was adopted by the RWQCB, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and the incorporated cities of San Diego County, including the City of Encinitas (Copermittees). Under the requirements of Order No. R9-2007-0001, the City prepared and submitted on March 24, 2008 an updated JURMP document describing enhancements to existing programs, as well as newly developed programmatic elements to meet the provisions of the adopted permit.

Section J.3 of Water Quality Order No. R9-2007-0001, requires the City to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2010-2011 (FY 2010-11) with a defined reporting period from July 1, 2010 through June 30, 2011.

1.1 BACKGROUND

The City of Encinitas encompasses an overall area of nearly 20 square miles and is located along six miles of Pacific coastline in northern San Diego County. The City is characterized by coastal beaches, cliffs, flat-topped coastal areas, steep mesa bluffs and rolling hills. Incorporated in 1986, drawing together the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain and Leucadia, the City has an approximate population of 60,000. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south.

The City of Encinitas is situated entirely within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and the Escondido Creek Watershed to the south. The City is naturally divided by eight (8) distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon sub-basins. Encinitas receives an average annual rainfall of approximately ten (10) inches.

The City owns and maintains improved and open storm water channels, underground pipes of varying material, storm water detention basins, catch basins, and a variety of other MS4 facilities.

In general, the City drains to three blue-line creeks: Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. In 2006, Cottonwood Creek was 303(d) listed for DDT, phosphorous, and sediment toxicity stressors. Further, the Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for total coliform bacteria indicators due to urban runoff from Cottonwood Creek. Encinitas Creek drains the north-central portion of the City, and drains into Batiquitos Lagoon, which is designated as a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. In 2006, Encinitas Creek was 303(d) listed for phosphorous impairments, and in 2010 has been listed for selenium and toxicity. Escondido Creek, listed in 2006 for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids, and in 2010 for enterococcus, fecal coliform, and total nitrogen, drains the southern and northwest (Olivenhain) portion of the City and drains into San Elijo Lagoon. San Elijo Lagoon is 303(d) listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic conditions.

1.2 PURPOSE AND OBJECTIVES

The purpose of the 2010-2011 JURMP Annual Report is to provide a comprehensive account of programmatic activities conducted by the City of Encinitas to meet the requirements of the Order No. 2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. Notably, a comprehensive program update occurred through the JURMP update process in 2008; therefore, only significant augmentation of program elements or planned changes will be captured in the following annual report. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

Being a coastal community, environmental protection and water quality are of utmost importance to the City of Encinitas. As a result, the City has established strong water quality protection policies which are reflected in development planning documents and procedures. Through the implementation of the Development Planning Component of the City's JURMP and other related planning documents, the City aims to reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP) to protect receiving water bodies and manage increases in runoff and erosion from development projects.

This section describes the City's actions during FY 2010-11 which contributed to the successful implementation of the City's Development Planning Component. Included in this section is a summary of recent updates made to land use policies and procedures, a description of the update of the City's Standard Urban Stormwater Mitigation Plan (SUSMP), the development of the San Diego region Hydromodification Management Plan, a review of the development projects approved in the reporting year, and a summary of implementation of the BMP installation, verification, and inspection programs.

2.2 LAND USE PLANNING

The City's land use planning process facilitates (1) the reduction of development project discharges of pollutants from the MS4 to the MEP, (2) the prevention of development project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) management of increases in runoff discharge volumes, rates, and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

The City's land use planning process is fundamentally structured around the following planning, guidance, and enforcement documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- Watercourse Protection, Storm Water Management and Discharge Control Ordinance (Municipal Code Chapter 20.08)
- Grading, Erosion and Sediment Control Ordinance (Municipal Code Chapter 23.24)
- Encinitas Stormwater Manual (Local SUSMP & HMP)
- Storm Water Best Management Practices Manual II

The consistent application and regular update, as required or necessary, of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections describe the City's land use planning process and the documents in more detail.

2.2.1 BACKGROUND

The City of Encinitas was incorporated in 1986, drawing together the communities of Cardiff-By-The-Sea, Leucadia, Olivenhain, and old and new Encinitas. The City's General Plan was adopted in 1989 and is amended on a limited, as needed basis. The City's JURMP, the Storm Water Ordinance, and the Storm Water BMP Manual II were each originally developed in 2002 as required by Order 2001-01. Each of these documents were reviewed and updated as needed in FY 2007-08 as part of the JURMP update process and as required by Order 2007-001 Municipal Stormwater Permit. Notably, in FY 2010-11 the City of Encinitas incorporated the San Diego Region Hydromodification Management Plan (HMP), as adopted by the RWQCB into the Encinitas Stormwater Manual (ESM), which serves as the City's local SUSMP and HMP implementation document.

2.2.2 SOURCE CHARACTERIZATION

The City addresses seven major land use categories in its General Plan: residential, office professional, commercial, industrial, public / semi-public, transportation, and ecological / open space / parks. Each of these land uses is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their designated sections within this document.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Storm Water Ordinance, Grading Ordinance, BMP Manual II, and the Encinitas Stormwater Manual, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During FY 2007-08, the City of Encinitas updated its land use planning BMPs as required by Order 2007-0001. As part of the 2008 JURMP update process, these BMPs were incorporated into the City's Storm Water BMP Manual II. In FY 2009-10, Clean Water Program staff completed the process of updating the City's local SUSMP to meet the minimum standards established in the updated and approved regional Model SUSMP. The City's new local SUSMP document, titled the Encinitas Stormwater Manual, was adopted in March 2010. In FY 2010-11, as required by the timeframe established in Order 2007-0001, the City incorporated the San Diego Region Hydromodification Mitigation Plan (HMP) into the City's local SUSMP, titled the Encinitas Stormwater Manual (ESM). The most current version of the City's BMP Manual II and the Encinitas Stormwater Manual can be accessed through the Clean Water Program webpage at: http://cwp.cityofencinitas.org. For more detail regarding the development and adoption of the Encinitas Stormwater Manual and the regional Model SUSMP refer to Section 2.2.4.4 and 2.4.4.1 below.

2.2.4 PROGRAM IMPLEMENTATION

2.2.4.1 GENERAL PLAN

The City of Encinitas General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural water bodies and drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The General Plan also discourages the use of large amounts of impervious surfaces in new development areas, minimizing the transport of urban runoff and pollutants. The breadth of the City's General Plan policies are such that they cross reference each other and have been determined to comprehensively comply with the Municipal Permit.

The City's General Plan document serves as the blueprint for the long-range, orderly, physical development of the City and contains stated community goals and policies designed to protect its environmental, social, cultural and economic resources as the City develops. The General Plan consists of an integrated and internally consistent set of goals, policies, and standards that address a number of issue areas which include land use, circulation, housing, noise, safety, recreation, conservation, and open space.

Portions of the General Plan also encompass the City's Local Coastal Program (LCP) Land Use Plan, which guides development in the City's Coastal Zone pursuant to the Coastal Act. As a result, the City's General Plan and LCP are a combined single document.

The City implements the policies in the General Plan using a variety of resources including: the JURMP, Municipal Code, Storm Water BMP Manual II, the Encinitas Stormwater Manual, Development Agreements, and other various land use plans and permits. Section 2.4 of this document describes how the water quality and watershed policies are implemented through the City's development planning process.

As a component of the 2008 JURMP update (prepared in FY 2007-08) an assessment of the City of Encinitas General Plan was conducted to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City's General Plan goals and policies are consistent with the Municipal Permit, and no amendments to the General Plan were required as a part of the JURMP update.

In FY 2010-11, Clean Water Program staff remained engaged and productive in the City of Encinitas General Plan Update 2035. As the process of outlining policy statements for inclusion in the anticipated Draft release in September of 2011 continued throughout the reporting period, Clean Water Program staff worked to ensure that policy statements reflecting the priorities of the program are fully integrated across plan elements. The General Plan Update process will continue over the forthcoming permit reporting year through a combination of draft document review and community outreach, both of which the Clean Water Program will utilize to affect appropriate policy and direction in regards to surface water quality, stormwater management, and interrelated disciplines.

2.2.4.2 JURMP

In compliance with the new Municipal Permit, the City's JURMP document underwent a comprehensive update during FY 2007-08. The JURMP document serves as the City's foundational storm water program management tool, capturing the development process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Encinitas.

2.2.4.3 STORM WATER ORDINANCE AND GRADING ORDINANCE

As required by section J.a.(3)(b)iii of the Municipal Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance *(EMC Chapter 20.08)*, also called the Storm Water Ordinance, was updated during FY 2007-08 to comply with the Municipal Permit. The Storm Water Ordinance sets up the legal framework which enables the City to enforce the water quality and watershed protection principles established in the General Plan and the JURMP. The Storm Water Ordinance also references the City's Storm Water BMP Manual II and enables the City to enforce the minimum BMPs and SUSMP requirements that are outlined in BMP Manual II and extended to the Encinitas Stormwater Manual. The ordinance is periodically reviewed and updated on an as needed basis to ensure that potential discharges of pollutants may be addressed appropriately.

The Grading, Erosion, and Sediment Control Ordinance *(EMC Chapter 23.24)* was thoroughly reviewed and updated in FY 2007-08, approved by City Council on February 25, 2009, and subsequently approved by the California Coastal Commission. The update largely addressed engineering related revisions, but also included some updates which serve to further strengthen the City's legal authority in meeting the provisions of the Municipal Permit related to both construction and post-construction activities. Specifically, the grading ordinance was updated to require that all Priority Projects acquire a grading permit, and that any project proposing 500 square feet or more of impervious surface is reviewed for conformance with City stormwater regulations.

2.2.4.4 LOCAL SUSMP (BMP MANUAL II, ESM, AND HMP)

Over the past serveral years the City's local SUSMP has undergone significant improvement. Updates included transition away from old SUSMP regulations that were housed in Storm Water BMP Manual II and development of the new comprehensive Encinitas Stormwater Manual. The Encintias Stormwater Manual (ESM) currently serves as the City's Local SUSMP and HMP implimentation document. The section below describes the updates that have occurred over the past few years.

Storm Water BMP Manual II

As part of the 2008 JURMP update, Storm Water BMP Manual II was also updated with revised SUSMP requirements and regionally adopted Interim Hydromodification Criteria required by the Municipal Permit. As a component of this update, the City also integrated the interim SUSMP provisions into local land use planning and development process and procedure as outlined in the BMP Manual II.

The City originally created Storm Water BMP Manual II in 2002 to be used by individuals involved with development projects within the City. BMP Manual II prescribes minimum stormwater BMPs for Land Development and Construction activities, and is enforceable through reference by the Stormwater Ordinance and the Grading Ordinance. With the development and adoption of the Encinitas Stormwater Manual, BMP Manual II has become more of a reference document. Refer to the following section for details about the Encinitas Stormwater Manual.

Encinitas Stormwater Manual

In FY 2009-10, the City of Encinitas developed the Encinitas Stormwater Manual as its updated local SUSMP based on the approved San Diego Regional Model SUSMP. The revised Model SUSMP was developed to address post-construction urban runoff pollution from development projects and defines the minimum required Low Impact Development (LID), source control, and treatment control BMPs. As required by Order No. 2007-001, all new updates to the San Diego Regional Model SUSMP were incorporated into the City's local SUSMP and land development process and procedures before March 24, 2010. The Encinitas Stormwater Manual and the updated BMP Manual II were adopted by City Council on March 17, 2010. More detail about the completed update can be found in Section 2.4.4.1.

Hydromodification Management Plan (HMP)

Within the defined reporting period of this report, the City of Encinitas updated its local SUSMP based on the Regional Board approved San Diego Region Hydromodification Management Plan (HMP). Subsequent to Regional Board approval of the HMP, copermittees updated the Model SUSMP to include the new HMP requirements. The City of Encinitas used the regional model to update the Encinitas Stormwater Manual (local SUSMP). The local update included integration of all of the HMP regulations including HMP applicability requirements, hydromodification sizing factors and hydromodification calculations for IMPs. The City's local update was completed by the required January 14, 2011 deadline and included City Council adoption of the updates.

2.3 ENVIRONMENTAL REVIEW PROCESS

As part of the 2008 JURMP update, the City's environmental review staff evaluated the City's environmental review process and confirmed that the current process accurately evaluates water quality and cumulative impacts and identifies appropriate measures to avoid, minimize, and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality. In compliance with the Municipal Permit, additional questions have been provided in the initial study checklist; a tool utilized to evaluate the environmental effects of a project. To evaluate potential water quality impacts of projects requiring discretionary review, the following questions have been included as part of the initial study checklist:

Would the project:

- *Substantially conflict with city-adopted water quality standards or waste discharge requirements?*
- *Substantially alter the existing drainage pattern of the site or area, including the alteration of a stream or river course, in a manner which would result in substantial erosion or siltation on- or off-site?*
- *Result in a substantial degradation of receiving water quality during construction activities?*
- *Propose a land use or an on-site activity that would substantially degrade receiving water quality?*
- *Substantially increase any pollutant for which* a *tributary water body is listed on the Clean Water Act Section 303(d) list?*
- *Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?*
- *Substantially degrade groundwater quality?*

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a proposed project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

As discussed in the previous sections, the City of Encinitas has an established multi-departmental review process for all new development and redevelopment projects. Through the application of the City's Storm Water Ordinance, Grading Ordinance, Storm Water BMP Manual II, Encinitas Stormwater Manual, and development project review process, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP.

Each proposed discretionary and ministerial project is subject to the City's Development Project Approval and Verification Process. The following sections describe this process in detail.

2.4.2 SOURCE CHARACTERIZATION

As discussed in Section 2.2.2, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP (Encinitas Stormwater Manual), which was developed and adopted as required during FY 2009-10, describes specific categories for Priority Projects. A Priority Project must implement Low Impact Development techniques, source control components, Treatment Control Best Management Practices, and Hydromodification Management Practices to address potential pollutants.

In the City of Encinitas, all development projects, including Standard projects (projects not subject to SUSMP standards), are required to meet the minimum BMP requirements, which are discussed below in Section 2.4.3.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are summarized here and are included in the new Encinitas Stormwater Manual. These minimum BMPs are based on BMPs established in the regional Model SUSMP. All development projects are required to include the following minimum BMPs:

- Implementation of source control BMPs as listed in Appendix A of the Encinitas Stormwater Manual.
- Inclusion of Low Impact Design (LID) features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, and retain and slow runoff. (Specific LID requirements are dependent on the type of project that is proposed.)
- Compliance with requirements for construction-phase controls on sediment and other pollutants.

SUSMP Priority Projects must submit a grading plan, which includes identification of proposed LID features, source control and treatment control BMPs, calculations for sizing the treatment control BMPs, and a maintenance agreement that will be recorded with the County. The grading plan must also address how the project will manage increases in runoff discharge rates and durations associated with the project, where such increases could cause impacts downstream of the project.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to a development project's proposed storm water BMPs during project construction must be approved by the City before being implemented.

2.4.3.1 HYDROMODIFICATION MANAGEMENT PLAN (HMP) AND INTERIM HYDROMODIFICATION CRITERIA

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order No. 2007-0001, during the defined reporting period of this report, the City collaborated with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP) for the San Diego Region.

In FY 2007-08, the City established Interim Hydromodification Criteria, consistent with the regionally adopted interim hydromodification standards developed by the regional Technical Advisory Committee. The interim criteria were in effect until the final HMP was approved and incorporated in the Encinitas Stormwater Manual. In accordance with the Municipal Permit, the City required all Priority Projects disturbing 50 or more acres to comply with the Interim Hydromodification Criteria, except for those sites considered exempt as described in Section D.1.(g)(6) of the Municipal Permit. The details of the Interim Hydromodification Criteria were presented in the Encinitas Stormwater Manual and BMP Manual II and were replaced when the new HMP criteria were integrated.

Over the past three fiscal years, the Copermittees—in cooperation with a Technical Advisory Committee, the Southern California Coastal Water Research Project and the Regional Board—were actively involved in conducting scientific research and gathering the necessary data in order to prepare the final HMP. A time table for development of the final HMP can be found in Section 2.4.4.1 and Table 2-2. The final draft HMP was completed within the last fiscal year and was approved by the Regional Board on July 14, 2010. As required by the Municipal Permit, the City of Encinitas updated its local SUSMP (Encinitas Stormwater Manual) to include HMP requirements on January 14, 2011, within 180 days of Regional Water Quality Control Board approval. In accordance with the HMP criteria, the City now requires all Priority Projects (unless otherwise exempt) to comply with the hydromodification standards.

2.4.4 PROGRAM IMPLEMENTATION

As required by the Municipal Permit, the City of Encinitas has implemented a program to ensure that development and redevelopment projects comply with SUSMP requirements, including Low Impact Development, source control, treatment control BMPs, and Hydromodification Management. The Municipal Permit further requires that the City ensure proper installation of treatment control BMPs and their maintenance into perpetuity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following section provides an overview of the City's SUSMP implementation (including project tracking) during FY 2010-11.

2.4.4.1 MODEL AND LOCAL SUSMP UPDATES

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the new Municipal Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into Storm Water BMP Manual II (see Section 2.2.4.4). In compliance with the interim SUSMP update standards established in Order No. 2007-0001, the following tasks were performed during the review and interim update of the SUSMP:

- Priority Project categories were updated.
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained.

- LID requirements and additional source control requirements were added to meet or exceed Municipal Permit requirements.
- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly.
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary.

In addition to the changes discussed above, a comprehensive regional Model SUSMP update was completed by the copermittees during FY 2008-09 and submitted to the Regional Board for approval on January 26, 2009. After incorporation of revisions based on Regional Board comments the Model SUSMP was approved by the Regional Board on March 24, 2009. The comprehensive Model SUSMP update includes the following as required by the Municipal Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Municipal Permit.
- Establishment of site, design, and maintenance criteria for each LID and treatment control BMP listed in the Model SUSMP.
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the Model SUSMP is applicable and feasible.
- Addition of a requirement for Priority Projects with low traffic areas and appropriate soil conditions to use permeable surfaces.
- Addition of any necessary restrictions for infiltration BMPs from Priority Projects that generate high levels of pollutants.

During FY 09-10, the City completed the update of its Local SUSMP (Encinitas Stormwater Manual) to meet the requirements established in the regional Model SUSMP. The local update was completed and adopted by City Council on March 17, 2010, within one year after the adoption of the Model SUSMP. As described in section 2.2.4.4 and 2.4.3.1 the City's local SUSMP was further updated January 14, 2011 to include regionally adopted HMP requirements.

Development of the Encinitas Stormwater Manual (local SUSMP) involved extensive coordination between several City departments, including Engineering, Planning, Public Works, Parks & Recreation, and the San Dieguito Water District. Involving all appropriate departments in the development of the Encinitas Stormwater Manual provided interdepartmental ownership and awareness of applicable standard and helped to ensure that implementation of the new SUSMP requirements would go smoothly. Clean Water Program staff hosted bi-weekly Stormwater Quality Workgroup sessions from July 2009 through February 2010, providing a collaborative forum for the development of the local SUSMP (Encinitas Stormwater Manual). At these workshop meetings, staff from several departments actively participated in the development of Encinitas-specific document language, implementation tools (such as the Stormwater Checklist and Certification form), template maintenance agreements, and detailed Integrated Management Practice (IMP) design

guidelines. The workshop meetings were very successful and allowed for each department to be involved in the integration of the new SUSMP requirements into existing practices and procedures. After commencement of the workshop series, each department was well aware of the new SUSMP requirements and how these requirements would be presented in the Encinitas Stormwater Manual.

The City's updated Local SUSMP is titled the Encinitas Stormwater Manual. The Encinitas Stormwater Manual serves as an implementation guide for stormwater standards to assist the professional development community and the general public in understanding the City of Encinitas SUSMP requirements. The Encinitas Stormwater Manual establishes a regionally consistent and systematic BMP design procedure intended to meet complex and overlapping water quality requirements, including stormwater treatment controls, Low Impact Development (LID) standards, control of potential pollutant sources, and control of runoff peak and duration (hydrograph management).

The Encinitas Stormwater Manual is comprised of five interrelated document sections, each supporting and defining the background, regulatory drivers, process, and procedure necessary to guide project applicants toward compliance with defined stormwater quality requirements.

Section 1 – Policies and Procedures, summarizes all City requirements and subsequent procedural elements pertaining to proposed new development and redevelopment projects.

Section 2 – Concepts & Criteria, describes the water quality science, engineering standards, and regulatory framework that form the basis of stormwater requirements for land development.

Section 3 – Preparing Your Project Submittal, details a procedure for determining applicable project requirements, and drafting and submitting associated materials required for a proposed development project.

Section 4 – Low Impact Development Design Guide, instructs applicants on how to plan, design, and size (engineer) treatment facilities and LID features to meet stormwater requirements.

Section 5 – Operation & Maintenance of Stormwater Facilities, outlines the long-term operation and maintenance requirements for stormwater treatment facilities and establishes the process by which applicants will develop an operation and maintenance agreement for the proposed stormwater facilities.

In addition, the Encinitas Stormwater Manual contains a series of appendices specific to the material presented in each of the sections outlined above, including a stormwater quality checklist and certification, design specification sheets for various facility types, and template maintenance agreements for a variety of project types. Notably, the template maintenance agreements, designed to be used as models for legal agreements between the responsible party and the City of Encinitas for long-term operation and maintenance of the proposed stormwater facilities, have been reviewed by the City's legal counsel.

The Encinitas Stormwater Manual is intended to complement the existing BMP Manual II. While BMP Manual II establishes minimum BMP standards for development projects and construction activities, the Encinitas Stormwater Manual defines implementation policy and procedure by which to plan, select, design, construct, and ultimately maintain required

stormwater BMP facilities in the City of Encinitas. Complete versions of the updated BMP Manual II and the new Encinitas Stormwater Manual are available on the City's Clean Water Program webpage at http://cwp.cityofencinitas.org.

All necessary SUSMP updates described above and their completion dates are presented in Table 2-1.

Table 2-1
Time Schedule for Model and Local SUSMP Updates

SUSMP Update	Time Schedule	Status
Final Model SUSMP update	January 2009 (submitted) March 2009 (RB Approved)	Completed
Local SUSMP update	March 2010	Completed
HMP Progress Report	July 2008	Completed
Draft HMP	January 2009	Completed
Final HMP	December 2009	Completed
Regional Board Approval of Final HMP	Summer of 2010 (July 14, 2010)	Completed
Adoption of HMP into Local SUSMP (Encinitas Stormwater Manual)	180 days after RWQCB approval of the final HMP	Completed: January 14, 2011

2.4.4.2 DEVELOPMENT PROJECT APPROVAL PROCESS

The following section includes a summary of the City's updated development review process which has been implemented since the adoption of the Encinitas Stormwater Manual (local SUSMP).

DISCRETIONARY PROJECTS

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring an additional, ministerial permit are also subject to engineering plancheck review as described in the Ministerial Project section.

Predevelopment Process

The stormwater element of the predevelopment process is geared toward disseminating information on stormwater pollution control and the City's SUSMP requirements. During this preliminary design phase, engineers and applicants are guided by City staff to provide adequate post-construction BMP facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process

results in better designed and integrated post-construction BMPs, since the facilities are included in the project design even in the earliest phases of the project.

Priority Projects (defined by the City of Encinitas as those projects subject to SUSMP requirements), which require more stringent stormwater pollution control methods, are first identified during the predevelopment process. The categories of development falling under the Priority Project classification can be found in the Encinitas Stormwater Manual and are consistent with the requirements of the Municipal Permit. During the predevelopment meeting, applicants proposing Priority Projects learn that they must implement LID and source control BMPs and must install treatment control and hydromodification BMPs which meet the numeric sizing criteria required by the Municipal Permit. City staff also informs applicants at the predevelopment meeting that installed post-construction BMP facilities must be maintained in good working order into perpetuity. City staff and the applicant and/or engineer discuss options for meeting the numerical post-construction treatment requirements, including volume-based systems and flow-based systems. The applicant is also directed to follow the guidelines detailed in the Encinitas Stormwater Manual when designing post-construction BMPs and submitting plans and documents to Engineering for review. In Encinitas, mechanical treatment systems are discouraged and when accepted may only account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

Stormwater Pollution Control Checklist and Certification

All development project applicants are required to complete a written self-certification of the post-construction BMPs proposed with their project. This certification is required to accompany the initial submittal of each discretionary permit application. The checklist walks the applicant through the process of determining whether their project is a Priority Project and outlines the minimum submittal requirements for Priority Project applicants. The checklist is designed to assist applicants in:

- Classifying their projects as Priority, Standard, or Exempt from SUSMP.
- Determining whether or not the Project must meet HMP requirements.
- Certifying that their project will be designed, constructed, and maintained in conformance with the City's stormwater quality requirements detailed in the Encinitas Stormwater Manual.

The stormwater checklist must be completed by the party responsible for the development project and submitted with the project's permit applications. The stormwater checklist is an appendix of the Encinitas Stormwater Manual. In FY 10-11 a supplemental HMP checklist was developed to assist applicants in determining whether their project must meet HMP requirements. A copy of the SUSMP and supplemental HMP checklists are provided in this annual report as Appendix A-10 and Appendix-11.

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions include construction requirements as well as post-construction BMP standards for effective

stormwater pollution control facilities. Once the predevelopment meetings are conducted and the stormwater checklist has been completed, the applicant must follow the requirements established in the Encinitas Stormwater Manual when designing stormwater controls for the proposed project. Once the proposed plan is submitted, the Engineering Department reviews the adequacy of the project's proposed stormwater facilities shown on the site plan and issues Conditions of Approval to ensure implementation of satisfactory LID, source control, and treatment control BMP measures. The Conditions of Approval take into account the nature of each project site and the work proposed. The Conditions of Approval are then recorded in a covenant against the property.

Applicants not showing adequate construction or post-construction BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. Stormwater pollution control facilities for Standard projects must meet the minimum requirements established in the Encinitas Stormwater Manual. Priority Projects must additionally show LID, source control, and treatment control BMPs on the project plans. In addition, Hydromodification Management requirements must also be met, unless the project is determined to be exempt from HMP. The project plans must show a feasible solution with substantiating calculations for numerically-sized treatment control BMPs. The process of designing appropriately sized treatment control BMPs is detailed in the Encinitas Stormwater Manual, which is available to all applicants through the City website.

MINISTERIAL PROJECTS

Projects requiring a ministerial permit such as a grading, improvement, or building permit are also required to include post-construction stormwater pollution control facilities in the project design. These BMP facilities must be considered adequate before the project's plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project is already conditioned to provide specific treatment facilities. For those projects not requiring a discretionary permit, the review of the storm water pollution control treatment facilities begins at the Engineering plancheck stage.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater construction and post-construction BMPs.

Every plan in plancheck is initially reviewed to determine if it meets the City's definition of a Priority Project. In addition to meeting standard BMP requirements, Priority Projects must provide LID, source control, and numerically-sized treatment control BMPs as required by the Municipal Permit and the Encinitas Stormwater Manual (City's local SUSMP). Hydromodification Management requirements must also be met, unless the project is determined to be exempt from HMP.

The Encinitas Stormwater Manual details the process which must be followed in order to design proposed stormwater treatment control facilities for Priority Projects. The manual also identifies specific design details and documents which must be submitted for review by the City's plancheck engineers. The Encinitas Stormwater Manual and City plancheck engineers

emphasize to applicants the variety of natural solutions that may be used in providing stormwater pollution control. Any areas used as post-construction BMPs must be clearly marked on the project plans along with the following associated note: "Stormwater Best Management Practice to be privately maintained and not to be modified without a permit from City". The permitted drawing will become public record; therefore documentation of the designated treatment areas is maintained. Engineers are also required to complete the Sources and Source Control BMP Checklist and incorporate all of the applicable permanent controls and operational BMPs into the project plans. Potential source control BMPs may include stormwater education, materials storage, erosion control, and waste management in order to meet the minimum SUSMP requirements.

All Priority Projects must comply with the numeric sizing criteria for treatment control BMPs in order to be approved by the City Engineer. Plancheck engineers review the project's hydrology calculations to determine the adequacy of the treatment system proposed. The project applicant is required to assume maintenance responsibility and identify the maintenance mechanism for the treatment system prior to project approval. A covenant ensuring adequate maintenance into perpetuity is recorded against the property. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City to guarantee successful implementation of the measures shown thereon. Such bonds are retained until all components of the project have been completed (including installation of treatment control BMPs) and the landscaping has become fully established.

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. For more information regarding temporary construction BMPs, refer to Section 3 of this document.

Post-Construction BMP Maintenance Agreements

All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance of permanent BMPs as necessary into perpetuity. The maintenance agreement or covenant includes an attachment depicting the location of specific project BMPs and their detailed maintenance requirements. The agreement is then recorded against and runs with the property. The City of Encinitas has developed, and included as an appendix in the new Encinitas Stormwater Manual, template maintenance agreements for a variety of project ownership scenarios including single family homeowners, Home Owners Associations (HOAs), agents, or commercial entities.

CAPITAL IMPROVEMENT PROJECTS

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear, or repair projects, often only construction BMPs are necessary. However, qualifying Priority SUSMP projects must also install post-construction BMPs. Priority CIP Projects are designed to

incorporate LID, source control, treatment control BMPs, and hydromodification management measures as required by the Municipal Permit and detailed in the Encinitas Stormwater Manual. The City takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.4.4.3 SUSMP PROJECT APPROVAL

During the planning process and prior to project review, the **10** projects listed in Table 2-2 were identified as Priority SUSMP Projects and approved during FY 2010-11. All applicable SUSMP and HMP BMP requirements specified in the City's local SUSMP were applied to each of the projects in Table 2-2. As detailed in Table 2-2, all of the development projects approved in FY 2010-11 were individually reviewed and determined to be exempt from Interim Hydromodification Criteria and the new Hydromodification Criteria (which became effective on January, 14, 2011). All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2010-11.

Table 2-2
SUSMP Priority Projects approved in FY 2010-11

Permit No.	Location	Approval Date	HMP Applicability
10525 G	453 Santa Fe Dr	8/17/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
10501 G	3177 Wildflower Summit	10/7/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
10375 G	1010 N El Camino Real	10/7/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
10351 G	Rancho Summit Estates	10/7/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
556 G	135 Daphne St	10/18/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
10523 G	453 Santa Fe Dr	11/10/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
10536 G	1492 Hymettus Ave	1/11/2011	N/A – Approved prior to 1/14/2011 and less than 50 acres
10548 G	1502 Encinitas Blvd	1/27/2011	N/A – No new impervious area
10474 G	1520 Caudor St	2/7/2011	N/A – Priority project due to driveway area only (local requirement)
10417 G	618 Birmingham Dr	3/8/2011	N/A – Discharges to hardened conveyance system that extends to a tidally-influenced area

The renovation of the Taco Bell restaurant at 1502 Encinitas Blvd (10548-G) provides a good example of the typical Priority SUSMP projects that are permitted by the City of Encinitas. The proposed project consisted of the complete renovation of the interior and exterior of the restaurant, and removal and replacement of approximately 14,000 square feet of parking lot area. Since the project was located on a previously developed site and plans included replacement of more than 5,000 square feet of impervious area, the project was determined to be a SUSMP Priority Project. Since the project did not create any additional impervious area, the project was exempt from HMP requirements. As a result, several Treatment Control BMPs were incorporated into the design of the project in order to meet SUSMP requirements. The Treatment Control BMPs that will be installed during construction include four bioretention areas and one bioretention swale. These Treatment Control BMPs have been situated on the site plan to collect and treat runoff from roof of the restaurant and the parking lot prior to the runoff entering the storm drain system. All Treatment Control BMPs were designed accordance with the new SUSMP requirements established in the Encinitas Stormwater Manual.

2.4.4.4 SUSMP PROJECT AND TREATMENT CONTROL BMP TRACKING

In FY 2007-08, Clean Water Program staff worked with GIS staff to implement a comprehensive watershed-based SUSMP tracking system. The GIS data management system was designed to track the SUSMP Priority Projects and the long-term maintenance of all approved treatment control BMPs installed at development sites. As required by the Municipal Permit, the database is capable of tracking the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located[1]
- Date of construction of the BMP
- The party responsible for maintenance of the BMP
- Maintenance certifications or verifications
- Inspection findings
- Any corrective actions issued

Since the initial introduction, the City has been working to continually refine The Treatment Control BMP database, and new projects with treatment control BMPs are added to the database on a routine basis. Database improvements are a result of a thorough review of plans for proposed and built projects, a quality check of the existing data, and coordination with the GIS department. A hardcopy version of the most current inventory of treatment Control BMPs in the City's SUSMP Project and Treatment Control BMP Database is available in Appendix A-1. The inventory includes all operational treatment control BMPs installed at SUSMP priority projects. For a map of all the SUSMP Priority Development Projects approved within the City of Encinitas, refer to Appendix A-2.

[1] The entire City of Encinitas is within the Carlsbad watershed.

With the aid of the City's Treatment Control BMP Inspection Priority flowchart (see Appendix A-3), all development projects with approved treatment control BMPs were prioritized as high, medium, or low Threat to Water Quality (TTWQ) during the 2008 JURMP update, as required by the Permit. In addition, prioritization of each BMP was further refined during subsequent annual Operation and Maintenance Inspections and review of Self-Verification submittals. For new projects with treatment control BMPs that are added to the inventory, prioritization of the project occurs during the first treatment control BMP inspection. When the construction of a new project with treatment control BMPs is completed, the City requires that the treatment control BMP(s) are inspected within the first year and prior to the next rainy season in order to determine prioritization for future inspection frequency. This allows the City to determine TTWQ based on a visual inspection of the project as well as the following criteria:

- Type of project
- Sensitivity of the receiving water body
- Proximity to ESAs
- Size of the BMP
- Recommended maintenance frequency
- Likelihood of operational and maintenance issues associated with the BMP(s)
- Location of the BMP(s)
- Other pertinent factors

The BMP Inspection Priority flow chart addresses basic site and treatment control BMP characteristics that can influence a site's TTWQ such as receiving water body sensitivity and the removal efficiencies of the installed treatment controls. Note that not all development projects and treatment control BMPs are the same; each may have unique water quality risks associated with it. The City considered additional relevant factors beyond those included in the flow chart as necessary.

2.4.4.5 BMP INSTALLATION VERIFICATION

Beginning in January 2008, the City of Encinitas began tracking the verification of post-construction BMPs that were installed on projects throughout the City. Upon project completion, the engineering inspector now requires that the project engineer submit a grading certification letter to the City verifying that all the Low Impact Development, Source Control, and Treatment Control Best Management Practices, as shown on the approved project plans and required by the Encinitas Stormwater Manual, were constructed and are operational, together with the required maintenance covenant(s).

A sample grading certification letter is provided as Appendix A-4. Table 2-3 provides a list of the BMP verifications conducted for priority development projects completed in FY 2010-11.

Table 2-3
BMP Verifications for Priority Development Projects
Completed in FY 2010-11

Permit No.		Location	Construction Date
94	G	1020 Calle Anacapa	7/16/2010
9561	G	303 Santa Fe Drive	7/16/2010
483	G	540 La Costa Ave	7/28/2010
9481	I	Quail Point Ln and Quail Gardens Dr	10/20/2010
947	G	1435 Bella Azul Ct	11/17/2010
10404	SG	3211 Wildflower Valley Drive	11/30/2010
1469	G	1555 Bella Vista Dr	1/14/2011
718	G	687 South Coast Highway	2/10/2011
570	G	489 Latigo Row	3/29/2011
482	G	1864 Crest Dr	3/31/2011
10305	G	354 Santa Fe Dr	5/18/2011
325	G	2620, 2622, 2624 Lone Jack Rd	6/30/2011

Subsequent to the submittal of the grading certification letter, engineering inspection staff inspect the project site to verify that LID, source control, and treatment control BMPs proposed for the project were constructed in compliance with all approved plans, City permits, and ordinances. Inspections of Priority Project sites prior to occupancy allow the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied site are generated. Engineering inspectors also check to ensure that BMPs have been built according to plans before signing off on each stage of construction. The inspectors use the project's grading plans to identify any missing or incorrectly installed BMPs and deny approval for sites with observed problems. If the engineering inspector is satisfied that the post-construction BMPs were installed as required, the inspector verifies the project engineer's letter with their signature and a date and takes photos of the completed BMP installation. Hardcopies of these signed and certified verification letters and the photos of the BMPs are retained by the Clean Water Program.

2.4.4.6 ANNUAL TREATMENT CONTROL BMP OPERATION AND MAINTENANCE SELF-VERIFICATION

As required by the new Municipal Permit, all treatment control BMPs installed at development projects must be self-verified annually and maintained in perpetuity by a responsible party. As part of the JURMP update, the City of Encinitas established a Treatment Control BMP Operation and Maintenance Self-Verification Program.

During FY 2007-08, Clean Water Program staff prepared the essential elements of the Treatment Control BMP Operation and Maintenance Self-Verification Program. First, a comprehensive list of mailing addresses for completed projects with treatment control BMPs was pulled from the newly developed SUSMP Project and Treatment Control BMP GIS Database. Then, a formal letter was developed to notify property owners of their verification responsibility. An informative Treatment Control BMP brochure was also created to help property owners identify the BMPs that were installed as a part of their development project. Finally, a self-verification form was developed for responsible parties to use to report annual verification of Operation and Maintenance of their treatment control BMPs. In FY 09-10 and FY 10-11, the BMP verification letter was updated in an effort to promote a greater inspection response rate and self-verification return rate. An example of the updated verification letter, brochure, and form can be found in Appendices A-5a, A-6, and A-7, respectively. In some cases additional notifications were required in order to get responsible parties to submit their inspection certification and documentation.

In FY 09-10, in an effort to further improve the self-verification response rate the City developed a webpage and on-line form which responsible parties may use to submit their self-verification documentation. The webpage provides responsible parties with information about the TC BMP Operation and Maintenance Program and allows them to update their ownership and mailing information, certify that their BMPs were annually inspected, maintained and are operational and upload photos and maintenance documentation. The City's Information Technology department has ensured security of personal information by creating a unique Personal Identification Number (PIN) for each responsible party, allowing secure access property specific BMP information.

In FY 2009-10, the City determined that only those projects that were not designated as requiring a City inspection of their BMPs would be required to conduct a self-verification of their BMPs and submit self-verification documentation. It was reasoned that it would be redundant to require those responsible parties who were already receiving an inspection of their BMPs by City staff to also have to conduct a self-verification. When conducting an inspection, City staff thoroughly assesses the condition of all BMPs on a site and typically the responsible party is present when the inspection is conducted, providing an opportunity to educate the property owner about the function of the facilities on site and their obligations to maintain and preserve them. If deficiencies are identified, corrective actions are noted on the inspection form, and the responsible party is required to complete corrective actions by a specified deadline. Additional detail regarding the City's Treatment Control BMP Operation and Maintenance Inspection Program can be found in Section 2.4.4.7.

All required self-verifications must include an evaluation of <u>all</u> treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. Within the defined reporting period of this report, the City mailed annual self-verification notifications to each party responsible for the maintenance of treatment control BMPs constructed within the City of Encinitas who was not scheduled to receive a City inspection. The notification package included a letter informing the responsible parties of their inspection and maintenance obligation and a brochure which explains the program and provides examples of common BMPs. Responsible parties were directed to complete the self-verification form online and

upload photos showing that all BMPs on their property have been maintained and are in good working order.

Self-Verification Results and Findings

FY 10-11 was the third year of implementation of the Treatment Control BMP inspection and maintenance program. The City mailed out a first and second notification reminding responsible parties of their inspection and maintenance obligations. 78% of the parties submitted their self-verification documentation after one or two notifications. This is a signification improvement from the results of past years. Twenty BMP owners did not submit their self-verification even after receiving two notices (see Table 2-4). In the event that self-verification documentation was not submitted, City staff made every attempt to conduct a City Inspection in lieu of a Self-Verification. A total of **13** City Inspections were completed in lieu of Self-Verification. Copies of the two BMP Operation and Maintenance verification letters issued to responsible parties in FY 10-11 may be found in Appendices A-5a and A-5b.

Table 2-4
Summary of Notifications Sent and Self-Verification Submittals Received

Action	Total
Self-Verification Notifications Issued:	96
Self-Verification Submittals Received:	75
City Inspections conducted in lieu of Self-Verification:	13
Non-Responsive Responsible Parties:	8

Upon receipt of a self-verification packet from responsible parties, City staff reviews the completed forms and the required photos and maintenance documentation (if any). Staff determines whether the information is complete or if any further maintenance is required. For a detailed summary of the results and findings of FY 2010-11 treatment control BMP inspections see Appendix A-8. Appendix A-8 includes detailed information about each project, such as project location, inspection date, inspection results, and any City action. As a result of the Self-Verification program (Section 2.4.4.7), there were **two** properties with treatment control BMPs that warranted enforcement action. For a summary of enforcement action, refer to section 2.4.4.8.

The defined reporting period of this report represents the third year of implementation of the Permanent BMP Self-Verification Program. City staff continued the use of the online submittal form that was offered to responsible parties as an option to submitting their self-verification documentation. This provided responsible parties with four submittal options—online, email, regular mail, and hand delivery to City Hall. This fiscal year the City highlighted the online form as the preferred submittal option in the notices that were issued to responsible parties. As a result, the majority of self-verification forms were submitted via the online form. Since this was the third year of implementation, the BMP and Priority Project inventories were more complete due to previous year's efforts to validate current contact information and inform

property owners of their maintenance responsibilities and submittal requirements. As detailed in Tables 2-4 and 2-5, the City's implementation process was generally successful.

Table 2-5
Summary of Self-Verification Results and City Actions

Self-Verification Results	**Frequency**
All BMPs in Good Condition	83
Maintenance Conducted or Follow-up Required	5
Non-responsive Owner	8
City Actions	**Frequency**
Submittal Information Validated	70
City Inspected	13
Other City Actions (see Appendix A-8)	13

2.4.4.7 TREATMENT CONTROL BMP OPERATION AND MAINTENANCE INSPECTIONS

During FY 2007-08, Clean Water Program staff developed the City's new Treatment Control BMP Operation and Maintenance Inspection Program. New inspection forms were created, and the Treatment Control BMP inventory database was designed and quality checked. For a detailed description of the development of the GIS-based Treatment Control BMP Inventory and Tracking system refer to Section 2.4.4.4. Notably, unique to the development dynamic of the City of Encinitas, a large number of inventoried BMPs exist on private, single-family residential lots. Therefore, the City of Encinitas Treatment Control BMP Operation and Maintenance Inspection program was developed with this condition in mind.

In FY 2009-10, as required by the Municipal Permit, 100% treatment control BMPs installed at high priority development projects, at least 50% of the medium priority development projects, a minimum of 20% of the total number of projects with approved treatment controls, and a maximum of 200% of the average number of projects with treatment control BMPs approved per year were inspected by the City's inspection staff prior to the rainy season. Implementation of the City's BMP Inspection Program was very effective. The City met, and in most cases far exceeded, all the inspection requirements outlined in Section D.1.e. of the Municipal Permit.

As of July 1, 2010, there were a total of **75** constructed Priority SUSMP projects (5 high, 40 medium, and 30 low priority) on the City's treatment control inventory (See Appendix A-1). With **15** Priority SUSMP projects approved in FY 2009-10, there was an annual average of **12** projects with treatment control BMPs completed since permanent BMPs were first required on Priority Development Projects in 2003 (see Table 2-6). A total of **44** projects (5 high, 30 medium, and 9 low priority) with approved and constructed treatment control BMPs were inspected in FY 2009-10. This amounted to **100%** of the high priority sites, **75%** of the medium priority sites, **30%** of the low priority sites, **59%** of the total number of constructed Priority SUSMP sites, and

367% of the average number of projects with treatment control BMPs approved per year that were inspected in FY 2009-10 (see Table 2-7). In addition, **80%** of the projects with drainage inserts were inspected in FY 2010-11.

Table 2-6
Average Number of Constructed Projects with Treatment Control BMPs

Fiscal Year	Completed Projects
2004-05	6
2005-06	8
2006-07	14
2007-08	15
2008-09	12
2009-10	15
Average	12

When inspections are conducted in future years, inspection frequencies will be based on the project's assigned TTWQ priority as determined by City staff in FY 2008-09 or assessed during future treatment control inspections, and the criteria outlined in Section 2.4.4.4 of this document. Table 2-7 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 2-7
Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Permit Mandated Inspection Frequency	FY 10-11 Inspection Frequency
High	Annually (prior to start of rainy season)	100%
Medium*	50% annually	75%
Low	As needed	30%

*Drainage insert controls are considered medium priority BMPs

FY 2010-11 inspections included an examination of all treatment control BMPs at the site to verify that each treatment control BMP was working, being maintained properly, and was in compliance with all applicable City ordinances and permits. Inspection findings were documented by the inspector using the Treatment Control BMP Inspection Form (Appendix A-9). If any deficiencies in operation and maintenance were noted during the inspection, the responsible party was notified and appropriate enforcement actions were taken (as described in Section 2.4.4.8 of this document) to achieve compliance.

Because the majority of the treatment control BMPs installed in the City of Encinitas are on single-family residential lots, great care was taken to educate homeowners of their maintenance, inspection, and self-verification obligations. As noted in section 2.4.4.6, packages mailed to responsible parties included information detailing the BMP operation and maintenance

program. When working with homeowners, City stormwater staff devoted personal, specialized assistance as warranted in order to improve knowledge and awareness and achieve compliance.

For a detailed summary of the results and findings of the FY 2010-11 treatment control BMP inspections see Appendix A-8. Appendix A-8 contains information about each project, such as project location, inspection date, inspection results, and additional City action. Depending on the findings during the course of initial inspections, follow-up inspections were conducted and enforcement action was taken as necessary. For a detailed summary of enforcement action taken as part of the treatment control BMP inspection program, refer to section 2.4.4.8.

Treatment control BMPs that are operated and maintained by the City are considered part of the City's MS4 and are maintained and inspected by Public Works staff on an annual basis. BMPs that are located in specialized public facilities such as parks and libraries may be inspected by City stormwater staff and maintained as necessary by City staff. For more information regarding the maintenance and inspection of the City's MS4 refer to Section 4 of this document.

2.4.4.8 ENFORCEMENT MEASURES FOR DEVELOPMENT SITES

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all development projects and permanent BMPs as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. A more detailed description of the different enforcement measures used by the City to enforce its storm water regulations and their legal basis can be found in Section 2 of the 2008 JURMP update document.

As a result of post-construction treatment BMP verification inspections and self-verification results, the City determined that **seven** inspected projects were partially or totally deficient in the installation and or maintenance of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, all **seven** projects were brought into compliance through a combination of written orders to correct and/or verbal warnings.

3.0 CONSTRUCTION

3.1 INTRODUCTION

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site Best Management Practices (BMPs), inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Municipal Permit as outlined in Section D.2.

3.2 SOURCE CHARACTERIZATION

3.2.1 SITE INVENTORY

Within the defined reporting period of this report, the City of Encinitas has compiled, maintained, and updated a watershed-based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2010-11 included a total of **106** construction sites. During this period, there were **13** high priority sites that were inspected biweekly, **39** medium priority sites that were inspected monthly and **54** low priority sites that were inspected on a biannual basis. The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of all construction projects. The GIS inventory includes details on each construction site, including project name, location, sub-basin, type of construction permit, date of permit issuance, inspection prioritization, and the assigned storm water inspector. The City's Clean Water Program staff, in coordination with the City's IT department has designed a technical solution in GIS to inventory and prioritize all construction projects as permits are approved. A more detailed description of the prioritization process is provided below in Section 3.2.2. A fully prioritized construction inventory can be found in Appendix B-1 in addition to a map of all active construction sites located in Appendix B-2.

3.2.2 INVENTORY UPDATES

As required by Section D.2.b of the Municipal Permit the City's watershed-based inventory of construction sites is updated weekly by the Engineering department as new grading permits are approved. The Engineering department shares all approved permit information with the City's IT Department which also maintains an updated inventory of all active construction projects in a GIS database. As part of the 2008 Jurisdictional Urban Runoff Management Plan (JURMP) update process, and to ensure monthly construction inventory management, a construction specific GIS script was developed by the City's GIS staff in ESRI's ArcMap for prioritizing approved construction permits. This mechanism remains an efficient and effective tool in maintaining a current construction inventory, and is accessible via desktop to Clean Water Program staff to execute the GIS script and review the prioritizations on a monthly basis. Regular updates to the inventory include the addition of new construction projects, the removal

of completed construction projects, and re-assignment of inspection frequencies of active construction sites as determined by the City's Clean Water Program staff. A flow-chart that outlines the process by which the inspection frequency of construction projects is determined in GIS can be found in Appendix B-3.

3.3 ORDINANCE UPDATES

As required by Section D.2.a of the Municipal Permit, applicable City documents and ordinances were updated on March 12, 2008 by the City of Encinitas City Council to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code Section 20.08, the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, including construction specific provisions. The City's legal authority related to construction activities was further strengthened on February 25, 2009 when the City Council adopted a revised Grading Ordinance, EMC Section 23.34. Subsequently, the California Coastal Commission approved the adopted changes and the following provisions for storm water pollution control have been incorporated into the City's grading ordinance:

- All grading permits shall comply with the provisions of the City's Best Management Practices (BMP) Manual Part II which provides design, construction, and operation requirements for minimizing storm water pollution related to construction activities (§ 23.24.071).

- Any removal of BMPs that were required for a priority project will require a grading permit for corrective or other action. A requirement may be imposed to replace the BMP with equivalent water quality protection (§ 23.24.080).

- Priority projects for storm water pollution control cannot be exempted from obtaining a grading permit (§ 23.24.090.I).

- Any project creating over 500 square feet of new impervious area has to obtain a construction permit and adhere to all standards in the City's BMP Manual Part II (§ 23.24.105).

- All grading plans shall contain the location, design, detail, and cross section of all erosion control and post construction BMPs (§ 23.24.140).

- If the approved grading plan does not show post construction BMPs in sufficient detail, a precise grading plan for development projects is required to include and accurately depict post construction BMPs for review and approval of the City Engineer (§ 23.24.126).

- Both Interim and Final Erosion and Sediment Control Plans are required (§ 23.24.150, 23.24.160).

- A waste management plan is required to be submitted with all interim erosion control plans. The management of the waste on the construction site must be graphically and verbally described on the grading plan (§ 23.24.150F).

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

3.4.1 UPDATED BMP REQUIREMENTS

Through the JURMP update process completed in March 2008, the City reviewed and updated a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the Maximum Extent Practicable (MEP). Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm water Best Management Practices Manual, Parts I and II, and the City of Encinitas' 2008 JURMP Update.

3.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are different for the wet season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). The City's Storm Water Manual Parts I and II provide a detailed list of dry and wet season requirements for all construction sites. Prior to the beginning of the wet season, in September 2010, the City sent **71** Erosion Control letters which included a copy of the City's Municipal Code Sections outlining erosion and sediment controls in wet weather conditions and an educational brochure "A Pollution Prevention Guide for the Construction Industry," to all property owners with active and inactive construction sites in the city (See Appendix B-5).

3.5 PROGRAM IMPLEMENTATION

3.5.1 CONSTRUCTION AND GRADING APPROVAL PROCESS

The City has established a thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards, obstructs a waterway, or occurs over an area of 10,000 square feet. All other projects require a building permit. Both grading and building permits require that plans be submitted and approved by the City. The City's grading ordinance requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all

projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a citywide data management system called "HTE".

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As a part of this approval process, the City's Clean Water Program staff also reviews the grading plans when necessary to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Engineering staff reviews the plans for overall compliance with the grading ordinance and for specific compliance with the Storm Water Management Ordinance and Federal and State regulations. If the site falls under jurisdiction of the State's Construction General Permit (CGP) Order No. 2009-0009-DWQ, Engineering staff follows up with the developer to ensure that a Storm Water Pollution Prevention Plan (SWPPP) is properly prepared and submitted. The City also requires proof that a Notice of Intent (NOI) has been issued for sites that are subject to the CGP.

Prior to issuing construction and grading permits, the City's Engineering Department verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP. It should also be noted that the general notes for building plans have been amended to include erosion control, sediment control, and materials management practices.

Projects that are generated by the City's Capital Improvement Program (CIP) follow a similar process as the private development projects outlined above. City initiated projects require the use of a Qualified SWPPP Developer (QSD) for the preparation of Storm Water Pollution Prevention Plans (SWPPP) when the project falls under the jurisdiction of the CGP. The City also assures that an NOI is submitted for all sites that are subject to the CGP. During the construction phase of capital projects, contractors are also required to secure the services of a Qualified SWPPP Practitioner (QSP) to assure that CGP requirements are followed. In supplement to contractor required compliance assurance responsibilities, all CIP sites are inspected by City Engineering Inspectors as well as Clean Water Program staff to assure compliance with local standards throughout the life of the project.

3.5.2 BMP IMPLEMENTATION

Clean Water Program staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the City Engineering Inspectors. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08 and the City's Storm Water Best Management Practices Manual, Parts I and II.

Clean Water Program staff constantly monitor weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all Engineering Inspectors to inform them of the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation, maintenance, or replacement should take place, and where necessary, they require responsible parties to have additional BMPs in place at the end of each work day.

Through the review and plancheck process, and supported by the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, staff maintains the authority to require additional or alternative BMPs to be implemented on individual projects as determined necessary. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

3.5.3 CONSTRUCTION SITES REQUIRING ADVANCED TREATMENT

There were no sites in FY 2010-11 that required advanced treatment. For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined by the new statewide CGP that a project possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat To Water Quality (TTWQ), an Active Treatment System (ATS) will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are fully described in the new statewide CGP.

3.5.4 INSPECTIONS & BMP VERIFICATION

The City has an established inspection program to evaluate compliance with storm water regulations at all construction sites within the City's jurisdiction. The City of Encinitas's Engineering Department employs two full time Engineering Inspectors and three full time contract Engineering Inspectors who are responsible for inspections at all construction sites in the city. Storm water issues such as compliance with the grading and storm water ordinances in the Municipal Code have become one of their main focuses, especially during the wet season.

On January 24, 2008, the RWQCB adopted the 2007 Municipal Permit. Inspection activities for the construction program were updated and implemented at that time to meet the new Municipal Permit requirements as outlined in Order No. R9-2007-0001. During Fiscal Year 2010-11, consistent with required inspection frequencies as outlined in Sections 2.d.1-3 of the Municipal Permit, City staff conducted a total of **200** storm water inspections. Appendix B-1 details the complete Construction Inventory for FY 2010-11, the construction site prioritizations, and the number of inspections conducted at each site. Notably within the defined reporting period of this report, due to widespread slowdowns in the economy and development related activity, there were fewer active construction projects and therefore fewer site inspections than reported in previous years.

The Engineering Inspectors captured all construction inspections on a form titled "Storm Water Quality Inspection for Construction Activities", included in Appendix B-4. The inspection form contains questions to ensure all the inspection components required by Section D.2.d.6 of the Municipal Permit are addressed. The form lists the minimum construction BMPs required by the City and includes check boxes and comment areas to document if BMP installation or maintenance is required or if other corrective actions are necessary. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 3.5.5 below are taken.

As part of the 2008 JURMP update process, and codified through BMP Manual II, the City of Encinitas established a maximum disturbed area for grading at 50 acres. Within the defined reporting period of this report, no construction projects in the City of Encinitas were subject to maximum disturbed area or advanced treatment requirements, and therefore no required inspections related to this standard were completed.

3.5.5 COMPLIANCE AND ENFORCEMENT ACTIONS

3.5.5.1 GENERAL ENFORCEMENT

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites within its jurisdiction. Inspection and enforcement for construction projects is administered by the Engineering Inspectors and other City staff with inspection and enforcement authority.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may be applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to be corrected, and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's storm water regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop / Correct Work Notice. The NOV and Correct Work Notice provide a description of the violation to be corrected, the time frame for correction, and a

follow-up inspection date. All Stop Work Notices issued by the City are reported to the RWQCB per the reporting requirements of the Municipal Permit.

Civil penalties for violations of the Encinitas Municipal Code (EMC) are established in EMC Chapter 1.08, and determined violations of storm water regulations may be subject to administrative citations and associated administrative fines, including those at construction sites. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector.

3.5.5.2 REPORTING AND NON COMPLIANCE

During the FY 2010-11, **42** construction related complaint calls were received through the City's Clean Water Hotline. A total of **41** complaints were investigated and **1** call was referred to another department for further action. Of the **41** complaints investigated by Clean Water Program Staff, there were **32** violations resulting in **38** instances in which educational information was disseminated, **16** instances in which Notice of Violations notices were issued, and **3** instances in which a citation was issued. A complete summary of all construction related complaints can be found in Appendix H-1.

There were an additional **67** correct work notices and **7** citations issued as a result of the routine City inspections at construction sites throughout the fiscal year. With immediate oversight from the City's Engineering Inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance and avoid further enforcement. Appendix B-6 features a summary of all violations and enforcement actions for all routinely inspected construction sites in FY 2010-11.

4.0 MUNICIPAL

4.1 INTRODUCTION

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, the storm drain system, and municipally owned facilities, which includes 17 public parks, 11 parking lots, 6 beach access areas, 5 fire stations, 4 public works yards, 4 administration buildings, 4 open space areas, 3 viewpoints and 1 golf course. The updated municipal facilities inventory is included as Appendix C-1. The City also conducts high Threat to Water Quality (TTWQ) activities, as defined by the Municipal Stormwater Permit, such as power washing and other mobile activities including street and sidewalk repair, building cleaning, painting, graffiti cleaning, and fleet vehicle maintenance. Other prominent water quality related activities include street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel and landscaping contractors, annual Municipal Separate Storm Sewer System (MS4) maintenance, and regular upkeep of the sanitary sewer system to prevent overflows.

Due to the large expanse of municipal areas, activities, and functions, City staff must carefully manage pollution prevention measures and Best Management Practices (BMPs) to reduce or potentially eliminate the discharge of pollutants into the MS4 from municipal areas and activities. To comply with the Municipal Stormwater Permit, the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas, activities, and functions.

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 BACKGROUND

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.2.2 SOURCE CHARACTERIZATION

The City of Encinitas maintains approximately 166 miles of roads, streets, and highways and 11 City owned and operated parking facilities. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included in Appendix C-1.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's BMP Manual Part I and the California Stormwater Quality Association (CASQA) Municipal Handbook to choose applicable BMPs to implement for roads, streets, highways, and parking facilities within the City. Street sweeping and cleaning is the main BMP that is implemented for road, street, highway, and parking facilities (both stand-alone and those associated with a municipal facility) maintenance. Treatment control BMPs used for all roadway projects determined to be priority projects and subject to Standard Urban Storm Water Mitigation Plan (SUSMP) standards, are described in more detail in Section 2.0. The City implements additional controls for roads, streets, highways, and parking facilities adjacent to or tributary to Environmentally Sensitive Areas (ESAs) when determined to be necessary.

4.2.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2010-11 to require and verify the implementation of designated BMPs for all City maintained roads, streets, highways, parking areas, and related activities as outlined in the Municipal Permit Section D.3.a.(5)(a-c).

In compliance with street sweeping standards established in Order 2007-0001, the City implemented an aggressive sweeping schedule for roads, streets, highways, and parking facilities.

The frequency of street sweeping is as follows:

- All arterial roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris are swept weekly.
- All collector streets and parking facilities identified as consistently generating moderate volumes of trash and/or debris are swept bi-monthly.
- All residential (publicly owned) and parking facilities identified as generating low volumes of trash and/or debris are swept monthly.

The City also maintains parking facilities at six local parks, four local beaches and the Encinitas Community Center. Four parking facilities at the local parks have been identified as generating low volumes of trash, sediment, and debris and are swept monthly from March through September. The remaining parking lots have been identified as generating moderate volumes of trash, sediment, and debris, and have been assigned a sweeping prioritization of medium priority. Each of these facilities is swept on a monthly basis throughout the year. The parking facilities at the beaches are swept every week from April through September to address the increased traffic, and monthly from October through March. In FY 2010-11, a total of **89 tons** of debris was collected from all City maintained parking lots.

In FY 2010-11, a total distance of **11,330 curb miles** was swept, and a total of **1,772 tons of debris** was collected. The total amount of material collected from both street and parking lot sweeping was **1,861 tons**.

Additionally, in FY 2010-11, the City's Public Works Department through coordinated efforts with Partners with Industry (PWI) collected and removed **62** 30-gallon bags of litter from all of the City's bus stops. The City also partnered with San Diego County probation crews to collect and remove **136** 30-gallon bags of over-grown vegetation from City right-of-ways based on visual observations and citizen complaints.

4.3 FIXED FACILITIES

4.3.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities that have been grouped in this section because these facilities receive formal inspections as part of the municipal program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreational Facilities
- Public Works Facilities
- Potable Water Facilities
- Fire Stations
- Other Fixed Facilities

4.3.2 SOURCE CHARACTERIZATION

The Municipal Permit requires Copermittees to inspect high priority municipal areas and activities annually according to D.3.a.(7)(a). High priority facilities include parks and recreational facilities and other municipal areas and activities that the City determines may contribute a significant pollutant load to the MS4.

As part of the (Jurisdictional Urban Runoff Management Program) JURMP Update process in March 2008, all municipal facilities were assigned an inspection priority based on the Municipal Permit requirements and an evaluation of their threat to water quality. Each site and activity has been evaluated based on a variety of site-specific factors including size, location, type of activity, waste generated, pollutant discharge potential, non-storm water discharges, proximity to receiving water bodies, and any other relevant factors deemed appropriate. Using these criteria, a complete prioritized, watershed based inventory was developed and is included in Appendix C-1.

The City of Encinitas owns, operates, and maintains 55 fixed facilities within the City. Of these facilities, 29 have been designated with a high priority inspection priority and 26 were designated a low inspection priority. All high priority facilities are formally inspected on an annual basis and described further in Section 4.3.4. Both high and low priority facilities are visually inspected on a routine basis by City staff. Any illicit discharges or illegal connections are immediately referred to the Clean Water Program. All fixed municipal facilities are

included in the City's inventory located in Appendix C-1. Figure 4.1 illustrates the various municipal fixed facilities and their associated activities within the City of Encinitas.

Parks and Recreation Facilities

The City maintains 17 public parks, 6 beach access areas, 3 viewpoints, 40 miles of trails, and 70 acres of open space. All landscape maintenance activities are performed through the use of private landscape contractors. Parks and Recreation Department Supervisors are responsible for monitoring contract activities for landscaping which includes; implementing BMPs for pesticide, herbicide, and fertilizer usage, waste removal and control, and maintenance at all municipal parks and recreation facilities.

Public Works Operations Facilities

Public Works operations facilities are important in maintaining the functionality of many publicly offered services. The City of Encinitas maintains a total of four public works facilities, which include the City of Encinitas Wastewater Collection Facility and three public works yards, "A" Tank site, Calle Magdalena and Requeza Street (Appendix C-1).

Potable Water Facilities

The means to provide residents of the City with potable water is an essential activity conducted by the City of Encinitas's San Dieguito Water District. The City maintains several underground fixed facilities which include a pump station, pressure regulating stations as well as two water reservoir/water storage facilities. The City also maintains an above ground water recycling reservoir.

Fire Stations

Fire fighting capability is an essential element of municipal activities conducted in the City. The City of Encinitas maintains five fire stations, which are included in the municipal inventory (Appendix C-1). Two fire stations within the City, stations #3 and #4, have fueling stations on site.

Other Fixed Facilities

Other fixed municipal facilities include a community center, three administrative buildings, five pump stations, and an Ultra Violet Urban Runoff Treatment Facility (UV Facility). All of these facilities are considered a low priority because many of the activities at these facilities are conducted indoors and do not correspond with activities that are considered a high threat to water quality.

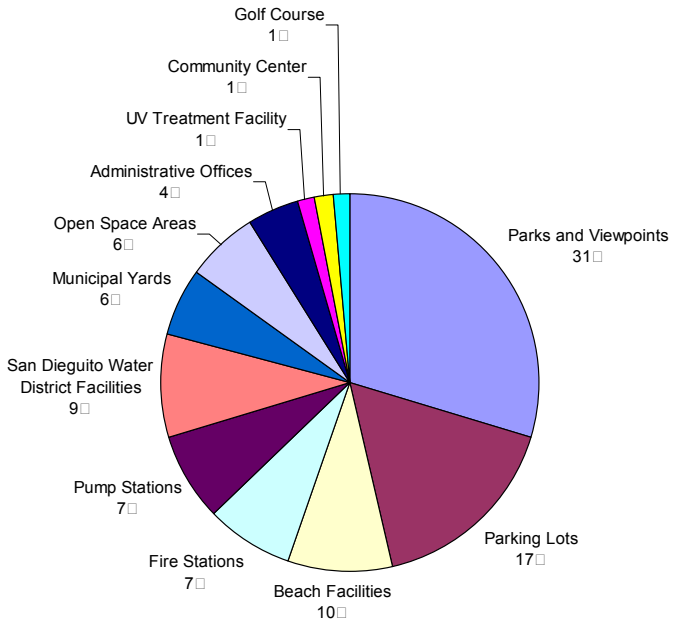

Figure 4.1 City of Encinitas Fixed Facilities

4.3.3 BEST MANAGEMENT PRACTICES

4.3.3.1 UPDATED BMPS

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP Update and the City's BMP Manual Part I. The City also references the CASQA Municipal BMP Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2010-11, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas. City personnel implemented general waste management BMPs, and patrons of the facilities were encouraged to recycle and properly dispose of trash and pet waste. Notable activities during the fiscal year included the maintenance of 20 doggie bag dispensers at 3 public parks and along several trails. The City also posted recycling signs along with trash and recycling bag dispensers at 6 beaches during peak holiday weekends throughout the reporting period.

City staff continued operation and maintenance of post-construction BMPs at Cottonwood Creek Park. The park is a prime example of low impact development and includes the following post-construction BMPs: 90 feet of day lighting Cottonwood Creek, porous pavement for all parking areas and driveways, pervious walkways, surface drainage through earthen-bottom open channels, and drought tolerant plants in landscaping areas.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: (1) runoff from improper irrigation after application; (2) application of chemicals during or prior to storm events; (3) use of chemicals that do not properly absorb to soil or plants; and (4) overspray from chemical applications that may eventually enter the MS4. The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management. Implementation of the policy includes:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The regulations generally include: a list of approved pesticides and selected uses, updated regularly, general application information, equipment use and maintenance procedures, and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs.

In FY 2010-11, the following BMPs were implemented at all municipal parks and recreation facilities, public streets, channels, and right-of-ways to reduce pollution from pesticides, herbicides, and fertilizers:

- Whenever practicable, integrated pest management techniques that rely on non-chemical solutions are implemented.
- City personnel who participate in the application of pesticides are properly trained, maintain Qualified Applicator Certifications and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- City staff records the applications of all chemical agents by noting the locations, types, and quantities of chemicals used. Records are reported monthly to the Department of Agriculture.
- Pesticide, fertilizer, and herbicide handling and safety refresher sessions are provided to City personnel involved with application.

- The use of fertilizers is minimized as much as possible; compost and soil amendments are used in place of fertilizer, where applicable.
- Employees are trained to handle pesticides, herbicides, and fertilizers properly.
- All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides, and fertilizers are applied only when necessary (typically during growing seasons) and not during or prior to anticipated storm events.
- Pesticides are not sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- The City maintains compliance with federal and state reporting law for pesticide use.
- Weeds, grass, and brush are cleared from building perimeters and fence lines to reduce the need for pesticides and herbicide use, when applicable.
- Native plants are used in landscaping, where applicable.
- Diseased plants are removed, and infected parts of plants are removed to minimize the need for pesticide and herbicide use, where applicable.
- Several evapotranspiration gauges located throughout the City are used to monitor microclimates to properly set irrigation systems for different areas of the City and reduce the potential of over-irrigation.
- Flow sensors and master valves prevent water loss in the event of a break in any of the main lines.
- One bilingual municipal storm water training session for the City's private landscaping contractors was conducted by Clean Water Program staff during the fiscal year. There were 25 participants at the training session on May 3, 2011.

Public Works Operations Facilities

City personnel implement appropriate BMPs for all activities that take place at public works facilities. Storm Water Pollution Prevention Plans (SWPPPs) have been developed for all four public works facilities, which include the City of Encinitas Wastewater Collection Facility and three public works yards, "A" Tank site, Calle Magdalena and Requeza Street. The SWPPPs include a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs are maintained at each facility, and all of the facilities are inspected by City staff on an annual basis. Additionally, all Public Works employees are annually trained in storm water management. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Potable Water Facilities

City personnel implement appropriate BMPs for all activities that take place at potable water facilities when deemed appropriate. San Dieguito Water District employees are trained in storm water management on an annual basis. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. In FY 2009-10, Fire Station #3 was redesigned to incorporate the following storm water BMPs: bio swales, pervious pavement and a roof cover for the fueling area. Two fire stations (#3 and #5) have permanent treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. More detailed information regarding municipal staff training and non-emergency fire fighting flows can be found in Sections 8.2 and Section 13 of this document.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management, as discussed in the City's BMP Manual Part I and the CASQA Municipal Handbook.

Additionally, the City implements and maintains several pollution prevention practices throughout the City of Encinitas. In FY 2010-11, the City adopted the Parks and Recreation Policy and Procedures Manual for integrated pest management for all departments citywide, expanded its battery collection program to offer public collection of used batteries at the Encinitas Branch Library, the Encinitas Community Center and at all Public Works facilities and fire stations. The City also partnered with the Downtown Encinitas Mainstreet Association to purchase and install 50 trash/recycling containers in downtown Encinitas to increase recycling opportunities.

Other pollution prevention practices that are maintained at City Hall, Calle Magdalena Public Works Facility and the Wastewater Collections Division Municipal Yard include the following:

- automatic lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- replacing large trash receptacles at each individual desk with mini size trash receptacles and providing large recycling containers for mixed paper and cans/bottles,
- maintaining recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments,
- use of seven alternative fuel vehicles,
- use of 100% recycled paper for all copiers and printers,
- Low Impact Cleaning policy which seeks to minimize the impact of the City's cleaning products and procedures on the environment,

- Environmentally Preferable Purchasing policy,
- use of ten energy efficient Dyson hand dryers installed in all of the bathrooms at City Hall, the Encinitas Community Center and the Encinitas Branch Library and
- solar photo voltaic panels, a high efficiency air conditioning system, and day lighting the building in certain areas at City Hall.

4.3.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

Fertilizers which are used on landscaped areas in municipal parks and public right-of-way areas are considered a pollutant of concern for the San Elijo Lagoon and its larger drainage area. To mitigate potential discharges of nutrients to the lagoon from Municipal activities, the City requires that the City's landscaping contractors implement an extensive fertilizer management program as described earlier in section 4.3.3.1. The City will continue to monitor the fertilizer management program, and if the existing measures are found to be deficient, the City may adjust the BMP implementation as needed to achieve a higher level of pollutant reduction.

Similarly, if the City identifies any potential sources of other constituents for which water bodies in the City are 303(d) listed that could be the result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no other municipal fixed facilities that have been determined to be a source of pollutants for which water bodies within the City are on the Clean Water Act (CWA) 303(d) list.

4.3.4 PROGRAM IMPLEMENTATION

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and if necessary, enforcement actions. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.3.4.1 MAINTENANCE

In FY 2010-11, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot, and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular maintenance activities.

The City maintains a regular maintenance schedule for fixed facilities in the City. As previously discussed, City personnel are trained to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly, and to report illegal discharges/illicit connections as they may come across them during normal work activities.

4.3.4.2 TRAINING AND EDUCATION

Municipal personnel are trained in implementing appropriate BMPs and preventing non-storm water discharges. In FY 2010-11, Clean Water Program staff conducted training for the following municipal departments: Engineering, Fire and Marine Safety, Parks and Recreation, Public Works and the San Dieguito Water District. Additionally, the Streets Division of the Public Works Department discussed storm water issues at regular staff meetings throughout the reporting period. A detailed description of the municipal education program can be found in Section 8.2 of this document.

4.3.4.3 MUNICIPAL INSPECTIONS

City staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. As part of the FY 2010-11 program City staff performed a total of **29** high priority inspections. The fixed facility inspection locations and inspection dates are summarized in Table 4-1 below.

Table 4-1
Fixed Facility Inspections

No.	Facility Name	Inspection Date
1	"A" Tank Site Public Works Yard	5/25/2011
2	Calle Magdalena Public Works Yard	5/25/2011
3	Requeza Street Public Works Yard	5/25/2011
4	Wastewater Collection Facility	5/25/2011
5	Encinitas Ranch Golf Course	5/26/2011
6	Beacon's Beach	6/30/2011
7	Cardiff Sports Park	6/20/2011
8	Cardiff Sports Park Expansion	6/20/2011
9	Cottonwood Creek Park	6/20/2011
10	Encinitas Viewpoint Park	5/23/2011
11	Glen Park	6/30/2011
12	Grandview Beach	6/30/2011
13	H Street Viewpoint	6/30/2011
14	Hawkview Park	6/22/2011
15	J Street Viewpoint	6/30/2011
16	Las Verdes Park	5/23/2011

No.	Facility Name	Inspection Date
17	Leo Mullen Sports Park	5/17/2011
18	Leucadia Oaks Park	6/20/2011
19	Leucadia Roadside Park	6/30/2011
20	Little Oaks Equestrian	6/22/2011
21	Mildred Macpherson Park	6/30/2011
22	Moonlight Beach	6/30/2011
23	Oakcrest Community Park	5/17/2011
24	Orpheus Park	6/30/2011
25	Paul Ecke Sports Park	5/23/2011
26	Scott Valley Park	5/24/2011
27	Sun Vista Park	6/21/2011
28	Swami's Beach	6/30/2011
29	Wiro Park	6/22/2011

The recommended BMPs and corrective actions are summarized in the City's Routine Inspection Summary located in Appendix C-6. Of the 29 sites inspected, **1** public park facility required a minor corrective action. As a result, the facility has implemented all appropriate BMPs, and the Parks and Recreations Department has verified that the corrective action has been completed. There were no enforcement actions for any of the Municipal fixed facilities during FY 2010-11.

Potable Water Facilities

All of these facilities are considered a low priority and do not receive formal inspections because the activities associated with these facilities are located underground and do not involve any other activities on site.

4.4 MS4

4.4.1 BACKGROUND

The primary functions of municipal separate storm sewer systems (MS4) are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consist of streets, curbs, catch basins, inlets, pipes of varying materials, natural creeks and streams, natural channels, concrete channels,

culverts, desilting basins, and detention basins. The City also maintains a number of treatment control BMPs such as storm drain filter inserts and a UV treatment facility, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City of Encinitas regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the Maximum Extent Practicable (MEP).

4.4.2 SOURCE CHARACTERIZATION

The City maintains a variety of MS4 facilities which includes 1,757 catch basins and inlets, 63 miles of storm drain pipe, 2.43 miles of open channels, 14 desilting basins, and 1 Ultra Violet Urban Runoff Treatment Facility located throughout its jurisdiction. The MS4, as one complete entity, is included in the municipal inventory located in Appendix C-1.

The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of the MS4. The GIS MS4 inventory includes inlets (i.e. catch basins, curb inlets, grate/inlet combos, etc.), outlets (i.e. curb outlets, headwalls, etc.), manholes, pumps, ditches, channels, storm drain pipes, and detention basins. To ensure that the City's GIS inventory is current and accurate, the MS4 inventory continually undergoes data (feature and attribute) review, quality control and validation by City staff from multiple departments. GIS staff also maintains storm drain infrastructure data by mapping new infrastructure through a combination of field work and Engineering Plans.

In FY 2010-11, the City continued with its Channel Maintenance and Environmental Permitting project by conducting a series of interdepartmental meetings to evaluate individual facilities for such considerations as maintenance needs, equipment needs, site accessibility and any other pertinent attribute information to help define the ultimate maintenance plan for each facility. With a refined inventory and well developed maintenance plans, it is anticipated that this project will move into subsequent phases to better coordinate the appropriate permitting process.

4.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.4.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction, and new development. The City's JURMP also directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste from entering the MS4 system as well as ensuring that waste which is collected during maintenance of the City's MS4 does not re-enter the system.

The 2007 Municipal Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City of Encinitas does not

own or operate any flood management projects or flood control devices that may be retrofitted. However, in FY 2010-11 the City did maintain 10 detention basins throughout the City that serve a pollutant removal function, particularly for sediment and associated pollutants bound to the sediment. These facilities are inspected on an annual basis and cleaned of debris and sediment as needed. A Municipal BMP map that depicts all of the City's structural BMPs, detention basins and storm drain filter locations can be found in Appendix C-3.

4.4.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS/ACTIVITIES

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined to be necessary.

4.4.4 PROGRAM IMPLEMENTATION

The City's MS4 management program includes responding to complaints received by the City's Clean Water Hotline {(760) 633-2787}; detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, repairing and/or replacing damaged or failing MS4 structures; and by stenciling signs on storm drain inlets warning of effects of illegal dumping. The City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a combination sewer and storm drain cleaner (a vactor truck) during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance. City staff report on the maintenance of the MS4 through an industry standard asset inventory and a work management system that integrates with the City's GIS system. Maintenance is performed on the storm drain infrastructure and captured through work orders that are attached to the storm drain features represented in GIS. Any changes or updates to the MS4 inventory will be reported in future JURMP Annual Reports.

All maintenance activities this fiscal year met the Municipal Permit requirements as outlined in Order No. R9-2007-0001. The FY 2010-11 annual results for all municipal activities are summarized below and reported in detail in Appendix C-2.

4.4.4.1 MAINTENANCE

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year are included below:

- Within the defined reporting period of this report, approximately **401 tons** of waste and litter were removed from the entire MS4. This included the removal of **81 tons** from the catch basins and inlets, **3 tons** from the City's storm drain filter inserts, **317 tons** from open channels and 10 desilting basins. All MS4 facilities observed to be collecting relatively high volumes of trash were cleaned between May 1 and September 30.

- Within the defined reporting period of this report, **317 tons** of litter and vegetation were removed from open channels and 10 desilting basins. Cleaning the open channels and the desilting basins is conducted annually/year round or more often when necessary. The City responds to observations or reports of anthropogenic litter in channels and desilting basins in a timely manner.

- Within the defined reporting period of this report the City inspected and cleaned **2,503** catch basins and inlets and removed a total of **81.3** tons of waste and litter. Storm drain inlets and catch basins that City personnel have identified as gathering a greater amount of trash and debris as compared to other areas of the City are inspected throughout the year and cleaned if necessary. The City's inspection and cleaning activities are sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris. Inspection and cleaning schedules are subject to change based on observations and records of City personnel.

- The City maintains a total of 56 storm drain filter inserts in 35 inlets (some larger inlets may contain more than 1 filter insert) located throughout its jurisdiction to remove sediment, debris, oil, and grease from the MS4. From July 1, 2010 through June 30, 2011, **3 tons** of sediment and litter were removed from all 35 inlets. These inserts are maintained on a quarterly basis by a specialty contractor. Table 4-2 below outlines the complete filter insert inventory. A Municipal BMP map that depicts all of the City's storm drain filter locations can be found in Appendix C-3.

- The City of Encinitas has a formal maintenance agreement with the San Elijo Joint Powers Authority to maintain the Ultra Violet Urban Runoff Treatment Facility. The scope of the agreement ensures daily monitoring and inspection, startup and shutdown of the facility as dictated by rain events, and preventative and regular maintenance. In FY 2010-11, over $17,250 was spent on the preventative and regular maintenance of the facility including, pump replacement, control screen and software updates, and other electronic equipment and parts. The Ultra Violet Urban Runoff Treatment Facility provides the City with a vital treatment function, and ongoing operations and maintenance activities are critical to ensure optimum performance and pollutant removal.

A complete report of all MS4 operation and maintenance activities can be found in Appendix C-2.

Table 4-2
Storm Drain Filter Inserts Inventory

Inlet ID Number	Number of Filters	Location	Inlet Type
1	1	194 El Camino Real @ Via Molena	Curb
2	1	1470 Neptune Ave. in driveway apron	Grate
3	2	337 El Camino Real, in front of Circuit City Mall	Curb
4	1	1638 Neptune in grass shoulder	Grate
5	2	1786 1/2 Highway 101	Curb
6	1	1650 Highway 101	Grate
7	1	970 Hwy 101 in alley, north of Jasper	Grate
8	1	918 N. Hwy 101 in alley	Grate
9	2	204 El Camino Real, in front of Blockbuster Video	Curb
10	1	914 Hwy 101 in alley @ Leucadia Blvd. north of the park	Grate
12	1	828 Hwy 101 in alley, behind building	Grate
13	1	802 Hwy 101 in alley, west of Europa St.	Grate
14	1	129 Cadmus at Highway 101	Grate
15	1	149 Basil St. at Highway 101	Grate
16	4	130 Basil St. at Highway 101	Curb
17	1	130 Athena at Highway 101	Grate
18	2	170 Athena at Highway 101	Curb
19	1	577 N. Vulcan north of Union	Grate
20	1	208 Cereus at Hygeia	Curb
21	3	501 El Camino Real, east side @ Garden View Rd.	Combination
22	1	321 Union at Hygeia	Grate
23	1	321 Union across from Hygeia St.	Grate
24	1	1750 Hwy 101 at Bishope Gate	Curb
25	1	750 G St. at Second St. alley	Grate
26	3	364 2nd St. at C Street	Grate
27	5	247 Hwy 101 at NE corner of Encinitas Blvd.	Curb

Inlet ID Number	Number of Filters	Location	Inlet Type
28	3	102 Encinitas Blvd.	Curb
29	2	485 Santa Fe Dr., west of I-5.	Curb
30	2	485 Santa Fe Dr., north side of street, west of I-5	Curb
31	1	2560 Manchester in alley	Grate
32	1	2582 Manchester across from alley	Grate
33	2	499 El Camino Real, SE corner @ Garden View Rd.	Curb
34	3	398 El Camino Real, SW Corner @ Garden View Rd.	Curb
35	1	398 El Camino Real, across from Circuit City mall	Curb

In FY 2010-2011, the Engineering Department was instrumental in conceptualizing and designing numerous drainage related capital improvement projects (CIP). These projects are outlined in Table 4-3 below.

Table 4-3
Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Stratford Knoll Drainage Improvements	$650,000	Replace existing storm drain channel and increase capacity.	Construction complete under plant establishment
Cardiff Alley Improvements	$200,000	Build a perforated sub-drain to improve drainage in area.	Complete
Parking Lot B	$1,000,000	Implement Low Impact Designs (LIDs) including dry wells and flow through planters to treat storm water.	Complete
Encinitas Creek Drainage Channel	$1,100,000	Increase capacity and provide flood control.	In Design
Melba Road Improvements	$250,000	Installation of drainage improvements including curb and gutter and an 8 inch storm drain.	Complete

Project Title	Budget	Goal	Status
Santa Fe Drive Sidewalk and Drainage Project	$165,000	Installation of drainage improvements including curb, gutter and 330 feet of 18 inch storm drain.	In Design

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City of Encinitas conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.5.2 SOURCE CHARACTERIZATION

The City of Encinitas Wastewater Collection Division maintains approximately 122 miles of public sanitary sewer collection pipes.

4.5.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.5.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction and new development. In March 2008, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.5.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program that minimizes sanitary sewer overflows (SSO) and is described in more detail below.

4.5.4 PROGRAM IMPLEMENTATION

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediating existing sewer lines as necessary and proper disposal of hazardous waste.

4.5.4.1 MAINTENANCE

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2010-11, the entire sewer system was cleaned, and known trouble spots were cleaned on a more frequent basis. The City seeks to reduce and eliminate the amount of seepage from the sanitary sewer system to the MS4 through routine preventative maintenance of both the sanitary sewer and the MS4 systems. Preventative maintenance of both systems allows City officials to detect and eliminate active seepage points before they become a larger problem, and also to repair areas of the system that have a high possibility of becoming a seepage point.

In FY 2010-2011, the Engineering Department was instrumental in conceptualizing and designing CIPs to prevent sewage spills by improving the wastewater collection system. Sewer and emergency repair projects initiated during FY 2010-11 are shown below in Table 4-4.

Table 4-4
Sewer CIP Projects

Project Title	Budget	Goal	Status
Olivenhain Sewer Pump Station	$ 5,300,000	Reduce sewage spills, increase capacity and capture first flush from Interstate 5.	Under Construction
2nd Street Sewer Replacement Project	$2,200,000	Relocate existing sewer line to increase maintainability and increase reliability.	Request for Proposals
Sewer Master Plan Update	$150,000	Update the existing master plan to identify and prioritize system wide rehabilitation and replacement projects	Update Completed

In FY 2010-11, the City took the following measures to reduce the seepage from the sanitary sewer system to the MS4:

- 7.06 miles of the sewer system was televised to check pipe conditions,
- 210.8 miles of sewer lines were cleaned,
- 9 storm drain and sewer pipes were repaired.

City staff report on the maintenance of the sewer system through an industry standard asset inventory and work order management system that integrates with the City's GIS system. Maintenance is performed on the sewer infrastructure and captured through work orders that are attached to the features represented in GIS. Any changes or updates to the sewer system inventory will be reported in future JURMP Annual Reports.

On August 8, 2009, the City implemented a Sewer System Management Plan (SSMP). The SSMP is a program that ensures that the sewer system is functioning properly and that the necessary maintenance is conducted. The SSMP also includes a spill response plan that establishes standard procedures for immediate response to all sanitary sewer system overflows (SSOs). In FY 2010-11 the City of Encinitas Wastewater Collection Division personnel were trained in detecting, reporting and responding to SSOs in accordance with the SSMP.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.6.2 SOURCE CHARACTERIZATION

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- power washing, including graffiti removal,
- street and sidewalk repair and maintenance which includes street striping, street painting and pothole repair, and
- landscape maintenance.

4.6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.6.3.1 UPDATED BMP REQUIREMENTS

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities discussed above. In March 2008, the City established minimum BMPs which were described in the City's 2008 JURMP Update. The JURMP Update directs city staff to utilize the City's BMP Manual Part I and the

CASQA Municipal Handbook to choose applicable BMPs to implement for municipal areas and activities, including mobile activities. BMPs similar to those implemented for the management and maintenance of parks and landscaped areas are implemented for landscape maintenance in landscaped City right-of-way areas such as medians.

4.6.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined to be necessary. Presently, City related mobile activities have not been determined to be a source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated as effectively reducing pollutant discharge to all receiving waters in the City to the maximum extent practicable (MEP).

4.6.4 PROGRAM IMPLEMENTATION

In FY 2010-11, City field crews were trained to implement BMPs during all mobile activities. The Public Works Department Streets Division received training on storm water BMPs as they relate to mobile cleaning activities throughout the reporting period. Additionally, the Public Works Wastewater Collections Division also received training from Clean Water Program staff on April 20, 2011. City field crews were trained to properly contain, control, and capture any discharge that was generated by a mobile activity. City field crews were also trained to use mobile equipment properly to ensure all wastewater is collected and that the equipment continues to function properly. For more detail regarding municipal staff training refer to Section 8.2 of this document.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City of Encinitas hosts a variety of special events throughout the city. These events may include, but are not limited to, festivals, fairs, events for charitable causes, and special occasions. The City recognizes that many special events have the potential to generate significant trash and litter caused by the patrons and the associated activities that occur at the special events. The City has considered the controls that are described in the Municipal Permit and has chosen the BMPs listed in Section 4.7.3.1 below as most effective and efficient for the City's needs. These BMPs are implemented during and/or after special events, where applicable.

4.7.2 SOURCE CHARACTERIZATION

The City of Encinitas hosts a variety of special events at various locations throughout the city; including City sanctioned events and venues, as well as privately managed events. According to the Encinitas Municipal Code Chapter 6.12, any organized event coordinated for 25 people or

more requires an Operations Permit (Special Events Permit). For the purpose of Special Event source characterization, events that require an Operations Permit (as defined by Encinitas Municipal Code Section 6.12) by the City have been identified as priority events.

4.7.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.7.3.1 UPDATED BMP REQUIREMENTS

The City has considered many of the controls specific to special events listed in the Municipal Permit. Before any special event permits are approved, applicants must fill out the City's "Special Events Permit P2 Questionnaire" (Appendix C-4) to assess the most appropriate BMPs for their event, and all applications must be reviewed by Clean Water Program staff. Applications are evaluated to ensure that event organizers select an effective combination of BMPs to prevent trash or other pollutants from entering the storm drain system. The City has chosen the following BMPs as most effective and efficient for City needs. Notably, the City may require additional event specific BMPs at any time as determined necessary.

Inlet Protection:

- Identify all storm drain inlets with appropriate signage and prohibitive language to deter illegal dumping and / or discharge.
- Protect all storm drains identified on their site plans. Fabric filters, gravel bags, or other approved inlet protection device over the drain opening are recommended.
- Visually inspect and clean, if necessary, all identified storm drain inlets impacted by the special event activities.

Trash and Debris:

- Adequate trash and recycling containers must be provided throughout the event venue, including at the exit and entry points.
- Regular collection of loose trash and debris must be applied as needed.
- Temporary fencing will be required to be put into place if the event, or any portion thereof, is determined to pose a threat of wind blown debris into any water bodies.
- Post event sweeping of the entire venue area and related staging areas is required.

Temporary Portable Restrooms:

- All temporary portable restrooms will be placed away from all storm drain inlets, drainage swales, water bodies, and any other locations that have the potential to impact the storm drain system.
- All temporary portable restrooms are required to have a secondary containment pan or additional BMPs in place around the stations for possible overflows.
- The contact information for the company responsible for the restrooms will be clearly marked on or around the restrooms.

In addition to the BMPs that are implemented by the applicant, The City of Encinitas implements the following during and/or after special events, where applicable:

- proper management of trash and litter, including temporary trash receptacles for trash,
- street sweeping following the special event,
- other BMPs, as included in the Municipal Permit, when deemed necessary by City personnel, and
- other post clean-up activities, such as catch basin cleaning, when necessary.

The City may also set up storm water informational booths with educational handouts and watershed maps, which demonstrate the impacts of pollution on a watershed. The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.7.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary. Presently, special events have not been determined to be a significant source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated for effectiveness in reducing pollutant discharge to all receiving waters in the City to the MEP.

4.7.4 PROGRAM IMPLEMENTATION

Events which require a discretionary Special Events Permit from the City, and completion of the BMP specific Special Events Permit P2 Questionnaire (Appendix C-4), must meet minimum pollution control standards as described above, and receive permit approval from the Clean Water Program. More refined event characterization as defined in Section 4.7.2 above, and improved event tracking enhanced the overall efficiency and effectiveness of Special Event oversight. In FY 2010-11, there were **57** special event applications processed by the Clean Water Program (see Appendix C-5).

The Clean Water Hotline is advertised on all Special Events Permit Applications and can be used to report spills during normal business hours. Additionally, the City has an after hours phone number that can be used to report any large or hazardous spills during special events that may occur on weekends or when the City offices are closed. City personnel are on call to respond to any emergency situations that may arise. During City sponsored events, trained City personnel are on hand to ensure that the event remains free of illegal discharges and/or illicit connections to the MS4.

In addition, the City maintains the authority to charge the applicant a Clean-up Fee and Deposit, depending on the size, location, and type of event. Following permitted events, post-event inspections are conducted by City staff, and the location of the event must be returned to pre-event conditions in order for the applicant to receive a full refund of deposited monies. If the City determines that more clean-up is necessary, the deposit will be used as reimbursement

for City time and cleanup efforts including street and parking lot sweeping. The event sponsors or organizers may be charged any excess clean-up fees the City may encounter beyond the amount of the deposit. In FY 2010-11, the City collected $600.00 in clean-up deposits (see Appendix C-5).

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4 (Municipal Separate Storm Sewer System). The City of Encinitas has implemented a program that aims to reduce industrial and commercial pollution discharges from the MS4 to the MEP, prevent industrial and commercial discharges from the MS4 from causing or contributing to a violation of water quality standards, protect local receiving water bodies, and comply with the Municipal Permit.

Commercial facilities within the City of Encinitas include a wide range of service oriented businesses from restaurants to nurseries. There are five main commercial areas within the City. The largest areas are downtown Old Encinitas and the Leucadia business district, along Highway 101 from Swami's Beach to La Costa Boulevard. This area contains many different commercial businesses ranging from restaurants to automotive outlets and is the oldest portion of Encinitas. Three industrial facilities are also located in the City: the San Dieguito Union High School District Transportation Cooperative, the San Elijo JPA Water Reclamation Facility, and the inactive Encinitas Landfill.

Within the defined reporting period of this report, Clean Water staff worked diligently to fulfill the requirements of the Order 2007-0001 related to commercial and industrial sectors. The City's geographic information system (GIS)-based commercial inventory was updated and prioritized based on the new requirements of Order 2007-0001 and the guidelines established in the City's 2008 JURMP. FY 2010-11 commercial and industrial facility inspections were based on this prioritization scheme and the new inspection frequencies outlined in Order 2007-0001. Inspections, follow-up, and enforcement actions were tracked using CityWorks, the City's existing GIS-based Work Order tracking system. In addition, the City participated in the regional industrial/commercial workgroup and subgroups, and helped to shape the mobile commercial businesses database and inspection standards. The following section demonstrates the City's successful implementation of required programmatic activities related to the Industrial and Commercial Section of Order 2007-0001 (Section D.3.b) during FY 2010-11

5.2 INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The Clean Water Program emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Municipal Permit.

For the rest of Section 5.2, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial site/sources component is described in Section 5.3.

5.2.2 SOURCE CHARACTERIZATION

A watershed-based inventory of the industrial and commercial sites/sources within the City's jurisdiction was compiled as part of the 2008 JURMP update. As required by the Municipal Permit, the inventory includes the following information for each site/source: facility name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired); and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. Inventories of commercial and industrial facilities within the City of Encinitas are included in Appendices D-1 and D-2. Mobile commercial businesses do not have a fixed address at which they operate; they are tracked within a separate, non-spatial database (refer to Section 5.3).

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. The GIS department and the Clean Water Program both receive a monthly summary of new and renewed business registrations from the City Clerk's Department. Upon receipt of the monthly summary, a GIS Analyst updates the spatial facility database, and a Clean Water Program staff member updates the storm water inspection information for each business. In addition, Clean Water staff identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered with the City. When this occurs, these facilities are added to the inventory. Additionally, when Clean Water staff conducts annual commercial and industrial inspections, they have the opportunity to identify new or closed businesses and update the inventory with these findings.

In FY 2007-08, commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the JURMP update and transition to complying with the current Municipal Permit, a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. Section 5.2.4.1 provides a detailed description of the City's prioritization process for commercial facilities.

Three industrial facilities are located in the City of Encinitas—the San Elijo JPA Water Reclamation Facility, San Dieguito Union High School District (SDUHSD) Transportation Cooperative, and the Encinitas Landfill. All three facilities are covered under the Industrial Storm Water General Permit Order 97-03-DWQ. The industrial inventory is included as Appendix D-2. The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The SDUHSD Transportation Cooperative is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The Encinitas Landfill is owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected

by the City of Encinitas, and the Encinitas Landfill is inspected by the County of San Diego. Completed industrial facility inspection forms are available upon request.

As part of the 2008 JURMP update and the development of the SUSMP, the City collaborated with copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-1 lists the pollutants that may be generated by each category of business. The pollutants that may be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in Appendix D-1 with the category in Table 5-1 and its corresponding pollutants. In FY 2010-11 the pollutants that are likely generated by each facility were added to the inventory presented in Appendix D-1 and D-2 for clarity. Waste Discharge Identification Number (WDID) is also included for sites that are covered under the State of California Industrial General Permit (General Industrial Permit). The TTWQ prioritization of each facility is also included in the inventories. Prioritization was assigned via the process described in Section 5.2.4.1.

Table 5-1
Pollutant Loading Potentials of Industrial and Commercial Sources

Site/Source Type	Heavy Metals*	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Body Repair	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair/Maintenance	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical Garden	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Mobile Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	PO	L	L	PO	PO	PO
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nursery/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Auto Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Mobile Auto Washing	PO	L	PO	PO	UL	UL	PO	UL	PO
Contractor (Mobile)	PO	PO	PO	PO	UL	UL	PO	UL	PO
Handyman (Mobile)	UL	PO	PO	UP	UL	UL	PO	UL	PO
Landfill	PO	PO	PO	L	PO	PO	L	L	L
Wastewater Treatment	UL	UL	L	PO	UL	L	L	L	PO

Notes

L = Likely, PO = Possible, UL= Unlikely

* Heavy metals are a possible pollutant for any facility that has a parking lot.

This table is based on the field experience of D-MAX Engineering and on tables in the Copermittees' Baseline LTEA. D-MAX has conducted more than 1,000 industrial and commercial inspections during which it assessed the pollutant discharge potentials of the inspected facilities.

As required by Section D.3.b(1) of the Permit, all industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing[1]
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling
- Pest control services
- Eating or drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning[1]
- Cement mixing or cutting[1]
- Masonry[1]
- Painting and coating[1]
- Botanical or zoological gardens and exhibits
- Landscaping[1]
- Nurseries and greenhouses
- Golf courses, parks, and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning[1]
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services[1]

[1] Mobile commercial businesses are discussed in more detail in Section 5.3.

Both Industrial and Commercial facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e., within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA).
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.2.3.1 UPDATED BMP REQUIREMENTS

As required by section D.3.b.(2) of the Permit, during the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sites and incorporated these into the City's BMP Manual I. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's BMP Manual I. The BMP Manual I can be accessed through the Clean Water Program webpage at: http://cwp.cityofencinitas.org.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP (Storm Water Pollution Prevention Plan) and implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are determined based upon a review of the site's SWPPP and site inspections.

5.2.3.2 ADDITIONAL CONTROLS

As required by section D.3.b.(2)(e), the City of Encinitas requires the implementation of additional controls for industrial and commercial sites and sources that are 1) tributary to CWA Section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired) or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

Clean Water Program staff utilizes a GIS to maintain the commercial and industrial inventory and has the ability to spatially locate facilities relative to receiving waters and ESAs. Clean Water inspection staff is provided a hard copy map to use as a field reference to make appropriate determinations in consideration of these factors. Clean Water Program staff may prescribe additional controls during inspections of commercial and industrial facilities, as needed, in consideration of the proximity of the facility to the water body and the observed

potential of the site to be a significant source of pollutants that may threaten the downstream water body as necessary and appropriate.

5.2.4 PROGRAM IMPLEMENTATION

This section describes the steps employed by Clean Water Program staff to require and verify the implementation of required designated BMPs for industrial and commercial sources. During FY 2010-11, the City of Encinitas implemented the following industrial and commercial program elements:

- provided education and outreach through inspection actions so that regulated businesses were aware of the City's stormwater requirements;
- inspected inventoried businesses to evaluate compliance with established minimum BMP requirements and the local stormwater ordinance;
- conducted follow-up inspections as necessary to ensure facility compliance with minimum BMP standards;
- took enforcement action as necessary to bring violators into compliance.

5.2.4.1 INVENTORY PRIORITIZATION

As required by section D.3.b(1)(b), when evaluating threat to water quality, the City of Encinitas considered the following attributes of each industrial and commercial business to determine priority status (high or low):

i. Type of activity (SIC code);
ii. Materials used at the facility;
iii. Wastes generated;
iv. Pollutant discharge potential;
v. Non-storm water discharges;
vi. Size of facility;
vii. Proximity to receiving water bodies;
viii. Sensitivity of receiving water bodies;
ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
xi. Facility design;
xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
xiii. The facility's compliance history; and
xiv. Any other relevant factors.

Although not specifically required by the Municipal Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City's GIS data management system was used to prioritize commercial businesses based upon the following spatially referenced TTWQ criteria:

- proximity to a 303(d) listed water body
- pollutant potential of the facility type
- stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. For example, if the facility is tributary to the San Elijo Lagoon and received a Notice of Violation from the City in the past the facility would be considered high priority based upon the additional criteria that the City has established in determining TTWQ. In addition, if during the City's commercial inspection process or based on institutional knowledge, it was determined that additional sites that would otherwise have a low priority should be classified as high priority industrial or commercial facilities, then they were added to the inventory and were inspected.

The City's commercial inventory was updated and prioritized during the defined reporting period of this report and will be prioritized a least once per year prior to conducting annual inspections.

As a result of the City's threat to water quality analysis during FY-2010-11, 12% of the industrial and commercial facilities were identified as high priority. The identified high priority facilities included all three industrial facilities and many of the City's restaurants. For a complete list of prioritized facilities refer to Appendices D-1 and D-2. Notably in 2010-11, stormwater violation history was considered for three years prior to the permit year, versus five years as applied in the past. This resulted in a more refined list of high priority facilities and resulted in a more efficient overall inspection program, while meeting all permit inspection frequency and prioritization provisions.

5.2.4.2 INSPECTION FREQUENCY

FY 2010-11 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the 2008 JURMP update and transition to complying with the current Municipal Permit a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. The following steps were taken to determine which industrial and commercial sites were inspected:

1. Confirm that the current industrial and commercial inventories are up-to-date
2. Prioritize each facility based on the prioritization process described in section 5.2.4.1 of this document
3. Review the list of facilities that were inspected the previous year
4. Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with standards established in section D.3.b.(3)(b) & (c) of the Permit, in FY 2010-11, the City inspected 100% of the industrial and commercial facilities inventoried as high

TTWQ and over 25% of all inventoried sites. Consistent with the Permit, mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Municipal Permit were met.

In FY 2010-11, the City's industrial and stationary commercial inventories included a total of **385** facilities, of which **46** facilities were identified as having a high TTWQ (**43** stationary commercial facilities and **three** industrial facilities[2]). Rounding to the nearest whole number, 25% of the stationary industrial/commercial inventory would be **96** sites, and 100% of the high TTWQ facilities would be **100** sites.

During FY 2010-11, the City completed inspections for all high priority facilities identified on the industrial/commercial facility inventory. City of Encinitas stormwater specialists conducted **two** industrial and **97** commercial site inspections; of which **two** were high priority industrial facilities and **43** were high priority commercial facilities. Therefore, the City of Encinitas met the minimum inspection requirements established in Order 2007-0001 and inspected 100% of all the high TTWQ facilities and 26% of all facilities in the industrial and commercial stationary facility inventories.

[2] The Encinitas Landfill is regulated and inspected by the County of San Diego.

Table 5-2
Summary of Facility Prioritization and Inspections Conducted in FY 2010-11

TTWQ Prioritization	Number of Facilities	Order 2007-0001 Inspection Requirements	Inspections Completed	
			Total	Percent
High priority	46	100% (46)	46	100%
Low priority	339	as needed	54	16%
Total	385	25% (96)	100*	26%

*Total includes one industrial inspection conducted by the County of San Diego.

5.2.4.3 ROUTINE FACILITY INSPECTIONS

As required by section D.3.b.(3) of the Permit, commercial and industrial facilities in Encinitas are routinely inspected by the City's Clean Water Program staff. Inspections are intended to:

- identify facilities that are not in compliance with the City's Storm Water Management Ordinance and the Municipal Permit;
- provide facilities with information regarding the City's Clean Water Program;
- provide guidance in complying with stormwater regulations (City's Storm Water Management Ordinance, Municipal Permit, etc.); and
- validate and manage the inventory.

During FY 2010-11, City of Encinitas stormwater specialists conducted **two** industrial and **97** commercial site inspections for compliance with its ordinances, permits, manuals, and this Order. All inspections included, as applicable:

i. Review of BMP implementation plans, if the site uses or is required to use such a plan;
ii. Review of facility monitoring data, if the site monitors its runoff;
iii. Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
iv. Assessment of compliance with Copermittee ordinances and permits related to urban runoff;
v. Assessment of BMP implementation, maintenance and effectiveness;
vi. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
vii. Education and training on stormwater pollution prevention, as conditions warrant.

Specialists use a Storm Water Quality Inspection Form to document inspection activities (see Appendix D-3). The specialized form allows staff to document the above listed inspection steps, as applicable, to determine full compliance for each type of facility. In FY 2008-09, staff designed a new triplicate form called Commercial and Industrial Stormwater Quality Inspection Summary form, which is used in addition to the detailed industrial and commercial inspection form. The form summarizes the corrective actions that are required as a result of the detailed

inspection and acts as the responsible party's record of receipt upon completion of the inspection. This customer friendly form more effectively summarizes the inspection results, making corrective action requirements very clear to the business operation owner/manager. The form lists the most common corrective actions and requires a completion date to be met via the signature of the manager/owner. Further, the form effectively aids in the owner's understanding of stormwater regulations and compliance with current and future inspection actions. A copy of this form is included in Appendix D-4. When conducting inspections, specialists worked with site contacts to provide examples of BMP solutions that could be implemented when corrective actions were necessary to minimize threat to water quality. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. For example a restaurant may be required to provide overhead coverage and secondary containment for outdoor grease storage. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the specialist was at the site. The responsible party was always provided a copy of the inspection summary form, and a complete copy of the detailed inspection report is always available upon request.

For a complete summary and confirmation that the designated BMPs were implemented (or required to be implemented) for industrial and commercial sites inspected in FY 2010-11, see the routine inspections summary in Appendix D-5. This Appendix describes, in detail, actions taken by specialists to confirm or require that BMPs were implemented at each industrial and commercial site inspected. Appendix D-5 and the associated inspection forms completed for each routine inspection confirm that all inspections conducted in FY 2010-11 addressed all the required inspection steps. Completed forms are available upon request.

Inspection Tracking

Complaint and inspection documentation is filed in the City's GIS database and is kept up-to-date on a daily basis. The GIS database is also used to track the number of inspections conducted for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that sites/sources are inspected at the minimum frequencies listed in section D.3.b.(3)(b)& (c) of the Municipal Permit. Clean Water Program staff reference the inspection data in the GIS to assist in preparing for annual inspections, follow-up inspections, or IDDE investigations.

Third Party Inspections

All commercial inspections conducted in FY 2010-11 were completed by City of Encinitas Clean Water Program staff. The City has one full-time stormwater specialist (and three backup specialists) dedicated to conducting routine commercial and industrial inspections and following up on stormwater complaint calls. A third party was not employed to conduct commercial and industrial inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting stormwater compliance inspections and enforcement of industrial and commercial facilities are trained regularly on inspection and enforcement

procedures, BMP implementation, and assessment of monitoring data. Clean Water specialists attend available workshops and regularly receive training through staff meetings and direction from the Clean Water Program Manager. Further, Clean Water staff actively collaborates with inspection staff throughout the San Diego region to share methodologies and approaches that may be beneficial to each jurisdiction. Refer to Section 8.2 for a complete list of workshops, trainings, and conferences attended by Clean Water Program staff in FY 2010-11.

Inspection Follow-up and Enforcement

Clean Water Program staff conducted follow-up inspections at all facilities where deficiencies were identified and corrective actions were required. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. A total of **34** follow-up investigations were conducted as part of the FY 2010-11 routine inspection program. Depending on the severity of the infraction requiring corrective action, inspectors may elect to issue a Notice of Violation and/or monetary citation. In FY 2010-11, all inspected facilities complied with the corrective actions; therefore, **zero** Notices of Violation (NOVs) were required to obtain compliance. Appendix D-5 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

5.2.4.4 NOTIFICATION

As required by section D.3.b.(2)(c) of the Permit, and initiated in FY 2009-2010, the City of Encinitas notified all inventoried industrial and commercial business of the City's minimum BMP requirements that are applicable to the site and/or activity. Copies of the notification letters (stationary and mobile) are included in Appendices D-7 and D-8 respectively. In addition, during FY 2010-11, the City continued notification efforts as part of routine facility inspections. All industrial and commercial facilities inspected in FY 2010-11 were notified of minimum BMP requirements applicable to their site/source. City of Encinitas stormwater specialists conduct thorough inspections with the owner/operator of each facility. During each inspection the stormwater specialist discusses the applicable BMP requirements in detail with the owner/operators.

5.2.4.5 COMPLAINT INVESTIGATIONS (VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE)

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge involving a commercial facility, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigations typically include stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its stormwater ordinance for all commercial and industrial facilities as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2010-11, there were **97** stationary commercial ICID complaint investigations. Of those investigations, **42** required follow-up assessments, **21** NOVs and **one** citation were issued in order to achieve compliance. A summary of the commercial complaints, violations, and enforcement actions occurring in FY 2010-11 is available for review in Appendix H-1. As a component of complaint investigations, educational information is commonly provided to the owner/operator of commercial facilities to improve knowledge and awareness of stormwater regulations. Materials typically distributed included general stormwater education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. During **75** investigations, educational information was provided to the business owner/operator by the Clean Water specialist.

Appendix H-1 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2011.

Reporting of Industrial Non-Filers

The City of Encinitas did not identify any industrial sites that may require coverage under the General Industrial Permit but which, to the City's knowledge, did not file NOIs.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City of Encinitas and do not maintain a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 SOURCE CHARACTERIZATION OF MOBILE SOURCES

The mobile businesses known to operate within the City's jurisdiction are listed on an inventory separate from the stationary commercial inventory in Appendix D-6. This inventory was comprehensively reviewed and updated during FY 2010-11. The following business types are addressed by the mobile sources element of the City's industrial and commercial program:

- Mobile automobile or other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades
  - Cement mixing or cutting
  - Masonry
  - Painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile business that the City determines to have a significant threat to water quality will be added to the inventory. Because not all mobile businesses have obtained a City of Encinitas business registration certificate or have a base of operations outside the City of Encinitas, Clean Water Program staff is continually refining and updating the mobile commercial inventory. Sources for such inventory updates include reported incidents, general observations by City staff, and available business registration certificates.

In FY 2008-09, the City participated in the development of a regional inventory and tracking system for mobile businesses. The industrial/commercial workgroup worked with a consultant who specializes in database design to create and maintain a mobile businesses database for the region. Figure 5-1 depicts the online form used by copermittees to enter a new business into the regional mobile business database. It is anticipated that this regionally updated and shared database will aid in collaborative enforcement of stormwater violations caused by mobile businesses.

Figure 5-1
Mobile Business Database New Business Entry Form

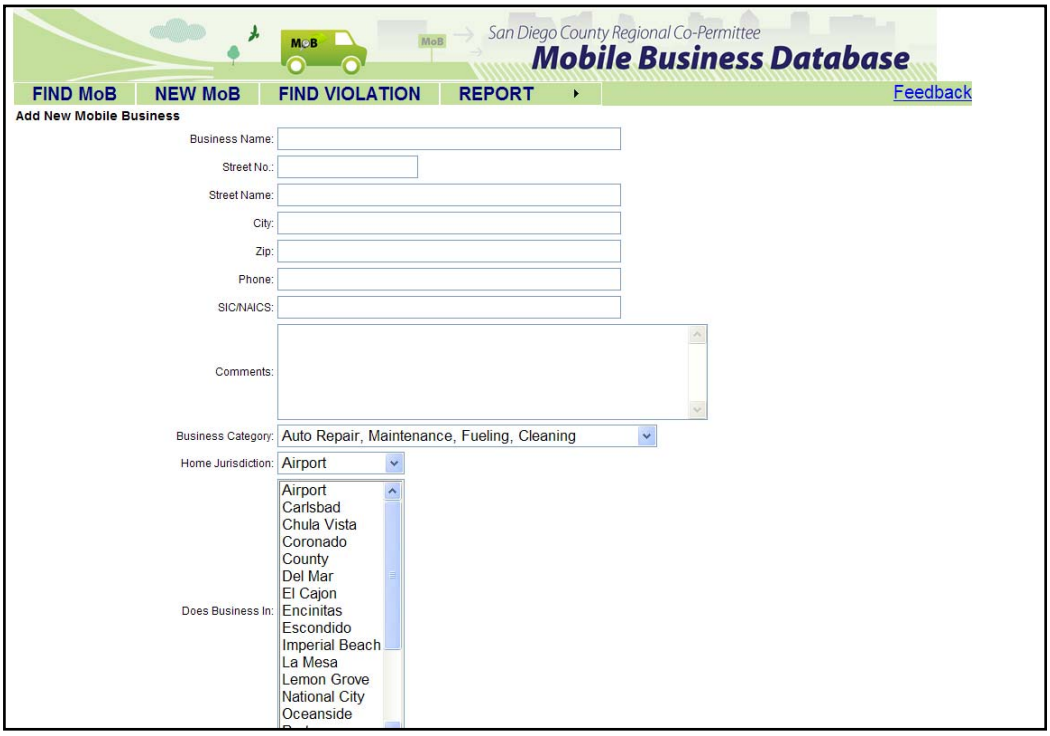

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 UPDATED BMP REQUIREMENTS FOR MOBILE SOURCES

All BMPs required for stationary sources, described in Section 5.2.3.1 of this document and listed in detail in the City's BMP Manual, are also required for mobile businesses, where applicable. The most important BMPs for most mobile businesses are typically those that address non-stormwater discharge control and spill prevention, control, and cleanup.

5.3.3.2 ADDITIONAL CONTROLS FOR MOBILE SOURCES

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. If the City finds that the activities of a mobile business are contributing pollutants of concern to a CWA section 303(d) impaired water body segment or are negatively impacting ESAs, additional controls will be required for those activities as applicable. Further, if the City has reason to believe that any mobile business is generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more frequently visit those areas and/or take other actions to address the illegal discharges.

5.3.4 PROGRAM IMPLEMENTATION

5.3.4.1 EDUCATION/OUTREACH AND NOTIFICATION OF MOBILE SOURCES

In FY 2010-11, the City of Encinitas provided information and outreach regarding stormwater quality to mobile business owners and operators that were contacted as a result of a complaint call *(See Section 5.3.4.4 below for a summary of complaint calls related to mobile business activities)*. Contacted businesses were given educational materials with detailed pollution prevention methods and other related BMPs to aid in their compliance with the City's stormwater ordinance and the Municipal Permit.

In 2009-2010, the City completed a comprehensive mail out to all inventoried mobile businesses known to operate in the City of Encinitas, disseminating minimum BMP requirements to identified proprietors. This effort leveraged upon regional and jurisdictional efforts to develop an exhaustive inventory of mobile businesses conducting a variety of activities. Based upon this well developed effort, the City of Encinitas assuredly met Municipal Permit (Section D.3.b.(2)(c)) requirement to notify inventoried businesses of minimum BMP requirements.

5.3.4.2 INTER-JURISDICTIONAL COORDINATION

During FY 2007-08, the City of Encinitas participated with other Copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

As described above, in FY 2008-09, a consultant was obtained to develop and launch a mobile business database to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy. See Appendix F-1 for the complete Regional Mobile Business Strategy.

5.3.4.3 INSPECTIONS

The inspections for mobile businesses generally follow the same procedure described in Section 5.2.4.3 of this document. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, Clean Water staff work directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.3.4.4 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to section 5.2.4.5.

In FY 2010-11, there were **33** mobile complaint investigations conducted. **32** resulted in dissemination of educational information to the business owner/operator; **14** Notices of Violation and **four** citations were issued. Refer to Table 5-3 for a summary of the mobile commercial complaints and associated enforcement actions. This table includes complaint response to discharges from mobile businesses and discusses each violation and the follow-up actions taken. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance. Appendix H-1 also includes a summary of violations and enforcement actions resulting from complaints about mobile businesses occurring in FY 2010-11.

Complaint investigation procedures, including those related to mobile business operations, will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report, which will be completed and submitted to the RWQCB as required by December 15, 2011.

Table 5-3
FY 2010-11 Mobile Commercial Complaints and Enforcement Actions

Complaint Location	Mobile Business Type	Enforcement Action(s)
605 WEST BLUFF CT	Landscaper	Education
200 W D STREET	Painting	Education, NOV
1952 CIRCLE PARK LANE	Carpet Cleaning	Education, NOV
835 STRATFORD KNOLL	N/A	No Violation
1404 CALLE CHRISTOPER	Carpet Cleaning	Education
850 HYGEIA AVE	Street Sweeping	Education
2355 LAGOON VIEW DRIVE	Power Washing	Education
2347 LAGOON VIEW DRIVE	Power Washing	Education
2343 LAGOON VIEW DRIVE	Power Washing	Education
262 N. EL CAMINO REAL	Recycler	Education, NOV
1142 WOODLAKE DR	Utility provider	Education
287 CHAPALITA DR	Landscaper	Education, NOV
233 N EL CAMINO REAL	Utility provider	Education
804 NOLBEY	Contractor	Education
249 MANGANO CIRCLE	Contractor	Education
1669 SAN ELIJO AVE	Contractor	Education, NOV
745 S. COAST HWY 101	Roof Contractor	Education
721 N VULCAN AVE	Contractor	Education, NOV, Citation
804 NOLBEY DR	Contractor	Education
2005 MACKINNON	Contractor	Education, NOV, Citation
1409 AVENIDA DE LAS ADELSAS	Contractor	Education
1120 ISLAND VIEW LANE	Utility provider	Education
1090 ALEXANDRA LN	Landscaper	Education
396 N COAST HWY 101	Contractor	Education, NOV
422 REQUEZA ST	Contractor	Education, NOV, Citation
415 SANTA FE DR	Contractor	Education
1661 VILLA CARDIFF DR	Contractor	Education
617 BRAE MAR CT	Contractor	Education, NOV
1620 BELLA VISTA DRIVE	Contractor	Education, NOV
606 BRAE MAR CT	Painting	Education, NOV
602 ARDEN DRIVE	Contractor	Education
160 CALLE MAGDELENA	Contractor	Education
609 S VULCAN AVE	Contractor	Education, NOV, Citation

6.0 RESIDENTIAL

6.1 INTRODUCTION

Approximately 80 percent of the City's 19.4 square mile area is designated as residential in the City's General Plan map. Residential land use comprises a large area of the City, and residential activities can have a considerable effect on the water quality of receiving waters. The City's residential component of the Clean Water Program aims to reduce pollutant runoff from residential areas and activities to the MEP (Maximum Extent Practicable) and prevent residential discharges from the MS4 (Municipal Separate Storm Sewer System) from causing or contributing to a violation of water quality standards.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2010-11 that contributed to the successful implementation of the City's Residential Component.

6.2 SOURCE CHARACTERIZATION

Residential high threat to water quality areas and activities within the City of Encinitas were identified during the 2008 JURMP update process and are described in detail in City's 2008 JURMP. The following section identifies the high threat to water quality residential areas and activities that were focused on during FY 2010-11. The Municipal Permit (Order R9-2007-0001) requires each Copermittee to identify and provide a list of the residential areas and activities within its jurisdiction that have been identified as having a high threat to water quality. The following section briefly summarizes this process.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

In consideration of the minimum required *high threat to water quality* residential activities listed in section D.3.c.(1) of Order No 2007-0001, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

Section D.3.c. (1) of Order No 2007-001, requires that Copermittees identify all *high threat to water quality* residential areas. During the 2008 JURMP update, the City identified *high threat to water quality* residential areas using the following criteria (as defined in the Municipal Permit):

- Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in Attachment C of the Municipal Permit).

The City of Encinitas has several Section 303(d) impaired water bodies and coastal lagoons within or directly adjacent to the City's jurisdictional boundary. The 303(d) impaired water bodies within the City of Encinitas include Cottonwood Creek, Encinitas Creek, Escondido Creek, San Elijo Lagoon, and the Pacific Ocean at Moonlight State Beach and the San Elijo Lagoon Outlet.

Based on the definition in Attachment C of the Order No 2007-0001, Environmentally Sensitive Areas within the City of Encinitas include those areas identified as Natural Resource Sensitive areas in the City's General Plan and the City's Wetland buffer layer. The City does not contain any Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, or areas designated as preserves in the Multiple Species Conservation Program.

In the process of drafting the Regional Residential Education Program, the Regional Outreach Workgroup identified the major pollutants of concern from residential sources for the San Diego region. The major pollutants of concern for residential areas include: bacteria, nutrients, sediment, pesticides, and trash.

In consideration of identified 303(d) listed water bodies, the City's ESAs (Environmentally Sensitive Areas), and the primary pollutants of concern, Clean Water Program staff employed GIS analysis to determine the location of *high threat to water quality* residential areas. Based on this analysis the following residential areas within the City of Encinitas were identified as *high threat to water quality* residential areas:

- All residential areas within 500 feet of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to, or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

Appendix E-1 includes a map of residential areas. The map was developed for Clean Water Program staff to utilize in the office and in the field to help identify residential discharges or

activities which could pose a threat to water quality due to their proximity to receiving water bodies and ESAs.

6.2.3 EVALUATION OF OVERSIGHT OF RESIDENTIAL AREAS AND ACTIVITIES

Through an evaluation of effectiveness assessment measures as part of this report (See Section 11.0), it has been reasoned that the City has achieved overall success as it relates to the oversight of residential areas. Hotline complaint calls received, compliance achievement, and dry weather monitoring exceedances as they relate to residential sources all support this assessment. Continual evaluation in subsequent reporting years will be vital to assessing the overall efficacy of oversight related to residential activities.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

6.3.1 POLLUTION PREVENTION

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for *high threat to water quality* areas and activities.

6.3.2 LIST OF MINIMUM BMPS

As part of the City's 2008 JURMP update, the City designated the following minimum BMPs for *high threat to water quality* residential activities. The minimum BMPs are primarily nonstructural and are targeted at activities specified in Section 6.2 as having a *high threat to water quality*. Pollution prevention methods were incorporated into this set of BMPs, where appropriate. The list of minimum BMPs can also be found in the City's Storm Water BMP Manual I. The manual can be accessed through the City's Clean Water Program webpage at: http://cwp.cityofencinitas.org.

(a) Automobile Repair and Maintenance

Pollution Prevention

(1) Employ routine preventative maintenance practices
(2) Reduce vehicle use, whenever possible
- Change driving habits
- Carpool
- Increase the use of public transportation
- Bike or walk for short trips

(3) Make timely vehicle repairs

Leaks and Spills

(1) Prevent leaks and spills from contacting stormwater
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter
- If working outdoors, don't work in the rain
- Immediately contain and clean up leaks and spills when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Properly manage and dispose of automotive wastes and materials
- Properly drain fluids from automobiles
- Dispose of wastes properly and lawfully and recycle used oil and antifreeze
- Store materials and wastes indoors or under cover
- Use secure and watertight containers when storing materials and wastes

(b) Automobile Washing

Management / Reduction **of** *Wash Water*

(1) Whenever possible, use commercial self-serve or full-serve car washes that properly dispose or recycle their wash water
(2) When washing a vehicle at a residence:
- Wash vehicles over porous surfaces (grass, dirt, etc.) whenever possible
- Use dry cleaning methods to avoid the generation of wash and rinse water
- Turn off the water when not in use or use a controllable spray nozzle
- Encourage the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Properly dispose of soapy water or bucket rinse water to the sanitary sewer or soak into a landscaped area
(2) Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing (e.g., remove grease or brake dust using towels, etc.)
(3) Refrain from degreasing or cleaning of engine parts in areas other than those designated for such purposes

(c) Automobile Parking

(1) Use routine preventative maintenance practices and make timely vehicle repairs to prevent leaks of automotive fluids
(2) Design and construct parking areas to minimize storm water impacts; covered garages should be plumbed to the sewer system

(d) Home and Garden Care Activities and Product Use

GARDEN AND YARD CARE

Pollution Prevention

(1) Use safe substitutes and alternative methods when gardening:
- Use integrated pest management techniques and biological controls
- Use native plants and drought tolerant species to reduce water use and green waste produced
- Implement planting techniques that attract beneficial insects
- Consider composting, vermiculture and yard waste recycling
- Recommend and encourage practical purchasing practices for pesticides and fertilizers
- Identify "pests" before attempting to eliminate them

(2) Always read label instructions and follow the instructions for garden care products
(3) Implement water conservation practices, whenever possible
(4) Consider xeriscape gardening, including: drip irrigation, soaker hoses, and micro-spray systems
(5) Repair and maintain irrigation systems to reduce excessive runoff
(6) Recycle lawn clippings and green waste through local programs
(7) Plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills

(1) Immediately cleanup spills of gardening chemicals, fertilizers, and soils
(2) Return spilled materials to the container for future use or proper disposal

Materials and Waste Management

(1) Store lawn care products in closed labeled containers and in covered areas
(2) Refrain from using hazardous materials during windy or rainy days
(3) Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain
(4) Dispose of household chemicals to the household hazardous waste collection facility or scheduled drop-off events
(5) Utilize dry sweeping techniques for clean up

Restrictions on Activities

(1) Do not hose off paved surfaces to the street or gutter
(2) Do not dispose of hazardous waste to the trash, landfill, or storm drain

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Utilize purchasing practices that reduce waste
(2) Use safe substitutes for home cleaning and maintenance

(3) Read and follow product labels
(4) Recycle unused or unwanted products
(5) Use water based paints when possible
(6) Recycle unwanted appliances and household equipment

Leaks and Spills

(1) Clean up hazardous materials spills immediately
(2) Properly dispose of waste from spill cleanup materials

Materials and Waste Management

(1) Store household hazardous materials in closed labeled containers and in a covered area
(2) Recycle latex paint through community programs
(3) Dispose of unwanted household hazardous waste through household hazardous waste collection facilities
(4) Dispose of trash in provided trash cans or shared dumpsters and keep dumpster and trash can lids closed when not in use

Restrictions

(1) Do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter, or storm drain

***(e)* Disposal of Pet Waste**

Pollution Prevention

(1) Spay or neuter pets to reduce feral populations

Waste Management / Disposal

(1) Clean up after pets when walking them in public places
(2) If pets are allowed to defecate outside, clean up feces from yards
(3) Properly dispose of pet feces in the toilet or trash

Pet Management (Dogs and Cats)

(1) Whenever possible, do not allow pets to run free in residential neighborhoods

Manure Management (Horses and Other Large Animals)

(1) Properly manage manure (including the preparation of manure management plans when appropriate)
(2) Compost or properly dispose of manure
(3) Cover manure stockpiles with plastic tarp to prevent contact with rain

6.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2010-11 to require and verify the implementation of designated BMPs for residential areas and activities.

6.4.1 OUTREACH AND TRAINING

The City has a comprehensive set of Education and Public Participation Programs, which are a component of the City's jurisdictional program. A significant element of these programs consists of educating and engaging residents about ways in which they can minimize their impact on local waterways. Education of the citizens who reside in the City of Encinitas contributes to the implementation of the Residential Component of the City's Clean Water Program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between MS4s and sanitary sewers
- Pollution prevention and safe alternatives
- Household hazardous waste collection and recycling
- BMP implementation and BMP maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment, and recovery
- Water conservation

During FY 2010-11, Clean Water program staff conveyed these messages to the public through a variety of mechanisms, including:

- Clean Water Program website
- Production and distribution of brochures and promotional items
- Public participation in community events, workshops, and trainings
- Presentations at local schools
- Media coverage
- Response to residential complaints (Clean Water Hotline or email)

Implementation of these mechanisms by the Clean Water Program helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the Clean Water Program can be found in the Section 8.

6.4.2 USED OIL AND HHW COLLECTION SERVICES

The City of Encinitas facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City offers its residents door-to-door home collection, two permanent collection facilities, and periodic, temporary collection events for all HHW. In addition, the City requires weekly curbside garbage, recycling, and yard waste pick-up for all residents. The various components

of the solid waste and hazardous waste collection services provided by the City are described in detail below.

HHW Home Collection Program - Door-to-door home collection service is available to all residents of the City of Encinitas. Qualifying homebound, elderly, and disabled citizens may request pickup at no charge. Residents not qualifying for free pickup service are charged a nominal fee of $10 for home collection. Materials accepted via the HHW Home Collection Program include:

- **Household Cleaners:** Drain openers, oven cleaners, wood and metal polish / cleaners, toilet bowl cleaners, and disinfectants
- **Automotive Products:** Oil and fuel additives, grease and rust solvents, carburetor and fuel injector cleaners, air conditioning refrigerants, starter fluid, lubricating fluids, radiator fluids and additives, waxes, polishes, cleaners, and transmission additives
- **Home Maintenance and Improvement Products:** Paint thinners, paint strippers, adhesives, paints, stains, varnishes, sealants, and wood preservatives
- **Lawn and Garden Products:** Pesticides, herbicides, and fungicides (poisons)
- **Miscellaneous:** Batteries, fingernail polish removers, pool and photo chemicals

Poway and Vista Permanent HHW Collection Facilities - In an agreement with the Cities of Vista and Poway, residents of the City of Encinitas may also drop off household hazardous waste at the Vista or Poway collection centers. The Vista collection center is located at 1145 East Taylor Street, at Laguna Lane. The Poway collection center is located in the South Poway Business Park, at 12325 Crosthwaite Circle off of Stowe Drive. These regional, permanent collection centers are open every Saturday (except holiday weekends) from 9:00am to 3:00pm. No fee is charged to Encinitas residents and no appointments are necessary. Waste collected is separated, packaged, secured, and temporarily stored at the permanent facilities. It is then removed on a regular basis for proper recycling or disposal. Material accepted at the Poway and Vista facilities are the same as those accepted through the Home Collection Program.

Used Oil Recycling Program - The City's used oil recycling program consists of a network of certified automotive waste recycling centers throughout the city. These facilities accept a range of used automobile products including used oil, oil filters, batteries, and antifreeze. A significant part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through grants from the California Integrated Waste Management Board (CIWMB). A list of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Residents may also opt to use the City's door-to-door HHW collection service to recycle their used oil and oil filters. However, most residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities.

Trash and Recycling Services - For public health purposes, the City of Encinitas requires that all residents participate in the City's solid waste collection service. All residents and businesses are

liable for payment of fees for the mandatory service (see Municipal Code section 11.20.010, paragraph A). Residential service includes curbside green waste collection and recyclable materials collection in addition to regular garbage collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste Recycling Services to provide solid waste collection services in Encinitas for both residential and commercial customers.

Detailed information regarding used oil, HHW, and solid waste disposal is made available to residents through the City's website, ECDO's website, and other various environmental websites. In addition, brochures about household hazardous waste disposal options are available at outreach events staffed by the Clean Water Program, the Solana Center, and EDCO Waste Recycling Services. Brochures and information regarding HHW disposal are also available upon request at the City's main office.

Table 6-1 provides a summary of the used oil collected via the City's used oil recycling program. Table 6-2 identifies types and amounts of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 6-1
Used Oil Collected in FY 2010-11

Collection Type	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)
Certified Centers	6,676	26
Permanent HHW Centers	480	136
Total	**7,156**	**162**

Table 6-2
Household Hazardous Waste Collected in FY 2010-11

Material Type	Description	HHW Collection Facilities*
Flammable	Flammable solid/liquid	2,740
& Poison	Bulked flammable liquids	0
	Oil-base paint	16,119
	Poison (excl. aerosols)	5,318
	Reactive and explosive	0
	Subtotal	**24,177**
Acid	Inorganic & Organic acid	987
Base	Inorganic & Organic base	1,773
Oxidizer	Neutral oxidizers, Organic peroxides	158
	Subtotal	**2,918**
PCB-containing	PCB-containing paint	0
	Other PCB waste	0
	Subtotal	**0**
Reclaimable	Antifreeze	1,018
	Car batteries	1,089
	Latex paint	19,457
	Motor oil/oil products	4,078
	Oil filters	204
	Subtotal	**25,846**
Asbestos		**37**
Universal Waste (UW)	Mercury containing waste	0
	Thermostats/switches/thermometers	5
	Fluorescent Lamps	571
	Rechargeable batteries	171
	Household batteries	2,217
	Subtotal	*2,964*
Electronic Waste (UW)	SB20/50 covered electronic devices	12,593
	Universal waste electronic devices	21,858
	Subtotal	*34,451*
Aerosols (UW)	Non-empty aerosol containers	0
	Other	49
	All UW Subtotal	**36,501**
Other HHW	Home-generated sharps	443
	Pharmaceutical waste	0
	Compressed gas cylinder	553
	Non-UW aerosol containers	1,943
	Treated Wood	55
	Other	1,139
	Subtotal	**4,133**
Grand Total		**93,575**

*Waste measured in pounds.

6.4.3 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by section D.3.c.(3) of Order No 2007-0001, and depending on the severity of the violation, the City enforces its storm water ordinance for all residential areas and activities as necessary to maintain compliance. Enforcement may include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2010-11, there were **52** residential ICID complaint calls. Of these calls, **3** were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **49** residential complaint investigations conducted, **44** resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In addition to education, FY 2010-11 complaint investigations resulted in **five** Notices of Violation and **two** citations.

A summary of the residential violations and enforcement actions occurring in FY 2010-11 is available for review in Appendix H-1. The tabular summary includes a brief discussion, which includes the follow-up actions taken, for each violation. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2011.

6.4.4 REGIONAL RESIDENTIAL EDUCATION PROGRAM

In prior reporting years, the City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. This Plan contains recommended strategies for the development and implementation of

the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6. Details of the implementation of this Plan can be found in Section 8.3.4(d) of this annual report and in the Regional Urban Runoff Management Plan (RURMP) annual report to be submitted under separate cover by the County of San Diego on behalf of the San Diego County Stormwater Copermittees.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Encinitas will submit the entire FY 2010-11 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2011.

8.0 EDUCATION

8.1 INTRODUCTION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the Engineering Services Department, Clean Water Program.

The Municipal Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience.

(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The City conducted or participated in a wide variety of stormwater education activities during the FY 2010-11 reporting period. Education and outreach activities and opportunities are organized and implemented on three levels—Jurisdictional, Watershed, and Regional. For ease of reporting, activities occurring on all levels have been captured below.

8.2 MUNICIPAL STAFF TRAINING

As required by Municipal Permit section 5.b.1 (d), activity specific training opportunities were provided to City staff. The summary below outlines departmental training activities conducted during the defined reporting period of this report.

Notably, in FY 2007-08, the Clean Water Program developed the "Clean Water Challenge" stormwater training game. This training element was created to address topics specifically identified in the Municipal Stormwater Permit, as well as activity and department specific topics. In FY 2010-11, the Clean Water Challenge stormwater training game continued to be utilized for all municipal training activities as described below. The Clean Water Challenge has been well received by City staff and provides a competitive and informative format for training various departments on a wide range of topics including low impact development, SUSMP standards, activity specific BMPs, impaired water bodies, stormwater code violations, potential sources of pollutants, and other department specific concepts.

Public Works, Streets Division. FY 2010-11 stormwater training was provided to the Streets Division during regular weekly staff meetings on the following dates:

- July 8, 2010; Municipal Program-Best Management Practices; 12 attendees
- July 8, 2010; Building & Grounds Maintenance, SC-41; 12 attendees
- September 02, 2010; Road & Street Maintenance, SC-70; 13 attendees
- September 02, 2010; Landscape Maintenance, SC-73; 13 attendees
- September 9, 2010; Water & Sewer Utility Maintenance, SC-76; 13 attendees
- September 24, 2010; Spill Prevention, Control, and Clean Up, SC-11; 13 attendees
- October 7, 2010; Plaza & Sidewalk Cleaning, SC-71; 13 attendees

Public Works, Wastewater Division. The Clean Water Program works closely with the Wastewater division to prevent illegal discharges from entering the City's waterways. Seven staff members from the Wastewater division were trained by Clean Water Program staff on April 20, 2011.

San Dieguito Water District. Sixteen staff members from the San Dieguito Water District were trained on April 27, 2011. Topics included a refresher on stormwater regulations, activity specific BMPs, and the relationship between irrigation runoff and stormwater pollution.

City of Encinitas Fire Department. Within the defined reporting period of this report, stormwater training workshops were given to the Fire Department on three separate dates. On May 19, 2011, thirteen fire personnel were in attendance; ten fire personnel attended the training on May 20, 2011; and five fire personnel were at the June 3rd, 2011 training.

City of Encinitas Landscape Contractors. The City contracts with multiple landscaping companies to maintain our parks, beaches, and other public landscaped areas. In collaboration with the City's Parks and Recreation Department, training was given in Spanish to 25 staff from the City's landscape contractors on May 3rd, 2011. Topics of this training included activity specific BMPs, City stormwater regulations, and proper materials management.

Engineering Department. Staff from the Clean Water Program and other divisions of the Engineering Department attended the following trainings:

- Stormwater Training: Understanding the New Construction Permit - July 29, 2010
- APWA HMP/BMP Sizing Calculator Training I - December 14, 2010
- Foley New General Construction Permit - February 24, 2011
- APWA HMP/BMP Sizing Calculator Training II - March 8, 2011
- Qualified SWPPP Practitioner/Qualified SWPPP Developer Training - May 9-11, 2011

Clean Water Program, Engineering Department. Clean Water Program staff regularly attends trainings, workshops, and conferences related to stormwater management. This fiscal year staff attended the following:

- Rainwater Harvesting Symposium - October 12, 2010
- Permanent BMP Inspection and Maintenance Workshop - April 6, 2011

- Dog Bite Prevention Training - April 19, 2011
- H20/Headwaters to Oceans Conference - May 24-26, 2011
- Confined Space Training - June 15, 2011

In addition to formal training, Clean Water Program staff is regularly informed of new and emerging water quality regulations, science, and technology through regional meetings, subscription to relevant scientific journals, and individual research.

Multiple City Departments.

Staff from various City Departments attended trainings within the reporting period of this report that support the efforts of the City's Clean Water Program.

- APWA Gray Water Reuse and Rainwater Harvesting Rebroadcast - February 15, 2011
- Re:Streets - Streets Reconsidered Workshop - June 7, 2011

8.3 EDUCATIONAL OUTREACH

The following section describes education efforts conducted for each target community, as identified in the Permit and summarized above, during FY 2010-11.

8.3.1 UNDERSERVED TARGET AUDIENCES, HIGH-RISK BEHAVIORS, AND "ALLOWABLE" BEHAVIORS AND DISCHARGES

Underserved Target Audiences - Bilingual Education

For those that work in the City, and for segments of the community that do not speak English as their first language, the City provided bilingual (English/Spanish) brochures at all outreach events. The Clean Water Program utilized the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures include information about Best Management Practices for Yard and Garden Care, Restaurants, Home Improvement, Pesticides, Developers, and Automotive Care. Further, a bilingual Clean Water Program staff resource provided training and responded to complaint calls as needed in various community sectors.

High Risk Behaviors - Regional Mobile Business Outreach and Education Plan

During FY 2010-11, the City of Encinitas participated with other copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. The Industrial/Commercial Workgroup will be overseeing the implementation of that Strategy throughout the permit cycle. A complete description of the education and outreach of mobile businesses and inter-jurisdictional coordination of notifications can be found in section 5.3. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

8.3.2 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to the new development and construction communities.

- "A Pollution Prevention Guide for the Construction Industry" was distributed at public events, to engineering construction inspectors and the building department, and displayed at the City of Encinitas Engineering counter for the public. One hundred and twenty-two were disseminated during the 2010-11 fiscal year. This brochure was developed as part of the Carlsbad Watershed Urban Runoff Management Plan workgroup (Appendix F-2).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by Engineering Department inspectors and Clean Water staff as determined appropriate. For all projects, stormwater topics including required construction site BMPs, general site management, post-development BMP construction, and other relevant SUSMP requirements are discussed.
- Construction inspector stormwater coordination. Staff from the Clean Water Program attended inspector staff meetings to provide support and information to the City's construction inspectors.
- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers – Simple and Cost Effective Ways to Comply with Stormwater Regulations" (Appendix F-3). The brochure is available in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In September 2010 the City mailed 71 letters to local developers and contractors regarding BMP requirements for the upcoming rainy season (Appendix B-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into the annual Erosion Control Letter that went to contractors, developers, and job superintendents.

8.3.3 COMMERCIAL/INDUSTRIAL OWNERS AND OPERATORS

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to commercial and industrial sectors of the community:

- The San Dieguito Water District (SDWD), in coordination with the Olivenhain Municipal Water District (OMWD) and the Santa Fe Irrigation District (SFID), hosted a Professional Landscape Series every Tuesday from February 22 through March 15, 2011. The series was taught in English with a bilingual interpreter and topics included irrigation principles, irrigation troubleshooting, controller programming, and irrigation scheduling. Approximately 20 people attended the class series.

- Stormwater quality inspections were performed at **97** commercial facilities and two industrial facilities during the FY 2010-11 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general stormwater quality information and minimum BMP requirements.

8.3.4 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential, community, and school audiences:

a. Residential Community and General Public

- During the defined reporting period of this report, San Dieguito Water District (SDWD) hosted eight Water Conservation Classes and held Project WET teacher training. Several of the classes listed below were cosponsored or co-hosted by other local agencies and non-governmental organizations as noted.

Table 8-1
SDWD Water Conservation Classes held in FY 2010-11

Date	Event Title	Event Details	Material Provided	Number of Participants
Aug 24, 2010	Ocean Friendly Gardens Course, part 1: Classroom Instruction Location: City of Encinitas Community Center	Presenters: G-3, Surfrider, and SDWD (Information Table). Cosponsored by City of Encinitas and OMWD. Topic: Conservation, Permeability & Retention for residential landscapes	Ocean Friendly Gardens book, SDWD drought information and resources.	54 people
Sep 11, 2010	California Friendly Landscape Training Location: Rancho Santa Fe Garden Club	Presenter; Megan Fairleigh (Mira Costa College) Topic: design, irrigation, scheduling controllers, soils, fertilizers, drought friendly plants Cosponsors: CMWD, OMWD, SFID & SDWD	Drought information, drought tolerant resources, "how to read your meter" handout, pens, seeds and plant material on display from 3 nurseries.	95 people
Sep 26, 2010	Ocean Friendly Gardens Course, part 2: Site Evaluation	Presenters: G-3, Surfrider, and SDWD (Information Table). Cosponsored by City of Encinitas and OMWD. Topic: Evaluation of landscape area,		30 people

Date	Event Title	Event Details	Material Provided	Number of Participants
		irrigation, runoff issues, and approximation of rain capture.		
Oct 24, 2010	Ocean Friendly Gardens Class part 3: Hands on Workshop. Location: Residential Home in Encinitas	Presenters: G-3, Surfrider, and SDWD (Information Table). Cosponsored by City of Encinitas and OMWD. Topic: Hands-on removal of turf, turn and treat soil and install plants		20 people
Mar 15, 2011	Fix a Leak Week Workshop (2 1-hour workshops) Location: Encinitas Community Center	Presenters: Peter Sternberger and SDWD staff Topic: Basic faucet and toilet tank leak repair. Checking meter for read and leak dial movement.	Materials: Practical Plumbing Handbook, dye tablets, shower flow meter, seeds, FALW flyers	15 people
Mar 17, 2011	Project WET (Water Education for Teachers) Teacher Training Location: San Diego Botanic Garden (SDBG)	Pilot workshop for Encinitas Union School District teachers (K-6) Presenter: Brian Brown from Project WET Topic: Teachers learn about Project WET though hands-on training and tour of Children's Garden at SDBG.	Curriculum Guide	20 teachers
Apr 16, 2011	Residential Water Efficient Landscaping Workshop Location: Encinitas Community Center	Presenters: Don Schultz, Horticulturist and Cuyamaca College Professor Topics: design, plant material, soils, and irrigation.		83 people
May 10, 2011	Rainwater Capture Workshop Location: Encinitas Community Center	Event Organizer: Grangetto's Farm and Garden Supply Cosponsors: SDWD, OMWD, Rainbird, and Bushman. Topic: Displays of irrigation equipment & efficient watering.		20 people

- The City of Encinitas Parks and Recreation Department offers a very popular Junior Lifeguard program offered to Encinitas residents as well as young adults and children from throughout the County. An estimated 1,000+ children participate in the Junior Lifeguard Program every summer. In June of 2011, a new field manual was created by

the Encinitas Marine Safety Department and through collaboration with Clean Water Staff included a City of Encinitas Clean Water Program page. This printed page explains in detail what the Clean Water Program does, how to protect our waterways, and also includes the Program's hotline phone number, email and website address. Over 1,000 of these official Junior Lifeguard Field Manuals were printed and distributed to the participants and their parents (Appendix I-2) within the defined reporting period of this report.

- A City of Encinitas Environmental Services Guide was created in FY 2006-07. It continues to be handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, stormwater management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix F-4).
- The Solana Center for Environmental Innovation continued to sell compost bins and worm bins to residents of Encinitas throughout FY 2010-11. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City. A total of **474** bins were sold in FY 2010-11.
- Individual Communication. There were 52 residential ICID complaint calls in FY 2010-11. Three of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the 49 residential complaint investigations conducted, 44 resulted in education provided to parties involved. Materials distributed included general stormwater education, activity specific BMP requirements, pollution prevention education, as well as specific municipal code and clean water regulations.
- Media Coverage (newspaper articles, press releases, etc.): See Table 8-2 below.

Table 8-2
Summary of Media Coverage in FY 2010-11

No.	Title	Date	Source
1	Encinitas: Surfrider Foundation hosts gardening classes	August 15, 2010	The North County Times
2	City's Clean Water Program Achieves Clear Results	Fall 2010	Encinitas NOW!
3	Experts discuss 'rain harvesting' in San Diego	October 12, 2010	SIGN ON San Diego
4	Countywide program seeks to 'bag' environmentalism	December 8, 2010	The Coast News
5	Encinitas played pivotal role in Thursday's Day Without a Bag	December 11, 2010	SIGN ON San Diego
6	ENCINITAS: Plastic bag-free day goes countywide	December 13, 2010	The North County Times
7	Swami's One of the New Marine Protected Areas	December 16, 2010	Encinitas Patch
8	REGION: Creek to Bay Cleanup aims to keep trash out of ocean	April 25, 2011	The North County Times

No.	Title	Date	Source
9	ENCINITAS: Sewage spills into Batiquitos Lagoon	April 27, 2011	The North County Times
10	Encinitas Growing Trend-Annual Environmental Fair becoming more popular	June 6, 2011	The North County Times

Workshops and events attended/hosted by the City of Encinitas, San Dieguito Water District and/or the Solana Center in FY 2010-11:

- OMWD Water Conservation Expo - August 12, 2010
- Surfrider Ocean Friendly Gardens Basics Course – August 24, 2010
- Coastal Cleanup Day – September 25, 2010
- Stars in the Park Movie Nights-September 25, 2010
- School District Liaison Committee (provided water education resources)- September 27, 2010
- Surfrider Ocean Friendly Gardens Site Evaluation – September 26, 2010
- Cardiff Surf Classic & Green Beach fair – October 1-2, 2010
- Stars in the Park Movie Nights-October 16, 2011
- Stars in the Park Movie Nights-October 23, 2011
- Ocean Friendly Gardens GAP Workday – October 24, 2010
- Mission Estancia Elementary School Presentation – January 31, 2011
- Girl Scout Cookie Drive (Water Conservation fliers handed out)- February 2011
- San Diego High Tech Fair – February 9, 2011
- Kid's Day at the Flower Fields, March 26, 2011
- La Costa Canyon High School Earth Day - April 22, 2011
- Creek to Bay Cleanup – April 30, 2011
- Encinitas Garden Festival - 4/30/11
- Public Works Day – May 20, 2011
- Encinitas Environment Day – June 5, 2011
- San Diego County Fair - Enviro Fair – June 18, 2011

b. School Children

- During the defined reporting period of this report, the San Dieguito Water District hosted the following outreach events geared towards school-aged children:

Table 8-3
SDWD School Presentations held in FY 2010-11

Date	Presentation/Location/Details	Number of Participants
Aug 3, 2010	City of Encinitas Day Camp at Glen Park Hands on activities: water cycle activity, California Delta information sheet, puzzle/water sheets, and globe toss	Approx. 60 students, 1st - 6th grade

Date	Presentation/Location/Details	Number of Participants
Sep 19, 2010	Splash Mobile Science Lab at Ocean Knoll School	110 students, 4th and 5th grade
Nov 19, 2010	Splash Mobile Science Lab at Paul Ecke School	60 students, 5th grade
Feb 7, 2011	H2O Where Did You GO Theater Group at St. John's School	218 students, K-3rd grade; 124 students, 4th – 6th grade
Feb 15, 2011	H2O Where Did You GO Theater Group at Ocean Knoll School	225 students, K-3rd grade; 243 students, 4th – 6th grade
Mar 23, 2011	4th grade poster contest classroom visit to St. John's School. Hands on activities: California water supply map, water cycle activity, Project WET: Blue Planet & Thunderstorm activity	58 students
Mar 31, 2011	4th grade poster contest classroom visit at Ecke Central School Hands on activities: California water supply map, water cycle activity, Project WET: Blue Planet & Thunderstorm activity	90 students
May 6, 2011	3rd Grade Conservation Visit to Ada Harris School Hands on activities: Water Cycle Poster, California Water Supply Poster, Incredible Journey (ProjectWET).	20 students
April 14, 2011	Splash Mobile Science Lab at St. John School	115 students, 4th and 5th grade
April 22, 2011	Earth Day at La Costa Canyon High School	Approx 2500 students attended
May 20, 2011	Public Works Week, City of Encinitas Public Works Yard	115 students

Date	Presentation/Location/Details	Number of Participants
Jun 9, 2011	Splash Lab at Ada Harris School	87 students, 4th grade
March 2011	Water History, Supply & Conservation Slide Show given to Ada Harris School	100 students, 4th grade

- The City of Encinitas Parks and Recreation Department hosted three movie nights for families in the Fall of 2010. These free entertainment events were held in the City's Parks and one movie was at Moonlight Beach. The "Stars in the Park" movie nights were sponsored by Noodles & Company and the City of Encinitas Clean Water Program. Before each movie began, an announcement was made about the Clean Water Program services and the Clean Water logo was used for all advertisements. Over 700 people attended this Clean Water Program sponsored event.
- In the Fall of 2009, the Encinitas Union School District created a Green Team consisting of teachers, principals, parent volunteers, and environmental organizations in the community. The Green Team met once a month during the school year to discuss how to improve efficiency, reduce economic costs, and increase environmental awareness throughout the District. Topics discussed include waste management, composting, water conservation, energy use, environmental health, and stormwater pollution prevention. In FY 2010-11, Clean Water Program staff attended nine Green Team meetings.
- The Solana Center monitors large worm bins at Capri Elementary, Paul Ecke Elementary, Ocean Knoll Elementary, Encinitas County Day, Olivenhain Pioneer Elementary, San Dieguito Academy, Flora Vista, and a small worm bin at Mission Estancia Elementary. Solana Center has trained volunteer master composters to give composting/vermicomposting presentations at schools throughout Encinitas. School presentations are conducted both on and off site and scheduled as requested.
- The Solana Center for Environmental Innovation also participated in school based educational programs where stormwater awareness was taught. See Table 8-4 for details.

Table 8-4
Watershed Presentations FY 2010-11

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Kids Kore Camp- Solana Beach	7/6/10	1	29
Kids Kore Camp- Solana Beach	7/23/10	1	30
Flora Vista Elementary	2/23/11	3	60
Cardiff Ocean Night	4/5/11	1	28
	Total	**6**	**147**

c. **Watershed Educational Activities-** Important components of the City's education program include materials and activities that were generated on a watershed basis to address the high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were created or performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities will be provided in the FY 2010-11 Carlsbad WURMP Annual Report.

- **Watershed Map**- A 36"x 24" "We all Live in a Watershed" poster was developed giving information about the San Luis Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a topographic map of the watershed, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public displays throughout the reporting year.

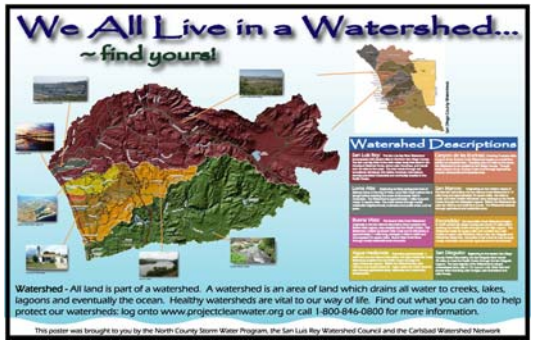

- **Watershed Collaboration**- The City of Encinitas collaborated with other outside organizations, including the Carlsbad Watershed Network, Solana Center, and Escondido Creek Watershed Alliance to enhance public educational efforts and understand watershed issues. The Escondido Creek Watershed Alliance participated in the following watershed events in FY 2010-11:

    - La Costa Canyon High School Earth Day-April 22, 2011
    - Earth Day, clean up and tree planting-April 23, 2011
    - Encinitas Garden Festival-April 30, 2011
    - Creek to Bay clean up -April 30, 2011
    - Lake Dixon clean up-April 30, 2011
    - City of Escondido Street Fair-May 15, 2011
    - Encinitas Environment Day-June 5, 2011
    - City of Escondido Enviro Fair-June 18, 2011

  The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2010-11, the City participated in the following watershed outreach events:

    - Coastal Cleanup Day – Sep 25, 2010
    - Creek to Bay Beach Cleanup – Apr 30, 2011

- **Watershed Educational Materials**- The City continues to distribute materials developed by the North County Stormwater Program in previous reporting periods, including the restaurant posters, automotive posters, "Storm Drains Lead to the Ocean" posters, general stormwater brochures, and the door hangers.

d. Regional Residential Education Plan

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources (ERS) Workgroup to develop the Regional Residential Education Plan in FY 07-08. This plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6.

The ERS Workgroup participated in Enviro Fair Day at the San Diego County Fair on June 18, 2011 Six Copermittees were represented at the event, with staff members throughout the day. Copermittees were able to supply their own giveaways and literature during their individual shifts, but the main Regional giveaways were coloring books and crayons, reusable Chico bags, pencils, IPM Tip Card Packets, and pet waste bag dispensers. Fair attendance for the day was more than 70,000, and record attendance for 2011 was recorded again, exceeding the previous year's record.

Program Identity. Through Citywide environmental efforts and initiatives, stormwater pollution prevention and water quality have been identified as priorities for residents and businesses in the Encinitas community. As a result, the City of Encinitas Clean Water Program staff felt that updating the program identity through a new logo would enhance awareness within the community and help identify the diverse City functions that help to protect local surface water quality in creeks, lagoons, and the ocean. A new Clean Water Program logo was developed in FY 2009-10 and is currently being used on new educational outreach materials, event giveaways, program correspondence, and staff apparel and will be used on an anticipated web site update.

Educational Outreach Materials Distributed. In FY 2010-11, a total of **2,783** outreach materials were distributed by the Clean Water Program. This includes BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed pencils, Clean Water Program Hotline magnets, key chains, reusable shop towels, "Bags on Board" dispensers, construction brochures, posters, door hangers, eating establishment guides ("What's Cooking"), automotive guides ("Green Wrench"), flyers printed from the Project Clean Water Toolbox, Think Blue Regional Calendars, Minimum Required BMP mailers, and other informational guides. These guides included information on Integrated Pest Management (UCSD Cooperative Extension), water conservation from local water districts and the County Water Authority, invasive species ("Don't Plant A Pest" and

"NIMBY-No Invasives In My Back Yard"), "How to Hire A Landscaper"-UCSD Cooperative Extension/Scott Parker, County of San Diego Household Hazardous Waste, miscellaneous stormwater educational for children, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority, and our newest and most colorful addition is the reusable and recycled Clean Water Program bag, made from 85% post industrial recycled paper. The bag has handles for grocery shopping and the exterior is paper so that it can be colored or painted. This multifunctional bag displays the Clean Water Program hotline phone number and appeals to both children and adults (Appendix F-5). The use and re-use of collectable recycle bags also replaces the formerly and commonly used disposable plastic bags. Discouraging the use of plastic bags is the most current and prolific movement to protect the watershed, the ocean and its marine life.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program and the Watershed. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the quality of our waterways. This is evident by the attendance and participation at community events and workshops and the number of complaints reported to the storm water hotline (discussed in more detail in Section 9.3.5 below and also in Section 8.3.4(a)). Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2010-11 reporting period.

9.2 PUBLIC PARTICIPATION APPROACH

The City's approach for the outreach program is to develop an understanding among its residents and businesses of fundamental storm water and pollution prevention concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches, untreated).
- The economic value of our beaches and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a storm water violation (Clean Water Hotline, email or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and ocean.
- Reducing pollutants of concern.

- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals, etc.).

Within the defined reporting period of this report, the tools that have been used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- City of Encinitas Environmental Advisory Commission
- Public Outreach Events
- Public Opinion Survey
- Public Reporting Methods
- Pet Waste Dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- Permanent Best Management Practices (BMP) Self Verification & Inspection Programs
- Reusable Recycled Shopping Bags

9.3 PROGRAM IMPLEMENTATION

This section describes the specific public participation tools used during the FY 2010-11 reporting period.

9.3.1 WORKSHOPS/TRAINING SESSIONS

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of stormwater education and/or water conservation and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the stormwater regulations. Table 9-1 provides a summary of the FY 2010-11 workshops/training sessions conducted.

Table 9-1
City of Encinitas Workshops/Training Sessions FY 2010-11

Workshop/Training Session	Target Audience	Date	Attendance
Public Works- Streets Division	City Staff	7/8/10, 9/2/10, 9/9/10, 9/24/10, 10/7/2010	89
Stormwater Training	San Dieguito High School District Transportation	8/24/2010	55
Ocean Friendly Gardens Program	Public	8/24/2010	54
Ocean Friendly Gardens Program	Public	9/26/2010	30
Ocean Friendly Gardens Program	Public	10/24/2010	35

Workshop/Training Session	Target Audience	Date	Attendance
City-wide Goal Setting Workshop for General Plan	Residents	11/16/2010	250+
Stormwater Presentation	4th Graders @ Mission Estancia Elementary School	1/31/2011	90
City-wide Goal Setting Workshop for General Plan	Residents	3/28/2011	200+
Public Works-Wastewater Division	City Staff	4/20/2011	7
Spanish-speaking Landscapers	City Staff and Landscape Contractors	5/3/2011	25
Marine Safety Stormwater Training	City Staff	5/18/2011	7
Fire Department	City Staff	5/19/11, 5/20/11, 6/3/2011	28
San Dieguito Water District	City Staff	4/27/2011	16
		Total	**886**

9.3.2 CITY OF ENCINITAS ENVIRONMENTAL ADVISORY COMMISSION

The Environmental Advisory Commission (EAC) provides policy advice and recommendations to the City Council on issues related to environmental stewardship and sustainability. The Commission assesses the City's current environmental efforts in relation to specified areas of interest and creates and recommends strategies to enhance City activities that promote conservation and sustainable practices. The mission of the Encinitas Environmental Advisory Commission (EAC) is to make recommendations to the Encinitas City Council, raise public awareness, and build community partnerships in order to promote a shared vision of environmental sustainability throughout city government and the community. The Clean Water Program staff provides technical expertise to the Commission on matters related to water quality, pollution prevention, and stormwater regulations.

During the defined reporting period, the EAC presented its third annual series of community outreach activities in partnership with other Encinitas Environment Day activities. The series, entitled "Green Spring", included twenty-one activities and presentations (Appendix I-1); well as nature walks & lagoon clean-ups on Saturdays at the San Elijo Lagoon Conservancy, and Cottonwood Creek Clean-ups – 3rd Saturday each month hosted by the Cottonwood Creek Conservancy . Additionally the Environmental Commission had been asked by the City Council to provide ongoing advice on the phase-out or ban of single-use plastic and paper bags. In support if this initiative, each December the City coordinates "A Day Without a Bag," a

community-wide promotion of reusable bags which includes a Mayor's press event, broad media coverage, school presentations, and the giveaway of over 4,000 reusable bags which have been donated by all local grocers and several businesses.

9.3.3 PUBLIC OUTREACH EVENTS

The Clean Water Program participated in the following outreach events during FY 2010-11:

1. OMWD Water Conservation Expo in Village Park, Encinitas-August 12, 2010; 300 attendees
2. Ocean Friendly Gardens Basics Course @ Encinitas Community Center-August 24, 2010; 54 attendees
3. Coastal Cleanup Day @ Swami's – September 25, 2010; 125 volunteers
4. Ocean Friendly Gardens Site Evaluation– September 26 2010; 30 attendees
5. Cardiff Surf Classic/Green Beach Fair @ Seaside Beach, Cardiff –October 1st & 2nd, 2010; 160 visitors
6. Ocean Friendly Gardens GAP Workday-October 24, 2010; 35 attendees
7. Stormwater Presentation @ Mission Estancia Elementary, Encinitas-January 31, 2011; 90 students
8. La Costa Canyon High School Earth Day in Encinitas-April 22, 2011; 2500 students
9. Creek to Bay Cleanup @ Moonlight Beach – April 30, 2011; 68 volunteers
10. Public Works Day – May 20, 2011; 100+ students and 25 school staff (125 total)
11. Encinitas Environment Day @ Cottonwood Creek Park– June 5, 2011; 4,000 attendees
12. Encinitas Junior Lifeguard Program @ Moonlight Beach-June-July 2011; 1,166 participants

Solana Center for Environmental Innovation. Outreach to the general public and school children is also provided through the Solana Center for Environmental Innovation via workshops and presentations involving stormwater, household hazardous waste, composting, and recycling. The Solana Center works closely with the City for many of these workshops and presentations. See the tables below for a description of Solana Center's attended events and workshops.

Table 9-2
Solana Center Composting Workshops/Presentations FY 2010-11

Workshop schedule	Location	Attendance
7/17/2010	San Diego Botanic Gardens	42
Master Composter Training Course-Mondays; September 27- October 25	San Dieguito Academy	32
8/28/10	San Diego Botanic Gardens	38
11/6/11	San Diego Botanic Gardens	31
1/22/11	San Diego Botanic Gardens	34
3/12/11	Solana Center for Environmental Innovation	29

Workshop schedule	Location	Attendance
4/2/11	San Diego Botanic Gardens	14
4/30/11	San Diego Botanic Gardens	22
	Total	**242**

Table 9-3
Solana Center Used Oil Collection Events FY 2010-11

Encinitas Used Oil Events	Date	Total Attendance
O'Reilly Auto Parts #4191	4/23/11	44
	Total	**44**

Table 9-4
Solana Center Watershed Presentations FY 2010-11

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Kids Kore Camp- Solana Beach	7/6/10	1	29
Kids Kore Camp- Solana Beach	7/23/10	1	30
Flora Vista Elementary	2/23/11	3	60
Cardiff Ocean Night	4/5/11	1	28
	Total	**6**	**147**

Table 9-5
Other Solana Center Outreach Events FY 2010-11

Event	Date	Booth Visitors/Attendees
Solana Beach Blanket Movie Night	8/28/10	200+
Encinitas Fall Fest Event	11/21/10	75+
Solana Beach Green Fair	3/26/11	Unknown
Encinitas Street Fair	4/10/11	50,000
	Total	**50,275+**

Table 9-6
Solana Center Automotive Presentations FY 2010-11

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
San Dieguito Academy	11/19/10	1	20
	Total		**20**

9.3.4 PUBLIC OPINION SURVEY

The City of Encinitas joined the Think Blue San Diego Region workgroup in distributing public opinion surveys at regional events held throughout the County. In FY 2009-10, automotive surveys were given out at Enviro Fair at the San Diego County Fair. In addition, residents were asked to complete a pre-assessment survey in order to receive a Regional 2010 Stormwater Pollution Prevention Calendar. Post-assessment survey cards were included with the calendars to test whether stormwater knowledge had increased after viewing the calendar. The post-assessment survey was also available on the Think Blue San Diego Region website. Results from all regional surveys will be included in the FY 2010-11 Regional URMP.

9.3.5 PUBLIC REPORTING METHODS

The City has a local Clean Water Hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours number (760) 633-2922 is available for after-hours emergencies and connects the caller with the City's external answering service which takes in calls and contacts the appropriate City staff to determine appropriate response actions. In 2010-11, an updated Clean Water Hotline email was established (cleanwater@cityofencinitas.org) and is being promoted and disseminated through the numerous outlets and venues described in this report. There are also currently two regional storm water hotline numbers widely advertised within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800, and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voicemail message for 24-hour public access.

The Encinitas Clean Water Hotline has been in service for over 10 years. In FY 2010-11, the Clean Water Program received 180 calls and emails. The hotline phone number and email address is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-ups, and enforcement actions related to the hotline are presented in Appendix H-1.

The Clean Water Program has a specific website URL (http://cwp.cityofencinitas.org) that provides information, as well as the general NPDES email address which can also be used to report stormwater violations. Each method of contact can also be used for general questions relating to stormwater.

9.3.6 PET WASTE DISPENSERS

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier, 20 doggie bag dispensers are located at parks and trails throughout the City. Trash cans are also available in these areas. Both the trash cans and bag dispensers are maintained by the City's Parks and Recreation Department. In addition, individual Bags on Board pet waste bag dispensers were developed in FY 2007-08 and continued to be distributed at jurisdictional events during FY 2009-10 (Appendix F-5).

9.3.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

City of Encinitas residents can bring their HHW and Electronic Waste to drop off facilities in Vista and Poway, free of charge. There is also a home pick up available for a small fee; however, the fee is waived for elderly and disabled residents. Used oil collection events were organized through the Solana Center at local automotive supply stores, and free used oil containers were available for pick up from the Center to encourage oil recycling. Please refer to Section 6.4.2 and Table 9-3 in Section 9.3.3 for a detailed description of Used Oil events and collection totals.

9.3.8 PERMANENT BEST MANAGEMENT PRACTICE (BMP) SELF-VERIFICATION AND INSPECTION PROGRAMS

FY 2010-11 marked continued implementation of the Permanent BMP Self-Verification and Inspection Programs. This successful program provides a valuable opportunity for residents and business owners to be actively involved in protecting stormwater quality. Residents and business owners with treatment control BMPs on their private property are responsible for the successful operation and routine maintenance of these facilities. The City's Self-Verification and Inspection Programs aim to make residents and owners aware of their operation and maintenance obligations through formal notification campaigns and one-on-one communication. Notification campaigns generally consist of two rounds of notices mailed to the residents and business owners responsible for BMP maintenance. The initial notification packages consist of a combination of the following materials: notification/program introduction letter, Treatment Control BMP brochure, grading plan identifying the location of BMPs, and forms and self addressed stamped envelopes necessary to complete self-verifications. As part of the self-verification and inspection processes, City staff also offer one-on-one assistance with identifying BMPs, conducting BMP inspections, and determining maintenance needs. City staff is available to answer questions regarding the self-verification and inspection programs both over the phone and on-site as requested by the responsible party. As these programs have matured since 2008, the public knowledge and awareness of permanent BMPs and required operation and maintenance activities has continually improved. For more information regarding the Permanent BMP Self-Verification and Inspection Programs refer to Section 2 of this report.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

On January 29, 2009, the San Diego Region Stormwater Copermittees submitted the *Standardized Fiscal Analysis Method and Format* as required by municipal permit Sections G, J.1.a(3)(k), and J.1.c(1)(d). The defined reporting period of this report marks the second full application of the fiscal analysis methodologies developed in the document, and the information provided in this section has been prepared consistent with the standardized approach, using the best information available at the time of report preparation. The *Standardized Fiscal Analysis Method and Format* supports a greater scope of fiscal tracking, yielding a much more complete analysis of program related expenditures across a variety of City functions and departments and/or divisions that may not have been captured in previous reporting years. For consideration, using the standardized format to capture programmatic expenditures across multiple City departments that provide an array of interrelated stormwater management services has necessitated a considerable margin of approximation for various functional areas, particularly related to staff resources (labor costs). In compliment to approximated figures, actual programmatic expenditures have been used as much as possible to present a refined fiscal analysis overview specific to the City of Encinitas.

10.2 GENERAL BUDGET INFORMATION

The Clean Water Program and associated functions and activities in the City of Encinitas are organizationally shared by two primary departments: Engineering Services and Public Works. Engineering Services is responsible for the overall administration of the Clean Water Program and develops and implements core program components including water quality monitoring; development oversight (SUSMP & HMP implementation) inspection and enforcement; and education, outreach, and training related to stormwater and water quality. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4) including channel maintenance, sewer maintenance, street sweeping, municipal facility inventories, and municipal facility inspections. Other City departments additionally support core program functions and needs including the Planning, Finance, Fire, and Parks & Recreation departments.

The 2011-2012 Clean Water Program and supporting Department Budgets have been prepared in consideration of Water Quality Order No. 2007-0001 as well as other regulatory mandates placed upon the City of Encinitas. Despite significant budget constraints due to widespread economic downturns, the 2011-2012 budgets support the historic level of service provided by the Clean Water Program in addressing water quality concerns specific to Encinitas through response to citizen complaints, education, inspection, enforcement, monitoring, and development oversight. 2011-2012 budgeting

represents the City's ongoing commitment to this program and the community that it serves.

10.3 FISCAL ANALYSIS METHODS

As introduced above, the information presented in this section has been prepared based upon the *Standardized Fiscal Analysis Method and Format* document that was collaboratively developed by the San Diego County Stormwater Copermittees. This document provides the Copermittees, including the City of Encinitas, with guidance and standards to analyze and report on their respective urban runoff management program expenditures, and to identify the funding sources for their programs in a uniform format. While the regionally developed methodologies greatly support reporting consistencies such as expenditure categories and reporting metrics, the *Standardized Fiscal Analysis Method and Format* does not set up stringent or prescribed accounting practices.

In order to elucidate the information presented below, it is important to identify any assumptions used to calculate expenditures related to various program elements. The following points of consideration should be noted:

- Staff Resources have been calculated as a percentage of time and associated costs applied to a specific program area.
- Staff Resources have been captured for both Engineering Services and Public Works Operations personnel.
- In order to avoid cost "overlaps" in those areas implemented across multiple departments, supporting department staff costs have not been included in the accounting below.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

The City of Encinitas Clean Water Program FY 2010-2011 Jurisdictional expenditure summary is presented below in Table 10-1. In FY 201--2011, the City's Coastal Storm Drain Monitoring; Dry Weather Monitoring; IDDE; Construction, Education, Residential, and Commercial program elements; and overall program administration were accomplished through the use of five full time Clean Water Program staff. Land Development and Construction components utilized Engineering Services staff resources from various divisions, and Municipal activities utilized Public Works personnel. Labor related costs have been captured in the summary below based upon percentages of applicable staff resources. In addition, non-labor costs including materials, supplies, and equipment have also been included.

Table 10-2 below presents the Watershed expenditure summary specific to Encinitas, and Table 10-3 presents the Regional expenditure summary capturing the City of Encinitas share of regionally distributed costs.

10.4.2 FUNDING SOURCES

In FY 2003-2004, the City Council attempted to pass a Clean Water Fee, which charged $5.00 per month per water meter to the residents and businesses in the City of Encinitas. The Howard Jarvis Taxpayers Associated challenged the fee based upon Proposition 218 requirements. The City was required to add this item to the ballot in March 2006 which was defeated. As a result, the City of Encinitas must and continues to completely subsidize the Clean Water Program through the General Fund.

Table 10-1 – Jurisdictional Expenditure Summary

JURISDICTIONAL EXPENDITURES		
ADMINISTRATION		132,003
DEVELOPMENT PLANNING		466,967
CONSTRUCTION		192,332
MUNICIPAL		1,721,789
INDUSTRIAL AND COMMERCIAL		101,961
RESIDENTIAL		25,490
IDDE		141,101
EDUCATION		26,662
PUBLIC PARTICIPATION		12,745
SPECIAL INVESTIGATIONS		1,365
NON-EMERGENCY FIREFIGHTING		12,745
Jurisdictional Total		**2,835,159**

Table 10-2 – Watershed Expenditure Summary

WATERSHED EXPENDITURES		
CARLSBAD WATERSHED		3,249
Watershed Total		**3,249**

Table 10-3 – Regional Expenditure Summary

REGIONAL EXPENDITURES		
CITY OF ENCINITAS SHARE OF REGIONAL COSTS		58,944
Regional Total		**58,944**

TOTAL EXPENDITURES	***$***	***2,897,352***

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City of Encinitas began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs to evaluate program effectiveness. Due to a variety of complications on a regional level, that standardization process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures modeled after conventionalized strategies and calibrated to evaluate "significant" program activities as required in Order No. 2007-0001.

Since the submittal of the JURMP in March 2008, little additional progress has been made on regionally standardized approaches to program effectiveness assessment. In FY 2009-2010, the Copermittees' Fiscal, Reporting, and Assessment Workgroup initiated renewed efforts to undertake the issue of standardized assessment metrics and procedures. The City of Encinitas is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's stormwater program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities unique to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the stormwater program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP Annual Report, can be found in Appendix G-1.

Levels 2 and 3

Tables 11-3 through 11-10 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City of Encinitas within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the San Diego Regional Water Quality Control Board adopted Addendum 2 to Order No. 2007-0001, effectively extending the annual due date of the Illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City of Encinitas that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City of Encinitas and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. The Encinitas Stormwater Manual was in use during all of FY 10-11 and has been well received by the public. Further, two new significant program elements were in the third year of full implementation within the defined reporting period of this report (treatment control BMP self-verification and inspection); in the third year of implementation responsible parties were more responsive than ever. 78% of responsible parties submitted self-verification documentation upon request—this is a significant increase from past years. Continued refinement of this program area will support long term effectiveness assessment measures for development planning. *(See Table 11-3)*

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures *(See Table 11-4).* It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue. Additionally, stormwater construction permitting dynamics have changed with the adoption of the new statewide Construction General Permit Order No. 2009-0009-DWQ (CGP) in which project applicants are responsible for determining permit applicability and project specific requirements per the CGP.

Municipal

Enhanced stormwater conveyance, drainage facility, channel maintenance, and inspection and street sweeping activities were developed and implemented, equating to the removal of salient volumes of debris in FY 2010-11. Effective operations and maintenance activities are demonstrated in the Table 11-5 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will support the efficacy of municipal program activities.

Industrial and Commercial

Similar to prior reporting years, Clean Water Program activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City of Encinitas has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (*See Table 11-6)* through the gathering of critical statistics, including a knowledge and BMP assessment scoring system presented in Figures 11-1 and 11-2. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Encinitas.

Education

Education effectiveness is assessed for a variety of program elements as presented in the Table 11-9 below. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success. These measurable successes will also be enhanced by supporting items such as the Clean Water Program logo, developed in 2009-2010, which will increase program notoriety and promote consistency of educational programs and activities.

Public Participation

The City of Encinitas provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however, the assessment measures identified in Table 11-10 are focused on success of the venues and outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, Clean Water Hotline calls, and volumes

of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 PROGRAM REVIEW AND MODIFICATION

While no significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document, Clean Water Staff continued to meet periodically throughout the reporting period of this report to evaluate effectiveness assessment measures as they relate to specific program elements. The purpose of this effort has been to keep the issue of effectiveness assessment in the forefront of program implementation strategies, and to conduct ongoing effectiveness assessment, and augment program areas as deemed necessary. While effectiveness assessments conducted on an annual basis are helpful, a critical first step in the process is to identify significant activities and to evaluate value added benefits both to the program and to the community of Encinitas throughout the implementation period.

Table 11-3
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify High Efficiency Treatment BMPs are Approved	Internal The City's Engineering Department staff is well versed in treatment BMPs and pollutant removal efficiencies.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify Proposed BMPs are Implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects installing / implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	N/A	
Verify BMPs are Properly Maintained	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal N/A, see Municipal section.	Percent of responsible parties submitting verification documentation	78%	Additional load reduction could be achieved through improved BMP maintenance.
		Number of responsible parties that did not submit self-verification documentation	20	
		Number of sites with BMPs requiring repair or maintenance	7	
		Resolution status of repair/maintenance	All Complete	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify Planned BMP Implementation - Review Proposed Plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects must meet minimum requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify Proposed BMPs are Implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs.	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of inspection actions resulting in Corrective Action.	33%	
		Percent of inspection actions resulting in a Notice of Violation (NOV).	0%	
		Percent of inspections actions resulting in a Citation.	<1%	
		Number of dry weather monitoring exceedances traced to construction sources.	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify Proposed BMPs are Implemented at Facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep Streets and Parking Facilities		N/A, streets and parking facilities are swept as determined necessary and in compliance with Municipal Stormwater Permit standards.		Amount of sediment and debris removed per length of street swept (weight or volume per curb mile).	1,861 tons/ 11,330 curb miles (0.16 tons/curb miles)
Maintain and Clean the MS4 (catch basins, inlets and open channels).		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume).	401 tons
Maintain Sanitary Sewer System		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons).	Data will be included in Section 7.0 for the 12/15/11 submittal.
Maintain Municipal Treatment Control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from storm drain filter inserts.	3 tons
				BMP effectiveness studies	N/A
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP Implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Percent of inspected sites in compliance with BMP requirements (inspections that did NOT require follow-up actions)	65%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of inspection related enforcement actions	100%		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	Data will be included in Section 7.0 for the 12/15/11 submittal.	Number of IC/IDs eliminated through enforcement actions taken as a result of routine inspection OR complaint investigations. (NOVs & Citations)	22
		Based on the results of individual facility assessment surveys, most facilities inspected have a good general understanding of BMPs and implement BMPs as required. See Figure 11-1 and 11-2 below.			
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

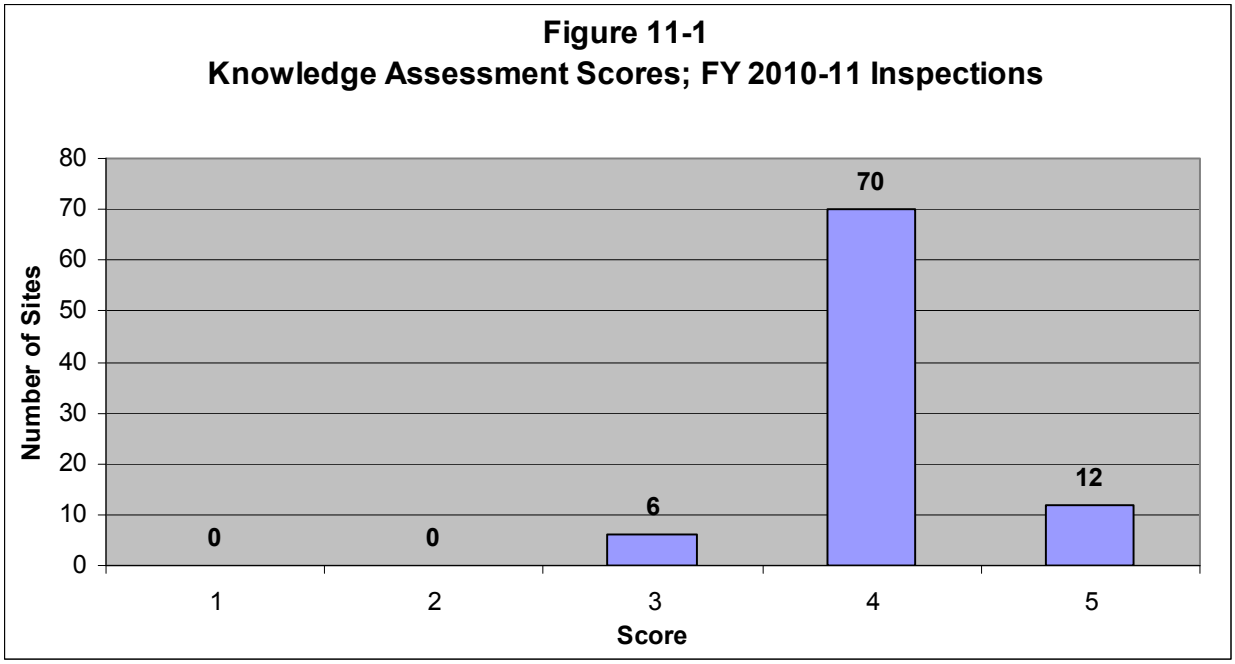
Figure 11-1
Knowledge Assessment Scores; FY 2010-11 Inspections
Number of Sites
80
70
60
50
40
30
20
10
0
0
0
6
70
12
1
2
3
4
5
Score

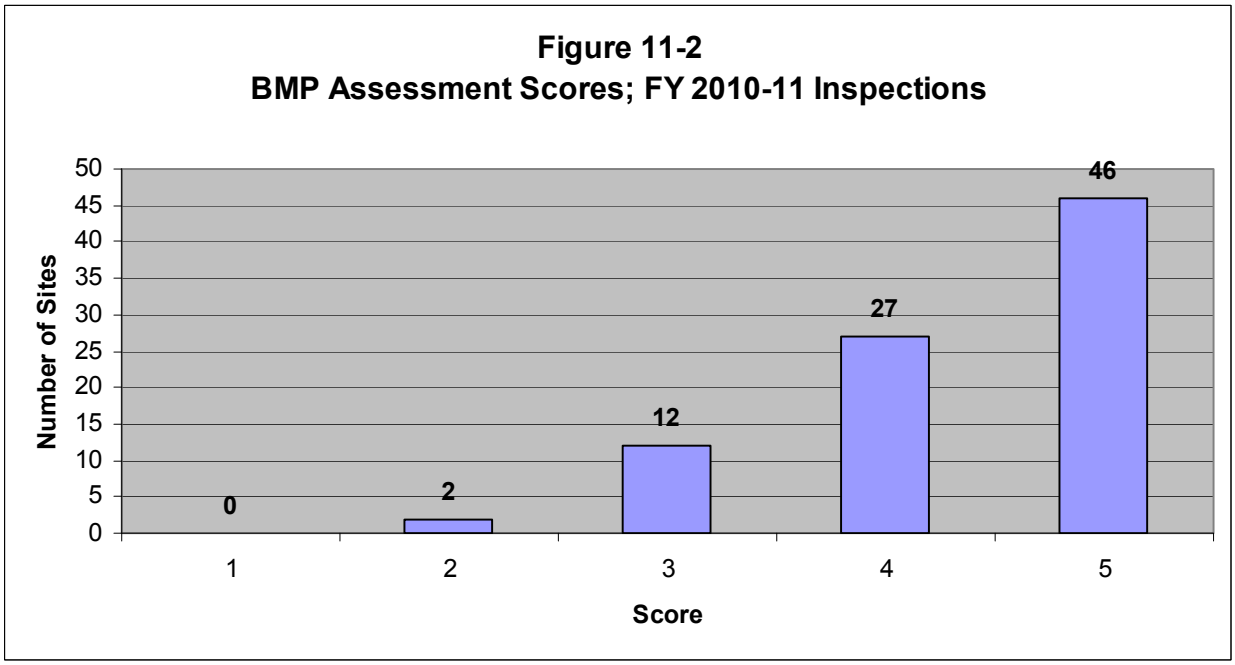
Figure 11-2
BMP Assessment Scores; FY 2010-11 Inspections
Number of Sites
50
45
40
35
30
25
20
15
10
5
0
0
2
12
27
46
1
2
3
4
5
Score

Table 11-7
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP Implementation	External Residents were educated in variety of ways in 2010/2011; see sections 6 and 8 for details. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Number of residential incidents reported to storm water hotline	53	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution status of residential related enforcement actions	100%	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	Clean Water Program staff executes the City's Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.
Respond to Incidents Reported to Clean Water Hotline	Dedicated Engineering and Public Works staffs are trained to respond to reported incidents.	N/A, personnel respond to incidents as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.
Respond To and Clean up SSOs	Dedicated Public Works staffs are trained to respond to reported SSO incidents.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2010-11.
	Estimated number of impressions made*	10,000		
	Estimated number of educational materials distributed to various community sectors	2,783		
Provide storm water education to City staff & contractors	Internal The City provides staff and contractors w/ regular stormwater training. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2010--11.
	Number of Staff and Contractors trained	165		

Notes:
Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Impressions are based upon the number of interactions with public at education events, workshops, and presentations.

Table 11-10
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Estimated number of attendees at events, workshops, and presentations	4826	Amount of trash, recycling, and debris collected at cleanup events	526
		Number of calls and or emails received to the Clean Water Hotline*	180	Amount of HHW collected	93,575

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The sum total of calls to the Clean Water Hotline related to all Community Sectors.

12.0 SPECIAL INVESTIGATIONS

As determined necessary and appropriate, the City of Encinitas is engaged in a variety of ongoing and long-term investigations to support reasoned and informed management actions to address local water quality concerns and threats.

12.1 STORM DRAINS AS SOURCES OF ENTEROCOCCUS TO SAN DIEGO BEACHES

In FY 2010-11, in collaboration with the Regional Monitoring Workgroup and Southern California Coastal Water Research Project (SCCRWP), the City of Encinitas continued its participation in a special study identified as *Storm Drains as Sources of Enterococcus to San Diego Beaches.* This study was developed to assess storm drains as a potential source of *Enterococcus* bacteria to San Diego's marine coastal waters during dry weather. The goals of the study include: 1) to determine if biofilms and algae that form on the surfaces of storm drains support the growth of enterococci; 2) to determine if enterococci growing on storm drain surfaces are a source of bacteria to sand and beach water; and 3) to determine if enterococci growing on storm drain surfaces may be differentiated from those of fecal origin. Enterococcal growth will be assessed using small concrete blocks (coupons) tethered to the bottom surfaces of storm drain pipes. The hypothesis is that enterococci in urban runoff will attach to the coupons located inside the storm drain pipes, form biofilm, and multiply, leading to increased densities of enterococci over time. This raises the possibility that bacterial growth within storm drains may be at least partly responsible for elevated concentrations of enterococci observed in urban runoff impacting beach water quality.

Based on historical bacterial monitoring data, the presence of continuous dry weather flow, and accessibility, both Moonlight Beach in Encinitas and a City of San Diego beach in the community of La Jolla were chosen to participate in this regional study. The site at Moonlight Beach was of particular interest because it has an ultra violet urban runoff treatment facility (UV Facility) located approximately 230 yards upstream of Moonlight Beach. The UV Facility diverts 85% of the dry weather flows in Cottonwood Creek into an ultra violet treatment system designed to inactivate bacteria and viruses in the creek water. Bacteria removal efficiencies through the UV Facility have been calculated at >99%. In February 2006, the City of Encinitas published the Moonlight Beach Urban Runoff Treatment Facility Final Report which indicated that additional sources of bacteria are contributing to the degradation of water quality downstream of the UV Facility. While nearly 100% of the bacteria were removed from the treated water at the UV Facility, removal efficiencies from the effluent to the Moonlight Beach outfall were not as dramatic, indicating significant regeneration of bacteria between the UV Facility and the beach. Despite the presence of the UV Facility, samples from Moonlight Beach

occasionally exceed the *Enterococci* AB411 single sample standard of 104 MPN/100 ml. Hypotheses offered in the City's Moonlight Beach Urban Runoff Treatment Facility Final Report indicated that increases in bacteria downstream of the UV Facility could be primarily due to animals in the creek and on the beach, sediments and debris in the creek and storm drains, and the wrack line on the beach.

The *Storm Drains as Sources of Enterococcus to San Diego Beaches* study consists of a detailed study plan, field sampling, data analysis, and preparation of a final report. Sampling for this study commenced on May 19, 2010, and within the defined reporting period of this report was completed on October 5, 2010. All study samples were collected by City of Encinitas Clean Water Program staff in collaboration with an independent researcher from SCCWRP. SCCWRP is responsible for managing and analyzing all of the data from this study. At Moonlight Beach, sampling for the study consisted of collecting water samples from the following five locations: an area of the creek that bypasses the UV Facility, the UV Facility treated water, upstream of the storm drain coupons, at the outfall which is downstream of the coupons, and in the receiving water along the shoreline. The water samples upstream from the coupons and the beach water are analyzed for the following parameters: conductivity, dissolved oxygen, pH, temperature, and turbidity. Additionally, the water samples upstream from the coupons are also analyzed for the following nutrient parameters: TOC, Nitrate as N, Nitrite as N, TKN as N, Ammonia as N, Orthophosphate as P, Total Phosphate as P, and Total Nitrogen (calculated). Two coupons are collected each week and analyzed for densities of enterococci. In addition to the water and coupon samples, natural samples of plants upstream of the coupons, algae, and sea wrack located downstream of the coupons and beach sand are also being collected at Moonlight Beach and are being analyzed to determine the densities of enterococci present on each sample. It is anticipated that a final report on the *Storm Drains as Sources of Enterococcus to San Diego Beaches* study will be made available in FY 2011-12.

12.2 SAN ELIJO LAGOON RESTORATION PROJECT

For a number of years, the City of Encinitas along with numerous agencies including the Army Corps of Engineers, San Elijo Lagoon Conservancy, Caltrans, SANDAG, SDRWQCB, California Coastal Commission, Department of Fish & Game, and NCTD have been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (I-5) North Coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast project.

The goal of the study and ultimate project is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. Related studies have looked specifically into the effects of varying channel widths at each opening: inlet and PCH

Bridge, the SDNR system, and the I-5 freeway. Various alternatives have been identified based upon complex system simulations and evaluated on effects to reduce tidal muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur.

Work on this project continued throughout the defined reporting period of this report, most significantly with efforts to conduct a variety of modeling and engineering studies including water quality and hydraulic modeling, sea level rise, sediment characterization, and shoaling studies to evaluate the various alternatives that are being considered for the restoration project.

Notably, the San Elijo Lagoon Restoration Project is a multi-agency effort, and far-reaching coordination has been critical and remains key to the long-term success of this project. In consideration of future Lagoon specific TMDL development and the emerging lagoon restoration scenarios, on May 24, 2010, staff from the City of Encinitas, San Diego Regional Water Quality Control Board (SDRWQCB), San Elijo Lagoon Conservancy (SELC), and Moffat & Nichol (Restoration Project Consultant) convened to discuss how these efforts may meet the mutual needs of the stakeholders involved. This meeting provided a good venue to connect the collective benefits of restoration efforts with water quality improvements in the San Elijo Lagoon and to better define priorities for all parties involved.

13.0 NON-EMERGENCY FIRE FIGHTING

13.1 INTRODUCTION

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (No. 3 and No. 5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis by Clean Water Staff. Following is a detailed description of the program developed by the City to reduce pollutants from non-emergency fire fighting flows.

13.2 PROGRAM FOR NON-EMERGENCY FIRE FIGHTING FLOWS

The City of Encinitas has identified a number of potential discharge sources including maintenance of fire and emergency vehicles and equipment, training exercises, and facility maintenance. It is important to recognize and make provision for the post-emergency rehabilitation of response equipment including tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency, as this equipment must be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for subsequent response actions. As such, the use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified and will be performed in a manner that minimizes discharges to the MEP. In consideration of the non-emergency activities identified above, the City's fire personnel utilized the following BMPs to address discharge generated from such activities during FY 2010-11:

- Whenever possible, practice drills were performed in areas where runoff was contained. When practice drills were performed in an area where runoff could potentially leave the site, the site was surveyed by the officer-in-charge prior to training activities to ensure that debris would not enter the storm drain system as a result of the drill.
- As determined feasible, runoff from training drills or other non-emergency activities, was directed to landscaped areas.
- Areas that have debris that could potentially enter the storm drain system as a result of the drill activities were not used for training until the debris had been removed.
- Live fire training activities were pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
- Runoff from live fire training activities was contained and recovered with the City's Vac-con truck so that runoff did not discharge to the storm drain system or receiving waters.
- Good housekeeping and dry cleanup practices were utilized as part of standard facility maintenance procedures.

13.2.1 EDUCATIONAL METHODS

Details of the City's educational programs, including fire fighting personnel education, are provided in Section 8 of this document.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 as required by Water Quality Order No. 2007-0001. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes made to the JURMP since the comprehensive JURMP update in the spring of 2008 would be detailed in the preceding sections of this JURMP Annual Report. Revisions may include, but would not be limited to, required inventory updates, necessary process and procedure changes, or programmatic modifications to improve efficiency and effectiveness.

15.0 CONCLUSIONS & RECOMMENDATIONS

During the 2007-2008 reporting period, the City of Encinitas updated its JURMP, which was finalized and submitted to the RWQCB on March 24, 2008. As captured in the preceding 2010-2011 JURMP Annual Report, the City of Encinitas has continued to implement and refine various program elements, standardize core program components, and stay current with emerging trends and technology. Further, the City has and will continue to actively participate and collaborate with other Copermittees in the development and collective implementation of regional programs. As compliance standards evolve based upon defined timeframes in Order No. 2007-0001, the City of Encinitas will continue to augment and update programs as necessary to comply with regulatory requirements, and evaluate the overall efficacy of program elements against value added outcomes to assure focused and refined implementation protocols.

Appendix A

Development Planning

A-1 Treatment Control BMP Inventory

A-2 SUSMP Priority Project Map

A-3 Treatment Control BMP Inspection Priority Flowchart

A-4 Sample Grading Certification BMP Installation Verification Letter

A-5 Treatment Control BMP Operation and Maintenance Self-Verification Letter

A-6 Treatment Control BMP Operation and Maintenance Brochure

A-7 Treatment Control BMP Operation and Maintenance Self-Verification Online Form

A-8 Treatment Control BMP Operation and Maintenance City Inspection and Self-Verification Results and Findings

A-9 Treatment Control BMP Operation and Maintenance Inspection Form

A-10 Stormwater Pollution Control Checklist and Certification

A-11 Hydromodification Management Plan Checklist and Certification

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
55	I	540 Cornish Dr	Vegetated Swale	vegetated swale	9/27/2005	3/17/2008	Encinitas Other		Low
55	I	540 Cornish Dr	Vegetated Swale	vegetated swale	9/27/2005	3/17/2008	Encinitas Other		Low
60	G	3275 Poppy Hills Ln	Extended Detention Basin	detention basin	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Rock Swale	rock-lined swale	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Pervious Pavement	gravel parking area	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	fuel slab reservoir	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	roof cover for fueling area	10/15/2007	6/7/2010	Encinitas Other		Low
87	G	354 Santa Fe Dr	Extended Detention Basin	detention basin	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
106	G	3358 Wildflower Valley Dr	Vegetated Swale	min. 100' long priority stormwater BMP grass swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
106	G	3358 Wildflower Valley Dr	Vegetated Swale	treatment swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
153	I	111 Chesterfield Dr	Interceptor (Sewer)	traffic rated oil seperator	8/31/2006	2/13/2007	Private		Medium
153	I	111 Chesterfield Dr	Mechanical Filter	Flo-Gard FF-RF24D	8/31/2006	2/13/2007	Private		Medium
169	G	510 S El Camino Real	Mechanical Filter	Kristar flogard	9/23/2008	7/15/2009	Private	2007-0310771	Medium
169	G	510 S El Camino Real	Vegetated Swale	grass-lined swale	9/23/2008	7/15/2009	Private	2007-0310771	Medium
169	G	510 s el camino real	Vegetated Swale	vegetated swale	9/23/2008	7/15/2009	Private		Medium
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
183	G	3234 Olivenhain Farms Rd	Vegetated Swale	bio-swale for post BMP treatment	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	5' wide x 10' long x 1' thick rip rap	11/1/2006	5/13/2008	Private	2006-0764616	Low
276	G	Phoebe St & Hwy 101	Vortex Separator	StormFilter chamber by Contech	4/19/2007	6/19/2008	Private		High
276	G	Phoebe St & Hwy 101	Retention/Infiltration Vault	stormwater collection vault	4/19/2007	6/19/2008	Private		High
385	G	1555 Crest Dr	Vegetated Swale	BMP landscape swale	8/31/2007	7/13/2009	Private	2007-0611836	Low
385	G	1555 Crest Dr	Rock Swale	gravel/sand filter	8/31/2007	7/13/2009	Private	2007-0611836	Low
386	G	3535 Manchester Ave	Mechanical Filter	Biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Katchall curb outlet filter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Vegetated Swale	flow-based system for BMP	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	stormtech detention	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
414	G	4455 Manchester Ave	Vegetated Swale	grassy swale	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Vortex Separator	StormFliter per Contech stormwater solutions	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	2/20/2008	Private	2007-0317169	Medium
437	G	222 El Camino Real	Vortex Separator	StormScreen unit	8/31/2007	5/22/2008	Private	2007-0571994	Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Turf Block Swale	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium

Note: All TC BMPs are located in the Carlsbad Watershed

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
462	G	90 N Coast Hwy 101	Interceptor (sewer)	Jensen sand and oil trap model JP50050	7/6/2007	4/6/2009	Private - HOA		Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Turf Block Swale	grasscrete	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
482	G	1864 Crest Dr	Rock Swale	4' wide rock lined treatment swale w/ rip-rap entrance	3/28/2008	3/31/2011	Private	2007-0495449	Low
482	G	1864 Crest Dr	Extended Detention Basin	detention basin	3/28/2008	3/31/2011	Private	2007-0495449	Low
482	G	1864 Crest Dr	Rock Swale	4' wide rock lined treatment swale w/ rip-rap entrance	3/28/2008	3/31/2011	Private	2007-0495449	Low
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Vegetated Swale	bio-swale	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Interceptor (Sewer)	wastewater sump	9/10/2007	7/28/2010	Private	2007-0637421	Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	4' wide landscaped swale	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Infiltration Basin	infiltration basin	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	8' wide treatment swale with 6' wide bottom	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Mechanical Filter	flogard lopro hydrocarbon absorbant filter	8/21/2007	8/4/2008	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	65 l.f. gravel detention / dispersion pit	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Rock Swale	rock swale	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
704	G	230 Quail Gardens Dr	Pervious Pavement	pavers	4/17/2008	11/25/2009	San Diego County		Low
704	G	230 Quail Gardens Dr	Vegetated Swale	vegetated BMP swale and 2 energy dissipators	4/17/2008	10/19/2009	Private	2008-0162733	Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
705	G	3354 Wildflower Valley Dr	Rock Swale	rock-lined swale	1/14/2008	7/16/2009	Private	2008-0106026	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Landscaped Area	landscaped area	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Advanced Mechanical Filter	6' X 12' precast StormFilter by Contech	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Interceptor (Sewer)	320 gal. sand-oil interceptor	8/28/2008	2/10/2011	Private	2008-0440635	High
789	G	2005 San Elijo Ave	Interceptor (Sewer)	grease interceptor	1/9/2008	3/23/2009	Private	2008-0609543	Low
789	G	2005 San Elijo Ave	Pervious Pavement	porous concrete	1/9/2008	3/23/2009	Private	2008-0609543	Low
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Media Filter	2' diameter, 6' deep gravel pit with open bottom for BMP use	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	2.5' wide of 6" cobbles over 12" thick pea gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	10' X 25' gravel	1/16/2009	9/24/2009	Private	2008-0609456	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Vegetated Swale	2' wide grass swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Vegetated Swale	vegetated swale	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Flow-Through Planter	6' X 12' Filterra unit	1/14/2009	1/2/2010	Private	2009-0016310	Medium
947	G	1447 Bella Vista Ct	Landscaped Area	planter area	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1447 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1447 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1459 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1459 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	11/17/2010	Private	2009-0134165	Medium

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
983	G	1320 Encinitas Blvd	Vortex Separator	Contech Stormfilter	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	unknown	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	unknown	6/26/2009	Private	2008-0075668	Medium
1365	G	315 and 311 Hana Ct	Rock Swale	rock swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 315, 319, 323, and 327 Hana Ct	Vegetated Swale	vegetated swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1389	G	302 Requeza St	Extended Detention Basin	stormwater detention treatment basin	1/5/2004	8/2/2005	Private	2003-1503915	High
1457	G	200 Saxony Rd	Vegetated Swale	grass-lined swale	5/6/2004	4/6/2006	Private		Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1442 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1519	G	200 Saxony Rd	Mechanical Filter	flogard plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Mechanical Filter	flogard plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach basin	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach apron	3/1/2004	7/12/2005	Private		Medium
1532	G	1316, 1318 Summit Ave	Vegetated Swale	grass swale and storm water "cleansing area" (detention basin)	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
1600	G	1588-1590 Leucadia Blvd	Interceptor (Sewer)	grease trap	6/14/2004	7/6/2005	Private		Medium
1600	G	1588 Leucadia Blvd	Extended Detention Basin	Detention Basin	6/14/2004	7/6/2005	Encinitas Street Maintenance		Medium
5814	G	2112 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2108 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2112 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low
5814	G	2108 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low
6402	G	311 Princehouse Ln	Vegetated Swale	grass swale (275 ft by 4 ft)	7/18/2005	12/8/2006	Private	2004-0576710	Medium
6442	G	3616 Manchester Ave	Extended Detention Basin	ballfield detention basin w/ subterranean filtration sytem	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Mechanical Filter	fossil filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6813	G	155 Saxony Rd	Vegetated Swale	grass swale/infiltration basin	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	Vegetated Swale	grass swale	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	Other	drain inlet with seepage pit	9/5/2003	7/23/2009	Private		Low
6816	G	Piraeus St & Sparta Drive	Extended Detention Basin	water quality basin	5/3/2001	4/21/2004	Encinitas Street Maintenance		Medium
6816	G	Piraeus St & Sparta Dr	Extended Detention Basin	water quality basin	5/3/2001	4/21/2004	Encinitas Street Maintenance		Medium
7005	G	510 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	507 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	513 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	517 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	521 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	558 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	532 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	526 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	509 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	525 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	518 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	503 Ocean Bluff Wy	Vegetated Swale	vegetated swale around the home	9/4/2002	4/30/2007	Private		Medium

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7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter insert	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7300	G	760 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7300	G	760 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7300	G	740 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7300	G	740 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7305	G	131 Princehouse Ln	Rock Swale	3-ft wide gravel swale	1/10/2003	4/7/2004	Private		Low
7305	G	131 Princehouse Ln	Infiltration Basin	3-ft diameter absorption pit, 4-ft deep w/ 3/4" rock	1/10/2003	4/7/2004	Private		Low
7374	I	95 N Vulcan Ave	Pervious Pavement	grass pavers	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement parking lot	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Rock Swale	rock lined swale	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Extended Detention Basin	detention basin	1/30/2003	10/16/2006	Encinitas Street Maintenance		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Extended Detention Basin	35'x35' facing class rip rap	1/30/2003	10/16/2006	Encinitas Wastewater		Medium
7374	I	95 N Vulcan Ave	Mechanical Filter	storm drain filter insert	1/30/2003	10/16/2006	Encinitas Wastewater		Medium
7425	G	195 La Mesa Ave	Landscaped Area	landscaped area	12/16/2002	3/9/2004	Private		Low
7425	G	195 La Mesa	Landscaped Area	runoff to street and enclosed rock trench across the back	12/16/2002	3/9/2004	Private		Low
7425	G	195 La Mesa Ave	Landscaped Area	landscaped area	12/16/2002	3/9/2004	Private		Low
7588	G	1200 Garden View Rd	Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4120-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grass lined swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	vegetated swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7628	G	221 La Costa Ave	Vegetated Swale	landscaped area for filtration	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	235 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	315 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	329 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	322, 336 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	301 Chopin Way	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Retention/Infiltration Vault	stormwater detention vault	8/6/2003	1/23/2006	Private		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	11/23/2010	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	11/23/2010	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	11/23/2010	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	11/23/2010	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	11/23/2010	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	11/23/2010	Encinitas Wastewater		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	11/23/2010	Encinitas Wastewater		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	11/23/2010	Encinitas Wastewater		Medium
7732	G	175 La Costa Ave	Other	DG-lined swale	12/30/2003	5/15/2006	Private		Medium
7732	G	175 La Costa Ave	Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	183 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium

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7771	G	1550 S El Camino Real	Extended Detention Basin	desiltation basin	10/28/2003	2/4/2008	Private		Low
7771	G	1550 S El Camino Real	Pervious Pavement	pervious pavemnet "gravel pave" manufactured by Invisible Structures	10/28/2003	2/4/2008	Private		Low
7780	G	133 Rosebay Dr	Infiltration Basin	rock-lined infiltration trench	8/4/2003	4/29/2005	Private		Low
7780	G	133 Rosebay Dr	Bioretention Basin	terraced stormwater drainage area	8/4/2003	4/29/2005	Private		Low
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Interceptor (Sewer)	grease interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Sand/Oil Separator (stormwater)	sand/oil interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7828	G	1200 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1216 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1208 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1200 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1219 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1945 Lake Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7847	G	2300 Eighth St	Infiltration Basin	filtration/desiltation pond	8/12/2003	7/23/2009	Private		Low
7852	G	3445 Via Monte Verde	Vegetated Swale	landscape area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegation cleansing area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	landscaped area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3430 Via Monte verde	Infiltration Basin	rip rap lined infiltration basin (does not conform to plan)	1/1/2003	10/24/2005	Private		Medium
7893	G	Christine Pl	Retention/Infiltration Vault	'Stormchamber' infiltration units (4)	unknown	6/7/2010	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Flogard Plus filter insert	unknown	6/7/2010	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Fflogard Plus filter insert	unknown	6/7/2010	Private	2003-1457627	Medium
9023	G	427 Bristol Ave	Pervious Pavement	pathway filtration	10/20/2004	10/5/2006	Private		Low
9034	G	1470 Summit Ave	Other	DG swale	12/21/2004	12/3/2007	Private		Medium
9034	G	1464 Summit Ave	Infiltration Basin	detention filtration basin	12/21/2004	12/3/2007	Private		Medium
9057	G	192 Pacific View Ln	Vegetated Swale	7.8 ft wide terraced treatment swale	1/26/2005	1/22/2007	Private		Medium
9071	G	3317 Poppy Hills Ln	Vegetated Swale	vegetated swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9071	G	3317 Poppy Hills Ln	Rock Swale	rock swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9134	G	2153 Whisper Wind Ln	Vegetated Swale	grass swale	11/23/2004	4/6/2006	Private		Low
9134	G	2153 Whisper Wind Ln	Infiltration Basin	rip-rap infiltration	11/23/2004	4/6/2006	Private		Low
9150	G	3113 Camino Del Rancho	Bioretention Basin	flat area for stormwater treatment covered with grass	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	Rock Swale	Rock lined swale	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	Rock Swale	rock lined swale	3/24/2005	9/11/2007	Private		Medium
9180	G	1610 Neptune Ave	Landscaped Area	landscaped area and planters	7/20/2006	5/21/2009	Private		Low
9253	G	701 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	703 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	719 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	721 N Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	717 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	715 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	890 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	890 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium

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9278	G	494 Latigo Row	Extended Detention Basin	detention area	12/27/2005	6/17/2010	Private		Medium
9278	G	490 Latigo Row	Extended Detention Basin	detention area	12/27/2005	6/17/2010	Private		Medium
9278	G	490, 494 Latigo Row	Turf Block Swale	turf block swale with gravel (no turf)	12/27/2005	6/17/2010	Private		Medium
9283	G	267 Sanford St & 1440 Hygeia Ave	Rock Swale	rock swale	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	1440 Hygeia Ave	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	265 Sanford St	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9289	G	2934 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914, 2934 Lone Jack Rd	Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Vegetated Swale	grass-lined channel for BMP	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9301	G	187 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Turf Block Swale	Grasscrete	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9303	G	869 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	6/7/2010	Private	2005-0496885	Low
9303	G	869 Brittany Rd	Extended Detention Basin	40' □/- detention area	6/7/2005	6/7/2010	Private	2005-0496885	Low
9303	G	869, 875, 881, 887 Brittany Rd	Vegetated Swale	landscape filtration strip	6/7/2005	6/7/2010	Private	2005-0496885	Low
9318	G	1154 Evergreen Dr	Landscaped Area	landscape area BMP	8/16/2005	2/16/2007	Private		Medium
9318	G	1154 Evergreen Dr	Landscaped Area	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1154, 1158 Evergreen Dr	Rock Swale	gravel swale (GravePave)	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1160, 1164, 1168, 1172, 1169, 1165 Kava Ct	Vegetated Swale	vegetated swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1176 & 1173 Kava Ct	Rock Swale	6.5 ft wide gravel swale w/ 3" river rock	8/16/2005	2/16/2007	Private		Medium
9318	G	1169 & 1165 Kava Ct	Rock Swale	gravel swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1154 Evergreen Dr	Landscaped Area	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9367	G	781 Garden View Ct	Vegetated Swale	grass lined swale	7/10/2006	1/14/2009	Private		Medium
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Medium
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Medium
9370	G	406 La Costa Ave	Pervious Pavement	Orco block pavers	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft diameter dual pump lift station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Vegetated Swale	4-ft wide grass swale	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft X 4ft X 2.5 ft Jenson precast sump station	1/30/2006	8/14/2007	Private	2006-0071959	High
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Turf Block Swale	Grasscrete grass block	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9459	G	211 Saxony Rd	Infiltration Basin	landscaped area (detention basin)	6/12/2006	9/10/2007	Private - HOA		Medium
9459	G	211 Saxony Rd	Pervious Pavement	Grass Pave	6/12/2006	9/10/2007	Private - HOA		Medium
9481	I	545 Quail Point Ln	Advanced Mechanical Filter	StormFilter by Stormwater Management Inc.	5/17/2009	10/20/2010	Private	2007-0353916	Medium
9481	I	545 Quail Point Ln	Other	Stormgate	5/17/2009	10/20/2010	Private	2007-0353916	Medium
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low

Note: All TC BMPs are located in the Carlsbad Watershed

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9580	G	3451 Dove Hollow Ln	Dry Well	Dry Well Storm Water Retention	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
10187	G	1603 Crest Dr	Landscaped Area	turf area BMP	5/27/2009	4/13/2010	Private	2009-0280381	Low
10187	G	1603 Crest Dr	Rock Swale	2' wide BMP gravel/sand filter	5/27/2009	4/13/2010	Private	2009-0280381	Low
10305	G	354 Santa Fe Dr	Mechanical Filter	Fossil filter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Vegetated Swale	Bioswale	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Extended Detention Basin	water quality basin	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10404	SG	3211 Wildflower Valley Drive	Pervious Pavement	pervious pavers	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Drive	Media Filter	sand pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Drive	Rock Swale	gravel swale	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Drive	Media Filter	sand and gravel pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Drive	Media Filter	gravel pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium

Note: All TC BMPs are located in the Carlsbad Watershed

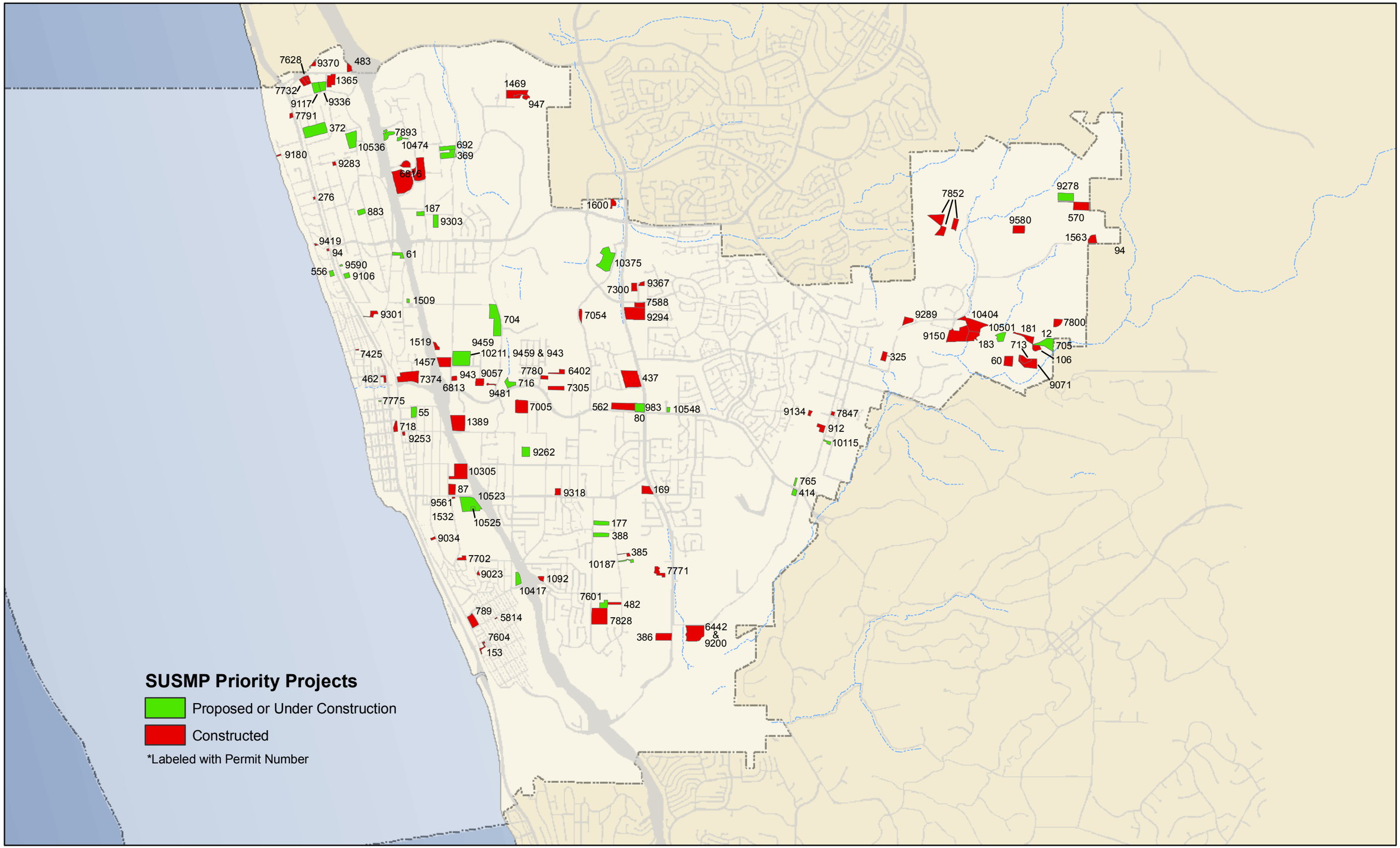

Appendix A-2

SUSMP Priority Projects with Treatment Control BMPs

DISCLAIMER: This map should not be used for Engineering, Survey, or Site-Specific Analysis.
Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

- Map Coordinates: Stateplane NAD83 Feet, CA Zone 6

N

0 6,300 Feet

1 inch = 3,700 feet

Treatment Control BMP Inspection Priority

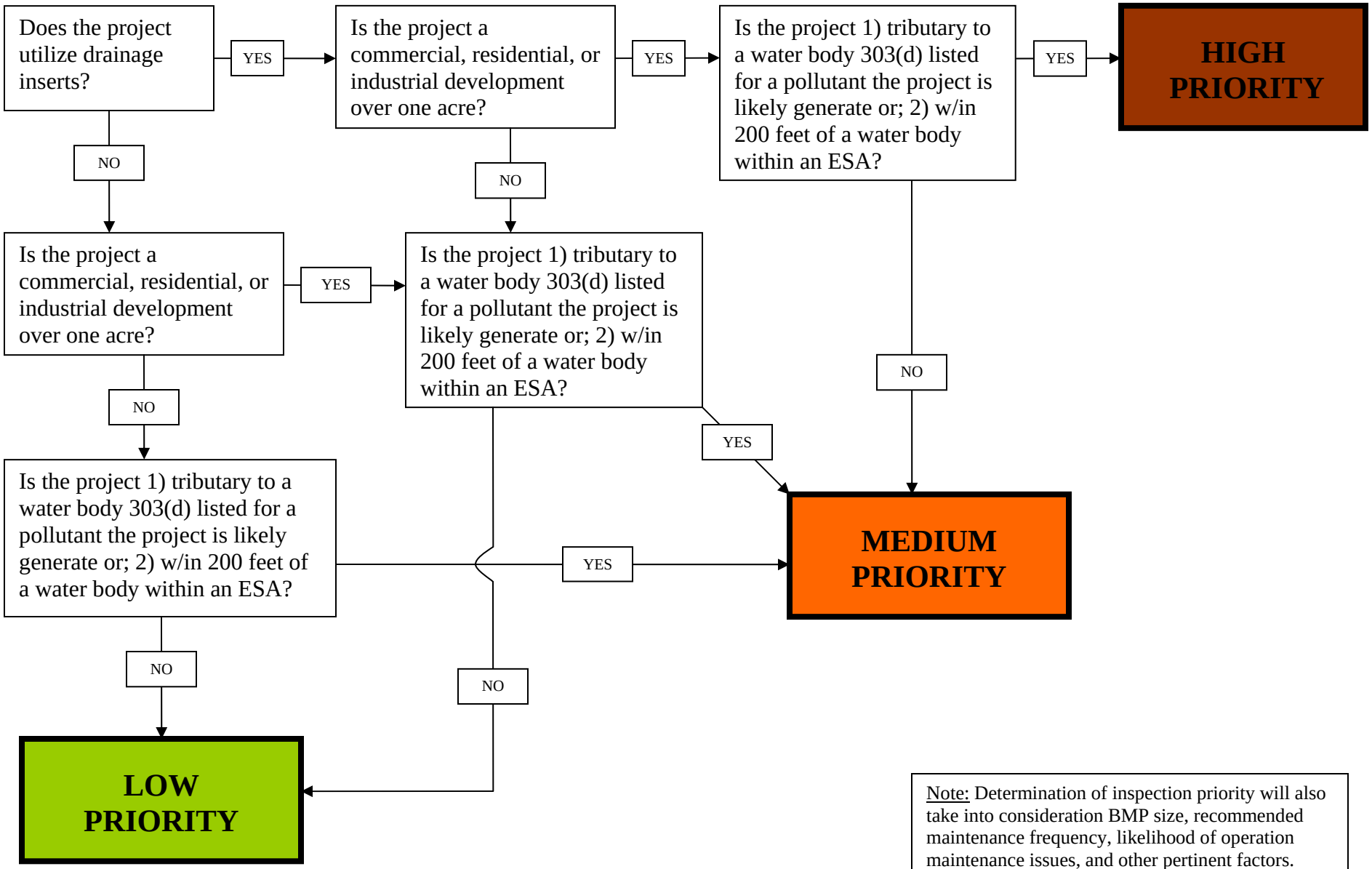

Note: Determination of inspection priority will also take into consideration BMP size, recommended maintenance frequency, likelihood of operation maintenance issues, and other pertinent factors.

SAMPLE

Date: _____

City of Encinitas
Engineering Services Permits
505 South Vulcan Ave.
Encinitas, CA 92024

Re: **Engineer's Final Grading Certification for Project No. 99-001 TM and Grading Permit Number XXXX - G.**

The grading under permit number XXXX has been performed in substantial conformance with the approved grading plan or as shown on the attached "As Graded" plan.

Final grading inspection has demonstrated that lot drainage conforms with the approved grading plan and that swales drain at a minimum of 1% to the street and/or an appropriate drainage system.

All the Low Impact Development, Source Control and Treatment Control Best Management Practices as shown on the drawing and required by the Best Management Practice Manual Part II were constructed and are operational, together with the required maintenance covenant(s).

Engineer of Record _____ (signed & sealed)

Dated _____

Verification by the Engineering Inspector of this fact is done by the Inspector's signature hereon and will take place only after the above is signed and stamped and will not relieve the Engineer of Record of the ultimate responsibility:

Engineering Inspector: _____

Dated:_____

The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.

City of Encinitas

OFFICIAL CITY BUSINESS

Response Required By: 8/20/10

July 26, 2010

TO: *Owner Name*
Contact Person
Street Address
City, State, ZIP

RE: Treatment Control Best Management Practices (BMP) Operation Maintenance Verification

Please find included with this letter property specific information and detailed instructions on how to fulfill your annual treatment control BMP operation and maintenance verification obligations.

As you may be aware, in an effort to improve the quality of runoff flowing into our storm drain system and out to the ocean and coastal lagoons, priority development projects within the City of Encinitas are required to construct treatment control BMP facilities to control and treat water runoff.

To ensure the long term effectiveness and efficiency of these facilities, the City of Encinitas, as required by the State Water Resources Control Board, must annually verify that these features are being properly managed and maintained by responsible property owners.

For more information regarding the Treatment Control BMP Operation and Maintenance Program, please refer to the enclosed brochure or call the City of Encinitas Clean Water Hotline at (760) 633-2787 for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

CITY OF ENCINITAS
Clean Water Program

Enclosures: BMP Operation and Maintenance Verification Instructions
Program Brochure

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

CITY OF ENCINITAS

Treatment Control BMP Operation Maintenance Verification Instructions

REMINDER: Annual inspection and maintenance verification of Treatment Control BMP(s) located on your property is due no later than **August 20, 2010**

City of Encinitas records indicate that the treatment control BMP(s) on your property at **Insert Property Location here** include:

List BMPs here

To fulfill inspection and maintenance obligations, please complete the following steps:

1) **Visually inspect all Treatment Control BMPs** for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).
2) **Maintain repair any damage to the BMP(s)**. Necessary maintenance may include removing accumulated sediment, trash, or other debris; stabilizing eroded areas; replanting vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.
4) **Take current photos of all BMPs on the property**.
5) **Complete the Operation and Maintenance Self-Verification Online Form** and submit photos and related maintenance documentation as necessary. The online form can be found at the following website: **http: cleanwaterBMP.cityofencinitas.org**. To access the form, enter your property identification number (PIN) in the field provided on the main webpage.

Your PIN is:	*Insert PIN here*

Annual inspection, routine maintenance, and effective operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

If hardcopy submittal is preferred, a paper copy of the O & M Verification From may be picked up at City Hall (505 S Vulcan Ave), or please email npdesmail cityofencinitas.org and an electronic copy of the O & M Verification Form will be emailed to you.

CITY OF ENCINITAS
Clean Water Program

City of Encinitas

OFFICIAL CITY BUSINESS

FINAL NOTICE

Response Required By: 9/30/10

September 2, 2010

TO: *Owner Name*
Contact Person
Street Address
City, State, ZIP

RE: Treatment Control Best Management Practices (BMP) Operation Maintenance Verification

The intent of this letter is to inform you that your annual treatment control BMP operation and maintenance verification is **PAST DUE** as of August 20, 2010. In a letter dated July 26, 2010, the City of Encinitas requested submittal of documentation showing that you have completed your BMP evaluation and maintenance activities.

The City of Encinitas is extending you an additional opportunity to complete your BMP evaluation, conduct necessary maintenance activities, and submit the required self-verification information no later than September 30, 2010.

Please find included with this letter property specific information and detailed instructions on how to fulfill your annual treatment control BMP operation and maintenance verification obligations.

If you do not complete your self-verification obligations, City staff will be required to pursue formal inspection actions to assess the BMPs on your property. Inspections will consist of a site visit by City staff and documentation of BMP features consistent with the original grading permit or other approved property specific permits or plans. Formal inspection actions will take place beginning October 1, 2010.

Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information constitutes a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants for which the City may opt to pursue further enforcement action.

For more information regarding the Treatment Control BMP Operation and Maintenance Program, please call the City of Encinitas Clean Water Hotline at (760) 633-2787 for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Enclosures: BMP Operation and Maintenance Verification Instructions

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

CITY OF ENCINITAS

Treatment Control BMP Operation Maintenance Verification Instructions

PAST DUE NOTICE: If annual evaluation and maintenance verification of your Treatment Control BMPs is not completed by **Sept 30, 2010**, as required by State mandates, City staff will conduct an inspection of the BMPs on your property on or after October 1, 2010. Additionally, the City may opt to pursue further enforcement action in accordance with EMC Section 20.08.

City of Encinitas records indicate that the treatment control BMP(s) on your property at **Insert Property Location here** include:

List BMPs here

To fulfill inspection and maintenance obligations, please complete the following steps:

1) **Visually inspect all Treatment Control BMPs** for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).
2) **Maintain repair any damage to the BMP(s)**. Necessary maintenance may include removing accumulated sediment, trash, or other debris; stabilizing eroded areas; replanting vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.
4) **Take current photos of all BMPs on the property**.
5) **Complete the Operation and Maintenance Self-Verification Online Form** and submit photos and related maintenance documentation as necessary. The online form can be found at the following website: **http: cleanwaterBMP.cityofencinitas.org**. To access the form, enter your property identification number (PIN) in the field provided on the main webpage.

Your PIN is:	*Insert PIN here*

Annual inspection, routine maintenance, and effective operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

If hardcopy submittal is preferred, a paper copy of the O & M Verification From may be picked up at City Hall (505 S Vulcan Ave), or please email npdesmail cityofencinitas.org and an electronic copy of the O & M Verification Form will be emailed to you.

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Frequently Asked Questions

1. Why does the City of Encinitas require that Treatment Control BMPs be maintained?

Proper operation and regular maintenance of permanent stormwater treatment control BMPs ensures that the facility reduces the amount of pollutants that end up in our creeks, lagoons, and beaches. These BMPs help to improve water quality and minimize human and environmental health risks. The San Diego Region Municipal Stormwater Permit (issued by the San Diego Regional Water Quality Control (RWQCB)) requires that the City annually verify that treatment control BMPs installed on private property are adequately maintained.

2. What should I do if I am unsure how to complete my self-inspection form or cannot locate the treatment control BMPs on my property?

Contact Clean Water Program staff as soon as possible. We can provide assistance in understanding the self-verification form, identifying the location of BMP(s) on your property, and determining operation and maintenance needs of your BMP(s). Staff can be reached via phone: 760-633-2787, or email: cleanwater@cityofencinitas.org

3. What happens during the City's inspection of Treatment Control BMPs on my property?

If requested or as required due to repudiation, a City inspector will visit the property to validate the existence, proper maintenance, and function of treatment control BMPs. Inspection actions will be documented with an inspection report form and photos of specific BMPs. If access is limited or located on private property, the City inspector will call the responsible party to schedule an inspection.

FAQs continued…

4. What happens if I don't certify that my Treatment Control BMP(s) have been maintained?

The City is responsible for ensuring the proper maintenance and function of treatment facilities. Failure of a responsible party to provide adequate inspection and maintenance information, upon request, may constitute a violation of the City ordinance as well as property related agreements or covenants. The RWQCB requires the City to verify the proper function of treatment control BMPs through the Municipal Stormwater Permit. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. The Treatment Control BMP Self Verification online form has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of these facilities, and to help the City meet State mandated requirements.

City of Encinitas
Clean Water Program
505 S. Vulcan Avenue
Encinitas, CA 92024

For questions relating to
Treatment Control BMPs,
please call: 760-633-2787
or e-mail: cleanwater@cityofencinitas.org

Printed on recycled paper

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Operation and Maintenance Guide for your Treatment Control Best Management Practices (BMPs)

Thanks for helping us keep our creeks, lagoons, and ocean clean!

Appendix A-6

What is a Treatment Control BMP?

Treatment Control BMPs are drainage devices, structures, or areas designed to remove pollutants from storm water runoff, or minimize the quantity of runoff ultimately discharged from a development site. These facilities are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. They are also frequently referred to as Stormwater Best Management Practices or BMPs.

The following BMPs are commonly incorporated into development projects throughout the City of Encinitas:

Vegetated Swales / Grassy Swales are open, shallow channels or depressions with vegetation or grass covering the side slopes and bottom that collect, infiltrate, and slowly convey runoff water. Rock lined swales are also commonly used.

Bioretention Areas consist of a planted or vegetated depression area designed to pond during a rain event. It is common to find multiple bioretention areas located throughout a development area.

Infiltration Trenches or **Basins** temporarily store runoff in shallow basins or linear depressions lined with sandy soil or gravel to enhance infiltration of water into the ground.

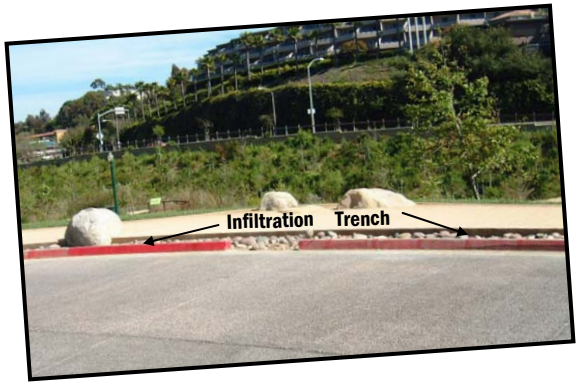

Storm Drain Filter Inserts are manufactured filters or fabric placed in a storm drain inlet to remove sediment, debris, oil, or other pollutants.

Other BMPs include Rock-Lined Swales, Terraced Swales, Detention Basins, Subsurface Infiltration Systems, Constructed Wetlands, Media Filters, Storm Water Storage Systems, and Vortex Separators.

Please note that each of the BMPs may vary in design size, shape, or materials from the descriptions above. City staff is available to help you determine the location of BMPs located on your property.

For more information on Treatment Control BMPs, refer to the City's Storm Water Best Management Practices Manual, Part II which can be accessed via the Clean Water Program webpage:

http://cwp.ci.encinitas.ca.us

How to locate Treatment Control BMPs on your property:

1. Refer to your approved grading or improvement plans. The plans will show the location of Treatment Control BMPs.
2. Walk your property to look for defined drainage areas such as channels, depressions, or basins.
3. Typical treatment control BMPs may look similar to traditional landscaped areas. Look for areas that have been graded in a concave, swale, or linear shape to capture and infiltrate storm water.
4. Structural treatment control devices such as an inlet filter may be located within a curb inlet or underground. *Please contact the City of Encinitas if you have a structural control located on your property with limited access.

Minimum Operation and Maintenance Requirements:

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

- ☑ On an annual basis, or as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair.
- ☑ Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, etc.
- ☑ Remove any accumulated trash and debris.
- ☑ Take photos of all BMPs on the property.
- ☑ Complete the online Operation and Maintenance Self-Verification Form, if requested, or provide access to Clean Water Program staff to conduct a BMP inspection.

City of Encinitas

CITY OF ENCINITAS Clean Water Program

Welcome to the City of Encinitas Stormwater Treatment Control BMP Annual Operation and Maintenance Verification Website

This web portal will allow you to:

- Review treatment control BMP information associated with your property.
- Document your required annual BMP evaluation and Maintenance activities.

Login below to complete the **Operation and Maintenance Self-Verification Form** or to view your BMP and property related information:

PIN #:

Login

Background:

Development projects constructed within the City of Encinitas are commonly required to construct stormwater treatment BMPs (Best Management Practices). The treatment control BMPs provide a critical function for downstream creek and ocean water quality. Proper operation and routine maintenance of these BMPs is necessary to achieve maximum water quality benefits.

Annual evaluation, maintenance, and operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements.

To fulfill evaluation and maintenance obligations, please complete the following steps:

- Visually inspect all Treatment Control BMP(s).
- Maintain/repair any damage to the BMP(s).
- Take photos of all BMP(s) and document any third-party maintenance.
- Complete the **Operation and Maintenance Self-Verification Form** by entering your "PIN" in the box above. Your PIN can be found on the notification letter you received in the mail.

Reference Tools

View the Operation & Maintenance Brochure

Surfrider's Ocean Friendly Gardens Program

City's Municipal Stormwater Code

San Diego Stormwater Permit

For more detailed instructions review the Operation & Maintenance Brochure.

ALL EVALUATIONS, MAINTENANCE ACTVITIES, AND ONLINE VERIFICATION MUST BE COMPLETED NO LATER THAN:
AUGUST 31, 2011

Have Questions? Visit our Frequently Asked Questions Page.

If you have any additional questions regarding the Treatment Control BMP Operation and Maintenance Program, please call the Clean Water Hotline at 760-633-2787 or email cleanwater@cityofencinitas.org for assistance.

If you are having trouble using this website to submit your Self-Verification documentation, please contact the City of Encinitas webmaster at: 760-633-2668 or via email at: webmaster@cityofencinitas.org for assistance.

Please be advised that failure to complete annual evaluation and maintenance activities and provide adequate verification information may constitute a violation of EMC Section 20.08 or breach of property related covenants.

Phone: (760) 633-2600 | TDD: (760) 633-2700 | Fax: (760) 633-2627 | 505 S. Vulcan Avenue, Encinitas, CA 92024-3633
Site Map | Contact Us | Feedback Form | Site Policy | Email: webmaster@ci.encinitas.ca.us | Copyright © 2010

City of Encinitas

CITY OF ENCINITAS Clean Water Program

Stormwater Treatment Control Best Management Practices Operation and Maintenance Self Verification

This online form will allow you to **review** the property and contact information related to the Treatment Control BMPs located on your property and **verify** that all BMP evaluation and maintenance activities have been completed as necessary.

REMINDER: Annual evaluation and maintenance verification of Treatment Control BMP(s) located on your property is due no later than August 31, 2011.

Property Information

[redacted]
Encinitas, CA 92024
Permit 1563-G

Treatment Control BMPs on Your Property

2 Grassy / Vegetated Swale

Step 1 **Review / Update Contact Information**

[redacted]
Encinitas, CA 92024
[redacted]
No Email on file

If the above information is incorrect or needs to be updated, please provide current information in the boxes below:

Name:

Street:

City:

State:

ZIP: *Email:

Phone:

* If you would like email confirmation that y our submittal has been received, a valid email address must be provided.

Step 2 Self-Verification of BMPs

The following section should be completed based on the results of your evaluation of the treatment control BMP(s) on your property. If any maintenance or repair of the BMP(s) was conducted as a result of the evaluation, describe the work completed in the comment box provided below.

Date Evaluated: (mm/dd/yyyy)

Self Evaluation Results (check the box that applies):

- (●) A. All BMP(s) were evaluated and are in good working order. No maintenance required.
- ( ) B. All BMP(s) were evaluated. All or some BMP(s) required maintenance. Describe below.
- ( ) C. Other results, describe below

If you checked B or C please describe maintenance conducted or other results below

If you checked B or C, please indicate the date maintenance was completed below.

Maintenance Date: (mm/dd/yyyy)

Step 3 Upload Photos

Supporting photographic documentation of each BMP is required to be submitted along with your Self-Verification. Photos should be taken during your evaluation of the BMPs or after completion of any maintenance activities. Upload current photos of each of the BMPs on your property using the boxes provided below. If you have more than five photos, submit any additional photos to the Clean Water Program via email: cleanwater@cityofencinitas.org Please note that email attachments cannot be larger than 5 MB.

Step 4 Upload Maintenance Documentation

If a third-party was hired to complete your annual BMP evaluation and maintenance activities, provide documentation showing that the work was completed. Documentation may include receipt for services or invoices which detail the work completed. Documentation must be in PDF or JPG format. If you have more than three documents to upload, or documents that are not in PDF or JPG format, provide them to the Clean Water Program via email: cleanwater@cityofencinitas.org Please note that email attachments cannot be larger than 5 MB.

Step 5 **Certification**

By checking the box below, you are certifying that all the information you have entered in Steps 1 – 3 above is true and correct to the best of your knowledge, that all annually required treatment control BMP evaluation and maintenance activities have been satisfactorily completed, and that all treatment control BMPs are in good working order.

☐ "I hereby certify that all treatment control BMPs on my property were evaluated, maintained, and repaired as necessary and are in good working order."

Submit

For questions relating to Treatment Control BMPs, please call: 760-633-2787 or e-mail: cleanwater@cityofencinitas.org

If you are having trouble using this website to submit your Self-Verification documentation, please contact the City of Encinitas webmaster at 760-633-2668 or via email at webmaster@cityofencinitas.org

Phone: (760) 633-2600 | TDD: (760) 633-2700 | Fax: (760) 633-2627 | 505 S. Vulcan Avenue, Encinitas, CA 92024-3633
Site Map | Contact Us | Feedback Form | Site Policy | Email: webmaster@ci.encinitas.ca.us | Copyright © 2010

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
55	G	540 Cornish Dr	City Inspection	7/30/2010	grass on south swale is dead	landscape crews regraded, placed erosion control blanket and reseed swales	required maintenance
60	G	3275 Poppy Hills Ln	Self-Verification	9/25/2010	all BMPs in good condition	none necessary	information validated
61	CN	801 Orpheus Ave	City Inspection	10/27/2010	all BMPs in good condition	none necessary	inspection
87	G	354 Santa Fe Dr	City Inspection	6/16/2010	filter inserts need maintenance	filter inserts cleaned	required maintenance
106	G	3358 Wildflower Valley Dr	Self-Verification	8/10/2010	all BMPs in good condition	none necessary	information validated
153	I	111 Chesterfield Dr	Self-Verification	9/8/2010	all BMPs in good condition		information validated
169	G	510 S El Camino Real	Self-Verification	8/6/2010	all BMPs in good condition	none necessary	information validated
181	G	3342 Wildflower Valley Dr	Both	none	non-responsive owner		no response to self-verification request; City inspection attempted, no response; placed on inspection list for FY 11-12
183	G	3234 Olivenhain Farms Rd	Self-Verification	9/15/2010	all BMPs in good condition	none necessary	information validated
276	G	1222 N Coast Highway 101	City Inspection	10/29/2010	all BMPs in good condition	none necessary	inspection
385	G	1555 Crest Dr	Both	4/25/2011	all BMPs in good condition	none necessary	self-verification not received, City inspection conducted
386	G	3535 Manchester Ave	City Inspection	10/14/2010	all BMPs in good condition	none necessary	inspection
414	G	4455 Manchester Ave	City Inspection	10/27/2010	all BMPs in good condition	none necessary	inspection
437	G	235 La Costa Ave	Both	6/21/2011	all BMPs in good condition	none necessary	self-verification not received, City inspection conducted
462	G	70 N Coast Hwy 101	City Inspection	7/30/2010	maintenance records required for interceptor, dry wells, mechanical filter	3rd party inspected, cleaned facilities' as needed	directed to inspect and maintain underground facilities as needed
462	G	90 N Coast Highway 101	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
473	G	204 N El Camino Real	Self-Verification	4/14/2010	1 vortex separator required cleaning	vortex separator cleaned	information validated
482	G	1864 Crest Dr	Self-Verification	8/10/2010	all BMPs in good condition	none necessary	information validated
483	G	540 La Costa Ave	City Inspection	7/22/2010	all BMPs in good condition	none necessary	inspection
562	G	1302 Encinitas Blvd	City Inspection	6/29/2010	Revegetate swale and irrigate to 70□ coverage; clean and replace filter medium	Revegetated and cleaned/replaced filter medium	required maintenance
570	G	489 Latigo Row	City Inspection	6/30/2010	all BMPs in good condition	none necessary	inspection

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
704	G	300 Quail Gardens Dr	Self-Verification	8/9/2010	all BMPs in good condition	none necessary	information validated
705	G	3354 Wildflower Valley Dr	Self-Verification	7/28/2010	all BMPs in good condition	none necessary	information validated
713	G	3003 Wildflower Dr	Self-Verification	8/20/2010	all BMPs in good condition	none necessary	information validated
789	G	2005 San Elijo Ave	Self-Verification	12/1/2010	pervious pavement steam cleaned		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
912	G	416 Rancho Santa Fe Rd	City Inspection	7/30/2010	all BMPs in good condition	none necessary	inspection
943	G	211 Saxony Rd	City Inspection	7/22/2010	all BMPs in good condition	none necessary	inspection
983	G	1320 Encinitas Blvd	City Inspection	10/26/2010	all BMPs in good condition	none necessary	inspection
1092	EBP	820 Birmingham Dr	Self-Verification	8/19/2010	all BMPs in good condition	none necessary	information validated
1365	G	310 Hana Ct	Self-Verification	7/29/2010	all BMPs in good condition	none necessary	information validated
1365	G	311 Hana Ct	Self-Verification	9/12/2010	all BMPs in good condition	none necessary	information validated
1365	G	314 Hana Ct	Self-Verification	8/12/2010	all BMPs in good condition	none necessary	information validated
1365	G	315 Hana Ct	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
1365	G	318 Hana Ct	Self-Verification	8/1/2010	all BMPs in good condition	none necessary	information validated
1365	G	319 Hana Ct	Self-Verification	9/2/2010	all BMPs in good condition	none necessary	information validated
1365	G	323 Hana Ct	Self-Verification	7/27/2010	all BMPs in good condition	none necessary	information validated
1365	G	327 Hana Ct	Self-Verification	9/15/2010	all BMPs in good condition	none necessary	information validated
1389	G	302 Requeza St	City Inspection	10/27/2010	all BMPs in good condition	none necessary	inspection
1469	G	1414 Bella Azul Ct	Self-Verification	7/27/2010	all BMPs in good condition	none necessary	information validated
1469	G	1428 Bella Azul Ct	Self-Verification	8/20/2010	all BMPs in good condition	none necessary	information validated
1519	G	200 Saxony Rd	City Inspection	7/30/2010	all BMPs in good condition	none necessary	inspection
1532	G	1316 Summit Ave	Self-Verification		non-responsive owner		property vacant. no address forwarding available. no further action possible.
1532	G	1318 Summit Ave	Self-Verification	8/17/2010	all BMPs in good condition	none necessary	information validated
1532	G	1320 Summit Ave	Self-Verification	9/16/2010	all BMPs in good condition	none necessary	information validated
1563	G	3701 Fortuna Ranch Rd	Self-Verification	7/27/2010	all BMPs in good condition	vegetated swale converted to rock swale	referred to engineer for review
5814	G	2112 Oxford Ave	Self-Verification	8/20/2010	all BMPs in good condition	none necessary	information validated

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
6402	G	311 Princehouse Ln	Self-Verification	9/6/2010	all BMPs in good condition		information validated
6442	G	3616 Manchester Ave	Both	4/11/2011	sand/oil interceptors require sediment removal	Maintenance Plan developed; maintenance conducted by on-site staff.	Maintenance plan reviewed and approved, site inspected
6813	G	155 Saxony Rd	City Inspection	6/14/2010	all BMPs in good condition	none necessary	inspection
7005	G	509 Ocean Bluff Way	Self-Verification	8/24/2010	all BMPs in good condition	none necessary	information validated
7005	G	510 Camino De Orchidia	Self-Verification	9/1/2010	yard being re-landscaped		review building/grading permits
7005	G	517 Ocean Bluff Way	Self-Verification	9/20/2010	all BMPS in good condition	none necessary	information validated
7005	G	518 Camino De Orchidia	Self-Verification	8/14/2010	all BMPs in good condition	none necessary	information validated
7005	G	521 Ocean Bluff Way	Self-Verification	9/22/2010	all BMPs in good condition	none necessary	information validated
7005	G	525 Ocean Bluff Way	Self-Verification	9/11/2010	all BMPs in good condition	none necessary	information validated
7005	G	526 Camino De Orchidia	Self-Verification	9/8/2010	all BMPs in good condition	none necessary	information validated
7005	G	532 Camino De Orchidia	Both	none	unable to conduct inspection		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
7005	G	558 Camino De Orchidia	Self-Verification	8/18/2010	all BMPs in good condition	none necessary	information validated
7054	G	645 Via Cantebria	City Inspection	3/30/2011	all BMPs in good condition	none necessary	inspection
7300	G	760 Garden View Ct	Self-Verification	10/2/2010	all BMPs in good condition	none necessary	information validated
7305	G	131 Princehouse Ln	Self-Verification	10/5/2010	all BMPs in good condition	none necessary	information validated
7374	I	N Vulcan Ave and Encinitas Blvd	City Inspection	7/30/2010	all BMPs in good condition	none necessary	inspection
7588	G	1200 Garden View Rd	Both	3/23/2011	sand/oil interceptor and filter inserts require maintenance	maintenance required in FY 11-12 prior to rainy season	Self Verification not received, City inspection conducted
7628	G	199 La Costa Ave	Both	6/21/2011	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
7628	G	207 La Costa Ave	Both	6/21/2011	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
7628	G	215 La Costa Ave	Both	6/21/2011	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
7628	G	223 La Costa Ave	Self-Verification	7/28/2010	all BMPs in good condition	none necessary	information validated

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
7702	G	301 Chopin Way	Both	none	unable to conduct inspection		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
7702	G	301 Chopin Way	Self-Verification	8/21/2010	all BMPs in good condition	none necessary	information validated
7702	G	315 Chopin Way	Both	none	unable to conduct inspection		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
7702	G	322 Chopin Way	Both	none	unable to conduct inspection		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
7702	G	329 Chopin Way	Self-Verification	8/18/2010	all BMPs in good condition	none necessary	information validated
7702	G	336 Chopin Way	Self-Verification	8/15/2010	all BMPs in good condition	none necessary	information validated
7732	G	175 La Costa Ave	City Inspection	7/30/2010	all BMPs in good condition	none necessary	inspection
7732	G	183 La Costa Ave	City Inspection	none	unable to conduct inspection		several attempts, gated home
7732	G	191 La Costa Ave	City Inspection	none	unable to conduct inspection		several attempts, gated home
7771	G	1550 S El Camino Real	Self-Verification	8/19/2010	all BMPs in good condition	none necessary	information validated
7780	G	121 Rosebay Dr	Self-Verification	8/5/2010	all BMPs in good condition	none necessary	information validated
7791	G	1766 N Coast Highway 101	City Inspection	10/28/2010	Interceptor needs inspection	3rd party inspected 11/1/2010	inspection
7800	G	3542 Jasmine Crest	Both	8/3/2010	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
7828	G	1200 Crestview Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
7828	G	1207 Crestview Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
7828	G	1208 Crestview Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
7828	G	1216 Crestview Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
7828	G	1219 Crestview Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
7828	G	1223 Crestview Dr	City Inspection	none	unable to conduct inspection		Made several attempts to contact. For sale sign in front. Possible foreclosure.
7828	G	1945 Lake Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
7847	G	2300 8th St	Self-Verification	9/6/2010	all BMPs in good condition	none necessary	information validated
7852	G	3411 Via Monte Verde	Self-Verification	9/13/2010	all BMPs in good condition	none necessary	information validated
7852	G	3430 Via Monte Verde	Self-Verification	8/15/2010	all BMPs in good condition	none necessary	information validated
7852	G	3445 Via Monte Verde	Both	none	unable to conduct inspection		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
7893	G	1502 Christine Place	City Inspection	10/13/2010	all BMPs in good condition		Maintenance records requested
9023	G	427 Bristol Ave	Self-Verification	9/3/2010	all BMPs in good condition		Photo shows BMP in construction. Need to see finished BMP in FY 11-12.
9034	G	1462 Summit Ave	Self-Verification	9/17/2010	all BMPs in good condition	none necessary	information validated
9034	G	1464 Summit Ave	Self-Verification	9/7/2010	all BMPs in good condition	none necessary	information validated
9034	G	1470 Summit Ave	Both	4/25/2011	all BMPs in good condition	none necessary	Self-verification not received, City inspection conducted
9057	G	192 Pacific View Ln	City Inspection	12/20/2010	all BMPs in good condition	none necessary	inspection
9071	G	3317 Poppy Hills Ln	Both	none	non-responsive owner		place on inspection list for FY 11-12
9134	G	2153 Whisper Wind Ln	Self-Verification	8/7/2010	all BMPs in good condition	none necessary	information validated
9150	G	3113 Camino Del Rancho	Self-Verification	8/5/2010	all BMPs in good condition	none necessary	information validated
9180	G	1610 Neptune Ave	Self-Verification	8/20/2010	all BMPs in good condition	none necessary	information validated
9253	G	701 S Vulcan Ave	Self-Verification	8/17/2010	all BMPs in good condition	none necessary	information validated
9253	G	703 S Vulcan Ave	Self-Verification	8/31/2010	all BMPs in good condition	none necessary	information validated
9253	G	715 S Vulcan Ave	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
9253	G	717 S Vulcan Ave	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
9253	G	719 S Vulcan Ave	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
9253	G	721 S Vulcan Ave	Self-Verification	9/22/2010	all BMPs in good condition	none necessary	information validated
9278	G	490 Latigo Row	Self-Verification	8/2/2010	all BMPs in good condition	none necessary	information validated

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
9283	G	1440 Hygeia Avenue	Self-Verification	12/31/2010	all BMPs in good condition	none necessary	information validated
9283	G	265 Sanford St	Both	4/25/2011	all BMPs in good condition	none necessary	Self-verification not received, City inspection conducted, changed mailing address to property address
9283	G	267 Sanford Street	Self-Verification	8/6/2010	all BMPs in good condition	none necessary	information validated
9289	G	2914 Lone Jack Rd	Both	4/26/2011	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
9289	G	2932 Lone Jack Rd	Self-Verification	9/24/2010	all BMPs in good condition	none necessary	information validated
9289	G	2934 Lone Jack Rd	Self-Verification	9/7/2010	all BMPs in good condition	none necessary	information validated
9289	G	2944 Lone Jack Rd	Self-Verification	8/7/2010	all BMPs in good condition	none necessary	information validated
9294	G	477 N El Camino Real	City Inspection	10/13/2010	all BMPs in good condition	none necessary	inspection
9301	G	187 Halcyon Rd	Self-Verification	8/10/2010	all BMPs in good condition	none necessary	information validated
9301	G	189 Halcyon Rd	Self-Verification	9/1/2010	all BMPs in good condition	none necessary	information validated
9303	G	869 Brittany Ave	Self-Verification	9/10/2010	all BMPs in good condition	none necessary	information validated
9303	G	887 Brittany Ave	Self-Verification	10/8/2010	all BMPs in good condition	none necessary	BMP in place but appears to be modified w/ palm trees. OK for 2010, needs city inspection in 2011.
9318	G	1154 Evergreen Dr	Self-Verification	8/19/2010	all BMPs in good condition	none necessary	information validated
9318	G	1158 Evergreen Dr	Self-Verification	8/17/2010	all BMPs in good condition	none necessary	information validated
9318	G	1160 Kava Ct	Self-Verification	8/1/2010	all BMPs in good condition	none necessary	information validated
9318	G	1164 Kava Ct	Self-Verification	8/5/2010	all BMPs in good condition	none necessary	information validated
9318	G	1165 Kava Ct	Self-Verification	8/11/2010	all BMPs in good condition	none necessary	information validated
9318	G	1168 Kava Ct	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
9318	G	1169 Kava Ct	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
9318	G	1172 Kava Ct	Self-Verification	9/23/2010	all BMPs in good condition	none necessary	information validated
9318	G	1173 Kava Ct	Self-Verification	8/18/2010	all BMPs in good condition	none necessary	information validated
9318	G	1176 Kava Ct	Self-Verification	8/18/2010	all BMPs in good condition	none necessary	information validated
9367	G	781 Garden View Ct	Both	3/30/2011	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
9370	G	406 La Costa Ave	City Inspection	8/2/2010	all BMPs in good condition	none necessary	inspection
9419	G	871 Neptune Ave	Self-Verification	8/10/2010	all BMPs in good condition	none necessary	information validated
9561	G	303 Santa Fe Dr	Self-Verification	10/6/2010	all BMPs in good condition	none necessary	information validated

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
9580	G	3451 Dove Hollow Road	Both	8/9/2010	all BMPs in good condition	none necessary	resident requested city inspection. City inspection conducted.
10187	G	1603 Crest Dr	Self-Verification	9/20/2010	all BMPs in good condition	none necessary	information validated

CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Treatment Control BMPs

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

GENERAL INFORMATION

Permit No/Type _____ Property Address _____ Gate Code _____

Inspection Type: ☐ Annual ☐ Complaint Ownership: ☐ HOA ☐ Homeowner ☐ Commercial

Project Type: ☐ Private ☐ City of Encinitas SUSMP Status: ☐ Priority ☐ Standard

Inspection Priority: ☐ High ☐ Medium ☐ Low ☐ Unk Property Access: ☐ Open ☐ Limited ☐ None

TREATMENT CONTROL BMP EVALUATION

BMP Type	Location	Observations	Comments ☐Corrective Actions
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	

Photo(s) Taken: ☐ Yes ☐ No

Additional Comments:

CORRECTIVE ACTIONS

☐ None ☐ Maintenance/Repair ☐ Other _____

_____

_____

_____ Completion Due Date _____

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.140. Failure to comply with minimum Best Management Practices (BMP) Standards may result in further enforcement action by the City of Encinitas.

_____

Inspector (Print) **Signature** **Date**

_____

Responsible Party (Print) **Signature** **Date** **Contact Number**

☐ Responsible Party not present. Copy of inspection report provided to Responsible Party on _____

FOLLOW UP INSPECTION

☐ All Corrective Actions completed ☐ Corrective Actions not complete ☐ Enforcement Action required

_____

Inspector Sign-Off **Date**

COPY DISTRIBUTION White – Responsible Party Yellow – City Inspector Pink – File REVISED 9/1/09

CITY OF ENCINITAS
CLEAN WATER PROGRAM
505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

STORMWATER TREATMENT CONTROL BMP MAINTENANCE AND INSPECTION PROGRAM

Stormwater Treatment Control BMPs are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. Common Treatment Control BMPs include Vegetated Swales, Bioinfiltration Areas, Infiltration Basins or Trenches, and Storm Drain Filter Inserts.

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner, business owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

☑ **On an annual basis prior to the wet season, or more frequently as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair (i.e. overgrown vegetation, restricted water flow, excessive sediment and debris).**

☑ **Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming/mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, removing trash or other debris, etc.**

DEFINITIONS

Treatment Control Best Management Practice (BMP) means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process. Also frequently referred to as Stormwater Best Management Practices or BMPs.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains.

Wet Season means October 1 thru April 30 of each year.

EMC 20.08.140.F. • INSPECTION, MAINTENANCE, REPAIR AND UPGRADING OF BMPS

Treatment Control BMPs must be inspected by the Discharger or responsible party before the start of the wet season and following actual rain events. These BMPs must be maintained so that they continue to function as designed. Treatment BMPs which fail must be repaired as soon as it is safe to do so. If the failure of a structural or nonstructural BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances. All sediment and debris in catch basins must be removed prior to the wet season and disposed of in a manner which prevents it from entering the Storm Water Conveyance System or the Receiving Waters.

EMC 20.08.080 • COMPLIANCE WITH BEST MANAGEMENT PRACTICES

No Discharger shall fail to implement, install, use, or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

EMC 20.08.160.A. • REGULATORY INSPECTIONS

The City Engineer or his designee may inspect the premises of any Discharger at reasonable times and in a reasonable manner to carry out the purposes of this Chapter. If a Discharger refuses to allow entry for an inspection, an inspection warrant shall be obtained prior to inspection.

EMC 20.08.040 • ILLEGAL DISCHARGES

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

Case / Permit No.:_____

CITY OF ENCINITAS
STORMWATER QUALITY CHECKLIST AND CERTIFICATION

SW

All development projects proposed within the City of Encinitas are required to implement stormwater quality measures in accordance with the *Encinitas Stormwater Manual*. The intent of these requirements is to promote practices and project designs that improve the quality of runoff and protect our local ocean, creeks, and lagoons from the harmful effects of polluted runoff. The *Encinitas Stormwater Manual* meets State-mandated requirements established by Regional Water Quality Control Board Order No. R9-2007-0001 (San Diego Region Municipal Stormwater Permit). For a more detailed description of the City's stormwater requirements, refer to the *Encinitas Stormwater Manual* on the City website (www.CityofEncinitas.org). The manual provides detailed, step-by-step guidelines on how to plan for, design, construct, and maintain stormwater treatment features. Other City stormwater-related resources available on the City's website include:

1. Municipal Code Chapter 20.08: Stormwater Management
2. Municipal Code Chapter 23.24: Grading, Erosion, and Sediment Control

This checklist is designed to guide applicants in the determination of the stormwater quality designation of the project and the design of appropriate stormwater quality features. Projects may be designated as 1) **Priority**, 2) **Standard**, or 3) **Exempt** projects. At a minimum, all projects are required to provide designs and employ practices that minimize the potential for discharge of pollutants into the City's storm drainage system or local receiving waters, as outlined in the *Requirements for All Development Projects* below.

Requirements for ALL Development Projects

All development projects (including Exempt Projects) must include a minimum set of control measures to reduce the discharge of stormwater pollutants to the maximum extent practicable. All projects must include:

- ☑ Implementation of Best Management Practices (BMPs) to control potential pollutant sources.
- ☑ Inclusion of Low Impact Development (LID) features that minimize the water quality impacts of the project.
- ☑ Compliance with requirements for construction-phase controls on sediment and other pollutants.

In addition, all projects must design and install drainage features so that runoff from impervious areas (such as rooftops, parking lots, and driveways) drains through pervious or vegetated areas for treatment before draining to public or private streets or storm drainage systems. No Directly Connected Impervious Area (DCIA) will be allowed on any development project (Encinitas Municipal Code Section 23.24.120). For more information about prohibited DCIA practices and the stormwater runoff requirements for all projects, refer to the *Encinitas Stormwater Manual*.

Beyond the minimum *Requirements for All Development Projects* listed above, the stormwater quality measures required for a particular project differ based upon the nature of the proposed development. Step 1 (Tables I and II below) is designed to assist you in determining the appropriate stormwater quality designation for your project. An overview of the method for determining the designation is included in the flowchart on the next page.

Case / Permit No.:_____

FLOWCHART: DETERMINATION OF THE APPROPRIATE STORMWATER QUALITY DESIGNATION FOR DEVELOPMENT PROJECTS

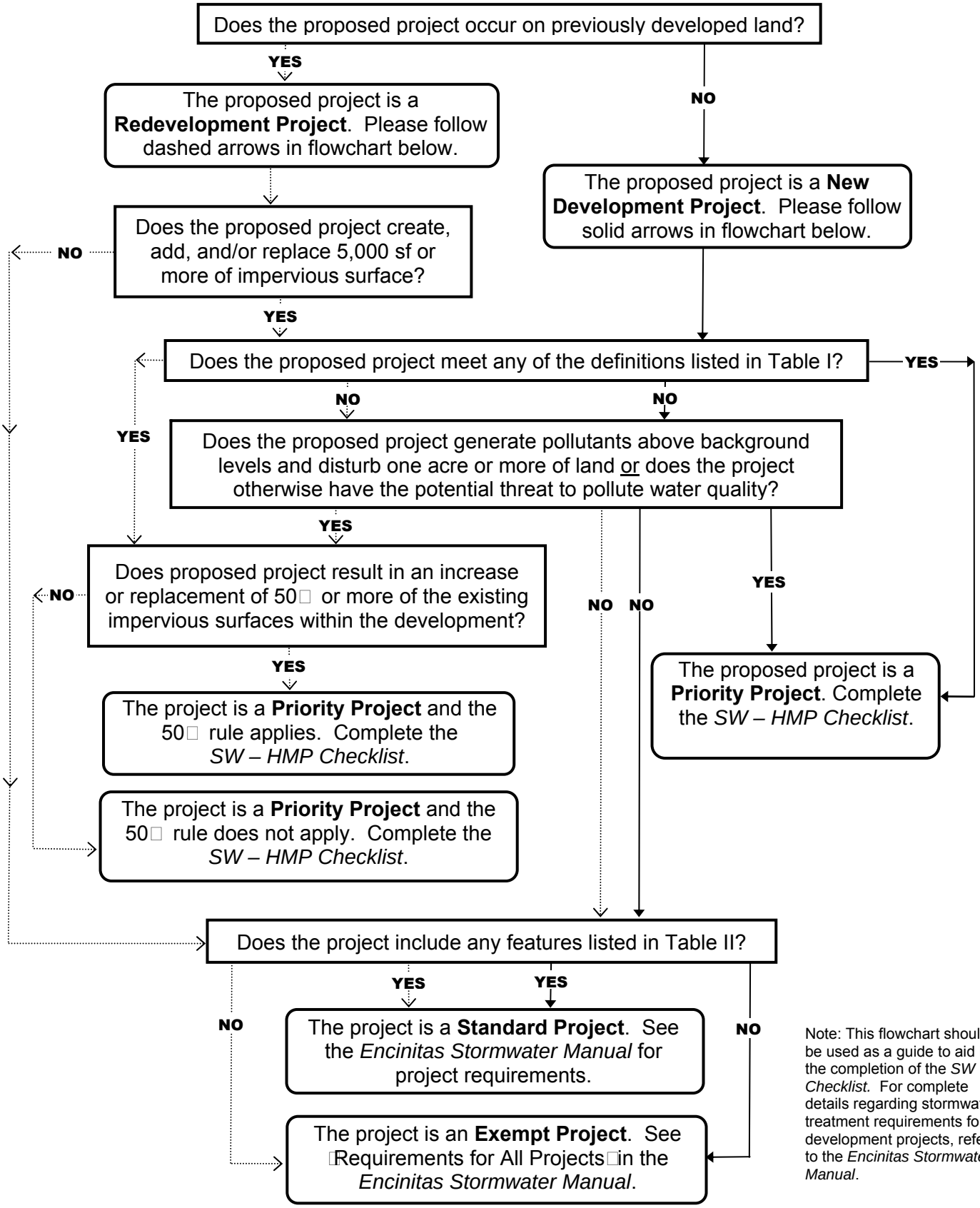

Note: This flowchart should be used as a guide to aid in the completion of the *SW Checklist*. For complete details regarding stormwater treatment requirements for development projects, refer to the *Encinitas Stormwater Manual*.

Case / Permit No.:_____

STEP 1: DETERMINE STORMWATER QUALITY DESIGNATION

Step 1 is designed to assist you in determining the appropriate stormwater quality designation for your project.

Step 1A: Determine Development Type and Priority Project Category Applicability

The first step in assessing the appropriate stormwater designation for your project is to determine whether it is a New Development Project or a Significant Redevelopment Project according to the definitions below.

New Development Projects are defined as projects proposing new impervious area on a previously undeveloped parcel.

Significant Redevelopment Projects are projects on previously developed land that create, add, and/or replace 5,000 square feet (s.f.) or more of impervious surface. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include interior remodels, roof or exterior surface replacement; trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; or routine replacement of damaged pavement, such as pothole repair. However, other requirements, including incorporation of appropriate source controls, still apply. If your redevelopment project is exempt, the project is still obligated to meet the *Requirements for All Development Projects*, to the extent practicable. The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the *Encinitas Stormwater Manual*.

If your project meets one of the two definitions of development listed above, use Table I to determine if your project is a Priority Development Project.

Table I: Determine if Project is a Priority Development Project

Review each category A through J to determine whether the project meets the definition of one or more of the Priority Project categories. If any response in Table I is "Yes", the project is a **Priority Development Project**; *please continue to Step 2.* If all responses are "No", *please continue to Step 1B*.

Does the project meet the definition of one or more of the following categories?

A	**Housing subdivisions of 10 or more dwelling units**. Examples: single-family homes, multi-family homes, condominiums, and apartments.	Yes ❑	No ❑
B	**Commercial" greater than one acre of development**. Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.	Yes ❑	No ❑
C	**Heavy industry" greater than one acre of development**. Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).	Yes ❑	No ❑
D	**Restaurants**. Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.	Yes ❑	No ❑

Case / Permit No.:_____

Table I (cont.): Does the project meet the definition of one or more of the following categories?			
E	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.	Yes ❑	No ❑
F	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 or more of its naturally occurring condition. Directly adjacent means situated within 200 feet of the ESA. Discharging directly to means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.	Yes ❑	No ❑
G	**Parking lots** 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.	Yes ❑	No ❑
H	**Streets, roads, driveways, highways, and freeways**. Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. If a project is determined to be a Priority Project based solely on the driveway surface area, the project will only be subject to stormwater treatment requirements and will not be required to meet Hydromodification Mitigation Plan (HMP) regulations. Refer to the *SW-HMP Checklist* for more details.	Yes ❑	No ❑
I	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more of development or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.	Yes ❑	No ❑
J	**Automotive repair shops**. A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.	Yes ❑	No ❑

If the answer to one or more of the categories in Table I is Yes, the project is a considered **Priority Development Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria. Proceed to Step 2 and refer to the *SW—HMP Checklist* to determine whether your project is required to meet hydromodification regulations. If all answers in Table I are No, proceed to Step 1B.

Step 1B: Determine Project s Water Quality Sensitivity

Development projects have the potential to contribute pollutants that could threaten local and downstream water quality. Review the following project categories and determine whether your project meets either one of these definitions.

Pollutant Generating Project Which Disturbs One Acre or More of Land. Projects that generate pollutants at levels greater than background levels and disturb one acre or more of land are considered Priority Development Projects. In most cases linear pathway projects that are for infrequent vehicle use (such as emergency or maintenance access) or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they allow runoff to sheet flow to surrounding pervious surfaces.

All Development Projects with Potential Threat to Pollute. Some projects not meeting the definitions listed in Table I may still be designated as Priority Projects if they are found to cause a threat to water quality through excess pollution potential. The City of Encinitas has the discretion to designate a project not listed within Table I as being a Priority Project based on the project s potential impacts to stormwater quality.

If your project meets either of the categories described above, the project is a **Priority Development Project** for stormwater quality and the project will be required to install Source Control measures, LID features, and Stormwater Treatment Facilities. The City Engineer will make the final determination as to whether your project meets one of the definitions. Proceed to Step 2 and refer to the *SW—HMP Checklist* to determine whether your project is required to meet hydromodification regulations.

If your project does not meet one of the two categories listed above, proceed to Step 1C to determine whether your project includes any features that are consistent with the Standard Project classification.

Step 1C: Determine Standard Project Feature Applicability

Table II: Determine if Project is a Standard Project

To use Table II, review A through J to determine whether the proposed project includes any feature that would qualify the project as a Standard Project. If the response to any feature in A through J below is "Yes", the project is designated as a **Standard Project**. If all responses are "No", the project is an **Exempt Project**. After completion of Table II, *please proceed to Step 2.*

Does the project include any features qualifying it as a Standard Project?

A	**New Impervious Surface Areas totaling 500 square feet or more** combined, and including any cumulative development over the five-year period preceding the time of application. Impervious areas include improvements such as rooftops, roads, parking lots, driveways, patios, pool decks, paths, etc.	Yes ❑	No ❑
B	**Reconstruction of any Existing Impervious Surface Areas** such as rooftops, roads, parking lots, driveways, paths, and sidewalks in excess of 500 square feet, including any cumulative development over the five-year period preceding the time of application.	Yes ❑	No ❑
C	**Permanent Structures** within 100 feet of any natural water body.	Yes ❑	No ❑
D	**Trash Storage Areas**.	Yes ❑	No ❑
E	**Loading and/or Unloading Areas** for liquids and/or solid materials.	Yes ❑	No ❑
F	**Vehicle or Equipment Fueling, Washing, and/or Maintenance Areas**.	Yes ❑	No ❑
G	**General NPDES Permit Required** for storm water discharges associated with industrial activities (except for construction permits)	Yes ❑	No ❑
H	**Commercial and/or Industrial Waste** handling or storage, excluding typical office or household waste.	Yes ❑	No ❑
I	**Grading** or ground disturbance proposed during construction.	Yes ❑	No ❑
J	**Storm Drains** including new storm drains as well as alteration to existing storm drains that reduce natural storm water treatment.	Yes ❑	No ❑

If the answer to one or more of the features in Table II is "Yes", the project is a **Standard Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design Features, and some Stormwater Treatment Facilities. Proceed to Step 2 and use Chapter 4 of the *Encinitas Stormwater Manual* as a general guide when designing stormwater treatment facilities that will meet Standard Development Project requirements.

The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the *Encinitas Stormwater Manual*. If the answers to all categories in Tables I and II are "No", and the project has been determined by the City of Encinitas not to be a pollutant generating project or have the potential to pollute, the project is an **Exempt Project** for stormwater quality but is still required to meet the *Requirements for All Development Projects*. Please proceed to Step 2.

Case / Permit No.:_____

STEP 2: DETERMINE PROJECT SUBMITTAL REQUIREMENTS

Requirements for Exempt, Standard, and Priority Projects are discussed in turn below. Engineering Services Department staff are available to answer any specific questions regarding the stormwater quality requirements.

Please check the box adjacent to the project type determined in Step 1.

- ❑ **Exempt Project:** See Step 2A below.
- ❑ **Standard Project**: See Step 2B below.
- ❑ **Priority Project**: See Step 2C below.

Step 2A: Determining Stormwater Quality Measures for an Exempt Project.

Exempt projects are not required to install new Stormwater Treatment Facilities but shall utilize existing on-site landscape and pervious areas to avoid Directly Connected Impervious Areas (DCIA) as outlined in the *Requirements for All Development Projects* section above and in the *Encinitas Stormwater Manual.* In addition, Exempt Projects, like all other projects, are required to comply with requirements for construction-phase controls on sediment and other pollutants. *Please proceed to Step 3.*

Step 2B: Determining Stormwater Quality Measures for a Standard Project.

Standard Projects are obligated to conform to the *Requirements for All Development Projects* outlined in the previous section as well to as integrate some BMP or LID features into the project proposal. BMP and LID features should be designed using Chapter 4 of the *Encinitas Stormwater Manual* as a general guide and then depicted on the plans for the permit. In addition, based on the types of BMPs or LIDs proposed, the City may require that a maintenance agreement be developed. *Please proceed to Step 3.*

Step 2C: Determine Stormwater Quality Measures for a Priority Project.

Priority Projects will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria and may be required to meet HMP regulations. To determine whether your project needs to meet hydromodification regulations please complete the *SW—HMP Checklist*. The ***Encinitas Stormwater Manual*** includes detailed guidance for the planning and design of acceptable storm water quality features and for developing your project submittal package.

The 50% Rule for Significant Redevelopment Projects Only: The requirements for Priority Redevelopment Projects differ depending upon the amount of redevelopment proposed. If the proposed project results in an increase and/or replacement of 50% or more of the previously existing impervious surfaces onsite, then the entire development must be included in the stormwater treatment design. If less than 50% of the previously existing impervious surfaces will be affected by the proposed project, then only the affected previously existing areas and the newly proposed project must be included in the stormwater treatment design.

After completing the steps outlined in the *Encinitas Stormwater Manual*, Priority Projects shall provide required documentation to the City detailing the project's compliance with Priority Project standards. All documentation shall be reviewed and approved by the City of Encinitas prior to issuance of a grading or improvement permit or prior to the issuance of any discretionary permit, at the direction of the City Engineer. At a minimum, the items below are required for stormwater facility documentation of Priority Projects. The City Engineer may pose additional requirements for certain projects. Upon review of the submittal requirements in Step 2C, *please proceed to Step 3.*

Case / Permit No.:_____

PRIORITY PROJECT SUBMITTAL MINIMUM REQUIREMENTS

Priority Projects shall provide to the City all of the following documentation detailing the project's compliance.

I) STORMWATER QUALITY SECTION OF DRAINAGE STUDY: A Stormwater Quality discussion shall be included as a separate section within the project drainage study and shall include a **narrative** as well as an **exhibit**. Minimum requirements for the narrative and exhibit are discussed in items (a) and (b) below.

a) STORMWATER QUALITY NARRATIVE: The stormwater quality narrative in the drainage study shall discuss, at a minimum, the items listed below.

1) Tabulation of the square footage of proposed pervious areas, impervious areas, and areas draining to an IMP. Also, a tabulation of the square footage of self-treating areas, self retaining areas, and areas draining to self-retaining areas, as applicable. (Step 3)

2) Calculations of the required sizing for self-retaining and Integrated Management Practice (IMP) areas and calculations documenting the sufficiency of the facilities provided. (Step 3)

3) A table of pollutant sources identified and the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix A of the *Encinitas Stormwater Manual*. (Step 4)

b) STORMWATER QUALITY EXHIBIT: The Stormwater Quality Section of the drainage study shall contain one exhibit including all of the items listed below. The Stormwater Quality Exhibit must be in conformance with the Site Plan. The Stormwater Quality Exhibit shall include the Site Plan features screened into the background for ease of confirming agreement between the Exhibit and the Site Plan.

1) Division of entire site into distinct drainage management areas (DMAs), with each drainage management area assigned a unique identifier (e.g., 1, 2, 3 or A, B, C). (Step 1)

2) Square footage and types of surfacing (e.g., roof, landscape, pavement) included in each DMA and the total DMA square footage. (Step 1)

3) Hydrologic soil group and depth to groundwater (as applicable) for each DMA. (Step 1)

4) Each DMA labeled as self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. (Step 2)

5) Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix A and corresponding required source controls. (Step 4)

II) SITE PLAN: At a minimum, the Site Plan shall include the items listed below. A copy of the Site Plan shall be included in the Stormwater Quality Section of the drainage study.

1) Existing and proposed drainage network and connections to drainage off-site. (Step 3)

2) Depiction of site design characteristics that minimize disturbance as well as building features and pavement selections that minimize the proposed imperviousness of the site. (Step 3)

3) Proposed design of each IMP feature and any Permanent Source Control features. (Step 3)

4) Title sheet standard notes for each of pollutant sources identified specifying the source control measure(s) to be used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix. (Step 4)

5) Existing natural hydrologic features such as depressions, watercourses, floodplains, and relatively undisturbed areas, as well as significant natural resources. (Step 1)

6) The City of Encinitas Standard Storm Water Quality Notes shall be added to the site plan.

7) Certification by a civil engineer, architect, or landscape architect on the title sheet. (Step 6)

III) MAINTENANCE AGREEMENT: In order to provide for the perpetual maintenance of the stormwater treatment facilities, the City will prepare for the property owner a Maintenance Agreement that shall record against the property. The items listed below shall be provided to the City for inclusion in the Maintenance Agreement.

1) Discussion of general maintenance needs for infiltration, treatment, and flow-control facilities. (Step 5)

2) The means by which facility maintenance will be financed and maintained into perpetuity. (Step 5)

3) Statement accepting responsibility for interim operation and maintenance of facilities. (Step 5)

4) Plat and legal description of the property.

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STEP 3: STORMWATER PROJECT CERTIFICATION

The property owner of any project (Priority, Standard, or Exempt) shall complete the following Owner's Certification. In addition, any agent completing this form on behalf of a client shall complete the Agent's Certification below.

Owner's Certification:

I hereby acknowledge that my project is subject to the stormwater quality regulations of the City of Encinitas and certify that my project will provide satisfactory stormwater quality measures both during the construction process and afterwards.

If my project is designated as a Priority or a Standard Project, I further acknowledge my understanding that the permanent stormwater treatment features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____ _____

Owner 1 Signature Date Owner 2 Signature Date

_____ _____

Printed Name of Owner 1 Printed Name of Owner 2

Agent's Certification:

I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____

Agent Signature Date

_____

Printed Name of Agent

_____

Working Capacity of Agent (architect, engineer)

_____

Company Name Place Professional Seal Above

Case / Permit No.:_____

SW-HMP

CITY OF ENCINITAS
HYDROMODIFICATION MANAGEMENT PLAN (HMP)
CHECKLIST AND CERTIFICATION

All development projects proposed within the City of Encinitas are required to implement stormwater quality measures in accordance with the *Encinitas Stormwater Manual*. If your project is a Priority Project, as determined by the *SW Checklist*, you may also be required to mitigate for potential hydromodification impacts to downstream water bodies. Hydromodification refers to changes in the magnitude and frequency of stream flows as a result of urbanization and the resulting impacts on receiving channels. Potential impacts to receiving channels include erosion, sedimentation, and degradation of in-stream habitat.

If you have completed the *SW Checklist* and determined that your project is a Priority Project, use the following HMP Decision Matrix to determine whether your project must also comply with the San Diego region hydromodification requirements. If your project is subject to HMP requirements, the HMP Decision Matrix will also assist you in determining the flow range which the project must adhere to.

For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the ***Encinitas Stormwater Manual*** and the ***County of San Diego Hydromodification Management Plan***.

As identified in Figure 1-1, projects may be exempt from HMP criteria if they meet one of the following conditions:

- If the project is not a Priority Development Project (i.e. if the project is determined to be a Standard Project or an Exempt Project after completing the *SW Checklist*.)
- If the proposed project does not increase the impervious area or peak flows to any discharge location.
- If the proposed project discharges runoff directly to an exempt receiving water such as the Pacific Ocean or a lagoon.
- If the proposed project discharges to a stabilized conveyance system that extends to the Pacific Ocean, San Diego Bay, a tidally-influenced area, an exempt river reach or reservoir.
- If the contributing watershed area to which the project discharges has an impervious area percentage greater than 70 percent
- If an urban infill project discharges to an existing hardened or rehabilitated conveyance system that extends beyond the domain of analysis, the potential for cumulative impacts in the watershed are low, and the ultimate receiving channel has a Low susceptibility to erosion as defined in the SCCWRP[1] channel assessment tool.
- If the project includes the construction of a new impervious private driveway and the project has been determined to be a Priority Project solely due to the surface area of that driveway being greater than 5,000 square feet.

[1] Southern California Coastal Water Research Project

Case / Permit No.:_____

Figure 1-1 HMP Applicability Determination is the first component of the HMP Decision Matrix and can be used for all projects. For redevelopment projects, flow controls are required only if the redevelopment project increases impervious area or peak flow rates above pre-project conditions.

If your project is determined to be exempt from HMP applicability, proceed to Page 7 of this checklist. If your project is determined to require hydromodification controls, complete the remainder of the HMP Decision Matrix (Figures 1-2 through 1-5) to determine the flow range your project must adhere to.

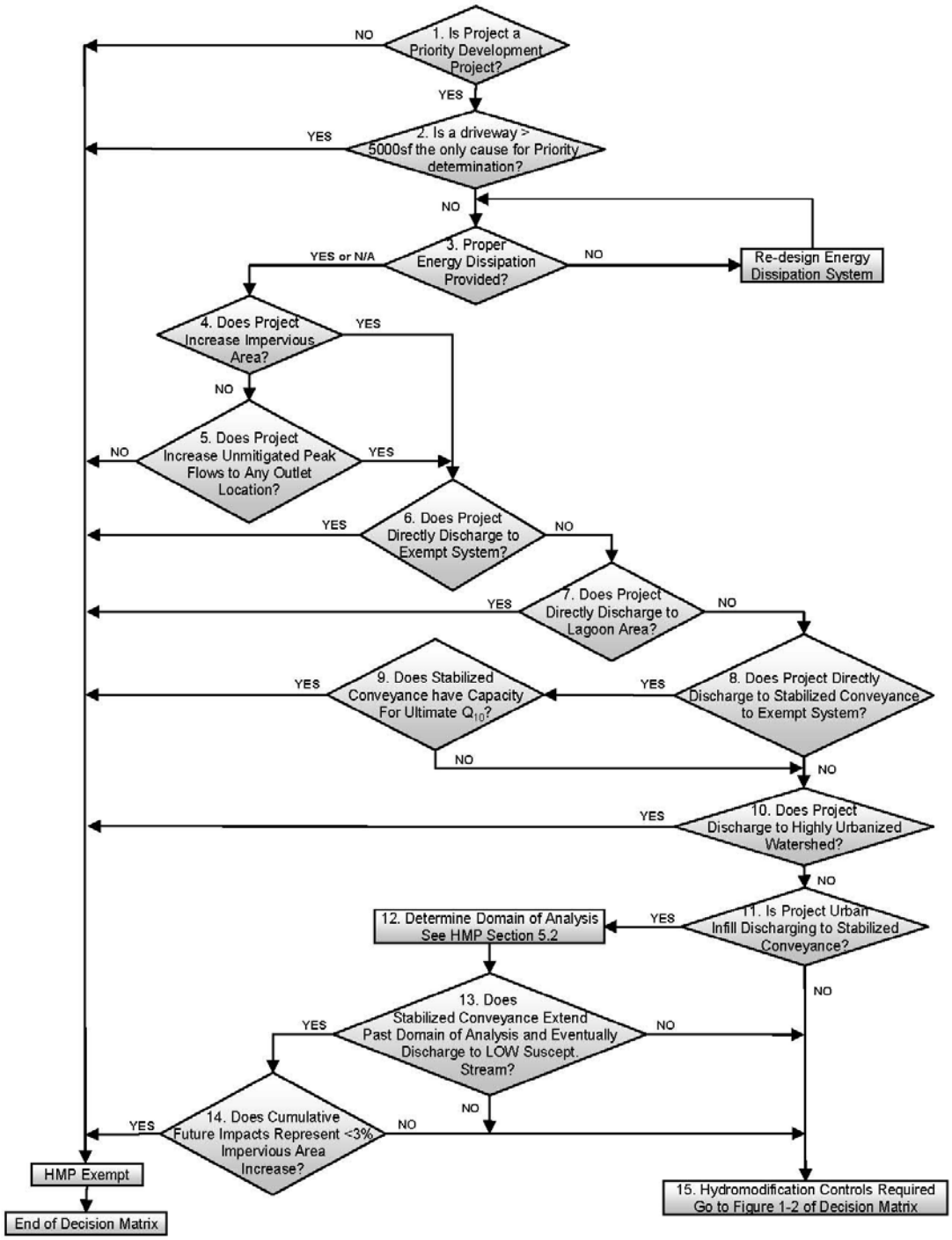

FIGURE 1-1. HMP Applicability Determination

*For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the **Encinitas Stormwater Manual** and the **County of San Diego Hydromodification Management Plan**.*

Case / Permit No.:_____

Please check the box adjacent to the HMP applicability determined by Figure 1-1.

- ❑ **HMP Exempt**. List the Exemption below and proceed to Page 7.

  Exemption: _____

- ❑ **Hydromodification Controls Required**. Continue with the HMP Decision Matrix (Figures 1-2 through 1-5).

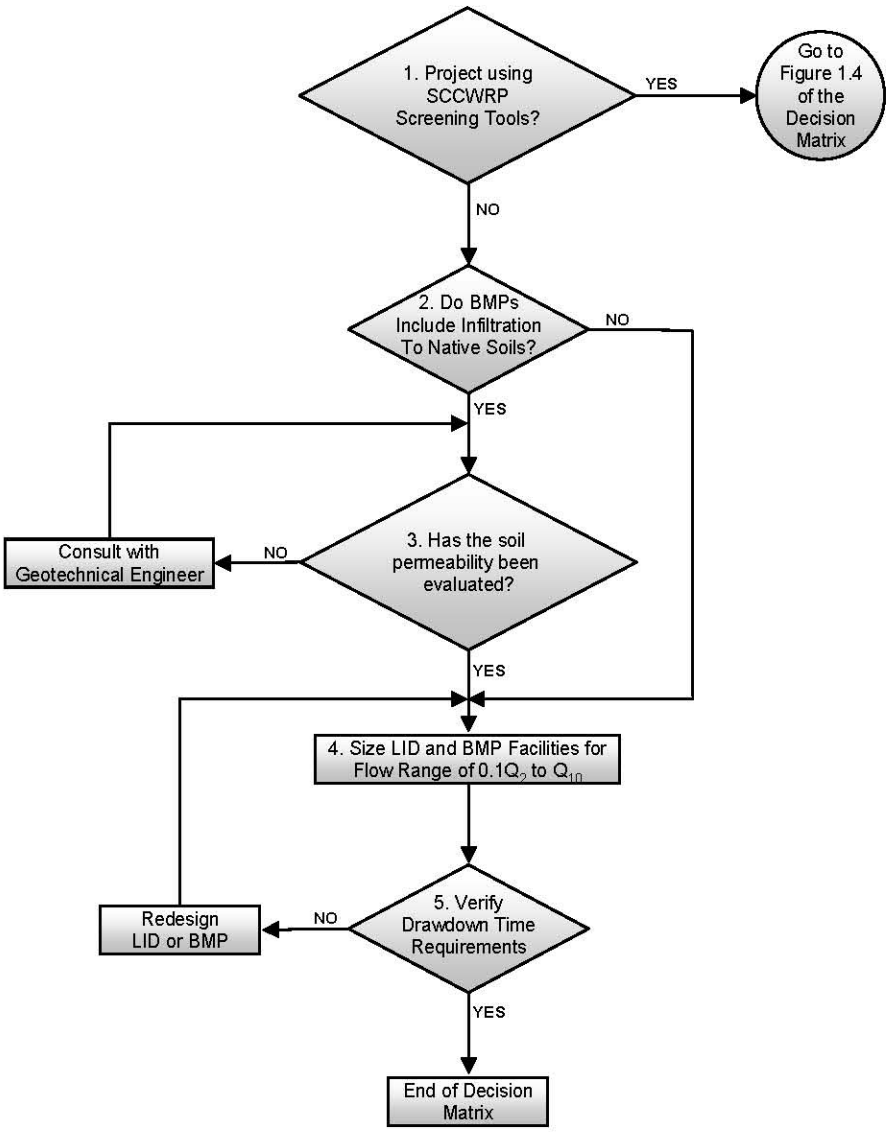

FIGURE 1-2. Mitigation Criteria and Implementation

*For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the **Encinitas Stormwater Manual** and the **County of San Diego Hydromodification Management Plan**.*

Case / Permit No.:_____

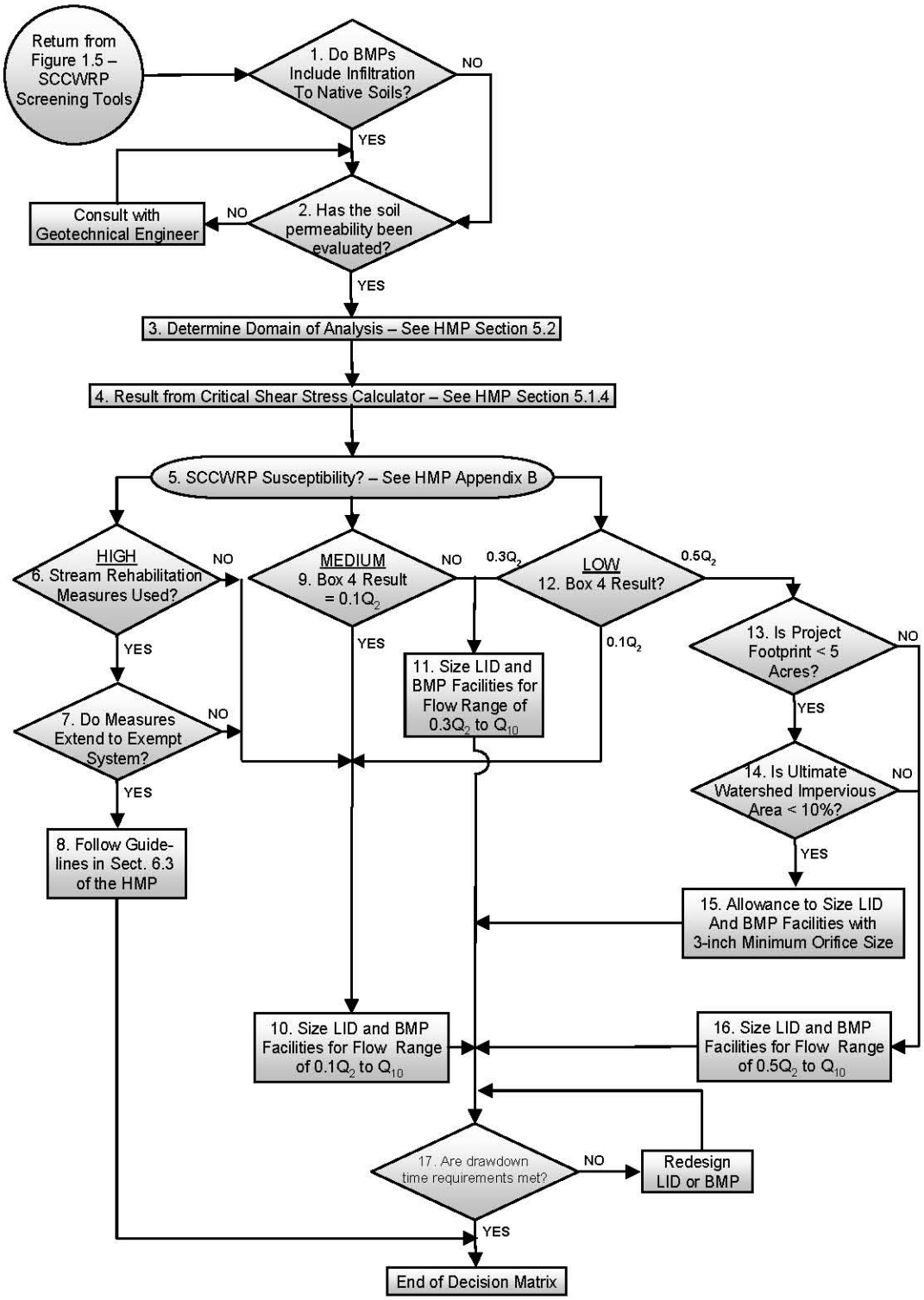

FIGURE 1-3. Mitigation Criteria and Implementation

For a detailed description of each step of the HMP Decision Matrix, refer to ***Section 1*** *of the* ***Encinitas Stormwater Manual*** *and the* ***County of San Diego Hydromodification Management Plan****.*

Case / Permit No.:_____

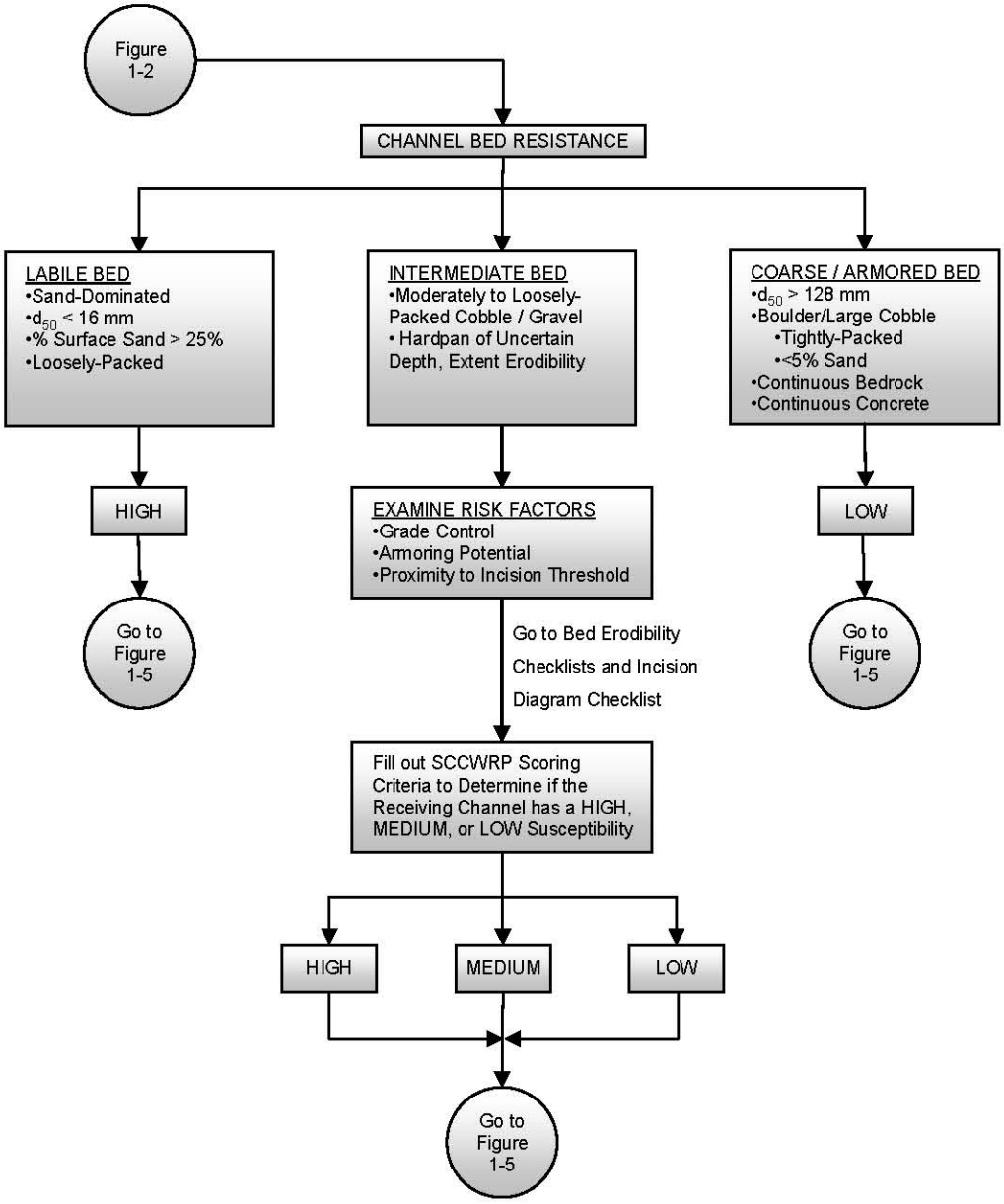

FIGURE 1-4. SCCWRP Vertical Susceptibility. *For a description of how to complete this decision matrix refer to Appendix B of the County of San Diego Hydromodification Management Plan.*

Case / Permit No.:_____

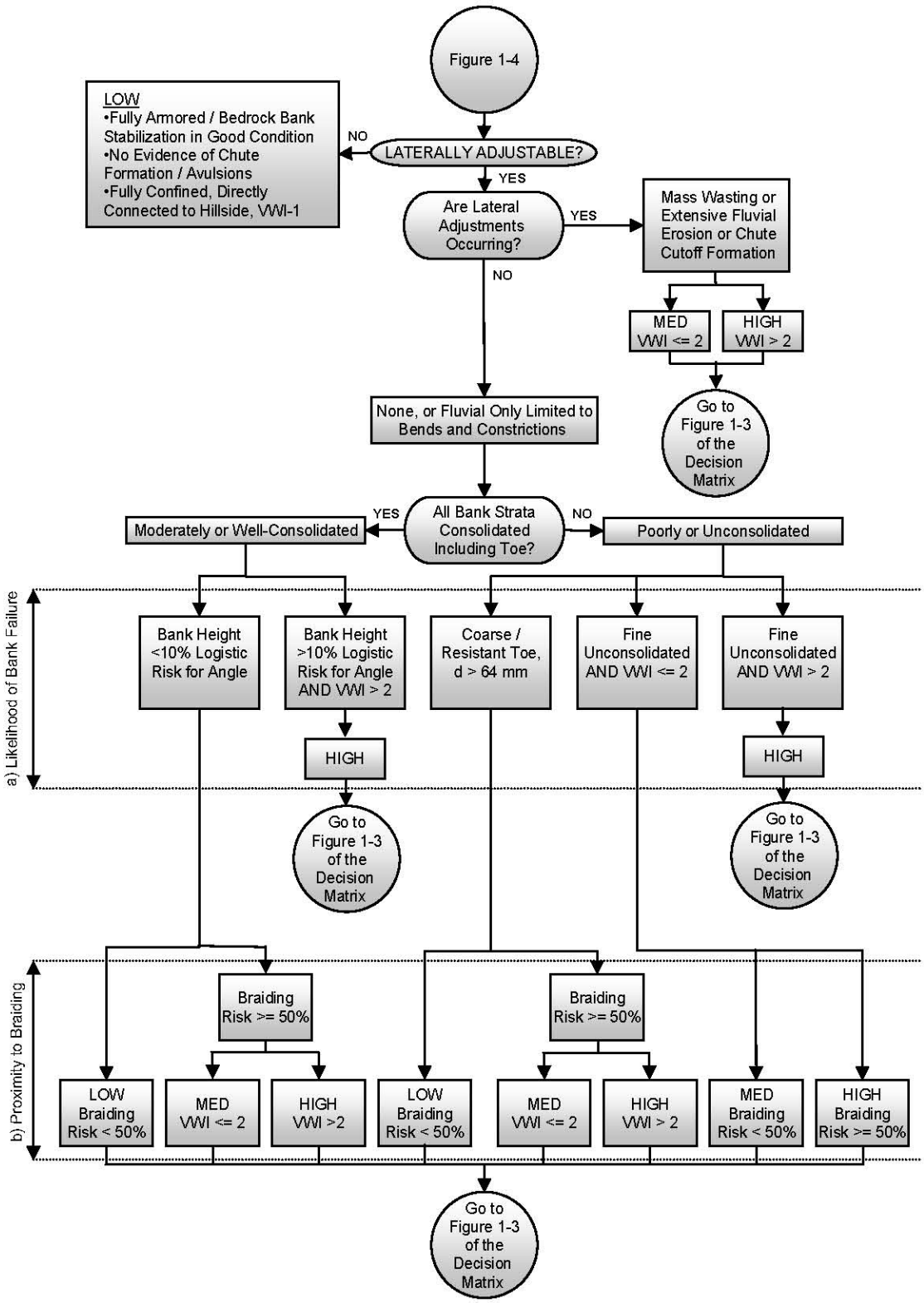

FIGURE 1-5. SCCWRP Lateral Channel Susceptibility. *For a description of how to complete this decision matrix refer to Appendix B of the County of San Diego Hydromodification Management Plan.*

Case / Permit No.:_____

HYDROMODIFICATION DETERMINATION AND CERTIFICATION

Please check the box adjacent to the Flow Range in which your stormwater treatment facilities must be sized to control, as determined through Figures 1-2 to 1-5.

- ❑ **Flow Range: $0.1Q_2$ □ Q_{10}**
- ❑ **Flow Range: $0.3Q_2$ □ Q_{10}**
- ❑ **Flow Range: $0.5Q_2$ □ Q_{10}**
- ❑ **HMP Exempt, Not Applicable** (List Exemption Below)
  Exemption: _____

The project engineer and property owner shall complete the following certification.

Engineer□s Certification:

I hereby certify that the project, Case/Permit No.:_____, ***IS / IS NOT (circle one)*** subject to the hydromodification regulations of the City of Encinitas. If the project is subject to hydromodification regulations, I certify that the project will provide satisfactory permanent flow control measures.

I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____
Engineer□s Signature Date

_____
Printed Name of Engineer

_____
Company Name Place Professional Seal Above

Owner□s Certification:

I hereby acknowledge that the project, Case/Permit No.:_____, ***IS / IS NOT (circle one)*** subject to the hydromodification regulations of the City of Encinitas. If the project is subject to hydromodification regulations, I certify that the project will provide satisfactory permanent flow control measures.

I further acknowledge my understanding that permanent flow control features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

_____ _____
Owner 1 Signature Date Owner 2 Signature Date

_____ _____
Printed Name of Owner 1 Printed Name of Owner 2

Case / Permit No.:_____

SUPPLEMENTAL SUBMITTAL REQUIREMENTS FOR PROJECTS SUBJECT TO HMP

Priority Projects required to meet hydromodification mitigation standards shall provide to the City all of the following documentation detailing the project's compliance. This documentation is **in addition to** the minimum submittal requirements for Priority Projects.

A **narrative** presenting the following information:

1) If the project is exempt from HMP requirements, a discussion demonstrating which exemption is being claimed and why the project qualifies must be included.

2) If the project is not exempt from HMP requirements, provide the input parameters for the BMP Sizing Calculator or detail the calculations that were used to determine the size of the treatment facility(ies).

3) If the project is not exempt from HMP requirements, document the stormwater facility(ies) dimensions as determined by the BMP Sizing Calculator or the calculations completed above.

A **map** showing the following details:

1) Location of the project.

2) Delineation of the watershed within which the project is located.

3) Location of the discharge point(s) of stormwater from the project.

4) The Domain of Analysis (as defined in Chapter 1 of the ESM).

5) The downstream hydrologic system (both the engineered stormwater system and the natural system--channels, lagoons, etc).

Note: The City Engineer may pose additional submittal requirements for certain projects.

Appendix B

Construction

B-1	Construction Inventory
B-2	Prioritized Construction Sites Map
B-3	Flow Chart for Inspection Frequencies
B-4	Construction Inspection Form
B-5	Erosion Control Letter
B-6	Construction Enforcement Actions

Appendix B-1 Construction Inventory

Permit #	Permit Type	Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2010-June 30, 2011
54	GI		BIRMINGHAM & MACKINNON	Biannual	28	2	0	2
80	SI		MELBA SAFE ROUTE TO SCHOOL	Biannual	14	2	0	2
185	GI	1423	RAINBOW RIDGE	Biannual	0	1	0	1
215	GI	424	BRIGHTON AVE	Biannual	30	2	0	2
366	GI	742-744	DEWITT	Biannual	15	1	0	1
528	GI	402	SECOND ST aka 207 C Street	Biannual	30	2	0	2
556	GI	135	DAPHNE ST	Biannual	28	2	0	2
578	GI	1531	SAN ELIJO AVE	Biannual	30	2	0	2
675	GI	1719	SAN ELIJO	Biannual	5	2	0	2
776	II	585	CAMINO EL DORADO	Biannual	1	0	0	0
859	GI	721	Dewitt Ave	Biannual	21	2	0	2
944	GI	1501	NEPTUNE AVE	Biannual	30	2	0	2
1000	GI	272	SEEMAN DR	Biannual	28	2	0	2
1001	GI	342	HILLCREST DRIVE	Biannual	17	2	0	2
1010	GI	1865	N. Vulcan Ave	Biannual	15	1	0	1
9482	GI	1635	GASCONY	Biannual	0	1	0	1
9590	GI	721	N VULCAN AVE	Biannual	30	3	0	3
10045	GI	1660	Brahms	Biannual	30	2	0	2
10068	GI	119/133	Mozart	Biannual	30	1	0	1
10068	GI	129	Mozart	Biannual	28	0	0	0
10071	GI	975	EOLUS	Biannual	0	0	0	0
10115	GI	350	COLE RANCH RD	Biannual	13	1	0	1
10116	GI	2209	SERENO VIEW LANE	Biannual	9	1	0	1
10117	GI	1060	HYGEIA AVE	Biannual	30	2	0	2
10150	II	684	Requeza Street	Biannual	0	0	0	0
10153	GI	1521	NEPTUNE AVE	Biannual	30	2	0	2
10172	GI	221	FLORITA STREET	Biannual	6	1	0	1
10252	SG	1516	Calle Pensamientos	Biannual	10	1	0	1
10309	GI	2358	NEWCASTLE AVE	Biannual	30	2	0	2
10315	GI	794	NEPTUNE AVE	Biannual	2	1	0	1
10332	GI		PHOEBE ST @ HWY 101	Biannual	30	2	0	2
10352	GI	1463	SUMMIT AVE	Biannual	13	1	0	1
10360	GI	1729	SAN ELIJO AVE	Biannual	30	2	0	2
10413	GI	747	DORIS DR	Biannual	28	2	0	2
10430	SG	1022	SAXONY RD	Biannual	21	2	0	2
10437	GI	1491	NEPTUNE AVE	Biannual	0	1	0	1
10467	SG	4149	MANCHESTER AVE	Biannual	12	1	0	1
10489	SG	200	SAXONY RD	Biannual	30	2	0	2
10498	CN		PARKING LOT B	Biannual	8	0	0	0
10515	GI	1557-63	CALLE RYAN	Biannual	25	1	0	1
10518	II	586	RANCHO SANTA FE RD	Biannual	12	1	0	1
10525	GI	416-461	SANTA FE DR	Biannual	30	3	0	3
10526	GI	1361	AHLRICH AVE	Biannual	12	2	0	2
10548	GI	1502	ENCINITAS BLVD	Biannual	13	3	0	3
10576	SG	1845	LAHOUD DR	Biannual	25	1	0	1
10578	SG	599	CAMINO EL DORADO	Biannual	25	1	0	1
10640	GI	1761	HAYDN DR	Biannual	15	1	0	1
10642	GI	441	RANCHO SANTA FE RD	Biannual	4	1	0	1
10653	SG	1835	LAHOUD DR	Biannual	21	3	0	3
10654	GI	1525	SUMMIT AVE	Biannual	0	0	0	0

Appendix B-1 Construction Inventory

Permit #	Permit Type	Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2010-June 30, 2011
10658	GI		JASON ST AT N COAST HWY 101	Biannual	4	1	0	1
10757	SG	610	OCEAN VIEW AVE	Biannual	11	2	0	2
278	GI	3403	BUMANN RD.	Biweekly	2	0	0	0
325	GI		LONE JACK RD	Biweekly	2	0	0	0
369	GI	1415	RAINBOW RIDGE	Biweekly	2	0	0	0
583	SG	2898	LONE JACK ROAD	Biweekly	2	0	0	0
692	GI	1435	RAINBOW RIDGE	Biweekly	2	0	0	0
716	GI	662	ENCINITAS BLVD. @ QUAIL GARDENS	Biweekly	2	0	0	0
718	GI	687	S. COAST HIGHWAY 101	Biweekly	10	0	0	0
9481	GI	500	QUAIL GARDENS	Biweekly	2	0	0	0
10351	GI		RANCHO SUMMIT DR	Biweekly	4	0	0	0
10404	SG	3211	Wildflower Valley Dr	Biweekly	4	0	0	0
10425	SG	409	BRIDOON TERRACE	Biweekly	22	0	0	0
10470	CN		S COAST HWY BY SAN ELIJO LAGOON	Biweekly	2	0	0	0
10584	GI	3214	FORTUNA RANCH RD	Biweekly	14	0	0	0
187	GI	1060	URANIA AVE	Monthly	25	5	0	5
245	GI	3351	LILAC SUMMIT	Monthly	0	1	0	1
372	GI	1657	N. VULCAN AVE.	Monthly	0	1	0	1
388	GI	1435	LAKE DR.	Monthly	0	2	0	2
482	GI	1864	CREST DRIVE	Monthly	26	6	0	6
570	GI	489	LATIGO ROW (formerly 3557 Lone Hill Lane)	Monthly	26	8	0	8
883	GI	1058/1076	HYMETTUS	Monthly	18	6	0	6
886	GI	1084 & 1086	NEPTUNE AVE	Monthly	0	1	0	1
912	GI	416	Rancho Santa Fe Rd	Monthly	0	0	0	0
926	SG	234	RANCHO SANTA FE RD.	Monthly	0	1	0	1
947	GI	1555	BELLA VISTA	Monthly	0	0	0	0
949	GI	1007-1021	HERMES AVE	Monthly	8	1	0	1
963	GI	1150	MELBA RD	Monthly	19	5	0	5
1469	GI	1555	BELLA VISTA	Monthly	0	0	0	0
7601	GI	1255	BIRMINGHAM	Monthly	0	1	0	1
7893	GI	600	Christine Place (PIRAEUS & PLATO)	Monthly	0	1	0	1
8091	GI	2145	13TH STREET	Monthly	9	1	0	1
9106	GI	Vulcan Townhomes	NORTH VULCAN AVE	Monthly	0	1	0	1
9117	GI	236/268	ANDREW	Monthly	0	1	0	1
9262	GI	840	BRACERO RD	Monthly	0	1	0	1
9278	GI		OFF LONE HILL LN	Monthly	18	6	0	6
9303	GI	875/887	BRITTANY	Monthly	0	1	0	1
9336	GI	290	ANDREW	Monthly	4	2	0	2
10042	GI	1450	BLUE HERON DR	Monthly	23	5	0	5
10087	GI	237	Seeman Dr	Monthly	0	1	0	1
10090	GI	3183	Wildflower/Narcissus Summit	Monthly	21	6	0	6
10205	GI	3055	BROOKSIDE LANE	Monthly	25	5	0	5
10211	GI	211	SAXONY RD	Monthly	30	8	0	8
10225	SG	2207	SERENO VIEW LN	Monthly	0	0	0	0
10305	GI	354	SANTA FE DR	Monthly	23	5	0	5
10323	GI	950	SAXONY RD	Monthly	26	7	0	7
10375	GI	1010	N EL CAMINO REAL	Monthly	16	5	0	5
10501	GI	3177	WILDFLOWER SUMMIT	Monthly	24	6	0	6
10523	GI	453	SANTA FE DR	Monthly	18	5	0	5
10528	GI	422	Requeza Street	Monthly	16	4	0	4
10536	GI	1492	HYMETTUS	Monthly	16	3	0	3
10672	SG	1534	CREST DRIVE	Monthly	5	2	0	2
CMD06E			LONE JACK STRATFORD KNOLL	Monthly	22	5	0	5
CMS09F			CARDIFF SAFE ROUTE TO SCHOOL	Monthly	17	5	0	5
			FY 2010-11 Total Inspections		**NA**	**200**	**0**	**200**

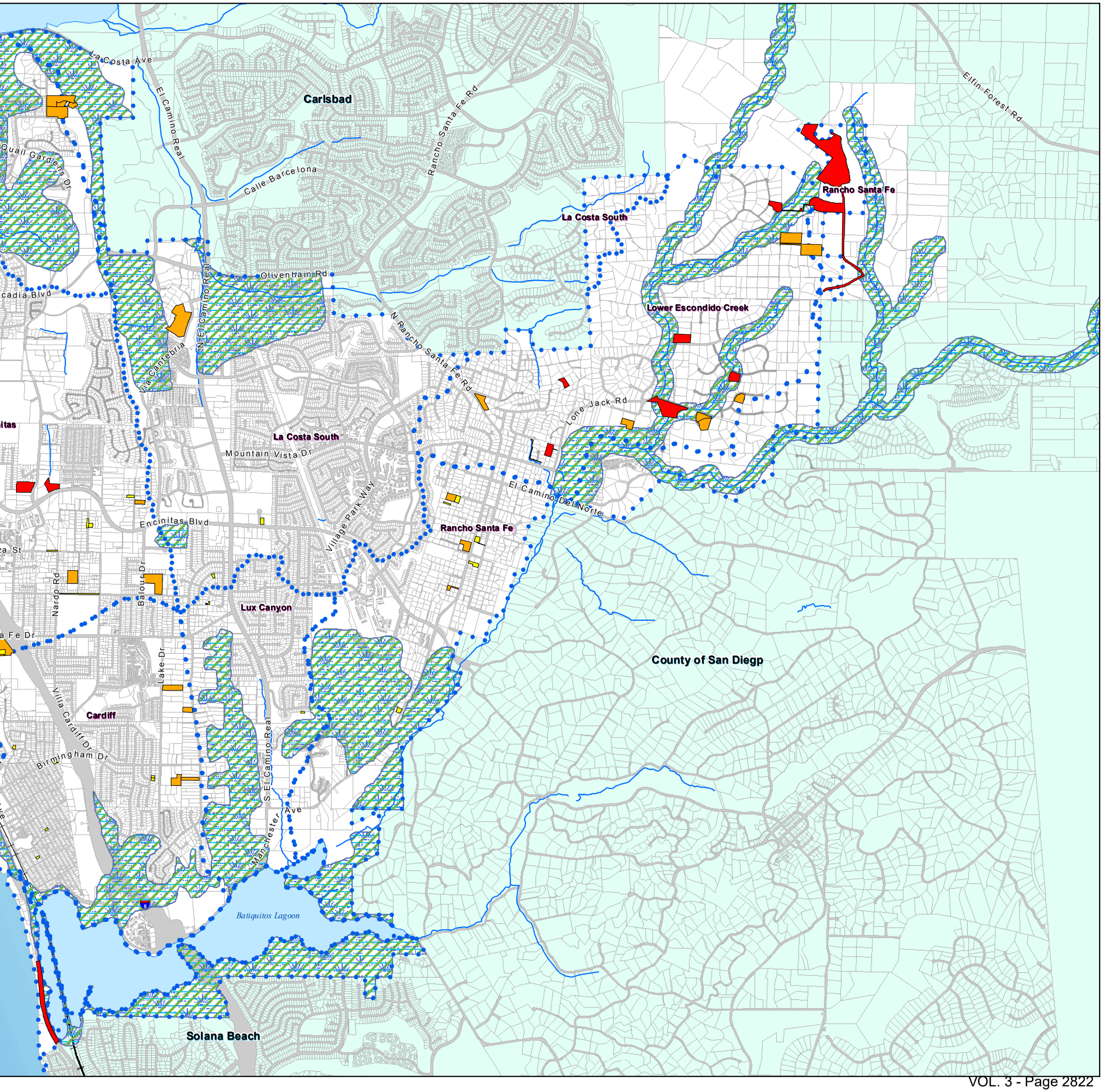
Carlsbad
La Costa Ave
El Camino Real
Quail Gardens Dr
Calle Barcelona
Rancho Santa Fe Rd
Elfin Forest Rd
Rancho Santa Fe
La Costa South
Olivenhain Rd
N El Camino Real
Lower Escondido Creek
N Rancho Santa Fe Rd
Via Cantebria
Lone Jack Rd
La Costa South
Mountain Vista Dr
El Camino Del Norte
Encinitas Blvd
Village Park Way
Rancho Santa Fe
Nardo Rd
Balour Dr
Lux Canyon
Lake Dr
County of San Diegp
Villa Cardiff Dr
Cardiff
Birmingham Dr
S El Camino Real
Manchester Ave
Batiquitos Lagoon
Solana Beach

2823

GIS Script Process for Determining Construction Project Inspection Frequencies

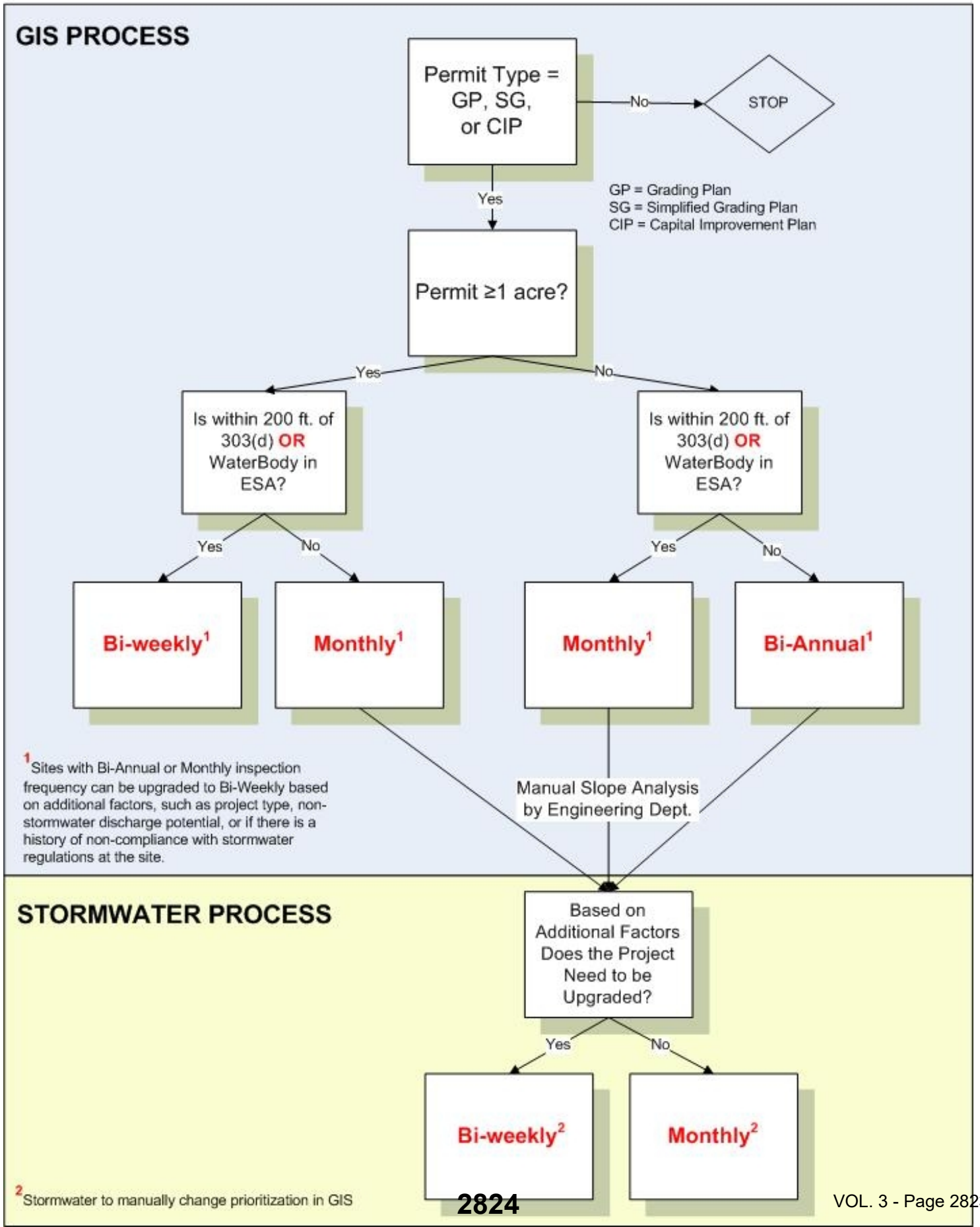

CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Construction Activities

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

Property Address: _____ Inspection Date: _____

Contact Person: _____ Permit No: _____

Phone Number: _____ Project Size: _____

Site Status: ❒ Active ❒ Inactive ❒ First Inspection ❒ Final Sign-Off Date__/__/__

Inspection Frequency: ❒ Bi-Weekly ❒ Monthly ❒ Bi-Annual ❒ Post Rain Event ❒ Complaint Assessment

State General Construction Permit? ❒ Yes ❒ No WDID _____

Is Project SWPPP on Site? ❒ Yes ❒ No

Qualified SWPPP Practitioner (QSP) Name: _____ Phone Number: _____

MINIMUM BEST MANAGEMENT PRACTICE (BMP) REQUIREMENTS		BMP INSTALLATION REQUIRED	BMP REQUIRES MAINTENANCE	OTHER CORRECTIVE ACTIONS REQUIRED
A. Erosion Control BMPs				
1	**Slope Soil Stabilization**			
2	**Silt Fencing**			
3	**Check Dams Rip Rap**			
4	**Fiber Rolls**			
5	**Permanent Landscaping**			
6	**Preserving Existing Vegetation**			
7	**Diversion Channel for Run-On**			
8	**Other:**			
B. Sediment Control BMPs				
1	**Storm Drain Inlet Protection**			
2	**Detention Basin Desilting Basin**			
3	**Perimeter Protection**			
4	**Stabilized Construction Entrance Exit**			
5	**Other:**			
C. Materials Management BMPs				
1	**Stockpile Management**			
2	**Material Washout Area**			
3	**Equipment Storage**			
4	**Trash, Litter, Debris Management**			
5	**Designated Washout Area(s)**			
6	**Sanitary Waste Area Management**			
7	**Fuel Chemical Storage**			
8	**Other:**			

Corrective Actions: ❒ Correct Work (*See Comments*) ❒ No Corrective Actions Required

❒ Referred to the Clean Water Program ❒ Stop Work/NOV

Comments:_____

_____

_____

_____

Corrective Actions identified above must be addressed, to the satisfaction of the City Inspector, within _____ days from the date above OR prior to the next predicted rain event. Failure to comply by this date may result in further enforcement action by the City of Encinitas.

Inspector (Signature) _____ Date ___/___/___

Received By (Signature) _____ Date ___/___/___

COPY DISTRIBUTION White – Responsible Party Yellow – City Inspector Pink – File REVISED 3/1/11

CITY OF ENCINITAS

CLEAN WATER PROGRAM

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

CONSTRUCTION SITE STORMWATER MANAGEMENT AND DISCHARGE CONTROL

All construction projects in the City of Encinitas are required to implement minimum Best Management Practices (BMPs) as necessary to comply with the current State General Municipal Stormwater Permit, State General Construction Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance (EMC 20.08), and the Grading Ordinance (EMC 23.24). Construction is a dynamic operation where changes are expected. Stormwater BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain effectiveness and may require relocation, revision, and re-installation, particularly as project grading progresses. If minimum BMPs are infeasible or deemed inadequate at any specific site, the City will require the implementation of equivalent or alternative BMPs in order to minimize and/or eliminate non-stormwater discharge.

DEFINITIONS

Best Management Practices or "BMPs" means schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, operation and maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to Storm Water, Receiving Waters, or the Storm Water Conveyance System.

Illegal Discharge is any discharge to the Storm Water Conveyance System that is not composed entirely of Storm Water.

Inactive Construction Site means that construction activities have ceased for a period of 7 or more consecutive calendar days. At any time of the year, an inactive site must be fully protected from erosions and discharges of sediment.

State General Construction Storm Water Permit means State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities, and any amendments thereto.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains.

Wet Season means October 1 thru April 30 of each year.

EMC 20.08.040 • ILLEGAL DISCHARGES

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

EMC 20.08.050 • NOTIFICATION AND MITIGATION OF ILLEGAL DISCHARGES

A Discharger shall immediately notify the City Engineer of an Illegal Discharge and take immediate action to control and contain the Illegal Discharge. The Discharger shall also mitigate any damage caused by the Illegal Discharge.

EMC 20.08.070 • LITTERING SWEEPING

No person shall throw, deposit, leave, maintain, keep or permit to be thrown, deposited, placed, left or maintained, any refuse, pet waste, rubbish, garbage, or other discarded or abandoned objects, in or upon any street, alley, parking lot, sidewalk, curb, gutter, storm drain, catch basin, conduit, or other drainage structure or lot except in receptacles maintained for the regular disposal of garbage. Impervious surfaces which drain directly or indirectly into the Storm Water Conveyance System shall be kept free of dirt and debris by regular sweeping. The sweepings shall be placed in garbage receptacles and shall not be allowed to enter the Storm Water Conveyance System.

EMC 20.08.080 • COMPLIANCE WITH BEST MANAGEMENT PRACTICES

No Discharger shall fail to implement, install, use, or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

City of Encinitas

September 20, 2010

RE: **SEDIMENT AND EROSION CONTROL**

City of Encinitas Permit Holder:

Please be advised that starting October 1, 2010 and continuing through April 30, 2011, the City will enter into the official wet season as defined by the State Water Resources Control Board. As such, all construction projects (active or inactive) are required to implement sediment and erosion control Best Management Practices (BMPs) to prevent the discharge of sediment and non-stormwater into the stormwater conveyance system and local water bodies.

Ultimately, for permit holders within the City of Encinitas, the wet season brings with it a responsibility for erosion and sediment control as outlined in sections 23.24.370, 23.24.380 and 23.24.390 of the City of Encinitas' Municipal Code. For your reference, a copy of these Municipal Code sections has been enclosed with this letter. The full text of the Municipal Code can also be accessed on the City's website at http://www.ci.encinitas.ca.us/Government/PublicD/MunicipalCode/

Please feel free to address any questions regarding this work to your City of Encinitas Engineering Inspector.

Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

Cc: City of Encinitas Engineering Inspectors

Encl: North County Storm Water Program Construction Brochure
City of Encinitas Municipal Code Sections 23.24.370, 23.24.380, and 23.24.390

505 South Vulcan Avenue, Encinitas, CA 92024, TEL: 760/633-2600 FAX: 760/633-2627 TDD: 760/633-2700

23.24.360 - Transfer of Responsibility for Approval. If the civil engineer, the soil engineer, the engineering geologist, the testing agency or the grading contractor of record are changed during the course of the work, the work shall be stopped unless and until: (1) the owner submits a letter of notification verifying the change of the responsible professional; and (2) the new responsible professional submits in writing that all prior reports and/or plans (specified by date and title) and work performed by the prior responsible professional have been properly reviewed and all findings, conclusions, and recommendations are appropriate, and the work performed is consistent with standard engineering practices. The new responsible professional may modify or revise recommendations, specifications or work performed if accompanied by supporting data and approved by the City Engineer. The new responsible professional must state that all responsibility within the purview of the area of professional responsibility is assumed as of a specified date. All exceptions must be justified in writing to the satisfaction of the City Engineer. (Ord. 2008-03)

23.24.370 - Wet Season Work.

A. Grading shall be minimized during the wet season to the extent feasible. Grading operations shall be phased as necessary to allow minimal exposure of disturbed soils during the grading operation. If grading does occur during the wet season, the City Engineer may require the applicant to implement additional best management practices for any rain events that may occur. No grading permit shall be issued for work occurring from October 1 to April 30 unless the plans include details of protective measures, including de-silting basins or other temporary drainage control measures, or both, as may be deemed necessary by the City Engineer to protect adjoining public and private property or the Waters of the State from damage by erosion, flooding, or the deposit of mud or debris which may originate from the site or result from grading operations. (Ord. 2008-03)

B. If grading is begun prior to October 1st, all protective measures shall be installed prior to October 1st. If grading is begun on or after October 1st, all protective measures shall be installed before grading is begun. All protective measures shall be maintained in good working order until April 30th of the succeeding year, where grading is done between October 1st and December 31st, or until April 30th of the same year where grading is done between January 1st and April 30th, unless their removal at an earlier date is approved by the City Engineer. (Ord. 2008-03)

C. Where a grading permit is issued and the work is commenced after April 15th and before September 15th of any year, and the permit was issued without an Interim Erosion and Sediment Control Plan, and it appears that the grading and installation of the permanent drainage devices as authorized by the permit will not be completed prior to October 1, then on or before September 15th, the owner of the site on which the grading is being performed shall file or cause to be filed with the City Engineer an Interim Erosion and Sediment Control Plan as provided for in this Chapter and shall implement the measures contained in the approved plan by October 1.

The plan check fee for the Interim Erosion and Sediment Control Plan shall be paid at the time of plan submittal and shall be in the amount provided for in this Chapter.

D. For continuation of grading activities, other than installation, maintenance, or repair of measures on the Erosion Control Plans, during the wet season, Permittee must apply for and receive, every seven days, special permission to proceed.

E. The City Engineer shall grant permission under this section on the basis of weather forecasts, site conditions, experience and other pertinent factors which indicate the activity may commence or continue without excessive erosion occurring.

F. Should the Permittee fail to submit the plans, fail to provide the protective measures or fail to obtain permission for wet season activities as required by this Chapter by the dates specified therein, it shall be deemed that a default has occurred under the conditions of the grading permit security. Thereupon the City Engineer may enter the property for the purpose of installing, by City forces or by other means, the drainage and erosion control devices shown on the approved plans, or if there are not approved plans, as may be deemed necessary to protect adjoining property from storm damage, or the City Engineer may cause the owner of the site to be prosecuted as a violator of this code, or both actions may be taken. (Ord. 2008-03)

G. The City Engineer shall have the authority to require implementation of all erosion control systems and requirements at any time of the year.

23.24.380 - Erosion Control System.

A. Erosion prevention shall be considered the most important erosion control measure, with sediment controls as a necessary backup. The faces of cut and fill slopes and the project site shall be prepared and maintained to control against erosion and runoff in accordance with this Chapter. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted only upon approval of the City Engineer. (Ord. 2008-03)

B. Paved streets, sidewalks, and other improvements shall be maintained in a neat and clean condition free of loose soil, construction debris and trash. Street sweeping or other equally effective means shall be used on a regular basis to prevent storm flows from carrying sediment and debris outside the project boundaries. Watering shall not be used to clean streets except for fine material not otherwise removed by sweeping or other mechanical means.

C. The registered civil engineer who prepared the grading plan and designed the erosion control devices shall be responsible for modification of the design of devices, as necessary, during the rainy season.

D. Desilting facilities shall be provided at drainage outlets from the graded site.

E. Desilting basins shall be designed in accordance with City standards. Permanent desilting facilities shall be designed and constructed as to be aesthetically compatible with the surrounding development and terrain.

F. Desilting basins constructed of compacted earth shall be compacted to a relative compaction of ninety (90) percent of maximum density. A soil engineering report, prepared by the soil engineer, which includes the type of field testing performed, location and results of testing shall be submitted to the City Engineer for approval upon completion of the desilting basins.

G. Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available onsite and stockpiled at convenient locations to facilitate rapid construction of temporary device when rain is imminent.

H. Erosion protection shall consist of effective planting of all cut slopes in excess of three (3) feet high and fill slopes more than three (3) feet high unless otherwise approved by the City Engineer. Slopes exceeding five (5) feet high will require an approved sprinkler system, as determined by the City Engineer. (Ord. 2008-03)

I. Protection for the slopes shall be installed as soon as practicable which may be prior to rough grade approval. Effective planting shall be installed, fully germinated and effectively cover the required slopes prior to final approval unless otherwise approved by the City Engineer.

J. The erosion control provisions shall take into account drainage patterns during the current and future phases of grading throughout the rainy season.

K. All removable protective devices shown shall be in place at the end of each working day when the five (5) day rain probability forecast exceeds forty (40) percent.

L. Unvegetated slopes shall be protected in accordance with the guidelines set forth by the Erosion and Sediment Control Manual or in accordance with other requirements set forth by the City Engineer.

23.24.390 - Erosion Control Maintenance.

A. After each rainstorm exceeding 1/4-inch in a 12 hour period, silt and debris shall be removed from all temporary check berms and desilting basins and the basins pumped dry. The requirement to clean and pump permanent desilting basins will be addressed on a case by case basis. No person shall allow the removed silt and debris to enter the Storm Water Conveyance System. (Ord. 2008-03)

B. After each rainstorm, the performance of the erosion control system shall be evaluated and revised and repaired as necessary.

C. Devices shall not be moved or modified without the approval of the City Engineer.

D. The contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a threat to public health, safety and welfare.

E. The contractor, the Permittee, and project owner shall be jointly and severally responsible for the continued maintenance of the devices during the wet season. In the event of failure or refusal by the contractor, permittee or project owner to maintain the devices, the City Engineer may cause emergency maintenance work to be done to protect adjacent private property, public property or the Waters of the State. The cost shall be charged to the owner and shall include an initial mobilization cost plus the cost of doing the work as provided for in this Chapter. (Ord. 2008-03)

F. In the event the City Engineer must cause emergency maintenance work to be done, the grading permit may be revoked in writing. The permit shall not be renewed until an erosion control system approved by the City Engineer is installed and a fee of one-half the amount required for the original permit is paid by the owner. The City Engineer may waive installation of an erosion control system after April 15. (Ord. 2008-03)

G. If any grading subject to the provisions of this Chapter has commenced on private property without a valid grading permit, the property owner shall be required to prepare and implement an erosion control plan which has been approved by the City Engineer. In the event of failure by the property owner to install an approved erosion control system, the City Engineer may cause emergency work to be done to protect adjacent private property, public property or the Waters of the State. (Ord. 2008-03)

23.24.400 - Dry Season Work. The Permittee conducting any earth moving operations under this Ordinance shall be responsible for controlling dust at all times. Provisions for dry season dust control shall be included in the grading plan. (Ord. 2008-03)

23.24.410 - Import and Export of Materials. Where transport of earth is proposed on public roadways from or to the site of an earth grading operation, the following requirements in A through D shall apply. In those instances where an excess of two thousand (2,000) cubic yards of earth per project site is transported on public roadways, in addition to requirements A through D, requirements E through G shall also apply. (Ord. 2008-03)

A. Either water or dust palliative, or both, must be applied for the alleviation or prevention of excessive dust resulting from the loading or transportation of earth from or to the project site on public roadways. The Permittee shall be responsible for maintaining public rights-of-way used for handling purposes in a condition free of dust, earth, or debris attributed to the grading operation.

Appendix B-6 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
11/1/10	Mackinnon & Birmingham	BMP Installation and Maintenance Required	1						1	
10/20/10	1450 Blue Heron Dr	BMP Installation Required	1						1	
11/23/10	424 Brighton	BMP Installation Required	1						1	
10/19/10	3055 Brookside Ln	BMP Installation and Maintenance Required	1						1	
11/18/10	3055 Brookside Ln	BMP Installation Required	1						1	
1/25/11	3055 Brookside Ln	BMP Maintenance Required	1						1	
11/3/10	207 C Street	BMP Installation Required	1						1	
11/1/10	599 Camino El Dorado	BMP Maintenance Required	1						1	
10/22/10	Cardiff Safe Route to School	BMP Installation Required	1						1	
10/27/10	600 Christine Place	BMP Installation and Maintenance Required	1						1	
10/12/10	687 S Coast Hwy 101	BMP Installation Required	1						1	
10/28/10	687 S Coast Hwy 101	BMP Installation Required	1						1	
11/2/10	350 Cole Ranch Rd	BMP Installation Required	1						1	
11/2/10	747 Doris Dr	BMP Installation Required	1						1	
2/14/11	1502 Encinitas Blvd	BMP Maintenance Required	1						1	
3/30/11	1502 Encinitas Blvd	BMP Maintenance Required	1						1	
4/4/11	1502 Encinitas Blvd	BMP Installation and Maintenance Required	1							1
11/2/10	221 Florita	BMP Installation Required	1						1	
2/3/11	3214 Fortuna Ranch Rd	BMP Installation and Maintenance Required	1						1	
2/17/11	3214 Fortuna Ranch Rd	BMP Maintenance Required	1						1	
3/3/11	3214 Fortuna Ranch Rd	BMP Maintenance Required	1						1	
10/26/10	1635 Gascony Rd	BMP Maintenance Required	1						1	
4/29/11	1007-1021 Hermes Ave	BMP Installation Required	1						1	
12/3/10	1060 Hygeia Ave	BMP Maintenance Required	1						1	
10/22/10	1058-1076 Hymettus Ave	BMP Installation Required	1						1	
1/3/11	1076 Hymettus Ave	BMP Installation and Maintenance Required	1			200	CW010311A			1
3/24/11	1058-1076 Hymettus Ave	BMP Maintenance Required	1							1
2/23/11	1492 Hymettus Ave	BMP Maintenance Required	1						1	
3/23/11	1492 Hymettus Ave	BMP Installation and Maintenance Required	1							1
12/21/10	1835 Lahoud Dr	BMP Installation Required	1						1	
3/15/11	1835 Lahoud Dr	BMP Installation and Maintenance Required	1						1	
3/24/11	1835 Lahoud Dr	BMP Maintenance Required	1			200	CW032411D			1
10/22/10	1845 Lahoud Dr	BMP Installation Required	1						1	
10/19/10	3351 Lilac Summit	BMP Installation and Maintenance Required	1						1	
10/22/10	Lone Jack Stratford Knoll	BMP Maintenance Required	1						1	
11/22/10	Lone Jack Stratford Knoll	BMP Installation Required	1						1	
12/17/10	Lone Jack Stratford Knoll	BMP Maintenance Required	1						1	
2/8/11	1150 Melba Dr	BMP Installation and Maintenance Required	1						1	
3/21/11	1150 Melba Dr	BMP Maintenance Required	1						1	
3/24/11	1150 Melba Dr	BMP Installation and Maintenance Required	1							1
4/26/11	1150 Melba Dr	BMP Maintenance Required	1						1	
10/26/10	234 Rancho Santa Fe Rd	BMP Maintenance Required	1						1	
3/21/11	422 Requeza	BMP Installation Required	1						1	
3/24/11	422 Requeza	BMP Maintenance Required	1			200	CW032411			1
1/4/11	1531 San Elijo Ave	BMP Installation and Maintenance Required	1			200	CW010411			1
3/21/11	1531 San Elijo Ave	BMP Maintenance Required	1			400	CW032411A			1
3/24/11	1719 San Elijo Ave	BMP Maintenance Required	1			200	CW032411B			1
12/21/10	1729 San Elijo Ave	BMP Installation Required	1						1	
10/20/10	354 Santa Fe Dr	BMP Installation and Maintenance Required	1						1	
11/16/10	354 Santa Fe Dr	BMP Installation Required	1						1	
2/8/11	354 Santa Fe Dr	BMP Installation Required	1						1	
10/26/10	200 Saxony Rd	BMP Installation Required	1						1	
10/26/10	950 Saxony Rd	BMP Installation Required	1						1	
11/16/10	950 Saxony Rd	BMP Maintenance Required	1						1	
1/18/11	950 Saxony Rd	BMP Installation and Maintenance Required	1						1	
11/4/10	272 Seeman Dr	BMP Installation and Maintenance Required	1						1	
11/3/10	1463 Summit Ave	BMP Maintenance Required	1						1	
4/27/11	2145 Thirteenth St	BMP Installation Required	1						1	
10/22/10	1060 Urania	BMP Installation Required	1						1	
11/22/10	1060 Urania	BMP Installation and Maintenance Required	1						1	
12/23/10	721 N Vulcan Ave	Illegal Dewatering of Site	1			200	CW122310C			1
10/26/10	1657 N Vulcan Ave	BMP Maintenance Required	1						1	
11/17/10	3177 Wildflower Summit	BMP Installation Required	1						1	
12/9/10	3177 Wildflower Summit	BMP Installation Required	1						1	
2/23/11	3177 Wildflower Summit	BMP Installation and Maintenance Required	1						1	
10/13/10	3183 Wildflower Summit	BMP Installation Required	1						1	
10/28/10	3183 Wildflower Summit	BMP Installation Required	1						1	
		Totals	**67**	**0**	**0**	**1,600**	**NA**	**0**	**56**	**11**

Appendix C

Municipal

C-1 Municipal Inventory

C-2 Municipal Activities Report

C-3 Municipal BMP Map

C-4 Special Events Permit P2 Questionnaire

C-5 Approved Special Events

C-6 Routine Inspections Summary

	Facility Name	Address	Land Use/Activities	Tributary to a 303(d) Impaired Water Body	Inspection Priority	Sub-basin
1	"A" TANK SITE	601 SANTA FE DR	Tank storage site/municipal yard	NOT TRIBUTARY	High Priority	Encinitas
2	BEACON'S BEACH	948 NEPTUNE AVE	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
3	CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Administrative offices/municipal yard/vehicle maintenance/materials storage	NOT TRIBUTARY	High Priority	Encinitas
4	CARDIFF SPORTS PARK	1661 LAKE DR	Recreational facilities/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
5	CARDIFF SPORTS PARK EXPANSION	1623 LAKE DR	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
6	COTTONWOOD CREEK PARK	95 N. VULCAN AVE	Park/landscaped areas/parking lot	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
7	ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DR	Golf course	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
8	ENCINITAS VIEWPOINT PARK	56 E D STREET	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
9	GLEN PARK	2149 ORINDA DR	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
10	GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
11	H STREET VIEWPOINT	498 H STREET	Vista point	NOT TRIBUTARY	High Priority	Encinitas
12	HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
13	J STREET VIEWPOINT	398 J STREET	Vista point/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
14	LAS VERDES PARK	1390 PASEO DE LAS VERDES	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
15	LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	La Costa South
16	LEUCADIA OAKS PARK	1511 N. VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
17	LEUCADIA ROADSIDE PARK	860 N COAST HIGHWAY 101	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
18	LITTLE OAKS EQUESTRIAN PARK	2879 LONE JACK RD	Park/horse corral/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek
19	MILDRED MACPHERSON PARK	1045 S VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
20	MOONLIGHT BEACH	400 B STREET	Beach access/park/landscaped area/parking lot	TRIBUTARY TO PACIFIC OCEAN SHORELINE	High Priority	Encinitas
21	MS4	CITY WIDE	MS4	TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
22	OAKCREST PARK	1219 ENCINITAS BLVD	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
23	ORPHEUS PARK	482 ORPHEUS AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
24	PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
25	REQUEZA STREET FACILITY	397 REQUEZA ST	Municipal yard/sediment/materials storage	NOT TRIBUTARY	High Priority	Encinitas
26	ROADS, STREETS AND HIGHWAYS	CITY WIDE		TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
27	WASTEWATER COLLECTION FACILITY	2695 MANCHESTER AVE	Administrative offices/Municipal yard	NOT TRIBUTARY	High Priority	Cardiff
28	SCOTT VALLEY PARK	1602 WILLOWHAVEN	Park/landscaped areas	TRIBUTARY TO ENCINITAS CREEK	High Priority	La Costa South
29	SPECIAL EVENTS	CITY WIDE	Recreational facilities, parks, landscaped areas, roads, streets and highways	MAY BE TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
30	SUN VISTA PARK	2011 AVENIDA LA POSTA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
31	SWAMI'S BEACH	1298 S COAST HIGHWAY 101	Beach access/parking lot	NOT TRIBUTARY	High Priority	Encinitas
32	WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek/Ranch Santa Fe
33	CARDIFF PUMP STATION	2690 MANCHESTER AVE	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
34	CIVIC CENTER	505 S VULCAN AVE.	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	Encinitas
35	ENCINITAS COMMUNITY & SENIOR CENTER	1140 OAKCREST PARK DR	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	La Costa South
36	D STREET BEACH	450 D STREET	Beach access and vista point	TRIBUTARY TO PACIFIC OCEAN SHORELINE	Low Priority	Encinitas
37	FIRE STATION #1	415 2ND ST	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
38	FIRE STATION #2	1867 MACKINNON	Fire station	NOT TRIBUTARY	Low Priority	Cardiff
39	FIRE STATION #3	801 ORPHEUS AVE	Fire station	NOT TRIBUTARY	Low Priority	Leucadia
40	FIRE STATION #4	2011 VILLAGE PARK	Fire station	NOT TRIBUTARY	Low Priority	La Costa South
41	FIRE STATION #5	540 BALOUR DR	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
42	HALL PROPERTY	425 SANTA FE DR.	Undeveloped park site	NOT TRIBUTARY	Low Priority	Cardiff
43	HIGHWAY 101 PUMP STATION	S. COAST HIGHWAY 101	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
44	I STREET VIEWPOINT	498 I STREET	Vista point	NOT TRIBUTARY	Low Priority	Encinitas
45	INDIAN HEAD CANYON	SAXONY ROAD/QUAIL HOLLOW DR	Undeveloped park site	NOT TRIBUTARY	Low Priority	Leucadia
46	MOONLIGHT BEACH PUMP STATION	305 THIRD ST.	Pump station	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas
47	OLIVENHAIN PUMP STATION	MANCHESTER/I-5	Pump Station	NOT TRIBUTARY	Low Priority	Cardiff
48	PHOEBE PUMP STATION	1200 block of N. Coast Highway 101	Pump Station	NOT TRIBUTARY	Low Priority	Leucadia
49	SAN DIEGUITO WATER DISTRICT*		Pump Station	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
50	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
51	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	Encinitas
52	SAN DIEGUITO WATER DISTRICT*		Water recycling reservoir	NOT TRIBUTARY	Low Priority	Encinitas
53	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Encinitas
54	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Cardiff
55	SWAMIS BLUFFS PARCELS	1400 S. COAST HIGHWAY 101	Undeveloped site	NOT TRIBUTARY	Low Priority	Encinitas
56	STANDARD PACIFIC PARK	OLYMPUS / PIRAEUS	Undeveloped site	NOT TRIBUTARY	Low Priority	Leucadia
57	STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach access and vista point	NOT TRIBUTARY	Low Priority	Leucadia
58	UV TREATMENT FACILITY	305 THIRD ST.	UV Treatment Facility	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas

***Note: The San Dieguito Water District's facility addresses have been omitted for security purposes.**

Appendix C-2 Municipal Activities Report

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2010-11 Annual Result
1.	Report on updates to the municipal inventory and prioritization (J.3.a.(3)(c)i).	July 1, 2009-June 30, 2010		See Appendix C-1
2.	Confirmation that the designated BMPs were implemented, or required to be implemented for: municipal areas and activities (J.3.a.(3)(c)ii).	July 1, 2009-June 30, 2010		See Sections 4.2.3, 4.3.3, 4.4.3, 4.5.3 and 4.6.3
3.	Confirmation that the designated BMPs were implemented, or required to be implemented for: special events (J.3.a.(3)(c)ii).	July 1, 2009-June 30, 2010		See Section 4.7.3
4.	A description of inspections and maintenance conducted for municipal treatment controls-Municipal Filter Inserts (J.3.a.(3)(c)iii).	July 1, 2009-June 30, 2010		See Section 4.4.4.1
5.	A description of inspections and maintenance conducted for municipal treatment controls-UV Treatment Facility (J.3.a.(3)(c)iii).	July 1, 2009-June 30, 2010		See Section 4.4.4.1
6.	Identification of the total number of catch basins and inlets (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		1,757
7.	Identification of the number of catch basins and inlets **inspected** (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		2,503
8.	Identification of the number of catch basins and inlets found with accumulated waste exceeding 33% of design capacity ((J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010	All inlets and catch basins within the City are inspected on an annual basis, which is sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris.	0
9.	Identification of the number of catch basins and inlets **cleaned** (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		2,503
10.	Identification of total distance (miles) of the MS4 (J.3.a.(3)(c)v).	July 1, 2009-June 30, 2010		63 miles of pipe
11.	Identification of distance of the MS4 **inspected** (J.3.a.(3)(c)v).	July 1, 2009-June 30, 2010		63.6 miles of pipe
12.	Idenitification of distance of the MS4 found with accumulated waste exceeding cleaning criteria (J.3.a.(3)(c)v).	July 1, 2009-June 30, 2010		0
13.	Identification of distance of the MS4 **cleaned** (J.3.a.(3)(c)v).	July 1, 2009-June 30, 2010		1.54 miles of pipe
14.	Identification of total distance (miles) of open channels (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		2.43 miles

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2010-11 Annual Result
15.	Identification of distance of open channels **inspected** (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		4.86 miles
16.	Identification of distance of open channels found with anthropogenic litter (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		.69 miles
17.	Identification of distance of open channels **cleaned** (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		.69 miles
18.	Amount of waste and litter (tons) removed from catch basins (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010	* The combined total amount of waste and litter removed from catch basins and inlets is 81.3 tons.	81.3 tons *
19.	Amount of waste and litter (tons) removed from inlets (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010	* The combined total amount of waste and litter removed from catch basins and inlets is 81.3 tons.	81.3 tons *
20.	Amount of waste and litter (tons) removed from the MS4 (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		401 tons
21.	Amount of waste and litter (tons) removed from the open channels (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		317 tons
22.	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification of the finding (J.3.a.(3)(c)viii).	July 1, 2009-June 30, 2010		None
23.	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented or required to be implemented for municipal areas and activities (J.3.a.(3)(c)ix).	July 1, 2009-June 30, 2010		See Section 4.3.3.1
24.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating the **highest** volumes of trash and/or debris (J.3.a.(3)(c)x).	July 1, 2009-June 30, 2010		75 curb miles
25.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)x).	July 1, 2009-June 30, 2010	See Section 4.2.4	Weekly

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2010-11 Annual Result
26.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **moderate** volumes of trash and/or debris (J.3.a.(3)(c)xi).	July 1, 2009-June 30, 2010		92 curb miles
27.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xi).	July 1, 2009-June 30, 2010	See Section 4.2.4	Twice a month
28.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **low** volumes of trash and/or debris (J.3.a.(3)(c)xii).	July 1, 2009-June 30, 2010		280 curb miles
29.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xii).	July 1, 2009-June 30, 2010	See Section 4.2.4	Monthly
30.	Identification of the total distance of curb-miles swept (J.3.a.(3)(c)xiii).	July 1, 2009-June 30, 2010		Approximately 11,330 miles
31.	Identification of the number of municipal parking lots (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010		4
32.	Identification of the number of municipal parking lots swept (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010		4
33.	Identification of the frequency of sweeping (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010	All beach parking lots are swept once per week April through September and once per month October through March.	See Section 4.2.4
34.	Amount of material (tons) collected from street and parking lot sweeping (J.3.a.(3)(c)xv).	July 1, 2009-June 30, 2010		1,861 tons
35.	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 (J.3.a.(3)(c)xvi).	July 1, 2009-June 30, 2010		See Section 4.5.4.1
36.	Identification of the number of fixed municipal sites requiring inspections (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010	Refer to Appendix C-1 list of all High Priority Municipal Facilities	29
37.	Identification of the number of municipal sites inspected (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010		29
38.	Identification of the frequency of inspections (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010		Annual

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2010-11 Annual Result
39.	A description of the general results of the inspections (J.3.a.(3)(c)xviii).	July 1, 2009-June 30, 2010		See Appendix C-6
40.	Confirmation that the inspections conducted addressed all the required inspection steps and follow-ups to determine full compliance (J.3.a.(3)(c)xix).	July 1, 2009-June 30, 2010	All inspections conducted meet BMP requirements	See Appendix C-6
41.	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken (J.3.a.(3)(c)xx).	July 1, 2009-June 30, 2010	In FY 2010-11, there was 1 corrective action and a follow-up inspection as a result of the routine annual inspections at all high priority municipal facilities. Details of the corrective action for all routine municipal inspections can be found in Appendix C-6. The Clean Water Program hotline also received a total of 8 municipal complaints during the reporting period. A total of 8 complaints were investigated which resulted in 6 violations, 0 NOVs, 0 citations, 6 education actions and 3 follow-up inspections.	0
42.	A description of notable activities conducted to manage urban runoff from municipal areas and activities (J.3.a.(3)(c)xxi).	July 1, 2009-June 30, 2010		See Sections 4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4 and 4.7.4

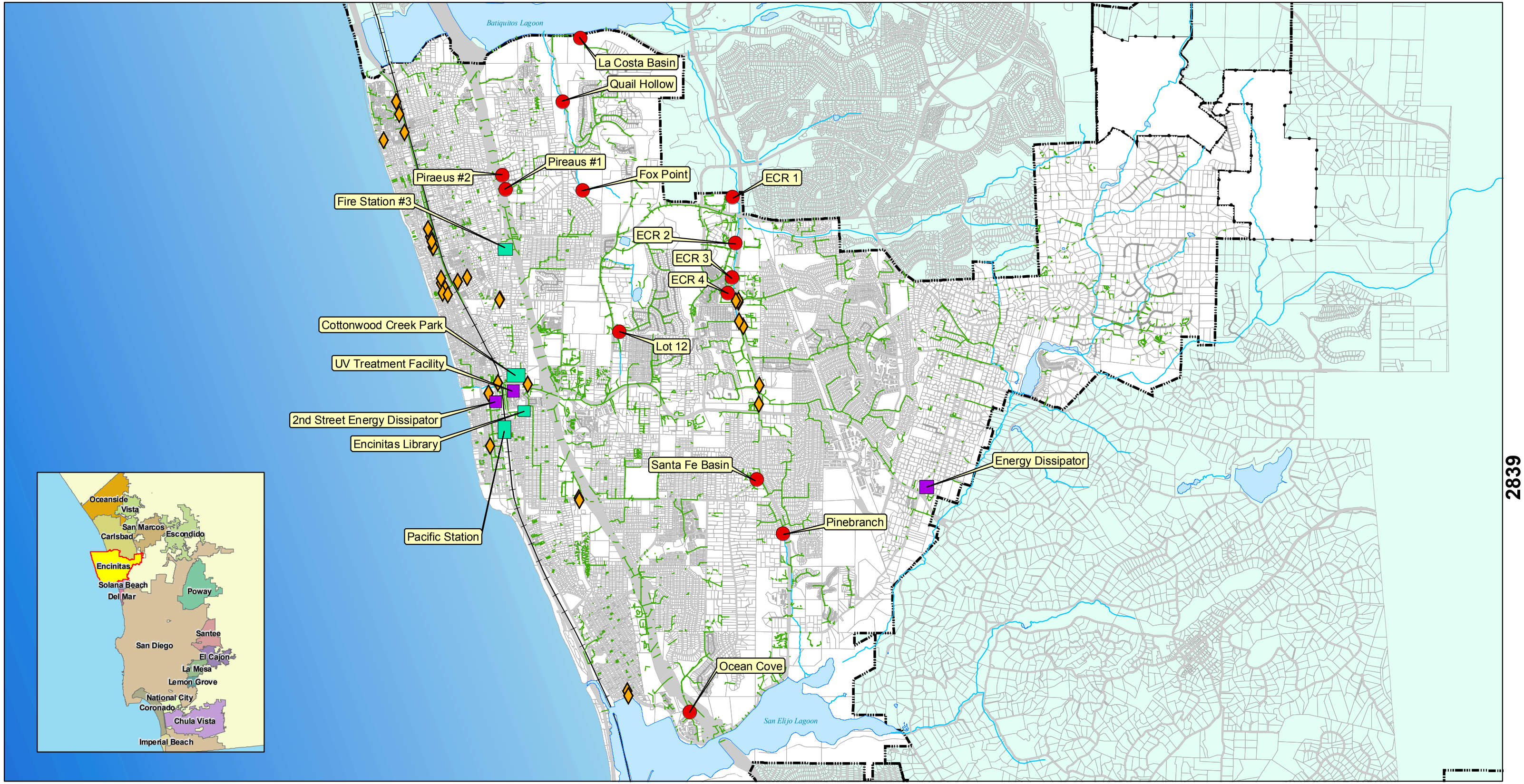

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FY 2010-2011 Encinitas Municipal BMP Locations

- Storm Drain Inlet Filters
- Detention Basin
- Structural BMP
- Multiple BMPs
- Storm Drains
- Streams
- Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

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Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: September, 2011

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0 2,500 5,000 Feet

POLLUTION PREVENTION
(Does not apply to Special Ceremonies)

Storm drains are not connected to the City's sewer system. All pollutants allowed to enter the storm drain system flow directly to our beaches, ocean, lagoons, and other waterways without being treated. The City of Encinitas is required by the San Diego Regional Water Quality Control Board to report on pollution prevention measures taken at special events held throughout the City.

In the area provided on the next page or on a separate sheet of paper, please complete the following questions and describe methods of pollution prevention that will be implemented at your proposed event.

1. Describe how trash, recycling, and debris will be managed (i.e. extra bins, temporary fencing, etc.)

2. If your event will include food production, describe how excess oil and grease will be disposed of. These materials cannot be dumped into the streets or storm drain system.

3. Please identify any other potential pollutant generating sources or activities that may take place (i.e. portable toilets).

For questions, please call the City's Clean Water Program at (760) 633-2787.

Appendix C-5 Approved Special Events in FY 2010-11

	Event	Event Date	Time	Location	Estimated Attendance	Clean-up Deposit required?
1	Cottonwood Creek Environmental Film Series	7/1/10	7-9pm	Pacific Station 687 S Coast Hwy 101	100	
2	Fire Stafey Awareness Event	7/1/10	11:30am-1:30pm	Magdalena Ecke Family YMCA	200	
3	Sunday Summer Concerts	7/11, 7/25, 8/8, 8/22	3pm-5pm	MLB	2000	
4	29th Annual Carlsbad Triathlon	7/11/10	8am-1pm	Tamarack State Beach (Carlsbad)	1100	
5	Encinitas Classic Car Nights	7/15, 8/19, 9/16	5:30-7:30pm	F Street from Hwy 101 to 2nd Street	400	
6	Solana Beach Triathlon & Duathlon	7/25/10	5:30-11am	Hwy 101	1400	
7	St John's Fiesta de las Flores	8/13-8/15	10am-7pm	1001 Encinitas Blvd	7000	
8	Dog Days of Summer	8/14/10	10am-3pm	Cardiff- Liverpool to Chesterfield on Ne	4000	
9	21st Annual Taste of Mainstreet	8/26/10	6pm-9pm	Hwy 101 from Encinitas Blvd to K Stree	1000	
10	LeucadiART Walk	8/29/10	8am-6pm	Hwy101 btwn Marcheta and W. Glaucu	3000	
11	Labor Day Family Picnic	9/6/10	8am-6pm	Oakcrest Park	100	
12	Wavecrest 2010	9/17 & 9/18	12 & 3pm	MLB Parking Lot	5000	
13	Challenge Walk MS 2010	9/24-9/26/10	8am-2pm	Route throughout City	350	
14	26th Annual CA Coastal Cleanup Day	9/25/10	8am-1pm	Swamis, Beacons, MLB	100 per site	
15	Encinitas Lifestyles Fashion Show	9/25/10	5-8pm	710 S Coast Hwy 101- Charlie's	300	
16	16th Annual Oktoberfest	9/26/10	10am-6pm	El Camino Real at Mountain Vista	35000	$300.00
17	Fire Engineer Promotional Testing	9/27/10	8am-6pm	MLB Parking Lot	15	
18	Encinitas Fire Safety Expo	10/2/10	8:30am-2:30pm	MLB Parking Lot	250	
19	Feeling Fit Festival	10/3/10	10am-2pm	951 Via Cantebria- Leo Mullen	800	
20	SD County Library Book Festival	10/9/10	8am-6pm	Viewpoint Park	200	
21	Pink Pancake Breakfast for a Cure	10/10/10	8am-11am	MLB	500	
22	Bike MS Bay to Bay Tour	10/16/10	8am-4pm	MLB Parking Lot	1000	
23	City of Encinitas P&R Community Garage Sale	10/23/10	8am-12pm	Community Center parking lot	300	
24	Cycle for Life	10/30/10	7am-3pm	Mira Costa College	200	
25	ISF High School Surf Team Competition	10/30, 10/31,11/13, 11/14, 3/13	7am-4pm	MLB/D Street Beach	200	
26	Safe Trick or Treat	10/31/10	4-9pm	Hwy 101 from D to J Streets	1,000	
27	Bike the Coast	11/6/10	6:30am-12pm	MLB Parking Lot	500	
28	Fall Festival Street Fair	11/21/10	9am-4pm	Hwy 101 from D to J Streets	50,000	
29	L8 Nights and Sidewalk Sale	12/2,9,16,23 and 12/26-31	5-8pm, 11am-5pm	Hwy 101 from D to K Streets	200	
30	City of Encinitas Holiday Parade	12/4/10	3:30-9pm	Downtown Encinitas	15,000	
31	NSSA Jr #4	12/11/10	7am-5pm	MLB	75	
32	NSSA Explorer #5	1/15 &1/16/11	7am-5pm	D Street	150	
33	Scholastic Surf Series	2/5 & 2/6/11	7am-4:30pm	D Street/MLB	150	
34	Teen Driving Safety 5K Run	2/12/11	7am-12pm	MLB	250	
35	Burn Institute Boot Drive	4/6/11	7:30-9:30am	Encinitas Intersections	10 participants	
36	April Street Fair	4/9 & 4/10/11	9am-5pm	Hwy 101 from D to J Streets	40,000	$300.00
37	Ragnar Relay So Cal '11	4/16/11	3-10:30am	Various	4200	
38	Easter Egg Hunt Festival	4/23/11	10am-1pm	Ecke Sports Park	5000	
39	Easter Service	4/24/11	6am-1pm	MLB	450	
40	CWC Environmental Film Series	4/28, 5/26, 6/23	6-7pm	Pacific Station 687 S Coast Hwy 101	80	
41	Creek to Bay Cleanup	4/30/11	8am-12pm	MLB	100	
42	Encinitas Garden Festival	4/30/11	8am-5pm	Crest Dr- Santa Fe to Birmingham	1000	
43	Great Strides/ Walk	5/1/11	8am-2pm	MLB	400	
44	Tour de Cure	5/7/11	5am-4pm	Mira Costa College	1200	
45	Walk for Life Fundraiser	5/7/11	8am-12pm	MLB	75	
46	Encinitas Sprint Triathlon	5/8 & 5/15/11	6:30am-12pm	MLB	1500	
47	City of Encinitas 5K	5/14/11	8-10am	MLB	5000	
48	MLB Paddle and Swim	5/14 & 5/15/11	8-11am	MLB	400	
49	JTF Scholarship Award Picnic	5/15/11	9am-6pm	Oakcrest Park	150	
50	Fox 5 Morning News "On the Road"	5/20/11	3-11am	MLB, Library	50	
51	San Diego Century Bicycle Tour	5/21/11	6am-6pm	Mira Costa College	1500	
52	K5 Summer Surf Klassic	5/28/11	5am-5pm	D Street	100	
53	Law Enforcement Torch Run	6/1/11	6-9am	Coast Hwy 101	10	
54	Encinitas Pet Health Expo	6/5/11	9am-1pm	City Hall	500	
55	Encinitas Environment Day	6/5/11	10am-4pm	Cottonwood Creek Park	2000	
56	City of Encinitas Employee Recognition Lunch	6/17/11	9am-2pm	Encinitas Viewpoint Park	150	
57	Encinitas Festival of the Arts	6/25/11	9am-5pm	El Camino Real and Manchester Ave	500	

Appendix C-6 Routine Municipal Inspection Summary FY 2010 - 2011

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
1	**133901**	5/25/11	Requeza Yard	By EMERSON, MIKE: 8/30/2011 2:33:34 PM Inspected by John Ugrob	No Corrective Actions Required			
2	**133902**	5/25/11	Calle Magdelena Public Works Facility	By EMERSON, MIKE: 8/30/2011 2:55:33 PM Inspected by John Ugrob	No Corrective Actions Required			
3	**135903**	5/25/11	A Tank Site	By EMERSON, MIKE: 8/30/2011 3:02:48 PM Inspected by John Ugrob	No Corrective Actions Required			
4	**135904**	5/25/11	W. W. C. Facility	By EMERSON, MIKE: 8/30/2011 3:10:33 PM Inspected by John Ugrob	No Corrective Actions Required			
5	**135905**	5/23/11	Paul Ecke Sports Park	By EMERSON, MIKE: 8/30/2011 3:18:46 PM Inspected by Mike Wells	No Corrective Actions Required			
6	**135906**	5/23/11	Encinitas Viewpoint	By EMERSON, MIKE: 8/30/2011 3:41:37 PM Inspected by Mike Wells	No Corrective Actions Required			
7	**135908**	5/17/11	Leo Mullen Sports Park	By EMERSON, MIKE: 8/30/2011 4:04:15 PM Inspected by Mike Wells	Spill kit	No. Completed: 5/24/2011		
8	**135910**	5/23/11	Las Verdes Park	By EMERSON, MIKE: 8/30/2011 4:18:21 PM Inspected by Mike Wells	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
9	**135911**	5/17/11	Oakcrest Park	By EMERSON, MIKE: 8/30/2011 4:38:12 PM Inspected by Mike Wells	No Corrective Actions Required			
10	**135914**	5/24/11	Scott Valley Park	By EMERSON, MIKE: 8/31/2011 9:15:42 AM Inspected by Mike Wells	No Corrective Actions Required			
11	**135922**	6/20/11	Cardiff sports park	By EMERSON, MIKE: 8/31/2011 5:38:37 PM Inspected by Bob Keeley	No Corrective Actions Required			
12	**135926**	6/20/11	Cardiff Sports Park Expansion	By EMERSON, MIKE: 9/1/2011 2:15:38 PM Inspected by Bob Keeley	No Corrective Actions Required			
13	**135927**	6/20/11	Cottonwood Creek Park	By EMERSON, MIKE: 9/1/2011 2:23:11 PM Inspected by Bob Keeley	No Corrective Actions Required			
14	**135928**	6/20/11	Leucadia Oaks Park	By EMERSON, MIKE: 9/1/2011 2:29:10 PM Inspected by Bob Keeley	No Corrective Actions Required			
15	**135929**	6/22/11	Hawk View Park	By EMERSON, MIKE: 9/1/2011 2:33:40 PM Inspected by Bob Keeley	No Corrective Actions Required			
16	**135930**	6/21/11	Sun Vista Park	By EMERSON, MIKE: 9/1/2011 2:50:44 PM Inspected by Bob Keeley	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
17	**135931**	6/22/11	Wiro Park	By EMERSON, MIKE: 9/1/2011 3:11:04 PM Inspected by Bob Keeley	No Corrective Actions Required			
18	**135932**	6/22/11	Little Oaks Equestrian Park	By EMERSON, MIKE: 9/1/2011 3:39:06 PM Inspected by Bob Keeley	No Corrective Actions Required			
19	**135933**	6/30/11	Beacon's Beach	By EMERSON, MIKE: 9/1/2011 3:48:29 PM Inspected by Terry Smith	No Corrective Actions Required			
20	**135934**	6/30/11	Glen Park	By EMERSON, MIKE: 9/1/2011 3:54:10 PM Inspected by Terry Smith	No Corrective Actions Required			
21	**135935**	6/30/11	Grandview Beach	By EMERSON, MIKE: 9/1/2011 3:58:27 PM Inspected by Terry Smith	No Corrective Actions Required			
22	**135936**	6/30/11	H Street viewpoint	By EMERSON, MIKE: 9/1/2011 4:03:11 PM Inspected by Terry Smith	No Corrective Actions Required			
23	**135937**	6/30/11	J Street Viewpoint	By EMERSON, MIKE: 9/1/2011 4:07:00 PM Inspected by Terry Smith	No Corrective Actions Required			
24	**135938**	6/30/11	Leucadia Roadside park	By EMERSON, MIKE: 9/1/2011 4:13:17 PM Inspected by Terry Smith	No Corrective Actions Required			
25	**135939**	6/30/11	Mildred Macpherson Park	By EMERSON, MIKE: 9/1/2011 4:27:50 PM Inspected by Terry Smith	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
26	**135940**	6/30/11	Moonlight Beach	By EMERSON, MIKE: 9/1/2011 4:32:05 PM Inspected by Terry Smith	No Corrective Actions Required			
27	**135942**	6/30/11	Orpheus Park	By EMERSON, MIKE: 9/1/2011 4:36:18 PM Inspected by Terry Smith	No Corrective Actions Required			
28	**135943**	6/30/11	Swami's Beach	By EMERSON, MIKE: 9/1/2011 4:40:54 PM Inspected by Terry Smith	No Corrective Actions Required			
29	**136164**	5/26/11	Encinitas Ranch Golf Course-Maintenance		No Corrective Actions Required			

Total: 29

Total NOVs: 0

Appendix D

Industrial and Commercial

D-1 Stationary Commercial Inventory

D-2 Industrial Inventory

D-3 Industrial and Commercial Inspection Form

D-4 Inspection Summary Form

D-5 Routine Inspections Summary Table

D-6 Mobile Commercial Inventory

D-7 Commercial Business Notification Letter

D-8 Mobile Business Notification Letter

Appendix D-1: FY 2010-11 Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ►	Name used to identify facility in database.	Street number of facility.	Suite or unit number or letter, if needed.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
1	A & J Ultimate Petsitting Service	210	12	A St	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
2	California Backyard Birds	1283		Encinitas Blvd	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
3	Companion Pet Care Professionals	1466		Encinitas Blvd	Encinitas	CA	92024	4904.51	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
4	Gentle Touch Cat Grooming	146		Phoebe St	Encinitas	CA	92024	4904.51	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
5	Grateful Dog	802		N Coast Highway 101	Encinitas	CA	92024	4904.51	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
6	Holiday Pet Hotel	551		Union St	Encinitas	CA	92024	4904.51	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
7	Kamp Kanine, L L C	389		Requeza St	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
8	Moonlight Pet Sitting	152	21	N Coast Highway 101	Encinitas	CA	92024	4904.51	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
9	North Coast Equestrian Park, Inc.	1877		Olivenhain Rd	Encinitas	CA	92024	4904.51	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
10	Pet Nutrition Center Encinitas	123	G	N El Camino Real	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
11	Puppy Love Pet Grooming	191	211	N El Camino Real	Encinitas	CA	92024	4904.51	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
12	Santa Fe Animal Clinic	301	A	Santa Fe Dr	Cardiff	CA	92007	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
13	Sit And Stay Awhile Pet Care	251		Calle De Madera	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
14	Surf Dogg	2009		Sheridan Rd	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
15	The Animal Keeper	155		Saxony Rd	Encinitas	CA	92024	4904.51	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
16	The Drake Center For Animal Health	195		N El Camino Real	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
17	V C A North Coast Animal Hospital	414		Encinitas Blvd	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
18	Way To Walk Dog Walkers	1659		Neptune Ave	Encinitas	CA	92024	4904.51	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
19	Affordable Window Chip Repair	127		S El Camino Real	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
20	Bradley Allen Autobody Painting	204		N Coast Highway 101	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
21	California Body & Paint	320		N El Camino Real	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
22	Custom Cycle Creations, Inc.	324	B	N El Camino Real	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
23	Fender Mender	326		N El Camino Real	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
24	Rancho Auto Body	591	A	Westlake St	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
25	A□Smog Test Only Center	449		Second St	Encinitas	CA	92024	4904.51	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
26	Ace Cars And Vans	1244		N Coast Highway 101	Encinitas	CA	92024	4904.51	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
27	Bassett Auto Sales	1445		Encinitas Blvd	Encinitas	CA	92024	4904.51	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
28	Duru Inc./San Dieguito Towing/Dba Road One	1205		S Coast Highway 101	Encinitas	CA	92024	4904.51	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
29	Encinitas Smog Test Only Center	682		S Coast Highway 101	Encinitas	CA	92024	4904.51	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
30	F. I. C. Smog	322	C	N El Camino Real	Encinitas	CA	92024	4904.51	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
31	Happy Auto Sales	148		N Coast Highway 101	Encinitas	CA	92024	4904.51	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
32	790 First Street, L L C -D B A Sofspra	790		S Coast Highway 101	Encinitas	CA	92024	4904.51	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
33	All Car Center	140		N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
34	An Luxury Imports Of San Diego, Inc. (BMW Encinitas)	1302		Encinitas Blvd	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	High
35	Auto Parts Pros, L L C	523	100	Encinitas Blvd	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
36	Auto Zone 5657	120		Leucadia Blvd	Encinitas	CA	92024	4904.51	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
37	Brad's Foreign & Domestic	565	200C	Westlake St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
38	C P A Group, Inc./Dba Encinitas Foreign & Domestic	901		Second St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
39	Cameron Ventures, Inc./Dba "Midas"	328		N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
40	Cardiff Classics Inc.	1049		S Coast Highway 101	Encinitas	CA	92024	4904.51	7549	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
41	Certified Transmission Encinitas	322	F	N El Camino Real	Encinitas	CA	92024	4904.51	7537	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
42	Charlie's Foreign Car 197	751		Second St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	High
43	Coast Brake & Wheel	444		S Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
44	Coastal Foreign Auto Service	320	A	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
45	Dan's Precision Alignment Center	565	200F	Westlake St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
46	Discount Tire Company	107		N El Camino Real	Encinitas	CA	92024	4904.51	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
47	El Camino Tire & Brake	330		N El Camino Real	Encinitas	CA	92024	4904.51	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
48	Encinitas Automotive, Inc.	322	A	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
49	Encinitas Car Wash	293		N El Camino Real	Encinitas	CA	92024	4904.51	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
50	Encinitas Ford	1424		Encinitas Blvd	Encinitas	CA	92024	4904.51	5511	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
51	Encinitas Japanese Car Specialists, Inc.	328	A	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
52	Furgerson's Garage	807		Second St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
53	Harris Radiator Works, Inc.	274		N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
54	Hazar, Inc. D B A Precision Tune Auto Care	318	A	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
55	Hugo's European Car Service, Inc.	110		N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
56	Jiffy Lube 1764	221		N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
57	K & B Auto Service & Repair	320	D	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
58	Keith's Automotive	215		W G St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
59	Moonlight Motors, Inc.	215		Melrose Ave	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
60	Olson's Hand Car Wash	127		S El Camino Real	Encinitas	CA	92024	4904.51	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
61	O'Reilly Auto Parts 3154	180		N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
62	Paul's Auto Electric	325		Melrose Ave	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
63	Pep Boys/ Manny, Moe & Jack 701	256		N El Camino Real	Encinitas	CA	92024	4904.51	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
64	Rays Automotive Service	1051		S Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
65	Rover Repairs, Inc./Dba California Rover	386		Encinitas Blvd	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
66	Scott's Automotive	1508		N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
67	Speedy Lube & Tune & Brake, Inc. Dba	225		N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
68	Studio St. John	110		N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
69	Suspension Plus North County, Inc.	322	E	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
70	Technical Auto Repair	140	C	N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
71	Transmasters Transmissions	184	C	N Coast Highway 101	Encinitas	CA	92024	4904.51	7537	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
72	Valvoline Instant Oil Change	127	B	S El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
73	San Diego Botanical Gardens	230		Quail Gardens Dr	Encinitas	CA	92024	4904.51	8422	Botanical Garden	Yes	No	No	Yes	No	No	Yes	No	No	No	Low
74	Home Depot, The 660	1001		N El Camino Real	Encinitas	CA	92024	4904.51	5211	Building Material	No	No	No	No	No	No	No	Yes	Yes	No	Low
75	1st. Street Bar	656		S Coast Highway 101	Encinitas	CA	92024	4904.51	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
76	7-Eleven 13620	592		Santa Fe Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
77	7-Eleven 18087 / Moonlight Partners, Inc.	105		W D St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
78	7-Eleven 18087F	105		W D St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
79	7-Eleven 2111-17475 C	1446		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
80	A Little Moore	1030		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
81	Angelos Burgers	608		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
82	B G J Restaurants, Inc. (El Callejon)	345	C	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
83	Baker & Olive, L L C	165	A	S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
84	Bar Leucadian, Inc.	1542		N Coast Highway 101	Encinitas	CA	92024	4904.51	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
85	Barracuda Grill	641		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
86	Beach Grass Cafe	1476		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
87	Beach Tea House 101	1076		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
88	Beachside Bar & Grill	806		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
89	Berry Happy, Inc. Dba/Berry Happy	480		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
90	Bety's	1464		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
91	Bird House Grill	250	A	N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
92	Blue Ribbon Artisan Pizzeria	897	102	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
93	Borrelli's Pizza Inc.	285	106	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
94	Boscinita's, Inc. (Boston's)	294		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
95	Brett's B B Q	1505		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
96	Bubby's	937	106	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
97	Calypso	576		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
98	Captain Kenos	158		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
99	Chicks Natural	191	107	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
100	Chili's Grill & Bar 448	1004		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
101	Chinatown Restaurant	118		Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
102	Chins Szechwan Encinitas, Inc.	625		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
103	Chipotle Mexican Grill 222	268		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
104	Coco's 881	407		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
105	Cool Breeze Farms	244		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
106	Cotixan Mexican Food	219		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
107	D Street Bar And Grill	485		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
108	Dairy Queen Encinitas	1465	B	Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
109	Daley Double	546		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
110	Darshan Bakery And Cafe	949		Second St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
111	Del Mar Swirls, (Store 2)	204	G	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
112	Del Taco	130		Calle Magdalena	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
113	Dennys 6828	135		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
114	E Street Cafe	130		W E St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
115	East Village Asian Diner	628		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
116	Einstein Bros. Bagels 2309	1006	B	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
117	El Q' E R O	564		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
118	El Nopalito Market	560		Santa Fe Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
119	El Pollo Loco 3431	1002		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
120	El Torito Market	948	A	N Coast Highway 101	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
121	El Torito Restaurant	1068		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
122	Elizabethan Desserts	155		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
123	Encinitas Ale House	1044		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
124	Encinitas Cafe	531		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
125	Encinitas Donut Shop	580		Santa Fe Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
126	Encinitas Oggi's, Inc.	305		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
127	Encinitas Ranch Cafe & Golf School	1275		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
128	Encinitas Yogurt & Ice Cream	1070	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
129	Filiberto's Mexican Food	476		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
130	Fountain Of Youth Juice	168		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
131	Froots	127	J	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
132	Fulanos	145		Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
133	Garcia's Mexican Cuisine & Creative Catering	1486		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
134	Garden Fresh Restaurant Corp DBA Soup Plantation	109		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
135	Garden State Bagels	191	106	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
136	Giant New York Pizza & Pasta	191	110	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
137	Giovanni's Sandwich Shop	764		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
138	Global Grind Coffee	540		Cornish Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
139	Golden Bowl Restaurant	1337		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
140	Gordy's Bakery	441		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
141	Greek American Family Restaurant	392		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
142	Henry's Farmers Market 123	1327		Encinitas Blvd	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
143	Honey Baked Ham	459		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
144	Honey's Bistro & Bakery	632		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
145	Isabelle Briens, Inc.	127	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
146	Islands Restaurant, L P	1588		Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
147	J. S. Foods/Dba Burger King	242		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
148	Jamba Juice Co. 760	272	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
149	Jamroc 101 Caribbean Grill	101		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
150	Java Express	325		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
151	Java Hut Coffee Co.	1001		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
152	Jawz II, Inc.	1468		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
153	Jorges Mexicatesen	267	E	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
154	Jorge's Mexicatessen	417	B	Santa Fe Dr	Cardiff	CA	92007	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
155	Juanita's Taco Shop	290		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
156	Just Peachy	1354		N Coast Highway 101	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
157	K C'S Tandoor	1070	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
158	Kaito Restaurant	130	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
159	Karinas Taco Shop	916		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
160	Kealani's	137		W D St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
161	Kentucky Fried Chicken	266		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
162	Kims Vietnamese Chinese Restaurant	745	103	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
163	Kona Koffee Hut	230		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
164	Kotija Jr. Taco Shop	852		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
165	L & L Hawaiian Barbeque Encinitas	215	G	S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
166	La Bonne Bouffe	471		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
167	Le Papagayo	1002		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
168	Leucadia Donut Shop	1604		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
169	Leucadia Liquor	640		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
170	Leucadia Pizza, Inc. D B A -Leucadia Pizzeria	315	V	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
171	Leucadia Sushi Bar	996	E	N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
172	Little Caesars Pizza	118		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
173	Lotus Cafe	765	101	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
174	Lumberyard Tavern & Grill	967	101	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
175	M & N Foods	1137		Regal Rd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
176	Mama Houli & Sister T	423		La Mesa Ave	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
177	Manhattan's Giant Pizza	143		W D St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
178	Mc Donald's / Encinitas Town Center	1064		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
179	Mc Donald's Of Encinitas	1271		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
180	Mexico Viejo Mexican Food	1465	E	Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
181	Mister Sushi	111	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
182	Miyabi Japanese Steakhouse & Sushi	211	C	S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
183	Mozy	698		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
184	Mr. Peabodys	136		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
185	N. Carrillo Corp. DBA Tomiko	87		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
186	Naked Cafe	288	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
187	Noodles & Company	260	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
188	N-The Tube Dog	90	214	N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
189	Ogata Japanese Cuisine	615		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
190	Panda Express 500	1084	E	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
191	Pannikin Coffee & Tea	510	A	N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
192	Pantry 22, L L C/Dba East Village	628		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
193	Papa John's Pizza 1596	337		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
194	Papa Toni's Pizza	554		Santa Fe Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
195	Passage To India, Inc.	257	K	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
196	Pasta Bravo	1042	J05	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
197	Peet's Operating Company, Inc. (Peet's Coffee and Tea)	119	G	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
198	Pei Wei Asian Diner	1560	A	Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
199	Pick Up Stix 7205	127	H	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
200	Pizza Hut 315067	127	G	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
201	Pizzicato	252	5	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
202	Potato Shack Cafe	120		W I St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
203	Prescription For Java	477		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
204	Quickie Food Store	233		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
205	Quiznos Classic Subs	337	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
206	Ralphs Grocery Company 168	125		N El Camino Real	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
207	Raul's Mexican Food	490		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
208	Restaurant Leadership Grioup, L L C DBA Jack in the Box	1439		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
209	Rico's Taco Shop	165	L	S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
210	Rizing Steele, Inc. DBA Naked Cafe	288	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
211	Robbie's Road House Grill	530		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
212	Roberto's	274	B	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
213	Roberto's Mexican Food	1900	D	N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
214	Roberts Enterprises, L L C DBA Flippin Pizza	215	H	S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
215	Rosanna's Pasta	270	I	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
216	Round Table Pizza	1321		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
217	Roxy Restaurant	517		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
218	Rubio's Fresh Mexican Grill 7	252	4	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
219	Sake House-Yumeya	1246		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
220	Santa Fe Cafe	120	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
221	Savory Restaurant	267	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
222	Siamese Basil Restaurant	527		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
223	Soup Plantation	109		N El Camino Real	Encinitas	CA	92024	4904.51	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
224	Spartan Holdings, Inc. DBA Pacific Q Billiards	1454		Encinitas Blvd	Encinitas	CA	92024	4904.51	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
225	St Tropez Bistro.Com	947	D103	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
226	St. Germaine's Cafe	1010	112	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
227	Stadium Sports Bar & Restaurant	149		S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
228	Starbucks Coffee 5391	947	D101	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
229	Starbucks Coffee 588	258	B2	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
230	Starbucks Coffee 6546	1560	B	Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
231	Stater Bros. Markets 158	1048		N El Camino Real	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
232	Steakhouse 66,Inc./D B A Firefly Grill And Winebar	251	B	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
233	Sub Palace Leucadia	810		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
234	Subman	113	E	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
235	Subway 27567	1560	C	Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
236	Subway Sandwiches & Salads 18383	765	104	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
237	Sunny Sub., L L C	252	1	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
238	Super Donut 1	465		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
239	Super Donuts 2	252	2	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
240	Surf Brothers Teriyaki	274	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
241	Surfdog, Inc.	1126		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
242	Sushi Bar Blue Fin	257	D	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
243	Sushi Do	1031	101	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
244	Swamis Cafe	1163	A	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
245	Taco Bell, 25497	1502		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
246	Target T - 1029	1010		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
247	Thai Pan Express	138		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
248	The 101 Diner	552		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
249	The 3rd. Corner Wine Shop & Bistro	897	F104	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
250	The Greenery Raw Food Cafe	133		Daphne Ave	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
251	The Kairos Group, Inc. DBA Chuao	937	C109	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
252	The Quick Fix	144		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
253	Today's Pizza And Salad	481		Santa Fe Dr	Cardiff	CA	92007	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
254	Tok Subs, Inc. DBA Subway	138		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
255	Town Center Juice Stop	1042	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
256	Trader Joe's 25	115		N El Camino Real	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
257	Trattoria Gusto	429		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
258	Trattoria I. Trulli	830	A	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
259	Uncle Duke's Bar	107		Diana St	Encinitas	CA	92024	4904.51	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
260	Verma's Toasty, Inc./Quizno's 7305	1042	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
261	Vigilucci's Trattoria Italiana	505		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
262	Vons Food & Drug 2144	262		N El Camino Real	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
263	Vons Grocery 2351	453		Santa Fe Dr	Cardiff	CA	92007	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
264	Wahoo's Fish Taco	1006	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
265	Wendy's Restaurant	102		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
266	Zafferano, Inc./Dba Sage Grill	1506		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
267	7-Eleven 13627	102		Leucadia Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
268	7-Eleven 24335D-2111	1988		Village Park Way	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
269	Arco Nanak Petro	1766		N Coast Highway 101	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
270	Barry W. O' Brien Inc.	310		Encinitas Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
271	C N G Inc.	160		Encinitas Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	Yes	High
272	Chevron Stations, Inc 1943 / 95664	540		La Costa Ave	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
273	Encinitas Gasoline & Auto Service (Shell Station)	1355		Encinitas Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
274	Encinitas Promenade Gas & Oil Change	1580		Leucadia Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
275	Kihack Management L L C (Chevron Encinitas)	350		Encinitas Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
276	Leucadia Shell	865		Orpheus Ave	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
277	Rosanos 76	236		N El Camino Real	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
278	Shell 210	510		Santa Fe Dr	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
279	Valero Of Encinitas	325		Encinitas Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
280	Encinitas Ranch Golf Course	1275		Quail Gardens Dr	Encinitas	CA	92024	4904.51	7997	Golf Course	No	No	No	Yes	No	No	Yes	No	No	No	Low
281	Encinitas Ranch Golf Course Maintenance	1253		Paseo De Las Flores	Encinitas	CA	92024	4904.51	7997	Golf Course	No	No	No	Yes	No	No	Yes	No	No	No	Low
282	Glorious Gardens Landscape Design	495		Leucadia Blvd	Encinitas	CA	92024	4904.51	781	Landscaping	No	No	No	Yes	No	No	Yes	No	No	No	Low
283	R. C. P. Block & Brick, Inc.	577		N Vulcan Ave	Encinitas	CA	92024	4904.51	5211	Masonry	No	No	No	No	No	No	No	Yes	No	No	Low
284	Abels Flowers & Plants	712		Clark Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
285	Anne & Drews Flower Patch	184		N Coast Highway 101	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
286	Armstrong Garden Centers	701		N El Camino Real	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
287	Bird Rock Tropicals	221		Princehouse Ln	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
288	Cal Pacific Plant Farm	1122		Orpheus Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
289	Chino Greenhouses	1253		Urania Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
290	Coral Tree Farm & Nursery	598		Park Ln	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
291	Cordova Gardens	902		Encinitas Blvd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
292	Dramm & Echter, Inc.	1150		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
293	Emerald M. Growers, Inc.	834		Leucadia Blvd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
294	Encinitas Greenhouses	351		Union St	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
295	Erwin Mojonnier Ent.	2009		Sheridan Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
296	Flora Bunda	603		Union St	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	High
297	Franco's Flowers	842		Leucadia Blvd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
298	Go Green Agriculture	712		Clark Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
299	Greens & Things, Inc.	950		Brittany Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
300	Grow Master	1253		Urania Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
301	Horace Anderson Greenhouses	375		La Costa Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
302	Hydro Scape Products, Inc.	750		S Coast Highway 101	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	High
303	J & S Green Houses	748		Requeza St	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
304	La Costa Farms	1911		Saxony Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
305	Lattin	804		Capri Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
306	Leucadia Floral & Plant	1114	1	N Coast Highway 101	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
307	Lopez Flowers	440		Saxony Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
308	May Greenhouses, Inc.	241		Andrew Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
309	Miguel Estevez Flowers	708		Del Rio Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low

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											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
310	Pacific Verde Nursery, Inc.	556		Union St	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
311	Pacifica Flowers Inc.	514		La Costa Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
312	Seedling Express	440		Saxony Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
313	Specimen House, Inc.	782		Leucadia Blvd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
314	Sunny Whlse. Flowers	2009		Sheridan Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
315	Sunshine Gardens	155		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
316	Tayama Greenhouse	710		Requeza St	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
317	The Orchid Place	829		Bracero Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
318	Twigs By Teri	155		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
319	Two Together L L C, Dba The Palm Company	395		Sunset Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
320	W. F. Muhlethaler	350		Seeman Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
321	Walt Hoehn	1752		Eolus Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
322	Weidner's Gardens, Inc.	695		Normandy Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
323	Weston Nut Farm	1751		Noma Ln	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
324	Wilma Romero	870		Devonshire Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
325	rePLANET	262		N El Camino Real	Encinitas	CA	92024	4904.51	5093	Other - Recycling	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No	High
326	Frazee Paint	270	C	N El Camino Real	Encinitas	CA	92024	4904.51	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
327	Privateer Coatings	1114		N Coast Highway 101	Encinitas	CA	92024	4904.51	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
328	The Sherwin-Williams Company 8557	208		N El Camino Real	Encinitas	CA	92024	4904.51	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
329	Vista Paint Corporation	133		N El Camino Real	Encinitas	CA	92024	4904.51	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
330	Del Rancho Pools	1315		Encinitas Blvd	Encinitas	CA	92024	4904.51	1799	Pool	No	No	No	No	No	No	No	No	No	No	Low
331	Leslie's Swimming Pool Supplies 506	270	G	N El Camino Real	Encinitas	CA	92024	4904.51	1799	Pool	No	No	No	No	No	No	No	No	No	No	Low
332	Cardiff Animal Hospital, Inc.	2159		San Elijo Ave	Cardiff	CA	92007	4904.61	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
333	Dirty Dogs	2107		San Elijo Ave	Cardiff	CA	92007	4904.61	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
334	Dove Hollow Dressage Center, Inc.	1084		Double LI Ranch Rd	Encinitas	CA	92024	4904.61	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
335	Platinum K 9	632		S Willowspring Dr	Encinitas	CA	92024	4904.61	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
336	Rancho Los Amigos Equestrian Ctr.	3049		Camino Del Rancho	Encinitas	CA	92024	4904.61	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
337	Underwater Environment	442		Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5999	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
338	7-Eleven 21805A-2111	2240	A	Encinitas Blvd	Encinitas	CA	92024	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
339	A & M Investment, Inc./Dba East Coast Pizza	2015		San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
340	Beach City Cafe	102		Aberdeen Dr	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
341	Beach House Restaurant	2530		S Coast Highway 101	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
342	C H L N, Inc. D B A: The Chart House	2588		S Coast Highway 101	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
343	Cardiff Seaside Market, Inc.	2087		San Elijo Ave	Cardiff	CA	92007	4904.61	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
344	Champagne French Bakery Cafe'	162	E10	S Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
345	Cicciotti's Trattoria Italiana	1933		San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
346	Firenze Trattoria	162	G10	S Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
347	Harvest Ranch Market	162	E50	S Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
348	K I S Juice Bar & Restaurant	2591		S Coast Highway 101	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
349	Kraken	2531		S Coast Highway 101	Cardiff	CA	92007	4904.61	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
350	Las Olas, Inc.	2655		S Coast Highway 101	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
351	Mandarin City	815		Birmingham Dr	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
352	Nfarooqi Enterprises, L L C DBA Jack in the Box	1967		San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
353	Pipes Cafe	121		Liverpool Dr	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
354	Premier Food Services, Management Group, Inc.	3333		Manchester Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
355	Rimel-Zenbu Cardiff, L L C	2005		San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
356	Summers Besta Wan	148		Aberdeen Dr	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
357	T M P Restaurant Group, L L C DBA Bentley's	162	C10	S Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
358	The Original Pancake House	160	D10	S Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
359	Trattoria Positano	2171		San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
360	V G Donuts & Bakery	106		Aberdeen Dr	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
361	Wine Steals Cardiff	1953	100	San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
362	Yogis Beach Bar & Restaurant	2633		S Coast Highway 101	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
363	7-Eleven 25766B	2211		San Elijo Ave	Cardiff	CA	92007	4904.61	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
364	Cardiff 76 Rosano's	3085		Manchester Ave	Cardiff	CA	92007	4904.61	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
365	Cardiff Valero	820		Birmingham Dr	Cardiff	CA	92007	4904.61	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
366	Chevron Stations Inc. 1967	805		Birmingham Dr	Cardiff	CA	92007	4904.61	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
367	Dream Petroleum, Inc.	633		Birmingham Dr	Cardiff	CA	92007	4904.61	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
368	A & M Farms	1534		Crest Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
369	Barrels And Branches: Garden & Gift	1452		Santa Fe Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
370	Brown's Plants, Inc.	1264		Lake Dr	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
371	C M Landscape Maint. Services	1313		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
372	California Greenhouses, Inc.	1753		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
373	Cardiff Palm Trees 2	333		Liszt Ave	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
374	Gish Foliage	1255		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
375	K D Palms	1545		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
376	Orchid Barron	804		Cathy Ln	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
377	Rancho Verde	1616		Lake Dr	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
378	Raspy	335		Santa Fe Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
379	The Palm Source	1329		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
380	Tierra Verde Resources, Inc.	1545		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
381	Wilkens Palm Tree Nursery	1470		Mackinnon Ave	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
382	Williamson Produce	3111		Manchester Ave	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	High

Appendix D-2: FY 2010-11 Industrial Inventory

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ►	Name used to identify facility in database.	Street number of facility.	Suite or unit number or letter, if needed.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
1	Encinitas Landfill	2099		Encinitas Blvd	Encinitas	CA	92024	4904.610000	4953	Industrial - Closed Landfill	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
2	San Dieguito Transportation	1142		Bonita Dr	Encinitas	CA	92024	4904.610000	4151	Industrial - Vehicle Storage	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
3	San Elijo Joint Powers Authority	2695		Manchester Ave	Cardiff	CA	92007	4904.610000	9511	Industrial - Wastewater Treatment	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION REPORT
CLEAN WATER HOTLINE: 760-633-2787
http://cwp.ci.encinitas.ca.us

Revised 3/09

Type of Inspection:	☐ Annual (Date):	☐ Complaint Investigation (Date):
Business Name:	Size: Sq.Ft.	SIC Code:
Street Address:	Mailing Address:	
Contact Person(s):	Property Manager (PM):	
Business Phone/Fax:	PM Phone/Fax:	
Business Email:	PM Email :	
Does facility have a current Encinitas business certificate? ☐Yes ☐No : Exp:		

A. Training **Number of Employees:**

1. Are employees trained? ☐Yes ☐No a. Training log at facility? ☐Yes ☐No Last time trained:

B. Liquid Storage (Oil, Grease, Antifreeze) ☐NA

2. ☐Trap- Last Maintained(LM): ☐Interceptor- LM: By: Every ____ months
3. ☐Bin- LM: ☐Clarifier- LM: By: Every ____ months

a. Is there secondary containment? ☐Yes ☐No b. Overhead Coverage? ☐Yes ☐No

4. Are other outdoor items adequately stored/covered? ☐Yes ☐No ☐NA

5. Does facility have a spill kit? ☐Yes ☐No a. Posted spill response plan? ☐Yes ☐No

C. Cleaning Activities

6. Does facility conduct any of the following activities?:

Washing Floor Mats: ☐Y ☐N Vehicle Washing/Fueling: ☐Y ☐N Hosing Off / Power Washing Site: ☐Y ☐N

a. Is wash water contained and disposed of properly? ☐Y ☐N

D. Waste Management	Yes	No	N/A	Comments
7. Are the storm drains and site free of litter and debris?				
8. Downspouts directed away from areas of potential pollutants?				

9. Does trash/recycling storage area meet the following requirements?:

Receptacle Lids Closed: ☐Y ☐N Clean/Well Maintained: ☐Y ☐N Are bins overflowing?: ☐Y ☐N

10. Does the facility properly maintain the following landscape/maintenance issues: ☐NA

Erosion Control: ☐Y ☐N Over-irrigation Runoff: ☐Y ☐N Reclaimed Water Use: ☐Y ☐N Stockpiles: ☐Y ☐N

E. Other Storm Water Management

11. Is the site free of any evidence of illicit connections and illegal discharges? ☐Yes ☐No

F. Corrective Actions Needed? ☐Yes ☐No If yes, see Inspection Summary

G. Follow Up Inspection? ☐Yes ☐No Date: If yes, see Inspection Summary

H. Education or Best Management Practice (BMP) Information Distributed:

☐Restaurant Brochure Eng/Span ☐What's Cooking Guide Eng/Span ☐Auto Brochure Eng/Span ☐Green Wrench Guide Eng/Span ☐Only Rain ☐10 Simple Ways ☐Yard and Garden Care Eng/Span ☐Doorhanger ☐Business card ☐Green Business ☐Spill Response Guide ☐Other:

Inspector Name: **Signature:** **Date:**

Notes:

FOR OFFICE USE ONLY

ASSESSMENT (circle appropriate level - "5" is highest level)	
Level of knowledge regarding stormwater issues: 1 2 3 4 5	WO :
Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5	Follow Up WO

CITY OF ENCINITAS

Commercial Industrial

STORMWATER QUALITY INSPECTION SUMMARY

(760) 633-2787 ◆ FAX (760) 633-2818 ◆ npdesmail cityofencinitas.org

ISSUED TO:

CONTACT PERSON:

SITE ADDRESS:

PHONE : ( )

❒ **NO CORRECTIVE ACTIONS REQUIRED**

REQUIRED CORRECTIVE ACTIONS

ALL REQUIRED CORRECTIVE ACTIONS IDENTIFIED BELOW MUST BE COMPLETED AND REPORTED TO THE CITY BY THE FOLLOWING DATE:

❒ **Obtain Spill Kit**

❒ **Post Spill Response Plan**

❒ **Provide and Document Employee Training**

❒ **Provide Secondary Containment for Storage of Fluid Liquid**

❒ **Provide Coverage for Outdoor Storage of Fluid Liquid Waste**

❒ **Provide Coverage for Exposed Equipment and or Parts**

❒ **Clean Litter and Debris From Site, Trash Areas, and or Storm Drain**

❒ **Clean Maintain Outdoor Storage Areas**

Other Corrective Actions Comments:

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.110. Failure to comply with minimum Best Management Practice (BMP) Standards may result in further enforcement action by the City of Encinitas.

Inspector (Signature) **Date**

Responsible Party (Signature) **Date**

FOLLOW UP INSPECTION

❒ **All Corrective Actions Completed**

❒ **Corrective Actions Not Complete Enforcement Action Required**

Inspector Sign-Off **Date**

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
1	**121721**	7/14/10	Roberto's		Obtain spill kit; post spill response plan; provide and document employee training.	No. Completed: 7/15/2010		
2	**122369**	9/28/10	Ogata Japanese Cuisine	From: Request ID: 96621, 9/28/2010 10:12:53 AM DIS-BUILDING WASH Discharge of building or sidewalk washwater Problem Details: Restaurant hosing off sidewalk without containment. Problem Comments: By RYGIEL, KRISTINE: 9/28/2010 10:15:52 AM Sent advisory notice to restaurant with minimum required BMPs for commercial facilities on 9/28/10.	No Corrective Actions Required			
3	**125522**	11/18/10	Shell Oil (CNG INC)		Provide and document employee training. Review Hazmat storage containers.	No. Completed: 12/2/2010		
4	**125524**	10/18/10	Beach City Cafe		Obtain spill kit, provide 2nd containment and overhead cover for fluid/liquid.	No. Completed: 11/9/2010		
5	**125526**	12/6/10	Baker and Olive		No Corrective Actions Required			
6	**125527**	11/10/10	Wendy's 3015		No Corrective Actions Required			
7	**125529**	11/10/10	Little Caesars		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
8	**125530**	11/9/10	Cardiff Valero		No Corrective Actions Required			
9	**125531**	11/10/10	VGs Donuts & Bakery		No Corrective Actions Required			
10	**125532**	11/10/10	Uncle Duke's		No Corrective Actions Required			
11	**125534**	11/10/10	Tomiko		No Corrective Actions Required			
12	**125538**	11/30/10	Las Olas		No Corrective Actions Required			
13	**125542**	12/2/10	KI's Juice Bar and Restaurant		No Corrective Actions Required			
14	**125543**	12/2/10	Kraken		No Corrective Actions Required			
15	**125595**	12/2/10	Chart House		No Corrective Actions Required			
16	**125596**	12/2/10	The Beach House		No Corrective Actions Required			
17	**125597**	11/9/10	Go Green Agriculture		No Corrective Actions Required			
18	**125598**	12/16/10	Leucadia Floral and Plants		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
19	**126676**	2/11/11	Juanita's Tacos		Provide and document employee training; clean/maintain outdoor grease storage structure.	No. Completed: 2/22/2011		
20	**126677**	12/8/10	L&L Hawaiian BBQ		No Corrective Actions Required			
21	**126678**	1/20/11	Chevron Encinitas		No Corrective Actions Required			
22	**126679**	1/20/11	Gordy's Bakery		No Corrective Actions Required			
23	**126707**	1/20/11	Honey Baked Ham		No Corrective Actions Required			
24	**126708**	1/20/11	Java express		No Corrective Actions Required	Yes	No. Completed: 2/9/2011	
25	**126710**	1/24/11	McDonald's Corporation		No Corrective Actions Required			
26	**126713**	1/24/11	Jack in the Box		Clean all trash and debris from under dumpster.			
27	**126718**	1/25/11	The Quick Fix		No Corrective Actions Required			
28	**126720**	1/20/11	Valero		Provide cover for outdoor hazmat liquid; clean litter from trash area.	Yes	No. Completed: 2/9/2011	

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
29	**126723**	1/24/11	Henry's Farmers Market		Post spill response plan; clean oil from grease bin lid.	No. Completed: 2/9/2011		
30	**126849**	2/22/11	Pipes Cafe		No Corrective Actions Required			
31	**126901**	12/17/10	Jawz Inc		Provide 2nd containment and overhead cover for piant and oil. Provide cover for microwave and cardboard.			
32	**126902**	2/11/11	Kotija Jr Taco Shop		No Corrective Actions Required			
33	**126903**	12/6/10	Stadium Sports Bar and Restaurant		Obtain Spill kit, post spill response plan. Provide and document employee training. Provide cover for outdoor storage of grease. Clean litter from trash area. Clean outdoor storage areas.	No. Completed: 1/11/2011		
34	**126919**	2/24/11	Peet's Coffee and Tea		No Corrective Actions Required			
35	**126921**	2/14/11	Flora Bunda		Provide and document employee training			
36	**126922**	3/3/11	Chick's Chicken		No Corrective Actions Required			
37	**127903**	4/12/11	Hydro-Scape Products		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
38	**127905**	3/16/11	Prescription for Java		No Corrective Actions Required			
39	**127907**	3/14/11	Boston's Pizza		No Corrective Actions Required			
40	**127909**	3/14/11	Naked Cafe		No Corrective Actions Required			
41	**127911**	3/14/11	Vons 2144		No Corrective Actions Required			
42	**127912**	3/10/11	Burger King		No Corrective Actions Required			
43	**127913**	3/7/11	Giant New York Pizza		No Corrective Actions Required			
44	**127914**	4/19/11	Panda Express		No Corrective Actions Required			
45	**127916**	2/22/11	Summers Best-a-wan		Obtain spill kit; Provide 2nd containment for oil on west side.	No. Completed: 3/10/2011		
46	**127919**	2/17/11	Garcia's Encinitas		Obtain spill kit; post spill response plan; provide employee training; provide 2nd containment and overhead cover for outdoor storage.	No. Completed: 3/7/2011		
47	**127921**	4/8/11	Java Hut coffee Co.		Provide 2nd containment tray for storage of fluid/liquid waste.	No. Completed: 4/13/2011		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
48	**127925**	3/7/11	Thai Pan Express		Obtain spill kit; post spill response plan; provide employee training; provide 2nd containment and overhead cover for liquid storage; clean little and debris from oil storage	No. Completed: 4/13/2011		
49	**128150**	2/24/11	Soup Plantation		No Corrective Actions Required			
50	**128152**	4/19/11	El Torito		No Corrective Actions Required			
51	**129179**	5/24/11	Encinitas Golf Course		No Corrective Actions Required			
52	**129220**	5/24/11	Re-planet		No Corrective Actions Required			
53	**129222**	5/24/11	Fire Fly Grill & Wine Bar		No Corrective Actions Required			
54	**129223**	3/11/11	Cotixan Mexican food		2nd containment for grease Bin, employee training	No. Completed: 4/26/2011		
55	**129225**	5/6/11	Yogi's Beach Bar		2nd containment for grease	No. Completed: 5/17/2011		
56	**129227**	5/23/11	El Callejon		No Corrective Actions Required			
57	**129228**	5/25/11	Lotus cafe		Employee training			
58	**129230**	5/26/11	Encinitas Ranch Golf Course		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
59	**129231**	3/31/11	El Pollo Loco		Obtain Spill Kit, 2nd containment, overhead coverage, clean trash area	No. Completed: 5/26/2011		
60	**129233**	6/1/11	Shell Station		No Corrective Actions Required			
61	**129235**	6/1/11	Brett's BBQ		No Corrective Actions Required			
62	**129243**	6/2/11	Pei Wei Asian Diner		No Corrective Actions Required			
63	**129245**	6/2/11	Seven Eleven		No Corrective Actions Required			
64	**129246**	6/3/11	Cardiff 76 Rosano's		No Corrective Actions Required			
65	**129249**	6/6/11	Williamson Produce		No Corrective Actions Required			
66	**129270**	6/6/11	Dirty Dogs		No Corrective Actions Required			
67	**129271**	6/7/11	Firenze Trattoria		No Corrective Actions Required			
68	**129272**	6/7/11	Manhattan Giant Pizza		No Corrective Actions Required			
69	**129274**	6/8/11	Raspy Growers		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
70	**129275**	6/7/11	Charles Foreign Car 197		No Corrective Actions Required			
71	**129276**	6/13/11	RCP Block & Brick		No Corrective Actions Required			
72	**129286**	5/23/11	leucadia Pizzeria		spill kit, 2nd containment, coverage, clean trash area	No. Completed: 6/14/2011		
73	**133309**	6/14/11	Seven Eleven 25766B		Cover and tray	No. Completed: 6/16/2011		
74	**133313**	6/1/11	Angelo Burger		spill kit, post spill plan, cover and tray	No. Completed: 7/18/2011		
75	**133315**	6/2/11	St Germain's		tray	No. Completed: 7/18/2011		
76	**133317**	1/25/11	Golden Bowl		No Corrective Actions Required			
77	**133318**	1/26/11	El torito Market		No Corrective Actions Required			
78	**133319**	2/2/11	Giovanni's Sandwitch Shop		No Corrective Actions Required			
79	**133320**	6/8/11	Lumberyard Tavern & Grill		No Corrective Actions Required			
80	**133321**	6/7/11	Baracuda Fresh Grill		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
81	**133325**	6/1/11	Blue Ribbon Artisan Pizzeria		No Corrective Actions Required			
82	**133369**	5/26/11	Beachside Grill		tray, cover & clean trash area	No. Completed: 8/1/2011		
83	**133371**	2/22/11	Mozy Cafe		tray	Yes	Yes Follow up will be completed in FY 11-12	
84	**133535**	6/22/11	Taco Bell		spill kit, post spill plan, provide and document employee training, clean trash area of spilled oil and other debris	No. Completed: 8/3/2011		
85	**133537**	5/23/11	Raul's Mexican Food		roof, tray, training	No. Completed: 8/4/2011		
86	**133842**	2/22/11	Technical Auto Repair		No Corrective Actions Required			
87	**133843**	2/22/11	Anne and Drew's Flower Patch		No Corrective Actions Required			
88	**133844**	2/22/11	Cool breeze Farms		No Corrective Actions Required			
89	**133847**	12/16/10	Privateer Coatings		No Corrective Actions Required			
90	**133848**	4/19/11	Weston Nut Farm		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
91	**133849**	4/19/11	Coral Tree Farm and Nursery		No Corrective Actions Required			
92	**133851**	5/6/11	East Village Asian Dinner		Spill kit, post spill plan, training, and oil coverage Follow up will be completed in FY 11-12			
93	**133853**	6/3/11	Mr. Peobodys		Spill Kit, spill plan Follow up will be completed in FY 11-12			
94	**133858**	6/16/11	Zenbu/Rimel's		2nd containment for oil, Clean up trash Follow up will be completed in FY 11-12			
95	**133860**	6/3/11	Jack In the box		Post spill plan, document training, cover oil, clean oil off trash area, Follow up will be completed in FY 11-12			
96	**133868**	6/16/11	BMW Encinitas		2nd containment & coverage for oil storage, coverage for other outdoor items, clean debris and trash from storm drain Follow up will be completed in FY 11-12			
97	**133883**	1/26/11	Le Papagayo		No Corrective Actions Required			

Total: **97**

Total NOVs: **0**

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants								
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or unit number or letter, if needed.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
1	Dog Behavior 101	2142 Montgomery Ave	F	Montgomery Ave	Cardiff	CA	92007	4904.61		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
2	Dogs Are Awesome Pet Sitting Services	1305 Mackinnon Ave	B	Mackinnon Ave	Cardiff	CA	92007	4904.61		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
3	North Co. Coastal Canine Care	1549 San Elijo Ave		San Elijo Ave	Cardiff	CA	92007	4904.61		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
4	Robertson Relief Vet Services	785 Fieldstone Ln		Fieldstone Ln	Encinitas	CA	92024	4904.51		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
5	Sunland Ranch	3675 Copper Crest Rd		Copper Crest Rd	Encinitas	CA	92024	4904.51		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
6	Underdog Pet Sitting	2439 Caminito Ocean Cove		Caminito Ocean Cove	Cardiff	CA	92007	4904.61		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
7	70 Moto Parts, L L C	1873 Haymarket Rd		Haymarket Rd	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
8	B B'S Auto Detail Wheel Polishing	606 Stratford Dr		Stratford Dr	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
9	Blue Coast Taxi	928 Brass Way		Brass Way	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
10	Cardiff Limousine	844 Bonita Dr		Bonita Dr	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
11	Coast Highway Taxi	815 Wood Dr		Wood Dr	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
12	Color Solutions Auto Two	126 Triton Cir		Triton Cir	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
13	Elite Auto Trim	4265 Manchester Ave		Manchester Ave	Encinitas	CA	92024	4904.61		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
14	In Motion Motors	3675 Copper Crest Rd		Copper Crest Rd	Encinitas	CA	92024	4904.51	8999001	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
15	J C'S Taxi Service	919 Brass Way		Brass Way	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
16	Lucas' Cab	117 Rosebay Dr	21	Rosebay Dr	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
17	Mc Garry Mobile Detailing Systems	2134 Carol View Dr	116	Carol View Dr	Cardiff	CA	92007	4904.61		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
18	Mercedes West Auto Wholesale	2026 Oxford Ave		Oxford Ave	Cardiff	CA	92007	4904.61		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
19	Miller Tire & Wheels, Inc.	248 La Veta Ave		La Veta Ave	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
20	Trinity Express	1457 Pegaso St		Pegaso St	Encinitas	CA	92024	4904.61		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
21	Wallace Courier	523 Samuel Ct		Samuel Ct	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
22	Whalen Performance	1726 Avenida Melodia		Avenida Melodia	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
23	A - 1 Patio & Remodeling Experts	1280 Santa Fe Dr		Santa Fe Dr	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
24	A C Energy Systems, Inc.	224 Birmingham Dr	1A	Birmingham Dr	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
25	A. P. Cottam Co.	123 Jasper St	12	Jasper St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
26	Archibald Sheet Metal	125 A St		A St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
27	Artisan Textures And Drywall	909 Woodlake Dr		Woodlake Dr	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
28	B L T Construction, Inc.	1923 Lahoud Dr		Lahoud Dr	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
29	Beeson Squared Construction	1572 Caudor St		Caudor St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
30	Better Homes Construction	231 Countryhaven Rd		Countryhaven Rd	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
31	C A L Republic Co.	700 Garden View Ct	201	Garden View Ct	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
32	Caliber Drywall	1253 N Vulcan Ave	3	N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
33	Coastal Construction Group	742 Neptune Ave		Neptune Ave	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
34	Creative Garage Door Systems	1665 Orange Blossom Way		Orange Blossom Way	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
35	D. Bell Construction, Inc.	1539 Caudor St		Caudor St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
36	Eric Jason Cashion, Dba: Siding Solutions	168 Coop Ct		Coop Ct	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
37	Finishing Touch Moulding, Inc.	921 Hymettus Ave		Hymettus Ave	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
38	Green Building Squared, Inc.	1572 Caudor St		Caudor St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
39	Harbinger Electric	129 W Glaucus St	A	W Glaucus St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
40	Hudson Construction Incorporated	3462 Calle Margarita		Calle Margarita	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
41	J Z Framing, Inc.	134 S Jayton Ln		S Jayton Ln	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
42	J. Bryant Concepts	565 Requeza St		Requeza St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
43	J. Con Builders	1630 Gitano St		Gitano St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
44	K L R Bobcat And Hauling Services	1924 Country Grove Ln		Country Grove Ln	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
45	Langtree Woodworking	301 Horizon Dr		Horizon Dr	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
46	M R B Construction	1265 N Vulcan Ave		N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
47	Michael Buys Quality Builders	1802 Belle Grove Rd		Belle Grove Rd	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
48	Pacific Coast Glazing, Inc.	908 Nolbey St		Nolbey St	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
49	Pacific Custom Builders	146 W Glaucus St		W Glaucus St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
50	Paul Beeson H H P	1572 Caudor St		Caudor St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
51	Prola Landscape Design	1333 San Elijo Ave		San Elijo Ave	Cardiff	CA	92007	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
52	R. A. Booker Builders, Inc.	3451 Toscano Ct		Toscano Ct	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
53	Remoca General Contractors	818 Summerhill Ct		Summerhill Ct	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
54	Richard Thaisz Construction	1403 Caminito Septimo		Caminito Septimo	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
55	Robert R. Lovci	1236 Rubenstein Ave		Rubenstein Ave	Cardiff	CA	92007	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
56	Sahba Javedani	624 Faith Ave		Faith Ave	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
57	So - Cal Shade Sails	1009 Hurstdale Ave		Hurstdale Ave	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
58	Steffen Enterprises, Inc.	1008 Saxony Rd		Saxony Rd	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
59	Sun Cal Solar Incorporated	745 Winding Way		Winding Way	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
60	Tom Plumb	469 Summer View Cir		Summer View Cir	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
61	Van Veen Team	1145 Aloha Dr		Aloha Dr	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
62	Village Property Systems, Inc.	131 Aberdeen Dr		Aberdeen Dr	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
63	W O A Builders, Inc.	110 Requeza St		Requeza St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
64	Wolf Home Inspections	742 Cole Ranch Rd		Cole Ranch Rd	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
65	Dave De Jour	2080 Montgomery Ave		Montgomery Ave	Cardiff	CA	92007	4904.61		Mobile- Eating/Drinking	Yes	Yes	No	No	Yes	No	No	No	Yes

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants								
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash
Field Description ►	Name used to identify facility in database.	Street number of facility.	Suite or unit number or letter, if needed.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
66	Farm To Fork	404 La Veta Ave		La Veta Ave	Encinitas	CA	92024	4904.51		Mobile- Eating/Drinking	Yes	Yes	No	No	Yes	No	No	No	Yes
67	101 Window Cleaning	910 Hermes Ave		Hermes Ave	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
68	Anonymous Window Cleaning	1727 Legaye Dr		Legaye Dr	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
69	Aztech Cleaning Services	1627 Valleda Ln		Valleda Ln	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
70	Bart Forry Home Repairs	704 Regal Rd	C12	Regal Rd	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
71	Belman Handyman	738 Snapdragon St		Snapdragon St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
72	Blade Dufour Handyman Service	905 Woodlake Dr		Woodlake Dr	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
73	Bouche Construction	1115 Balour Dr		Balour Dr	Encinitas	CA	92024	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
74	Bright Visions Window Washing	616 Lynwood Dr		Lynwood Dr	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
75	Clean Sweep	1252 Mackinnon Ave		Mackinnon Ave	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
76	D V Environmental Group	1829 Forestdale Dr		Forestdale Dr	Encinitas	CA	92024	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
77	Designs By The Sea	1511 Calle Tulipanes		Calle Tulipanes	Encinitas	CA	92024	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
78	Dirt - Busters	808 Regal Rd	J1	Regal Rd	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
79	Ed's Handyman Service	1372 Hymettus Ave		Hymettus Ave	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
80	Handyman	226 Meadow Vista Way		Meadow Vista Way	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
81	Heavenly Views Window Cleaning	1123 Gardena Rd		Gardena Rd	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
82	Jesus Fuentes	2039 Shadow Grove Way		Shadow Grove Way	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
83	Linda Messling	454 Requeza St	224	Requeza St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
84	Liquid Pool And Spa Service	16 E I St		E I St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
85	Lux Homes	378 Fulvia St		Fulvia St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
86	M H S - Works	1008 Cottage Way		Cottage Way	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
87	Madrigal Handyman Service	513 S Willowspring Dr		S Willowspring Dr	Encinitas	CA	92024	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
88	Mike Hidalgo, Inc.	119 Europa St		Europa St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
89	North County Handy Man	1270 Avenida Miguel		Avenida Miguel	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
90	North County Hauling Service	1117 Woodlake Dr		Woodlake Dr	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
91	Patrice Alexander	2437 Oxford Ave		Oxford Ave	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
92	Phil's Handyman Service	1726 Old Mill Rd		Old Mill Rd	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
93	R. K. Enterprises	658 Santa Fe Dr		Santa Fe Dr	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
94	Reva Hydro Jetting	1056 Lark Song Ln		Lark Song Ln	Encinitas	CA	92024	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
95	Romeo Godinez Handyman	1159 Gardena Rd		Gardena Rd	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
96	San Diego Stone Care	731 Snapdragon St		Snapdragon St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
97	Seacoast Plumbing	1334 Caminito Septimo		Caminito Septimo	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
98	Sparkle Window Cleaning	2427 Newcastle Ave		Newcastle Ave	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
99	Spectrum Builders	699 N Vulcan Ave	84	N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
100	The London Window Cleaner	285 Rodney Ave		Rodney Ave	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
101	Turn Key Construction Handyman Services	444 N El Camino Real	87	N El Camino Real	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
102	Alberta Santiago	1020 Aloha Dr		Aloha Dr	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
103	All About Cleaning Services	1168 Arcadia Rd		Arcadia Rd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
104	All In Carpet Cleaing	720 Devonshire Dr		Devonshire Dr	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
105	Bob's Carpet Care, Inc.	336 Sanford St		Sanford St	Encinitas	CA	92024	4904.51	7217001	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
106	Cardiff Cleaningworks	375 Dublin Dr		Dublin Dr	Cardiff	CA	92007	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
107	Cardiff Maintenance	2233 Lagoon View Dr		Lagoon View Dr	Cardiff	CA	92007	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
108	Cifuentes Residential & Commercial Cleaning	1646 Landquist Dr		Landquist Dr	Encinitas	CA	92024	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
109	Claudia's Housekeeping Services	1338 Mackinnon Ave		Mackinnon Ave	Cardiff	CA	92007	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
110	Clean & Clear Windows	244 Second St	D	Second St	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
111	Coastal Carpet Cleaning	1252 Hygeia Ave		Hygeia Ave	Encinitas	CA	92024	4904.51	7217	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
112	David Rivers Cleaning Services	1743 Old Mill Rd		Old Mill Rd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
113	Doctor Playground, Inc.	123 Jasper St	46	Jasper St	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
114	Drenie's Housecleaning	1421 San Elijo Ave	B	San Elijo Ave	Cardiff	CA	92007	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
115	Encinitas Janitorial Service	699 N Vulcan Ave	109	N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
116	Favorite Maid	404 Encinitas Blvd	258	Encinitas Blvd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
117	Jason Cardoza General Maintenance	884 Del Riego Ave		Del Riego Ave	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
118	Just Us Cleaning And House Sitting	1066 Guildford Ct		Guildford Ct	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
119	Kamin's Cleaning Services	170 Phoebe St	11	Phoebe St	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
120	Nayeli Kim Dba Anago Of San Diego	1015 Guadalajara Dr		Guadalajara Dr	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
121	Organic Steam Carpet Clean	2039 Willowood Ln		Willowood Ln	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
122	Pacific Coast Maintenance	981 N Vulcan Ave	8	N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
123	Petra Cleaning	351 Countrywood Ln		Countrywood Ln	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
124	Professiional Cleaning & Errands	1099 Regal Rd		Regal Rd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
125	Ranch & Coast Mortgage Group, Inc.	149 W D St		W D St	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
126	Rita's Cleaning Services	796 Clark Ave		Clark Ave	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
127	Romero's Carpet Cleaning	1190 Encinitas Blvd	146	Encinitas Blvd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
128	Seaside Janitorial Service	1019 1/2 Hermes Ave		Hermes Ave	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
129	Terry's Cleaning Service	2157 Pleasant Grove Rd		Pleasant Grove Rd	Encinitas	CA	92024	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
130	Toledo House Cleaning	1146 Gardena Rd		Gardena Rd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants								
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash
Field Description ►	Name used to identify facility in database.	Street number of facility.	Suite or unit number or letter, if needed.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
131	Aguirre Services	347 Cerro St		Cerro St	Encinitas	CA	92024	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
132	Alfonso Rey Landscape Maintenance	351 Sprucewood Dr		Sprucewood Dr	Encinitas	CA	92024	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
133	All Cities Hauling	280 Cottage Grove Ln		Cottage Grove Ln	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
134	Alonzo	755 Regal Rd		Regal Rd	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
135	Arnulfo Medina Landscaping	1408 Hermes Ave	A	Hermes Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
136	Arroyo Landscaping Design	910 Nardo Rd		Nardo Rd	Encinitas	CA	92024	4904.51	0781	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
137	Benny's Gardening	1010 Balour Dr		Balour Dr	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
138	Bradley Landscape Development, Inc.	607 N Vulcan Ave		N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
139	Carrillo Tree Maintenance	794 Clark Ave		Clark Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
140	Coco's Landscape And Maintenance	1744 Knollfield Way		Knollfield Way	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
141	Crown Pool And Landscape	2126 Via Tiempo		Via Tiempo	Cardiff	CA	92007	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
142	Enrique Landscaping	1020 Aloha Dr		Aloha Dr	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
143	Falling Waters Landscape, Inc.	774 Lotus Blossom St		Lotus Blossom St	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
144	Felix Sanchez Gardening Service	880 Del Rio Ave		Del Rio Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
145	Galapacifica Landscape	924 Encinitas Blvd	73	Encinitas Blvd	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
146	Greg Stone Landscape Architects	69 Mcneill Ave		Mcneill Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
147	Gresham Landscaping & Consulting	1734 Noma Ln		Noma Ln	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
148	J A Landscape	2068 Bulrush Ln		Bulrush Ln	Cardiff	CA	92007	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
149	J M D Landscape, Inc.	187 N Vulcan Ave		N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
150	Jean Nordstrom	2156 Mountain Vista Dr		Mountain Vista Dr	Encinitas	CA	92024	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
151	Jeremy Spath Landscape Design	390 La Veta Ave		La Veta Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
152	John Hanna & Associates	1753 Swallowtail Rd		Swallowtail Rd	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
153	L. L. M. Landscape, Inc.	675 Requeza St		Requeza St	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
154	Lattin	246 A Neptune Ave		Neptune Ave	Encinitas	CA	92024	4904.51	5193	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
155	M A C Design & Development	471 Chesterfield Dr		Chesterfield Dr	Cardiff	CA	92007	4904.61	1799001	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
156	Mijangos Landscaping	1608 Charro St		Charro St	Encinitas	CA	92024	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
157	Mitchell Aquarium Service	591 Hygeia Ave	A	Hygeia Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
158	Morrison Workshop	875 Del Rio Ave		Del Rio Ave	Encinitas	CA	92024	4904.51	0781	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
159	Murillo Gardening Services	1216 Mackinnon Ave		Mackinnon Ave	Cardiff	CA	92007	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
160	Pacific View Landscapes	2444 Manchester Ave		Manchester Ave	Cardiff	CA	92007	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
161	Rajan Brown Landscape Design & Consulting	281 Fraxinella St		Fraxinella St	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
162	Silva's Landscaping	1105 Regal Rd		Regal Rd	Encinitas	CA	92024	4904.51	0782001	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
163	Zachary Jones Landscaping	704 Regal Rd	C3	Regal Rd	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
164	Kessing Painting,Inc.	261 Caliban Ct		Caliban Ct	Encinitas	CA	92024	4904.51	1799001	Mobile- Painting	No	No	No	No	No	No	No	No	No
165	Russell Handy Painting	2056 Bulrush Ln		Bulrush Ln	Cardiff	CA	92007	4904.61		Mobile- Painting	No	No	No	No	No	No	No	No	No
166	Shawn's Painting Services	721 Arden Dr		Arden Dr	Encinitas	CA	92024	4904.51		Mobile- Painting	No	No	No	No	No	No	No	No	No
167	A Plus Pool And Spa Service	1190 Encinitas Blvd	247	Encinitas Blvd	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
168	Absolute Fountain Service	730 Third St		Third St	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
169	Aqua Tech Pool Care, L L C	233 Delphinium St		Delphinium St	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
170	Aquatic Perfection	1590 Avenida De Los Lirios		Avenida De Los Lirios	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
171	Bishop Pool Service And Repair	744 Foxglove St		Foxglove St	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
172	Blue Water Of La Jolla	2008 Wandering Rd		Wandering Rd	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
173	C D Pools	1265 Rubenstein Ave		Rubenstein Ave	Cardiff	CA	92007	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
174	James Kandiguranis Pools	1853 N Vulcan Ave	4	N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
175	Leisure Friends,	368 N El Camino Real		N El Camino Real	Encinitas	CA	92024	4904.51	7389114	Mobile - Pool	No	No	No	No	No	No	No	No	No
176	Lonely Island Pool Services	1427 Arbor Ct		Arbor Ct	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
177	Mayer Pool Service & Repair	1553 Plumtree Dr		Plumtree Dr	Encinitas	CA	92024	4904.61	7389001	Mobile - Pool	No	No	No	No	No	No	No	No	No
178	Pacific Coast Pool Service	1439 Linda Sue Ln		Linda Sue Ln	Encinitas	CA	92024	4904.51	7389001	Mobile - Pool	No	No	No	No	No	No	No	No	No
179	Palisades Pool And Spa Service	230 Gloxina St		Gloxina St	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
180	Pro Clean Pools & Spas	1052 Arcadia Rd		Arcadia Rd	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
181	Ranch And Sea Pool Care	1686 Falcon Hill Ct		Falcon Hill Ct	Cardiff	CA	92007	4904.61	7389114	Mobile - Pool	No	No	No	No	No	No	No	No	No
182	Rancho Santa Fe Pool Service	2039 Willowood Ln		Willowood Ln	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
183	The Pool Pros	2061 Village Park Way	123	Village Park Way	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
184	The Poolman	349 N Vulcan Ave		N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
185	Wilson Pools Plus	185 Village Run East		Village Run East	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
186	Frazee Paint	270 N El Camino Real	C	N El Camino Real	Encinitas	CA	92024	4904.51	5231	Mobile- Painting	No	No	No	No	No	No	No	No	No
187	Privateer Coatings	1114 N Coast Highway 101		N Coast Highway 101	Encinitas	CA	92024	4904.51	5231	Mobile- Painting	No	No	No	No	No	No	No	No	No
188	The Sherwin-Williams Company 8557	208 N El Camino Real		N El Camino Real	Encinitas	CA	92024	4904.51	5231	Mobile- Painting	No	No	No	No	No	No	No	No	No
189	Vista Paint Corporation	133 N El Camino Real		N El Camino Real	Encinitas	CA	92024	4904.51	5231	Mobile- Painting	No	No	No	No	No	No	No	No	No
190	Del Rancho Pools	1315 Encinitas Blvd		Encinitas Blvd	Encinitas	CA	92024	4904.51	1799	Mobile - Pool	No	No	No	No	No	No	No	No	No
191	Leslie's Swimming Pool Supplies 506	270 N El Camino Real	G	N El Camino Real	Encinitas	CA	92024	4904.51	1799	Mobile - Pool	No	No	No	No	No	No	No	No	No

CITY OF ENCINITAS

Clean Water Program

Minimum Required

STORMWATER BEST MANAGEMENT PRACTICES

for Commercial Facilities

YOUR BUSINESS CAN MAKE A DIFFERENCE!

What is a stormwater Best Management Practice (BMP)?

The term "Best Management Practice" (BMP) refers to a combination of effective and economical practices, techniques, and/or activities that can help prevent or reduce stormwater runoff pollution. It's simple: only rain goes in the storm drain.

How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some facilities may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

See http://bmp.projectcleanwater.org for more information on Best Management Practices relating to specific commercial business activities.

To report stormwater pollution in the City of Encinitas, please call the Clean Water Hotline: (760) 633-2787

For any questions regarding the City's Clean Water Program or the information presented above, email: npdesmail@cityofencinitas.org

Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. A training log should be kept at the facility to ensure that all employees are properly trained in stormwater pollution prevention practices. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) for every activity performed on the job. (Please visit *http://bmp.projectcleanwater.org* for activity specific practices)
- Proper spill prevention and response procedures (containment, control, cleanup - do NOT hose it down)
- The location and proper use of clearly labeled spill kit and spill response guide.
- The location of all stormwater drains and inlets, and the knowledge that they all lead to the ocean.

Indoor/Outdoor Liquid Storage

Commonly stored liquids including grease, oil, and other fluids that may be kept in a container inside or outside may pose a potential threat to water quality if they can overflow, get knocked over, or leak. Properly storing these fluids is a key component to effective pollution prevention at any business. The following practices comply with minimum BMP standards for liquid storage — and will help to keep them out of the stormwater system.

- Keep containers that store fluid or liquid inside an additional container to provide secondary containment
- Provide overhead coverage for outdoor storage of fluid or liquid waste
- Schedule regular waste pick-ups to prevent spills and overflows from storage containers
- Perform regular maintenance and cleaning of storage areas

Good Housekeeping

Routine maintenance and clean-up is essential to minimizing stormwater pollution from your business. When cleaning up outdoors, it is important to keep debris and contaminants from running into the storm drain system. The following good practices should be applied to all cleanup and maintenance activities to prevent storm drain pollution:

- Dry cleaning methods (i.e. using a broom to sweep instead of a hose) will reduce water usage and lessen the potential to pollute. Also, using a mop and bucket will eliminate runoff; the wash water can then be disposed of in the sink or toilet (NOT the storm drain)
- Wash water from activities such as hosing off sidewalks and patios, vehicle washing, and cleaning floor mats should be directed toward or done over pervious areas (i.e. lawn, dirt, flower bed, shrubs, and planted areas).
- If using water as a clean-up method and it cannot be re-directed to a vegetated area, proper storm drain protection (i.e. sand bags) must be utilized to capture all washwater.

Trash/Recycling Storage and Management

Properly maintained trash, recycling, and debris containment areas are an easy way to protect the environment. Simple steps like keeping trash dumpster lids closed and immediate cleanup of spilled materials (solid or liquid) will go a long way. The following practices must also be applied to better manage trash, debris and other waste materials:

- Ensure the site, trash/recycling areas, and storm drains are free of litter and debris.
- Trash containers and dumpsters must be in good condition and free of holes.
- All receptacles must have closed lids or be placed in a covered area.

Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water

CITY OF ENCINITAS

Clean Water Program

Minimum Required

STORMWATER BEST MANAGEMENT PRACTICES

for Mobile Business Activities

YOUR BUSINESS CAN MAKE A DIFFERENCE!

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FOR MORE INFORMATION:

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Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) specific to mobile business activities. Please visit *http://bmp.projectcleanwater.org* for activity specific BMPs related to your business.
- Knowledge of the storm drainage system, and how to locate drains and inlets that must be protected.
- How to use appropriate and easily accessible supplies to properly control and eliminate any discharge to the storm drain system.
- Proper spill control and cleanup procedures.

Proper Waste Handling (solid, liquid, and hazardous wastes)

Before starting any job, consider the types of waste that may be generated including wash water, chemical compounds, residual construction or repair materials, paints, oil and grease, and loose trash and debris. It is important to properly control, contain, and transport these materials to prevent spills and discharge from entering the storm drain system. The following steps will help to manage waste generated from your mobile business activity:

- Do not dispose of ANY waste material in the storm drain system.
- Liquid non-hazardous wastes may be disposed of in the sanitary sewer (i.e. sinks, toilets) if appropriate, or placed in sealed containers and disposed of properly.
- Solid wastes should be removed from the worksite in waste containers with a lid and disposed of at appropriate waste sites.
- Inspect and label all hazardous material waste containers prior to removal. For details in the management, transport, and disposal of specific waste, contact the County of San Diego Hazardous Materials Division at (619) 338-2231.

Equipment Cleanup

Equipment cleanup activities should always be conducted away from storm drain inlets, and performed in a manner to prevent the release of any material into the street, curb, gutter, alley or any other conveyance facility. To ensure compliance with minimum BMP standards for equipment cleanup activities, follow these simple practices:

- Equipment cleanup should be conducted in a container such as a bucket, tub or basin to control liquids and prevent runoff.
- Alternatively, conduct equipment and material cleanup activities in an area contained by a berm or plastic liner to collect and contain all fluids.
- Dispose of waste water into a sanitary sewer drain (i.e. sink, toilet) as appropriate or into a vegetated area (i.e. lawn, flower bed, dirt area).

Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water

Appendix E

Residential

E-1 Map of High Threat to Water Quality Residential Areas

City of Encinitas

High Threat to Water Quality Residential Areas

High Threat to Water Quality Residential Areas in the City of Encinitas include:

- All residential areas within 500ft of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

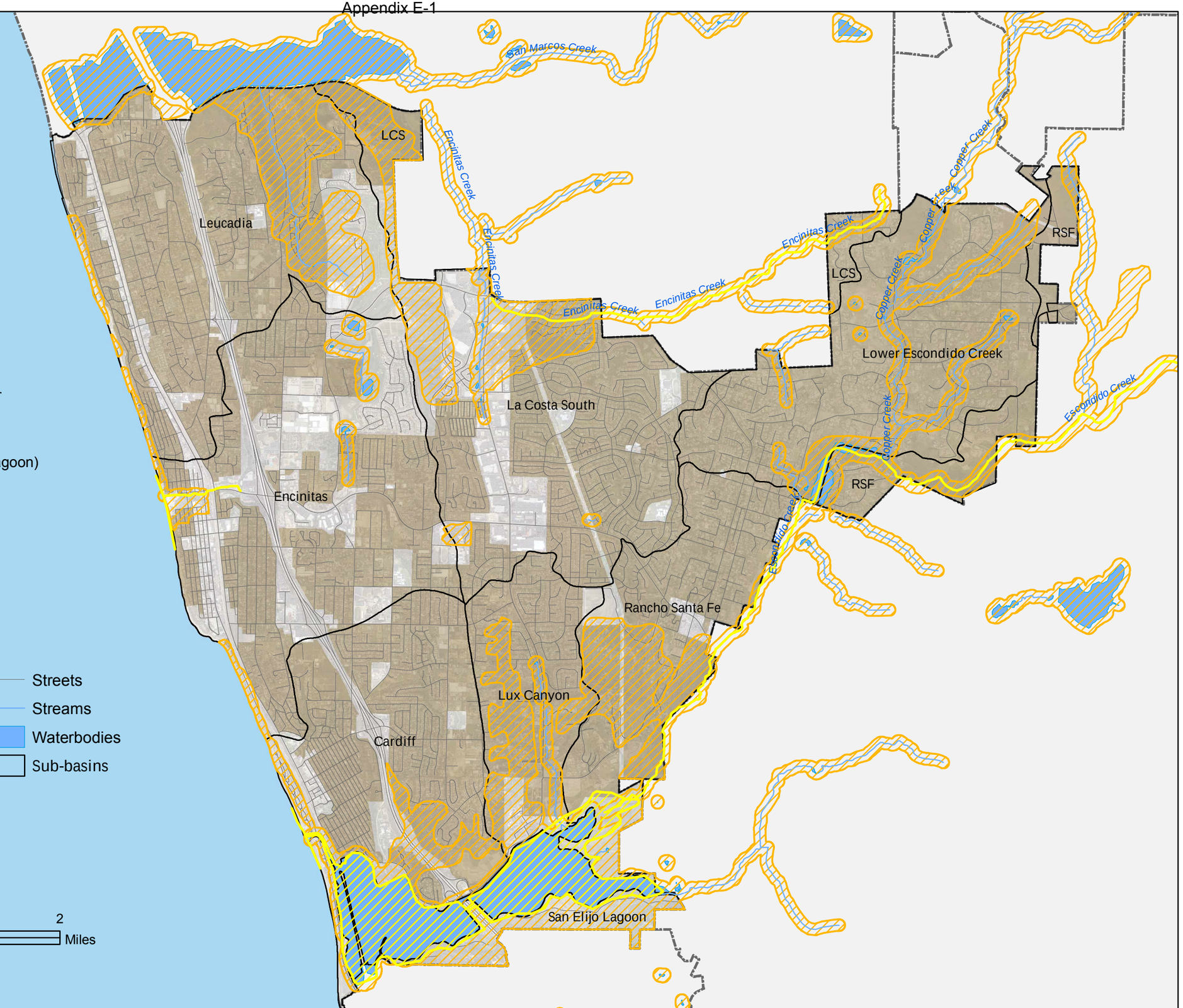

Residential Areas
303(d) listed streams
303(d) listed waterbodies
Environmentally Sensitive Areas
Streets
Streams
Waterbodies
Sub-basins

0 0.5 1 2 Miles

Appendix F

Education

F-1 Regional Mobile Business Outreach and Education Plan

F-2 NCSWP Construction Brochure

F-3 City of Encinitas Brochures (English Spanish)

F-4 Encinitas Environmental Services Guide

F-5 Outreach Materials for FY 10-11

F-6 Regional Residential Education Plan

Regional URMP Attachment 5.0

Regional Mobile Business Outreach and Education Strategy

FINAL - March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

This document describes a **Regional Mobile Business Outreach and Education Program** to be collaboratively conducted by the Copermittees of NPDES Order No. R9-2007-0001 (Permit). It was developed by the Mobile Business Subcommittee of the Copermittees' Outreach Workgroup. Permit section D.3.b.(4)(a) requires that each Copermittee develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP. Section D.3.b.(4)(b) further states "if they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education." Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy. It addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy.

2.0 SOURCE CHARACTERIZATION

Mobile businesses provide services at offsite locations rather than from fixed bases of operation. Services may be provided at, but are not limited to, residential, industrial, municipal, and commercial areas. Permit Section D.3.b.(1), identifies 12 categories of mobile business types that will be addressed as part of this regional Strategy. Table 1 identifies these businesses types and the potential pollutants associated with each. Additional characterization and description of these sources will be conducted during the development and implementation of the regional program elements described in Section 2.0

Table 1 – Identification of Mobile Business Types and Associated Pollutants-of-Concern

Source Type	Bacteria	Metals	Pesticides	Sediment	Trash	Nutrients	Organics	Oil/Grease
1. Auto Repair, Maintenance, Fueling, Cleaning		X		X	X		X	X
2. Equipment repair, maintenance, fueling, or cleaning		X		X	X		X	X
3. Mobile automobile or other vehicle washing		X		X	X		X	X
4. Pest control services		X	X				X	
5. Mobile carpet, drape or furniture cleaning							X	
6. Cement mixing or cutting				X		X	X	
7. Masonry				X		X	X	
8. Painting and coating		X			X		X	
9. Landscaping	X	X	X	X		X	X	
10. Pool and fountain cleaning		X		X		X	X	
11. Portable sanitary services	X				X	X	X	
12. Power washing services	X	X	X	X	X	X	X	X

3.0 REGIONAL PROGRAM ELEMENTS

The Regional Mobile Business Outreach and Education Program will consist of several elements to be developed and implemented by June 2010.

3.1 Inventory Development and Maintenance

Permit section D.3.b.(1) requires that each Copermittee keep as part of its commercial sources inventory a listing of mobile businesses known to operate within its jurisdiction, and section D.3.b.(4)(b) encourages Copermittees to share these inventories. In addition to sharing inventory information, the Copermittees have determined that the collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses, and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications. The Copermittees

intend to utilize a consultant to compile this inventory. It is expected to be completed by June 2009. Prior to the completion of a shared inventory, the Copermittees will continue to meet the requirements of section D.3.b.(4)(b) by individually maintaining and updating as necessary their existing jurisdictional mobile business inventories. These will be used as a starting point for the development of a consolidated inventory. The consultant will also be tasked with researching other information sources such as unlicensed mobile businesses operating within the County, as well as with managing updates to the inventory in subsequent years.

3.2 Establishment of Minimum BMP Requirements

Permit section D.3.b.(4)(a)i requires that Copermittees develop and implement minimum standards and BMPs to be required for each of the various types of mobile businesses. The Copermittees also intend to collaborate in the development of a minimum set of BMP standards for each type of mobile business addressed through the regional effort. Existing resources such as jurisdictional minimum BMPs, the Project Clean Water Clean Water Tool Box (http://www.projectcleanwater.org/bmp/) and the Think Blue website (http://www.sandiego.gov/thinkblue) will be reviewed by the Copermittees in developing these common standards. A consultant may also be utilized for BMP development support. This task is expected to be completed by June 2009.

3.3 Outreach and Education Strategy

Permit section D.3.b.(4)(a)iv requires that Copermittees develop and implement an outreach and education strategy for mobile businesses. A variety of educational methods and approaches will likely be utilized in complying with this requirement. These will be determined by the Copermittees during the development of this task. The centerpiece of the Copermittees' education strategy will be business notifications. This element is described further below.

3.4 Business Notifications

Permit section D.3.b.(4)(a)iii requires that, within the first three years of implementation of the updated JURMP, each Copermittee must notify the owner/operator of each

inventoried mobile business their minimum standards and BMP requirements and local ordinances. The Copermittees will collaboratively develop and implement a regional notification strategy to inform mobile businesses of their obligation to comply with the local ordinances of the jurisdictions where they operate. In addition to assisting in the development of this strategy, the consultant will be tasked with notifying businesses and tracking when and how they were notified. Potential notification options include mailing, emailing, workshops, and website posting. This task will be completed no later than March 24, 2011, but is targeted for completion by March 2010.

3.5 Implementation Schedule

Implementation of the Regional Mobile Business Outreach and Education Program will begin during FY 08/09, with all major tasks targeted for completion by the end of FY 2009/10. The consultant may also be retained for future management of the inventory and other tasks as needed. Major milestones are summarized below.

FY 2008/09

- Consultant selection by Subcommittee
- Completion and maintenance of regional inventory by consultant
- Development of regional minimum BMPs

FY 2009/10

- Notification of businesses by consultant (by January 2010)
- Final report including status of notifications submitted to Copermittees

4.0 INDIVIDUAL COPERMITTEE RESPONSIBILITIES

Although many of the specific requirements of Permit section D.3.b.(4)(a) will be collaboratively addressed through the completion and implementation of the Regional Mobile Business Outreach and Education Program, the responsibility for ensuring individual Permit compliance ultimately remains with each Copermittee. These responsibilities are briefly discussed below.

4.1 Inspections and Enforcement

Permit section D.3.b.(4)(a)ii requires that Copermittees develop and implement an enforcement strategy which specifically addresses the unique characteristics of mobile businesses operating within their jurisdictions. Section D.3.b.(4)(a)v further requires that Copermittees conduct inspections of mobile businesses as needed (e.g., on a complaint basis). The Regional Mobile Business Outreach and Education program will not address inspections or enforcement of mobile businesses; these responsibilities are retained individually by each Copermittee.

4.2 Education and Outreach

Copermittees are expected to participate as requested in the development of the Education and Outreach Strategy described in Section 3.3 above. Individual Copermittees may also have specific needs or requirements not addressed through this effort. Each jurisdiction retains the responsibility for developing additional education programs or strategies in accordance with their own needs, and as necessary to ensure their own Permit compliance.

4.3 Inventory Updates

As described in Section 3.1 above, individual Copermittee mobile business inventories will initially be used as a starting point for the development of a consolidated regional inventory. Copermittees are expected to make their inventories available as requested, and to provide updated information as determined necessary for future updates.

4.4 BMP Requirements

Copermittees are expected to make their jurisdictional BMPs and requirements available as requested during the development of regional standards and program content. The Regional Mobile Business Outreach and Education Program will emphasize standardized, common content. In the event that an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad 760-602-2719

City of San Marcos 760-744-1050

City of Encinitas 760-633-2787

City of Del Mar 858-755-9313

City of Oceanside 760-435-5800

City of Solana Beach 858-720-2470

City of Vista 760-726-1340

Best Management Practices

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.

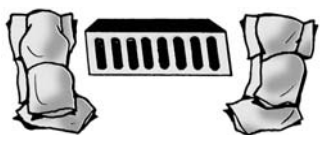

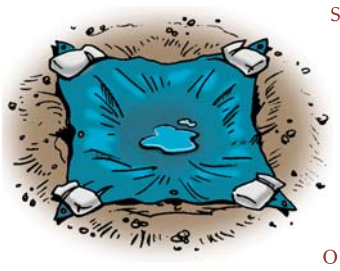

The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.

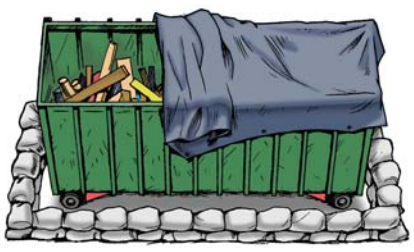

Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.

Water Quality Regulations for Construction Sites

In 1972, the Environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

A Pollution Prevention Guide for the Construction Industry

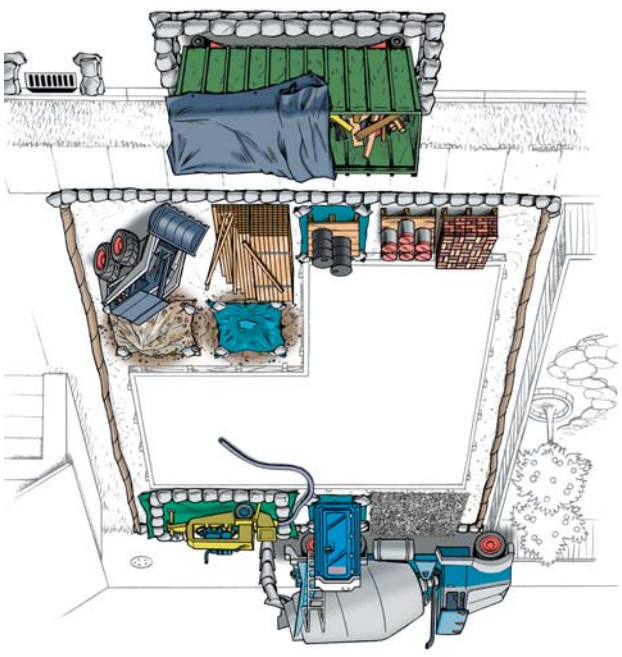

North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.

Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout Area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic

Mantenimiento
Automotriz
Automotive

Empresas Constructoras
Developers
Simple and Cost Effective Ways to Comply with Storm Water Regulations

Contratando un
Hombre Anto
Hiring a
Handy Man

DiaZinón
DiaZinon

Los Restaurantes Pueden
Ayudar a Mantener Limpias
Nuestras vías
Restaurants Can
Help Keep our
Waterways Clean

Cuidado del
Patio y del jardín
Yard & Garden
Care

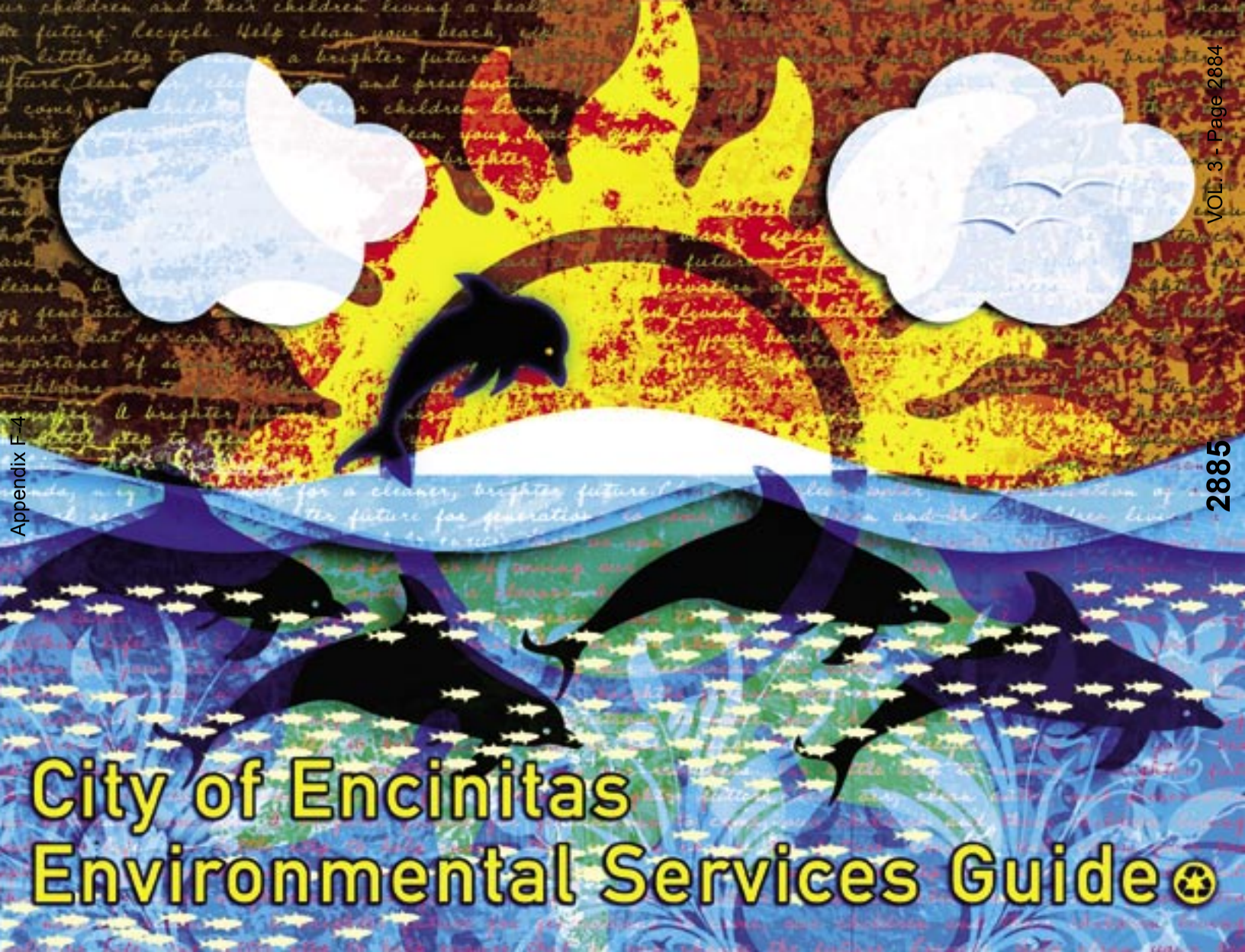
City of Encinitas
Environmental Services Guide

Ocean protection

The ocean begins at your front door.

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.

Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.

- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.

Color Changing Mood Pencil

Pet Waste Bag Dispenser

Recycled Shop Towel

Recycled Key Chain

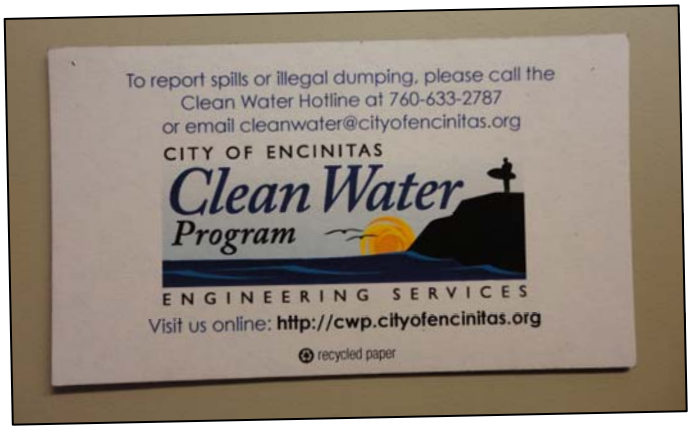

Magnet

CITY OF ENCINITAS

Clean Water Program

ENGINEERING SERVICES

Clean Water Hotline: 760-633-2787

made from 85% post-industrial recycled paper

Regional URMP Attachment 2.0

Regional Residential Education Plan

FINAL March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

The Regional Residential Education Program is a joint effort by the Copermittees of the Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES No. CAS0108758). The Regional Residential Education Plan (Plan) contains recommended strategies for the successful development and implementation of the Regional Residential Education Program. Per section F.1 of the Permit, as amended by Addendum No. 1 on December 12, 2007, this program must be collaboratively developed and implemented by March 24, 2008.

In the past, Copermittees have been limited in their ability to pursue strategies which may have a much greater potential to influence knowledge and behavioral change in residential populations. There are several benefits to implementing an enhanced regional program to target residential sources of stormwater pollution. First, it will encourage the development of consistent messages throughout the region. Second, a regional approach will enable Copermittees to better leverage resources and utilize economies of scale. Finally, stormwater and urban runoff pollution frequently cross jurisdictional boundaries, making collaborative approaches a necessity. While the regional program will be coordinated extensively among the Copermittees, it is not meant to supplant the jurisdictional and watershed programs.

The overall goals of the program are to increase awareness and knowledge, improve attitudes toward stormwater pollution and provide a foundation for changing behaviors that contribute to stormwater pollution. Based on extensive input from the Copermittee Regional Stormwater Management Committee (RMC) and the Education & Residential Sources Workgroup, as well as an independent analysis of existing educational efforts, the following objectives were developed to support these goals:

1. Maintain a consistent image, message, and brand
2. Use positive messages to increase knowledge and awareness, and ultimately change behavior
3. Develop community partnerships to leverage resources

4. Develop assessment strategies for program effectiveness

The Regional Education & Residential Sources Workgroup advises the RMC on regional shared outreach activities as necessary to support the requirements of the Permit. The Education & Residential Sources Workgroup plans, develops, and implements the various aspects of the stormwater education program. Education & Residential Sources Workgroup participants have traditionally combined efforts to reach business, industrial, and residential communities across the San Diego region. However, in accordance with the most recent NPDES Permit, this Plan represents a distinct effort to target residential sources of stormwater pollution.

Messages developed by the Education & Residential Sources Workgroup are designed to increase knowledge and awareness of regional stormwater issues and encourage positive changes in behavior. Assessment methods and measures have also been developed to evaluate the effectiveness of these messages and the strategies used to deliver them. Program evaluation methods and strategies will evolve as various program elements are implemented. Regional assessment methods will measure knowledge, awareness, and attitudes of residents. Program elements that are determined to be ineffective or least effective will be replaced by more effective elements or improved upon as needed. The regional program will also facilitate the measurement of changes in pollutant generating behaviors by the jurisdictional and watershed programs.

As a basis for developing this Regional Residential Education Plan, the Copermittees contracted with TRG & Associates to develop *Recommended Options for the San Diego Regional Stormwater Educational Program*. This document contains a number of recommended strategies for the successful development and implementation of a regional residential education program. It includes an extensive literature review, an analysis of existing educational programs in San Diego, and a comprehensive list of public awareness surveys. The literature review outlines other programs in the State that have

successfully implemented regional residential stormwater education programs. The document also summarizes the strengths and weaknesses of existing residential education efforts, provides suggestions for how they can be improved, provides a brief analysis of baseline public awareness surveys that have been implemented locally within the last five years, and offers recommendations for improving assessment methods and survey instruments.

2.0 SOURCE CHARACTERIZATION

The San Diego region occupies 4,261 square miles with a population of approximately 3 million people. Estimates for the year 2007 indicate that the San Diego regional population is 29% Hispanic and 71% non-Hispanic. Non-Hispanic persons include African Americans, American Indians, Native Hawaiians, Asians, and persons of a multitude of races, ethnicities, and cultures. SANDAG currently estimates that the median household income in the San Diego region is $68,388. According to the US Census Bureau in 2004 only 10.9% of San Diego's population was living below the poverty level, compared to 13.2% Statewide. Other estimates indicate that as much as 25% of California's population is living below the poverty level. Much of the region's quality of life revolves around the water resources.

Residential areas have been shown to be a prevalent source of urban runoff in the San Diego region, although less than ten percent of the region is developed as residential land. Most of the urban activity is clustered in the western third of the county, near coastal areas. However; residential land–based activities throughout the entire region contribute to polluted stormwater runoff.

The Regional Residential Education Program will focus efforts on high priority residential pollution sources that are common throughout the San Diego region. Water quality monitoring data and source characterization studies have provided the Copermittees with useful information in determining regional residential sources of stormwater pollution and constituents of concern. Regional threats to water quality were initially outlined in the Report of Waste Discharged and finalized in the Permit. Section

F.1.a of the Permit describes the process for determining which pollutants will be addressed by the program.

2.1. Regional Constituents of Concern

The following constituents of concern were determined to be the primary pollutants from residential sources for the San Diego region:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

Some jurisdictions may have additional high priority pollutants. Each jurisdiction will be individually responsible for addressing additional pollutants and their sources. The pollutants listed above will remain the focus of the Regional Residential Education Program.

2.2. Pollutant-generating Activities and Constituents of Concern

Table 1 outlines residential pollutant generating activities and associated constituents of concern generated by residential areas in the San Diego region.

Table 1) Pollutant Generating Activities

Pollutant Generating Activities	Priority Constituents				
	Bacteria	Nutrients	Pesticides	Sediments	Trash
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	X	X			
• Over-irrigation • Improper irrigation and system maintenance	X	X	X	X	
• Fertilizer use • Pesticide use • Landscaping activities	X	X	X	X	
• Cleaning outdoor impervious surfaces (i.e., driveways and patios)	X	X		X	X
• Improper waste disposal	X	X	X	X	X

2.3. Target Audiences

As described above, this program is intended to address the entire residential community of the San Diego region. This residential audience will be further described in terms of two specific target audiences in order to design more effective education and outreach strategies. The target audiences for the Regional Residential Education Program have been identified based on information gathered by the consultant (TRG and Associates), who utilized data from market research conducted by the County and City of San Diego and surveys gathered from other case studies. Although there may be other smaller groups of target audiences, regional outreach must realistically target the highest priority demographics in order to effectively utilize program funds. The following describes the target audiences for the campaign:

1. Primary Target Audience- English speaking residents and homeowners
2. Underserved Target Audience- Spanish speaking communities and Low Socio-Economic Status (SES)

One of the challenges of program implementation will be to develop messages that appeal to these communities. While creating content and developing materials for the primary target audience may be relatively straightforward, methods and approaches will need to be modified in order to engage the Underserved Target Audience. For example; some messages will be more conducive to translation into the Spanish language than others. Once translated, Spanish language media will be used to disseminate these messages.

According to the US Census Bureau, 33% of San Diego County residents speak a language other than English at home (2000). The same data indicates that 26.7 % of the regional population is Hispanic or Latino. Although this number varied within jurisdictions from 49.5% in Chula Vista to 11.7% in Carlsbad, it is clear that every jurisdiction in the region has significant populations of Hispanic or Latino residents. Therefore, although there are many languages spoken in San Diego, Spanish speaking communities are likely the most common throughout the region.

Research indicates that the motivating factors in Spanish speaking communities are 1) health and commitment to family, 2) children, and 3) finances. Similar priorities are found within the low SES communities. Hence, some messages will resonate more strongly with the communities among the Underserved Target Audience. Other messages may need to be modified in order to create a more appealing campaign. Low SES in California is defined as household annual income less than $25,000. Low SES residents tend to obtain information and resources from different sources than the residents within the Primary Target Audience. Again, message delivery becomes a key issue. In order to address all of these issues, specific outreach strategies will need to be developed in order to effectively reach the Underserved Target Audience.

3.0 TARGETED CHANGES TO KNOWLEDGE, AWARENESS AND BEHAVIOR

The overall goals of the Regional Residential Education Program are to raise the levels of knowledge and awareness with regards to stormwater pollution among residents, while encouraging changes to behaviors that are harmful to San Diego's waterways. The program will generally educate residents on 1) The difference between stormwater conveyance systems and sanitary sewer systems 2) the connection of storm drains to local waterways and 3) common residential sources of urban run-off. These are the general knowledge and awareness concepts upon which more specific messages will be built.

Recent research indicates that many residents do not understand that storm drains and sanitary sewer systems are completely separate. While sewage is treated, everything that goes down a storm drain goes directly to a creek, bay, or the ocean. The City of San Diego conducted a public opinion survey in 2007 in which 91% of respondents said they had heard the term "storm drain" before. However, only 46% knew that the water entering storm drains is not treated. This is a fundamental stormwater pollution prevention issue and general awareness concept. Awareness of the stormwater conveyance system is the first step towards understanding pollution prevention. Increasing knowledge and awareness that the system leads directly to local waterways will help residents to understand that urban sources of pollution have a direct effect on water quality. The awareness and knowledge of these issues are precursors to adjustments in attitudes (i.e.: increased concern for preventing this type of pollution).

Ultimately, it is anticipated that the program's targeting increased awareness and knowledge of these concepts will lead to positive changes in attitude. Furthermore, improved attitudes toward the importance of stormwater issues can provide motivation for changing pollutant generating behaviors.

In keeping with the program goals, the Copermittees have agreed on a number of positive behavior outcomes for each stormwater issue presented to the target audience. Pollutant generating activities are listed in Table 2, along with the knowledge required to understand the significance of the stormwater impacts. Also listed are numerous examples of desired behavior outcomes. Since it may not be feasible to craft messages that address each of the desired behavior outcomes listed in Table 2, some behaviors may be considered primary and targeted before others. Secondary behaviors will be targeted only if the initial efforts are determined to be unsuccessful. It is important to recognize that the Copermittees agreed on these issues and the associated behaviors, and some may wish to further utilize the concepts listed in Table 2 in their jurisdictional and/or watershed programs.

Table 2) Pollutant Generating Activities and Examples of Positive Behavior

Pollutant Generating Activities	Knowledge/Awareness	Examples of Desired Behavior Outcomes
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	Pet waste left in the yard and streets may introduce solids, bacteria, and nutrients to the storm drain and/or receiving water bodies.	• **Pick up pet waste during walks** • Pick up pet waste around home • **Properly dispose of pet waste in trash can or bin**
• Over-irrigation • Improper irrigation and system maintenance	Over-irrigation causes water and pollutants in its path to run into the storm drain and/or receiving water bodies.	• **Reduce over-irrigation** • Use irrigation controller technology to reduce the amount of over-watering • **Inspect and maintain irrigation system regularly** • Adjust irrigation schedule according to seasonal changes
• Fertilizer use • Pesticide use • Landscaping activities	Fertilizers and pesticides become pollutants that can be harmful to natural ecosystems when entering receiving water bodies. Soil, sediment, and yard waste can clog storm drains and/or receiving water bodies.	• Use plants that reduce the need for fertilizers (i.e.: native plants) • Apply chemical fertilizers and pesticides only as needed and at the appropriate time • **Use organic or slow-release fertilizers** • **Use Integrated Pest Management** • Store chemicals inside in a shed or storage cabinet where they are protected from rainfall • **Collect grass clippings and yard waste** • **Dispose of grass clippings and yard waste in the proper containers** • Protect exposed soil from rain with a tarp, vegetation, and/or mulch
• Cleaning outdoor impervious surfaces (i.e.: driveways and patios)	When it rains, trash, dirt, and chemicals that have built up on these surface can run into the street, the storm drain, and eventually local waterways.	• **Clean driveways, walkways, and patios by sweeping instead of hosing** • Direct wash water to soak in to lawn or garden
• Improper waste disposal	Litter and debris dropped on the ground will be washed into storm drains and local water bodies.	• **Put litter and cigarette butts in trash cans or bins** • Keep lids closed on trash cans or bins

Although many positive behaviors have been identified that may be encouraged by the messages developed in this program, the following have been selected as the primary desired behaviors to result from the changes to knowledge, awareness, and attitudes:

- Pick up pet waste and properly dispose of in trash can or bin
- Reduce over-irrigation by regularly inspecting and maintaining irrigation systems
- Reduce fertilizer use by applying chemical fertilizer only as needed and using organic or slow-release fertilizers
- Reduce chemical pesticide use through Integrated Pest Management
- Collect grass clippings and yard waste and place them in the appropriate disposal container in order to prevent them from entering the storm drain systems
- Sweep up outside areas such as driveways, walkways, and patios instead of hosing them down
- Put litter and cigarette butts in trash cans or bins

Specific messages will be designed to increase knowledge and awareness, and therefore encourage the behaviors listed above. Regional messages will be initially developed to address only the primary targeted behaviors. Once a baseline is established and program implementation is underway, Copermittees will have the opportunity to evaluate the knowledge, awareness, and willingness of the residential target audiences to adopt these behaviors. Other positive behaviors from Table 2 may also be substituted, if necessary.
It can reasonably be expected that the regional program will be able to measure success in terms of increasing knowledge and awareness, and improving attitudes, of residents.

Knowledge describes the accuracy of one's beliefs and awareness indicates recognition of the severity of the issues whereas attitude can be described as an individual's evaluation of it (favorable or unfavorable).

As a result of the regional efforts, Copermittees expect to see an increase in the general awareness of storm drain systems and their connection to local waterways, as well the sources of urban run-off. Specifically, residents should understand the difference between the stormwater conveyance system and sanitary sewer systems. They should become aware that water entering storm drains flows untreated to local waterways. Residents should also be able to accurately identify sources of stormwater pollution (i.e.: pet waste). Attitudes toward stormwater pollution should also improve. Ideally, there will be an increase in the numbers of households or individuals engaging in the desired behavior outcomes as a result of their increased knowledge and awareness. These targets will be measured using the assessment methods described in Section 6.0.

The primary assessment tool will be the public opinion surveys. A baseline regional residential telephone survey will be conducted in 2008 and, ideally, at one other point during the current permit cycle. The numeric objectives for survey results are set so that they exceed the statistical margin of error of 2.5 percent (assuming a sample size of 1000) so that if they are achieved, they will be statistically significant. In addition, the objectives are intentionally set high, with the understanding that they are intended as a point of reference rather than a pass/fail measure. With that in mind, Copermittees have set a target of a 10% change in knowledge that storm drains are separate from sanitary sewer systems, a 10% increase in the awareness that all storm drains are connected to local waterways, and a 15% increase in the number of participants who can identify residential sources of stormwater pollution.

4.0 EDUCATIONAL METHODS AND APPROACHES

A variety of methods and approaches will be utilized to implement the program objectives. As described above, the Regional Residential Education Program objectives are 1) to maintain a consistent image and brand 2) use positive messages to change behavior 3) develop community partnerships and 4) develop strategies to assess program effectiveness. The following regional program elements are designed to meet these objectives:

- Standardized Regional Brand (Think Blue)
- Regional Think Blue Website
- Mass Media (Broadcast and Outdoor)
- Regional Outreach Materials (Development and Distribution)
- Regional Outreach Event
- Partnerships
- Regional Stormwater Hotline
- Public Relations

Some of the elements are designed for program management whereas others are outreach methods. Program management elements include standardizing the Think Blue brand, message and material development, and partnership development. The program will have a multi-faceted outreach approach utilizing a regional website, mass media (broadcast and outdoor), public relations, printed materials and promotional items, and regional outreach such as a community event. Implementation of all the recommendations is dependent on funding for each year. Therefore, some activities may be feasible only if sufficient or additional funds are available in a given year.

4.1 Standardized Regional Brand (Think Blue)

The Think Blue campaign has created a locally recognizable brand that has demonstrated effectiveness in stormwater outreach. Expanding the brand to the regional program has obvious benefits for all of the Copermittees. With a consistent look and brand, the Copermittees can continue to conduct their own outreach; however they can use the Think Blue brand in conjunction with their materials for consistency. There will be a Think Blue Graphic Standards Guide that provides the correct fonts, colors and standards to be used for all outreach materials. This will help reinforce the Think Blue brand and provide standards for its use in messages and materials. Messages and materials may need to be continuously revised in order to keep current and effectively reach target audiences.

4.2 Regional Think Blue Website

A regional Think Blue website will help build upon and reinforce the branding strategy. The Internet is a powerful means of communication. Web sites can reach large audiences with relatively minimal effort. The regional website will be developed and maintained by a contractor. It could contain easy to download, user friendly information sheets, links to Copermittees websites, and short surveys or quizzes. The regional web site, along with the new logo and slogan, will increase program visibility.

4.3 Mass Media

Although the website is an important component of the outreach efforts, many residents still get the great bulk of their environmental messages from more traditional venues such as the television and radio (broadcast media). Public Service Announcements (PSA) and advertisements are the most common forms of broadcast media. Some PSAs have already been developed under the Think Blue campaign and through the combined efforts of the Copermittees. The Copermittees can utilize funds to expand or complement the existing Think Blue campaign. The public relations component will involve news coverage such as news stories, interviews, and event coverage. Public relations provide

valuable outreach opportunities that will be sought whenever possible. Outdoor media such as bus placards and billboards can also be utilized for outreach. The location of outdoor media advertisements will need to be carefully placed in order to reach the regional target audience.

4.4 Regional Outreach Materials and Community Events

Print materials and promotional items are critical items for successful outreach. Materials include items like fact sheets, brochures, flyers, booklets, coupon booklets, posters, and doorknob hangers. These materials are easily created and the target audience can refer to them repeatedly. Promotional materials are good for promoting the regional brand, increasing knowledge and awareness, and encouraging simple actions to prevent stormwater pollution. They will be designed to also serve as visual prompts that remind people to choose behaviors that protect and improve water quality.

A regional outreach event can be an energizing and successful venue for distributing outreach messages. Careful attention should be given to participating in a community event so that the effort reaches residents from the entire region. Extensive planning, material or display development, coordination, and marketing will be necessary in order to prepare for one successful regional outreach event. This is an endeavor that will involve identifying events that reach the entire region as well as coordinating, funding, and staffing the selected event. The Copermittees expect to participate in up to two regional events over the duration of this permit cycle. Some examples of regional events that may be considered are the San Diego County Fair, the Miramar Air Show, or a local sports venue.

4.5 Partnerships

Partnerships are both a management and outreach element of the program. A partnership is a voluntary collaboration of agencies, organizations, or other groups or individuals that have joined to work toward a common goal. The Copermittees can maximize resources through the use of partnerships. The potential for partnerships is immense for the

Copermittees. Potential partnerships include local water districts (combine conservation and pollution prevention messages), hardware stores and nurseries, pet stores, and Homeowner's Associations and Property Management Companies. Initial development of partnerships with businesses and business organizations, nonprofits, other government agencies, will be necessary before the full benefits can be realized. Copermittees may then encourage partners to distribute materials or spread messages through signage, advertising and websites. Partnerships will require time to develop and may not be fully recognized until later in the permit cycle.

4.6 Regional Stormwater Hotline

Although a regional stormwater hotline is already in place, successful outreach may lead to an increase in hotline calls. The regional hotline can also help the public gain access to information quickly and easily. The hotline will be promoted through the website, media advertising and other promotional venues. The number of calls to the hotline can be tabulated to help gauge whether some advertising is effective (if the call to action is a hotline call). Since the hotline will also be an important measure of program success, careful consideration will be given to managing the hotline as the program implementation moves forward.

4.7 Behavior Specific Outreach Methods

Table 3 lists the primary target behaviors for the program during this permit cycle. The table indicates which of the outreach methods described above may be utilized to deliver messages designed for each behavior. These were selected as the primary targets because they have current appeal. Primary target behaviors may be updated as program evaluation progresses. If necessary, resources may be reallocated to address the other (secondary) target behaviors previously listed in Table 2.

Table 3) Applicability of Outreach Methods to Primary Target Behaviors

Primary Target Behaviors	Potential Methods of Outreach						
	Website	Mass Media Broadcast	Mass Media Outdoor	Public Relations	Material Distribution	Partnerships	Regional Community Events
Pick up pet waste and dispose of in trash bin	X	X	X	X	X	X	
Reduce over-irrigation by regularly inspecting and maintaining irrigation systems	X			X	X	X	X
Apply chemicals to lawn and garden only as needed	X	X		X	X	X	X
Use organic or slow-release fertilizers	X	X		X	X	X	X
Collect grass clippings and dispose of them in the proper container	X				X		
Employ Integrated Pest Management	X	X	X		X	X	X
Sweep outside areas instead of hosing them down	X		X		X		
Put litter and cigarette butts in trash cans or bins	X			X	X	X	X

Specific messages will be developed to increase knowledge and awareness that will lead to each desired behavior outcome

4.8 Program Implementation

While the overall goals of the program are to educate the general public in order promote knowledge and awareness and decrease pollutant generating behaviors, a successful program will also require coordination among the Copermittees. Program planning and message development are key components of the program that will precede full implementation. Message delivery will be ongoing. Subsequently, as results from assessments are reviewed, messages and delivery methods will need to be revised. Therefore, there are essentially three steps in the program implementation process 1)

development, 2) implementation, and 3) assessment. For the purposes of this report, the development phase includes planning projects as well as developing materials and messages. Implementation includes initiating a program element (such as media outreach) as well as maintaining the ongoing nature of the element once it is in place. Assessment includes all levels of determining the effectiveness of program elements, as well as making revisions that reflect the knowledge gained through assessment.

Table 4 charts the schedule of program implementation over the 5-year permit cycle. Strategies to achieve these objectives will be implemented over the 5-year permit cycle. Because some upfront planning and development is necessary, the first year will focus on standardizing a regional brand, developing messages, and determining the most appropriate methods for disseminating messages on a regional scale (i.e.: a regional website). Copermittees may also begin fostering partnerships in the initial years of the program. Subsequent years will build on this foundation. Copermittees may decide to refine messages and could begin leveraging resources through partnerships.

Table 4) Projected General Implementation Schedule

Program Elements	Year 1: 2007-08	Year 2: 2008-09	Year 3: 2009-10	Year 4: 2010-11	Year 5: 2011-12
Branding	D	D, I, A	I, A	I, A	I,
Regional Website	D	D, I, A	I, A	I, A	I,
Regional Hotline	D	D, I	I, A	I, A	I,
Mass Media	D	D, I	I, A	D, A	I,
Regional Outreach (Marketing and Community Events)	D	D, I	I, A	D, A	I,
Materials Development & Distribution	D	D, I, A	D, I, A	D, A	D, I
Public Relations	D	D, I	I, A	D, A	I,
Market Research & Assessment Tools	D, I, A	D, I, A	D, I, A	D, I, A	D, I,
Partnerships	D, I	D, I,	I, A	I, A	I

Development (D), Implementation (I), Assessment (A)

4.9 Social Marketing Approaches

In all of the aforementioned efforts, a variety of social marketing approaches will be utilized whenever possible. There are so many techniques described as social marketing that it is not possible to utilize them all, especially with limited staff and budgets. Social marketing uses many of the principles of social psychology and marketing techniques to bring about behavior change. Rather than being product oriented, social marketing focuses on people and their behaviors. All social marketing approaches use audience research to learn how to motivate an audience to change one or more recurring actions.

Social marketing consists of several basic components that result in delivering messages that will increase knowledge and awareness, thereby prompting people to change certain behaviors. The challenge is to present the new behavior in a positive way and emphasize the benefits to adopting a new behavior. Forming strategic partnerships with community resources can help to achieve the end goal of behavior change. Social marketing campaigns deliver messages that are strategically created and positioned to give people a compelling reason to adopt a new behavior. In order to overcome the barriers to action it is necessary to understand what the barriers are and why they exist. Researching and understanding the audience is a critical step in developing a social marketing campaign. Messages are conveyed through advertising, websites, materials and other communications. Messages should be simple, memorable and easy to follow. There should be one simple message for each of the targeted areas of knowledge and awareness. Each message needs to be used consistently in communications.

Community Based Social Marketing (CBSM) is a type of social marketing. It has gained popular appeal among the environmental community as an effective alternative to traditional information-based marketing approaches. CBSM packages basic principles of behavior change and social science research in a way that provides a usable framework for practitioners working to promote positive behavior change.

A key element of the CBSM approach is to pilot test the program with a small representative segment of the community, and compare the results to a control group. For example, a small jurisdiction may implement a project that essentially serves as a pilot for the regional program. If the pilot is not successful, the strategy should be refined and then pilot tested again. If the pilot is successful at changing behavior, the strategy can be implemented more broadly throughout the community or on a regional level. Once the successful pilot program has been widely implemented CBSM requires that the program be carefully evaluated at several points to measure continued success.

The Copermittees have agreed that CBSM offers a solid foundation for developing an effective program. However, it may not always be feasible to utilize the CBSM approach on a regional scale, hence the need for a combined approach that uses traditional social marketing techniques as well as CBSM. Some methods will lend themselves more readily to developing CBSM based approaches. When implementing each of the methods, a CBSM approach will be pursued whenever feasible.

5.0 RELATIONSHIP OF REGIONAL, WATERSHED, AND JURISDICTIONAL OUTREACH

The Regional Residential Education Program is designed to meet the Permit requirements for residential education based on regional needs and issues. The first step in meeting these requirements is to establish a regional brand and consistent image. The City of San Diego's regionally recognized Think Blue logo will be utilized as the Regional Residential Education Program's brand. During the implementation phase of the permit cycle the Copermittees will work collaboratively with the City of San Diego to update and standardize the Think Blue brand. A Graphics Standards Manual will be developed by the City of San Diego and adopted by the Copermittees in order to facilitate ease of material development and ensure a consistent regional image. Existing jurisdictional programs may also choose to use the Think Blue brand, maintain individuality, or

combine both programs for maximum impact. In a similar manner, watershed activities may be coordinated under the Think Blue brand, so long as the standards are adhered to.

Copermittees will hire a contractor to build and maintain a regional Think Blue website. The website may include links to jurisdictional program, watershed program websites, and other regional websites such as Project Clean Water. The regional Think Blue website will provide user friendly information for the public in a single location, thereby promoting consistency and coordination among the regional, jurisdictional, and watershed programs.

In addition, the Education & Residential Sources Workgroup provides a platform for integration of regional, jurisdictional, and watershed messages. The Education & Residential Sources Workgroup also coordinates activities between non-profit organizations, private institutions, and governmental agencies providing environmental and water quality education. Regular meetings will continue to provide a forum for educators, trainers, and public information officers to collaborate, share methods and materials, and seek policy level support and direction.

Watershed and jurisdictional programs should look to the Regional Residential Education Program when designing residential educational activities. The Regional Residential Education Program can thereby serve as a basis for developing these other programs. Some specific watershed or jurisdictional issues may not be covered by the Regional Residential Education Program, and must still be met by the individual or Watershed Copermittees as required by the Permit. These issues will be addressed in the watershed or jurisdictional programs. In this manner, the watershed and jurisdictional programs can supplement the Regional Residential Education Program in order to ensure that all requirements are met. As a result, each jurisdictional program may be unique in some respects and elements of the watershed programs may go beyond those in the regional program.

While the regional program may play a role in encouraging behavior changes, it is more feasible for jurisdictional programs to be able to measure actual behavioral changes resulting from increased knowledge and awareness because of their ability to implement pilots on a small scale. The broad based regional program will be implementing methods and utilizing assessment tools that most accurately gauge attitudes, knowledge, and awareness. Positive changes in attitudes and awareness are generally accepted as precursors to behavior change. Therefore, due to the difficulty of assessing behavior change on a regional level, demonstrating behavior change will therefore reside with the jurisdictional and watershed programs. In order to facilitate the assessment of jurisdictional and watershed programs, the Plan outlines assessment tools for measuring changes in knowledge and awareness through the regional program. These measures can also be tailored to meet the needs of the jurisdictional and watershed programs that implement CBSM pilots or focused outreach efforts, which provide excellent opportunities to assess behavior change. Section 6.0 describes assessment tools in further detail.

6.0 ASSESSMENT OF REGIONAL EDUCATION ACTIVITIES

In order to evaluate whether the various components of the program are resulting in the targeted knowledge and awareness outcomes, a number of assessment methods may be utilized. A random digit dial telephone survey will be the primary tool for measuring changes resulting from implementation of the regional program. Different types of assessment methods will be employed in order to gauge the outcomes of each activity and thereby determine effectiveness. Copermittees will review and assess existing survey data while developing the new regional baseline survey. Public opinion surveys will be alternated with other assessment methods to adequately assess the overall effectiveness of the Regional Residential Education Program. Copermittees have agreed to work cooperatively on funding and conducting market research and surveys. Measurement tools outlined in the Plan may be modified somewhat to correspond with different program elements. The Plan basically provides a model for program effectiveness

assessment. Specific assessment methods will depend on the type of outreach or education activity conducted and other constraints.

Copermittees will work with the City of San Diego to conduct a county-wide random digit dial telephone survey in order to obtain baseline information on knowledge, awareness, attitudes, and behaviors pertaining to stormwater. Results of the survey will guide further adaptation of the program objectives. Ideally, another public opinion survey will be conducted later in the permit cycle to assess any changes resulting from program implementation. Once the baseline is established, future permit cycles may involve one or more public opinion surveys. Additional evaluation methods may be utilized once specific media, promotions, and outreach activities are implemented. Results will enable Copermittees to determine the most effective outreach methods and make modifications to the programs as needed.

Outcome levels used in this program are based on the Hierarchy of Targeted Outcomes Pyramid referred to in the NPDES Permit, which includes outcome levels 1-6. Outcome levels 1-3 will be most applicable to educational and outreach activities. Table 5 illustrates potential assessment methods that may be utilized for each of the activities being considered. Level 1 outcomes indicate compliance with permit based activities. This is the most basic means of assessing program effectiveness. Measuring Level 2 outcomes will indicate changes in attitudes, knowledge and awareness. Surveys and quizzes provide the most common means for measuring Level 2 outcomes. Level 3 outcomes provide an opportunity to measure behavioral changes and implementation of Best Management Practices (BMPs). This can be accomplished through observations and program specific counts. For example, tracking sales of less toxic pesticides in a store where IPM information is available may indicate changes in the behavior of consumers. Level 4 outcomes indicate actual load reduction, and are more practical for activities such as clean up events or Household Hazardous Waste collection activities, which are sometimes associated with outreach activities.

Table 5) Potential Program Element Assessment Measures

Activity Level		Type of Assessment Measure

Branding

1	Updating materials to reflect new regional brand.
2	Count number of survey respondents who are aware of brand/program.
3	N/A
4	N/A

Website

1	Count number of hits to website, interactive use/quizzes taken, etc.
2	Administer survey/quiz to assess attitude/knowledge of web users.
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data. Downloads of informational brochures.
4	N/A

Mass Media Public Service Announcement (PSA) Public Relations

1	Count number of household/individuals reached.
2	Administer survey/quiz to assess attitude/knowledge of PSA recipients.
3	Comments and feedback received regarding PSA via the hotline or website.
4	N/A

Outreach Materials (i.e.: fact sheets and brochures)

1	Count number of fact sheet/brochures handed out.
2	Administer survey/quiz to assess attitude/knowledge of fact sheet/brochure recipients
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4	N/A

Regional Outreach Event

1	Count number of visitors to booths, brochures handed out, surveys/quizzes completed, etc.
2	Count number of mail-in cards, number of volunteers to organization, number of persons who attended community event. Administer survey/quiz to assess attitude/knowledge of visitors
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4	N/A

Partnerships

1	Count number of incentives distributed, participants in the program.
2	Survey or quiz to assess attitude/knowledge of volunteers pre- and post- participation
3	Administer survey to assess behavior change in program participants or count observable behavior of program participants and compare to pilot data, historical data, and/or control group. Count number of mail-in cards, number of volunteers to organization, or number of persons who signed a petition directed from incentive program.
4	Count amount of load reduction in targeted residential area or count amount of load removed from targeted area

Hotline

1	Count number of calls to hotline.
2	Administer survey/quiz to assess attitude/knowledge of hotline users.
3	Administer survey to assess behavior change of participants in program and compare to pilot, historical, or control data, count observable behavior of participants in program and compare to pilot data and/or control group.
4	N/A

7.0 CONCLUSIONS AND RECOMMENDATIONS

The San Diego region has widely diverse socio-economic, ethnic, biological, and physical characteristics. These characteristics create the region's appeal and present many challenges to the entities charged with developing and implementing an effective Regional Urban Runoff Management Program (RURMP).

The Regional Residential Education Program is a component of the San Diego RURMP. This program is designed to increase knowledge and awareness of stormwater issues and potentially change pollutant generating behaviors. Research indicates that these are attainable goals under a well-funded, long term, multi-faceted and strategic public outreach campaign.

In order to implement program goals, the Copermittees have agreed on general objectives: 1) maintain a consistent image, message and brand 2) use positive messages to increase knowledge and awareness, thereby increasing the likelihood of behavior change 3) develop community partnerships and 4) develop strategies to assess program effectiveness. In order to efficiently accomplish these objectives, Copermittees have agreed to adopt Think Blue as the regional flagship brand. In addition, strong and

focused outreach messages will be selected to increase knowledge and awareness and ultimately target the primary pollutant generating behaviors from residential activities.

The basic program elements include an array of methods and approaches that will be utilized for program management, message delivery, and effectiveness assessment. Over time, the Regional Residential Education Program will be adapted to utilize the most effective outreach and education strategies practicable while maintaining a clear focus for the entire region. Annual reports will summarize progress and provide an opportunity to reflect on the year's successes and shortcomings. At the end of the 5-year permit cycle, Copermittees will be able to assess of the program's progress and develop more effective regional outreach strategies.

Appendix G

JURMP Annual Report Requirements Checklist

G-1 Requirements Checklist

Appendix G
JURMP Annual Report Requirements Checklist

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location In Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.4, 2.3, 2.4.4.1, 2.4.4.2
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2, 2.4.4.3, 2.4.4.4
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.3, Table 2-2
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.3, 2.4.4.4
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.3 (N/A)
vii. An updated treatment control BMP inventory.	2.4.4.4, Appendix A-1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.7
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.6
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.5
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.3 (N/A)
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.3 (N/A)
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.3.1, 2.4.4.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.3 (N/A)
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.3

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.3 (N/A)
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.4.3.1, 2.4.4.1, 2.4.4.4, 2.4.4.6, 2.4.4.7

3.0 Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.1
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2.2, Appendix B-1
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4.1
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.4 (N/A)
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.3, 3.5.4 (N/A)
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Appendix B-1
viii. A description of the general results of the inspections.	3.5.5.2
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.5.1
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.5.2, Appendix B-6 and H-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.2.2, 3.3, 3.4.1.1

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix C-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4.1, Appendix C-2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4.1, Appendix C-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Appendix C-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4.1, Appendix C-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4.1, Appendix C-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.3.3.1
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xiii. Identification of the total distance of curb-miles swept.	4.2.4, Appendix C-2
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.2.4, Appendix C-2
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.2.4, Appendix C-2
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4.1
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.3.2, 4.3.4.3, Appendix C-2
xviii. A description of the general results of the inspections.	4.3.4.3, Appendix C -6
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.3.4.3, Appendix C -6
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Appendix C-6 and H-1
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.2.4, 4.4.2, 4.4.4.1, 4.5.4.1, 4.7.3.1, 4.7.4

5.0 Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2, Appendix D-1 and D-2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4.5, 5.3.4.4, Appendix D-5 and H-1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4.4, 5.3.4.1 Appendix D-7 and D-8
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.2 Appendix D-1, D-2 and D-5
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4.1
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.3, 5.2.4.5
vii. Identification of the number of third party inspections conducted.	5.2.4.3 (N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.3 (N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.5, 5.3.4.4 Appendix H-1
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.5
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.2.4, 5.3.4

6.0 Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2 Appendix E-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3, 6.4.3, Appendix H-1
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.2
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.2
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.2.3
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.3, Appendix H-1
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.4, Appendix F-6
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Location in Report**
To be included in FY 2010-11 Illicit Discharge Detection and Elimination Component on December 15, 2011.	N/A

8.0 Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	**Location in Report**
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3.1
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.4

9.0 Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	**Location in Report**
i. A description of public participation efforts conducted.	9.3

10.0 Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	**Location in Report**
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.	10.1, 10.2, 10.3, 10.4

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	**Location in Report**
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.2, 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	**Location in Report**
i. A description of any special investigations conducted.	12.1, 12.2

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.2

14.0 JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14.0

Appendix H

Complaint Response

H-1 Construction Summary
Municipal Summary
Commercial Summary
Industrial Summary
Residential Summary
Referrals or Requests for Info Summary

Appendix H-1 Construction Complaint Response Summary FY 2010 - 2011

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	96362	8/10/10	Sediment	Discharge of water - Old pool water from 1076 sitting in private drainage ditch at 1065 Guadalajara.	WO 121682 : By EMERSON, MIKE: 8/27/2010 4:37:23 PM site inspection took photos contacted GC. He indicated that he had cleaned the drainage ditch behind complainant's home. Private drain Case closed	No	No		Yes			ENC	10/21/10
2	96425	8/2/10	Const waste	Discharge of sediment - Sediment discharge from construction zone.	WO 121699 : By EMERSON, MIKE: 8/30/2010 1:56:39 PM Site inspection spoke to GC to clean up street. Contractor will clean street and will street sweep on 8/31/10 WO 121700 : By EMERSON, MIKE: 8/30/2010 2:06:48 PM Site inspection area cleaned up case closed	Yes	No		Yes			ENC	10/21/10
3	96543	9/14/10	Cement wash	Discharge of concrete cutting slurry or wash water. - Concrete cutting in street, concrete in gutter.	WO 122112 : By EMERSON, MIKE: 9/14/2010 1:50:27 PM Site inspection contacted GC to dry clean up street took photos WO 122121 : By EMERSON, MIKE: 9/15/2010 11:11:22 AM Area cleaned up took photos case closed	Yes	Yes		Yes			CBS	9/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
4	96545	9/14/10	Cement debris	Discharge of concrete waste. - Concrete wash in front to construction site no BMPs Concrete debris in street down hill from construction site no BMPs Concrete wash in front to construction site no BMPs	WO 122113 : By EMERSON, MIKE: 9/14/2010 2:04:12 PM Site inspection contacted GC to dry clean up street took photos WO 122122 : By EMERSON, MIKE: 9/15/2010 11:16:49 AM Area cleaned up took photos case closed	Yes	Yes		Yes			CBS	9/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
5	96546	9/14/10	Concrete Debris	Discharge of concrete waste. -	WO 122114 : By EMERSON, MIKE: 9/14/2010 2:19:53 PM Site inspection contacted GC to dry clean up street took photos WO 122123 : By EMERSON, MIKE: 9/15/2010 11:19:59 AM Area cleaned up took photos case closed	Yes	Yes		Yes			CBS	9/14/10
6	96667	10/6/10	Silt	Discharge of construction debris - Construction debris discharge. No BMPs.	WO 122528 : By EMERSON, MIKE: 10/6/2010 5:24:12 PM Site inspection took photos of sediment in the road. Contacted resident and informed her that the sediment needs to be swept up no wash down needs unless all the wash water is captured. Also needs perimeter erosion control BMPs. WO 122550 : By EMERSON, MIKE: 10/11/2010 2:22:45 PM Site inspection took photos of BMPs in place signed off NOV Case closed	Yes	No	10/6/10	Yes			LCS	10/8/10
7	98778	10/20/10	Sediment	Discharge of sediment - Lack of BMPs and discharge of sediment. Referred to construction inspector.	WO 124807 : By RYGIEL, KRISTINE: 10/27/2010 3:04:19 PM Per construction inspector: maintenance required on gravel bags and BMP swale. Forwarded corrective actions to responsible party for follow up. Case closed	Yes	No		Yes			LUC	10/27/10
8	99054	12/20/10	Water/ sediment	Discharge of sediment - Water flowing from construction site, possible sediment discharge.	WO 125787 : By EMERSON, MIKE: 12/27/2010 4:57:37 PM Site inspection observed large amount of water in front of	No	No		Yes			CBS	1/13/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					house. Owner indicated that there is very little drainage in this area and that the water was run off from the road. He does not like the standing water and wants a CIP to fix it for good. Case closed								
9	99095	12/22/10	Sediment	Discharge of sediment - Uncovered dirt piles-lack of BMPs.	WO 125799 : By EMERSON, MIKE: 12/28/2010 10:38:28 AM Site inspection took photos issued NOV and citation WO 125801 : By EMERSON, MIKE: 12/28/2010 10:51:13 AM Site inspection min BMPs in place (sand bags around parameter) Case closed	Yes	No	12/23/10	Yes	12/23/10		CBS	12/27/10
10	99101	12/22/10	Sediment/ water	Discharge of sediment - Construction site pumping muddy water from their job site.	WO 125811 : By EMERSON, MIKE: 12/28/2010 11:46:14 AM Site inspection spoke to GC and he showed me how he is keeping all of the water on site. Took photos case closed.	No	No		Yes			CBS	1/24/11
11	99111	12/23/10	Sediment/ water	Discharge of sediment - Construction site dewatering without BMPs.	WO 125678 : By RYGIEL, KRISTINE: 12/23/2010 1:33:23 PM Construction inspector witnessed illegal dewatering at a site. Spoke with general contractor onsite and asked him to stop the dewatering. Sent NOV and 200 Citation 12/23/10. Case closed	Yes	Yes	12/23/10	Yes	12/23/10		LUC	12/23/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
12	99113	12/23/10	Sediment	Discharge of sediment - Sediment runoff during rain event.	WO 125813 : By EMERSON, MIKE: 12/28/2010 2:41:55 PM Site inspection took photos contacted contractor to install some Min BMPs. WO 125814 : By EMERSON, MIKE: 12/28/2010 2:47:21 PM Site inspection Min BMPs installed Case closed	Yes	No		Yes			ENC	12/27/10
13	99119	12/21/10	Silt/sediment	Discharge of sediment - Sediment runoff from construction site.	WO 125821 : By EMERSON, MIKE: 12/28/2010 5:30:18 PM 12/21/10 Site inspection took photos rain water has been diverted away from site BMPs need maintenance called construction/grading inspector to contact contractor. WO 125822 : By EMERSON, MIKE: 12/28/2010 5:33:10 PM 12/23/10 Site inspection took photos of newly installed Min BMPs to fix problem. Case closed WO 126208 : By EMERSON, MIKE: 1/11/2011 11:24:51 AM Site inspection with clean water manager took photos of leaking construction site, contacted construction inspector. Inspector informed us that the contractor had been contacted and to go ahead and write a citation if the site is leaking. WO 126211 : By EMERSON, MIKE:	Yes	No	1/4/11	Yes	1/4/11		ENC	1/4/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					1/11/2011 11:48:09 AM Site inspection took photos of leaking construction site, contacted construction inspector. Who said and to go ahead and write a citation if the site is leaking contractor has been warned repeatedly. Case closed								
14	99120	12/21/10	Silt/sediment	Discharge of sediment - Construction site dewatering without BMPs.	WO 125823 : By EMERSON, MIKE: 12/28/2010 5:38:44 PM Site inspection took photos of site dewatering contacted contractor and informed him of the illegal discharge and that he would be receiving a citation Case closed	Yes	Yes	12/23/10	Yes	12/23/10		CBS	1/24/11
15	99165	12/29/10	Sediment	Discharge of sediment - Received report of dewatering sediment	WO 126272 : By EMERSON, MIKE: 1/18/2011 10:54:50 AM Site inspection observed no evidence of dewatering. Site workers confirmed that no discharge has taken place Case closed	No	No		Yes			LUC	1/24/11
16	99166	12/29/10	Sediment	Discharge of sediment - received complaint of poor BMPs site draining sediment	WO 126269 : By EMERSON, MIKE: 1/18/2011 10:35:46 AM 12-29-11 Site inspection site leaking called contractor to fix leak ASAP (1043am) took photos WO 126270 : By EMERSON, MIKE: 1/18/2011 10:41:25 AM 1-3-11 site inspection took photos of site still leaking no work done. Issued citation and NOV By EMERSON, MIKE: 1/18/2011 10:45:13 AM 1-5-11 received call	Yes	No	1/3/11	Yes	1/3/11		LUC	3/25/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					from contractor regarding citation and questioned why there was no warning. Informed contactor that a call was made to fix BMPs on 12/29/10 same contractor phone number where promises were made to implement BMPs. Case closed								
17	99188	1/4/11	Cement gray water	Discharge of concrete cutting slurry or wash water. - Concrete cutting with no BMPs.	WO 126130 : By EMERSON, MIKE: 1/6/2011 5:20:42 PM Site inspection took photos contacted employee regarding cement and water discharge into storm drain. Requested dry clean up or collecting all wash water. WO 126131 : By EMERSON, MIKE: 1/6/2011 5:28:48 PM Site inspection took photos was contacted by property owner. Explained codes and that additional clean up is needed. WO 126132 : By EMERSON, MIKE: 1/6/2011 5:32:31 PM Site inspection area cleaned up but still has stains. Case closed	Yes	Yes		Yes			LUX	1/6/11
18	99239	1/10/11	H2O mixed with cement and sediment	Discharge of sediment - Dewatering causing sediment runoff.	WO 126261 : By EMERSON, MIKE: 1/14/2011 10:50:37 AM Site inspection took photos of drainage pattern. Appears that the dewatering spilled over into the storm drain, left card for contractor to call me. Received call from contractor and informed him that any dewatering that reaches the storm	Yes	No		Yes			CBS	1/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					drain is a violation. He understood and thanked me for the education. Case closed.								
19	99347	1/31/11	Yellow powder	Other discharge - Yellow powder runoff is appearing on Melba across from the Nursery subdivision that is under construction, behind the Lutheran Church.	WO 126519 : By EMERSON, MIKE: 2/2/2011 1:04:58 PM Site inspection met contractor and called complainant and inspector. Appears to be pollen case closed	No	No		Yes			ENC	3/24/11
20	99593	3/11/11	Dust/dirt	Discharge of sediment - Dust leaving property	WO 127101 : By EMERSON, MIKE: 3/15/2011 10:40:33 AM Site inspection (1405) contacted worker who informed me that they are actively spraying down the site with water to ensure no dust is leaving the property and water/sediment is not being deposited on the street. In addition, there is a street sweeper constantly sweeping the street. I observed truck entering site with minimal dust that settled on site. Received phone call from contractor (1420) volunteering any requested actions. No violation. Called DEH and reported actions. Case closed	No	No		Yes			LUC	4/7/11
21	99630	3/22/11	Sediment	Discharge of sediment - Runoff from construction site after rain event.	WO 127332 : By RYGIEL, KRISTINE: 3/24/2011 8:57:25 AM Per construction inspector: No sediment was found in street. Ongoing inspection and monitoring. All BMPs in place. Case closed	No	No					LUC	3/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
22	99655	3/17/11	Silt	Discharge of sediment - Sediment in street and uncovered stockpiles.	WO 127397 : By EMERSON, MIKE: 3/29/2011 4:03:35 PM Site inspection took photos of failing BMPs and silt discharge. Contacted construction inspector to contact contractor to implement or replace BMPs. WO 127399 : By EMERSON, MIKE: 3/29/2011 4:12:21 PM Site inspection took photos City construction inspector completed inspection report and site was maintained. Case closed	Yes	No	3/24/11	Yes	3/24/11		CBS	3/24/11
23	99656	3/21/11	Sediment	Discharge of sediment - Sediment discharge during rain event. Lack of BMPs. Dewatering site without BMPs.	WO 127394 : By EMERSON, MIKE: 3/29/2011 3:41:23 PM Site inspection took photos of BMPs. Contacted construction inspector to contact contractor to implement or replace BMPs. WO 127395 : By EMERSON, MIKE: 3/29/2011 3:49:01 PM Site inspection with program manager and completed inspection report. Site looks good Case closed	Yes	Yes	3/24/11	Yes	3/24/11	Cottonwood Creek	ENC	3/24/11
24	99658	3/21/11	Sediment	Discharge of sediment - Dewatering site without BMPs.	WO 127391 : By EMERSON, MIKE: 3/29/2011 3:23:44 PM Site inspection took photos of De-watering activities into storm drain. Contacted worker to discontinue immediately. Received call from contractor requesting area where he could de-water. He was informed that he would need a permit from the RWQCB.	Yes	No	3/24/11	Yes	3/24/11		ENC	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO 127392 : By EMERSON, MIKE: 3/29/2011 3:31:08 PM Site inspection took photos completed inspection report and referred to City construction inspector for follow up. Case closed								
25	99659	3/21/11	Sediment	Discharge of sediment - Sediment discharge during rain event.	WO 127383 : By EMERSON, MIKE: 3/29/2011 2:58:02 PM Site inspection took photos of failing BMPs and sediment discharge. Contacted construction inspector to contact contractor to implement or replace BMPs. WO 127388 : By EMERSON, MIKE: 3/29/2011 3:13:09 PM Site inspection took photos of BMPs. Appears they still have open slopes but perimeter BMPs appear to be implemented case closed	Yes	No	3/24/11	Yes	3/24/11		ENC	4/7/11
26	99660	3/21/11	Sediment	Discharge of sediment - Failing BMPs during rain event.	WO 127372 : By EMERSON, MIKE: 3/29/2011 1:17:03 PM Site inspection took photos was contacted site contractor who informed me that he had contacted his erosion/sediment control contractor to shore up site. WO 127373 : By EMERSON, MIKE: 3/29/2011 1:25:48 PM Site inspection took photos was contacted site contractor who informed me that he had contacted his	Yes	No		Yes			ENC	3/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					erosion/sediment control contractor and had shored up site. In addition to the street sweeper going around the neighboring streets.. By EMERSON, MIKE: 3/29/2011 1:29:03 PM 3/23/11 site inspection site appears to be ready for the approaching rain events. WO 127374 : By EMERSON, MIKE: 3/29/2011 1:33:29 PM Site inspection took photos walked site with contractor requested entrance/exit BMPs and informed contractor that de watering into the storm drain requires a permit from the RSWQCB. Water can be moved around on the site or removed by porter truck. Case closed								
27	99661	3/21/11	Sediment	Discharge of sediment - Failing BMPs, sediment runoff during rain event. Vacant construction site.	WO 127368 : By EMERSON, MIKE: 3/29/2011 11:12:22 AM Site inspection took photos of sediment leaving site. Contacted construction inspector to notify contractor to shore up site. Spoke with clean water manager regarding enforcement and it was agreed to have construction inspector monitor/inspect site. WO 127369 : By EMERSON, MIKE: 3/29/2011 11:16:42 AM 3-24-11 Site inspection from construction inspector and notified contractor to shore up site. 3-25-11 site inspection site OK	Yes	No					LUC	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Case closed								
28	99688	3/30/11	H2O	Discharge of water - report of large water discharge	WO 127477 : By EMERSON, MIKE: 3/30/2011 4:07:21 PM Site inspection contacted contractor on seen who indicated that he was cleaning the garage and the sump went off shooting the water into the street. He immediately stopped. Case closed	No	No		Yes			CBS	4/7/11
29	99707	4/4/11	Sediment	Discharge of sediment - Sediment discharge from construction site.	WO 127553 : By RYGIEL, KRISTINE: 4/4/2011 3:24:20 PM Construction inspector investigated complaint. Informed contractor to remove or cover stockpiles and clean sediment discharge. Case closed	Yes	No		Yes			LCS	4/4/11
30	99726	4/8/11	Stucco wash waste	Discharge of water - Power washing without containment	WO 127915 : By EMERSON, MIKE: 4/25/2011 1:32:25 PM Site inspection contacted General contractor to discontinue allowing construction wash to flow into TC BMPs. The contractor understood that those TC BMPs are for after construction and will discontinue discharge of construction waste into TC BMPs. Case closed	Yes	Yes		Yes			ENC	5/10/11
31	99727	4/7/11	h20	Discharge of sediment - Discharge of sediment water	WO 127918 : By EMERSON, MIKE: 4/25/2011 1:44:46 PM Site inspection contacted water truck driver who indicated that he was just doing what he was told to	Yes	Yes		Yes			CBS	5/10/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					empty the water into a storm drain. Contacted his supervisor who stated that the driver was to empty truck water onto vegetated bank. Driver will be talked to Case closed								
32	99753	4/13/11	Sediment	Discharge of sediment - New construction site lacking BMPs.	WO 127836 : By EMERSON, MIKE: 4/22/2011 8:13:46 AM Site inspection took photos contacted contractor to install BMPs and clean storm drain WO 127837 : By EMERSON, MIKE: 4/22/2011 8:18:50 AM Site inspection took photos signed off 3 of the 4 correction actions By EMERSON, MIKE: 4/22/2011 1:00:19 PM called contractor and emailed three storm drain cleaner contractors By EMERSON, MIKE: 7/7/2011 2:48:19 PM 5/9/11 contractor hired Down stream to clean storm drain By EMERSON, MIKE: 7/26/2011 10:58:08 AM 7/12/11 met with contractor and requested proof of storm drain cleaning. Gave me ph of contractor that cleaned the storm drain. Called contractor left message. By EMERSON, MIKE: 7/26/2011 10:59:45 AM 7/26/11 Called contractor and left	Yes	No	4/14/11	Yes			LCS	7/15/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					message to call me to provide proof of storm drain cleaning. By EMERSON, MIKE: 7/26/2011 3:30:32 PM Received call from contractor stating that they did the work and sent the invoice to corporate. GC to obtain invoice and forward to the City. By EMERSON, MIKE: 7/29/2011 9:55:27 AM Received copy of invoice to clean out storm drain on 5/13/11 case closed								
33	99786	4/19/11	Sediment/ cement	Discharge of sediment - Building inspector observed poor BMPs and discharge into storm drain	WO 127790 : By EMERSON, MIKE: 4/20/2011 5:01:31 PM Site inspection took photos contacted contractor to clean up street and to use BMPs WO 127791 : By EMERSON, MIKE: 4/20/2011 5:07:16 PM Site inspection area cleaned up case closed	Yes	Yes	4/19/11	Yes				4/20/11
34	99795	4/14/11	Sand	Discharge of sediment - Site inspection took photos called contractor	WO 127828 : By EMERSON, MIKE: 4/21/2011 4:01:27 PM Site inspection took photos called contractor site will be cleaned within 24hrs WO 127833 : By EMERSON, MIKE: 4/21/2011 4:16:14 PM Site inspection took photos of cleaned up area case closed By EMERSON, MIKE: 4/21/2011 4:18:36 PM Signed off NOV and faxed it to contractor	Yes	Yes	4/14/11	Yes			LUC	4/18/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
35	99836	4/28/11	Concrete wash water	Discharge of concrete waste. - Contractors washing off concrete materials into storm drain.	WO 128067 : By RYGIEL, KRISTINE: 5/2/2011 10:35:44 AM Site investigation 4/28/11 showed wash water discharge into storm drain. Spoke with contractors on site to inform them of their violation. Sent NOV and Warning Citation on 5/2/11. Case closed	Yes	Yes	5/2/11	Yes	5/2/11		ENC	5/2/11
36	100179	6/17/11	Construction wash	Discharge of paint - received email that there was paint running down the street	WO 128973 : By EMERSON, MIKE: 7/6/2011 12:24:40 PM Site inspection contacted worker to discontinue discharge and dry clean area case closed	Yes	No		Yes				8/9/11
37	100187	6/16/11	Construction waste	Discharge of construction debris - received complaint from construction inspector that they are staging in the street	WO 129009 : By EMERSON, MIKE: 7/6/2011 4:08:15 PM Site inspection observed no discharge case closed	Yes	No					ENC	8/9/11
38	100200	5/16/11	Sediment	Discharge of sediment - Received call from engineering inspector requesting enforcement discharge and no BMPs	WO 129036 : By EMERSON, MIKE: 7/7/2011 11:44:51 AM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future. WO 129037 : By EMERSON, MIKE: 7/7/2011 11:51:41 AM Site inspection area cleaned up took photos thanked manager case closed	Yes	No	5/16/11	Yes			LCS	8/9/11
39	100205	5/17/11	Sediment	Discharge of sediment - roof gutters draining into sediment that flows into storm drain	WO 129040 : By EMERSON, MIKE: 7/7/2011 1:41:35 PM Site inspection contacted contractor to fix BMPs took photos	Yes	No	5/17/11	Yes			LCS	8/9/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO 129041 : By EMERSON, MIKE: 7/7/2011 1:47:02 PM Site inspection area cleaned up took photos thanked manager case closed								
40	100212	5/31/11	Sediment	Discharge of sediment - Received call complaining of sediment discharge from trucks.	WO 129049 : By EMERSON, MIKE: 7/7/2011 4:00:35 PM Site inspection did not observe any discharge By EMERSON, MIKE: 7/7/2011 4:05:14 PM Contacted contractor who inform us that they are street sweeping and power washing street and collecting all wash water. case closed	No	No		Yes			LUC	8/9/11
41	100216	6/30/11	Tile cutting debris	Discharge of concrete cutting slurry or wash water. - Received call from SDWD inspector complaining about tile cutting debris discharging into storm drain.	WO 129067 : By EMERSON, MIKE: 7/11/2011 10:34:25 AM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future.	Yes	No		Yes			ENC	8/9/11
Totals	**41**					**32**	**12**	**16**	**38**	**10**			

Appendix H-1 Municipal Complaint Response Summary FY 2010 - 2011

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	96622	9/27/10	Sewer smell	Discharge of sewage - The runoff drain along side my home to the south has a horrible, foul, sewer odor.	WO 122453 : By EMERSON, MIKE: 10/4/2010 1:34:32 PM Site inspection took photos of inlet contacted complainant who informed me that a City representative had already met with her. Contacted Waste water and they reported that they had received the complaint on Wednesday 9/29 and contacted the complainant and cleaned and deodorized inlets on both sides on 9/30. Case closed	No	No		Yes			ENC	10/21/10
2	98769	10/19/10	Rain run off with human feces	Discharge of sewage - Human waste from homeless people behind public works yard being washed into storm drain.	WO 124842 : By EMERSON, MIKE: 11/1/2010 5:44:42 PM Site inspection took photos contacted property manager for PW and the church to the east. Could not find source. Manager cleaned up waste Casa closed	Yes	No		Yes			ENC	12/14/10
3	98770	10/19/10	Sediment	Discharge of sediment - Sediment discharge in driveway as a result of work done on irrigation system.	WO 124871 : By EMERSON, MIKE: 11/2/2010 10:42:29 AM Site inspection took photos and requested better BMPs and clean up of sediment WO 124872 : By EMERSON, MIKE: 11/2/2010 10:47:40 AM Site inspection area cleaned up and BMPs were updated Case closed	Yes	No		Yes			ENC	12/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
4	98837	11/8/10	Used motor oil	Other discharge - A couple 5 gallon buckets have been placed on the south side of Manchester Ave, just west of the freeway. Contents unknown.	WO 124944 : By EMERSON, MIKE: 11/8/2010 2:46:05 PM Site inspection took photos of dumped oil in soap containers. Called PW to remove and dispose. Casa closed	Yes	No					CBS	12/14/10
5	99115	12/21/10	Sediment	Discharge of sediment - Sediment runoff during rain event.	WO 125817 : By EMERSON, MIKE: 12/28/2010 3:48:52 PM Site inspection called PW to clean up took photos Casa closed	Yes	No		Yes			CBS	1/24/11
6	99121	12/21/10	Silt/sediment	Discharge of sediment - Sediment runoff during rain event	WO 125824 : By EMERSON, MIKE: 12/28/2010 5:52:38 PM 12/21/10 Site inspection took photos rain water has been diverted away from site BMPs need maintenance called construction/grading inspector to contact contractor. WO 125825 : By EMERSON, MIKE: 12/28/2010 5:56:32 PM 12/23/10 Site inspection took photos of newly installed Min BMPs to fix problem. Case closed	Yes	No		Yes			CBS	12/23/10
7	99595	3/10/11	Sediment	Discharge of sediment - Replacing valve, accidental break of potable water pipe caused erosion.	WO 127433 : By EMERSON, MIKE: 3/30/2011 10:28:39 AM Site inspection took photos of broken valve and poor BMPs. Contacted site lead worker and his supervisor to ensure proper clean up and preventative actions for future jobs WO 127434 : By EMERSON, MIKE: 3/30/2011 10:33:17 AM Site inspection took photos of clean up street Case Closed	Yes	No		Yes		Cottonwood Creek	ENC	3/11/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
8	100213	6/6/11	Sewer smell	Discharge of sewage - received call from lifeguards regarding sewer smell	WO 129050 : By EMERSON, MIKE: 7/7/2011 4:18:41 PM Site inspection took photos called waste water and the JPA could not find source case closed	No	No					ENC	8/9/11
Totals	**8**					**6**	**0**	**0**	**6**	**0**			

Appendix H-1 Commercial Complaint Response Summary FY 2010 - 2011

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	96190	7/2/10	Lack of BMPs	Discharge of oil. - Numerous containers of oil left behind gas station- seen during follow up commercial inspection. Gas station owner said they are not his and gave contact for responsible party	WO 121657 : By EMERSON, MIKE: 8/27/2010 10:50:34 AM Site inspection took photos WO 121677 : By EMERSON, MIKE: 8/27/2010 3:31:28 PM Site inspection took photos Case closed	Yes	No		Yes			LCS	8/27/10
2	96196	7/5/10	wash water	Discharge of building or sidewalk wash water - A man was power washing outdoor area over the 4th of July weekend without inlet protection, and some wash water was going into storm drain.	WO 121658 : By EMERSON, MIKE: 8/27/2010 11:02:26 AM Site inspection contacted manager Case closed	No	No		Yes			LCS	10/21/10
3	96204	7/6/10	construction waste/cement	Discharge of concrete waste. - Cement slurry into street	WO 121659 : By EMERSON, MIKE: 8/27/2010 11:16:22 AM Site inspection took photos called Manager WO 121660 : By EMERSON, MIKE: 8/27/2010 11:22:23 AM Site inspection took photos of cleaned up area Case closed	Yes	No		Yes			LUC	7/26/10
4	96227	7/8/10	black Sediment	Other discharge - Culvert full of black gunk on Zona Gale Rd. Slight sewer smell.	WO 121668 : By EMERSON, MIKE: 8/27/2010 1:45:37 PM Site inspection took photos and called PM for Landscaper info WO 121669 : By EMERSON, MIKE: 8/27/2010 2:01:27 PM Site inspection with Landscaper took photos does NOT use	Yes	Yes		Yes			ENC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					reclaimed water. Does clean swale weekly case closed								
5	96233	7/14/10	Grease	Discharge of food waste. - Neighboring restaurant calling to complain that restaurant is dumping grease into the sewer and causing back ups in the system.	WO 121673 : By EMERSON, MIKE: 8/27/2010 2:16:24 PM Site inspection with Leucadia Waste water no evidence of overflow or spill completed storm water quality routine inspection case closed	No	No					LCS	10/21/10
6	96294	7/26/10	Oil	Discharge of oil. - Oil stain in street leading from auto shop.	WO 121678 : By EMERSON, MIKE: 8/27/2010 3:39:50 PM Site inspection contacted Business owner who stated that the leak occurred over Fourth of July weekend. "A car was towed to us that we could not fix. We did clean up after the vehicle was towed away Case closed	No	No		Yes			LUC	10/21/10
7	96331	8/3/10	Paint chips	Discharge of paint - Contractors at Union Bank discharging wash water into alley.	WO 121680 : By EMERSON, MIKE: 8/27/2010 3:59:06 PM Site inspection took photos contacted workers to clean up WO 121681 : By EMERSON, MIKE: 8/27/2010 4:04:26 PM Site inspection OK to close case	Yes	Yes	8/3/10	Yes			ENC	8/3/10
8	96349	8/5/10	Water	Discharge of building or sidewalk wash water - Every night large amount of water from cafe goes into the street. Possibly from cleaning activities.	WO 121697 : By EMERSON, MIKE: 8/30/2010 1:34:54 PM Site inspection contacted worker and gave ed info no evidence of discharge case closed	No	No		Yes			LUC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
9	96417	8/19/10	oil	Discharge of oil. - Allegedly in the parking lot of this business, people are doing oil changes and maintenance on their cars. Oil is all over the ground in the parking area.	WO 121541 : By RYGIEL, KRISTINE: 8/24/2010 3:39:54 PM Visited site and spoke with regional manager. No oil observed in parking lot. Took pictures of signs posted. Regional manager is going to post more signs. Case Closed	No	No		Yes			LUC	8/24/10
10	96419	8/23/10	wash water	Discharge of building or sidewalk wash water - Restaurant uses bleach to wash off front sidewalk every Monday morning.	WO 121557 : By RYGIEL, KRISTINE: 8/24/2010 3:58:23 PM Met with restaurant employee. No discharge observed. Left flyer on power washing. Will call property owner. Case Closed	No	No		Yes			ENC	8/24/10
11	96427	7/28/10	dirt	Discharge of sediment - Private storm drain clogged with sediment.	WO 121702 : By EMERSON, MIKE: 8/30/2010 2:20:17 PM Site inspection Took photos contact business and property owners WO 121728 : By EMERSON, MIKE: 8/31/2010 11:31:47 AM site inspection took photos call PM Case Closed	Yes	No		Yes			LCS	8/30/10
12	96431	8/23/10	Wash water	Discharge of building or sidewalk wash water - Business hosing off pavement without BMPs.	WO 121732 : By EMERSON, MIKE: 8/31/2010 12:09:32 PM Site inspection contacted worker and gave educational information Case Closed	No	No		Yes			ENC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
13	96440	8/26/10	Water	Discharge of water - Cleaners dumped water into the parking lot.	WO 121733 : By EMERSON, MIKE: 8/31/2010 1:11:56 PM Site inspection contacted bus owner to discharge water into sink and not storm drain Case Closed	No	No		Yes			LCS	10/21/10
14	96459	8/30/10	Wash water	Discharge of building or sidewalk wash water - Carpet cleaners dumping wash water into storm drain.	WO 121734 : By EMERSON, MIKE: 8/31/2010 1:23:32 PM Site inspection took photos confirmed address with complainant and call business for explanation By RYGIEL, KRISTINE: 10/21/2010 2:07:16 PM Sent NOV 9/2/10 Case Closed	Yes	Yes	9/2/10	Yes			LCS	10/21/10
15	96463	8/27/10	dirt	Discharge of sediment - Workers not using any BMPs dirt appears to be flowing into storm drain	WO 121735 : By EMERSON, MIKE: 8/31/2010 2:00:26 PM Site inspection took photos called and emailed PM WO 122455 : By EMERSON, MIKE: 10/4/2010 2:53:34 PM Met with property maintenance supervisor and explained issues sprinkler work, BMP clean out and recent discharge. Sprinkler work complete on 9/29/10. Still waiting for invoice for BMP clean out. By EMERSON, MIKE: 7/26/2011 10:52:48 AM 7/26/11 left voicemail and email to Property management provide proof of maintenance By EMERSON, MIKE: 7/26/2011 3:21:40 PM Received email with invoice stating that the	Yes	No		Yes			LCS	10/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					BMP is in compliance (attached) case closed								
16	96464	8/30/10	Wash water	Discharge of other wash water - wash water in alley	WO 121736 : By EMERSON, MIKE: 8/31/2010 2:11:23 PM Site inspection took photos of cleaning water discharge contacted worker Case Closed	Yes	No		Yes			ENC	10/21/10
17	96509	9/9/10	Wash water	Discharge of other wash water - Neighbor witnessed carpet cleaners unload their wash water in the street.	WO 121945 : By RYGIEL, KRISTINE: 9/10/2010 7:38:49 AM Carpet cleaners had already left the residence when the call was received. Sent an advisory notice to carpet cleaners regarding the alleged discharge with Minimum Required BMPs for Mobile Business Activities. Case Closed	Yes	Yes		Yes			LUX	9/10/10
18	96542	9/14/10	Hydraulic fluid	Other discharge - Trash truck's hydraulic or brake fluid line broke and left a stain in the street.	WO 122115 : By EMERSON, MIKE: 9/14/2010 2:52:14 PM Site inspection took photos. Appears that the fluid was cleaned but it has left a stain in the roadway. I contacted site manager who informed me that the street sweeper had leaked the fluid. Street sweeper indicated that they had a spill on Friday 9/10/10 and cleaned it up that day. Sweeper will send email with the steps they took to clean up the spill. They will contact clean water when spills occur from now on. Case closed	Yes	Yes		Yes			LUC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
19	96582	9/21/10	Wash water	Discharge of building or sidewalk wash water - Restaurant hosing off floor mats without containing wash water.	WO 122324 : By EMERSON, MIKE: 9/23/2010 11:18:38 AM Site inspection took photos of a puddle water. Contacted restaurant owner, manager, property owner and complainant regarding draining. Case Closed	Yes	No	9/22/10	Yes			LUC	12/14/10
20	96610	9/20/10	Cigarette butts	Discharge of food waste. - Complaint stated that there is vomit outside of the bar frequently without timely clean up.	WO 122457 : By EMERSON, MIKE: 10/4/2010 4:10:05 PM Site inspection took photos contacted manager/owner worker who stated that the area is cleaned up everyday. The clean up company will be notified of this complaint. Manager started cleaning immediately. Case Closed	Yes	No		Yes			ENC	10/21/10
21	96611	9/22/10	Cement wash	Discharge of concrete waste. -	WO 122458 : By EMERSON, MIKE: 10/4/2010 4:20:32 PM Site inspection took photos contacted manager/owner worker who stated that he will clean area immediately. WO 122459 : By EMERSON, MIKE: 10/4/2010 4:31:43 PM Site inspection area cleaned up case closed	Yes	No	9/22/10	Yes			ENC	9/23/10
22	96612	9/21/10	Sidewalk wash water	Discharge of other wash water - Gallery Owner was power washing sidewalk without required BMPs	WO 122460 : By EMERSON, MIKE: 10/4/2010 4:47:46 PM Site inspection took photos called owner to discontinue discharge. Case Closed	Yes	No		Yes			LUC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
23	96625	9/27/10	Wash water	Discharge of other wash water - Inspector observed stains and wetness all over trash area. Plaza maintenance worker confirmed that the trash area was washed out	WO 122475 : By EMERSON, MIKE: 10/5/2010 10:36:07 AM Site inspection took photos contacted landscaper and business manager. Showed the manager the cleaning stains. He said he would contact his maintenance personnel ASAP to discontinue discharge. By RYGIEL, KRISTINE: 10/21/2010 10:55:41 AM Sent NOV 9/28/10 Case Closed	Yes	No	9/28/10	Yes			LCS	10/21/10
24	96626	9/25/10	Hydraulic fluid	Discharge of oil. - received incident report from FD stating that there was a large hydraulic spill and the driver left the scene without clean up	WO 122483 : By EMERSON, MIKE: 10/5/2010 12:20:18 PM Site inspection took photos contacted local workers to get story of discharge. Contacted hauler and requested receipt from clean up company. In addition, requested additional clean up. WO 122484 : By EMERSON, MIKE: 10/5/2010 12:27:47 PM Site inspection area cleaned up took photos Case closed	Yes	Yes	9/30/10	Yes			LCS	10/4/10
25	96631	9/29/30	Potable water	Discharge of water - Water flowing out of storm drain at corner of Lake and Woodlake.	WO 122454 : By EMERSON, MIKE: 10/4/2010 2:19:42 PM Site inspection took photos of inlet. SDG&E sump pump Case closed	No	Yes					CBS	10/21/10
26	96666	10/6/10	Sediment	Discharge of construction debris - Exposed pavers in street, no BMPs.	WO 122531 : By EMERSON, MIKE: 10/7/2010 4:37:39 PM Site inspection took photos of discharge and no BMPs Issued NOV to owner to comply by	Yes	Yes	10/6/10	Yes			LCS	10/7/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					10-8-10 2pm WO 122532 : By EMERSON, MIKE: 10/7/2010 4:45:22 PM Site inspection took photo appears to be in compliance Case closed								
27	98771	10/20/10	Silt/sediment	Discharge of sediment - Sediment/rock discharge- lack of BMPs.	WO 124873 : By EMERSON, MIKE: 11/2/2010 11:00:26 AM Site inspection took photos of silt discharge and failing BMPs contacted grower to clean up and update BMPs WO 124874 : By EMERSON, MIKE: 11/2/2010 11:07:24 AM Site inspection area cleaned and new BMPs installed took photos Case closed	Yes	No		Yes			RSF	12/14/10
28	98772	10/20/10	Silt/sediment	Discharge of sediment - Sediment discharge during rain event.	WO 124808 : By EMERSON, MIKE: 10/27/2010 3:21:22 PM Site inspection took photos. 10/27/10 emailed SDG&E Willie gators 'WGaters sempra utilities.com' WO 124878 : By EMERSON, MIKE: 11/2/2010 2:44:31 PM Site inspection took photos of silt discharge and failing BMPs contacted SDG&E to clean up and update BMPs WO 124945 : By EMERSON, MIKE: 11/8/2010 2:50:30 PM Site inspection area cleaned up took photos	Yes	Yes		Yes			LCS	12/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Case closed								
29	98774	10/20/10	Silt/sediment	Discharge of sediment - Sediment discharge during rain event	WO 124877 : By EMERSON, MIKE: 11/2/2010 2:36:43 PM Site inspection took photos of silt discharge and failing BMPs contacted SDG&E to clean up and update BMPs WO 124946 : By EMERSON, MIKE: 11/8/2010 3:03:50 PM Site inspection area cleaned up case closed	Yes	No		Yes			LCS	12/14/10
30	98775	10/21/10	Silt/sediment	Discharge of sediment - Sediment discharge during rain event.	WO 124875 : By EMERSON, MIKE: 11/2/2010 2:21:37 PM Site inspection took photos of silt discharge and failing BMPs contacted SDG&E to clean up and update BMPs	Yes	No		Yes			LCS	4/8/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO 124947 : By EMERSON, MIKE: 11/8/2010 3:07:40 PM Site inspecti9on area cleaned up case closed								
31	98776	10/21/10	Sediment	Discharge of sediment - Sediment discharge during rain event.	WO 124839 : By EMERSON, MIKE: 11/1/2010 5:00:02 PM Site inspection took photos of failing BMPs (straw waddles were not secured into the ground and vegetation was dumped into drainage swale blocking flow.). WO 124840 : By EMERSON, MIKE: 11/1/2010 5:07:59 PM Site inspection took photos of failing BMPs (straw waddle were not secured into the ground vegetation in drainage swale). Sent photos to Caltrans WO 124841 : By EMERSON, MIKE: 11/1/2010 5:18:01 PM Site inspection took photos of large amount of dirt in drainage ditch. Two workers stated that they are replacing the drainage inlet. Received call from Amid requesting that there should be an onsite meeting. WO 124949 : By EMERSON, MIKE: 11/8/2010 4:33:48 PM site inspection took photos of upgraded BMPs Case closed	Yes	Yes		Yes			CBS	12/23/10
32	98777	10/21/10	Silt sediment	Discharge of sediment - Sediment discharge during rain event	WO 124835 : By EMERSON, MIKE: 11/1/2010 4:01:19 PM Site inspection took	Yes	Yes		Yes			ENC	10/28/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					photos of failing BMP (sandbags were too low to handle sediment flow). Sent photos to Caltrans. WO 124836 : By EMERSON, MIKE: 11/1/2010 4:12:51 PM Site inspection took photos and emailed them to Caltrans WO 124837 : By EMERSON, MIKE: 11/1/2010 4:38:42 PM Site inspection area cleaned up new BMP (silt fence) in place Case closed								
33	98780	10/20/10	silt	Discharge of sediment - Sediment discharge from unpaved driveway.	WO 124833 : By EMERSON, MIKE: 11/1/2010 3:02:00 PM Site inspection with engineering development review division. Took photos of street and detention basin and sent them to PW. No source of sediment was found Case closed WO 124834 : By EMERSON, MIKE: 11/1/2010 3:16:56 PM Site inspection silt removed case closed	Yes	No		Yes			LUX	12/14/10
34	98781	10/25/10	Cement wash	Discharge of concrete cutting slurry or wash water. - Concrete wash water into street. No BMPs.	WO 124800 : By EMERSON, MIKE: 10/27/2010 10:12:54 AM Site inspection took photos issued NOV place sandbags and cones at storm drain inlet WO 124802 : By EMERSON, MIKE: 10/27/2010 10:30:16	Yes	No	10/25/10	Yes			CBS	10/26/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					AM Site inspection took photos of area that was clean up signed off NOV Case closed								
35	98822	11/3/10	Sediment	Discharge of sediment - Received complaint from Construction inspector stating that there is brown discharge possibly cement in the street	WO 124935 : By EMERSON, MIKE: 11/5/2010 3:28:23 PM Site inspection took photos of brown discharge contacted worker and issued NOV to dry clean up or capture all wash water. WO 124936 : By EMERSON, MIKE: 11/5/2010 3:36:20 PM Site inspection took photos of cleaned up area signed off NOV	Yes	Yes	11/3/10	Yes			ENC	11/3/10
36	98836	11/5/10	Sediment	Discharge of sediment - received complaint of sediment discharge during rain events	WO 124941 : By EMERSON, MIKE: 11/8/2010 10:04:04 AM Site inspection took photos of silt discharge sent email to President and vice present WO 124950 : By EMERSON, MIKE: 11/8/2010 4:41:28 PM Site inspection met complainant on site. Took photos of straw waddles. Still needs more sediment control on south side. PW will call complainant regarding street maintenance. Case Closed	Yes	No						3/28/11
37	98850	11/9/10	Gas/fuel	Discharge of liquid fuels. - Large truck leaking fuel into gutter	WO 124952 : By EMERSON, MIKE: 11/9/2010 1:30:19 PM Site inspection contacted drivers and requested that they fix the leak. Called PW to clean up and gave ED flyer to driver. Case Closed	Yes	Yes		Yes			ENC	12/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
38	98955	12/2/10	Sediment	Discharge of sediment - Sprinklers causing erosion into Ki's parking lot	WO 125327 : By EMERSON, MIKE: 12/3/2010 2:55:52 PM Site inspection took photos and called property owner to fix irrigation problem. Tenants will call if problem persists. Case closed	Yes	No		Yes				12/14/10
39	98969	12/6/10	wash water from mats	Discharge of building or sidewalk wash water - Restaurants cleaning floor mats outdoors Saturday 12/4 at 10pm.	WO 125454 : By EMERSON, MIKE: 12/8/2010 2:14:28 PM 12/6/10 called owner/operator to consult his staff regarding who may have washed out the kitchen mats. 12/8/10 Owner reported that his guys did not do it. He was informed that he will be sent an alleged NOV Case closed	Yes	No	12/8/10	Yes			LCS	12/14/10
40	99013	12/13/10	Black substance	Other discharge - Sewage/leak/black mold coming out of the south side of the building.	WO 125516 : By EMERSON, MIKE: 12/13/2010 4:34:36 PM Site inspection, took photos, contacted manager who indicated that a plumber has been contacted and has confirmed does not appear to be originating from the sewer he checked all of the pipes and is to return to find leak that is coming out of the south building face. WO 125599 : By EMERSON, MIKE: 12/20/2010 10:38:32 AM Site inspection took photos of area. It appears that the hole on the wall was sealed and the ground was	Yes	No		Yes			LUC	12/15/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					cleaned up. Contacted plumber on site and was informed that the drainage lines are to be televised. Requested that the owner provide copies of invoices. Leucadia waste water has been notified. By EMERSON, MIKE: 12/27/2010 2:19:30 PM Received call from respondent stating that he was waiting for the invoice but the leak was fixed. Case closed By EMERSON, MIKE: 1/4/2011 10:26:29 AM Received a Billing Statement dated 12-19-10 showing all the plumbing work that was performed to fix the leak (attached) Case closed								
41	99114	12/21/10	Sediment	Discharge of sediment - Sediment runoff during rain event.	WO 125815 : By EMERSON, MIKE: 12/28/2010 3:11:49 PM Site inspection took photos of large erosion called contractor to install some Min BMPs fix problem. WO 125816 : By EMERSON, MIKE: 12/28/2010 3:26:04 PM 12/22/10 Site inspection took photos rain water has been diverted away from erosion. By EMERSON, MIKE: 12/28/2010 3:27:19 PM 12/23/10 Site inspection took photos of contractor installing Min BMPs to fix problem.	Yes	Yes		Yes			CBS	1/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
42	99116	12/21/10	Trash debris	Discharge of trash - Open dumpster lids	WO 125818 : By EMERSON, MIKE: 12/28/2010 4:16:07 PM Dumpster open during rain event contact operator to close them	Yes	No		Yes			CBS	1/24/11
43	99117	12/21/10	Trash debris	Discharge of trash - Dumpster lids open, no recycling.	WO 125819 : By EMERSON, MIKE: 12/28/2010 5:17:23 PM Site inspection took photo of open dumpster during a rain event closed it and contacted bar tender to keep it closed especially during a rain events they will comply and thanked me for closing the lid. Case Closed	Yes	No		Yes			SEL	1/24/11
44	99118	12/21/10	Trash Debris	Discharge of trash - Dumpster lids open	WO 125820 : By EMERSON, MIKE: 12/28/2010 5:22:07 PM Site inspection took photo of open dumpster during a rain event closed it and contacted bar tender to keep it closed especially during a rain event they will comply and thanked me for closing the lid. Case Closed	Yes	No		Yes			SEL	1/24/11
45	99183	1/3/11	sediment	Discharge of sediment - Proactive site inspection showed discharge of sediment from the SDG&E road and the Parks & Rec Trail	WO 126024 : By EMERSON, MIKE: 1/4/2011 1:46:46 PM Site inspection took photos (1/3/11) emailed SDG&E contact for road discharge and Parks & Rec. for the trial discharge (1/4/11) WO 126268 : By EMERSON, MIKE: 1/18/2011 10:25:20 AM Site inspection area cleaned up took photos case closed	Yes	No		Yes			LCS	1/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
46	99192	1/5/11	Gray water	Discharge of sewage - Customer saw employee take gray water from the bathroom toilet and dump it into the grass outside the store.	WO 126129 : By EMERSON, MIKE: 1/6/2011 4:53:41 PM Site inspection contact employee regarding dumping sewer water. He indicated that it was gray water and will dump it in the toilet next time. Case closed	No	No		Yes			LCS	1/24/11
47	99237	1/10/11	silt	Discharge of sediment - Replacing power hole, no BMPs.	WO 126267 : By EMERSON, MIKE: 1/18/2011 10:03:23 AM Site inspection took photos of silt discharge By EMERSON, MIKE: 1/18/2011 10:17:47 AM 1/18/11 sent email to SDG&E Case Closed	Yes	Yes		Yes			ENC	4/7/11
48	99241	1/10/11	H2O	Discharge of water - Excess water runoff with sheen causing slip hazard.	WO 126233 : By EMERSON, MIKE: 1/13/2011 10:31:20 AM Site inspection met neighbor on site he indicated that people used to dump their old motor oil in the vacant lot east of 770 Munevar took photos Appears to be ground water. 1/13/11 emailed photos to street Division of PW. Case Closed	No	No		Yes			CBS	1/24/11
49	99293	1/20/11	H2O	Discharge of water - Excessive water flowing from driveway/hillside into storm drain.	WO 126304 : By EMERSON, MIKE: 1/20/2011 5:03:40 PM Site inspection spoke to worker that were clearing out a storm drain or rain water. Waste water confirmed that it was private storm drain case closed	No	No		Yes		cottonwood creek	ENC	1/24/11
50	99323	1/26/11	Wash water	Discharge of water - Power washing store's sidewalks, possibly without containment. Occurred at 6am	WO 126529 : By EMERSON, MIKE: 2/2/2011 1:43:21 PM Contacted Manager of Ralph's who referred me to Property	No	No		Yes			LCS	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Manager Sudbury. Contacted PM and sent link to PCW bmp detail for cleaning sidewalks. To make sure they capture all wash water. Clean Water Manager sent follow up email to complainant (attached) case closed								
51	99324	1/26/11	Vegetation	Discharge of yard waste - Complaint of Landscape Company blowing leaves into the storm drain.	WO 126520 : By EMERSON, MIKE: 2/2/2011 1:13:06 PM Site inspection appeared that the contractor was cleaning up all vegetation. Contacted lead worker who confirmed that all vegetation was cleaned up case closed	No	Yes		Yes			ENC	4/7/11
52	99334	1/25/11	Concrete	Discharge of concrete waste. - Pile concrete rubble next to storm drain Pile concrete ruble next to storm drain	WO 126456 : By EMERSON, MIKE: 1/28/2011 3:22:52 PM Site inspection worker cleaned up rubble Case Closed	Yes	No		Yes			ENC	4/7/11
53	99354	2/1/11	Dirt	Discharge of sediment - Three uncovered piles of dirt/debris in parking lot behind suite 119.	WO 126505 : By EMERSON, MIKE: 2/1/2011 3:54:16 PM Site inspection contacted Facilities Manager regarding storage of stock piles he said it would be covered and removed within a week. Took photos of stock piles. WO 126609 : By EMERSON, MIKE: 2/11/2011 10:18:05 AM Site inspection took photos of uncovered stock piles. Called facilities Manager to call me when stock pile is in compliance (removed or covered). WO 126764 :	Yes	No		Yes			ENC	2/16/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					By EMERSON, MIKE: 2/22/2011 9:21:19 AM Site inspection took photos of covered Stock piles case closed								
54	99376	2/5/11	Wash water	Discharge of building or sidewalk wash water - Staff witnessed restaurant hosing off sidewalk without containment.	WO 126557 : By RYGIEL, KRISTINE: 2/7/2011 9:36:22 AM NOV to be sent 2/8/11 Case Closed	Yes	No	2/8/11	Yes			LUC	2/7/11
55	99427	2/11/11	Wash water	Discharge of vehicle wash water - Business washing company trucks in driveway without containment.	WO 126630 : By EMERSON, MIKE: 2/14/2011 1:48:31 PM Site inspection took photos contacted worker and issued NOV. Worker discontinued and will capture all wash water in the future. Case closed	Yes	Yes	2/11/11	Yes			LUC	4/7/11
56	99433	2/11/11	Silt and greenhouse debris	Discharge of sediment - Nursery owner is illegally dumping sediment and other debris into the storm drain channel behind the nursery	WO 126704 : By EMERSON, MIKE: 2/16/2011 11:20:49 AM Site inspection met with business owner conducted storm water quality inspection. 2/15/11 inspected drainage swale below business took photos of some greenhouse debris called business owner to clean area of all his debris and install some erosion/sediment control BMPs at the discharge location. 2/16/11 met with clean water staff regarding clean up responsibilities appears that adjacent property owner needs to maintain drainage ditch. WO 126766 : By EMERSON, MIKE: 2/22/2011 10:03:06 AM Site inspection with John Smith of SDWD and Mike Piper of JPA.	Yes	No		Yes			ENC	7/11/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Took photos of silt/sediment discharge into drainage swale. John and Mike to contact HOA's landscaper regarding reclaimed water discharge into MS4. I contacted nursery owner and met him on site and showed him the silt discharge from his business. He agreed to work with the HOA to clean the swale and discontinue silt discharge to re inspect in 30 days. Called waste water to inspect their access to sewer. By EMERSON, MIKE: 2/23/2011 3:13:23 PM 2-23-11 received email from SDWD stating that line was capped next to freeway and Sprinkler heads removed along culvert. Attached emails and photos to this work order WO 127476 : By EMERSON, MIKE: 3/30/2011 3:05:13 PM Site inspection took photos walked site with business owner temporary BMPs OK but requested permanent fix to drainage BMPs. It was agreed to meet monthly to monitor status. Next meeting 4/21/11. WO 129239 : By EMERSON, MIKE: 7/21/2011 3:46:46 PM Site inspection area cleaned took photos case closed								

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
57	99454	2/16/11	H2O	Discharge of water - White tinted water coming from storage tank off Via Cantabria.	WO 126765 : By EMERSON, MIKE: 2/22/2011 9:34:09 AM Site inspection took photos of water turning white milky color after flowing through a pipe. Called OMWD confirmed that it is an allowable discharge as they are draining water tank and de-chlorinating the water discharge. No violation case closed.	No	No		Yes			LCS	5/10/11
58	99509	2/24/11	Wash water from tire inspections	Discharge of vehicle wash water - Business washing off tires into gutter.	WO 126843 : By EMERSON, MIKE: 2/28/2011 9:20:17 AM Site inspection contacted worker took photos and contacted manager to discontinue illegal discharge. Case closed.	Yes	No		Yes			LCS	4/7/11
59	99510	2/25/11	Silt	Discharge of sediment - Flushing hydrant created erosion.	WO 126846 : By EMERSON, MIKE: 2/28/2011 11:08:02 AM Site inspection contacted OMWD's supervisor. Took photos and met supervisor on scene. Requested clean up and to discontinue illegal discharge. WO 126847 : By EMERSON, MIKE: 2/28/2011 11:11:29 AM Site inspection took photos appears that no clean up has occurred. WO 127459 : By EMERSON, MIKE: 3/30/2011 11:31:56 AM Site inspection, Appears they still have open slopes but perimeter BMPs appear to be implemented case closed	Yes	No		Yes			RSF	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
60	99537	2/28/11	Silt	Discharge of sediment - received Complaint of sediment discharge during rain event.	WO 126927 : By EMERSON, MIKE: 3/3/2011 3:16:11 PM Site inspection took photos and sent them to the Sempra/SDG&E to clean up street and replace gravel bags. WO 127437 : By EMERSON, MIKE: 3/30/2011 10:42:56 AM Site inspection took photos of clean up street Case Closed	Yes	No		Yes			LCS	4/7/11
61	99596	3/11/11	H2O	Discharge of water - Drainage from neighboring property causing erosion.	WO 127431 : By EMERSON, MIKE: 3/30/2011 10:12:32 AM Site inspection took photos was contacted site manager to contact his supervisor or property manager/owner regarding the drainage from behind their building. WO 127432 : By EMERSON, MIKE: 3/30/2011 10:21:34 AM Site inspection took photos was contacted site manager to contact his supervisor or property manager/owner regarding the drainage from behind their building. By EMERSON, MIKE: 7/11/2011 2:40:21 PM Pm contacted me with phone case closed see other SR 100200	Yes	No		Yes			LCS	3/28/11
62	99678	3/21/11	Silt	Discharge of sediment - silt discharge from failing BMPs and rain into street	WO 127442 : By EMERSON, MIKE: 3/30/2011 10:55:25 AM Site inspection took photos of failing BMPs and silt discharge. Contacted business to	Yes	No		Yes			LCS	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					contact contractor/crew to implement or replace BMPs and clean up street. WO 127445 : By EMERSON, MIKE: 3/30/2011 11:01:49 AM Site inspection took photos area cleaned up case closed.								
63	99679	3/28/11	Sediment	Discharge of sediment - sediment discharge from failing BMPs and rain event	WO 127449 : By EMERSON, MIKE: 3/30/2011 11:08:54 AM Site inspection took photos of failing BMPs and silt discharge. Contacted business to contact contractor/crew to implement or replace BMPs and clean up street. WO 127927 : By EMERSON, MIKE: 4/25/2011 2:20:49 PM Site inspection area cleaned up took photos sent thank you email case closed	Yes	No					LCS	5/10/11
64	99686	3/30/11	Silt/mud	Discharge of sediment - received complaint stating mud and silt runoff from rain event	WO 129279 : By EMERSON, MIKE: 7/26/2011 11:26:21 AM Site inspection no discharge observed case closed	No	No					LUC	7/26/11
65	99705	4/4/11	Grease/oil	Discharge of food waste. - Restaurant's grease interceptor overflowing.	WO 127922 : By EMERSON, MIKE: 4/25/2011 1:56:28 PM Site inspection took photos of spill contacted manager to clean up collecting all wash water. In addition contacted Leucadia waste water. WO 127924 : By EMERSON, MIKE: 4/25/2011 2:01:36 PM Site inspection took photos of spill	Yes	No		Yes			LCS	4/4/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					contacted manager to clean up collecting all wash water. In addition contacted Leucadia waste water. Case Closed								
66	99713	4/5/11	Wash water	Discharge of building or sidewalk wash water - Restaurant hosing off back area without containment.	WO 127857 : By EMERSON, MIKE: 4/22/2011 4:07:49 PM Site inspection took photos contacted bar tender issued NOV to discontinue discharge. Case Closed	Yes	No	4/5/11	Yes			ENC	5/10/11
67	99725	4/8/11	Antifreeze	Discharge of antifreeze - Radiator blew up in parking lot of bank.	WO 127910 : By EMERSON, MIKE: 4/25/2011 1:07:49 PM Site inspection took photos of spill contacted manager to clean up collecting all wash water. Received a call from manager that cleaning crew power washed site and collected all wash water. Case Closed	Yes	No		Yes			ENC	5/10/11
68	99728	4/5/11	H20	Discharge of water - Complaint of overwatering at restaurant.	WO 127668 : By EMERSON, MIKE: 4/13/2011 10:24:23 AM Site inspection took photos contacted manager and was informed that the power outage on 3/31/11 reset the sprinklers to factory settings. He has contacted his landscaper and the adjusted the system to prevent over irrigation. He was informed that SDWD and Clean water will send additional information to assist in compliance with applicable codes. By EMERSON, MIKE: 4/13/2011 10:33:22 AM 4/6/11 SDWD dropped off conservation notice. Case Closed	No	No		Yes		ocean	SEL	5/10/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
69	99744	4/10/11	Wash water	Discharge of water - Inspector observed a constant stream of water flowing into the storm drain no BMPs	WO 127902 : By EMERSON, MIKE: 4/25/2011 10:39:55 AM Site inspection contacted manager who stopped the discharge. Case Closed	Yes	No		Yes			LCS	5/10/11
70	99797	4/19/11	Building wash	Discharge of building or sidewalk wash water - Specialist observed colored discharge and no BMPs	WO 127834 : By EMERSON, MIKE: 4/21/2011 4:50:40 PM Site inspection contacted worker and called his supervisor regarding drainage from house washing into storm drain. WO 127835 : By EMERSON, MIKE: 4/21/2011 4:55:56 PM Site inspection area cleaned up signed off NOV case closed	Yes	Yes	4/14/11	Yes			ENC	4/18/11
71	99809	4/14/11	Wash water	Discharge of water - Clean water staff observed cement work and wash down with no BMPs	WO 127899 : By EMERSON, MIKE: 4/25/2011 10:14:27 AM site inspection contacted worker and advised them of the regulations and how they were in violation. Requested dry clean up ASAP WO 127900 : By EMERSON, MIKE: 4/25/2011 10:17:31 AM Site inspection area clean up case closed	Yes	Yes		Yes			ENC	4/14/11
72	99810	4/11/11	Wash water	Discharge of water - Inspector observed flow at PW yard from window washing activities	WO 127908 : By EMERSON, MIKE: 4/25/2011 11:44:57 AM Site inspection tried to contact facility managers none on seen. Contacted worker who informed me that they were dumping the bucket wash water in the storm drain. They will discontinue this practice and dispose of the wash water into a	Yes	Yes		Yes			ENC	5/10/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					vegetated or impervious area from now on. Case Closed								
73	99868	5/5/11	Wash water	Discharge of building or sidewalk wash water - Power washing building without containment.	WO 128114 : By RYGIEL, KRISTINE: 5/6/2011 8:36:26 AM Site inspection showed water runoff in alley from behind the bar to E Street. Sent NOV and Citation Warning on 5/5/11. Case Closed	Yes	No	5/5/11	Yes	5/5/11		ENC	5/6/11
74	99889	5/9/11	Cement	Discharge of concrete cutting slurry or wash water. - Restaurant under construction. Concrete cutting, washing off materials into alley.	WO 129010 : By EMERSON, MIKE: 7/6/2011 4:17:41 PM Site inspection contacted owner and requested clean up collecting all waste material. Case Closed	Yes	No		Yes			ENC	8/9/11
75	100136	6/21/11	Reclaimed water	Discharge of water - report of reclaimed water going into the storm drain	WO 128714 : By EMERSON, MIKE: 6/22/2011 3:38:40 PM Site inspection took photos contacted workers and their supervisors. Sent email with photos. Workers turned off water supply, will test system to ensure no over spray and will install signs case closed	Yes	No		Yes			CBS	8/9/11
76	100138	6/16/11	Wash water	Discharge of building or sidewalk wash water - worker washing building without containment photos were taken	WO 128716 : By EMERSON, MIKE: 6/22/2011 4:40:50 PM Case Closed	Yes	No	6/20/11	Yes			LCS	8/9/11
77	100191	5/9/11	Trash and grease	Discharge of trash - inspector observed overfilled trash containers	WO 129032 : By EMERSON, MIKE: 7/7/2011 10:42:24 AM Site inspection took photos contacted manager to clean up and maybe order additional pick ups. Case closed	Yes	No		Yes				5/17/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
78	100199	5/9/11	Gray water laundry	Discharge of sewage - Received call from water inspector complaining of gray water discharge	WO 129033 : By EMERSON, MIKE: 7/7/2011 11:17:37 AM Site inspection took photos contacted manager and requested clean up and discontinue dumping. WO 129035 : By EMERSON, MIKE: 7/7/2011 11:29:05 AM Site inspection area cleaned up took photos thanked manager case closed	Yes	No		Yes			LUC	5/17/11
79	100206	5/17/11	Kitty litter oil and trash	Discharge of trash - Trash containers open and kitty litter not cleaned up during rain event	WO 129042 : By EMERSON, MIKE: 7/7/2011 2:20:34 PM Site inspection took photos contacted manager to clean up litter and closed dumpsters WO 129043 : By EMERSON, MIKE: 7/7/2011 2:36:14 PM Site inspection area cleaned up took photos thanked manager case closed	Yes	Yes	5/17/11	Yes			LCS	5/17/11
80	100210	5/18/11	Sediment	Discharge of sediment - Received call complaining of sediment water discharge.	WO 129047 : By EMERSON, MIKE: 7/7/2011 3:35:44 PM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future. WO 129237 : By EMERSON, MIKE: 7/21/2011 3:30:46 PM Site inspection stock pile removed case closed	Yes	No		Yes			CBS	7/11/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
81	100217	6/22/11	Other discharge	Other discharge - Received complaint about alley behind business smelled bad	WO 129070 : By EMERSON, MIKE: 7/11/2011 10:57:42 AM Site inspection did not observe any discharge but did see pore management practices took photos and put restaurant on priority inspection list for FY 11-12. Case Closed	Yes	No					ENC	8/9/11
82	100222	6/16/11	Bleach	Discharge of other wash water - received complaint that man was cleaning sidewalk with beach inspector to investigate	WO 129076 : By EMERSON, MIKE: 7/11/2011 11:42:32 AM Called respondent back and was informed that cleaner was done a few days ago. Contacted PW streets who are issuing a no fee construction permit to drill curb so discharge will flow under sidewalk. Case closed	Yes	No		Yes			LCS	8/9/11
Totals	**82**					**65**	**21**	**17**	**75**	**1**			

Appendix H-1 Industrial Complaint Response Summary FY 2010 - 2011

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
0													
Totals													

Appendix H-1 Residential Complaint Response Summary FY 2010 - 2011

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	96263	7/19/10	sed, vegi, blgd waste	Discharge of yard waste - Yard waste, construction waste, and dirt/gravel in storm drain channel	WO 121675 : By EMERSON, MIKE: 8/27/2010 2:29:04 PM site inspection took photos of ditch west of homes on monaco and left door hangers at 207, 215, 223, 231 avenida De Monaco. spoke to HOA president Sabi Kent (279 Aveinida De Monaco) all mantenance is to be completed by the private home owers	Yes	No		Yes			ENC	10/21/10
2	96274	7/22/10	auto waste	Discharge of antifreeze - Neighbors' truck is leaking transmission fluid onto street.	WO 121676 : By EMERSON, MIKE: 8/27/2010 3:25:46 PM site inspection took photos contacted resident to fix leak	Yes	No		Yes			ENC	10/21/10
3	96329	8/2/10	blue stain from old tarp	Other discharge - Complaint of trash and paint residue in street in front of 1260 and 1272.	WO 121679 : By EMERSON, MIKE: 8/27/2010 3:49:43 PM Site inspection took photos contacted realtor	Yes	No		Yes			CBS	10/21/10
4	96426	8/2/10	sediment	Discharge of sediment - Broken sprinkler causing sediment discharge.	WO 121698 : By EMERSON, MIKE: 8/30/2010 1:50:50 PM Site inspection contacted resident took photos	Yes	No		Yes			ENC	10/21/10
5	96467	8/31/10	oil & cat litter	Discharge of oil. - Car leaking oil in street and driveway.	WO 121792 : By EMERSON, MIKE: 9/2/2010 11:51:29 AM site inspection took photos of oil and kitty litter on drive way and in street. Recived call from resident stating that he will sweep up kitty litter and fix leak ASAP case closed	Yes	No		Yes			LCS	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
6	96496	8/30/10	H20	Discharge of water - TC BMP not draining	WO 121832 : By EMERSON, MIKE: 9/7/2010 5:49:34 PM 8/30 site inspection spoke to resident/complainant regarding slow to non drainage and health concerns from mosquitoes. By EMERSON, MIKE: 9/7/2010 5:56:02 PM 9/2/10 discussed case with program manager and senor civil engineer. Appears to be an unothorized change in TC BMP. Engineer resent email to resident. emailed and called Vector control By EMERSON, MIKE: 9/7/2010 5:57:46 PM 9/3/10 received call from vector control that there were mosquitoes in the inlet and it was treated and will be watched until it is modified. WO 124805 : By EMERSON, MIKE: 10/27/2010 1:42:26 PM Issued nov/citation to comply by 12/1/10 for unauthorized change to permanent TC BMP on south side of property By RYGIEL, KRISTINE: 12/14/2010 8:50:54 AM Construction permit was issued to repair the drainage swale and signed off 12/13/10.	Yes	No	10/27/10	Yes	10/27/10		ENC	10/27/10
7	96497	9/7/10	H2O	Discharge of water - Continuous water discharge from curb outlets.	WO 122014 : By EMERSON, MIKE: 9/13/2010 9:44:07 AM Site inspection took photos of constant	No	Yes		Yes			ESC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					drainage. Contacted owner who stated that they have tried several times to find the source of the water. They have asked their landscaper, water department and a leak specialist and determined that it is ground water. Inspected back yard appeared dry. Case closed								
8	96498	9/7/10		Discharge of vehicle wash water - washing off race trucks in driveway	WO 121831 : By EMERSON, MIKE: 9/7/2010 5:30:14 PM Site inspection contacted resident and informed him on storm water regulations No discharge observed case closed	No	No		Yes			LUC	10/21/10
9	96526	9/10/10	water	Discharge of water - complaint ant says her neighbor is draining their hot tub into the street with a PVC pipe	WO 122015 : By EMERSON, MIKE: 9/13/2010 10:06:37 AM Site inspection no discharge observed. 9/13/10 received call from owner stating that they drain their hot tub into the sewer case closed	No	No		Yes			ENC	10/21/10
10	96529	9/10/10	PAINT	Discharge of paint - RESIDENT PAINTING CAR IN DRIVEWAY	WO 122016 : By EMERSON, MIKE: 9/13/2010 10:42:21 AM Site inspection gave ed info no discharge case closed	No	No		Yes			ENC	10/21/10
11	96532	9/13/10	wash water	Discharge of building or sidewalk washwater - Staff witnessed power washing without containment.	WO 122036 :	Yes	No		Yes				9/13/10
12	96568	9/20/10	h2o	Discharge of water - Over-irrigation water coming from apt complex	WO 122456 : By EMERSON, MIKE: 10/4/2010 3:44:47 PM Site inspection took photos of inlet contacted landscape	No	No		Yes			ENC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					worker who stated that a pipe had broken on Friday 9/17 and was repaired that day. The worker was informed that the city received a complaint about constant run-off. The representative understood the issue and will try to discontinue the flow.								
13	96613	9/23/10	h2o	Other discharge - Complainant reported discolored fluorescent water appearing in pond.	WO 122461 : By EMERSON, MIKE: 10/4/2010 4:55:12 PM Site inspection with program manager. Took photos appears to be the same condition that occurred last year	No	No					ESC	10/21/10
14	96646	9/30/10	none	Discharge of oil. - Resident says he witnessed his neighbor dumping oil onto the ground and covering it up with dirt 5 days ago.	WO 122485 : By EMERSON, MIKE: 10/5/2010 1:35:11 PM Site inspection took photos of no drainage case closed By EMERSON, MIKE: 10/14/2010 11:01:15 AM 10/14/10 sent NOV and called respondent and complaint. WO 124830 : By EMERSON, MIKE: 11/1/2010 12:48:54 PM Site inspection area cleaned up took photos case closed	Yes	No	10/14/10	Yes			ENC	12/14/10
15	96668	10/6/10	wash water	Discharge of vehicle wash water - Resident washing boat in street.	WO 122526 : By EMERSON, MIKE: 10/6/2010 5:08:13 PM Site inspection took photos of resident washing boat in street. Requested that he capture the wash water. After reviewing the code and checking with the manager it appears that	No	No		Yes			LCS	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					this is an exempted discharge. Left message with resident that it is not a violation Case closed								
16	96669	10/6/10	oil	Discharge of oil. - Car dripping oil in street	WO 122527 : By EMERSON, MIKE: 10/6/2010 5:13:55 PM Site inspection took photos of large oil stains in the road. Left message with resident that it needs to be cleaned up capturing all the wash water and fix leak and use a drip pan. WO 124663 : By EMERSON, MIKE: 10/14/2010 4:38:47 PM site inspection took photos of cleaned up area and drip pan on driveway for red PU truck case closed	Yes	No		Yes			LCS	10/14/10
17	98723	10/14/10	water	Discharge of water - Runoff coming from an open drain near the street on the north side of the driveway. Possibly over-irrgiation, causing erosion.	WO 124675 : By EMERSON, MIKE: 10/18/2010 5:26:59 PM Site inspection took photos. Called complainant and asked that they call me when there is no rain and there is discharge so that we can find the source. No discharge case closed.	No	No		Yes			LUC	10/21/10
18	98758	10/21/10	sediment	Discharge of water - Resident concerned with water from vernal pool collecting on his street. Forwarded to PW Streets for street repair.	WO 124832 : By EMERSON, MIKE: 11/1/2010 2:07:11 PM Contacted streets division of the PW department and discussed voice mail and solutions to the drainage issue. DG was dumped on the corner of Birmingham and Crest. But they can't put	No	No					LUX	12/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					DG there as it is too cost prohibited By EMERSON, MIKE: 11/1/2010 2:17:20 PM Site inspection took photos of street sent PW. No source of sediment was found Case closed								
19	98956	12/2/10	clay debris	Other discharge - White substance pooling infrom of house inspector to investigate	WO 125328 : By EMERSON, MIKE: 12/3/2010 4:01:26 PM Site inspection contacted property owner to discontinue washing off dust from ordinments	Yes	No		Yes			ENC	12/14/10
20	98961	12/2/10	H2O	Discharge of other washwater - Received call and email from the RWQCB that there is an illegal connection at 2354 Oxford west in the alley.	WO 125358 : By EMERSON, MIKE: 12/6/2010 10:03:06 AM Site inspection with Clean Water Manager took photos of white pipe that discharges into the unimproved dirt alley. By EMERSON, MIKE: 12/6/2010 10:29:36 AM Emailed results from last investigation to the RWQCB. They will contact the complainant case closed WO 125779 : By EMERSON, MIKE: 12/27/2010 1:45:25 PM Sent email to complainant with permit for drainage	No	No						12/14/10
21	98977	12/7/10	green liquid	Discharge of antifreeze - Antifreeze spilled in alley at 295 Neptune Ave.	WO 125401 : By EMERSON, MIKE: 12/7/2010 5:20:20 PM Site inspection took photos called PW streets. Streets called and will get the vacon truck to suck up green liquid.	Yes	No		Yes			LUC	12/7/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO 125402 : By EMERSON, MIKE: 12/7/2010 5:26:16 PM Site inspection took photos of area cleaned up. Neighbors commented on the algae in the puddle and asked if the city could fix it or require the adjacent property owner to fix it with gravel. They were referred to code enforcement.								
22	99019	12/15/10	leaves	Discharge of yard waste - Resident dumping yard waste into the curb and gutter in front of his house.	WO 125594 : By EMERSON, MIKE: 12/17/2010 1:18:59 PM Site inspection took photos of large amount of leaves in street left door hanger	Yes	No		Yes			LCS	1/13/11
23	99048	12/20/10	Vegetation	Discharge of yard waste - Neighbor trimmed hedges and left trimmings in the gutter.	WO 125785 : By EMERSON, MIKE: 12/27/2010 4:32:50 PM Site inspection took photos of trimmings in storm drain. Contacted resident and requested clean up WO 125786 : By EMERSON, MIKE: 12/27/2010 4:39:16 PM site inspection area cleaned up took photo case closed	Yes	No		Yes			CBS	1/13/11
24	99096	12/22/10	stinky water	Discharge of sewage - Neighbor says there is sewer water flooding the house.	WO 125804 : By EMERSON, MIKE: 12/28/2010 11:13:20 AM Site inspection no one home took photos of uncovered stock pile and standing water mixing with sediment. Complainant was concerned about the run on to her property to the north. Left card at door. Did not appear to be sewer water.	Yes	No		Yes			ENC	12/23/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO 125806 : By EMERSON, MIKE: 12/28/2010 11:22:27 AM Site inspection took photo left const flyer By EMERSON, MIKE: 1/14/2011 1:15:08 PM 1/10/11 contacted property owner who indicated that he will use Min construction BMPs								
25	99236	1/10/11	H2O	Discharge of sewage - Stinky water draining down Island View to Balour.	WO 126266 : By EMERSON, MIKE: 1/18/2011 9:44:21 AM Site inspection took photos and spoke to residents and waste water. It was concluded that the seepage is from ground water no source.	No	No		Yes			ENC	4/7/11
26	99238	1/10/11	H2O	Discharge of sediment - Possible broken pipe at residence causing runoff.	WO 126264 : By EMERSON, MIKE: 1/14/2011 11:12:22 AM Site inspection took photos of water draining out of driveway. Contacted resident and showed her the discharge she gave me the landlord's phone number. Landlord indicated that the water is not in the same area as his water line and that it is ground water.	No	No		Yes			CBS	1/24/11
27	99240	1/11/11	H2O	Discharge of sediment - Possible broken pipe causing runoff.	WO 126260 : By EMERSON, MIKE: 1/14/2011 10:41:08 AM site inspection contacted owner regarding constant discharge. She said she cleans it and dumps her waste water into her landscaping area. It appears to be ground water. took photos and	No	No		Yes			LCS	1/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					informed PW								
28	99253	1/11/11	sediment	Discharge of sediment - Inspector reported silt discharge from work site.	WO 126235 : By EMERSON, MIKE: 1/13/2011 11:00:54 AM Site inspection took photos contacted workers and issued NOV to clean up street by 4pm 1/13/11 WO 126259 : By EMERSON, MIKE: 1/14/2011 10:26:40 AM site inspection area cleaned up signed off NOV and gave it to home owner	Yes	No	1/11/11	Yes			LCS	1/13/11
29	99337	1/27/11	pool water	Discharge of water - received complaint of pool being drained into storm drain	WO 126458 : By EMERSON, MIKE: 1/28/2011 3:37:56 PM Site inspection observed H2o flowing down the storm drain left door hanger. Received call from pool contractor that the water is de chlorinated	No	No		Yes			LCS	4/7/11
30	99348	1/27/11	H2o	Other discharge - Specialist observed white substance flowing out of property drain	WO 126479 : By EMERSON, MIKE: 1/31/2011 1:37:47 PM Site inspection left door hanger and questioned contractors on adjacent property. Received call from property owner stating that it is ground water and it has been flowing for years and would like it to stop. He thinks it may be from over irrigation on uphill properties.	No	No		Yes				4/7/11
31	99386	2/7/11	ground water	Discharge of water - Sump pump water discharges to creek, area around outlet is rusty.	WO 126612 : By EMERSON, MIKE: 2/11/2011 10:43:42 AM Site inspection contacted property owner took photos of French drains and sump pumps. Appears	No	No		Yes			ESC	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					to be ground water. At the request of the property owner, emailed Vector control to monitor/treat adjacent stream bed. Case closed								
32	99508	2/24/11	White milky fluid	Discharge of paint - White milky fluid running down gutter.	WO 126842 : By EMERSON, MIKE: 2/28/2011 9:14:02 AM Site inspection took photos of milky discharge. Left info at door to call me. WO 126850 : By EMERSON, MIKE: 2/28/2011 2:12:32 PM Site inspection took photos of cleaned up area case closed	Yes	No		Yes			ENC	2/28/11
33	99516	2/28/11	silt	Discharge of sediment - Sediment discharge after rain event. Failing BMPs.	WO 126929 : By EMERSON, MIKE: 3/3/2011 4:35:52 PM Site inspection took photos of street, silt bar and suspected discharger. I called business owner who informed me that they are in the process of moving their business off the subject property. They will call the landlord to get permission to replace BMPs on 2/28/11 By EMERSON, MIKE: 3/3/2011 4:40:32 PM 3/3/11 received email and call from PW requesting fines and cost recovery. Called business owner for update on responsible party WO 126940 : By EMERSON, MIKE: 3/8/2011 3:07:32 PM Site inspection took photos of failing BMPs	Yes	No	3/7/11	Yes	3/7/11		LUC	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					at 403 Orpheus. Met with clean water manager, it was agreed to put the property owner on notice via NOV. Informed the Palm Co. of this action and obtained property owners phone number and faxed a copy of the notice. By EMERSON, MIKE: 3/8/2011 3:21:57 PM 3/7/11 Called property owner left message that there are sediment discharges occurring from their property after every rain event and that the city had sent and NOV to discontinue discharge and to implement, maintain and/or replace BMPs for sediment control. 3/8/11 received call from property owner stating that they have evicted the palm Co for not paying rent and are auctioning off the remaining trees and will have the property secured with in 30 days. WO 127453 : By EMERSON, MIKE: 3/30/2011 11:19:09 AM Site inspection took photos of BMPs. Appears they still have open slopes but perimeter BMPs appear to be implemented case closed received call with new contact information								
34	99550	3/7/11	oil	Discharge of oil. - Car leaking oil onto street. Black porsche	WO 126935 : By EMERSON, MIKE: 3/8/2011 11:09:38 AM Site inspection observed oil leak took photos left ed info.	Yes	No		Yes			LUC	3/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO 127435 : By EMERSON, MIKE: 3/30/2011 10:37:55 AM Site inspection took photos of oil leaking from vehicle left card and door hanger.								
35	99588	3/10/11	H2O	Discharge of other washwater - Illegal connection, greywater discharging onto street.	WO 127100 : By EMERSON, MIKE: 3/15/2011 10:17:10 AM CIP co-worker and I met with owners and tenants and inspected area drains. They appeared to be landscape drains from the west side yard and rear patio. Cautioned the tenants not to wash off the patio as it drains into the storm drain case closed	No	No		Yes			ENC	4/7/11
36	99594	3/10/11	pool water	Discharge of water - Pool draining, causing erosion.	WO 127102 : By EMERSON, MIKE: 3/15/2011 11:39:41 AM Site inspection observed erosion downstream from subject property (took photos) but the discharge has stopped. Met with complainant who informed me that she had contacted the discharger after looking online for pool discharge rules and was told it was OK to discharge. I agreed as long as there is no erosion. I contacted PW streets regarding cold patch and street condition. Streets informed me that the street works fine during a rain event and that the discharger needs to slow down the flow and the discharger may have some additional civil responsibilities.	Yes	No		Yes			CBS	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Contacted the discharger and informed her of the rules. She will comply next time. Case closed.								
37	99657	3/21/11	silt	Discharge of sediment - Sediment from trail easement ran off during event.	WO 127396 : By EMERSON, MIKE: 3/29/2011 3:54:15 PM Site inspection took photos of failing BMPs and silt discharge. WO 127631 : By EMERSON, MIKE: 4/11/2011 4:17:52 PM Site inspection took photos sent closing letter and called and thanked contractor case closed	Yes	No	3/24/11	Yes			LCS	5/10/11
38	99662	3/17/11	reclaimed water	Discharge of water - Leaking reclaimed water sprinklers.	WO 127366 : By EMERSON, MIKE: 3/29/2011 10:42:47 AM 2/15/11 site inspection contacted SDWD and JPA for reclaimed water leakage from sprinklers. They are to contact HOA landscaper to cap off old lines. 3/17/11 site inspection took photos of leaking purple boxes. Called SDWD. WO 127367 : By EMERSON, MIKE: 3/29/2011 10:50:22 AM Site inspection contacted SDWD and JPA for reclaimed water leakage from sprinklers. They are to contact HOA landscaper to inspect all lines for leakage. WO 129238 : By EMERSON, MIKE: 7/21/2011 3:34:59 PM Area cleaned up case closed	Yes	No		Yes			ENC	7/11/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
39	99663	3/28/11	appears to be paint	Discharge of paint - Paint discharge into gutter.	WO 127365 : By EMERSON, MIKE: 3/29/2011 10:20:13 AM Site inspection took photos of white stains in gutter line. Contacted tile guy who indicated that it was the painter that left his waste in the gutter. He will ask one of his workers to try to remove the stains without discharging the wash water into the storm drain. Gave him educational info to give the home owner. Case closed	Yes	No		Yes			LCS	4/7/11
40	99717	4/6/11	UNKNOWN	Discharge of sediment - Broken sprinkler causing erosion. Leaking onto Rubenstin and Westminster	WO 127901 : By EMERSON, MIKE: 4/25/2011 10:36:21 AM Site inspection contacted owner who had already fixed broken sprinkler case closed	Yes	No		Yes			ENC	5/10/11
41	99743	4/11/11	silt	Discharge of sediment - Inspector observed silt discharge from drain construction	WO 127904 : By EMERSON, MIKE: 4/25/2011 10:49:08 AM Site inspection took photos of silt discharge WO 127906 : By EMERSON, MIKE: 4/25/2011 11:01:01 AM Site inspection area cleaned up case closed	Yes	No		Yes			CBS	4/12/11
42	99794	4/20/11	h20	Discharge of water - Waste water reported possible illegal conection to culvert box adjacent to 948 springwood Lane	WO 127818 : By EMERSON, MIKE: 4/21/2011 3:23:06 PM Site inspection took photos researched property obtained permit 10755-cn signed off in February case closed	No	No		Yes				5/10/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
43	99916	5/12/11	water	Discharge of water - Neighbor emptying pool onto complainant's property.	WO 128205 : By RYGIEL, KRISTINE: 5/12/2011 3:32:05 PM No discharge occurring during site inspection. case closed.	No	No		Yes			ENC	5/12/11
44	100188	5/9/11	sediment	Discharge of sediment - Received complaint from water inspector that there is intermediate discharge with sediment flowing into the street	WO 129011 : By EMERSON, MIKE: 7/6/2011 4:47:54 PM site inspection with water inspector who will monitor discharge case closed	Yes	No					CBS	8/9/11
45	100202	4/5/11	sediment	Discharge of sediment - received Received call from PW complaining of sediment water discharge.	WO 129038 : By EMERSON, MIKE: 7/7/2011 12:45:44 PM Site inspection took photos contacted owner on 5/31/11 to re grade to eliminate discharge WO 129039 : By EMERSON, MIKE: 7/7/2011 12:52:33 PM Site inspection took photos contacted owner to re grade to eliminate discharge case closed.	Yes	No		Yes			ESC	6/1/11
46	100207	5/18/11	sediment	Discharge of sediment - Received call complaining of sediment water discharge.	WO 129044 : By EMERSON, MIKE: 7/7/2011 3:00:51 PM Site inspection took photos contacted owner to re grade to eliminate discharge case closed.	No	No		Yes			CBS	8/9/11
47	100208	5/18/11	sedimnet	Discharge of sediment - Received call complaining of sediment water discharge.	WO 129045 : By EMERSON, MIKE: 7/7/2011 3:15:53 PM Site inspection took photos contacted owner to re grade to eliminate discharge case closed. Called vector control to treat ponding water	No	No		Yes			CBS	8/9/11
48	100209	5/18/11	sedimnet	Discharge of sediment - Received call complaining of sediment water discharge.	WO 129046 : By EMERSON, MIKE: 7/7/2011 3:23:56 PM Site inspection took photos contacted owner	No	No					CBS	8/9/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					to re grade to eliminate discharge case closed. Called vector control to treat ponding water								
49	100211	5/5/11	Pet Waste	Other discharge - Received call complaining of animal waste discharge.	WO 129048 : By EMERSON, MIKE: 7/7/2011 3:54:55 PM Left info at door	No	No		Yes			CBS	8/9/11
Totals	**49**					**26**	**1**	**5**	**44**	**2**			

Appendix H-1 Referral or Request for Info **FY 2010 - 2011**

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
1	96291	7/26/10	Commercial	na- request for info	Discharge of building or sidewalk wash water - Property management company wanted regulations for washing off buildings.		Stormwater Regulations	ENC	7/26/2010
2	96533	9/13/10	Residential	Trash	Discharge of trash - Trash on sidewalk	City Manager Memo dated 5/27/10		CBS	9/13/2010
3	96620	9/27/10	Commercial	NA- request for info	Other discharge - Encinitas business called to get regulations for cleaning sidewalks in front of their business.		Power washing requirements	LUC	9/27/2010
4	98779	10/20/10	Construction	Sediment	Discharge of sediment - Lack of BMPs and discharge of sediment. Referred to construction inspector.	Construction Inspector		LUC	12/14/2010
5	98823	11/4/10	Commercial	Water	Discharge of water - Company called to verify requirements for flushing fire lines. They protect storm drain with filter sock and will ensure no erosion occurs.		Requirements for flushing fire lines	ENC	11/4/2010
6	99007	12/9/10	Residential	Trash/graffiti	Discharge of trash - Resident called to report illegal dumping of trash and graffiti. Problem was in County of SD- referred to County of SD Code Enforcement	County of SD Code Enforcement			12/9/2010
7	99774	4/19/11	Residential	Water	Discharge of water - Water pudding at Vulcan and East F Street on a daily basis because of over-irrigation. Referred to SDWD.	SDWD		ENC	4/19/2011

Commercial Total:	**3**
Residential Total:	**3**
Construction Total:	**1**
Municipal Total:	**0**
Industrial Total:	**0**
Total:	**7**

Appendix I

Public Participation

I-1 **Green Spring List 2011**

I-2 **Official Lifeguard Field Manual**

Encinitas "GREEN SPRING" Activities & Events
(April through June, 2011)

Welcome to the Encinitas "Green Spring" listing of educational activities and events being brought to the community through a collaborative effort of volunteers from the Encinitas Environmental Advisory Commission, Encinitas Environment Day, Downtown Encinitas Mainstreet Association (DEMA) and the Solana Center for Environmental Innovation.

April 22 **Captain Charles Moore** - Friday, 7:00pm - $5 donation suggested
Plastics in our Oceans, Environment & Us – Captain Moore shares his research findings and insights from his trips to the "Great Pacific Garbage Patch" (North Pacific Gyre)
Paul Ecke Central School, 185 Union Street, Encinitas.
Seating is limited, RSVP to Darcy Lyons kdlyons@cox.net

April 23 **Electronic Waste Collection Event** – Saturday, 9 am-Noon, *FREE*
> open to all communities
Solana Center for Environmental Innovation
137 N El Camino Real, Encinitas
(just up the hill past the Sheriff's Substation – follow signs)

April 23 **Paper Shredding Event** – Saturday, 9 am-Noon, *FREE*
Encinitas residents & businesses only, 2 bankers box limit
Encinitas City Hall
505 South Vulcan Avenue, Encinitas
For more information, call (760) 436-4151

April 23 **Solar For Homes** – Saturday, 9:30 am
Encinitas Library Community Room
540 Cornish Drive, Encinitas
Baker Electric Solar educational presentation on solar benefits, financial benefits (rebates, tax credits) including free on-site consultation. RSVP to www.BakerElectricSolar.com or (877) 543-8765.

April 26 **Succulent Wreath Class** – Tuesday, 9 am – 2 pm
San Diego Botanic Garden
http://www.sdbgarden.org/classes.htm

April 28 **Cottonwood Creek Environmental Film Series -** Thursday 6:30 pm – 8 pm, *FREE*
Out There – Insane Waves and an Uncertain Future
Downtown Encinitas Mainstreet Association.
http://www.encinitas101.com/events/the-cottonwood-creek-environmental-film-festival/

April 30 **Beach Cleanup** – Saturday, 9 am-Noon
Moonlight Beach
Encinitas Clean Water Program & Solana Center for Environmental Innovation
Please pre-register at http://www.creektobay.org/

April 30 **Composting Workshop** – Saturday, 10 am - Noon, *FREE*
Solana Center for Environmental Innovation
137 N. El Camino Real, Encinitas
Please register at http://www.solanacenter.org/1workshops.html

Continued.....

Last Updated - 5/16/2011 10:06 AM

GREEN SPRING
www.eeday.org

April 30 **Encinitas Garden Festival** – Saturday, 10 am – 5 pm
www.EncinitasGardenFestival.org

April 30 **Sacred Altars, Environmental Art Exhibit Opening Reception** Saturday, 6 pm – 8 pm
Encinitas Library Community Room
540 Cornish Drive, Encinitas
30 local artist invitational exhibit curated by Rodney McCoubrey with artwork made from up to 25% recycled materials. More info: www.SacredAltars.blogspot.com
Open to all – Exhibit on display through June 6th

May 7 **Solar Luncheon** – Saturday, 11 am
Encinitas Community Center
1140 Oakcrest Park Drive, Encinitas
Sullivan Solar educational presentation about solar technology, rebates, incentives and their cash-back program specifically for Encinitas.
For more information contact Sullivan Solar at 1-800-SULLIVAN or www.EncinitasSolarProgram.org

May 10 **Water Conservation Workshop** – Tuesday, 6:30 pm *FREE*
Rainwater Capture & Irrigation System Improvements
Learn how to efficiently capture, collect and utilize rainwater AND fine tune your irrigation system for the most efficient water delivery for your landscape. 10% off coupons from Grangetto's for all attendees
Encinitas Community Center, 1140 Oakcrest Park Drive, Encinitas
Please RSVP to GreenCommunity@CityofEncinitas.org

May 18 **Bike Safety Workshop** – Wednesday, 6 pm
Ride Cyclery
559 S. Coast Hwy 101, Encinitas
Keep yourself safe on the road with useful information on: bike safety, training on how to change a tire, importance of hand signals, and other tips. Ride your bike there and receive 20% discount off of bike accessories!

May 20 **Bike to Work Day – *Region-wide***
You know you've been thinking about the idea of riding your bike to work. Everyone else will be doing it - Join interested people from throughout the County in getting out of your car and riding your bike to work. For more information visit: http://www.icommutesd.com/Events/BikeToWorkDay.aspx

May 20 **Arbor Day Activity & Public Works Day –** Friday, Noon-2pm
Encinitas Public Works
160 Calle Magdalena, Encinitas
> Arbor Day Tree Planting dedication, included tree planting demo @ 12:15pm
> Public Works Open House complete with equipment demos for 'kids' of all ages, booths, reusable bag giveaways and a possible "Bag Monster" sighting.

May 21 **Tired of Flats on Hwy 101??! Help Rid Coast Hwy 101 of Thorns in Leucadia –** Saturday, 8am-2pm
Community Work Party: Puncture Vine/Goathead Thorn Removal
Hwy 101 & A Street , Leucadia – moving north
Bring your gloves, sturdy closed toe shoes, a hat, sunscreen, water bottle, shovels, rakes, hoes, good cheer & energy! We will bring coffee and some snacks…bring your own mug, fork, etc…it'll be a **ZERO WASTE PARTY.** For more event details click HERE - **PLEASE RSVP TO:** NoMoreGoathead@gmail.com
*Due to the nature of the work in the City's & NCTD's Right of Ways – all volunteers will need to check in and be trained on safety procedures before starting work.

Continued…..

Last Updated - 5/16/2011 10:06 AM

GREEN SPRING
www.eeday.org

May 21 **Ladybug Day** – Saturday, 10am-12:30pm
San Diego Botanic Garden
Bring your kids (of all ages) to participate in the "Lost Ladybug Project". Help search for and report on ladybugs as part of a cooperative study with Cornell University. There will also be lots of ladybug crafts, an important release of ladybugs and a children's flower arranging activity (each child will be able to take home their own bouquet of fresh flowers).
For more information visit: http://www.sdbgarden.org/ladybug.htm

May 26 **Cottonwood Creek Environmental Film Series** – *FREE*, Thursday 5:30 pm – 9:00 pm
Film: "Wherever You Want to Go" – part of the BMW activate the future series
Included in this special evening is an underground car show from5:30-7:30pm featuring 10 electric cars and scooters as well as a regional panel discussion from 8:30-9pm on the future of transportation with regional transportation experts.
Host: Downtown Encinitas Mainstreet Association.
http://www.encinitas101.com/events/the-cottonwood-creek-environmental-film-festival/

May 28 **Electronic Waste Collection & Recycling Event** – Saturday, 9am-Noon
> open to all communities
Solana Center for Environmental Innovation
137 N El Camino Real, Encinitas
(just up the hill past the Sheriff's Substation – follow signs)

May 28 **Hydroponic Gardening Workshop** – Saturday, 9am-Noon
San Diego Botanic Garden
Dynamic hands-on workshop teaching the principles of the hydroponic wick method – a fun and easy sustainable gardening technique. Participants will build and take home their own sustainable garden filled with veggies. To register visit: http://sdbgarden.org/classes.htm

June 5 **Encinitas Environment Day** – 10am-4pm, *FREE*
Come out for a day of amazing environmental awareness booths, vendors, music and activities.
Cottonwood Creek Park
Corner of Encinitas Blvd & Vulcan Avenue, Encinitas
See www.eeday.org for a complete event listing

Regular Ongoing Activities:

Nature Walks & Lagoon Clean-ups - Saturdays
San Elijo Lagoon Conservancy www.sanelijo.org

Leucadia Farmer's Market & Art Fair - EVERY Sunday 10 am – 2 pm
Paul Ecke Central School, 185 Union Street, Leucadia

Cottonwood Creek Clean-ups – 3rd Saturday each month, 8:30 am – Noon
Contact Brad Roth, Project Manager, Cottonwood Creek Conservancy broth@cox.net

All of this programming and coordination has been brought to you by the following organizations and their dedicated volunteers:

City of Encinitas – Greening our Community; Solana Center for Environmental Innovation; Encinitas 101; Today's Roots

Encinitas Environment Day '11

& The Encinitas Environmental Commission

To give us feedback, or request future events/activities: GreenCommunity@cityofencinitas.org

Visit Encinitas Environmental Commission webpage for any updates to Green Spring Listing

Last Updated - 5/16/2011 10:06 AM

ENCINITAS JR. LIFEGUARDS

N33° 2' 52" / W117° 17' 49"

MOONLIGHT BEACH, CA

OFFICIAL

ENCINITAS MARINE SAFETY DEPARTMENT
JUNIOR LIFEGUARD FIELD MANUAL

CITY OF ENCINITAS CLEAN WATER PROGRAM

The storm drain system carries untreated runoff directly to our creeks, lagoons, and the ocean. Runoff containing trash, pet waste, oil, grease, soap, metals, and other pollutants contributes to high bacteria levels in the ocean and may cause sickness and/or beach closures. The Clean Water Program was created to protect our waterways and keep our beaches clean and safe.

WHAT DOES THE PROGRAM DO?

- Water quality monitoring
- Public outreach & education
- Complaint response and enforcement
- Annual facilities inspections
- Low impact development
- Watershed planning and coordination

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

HOW CAN YOU PROTECT OUR WATERWAYS?

- Pick up after your pets. Pet waste carries bacteria, viruses, and parasites that can pose risks to human and environmental health.
- Don't be a litter bug. Trash easily makes its way to the beach.
- Never dispose of household hazardous waste in the trash, sewer system, or storm drains.
- Limit your use of fertilizers and pesticides. Do not apply chemicals if rain is in the forecast, and avoid over-irrigation, which can wash chemicals into the storm drain.
- Sweep or rake instead of using water to wash off outdoor surfaces.
- During home improvements and maintenance activities, do not allow any runoff or debris to enter the street or storm drain. Properly dispose of all wash water, paint and other construction materials.

To report spills or illegal dumping in Encinitas, or for more information on stormwater pollution prevention, please call the **Clean Water Hotline: 760-633-2787**, or email: **cleanwater@cityofencinitas.org** website: **www.cwp.cityofencinitas.org**

CITY OF ENCINITAS

Clean Water Program

ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program Annual Report

FY 2011-12

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EXECUTIVE SUMMARY

Section J.3 of Water Quality Order No. R9-2007-0001, adopted January 24, 2007, requires the City of Encinitas to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2011-2012 with a defined reporting period from July 1, 2011 through June 30, 2012. Reporting for this annual report has been prepared in compliance with standards established in Water Quality Order No. 2007-0001, and is based upon the most current information available at the time of document preparation. This report is presented in the standardized annual reporting format developed collectively by the San Diego Region Municipal Stormwater Copermittees.

On March 24, 2008, the City of Encinitas submitted, as required by Order No. 2007-0001, an updated JURMP. The JURMP was prepared as a foundational program document to detail programs, process, procedure, and implementation strategies employed by the City to improve and protect the quality of local surface and receiving waters. As part of the JURMP update process, the following list of objectives was established to set baseline guidance for overall program success:

- Develop programmatic elements to ensure compliance with regulatory standards and provisions mandated in Order No. R9-2007-001.
- Establish management processes and procedures to ensure accountability for program actions and activities.
- Establish and support a set of effective and efficient strategies to address Encinitas water quality concerns.
- Build program elements around integrated assessment approaches in order to evaluate overall performance and effectiveness of program components.

Programmatic reporting, as required and represented in this document, serves as a critical self assessment tool in consideration of the objectives outlined above. However, it should be noted that the value added outcomes, both to the program and to the community of Encinitas, of each program area are in constant review as local, regional, and discipline specific technical and scientific knowledge advances. It is important to recognize the iterative nature of stormwater and surface water quality management, as such programs are comprehensive in nature, and each individual component contributes to the overall effectiveness of program outcomes. Each reporting year provides opportunity to express refinement and acuity of programs and the City's overall progression in the field of stormwater and surface water quality management.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Greg Shields

Greg Shields, P.E.
Interim Director of Public Works

9.24.2012
Date

1.0 INTRODUCTION

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollution such as urban runoff, and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issued to local governments and other agencies.

In 2002, the City of Encinitas (City) developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01 (2001 Permit). On January 24, 2007, Order No. R9-2007-0001 (Order, Permit, 2007 Permit or Municipal Stormwater Permit), was adopted by the RWQCB, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and the incorporated cities of San Diego County, including the City of Encinitas (Copermittees). Under the requirements of Order No. R9-2007-0001, the City prepared and submitted on March 24, 2008 an updated JURMP document describing enhancements to existing programs, as well as newly developed programmatic elements to meet the provisions of the adopted permit.

Section J.3 of Water Quality Order No. R9-2007-0001, requires the City to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2011-2012 (FY 2011-12) with a defined reporting period from July 1, 2011 through June 30, 2012.

1.1 BACKGROUND

The City of Encinitas encompasses an overall area of nearly 20 square miles and is located along six miles of Pacific coastline in northern San Diego County. The City is characterized by coastal beaches, cliffs, flat-topped coastal areas, steep mesa bluffs and rolling hills. Incorporated in 1986, drawing together the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain and Leucadia, the City has an approximate population of 60,000. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south.

The City of Encinitas is situated entirely within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and the Escondido Creek Watershed to the south. The City is naturally divided by eight (8) distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon sub-basins. Encinitas receives an average annual rainfall of approximately ten (10) inches.

The City owns and maintains improved and open storm water channels, underground pipes of varying material, storm water detention basins, catch basins, and a variety of other MS4 facilities.

In general, the City drains to three blue-line creeks: Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. In 2006, Cottonwood Creek was 303(d) listed for DDT, phosphorous, and sediment toxicity stressors. Further, the Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for total coliform bacteria indicators due to urban runoff from Cottonwood Creek. Encinitas Creek drains the north-central portion of the City, and drains into Batiquitos Lagoon, which is designated as a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. In 2006, Encinitas Creek was 303(d) listed for phosphorous impairments, and in 2010 has been listed for selenium and toxicity. Escondido Creek, listed in 2006 for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids, and in 2010 for enterococcus, fecal coliform, and total nitrogen, drains the southern and northwest (Olivenhain) portion of the City and drains into San Elijo Lagoon. San Elijo Lagoon is 303(d) listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic conditions.

1.2 PURPOSE AND OBJECTIVES

The purpose of the 2011-2012JURMP Annual Report is to provide a comprehensive account of programmatic activities conducted by the City of Encinitas to meet the requirements of the Order No. 2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. Notably, a comprehensive program update occurred through the JURMP update process in 2008; therefore, only significant augmentation of program elements or planned changes will be captured in the following annual report. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

Being a coastal community, environmental protection and water quality are of utmost importance to the City of Encinitas. As a result, the City has established strong water quality protection policies which are reflected in development planning documents and procedures. Through the implementation of the Development Planning Component of the City's JURMP and other related planning documents, the City aims to reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP) to protect receiving water bodies and manage increases in runoff and erosion from development projects.

This section describes the City's actions during FY 2011-12 which contributed to the successful implementation of the City's Development Planning Component. Included in this section is a summary of recent updates made to land use policies and procedures, a description of the update of the City's Standard Urban Stormwater Mitigation Plan (SUSMP), the development of the San Diego region Hydromodification Management Plan, a review of the development projects approved in the reporting year, and a summary of implementation of the BMP installation, verification, and inspection programs.

2.2 LAND USE PLANNING

The City's land use planning process facilitates (1) the reduction of development project discharges of pollutants from the MS4 to the MEP, (2) the prevention of development project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) management of increases in runoff discharge volumes, rates, and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

The City's land use planning process is fundamentally structured around the following planning, guidance, and enforcement documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- Watercourse Protection, Storm Water Management and Discharge Control Ordinance (Municipal Code Chapter 20.08)
- Grading, Erosion and Sediment Control Ordinance (Municipal Code Chapter 23.24)
- Encinitas Stormwater Manual (Local SUSMP & HMP)
- Storm Water Best Management Practices Manual II

The consistent application and regular update, as required or necessary, of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections describe the City's land use planning process and the documents in more detail.

2.2.1 BACKGROUND

The City of Encinitas was incorporated in 1986, drawing together the communities of Cardiff-By-The-Sea, Leucadia, Olivenhain, and old and new Encinitas. The City's General Plan was adopted in 1989 and is amended on a limited, as needed basis. The City's JURMP, the Storm Water Ordinance, and the Storm Water BMP Manual II were each originally developed in 2002 as required by Order 2001-01. Each of these documents were reviewed and updated as needed in FY 2007-08 as part of the JURMP update process and as required by Order 2007-001 Municipal Stormwater Permit.

2.2.2 SOURCE CHARACTERIZATION

The City addresses seven major land use categories in its General Plan: residential, office professional, commercial, industrial, public / semi-public, transportation, and ecological / open space / parks. Each of these land uses is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their designated sections within this document.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Storm Water Ordinance, Grading Ordinance, BMP Manual II, and the Encinitas Stormwater Manual, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During FY 2007-08, the City of Encinitas updated its land use planning BMPs as required by Order 2007-0001. As part of the 2008 JURMP update process, these BMPs were incorporated into the City's Storm Water BMP Manual II. In FY 2009-10, Clean Water Program staff completed the process of updating the City's local SUSMP to meet the minimum standards established in the updated and approved regional Model SUSMP. The City's new local SUSMP document, titled the Encinitas Stormwater Manual, was adopted in March 2010. In FY 2010-11, as required by the timeframe established in Order 2007-0001, the City incorporated the San Diego Region Hydromodification Mitigation Plan (HMP) into the City's local SUSMP, titled the Encinitas Stormwater Manual (ESM). The most current version of the City's BMP Manual II and the Encinitas Stormwater Manual can be accessed through the Clean Water Program webpage at: http://cwp.cityofencinitas.org. For more detail regarding the development and adoption of the Encinitas Stormwater Manual and the regional Model SUSMP refer to Section 2.2.4.4 and 2.4.4.1 below.

2.2.4 PROGRAM IMPLEMENTATION

2.2.4.1 GENERAL PLAN

The City of Encinitas General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural water bodies and drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The General Plan also discourages the use of large amounts of impervious surfaces in new development areas, minimizing the transport of urban runoff and pollutants. The breadth of the City's General Plan policies are such that they cross reference each other and have been determined to comprehensively comply with the Municipal Permit.

The City's General Plan document serves as the blueprint for the long-range, orderly, physical development of the City and contains stated community goals and policies designed to protect its environmental, social, cultural and economic resources as the City develops. The General Plan consists of an integrated and internally consistent set of goals, policies, and standards that address a number of issue areas which include land use, circulation, housing, noise, safety, recreation, conservation, and open space.

Portions of the General Plan also encompass the City's Local Coastal Program (LCP) Land Use Plan, which guides development in the City's Coastal Zone pursuant to the Coastal Act. As a result, the City's General Plan and LCP are a combined single document.

The City implements the policies in the General Plan using a variety of resources including: the JURMP, Municipal Code, Storm Water BMP Manual II, the Encinitas Stormwater Manual, Development Agreements, and other various land use plans and permits. Section 2.4 of this document describes how the water quality and watershed policies are implemented through the City's development planning process.

As a component of the 2008 JURMP update (prepared in FY 2007-08) an assessment of the City of Encinitas General Plan was conducted to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City's General Plan goals and policies are consistent with the Municipal Permit, and no amendments to the General Plan were required as a part of the JURMP update.

In FY 2011-12, Clean Water Program staff remained engaged and productive in the City of Encinitas General Plan Update 2035. As the process of outlining policy statements for the draft General Plan continued throughout the reporting period, Clean Water Program staff worked to ensure that policy statements reflecting the priorities of the program are fully integrated across plan elements. The General Plan Update process will continue over the forthcoming permit reporting year through a combination of draft document review and community outreach, both of which the Clean Water Program will utilize to affect appropriate policy and direction in regards to surface water quality, stormwater management, and interrelated disciplines.

2.2.4.2 JURMP

In compliance with the new Municipal Permit, the City's JURMP document underwent a comprehensive update during FY 2007-08. The JURMP document serves as the City's foundational storm water program management tool, capturing the development process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Encinitas.

2.2.4.3 STORM WATER ORDINANCE AND GRADING ORDINANCE

As required by section J.a.(3)(b)iii of the Municipal Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance *(EMC Chapter 20.08)*, also called the Storm Water Ordinance, was updated during FY 2007-08 to comply with the Municipal Permit. The Storm Water Ordinance sets up the legal framework which enables the City to enforce the water quality and watershed protection principles established in the General Plan and the JURMP. The Storm Water Ordinance also references the City's Storm Water BMP Manual II and enables the City to enforce the minimum BMPs and SUSMP requirements that are outlined in BMP Manual II and extended to the Encinitas Stormwater Manual. The ordinance is periodically reviewed and updated on an as needed basis to ensure that potential discharges of pollutants may be addressed appropriately.

The Grading, Erosion, and Sediment Control Ordinance *(EMC Chapter 23.24)* was thoroughly reviewed and updated in FY 2007-08, approved by City Council on February 25, 2009, and subsequently approved by the California Coastal Commission. The update largely addressed engineering related revisions, but also included some updates which serve to further strengthen the City's legal authority in meeting the provisions of the Municipal Permit related to both construction and post-construction activities. Specifically, the grading ordinance was updated to require that all Priority Projects acquire a grading permit, and that any project proposing 500 square feet or more of impervious surface is reviewed for conformance with City stormwater regulations.

2.2.4.4 LOCAL SUSMP (BMP MANUAL II, ESM, AND HMP)

Over the past serveral years the City's local SUSMP has undergone significant improvement. Updates included transition away from old SUSMP regulations that were housed in Storm Water BMP Manual II and development of the new comprehensive Encinitas Stormwater Manual. The Encintias Stormwater Manual (ESM) currently serves as the City's Local SUSMP and HMP implimentation document. The section below describes the updates that have occurred over the past few years.

Storm Water BMP Manual II

As part of the 2008 JURMP update, Storm Water BMP Manual II was also updated with revised SUSMP requirements required by the Municipal Permit. As a component of this update, the City also integrated the SUSMP provisions into local land use planning and development process and procedure as outlined in the BMP Manual II.

The City originally created Storm Water BMP Manual II in 2002 to be used by individuals involved with development projects within the City. BMP Manual II prescribes minimum stormwater BMPs for Land Development and Construction activities, and is enforceable through reference by the Stormwater Ordinance and the Grading Ordinance. With the development and adoption of the Encinitas Stormwater Manual, BMP Manual II has become more of a reference document. Refer to the following section for details about the Encinitas Stormwater Manual.

Encinitas Stormwater Manual

In FY 2009-10, the City of Encinitas developed the Encinitas Stormwater Manual as its updated local SUSMP based on the approved San Diego Regional Model SUSMP. The revised Model SUSMP was developed to address post-construction urban runoff pollution from development projects and defines the minimum required Low Impact Development (LID), source control, and treatment control BMPs. As required by Order No. 2007-001, all new updates to the San Diego Regional Model SUSMP were incorporated into the City's local SUSMP and land development process and procedures before March 24, 2010. The Encinitas Stormwater Manual and the updated BMP Manual II were adopted by City Council on March 17, 2010 (Resolution No. 2010-18). The Encinitas Stormwater Manual was adopted as Chapter 7 of the City of Encinitas Engineering Design Manual. By doing this the stormwater design requirements became an integral component of the city's engineering regulations. More detail about the completed update can be found in Section 2.4.4.1.

Hydromodification Management Plan (HMP)

In FY 2010-11, the City of Encinitas updated its local SUSMP based on the Regional Board approved San Diego Region Hydromodification Management Plan (HMP). Subsequent to Regional Board approval of the HMP, copermittees updated the Model SUSMP to include the new HMP requirements. The City of Encinitas used the regional model to update the Encinitas Stormwater Manual (local SUSMP). The local update included integration of all of the HMP regulations including HMP applicability requirements, hydromodification sizing factors and hydromodification calculations for IMPs. The City's local update was completed by the required January 14, 2011 deadline and included City Council adoption of the updates.

2.3 ENVIRONMENTAL REVIEW PROCESS

As part of the 2008 JURMP update, the City's environmental review staff evaluated the City's environmental review process and confirmed that the current process accurately evaluates water quality and cumulative impacts and identifies appropriate measures to avoid, minimize, and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality. In compliance with the Municipal Permit, additional questions have been provided in the initial study checklist; a tool utilized to evaluate the environmental effects of a project. To evaluate

potential water quality impacts of projects requiring discretionary review, the following questions have been included as part of the initial study checklist:

Would the project:

- *Substantially conflict with city-adopted water quality standards or waste discharge requirements?*
- *Substantially alter the existing drainage pattern of the site or area, including the alteration of a stream or river course, in a manner which would result in substantial erosion or siltation on- or off-site?*
- *Result in a substantial degradation of receiving water quality during construction activities?*
- *Propose a land use or an on-site activity that would substantially degrade receiving water quality?*
- *Substantially increase any pollutant for which* a *tributary water body is listed on the Clean Water Act Section 303(d) list?*
- *Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?*
- *Substantially degrade groundwater quality?*

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a proposed project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

As discussed in the previous sections, the City of Encinitas has an established multi-departmental review process for all new development and redevelopment projects. Through the application of the City's Storm Water Ordinance, Grading Ordinance, Storm Water BMP Manual II, Encinitas Stormwater Manual, and development project review process, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP.

Each proposed discretionary and ministerial project is subject to the City's Development Project Approval and Verification Process. The following sections describe this process in detail.

2.4.2 SOURCE CHARACTERIZATION

As discussed in Section 2.2.2, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential

for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP (Encinitas Stormwater Manual), which was developed and adopted as required during FY 2009-10, describes specific categories for Priority Projects. A Priority Project must implement Low Impact Development techniques, source control components, Treatment Control Best Management Practices, and Hydromodification Management Practices to address potential pollutants.

In the City of Encinitas, all development projects, including Standard projects (projects not subject to SUSMP standards), are required to meet the minimum BMP requirements, which are discussed below in Section 2.4.3.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are summarized here and are included in the new Encinitas Stormwater Manual. These minimum BMPs are based on BMPs established in the regional Model SUSMP. All development projects are required to include the following minimum BMPs:

- Implementation of source control BMPs as listed in Appendix A of the Encinitas Stormwater Manual.
- Inclusion of Low Impact Design (LID) features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, and retain and slow runoff. (Specific LID requirements are dependent on the type of project that is proposed.)
- Compliance with requirements for construction-phase controls on sediment and other pollutants.

SUSMP Priority Projects must submit a grading plan, which includes identification of proposed LID features, source control and treatment control BMPs, calculations for sizing the treatment control BMPs, and a maintenance agreement that will be recorded with the County. The grading plan must also address how the project will manage increases in runoff discharge rates and durations associated with the project, where such increases could cause impacts downstream of the project.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to a development project's proposed storm water BMPs during project construction must be approved by the City before being implemented.

2.4.3.1 HYDROMODIFICATION MANAGEMENT PLAN (HMP)

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and volumes and in compliance with Order No. 2007-0001, the City has collaborated with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP) for the San Diego Region.

In cooperation with a Technical Advisory Committee (TAC), the Southern California Coastal Water Research Project and the Regional Board the San Diego County Copermittees, including the City of Encinitas endeavored in the scientific research and data gathering necessary to prepare the final HMP. The final San Diego County HMP was completed and subsequently approved by the Regional Board on July 14, 2010. As required by the Municipal Permit, the City of Encinitas updated its local SUSMP (Encinitas Stormwater Manual) to include HMP requirements on January 14, 2011, within 180 days of Regional Water Quality Control Board approval. In accordance with the HMP criteria, the City now requires all Priority Projects (unless otherwise exempt) to comply with the hydromodification standards.

2.4.4 PROGRAM IMPLEMENTATION

As required by the Municipal Permit, the City of Encinitas has implemented a program to ensure that development and redevelopment projects comply with SUSMP requirements, including Low Impact Development, source control, treatment control BMPs, and Hydromodification Management. The Municipal Permit further requires that the City ensure proper installation of treatment control BMPs and their maintenance into perpetuity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following section provides an overview of the City's SUSMP implementation (including project tracking) during FY 2011-12.

2.4.4.1 MODEL AND LOCAL SUSMP UPDATES

Regional Model SUSMP Update: In addition to the changes discussed above, a comprehensive regional Model SUSMP update was completed by the copermittees during FY 2008-09 and submitted to the Regional Board for approval on January 26, 2009. After incorporation of revisions based on Regional Board comments the Model SUSMP was approved by the Regional Board on March 24, 2009. The comprehensive Model SUSMP update includes the following as required by the Municipal Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Municipal Permit.
- Establishment of site, design, and maintenance criteria for each LID and treatment control BMP listed in the Model SUSMP.
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the Model SUSMP is applicable and feasible.
- Addition of a requirement for Priority Projects with low traffic areas and appropriate soil conditions to use permeable surfaces.
- Addition of any necessary restrictions for infiltration BMPs from Priority Projects that generate high levels of pollutants.

Incorporation of Model SUSMP into Local SUSMP: During FY 09-10, the City completed the update of its Local SUSMP (Encinitas Stormwater Manual) to meet the requirements established in the regional Model SUSMP. The local update was completed and adopted by City Council

on March 17, 2010, within one year after the adoption of the Model SUSMP. As described in section 2.2.4.4 and 2.4.3.1 the City's local SUSMP was further updated January 14, 2011 to include regionally adopted HMP requirements.

Development of the Encinitas Stormwater Manual (local SUSMP) involved extensive coordination between several City departments, including Engineering, Planning, Public Works, Parks & Recreation, and the San Dieguito Water District. Involving all appropriate departments in the development of the Encinitas Stormwater Manual provided interdepartmental ownership and awareness of applicable standard and helped to ensure that implementation of the new SUSMP requirements would go smoothly. Clean Water Program staff hosted bi-weekly Stormwater Quality Workgroup sessions from July 2009 through February 2010, providing a collaborative forum for the development of the local SUSMP (Encinitas Stormwater Manual). At these workshop meetings, staff from several departments actively participated in the development of Encinitas-specific document language, implementation tools (such as the Stormwater Checklist and Certification form), template maintenance agreements, and detailed Integrated Management Practice (IMP) design guidelines. The workshop meetings were very successful and allowed for each department to be involved in the integration of the new SUSMP requirements into existing practices and procedures. After commencement of the workshop series, each department was well aware of the new SUSMP requirements and how these requirements would be presented in the Encinitas Stormwater Manual.

The City's updated Local SUSMP is titled the Encinitas Stormwater Manual. The Encinitas Stormwater Manual serves as an implementation guide for stormwater standards to assist the professional development community and the general public in understanding the City of Encinitas SUSMP requirements. The Encinitas Stormwater Manual establishes a regionally consistent and systematic BMP design procedure intended to meet complex and overlapping water quality requirements, including stormwater treatment controls, Low Impact Development (LID) standards, control of potential pollutant sources, and control of runoff peak and duration (hydrograph management).

The Encinitas Stormwater Manual is comprised of five interrelated document sections, each supporting and defining the background, regulatory drivers, process, and procedure necessary to guide project applicants toward compliance with defined stormwater quality requirements.

Section 1 – Policies and Procedures, summarizes all City requirements and subsequent procedural elements pertaining to proposed new development and redevelopment projects.

Section 2 – Concepts & Criteria, describes the water quality science, engineering standards, and regulatory framework that form the basis of stormwater requirements for land development.

Section 3 – Preparing Your Project Submittal, details a procedure for determining applicable project requirements, and drafting and submitting associated materials required for a proposed development project.

Section 4 – Low Impact Development Design Guide, instructs applicants on how to plan, design, and size (engineer) treatment facilities and LID features to meet stormwater requirements.

Section 5 – Operation & Maintenance of Stormwater Facilities, outlines the long-term operation and maintenance requirements for stormwater treatment facilities and establishes the process by which applicants will develop an operation and maintenance agreement for the proposed stormwater facilities.

In addition, the Encinitas Stormwater Manual contains a series of appendices specific to the material presented in each of the sections outlined above, including a stormwater quality checklist and certification, design specification sheets for various facility types, and template maintenance agreements for a variety of project types. Notably, the template maintenance agreements, designed to be used as models for legal agreements between the responsible party and the City of Encinitas for long-term operation and maintenance of the proposed stormwater facilities, have been reviewed by the City's legal counsel.

The Encinitas Stormwater Manual is intended to complement the existing BMP Manual II. While BMP Manual II establishes minimum BMP standards for development projects and construction activities, the Encinitas Stormwater Manual defines implementation policy and procedure by which to plan, select, design, construct, and ultimately maintain required stormwater BMP facilities in the City of Encinitas. Complete versions of the updated BMP Manual II and the new Encinitas Stormwater Manual are available on the City's Clean Water Program webpage at http://cwp.cityofencinitas.org.

2.4.4.2 DEVELOPMENT PROJECT APPROVAL PROCESS

The following section includes a summary of the City's updated development review process which has been implemented since the adoption of the Encinitas Stormwater Manual (local SUSMP).

DISCRETIONARY PROJECTS

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring an additional, ministerial permit are also subject to engineering plancheck review as described in the Ministerial Project section.

Predevelopment Process

The stormwater element of the predevelopment process is geared toward disseminating information on stormwater pollution control and the City's SUSMP requirements. During this preliminary design phase, engineers and applicants are guided by City staff to provide adequate post-construction BMP facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process results in better designed and integrated post-construction BMPs, since the facilities are included in the project design even in the earliest phases of the project.

Priority Projects (defined by the City of Encinitas as those projects subject to SUSMP requirements), which require more stringent stormwater pollution control methods, are first

identified during the predevelopment process. The categories of development falling under the Priority Project classification can be found in the Encinitas Stormwater Manual and are consistent with the requirements of the Municipal Permit. During the predevelopment meeting, applicants proposing Priority Projects learn that they must implement LID and source control BMPs and must install treatment control and hydromodification BMPs which meet the numeric sizing criteria required by the Municipal Permit. City staff also informs applicants at the predevelopment meeting that installed post-construction BMP facilities must be maintained in good working order into perpetuity. City staff and the applicant and/or engineer discuss options for meeting the numerical post-construction treatment requirements, including volume-based systems and flow-based systems. The applicant is also directed to follow the guidelines detailed in the Encinitas Stormwater Manual when designing post-construction BMPs and submitting plans and documents to Engineering for review. In Encinitas, mechanical treatment systems are discouraged and when accepted may only account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

Stormwater Pollution Control Checklist and Certification

All development project applicants are required to complete a written self-certification of the post-construction BMPs proposed with their project. This certification is required to accompany the initial submittal of each discretionary permit application. The checklist walks the applicant through the process of determining whether their project is a Priority Project and outlines the minimum submittal requirements for Priority Project applicants. The checklist is designed to assist applicants in:

- Classifying their projects as Priority, Standard, or Exempt from SUSMP.
- Determining whether or not the Project must meet HMP requirements.
- Certifying that their project will be designed, constructed, and maintained in conformance with the City's stormwater quality requirements detailed in the Encinitas Stormwater Manual.

The stormwater checklist must be completed by the party responsible for the development project and submitted with the project's permit applications. The stormwater checklist is an appendix of the Encinitas Stormwater Manual. In FY 2010-11 a supplemental HMP checklist was developed to assist applicants in determining whether their project must meet HMP requirements. A copy of the SUSMP and supplemental HMP checklists are provided in this annual report as Appendix A-10 and Appendix A-11.

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions include construction requirements as well as post-construction BMP standards for effective stormwater pollution control facilities. Once the predevelopment meetings are conducted and the stormwater checklist has been completed, the applicant must follow the requirements established in the Encinitas Stormwater Manual when designing stormwater controls for the proposed project. Once the proposed plan is submitted, the Engineering Department reviews the adequacy of the project's proposed stormwater facilities shown on the site plan and issues

Conditions of Approval to ensure implementation of satisfactory LID, source control, and treatment control BMP measures. The Conditions of Approval take into account the nature of each project site and the work proposed. The Conditions of Approval are then recorded in a covenant against the property.

Applicants not showing adequate construction or post-construction BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. Stormwater pollution control facilities for Standard projects must meet the minimum requirements established in the Encinitas Stormwater Manual. Priority Projects must additionally show LID, source control, and treatment control BMPs on the project plans. In addition, Hydromodification Management requirements must also be met, unless the project is determined to be exempt from HMP. The project plans must show a feasible solution with substantiating calculations for numerically-sized treatment control BMPs. The process of designing appropriately sized treatment control BMPs is detailed in the Encinitas Stormwater Manual, which is available to all applicants through the City website.

MINISTERIAL PROJECTS

Projects requiring a ministerial permit such as a grading, improvement, or building permit are also required to include post-construction stormwater pollution control facilities in the project design. These BMP facilities must be considered adequate before the project's plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project is already conditioned to provide specific treatment facilities. For those projects not requiring a discretionary permit, the review of the storm water pollution control treatment facilities begins at the Engineering plancheck stage.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater construction and post-construction BMPs.

Every plan in plancheck is initially reviewed to determine if it meets the City's definition of a Priority Project. In addition to meeting standard BMP requirements, Priority Projects must provide LID, source control, and numerically-sized treatment control BMPs as required by the Municipal Permit and the Encinitas Stormwater Manual (City's local SUSMP). Hydromodification Management requirements must also be met, unless the project is determined to be exempt from HMP.

The Encinitas Stormwater Manual details the process which must be followed in order to design proposed stormwater treatment control facilities for Priority Projects. The manual also identifies specific design details and documents which must be submitted for review by the City's plancheck engineers. The Encinitas Stormwater Manual and City plancheck engineers emphasize to applicants the variety of natural solutions that may be used in providing stormwater pollution control. Any areas used as post-construction BMPs must be clearly marked on the project plans along with the following associated note: "Stormwater Best Management Practice to be privately maintained and not to be modified without a permit from City". The permitted drawing will become public record; therefore documentation of the

designated treatment areas is maintained. Engineers are also required to complete the Sources and Source Control BMP Checklist and incorporate all of the applicable permanent controls and operational BMPs into the project plans. Potential source control BMPs may include stormwater education, materials storage, erosion control, and waste management in order to meet the minimum SUSMP requirements.

All Priority Projects must comply with the numeric sizing criteria for treatment control BMPs in order to be approved by the City Engineer. Plancheck engineers review the project's hydrology calculations to determine the adequacy of the treatment system proposed. The project applicant is required to assume maintenance responsibility and identify the maintenance mechanism for the treatment system prior to project approval. A covenant ensuring adequate maintenance into perpetuity is recorded against the property. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City to guarantee successful implementation of the measures shown thereon. Such bonds are retained until all components of the project have been completed (including installation of treatment control BMPs) and the landscaping has become fully established.

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. For more information regarding temporary construction BMPs, refer to Section 3 of this document.

Post-Construction BMP Maintenance Agreements

All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance of permanent BMPs as necessary into perpetuity. The maintenance agreement or covenant includes an attachment depicting the location of specific project BMPs and their detailed maintenance requirements. The agreement is then recorded against and runs with the property. The City of Encinitas has developed, and included as an appendix in the new Encinitas Stormwater Manual, template maintenance agreements for a variety of project ownership scenarios including single family homeowners, Home Owners Associations (HOAs), agents, or commercial entities.

CAPITAL IMPROVEMENT PROJECTS

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear, or repair projects, often only construction BMPs are necessary. However, qualifying Priority SUSMP projects must also install post-construction BMPs. Priority CIP Projects are designed to incorporate LID, source control, treatment control BMPs, and hydromodification management measures as required by the Municipal Permit and detailed in the Encinitas Stormwater Manual. The City takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.4.4.3 SUSMP PROJECT APPROVAL

During the planning process and prior to project review, the **7** projects listed in Table 2-1 were identified as Priority SUSMP Projects and approved during FY 2011-12. All applicable SUSMP and HMP BMP requirements specified in the City's local SUSMP were applied to each of the projects in Table 2-1. As detailed in Table 2-1, all of the development projects approved in FY 2011-12 were individually reviewed for applicability of Hydromodification Criteria and HMP sizing criteria was required to be met if the project was HMP applicable. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2011-12.

Table 2-1
SUSMP Priority Projects approved in FY 2011-12

Permit No.		Location	Development Type	Approval Date	HMP Applicability
10598	G	Normandy St and Urania Ave	Redevelopment	12/12/2011	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.
10839	G	354 Santa Fe Dr	Redevelopment	12/20/2011	HMP Applicable
11112	G	905 Orpheus Ave	New Development	2/6/2012	HMP Applicable
11073	G	194 N El Camino Real	Redevelopment	3/28/2012	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.
11147	G	934 N Coast Hwy 101	Redevelopment	4/17/2012	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.
11182	G	400 B Street (Moonlight Beach Redevelopment)	Redevelopment	4/18/2012	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.
10630	G	425 Santa Fe Dr (Encinitas Community Park)	Redevelopment	5/4/2012	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.
11249	G	1550 Leucadia Blvd	Redevelopment	6/6/2012	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.

In FY 2011-12, most of the projects that were approved were redevelopment projects in which existing buildings, pavement or other impervious surface previously existed on the site. The redevelopment of a greenhouse property located on Normandy Street and Urania Avenue provides a good example of the typical Priority SUSMP projects that are permitted by the City of Encinitas. The development will convert the land from agricultural use to residential use. The proposed project will consist of removal of covered growing facilities, installation of three new cul-de-sac streets, and construction of 23 single family homes. Since the project was located on a previously developed site and plans included replacement of more than 5,000 square feet of impervious area, the project was determined to be a SUSMP Priority Project. The project did not create any additional impervious area greater than the impervious area in the pre-project condition; therefore the project was exempt from HMP requirements. To meet Treatment Control requirements, three large bioretention areas were incorporated into the design of the project. These bioretention areas have been situated on the site plan to collect and treat runoff from the streets and the rooftops of the homes prior to the runoff entering the storm drain system. All Treatment Control BMPs were designed accordance with the new SUSMP requirements established in the Encinitas Stormwater Manual.

2.4.4.4 SUSMP PROJECT AND TREATMENT CONTROL BMP TRACKING

In FY 2007-08, Clean Water Program staff worked with GIS staff to implement a comprehensive watershed-based SUSMP tracking system. The GIS data management system was designed to track the SUSMP Priority Projects and the long-term maintenance of all approved treatment control BMPs installed at development sites. As required by the Municipal Permit, the database is capable of tracking the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located[1]
- Date of construction of the BMP
- The party responsible for maintenance of the BMP
- Maintenance certifications or verifications
- Inspection findings
- Any corrective actions issued

Since the initial introduction, the City has been working to continually refine The Treatment Control BMP database, and new projects with treatment control BMPs are added to the database on a routine basis. Database improvements are a result of a thorough review of plans for proposed and built projects, a quality check of the existing data, and coordination with the GIS department. A hardcopy version of the most current inventory of treatment Control BMPs in the City's SUSMP Project and Treatment Control BMP Database is available in Appendix A-1. The inventory includes all operational treatment control BMPs installed at SUSMP priority projects. For a map of all the SUSMP Priority Development Projects approved within the City of Encinitas, refer to Appendix A-2.

[1] The entire City of Encinitas is within the Carlsbad watershed.

With the aid of the City's Treatment Control BMP Inspection Priority flowchart (see Appendix A-3), all development projects with approved treatment control BMPs were prioritized as high, medium, or low Threat to Water Quality (TTWQ) during the 2008 JURMP update, as required by the Permit. In addition, prioritization of each BMP was further refined during subsequent annual Operation and Maintenance Inspections and review of Self-Verification submittals. For new projects with treatment control BMPs that are added to the inventory, prioritization of the project occurs during the first treatment control BMP inspection. When the construction of a new project with treatment control BMPs is completed, the City requires that the treatment control BMP(s) are inspected within the first year and prior to the next rainy season in order to determine prioritization for future inspection frequency. This allows the City to determine TTWQ based on a visual inspection of the project as well as the following criteria:

- Type of project
- Sensitivity of the receiving water body
- Proximity to ESAs
- Size of the BMP
- Recommended maintenance frequency
- Likelihood of operational and maintenance issues associated with the BMP(s)
- Location of the BMP(s)
- Other pertinent factors

The BMP Inspection Priority flow chart addresses basic site and treatment control BMP characteristics that can influence a site's TTWQ such as receiving water body sensitivity and the removal efficiencies of the installed treatment controls. Note that not all development projects and treatment control BMPs are the same; each may have unique water quality risks associated with it. The City considered additional relevant factors beyond those included in the flow chart as necessary.

2.4.4.5 BMP INSTALLATION VERIFICATION

Beginning in January 2008, the City of Encinitas began tracking the verification of post-construction BMPs that were installed on projects throughout the City. Upon project completion, the engineering inspector now requires that the project engineer submit a grading certification letter to the City verifying that all the Low Impact Development, Source Control, and Treatment Control Best Management Practices, as shown on the approved project plans and required by the Encinitas Stormwater Manual, were constructed and are operational, together with the required maintenance covenant(s).

A sample grading certification letter is provided as Appendix A-4. Table 2-2 provides a list of the BMP verifications conducted for priority development projects completed in FY 2011-12.

Table 2-2
BMP Verifications for Priority Development Projects
Completed in FY 2011-12

Permit No.		Location	Construction Date
10115	G	350 Cole Ranch Rd	3/13/2012
9590	G	721 N Vulcan Ave	2/8/2012
10211	G	211 Saxony Rd	7/26/2011
10375	G	1010 N El Camino Real	2/15/2012

Subsequent to the submittal of the grading certification letter, engineering inspection staff inspect the project site to verify that LID, source control, and treatment control BMPs proposed for the project were constructed in compliance with all approved plans, City permits, and ordinances. Inspections of Priority Project sites prior to occupancy allow the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied site are generated. Engineering inspectors also check to ensure that BMPs have been built according to plans before signing off on each stage of construction. The inspectors use the project's grading plans to identify any missing or incorrectly installed BMPs and deny approval for sites with observed problems. If the engineering inspector is satisfied that the post-construction BMPs were installed as required, the inspector verifies the project engineer's letter with their signature and a date and takes photos of the completed BMP installation. Hardcopies of these signed and certified verification letters and the photos of the BMPs are retained by the Clean Water Program.

2.4.4.6 ANNUAL TREATMENT CONTROL BMP OPERATION AND MAINTENANCE SELF-VERIFICATION

As required by the new Municipal Permit, all treatment control BMPs installed at development projects must be self-verified annually and maintained in perpetuity by a responsible party. As part of the JURMP update, the City of Encinitas established a Treatment Control BMP Operation and Maintenance Self-Verification Program.

During FY 2007-08, Clean Water Program staff prepared the essential elements of the Treatment Control BMP Operation and Maintenance Self-Verification Program. First, a comprehensive list of mailing addresses for completed projects with treatment control BMPs was pulled from the newly developed SUSMP Project and Treatment Control BMP GIS Database. Then, a formal letter was developed to notify property owners of their verification responsibility. An informative Treatment Control BMP brochure was also created to help property owners identify the BMPs that were installed as a part of their development project. Finally, a self-verification form was developed for responsible parties to use to report annual verification of Operation and Maintenance of their treatment control BMPs. In FY 09-10 and FY 10-11, the BMP verification letter was updated in an effort to promote a greater inspection response rate and

self-verification return rate. An example of the updated verification letter, brochure, and form can be found in Appendices A-5, A-6, and A-7, respectively. In some cases additional notifications were required in order to get responsible parties to submit their inspection certification and documentation.

In FY 09-10, in an effort to further improve the self-verification response rate the City developed a webpage and on-line form which responsible parties may use to submit their self-verification documentation. The webpage provides responsible parties with information about the TC BMP Operation and Maintenance Program and allows them to update their ownership and mailing information, certify that their BMPs were annually inspected, maintained and are operational and upload photos and maintenance documentation. The City's Information Technology department has ensured security of personal information by creating a unique Personal Identification Number (PIN) for each responsible party, allowing secure access to property specific BMP information.

In FY 2009-10, the City determined that only those projects that were not designated as requiring a City inspection of their BMPs would be required to conduct a self-verification of their BMPs and submit self-verification documentation. It was reasoned that it would be redundant to require those responsible parties who were already receiving an inspection of their BMPs by City staff to also have to conduct a self-verification. When conducting an inspection, City staff thoroughly assesses the condition of all BMPs on a site and typically the responsible party is present when the inspection is conducted, providing an opportunity to educate the property owner about the function of the facilities on site and their obligations to maintain and preserve them. If deficiencies are identified, corrective actions are noted on the inspection form, and the responsible party is required to complete corrective actions by a specified deadline. Additional detail regarding the City's Treatment Control BMP Operation and Maintenance Inspection Program can be found in Section 2.4.4.7.

All required self-verifications must include an evaluation of all treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. Within the defined reporting period of this report, the City mailed annual self-verification notifications to each party responsible for the maintenance of treatment control BMPs constructed within the City of Encinitas who was not scheduled to receive a City inspection. The notification package included a letter informing the responsible parties of their inspection and maintenance obligation and a brochure which explains the program and provides examples of common BMPs. Responsible parties were directed to complete the self-verification form online and upload photos showing that all BMPs on their property have been maintained and are in good working order.

Self-Verification Results and Findings

FY 11-12 was the fourth year of implementation of the Treatment Control BMP inspection and maintenance program. The City mailed out a first and second notification reminding responsible parties of their inspection and maintenance obligations. 80% of the parties submitted their self-verification documentation after one or two notifications. This is a signification improvement from the results of past years. Fifteen BMP owners did not submit their self-verification even after receiving two notices (see Table 2-3). In the event that self-

verification documentation was not submitted, City staff made every attempt to conduct a City Inspection in lieu of a Self-Verification and followed-up with a final advisory notice of non-compliance. A total of **3** City Inspections were completed in lieu of Self-Verification. Copies of the three BMP Operation and Maintenance verification letters issued to responsible parties in FY 11-12 may be found in Appendices A-5a, A-5b, and A-5c.

Table 2-3
Summary of Notifications Sent and Self-Verification Submittals Received

Action	Total
Self-Verification Notifications Issued:	80
Self-Verification Submittals Received:	64
City Inspections conducted in lieu of Self-Verification:	3
Non-Responsive Responsible Parties:	12

Upon receipt of a self-verification packet from responsible parties, City staff reviews the completed forms and the required photos and maintenance documentation (if any). Staff determines whether the information is complete or if any further maintenance is required. For a detailed summary of the results and findings of FY 2011-12 treatment control BMP inspections see Appendix A-8. Appendix A-8 includes detailed information about each project, such as project location, inspection date, inspection results, and any City action. As a result of the Self-Verification program (Section 2.4.4.7), there were **9** properties with treatment control BMPs that warranted enforcement action. For a summary of enforcement action, refer to section 2.4.4.8.
The defined reporting period of this report represents the fourth year of implementation of the Permanent BMP Self-Verification Program. City staff continued the use of the online submittal form that was offered to responsible parties as an option to submitting their self-verification documentation. This provided responsible parties with four submittal options—online, email, regular mail, and hand delivery to City Hall. The online form is the preferred submittal option in the notices that were issued to responsible parties and a majority of self-verification forms were submitted via the online form. Since this was the fourth year of implementation, the BMP and Priority Project inventories were more complete due to previous year's efforts to validate current contact information and inform property owners of their maintenance responsibilities and submittal requirements. As detailed in Tables 2-3 and 2-4, the City's implementation process was generally successful.

Table 2-4
Summary of Self-Verification Results and City Actions

Self-Verification Results	**Frequency**
All BMPs in Good Condition	57
Maintenance Conducted or Follow-up Required	10
Non-responsive Owner	13
City Actions	**Frequency**
Submittal Information Validated	61
City Inspected	3
Other City Actions (see Appendix A-8)	16

2.4.4.7 TREATMENT CONTROL BMP OPERATION AND MAINTENANCE INSPECTIONS

During FY 2007-08, Clean Water Program staff developed the City's new Treatment Control BMP Operation and Maintenance Inspection Program. New inspection forms were created, and the Treatment Control BMP inventory database was designed and quality checked. For a detailed description of the development of the GIS-based Treatment Control BMP Inventory and Tracking system refer to Section 2.4.4.4. Notably, unique to the development dynamic of the City of Encinitas, a large number of inventoried BMPs exist on private, single-family residential lots. Therefore, the City of Encinitas Treatment Control BMP Operation and Maintenance Inspection program was developed with this condition in mind.

In FY 2011-12, as required by the Municipal Permit, 100% treatment control BMPs installed at high priority development projects, at least 50% of the medium priority development projects, a minimum of 20% of the total number of projects with approved treatment controls, and a maximum of 200% of the average number of projects with treatment control BMPs approved per year were inspected by the City's inspection staff prior to the rainy season. Implementation of the City's BMP Inspection Program was very effective. The City met, and in most cases far exceeded, all the inspection requirements outlined in Section D.1.e. of the Municipal Permit.

As of July 1, 2011, there were a total of **87** constructed Priority SUSMP projects (7 high, 39 medium, and 39 low priorities) on the City's treatment control inventory (See Appendix A-1). With **13** Priority SUSMP projects approved in FY 2010-11, there was an annual average of **12** projects with treatment control BMPs completed since permanent BMPs were first required on Priority Development Projects in 2003 (see Table 2-5). A total of **40** projects (7 high, 21 medium, and 12 low priorities) with approved and constructed treatment control BMPs were inspected in FY 2001-12. This amounted to **100%** of the high priority sites, **54%** of the medium priority sites, **31%** of the low priority sites, **46%** of the total number of constructed Priority SUSMP sites, and **337%** of the average number of projects with treatment control BMPs approved per year that were inspected in FY 2011-12 (see Table 2-6). In addition, **54%** of the projects with drainage inserts were inspected in FY 2011-12.

Table 2-5
Average Number of Constructed Projects with Treatment Control BMPs

Fiscal Year	Completed Projects
2004-05	6
2005-06	8
2006-07	14
2007-08	15
2008-09	12
2009-10	15
2010-11	13
Average	12

When inspections are conducted in future years, inspection frequencies will be based on the project's assigned TTWQ priority as determined by City staff in FY 2008-09 or assessed during future treatment control inspections, and the criteria outlined in Section 2.4.4.4 of this document. Table 2-7 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 2-6
Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Permit Mandated Inspection Frequency	FY 2011-12 Inspection Frequency
High	Annually (prior to start of rainy season)	100%
Medium*	50% annually	54%
Low	As needed	31%

*Drainage insert controls are considered medium priority BMPs

FY 2011-12 inspections included an examination of all treatment control BMPs at the site to verify that each treatment control BMP was working, being maintained properly, and was in compliance with all applicable City ordinances and permits. Inspection findings were documented by the inspector using the Treatment Control BMP Inspection Form (Appendix A-9). If any deficiencies in operation and maintenance were noted during the inspection, the responsible party was notified and appropriate enforcement actions were taken (as described in Section 2.4.4.8 of this document) to achieve compliance.

Because the majority of the treatment control BMPs installed in the City of Encinitas are on single-family residential lots, great care was taken to educate homeowners of their maintenance, inspection, and self-verification obligations. As noted in section 2.4.4.6, packages mailed to responsible parties included information detailing the BMP operation and maintenance program. When working with homeowners, City stormwater staff devoted personal,

specialized assistance as warranted in order to improve knowledge and awareness and achieve compliance.

For a detailed summary of the results and findings of the FY 2011-12 treatment control BMP inspections see Appendix A-8. Appendix A-8 contains information about each project, such as project location, inspection date, inspection results, and additional City action. Depending on the findings during the course of initial inspections, follow-up inspections were conducted and enforcement action was taken as necessary. For a detailed summary of enforcement action taken as part of the treatment control BMP inspection program, refer to section 2.4.4.8.

Treatment control BMPs that are operated and maintained by the City are considered part of the City's MS4 and are maintained and inspected by Public Works staff on an annual basis. BMPs that are located in specialized public facilities such as parks and libraries may be inspected by City stormwater staff and maintained as necessary by City staff. For more information regarding the maintenance and inspection of the City's MS4 refer to Section 4 of this document.

2.4.4.8 ENFORCEMENT MEASURES FOR DEVELOPMENT SITES

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all development projects and permanent BMPs as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. A more detailed description of the different enforcement measures used by the City to enforce its storm water regulations and their legal basis can be found in Section 2 of the 2008 JURMP update document.

As a result of post-construction treatment BMP verification inspections and self-verification results, the City determined that **9** self-verification projects and **one** inspected projects were partially or totally deficient in the installation and or maintenance of post-construction BMPs. Of the total enforcement actions taken 8 were written notices for failure to maintain BMPs or failure to respond to requests for inspection information. Further enforcement action was necessary for two properties; both received written notices of violation. By the date of writing this report one of the Notices of Violation is still pending corrective action. The responsible party has completed most of the corrective actions and is in coordination with the Department of Engineering design review staff to complete and install a solution that is satisfactory to the City.

3.0 CONSTRUCTION

3.1 INTRODUCTION

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site Best Management Practices (BMPs), inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Municipal Permit as outlined in Section D.2.

3.2 SOURCE CHARACTERIZATION

3.2.1 SITE INVENTORY

Within the defined reporting period of this report, the City of Encinitas has compiled, maintained, and updated a watershed-based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2011-12 included a total of **111** construction sites. During this period, there were **11** high priority sites that were inspected biweekly, **33** medium priority sites that were inspected monthly and **67** low priority sites that were inspected on a biannual basis. The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of all construction projects. The GIS inventory includes details on each construction site, including project name, location, sub-basin, type of construction permit, date of permit issuance, inspection prioritization, and the assigned storm water inspector. The City's Clean Water Program staff, in coordination with the City's IT department has designed a technical solution in GIS to inventory and prioritize all construction projects as permits are approved. A more detailed description of the prioritization process is provided below in Section 3.2.2. A fully prioritized construction inventory can be found in Appendix B-1 in addition to a map of all active construction sites located in Appendix B-2.

3.2.2 INVENTORY UPDATES

As required by Section D.2.b of the Municipal Permit the City's watershed-based inventory of construction sites is updated weekly by the Engineering department as new grading permits are approved. The Engineering department shares all approved permit information with the City's IT Department which also maintains an updated inventory of all active construction projects in a GIS database. As part of the 2008 Jurisdictional Urban Runoff Management Plan (JURMP) update process, and to ensure monthly construction inventory management, a construction specific GIS script was developed by the City's GIS staff in ESRI's ArcMap for prioritizing approved construction permits. This mechanism remains an efficient and effective tool in maintaining a current construction inventory, and is accessible via desktop to Clean Water Program staff to execute the GIS script and review the prioritizations on a monthly basis. Regular updates to the inventory include the addition of new construction projects, the removal

of completed construction projects, and re-assignment of inspection frequencies of active construction sites as determined by the City's Clean Water Program staff. A flow-chart that outlines the process by which the inspection frequency of construction projects is determined in GIS can be found in Appendix B-3.

3.3 ORDINANCE UPDATES

As required by Section D.2.a of the Municipal Permit, applicable City documents and ordinances were updated on March 12, 2008 by the City of Encinitas City Council to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code Section 20.08, the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, including construction specific provisions. The City's legal authority related to construction activities was further strengthened on February 25, 2009 when the City Council adopted a revised Grading Ordinance, EMC Section 23.34. Subsequently, the California Coastal Commission approved the adopted changes and the following provisions for storm water pollution control have been incorporated into the City's grading ordinance:

- All grading permits shall comply with the provisions of the City's Best Management Practices (BMP) Manual Part II which provides design, construction, and operation requirements for minimizing storm water pollution related to construction activities (§ 23.24.071).

- Any removal of BMPs that were required for a priority project will require a grading permit for corrective or other action. A requirement may be imposed to replace the BMP with equivalent water quality protection (§ 23.24.080).

- Priority projects for storm water pollution control cannot be exempted from obtaining a grading permit (§ 23.24.090.I).

- Any project creating over 500 square feet of new impervious area has to obtain a construction permit and adhere to all standards in the City's BMP Manual Part II (§ 23.24.105).

- All grading plans shall contain the location, design, detail, and cross section of all erosion control and post construction BMPs (§ 23.24.140).

- If the approved grading plan does not show post construction BMPs in sufficient detail, a precise grading plan for development projects is required to include and accurately depict post construction BMPs for review and approval of the City Engineer (§ 23.24.126).

- Both Interim and Final Erosion and Sediment Control Plans are required (§ 23.24.150, 23.24.160).

- A waste management plan is required to be submitted with all interim erosion control plans. The management of the waste on the construction site must be graphically and verbally described on the grading plan (§ 23.24.150F).

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

3.4.1 UPDATED BMP REQUIREMENTS

Through the JURMP update process completed in March 2008, the City reviewed and updated a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the Maximum Extent Practicable (MEP). Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm water Best Management Practices Manual, Parts I and II, and the City of Encinitas' 2008 JURMP Update.

3.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are different for the wet season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). The City's Storm Water Manual Parts I and II provide a detailed list of dry and wet season requirements for all construction sites. Prior to the beginning of the wet season, in September 2011, the City sent **79** Erosion Control letters which included a copy of the City's Municipal Code Sections outlining erosion and sediment controls in wet weather conditions and an educational brochure "A Pollution Prevention Guide for the Construction Industry," to all property owners with active and inactive construction sites in the city (See Appendix B-5).

3.5 PROGRAM IMPLEMENTATION

3.5.1 CONSTRUCTION AND GRADING APPROVAL PROCESS

The City has established a thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards, obstructs a waterway, or occurs over an area of 10,000 square feet. All other projects require a building permit. Both grading and building permits require that plans be submitted and approved by the City. The City's grading ordinance requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all

projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a citywide data management system called "HTE".

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As a part of this approval process, the City's Clean Water Program staff may review the grading plans when necessary to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Engineering staff reviews the plans for overall compliance with the grading ordinance and for specific compliance with the Storm Water Management Ordinance and Federal and State regulations. If the site falls under jurisdiction of the State's Construction General Permit (CGP) Order No. 2009-0009-DWQ, Engineering staff follows up with the developer to ensure that a Storm Water Pollution Prevention Plan (SWPPP) is properly prepared and submitted. The City also requires proof that a Notice of Intent (NOI) has been issued for sites that are subject to the CGP.

Prior to issuing construction and grading permits, the City's Engineering Department verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP. It should also be noted that the general notes for building plans have been amended to include erosion control, sediment control, and materials management practices.

Projects that are generated by the City's Capital Improvement Program (CIP) follow a similar process as the private development projects outlined above. City initiated projects require the use of a Qualified SWPPP Developer (QSD) for the preparation of Storm Water Pollution Prevention Plans (SWPPP) when the project falls under the jurisdiction of the CGP. The City also assures that an NOI is submitted for all sites that are subject to the CGP. During the construction phase of capital projects, contractors are also required to secure the services of a Qualified SWPPP Practitioner (QSP) to assure that CGP requirements are followed. In supplement to contractor required compliance assurance responsibilities, all CIP sites are inspected by City Engineering Inspectors as well as Clean Water Program staff to assure compliance with local standards throughout the life of the project.

3.5.2 BMP IMPLEMENTATION

Clean Water Program staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the City Engineering Inspectors. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08 and the City's Storm Water Best Management Practices Manual, Parts I and II.

Clean Water Program staff constantly monitors weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all Engineering Inspectors to inform them of the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation, maintenance, or replacement should take place, and where necessary, they require responsible parties to have additional BMPs in place at the end of each work day.

Through the review and plancheck process, and supported by the "Watercourse Protection, Stormwater Management and Discharge Control Ordinance," staff maintains the authority to require additional or alternative BMPs to be implemented on individual projects as determined necessary. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

3.5.3 CONSTRUCTION SITES REQUIRING ADVANCED TREATMENT

There were no sites in FY 2011-12 that required advanced treatment. For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined by the new statewide CGP that a project possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat To Water Quality (TTWQ), an Active Treatment System (ATS) will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are fully described in the statewide CGP.

3.5.4 INSPECTIONS & BMP VERIFICATION

The City has an established inspection program to evaluate compliance with storm water regulations at all construction sites within the City's jurisdiction. The City of Encinitas's Engineering Department employs two full time Engineering Inspectors and two full time contract Engineering Inspectors who are responsible for inspections at all construction sites in the city. Storm water issues such as compliance with the grading and storm water ordinances in the Municipal Code have become one of their main focuses, especially during the wet season.

On January 24, 2008, the RWQCB adopted the 2007 Municipal Permit. Inspection activities for the construction program were updated and implemented at that time to meet the new Municipal Permit requirements as outlined in Order No. R9-2007-0001. During Fiscal Year 2011-12, consistent with required inspection frequencies as outlined in Sections 2.d.1-3 of the Municipal Permit, City staff conducted a total of **202** storm water inspections. Appendix B-1 details the complete Construction Inventory for FY 2011-12, the construction site prioritizations, and the number of inspections conducted at each site.

The Engineering Inspectors captured all construction inspections on a form titled "Storm Water Quality Inspection for Construction Activities", included in Appendix B-4. The inspection form contains questions to ensure all the inspection components required by Section D.2.d.6 of the

Municipal Permit are addressed. The form lists the minimum construction BMPs required by the City and includes check boxes and comment areas to document if BMP installation or maintenance is required or if other corrective actions are necessary. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 3.5.5 below are taken.

As part of the 2008 JURMP update process, and codified through BMP Manual II, the City of Encinitas established a maximum disturbed area for grading at 50 acres. Within the defined reporting period of this report, no construction projects in the City of Encinitas were subject to maximum disturbed area or advanced treatment requirements, and therefore no required inspections related to this standard were completed.

3.5.5 COMPLIANCE AND ENFORCEMENT ACTIONS

3.5.5.1 GENERAL ENFORCEMENT

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites within its jurisdiction. Inspection and enforcement for construction projects is administered by the Engineering Inspectors and other City staff with inspection and enforcement authority.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may be applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to be corrected, and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's storm water regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop / Correct Work Notice. The NOV and Correct Work Notice provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City are reported to the RWQCB per the reporting requirements of the Municipal Permit.

Civil penalties for violations of the Encinitas Municipal Code (EMC) are established in EMC Chapter 1.08, and determined violations of storm water regulations may be subject to

administrative citations and associated administrative fines, including those at construction sites. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector.

3.5.5.2 REPORTING AND NON COMPLIANCE

During the FY 2011-12, **21** construction related complaint calls were received through the City's Clean Water Hotline. A total of **21** complaints were investigated by Clean Water Program Staff, there were **16** violations resulting in **17** instances in which educational information was disseminated, **4** instances in which Notice of Violations notices were issued, and **2** instances in which a citation was issued. A complete summary of all construction related complaints can be found in Appendix H-1.

There were an additional **57** correct work notices issued as a result of the routine City inspections at construction sites throughout the fiscal year. With immediate oversight from the City's Engineering Inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance and avoid further enforcement. Appendix B-6 features a summary of all violations and enforcement actions for all routinely inspected construction sites in FY 2011-12.

4.0 MUNICIPAL

4.1 INTRODUCTION

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, the storm drain system, and municipally owned facilities, which includes 17 public parks, 11 parking lots, 6 beach access areas, 6 fire stations, 4 public works yards, 4 administration buildings, 4 open space areas, 3 viewpoints and 1 golf course. The updated municipal facilities inventory is included as Appendix C-1. The City also conducts high Threat to Water Quality (TTWQ) activities, as defined by the Municipal Stormwater Permit, such as power washing and other mobile activities including street and sidewalk repair, building cleaning, painting, graffiti cleaning, and fleet vehicle maintenance. Other prominent water quality related activities include street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel and landscaping contractors, annual Municipal Separate Storm Sewer System (MS4) maintenance, and regular upkeep of the sanitary sewer system to prevent overflows.

Due to the large expanse of municipal areas, activities, and functions, City staff must carefully manage pollution prevention measures and Best Management Practices (BMPs) to reduce or potentially eliminate the discharge of pollutants into the MS4 from municipal areas and activities. To comply with the Municipal Stormwater Permit, the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas, activities, and functions.

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 BACKGROUND

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.2.2 SOURCE CHARACTERIZATION

The City of Encinitas maintains approximately 166 miles of roads, streets, and highways and 11 City owned and operated parking facilities. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included in Appendix C-1.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's BMP Manual Part I and the California Stormwater Quality Association (CASQA) Municipal Handbook to choose applicable BMPs to implement for roads, streets, highways, and parking facilities within the City. Street sweeping and cleaning is the main BMP that is implemented for road, street, highway, and parking facilities (both stand-alone and those associated with a municipal facility) maintenance. Treatment control BMPs used for all roadway projects determined to be priority projects and subject to Standard Urban Storm Water Mitigation Plan (SUSMP) standards, are described in more detail in Section 2.0. The City implements additional controls for roads, streets, highways, and parking facilities adjacent to or tributary to Environmentally Sensitive Areas (ESAs) when determined to be necessary.

4.2.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2011-12 to require and verify the implementation of designated BMPs for all City maintained roads, streets, highways, parking areas, and related activities as outlined in the Municipal Permit Section D.3.a.(5)(a-c).

In compliance with street sweeping standards established in Order 2007-0001, the City implemented an aggressive sweeping schedule for roads, streets, highways, and parking facilities.

The frequency of street sweeping is as follows:

- All arterial roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris are swept weekly.
- All collector streets and parking facilities identified as consistently generating moderate volumes of trash and/or debris are swept bi-monthly.
- All residential (publicly owned) and parking facilities identified as generating low volumes of trash and/or debris are swept monthly.

In FY 2011-12, a total distance of **9,199 curb miles** was swept, and a total of **2,178 tons of debris** was collected.

The City also maintains parking facilities at six local parks, four local beaches and the Encinitas Community Center. Six parking facilities at the local parks have been identified as generating low volumes of trash, sediment, and debris and are swept monthly from March through September. The Encinitas Community Center and the remaining beach parking lots have been identified as generating moderate volumes of trash, sediment, and debris, and have been assigned a sweeping prioritization of medium priority. The Encinitas Community Center is swept monthly from January through December. The beach parking lots are swept twice a month from January through December. In FY 2011-12, a total of **92.45 tons** of debris was collected from all City maintained parking lots.

In FY 2011-12, the total amount of material collected from both street and parking lot sweeping was **2,270 tons**.

Additionally, in FY 2011-12, the City's Public Works Department through coordinated efforts with Partners with Industry (PWI) collected and removed **224 30-gallon bags** of litter from all of the City's bus stops. The City also partnered with San Diego County probation crews to collect and remove **185 cubic yards** of over-grown vegetation from City right-of-ways based on visual observations and citizen complaints.

4.3 FIXED FACILITIES

4.3.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities that have been grouped in this section because these facilities receive formal inspections as part of the municipal program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreational Facilities
- Public Works Facilities
- Potable Water Facilities
- Fire Stations
- Other Fixed Facilities

4.3.2 SOURCE CHARACTERIZATION

The Municipal Permit requires Copermittees to inspect high priority municipal areas and activities annually according to D.3.a.(7)(a). High priority facilities include parks and recreational facilities and other municipal areas and activities that the City determines may contribute a significant pollutant load to the MS4.

As part of the Jurisdictional Urban Runoff Management Program (JURMP) Update process in March 2008, all municipal facilities were assigned an inspection priority based on the Municipal Permit requirements and an evaluation of their threat to water quality. Each site and activity has been evaluated based on a variety of site-specific factors including size, location, type of activity, waste generated, pollutant discharge potential, non-storm water discharges, proximity to receiving water bodies, and any other relevant factors deemed appropriate. Using these criteria, a complete prioritized, watershed based inventory was developed and is included in Appendix C-1.

The City of Encinitas owns, operates, and maintains 56 fixed facilities within the City. Of these facilities, 29 have been designated with a high priority inspection priority and 27 were designated a low inspection priority. All high priority facilities are formally inspected on an annual basis and described further in Section 4.3.4. Both high and low priority facilities are visually inspected on a routine basis by City staff. Any illicit discharges or illegal connections

are immediately referred to the Clean Water Program. All fixed municipal facilities are included in the City's inventory located in Appendix C-1. Figure 4.1 illustrates the various municipal fixed facilities and their associated activities within the City of Encinitas.

Parks and Recreation Facilities

The City maintains 17 public parks, 6 beach access areas, 3 viewpoints, 40 miles of trails, and 70 acres of open space. All landscape maintenance activities are performed through the use of private landscape contractors. Parks and Recreation Department Supervisors are responsible for monitoring contract activities for landscaping which includes; implementing BMPs for pesticide, herbicide, and fertilizer usage, waste removal and control, and maintenance at all municipal parks and recreation facilities.

Public Works Operations Facilities

Public Works operations facilities are important in maintaining the functionality of many publicly offered services. The City of Encinitas maintains a total of four public works facilities, which include the City of Encinitas Wastewater Collection Facility and three public works yards, "A" Tank site, Calle Magdalena and Requeza Street (Appendix C-1).

Potable Water Facilities

The means to provide residents of the City with potable water is an essential activity conducted by the City of Encinitas's San Dieguito Water District. The City maintains an above ground water recycling reservoir, pump station and pressure regulating stations as well as two underground water reservoir/water storage facilities.

Fire Stations

Firefighting capability is an essential element of municipal activities conducted in the City. The City of Encinitas maintains six fire stations, which are included in the municipal inventory (Appendix C-1). Two fire stations within the City, stations #3 and #4, have fueling stations on site.

Other Fixed Facilities

Other fixed municipal facilities include a community center, three administrative buildings, five pump stations, and an Ultra Violet Urban Runoff Treatment Facility (UV Facility). All of these facilities are considered a low priority because many of the activities at these facilities are conducted indoors and do not correspond with activities that are considered a high threat to water quality.

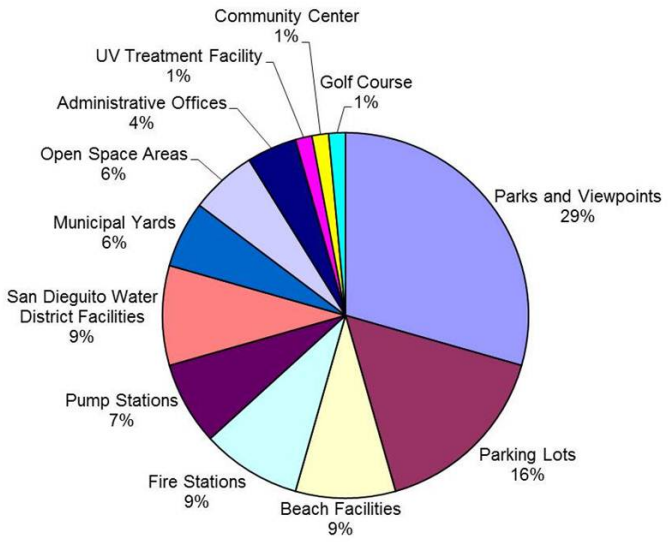

Figure 4.1 City of Encinitas Fixed Facilities

4.3.3 BEST MANAGEMENT PRACTICES

4.3.3.1 UPDATED BMPS

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP Update and the City's BMP Manual Part I. The City also references the CASQA Municipal BMP Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2011-12, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas. City personnel implemented general waste management BMPs, and patrons of the facilities were encouraged to recycle and properly dispose of trash and pet waste. Notable activities during the fiscal year included the maintenance of 34 doggie bag dispensers at 10 public parks and along several trails. The City also posted recycling signs along with trash and recycling bag dispensers at 6 beaches during peak holiday weekends throughout the reporting period.

City staff continued operation and maintenance of post-construction BMPs at Cottonwood Creek Park. The park is a prime example of low impact development and includes the following post-construction BMPs: 90 feet of day lighting Cottonwood Creek, porous pavement for all parking areas and driveways, pervious walkways, surface drainage through earthen-bottom open channels, and drought tolerant plants in landscaping areas.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: (1) runoff from improper irrigation after application; (2) application of chemicals during or prior to storm events; (3) use of chemicals that do not properly absorb to soil or plants; and (4) overspray from chemical applications that may eventually enter the MS4. The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management. Implementation of the policy includes:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The regulations generally include: a list of approved pesticides and selected uses, updated regularly, general application information, equipment use and maintenance procedures, and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs.

In FY 2011-12, the following BMPs were implemented at all municipal parks and recreation facilities, public streets, channels, and right-of-ways to reduce pollution from pesticides, herbicides, and fertilizers:

- Whenever practicable, integrated pest management techniques that rely on non-chemical solutions are implemented.
- City personnel who participate in the application of pesticides are properly trained, maintain Qualified Applicator Certifications and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- City staff records the applications of all chemical agents by noting the locations, types, and quantities of chemicals used. Records are reported monthly to the Department of Agriculture.
- Pesticide, fertilizer, and herbicide handling and safety refresher sessions are provided to City personnel involved with application.

- The use of fertilizers is minimized as much as possible; compost and soil amendments are used in place of fertilizer, where applicable.
- Employees are trained to handle pesticides, herbicides, and fertilizers properly.
- All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides, and fertilizers are applied only when necessary (typically during growing seasons) and not during or prior to anticipated storm events.
- Pesticides are not sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- The City maintains compliance with federal and state reporting law for pesticide use.
- Weeds, grass, and brush are cleared from building perimeters and fence lines to reduce the need for pesticides and herbicide use, when applicable.
- Native plants are used in landscaping, where applicable.
- Diseased plants are removed, and infected parts of plants are removed to minimize the need for pesticide and herbicide use, where applicable.
- Several evapotranspiration gauges located throughout the City are used to monitor microclimates to properly set irrigation systems for different areas of the City and reduce the potential of over-irrigation.
- Flow sensors and master valves prevent water loss in the event of a break in any of the main lines.
- An annual bilingual municipal storm water training session was conducted by Clean Water Program staff for the City's private landscaping contractors during the fiscal year. There were 27 participants in attendance at the training session held on March 22, 2012.

Public Works Operations Facilities

City personnel implement appropriate BMPs for all activities that take place at public works facilities. Storm Water Pollution Prevention Plans (SWPPPs) have been developed for all four public works facilities, which include the City of Encinitas Wastewater Collection Facility and three public works yards, "A" Tank site, Calle Magdalena and Requeza Street. The SWPPPs include a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs are maintained at each facility, and all of the facilities are inspected by City staff on an annual basis. Additionally, all Public Works employees are annually trained in storm water management. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Potable Water Facilities

City personnel implement appropriate BMPs for all activities that take place at potable water facilities when deemed appropriate. San Dieguito Water District employees are trained in storm water management on an annual basis. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by firefighting activities both at fire stations in the City and locations throughout the City. In FY 2009-10, Fire Station #3 was redesigned to incorporate the following storm water BMPs: bio swales, pervious pavement and a roof cover for the fueling area. Two fire stations (#3 and #5) have permanent treatment control BMPs in place to treat any runoff which may be discharged from washing activities. Notably, significant improvements to fire station #2 (Cardiff), including the addition of treatment control BMP facilities, is anticipated for completion within the forthcoming reporting period. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All firefighting training activities which include firefighting foams are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. More detailed information regarding municipal staff training and non-emergency firefighting flows can be found in Sections 8.2 and Section 13 of this document.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management, as discussed in the City's BMP Manual Part I and the CASQA Municipal Handbook.

Additionally, the City implements and maintains several pollution prevention practices throughout the City of Encinitas. In FY 2010-11, the City adopted the Parks and Recreation Policy and Procedures Manual for integrated pest management for all departments citywide, expanded its battery collection program to offer public collection of used batteries at the Encinitas Branch Library, the Encinitas Community Center and at all Public Works facilities and fire stations. The City also partnered with the Downtown Encinitas Mainstreet Association to purchase and install 50 trash/recycling containers in downtown Encinitas to increase recycling opportunities. In FY 2011-12, the City installed LED lighting in the parking lots at the Encinitas Civic Center, the Calle Magdalena Public Works Facility and the Encinitas Community Center. The City also hosted an annual community document shredding and e-waste recycling event at the Encinitas Civic Center and coordinated the regional, "Day Without a Bag" program.

Other pollution prevention practices that are maintained at the Encinitas Civic Center, Calle Magdalena Public Works Facility and the Wastewater Collections Division Municipal Yard include the following:

- automatic lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- replacing large trash receptacles at each individual desk with mini size trash receptacles and providing large recycling containers for mixed paper and cans/bottles,

- maintaining recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments,
- use of seven alternative fuel vehicles,
- use of 100% recycled paper for all copiers and printers,
- Low Impact Cleaning policy which seeks to minimize the impact of the City's cleaning products and procedures on the environment,
- Environmentally Preferable Purchasing policy,
- use of ten energy efficient Dyson hand dryers installed in all of the bathrooms at the Encinitas Civic Center, the Encinitas Community Center and the Encinitas Branch Library and
- solar photo voltaic panels, a high efficiency air conditioning system, and day lighting the building in certain areas at the Encinitas Civic Center.

4.3.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

Fertilizers which are used on landscaped areas in municipal parks and public right-of-way areas are considered a pollutant of concern for the San Elijo Lagoon and its larger drainage area. To mitigate potential discharges of nutrients to the lagoon from Municipal activities, the City requires that the City's landscaping contractors implement an extensive fertilizer management program as described earlier in Section 4.3.3.1. The City will continue to monitor the fertilizer management program, and if the existing measures are found to be deficient, the City may adjust the BMP implementation as needed to achieve a higher level of pollutant reduction.

Similarly, if the City identifies any potential sources of other constituents for which water bodies in the City are 303(d) listed that could be the result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no other municipal fixed facilities that have been determined to be a source of pollutants for which water bodies within the City are on the Clean Water Act (CWA) 303(d) list.

4.3.4 PROGRAM IMPLEMENTATION

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and if necessary, enforcement actions. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.3.4.1 MAINTENANCE

In FY 2011-12, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot, and sidewalk

repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular maintenance activities.

The City maintains a regular maintenance schedule for fixed facilities in the City. As previously discussed, City personnel are trained to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly, and to report illegal discharges/illicit connections as they may come across them during normal work activities.

4.3.4.2 TRAINING AND EDUCATION

Municipal personnel are trained in implementing appropriate BMPs and preventing non-storm water discharges. In FY 2011-12, Clean Water Program staff conducted training for the following municipal departments: Engineering, Fire and Marine Safety, Parks and Recreation, Public Works and the San Dieguito Water District. Additionally, the Streets Division of the Public Works Department discussed storm water issues at regular staff meetings throughout the reporting period. A detailed description of the municipal education program can be found in Section 8.2 of this document.

4.3.4.3 MUNICIPAL INSPECTIONS

City staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. As part of the FY 2011-12 program City staff performed a total of **29** high priority inspections. The fixed facility inspection locations and inspection dates are summarized in Table 4-1 below.

Table 4-1
Fixed Facility Inspections

No.	Facility Name	Inspection Date
1	"A" Tank Site Public Works Yard	5/8/2012
2	Calle Magdalena Public Works Yard	5/9/2012
3	Requeza Street Public Works Yard	5/9/2012
4	Wastewater Collection Facility	5/15/2012
5	Encinitas Ranch Golf Course	5/22/2012
6	Beacon's Beach	6/6/2012
7	Cardiff Sports Park	6/11/2012
8	Cardiff Sports Park Expansion	6/11/2012
9	Cottonwood Creek Park	6/11/2012
10	Encinitas Viewpoint Park	6/6/2012

No.	Facility Name	Inspection Date
11	Glen Park	6/15/2012
12	Grandview Beach	6/5/2012
13	H Street Viewpoint	5/29/2012
14	Hawkview Park	6/7/2012
15	J Street Viewpoint	5/30/2012
16	Las Verdes Park	5/29/2012
17	Leo Mullen Sports Park	5/29/2012
18	Leucadia Oaks Park	6/7/2012
19	Leucadia Roadside Park	6/6/2012
20	Little Oaks Equestrian	6/6/2012
21	Mildred Macpherson Park	5/31/2012
22	Moonlight Beach	6/6/2012
23	Oakcrest Community Park	6/6/2012
24	Orpheus Park	6/15/2012
25	Paul Ecke Sports Park	6/1/2012
26	Scott Valley Park	5/21/2012
27	Sun Vista Park	6/6/2012
28	Swami's Beach	5/29/2012
29	Wiro Park	6/6/2012

The recommended BMPs and corrective actions are summarized in the City's Routine Inspection Summary located in Appendix C-6. There were no corrective actions for any of the Municipal fixed facilities during FY 2011-12.

Potable Water Facilities

All of these facilities are considered a low priority and do not receive formal inspections because the activities associated with these facilities are located underground and do not involve any other activities on site.

4.4 MS4

4.4.1 BACKGROUND

The primary functions of municipal separate storm sewer systems (MS4) are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consist of streets, curbs, catch basins, inlets, pipes of varying materials, natural creeks and streams, natural channels, concrete channels, culverts, desilting basins, and detention basins. The City also maintains a number of treatment control BMPs such as storm drain filter inserts and a UV treatment facility, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City of Encinitas regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the Maximum Extent Practicable (MEP).

4.4.2 SOURCE CHARACTERIZATION

The City maintains a variety of MS4 facilities which includes 1,781 catch basins and inlets, 65.2 miles of storm drain pipe, 2.00 miles of open channels, 14 desilting basins, and 1 Ultra Violet Urban Runoff Treatment Facility located throughout its jurisdiction. The MS4, as one complete entity, is included in the municipal inventory located in Appendix C-1.

The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of the MS4. The GIS MS4 inventory includes inlets (i.e. catch basins, curb inlets, grate/inlet combos, etc.), outlets (i.e. curb outlets, headwalls, etc.), manholes, pumps, ditches, channels, storm drain pipes, and detention basins. To ensure that the City's GIS inventory is current and accurate, the MS4 inventory continually undergoes data (feature and attribute) review, quality control and validation by City staff from multiple departments. GIS staff also maintains storm drain infrastructure data by mapping new infrastructure through a combination of field work and Engineering Plans.

In FY 2011-12, the City continued with its Channel Maintenance and Environmental Permitting project by completing a variety of bird and rare plant species surveys, vegetation mapping, and formal wetland delineations which will culminate into a biological resources report and inform the formal CEQA process. It is anticipated in the forthcoming reporting year that additional progress will be made toward formal environmental permit preparation and submittal to various resource agencies.

4.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.4.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction, and new development. The City's JURMP also directs city staff to utilize the

CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste from entering the MS4 system as well as ensuring that waste which is collected during maintenance of the City's MS4 does not re-enter the system.

The 2007 Municipal Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City of Encinitas does not own or operate any flood management projects or flood control devices that may be retrofitted. However, in FY 2011-12 the City did maintain 10 desilting basins throughout the City that serve a pollutant removal function, particularly for sediment and associated pollutants bound to the sediment. These facilities are inspected on an annual basis and cleaned of debris and sediment as needed. A Municipal BMP map that depicts all of the City's structural BMPs, detention basins and storm drain filter locations can be found in Appendix C-3.

4.4.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS/ACTIVITIES

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined to be necessary.

4.4.4 PROGRAM IMPLEMENTATION

The City's MS4 management program includes responding to complaints received by the City's Clean Water Hotline {(760) 633-2787}; detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, repairing and/or replacing damaged or failing MS4 structures; and by stenciling signs on storm drain inlets warning of effects of illegal dumping. The City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a combination sewer and storm drain cleaner during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance. City staff report on the maintenance of the MS4 through an industry standard asset inventory and a work management system that integrates with the City's GIS system. Maintenance is performed on the storm drain infrastructure and captured through work orders that are attached to the storm drain features represented in GIS. Any changes or updates to the MS4 inventory will be reported in future JURMP Annual Reports.

During the FY 2011-12, **10** municipal related complaint calls were received through the City's Clean Water Hotline. A total of **10** complaints were investigated by Clean Water Program Staff, there were **7** violations resulting in **8** instances in which educational information was disseminated, and **1** instance in which a Notice of Violation was issued. A complete summary of all municipal related complaints can be found in Appendix H-1.

All maintenance activities this fiscal year met the Municipal Permit requirements as outlined in Order No. R9-2007-0001. The FY 2011-12 annual results for all municipal activities are summarized below and reported in detail in Appendix C-2.

4.4.4.1 MAINTENANCE

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year are included below:

- Within the defined reporting period of this report, approximately **558 tons** of waste and litter were removed from the entire MS4. This included the removal of **314 tons** from the catch basins and inlets, **1.88 tons** from the City's storm drain filter inserts, **242 tons** from open channels and 10 desilting basins. All MS4 facilities observed to be collecting relatively high volumes of trash were cleaned between May 1 and September 30.

- Within the defined reporting period of this report, **242 tons** of litter and vegetation were removed from open channels and 10 desilting basins. Cleaning the open channels and the desilting basins is conducted annually/year round or more often when necessary. The City responds to observations or reports of anthropogenic litter in channels and desilting basins in a timely manner.

- Within the defined reporting period of this report the City inspected and cleaned **2,337** catch basins and inlets and removed a total of **314** tons of waste and litter. Storm drain inlets and catch basins that City personnel have identified as gathering a greater amount of trash and debris as compared to other areas of the City are inspected throughout the year and cleaned if necessary. The City's inspection and cleaning activities are sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris. Inspection and cleaning schedules are subject to change based on observations and records of City personnel.

- The City maintains a total of 56 storm drain filter inserts in 34 inlets (some larger inlets may contain more than 1 filter insert) located throughout its jurisdiction to remove sediment, debris, oil, and grease from the MS4. From July 1, 2011 through June 30, 2012, **1.88 tons** of sediment and litter were removed from all 34 inlets. These inserts are maintained on a quarterly basis by a specialty contractor. Table 4-2 below outlines the complete filter insert inventory. A Municipal BMP map that depicts all of the City's storm drain filter locations can be found in Appendix C-3.

- The City of Encinitas has a formal maintenance agreement with the San Elijo Joint Powers Authority to maintain the Ultra Violet Urban Runoff Treatment Facility. The scope of the agreement ensures daily monitoring and inspection, startup and shutdown of the facility as dictated by rain events, and preventative and regular maintenance. In FY 2011-12, over $15,862 was spent on the preventative and regular maintenance of the facility including, pump replacement, control screen and software updates, and other

electronic equipment and parts. The Ultra Violet Urban Runoff Treatment Facility provides the City with a vital treatment function, and ongoing operations and maintenance activities are critical to ensure optimum performance and pollutant removal.

A complete report of all MS4 operation and maintenance activities can be found in Appendix C-2.

Table 4-2
Storm Drain Filter Inserts Inventory

Inlet ID Number	Number of Filters	Location	Inlet Type
1	1	194 El Camino Real @ Via Molena	Curb
2	1	1470 Neptune Ave. in driveway apron	Grate
3	2	337 El Camino Real, in front of Circuit City Mall	Curb
4	1	1638 Neptune in grass shoulder	Grate
5	2	1786 1/2 Highway 101	Curb
6	1	1650 Highway 101	Grate
7	1	970 Hwy 101 in alley, north of Jasper	Grate
8	1	918 N. Hwy 101 in alley	Grate
9	2	204 El Camino Real, in front of Blockbuster Video	Curb
10	1	914 Hwy 101 in alley @ Leucadia Blvd. north of the park	Grate
11	1	828 Hwy 101 in alley, behind building	Grate
12	1	802 Hwy 101 in alley, west of Europa St.	Grate
13	1	129 Cadmus at Highway 101	Grate
14	1	149 Basil St. at Highway 101	Grate
15	4	130 Basil St. at Highway 101	Curb
16	1	130 Athena at Highway 101	Grate
17	2	170 Athena at Highway 101	Curb
18	1	577 N. Vulcan north of Union	Grate
19	1	208 Cereus at Hygeia	Curb
20	3	501 El Camino Real, east side @ Garden View Rd.	Combination
21	1	321 Union at Hygeia	Grate

Inlet ID Number	Number of Filters	Location	Inlet Type
22	1	321 Union across from Hygeia St.	Grate
23	1	1750 Hwy 101 at Bishope Gate	Curb
24	1	750 G St. at Second St. alley	Grate
25	3	364 2nd St. at C Street	Grate
26	5	247 Hwy 101 at NE corner of Encinitas Blvd.	Curb
27	3	102 Encinitas Blvd.	Curb
28	2	485 Santa Fe Dr., west of I-5.	Curb
29	2	485 Santa Fe Dr., north side of street, west of I-5	Curb
30	1	2560 Manchester in alley	Grate
31	1	2582 Manchester across from alley	Grate
32	2	499 El Camino Real, SE corner @ Garden View Rd.	Curb
33	3	398 El Camino Real, SW Corner @ Garden View Rd.	Curb
34	1	398 El Camino Real, across from Circuit City mall	Curb

In FY 2011-2012, the Engineering Department was instrumental in conceptualizing and designing numerous drainage related capital improvement projects (CIP). These projects are outlined in Table 4-3 below.

Table 4-3
Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Stratford Knoll Drainage Improvements	$650,000	Replace existing storm drain channel and increase capacity.	Complete
Encinitas Creek Drainage Channel	$1,100,000	Increase capacity and provide flood control.	In Design
Santa Fe Drive Sidewalk and Drainage Project	$165,000	Installation of drainage improvements including curb, gutter and 330 feet of 18 inch storm drain.	Complete

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City of Encinitas conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.5.2 SOURCE CHARACTERIZATION

The City of Encinitas Wastewater Collection Division maintains approximately 122 miles of public sanitary sewer collection pipes.

4.5.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.5.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction and new development. In March 2008, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.5.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program that minimizes sanitary sewer overflows (SSO) and is described in more detail below.

4.5.4 PROGRAM IMPLEMENTATION

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediating existing sewer lines as necessary and proper disposal of hazardous waste.

4.5.4.1 MAINTENANCE

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2011-12, the entire sewer system was cleaned, and known trouble spots were cleaned on a more frequent basis. The City seeks to reduce and eliminate the amount of seepage from the sanitary sewer system to the MS4 through routine preventative maintenance of both the sanitary sewer and the MS4 systems. Preventative maintenance of both systems allows City officials to detect and eliminate active seepage points before they become a larger problem, and also to repair areas of the system that have a high possibility of becoming a seepage point.

In FY 2011-2012, the Engineering Department was instrumental in conceptualizing and designing CIPs to prevent sewage spills by improving the wastewater collection system. Sewer and emergency repair projects initiated during FY 2011-12 are shown below in Table 4-4.

Table 4-4
Sewer CIP Projects

Project Title	Budget	Goal	Status
Olivenhain Sewer Pump Station	$ 5,300,000	Reduce sewage spills, increase capacity and capture first flush from Interstate 5.	Under Construction
2nd Street Sewer Replacement Project	$4,000,000	Relocate existing sewer line to increase maintainability and increase reliability.	In Design
Olivenhain/Coast Highway Sewer Force Main Replacement	$3,999,900	Replace the existing sewer force mains to minimize spill potential and increase reliability.	Under Construction
Olivenhain Sewer Trunk Line Rehabilitation	$2,000,000	Rehabilitate 54 existing manholes to minimize infiltration and inflow and improve maintenance access.	In Design

In FY 2011-12, the City took the following measures to reduce the seepage from the sanitary sewer system to the MS4:

- 11.40 miles of the sewer system was televised to check pipe conditions,
- 286.59 miles of sewer lines were cleaned,
- 7 storm drain and sewer pipes were repaired.

City staff report on the maintenance of the sewer system through an industry standard asset inventory and work order management system that integrates with the City's GIS system. Maintenance is performed on the sewer infrastructure and captured through work orders that are attached to the features represented in GIS. Any changes or updates to the sewer system inventory will be reported in future JURMP Annual Reports.

On August 8, 2009, the City implemented a Sewer System Management Plan (SSMP). The SSMP is a program that ensures that the sewer system is functioning properly and that the necessary maintenance is conducted. The SSMP also includes a spill response plan that establishes standard procedures for immediate response to all sanitary sewer system overflows (SSOs). In FY 2011-12 the City of Encinitas Wastewater Collection Division personnel were trained in detecting, reporting and responding to SSOs in accordance with the SSMP.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.6.2 SOURCE CHARACTERIZATION

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- power washing, including graffiti removal,
- street and sidewalk repair and maintenance which includes street striping, street painting and pothole repair, and
- landscape maintenance.

4.6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.6.3.1 UPDATED BMP REQUIREMENTS

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities discussed above. In March 2008, the City established minimum BMPs which were described in the City's 2008 JURMP Update. The JURMP Update directs city staff to utilize the City's BMP Manual Part I and the

CASQA Municipal Handbook to choose applicable BMPs to implement for municipal areas and activities, including mobile activities. BMPs similar to those implemented for the management and maintenance of parks and landscaped areas are implemented for landscape maintenance in landscaped City right-of-way areas such as medians.

4.6.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined to be necessary. Presently, City related mobile activities have not been determined to be a source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated as effectively reducing pollutant discharge to all receiving waters in the City to the maximum extent practicable (MEP).

4.6.4 PROGRAM IMPLEMENTATION

In FY 2011-12, City field crews were trained to implement BMPs during all mobile activities. The Public Works Department Streets Division received storm water training from Clean Water Program staff on April 26, 2012. The training focused on storm water BMPs as they relate to mobile cleaning activities that take place throughout the City. Additionally, the Public Works Wastewater Collections Division received training from Clean Water Program staff on March 7, 2012. City field crews were trained to properly contain, control, and capture any discharge that was generated by a mobile activity. City field crews were also trained to use mobile equipment properly to ensure all wastewater is collected and that the equipment continues to function properly. For more detail regarding municipal staff training refer to Section 8.2 of this document.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City of Encinitas hosts a variety of special events throughout the city. These events may include, but are not limited to, festivals, fairs, events for charitable causes, and special occasions. The City recognizes that many special events have the potential to generate significant trash and litter caused by the patrons and the associated activities that occur at the special events. The City has considered the controls that are described in the Municipal Permit and has chosen the BMPs listed in Section 4.7.3.1 below as most effective and efficient for the City's needs. These BMPs are implemented during and/or after special events, where applicable.

4.7.2 SOURCE CHARACTERIZATION

The City of Encinitas hosts a variety of special events at various locations throughout the city; including City sanctioned events and venues, as well as privately managed events. According

to the Encinitas Municipal Code Chapter 6.12, any organized event coordinated for 25 people or more requires an Operations Permit (Special Events Permit). For the purpose of Special Event source characterization, events that require an Operations Permit (as defined by Encinitas Municipal Code Section 6.12) by the City have been identified as priority events.

4.7.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.7.3.1 UPDATED BMP REQUIREMENTS

The City has considered many of the controls specific to special events listed in the Municipal Permit. Before any special event permits are approved, applicants must fill out the City's "Special Events Permit P2 Questionnaire" (Appendix C-4) to assess the most appropriate BMPs for their event, and all applications must be reviewed by Clean Water Program staff. Applications are evaluated to ensure that event organizers select an effective combination of BMPs to prevent trash or other pollutants from entering the storm drain system. The City has chosen the following BMPs as most effective and efficient for City needs. Notably, the City may require additional event specific BMPs at any time as determined necessary.

Inlet Protection:

- Identify all storm drain inlets with appropriate signage and prohibitive language to deter illegal dumping and / or discharge.
- Protect all storm drains identified on their site plans. Fabric filters, gravel bags, or other approved inlet protection device over the drain opening are recommended.
- Visually inspect and clean, if necessary, all identified storm drain inlets impacted by the special event activities.

Trash and Debris:

- Adequate trash and recycling containers must be provided throughout the event venue, including at the exit and entry points.
- Regular collection of loose trash and debris must be applied as needed.
- Temporary fencing will be required to be put into place if the event, or any portion thereof, is determined to pose a threat of wind blown debris into any water bodies.
- Post event sweeping of the entire venue area and related staging areas is required.

Temporary Portable Restrooms:

- All temporary portable restrooms will be placed away from all storm drain inlets, drainage swales, water bodies, and any other locations that have the potential to impact the storm drain system.
- All temporary portable restrooms are required to have a secondary containment pan or additional BMPs in place around the stations for possible overflows.
- The contact information for the company responsible for the restrooms will be clearly marked on or around the restrooms.

In addition to the BMPs that are implemented by the applicant, The City of Encinitas implements the following during and/or after special events, where applicable:

- proper management of trash and litter, including temporary trash receptacles for trash,
- street sweeping following the special event,
- other BMPs, as included in the Municipal Permit, when deemed necessary by City personnel, and
- other post clean-up activities, such as catch basin cleaning, when necessary.

The City may also set up storm water informational booths with educational handouts and watershed maps, which demonstrate the impacts of pollution on a watershed. The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.7.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary. Presently, special events have not been determined to be a significant source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated for effectiveness in reducing pollutant discharge to all receiving waters in the City to the MEP.

4.7.4 PROGRAM IMPLEMENTATION

Events which require a discretionary Special Events Permit from the City, and completion of the BMP specific Special Events Permit P2 Questionnaire (Appendix C-4), must meet minimum pollution control standards as described above, and receive permit approval from the Clean Water Program. More refined event characterization as defined in Section 4.7.2 above, and improved event tracking enhanced the overall efficiency and effectiveness of Special Event oversight. In FY 2011-12, there were **48** special event applications processed by the Clean Water Program (see Appendix C-5).

The Clean Water Hotline is advertised on all Special Events Permit Applications and can be used to report spills during normal business hours. Additionally, the City has an after hours phone number that can be used to report any large or hazardous spills during special events that may occur on weekends or when the City offices are closed. City personnel are on call to respond to any emergency situations that may arise. During City sponsored events, trained City personnel are on hand to ensure that the event remains free of illegal discharges and/or illicit connections to the MS4.

In addition, the City maintains the authority to charge the applicant a Clean-up Fee and Deposit, depending on the size, location, and type of event. Following permitted events, post-event inspections are conducted by City staff, and the location of the event must be returned to pre-event conditions in order for the applicant to receive a full refund of deposited monies. If the City determines that more clean-up is necessary, the deposit will be used as reimbursement

for City time and cleanup efforts including street and parking lot sweeping. The event sponsors or organizers may be charged any excess clean-up fees the City may encounter beyond the amount of the deposit.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4 (Municipal Separate Storm Sewer System). The City of Encinitas has implemented a program that aims to reduce industrial and commercial pollution discharges from the MS4 to the MEP, prevent industrial and commercial discharges from the MS4 from causing or contributing to a violation of water quality standards, protect local receiving water bodies, and comply with the Municipal Permit.

Commercial facilities within the City of Encinitas include a wide range of service oriented businesses from restaurants to nurseries. There are five main commercial areas within the City. The largest areas are downtown Old Encinitas and the Leucadia business district, along Highway 101 from Swami's Beach to La Costa Avenue. This area contains many different commercial businesses ranging from restaurants to automotive outlets and is the oldest portion of Encinitas. Three industrial facilities are also located in the City: the San Dieguito Union High School District Transportation Cooperative, the San Elijo JPA Water Reclamation Facility, and the inactive Encinitas Landfill.

Within the defined reporting period of this report, Clean Water staff worked diligently to fulfill the requirements of the Order 2007-0001 related to commercial and industrial sectors. The City's geographic information system (GIS)-based commercial inventory was updated and prioritized based on the new requirements of Order 2007-0001 and the guidelines established in the City's 2008 JURMP. FY 2011-12 commercial and industrial facility inspections were based on this prioritization scheme and the new inspection frequencies outlined in Order 2007-0001. Inspections, follow-up, and enforcement actions were tracked using CityWorks, the City's existing GIS-based Work Order tracking system. In addition, the City participated in the regional industrial/commercial workgroup and subgroups, and helped to shape the mobile commercial businesses database and inspection standards. The following section demonstrates the City's successful implementation of required programmatic activities related to the Industrial and Commercial Section of Order 2007-0001 (Section D.3.b) during FY 2011-12.

5.2 INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The Clean Water Program emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Municipal Permit.

For the rest of Section 5.2, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial site/sources component is described in Section 5.3.

5.2.2 SOURCE CHARACTERIZATION

A watershed-based inventory of the industrial and commercial sites/sources within the City's jurisdiction was compiled as part of the 2008 JURMP update. As required by the Municipal Permit, the inventory includes the following information for each site/source: facility name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired); and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. Inventories of commercial and industrial facilities within the City of Encinitas are included in Appendices D-1 and D-2. Mobile commercial businesses do not have a fixed address at which they operate; they are tracked within a separate, non-spatial database (refer to Section 5.3).

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. The GIS department and the Clean Water Program both receive a monthly summary of new and renewed business registrations from the City Clerk's Department. Upon receipt of the monthly summary, a GIS Analyst updates the spatial facility database, and a Clean Water Program staff member updates the storm water inspection information for each business. In addition, Clean Water staff identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered with the City. When this occurs, these facilities are added to the inventory. Additionally, when Clean Water staff conducts annual commercial and industrial inspections, they have the opportunity to identify new or closed businesses and update the inventory with these findings.

Three industrial facilities are located in the City of Encinitas—the San Elijo JPA Water Reclamation Facility, San Dieguito Union High School District (SDUHSD) Transportation Cooperative, and the Encinitas Landfill. All three facilities are covered under the Industrial Storm Water General Permit Order 97-03-DWQ. The industrial inventory is included as Appendix D-2. The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The SDUHSD Transportation Cooperative is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The Encinitas Landfill is owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected by the City of Encinitas, and the Encinitas Landfill is inspected by the County of San Diego. Completed industrial facility inspection forms are available upon request.

As part of the 2008 JURMP update and the development of the SUSMP, the City collaborated with copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-1 lists the pollutants that may be generated by each category of business. The pollutants that may be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in

Appendix D-1 with the category in Table 5-1 and its corresponding pollutants. Prioritization was assigned via the process described in Section 5.2.4.1.

Table 5-1
Pollutant Loading Potentials of Industrial and Commercial Sources

Site/Source Type	Heavy Metals*	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Body Repair	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair/Maintenance	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical Garden	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Mobile Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	PO	L	L	PO	PO	PO
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nursery/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Auto Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Mobile Auto Washing	PO	L	PO	PO	UL	UL	PO	UL	PO
Contractor (Mobile)	PO	PO	PO	PO	UL	UL	PO	UL	PO
Handyman (Mobile)	UL	PO	PO	UP	UL	UL	PO	UL	PO
Landfill	PO	PO	PO	L	PO	PO	L	L	L
Wastewater Treatment	UL	UL	L	PO	UL	L	L	L	PO

Notes

L = Likely, PO = Possible, UL= Unlikely

* Heavy metals are a possible pollutant for any facility that has a parking lot.

This table is based on the field experience of D-MAX Engineering and on tables in the Copermittees' Baseline LTEA. D-MAX has conducted more than 1,000 industrial and commercial inspections during which it assessed the pollutant discharge potentials of the inspected facilities.

As required by Section D.3.b(1) of the Permit, all industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing[1]
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling
- Pest control services
- Eating or drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning[1]
- Cement mixing or cutting[1]
- Masonry[1]
- Painting and coating[1]
- Botanical or zoological gardens and exhibits
- Landscaping[1]
- Nurseries and greenhouses
- Golf courses, parks, and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning[1]
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services[1]

[1] Mobile commercial businesses are discussed in more detail in Section 5.3.

Both Industrial and Commercial facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired.
- All other commercial or industrial sites/sources within or directly adjacent to (i.e., within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA).
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.2.3.1 UPDATED BMP REQUIREMENTS

As required by section D.3.b.(2) of the Permit, during the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sites and incorporated these into the City's BMP Manual I. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's BMP Manual I.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP (Storm Water Pollution Prevention Plan) and implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are determined based upon a review of the site's SWPPP and site inspections.

5.2.3.2 ADDITIONAL CONTROLS

As required by section D.3.b.(2)(e), the City of Encinitas requires the implementation of additional controls for industrial and commercial sites and sources that are 1) tributary to CWA Section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired) or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

Clean Water Program staff utilizes GIS to maintain the commercial and industrial inventory and has the ability to spatially locate facilities relative to receiving waters and ESAs. Clean Water inspection staff is provided a hard copy map to use as a field reference to make appropriate determinations in consideration of these factors. Clean Water Program staff may prescribe additional controls during inspections of commercial and industrial facilities, as needed, in consideration of the proximity of the facility to the water body and the observed potential of the site to be a significant source of pollutants that may threaten the downstream

water body as necessary and appropriate.

5.2.4 PROGRAM IMPLEMENTATION

This section describes the steps employed by Clean Water Program staff to require and verify the implementation of required designated BMPs for industrial and commercial sources. During FY 2011-12, the City of Encinitas implemented the following industrial and commercial program elements:

- provided education and outreach through inspection actions so that regulated businesses were aware of the City's stormwater requirements;
- inspected inventoried businesses to evaluate compliance with established minimum BMP requirements and the local stormwater ordinance;
- conducted follow-up inspections as necessary to ensure facility compliance with minimum BMP standards;
- took enforcement action as necessary to bring violators into compliance.

5.2.4.1 INVENTORY PRIORITIZATION

As required by section D.3.b(1)(b), when evaluating threat to water quality, the City of Encinitas considered the following attributes of each industrial and commercial business to determine priority status (high or low):

i. Type of activity (SIC code);
ii. Materials used at the facility;
iii. Wastes generated;
iv. Pollutant discharge potential;
v. Non-storm water discharges;
vi. Size of facility;
vii. Proximity to receiving water bodies;
viii. Sensitivity of receiving water bodies;
ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
xi. Facility design;
xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
xiii. The facility's compliance history; and
xiv. Any other relevant factors.

Although not specifically required by the Municipal Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City's GIS data management system was used to prioritize commercial businesses based upon the following spatially referenced TTWQ criteria:

- proximity to a 303(d) listed water body

- pollutant potential of the facility type
- stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. For example, if the facility is tributary to the San Elijo Lagoon and received a Notice of Violation from the City in the past three years the facility would be considered high priority based upon the additional criteria that the City has established in determining TTWQ. In addition, if during the City's commercial inspection process or based on institutional knowledge, it was determined that additional sites that would otherwise have a low priority should be classified as high priority industrial or commercial facilities, then they were added to the inventory and were inspected.

The City's commercial inventory was updated and prioritized during the defined reporting period of this report and will be prioritized a least once per year prior to conducting annual inspections.

As a result of the City's threat to water quality analysis during FY-2011-12, 14% of the industrial and commercial facilities were identified as high priority. The identified high priority facilities included all three industrial facilities and many of the City's restaurants. For a complete list of prioritized facilities refer to Appendices D-1 and D-2.

5.2.4.2 INSPECTION FREQUENCY

FY 2011-12 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. In compliance with Section D.3.b.(3)(b) & (c) of the Permit, in FY 2011-12, the City inspected 100% of the industrial and commercial facilities inventoried as high TTWQ and over 25% of all inventoried sites. Consistent with the Permit, mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Municipal Permit were met.

In FY 2011-12, the City's industrial and stationary commercial inventories included a total of **390** facilities, of which **53** facilities were identified as having a high TTWQ (**50** stationary commercial facilities and **three** industrial facilities[2]). Rounding to the nearest whole number, 25% of the stationary industrial/commercial inventory would be **98** sites, and 100% of the high TTWQ facilities would be **53** sites.

During FY 2011-12, the City completed inspections for all high priority facilities identified on the industrial/commercial facility inventory. City of Encinitas storm water specialist conducted **two** industrial and **121** commercial site inspections; of which **two** were high priority industrial facilities and **50** were high priority commercial facilities. Therefore, the City of Encinitas met the minimum inspection requirements established in Order 2007-0001 and inspected 100% of all

[2] The Encinitas Landfill is regulated and inspected by the County of San Diego.

the high TTWQ facilities and 32% of all facilities in the industrial and commercial stationary facility inventories.

Table 5-2
Summary of Facility Prioritization and Inspections Conducted in FY 2011-12

TTWQ Prioritization	Number of Facilities	Order 2007-0001 Inspection Requirements	Inspections Completed	
			Total	Percent
High priority	53	100% (53)	53	100%
Low priority	337	as needed	70	21%
Total	390	25% (98)	124*	32%

*Total includes one industrial inspection conducted by the County of San Diego.

5.2.4.3 ROUTINE FACILITY INSPECTIONS

As required by section D.3.b.(3) of the Permit, commercial and industrial facilities in Encinitas are routinely inspected by the City's Clean Water Program staff. Inspections are intended to:

- identify facilities that are not in compliance with the City's Storm Water Management Ordinance and the Municipal Permit;
- provide facilities with information regarding the City's Clean Water Program;
- provide guidance in complying with stormwater regulations (City's Storm Water Management Ordinance, Municipal Permit, etc.); and
- validate and manage the inventory.

During FY 2011-12, City of Encinitas storm water specialist conducted **two** industrial and **121** commercial site inspections for compliance with its ordinances, permits, manuals, and this Order. All inspections included, as applicable:

i. Review of BMP implementation plans, if the site uses or is required to use such a plan;
ii. Review of facility monitoring data, if the site monitors its runoff;
iii. Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
iv. Assessment of compliance with City ordinances and permits related to urban runoff;
v. Assessment of BMP implementation, maintenance and effectiveness;
vi. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
vii. Education and training on stormwater pollution prevention, as conditions warrant.

The specialist uses a Storm Water Quality Inspection Form to document inspection activities (see Appendix D-3). The specialized form allows staff to document the above listed inspection steps, as applicable, to determine full compliance for each type of facility. In FY 2008-09, staff designed a new triplicate form called Commercial and Industrial Stormwater Quality Inspection

Summary form, which is used in addition to the detailed industrial and commercial inspection form. The form summarizes the corrective actions that are required as a result of the detailed inspection and acts as the responsible party's record of receipt upon completion of the inspection. This customer friendly form more effectively summarizes the inspection results, making corrective action requirements very clear to the business operation owner/manager. The form lists the most common corrective actions and requires a completion date to be met via the signature of the manager/owner. Further, the form effectively aids in the owner's understanding of stormwater regulations and compliance with current and future inspection actions. A copy of this form is included in Appendix D-4. When conducting inspections, the specialist worked with site contacts to provide examples of BMP solutions that could be implemented when corrective actions were necessary to minimize threat to water quality. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. For example a restaurant may be required to provide overhead coverage and secondary containment for outdoor used oil/grease storage. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the specialist was at the site. The responsible party was always provided a copy of the inspection summary form, and a complete copy of the detailed inspection report is always available upon request.

For a complete summary and confirmation that the designated BMPs were implemented (or required to be implemented) for industrial and commercial sites inspected in FY 2011-12, see the routine inspections summary in Appendix D-5. This Appendix describes, in detail, actions taken by the specialist to confirm or require that BMPs were implemented at each industrial and commercial site inspected. Appendix D-5 and the associated inspection forms completed for each routine inspection confirm that all inspections conducted in FY 2011-12 addressed all the required inspection steps. Completed forms are available upon request.

Inspection Tracking

Complaint and inspection documentation is filed in the City's GIS database, which is also used to track the number of inspections conducted for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that sites/sources are inspected at the minimum frequencies listed in section D.3.b.(3)(b)& (c) of the Municipal Permit. Clean Water Program staff reference the inspection data in the GIS to assist in facility prioritization, preparing for annual inspections, follow-up inspections, or IDDE investigations.

Third Party Inspections

All commercial inspections conducted in FY 2011-12were completed by City of Encinitas Clean Water Program staff. The City has one full-time stormwater specialist (and three backup specialists) dedicated to conducting routine commercial and industrial inspections and following up on stormwater complaint calls. A third party was not employed to conduct commercial and industrial inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting stormwater compliance inspections and enforcement of industrial and commercial facilities is trained regularly on inspection and enforcement procedures, BMP implementation, and assessment of monitoring data. Clean Water specialists attend available workshops and regularly receive training through staff meetings and direction from the Clean Water Program Manager. Further, Clean Water staff actively collaborates with inspection staff throughout the San Diego region to share methodologies and approaches that may be beneficial to each jurisdiction. Refer to Section 8.2 for a complete list of workshops, trainings, and conferences attended by Clean Water Program staff in FY 2011-12.

Inspection Follow-up and Enforcement

Clean Water Program staff conducted follow-up inspections at all facilities where deficiencies were identified and corrective actions were required. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. A total of **34** follow-up investigations were conducted as part of the FY 2011-12 routine inspection programs. Depending on the severity of the infraction requiring corrective action, inspectors may elect to issue a Notice of Violation and/or monetary citation. In FY 2011-12, all inspected facilities complied with required corrective actions; therefore, **zero** Notices of Violation (NOVs) were requisite to obtain compliance. Appendix D-5 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

5.2.4.4 NOTIFICATION

As required by section D.3.b.(2)(c) of the Permit, and initiated in FY 2009-2010, the City of Encinitas notified all inventoried industrial and commercial business of the City's minimum BMP requirements that are applicable to the site and/or activity. Copies of the notification letters (stationary and mobile) are included in Appendices D-7 and D-8 respectively. In addition, during FY 2011-12, the City continued notification efforts as part of routine facility inspections. All industrial and commercial facilities inspected in FY 2011-12 were notified of minimum BMP requirements applicable to their site/source. City of Encinitas stormwater specialists conduct thorough inspections with the owner/operator of each facility. During each inspection the stormwater specialist discusses the applicable BMP requirements in detail with the owner/operators.

5.2.4.5 COMPLAINT INVESTIGATIONS (VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE)

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge involving a commercial facility, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigations typically include stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its stormwater ordinance for all commercial and industrial facilities as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2011-12, there were **65** stationary commercial/industrial ICID complaint investigations. Of those investigations, **48** required follow-up assessments, **18** NOVs and **two** citations were issued in order to achieve compliance. A summary of the commercial complaints, violations, and enforcement actions occurring in FY 2011-12 is available for review in Appendix H-1. As a component of complaint investigations, educational information is commonly provided to the owner/operator of commercial facilities to improve knowledge and awareness of stormwater regulations. Materials typically distributed included general stormwater education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. During **54** investigations, educational information was provided to the business owner/operator by the Clean Water specialist.

Appendix H-1 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2011.

Reporting of Industrial Non-Filers

The City of Encinitas did not identify any industrial sites that may require coverage under the General Industrial Permit but which, to the City's knowledge, did not file NOIs.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City of Encinitas and do not maintain a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 SOURCE CHARACTERIZATION OF MOBILE SOURCES

The mobile businesses known to operate within the City's jurisdiction are listed on an inventory separate from the stationary commercial inventory in Appendix D-6. This inventory was comprehensively reviewed and updated during FY 2011-12. The following business types are addressed by the mobile sources element of the City's industrial and commercial program:

- Mobile automobile or other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades
  - Cement mixing or cutting
  - Masonry
  - Painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile business that the City determines to have a significant threat to water quality will be added to the inventory. Because not all mobile businesses have obtained a City of Encinitas business registration certificate or have a base of operations outside the City of Encinitas, Clean Water Program staff is continually refining and updating the mobile commercial inventory. Sources for such inventory updates include reported incidents, general observations by City staff, and available business registration certificates.

In FY 2008-09, the City participated in the development of a regional inventory and tracking system for mobile businesses. The industrial/commercial workgroup worked with a consultant who specializes in database design to create and maintain a mobile businesses database for the region. Figure 5-1 depicts the online form used by copermittees to enter a new business into the regional mobile business database. It is anticipated that this regionally updated and shared database will aid in collaborative enforcement of stormwater violations caused by mobile businesses.

Figure 5-1
Mobile Business Database New Business Entry Form

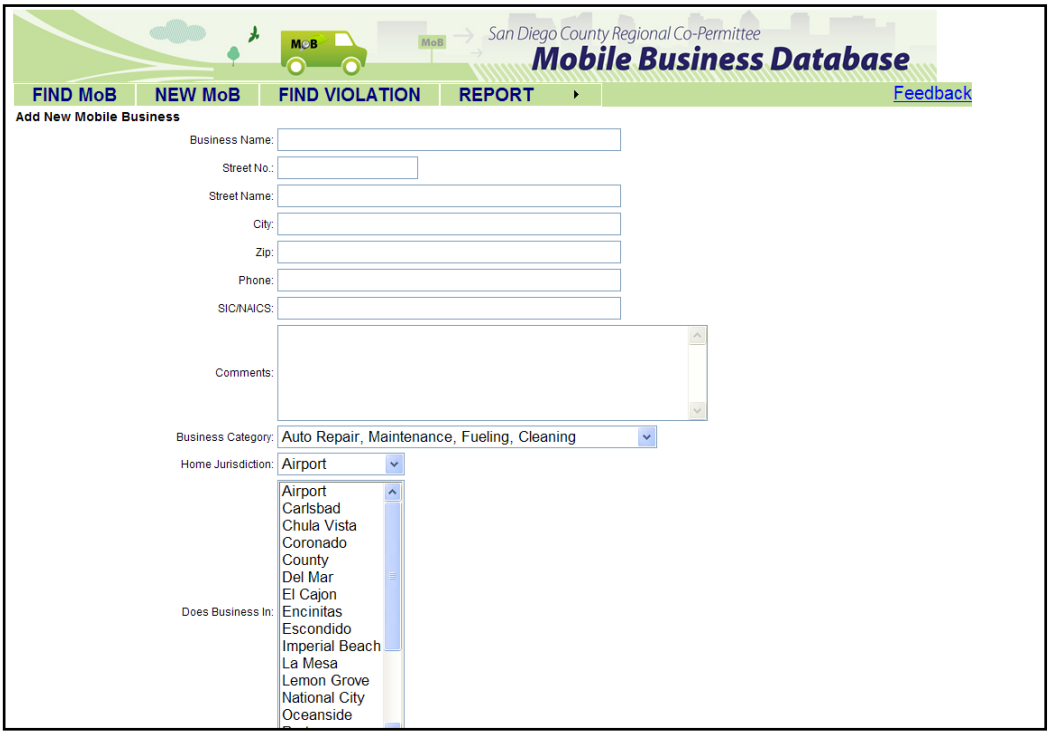

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 UPDATED BMP REQUIREMENTS FOR MOBILE SOURCES

All BMPs required for stationary sources, described in Section 5.2.3.1 of this document and listed in detail in the City's BMP Manual, are also required for mobile businesses, where applicable. The most important BMPs for most mobile businesses are typically those that address non-stormwater discharge control and spill prevention, control, and cleanup.

5.3.3.2 ADDITIONAL CONTROLS FOR MOBILE SOURCES

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. If the City finds that the activities of a mobile business are contributing pollutants of concern to a CWA section 303(d) impaired water body segment or are negatively impacting ESAs, additional controls will be required for those activities as applicable. Further, if the City has reason to believe that any mobile business is generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more frequently visit those areas and/or take other actions to address the illegal discharges.

5.3.4 PROGRAM IMPLEMENTATION

5.3.4.1 EDUCATION/OUTREACH AND NOTIFICATION OF MOBILE SOURCES

In FY 2011-12, the City of Encinitas provided information and outreach regarding stormwater quality to mobile business owners and operators that were contacted as a result of a complaint call *(See Section 5.3.4.4 below for a summary of complaint calls related to mobile business activities)*. Contacted businesses were given educational materials with detailed pollution prevention methods and other related BMPs to aid in their compliance with the City's stormwater ordinance and the Municipal Permit.

In 2009-2010, the City completed a comprehensive mail out to all inventoried mobile businesses known to operate in the City of Encinitas, disseminating minimum BMP requirements to identified proprietors. This effort leveraged upon regional and jurisdictional efforts to develop an exhaustive inventory of mobile businesses conducting a variety of activities. Based upon this well developed effort, the City of Encinitas assuredly met Municipal Permit (Section D.3.b.(2)(c)) requirement to notify inventoried businesses of minimum BMP requirements.

5.3.4.2 INTER-JURISDICTIONAL COORDINATION

During FY 2007-08, the City of Encinitas participated with other Copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

As described above, in FY 2008-09, a consultant was obtained to develop and launch a mobile business database to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy. See Appendix F-1 for the complete Regional Mobile Business Strategy.

5.3.4.3 INSPECTIONS

The inspections for mobile businesses generally follow the same procedure described in Section 5.2.4.3 of this document. The main focus of most mobile business inspections is on discharge control BMPs. Notably, as part of standard response actions, Clean Water staff work directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.3.4.4 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to section 5.2.4.5.

In FY 2011-12, there were **16** mobile complaint investigations conducted. **12** resulted in dissemination of educational information to the business owner/operator; **8** Notices of Violation were issued. Appendix H-1 includes a summary of violations and enforcement actions resulting from complaints about mobile businesses occurring in FY 2011-12.

Complaint investigation procedures, including those related to mobile business operations, will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report, which will be completed and submitted to the RWQCB as required by December 15, 2011.

6.0 RESIDENTIAL

6.1 INTRODUCTION

Approximately 80 percent of the City's 19.4 square mile area is designated as residential in the City's General Plan map. Residential land use comprises a large area of the City, and residential activities can have a considerable effect on the water quality of receiving waters. The City's residential component of the Clean Water Program aims to reduce pollutant runoff from residential areas and activities to the MEP (Maximum Extent Practicable) and prevent residential discharges from the MS4 (Municipal Separate Storm Sewer System) from causing or contributing to a violation of water quality standards.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2011-12 that contributed to the successful implementation of the City's Residential Component.

6.2 SOURCE CHARACTERIZATION

Residential high threat to water quality areas and activities within the City of Encinitas were identified during the 2008 JURMP update process and are described in detail in the City's 2008 JURMP. The following section identifies the high threat to water quality residential areas and activities that were focused on during FY 2011-12. The Municipal Permit (Order R9-2007-0001) requires each Copermittee to identify and provide a list of the residential areas and activities within its jurisdiction that have been identified as having a high threat to water quality. The following section briefly summarizes this process.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

In consideration of the minimum required *high threat to water quality* residential activities listed in section D.3.c.(1) of Order No 2007-0001, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

Section D.3.c. (1) of Order No 2007-001, requires that Copermittees identify all *high threat to water quality* residential areas. During the 2008 JURMP update, the City identified *high threat to water quality* residential areas using the following criteria (as defined in the Municipal Permit):

- Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in Attachment C of the Municipal Permit).

The City of Encinitas has several Section 303(d) impaired water bodies and coastal lagoons within or directly adjacent to the City's jurisdictional boundary. The 303(d) impaired water bodies within the City of Encinitas include Cottonwood Creek, Encinitas Creek, Escondido Creek, San Elijo Lagoon, and the Pacific Ocean at Moonlight State Beach and the San Elijo Lagoon Outlet.

Based on the definition in Attachment C of the Order No 2007-0001, Environmentally Sensitive Areas within the City of Encinitas include those areas identified as Natural Resource Sensitive areas in the City's General Plan and the City's Wetland buffer layer. The City does not contain any Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, or areas designated as preserves in the Multiple Species Conservation Program.

In the process of drafting the Regional Residential Education Program, the Regional Outreach Workgroup identified the major pollutants of concern from residential sources for the San Diego region. The major pollutants of concern for residential areas include: bacteria, nutrients, sediment, pesticides, and trash.

In consideration of identified 303(d) listed water bodies, the City's ESAs (Environmentally Sensitive Areas), and the primary pollutants of concern, Clean Water Program staff employed GIS analysis to determine the location of *high threat to water quality* residential areas. Based on this analysis the following residential areas within the City of Encinitas were identified as *high threat to water quality* residential areas:

- All residential areas within 500 feet of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to, or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

Appendix E-1 includes a map of residential areas. The map was developed for Clean Water Program staff to utilize in the office and in the field to help identify residential discharges or

activities which could pose a threat to water quality due to their proximity to receiving water bodies and ESAs.

6.2.3 EVALUATION OF OVERSIGHT OF RESIDENTIAL AREAS AND ACTIVITIES

Through an evaluation of effectiveness assessment measures as part of this report (See Section 11.0), it has been reasoned that the City has achieved overall success as it relates to the oversight of residential areas. Hotline complaint calls received, compliance achievement, and dry weather monitoring exceedances as they relate to residential sources all support this assessment. Continual evaluation in subsequent reporting years will be vital to assessing the overall efficacy of oversight related to residential sources.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

6.3.1 POLLUTION PREVENTION

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for *high threat to water quality* areas and activities.

6.3.2 LIST OF MINIMUM BMPS

As part of the City's 2008 JURMP update, the City designated the following minimum BMPs for *high threat to water quality* residential activities. The minimum BMPs are primarily nonstructural and are targeted at activities specified in Section 6.2 as having a *high threat to water quality*. Pollution prevention methods were incorporated into this set of BMPs, where appropriate. The list of minimum BMPs can also be found in the City's Storm Water BMP Manual I.

(a) Automobile Repair and Maintenance

Pollution Prevention

(1) Employ routine preventative maintenance practices
(2) Reduce vehicle use, whenever possible
- Change driving habits
- Carpool
- Increase the use of public transportation
- Bike or walk for short trips

(3) Make timely vehicle repairs

Leaks and Spills

(1) Prevent leaks and spills from contacting stormwater
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter
- If working outdoors, don't work in the rain
- Immediately contain and clean up leaks and spills when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Properly manage and dispose of automotive wastes and materials
- Properly drain fluids from automobiles
- Dispose of wastes properly and lawfully and recycle used oil and antifreeze
- Store materials and wastes indoors or under cover
- Use secure and watertight containers when storing materials and wastes

(b) Automobile Washing

Management / Reduction* of *Wash Water

(1) Whenever possible, use commercial self-serve or full-serve car washes that properly dispose or recycle their wash water
(2) When washing a vehicle at a residence:
- Wash vehicles over porous surfaces (grass, dirt, etc.) whenever possible
- Use dry cleaning methods to avoid the generation of wash and rinse water
- Turn off the water when not in use or use a controllable spray nozzle
- Encourage the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Properly dispose of soapy water or bucket rinse water to the sanitary sewer or soak into a landscaped area
(2) Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing (e.g., remove grease or brake dust using towels, etc.)
(3) Refrain from degreasing or cleaning of engine parts in areas other than those designated for such purposes

(c) Automobile Parking

(1) Use routine preventative maintenance practices and make timely vehicle repairs to prevent leaks of automotive fluids
(2) Design and construct parking areas to minimize storm water impacts; covered garages should be plumbed to the sewer system

(d) Home and Garden Care Activities and Product Use

GARDEN AND YARD CARE

Pollution Prevention

(1) Use safe substitutes and alternative methods when gardening:
- Use integrated pest management techniques and biological controls
- Use native plants and drought tolerant species to reduce water use and green waste produced
- Implement planting techniques that attract beneficial insects
- Consider composting, vermiculture and yard waste recycling
- Recommend and encourage practical purchasing practices for pesticides and fertilizers
- Identify "pests" before attempting to eliminate them

(2) Always read label instructions and follow the instructions for garden care products
(3) Implement water conservation practices, whenever possible
(4) Consider xeriscape gardening, including: drip irrigation, soaker hoses, and micro-spray systems
(5) Repair and maintain irrigation systems to reduce excessive runoff
(6) Recycle lawn clippings and green waste through local programs
(7) Plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills

(1) Immediately cleanup spills of gardening chemicals, fertilizers, and soils
(2) Return spilled materials to the container for future use or proper disposal

Materials and Waste Management

(1) Store lawn care products in closed labeled containers and in covered areas
(2) Refrain from using hazardous materials during windy or rainy days
(3) Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain
(4) Dispose of household chemicals to the household hazardous waste collection facility or scheduled drop-off events
(5) Utilize dry sweeping techniques for clean up

Restrictions on Activities

(1) Do not hose off paved surfaces to the street or gutter
(2) Do not dispose of hazardous waste to the trash, landfill, or storm drain

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Utilize purchasing practices that reduce waste
(2) Use safe substitutes for home cleaning and maintenance

(3) Read and follow product labels
(4) Recycle unused or unwanted products
(5) Use water based paints when possible
(6) Recycle unwanted appliances and household equipment

Leaks and Spills

(1) Clean up hazardous materials spills immediately
(2) Properly dispose of waste from spill cleanup materials

Materials and Waste Management

(1) Store household hazardous materials in closed labeled containers and in a covered area
(2) Recycle latex paint through community programs
(3) Dispose of unwanted household hazardous waste through household hazardous waste collection facilities
(4) Dispose of trash in provided trash cans or shared dumpsters and keep dumpster and trash can lids closed when not in use

Restrictions

(1) Do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter, or storm drain

***(e)* Disposal of Pet Waste**

Pollution Prevention

(1) Spay or neuter pets to reduce feral populations

Waste Management / Disposal

(1) Clean up after pets when walking them in public places
(2) If pets are allowed to defecate outside, clean up feces from yards
(3) Properly dispose of pet feces in the toilet or trash

Pet Management (Dogs and Cats)

(1) Whenever possible, do not allow pets to run free in residential neighborhoods

Manure Management (Horses and Other Large Animals)

(1) Properly manage manure (including the preparation of manure management plans when appropriate)
(2) Compost or properly dispose of manure
(3) Cover manure stockpiles with plastic tarp to prevent contact with rain

6.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2011-12 to require and verify the implementation of designated BMPs for residential areas and activities.

6.4.1 OUTREACH AND TRAINING

The City has a comprehensive set of Education and Public Participation Programs, which are a component of the City's jurisdictional program. A significant element of these programs consists of educating and engaging residents about ways in which they can minimize their impact on local waterways. Education of the citizens who reside in the City of Encinitas contributes to the implementation of the Residential Component of the City's Clean Water Program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between MS4s and sanitary sewers
- Pollution prevention and safe alternatives
- Household hazardous waste collection and recycling
- BMP implementation and BMP maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment, and recovery
- Water conservation

During FY 2011-12, Clean Water program staff conveyed these messages to the public through a variety of mechanisms, including:

- Clean Water Program website
- Production and distribution of brochures and promotional items
- Public participation in community events, workshops, and trainings
- Presentations at local schools
- Media coverage
- Response to residential complaints (Clean Water Hotline or email)

Notably, the City's website, including the Clean Water Program pages underwent a comprehensive update in 2011-2012. The website was update to improve overall look and feel, improve navigation, and provide the most current information available to the public. This site continues to be a central location by which to make Clean Water Program information available to the community and critical venue to disseminate activity and source specific minimum BMPs. Implementation of this and all those mechanisms mentioned above by the Clean Water Program helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the Clean Water Program can be found in the Section 8.

6.4.2 USED OIL AND HHW COLLECTION SERVICES

The City of Encinitas facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City offers its residents door-to-door home collection, two permanent collection facilities, and periodic, temporary collection events for all HHW. In addition, the City requires weekly curbside garbage, recycling, and yard waste pick-up for all residents. The various components of the solid waste and hazardous waste collection services provided by the City are described in detail below.

HHW Home Collection Program - Door-to-door home collection service is available to all residents of the City of Encinitas. Qualifying homebound, elderly, and disabled citizens may request pickup at no charge. Residents not qualifying for free pickup service are charged a nominal fee of $10 for home collection. Materials accepted via the HHW Home Collection Program include:

Household Cleaners: Drain openers, oven cleaners, wood and metal polish / cleaners, toilet bowl cleaners, and disinfectants

Automotive Products: Oil and fuel additives, grease and rust solvents, carburetor and fuel injector cleaners, air conditioning refrigerants, starter fluid, lubricating fluids, radiator fluids and additives, waxes, polishes, cleaners, and transmission additives

Home Maintenance and Improvement Products: Paint thinners, paint strippers, adhesives, paints, stains, varnishes, sealants, and wood preservatives

Lawn and Garden Products: Pesticides, herbicides, and fungicides (poisons)

Miscellaneous: Batteries, fingernail polish removers, pool and photo chemicals

Electronic/Universal Wastes: Electronic waste, or E-Waste, electronic products nearing or at the end of their "useful life," and includes cell phones, computers, televisions, VCRs, stereos, copiers, and fax machines which contain lead and other hazardous materials

Medical Sharps/Pharmaceuticals

Poway and Vista Permanent HHW Collection Facilities - As a member agency of the Regional Solid Waste Association, residents of the City of Encinitas may also drop off household hazardous waste at permanent HHW collection facilities located in the cities of Poway and Vista. The Vista collection center is located at 1145 East Taylor Street, at Laguna Lane. The Poway collection center is located in the South Poway Business Park, at 12325 Crosthwaite Circle off of Stowe Drive. These regional, permanent collection centers are open every Saturday (except holiday weekends) from 9:00am to 3:00pm. No fee is charged to Encinitas residents and no appointments are necessary. Waste collected is separated, packaged, secured, and temporarily stored at the permanent facilities. It is then removed on a regular basis for proper recycling or disposal. Material accepted at the Poway and Vista facilities are the same as those accepted through the Home Collection Program.

Used Oil Recycling Program - The City's used oil recycling program consists of a network of certified automotive waste recycling centers throughout the city. These facilities accept a range of used automobile products including used oil and oil filters. A significant part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through grants from Calrecycle. A list of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Residents may also opt to use the City's door-to-door HHW collection service to recycle their used oil and oil filters. However, most residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities.

Trash and Recycling Services - For public health purposes, the City of Encinitas requires that all residents participate in the City's solid waste collection service. All residents and businesses are liable for payment of fees for the mandatory service (see Municipal Code section 11.20.010, paragraph A). Residential service includes curbside green waste collection and recyclable materials collection in addition to regular garbage collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste and Recycling Services to provide solid waste collection services in Encinitas for both residential and commercial customers.

Detailed information regarding used oil, HHW, and solid waste disposal is made available to residents through the City's website, ECDO's website, and other various environmental websites. In addition, brochures about household hazardous waste disposal options are available at outreach events staffed by the Clean Water Program, the Solana Center, and EDCO Waste Recycling Services. Brochures and information regarding HHW disposal are also available upon request at City facilities.

Table 6-1 provides a summary of the used oil collected via the City's used oil recycling program. Table 6-2 identifies types and amounts of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 6-1
Used Oil Collected in FY 2011-12

Collection Type	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)
Certified Centers	418	103
Permanent HHW Centers	730	410
Total	**1138**	**513**

Table 6-2
Household Hazardous Waste Collected in FY 2011-12

Material Type	Description	HHW Collection Facilities*
Flammable & Poison	Flammable solid/liquid	3,091
	Bulked flammable liquids	206
	Oil-base paint	16,218
	Poison (excl. aerosols)	4,929
	Reactive and explosive	0
	Subtotal	**24,444**
Acid	Inorganic & Organic acid	788
Base	Inorganic & Organic base	1,537
Oxidizer	Neutral oxidizers, Organic peroxides	151
	Subtotal	**2,476**
PCB-containing	PCB-containing paint	0
	Other PCB waste	63
	Subtotal	**63**
Reclaimable	Antifreeze	946
	Car batteries	468
	Latex paint	40,532
	Motor oil/oil products	3,554
	Oil filters	154
	Subtotal	**45,654**
Asbestos		0
Universal Waste (UW)	Mercury containing waste	11
	Thermostats/switches/thermometers	0
	Fluorescent Lamps	605
	Rechargeable batteries	75
	Household batteries	765
	Subtotal	*1,456*
Electronic Waste (UW)	SB20/50 covered electronic devices	14,363
	Universal waste electronic devices	14,332
	Subtotal	*28,695*
Aerosols (UW)	Non-empty aerosol containers	0
	Other	0
	Subtotal	**30,151**
Other HHW	Home-generated sharps	308
	Pharmaceutical waste	0
	Compressed gas cylinder	395
	Non-UW aerosol containers	1.334
	Treated Wood	114
	Other	1,108
	Subtotal	**3,259**
Grand Total		**106,047**

*Waste measured in pounds.

6.4.3 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by section D.3.c.(3) of Order No 2007-0001, and depending on the severity of the violation, the City enforces its storm water ordinance for all residential areas and activities as necessary to maintain compliance. Enforcement may include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2011-12, there were **59** residential ICID complaint calls. Of these calls, **five** were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **54** residential complaint investigations conducted, **41** resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In addition to education, FY 2011-12 complaint investigations resulted in **four** Notices of Violation and **one** citation.

A summary of the residential violations and enforcement actions occurring in FY 2011-12 is available for review in Appendix H-1. The tabular summary includes a brief discussion, which includes the follow-up actions taken, for each violation. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted to the RWQCB as required by December 15, 2012.

6.4.4 REGIONAL RESIDENTIAL EDUCATION PROGRAM

In prior reporting years, the City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. This plan contains recommended strategies for the development and implementation of

the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6. Details of the implementation of this Plan can be found in Section 8.3.4(d) of this annual report and in the Regional Urban Runoff Management Plan (RURMP) annual report to be submitted under separate cover by the County of San Diego on behalf of the San Diego County Stormwater Copermittees.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Encinitas will submit the entire FY 2011-12 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2012.

8.0 EDUCATION

8.1 INTRODUCTION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the Engineering Services Department, Clean Water Program.

The Municipal Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience.

(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The City conducted or participated in a wide variety of stormwater education activities during the FY 2011-12 reporting period. Education and outreach activities and opportunities are organized and implemented on three levels—Jurisdictional, Watershed, and Regional. For ease of reporting, activities occurring on all levels have been captured below.

8.2 JURISDICTIONAL EDUCATION

8.2.1 Program Identity

Through Citywide environmental efforts and initiatives, stormwater pollution prevention and water quality have been identified as priorities for residents and businesses in the Encinitas community. As a result, the City of Encinitas Clean Water Program staff felt that updating the program identity through a new logo would enhance awareness within the community and help identify the diverse City functions that help to protect local surface water quality in creeks, lagoons, and the ocean. A new Clean Water Program logo was developed in FY 2009-10 and is currently being used on new educational outreach materials,

event giveaways, program correspondence, staff apparel, and our logo is also displayed on our new web site.

8.2.2 Educational Materials Distribution

In FY 2011-12, a total of **3,578** outreach materials were distributed by the Clean Water Program. This includes BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed pencils, reusable shop towels, "Bags on Board" dispensers, construction brochures, watershed posters, door hangers, eating establishment guides ("What's Cooking"), automotive guides ("Green Wrench"), flyers printed from the Project Clean Water Toolbox, Think Blue Regional Calendars, Think Blue Regional bilingual stormwater coloring books, Minimum Required BMP brochures for stationary as well as mobile businesses, and other informational guides. These guides included information on Integrated Pest Management (UCSD Cooperative Extension), water conservation from local water districts and the County Water Authority, County of San Diego Household Hazardous Waste, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority, and our newest and most colorful addition is the reusable and recycled Clean Water Program bag, made from 85% postindustrial recycled paper.

8.2.3 Municipal Staff Training

As required by Municipal Permit section 5.b.1 (d), activity specific training opportunities were provided to City staff. The summary below outlines departmental training activities conducted during the defined reporting period of this report.

Public Works, Streets Division. FY 2011-12 stormwater training was provided to the Streets Division during regular staff meetings on the following dates:

- August 11, 2011; Municipal Program Best Management Practices: SC-41 Building & Ground Maintenance, SC-70 Road & Street Maintenance, & SC-73 Landscape Maintenance; 13 attendees
- August 25, 2011; Municipal Program Best Management Practices: SC-11 Spill Prevention, Control, & Clean up, SC-71 Plaza & Sidewalk Cleaning, & SC-76 Water & Sewer Utility Maintenance; 13 attendees
- April 26, 2012; Municipal Stormwater Training presented by Clean Water Staff; 13 attendees

Public Works, Wastewater Division: The Clean Water Program works closely with the Wastewater division to prevent illegal discharges from entering the City's waterways. **Eight** staff members from the Wastewater division were trained by Clean Water Program staff on March 7, 2012.

San Dieguito Water District: Seventeen staff members from the San Dieguito Water District were trained on **April 11, 2012**. Topics included a refresher on stormwater regulations, activity specific BMPs, and the relationship between irrigation runoff and stormwater pollution.

City of Encinitas Fire Department: Within the defined reporting period of this report, stormwater training workshops were given to the Fire Department on three separate dates. On **March 12, 2012**, **fifteen** fire personnel were in attendance; **thirteen** fire personnel attended the training on **March 13, 2012**; and **eight** fire personnel were at the **March 14, 2012** training.

City of Encinitas Landscape Contractors: The City contracts with multiple landscaping companies to maintain our parks, beaches, and other public landscaped areas. In collaboration with the City's Parks and Recreation Department, training was given in Spanish to **twenty-seven** staff from the City's landscape contractors on **March 22, 2012**. Topics of this training included activity specific BMPs, City stormwater regulations, and proper materials management.

Engineering Department: Staff from the Clean Water Program and other divisions of the Engineering Department attended the following trainings:

- StormCon – August 23, 2011: Anaheim, CA; 3 attendees
- Stormwater Construction Requirements – September 22, 2011: San Diego, CA; 1 attendee
- Stormwater Inspection and Maintenance – December 13, 2011: Encinitas, CA; 8 attendees
- CASQA Webinar – January 12, 2012: Encinitas, CA; 1 attendee

Clean Water Program, Engineering Department. Clean Water Program staff regularly attends trainings, workshops, and conferences related to stormwater management. This fiscal year staff attended the following:

- California Water Environment Association 2012 Conference – February 29th, 2012: Huntington Beach, CA; 1 attendee
- Floodplain Management Association; Geomorphic Assessment – June 19, 2012: San Diego, CA; 1 attendee

In addition to formal training, Clean Water Program staff is regularly informed of new and emerging water quality regulations, science, and technology through regional meetings, subscription to relevant scientific journals, and individual research.

Multiple City Departments: Staff from various City Departments attended trainings within the reporting period of this report that support the efforts of the City's Clean Water Program.

- Stormwater Quality Workgroup-Design Standards – March 5, 2012

8.2.4 UNDERSERVED TARGET AUDIENCES, HIGH-RISK BEHAVIORS, AND "ALLOWABLE" BEHAVIORS AND DISCHARGES

Underserved Target Audiences - Bilingual Education

For those that work in the City, and for segments of the community that do not speak English as their first language, the City provided bilingual (English/Spanish) brochures at all outreach events. The Clean Water Program utilized the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures include information about Best

Management Practices for Yard and Garden Care, Restaurants, Home Improvement, Pesticides, Developers, and Automotive Care. Bilingual Think Blue Regional Stormwater Coloring Books and calendars were distributed in FY 11-12. Further, a bilingual Clean Water Program staff person provides training and responds to complaint calls as needed in various community sectors.

High Risk Behaviors - Regional Mobile Business Outreach and Education Plan
During FY 2010-2011 the City of Encinitas participated with other copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. The Industrial/Commercial Workgroup will be overseeing the implementation of that Strategy throughout the permit cycle. A complete description of the education and outreach of mobile businesses and inter-jurisdictional coordination of notifications can be found in section 5.3. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

8.2.5 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to the new development and construction communities.

- "A Pollution Prevention Guide for the Construction Industry" was distributed at public events, to engineering construction inspectors and the building department, and displayed at the City of Encinitas Engineering counter for the public. **One hundred and twenty-two** construction brochures were disseminated during the 2011-12 reporting year. This brochure was developed as part of the Carlsbad Watershed Urban Runoff Management Plan workgroup (Appendix F-2).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by Engineering Department inspectors and Clean Water staff as determined appropriate. For all projects, stormwater topics including required construction site BMPs, general site management, post-development BMP construction, and other relevant SUSMP requirements are discussed.
- Construction inspector stormwater coordination. Within the defined reporting period of this report, staff from the Clean Water Program attended inspector staff meetings to provide support and information to the City's construction inspectors.
- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers – Simple and Cost Effective Ways to Comply with Stormwater Regulations" (Appendix F-3). The brochure is available in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In September 2011 the City mailed **79** letters to local developers and contractors regarding sediment and erosion control BMP requirements for the upcoming rainy season (Appendix B-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into each annual Erosion Control Letter that went to contractors, developers, and job superintendents.

8.2.6 COMMERCIAL/INDUSTRIAL OWNERS AND OPERATORS

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to commercial and industrial sectors of the community:

- Stormwater quality inspections were performed at **121** commercial facilities and two industrial facilities during the FY 2011-12 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general stormwater quality information and minimum BMP requirements.

8.2.7 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential, community, and school audiences:

- During the defined reporting period of this report, San Dieguito Water District (SDWD) hosted **eight** Water Conservation Classes and held **one** Project WET teacher training. Several of the classes listed below were cosponsored or co-hosted by other local agencies and non-governmental organizations as noted. Additionally, within the defined reporting period of this report, the San Dieguito Water District (SDWD) hosted numerous outreach events geared towards school-aged children. All SDWD events summarized in Table 8-1 below include topics or the distribution of materials related to stormwater pollution prevention.

Table 8-1
SDWD Water Conservation Classes held in FY 2011-12

Date	Event/Location	Material Provided	# of Participants
Jul 19, 2011	City of Encinitas Day Camp at Glen Park	Water cycle activity, California Delta Information Sheet, other puzzle/water sheets, globe toss	75 children ages 5-13
Jul 21, 2011	Mira Costa College student presentation	Water conservation kits & Water for Tomorrow material	25 students
Jul 20, 2011	Mira Costa College student presentation	35 copies of 2010 Water Quality Report for Child Development Class	35 students
Sept 10, 2011	Capri School Volunteer Day to prepare for native habitat	Information on grants, rebates, conservation work; temp tattoos, flower seed	45 adults (approx.)

Date	Event/Location	Material Provided	# of Participants
	restoration Partner: US Fish & Wildlife Service	packets; water and snacks.	
Sept 17-18, 2011	Cardiff Green Expo (Surf Classic & Rerip) at San Elijo Beach	Outreach materials provided at booth	200 people
Sept 29, 2011	Plant Sale & Expo at Home Depot		unknown
Oct 1, 2011	Encinitas' 25th Anniversary Celebration at San Dieguito Heritage Museum	Table event: seed packs, homeowner's guide, rebate info, stickers	250 people (approx.)
Oct 7, 2011	Direct & e-mail of Water Budgets to 84 sites with dedicated landscape meters	Individualized water budgets. Information on water audits & Yard & Garden Care brochures.	84 water customers
Oct 13, 2011	EUSD Green Team Meeting at EUSD District Office	Provided information on what Project WET offers	12 teachers and parents
Oct 18, 2011	Water Science in a Box Presentation provided to Ocean Knoll science coordinator	Water Science in a Box: materials, lesson plans with curriculum match for grades K-1, materials from SDCWA former program, MWD Water Precious Water, Teacher's Guide for Hands-on Water Activities grade 1-6	120 kindergarten and 1st grade students
Oct 29, 2011	Capri School Volunteer Day to prepare for native habitat restoration Partner: US Fish & Wildlife Service had	Homeowner information for water savings, snacks	unknown

Date	Event/Location	Material Provided	# of Participants
	attendees		
Oct 10, 2011	Ocean Knoll Splash Lab visit	Splash Lab materials	117 students
Nov 1, 2011	Ecke Central Splash Lab visit	Splash Lab materials	87 students
Dec 21, 2011	PW Yard – SDWD Safety Meeting	10 minute quick update on surveys & landscape pressure gauges	15 SDWD employees
Jan 3, 2012	Mailers on Turf Replacement Program and Professional Classes offered	Information provided on Turf Replacement Program & professional class offered	76 water customers
Jan 9, 2012	Ocean Knoll Elementary 3rd Grade Travelling Library Presentation		85 students
Jan 10, 2012	Mailers Turf replacement & program schedule & audits/surveys	Turf replacement & program schedule & audits/surveys information	96 water customers (approx.)
Jan 23, 2012	School District Liaison Committee at City Hall		15 people (approx.)
Feb 7, 14, 21, 28, 2010	Landscape Maintenance for Professionals Course at Encinitas Community Center		18 graduates
Feb 22, 2012	PW Yard slide show on water conservation, water supply, delta issues		15 SDWD employees (approx.)
Feb 24, 2012	Magic Of Water – Assembly at St. John School		380 students
Mar 18, 2012	90th Anniversary Newsletter	Newsletter	Website, print and email distribution
Mar 3, 2012	Class on California friendly landscape, design, irrigation, maintenance, soils &		35 attendees (approx.)

Date	Event/Location	Material Provided	# of Participants
	fertilizers. Taught by Steve Sherman, American Society of Landscape Architects		
Mar 9, 2012	Cardiff Elementary School Splashtastic – Assembly		400 students (approx.)
Mar 10, 2012	Home Depot Plant Sale & Expo		200 attendees (approx.)
Mar 13, 2012	Fix a Leak Week Repair Demonstration at City Hall & Community Center		8 people
Mar 15, 2012	Water Conservation teaching materials provided to Ocean Knoll	Ecology & water conservation music CD's, water conservation poster.	unknown
Mar 15, 2012	Project WET program presented at Ada Harris	Thunderstorm poetry, isohyedral lines activity, provided BeWaterSmart video & CWA 4th grade history video.	108 students
Mar 21, 2012	Calendar Contest promotion presented to 3 classes at Capri Elementary	BeWaterSmart video & CWA 4th grade history video	93 students
Mar 22, 2012	Project WET program and Calendar Contest promotion presented at St. John Elementary	Water Education Foundation Materials/unit on California Water Story: CA map, Water Cycle Map, Teacher Guide w/activities	60 4th – 6th grade students
Apr 18, 2012	Splash Lab visit at St. John School	Splash Lab materials	110 students
Apr 19, 2012	5th grade weather & water presentation at Ocean Knoll Elementary		3 classes, 105 students

Date	Event/Location	Material Provided	# of Participants
Apr 21, 2012	Encinitas Garden Festival		300 people
May 15, 2012	Project W.E.T, Kumeyaay & current water use presentation at Ada Harris	Activity book & Incredible Journey	24 3rd grade students
May 18, 2012	Public Works Week Event at Public Works Yard		63 children
May 19, 2012	California Friendly Landscape contest award ceremony at Cuyamaca College		25 people
May 23, 2012	Presentation of poster contest awards at SDWD Board Meeting		60 people (approx.)
May 26, 2012	Sustainable Garden Workshop at Mira Costa College	Sunflower seeds, Don't Plant a Pest brochure, SDWD newsletter, toilet leak tablets, Be Water Wise brochure in eng/span., home composting resource list, Easy Water Wise Gardening (Sunset magazine)	26 people
Jun 2, 2012	90th anniversary powerpoint & giveaways at San Diego Heritage Society Schoolhouse	Practical Plumbing Handbooks, shower timers, seed packets, leak tablets, drip gauges, jar openers (conservation promo), newsletters	25 people (approx.)
Jun 6 & 13, 2012	Project W.E.T, Kumeyaay & current water use presentation at Capri School	Activity book & Incredible Journey	5 classes, 100 3rd grade students
Jun 10, 2012	Encinitas Environment Day	Various brochures and water conservation materials	150 people (approx.)
Jun 13, 2012	Splash Lab visit Ada	Splash Lab materials	109 students

Date	Event/Location	Material Provided	# of Participants
	Harris School		
Jun 29, 2012	Water Conservation presentation to YMCA Discovery Camp, ages 5-7	Incredible Journey: Water by Frank Asch, Search a word, Guzzler Gang booklets, pencils & stickers (teacher gift: water cd)	59 children 12 counselors

- The City of Encinitas Parks and Recreation Department offers a very popular Junior Lifeguard program offered to Encinitas residents as well as young adults and children from throughout the County. An estimated 1,000+ children participate in the Junior Lifeguard Program every summer. In June of 2011, a new field manual was created by the Encinitas Marine Safety Department and through collaboration with Clean Water Staff included a City of Encinitas Clean Water Program page. This printed page explains in detail what the Clean Water Program does, how to protect our waterways, and also includes the Program's hotline phone number, email and website address. Approximately 1,200 official Junior Lifeguard Field Manuals were printed and distributed to the participants and their parents (Appendix I-2) within the defined reporting period of this report.
- A City of Encinitas Environmental Services Guide was originally created in FY 2006-07 and revised and updated in FY 11-12. It continues to be handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, stormwater management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix F-4).
- The Solana Center for Environmental Innovation continued to sell compost bins and worm bins to residents of Encinitas throughout FY 2011-12. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City. A total of **456** bins were sold in FY 2011-12.
- Individual Communication. There were **59** residential ICID complaint calls in FY 2011-12. **Five** of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, pool draining, etc.). Of the **54** residential complaint investigations conducted, **41** resulted in education provided to parties involved. Materials distributed included general stormwater education, activity specific BMP requirements, pollution prevention education, as well as specific municipal code and clean water regulations.
- Media Coverage (newspaper articles, press releases, etc.): See Table 8-2 below.

Table 8-2
Summary of Media Coverage in FY 2011-12

No.	Title	Date	Source
1	Nearly 250,000 Gallons of Sewage Spills in North County	August 29, 2011	10 News.com
2	ENCINITAS: Growers, biologists debate invasive plant list	September 4, 2011	The North County Times
3	1.9 million gallon sewage spill closes beaches	September 9, 2011	SIGN ON San Diego
4	In San Diego, power is on, but many beaches are closed	September 9, 2011	The Los Angeles Times
5	Green beach fair draws hundreds	September 21, 2011	The Coast News
6	Encinitas Family Forms Volunteer Group to Clean Waterways	September 30, 2011	Encinitas Patch
7	Electric Vehicle Charging Station Coming to Encinitas	October 12, 2011	Encinitas Patch
8	Plastic vortex crusader tells story of discovery	October 19, 2011	SIGN ON San Diego
9	Clean Water Act failing in new climate	October 30, 2011	SIGN ON San Diego
10	Marines deploy novel sewage treatment plan	November 1, 2011	The San Diego Union Tribune
11	UCSC Scientists lead a team deploying robots to forecast toxic algae blooms	November 18, 2011	Santa Cruz Sentinel
12	Rain Brings Urban Runoff to Beaches	December 13, 2011	Encinitas Patch
13	ENCINITAS: City celebrates 'Day Without A Bag'	December 15, 2011	The North County Times
14	San Elijo Lagoon Conservancy Buys Landmark Gateway Property	December 30, 2011	Encinitas Patch
15	New Marine Protected Areas In Effect Jan. 1	January 1, 2012	Encinitas Patch
16	Cigarette Butts on Local Beaches a Growing Problem, Data Shows	January 11, 2012	Encinitas Patch
17	Learn About the Ocean and What We Can Do to Help Save It	February 14, 2012	Encinitas Patch
18	Another Year, Another Big Pile of Trash (and Data)	February 22, 2012	Encinitas Patch
20	Report: Green infrastructure saves money while improving clean water	April 12, 2012	WaterWorld
21	Encinitas Girls Win State Award for Keeping Local Beaches Clean	May 4, 2012	Encinitas Patch
22	U.S. Conference of Mayors To Address Rising Costs of Unfunded Environmental Mandates	May 30, 2012	Water Efficiency

- Workshops and events attended/hosted by the City of Encinitas, San Dieguito Water District and/or the Solana Center in FY 2011-12:

  Coastal Cleanup Day – September 17, 2011
  Cardiff Green EXPO – September 17-18, 2011
  City of Encinitas 25th Anniversary Celebration-October 1, 2011

Plant Sale at Home Depot-March 10, 2012
Kid's Day at the Flower Fields – April 1, 2012
Encinitas Garden Festival – April 21, 2012
Creek to Bay Cleanup – April 28, 2012
Public Works Day – May 18, 2012
Encinitas Environment Day – June 10, 2012
San Diego County Fair - Enviro Fair – June 23, 2012

- In November and December of 2011, the Cardiff Library in Encinitas displayed an "IPM Garden Kiosk". The Integrated Pest Management information displayed helps the public address pest control concerns in an environmentally friendly way. This education was offered in English and Spanish.
- In FY 11-12, the Encinitas Library hosted Healthy Ocean Events that promote ocean protection and appreciation. On October 23rd, 2011, Captain Charles Moore from the Algalita Marine Research Foundation spoke about the dangers of marine debris. On February 15th, 2012, Dr. Nigella Hillgarth, executive director of the Birch Aquarium at Scripps Institute of Oceanography gave a "Health of Our Oceans" presentation. Lastly, on February 18th, 2012, Captain Charles Moore presented information on plastic debris in the ocean and his 7,000 mile expedition through the Pacific Ocean's "Western Garbage Patch Gyre," a large vortex of ocean currents where marine debris has accumulated.
- The Green Team met once a month during the 2011-2012 school year to discuss how to improve efficiency, reduce economic costs, and increase environmental awareness throughout the District. The Encinitas Union School District created a Green Team consisting of teachers, principals, parent volunteers, and environmental organizations in the community back in 2009. Topics discussed include waste management, composting, water conservation, energy use, environmental health, and stormwater pollution prevention. The Solana Center monitors large worm bins at Capri Elementary, Paul Ecke Elementary, Ocean Knoll Elementary, Encinitas County Day, Olivenhain Pioneer Elementary, San Dieguito Academy, Flora Vista, and a small worm bin at Mission Estancia Elementary. Solana Center has trained volunteer master composters to give composting/vermicomposting presentations at schools throughout Encinitas. School presentations are conducted both on and off site and scheduled as requested.

8.3 WATERSHED EDUCATIONAL ACTIVITIES

Important components of the City's education program include materials and activities that were generated on a watershed basis to address the high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were created or performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities will be provided in the FY 2011-12 Carlsbad WURMP Annual Report.

Watershed Map- A 36"x 24" "We all Live in a Watershed" poster was developed giving information about the San Luis Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a topographic map of the watershed, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public displays throughout the reporting year.

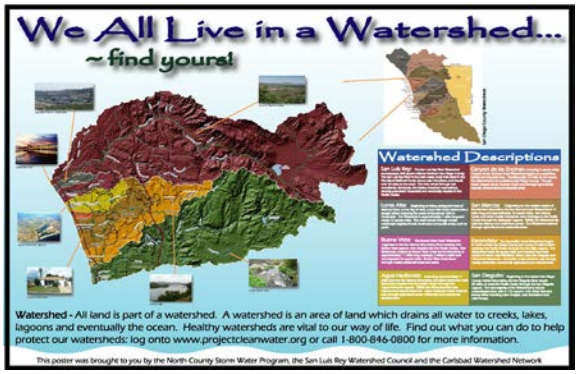

Watershed Collaboration- The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2011-12, the City participated in the following watershed outreach events:

- Coastal Cleanup Day – Sep 17, 2011
- Creek to Bay Beach Cleanup – Apr 28, 2012

Watershed Educational Materials- The City continues to distribute materials developed by the North County Stormwater Program in previous reporting periods. A large watershed poster has been displayed and given out at several public events throughout FY 11-12.

8.4 REGIONAL RESIDENTIAL EDUCATION PLAN

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources (ERS) Workgroup to develop the Regional Residential Education Plan in FY 07-08. This plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6.

The ERS Workgroup participated in Enviro Fair Day at the San Diego County Fair on June 23, 2012. Copermittees were represented at the event, with staff members throughout the day. Copermittees' Regional giveaways were bilingual stormwater coloring books, reusable Chico bags, pencils, IPM Tip Card Packets, and pet waste bag dispensers. In addition, the Household Hazardous Waste phone number was provided to the public. Fair attendance was up again for the fourth year in a row with an average of over 63,000 attendees per day.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become more involved, there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program and the Watershed. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the quality of our waterways. This is evident by the attendance and participation at community events and workshops and the number of complaints reported to the storm water hotline (discussed in more detail in Section 9.3.5 below and also in Section 8.2.7. Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2011-12 reporting period.

9.2 PUBLIC PARTICIPATION APPROACH

The City's approach for the outreach program is to develop an understanding among its residents and businesses of fundamental storm water and pollution prevention concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches, untreated).
- The economic value of our beaches and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a storm water violation (Clean Water Hotline, email or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and ocean.
- Reducing pollutants of concern.
- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals, etc.).

Within the defined reporting period of this report, the tools that have been used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- City of Encinitas Environmental Advisory Commission
- Public Outreach Events
- Public Opinion Survey
- Public Reporting Methods
- Pet Waste Dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- Permanent Best Management Practices (BMP) Self Verification & Inspection Programs
- Reusable Recycled Shopping Bags

9.3 PROGRAM IMPLEMENTATION

This section describes the specific public participation tools used during the FY 2011-12 reporting period.

9.3.1 WORKSHOPS/TRAINING SESSIONS

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of stormwater education and/or water conservation and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the stormwater regulations. Table 9-1 provides a summary of the FY 2011-12 workshops/training sessions conducted.

Table 9-1
City of Encinitas Workshops/Training Sessions FY 2011-12

Workshop/Training Session	Target Audience	Date	Attendance
General Plan Update – Public Health Element Workshop	Public	July 18, 2011	~50
General Plan Update – Citywide Public Workshop	Public	September 19, 2011	~100
Stormwater Quality Workgroup – Annual Development Planning Implementation Refresher (SUSMP/HMP)	City Staff	3/5/12	14
Stormwater Training to: Public Works-Wastewater Division	City Staff	3/07/2012	8
Stormwater Training to:	City Staff	3/12/12, 3/13/12, 3/14/12	38

Workshop/Training Session	Target Audience	Date	Attendance
Fire Department			
Stormwater Training to: Parks & Recreation	City Staff & Contract Landscapers	3/22/12	27
Stormwater Training to: San Dieguito Water District	City Staff	4/11/12	17
Stormwater Training to: Public Works-Streets Division	City Staff	4/26/12	16
Stormwater Training to: Marine Safety Division	City Staff	4/30/12	3
General Plan Update – Citywide Public Workshop	Public	May 7 & 14, 2012	~500
Total Attendees			**773**

9.3.2 CITY OF ENCINITAS ENVIRONMENTAL ADVISORY COMMISSION

The Environmental Advisory Commission (EAC) provides policy advice and recommendations to the City Council on issues related to environmental stewardship and sustainability. The Commission assesses the City's current environmental efforts in relation to specified areas of interest and creates and recommends strategies to enhance City activities that promote conservation and sustainable practices. The mission of the Encinitas Environmental Advisory Commission (EAC) is to make recommendations to the Encinitas City Council, raise public awareness, and build community partnerships in order to promote a shared vision of environmental sustainability throughout city government and the community. The Clean Water Program staff provides technical expertise to the Commission on matters related to water quality, pollution prevention, and stormwater regulations. During the defined reporting period, the EAC presented its third annual series of community outreach activities in partnership with other Encinitas Environment Day activities. The series, entitled "Green Spring", included twenty-seven activities and presentations (Appendix I-1); as well as nature walks & lagoon clean-ups on Saturdays at the San Elijo Lagoon Conservancy, and Cottonwood Creek Clean-ups – 3rd Saturday each month hosted by the Cottonwood Creek Conservancy. Additionally, the Environmental Commission had been asked by the City Council to provide ongoing advice on the phase-out or ban of single-use plastic and paper bags. In support if this initiative, each December the City coordinates "A Day Without a Bag," a community-wide promotion of reusable bags which includes a Mayor's press event, broad media coverage, school presentations, and the giveaway of over 4,000 reusable bags which have been donated by all local grocers and several businesses.

9.3.3 PUBLIC OUTREACH EVENTS

The Clean Water Program participated in the following outreach events during FY 2011-12:

1. Coastal Cleanup Day @ Swami's, Encinitas-September 17th, 2012; **86** volunteers
2. Cardiff Green Expo @ Seaside Beach, Cardiff –September 17-18th, 2012; approximately **200** visitors
3. City of Encinitas' 25th Anniversary Celebration – October 1, 2012; approximately **93** booth visitors
4. Plant Sale @ Home Depot – March 10, 2012; **159** booth visitors
5. Encinitas Garden Festival – April 21, 2012; **170** booth visitors
6. Creek to Bay Cleanup @ Moonlight Beach – April 28, 2012; **113** volunteers
7. Public Works Day – May 18, 2012; **79** attendees
8. Encinitas Environment Day @ Cottonwood Creek Park– June 10, 2012; **88** booth visitors
9. Enviro Day @ the San Diego County Fair – June 23, 2012; approximately **161** booth visitors

Solana Center for Environmental Innovation: Outreach to the general public and school children is also provided through the Solana Center for Environmental Innovation via workshops and presentations involving stormwater, household hazardous waste, composting, and recycling. The Solana Center works closely with the City for many of these workshops and presentations. See the tables below for a description of Solana Center's attended events and workshops.

Table 9-2
Solana Center Composting Workshops/Presentations FY 2011-12

Workshop schedule	Location	Attendance
July, 23, 2011	San Diego Botanic Garden	54
August 27, 2011	Solana Center	14
September 10, 2011	Patagonia – Encinitas	38
October 6 – November 8, 2011	Master Composter course – Solana Center	29
October 8, 2011	Whole Foods – Encinitas	55
November 5, 2011	San Diego Botanic Garden	22
November 19, 2011	Solana Center	17
January 21, 2012	San Diego Botanic Gardens	20
May 5, 2012	San Diego Botanic Gardens	32
Total Attendees		**281**

Table 9-3
Solana Center Used Oil Collection Events FY 2011-12

Encinitas Used Oil Events	Date	Participants
Kragen O'Reilly – 180 N. El Camino Real	10/29/11	43
PepBoys – 256 N. El Camino Real	4/14/12	27
Autozone – 120 Leucadia Blvd.	5/12/12	20
PepBoys – 256 N. El Camion Real	6/2/12	46
Kragen O'Reilly – 180 N. El Camino Real	6/23/12	39
Total Participants		**175**

Table 9-4
Solana Center Outreach Events FY 2011-12

Event	Date	Booth Visitors/Attendees
Encinitas Classic Car Nights	7/21/11	150
Encinitas Classic Car Nights	8/18/11	175
Solana Beach Movie Night	8/27/11	200
Encinitas Classic Car Nights	9/15/11	25
Cardiff Surf Classic	9/17-18/11	300
City of Encinitas 25th Anniversary Celebration	10/1/11	120
Encinitas Garden Tour	4/21/12	150
Encinitas Street Fair	4/29/12	125
Fiesta Del Sol – Solana Beach	6/2-3/12	275
Total Attendees		**1,520**

Table 9-5
Solana Center Automotive Presentations FY 2011-12

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
San Dieguito Academy	5/31/12	1	20
Total Attendees			**20**

9.3.4 PUBLIC OPINION SURVEY

The City of Encinitas joined the Think Blue San Diego Region workgroup in distributing public opinion surveys at regional events held throughout the County. In FY 2009-10, automotive surveys were given out at Enviro Fair at the San Diego County Fair. In FY 2011-12, residents were asked to complete a pre-assessment survey in order to receive a Regional 2012 Stormwater Pollution Prevention Calendar. Post-assessment survey cards were included with the calendars to test whether stormwater knowledge had increased after viewing the calendar. The post-assessment survey is also available on the Think Blue San Diego Region website. Results from all regional surveys will be included in the FY 2011-12 Regional URMP.

9.3.5 PUBLIC REPORTING METHODS

The City has a local Clean Water Hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours number (760) 633-2922 is available for after-hours emergencies and connects the caller with the City's external answering service which takes in calls and contacts the appropriate City staff to determine appropriate response actions. In 2010-11, an updated Clean Water Hotline email was established (cleanwater@encinitasca.gov) and is being promoted and disseminated through the numerous outlets and venues described in this report. There are also currently two regional storm water hotline numbers widely advertised within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800, and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voicemail message for 24-hour public access.

The Encinitas Clean Water Hotline has been in service for over a dozen years. In FY 2011-12, the Clean Water Program received **150 complaint** calls and emails. There were an additional **16** calls which were referred to other departments or agencies. The hotline phone number and email address is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-ups, and enforcement actions related to the hotline are presented in Appendix H-1.

The Clean Water Program has a specific website URL (**http://cwp.encinitasca.gov**) that provides information, as well as the general NPDES email address which can also be used to report stormwater violations. Each method of contact can also be used for general questions relating to stormwater.

9.3.6 PET WASTE DISPENSERS

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier, 34 doggie bag dispensers are located at 10 public parks and along several trails throughout the City. Trash cans are also available in these areas. Both the trash cans and bag dispensers are maintained by the City's Parks and Recreation Department. In addition, individual Bags on Board pet waste bag dispensers were developed in FY 2007-08 and continued to be distributed at regional events during FY 2011-12 (Appendix F-5).

9.3.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

City of Encinitas residents can bring their HHW and Electronic Waste to drop off facilities in Vista and Poway, free of charge. There is also a home pick up available for a small fee; however, the fee is waived for elderly and disabled residents. The Solana Center for Environmental Innovation conducts Electronic Waste Events every third Saturday of each month except November and December. Oil filter exchange events were organized through the Solana Center at local automotive supply stores, and free used oil containers were available for pick up from the Center to encourage oil recycling. Please refer to Section 6.4.2 and Table 9-3 in Section 9.3.3 for a detailed description of Used Oil events and collection totals.

9.3.8 PERMANENT BEST MANAGEMENT PRACTICE (BMP) SELF-VERIFICATION AND INSPECTION PROGRAMS

FY 2011-12 marked continued implementation of the Permanent BMP Self-Verification and Inspection Programs. This successful program provides a valuable opportunity for residents and business owners to be actively involved in protecting stormwater quality. Residents and business owners with treatment control BMPs on their private property are responsible for the successful operation and routine maintenance of these facilities. The City's Self-Verification and Inspection Programs aim to make residents and owners aware of their operation and maintenance obligations through formal notification campaigns and one-on-one communication. Notification campaigns generally consist of two rounds of notices mailed to the residents and business owners responsible for BMP maintenance. The initial notification packages consist of a combination of the following materials: notification/program introduction letter, Treatment Control BMP brochure, grading plan identifying the location of BMPs, and forms and self addressed stamped envelopes necessary to complete self-verifications. As part of the self-verification and inspection processes, City staff also offer one-on-one assistance with identifying BMPs, conducting BMP inspections, and determining maintenance needs. City staff is available to answer questions regarding the self-verification and inspection programs both over the phone and on-site as requested by the responsible party. As these programs have matured since 2008, the public knowledge and awareness of permanent BMPs and required operation and maintenance activities has continually improved. For more information regarding the Permanent BMP Self-Verification and Inspection Programs refer to Section 2 of this report.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

On January 29, 2009, the San Diego Region Stormwater Copermittees submitted the *Standardized Fiscal Analysis Method and Format* as required by municipal permit Sections G, J.1.a(3)(k), and J.1.c(1)(d). The defined reporting period of this report marks the third full application of the fiscal analysis methodologies developed in the document, and the information provided in this section has been prepared consistent with the standardized approach, using the best information available at the time of report preparation. The *Standardized Fiscal Analysis Method and Format* supports a greater scope of fiscal tracking, yielding a much more complete analysis of program related expenditures across a variety of City functions and departments and/or divisions that may not have been captured in previous reporting years. For consideration, using the standardized format to capture programmatic expenditures across multiple City departments that provide an array of interrelated stormwater management services has necessitated a considerable margin of approximation for various functional areas, particularly related to staff resources (labor costs). In compliment to approximated figures, actual programmatic expenditures have been used as much as possible to present a refined fiscal analysis overview specific to the City of Encinitas.

10.2 GENERAL BUDGET INFORMATION

The Clean Water Program and associated functions and activities in the City of Encinitas are organizationally shared by two primary departments: Engineering Services and Public Works. Engineering Services is responsible for the overall administration of the Clean Water Program and develops and implements core program components including water quality monitoring; development oversight (SUSMP & HMP implementation) inspection and enforcement; and education, outreach, and training related to stormwater and water quality. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4) including channel maintenance, sewer maintenance, street sweeping, municipal facility inventories, and municipal facility inspections. Other City departments additionally support core program functions and needs including the Planning, Finance, Fire, and Parks & Recreation departments.

The FY 2011-2012 Clean Water Program and supporting Department Budgets have been prepared in consideration of Water Quality Order No. 2007-0001 as well as other regulatory mandates placed upon the City of Encinitas. Despite significant budget constraints due to widespread economic downturns, the FY 2011-2012 budgets support the historic level of service provided by the Clean Water Program in addressing water quality concerns specific to Encinitas through response to citizen complaints, education, inspection, enforcement, monitoring, and development oversight. FY 2012-2013

budgeting represents the City's ongoing commitment to this program and the community that it serves.

10.3 FISCAL ANALYSIS METHODS

As introduced above, the information presented in this section has been prepared based upon the *Standardized Fiscal Analysis Method and Format* document that was collaboratively developed by the San Diego County Stormwater Copermittees. This document provides the Copermittees, including the City of Encinitas, with guidance and standards to analyze and report on their respective urban runoff management program expenditures, and to identify the funding sources for their programs in a uniform format. While the regionally developed methodologies greatly support reporting consistencies such as expenditure categories and reporting metrics, the *Standardized Fiscal Analysis Method and Format* does not set up stringent or prescribed accounting practices.

In order to elucidate the information presented below, it is important to identify any assumptions used to calculate expenditures related to various program elements. The following points of consideration should be noted:

- Staff Resources have been calculated as a percentage of time and associated costs applied to a specific program area.
- Staff Resources have been captured for both Engineering Services and Public Works Operations personnel.
- In order to avoid cost "overlaps" in those areas implemented across multiple departments, supporting department staff costs have not been included in the accounting below.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

The City of Encinitas Clean Water Program FY 2011-2012 Jurisdictional expenditure summary is presented in Table 10-1. In FY 2011-2012, the City's Coastal Storm Drain Monitoring; Dry Weather Monitoring; IDDE; Construction, Education, Residential, and Commercial program elements; and overall program administration were accomplished through the use of five full time Clean Water Program staff. Land Development and Construction components utilized Engineering Services staff resources from various divisions, and Municipal activities utilized Public Works personnel. Labor related costs have been captured in the summary below based upon percentages of applicable staff resources. In addition, non-labor costs including materials, supplies, and equipment have also been included.

Table 10-2 presents the Watershed expenditure summary specific to Encinitas, and Table 10-3 presents the Regional expenditure summary capturing the City of Encinitas share of regionally distributed costs.

10.4.2 FUNDING SOURCES

In FY 2003-2004, the City Council attempted to pass a Clean Water Fee, which charged $5.00 per month per water meter to the residents and businesses in the City of Encinitas. The Howard Jarvis Taxpayers Associated challenged the fee based upon Proposition 218 requirements. The City was required to add this item to the ballot in March 2006 which was defeated. As a result, the City of Encinitas must and continues to completely subsidize the Clean Water Program through the General Fund.

Table 10-1 – Jurisdictional Expenditure Summary

JURISDICTIONAL COMPONENTS		
ADMINISTRATION		137,693
DEVELOPMENT PLANNING		490,005
CONSTRUCTION		183,612
MUNICIPAL		1,638,563
INDUSTRIAL AND COMMERCIAL		107,162
RESIDENTIAL		26,790
IDDE		147,955
EDUCATION		26,790
PUBLIC PARTICIPATION		13,395
SPECIAL INVESTIGATIONS		1,365
NON-EMERGENCY FIREFIGHTING		13,395
Jurisdictional Total		2,786,727

Table 10-2 – Watershed Expenditure Summary

WATERSHED		
CARLSBAD WATERSHED		2,519
Watershed Total		2,519

Table 10-3 – Regional Expenditure Summary

REGIONAL		
CITY OF ENCINITAS - REGIONAL COST SHARE		58,064
Regional Total		58,064

TOTAL EXPENDITURES: FY 11-12	***$***	***2,847,310***

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City of Encinitas began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs to evaluate program effectiveness. Due to a variety of complications on a regional level, that standardization process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures modeled after conventionalized strategies and calibrated to evaluate "significant" program activities as required in Order No. 2007-0001.

Since the submittal of the JURMP in March 2008, little additional progress has been made on regionally standardized approaches to program effectiveness assessment. In FY 2009-2010, the Copermittees' Fiscal, Reporting, and Assessment Workgroup initiated renewed efforts to undertake the issue of standardized assessment metrics and procedures. The City of Encinitas is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's stormwater program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities unique to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the stormwater program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP Annual Report, can be found in Appendix G-1.

Levels 2 and 3

Tables 11-3 through 11-10 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City of Encinitas within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the San Diego Regional Water Quality Control Board adopted Addendum 2 to Order No. 2007-0001, effectively extending the annual due date of the Illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City of Encinitas that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City of Encinitas and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. The Encinitas Stormwater Manual was in use during all of FY 2011-12 and has been well received by the public. Further, two significant program elements were in the fourth year of full implementation within the defined reporting period of this report (treatment control BMP self-verification and inspection); in the fourth year of implementation responsible parties were more responsive than ever. 80% of responsible parties submitted self-verification documentation upon request. Responsiveness of responsible parties has consistently improved over the past four years. Continued refinement of this program area will support long term effectiveness assessment measures for development planning. *(See Table 11-3)*

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures *(See Table 11-4).* It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue. Additionally, stormwater construction permitting dynamics have changed with the adoption of the new statewide Construction General Permit Order No. 2009-0009-DWQ (CGP) in which project applicants are responsible for determining permit applicability and project specific requirements per the CGP.

Municipal

Enhanced stormwater conveyance, drainage facility, channel maintenance, and inspection and street sweeping activities were developed and implemented, equating to the removal of salient volumes of debris in FY 2011-12. Effective operations and maintenance activities are demonstrated in Table 11-5 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will continue to support the efficacy of municipal program activities.

Industrial and Commercial

Similar to prior reporting years, Clean Water Program activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City of Encinitas has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (*See Table 11-6)* through the gathering of critical statistics, including a knowledge and BMP assessment scoring system presented in Figures 11-1 and 11-2. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Encinitas.

Education

Education effectiveness is assessed for a variety of program elements as presented in the Table 11-9 below. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success. These measurable successes will also be enhanced by supporting items such as the Clean Water Program logo, developed in 2009-2010, which will increase program notoriety and promote consistency of educational programs and activities.

Public Participation

The City of Encinitas provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however, the assessment measures identified in Table 11-10 are focused on success of the venues and outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, Clean Water Hotline calls, and volumes

of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 PROGRAM REVIEW AND MODIFICATION

While no significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document, Clean Water Staff continued to meet periodically throughout the reporting period of this report to evaluate effectiveness assessment measures as they relate to specific program elements. The purpose of this effort has been to keep the issue of effectiveness assessment in the forefront of program implementation strategies, and to conduct ongoing effectiveness assessment, and augment program areas as deemed necessary. While effectiveness assessments conducted on an annual basis are helpful, a critical first step in the process is to identify significant activities and to evaluate value added benefits both to the program and to the community of Encinitas throughout the implementation period.

Table 11-3
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify High Efficiency Treatment BMPs are Approved	Internal The City's Engineering Department staff is well versed in treatment BMPs and pollutant removal efficiencies.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify Proposed BMPs are Implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects installing / implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	N/A	
Verify BMPs are Properly Maintained	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal N/A, see Municipal section.	Percent of responsible parties submitting verification documentation	80%	Additional load reduction could be achieved through improved BMP maintenance.
		Number of responsible parties that did not submit self-verification documentation	15	
		Number of sites with BMPs requiring repair or maintenance	9	
		Resolution status of repair/maintenance	8 complete; 1 pending (enforcement action in process)	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify Planned BMP Implementation - Review Proposed Plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects must meet minimum requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify Proposed BMPs are Implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs.	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of inspection actions resulting in Corrective Action.	28%	
		Percent of inspection actions resulting in a Notice of Violation (NOV).	2%	
		Percent of inspections actions resulting in a Citation.	<1%	
		Number of dry weather monitoring exceedances traced to construction sources.	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify Proposed BMPs are Implemented at Facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep Streets and Parking Facilities		N/A, streets and parking facilities are swept as determined necessary and in compliance with Municipal Stormwater Permit standards.		Amount of sediment and debris removed per length of street swept (weight or volume per curb mile).	2,270 tons/ 9,199 curb miles (0..25 tons/curb miles)
Maintain and Clean the MS4 (catch basins, inlets and open channels).		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume).	558 tons
Maintain Sanitary Sewer System		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons).	Data will be included in Section 7.0 for the 12/15/12 submittal.
Maintain Municipal Treatment Control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from storm drain filter inserts.	1.88 tons
				BMP effectiveness studies	N/A
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP Implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Percent of inspected sites in compliance with BMP requirements (inspections that did NOT require follow-up actions)	73%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of inspection related enforcement actions	100%		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	Data will be included in Section 7.0 for the 12/15/11 submittal.	Number of IC/IDs eliminated through enforcement actions taken as a result of routine inspection OR complaint investigations. (NOVs & Citations)	20
		Based on the results of individual facility assessment surveys, most facilities inspected have a good general understanding of BMPs and implement BMPs as required. See Figure 11-1 and 11-2 below.			
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

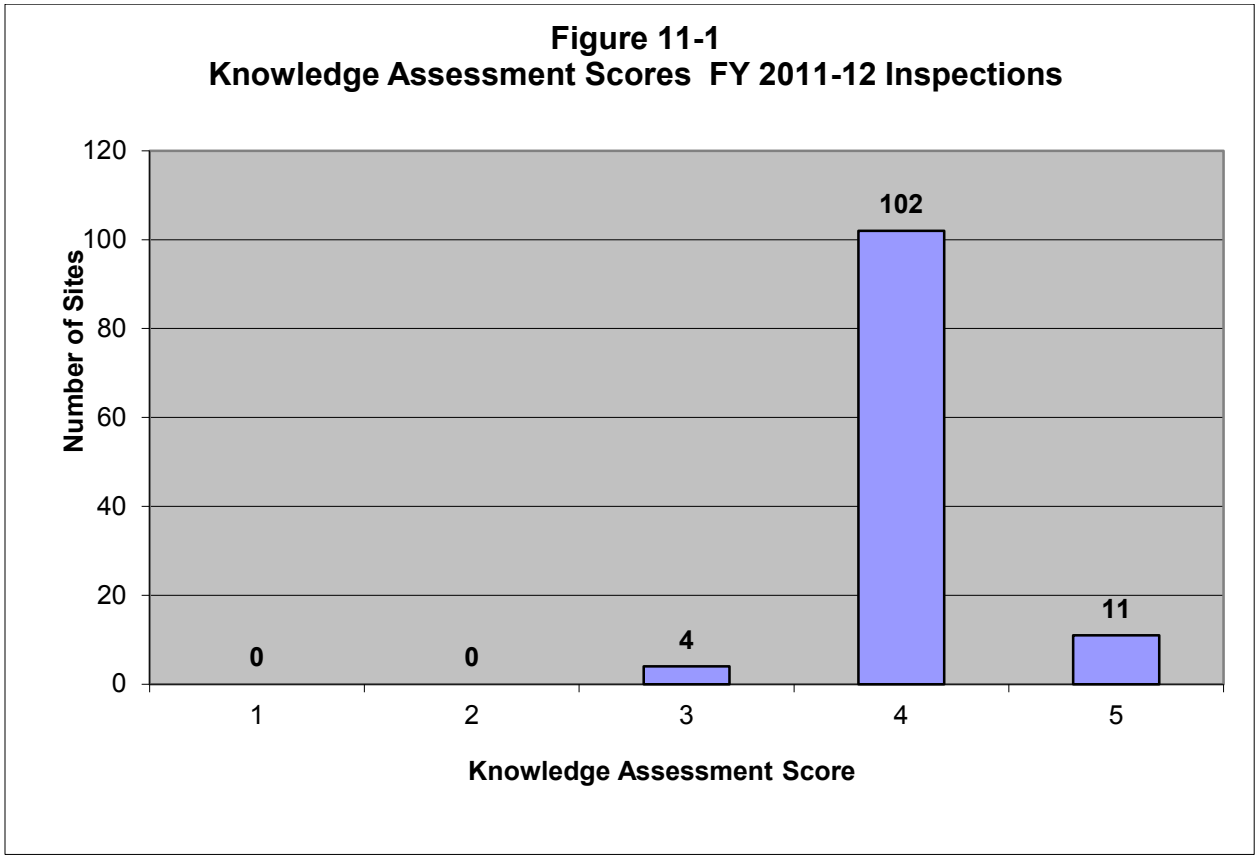
Figure 11-1
Knowledge Assessment Scores FY 2011-12 Inspections
Number of Sites
120
100
80
60
40
20
0
0
0
4
102
11
1
2
3
4
5
Knowledge Assessment Score

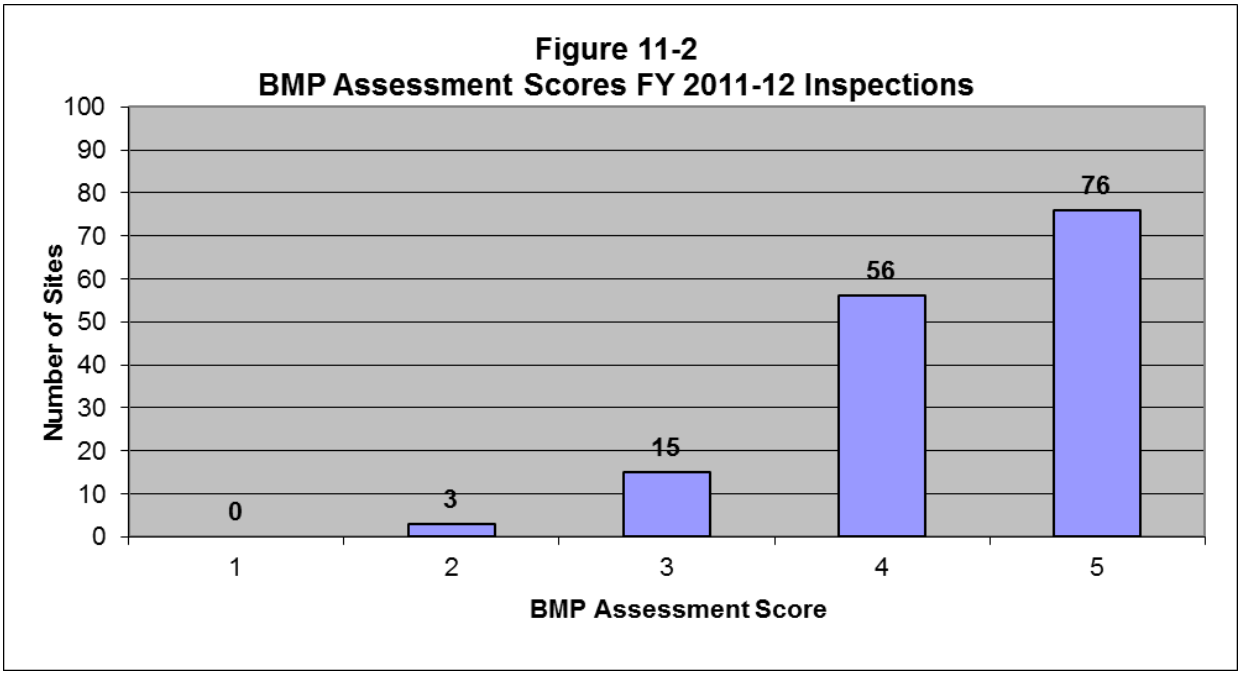
Figure 11-2
BMP Assessment Scores FY 2011-12 Inspections
Number of Sites
100
90
80
70
60
50
40
30
20
10
0
0
3
15
56
76
1
2
3
4
5
BMP Assessment Score

Table 11-7
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP Implementation	External Residents were educated in variety of ways in 2011/2012; see sections 6 and 8 for details. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Number of residential incidents reported to storm water hotline	594	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution status of residential related enforcement actions	100%	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	Clean Water Program staff executes the City's Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.
Respond to Incidents Reported to Clean Water Hotline	Dedicated Engineering and Public Works staffs are trained to respond to reported incidents.	N/A, personnel respond to incidents as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.
Respond To and Clean up SSOs	Dedicated Public Works staffs are trained to respond to reported SSO incidents.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2011-12.
	Estimated number of impressions made*	12,000		
	Estimated number of educational materials distributed to various community sectors	3,578		
Provide storm water education to City staff & contractors	Internal The City provides staff and contractors w/ regular stormwater training. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2011--12.
	Number of Staff and Contractors trained	127		

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Impressions are based upon the number of interactions with public at education events, workshops, and presentations.

Table 11-10
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Estimated number of attendees at events, workshops, and presentations	7,245	Amount of trash, recycling, and debris collected at cleanup events	242
		Number of calls and or emails received to the Clean Water Hotline*	150 + 16 referrals	Amount of HHW items collected	106,047

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The sum total of calls to the Clean Water Hotline related to all Community Sectors.

12.0 SPECIAL INVESTIGATIONS

As determined necessary and appropriate, the City of Encinitas is engaged in a variety of ongoing and long-term investigations to support reasoned and informed management actions to address local water quality concerns and threats.

12.1 BACTERIA TOTAL MAXIMUM DAILY LOAD (TMDL)

In 2010, the San Diego Regional Water Quality Control Board (Regional Board) adopted Resolution No. R9-2010-0001 to incorporate into the Basin Plan the *Revised Total Maximum Daily Loads (TMDL) for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)* (hereafter, Bacteria TMDL or TMDL). Per the Resolution adopting the Basin Plan Amendment (BPA), the TMDL was established to address exceedances of the Contact Water Recreation (REC-1) water quality objectives.

The BPA lists the San Marcos Hydrologic Area (HA) shoreline as a waterbody addressed by the TMDL. Inclusion of the San Marcos HA in the TMDL is based upon data from the receiving waters at Moonlight State Beach in Encinitas. Responsible Parties in the San Marcos HA include the Cities of Carlsbad, Encinitas, Escondido, San Marcos, the California Department of Transportation, and County of San Diego.

12.1.1 SAN MARCOS HA – BACTERIA TMDL TECHNICAL ANALYSIS

Based upon the unique dynamic of the San Marcos HA as it relates to the provisions of the Bacteria TMDL, and as the lead responsible party for the HA, the City of Encinitas coordinated an effort to identify, evaluate, and assess a variety of approaches to meet their mandated obligations defined by the Bacteria TMDL. The starting point for this effort was to evaluate existing information and data to assess the extent and magnitude of the REC-1 impairment in order to define implementation of the Bacteria TMDL in the San Marcos HA.

To assess the extent and magnitude of exceedances of the REC-1 water quality objectives (the basis for the TMDL), current and prior Clean Water Act Section 303(d) lists were evaluated. Per the 2010 303(d) list, the Pacific Ocean Shoreline at Moonlight State Beach is listed for Total Coliform based upon exceedances of the Shellfish Harvesting Beneficial Use (SHELL) water quality objectives and not the REC-1 water quality objectives[1]. As the TMDL applies only to the REC-1 beneficial use and not the SHELL beneficial use[2], prior 303(d) lists were evaluated as well. Prior 303(d) lists, including the 2002 list that the TMDL is based upon, only list the San Marcos HA as impaired for

[1] http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/02492.shtml#17722
[2] Resolution No. R9-2010-0001, Pg. 4, footnote 17.

indicator bacteria without specifying the bacteria indicator and/or beneficial use (SHELL and/or REC-1) that the listing decision is based upon.

To assess impairment status of the REC-1 water quality objectives (both historic and current impairment), data were evaluated against the applicable water quality objectives. Exceedances of the objectives were compared to the allowable exceedance frequencies per the *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List* (Listing Policy) [3].

Based upon the impairment and associated data analysis conducted as part of this effort, the following conclusions were made:

- The Pacific Ocean Shoreline at Moonlight State Beach, the basis for including the entire San Marcos HA in the Bacteria TMDL, is not impaired for REC-1 beneficial uses.
- Per the 2010 303(d) list, the listing at Moonlight Beach for total coliform is based upon the water quality objectives for the SHELL beneficial use only, and is not listed for REC-1.
- Based upon data analysis, no REC-1 impairment can be established for any period of time from 1999-2011, including the approximate period of time for which data were assessed to establish the TMDL (the 2002 303(d) List).
- Based upon data analysis, all other beach monitoring locations in the San Marcos HA (Batiquitos Lagoon Outlet, Swami's, Ponto Drive) are also not impaired for REC-1 beneficial uses.
    - Similar to Moonlight State Beach, no REC-1 impairment can be established for any period of time from 1999-2011, including the approximate period of time for which data were assessed to establish the TMDL (the 2002 303(d) List).

Defined by the conclusions of the San Marcos HA TMDL Technical Analysis summarized above and confirmed by RWQCB staff, it was determined that the Moonlight Beach segment is not currently listed for REC-1 impairments. Therefore, the San Marcos HA responsible parties are not required to submit a Bacteria Load Reduction Plan (BLRP) as long as monitoring data continues to support compliance with REC-1 water quality standards.

12.2 SAN ELIJO LAGOON RESTORATION PROJECT

For a number of years, the City of Encinitas along with numerous agencies including the Army Corps of Engineers, San Elijo Lagoon Conservancy, Caltrans, SANDAG, SDRWQCB, California Coastal Commission, Department of Fish & Game, and NCTD

[3] Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List, adopted September 2004

have been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (I-5) North Coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast project.

The goal of the study and ultimate project is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. Related studies have looked specifically into the effects of varying channel widths at each opening: inlet and PCH Bridge, the SDNR system, and the I-5 freeway. Various alternatives have been identified based upon complex system simulations and evaluated on effects to reduce tidal muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur.

Work on this project continued throughout the defined reporting period of this report, most significantly through the progression of the environmental review process, the development of a draft EIR/EIS, public scoping meetings, and the completion of associated technical studies.

Notably, the San Elijo Lagoon Restoration Project is a multi-agency effort, and far-reaching coordination has been critical and remains central to the long-term success of this project. In consideration of future Lagoon specific TMDL development and the emerging lagoon restoration scenarios, on May 24, 2010, staff from the City of Encinitas, San Diego Regional Water Quality Control Board (SDRWQCB), San Elijo Lagoon Conservancy (SELC), and Moffat & Nichol (Restoration Project Consultant) convened to discuss how these efforts may meet the mutual needs of the stakeholders involved. This meeting provided a good venue to connect the collective benefits of restoration efforts with water quality improvements in the San Elijo Lagoon and to better define priorities for all parties involved.

13.0 NON-EMERGENCY FIRE FIGHTING

13.1 INTRODUCTION

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (No. 3 and No. 5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. Notably, significant improvements to fire station #2 (Cardiff), including the addition of treatment control BMP facilities, is anticipated for completion within the forthcoming reporting period. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis by Clean Water Staff. Following is a detailed description of the program developed by the City to reduce pollutants from non-emergency fire fighting flows.

13.2 PROGRAM FOR NON-EMERGENCY FIRE FIGHTING FLOWS

The City of Encinitas has identified a number of potential discharge sources including maintenance of fire and emergency vehicles and equipment, training exercises, and facility maintenance. It is important to recognize and make provision for the post-emergency rehabilitation of response equipment including tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency, as this equipment must be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for subsequent response actions. As such, the use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified and will be performed in a manner that minimizes discharges to the MEP. In consideration of the non-emergency activities identified above, the City's fire personnel utilized the following BMPs to address discharge generated from such activities during FY 2010-11:

- Whenever possible, practice drills were performed in areas where runoff was contained. When practice drills were performed in an area where runoff could potentially leave the site, the site was surveyed by the officer-in-charge prior to training activities to ensure that debris would not enter the storm drain system as a result of the drill.
- As determined feasible, runoff from training drills or other non-emergency activities, was directed to landscaped areas.
- Areas that have debris that could potentially enter the storm drain system as a result of the drill activities were not used for training until the debris had been removed.
- Live fire training activities were pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
- Runoff from live fire training activities was contained and recovered with the City's Vac-con truck so that runoff did not discharge to the storm drain system or receiving waters.

- Good housekeeping and dry cleanup practices were utilized as part of standard facility maintenance procedures.

13.2.1 EDUCATIONAL METHODS

Details of the City's educational programs, including fire fighting personnel education, are provided in Section 8 of this document.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 as required by Water Quality Order No. 2007-0001. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes made to the JURMP since the comprehensive JURMP update in the spring of 2008 would be detailed in the preceding sections of this JURMP Annual Report. Revisions may include, but would not be limited to, required inventory updates, necessary process and procedure changes, or programmatic modifications to improve efficiency and effectiveness.

15.0 CONCLUSIONS & RECOMMENDATIONS

During the 2007-2008 reporting period, the City of Encinitas updated its JURMP, which was finalized and submitted to the RWQCB on March 24, 2008. As captured in the preceding 2011-2012 JURMP Annual Report, the City of Encinitas has continued to implement and refine various program elements as determined appropriate, standardize core program components, and stay current with emerging trends and technology. Further, the City has and will continue to actively participate and collaborate with other Copermittees in the development and collective implementation of regional programs. As compliance standards evolve based upon defined timeframes in Order No. 2007-0001, the City of Encinitas will continue to augment and update programs as necessary to comply with regulatory requirements, and evaluate the overall efficacy of program elements against value added outcomes to assure focused and refined implementation protocols.

Appendix A

Development Planning

A-1 Treatment Control BMP Inventory

A-2 SUSMP Priority Project Map

A-3 Treatment Control BMP Inspection Priority Flowchart

A-4 Sample Grading Certification BMP Installation Verification Letter

A-5 Treatment Control BMP Operation and Maintenance Self-Verification Letters

A-6 Treatment Control BMP Operation and Maintenance Brochure

A-7 Treatment Control BMP Operation and Maintenance Self-Verification Online Form

A-8 Treatment Control BMP Operation and Maintenance City Inspection and Self-Verification Results and Findings

A-9 Treatment Control BMP Operation and Maintenance Inspection Form

A-10 Stormwater Pollution Control Checklist and Certification

A-11 Hydromodification Management Plan Checklist and Certification

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
55	I	540 Cornish Dr	Vegetated Swale	Biofiltration Swale	9/27/2005	3/17/2008	Encinitas Other		Low
55	I	540 Cornish Dr	Vegetated Swale	Biofiltration Swale	9/27/2005	3/17/2008	Encinitas Other		Low
60	G	3275 Poppy Hills Ln	Extended Detention Basin	detention basin	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Rock Swale	rock-lined swale	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Pervious Pavement	gravel parking area	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	fuel slab reservoir	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	roof cover for fueling area	10/15/2007	6/7/2010	Encinitas Other		Low
87	G	354 Santa Fe Dr	Extended Detention Basin	detention basin	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
94	I	3740 Fortuna Ranch Rd	Rock Swale	gravel swale	4/12/2010	7/16/2010	Private	2010-0170453	Low
94	I	3740 Fortuna Ranch Rd	Rock Swale	gravel swale	4/12/2010	7/16/2010	Private	2010-0170453	Low
94	I	3740 Fortuna Ranch Rd	Rock Swale	gravel swale	4/12/2010	7/16/2010	Private	2010-0170453	Low
106	G	3358 Wildflower Valley Dr	Vegetated Swale	min. 100' long priority stormwater BMP grass swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
106	G	3358 Wildflower Valley Dr	Vegetated Swale	treatment swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
153	I	111 Chesterfield Dr	Interceptor (Sewer)	traffic rated oil seperator	8/31/2006	2/13/2007	Private		Medium
153	I	111 Chesterfield Dr	Interceptor (Sewer)	traffic rated oil seperator	8/31/2006	2/13/2007	Private		Medium
153	I	111 Chesterfield Dr	Mechanical Filter	Flo-Gard FF-RF24D	8/31/2006	2/13/2007	Private		Medium
169	G	510 s el camino real	Vegetated Swale	vegetated swale	9/23/2008	7/15/2009	Private		Medium
169	G	510 S El Camino Real	Vegetated Swale	grass-lined swale	9/23/2008	7/15/2009	Private	2007-0310771	Medium
169	G	510 S El Camino Real	Mechanical Filter	Kristar flogard	9/23/2008	7/15/2009	Private	2007-0310771	Medium
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low

Note: All TC BMPs are located in the Carlsbad Watershed

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Infiltration Basin	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Infiltration Basin	15' X 15' X 12" gravel	10/26/2006	4/6/2009	Private	2006-0754938	Low
183	G	3234 Olivenhain Farms Rd	Vegetated Swale	bio-swale for post BMP treatment	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
187	G	1060 Urania Ave	Dry Well	9' deep drywell	3/22/2007	TBD	Private	2006-0898796	Medium
187	G	1060 Urania Ave	Vegetated Swale	vegetated swale	3/22/2007	TBD	Private	2006-0898796	Medium
187	G	1060 Urania Ave	Cistern/Bioretention	20'X12'X5' Cistern	3/22/2007	TBD	Private	2006-0898796	Medium
276	G	Phoebe St & Hwy 101	Retention/Infiltration Vault	stormwater collection vault	4/19/2007	6/19/2008	Private		High
276	G	Phoebe St & Hwy 101	Vortex Separator	fix-point says drain insert, polygon says veg swale, given bmp description; StormFilter chamber by Contech	4/19/2007	6/19/2008	Private		High
276	G	Phoebe St & Hwy 101	Vortex Separator	StormFilter chamber by Contech	4/19/2007	6/19/2008	Private		High
325	G	2620 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2620 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2620, 2622, 2624 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2622 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2622 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2624 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2624 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
372	G	1657 N Vulcan Ave	Infiltration Basin	grass swale	8/9/2007	TBD	Private	2007-0615430	Medium
385	G	1555 Crest Dr	Vegetated Swale	BMP landscape swale	8/31/2007	7/13/2009	Private	2007-0611836	Low
385	G	1555 Crest Dr	Rock Swale	gravel/sand filter	8/31/2007	7/13/2009	Private	2007-0611836	Low
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Vegetated Swale	flow-based system for BMP	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	stormtech detention	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium

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Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
386	G	3535 Manchester Ave	Mechanical Filter	Biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Katchall curb outlet filter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
388	G	1435 Lake Dr	Vegetated Swale	6'W X 20'L bioswale	12/17/2007	TBD	Private		Medium
388	G	1435 Lake Dr	Vegetated Swale	6' X 28'L bioswale	12/17/2007	TBD	Private		Medium
388	G	1435 Lake Dr	Vegetated Swale	203' long grass-lined swale	12/17/2007	TBD	Private		Medium
414	G	4455 Manchester Ave	Vegetated Swale	grassy swale	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Vegetated Swale	grassy swale	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Vortex Separator	StormFliter per Contech stormwater solutions	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	SWC of Encinitas BLVD & Manchester AVE	Mechanical Filter	Install (SF 1) 48" precast storm filter	5/10/2007	2/20/2008	Private		Medium
437	G	222 El Camino Real	Vortex Separator	StormScreen unit	8/31/2007	5/22/2008	Private	2007-0571994	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Turf Block Swale	grasscrete	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Turf Block Swale	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Interceptor (sewer)	Jensen sand and oil trap model JP50050	7/6/2007	4/6/2009	Private - HOA		Medium
462	G	90 N Coast Hwy 101	Landscaped Area	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Landscaped Area	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
482	G	1864 Crest Dr	Rock Swale	4' wide rock lined treatment swale w/ rip-rap entrance	3/28/2008	3/31/2011	Private	2007-0495449	Low
482	G	1864 Crest Dr	Extended Detention Basin	detention basin	3/28/2008	3/31/2011	Private	2007-0495449	Low
482	G	1864 Crest Dr	Rock Swale	4' wide rock lined treatment swale w/ rip-rap entrance	3/28/2008	3/31/2011	Private	2007-0495449	Low
482	G	1864 Crest Dr	Turf Block Swale	6' wide turf block reinforced grass swale	3/28/2008	3/31/2011	Private		Low
483	G	540 La Costa Ave	Interceptor (Sewer)	wastewater sump	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Vegetated Swale	bio-swale	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/28/2010	Private	2007-0637421	Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	4' wide landscaped swale	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Infiltration Basin	infiltration basin	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	8' wide treatment swale with 6' wide bottom	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Mechanical Filter	flogard lopro hydrocarbon absorbant filter	8/21/2007	8/4/2008	Private		Medium

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Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Rock Swale	rock swale	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	65 l.f. gravel detention / dispersion pit	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
692	G	1435 Rainbow Ridge	Vegetated Swale	6' BMP treatment swale	3/27/2008	TBD	Private	2008-0029728	TBD
704	G	230 Quail Gardens Dr	Pervious Pavement	pavers	4/17/2008	TBD	San Diego County		Low
704	G	230 Quail Gardens Dr	Vegetated Swale	vegetated BMP swale and 2 energy dissipators	4/17/2008	TBD	Private	2008-0162733	Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	TBD	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	TBD	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	TBD	Private		Low
705	G	3354 Wildflower Valley Dr	Rock Swale	rock-lined swale	1/14/2008	TBD	Private	2008-0106026	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Landscaped Area	landscaped area	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
716	G	662 Encinitas Blvd	Pervious Pavement	grasspave2 by Invisible Structures, Inc.	6/2/2008	TBD	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	Vegetated Swale	3' wide grass lined treatment swale	6/2/2008	TBD	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	Other	Drain Inserts	6/2/2008	TBD	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	Vortex Separator	StormFilter catch basin by Contech	6/2/2008	TBD	Private	2008-0243901	TBD
718	G	687 South Coast Hwy 101	Advanced Mechanical Filter	6' X 12' precast StormFilter by Contech	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Interceptor (Sewer)	320 gal. sand-oil interceptor	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
789	G	2005 San Elijo Ave	Interceptor (Sewer)	grease interceptor	1/9/2008	3/23/2009	Private	2008-0609543	Low
789	G	2005 San Elijo Ave	Pervious Pavement	porous concrete	1/9/2008	3/23/2009	Private	2008-0609543	Low
883	G	1058 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	TBD	Private		TBD
883	G	1058 Hymettus Ave	Pervious Pavement	modular reinforced turf area	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Infiltration Basin	15' X 8' X 5' infiltration basin	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
883	G	1058 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	TBD	Private		TBD
883	G	1058 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	TBD	Private		TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	TBD	Private		TBD
883	G	1076 Hymettus Ave	Infiltration Basin	15' X 8' X 5' infiltration basin	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Media Filter	2' diameter, 6' deep gravel pit with open bottom for BMP use	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	2.5' wide of 6" cobbles over 12" thick pea gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	10' X 25' gravel	1/16/2009	9/24/2009	Private	2008-0609456	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Vegetated Swale	2' wide grass swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	TBD	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	TBD	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Vegetated Swale	vegetated swale	1/14/2009	TBD	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Flow-Through Planter	6' X 12' Filterra unit	1/14/2009	TBD	Private	2009-0016310	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1447 Bella Vista Ct	Landscaped Area	planter area	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1447 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1447 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1459 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1459 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	11/17/2010	Private	2009-0134165	Medium
963	G	1002 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	515430	TBD
963	G	1002 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1003 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1006 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1006 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
963	G	1007 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1010 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1010 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1011 Scarley way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1011 Scarley way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1011 Scarley way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1013 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1013 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1013 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1014 Scarlet way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1014 Scarlet way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1017 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1017 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1017 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1017 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1021 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1021 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Vegetated Swale	Vegetated Swale	10/8/2009	TBD	Private	2009-515430	TBD
963	G	923 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	923 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	927 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	931 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	932 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	932 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	935 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	936 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	939 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	940 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
983	G	1320 Encinitas Blvd	Vortex Separator	Contech Stormfilter	10/28/2008	TBD	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	TBD	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	TBD	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	TBD	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	TBD	Private	2008-0522122	Medium
983	G	1340 Encinitas Blvd	Other		10/28/2008	TBD	Private		Medium

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	8/6/2007	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	8/6/2007	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	8/6/2007	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	8/6/2007	6/26/2009	Private	2008-0075668	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 315, 319, 323, and 327 Hana Ct	Vegetated Swale	vegetated swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	315 and 311 Hana Ct	Rock Swale	rock swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1389	G	302 Requeza St	Extended Detention Basin	stormwater detention treatment basin	1/5/2004	8/2/2005	Private	2003-1503915	High
1457	G	200 Saxony Rd	Vegetated Swale	grass-lined swale	5/6/2004	4/6/2006	Private		Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1442 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach basin	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach apron	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Mechanical Filter	flogard+plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Mechanical Filter	flogard+plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1532	G	1316, 1318 Summit Ave	Vegetated Swale	grass swale and storm water "cleansing area" (detention basin)	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
1600	G	1588-1590 Leucadia Blvd	Interceptor (Sewer)	grease trap	6/14/2004	7/6/2005	Private		Medium
5814	G	2108 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2108 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
5814	G	2112 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2112 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low
6402	G	311 Princehouse Ln	Vegetated Swale	grass swale (275 ft by 4 ft)	7/18/2005	12/8/2006	Private	2004-0576710	Medium
6442	G	3616 Manchester Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Mechanical Filter	fossil filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Extended Detention Basin	Football field is a detention basin with a filtration sytem under it There are two 2000 gallon sand-oil interceptors	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6813	G	155 Saxony Rd	Vegetated Swale	grass swale/infiltration basin	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	Vegetated Swale	grass swale	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	Other	drain inlet with seepage pit	9/5/2003	7/23/2009	Private		Low
7005	G	503 Ocean Bluff Wy	Vegetated Swale	vegetated swale around the home	9/4/2002	4/30/2007	Private		Medium
7005	G	503 Ocean Bluff Wy	Vegetated Swale	vegetated swale around the home	9/4/2002	4/30/2007	Private		Medium
7005	G	507 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	509 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	509 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	510 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	513 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	513 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	517 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	517 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	518 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	521 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	521 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	525 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	526 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	532 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	532 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	558 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	558 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium

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7054	G	645 Via Cantebria	Mechanical Filter	fossil filter insert	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7300	G	740 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7300	G	740 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7300	G	760 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7300	G	760 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7305	G	131 Princehouse Ln	Rock Swale	3-ft wide gravel swale	1/10/2003	4/7/2004	Private		Low
7305	G	131 Princehouse Ln	Infiltration Basin	3-ft diameter absorption pit, 4-ft deep w/ 3/4" rock	1/10/2003	4/7/2004	Private		Low
7374	I	95 N Vulcan Ave	Pervious Pavement	grass pavers	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement parking lot	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Rock Swale	rock lined swale	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Extended Detention Basin	detention basin	1/30/2003	10/16/2006	Encinitas Street Maintenance		Medium
7425	G	195 La Mesa	Landscaped Area	runoff to street and enclosed rock trench across the back	12/16/2002	3/9/2004	Private		Low
7425	G	195 La Mesa Ave	Landscaped Area	landscaped area	12/16/2002	3/9/2004	Private		Low
7425	G	195 La Mesa Ave	Landscaped Area	landscaped area	12/16/2002	3/9/2004	Private		Low
7588	G	1200 Garden View Rd	Vegetated Swale	grass lined swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	vegetated swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4120-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7604	G	111 Chesterfield Dr	Infiltration Basin	crushed rock infiltration for offsite runoff	10/23/2003	7/3/2008	Private		Low
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	221 La Costa Ave	Vegetated Swale	landscaped area for filtration	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	235 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium

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7702	G	301 Chopin Way	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	315 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	315 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	322, 336 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	329 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Retention/Infiltration Vault	stormwater detention vault	8/6/2003	1/23/2006	Private		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	TBD	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	TBD	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	TBD	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	TBD	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	TBD	Encinitas Wastewater		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	TBD	Encinitas Wastewater		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	TBD	Encinitas Wastewater		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	TBD	Encinitas Parks		Medium
7732	G	175 La Costa Ave	Other	DG-lined swale	12/30/2003	5/15/2006	Private		Medium
7732	G	175 La Costa Ave	Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	183 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7771	G	1550 S El Camino Real	Extended Detention Basin	desiltation basin	10/28/2003	2/4/2008	Private		Low
7771	G	1550 S El Camino Real	Pervious Pavement	pervious pavemnet "gravel pave" manufactured by Invisible Structures	10/28/2003	2/4/2008	Private		Low
7771	G	1550 S El Camino Real	Pervious Pavement	pervious pavemnet "gravel pave" manufactured by Invisible Structures	10/28/2003	2/4/2008	Private		Low
7771	G		Other	Dissipator per sdrsd d-40	10/28/2003	2/4/2008	Private		Low
7771	G		Landscaped Area	Landscaped area for storm water cleaning	10/28/2003	2/4/2008	Private		Low
7771	G		Pervious Pavement	Pervious pavement "Gravel Pave" as manufactured by invisible structures	10/28/2003	2/4/2008	Private		Low
7780	G	133 Rosebay Dr	Infiltration Basin	rock-lined infiltration trench	8/4/2003	4/29/2005	Private		Low
7780	G	133 Rosebay Dr	Bioretention Basin	terraced stormwater drainage area	8/4/2003	4/29/2005	Private		Low
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium

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7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Interceptor (Sewer)	grease interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Sand/Oil Separator (stormwater)	sand/oil interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7828	G	1200 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1200 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1208 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1216 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1219 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1945 Lake Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7847	G	2300 Eighth St	Infiltration Basin	filtration/desiltation pond	8/12/2003	7/23/2009	Private		Low
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegation cleansing area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	landscaped area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3430 Via Monte verde	Infiltration Basin	rip rap lined infiltration basin (does not conform to plan)	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	Vegetated Swale	landscape area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G		Other	Rip rap energy dissipator	1/1/2003	10/24/2005	Private		Medium
7852	G		Other	Rip rap energy dissipator	1/1/2003	10/24/2005	Private		Medium
7852	G		Other	Rip rap energy dissipator	1/1/2003	10/24/2005	Private		Medium
7852	G		Other	Rip rap energy dissipator	1/1/2003	10/24/2005	Private		Medium
7893	G	Christine Pl	Retention/Infiltration Vault	'Stormchamber' infiltration units (4)	1/27/2004	TBD	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Flogard Plus filter insert	1/27/2004	TBD	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Fflogard Plus filter insert	1/27/2004	TBD	Private	2003-1457627	Medium
9023	G	427 Bristol Ave	Pervious Pavement	pathway filtration	10/20/2004	10/5/2006	Private		Low

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9034	G	1464 Summit Ave	Infiltration Basin	detention filtration basin	12/21/2004	12/3/2007	Private		Medium
9034	G	1470 Summit Ave	Other	DG swale	12/21/2004	12/3/2007	Private		Medium
9057	G	192 Pacific View Ln	Vegetated Swale	7.8 ft wide terraced treatment swale	1/26/2005	1/22/2007	Private		Medium
9071	G	3317 Poppy Hills Ln	Vegetated Swale	vegetated swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9071	G	3317 Poppy Hills Ln	Rock Swale	rock swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9106	G	vacant lot N Vulcan Ave	Vegetated Swale	vegetated swale	12/21/2006	TBD	Private		TBD
9106	G	vacant lot N Vulcan Ave	Infiltration Basin	vegetated infiltration basin w/ gravel pit	12/21/2006	TBD	Private		TBD
9117	I	1902 Paxton Wy	Turf Block Swale	GravelPave swale	8/11/2005	TBD	Private	2004-1183355	TBD
9117	I	1905 Paxton Wy	Turf Block Swale	GravelPave swale	8/11/2005	TBD	Private	2004-1183355	TBD
9117	I	1908 Paxton Wy	Turf Block Swale	gravel pave swale	8/11/2005	TBD	Private	2004-1183355	TBD
9117	I	1908 Paxton Wy	Turf Block Swale	Gravel Pave Swale	8/11/2005	TBD	Private	2004-1183355	TBD
9117	I	1916 Paxton Wy	Turf Block Swale	Gravel Pave Swale	8/11/2005	TBD	Private	2004-1183355	TBD
9117	I	1920 Paxton Wy	Turf Block Swale	GravelPave swale	8/11/2005	TBD	Private	2004-1183355	TBD
9134	G	2153 Whisper Wind Ln	Vegetated Swale	grass swale	11/23/2004	4/6/2006	Private		Low
9134	G	2153 Whisper Wind Ln	Infiltration Basin	rip-rap infiltration	11/23/2004	4/6/2006	Private		Low
9150	G	3113 Camino Del Rancho	Bioretention Basin	flat area for stormwater treatment covered with grass	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	Rock Swale	Rock lined swale	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	Rock Swale	rock lined swale	3/24/2005	9/11/2007	Private		Medium
9180	G	1610 Neptune Ave	Landscaped Area	landscaped area and planters	7/20/2006	5/21/2009	Private		Low
9253	G	701 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	703 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	715 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	717 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	719 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	721 N Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9262	G	860 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Retention/Infiltration Vault	Trenched insert for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Retention/Infiltration Vault	Trenched insert for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Retention/Infiltration Vault	Trenched insert for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Retention/Infiltration Vault	Trenched insert for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	874 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	874 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	874, 896 & 900 Bracero Rd	Vegetated Swale	7' wide grass lined treatment channel	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	886 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9262	G	886 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	886 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	890 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	890 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	896 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9278	G	490 Latigo Row	Extended Detention Basin	detention area	12/27/2005	TBD	Private		Medium
9278	G	490, 494 Latigo Row	Turf Block Swale	turf block swale with gravel (no turf)	12/27/2005	TBD	Private		Medium
9278	G	494 Latigo Row	Extended Detention Basin	detention area	12/27/2005	TBD	Private		Medium
9283	G	1440 Hygeia Ave	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	265 Sanford St	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St & 1440 Hygeia Ave	Rock Swale	rock swale	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Other	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Other	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914, 2934 Lone Jack Rd	Other	Turf reinforced drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2934 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Vegetated Swale	grass-lined channel for BMP	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9301	G	187 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Turf Block Swale	Grasscrete	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9303	G	869 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	TBD	Private	2005-0496885	Low
9303	G	869 Brittany Rd	Extended Detention Basin	40' +/- detention area	6/7/2005	TBD	Private	2005-0496885	Low
9303	G	869, 875, 881, 887 Brittany Rd	Vegetated Swale	landscape filtration strip	6/7/2005	TBD	Private	2005-0496885	Low
9303	G	875 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	TBD	Private	2005-0496885	Low
9303	G	875 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	TBD	Private	2005-0496885	Low
9318	G	1154 Evergreen Dr	Landscaped Area	landscape area BMP	8/16/2005	2/16/2007	Private		Medium
9318	G	1154 Evergreen Dr	Landscaped Area	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1154 Evergreen Dr	Landscaped Area	fix-subtype does not match, given bmp description; 2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1154, 1158 Evergreen Dr	Rock Swale	gravel swale (GravePave)	8/16/2005	2/16/2007	Private		Medium
9318	G	1154, 1158 Evergreen Dr	Rock Swale	gravel swale (GravePave)	8/16/2005	2/16/2007	Private		Medium
9318	G	1154, 1158 Evergreen Dr	Rock Swale	gravel swale (GravePave)	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1160, 1164, 1168, 1172, 1169, 1165 Kava Ct	Vegetated Swale	vegetated swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1169 & 1165 Kava Ct	Rock Swale	gravel swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1176 & 1173 Kava Ct	Rock Swale	6.5 ft wide gravel swale w/ 3" river rock	8/16/2005	2/16/2007	Private		Medium
9336	G	1904 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1904 Sheridan Rd	Turf Block Swale	Gravel Pave Swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1904, 1938 Sheridan Rd	Turf Block Swale	Gravel Pave swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1938 Sheridan Rd	Turf Block Swale	Gravel Pave swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1950 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1957 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9336	G	1957 Stewart Wy and 1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	292 Andrew Ave	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	292 Andrew Ave	Turf Block Swale	Gravel Pave Swale	8/4/2005	TBD	Private	2005-0503915	TBD
9367	G	781 Garden View Ct	Vegetated Swale	grass lined swale	7/10/2006	1/14/2009	Private		Medium
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Medium
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Medium
9370	G	406 La Costa Ave	Pervious Pavement	Orco block pavers	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Vegetated Swale	4-ft wide grass swale	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft X 4ft X 2.5 ft Jenson precast sump station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft diameter dual pump lift station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft diameter dual pump lift station	1/30/2006	8/14/2007	Private	2006-0071959	High
9419	G	871 Neptune Ave	Turf Block Swale	Grasscrete grass block	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9459	G	211 Saxony Rd	Infiltration Basin	landscaped area (detention basin)	6/12/2006	9/10/2007	Private - HOA		Medium
9459	G	211 Saxony Rd	Pervious Pavement	Grass Pave	6/12/2006	9/10/2007	Private - HOA		Medium
9481	G	518 Quail Pointe Lane	Other	Pre-Treatment for Bioretention	5/17/2007	TBD	Private	2007-0353916	High
9481	G	518 Quail Pointe Lane	Other	Pre-Treatment for Bioretention	5/17/2007	TBD	Private	2007-0353916	High
9481	G	518 Quail Pointe Lane	Bioretention Basin	Infiltration Basin	5/17/2007	TBD	Private	2007-0353916	High
9481	G	545 Quail Point Ln	Advanced Mechanical Filter	StormFilter by Stormwater Management Inc.	5/17/2007	TBD	Private	2007-0353916	High
9481	G	545 Quail Point Ln	Other	Stormgate	5/17/2007	TBD	Private	2007-0353916	High
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Drive	Other	Private overflow concrete catch basin	9/18/2007	7/16/2010	Private		Low
9561	G	303 Santa Fe Drive	Other	Private overflow concrete catch basin	9/18/2007	7/16/2010	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Dry Well	Dry Well Storm Water Retention	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9590	G	721 Vulcan Ave	Bioretention Basin	bioretiention basin	6/23/2006	2/8/2012	Private	2010-0501734	High
9590	G	721 Vulcan Ave	Rock Swale	rock swale	6/23/2006	2/8/2012	Private	2010-0501734	High
9590	G	721 Vulcan Ave	Rock Swale	rock swale	6/23/2006	2/8/2012	Private	2010-0501734	High
9590	G	721 Vulcan Ave	Vegetated Swale	vegetated swale	6/23/2006	2/8/2012	Private	2010-0501734	High
10061	G	3403 Via Monte Verde	Bioretention Basin	Bioretention Basin	3/24/2010	TBD	Private	2012-0399728	TBD
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low

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10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Extended Detention Basin	detention basin	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Turf Block Swale	turf block swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Turf Block Swale	turf block swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Turf Block Swale	turf block swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Turf Block Swale	turf block swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10187	G	1603 Crest Dr	Landscaped Area	turf area BMP	5/27/2009	4/13/2010	Private	2009-0280381	Low
10187	G	1603 Crest Dr	Rock Swale	2' wide BMP gravel/sand filter	5/27/2009	4/13/2010	Private	2009-0280381	Low
10211	G	211 Saxony Rd	Flow-Through Planter	Filterra Unit	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Flow-Through Planter	Filterra Unit	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Extended Detention Basin	underground detention system	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Vortex Separator	Kristar DVS-36C Seperator	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Mechanical Filter	filter fossil filter drain insert	2/11/2010	7/26/2011	Private	TBD	Medium
10305	G	354 Santa Fe Dr	Mechanical Filter	Fossil filter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Vegetated Swale	Bioswale	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Extended Detention Basin	water quality basin	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10349	G	1220 S El Camino Real	Rock Swale	Rock Lined BMP Swale	1/5/2011	TBD	Private	2011-0006436	TBD
10349	G	1328 S El Camino Real	Rock Swale	Rock Lined BMP Swale	1/5/2011	TBD	Private	2011-0006436	TBD
10349	G	1328 S El Camino Real	Rock Swale	Rock Lined BMP Swale	1/5/2011	TBD	Private	2011-0006436	TBD

Note: All TC BMPs are located in the Carlsbad Watershed

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
10375	G	1010 N El Camino Real	Flow-Through Planter	Filterra Unit	10/7/2010	2/15/2012	Private	2010-0533381	TBD
10375	G	1010 N El Camino Real	Infiltration Basin	7'X7'X2' Infiltration Bed	10/7/2010	2/15/2012	Private	2010-0533381	TBD
10375	G	1010 N El Camino Real	Infiltration Basin	7'X8'X2' Infiltration Bed	10/7/2010	2/15/2012	Private	2010-0533381	TBD
10375	G	1010 N El Camino Real	Infiltration Basin	8'X8'X2' Infiltration Bed	10/7/2010	2/15/2012	Private	2010-0533381	TBD
10404	SG	3211 Wildflower Valley Dr	Pervious Pavement	pervious pavers	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Dr	Media Filter	sand pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Dr	Rock Swale	gravel swale	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Dr	Media Filter	sand and gravel pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Dr	Media Filter	gravel pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10474	G	1524 Caudor St	Rock Swale	5' Wide Rock Swale	2/7/2011	TBD	Private	2011-0020824	TBD
10474	G	1524 Caudor St	Vegetated Swale	Vegetated Swale	2/7/2011	TBD	Private	2011-0020824	TBD
10474	G	1524 Caudor St	Vegetated Swale	Vegetated Swale	2/7/2011	TBD	Private	2011-0020824	TBD
10474	G	1524 Caudor St	Bioretention Swale	Bioretention Structure	2/7/2011	TBD	Private	2011-0020824	TBD
10501	G	3177 Wildflower Summit	Bioretention Basin	Bioretention Basin	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Bioretention Basin	Bioretention Basin	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Bioretention Basin	Bioretention Basin	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Rock Swale	Cobble Swale	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Rock Swale	Cobble Swale	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Rock Swale	Cobble Swale	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Rock Swale	Cobble Swale	10/7/2010	TBD	Private	2010-0533421	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD

Note: All TC BMPs are located in the Carlsbad Watershed

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Pervious Pavement	Pervious Concrete	11/10/2010	TBD	Private	2010-0339027	TBD
10536	I	1492 Hymettus Ave	Vegetated Swale	Vegetated Swale	4/6/2011	TBD	Private - HOA	2011-0062689	TBD
10536	I	1492 Hymettus Ave	Vegetated Swale	Vegetated Swale	4/6/2011	TBD	Private - HOA	2011-0062689	TBD
10536	G	1496 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1496 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1496 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1497 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1497 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	I	1497 Halia Ct	Turf Block Swale	Turf Block Swale	4/6/2011	TBD	Private - HOA	2011-0062689	TBD
10536	G	1500 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	2011-0062689	TBD
10536	G	1500 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1501 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1501 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1501 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1501 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1504 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1504 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1505 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1505 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1505 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1508 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1508 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1509 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1512 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1512 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD

Note: All TC BMPs are located in the Carlsbad Watershed

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
10536	G	1512 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1513 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1516 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1516 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1520 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	2011-0062689	TBD
10536	G	1520 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1520 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1521 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1524 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1524 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1525 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1528 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1528 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1529 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1533 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1533 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10548	G	1502 Encinitas Blvd	Bioretention Swale	Bioretention Basin	1/27/2011	5/31/2011	Private	2011-0055467	Low
10548	G	1502 Encinitas Blvd	Bioretention Basin	Bioretention Basin	1/27/2011	5/31/2011	Private	2011-0055467	Low
10548	G	1502 Encinitas Blvd	Bioretention Basin	Bioretention Basin	1/27/2011	5/31/2011	Private	2011-0055467	Low
10548	G	1502 Encinitas Blvd	Bioretention Basin	Bioretention Basin	1/27/2011	5/31/2011	Private	2011-0055467	Low
10598	G	adjacent to Normandy Rd	Turf Block Swale	Turf Block BMP Swale	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	adjacent to Urania Ave	Flow-Through Planter	Roadside Treatment Swale	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	adjacent to Urania Ave	Flow-Through Planter	Roadside Treatment Swale	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	adjacent to Urania Ave	Flow-Through Planter	Roadside Treatment Swale	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	Dolphin Cir and Urania Ave	Bioretention Basin	Bioretention Basin (lined)	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	Tuscany Ct	Bioretention Basin	Bioretention Basin (lined)	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	Urania Ave and Sandy Ct	Bioretention Basin	Bioretention Basin (lined)	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10839	G	354 Santa Fe Dr	Flow-Through Planter	Filterra unit	12/20/2011	TBD	Private	2011-0626811	TBD
10839	G	354 Santa Fe Dr	Flow-Through Planter	Filterra unit	12/20/2011	TBD	Private	2011-0626811	TBD
10839	G	354 Santa Fe Dr	Bioretention Swale	bio-swale	12/20/2011	TBD	Private	2011-0626811	TBD
10839	G	354 Santa Fe Dr	Pervious Pavement	grass-pave	12/20/2011	TBD	Private	2011-0626811	TBD
10839	G	354 Santa Fe Dr	Other	green roof	12/20/2011	TBD	Private	2011-0626811	TBD
11073	G	194 N El Camino Real	Bioretention Basin	Bioretention Basin	3/28/2012	TBD	Private	2012-0192859	TBD
11073	G	194 N El Camino Real	Bioretention Basin	Bioretention Basin	3/28/2012	TBD	Private	2012-0192859	TBD
11073	G	194 N El Camino Real	Interceptor (sewer)	Grease Interceptor, existing	3/28/2012	TBD	Private	2012-0192859	TBD
11112	G	905 Orpheus Ave	Mechanical Filter	Hydrocarbon Filter by Kristar	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Interceptor (sewer)	320 gal Sand/Oil Seperator by Jensen	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Landscaped Area	Landscaped BMP Area	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Landscaped Area	Landscaped BMP Area	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Landscaped Area	Landscaped BMP Area	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Pervious Pavement	PErvious Pavers Aquabric by Orco	2/6/2012	TBD	Private	2012-77290	TBD

Note: All TC BMPs are located in the Carlsbad Watershed

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
11112	G	905 Orpheus Ave	Pervious Pavement	PErvious Pavers Aquabric by Orco	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Pervious Pavement	PErvious Pavers Aquabric by Orco	2/6/2012	TBD	Private	2012-77290	TBD
11147	G	934 N Coast Hwy 101	Pervious Pavement	Orco Aquabric	4/17/2012	TBD	Private	2012-0239482	TBD
11147	G	934 N Coast Hwy 101	Media Filter	DG BMP Area	4/17/2012	TBD	Private	2012-0239482	TBD
11147	G	934 N Coast Hwy 101	Sand/Oil Separator (stormwater)	320 gal san/oil seperator by Jensen Precast	4/17/2012	TBD	Private	2012-0239482	TBD
11147	G	934 N Coast Hwy 101	Interceptor (sewer)	750 gal Grease Interceptor by Jensen Precast	4/17/2012	TBD	Private	2012-0239482	TBD
11147	G	934 N Coast Hwy 101	Mechanical Filter	Hydrocarbon Filter by Kristar	4/17/2012	TBD	Private	2012-0239482	TBD
11182	G	Moonlight Beach	Media Filter	3' wide permanent BMP strip	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Media Filter	3' wide permanent BMP strip	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Rock Swale	Cobble Lined Swale	4/18/2012	TBD	Encinitas Parks		TBD
11249	G	1550 Leucadia Blvd	Mechanical Filter	Inlet filter by Bio-Clean Model BC-RGISB-22-24	6/6/2012	TBD	Private	2012-0333149	TBD
11249	G	1550 Leucadia Blvd	Mechanical Filter	Inlet filter by Bio-Clean Model BC-RGISB-22-24	6/6/2012	TBD	Private	2012-0333149	TBD

Note: All TC BMPs are located in the Carlsbad Watershed

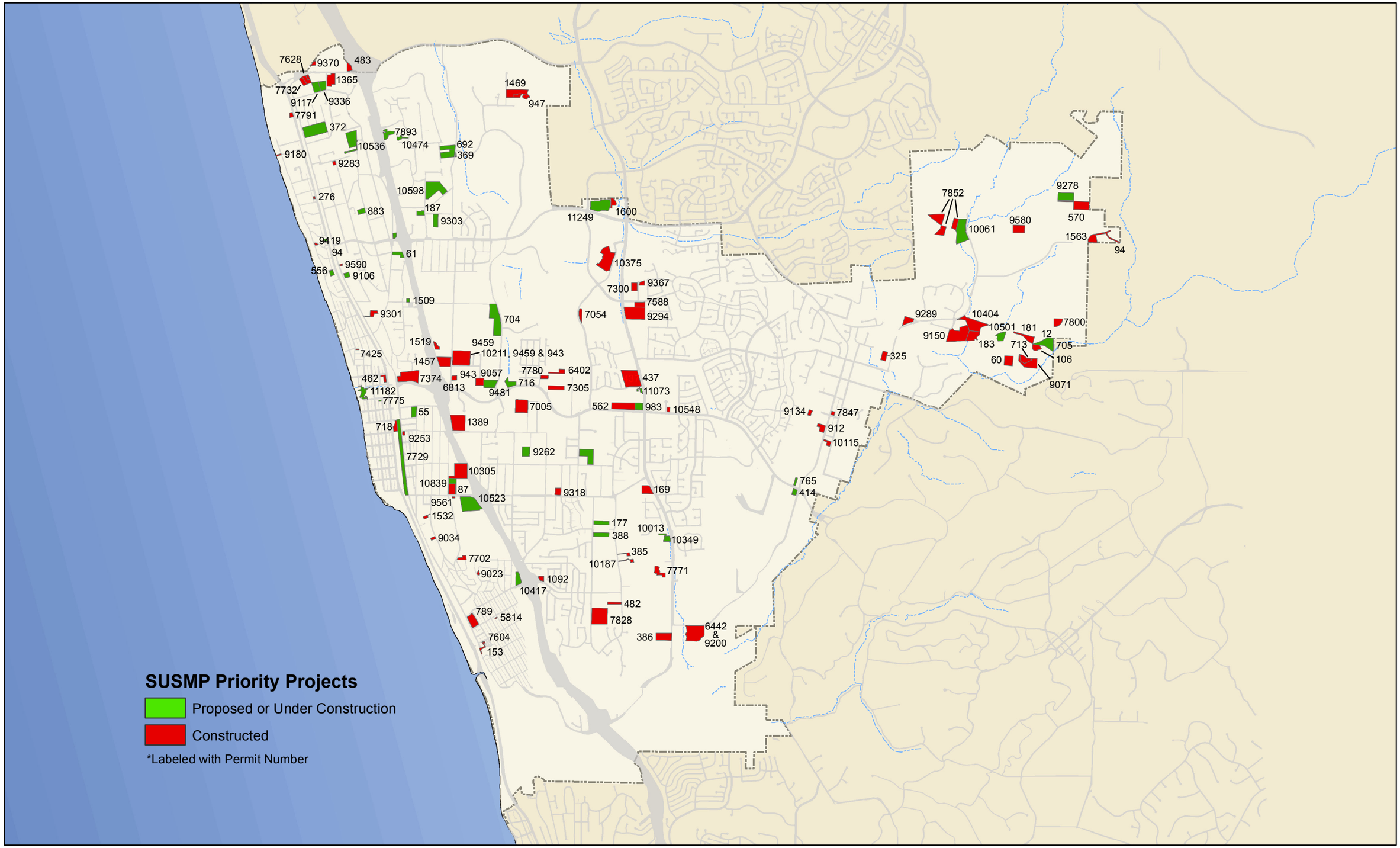

Appendix A-2

SUSMP Priority Projects with Treatment Control BMPs

DISCLAIMER: This map should not be used for Engineering, Survey, or Site-Specific Analysis.
Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

- Map Coordinates: Stateplane NAD83 Feet, CA Zone 6

N

0 6,400 Feet

1 inch = 3,700 feet

Treatment Control BMP Inspection Priority

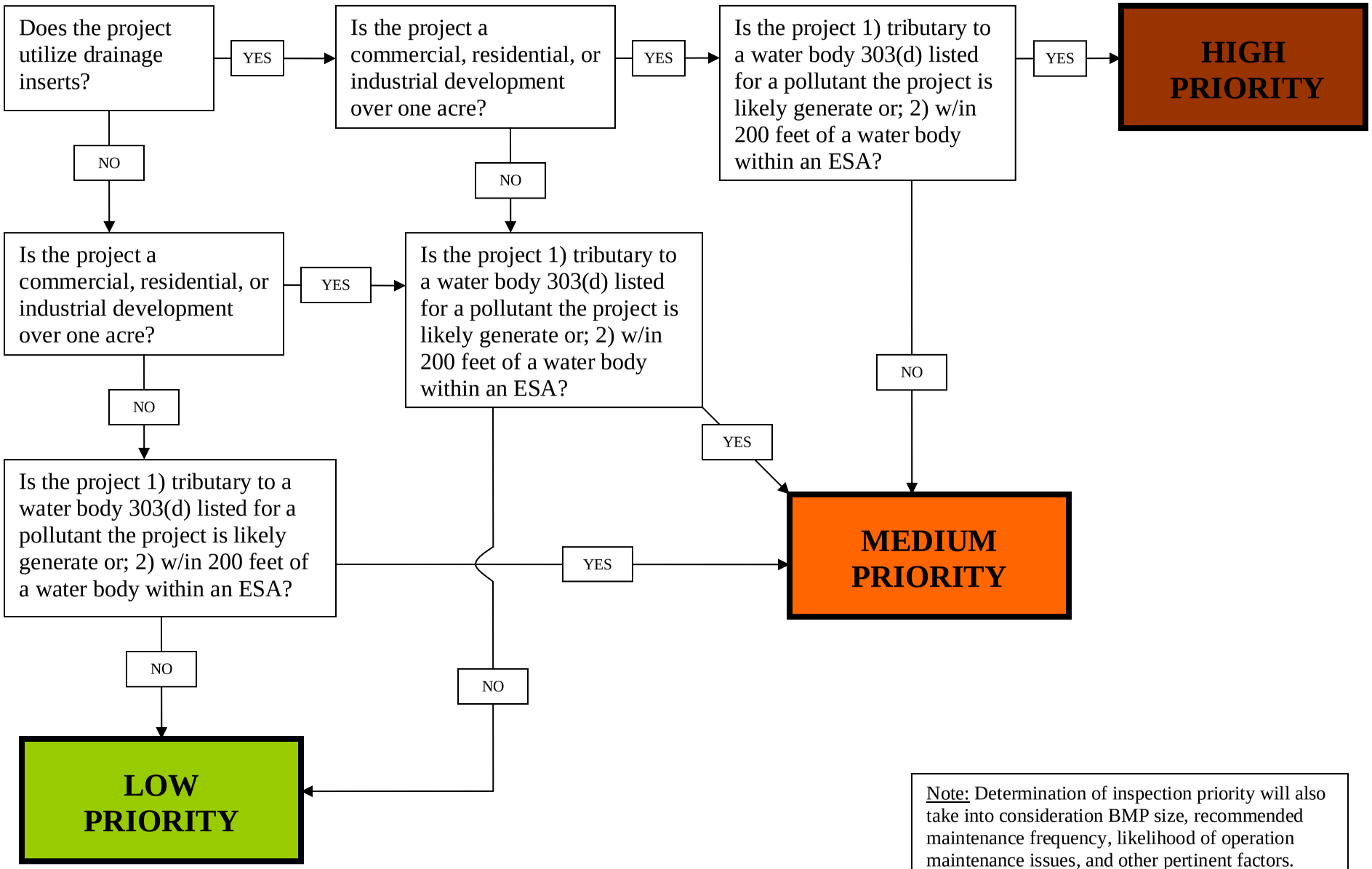

Note: Determination of inspection priority will also take into consideration BMP size, recommended maintenance frequency, likelihood of operation maintenance issues, and other pertinent factors.

SAMPLE

Date: _____

City of Encinitas
Engineering Services Permits
505 South Vulcan Ave.
Encinitas, CA 92024

Re: **Engineer's Final Grading Certification for Project No. 99-001 TM and Grading Permit Number XXXX - G.**

The grading under permit number XXXX has been performed in substantial conformance with the approved grading plan or as shown on the attached "As Graded" plan.

Final grading inspection has demonstrated that lot drainage conforms with the approved grading plan and that swales drain at a minimum of 1% to the street and/or an appropriate drainage system.

All the Low Impact Development, Source Control and Treatment Control Best Management Practices as shown on the drawing and required by the Best Management Practice Manual Part II were constructed and are operational, together with the required maintenance covenant(s).

Engineer of Record _____ (signed & sealed)

Dated _____

Verification by the Engineering Inspector of this fact is done by the Inspector's signature hereon and will take place only after the above is signed and stamped and will not relieve the Engineer of Record of the ultimate responsibility:

Engineering Inspector: _____

Dated:_____

The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.

City of Encinitas

OFFICIAL CITY BUSINESS

Response Required By: 8/31/11

July 28, 2011

TO: *Owner Name*
Contact Person
Street Address
City, State, ZIP

RE: Treatment Control Best Management Practices (BMP) Operation Maintenance Verification

Please find included with this letter property specific information and detailed instructions on how to fulfill your annual treatment control BMP operation and maintenance verification obligations.

As you may be aware, in an effort to improve the quality of runoff flowing into our storm drain system and out to the ocean and coastal lagoons, priority development projects within the City of Encinitas are required to construct treatment control BMP facilities to control and treat water runoff.

To ensure the long term effectiveness and efficiency of these facilities, the City of Encinitas, as required by the State Water Resources Control Board, must annually verify that these features are being properly managed and maintained by responsible property owners.

For more information regarding the Treatment Control BMP Operation and Maintenance Program, please refer to the enclosed brochure or call the City of Encinitas Clean Water Hotline at (760) 633-2787 for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

Enclosures: BMP Operation and Maintenance Verification Instructions
Treatment Control BMP Program Brochure

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

CITY OF ENCINITAS

Treatment Control BMP Operation Maintenance Verification Instructions

REMINDER: Annual inspection and maintenance verification of Treatment Control BMP(s) located on your property is due no later than **August 31, 2011**

City of Encinitas records indicate that the treatment control BMP(s) on your property at **Insert Property Location here** include:

List BMPs here

To fulfill inspection and maintenance obligations, please complete the following steps:

1) **Visually inspect all Treatment Control BMPs** for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).
2) **Maintain repair any damage to the BMP(s)**. Necessary maintenance may include removing accumulated sediment, trash, or other debris; stabilizing eroded areas; replanting vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.
4) **Take current photos of all BMPs on the property**.
5) **Complete the Operation and Maintenance Self-Verification Online Form** and submit photos and related maintenance documentation as necessary. The online form can be found at the following website: **http: cleanwaterBMP.cityofencinitas.org**. To access the form, enter your property identification number (PIN) in the field provided on the main webpage.

Your PIN is:	*Insert PIN here*

Annual inspection, routine maintenance, and effective operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

If hardcopy submittal is preferred, a paper copy of the O & M Verification From may be picked up at City Hall (505 S Vulcan Ave), or please email cleanwater cityofencinitas.org and an electronic copy of the O & M Verification Form will be emailed to you.

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

City of Encinitas

OFFICIAL CITY BUSINESS

PAST DUE
NOTICE

September 9, 2011

TO: *Owner Name*
Contact Person
Street Address
City, State, ZIP

RE: Treatment Control Best Management Practices (BMP) Operation Maintenance Verification

The intent of this letter is to inform you that your annual treatment control BMP operation and maintenance verification is **PAST DUE** as of August 31, 2011. In a letter dated July 28, 2011, the City of Encinitas requested submittal of documentation showing that you have completed your BMP evaluation and maintenance activities.

The City of Encinitas is extending you an additional opportunity to complete your BMP evaluation, conduct necessary maintenance activities, and submit the required self-verification information no later than September 30, 2011.

Please find included with this letter property specific information and detailed instructions on how to fulfill your annual treatment control BMP operation and maintenance verification obligations.

Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information constitutes a violation of City ordinance (EMC Section 20.08) and breach of property related agreements or covenants, for which the City may opt to pursue further enforcement action.

If self-verification obligations are not completed, a formal Notice of Violation will be issued and City staff will be required to conduct a site inspection to assess the BMPs on your property. Inspections will consist of a site visit by City staff and documentation of BMP features consistent with the original grading permit or other approved property specific permits or plans. Formal inspection actions will take place beginning October 1, 2010.

For more information regarding the Treatment Control BMP Operation and Maintenance Program, please call the City of Encinitas Clean Water Hotline at (760) 633-2787 for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Enclosures: BMP Operation and Maintenance Verification Instructions

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

CITY OF ENCINITAS

Treatment Control BMP Operation Maintenance Verification Instructions

PAST DUE NOTICE: If annual evaluation and maintenance verification of your Treatment Control BMPs is not completed by **Sept 30, 2011**, as required by State mandates, City staff will conduct an inspection of the BMPs on your property on or after October 1, 2011. Additionally, the City may opt to pursue further enforcement action in accordance with EMC Section 20.08.

City of Encinitas records indicate that the treatment control BMP(s) on your property at **Insert Property Location here** include:

List BMPs here

To fulfill inspection and maintenance obligations, please complete the following steps:

1) **Visually inspect all Treatment Control BMPs** for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).
2) **Maintain repair any damage to the BMP(s)**. Necessary maintenance may include removing accumulated sediment, trash, or other debris; stabilizing eroded areas; replanting vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.
4) **Take current photos of all BMPs on the property**.
5) **Complete the Operation and Maintenance Self-Verification Online Form** and submit photos and related maintenance documentation as necessary. The online form can be found at the following website: **http: cleanwaterBMP.cityofencinitas.org**. To access the form, enter your property identification number (PIN) in the field provided on the main webpage.

Your PIN is:	*Insert PIN here*

Annual inspection, routine maintenance, and effective operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

If hardcopy submittal is preferred, a paper copy of the O & M Verification From may be picked up at City Hall (505 S Vulcan Ave), or please email cleanwater cityofencinitas.org and an electronic copy of the O & M Verification Form will be emailed to you.

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

City of Encinitas

OFFICIAL CITY BUSINESS

ADVISORY NOTICE

October 27, 2011

TO: *Owner Name*
Contact Person
Street Address
City, State, ZIP

RE: Failure to Inspect Treatment Control Best Management Practices (BMPs)

Please be advised that as of the date of this letter, the City of Encinitas has not received requested self-inspection and maintenance verification documentation specific to **[xx location]**. On July 26, 2011 and September 9, 2011 the City issued letters to the owner / responsible party associated with this property address, identifying specific Treatment Control Best Management Practices that require self-inspection and as needed maintenance no later than September 30, 2011.

This information has been requested to fulfill your obligation to self-inspect and maintain as needed treatment control BMP drainage features that are installed on your property to reduce the quantity and improve the quality of water runoff from the site.

Failure to respond to this request for information may constitute a violation of Encinitas Municipal Code Section 20.08.140 which is summarized below. The full text of the Storm Water Municipal Code may be accessed on the City's website at http://cwp.cityofencinitas.org.

> **EMC Section 20.08.140 - Minimum Best Management Practices**, which states that *Treatment Control BMPs must be inspected by the Discharger or responsible party before the start of the rainy season and following actual rain events.*

To address this Advisory Notice, City staff will schedule a site inspection to assess the BMPs on your property. The City inspection will consist of a site visit by City staff and documentation of BMP features consistent with the original grading permit or other approved property specific permits or plans.

If you would prefer to complete your self-verification in lieu of a City staff inspection, please notify City staff via email or phone and complete the online self-verification form as soon as possible. Self-verification inspection and maintenance instructions are enclosed.

For more information regarding the Treatment Control BMP Operation and Maintenance Program, please call the City of Encinitas Clean Water Hotline at (760) 633-2787 or email cleanwater@encinitasca.gov for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Enclosures: BMP Operation and Maintenance Verification Instructions

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

CITY OF ENCINITAS

Treatment Control BMP Operation Maintenance Verification Instructions

City of Encinitas records indicate that the treatment control BMP(s) on your property at **Insert Property Location here** include:

List BMPs here

To fulfill inspection and maintenance obligations, please complete the following steps:

1) **Visually inspect all Treatment Control BMPs** for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).
2) **Maintain repair any damage to the BMP(s)**. Necessary maintenance may include removing accumulated sediment, trash, or other debris; stabilizing eroded areas; replanting vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.
4) **Take current photos of all BMPs on the property**.
5) **Complete the Operation and Maintenance Self-Verification Online Form** and submit photos and related maintenance documentation as necessary. The online form can be found at the following website: **http: cleanwaterBMP.cityofencinitas.org**. To access the form, enter your property identification number (PIN) in the field provided on the main webpage.

Your PIN is:	*Insert PIN here*

Annual inspection, routine maintenance, and effective operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

If hardcopy submittal is preferred, a paper copy of the O & M Verification From may be picked up at City Hall (505 S Vulcan Ave), or please email cleanwater encinitasca.gov and an electronic copy of the O & M Verification Form will be emailed to you.

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Frequently Asked Questions

1. Why does the City of Encinitas require that Treatment Control BMPs be maintained?

Proper operation and regular maintenance of permanent stormwater treatment control BMPs ensures that the facility reduces the amount of pollutants that end up in our creeks, lagoons, and beaches. These BMPs help to improve water quality and minimize human and environmental health risks. The San Diego Region Municipal Stormwater Permit (issued by the San Diego Regional Water Quality Control (RWQCB)) requires that the City annually verify that treatment control BMPs installed on private property are adequately maintained.

2. What should I do if I am unsure how to complete my self-inspection form or cannot locate the treatment control BMPs on my property?

Contact Clean Water Program staff as soon as possible. We can provide assistance in understanding the self-verification form, identifying the location of BMP(s) on your property, and determining operation and maintenance needs of your BMP(s). Staff can be reached via phone: 760-633-2787, or email: cleanwater@cityofencinitas.org

3. What happens during the City's inspection of Treatment Control BMPs on my property?

If requested or as required due to repudiation, a City inspector will visit the property to validate the existence, proper maintenance, and function of treatment control BMPs. Inspection actions will be documented with an inspection report form and photos of specific BMPs. If access is limited or located on private property, the City inspector will call the responsible party to schedule an inspection.

FAQs continued…

4. What happens if I don't certify that my Treatment Control BMP(s) have been maintained?

The City is responsible for ensuring the proper maintenance and function of treatment facilities. Failure of a responsible party to provide adequate inspection and maintenance information, upon request, may constitute a violation of the City ordinance as well as property related agreements or covenants. The RWQCB requires the City to verify the proper function of treatment control BMPs through the Municipal Stormwater Permit. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. The Treatment Control BMP Self Verification online form has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of these facilities, and to help the City meet State mandated requirements.

City of Encinitas
Clean Water Program
505 S. Vulcan Avenue
Encinitas, CA 92024

For questions relating to
Treatment Control BMPs,
please call: 760-633-2787
or e-mail: cleanwater@cityofencinitas.org

Printed on recycled paper

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Operation and Maintenance Guide for your Treatment Control Best Management Practices (BMPs)

Thanks for helping us keep our creeks, lagoons, and ocean clean!

Appendix A-6

What is a Treatment Control BMP?

Treatment Control BMPs are drainage devices, structures, or areas designed to remove pollutants from storm water runoff, or minimize the quantity of runoff ultimately discharged from a development site. These facilities are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. They are also frequently referred to as Stormwater Best Management Practices or BMPs.

The following BMPs are commonly incorporated into development projects throughout the City of Encinitas:

Vegetated Swales / Grassy Swales are open, shallow channels or depressions with vegetation or grass covering the side slopes and bottom that collect, infiltrate, and slowly convey runoff water. Rock lined swales are also commonly used.

Bioretention Areas consist of a planted or vegetated depression area designed to pond during a rain event. It is common to find multiple bioretention areas located throughout a development area.

Infiltration Trenches or **Basins** temporarily store runoff in shallow basins or linear depressions lined with sandy soil or gravel to enhance infiltration of water into the ground.

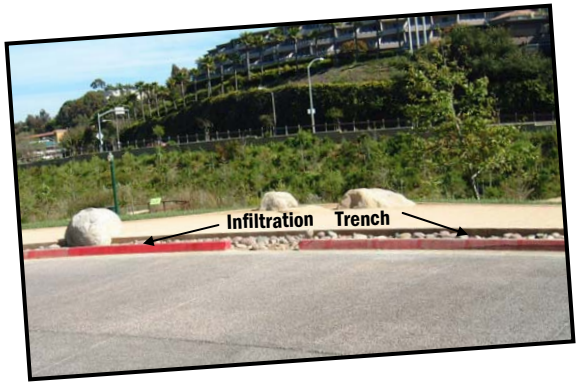

Storm Drain Filter Inserts are manufactured filters or fabric placed in a storm drain inlet to remove sediment, debris, oil, or other pollutants.

Other BMPs include Rock-Lined Swales, Terraced Swales, Detention Basins, Subsurface Infiltration Systems, Constructed Wetlands, Media Filters, Storm Water Storage Systems, and Vortex Separators.

Please note that each of the BMPs may vary in design size, shape, or materials from the descriptions above. City staff is available to help you determine the location of BMPs located on your property.

For more information on Treatment Control BMPs, refer to the City's Storm Water Best Management Practices Manual, Part II which can be accessed via the Clean Water Program webpage:

http://cwp.ci.encinitas.ca.us

How to locate Treatment Control BMPs on your property:

1. Refer to your approved grading or improvement plans. The plans will show the location of Treatment Control BMPs.
2. Walk your property to look for defined drainage areas such as channels, depressions, or basins.
3. Typical treatment control BMPs may look similar to traditional landscaped areas. Look for areas that have been graded in a concave, swale, or linear shape to capture and infiltrate storm water.
4. Structural treatment control devices such as an inlet filter may be located within a curb inlet or underground. *Please contact the City of Encinitas if you have a structural control located on your property with limited access.

Minimum Operation and Maintenance Requirements:

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

- ☑ On an annual basis, or as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair.
- ☑ Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, etc.
- ☑ Remove any accumulated trash and debris.
- ☑ Take photos of all BMPs on the property.
- ☑ Complete the online Operation and Maintenance Self-Verification Form, if requested, or provide access to Clean Water Program staff to conduct a BMP inspection.

City of Encinitas

CITY OF ENCINITAS Clean Water Program

Welcome to the City of Encinitas Stormwater Treatment Control BMP Annual Operation and Maintenance Verification Website

This web portal will allow you to:

- Review treatment control BMP information associated with your property.
- Document your required annual BMP evaluation and Maintenance activities.

Login below to complete the **Operation and Maintenance Self-Verification Form** or to view your BMP and property related information:

PIN #:

Login

Background:

Development projects constructed within the City of Encinitas are commonly required to construct stormwater treatment BMPs (Best Management Practices). The treatment control BMPs provide a critical function for downstream creek and ocean water quality. Proper operation and routine maintenance of these BMPs is necessary to achieve maximum water quality benefits.

Annual evaluation, maintenance, and operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements.

To fulfill evaluation and maintenance obligations, please complete the following steps:

- Visually inspect all Treatment Control BMP(s).
- Maintain/repair any damage to the BMP(s).
- Take photos of all BMP(s) and document any third-party maintenance.
- Complete the **Operation and Maintenance Self-Verification Form** by entering your "PIN" in the box above. Your PIN can be found on the notification letter you received in the mail.

Reference Tools

View the Operation & Maintenance Brochure

Surfrider's Ocean Friendly Gardens Program

City's Municipal Stormwater Code

San Diego Stormwater Permit

For more detailed instructions review the Operation & Maintenance Brochure.

ALL EVALUATIONS, MAINTENANCE ACTVITIES, AND ONLINE VERIFICATION MUST BE COMPLETED NO LATER THAN:
AUGUST 31, 2011

Have Questions? Visit our Frequently Asked Questions Page.

If you have any additional questions regarding the Treatment Control BMP Operation and Maintenance Program, please call the Clean Water Hotline at 760-633-2787 or email cleanwater@cityofencinitas.org for assistance.

If you are having trouble using this website to submit your Self-Verification documentation, please contact the City of Encinitas webmaster at: 760-633-2668 or via email at: webmaster@cityofencinitas.org for assistance.

Please be advised that failure to complete annual evaluation and maintenance activities and provide adequate verification information may constitute a violation of EMC Section 20.08 or breach of property related covenants.

Phone: (760) 633-2600 | TDD: (760) 633-2700 | Fax: (760) 633-2627 | 505 S. Vulcan Avenue, Encinitas, CA 92024-3633
Site Map | Contact Us | Feedback Form | Site Policy | Email: webmaster@ci.encinitas.ca.us | Copyright © 2010

City of Encinitas

CITY OF ENCINITAS Clean Water Program

Stormwater Treatment Control Best Management Practices Operation and Maintenance Self Verification

This online form will allow you to **review** the property and contact information related to the Treatment Control BMPs located on your property and **verify** that all BMP evaluation and maintenance activities have been completed as necessary.

REMINDER: Annual evaluation and maintenance verification of Treatment Control BMP(s) located on your property is due no later than August 31, 2011.

Property Information

[redacted]
Encinitas, CA 92024
Permit 1563-G

Treatment Control BMPs on Your Property

2 Grassy / Vegetated Swale

Step 1 **Review / Update Contact Information**

[redacted]
Encinitas, CA 92024
[redacted]
No Email on file

If the above information is incorrect or needs to be updated, please provide current information in the boxes below:

Name:

Street:

City:

State:

ZIP: *Email:

Phone:

* If you would like email confirmation that y our submittal has been received, a valid email address must be provided.

Step 2 Self-Verification of BMPs

The following section should be completed based on the results of your evaluation of the treatment control BMP(s) on your property. If any maintenance or repair of the BMP(s) was conducted as a result of the evaluation, describe the work completed in the comment box provided below.

Date Evaluated: (mm/dd/yyyy)

Self Evaluation Results (check the box that applies):

- (●) A. All BMP(s) were evaluated and are in good working order. No maintenance required.
- ( ) B. All BMP(s) were evaluated. All or some BMP(s) required maintenance. Describe below.
- ( ) C. Other results, describe below

If you checked B or C please describe maintenance conducted or other results below

If you checked B or C, please indicate the date maintenance was completed below.

Maintenance Date: (mm/dd/yyyy)

Step 3 Upload Photos

Supporting photographic documentation of each BMP is required to be submitted along with your Self-Verification. Photos should be taken during your evaluation of the BMPs or after completion of any maintenance activities. Upload current photos of each of the BMPs on your property using the boxes provided below. If you have more than five photos, submit any additional photos to the Clean Water Program via email: cleanwater@cityofencinitas.org Please note that email attachments cannot be larger than 5 MB.

Step 4 Upload Maintenance Documentation

If a third-party was hired to complete your annual BMP evaluation and maintenance activities, provide documentation showing that the work was completed. Documentation may include receipt for services or invoices which detail the work completed. Documentation must be in PDF or JPG format. If you have more than three documents to upload, or documents that are not in PDF or JPG format, provide them to the Clean Water Program via email: cleanwater@cityofencinitas.org Please note that email attachments cannot be larger than 5 MB.

Step 5 **Certification**

By checking the box below, you are certifying that all the information you have entered in Steps 1 – 3 above is true and correct to the best of your knowledge, that all annually required treatment control BMP evaluation and maintenance activities have been satisfactorily completed, and that all treatment control BMPs are in good working order.

☐ "I hereby certify that all treatment control BMPs on my property were evaluated, maintained, and repaired as necessary and are in good working order."

Submit

For questions relating to Treatment Control BMPs, please call: 760-633-2787 or e-mail: cleanwater@cityofencinitas.org

If you are having trouble using this website to submit your Self-Verification documentation, please contact the City of Encinitas webmaster at 760-633-2668 or via email at webmaster@cityofencinitas.org

Phone: (760) 633-2600 | TDD: (760) 633-2700 | Fax: (760) 633-2627 | 505 S. Vulcan Avenue, Encinitas, CA 92024-3633
Site Map | Contact Us | Feedback Form | Site Policy | Email: webmaster@ci.encinitas.ca.us | Copyright © 2010

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
55	I	540 Cornish Dr - Encinitas Library	City Inspection	BMP(s) needed maintenance	5/1/2012	inspection conducted	none necessary
60	G	3275 Poppy Hills Ln	Self-Verification	non-responsive owner, unable to conduct inspection		advisory notice sent: failure to inspect	
61	CN	801 Orhpeus Ave - Fire Station #3)	City Inspection	all BMPs in good condition	9/29/2011	inspection conducted	none necessary
87	G	354 Santa Fe Dr	City Inspection	all BMPs in good condition	8/31/2011	inspection conducted	none necessary
94	I	3740 Fortuna Ranch Rd	Self-Verification	all BMPs in good condition	8/31/2011	information validated	none necessary
106	G	3358 Wildflower Valley Dr	Self-Verification	no response, changed owner		change of ownership, GIS info updated. mail to new owner in FY 12-13.	N/A
153	I	111 Chesterfield Dr	Self-Verification	all BMPs in good condition	6/23/2011	information validated	none necessary
169	G	510 S El Camino Real	Self-Verification	all BMPs in good condition	8/18/2011	information validated	none necessary
181	G	3342 Wildflower Valley Dr	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
183	G	3234 Olivenhain Farms Rd	Self-Verification	all BMPs in good condition	9/28/2011	information validated	none necessary
276	G	1222 N Coast Highway 101	City Inspection	all BMPs in good condition	9/20/2011	inspection conducted	none necessary
385	G	1555 Crest Dr	City Inspection	all BMPs in good condition	9/23/2011	inspection conducted	none necessary
386	G	3535 Manchester Ave	City Inspection	all BMPs in good condition	9/8/2011	inspection conducted	none necessary
414	L	4455 Manchester Ave	Self-Verification	non-responsive owner		place on FY 12-13 inspection list	
437	G	222 N El Camino Real	Self-Verification	BMP(s) needed maintenance	9/27/2011	requested maintenance docs for Contec unit	unit cleaned, docs provided
462	G	90 N Coast Highway 101	Self-Verification	BMP(s) needed maintenance	9/27/2011	information validated	1 pouch replaced at Inlet No. 16, inlets cleaned
482	G	1864 Crest Dr	Self-Verification	all BMPs in good condition	8/7/2011	information validated	none necessary
483	G	540 La Costa Ave	City Inspection	BMP(s) needed maintenance	8/31/2011	requested maintenance doc for sand/oil interceptor	sand/oil interceptors cleaned, docs provided

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
562	G	1302 Encinitas Blvd	City Inspection	BMP(s) needed maintenance	3/12/2012	NOV/warning citation issued on 2/1/2012	changed filter inserts, cleaned out channel grate and inflitertaion basin
570	G	489 Latigo Row	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
704	G	300 Quail Gardens Dr	Self-Verification	all BMPs in good condition	9/6/2011	information validated	none necessary
705	G	3354 Wildflower Valley Dr	Self-Verification	all BMPs in good condition	7/30/2011	information validated	none necessary
713	G	3003 Wildflower Dr	Self-Verification	all BMPs in good condition	8/21/2011	information validated	none necessary
718	G	687 S Coast Highway 101	City Inspection	all BMPs in good condition	9/21/2011	inspection conducted	none necessary
789	G	2005 San Elijo Ave	City Inspection	BMP(s) needed maintenance	9/22/2011	inspection conducted, maintenance requested	1) removed debris/water from catch basin, 2) clean perv pave
912	G	416 Rancho Santa Fe Rd	City Inspection	all BMPs in good condition	8/4/2011	inspection conducted	none necessary
943	G	211 Saxony Rd	City Inspection	all BMPs in good condition	7/25/2011	inspection conducted	none necessary
983	G	1320 Encinitas Blvd	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
1092	EBP	820 Birmingham Dr	Self-Verification	all BMPs in good condition	8/11/2011	information validated	none necessary
1092	EBP	820 Birmingham Dr	City Inspection	all BMPs in good condition	1/10/2012	information validated	cleaned prior to inspection
1365	G	310 Hana Ct	Self-Verification	all BMPs in good condition	8/7/2011	information validated	none necessary
1365	G	311 Hana Ct	Self-Verification	all BMPs in good condition	9/21/2011	information validated	none necessary
1365	G	314 Hana Ct	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
1365	G	315 Hana Ct	Self-Verification	all BMPs in good condition	8/31/2011	information validated	none necessary
1365	G	318 Hana Ct	Self-Verification	all BMPs in good condition	7/31/2011	information validated	none necessary
1365	G	319 Hana Ct	Self-Verification	all BMPs in good condition	9/10/2011	information validated	none necessary
1365	G	323 Hana Ct	Self-Verification	all BMPs in good condition	7/30/2011	information validated	none necessary
1365	G	327 Hana Ct	Self-Verification	all BMPs in good condition	11/18/2011	information validated	none necessary
1389	G	302 Requeza St	City Inspection	all BMPs in good condition	9/8/2011	inspection conducted	none necessary
1457	G	200 Saxony Rd	Self-Verification	all BMPs in good condition	8/29/2011	information validated	none necessary
1469	G	1401 Bella Azul Ct	Self-Verification	all BMPs in good condition	10/12/2011	information validated	none necessary

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
1469	G	1414 Bella Azul	Both	BMP(s) needed maintenance	11/3/2011	issued NOV/warning citation, required corrective actions	removed, reinstalled gravel base, vegation still
1469	G	1428 Bella Azul Ct	Self-Verification	all BMPs in good condition	8/29/2011	information validated	none necessary
1469	G	1442 Bella Azul Ct	Self-Verification	all BMPs in good condition	9/14/2011	information validated	none necessary
1532	G	1316 Summit Ave	Self-Verification	all BMPs in good condition	11/28/2011	information validated	none necessary
1532	G	1318 Summit Ave	Self-Verification	no response, changed owner		change of ownership, GIS info updated. mail new owner in FY 12-13.	N/A
1532	G	1320 Summit Ave	Self-Verification	all BMPs in good condition	7/31/2011	information validated	none necessary
1563	G	3701 Fortuna Ranch Rd	Self-Verification	all BMPs in good condition		information validated	none necessary
5814	G	2108 Oxford Ave	City Inspection	all BMPs in good condition	8/2/2011	inspection conducted	none necessary
5814	G	2112 Oxford Ave	City Inspection	all BMPs in good condition	8/2/2011	inspection conducted	none necessary
6402	G	311 Princehouse Ln	Self-Verification	BMP(s) needed maintenance	9/30/2011	information validated	grass swale mowed
6442	G	3616 Manchester Ave	City Inspection	all BMPs in good condition	9/8/2011	inspection conducted	inspection conducted by RP, no maint necessary
6813	G	155 Saxony Rd	City Inspection	all BMPs in good condition	8/4/2011	inspection conducted	none necessary
7005	G	503 Ocean Bluff Way	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	L	507 Ocean Bluff Way	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	G	509 Ocean Bluff Way	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	G	510 Camino De Orchidia	City Inspection	all BMPs in good condition	1/11/2012	inspection conducted	none necessary
7005	G	513 Ocean Bluff Way 1	City Inspection	all BMPs in good condition	1/11/2012	inspection conducted	none necessary
7005	G	517 Ocean Bluff Way	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	G	518 Camino De Orchidia	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	G	521 Ocean Bluff Way	City Inspection	all BMPs in good condition	1/11/2012	inspection conducted	none necessaru
7005	G	526 Camino De Orchidia	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
7005	G	532 Camino De Orchidia	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	G	558 Camino De Orchidia	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7054	G	645 Via Cantebria	Self-Verification	non-responsive owner		several attempts to contact	
7300	G	760 Garden View Ct	Self-Verification	all BMPs in good condition	9/12/2011	information validated	none necessary
7305	G	131 Princehouse Ln	Self-Verification	all BMPs in good condition	8/26/2011	information validated	none necessary
7374	I	Cottonwood Creek Park	City Inspection	all BMPs in good condition	9/29/2011	inspection conducted	perv concrete swept monthly
7588	G	1200 Garden View Rd	City Inspection	BMP(s) needed maintenance	10/13/2011	requested maint docs for sand/oil interceptor	sand/oil interceptor cleaned
7628	G	199 La Costa Ave	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7628	G	207 La Costa Ave	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7628	G	215 La Costa Ave	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7628	G	223 La Costa Ave	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7628	G	235 La Costa Ave	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7702	G	301 Chopin Way	City Inspection	inspection not conducted		follow-up in FY 12-13	
7702	G	315 Chopin Way	City Inspection	property vacant, no forwarding address		review contact info	
7702	G	322 Chopin Way	City Inspection	inspection not conducted		follow-up in FY12-13	
7702	G	329 Chopin Way	City Inspection	inspection not conducted		follow-up in FY 12-13	
7702	G	336 Chopin Way	City Inspection	inspection not conducted		follow-up in FY 12-13	
7729	I	Vulcan Ave and E St - Parking Lot B	City Inspection	all BMPs in good condition	9/28/2011	inspection conducted	none necessary
7732	G	175 La Costa Ave	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
7732	G	183 La Costa Ave	City Inspection	all BMPs in good condition	8/12/2011	inspection conducted	none necessary
7732	G	191 La Costa Ave	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
7771	G	1550 S El Camino Real	Self-Verification	BMP(s) needed maintenance	10/31/2011	information validated	annual cleaning conducted
7780	G	121 Rosebay Dr	Self-Verification	all BMPs in good condition	7/14/2011	information validated	none necessary

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
7791	G	1766 N Coast Highway 101	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7800	G	3542 Jasmine Crest	City Inspection	non-responsive owner, unable to conduct inspection	5/2/2012	place on FY 12-13 inspection list	N/A
7828	G	1200 Crestview Dr	Self-Verification	all BMPs in good condition	9/26/2011	information validated	none necessary
7828	G	1207 Crestview Dr	Self-Verification	all BMPs in good condition	8/30/2011	information validated	none necessary
7828	G	1208 Crestview Dr	Self-Verification	all BMPs in good condition	8/3/2011	information validated	none necessary
7828	G	1216 Crestview Dr	Self-Verification	all BMPs in good condition	8/31/2011	information validated	none necessary
7828	G	1219 Crestview Dr	Self-Verification	all BMPs in good condition	8/21/2011	information validated	none necessary
7828	G	1223 Crestview Dr	Self-Verification	all BMPs in good condition	9/20/2011	information validated	none necessary
7828	G	1945 Lake Dr	Self-Verification	all BMPs in good condition	9/12/2011	information validated	none necessary
7847	G	2300 8th St	Self-Verification	BMP(s) needed maintenance	11/1/2011	information validated	removed debris
7852	G	3411 Via Monte Verde	City Inspection	all BMPs in good condition	7/26/2011	inspection conducted	none necessary
7852	G	3430 Via Monte Verde	City Inspection	inspection not conducted		follow-up in FY 12-13	
7852	G	3445 Via Monte Verde	City Inspection	non-responsive owner, unable to conduct inspection		several attempts to inspect	
7893	G	1502 Christine Place	Self-Verification	BMP(s) needed maintenance	10/3/2011	information validated	none necessary
9023	G	427 Bristol Ave	Self-Verification	BMP(s) needed maintenance	7/30/2011	information validated	silt removed
9034	G	1462 Summit Ave	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
9034	G	1464 Summit Ave	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
9034	G	1470 Summit Ave	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
9057	G	192 Pacific View Ln	Self-Verification	all BMPs in good condition	8/1/2011	information validated	none necessary
9071	G	3317 Poppy Hills Ln	City Inspection	all BMPs in good condition	9/30/2011	inspection conducted	none necessary
9134	G	2153 Whisper Wind Ln	Self-Verification	all BMPs in good condition	8/6/2011	information validated	none necessary
9150	G	3113 Camino Del Rancho	Self-Verification	all BMPs in good condition	8/4/2011	information validated	none necessary
9180	G	1610 Neptune Ave	Self-Verification	all BMPs in good condition	8/30/2011	information validated	none necessary
9200	G	3616 Manchester Ave	City Inspection	all BMPs in good condition	9/8/2011	inspection conducted	none necessary
9253	G	701 S Vulcan Ave	Self-Verification	all BMPs in good condition	8/10/2011	information validated	none necessary
9253	G	703 S Vulcan Ave	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
9253	G	715 S Vulcan Ave	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
9253	G	717 S Vulcan Ave	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
9253	G	719 S Vulcan Ave	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
9253	G	721 S Vulcan Ave	Self-Verification	all BMPs in good condition	9/25/2011	information validated	none necessary
9278	G	490 Latigo Row	Self-Verification	all BMPs in good condition	8/10/2011	information validated	none necessary
9283	G	1440 Hygeia Avenue	Self-Verification	all BMPs in good condition	1/25/2012	information validated	none necessary
9283	G	265 Sanford St	Both	all BMPs in good condition	12/6/2011	inspection conducted	none necessary
9283	G	267 Sanford Street	Self-Verification	all BMPs in good condition	8/24/2011	Check with building dept re: veg swale converted to rock.	none necessary
9289	G	2914 Lone Jack Rd	City Inspection	all BMPs in good condition	10/19/2011	inspection conducted	none necessary
9289	G	2932 Lone Jack Rd	City Inspection	all BMPs in good condition	10/19/2011	inspection conducted	none necessary
9289	G	2934 Lone Jack Rd	City Inspection	all BMPs in good condition	10/19/2011	inspection conducted	none necessary
9289	G	2944 Lone Jack Rd	City Inspection	all BMPs in good condition	8/9/2011	inspection conducted	none necessary
9294	G	477 N El Camino Real	City Inspection	BMP(s) needed maintenance	9/6/2011	requested maintenace docs for 2 ADS units	ADS units cleaned, docs provided
9301	G	187 Halcyon Rd	Self-Verification	all BMPs in good condition	8/15/2011	information validated	none necessary
9301	G	189 Halcyon Rd	Self-Verification	all BMPs in good condition	9/29/2011	information validated	none necessary
9303	G	887 Brittany Rd	Self-Verification	all BMPs in good condition	8/1/2011	information validated	none necessary
9303	G	887 Brittany Rd	Both	all BMPs in good condition	7/26/2011	inspection conducted	none necessary
9318	G	1154 Evergreen Dr	Self-Verification	all BMPs in good condition	8/30/2011	information validated	none necessary
9318	G	1158 Evergreen Dr	Self-Verification	all BMPs in good condition	8/24/2011	information validated	none necessary
9318	G	1160 Kava Ct	Self-Verification	all BMPs in good condition	7/31/2011	information validated	none necessary
9318	G	1164 Kava Ct	Self-Verification	all BMPs in good condition	8/14/2011	information validated	none necessary
9318	G	1165 Kava Ct	Self-Verification	all BMPs in good condition	8/4/2011	information validated	none necessary
9318	G	1168 Kava Ct	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
9318	G	1169 Kava Ct	Self-Verification	change of owner		determine new owner for FY 12-11 inspection	
9318	G	1172 Kava Ct	Self-Verification	all BMPs in good condition	8/27/2011	information validated	none necessary
9318	G	1173 Kava Ct	Self-Verification	all BMPs in good condition	8/16/2011	information validated	none necessary

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
9318	G	1176 Kava Ct	Self-Verification	all BMPs in good condition	9/13/2011	information validated	none necessary
9367	G	781 Garden View Ct	City Inspection	all BMPs in good condition	10/13/2011	inspection conducted	none necessary
9370	G	406 La Costa Ave	City Inspection	all BMPs in good condition	8/2/2011	inspection conducted	none necessary
9419	G	871 Neptune Ave	Self-Verification	all BMPs in good condition	9/10/2011	information validated	none necessary
9481	I	545 Quail Pointe Ln	Self-Verification	BMP(s) needed maintenance	11/1/2011	requested verification that cartridges were inspected and maintained if needed	unit cleaned, docs provided
9561	G	303 Santa Fe Dr	Self-Verification	all BMPs in good condition	8/21/2011	information validated	none necessary
9580	G	3451 Dove Hollow Road	City Inspection	all BMPs in good condition	9/22/2011	inspection conducted	none necessary
10187	G	1603 Crest Dr	Self-Verification	BMP(s) needed maintenance	10/8/2011	information validated	removal of leaves/dirt from drain boxes
10404	G	3211 Wildflower Valley Dr	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
10548	G	1502 Encinitas Blvd	City Inspection	BMP(s) needed maintenance	10/21/2011	inspection conducted, reinstallation to meet plan necessary	reinstalled per direction of City inspector and City design engineer

CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Treatment Control BMPs

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

GENERAL INFORMATION

Permit No/Type _____ Property Address _____ Gate Code _____

Inspection Type: ☐ Annual ☐ Complaint Ownership: ☐ HOA ☐ Homeowner ☐ Commercial

Project Type: ☐ Private ☐ City of Encinitas SUSMP Status: ☐ Priority ☐ Standard

Inspection Priority: ☐ High ☐ Medium ☐ Low ☐ Unk Property Access: ☐ Open ☐ Limited ☐ None

TREATMENT CONTROL BMP EVALUATION

BMP Type	Location	Observations	Comments ☐Corrective Actions
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	

Photo(s) Taken: ☐ Yes ☐ No

Additional Comments:

CORRECTIVE ACTIONS

☐ None ☐ Maintenance/Repair ☐ Other _____

_____

_____

_____ Completion Due Date _____

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.140. Failure to comply with minimum Best Management Practices (BMP) Standards may result in further enforcement action by the City of Encinitas.

_____

Inspector (Print) **Signature** **Date**

_____

Responsible Party (Print) **Signature** **Date** **Contact Number**

☐ Responsible Party not present. Copy of inspection report provided to Responsible Party on _____

FOLLOW UP INSPECTION

☐ All Corrective Actions completed ☐ Corrective Actions not complete ☐ Enforcement Action required

_____

Inspector Sign-Off **Date**

COPY DISTRIBUTION White – Responsible Party Yellow – City Inspector Pink – File REVISED 9/1/09

CITY OF ENCINITAS
CLEAN WATER PROGRAM
505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

STORMWATER TREATMENT CONTROL BMP MAINTENANCE AND INSPECTION PROGRAM

Stormwater Treatment Control BMPs are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. Common Treatment Control BMPs include Vegetated Swales, Bioinfiltration Areas, Infiltration Basins or Trenches, and Storm Drain Filter Inserts.

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner, business owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

☑ **On an annual basis prior to the wet season, or more frequently as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair (i.e. overgrown vegetation, restricted water flow, excessive sediment and debris).**

☑ **Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming/mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, removing trash or other debris, etc.**

DEFINITIONS

Treatment Control Best Management Practice (BMP) means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process. Also frequently referred to as Stormwater Best Management Practices or BMPs.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains.

Wet Season means October 1 thru April 30 of each year.

EMC 20.08.140.F. • INSPECTION, MAINTENANCE, REPAIR AND UPGRADING OF BMPS

Treatment Control BMPs must be inspected by the Discharger or responsible party before the start of the wet season and following actual rain events. These BMPs must be maintained so that they continue to function as designed. Treatment BMPs which fail must be repaired as soon as it is safe to do so. If the failure of a structural or nonstructural BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances. All sediment and debris in catch basins must be removed prior to the wet season and disposed of in a manner which prevents it from entering the Storm Water Conveyance System or the Receiving Waters.

EMC 20.08.080 • COMPLIANCE WITH BEST MANAGEMENT PRACTICES

No Discharger shall fail to implement, install, use, or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

EMC 20.08.160.A. • REGULATORY INSPECTIONS

The City Engineer or his designee may inspect the premises of any Discharger at reasonable times and in a reasonable manner to carry out the purposes of this Chapter. If a Discharger refuses to allow entry for an inspection, an inspection warrant shall be obtained prior to inspection.

EMC 20.08.040 • ILLEGAL DISCHARGES

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

Case / Permit No.:_____

CITY OF ENCINITAS
STORMWATER QUALITY CHECKLIST AND CERTIFICATION

SW

All development projects proposed within the City of Encinitas are required to implement stormwater quality measures in accordance with the *Encinitas Stormwater Manual*. The intent of these requirements is to promote practices and project designs that improve the quality of runoff and protect our local ocean, creeks, and lagoons from the harmful effects of polluted runoff. The *Encinitas Stormwater Manual* meets State-mandated requirements established by Regional Water Quality Control Board Order No. R9-2007-0001 (San Diego Region Municipal Stormwater Permit). For a more detailed description of the City's stormwater requirements, refer to the *Encinitas Stormwater Manual* on the City website (www.CityofEncinitas.org). The manual provides detailed, step-by-step guidelines on how to plan for, design, construct, and maintain stormwater treatment features. Other City stormwater-related resources available on the City's website include:

1. Municipal Code Chapter 20.08: Stormwater Management
2. Municipal Code Chapter 23.24: Grading, Erosion, and Sediment Control

This checklist is designed to guide applicants in the determination of the stormwater quality designation of the project and the design of appropriate stormwater quality features. Projects may be designated as 1) **Priority**, 2) **Standard**, or 3) **Exempt** projects. At a minimum, all projects are required to provide designs and employ practices that minimize the potential for discharge of pollutants into the City's storm drainage system or local receiving waters, as outlined in the *Requirements for All Development Projects* below.

Requirements for ALL Development Projects

All development projects (including Exempt Projects) must include a minimum set of control measures to reduce the discharge of stormwater pollutants to the maximum extent practicable. All projects must include:

- ☑ Implementation of Best Management Practices (BMPs) to control potential pollutant sources.
- ☑ Inclusion of Low Impact Development (LID) features that minimize the water quality impacts of the project.
- ☑ Compliance with requirements for construction-phase controls on sediment and other pollutants.

In addition, all projects must design and install drainage features so that runoff from impervious areas (such as rooftops, parking lots, and driveways) drains through pervious or vegetated areas for treatment before draining to public or private streets or storm drainage systems. No Directly Connected Impervious Area (DCIA) will be allowed on any development project (Encinitas Municipal Code Section 23.24.120). For more information about prohibited DCIA practices and the stormwater runoff requirements for all projects, refer to the *Encinitas Stormwater Manual*.

Beyond the minimum *Requirements for All Development Projects* listed above, the stormwater quality measures required for a particular project differ based upon the nature of the proposed development. Step 1 (Tables I and II below) is designed to assist you in determining the appropriate stormwater quality designation for your project. An overview of the method for determining the designation is included in the flowchart on the next page.

Case / Permit No.:_____

FLOWCHART: DETERMINATION OF THE APPROPRIATE STORMWATER QUALITY DESIGNATION FOR DEVELOPMENT PROJECTS

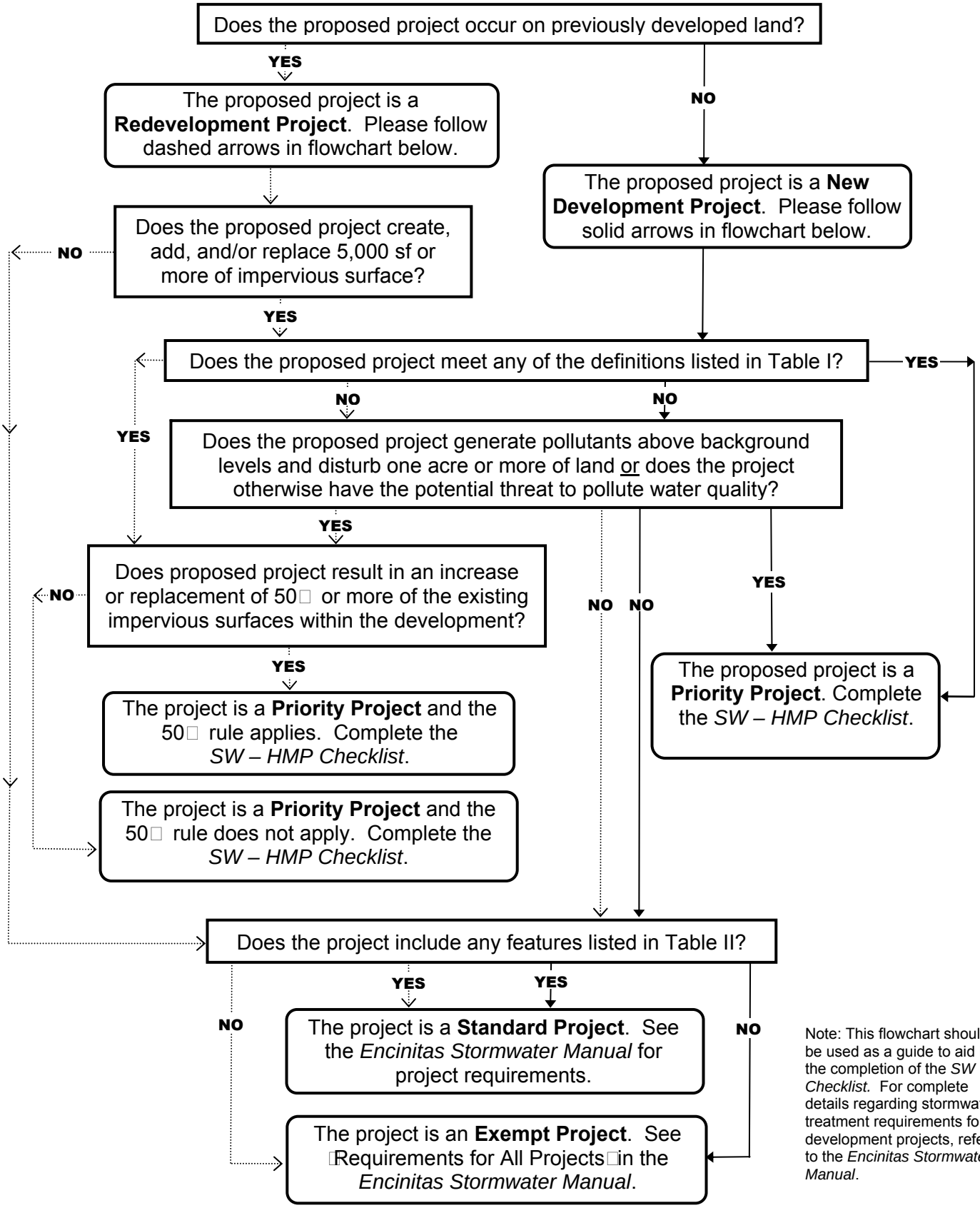

Note: This flowchart should be used as a guide to aid in the completion of the *SW Checklist*. For complete details regarding stormwater treatment requirements for development projects, refer to the *Encinitas Stormwater Manual*.

Case / Permit No.:_____

STEP 1: DETERMINE STORMWATER QUALITY DESIGNATION

Step 1 is designed to assist you in determining the appropriate stormwater quality designation for your project.

Step 1A: Determine Development Type and Priority Project Category Applicability

The first step in assessing the appropriate stormwater designation for your project is to determine whether it is a New Development Project or a Significant Redevelopment Project according to the definitions below.

New Development Projects are defined as projects proposing new impervious area on a previously undeveloped parcel.

Significant Redevelopment Projects are projects on previously developed land that create, add, and/or replace 5,000 square feet (s.f.) or more of impervious surface. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include interior remodels, roof or exterior surface replacement; trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; or routine replacement of damaged pavement, such as pothole repair. However, other requirements, including incorporation of appropriate source controls, still apply. If your redevelopment project is exempt, the project is still obligated to meet the *Requirements for All Development Projects*, to the extent practicable. The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the *Encinitas Stormwater Manual*.

If your project meets one of the two definitions of development listed above, use Table I to determine if your project is a Priority Development Project.

Table I: Determine if Project is a Priority Development Project

Review each category A through J to determine whether the project meets the definition of one or more of the Priority Project categories. If any response in Table I is "Yes", the project is a **Priority Development Project**; *please continue to Step 2.* If all responses are "No", *please continue to Step 1B*.

Does the project meet the definition of one or more of the following categories?

A	**Housing subdivisions of 10 or more dwelling units**. Examples: single-family homes, multi-family homes, condominiums, and apartments.	Yes ❑	No ❑
B	**Commercial" greater than one acre of development**. Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.	Yes ❑	No ❑
C	**Heavy industry" greater than one acre of development**. Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).	Yes ❑	No ❑
D	**Restaurants**. Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.	Yes ❑	No ❑

Case / Permit No.:_____

Table I (cont.): Does the project meet the definition of one or more of the following categories?			
E	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.	Yes ❑	No ❑
F	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 or more of its naturally occurring condition. Directly adjacent means situated within 200 feet of the ESA. Discharging directly to means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.	Yes ❑	No ❑
G	**Parking lots** 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.	Yes ❑	No ❑
H	**Streets, roads, driveways, highways, and freeways**. Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. If a project is determined to be a Priority Project based solely on the driveway surface area, the project will only be subject to stormwater treatment requirements and will not be required to meet Hydromodification Mitigation Plan (HMP) regulations. Refer to the *SW-HMP Checklist* for more details.	Yes ❑	No ❑
I	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more of development or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.	Yes ❑	No ❑
J	**Automotive repair shops**. A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.	Yes ❑	No ❑

If the answer to one or more of the categories in Table I is Yes, the project is a considered **Priority Development Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria. Proceed to Step 2 and refer to the *SW—HMP Checklist* to determine whether your project is required to meet hydromodification regulations. If all answers in Table I are No, proceed to Step 1B.

Step 1B: Determine Project s Water Quality Sensitivity

Development projects have the potential to contribute pollutants that could threaten local and downstream water quality. Review the following project categories and determine whether your project meets either one of these definitions.

Pollutant Generating Project Which Disturbs One Acre or More of Land. Projects that generate pollutants at levels greater than background levels and disturb one acre or more of land are considered Priority Development Projects. In most cases linear pathway projects that are for infrequent vehicle use (such as emergency or maintenance access) or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they allow runoff to sheet flow to surrounding pervious surfaces.

All Development Projects with Potential Threat to Pollute. Some projects not meeting the definitions listed in Table I may still be designated as Priority Projects if they are found to cause a threat to water quality through excess pollution potential. The City of Encinitas has the discretion to designate a project not listed within Table I as being a Priority Project based on the project s potential impacts to stormwater quality.

If your project meets either of the categories described above, the project is a **Priority Development Project** for stormwater quality and the project will be required to install Source Control measures, LID features, and Stormwater Treatment Facilities. The City Engineer will make the final determination as to whether your project meets one of the definitions. Proceed to Step 2 and refer to the *SW—HMP Checklist* to determine whether your project is required to meet hydromodification regulations.

If your project does not meet one of the two categories listed above, proceed to Step 1C to determine whether your project includes any features that are consistent with the Standard Project classification.

Step 1C: Determine Standard Project Feature Applicability

Table II: Determine if Project is a Standard Project

To use Table II, review A through J to determine whether the proposed project includes any feature that would qualify the project as a Standard Project. If the response to any feature in A through J below is Yes, the project is designated as a **Standard Project**. If all responses are No, the project is an **Exempt Project**. After completion of Table II, *please proceed to Step 2.*

Does the project include any features qualifying it as a Standard Project?

A	**New Impervious Surface Areas totaling 500 square feet or more** combined, and including any cumulative development over the five-year period preceding the time of application. Impervious areas include improvements such as rooftops, roads, parking lots, driveways, patios, pool decks, paths, etc.	Yes ❑	No ❑
B	**Reconstruction of any Existing Impervious Surface Areas** such as rooftops, roads, parking lots, driveways, paths, and sidewalks in excess of 500 square feet, including any cumulative development over the five-year period preceding the time of application.	Yes ❑	No ❑
C	**Permanent Structures** within 100 feet of any natural water body.	Yes ❑	No ❑
D	**Trash Storage Areas**.	Yes ❑	No ❑
E	**Loading and/or Unloading Areas** for liquids and/or solid materials.	Yes ❑	No ❑
F	**Vehicle or Equipment Fueling, Washing, and/or Maintenance Areas**.	Yes ❑	No ❑
G	**General NPDES Permit Required** for storm water discharges associated with industrial activities (except for construction permits)	Yes ❑	No ❑
H	**Commercial and/or Industrial Waste** handling or storage, excluding typical office or household waste.	Yes ❑	No ❑
I	**Grading** or ground disturbance proposed during construction.	Yes ❑	No ❑
J	**Storm Drains** including new storm drains as well as alteration to existing storm drains that reduce natural storm water treatment.	Yes ❑	No ❑

If the answer to one or more of the features in Table II is Yes, the project is a **Standard Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design Features, and some Stormwater Treatment Facilities. Proceed to Step 2 and use Chapter 4 of the *Encinitas Stormwater Manual* as a general guide when designing stormwater treatment facilities that will meet Standard Development Project requirements.

The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the *Encinitas Stormwater Manual*. If the answers to all categories in Tables I and II are No, and the project has been determined by the City of Encinitas not to be a pollutant generating project or have the potential to pollute, the project is an **Exempt Project** for stormwater quality but is still required to meet the *Requirements for All Development Projects*. Please proceed to Step 2.

Case / Permit No.:_____

STEP 2: DETERMINE PROJECT SUBMITTAL REQUIREMENTS

Requirements for Exempt, Standard, and Priority Projects are discussed in turn below. Engineering Services Department staff are available to answer any specific questions regarding the stormwater quality requirements.

Please check the box adjacent to the project type determined in Step 1.

- ❑ **Exempt Project:** See Step 2A below.
- ❑ **Standard Project**: See Step 2B below.
- ❑ **Priority Project**: See Step 2C below.

Step 2A: Determining Stormwater Quality Measures for an Exempt Project.

Exempt projects are not required to install new Stormwater Treatment Facilities but shall utilize existing on-site landscape and pervious areas to avoid Directly Connected Impervious Areas (DCIA) as outlined in the *Requirements for All Development Projects* section above and in the *Encinitas Stormwater Manual.* In addition, Exempt Projects, like all other projects, are required to comply with requirements for construction-phase controls on sediment and other pollutants. *Please proceed to Step 3.*

Step 2B: Determining Stormwater Quality Measures for a Standard Project.

Standard Projects are obligated to conform to the *Requirements for All Development Projects* outlined in the previous section as well to as integrate some BMP or LID features into the project proposal. BMP and LID features should be designed using Chapter 4 of the *Encinitas Stormwater Manual* as a general guide and then depicted on the plans for the permit. In addition, based on the types of BMPs or LIDs proposed, the City may require that a maintenance agreement be developed. *Please proceed to Step 3.*

Step 2C: Determine Stormwater Quality Measures for a Priority Project.

Priority Projects will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria and may be required to meet HMP regulations. To determine whether your project needs to meet hydromodification regulations please complete the *SW—HMP Checklist*. The ***Encinitas Stormwater Manual*** includes detailed guidance for the planning and design of acceptable storm water quality features and for developing your project submittal package.

The 50% Rule for Significant Redevelopment Projects Only: The requirements for Priority Redevelopment Projects differ depending upon the amount of redevelopment proposed. If the proposed project results in an increase and/or replacement of 50% or more of the previously existing impervious surfaces onsite, then the entire development must be included in the stormwater treatment design. If less than 50% of the previously existing impervious surfaces will be affected by the proposed project, then only the affected previously existing areas and the newly proposed project must be included in the stormwater treatment design.

After completing the steps outlined in the *Encinitas Stormwater Manual*, Priority Projects shall provide required documentation to the City detailing the project's compliance with Priority Project standards. All documentation shall be reviewed and approved by the City of Encinitas prior to issuance of a grading or improvement permit or prior to the issuance of any discretionary permit, at the direction of the City Engineer. At a minimum, the items below are required for stormwater facility documentation of Priority Projects. The City Engineer may pose additional requirements for certain projects. Upon review of the submittal requirements in Step 2C, *please proceed to Step 3.*

Case / Permit No.:_____

PRIORITY PROJECT SUBMITTAL MINIMUM REQUIREMENTS

Priority Projects shall provide to the City all of the following documentation detailing the project's compliance.

I) STORMWATER QUALITY SECTION OF DRAINAGE STUDY: A Stormwater Quality discussion shall be included as a separate section within the project drainage study and shall include a **narrative** as well as an **exhibit**. Minimum requirements for the narrative and exhibit are discussed in items (a) and (b) below.

a) STORMWATER QUALITY NARRATIVE: The stormwater quality narrative in the drainage study shall discuss, at a minimum, the items listed below.

1) Tabulation of the square footage of proposed pervious areas, impervious areas, and areas draining to an IMP. Also, a tabulation of the square footage of self-treating areas, self retaining areas, and areas draining to self-retaining areas, as applicable. (Step 3)

2) Calculations of the required sizing for self-retaining and Integrated Management Practice (IMP) areas and calculations documenting the sufficiency of the facilities provided. (Step 3)

3) A table of pollutant sources identified and the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix A of the *Encinitas Stormwater Manual*. (Step 4)

b) STORMWATER QUALITY EXHIBIT: The Stormwater Quality Section of the drainage study shall contain one exhibit including all of the items listed below. The Stormwater Quality Exhibit must be in conformance with the Site Plan. The Stormwater Quality Exhibit shall include the Site Plan features screened into the background for ease of confirming agreement between the Exhibit and the Site Plan.

1) Division of entire site into distinct drainage management areas (DMAs), with each drainage management area assigned a unique identifier (e.g., 1, 2, 3 or A, B, C). (Step 1)

2) Square footage and types of surfacing (e.g., roof, landscape, pavement) included in each DMA and the total DMA square footage. (Step 1)

3) Hydrologic soil group and depth to groundwater (as applicable) for each DMA. (Step 1)

4) Each DMA labeled as self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. (Step 2)

5) Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix A and corresponding required source controls. (Step 4)

II) SITE PLAN: At a minimum, the Site Plan shall include the items listed below. A copy of the Site Plan shall be included in the Stormwater Quality Section of the drainage study.

1) Existing and proposed drainage network and connections to drainage off-site. (Step 3)

2) Depiction of site design characteristics that minimize disturbance as well as building features and pavement selections that minimize the proposed imperviousness of the site. (Step 3)

3) Proposed design of each IMP feature and any Permanent Source Control features. (Step 3)

4) Title sheet standard notes for each of pollutant sources identified specifying the source control measure(s) to be used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix. (Step 4)

5) Existing natural hydrologic features such as depressions, watercourses, floodplains, and relatively undisturbed areas, as well as significant natural resources. (Step 1)

6) The City of Encinitas Standard Storm Water Quality Notes shall be added to the site plan.

7) Certification by a civil engineer, architect, or landscape architect on the title sheet. (Step 6)

III) MAINTENANCE AGREEMENT: In order to provide for the perpetual maintenance of the stormwater treatment facilities, the City will prepare for the property owner a Maintenance Agreement that shall record against the property. The items listed below shall be provided to the City for inclusion in the Maintenance Agreement.

1) Discussion of general maintenance needs for infiltration, treatment, and flow-control facilities. (Step 5)

2) The means by which facility maintenance will be financed and maintained into perpetuity. (Step 5)

3) Statement accepting responsibility for interim operation and maintenance of facilities. (Step 5)

4) Plat and legal description of the property.

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STEP 3: STORMWATER PROJECT CERTIFICATION

The property owner of any project (Priority, Standard, or Exempt) shall complete the following Owner's Certification. In addition, any agent completing this form on behalf of a client shall complete the Agent's Certification below.

Owner's Certification:

I hereby acknowledge that my project is subject to the stormwater quality regulations of the City of Encinitas and certify that my project will provide satisfactory stormwater quality measures both during the construction process and afterwards.

If my project is designated as a Priority or a Standard Project, I further acknowledge my understanding that the permanent stormwater treatment features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____ _____

Owner 1 Signature Date Owner 2 Signature Date

_____ _____

Printed Name of Owner 1 Printed Name of Owner 2

Agent's Certification:

I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____

Agent Signature Date

_____

Printed Name of Agent

_____

Working Capacity of Agent (architect, engineer)

_____

Company Name Place Professional Seal Above

Case / Permit No.:_____

SW-HMP

CITY OF ENCINITAS
HYDROMODIFICATION MANAGEMENT PLAN (HMP)
CHECKLIST AND CERTIFICATION

All development projects proposed within the City of Encinitas are required to implement stormwater quality measures in accordance with the *Encinitas Stormwater Manual*. If your project is a Priority Project, as determined by the *SW Checklist*, you may also be required to mitigate for potential hydromodification impacts to downstream water bodies. Hydromodification refers to changes in the magnitude and frequency of stream flows as a result of urbanization and the resulting impacts on receiving channels. Potential impacts to receiving channels include erosion, sedimentation, and degradation of in-stream habitat.

If you have completed the *SW Checklist* and determined that your project is a Priority Project, use the following HMP Decision Matrix to determine whether your project must also comply with the San Diego region hydromodification requirements. If your project is subject to HMP requirements, the HMP Decision Matrix will also assist you in determining the flow range which the project must adhere to.

For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the ***Encinitas Stormwater Manual*** and the ***County of San Diego Hydromodification Management Plan***.

As identified in Figure 1-1, projects may be exempt from HMP criteria if they meet one of the following conditions:

- If the project is not a Priority Development Project (i.e. if the project is determined to be a Standard Project or an Exempt Project after completing the *SW Checklist*.)
- If the proposed project does not increase the impervious area or peak flows to any discharge location.
- If the proposed project discharges runoff directly to an exempt receiving water such as the Pacific Ocean or a lagoon.
- If the proposed project discharges to a stabilized conveyance system that extends to the Pacific Ocean, San Diego Bay, a tidally-influenced area, an exempt river reach or reservoir.
- If the contributing watershed area to which the project discharges has an impervious area percentage greater than 70 percent
- If an urban infill project discharges to an existing hardened or rehabilitated conveyance system that extends beyond the domain of analysis, the potential for cumulative impacts in the watershed are low, and the ultimate receiving channel has a Low susceptibility to erosion as defined in the SCCWRP[1] channel assessment tool.
- If the project includes the construction of a new impervious private driveway and the project has been determined to be a Priority Project solely due to the surface area of that driveway being greater than 5,000 square feet.

[1] Southern California Coastal Water Research Project

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Figure 1-1 HMP Applicability Determination is the first component of the HMP Decision Matrix and can be used for all projects. For redevelopment projects, flow controls are required only if the redevelopment project increases impervious area or peak flow rates above pre-project conditions.

If your project is determined to be exempt from HMP applicability, proceed to Page 7 of this checklist. If your project is determined to require hydromodification controls, complete the remainder of the HMP Decision Matrix (Figures 1-2 through 1-5) to determine the flow range your project must adhere to.

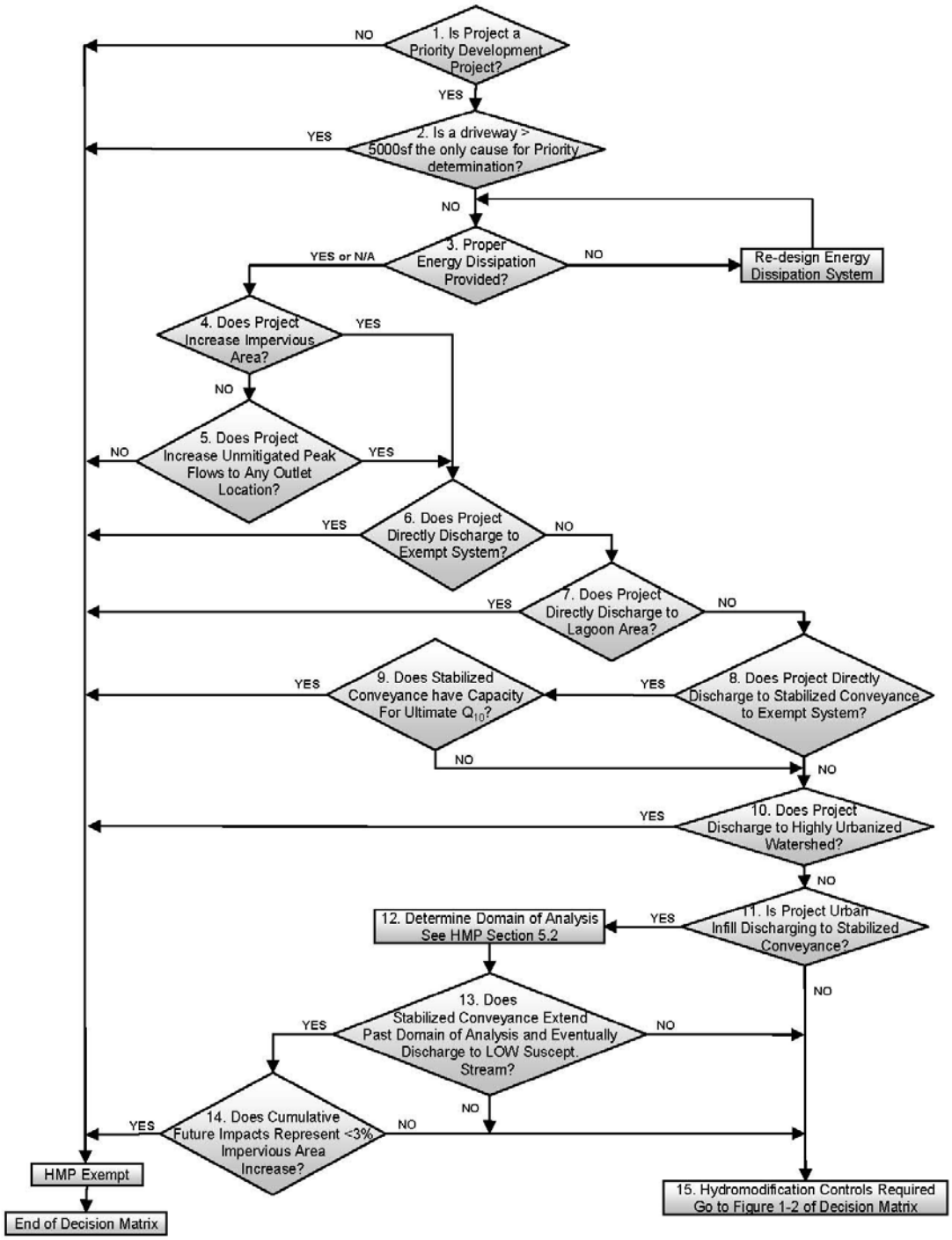

FIGURE 1-1. HMP Applicability Determination

*For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the **Encinitas Stormwater Manual** and the **County of San Diego Hydromodification Management Plan**.*

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Please check the box adjacent to the HMP applicability determined by Figure 1-1.

- ❑ **HMP Exempt**. List the Exemption below and proceed to Page 7.

  Exemption: _____

- ❑ **Hydromodification Controls Required**. Continue with the HMP Decision Matrix (Figures 1-2 through 1-5).

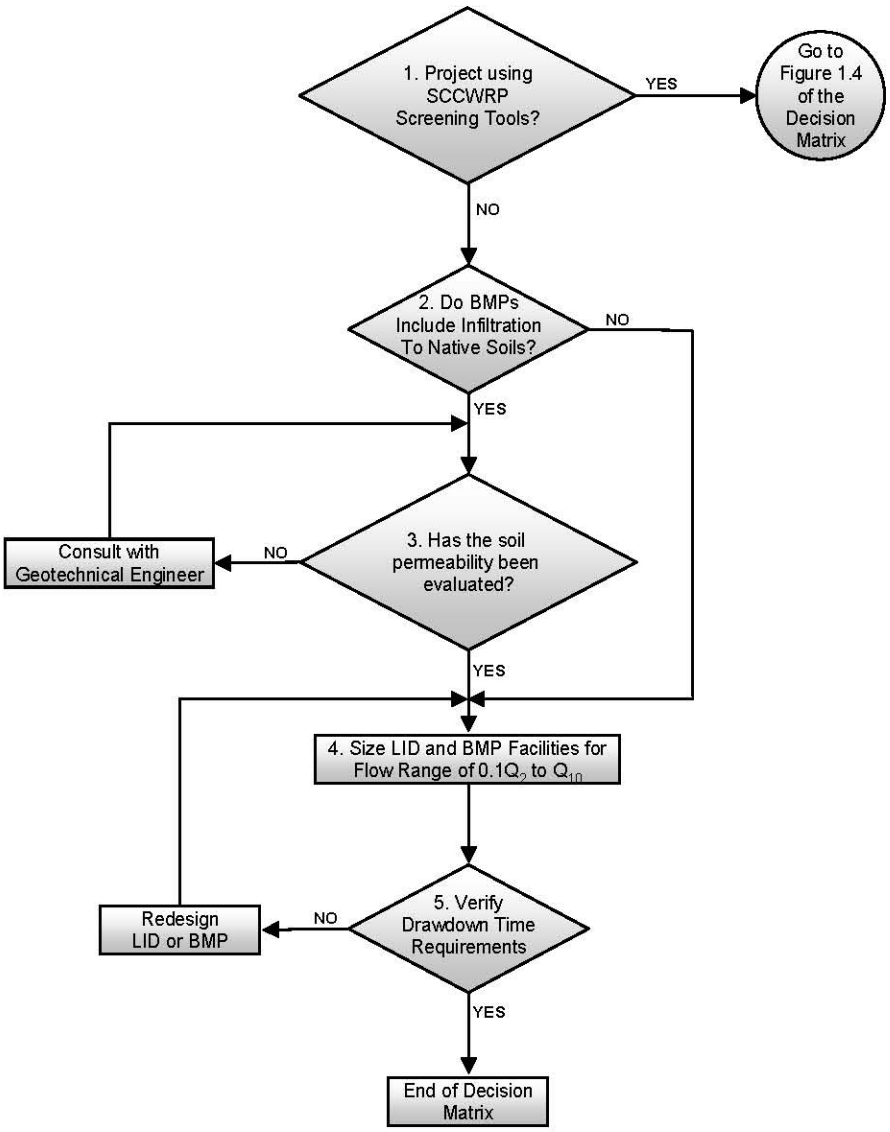

FIGURE 1-2. Mitigation Criteria and Implementation

*For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the **Encinitas Stormwater Manual** and the **County of San Diego Hydromodification Management Plan**.*

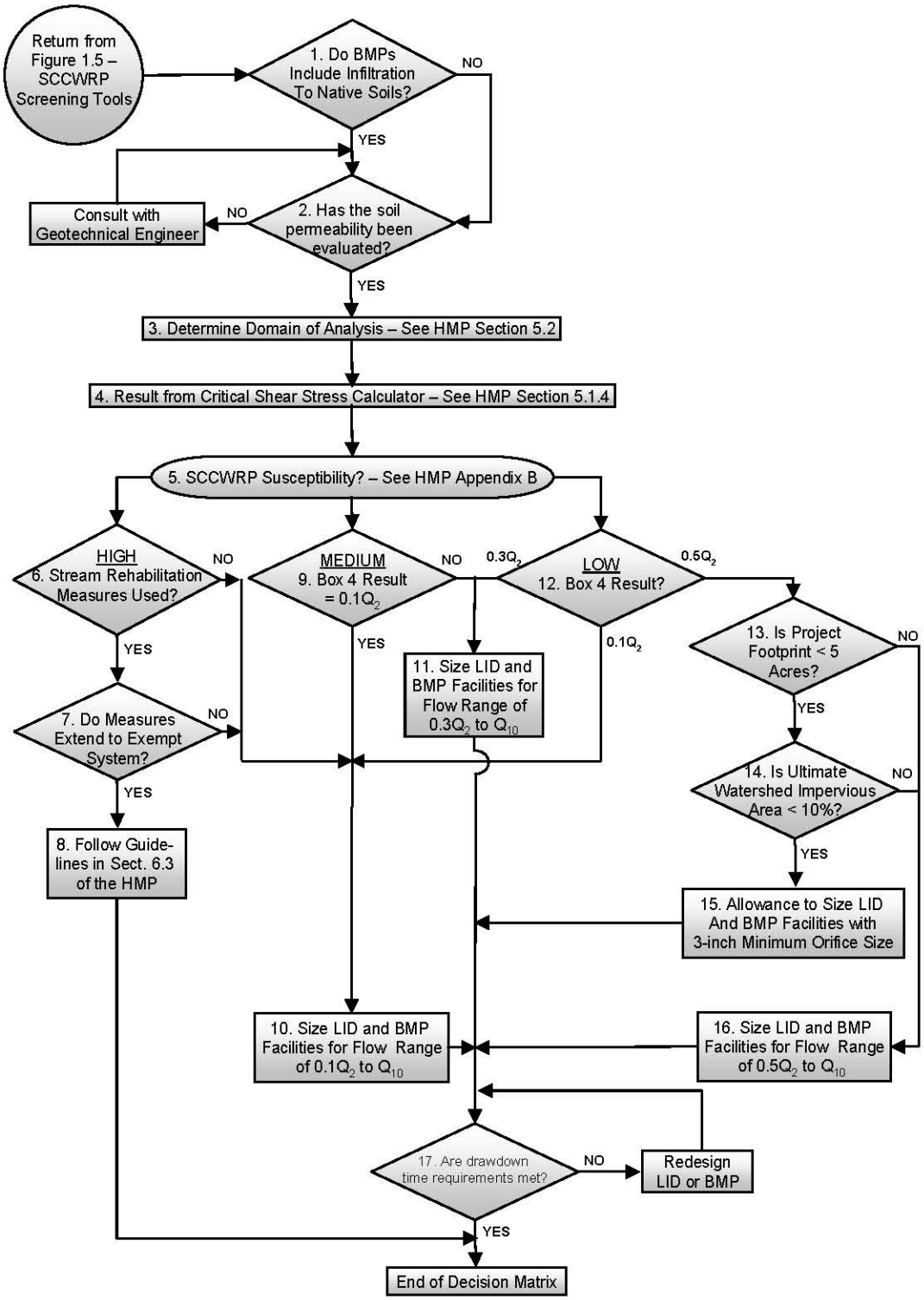

FIGURE 1-3. Mitigation Criteria and Implementation

For a detailed description of each step of the HMP Decision Matrix, refer to ***Section 1*** *of the* ***Encinitas Stormwater Manual*** *and the* ***County of San Diego Hydromodification Management Plan****.*

Case / Permit No.:_____

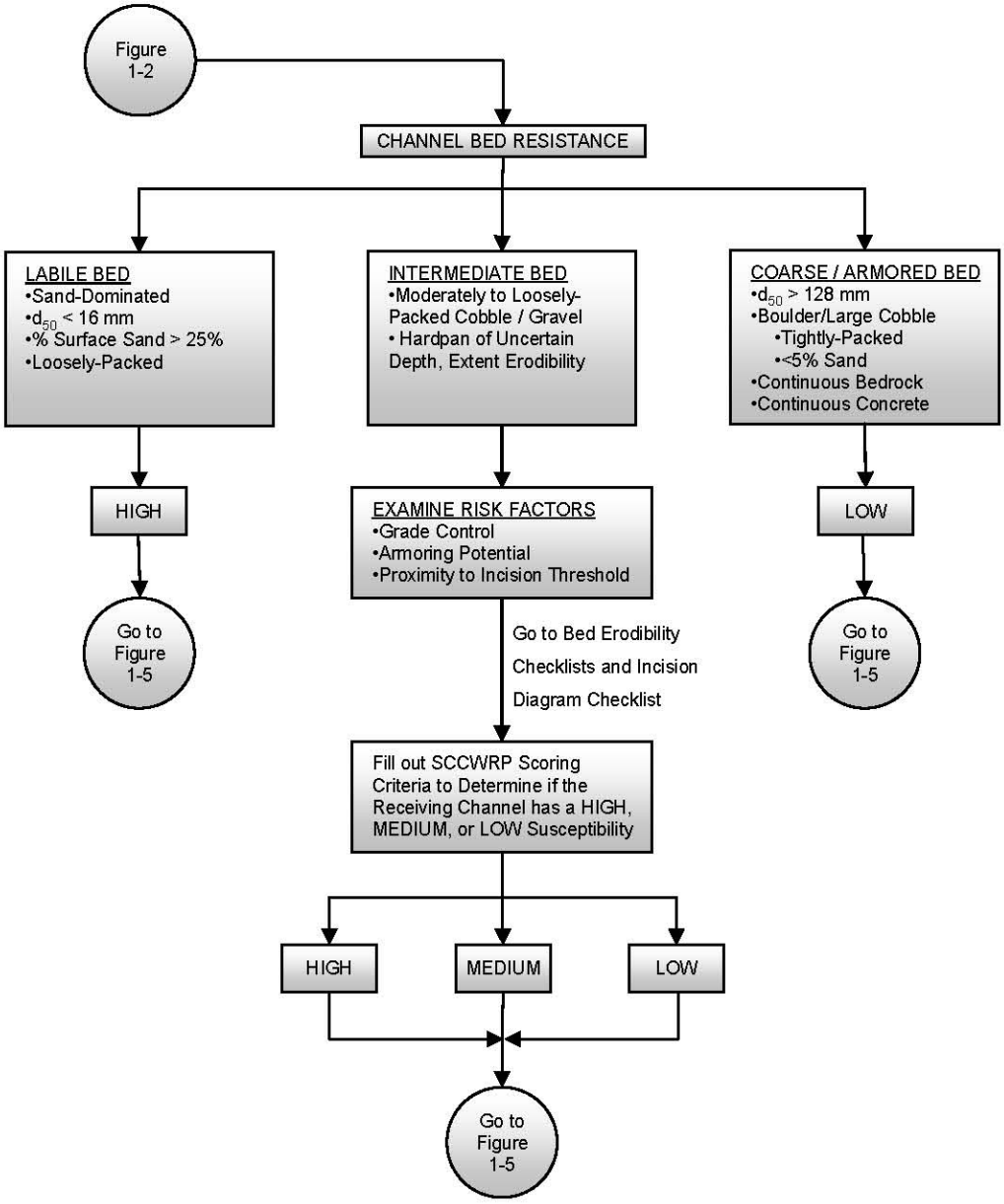

FIGURE 1-4. SCCWRP Vertical Susceptibility. *For a description of how to complete this decision matrix refer to Appendix B of the County of San Diego Hydromodification Management Plan.*

Case / Permit No.:_____

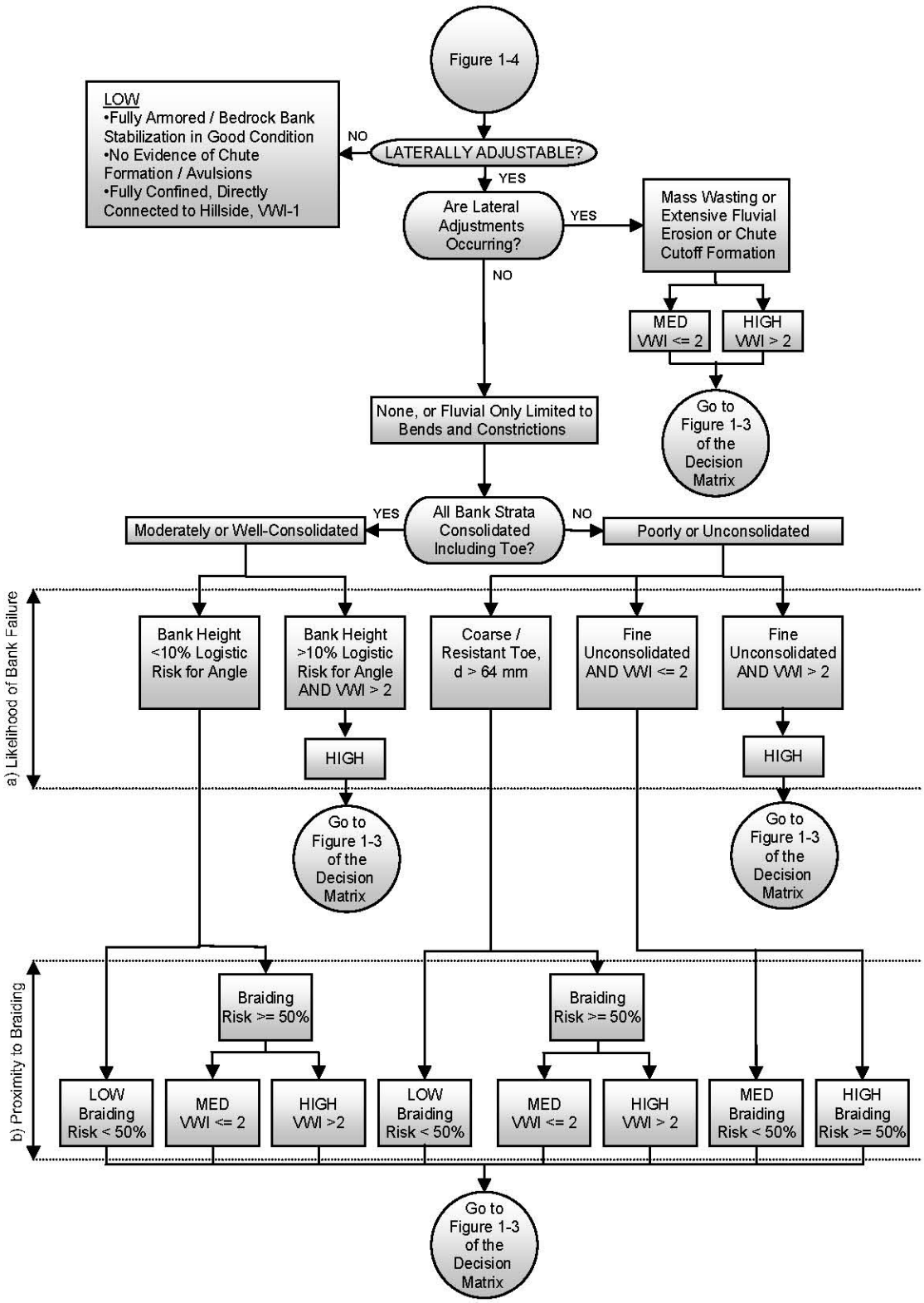

FIGURE 1-5. SCCWRP Lateral Channel Susceptibility. *For a description of how to complete this decision matrix refer to Appendix B of the County of San Diego Hydromodification Management Plan.*

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HYDROMODIFICATION DETERMINATION AND CERTIFICATION

Please check the box adjacent to the Flow Range in which your stormwater treatment facilities must be sized to control, as determined through Figures 1-2 to 1-5.

- ❑ **Flow Range: $0.1Q_2$ □ Q_{10}**
- ❑ **Flow Range: $0.3Q_2$ □ Q_{10}**
- ❑ **Flow Range: $0.5Q_2$ □ Q_{10}**
- ❑ **HMP Exempt, Not Applicable** (List Exemption Below)
  Exemption: _____

The project engineer and property owner shall complete the following certification.

Engineer□s Certification:

I hereby certify that the project, Case/Permit No.:_____, ***IS / IS NOT (circle one)*** subject to the hydromodification regulations of the City of Encinitas. If the project is subject to hydromodification regulations, I certify that the project will provide satisfactory permanent flow control measures.

I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____
Engineer□s Signature Date

_____
Printed Name of Engineer

_____
Company Name Place Professional Seal Above

Owner□s Certification:

I hereby acknowledge that the project, Case/Permit No.:_____, ***IS / IS NOT (circle one)*** subject to the hydromodification regulations of the City of Encinitas. If the project is subject to hydromodification regulations, I certify that the project will provide satisfactory permanent flow control measures.

I further acknowledge my understanding that permanent flow control features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

_____ _____
Owner 1 Signature Date Owner 2 Signature Date

_____ _____
Printed Name of Owner 1 Printed Name of Owner 2

Case / Permit No.:_____

SUPPLEMENTAL SUBMITTAL REQUIREMENTS FOR PROJECTS SUBJECT TO HMP

Priority Projects required to meet hydromodification mitigation standards shall provide to the City all of the following documentation detailing the project's compliance. This documentation is **in addition to** the minimum submittal requirements for Priority Projects.

A **narrative** presenting the following information:

1) If the project is exempt from HMP requirements, a discussion demonstrating which exemption is being claimed and why the project qualifies must be included.

2) If the project is not exempt from HMP requirements, provide the input parameters for the BMP Sizing Calculator or detail the calculations that were used to determine the size of the treatment facility(ies).

3) If the project is not exempt from HMP requirements, document the stormwater facility(ies) dimensions as determined by the BMP Sizing Calculator or the calculations completed above.

A **map** showing the following details:

1) Location of the project.

2) Delineation of the watershed within which the project is located.

3) Location of the discharge point(s) of stormwater from the project.

4) The Domain of Analysis (as defined in Chapter 1 of the ESM).

5) The downstream hydrologic system (both the engineered stormwater system and the natural system--channels, lagoons, etc).

Note: The City Engineer may pose additional submittal requirements for certain projects.

Appendix B

Construction

B-1	Construction Inventory
B-2	Prioritized Construction Sites Map
B-3	Flow Chart for Inspection Frequencies
B-4	Construction Inspection Form
B-5	Erosion Control Letter
B-6	Construction Enforcement Actions

Permit #	Permit Type	Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2011-June 30, 2012
369	GI	1415	RAINBOW RIDGE	Biweekly	0	1	0	1
583	SG	2898	LONE JACK ROAD	Biweekly	0	1	0	1
692	GI	1435	RAINBOW RIDGE	Biweekly	0	1	0	1
716	GI	662	ENCINITAS BLVD. @ QUAIL GARDENS	Biweekly	0	1	0	1
1453	GI	1069	DOUBLE LL RANCH ROAD	Biweekly	0	1	0	1
6857/6242	GI		RANCHO SUMMIT ESTATES	Biweekly	0	1	0	1
10351	GI		RANCHO SUMMIT DR	Biweekly	0	1	0	1
10425	SG	409	BRIDOON TERRACE	Biweekly	0	2	0	2
10470	CN		S COAST HWY BY SAN ELIJO LAGOON	Biweekly	0	0	0	0
10584	GI	3214	FORTUNA RANCH RD	Biweekly	0	1	0	1
10801	SG	3273	RIM ROCK CIRCLE	Biweekly	0	0	0	0
245	GI	3351	LILAC SUMMIT	Monthly	16	3	0	3
325	GI		LONE JACK ROAD	Monthly	0	0	0	0
372	GI	1657	N. VULCAN AVE.	Monthly	0	1	0	1
388	GI	1435	LAKE DR.	Monthly	0	0	0	0
419	SG	1972	CREST DRIVE	Monthly	0	1	0	1
883	GI	1058/1076	HYMETTUS	Monthly	30	7	0	7
886	GI	1084 & 1086	NEPTUNE AVE	Monthly	0	1	0	1
926	SG	234	RANCHO SANTA FE RD.	Monthly	0	1	0	1
949	GI	1007-1021	HERMES AVE	Monthly	30	7	0	7
963	GI	1150	MELBA RD/931- BLUEJACK RD	Monthly	30	7	0	7
1000	GI	272	SEEMAN DRIVE	Monthly	0	1	0	1
7601	GI	1255	BIRMINGHAM	Monthly	4	1	0	1
7893	GI	600	CHRISTINE PLACE	Monthly	0	2	0	2
8091	GI	2145	13TH STREET	Monthly	10	3	0	3
9106	GI	Vulcan Townhomes	NORTH VULCAN AVE	Monthly	0	1	0	1
9117	GI	236/268	ANDREW	Monthly	0	1	0	1
9262	GI	840	BRACERO RD	Monthly	0	1	0	1
9303	GI	875/887	BRITTANY	Monthly	0	1	0	1
9336	GI	290	ANDREW AVENUE	Monthly	14	4	0	4
10042	GI	1450	BLUE HERON AVENUE	Monthly	0	1	0	1
10087	GI	237	SEEMAN DR.	Monthly	0	1	0	1
10090	GI	3183	WILDFLOWER/NARCISSUS SUMMIT	Monthly	30	7	0	7
10323	GI	950	SAXONY RD	Monthly	12	3	0	3
10375	GI	1010	N EL CAMINO REAL	Monthly	0	2	0	2
10417	GI	618	BIRMINGHAM DRIVE	Monthly	30	7	0	7
10501	GI	3177	WILDFLOWER SUMMIT	Monthly	30	7	0	7
10516	GI	556	UNION STREET	Monthly	0	1	0	1
10528	GI	422	REQUEZA STREET/QUENTIN COURT	Monthly	30	7	0	7
10536	GI	1492	HYMETTUS	Monthly	30	8	0	8
10672	SG	1534	CREST DRIVE	Monthly	30	7	0	7
10828	SG	3168	WILDFLOWER SUMMIT	Monthly	30	7	0	7
10889	GI	2551	SAN ELIJO AVE	Monthly	28	5	0	5
CCE04F	TE	3050	MANCHESTER AVE	Monthly	25	6	0	6
80	SI	CMS10B/CMS10E	MELBA SAFE ROUTE TO SCHOOL	Biannual	30	1	1	2
185	GI	1423	RAINBOW RIDGE	Biannual	25	1	0	1
215	GI	424	BRIGHTON AVE	Biannual	30	1	0	1
366	GI	742-744	DEWITT	Biannual	0	0	0	0
528	GI	402	SECOND ST (AKA 207 C STREET)	Biannual	30	2	0	2
556	GI	135	DAPHNE ST	Biannual	30	2	0	2
578	GI	1531	SAN ELIJO AVE	Biannual	30	2	0	2
675	GI	1719	SAN ELIJO AVE	Biannual	25	1	0	1
844	GI	27	EAST "E" STREET	Biannual	0	1	0	1
944	GI	1501	NEPTUNE AVE	Biannual	30	2	0	2
948	SG	411	SANTA FE DRIVE	Biannual	30	0	0	0
1001	GI	342	HILLCREST DRIVE	Biannual	8	0	0	0
1010	GI	1865	N VULCAN AVE	Biannual	0	1	0	1
7505	GI	379	FULVIA STREET	Biannual	30	0	0	0
9482	GI	1635	GASCONY	Biannual	0	0	1	1
9590	GI	721	N VULCAN AVE	Biannual	18	0	0	0
10045	GI	1660	BRAHMS	Biannual	27	2	0	2
10068	GI	119, 125,&133	MOZART	Biannual	8	0	0	0
10116	GI	2209	SERENO VIEW LANE	Biannual	30	1	0	1
10117	GI	1060	HYGEIA AVE	Biannual	30	0	0	0
10153	GI	1521	NEPTUNE AVE	Biannual	8	1	0	1

Permit #	Permit Type	Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2011-June 30, 2012
10309	GI	2358	NEWCASTLE AVE	Biannual	0	0	0	0
10315	GI	794	NEPTUNE AVE	Biannual	30	1	0	1
10332	GI	1200-1214	N COAST HWY 101 @ PHOEBE ST	Biannual	30	2	0	2
10360	GI	1729	SAN ELIJO AVE	Biannual	7	0	0	0
10413	GI	747	DORIS DR	Biannual	0	0	0	0
10430	SG	1022	SAXONY RD	Biannual	30	2	0	2
10433	GI	680	WESTLAKE STREET	Biannual	30	2	0	2
10437	GI	1491	NEPTUNE AVE	Biannual	0	1	0	1
10467	SG	4149	MANCHESTER AVE	Biannual	0	0	0	0
10474	GI	1520	CAUDOR STREET	Biannual	30	2	0	2
10500	GI	151	LA VETA	Biannual	8	1	0	1
10518	II	586	RANCHO SANTA FE RD	Biannual	30	0	0	0
10525	GI	416-461	SANTA FE DR	Biannual	30	2	0	2
10526	GI	1361	AHLRICH AVE	Biannual	30	2	0	2
10543	SG	1745	EOLUS AVENUE	Biannual	0	0	0	0
10548	GI	1502	ENCINITAS BLVD	Biannual	4	0	0	0
10598	GI		URANIA AVENUE (& NORMANDY)	Biannual	30	1	0	1
10642	GI	441	RANCHO SANTA FE RD	Biannual	18	2	0	2
10654	GI	1525	SUMMIT AVE	Biannual	0	0	0	0
10658	GI		JASON ST AT N COAST HWY 101	Biannual	26	1	0	1
10686	GI	3529	FORTUNA RANCH ROAD	Biannual	30	2	0	2
10750	GI	165	KILKENNY DRIVE	Biannual	30	2	0	2
10756	SG	445	FOURTH STREET	Biannual	30	2	0	2
10757	SG	610	OCEAN VIEW AVE	Biannual	30	2	0	2
10774	SG	2622	LONE JACK ROAD	Biannual	30	2	0	2
10799	GI	820	ORPHEUS AVENUE	Biannual	30	2	0	2
10808	GI	816	NEPTUNE AVE	Biannual	26	2	0	2
10830	GI	2156	CAMBRIDGE AVENUE	Biannual	30	2	0	2
10839	GI	354	SANTA FE DRIVE	Biannual	18	1	0	1
10852	GI	357	ROSEMARY LANE	Biannual	30	2	0	2
10853	GI	1255	SAN DIEGUITO DRIVE	Biannual	30	2	0	2
10867	GI	1065	VALLEYSIDE LANE	Biannual	30	1	0	1
10907	GI	706	CORNISH DRIVE	Biannual	30	2	0	2
10917	SG	1105	SECOND ST. @ J STREET	Biannual	26	2	0	2
10924	GI	1833	SOMMERSET	Biannual	18	1	0	1
10931	GI	1034	CORNISH DRIVE	Biannual	18	1	0	1
10938	SG	3401	ADAMS RUN	Biannual	26	2	0	2
10947	SG	3453	TOSCANO COURT	Biannual	24	2	0	2
10979	GI	133	AVENIDA ESPERANZA	Biannual	18	1	0	1
11018	SG	189	N. VULCAN AVENUE	Biannual	22	1	0	1
11020	GI	1159	LARKSONG LANG	Biannual	14	2	0	2
11048	GI	1500-1520	NEPTUNE AVE	Biannual	12	1	0	1
11112	GI	905	ORPHEUS AVENUE	Biannual	11	1	0	1
11118	SG	1446	BLUE HERON AVENUE	Biannual	8	1	0	1
11130	SG	521	CAMINO ELDORADO	Biannual	6	1	0	1
CMD06E	CN		CARDIFF TRAFFIC CALMING	Biannual	16	1	0	1
			FY 2010-11 Total Inspections		**NA**	**200**	**2**	**202**

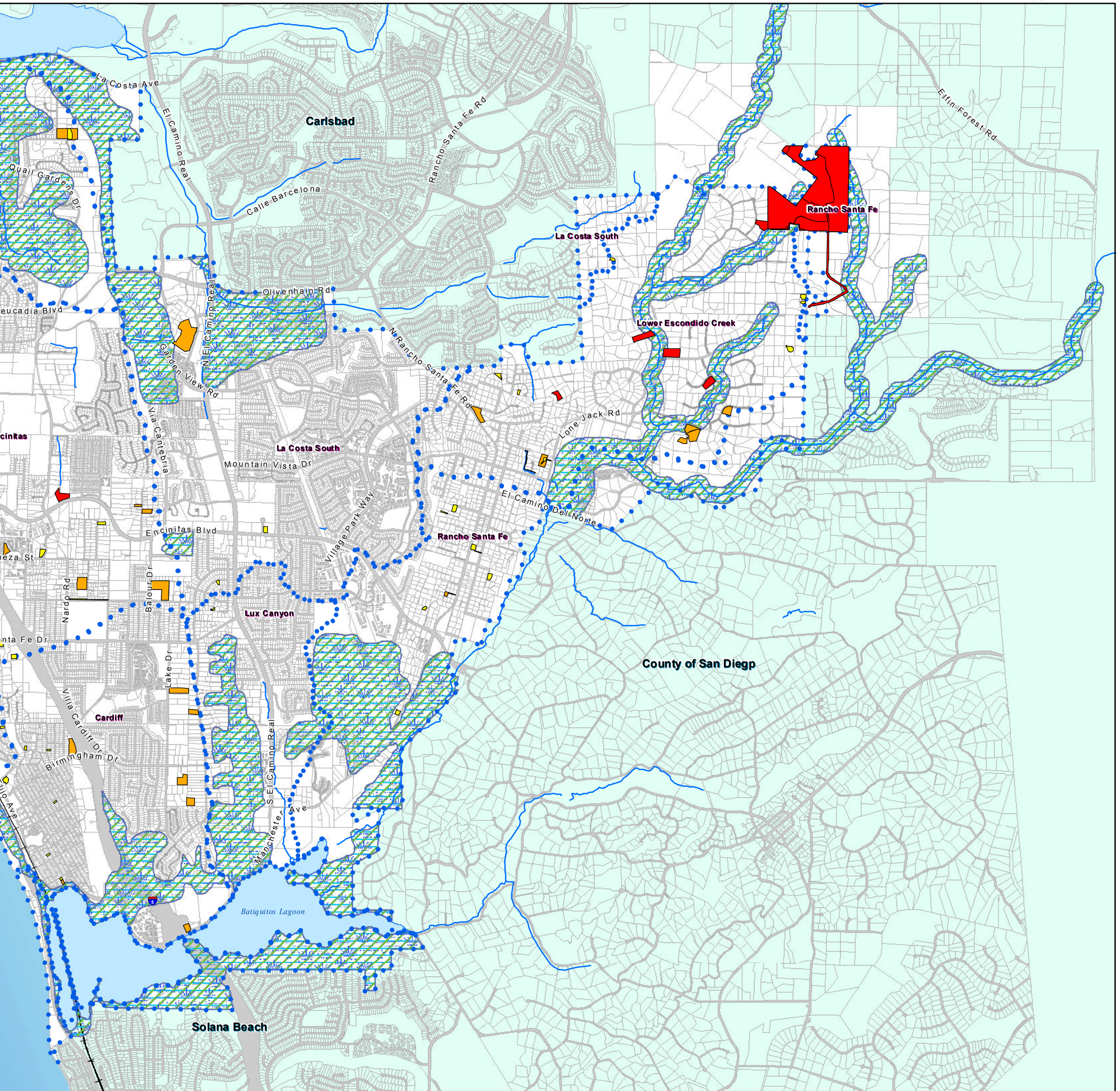
La Costa Ave
El Camino Real
Carlsbad
Rancho Santa Fe Rd
Elfin Forest Rd
Quail Gardens Dr
Calle Barcelona
Rancho Santa Fe
La Costa South
Olivenhain Rd
N El Camino Real
eucadia Blvd
Lower Escondido Creek
N Rancho Santa Fe Rd
Garden View Rd
Lone Jack Rd
Via Cantebria
cinitas
La Costa South
Mountain Vista Dr
El Camino Del Norte
Encinitas Blvd
Village Park Way
Rancho Santa Fe
eza St
Nardo Rd
Balour Dr
Lux Canyon
nta Fe Dr
Lake Dr
County of San Diegp
Villa Cardiff Dr
Cardiff
Birmingham Dr
S El Camino Real
Manchester Ave
Batiquitos Lagoon
Solana Beach

GIS Script Process for Determining Construction Project Inspection Frequencies

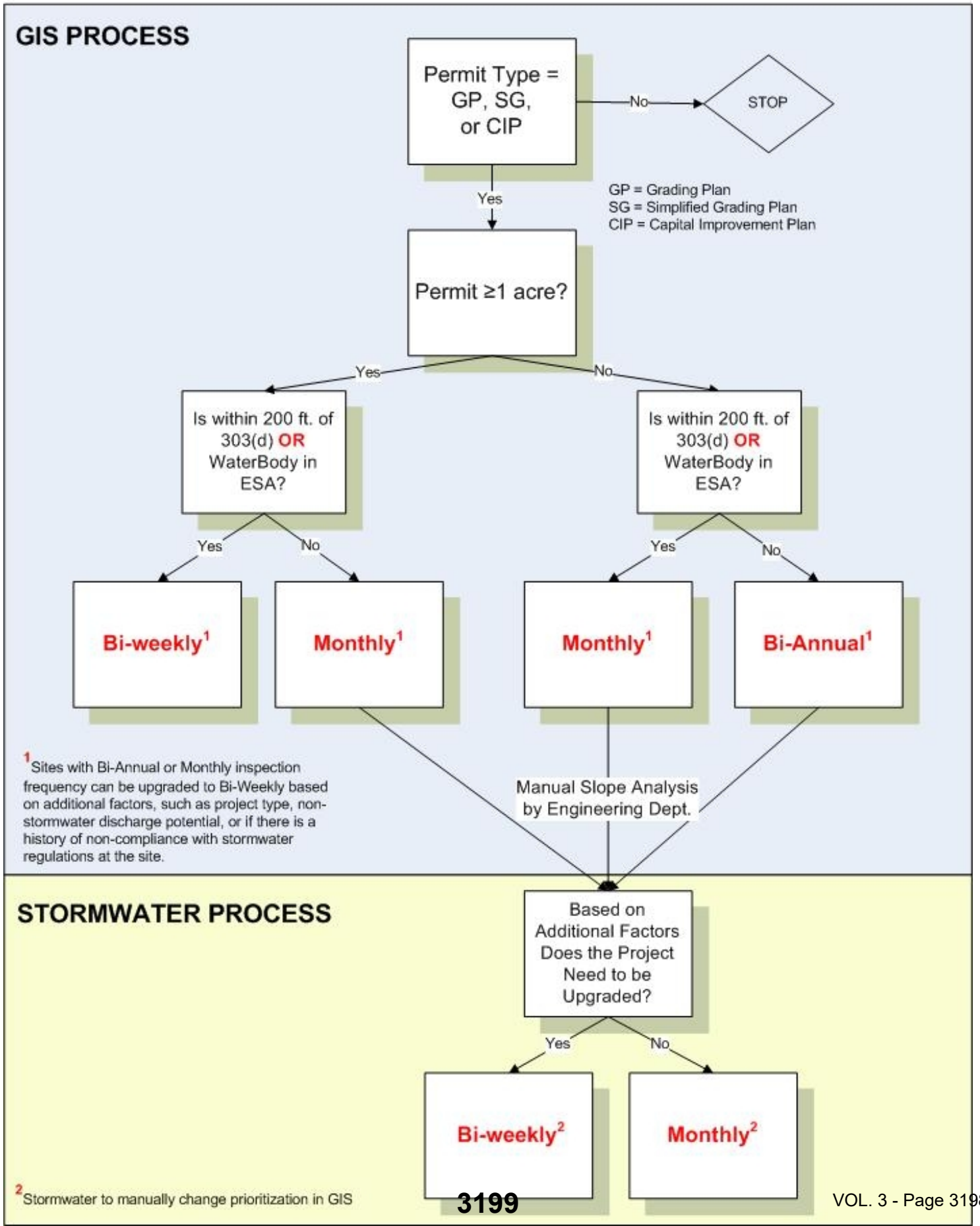

CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Construction Activities

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

Property Address: _____ Inspection Date: _____

Contact Person: _____ Permit No: _____

Phone Number: _____ Project Size: _____

Site Status: ❒ Active ❒ Inactive ❒ First Inspection ❒ Final Sign-Off Date__/__/__

Inspection Frequency: ❒ Bi-Weekly ❒ Monthly ❒ Bi-Annual ❒ Post Rain Event ❒ Complaint Assessment

State General Construction Permit? ❒ Yes ❒ No WDID _____

Is Project SWPPP on Site? ❒ Yes ❒ No

Qualified SWPPP Practitioner (QSP) Name: _____ Phone Number: _____

MINIMUM BEST MANAGEMENT PRACTICE (BMP) REQUIREMENTS		BMP INSTALLATION REQUIRED	BMP REQUIRES MAINTENANCE	OTHER CORRECTIVE ACTIONS REQUIRED
A. Erosion Control BMPs				
1	**Slope Soil Stabilization**			
2	**Silt Fencing**			
3	**Check Dams Rip Rap**			
4	**Fiber Rolls**			
5	**Permanent Landscaping**			
6	**Preserving Existing Vegetation**			
7	**Diversion Channel for Run-On**			
8	**Other:**			
B. Sediment Control BMPs				
1	**Storm Drain Inlet Protection**			
2	**Detention Basin Desilting Basin**			
3	**Perimeter Protection**			
4	**Stabilized Construction Entrance Exit**			
5	**Other:**			
C. Materials Management BMPs				
1	**Stockpile Management**			
2	**Material Washout Area**			
3	**Equipment Storage**			
4	**Trash, Litter, Debris Management**			
5	**Designated Washout Area(s)**			
6	**Sanitary Waste Area Management**			
7	**Fuel Chemical Storage**			
8	**Other:**			

Corrective Actions: ❒ Correct Work (*See Comments*) ❒ No Corrective Actions Required

❒ Referred to the Clean Water Program ❒ Stop Work/NOV

Comments:_____

_____

_____

_____

Corrective Actions identified above must be addressed, to the satisfaction of the City Inspector, within _____ days from the date above OR prior to the next predicted rain event. Failure to comply by this date may result in further enforcement action by the City of Encinitas.

Inspector (Signature) _____ Date ___/___/___

Received By (Signature) _____ Date ___/___/___

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CITY OF ENCINITAS

CLEAN WATER PROGRAM

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

CONSTRUCTION SITE STORMWATER MANAGEMENT AND DISCHARGE CONTROL

All construction projects in the City of Encinitas are required to implement minimum Best Management Practices (BMPs) as necessary to comply with the current State General Municipal Stormwater Permit, State General Construction Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance (EMC 20.08), and the Grading Ordinance (EMC 23.24). Construction is a dynamic operation where changes are expected. Stormwater BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain effectiveness and may require relocation, revision, and re-installation, particularly as project grading progresses. If minimum BMPs are infeasible or deemed inadequate at any specific site, the City will require the implementation of equivalent or alternative BMPs in order to minimize and/or eliminate non-stormwater discharge.

DEFINITIONS

Best Management Practices or "BMPs" means schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, operation and maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to Storm Water, Receiving Waters, or the Storm Water Conveyance System.

Illegal Discharge is any discharge to the Storm Water Conveyance System that is not composed entirely of Storm Water.

Inactive Construction Site means that construction activities have ceased for a period of 7 or more consecutive calendar days. At any time of the year, an inactive site must be fully protected from erosions and discharges of sediment.

State General Construction Storm Water Permit means State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities, and any amendments thereto.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains.

Wet Season means October 1 thru April 30 of each year.

EMC 20.08.040 • ILLEGAL DISCHARGES

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

EMC 20.08.050 • NOTIFICATION AND MITIGATION OF ILLEGAL DISCHARGES

A Discharger shall immediately notify the City Engineer of an Illegal Discharge and take immediate action to control and contain the Illegal Discharge. The Discharger shall also mitigate any damage caused by the Illegal Discharge.

EMC 20.08.070 • LITTERING SWEEPING

No person shall throw, deposit, leave, maintain, keep or permit to be thrown, deposited, placed, left or maintained, any refuse, pet waste, rubbish, garbage, or other discarded or abandoned objects, in or upon any street, alley, parking lot, sidewalk, curb, gutter, storm drain, catch basin, conduit, or other drainage structure or lot except in receptacles maintained for the regular disposal of garbage. Impervious surfaces which drain directly or indirectly into the Storm Water Conveyance System shall be kept free of dirt and debris by regular sweeping. The sweepings shall be placed in garbage receptacles and shall not be allowed to enter the Storm Water Conveyance System.

EMC 20.08.080 • COMPLIANCE WITH BEST MANAGEMENT PRACTICES

No Discharger shall fail to implement, install, use, or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

City of Encinitas

September 12, 2011

RE: **REQUIRED SEDIMENT AND EROSION CONTROL**

City of Encinitas Permit Holder:

Please be advised that starting October 1, 2011 and continuing through April 30, 2012, the City will enter into the official wet season as defined by the State Water Resources Control Board. As such, all construction projects (active or inactive) are required to implement sediment and erosion control Best Management Practices (BMPs) to prevent the discharge of sediment and non-stormwater into the stormwater conveyance system and local water bodies.

Ultimately, for permit holders within the City of Encinitas, the wet season brings with it a responsibility for erosion and sediment control as outlined in sections 23.24.370, 23.24.380 and 23.24.390 of the City of Encinitas' Municipal Code. For your reference, a copy of these Municipal Code sections has been enclosed with this letter. The full text of the Municipal Code can also be accessed on the City's website at:

http://www.ci.encinitas.ca.us/Government/PublicD/MunicipalCode/

In addition, please be advised that your construction project may be subject to requirements as defined by State Water Resources Control Board Order No. 2009-0009-DWQ, General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (State General Construction Permit). To determine permit applicability and project specific requirements, you may find a complete copy of the General Construction Permit at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Please feel free to address any questions regarding this required work to your City of Encinitas Engineering Inspector.

Sincerely,

Greg Shields

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

Cc: City of Encinitas Engineering Inspectors

Encl: North County Storm Water Program Construction Brochure
City of Encinitas Municipal Code Sections 23.24.370, 23.24.380, and 23.24.390

505 South Vulcan Avenue, Encinitas, CA 92024, TEL: 760/633-2600 FAX: 760/633-2627 TDD: 760/633-2700

Appendix B-6 Construction Enforcement Actions for Routine Inspections in FY 2011-12

Date	Site Address	Violation	Correct Work	NOV	Stop Work	Citation Warning	Citation Fine	Citation Number	Cost Recovery
10/4/2011	1531 San Elijo Ave	BMP Installation and Maintenance Required	1						
10/5/2011	1255 San Dieguito Dr	BMP Installation Required	1						
10/5/2011	1719 San Elijo Ave	BMP Installation Required	1						
10/5/2011	1761 Hayon Dr	BMP Installation Required	1						
10/7/2011	1022 Saxony Rd	BMP Installation and Maintenance Required	1						
10/7/2011	950 Saxony Rd	BMP Installation Required	1						
10/10/2011	3351 Lilac Summit	BMP Installation Required	1						
10/10/2011	3529 Fortuna Ranch Rd	BMP Installation Required	1						
10/11/2011	207 C St	BMP Installation Required	1						
10/11/2011	422 Requeza St	BMP Installation Required	1						
10/16/2011	357 Rosemary Ln	BMP Installation and Maintenance Required	1						
10/18/2011	1534 Crest Dr	BMP Installation Required	1						
10/19/2011	3183 Wildflower Summit	BMP Installation and Maintenance Required	1						
11/2/2011	820 Orpheus	BMP Installation Required	1						
11/10/2011	290 Andrew Ave	BMP Installation Required	1						
11/14/2011	1150 Melba Rd	BMP Requires Maintenance	1						
11/14/2011	422 Requeza St	BMP Requires Maintenance	1						
11/27/2011	1007-1021 Hermes Ave	BMP Requires Maintenance	1						
11/30/2011	1492 Hymettus Ave	BMP Requires Maintenance	1						
12/5/2011	618 Birmingham Dr	BMP Installation Required	1						
12/6/2011	422 Requeza St	BMP Requires Maintenance	1						
12/7/2011	3183 Wildflower Summit	BMP Installation Required	1						
12/7/2011	3453 Toscano Ct	BMP Installation Required	1						
12/8/2011	2551 San Elijo Ave	BMP Installation Required	1						
12/12/2011	1492 Hymettus Ave	BMP Requires Maintenance	1						
12/14/2011	290 Andrew Ave	BMP Installation Required	1						
12/27/2011	3177 Wildflower Summit	BMP Requires Maintenance	1						
12/28/2011	1534 Crest Dr	BMP Requires Maintenance	1						
1/18/2012	1150 Melba Rd	BMP Installation Required	1						
1/18/2012	422 Requeza St	BMP Requires Maintenance	1						
1/18/2012	618 Birmingham Dr	BMP Installation and Maintenance Required	1						
1/20/2012	3177 Wildflower Summit	BMP Requires Maintenance	1						
1/20/2012	3183 Wildflower Summit	BMP Installation Required	1						
1/25/2012	3168 Wildflower Summit	BMP Installation and Maintenance Required	1						
2/15/2012	1150 Melba Rd	BMP Requires Maintenance	1						
2/27/2012	2551 San Elijo Ave	BMP Requires Maintenance	1						
2/29/2012	1492 Hymettus Ave	BMP Requires Maintenance	1						
3/6/2012	165 Kilkenny Dr	BMP Requires Maintenance	1						
3/7/2012	2622 Lone Jack Rd	BMP Requires Maintenance	1						
3/7/2012	680 Westlake	BMP Requires Maintenance	1						
3/12/2012	3453 Toscano Ct	BMP Requires Maintenance	1						
3/12/2012	3529 Fortuna Ranch Rd	BMP Requires Maintenance	1						
3/13/2012	1022 Saxony Rd	BMP Requires Maintenance	1						
3/14/2012	1255 San Dieguito Dr	BMP Installation Required	1						

Appendix B-6 Construction Enforcement Actions for Routine Inspections in FY 2011-12

Date	Site Address	Violation	Correct Work	NOV	Stop Work	Citation Warning	Citation Fine	Citation Number	Cost Recovery
3/14/2012	905 Orpheus Ave	BMP Installation Required	1						
3/14/2012	Urania Ave/ Normandy Rd	BMP Installation Required	1						
3/23/2012	1492 Hymettus Ave	BMP Installation and Other Corrective Actions Requ	1						
3/28/2012	2551 San Elijo Ave	BMP Installation Required	1						
3/29/2012	618 Birmingham Dr	BMP Requires Maintenance	1						
4/2/2012	521 Camino El Dorado	BMP Installation Required	1						
4/3/2012	1446 Blue Heron Ave	BMP Installation Required	1						
4/5/2012	133 Avenida Esperanza	BMP Requires Maintenance	1						
4/6/2012	1520 Caudor	BMP Requires Maintenance	1						
4/20/2012	680 Westlake	BMP Installation and Maintenance Required	1						
4/25/2012	2551 San Elijo Ave	BMP Installation Required	1						
5/1/2012	1635 Gascony Rd	BMP Requires Maintenance	1						
10/13/2012	1520 Caudor	BMP Installation Required	1						
		FY 2011-12 Total	**57**	**0**	**0**	**0**	**0**	**0**	**0**

Appendix C

Municipal

C-1 Municipal Inventory

C-2 Municipal Activities Report

C-3 Municipal BMP Map

C-4 Special Events Permit P2 Questionnaire

C-5 Approved Special Events

C-6 Routine Inspections Summary

	Facility Name	Address	Land Use/Activities	Tributary to a 303(d) Impaired Water Body	Inspection Priority	Sub-basin
1	"A" TANK SITE	601 SANTA FE DR	Tank storage site/municipal yard	NOT TRIBUTARY	High Priority	Encinitas
2	BEACON'S BEACH	948 NEPTUNE AVE	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
3	CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Administrative offices/municipal yard/vehicle maintenance/materials storage	NOT TRIBUTARY	High Priority	Encinitas
4	CARDIFF SPORTS PARK	1661 LAKE DR	Recreational facilities/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
5	CARDIFF SPORTS PARK EXPANSION	1623 LAKE DR	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
6	COTTONWOOD CREEK PARK	95 N. VULCAN AVE	Park/landscaped areas/parking lot	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
7	ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DR	Golf course	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
8	ENCINITAS VIEWPOINT PARK	56 E D STREET	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
9	GLEN PARK	2149 ORINDA DR	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
10	GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
11	H STREET VIEWPOINT	498 H STREET	Vista point	NOT TRIBUTARY	High Priority	Encinitas
12	HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
13	J STREET VIEWPOINT	398 J STREET	Vista point/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
14	LAS VERDES PARK	1390 PASEO DE LAS VERDES	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
15	LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	La Costa South
16	LEUCADIA OAKS PARK	1511 N. VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
17	LEUCADIA ROADSIDE PARK	860 N COAST HIGHWAY 101	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
18	LITTLE OAKS EQUESTRIAN PARK	2879 LONE JACK RD	Park/horse corral/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek
19	MILDRED MACPHERSON PARK	1045 S VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
20	MOONLIGHT BEACH	400 B STREET	Beach access/park/landscaped area/parking lot	TRIBUTARY TO PACIFIC OCEAN SHORELINE	High Priority	Encinitas
21	MS4	CITY WIDE	MS4	TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
22	OAKCREST PARK	1219 ENCINITAS BLVD	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
23	ORPHEUS PARK	482 ORPHEUS AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
24	PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
25	REQUEZA STREET FACILITY	397 REQUEZA ST	Municipal yard/sediment/materials storage	NOT TRIBUTARY	High Priority	Encinitas
26	ROADS, STREETS AND HIGHWAYS	CITY WIDE		TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
27	WASTEWATER COLLECTION FACILITY	2695 MANCHESTER AVE	Administrative offices/Municipal yard	NOT TRIBUTARY	High Priority	Cardiff
28	SCOTT VALLEY PARK	1602 WILLOWHAVEN	Park/landscaped areas	TRIBUTARY TO ENCINITAS CREEK	High Priority	La Costa South
29	SPECIAL EVENTS	CITY WIDE	Recreational facilities, parks, landscaped areas, roads, streets and highways	MAY BE TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
30	SUN VISTA PARK	2011 AVENIDA LA POSTA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
31	SWAMI'S BEACH	1298 S COAST HIGHWAY 101	Beach access/parking lot	NOT TRIBUTARY	High Priority	Encinitas
32	WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek/Ranch Santa Fe
33	CARDIFF PUMP STATION	2690 MANCHESTER AVE	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
34	CIVIC CENTER	505 S VULCAN AVE.	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	Encinitas
35	ENCINITAS COMMUNITY & SENIOR CENTER	1140 OAKCREST PARK DR	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	La Costa South
36	D STREET BEACH	450 D STREET	Beach access and vista point	TRIBUTARY TO PACIFIC OCEAN SHORELINE	Low Priority	Encinitas
37	FIRE STATION #1	415 2ND ST	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
38	FIRE STATION #2	1867 MACKINNON	Fire station	NOT TRIBUTARY	Low Priority	Cardiff
39	FIRE STATION #3	801 ORPHEUS AVE	Fire station	NOT TRIBUTARY	Low Priority	Leucadia
40	FIRE STATION #4	2011 VILLAGE PARK	Fire station	NOT TRIBUTARY	Low Priority	La Costa South
41	FIRE STATION #5	540 BALOUR DR	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
42	FIRE STATION #6	770 RANCHO SANTA FE RD	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
43	HALL PROPERTY	425 SANTA FE DR.	Undeveloped park site	NOT TRIBUTARY	Low Priority	Cardiff
44	HIGHWAY 101 PUMP STATION	S. COAST HIGHWAY 101	Pump station	NOT TRIBUTARY	Low Priority	Cardff
45	I STREET VIEWPOINT	498 I STREET	Vista point	NOT TRIBUTARY	Low Priority	Encinitas
46	INDIAN HEAD CANYON	SAXONY ROAD/QUAIL HOLLOW DR	Undeveloped park site	NOT TRIBUTARY	Low Priority	Leucadia
47	MOONLIGHT BEACH PUMP STATION	305 THIRD ST.	Pump station	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas
48	OLIVENHAIN PUMP STATION	MANCHESTER/I-5	Pump Station	NOT TRIBUTARY	Low Priority	Cardiff
49	PHOEBE PUMP STATION	1200 block of N. Coast Highway 101	Pump Station	NOT TRIBUTARY	Low Priority	Leucadia
50	SAN DIEGUITO WATER DISTRICT*		Pump Station	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
51	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
52	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	Encinitas
53	SAN DIEGUITO WATER DISTRICT*		Water recycling reservoir	NOT TRIBUTARY	Low Priority	Encinitas
54	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Encinitas
55	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Cardiff
56	SWAMIS BLUFFS PARCELS	1400 S. COAST HIGHWAY 101	Undeveloped site	NOT TRIBUTARY	Low Priority	Encinitas
57	STANDARD PACIFIC PARK	OLYMPUS / PIRAEUS	Undeveloped site	NOT TRIBUTARY	Low Priority	Leucadia
58	STONESTEP'S BEACH	350 SOUTH EL PORTAL	Beach access and vista point	NOT TRIBUTARY	Low Priority	Leucadia
59	UV TREATMENT FACILITY	305 THIRD ST.	UV Treatment Facility	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas

***Note: The San Dieguito Water District's facility addresses have been omitted for security purposes.**

Appendix C-2

FY 2011-12 Municipal Activities Report

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2011-12 Annual Result
1.	Report on updates to the municipal inventory and prioritization (J.3.a.(3)(c)i).	July 1, 2011-June 30, 2012		See Appendix C-1
2.	Confirmation that the designated BMPs were implemented, or required to be implemented for: municipal areas and activities (J.3.a.(3)(c)ii).	July 1, 2011-June 30, 2012		See Sections 4.2.3, 4.3.3, 4.4.3, 4.5.3 and 4.6.3
3.	Confirmation that the designated BMPs were implemented, or required to be implemented for: special events (J.3.a.(3)(c)ii).	July 1, 2011-June 30, 2012		See Section 4.7.3
4.	A description of inspections and maintenance conducted for municipal treatment controls-Municipal Filter Inserts (J.3.a.(3)(c)iii).	July 1, 2011-June 30, 2012		See Section 4.4.4.1
5.	A description of inspections and maintenance conducted for municipal treatment controls-UV Treatment Facility (J.3.a.(3)(c)iii).	July 1, 2011-June 30, 2012		See Section 4.4.4.1
6.	Identification of the total number of catch basins and inlets (J.3.a.(3)(c)iv).	July 1, 2011-June 30, 2012		1,781
7.	Identification of the number of catch basins and inlets **inspected** (J.3.a.(3)(c)iv).	July 1, 2011-June 30, 2012		2,337
8.	Identification of the number of catch basins and inlets found with accumulated waste exceeding 33% of design capacity ((J.3.a.(3)(c)iv).	July 1, 2011-June 30, 2012	*All inlets and catch basins within the City are inspected on an annual basis, which is sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris.	0*
9.	Identification of the number of catch basins and inlets **cleaned** (J.3.a.(3)(c)iv).	July 1, 2011-June 30, 2012		2,337
10.	Identification of total distance (miles) of the MS4 (J.3.a.(3)(c)v).	July 1, 2011-June 30, 2012		65 miles of pipe
11.	Identification of distance of the MS4 **inspected** (J.3.a.(3)(c)v)**.**	July 1, 2011-June 30, 2012		85 miles of pipe
12.	Idenitification of distance of the MS4 found with accumulated waste exceeding cleaning criteria (J.3.a.(3)(c)v).	July 1, 2011-June 30, 2012		0
13.	Identification of distance of the MS4 **cleaned** (J.3.a.(3)(c)v)**.**	July 1, 2011-June 30, 2012		0.96 miles of pipe

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2011-12 Annual Result
14.	Identification of total distance (miles) of open channels (J.3.a.(3)(c)vi).	July 1, 2011-June 30, 2012		2 miles
15.	Identification of distance of open channels **inspected** (J.3.a.(3)(c)vi).	July 1, 2011-June 30, 2012		4 miles
16.	Identification of distance of open channels found with anthropogenic litter (J.3.a.(3)(c)vi).	July 1, 2011-June 30, 2012		.54 miles
17.	Identification of distance of open channels **cleaned** (J.3.a.(3)(c)vi).	July 1, 2011-June 30, 2012		.54 miles
18.	Amount of waste and litter (tons) removed from catch basins (J.3.a.(3)(c)vii).	July 1, 2011-June 30, 2012	* The combined total amount of waste and litter removed from catch basins and inlets is 316 tons. 177.5 yards of waste and litter x 1.77 = 314 tons. An additionial 1.88 tons was removed from the municipal filter inserts discussed in Item No. 4.	316 tons *
19.	Amount of waste and litter (tons) removed from inlets (J.3.a.(3)(c)vii).	July 1, 2011-June 30, 2012	* The combined total amount of waste and litter removed from catch basins and inlets is 316 tons. 177.5 yards of waste and litter x 1.77 = 314 tons. An additionial 1.88 tons was removed from the municipal filter inserts discussed in Item No. 4.	316 tons *
20.	Amount of waste and litter (tons) removed from the MS4 (J.3.a.(3)(c)vii).	July 1, 2011-June 30, 2012	* The total amount of waste and litter removed from the MS4 is 558 tons. This is the sum total of the waste and litter removed from catchbasins and inlets (316 tons) and the open channels (242 tons).	558 tons*
21.	Amount of waste and litter (tons) removed from the open channels (J.3.a.(3)(c)vii).	July 1, 2011-June 30, 2012	* The combined total amount of waste and litter removed from open channels is 242 tons. 175 cubic yards of waste and litter x 1.38 = 242 tons.	242 tons*
22.	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification of the finding (J.3.a.(3)(c)viii).	July 1, 2011-June 30, 2012		None
23.	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented or required to be implemented for municipal areas and activities (J.3.a.(3)(c)ix).	July 1, 2011-June 30, 2012		See Section 4.3.3.1

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2011-12 Annual Result
24.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating the **highest** volumes of trash and/or debris (J.3.a.(3)(c)x).	July 1, 2011-June 30, 2012		75 curb miles
25.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)x).	July 1, 2011-June 30, 2012	See Section 4.2.4	Weekly
26.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **moderate** volumes of trash and/or debris (J.3.a.(3)(c)xi).	July 1, 2011-June 30, 2012		92 curb miles
27.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xi).	July 1, 2011-June 30, 2012	See Section 4.2.4	Twice a month
28.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **low** volumes of trash and/or debris (J.3.a.(3)(c)xii).	July 1, 2011-June 30, 2012		280 curb miles
29.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xii).	July 1, 2011-June 30, 2012	See Section 4.2.4	Monthly
30.	Identification of the total distance of curb-miles swept (J.3.a.(3)(c)xiii).	July 1, 2011-June 30, 2012		9,199 miles
31.	Identification of the number of municipal parking lots (J.3.a.(3)(c)xiv).	July 1, 2011-June 30, 2012		11
32.	Identification of the number of municipal parking lots swept (J.3.a.(3)(c)xiv).	July 1, 2011-June 30, 2012		11
33.	Identification of the frequency of sweeping (J.3.a.(3)(c)xiv).	July 1, 2011-June 30, 2012	All beach parking lots are swept once per week April through September and once per month October through March.	See Section 4.2.4
34.	Amount of material (tons) collected from street and parking lot sweeping (J.3.a.(3)(c)xv).	July 1, 2011-June 30, 2012		2,270 tons
35.	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 (J.3.a.(3)(c)xvi).	July 1, 2011-June 30, 2012		See Section 4.5.4.1
36.	Identification of the number of fixed municipal sites requiring inspections (J.3.a.(3)(c)xvii).	July 1, 2011-June 30, 2012	Refer to Appendix C-1 list of all High Priority Municipal Facilities	29

	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2011-12 Annual Result
37.	Identification of the number of municipal sites inspected (J.3.a.(3)(c)xvii).	July 1, 2011-June 30, 2012		29
38.	Identification of the frequency of inspections (J.3.a.(3)(c)xvii).	July 1, 2011-June 30, 2012		Annual
39.	A description of the general results of the inspections (J.3.a.(3)(c)xviii).	July 1, 2011-June 30, 2012		See Appendix C-6
40.	Confirmation that the inspections conducted addressed all the required inspection steps and follow-ups to determine full compliance (J.3.a.(3)(c)xix).	July 1, 2011-June 30, 2012	All inspections conducted meet BMP requirements	See Appendix C-6
41.	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken (J.3.a.(3)(c)xx).	July 1, 2011-June 30, 2012	*In FY 2011-12, there were no corrective actions as a result of the routine annual inspections at all high priority municipal facilities. Details for all routine municipal inspections can be found in Appendix C-6. The Clean Water Program hotline also received a total of 10 municipal complaints during the reporting period. A total of 10 complaints were investigated which resulted in 7 violations, 1 NOV, 0 citations, 8 education actions and 4 follow-up inspections. A complete summary of all municipal complaints can be found in Appendix H-1.	1*
42.	A description of notable activities conducted to manage urban runoff from municipal areas and activities (J.3.a.(3)(c)xxi).	July 1, 2011-June 30, 2012		See Sections 4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4 and 4.7.4

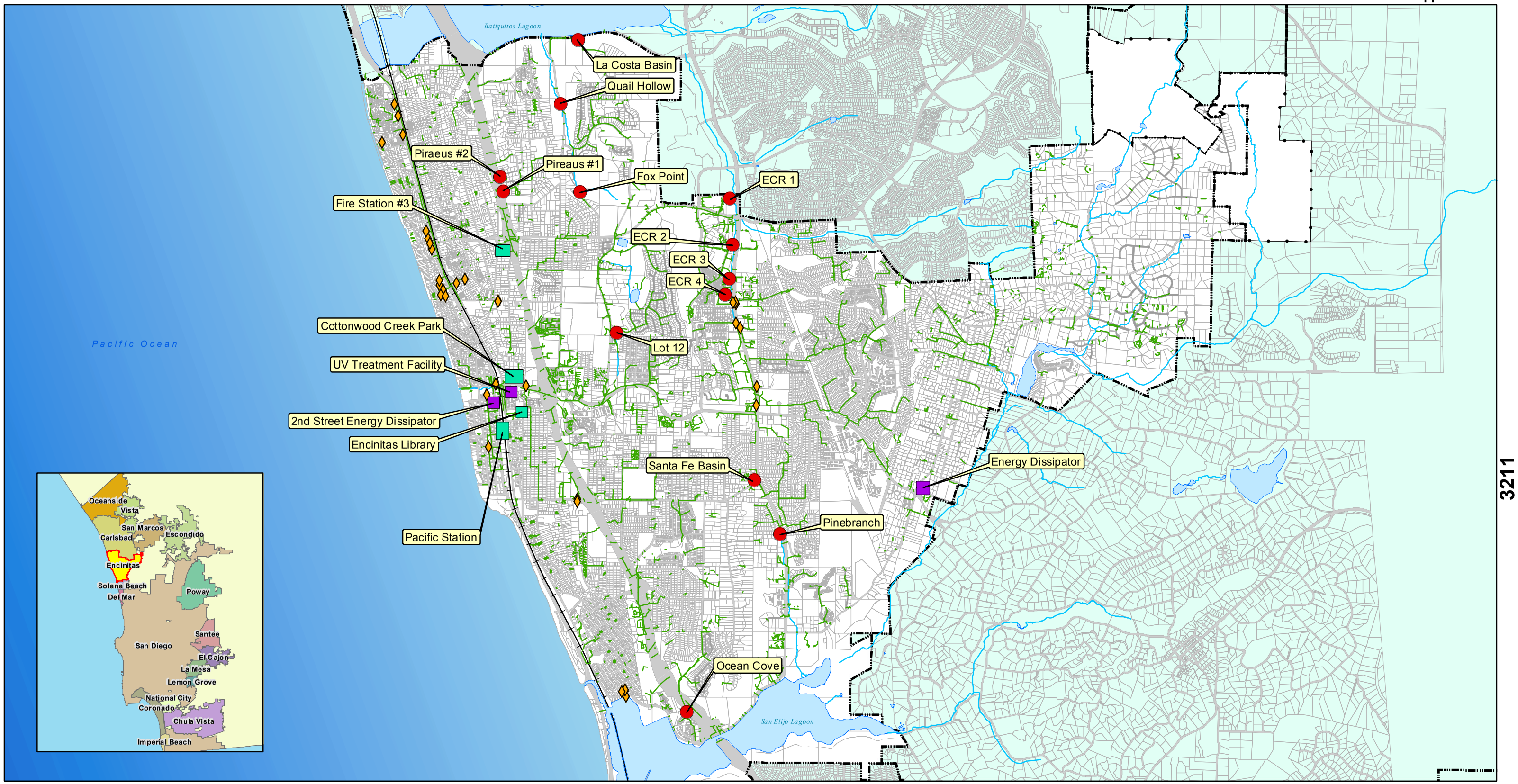

3211

FY 2011-2012 Encinitas Municipal BMP Locations

- Storm Drain Inlet Filters
- Detention Basin
- Structural BMP
- Multiple BMPs
- Storm Drains
- Streams
- Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

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Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: September, 2012

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N

0 2,500 5,000 Feet

POLLUTION PREVENTION
(Does not apply to Special Ceremonies)

Storm drains are not connected to the City's sewer system. All pollutants allowed to enter the storm drain system flow directly to our beaches, ocean, lagoons, and other waterways without being treated. The City of Encinitas is required by the San Diego Regional Water Quality Control Board to report on pollution prevention measures taken at special events held throughout the City.

In the area provided on the next page or on a separate sheet of paper, please complete the following questions and describe methods of pollution prevention that will be implemented at your proposed event.

1. Describe how trash, recycling, and debris will be managed (i.e. extra bins, temporary fencing, etc.)

2. If your event will include food production, describe how excess oil and grease will be disposed of. These materials cannot be dumped into the streets or storm drain system.

3. Please identify any other potential pollutant generating sources or activities that may take place (i.e. portable toilets).

For questions, please call the City's Clean Water Program at (760) 633-2787.

	Event	Event Date	Time	Location	Estimated Attendance
1	Cardiff 100 year birthday celebration	7/2/11	8am-10pm	Glen Park	3000
2	Summer Fun on the 101	7/8 and 7/9/11	6-11:30pm	Leucadia Roadside Park	500
3	City of Encinitas Summer Sunday Concerts by the Sea	7/10, 7/24, 8/7, 8/21/2011	3-5pm	MLB	3000
4	Solana Beach Triathlon	7/24/11	7-10am	Hwy 101 South of Las Olas	1400
5	Dog Days of Summer	8/13/11	10am-3pm	Downtown Cardiff	5000
6	LeucadiArt Walk	8/28/11	8am-6pm	Hwy 101 between Glaucus and Marcheta	3000
7	25th Anniversary Celebration-Lima Bean Cook Off	10/1/11	12-4pm	San Dieguito Heritage Museum	5000
8	Bike MS Bay to Bay Tour	10/22-10/23/11	1pm-5pm & 7am-10am	Hwy 101 & Third Street	600
9	Safe Trick or Treat	10/31/11	5-8pm	HWY 101-Lumberyard/Courtyard	1000
10	FE (Family Enrichment) Garage Sale	11/19/11	8:00am-12:00pm	Encinitas Community Center, 1140 Oakcrest Park Drive	400
11	Fall Festival Street Fair	11/20/11	5:00am-5:30pm	South Coast HWY 101(D to J St.)	40,000
12	Kringle Mingle	12/2/11	4:00pm-8:00pm	2005 San Elijo Avenue, Cardiff	500
13	Holiday Parade	12/3/11	3:30-9:30pm	South Coast HWY 101(D to J St.)	50,000
14	101 Tree Ceremony/Dedication Planting	12/7/11	3:00-4:30pm	N Coast Hwy 101	75-200
15	Pedestrian Undercrossing Ground Breaking Event	1/18/12	12:00-1:00pm	HWY 101 & K Street	50
16	DEMA Farmer's Market	2/1/12 (Every Wednesday)	4 pm to 7 pm (Oct-April), 5 pm to 8 pm (May-Sept)	Parking Lot B; SW corner of E St. & Vulcan Ave	400
17	Cardiff Kook Run	2/5/12	7:00-10:30am	Moonlight Beach to HWY101Cardiff State Beach	100
18	Teen Safe Driving 5K	2/25/12	7am-12pm	MLB then north 1-5 miles and back to MLB	300
19	ELL Opening Day March 3	3/3/12	8:00am-8:00pm	YMCA-ECKE Fields	500
20	Bike Road-EO March 10	3/10/12	8:00am-1:00pm	City Hall Parking Lot	75
21	SDYS Opening Day	3/10/12	8:00am-7:00pm	Cardiff Sports Park	300
22	NCC HS SOFTBALL GAMES	3/17/12	9:00am-5:00pm	Cardiff Sports Park	100
23	SDYS Youth Softball Tournament	3/30-4/1/12	8:00am-9:00pm	Cardiff Sports Park	300
24	Burn Institute Boot Drive	4/3/12	7:00am-9:00pm	Encinitas Blvd & ECR also Leucadia Blvd & ECR	10
25	Easter Egg Hunt 2012	4/7/12	5:00am-3:00pm	YMCA-Saxony Road	5,000
26	Easter Service	4/8/12	6:00am-1:00pm	Moonlight Beach	500
27	Paper Schredding E-Waste Collection Event	4/14/12	9:00am-1:00pm	Civic Center Parking Lot	300
28	Ragnar Relay So Cal 2012	4/20-4/21/12	5:30am-Noon (4/21)	Streets of Encinitas (Quail Gardens Dr., Encinitas Blvd., Calle Magdalena, HWY 101)	7,200
29	Tour De Cure	4/21/12	5:00am-4:00pm	4 routes-Chesterfield, S. Coast HWY 101	1,500
30	Encinitas Garden Festival April 21	4/21/12	8:00am-5:00pm	Capri Elementary & surrounding neighborhood	1,500
31	Street Fair April 28 & 29	4/28/12 & 4/29/12	5:00am-6:00pm	HWY 101 from D Street to J Street	80,000 (40,000 per day)
32	Taste of Cardiff	5/17/12	5:00pm-8:00pm	San Eljo Avenue south to HWY 101 (Las Olas)	1500
33	San Diego Century Bicycle Tour	5/19/12	6:00am-5:00pm	Manchester from MCC to RSF Rd. & HWY 101 to Chesterfield to Manchester	1,500
34	Encinitas 5K	5/19/12	8:00am-11:00am	Moonlight Beach, 2nd, 3rd, & 4th Streets	3,000
35	MLB Paddle & Swim	5/19 & 5/20/12	8:00am-11:00am	Moonlight Beach	400
36	Moonlight Beach Paddle & Swim	5/19/12 & 5/20/12	8:00am-11:00am & 8:30am-9:30am	400 B Street, Encinitas, CA 92024: Moonlight Beach	500
37	Encinitas Sprint Triathalon	5/20/12	6:40am-3:00pm	Moonlight Beach	1,800
38	10th Annual Ohana Scholarship Picnic	5/20/12	8:00am-5:00pm	Oak Crest Park	60
39	Memorial Day Tournament	5/25-5/28/12	8:00am-9:00pm	Cardiff Sports Park	2,000
40	Law Enforcement Torch Run	5/30/12	6:00am-9:00am	2655 So Coast HWY 101 Cardiff Northbound to La Costa Avenue	20
41	Encinitas Wine Festival	6/2/12	11:00am-9:30pm	San Diego Botancial Gardens the Hamilton Gardens	700
42	Pet Health Expo 2012	6/3/12	9:00am-1:00pm	City Hall Courtyard & Parking Lot	500
43	EE DAY (Encinitas Environment Day)	6/10/12	8:00am-6:00pm	Cottonwood Creek Park, Encinitas	3,000
44	Switchfoot Bro-AM	6/16/12	7:00am-5:00pm	Moonlight Beach	7,000
45	Classic Car Nights	6/21, 7/19, 8/16 & 9/13/12	5:30pm-7:30pm	South Coast HWY 101(D to K St.)	3,000
46	Encinitas Foodie Fest	6/23/12	11:00am-5:00pm	Pacific Station Encinitas	3,000
47	Summer Fun on the 101	6/29/12 & 6/30/12	6:00pm-11:00pm (6/29) Noon-10:00pm (6/30)	Coast HWY 101 (Leucadia)	400
48	Summer Sunday Concerts	7/8/12, 7/22/12, 8/5/12, & 8/19/12	7:00am-7:00pm	Moonlight Beach	2,000

Appendix C-6 Routine Municipal Inspection Summary **FY 2011 - 2012**

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
1	**154622**	5/8/12	"A" Tank Site		No Corrective Actions Required			
2	**154961**	5/22/12	Encinitas Ranch Golf Course Maintenance		No Corrective Actions Required			
3	**154991**	5/9/12	City of Encinitas Public Works Yard		No Corrective Actions Required			
4	**154992**	5/9/12	Requeza Yard		No Corrective Actions Required			
5	**154993**	5/15/12	Wastewater Collection Facility		No Corrective Actions Required			
6	**154994**	6/6/12	Beacon's Beach		No Corrective Actions Required			
7	**154995**	6/11/12	Cardiff Sports Park		No Corrective Actions Required			
8	**154996**	6/11/12	Cardiff Sports Park Express		No Corrective Actions Required			
9	**154997**	6/11/12	Cottonwood Creek Park		No Corrective Actions Required			
10	**154998**	6/5/12	Grandview Beach		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
11	**154999**	5/29/12	H Street Viewpoint		No Corrective Actions Required			
12	**155000**	6/7/12	Hawk View Park		No Corrective Actions Required			
13	**155004**	6/6/12	Encinitas Viewpoint Park		No Corrective Actions Required			
14	**155005**	5/21/12	Las Verdes Park		No Corrective Actions Required			
15	**155006**	6/15/12	Glen Park		No Corrective Actions Required			
16	**155007**	5/29/12	J Street Viewpoint		No Corrective Actions Required			
17	**155008**	6/7/12	Leucadia Oaks Park		No Corrective Actions Required			
18	**155009**	6/6/12	Leucadia Roadside Park		No Corrective Actions Required			
19	**155010**	6/12/12	Little Oaks Equestrian Park		No Corrective Actions Required			
20	**155011**	5/30/12	Leo Mullen Sports Park		No Corrective Actions Required			
21	**155012**	5/31/12	Mildred Macpherson Park		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
22	**155013**	6/6/12	Moonlight Beach		No Corrective Actions Required			
23	**155014**	6/6/12	Oakcrest Park		No Corrective Actions Required			
24	**155015**	6/15/12	Orpheus Park		No Corrective Actions Required			
25	**155016**	6/1/12	Paul Ecke Sports Park		No Corrective Actions Required			
26	**155017**	5/21/12	Scott Valley Park		No Corrective Actions Required			
27	**155018**	6/6/12	Sun Vista Park		No Corrective Actions Required			
28	**155019**	5/29/12	Swami's Beach		No Corrective Actions Required			
29	**155020**	6/6/12	Wiro Park		No Corrective Actions Required			

Total: 29

Total NOVs: 0

Appendix D

Industrial and Commercial

D-1 Stationary Commercial Inventory

D-2 Industrial Inventory

D-3 Industrial and Commercial Inspection Form

D-4 Inspection Summary Form

D-5 Routine Inspections Summary Table

D-6 Mobile Commercial Inventory

D-7 Commercial Business Notification Letter

D-8 Mobile Business Notification Letter

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
1	Dirty Dogs	2107		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
2	Moonlight Pet Sitting	152	21	N Coast Highway 101	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
3	Companion Pet Care Professionals	1466		Encinitas Blvd	Encinitas	CA	92024	San Marcos	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
4	Santa Fe Animal Clinic	301	A	Santa Fe Dr	Cardiff	CA	92007	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
5	California Backyard Birds	1283		Encinitas Blvd	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
6	Dog Behavior 101	2142	F	Montgomery Ave	Cardiff	CA	92007	Escondido Creek	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
7	Puppy Love Pet Grooming	191	211	N El Camino Real	Encinitas	CA	92024	San Marcos	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
8	Rancho Los Amigos Equestrian Ctr.	3049		Camino Del Rancho	Encinitas	CA	92024	Escondido Creek	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
9	Way To Walk Dog Walkers	1659		Neptune Ave	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
10	Sit And Stay Awhile Pet Care	251		Calle De Madera	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
11	Kamp Kanine, L L C	389		Requeza St	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
12	Cool Breeze Farms	244		N Coast Highway 101	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
13	Susan Robertson Dog Training	155		Saxony Rd	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
14	The Animal Keeper	155		Saxony Rd	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
15	The Drake Center For Animal Health	195		N El Camino Real	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
16	The Contented K - 9	1711		Old Mill Ct	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
17	A & J Ultimate Petsitting Service	210	12	A St	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
18	S N Stables, L L C	3211		Wildflower Valley Dr	Encinitas	CA	92024	Escondido Creek	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
19	Underdog Pet Sitting	2439		Caminito Ocean Cove	Cardiff	CA	92007	Escondido Creek	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
20	V C A North Coast Animal Hospital	414		Encinitas Blvd	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
21	North Co. Coastal Canine Care	1549		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
22	Cardiff Animal Hospital, Inc.	2159		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
23	Charmaine's Pet Sit	685		Sweet Pea Pl	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
24	Platinum K 9	632		S Willowspring Dr	Encinitas	CA	92024	Escondido Creek	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
25	Pet Care By Erin Schwartz	1137		Pacifica Pl	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
26	Surf Dogg	2009		Sheridan Rd	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
27	Holiday Pet Hotel	551		Union St	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
28	Grateful Dog	802		N Coast Highway 101	Encinitas	CA	92024	San Marcos	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
29	Dove Hollow Dressage Center, Inc.	1084		Double Ll Ranch Rd	Encinitas	CA	92024	Escondido Creek	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
30	Underwater Environment	442		Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	5999	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
31	North Coast Equestrian Park, Inc.	1877		Olivenhain Rd	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
32	Fender Mender	326		N El Camino Real	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
33	Custom Cycle Creations, Inc.	324	B	N El Camino Real	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
34	Bradley Allen Autobody Painting	204		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
35	California Body & Paint	320		N El Camino Real	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
36	Rancho Auto Body	591	A	Westlake St	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
37	Fender Mender	328	B	N El Camino Real	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
38	Car Rejuvenation	222		Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
39	Happy Auto Sales	148		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
40	Duru Inc./San Dieguito Towing/Dba Road One	1205		S Coast Highway 101	Encinitas	CA	92024	San Marcos	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
41	F. I. C. Smog	322	C	N El Camino Real	Encinitas	CA	92024	San Marcos	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
42	Ace Cars And Vans	1244		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
43	A+ Smog Test Only Center	449		Second St	Encinitas	CA	92024	San Marcos	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
44	Encinitas Buggy Bath Carwash	207		N El Camino Real	Encinitas	CA	92024	San Marcos	7542	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
45	Encinitas Smog Test Only Center	682		S Coast Highway 101	Encinitas	CA	92024	San Marcos	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
46	Bassett Auto Sales	1445		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
47	Raysugo, L L C	127		S El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
48	790 First Street, L L C -D B A Sofspra	790		S Coast Highway 101	Encinitas	CA	92024	San Marcos	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
49	Speedy Lube & Tune & Brake, Inc. Dba	225		N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
50	Jiffy Lube #1764	221		N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
51	O'Reilly Auto Parts #3154	180		N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
52	All Car Center	140		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
53	Cardiff Classics Inc.	1049		S Coast Highway 101	Encinitas	CA	92024	San Marcos	7549	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
54	El Camino Tire & Brake	330		N El Camino Real	Encinitas	CA	92024	San Marcos	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	High
55	Pep Boys/ Manny, Moe & Jack #701	256		N El Camino Real	Encinitas	CA	92024	San Marcos	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
56	Certified Transmission Encinitas	322	F	N El Camino Real	Encinitas	CA	92024	San Marcos	7537	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
57	Encinitas Automotive, Inc.	322	A	N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
58	Valvoline Instant Oil Change	127	B	S El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
59	Hazar, Inc. D B A Precision Tune Auto Care	318	A	N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
60	Coastal Foreign Auto Service	320	A	N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
61	Cameron Ventures, Inc./Dba "Midas"	328		N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
62	Furgerson's Garage	807		Second St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
63	Harris Radiator Works, Inc.	274		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
64	Encinitas Car Wash	293		N El Camino Real	Encinitas	CA	92024	San Marcos	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
65	C P A Group, Inc./Dba Encinitas Foreign & Domestic	901		Second St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
66	Rays Automotive Service	1051		S Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
67	Brad's Foreign & Domestic	565	200C	Westlake St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
68	Dan's Precision Alignment Center	565	200F	Westlake St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
69	Encinitas Japanese Car Specialists, Inc.	328	A	N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
70	K & B Auto Service & Repair	320	D	N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
71	Moonlight Motors, Inc.	215		Melrose Ave	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
72	Rover Repairs, Inc./Dba California Rover	386		Encinitas Blvd	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
73	Discount Tire Company	107		N El Camino Real	Encinitas	CA	92024	San Marcos	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
74	Evans Tire & Service Center # 41	206		N El Camino Real	Encinitas	CA	92024	San Marcos	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
75	Encinitas Ford	1424		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5511	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
76	Auto Parts Pros, L L C	523	100	Encinitas Blvd	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
77	Keith's Automotive	215		W G St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
78	Paul's Auto Electric	325		Melrose Ave	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
79	Scott's Automotive	1508		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
80	Auto Zone #5657	120		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
81	Transmasters Transmissions	184	C	N Coast Highway 101	Encinitas	CA	92024	San Marcos	7537	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
82	Olson's Hand Car Wash	127		S El Camino Real	Encinitas	CA	92024	San Marcos	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
83	Studio St. John	110		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
84	Hugo's European Car Service, Inc.	110		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
85	Charlie's Foreign Car 197	751		Second St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
86	An Luxury Imports Of San Diego, Inc. DBA BMW Dealership	1302		Encinitas Blvd	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
87	San Diego Botanical Gardens	230		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	8422	Botanical Garden	Yes	No	No	Yes	No	No	Yes	No	No	No	Low
88	Home Depot, The #660	1001		N El Camino Real	Encinitas	CA	92024	San Marcos	5211	Building Material	No	No	No	No	No	No	No	Yes	Yes	No	Low
89	B G J Restaurants, Inc. DBA El Callejon	345	C	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
90	El Pollo Loco #3431	1002		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
91	Steakhouse 66,Inc./D B A Firefly Grill And Winebar	251	B	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
92	The 3rd. Corner Wine Shop & Bistro	897	F104	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
93	The Quick Fix	144		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
94	C H L N, Inc. D B A: The Chart House	2588		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
95	Beach House Restaurant	2530		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
96	Wendy's Restaurant	102		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
97	Le Papagayo	1002		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
98	Beachside Bar & Grill	806		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
99	Juanita's Taco Shop	290		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
100	Taco Bell, #25497	1502		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
101	Mozy	698		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
102	Manhattan's Giant Pizza	143		W D St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
103	El Torito Restaurant	1068		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
104	Henry's Farmers Market # 123 DBA SPROUTS	1327		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
105	N. Carrillo Corp. DBA Tomiko	87		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
106	Little Caesars Pizza	118		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
107	Yogis Beach Bar & Restaurant	2633		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
108	Leucadia Pizza, Inc. D B A -Leucadia Pizzeria	315	V	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
109	Barracuda Grill	641		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
110	Angelos Burgers	608		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
111	Encinitas Ale House	1044		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
112	Daley Double	546		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
113	Java Hut Coffee Co.	1001		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
114	Vons Food & Drug #2144	262		N El Camino Real	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
115	Firenze Trattoria	162	G10	S Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
116	Vigilucci's Trattoria Italiana	505		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
117	Kl's Juice Bar & Restaurant	2591		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
118	Kraken	2531		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
119	Las Olas, Inc.	2655		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
120	Ogata Japanese Cuisine	615		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
121	Pantry 22, L L C/Dba East Village	628		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
122	Leucadia Sushi Bar	996	E	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
123	Foodie Amor, Inc.	1010		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
124	Chipotle Mexican Grill # 222	268		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
125	Islands Restaurant, L P	1588		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
126	Target T - 1029	1010		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
127	Borrelli's Pizza Inc.	285	106	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
128	The Original Pancake House	160	D10	S Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
129	Rubio's Fresh Mexican Grill #7	252	4	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
130	Pizzicato	252	5	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
131	Super Donuts #2	252	2	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
132	Pei Wei Asian Diner	1560	A	Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
133	Sushi Do	1031	101	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
134	Baker & Olive, L L C	165	A	S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
135	Rico's Taco Shop	165	L	S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
136	Swami's Cafe	1476		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
137	Bety's	1464		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
138	Figaro's Pizza	1458		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
139	7-Eleven 2111-17475 C	1446		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
140	Golden Bowl Restaurant	1337		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
141	Starbucks Coffee #6546	1560	B	Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
142	L & L Hawaiian Barbeque Encinitas	215	G	S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
143	Roxy Restaurant	517		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
144	Kaito Restaurant	130	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
145	Santa Fe Cafe	120	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
146	Thai Society	1070	B	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
147	Lumberyard Tavern & Grill	967	101	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
148	Roberts Enterprises, L L C DBA Flippin Pizza	215	H	S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
149	Savory Restaurant	267	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
150	Sushi Bar Blue Fin	257	D	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
151	Fulanos	145		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
152	Trattoria Gusto	429		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
153	Super Donut #1	465		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
154	Chihuahua Taco Shop	471		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
155	El Q' E R O	564		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
156	Town Center Juice Stop	1042	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
157	Verma's Toasty, Inc./Quizno's #7305	1042	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
158	Subway #27567	1560	C	Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
159	Gordy's Bakery	441		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
160	Leucadia Donut Shop	1604		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
161	Chins Szechwan Encinitas, Inc.	625		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
162	Today's Pizza And Salad	481		Santa Fe Dr	Cardiff	CA	92007	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
163	Coco's #881	407		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
164	Honey Baked Ham	459		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
165	Roberto's Mexican Food	1900	D	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
166	Dennys 6828	135		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
167	Passage To India, Inc.	257	K	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
168	Roberto's	274	B	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
169	K C's Tandoor	1070	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
170	Isabelle Briens, Inc.	127	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
171	The Kebab Shop Encinitas, Inc.	127	E	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
172	Chronic Tacos	127	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
173	Froots	127	J	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
174	7-Eleven Store, #21805A-2111	2240	A	Encinitas Blvd	Encinitas	CA	92024	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
175	Blue Ribbon Artisan Pizzeria	897	102	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
176	The Kairos Group, Inc. DBA Chuao	937	C109	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
177	Five Guys Operations, L L C	130	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
178	Jamba Juice Co. #760	272	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
179	Rizing Steele, Inc. DBA Naked Cafe	288	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
180	Wahoo's Fish Taco	1006	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
181	Einstein Bros. Bagels #2309	1006	B	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
182	Mandarin City	815		Birmingham Dr	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
183	Vines And Roses, A Wine Bar	166	B	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
184	Peet's Operating Company, Inc.	119	G	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
185	Giant New York Pizza & Pasta	191	110	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
186	Chicks Natural	191	107	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
187	Garden State Bagels	191	106	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
188	Panda Express #500	1084	E	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
189	Mexico Viejo Mexican Food	1465	E	Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
190	Mister Sushi	111	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
191	N-The Tube Dog	90	214	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
192	Lofty Bean	90	214	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
193	Beach Tea House 101	1076		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
194	Sub Palace Leucadia	810		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
195	Swamis Cafe	1163	A	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
196	Dairy Queen Encinitas	1465	B	Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
197	Kentucky Fried Chicken	266		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
198	Encinitas Donut Shop	580		Santa Fe Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
199	7 - Eleven # 13620	592		Santa Fe Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
200	Jorge's Mexicatessen	417	B	Santa Fe Dr	Cardiff	CA	92007	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
201	Sake House-Yumeya	1246		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
202	Fountain Of Youth Juice	168		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
203	El Torito Market	948	A	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
204	Noodles & Company	260	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
205	Cotixan Mexican Food	219		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
206	Spartan Holdings, Inc. DBA Pacific Q Billiards	1454		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
207	Garcia's Mexican Cuisine & Creative Catering	1486		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
208	Calypso	576		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
209	Leucadia Liquor	640		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
210	Action Food & Beverage Company, L L C (HapiFish)	190		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
211	Captain Kenos	158		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
212	Vignette Patisserie	158		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
213	Darshan Bakery And Cafe	949		Second St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
214	Mama Houli & Sister T	423		La Mesa Ave	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
215	Encinitas Oggi's, Inc.	305		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
216	Del Taco	130		Calle Magdalena	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
217	Chili's Grill & Bar #448	1004		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
218	J. S. Foods/Dba Burger King	242		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
219	Fish 101	1468		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
220	Kealani's	137		W D St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
221	Filiberto's Mexican Food	476		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
222	Berry Happy, Inc. Dba/Berry Happy	480		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
223	Raul's Mexican Food	490		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
224	Mc Donald's / Encinitas Town Center	1064		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
225	Stater Bros. Markets #158	1048		N El Camino Real	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
226	El Nopalito Market	560		Santa Fe Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
227	Papa John's Pizza #1596	337		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
228	Round Table Pizza	1321		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
229	Prescription For Java	477		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
230	Jamroc 101 Caribbean Grill	101		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
231	Encinitas Ranch Cafe & Golf School	1275		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
232	Bull Taco., L L C	2050		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
233	Sunny Sub., L L C	252	1	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
234	Subman	113	E	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
235	Bird House Grill	250	A	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
236	Trattoria I. Trulli	830	A	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
237	Starbucks Coffee #5391	947	D101	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
238	St. Germaine's Cafe	1010	112	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
239	Miyabi Japanese Steakhouse & Sushi	211	C	S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
240	Jorges Mexicatesen	267	E	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
241	Starbucks Coffee #588	258	B2	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
242	Rosanna's Pasta	270	I	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
243	Surf Brothers Teriyaki	274	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
244	Del Mar Swirls, (Store # 2)	204	G	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
245	Champagne French Bakery Cafe'	162	E10	S Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
246	Just Peachy	1354		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
247	Potato Shack Cafe	120		W I St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
248	Honey's Bistro & Bakery	632		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
249	Surfdog, Inc. DBA Java Hut	1126		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
250	Quickie Food Store	233		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
251	Summers @ Besta Wan	148		Aberdeen Dr	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
252	Beach City Cafe	102		Aberdeen Dr	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
253	V G Donuts & Bakery	106		Aberdeen Dr	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
254	Vons # 2859	453		Santa Fe Dr	Cardiff	CA	92007	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
255	Robbie's Road House Grill	530		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
256	Pipes Cafe	121		Liverpool Dr	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
257	Greek American Family Restaurant	392		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
258	Java Express	325		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
259	Chinatown Restaurant	118		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
260	Kims Vietnamese Chinese Restaurant	745	103	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
261	Lotus Cafe	765	101	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
262	Subway Sandwiches & Salads #18383	765	104	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
263	Pannikin Coffee & Tea	510	A	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
264	St Tropez Bistro.Com	947	D103	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
265	Harvest Ranch Market	162	E50	S Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
266	7- Eleven 18087/Moonlight Partners, Inc.	105		W D St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
267	The 101 Diner	552		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
268	E Street Cafe	130		W E St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
269	Siamese Basil Restaurant	527		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
270	Wine Steals Cardiff	1953	100	San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
271	Brett's B B Q	1505		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
272	Restaurant Leadership Grioup, L L C DBA Jack in the Box	1439		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
273	Stadium Sports Bar & Restaurant	149		S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
274	Trader Joe's #25	115		N El Camino Real	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
275	Elizabethan Desserts	155		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
276	Thai Pan Express	138		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
277	Mr. Peabodys	136		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
278	Kona Koffee Hut	230		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
279	Trattoria Positano	2171		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
280	Cicciotti's Trattoria Italiana	1933		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
281	Nfarooqi Enterprises, L L C DBA Jack in the Box	1967		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
282	A & M Investment, Inc./Dba East Coast Pizza	2015		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
283	Rimel-Zenbu Cardiff, L L C	2005		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
284	Sambazon Acai Cafe	2031		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
285	Cardiff Seaside Market, Inc.	2087		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
286	Bar Leucadian, Inc.	1542		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
287	M & N Foods	1137		Regal Rd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
288	Kotija Jr. Taco Shop	852		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
289	A Little Moore	1030		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
290	Healthy Creations	376		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
291	D Street Bar And Grill	485		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
292	Encinitas Cafe	531		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
293	1st. Street Bar	656		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
294	Giovanni's Sandwich Shop	764		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
295	Boscinita's, Inc.	294		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
296	Garden Fresh Restaurant Corp DBA Soup Plantation	109		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
297	Ralphs Grocery Company #168	125		N El Camino Real	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
298	Premier Food Services, Management Group, Inc.	3333		Manchester Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
299	Bubby's	937	C106	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
300	Mrs. Gooch's Natural Food Market, Inc. DBA Whole Foods	687	101	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
301	Global Grind Coffee	540		Cornish Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
302	Solace And The Moonlight Lounge	25		E E St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
303	Karinas Taco Shop	916		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
304	C N G Inc.	160		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	Yes	Low
305	Shell 210	510		Santa Fe Dr	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
306	Cardiff Valero	820		Birmingham Dr	Cardiff	CA	92007	Escondido Creek	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
307	Rosanos 76	236		N El Camino Real	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
308	Dream Petroleum, Inc.	633		Birmingham Dr	Cardiff	CA	92007	Escondido Creek	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
309	Chevron Stations Inc. #1967	805		Birmingham Dr	Cardiff	CA	92007	Escondido Creek	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
310	Kihack Management L L C	350		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
311	Barry W. O' Brien Inc.	310		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
312	Cardiff 76	3085		Manchester Ave	Cardiff	CA	92007	Escondido Creek	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
313	Encinitas Promenade Gas & Oil Change	1580		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
314	Encinitas Gasoline & Auto Service	1355		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
315	Valero Of Encinitas	325		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
316	7-Eleven Store, #24335D-2111	1988		Village Park Way	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
317	7 Eleven Food Store 25766B	2211		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
318	Chevron Stations, Inc #1943 / 95664	540		La Costa Ave	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
319	Arco Nanak Petro	1766		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
320	7 - Eleven # 13627	102		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
321	Leucadia Shell	865		Orpheus Ave	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
322	Encinitas Ranch Golf Course	1275		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	7997	Golf Course	No	No	No	Yes	No	No	Yes	No	No	No	High
323	Encinitas Ranch Golf Course Maintenance	1253		Paseo De Las Flores	Encinitas	CA	92024	San Marcos	7997	Golf Course	No	No	No	Yes	No	No	Yes	No	No	No	Low
324	Encinitas Landfill- Closed	2099		Encinitas Blvd	Encinitas	CA	92024	Escondido Creek	4953	Industrial	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Low
325	San Dieguito Transportation	1142		Bonita Dr	Encinitas	CA	92024	Escondido Creek	4151	Industrial	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
326	San Elijo Joint Powers Authority	2695		Manchester Ave	Cardiff	CA	92007	Escondido Creek	9511	Industrial	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
327	Glorious Gardens Landscape Design	495		Leucadia Blvd	Encinitas	CA	92024	San Marcos	781	Landscaping	No	No	No	Yes	No	No	Yes	No	No	No	High
328	R. C. P. Block & Brick, Inc.	577		N Vulcan Ave	Encinitas	CA	92024	San Marcos	5211	Masonry	No	No	No	No	No	No	No	Yes	No	No	Low
329	Lattin	804		Capri Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
330	Hydro Scape Products, Inc.	750		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
331	Wilma Romero	870		Devonshire Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
332	Emerald M. Growers, Inc.	834		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
333	Barrels And Branches: Garden & Gift	1452		Santa Fe Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
334	Dramm & Echter, Inc.	1150		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
335	Cordova Gardens	902		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
336	Miguel Estevez Flowers	708		Del Rio Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
337	Weidner's Gardens, Inc.	695		Normandy Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
338	W. F. Muhlethaler	350		Seeman Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
339	Bird Rock Tropicals	221		Princehouse Ln	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
340	Franco's Flowers	842		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
341	Specimen House, Inc.	782		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
342	Leucadia Floral & Plant	1114	1	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
343	La Costa Farms	1911		Saxony Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
344	Raspy	335		Santa Fe Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
345	Weston Nut Farm	1751		Noma Ln	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
346	Coral Tree Farm & Nursery	598		Park Ln	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
347	Tierra Verde Resources, Inc.	1545		Lake Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
348	K D Palms	1545		Lake Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
349	Orchid Barron	804		Cathy Ln	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
350	Williamson Produce	3111		Manchester Ave	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
351	A & M Farms	1534		Crest Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
352	The Palm Source	1329		Lake Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
353	May Greenhouses, Inc.	241		Andrew Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
354	Anne & Drews Flower Patch	184		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
355	Twigs By Teri	155		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
356	Sunshine Gardens	155		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
357	Gish Foliage	1255		Lake Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
358	The Orchid Place	829		Bracero Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
359	Armstrong Garden Centers	701		N El Camino Real	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
360	Cardiff Palm Trees 2	333		Liszt Ave	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
361	Wilkens Palm Tree Nursery	1470		Mackinnon Ave	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
362	Greens & Things, Inc.	950		Brittany Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
363	Rancho Verde	1616		Lake Dr	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
364	California Greenhouses, Inc.	1753		Lake Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
365	Horace Anderson Greenhouses	375		La Costa Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
366	Cal Pacific Plant Farm	1122		Orpheus Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
367	Pacifica Flowers Inc.	514		La Costa Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
368	Erwin Mojonnier Ent.	2009		Sheridan Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
369	Sunny Whlse. Flowers	2009		Sheridan Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
370	Walt Hoehn	1752		Eolus Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
371	Encinitas Greenhouses	351		Union St	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
372	Two Together L L C, Dba The Palm Company	395		Sunset Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
373	Seedling Express	440		Saxony Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
374	Lopez Flowers	440		Saxony Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
375	La Cascada Growers	440		Saxony Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
376	J & S Green Houses	748		Requeza St	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
377	Tayama Greenhouse	710		Requeza St	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
378	Go Green Agriculture	712		Clark Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
379	Abels Flowers & Plants	712		Clark Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
380	Brown's Plants, Inc.	1264		Lake Dr	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
381	rePLANET	262		N El Camino Real	Encinitas	CA	92024	San Marcos	5093	Other	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No	High
382	Frazee Paint	270	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
383	Vista Paint Corporation	133		N El Camino Real	Encinitas	CA	92024	San Marcos	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
384	The Sherwin-Williams Company #8557	208		N El Camino Real	Encinitas	CA	92024	San Marcos	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
385	Morgera Pools	2040		Coolngreen Ln	Encinitas	CA	92024	San Marcos	1799	Pool	No	No	No	No	No	No	No	No	No	No	Low
386	Del Rancho Pools	1315		Encinitas Blvd	Encinitas	CA	92024	San Marcos	1799	Pool	No	No	No	No	No	No	No	No	No	No	Low
387	Leslie's Swimming Pool Supplies #506	270	G	N El Camino Real	Encinitas	CA	92024	San Marcos	1799	Pool	No	No	No	No	No	No	No	No	No	No	Low

Appendix D-2
Industrial Inventory FY 11-12

No. ▼	Facility Name	Address	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
										Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ►	Name used to identify facility in database.	Street number of facility.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
1	Encinitas Landfill	2099	Encinitas Blvd	Encinitas	CA	92024	4904.610000	4953	Industrial - Closed Landfill	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
2	San Dieguito Transportation	1142	Bonita Dr	Encinitas	CA	92024	4904.610000	4151	Industrial - Vehicle Storage	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
3	San Elijo Joint Powers Authority	2695	Manchester Ave	Cardiff	CA	92007	4904.610000	9511	Industrial - Wastewater Treatment	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION REPORT
Clean Water Hotline: 760-633-2787 Email: cleanwater encinitasca.gov
http://cwp.encinitasca.gov

Type of Inspection:	☐ Annual (Date):	☐ Complaint Investigation (Date):	
Business Name:		Size: Sq.Ft.	SIC Code:
Street Address:		Mailing Address:	
Contact Person(s):		Property Manager (PM):	
Business Phone/Fax:		PM Phone/Fax:	
Business Email:		PM Email :	
Does facility have a current Encinitas business certificate?		☐Yes ☐No :	Exp:

A. Training **Number of Employees:**

1. Are employees trained? ☐Yes ☐No a. Training log at facility? ☐Yes ☐No Last time trained:

B. Liquid Storage (Oil, Grease, Antifreeze) ☐NA

2. ☐Trap- Last Maintained(LM): ☐Interceptor- LM: By: Every ____ months
3. ☐Bin- LM: ☐Clarifier- LM: By: Every ____ months

a. Is there secondary containment? ☐Yes ☐No b. Overhead Coverage? ☐Yes ☐No

4. Are other outdoor items adequately stored covered? ☐Yes ☐No ☐NA

5. Does facility have a spill kit? ☐Yes ☐No a. Posted spill response plan? ☐Yes ☐No

C. Cleaning Activities

6. Are outdoor cleaning activities conducted at facility?: ☐Y ☐N

Washing Floor Mats: ☐Y ☐N Vehicle Washing/Fueling: ☐Y ☐N Hosing Off / Power Washing Site: ☐Y ☐N

a. Is wash water contained and disposed of properly? ☐Y ☐N

D. Waste Management	Yes	No	N A	Comments
7. Are the storm drains and site free of litter and debris?				
8. Downspouts directed away from areas of potential pollutants?				

9. Does trash/recycling storage area meet the following requirements?:

Receptacle Lids Closed: ☐Y ☐N Clean/Well Maintained: ☐Y ☐N Are bins not overflowing?: ☐Y ☐N

10. Does the facility properly maintain the following landscape/maintenance issues:

Erosion Control: ☐Y ☐N Over-irrigation Runoff: ☐Y ☐N Reclaimed Water Use: ☐Y ☐N Stockpiles: ☐Y ☐N

E. Other Storm Water Management

11. Is the site free of any evidence of illicit connections and illegal discharges? ☐Yes ☐No

F. Corrective Actions Needed? ☐Yes ☐No If yes, see Inspection Summary

G. Follow Up Inspection? ☐Yes ☐No Date: If yes, see Inspection Summary

H. Education or Best Management Practice (BMP) Information Distributed:

☐Training log ☐Auto Brochure Eng/Span ☐Oil storage and transport information ☐Spill Response Guide
☐10 Simple Ways ☐Yard and Garden Care Eng/Span ☐Doorhanger ☐Business card ☐Verbal Education
☐BMP Minimum requirements Stationary ☐BMP Minimum requirements Mobile ☐Cookin' Guide ☐Other:

Inspector Name: **Signature:** **Date:**

Notes:

FOR OFFICE USE ONLY

ASSESSMENT (circle appropriate level - "5" is highest level)		
Level of knowledge regarding stormwater issues: 1 2 3 4 5		WO :
Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5		Follow Up WO

Revised 12/11

CITY OF ENCINITAS

Commercial Industrial

STORMWATER QUALITY INSPECTION SUMMARY

(760) 633-2787 ◆ FAX (760) 633-2818 ◆ npdesmail cityofencinitas.org

ISSUED TO:

CONTACT PERSON:

SITE ADDRESS:

PHONE : ( )

❒ **NO CORRECTIVE ACTIONS REQUIRED**

REQUIRED CORRECTIVE ACTIONS

ALL REQUIRED CORRECTIVE ACTIONS IDENTIFIED BELOW MUST BE COMPLETED AND REPORTED TO THE CITY BY THE FOLLOWING DATE:

❒ **Obtain Spill Kit**

❒ **Post Spill Response Plan**

❒ **Provide and Document Employee Training**

❒ **Provide Secondary Containment for Storage of Fluid Liquid**

❒ **Provide Coverage for Outdoor Storage of Fluid Liquid Waste**

❒ **Provide Coverage for Exposed Equipment and or Parts**

❒ **Clean Litter and Debris From Site, Trash Areas, and or Storm Drain**

❒ **Clean Maintain Outdoor Storage Areas**

Other Corrective Actions Comments:

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.110. Failure to comply with minimum Best Management Practice (BMP) Standards may result in further enforcement action by the City of Encinitas.

Inspector (Signature) **Date**

Responsible Party (Signature) **Date**

FOLLOW UP INSPECTION

❒ **All Corrective Actions Completed**

❒ **Corrective Actions Not Complete Enforcement Action Required**

Inspector Sign-Off **Date**

Appendix D-5 Routine Commercial Inspections Summary **FY 2011 - 2012**

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
1	**137386**	11/14/11	CHIPOTLE		No Corrective Actions Required			
2	**137387**	9/6/11	LEUCADIA TOWING		No Corrective Actions Required	No. Completed: 11/8/2011		
3	**137391**	11/7/11	YOGI'S BEACH BAR		No Corrective Actions Required			
4	**137405**	11/4/11	BLUE RIBBON ARTISAN PIZZERIA		No Corrective Actions Required			
5	**137431**	11/7/11	LAS OLAS MEXICAN RESTAURANT		No Corrective Actions Required			
6	**137438**	11/18/11	THIRD CORNER WINE SHOP & BISTRO		No Corrective Actions Required	No. Completed: 12/2/2011		
7	**137453**	1/5/12	WENDY'S 3015		No Corrective Actions Required			
8	**138481**	1/9/12	CHIN'S SCHEZWAN		No Corrective Actions Required			
9	**138482**	1/9/12	COCO'S 881		No Corrective Actions Required			
10	**138491**	1/5/12	THE QUICK FIX		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
11	**138521**	1/5/12	LITTLE CAESAR'S		Clean & Maintain Recycle Area			
12	**138540**	1/5/12	SHELL OIL dba CNG Inc.		No Corrective Actions Required			
13	**138792**	1/24/12	BETY'S TRADITIONAL MEXICAN FOOD		Secondary Containment (tray), Overhead Coverage for oil or store inside, Keep Trash Area Clean, Keep Trash Lids Closed.			
14	**138815**	1/24/12	GARCIA'S		No Corrective Actions Required			
15	**150912**	2/14/12	THE KEBAB SHOP		No Corrective Actions Required			
16	**154549**	4/16/12	The 101 Diner		No Corrective Actions Required			
17	**154550**	4/16/12	Q'ero		No Corrective Actions Required	No. Completed: 4/16/2012		
18	**154652**	4/6/12	Chart House		No Corrective Actions Required			
19	**154653**	3/23/12	Leucadia Pizzeria		1) Provide coverage for oil storage 2) Business owner to contact Property Mgmt. regarding landscape erosion	No. Completed: 4/2/2012		
20	**154655**	2/13/12	Trader Joe's 25		Keep trash areas clean at all times			
21	**154656**	3/19/12	Jersey Mike's Subs		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
22	**154711**	4/6/12	Las Olas Mexican Restaurant		No Corrective Actions Required			
23	**154714**	4/6/12	KI's Juice Bar & Restaurant		No Corrective Actions Required			
24	**154729**	4/6/12	Kraken		No Corrective Actions Required			
25	**154768**	3/23/12	El Callejon		No Corrective Actions Required			
26	**154773**	4/6/12	Barracuda Fresh Grill & Wine Bar		No Corrective Actions Required			
27	**154806**	4/12/12	Stadium Sports Bar & Restaurant		No Corrective Actions Required			
28	**154808**	4/12/12	Flippin Pizza New York Style		No Corrective Actions Required			
29	**154809**	4/17/12	Firenze Trattoria		No Corrective Actions Required			
30	**154810**	4/17/12	7-11 Store 25766B		No Corrective Actions Required			
31	**154811**	4/17/12	Dirty Dogs		No Corrective Actions Required			
32	**154812**	4/17/12	Rimel-Zenbu Cardiff, LLC Restaurants		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
33	**154813**	5/9/12	7-11		Regularly clean trash area			
34	**154814**	5/9/12	The Animal Keeper		No Corrective Actions Required			
35	**154815**	5/9/12	Manhattan Giant Pizza		No Corrective Actions Required			
36	**154816**	5/9/12	Dan's Precision Alignment Center		No Corrective Actions Required			
37	**154820**	5/9/12	Brad's Foreign & Domestic		No Corrective Actions Required			
38	**154821**	5/14/12	Ray's Automotive		Cover outdoor parts; old transmission outside			
39	**154822**	5/18/12	SN Stables		No Corrective Actions Required			
40	**154823**	5/15/12	Williamson Produce		No Corrective Actions Required			
41	**154824**	2/10/12	Juanita's Taco Shop		No Corrective Actions Required			
42	**154825**	2/7/12	Dog Behavior	By MEADOW, CHAMOMILE: 9/19/2012 12:54:41 PM Notes: Appears to be a residence; left business card. No pollution potential. Specialist received a phone call same day confirming no business.	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
43	**154826**	2/9/12	Leucadia Liquor		No Corrective Actions Required			
44	**154827**	2/10/12	Mozy Cafe		No Corrective Actions Required			
45	**154828**	1/30/12	Tierra Verde Resources		No Corrective Actions Required			
46	**154829**	1/30/12	KD Palms		No Corrective Actions Required			
47	**154830**	4/2/12	Ogata Japanese Restaurant		No Corrective Actions Required			
48	**154831**	4/2/12	Trattoria I Trulli		No Corrective Actions Required			
49	**154832**	5/7/12	Today's Pizza & Salad		No Corrective Actions Required			
50	**154833**	4/12/12	L & L Hawaiian BBQ	By MEADOW, CHAMOMILE: 9/19/2012 3:26:37 PM Business is closed for renovation; no discharges observed.	No Corrective Actions Required			
51	**154835**	2/13/12	The Lofty Bean		No Corrective Actions Required			
52	**154836**	2/13/12	N-the Tube Dog	By MEADOW, CHAMOMILE: 9/19/2012 4:02:14 PM OUT OF BUSINESS	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
53	**154837**	2/13/12	Studio St. John	By MEADOW, CHAMOMILE: 9/19/2012 4:09:36 PM OUT OF BUSINESS	No Corrective Actions Required			
54	**154840**	1/12/12	Round Table Pizza	By MEADOW, CHAMOMILE: 9/19/2012 5:33:19 PM Education "Other" was a Training Log.	No Corrective Actions Required			
55	**154841**	1/24/12	7-11 Store 21805A-2111		No Corrective Actions Required			
56	**154842**	1/19/12	7-11 Store 2111-17475C		No Corrective Actions Required			
57	**154843**	1/27/12	Wilkens Palm Tree Nursery		No Corrective Actions Required			
58	**154844**	1/26/12	California Greenhouses, Inc.		No Corrective Actions Required			
59	**154847**	1/25/12	Chevron Extra Mile		No Corrective Actions Required			
60	**154848**	1/25/12	Gish Foliage		No Corrective Actions Required			
61	**154849**	1/19/12	Golden Bowl Restaurant		No Corrective Actions Required			
62	**154850**	1/19/12	Encinitas Ford		Clean litter and debris from storm drain			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
63	**154851**	2/14/12	Pizzicato		No Corrective Actions Required			
64	**154852**	1/12/12	Sprouts Farmer's Market		1) Provide Employee Training LOG, 2) Clean litter and debris around site and storm drain & 3) Provide grease trap servicing information; who and when	No. Completed: 2/23/2012		
65	**154855**	2/22/12	Blue Finn Sushi Bar		No Corrective Actions Required			
66	**154862**	2/22/12	Passage to India		No Corrective Actions Required			
67	**154863**	2/22/12	Noodles & Company		No Corrective Actions Required			
68	**154868**	2/21/12	Encinitas Buggy Bath Carwash		No Corrective Actions Required			
69	**154869**	2/21/12	Firefly Grill & Wine Bar		No Corrective Actions Required			
70	**154874**	5/16/12	Premier Food Services, Management Inc.		No Corrective Actions Required			
71	**154876**	2/13/12	Chronic Tacos		No Corrective Actions Required			
72	**154879**	2/16/12	The Palm Source		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
73	**154880**	3/6/12	Healthy Creations	By MEADOW, CHAMOMILE: 9/21/2012 3:41:48 PM Notes: Property Management contacted to replace or remove dumpster.	No Corrective Actions Required			
74	**154881**	3/6/12	Borrelli's Pizza Inc.		No Corrective Actions Required			
75	**154882**	3/6/12	The Naked Cafe		No Corrective Actions Required			
76	**154883**	3/6/12	Town Center Juice Stop		No Corrective Actions Required			
77	**154884**	3/29/12	Angelo s Burgers		No Corrective Actions Required			
78	**154885**	3/29/12	Beachside Grill		No Corrective Actions Required			
79	**154886**	3/29/12	The Lumberyard Tavern		No Corrective Actions Required			
80	**154887**	4/2/12	Kona Koffee Hut		No Corrective Actions Required			
81	**154888**	4/2/12	Bubby's		No Corrective Actions Required			
82	**154889**	4/6/12	The Beach House		1) Obtain proper spill kit, i.e. kitty litter & 2) Clean trash areas	No. Completed: 5/2/2012		
83	**154891**	5/2/12	Raspy Growers		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
84	**154892**	5/7/12	Barrels & Branches		No Corrective Actions Required			
85	**154893**	5/7/12	Encinitas Donut Shop		No Corrective Actions Required			
86	**154897**	4/2/12	Daley Double		No Corrective Actions Required			
87	**154898**	3/6/12	El Camino Tire & Brake	By MEADOW, CHAMOMILE: 9/24/2012 11:46:00 AM OUT OF BUSINESS	No Corrective Actions Required			
88	**154899**	3/5/12	Roberto's Taco Shop		No Corrective Actions Required			
89	**154900**	2/28/12	Leslie's Swimming Pool Supplies		No Corrective Actions Required			
90	**154901**	2/28/12	Frazee Paint		No Corrective Actions Required			
91	**154902**	2/28/12	Rosanna's Pasta		No Corrective Actions Required			
92	**154903**	2/28/12	Re-Planet		No Corrective Actions Required			
93	**154904**	2/28/12	Starbucks Coffee 588		No Corrective Actions Required			
94	**154907**	1/26/12	Brown's Plants		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
95	**154908**	2/24/12	VONS 2144		No Corrective Actions Required			
96	**154909**	3/21/12	Leucadia Shell		No Corrective Actions Required			
97	**154912**	3/7/12	Java Hut Coffee Co.		No Corrective Actions Required			
98	**154915**	3/13/12	El Torito Restaurant	By MEADOW, CHAMOMILE: 9/24/2012 2:54:40 PM OUT OF BUSINESS	No Corrective Actions Required			
99	**154917**	1/10/12	Cardiff Valero		1) Provide Employee training documentation, & 2) Provide secondary containment of liquid	No. Completed: 2/24/2012		
100	**154923**	2/14/12	Santa Fe Cafe		No Corrective Actions Required			
101	**154926**	2/22/12	Savory Restaurant		1) Obtain Spill Kit, 2) Clean litter and debris from site, & 3) Close dumpster lids	No. Completed: 4/5/2012		
102	**154932**	1/19/12	Figaro's Pizza		1) Obtain spill kit, 2) Post Spill Response Plan, 3) Provide Employee training documentation, 4) Provide secondary containment, 5) Provide coverage of outdoor storage, & 6) Clean litter and debris from trash areas	Yes	No. Completed: 4/4/2012	
103	**154945**	2/9/12	El Torito Market		1) Provide secondary containment for grease bin	No. Completed: 4/5/2012		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
104	**154947**	1/24/12	Taco Bell		1) Spill kit & 2) Provide secondary containment	No. Completed: 4/4/2012		
105	**154949**	3/22/12	Elizabethan Desserts		No Corrective Actions Required			
106	**154950**	3/22/12	Kamp Kanine		No Corrective Actions Required			
107	**154951**	2/8/12	Fish 101		1) Obtain Spill Kit & 2) Provide overhead coverage of liquid storage	No. Completed: 3/23/2012		
108	**154953**	3/28/12	Lotus Cafe		No Corrective Actions Required			
109	**154954**	2/14/12	Thai Pan Cuisine		No Corrective Actions Required			
110	**154956**	2/16/12	Le Papagayo		1) Obtain Spill Kit & 2) Clean outside of oil storage	No. Completed: 4/4/2012		
111	**154960**	5/22/12	Encinitas Ranch Golf Course		No Corrective Actions Required			
112	**154962**	3/28/12	Thai Society		1) Obtain Spill Kit & 2) Provide coverage for outside storage (Biodriven)			
113	**154963**	3/13/12	El Pollo Loco 3431		1) Obtain Spill Kit, 2) Post Spill Response Plan, 3) Provide secondary containment, 4) Provide coverage for outdoor storage, & 5) Clean trash & litter			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
114	**154964**	2/24/12	Jorge's Mexicatesen		1) Obtain Spill Kit, 2) Post Spill Response Plan, 3) Provide employee training documentation, & 4) Clean trash area			
115	**154966**	2/14/12	Five Guys Operations, LLC		1) Provide employee training documentation, 2) Provide secondary containment, & 3) Provide coverage for outside storage			
116	**154980**	5/14/12	Calypso Cafe		1) Provide secondary containment (Biodriven), 2) Provide coverage for outdoor storage, 3) Post spill response plan			
117	**154986**	3/22/12	K.C. Tandoor		1) Provide overhead coverage for outside storage			
118	**154987**	3/28/12	Giovanni's Sandwich Shop	By MEADOW, CHAMOMILE: 9/25/2012 10:36:28 AM Business is now closed. No follow-up required. CM	1) Obtain Spill Kit & Post Response Plan & 2) Provide secondary containment			
119	**154988**	3/27/12	Vigilucci's		1) Clean litter and debris from storm drain, 2) Call for oil service (Biodriven), 3) How often is oil removed?			
120	**154989**	2/23/12	Union Kitchen & Tap		1) Obtain Spill Kit, 2) Post Spill Response, 3) Provide employee training and documentation, & 4) Clean litter & debris around trash area and smoking area, 5) Sweep (dry/clean)			
121	**154990**	3/29/12	Encinitas Ale House		1) Provide secondary containment & 2) Provide coverage □ BIODRIVEN			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up 1	Corrective Actions Still Needed Additional Follow Ups	NOV Date

Total: 121

Total NOVs: 0

Appendix D-6
Mobile Commercial Inventory FY 11-12

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	Activity Description	Potential Pollutants								
										Bacteria	Gross Pollutants	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or Unit	Name of street where facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
1	A - 1 Patio & Remodeling Experts	1280		Santa Fe Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
2	A G Housekeeping Service	110	6	Hillcrest Dr	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
3	A Plus Pool And Spa Service	1190	247	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
4	Absolute Fountain Service	730		Third St	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
5	Accountable Plumbing	2434		Oxford Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
6	Alba Genesis Services	541		Guidero Way	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
7	Alberta Santiago	1020		Aloha Dr	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
8	Alfonso Rey Landscape Maintenance	351		Sprucewood Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
9	All Aspects Glass Company	152	51	N Coast Highway 101	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
10	All In Carpet Cleaing	720		Devonshire Dr	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
11	Alonzo	755		Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
12	Anguiano Landscape	471		Cole Ranch Rd	Encinitas	CA	92024	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
13	Anonymous Window Cleaning	1727		Legaye Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
14	Aqua Tech Pool Care, L L C	233		Delphinium St	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
15	Aquatic Perfection	1590		Avenida De Los Lirios	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
16	Archibald Sheet Metal	125		A St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
17	Arnulfo Medina Landscaping	1408	A	Hermes Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
18	B B'S Auto Detail Wheel Polishing	606		Stratford Dr	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
19	B L T Construction, Inc.	1923		Lahoud Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
20	B T D Construction	1397		Hermes Ave	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
21	Bart Forry Home Repairs	704	C12	Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
22	Belman Handyman	738		Snapdragon St	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
23	Benny's Gardening	1010		Balour Dr	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
24	Berger Pool And Spa	1105		Pacifica Pl	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
25	Bernardo Landscaping	1105		Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
26	Best Cleaning	1260		Loch Lomond Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
27	Better Homes Construction	231		Countryhaven Rd	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
28	Bishop Pool Service And Repair	744		Foxglove St	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
29	Black Diamond Landscapes	1822		Orchard Wood Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
30	Blue Coast Taxi	928		Brass Way	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
31	Blue Water Of La Jolla	2008		Wandering Rd	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
32	Bob's Carpet Care, Inc.	336		Sanford St	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
33	Bouche Construction	1115		Balour Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
34	Bradley Landscape Development, Inc.	607		N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
35	Bright Visions Window Washing	616		Lynwood Dr	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
36	Britta's Pet - Sitting	1706		N Willowspring Dr	Encinitas	CA	92024	San Marcos	Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
37	C D Pools	1265		Rubenstein Ave	Cardiff	CA	92007	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
38	C. A. A. Landscaping & House Cleaning	404	279	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
39	Caliber Drywall	1253	3	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
40	Calray Electric, Inc.	375		Arroyo Dr	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
41	Cardiff Cleaningworks	375		Dublin Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
42	Cardiff Limousine	844		Bonita Dr	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
43	Cardiff Maintenance	2233		Lagoon View Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
44	Carrillo Tree Maintenance	794		Clark Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
45	Claudia's Housekeeping Services	1338		Mackinnon Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
46	Clean & Clear Windows	244	D	Second St	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
47	Coast Mobile Oil Service	925	102	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
48	Coastal Carpet Cleaning	1252		Hygeia Ave	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
49	Coastal Construction Group	742		Neptune Ave	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
50	Coco's Landscape And Maintenance	1744		Knollfield Way	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
51	Color Solutions Auto Two	126		Triton Cir	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
52	Crown Pool And Landscape	2126		Via Tiempo	Cardiff	CA	92007	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
53	D V Environmental Group	1829		Forestdale Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No

Appendix D-6
Mobile Commercial Inventory FY 11-12

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	Activity Description	Potential Pollutants								
										Bacteria	Gross Pollutants	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or Unit	Name of street where facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
54	D. Bell Construction, Inc.	1539		Caudor St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
55	Designs By The Sea	1511		Calle Tulipanes	Encinitas	CA	92024	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
56	Dirt - Busters	808	J1	Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
57	Doctor Playground, Inc.	123	46	Jasper St	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
58	Dogs Are Awesome Pet Sitting Services	1305	B	Mackinnon Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
59	Drenie's Housecleaning	1421	B	San Elijo Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
60	Ed's Handyman Service	1372		Hymettus Ave	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
61	El Monte Landscape	2048		Willowood Ln	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
62	Elite Auto Trim	4265		Manchester Ave	Encinitas	CA	92024	Escondido Creek	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
63	Encinitas 9, L L C	422		Requeza St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
64	Encinitas Drain	737		Nardo Rd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
65	Encinitas Janitorial Service	699	109	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
66	Enrique Landscaping	1020		Aloha Dr	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
67	Eric Jason Cashion, Dba: Siding Solutions	168		Coop Ct	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
68	Falling Waters Landscape, Inc.	774		Lotus Blossom St	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
69	Favorite Maid	404	258	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
70	Felix Sanchez Gardening Service	880		Del Rio Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
71	Fernando Landscaping & Gardening	755		Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
72	Finishing Touch Moulding, Inc.	921		Hymettus Ave	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
73	Four Corners Catering	1515		Vivaldi St	Cardiff	CA	92007	Escondido Creek	Mobile- Eating/Drinking	Yes	Yes	No	No	Yes	No	No	No	Yes
74	G L S Installations	1537		Burgundy Rd	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
75	Galapacifica Landscape	924	73	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
76	Green Building Squared, Inc.	1572		Caudor St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
77	Greg Stone Landscape Architects	69		Mcneill Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
78	Gresham Landscaping & Consulting	1734		Noma Ln	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
79	Handyman	226		Meadow Vista Way	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
80	Harbinger Electric	129	A	W Glaucus St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
81	Hayes Construction And Design, Inc.	560	2	N Coast Highway 101	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
82	Heavenly Views Window Cleaning	460		Saxony Rd	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
83	In Motion Motors	3675		Copper Crest Rd	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
84	J A Landscape	2068		Bulrush Ln	Cardiff	CA	92007	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
85	J C'S Taxi Service	919		Brass Way	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
86	J M D Landscape, Inc.	187		N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
87	J Z Framing, Inc.	134		S Jayton Ln	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
88	J. Bryant Concepts	565		Requeza St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
89	J. Morales Tree Service	130		Village Run West	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
90	James Kandiguranis Pools	1853	4	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
91	Jason Cardoza General Maintenance	884		Del Riego Ave	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
92	Jason's Handyman Service	139		Countrywood Ln	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
93	Jeremy Spath Landscape Design	390		La Veta Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
94	Jesus Fuentes	2039		Shadow Grove Way	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
95	John Hanna & Associates	1753		Swallowtail Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
96	Just Us Cleaning And House Sitting	1066		Guildford Ct	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
97	K L R Bobcat And Hauling Services	1924		Country Grove Ln	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
98	Kamin's Cleaning Services	170	11	Phoebe St	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
99	Kelly G R N Native Landscape Living Co.	911	A	Third St	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
100	Kessing Painting,Inc.	261		Caliban Ct	Encinitas	CA	92024	San Marcos	Mobile- Painting	No	No	No	No	No	No	No	No	No
101	L C I Walls & Ceilings	234		Fraxinella St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
102	L. L. M. Landscape, Inc.	675		Requeza St	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
103	Langtree Woodworking	301		Horizon Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
104	Leisure Friends,	368		N El Camino Real	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
105	Liquid Pool And Spa Service	16		E I St	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
106	Lucas' Cab	117	21	Rosebay Dr	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No

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										Bacteria	Gross Pollutants	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or Unit	Name of street where facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
107	Lupita Housekeeping	800	205	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
108	M A C Design & Development	471		Chesterfield Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
109	M H S - Works	1008		Cottage Way	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
110	M R B Construction	1265		N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
111	Madrigal Handyman Service	513		S Willowspring Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
112	Mallory's Pool Maintenance	2104	B	Manchester Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Pool	No	No	No	No	No	No	No	No	No
113	Maurice's Handyman Services	1190	167	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
114	Mayer Pool Service & Repair	1553		Plumtree Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Pool	No	No	No	No	No	No	No	No	No
115	Mc Garry Mobile Detailing Systems	2134	116	Carol View Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
116	Mercedes West Auto Wholesale	2026		Oxford Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
117	Michael Buys Quality Builders	1802		Belle Grove Rd	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
118	Mijangos Landscaping	1608		Charro St	Encinitas	CA	92024	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
119	Mike Hidalgo, Inc.	119		Europa St	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
120	Miller Tire & Wheels, Inc.	248		La Veta Ave	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
121	Mitchell Aquarium Service	591	A	Hygeia Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
122	Mobile Detailing Specialists	2340		Carol View Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
123	Nature Concepts Landscaping	1124		Nardo Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
124	North County Handy Man	1270		Avenida Miguel	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
125	North County Hauling Service	1117		Woodlake Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
126	North County Paintless Dent Removal	147		Countrywood Ln	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
127	Pacific Coast Glazing, Inc.	908		Nolbey St	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
128	Pacific Coast Maintenance	981	8	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
129	Pacific Coast Pool Service	1439		Linda Sue Ln	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
130	Pacific Custom Builders	146		W Glaucus St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
131	Pascal Steel Corporation	555	4	Second St	Encinitas	CA	92024	San Marcos	Mobile	No	No	No	No	No	No	No	No	No
132	Patrice Alexander	2437		Oxford Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
133	Paul Beeson H H P	1572		Caudor St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
134	Phil's Handyman Service	1726		Old Mill Rd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
135	Professiional Cleaning & Errands	1099		Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
136	Prola Landscape Design	1333		San Elijo Ave	Cardiff	CA	92007	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
137	Pure Sustainable Home, Inc.	147		Coop Ct	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
138	R S B Homes, Inc.	2235	111	Encinitas Blvd	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
139	R. A. Booker Builders, Inc.	3451		Toscano Ct	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
140	R. K. Enterprises	658		Santa Fe Dr	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
141	Rajan Brown Landscape Design & Consulting	281		Fraxinella St	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
142	Ranch And Sea Pool Care	1686		Falcon Hill Ct	Cardiff	CA	92007	Escondido Creek	Mobile- Pool	No	No	No	No	No	No	No	No	No
143	Rancho Santa Fe Pool Service	2039		Willowood Ln	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
144	Remoca General Contractors	818		Summerhill Ct	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
145	Reva Hydro Jetting	1056		Lark Song Ln	Encinitas	CA	92024	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
146	Richard Thaisz Construction	1403		Caminito Septimo	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
147	Robert R. Lovci	1236		Rubenstein Ave	Cardiff	CA	92007	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
148	Robertson Relief Vet Services	785		Fieldstone Ln	Encinitas	CA	92024	San Marcos	Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
149	Romeo Godinez Handyman	1159		Gardena Rd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
150	Romero's Carpet Cleaning	1190	146	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
151	Ruby Construction Corporation	1420		Rubenstein Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
152	Rusk Landscape	2156		Mountain Vista Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
153	Russell Handy Painting	2056		Bulrush Ln	Cardiff	CA	92007	Escondido Creek	Mobile- Painting	No	No	No	No	No	No	No	No	No
154	Sahba Javedani	624		Faith Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
155	San Diego Stone Care	731		Snapdragon St	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
156	Seacoast Plumbing	1334		Caminito Septimo	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
157	Seaside Janitorial Service	1019 1/2		Hermes Ave	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
158	Shawn's Painting Services	721		Arden Dr	Encinitas	CA	92024	San Marcos	Mobile- Painting	No	No	No	No	No	No	No	No	No
159	Silva's Landscaping	1105		Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No

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										Bacteria	Gross Pollutants	Metals	Nutrients	Oil Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or Unit	Name of street where facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
160	Simple Vision	1814		Autumn Pl	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
161	So - Cal Shade Sails	1009		Hurstdale Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
162	Sparkle Window Cleaning	2427		Newcastle Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
163	Spectrum Builders	699	84	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
164	Steffen Enterprises, Inc.	1008		Saxony Rd	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
165	Sun Cal Solar Incorporated	745		Winding Way	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
166	Sunland Ranch	3675		Copper Crest Rd	Encinitas	CA	92024	San Marcos	Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
167	Terry's Cleaning Service	2157		Pleasant Grove Rd	Encinitas	CA	92024	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
168	The London Window Cleaner	285		Rodney Ave	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
169	The Pool Pros	2061	123	Village Park Way	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
170	The Poolman	349		N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
171	Tom Plumb	469		Summer View Cir	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
172	Tom Wolf Ltd.	1459		Big Canyon Ter	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
173	Trinity Express	1457		Pegaso St	Encinitas	CA	92024	Escondido Creek	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
174	Turn Key Construction Handyman Services	444	87	N El Camino Real	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
175	Van Veen Team	1145		Aloha Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
176	Village Property Systems, Inc.	131		Aberdeen Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
177	W O A Builders, Inc.	110		Requeza St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
178	Wallace Courier	523		Samuel Ct	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
179	Whalen Performance	1726		Avenida Melodia	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
180	Wilson Pools Plus	185		Village Run East	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
181	Zachary Jones Landscaping	704	C3	Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No

CITY OF ENCINITAS

Clean Water Program

Minimum Required

STORMWATER BEST MANAGEMENT PRACTICES

for Commercial Facilities

YOUR BUSINESS CAN MAKE A DIFFERENCE!

What is a stormwater Best Management Practice (BMP)?

The term "Best Management Practice" (BMP) refers to a combination of effective and economical practices, techniques, and/or activities that can help prevent or reduce stormwater runoff pollution. It's simple: only rain goes in the storm drain.

How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some facilities may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

See http://bmp.projectcleanwater.org for more information on Best Management Practices relating to specific commercial business activities.

To report stormwater pollution in the City of Encinitas, please call the Clean Water Hotline: (760) 633-2787

For any questions regarding the City's Clean Water Program or the information presented above, email: npdesmail@cityofencinitas.org

Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. A training log should be kept at the facility to ensure that all employees are properly trained in stormwater pollution prevention practices. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) for every activity performed on the job. (Please visit *http://bmp.projectcleanwater.org* for activity specific practices)
- Proper spill prevention and response procedures (containment, control, cleanup - do NOT hose it down)
- The location and proper use of clearly labeled spill kit and spill response guide.
- The location of all stormwater drains and inlets, and the knowledge that they all lead to the ocean.

Indoor/Outdoor Liquid Storage

Commonly stored liquids including grease, oil, and other fluids that may be kept in a container inside or outside may pose a potential threat to water quality if they can overflow, get knocked over, or leak. Properly storing these fluids is a key component to effective pollution prevention at any business. The following practices comply with minimum BMP standards for liquid storage — and will help to keep them out of the stormwater system.

- Keep containers that store fluid or liquid inside an additional container to provide secondary containment
- Provide overhead coverage for outdoor storage of fluid or liquid waste
- Schedule regular waste pick-ups to prevent spills and overflows from storage containers
- Perform regular maintenance and cleaning of storage areas

Good Housekeeping

Routine maintenance and clean-up is essential to minimizing stormwater pollution from your business. When cleaning up outdoors, it is important to keep debris and contaminants from running into the storm drain system. The following good practices should be applied to all cleanup and maintenance activities to prevent storm drain pollution:

- Dry cleaning methods (i.e. using a broom to sweep instead of a hose) will reduce water usage and lessen the potential to pollute. Also, using a mop and bucket will eliminate runoff; the wash water can then be disposed of in the sink or toilet (NOT the storm drain)
- Wash water from activities such as hosing off sidewalks and patios, vehicle washing, and cleaning floor mats should be directed toward or done over pervious areas (i.e. lawn, dirt, flower bed, shrubs, and planted areas).
- If using water as a clean-up method and it cannot be re-directed to a vegetated area, proper storm drain protection (i.e. sand bags) must be utilized to capture all washwater.

Trash/Recycling Storage and Management

Properly maintained trash, recycling, and debris containment areas are an easy way to protect the environment. Simple steps like keeping trash dumpster lids closed and immediate cleanup of spilled materials (solid or liquid) will go a long way. The following practices must also be applied to better manage trash, debris and other waste materials:

- Ensure the site, trash/recycling areas, and storm drains are free of litter and debris.
- Trash containers and dumpsters must be in good condition and free of holes.
- All receptacles must have closed lids or be placed in a covered area.

Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water

CITY OF ENCINITAS

Clean Water Program

Minimum Required

STORMWATER BEST MANAGEMENT PRACTICES

for Mobile Business Activities

YOUR BUSINESS CAN MAKE A DIFFERENCE!

What is a stormwater Best Management Practice (BMP)?

The term "Best Management Practice" (BMP) refers to a combination of effective and economical practices, techniques, and/or activities that can help prevent or reduce stormwater runoff pollution. It's simple: only rain goes in the storm drain.

How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some businesses may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

See http://bmp.projectcleanwater.org for more information on Best Management Practices relating to specific commercial business activities.

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Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) specific to mobile business activities. Please visit *http://bmp.projectcleanwater.org* for activity specific BMPs related to your business.
- Knowledge of the storm drainage system, and how to locate drains and inlets that must be protected.
- How to use appropriate and easily accessible supplies to properly control and eliminate any discharge to the storm drain system.
- Proper spill control and cleanup procedures.

Proper Waste Handling (solid, liquid, and hazardous wastes)

Before starting any job, consider the types of waste that may be generated including wash water, chemical compounds, residual construction or repair materials, paints, oil and grease, and loose trash and debris. It is important to properly control, contain, and transport these materials to prevent spills and discharge from entering the storm drain system. The following steps will help to manage waste generated from your mobile business activity:

- Do not dispose of ANY waste material in the storm drain system.
- Liquid non-hazardous wastes may be disposed of in the sanitary sewer (i.e. sinks, toilets) if appropriate, or placed in sealed containers and disposed of properly.
- Solid wastes should be removed from the worksite in waste containers with a lid and disposed of at appropriate waste sites.
- Inspect and label all hazardous material waste containers prior to removal. For details in the management, transport, and disposal of specific waste, contact the County of San Diego Hazardous Materials Division at (619) 338-2231.

Equipment Cleanup

Equipment cleanup activities should always be conducted away from storm drain inlets, and performed in a manner to prevent the release of any material into the street, curb, gutter, alley or any other conveyance facility. To ensure compliance with minimum BMP standards for equipment cleanup activities, follow these simple practices:

- Equipment cleanup should be conducted in a container such as a bucket, tub or basin to control liquids and prevent runoff.
- Alternatively, conduct equipment and material cleanup activities in an area contained by a berm or plastic liner to collect and contain all fluids.
- Dispose of waste water into a sanitary sewer drain (i.e. sink, toilet) as appropriate or into a vegetated area (i.e. lawn, flower bed, dirt area).

Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water

Appendix E

Residential

E-1 Map of High Threat to Water Quality Residential Areas

City of Encinitas

High Threat to Water Quality Residential Areas

High Threat to Water Quality Residential Areas in the City of Encinitas include:

- All residential areas within 500ft of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

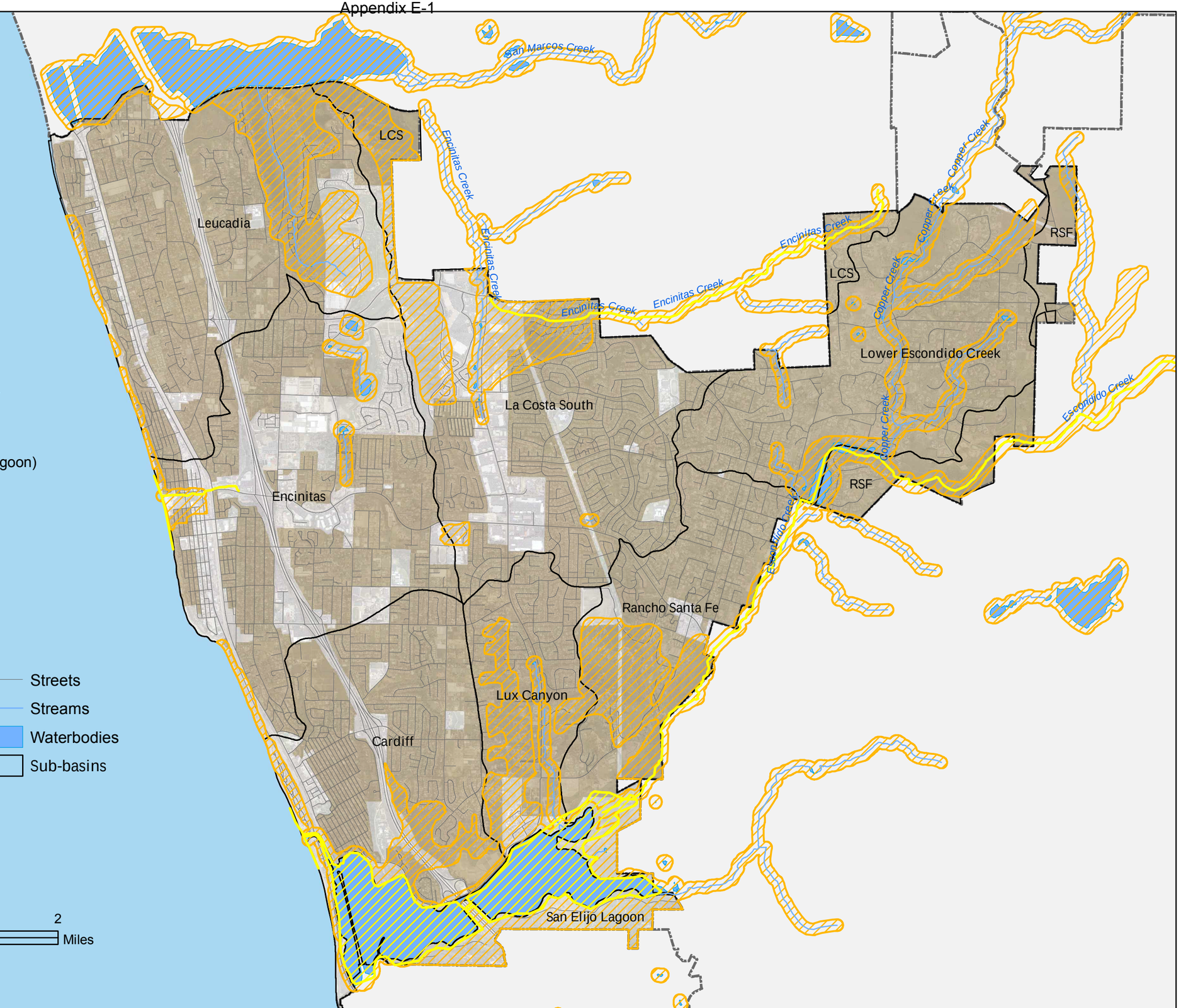

Residential Areas
303(d) listed streams
303(d) listed waterbodies
Environmentally Sensitive Areas
Streets
Streams
Waterbodies
Sub-basins

0 0.5 1 2 Miles

Appendix F

Education

F-1	Regional Mobile Business Outreach and Education Plan
F-2	NCSWP Construction Brochure
F-3	City of Encinitas Brochures (English Spanish)
F-4	Encinitas Environmental Services Guide
F-5	Giveaway items for FY 11-12
F-6	Regional Residential Education Plan

Regional URMP Attachment 5.0

Regional Mobile Business Outreach and Education Strategy

FINAL - March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

This document describes a **Regional Mobile Business Outreach and Education Program** to be collaboratively conducted by the Copermittees of NPDES Order No. R9-2007-0001 (Permit). It was developed by the Mobile Business Subcommittee of the Copermittees' Outreach Workgroup. Permit section D.3.b.(4)(a) requires that each Copermittee develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP. Section D.3.b.(4)(b) further states "if they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education." Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy. It addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy.

2.0 SOURCE CHARACTERIZATION

Mobile businesses provide services at offsite locations rather than from fixed bases of operation. Services may be provided at, but are not limited to, residential, industrial, municipal, and commercial areas. Permit Section D.3.b.(1), identifies 12 categories of mobile business types that will be addressed as part of this regional Strategy. Table 1 identifies these businesses types and the potential pollutants associated with each. Additional characterization and description of these sources will be conducted during the development and implementation of the regional program elements described in Section 2.0

Table 1 – Identification of Mobile Business Types and Associated Pollutants-of-Concern

Source Type	Bacteria	Metals	Pesticides	Sediment	Trash	Nutrients	Organics	Oil/Grease
1. Auto Repair, Maintenance, Fueling, Cleaning		X		X	X		X	X
2. Equipment repair, maintenance, fueling, or cleaning		X		X	X		X	X
3. Mobile automobile or other vehicle washing		X		X	X		X	X
4. Pest control services		X	X				X	
5. Mobile carpet, drape or furniture cleaning							X	
6. Cement mixing or cutting				X		X	X	
7. Masonry				X		X	X	
8. Painting and coating		X			X		X	
9. Landscaping	X	X	X	X		X	X	
10. Pool and fountain cleaning		X		X		X	X	
11. Portable sanitary services	X				X	X	X	
12. Power washing services	X	X	X	X	X	X	X	X

3.0 REGIONAL PROGRAM ELEMENTS

The Regional Mobile Business Outreach and Education Program will consist of several elements to be developed and implemented by June 2010.

3.1 Inventory Development and Maintenance

Permit section D.3.b.(1) requires that each Copermittee keep as part of its commercial sources inventory a listing of mobile businesses known to operate within its jurisdiction, and section D.3.b.(4)(b) encourages Copermittees to share these inventories. In addition to sharing inventory information, the Copermittees have determined that the collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses, and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications. The Copermittees

intend to utilize a consultant to compile this inventory. It is expected to be completed by June 2009. Prior to the completion of a shared inventory, the Copermittees will continue to meet the requirements of section D.3.b.(4)(b) by individually maintaining and updating as necessary their existing jurisdictional mobile business inventories. These will be used as a starting point for the development of a consolidated inventory. The consultant will also be tasked with researching other information sources such as unlicensed mobile businesses operating within the County, as well as with managing updates to the inventory in subsequent years.

3.2 Establishment of Minimum BMP Requirements

Permit section D.3.b.(4)(a)i requires that Copermittees develop and implement minimum standards and BMPs to be required for each of the various types of mobile businesses. The Copermittees also intend to collaborate in the development of a minimum set of BMP standards for each type of mobile business addressed through the regional effort. Existing resources such as jurisdictional minimum BMPs, the Project Clean Water Clean Water Tool Box (http://www.projectcleanwater.org/bmp/) and the Think Blue website (http://www.sandiego.gov/thinkblue) will be reviewed by the Copermittees in developing these common standards. A consultant may also be utilized for BMP development support. This task is expected to be completed by June 2009.

3.3 Outreach and Education Strategy

Permit section D.3.b.(4)(a)iv requires that Copermittees develop and implement an outreach and education strategy for mobile businesses. A variety of educational methods and approaches will likely be utilized in complying with this requirement. These will be determined by the Copermittees during the development of this task. The centerpiece of the Copermittees' education strategy will be business notifications. This element is described further below.

3.4 Business Notifications

Permit section D.3.b.(4)(a)iii requires that, within the first three years of implementation of the updated JURMP, each Copermittee must notify the owner/operator of each

inventoried mobile business their minimum standards and BMP requirements and local ordinances. The Copermittees will collaboratively develop and implement a regional notification strategy to inform mobile businesses of their obligation to comply with the local ordinances of the jurisdictions where they operate. In addition to assisting in the development of this strategy, the consultant will be tasked with notifying businesses and tracking when and how they were notified. Potential notification options include mailing, emailing, workshops, and website posting. This task will be completed no later than March 24, 2011, but is targeted for completion by March 2010.

3.5 Implementation Schedule

Implementation of the Regional Mobile Business Outreach and Education Program will begin during FY 08/09, with all major tasks targeted for completion by the end of FY 2009/10. The consultant may also be retained for future management of the inventory and other tasks as needed. Major milestones are summarized below.

FY 2008/09

- Consultant selection by Subcommittee
- Completion and maintenance of regional inventory by consultant
- Development of regional minimum BMPs

FY 2009/10

- Notification of businesses by consultant (by January 2010)
- Final report including status of notifications submitted to Copermittees

4.0 INDIVIDUAL COPERMITTEE RESPONSIBILITIES

Although many of the specific requirements of Permit section D.3.b.(4)(a) will be collaboratively addressed through the completion and implementation of the Regional Mobile Business Outreach and Education Program, the responsibility for ensuring individual Permit compliance ultimately remains with each Copermittee. These responsibilities are briefly discussed below.

4.1 Inspections and Enforcement

Permit section D.3.b.(4)(a)ii requires that Copermittees develop and implement an enforcement strategy which specifically addresses the unique characteristics of mobile businesses operating within their jurisdictions. Section D.3.b.(4)(a)v further requires that Copermittees conduct inspections of mobile businesses as needed (e.g., on a complaint basis). The Regional Mobile Business Outreach and Education program will not address inspections or enforcement of mobile businesses; these responsibilities are retained individually by each Copermittee.

4.2 Education and Outreach

Copermittees are expected to participate as requested in the development of the Education and Outreach Strategy described in Section 3.3 above. Individual Copermittees may also have specific needs or requirements not addressed through this effort. Each jurisdiction retains the responsibility for developing additional education programs or strategies in accordance with their own needs, and as necessary to ensure their own Permit compliance.

4.3 Inventory Updates

As described in Section 3.1 above, individual Copermittee mobile business inventories will initially be used as a starting point for the development of a consolidated regional inventory. Copermittees are expected to make their inventories available as requested, and to provide updated information as determined necessary for future updates.

4.4 BMP Requirements

Copermittees are expected to make their jurisdictional BMPs and requirements available as requested during the development of regional standards and program content. The Regional Mobile Business Outreach and Education Program will emphasize standardized, common content. In the event that an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad 760-602-2719

City of San Marcos 760-744-1050

City of Encinitas 760-633-2787

City of Del Mar 858-755-9313

City of Oceanside 760-435-5800

City of Solana Beach 858-720-2470

City of Vista 760-726-1340

Best Management Practices

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.

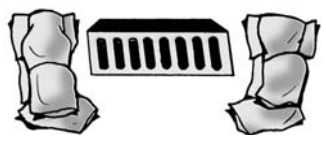

The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.

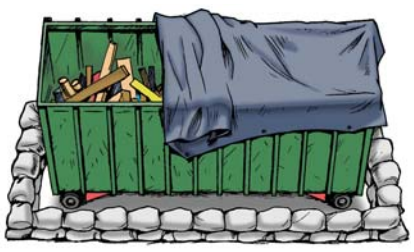

Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.

Water Quality Regulations for Construction Sites

In 1972, the Environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

A Pollution Prevention Guide for the Construction Industry

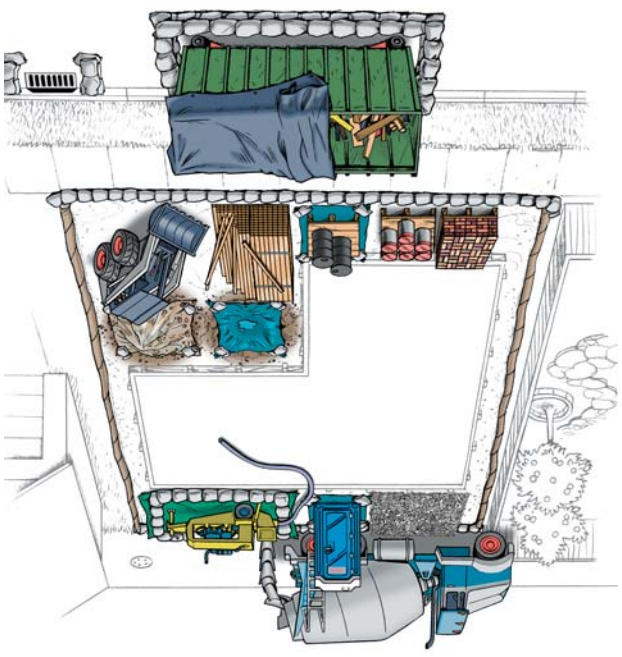

North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.

Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

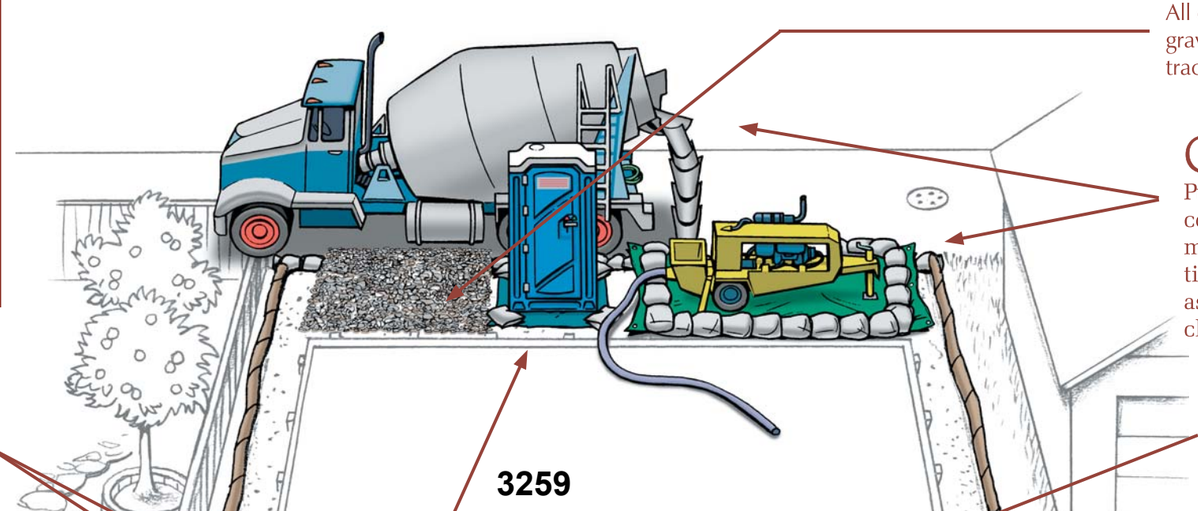

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout Area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic

Mantenimiento
Automotriz
Automotive

Empresas Constructoras
Developers
Simple and Cost Effective Ways to Comply with Storm Water Regulations

Contratando un
Hombre Anto
Hiring a
Handy Man

DiaZinón
DiaZinon

Los Restaurantes Pueden
Ayudar a Mantener Limpias
Nuestras vías
Restaurants Can
Help Keep our
Waterways Clean

Cuidado del
Patio y del jardín
Yard & Garden
Care

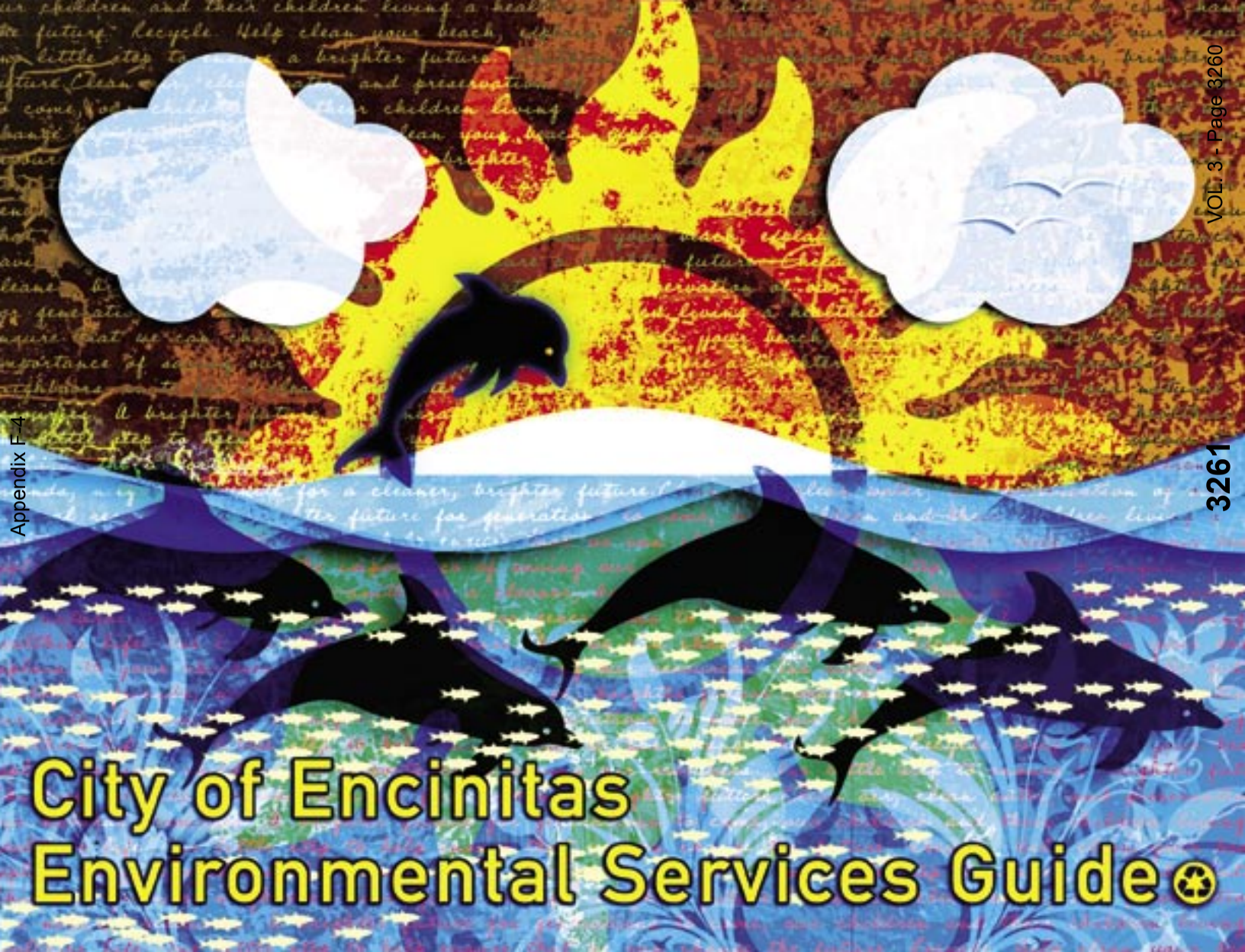
City of Encinitas
Environmental Services Guide

Ocean protection

The ocean begins at your front door.

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.

Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.

- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.

Color Changing Mood Pencil

Pet Waste Bag Dispenser

Recycled Shop Towel

Recycled Key Chain

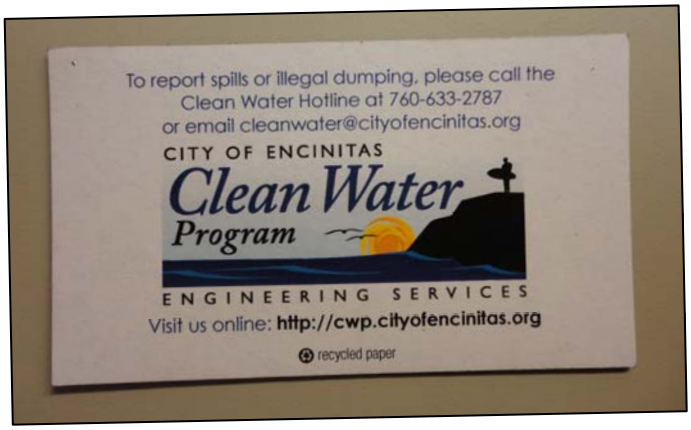

Magnet

CITY OF ENCINITAS

Clean Water Program

ENGINEERING SERVICES

Clean Water Hotline: 760-633-2787

made from 85% post-industrial recycled paper

Regional URMP Attachment 2.0

Regional Residential Education Plan

FINAL March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

The Regional Residential Education Program is a joint effort by the Copermittees of the Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES No. CAS0108758). The Regional Residential Education Plan (Plan) contains recommended strategies for the successful development and implementation of the Regional Residential Education Program. Per section F.1 of the Permit, as amended by Addendum No. 1 on December 12, 2007, this program must be collaboratively developed and implemented by March 24, 2008.

In the past, Copermittees have been limited in their ability to pursue strategies which may have a much greater potential to influence knowledge and behavioral change in residential populations. There are several benefits to implementing an enhanced regional program to target residential sources of stormwater pollution. First, it will encourage the development of consistent messages throughout the region. Second, a regional approach will enable Copermittees to better leverage resources and utilize economies of scale. Finally, stormwater and urban runoff pollution frequently cross jurisdictional boundaries, making collaborative approaches a necessity. While the regional program will be coordinated extensively among the Copermittees, it is not meant to supplant the jurisdictional and watershed programs.

The overall goals of the program are to increase awareness and knowledge, improve attitudes toward stormwater pollution and provide a foundation for changing behaviors that contribute to stormwater pollution. Based on extensive input from the Copermittee Regional Stormwater Management Committee (RMC) and the Education & Residential Sources Workgroup, as well as an independent analysis of existing educational efforts, the following objectives were developed to support these goals:

1. Maintain a consistent image, message, and brand
2. Use positive messages to increase knowledge and awareness, and ultimately change behavior
3. Develop community partnerships to leverage resources

4. Develop assessment strategies for program effectiveness

The Regional Education & Residential Sources Workgroup advises the RMC on regional shared outreach activities as necessary to support the requirements of the Permit. The Education & Residential Sources Workgroup plans, develops, and implements the various aspects of the stormwater education program. Education & Residential Sources Workgroup participants have traditionally combined efforts to reach business, industrial, and residential communities across the San Diego region. However, in accordance with the most recent NPDES Permit, this Plan represents a distinct effort to target residential sources of stormwater pollution.

Messages developed by the Education & Residential Sources Workgroup are designed to increase knowledge and awareness of regional stormwater issues and encourage positive changes in behavior. Assessment methods and measures have also been developed to evaluate the effectiveness of these messages and the strategies used to deliver them. Program evaluation methods and strategies will evolve as various program elements are implemented. Regional assessment methods will measure knowledge, awareness, and attitudes of residents. Program elements that are determined to be ineffective or least effective will be replaced by more effective elements or improved upon as needed. The regional program will also facilitate the measurement of changes in pollutant generating behaviors by the jurisdictional and watershed programs.

As a basis for developing this Regional Residential Education Plan, the Copermittees contracted with TRG & Associates to develop *Recommended Options for the San Diego Regional Stormwater Educational Program*. This document contains a number of recommended strategies for the successful development and implementation of a regional residential education program. It includes an extensive literature review, an analysis of existing educational programs in San Diego, and a comprehensive list of public awareness surveys. The literature review outlines other programs in the State that have

successfully implemented regional residential stormwater education programs. The document also summarizes the strengths and weaknesses of existing residential education efforts, provides suggestions for how they can be improved, provides a brief analysis of baseline public awareness surveys that have been implemented locally within the last five years, and offers recommendations for improving assessment methods and survey instruments.

2.0 SOURCE CHARACTERIZATION

The San Diego region occupies 4,261 square miles with a population of approximately 3 million people. Estimates for the year 2007 indicate that the San Diego regional population is 29% Hispanic and 71% non-Hispanic. Non-Hispanic persons include African Americans, American Indians, Native Hawaiians, Asians, and persons of a multitude of races, ethnicities, and cultures. SANDAG currently estimates that the median household income in the San Diego region is $68,388. According to the US Census Bureau in 2004 only 10.9% of San Diego's population was living below the poverty level, compared to 13.2% Statewide. Other estimates indicate that as much as 25% of California's population is living below the poverty level. Much of the region's quality of life revolves around the water resources.

Residential areas have been shown to be a prevalent source of urban runoff in the San Diego region, although less than ten percent of the region is developed as residential land. Most of the urban activity is clustered in the western third of the county, near coastal areas. However; residential land–based activities throughout the entire region contribute to polluted stormwater runoff.

The Regional Residential Education Program will focus efforts on high priority residential pollution sources that are common throughout the San Diego region. Water quality monitoring data and source characterization studies have provided the Copermittees with useful information in determining regional residential sources of stormwater pollution and constituents of concern. Regional threats to water quality were initially outlined in the Report of Waste Discharged and finalized in the Permit. Section

F.1.a of the Permit describes the process for determining which pollutants will be addressed by the program.

2.1. Regional Constituents of Concern

The following constituents of concern were determined to be the primary pollutants from residential sources for the San Diego region:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

Some jurisdictions may have additional high priority pollutants. Each jurisdiction will be individually responsible for addressing additional pollutants and their sources. The pollutants listed above will remain the focus of the Regional Residential Education Program.

2.2. Pollutant-generating Activities and Constituents of Concern

Table 1 outlines residential pollutant generating activities and associated constituents of concern generated by residential areas in the San Diego region.

Table 1) Pollutant Generating Activities

Pollutant Generating Activities	Priority Constituents				
	Bacteria	Nutrients	Pesticides	Sediments	Trash
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	X	X			
• Over-irrigation • Improper irrigation and system maintenance	X	X	X	X	
• Fertilizer use • Pesticide use • Landscaping activities	X	X	X	X	
• Cleaning outdoor impervious surfaces (i.e., driveways and patios)	X	X		X	X
• Improper waste disposal	X	X	X	X	X

2.3. Target Audiences

As described above, this program is intended to address the entire residential community of the San Diego region. This residential audience will be further described in terms of two specific target audiences in order to design more effective education and outreach strategies. The target audiences for the Regional Residential Education Program have been identified based on information gathered by the consultant (TRG and Associates), who utilized data from market research conducted by the County and City of San Diego and surveys gathered from other case studies. Although there may be other smaller groups of target audiences, regional outreach must realistically target the highest priority demographics in order to effectively utilize program funds. The following describes the target audiences for the campaign:

1. Primary Target Audience- English speaking residents and homeowners
2. Underserved Target Audience- Spanish speaking communities and Low Socio-Economic Status (SES)

One of the challenges of program implementation will be to develop messages that appeal to these communities. While creating content and developing materials for the primary target audience may be relatively straightforward, methods and approaches will need to be modified in order to engage the Underserved Target Audience. For example; some messages will be more conducive to translation into the Spanish language than others. Once translated, Spanish language media will be used to disseminate these messages.

According to the US Census Bureau, 33% of San Diego County residents speak a language other than English at home (2000). The same data indicates that 26.7 % of the regional population is Hispanic or Latino. Although this number varied within jurisdictions from 49.5% in Chula Vista to 11.7% in Carlsbad, it is clear that every jurisdiction in the region has significant populations of Hispanic or Latino residents. Therefore, although there are many languages spoken in San Diego, Spanish speaking communities are likely the most common throughout the region.

Research indicates that the motivating factors in Spanish speaking communities are 1) health and commitment to family, 2) children, and 3) finances. Similar priorities are found within the low SES communities. Hence, some messages will resonate more strongly with the communities among the Underserved Target Audience. Other messages may need to be modified in order to create a more appealing campaign. Low SES in California is defined as household annual income less than $25,000. Low SES residents tend to obtain information and resources from different sources than the residents within the Primary Target Audience. Again, message delivery becomes a key issue. In order to address all of these issues, specific outreach strategies will need to be developed in order to effectively reach the Underserved Target Audience.

3.0 TARGETED CHANGES TO KNOWLEDGE, AWARENESS AND BEHAVIOR

The overall goals of the Regional Residential Education Program are to raise the levels of knowledge and awareness with regards to stormwater pollution among residents, while encouraging changes to behaviors that are harmful to San Diego's waterways. The program will generally educate residents on 1) The difference between stormwater conveyance systems and sanitary sewer systems 2) the connection of storm drains to local waterways and 3) common residential sources of urban run-off. These are the general knowledge and awareness concepts upon which more specific messages will be built.

Recent research indicates that many residents do not understand that storm drains and sanitary sewer systems are completely separate. While sewage is treated, everything that goes down a storm drain goes directly to a creek, bay, or the ocean. The City of San Diego conducted a public opinion survey in 2007 in which 91% of respondents said they had heard the term "storm drain" before. However, only 46% knew that the water entering storm drains is not treated. This is a fundamental stormwater pollution prevention issue and general awareness concept. Awareness of the stormwater conveyance system is the first step towards understanding pollution prevention. Increasing knowledge and awareness that the system leads directly to local waterways will help residents to understand that urban sources of pollution have a direct effect on water quality. The awareness and knowledge of these issues are precursors to adjustments in attitudes (i.e.: increased concern for preventing this type of pollution).

Ultimately, it is anticipated that the program's targeting increased awareness and knowledge of these concepts will lead to positive changes in attitude. Furthermore, improved attitudes toward the importance of stormwater issues can provide motivation for changing pollutant generating behaviors.

In keeping with the program goals, the Copermittees have agreed on a number of positive behavior outcomes for each stormwater issue presented to the target audience. Pollutant generating activities are listed in Table 2, along with the knowledge required to understand the significance of the stormwater impacts. Also listed are numerous examples of desired behavior outcomes. Since it may not be feasible to craft messages that address each of the desired behavior outcomes listed in Table 2, some behaviors may be considered primary and targeted before others. Secondary behaviors will be targeted only if the initial efforts are determined to be unsuccessful. It is important to recognize that the Copermittees agreed on these issues and the associated behaviors, and some may wish to further utilize the concepts listed in Table 2 in their jurisdictional and/or watershed programs.

Table 2) Pollutant Generating Activities and Examples of Positive Behavior

Pollutant Generating Activities	Knowledge/Awareness	Examples of Desired Behavior Outcomes
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	Pet waste left in the yard and streets may introduce solids, bacteria, and nutrients to the storm drain and/or receiving water bodies.	• **Pick up pet waste during walks** • Pick up pet waste around home • **Properly dispose of pet waste in trash can or bin**
• Over-irrigation • Improper irrigation and system maintenance	Over-irrigation causes water and pollutants in its path to run into the storm drain and/or receiving water bodies.	• **Reduce over-irrigation** • Use irrigation controller technology to reduce the amount of over-watering • **Inspect and maintain irrigation system regularly** • Adjust irrigation schedule according to seasonal changes
• Fertilizer use • Pesticide use • Landscaping activities	Fertilizers and pesticides become pollutants that can be harmful to natural ecosystems when entering receiving water bodies. Soil, sediment, and yard waste can clog storm drains and/or receiving water bodies.	• Use plants that reduce the need for fertilizers (i.e.: native plants) • Apply chemical fertilizers and pesticides only as needed and at the appropriate time • **Use organic or slow-release fertilizers** • **Use Integrated Pest Management** • Store chemicals inside in a shed or storage cabinet where they are protected from rainfall • **Collect grass clippings and yard waste** • **Dispose of grass clippings and yard waste in the proper containers** • Protect exposed soil from rain with a tarp, vegetation, and/or mulch
• Cleaning outdoor impervious surfaces (i.e.: driveways and patios)	When it rains, trash, dirt, and chemicals that have built up on these surface can run into the street, the storm drain, and eventually local waterways.	• **Clean driveways, walkways, and patios by sweeping instead of hosing** • Direct wash water to soak in to lawn or garden
• Improper waste disposal	Litter and debris dropped on the ground will be washed into storm drains and local water bodies.	• **Put litter and cigarette butts in trash cans or bins** • Keep lids closed on trash cans or bins

Although many positive behaviors have been identified that may be encouraged by the messages developed in this program, the following have been selected as the primary desired behaviors to result from the changes to knowledge, awareness, and attitudes:

- Pick up pet waste and properly dispose of in trash can or bin
- Reduce over-irrigation by regularly inspecting and maintaining irrigation systems
- Reduce fertilizer use by applying chemical fertilizer only as needed and using organic or slow-release fertilizers
- Reduce chemical pesticide use through Integrated Pest Management
- Collect grass clippings and yard waste and place them in the appropriate disposal container in order to prevent them from entering the storm drain systems
- Sweep up outside areas such as driveways, walkways, and patios instead of hosing them down
- Put litter and cigarette butts in trash cans or bins

Specific messages will be designed to increase knowledge and awareness, and therefore encourage the behaviors listed above. Regional messages will be initially developed to address only the primary targeted behaviors. Once a baseline is established and program implementation is underway, Copermittees will have the opportunity to evaluate the knowledge, awareness, and willingness of the residential target audiences to adopt these behaviors. Other positive behaviors from Table 2 may also be substituted, if necessary.
It can reasonably be expected that the regional program will be able to measure success in terms of increasing knowledge and awareness, and improving attitudes, of residents.

Knowledge describes the accuracy of one's beliefs and awareness indicates recognition of the severity of the issues whereas attitude can be described as an individual's evaluation of it (favorable or unfavorable).

As a result of the regional efforts, Copermittees expect to see an increase in the general awareness of storm drain systems and their connection to local waterways, as well the sources of urban run-off. Specifically, residents should understand the difference between the stormwater conveyance system and sanitary sewer systems. They should become aware that water entering storm drains flows untreated to local waterways. Residents should also be able to accurately identify sources of stormwater pollution (i.e.: pet waste). Attitudes toward stormwater pollution should also improve. Ideally, there will be an increase in the numbers of households or individuals engaging in the desired behavior outcomes as a result of their increased knowledge and awareness. These targets will be measured using the assessment methods described in Section 6.0.

The primary assessment tool will be the public opinion surveys. A baseline regional residential telephone survey will be conducted in 2008 and, ideally, at one other point during the current permit cycle. The numeric objectives for survey results are set so that they exceed the statistical margin of error of 2.5 percent (assuming a sample size of 1000) so that if they are achieved, they will be statistically significant. In addition, the objectives are intentionally set high, with the understanding that they are intended as a point of reference rather than a pass/fail measure. With that in mind, Copermittees have set a target of a 10% change in knowledge that storm drains are separate from sanitary sewer systems, a 10% increase in the awareness that all storm drains are connected to local waterways, and a 15% increase in the number of participants who can identify residential sources of stormwater pollution.

4.0 EDUCATIONAL METHODS AND APPROACHES

A variety of methods and approaches will be utilized to implement the program objectives. As described above, the Regional Residential Education Program objectives are 1) to maintain a consistent image and brand 2) use positive messages to change behavior 3) develop community partnerships and 4) develop strategies to assess program effectiveness. The following regional program elements are designed to meet these objectives:

- Standardized Regional Brand (Think Blue)
- Regional Think Blue Website
- Mass Media (Broadcast and Outdoor)
- Regional Outreach Materials (Development and Distribution)
- Regional Outreach Event
- Partnerships
- Regional Stormwater Hotline
- Public Relations

Some of the elements are designed for program management whereas others are outreach methods. Program management elements include standardizing the Think Blue brand, message and material development, and partnership development. The program will have a multi-faceted outreach approach utilizing a regional website, mass media (broadcast and outdoor), public relations, printed materials and promotional items, and regional outreach such as a community event. Implementation of all the recommendations is dependent on funding for each year. Therefore, some activities may be feasible only if sufficient or additional funds are available in a given year.

4.1 Standardized Regional Brand (Think Blue)

The Think Blue campaign has created a locally recognizable brand that has demonstrated effectiveness in stormwater outreach. Expanding the brand to the regional program has obvious benefits for all of the Copermittees. With a consistent look and brand, the Copermittees can continue to conduct their own outreach; however they can use the Think Blue brand in conjunction with their materials for consistency. There will be a Think Blue Graphic Standards Guide that provides the correct fonts, colors and standards to be used for all outreach materials. This will help reinforce the Think Blue brand and provide standards for its use in messages and materials. Messages and materials may need to be continuously revised in order to keep current and effectively reach target audiences.

4.2 Regional Think Blue Website

A regional Think Blue website will help build upon and reinforce the branding strategy. The Internet is a powerful means of communication. Web sites can reach large audiences with relatively minimal effort. The regional website will be developed and maintained by a contractor. It could contain easy to download, user friendly information sheets, links to Copermittees websites, and short surveys or quizzes. The regional web site, along with the new logo and slogan, will increase program visibility.

4.3 Mass Media

Although the website is an important component of the outreach efforts, many residents still get the great bulk of their environmental messages from more traditional venues such as the television and radio (broadcast media). Public Service Announcements (PSA) and advertisements are the most common forms of broadcast media. Some PSAs have already been developed under the Think Blue campaign and through the combined efforts of the Copermittees. The Copermittees can utilize funds to expand or complement the existing Think Blue campaign. The public relations component will involve news coverage such as news stories, interviews, and event coverage. Public relations provide

valuable outreach opportunities that will be sought whenever possible. Outdoor media such as bus placards and billboards can also be utilized for outreach. The location of outdoor media advertisements will need to be carefully placed in order to reach the regional target audience.

4.4 Regional Outreach Materials and Community Events

Print materials and promotional items are critical items for successful outreach. Materials include items like fact sheets, brochures, flyers, booklets, coupon booklets, posters, and doorknob hangers. These materials are easily created and the target audience can refer to them repeatedly. Promotional materials are good for promoting the regional brand, increasing knowledge and awareness, and encouraging simple actions to prevent stormwater pollution. They will be designed to also serve as visual prompts that remind people to choose behaviors that protect and improve water quality.

A regional outreach event can be an energizing and successful venue for distributing outreach messages. Careful attention should be given to participating in a community event so that the effort reaches residents from the entire region. Extensive planning, material or display development, coordination, and marketing will be necessary in order to prepare for one successful regional outreach event. This is an endeavor that will involve identifying events that reach the entire region as well as coordinating, funding, and staffing the selected event. The Copermittees expect to participate in up to two regional events over the duration of this permit cycle. Some examples of regional events that may be considered are the San Diego County Fair, the Miramar Air Show, or a local sports venue.

4.5 Partnerships

Partnerships are both a management and outreach element of the program. A partnership is a voluntary collaboration of agencies, organizations, or other groups or individuals that have joined to work toward a common goal. The Copermittees can maximize resources through the use of partnerships. The potential for partnerships is immense for the

Copermittees. Potential partnerships include local water districts (combine conservation and pollution prevention messages), hardware stores and nurseries, pet stores, and Homeowner's Associations and Property Management Companies. Initial development of partnerships with businesses and business organizations, nonprofits, other government agencies, will be necessary before the full benefits can be realized. Copermittees may then encourage partners to distribute materials or spread messages through signage, advertising and websites. Partnerships will require time to develop and may not be fully recognized until later in the permit cycle.

4.6 Regional Stormwater Hotline

Although a regional stormwater hotline is already in place, successful outreach may lead to an increase in hotline calls. The regional hotline can also help the public gain access to information quickly and easily. The hotline will be promoted through the website, media advertising and other promotional venues. The number of calls to the hotline can be tabulated to help gauge whether some advertising is effective (if the call to action is a hotline call). Since the hotline will also be an important measure of program success, careful consideration will be given to managing the hotline as the program implementation moves forward.

4.7 Behavior Specific Outreach Methods

Table 3 lists the primary target behaviors for the program during this permit cycle. The table indicates which of the outreach methods described above may be utilized to deliver messages designed for each behavior. These were selected as the primary targets because they have current appeal. Primary target behaviors may be updated as program evaluation progresses. If necessary, resources may be reallocated to address the other (secondary) target behaviors previously listed in Table 2.

Table 3) Applicability of Outreach Methods to Primary Target Behaviors

Primary Target Behaviors	Potential Methods of Outreach						
	Website	Mass Media Broadcast	Mass Media Outdoor	Public Relations	Material Distribution	Partnerships	Regional Community Events
Pick up pet waste and dispose of in trash bin	X	X	X	X	X	X	
Reduce over-irrigation by regularly inspecting and maintaining irrigation systems	X			X	X	X	X
Apply chemicals to lawn and garden only as needed	X	X		X	X	X	X
Use organic or slow-release fertilizers	X	X		X	X	X	X
Collect grass clippings and dispose of them in the proper container	X				X		
Employ Integrated Pest Management	X	X	X		X	X	X
Sweep outside areas instead of hosing them down	X		X		X		
Put litter and cigarette butts in trash cans or bins	X			X	X	X	X

Specific messages will be developed to increase knowledge and awareness that will lead to each desired behavior outcome

4.8 Program Implementation

While the overall goals of the program are to educate the general public in order promote knowledge and awareness and decrease pollutant generating behaviors, a successful program will also require coordination among the Copermittees. Program planning and message development are key components of the program that will precede full implementation. Message delivery will be ongoing. Subsequently, as results from assessments are reviewed, messages and delivery methods will need to be revised. Therefore, there are essentially three steps in the program implementation process 1)

development, 2) implementation, and 3) assessment. For the purposes of this report, the development phase includes planning projects as well as developing materials and messages. Implementation includes initiating a program element (such as media outreach) as well as maintaining the ongoing nature of the element once it is in place. Assessment includes all levels of determining the effectiveness of program elements, as well as making revisions that reflect the knowledge gained through assessment.

Table 4 charts the schedule of program implementation over the 5-year permit cycle. Strategies to achieve these objectives will be implemented over the 5-year permit cycle. Because some upfront planning and development is necessary, the first year will focus on standardizing a regional brand, developing messages, and determining the most appropriate methods for disseminating messages on a regional scale (i.e.: a regional website). Copermittees may also begin fostering partnerships in the initial years of the program. Subsequent years will build on this foundation. Copermittees may decide to refine messages and could begin leveraging resources through partnerships.

Table 4) Projected General Implementation Schedule

Program Elements	Year 1: 2007-08	Year 2: 2008-09	Year 3: 2009-10	Year 4: 2010-11	Year 5: 2011-12
Branding	D	D, I, A	I, A	I, A	I,
Regional Website	D	D, I, A	I, A	I, A	I,
Regional Hotline	D	D, I	I, A	I, A	I,
Mass Media	D	D, I	I, A	D, A	I,
Regional Outreach (Marketing and Community Events)	D	D, I	I, A	D, A	I,
Materials Development & Distribution	D	D, I, A	D, I, A	D, A	D, I
Public Relations	D	D, I	I, A	D, A	I,
Market Research & Assessment Tools	D, I, A	D, I, A	D, I, A	D, I, A	D, I,
Partnerships	D, I	D, I,	I, A	I, A	I

Development (D), Implementation (I), Assessment (A)

4.9 Social Marketing Approaches

In all of the aforementioned efforts, a variety of social marketing approaches will be utilized whenever possible. There are so many techniques described as social marketing that it is not possible to utilize them all, especially with limited staff and budgets. Social marketing uses many of the principles of social psychology and marketing techniques to bring about behavior change. Rather than being product oriented, social marketing focuses on people and their behaviors. All social marketing approaches use audience research to learn how to motivate an audience to change one or more recurring actions.

Social marketing consists of several basic components that result in delivering messages that will increase knowledge and awareness, thereby prompting people to change certain behaviors. The challenge is to present the new behavior in a positive way and emphasize the benefits to adopting a new behavior. Forming strategic partnerships with community resources can help to achieve the end goal of behavior change. Social marketing campaigns deliver messages that are strategically created and positioned to give people a compelling reason to adopt a new behavior. In order to overcome the barriers to action it is necessary to understand what the barriers are and why they exist. Researching and understanding the audience is a critical step in developing a social marketing campaign. Messages are conveyed through advertising, websites, materials and other communications. Messages should be simple, memorable and easy to follow. There should be one simple message for each of the targeted areas of knowledge and awareness. Each message needs to be used consistently in communications.

Community Based Social Marketing (CBSM) is a type of social marketing. It has gained popular appeal among the environmental community as an effective alternative to traditional information-based marketing approaches. CBSM packages basic principles of behavior change and social science research in a way that provides a usable framework for practitioners working to promote positive behavior change.

A key element of the CBSM approach is to pilot test the program with a small representative segment of the community, and compare the results to a control group. For example, a small jurisdiction may implement a project that essentially serves as a pilot for the regional program. If the pilot is not successful, the strategy should be refined and then pilot tested again. If the pilot is successful at changing behavior, the strategy can be implemented more broadly throughout the community or on a regional level. Once the successful pilot program has been widely implemented CBSM requires that the program be carefully evaluated at several points to measure continued success.

The Copermittees have agreed that CBSM offers a solid foundation for developing an effective program. However, it may not always be feasible to utilize the CBSM approach on a regional scale, hence the need for a combined approach that uses traditional social marketing techniques as well as CBSM. Some methods will lend themselves more readily to developing CBSM based approaches. When implementing each of the methods, a CBSM approach will be pursued whenever feasible.

5.0 RELATIONSHIP OF REGIONAL, WATERSHED, AND JURISDICTIONAL OUTREACH

The Regional Residential Education Program is designed to meet the Permit requirements for residential education based on regional needs and issues. The first step in meeting these requirements is to establish a regional brand and consistent image. The City of San Diego's regionally recognized Think Blue logo will be utilized as the Regional Residential Education Program's brand. During the implementation phase of the permit cycle the Copermittees will work collaboratively with the City of San Diego to update and standardize the Think Blue brand. A Graphics Standards Manual will be developed by the City of San Diego and adopted by the Copermittees in order to facilitate ease of material development and ensure a consistent regional image. Existing jurisdictional programs may also choose to use the Think Blue brand, maintain individuality, or

combine both programs for maximum impact. In a similar manner, watershed activities may be coordinated under the Think Blue brand, so long as the standards are adhered to.

Copermittees will hire a contractor to build and maintain a regional Think Blue website. The website may include links to jurisdictional program, watershed program websites, and other regional websites such as Project Clean Water. The regional Think Blue website will provide user friendly information for the public in a single location, thereby promoting consistency and coordination among the regional, jurisdictional, and watershed programs.

In addition, the Education & Residential Sources Workgroup provides a platform for integration of regional, jurisdictional, and watershed messages. The Education & Residential Sources Workgroup also coordinates activities between non-profit organizations, private institutions, and governmental agencies providing environmental and water quality education. Regular meetings will continue to provide a forum for educators, trainers, and public information officers to collaborate, share methods and materials, and seek policy level support and direction.

Watershed and jurisdictional programs should look to the Regional Residential Education Program when designing residential educational activities. The Regional Residential Education Program can thereby serve as a basis for developing these other programs. Some specific watershed or jurisdictional issues may not be covered by the Regional Residential Education Program, and must still be met by the individual or Watershed Copermittees as required by the Permit. These issues will be addressed in the watershed or jurisdictional programs. In this manner, the watershed and jurisdictional programs can supplement the Regional Residential Education Program in order to ensure that all requirements are met. As a result, each jurisdictional program may be unique in some respects and elements of the watershed programs may go beyond those in the regional program.

While the regional program may play a role in encouraging behavior changes, it is more feasible for jurisdictional programs to be able to measure actual behavioral changes resulting from increased knowledge and awareness because of their ability to implement pilots on a small scale. The broad based regional program will be implementing methods and utilizing assessment tools that most accurately gauge attitudes, knowledge, and awareness. Positive changes in attitudes and awareness are generally accepted as precursors to behavior change. Therefore, due to the difficulty of assessing behavior change on a regional level, demonstrating behavior change will therefore reside with the jurisdictional and watershed programs. In order to facilitate the assessment of jurisdictional and watershed programs, the Plan outlines assessment tools for measuring changes in knowledge and awareness through the regional program. These measures can also be tailored to meet the needs of the jurisdictional and watershed programs that implement CBSM pilots or focused outreach efforts, which provide excellent opportunities to assess behavior change. Section 6.0 describes assessment tools in further detail.

6.0 ASSESSMENT OF REGIONAL EDUCATION ACTIVITIES

In order to evaluate whether the various components of the program are resulting in the targeted knowledge and awareness outcomes, a number of assessment methods may be utilized. A random digit dial telephone survey will be the primary tool for measuring changes resulting from implementation of the regional program. Different types of assessment methods will be employed in order to gauge the outcomes of each activity and thereby determine effectiveness. Copermittees will review and assess existing survey data while developing the new regional baseline survey. Public opinion surveys will be alternated with other assessment methods to adequately assess the overall effectiveness of the Regional Residential Education Program. Copermittees have agreed to work cooperatively on funding and conducting market research and surveys. Measurement tools outlined in the Plan may be modified somewhat to correspond with different program elements. The Plan basically provides a model for program effectiveness

assessment. Specific assessment methods will depend on the type of outreach or education activity conducted and other constraints.

Copermittees will work with the City of San Diego to conduct a county-wide random digit dial telephone survey in order to obtain baseline information on knowledge, awareness, attitudes, and behaviors pertaining to stormwater. Results of the survey will guide further adaptation of the program objectives. Ideally, another public opinion survey will be conducted later in the permit cycle to assess any changes resulting from program implementation. Once the baseline is established, future permit cycles may involve one or more public opinion surveys. Additional evaluation methods may be utilized once specific media, promotions, and outreach activities are implemented. Results will enable Copermittees to determine the most effective outreach methods and make modifications to the programs as needed.

Outcome levels used in this program are based on the Hierarchy of Targeted Outcomes Pyramid referred to in the NPDES Permit, which includes outcome levels 1-6. Outcome levels 1-3 will be most applicable to educational and outreach activities. Table 5 illustrates potential assessment methods that may be utilized for each of the activities being considered. Level 1 outcomes indicate compliance with permit based activities. This is the most basic means of assessing program effectiveness. Measuring Level 2 outcomes will indicate changes in attitudes, knowledge and awareness. Surveys and quizzes provide the most common means for measuring Level 2 outcomes. Level 3 outcomes provide an opportunity to measure behavioral changes and implementation of Best Management Practices (BMPs). This can be accomplished through observations and program specific counts. For example, tracking sales of less toxic pesticides in a store where IPM information is available may indicate changes in the behavior of consumers. Level 4 outcomes indicate actual load reduction, and are more practical for activities such as clean up events or Household Hazardous Waste collection activities, which are sometimes associated with outreach activities.

Table 5) Potential Program Element Assessment Measures

Activity Level		Type of Assessment Measure

Branding

1	Updating materials to reflect new regional brand.
2	Count number of survey respondents who are aware of brand/program.
3	N/A
4	N/A

Website

1	Count number of hits to website, interactive use/quizzes taken, etc.
2	Administer survey/quiz to assess attitude/knowledge of web users.
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data. Downloads of informational brochures.
4	N/A

Mass Media Public Service Announcement (PSA) Public Relations

1	Count number of household/individuals reached.
2	Administer survey/quiz to assess attitude/knowledge of PSA recipients.
3	Comments and feedback received regarding PSA via the hotline or website.
4	N/A

Outreach Materials (i.e.: fact sheets and brochures)

1	Count number of fact sheet/brochures handed out.
2	Administer survey/quiz to assess attitude/knowledge of fact sheet/brochure recipients
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4	N/A

Regional Outreach Event

1	Count number of visitors to booths, brochures handed out, surveys/quizzes completed, etc.
2	Count number of mail-in cards, number of volunteers to organization, number of persons who attended community event. Administer survey/quiz to assess attitude/knowledge of visitors
3	Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4	N/A

Partnerships

1	Count number of incentives distributed, participants in the program.
2	Survey or quiz to assess attitude/knowledge of volunteers pre- and post- participation
3	Administer survey to assess behavior change in program participants or count observable behavior of program participants and compare to pilot data, historical data, and/or control group. Count number of mail-in cards, number of volunteers to organization, or number of persons who signed a petition directed from incentive program.
4	Count amount of load reduction in targeted residential area or count amount of load removed from targeted area

Hotline

1	Count number of calls to hotline.
2	Administer survey/quiz to assess attitude/knowledge of hotline users.
3	Administer survey to assess behavior change of participants in program and compare to pilot, historical, or control data, count observable behavior of participants in program and compare to pilot data and/or control group.
4	N/A

7.0 CONCLUSIONS AND RECOMMENDATIONS

The San Diego region has widely diverse socio-economic, ethnic, biological, and physical characteristics. These characteristics create the region's appeal and present many challenges to the entities charged with developing and implementing an effective Regional Urban Runoff Management Program (RURMP).

The Regional Residential Education Program is a component of the San Diego RURMP. This program is designed to increase knowledge and awareness of stormwater issues and potentially change pollutant generating behaviors. Research indicates that these are attainable goals under a well-funded, long term, multi-faceted and strategic public outreach campaign.

In order to implement program goals, the Copermittees have agreed on general objectives: 1) maintain a consistent image, message and brand 2) use positive messages to increase knowledge and awareness, thereby increasing the likelihood of behavior change 3) develop community partnerships and 4) develop strategies to assess program effectiveness. In order to efficiently accomplish these objectives, Copermittees have agreed to adopt Think Blue as the regional flagship brand. In addition, strong and

focused outreach messages will be selected to increase knowledge and awareness and ultimately target the primary pollutant generating behaviors from residential activities.

The basic program elements include an array of methods and approaches that will be utilized for program management, message delivery, and effectiveness assessment. Over time, the Regional Residential Education Program will be adapted to utilize the most effective outreach and education strategies practicable while maintaining a clear focus for the entire region. Annual reports will summarize progress and provide an opportunity to reflect on the year's successes and shortcomings. At the end of the 5-year permit cycle, Copermittees will be able to assess of the program's progress and develop more effective regional outreach strategies.

Appendix G

JURMP Annual Report

Requirements Checklist

G-1 **Requirements Checklist**

Appendix G
JURMP Annual Report Requirements Checklist

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location In Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.4, 2.3, 2.4.4.1, 2.4.4.2
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2, 2.4.4.3, 2.4.4.4
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.3, Table 2-2
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.3, 2.4.4.4
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.3 (N/A)
vii. An updated treatment control BMP inventory.	2.4.4.4, Appendix A-1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.7, Appendix A-8
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.6, Appendix A-8
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.5, Appendix A-4
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.3 (N/A)
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.3 (N/A)
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.3.1, 2.4.4.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.3, Table 2-2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.3, Table 2-2

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	N/A
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.4.3.1, 2.4.4.1, 2.4.4.4, 2.4.4.6, 2.4.4.7

3.0 Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.1
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2.2, Appendix B-1
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4.1
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.4 (N/A)
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.3, 3.5.4 (N/A)
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Appendix B-1
viii. A description of the general results of the inspections.	3.5.5.2
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.5.1
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.5.2, Appendix B-6 and H-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.2.2, 3.3, 3.4.1.1

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix C-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4.1, Appendix C-2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4.1, Appendix C-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Appendix C-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4.1, Appendix C-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4.1, Appendix C-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.3.3.1
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.2.4, Appendix C-2
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.2.4, Appendix C-2
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.2.4, Appendix C-2
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4.1
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.3.2, 4.3.4.3, Appendix C-2
xviii. A description of the general results of the inspections.	4.3.4.3, Appendix C -6
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.3.4.3, Appendix C -6
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.4.4, Appendix C-6 and H-1
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.2.4, 4.4.2, 4.4.4.1, 4.5.4.1, 4.7.3.1, 4.7.4

5.0 Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2, Appendix D-1 and D-2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4.5, 5.3.4.4, Appendix D-5 and H-1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4.4, 5.3.4.1 Appendix D-7 and D-8
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.2 Appendix D-1, D-2 and D-5
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4.1
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.3, 5.2.4.5
vii. Identification of the number of third party inspections conducted.	5.2.4.3 (N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.3 (N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.5, 5.3.4.4 Appendix H-1
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.5
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.2.4, 5.3.4

6.0 Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2 Appendix E-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3, 6.4.3, Appendix H-1
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.2
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.2
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.2.3
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.3, Appendix H-1
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.4, Appendix F-6
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Location in Report**
To be included in FY 2010-11 Illicit Discharge Detection and Elimination Component on December 15, 2011.	N/A

8.0 Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	**Location in Report**
i. A description of education efforts conducted for each target community.	8.2
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.2.4
iii. A description of education efforts conducted for municipal departments and personnel.	8.2.3
iv. A description of education efforts conducted for the new development and construction communities.	8.2.5
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.2.7

9.0 Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	**Location in Report**
i. A description of public participation efforts conducted.	9.3

10.0 Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	**Location in Report**
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.	10.1, 10.2, 10.3, 10.4

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	**Location in Report**
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.2, 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12.1, 12.2

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	Location in Report
i. A description of efforts conducted to reduce pollutant discharges from non-emergency firefighting flows.	13.2

14.0 JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	Location in Report
i. A description of any proposed revisions to the JURMP.	14.0

Appendix H

Complaint Response Summaries

H-1 Construction Complaint Response Summary

H-1 Municipal Complaint Response Summary

H-1 Industrial Complaint Response Summary

H-1 Commercial Complaint Response Summary

H-1 Mobile Complaint Response Summary

H-1 Residential Complaint Response Summary

H-1 Referral or Request for Info

Appendix H-1 Construction Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	100241	7/12/11	construction waste	Discharge of concrete cutting slurry or washwater. - Received call from waste water regarding a possible illegal dumping.	WO 129169 : By EMERSON, MIKE: 7/13/2011 4:40:58 PM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future. By EMERSON, MIKE: 7/13/2011 4:47:37 PM Issued citation WO 129176 : By EMERSON, MIKE: 7/15/2011 3:10:24 PM Site inspection area cleaned up took photos case closed	Yes	No		Yes	7/12/11		LCS	8/9/11
2	104350	7/14/11	sediment	Discharge of sediment - received complaint stating "The construction crew currently working on Requeza near Beach Street has had some problems today resulting the discharge of quite a bit of sediment"	WO 133376 : By EMERSON, MIKE: 8/2/2011 3:07:34 PM inspector reported "I checked with the contractor and SDWD. The contractor is doing a Bac-T Test on the newly installed water lines. The test past and the water was dechlorinated and hosed to a brow ditch which feeds into an inlet. Apparently after about a hour, leaves and palm fronds blocked the grate and water spilled over the slope into someone's yard. The homeowner alerted the contractor and he immediately unclogged the drain and everything was fine. The hoa knows and is working with Fieldstone homes on several issues that impact both	Yes	No		Yes			ENC	8/2/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					properties, and the hoa said they would make contact with them. The contractor said it was caught in time and was a non-issue."								
3	104499	8/09/11	Building debris	Discharge of construction debris - Construction waste in roadway without permits or BMPs	WO 133900 : By EMERSON, MIKE: 8/30/2011 1:25:44 PM Site inspection area cleaned up case closed	Yes	No		Yes				8/30/11
4	106697	9/9/11	sand	Discharge of sediment - received complaint from PW streets regarding uncovered stock pile	WO 136247 : By EMERSON, MIKE: 10/5/2011 5:09:36 PM Site inspection took photos contacted CIP staff to address stock pile WO 136248 : By EMERSON, MIKE: 10/5/2011 5:14:53 PM Site inspection with inspector. Stock pile covered but blowing in the wind. Inspector to contact contractor to better secure plastic. Case closed	Yes	No		Yes				10/3/11
5	106713	9/15/11	dirt	Discharge of sediment - Specialist observed 3 huge dirt stockpiles corner of Cornish & Santa Fe Drive. Sign said "FREE DIRT." Part of Cardiff Traffic Calming Project. CM	WO 136439 : By EMERSON, MIKE: 10/18/2011 3:09:19 PM Site inspection took photos of un secured stock piles of dirt. The dirt was from the Cardiff street calming project and the piles will be secured and removed shortly. Construction inspector to follow up case closed	Yes	No		Yes			ENC	10/19/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
6	106890	10/05/2011	Dirt	Discharge of construction debris - Anonymous complaint came through about a Construction Site on Hymettus Avenue. Complainant said that dirt was escaping the site and it was drizzly outside. CM	WO 136909 : MOMILE: 11/17/2011 4:16:50 PM Inspector notified contractor that a complaint came in. BMP's were installed before runoff. Complainant did not report any discharge. CM	No	No		Yes		NA	LUC	11/17/11
7	106911	8/3/11	N/A	Discharge of construction debris - Observed construction activites taking place in the shopping center. CM	WO 136950 : By EMERSON, MIKE: 11/28/2011 10:50:43 AM Site inspection observed all BMPs in place no discharge case closed	No	No		Yes			LCS	11/30/11
8	106954	11/15/11	Silt sediment	Discharge of sediment - City Staff phoned to complain about broken water line. CM City Staff observed an additional water line break while doing routine follow ups. More sediment and dirt mixed with potable water running in street. CM City Staff phoned to complain about broken water line. CM City Staff observed a second water line break and sediment mixed with potable water. CM City Staff phoned to complain about broken water line. CM City Staff performed routine inspection and noticed 2nd water line break with se	WO 136910 : By EMERSON, MIKE: 11/18/2011 9:03:59 AM Site inspection took photos of silt/sediment discharge from broken water pipe resulting from a sewer installation for construction project located at 1050 Eolus Ave. Contractor to clean street to inspectors approval. WO 136911 : By EMERSON, MIKE: 11/18/2011 9:11:34 AM Inspector reported that street was clean case closed	Yes	No		Yes			LUC	11/18/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
9	106955	11/15/11	silt/sediment	Discharge of sediment - Routine inspection of construction sites revealed sediment leaving site. Specialist and Construction Inspector observed discharge. CM	WO 136945 : By EMERSON, MIKE: 11/28/2011 10:07:11 AM Site inspection requested clean up case closed WO 136946 : By EMERSON, MIKE: 11/28/2011 10:13:15 AM Site inspection took photos of gravel bags and cleaned up area case closed	Yes	No		Yes			LUC	11/23/11
10	106961	11/16/11	sediment/silt	Discharge of sediment - Specialist observed additional discharge in a follow up investigation. Sediment and potable water leaving property due to a second water line break above the sewer line. CM	WO 136916 : By EMERSON, MIKE: 11/16/2011 2:39:13 PM Site inspection took photos of silt/sediment discharge from water pipe. Construction inspector issued an NOV-correction notice to clean up area by 11/18/11 COB WO 136939 : By EMERSON, MIKE: 11/18/2011 10:53:11 AM Site inspection area cleaned up case closed	Yes	No	11/16/11				LUC	11/18/11
11	106985	11/22/11	silt/sediment	Discharge of sediment - Specialists observed poor BMPs and some discharge from construction site	WO 136938 : By EMERSON, MIKE: 11/23/2011 10:42:06 AM Site inspection took photos contacted contractor to clean up sediment WO 136942 : By EMERSON, MIKE: 11/28/2011 9:14:33 AM Site inspcetion took photos of clean up case closed	Yes	No		Yes	11/22/11		LCS	11/23/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
12	107026	12/5/2011	Concrete	Discharge of concrete waste. - Inspector called Clean Water Staff to report concrete pumping with no containment. CM	WO 137257 : By EMERSON, MIKE: 12/20/2011 10:42:39 AM Site inspection took photos of no discharge case closed	No	No		Yes			LUC	12/28/11
13	107132	12/13/11	sediment	Discharge of sediment - Contractor discharging footing rain water mixed with sediment into alley	WO 137302 : By EMERSON, MIKE: 12/27/2011 4:58:30 PM Site inspection took photos of hose discharging sediment laden water. Contactor to sweep up sediment and discharge into landscaped area in the future. Case closed	Yes	No		Yes			ENC	12/28/11
14	107142	12/13/2011	silt/sediment	Discharge of sediment - Citizen phone Eng Construction Inspector to report sediment leaving Ashbury street. Specialist to investigate. CM	WO 137366 : By EMERSON, MIKE: 12/30/2011 3:46:47 PM Site inspection with engineering inspector took photos and contacted resident to address her concerns. Inspector contact adjacent construction site to allow run-on in two locations. Contacted streets to clean street and prevent run on into respondents garage. WO 137367 : By EMERSON, MIKE: 12/30/2011 3:49:07 PM Site inspection contractor allowed run-on into vacant lot CASE CLOSED	Yes	No					LUC	12/29/11
15	107143	12/13/2011	Water	Discharge of water - Specialist noticed run-on erosion at a construction site. CM	WO 137364 : By EMERSON, MIKE: 12/30/2011 3:39:03 PM Site inspection with engineering inspector took photos. Inspector contact construction site to allow run-on and prevent ereosion. Contacted streets.	Yes	No					LUC	12/29/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO 137365 : By EMERSON, MIKE: 12/30/2011 3:41:43 PM Site inspection erosion addressed CASE CLOSED								
16	107146	12/15/2011	silt	Discharge of sediment - City Staff phoned to report dirty water and sediment leaving construction site. Specialists to investigate. CM	WO 137354 : By EMERSON, MIKE: 12/29/2011 2:14:08 PM Site inspection took photos of silt discharge contacted Contractor to clean and implement BMPs. CASE CLOSED	Yes	No		Yes		Batiquitos Lagoon	LUC	12/30/11
17	107207	1/11/12	cement	Discharge of concrete waste. - City Staff: ENG Construction Inspector noticed concrete being dumped into a planter in the shopping center. Workers were not using a wash out pan. Specialist to investigate. CM	WO 138480 : By EMERSON, MIKE: 1/11/2012 11:22:59 AM Site inspection observed poor BMP wash out area. Took photos and contacted workers to clean up planter WO 138492 : By EMERSON, MIKE: 1/12/2012 11:16:13 AM Engineering inspection preformed follow up inspection area cleaned up NOV signed off CASE CLOSED	Yes	No	1/11/12	Yes			ENC	1/30/12
18	119829	3/6/2012	NONE	Discharge of concrete waste. - Cititzen noticed over the weekend that there was a pile of dirt/concrete at the base of the sea wall on the beach. CM	WO 151722 : By MEADOW, CHAMOMILE: 5/30/2012 3:07:41 PM CONSTRUCTION INSPECTOR WENT TO SITE TO INSPECT STOCKPILES. PILE WAS NOT CONCRETE BUT EROSION FROM CLIFF. CONSTRUCTION MANAGER RESPONDED TO COMPLAINANT. CASE	No	No					LUC	5/30/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					CLOSED. CM								
19	120119	6/6/2012	concrete wash	Discharge of concrete cutting slurry or washwater. - Staff in the area noticed work being done in a driveway near the market. Some debris noticed in the right of way; workers still on site. Specialist to investigate. CM	WO 152234 : MOMILE: 7/25/2012 5:05:54 PM 6/7/2012: Site inspection; Specialist contacted lead contractor who indicated that he was not discharging but would clean the street. Follow-up inspection later the same day showed area clean. Before and after photos taken. CM	No	Yes		Yes			CBS	7/25/12
20	120125	6/18/2012	Concrete wash & muriatic acid	Discharge of concrete waste. - City Staff noticed a construction job washing down a new concrete driveway. Specialist to investigate. CM	WO 152266 : MOMILE: 7/26/2012 12:07:37 PM 6/18/2012: Site Inspection, took photos and contacted worker who referred us to head contractor. Contractor provided homeowner's phone number and stated that he finished working two weeks prior. Owner provided landscaper's who agreed to clean the street. NOV issued to comply by next day 6/19/12. CM WO 152267 : MOMILE: 7/26/2012 12:13:35 PM 6/20/2012: Site Inspection; compliance received. NOV signed off. CM	Yes	Yes	6/18/12	Yes			ENC	7/26/12
21	120131	6/21/2012	asphalt	Other discharge - 6/21/12: City Staff noticed a messy street with asphalt spread all over. Specialist to inspect. CM	WO 152270 : MOMILE: 7/26/2012 5:57:21 PM 6/21/12: Site inspection; issued NOV to comply by the end of the day-5pm. WO 152271 : MOMILE: 7/26/2012 6:03:37 PM 6/25/2012: Site inspection to review compliance. Area clean. Case Closed.	Yes	Yes	6/21/12	Yes			ENC	7/26/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					CM								
Totals	**21**					**16**	**3**	**4**	**17**	**2**			

Appendix H-1 Municipal Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	106726	10/06/11	silt	Discharge of water - Received complaint of dirty water flowing down street from main repair. CM	WO 136344 : By EMERSON, MIKE: 10/17/2011 5:43:51 PM Site inspection took photos of silt discharge, Contacted Mark from SDWD to clean up street. He said his contractor has a sweeper to clean up the streets. This was an accidental discharge. I suggested additional BMPs WO 136345 : By EMERSON, MIKE: 10/17/2011 5:47:40 PM Site inspection took photos of cleaned up area Case Closed	Yes	No		Yes			CBS	10/19/11
2	106727	10/6/11	h20	Discharge of water - Received complaint that truck was emptying substance into catch basin. CM	WO 136343 : By EMERSON, MIKE: 10/17/2011 5:03:20 PM Site inspection took photos called complainant and followed a southland paving truck to A-tank yard. Driver indicated that he was working on Seeman drive for the City of Encinitas and that he was directed to discharge this "clean water" into a storm drain catch basin. SDWD confirmed that the water was de-chlorinated. Case closed.	No	No		Yes		Cottonwood Creek	ENC	10/19/11
3	106751	10/11/11	silt	Discharge of sediment - Received call that sediment is in the street. CM	WO 136317 : By EMERSON, MIKE: 10/13/2011 2:18:00 PM Site inspection contacted lead worker and showed him sediment photos and obtained his phone	Yes	No		Yes			CBS	10/13/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					number requested call back when streets are clean WO 136318 : By EMERSON, MIKE: 10/13/2011 2:27:28 PM Site inspection most silt appeared to be cleaned up except San Elijo west of Glen Park WO 136319 : By EMERSON, MIKE: 10/13/2011 2:34:52 PM Site inspection area cleaned up case closed								
4	106766	9/7/11	unsecured stockpiles X 4	Other discharge - received complaint from the building official regarding uncoverd stockpiles	WO 136332 : By EMERSON, MIKE: 10/17/2011 3:06:37 PM Site inspection with PW and CIP staff. It was agreed that the gravel bags & silt fences will be replace and the stockpiles will be sprayed. Took photos. WO 136333 : By EMERSON, MIKE: 10/17/2011 3:12:43 PM Site inspection Took photo of new gravel bags. Still needs coverage. WO 136335 : By EMERSON, MIKE: 10/17/2011 3:15:50 PM Site inspection Took photo of storm drains that need better BMPs. WO 136336 : By EMERSON, MIKE: 10/17/2011 3:19:36 PM site inspection stock piles secured case closed	Yes	No		Yes			ENC	10/25/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
5	106809	10/21/11	sediment	Discharge of sediment - Citizen emailed the Clean Water Program with concern of dirt residue and pollutants near the school. Specialist to investigate. CM	WO 136464 : By EMERSON, MIKE: 10/24/2011 5:24:57 PM Site inspection took photos of sediment being removed. Pw workers say they do this every year. Sent complainant email to PW utilities & maintenance field supervisor to respond. Case closed	No	No		Yes			ENC	10/25/11
6	106891	11/9/2011	sediment and vegetation	Other discharge - Citizen phoned Specialist to alert Clean Water that a contractor is blowing everything from the street into the creek 4th & B. CM	WO 136876 : By EMERSON, MIKE: 11/16/2011 11:16:30 AM Site inspection met with complainant and workers regarding dumping vegetation and sediment into creek took photos. Called supervisors and requested BMPs be adhered to. Informed clean water staff. CW manager to send compliance request to parks and rec. regarding landscapers and PW regarding street sweeping and ground water pipe cleaning	Yes	Yes		Yes		Cottonwood Creek	ENC	11/18/11
7	107149	12/15/2011	cement wash	Discharge of concrete waste. - Engineering Construction Inspector phoned Stormwater Specialist to report cement runoff. Specialist investigated. CM	WO 137356 : By EMERSON, MIKE: 12/29/2011 3:31:38 PM Site inspection took photos of cement discharge contacted Parks and rec, realtor & property owner. Parks & Rec to clean and implement BMPs WO 137358 : By EMERSON, MIKE: 12/30/2011 11:32:42 AM Site inspection area cleaned up case closed	Yes	No		Yes			LUC	12/29/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
8	107208	1/11/12	Irrigation Water	Discharge of other washwater - Specialist out in the field noticed runoff floating off site from parking lot improvements. Referred to Engineering Construction Inspector in charge of job. Inspector phoned and reporting to scene in 5 min. CM	WO 138692 : By MEADOW, CHAMOMILE: 1/30/2012 11:54:19 AM Engineering Construction Inspector responded immediately and found an irrigation line break. CM	No	No					ENC	1/30/12
9	119623	4/10/2012	antifreeze	Discharge of antifreeze - City Staff noticed a car in the parking lot leaking antifreeze. Specialist to investigate immediately due to eminent rain. CM	WO 151389 : By MEADOW, CHAMOMILE: 4/16/2012 3:53:40 PM Specialist spoke to car owner and explained issue. Both owner of vehicle and City Specialist cleaned up discharge with cat litter and disposed of spill reponse materials. Re-stocked City Facilities' Spill Kit. Case Closed. CM	Yes	No					ENC	4/16/12
10	119834	3/15/2012	Dirt & water	Discharge of sediment - City Staff noticed dirt and water running in parking lot while landscape maintenance was being done. CM	WO 151725 : By MEADOW, CHAMOMILE: 5/30/2012 5:44:44 PM Environmental Specialist contacted lead worker and issued a Notice of Violation to discontinue discharge and clean up. Signed off NOV within one hour. Case Closed. CM	Yes	Yes	3/15/12	Yes			ENC	5/30/12
Totals	**10**					**7**	**2**	**1**	**8**	**0**			

Appendix H-1 Industrial Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	106712	9/14/11	reclaimed h2o	Discharge of water - Leaky reclaimed water into street. West Side of Santa Fe Drive. CM	WO 136442 : By EMERSON, MIKE: 10/18/2011 4:54:05 PM Site inspection took photos of what appears to be leaking reclaimed water sprinkler. Called JPA. WO 136443 : By EMERSON, MIKE: 10/18/2011 4:58:15 PM Site inspection met with worker and he confirmed that it was broken but he fixed it case closed	Yes	No		Yes			CBS	9/19/11
Totals	**1**					**1**	**0**	**0**	**1**	**0**			

Appendix H-1 Commercial Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	100219	7/1/11	H2O	Discharge of water - Large amount of run off discharging from garden area No bmps	WO 129236 : By EMERSON, MIKE: 7/21/2011 3:16:27 PM Site inspection no discharge observed case closed	No	No					LCS	7/21/11
2	100240	7/13/11	oil	Discharge of oil. - Received complaint of dumped oil in an area South of 699 N. Vulcan Ave	WO 129168 : By EMERSON, MIKE: 7/13/2011 4:31:23 PM Site inspection Called complainant to locate spill. Found spill took photos and called PW streets to clean up. Will be cleaned up in the next few days WO 129172 : By EMERSON, MIKE: 7/14/2011 5:10:18 PM Site inspection area cleaned up took photos thanked PW case closed	Yes	Yes					LUC	7/14/11
3	100255	7/17/11	oil	Discharge of oil. - received report of spilled oil in alley behind restaurant	WO 129177 : By EMERSON, MIKE: 7/18/2011 2:19:59 PM Site inspection took photos contacted manager to clean up litter and better secure oil storage unit WO 129178 : By EMERSON, MIKE: 7/18/2011 3:30:06 PM Site inspection area cleaned up took photos case closed oil storage will be address in inspection follow up	Yes	No		Yes				7/18/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
4	104351	8/1/11	sediment	Discharge of sediment - Construction's contractor downstream reported large amount sediment in storm drain appeared to be from neighboring property	WO 133377 : By EMERSON, MIKE: 8/2/2011 4:02:22 PM Called and emailed both parties to set up site meeting to create an clean up action plan	Yes	No		Yes			LCS	8/9/11
5	104371	7/29/11	oil/grease	Discharge of oil. - Received email complaint from Pw waste water stating that the restaurant to discharging oil into the storm drain Received email complaint from PW waste water stating that the restaurant is discharging oil into the storm drain	WO 133523 : By EMERSON, MIKE: 8/8/2011 10:40:14 AM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future. WO 133524 : By EMERSON, MIKE: 8/8/2011 10:47:37 AM Site inspection area cleaned up took photos signed off NOV case closed	Yes	No	7/29/11	Yes			ENC	8/8/11
6	104376	7/12/11	Sediment	Discharge of sediment - Received call complaining of sediment discharge from palm grower upstream.	WO 133528 : By EMERSON, MIKE: 8/8/2011 11:26:27 AM Site inspection took photos contacted called property manager and requested clean up and discontinue discharge and install BMPs in the future. WO 133529 : By EMERSON, MIKE: 8/8/2011 11:32:51 AM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future. need to schedule a complete inspection	Yes	No		Yes			LUC	8/8/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
7	104433	11/1/11	Wash Water	Discharge of other wash water - Strong chemical smell and evidence of possible recent wash water discharge.	WO 136564 : By EMERSON, MIKE: 11/1/2011 10:04:45 AM Site inspection did not observe any discharge but did observe stains contacted manager and informed them of the storm water prohibitions case closed	No	No		Yes			ENC	11/8/11
8	106602	9/19/11	wash water	Discharge of sewage - Complainant phoned that restaurant dumped large amounts of sewage in alley. Smells of sewage. Complainant states that facility admits to discharging every six months. Caller would like a follow-up call. CM	WO 136407 : By EMERSON, MIKE: 10/18/2011 10:48:34 AM Site inspection took photos of dirty water discharged into alley. Contacted new manager to discontinue discharge and to clean up water pooled in alley. By EMERSON, MIKE: 10/18/2011 11:26:03 AM Contacted Sergio of Sergio's Salon De Sol to discontinue washing pavement in front of his business. he said he would comply 760 9441996 WO 136409 : By EMERSON, MIKE: 10/18/2011 10:57:22 AM Site inspection alley cleaned case closed	Yes	No	9/19/11	Yes				10/19/11
9	106631	9/17/11-referred from County 9/21/11	H2o	Discharge of oil. - Complainant notified County of San Diego that a local Jiffy Lube is washing some oil residue into a storm drain when their sprinklers activate. The residue left on the side walk has an oily sheen look to it. CM	WO 136521 : By EMERSON, MIKE: 10/26/2011 5:18:00 PM Site inspection took photos of h20 discharge appears to be irrigation water. Contacted business & Property managers. Confirmed that it is over irrigation and that the water will be drained through a hole that will be cored	No	No		Yes			LCS	10/31/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					through the sidewalk. . 10/21/11received call from PW that sidewalk has been cored WO 136537 : By EMERSON, MIKE: 10/27/2011 10:35:23 AM Site inspection took photos contacted PW and property manager. PW to give no fee construction permit to core through the sidewalk via Engineering. By EMERSON, MIKE: 10/27/2011 10:36:55 AM site inspection took photos case closed								
10	106684	10/03/11	Wash water	Discharge of other wash water - Specialist observed runoff. Power washing without collection. CM	WO 136235 : MOMILE: 10/4/2011 3:57:06 PM Site inspection. Contacted contractor and requested an immediate discontinue of wash water discharge. Issued NOV. CASE CLOSED.	Yes	No	10/3/11	Yes			CBS	10/4/11
11	106704	9/1/11	silt	Discharge of sediment -Received complaint of uncovered stock piles	WO 136519 : By EMERSON, MIKE: 10/26/2011 4:10:47 PM Site inspection with business owner took photos of three stock piles and silt on access road issued NOV to comply by covering or removing stock piles and racking silt off access road by 10/1/11 WO 136520 : By EMERSON, MIKE: 10/26/2011 4:18:18 PM Site inspection with business owner took photos of covered stock piles and access road clear of silt. Case	Yes	No	9/8/11	Yes			ENC	10/31/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					closed								
12	106707	9/08/11	wash water from car cleaning	Discharge of vehicle wash water - Received complaint stating auto detailing without BMP's. CM	WO 136418 : By EMERSON, MIKE: 10/18/2011 11:50:19 AM Site inspection contact auto detailer issued NOV to discontinue discharge	Yes	Yes	9/8/11	Yes			ENC	10/19/11
13	106714	9/20/11	trash wash water	Discharge of trash - Received complaint about black liquid substance draining into alley. CM	WO 136413 : By EMERSON, MIKE: 10/18/2011 11:06:41 AM Site inspection took photos of dirty water discharged into alley. Contacted manager to discontinue discharge and to clean up water pooled in trash area, move smoker inside and ensure shower wash water flows into drain. WO 136415 : By EMERSON, MIKE: 10/18/2011 11:17:57 AM Site inspection took photos of cleaned up area case closed	Yes	No	9/20/11	Yes			ENC	9/27/11
14	106715	9/15/11	oil	Discharge of oil. - Received email stating poor BMP Practices and washing out floor mats in alley, and oil uncovered and spilling out-not contained. CM	WO 136404 : By EMERSON, MIKE: 10/18/2011 10:22:39 AM Site inspection took photos of poor oil storage, open trash container and spilled oil left out. Contacted head chef to clean and store potential pollutants properly. Gave educational information to help with compliance. WO 136405 : By EMERSON, MIKE: 10/18/2011 10:26:57 AM Site inspection area	Yes	No	9/15/11	Yes			LUC	10/19/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					cleaned up case closed								
15	106723	10/7/11	h2o	Discharge of water - Received complaint of large amount of water coming out of driveway. Specialist to investigate. CM	WO 136392 : By EMERSON, MIKE: 10/18/2011 9:54:42 AM Site inspection took photos of large water discharge contacted on site person that indicated that there was a sprinkler leak in store and that it is clean water. They indicated that a fire person said it was OK to discharge into the driveway because it was an emergency. Case closed.	No	No		Yes		Cottonwood creek	ENC	10/19/11
16	106725	9/12/11	h2o	Discharge of water - Complaint received regarding over-irrigation. Specialist to investigate. CM	WO 136352 : By EMERSON, MIKE: 10/18/2011 9:06:06 AM Site inspection took photos of sediment laden water and contacted on site person (Gale) and showed her broken sprinkler. 9/13/11 called PM to fix sprinkler. Case closed	Yes	No		Yes			CBS	10/19/11
17	106731	9/29/11	Horse Manure	Other discharge - Received email from Regional Board one month after complaint. Complainant stated that horse manure was being dumped into sites wetlands. Specialist to investigate. CM	WO 136485 : By EMERSON, MIKE: 10/25/2011 11:43:21 AM Site inspection took photos and contacted horse owner who showed me how clean the stables are and the rules that each horse owner must comply with. No manure was seen on property. Obtained managers phone who confirmed that no manure is ever dumped into the creek. She said she cleared the creek of trash but was told to discontinue clearing as the stream is considered a wetland.	No	No		Yes			ESC	11/8/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					In addition, manure management practices were observed. Horse manure was properly picked up and stored in three (3) covered dumpsters located on site. Case closed								
18	106732	8/17/11	oil	Discharge of oil. - Received complaint from Regional Board alleged that automotive batteries stored on the ground & unsafe storage of Methanol, manufacturing of diesel fuel. Illegal dumping of waste/unused product from the manufacturing of fuel in the toilet. CM	WO 136471 : By EMERSON, MIKE: 10/25/2011 9:03:21 AM Site inspection took photos of liquid storage without overhead coverage & 2nd containment. Contacted owner and requested the following corrective actions Issues of Concern: a. Automotive Batteries Stored on Ground: This issue was validated during the initial site visit. Used batteries were being temporarily stored outside on wooden pallets prior to pick by a disposal company. b. Unsafe Storage of Methanol: This issue was validated during the site visit. 55 gallon drums of Methanol were stored outside, uncovered, and without proper secondary containment. c. Manufacturing of Diesel Fuel: This activity (manufacturing) was evaluated within the context of potential threat to water quality. The manufacturing process is contained within a structure (trailer), minimizing the potential threat to water quality directly related	Yes	No		Yes			ENC	9/6/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					to the manufacturing activities. d. Illegal dumping of waste / unused manufacturing fuel in the toilet: This issue was not validated upon the initial site visit. Required Corrective Actions a. Battery Storage - Automotive Batteries must be stored in a closed container. b. Materials Storage - 55 Gallon Drums must be stored with proper coverage and containment. c. Good Housekeeping Paved lot areas require significant cleaning of old fluid and material spills, excessive scrap parts need to be removed or covered for proper storage, overall site wide cleanup required. d. Drip Pans Required under all stored vehicles on site. e. Spill Kit A spill control / containment kit is required for the facility. By EMERSON, MIKE: 10/25/2011 9:12:08 AM In addition the city was provided Department of Toxic Substances Control CAL000366472								

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO 136476 : By EMERSON, MIKE: 10/25/2011 9:18:10 AM Site inspection with clean water manager took photos of improvements and completed inspection This inspection action concluded that all required corrective actions were adequately addressed. Upon further consideration of ongoing business activities, additional requirements for more permanent BMP s were defined, and will be reassessed at a second follow-up inspection through storm water quality inspection follow up. case closed								
19	106733	8/17/11	Carpet wash	Discharge of other wash water - Received complaint that carpet cleaner discharging wash water. CM	WO 136448 : MOMILE: 10/19/2011 4:53:58 PM Site inspection, took photos, informed workers that they were in violation. CM	Yes	Yes		Yes			CBS	11/8/11
20	106775	10/17/11	oil and trash water	Discharge of oil. - Specialist observed poor BMPs for trash and oil.	WO 136324 : By EMERSON, MIKE: 10/17/2011 11:42:55 AM Site inspection took photos of open grease and trash storage. Contacted book keeper and worker. Requested manager T.J. give me a call. By EMERSON, MIKE: 10/17/2011 2:45:04 PM Received call from restaurant manager stating that he will clean oil & trash area and give me a call back. WO 136538 : By EMERSON, MIKE:	Yes	No		Yes			ENC	10/27/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					10/27/2011 10:44:48 AM Site inspection area cleaned up case closed								
21	106776	10/17/11	h20	Discharge of other wash water - Specialist observed poor BMPs appears business is washing in alley.	WO 136329 : By EMERSON, MIKE: 10/17/2011 2:21:40 PM Contacted Business owner to ensure that his staff is not washing the floor mats into alley.	Yes	No		Yes			ENC	10/19/11
22	106791	10/19/11	gray water	Discharge of other wash water - Complainant phoned that a bad smell and foul water was in a brow ditch near a storm drain. Caller was asking if the fruit stand had anything to do with it. CM	WO 136462 : By EMERSON, MIKE: 10/24/2011 4:56:28 PM Site inspection with complainant/tenant took photos of gray water discharge. Contacted property owner who informed me that he was not aware of this discharge and removed the sinks and the end of the pipe. A compliance inspection is set for 10/24/11 10am. WO 136463 : By EMERSON, MIKE: 10/24/2011 5:10:19 PM Site inspection took photos of abated sinks, port-a-potty and wash trailer. Respondent requested information on getting connected to the sewer. Case closed	Yes	No		Yes			LUC	10/25/11
23	106899	11/03/11	trash wash water	Discharge of other wash water - received complaint resident preformed a site inspection and found employees washing out the trash containers Specialist received complaint that a resident performed a site inspection and found employees washing out the trash containers.	WO 136877 : By EMERSON, MIKE: 11/16/2011 1:54:31 PM Site inspection took photos of area that appeared to be washed and contacted business manager to discontinue this practice. Manager agreed to meet for a routine storm water quality inspection. Case closed	Yes	No	11/4/11	Yes	11/4/11	ocean	ENC	11/18/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
24	106903	11/03/11	trash	Discharge of oil. - Specialist observed poor BMPs in trash area restaurant indicated that it was PM responsibility Specialist observed poor BMPs in trash area. Restaurant indicated that it was PM responsibility. ME	WO 136770 : By EMERSON, MIKE: 11/10/2011 10:31:31 AM Site inspection took photos of poor BMPs in trash area WO 136791 : By EMERSON, MIKE: 11/10/2011 4:23:16 PM Received call from PM stating that the grease/oil storage is the responsibility of the restaurant and the trash area has been cleaned up. In addition, the PM trained the on site staff. Site inspection took photos of cleaned trash area and thanked worker. Oil grease still needs to be addressed WO 136878 : By EMERSON, MIKE: 11/16/2011 2:12:57 PM Site inspection took photos of trash area and used oil storage. Restaurateur indicated that property manager was responsible for the trash area. Left messages for property manager to clean trash area. WO 136879 : By EMERSON, MIKE: 11/16/2011 2:23:15 PM Site inspection took photos of cleaned trash area. Used oil storage area still needs maintenance. WO 137264 : By EMERSON, MIKE: 12/20/2011 2:22:48 PM Site inspection took photo of cleaned up area case closed	Yes	No	11/3/11	Yes			ENC	12/28/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO 136770 : By EMERSON, MIKE: 11/10/2011 10:31:31 AM Site inspection took photos of poor BMPs in trash area WO 136791 : By EMERSON, MIKE: 11/10/2011 4:23:16 PM Received call from PM stating that the grease/oil storage is the responsibility of the restaurant and the trash area has been cleaned up. In addition, the PM trained the onsite staff. Site inspection took photos of cleaned trash area and thanked worker. Oil grease still needs to be addressed WO 136878 : By EMERSON, MIKE: 11/16/2011 2:12:57 PM Site inspection took photos of trash area and used oil storage. Restaurateur indicated that property manager was responsible for the trash area. Left messages for property manager to clean trash area. WO 136879 : By EMERSON, MIKE: 11/16/2011 2:23:15 PM Site inspection took photos of cleaned trash area. Used oil storage area still needs maintenance. WO 137264 : By EMERSON, MIKE: 12/20/2011 2:22:48 PM Site inspection took photo of cleaned up area case closed								

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25	106908	8/03/11	h2o	Discharge of sediment - Specialist observed broken sprinkler running and carrying sediment and green waste into the storm drain. Smelly trash compactor also discharging. Staff was notified and indicated that the compactor needed a repair. CM	WO 136956 : By EMERSON, MIKE: 11/28/2011 2:34:38 PM Site inspection took photos of trash compactor and broken sprinkler. Contacted store manager to fix trash compactor and sprinkler. WO 137265 : By EMERSON, MIKE: 12/20/2011 2:45:33 PM Site inspection area looked cleaned up and sprinklers were shut off case closed	Yes	No		Yes			LCS	12/28/11
26	106909	8/3/11	oil kitty litter	Other discharge - Specialist observed poor management of grease storage w/remnants of cat litter on the ground. CM	WO 136952 : By EMERSON, MIKE: 11/28/2011 11:30:31 AM Site inspection took photos of poor BMPs for oil storage contacted GM to clean and train workers. Facility will be added to FY 11-12. WO 137266 : By EMERSON, MIKE: 12/20/2011 3:00:15 PM Site inspection took photos of cleaned area case closed	Yes	No		Yes			LCS	12/5/11
27	106910	8/3/11	Human waste?	Other discharge - Construction worker reported that an employee from the restaurant sleeps in his vehicle and then dumps their waste into the stormdrain.CM	WO 136951 : By EMERSON, MIKE: 11/28/2011 11:21:55 AM Site inspection did not observe van case closed	Yes	No					LCS	11/30/11

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28	106917	11/13/11	wash water	Discharge of other wash water - Hotline call over weekend reported restaurant washing back area of restaurant with water and a broom. No containment and wash water was running all over into parking lot. CM	WO 136949 : By EMERSON, MIKE: 11/28/2011 10:42:48 AM Site inspection took photos scheduled a completed storm water quality inspection case closed	Yes	No		Yes			LCS	11/30/11
29	106957	11/17/11	silt/sediment	Discharge of sediment - City Staff-PW/Streets complained that NCTD did not have proper BMP's and may clog the slew gate. CM	WO 136940 : By EMERSON, MIKE: 11/23/2011 11:04:13 AM Site inspection took photos discussed cased with CW manager By EMERSON, MIKE: 11/23/2011 11:29:12 AM Called NCTD 760 966-6500 and left message for the maintenance person to call me back regarding the sediment/silt discharge into the city's MS4 By EMERSON, MIKE: 12/27/2011 3:37:32 PM Received email with drainage agreement attached stating that the City was responsible for maintenance. Gave contact info to PW streets see attached emails case closed	Yes	No		Yes			LUC	12/28/11
30	106982	11/22/11	oil	Discharge of oil. - Over filled 55 gal oil container	WO 136937 : By EMERSON, MIKE: 11/23/2011 9:48:34 AM Site inspection took photos of over filled oil container. Called company to empty. WO 136943 : By EMERSON, MIKE: 11/28/2011 9:38:31 AM Site inspection called grease hauler who had a miss-communication and when to the wrong	Yes	No		Yes				11/30/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					restaurant but will pick it up ASAP. WO 136965 : By EMERSON, MIKE: 11/30/2011 12:44:37 PM Site inspection Oil removed case closed								
31	107003	11/29/2011	Vehicle Wash	Discharge of vehicle wash water - City Staff noticed two guys washing vehicles with no containment. CM	WO 137008 : By EMERSON, MIKE: 12/2/2011 9:47:05 AM Site inspection no evidence of vehicle washing case closed	Yes	Yes					LUC	12/5/11
32	107024	12/2/2011	h20	Discharge of other wash water - Specialist noticed runoff/water leak flowing through trash area. Poor BMP's. CM	WO 137272 : By EMERSON, MIKE: 12/21/2011 10:34:41 AM Site inspection took photos of broken hose connection flowing through trash area. Issued NOV to comply in one week. WO 137273 : By EMERSON, MIKE: 12/21/2011 10:45:08 AM Site inspection took photos of cleaned up area Signed off NOV Case closed	Yes	No	12/5/11	Yes			LCS	12/21/11
33	107025	12/5/2011	Gypsum	Discharge of sediment - Eng. Inspector phoned Clean Water Specialist regarding sediment and gypsum stored on street without containment. CM	WO 137178 : By EMERSON, MIKE: 12/16/2011 9:35:49 AM Site inspection took photos and contacted lead worker regarding discharge into storm drain. Issued NOV to clean up street. WO 137179 : By EMERSON, MIKE: 12/16/2011 9:49:49 AM Site inspection took photos cleaned up street case closed	Yes	Yes	12/5/11	Yes			LUC	12/5/11

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34	107027	12/5/2011	grease	Discharge of oil. - Specialist observed grease spilling over poor BMP grease storage unit. No containment or overhead coverage. CM	WO 137180 : By EMERSON, MIKE: 12/16/2011 9:57:25 AM Site inspection took photos and contacted lead worker regarding storage of grease and recent spills. Issued NOV to clean up old spilled grease. WO 137184 : By EMERSON, MIKE: 12/16/2011 2:59:23 PM Site inspection took photos signed off NOV case closed	Yes	No	12/5/11	Yes			LCS	12/28/11
35	107116	12/21/11	auto parts	Other discharge - Citizen reported workers repairing an engine in the road. Engine was pulled out and looked messy. Specialist responded immediately. CM	WO 137279 : By EMERSON, MIKE: 12/27/2011 2:01:20 PM Site inspection large amount of car parts on sidewalk and roadway no discharge. Issued NOV to discontinue use of the street and clean up all parts WO 137280 : By EMERSON, MIKE: 12/27/2011 2:05:49 PM Site inspection area cleaned up case closed	Yes	Yes	12/21/11	Yes			ENC	12/21/11
36	107117	12/19/11	trash	Discharge of trash - Citizen phoned to report trash bins behind business area are overflowing and out of control. Specialist to investigate. CM	WO 137292 : By EMERSON, MIKE: 12/27/2011 2:47:42 PM Site inspection took photos contacted fire fly manager who indicated that they had a really busy weekend but the trash was picked up case closed	No	No		Yes			LCS	12/28/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
37	107131	12/13/11	RAIN WATER	Discharge of other wash water - received complaint from construction inspector that de-watering is occurring at Vons and sent a photos showing discharge specialist to inspect.	WO 137301 : By EMERSON, MIKE: 12/27/2011 4:10:02 PM Site inspection contacted manager to get PM info. Senor Civil Engineer determined that the discharge was rain water and it is not a violation CASE CLOSED	No	No		Yes			ENC	12/28/11
38	107139	12/12/11	silt/sediment	Discharge of sediment - City Staff reported sediment in the street. Specialist to inspect. CM	WO 137337 : By EMERSON, MIKE: 12/29/2011 9:41:42 AM Site inspection took photos of silt discharge contacted Contractor to clean and implement BMPs WO 137338 : By EMERSON, MIKE: 12/29/2011 9:46:38 AM Site inspection took photos of cleaned up area and reinforcement BMPs CASE CLOSED	Yes	No		Yes			LCS	12/30/11
39	107140	12/12/2011	silt/sediment	Discharge of sediment - City Staff reported sediment run-off after recent rain. CM	WO 137339 : By EMERSON, MIKE: 12/29/2011 9:51:16 AM Site inspection took photos of silt discharge contacted Contractor to clean and implement BMPs WO 137340 : By EMERSON, MIKE: 12/29/2011 11:11:22 AM Site inspection took photos of silt discharge contacted Contractor to clean and implement BMPs WO 138609 : By EMERSON, MIKE: 1/24/2012 10:52:15 AM Area cleaned case closed	Yes	No		Yes			LCS	1/25/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
40	107141	12/12/2011	silt/sediment	Discharge of sediment - City Staff reported sediment leaving properties in the area after heavy rains. CM	WO 137352 : By EMERSON, MIKE: 12/29/2011 2:02:17 PM Site inspection took photos of silt discharge contacted Contractor to clean and implement BMPs WO 137353 : By EMERSON, MIKE: 12/29/2011 2:07:49 PM Site inspection took photos of cleaned up area and implemented BMPs CASE CLOSED	Yes	No		Yes			LCS	12/30/11
41	107144	12/13/2011	silt	Discharge of sediment - Citizen emailed staff photos of drainage changes. CM	WO 137362 : By EMERSON, MIKE: 12/30/2011 2:23:50 PM Site inspection with senor civil engineer appears to be a grading violation resulting from surface drainage change. Respondent to submit a plan through a construction permit to show how the property is to drain. Informed respondent who requested 30 days to submit a plan. 12/15/11 inspection showed pipes removed but sediment flowing across sewer easement into drainage ditch. Sent email to comply by 1/16/12 WO 137363 : By EMERSON, MIKE: 12/30/2011 2:33:40 PM Site inspection no work completed on drainage but ditch cleaned By EMERSON, MIKE: 1/12/2012 9:47:56 AM Business owner met with city engineer on site 1/11/12 and showed the drainage facility that needed	Yes	No		Yes			ENC	7/25/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					repair. Repair to be completed by mid-February. By EMERSON, MIKE: 1/12/2012 10:30:44 AM Contacted business owner to implement BMPs to discontinue silt discharge into drainage swale and remove any silt that is on the access road.								
42	107237	01/17/12	Wash water	Discharge of other wash water - City Staff noticed poor BMP practices while en route to work. Pictures show evidence of buckets of water being used to clean outside areas. Specialist to re-inspect & letter to be sent. CM	WO 138697 :	Yes	No	1/17/12	Yes				1/30/12
43	107274	01/24/12	Pollen	Discharge of other wash water - Specialist out in the field noticed wash water dispersed behind restaurant prompting a commercial complaint inspection. CM	WO 138706 : By MEADOW, CHAMOMILE: 1/31/2012 1:15:09 PM Specialist went to site to investigate alleged paint violation. Specialist met with administrator for school and both parties agreed that the yellow substance was pollen from the trees. Photos taken. Case closed. CM WO 138706 : By MEADOW, CHAMOMILE: 1/31/2012 1:15:09 PM Specialist went to site to investigate alleged paint violation. Specialist met with administrator for school and both parties agreed that the yellow substance was pollen from the trees. Photos taken. Case closed. CM	Yes	No		Yes			LCS	2/9/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
44	107297	1/23/2012	Pollen	Discharge of paint - City Staff noticed a yellow substance (silt) on a basketball court over the weekend (Sunday). Specialist to investigate. CM	WO 138706 : By MEADOW, CHAMOMILE: 1/31/2012 1:15:09 PM Specialist went to site to investigate alleged paint violation. Specialist met with administrator for school and both parties agreed that the yellow substance was pollen from the trees. Photos taken. Case closed. CM WO 138706 : By MEADOW, CHAMOMILE: 1/31/2012 1:15:09 PM Specialist went to site to investigate alleged paint violation. Specialist met with administrator for school and both parties agreed that the yellow substance was pollen from the trees. Photos taken. Case closed. CM	No	No		Yes			LCS	2/9/12
45	107299	1/31/2012	Water	Discharge of water - City Staff from the SDWD phoned Specialist to inform of water running down the street. Specialist to investigate immediately. CM City Staff from the SDWD phoned Specialist to inform of water and sediment running down the street. Specialist to investigate immediately. CM	WO 138708 : By MEADOW, CHAMOMILE: 2/7/2012 4:05:02 PM Specialist went location and did not observe any discharge. Business closed. Case closed. CM By MEADOW, CHAMOMILE: 2/10/2012 11:24:21 AM Specialist went to location and did not observe any discharge, business was closed for the day. Case closed. CM	No	No					CBS	2/10/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
46	107329	2/7/2012	water	Discharge of water - City Staff noticed runoff from a broken sprinkler head that was leading to the nearby storm drain. Sediment & algae present. Specialist to investigate. CM	WO 151712 : By MEADOW, CHAMOMILE: 5/29/2012 2:52:28 PM 2/8/12-SDWD employee requested shut off & fix from property owner. 2/9/12-Plumber fixed problem. 2/10/12-Clean Water Specialist went to site to inspect and obtained property owner/managers contact information and left business card. Case Closed. CM	Yes	No					ENC	5/29/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
47	119742	2/22/2012 11:45AM	trash/oil	Discharge of trash - specialist contacted all three restaurants that use the same trash area; none claimed ownership of the mess. property manager was contracted to remove or provide cover & tray. meeting with property owner when he is back in town. follow-up needed. CM	WO 151557 : By MEADOW, chamomile: 5/7/2012 2:04:55 pm pm will be in town 2/24/12 to address issue. needs follow-up. CM WO 151559 : By MEADOW, CHAMOMILE: 5/7/2012 2:13:02 PM specialist did site inspection & took photos. three different grease haulers used. parking lot also inspected. cm WO 151560 : By MEADOW, CHAMOMILE: 5/7/2012 2:54:54 PM 5/3/2012; site inspection: oil barrel was removed however the storage area needs cleaning. re-inspections for all restaurants in the immediate area. property manager to inform tenants of clean-up requirements. 5/4/2012; emailed minimum bmp flyer, spill guide, & photos to property manager. case closed. cm	Yes	No		Yes			LCS	5/7/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
48	119824	2/23/12	Dirty Wash Water	Discharge of other wash water - Clean Water Specialist went to site and took photos of sudsy water in the alley adjacent to business. Poor BMP's warranted a complete Storm Water Quality Inspection Report. NOV issued and compliance by 3/1/12. CM	WO 151717 : By MEADOW, CHAMOMILE: 5/29/2012 3:54:44 PM 3/1/12 Site inspection w/ manager. Took photos and requested copies of any power washing invoices. CASE CLOSED. CM	Yes	No					ENC	5/29/12
49	119831	3/8/2012	pool siding	Other discharge - Citizen phoned to notify the Clean Water Program that a truck on her street has blue liquid dripping out the back of the vehicle. Specialist to investigate. CM	WO 151723 : By MEADOW, CHAMOMILE: 5/30/2012 4:22:09 PM Specialist contacted owner of property who called his contractor. Contractor indicated that the trailer truck would be pumped out and taken away. Temporary BMP's with traffic cones were placed on site. CM WO 151724 : By MEADOW, CHAMOMILE: 5/30/2012 4:43:30 PM 3/9 -Follow up inspection determined clean-up was done. Photos taken. Case Closed. CM	Yes	Yes					CBS	5/30/12
50	119841	2/22/12	trash leaking	Discharge of trash - Leaky trash enclosure was noticed by Clean Water Staff. Specialist to investigate. CM	WO 151730 : By MEADOW, CHAMOMILE: 5/31/2012 4:46:55 PM Specialist phoned Property Manager to have leak fixed ASAP. Property Manager agreed to fix leak and upon detecting leak found that condensation from the nearby laundry mat was cause of moisture; no leak. Case Closed. CM	Yes	No		Yes			LCS	5/31/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
51	119843	1/24/12	RESTAURANT WASH WATER	Discharge of other wash water - Specialist out in the field doing routine commercial inspections noticed a restaurant washing down while en route. Pictures taken. CM	WO 151740 : By MEADOW, CHAMOMILE: 6/1/2012 8:22:54 AM specialist spoke to manager to discontinue all future discharges, "dry clean" or collect all wash water. nov issued to restaurant. 5pm deadline 1/24/12. case closed. CM	Yes	No	1/24/12	Yes			LCS	6/1/12
52	119844	3/15/2012	PAINT WASH WATER	Discharge of paint - City Staff noticed workers washing green paint into street and gutter. Specialist to investigate immediately. CM	WO 151752 : By MEADOW, CHAMOMILE: 6/1/2012 9:31:05 AM Specialist inspected discharge immediately and spoke to three contractors (stucco, dry Waller, & painter). Painter cleaned up puddles of wash water. Power washer to wash site and collect all wash water. Dry Waller requested BMP brochures to help with compliance. CM WO 151753 : By MEADOW, CHAMOMILE: 6/1/2012 10:51:43 AM Specialist signed off NOV & took photos. Case Closed. CM WO 151754 : By MEADOW, CHAMOMILE: 6/1/2012 11:00:37 AM 3/15/12 -Staff received another complaint call. Specialist revisited site, took photos of green discharge from job. Supervisor on site was issued a 2nd NOV and given more education.	Yes	Yes	3/15/12	Yes			ENC	6/1/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Specialist to revisit site and communicate with 2nd caller nearby on activity. CM WO 151755 : By MEADOW, CHAMOMILE: 6/1/2012 12:05:35 PM 3/20/2012-Site inspection. More photos taken of waste discharge collected from cleanup. Business owner showed photos of before, during, and after cleanup. Final sign off of 2nd NOV. Case Closed. CM								
53	119874	4/8/12	sediment	Discharge of sediment - Citizen phoned to notify City that sediment was leaving a nearby property and entering the citizen's property in rain events. Specialist to investigate. CM	WO 151803 : By MEADOW, CHAMOMILE: 6/6/2012 4:32:43 PM 4/12/12 Site Inspection on 301 Crocus (complainant's address) observed sediment stains. Specialist contacted site worker at nearby construction site. Drains were addressed and BMP's requested-additional controls ASAP. CM By MEADOW, CHAMOMILE: 6/6/2012 4:41:42 PM Complainant's email forwarded to Planning Dept and Engineering. Permanent BMP's to be installed-no permit required. New BMP to be on resubmitted plans with condition to maintain in perpetuity. CM	Yes	No					LUC	6/6/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
54	119894	4/17/12	wash water	Discharge of other wash water - Hose connected to a non-metered fire hydrant to power wash site. CM	WO 151825 : By MEADOW, CHAMOMILE: 6/11/2012 3:10:11 PM Specialist did site inspection, contacted representative of businesses, as well as owner of property. Education given. Case Closed. CM	Yes	Yes		Yes			ENC	6/11/12
55	119898	4/24/12	Concrete wash	Discharge of concrete waste. - Citizen noticed workers washing concrete wash down the street. Environmental Specialist to inspect immediately. CM	WO 151826 : By MEADOW, CHAMOMILE: 6/11/2012 4:30:21 PM Specialist contacted business owner to "dry clean" the street and swale to the Maximum Extent Possible ASAP. NOV given to owner of business. Street cleaned properly. Case Closed. CM	Yes	Yes	4/18/12	Yes			ENC	6/11/12
56	119916	4/24/12	milky white substance	Other discharge - Business owner phoned to notify the City that they observed white milky water in a little stream under the bridge. Specialist to investigate immediately. CM	WO 151836 : By MEADOW, CHAMOMILE: 6/13/2012 4:24:52 PM White milky water evident just downstream of bridge. Inspector looked upstream for source. No obvious discharge. Some clear water coming from business nearby; inspection recommended to verify no illegal connection to storm drain. A commercial van with no decal had just serviced dishwasher-maybe unrelated. An additional search along the nearby creek showed no evidence of discharge. A homeowner nearby was conducting power washing with no collection of wash water. Evidence of debris and	Yes	No				Rossini Creek/San Elijo Lagoon	CBS	6/13/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					wash water entering storm drain. An advisory letter of education and notice to correct work to be sent. Investigator asked homeowner to correct work and clean up debris in street. Case Closed. CM								
57	119918	4/26/2012	None	Other discharge - Citizen phoned to report the odor of chemicals and white foam on the sidewalk. Specialist to investigate. CM	WO 151837 : By MEADOW, CHAMOMILE: 6/13/2012 5:17:04 PM Specialist went to site and spoke to staff. Paint had already been picked up. Insulation had been re-installed. Storm drain and parking lot were free of debris. No evidence of pollution, foam, or chemicals. White foam observed by caller may have been old insulation. Employees were knowledgeable and receptive. Case Closed. CM	No	No		Yes			LUC	6/13/12
58	119994	5/1/2012	water & dirt	Discharge of sediment - A resident phoned to report that a nearby business is hosing down water and dirt into the street and her property. Specialist to investigate. CM	WO 151925 : By MEADOW, CHAMOMILE: 6/28/2012 12:51:12 PM 5/3/12: Specialist did site inspection & took photos of discharge into storm drain. Tenant was contacted and shown pictures of violation. Follow up for following day 5/4/12. CM WO 151926 : By MEADOW, CHAMOMILE: 6/28/2012 2:56:43 PM 5/4/12: Specialist requested repair of BMP's and miscellaneous pipes. An NOV & Citation to	Yes	No		Yes			LUC	6/28/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					be issued if repairs are not done in a timely manner or done to specifications. Re-inspection for 5/8/12. CM WO 151928 : By MEADOW, CHAMOMILE: 6/28/2012 3:31:00 PM 5/8/12 Received call from owner of property regarding sprinkler system timer issue. Owner promised to adjust timer and clean dirt from drain. 5/8/12 site inspection determined work had not been completed. 5/15/12 work complete. Landscapers directed to call the CWP hotline if future silt discharges occur. Case closed. CM								
59	120013	5/8/2012	water	Discharge of water - Report of water running down sidewalk and street. Specialist to investigate. CM	WO 151947 : By MEADOW, CHAMOMILE: 7/2/2012 12:57:04 PM 5/8/12: Specialist contacted Gen. Contractor who indicated that the drainage was from a broken sprinkler head. Landscaper was called and they fixed the problem together. CASE CLOSED. CM	No	No		Yes			LCS	7/2/12
60	120014	5/14/2012	water	Discharge of water - 5/14/12: Staff noticed water runoff coming from a nearby restaurant. Specialist to investigate immediately. CM	WO 151948 : By MEADOW, CHAMOMILE: 7/2/2012 1:31:56 PM 5/14/2012: Specialist took photos of water from property into patio drain. Business owner was contacted; owner will check property & call back. 5/17/12: Specialist phoned owner who stated that	Yes	No		Yes			ENC	7/2/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					the water heater leak will be fixed on Saturday. CM WO 151949 : By MEADOW, CHAMOMILE: 7/2/2012 1:37:47 PM 6/5/12: Specialist did site inspection; leak fixed. Photos taken. CASE CLOSED. CM								
61	120087	Unknown; pipes discovered 5/16/2012	no discharge	Other discharge - During a Dry Weather Monitoring event, staff notice black PVC pipe coming from a business and into the storm drain channel. Please request to have pipes removed if unpermitted. Specialist to investigate. CM	WO 152226 : MOMILE: 7/19/2012 6:19:20 PM 5/24/12: Staff met with supervisor & business owner to determine the purpose and content of pipes and any possible discharge. Owner of property/business agreed to remove pipes. Routine commercial storm water quality inspection to be conducted after pipes are removed. CM By MEADOW, CHAMOMILE: 7/19/2012 6:29:44 PM 5/31/2012 Staff contacted business owner to confirm pipes were removed. Site inspection completed to view corrected work. Photos taken. Some erosion detected and addressed. Routine commercial inspection scheduled. Case closed. CM	No	No		Yes			LUC	7/19/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
62	120110	5/23/2012	sediment	Discharge of sediment - 5/23/12: Clean Water Staff requested that business owner fix erosion on the west end of the site. 5/31/12 Received call that erosion work would be completed by Saturday, 6/2/12. CM	WO 152230 : MOMILE: 7/24/2012 6:25:37 PM 6/21/12: Specialist did a site inspection of completed work; erosion fixed. Case Closed. CM	Yes	No		Yes			LUC	7/24/12
63	120124	6/12/2012	sediment	Discharge of sediment - Citizen noticed a large renovation of planter boxes taking place within a nearby parking lot. Specialist to ensure BMP's are in place. CM	WO 152265 : MOMILE: 7/26/2012 11:52:04 AM 6/12/12: Site inspection; made contact with construction site supervisor who said that he did not wash down any sediment. Property Manager contacted to inquire who was washing down the patio at a nearby restaurant. Property Manager claims that it was not their worker either. CM	No	No		Yes			ENC	7/26/12
64	120132	6/25/2012	Removal of permanent TC BMP	Other discharge - City Staff noticed a landscape change at a recently finaled job. Contractor was questioned and explained that the owners requested the landscape change even though they were explicitly warned that no changes were to be made without City knowledge.	WO 152272 : MOMILE: 7/26/2012 6:43:13 PM 6/25/2012: Site inspection; took photos of direct connecting of pipes from gutter to swale with no filter. 6/26/12 Specialist left message for owner. 6/27/12 sent NOV & Citation to owner to comply by 7/27/12. 6/28/12 Specialist met with contractor on site & took additional photos of BMP removal & direct connect. CM	Yes	No	6/27/12	Yes	6/27/12		LUC	7/26/12
Totals	**64**					**51**	**10**	**18**	**54**	**2**			

Appendix H-1 Mobile Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Work Order IDs	Was it a Violation?	Was it a Mobile Business ?	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	100240	7/13/11	Oil	Discharge of oil. - Received complaint of dumped oil in an area South of 699 N. Vulcan Ave	129168	Yes	Yes					LUC	7/14/11
2	106707	9/08/11	Wash water from car cleaning	Discharge of vehicle wash water - Received complaint stating auto detailing without BMP's. CM	136418	Yes	Yes	9/8/2011	Yes			ENC	10/19/11
3	106733	8/17/11	Carpet wash	Discharge of other wash water - Received complaint that carpet cleaner discharging wash water. CM	136448	Yes	Yes		Yes			CBS	11/8/11
4	106891	11/9/2011	Sediment and vegetation	Other discharge - Citizen phoned Specialist to alert Clean Water that a contractor is blowing everything from the street into the creek 4th & B. CM	136876	Yes	Yes		Yes		Moonlight creek	ENC	11/18/11
5	107003	11/29/2011	Vehicle Wash	Discharge of vehicle wash water - City Staff noticed two guys washing vehicles with no containment. CM	137008	Yes	Yes					LUC	12/5/11
6	107025	12/5/2011	Gypsum	Discharge of sediment - Eng. Inspector phoned Clean Water Specialist regarding sediment and gypsum stored on street without containment. CM	137178	Yes	Yes	12/5/201	Yes			LUC	12/5/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Work Order IDs	Was it a Violation?	Was it a Mobile Business ?	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
7	107116	12/21/2011	Auto parts	Other discharge - Citizen reported workers repairing an engine in the road. Engine was pulled out and looked messy. Specialist responded immediately. CM	137279	Yes	Yes	12/21/20	Yes			ENC	12/21/11
8	119486	3/14/2012	Unknown	Other discharge - Fire Dept. staff noticed a white filmy substance near their private residence after an HVAC company had serviced their neighbor s property. Specialist to investigate. CM	151388	Yes	Yes					LUX	4/16/12
9	119831	3/8/2012	Pool siding	Other discharge - Citizen phoned to notify the Clean Water Program that a truck on her street has blue liquid dripping out the back of the vehicle. Specialist to investigate. CM	151723	Yes	Yes					CBS	5/30/12
10	119834	3/15/2012	Dirt & water	Discharge of sediment - City Staff noticed dirt and water running in parking lot while landscape maintenance was being done. CM	151725	Yes	Yes	3/15/201	Yes			ENC	5/30/12
11	119844	3/15/2012	PAINT WASH WATER	Discharge of paint - City Staff noticed workers washing green paint into street and gutter. Specialist to investigate immediately. CM	151752	Yes	Yes	3/15/201	Yes			ENC	6/1/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Work Order IDs	Was it a Violation?	Was it a Mobile Business ?	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
12	119894	4/17/12	Wash water	Discharge of other wash water - Hose connected to a non-metered fire hydrant to power wash site. CM	151825	Yes	Yes		Yes			ENC	6/11/12
13	119898	4/24/12	Concrete wash	Discharge of concrete waste. - Citizen noticed workers washing concrete wash down the street. Environmental Specialist to inspect immediately. CM	151826	Yes	Yes	4/18/201	Yes			ENC	6/11/12
14	120119	6/6/2012	Concrete wash	Discharge of concrete cutting slurry or wash water. - Staff in the area noticed work being done in a driveway near the market. Some debris noticed in the right of way; workers still on site. Specialist to investigate. CM	152234	No	Yes		Yes			CBS	7/25/12
15	120125	6/18/2012	Concrete wash & muriatic acid	Discharge of concrete waste. - City Staff noticed a construction job washing down a new concrete driveway. Specialist to investigate. CM	152266	Yes	Yes	6/18/201	Yes			ENC	7/26/12
16	120131	6/21/2012	Asphalt	Other discharge - 6/21/12: City Staff noticed a messy street with asphalt spread all over. Specialist to inspect. CM	152270	Yes	Yes	6/21/201	Yes			ENC	7/26/12
Totals	**16**					**15**	**16**	**8**	**12**	**0**			

Appendix H-1 Residential Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	100218	7/1/11	H2o	Discharge of water - Large amount of run off pooling at intersection of requeza and Vulcan ave	WO 129278: By EMERSON, MIKE: 7/26/2011 8:49:50 AM Site inspection appeared to be over irrigation from 701-721 S Vulcan ave. case closed	No	No					ENC	7/26/11
2	100224	7/1/11	Red/rust colored substance	Discharge of paint - received complaint from waste water and SDWD of red/rust colored substance flowing into storm drain	WO 129166: By EMERSON, MIKE: 7/13/2011 3:09:52 PM Site inspection took photos of brown substance in storm drain. Called waste water and they reported natural causes produced from minerals. Case closed.	Yes	No					LUC	8/9/11
3	100276	7/20/11	Seal coating for parking	Other discharge - Received complaint call of smelly substance being dumped on vacant lot at unit 11	WO 129229: By EMERSON, MIKE: 7/21/2011 9:27:10 AM Site inspection did not find violation contacted park manager who informed me that he had just resealed some parking spaces case closed.	No	No		Yes				7/21/11
4	100282	7/21/11	Bird droppings	Other discharge - Received email complaint of dumping bird droppings into storm drain	WO 129240: By EMERSON, MIKE: 7/21/2011 4:45:58 PM Site inspection left card to call me By EMERSON, MIKE: 7/26/2011 8:59:28 AM 7/26/11 received call from respondent stating that they put the bird droppings in the trash not the storm drain case closed	No	No		Yes			ENC	7/26/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation?	Was it a Mobile Business ?	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
5	104352	7/29/11	Vegetation	Discharge of construction debris - Received complaint of planters installed in BMP	WO 133378 : By EMERSON, MIKE: 8/2/2011 5:02:00 PM Site inspection took photos appears that the planters and walkway will not hinder the effectiveness of the road bmp case closed	No	No						8/2/11
6	104368	7/29/11	Vegetation wash water	Discharge of yard waste - Resident washing down drive way without collecting wash water	WO 133522 : By EMERSON, MIKE: 8/8/2011 10:03:49 AM Site inspection contacted property owner to discontinue or collect all wash water case closed	Yes	No		Yes			ENC	8/8/11
7	104375	714/11	Fire wash water	Discharge of water - Received call from FD wanting to know what to do with the waste water	WO 133527 : By EMERSON, MIKE: 8/8/2011 11:09:35 AM Site inspection took photos contacted PW and requested clean up case closed	Yes	No					ENC	8/8/11
8	106683	9/29/11	Water	Discharge of water - Complainant phoned the hotline to say water was running down the street with debris, dirt, chemicals, & suds. Caller said that this is the 2nd time. CM	WO 136234 : MOMILE: 10/4/2011 3:28:49 PM Site inspection completed. No discharge observed. CASE CLOSED.	No	No				NA		10/4/11
9	106685	10/03/11	Wash from cleaning paint	Discharge of paint - Citizen phoned to say that white liquid was washing down driveway. CM	WO 136239 : By EMERSON, MIKE: 10/5/2011 10:44:15 AM Site inspection contacted resident. Resident stated his son was painting a wall and must have washed off his brushes into the storm drain. He will clean the brushes in a sink from now on. Case closed	Yes	No		Yes			CBS	10/6/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
10	106686	10/03/11	Oil/car part debris	Discharge of oil. - Wastewater Staff observed vehicle maintenance with parts left in street in right of way. CM	WO 136241 : By EMERSON, MIKE: 10/5/2011 11:23:31 AM Site inspection took photos and contacted resident. Resident stated that it was air conditioner parts in the street and he will clean it up ASAP. Case closed	Yes	No		Yes			CBS	10/11/11
11	106694	9/7/11	Oil	Discharge of oil. - Received complaint from community service officer stating that vehicle is leaking oil	WO 136243 : By EMERSON, MIKE: 10/5/2011 1:49:53 PM Site inspection took photos left information on windshield. WO 136399 : By EMERSON, MIKE: 10/18/2011 10:06:49 AM Site inspection took photos of dripping oil left educational information on vehicle WO 136400 : By EMERSON, MIKE: 10/18/2011 10:09:07 AM Site inspection took photos of dripping oil left educational information on vehicle WO 136401 : By EMERSON, MIKE: 10/18/2011 10:11:02 AM Site inspection vehicle removed case closed WO 136243 : By EMERSON, MIKE: 10/5/2011 1:49:53 PM Site inspection took photos left information on windshield. WO 136399 : By EMERSON, MIKE: 10/18/2011 10:06:49 AM	Yes	No		Yes			ENC	10/11/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Site inspection took photos of dripping oil left educational information on vehicle WO 136400 : By EMERSON, MIKE: 10/18/2011 10:09:07 AM Site inspection took photos of dripping oil left educational information on vehicle WO 136401 : By EMERSON, MIKE: 10/18/2011 10:11:02 AM Site inspection vehicle removed case closed								
12	106711	9/14/11	Cement wash water	Discharge of building or sidewalk wash water - Received complaint that wash water from building was running into storm drain. CM	WO 136416 : By EMERSON, MIKE: 10/18/2011 11:33:53 AM Site inspection took photos of dirty water discharged into Street. Contacted worker to discontinue discharge and to clean up water pooled in street using dry cleaning methods or collection all wash water. WO 136417 : By EMERSON, MIKE: 10/18/2011 11:38:09 AM Site inspection took photos of area that was cleaned up case closed	Yes	No	9/14/11	Yes			CBS	9/14/11
13	106724	10/7/11	H20 with sediment	Discharge of sediment - Received complaint of large amount of water in street. Specialist to investigate. CM	WO 136375 : By EMERSON, MIKE: 10/18/2011 9:35:15 AM Site inspection took photos of sediment laden water and left card to fix sprinkler.	Yes	No		Yes			ENC	10/19/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
14	106734	8/18/11	Debris	Discharge of yard waste - Complainant phoned that street sweepers were unable to clear all debris and neighbors were dumping into street. CM	WO 136447 : MOMILE: 10/19/2011 4:34:13 PM Site inspection. Unable to locate. No violation. Case Closed. CM	No	No					LUC	11/8/11
15	106735	8/17/11	Oil-unable to locate	Discharge of oil. - Received email from PW/Streets Dept. that anonymous caller reported oil dumped at the storm drain on Avenida de San Clemente. CM	WO 136446 : MOMILE: 10/19/2011 4:26:12 PM Site inspection, drove down streets, unable to locate discharge, case closed. CM	No	No					ENC	11/8/11
16	106736	8/10/11	Cement	Discharge of concrete waste. - Complainant phoned to report that concrete had been washed from the driveway to the gutter from construction of driveway. CM	WO 136445 : MOMILE: 10/19/2011 4:14:45 PM Site inspection. Took photos of driveway. Could not locate discharge. Case closed. CM	No	No		Yes			CBS	11/8/11
17	106737	8/31/11	h20	Discharge of water - Received email from PW regarding water flowing over sidewalk slip hazard.	WO 136337 : By EMERSON, MIKE: 10/17/2011 4:11:35 PM Site inspection with clean water manager, Senior Civil Engineer and TC BMP program facilitator, we observed failing BMP (grassy swale not draining and leaking over sidewalk and creating a mosquito breeding area). Called vector control to treat water for mosquitoes and contacted property owner. Owner indicated that the property was built to plan and that he did not want to spend any money. WO 136518 : By EMERSON, MIKE: 10/26/2011 3:24:27 PM Site inspection took photos of grassy swale BMP appears to be not	Yes	No	1/12/12	Yes	1/12/12		LUC	10/26/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					working correctly. By EMERSON, MIKE: 1/12/2012 11:10:47 AM Called contractor who indicated that they will work with engineering to develop a solution within the next couple of weeks By EMERSON, MIKE: 1/24/2012 10:56:57 AM Designer is working with applicant and city engineer to create solution								
18	106741	9/29/11	Oil	Discharge of oil. - Code Enforcement received a complaint regarding a red minivan leaking excessive oil into the street and the owner refuses to respond to requests to fix the issue. CM	WO 136320 : By EMERSON, MIKE: 10/13/2011 2:57:33 PM Site inspection contacted resident and requested that she fix oil leak Case closed	Yes	No		Yes			ENC	10/17/11
19	106764	10/12/11	Soap and clay	Discharge of other wash water - Brown soapy wash water draining down alley from 2128 Manchester	WO 136315 : By EMERSON, MIKE: 10/13/2011 1:14:33 PM Site inspection contacted resident to discontinue discharge took photos. She said it was a spill and will use the sewer to empty buckets in the future case closed	Yes	No		Yes			CBS	10/17/11
20	106792	10/19/11	Gray water	Other discharge - City Staff took pictures of a site that appears to have a grey water connection discharging onto property. Specialist to inspect. CM	WO 136461 : By EMERSON, MIKE: 10/24/2011 4:31:00 PM Site inspection with complainant/tenant took photos of gray water discharge. Contacted property owner who informed me that the laundry room is locked and not being used and will contact me in the week of 10/24/11. The complainant wanted an update and indicated	Yes	No		Yes			RSF	12/21/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					that the laundry room is still in use. In addition, he requested the adjacent property owner's information (property where gray water is discharged). By EMERSON, MIKE: 10/26/2011 2:09:32 PM Received call from owner stating that the washing machine is not being used. He will call me within 3 weeks to give me an update. WO 137275 : By EMERSON, MIKE: 12/21/2011 1:17:59 PM Site inspection with owner washer replumbed to toilet case closed								
21	106836	10/26/11	H2o	Discharge of sediment - Received call from SDWD stating illegal discharge onto Cal trans easement	WO 136542 : By EMERSON, MIKE: 10/27/2011 3:40:05 PM Site inspection took photos left card at door. 10/27/11 received call back message from respondent. WO 136554 : By EMERSON, MIKE: 10/31/2011 3:38:51 PM Received call from respondent stating that the discharge is from the yard no gray or black water referred to Cal Trans. Case closed.	Yes	No		Yes			ENC	10/31/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
22	106887	11/08/2011	Water	Discharge of other wash water - Gentleman phoned the Clean Water Hotline to notify us that his neighbor is discharging large amounts of SUMP Pump water into the street. Pipe is located 3-4 ft. in front of mailbox. CM	WO 136958 : By EMERSON, MIKE: 11/28/2011 3:52:49 PM Site inspection took photos and left card with worker. Received call back from owner. He will clean up around yard drain and educate workers. Case closed	No	No		Yes			CBS	11/30/11
23	106900	11/08/2011	Silt/sediment	Discharge of sediment - City Staff requested assistance with a vacant property that appears to be lacking proper BMP's. CM	WO 136957 : By EMERSON, MIKE: 11/28/2011 3:34:58 PM Site inspection took photos and was contacted by the resident. He is maintaining his side of the road and that his neighbors need to implement some BMPs. Discussed case with CWM to come up with a solution for publically owned privately maintained streets By EMERSON, MIKE: 12/20/2011 4:18:18 PM The owner should maintain their property unless otherwise stated. Sent email back to PW requesting owner fix or reason why they should not. Case closed	Yes	No		Yes			ENC	12/21/11
24	106921	11/10/11	Silt	Discharge of sediment - Citizen came into City Hall Engineering counter to complain that his neighbor discharged dirt over his property. Specialist to investigate. CM	WO 136948 : By EMERSON, MIKE: 11/28/2011 10:35:02 AM Site inspection observed small amount of dirt requested resident to clean up case closed	Yes	No		Yes			ENC	11/30/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
25	106956	10/23/11	Water	Discharge of water - City Staff (Code Enforcement) forwarded complaint from 10/23/11 on 11/15/11 regarding a backyard being paved over with pipes	WO 137347 : By EMERSON, MIKE: 12/29/2011 1:43:03 PM Site inspection took photos of drainage area and suggested BMPs between properties CASE CLOSED	No	No		Yes			CBS	12/30/11
26	106976	11/21/11	Silt/sediment	Other discharge - Complainant came to Engineering counter and filled out a complaint form stating that muddy water runoff floods sidewalk and flows to storm drain. Erosion of dirt and plants occur with every rain. CM	WO 136944 : By EMERSON, MIKE: 11/28/2011 9:47:24 AM Site inspection contacted owner to implement BMPs directed him to PW to pick up sand bags. Case closed.	Yes	No		Yes			ENC	11/30/11
27	107002	11/28/2011	h2o	Other discharge - Complainant phoned the clean water hotline with a concern of neighbor s horses and possible pollution of urine and feces from animals running off into storm drain nearby and complainant's property. Smells bad. CM	WO 137295 : By EMERSON, MIKE: 12/27/2011 3:18:44 PM Site inspection met owner and took photos. Requires direction from Civil Engineer. WO 137296 : By EMERSON, MIKE: 12/27/2011 3:23:56 PM Site inspection with Senior Civil Engineer. Appears to be a grading violation and case was referred to Engineering construction division for enforcement clean water case closed	Yes	No		Yes			RSF	12/2/11
28	107004	11/28/2011	H2O	Discharge of water - PW/Streets called Specialist about constant water draining from 133 Town wood. CM	WO 137003 : By EMERSON, MIKE: 12/1/2011 5:16:27 PM Site inspection took photos of drainage over sidewalk. Left card at door to call me. 11/29/11 received call from tenant stating that they have tried to find the source of the water and have reviewed their water bill appears that there are no leaks and it	No	No		Yes			RSF	12/28/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					may be water from the upper property over irrigating. Discussed case with CW manager and it may not be a clean water issue. 12/1/11 left message with tenant that the City is looking for a solution. By EMERSON, MIKE: 12/27/2011 3:14:13 PM Sent email to PW streets that this is not a clean water concern but a possible slip hazard concern case closed								
29	107048	12/5/2011	Wash water	Discharge of other wash water - Citizen phoned the Clean Water Hotline to inform us that a resident was washing his driveway and sidewalk with a hose. Water was running off into the street. CM	WO 137254 : By EMERSON, MIKE: 12/20/2011 10:29:25 AM Site inspection no discharge observed left card with resident case closed	No	No		Yes			ENC	12/28/11
30	107050	12/6/2011	Silt	Discharge of sediment - An employee of the Encinitas Landfill phoned the Code Enforcement Dept. to report grading and dirt being pushed onto San Elijo Lagoon Property. Environmental Specialist and Engineering Construction Inspector to investigate; appt. made w/ County. CM	WO 137252 : By EMERSON, MIKE: 12/20/2011 10:10:27 AM Site inspection with county worker and engineering inspector. Took photos of grading. WO 137253 : By EMERSON, MIKE: 12/20/2011 10:21:15 AM Site inspection took photos of stream adjacent to grading appears grading does not leave the property referred to grading engineer for NOV case closed	Yes	No					RSF	12/12/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
31	107085	12/8/2011	h2o	Discharge of concrete cutting slurry or wash water. - SDWD phoned the Hotline to report discharge of water and concrete slurry running down the street. Specialist to investigate. CM	WO 137251 : By EMERSON, MIKE: 12/20/2011 9:57:45 AM Site inspection took photos of discharge contacted owner and contractor to implement BMPs and discontinue any discharges ASAP case closed	Yes	No		Yes			ENC	12/28/11
32	107086	12/13/11	Sediment/silt/rock	Discharge of sediment - Building inspector report sediment wash out from old palm co. Building inspector reported sediment wash out from old palm co. ME	WO 137249 : By EMERSON, MIKE: 12/20/2011 9:32:48 AM Site inspection took photos of discharge called owner to implement BMPs ASAP WO 137250 : By EMERSON, MIKE: 12/20/2011 9:47:12 AM Site inspection took photos of implement BMPs Case closed	Yes	No		Yes		na	LUC	12/28/11
33	107133	11/23/11	h2o	Discharge of water - received complaint call manhole cover water leaking out of it	WO 137303 : By EMERSON, MIKE: 12/27/2011 5:45:18 PM Site inspection observed broken sprinkler contacted gardener to fix it case closed	No	No		Yes			ENC	12/28/11
34	107134	12/28/2011	Soap	Discharge of other wash water - Citizen phoned to report powdery substance in gutter and street. Possibly cement dust? Specialist to investigate. CM	WO 137336 : By EMERSON, MIKE: 12/29/2011 9:22:54 AM Site inspection observed white substance in gutter. Resident said it was soap from washing a car and agreed to clean up area case closed	Yes	No		Yes			CBS	12/30/11
35	107145	12/13/2011	Silt sediment	Discharge of sediment - Specialist observed poor BMP's. Sediment runoff into MS4. Specialist to contact HOA President to correct. CM	WO 137360 : By EMERSON, MIKE: 12/30/2011 1:54:59 PM Site inspection observed sediment from HOA flowing into drainage ditch. 12/13/11 requested HOA to BMP	Yes	No		Yes			ENC	8/16/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					bank to prevent sediment from flowing into ditch. WO 137361 : By EMERSON, MIKE: 12/30/2011 1:58:21 PM Site inspection took photos no work done By EMERSON, MIKE: 1/12/2012 10:23:44 AM Called HOA president to install BMPs on her bank she requested a meeting to discuss solutions. We are to meet on 1/18/12 10am with John Smith By EMERSON, MIKE: 1/18/2012 4:38:47 PM Site inspection with HOA president, their landscaper, Mike Piper from the JPA and John Smith from SDWD. Landscaper informed the group that all reclaimed water sprinklers on the lower bank were shut off. Sent email with BMP details from erosion control to HOS president. Neighbor was called regarding stock pile and monitoring especially after a rain event.								
36	107148	12/20/2011	Wood chips/vegetation	Discharge of sediment - City Staff reported large amount of sediment runoff from residential property. Specialist to investigate. CM	WO 137355 : By EMERSON, MIKE: 12/29/2011 3:07:41 PM Site inspection took photos of wood chips discharge left card to clean and implement BMPs WO 137359 : By EMERSON, MIKE: 12/30/2011 1:42:07 PM Site inspection street cleaned up left	No	No		Yes			ENC	12/29/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					construction flyer at door CASE CLOSED								
37	107159	1/3/2012	UNKNOWN	Discharge of paint - City Staff noticed white paint in road, gutter, & storm drain on the way to work. Specialist to investigate. CM	WO 137369 : By EMERSON, MIKE: 1/3/2012 4:26:31 PM Site inspection took photos of shite substance in street. Received call from respondent stating that he will sweep it up WO 137450 : By EMERSON, MIKE: 1/10/2012 10:44:39 AM Site inspection area cleaned up CASE CLOSED WO 137369 : By EMERSON, MIKE: 1/3/2012 4:26:31 PM Site inspection took photos of shite substance in street. Received call from respondent stating that he will sweep it up WO 137450 : By EMERSON, MIKE: 1/10/2012 10:44:39 AM Site inspection area cleaned up CASE CLOSED	Yes	No					ENC	1/10/12
38	107161	1/3/2012	Chemicals	Other discharge - Citizen came to Engineering Counter to report neighbor dumping hazardous chemicals. Chemicals are killing his palm trees and runoff is entering the storm drain system. Specialist to investigate. CM	WO 137368 : By EMERSON, MIKE: 1/3/2012 4:18:55 PM Site inspection no discharge observed contacted respondents grand kid regarding over spraying chemicals into storm drain CASE CLOSED	No	No		Yes			ENC	1/11/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
39	107213	1/11/12	Sewer waste	Discharge of sewage - Business owner called Code Enforcement to report pipes from a residential home nearby have open sewer lines that drain to street and storm drain. Call was forwarded to the CWP. Specialist to investigate. CM	WO 138490 : By EMERSON, MIKE: 1/12/2012 9:24:44 AM Site inspection took photos of uncapped clean out line. Tenant was contacted to fix problem. Tenant to contact landlord ASAP WO 138584 : By EMERSON, MIKE: 1/18/2012 4:29:52 PM Site inspection took photos of capped clean out CASE CLOSED	Yes	No		Yes			ENC	1/18/12
40	107239	01/13/2012	Paint? Stucco?	Discharge of paint - City Staff noticed over the weekend that paint wash was thrown all over the property, sidewalk, & street. Pictures show clear violation. Specialist to investigate. Letters to be sent. CM	WO 138698 : By MEADOW, CHAMOMILE: 1/30/2012 6:06:02 PM Environmental Specialist investigated complaint and was unable to find responsible party. Business card left at Unit 1 requesting a call back. More photos taken. NOV Letter sent to owner of property and also to property manager at violation address. CM	Yes	No	1/23/12	Yes				1/31/12
41	107273	1/13/2012	Car fluid	Discharge of oil. - Sheriff's Dept. phoned the CWP to report a vehicle has been sitting on the street in the same spot for one week and is leaking fluid. Specialist to report. CM	WO 138696 : By MEADOW, CHAMOMILE: 1/30/2012 3:16:28 PM Specialist went to complaint location the same day and did not observe the described vehicle or any leaking fluid. The vehicle had either been towed or moved already. CM	No	No						1/30/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
42	119389	2/15/2012	WATER	Discharge of water - Complainant phoned the hotline to report water run-off in excess that is entering his property and causing erosion. Call directed to drainage specialist in ENG. Specialist to respond also. CM	WO 150886 : By MEADOW, CHAMOMILE: 2/22/2012 4:57:08 PM Complainant observed that the water has slowed/decreased after contacting owner of neighboring property. He will follow-up with the water district and neighbor. Drainage Engineer indicated that this could be a civil issue. Complainant was updated of actions City would be able to take. CM	No	No					LUC	2/22/12
43	119484	3/14/2012	Unknown. Only water was visible at time of investigation	Other discharge - Citizen phoned Streets Dept. to report a green substance that was thrown in the street. Specialist to respond immediately. CM	WO 151130 : By MEADOW, CHAMOMILE: 3/14/2012 4:02:26 PM Environmental Specialist responded to complaint and found water in the street. No visible signs of green liquid or substance. Pictures taken. Case closed. CM	No	No					CBS	3/14/12
44	119486	3/14/2012	Unknown	Other discharge - Fire Dept. staff noticed a white filmy substance near their private residence after an HVAC company had serviced their neighbor's property. Specialist to investigate. CM	WO 151388 : By MEADOW, CHAMOMILE: 4/16/2012 3:02:25 PM Site visit on 3/15/12. No discharge observed or material observed. Entire 300 block of street inspected. Complainant emailed with results of investigation. CM	Yes	Yes					LUX	4/16/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
45	119839	3/28/12	Paint	Discharge of paint - Sheriff's Dept. phoned to report an incident in Village Park whereby a citizen saw their neighbor dumping white paint in the gutter and storm drain. The citizen confronted her neighbor and the polluter laughed and ignored the request. CM	WO 151729 : By MEADOW, CHAMOMILE: 5/31/2012 3:39:46 PM Specialist investigated and took pictures. Staff met with homeowner and explained violation. Paint stains were evident all the way down the street. Education given and a follow up advisory letter to be sent. CM	Yes	No		Yes			LCS	5/31/12
46	120045	5/15/2012	Pool water	Discharge of water - City Staff noticed a homeowner draining their pool into the storm drain with the hose in the gutter line. Specialist to respond immediately. CM	WO 152070 : MOMILE: 7/10/2012 3:51:03 PM Specialist did site inspection; no erosion. Project Clean Water Pool Draining Flyer left for homeowner on front door of property. Case Closed. CM	Yes	No		Yes			LCS	7/10/12
47	120046	5/16/2012	Salt water	Discharge of water - Citizen phoned to complain that a large amount of water was running down the street. Not a water line break. Specialist to inspect immediately. CM	WO 152071 : MOMILE: 7/10/2012 5:25:45 PM Specialist went to site of pool discharge and spoke to owner. Salt water pool with no chemicals. Owner redirected discharge to landscaped area. CASE CLOSED. CM	Yes	No		Yes			ESC	7/10/12
48	120049	5/17/2012	Sewage	Discharge of sewage - Manager of trailer park phoned to report a leaking mobile home on the street in front of her place of business. Specialist to investigate. CM	WO 152073 : MOMILE: 7/11/2012 10:44:04 AM 5/17/12: Specialist did site inspection & took photos. Sheriff was called to post vehicle with 72 hour notice. Sheriff unable to give out address information for vehicle. PW/Streets unavailable to respond to spill. Specialist Mike E. cleaned pollution in street with dirt and broom. CM WO 152074 : MOMILE: 7/11/2012 11:53:52 AM 5/21/12: Site inspection;	Yes	No		Yes			LUC	7/11/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					RV Home removed. Photos taken of street. Code Enforcement Dept. to get address to send citation. CM								
49	120051	5/18/2012	Paint washout	Discharge of paint - Citizen phoned to report dumping of paint and other debris behind fence into canyon trail. Citizen mentioned that event occurred two weeks prior. Clean Water Staff to investigate. CM	WO 152075 : MOMILE: 7/11/2012 12:32:09 PM Clean Water Staff inspected site and took photos of construction debris, concrete or stucco or paint washout evident. Garden hose inside fence near washout pollution. NOV & Advisory Letter to be sent. CM	Yes	No					ENC	7/11/12
50	120120	6/11/2012	Paint etc.	Discharge of paint - Citizen phoned to report a neighbor dumping paint, chemicals, and trash onto a shared embankment. Citizen asked neighbor to stop and discharge defiantly continued to pollute onto property and out to the street. Specialist to investigate. CM	WO 152235 : MOMILE: 7/25/2012 6:12:01 PM 6/11/12: Site inspection conducted. Home owners and contractor contacted regarding white milky discharge from landscape area drain & were instructed to clean. Dry Waller was called back to property. Waste Water Vaccon was dispatched to site. Dry wall debris was removed from catch basin before it discharged into 2nd storm drain. CM	Yes	No		Yes			CBS	7/25/12
51	120123	6/12/2012	No discharge observed	Discharge of antifreeze - A citizen phoned the Streets Dept. to report a neighbor allegedly flushing his van's radiator system. Specialist to investigate. CM	WO 152260 : MOMILE: 7/26/2012 10:37:10 AM 6/12/12: Specialist investigated area and found no evidence of any discharge. Photos of street and storm drain taken. Auto maintenance brochure left for resident. Case Closed. CM	No	No		Yes			LCS	7/26/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
52	120128	6/19/2012	Silt/sediment	Discharge of sediment - City Staff noticed some sediment leaving a residential property. Further inspection required by Clean Water Specialist. CM	WO 152268 : MOMILE: 7/26/2012 3:16:40 PM 6/20/12: Site inspection, took photos, and issued NOV to correct work. CM WO 152269 : MOMILE: 7/26/2012 5:05:46 PM 7/3/2012: Site inspection; swale cleaned and new BMP's are in place. Case Closed. CM	Yes	No	6/20/12	Yes			ENC	7/26/12
53	120136	6/27/2012	Diatomaceous earth	Discharge of other wash water - City Staff noticed over the weekend that someone in the neighborhood washed down a white substance from their driveway into the street and down a canyon. Specialist to investigate. CM	WO 152277 : MOMILE: 7/27/2012 12:34:20 PM 6/27/12: Site inspection; took photos of white stain in the street. Door Hanger and Business Card left on front door. Received phone call from homeowner stating that the substance was diatomaceous earth that he used in his pool. Specialist educated homeowner that this is NOT an allowable discharge and needs to be diverted to the sewer system. Case Closed. CM	Yes	No		Yes			ENC	7/27/12
54	120137	6/27/2012	Green liquid	Other discharge - Citizen reported that green water is coming out of a street drain near her home. Specialist to investigate. CM	WO 152278 : MOMILE: 7/27/2012 3:01:34 PM 6/27/12: Specialist went to inspect area and viewed the green water coming out of sidewalk drain. Door hanger with request to phone the Clean Water Program left at residence. CM WO 152279 : MOMILE: 7/27/2012 3:18:08 PM 7/12/12 Site visit; took photos. Discharge was stopped. Complainant was notified. Case Closed. CM	Yes	No		Yes			ENC	7/27/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
Totals	54					35	1	4	41	1			

Appendix H-1 Referral or Request for Info FY 2011 - 2012

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
1	100226	7/1/11	Commercial	h20	Discharge of water - Constant water and slime	Streets Division of PW			7/11/2011
2	100227	7/7/11	Commercial	pool water	Discharge of water - Car washing discharge question		Car washing requirements		7/11/2011
3	104486	7/1/11	Residential	Water	Discharge of vehicle wash water - Car washing at home what are the regulations		Car Washing requirements		8/26/2011
4	104487	7/1/11	Municipal	trash	Discharge of trash - Lots of trash going into Buena Vista Lagoon	Oceanside			8/26/2011
5	104488	7/1/11	Residential	Hot tub water	Discharge of water - Emptying hot tub is it legal?		Draining hot tub		8/26/2011
6	106609	9/9/11-	Municipal	N/A	Other discharge - Complainant called about abnormally large mosquito problem and suggests that the storm drain in front of Mira Costa College may be clogged causing a mosquito problem. CM	County Vector Control & City of Encinitas Streets Dept.		CBS	9/20/2011
7	106843	10/25/11	Residential	Washing Machine Water	Discharge of other wash water - Citizen called the Hotline to ask if it was alright for his neighbor to discharge large amounts of grey water (washing machine water) and soap into his yard causing flooding and standing water. Has spoken to neighbor to alert them. CM	Wastewater-r	Discharging grey water allowed?		11/8/2011
8	106978	11/21/11	Construction	Water	Discharge of water - Biologist from City of SD noticed a water leak coming from a utility box on Saturday and Sunday. Complainant emailed Clean Water Program on Monday. CM	Caltrans			11/22/2011
9	107087	12/12/11	Residential	Rain Runoff	Discharge of water - Citizen phoned to report large amounts of rain runoff leaving the two properties above and flooding complainant's property. CM	-Civil Engineer and then to -Public Works Supervisor		LUC	12/14/2011
10	107099	12/14/11	Construction	Dirty water	Discharge of construction debris - Citizen phoned the CWP hotline to report construction site allegedly dumping dirty water onto HWY 101. CM	Engineering Inspector		LUC	12/16/2011
11	107157	12/30/11	Construction	Sediment	Discharge of sediment - City Staff requested inspection of sidewalk at job site. Sediment on sidewalk and gutter. CM	Construction Inspector			12/30/2011

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
12	107158	12/29/11	Construction	Dust	Other discharge - Citizen phoned the City Manager's Office with a concern about dust control and air quality at a construction site doing excavation. CM	Engineering Construction Inspector			12/30/2011
13	119392	2/22/12	Residential	Water	Discharge of water - Citizen phoned with concern of large amounts of water running onto his property from neighboring property. Information given to Wastewater due to concern of possible grey water. CM	Wastewater then to the Drainage Specialist in Engineering		ESC	6/13/2012
14	119835	3/28/12	Commercial	Paint	Discharge of paint - Complainant originally emailed the E-Assistance Program and then emailed the Clean Water Program. Citizen noticed that a truck lost a gallon of paint when turning the corner. Paint had been there for many weeks. Referred to Streets/PW Dept. CM Complainant originally emailed the E-Assistance Program and then emailed the Clean Water Program. Citizen noticed that a truck lost a gallon of paint when turning the corner. Paint had been there for many weeks. Referred to Streets/PW Dept. CM	STREETS/Publi c Works Dept.		LCS	5/31/2012
15	119892	4/12/12	Construction	sediment	Discharge of sediment - Citizen phoned to report sediment/silt runoff during heavy rains. Completed development project believed to be the source. Referred to Engineering Inspector assigned to job. CM	Engineering Construction Inspector		ENC	6/11/2012
16	119988	4/9/12	Commercial	Dirt	Discharge of sediment - City Staff noticed a dirt spill in the road that has been left for at least 48 hours. Streets Dept will sweep up. Case Closed. CM	STREETS DEPT.		LUC	6/27/2012

Commercial Total:	**4**
Residential Total:	**5**
Construction Total:	**5**
Municipal Total:	**2**
Industrial Total:	**0**
Total:	**16**

Appendix I

Public Participation

I-1 **Green Spring List 2012**

I-2 **Official Lifeguard Field Manual**

Encinitas "GREEN SPRING" Activities & Events
(April through June, 2012)

Welcome to the Encinitas "Green Spring" listing of local educational activities and events being brought to the community through a collaborative effort of volunteers from the Encinitas Environmental Commission, Encinitas Environment Day, and the Solana Center for Environmental Innovation.

April

April 14 *Free* **Paper Shredding & Electronic Waste Collection Event** for Encinitas residents & businesses – up to 2 bankers boxes - provided by EDCO. Saturday 9 am – 1pm at Encinitas City Hall, 505 S. Vulcan Avenue. For more information call (760) 436-4151 or see City of Encinitas website calendar at www.EncinitasCA.gov.

April 14 *Free* **Used Oil Filter Exchange – Encinitas Residents Only** Saturday 10am-2pm at Pep Boys, 256 N. El Camino Real, Encinitas. Encinitas residents are invited to bring their used oil filters to exchange for new oil filters. Residents are eligible to receive up to 5 FREE filters in exchange. Coordinated by Solana Center for Environmental Innovation www.SolanaCenter.org

April 16–June 4 **Environmental Art Exhibit: The Many Faces of Trash -** View fine art by 25 local artists using recycled materials. In Encinitas Library Community Room, 540 Cornish Drive.

April 18 *Free* **Solar Water Heating Basics for Homeowners:** information on different solar water heating technologies and applications. Discussion provided on CSI-Thermal rebate program and the economics of Solar Water Heating. California Center For Sustainable Energy 8960 Balboa Ave, Suite 100, San Diego, CA, 6pm-8pm. For registration information see Events Calendar: www.energycenter.org

April 21 **Habitat Restoration Activity**: San Elijo Lagoon's Coastal Dunes – Saturday 9:00 am – 12 noon www.sanelijo.org/restoration-events

April 21 **Encinitas Garden Festival**; Saturday 10 am – 4:30 pm www.EncinitasGardenFestival.org

April 21 **Lady Bug Day:** San Diego Botanic Garden, Saturday 10:00 am – 12:30 pm, Free with admission or membership www.sdbgarden.org/ladybug.htm

April 28 **E-Waste Collection Event** – *FREE*; Solana Center for Environmental Innovation, Saturday 9 am – Noon www.solanacenter.org/recycling

April 28 **Build Your Own Spring Hydroponic Garden;** San Diego Botanic Garden, 9:00 am – 1:00 pm, for registration and fees visit www.sdbgarden.org/classes.htm

Continued.....

April 28 **Waterwise Without the Compromise;** San Diego Botanic Garden, 2:00 pm – 4:00 pm, for registration and fees visit www.sdbgarden.org/classes.htm

April 28 **Waterwise Garden Tour:** San Diego Botanic Garden, Saturday 10:30 am www.sdbgarden.org/tours.htm#water

April 28 **Beach Clean-Up** at Moonlight Beach; Encinitas Clean Water Program & Solana Center for Environmental Innovation; Saturday 9:00 am – Noon. Please pre-register at: www.creektobay.org

MAY

May 5 *Free* **Composting Workshop** from the Solana Center; at San Diego Botanic Garden, Saturday 10:00 am – 12 noon, register at: www.solanacenter.org/free-compost-workshops

May 5 **Spring Fling at Carpentier Parkway –** Celebrate spring and sustainable gardening practices by attending this FREE, informative event. Saturday 9am-1pm along San Elijo Ave in downtown Cardiff. Hosted by Cardiff 101 Mainstreet, www.Cardiff101.com.

May 18 **Bike to Work Day** Those who register for Bike to Work Day will be automatically entered to win one of many great prizes, including the grand prize — a new bicycle! Visit Sandag's iCommute site at: http://www.icommutesd.com/Events/BikeToWorkDay.aspx

- Pit Stop locations in Encinitas for t-shirts, snacks, water & encouragement: El Camino Bike Shop, Nytro, REI, and Whole Foods.

May 19+++ **Landscape Makeover Workshop Series** The San Dieguito Water District and their partners are offering a workshop series designed to provide homeowners a comprehensive overview and the basic hands-on skills necessary to makeover a traditional turf yard into a beautiful and climate-appropriate WaterSmart showcase. The series consists of three workshops and two professional landscape design coaching sessions that will teach participants how to transform their yards. For more information and a listing of all dates visit SDWD Website.

May 19 **Habitat Restoration Activity**: San Elijo Lagoon's Coastal Dunes – Saturday 9:00 am – 12 noon www.sanelijo.org/restoration-events

May 26 **E-Waste Collection Event** – *FREE*; Solana Center for Environmental Innovation, Saturday 9 am – Noon www.solanacenter.org/recycling

May 26 **Waterwise Garden Tour:** San Diego Botanic Garden, Saturday 10:30 am www.sdbgarden.org/tours.htm#water

Continued……..

GREEN SPRING www.eeday.org

JUNE

June 2 **Tips on Designing a Water-Smart Landscape with Color, Interest, and Budget Savings**; San Diego Botanic Garden 2:00 pm – 4:00 pm, for registration and fees visit www.sdbgarden.org/classes.htm

June 7 **Environmental Film: Queen of the Sun: What Are Bees Telling Us?** is a profound, alternative look at the global bee crisis. Thursday at sundown (time tbd) in the Whole Foods/Pacific Station courtyard www.wholefoodsmarket.com/stores/encinitas/store-calendar

June 10 **Encinitas Environment Day** – *FREE* ; Cottonwood Creek Park; Saturday 10 am – 4 pm **www.EEDay.org**

June 14 *Free* **Solar Water Heating Basics for Homeowners:** information on different solar water heating technologies and applications. Discussion provided on CSI-Thermal rebate program and the economics of Solar Water Heating. California Center For Sustainable Energy 8960 Balboa Ave, Suite 100, San Diego, CA, 6pm-8pm. For registration information see Events Calendar: www.energycenter.org

June 16 **Habitat Restoration Activity**: San Elijo Lagoon's Coastal Dunes – Saturday 9:00 am – 12 noon www.sanelijo.org/restoration-events

June 23 **E-Waste Collection Event** – *FREE*; Solana Center for Environmental Innovation, Saturday 9 am – Noon www.solanacenter.org/recycling

June 30 **Attracting Birds, Hummingbirds, and Butterflies;** San Diego Botanic Garden, Saturday 10:00 am – 12 noon, for registration and fees visit www.sdbgarden.org/classes.htm

June 30 **Waterwise Garden Tour:** San Diego Botanic Garden, Saturday 10:30 am www.sdbgarden.org/tours.htm#water

Regular Ongoing Activities:

Nature Walks & Lagoon Clean-ups - Saturdays
San Elijo Lagoon Conservancy www.sanelijo.org

Leucadia Farmer's Market & Art Fair - EVERY Sunday 10 am – 2 pm
Paul Ecke Central School, 185 Union Street, Leucadia

Cottonwood Creek Clean-ups – 3rd Saturday each month, 8:30 am – Noon
Contact Brad Roth, Project Manager, Cottonwood Creek Conservancy broth@cox.net

All of this programming and coordination has been brought to you by the following organizations and their dedicated volunteers:

City of Encinitas GREENING OUR COMMUNITY
The Encinitas Environmental Commission

Solana Center for Environmental Innovation

Encinitas Environment Day '12
www.EEDay.org

To give us feedback, or request future events/activities: GreenCommunity@cityofencinitas.org
Visit Encinitas Environmental Commission webpage @ www.EncinitasCA.gov for any updates to Green Spring Listing

ENCINITAS JR. LIFEGUARDS

N33° 2' 52" / W117° 17' 49"

MOONLIGHT BEACH, CA

OFFICIAL

ENCINITAS MARINE SAFETY DEPARTMENT
JUNIOR LIFEGUARD FIELD MANUAL

CITY OF ENCINITAS CLEAN WATER PROGRAM

The storm drain system carries untreated runoff directly to our creeks, lagoons, and the ocean. Runoff containing trash, pet waste, oil, grease, soap, metals, and other pollutants contributes to high bacteria levels in the ocean and may cause sickness and/or beach closures. The Clean Water Program was created to protect our waterways and keep our beaches clean and safe.

WHAT DOES THE PROGRAM DO?

- Water quality monitoring
- Public outreach & education
- Complaint response and enforcement
- Annual facilities inspections
- Low impact development
- Watershed planning and coordination

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

HOW CAN YOU PROTECT OUR WATERWAYS?

- Pick up after your pets. Pet waste carries bacteria, viruses, and parasites that can pose risks to human and environmental health.
- Don't be a litter bug. Trash easily makes its way to the beach.
- Never dispose of household hazardous waste in the trash, sewer system, or storm drains.
- Limit your use of fertilizers and pesticides. Do not apply chemicals if rain is in the forecast, and avoid over-irrigation, which can wash chemicals into the storm drain.
- Sweep or rake instead of using water to wash off outdoor surfaces.
- During home improvements and maintenance activities, do not allow any runoff or debris to enter the street or storm drain. Properly dispose of all wash water, paint and other construction materials.

To report spills or illegal dumping in Encinitas, or for more information on stormwater pollution prevention, please call the **Clean Water Hotline: 760-633-2787**, or email: **cleanwater@cityofencinitas.org** website: **www.cwp.cityofencinitas.org**

ESCONDIDO
City of Choice

Christopher W. McKinney
Director of Utilities
201 N. Broadway, Escondido, CA 92025
Phone: 760-839-4662 Fax: 760-839-4651

September 28, 2012

California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

Three compact disc (CD) copies of the City of Escondido's FY 2011-2012 Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report are being submitted to comply with Order No. R9-2007-0001, NPDES No. CAS0108758 issued by the California Regional Water Quality Control Board, San Diego Region. As a copermittee, the City of Escondido is providing this annual report to the County of San Diego (Principal Permittee) for inclusion in the collated submittal to the Regional Board.

I certify under penalty of law that the FY 2011-2012 Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine or imprisonment.

If you have any questions or need assistance, please contact Cheryl Filar, Environmental Programs Manager, at 760-839-6315.

Sincerely,

Christopher W. McKinney

Christopher W. McKinney
Director of Utilities

ESCONDIDO
City of Choice

JURISDICTIONAL

Urban Runoff

MANAGEMENT PROGRAM

2011-2012 Annual Report

SEPTEMBER 2012

Submitted to

CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
SAN DIEGO REGION
9174 SKY PARK COURT, SUITE 100
SAN DIEGO, CA 92123-4340

Submitted by

CITY OF ESCONDIDO
201 NORTH BROADWAY
ESCONDIDO, CA 92025

With Assistance from

AECOM
1420 KETTNER BLVD., SUITE 500
SAN DIEGO, CA 92101

AECOM

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EXECUTIVE SUMMARY

The City of Escondido's (City's) jurisdictional urban runoff management program (JURMP) is a small component of a larger effort to comply with the regulatory framework that serves to control the discharge of pollutants to "waters of the U.S." in accordance with the National Pollutant Discharge Elimination System (NPDES) permit program and its associated municipal stormwater program, which is enforced through the San Diego Regional Water Quality Control Board (RWQCB or Regional Board) Order R9-2007-0001 (i.e., municipal stormwater permit). The San Diego RWQCB administers the municipal NPDES stormwater program, which requires each Copermittee to implement a JURMP. The City is one of the Copermittees subject to this permit.

This document satisfies the Annual Report submittal requirements of Order R9-2007-0001. The information in this Annual Report describes related compliance activities conducted by City staff in multiple departments and divisions (e.g., Engineering, Field Engineering, Utilities, Code Enforcement, Planning, Attorney's Office, and Fire).

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM

The development of the JURMP was the first step in an evolving stormwater management program mandated by the previous municipal stormwater permit (Order 2001-01). The JURMP was first developed in 2001 and was updated in March 2008. The City significantly revised and redesigned the JURMP (City of Escondido 2008) to address the new and expanded compliance requirements set forth in Order R9-2007-0001. The results of this program over the last fiscal year (June 2011–July 2012) are summarized below relative to each plan component.

Environmental Setting

Escondido is located in the northern part of inland San Diego County and primarily lies within two major watershed units: Carlsbad and San Dieguito. A very small natural area in the north part of Escondido also crosses the boundary line into the San Luis Rey Watershed.

Escondido is largely a residential semi-urban city, with a variety of land uses, including industrial, commercial, municipal, agricultural, and rural, in each of the major drainages. Stormwater in Escondido is discharged into three main drainage basins: Escondido Creek (including Reidy Creek) and San Marcos Creek in the Carlsbad Watershed, and Lake Hodges (a dammed section of San Dieguito River) in the San Dieguito Watershed. The municipal boundaries of the City abut, for the most part, properties located in unincorporated portions of San Diego County, which also drain across and into City stormwater conveyance facilities. The total drainage area within the City limits is 23,687 acres.

Development Planning Component

Development, redevelopment, and land use planning efforts are governed by municipal ordinances and policies, including the City's updated Standard Urban Stormwater Mitigation Plan (SUSMP) (City of Escondido 2010). The SUSMP requires an evaluation of site conditions and proposed project designs through the development and submittal of a Water Quality Technical Report that designates appropriate best management practices (BMPs) (i.e., site design, source control, and treatment control) to mitigate potential development impacts to the maximum extent practicable (MEP).

In March 2010, the City adopted its local SUSMP, consistent with Order R9-2007-0001 requirements and the Regional Board-accepted Model SUSMP template, including low-impact development (LID) design

requirements to reduce runoff volumes, improve parcel-specific water quality benefits, and improve aesthetics.

During the last reporting period, the City updated its local SUSMP to incorporate the Hydromodification Management Plan (HMP) as required by Order R9-2007-0001. The HMP was approved by Escondido's City Council in January 2011, and HMP requirements became effective on January 14, 2011. Consistent with the requirements set forth in the HMP, priority development projects are required to implement hydromodification mitigation measures so that post-project runoff flow rates and durations do not exceed pre-project flow rates and durations where such increases would result in an increased potential for erosion or significant impacts to beneficial uses.

Nine projects were subject to SUSMP requirements and three projects were subject to HMP requirements during the reporting period. No projects received compliance waivers; if this were to occur, appropriate collateral mitigation would be required.

Construction Component

Construction site owners, developers, contractors, and other responsible parties are mandated to employ stormwater pollution prevention measures at active construction sites to protect receiving waters and other environmental resources in accordance with local ordinances and permit requirements.

In addition to the requirements set forth in the City's JURMP and SUSMP, construction projects during the reporting period were also subject to coverage and compliance requirements of the *General Permit for Discharges of Stormwater Associated with Construction Activity* (Order 2009-0009-DWQ as amended by 2010-0014-DWQ). Under this permit, risk evaluations must be conducted for each project and minimum BMP requirements must be implemented specific to risk type to eliminate or reduce pollutant discharges to the MEP.

City staff inspect construction sites for compliance with these regulations. Construction activity remains slow due to the continued economic downturn in the region. As determined by City compliance inspectors, no enforcement measures were necessary during the reporting period. For inactive sites, staff confirmed that effective BMPs were installed and/or maintained, even though dry conditions prevailed through most of the rainy season.

Municipal Component

The City implements an extensive municipal program to control and eliminate the discharge of pollutants from municipal areas and activities. Municipal program elements are as follows:

- inspection and maintenance of the sanitary sewer system, including implementation of the Sewer System Management Plan; Sewer Overflow and Prevention Plan; and Fats, Oils and Grease Control Program;
- frequent sweeping of all municipal streets and parking lots;
- year-round Municipal Separate Storm Sewer System (MS4) inspection and cleaning;
- regular flood control channel trash and debris removal, including sea curtain deployment and cleaning;
- implementation of pollution prevention and treatment control BMPs at fixed municipal facilities and events;
- general stormwater education for City staff and continued focused training for City departments;
- stormwater compliance inspections for municipal facilities;

- implementation of standard procedures and required BMPs to prevent discharges from special events and power washing activities to the MS4; and
- implementation of an integrated pest management program for pesticides, herbicides, and fertilizers.

During the program year:

- approximately 9,408 curb miles were swept and 543 tons of material was collected;
- approximately 40 miles of sanitary sewer line were inspected and approximately 191 miles were cleaned;
- approximately 302 miles of open channel and 3,113 storm drain facilities were inspected resulting in the removal of 77 tons of debris from the MS4; and
- 26 high-priority and 13 medium-priority fixed municipal facilities were inspected for stormwater compliance, surpassing permit inspection requirements.

The City continues to evaluate existing municipal program pollution prevention efforts and BMPs and develop and implement new measures, as needed. Through implementation of the municipal component, the City is ensuring the removal of many pollutants that otherwise could have been exposed to precipitation and eventually transported to surface waterbodies by urban runoff.

Industrial and Commercial Component

The City's most notable efforts to control pollutants from industrial and commercial activities are maintaining and updating a facility inventory, inspecting high- and medium-priority facilities, and educating owners and operators on stormwater pollution prevention.

During the reporting period, more than 1,400 industrial and commercial sites were inspected by trained staff for compliance with stormwater requirements and to verify the use of appropriate BMPs. Sites were assessed based on the following:

- maintenance/general site housekeeping,
- pollutant source control/material storage,
- erosion control,
- sediment control,
- non-stormwater control, and
- waste management control,

Compliance inspectors also performed the following:

- assessed compliance with City ordinances and permits related to urban runoff;
- assessed BMP implementation, maintenance, and effectiveness;
- confirmed facility coverage under the General Industrial Permit (Notice of Intent [NOI] and/or Waste Discharge Identification number), when applicable;
- reviewed BMP implementation plans, when applicable, and determined whether they were being properly implemented;
- reviewed facility monitoring data, when applicable;
- informed operators/owners about stormwater pollution prevention, as conditions warranted; and

- conducted visual observations for non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff.

During inspections, staff educated site owners and operators on applicable stormwater regulations and BMP implementation. Educational and outreach materials are distributed to many facilities based on site conditions and activities.

As in years past, Notices of Correction (NOCs) were the primary form of enforcement action used to correct compliance issues at commercial or industrial facilities during the reporting period. Each business was given a specific timeframe to correct noncompliance based on the severity of the issues found. Follow-up inspections were conducted for every business that received an NOC, and re-inspections continued until compliance was achieved.

All commercial/industrial inspections and NOC follow-ups were completed prior to the end of the fiscal year (June 30). During this reporting period, 150 NOCs were issued to industrial and commercial businesses for stormwater violations. The majority of the NOCs were given for poor housekeeping practices, inadequate maintenance of pretreatment devices (e.g., grease traps), and lack of secondary containment (e.g., 55-gallon drums outside without secondary containment and weather protection). Other common BMP requirements that were found to need enhancement were the following:

- frequency of sweeping,
- presence of dumpster covers,
- implementation of spill kits, and
- removal of equipment/materials stored outside or improperly covered.

All sites were found to be compliant upon reinspection.

During inspections, City staff also evaluated whether industrial facilities needed to obtain coverage under the Industrial General Permit (RWQCB 1997). No new non-filers were discovered during this reporting period. However, as reported in past annual reports and via email, seven businesses were determined to require coverage under the permit. Information associated with these businesses was provided to the Regional Board, but inspections conducted during the 2011–2012 reporting period revealed that none of the facilities have yet obtained coverage under the permit.

Industrial and commercial inspection results continue to indicate that, in spite of the high-priority designation assigned to many sites, a majority of facilities are currently compliant with BMP implementation (structural and nonstructural) that reduce and/or eliminate urban runoff pollutants to the MEP.

Residential Component

The City's residential program consists of pollution prevention and source control BMP activities associated with the following:

- disposal of household hazardous waste, pet waste, and green waste;
- at-home car maintenance and cleaning; and
- home and garden care.

The City targets these issues through a variety means, but most notably through a public education and outreach campaign, and a recycling and household hazardous waste collection program. In addition to these programs, the City implements a stormwater hotline for reporting illegal storm drain discharges, conducts resident research surveys to gather data for program modification and effectiveness, and performs water quality monitoring to identify and evaluate potential sources of pollutants from residential areas. Furthermore, the City focuses its outreach and education campaign on high-priority residential areas that correspond to the community's underserved populations. As part of this campaign, the City

partners with the Neighborhood Services Division, which coordinates groups in Escondido's higher density areas.

City staff also strongly encourage public reporting of violations to help with Citywide pollution prevention. Compliance violations may be documented through verbal warnings, written warnings, orders to abate and correct, and fines. Throughout the reporting period, the City issued three verbal warnings and 18 NOCs for the discharge of illegal substances to the storm drain system from residential areas. All of the violations were resolved within the reporting period. To prevent such violations from recurring, the City continued to focus its residential outreach program on increased residential pollution prevention awareness.

Illicit Discharge Detection and Elimination Component

The City established the dry-weather monitoring program in 2000 to detect illicit connections and eliminate illegal discharges. This program represents an extensive and geographically widespread monitoring station network along the reaches and tributaries of Escondido Creek, Reidy Creek, Felicita Creek, and Kit Carson Creek. Monitoring stations were selected on the basis of location, drainage patterns, surrounding land uses, and historic water quality monitoring results. These monitoring stations mostly coincide with major storm drain outfalls, but they also are strategically located in natural creek tributary junctions and/or specific drainages associated with heavy urbanization (e.g., industrial activities).

As reported to the RWQCB in the JURMP 2011–2012 Illicit Discharge Detection and Elimination (IDDE) Annual Report (City of Escondido 2011), 57 of the 117 dry-weather monitoring stations (49 percent) were found to have suitable runoff for collecting samples for laboratory analyses. Analysis of the samples collected this reporting period revealed the following:

- fifteen stations were above the nitrate action level (26 percent of all stations sampled), and
- one station was above the action level for total fecal coliform and *Enterococcus* (less than 2 percent of all stations sampled).

No other dry-weather monitoring parameters were above their respective action level.

For samples found to contain concentrations above action levels, follow-up sampling was conducted. During the reporting period, nitrate was the only constituent that was found in follow-up samples above action level concentrations. Evaluation of the data revealed findings consistent with past annual reports that stations with elevated nitrates were likely affected by factors outside of the City's jurisdiction, such as upstream livestock/agricultural activities.

Bacteria action levels were not exceeded upon analysis of follow-up sampling at the site that initially exceeded fecal and *Enteroccocus* concentrations.

If an illicit connection or illegal discharge is suspected, observed, or reported, the City initiates an investigation to identify the source. A systematic process of elimination is used to determine the potential source—tributary junctions are screened and/or tested for constituents related to the discharge to determine upgradient conditions until the source is located.

No illicit sewer connections were detected as a result of the follow-up investigations during this reporting period. However, 44 illicit discharges to the MS4 were identified and resolved (Appendix D). Twenty-two violations were issued to commercial/industrial and/or food service businesses, and 22 were associated with residential activities

To address and reduce these types of illicit discharges, the City continues to modify and strengthen its public outreach and education program.

Education Component

Education training this fiscal year continued to focus on the requirements of Order R9-2007-0001. City employees received stormwater-related messages through *CityLine*, a weekly electronic Citywide newsletter distributed by the City Manager's Office. New employee orientation included a 20-minute presentation on the Clean Water Act (CWA), current permit requirements, and general information on watersheds and BMPs. During this reporting period, 20 new employees received this presentation.

Various City departments received focused training sessions, as follows:

- On May 30, 2012, the City's Field Engineering, Engineering, Planning and Utilities staff attended a three-hour workshop designed to cover the various components of the development process as it relates to stormwater requirements: the Construction General Permit; Standard Urban Stormwater Management Plan (SUSMP), Low Impact Development, and Hydromodification. The training included stormwater requirements from the inception of a construction project, through its active construction phase(s), and then into its post-development and final phase. Much of this discussion was set in the larger context of the municipal stormwater permit. Questions were raised throughout the presentation, which provided a good dialogue between staff and the environmental professionals who were retained to conduct the workshop.

- On June 27 and 28, 2011, Pretreatment staff watched a municipal training video that provides an overview of basic stormwater concepts, as well as detailed procedures for implementing basic best management practices.

- The City provides a thorough, bi-annual workshop on municipal stormwater concepts, requirements, and BMPs. The last workshop was provided on April 19, 2011, for maintenance and collections staff. The training provided an overview of stormwater regulations, municipal requirements, watershed concepts and drainages, pollutant sources, and BMPs such as inlet protection, perimeter controls, storage practices, and spill preparedness. The presentation also addressed the legal consequences for noncompliance and included opportunities for questions and answers. Another workshop will be provided in the spring of 2013.

In addition to staff education, the City conducted numerous programs to educate and involve the public (residents, business owners, developers, and school children), such as the following:

- A focused education and outreach campaign to Escondido's underserved population.

- A comprehensive stormwater website that features an interactive BMP education site for residents and businesses.

- Televised City Council meetings, community service announcements and videos related to urban runoff.

- Numerous special events that provided a venue for stormwater education and public outreach efforts.

- Public outreach events focused on water conservation, urban runoff and the importance of reusable bags in the reduction of waste.

- Composting demonstration workshops, which are hosted by the City of Escondido and the Escondido Community Garden group.

- Education programs for school children that include presentations focused on water conservation and water quality protection, a poster contest, City-sponsored mobile lab, summer camp programs in partnership with the Humane Society, and participation in career fairs.

- Installation of pet waste stations in various neighborhoods and distribution of pet waste dispensers to individuals adopting dogs from the Escondido Humane Society.
- Hotlines for the community to report stormwater violations and obtain information on water conservation and recycling opportunities.
- Operation of a Permanent Household Hazardous Waste Collection facility.
- Litter removal events.
- Distribution of stormwater materials and BMP handouts to industrial and commercial facilities and construction site owners and developers.

The City's outreach and education program is modified on an ongoing basis such that it continues to educate the public on evolving stormwater quality concepts and particular pollutants of concern associated with various jurisdictions and/or watersheds.

Public Participation Component

Public participation is an integral part of the City's successful stormwater planning. The public is provided with numerous opportunities to participate in the City's urban runoff management program. During the 2011–2012 reporting period, the City continued to provide opportunities to participate that included efforts summarized above in the Education Component, as well as the following:

- Participation in the San Dieguito Watershed group, a consortium of nongovernmental organizations and governmental agencies that are collaborating to preserve and improve the environmental integrity of the San Dieguito Watershed.
- Participation in the Escondido Creek Watershed Cooperative Agreement (ECWA), a collaboration of jurisdictions and nongovernmental organizations that seeks to preserve and create a healthy environment to provide a foundation for the overall quality of life in the watershed.
- Participation in the Escondido Revealing the Creek organization, which is a group of residents, nongovernmental organizations, and local government representatives who seek to create a new vision of the creek as a functional and aesthetically pleasing recreation and transit corridor that is a social, environmental, and economic resource to the community.

In addition, the City holds numerous public outreach events throughout the year. Participation in these programs continues to grow and is a key component to keeping the public educated on stormwater pollution prevention.

Effectiveness Assessment

The JURMP effectiveness assessment analyzes the data collected to date and evaluates the progression toward achieving receiving water quality improvements. For the City, these improvements are gauged by dry-weather data collected as part of the JURMP, but are also related to available wet-weather information provided from regional monitoring efforts.

Load Reductions

From the 10 years of data collected, it is clear that urban runoff pollutant load reductions have been achieved in Escondido (see Figures 11-5 through 11-8 in the Effectiveness Assessment Component). Although these loads are difficult to accurately quantify due to the instantaneous nature of grab-sampling under the IDDE component, it is clear that water quality has improved in the City, which is attributed to structural and non-structural BMPs that continue to be implemented as part of the JURMP.

In terms of pollution prevention, the City has intercepted more than 3 million cubic yards of sediment around the City, translating to a capacity of approximately 159,653 dump trucks of sediment, or more than 8 feet of sediment over an entire football field.

Other pollutant load reductions are evident from the results of various education and public participation efforts of the past decade. These collective efforts have reduced City-dispersed trash, removed litter from local creeks, increased recycling of potentially toxic electronic materials, and diverted tons of household hazardous waste from landfills and potential watershed exposure. Since 2002, more than 35 tons of creek litter and Citywide trash has been diverted from reaching receiving waters (e.g., San Elijo Lagoon).

The San Diego County-sponsored wet-weather water quality monitoring program is the region's sole evaluation tool for assessing pollutant load reductions because it is the only composite stormwater runoff sampling campaign sponsored under the NPDES municipal stormwater program. The benefits of the JURMP and this regional counterpart can be summarized by the low pollutant concentrations found within the City's jurisdiction (as described and quantified in this Annual Report), coupled with the results of the 2005–2011 Carlsbad Watershed long-term assessment (Weston et al. 2011). This regional study found that wet-weather receiving water data from mass loading stations at the lower reaches of Escondido Creek (i.e., close to the Pacific coast) and at temporary watershed assessment stations in the Escondido Creek Hydrologic Area contained the following:

- High-priority constituents — turbidity, bifenthrin, and fecal coliforms
- Medium-priority constituents — total suspended solids (TSS) and diazinon
- Low-priority constituents — toxicity and nutrients

The priority constituents found in the Escondido Creek Hydrologic Area during the regional dry-weather receiving water quality monitoring program were as follows:

- High-priority constituents — total dissolved solids (TDS) and total nitrogen, enterococci, total nitrogen, and benthic algae
- Medium-priority constituents — total phosphorus, fecal coliforms, and chemical oxygen demand
- Low-priority constituents — metals, organics, and pesticides

Relative to these observations and conclusions from regional long-term data collection, Escondido's JURMP is not contributing to the exacerbation of high- or medium-priority pollutants. Moreover, the results of its implementation have significantly improved watershed pollution prevention. Although some nutrient sources have been identified and eliminated or significantly reduced through BMP implementation over the past 10 years, nutrient concentrations above action levels are related to wildlife found in semi-rural Escondido. The levels found do not indicate problematic sources but, rather, a characterization of background ambient water quality.

Changes in Discharge Quality

To date, the results of Escondido's urban runoff management program indicate improvements in dry-weather discharge water quality and that pollutants measured are generally low, with concentrations mostly below action levels. This indicates that the City's Clean Water Program (monitoring, public education, outreach, and enforcement) has been effective in achieving meaningful pollutant-load

reductions. From 10 years of data collection under the JURMP, the following observations, improvements, and recommendations can be made:

- Runoff pollutant concentration data is consistently low, with few results that are over action levels. There are no water quality problems or significant stressors that can be associated with urban runoff as measured through the JURMP components.
- Bacteria levels are notably lower than 2001 levels, and no sporadic bacteria elevations were recorded this reporting period (see Figures 11-5 and 11-6). Some anthropogenic sources of bacteria and nitrate have been documented from unincorporated lands outside and upgradient of the City's jurisdictional boundaries under this program.
    - Bacteria concentrations appear to be declining. This reporting period, no bacteria action levels were exceeded.
    - Historically high groundwater elevations and the potential for seepage throughout the City's MS4 may be influencing some of the elevated nitrate levels found within the infrastructure system (non-riparian areas). Overall, the number and occurrence of stations with elevated nitrate have ranged from four to 15 stations (about 3 percent to 13 percent of the total). Concentrations exceeding the action level have typically been between 11 milligrams per liter (mg/L) and 25 mg/L.
- Dissolved metal concentrations are overall very low, demonstrating a notable improvement from initial sampling in 2001–2002, and show no definitive correlation to an area within the jurisdiction that suggests a significant pollutant source (see Figure 11-8).

Changes in Receiving Water Quality

Since the Escondido dry-weather monitoring program began in 2000 (pre-JURMP implementation), receiving water quality data from in-stream sampling during dry weather have shown positive changes in water quality and appear to correlate with the positive behavioral changes. Citywide dry-weather monitoring data show that urban runoff quality is good throughout the City, with very few samples exceeding action levels, suggesting that the JURMP's various components are successful.

Program Assessment

In general, the success of Escondido's urban runoff management program has been largely reliant on the quality and content of the City's educational outreach and public participation programs, including the extensive outreach efforts conducted during the annual inspections of its municipal, commercial, and industrial facilities, as well as active construction sites. These programs have been successful in continually elevating the public's awareness concerning the importance of urban runoff pollution prevention and proper stormwater management. Dry-weather data suggest that these outreach efforts are providing tangible results.

Targeted outcomes have been achieved, as follows:

- To date, the realized urban runoff water quality improvements reflect a change in human behavior and reflect that the JURMP has reduced concentrations of surface water pollutants.
- Pollution prevention by municipal staff and through municipal maintenance practices and engineering designs has improved over the past 9 years at municipal facilities.
- The inspection of industrial facilities, commercial properties, and construction sites has substantially raised awareness levels and improved compliance since the JURMP began.
- Field Engineering and Maintenance staff training continues to raise compliance awareness and contributes to pollution prevention.

The City is proud of the vast dataset that has been collected from the JURMP program to date and the water quality characteristics that it portrays. The results of Escondido's urban runoff management program show that dry-weather discharge water quality has improved and that pollutants measured are generally low, with concentrations mostly below action levels.

Fiscal Analysis Component

This program year represents the third year in which the City's fiscal analysis was based on the "Standardized Fiscal Method and Format" (Fiscal Analysis Method) that was collaboratively developed by the Copermittees in January 2009 in accordance with Order R9-2007-0001. It provides Copermittees with guidance and standards to analyze and report their expenditures for each of the urban runoff management programs (jurisdictional, watershed, and regional), and provides direction to identify the funding sources that support those costs. A fee assessed through the City's wastewater fund provides fiscal support for each of these programs. During fiscal year 2011–2012, the City spent $1.55 million to develop and deliver its stormwater program and services to its residents, businesses, and watershed and regional stakeholders. These expenditures are divided among the various categories of the permit-required components, which incorporate a wide range of jurisdictional, watershed, and regional services.

The City's Wastewater Fee provides fiscal support for jurisdictional, regional, and watershed urban runoff management plan components. The fee is based on each utility customer's contribution to the City's wastewater system. Commercial and residential customers are charged a fixed fee of $16.37 and then are assessed additional fees based on customer class and volume. Of the revenue generated from the wastewater fee in 2011–2012, the stormwater program was allocated $2.1 million.

The stormwater program is supplemented by services provided by the City's General Fund departments and divisions. Although the stormwater services represent functions that would occur regardless of the stormwater-mandated functions, such as street sweeping and maintenance of the City's storm sewer infrastructure, these General Fund-supported services allocate a portion of their operational costs to the stormwater budget to address gaps in resources created by the expanded requirements of the 2007 stormwater permit (Order R9-2007-0001).

The City will continue to participate with other Copermittees in reviewing and reporting regional and local stormwater program funding and expenditures. Programs where shared costs and resources are beneficial to reduce jurisdictional expenses will be evaluated—an effort that began in fiscal year 2010–2011 because of continuing fiscal restraints resulting from the ongoing economic downturn. As a result of this evaluation, outside contracts were significantly reduced or eliminated, and several functions, such as project administration and street maintenance, were accomplished with in-house staff. City activities and staffing will continue to be analyzed for cost-effectiveness and fiscal responsibility relative to municipal stormwater permit compliance, water quality improvements, and pollution reduction. Annual modifications to the overall stormwater budget and/or City fees will be made in accordance with permit requirements, established public review processes, and minimum debt service funding levels.

Special Investigations

In March 2012, a chemical release of sodium hydroxide solution occurred at the City's Dixon Lake water treatment plant as a result of a holding tank rupture. The spill flowed into an adjacent natural land area but did not impact the lake, drinking water supply, or reach downstream receiving waters. Around-the-clock emergency measures were employed to contain and capture the spilled material in areas where it had pooled. The City, in collaboration with San Diego County HAZMAT and the California Department of Fish and Game, remediated the area through various cleanup, collection, and disposal measures. Stormwater staff and an environmental consultant conducted an environmental assessment and designed BMPs for protecting downstream receiving waters from the residual efforts of the remediation cleanup or from potential precipitation and runoff transport of pollutants.

Follow-up measures conducted to confirm that water quality protection continued throughout the cleanup process included sampling of base soil in excavated areas until pH levels returned to acceptable levels

and/or until agencies were satisfied, returning modified areas to their natural topographic state, and maintaining erosion and sediment controls until landscape was reestablished.

To prevent and/or reduce the occurrence of similar situations, the City is assessing the tank storage system, including evaluating the installation of a remotely controlled isolation valve, the modification of secondary containment measures; and the spill response measures and controls.

Non-Emergency Firefighting

The City's program to reduce pollutants from nonemergency firefighting flows includes the implementation of BMPs targeted at firefighting activities with the potential for stormwater discharge. There are now six fire stations within Escondido that employ a variety of structural and operational BMPs. This program is enforced and evaluated through the City's municipal inspection campaign.

JURMP Revisions

The City continues to evaluate program elements through this annual reporting effort. Pending this yearly evaluation perspective (and each year), the results and analysis of the dry-weather water quality monitoring and program effectiveness are used to determine whether positive changes in water quality protection are being maintained. JURMP data collected to date indicate that no revisions to the program are presently necessary particularly since JURMP requirements are anticipated to change substantially under the new municipal stormwater permit expected to be issued in 2013.

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1 INTRODUCTION

1.1 BACKGROUND

In response to widespread water pollution concerns several decades ago, the federal Clean Water Act (CWA) was established and continues today as the basic structure for regulating discharges of pollutants into "waters of the U.S." (lakes, rivers, creeks, aquifers, and oceans). In 2001, to help achieve the Act's primary objective of making waters "fishable and swimmable," the San Diego Regional Water Quality Control Board (RWQCB or Regional Board) required cities and other regional entities to develop and implement a Jurisdictional Urban Runoff Management Program (JURMP) under Order 2001-01. The purpose of the required program was to improve the water quality of urban runoff to better protect the beneficial uses of waterbodies. The City of Escondido's (City's) evolving runoff water quality program began in 2002 and included development of a JURMP as its first major step.

The requirements of Order 2001-01 focused on inventorying and prioritizing facilities and pollution sources, setting up a program to implement and enforce the plan, establishing best management practices (BMPs) to control pollutants identified, and developing an education and outreach program for various groups. In accordance with Order 2001-01, the 2002 JURMP was in effect for 6 years until Order R9-2007-0001 was issued. Under this Order, municipalities were required to update their programs based on new and more extensive requirements and annually report on the activities implemented as part of the program. In 2008, the City developed and began implementation of its updated JURMP (City of Escondido 2008) in accordance with the new Order.

1.2 PURPOSE OF THE ANNUAL REPORT

This report fulfills the annual reporting requirements as set forth in Order R9-2007-0001; summarizes the activities that were implemented between July 1, 2011, and June 30, 2012, as part of the JURMP; and provides information related to those activities.

1.3 JURISDICTIONAL OVERVIEW

To better understand the program components described within this report, the following sections provide an overview of Escondido, including location, land uses, and watersheds. Additional specific information can be found in the approved 2008 Escondido JURMP.

1.3.1 Location and Land Uses

With a population of just under 144,000, Escondido is located in northern San Diego County, approximately 13 miles east of the Pacific Ocean (Figure 1-1). Land within the city generally ranges in elevation between 800 and 1,000 feet above mean sea level (MSL); however, Burnt Mountain (Daley Ranch) is over 2,100 feet above MSL. The area within city limits is 23,687 acres, much of which is residential. More than 60 percent of Escondido is either residential land use or dedicated space for parks and recreation. Only 9 percent of the jurisdiction remains undeveloped. Current major land uses within Escondido are graphically presented in Figure 1-2 and are summarized in Table 1-1.

Table 1-1. Land Use Percentage in Escondido

Land Use Designation	Percentage of Total
Residential	35
Parks and Recreation	28
Public Facilities and Utilities	16
Undeveloped	9
Commercial and Office	4
Industrial	3
Agriculture	4
Total	**100**

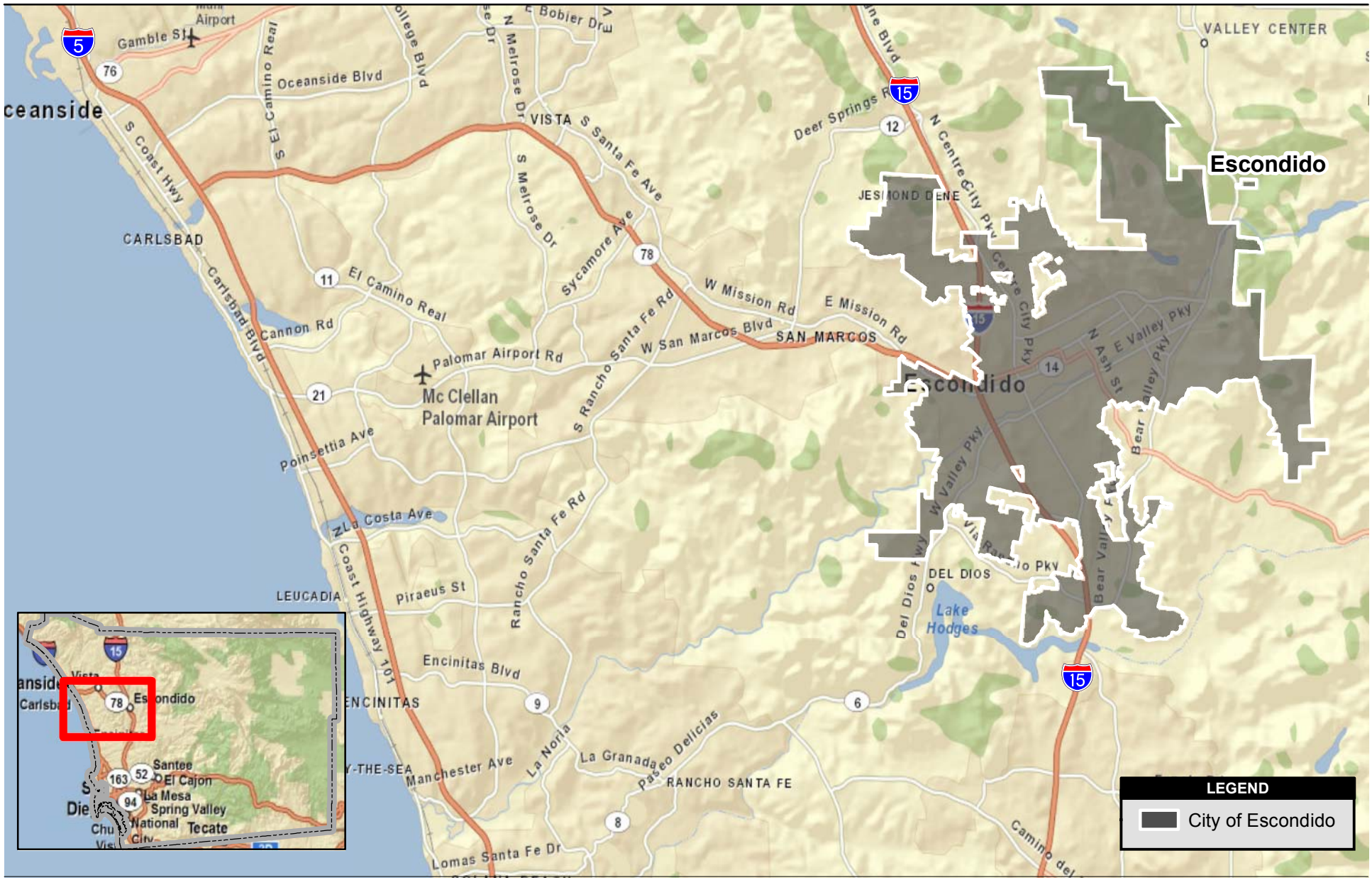

Source: ESRI 2011; SANGIS 2008; City of Escondido 2009

2.5 1.25 0 2.5 Miles

Scale: 1 = 158,400; 1 inch = 2.5 miles

Figure 1-1
City of Escondido Location Map

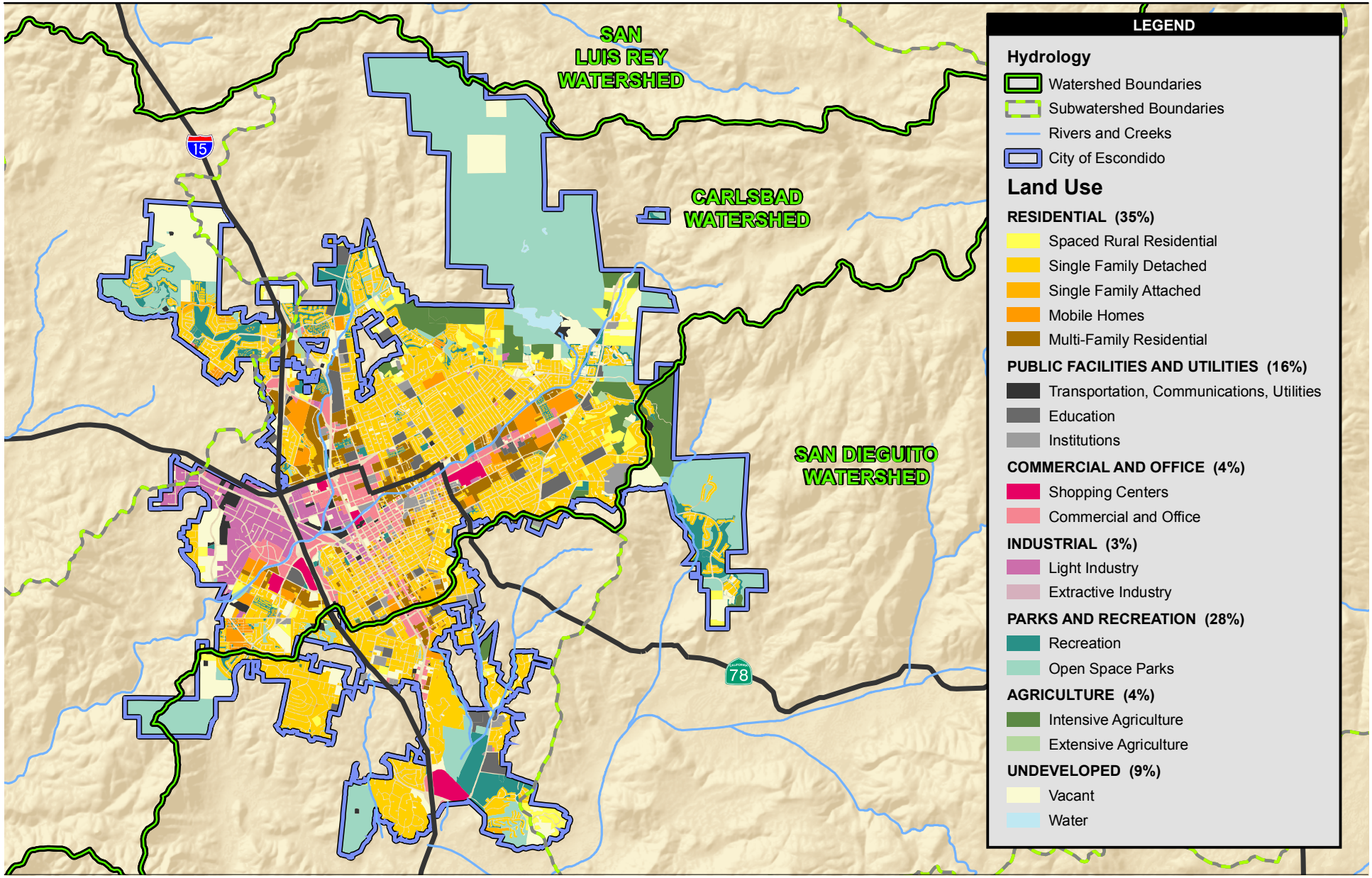

Source: USGS 2000; SANDAG 2010; California Interagency Watershed Mapping Committee 2004; City of Escondido 2009

1.8 0.9 0 1.8 Miles

Scale: 1 = 114,000; 1 inch = 1.8 miles

Figure 1-2
Land Use Designations

1.3.2 Watersheds

Escondido falls primarily within two major watersheds: Carlsbad and San Dieguito, as illustrated in Figure 1-3. A very small undisturbed area at the northern end of the city's jurisdictional boundary crosses into the San Luis Rey Watershed. The following sections briefly describe the watershed characteristics specific to Escondido.

Carlsbad Watershed

Approximately 75 percent of Escondido is located within the Carlsbad Watershed. The majority of the city's northern jurisdiction drains to Escondido Creek within the Escondido Creek drainage area. Reidy Creek, located mostly within the city, is a main tributary to Escondido Creek. A very small portion of the city drains into the San Marcos Creek Subwatershed. The Carlsbad Watershed drains to several coastal lagoons, including San Elijo Lagoon. Escondido Creek is tributary to San Elijo Lagoon. San Elijo Lagoon is listed as being impaired for eutrophic conditions, indicator bacteria, and sedimentation and/or siltation. Escondido Creek leaves the city's boundaries approximately 14 miles upstream of San Elijo Lagoon.

According to the 2010 CWA §303(d) List of Water Quality Limited Segments (SWRCB 2010), the following Carlsbad Watershed surface waters within the jurisdiction are impaired for the following water quality constituents:

- Escondido Creek: DDT, enterococcus, fecal coliform, manganese, phosphate, selenium, sulfates, total dissolved solids (TDS), total nitrogen as N, toxicity
- San Marcos Creek: DDE, phosphorus, sediment toxicity, selenium

San Dieguito Watershed

The southern part of Escondido is located within the San Dieguito Watershed. The major receiving water within the San Dieguito Watershed is the San Dieguito River. For the most part, the San Dieguito River is an ephemeral stream that flows into Lake Hodges during extreme wet weather. Additionally, except during extreme wet weather events, the water contained behind Lake Hodges Dam is rarely released and allowed to proceed westerly to San Dieguito Lagoon. The majority of the city's area within this watershed drains to Felicita and Kit Carson creeks and ultimately Lake Hodges. Within the San Dieguito Watershed, the following CWA §303(d)-listed waterbodies are located in Escondido and are currently listed as being impaired for the following constituents:

- Felicita Creek: aluminum, TDS
- Lake Hodges: color, manganese, mercury, nitrogen, pH, phosphorus, turbidity
- Kit Carson Creek: pentachlorophenol, TDS

San Luis Rey Watershed

Only about 50 acres (0.2 percent) of Escondido is located within the San Luis Rey Watershed. This area is composed of a portion of Daley Ranch, a 3,058-acre open-space reserve owned by the City that will remain undeveloped in perpetuity. This area makes up only about 0.014 percent of the entire San Luis Rey Watershed and is far removed from any tributary that would convey runoff into the San Luis Rey River. Because of this extremely low runoff contribution to the San Luis Rey Watershed, the City is not included as a member agency in the management of this watershed. Therefore, for the purposes of assessing and controlling potential pollutants in runoff within watershed areas, the City focuses on the Carlsbad and San Dieguito River watersheds, which make up the majority of the City's jurisdictional area.

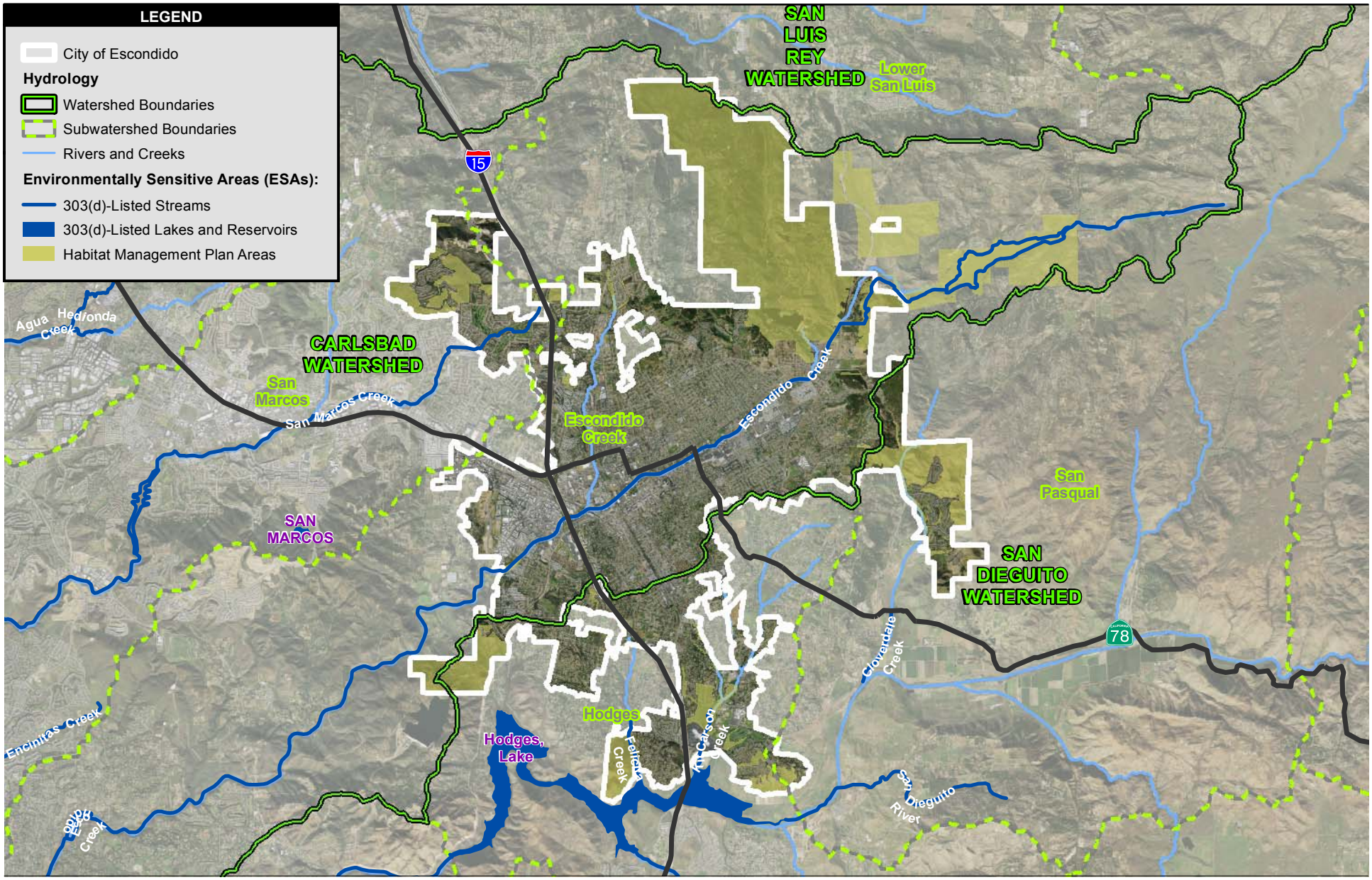

Source: DigitalGlobe 2008; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004; City of Escondido 2009

2 1 0 2 Miles

Scale: 1 = 126,720; 1 inch = 2 miles

Figure 1-3
Hydrology

1.4 DESIGNATION OF ENVIRONMENTALLY SENSITIVE AREAS

In compliance with Order R9-2007-0001, environmentally sensitive areas (ESAs) have been designated by the City and include CWA 303d-listed impaired waterbodies and areas associated with and protected by the City's Habitat Management Plan.

2 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

This chapter provides a perspective of the water quality and watershed protection principles the City is implementing for proposed development projects, specifically focusing on:

- procedures that the City employs for authorizing the implementation of development projects,
- BMP requirements that responsible parties must employ for development projects to protect water quality and provide environmental enhancement and/or protection for the community, and
- efforts conducted by the City to ensure that the program is being implemented to the maximum extent practicable (MEP).

2.2 LAND USE PLANNING

As Escondido and the surrounding region continue to grow, and as available open space for new development diminishes, redevelopment is receiving more attention. Land development and urban redevelopment projects in Escondido now require the integration of stormwater protection and, in some cases, treatment measures to protect and improve water quality. Through implementation of its Standard Urban Stormwater Mitigation Plan (SUSMP)/ Hydromodification Management Plan (HMP) and other local regulations and plans, the City strives to implement significant and sustainable outcomes that minimize urban runoff and its pollution potential.

2.2.1 Background

The City's development design standards and building permit issuance requirements are structured to inform the general public about established and emerging practices for properly managing site runoff in environmentally sensitive and economical ways. Traditional practices in the industry have often featured larger runoff detention-type systems that are usually associated with large footprints, which are becoming more difficult and expensive to implement as available space becomes scarcer. Consistent with Order R9-2007-0001 and the San Diego region's local SUSMPs, the City and other Copermittees are promoting consistent, more economical, and small-scale (i.e., project- or parcel-specific as opposed to regional- or community-level) stormwater treatment and runoff volume control opportunities that are based on low impact development (LID) concepts and practices.

2.2.2 Source Characterization

From a planning viewpoint, source characterization is conducted at the design stage, when project proponents or planners evaluate site conditions and approaches to developing the landscape into the desired end product. The City's SUSMP provides contractors, designers, planners, and the general public with the appropriate guidance for evaluating site conditions and project elements, and establishes a consistent and regulated approach to prescribing appropriate BMPs for controlling pollutant discharges from priority development projects (as defined by SUSMP requirements). City planning and engineering staff meet with project proponents in one or more preapplication meetings to identify priority projects and discuss SUSMP requirements applicable to the specific project site.

A variety of pollutants can be attributed to runoff from proposed projects. In approving development projects through the SUSMP process, target pollutants are identified, their potential sources are evaluated, and appropriate BMPs are designated to manage urban runoff quality.

2.2.3 Best Management Practice Requirements

In accordance with Order R9-2007-0001, the review of planning and development projects involves collectively considering a number of traditional water quality/watershed protection practices, as well as emerging sustainable planning approaches that incorporate a variety of LID concepts. Low-impact options are considered for general land use planning designs based on project-specific parameters and constraints.

The City has established guidelines and requirements for evaluating and approving development projects to ensure that pollutants and runoff from proposed projects are reduced to the MEP to avoid causing or contributing to an exceedance of receiving water quality objectives and to avoid hydromodification impacts. The evaluation and incorporation of BMPs into development projects are governed by the City's SUSMP/HMP and the 2008 JURMP, which provide information and guidance associated with development project BMP options, including LID and hydromodification management guidance. Specific LID and hydromodification management site designs that must be implemented by priority development projects are discussed in Section 2.4.3 below.

2.2.4 Program Implementation

The discussion below outlines the steps and methods the City employs to protect water quality and instill watershed protection principles through land use planning.

Environmental Policies

With the adoption of Order R9-2007-0001, municipal policies and ordinances were reviewed and revised. The City incorporated amendments to the General Plan, the Zone Code, and the Storm Water Ordinance. The sections below provide a summary of resolutions and updates, including BMP requirements and other measures that are now being implemented and enforced.

General Plan Amendment

In accordance with the direction of Order R9-2007-0001, the General Plan was reviewed and amended in 2008 to maintain consistency with pertinent state and federal water quality and watershed protection regulations. These amendments included the following:

- Land Use/Circulation Policy D2.4 (i.e., street design that accounts for anticipated runoff issues);
- Community Facilities and Services Drainage Policy G3.8 (i.e., the maintenance of flood control channels and storm drains consistent with state and federal permits, such as permits issued by the California Department of Fish and Game [DFG] and the U.S. Army Corps of Engineers [USACE]);
- Storm Water Permit and Drainage Policy G3.9 (i.e., permanent mitigation or buffering measures between drainage-way corridors, and adjacent and surrounding land uses that protect watershed and water quality principles and practices, such as preserving the integrity of natural land uses);
- Community Protection and Safety Soils Policy D1.4 (i.e., grading practices that restore or preserve natural patterns of surface water runoff so that any diversions will not create or accelerate various types of erosion); and
- Flood Policy D2.4 (i.e., the maintenance of flood control channels and storm drains that are consistent with state and federal permits, such as those issued by DFG and USACE).

In May 2012, the City adopted a new General Plan that includes the amendments above and additional stormwater policies to protect natural resources and water quality. These newly adopted stormwater policies are as follows:

- Storm Drainage Policies 14.1 through 14.13, Goal 4 – Provision of adequate and sustainable infra-structure that is environmentally sensitive to serve residents, businesses, and property.
    - For example, Policy 14.6 – Require new development to minimize alterations to natural landforms and amount of impervious surfaces to minimize erosion, while encouraging implementation of low impact development measures and the maximum use of natural drainage ways, consistent with sound engineering and best management practices.
    - Policy 14.7 – Require new development and redevelopment to minimize stormwater runoff and contaminants entering drainage facilities by incorporating low impact

development measures and other on-site design features such as bio-swales, retention ponds, and cisterns for storage and infiltration treatment of flows, and appropriate best management practices consistent with the National Pollution Discharge Elimination System.

- Flood Policies 6.4 and 6.5, Goal 6 – A safe community that is protected from potential flood hazards.
    - For example, Policy 6.4 – Maintain flood control channels, storm drains, and detention basins through periodic dredging, repair, desilting, and clearing, subject to approval from appropriate state and federal agencies to ensure they are operating efficiently.
- Water Resources and Quality Policies 6.1 through 6.16, Goal 6 – Preservation and protection of the City's surface water and groundwater quality and resources.
    - For example, Policy 6.14 – Require new development to protect the quality of water resources and natural drainage systems through site design and use of source controls, stormwater treatment, runoff reduction measures, best management practices, and low impact development measures.

Zone Code Amendment, Article 55 Grading and Erosion Control

The amendments to Zone Code §33-1062 (Best Management Practice Implementation) respond to the construction requirements of Order R9-2007-0001, which address phased grading, natural land use preservation, erosion and sediment controls, and advanced treatment for sediment. These BMPs specifically require the following:

- minimizing site clearing and grading to the portion of the site that is necessary for construction;
- minimizing exposure time during the wet season and maximizing grading during the dry season to the extent feasible; and
- developing sediment control specifications for advanced treatment, such as flocculation or chemical treatment at construction sites determined to be a high threat to water quality (e.g., soil erosion potential, slope steepness, proximity to ESAs).

Since the initial effort to update ordinances and policy documents to comply with the 2007 Stormwater Permit, no new resolutions or updates have been made to the Zone Code Amendment.

Storm Water Ordinance— Escondido Municipal Code Chapter 22, Article 2

Revisions to the Storm Water Ordinance language were incorporated for better consistency with Order R9-2007-0001, in particular the language referenced in the Prohibited Discharges and Discharge Exemptions sections. Other changes include the addition of enforcement measures, such as administrative fines, which are consistent with the schedule employed by the City's Code Enforcement Division, and stop-work notices, which are used by City inspectors to require developers to install appropriate BMPs prior to resuming construction activities.

Throughout the program year, the City continued to operate in accordance with all municipal policies and regulations designed to protect water quality. These environmental measures are enforced but are also periodically reviewed and updated as the regulatory compliance setting changes. No updates to the City's Municipal Code relating to stormwater occurred during this reporting period. Updates to the City's municipal codes relating to stormwater are anticipated subsequent to the State Water Resources Control Board's issuance of the next Municipal Storm Water Permit, expected in spring 2013.

Standard Urban Stormwater Mitigation Plan

The City continues to implement the current SUSMP that was adopted in March 2010. The SUSMP encourages the following:

- adopting smart growth principles that involve an integrated perspective, comprehensive analysis, and incorporation of sustainable elements;
- retrofitting or otherwise modernizing aged municipal separate storm sewer system (MS4) infrastructure with similar structures that offer improved water quality protection and pollutant capture abilities (e.g., older urban centers where surface and subsurface improvements are needed and there is little opportunity for vegetated treatments); and
- integrating designs for new projects that incorporate environmentally balanced development approaches relative to regional conditions.

Hydromodification Management Plan

In 2011, the City updated its SUSMP to include hydromodification management regulations required by Order R9-2007-0001. The City's current HMP is based on the model HMP developed in coordination with all 21 permit Copermittees.

The HMP was approved by Escondido's City Council in January 2011 and HMP requirements became effective on January 14, 2011. Consistent with the requirements set forth in the plan, priority development projects are required to implement hydromodification mitigation measures so that post-project runoff flow rates and durations do not exceed pre-project flow rates and durations where such increases would result in an increased potential for erosion or significant impacts to beneficial uses. Overall, hydromodification mitigation involves any one and/or several of the following outcomes, practices, or measures:

- demonstration of no post-project increase in impervious area and resultant peak flow rates as compared to pre-project conditions for a certain percentage (10, 30, or 50 percent) of the 2-year storm (determined through a channel erosion susceptibility analysis on a project-by-project basis) up to the 10-year storm;
- installation of LID BMPs;
- mitigation of flow and durations through the implementation of extended detention flow duration control basins;
- preparation of continuous simulation hydrologic models; and/or
- implementation of in-stream rehabilitation controls to demonstrate the projected increases in runoff would not accelerate erosion to the rehabilitated receiving stream.

Application Process

All proposed development projects must complete the City's application and project review process, which includes the requirements identified below:

- The project proponent is required to complete the application package, including the SUSMP applicability form and the California Environmental Quality Act (CEQA) Initial Study form. All priority development projects are required to prepare a Water Quality Technical Report (WQTR).
- The project proponent must meet with planning and engineering staff in one or more pre-application meetings to review project details; assess water resource impacts; including potential impacts to water quality and drainage patterns; and discuss SUSMP and hydromodification requirements as applicable.
- For all priority development projects, an HMP analysis must be provided with the WQTR.
- City staff evaluate the project for any mitigation measures required by CEQA and confirm that the project design meets SUSMP requirements. Once the WQTR is finalized, for a priority development project, the project site plan is updated to reflect the site design and treatment

control measures. A final site plan that is in full compliance with the City's adopted SUSMP is processed with recommendation for approval.

Construction/Grading Approval

The City takes the following steps before approving and issuing local construction and grading permits:

- requires individual proposed construction sites to implement designated BMPs and other measures to reduce the discharge of pollutants to the MEP such that discharges from properly maintained BMPs will not cause or contribute to a violation of water quality standards;
- requires and reviews the project proponent's stormwater management plan to verify compliance with the Grading Ordinance, the Storm Water Ordinance, and Order R9-2007-0001; and
- verifies that project proponents subject to the state's General National Pollution Discharge Elimination System (NPDES) Permit for Storm Water Discharges Associated with Construction Activities (Order 2009-0009-DWQ) have obtained coverage under that permit.

Municipal Staff Education and Training

The City conducts education efforts designed to inform and train municipal employees on an ongoing basis to increase their knowledge and awareness of urban runoff impacts such that planning and development decision-making achieves measurable improvements in water quality and watershed protection. Moreover, the municipal education program educates City departments and personnel (including planning boards and elected officials) on advances in land use planning and environmental development concepts, which are then conveyed to construction site owners and developers. Municipal training generally focuses on establishing and maintaining an understanding of the following:

- existing and evolving federal, state, and local water quality laws and regulations applicable to development projects;
- connection between land use decisions and short- and long-term water quality impacts; and
- implementation of various source controls and both nonstructural and structural BMPs to minimize impacts to receiving water quality resulting from development (i.e., the SUSMP process).

The City's internal development and redevelopment education program is delivered through formal and informal means, including in-house staff training/workshops, JURMP reports provided to the Planning Commission and the City Council, and regular stormwater staff meetings that are attended by personnel from a broad range of departments and divisions.

On May 30, 2012, a workshop was provided to the Utilities, Planning, and Engineering staff regarding HMP requirements and implementation, and the MS4 permit. The presentation was developed and provided by the City's environmental contractor, AECOM, and included a discussion of the following:

- the regulatory background that supports HMP requirements,
- the HMP review process and submittal requirements,
- exemptions to HMP requirements,
- the HMP decision matrix,
- HMP design standards,
- modeling versus the BMP Sizing Calculator,
- designing for LID and HMP goals—Integrated Management Practices (IMPs),

- construction inspection requirements, and
- program reporting requirements.

The 3-hour workshop allowed for staff questions and discussion.

Engineering staff members regularly attend the Land Development Workgroup established by the San Diego Copermittees group, which focuses on implementation of the SUSMP and HMP components of the jurisdictional program.

As unique project situations related to stormwater arise, project planners or engineers update other staff members at the weekly Staff Development Committee meetings and/or division staff meetings.

Project Applicant Education and Outreach

The City's SUSMP is designed to educate project applicants, developers, contractors, and property owners on the following:

- complying with federal, state, and local water quality laws and regulations applicable to development projects; and
- reducing water quality impacts on receiving waters from development and urbanization.

The City's public website provides information about stormwater regulations and design for applicants and interested parties. Project and application information related to stormwater issues is provided on the Engineering and Planning Departments' web pages, as well as on a dedicated Stormwater Regulations page. Links to various documents, including the City's JURMP; hydromodification criteria; stormwater ordinance; Stormwater Permit; and the grading, erosion control, and zoning ordinances, are included. Planning and engineering staff encourage applicants to schedule preapplication meetings at which City staff acquaint the project proponent with stormwater regulations and discuss project-specific requirements.

2.3 ENVIRONMENTAL REVIEW PROCESS

In addition to the analysis and permitting clearance required to satisfy CEQA (if applicable), the City's environmental assessment of potential impacts to water quality and the proposed mitigation measures is controlled through the SUSMP process. The City's SUSMP/HMP was updated to assist the land development community in streamlining project reviews and maximizing cost-effective environmental benefits.

Implementation of the SUSMP/HMP process serves to accurately evaluate water quality and hydromodification impacts of priority development projects, and identify appropriate measures to avoid, minimize, and mitigate those impacts. The Engineering, Utilities, and Planning Departments are responsible for reviewing projects for compliance with all applicable environmental regulations, including stormwater requirements.

City planning staff members coordinate environmental review for development projects using a team approach with staff from Engineering, Utilities, and other departments. Development applications include the CEQA Environmental Information form, SUSMP Applicability form, and the three-part Storm Water Urban Runoff Management Program form, which are all required to be filled out by the applicant before an application package is deemed complete by City staff. City staff members evaluate the proposed development for conformance with General Plan policies, SUSMP requirements, and City Code standards, and determine the potential for significant environmental impacts to water quality, drainage patterns, flood hazards, and runoff. Any potentially significant environmental impact must be addressed by revising the project to reduce or eliminate the impact, or by including a mitigation measure that reduces the impact to a less-than-significant level. All mitigation measures are incorporated into project conditions.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 Background

The City's local SUSMP provides guidance for complying with postconstruction stormwater requirements for new private and public priority development projects in the jurisdiction. The SUSMP guides the project applicant through the project prioritization evaluation and the subsequent selection, design, and incorporation of stormwater BMPs into the project's design plan by providing the following:

- a description of the regulatory requirements, concepts, and criteria associated with stormwater pollution control;
- hydromodification mitigation measures so that post-project runoff does not exceed pre-project flow rates;
- guidance for selecting appropriate source control and water quality treatment control measures;
- an LID design procedure for integrating site planning and design measures with engineered, small-scale BMPs, such as bioretention;
- guidance for demonstrating compliance with the hydromodification management criteria in the Stormwater Permit;
- guidance for preparing detailed maintenance plans for each proposed stormwater treatment facility; and
- step-by-step instructions for preparing a SUSMP project submittal for review by City staff.

All priority development projects are subject to LID and water quality treatment requirements, even if hydromodification flow controls are not required.

2.4.2 Source Characterization

As part of the authorization process for obtaining grading or building permits from the City, projects are assessed for incorporation of any project mitigation measures and/or conditions of approval, appropriate design, source control, and applicable stormwater runoff treatment controls. Prior to this jurisdictional review, project proponents are responsible for assessing proposed projects for SUSMP applicability and (if a priority project) applying appropriate permanent source controls, site designs, and treatment controls relative to site-specific conditions and proposed elements. As a result, the City's SUSMP process serves to identify and incorporate proper stormwater management planning and water quality principles into regulated projects located in the City's watersheds. In general, the City requires a consistent set of BMPs to be applied to projects for reducing the following potential pollutants:

- sediments
- nutrients
- heavy metals
- organic compounds
- trash and debris
- oxygen-demanding substances
- oil and grease
- bacteria and viruses
- pesticides

2.4.3 Best Management Practice Requirements

For priority projects, the City's SUSMP was developed to reduce pollutants of concern to the MEP to protect receiving water quality (with specific attention to impaired waterbodies defined under CWA §303[d]). The SUSMP process involves a review of the project's land use type and associated pollutants, as well as pollutants that would be expected to be present on-site relative to the proposed site activities.

Pollutants of concern are addressed through the incorporation of the following BMP categories. The SUSMP/HMP evaluation process identifies which combination of these BMP categories is necessary for controlling and minimizing anticipated pollutants due to site runoff. The BMP categories are as follows:

- LID BMPs,
- source control BMPs,
- treatment control BMPs, and
- hydromodification flow control BMPs.

BMP design objectives and requirements for these categories are described below.

LID BMP Requirements

Through the SUSMP evaluation and compliance process, applicable priority development projects are required to implement LID BMPs that will collectively minimize directly connected impervious areas and promote on-site biofiltration. LID BMP design guidance, which is provided in the SUSMP, includes two general considerations:

- Projects with landscaped or other pervious areas: (1) Drain a portion of impervious areas (rooftops, parking lots, sidewalks, walkways, patios, etc.) into properly designed and constructed pervious areas to effectively receive and infiltrate or treat runoff prior to discharge to the MS4. The amount of runoff from impervious areas that is drained to pervious areas shall correspond to the total capacity of the project's pervious areas to infiltrate or treat runoff, taking into consideration the pervious area's soil conditions, slope, and other pertinent factors, and (2) properly design and construct the pervious areas to effectively receive and infiltrate or treat runoff from impervious areas, taking into consideration the pervious area's soil conditions, slope, and other pertinent factors.
- Projects with low traffic areas and appropriate soil conditions: Construct a portion of walkways, trails, overflow parking lots, alleys, or other low-traffic areas with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials.

As determined by City engineering and planning staff, the following LID BMPs are implemented for priority development projects, where applicable and feasible:

- conserve natural areas, including existing trees, other vegetation, and soils;
- construct streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised;
- minimize the impervious footprint of the project;
- minimize soil compaction; and
- minimize disturbances to natural drainages (e.g., natural swales, topographic depressions).

Source Control BMP Requirements

City engineering and planning staff review project plans to ensure that the following source control BMPs are implemented for priority development projects, where applicable and feasible:

- minimize stormwater pollutants of concern in urban runoff,
- include stenciling or signage for the storm drain system,
- include properly designed trash storage areas and outdoor material storage areas,

- incorporate efficient irrigation systems, and
- address water quality requirements applicable to individual priority project categories.

Treatment Control BMP Requirements

The City requires each priority development project to implement treatment control BMPs that accomplish the objectives outlined below.

- Mitigate (infiltrate, filter, or treat) the required volume or flow of runoff from developed portions of the project, including landscaped areas.
- Infiltrate, filter, or treat the required runoff volume or flow prior to its discharge to any "waters of the U.S." Multiple priority development projects may use shared treatment control BMPs as long as construction of any shared treatment control BMP is completed prior to the use or occupation of any portion of the project within the treatment control drainage area.
- Comply with the following numeric sizing criteria (single-priority development projects only):
    - Volume-based treatment control BMPs shall be designed to mitigate (infiltrate, filter, or treat) the volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map; or
    - Flow-based treatment control BMPs shall be designed to mitigate (infiltrate, filter, or treat) either (a) the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event or (b) the maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity (for each hour of a storm event), as determined from the local historical rainfall record, multiplied by a factor of 2.

All treatment control BMPs for priority development projects must accomplish the objectives identified below:

- Be ranked with a high or medium pollutant removal efficiency for the project's most significant pollutants of concern (per the City's SUSMP). The City Engineer must approve the proposed use of any treatment control BMPs with a low removal efficiency ranking. Low-efficiency treatment control BMPs may be approved only once a feasibility analysis has been conducted that concludes high or medium removal efficiency BMPs are infeasible.
- Be correctly sized and designed to remove pollutants to the MEP.
- Target removal of pollutants of concern from urban runoff.
- Be implemented close to pollutant sources (where shared BMPs are not proposed) and prior to discharging into "waters of the U.S."
- Not be constructed within a receiving water.
- Include proof of an ongoing long-term BMP maintenance agreement.

Hydromodification Flow Control Requirements

Through the SUSMP evaluation and compliance process, all priority development projects are required to implement hydrologic control measures so that post-project runoff flow rates and durations do not exceed pre-project flow rates and durations where they would result in an increased potential for erosion or significant impacts to beneficial uses. City engineering staff review all project plans to determine if they are subject to SUSMP requirements, including those that pertain to hydromodification.

Selection of the appropriate flow control treatment device(s) depends on the susceptibility of the receiving channel, geologic conditions, and impacts of the proposed development and water quality sensitivity of the receiving streams. City engineering staff ensure compliance with hydromodification flow control

requirements by adhering to design criteria and specifications that have been provided in the SUSMP for a variety of LID-based flow control methods, including the following:

- bioretention basins,
- flow-through planter boxes,
- dry wells,
- bioretention in series with an underground vault, and/or
- self-retaining areas.

In addition, City engineering staff evaluate if sizing factors have been appropriately developed through the use of continuous hydrologic modeling, the results of which are incorporated into the HMP Sizing Calculator.

2.4.4 Program Implementation

The sections below describe the results of the development planning process employed by the City for development projects submitted within the reporting period.

Urban Runoff Project Approval

The City's SUSMP process was used to guide priority development project proponents through the project approval process. Municipal staff responsibilities for this process are identified in Table 2-1.

Table 2-1. Summary of Municipal Responsibilities for Priority Project Review and Approval

Title	Responsibility
Staff Planner and/or Engineering Desk Clerk	Completes checklist review for completeness of submittal package
Staff Planner	Reviews environmental information and determines mitigation measures, if any
Staff Planner & Engineer	Reviews LID design and BMP incorporation (i.e., SUSMP compliance) and determines project conditions, incorporating any mitigation measures
Approval Body	Conducts final review and approval of conditions and mitigation measures

Proposed development projects were assessed for pollutant potential and appropriate selection of BMPs prior to project approval and issuance of local permits. As a result of this analysis, LID, source control, and treatment control BMPs and flow control measures, where appropriate, were reviewed or recommended on the basis of the project site's location (including sensitive receiving waters) and preliminary project design. These measures were incorporated into the project plans prior to submittal, along with a WQTR that analyzed the project's anticipated pollutants of concern in downstream receiving waters, and analyzed conditions of concern prior to City approval. Project applicants were also required to submit proof of an ongoing long-term maintenance agreement for all post-construction BMPs, where applicable. Data associated with priority development projects were tracked and managed in the City's development planning database to ensure that the project approval process was complete and that project designs complied with BMP requirements.

During the reporting period, all of the proposed development project applications submitted to the Planning Division were reviewed for SUSMP/HMP applicability and compliance. No projects have received compliance waivers to date.

A list of the development projects that were approved during the reporting period and that are subject to SUSMP requirements is provided in Table 2-2; a description of one project that underwent SUSMP/HMP review is provided below. None of the priority development projects implemented treatment control BMPs with low removal efficiency rankings during the reporting period.

Table 2-2. Development Projects Subject to SUSMP Requirements, Fiscal Year 2011–2012

Project ID	Project Type	Location	Watershed	Project Owner	Disturbed Area (Acres)	HMP Exempt (Yes or No)	Exemption Description	Hydromod Mitigation Measures Implemented
PRI-11-198	Commercial	761 N Broadway	Carlsbad	ARCO Fuel	0.55	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A
PRI-11-199	Commercial	1999 Citracado Parkway	Carlsbad	Liquid Stone Holdings LLC	4	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A
PRI-11-200	Commercial	543 W 2nd Avenue	Carlsbad	Antonio & Alicia Rubalcaba	2	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A
PRI-11-203	Commercial	1700 Mission Road	Carlsbad	SDG&E Northeast ANNEX	4.09	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A
PRI-12-205	Commercial	1330 E Grand Avenue	Carlsbad	Escondido Venture 99 LLC	9	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A
PRI-12-208	Industrial	2305 Harveson Place	Carlsbad	JRM-ERTC, I LP	5.13	No	N/A	Bioretention
PRI-12-209	Residential	141 E El Norte Parkway	Carlsbad	Community Housing Works	2.2	No	N/A	Bioretention
PRI-12-212	Commercial	400 Brotherton Road	San Dieguito	Talk of the Town LLC	1.35	No	N/A	Bioretention
PUB-11-035	Capital Improvement	Maple Street	Carlsbad	City of Escondido	0.83	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A

During the reporting period, the Corodata Records Management Facility (PRI-12-208) underwent HMP analysis that included implementation of perimeter bioretention treatment control BMPs integrated with temporary on-site water storage for avoiding hydromodification effects. Two LID bioretention basins incorporate an underground gravel water storage layer equipped with an underdrain, orifice plate, amended soil layer, and a separate surface detention basin for overflow. These BMPs were combined to treat and provide volume control in accordance with the City's HMP requirements.

BMP Verification

In compliance with Order R9-2007-0001, LID, source control, treatment control BMPs, and flow control on priority development project sites subject to SUSMP/HMP requirements are inspected by City compliance staff prior to building occupancy to verify that construction complies with all applicable specifications and regulations.

Treatment control BMPs, consistent with the project's WQTR, are indicated on the Street Improvement/ Drainage Grading and Landscaping Plans. All projects are subject to completion of all improvements in accordance with the approved plans prior to filing notice of completion and occupancy. Field engineering inspectors verify the completion of improvements and project engineers provide signed and sealed record plans certifying completion of all improvements. Both the inspection and certification procedures ensure that all approved treatment control BMPs are in place prior to owner occupancy.

Once the initial BMP verification inspection is complete, the City conducts operation and maintenance verification inspections of treatment control BMPs in accordance with permit requirements as described below.

Treatment Control BMP Maintenance Inspections and Data Tracking

The City maintains a geographic information system (GIS)-based inventory of treatment control BMPs. With other information, the inventory is used to track BMP type, location, watershed, and the party responsible for maintenance, inspections, inspection findings, and maintenance needs. The City continues to prioritize treatment control BMPs based on the following criteria:

- Sites with drainage insert treatment control BMPs are designated as medium priority.
- All other sites are prioritized based on consideration of treatment control BMP size, recommended maintenance frequency, likelihood of operational and maintenance issues, location, receiving water quality, and other pertinent environmental factors.

During the reporting period, all inventoried public and private treatment control BMPs were inspected for maintenance needs and verification of operation. Vegetated treatment controls, such as detention basins and vegetated swales, are inspected for erosion/sedimentation issues, sufficient vegetation cover, and drainage issues. Structural treatment controls, such as storm drain filters or other drainage inserts, are inspected for components in need of repair or replacement and any other issues that may affect performance. Information gathered during the inspection is documented on a standardized BMP form. This form, as well as the treatment control BMP inventory and summary of findings, is provided in Appendix A.

City maintenance staff are deployed to public treatment control BMP locations for repair or maintenance, when necessary. Cleaning treatment control BMPs that are associated with capital roadway projects is performed by maintenance staff during the MS4 inspection and cleaning component, as discussed in Chapter 4.

For private treatment control BMPs in need of maintenance, the City notifies private property owners via mail. In some cases, property owners cannot be tracked or are unresponsive to City requests. To address this issue, the City is currently improving its protocol for notifying responsible parties and updating its municipal ordinance to better enforce private treatment control operation and maintenance requirements of property owners. The City anticipates that the ordinance will be adopted within the next reporting period. No violations were issued in this reporting period.

3 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

This section summarizes the City's program for identifying potential pollutants that may exist at active construction sites and presents the BMPs that can be implemented to eliminate or minimize these pollutants in construction site stormwater runoff. With the adoption of Order R9-2007-0001, the City has modified and is enforcing local ordinances and construction permit requirements. Construction site owners, developers, contactors, and other responsible parties are mandated to improve stormwater pollution prevention measures such that receiving waters and other environmental resources are protected in accordance with the requirements of the Order.

In addition to the requirements set forth in the City's JURMP, construction projects that disturb 1 acre or more of soil (or those projects that disturb less than 1 acre but are part of a larger common plan of development that disturbs 1 or more acres) including Linear Underground/Overhead Projects (LUPs) were required to obtain coverage under the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit, Order 2009-0009-DWQ as amended by 2010-0014-DWQ). Construction activities subject to this permit include clearing, grading, stockpiling, or excavation, but do not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility.

The current Construction General Permit has several new requirements and changes as compared to the previous permit. Under the Construction General Permit, LUPs are now under the same permit, whereas before they were covered under their own separate permit. In addition, following are some of the significant changes to the Construction General Permit:

- Technology-Based Numeric Action Levels (NALs) – for pH and turbidity.
- Risk-Based Permitting Approach – three levels of risk possible for a construction site. Risk is calculated by project sediment risk and receiving water risk.
- Effluent Monitoring/Reporting – monitoring and reporting for pH and turbidity in stormwater discharges.
- Bioassessment Monitoring/Reporting – requires Risk Level 3 discharges to conduct bioassessments under certain criteria.
- Rain Event Action Plan (REAP) – designed to protect all exposed portions of the site within 48 hours prior to any precipitation event.
- Certification/Training Requirements – specific training or certifications to ensure adequate design, knowledge, and skills pertaining to the Construction General Permit.
- Annual Reports – electronic annual reports via the State's Storm Water Multiple Application and Reporting Tracking System (SMARTS) Database.

3.2 SOURCE CHARACTERIZATION

If not properly managed, construction activities have the potential to contribute various pollutants to stormwater runoff and downstream receiving waterbodies. Erosion and sedimentation from earth-moving operations, including grading, excavation, clearing, and stockpiling, are generally the most significant source of stormwater pollution associated with construction sites. However, other activities, including dewatering operations, hazardous materials handling and storage, paving and painting operations, structure construction, waste management (solid, concrete, sanitary), and vehicle and equipment maintenance and fueling, can also contribute pollutants and adversely impact water quality.

Construction site pollutants are characterized in the Construction General Permit as visible and nonvisible forms. Visible pollutants are generally associated with erosion and sedimentation that lead to suspended

solids and turbidity in site runoff, whereas nonvisible forms are usually associated with chemicals or other substances that are diluted or dissolved in runoff and are not observable to the eye.

Because the occurrence and exposure of pollutants associated with construction sites are highly variable relative to construction phases, building materials, site size, and other physical parameters, site inspections are the principal tool for assessing on-site pollution potential. The City uses the Construction Site Inspection Checklist for evaluating pollution potential on a site-by-site basis. In general, information and features identified below are evaluated, as applicable, by City inspectors, to characterize pollutant sources and identify BMPs needed to control the pollutants:

- geographic features and the general topography both before and after construction;
- existing and planned paved areas, lots, and roadways;
- stormwater collection and discharge points and the anticipated discharge location(s) where the stormwater from the construction site discharges to a municipal storm sewer system or other waterbody;
- drainage patterns across the project area and surrounding relevant drainage areas;
- temporary on-site drainages to carry concentrated flow;
- potential sources of pollutants that may result in non-stormwater discharges from the construction site, and off-site discharges that flow across or through areas disturbed by construction;
- drainage patterns and slopes anticipated after major grading activities are completed;
- drainage patterns into each on-site stormwater inlet point or receiving water;
- potential sources of sediment discharges and soil amendments (e.g., lime or gypsum, concrete or asphalt saw-cutting slurry, aggregate or concrete rinse water, building washing operations, equipment washing operations, minor street washing associated with street delineation, and/or sealing and paving activities occurring during rains);
- existing areas known to have toxic materials that have been treated, stored, disposed, spilled, or leaked onto the construction site;
- soil or waste storage areas;
- vehicle storage and service areas;
- construction material loading, unloading, and access areas; and
- equipment storage, cleaning, and maintenance areas.

3.2.1 Site Inventory

The current construction project inventory is maintained by the City's Engineering Department and is regularly updated as projects are proposed, approved, and completed. An inventory of construction sites active during the reporting period and associated inspection records are provided in Appendix B.

3.3 UPDATES TO ORDINANCES AND APPROVAL PROCESSES

With the adoption of Order R9-2007-0001, municipal policies and ordinances were reviewed and revised. The City incorporated amendments to the General Plan, the Zone Code, and the Storm Water Ordinance. The sections below provide a summary of resolutions and updates including BMP requirements and other measures that are now being implemented and enforced.

3.3.1 General Plan Amendment

In accordance with the direction of Order R9-2007-0001, the General Plan was reviewed and amended to maintain consistency with pertinent state and federal water quality and watershed protection regulations. Recent General Plan amendments include the following:

- Land Use/Circulation Policy D2.4 (i.e., street design that accounts for anticipated runoff issues);
- Community Facilities and Services Drainage Policy G3.8 (i.e., the maintenance of flood control channels and storm drains consistent with state and federal permits, such as permits issued by DFG and USACE;
- Storm Water Permit and Drainage Policy G3.9 (i.e., permanent mitigation or buffering measures between drainage-way corridors and adjacent and surrounding land uses that protect watershed and water quality principles and practices, such as preserving the integrity of natural land uses);
- Community Protection and Safety Soils Policy D1.4 (i.e., grading practices that restore or preserve natural patterns of surface water runoff so that any diversions will not create or accelerate various types of erosion); and
- Flood Policy D2.4 (i.e., the maintenance of flood control channels and storm drains that are consistent with state and federal permits, such as those issued by DFG and USACE).

In May 2012, a new City General Plan was adopted and includes several goals and policies to protect natural resources and water quality. These goals and policies are discussed in more detail in Section 2.2.4.

3.3.2 Zone Code Amendment, Article 55 Grading and Erosion Control

The amendments to Zone Code §33-1062 (Best Management Practice Implementation) respond to the construction requirements of Order R9-2007-0001, which address phased grading, natural land use preservation, erosion and sediment controls, and advanced treatment for sediment. These BMPs specifically require the following:

- minimizing site clearing and grading to the portion of the site that is necessary for construction;
- minimizing exposure time during the wet season and maximizing grading during the dry season to the extent feasible; and
- developing sediment control specifications for advanced treatment, such as flocculation or chemical treatment at construction sites determined to be a high threat to water quality (e.g., soil erosion potential, slope steepness, proximity to ESAs).

Since the initial effort to update ordinances and policy documents to comply with the 2007 Stormwater Permit, no new resolutions or updates have been made to the Zone Code Amendment.

3.3.3 Storm Water Ordinance – Escondido Municipal Code Chapter 22, Article 2

Revisions to the Storm Water Ordinance language were incorporated for better consistency with Order R9-2007-0001, in particular the language referenced in the Prohibited Discharges and Discharge Exemptions sections. Other changes include the addition of enforcement measures, such as administrative fines, which are consistent with the schedule employed by the City's Code Enforcement Division, and stop-work notices, which are used by City inspectors to require developers to install appropriate BMPs prior to resuming construction activities.

Since the initial effort to update ordinances and policy documents to comply with Order R9-2007-0001, no new resolutions or updates have been made to the Storm Water Ordinance.

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

As mandated by the Construction General Permit, construction site owners, developers, contactors, and other responsible parties were required to implement minimum BMP requirements to eliminate or reduce pollutant discharges from construction sites to the maximum extent possible (MEP) based on the project's determined risk. These BMPs and their implementation are outlined in each project's SWPPP and are to be maintained at the project construction site at all times. Through the site inspection process, City inspectors confirm that required BMPs are implemented, assess the condition of BMPs, and determine when measures are inadequate (refer to construction site inspection form presented in Appendix B).

3.4.1 Pollution Prevention

Pollution prevention measures are required for construction sites and include the following:

- preservation of natural hydrologic features;
- preservation of riparian buffers and corridors;
- minimized or phased grading, including a maximum disturbed area for erosion control as set forth in the City's grading ordinance;
- rapid protection requirements for areas of bare soil;
- dry weather scheduling; and
- slope stabilization during rain.

3.4.2 Erosion and Sediment Control

BMPs to eliminate or reduce erosion and control sediment are required for construction sites on a case-by-case basis and may include the following:

- soil stabilizers such as mulch, hydroseed, binders, geotextiles, and mats;
- velocity dissipation devices;
- slope drains;
- earth dikes, drainage swales, and sediment basins;
- fiber rolls, silt fences, berms, and barriers;
- storm drain inlet protection;
- stockpile management;
- tracking control; and
- dust suppression.

3.4.3 Non-Stormwater Control

BMPs are selected and required at construction sites based on site-specific activities to control non-stormwater discharges. General BMP categories are as follows:

- material delivery, storage, and use;
- spill prevention and control;
- vehicle and equipment maintenance and fueling practices;

- recycling and disposal requirements;
- construction operations (such as dewatering, and paving and grinding) practices;
- water conservation practices;
- waste management requirements; and
- recycling and disposal requirements.

3.4.4 Advanced Treatment

Construction sites that are identified as posing an exceptional threat to water quality for sediment may be required to incorporate advanced treatment methods (e.g., mechanical or chemical means to flocculate and remove suspended sediment from runoff). The following factors are considered in determining the sedimentation threats to water quality:

- soil erosion potential or soil type,
- slopes,
- project size and type,
- sensitivity of receiving waterbodies,
- proximity to receiving waterbodies,
- non-stormwater discharges,
- ineffectiveness of other BMPs, and
- any other relevant factors.

There were no projects subject to advanced treatment requirements during the reporting period.

3.4.5 Additional Controls

Per Order R9-2007-0001, construction projects are evaluated on a case-by-case basis in relation to the following criteria prior to project approval to determine if additional controls are needed above and beyond the required BMPs:

- sites within or adjacent to ESAs,
- sites discharging directly to receiving waters within ESAs, and
- sites tributary to CWA §303(d) waterbody segments impaired for sediment.

Relative to the 2010 CWA §303(d) List of Impaired Water Quality Limited Segments, Lake Hodges is listed as impaired for turbidity (a condition associated with the discharge of sediment into a receiving water). Additional controls for construction sites within the Lake Hodges drainage area are evaluated by City compliance staff during site inspections; additional controls are considered for implementation where deemed necessary.

3.5 PROGRAM IMPLEMENTATION

3.5.1 Staff Education and Training

New and existing engineering staff or construction site inspectors are provided stormwater training as needed. This training includes an overview of current regulations, City-specific requirements, and individual project needs. The City also utilizes stormwater professionals (e.g., CASQA, local workshops, and RWQCB) to provide training for City personnel. In May 2012, Field Engineering staff

attended a 3-hour training/education workshop on Construction General Permit and Order R9-2007-0001 requirements. In addition, SUSMP/HMP requirements and implementation of LID BMPs were emphasized. The presentation was developed and provided by the City's environmental contractor, AECOM, and the City's stormwater staff.

3.5.2 Construction Site Owner or Operator Training

To promote awareness of and compliance with construction stormwater regulations and BMP requirements, the City provided the following:

- educational material for construction and land development companies;
- BMP handouts for building and grading permit applicants;
- preconstruction meetings with developers, project supervisors, and engineers to review stormwater pollution prevention requirements and BMPs; and
- education for construction site inspectors regarding routine and nonroutine (e.g., noncompliance follow-up) inspections.

Through these efforts, the potential water quality issues, such as incorporating LID practices, were addressed early in the site design process, (as directed by the City's SUSMP).

3.5.3 Urban Runoff Approval Process

Prior to project approval and issuance of construction and grading permits, project applicants must demonstrate they comply with local ordinances and the City's SUSMP (as applicable). This process includes:

- attending a preconstruction meeting, where proposed projects are evaluated in accordance with the stormwater management requirements and local SUSMP guidance document (City of Escondido 2010);
- verifying that the minimum required BMPs and other measures provided in the SUSMP are incorporated into the construction phase to reduce potential pollutant discharges and protect water quality to the MEP;
- reviewing the stormwater management plan to verify compliance with the Grading Ordinance, the Storm Water Ordinance, and Order R9-2007-0001;
- verifying that projects subject to the state's Construction General Permit (Order 2009-0009-DWQ) are compliant with and covered by that permit; and
- providing an up-front cash deposit ($2,000 to $30,000 depending on project size) to ensure that funds are available if compliance remedies are necessary.

As required by Order R9-2007-0001, each Copermittee must update its local SUSMP to meet the requirements of §D.1.d. The updated SUSMP was adopted by the City Council in March 2010 and, in addition, City Council adopted the new Hydromodification Plan (HMP) in January 2011. Designated personnel within the City's Engineering Department are responsible for reviewing projects in accordance with the urban runoff approval process. This SUSMP/HMP process is discussed in further detail in Chapter 2. All proposed construction projects during the reporting period underwent this review process prior to approval.

3.5.4 BMP Manual

During project review and throughout construction site compliance evaluations and inspections, the City uses its BMP manual (City of Escondido 2008) to provide staff with guidance for reducing water quality impacts, including erosion control, sediment control, non-stormwater control, and waste management control associated with construction activities.

3.5.5 Construction Site Inspections

Construction sites were inspected depending on a variety of site conditions, season, size, environmental sensitivity, and several other factors. Construction site inspections serve to:

- assess compliance with city ordinances and permits related to urban runoff, including the implementation and maintenance of required minimum BMPs;
- verify coverage under the General Construction Permit (i.e., Notice of Intent is filed) and/or grant a Waste Discharge Identification number, if applicable;
- review the site erosion control and BMP implementation plans;
- determine if BMPs (including advanced treatment, additional controls, and maximum disturbed area requirements) are being implemented properly and in accordance with approved plans;
- confirm that the designated BMPs were implemented and assess BMP effectiveness;
- determine whether the owner/developer/contractor is making appropriate adjustments when ineffective BMPs are found;
- conduct visual observations for non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff;
- provide education and outreach materials on stormwater pollution prevention, if needed;
- complete the construction site inspection form; and
- when applicable, confirm that a maximum disturbed area for grading was applied to all applicable construction sites.

An inventory of construction sites that were active during the reporting period and associated inspection records are provided in Appendix B.

3.5.6 Data Management and Project Tracking

During the past reporting period, construction site inspections were tracked using inspection forms, field logs, and the City's electronic project tracking system.

3.5.7 Enforcement of Noncompliant Construction Sites

City inspectors enforce stormwater pollution prevention requirements at construction sites and issue citations when violations are observed. Once a violation citation has been issued, a follow-up compliance inspection is conducted to determine if corrective actions have been implemented.

Depending on violation frequencies and severity, enforcement actions can escalate from a verbal warning to stop-work orders and/or monetary penalties. Inspectors have the flexibility to establish appropriate compliance penalties and corrective action time frames on a case-by-case basis. Figure 3-1 shows the progressive enforcement steps that may be taken as part of the City's Inspection Enforcement Program:

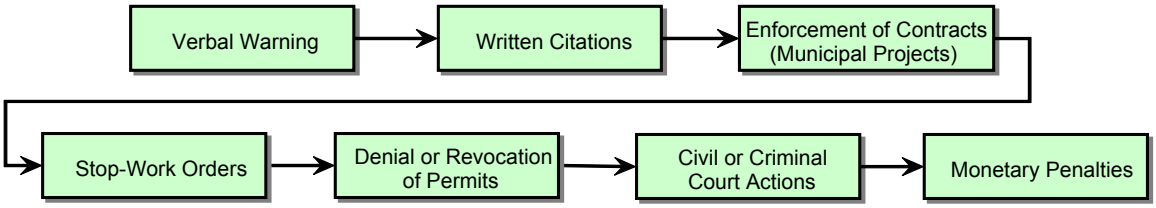

Figure 3-1. Enforcement Actions for Noncompliant Construction Sites

The economic downturn has impacted development in Escondido to the extent that construction activity at many private sites was markedly slow and/or at a standstill during the reporting period. As determined by City compliance inspectors, enforcement actions were not necessary for the sites where construction had occurred. For inactive sites, staff made sure that effective BMPs were installed and/or maintained, even though dry conditions prevailed through most of the rainy season. Site inspection records are provided in Appendix B.

3.5.8 Reporting of Noncompliant Construction Sites

In accordance with Order R9-2007-001, the City will notify the RWQCB when staff issue a stop-work order or other high-level enforcement to a construction site as a result of a stormwater compliance violation. Although there were no such enforcement actions taken during this reporting period, any noncompliance that may endanger public health and/or the environment will be reported as follows (Order R9-2007-0001 Attachment B, Section 5[e]):

> *"…(1) The Copermittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Copermittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Copermittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.*
>
> *(2) The following shall be included as information, which must be reported within 24 hours under this paragraph:*
>
> > *i) Any unanticipated bypass that exceeds any effluent limitation in the Order (See 40 CFR 122.41(g)).*
> >
> > *ii) Any upset which exceeds any effluent limitation in this Order.*
>
> *(3) The Regional Board may waive the above-required written report under this provision on a case-by-case basis if the oral report has been received within 24 hours."*

4 MUNICIPAL COMPONENT

4.1 INTRODUCTION

The City's efforts to control the discharge of pollutants associated with municipal land use areas and activities to protect receiving waters and other environmental resources while achieving compliance with Order R9-2007-0001 are described below. In general, the major elements of the municipal component are as follows:

- maintaining an updated inventory of all municipal areas and special events;
- identifying potential sources of pollution from municipal land use areas, activities, and special events;
- prioritizing the threat to water quality;
- determining and employing pollution prevention and source control measures to preclude the release of pollutants at the source;
- specifying and implementing BMPs to reduce contaminated runoff based on threat to water quality; and
- taking steps to ensure that City staff are well informed and are implementing the program appropriately.

These elements are described within this section as they pertain to the various municipal areas and special events. It should be noted that the City does not own or operate any landfills, incinerators, solid waste transfer facilities, land application sites, sewage sludge treatment or disposal sites, hazardous waste facilities, or municipal airfields. Accordingly, these facilities are not discussed below.

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 Background

Within its jurisdiction, the City is responsible for the maintenance of most surface streets and municipal parking facilities, but it does not own, operate, or maintain highway or freeway facilities. The following roadways are owned and maintained by the California Department of Transportation and are not the City's responsibility:

- Interstate 15,
- State Route 78, and
- portions of San Pasqual Road.

4.2.2 Source Characterization

Roadway activities and parking facilities can be associated with a variety of potential pollutants, such as heavy metals, oil and grease, battery acid, antifreeze, or other similar pollutants. In addition, the maintenance of municipal roadways and paved surfaces often involves repair and repaving activities that can also be sources of urban runoff pollution if not properly managed. Roadway and parking lot usage can generate notable amounts of litter and sediment as well if public awareness is lacking and proper controls are not implemented.

Because paved roads are impervious, these various pollutants have the potential to accumulate and be transported by stormwater runoff into the MS4 and/or possibly into sensitive receiving waterbodies. In turn, the City has designated its roads and parking facilities as a high-priority threat to water quality. As part of the inventory, the City further categorizes these areas relative to a high, medium, or low potential for being associated with trash and/or debris. The City uses this categorization to prescribe appropriate street sweeping frequencies for controlling these pollutants.

acilities inventory is maintained by the City and is updated annually (as part of the ss) if facilities are created, modified, or eliminated. A listing of the stand-alone provided in Table 4-1. Figure 4-1 illustrates municipal roads and parking facilities as the associated priorities relative to the presence of trash and/or debris.

Municipal Parking Lots

Address			Hydrologic Unit	Location
51	W	Valley Parkway	Carlsbad	SE Corner of W Valley Parkway & Maple
27	W	2nd Avenue	Carlsbad	SE Corner of W 2nd Ave & Maple
35	E	Valley Parkway	Carlsbad	E Valley Parkway between Broadway & Kalmia, south side of street
39	S	Kalmia Avenue	Carlsbad	Corner of 2nd Ave & Kalmia, north side of street
25	E	Valley Parkway	Carlsbad	E Valley Parkway between Kalmia & Juniper
30	E	2nd Avenue	Carlsbad	Corner of E 2nd Ave & Juniper, just west of 161 E 2nd Ave
45	E	Valley Parkway	Carlsbad	SW Corner of E Valley Parkway & Juniper

ent Practice Requirements

ity maintained roads and parking facilities, the BMPs described below are ty to minimize the amount of contaminated runoff that enters the MS4 and/or om these areas.

ent

e 2008 JURMP (as required by Order R9-2007-0001), LID designs are being l Improvement Program (CIP) projects involving roads and parking areas, where ew the BMP manual (City of Escondido 2008) to assess applicable and adequate rise, which is consistent with San Diego County-adopted standards.

d Parking Lots

ping frequency for all City-owned and City-maintained roads was set forth in the sents the number of curb miles categorized as having a high, medium, or low g trash and the associated minimum sweeping frequencies related to each

ping Program

s	Total Number of Curb Miles	Sweeping Frequency
	68.8	Twice Monthly
	43.5	Monthly
	279.6	As Needed

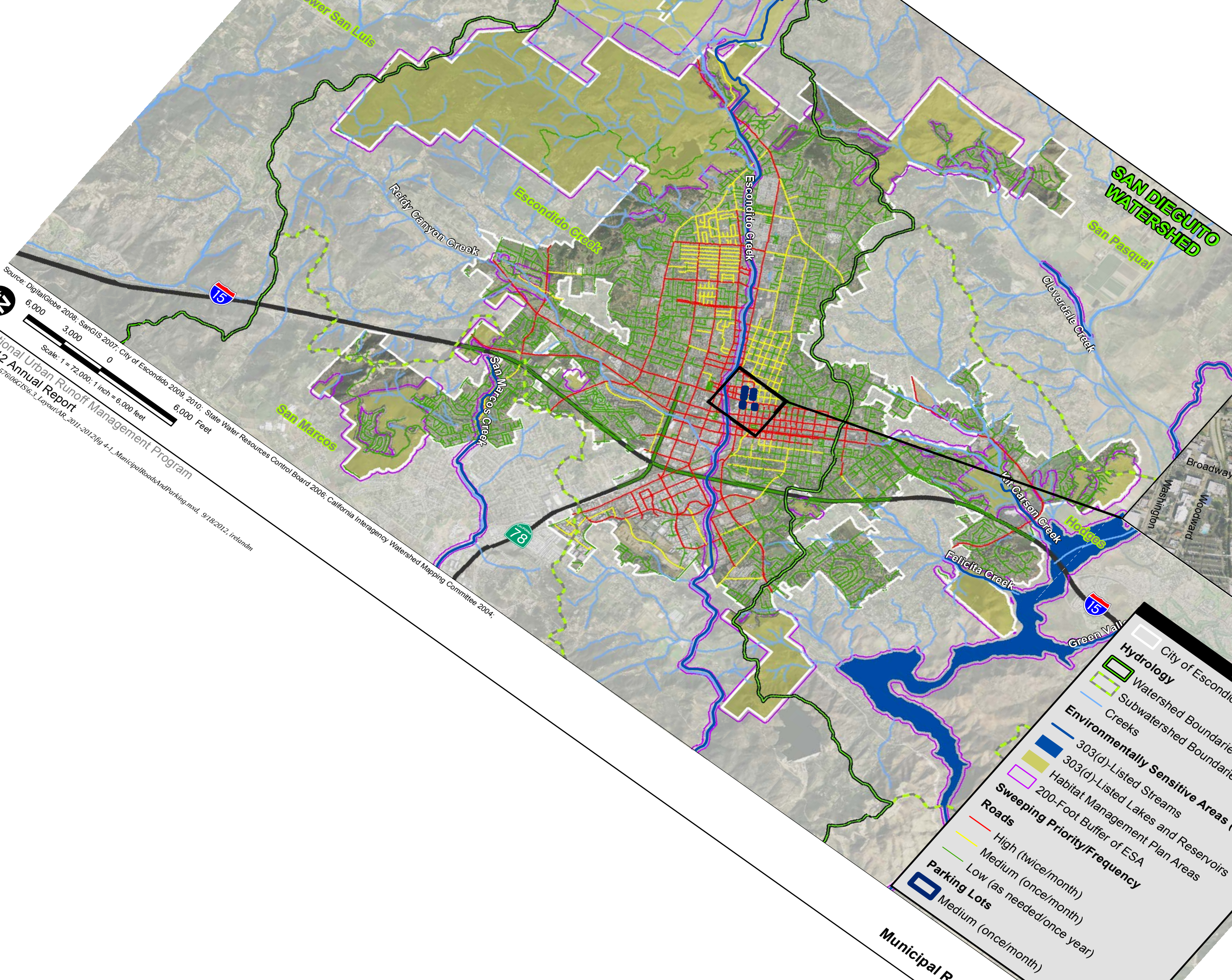
SAN DIEGUITO WATERSHED
Municipal R
City of Escondi
Hydrology
Watershed Boundarie
Subwatershed Boundarie
Creeks
Environmentally Sensitive Areas (
303(d)-Listed Streams
303(d)-Listed Lakes and Reservoirs
Habitat Management Plan Areas
200-Foot Buffer of ESA
Sweeping Priority/Frequency
Roads
High (twice/month)
Medium (once/month)
Low (as needed/once year)
Parking Lots
Medium (once/month)
Escondido Creek
Reidy Canyon Creek
Escondido Creek
San Pasqual
Cloverdale Creek
San Marcos Creek
San Marcos
Felicita Creek
Hodges
Broadway
Washington
Woodward
15
78
Source: DigitalGlobe 2008; SanGIS 2007; City of Escondido 2009, 2010; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004;
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Jurisdictional Urban Runoff Management Program
2011–2012 Annual Report
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Source Control/Pollution Prevention

BMPs are implemented during street and parking lot maintenance activities to reduce pollutants in runoff. These BMP requirements include inlet protection, berming work areas, vacuum cleanup, and properly disposing of waste products and materials.

Good Housekeeping

Measures are employed for municipal parking areas, including utilizing and routinely emptying trash receptacles, and keeping areas swept to remove pollutants such as trash, debris, and sediment. Good housekeeping practices are also implemented during street and parking lot maintenance activities, including keeping work areas clean by removing trash, sediment, and debris, and cleaning up materials or spills, as necessary.

Additional Controls

Supplemental measures are applied in areas tributary to §303(d)-listed waterbody segments when a roadway, parking facility, or associated municipal activity generates pollutants for which the waterbody segment is impaired or for areas/activities located within or directly adjacent to or discharging directly to receiving waters within ESAs. Activities associated with roads and parking facilities have the potential to contribute to the following receiving water impairments:

- Escondido Creek (TDS and manganese)
- San Marcos Creek (sediment toxicity)
- Lake Hodges (turbidity and manganese)
- Kit Carson Creek (TDS)
- Felicita (TDS)

As part of its Integrated Pest Management (IPM) program, the City restricts the use of pesticides, herbicides, and fertilizers so that sensitive local waterways are protected. Additionally, the City implements increased sweeping above and beyond the scheduled frequency, which reduces potential turbidity and TDS in site runoff.

4.2.4 Program Implementation

The City has established numerous programs and processes to ensure that BMPs designated for streets and parking areas, as described above, are implemented in accordance with Order R9-2007-0001. A description of these programs and processes is provided below.

Municipal Staff Education and Training

The City's municipal education program (see Chapter 8) is designed to inform and train City employees on urban runoff impacts and the associated BMPs to minimize potential impacts. Additional staff from the Planning and Engineering Departments attended a workshop held by the City's Stormwater Department to review Municipal permit requirements, including SUSMP and HMP requirements in compliance with Order R9-2007-0001. Maintenance personnel and collections staff are trained to review JURMP requirements, BMP implementation compliance, and stormwater pollution prevention techniques, including proper runoff controls during street construction, maintenance, and repairs. A workshop to review Municipal permit requirements is provided to maintenance and collection staff bi-annually. The last workshop was held in the spring of 2011, and the next training will be held in early 2013.

SUSMP Process

Through the City's SUSMP and HMP process, stormwater management, water quality protection, and hydromodification management measures are integrated into priority road and parking lot development projects to reduce urban runoff pollutants from these areas to the MEP.

BMP Manual

The municipal component of the City's BMP manual (City of Escondido 2008) presents industry-standard BMP guidance specific to municipal operations information, including street maintenance and repair, spill prevention and cleanup, and solid and liquid waste management. The BMP manual has been distributed to municipal staff.

Routine Visual Inspections

Visual inspections are regularly scheduled assessments of City-owned and City-maintained roads and parking facilities focusing on road condition, litter, vegetation, and sediment. Inspections are conducted in conjunction with street and parking lot sweeping activities to determine maintenance needs, changes in sweeping frequency, and potential sources of pollutants. Municipal parking lots are also inspected as part of the municipal facility inspection program. Parking areas are inspected for adequate waste disposal; presence of trash, debris, stains, or spills; proper storage of outdoor materials (if applicable); the need for increased sweeping; and to confirm that good housekeeping practices are being employed. Annual stormwater inspections were also conducted for municipal parking lots and parking areas adjacent to fixed municipal facilities during the reporting period.

Overall, no major stormwater issues were identified at any of the stand-alone municipal parking lots during the annual inspection process. One 55-gallon drum remains within an enclosed dumpster area at one location (Parking Lot #6). The issue is being resolved and the outcome will be reported in next year's annual report. In general, all parking lots were free from trash and debris, and dumpster areas were well kept. Inspections for parking areas associated with fixed municipal facilities are described in Section 4.6.4.

Street and Parking Lot Sweeping Data Collection

The Maintenance and Operations Division of the Community Services Department is responsible for conducting a combination of comprehensive and focused sweeping on municipal roads. Moreover, during the reporting period, the City conducted a more rigorous street sweeping schedule than the minimum frequencies set forth in the JURMP to prevent trash and debris from entering receiving waters. The frequency at which municipal roads were swept is presented below:

- Downtown focus blocks were swept three times a week.
- Heavily traveled streets were swept one time per week.
- Moderately traveled streets were swept two times per month.
- All other roads were swept one time per month.

Approximately 7,408 curb miles were swept by the Maintenance and Operations Division and 410 tons (1,518 cubic yards) of material was collected.

The City currently contracts with an independent company to conduct sweeping of all municipal parking areas and downtown streets, which were each swept 36 times for heavily used lots, 24 times for medium-use lots, and 12 times for lesser used lots during the reporting period. The contractor swept approximately 2,000 miles of downtown Escondido, with approximately 133 tons (494 cubic yards) removed.

4.3 SANITARY SEWAGE COLLECTION SYSTEM

4.3.1 Background

The City's Utilities Department operates and maintains the sanitary sewage collection system under the Wastewater/Collections Division. The City's municipal sanitary wastewater is routed to the Hale Avenue Resource Recovery Facility (HARRF), where it undergoes tertiary treatment for discharge. The City's sanitary wastewater is discharged in accordance with strict NPDES permit requirements through the Escondido Land Outfall in San Elijo Lagoon. Discharged effluent is tested daily, monthly, quarterly, and annually for various constituents relative to the limits established in the NPDES permit. These results are

routinely reported to the U.S. Environmental Protection Agency (USEPA) and RWQCB to demonstrate permit compliance and environmental protection.

The Collections Division maintains more than 360 miles of sewer lines, 14 pumping stations, more than 6,000 sewer manholes, 14 miles of sewer outfall line, and a pretreatment inspection program for food and commercial establishments. The division keeps the sanitary sewers flowing and clear of obstructions, while protecting the citizens and the environment from sewer overflows and backups.

4.3.2 Source Characterization

If not properly inspected and maintained, municipal sewer systems have the potential to contribute pollutants to the MS4 and receiving waterbodies primarily as a result of blockages, leaks, or breaks in the system. Sanitary wastewater can contribute pathogens, nutrients, greases, and/or biosolids, which can impact water quality. Because of the potential for these facilities to transport these pollutants to the MS4 and/or possibly into sensitive receiving waterbodies, the City has designated all sewer facilities as a high-priority threat to water quality and designates appropriate measures as described below to maintain the sewer system and prevent wastewater releases.

The GIS-based sewer system inventory is maintained by City GIS staff and is updated on a routine basis as sewer facilities are created, modified, or eliminated. City staff use project plans and data gathered by field crews to update and modify the inventory. Figure 4-2 illustrates the City's current sewer system inventory. Further information associated with the sewer pump stations is presented in Table 4-3.

Table 4-3. Sewer Pump Stations

Property Name	Address	Hydrologic Unit
Sewer Pump Station No. 1	3680 Sunset Dr.	San Dieguito
Sewer Pump Station No. 2	2698 South Escondido Blvd.	San Dieguito
Sewer Pump Station No. 3	2045 South Escondido Blvd.	San Dieguito
Sewer Pump Station No. 4	1750 W. El Norte Pkwy.	Carlsbad
Sewer Pump Station No. 5	735 Opper St.	Carlsbad
Sewer Pump Station No. 6	2297 Felicita Rd.	San Dieguito
Sewer Pump Station No. 7	870 East 17th St.	San Dieguito
Sewer Pump Station No. 8	2472 Eucalyptus Ave.	San Dieguito
Sewer Pump Station No. 9	1399 Hamilton Ln.	San Dieguito
Sewer Pump Station No. 10	2356-1/2 Willowbrook St.	San Dieguito
Sewer Pump Station No. 11	2451 Bernardo Ln.	San Dieguito
Sewer Pump Station No. 12	1400 Country Club Dr.	Carlsbad
Eagle Crest Lift Station	20950 San Pasqual Rd.	San Dieguito

4.3.3 Best Management Practice Requirements

Relative to the source characterization described above and the associated municipal activities conducted, the City specifies various pollution prevention and source control BMPs to (1) address pollutants of concern from maintenance and operation of sewer facilities, including emergency response to sewer spills, and (2) prevent and eliminate infiltration from the sanitary sewer to the MS4. These BMPs are described below.

Sewer System Management Plan (SSMP)

The City implements the SSMP in accordance with the SWRCB Order 2006-0003-DWQ (*Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*). The City's Utilities Department developed and implemented an SSMP in August 2007. The Operation and Maintenance Program portion of the SSMP includes the elements described below.

- An up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities.
- A description of routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeting known problem areas. Specific measures can include routine hydraulic and mechanical cleaning of the sanitary sewer and MS4, regular closed-circuit television inspection—particularly of identified high-priority areas—dye testing, and smoke testing.
- A Rehabilitation and Replacement Plan that identifies and prioritizes system deficiencies and implements short- and long-term rehabilitation actions to address deficiencies. The focus of the plan is on sewer pipes that are at risk of damage or prone to more frequent blockages due to pipe defects. The program includes visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation.
- The Rehabilitation and Replacement Plan also includes a Capital Improvement Program that addresses proper management and protection of the infrastructure assets, which includes a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the CIP.
- Regular training of staff in sanitary sewer system operations, maintenance, and appropriate training for contractors.
- Equipment and replacement part inventories, including identification of critical replacement parts.
- A Monitoring and Reporting Program that summarizes these activities and reports any operational, maintenance, or compliance issues.

Sewer Overflow and Prevention Plan (SOPP)

The City developed and implements an SOPP to prevent overflow of the sewage collection system. The SOPP includes the City's Preventative and Corrective Maintenance Program, as well as the Sewer Overflow Response Plan (SORP), which provides emergency response measures to minimize or eliminate the potential for introducing pollutants to nearby surface waters. The Preventive and Corrective Maintenance Program consists of routine monitoring, inspection, cleaning, and related maintenance of the sanitary wastewater collection system. In addition, a Pipeline Replacement Program for damaged or failing sections of wastewater pipeline is instituted, which provides a means for tracking prior problems encountered and corrective measures taken, as well as current problem areas and necessary improvements needed.

If the sewer collection system overflows, the City implements the SORP to immediately report the incident and dispatch the appropriate City maintenance crews to minimize overflow impacts to public health and the natural environment. The SORP includes extensive notification procedures, based on the new California Integrated Water Quality System on-line Sewer System Overflow Reporting System Database.

Fats, Oils, and Grease (FOG) Control Program

This program is designed to reduce the amount of FOG substances discharged to the sanitary sewer system. The City's FOG Control Program includes an implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG. For City staff, a plan and schedule

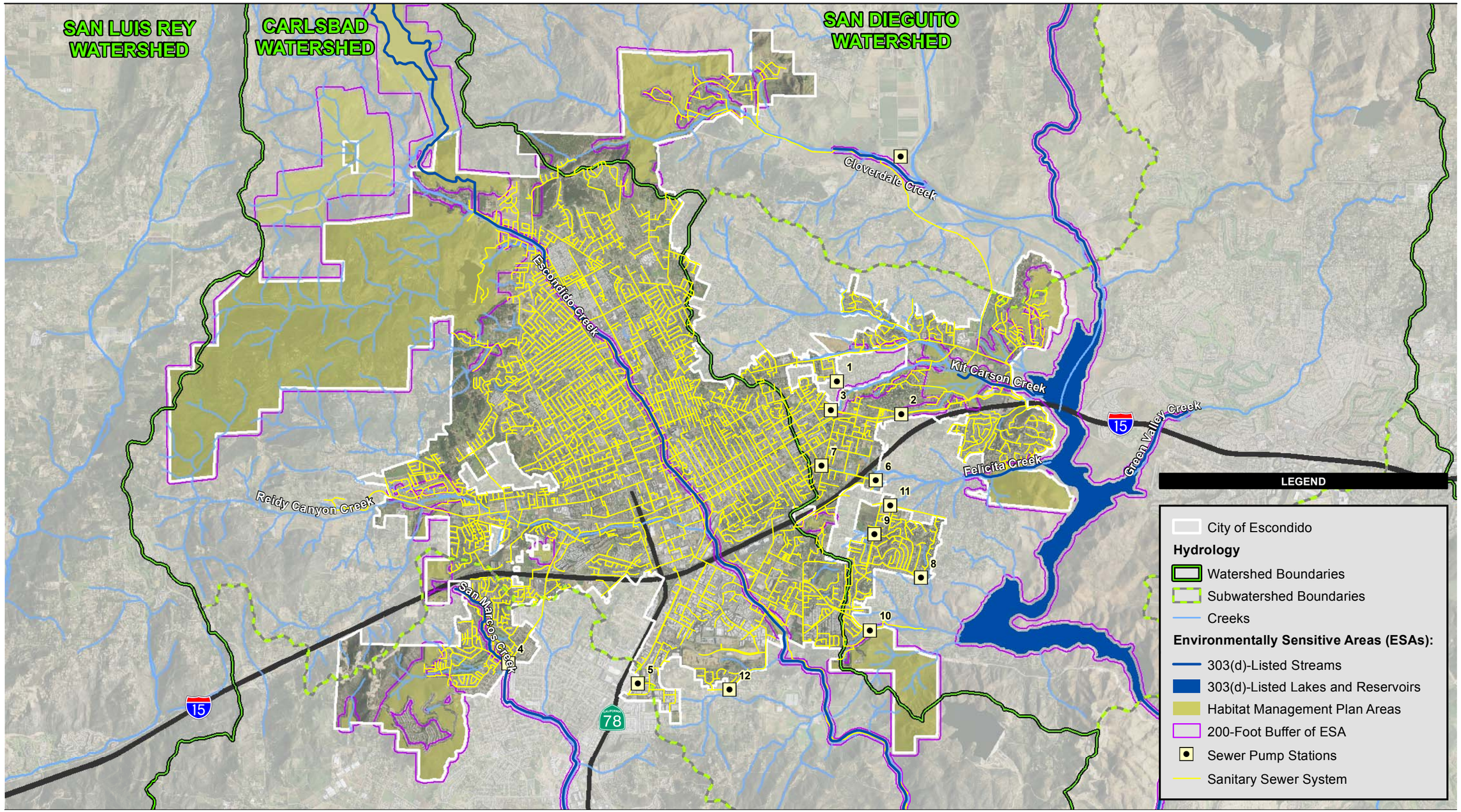

Source:DigitalGlobe 2008; SanGIS 2007; City of Escondido 2008, 2009; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004

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Scale: 1 = 72,000; 1 inch = 6,000 feet

Figure 4-2
Sanitary Sewer Collection System

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are also included for the proper disposal of FOG generated within the sanitary sewer system service area. The program also serves to identify sanitary sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for these sections.

This program establishes the City as the legal authority to prohibit FOG discharges to the system and identify measures to prevent overflows and blockages. It also gives the City the authority to:

- require grease removal devices (such as traps or interceptors), design standards for the removal devices, proper maintenance, suitable BMPs, and accurate recordkeeping and reporting; and
- inspect grease producing facilities, take enforcement measures, and determine whether the enrollee has sufficient staff to inspect and enforce the FOG ordinance.

Good Housekeeping

Measures are incorporated into sewer maintenance activities to minimize the discharge of potential pollutants to the environment. These standard work practices include keeping work areas clean, vacuuming, and cleaning up spills or other maintenance-related materials, as necessary.

Source Control/Pollution Prevention

BMPs are implemented for sewer maintenance activities and include dry weather scheduling of activities, berming work areas, and properly disposing of waste products and materials.

Sewer System Inventory Management

To assist with inspection and maintenance activities and to track potential leaks within the sanitary sewer system, the City maintains and updates a GIS-based inventory of its sewer collection system facilities (Figure 4-2). Information related to the City's sewer pump stations is managed in the City's municipal facility database, which includes site location, activity description, potential pollutants, required BMPs, and whether the facility is within a tributary of a §303(d)-listed waterbody and generates pollutants for which the waterbody segment is impaired.

Additional Controls

As appropriate, supplemental measures are employed where facilities are repaired or maintained and are tributary to a §303(d)-listed waterbody segment (where pollutants are potentially generated for which the water is impaired), or are within, directly adjacent to (i.e., within 200 feet), or discharging directly into receiving waters within ESAs. The following 303(d)-listed waterbodies have impairments that can be associated with pollutants from sewer system operation:

- Escondido Creek (phosphate, sulfate, enterococcus, fecal coliform, total nitrogen as N),
- San Marcos Creek (phosphorus),
- Lake Hodges (nitrogen, phosphorus, turbidity),
- Kit Carson Creek (TDS),
- Felicita Creek (TDS), and
- Cloverdale Creek (phosphorus, TDS).

The following additional controls were implemented within these areas:

- increased visual inspection frequency for potential leaks,
- implementation of absorbent spill response materials in the work area perimeter, and
- additional sedimentation controls when needed.

4.3.4 Program Implementation

The programmatic elements described above serve to verify that the required BMPs are consistently employed for the sanitary sewer collection system. In addition, the following BMPs are implemented by the City to minimize potential pollution from municipal sanitary wastewater.

Education and Staff Training

The City's municipal education program is designed to inform and train municipal employees on urban runoff impacts and associated required BMPs. During the reporting period, Collections staff attended industry conferences to learn about technological advances, regulatory and permit requirement updates, and BMP upgrade requirement s relating to sewer facility operation and maintenance. New staff undergo an orientation process for proper training.

BMP Manual

The City utilizes a comprehensive BMP manual (City of Escondido 2008), which includes industry standard BMP guidance specific to municipal operations information, including sewer maintenance and repair, spill prevention and cleanup, and solid and liquid waste management.

Visual Inspections and Cleaning

The sewer system is routinely inspected by the Wastewater/Collections Division as part of the City's Preventative and Corrective Maintenance Program. Inspections were conducted at varying frequencies depending on historical issues, and age and location of the infrastructure and included:

- completing the Stormwater/Pretreatment Program inspection form for each location inspected,
- confirming manhole seal integrity,
- documenting site conditions,
- prescribing corrective action (if necessary),
- reviewing the need for additional BMPs (if necessary), and
- designating modifications for improving pollution prevention.

During the reporting period, approximately 40 miles of sewer line were inspected and approximately 191 miles were cleaned.

HARRF Monitoring

During wet weather conditions, wastewater treatment plant flows at the HARRF were monitored as an indicator of stormwater infiltration. Wastewater plant staff are vigilant in monitoring plant flow, as plant capacity is an ongoing issue of concern for operators and City management. HARRF monitoring data and associated information are reported to the state under separate cover.

4.4 MUNICIPAL SEPARATE STORM SEWER SYSTEM

4.4.1 Background

The primary function of an MS4 is to collect and convey surface runoff during storm events to prevent flooding. The City's MS4 consists of natural creeks and streams, streets, curbs/gutters, inlets, catch basins, pipes, culverts, outfalls, and concrete channels. Escondido Creek and Reidy Creek are the largest drainages within the City's MS4.

4.4.2 Source Characterization

Activities associated with the operation and maintenance, or misuse (i.e., illicit discharges or connections, as discussed in Chapter 7), of the City's MS4 can contribute a variety of pollutants to receiving waterbodies. Further, as addressed in subsequent sections of this annual report, pollutants from activities associated with construction or developed areas (industrial/commercial/residential activities) can be transported to the MS4 if not properly managed.

To successfully implement a program to preclude the release of pollutants into the City's MS4 and receiving waters, the City maintains a GIS-based MS4 inventory. In 2009 all MS4 features, including inlets, outlets/outfalls, culverts, and channels, were mapped with submeter Global Positioning System (GPS) units in concert with MS4 inspections. The updated MS4 inventory developed as part of this effort is illustrated in Figure 4-3.

4.4.3 Best Management Practice Requirements

BMPs are specified to address pollutants of concern associated with maintenance and operation of the MS4 and are applied on the basis of site-specific conditions, needs, and feasibility to the MEP. BMPs implemented by the City that are associated with the MS4 are described below.

Visual Inspections and Storm Drain Cleaning

The City conducts a variety of visual inspections of the MS4 for maintenance and cleaning needs. As part of its MS4 cleaning and inspection program, maintenance crews conduct year-round inspections of the City's high-, medium-, and low-priority MS4 facilities to assess the need for cleaning to minimize pipe blockages, remove pollutants from the MS4, and reduce flooding hazards. This effort also helps to minimize the amount of pollutants and contaminated runoff that enters the MS4 when maintenance is conducted prior to the wet season (October–April).

During this reporting period, visual inspections were conducted based on the MS4 prioritization. Other inspections and cleanings were a result of public service requests or hot line calls. Inspection procedures involved evaluating each MS4 feature (including inlets, cleanouts, curb drains, and culverts) to determine if cleaning was needed. Due to the size of the City's MS4, the effort of inspecting and cleaning storm drain facilities is conducted on an ongoing basis; therefore, data provided include what was accomplished during this reporting period (refer to Table 4-4 in Section 4.4.4). The City has one dedicated crew continually inspecting and cleaning year-round.

The information relative to each MS4 feature is documented and analyzed to assist in determining the re-prioritization of MS4 facilities throughout Escondido. In addition, the monitoring and cleaning of the MS4 locations assist in determining trends or patterns with trash/debris in relation to population density or traffic volumes and will provide assistance in determining additional BMPs to combat pollution. The City plans to analyze the inspection data collected to date and next program year's inspection results (2012–2013) to determine the need to reprioritize MS4 facilities. This analysis will coincide with the expiration of Order R9-2007-0001 and the anticipated adoption of the new permit in 2013.

The City also routinely conducts bimonthly channel and creek assessments. Visual inspections are also conducted for MS4 facilities that are prone to flooding, which can be attributed to high volumes of trash and debris. These locations are inspected once per year between May 1 and September 30.

In addition, open channels are cleaned of anthropogenic litter during regularly scheduled cleaning activities or as additional conditions necessitate. Debris and waste removed from these facilities are disposed of properly and in accordance with all applicable regulations. Where sensitive environmental conditions exist, regulatory permitting needs are assessed to avoid or minimize pollutant impacts. The amount of trash and debris collected is tracked and maintained in a database to assist in evaluating future inspection and maintenance needs. Inspection and cleaning information is provided below in Section 4.4.4.

Sea Curtain Maintenance

Areas downstream of the Escondido Creek flood control channel are protected from significant accumulation of floating trash and debris via retrofitted sea curtains. Although these curtains are deployed year-round, they primarily serve to capture trash and debris in the channel during wet weather. The curtains are cleaned in conjunction with other MS4 cleaning efforts (described above), and the amounts of trash and debris removed are quantified.

Good Housekeeping

Measures are incorporated into MS4 maintenance activities to minimize and eliminate potential pollutants. These standard work practices include keeping work areas clean of trash, sediment, and debris; vacuuming; and cleaning up spills, as necessary.

Source Control/Pollution Prevention

BMPs are implemented for storm drain maintenance activities and include dry-weather scheduling of activities, berming work areas, and properly disposing of waste products and materials.

Access Restrictions

Fencing is maintained along the perimeter of the Escondido Creek flood channel and many other associated flood control structures to prevent public access. In addition to public safety, security fencing provides additional protection against vandalism, windblown trash and debris, illegal dumping, and animal access.

Water Conservation Programs

The City administers a comprehensive Water Conservation Program that complements its stormwater pollution prevention efforts. For example, in conjunction with the San Diego County Water Authority and the Metropolitan Water District of Southern California, the City provides programs to assist the public in efficiently managing residents' outdoor water use to reduce irrigation runoff. These programs include water surveys, rebates to purchase irrigation-efficient devices such as stream-rotating nozzles, and weather-based irrigation controllers. In addition, the City adopted a water conservation/shortage ordinance that restricts water use activities often associated with urban runoff.

Additional Controls

Supplemental measures are implemented in areas tributary to §303(d)-listed waterbody segments (where an activity might generate pollutants for which the waterbody segment is impaired) and for areas directly adjacent to (i.e., within 200 feet) or discharging directly to receiving waters within ESAs. Within Escondido, Lake Hodges and Escondido, Felicita, and Kit Carson Creeks are impaired for constituents that could be associated with MS4 runoff. As needed, the following additional controls are implemented in these areas:

- increased cleaning and maintenance priority, and
- inlet protection during maintenance activities.

4.4.4 Program Implementation

The steps that the City has taken during the reporting period to ensure the implementation of required BMPs are described below.

Education and Staff Training

Municipal maintenance stormwater staff attend a bi-annual stormwater workshop. The last workshop was help in the spring of 2011 and the next training will be held in early 2013.

BMP Manual

The City uses a comprehensive BMP manual (City of Escondido 2008) that provides specific information and BMP implementation guidance applicable to MS4 operation and maintenance activities, including identification and elimination of illicit discharges and connections.

MS4 Trash Assessment

The City continues to implement trash monitoring requirements (as provided by the Copermittee Dry Weather Monitoring Workgroup) as part of the dry-weather monitoring program. Results of the trash assessment and monitoring will be reported in the forthcoming Illicit Discharge Detention and Elimination Monitoring Report to be provided to the RWQCB in December 2012.

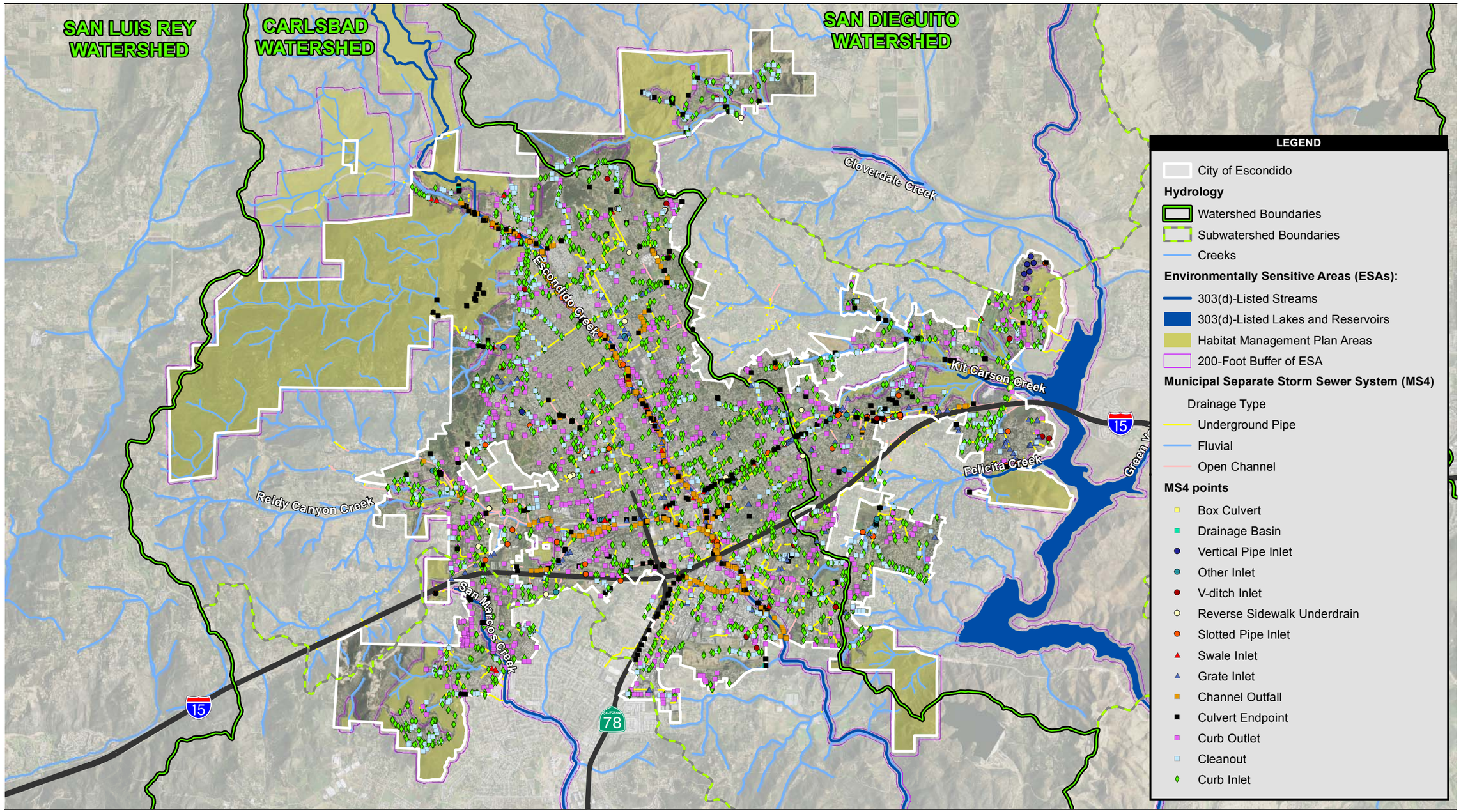

Source: DigitalGlobe 2008; City of Escondido 2006, 2009; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004

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Scale: 1 = 72,000; 1 inch = 6,000 feet

Figure 4-3
Municipal Separate Storm Sewer System (MS4)

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MS4 Data Inspection and Cleaning

Table 4-4 presents information associated with MS4 inspection and cleaning efforts as described in Section 4.4.3. Inspection and maintenance activities of municipal treatment control facilities are presented in Chapter 2.

Table 4-4. MS4 Inspection and Cleaning Data

MS4 Type	Total number	Number inspected	Number where accumulated trash exceeded cleaning criteria	Distance inspected found with anthropogenic litter	Number cleaned	Amount of waste and litter removed (tons)
Channel Outfalls	356	303	1	N/A	1	0.08
Open Channel	302 (mi)	379 (mi)	N/A	244 (mi)	244 (mi)	13.23**
Subtotal						**13.31**
Inlets	2,821	1,623	299	N/A	299	--
Culverts	387	224	16	N/A	16	--
Cleanouts	902	445	46	N/A	46	--
Outlets	834	516	189	N/A	189	--
Basins	4	2	1	N/A	0*	--
Subtotal	**5,304**	**2810**	**551**	**N/A**	**551**	**64**
Total Amount (tons) Collected from Entire MS4						**77**

* Site had not been cleaned as of the time of report development.
** Includes open channel, homeless camp cleanups, and adjacent bike path cleanups
mi = miles
N/A = not applicable

The City does not propose any facilities needing less than annual inspection at this time.

Administrative Controls

The City utilizes a GIS-based Asset Management Program to inventory MS4 facilities, create work orders for MS4 maintenance, and manage work history. The software creates an electronic task inventory and work history each time a work order is assigned. Utilization of this system allows City employees to analyze the City's infrastructure as a whole. Current and future problem areas are more easily tracked and located because the program compiles a maintenance history.

4.5 CORPORATE YARD

4.5.1 Background

The Corporate Yard (Yard) accommodates several divisions of the municipal Public Works/Utilities Department, including:

- **Streets Division and Parks Division**, which are responsible for maintaining streets, storm drains, and median/parkway and municipal parks landscaping; graffiti removal; and street sweeping;
- **Building Maintenance Division**, which provides preventative maintenance, repairs, and custodial services for all City-owned buildings and facilities;
- **Fleet Services Division**, which provides centralized management of the City's fleet of vehicles and equipment;

- **Water Division and Field Operations Division**, which provide maintenance and operations of the water distribution system;
- **Wastewater Collections Division**, which keeps the sanitary sewers flowing and clear of obstructions while protecting the citizens and the environment from sewer overflows and backups; and
- **Industrial Pretreatment Inspection Division,** which inspects food and commercial business establishments for appropriate sewage pretreatment.

4.5.2 Source Characterization

The Yard consists of two distinct parcels: the "Old" City Corporate Yard and the Corporate Yard Expansion. The Old City Corporate Yard site is located on North Spruce Street, approximately 0.25 mile south of Washington Avenue (Figure 4-4). Both parcels comprise approximately 9.25 acres. The Yard is situated at the confluence of Reidy and Escondido Creeks, which are concrete lined at this location. Although approximately 90 percent of the site is impermeable, it is separated by vegetated buffer strips along the upper banks of the adjacent creeks. The site has nine drainage basins that discharge stormwater at six discrete locations.

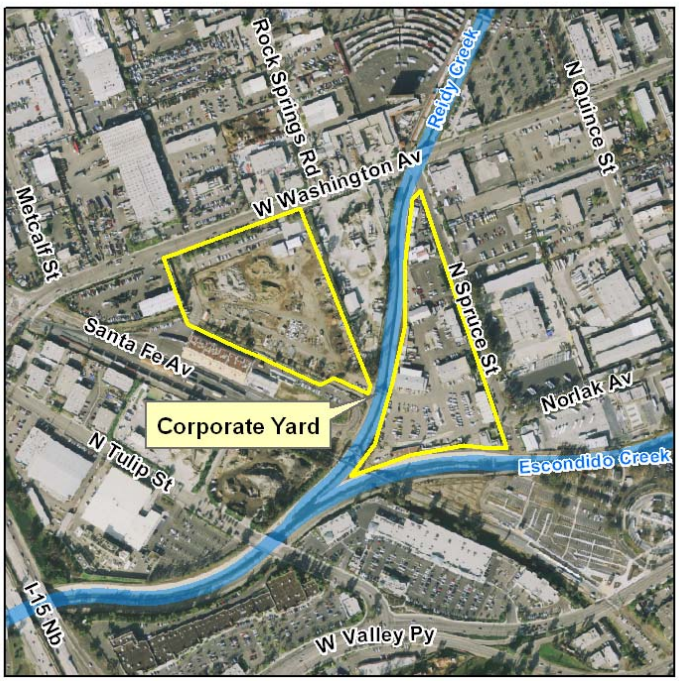

Figure 4-4. Corporate Yard Location

On-site facilities include a maintenance shop and garage for City vehicles, refueling station, two large fuel storage tanks, office building, parking lot, storage areas, and self-contained vehicle washing station. Activities at the site include the following: materials storage; vehicle washing, refueling, and maintenance; and employee parking. Pollutants of concern from these activities include oil and grease from vehicle parking; maintenance, parking, and storage of equipment; potential spills from fueling areas; sediment from unpaved grounds; and potentially hazardous waste from material storage.

The Corporate Yard Expansion site lies to the northwest of the Old City Corporate Yard and is separated via a metal-mesh bridge over Reidy Creek. Most of the site is unpaved and used for spare equipment and material storage, equipment training, and waste recycling. An unoccupied (temporary) fire station and an office trailer are situated at the northern portion of the yard along Washington Avenue. Pollutants of concern from this area could include oil and grease from temporary storage of equipment and vehicles, and sediment from stockpiles and unpaved grounds. The City plans to relocate the entire corporate yard and is currently evaluating several locations throughout the city. During this reporting period, no staff have relocated, and activities at the Yard are being conducted as mentioned above. However, the City's Water Division began relocating equipment and materials to the future site located in East Escondido, near 3450 East Valley Parkway. Currently, only water pipes are being stored on the site. Future activities associated with relocation of the Yard will be reported in the appropriate annual report.

A summary of the potential pollutant-generating activities that could occur at the Yard is provided in Table 4-5.

Table 4-5. Potential Pollutant-Generating Yard Activities/Areas and Corresponding BMPs

Area	Activity	Pollutant Source	Potential Pollutant	Required BMPs
Fuel Storage Area	Refueling of vehicles	Diesel and gasoline storage containers	Petroleum products	Good housekeeping Secondary containment (double-walled fuel tanks) Hazardous material containment Spill kits
Vehicle Parking	Parking for City vehicles	Leaks from vehicles or sheet-flow runoff	Hydrocarbons, metals	Good housekeeping Spill kits Storm drain inlet protection Vehicle inspections Drip pans, as needed
Stockpile Yard	Stockpiling of equipment and materials used in City Public Works activities	Sediment from soil stockpiles; runoff from debris piles and equipment storage	Sediment, nutrients	Good housekeeping Erosion and sediment control BMPs Dust and particulate control practices Vehicle inspections, monitoring
Vehicle Wash Area	Washing of City vehicles and equipment	Dirt from vehicles and grey water from cleaning and washing	Detergents and emulsifiers	Good housekeeping Washwater recycling Sump filtering location Biodegradable emulsifiers and detergents
Auto Repair Shop	Vehicle repair and maintenance for City motor vehicles	Potential spills from vehicle maintenance and waste material storage, and equipment leaks	Hydrocarbons	Good housekeeping Spill kits Weather protection for work areas Secondary containment of oils and lubricants
Electrical and Paint Shop	Storage and maintenance shop for painting equipment	Potential spills from paint equipment maintenance and paint material storage	Paints, additives, and equipment leaks	Good housekeeping Materials kept under cover Secondary containment of hazardous materials
Equipment Storage Areas	Heavy equipment storage for Public Works Yard	Equipment leaks and vehicle repairs	Hydrocarbons, dirt from vehicles	Good housekeeping Spill kits Work conducted under covered areas Secondary containment of oils and lubricants
Employee Parking Area	Vehicle parking for City employees	Equipment leaks	Hydrocarbons, dirt from vehicles	Good housekeeping Spill kits Drip pans Storm drain inlet protection Vehicle inspections
Various City Buildings	Administration and offices for City Public Works	Roof drainage	Air-deposited pollutants	Good housekeeping Storm drain inlet protection
Landscaped Areas	Irrigation for City landscaping	Runoff from irrigation	Soil and fertilizers	Good housekeeping Regulated landscaping irrigation
Unpaved Areas	None	Water and wind erosion	Sediment	Good housekeeping Erosion and sediment control BMPs Dust and particulate control practices Storm drain inlet protection

4.5.3 Best Management Practice Requirements

BMPs are applied to address pollutants of concern associated with specific activities and areas throughout the Yard (Table 4-5). Additional controls are also implemented for this facility since it is tributary to a §303(d)-listed waterbody (i.e., Escondido Creek concrete flood channel). These BMPs and controls are summarized in Table 4-5.

The Yard operates under an approved HAZMAT Business Plan for the handling and storage of material used at the facility. Fueling stations are maintained in good operating condition and spill cleanup materials are readily available at multiple locations. Street cleaning of the Yard is performed at least annually (in September) but is conducted as needed if conditions warrant.

Additional Controls

Due to the proximity to sensitive surface waters and on-site activities, additional controls are implemented at the Yard. Runoff from the Yard discharges to either Escondido or Reidy creeks, both concrete-lined channels at the discharge location. The segment of Escondido Creek where Yard runoff is discharged is listed as impaired for DDT, manganese, phosphate, selenium, sulfate, toxicity, enterococcus, fecal coliform, total nitrogen as N, and TDS. Activities occurring on the portion of the Yard discharging to Escondido Creek that have the potential to contribute these pollutants include the storage and handling of fertilizers (phosphate, sulfate, total nitrogen as N) and TDS from general runoff.

Additional controls implemented to address these potential pollutants at the Old Corporate Yard are described below.

- A vegetated buffer strip is maintained along Escondido and Reidy creeks for infiltration of sheet runoff. Vegetated buffers are also protected by fiber rolls to capture sediment and help filter runoff.
- Fiber rolls are maintained along the perimeter (i.e., fence) to capture sediment and prevent it from leaving the site.
- Storm drain inlet inserts are used and maintained to filter out runoff pollutants, and some inlet locations are protected with gravel bag/fiber roll protection.

Reidy Creek is not listed for water quality impairments; however, the following BMPs are employed to control pollutant discharges to the creek:

- Pervious surfaces are maintained to promote infiltration of rainfall.
- Fiber rolls and gravel bags are used and maintained at multiple discharge points throughout the Yard. These devices are used for filtering debris, screening floatable trash, and capturing other potential solids at the main drainage inlet of the Corporate Yard Expansion.
- A construction entrance shaker plate is installed at the Reidy Creek bridge crossing to reduce the potential for sediment addition to the creek.
- Perimeter protection is used and maintained around excavation training areas.
- Removal of recycled waste materials is conducted weekly.
- Outdoor storage of equipment is minimized and consolidated.
- Equipment associated with mechanical moving parts and/or internal combustion engines is covered with tarps to prevent contact with stormwater.

4.5.4 Program Implementation

The steps described below are taken by the City to ensure implementation of the required BMPs during the reporting period.

Education and Staff Training

Stormwater training is conducted bi-annually for the Yard maintenance staff. This training provides a general overview of stormwater regulations; pollutant sources; and required BMPs specific to the Yard, including source control, runoff control, and spill response and cleanup. The last training was held in the spring of 2011 and the next is scheduled for early 2013.

Focused Stormwater Compliance Inspections

The Yard was inspected in May 2012 by City stormwater staff to:

- verify compliance with stormwater regulations (including the General Industrial and General Municipal Stormwater NPDES permits, as applicable);
- designate corrective actions (if necessary);
- identify opportunities for improvement; and
- train staff regarding permit requirements as they relate to BMP selection, implementation, and maintenance.

In general, required pollution prevention and stormwater BMPs are being implemented throughout the Yard in accordance with the JURMP. Areas in need of additional or enhanced structural or nonstructural BMPs were identified for corrective action and the associated work routines are being evaluated for improved pollution prevention.

BMP Manual

The City Yard staff utilize a comprehensive BMP manual (City of Escondido 2008), which includes specific information and guidance to effectively implement the required BMPs as specified in this section as well as in the Yard's SWPPP.

4.6 OTHER FIXED MUNICIPAL SITES

4.6.1 Background

In addition to the Yard, numerous other municipal facilities exist throughout Escondido, including administrative buildings, police and fire facilities, parks, open space, and other various municipal sites. As previously mentioned, landfills, incinerators, solid waste transfer facilities, land application sites, sewage sludge treatment or disposal sites, hazardous waste facilities, and municipal airfields do not exist within the city and therefore are not addressed.

4.6.2 Source Characterization

As shown in Figure 4-5, the various types of facilities mentioned above have the potential to contribute pollutants in stormwater runoff if not properly managed. All municipal facilities are evaluated to determine potential pollutants so that appropriate BMPs can be applied. Each site is further evaluated and categorized as being a high, medium, or low threat to water quality on the basis of the following factors:

- type of area or activity,
- type and size of materials used/generated,
- potential for pollutants to be discharged to the MS4,
- location of area/activity, and
- proximity to receiving waterbodies and condition of receiving waterbodies.

To manage and track this information, the City maintains a watershed-based municipal facilities database that is updated annually during municipal facility inspections or as needed. The database includes information such as site location, activity description, potential pollutants, required BMPs, tributary status relative to §303(d)-listed waterbodies, and whether the facility generates pollutants for which the waterbody segment is impaired.

During this reporting period, one update to the municipal inventory occurred: removal of Fire Station Number 4, which is closed and scheduled for demolition. No changes to facility prioritization were made as a result of inspection findings.

4.6.3 Best Management Practice Requirements

BMPs for other fixed municipal facilities are specified relative to pollutants of concern and on-site materials or activities. Depending on the facility location, additional controls may also be applied.

Facility-Specific BMPs

All municipal properties within Escondido are categorized on the basis of usage type and evaluated to determine the most appropriate BMPs. These practices are evaluated throughout the year by designated staff and during the annual stormwater inspections. BMPs are modified, as needed, to improve pollution prevention/reduction effectiveness. Municipal fixed facilities are required to implement the following BMPs as site conditions or activities warrant:

- good housekeeping practices,
- material and waste management,
- vehicle and equipment management,
- spill prevention control and cleanup,
- use of safer alternative products,
- erosion and sediment controls,
- non-stormwater discharge controls,
- SWPPP implementation, and
- treatment controls.

Additional Controls

Supplemental measures are employed for municipal facilities that are tributary to a §303(d)-listed waterbody segment (where pollutants are potentially generated for which the water is impaired) or within or directly adjacent to (i.e., within 200 feet); or discharging directly to receiving waters within ESAs. The following 303(d)-listed waterbodies have impairments that can be associated with pollutants from various fixed municipal facilities:

- Escondido Creek (phosphate, sulfate, TDS, total nitrogen as N, enterococcus, fecal coliform),
- San Marcos Creek (phosphorus),
- Cloverdale Creek (phosphorus, TDS),
- Kit Carson Creek (TDS),
- Felicita Creek (TDS), and
- Lake Hodges (nitrogen, phosphorus, turbidity).

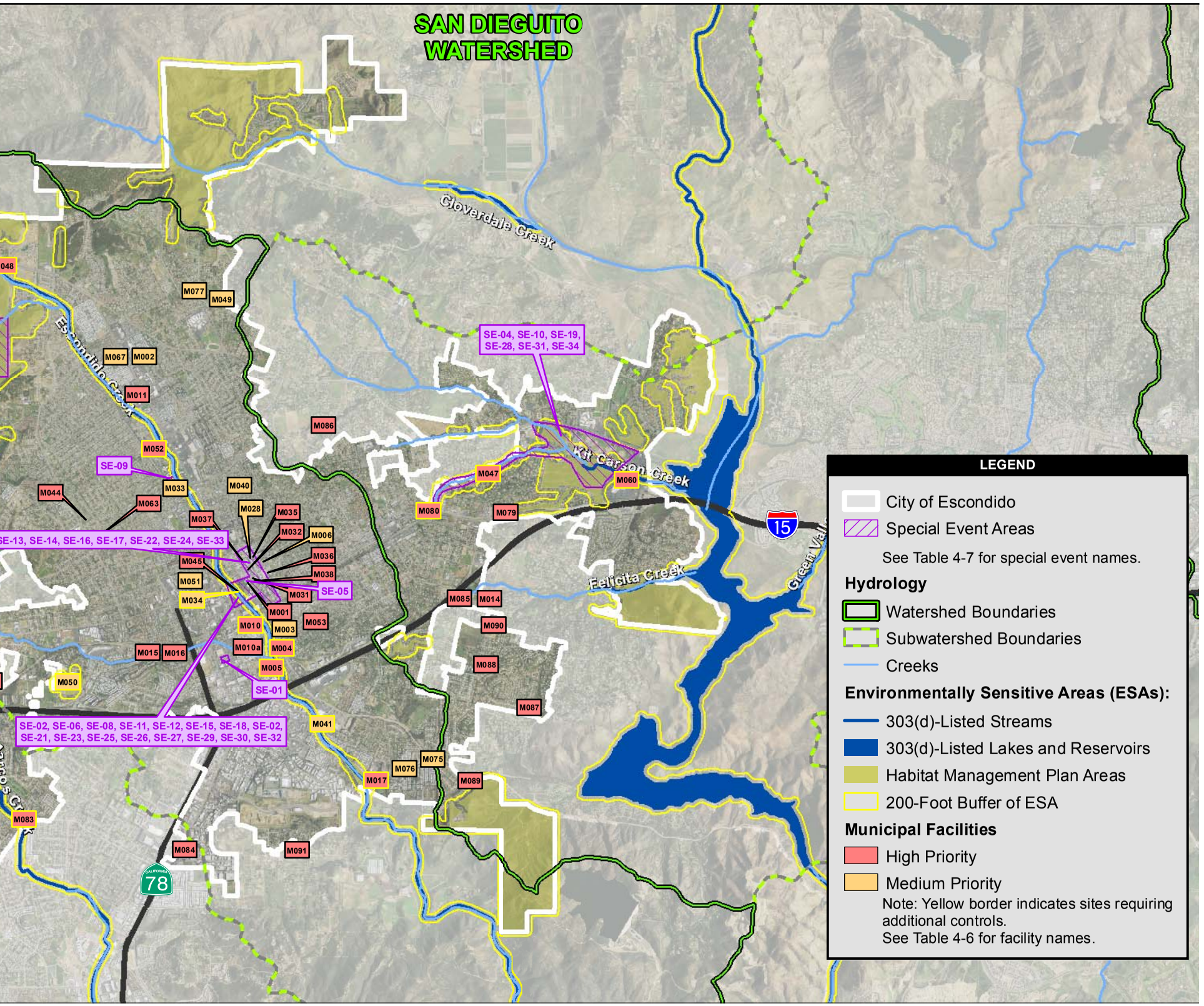

ency Watershed Mapping Committee 2004

Figure 4-5
Municipal Fixed Facilities and Special Event Locations

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The following additional controls were implemented to enhance pollution prevention relative to the pollutants listed above:

- focused training for Parks and Recreation Division staff on minimizing fertilizer use and proper application timing for park maintenance;
- maintenance of vegetated buffer areas in parks and around parking lot facilities (such as City Hall, Mountain View Park, and Parking Lots #1 and #2) to capture sediment and nutrients and help filter runoff to the MEP;
- inspection and assessment of discharge points to identify areas in need of additional protection including retrofitting of drain inlet inserts or gravel bag/fiber roll protection; and
- increased sweeping of all parking lots associated with municipal fixed facilities to reduce potential turbidity and TDS in site runoff.

4.6.4 Program Implementation

The following steps are taken to ensure that BMPs as identified above are being implemented at each fixed municipal site throughout the city.

Education and Staff Training

Maintenance Division staff attend stormwater education/training bi-annually. The last workshop was held in the spring of 2011 and the next training will be held in early 2013. Since several departments fall within this Division, the 2011 training included stormwater regulation and pollution control education specific to the range of activities that staff are required to implement in their applicable fields. The general training and outreach effort is accomplished through a variety of means as described in Chapter 8. Activity-specific trainings and tailgates are conducted as appropriate, depending on the activities performed at each municipal site. Refer to Chapter 8 for a detailed discussion on municipal staff training.

BMP Manual

The City developed and utilizes a BMP manual (City of Escondido 2008), which provides information and guidance to effectively implement the required BMPs appropriate for the activities at each municipal site.

Hotline

The City Public Works main line (760-839-4668) includes a menu selection for reporting illegal dumping into storm drains, creeks, and lakes. This hotline, described in detail in Chapter 8, provides a means for individuals to report stormwater violations for all areas, including municipal facilities and activities.

Facility Inspections

Stormwater inspections are conducted annually for all fixed municipal facilities that meet the inspection requirement criteria as set forth in Order R9-2007-0001. These facilities are designated as high and medium priority within the City's municipal facilities database. Inspections of these facilities involve the following:

- verifying compliance with stormwater regulations,
- identifying issues/violations,
- designating corrective actions (if necessary), and
- identifying opportunities for improvement.

There are 26 fixed municipal areas that are designated as high priority (not including stand-alone municipal parking lots, pump stations, and the Corporate Yard as addressed in previous sections) and that were inspected for stormwater compliance during the 2011–2012 program year. In addition, 13 medium-priority fixed municipal sites were also inspected to verify priority designation and confirm stormwater compliance. Table 4-6 presents all sites that were inspected during the reporting period.

Table 4-6. Municipal Fixed Facilities Inspected, Fiscal Year 2011–2012

ID	JURMP ID	Property Name	Location		
High-Priority Facilities					
1	M016	Community Gardens			Centre City Pkwy and Lincoln Avenue
2	M044	El Norte Park	1395		El Norte Parkway
3	M001	Escondido City Hall and Center for the Arts	201	N	Broadway
4	M010	Fire Station #1	310	N	Quince Street
5	M011	Fire Station #2	421	N	Midway Drive
6	M012	Fire Station #3	1808		Nutmeg Street
7	M013	Fire Station #4	3301		Bear Valley Parkway
8	M014	Fire Station #5	2319		Felicita Road
9	M108	Fire Station #6	1735		Del Dios Hwy
10	M063	Fire Station #7 Site	1220	N	Ash Street
11	M045	Grape Day Park	321	N	Broadway
12	M017	Hale Avenue Resource Recovery Facility	1521	S	Hale Avenue
13	M082	Humane Society	3450	E	Valley Parkway
14	M046	Jesmond Dene Park	2401	N	Broadway
15	M047	Kit Carson Park	3333		Bear Valley Parkway
16	M042	Lake Dixon Park	700	N	La Honda Drive
17	M008	Lake Dixon Water Filtration Plant and Park			La Honda Drive
18	M043	Lake Wohlford Park	25453		Lake Wohlford Road
19	M048	Mayflower Dog Park	3240		Valley Center Road
20	M049	Mountain View Park	1160	S	Citrus Avenue
21	M050	Rod McLeod Park	1701	S	Iris Lane
22	M051	Stephanie Lagunas Youth Activity Area	305	E	Mission Avenue
23	M052	Washington Park	501	N	Rose Street
24	M060	Westfield Shopping Town	272	E	Via Rancho Parkway
25	M053	Westside Park	333	S	Spruce Street
26	M015	Public Safety Facility (Police and Fire)	1163	N	Centre City Parkway
Medium-Priority Facilities					
1	M067	Surplus City Property for Purchase	2245	E	Valley Parkway
2	M034	Boys and Girls Club	115	W	Woodward Avenue
3	M002	East Valley Civic Center	2245	E	Valley Parkway
4	M040	Hidden Valley House	220	S	Cedar Street
5	M039	Interfaith Community Services	401	N	Spruce Street
6	M026	Joslyn Senior Center, Veterans Memorial Bldg	210	E	Park
7	M081	Land Lease El Norte Parkway			El Norte Parkway and Seven Oaks
8	M006	Main Library and Mathes Center	239	S	Kalmia Street
9	M033	Mental Health Systems	620	N	Ash
10	M076	Mountain Shadows Mobilehome Parks	1750	W	Citracado Parkway
11	M028	Police Substation	235	E	Grand Avenue
12	M075	The Views Mobilehome Park	2400	W	Valley Parkway
13	M041	Windsor Garden	1600	W	Ninth Avenue

Inspection findings for municipal parking lots, pump stations, and the Yard are presented in the respective sections within this chapter.

In general, inspections confirmed that required pollution prevention and source control BMPs are being implemented appropriately at municipal facilities. Six locations were issued verbal warnings, primarily due to poor housekeeping issues (e.g., presence of vegetative/organic debris). All sites demonstrated full compliance during follow-up inspections.

Facility inspections may also be conducted as a result of a public report/complaint or as part of an illicit discharge investigation (if applicable). During the reporting period, no reports of this nature led to additional inspections of municipal facilities.

4.7 POWER WASHING

4.7.1 Background

Power washing uses mechanical equipment to create a high-pressure stream of water, typically from a hand-held wand or nozzle for cleaning a wide variety of surfaces and objects. Depending on the application, power washing may be conducted with or without heated water or added cleaners. If not contained properly, wastewater from runoff from power washing has the potential to transport pollutants to surface waters.

4.7.2 Source Characterization

Power washing is conducted in municipal areas as a last resort if an area cannot be sufficiently cleaned through the use of dry methods alone. If needed, City staff are instructed to transfer vehicles, equipment, or other materials to the Yard, where dedicated washwater capture and recycling systems are in place. Other than at the Yard, power washing by municipal staff is discouraged and seldom occurs.

When absolutely necessary, municipal employees may conduct power washing for the following reasons:

- parking lot grease removal,
- building painting preparation,
- heavy equipment cleaning (when it is not feasible at the Yard's washwater recycling facility),
- graffiti removal, and
- preparing or treating certain surfaces.

4.7.3 Best Management Practice Requirements

Although dry cleaning methods are the preferred choice of cleaning by municipal staff, it may be an ineffective solution and power washing may be deemed necessary. If necessary, power washing must be conducted in accordance with the BMP requirements below:

- Prior to pressure washing activities, determine wastewater collection methods and proper wastewater disposal for each cleaning activity planned.
- Avoid power washing surfaces that contain lead-based paint or freestanding liquids (e.g., oil, solvents, antifreeze, etc.).
- Identify the disposal location.
- Maximize the use of dry methods for surface precleaning so that pollutants in the wastewater generated are reduced.
- Minimize the amount of water used during pressure washing activities (reduce wastewater generation).
- Use biodegradable cleaning products.

- Before power washing, sweep the area of any visible residual solids.
- Identify where all area storm drains are situated.
- Locate depressed areas that can be used to pool wastewater for collection.
- Contain and collect wastewater using vacuum pumps, booms/berms, portable containment areas, weighted storm drain covers, inflatable plumber's plugs, holding tanks, portable sump pumps, absorbents, or other suitable method.
- Place an oil-absorbent mat/pad on the surface of collected wastewater to help reduce oils in the wastewater collection area.
- Once wastewater has been collected, sweep up the visible solids remaining.
- Wastewater containing garbage, food wastes, or visible trash may not be discharged to land.
- Disposal of power washing wastewater into the sanitary sewer must be in accordance with the City's sanitary sewer ordinance and must meet pretreatment discharge requirements.
- Discharges of power washing wastewater into a septic system within City limits must not contain constituents known to be harmful to septic systems or likely to contaminate groundwater.

These or other similar procedures must be used to capture washwater and prevent pollutants from entering the MS4.

Because the required standard procedures for power washing serve to eliminate runoff and associated pollutants from entering the MS4 and ultimately the receiving waterbodies, the same procedures are employed when power washing is conducted in areas that are tributary to CWA §303(d)-impaired waterbodies or that are located within or directly adjacent to ESAs.

4.7.4 Program Implementation

The following procedures were implemented to ensure that the standard procedures were followed for power washing activities occurring during the reporting period.

Staff Training

As the major method of controlling pollution from power washing activities, the City has specific training materials on power washing BMPs for its employees. These materials specify that individuals performing power washing must demonstrate the following:

- they have the appropriate equipment necessary for controlling and cleaning up discharges,
- they know how to use the equipment, and
- they understand waste control BMPs and cleanup requirements.

BMP Manual

Should additional guidance be needed for properly conducting power washing and managing the wastewater generated, the municipal section of the City's BMP manual (City of Escondido 2008) provides information and guidance to effectively carry out the standard procedures associated with power washing. This BMP manual is available to all municipal staff.

4.8 SPECIAL EVENT VENUES

4.8.1 Background

Agricultural fairs, heritage days, and other special events are important occasions for Escondido residents and outlying rural communities. These events showcase unique aspects of Escondido and represent one of the few opportunities when residents and businesses can come together to celebrate what makes their community special.

4.8.2 Source Characterization

The City holds various special events throughout the year. These events have the potential to contribute pollutants (primarily trash and debris) that could be introduced into nearby surface waters. As a result, pollution prevention measures and BMPs are implemented during these events.

An important element of special events is minimizing the amount of waste generated before, during, and at the end of the event. Special events can generate hundreds of thousands of tons of waste each year, which can represent a significant cost, consume many volunteer or staff hours, and potentially impact water quality (through event non-stormwater discharges and waste exposure to rainfall at the event site and at the landfills). Accordingly, avoiding waste generation or providing opportunities and tools to adequately capture and contain it are target outcomes for special events management—particularly when special events are used as a forum for promoting pollution prevention through demonstration.

Events that are held on a consistent basis and at a fixed location are included as part of the watershed-based municipal inventory. The inventory is updated annually or as changes in special events occur. A list of the special events that took place during the reporting period is provided in Section 4.8.4. The BMPs applied to these events, as appropriate, are discussed in Section 4.8.3. Each event sponsor must obtain a permit that includes stormwater requirements. Other measures that are taken to ensure that the appropriate BMPs are installed and maintained are discussed in Section 4.8.4.

4.8.3 Best Management Practice Requirements

BMPs implemented for special events address pollutants of concern (largely trash and litter) and are applied based on event- and site-specific conditions, needs, and feasibility to the MEP. These BMPs include the following:

- litter and trash management,
- inspection of venue during the event,
- street sweeping,
- catch basin cleaning,
- stormwater handout distribution,
- pet waste dispenser distribution, and
- post-event inspection.

Special events provide a valuable opportunity to outreach, inform, and educate the public on stormwater awareness. As part of the public education campaign, the City disseminates information and materials to event attendees. Further detail regarding the public education campaign is provided in Chapter 8.

The City assesses the need for additional BMPs, as changes to activities or new events occur.

Additional Controls

For events that are expected to generate a significant amount of trash (e.g., Christmas Parade, Street Fair), additional controls are implemented and include the following:

- For events where trash is generated within municipal roads or parking lots, supplemental street sweeping is scheduled with Maintenance and Operations staff and conducted subsequent to the event.
- Temporary screens are used on storm drain inlets or catch basins to provide inlet protection where trash or debris has the potential to enter.
- Catch basins that intercept trash and debris from special event locations are inspected after each event and cleaned as needed by Maintenance and Collections staff.
- Temporary fencing is used when feasible and is useful in preventing trash from being transported off premises and into adjacent MS4s or waterbodies.

4.8.4 Program Implementation

Table 4-7 identifies the special events that took place during the reporting period.

Table 4-7. Special Events

Map ID	Event	Location	Sponsor
SE-01	American Crown Circus	635 W. Mission Ave.	American Crown Circus Inc.
SE-02	American Heritage Car Show	Grape Day Park	Escondido History Center
SE-03	Farmers Market	Grand Avenue	Escondido Downtown Business Association
SE-04	California Flying Disc Championships	Disc Golf Course in Kit Carson Park	San Diego Aces Disc Golf Association
SE-05	City Employee Health Fair	City Hall	City of Escondido
SE-06	Community Easter Egg Hunt	Grape Day Park	Cornerstone Church of San Diego
SE-07	Cruisin' Grand	Grand Ave. & Broadway	So Cal Show Promotions
SE-08	Dia del Ninos	Grape Day Park	San Diego Children's Discovery Museum
SE-09	Escondido Chamber of Commerce Carnival	Ash & Washington	Christiansen Amusements
SE-10	Escondido East Rotary Club BBQ	Kit Carson Park	Escondido East Rotary Club
SE-11	Escondido High 50+ Year Reunion	Grape Day Park	Escondido History Center
SE-12	Escondido Jaycees Christmas Parade	Broadway from Esc. High to Grape Day Park	Escondido Jaycees
SE-13	Escondido Street Fair	Grand Avenue	Escondido Chamber of Commerce
SE-14	Escondido Sunrise Rotary's Grape Day 5K	Escondido Streets	Escondido Sunrise Rotary Club
SE-15	Fiesta Mexicana	Grape Day Park	Huatulco Entertainment
SE-16	For the Love of Chocolate & Sweet Art Festival	Maple Street between Grand Ave & 2nd	Downtown Business Association
SE-17	Grand Champion Cruise	Kalmia St. between Grand & the alley	So Cal Show Promotions
SE-18	Grape Day Festival & Parade	Grape Day Park & Grand Ave.	Escondido History Center
SE-19	Great Strides Walk-a-thon	Kit Carson Park	Cystic Fibrosis Foundation
SE-20	Hidden Valley Kiwanis Trout Derby	Dixon Lake	Hidden Valley Kiwanis
SE-21	Hope for Smiley Ricky	Grape Day Park	Martinez Family
SE-22	Hula Paloosa	Kalmia St. between Grand & the alley	Downtown Business Association
SE-23	Independence Day Celebration	Grape Day Park/Great Green	CCAE
SE-24	Jingle Bell Cruise	Broadway downtown	So Cal Show Promotions
SE-25	Mother's Day Festival 2012	Grape Day Park	Golazo Sports Magazine
SE-26	Movies in the Park	Grape Day Park	Escondido History Center
SE-27	National Night Out	Grape Day Park	National Association of Town Watch
SE-28	Paws in the Park	Kit Carson Park	Escondido Humane Society
SE-29	Peace Begins with ME	Grape Day Park	Escondido Education COMPACT
SE-30	Saturdays in the Park	Grape Day Park	Escondido History Center
SE-31	Spring Fling Pro	Disc Golf Course in Kit Carson Park	San Diego Aces Disc Golf Association
SE-32	Spring Forward Festival	Grape Day Park	The Kids of America
SE-33	The Wedge	Grand & Broadway	Downtown Business Association
SE-34	Walk for Life	Kit Carson Park	Alternatives Women's Center

The following steps were taken to ensure that the required BMPs were implemented for special events.

Education and Staff Training

The City's municipal education and outreach program is designed to inform and to train municipal employees on urban runoff impacts and associated required BMPs. The general training and outreach effort is accomplished through a variety of means as described in Chapter 8.

BMP Manual

The municipal section of the City's BMP Manual (City of Escondido 2008) provides information and guidance to effectively carry out BMPs required during special events. The manual was distributed and is available to all staff involved in carrying out required BMPs for special events.

Pre-Event Planning Meetings

Planning meetings are held with event coordinators and City staff to outline expectations, including regulations and restricted activities associated with stormwater, many of which are incorporated into the permit applications.

Inspections

Inspections were conducted (for multi-day events) by designated staff in Streets and Parks Divisions to ensure compliance with stormwater regulations. Inspections were also conducted subsequent to each event to ensure that proper cleanup practices were completed.

4.9 MANAGEMENT OF PESTICIDES, HERBICIDES, AND FERTILIZERS

4.9.1 Background

Improper use, handling, or storage of pesticides, herbicides, and fertilizers can allow these chemicals to come into contact with receiving waters via stormwater or urban runoff from overwatering. To the extent practicable, the City minimizes or prohibits the use of these materials unless they are essentially needed.

4.9.2 Source Characterization

The main use of pesticides, herbicides, and fertilizers is to maintain municipal lawn and landscaped areas. These products are used primarily at developed park sites. Currently, the City manages these products through the Maintenance Division of the Public Works Department.

4.9.3 Best Management Practice Requirements

In accordance with Order R9-2007-0001, BMPs are employed as pesticides, herbicides, and fertilizers are used or stored throughout Escondido. These BMPs are summarized below.

Integrated Pest Management (IPM) Program

The City's IPM program is compliant with and implemented using the guidelines outlined by the California Department of Pesticide Regulation and the N-series publication for nonagricultural pesticide handlers. The program is monitored by the San Diego County Department of Agricultural Weights and Measures Pesticide Regulation Division.

Along with annual pesticide handlers training for employees who work with and apply pesticides, the City has an in-house Disciplinary Action Policy that includes field compliance inspections and disciplinary consequences for code violations by employees. The pesticide handler's training includes such topics as Workers Right-to-Know information; controlling leaks and spills; moving, storing, and disposing of pesticides; and first aid.

The City provides BMP training for landscape maintenance personnel. This training includes such topics as fertilizer application, vegetation control, and disposal and stormwater protection.

In accordance with the City's IPM program, insect pest management practices are closely managed and applications are minimized to the extent practicable. The majority of pest control applications are for weed and rodent control.

Spill Prevention, Control, and Cleanup

City staff involved in the application or storage of chemicals are trained in practices to prevent, control, and clean up potential spills and are provided with spill kits in the event of a spill.

Proper Storage and Disposal of Unused Pesticides, Herbicides, and Fertilizers

As part of the IPM program, storage and disposal of any used portion of pesticides and herbicides are conducted in accordance with container labels for each chemical as required per 40 CFR 156.10(i)(2)(ix). These instructions also include the appropriate disposal of any rinse liquids resulting from cleaning of pesticide application equipment and the disposal of the pesticide container. At a minimum, pesticides, herbicides, and fertilizers and associated equipment for application are stored in areas where contact with stormwater is prevented.

Additional Controls

The City restricts the use of pesticides, herbicides, or fertilizers through the implementation of its IPM program, a source control effort that benefits areas that are tributary to CWA §303(d)-listed waterbodies impaired for nutrients or pesticide/herbicide constituents or that are located within ESAs. Currently, these include the following waters and their associated impairments:

- Escondido Creek (DDT, manganese, phosphate, selenium, sulfate)
- Lake Hodges (manganese, nitrogen, phosphorus)

4.9.4 Program Implementation

The City conducts the following steps to ensure implementation of the IPM program and other designated BMPs for the use and storage of pesticides, herbicides, and fertilizers.

Municipal Staff Education and Training

Employees involved in the use or handling of pesticides, herbicides, or fertilizers attended pesticide safety training in the spring of 2012. This training session involves educating appropriate employees about the proper use and storage of these chemicals. Records associated with these trainings are kept at the Yard.

BMP Manual

The City's BMP manual (City of Escondido 2008) provides the necessary information and guidance to effectively carry out the required BMPs associated with the use, handling, and storage of pesticides, herbicides, and fertilizers. The BMP manual is available to all employees involved in these activities.

Application Documentation

The City continued to maintain records of the quantity and location of chemical usage for each application area. These records help to ensure that BMPs are being implemented and allow the City to modify the IPM program, where necessary.

5 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 INTRODUCTION

The Industrial and Commercial component of the City's JURMP is designed to reduce the discharge of pollutants in urban runoff from both stationary industrial and commercial areas and similar mobile businesses to the Maximum Extent Practicable (MEP). Facility owners and operators are mandated by City ordinances to implement stormwater pollution prevention measures to protect receiving waters and other environmental resources in accordance with the requirements of Order R9-2007-0001.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 Background

There are thousands of industrial and commercial facilities conducting business within the City's jurisdiction. The following sections describe the City's efforts to control urban runoff pollution from stationary industrial and commercial facilities.

5.2.2 Source Characterization

As presented in the Introduction (Chapter 1), industrial and commercial land uses within Escondido make up approximately 7 percent of the total jurisdictional area. Commercial land uses account for approximately 4 percent of the total land area and include administrative office areas. Industrial land uses account for approximately 3 percent of the total land area, all of which are designated as light industry. Although these land uses only comprise a small portion of the total land area within the city, they still have the potential to contribute a wide variety of pollutants to receiving waters. Based on prior site assessments and inspections, the following pollutants could occur at commercial and industrial sites:

- petroleum hydrocarbons from lubricants and fuels,
- fat/oil and grease from food preparation,
- nutrients from fertilizers,
- caustic substances from cement and other building materials,
- metals from mechanical devices,
- bacteria from various wastes,
- sediment,
- trash, and
- pesticides.

There are no landfills, no facilities subject to the Superfund Amendments and Reauthorization Act Title III, and no hazardous waste management facilities in Escondido.

To track and assess potential pollutant sources and focus program efforts where they are needed most, the City maintains and annually updates an inventory of all commercial and industrial facilities. The inventory is made up of facilities from the City's business license database that have the potential to contribute pollutants to the MS4 and are further categorized as being either a high threat or medium threat to water quality based on facility type, outdoor activities, past compliance findings, and proximity to surface waters and ESAs. Proximity to ESAs, including sensitive waterbodies (i.e., CWA §303[d]-listed waters), is determined through the use of GIS technology. In accordance with Order R9-2007-0001, the GIS-based inventory also includes the following information associated with each business: name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a CWA §303[d] waterbody segment and generates pollutants for which the waterbody segment is impaired); and a narrative description including SIC codes that best reflects the principal products or services provided by each facility.

Updates to the commercial and industrial facilities inventory during this reporting period were as follows:

- inclusion of new facilities that applied for city business licenses,
- removal of sites that moved or went out of business, and
- changes in priority status based on site activities or inspection findings.

Updates to the inventory of medium- and high-priority stationary facilities are provided in Appendix C. Figure 5-1 illustrates the location of all industrial and commercial facilities included in the database.

5.2.3 Best Management Practice Requirements

Owners and operators of industrial and commercial facilities throughout Escondido are required to implement a variety of BMPs to reduce and/or eliminate pollutants in stormwater discharges. BMPs are selected on the basis of business type and pollutant-generating activities occurring on-site. Minimum-required BMPs, as well as additional controls required for sites meeting specific permit criteria, are presented in Table 5-1.

Additional Controls for Stationary Industrial and Commercial Sites/Sources

Sites meeting the following criteria and that have the potential to contribute pollutants to runoff are designated as high priority and are inspected annually regardless of site type/activity:

- within or adjacent (within 200 feet) to an ESA;
- discharging directly to receiving waters within an ESA;
- tributary to a CWA §303(d)-listed waterbody segment, where a site/source generates pollutants resulting in impairment of the waterbody; and
- commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

CWA §303(d)-listed waterbodies and their respective impairments within the City's jurisdiction are as follows:

- San Marcos Creek: phosphorus, DDE, sediment toxicity, selenium
- Escondido Creek: DDT, manganese, phosphate, selenium, sulfate, TDS, toxicity, total nitrogen as N, enterococcus, fecal coliform
- Cloverdale Creek: phosphorus, TDS
- Kit Carson Creek: pentachlorophenol, TDS
- Felicita Creek: aluminum, TDS
- Lake Hodges: color, manganese, mercury, nitrogen, pH, phosphorus, turbidity

5.2.4 Program Implementation

During the current reporting period, the City implemented the methods described below to promote compliance and awareness of pollution prevention measures and BMP implementation at industrial and commercial facilities.

Facility Owner/Operator Education and Outreach

During industrial and commercial inspections, various educational and outreach materials were distributed to facility owners and operators based on site conditions and activities. In addition, the City's ordinances relative to stormwater and pretreatment were either distributed or discussed. Where necessary, inspectors designated site-specific BMPs to address on-site pollution-reduction concerns.

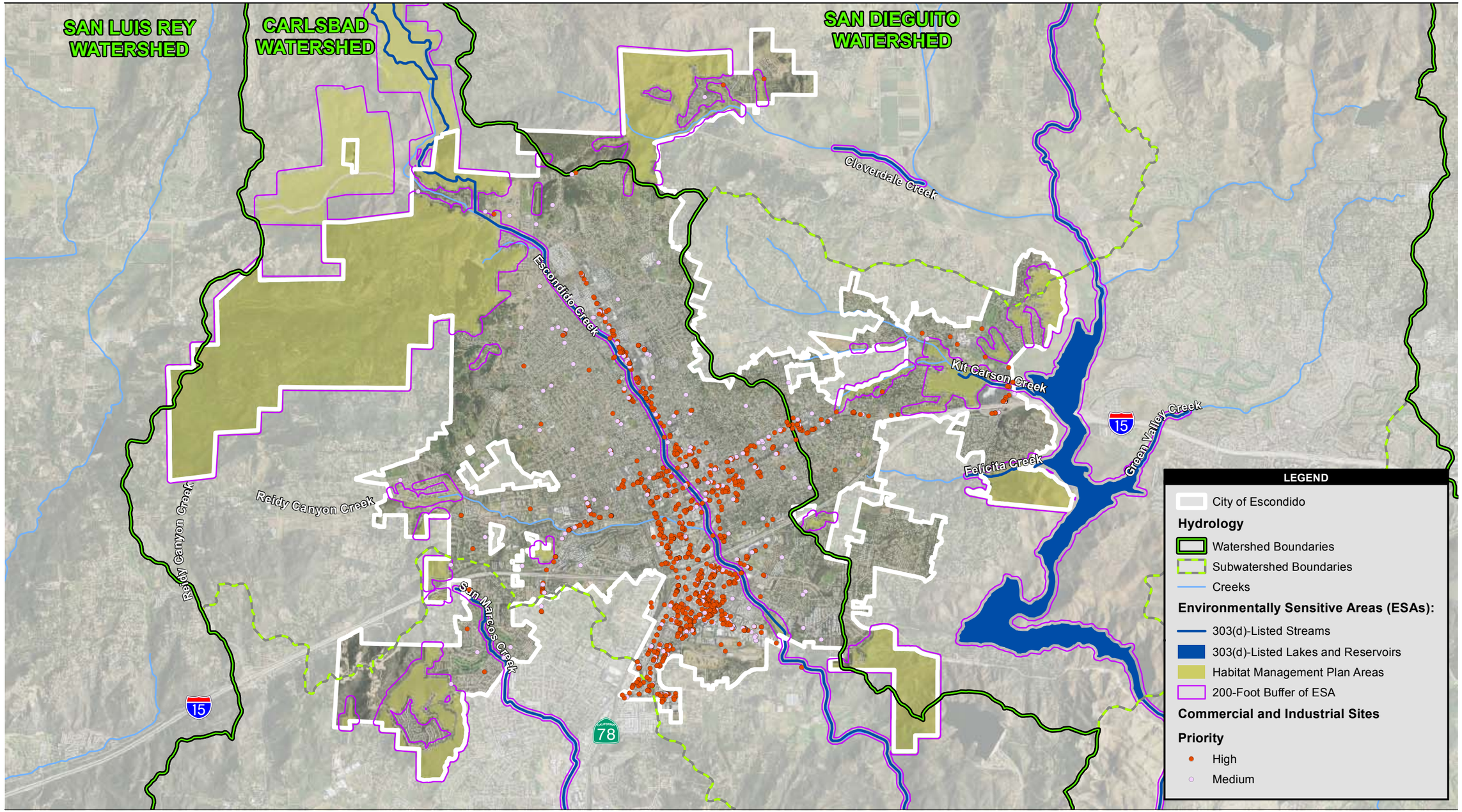

Source: DigitalGlobe 2008; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004; City of Escondido 2009, 2011; SanGIS 2011

6,000 3,000 0 6,000 Feet

Scale: 1 = 72,000; 1 inch = 6,000 feet

Figure 5-1
Priority Commercial and Industrial Facilities

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Table 5-1. Potential Pollutant-Generating Industrial and Commercial Activities/Areas and Corresponding BMPs

Commercial / Industrial Facility Type	Potential Pollutants	BMPs Required Based on Site Conditions
Automobile/Boat/Equipment Repair, Maintenance, Fueling, or Cleaning	Oil & Grease VOCs Detergents (MBAS) Mechanical Fluids and Lubricants Metals	Secondary containment Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Auto/Vehicle Parking Lots/ Miscellaneous Storage	Oil & Grease VOCs Mechanical Fluids and Lubricants Metals	Sweeping Secondary containment Spill cleanup
Retail/Wholesale Fueling and Petroleum Products	Oil & Grease VOCs Detergents (MBAS) Mechanical Fluids and Lubricants Metals	Secondary containment Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Pest Control Services	Pesticides	Indoors/proper storage Spill kits
Eating and Drinking Establishments	Trash Grease Bacteria Cleaners	Secondary containment (oil and grease) Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Cement/Masonry/Aggregate/Stone/ Excavation/Plastering (stationary)	Sediment Cutting fluids Cement waste	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Painting/Coating (stationary)	VOCs Metals	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Golf Course/Landscaping	Oil & Grease Detergents Fertilizer (Nutrients) Pesticides Sediment	Secondary containment and/or indoor storage Spill kits/cleanup Covering of outdoor storage materials (stockpiles) Secondary containment Dumpster covers
Pool Cleaning (stationary)	Acids/Bases Chlorine products Cleaners	Secondary containment and/or proper storage (no exposure)
Sanitary Services (stationary)	Bacteria Detergents (MBAS)	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms
Construction/Contractors	Oil & Grease Sediment VOCs Trash Cement	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Textiles/Fabrics	Cutting fluids VOCS Trash Oil & Grease	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers

Commercial / Industrial Facility Type	Potential Pollutants	BMPs Required Based on Site Conditions
Special Trade Contractors, including Metal Works, Recycling, Chemicals, Welding, Drywall	Cutting fluids VOCS Trash Oil & Grease Sediment Detergents (MBAS)	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers

MBAS = methylene blue active substances
VOCs = volatile organic compounds

Annual Inspections

The City aims to annually inspect all businesses designated as high or medium priority. Stormwater inspections are performed by the City's Utilities Wastewater Division in conjunction with pretreatment program inspections. This ensures that, in addition to stormwater BMP requirements, businesses are inspected for proper maintenance of grease traps, clarifiers, and other pretreatment devices that have the potential to result in illicit discharges and to impact water quality. No third-party inspections were conducted during the reporting period. The overall number of high-priority and medium-priority businesses within the City's inventory is 1,430; however, the number is consistently fluctuating due to businesses closing, opening, and being reprioritized. During this reporting period, the City's stormwater inspection totals continued to be robust, with more than 1,400 priority businesses inspected by trained municipal staff. These inspection totals included more than 500 food-based businesses, which were inspected twice during the program year to assess compliance with stormwater and pretreatment regulations. This effort alone accounts for more than 1,000 inspections annually. In addition, new facilities are added to the inspection process annually. All businesses that have applied for a new business license are flagged and, based on SIC/NAIC, are added to industrial and commercial facilities inventories for inspection. Approximately 152 new businesses were added and inspected during this reporting period. Of the 152 new businesses, 73 remain on the existing high- and medium-priority inspection inventory (Appendix C). The remaining 79 businesses were either removed from the inventory or ranked as low-priority due to business activity (typically administrative) or location (i.e., outside of the City's jurisdiction).

Inspections are structured to ensure full stormwater compliance at each site. During annual inspections, owners/operators were notified of applicable BMP requirements if conditions were found deficient. Sites were assessed based on stormwater compliance in the following areas:

- maintenance/general site housekeeping,
- pollutant source control/material storage,
- erosion control,
- sediment control,
- non-stormwater control, and
- waste management control.

Compliance inspectors also performed the following tasks:

- assessed compliance with City ordinances and permits related to urban runoff;
- assessed BMP implementation, maintenance, and effectiveness;
- confirmed facility coverage under the General Industrial Permit (Notice of Intent [NOI] and/or Waste Discharge Identification number), when applicable;
- reviewed BMP implementation plans, when applicable, and determined whether they were being properly implemented;
- reviewed facility monitoring data, when applicable;

- informed operators/owners on stormwater pollution prevention, as conditions warranted; and
- conducted visual observations for non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff.

As evidenced in past years, the annual compliance inspection process has demonstrated that a large percentage of the regulated community is responsive to JURMP requirements.

Enforcement and Follow-Up Measures

Enforcement actions conducted during the current reporting period included verbal warnings and written citations (e.g., Notice of Correction [NOC]), depending on past violation frequencies and the severity of on-site conditions. This year, as well as in years past, NOC violations have been effective in correcting compliance issues and have had lasting effects (as confirmed by subsequent inspections). Nonetheless, the City has structured its enforcement program to now include escalating actions to allow inspectors the flexibility to establish appropriate compliance penalties and corrective action time frames on a case-by-case basis. This escalating process is illustrated in Figure 5-2.

Figure 5-2. Enforcement Action Process

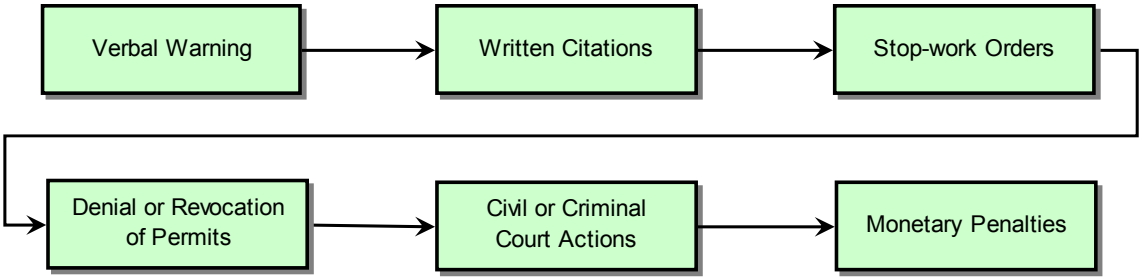

During the reporting period, NOCs were the primary form of enforcement action used to correct compliance issues at commercial or industrial facilities. Each business was given a specific timeframe to correct noncompliance based on the severity of the issues found. Follow-up inspections were conducted for every business that received an NOC. In addition, verbal warnings were issued when the severity of the activities or issues did not warrant an NOC.

All commercial/industrial inspections and NOC follow-ups were completed prior to the end of the fiscal year (June 30). Inspections confirmed that designated BMPs for industrial and commercial facilities are implemented consistently at the majority of sites. During this reporting period, 20 verbal warnings and 50 NOCs for stormwater violations were issued to industrial and commercial businesses. The NOC process serves to ensure that businesses are held to the designated BMP requirements and that compliance is achieved. The majority of the NOCs were given for poor housekeeping practices, inadequate maintenance of pretreatment devices (e.g., grease traps), and lack of secondary containment. Several businesses stored various materials in containers (e.g., 55-gallon drums) outside without secondary containment or weather protection. Other common BMP requirements found to need enhancement were the following:

- frequency of sweeping,
- presence of dumpster covers,
- implementation of spill kits, and
- removal of equipment/materials stored outside or properly covered.

Following issuance of the initial NOCs, all 50 sites were found to be compliant upon re-inspection.

Businesses that received an NOC for an illegal discharge that were not identified as a result of inspections but rather another enforcement mechanism, such as a hotline complaint, are discussed in Chapter 7, Illicit Discharge Detection and Elimination Component, and listed in Appendix D.

Identification of Non-Filers

During annual inspections, stormwater compliance at industrial and commercial facilities was evaluated relative to the Industrial General Permit (RWQCB 1997). No new non-filers were discovered during this reporting period. The non-filer businesses listed in Table 5-2 were provided to the Regional Board in the past three JURMP annual reports and via email in 2010, but, to date, have not obtained the recommended Industrial Permit coverage.

Table 5-2. Industrial General Permit Candidates

Business Name	SIC Code	Address
Pauley Equipment Rental	3523001	1110 W. Washington Ave.
Neff Equipment Rental	532*	955 W. Mission Ave.
Rebel Rental	7359001	142 W. Mission Ave.
Pine Tree Lumber (Wholesale and Retail)	5211001	707 N. Andreasen Dr.
J & W Redwood Co.	5211001	1179 W. Washington Ave.
Escondido Lumber Co.	5013001	310 S. Quince St.
Santa Barbra Transportation	4151001	520 Gannon Pl.

* NAIC

5.3 MOBILE SOURCES ELEMENT

5.3.1 Background

Numerous mobile services occur throughout the City's jurisdiction that can contribute a variety of pollutants to the MS4. Urban runoff pollution potential from these business areas varies temporally and spatially, and predicting where potential pollution might occur can be difficult. Identifying potential pollutants from mobile sources, requiring appropriate BMPs and educating business owners, is critical to preventing discharges from these mobile sources.

5.3.2 Source Characterization

The City developed and maintains an inventory of mobile businesses, which is updated annually from the business license database. The pollutants identified in Table 5-3 have been inferred from the types of mobile businesses operating in Escondido. However, the actual pollutant discharges occurring from these sources is based on proper handling and management of associated products and the waste streams generated.

Table 5-3. Potential Pollutants Associated with Mobile Businesses

Mobile Business Type	Potential Pollutants
Vehicle/Pressure/Carpet Washing	Detergents (MBAS) Oil & Grease Mechanical fluids (e.g., hydraulic, antifreeze) VOCs
Pest Control Services	Pesticides
Cement/Masonry/Aggregate/Stone/ Excavation/Plastering	Sediment Cutting fluids Cement waste
Painting/Coating	VOCs Metals
Pool Cleaning	Acids/Bases Chlorine products Cleaners
Sanitary Services	Bacteria Detergents (MBAS)
Construction/Contractors	Oil & Grease Sediment VOCs Trash Cement
Special Trade Contractors, including Metal Works, Recycling, Chemicals, Welding, Drywall	Cutting fluids VOCS Trash Oil & Grease Sediment Detergents (MBAS)

MBAS = methylene blue active substances
VOCs = volatile organic compounds

5.3.3 Best Management Practice Requirements

BMPs required of mobile businesses are designed to address proper management of contaminated runoff from their activities. Operators of mobile activities that generate wastewater must capture that wastewater and prevent pollutants from entering the MS4. As applicable, the following BMPs were required of mobile businesses to control wastewater and prevent pollution:

- Identify wastewater collection/containment methods and the ultimate disposal locations before the activity, sweep the area beforehand to collect visible solids.
- Use dry methods for surface precleaning to reduce wastewater generation.
- Minimize water use.
- Use biodegradable cleaning products.
- Identify and protect downstream storm drains.
- Contain and collect wastewater using vacuum pumps, booms/berms, portable containment areas, weighted storm drain covers, inflatable plumber's plugs, holding tanks, portable sump pumps, absorbents, or other suitable method.
- Use oil-absorbent mats/pads to help contain oils in wastewater.
- Once wastewater has been collected, sweep up visible solids remaining.

- Separate and dispose of garbage, food wastes, or visible trash in wastewater generated.
- Dispose of power washing wastewater to the sanitary sewer, if allowable under the City's sanitary sewer ordinance.
- Comply with pretreatment discharge requirements.

Because the required standard procedures for power washing serve to eliminate runoff and associated pollutants from entering the MS4 and ultimately the receiving waterbodies, the same procedures are required when power washing is conducted in areas that are tributary to CWA §303(d)-impaired waterbodies or that are located within or directly adjacent to ESAs.

5.3.4 Program Implementation

Education and Outreach

As part of the business license application and renewal process, mobile businesses were provided with information associated with local ordinance and BMP requirements specific to reducing the discharge of pollutants to the MEP.

Business License Application Process

Before business licenses were granted, applicants were required to demonstrate that they:

- have the appropriate equipment necessary to control, contain, clean, and recover discharges;
- know how to use the equipment; and
- understand waste control BMPs and cleanup requirements.

City business license staff members were trained to screen and assess the knowledge of various mobile business applicants regarding urban runoff pollution prevention.

Enforcement Measures

Since the location of mobile business activities is unpredictable, the process of confirming that required BMPs are being employed is challenging. The hotline is the primary method the City uses to assist with this effort. Another method includes visual observations conducted by City staff and stormwater inspectors while performing other activities throughout the city.

As with stationary businesses, the City enforces stormwater regulations for mobile businesses through a variety of means when violations are observed. Depending on violation frequencies and severity, enforcement actions are designed to escalate from a verbal warning to stop-work orders and/or monetary penalties.

6 RESIDENTIAL COMPONENT

6.1 INTRODUCTION

Residential land use areas and activities have the potential to contribute pollutants through urban runoff to Escondido's waterways. In an effort to prevent and/or reduce these pollutants, the City has designated and implemented pollution prevention and source control measures aimed at specific high-priority areas and activities. To better educate residents, the City develops and implements a broad range of tools and programs aimed at preventing pollutants from entering its storm drain system and nearby waterways.

6.2 SOURCE CHARACTERIZATION

Residential land use in Escondido constitutes approximately 34 percent (9,357 acres) of the total jurisdictional land uses, some of which are located within or adjacent to ESAs (e.g., a CWA §303[d]-listed impaired waterbody) where pollutants in runoff are of particular concern. Residential land use within or directly adjacent to ESAs is designated as an area requiring high prioritization for urban runoff controls. Figure 6-1 summarizes the residential areas around Escondido and identifies those that are within or adjacent to ESAs.

Because various domestic activities can introduce pollutants to urban runoff, they have the potential to contribute pollutants to Escondido's waterways through a variety of means, which are discussed below.

Automobile Repair and Maintenance

Repair and maintenance of automobiles occur frequently in residential neighborhoods. Automobile repair and maintenance activities, done by either residents or professional service providers, have the potential to contribute motor oil, grease, antifreeze, solvents, trace metals, and fuel to driveways and streets where they can be picked up by runoff and discharged to the MS4. Well-maintained vehicles will pollute less because they are less likely to leak fluids, require less gasoline to operate, and produce lower tailpipe emissions of hydrocarbons and particulates.

Automobile Washing

Automobile washing can potentially contribute detergents and foaming agents, sediments, metals, and hydrocarbons into receiving waterbodies. Runoff of washwater from driveways, carports, streets, and parking lots can convey these pollutants to storm drains, which could eventually discharge to receiving waters.

Automobile Parking

Vehicle parking on driveways, streets, or parking lots contributes to the accumulation of pollutants (particularly hydrocarbons) on these impervious surfaces when poorly maintained vehicles leak various fluids. Once deposited and exposed to runoff, these pollutants have the potential to be conveyed to the MS4 and surface waterbodies.

Home and Garden Care Activities and Product Use

A variety of home and garden care activities can potentially contribute pollutants to urban runoff, including the handling, storage, and disposal of hazardous products; excessive irrigation; and disposal of green waste. The conveyance of substances such as paints, insecticides, fertilizers, and cleaning products in urban runoff can potentially lead to aquatic toxicity, nutrient enrichment, and algal blooms in surface waters. Runoff from excessive irrigation can potentially convey these dissolved contaminants to the stormwater conveyance system.

Green Waste

The presence of green waste (e.g., grass, leaves, tree branches) in waterbodies can potentially affect the natural flow and configuration of stream channels, contribute to the suffocation of bottom-dwelling organisms, and increase the biochemical oxygen demand, which can decrease the amount of dissolved oxygen available for aquatic organisms.

Disposal of Trash and Household Hazardous Waste

If improperly disposed of, trash and household hazardous waste (e.g., paints, thinners, solvents, and pesticides) can be washed into surface waters after being exposed to rainfall and runoff. Because green waste is a byproduct of gardening and landscape maintenance, it can often contain residues of insecticides, pesticides, and fertilizers that could be transported into sensitive surface waters by runoff.

Disposal of Pet and Animal Waste

Animal waste contributes fecal bacteria to receiving waters when pet owners fail to act responsibly—including on their own private residential lawns and properties. In Escondido, equestrian and other semirural livestock land uses have a significant potential to negatively impact water quality if waste is left exposed to weather and allowed to run off residential properties.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During the reporting period, the City implemented a variety of BMPs for high-priority residential areas and activities. These BMPs include measures that require education and outreach. Table 6-1 specifies the BMPs that were encouraged and implemented as part of the residential education program.

6.4 ADDITIONAL CONTROLS FOR RESIDENTIAL AREAS

Although the City identifies high threat residential areas and activities as those located near or adjacent to ESAs, additional areas and controls are identified and implemented based on other variables, such as water quality monitoring results, visual observations by stormwater inspectors or other City staff, and persistent patterns of residential complaints.

Because it can be difficult to convey environmental messages in areas with language and other barriers, the City has, over the years, developed programs that directly deliver various resources to residents who are sometimes not as aware of community health, safety, and environmental issues such as the impact of litter, debris, or other activities that convey pollutants directly into the City's storm sewer conveyance system. In addition, the City's annual inspection of its storm sewer system continued to indicate greater volumes of debris in the infrastructure adjacent to areas where multi-family units and underserved populations are located. As a result of these findings, the City's stormwater education staff continued its outreach to the community's underserved populations by partnering with the Housing and Neighborhood Services Division, which coordinates neighborhood groups in Escondido's higher-density areas. Currently, the outreach program includes 16 neighborhoods that encompass 2,534 households. A description of these efforts is provided in Section 6.5.6, Community Outreach.

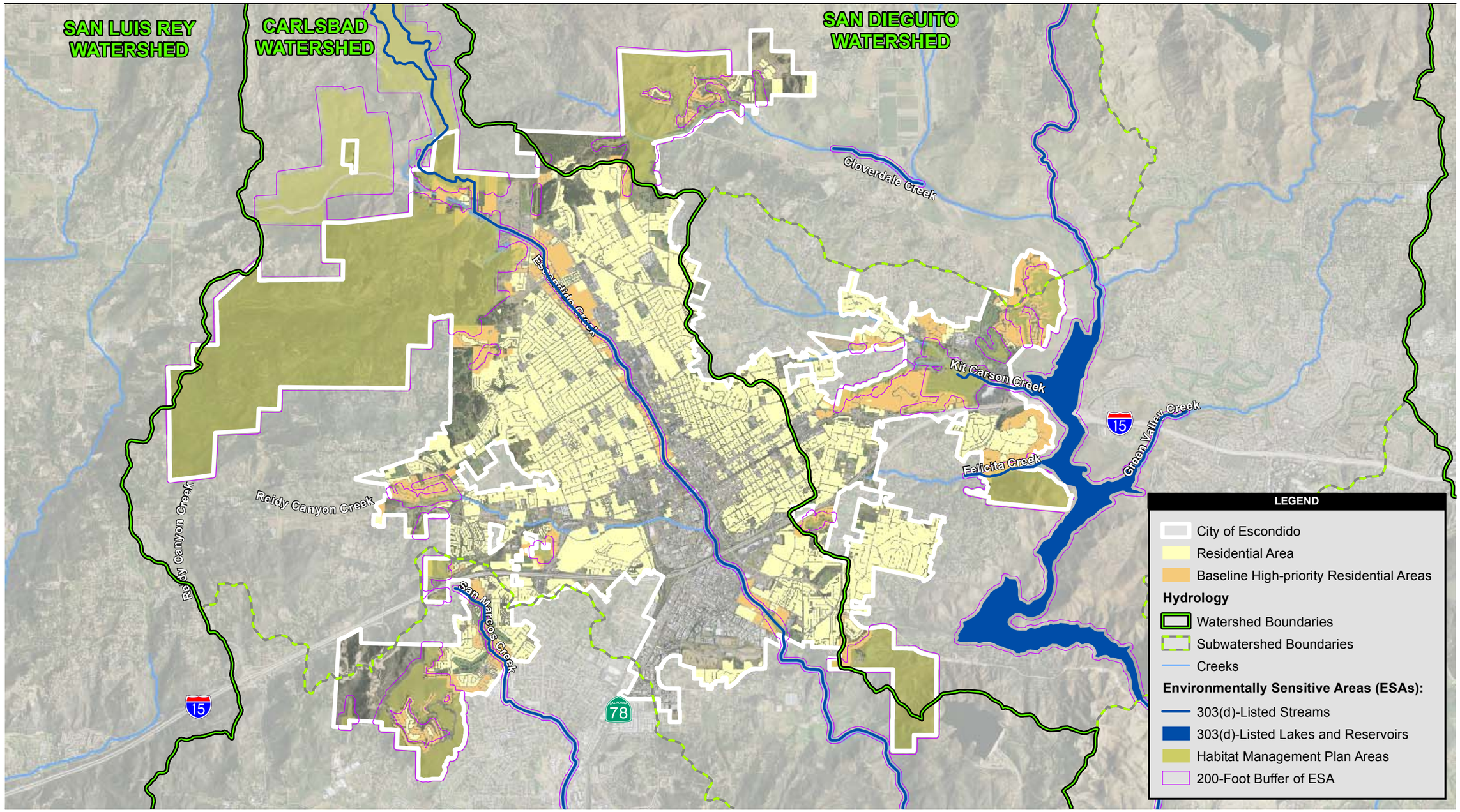

Source: DigitalGlobe 2008; City of Escondido 2007, 2009; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004; SanGIS 2011

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Scale: 1 = 72,000; 1 inch = 6,000 feet

Figure 6-1
Residential Areas

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Table 6-1. BMPs Designated for Residential Activities

Pollution Prevention	Controlling Discharges	Materials and Waste Management	Restrictions on Activity
Automobile Repair and Maintenance			
Practice routine preventative maintenance Reduce vehicle use through • changing driving habits • carpooling • use of public transportation • biking or walking for short trips Make timely vehicle repairs	Prevent leaks and spills from contacting stormwater by • using drip pans, plastic sheeting, or other materials to contain spills • working indoors or under shelter • not working outdoors in the rain • immediate cleanup of leaks and spills • using absorbent materials to clean up spills • establishing cleanup standards • requiring that tools and parts be cleaned only in contained areas	Properly manage and dispose of automotive wastes and material through • proper and lawful disposal of wastes • recycling of oil and antifreeze • storage of materials and wastes indoors or under cover • use of secure and watertight containers when storing materials and wastes outside	• Use commercial repair and maintenance facilities to avoid the potential for pollution in residential areas
Automobile Washing			
• Limit or eliminate detergents and/or other cleaners when washing • Use preventative practices to keep vehicles clean (i.e., park under cover)	• Use dry cleaning methods to avoid the generation of washwater • Turn off the water when not in use or use a controllable spray nozzle • Contain, capture, or divert washwater from the conveyance system, e.g., berms, etc. • Wash vehicles over porous surfaces, e.g., grass • Establish neighborhood wash areas where runoff can be properly managed	• Properly dispose of soapy water or rinse water • Launder rags and towels or dispose of them in the trash • Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing, i.e., remove grease or brake dust using towels	• Use commercial wash facilities to avoid the potential for pollution in residential neighborhoods
Automobile Parking			
• Use routine preventative maintenance practices • Establish parking restrictions in high-priority areas • Properly design and construct residential parking areas • Establish and enforce design standards for parking areas in residential areas	• Clean parking areas, especially where deposits have accumulated	• Use drip pans for leaking vehicles • Employ dry cleanup methods • Park on vegetated areas	• Prohibit the parking of inoperable vehicles on city streets

Pollution Prevention	Controlling Discharges	Materials and Waste Management	Restrictions on Activity
Home and Garden Care Activities and Product Use			
Garden and Yard Care Use safe and alternative methods: • Plant native and drought-tolerant species to reduce water use and green waste • Use beneficial insects as biological controls • Compost yard waste • Be practical when purchasing pesticides and fertilizers • Identify pests before attempting to eliminate them • Read and follow the instructions for garden care products Conserve water through xeriscaping, drip irrigation, soaker hoses, and microspray systems, and minimize overwatering runoff	• Immediately clean up spills of gardening chemicals, fertilizers, and soils • Return spilled materials to the container for future use or proper disposal	• Store lawn care products in closed, labeled containers in covered areas • Discourage the use of materials during windy or rainy days • Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain • Dispose household chemicals to household hazardous waste collection facilities or scheduled events • Use dry sweeping techniques for cleanup • Recycle lawn clippings and greenery waste through local programs	• Restrict hosing of paved surfaces to the street or gutter • Prohibit disposal of hazardous waste to the trash, landfill, or storm drain
Home Care and Maintenance			
• Plant or mulch hillsides to prevent erosion • Use safe substitutes for home cleaning and maintenance • Use products only according to label instructions • Use water-based paints when possible	• Clean up hazardous materials spills immediately • Use dry techniques for spill cleanup	• Store household hazardous materials in closed, labeled containers in a covered area • Recycle latex paint through community programs • Dispose unwanted household hazardous waste through proper collection facilities • Recycle unused, unwanted products • Recycle unwanted appliances and household equipment	• Restrict the disposal of washwaters (carpet cleaning, mop water, paint wash-up) from disposal to the street, gutter, or storm drain
Disposal of Pet Waste			
• Use spay/neuter programs to reduce feral dog and cat populations • Limit the number of pets allowed in residential neighborhoods	• Clean up after pets when walking them in public places • Clean up feces from yards • Properly dispose of pet feces in the toilet or trash	• Restrict free-running pets in high-priority areas • Properly manage manure • Compost manure	• Require livestock and similar semirural areas to control runoff from areas of animal waste

6.5 PROGRAM IMPLEMENTATION

6.5.1 Residential Area Oversight and Activities

The City's dry-weather monitoring and annual inspection programs provide a foundational tool for evaluating likely sources of pollutants. Based on data from the programs, the City implements focused education and outreach as appropriate. Table 6-2 lists each of the City programs and BMPs that are implemented based on residential activities and associated potential pollutants in order to reduce or prevent those pollutants from entering the City's storm drain system.

Table 6-2. Pollution Prevention Programs for Residential Activities

Residential Activity	Target Audience and Activity-Related Pollutants	City Program(s) and/or BMPs
Auto Repair	Do-It-Yourselfers Hydrocarbons Solvents	Used oil recycling campaign Street survey Street sweeping Complaint response and education Storm drain stenciling
Auto Washing	All residents Hydrocarbons Surfactants	Car washing campaign with coupon for free buckets Billing inserts City newsletter Complaint response and education Street sweeping Storm drain stenciling
Auto Parking	Multifamily schools Locations from street survey Hydrocarbons	Complaint response Street sweeping Storm drain stenciling
Home and Garden Care	All Residents Single-family residences with landscaping Household hazardous wastes Pesticides, fertilizers	Landscape and irrigation seminars Home conservation surveys Complaint response Billing inserts City newsletter Storm drain stenciling Street sweeping City household hazardous wastes disposal/collection
Pet Wastes	All residents Fecal coliform	Dog park Dog waste disposal bags at parks Storm drain stenciling Targeted signage Educational brochures
Trash**	All residents	"We Clean Escondido" Litter Abatement Street sweeping Storm drain stenciling Signage Strategic fencing Catch basin cleaning Sea curtain installation and cleaning

* Based on analysis/identification of residential properties in the City; prioritizing their potential for stormwater pollution based on location to ESAs and local waterbodies; and using monitoring and inspection data as appropriate information to support reasonable prohibitions to minimize impacts.

**Trash is considered a significant pollutant throughout Escondido. All urban runoff components include efforts to educate the public and minimize trash pollution. Citywide surveys to target debris accumulation locations and the current education and removal program, including biweekly monitoring of flood control facilities and daily debris collection and removal from City facilities, are being utilized to establish the appropriate data for a more comprehensive program.

Dry-weather data results for the 2011–2012 program year were evaluated for potential pollutant concerns related to residential sources. However, the results did not indicate a residential-specific source for some elevated actions levels. Dry-weather data provide water quality trends (i.e., exceedances over the action level) within residential areas; however, due to historical land uses (i.e., agricultural) and surrounding environmental conditions (e.g., heavily vegetated and natural waterways) it has been determined that the exceedances were not primarily caused by residential activities. However, follow-up investigations occur

with all exceedances, and during this reporting period no active residential activities were identified as a source of those exceedances. In the past, most exceedances caused by residential activities occurred upstream of the City's boundary within the unincorporated areas of San Diego County. For the complete dry-weather discussion, please refer to Chapter 7. Dry-weather data will continue to be evaluated relative to residential contributions.

Other effective mechanisms for implementing the City's residential program include the elements identified below, most of which are discussed in detail in Chapter 8 of this report.

6.5.2 Hotline

The City operates a stormwater hotline number that residents can call to report illegal storm drain discharge or disposal of trash or debris. The City Public Works main line (760-839-4668) includes a menu selection for reporting illegal disposal into storm drains, creeks, and lakes. This number is printed on all outreach material, including brochures, promotional items, and articles. Callers can leave a message or report their findings to the receptionist during business hours. After business hours, the caller is instructed to call Police Dispatch or 911 if the call pertains to a health and safety concern. The information from the calls is entered and tracked by the City's AZTECA program. This program is linked to the GIS program, which enables staff to locate the address in relation to the nearest storm drain. Details regarding the hotline calls are provided in Chapter 8, Section 8.3.4.

6.5.3 Surveys

The City used surveys to target residential areas and activities that create the greatest potential for urban runoff impacts. These surveys included street surveys to identify areas of trash and sediment accumulation, and resident research surveys by phone, mail, and email to identify community knowledge of urban runoff issues. During this reporting period, the City supported surveys developed on a regional basis. One of the surveys included questions to assess knowledge of basic stormwater concepts, such as pollution prevention and whether stormwater is conveyed to waterways untreated. This particular survey was distributed at the San Diego County Fair in June by representatives from various agencies, including the City of Escondido. In addition, a pet waste survey was developed on a regional basis and distributed at various jurisdictional outreach events. The City distributed the pet waste survey at the annual Paws in the Park event in Kit Carson Park. Regional representatives were present to help City outreach staff distribute the survey and various giveaways, such as pet waste bags. The City will continue to support surveys conducted on a regional basis and develop jurisdictional surveys as appropriate to better inform the community about the residential stormwater program.

6.5.4 Website

The City has developed the stormwater website that includes interactive BMP information for residents regarding car maintenance, pet waste disposal, swimming pool maintenance, garden care, and waste disposal. So that users can quickly access information, there is a quick link to the Stormwater Program in the "Find it Fast" section, which is located on the City's home page. The City tracks the number of visits to its stormwater website, the details of which are provided in Chapter 8, Section 8.3.2. The City will continue to track the number of visits to its website to evaluate its continuing relevance.

6.5.5 Distribution of Educational Information

The City provides a comprehensive local school educational program to provide stormwater pollution prevention information. Door hangers and focused mailings are also used to help reduce fertilizer use and exposure to pet waste when dry-weather monitoring results indicate elevated levels of nitrates and/or bacteria. The details of these efforts are discussed in Chapter 8.

6.5.6 Community Outreach

During this reporting period, the City's stormwater education staff continued their outreach to the underserved population, including the Latino population, by partnering with the Neighborhood Services Division, which coordinates neighborhood groups that target the underserved and Hispanic populations. The goal is to improve the safety and health of neighborhoods. Currently, 16 neighborhoods are in the

program, encompassing approximately 2,534 households. The City's Education and Outreach staff offer education and outreach to these neighborhoods; some of the neighborhoods have requested speakers at meetings. During this reporting period, the education staff attended meetings and gave presentations on water quality and conservation to three neighborhood groups: Rustic Village, Lansing Circle, and West Hillside. They also provided stormwater information at the Neighborhood Leadership Forum, which includes representatives from all 16 neighborhoods. In addition, the City's Education and Outreach staff provided stormwater and/or stormwater-related (water conservation) information to the Rancho Escondido Mobile Home Park residents and to the Del Lago Homeowners Association. Nineteen doggie pot stations were installed by Community Services staff in various neighborhoods organized by the Neighborhood Development Division. Although the doggie pot stations will be maintained by the neighborhoods, they will receive an ongoing supply of pet waste bags from the City. It is anticipated that other neighborhoods will participate in the near future. Refer to Chapter 8 for a more detailed discussion of the community outreach and education efforts employed by the City.

6.5.7 Recycling and Waste Collection

A Household Hazardous Waste (HHW) fee is implemented by the City and collected on customer utility bills. The fee provides funding for residential access to two permanent collection sites in North County (at Poway and Vista). These sites are open every Saturday and are more convenient for routine disposal purposes. Another HHW facility in Escondido is open two Saturdays per month by appointment from 9:00 a.m. to 3:00 p.m. for Escondido residents free of charge. In addition, there are numerous certified centers in Escondido that accept used oil from residents. The details of the City's Recycling and Waste Collection Program are provided in Chapter 8.

6.5.8 Solid Waste Disposal

Residential solid waste service includes curbside green waste collection and recyclable materials collection. This citywide service is supported by an exclusive franchise agreement with EDI, which provides collection services for both residential and commercial customers. By providing these services, the City provides the means for the proper disposal of trash, recyclables, and green waste. In addition, the City conducts litter cleanup campaigns, and electronics and plastic recycling. The details of these programs and activities are provided in Chapter 8.

6.5.9 Water Quality Monitoring

Water quality monitoring programs assist the City in identifying potential illegal discharges into the MS4 from residential areas. These data assist in determining where focused and targeted pollution prevention is needed.

6.5.10 Enforcement

The City enforces stormwater ordinances consistent with existing City policy and modifies appropriate ordinance language as applicable regulations evolve. The City encourages (and will require in some instances) BMPs in high-priority residential areas, as well as widespread implementation of the practices listed in Tables 6-1 and 6-2. City staff also strongly encourage public reporting of violations to help with Citywide pollution prevention. Ordinance violations are documented through verbal warnings, written warnings, orders to abate and correct, and fines. During the current program year, the City issued three verbal warnings and 11 NOCs and two NOVs, with an administrative fine for the discharge of illegal substances to the storm drain system from residential areas. A summary of all illicit discharges during the reporting period is provided in Appendix D. All of the violations were resolved within the reporting period.

6.5.11 Watershed and Regional Program Oversight and Evaluation

Through the watershed and regional residential education programs, the City collaborates with other Copermittees to evaluate and revise its jurisdictional program and address pollutants of concern as conditions warrant and evolve. This cooperative effort includes evaluating the methods employed for residential activity oversight. Collaboration is often conducted in concert with Copermittee member meetings and other watershed management gatherings. In 2011–2012, an example of such a watershed collaboration was the continuing implementation of the Lake San Marcos Nutrient Reduction

Management Plan, which involved the cities of San Marcos and Escondido, and the County of San Diego in identifying land uses and associated activities that are likely sources for nutrients in the upper San Marcos Creek and the lake into which it discharges. Since many of these sources are residential in nature, the implementation of the plan is accomplished through each agency's jurisdictional stormwater program. As a result of this effort, the City is focusing on the residential area within its jurisdictional boundary that drains into the upper San Marcos Creek. An example of a BMP that was implemented during the reporting period is a thorough inspection of the Escondido Country Club golf course. Another BMP that was implemented is a guidance document for homeowners associations that addresses activities such as pet waste disposal, irrigation, litter and waste management, and landscaping and green waste. All participating agencies anticipate that this targeted residential effort will result in the reduction of nutrients introduced into the Upper San Marcos Creek Watershed.

7 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 INTRODUCTION

The purpose of the City's illicit discharge detection and elimination (IDDE) component is to detect the existence of either illicit connections to the storm drainage system or the use of the storm drainage system for illegal discharges. To accomplish this, the City implements a variety of program elements, which are described below. The core of the IDDE component is the City's Dry-Weather Field Screening and Analytical Monitoring Program (Dry-Weather Program), which includes inspection of the City's MS4 and appropriate water sampling during the dry-weather season, when urban runoff is least affected by potential rainfall and its quality can be best determined. The IDDE component of the JURMP provides a core element upon which the program's effectiveness can be measured and evaluated. The data presented in this chapter were reported to the RWQCB within the JURMP 2011–2012 IDDE Annual Report December 2011 (City of Escondido 2011) and is used in this Annual Report to form and support a meaningful effectiveness analysis (see Chapter 11).

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

The City facilitates public reporting of illicit connections and discharges (IC/IDs) through a bilingual City-sponsored hotline number (760-839-4668) for complaints and inquiries on a 7-day, 24-hour basis. The City's round-the-clock hotline is well advertised through the routine disbursement of flyers, bill inserts, advertisements, and brochures.

During regular business hours, all private sewer overflow calls are routed through the Public Works Administration office to designated supervisory personnel. After-hours calls are routed to the City's Police Department officials, who contact standby personnel to dispatch staff. For hazardous materials issues, the City's Fire Department is available on a 7-day, 24-hour basis.

IC/ID referrals can also be made directly to City offices and through other agencies receiving complaints of activities in Escondido. The County Health Department, RWQCB staff, and e-mail referrals can be transmitted to the City for response. City staff (either on routine work assignments or deployed for specific response calls) also provide additional awareness and corrective action support should IC/IDs be detected. Additional information pertaining to hotline calls is discussed in Section 8.3, Educational Outreach.

7.3 SPILL REPORTING, RESPONSE, AND PREVENTION

The City conducts numerous programs to prevent, report, and respond to spills into its MS4 from any source, including private laterals and failing septic systems. These programs are described below.

7.3.1 Sewer Maintenance, Overflow, and Prevention Programs

The City implements the following sewer overflow prevention programs and sewer facility protection measures for protecting the MS4 from potential sewage-related pollution.

- **Sewer System Management Plan (SSMP)** that is composed of an Operations and Maintenance Program, as well as a Monitoring and Reporting Program (see Chapter 4, Municipal Component for details).
- **Sewer Overflow and Prevention Plan (SOPP)** that includes the City's Preventative and Corrective Maintenance Program, as well as the Sewer Overflow Response Plan. This program is described in detail in Chapter 4, Municipal Component.
- **Grease-Trap Permitting and Inspection Program** for regularly inspecting food service establishments to ensure compliance and minimize sewer grease buildup. Through these inspections, staff also educate owners/operators on proper cooking grease disposal, with particular attention to areas where grease buildup in the sewer lines is most common.

- **Fats, Oils, and Grease (FOG) Control Program** to reduce discharges of these substances to the sanitary sewer system (see Chapter 4, Municipal Component for details).
- **Sewer Database Management** involves a GIS-based inventory to assist with tracking maintenance and spill response efforts. This GIS inventory includes curb inlets, outfall points, surface drainages, pump stations, manholes, flap gates, pipeline diameters, pipe composition, junction structures, age and condition of major sections of the system, and the pipeline maintenance schedule.

7.3.2 Sewer Spills and Response Procedures

The City's Collections Division's crews provide immediate assistance for sewer overflows, both public and private. As mentioned above, the City's SOPP sets forth response and cleanup measures in the event of a sewer spill. In response to sewer spills, the procedures listed below are followed:

- If the overflow occurs during working hours, Collections Division crews are dispatched immediately to the scene to clear the stoppage and implement cleanup measures. A second recovery crew is dispatched as needed.
- If the overflow occurs after working hours, the Police Department is notified and immediately calls the Collections Division standby person, who dispatches a crew to the overflow. A second recovery crew is dispatched as needed.
- System blockages are cleared as a first priority, followed by containing and recovering the surface spillage (wash down, disinfection, and vactor recovery for proper disposal).
- Crews use cameras to inspect the lines associated with the spill/overflow to determine the cause and identify any corrective action.

7.3.3 Sewer Spill Reporting Procedures

To protect the public's health and safety and protect the environment, City policy requires that the RWQCB and the County Environmental Health Department be verbally notified within 24 hours of a spill/overflow occurrence. This notification is followed by a written report submitted to RWQCB within 5 days of the incident. During the reporting period, seven spills were reported to SWRCB and RWQCB through the state's Stormwater Multi-Application, Reporting, and Tracking System (SMARTS) via SWRCB's website. Information associated with the spills can be accessed through that system.

7.3.4 Spill Prevention Program Activities and Effectiveness

During the 2011–2012 reporting period, the City's Collections Division:

- inspected 40 miles of sanitary sewer pipeline;
- cleaned 191 miles of sanitary sewer pipeline;
- responded to seven spills; and
- contained, disinfected, and collected overflow and/or washdown fluids via vacuum or vactor truck.

7.4 URBAN RUNOFF MONITORING

7.4.1 Dry-Weather Program

The Dry-Weather Program in Escondido is conducted to characterize the quality of the jurisdiction's urban runoff without the influence of storm flow. Dry-weather runoff is therefore representative of natural creek flows and non-stormwater contributions from a variety of water sources and uses, both intentional and unintentional. Monitoring this runoff helps to identify local water pollution problems by characterizing background stream water quality relative to various storm drain dry-season discharges. The characterization is largely done through the inspection of more than 100 monitoring stations, while also conducting water quality field screening and collecting water samples for chemical analyses when actively flowing water is found. Dry-weather field screening and analytical monitoring reporting are conducted in

compliance with all monitoring and standard reporting requirements in Attachment B of Order R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.

These results provide the City with annual perspectives of urban runoff quality throughout the jurisdiction on both spatial and temporal scales. The elements of the 2011–2012 Dry-Weather Program are described below.

Site Selection Approach

The Dry-Weather Program is composed of an extensive and geographically widespread monitoring station network of 117 sites located along the reaches and tributaries of Escondido Creek, Reidy Creek, Felicita Creek, and Kit Carson Creek (Figure 7-1). These sites were selected on the basis of location, drainage patterns, surrounding land uses, and historic water quality monitoring results. Monitoring stations mostly coincide with major storm drain outfalls, but they also are situated at natural creek tributary junctions and/or specific drainages associated with heavy urbanization (e.g., industrial activities). No changes to station locations or the MS4 map were made during the reporting period.

Timing

The City monitored its dry-weather stations between June 1 and September 30 per Order R9-2007-0001. To ensure that water samples collected were from dry-weather sources, monitoring was only conducted if there was at least 72 hours of antecedent dry weather. No rainfall occurred during fiscal year 2011–2012 dry-weather monitoring.

Monitoring Procedures

The following dry-weather monitoring activities occurred for the 2011–2012 reporting period:

- recording physical characteristics at each monitoring station (visual observations, flow rate, water clarity, floatables, debris, deposits/stains, vegetation growth, and structural condition);
- conducting field screening at all stations where water was present;
- collecting water samples for analytical laboratory analyses if active flow was found;
- conducting trash assessment at each site in accordance with permit monitoring requirements;
- performing follow-up surveys/inspections where needed to confirm the presence or absence of a pollutant or condition of concern; and
- evaluating information and analysis results, including comparison with previous findings.

In accordance with Order R9-2007-0001, jurisdictions are required to collect samples for laboratory analysis for at least 25 percent of sites where water is present. During the 2011–2012 Dry-Weather Program, the City performed analytical sampling for more than 50 percent (32 of 57) of the sites where water was present. The City continues to collect additional water-quality (dry-weather flow) data within each subwatershed to monitor and evaluate surrounding land uses, trends, and the program's effectiveness.

A submeter Global Positioning System unit was used to record all monitoring data, including physical characteristics, water quality field parameters, and trash information at each station. Site data were collected in accordance with Order R9-2007-0001 and the County of San Diego's Dry-Weather Monitoring data submittal format. Dry-Weather Program data and site photographs are included in the City of Escondido's 2011–2012 Illicit Discharge Detection and Elimination Annual Report (City of Escondido 2011).

Water quality characterization parameters recorded at each station were documented on monitoring forms (Appendix D) in accordance with Order R9-2007-0001 and Project Clean Water's Dry-Weather Monitoring Workgroup requirements. Dry-Weather Program data and site photographs were included on compact disc in the 2011–2012 IDDE Annual Report (City of Escondido 2011) submitted in December

2011. Dry-weather data are evaluated as part of the IDDE annual reporting process and as part of the JURMP program effectiveness assessment (Chapter 11).

Sampling Handling

Where grab samples of actively flowing water are collected for field screening and laboratory analysis, sampling protocols comply with those specified in Title 40 of the Code of Federal Regulations Section 136 (40 CFR 136). Sampling personnel also follow established health and safety procedures while sampling as conditions warrant. When samples are collected, sample containers are:

- prelabeled with waterproof labels;
- placed in the center of the discharge flow;
- placed just below the water surface to avoid interference with underlying sediment;
- filled with the mouth of the bottle faced into the current;
- filled completely, without overfilling (to avoid loss of preservative, if present); and
- capped and placed in a waterproof storage bag within an ice-chilled cooler (at as near to 4 degrees Celsius as practicable).

Following proper labeling, preservation, and packing, samples are transported to the analytical laboratory to meet holding time requirements. Chain-of-custody forms for the samples are completed before samples are relinquished by the sampling team. Chain-of-custody forms are kept with the samples from the initial sample drop-off through the final laboratory analysis. After sampling, field staff confirm that the analytical laboratory received the samples and that they are analyzed within the proper holding times.

Sample Analysis

Dry-weather samples are analyzed for the following parameters and constituents in accordance with the specifications provided in Table 7-1. Although not mandated under Order R9-2007-0001, the City collects temperature, conductivity, salinity, and dissolved oxygen data for each site sampled.

- Flow
- Water Temperature
- Conductivity
- Salinity
- Total Dissolved Solids (TDS)
- Hardness
- pH
- Dissolved Oxygen (DO)
- Turbidity
- Oil and Grease
- Surfactants (MBAS)
- Orthophosphate
- Ammonia
- Reactive Phosphorus
- Nitrate (as N)
- Dissolved Cadmium
- Dissolved Copper
- Dissolved Lead
- Dissolved Zinc
- Total Coliform Bacteria
- Fecal Coliform Bacteria
- *Enterococcus* Bacteria
- Diazinon
- Chlorpyrifos

These parameters were either screened in the field using electronic probes or sensors, or chemical test kits, or they were submitted to a California-certified analytical laboratory for analysis.

As part of the dry-weather monitoring sampling and analysis, quality assurance/quality control procedures were incorporated to ensure the integrity of field sampling techniques and laboratory results. A duplicate sample was collected and analyzed for 1 out of every 10 samples collected. Duplicate sampling was conducted in conformance with approved sampling protocol (i.e., USEPA). Duplicate samples were submitted as blind samples to the analytical laboratory.

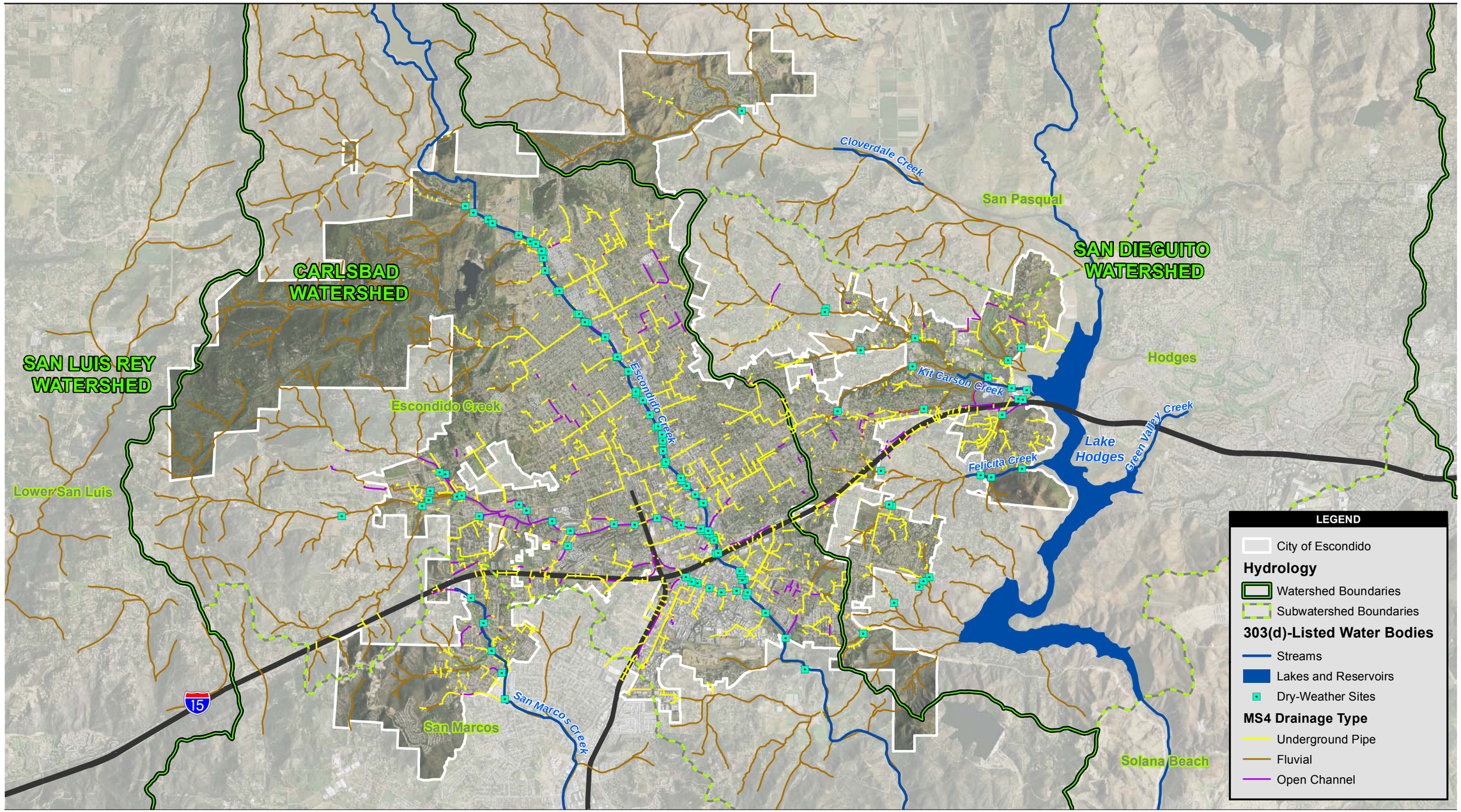

Source: DigitalGlobe 2008; City of Escondido 2006, 2009; SanGIS 2010; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004

6,000 3,000 0 6,000 Feet

Scale: 1 = 72,000; 1 inch = 6,000 feet

Figure 7-1
Dry-Weather Monitoring Program Sites

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Table 7-1. Analytical Constituent Method Specifications and Recommended Reporting Limits

Analyte	Method Type	EPA Method/ Standard Method	Minimum Sample Volume (mL)	Holding Time[a]	Container Type[b]	Preservation	Reporting Limit/ Resolution	Units
Conventionals								
DO	Probe	SM4500-O G		Field		N/A	1.0	mg/L
Conductivity	Conductivity meter	SM 2510	100	28 days	glass or PE	4°C	±1[d]	µmho/cm
Hardness	Titrimetric; colorimetric	SM 2340C	100	6 months	glass or PE	4°C and HNO3 to pH<2	2	mg/L
pH	Electrometric	150.1	100	15 minutes	glass or PE	None	±0.1[d, e]	std. units
Temperature	Thermistor	SM 2550	50	15 minutes	glass or PE	None	±0.1[e]	°C
TDS	Est. Calculation	SM2510 B	100	7 days	glass or PE	4°C	1	mg/L
Turbidity	Nephelometric	180.1	100	48 hours	glass or PE	4°C	±0.05 [d]	NTU
MBAS	Extraction	SM 5540-C	500	48 hours	glass or PE	4°C	0.1	mg/L
Nutrients								
NH3-N	Salicylate Method	HACH	500	28 days	glass or PE	4°C and H2SO4 to pH<2	0.05	mg/L
NO3-N	Chromotropic Acid	HACH	200	48 hours	glass or PE	4°C	0.3	mg/L
Ortho-P, dissolved	Ascorbic Acid	HACH 8048	200	48 hours	glass or PE	4°C; filter immediately	0.03	mg/L
Metals								
Cd	ICP	200.7	1000 for all	Filter for dissolved fraction & preserve within 48 hours; 6 months to analysis	teflon, PE, or borosilicate glass	4°C and HNO3 to pH<2[c]	2	µg/L
Cu							5	
Pb							5	
Zn							10	
Total Petroleum Hydrocarbons								
Oil and Grease	Gravimetric	413.1	1000	28 days	wide-mouth glass	4°C and HCl or HCL to pH<2	5	mg/L
Organophosphorus Pesticide								
Diazinon	GC with FPD detector	8141A	1000	14 days (extraction within 7 days after collection)	glass	4°C	0.49	µg/L
Chlorpyrifos							0.49	

Analyte	Method Type	EPA Method/ Standard Method	Minimum Sample Volume (mL)	Holding Time[a]	Container Type[b]	Preservation	Reporting Limit/ Resolution	Units
Bacteriological								
Total Coliforms	Colilert/MTF	SM9223	100	6 hours[f]	sterile glass or plastic	4°C; sodium thiosulfate in the presence of chlorine	20	MPN/ 100 mL
			100					
E. coli	Colilert	SM9223	100	6 hours[f]	sterile glass or plastic	4°C; sodium thiosulfate in the presence of chlorine	20	MPN/ 100 mL
Fecal Coliform	MTF/EC	SM 9221E	100					
Enterococcus	Entrolilert	IDEXX	100	6 hours[f]	sterile glass or plastic	4°C; sodium thiosulfate in the presence of chlorine	20	MPN/ 100 mL

[a] Holding time specified in EPA guidance or referenced in Standard Method for equivalent method.

[b] Sampling and storage of samples in glass bottles is preferable. Sampling and storage in plastic bottles such as conventional polyethylene (PE) and cubitainers is permissible if it is established that the containers do not contribute contaminating organics to the samples.

[c] Filter dissolved samples before preservation.

[d] Refers to the instrument resolution.

[e] Also report temperature at time of measurement.

[f] 40 CFR §136.3, Table II specifies a holding time of 48 hours. Standard Methods 20th Edition requires a 6-hour holding time except when the sampling location is distant from the laboratory, in which case 24 hours is the maximum holding time. All efforts should be made to analyze samples within 6 hours of sampling to conform with the currently adopted edition of Standard Methods.

The use of expendable sampling devices eliminated the need for equipment blanks and the possibility of cross-contamination between sampling locations. Trip blanks were not required because volatile organics testing is not required under this program.

Response Procedures

Dry-weather monitoring results trigger investigation and follow-up actions when either of the following occurs:

- field technicians observe unusual qualities in dry-weather flow, such as a strong chemical odor or unusual coloration; or
- field screening parameters or laboratory analysis of water samples exceeds established water quality action levels (per Copermittees and Project Clean Water) at the time of sampling.

During the program year, the Copermittees adopted new action levels for bacteria to focus on *Enterococcus* and fecal coliform, which are indicators of human and/or animal waste. The new action levels for bacteria are as follows:

- Greater than 130,000 MPN/100mL for total coliform (previously >50,000)
- Greater than 13,000 MPN/100mL for fecal coliform (previously >20,000)
- Greater than 7,000 MPN/100mL for *Enterococcus* (previously >10,000)

These action levels were used to conduct follow-up sampling this year, where needed.

Information Management

The City maintains a GIS-based inventory of all dry-weather monitoring stations. Analytical data collected are correlated to the inventory for evaluating program results in relation to water features, drainage basins, topography, land use, and MS4.

7.4.2 Dry-Weather Program Findings

During fiscal year 2011–2012, water quality sampling for the Dry-Weather Program was conducted at 49 percent of the monitoring stations due to the presence of actively flowing water (Table 7-2). Data associated with field observations, field measurements, and laboratory analyses were provided in the 2011 IDDE Annual Report (City of Escondido 2011). Additional details are provided below. Trends in the data collected, as well as historical data, are presented in Chapter 11, Effectiveness Assessment Component.

7.4.3 Data Evaluation

The dry-weather data collected during this reporting period continue to document that urban runoff quality in Escondido is good despite the dense industrial/ commercial operations in the center of the City and the numerous agricultural/equestrian activities in the eastern and southern areas of the jurisdiction. This is verified by the lack of detectable metals and other pollutants.

As in past years, nitrate and bacteria were the two parameters that were found above action levels at some sites. Specific trends for each of these parameters are further evaluated in the below.

Table 7-2. Percentage of Wet versus Dry Sites, Fiscal Year 2011–2012

Result	Number of Stations	Percentage of Total Sites
Dry Locations	60	51% (60/117)
Sites with Active Flow	57	49% (57/117)

Nutrients

Nutrients within a semirural watershed are often a by-product of agricultural and/or equestrian land use because of fertilizers and animal waste. Residential land use, including lawn fertilizers, car-washing

detergents, and pet waste, can also contribute to nutrient levels. Ambient nutrient levels near natural spaces and parklands are also known to exist as a result of wildlife.

Elevated nitrate levels in Escondido have been known to correlate with agricultural irrigation practices and historical land use that occurred prior to urban development. Before residential development, land areas now serviced by stormwater drainage systems were dominated by dairy farms, grape vineyards, and citrus and avocado orchards, many of which (if not all) also employed septic sewer systems. Current and historical data (including follow-up field investigations in 2008) suggest that elevated nitrate (and bacteria) concentrations are largely the result of agriculture and livestock operations. Septic systems are progressively becoming rarer, with urban development expanding into more rural areas.

The Copermittees' Dry-Weather Monitoring Workgroup established the action level for nitrate at 10 milligrams/liter (mg/L). Sites that exceeded this action level (after follow-up sampling) are presented in Table 7-3. To better understand the spatial distribution of nitrate and discern whether distinctive patterns exist in the various tributary drainages of the watershed, stations with elevated nitrate concentrations were plotted on a GIS aerial map (Figure 7-2).

Table 7-3. Monitoring Stations Exceeding Action Level Limits for Nitrate

Drainage Basin	Station	Sample Location	Nitrate Conc. (mg/L)
Escondido Creek	819.1.1	4-foot by 8-foot box culvert on east side of Escondido Creek 400 feet south (downstream) of Auto Park Way bridge	10.4
	820.0.0	Escondido Creek just east of the junction with Reidy Creek	10.9
	823.0.1	Two 48-inch-diameter CMP that drain from the north side of Escondido Creek and just west of the bridge at Ash Street	10.2
	823.0.4	36-inch-diameter flapper gate drain on south side of Escondido Creek and 81 yards east of Harding Street	13.1
	825.0.2	Two 5- by 8-foot reinforced concrete pipe drains on north side of Escondido Creek and just east of the bridge at Midway Drive	23.8
	826.0.1	Box culvert drains on south side of Escondido Creek just west of the bridge at Citrus Avenue	10.8
	826.0.2	48-inch RCP drain on north side of Escondido Creek and just east of Citrus Avenue	14.5
	826.0.7	36-inch RCP outfall on east side of Escondido Creek at Washington Street	20.7
Reidy Creek	842.0.1	54-inch RCP on northeast side of Reidy Creek, north of Mission Ave, just west of CCP	14.4
	844.1.2	Reidy Creek, west of Broadway and south of Brava Place	19.9
	844.1.3	Reidy Creek, south of Brava Place and east of N. Broadway	18.7
Lake Hodges	861.1.1	Unnamed creek just east of S. Escondido Boulevard and just north (upstream) of the bridge on Ross Lane	12.6
	861.2.2	Unnamed tributary to creek on west side of Marion Lane, about 50 yards south of bridge at Marion Lane	12.2
	861.2.3	Unnamed creek downstream of Marion Lane, east of El Dorado Drive	10.5
	862.0.0	Creek through Kit Carson Park, just south (downstream) of Las Palas Ave Bridge	10.7

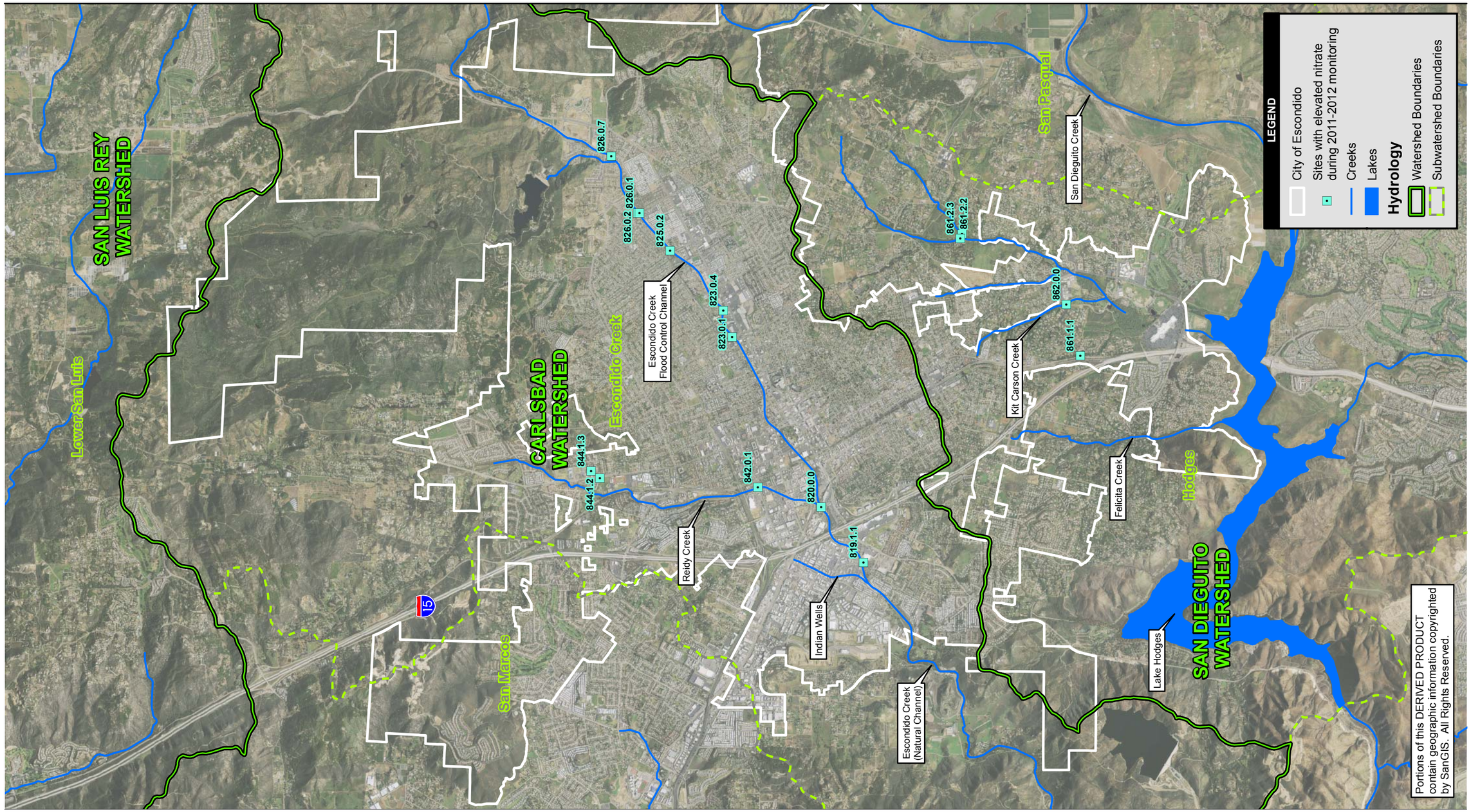

Source: City of Escondido 2008, 2009; SanGIS 2010; DigitalGlobe 2008; California Interagency Watershed Mapping Committee 2004

5,000 2,500 0 5,000 Feet

Scale: 1:60,000; 1 inch = 5,000 feet

Figure 7-2
Monitoring Sites with Elevated Nitrate

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The nitrate exceedances within the Escondido Creek drainage are believed to be associated with past and present land uses located along the eastern boundary of Escondido. Citrus orchards dominated the area along Escondido Creek and East Valley Parkway until early 2006. Now homes occupy the orchard fields, with newly constructed stormwater infrastructure and unnamed tributaries, but citrus and avocado orchards are still present on the surrounding north and south hillsides that drain to Escondido Creek. Despite some of the exceedances found, an in-stream sample taken in Escondido Creek where it leaves the City boundary (813.0.0) revealed nitrate levels well below the action level. Nitrate concentrations in the Reidy Creek and Lake Hodges drainages correlate to drainage originating from unincorporated areas outside City limits that are upgradient in the watershed. All phosphorus data are below the 2.0-mg/L action level and do not exhibit a correlating pattern with the nitrate data (Figure 7-3), indicating that the nitrate source may be wildlife related rather than from fertilizer. Ammonia found at 12 stations was below the action level (Figure 7-3) and did not show a correlation to the other nutrients. Follow-up investigation procedures associated with nitrate exceedances are discussed in Section 7.5.

Bacteria

Indicator bacteria (total coliform and fecal coliform [*E. coli* and *Enterococcus*]) are used to detect the presence of human or animal waste contamination in water. Total coliform bacteria are a large group of bacteria that are common where wildlife, livestock, and equestrian activities occur, but they can also be found in human waste, soil, decomposing plant material, and other nonsewage sources. Fecal coliform bacteria or *E. coli* are found in the digestive tracts of humans and animals, and their presence in dry-weather runoff can suggest sewage contamination. *Enterococcus* bacteria are a subgroup of fecal streptococci bacteria that are more human-specific than either total coliform or *E. coli* bacteria.

During the reporting period, only one site, 860.1.4, was found to exceed bacteria action levels. Fecal coliform and *Enterococcus* concentrations at this location initially exceeded the newly adopted action levels but were compliant upon follow-up sampling. The site is located just west of Interstate 15 and south of Via Rancho Parkway in the San Dieguito Hydrologic Unit.

Figures 7-4 and 7-5 present the spatial distribution of indicator bacteria among the City's dry-weather monitoring stations sampled in FY 2011–2012.

Dissolved Metals

Metal concentrations of sites sampled during the program year were overall very low. Dissolved metal concentrations detected throughout the dry-weather monitoring stations show no definitive correlation to an area within the jurisdiction that suggests a significant pollutant source (Figure 7-6). The highest zinc concentration detected occurred at Station 874.4.0 (36.1 micrograms per liter [µg/L]) in the San Marcos drainage, which is significantly below the 297-µg/L action level. In addition, the highest copper concentration detected occurred at Station 818.0.0 (8.12 µg/L), which is substantially below the 38-µg/L action level.

Other Parameters

All other parameters not presented within spatial distribution graphs were either consistently undetected or exhibited no concentrations of concern throughout the City.

Trash Assessment

The City employs a range of preventive and proactive measures to limit trash and debris accumulation within its MS4, which is reflected by the rare occurrence of trash in the 2011–2012 dry-weather monitoring data. The results of the trash assessment for this reporting period are as follows:

- Optimal: 88 sites (77 percent)
- Suboptimal: 26 sites (23 percent)
- Marginal: One site (<1 percent)
- Poor: 0 sites (0 percent)

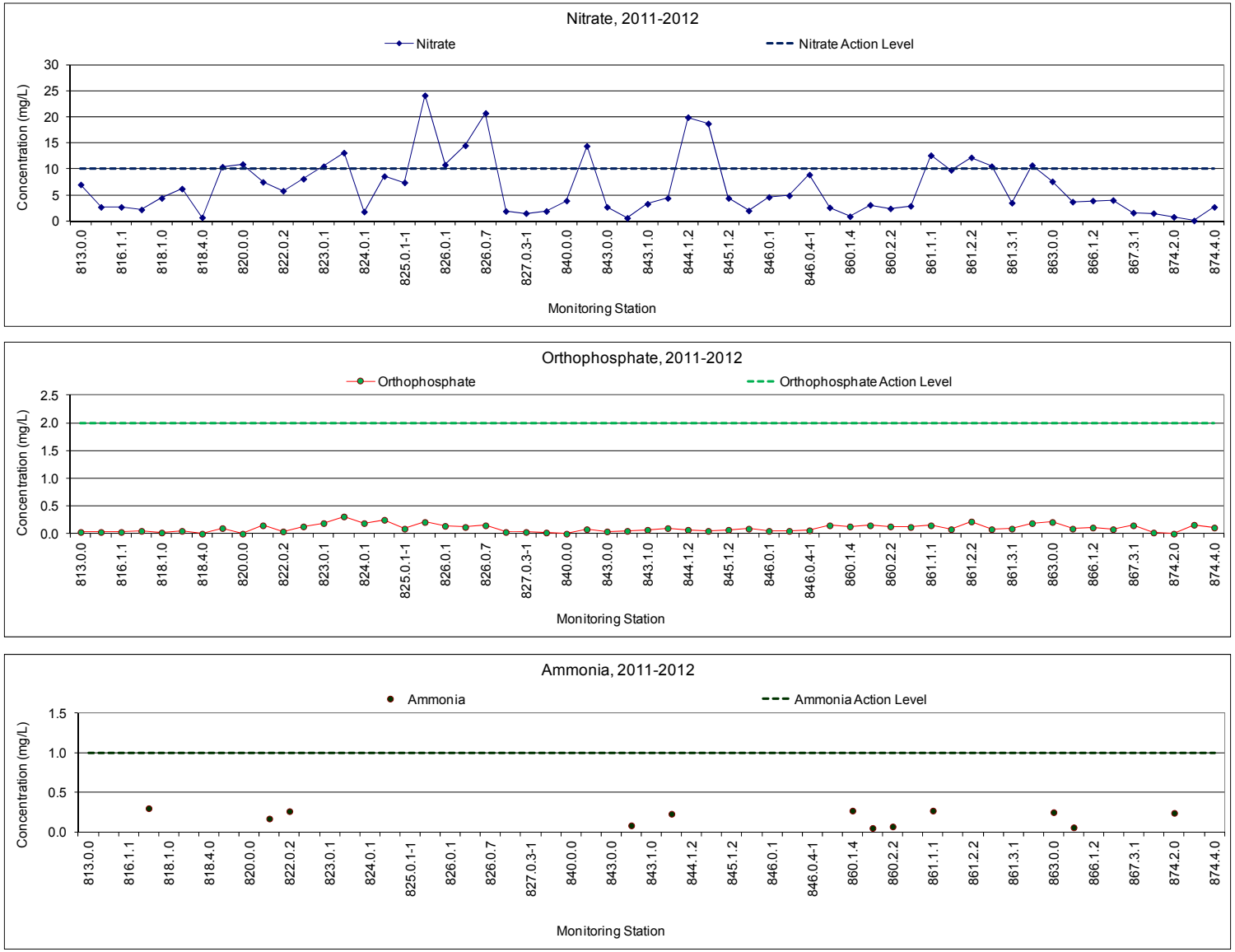

Figure 7-3. Nutrient (Nitrate and Orthophosphate) and Ammonia Concentrations, City of Escondido Dry-Weather Monitoring Program, Fiscal Year 2011–2012

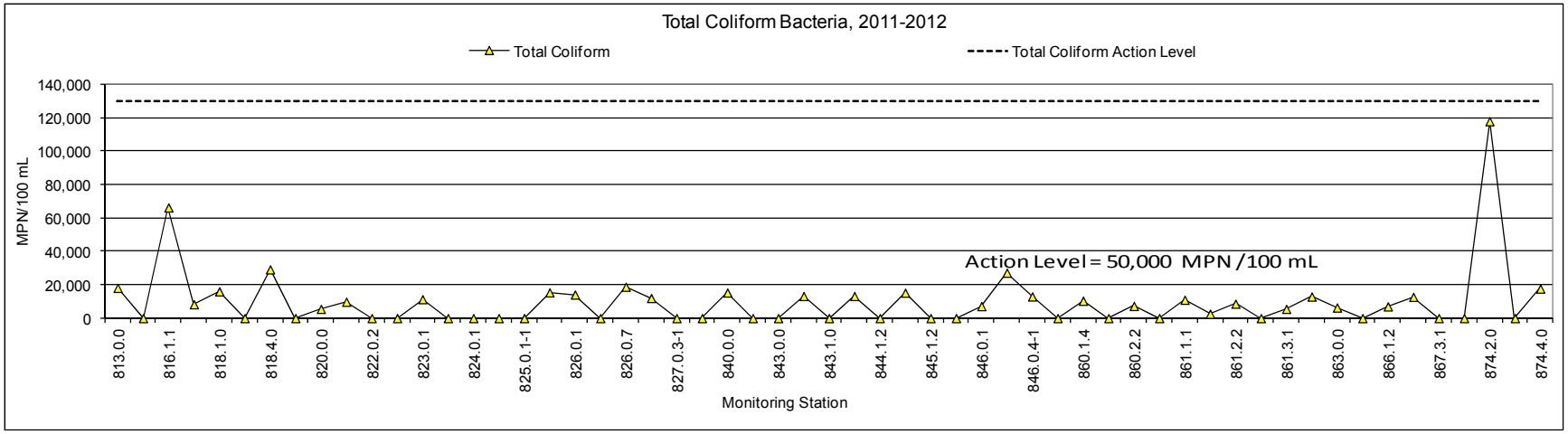

Figure 7-4. Total Coliform Bacteria Concentrations,
City of Escondido Dry-Weather Monitoring Program, Fiscal Year 2011–2012

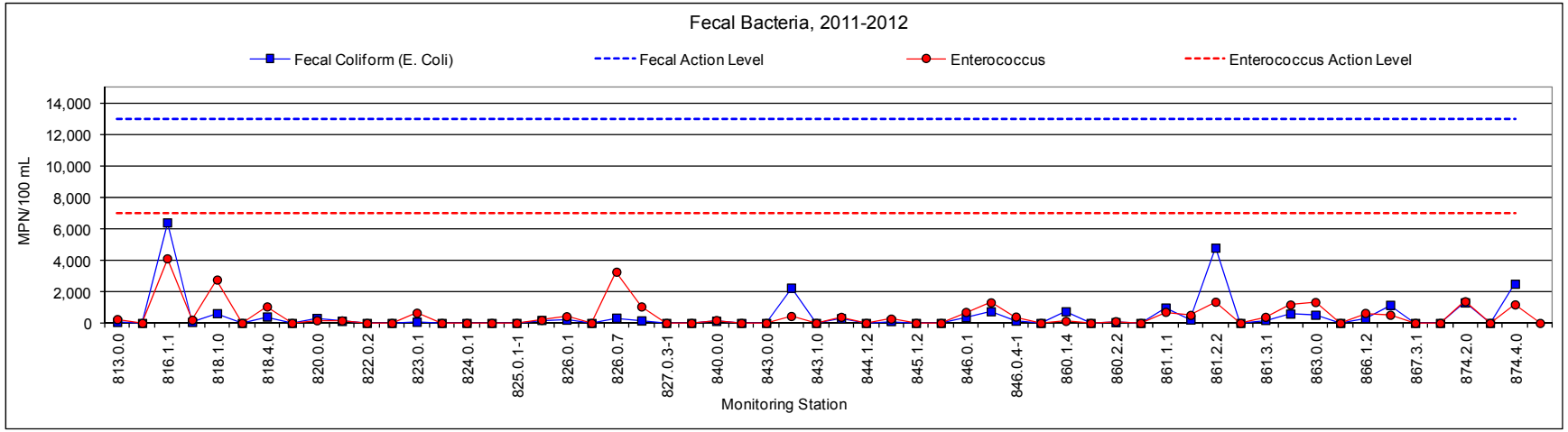

Note: The follow-up sampling result is presented for site 860.1.4.

Figure 7-5. Fecal Coliform and *Enterococcus* Bacteria Concentrations,
City of Escondido Dry-Weather Monitoring Program, Fiscal Year 2011–2012

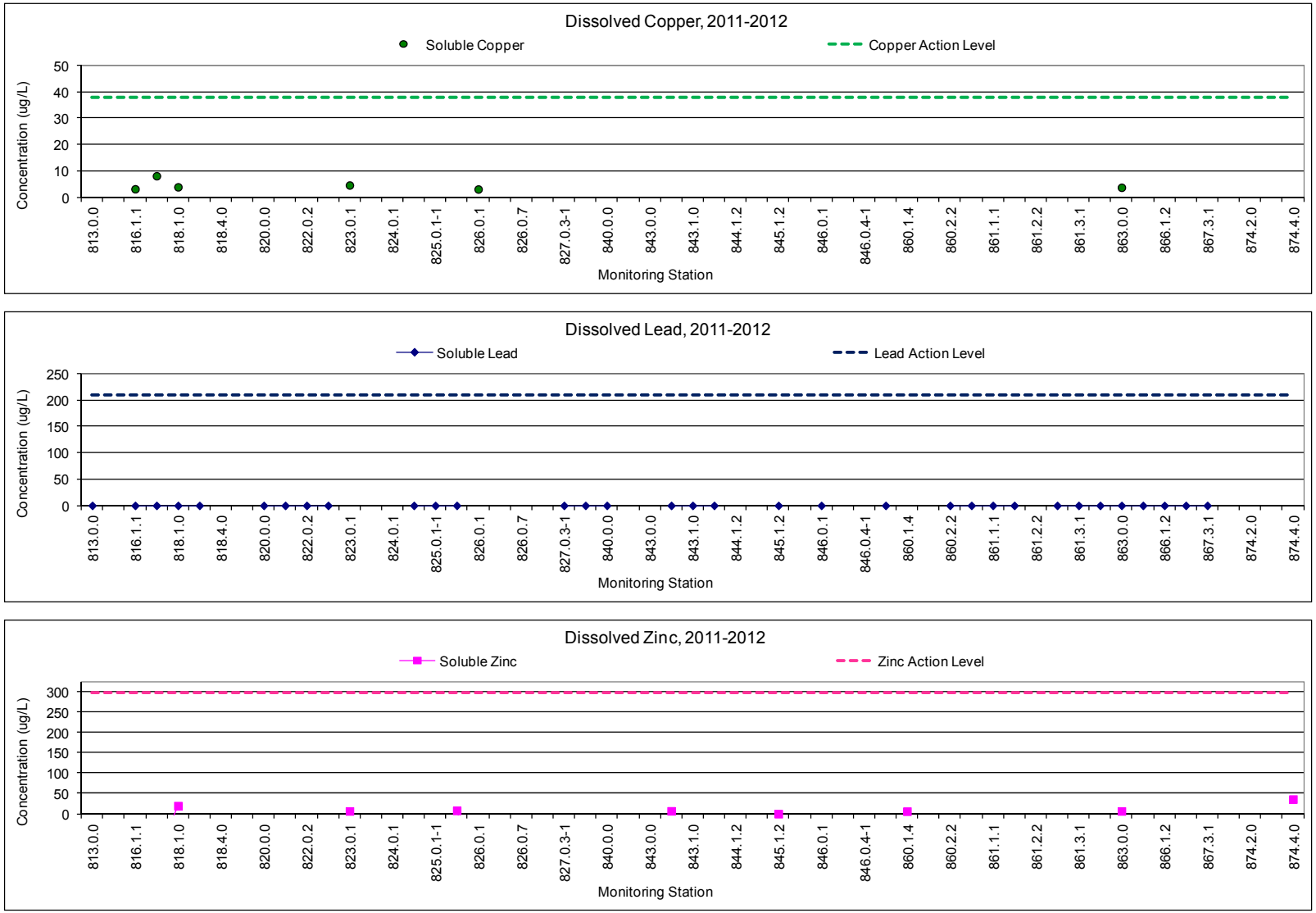

Figure 7-6. Dissolved Metals Concentrations, City of Escondido Dry-Weather Monitoring Program, Fiscal Year 2011–2012

The vast majority of trash documented during the inspections was from in-stream observations versus that which could be correlated to specific outfalls or tributaries. The entire length of Escondido Creek is exposed and flows through the center of the urbanized City, which includes several housing areas and several main arterial streets along the creek banks. As a result, Escondido Creek has a higher probability for trash and debris accumulation, but no particular source could be correlated from the data collected.

Evaluation of Historic Trends

Dry-weather investigations and sampling over the past 10 years have shown correlations of elevated total coliform organisms consistent with the existence of wildlife and other domestic animal populations and/or the decomposition of organic substances. This year, under the new pollutant action levels adopted by the Copermittees, bacteria results were all less than their respective limits (after resampling at one location). Relative to the previous action levels used to monitor bacteria source concerns, the number of exceedances for all indicator bacteria this year was significantly lower than for any of the past years. This is particularly true for total coliform, which in the past triggered follow-up sampling and several investigations.

Until this year, bacteria data collected under this program were reviewed and evaluated relative to the following action levels:

Total coliform: Greater than 50,000 MPN/100 mL
Fecal coliform: Greater than 20,000 MPN/100 mL
Enterococcus: Greater than 10,000 MPN/100 mL

Relative to these previously established limits, historic trends in the City's dry-weather data over the past 10 years reveal the following:

- Several of the stations with elevated concentrations of nitrate are being influenced by dry-weather discharge sources outside of the City's jurisdiction.
- Elevated nitrate patterns in east Escondido (see Figure 7-2) were field-investigated in the past and are suspected to be associated with the following:
  - commercial and private livestock operations/activities,
  - estate (residential) horticulture and lawn care (irrigation and fertilizers), and/or
  - agriculture.
- Bacteria action level exceedances have consistently decreased with time, as summarized in the table below:

Program Year	Percentage of Sites with Bacteria Exceedances[1]
2008–2009	35% (21 of 60 sites)
2009–2010	15% (8 of 55 sites)
2010–2011	12% (7 of 60 sites)
2011–2012	4% (2 of 57 sites)[2]

[1] Sites with exceedances during field standard and follow-up sampling.
[2] Evaluation based on original action levels for all years for comparison purposes.

Summary

Overall, fiscal year 2011–2012 dry-weather monitoring results continue to confirm good urban runoff water quality within Escondido and no discernible problem pollutant sources within the City's jurisdiction. However, some outlying unincorporated San Diego County-owned land uses are suspected of contributing bacteria and nitrate to the City's conveyance system. The watershed program will be used as

a mechanism to collaborate with the County of San Diego to address ongoing nitrate issues, especially with the anticipated development of Water Quality Improvement Plans in response to the new municipal stormwater permit that will be issued in the spring of 2013. Bacteria exceedances have consistently decreased over time.

7.4.4 MS4 Outfall Monitoring

Copermittees situated within coastal drainages that discharge to river mouths, shoreline lagoons, and/or the Pacific Ocean have developed and implemented monitoring programs to characterize pollutant discharges from MS4 outfalls in these areas during wet and dry weather. Because Escondido does not border the coastline, coastal MS4 outfall monitoring efforts are not applicable, but Escondido's watershed is partially represented through the County-sponsored wet-weather monitoring that occurs at Agua Hedionda Lagoon and Escondido Creek. The City provides financial support for, but does not conduct, this wet-weather monitoring.

However, the City monitors numerous MS4 outfalls that discharge to surface waters in the jurisdiction during the annual dry-weather monitoring. In general, these structural pipelines and culverts outfall into large concrete-lined flood-control drainage channels that are monitored as part of the Dry-Weather Program described above. These outfalls are of particular interest to the City because of the tributaries they represent, the ability to characterize runoff from a variety of land uses at a single outfall, and the sensitivity of the respective receiving waters. With the adoption of the MS4 Outfall Monitoring Program in San Diego County Watershed Management Areas Work Plan (MS4 Outfall Program) (Weston 2008), the City conducted its first MS4 (targeted) outfall sampling event in 2009. As required in the MS4 Outfall Monitoring Program, the City was assigned eight targeted outfall stations (five stations within the Carlsbad Watershed and three within the San Dieguito Watershed). Under this program, each watershed was assigned specific analytes to monitor (in addition to the dry-weather constituents) that include the following:

- TSS,
- total phosphate,
- manganese,
- selenium, and
- sulfates.

MS4 (Targeted) Outfall Monitoring results are provided to the RWQCB annually under separate cover.

7.5 FOLLOW-UP AND ENFORCEMENT

The sections below describe the City's efforts to investigate and follow up on dry-weather monitoring results or other indicators of IC/IDs.

7.5.1 Dry-Weather Monitoring Follow-Up Activities

During the reporting period, the City initiated the follow-up activities described below to identify potential sources of pollutants.

Source Identification and Follow-Up Sampling

At stations where initial samples indicate a potential water quality concern, source identification inspections and follow-up sampling were conducted to confirm persistent pollutant discharges and identify potential sources of the pollutants found. These activities were conducted at stations where field screening measurements or laboratory analyses found that samples:

- exceed an established action level, or
- have total coliform:fecal coliform/*Enterococcus* ratios that are significantly high (i.e., approaching 1:1 ratio).

Established numeric action levels are those identified by the Dry-Weather Monitoring Workgroup (component of the San Diego County-sponsored Project Clean Water) or State Water Resources Control Board's water-quality objectives.

Follow-up investigations are initiated within 2 business days of the exceedance to the maximum extent practicable. If immediate follow-up is not practicable, a rationale is provided.

As discussed below, repeat sampling and field investigation during this reporting period were necessary at some stations where action levels were exceeded for nitrate and bacteria.

Nitrate

Results of follow-up sampling found 15 sites with elevated nitrate. Of these sites, two are located outside of the City's jurisdiction (Stations 861.2.2 and 861.2.3) and three (Stations 844.1.2, 844.1.3, and 862.0.0) are within City limits but are associated with drainage originating from upstream livestock/agricultural activities or open areas on unincorporated lands. Follow-up actions for the remaining 15 elevated nitrate sites found no activities or sources contributing to the exceedances, which are believed to originate from historical land uses, as mentioned in Section 7.4.3. In the past, the City provided public outreach material to educate residents and property owners in these areas in an effort to reduce non-point-pollutant contributions; the City will continue to target these areas to address persistent water-quality issues. In addition, the City will continue to work with the County of San Diego to identify BMPs that can be implemented to address nitrate exceedances through the ongoing total maximum daily load (TMDL) effort.

Bacteria

Follow-up sampling for bacteria was only necessary at one site (Station 860.1.4), where fecal coliform and *Enterococcus* action levels were initially exceeded. Upon the analysis of follow-up samples, there were no action-level exceedances for bacteria within the jurisdiction.

Illicit Connections and Illegal Discharges

No illicit sewer connections or illegal discharges to the MS4 were detected as a result of the follow-up investigations during this reporting period.

7.5.2 Investigation Procedures

In addition to Dry-Weather Program follow-up activities, if an IC/ID is suspected, observed, or reported, the City initiates an investigation to identify the source. Depending on the circumstance, investigations normally involve following flows or discharges upstream to locate the source. A systematic process of elimination is used to determine the potential source—tributary junctions are screened and/or tested to determine upgradient conditions until the source is located. As needed, samples are collected and analyzed to provide constituent information related to the discharge. For example, if the flow under investigation is suspected of being sewage related, field screening for ammonia and/or testing for bacteria may be conducted. GIS is used to help identify possible upstream contributors and hydraulic connections, and to assist with field investigation efforts.

Various techniques are employed by the City to evaluate the hydraulic continuity of the associated MS4 components and whether IC/IDs exist. These techniques are summarized below:

- Dye-testing to confirm hydraulic connections. This involves discharging biodegradable fluorescent dye at the source of a potential IC/ID.
- Smoke-testing to confirm the hydraulic connection between a potential source and a downstream location. This process is avoided unless absolutely necessary as it has the potential to cause public alarm.

- Video monitoring to visually document pipeline condition, the occurrence of laterals, and other subsurface characteristics using mobile video cameras in underground stormwater conveyance facilities.

- Commercial and industrial pretreatment inspections.

The City documents information related to IC/ID and pollutant source investigations. This information is compiled in the City's database, AZTECA.

During the reporting period, 44 illicit discharges to the MS4 were identified and resolved. Twenty-two were associated with commercial or industrial facilities, including food service businesses, and 22 were associated with residential activities. Illicit discharges are detailed in Appendix D.

7.5.3 Enforcement Measures

The City has a number of enforcement action options against individuals or parties identified as being responsible for IC/IDs. The type of enforcement action depends on the severity of the violation and can include one or more of the actions described below.

- Verbal or written warnings are given for minor cases. The written warning, or NOC, restates the violation and sets a timeline for reinspection of the site, if applicable. Failure to comply with a verbal or written warning results in more severe enforcement actions.

- A Notice of Violation (NOV), which identifies a specific response time and compliance schedule, is written by the Utilities Department. The compliance schedule outlines what actions must be taken to remedy the violation and includes dates for implementation of the remedies.

- Stop-work orders are cited where businesses or construction activities are involved. The Field Engineering Department can issue a stop-work order and, in more severe cases, use this citation in conjunction with Cost Recovery and/or a Clean and Test Order. This effort is used to stop the violation, attempt to recover any expenses incurred from the investigation, and require proof that the activities associated with the violation have ceased. If the violation continues, or the responsible party is uncooperative, the NOV information is forwarded to the City Attorney.

- Fines are levied by the City's Code Enforcement Division and/or Utilities Department Inspectors for violations of stormwater regulations. Fines can escalate depending on the level of cooperation received by the violator.

- Revocation or denial of permits or licenses is exercised by the City's Code Enforcement Division until the violation is remedied.

- Declaration of a Public Nuisance is declared by the City Attorney and remains in force until the unauthorized activity ceases.

Civil and/or criminal court actions can be filed by the City Attorney against the responsible party. These actions can result in significant fines levied upon the responsible party. Four businesses were issued administrative fines during the reporting period. Refer to Appendix D for a list of dischargers, violation descriptions, and corrective actions for this reporting period.

7.5.4 Elimination

As described in the preceding sections, the City takes immediate action to eliminate detected illicit discharges, illicit discharge sources, and illicit connections as soon as possible after detection. The City may impose an escalating series of enforcement actions for those illicit discharges that are not a serious threat to public health or the environment, as listed above. However, illicit discharges that pose a serious threat to public health or the environment are eliminated immediately.

8 EDUCATION COMPONENT

8.1 INTRODUCTION

During the 2011–2012 reporting period, the City continued its extensive education and outreach programs to deliver information about urban runoff and its effect on water quality, focusing on the constituents of concern associated with the water bodies that lie within the City's primary watersheds: Carlsbad and San Dieguito.

According to the most current demographic data from the San Diego Association of Governments, the City of Escondido's population is estimated at 143,911. Of that total, 51 percent is considered Caucasian and 49 percent Latino, with the remainder identified as mixed ethnicity. Because of its diversity, particularly Escondido's significant Latino population, the City continued to explore ways to reach this community.

8.2 STAFF TRAINING

8.2.1 General Employees

City employees receive stormwater-related messages through CityLine, a weekly electronic citywide newsletter distributed by the City Manager's Office. To reach new employees, the City offers a day of orientation on a quarterly basis. A 20-minute presentation provides background on the Clean Water Act, the current municipal stormwater permit requirements, general information on watersheds, and BMPs. A 12-minute video, *Preventing Stormwater Pollution in San Diego County*, produced by Impact Media and developed by the San Diego Copermittees' Municipal Workgroup, has been incorporated into the presentation. The session ends with the employees playing "Storm Water Jeopardy," a game provided on PowerPoint that reinforces the information in the presentation. Included in their New Employee binder, each employee is given a laminated "Be a Clean Water Leader" sheet that explains the three C's: Control, Contain, and Capture. All employees receive a message click pen that rotates through six messages: Pick Up Pet Waste, Use a Hose Nozzle, Eliminate Runoff, Pick Up Litter, Sweep Sidewalks, and Reduce Pesticide Use. During this reporting period, 20 new employees received this presentation.

8.2.2 Field Engineering/Engineering/Utilities/Construction/Planning Staff

On May 30, 2012, the City's Field Engineering, Engineering, Planning, and Utilities staff attended a 3-hour workshop designed to cover the various components of the development process as it relates to stormwater requirements: the Construction General Permit, Standard Urban Stormwater Management Plan (SUSMP), Low Impact Development, and Hydromodification. The training included stormwater requirements from inception of a project through active construction and into the post-development phase. Much of this discussion was set in the larger context of the municipal stormwater permit. Questions were raised throughout the presentation, which provided a good dialogue between staff and the environmental professionals who were retained to conduct the workshop.

8.2.3 Utilities/Stormwater-Pretreatment Inspection Staff

In June of 2012, pretreatment staff watched a municipal training video that provides an overview of basic stormwater concepts and detailed procedures for implementing basic BMPs. The video was well received by staff.

8.2.4 Maintenance and Collections

The City provides a thorough workshop on municipal stormwater concepts, requirements, and BMPs on a bi-annual basis. On April 19, 2011, stormwater training was conducted for the maintenance and collections staff. The training provided an overview of stormwater regulations, municipal requirements, watershed concepts and drainages, pollutant sources, and BMPs such as inlet protection, perimeter controls, storage practices, spill preparedness, etc. The presentation also addressed the legal consequences for noncompliance and included opportunities for questions and answers. The next training is scheduled for early 2013.

8.3 EDUCATIONAL OUTREACH

8.3.1 Underserved Community

During this reporting period, the City's stormwater education staff continued its outreach to the underserved population, including the Latino population, by partnering with the Neighborhood Services Division, which coordinates neighborhood groups, targeting the underserved and Hispanic populations. The goal is to improve the safety and health of neighborhoods. Currently, 16 neighborhoods are in the program, encompassing approximately 2,534 households. The stormwater education staff offers education and outreach to these neighborhoods. Some of the neighborhoods have requested speakers at their meetings. During this reporting period, the education staff attended and gave presentations on water quality and conservation to three neighborhood groups: Rustic Village, Lansing Circle, and West Hillside. They also provided stormwater information at the Neighborhood Leadership Forum, which includes representatives from all 16 neighborhoods. In addition, the City's Education and Outreach staff provided stormwater and/or stormwater-related (water conservation) information to Rancho Escondido Mobile Home Park residents and to the Del Lago Homeowners Association.

8.3.2 General Public

The City continues to maintain a stormwater website (http://www.escondido.org/storm-water-program.aspx) so users can quickly access information. A link to the Storm Water Program is located in the "Find it Fast" section, which is found on the City's home page.

Beginning in 2005, the City began tracking the number of hits that the stormwater page received. The purpose of tracking website visits is to assess the success of the outreach program and to evaluate the usefulness of the website to its residents. Figure 8-1 provides the number of website visits during the past 4 program years. The higher number of site visits at the beginning of fiscal year 2010–2011 may be attributed to changes to the water conservation regulations that occurred during that time.

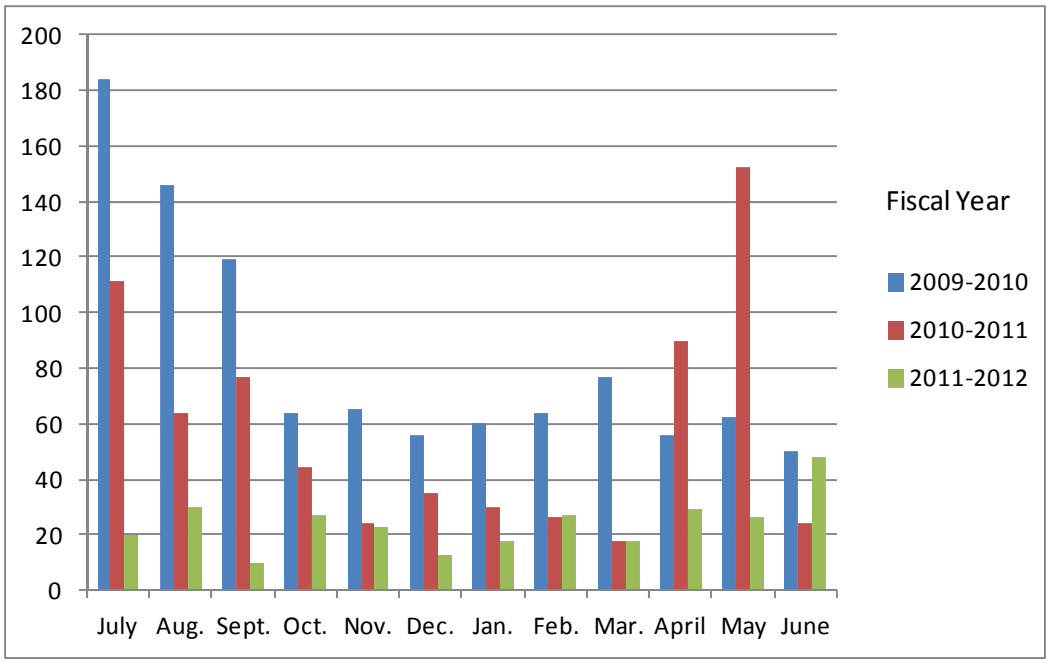

Figure 8-1. Annual Stormwater Website Hits, 2009–2012

In addition to using the website to disseminate information on the City's stormwater program and water quality issues, the City employs other means, including direct mail through utility bill inserts, local cable network, the speakers' bureau, and special events.

For local outreach, the City continued to broadcast slides on its local Cox cable station (Channel 19) and ATT Universe (Channel 99), which together reach 36,000 households. These slides are part of the City's community services announcements that run 7 days per week, 5 hours per day. In this reporting period, the City also began broadcasting two short videos about saving water, including preventing residential landscape runoff. Also, three new stormwater messages regarding cigarette butts, irrigation runoff, and litter were added this reporting period.

City Council meetings are televised live and are broadcast two times throughout the week. In celebration of Pollution Prevention Week, the City's Mayor, Sam Abed, presented the City's staff with a proclamation to reinforce the City's commitment to a clean and safe environment. Throughout the year, staff delivered presentations highlighting the City's ongoing environmental programs and activities, as well as public participation opportunities.

The City continued its extensive educational outreach efforts by participating in a variety of events (Table 8-1). Each booth typically included a visual demonstration or activity, literature, and handouts, as well as staff on hand to answer any questions.

Table 8-1. Educational Outreach Events, Fiscal Year 2011–2012

Name	Date	Location	Purpose	Participants	Handouts
Neighborhood Leadership Forum	7/21/11	City Hall	Water Conservation/ Stormwater	20	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Rustic Village	8/10/11	1145 Rustic Lane, Escondido	Water Conservation/ Stormwater	40	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
West Hillside Neighborhood Group	9/7/11	Mitchell Room	Water Conservation/ Stormwater	20	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Grape Day Festival	9/10/11	Grape Day Park	Water Conservation/Stormwater	200	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
I Love a Clean San Diego	9/17/11	Dixon Lake	Stormwater	80	I Love a Clean San Diego brochures
Pollution Prevention Week	9/19/11–9/29/11	City Hall Lobby	Stormwater	100	Stormwater calendars, kids' activity sheets, stormwater brochures
Educators' Night Out	9/28/11	San Diego Children's Discovery Museum	Water Conservation/ Stormwater	50	Promote classroom presentations

Name	Date	Location	Purpose	Participants	Handouts
Families on Foot	10/29/11	Kit Carson Park	Water Conservation/ Stormwater	250	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Employee Health & Lifestyle Expo	11/3/11	City Hall	Water Conservation/ Stormwater	200	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Farmer's Market	12/6/11	Grand Avenue	Stormwater	200	Stormwater calendars
Paws in the Park	3/25/12	Kit Carson Park	Stormwater	400	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Dia Del Nino	4/28/12	Grape Day Park	Water Conservation/Stormwater	400	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Street Faire	5/20/12	Grand Avenue	Stormwater/Water Conservation	100	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways

Workshops

Composting demonstration workshops, which are hosted by the City of Escondido and the Escondido Community Garden group, are held quarterly. These workshops provide residents with basic information about composting, including the promotion of healthier plants that are more resistant to disease and pests. Moreover, such resilience achieved through natural means reduces or even eliminates the need for pesticides that can contribute to pollutants conveyed to nearby creeks and streams by irrigation and stormwater runoff. During the reporting year, more than 100 residents attended the four workshops. These workshops were advertised in the City's Recreation Brochure, through the Recycling Hotline, and through a press release.

8.3.3 School Education

The City's water conservation and water quality education programs continue to be a success with teachers, even with limited classroom time because of the increased emphasis on testing and reduced school staffing. A brochure on the education program, which complements California's education standards for science and social studies, is distributed to office managers and teachers at public and private schools. Through puppetry and song, kindergarten and first graders are introduced to ways they can protect the water supply through conservation and learn how to keep creeks and lakes clean. The

second-grade presentation introduces the water cycle concept and leads students to discuss ways they can use water and keep it clean. Third-graders learn about matter and the molecular structure of water by constructing a model of the water molecule using pretzels and marshmallows. The presentation finishes with an assessment of the students' knowledge by playing BINGO. Using this informative and entertaining game, fourth-grade students observe and discuss how their domestic activities can pollute nearby waterways. Fifth-graders receive an advanced review of the concepts taught in earlier grades. Dedicating one part-time temporary employee to this program, the City delivered 197 water presentations to approximately 4,348 students during this reporting year.

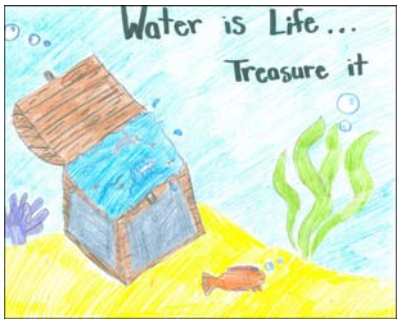

Sarah Lord

In addition to the regular water education program, the City partners with 12 other agencies in North San Diego County to sponsor a fourth-grade poster contest. This program year's theme was "Water is Life." Students were asked to demonstrate the importance of water and its impact on life. To complement the theme, the City provided a free presentation to 36 fourth-grade classes reaching 1,064 students. The 12 winners of the poster contest were recognized at the April 25, 2012, City Council meeting.

Since 1996, the City has sponsored the San Diego Outdoor Education's self-contained Splash Science Mobile Lab for the fifth and sixth grades. In the summer of 2008 the curriculum of the mobile lab was modified to focus on watersheds. This year, four schools were visited; approximately 160 students participated in the science lab per school. Each class was divided into teams and researched one of six areas. Utilizing a GIS program, the students identified typical beach pollutants and their likely sources. Students on the Storm Drain Team discovered how pollution that originates in their neighborhood can be conveyed to local estuaries, resulting in significant environmental consequences for the plants and animals they support. In addition, the Water Conservation Team discovered how water is used and established ways to stop its waste. Finally, the students on the Microscope Team looked at three different microorganisms and two macro-invertebrates called indicator species. During this reporting period the City sponsored 100 percent of the cost of the van for four schools. The City will continue to sponsor this exceptional educational outreach program to other schools within the district on a rotating basis so that every school will have the opportunity to utilize the Splash Science Mobile Lab resources.

During the summer months when the schools are not in session, the City partners with the Escondido Humane Society's summer camp program and gives presentations to children spanning grade levels kindergarten through sixth grade. The focus of the presentation is on stormwater issues. During this reporting period, water quality presentations were given on 15 separate visits to approximately 371 children ranging from ages 5 to 12.

8.3.4 Residents

The City involves the community to help report stormwater violations and provides opportunities for the public to help keep our watershed clean by offering a facility to dispose of their household hazardous waste and coordinating a litter abatement program.

The City Public Works main line (760-839-4668) includes a menu selection for reporting illegal dumping into storm drains, creeks, and lakes. This number is printed on all outreach material, including brochures, promotional items, and articles. Callers can leave a message or report their findings to the receptionist during business hours. After business hours, the caller is instructed to call Police Dispatch or 911 if the call pertains to a health and safety concern.

The information from the calls is entered and tracked by the City's AZTECA database. This program is linked to the City's GIS program, which enables staff to locate the address in relation to the nearest storm drain. When the calls are received, staff assign the concern to a category. A report is generated and given to the division of Community Services that handles the issue.

During this reporting period, 190 calls were labeled as stormwater-related, including debris in the MS4, illegal discharges, spills, blocked storm drains, residential and commercial discharges, and transient camps (Figure 8-2). City staff will continue to address these issues in outreach efforts and programs.

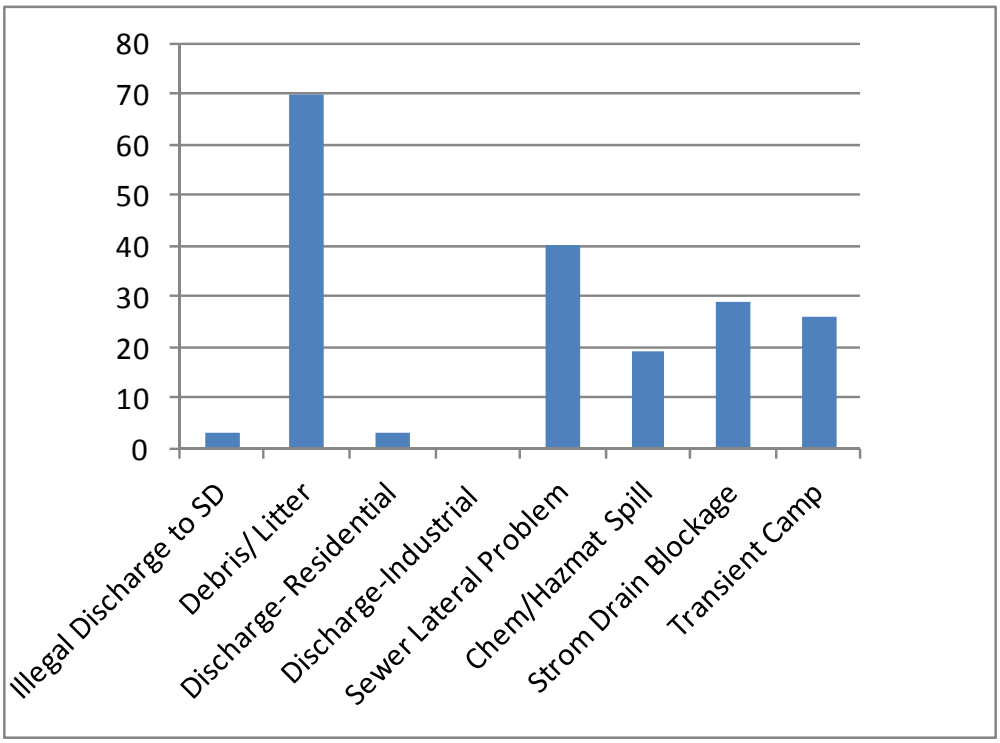

Figure 8-2. Stormwater Hotline Calls, City of Escondido JURMP, Fiscal Year 2011–2012

In addition to the Public Works hotline number, informational hotlines for water conservation (760-839-4658) and recycling (760-839-4818) are also available to Escondido's residents. Using a menu tree, the caller can receive information on used motor oil recycling, household hazardous waste disposal, water surveys, workshops, upcoming special events, and other related events or programs.

Escondido opened its own Permanent Household Hazardous Waste Collection facility in September 2004. The facility is open two Saturdays per month, by appointment, from 9:00 a.m. to 3:00 p.m. for Escondido residents, free of charge. All household hazardous wastes and universal wastes are accepted, including cathode ray tubes, alkaline batteries, miscellaneous electronics, LCD monitors, televisions, fluorescent/CFL lamps, and sharps (needles). Pharmaceuticals (non-controlled) are also now accepted at the facility, which is averaging 206 users per month, with continued usage at the regional facilities in Poway and Vista, averaging two users per month for a total of 208 users on a monthly basis. This is a 20 percent increase in the number of residents using the facility monthly. Overall volumes collected show an increase of 15.2 percent, with substantial increases in almost all areas of collection. Notable increases in collection volumes are for do-it-yourself used oil collection reported by CalRecycle (74 percent increase), paint (23.2 percent increase), e-waste (11.3 percent increase), lamps (126 percent increase), and sharps (25 percent increase). In this reporting period, the City made household hazardous waste collection the prime focus at all of its public education events. Batteries showed a 10.7 percent reduction in volume, but this is probably due to the City's waste hauler, Escondido Disposal, opening a drop-off battery collection site in 2011 at its office (open during all business hours), which is at the same location as the Household Hazardous Waste Facility. Table 8-2 shows the amount of household hazardous waste collected during the reporting period.

Table 8-2. Household Hazardous Waste Collected, Fiscal Year 2011–2012

Total Waste Collected (not including DIY used oil)	Used Oil & Filters Only	DIY Oil Collection	Paint (oil and latex)	E-waste	Lamps	Sharps	Batteries
526,706 lbs.	6,990 lbs.	53,333 gallons	101,600 lbs.	373,111 lbs.	3,190 lbs.	600 lbs.	5,075 lbs.

DIY = do-it-yourself
lbs. = pounds

The City continued its "We Clean Escondido" litter abatement program. Modeled after the "Adopt a Highway" program, businesses, civic organizations, and individuals choose an area to pick up litter before it reaches the storm drain inlets. In turn, the City supplies safety vests, gloves, trash pickers, and trash bags. Volunteers who commit to clean up a designated area once per month for 1 year can display their names on a sign provided by the City. Volunteers (individuals and groups) also conduct one-time cleanups; they are given supplies, but do not receive recognition signs. During this reporting period, 1,488 volunteers worked 2,826 service hours and picked up 1,263 bags of litter.

The City also participates in the California Coastal Cleanup Days that are scheduled in the spring and fall to coincide with Earth Day and Pollution Prevention Week. The site for these cleanups is Dixon Lake, one of the City's drinking water reservoirs. This past year, 162 volunteers picked up 614 pounds of trash and 526 pounds of recyclables, for a total of 1,140 pounds. In recognition of their volunteer efforts, each participant received a cloth litter bag, literature, and giveaways.

At all public events (composting workshops, coastal cleanups, etc.), handouts were provided to all participants regarding the following topics: Less Toxic Gardening, Recycling, Hazardous Waste Disposal, Composting, Construction Demolition Recycling, and various giveaways that include internet and hotline contact information.

This year, the City also participated in the region's "Day Without a Bag" event, held on December 15, 2011. Reusable bags were distributed at various retail outlets as a reminder to people about the waste created by the use of one-time-use disposable bags and to facilitate use of reusable bags. This event was heavily publicized throughout San Diego County. Escondido City staff coordinated with the regional group, and the City had participation at nine stores, including Jimbo's where the City hosted a table.

Because it is identified as one of the high-priority pollutants of concern, the City continued to target bacteria through its education and outreach dry-weather monitoring and watershed programs, including the San Dieguito and Carlsbad watersheds. The City partners with the Escondido Humane Society to provide pet waste dispensers to anyone who adopts a dog. During this reporting period, over 300 pet waste containers were given to new dog owners.

The dispenser has a cable-tie to attach onto the dog's leash. Twelve disposable bags are included with the dispenser. Additional bags are available at local pet retail stores. An informational tag is attached to

each dispenser. One side of the tag has a picture of a dog with a statement, “Thanks for picking up after me.” The alternate side informs the pet owner about the effects of bacteria on the watershed. The City also partnered with the Neighborhood Services Division to install 19 pet waste stations in nine neighborhoods.

On a regional and watershed basis, the City targeted pesticides and their harmful impacts on the watershed at various event venues by distributing Integrated Pest Management Tip Cards. The City distributed the tip cards at various community events.

Litter is always a focus of the City’s ongoing promotion of a healthy watershed. To raise awareness about litter, especially debris deposited on the City’s streets, colorful “Do Not Litter” signs are posted on the sides of the City’s two street sweepers. During this reporting period, approximately 7,408 curb miles were swept by the Maintenance and Operations Division and 410 tons (1,518 cubic yards) of material was collected. During this reporting period, the City conducted a more rigorous street sweeping schedule than the minimum frequencies set forth in the JURMP to prevent trash and debris from entering receiving waters. For example, downtown focus blocks were swept three times per week, heavily traveled streets were swept once per week, moderately traveled streets were swept two times per month, and all other roads were swept once per month.

8.3.5 Commercial and Industrial

The City continued to educate the commercial and industrial sector on a one-to-one basis during site visits. Brochures and posters are distributed on an as-needed basis to new businesses or those in need of assistance in understanding and implementing stormwater requirements. During the program year, new businesses were targeted to receive stormwater information, which included informative posters for break rooms. Overall, the City conducted more than 1,400 commercial and industrial inspections. These totals included more than 500 food-based businesses, which were inspected twice during the program year to assess compliance with stormwater and pretreatment regulations. This effort alone accounted for more than 1,000 inspections annually. Businesses received a variety of educational materials, including the Green Wrench Guide (available in both English and Spanish) for automotive business and the What’s Cooking Guide (available in English and Spanish), and a general BMP brochure for other businesses. Industrial businesses were assessed and, if applicable, advised about their responsibilities under the General Industrial Permit through the provision of a bilingual brochure that describes the types of operations that are subject to the Permit and the basic BMPs they should implement. In addition to distributing information via site visits, Business License staff provided brochures to applicants at the counter. In addition, the City distributed a brochure for mobile businesses through the Business License Division. The City’s Pretreatment staff reviews each mobile business’s recovery equipment as part of the business license application or reapplication process. If a business lacks the appropriate equipment or cannot demonstrate the proper use of it, a license will not be issued until corrective action has been taken.

8.3.6 Construction Site Owners and Developers

To promote awareness and compliance of construction stormwater regulations and BMP requirements, the City provided the following:

- educational material for construction and land development companies;
- BMP handouts for building and grading permit applicants;
- preconstruction meetings with developers, project supervisors, and engineers to review stormwater pollution prevention requirements and BMPs; and
- education for construction site inspectors regarding routine and nonroutine (e.g., violation follow-up) inspections.

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9 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

Public participation is an integral part of the success of stormwater planning. Key to this achievement is the City's effort to involve its citizens, as well as interested and affected groups, in the ongoing development and implementation of the JURMP, as required by Order R9-2007-0001. The City provides the public with numerous opportunities to participate in the City's Urban Runoff Management Program.

9.2 PUBLIC PARTICIPATION OPPORTUNITIES

During the 2011–2012 reporting period, the City continued to provide citizens with the opportunity to participate in many programs, including those outlined below, which are discussed in detail in Chapter 8, Education Component, of this report:

- participation in litter removal events;
- calls to the stormwater pollution prevention hotline;
- participation in composting workshops featuring stormwater pollution prevention techniques;
- stormwater presentations to elementary schoolchildren;
- promotion of the stormwater program and related events through local media (cable TV and newspapers);
- comprehensive stormwater website that features an interactive BMP education site for residents, as well as information for businesses;
- participation in the San Dieguito Watershed group, a consortium of nongovernmental organizations and governmental agencies that are collaborating to preserve and improve the environmental integrity of the San Dieguito Watershed;
- participation in the Escondido Creek and San Elijo Watershed Cooperative Agreement (ECWA), a collaboration of jurisdictions and nongovernmental organizations that seeks to preserve and create a healthy environment to provide a foundation for the overall quality of life in the watershed; and
- Participation in the Escondido Revealing the Creek organization, which is a group of residents, nongovernmental organizations, and local government representatives who seek to create a new vision of the creek as a functional and aesthetically pleasing recreation and transit corridor that is a social, environmental, and economic resource to its community.

In addition, the City holds public outreach events throughout the year. A listing of the events conducted during the reporting period is provided in Table 9-1.

Table 9-1. Public Outreach Events, Fiscal Year 2011–2012

Geographic Focus/ Outreach Group	Content	Number of Occurrences
City Council	• Legal and Regulatory Requirements • Watersheds and Water Quality Concepts • BMPs • Public and Community Resource Information	2

Geographic Focus/ Outreach Group	Content	Number of Occurrences
Environmental Groups	• Legal and Regulatory Requirements • Watersheds and Water Quality Concepts • BMPs • Public and Community Resource Information	2
Special Events (Street Faire, Earth Day, Public Works Week, Water Awareness Month, Cinco de Mayo, Grape Day Festival)	• Legal and Regulatory Requirements • Watersheds and Water Quality Concepts • Waste Reduction, Recycling, Urban Runoff BMPs • Public and Community Resource Information	See Chapter 8, Education Component
Commercial/Industrial Businesses	See Education Component	
Construction Businesses	See Education Component	
Residents and Schools	See Education Component	

As discussed in Chapter 8, the City partners with 12 other agencies in North San Diego County to sponsor a fourth-grade poster contest. This program year's theme was "Water is Life." Students were asked to demonstrate the importance of water and its impact on life. To complement the theme, the City presented a free presentation to 36 fourth-grade classes reaching 1,064 students. The 12 winners of the poster contest were recognized at the April 25, 2012, City Council meeting, where the students' achievements were recognized and where City staff provided an overview of the City's environmental programs' goals and objectives, as well as upcoming events, such as local litter cleanup events. The City's annual sponsorship of this televised event is an opportunity to celebrate and solicit residents' participation in Escondido's environmental programs. On September 14, 2011, the City's Mayor, Sam Abed, read a pollution prevention proclamation, which annually recognizes Pollution Prevention Week. The proclamation noted the City's pollution prevention efforts and programs, including stormwater and water conservation. Since City Council meetings are televised, they are estimated to reach approximately 30,000 people via live and recorded broadcasts.

10 FISCAL ANALYSIS COMPONENT

10.1 INTRODUCTION

The following fiscal analysis is based on the "Standardized Fiscal Method and Format" (Fiscal Analysis Method) that was collaboratively developed by the Copermittees in January 2009 in accordance with sections G,J.1.a(3)(k) and J.1.c(1)(d) of NPDES Order R9-2007-0001. The Fiscal Analysis Method document was submitted to the San Diego RWQCB in January 2009. The Fiscal Analysis Method provides Copermittees with guidance and standards to analyze and report their urban runoff management program (jurisdictional, watershed, and regional) expenditures, as well as with direction to identify the funding sources that support those costs. Because many stormwater-specific activities are co-mingled with other municipal responsibilities and tasks, some of the expenditures are best professional estimates of resources spent on a particular stormwater function or area. However, any estimates are documented by a rationale that will serve as a benchmark for future years' analyses.

10.2 GENERAL BUDGET INFORMATION

On an ongoing basis, the City reviews the revenue and expenditures associated with the Stormwater Management Fund to ensure that adequate support is available to implement jurisdictional, watershed, and regional urban runoff management program components (i.e., JURMP, WURMP, and RURMP). In doing so, the City annually tracks staff time, operations, maintenance, education, capital, and administrative expenditures, and makes allocation adjustments as necessary to accomplish the activities of this program. Since the majority of the stormwater program is supported by the Wastewater Fund, it is annually reviewed to determine whether adequate funding is available to sustain it.

Support from non-wastewater departments for stormwater services is largely represented by allocations to various General Fund departments involved in the planning and implementation of the program, e.g., Maintenance, Engineering, Information Systems, Planning, and Fire. However, because of budget constraints over the last couple of years, the City has focused on effectively delivering stormwater services that improve water quality and meet permit compliance targets while remaining within designated budget thresholds. To accomplish this in part, the City has relied less on outside contractors and more on existing staff resources to achieve program objectives and goals.

The following discussion of fiscal year 2011–2012 program expenditures and funding sources provides a more detailed analysis of how the balance between expenditures and available revenue has been achieved.

10.3 FISCAL ANALYSIS RESULTS

10.3.1 Expenditures

During fiscal year 2011–2012, the City spent $1.55 million to develop and deliver its stormwater program and services to its residents and businesses, as well as to its watershed and regional stakeholders. These expenditures are divided among the various categories of the permit-required components, which incorporate a wide range of jurisdictional, watershed, and regional services, including the following:

- administration;
- development project design review;
- residential complaint response and enforcement;
- education and outreach;
- commercial, industrial, and municipal facility inspections; and
- water quality monitoring.

It should be noted that an additional $15 million in wastewater funds is expended on programs that focus on removing, reducing, and preventing pollutants from entering and/or leaving city waterways and adjacent tributaries.

These programs and their costs are associated with the City's comprehensive sewer inspection and maintenance program, which incorporates a variety of methodologies to prevent sewer ruptures and overflows, including regular inspection and cleaning of its infrastructure; the operation and maintenance of its wastewater plant; and inspection of businesses such as restaurants, motive establishments, and significant industrial users that discharge to it. While not included in the stormwater budget, these services are integral to sustaining the health of the City's and the watershed's water quality.

Table 10-1 summarizes the required stormwater program components and their attendant expenditures for fiscal year 2011–2012, approximately 70 percent of which were devoted to program implementation. For more detail regarding fiscal year 2011–2012 expenditures, refer to the table, "San Diego County Copermittees' Fiscal Analysis Report," in Appendix E.

Table 10-1. Stormwater Program Expenditures, Fiscal Year 2011–2012

Program Components	Amount
Jurisdictional Programs	
Administration	$352,350
Development Planning	$255,630
Construction	$77,850
Municipal	$384,805
Industrial and Commercial	$88,000
Residential	$144,915
IDDE	$42,950
Education/Public Participation	$58,740
Special Investigations	$4,780
Non-Emergency Firefighting	$0
Jurisdictional Program Total	**$1,410,020**
Watershed Programs	
San Dieguito Watershed	$17,100
Carlsbad Watershed	$15,675
Watershed Programs Total	**$32,775**
Regional Programs	
Total Copermittee Cost Share	$95,330
Administration	$12,000
Regional Program Total	**$107,330**
TOTAL STORMWATER PROGRAM COSTS	**$1,550,125**

10.3.2 Funding Sources

A fee assessed through the City's Wastewater Fund provides fiscal support for all three urban runoff management plan components specified in the permit: (1) jurisdictional, (2) regional, and (3) watershed. The Wastewater Fee is included on the City's monthly utility bills, which is due and payable at the same time and on the same terms as other parts of the bill. The fee is based on each utility customer's contribution to the City's wastewater system. Both commercial and residential customers are charged a fixed fee of $16.37 and then are assessed additional fees based on customer class and volume. Although the fee generated $23.5 million in revenue during 2011–2012, the stormwater program was allocated $2.1 million of the total Wastewater Fund.

The Stormwater Program is supplemented by services provided by the City's General Fund departments and divisions. Although the stormwater services they provide represent functions that would occur irrespective of the stormwater-mandated functions, such as street sweeping and maintenance of the City's storm sewer infrastructure, these General Fund-supported services allocate a portion of their operational costs to the stormwater budget to address gaps in resources created by the expanded requirements of the 2007 stormwater permit.

In compliance with Proposition 218, any recommended wastewater increases are subject to a comprehensive public review process, including publicly noticed rate review workshops, proposed rate increase notifications sent to all residents and businesses, as well as publicly noticed City Council rate review hearings. In addition, under various debt issues, the City annually sets charges for wastewater services at rates sufficient to produce net revenues (after paying operating and maintenance expenses, excluding depreciation and interest) of at least 1.15 times the debt service on the Wastewater Fund bonds issued for that year. While this obligation is subject to the Proposition 218 public review process, the minimum funding requirement would legally supersede any rate restrictions proposed by the Proposition 218 public review process if the recommended rates did not meet the minimum debt service revenue requirement.

10.4 CONCLUSIONS AND RECOMMENDATIONS

The City will continue to participate with other Copermittees in the review and reporting of regional and local stormwater program funding and expenditures. Programs where shared costs and resources are beneficial to reduce jurisdictional expenses will be evaluated. City activities and staffing will continue to be analyzed for cost-effectiveness and fiscal responsibility relative to municipal stormwater permit compliance, water quality improvements, and pollution reduction. Annual modifications to the overall stormwater budget and/or City fees will be made in accordance with permit requirements, established public review processes, and minimum debt service funding levels.

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11 EFFECTIVENESS ASSESSMENT COMPONENT

This chapter assesses the JURMP's effectiveness at various levels of measurement. The effectiveness of City activities and BMP implementation, the individual JURMP components, and the program as a whole are analyzed herein using methods similar to those used in earlier years, which are based on the San Diego County Municipal Stormwater Copermittees' Effectiveness Assessment template.

11.1 INTRODUCTION

On an annual basis, the effectiveness of the JURMP, its various components, and the BMPs used in its implementation are evaluated to gauge the progress of reducing pollutants associated with stormwater and urban dry weather runoff. To be effective and measurable, JURMP priorities and activities have been established relative to program components or geographical areas that display water quality concerns. Relative to these priorities, program successes are gauged by achieving receiving water quality improvements. By realizing where water quality benefits occur, resources can then be shifted or focused in other priority locations within the City and/or within its two major watersheds.

Assessing the performance of the JURMP (and the specific BMPs that compose it) and continually improving the program on the basis of this assessment help to achieve water quality improvements in Escondido and downstream drainage areas. In compliance with Order R9-2007-0001, the City's long-term assessment of the effectiveness of the JURMP is based on direct and measureable targeted outcomes that are part of the Implementation Assessment, the Water Quality Assessment, and the overarching Integrated Assessment. This assessment considers both direct and indirect measures to evaluate the overall performance of the JURMP. The six outcome levels assessed as part of this evaluation method are as follows:

1. **Compliance with Activity-Based Permit Requirements** — outcomes directly related to the implementation of activities prescribed by Order R9-2007-0001. Examples include completion of required inspections, inventory updates, and staff training.
2. **Changes in Attitudes, Knowledge, and Awareness** — outcomes measured as increases in knowledge and awareness among target audiences such as residents, businesses, and municipal employees.
3. **Behavioral Change and BMP Implementation** — outcomes that measure the effectiveness of activities in affecting behavioral change and BMP implementation. Examples include installation of storm drain filters and decreases in littering.
4. **Load Reductions** — outcomes that measure load reductions and quantified changes in the amount of pollutants associated with specific sources before and after a BMP or other control measure was employed. Examples include street and catch basin sediment reduction.
5. **Changes in Urban Runoff and Discharge Quality** — outcomes that measure changes in one or more specific constituents or stressors in discharges into or from MS4s. An example is the decrease in copper concentrations in MS4 discharges or surface runoff.
6. **Changes in Receiving Water Quality** — outcomes that measure changes to receiving water quality resulting from discharges into and from MS4s that are expressed through a variety of means, such as compliance with water quality objectives, protection of biological integrity, or beneficial use attainment.

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The effectiveness of the JURMP during the 2011–2012 reporting period is described below relative to the various levels of analysis.

11.2.1 Level 1: Compliance with Activity-Based Permit Requirements

Permit compliance activities conducted by the City as discussed in previous chapters of this Annual Report are tabulated in Table 11-1.

Table 11-1. Level 1: Compliance with Activity-Based Permit Requirements

JURMP Component	Activity	Quantity	Comments
Development Planning	Number of projects subject to SUSMP requirements	9	Three projects qualified for a Hydromodification Plan.
Construction	Number of active construction sites during the reporting period	24	Includes public and private projects.
	Number of written citations issued	0	Ten citations issued during previous year, but the continuing economic slowdown caused a corresponding slowdown and/or shutdown of construction activity.
	Stop-work orders issued	0	Consistent with previous year, stop-work orders were not necessary during the program year.
	Focused compliance training conducted for City construction site inspectors	1	Three-hour workshop on the Construction and Municipal NPDES permits. Also included staff from Planning, Wastewater, Engineering, and Field Engineering.
Municipal	Miles of streets swept Corresponding amount of debris collected	7,408 410 tons (1.518 cubic yards)	More rigorous street sweeping schedule than the minimum frequencies set forth in the JURMP.
	Number of MS4 features (inlets, culverts, catch basins, outlets, and basins) inspected Corresponding amount of sediment and debris collected	2,810 77 tons	Removed by hand and vactor methods.
	Number of municipal facilities inspected	60	Parks, fire stations, City facilities, pump stations, parking lots, Public Works yard.
	Number of NOCs issued	0	Four verbal warnings were issued.
	City employees who received stormwater permit and related BMP information via City Newsletter, New Employee Orientation, and City's Employee Health Fair	100	This is a routine distribution among City employees.
Industrial and Commercial	Number of industrial and commercial facilities inspected during annual inspection process	Over 1,400	Includes motive service and food establishments
	Percentage of all industrial and commercial sites initially in compliance	96%	20 verbal warnings and 50 NOCs issued. Compliance improved by 13% over previous year.
Residential	Number of stormwater-related calls received through the Public Hotline	190	Decrease from 217 over previous year.
	Total amount of household hazardous waste collected (pounds)	52,6706	Up from 457,063 pounds during previous year.
	Number of residents who attended workshops held by the City	100	Four workshops

JURMP Component	Activity	Quantity	Comments
Illicit Discharge Detection and Elimination	Number of dry-weather monitoring locations	117	Monitoring for presence of water, water quality, and trash
	Number of dry-weather stations sampled (i.e., wet)	57	Consistent with number of stations (60) sampled during previous year.
	Number of illicit discharges identified and resolved	44	Cited 22 violations for commercial/industrial and/or food service businesses; 22 for residential.
Education / Public Participation	**California Coastal Clean-up Days** Number of volunteers participating Pounds of trash collected Pounds of recyclables collected	 162 614 526	Collected 1,140 pounds of trash and recyclables combined. More than 3 times the amount collected during the previous year.

Implementation of the JURMP, as demonstrated by these data, has removed a variety of pollutants from the storm drain conveyance system or prevented pollution due to a variety of public and private sector activities.

11.2.2 Level 2: Changes in Knowledge/Awareness

During this reporting period, the City continued its education and outreach programs to deliver information about urban runoff and its effect on water quality, with a particular focus on educating Spanish-speaking residents. Stormwater personnel also staffed booths at a variety of special events (see Table 8-1 in Chapter 8) to promote environmental awareness, pollution prevention knowledge, and green/sustainable behavior.

The public's knowledge regarding stormwater issues was documented in surveys conducted at special events throughout the year. The City has used surveys to target residential areas and activities that create the greatest potential for urban runoff impacts. Outreach efforts have included street surveys to identify areas of trash and sediment accumulation, as well as resident research surveys by phone, mail, and e-mail to identify community knowledge of urban runoff issues. The City and the region plan to expand their outreach programs and continue to incorporate evolving stormwater knowledge, with a particular focus on pollutants associated with surface water impairments and other sensitive receiving waters.

Training and Education

City employees received stormwater-related messages through *CityLine*, a weekly electronic Citywide newsletter distributed by the City Manager's Office. New employees undergo a day of orientation that includes a 20-minute presentation on the Clean Water Act, the current permit requirements, general information on watersheds, and BMPs. During this reporting period, 20 new employees received this presentation. Other training during this reporting period were as follows:

- 3-hour training workshop regarding the new Construction General Permit (Order 2009-0009-DWQ) and Municipal General Permit (Order R9-2007-0001). Attended by Field Engineering, Engineering, Planning, Wastewater, and Construction staff.
- Stormwater inspection workshop for stormwater/pretreatment inspectors.
- Stormwater staff training of stormwater regulations, pollutant sources, and BMPs for Maintenance and Collections staff.

During this reporting period, the City's stormwater education staff continued its outreach to the underserved population, including the Latino population, by partnering with the Housing and Neighborhood Services Division, which coordinates neighborhood groups, targeting the underserved and

Hispanic populations. Currently, 16 neighborhoods are in the program, encompassing over 2,500 households. During this reporting period, the City's education and outreach staff attended and gave presentations on water quality and conservation to two neighborhood groups: Hickory and South Tulip. In lieu of education staff attendance, bilingual stormwater brochures are provided at other neighborhood group meetings.

Outreach and Participation

During the reporting period, the City continued to provide citizens the opportunity to participate in many pollution prevention programs, including the following:

- litter removal events,
- the stormwater pollution prevention hotline,
- composting workshops featuring stormwater pollution prevention techniques,
- stormwater presentations to elementary school children,
- local media (cable TV and newspapers) promotions,
- stormwater website interaction and education,
- the San Dieguito Watershed group, and
- the Escondido Watershed Cooperative Agreement (EWCA) collaboration for improved watershed management.

The City also holds public outreach events throughout the year.

Inspection Compliance Communication

Through the City's extensive annual compliance inspection campaign this reporting period, the issuance of NOCs has again proven to be effective in asserting corrective action, achieving compliance, and increasing pollution prevention. Based on inspection results, business owners/operators received a variety of general BMP educational materials in both English and Spanish, and were informed about their responsibilities under the stormwater permit. As warranted, facility owners/operators were also advised about their responsibilities under the Industrial General Permit. In addition, business license staff mailed stormwater education and awareness materials to anyone applying for or renewing a business license, and made brochures available at the counter.

11.2.3 Level 3: Behavioral Change/BMP Implementation

Knowledge and awareness training and outreach among municipal employees, residents, and business representatives continue to help change community behavior in minimizing urban runoff pollution. The methods of communication and their effectiveness are described in the sections below.

Land-Use Planning for New Development and Redevelopment

As part of the authorization process for obtaining grading or building permits from the City, applicable projects are assessed for appropriate design, source control, and stormwater runoff management and treatment controls relative to their size, location, and complexity. This process (the SUSMP evaluation) helps development project proponents plan and incorporate proper stormwater management and water quality principles into regulated projects in the City's watershed. The SUSMP evaluation and implementation process includes the Hydromodification Management Plan, which is required of certain priority projects so that applicants understand and implement runoff controls to maintain a site's pre-development hydrology.

Construction

Although contractors must have project plans approved before site preparation can begin, City inspectors have found that developers and construction crews are implementing site protection and runoff control BMPs for practicable water quality protection that typically include the following:

- erosion controls (physical and vegetation stabilization BMPs),
- sediment controls (e.g., perimeter controls, inlet protection, check dams, desilting basins),
- materials management,
- spill protection/containment, and
- concrete wash-out containment.

In addition, City construction site inspectors and municipal staff have undergone construction stormwater awareness training. Select staff have also been certified as Qualified SWPPP Developers, as required by the new Construction General Permit (Order 2009-0009-DWQ).

Municipal

Compliance training for municipal staff continues to target operations or practices relative to the City's MS4 and associated Citywide maintenance activities to promote compliance among municipal employees. This fiscal year more than 2,800 MS4 features were inspected and cleaned by the Maintenance Department, which resulted in approximately 77 tons of sediment and debris being removed. In general, stormwater compliance inspections of municipal facilities have been effective in maintaining awareness of the changing regulatory climate, site management improvements, and pollution prevention.

Many municipal operations that support the public interest have helped in achieving compliance with Order R9-2007-0001. These operations improve hazardous waste collections, increase recycling, reduce trash collection at City parks and recreational facilities, and decrease water consumption rates.

Industrial and Commercial

JURMP data collected since 2002 continue to show positive behavioral change and compliance associated with the JURMP's industrial program. Relative to an average of approximately 1,400 industrial and commercial facilities inspected annually, compliance has been routinely good. As shown in Figure 11-1, as a percentage of the total number of facilities inspected, NOC violation citations were the lowest during this reporting period (3.6 percent of inventory) than ever recorded under the JURMP inspection program. From the inspection of all high-priority and medium-priority facilities, the NOCs issued were mostly for minor housekeeping issues that did not pose immediate threats to water quality. The results of this year's industrial and commercial compliance inspections demonstrate the success of the City's pollution prevention outreach program and the positive response/acceptance of pollution prevention behavior by local businesses throughout Escondido.

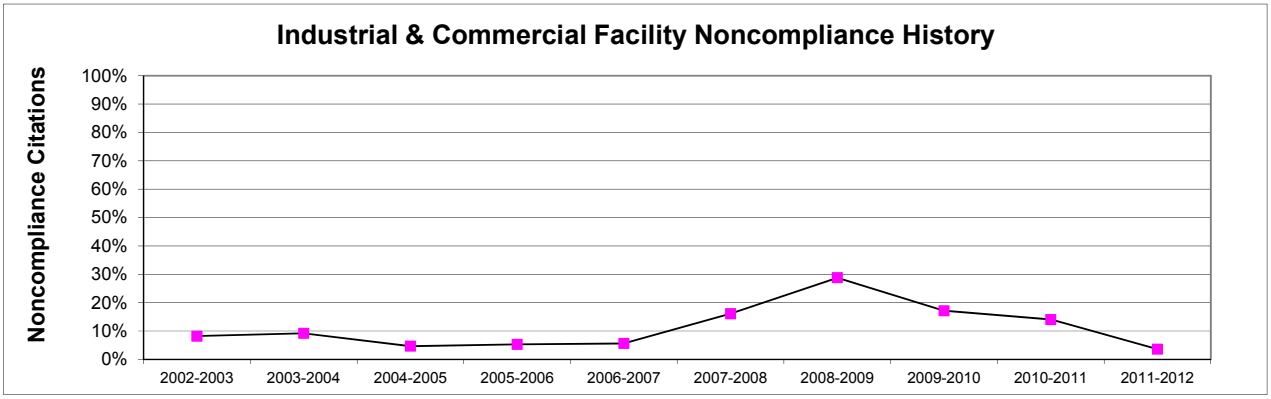

Figure 11-1. Industrial and Commercial Facility Noncompliance History

As part of the continuing campaign to optimize awareness and increase pollution prevention behavior, BMP materials were distributed during inspections to businesses based on facility type and site activities.

The City's continued escalating enforcement campaign reduced the number of noncompliance citations at municipal facilities to zero for this reporting period (Figure 11-1).

Residential

Confirming a continuously steady and impressive increase in positive behavioral change, the amount of household hazardous waste collection and electronic waste recycling has had great success since the program's inception in 2002 (Figure 11-2). Household hazardous waste collection increased over last year, suggesting a response to the City's escalated outreach within the residential community.

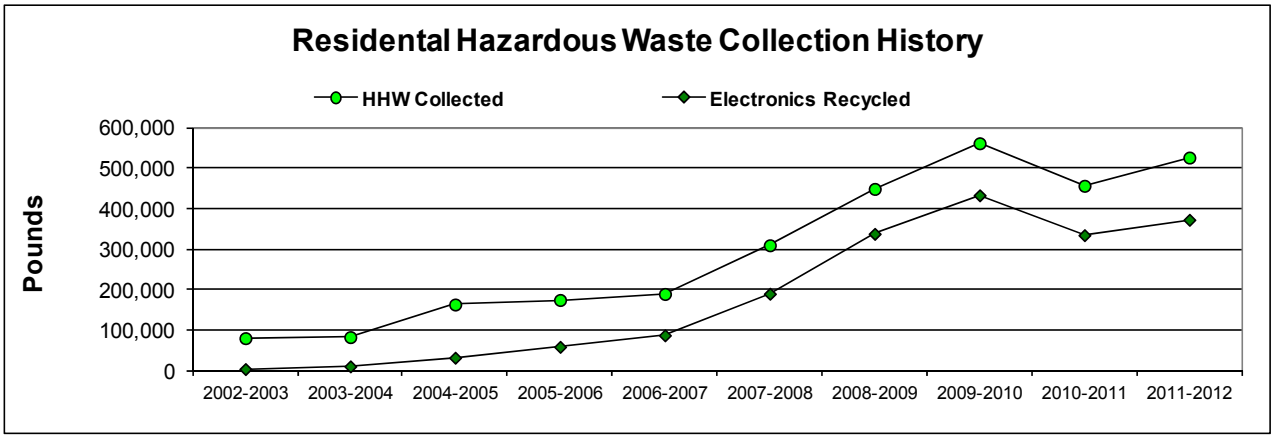

Figure 11-2. Household Hazardous Waste Collection History

As part of its residential outreach program, the City also actively educates residents about BMPs that can be applied to common domestic activities. These BMPs address the priority activities identified by the permit, including automobile repair, maintenance, and washing; home and garden care; and the disposal of pet waste. A number of approaches, such as the stormwater website and hotline, information booths, storm drain curb markers, education and outreach through local media, and bilingual door hangers have been successful in educating residents about pollution prevention.

Illicit Discharge Detection and Elimination

As discussed in Chapter 7, no illicit sewer connections or illegal discharges to the MS4 were detected during this reporting period as a result of dry-weather monitoring. However, the results of this monitoring component often indicate elevated nutrient patterns in the semirural areas known to correlate with agricultural areas (e.g., dairy farms, grape vineyards, and citrus and avocado orchards), many of which (if not all) also use septic sewer systems. Current and historical data suggest that elevated nitrate (and bacteria) concentrations are associated with agriculture and livestock operations, and may also be attributed to groundwater seepage at the point of measurement as well as residential fertilizer usage. Special follow-up investigations conducted during the course of JURMP implementation have indicated that some outlying unincorporated San Diego County properties are sources of suspected bacteria and nitrate that cause elevated measurements within the City's conveyance system downstream.

Despite some of the few elevated nitrate levels found, JURMP water quality data collected to date indicate that no significant problem pollutant sources have been identified overall within the City's jurisdiction. For the first time since JURMP monitoring began, there were no exceedances in bacteria actions levels during this reporting period.

Education

BMPs employed throughout this current permit term have consisted of the car washing education campaign, landscape and irrigation seminars, used-oil recycling program, litter abatement program, complaint response and education program, environmental classes for elementary school children, stormwater website, and stormwater hotline. As shown by the residential hazardous waste collection and recycling discussion above, the education and outreach efforts are having a positive impact on Escondido's residents and water quality. The Level 4 load reduction analysis presented below depicts similar trends of environmental benefits from the education programs in Escondido.

Public Participation

Since the first year of implementation in 2002, JURMP-related activities, community festivals, and public events and workshops have been well attended. Surveys among attendees indicate a continued and widening understanding of watershed pollution and management issues. During this reporting period, the City continued to involve its citizens and interested and affected groups in the ongoing development and implementation of the JURMP.

Summary of Behavioral Changes

As noted above, measureable improvements have occurred in behavioral changes and attention to BMP implementation related to the City's industrial, municipal, commercial, construction, and residential sectors. Individually and collectively, measurement indicators show an improvement in water quality that can be attributed to behavior changes among owners, operators, and residents. These behavior changes suggest an increased public awareness of pollution prevention and the incorporation of useful BMPs. In view of the progress documented since 2002, cumulative data collected to date demonstrate a quantifiable improvement in urban runoff and receiving water quality in the jurisdiction. The presence of such indicators is explained in the following three sections.

11.2.4 Level 4: Load Reductions

From historical dry-weather monitoring and sampling information, a number of monitoring locations and assorted water quality parameters have exhibited changes in water chemistry from year to year. In general, pollutant concentrations in urban runoff discharges and receiving waters within Escondido have decreased over 2001–2002 levels, when the program first began. Data collected as part of the City's JURMP provide useful information regarding pollutant removal on a Citywide scale. Figure 11-3 summarizes the volume of sediment removed by the City since JURMP implementation.

Other pollutant load reductions are evident through various municipal data and public participation information. Figure 11-4 illustrates the pollutant mass-load reductions realized within the jurisdiction since 2002. These collective efforts have reduced City-dispersed trash, removed litter from local creeks, increased recycling of potentially toxic electronic materials, and diverted tons of household hazardous waste from landfills and potential watershed exposure. Since 2002, nearly 35 tons of creek litter and Citywide trash alone have been diverted from reaching receiving waters (e.g., San Elijo Lagoon).

The City's extensive dry-weather monitoring program provides the ability to measure water quality improvements (suggesting pollutant load reductions) from the 117 discharge points and receiving water locations monitored throughout and outside Escondido. Current and historical dry-weather sampling data indicate that a number of the monitoring locations are exhibiting

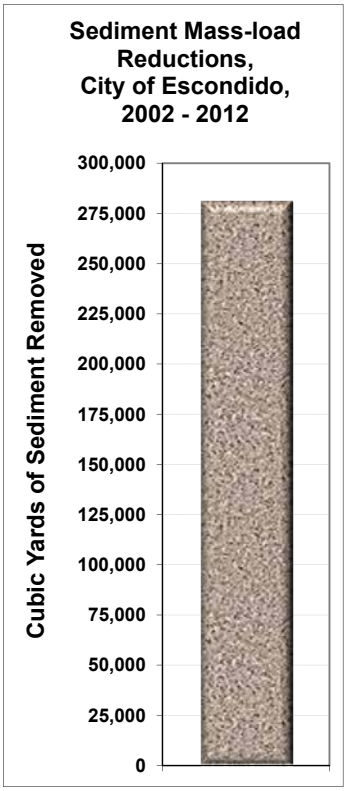

Figure 11-3. Sediment Mass-load Reduction, City of Escondido, 2002–2012

changes in water chemistry from year to year. These are reviewed relative to water quality changes in the following section.

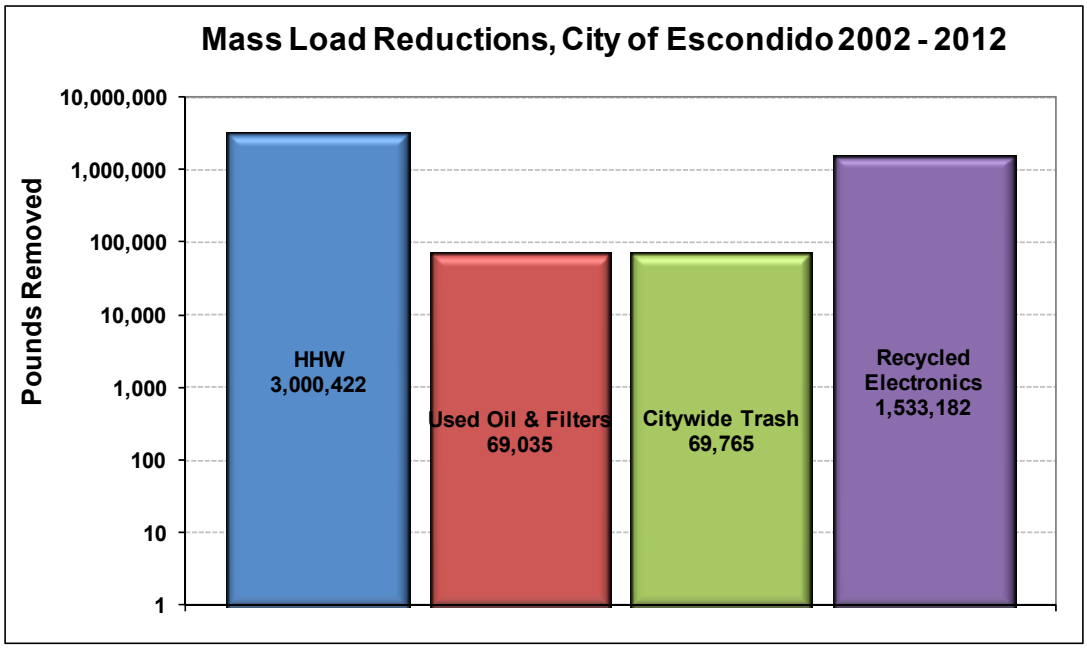

Note: HHW= household hazardous waste

Figure 11-4. Pollutant Mass-load Reductions, City of Escondido, 2002–2012

11.2.5 Level 5: Changes in Discharge Quality

Escondido's dry-weather program monitors storm drain outfall discharges and in-stream water quality in Escondido Creek, Reidy Creek, and San Marcos Creek, and drainages in Indian Wells and the east and west drainage areas associated with Lake Hodges. The effects of the Escondido JURMP implementation are apparent in the City's dry-weather monitoring database as quantifiable reductions in measured pollutants since the program began. Although some data anomalies occur from year to year, pollutant concentrations indicate a general decline with time.

Overall, dry-weather monitoring results during the reporting period confirm good water quality associated with dry-weather flows within the City's monitoring network. In-stream sampling of the various receiving water creeks in Escondido demonstrates that the urban runoff discharges are not negatively affecting surface water quality.

Water Quality Assessment

Improvements in urban runoff water quality in Escondido can be determined with a reasonable amount of certainty due to the City's extensive JURMP monitoring efforts. Dry-weather grab-sampling data provide screening-level information of water quality conditions at the time and point of sampling (i.e., "snapshot"), which are not useful in estimating annualized pollutant loads but do reveal general spatial and temporal changes in annual discharge quality. The dry-weather monitoring data collected within the City's drainage areas indicate a general improvement in dry-weather water quality since JURMP implementation, and that urban runoff discharges are not degrading receiving waters. Comparing the sampling data collected in the summer of 2002 (first sampling year) to data collected this reporting period, the conclusions below can be made:

- Bacteria concentrations have been vastly reduced from 2002 levels (Figure 11-5 and Figure 11-6), and no bacteria action levels were exceeded during this reporting period. All bacteria concentrations were notably below the lowest *Enterococcus action level (10,000 MPN/100ml)*.

  Spatial patterns of nutrient (nitrate and orthophosphate) concentrations are illustrated in Figure 11-7. Similar to previous years, elevated nitrate levels in Escondido have been known to correlate with agricultural irrigation practices and historical land use that occurred over the last 40 years prior to urban development. As mentioned earlier, the effects of land use (dairy farms, grape vineyards, and citrus and avocado orchards) and the presence or historical presence of septic sewer systems appear to influence elevated nitrate (and sometimes bacteria) concentrations, several sources of which have been found to correlate with drainage originating from unincorporated areas outside City limits that are upgradient in the watershed. Fifteen monitoring stations had samples containing nitrate concentrations above the action level (10 mg/L). Concentrations of orthophosphate did not exceed 0.31 mg/L this reporting period and have historically been well below the 2 mg/L action level since JURMP implementation.

- Metal concentrations in urban runoff continue to be very low overall, with none of the dissolved metal concentrations measuring above action levels during this reporting period (Figure 11-8). Relative to initial sampling conducted in 2001–2002, dissolved metals in urban runoff have been significantly reduced and there is no definitive correlation to an area within the jurisdiction that suggests a significant pollutant source among the concentrations recorded.

All other parameters measured were largely undetectable above analytical laboratory reporting limits.

11.2.6 Level 6: Changes in Receiving Water Quality

The major receiving waters within Escondido are Escondido Creek, Reidy Creek, and Lake Hodges. Receiving water quality data from in-stream sampling during dry weather have shown positive changes in water quality and appear to correlate with the positive behavioral changes associated with improving water quality. Based on the trend of improved urban runoff water quality over the past 9 years of JURMP implementation, these creeks and Lake Hodges would be expected to realize an increase in receiving water quality.

Water Quality Assessment

Since the Escondido dry-weather monitoring program began in 2000 (prior to JURMP implementation), changes in receiving water quality have been recorded. As presented in Chapter 7, data collected in the receiving waters show that pollutant concentrations have remained low at the majority of the stations sampled, with few elevated levels or other outlier data anomalies observed. Figures 11-5 through 11-8 exhibit the overall improvement in water quality in the City's jurisdiction. With the exception of a very few elevated levels, 2011–2012 data from monitoring stations located within the tributary drainage areas of Escondido Creek and Reidy Creek, Lake Hodges, Indian Wells, and San Marcos Creek show water quality improvement since the JURMP was initiated.

Long-Term Program Assessment

The long-term objective of assessing the JURMP's effectiveness is to provide an overall perspective of water quality improvements, the JURMP's program components, and evaluating these two principal elements through an integrated assessment.

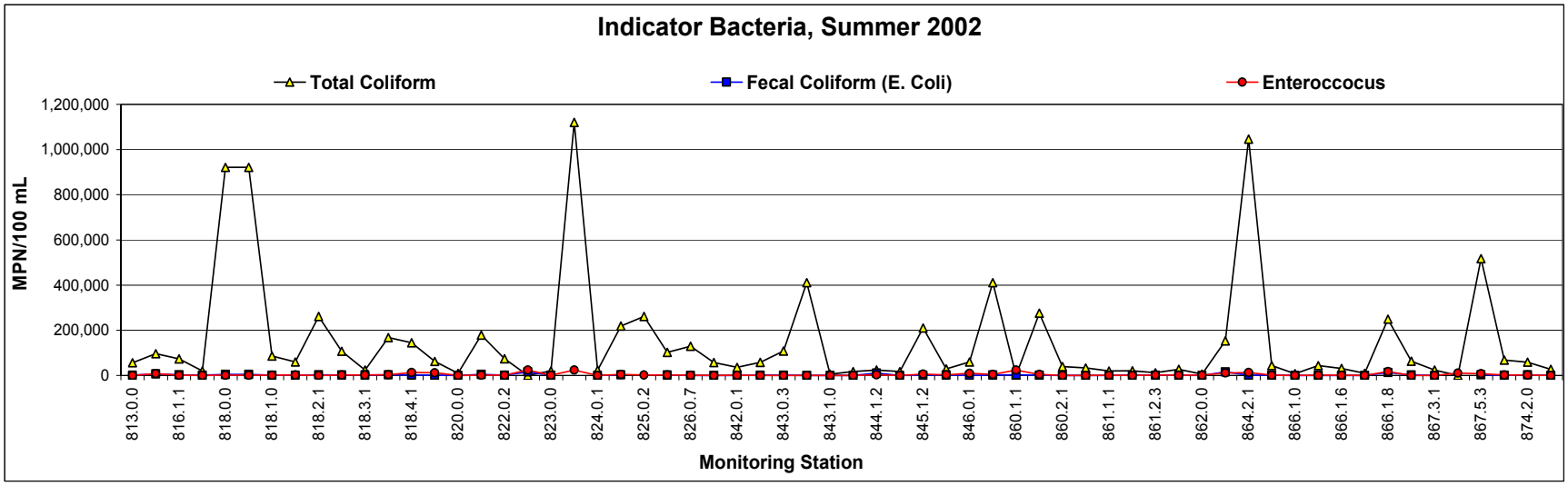

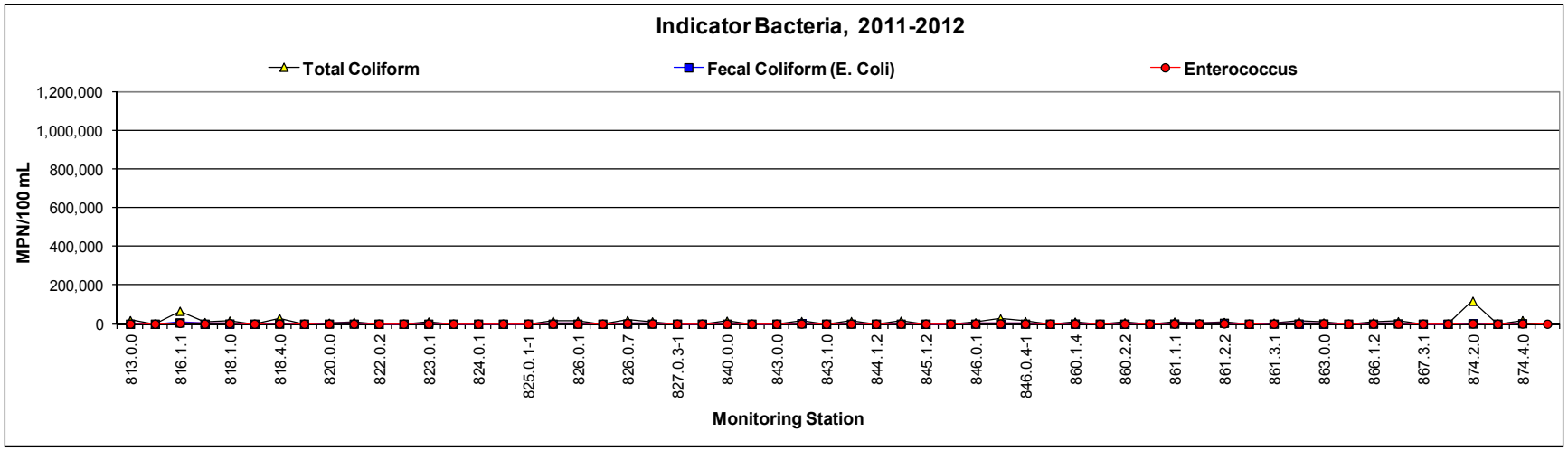

Figure 11-5. Dry-Weather Indicator Bacteria Monitoring, City of Escondido, Fiscal Year 2001–2002 and Fiscal Year 2011–2012

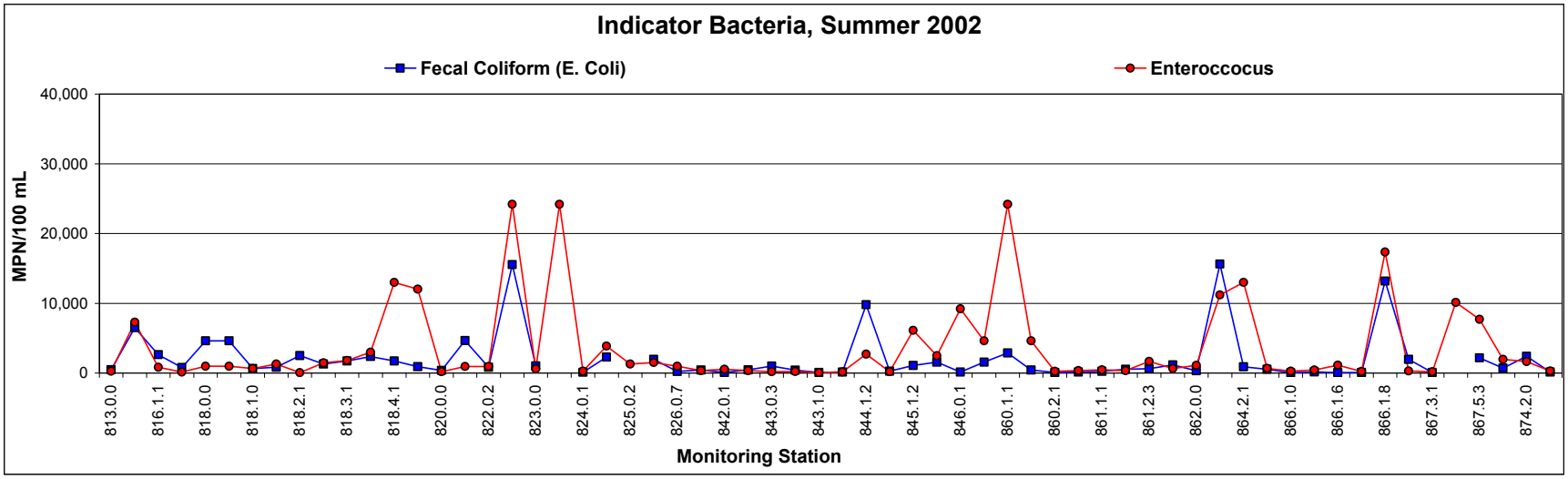

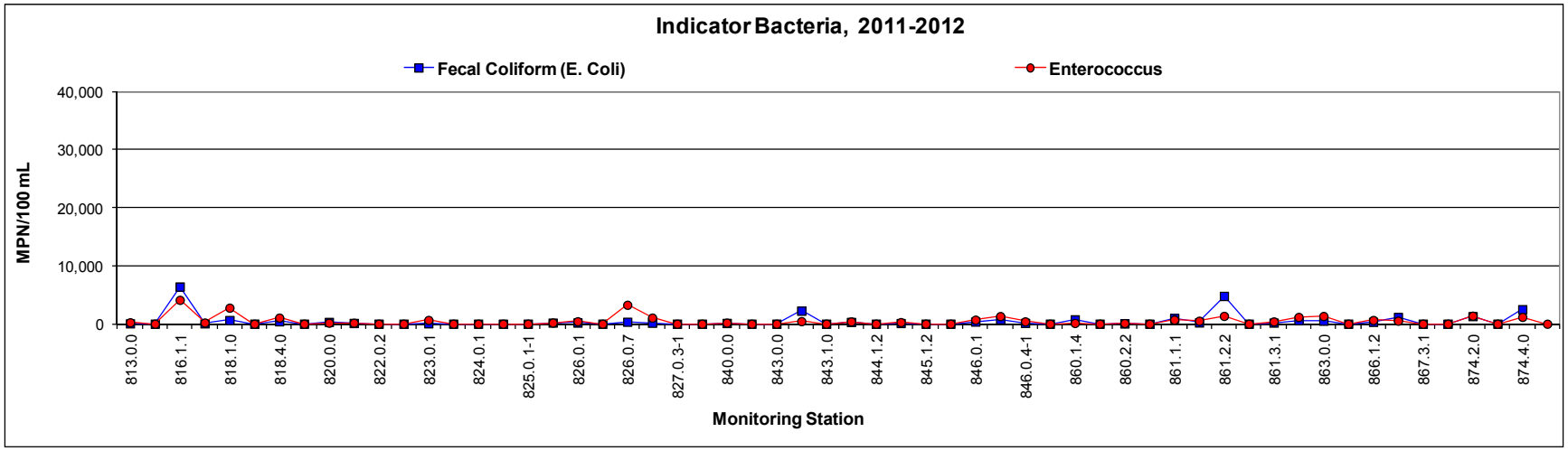

Figure 11-6. Dry-Weather Bacteria Monitoring (without Total Coliform), City of Escondido, Fiscal Year 2001–2002 and Fiscal Year 2011–2012

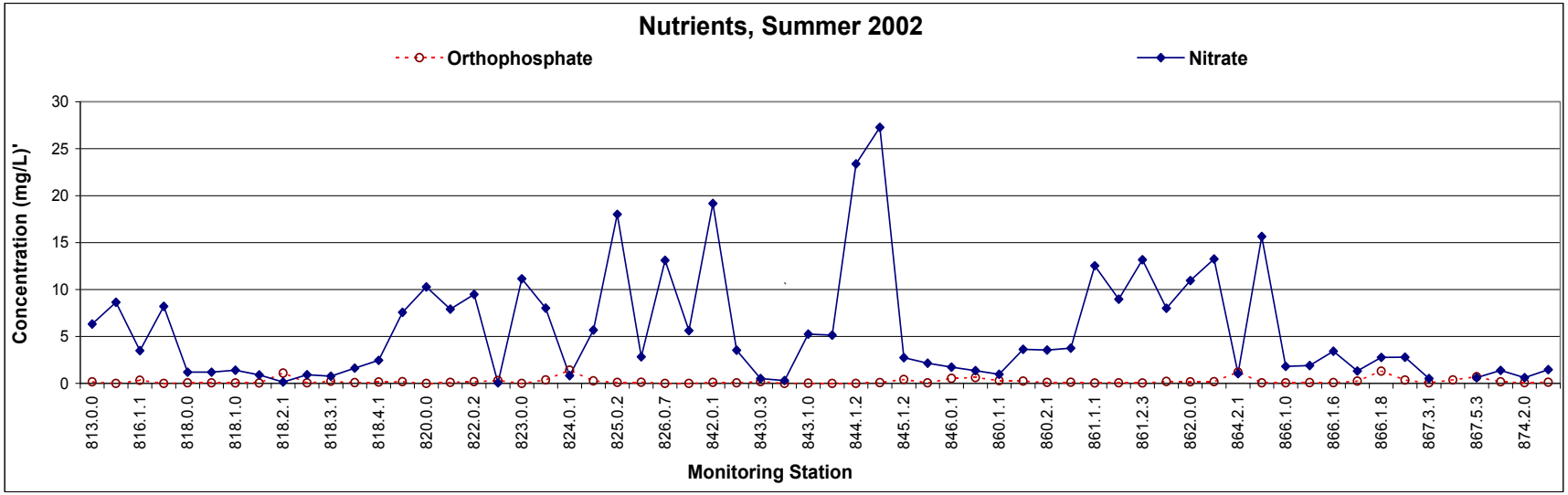

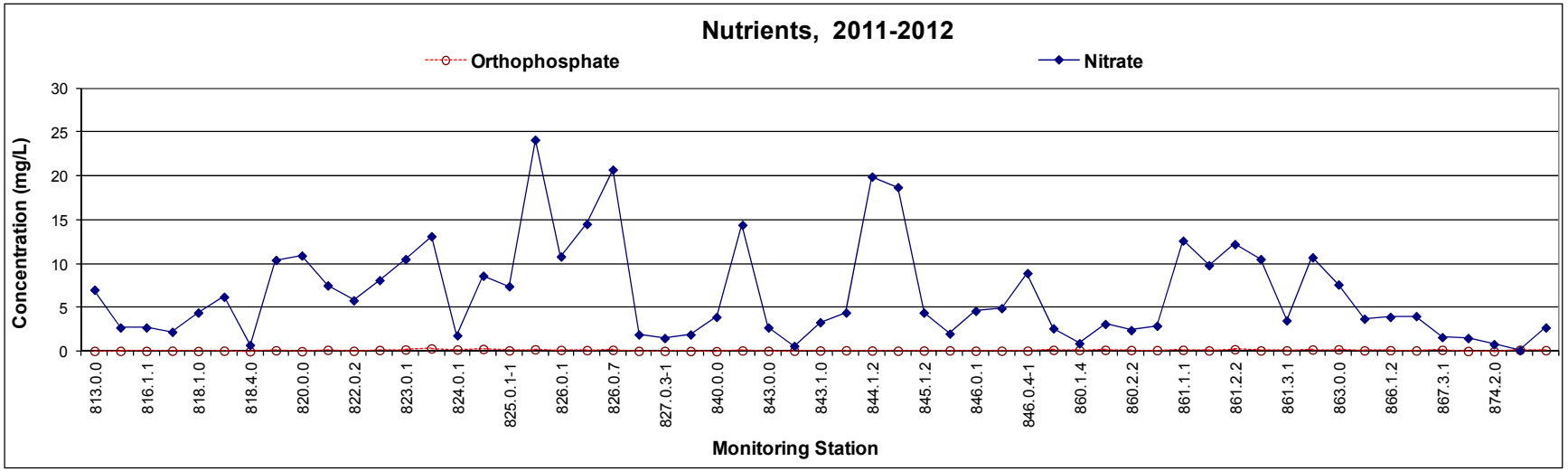

Figure 11-7. Dry-Weather Nutrient Monitoring, City of Escondido, Fiscal Year 2001–2002 and Fiscal Year 2011–2012

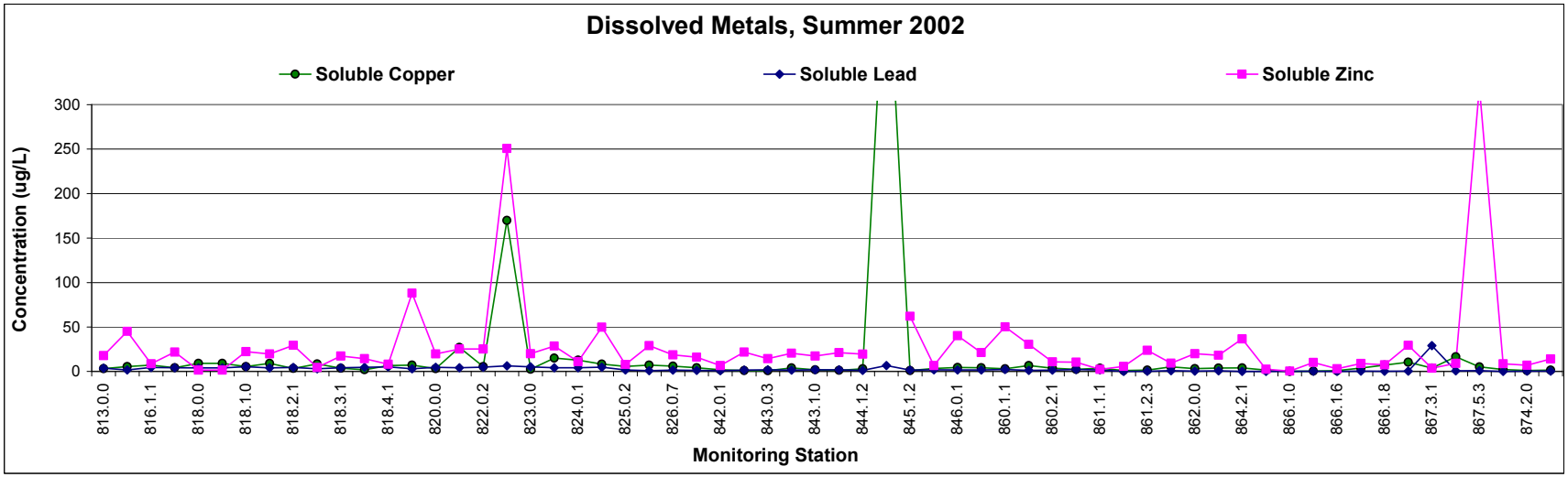

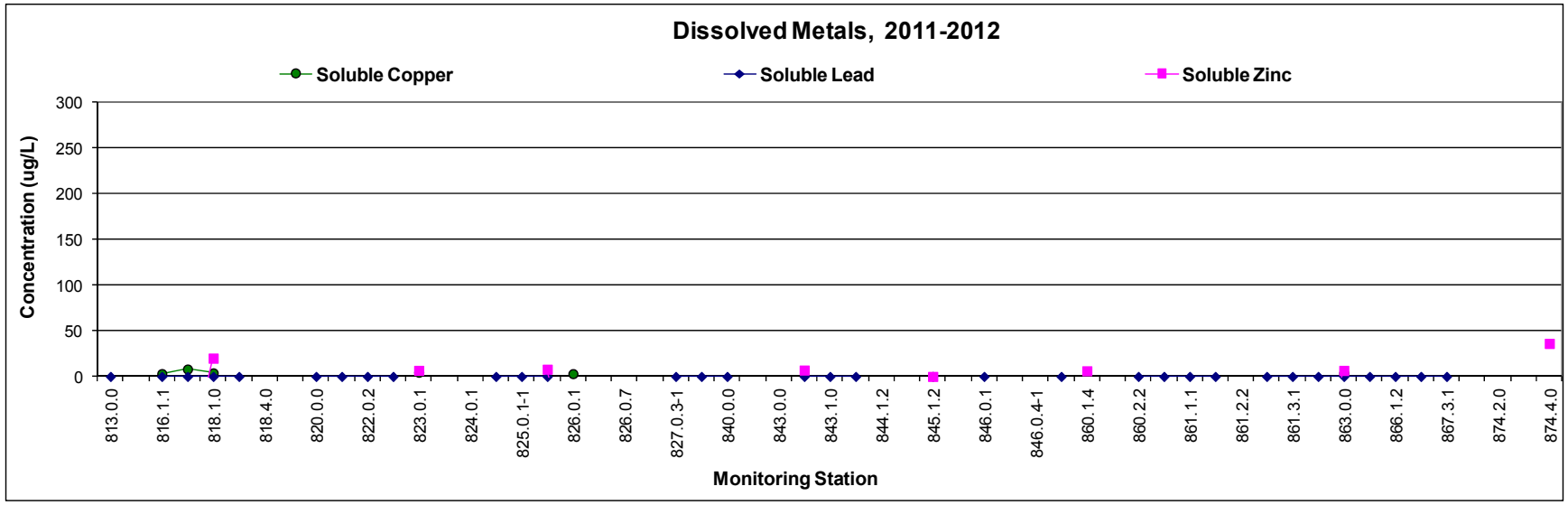

Figure 11-8. Dry-Weather Dissolved Metals Monitoring, City of Escondido, Fiscal Year 2001–2002 and Fiscal Year 2011–2012

At this 10-year benchmark, there are a number of core issues that can be addressed or assessed in determining the effectiveness of the program to date (Table 11-2).

Table 11-2. Key Management Questions for Urban Runoff Management Program Planning and Assessment

Program Activity	Annual (Core) Questions
Water Quality Assessment	What are the high-priority water quality problems? What is causing them (constituents/stressors of concern)?
Program Planning	What are the priority sources of constituents/stressors of concern contributing to water quality problems? What BMPs are needed to address key constituents/sources? What are the targeted outcomes for BMP implementation? What are the projected load reductions or other benefits of BMP implementation?
Program Assessment	Were targeted outcomes achieved? What are the estimated load reductions or other benefits of BMP implementation? What are the costs associated with program implementation?
Integrated Assessment	What is the basis for estimating the benefits of BMP implementation (assumptions, common knowledge, published research, monitoring, etc.)?

To date, the results of Escondido's urban runoff management program indicate improvements in dry-weather discharge water quality and that pollutants measured are generally low, with concentrations mostly below action levels. This indicates that the City's Clean Water Program (monitoring, public education, outreach, and enforcement) has been effective in achieving meaningful pollutant-load reductions. From 10 years of data collection under the JURMP, the following observations and improvement recommendations can be made:

Water Quality:

- Runoff data is consistently low, with few results over action levels. There are no water quality problems or significant stressors that can be associated with urban runoff as measured through the JURMP components.
- On occasion, total coliform bacteria and nitrate have been observed to correlate with naturally occurring conditions (e.g., riparian habitat). Some anthropogenic sources of bacteria and nitrate have been documented from unincorporated lands outside and upgradient of the City's jurisdictional boundaries under this program.
    - Bacteria concentrations appear to be declining. This reporting period there were no bacteria action levels were exceeded.
    - Historically high groundwater elevations and the potential for seepage throughout the City's MS4 may be influencing some of the elevated nitrate levels found within the infrastructure system (non-riparian areas). Overall the number and occurrence of stations with elevated nitrate have ranged from approximately four to 15 stations (about 3 percent to 13 percent of the total). Concentrations exceeding the action level have typically been between 11 mg/L and 25 mg/L.

Program Planning:

- Bacteria and nitrate data indicate that natural sources of these constituents exist in areas of the jurisdiction. The program should be modified to focus on the most important constituents, sources, and practices in the following ways:
    - Remove total coliform bacteria from the suite of analyses, as this parameter is not an accurate indicator of human-related bacteria, and the analytical results offer little useful information toward the program's purpose.
    - Integrate jurisdictional elements to help understand, document, and resolve runoff/run-on issues across entity boundaries. Evaluate all jurisdictional monitoring stations relative to upstream/downstream opportunities such that potential pollutant elevations can be measured through redundant, but separate, means (i.e., city vs. city; county vs. city).
- Cost/benefit sharing for BMPs to address key constituents and sources is not weighted proportionately among Copermittees. Coastal cities look to benefit more from bacteria/nutrient BMP measures that are implemented by others higher in the watershed (i.e., fewer beach postings and lagoon algae problems, improved ecotourism). Consideration to recreational and tourism tax bases should be evaluated relative to financial contribution to the urban runoff management program. Similar to pollutant-load cost sharing among tenants in port and harbor facilities, higher storm drain fee structures for lower watershed municipalities would improve normalizing the cost sharing relative to the benefits gained.
- Mass-loading and watershed-assessment stations should be placed higher in the watershed to better determine pollutant contributions and fill current geographical data gaps. Pollutant loads and potential cost sharing of resources could be gauged better with improved resolution of water quality data.

Program Assessment:

- Targeted outcomes have been achieved:
    - To date, the realized urban runoff water quality improvements reflect a change in human behavior, and that the JURMP has reduced concentrations of surface water pollutants.
    - Pollution prevention among municipal staff has also improved over the past 10 years at municipal facilities and through municipal maintenance practices and engineering designs.
    - The inspection of industrial facilities, commercial properties, and construction sites has substantially raised awareness levels and improved compliance since the JURMP began.
    - Field Engineering and Maintenance staff training continues to raise compliance awareness.
- The costs associated with program implementation totaled $1.55 million this program year ($117,000 more than last year). As the City continues to participate with regional and local stormwater program funding and expenditures, Copermittees' cost-sharing will likely result in mutual benefits. However, regional cost-sharing has not alleviated the significant cost of jurisdictional program implementation. The City is dedicated to local and regional watershed protection, but activities and staffing will continue to be analyzed and scrutinized for cost-effectiveness and fiscal responsibility relative to municipal stormwater permit compliance, water quality improvements, and pollution reduction.
- Urban runoff pollutant load reductions have been achieved in Escondido but are difficult to accurately estimate due to the instantaneous nature of grab-sampling under the IDDE

component. It is clear that water quality has improved in the City and that this is attributed to structural and non-structural BMPs that continue to be implemented as part of the JURMP.

Integrated Assessment:

- Estimating the benefits of the JURMP and its regional counterparts can be summarized by the low pollutant concentrations found within the City's jurisdiction, as described and quantified in this Annual Report, coupled with the results of the 2005–2010 Carlsbad Watershed long-term assessment (Weston et al. 2011). This regional study found that wet-weather receiving water data from mass loading stations at the bottom of Escondido Creek (i.e., close to the Pacific coast) and at temporary watershed assessment stations in the Escondido Creek Hydrologic Area contained the following:
    - High-priority constituents — turbidity, bifenthrin, and fecal coliforms
    - Medium-priority constituents — TSS and diazinon
    - Low-priority constituents — toxicity and nutrients
- The priority constituents found in the Escondido Creek Hydrologic Area during the regional dry-weather receiving water quality monitoring program (Weston et al 2011) were the following:
    - High-priority constituents — TDS and total nitrogen, enterococci, total nitrogen, and benthic algae
    - Medium-priority constituents — total phosphorus, fecal coliforms, and chemical oxygen demand
    - Low-priority constituents — metals, organics, and pesticides
- Relative to these observations and conclusions from regional long-term data collection, Escondido's JURMP is not contributing to the exacerbation of high- or medium-priority pollutants and the results of its implementation have significantly improved watershed pollution prevention. Although some nutrient sources have been identified and eliminated or significantly reduced through BMP implementation over the past 10 years, nutrient concentrations above action levels have been correlated to the presence of wildlife in semi-rural Escondido. The levels found do not indicate problematic sources but rather a characterization of background ambient water quality.

11.3 PROGRAM REVIEW AND MODIFICATION

The results of Escondido's urban runoff management program indicate measureable improvements in dry-weather discharge water quality and that the pollutants measured are generally low, with concentrations mostly below action levels. With continued JURMP implementation, improvements to urban runoff quality around the jurisdiction will likely begin to plateau (i.e., persistent low concentrations and few action level exceedances). However, with the adoption of the new Municipal Permit (expected in 2013), notable changes in surface water quality may become more evident on a watershed basis as Water Quality Improvement Plans evolve. Implementation of the JURMP since Order R9-2001-0001 was adopted is characterized by high expenses and moderate water quality improvement from baseline conditions. Although any water quality benefit is important to Escondido and the surrounding watershed, the cost/benefit ratio continues to exceed the water quality improvements that have been realized. For an improved return on investment, the City looks forward to collaborating with other Copermittees and environmental groups to obtain more state-sponsored grants for financial assistance, as well as additional cost sharing from coastal communities that benefit from BMPs upstream in the watershed.

The City will annually review, update, and present its effectiveness assessment in conformance with the San Diego Copermittees. These yearly reviews will serve to consolidate approaches and strategies for future JURMP revisions.

12 SPECIAL INVESTIGATIONS

On March 26, 2012, a chemical release of sodium hydroxide solution occurred at Escondido's water treatment plant as a result of a holding tank rupture. The amount of material released was estimated to be 3,000 to 5,000 gallons. The spill flowed down the plant's paved access road into an adjacent natural land area, primarily via three outfalls along the road's edge, where it then seeped into nearby soils. None of the material reached Escondido Creek, the closest receiving water to the incident. Because the spill occurred down-gradient of Lake Dixon, it did not impact the lake or drinking-water supply. Stormwater staff and an environmental contractor became involved to perform an environmental assessment and to ensure that no materials enter the creek as a result of cleanup efforts.

The environmental assessment involved characterizing the pollutant, sodium hydroxide, and its effect on the surrounding environment. Sodium hydroxide, also known as lye or caustic soda, is a strong base. A primary water-quality concern was high pH levels, which can harm aquatic biota. Immediately following the incident, pH sampling was conducted to determine the extent of the spill and to characterize soil and runoff conditions.

The principle area affected by the spill featured steep slopes with native scrub, chaparral, and riparian drainage areas. Immediately following the incident, emergency measures were employed to contain and capture the spilled material in areas where it had pooled. Emergency response crews pumped and collected the material into portable tanks for transport to an appropriate offsite location.

At the recommendation of the California Department of Fish and Game (DFG), and in collaboration with County HAZMAT and City officials, affected areas were flushed with potable water. The objective of the flushing was to dilute the contaminant (i.e., to reduce the pH level to below 9.0 in accordance with Basin Plan guidelines) (RWQCB 1994). Another objective of the flushing was to mobilize the residue for downstream collection and removal. Several test releases of potable water were conducted to determine appropriate flow rates, avoid erosion, and assess the best capture and containment approaches. Based on these tests, flushing consisted of the gradual release of water. The affected areas were flushed at approximately 20 gallons per minute, using 1,000 gallons per flush. Overall, approximately 11,000 gallons of potable water was used for the operation.

BMPs were employed to prevent runoff from flushing activities and potential precipitation. These measures included construction of two retention systems, acting as the first line of defense to prevent runoff from reaching the creek. Flushing activities were monitored continuously to ensure that all flush-water runoff was captured within the retention areas, pumped into tanks, and transported offsite for proper disposal. Natural drainage patterns were not altered as a result of the retention area construction. As a further precaution to prevent potentially contaminated runoff from discharging offsite, a sandbag barrier was installed down-gradient of the basins and up-gradient of culverts that convey drainage to Escondido Creek. The sandbags were left in place after flushing activities were completed to prevent potential rain runoff from discharging into the creek. To address sedimentation from excavation activities, crews installed fiber rolls and silt fencing during and after remediation efforts. Areas where excavation occurred and vegetation was removed were stabilized to prevent future erosion and sedimentation.

Several follow-up measures were conducted to ensure continued water-quality protection. Some of these measures included offsite disposal of contaminated soil, leaving retention systems in place until remediation was fully completed, sampling soil until runoff pH levels returned to acceptable levels (between 6.5 and 9.0) and/or until agencies were satisfied, returning retention areas to their natural topographic state, and leaving erosion and sediment controls until they were naturally reabsorbed by the restored landscape.

To prevent and/or reduce the recurrence of similar situations, several measures will be taken: assessing the tank storage system, including evaluating the installation of a remotely controlled isolation valve; evaluating and modifying secondary containment measures; and evaluating spill response measures and controls.

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13 NONEMERGENCY FIREFIGHTING

Order R9-2007-0001 requires that each Copermittee develop and implement a program to reduce pollutants from nonemergency firefighting flows (i.e., flows from controlled or practice blazes and maintenance activities). During the program year, inspection of the fire stations located within Escondido identified the following activities that create the potential for non-stormwater discharges and are not related to firefighting emergencies:

- vehicle washing,
- hose washing and testing, and
- fire response training.

Based on the risks associated with these activities, BMPs are implemented for each fire station to prevent or reduce pollutants associated with nonemergency urban runoff. These BMPs are summarized in Table 13-1.

Table 13-1. Escondido Fire Station BMPs for Nonemergency Flows

Station	Address	BMPs
Fire Station 1	310 North Quince Street	French drains around the training tower Berm along the property boundary parallel to Escondido Creek Vehicle washing limited to the enclosed bay area
Fire Station 2	421 North Midway Drive	Seal or plug in storm drains during dry periods Contain and recapture washwater on-site
Fire Station 3	1808 Nutmeg Street	Berm around wash areas to contain washwater (and at the fueling stations to contain drips or spills) Biofiltration system Media filters
Fire Station 4[1]	3301 Bear Valley Parkway	Berm around the fuel station Contain and recapture washwater with a berm and/or hydro-boom
Fire Station 5	2319 Felicita Road	Restrict vehicle and hose washing to within the bay area Contain and recover washwater Berm around the fuel station
Fire Station 6	1735 Del Dios Highway	Biofiltration system Berm around the fuel station Media filters
Fire Station 7	1220 North Ash	Biofiltration system Media filters

[1] Fire Station No. 4 closed during the reporting period.

As part of ongoing implementation of the JURMP, inspections were conducted during 2011–2012 to evaluate the use or existence of appropriate BMP practices or structures. During this process, the potential for various activities to create stormwater impacts was noted. These activities include washing and testing equipment, and practicing fire response procedures. As a result, BMPs for these practices were implemented such as washing vehicles within the fire station bays and containing and capturing firefighting water runoff during emergency response drills. Routine practices to prevent non-stormwater runoff from entering the storm drain system are understood and performed by firefighting staff. Structural improvements, such as catch basins to the sewer, constructing dedicated wash pads with a sewer drainage connection, constructing berms, and installing portable containment and recovery systems have

been reviewed, and many of them were implemented as part of new fire facilities construction or reconstruction of some older stations. For example, designed solely for emergency response practices, Fire Station 1 was retrofitted with a recycling system to prevent non-stormwater runoff from entering the storm drain system. In addition, the facility was re-plumbed to ensure that flows are directed to the sewer. Other stations feature biofiltration systems where runoff can be retained and infiltrated onsite. As resources become available, older fire stations will be evaluated for the installation of similar structural BMPs. During 2012–2013, facilities and operations will be reviewed to confirm that the appropriate practice and/or installation of the designated BMPs has occurred.

14 JURMP REVISIONS

Extensive modifications to the City's JURMP were completed in March 2008 to comply with the new and more comprehensive requirements of Order R9-2007-0001. The City began implementing its updated JURMP during the latter part of the 2007–2008 reporting cycle. This reporting period serves as the 5th full year of program implementation under Order R9-2007-0001.

Although no revisions to the JURMP occurred during the program year, the City continues to evaluate program elements, including dry-weather water-quality monitoring results and program effectiveness outcomes for future modifications. In addition, the City anticipates near-term program revisions in response to a new municipal stormwater permit that will be issued sometime in 2013.

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15 CONCLUSIONS AND RECOMMENDATIONS

With 10 years of JURMP implementation completed, there are a number of environmental, managerial, and fiscal conclusions that can be drawn from monitoring and administrative results.

15.1 ENVIRONMENTAL ASPECTS

Relative to the recent long-term effectiveness assessment conducted by the San Diego Copermittees (Weston et al. 2011), the following are evident in the City's JURMP database.

Watershed Health and Water Quality Issues

Wet-weather receiving water quality is not sufficiently characterized by the monitoring requirements of Order R9-2007-0001. Because wet-weather data is collected at lower points in the watershed, there are multiple land uses affecting wet-weather data that are below Escondido's municipal boundaries and the point of measurement. Therefore, drawing conclusions from wet-weather data relative to potential pollutant sources in Escondido would be conjecture.

Escondido does contribute to some of the watershed priority issues (such as storm event sediment transport [Weston et al. 2011]), but other issues such as fecal coliform bacteria and the detection of synthetic pyrethroid pesticides are not observed in Escondido data. Dry-weather data from Escondido show sporadic occurrences of fecal coliform bacteria over time, but tend to indicate a greater presence of total coliform bacteria rather than a strain associated with human or animal waste. Contrary to larger San Diego region receiving water quality priorities (Weston et al. 2011), the "countywide issue" with bacteria indicators (largely *Enterococci* and fecal coliform) is not present in Escondido dry-weather data, as shown by the table below.

Summary of Bacteriological Sampling, City of Escondido

Program Year	Percentage of Sites with Bacteria Exceedances[1]
2008–2009	35% (21 of 60 sites)
2009–2010	15% (8 of 55 sites)
2010–2011	12% (7 of 60 sites)
2011–2012	4% (2 of 57 sites)[2]

[1] Sites with exceedances during field standard and follow-up sampling.
[2] Evaluation based on original action levels for all years for comparison purposes.

Nutrients (nitrate but not orthophosphorus) have been detected each year since the program began, which indicates a spatial association with riparian habitat, agriculture, horticulture, and livestock activities inside and outside Escondido's jurisdictional boundaries. Several potential sources within the City's boundary have been investigated, and some were eliminated. Similar activities outside of the jurisdiction appear to be contributing to the detection of nitrate at some City monitoring stations. There have not been any detected pyrethroid pesticides since JURMP monitoring began.

Changes in Water Quality

Although the region's long-term effectiveness assessment (Weston et al. 2011) is unable to identify changes in discharge water quality, Escondido's JURMP data presented in this Annual Report (and earlier reports) clearly illustrates an improvement in water quality (both discharge points and receiving waters) since monitoring began in 2002 (see Figures 11-5 through 11-8). As noted above, some nitrate concentrations (ranging from approximately 3 percent to 13 percent of the total stations) have been above the action level. In contrast to the improvement in water quality seen from other pollutant parameters measured, the persistence of elevated nitrate occurrence appears to be largely associated with natural background sources.

Program Effectiveness

As detailed in Chapter 11, the effectiveness of Escondido's JURMP is demonstrated through measured results and community awareness. Consistent with countywide conclusions, the City and its Copermittees have made progress toward reducing pollutant loading and improvements to stormwater discharge quality and receiving water quality (Weston et al. 2011).

15.2 JURMP MANAGEMENT

Over the past 10 years, the City has participated in and led watershed stewardship activities in the Carlsbad and San Dieguito watersheds in the San Diego region. The City's dedication of staff and fiscal resources to manage, plan, implement, analyze, and evaluate the jurisdictional and watershed-based programs over these years represents an extensive commitment and investment, including extensive involvement in special water quality studies and wet-weather sampling for assessing eutrophication and sedimentation issues at Lake San Marcos.

Approximately $15.5 million of City funds have been expended for this purpose since 2001. As one of the largest cities in San Diego County, Escondido has committed approximately $1.5 to $2 million annually to urban runoff management. Like many municipalities in the county, the City is experiencing significant fiscal challenges, substantial staff reductions, and sizable revenue losses, yet it continues to maintain a dedicated stormwater budget to ensure that critical elements of the ongoing program continue uninterrupted.

15.3 COST/BENEFIT REALIZATIONS

Because JURMP planning and implementation costs are a significant portion of the City's resources, both fiscally and administratively, the City and its Copermittees continue to investigate and evaluate methods for improving the program's cost-effectiveness. Since JURMP implementation, water quality benefits have been quantified at a cost/benefit ratio that remains unbalanced relative to the stormwater program expense versus the nominal urban runoff water quality improvements that have been realized. The significant additional costs to comply with Order R9-2007-0001 and to address the ongoing development of extensive TMDL studies represent millions of additional dollars in municipal funding from the Copermittees that must come from residential and business fees. Current economics continue to significantly impact the City's tax-based revenue. As in earlier annual reports and communications to RWQCB through the San Diego Copermittees, the following recommendations are offered to improve the cost/benefit ratio.

15.4 RECOMMENDATIONS

As the San Diego Copermittees move toward adopting a new watershed-based municipal stormwater permit, monitoring parameters not detected (or seldom/randomly found above action levels) should be eliminated. For Escondido, this includes the following:

- total coliform bacteria;
- diazinon;
- dhlorpyrifos;
- dissolved cadmium, copper, and lead; and
- oil and grease.

Bacteria indicative of waste products and wastewater discharges (fecal coliform, *Enterococcus*, *E. coli*) are useful in detecting water quality concerns, albeit they are seldom found at Escondido monitoring stations. Dissolved metals (including zinc) are consistently well below action levels and should be monitored at tributary points rather than at each station. Total petroleum hydrocarbons (diesel, gas, and/or oil fractions) may be more useful than oil and grease analyses that often yield non-detection.

Because the City's JURMP annual analysis continues to confirm good water quality, JURMP data and activity information should be reported to the RWQCB for compliance evaluation rather than Copermittees

expending significant effort in developing compliance reports. This would allow municipalities to focus resources on water quality improvement priorities.

Grant monies for capital improvements for water quality projects should be better funded by the federal and state governments. Similar to the State of California and the rest of the United States, municipal governments are experiencing economic hardship and struggle to fund capital improvements, particularly for improvements outside of their jurisdiction that offer water quality benefits lower in the watershed (e.g., the Pacific coastline). Municipalities in San Diego County, as well as the state, would greatly benefit from improved grant funding to support such capital improvement projects; however, continued funding cuts for water quality and other environmental programs at the state level exacerbate this situation and reduce the willingness to financially contribute to non-jurisdictional projects.

15.5 EXPECTATIONS

The City looks forward to gaining an improved return on investment from the San Diego County-sponsored wet-weather monitoring program. Under Order R9-2007-0001, the bioassessment and mass-loading monitoring along Escondido Creek fails to assist the City in filling existing data gaps within its present environmental monitoring programs. In addition, the temporary watershed assessment station for Escondido should have considered water quality measurement higher in the watershed to complement the coastal dataset. A key to improving the measurability of Escondido's urban runoff management program is capturing information that correlates to the hydrological drainage associated with City lands, which cannot be accomplished through periodic wet-weather monitoring in Escondido Creek at the bottom of the watershed every-other-year over the 5-year permit term.

As emphasized throughout this document, the City has remained, and will continue to be, an effective and meaningful contributor to Copermittee and watershed planning, coordination, and implementation efforts aimed at improving surface water quality. The City's 2008 JURMP update is a key contribution to achieving long-term water quality improvements in the jurisdiction, and is a collaborating element in regional watershed protection. Being recognized by the Association of Environmental Professionals as an exemplary reference document, the Escondido JURMP continues to encourage compliance awareness of proper stormwater management.

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16 REFERENCES

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Appendix A

Supporting Information for the Development Planning Component

Contents:

1. Treatment Control BMP Inspection Form
2. Treatment Control BMP Inventory and Summary of Inspections

Appendix A

1. Treatment Control BMP Inspection Form

GPS locations must be logged for each treatment control BMP during initial inspections.

☐ **Maintenance Needed**

POST-CONSTRUCTION WATER QUALITY TREATMENT CONTROL BMP SITE INSPECTION CHECKLIST

Project ID:	Treatment Control ID:
Project Location:	
Date:	Time:
Inspector Name/Affiliation:	
Party Responsible for BMP O&M:	

Note: This section to be filled out for vegetated treatment controls (i.e. basins and swales) only.

DETENTION BASINS AND VEGETATED SWALES		
VEGETATION CONTROL/MANAGEMENT:		**Maintenance Req'd?**
Is vegetation coverage within the basin/swale inadequate for proper water quality treatment? Percent coverage floor _____ % slopes _____ %	☐ yes ☐ no	☐
Is vegetation growth excessive or inhibitive to the operation of the swale/basin?	☐ yes ☐ no	☐
Do weeds, leaves, or other organic debris interfere with the operation of the swale/basin?	☐ yes ☐ no	☐
Is there evidence of flattening of vegetation? If yes, describe.	☐ yes ☐ no	☐
SEDIMENT/EROSION CONTROL:		**Maintenance Req'd?**
Is there evidence of erosion, rilling, or undercutting?	☐ yes ☐ no	☐
Is there evidence of embankment slumping or cracking?	☐ yes ☐ no	☐
Are sediment deposits present that impede the flow of the basin/swale?	☐ yes ☐ no	☐
Is there standing water or other drainage problems? If yes, what is the depth, extent, and location of water?	☐ yes ☐ no	☐
Are seeps present?	☐ yes ☐ no	☐
ANIMAL CONCERNS:		**Maintenance Req'd?**
Is there evidence of small animals (burrows, mounds, etc) or bird nests within the BMP footprint? If yes, describe.	☐ yes ☐ no	☐

Note: This section to be filled out for structural water quality treatment controls only.

STRUCTURAL TREATMENT CONTROLS (e.g., storm drain filters or other drainage inserts)			
GENERAL OPERATION:			**Maintenance Req'd?**
Do any of the structural treatment control BMP components appear missing or in need of repair?	☐ yes	☐ no	☐
If applicable, do filters need to be replaced?	☐ yes	☐ no	☐
Does trash, debris or sediment interfere with the operation of the treatment control in any way?	☐ yes	☐ no	☐
Is there standing water or other drainage problems? If yes, what is the depth, extent, and location of water?	☐ yes	☐ no	☐

Note: This section to be filled out for ALL water quality treatment control BMPs.

AESTHETIC CONCERNS:			**Maintenance Req'd?**
Are trash and/or debris present? If yes, type, amount and location:	☐ yes	☐ no	☐
Other general aesthetic concerns:			
VECTOR CONCERNS:			**Maintenance Req'd?**
Are mosquitoes, larvae or other insects present?	☐ yes	☐ no	☐
NON-STORMWATER CONCERNS:			**Maintenance Req'd?**
Is their evidence of non-storm water discharge to the BMP (e.g., irrigation leaks)? If yes, contact Cheryl Filar at (760) 839-6315	☐ yes	☐ no	☐
If maintenance is required, explain:			

PHOTOGRAPHS (mandatory if maintenance is required):

Photograph No.	**Description**

(Inspector's Signature)	Information entered into database by: Name Date

Appendix A

2. Treatment Control BMP Inventory and Summary of Inspections

Treatment Control Inventory and Summary of Inspections, FY 2011-2012

Record No.	City Proj. ID	Location	Coordinates (N,W)	Project Type	Treatment Control ID	Treatment Control Type	Priority	Date Inspected	Status	Maintenance Required	Findings
1	PRI-02-019	2044 S. Juniper Street	33.09975, 117.06502	Residential	New TC Site	Settling Basin (Dry Pond)	High	4/30/2012		No	BMP operational; no maintenance necessary.
2	PRI-02-025	1202 & 1216 N Fig (at Jets Place)	33.14036, 117.08035	Residential	New TC Site	Bioswale	Medium	5/3/2012		Yes	Reverse sidewalk under drain needs to be cleared of sediment and debris.
3	PRI-02-111	Tract 835/2020 S Escondido Blvd	33.09774, 117.07067	Residential	PRI020044-TC001	Settling Basin (Dry Pond)	High	4/24/2012		No	BMP operational; no maintenance necessary.
4	PRI-02-112	300-390 W. Valley Pkwy	N/A	Commercial	PRI020045-TC001	Media Filter	High	5/1/2012		N/A	Shopping center. Unable to locate storm drain inserts.
5	PRI-02-116	Tract 846/ 430 N. Citrus*	N/A	Residential	PRI030024-TC001	Media Filter	Medium	4/30/2012		N/A	Unable to locate storm water TC BMPs.
6	PRI-02-117	Tract 842/ 643 N. Fig	33.13060, 117.07632	Residential	PRI030025-TC001	Biofiltration/Gravel Swale	High	4/30/2012		Yes	Reverse sidewalk under drain and curb outlet need to be cleared of sediment and debris.
7	PRI-02-117	Tract 842/ 643 N. Fig	33.13082, 117.07646	Residential	PRI030025-TC002	Biofiltration/Gravel Swale	High	4/30/2012		Yes	Reverse sidewalk under drain and curb outlet need to be cleared of sediment and debris.
8	PRI-02-118	Tract 759/ Reed Road	33.134679, 117.026490	Residential	PRI040027-TC001	Bioswale	High	4/30/2012		Yes	Information provided by City prior to 2012 TC inspections shows Tract 759 to be a housing development located at Reed Rd. and Bellagio Rd. The TC BMP on site is a bioswale. Extensive erosion and sedimentation issues are present throughout the swale. Also, vegetation cover is insufficient.
9	PRI-02-119	Tract 853/ 1100 Blk W 15th Ave	33.10344, 117.08630	Residential	PRI040028-TC001	Biofiltration/Landscaping	Low	4/24/2012		No	Project consists of 14 single-family residences with biofiltration/site design BMPs incorporated into landscaping.
10	PRI-02-120	Tract 862/ Reed Rd. & Falconer	33.135.35, 117.03038	Residential	PRI040029-TC001	Bioswale	Medium	4/30/2012		N/A	Bioswale was removed and replaced with a concrete v-ditch. No TC BMPs observed at this site.
11	PRI-02-121	Tract 873/ Escondido & Citracado	N/A	Residential	PRI040030-TC001	Media Filter	Medium	4/24/2012		N/A	Unable to locate storm water TC BMPs.
12	PRI-02-122	1510 & 1520 Escondido Blvd	33.10745, 117.07470	Commercial	PRI040031-TC001	Biofiltration	Medium	4/24/2012		No	BMP operational; no maintenance necessary.
13	PRI-02-123	I-15 & Citracado	33.09175, 117.07953	Commercial	PRI040032-TC001	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
14	PRI-02-123	I-15 & Citracado	33.09155, 117.07951	Commercial	PRI040032-TC002	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
15	PRI-02-123	I-15 & Citracado	33.09123, 117.07966	Commercial	PRI040032-TC003	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
16	PRI-02-123	I-15 & Citracado	33.09174, 117.07945	Commercial	PRI040032-TC004	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
17	PRI-02-123	I-15 & Citracado	33.09172, 117.07928	Commercial	PRI040032-TC005	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
18	PRI-02-123	I-15 & Citracado	33.091543, 117.079271	Commercial	PRI040032-TC006	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
19	PRI-02-124	150 La Terraza Blvd. (Office Buil.)	33.11674, 117.09550	Commercial	PRI040033-TC001	Bioswale	High	4/24/2012		Yes	Standing water at bioswale influent (several inches deep).
20	PRI-02-124	150 La Terraza Blvd. (Office Buil.)	33.11631, 117.09579	Commercial	PRI040033-TC002	Bioswale	High	4/24/2012		Yes	No vegetation in bioswale, requires maintenance.
21	PRI-02-125	Tract 874/ 1321 S. Upas	33.10391, 117.08540	Residential	PRI050002-TC001	Bioswale	Medium	4/24/2012		No	BMP operational; no maintenance necessary.
22	PRI-02-125	Tract 874/ 1321 S. Upas	33.10391, 117.08540	Residential	PRI050002-TC002	Storm Drain Insert Filter	Medium	4/24/2012		Yes	Replace insert filter. Standing water observed in storm drain inlet.
23	PRI-02-126	Tract 901/ Purdum Lane	33.11310, 117.06266	Residential	PRI050003-TC001	Bioswale	Medium	4/30/2012		Yes	Sediment deposits in reverse sidewalk under drain are preventing runoff from entering bioswale.
24	PRI-02-126	Tract 901/ Purdum Lane	33.11274, 117.06303	Residential	PRI050003-TC002	Biofiltration	Medium	4/30/2012		Yes	Insufficient vegetation cover in biofiltration area. Replace gravel bags at effluent discharge point.
25	PRI-02-127	Tract 912/ Mosaic- 11th & Del Dios	33.10667, 117.10053	Residential	PRI050004-TC001	Hydrodynamic Device	Medium	4/24/2012		Yes	Remove trash, debris, and sediment from hydrodynamic device.
26	PRI-02-128	Tract 914/Citrus Glen	33.15053, 117.03661	Residential	PRI050005-TC001	Hydrodynamic Device	Medium	5/1/2012		Yes	Remove debris from hydrodynamic device.
27	PRI-02-128	Tract 914/Citrus Glen	33.15184, 117.03519	Residential	PRI050005-TC002	Hydrodynamic Device	Medium	5/1/2012		Yes	Remove debris from hydrodynamic device.
28	PRI-02-131	Tract 861/ 2031 Felicita Road	33.09543, 117.08376	Residential	PRI050008-TC001	Bioswale	Medium	4/24/2012		No	BMP operational; no maintenance necessary.
29	PRI-02-133	Tract 876/ Seven Oaks	33.13354, 117.10360	Residential	PRI050010-TC001	Bioswale	Medium	5/1/2012		Yes	Observed scouring of bioswale floor. Vegetation overgrown, needs to be trimmed.

Treatment Control Inventory and Summary of Inspections, FY 2011-2012

Record No.	City Proj. ID	Location	Coordinates (N,W)	Project Type	Treatment Control ID	Treatment Control Type	Priority	Date Inspected	Status	Maintenance Required	Findings
30	PRI-02-134	Tract 881/ Washington Hills II	33.14736, 117.04456	Residential	PRI050011-TC001	Biofiltration	Medium	5/1/2012		Yes	Project drains to existing bioswale in City-maintained area along Escondido Creek channel. Organic debris and sediment deposits need to be removed from swale.
31	PRI-02-135	Tract 883/ El Norte & Midway	33.15119, 117.06214	Residential	PRI050012-TC001	Bioswale	Medium	5/1/2012		No	BMP operational; no maintenance necessary.
32	PRI-02-136	Tract 886/ 1998 E. Grand Ave	N/A	Residential	PRI050013-TC001	Media Filter	Medium	4/30/2012		N/A	Unable to locate storm water BMPs.
33	PRI-02-137	231 Lincoln Parkway	33.13464, 117.08280	Commercial	PRI060007-TC001	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
34	PRI-02-137	231 Lincoln Parkway	33.13459, 117.08295	Commercial	PRI060007-TC002	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
35	PRI-02-137	231 Lincoln Parkway	33.13455, 117.08311	Commercial	PRI060007-TC003	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
36	PRI-02-137	231 Lincoln Parkway	33.13442, 117.08340	Commercial	PRI060007-TC004	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
37	PRI-02-137	231 Lincoln Parkway	33.13427, 117.08362	Commercial	PRI060007-TC005	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
38	PRI-02-137	231 Lincoln Parkway	33.13419, 117.08375	Commercial	PRI060007-TC006	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
39	PRI-02-137	231 Lincoln Parkway	33.13384, 117.08360	Commercial	PRI060007-TC007	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
40	PRI-02-137	231 Lincoln Parkway	33.13342, 117.08368	Commercial	PRI060007-TC008	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
41	PRI-02-137	231 Lincoln Parkway	33.13344, 117.08396	Commercial	PRI060007-TC009	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
42	PRI-02-137	231 Lincoln Parkway	33.13364, 117.08421	Commercial	PRI060007-TC010	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
43	PRI-02-137	231 Lincoln Parkway	33.13345, 117.08413	Commercial	PRI060007-TC011	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
44	PRI-02-137	231 Lincoln Parkway	33.13338, 117.08431	Commercial	PRI060007-TC012	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
45	PRI-02-137	231 Lincoln Parkway	33.13347, 117.08440	Commercial	PRI060007-TC013	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
46	PRI-02-137	231 Lincoln Parkway	33.13368, 117.08450	Commercial	PRI060007-TC014	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
47	PRI-02-137	231 Lincoln Parkway	33.13353, 117.08473	Commercial	PRI060007-TC015	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
48	PRI-02-137	231 Lincoln Parkway	33.13318, 117.08522	Commercial	PRI060007-TC016	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
49	PRI-02-137	231 Lincoln Parkway	33.13294, 117.08562	Commercial	PRI060007-TC017	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
50	PRI-02-137	231 Lincoln Parkway	33.13286, 117.08578	Commercial	PRI060007-TC018	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
51	PRI-02-137	231 Lincoln Parkway	33.13277, 117.08545	Commercial	PRI060007-TC019	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
52	PRI-02-137	231 Lincoln Parkway	33.13268, 117.08561	Commercial	PRI060007-TC020	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
53	PRI-02-137	231 Lincoln Parkway	33.13251, 117.08589	Commercial	PRI060007-TC021	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
54	PRI-02-138	Tract 828/ 1277 Pacific Oaks Pl.	33.10815, 117.11691	Residential	PRI060008-TC001	Biofiltration	High	5/3/2012		No	BMP operational; no maintenance necessary.
55	PRI-02-138	Tract 828/ 1277 Pacific Oaks Pl.	33.10786, 117.11727	Residential	PRI060008-TC002	Biofiltration	High	5/3/2012		No	BMP operational; no maintenance necessary.
56	PRI-02-138	Tract 828/ 1277 Pacific Oaks Pl.	33.10799, 117.11719	Commercial	PRI060008-TC003	Biofiltration	High	5/3/2012		No	BMP operational; no maintenance necessary.
57	PRI-02-139	Tract 949/ 402 W. 6th Avenue	33.11552, 117.08279	Residential	PRI060009-TC001	Bioswale	Medium	4/24/2012		No	BMP operational; no maintenance necessary.
58	PRI-02-139	Tract 949/ 402 W. 6th Avenue	33.11552, 117.08279	Residential	PRI060009-TC002	Biofiltration	Medium	4/24/2012		No	BMP operational; no maintenance necessary.
59	PRI-02-140	Tract 865/125-133 Pennsylvania St.	33.12352, 117.08176	Residential	PRI040034-TC001	Bioswale	Medium	5/1/2012		No	Some scouring of bioswale floor. The bioswale is located within residential property.
60	PRI-02-141	Tract 857/ Falcon Crest	33.14191, 117.03173	Residential	PRI050014-TC001	Bioswale	Medium	4/30/2012		Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
61	PRI-02-141	Tract 857/ Falcon Crest	33.1418, 117.03210	Residential	PRI050014-TC002	Bioswale	Medium	4/30/2012		Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
62	PRI-02-141	Tract 857/ Falcon Crest	33.14154, 117.03299	Residential	PRI050014-TC003	Bioswale	Medium	4/30/2012		No	BMP operational; no maintenance necessary.
63	PRI-02-141	Tract 857/ Falcon Crest	33.14138, 117.03371	Residential	PRI050014-TC004	Bioswale	Medium	4/30/2012		Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
64	PRI-02-141	Tract 857/ Falcon Crest	33.14128, 117.03388	Residential	PRI050014-TC005	Bioswale	Medium	4/30/2012		Yes	Bioswale has no inlet structure.

Treatment Control Inventory and Summary of Inspections, FY 2011-2012

Record No.	City Proj. ID	Location	Coordinates (N,W)	Project Type	Treatment Control ID	Treatment Control Type	Priority	Date Inspected	Status	Maintenance Required	Findings
65	PRI-02-141	Tract 857/ Falcon Crest	33.14151, 117.03285	Residential	PRI050014-TC006	Bioswale	Medium	4/30/2012	■	Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
66	PRI-02-141	Tract 857/ Falcon Crest	33.14169, 117.03210	Residential	PRI050014-TC007	Bioswale	Medium	4/30/2012	■	Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
67	PRI-02-141	Tract 857/ Falcon Crest	33.14187, 117.03159	Residential	PRI050014-TC008	Bioswale	Medium	4/30/2012	■	Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
68	PRI-02-142	426 N. Date Street	33.12948, 117.07134	Commercial	PRI060010-TC001	Bioswale	Medium	4/30/2012	■	Yes	Insufficient vegetation cover in bioswale. Storm drain inlet is blocked with sediment and debris.
69	PRI-02-144	600 La Terraza Blvd.	33.11196, 117.09583	Commercial	PRI060011-TC001	Bioswale	High	4/24/2012	■	No	BMP operational; no maintenance necessary.
70	PRI-02-144	600 La Terraza Blvd.	33.11155, 117.09573	Commercial	PRI060011-TC002	Bioswale	High	4/24/2012	■	No	BMP operational; no maintenance necessary.
71	PRI-02-144	600 La Terraza Blvd.	33.11142, 117.09574	Commercial	PRI060011-TC003	Bioswale	High	4/24/2012	■	No	BMP operational; no maintenance necessary.
72	PRI-02-145	Tract 924/ 338 Brotherton Road	33.09409, 117.07092	Residential	PRI060012-TC001	Biofiltration	Medium	4/24/2012	■	Yes	Insufficient vegetation cover in bioswale.
73	PRI-02-146	500 La Terraza	33.11201, 117.09610	Commercial	PRI060013-TC001	Bioswale	High	4/24/2012	■	Yes	Large, bare areas in bioswale; vegetation needs to be reestablished.
74	PRI-02-146	500 La Terraza	33.11276, 117.09649	Commercial	PRI060013-TC002	Bioswale	High	4/24/2012	■	No	BMP operational; suggest trimming overgrown vegetation for increased effectiveness.
75	PRI-02-147	1507 E. Valley Pkwy	33.13221, 117.05855	Commercial	PRI060014-TC001	Biofiltration	High	4/30/2012	■	Yes	Insufficient vegetation cover in bioswale. Remove trash.
76	PRI-02-147	1507 E. Valley Pkwy	33.13233, 117.05859	Commercial	PRI060014-TC002	Storm Drain Insert Filter	High	4/30/2012	■	Yes	Replace insert filter, clear insert of trash and debris.
77	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10919, 117.11644	Commercial	PRI060015-TC001	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
78	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10922, 117.11657	Commercial	PRI060015-TC002	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
79	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10927, 117.11682	Commercial	PRI060015-TC003	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
80	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10931, 117.11702	Commercial	PRI060015-TC004	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
81	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10879, 117.11660	Commercial	PRI060015-TC005	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
82	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10850, 117.11679	Commercial	PRI060015-TC006	Biofiltration	High	5/2/2012	■	Yes	Insufficient vegetation cover.
83	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10831, 117.11696	Commercial	PRI060015-TC007	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
84	PRI-02-149	W. 15th Avenue/Escondido Blvd	33.10829, 117.07439	Commercial	PRI060016-TC001	Biofiltration	Medium	4/24/2012	■	No	BMP operational; no maintenance necessary.
85	PRI-02-150	1357 W. 9th Avenue	33.10914, 117.10181	Commercial	PRI060017-TC001	Biofiltration	Medium	4/24/2012	■	No	BMP operational; no maintenance necessary.
86	PRI-02-150	1357 W. 9th Avenue	33.10917, 117.10184	Commercial	PRI060017-TC002	Hydrodynamic Device	Medium	4/24/2012	■	No	AquaShield structure.
87	PRI-02-151	600 W. Mission Avenue	33.12794, 117.09409	Commercial	PRI060018-TC001	Storm Drain Insert Filter	High	5/1/2012	■	No	Minor trash/debris present in catch filter.
88	PRI-02-151	600 W. Mission Avenue	33.12812, 117.09368	Commercial	PRI060018-TC002	Biofiltration	High	5/1/2012	■	Yes	Insufficient vegetation coverage within biofiltration area. Evidence of minor erosion near associated storm drain inlet.
89	PRI-02-151	600 W. Mission Avenue	33.12834, 117.09376	Commercial	PRI060018-TC003	Hydrodynamic Device	High	5/1/2012	■	Yes	Remove sediment, trash, and debris from swirl chamber.
90	PRI-02-151	600 W. Mission Avenue	33.12757, 117.09552	Commercial	PRI060018-TC004	Storm Drain Insert Filter	High	5/1/2012	■	Yes	Replace storm drain insert filters.
91	PRI-02-154	1556 Auto Parkway	33.11655, 117.10550	Commercial	PRI070010-TC001	Bioswale	High	5/3/2012	■	No	BMP operational; no maintenance necessary.
92	PRI-02-154	1556 Auto Parkway	33.11711, 117.10569	Commercial	PRI070010-TC002	Bioswale	High	5/3/2012	■	No	BMP operational; no maintenance necessary.
93	PRI-02-155	613 E. Lincoln Ave.	33.13575, 117.08034	Commercial	PRI070011-TC001	Biofiltration	Medium	5/1/2012	■	Yes	Insufficient vegetation cover in bioswale. Evidence of erosion on slopes.
94	PRI-02-155	613 E. Lincoln Ave.	33.13575, 117.08034	Commercial	PRI070011-TC002	Storm Drain Insert Filter	Medium	5/1/2012	■	Yes	Replace insert filter and remove trash and debris from storm drain inlet. Existing filter is partially detached from housing unit.
95	PRI-07-169	2435 Bernardo Ave.	33.09020, 117.09126	Residential	New TC Site	Bioswales	Medium	5/3/2012	■	No	BMP operational; no maintenance necessary.
96	PRI-07-169	2435 Bernardo Ave.	33.090071, 117.09060	Residential	New TC Site	Bioswales	Medium	5/3/2012	■	No	BMP operational; no maintenance necessary.

Treatment Control Inventory and Summary of Inspections, FY 2011-2012

Record No.	City Proj. ID	Location	Coordinates (N,W)	Project Type	Treatment Control ID	Treatment Control Type	Priority	Date Inspected	Status	Maintenance Required	Findings
97	PUB-02-1	Bear Valley Parkway	N/A	Road	CIP030001-TC001	Media Filter	High	N/A		N/A	Need better project description/location. Cannot locate.
98	PUB-02-2	El Norte	33.14793, 117.06989	Road	CIP030002-TC001	Storm Drain Insert Filter	High	5/1/2012		Yes	Uncertain of project description. If referring to insert filters installed in curb inlets on El Norte Pkwy, insert filters need to be cleared of sediment, trash, and debris.
99	PUB-02-4	Tulip / Upas Street Improvements	N/A	N/A	CIP040002-TC001	Media Filter	High	N/A		N/A	Insufficient project description/location. Cannot locate.
100	PUB-02-10	Bear Valley Parkway From Boyle T	N/A	N/A	CIP040008-TC001	Media Filter	High	N/A		N/A	Insufficient project description/location. Cannot locate.
101	PUB-02-12	CCP Landscaping	N/A	N/A	CIP050001-TC001	Biofiltration	High	N/A		N/A	Insufficient project description/location. Cannot locate.
102	PUB-02-13	Grove Park	33.13668, 117.07124	N/A	CIP050002-TC001	Biofiltration	Medium	5/1/2012		No	BMP operational; no maintenance necessary.
103	PUB-02-14	S. Upas Street Imp.	33.10452, 117.08585	N/A	CIP050003-TC001	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
104	PUB-02-14	S. Upas Street Imp.	33.10392, 117.08542	N/A	CIP050003-TC002	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
105	PUB-02-14	S. Upas Street Imp.	33.10470, 117.08584	N/A	CIP050003-TC003	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
106	PUB-02-14	S. Upas Street Imp.	33.10505, 117.08620	N/A	CIP050003-TC004	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
107	PUB-02-14	S. Upas Street Imp.	33.10506, 117.08613	N/A	CIP050003-TC005	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
108	PUB-02-14	S. Upas Street Imp.	33.10769, 117.08799	N/A	CIP050003-TC006	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
109	PUB-02-14	S. Upas Street Imp.	33.10804, 117.08836	N/A	CIP050003-TC007	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
110	PUB-02-14	S. Upas Street Imp.	33.10736, 117.08783	N/A	CIP050003-TC008	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
111	PUB-02-14	S. Upas Street Imp.	33.10598, 117.08688	N/A	CIP050003-TC009	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
112	PUB-02-15	Tract 845/ Juniper St	N/A	Traffic Si	CIP030003-TC001	ND	ND	N/A		N/A	New information provided by the City designates Tract 845 as a private project, and is now in this inventory under the project ID PRI-02-019. More information is needed to determine the location of this project.
113	PUB-02-17	Ryan Park	33.15168, 117.03127	New Park	CIP030005-TC001	Biofiltration	Medium	5/1/2012		No	BMP operational; no maintenance necessary.
114	PUB-02-19	Oakhill		City Project	CIP020019-TC001	Other	Medium	N/A		N/A	Insufficient project description/location. Cannot locate.
115	PUB-02-20	1828 Nutmeg St.	33.1494, 117.10553	Fire Station	CIP070001-TC001	Biofiltration	High	5/4/2012		Yes	Evidence of erosion in biofiltration area.
116	PUB-02-20	1828 Nutmeg St.	33.14929, 117.10574	Fire Station	CIP070001-TC002	Media Filter	High	5/4/2012		Yes	Hose drying rack does not drain properly. Water ponds and does not flow to inlet.
117	PUB-02-21	1735 Del Dios Hwy	33.10487, 117.10268	Fire Station	CIP070002-TC001	Biofiltration	High	5/4/2012		No	BMP operational; no maintenance necessary.
118	PUB-02-21	1735 Del Dios Hwy	33.10487, 117.10268	Fire Station	CIP070002-TC002	Storm Drain Insert Filter	High	5/4/2012		Yes	Replace insert filter (existing filter is torn and ineffective).
119	PUB-02-21	1735 Del Dios Hwy	33.10529, 117.10258	Fire Station	CIP070002-TC003	Biofiltration	High	5/4/2012		No	BMP operational; no maintenance necessary.
120	PUB-02-21	1735 Del Dios Hwy	33.10525, 117.10251	Fire Station	CIP070002-TC004	Storm Drain Insert Filter	High	5/4/2012		Yes	Replace insert filter (existing filter is torn and ineffective).
121	PUB-02-22	1220 N. Ash St	33.14307, 117.07629	Fire Station	CIP070003-TC001	Biofiltration	High	5/4/2012		No	BMP operational; no maintenance necessary.
122	PUB-02-22	1220 N. Ash St	33.14344, 117.07545	Fire Station	CIP070003-TC002	Media Filter	High	5/4/2012		No	BMP operational; no maintenance necessary.
123	PUB-02-22	1220 N. Ash St	33.14300, 117.07623	Fire Station	CIP070003-TC003	Media Filter	High	5/4/2012		No	BMP operational; no maintenance necessary.
124	PUB-02-22	1220 N. Ash St	33.14308, 117.07627	Fire Station	CIP070003-TC004	Biofiltration	High	5/4/2012		No	BMP operational; no maintenance necessary.
125	PUB-02-23	1161 N. Centre City Pkwy	33.13557, 117.09420	Esc. Police	CIP070011-TC001	Bioswale	High	5/4/2012		Yes	Swale vegetation overgrown; requires maintenance.
126	PUB-02-23	1161 N. Centre City Pkwy	33.13586, 117.09409	Esc. Police	CIP070011-TC002	Bioswale	High	5/4/2012		Yes	Swale vegetation overgrown; requires maintenance.

Treatment Control Inventory and Summary of Inspections, FY 2011-2012

Record No.	City Proj. ID	Location	Coordinates (N,W)	Project Type	Treatment Control ID	Treatment Control Type	Priority	Date Inspected	Status	Maintenance Required	Findings
127	PUB-02-23	1161 N. Centre City Pkwy	33.13602, 117.09438	Esc. Police	CIP070011-TC003	Bioswale	High	5/4/2012	■	Yes	Swale vegetation overgrown; requires maintenance.
128	PUB-02-23	1161 N. Centre City Pkwy	33.13647, 117.09420	Esc. Police	CIP070011-TC004	Bioswale	High	5/4/2012	■	Yes	Swale vegetation overgrown; requires maintenance.
129	PUB-02-23	1161 N. Centre City Pkwy	33.13667, 117.09438	Esc. Police	CIP070011-TC005	Bioswale	High	5/4/2012	■	Yes	Swale vegetation overgrown; requires maintenance.
130	PUB-02-23	1161 N. Centre City Pkwy	33.13679, 117.09370	Esc. Police	CIP070011-TC006	Bioswale	High	5/4/2012	■	Yes	Swale vegetation overgrown; requires maintenance.
131	PUB-02-24	Valley Center Road	N/A	P.D. Firing	CIP070005-TC001	Biofiltration	Medium	N/A	■	N/A	Training facility/firing range. Need additional information regarding location of TC BMPs on site.
132	PUB-02-30	310 N. Quince	N/A	Fire Station	CIP070001-TC001	Biofiltration	High	N/A	■	N/A	No TC BMPs on-site. Storm water runoff from facility drains to pretreatment device.

ND - No Data; **N/A** - Not applicable.

Status Key:
Green - Facility is operational (48)
Red - Facility needs maintenance (71)
Black - Facility TC BMPs were not located/inspected (5)
Purple - Need additional facility information (8)

Note: Project "PRI-02-152" has been deleted from this inventory. It was a duplicate record of TC BMPs located at 402 W. 6th Avenue (Tract 949). Inspection results for this site are recorded under the project ID "PRI-02-139".

Appendix B

Supporting Information for the Construction Component

Contents:

1. Construction Site Inspection Checklist
2. Active Construction Site Inventory
3. Construction Site Inspection Records

Appendix B

1. Construction Site Inspection Checklists

CITY OF ESCONDIDO

Project: _____

Inspected By: _____ **Date:** _____

DRY SEASON – MAY 1 through SEPTEMBER 30
CONSTRUCTION SITE INSPECTION CHECKLIST

Grading and clearing should be phased to reduce the amount and the duration of sediment exposure. Always be aware of forecasted weather conditions prior to any scheduled grading or clearing activities.

Y, N, NA

- [ ] Perimeter protection, sediment control and tracking BMP's must be installed and maintained to comply with performance standards.

- [ ] BMP's to control sediment tracking must be installed and maintained at entrances/exits to comply with performance standards.

- [ ] Material needed to install standby BMP's necessary to completely protect the exposed portions of the site from erosion, and to prevent sediment discharges, must be stored on site. Areas that have already been protected from erosion using physical stabilization or established vegetation stabilization BMP's are not considered to be "exposed" for purposes of this requirement.

- [ ] The owner / contractor must have an approved "weather triggered" action pland and have the ability to deploy standby BMP's as needed to protect exposed areas within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted 40% chance of rain). On request, the owner / contractor must provide proof of this capability that is acceptable to the City of Escondido.

- [ ] Deployment of physical or vegetative erosion control BMP's must commence as soon as grading and/or excavation is completed for any portion of the site. The owner / contractor may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

- [ ] The area that can be cleared or graded and left exposed at one time is limited to the amount of acreage that the owner / contractor can adequately protect prior to a predicted rainstorm. This will require grading to be phased at larger sites and in may be necessary to deploy erosion and sediment control BMP's inareas that are not completed but are not actively being worked before additional grading is done.

CITY OF ESCONDIDO

Project: _____

Inspected By: _____ **Date:** _____

RAINY SEASON – OCTOBER 1 through APRIL 30
CONSTRUCTION SITE INSPECTION CHECKLIST

Grading and clearing should be phased to reduce the amount and the duration of sediment exposure. Always be aware of forecasted weather conditions prior to any scheduled grading or clearing activities.

Y,N, NA

- [ ] Perimeter protection, sediment control and tracking BMPs must be installed and maintained to comply with performance standards.
- [ ] Material needed to install standby BMPs necessary to completely protect the exposed portions of the site from erosion and to prevent sediment discharges must be stored on site.
- [ ] The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted 40% chance of rain). On request, the owner/contractor must provide proof of this capability that is acceptable to the City of Escondido.
- [ ] Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The owner/contractor may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- [ ] The area that can be cleared or graded and left exposed at one time is limited to the amount of acreage that the owner/contractor can adequately protect prior to a predicted rainstorm.
- [ ] Erosion control, perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- [ ] Adequate physical or vegetative BMPs must be installed, established and maintained for all graded areas prior to the start of the rainy season.
- [ ] All vegetative erosion control must be established prior to the rainy season.
- [ ] The amount of exposed soil allowed at one time shall not exceed that which can be adequately protected.
- [ ] Any disturbed area that is not completed but is not being actively graded must be fully protected if left for 7 or more consecutive calendar days during the rainy season. Standby BMPs are not sufficient; BMPs must actually be deployed.

Appendix B

2. Active Construction Site Inventory

Active Construction Inventory, FY 2011-2012

Project ID	Reporting Period	Project Status	Project Type	Project Description	Street Number	Street Direction	Street Name	Latitude	Longitude	Datum	Hydrologic Unit	Receiving Waterbody
PRI-04-153	2004	Completed	Residential Tract	Tract 833	3215		Walden Glen	33.1115	-117.0062	WGS84	San Dieguito	Lake Hodges
PRI-05-154	2005	Completed	Residential Tract	Tract 839	3355	E	Valley Pkwy	33.1559	-117.0315	WGS84	Carlsbad	Escondido Creek
PRI-06-156	2006	Active	Residential Tract	Tract 683-J	2024	S	Escondido Blvd	33.1811	-117.1173	WGS84	Carlsbad	San Marcos Creek
PRI-06-157	2006	Completed	Residential Tract	Tract 850	2600	E	Washington Ave	33.1328	-117.0690	WGS84	Carlsbad	Escondido Creek
PRI-06-160	2006	Active	Residential Tract	Tract 926	439	W	Washington Ave	33.1250	-117.0899	WGS84	Carlsbad	Escondido Creek
PRI-06-161	2006	Active	Residential Tract	Tract 921			Orange Street	33.1184	-117.0850	WGS84	Carlsbad	Escondido Creek
PRI-06-164	2006	Completed	Commercial	TPM 2007-11 Esc Adventist Academy	1301		Deodar Road	33.1405	-117.1064	WGS84	Carlsbad	Escondido Creek
PRI-07-169	2007	Completed	Residential Tract	Tract 947	2435		Bernardo Ave	33.0893	-117.0901	WGS84	San Dieguito	Lake Hodges
PRI-07-171	2007	Inactive	Commercial	City Plaza	328	S	Escondido	33.1184	-117.0825	WGS84	Carlsbad	Escondido Creek
PRI-08-172	2007	Completed	Commercial	Lexus Dealership	1205		Auto Parkway	33.1098	-117.0986	WGS84	Carlsbad	Escondido Creek
PRI-09-180	2009	Active	Hospital	Tract 834/ERTC Subarea 4	2185	N	Citracado Pkwy	33.1163	-117.1199	WGS84	Carlsbad	Escondido Creek
PRI-09-181	2009	Active	Office Bldg	Tract 834/ERTC Subarea 5	1800	N	Citracado Pkwy	33.1163	-117.1199	WGS84	Carlsbad	Escondido Creek
PRI-10-183	2010	Active	Residential TPM	TPM 2005-09 2 Parcel			Continental Lane	33.0941	-117.0998	WGS84	San Dieguito	Felicita/Lake Hodges
PRI-10-185	2010	Completed	Residential	Drainage, Erosion & BMP	2544		Bear Valle Pkwy	33.1400	-117.0405	WGS84	Carlsbad	Escondido Creek
PRI-10-188	2010	Completed	Residential	Elder Place 13 lots into 2 lots	715		Misson Grove	33.1325	-117.0755	WGS84	Carlsbad	Escondido Creek
PRI-11-189	2011	Completed	Commercial	Carmax Auto Super Store	830		Dan Way	33.1284	-117.0967	WGS84	Carlsbad	Escondido Creek
PRI-11-191	2011	Completed	Residential Single Family	Single Family Grading	15	S	Stonepointe Dr	33.0640	-117.0459	WGS84	San Dieguito	Lake Hodges
PRI-11-192	2011	Active	Residential Tract	Paramount Tract 858	511	N	Escondido Blvd	33.1239	-117.0868	WGS84	Carlsbad	Escondido Creek
PRI-11-193	2011	Active	Two single fam residences	Lots 84 & 85 Map 11686	700 - 718		Stoneybrae Pl	33.1532	-117.0431	WGS84	Carlsbad	Escondido Creek
PRI-11-196	2011	Active	Residential Single Family	Private Residence-Grading	3642		Monte Real	33.0612	-117.0761	WGS84	San Dieguito	Lake Hodges
PRI-11-204	2011	Completed	Residential Single Family	Grading Plan & Erosion Control	751		Gretna Green Way	33.0848	-117.0531	WGS84	San Dieguito	Lake Hodges
PUB-11-033	2010	Completed	CIP maintenance	Tulip Phase 3	N/A	N/S/E/W	Tulip Street	N/A	N/A	WGS84	Carlsbad	Escondido Creek
PUB-11-035	2011	Active	Capital Improvement	Maple Street Pedestrian Plaza	100 N	N/S	Maple Street	N/A	N/A	WGS84	Carlsbad	Escondido Creek
PUB-11-036	2011	Active	Capital Improvement	Ash St Pedestrian Bike Path	1201	E	Washington Ave	33.1332	-117.0681	WGS84	Carlsbad	Escondido Creek
PUB-11-037	2011	Active	CIP maintenance	Daley Ranch Road Rehab Project	End of La Honda	N/S	La Honda Drive	N/A	N/A	WGS84	Carlsbad	Escondido Creek

Active Construction Inventory, FY 2011-2012

Project ID	Project Owner	Project Area (Acres)	Disturbed Area (Acres)	Grading Plan Number	Grading Volume	MDA Applied	Construction Start Date	Construction End Date	Project Priority	Treatment Control BMP	Maint. Responsibility	Inspection Frequency	Advanced Treatment Required	Additional Controls Required	SUSMP Project	HMP Project	NPDES Permit Required
PRI-04-153	NUWI-Vistamonte	60 ac	40 ac	GP1868	150000	Yes	2004	2012	High	Bio/Grassy Swale □ Water	H.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-05-154	Eureka Escondido	200 ac	150 ac	GP1993	1225260	Yes	2005	2011	High	Bio/Water Quality Basin	P.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-06-156	Capstone Escondido	300 ac	50 ac	GP2024	603640	Yes	2006	Present	High	Bio/Water Quality Basin	P.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-06-157	Shea Homes	50 ac	40 ac	GP2008	14000	Yes	2006	2010	Medium	Storm Drain Filtration	H.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-06-160	Continental Seri	1.5 ac	1.5 ac	GP05-0021	5600	No	2006	Present	Medium	echanical Filter and Grassy Swa	HOA	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-06-161	Barratt American	3.4 ac	3.4 ac	GP2064	5000	No	2006	Present	Medium	Bio Swale □ Storm Drain Insert	H.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-06-164	Southeastern CA	6.1 ac	6.1 ac	GP06-0126	86000	No	2006	2011	Medium	Bio/Water Quality Basin	Prop. Owner	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-07-169	Carmichael Inves	7.6 ac	7 ac	GP06-0159	40000	No	2007	2012	Medium	Bio & Grassy Swales	Prop. Owner	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-07-171	City Plaza	1 Ac	1 Ac	GP07-0063	11200	No	2007		Medium	Mechanical Filter, Bioswale	Prop. Owner	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-08-172	Lexus Escondido	9 ac	9 ac	GP07-0010		No	2007	Present	Medium	Bioswales	Prop. Owner	Bi-Weekly/ Monthly	No	No	Yes	No	
PRI-09-180	Palomar Medical Center	35 ac	35 ac	GP-08-0024	300000	No	2008	Present	Medium	Bioswales and basins	P.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-09-181	Makena Medical	3.6 ac	3.6 ac	GP-09-0016	500	No	2010	Present	Medium	Bio filtration basins	P.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-10-183	A R C W Inc,	0.95 ac	0.95 ac	GP09-0020	1500	No	2010	Present	N/A	N/A	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	No
PRI-10-185	Frank L & Karen S Santa	0.21 ac	0.21 ac	GP10-0004	185	No	2010	2011	N/A	N/A	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	No
PRI-10-188	UHC 00437 Escondido LP	2.6 ac	2.6 ac	GP09-0015	5000	No	2010	2012	Medium	Veg Swale/Sand/Org Filters	HOA	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-11-189	Sunset Centers II L P	5.5 ac	5.5 ac	GP10-0015	14720	No	2010	2011	Medium	Bioretention	Prop. Owner	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-11-191	Dallas E Cormier	1.09 ac	0.23 ac	GP10-0011	620	No	2011	2012	N/A	N/A	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	No
PRI-11-192	von Escondido Paramount L L	4.5 ac	4.5 ac	GP11-0001	5283	No	2011	Present	N/A	Infiltration/Catch Basin	PO/Prop Mgm	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-11-193	Dale Andersen	10.31 ac	6.8 ac	GP07-0020	1500	No	2011	Present	N/A	Bio-Swale	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	Yes
PRI-11-196	Tibor & Ligia Varga	1.22 ac	0.5 ac	GP09-0013	342	No	2011	Present	No	N/A	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	No
PRI-11-204	Tod & Melissa Martin	0.9 ac		GP11-0005	300	No	2011	2012	No	N/A	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	No
PUB-11-033	City of Escondido	0.8 ac	0.8 ac	N/A	N/A	No	2011	2011	Medium	Grass Swale/Infiltration/Inlets	City of Esc.	Bi-Weekly/ Monthly	No	No	No	No	No
PUB-11-035	City of Escondido	0.83 ac	0.83 ac	N/A	0	No	2012	2012	Yes	Filter/Catch Basin	City of Esc.	Bi-Weekly/ Monthly	No	No	Yes	No	No
PUB-11-036	City of Escondido	0.46 ac	0.46 ac	N/A	500	No	2011	2012	No	N/A	City of Esc.	Bi-Weekly/ Monthly	No	No	No	No	No
PUB-11-037	City of Escondido	2.75 ac	0 ac	N/A	0	No	2011	2012	No	N/A	City of Esc.	Bi-Weekly/ Monthly	No	No	No	No	No

Appendix B

3. Construction Site Inspection Records

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-04-153	INSP001 Tract 833	Routine Compliance	7/6/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP002 Tract 833	Routine Compliance	8/3/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INPS003 Tract 833	Routine Compliance	9/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP004 Tract 833	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	Final Phase 6A
PRI-04-153	INSP005 Tract 833	Routine Compliance	10/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP006 Tract 833	Routine Compliance	10/19/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP007 Tract 833	Routine Compliance	10/26/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP008 Tract 833	Routine Compliance	11/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP009 Tract 833	Routine Compliance	11/9/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP010 Tract 833	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP011Tract 833	Routine Compliance	11/23/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP012 Tract 833	Routine Compliance	11/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP013 Tract 833	Routine Compliance	12/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP014 Tract 833	Routine Compliance	12/14/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP015 Tract 833	Routine Compliance	12/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP016 tract 833	Routine Compliance	12/28/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP017 Tract 833	Routine Compliance	1/4/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP018 Tract 833	Routine Compliance	1/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP019 Tract 833	Routine Compliance	1/18/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP020 Tract 833	Routine Compliance	1/25/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP021 Tract 833	Routine Compliance	2/1/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP022 Tract 833	Routine Compliance	2/8/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP023 Tract 833	Routine Compliance	2/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP024 Tract 833	Routine Compliance	2/22/2012	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-04-153	INSP025 Tract 833	Routine Compliance	2/29/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP026 Tract 833	Routine Compliance	3/7/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP027 Tract 833	Routine Compliance	3/14/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP028 Tract 833	Routine Compliance	3/21/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP029 Tract 833	Routine Compliance	3/28/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP030 Tract 833	Routine Compliance	4/4/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP031 Tract 833	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP032 Tract 833	Routine Compliance	4/18/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP033 Tract 833	Routine Compliance	4/25/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP034 Tract 833	Routine Compliance	5/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP035 tract 833	Routine Compliance	5/3/2012	Field Engineering	Yes	Compliant	N/A	**PROJECT COMPLETE**
PRI-05-154	INSP001 839 Eureka Springs	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP002 839 Eureka Springs	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP003 839 Eureka Springs	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP004 839 Eureka Springs	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP005 839 Eureka Springs	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP006 839 Eureka Springs	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP007 839 Eureka Springs	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP008 839 Eureka Springs	Routine Compliance	12/2/2011	Field Engineering	No	Compliant	N/A	**PROJECT COMPLETE, NOC being filed**
PRI-06-156	INSP001 683J High Point	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP002 683J High Point	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP003 683J High Point	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP004 683J High Point	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-06-156	INSP005 683J High Point	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP006 683J High Point	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP007 683J High Point	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP008 683J High Point	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP009 683J High Point	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP010 683J High Point	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP011 683J High Point	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP012 683J High Point	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP013 683J High Point	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP014 683J High Point	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP015 683J High Point	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP016 683J High Point	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP017 683J High Point	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP018 683J High Point	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP019 683J High Point	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP001 850 Washington Hills	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP002 850 Washington Hills	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP003 850 Washington Hills	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP004 850 Washington Hills	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP005 850 Washington Hills	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP006 850 Washington Hills	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP007 850 Washington Hills	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP008 850 Washington Hills	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP009 850 Washington Hills	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-06-157	INSP010 850 Washington Hills	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP011 850 Washington Hills	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP012 850 Washington Hills	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP013 850 Washington Hills	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP014 850 Washington Hills	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP015 850 Washington Hills	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP016 850 Washington Hills	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP017 850 Washington Hills	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP018 850 Washington Hills	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP019 850 Washington Hills	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	7/5/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	8/9/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	9/7/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	10/19/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	10/26/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	11/2/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	12/7/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	12/14/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	12/28/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	1/11/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	1/18/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	2/8/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	2/23/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	2/29/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	3/7/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	3/14/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	3/21/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	3/26/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	4/4/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	4/18/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	5/2/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	5/23/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	6/14/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	6/27/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	7/3/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-161	INSP001 921 City Square	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP002 921 City Square	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP003 921 City Square	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP004 921 City Square	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP005 921 City Square	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP006 921 City Square	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP007 921 City Square	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP008 921 City Square	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP009 921 City Square	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP010 921 City Square	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-06-161	INSP011 921 City Square	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP012 921 City Square	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP013 921 City Square	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP014 921 City Square	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP015 921 City Square	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP016 921 City Square	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP017 921 City Square	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP018 921 City Square	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP019 921 City Square	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-164	INSP001 1301 & 1305 Deodar	Routine Compliance	7/15/2011	Field Engineering	No	Compliant	N/A	Post construction BMP's in place
PRI-07-169	INSP001 947 Hamilton and Bernardo	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP002 947 Hamilton and Bernardo	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP003 947 Hamilton and Bernardo	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP004 947 Hamilton and Bernardo	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP005 947 Hamilton and Bernardo	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP006 947 Hamilton and Bernardo	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP007 947 Hamilton and Bernardo	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP008 947 Hamilton and Bernardo	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP009 947 Hamilton and Bernardo	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0010 947 Hamilton and Bernardo	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0011 947 Hamilton and Bernardo	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0012 947 Hamilton and Bernardo	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0013 947 Hamilton and Bernardo	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0014 947 Hamilton and Bernardo	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-07-169	INSP0015 947 Hamilton and Bernardo	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0016 947 Hamilton and Bernardo	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0017 947 Hamilton and Bernardo	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0018 947 Hamilton and Bernardo	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0019 947 Hamilton and Bernardo	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP001 City Plaza 328 S. Escondido Blvd	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP002 City Plaza 328 S. Escondido Blvd	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP003 City Plaza 328 S. Escondido Blvd	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP004 City Plaza 328 S. Escondido Blvd	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP005 City Plaza 328 S. Escondido Blvd	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP006 City Plaza 328 S. Escondido Blvd	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP007 City Plaza 328 S. Escondido Blvd	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP008 City Plaza 328 S. Escondido Blvd	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP009 City Plaza 328 S. Escondido Blvd	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP010 City Plaza 328 S. Escondido Blvd	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP011 City Plaza 328 S. Escondido Blvd	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP012 City Plaza 328 S. Escondido Blvd	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP013 City Plaza 328 S. Escondido Blvd	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP014 City Plaza 328 S. Escondido Blvd	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP015 City Plaza 328 S. Escondido Blvd	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP016 City Plaza 328 S. Escondido Blvd	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP017 City Plaza 328 S. Escondido Blvd	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP018 City Plaza 328 S. Escondido Blvd	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP019 City Plaza 328 S. Escondido Blvd	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-08-172	INSP001 Lexus 1205 Auto Pkwy	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP002 Lexus 1205 Auto Pkwy	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP003 Lexus 1205 Auto Pkwy	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP004 Lexus 1205 Auto Pkwy	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP004 Lexus 1205 Auto Pkwy	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP004 Lexus 1205 Auto Pkwy	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP004 Lexus 1205 Auto Pkwy	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP004 Lexus 1205 Auto Pkwy	Routine Compliance	12/2/2011	Field Engineering	No	Compliant	N/A	**PROJECT COMPLETE, NOC being filed**
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	7/5/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	7/11/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	7/18/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	7/25/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	8/1/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	8/8/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	8/15/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	8/22/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	8/29/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	9/6/2011	PPH / GST	Yes	Compliant	N/A	REAP
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	9/12/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	9/26/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	10/3/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	10/10/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	10/17/2011	PPH / GST	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	10/31/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/2/2011	PPH / GST	Yes	Compliant	N/A	Pre-storm Planning
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/7/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/9/2011	PPH / GST	Yes	Compliant	N/A	REAP
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/14/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/21/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/28/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	12/5/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	12/9/2011	PPH / GST	Yes	Compliant	N/A	REAP
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	12/12/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	12/19/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	12/27/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/3/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/9/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/16/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/19/2012	PPH / GST	Yes	Compliant	N/A	REAP
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/23/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/25/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	2/8/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	2/29/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	4/23/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	4/26/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	4/30/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	5/7/2012	PPH / GST	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	5/14/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	5/21/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	5/29/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	6/4/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	6/18/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	7/2/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-181	Tract 834/ERTC Sub-area 5 Makena Medical							No active construction
PRI-10-183	INSP001 TPM 2005-09 Continental Ln.	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP002 TPM 2005-09 Continental Ln.	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP003 TPM 2005-09 Continental Ln.	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP004 TPM 2005-09 Continental Ln.	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP005 TPM 2005-09 Continental Ln.	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP006 TPM 2005-09 Continental Ln.	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP007 TPM 2005-09 Continental Ln.	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP008 TPM 2005-09 Continental Ln.	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP009 TPM 2005-09 Continental Ln.	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP010 TPM 2005-09 Continental Ln.	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP011 TPM 2005-09 Continental Ln.	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP012 TPM 2005-09 Continental Ln.	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP013 TPM 2005-09 Continental Ln.	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP014 TPM 2005-09 Continental Ln.	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP015 TPM 2005-09 Continental Ln.	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP016 TPM 2005-09 Continental Ln.	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-10-183	INSP017 TPM 2005-09 Continental Ln.	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP018 TPM 2005-09 Continental Ln.	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP019 TPM 2005-09 Continental Ln.	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-185	INSP001 2544 Bear Valley Pkwy	Routine Compliance	6/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-185	INSP001 2544 Bear Valley Pkwy	Routine Compliance	7/19/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-185	INSP001 2544 Bear Valley Pkwy	Routine Compliance	8/24/2011	Field Engineering	Yes	Compliant	**PROJECT COMPLETE**	
PRI-10-188	INSP001 Mission Grove Place	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP002 Mission Grove Place	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP003 Mission Grove Place	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP004 Mission Grove Place	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP005 Mission Grove Place	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP006 Mission Grove Place	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP007 Mission Grove Place	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP008 Mission Grove Place	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP009 Mission Grove Place	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP010 Mission Grove Place	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP011 Mission Grove Place	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP012 Mission Grove Place	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP013 Mission Grove Place	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP014 Mission Grove Place	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP015 Mission Grove Place	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP016 Mission Grove Place	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP017 Mission Grove Place	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-10-188	INSP018 Mission Grove Place	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	**PROJECT COMPLETE, NOC being filed**
PRI-11-189	INSP001 Carmax 830 Dan Way	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP002 Carmax 830 Dan Way	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP003 Carmax 830 Dan Way	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP004 Carmax 830 Dan Way	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP005 Carmax 830 Dan Way	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP006 Carmax 830 Dan Way	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	Post Rain Event
PRI-11-189	INSP007 Carmax 830 Dan Way	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP008 Carmax 830 Dan Way	Routine Compliance	12/2/2011	Field Engineering	No	Compliant	N/A	**PROJECT COMPLETE, NOC being filed**
PRI-11-191	INSP001 15 Stonepointe	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP002 15 Stonepointe	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP003 15 Stonepointe	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP004 15 Stonepointe	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP005 15 Stonepointe	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP006 15 Stonepointe	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP007 15 Stonepointe	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP008 15 Stonepointe	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP009 15 Stonepointe	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP010 15 Stonepointe	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP011 15 Stonepointe	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP012 15 Stonepointe	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	**PROJECT COMPLETE**
PRI-11-192	INSP001 Tract 858 Paramount (Revised)	Routine Compliance	7/5/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP002 Tract 858 Paramount (Revised)	Routine Compliance	8/9/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-11-192	INSP003 Tract 858 Paramount (Revised)	Routine Compliance	9/7/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP004 Tract 858 Paramount (Revised)	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP005 Tract 858 Paramount (Revised)	Routine Compliance	10/19/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP006 Tract 858 Paramount (Revised)	Routine Compliance	11/2/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP007 Tract 858 Paramount (Revised)	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP008 Tract 858 Paramount (Revised)	Routine Compliance	12/7/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP009 Tract 858 Paramount (Revised)	Routine Compliance	12/14/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0010 Tract 858 Paramount (Revised)	Routine Compliance	12/28/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0011 Tract 858 Paramount (Revised)	Routine Compliance	1/11/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0012 Tract 858 Paramount (Revised)	Routine Compliance	1/18/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0013 Tract 858 Paramount (Revised)	Routine Compliance	2/8/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0014 Tract 858 Paramount (Revised)	Routine Compliance	2/23/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0015 Tract 858 Paramount (Revised)	Routine Compliance	2/29/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0016 Tract 858 Paramount (Revised)	Routine Compliance	3/7/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	3/14/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	3/21/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	3/26/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	4/1/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	4/25/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	5/2/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	5/23/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	6/14/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	6/27/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	7/3/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-193	INSP001 700-718 Stoneybrae Pl.	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP002 700-718 Stoneybrae Pl.	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP003 700-718 Stoneybrae Pl.	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP004 700-718 Stoneybrae Pl.	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP005 700-718 Stoneybrae Pl.	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP006 700-718 Stoneybrae Pl.	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP007 700-718 Stoneybrae Pl.	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP008 700-718 Stoneybrae Pl.	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP009 700-718 Stoneybrae Pl.	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP010 700-718 Stoneybrae Pl.	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP011 700-718 Stoneybrae Pl.	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP012 700-718 Stoneybrae Pl.	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP013 700-718 Stoneybrae Pl.	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP014 700-718 Stoneybrae Pl.	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP015 700-718 Stoneybrae Pl.	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP016 700-718 Stoneybrae Pl.	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP017 700-718 Stoneybrae Pl.	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP018 700-718 Stoneybrae Pl.	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP019 700-718 Stoneybrae Pl.	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	9/8/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	10/14/2011	Field Engineering	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-11-196	3642 Monte Real	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	11/22/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	12/13/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	1/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	1/27/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	2/10/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	2/15/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	2/16/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	2/28/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	3/8/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	3/22/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	4/26/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	6/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	7/19/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	8/24/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	9/20/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	10/14/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	11/22/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-11-204	751 Gretna Green Way	Routine Compliance	12/13/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	1/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	1/27/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	2/10/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	2/15/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	2/16/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	2/28/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	3/8/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	3/22/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	4/26/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-033	INSP001-Tulip Phase III	Routine Compliance	6/23/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP002-Tulip Phase III	Routine Compliance	7/19/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP003-Tulip Phase III	Routine Compliance	8/24/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP004-Tulip Phase III	Routine Compliance	9/20/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP005-Tulip Phase III	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP006-Tulip Phase III	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP007-Tulip Phase III	Routine Compliance	10/14/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP007-Tulip Phase III	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP007-Tulip Phase III	Routine Compliance	11/22/2011	Field Engineering	Yes	Compliant	N/A	**PROJECT COMPLETE**
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	6/23/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	7/19/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	8/24/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	9/20/2011	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	10/14/2011	Field Engineering	Yes	Compliant	N/A	**PROJECT COMPLETE**
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	9/20/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	10/14/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	11/22/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	12/13/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	1/11/2012	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	1/27/2012	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	2/10/2012	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	2/15/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	2/16/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	2/28/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	3/8/2012	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	3/22/2012	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	4/26/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-037	INSP001 Maple Street	Routine Compliance	2.29.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP002 Maple Street	Routine Compliance	3.7.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP003 Maple Street	Routine Compliance	3.14.12	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PUB-11-037	INSP004 Maple Street	Routine Compliance	3.21.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP005 Maple Street	Routine Compliance	3.28.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP006 Maple Street	Routine Compliance	4.4.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP007 Maple Street	Routine Compliance	4.11.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP008 Maple Street	Routine Compliance	4.18.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP009 Maple Street	Routine Compliance	4.25.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP010 Maple Street	Routine Compliance	5.2.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP011 Maple Street	Routine Compliance	5.9.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP012 Maple Street	Routine Compliance	5.16.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP013 Maple Street	Routine Compliance	5.23.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP014 Maple Street	Routine Compliance	5.30.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP015 Maple Street	Routine Compliance	6.6.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP016 Maple Street	Routine Compliance	6.13.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP017 Maple Street	Routine Compliance	6.20.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP018 Maple Street	Routine Compliance	6.27.12	Field Engineering	Yes	Compliant	N/A	

Appendix C

Supporting Information for the Industrial & Commercial Component

Contents:

1. Industrial & Commercial Facility Stormwater Inspection Form
2. Notice of Correction Form
3. Updates to Industrial & Commercial Stormwater Inventory

Appendix C

1. Industrial & Commercial Facility Stormwater Inspection Form

SUPPLEMENTAL ANNUAL INSPECTION FORM

FY 2011 - 2012
CITY OF ESCONDIDO
STORMWATER PROGRAM
Commercial / Industrial / Municipal

201 North Broadway
Escondido, CA 92025-2525
Telephone 760-839-4528
Fax 760-739-7040

Potential Pollutants:

- Bacteria: ☐
- Gross Pollutants: ☐
- Metals: ☐
- Oil & Grease: ☐
- Organics: ☐
- Pesticides: ☐
- Sediment: ☐
- Trash: ☐

N

_____ Date_____ Time _____ AM / PM

ry Sewer	☐ Municipal ☐ Commercial ☐ Industrial ☐ MSE
	☐ Follow-up Inspection ☐ Hotline

_____

☐ No ☐ Yes
☐ No ☐ Yes Description _____
☐ No ☐ Yes Description _____
☐ No ☐ Yes Description _____
☐ Inside ☐ Outside Describe if outside: _____
stored onsite?_____
inspection? _____
_____
_____

l Industrial Permit? ☐ No ☐ Yes WDID No. _____
required permit ☐ No ☐ Yes
☐ No ☐ Yes Is SWPPP adequate? ☐ No ☐ Yes
No ☐ Yes Is the facility compliant with stormwater monitoring? ☐ No ☐ Yes
ed monitoring? ☐ No ☐ Yes
re Certification (NEC) ☐ Sampling and Analysis Reduction Certification (SARC)
ermination (NOT) NEC/SARC/NOT Filed? ☐ No ☐ Yes

E/OUTREACH

(low) 2 ☐ 3 ☐ 4 ☐ 5 ☐ (High) Describe if low: _____
rench ☐ City BMP Brochure ☐ Ordinances ☐ General Industrial Permit Brochure
_____ ☐ Other: _____ ☐ None

❑Reidy Creek ❑Felicita Creek ❑Kit Carson Creek ❑ Lake Hodges

_____

STORMWATER BMP ASSESSMENT

Areas of Activity	Observations	Potential Discharge	Pollutant Exposure	Existing/Needed BMPs
Outdoor Processing & Manufacturing				
Activity conducted outside?	☐ No ☐ Yes ☐ N/A	☐ No ☐ Yes	☐ No ☐ Yes	
Activity conducted in covered area?	☐ No ☐ Yes ☐ N/A			
Outdoor Materials Storage				
Materials stored outside?	☐ No ☐ Yes ☐ N/A	☐ No ☐ Yes	☐ No ☐ Yes	
Adequate storage (covered area and secondary containment)?	☐ No ☐ Yes ☐ N/A			
Storage containers labeled?	☐ No ☐ Yes ☐ N/A			
Spill response kit onsite and accessible?	☐ No ☐ Yes ☐ N/A			
Is storage area free from spills and standing water?	☐ No ☐ Yes ☐ N/A			
Outdoor Waste Storage & Disposal				
Adequate trash/recycling containers provided?	☐ No ☐ Yes ☐ N/A	☐ No ☐ Yes	☐ No ☐ Yes	
Waste containers covered?	☐ No ☐ Yes ☐ N/A			
Trash/recycling areas free of litter/debris?	☐ No ☐ Yes ☐ N/A			
Drain inlets under or near waste area?	☐ No ☐ Yes ☐ N/A			
Outdoor Vehicle & Equipment Storage				
Parking lots free of significant leaks and spills?	☐ No ☐ Yes ☐ N/A	☐ No ☐ Yes	☐ No ☐ Yes	
Is vehicle maintenance conducted inside or under covered area?	☐ No ☐ Yes ☐ N/A			
Are vehicle-fueling areas covered?	☐ No ☐ Yes ☐ N/A			
Grounds Maintenance				
Is site and parking lot free of litter and debris?	☐ No ☐ Yes ☐ N/A	☐ No ☐ Yes	☐ No ☐ Yes	
Does facility do any washdown outdoors (e.g., parking lot, inside equipment, etc.)?	☐ No ☐ Yes ☐ N/A			
Are discharge locations free of sediment and debris?	☐ No ☐ Yes ☐ N/A			
Is soil or landscape waste stockpiled onsite?	☐ No ☐ Yes ☐ N/A			
Are irrigation systems programmed to minimize runoff?	☐ No ☐ Yes ☐ N/A			
Loading/Unloading Areas				
Loading areas covered?	☐ No ☐ Yes ☐ N/A	☐ No ☐ Yes	☐ No ☐ Yes	
Storm drain inlets in the docks?	☐ No ☐ Yes ☐ N/A			
Is loading area hosed down regularly?	☐ No ☐ Yes ☐ N/A			

Indicate BMP Types: Present: ❑EC ❑SE ❑SC ❑TC ❑NS ❑WM Needed: ❑EC ❑SE ❑SC ❑TC ❑NS ❑WM

Erosion Control (EC), Sediment Control (SE), Source Control (SC), Treatment Control (TC), Non SW (NS), and Waste Management (WM)

Description: _____

Appendix C

2. Notice of Correction Form

Facility: □□□□□□□□□□□□□□□□□□□□□□□□ **Date:** □□□□□□□□□□

NOTICE OF CORRECTION
Number _____

(*Section 22 of the City of Escondido Municipal Code)*

☐ **Sec. 22-8:** Unlawful discharge of sewage or other liquid waste.

☐ **Sec. 22-22:** Unlawful discharge into a storm water conveyance system.

☐ **Sec. 22-26:** Pollutant reduction required.

☐ **Sec. 22-37:** Unlawful discharge in the wastewater system.

☐ **Sec. 22-185:** Failure to install or maintain pretreatment equipment to an acceptable level.

☐ **Sec. 22-189:** You denied our authorized inspector access to your facility to observe, obtain information, and/or perform sampling on _____

ORDER TO COMPLY: You are hereby ordered to abate the preceding violations. Failure to comply may subject you to penalties and□or administrative fines, up to □1,000.00 per violation per day, as provided by law.

Complete the following by: 2 Weeks 4 Weeks 6 Weeks 8 Weeks Other _____
(circle one)

Specify corresponding date: □□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□□ □□□□□□□□

Comments/Requirements:

Business Name:_____ Business Phone:_____

Business Address:_____

Signed:_____ Date:_____

Inspector Signature:_____ Date:_____

For more information or questions call: (760) 839-6315

Appendix C

3. Updates to Industrial & Commercial Stormwater Inventory

Updates to the Industrial and Commercial Inventory, FY 2011-2012

BUSINESSES ADDED

Account	Business Name	Street Number	Street Prefix	Street Name	Suite No	NPDES Facility	Rank	NAIC SIC Description	NAIC SIC
20110124	Factory Transmissions	260	N	Juniper St		No	H	Auto Mech/Elec Repair Maint	81111
20110144	Jenkinson Concours & Customs	854		Metcalf St	B	Yes	H	Auto Repair and Maint	8111
20110068	Superior Pool Products LLC	2060		Aldergorve		No	H	Sport and Recr Goods and Supply Whsle	42191
20110052	Texmate Inc	450		State Pl		No	H	Other Elec Equip and Component Manuf	3359
20110033	Drewelow Remediation Equipment Inc	1523		Sterling Ct		No	H	Other Spec Trade Contr	23599
20110065	Valley Ornamental Iron	251	N	Vinewood St	E	No	H	Other Misc Manuf	3399
20110062	FT ENG INC	611		Rock Springs Rd		Yes	H	Other Misc Manuf	3399
20110116	Viva Express Pizza and Wings	1632	E	Valley Pkwy		No	H	Limited-Service Restaurants	722211
20110114	Pizza de La Comunidad	1815	E	Valley Pkwy	7	No	H	Limited-Service Restaurants	722211
20110043	Donut Broadway	675	N	Broadway		No	H	Retail Bakeries	311811
20110112	Happy Vegan	330	W	Felicita Ave	C7-9	No	H	Full-Service Restaurants	72211
20110115	Rancho Las Palmas Mex Grill&Seafood Bar	507	W	Washington Ave		No	H	Limited-Service Restaurants	722211
20110047	Esperanzas Tortilleria	1931		Commercial		No	H	Bread/Bakery Product Manuf	31181
20110087	Midway Mini Market	758	N	Midway		No	H	Grocery Store	4451
20110042	Belen Artisan Bakers	2250	S	Escondido Blvd	112	No	H	Retail Bakeries	311811
20110061	Bio TechPlex Corporation	926	S	Andreasen Dr	105	No	H	Other Misc Manuf	3399
20110117	Coker Bros LLC/dba: Snacktown	3333		Bear Vally Pkwy/Kit Carson	P	No	H	Snack and Nonalc Beverage Bars	722213
20110048	AFM	1145		Industrial Ave	A	No	H	Machine Shops	33271
20110054	Fastsigns	945	W	Valley Pkwy	J	No	H	Sign Manuf	33995
20110109	Mikes Pool Service	1001	S	Hale Ave	89	N/A	H	SVC to Bldgs and Dwellings	5617
20110082	San Clemente Auto Super Center	855	N	Broadway		No	H	Used Car Dealers	44112
20110123	So Cal Automotive Inc	859	N	Broadway		No	H	Auto Transmission Repair	811113
20110149	J H Heavy Equipment	851	W	Mission Ave		No	H	Comm/Ind Mach and Equip (Ex. Aut/Ele) Repmaint	81131
20110072	CarMax/CarMax The Auto Superstore	830		Dan Way			H	Used Car Dealers	44112
20110141	Escondido AAMCO	2040		Auto Park Way		No	H	Auto Repair and Maint	8111
20110049	T-GAZ Inc dba JR Competition	2080		Wineridge Pl	D	No	H	Machine Shops	33271
20110081	Power Image Auto	1433		Industrial Ave		No	H	Used Car Dealers	44112
20110080	North County Auto Wholesale	1002	S	Escondido Blvd		No	H	Used Car Dealers	44112
20110053	Sustainable Furniture Inc	640	S	Andreasen		No	H	Upholst House Furniture Manuf	337121
20110057	Acrylic Display Systems	620		Venture St	A	No	H	Other Misc Manuf	33999
20110152	Kit Wilson	1941		Don Lee Pl	C	No	H	Reupholster and Furn Repair	81142
20110064	Steichen Fine Woodworking	1421		Vaquero Glen		N/A	H	Other Misc Manuf	3399
20110113	Morrison Senior Living-Redwood Terrace	710	W	Thirteenth Ave		No	H	Limited-Service Restaurants	722211
20110071	Car Zone Pre-Owned Superstore	760	W	Mission Ave		No	H	Used Car Dealers	44112
20110099	2nd Time Around Furniture & Etc	1941		Don Lee Pl	A	No	H	Warehouse and Storage Facility	4931
20110148	Acacia Custom Guitars	1020		Hawaii Pl		No	H	Elec and Precision Equip Repair and Maint	81121
20110133	Escondido Smog Service LLC	615	W	El Norte Pkwy	320	No	H	Other Auto Repair and Maint	811198
20110086	The Grocier. com	1766	E	Valley Pkwy		No	H	Supermkt and Grocery (Esc Conv) Store	44511
20110070	Activated Ministries	735	S	Vinewood St		No	H	Used Car Dealers	44112
20110040	J T Young Construction Inc	1305		Simpson Way	G	No	H	Other Spec Trade Contr	2359
20110085	Window Solutions	344	E	Valley Pkwy		No	H	Other Bldg Mat Dealers	44419
20110032	Valley Glass and Showerdoor Inc	1313	E	Simpson		No	H	Glass and Glazing Contrs	23592
20110139	Chucks Mobile Service	138	S	Vinewood St	B		H	Auto Repair and Maint	8111
20110038	Coast 2 Coast Countertops	219	S	Andreasen Dr		No	H	Other Spec Trade Contr	2359
20110005	Life Construction	502	S	Quince St		No	H	Res Bldg Construction	2332
20110074	Easy Way Auto Sale	557	S	Escondido Blvd	A	No	H	Used Car Dealers	44112
20110140	Easy Auto Repair & Transmission	557	S	Escondido Blvd	B	No	H	Auto Repair and Maint	8111
20110119	Liberty Dawgz	1440	S	Escondido Blvd	A	N/A	H	Mobile Food Svc	722330
20110126	4 Lowest Price Auto Glass	1630	S	Escondido Blvd	D	No	H	Auto Glass Replacement Shops	811122
20110084	Metro Wall Works	2065	S	Escondido Blvd		N/A	H	Paint and Wallpaper Store	44412
20110014	Dominguez, G A	537	W	Grand Ave		No	H	Other Heavy Construction	2349
20110075	Escondido Auto Sales	1150	W	Mission Rd		No	H	Used Car Dealers	44112
20110063	Genesis Woodworking	125		Market Pl	B	No	H	Other Misc Manuf	3399

Updates to the Industrial and Commercial Inventory, FY 2011-2012

BUSINESSES ADDED

Account	Business Name	Street Number	Street Prefix	Street Name	Suite No	NPDES Facility	Rank	NAIC SIC Description	NAIC SIC
20110028	P Victor Roofing	218		Tampico Glen			H	Roof/Siding/Sheet Metal Contrs	23561
20110060	Big Fly Bat Company	505		Corporate Dr		No	H	Other Misc Manuf	3399
20110096	Sterling Rose Transportation/Mad DashLLC	625		Superior St	D	No	H	Limousine Service	48532
20110098	ASAP Towing Services	710		Rock Springs Rd		No	H	Motor Vehicle Towing	48841
20110145	Kuriata, Edward	727		Rock Springs Rd	H	No	H	Auto Repair and Maint	8111
20110035	Acampora Inc dba Ceilings Plus	740		Metcalf St	6	No	H	Other Spec Trade Contr	2359
20110125	Gutierrez Auto Electric	740		Metcalf St	28	No	H	Auto Mech/Elec Repair Maint	81111
20110051	Last Straw, The	1291		Pacific Oaks Pl	112	No	H	Other Fabr Metal Product Manuf	33299
20110058	Esco Dogs	1305		Simpson Way	A,B	No	H	Other Misc Manuf	33999
20110069	California Metal Services Inc	1428		Mission Rd			H	Recyclable Mat Whsle	42193
20110050	The Weld Shop Inc	1941		Don Lee Pl	E	No	H	Machine Shops	33271
20110143	Infamous Performance	1948		Don Lee Pl	6	No	H	Auto Repair and Maint	8111
20110031	Signature Paving Inc	2865		Progress Pl	A	No	H	Concrete Contrs	23571

BUSINESSES REMOVED

Account	Facility Type	Business Name	Street Number	Street Prefix	Street Name	Suite No	Reason Record Removed
	MSE	3W Truck and Equipment	847		Metcalf St		Closed/Vacant
	FSE	Acapulco Mexican Restaurant	1541	E	Valley Pkwy	15	Closed/Vacant
	MSE	Advanced Radiator	837		Metcalf St	B	Closed/Vacant
	MSE	Alan Taylor Co Inc	1220		Industrial Ave		vacant
	MSE	All Star Gas	555	W	Grand Ave		Closed/Vacant
	MSE	Closed/Vacant	670		Enterprise St		Closed/Vacant
55840	MSE	Cruz N Quality Discount	2121	E	Valley Pkwy	B	Closed/Vacant
	MSE	Escondido Auto Sales	541	N	Quince St		VACANT
	MSE	Felicita Mobil	501	W	Felicita Ave		Building gone, now
	MSE	Fidelity Auto Sales	557	S	Escondido Blvd		VACANT
	FSE	Four Season's Ice	635	W	Mission Ave	31	Closed/Vacant
	MSE	GMP Motors	1150	W	Mission Ave		Closed/Vacant
157795	Ind/Comm	H D Supply Plumbing/Hvac, Ltd.	480	N	Spruce St		Closed/Vacant
	FSE	Hawaiian Snow and Snacks	635	W	Mission Ave		Closed/Vacant
	MSE	Injecta-Max Corp	745	S	Vinewood St		CLOSED
	MSE	Kox Auto Sport	1175		Industrial Ave		Closed
	FSE	La Fiesta Mexicana	635	W	Mission Ave		Closed/Vacant
	FSE	La Tortuga	635	W	Mission Ave	4D	Closed/Vacant
	FSE	Lady Lasagna	200	E	Via Rancho Pkwy	4D	CLOSED
	FSE	Le's Food to Go	635	W	Mission Ave		Closed/Vacant
135207	MSE	Mechtech Motorsports Inc	1277		Simpson Way		MOVED
156737	Ind/Comm	Metro Iron Works Inc	1113		Industrial Ave		Vacant - Business Gone
	MSE	Mex-Cal Auto Sales	610	W	Ninth Ave	4	Not at this address
167681	MSE	Philo's Fast Service	2120		Harmony Grove		Closed/Vacant
	MSE	R &T Lodge Auto	2121	E	Valley Pkwy	A	Closed/Vacant
155105	Ind/Comm	R D R Machine Inc	2151		Enterprise St	C	Closed/Vacant
	Ind/Comm	Salvation Army	645		Metcalf St		No longer rents space
	MSE	Right Price Auto Sales	1408	S	Escondido Blvd		Vacant- owner of lot Ned Stojkovich
134756	MSE	Shahs Truck Rentals	1602	E	Valley Pkwy		CLOSED/VACANT
154598	Ind/Comm	So Cal Hot Tubs	1914		Mission Rd		Vacant - Business Gone
150875	Ind/Comm	Sonic View USA	1313		Simpson Way	F	Vacant - Business Gone
	MSE	Speed Dynamics			See File 1283		Closed/Vacant
	MSE	Star Metal Products	2275		Micro Pl		Closed/Vacant
126170	Ind/Comm	T R S Industries Inc	651	W	Fifth Ave		Vacant - Business Gone
	MSE	Tag Motor Sports	2181		Meyers Ave		Closed/Vacant
143562	Ind/Comm	T-Mar Construction Inc Dba Martin Corporation	2340		Meyers Ave		Vacant - Business Gone
142670	Ind/Comm	U-Haul Rentals	456	N	Quince St		Closed/Vacant
137790	MSE	Vehicle Store The Retail/Wholesale	900	W	Mission Ave		Closed/Vacant
147767	Ind/Comm	Walco Materials Group	2121		Chablis Ct	100	Vacant - Business Gone
	MSE	Wicked Wheels	2115	E	Valley Pkwy	E	Closed/Vacant
128319	Ind/Comm	Wise Enterprises	1861		Commercial St		Vacant - Business Gone
1200	Ind/Comm	Acme Drilling Co Inc	748	S	Vinewood St	B	Closed, New Business Present
	FSE	Aegis Senior Living	3012		Bear Valley		Closed, New Business Present
167419	Ind/Comm	Afdon Contracting CA Inc	115		Market Pl		Closed, New Business Present
	MSE	American Driveline Communications Corp	2040		Auto Park Way		Closed, New Business Present
157103	Ind/Comm	American Industrial Service	622	S	Vinewood St		Closed, New Business Present
146278	Ind/Comm	Americlean 2000/Mastercare Carpet & Upholstery	1433		Industrial Ave		Closed, New Business Present
	MSE	Andvantage Muffler	1630	S	Escondido Blvd	G & H	Closed, New Business Present
	MSE	Archer Roofing	2245		Micro Pl		Closed, New Business Present
168170	MSE	Asphalt Inc	610		Metcalf St		Closed, New Business Present
	MSE	Auto Innovations	545		Opper St		Closed, New Business Present
168477	Ind/Comm	Big Shaker Enterprises LLC	1150		Simpson Way		Closed, New Business Present
	MSE	Budget Car Sales and Service	855	N	Broadway		Closed, New Business Present
	MSE	C & E Auto Sales	760	W	Mission Ave		Closed, New Business Present
163181	Ind/Comm	C J R Concrete Inc	1230		Simpson Way	A	Closed, New Business Present
	MSE	California Recoveries Company	135		Engel St		Closed, New Business Present

BUSINESSES REMOVED

Account	Facility Type	Business Name	Street Number	Street Prefix	Street Name	Suite No	Reason Record Removed
	MSE	Coast Enclosure	2350		Myers Ave		Closed, New Business Present
18025	Ind/Comm	Convert A Phase Inc	1022	W	Mission Ave		Closed, New Business Present
162159	MSE	Craftec Machine	711	W	Fourth Ave		Closed, New Business Present
77460 &	MSE	Creative Fence Co, Inc	605		Venture St		Closed, New Business Present
142340	Ind/Comm	Custom Bedliners Of Escondido	2080		Wineridge Pl	B	Closed, New Business Present
145242	Ind/Comm	Detection Logic	1541		Simpson Way		Closed, New Business Present
68885	Ind/Comm	Easy Turf	2418		Auto Park Way		Closed, New Business Present
	FSE	El Rodeo Bar	426	N	Rose St		Closed, New Business Present
	MSE	Electra-City Motors	738	W	Washington Ave		Closed, New Business Present
	FSE	First Class Vending	2120		Harmony Grove		Closed, New Business Present
162442	MSE	Four Corners Concrete Inc.	2317		Auto Park Way		Closed, New Business Present
167490		G & R Motors	2245		Enterprise St	150	Closed, New Business Present
	FSE	Galaxy Diner	2250	S	Escondido Blvd		Closed, New Business Present
	FSE	Gloria's Cakes and Desserts/Cute Cakes	1320	E	Valley Pkwy	A	Closed, New Business Present
	MSE	Havic Motor Sports	740		Metcalf St	4	Closed, New Business Present
	MSE	ICS Cable	2161		Meyers Ave		Closed, New Business Present
2009272	MSE	Johnathan's Detail Service	549		Opper St		Closed, New Business Present
	FSE	Kindercare Learning Centers	3751		Mary Ln		Closed, New Business Present
	MSE	Luxury for Less Inc	350	S	Hale Ave		Closed, New Business Present
	FSE	Mariscos El Tio Max 2	636	N	Broadway		Closed, New Business Present
155846	Ind/Comm	Masterglass Windshield Repair & Replacement	316		State Pl		Closed, New Business Present
	MSE	Mobil Midway	2004	E	Valley Pkwy		Closed, New Business Present
	FSE	Morrison Senior Living	500	E	Valley Pkwy		Closed, New Business Present
129166	MSE	Motorcycle Dynamics	701		Andreasen		Closed, New Business Present
137196	Ind/Comm	Mountain Air	616	W	Third Ave		Closed, New Business Present
	FSE	Mr. Blues Donuts	675	N	Broadway	F	Closed, New Business Present
	MSE	Normans Auto Parts Inc	2444		Barham Dr	A & B	Closed, New Business Present
	MSE	Off Shore Model Basin	578		Enterprise St		Closed, New Business Present
135861	MSE	Pacific Oil Spreading Inc/ Weir Asphalt Const	610		Metcalf St		Closed, New Business Present
153260	MSE	Performance Plus Automotive And Transmissions	1630	S	Escondido Blvd	D	Closed, New Business Present
	FSE	Pescaderia 7 Mares	758	N	Midway Dr		Closed, New Business Present
156439	Ind/Comm	Precision Metalcraft	138	N	Vinewood St	A	Closed, New Business Present
167347	MSE	Quality Truck & Auto Repair of Escondido	2040		Auto Park Wy		Closed, New Business Present
	MSE	San Diego EZ Inc	851	W	Mission Ave	B	Closed, New Business Present
	FSE	Serenity House	123	S	Elm St		Closed, New Business Present
2009121	Ind/Comm	Solar Plus	2067		Windridge Pl	C & D	Closed, New Business Present
	MSE	Sunrise Staging	2210		Meyers Ave		Closed, New Business Present
167569	Ind/Comm	True Turf Inc	1924		Mission Rd	A,B & C	Closed, New Business Present
154223	Ind/Comm	U - Store - It	1531		Montiel Rd		Closed, New Business Present
134791	Ind/Comm	Unique Lighting Systems	1234		Simpson Way	A	Closed, New Business Present
138912	Ind/Comm	Villa Del Rey	1351	E	Washington Ave		Closed, New Business Present
	FSE	Washington Caf	507	W	Washington Ave		Closed, New Business Present
137375	MSE	Rapid Transmission	260	N	Juniper St		Closed
160649	MSE	Pepe's Auto Service	740		Metcalf St	26	Moved
160947	Ind/Comm	G S C Concrete Const. Inc	1413-1419		Industrial Ave		
160330	MSE	Motorco	1602	E	Valley Pkwy		
2009002	Ind/Comm	A A A Paving & Grading	1426		Hollyhock Ave.		
134025	Ind/Comm	A.J. Cunningham	403	W	Fifth Ave	A	
2009227	Ind/Comm	Victors Towing	428	W	Sixth Ave		
	FSE	Westside Caf	912		Redwood St		Vacant
162984	Ind/Comm	Bouchey's Heat & Air	324133		Jardin Ct		Not Esc. Business

Appendix D

Supporting Information for the IDDE Component

Contents:

1. Dry-Weather Monitoring and Trash Assessment Forms
2. IDDE Corrective Action Summary

Appendix D

1. Dry-Weather Monitoring and Trash Assessment Forms

DRY WEATHER MONITORING FIELD SHEET

☐ **Routine Investigation** ☐ **IC/ID Follow-Up For**_____

GENERAL SITE DESCRIPTION

Site ID: _____ **Latitude:** _____ (GPS coordinates recorded in NAD 83 decimal deg)
Location: _____ **Longitude:** _____ **HSA:**
Date/Time: _____ **Watershed:** Carlsbad San Luis Rey San Dieguito
Observer: _____ **TB Page/Grid:** _____

Land Use 1 (primary): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Rural Res. ☐ Open
Land Use 2 (sedondary): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Rural Res. ☐ Open
Conveyance Type: ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Earthen Channel
☐ Nat. Creek ☐ Curb Gutter ☐ Other
Construction: ☐ Concrete ☐ Steel ☐ Plastic ☐ Natural Other Description

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Last Rain ☐ > 72 hours ☐ < 72 hours
Rainfall ☐ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other _____
☐ Algae ☐ Trash/Algae
Deposits ☐ None ☐ Coarse particulate ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other
Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____
Biology ☐ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☐Yes ☐ No ☐ Ponded ☐ Dry
Flow Rate: _____ gpm

Does the storm drain flow reach Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☐ No **Picture #** _____

Field Measurement Type: ☐ Field Screening ☐ Confirmation ☐ ICID ☐ Field Dup ☐ Field Blank ☐ Field Standard

Water Temp (°C)		**NH_3-N** (mg/L)		**NO_3-N** (mg/L)		**React PO_4-P** (mg/L)	
pH (pH units)		**TURB** (NTU)		**COND** (mS/Cm)		**Salinity** (%)	
Dissolved Oxygen (mg/L)		**Chlorine** (mg/L)		**Surfactants** (mg/L)		**TDS** (mg/L)	

Analytical Lab Samples Collected? ☐ Yes ☐ No

COMMENTS: _____

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert*

Width		ft
Depth**		ft
Velocity		ft/sec
Flow		gpm

Bucket / Watch Method

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe*

Diameter		ft
Depth**		ft
Velocity		ft/sec
Flow		gpm

Sketch cross section below

Trash Assessment Form

SITE ID: □□□□□□□□□□□□□□□□ **DATE:** □□□□□□□□□□□□□□□□□□□

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (□10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (□10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (□51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.

□In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

- **Complete the following section for Marginal and Poor Evaluations ONLY**

TYPE	Ranking by Type □	Potential Route (check up to 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Homeless	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

□Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent □12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Appendix D

2. IDDE Corrective Action Summary

IDDE Corrective Action Summary, FY 2011-2012

Name	Address	Date	Facility Type	Stormwater Discharge	Violation Notes	Corrective Action	Corrective Action Completed
Montanas Del Sol Apartment	700 Park Place	6/26/2011	Residential	YES	Sewer overflow	NOC	YES
Valley Max Supermarket	2040 E Valley Pkwy	6/27/2011	Commercial	YES	Sewer overflow	NOC	YES
Attention To Detail	2164 Splendorwood Pl.	7/1/2011	Residential	YES	Contractor was washing down tile roof.	NOC	YES
Tower Carpet cleaning	1244 Tower Lane	7/1/2011	Commercial	YES	Carpet cleaning wash water.	Verbal	YES
Just Like New Mobile Detailing	36345 Rhine Ct.	7/29/2011	Commercial	YES	Mobile car washing business not using containment	NOC	YES
Miller Elementary School	1975 Miller St.	8/1/2011	Commercial	YES	Wash water from the carpet cleaning	NOC	YES
Villa La Paz Apartments	1240 N. Broadway	8/18/2011	Residential	YES	Sewerage From lateral	NOC	YES
Residential	1145 Fern St	9/8/2011	Residential	YES	Water softener tank discharge	NOC	YES
Kenwood Townhouse	915-917 N Fig St.	10/17/2011	Residential	YES	Power wash waste (dried paint & wash water)	NOC	YES
Residential	1155 E. 5th Ave.	11/1/2011	Residential	YES	Used oil left in front of address.	N/A	N/A
Residential	204 E. 2nd Ave.	11/2/2011	Residential	YES	Power washing building	NOC	YES
Residential	120 E. Lincoln Ave.	11/3/2011	Commercial	YES	Wash water discharge	NOC	YES
Sterling Rose Transportation	625 Superior Ct.	11/14/2011	Commercial	YES	Wash water discharge	NOC	YES
John Herrod Automotive	1542 Sterling	11/17/2011	Commercial	YES	Wash water discharge	NOC	YES
LaBahn's Landscaping	5000 Thorne Dr Ste F La Mesa, CA	12/1/2011	Commercial	YES	Power washing activities that entered the storm drain.	NOC	YES
Tee Vega Enterprises	738 W. Washington	12/2/2011	Commercial	YES	Power washing activities that entered the storm drain.	Administrative Citation	YES
Andrew's Pressure Washing	525 W. El Norte Pkwy 111	12/6/2011	Residential	YES	Cleaning rain gutters at residential home	Verbal	YES
Grape Day Park	321 N. Broadway	12/14/2011	Residential/Park	YES	Fuel discharge (1-2 gallons) from a burning car that Fire Dept extinguish.	N/A	N/A
Bronze Artwork	1991 Don Lee Pl. D	12/15/2011	Commercial	YES	Cooling water that discharged into the storm drain.	Verbal	YES
CertaPro Painters	1305 Simpson Way ste K	12/21/2011	Commercial	YES	Wash water discharge	NOC	YES
Residential	1764 Stillwater Gln	1/3/2012	Residential	YES	Private sewer lateral overflow from single family home	NOC	
Residential	220 E 7th Ave	1/3/2012	Residential	YES	Washing machine discharge.	NOC	YES
CertaPro Painters	1305 Simpson Way ste K	1/5/2012	Commercial	YES	Wash water discharge	Administrative Citation	YES

IDDE Corrective Action Summary, FY 2011-2012

Name	Address	Date	Facility Type	Stormwater Discharge	Violation Notes	Corrective Action	Corrective Action Completed
Larry Makel	1040 Metcalf	1/5/2012	Commercial	YES	Wash water discharge	NOC	YES
Sam Beckett (resident)	2361 Cranston Dr.	1/10/2012	Residential	YES	Septic Tank Overflow	Comply with NOC	N/A
Residential	2695 Pummelo Ct	1/31/2012	Residential	YES	Discharge of wash water from bbq activities.	Administrative Citation	YES
Golden State Tire	630 Rock springs rd.	2/8/2012	Commercial	YES	Wash water discharge	NOC	YES
AT&T Yard/Correia Contracting	5157 South Santa Fe San Diego CA	2/14/2012	Commercial	YES	Wash water discharge	NOC	YES
Farmer Boys/Seven Smith Landscape	1333 E. Valley Park wy	2/21/2012	Commercial	YES	Wash water discharge	NOC	YES
Vivian's Quality Furniture	845 E. Valley Pkwy	3/12/2012	Commercial	YES	Overflowing debris and refuse from dumpster.	NOC	YES
Westco trucking	1288 Auto Park Way	3/12/2012	Commercial	YES	Vehicle fire and Fire Department extinguished the fire. NRC Environmental Services cleaned the MS4 with supervision from County DEH.	N/A	N/A
Residential	1360 Alita Lane	4/2/2012	Residential	YES	Residential Pool Discharge	Verbal Warning	YES
Kunzik & Sara Construction INC	1699 La Costa Meadows Dr 102, San Marcos, CA 92078	4/11/2012	Commercial	YES	Wash water discharge	NOC	YES
Don Nguyen	500 Fig St.	4/30/2012	Residential	YES	Wash water discharge	NOC	YES
Baoshich Vojislava	410 Sheridan Ave.	5/30/2012	Residential	YES	Septic system pump failure	N/A	N/A
Old Mill Pond	360 N. Midway	5/31/2012	Commercial	YES	Pond wash water discharge	NOC	YES
Residence	1744 W. Country Club Ln.	6/11/2012	Residential	YES	Tile cutting residue on street/curb	NOC	YES
Residential (Broadway Pines Condos)	1122-1130 N. Broadway	6/11/2012	Residential	YES	Sewer overflow from clean out	Administrative Citation	YES
Christine Weldy	2414 Lake Forest St.	6/19/2012	Residential	YES	Dry paint in curb/gutter from discharge	N/A	N/A
San Dieguito Pool Center	1627 Highcrest Pl	6/27/2012	Residential	YES	Pool Discharge	N/A	N/A
Greg Marsh	445 Corporate Dr.	7/2/2012	Commercial	YES	Runoff from pressure washing	N/A	N/A
DeeAnn Kauhi-Borgner	710 N. Quince St. 8	7/2/2012	Residential	YES	Discharge from laundry machine dumping onto ground	Verbal	N/A
Jim Farley	1930 N. Ash St.	7/2/2012	Residential	YES	Discharge of septic tank	N/A	N/A
Progressive Publishing	119 E. Grand Ave.	7/25/2012	Commercial	YES	Trail of liquid towards dumpster	Verbal	N/A

Appendix E

Supporting Information for the Fiscal Analysis Component

Contents:

1. Fiscal Analysis Report

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR JURISDICTIONAL, WATERSHED, AND REGIONAL URBAN RUNOFF MANAGEMENT PROGRAMS (JURMPS, WURMPS, RURMPS)

Copermittee:	City of Escondido
Date:	9/17/2012
Reporting Year:	FY 2011-2012

STORM WATER ADMINISTRATION	
Program Planning	74,585
Municipal Staff Training	10,840
Policy, Plan and Legal Updates	19,020
BMP reviews and/or Updates	5,000
Source Inventory Reviewsan/or Updates	25,330
Treatment Control BMP Maintenance and Certifications	8,500
Program Assessment and Reporting	64,090
Certifications and Other Fees	0
Equipment Maintenance and Operation	98,770
Field Equipment and Supplies	37,460
Office Supplies	8,255
Professional Organization and Membership	500
Safety Equipment	0
Vehicle and Equipment Purchases/Leases	0
Total	**352,350**

PERMITTING AND LICENSING	
Counter Support	50,000
Application Processing, Plan Checks, Permit Issuance, Materials	21,825
Total	**71,825**

PROJECT PLANNING AND ENGINEERING	
Project Design and Specifications	63,315
Consultant Solicitation and Contract Management	5,000
Materials, Supplies and Equipment Purchases	115,490
Total	**183,805**

COMPLIANCE INSPECTION AND ENFORCEMENT	
Residential/Business Complaint Investigation and Enforcement	15,000
Construction Stie Inspections	77,850
Municipal Inpsections	8,080
Industrial/Commercial Inspections	88,000
Total	**188,930**

BMP IMPLEMENTATION	
Street and Parking Lot Sweeping	135,580
MS4 Evaluation and Cleaning	227,195
Installation/Maintenance of Storm Drain Inserts	6,015
BMP Materials, Supplies, and Equipment Purchases	7,935
Total	**376,725**

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR JURISDICTIONAL, WATERSHED, AND REGIONAL URBAN RUNOFF MANAGEMENT PROGRAMS (JURMPS, WURMPS, RURMPS)

EDUCATION AND OUTREACH	
Materials Development	500
Outreach Material Production	6,420
Staffing Outreach Events	51,820
Total	58,740

WASTE COLLECTION AND RECYCLING	
Waste Disposal and/or Recycling	129,915
Total	129,915

WATER QUALITY MONITORING	
Dry Weather	40,450
Field Sampling Equipment, Materials, or Supplies	2,500
Special Investigations	4,780
Total	47,730

WATERSHED MANAGEMENT SAN DIEGUITO WATERSHED	
Administration	15,000
Wateshed Cost Share	2,100
Total	17,100

WATERSHED MANAGEMENT CARLSBAD	
Administration	12,000
Watershed Cost Share	3,675
Total	15,675

REGIONAL PROGRAM	
Administration	12,000
Cost Share Contribution	95,330
Total	107,330

TOTAL COSTS	1,550,125

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
Henry A Levin	Public Works Director	(619) 628-1369	1/25/08

CITY OF IMPERIAL BEACH

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM

ANNUAL REPORT FY 2006-07

CITY OF IMPERIAL BEACH
FY 2006-07 JURMP ANNUAL REPORT

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ATTACHMENTS

EXECUTIVE SUMMARY

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order 2001-01 the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2006 and June 30, 2007 (FY 2006-07).

The purpose of the JURMP Annual Report is threefold: 1) to document the City s compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following are highlights and major accomplishments for each major JURMP component during this fiscal year.

Municipal Component

City employees, particularly field staff, continued to implement best management practices (BMPs) to prevent illegal discharge of water and pollutants to the storm drain system. Examples of BMPs implemented at municipal facilities included:

- Vehicle washing in wash bays that drain to the sanitary sewer.
- Preventive maintenance of City vehicles to prevent fluid leakage.
- Use of high-power vacuums to capture runoff from power washing activities (i.e., during graffiti abatement and spill cleanup).
- Hand weeding of street medians instead of herbicide application. Strict limitations on use of fertilizers and pesticides.
- Monitoring of sprinkler systems to prevent over-topping onto roadways.
- Completed the alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.
- Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup at work sites.

Other notable accomplishments during FY 2006-07 were:

- Removed an estimated 8.25 tons of material through storm drain cleaning.
- Removed an estimated 148 tons of material through frequent street sweeping.
- Continued maintenance of below-ground storm water treatment devices, which trap debris before it reaches receiving waters (10th Street storm water interceptor; 12 storm drain inlet filters).
- Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions.
- Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Commercial Industrial Components

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress was made on this front during this fiscal year:

- Conducted 33 inspections of which 13 were high priority businesses, including automotive repair shops, restaurants, bars, gas stations, car washes, etc. Inspections identified a total of 18 deficiencies, half of which involved general housekeeping practices (trash on the ground, cigarette debris, etc.).
- Performed an additional 46 investigations of commercial businesses as a result of complaint referrals or staff observations in the field. This was up from 28 during FY 2005-06. A commonly observed violation was the use of water to hose down parking lots, sidewalks, and other impervious surfaces.
- Issued 13 notices of violation, 3 notices of abatement, and 15 written letters to businesses as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings.

Residential Component

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions, and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

- Identified and mitigated 50 residential violations. This compares to 20, 18, 13, and 42 in the previous four years, respectively. The most commonly observed violations involved construction debris, automotive fluids, washwater, detergents or chemicals, chlorinated swimming pool water and green waste.
- Issued 14 notices of violation and 2 notices of abatement as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings and/or letters. No fines were issued to residents during this reporting period.
- Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.
- Educated residents on environmental issues including stormwater in the City s semi-annual newsletters and a quarterly newsletter distributed by EDCO.
- Approximately 9.36 tons of household hazardous waste was properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista.
- Imperial Beach residents recycled approximately 2,440 gallons of used oil and 1,000 used oil filters at Kragen Auto Parts on Palm Avenue and through EDCO s pick-up service.

Land Development Component

The Land Development Component involves incorporating storm water and urban runoff management into the development project review process. Major accomplishments during this fiscal year included the following:

- Conditioned 51 discretionary permit applications requiring developers to maximize infiltration, minimize impervious surfaces, install treatment devices, etc. This compares to 67 projects during FY 2005-06.
- Approved Storm Water Management Plans (SWMPs) for three (3) priority development projects subject to the Standard Urban Storm Water Mitigation Plan (SUSMP).
- Discussed urban runoff management requirements with all permit applicants at project intake.

Construction Component

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. Major accomplishments during FY 2006-07 included:

- Inspected 121 active discretionary permit projects for proper deployment of construction-phase BMPs. Approximately 242 inspections were performed, but this likely underestimates the total due to the way in which inspections are tracked.
- Performed oversight of construction BMP compliance at all three (3) capital improvement projects (CIPs) that were in active construction phase.
- Issued nine (9) notices of violation and one (1) notice of abatement to construction developers and contractors as part of the oversight and enforcement process.
- Discussed urban runoff management requirements with all applicants at project intake, and emphasized requirements again during follow-up inspections.

Illicit Discharge Detection and Elimination Component

The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to complaints and referrals of urban runoff discharge violations. The following were major accomplishments during the 2006 and 2007 calendar years.

- Conducted 226 site visits as part of the dry weather monitoring program.
- Collected 27 urban runoff samples for field screening analysis. Other sites were dry or tidally influenced and were not sampled as a result.
- Submitted 19 urban runoff samples to laboratories for additional analysis of water quality parameters.
- Conducted upstream investigations whenever dry weather monitoring results exceeded a dry weather action level.

- Identified and eliminated one significant illegal discharge as a result of dry weather monitoring investigations: an ongoing, approximately weekly, discharge of over 1,000 gallons of chlorinated swimming pool water from Mar Vista High School. The Sweetwater Union High School District subsequently closed the connection between its pool filter back flushing system and the City's storm drain. Pool water is now discharged to a holding tank and then to the sanitary sewer system.
- Performed 234 urban runoff investigations, up from 113 investigations during the previous reporting period (a 100% increase). This may be attributed to the recently implemented City Wide Inspection program. Staff confirmed the presence of an illicit discharge or BMP violation in 199 instances.
- City staff participated in the cleanup of 22 illicit discharges. Cost recovery was pursued in 3 of these cases, recouping approximately $700 in costs.
- Responded to 8 sewage spills during this reporting period.

1.0 INTRODUCTION

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of the National Pollutant Discharge Elimination System Municipal Stormwater Permit Order No. 2001-01 (Order No. 2001-01 or San Diego Municipal Stormwater Permit). The JURMP was developed to address water quality issues within the City of Imperial Beach (City). With limited exception, this annual report covers activities conducted between July 1, 2006 and June 30, 2007 (FY 2006-07).

1.1 Environmental Setting

The City of Imperial Beach comprises 4.5 square miles and a population of 29,180 (U.S. Census Bureau, 2000). Jurisdictional boundaries include:

- To the east: the City of San Diego
- To the west: the Pacific Ocean
- To the north: a U.S. Naval Communications Station within the City of Coronado's jurisdiction, the Otay River, and the southern shore of San Diego Bay
- To the south: Ream Field (a U.S. Navy helicopter training facility) and the U.S.-Mexico international boundary.

The City falls within two major watersheds, or drainage basins. The northern portion of the urbanized area drains to the Otay River and San Diego Bay, while the southern portion drains to the Tijuana River and Tijuana River Estuary. Within these watersheds, a small portion of the coastal area drains directly to the Pacific Ocean via ocean outfalls. Urban runoff impacts two protected wetland areas managed collaboratively by the U.S. Fish and Wildlife Service and other state, federal, and non-profit agencies. Much of the Tijuana Estuary is located within City limits to the south, while the San Diego Bay National Wildlife Refuge Complex sits just beyond the northern jurisdictional boundary. Both wetlands harbor an impressive array of sensitive habitat and wildlife potentially impacted by urban runoff.

1.2 Regulatory Framework

In 1972, Congress passed the Federal Water Pollution Control Act, subsequently known as the Clean Water Act (CWA), which established the National Pollutant Discharge Elimination System (NPDES). Regulatory action under the NPDES initially focused on permitting discharges from traditional point sources such as factories, sewage treatment plants, and other industrial facilities. In 1987, Congress passed the Water Quality Act, both broadening the scope of the CWA and subjecting urban runoff and storm water discharges from municipal separate storm sewer systems (MS4s) to NPDES regulations.

In California, regulatory authority under the CWA is delegated to the State Water Resources Control Board (SWRCB) and its regional branches, including the San Diego Regional Water Quality Control Board (SDRWQCB). The SDRWQCB issued its first regional NPDES permit for municipal stormwater discharges in the early 1990s. A Permit with significantly expanded requirements was re-issued on February 21, 2001. Imperial Beach is one of 21 Copermittees subject to Order 2001-01, also known as the San Diego Municipal Stormwater Permit.[1]

In response to the issuance of Order 2001-01, the City of Imperial Beach developed a JURMP, which was adopted by its City Council on February 6, 2002. The JURMP lays out the City's policies in regard to urban runoff management within its jurisdictional boundaries. Requirements are enforced locally through the City of Imperial Beach Municipal Code, particularly the Urban Runoff Management and Discharge Control Ordinance (Chapter 8.30.) and the Standard Urban Storm Water Mitigation Plan (Chapter 8.32.), both of which were also approved by City Council in 2002.

This report demonstrates City compliance during the FY 2006-07 reporting period. It also documents City efforts to reduce pollutants in urban runoff discharges to the maximum extent practicable (MEP).

1.3 Report Contents

This Annual Report serves multiple purposes. It is reviewed by SDRWQCB staff to evaluate the City's compliance with applicable Permit requirements and account for the accomplishments and achievements realized by the City during this reporting period. In addition to this regulatory function, the City uses the report as a management tool to preserve, enhance, and restore the quality of the water resources, assess program effectiveness, and to document past and future modifications to its JURMP.

The Annual Report is organized into the following sections:

1. Introduction
2. Municipal Component
3. Commercial and Industrial Components
4. Residential Component
5. Land-Use Planning for New Development Component
6. Construction Component
7. Illicit Discharge Detection and Elimination Component
8. Education and Public Participation Components
9. Assessment of JURMP Effectiveness Component
10. Fiscal Analysis Component
11. Special Investigations
12. Conclusions and Recommendations

[1] Other Copermittees include the County of San Diego, the Port of San Diego, the San Diego County Regional Airport Authority, and all incorporated cities within San Diego County.

Sections 2, 3, and 4 detail the programs and activities that have been implemented to address urban runoff from existing development, i.e., municipal facilities, commercial businesses, and residential areas. Programs to manage runoff from existing development generally consist of the implementation of best management practices (BMPs), education, and third-party oversight, including inspections and enforcement performed by City staff. Section 5 describes how the City incorporates urban runoff management requirements into its land-use planning, development review, and permitting processes. Section 6 describes the implementation of programs to address runoff from construction sites. Section 7 describes efforts to detect and eliminate illegal discharges and unauthorized connections to the MS4. Section 8 summarizes the education and public participation activities undertaken over the reporting period. Section 9 assesses the effectiveness of JURMP activities using an assessment strategy developed regionally by the Copermittees. Section 10 presents the City's stormwater program budget for FY 2007-08. Section 11 describes special investigations implemented in support of the City's urban runoff program. Section 12 summarizes conclusions and provides recommendations for improving the program during FY 2006-07. The last step in the annual review process is to present revisions and amendments to the City's JURMP that are necessary to maintain compliance with Order 2001-01, to reduce the discharge of pollutants to the MEP, and to ensure that urban runoff does not cause or contribute to a violation of water quality standards.

1.4 Participation in Regional and Watershed Activities

In addition to the jurisdictional activities described herein, the City also participates with regional and watershed partners to manage urban runoff through collaborative efforts. Regional activities undertaken during this reporting period are summarized under separate cover in the Common Activities Section submitted by the County of San Diego on behalf of all Copermittees. The City also participates in two Watershed Urban Runoff Management Programs (WURMPs). These efforts address urban runoff and shared water quality problems in the San Diego Bay and Tijuana River Watersheds. Various City activities implemented during FY 2006-07 are also described in the San Diego Bay and Tijuana River WURMP Annual Reports, which are submitted under separate cover.

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2.0 Municipal (Existing Development) Component

Order 2001-01 requires the City to prevent and reduce pollutants in urban runoff that may result from municipal activities and facility operations. The Municipal Component consists of the following elements:

- Identification of high priority municipal facilities and activities
- Establishment of minimum BMP requirements for municipal operations
- Training of municipal employees
- Implementation of BMPs
- Oversight of municipal BMP implementation

This section describes the activities conducted during FY 2006-07 in support of the City's Municipal Component. Attachment 2-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

2.1 Identification of high priority municipal facilities and activities

The City maintains and annually updates a prioritized inventory of municipal sites and activities with the potential to generate pollutants in runoff. In addition to the mandatory high priority sites called out by the Municipal Storm Water Permit, the City's JURMP outlines additional criteria for assigning high, medium, and low priority status to municipal facilities based on the following factors: 1) activities conducted on site, 2) materials used, 3) wastes generated, 4) facility size, 5) pollutant discharge potential, and 6) proximity to receiving water bodies. The City's municipal facility inventory has been reviewed and updated in preparing this report. There are currently 33 municipal facilities, the following 18 of which are designated high priority:

- 1 Corporate Yard
- 7 Parking Lots
- 3 Parks
- 1 Administration Building
- 1 Pier
- 4 Types of MS4 Structures
    - Catch Basins (Approximately 100)
    - Underground Pipes (Approximately 5 miles)
    - Brow Ditch Channels (Approximately 4,000 feet)
    - 1 Storm Water Pump Station
- All City Streets

Of the remaining 15 facilities, eight are ranked as medium priorities and seven as low priorities. An updated inventory is included as Attachment 2-2.

2.2 Minimum BMP requirements for municipal operations

JURMP Tables 2-4 through 2-8 lay out the minimum BMPs required to be implemented at all municipal facilities during this reporting period. Municipal BMP requirements were thoroughly reviewed in preparation of this report. No changes are necessary.

2.3 Training of municipal employees

Storm water training for municipal staff during FY 2006-07 consisted of the activities described in the table below.

Staff Training Events
FY 2006-07

Date	Training Session	Attendees	Topics
8/22/06	Storm Water Program Training for New Public Works Employee	1	Overview of storm water components, JURMP elements, complaint reporting procedures. Ride-along to several construction sites, storm drain outfalls, etc. Emphasized need for eyes and ears in field and what constitutes a storm water violation.
8/23/06	Storm Water Program training for new Public Works employee	1	Overview of storm water components, JURMP elements, complaint reporting procedures. Ride-along to several construction sites, storm drain outfalls, etc. Emphasized need for eyes and ears in field and what constitutes a storm water violation.
10/4/06	Annual program training for Building Official and Building Inspector	2	Review of construction-related JURMP requirements, including BMPs, SWMP forms, inspection procedures, enforcement actions, and information tracking.
12/4/06	Environmental Program training for Council Member-elect	1	Overview of all elements of Imperial Beach s JURMP and WURMP programs.
3/27/07	Recycling and waste reduction information presented to Public Works Department	27	Proper recycling procedures for Municipal Staff and background on AB 939 requirements including importance of recycling by the City, its residents, and businesses in order to meet diversion rates and comply with local and state laws.
5/17/07	Integrated Pest Management (IPM)	2	Environmental Program Specialist and Parks and Facilities Supervisor attended IPM training. Topics included importance of IPM to environmental quality, landscape retrofitting for reducing pesticide and runoff, and implementing IPM practices on parks and tidelands areas.
5/30/07	Storm Water Program Training for New Public Works Employee and GIS consultant	2	Overview of storm water components, JURMP elements, complaint reporting procedures. Ride-along to several construction sites, storm drain outfalls, etc. Emphasized need for eyes and ears in field and what constitutes a storm water violation.

2.4 Implementation of BMPs

The following section summarizes municipal BMP implementation during FY 2006-07. It is not intended to be an exhaustive documentation of all BMPs implemented by the City. Rather, it focuses on particularly noteworthy BMPs, special projects, and other BMPs that are easily quantified.

2.4.1 Pollution Prevention BMPs

The City continues to emphasize pollution prevention (P2) as the first line of defense in its efforts to manage runoff from municipal areas and activities. P2 practices are distinct from traditional BMPs, and can be broadly categorized under the term source reduction.[1] In contrast, traditional BMPs contain, capture, or treat pollutants after they have been generated or released to the environment. Some examples of ongoing P2 practices implemented by the City are listed in the table below.

Pollution Prevention Measures Implemented During Routine City Activities

Activity	Pollution Prevention Measures
Vehicle Maintenance	o Routine, preventive maintenance is conducted on all City vehicles to prevent leakage. o Recycled oil is purchased for use in all City vehicles. o Used oil, fluids, tires, batteries, and other hazardous wastes are properly recycled.
Graffiti Removal	o Dry methods such as scraping are attempted first in removing graffiti from buildings and other surfaces, limiting the use of water. o If dry methods fail, Bio-D, a non-toxic chemical is utilized to wipe graffiti from its surface. o Power washing is only used as a last resort, and graffiti removal staff carries a vacuum at all times to ensure that the residual wash water does not enter the storm water conveyance system.
Landscape Maintenance	o Grass cuttings and other landscape waste collected from parks, street medians, sidewalk parkways, and other public areas are recycled as green waste and used as alternative daily cover at the local landfill. o Soil is regularly aerated to encourage natural infiltration and reduce runoff. o The goal of municipal landscapers in complying with the City's Integrated Pest Management (IPM) Program is to avoid using pesticides or herbicides, and to minimize the use of fertilizers. Medians and sidewalks are hand-weeded as an alternative to pesticide use. o Any fertilizer application is performed during the dry season or when no rain is forecast. o Sprinkler systems are monitored weekly to ensure that they do not overtop roadways or other hardscape surfaces that drain into the storm drain conveyance system. o Watering schedules are routinely monitored and modified according to seasonal and weather conditions.

[1] Source reduction is defined as any practice which reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment prior to recycling, treatment, or disposal. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. *Pollution Prevention Act of 1990, United State Code Title 42, Chapter 133, 13101 Findings and Policy*

Activity	Pollution Prevention Measures
Sanitary Sewer Maintenance	o Sanitary sewer pipes are cleaned annually, or more frequently if necessary, to prevent blockages that may result in overflows or breaks. Preventive maintenance reduces the likelihood of sanitary sewer releases to the environment. o The City completed its goal of having all sewer pump stations alarmed to reduce the likelihood of an undetected system failure and subsequent sewer discharge to the environment. Currently, 10 of 11 sewage pump stations are alarmed. Effluent from the only unalarmed station would flow to another pump station if an overflow occurred, so in effect, all pump stations are now alarmed. o City staff performs daily pump station inspections as well as regularly scheduled preventive maintenance.
Street Maintenance	o The City continually inspects streets to determine if the current street sweeping schedule is sufficient to minimize storm water pollution. o Additional bi-monthly street inspections are conducted to identify, among other things, persistent or noticeable MS4 pollutant sources.

2.4.2 MS4 Maintenance, Street Sweeping, and Treatment BMPs

The following is an inventory of the City's municipal separate storm sewer system (MS4), including various structural treatment BMPs installed and maintained by the City:

- Approximately 5 miles of underground drainage pipes
- Approximately 100 catch basins / inlets
- Approximately 100 miles of streets
- 8 open drainage channels (approximately 4,000 feet)
- Storm Water Pump Station (Palm Avenue street end at Seacoast Drive)
- Low-Flow Urban Runoff Diverter (Date Avenue at Seacoast Drive)
- Vortechs System Storm Water Interceptor (10th St. at Imperial Beach Blvd.)
- 12 Storm Drain Filter Inserts at municipal facilities maintained by the City

<u>Routine MS4 Maintenance (Catch Basins, Manholes, Underground Pipes, and Open Channels)</u>

Routine maintenance and cleaning keeps accumulated debris in the MS4 from reaching and impacting receiving waters. It also ensures that the storm water conveyance system is functioning properly for the purposes of flood control. The City's Public Works Sewer Division has an annual goal of cleaning 100% of the MS4 between May 1 and September 30, prior to the rainy season. Due to staffing shortages, storm drain cleaning was approximately 67% complete by the end of September 2006. The 100% cleaning target was met on November 14, 2006, prior to the onset of most of the significant rain events.

Following each cleaning event, Sewer Division staff completes Inspection Form 2-C, City of Imperial Beach Storm Drain Cleaning & Maintenance, which documents the condition of the MS4, and provides estimates of the quantity and type of material removed. The following are MS4 cleaning statistics from June 13 to October 30, 2007. The figure below compares the totals for 2007 to activity in previous years.

- Quantity of Material Removed[2] □16,500 lbs. (8.25 tons)
- Type of Material □73□ Sediment, 14□ Trash, 13□ Debris (Rocks, Leaves, Wood, etc.)
- Manholes / Inlets Cleaned □168
- Open Drainage Channels Cleaned □8

Storm Drain Conveyance System Cleaning Totals (2002-2007)

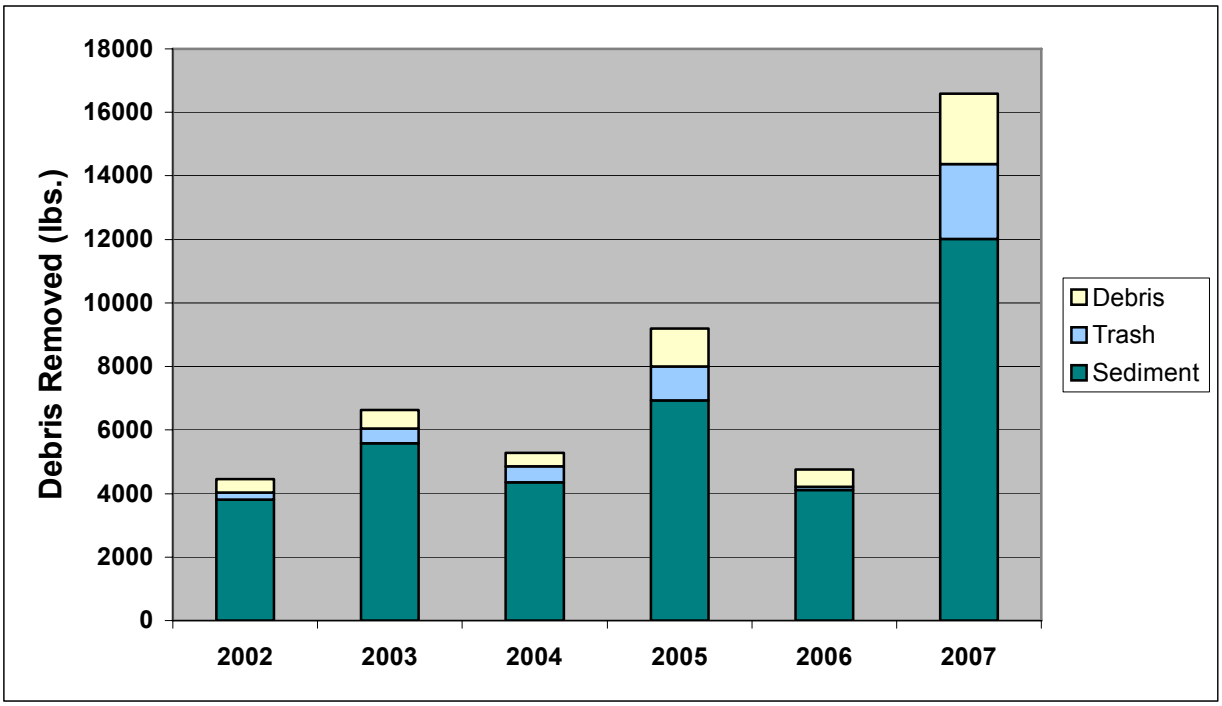

Street Sweeping

Frequent sweeping of streets, alleys, and commercial areas is an important component of the City□s urban runoff management program. The material that accumulates on streets is quickly washed through the MS4 and into receiving water bodies such as estuaries, bays, and the ocean. The City contracts street sweeping duties with EDCO Disposal Corporation, which sub-contracts actual implementation to Clean Streets, Inc. Sweeping frequencies vary by land use and location and are listed in the table below.

Street Sweeping Frequency
FY 2006-07

Area Type Description	Details	Frequency Schedule
Commercial o Palm Ave. / Hwy. 75 o Imperial Beach Blvd. o 13th St. (between Palm Ave. & I.B. Blvd.) o 9th St. (between Palm Ave. & I.B. Blvd.) o 3rd St. (all)	19.2 curb miles □ 4 parking lots Civic Center Parking Area Parking Lot (Elkwood/Seacoast)	Weekly (Mondays)

[2] Quantities removed are estimates. Quantities estimated in 2007 may be due to transitions in personnel.

Area Type Description	Details	Frequency Schedule
o Elm Ave. (between Seacoast Dr. & 7th St.) o Seacoast Dr. (all)	Parking Lot (Seacoast/Elm) Dunes Park	
Beachfront Residential Streets o From Seacoast Drive to 3rd Street	9.6 curb miles	Twice Monthly (Alternate Mondays)
All Other Residential Streets	80.5 curb miles	Monthly (Varies by neighborhood)
Paved Alleys	18.6 curb miles	Monthly (Varies by neighborhood)
Total	**127.9 curb miles** **4 parking lots**	

Clean Streets, Inc. swept approximately 2,392 curb miles during FY 2006-07, resulting in the collection of 148 tons of material. Collected material was estimated as 10 sediment, 70 sand and gravel, 10 trash, and 10 organic debris (leaves, etc.). The figure below shows the trend in estimated street sweeping collection totals from 2002 to 2007. The City continues to conduct regular inspections of sweeper effectiveness on a monthly basis. Parking restrictions are in place in the residential areas from Seacoast Drive to 3rd Street from 7:00 to 11:00 a.m., which greatly assists in increasing sweeping effectiveness in this area. All identified deficiencies and public complaints regarding street sweeping during this reporting period were immediately investigated and corrected.

Vortechs System Storm Water Interceptor

The City installed a Vortechs System Storm Water Interceptor at the corner of 10th Street and Imperial Beach Boulevard in December 2002. The system is designed to remove sediment, floating hydrocarbons, and debris from storm water during all levels of flow. The City continued to perform regular maintenance on the interceptor during this fiscal year. During this reporting period, the interceptor trapped a total of 20 pounds of material, separate from the total MS4 cleaning quantities reported above. This cleaning solely encompassed the trash collection chamber, and collected material was estimated as 80 trash and 20 sediment.

Street Sweeping Removal Totals
2002-2007

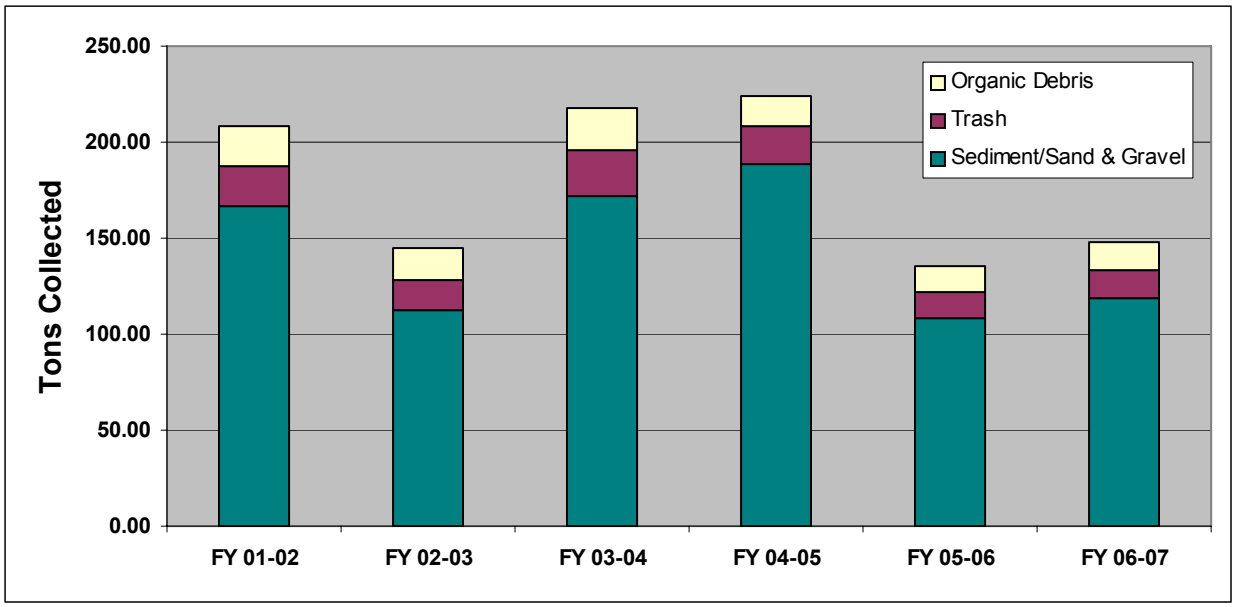

Storm Drain Inlet Filters

The City has voluntarily installed twelve storm drain inlet filters at the municipal locations listed in the table below. A total of four additional inlet filters were installed during this reporting period. Each filter is designed to capture sediment, hydrocarbons, litter, foliage, etc., while allowing nuisance runoff and storm water to flow through. The City contracts with a maintenance company to regularly service the devices to ensure that they continue operating at peak efficiency. Maintenance involves quarterly cleaning and removal of accumulated debris, as well as the replacement of filtration booms as necessary. The following table presents a summary of filter cleaning and material removal during FY 2006-07.

Storm Drain Inlet Filter Locations Maintenance
FY 2006-07

Name	Location	Installation Date	Cleanings FY 06-07	Quantity Debris Removed	Materials Collected
SDF1	495 10th St. Rear of Public Works Yard	10/13/03	4	16 lbs.	Sediment, Organics
SDF2	495 10th St. Public Works Parking Lot	10/13/03	4	7.75 lbs.	Sediment, Organics
SDF3	825 Imperial Beach Blvd. City Hall Parking Lot	10/13/03	4	41.5 lbs.	Sediment, Organics
SDF4	825 Imperial Beach Blvd. Fire Station Parking Lot	10/13/03	4	4.5 lbs.	Sediment, Organics

Storm Drain Inlet Filter Locations Maintenance
FY 2006-07

Name	Location	Installation Date	Cleanings FY 06-07	Quantity Debris Removed	Materials Collected
SDF5	8th St. / Marina Vista Marina Vista Center	1/13/03	3	88 lbs.	Sediment, Organics
SDF6	Seacoast Drive / Palm Ave. City Parking Lot	1/13/03	3	0.88 lbs.	Sediment, Organics
SDF7	Hemlock Ave. / 15th St. Residential Neighborhood	1/12/05	4	0	
SDF8	839 10th St. Alley b/w Elm & Donax	11/3/05	4	14.5 lbs.	Sediment, Organics, Trash
SDF9	Alley abutting 8th St. 100 yd. South of Palm	2/5/07	2	3.25 lbs.	Sediment, Organics, Trash
SDF10	Alley b/w 8th St. / Delaware St. just south of Palm Commercial Ctr.	2/5/07	2	50 lbs.	Sediment, Organics
SDF11	Curb inlet at SW corner 9th St. / Palm Ave.	2/22/07	2	35 lbs.	Sediment, Organics, Trash
SDF12	740-798 Florida St. Alley behind apartment complex	5/17/07	1	15 lbs.	Sediment, Organics

Low-Flow Urban Runoff Diversion

The City completed construction of a low-flow urban runoff diversion system at the corner of Date Avenue and Seacoast Drive in September 2004. This project was financed in part through Proposition 13 Clean Beaches Initiative (CBI) grant funds. It is the second of three CBI projects intended to address elevated levels of bacteria at local beaches. The first project completed was the South Bay Coastal Ocean Observing System (SBCOOS), which is designed to provide real-time measurements of key oceanographic parameters relevant to understanding the complex coastal transport mechanisms present in the region. The Date Avenue Low-Flow Urban Runoff Diversion Project (Date Avenue Diverter) was the first of two planned low-flow urban runoff diversion systems designed to divert nuisance flows from the storm drain system to the sanitary sewer, thereby eliminating a potential source of bacteria during dry weather and other low-flow conditions.

A second diversion project is planned for the Palm Avenue street end at Seacoast Drive. In July 2006, the City received clearance to move forward with its project, and at this time, construction is in the planning and development stages. The City has been awarded an extension on the grant fund timeline and the project is scheduled for completion in 2008.

2.4.3 Sewer System Maintenance and Spill Prevention

The City conducts routine maintenance on its sanitary sewer system to prevent spills and discharges to the MS4. Most sanitary sewer pipelines are cleaned at least

annually, and known problem areas are cleaned more frequently throughout the year. Twelve sewage pump stations are monitored daily. All pump stations alarmed to reduce the likelihood of an undetected system failure and subsequent sewer discharge to the environment. During FY 2006-07, nearly all of the City's 39.5 miles of underground sewer pipes were cleaned.

In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. Response procedures include notifications and response requests, response activities, investigations, clean-up activities, reporting, record keeping, and education/enforcement. The Public Works Sewer Division is notified of any spills from private laterals and septic systems. Calls to report spills during non-business hours are routed to the Sheriff Dispatch number, and the on-call sewer personnel are notified to resolve the situation.

Eight sewage spills were reported in Imperial Beach during this reporting period, two of which originated at private laterals. The City responded to all eight spills. An estimated total of 1,134 gallons of sewage was spilled and an estimated 194 gallons (or 17%) was recovered within the City. This is a lower recovery percentage than the previous four reporting periods (87%, 86%, 64%, and 20%, respectively). However, a total of 268 gallons were spilled with an estimated 15 gallons recovered at the Imperial Beach Pier, which is under the jurisdiction and maintenance of the Port of San Diego (Port). These were reported by the City of Imperial Beach because the Port has no spill reporting mechanism in place with the State of California. Therefore, the City was responsible for an estimated 21% recovery during this reporting period, compared to 20% the previous reporting period. Required reports were filed and forwarded as required in the City's Sanitary Sewer Overflow Response Plan.

The City will continue to be proactive in identifying potential sewer maintenance problems and take corrective actions before an overflow occurs. Identified trouble spots are on a more frequent inspection and cleaning schedule. As new areas are identified, the list of trouble spots is modified accordingly. The City is currently in the process of conducting a sewer capacity study. In addition, a sewer system management plan is being developed, and one of the components is a Chain of Communication, which will be disseminated to the public for reporting of spills. It is anticipated this educational effort will allow the public to correctly report spills. During this reporting period, a spill occurred in which the public did not place the call to the correct number, which delayed the response effort and resulted in only 22% of the spill being recovered.

Lateral sewer overflows are addressed by educating homeowners and business owners about the causes of overflows and corrective actions for dealing with blockages or partial blockages.

2.4.4 Beach Tidelands Maintenance

The City has a Tidelands Maintenance Division, funded by the Port of San Diego, whose mission it is to keep the beachfront area clean and free of trash and other debris. A crew of employees picks up trash, sand, seaweed, and other debris from the beach and one block inland of the beach seven days a week. This is in addition to a contract

with Partners With Industry (PWI), which employs disabled adults to pick up trash in the tidelands area. Prior to any forecasted storm event, Tidelands employees are instructed to concentrate their efforts on removing any accumulated trash and debris from the storm gutters in the vicinity of the Tijuana Estuary and the Pacific Ocean along Seacoast Drive. The City also maintains a contract with the Donovan Correctional Facility, a state prison which provides supervised labor to the City for various needs, including landscaping, trash cleanup, etc.

2.4.5 Management of Pesticides, Herbicides, and Fertilizers

Order 2001-01 identifies pesticides, herbicides, and fertilizers as storm water contaminants of concern. The City is responsible for a variety of municipal facilities including parks, landscaping areas, green ways, rights-of-way, and the tidelands area, which may require the application of these substances. As identified in the JURMP, the City has adopted and continues to comply with the Integrated Pest Management (IPM) Plan. IPM is the trend in pest management that supports moving away from reliance on pesticides, and toward an integrated approach using environmentally friendly pest control techniques.

The City limits its application of pesticides, herbicides, and fertilizers at all facilities. If necessary, the City has a qualified employee that applies these materials under the direction of a pest control advisor. The City employs various alternatives to pesticides, including hand weeding, using mulch and fabric for suppression, pruning, scheduling irrigation, etc. In addition, the use of native vegetation is encouraged to reduce the use of herbicides and fertilizer.

2.5 Oversight of municipal BMP implementation

The City has identified 18 high priority municipal facilities. All 18 high priority sites were inspected quarterly during this reporting period. Inspections included a review of activities and practices, review and inspection of site BMPs, and a review of the overall effectiveness of the BMPs.

Staff also inspected all 15 medium and low priority sites during the course of routine City activities. As indicated in the City's JURMP, follow-up inspections are to be conducted whenever non-compliance is observed. No significant issues of non-compliance were identified during this reporting period.

Revisions to the Municipal Component

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

2.7 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Municipal Component during FY 2007-08.

Existing Activities

- Continue to inspect all municipal facilities for BMP compliance
- Continue to inspect and clean the entire MS4 between May 2007 and September 2007
- Continue to sweep streets at the frequencies described above
- Continue to limit the application of fertilizers, pesticides, and herbicides
- Continue to inspect and clean the entire sewer system annually
- Continue daily cleanups in the beach and tidelands area
- Continue to conduct annual storm water training for City employees
- Continue to inspect and maintain all treatment BMPs (interceptors, diverters, inlet filters)
- Install the second of two dry weather low-flow diversion systems at the Palm Avenue outfall

New Activities Under Consideration

- Research and identification of a location for a structural treatment control upstream of the H-3 outfall (behind Bayside Elementary in the Otay River Watershed) is still underway. This control is needed to address trash and debris originating from commercial uses in the upstream drainage area. Design and installation of this structural control are currently included in the City's capital improvement project budget for FY 2007-08.
- Complete sewer capacity study and development of Sewer System Management Plan. Educate the public including employees on proper reporting of spills, including Chain of Communication.

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3.0 Commercial and Industrial Components

The Commercial and Industrial Components consist of the following activities intended to reduce pollutants in runoff from businesses in Imperial Beach:

- Identification of high priority commercial and industrial businesses
- Establishment of best management practice (BMP) requirements for businesses
- Outreach and education to business owners and operators
- Oversight of commercial and industrial BMP implementation
- Enforcement of commercial and industrial non-compliance

The section describes the activities conducted in support of the City's Commercial and Industrial Components during FY 2006-07. Attachment 3-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

3.1 Identification of high priority commercial and industrial businesses

There were only two businesses classified as "industrial" actively operating in the City of Imperial Beach during FY 2006-07. TNT Surfboards, 536 13th Street, is considered a low priority industrial site since it operates under a Notice of Non-Applicability (NONA) issued by the SWRCB. City staff has spoken with TNT representatives all work is performed indoors. It should also be noted that an important industrial use within the City's jurisdictional limits, but one not subject to direct oversight by the local municipality, is the Naval Outlying Field (NOLF), a helicopter training facility operated by the United States Navy.

Order 2001-01 delineates several categories of commercial business as mandatory high priorities for the purposes of prioritization and inspection. Cities have the discretion to designate additional commercial businesses or business categories as high priorities based upon compliance history, proximity to receiving waters, and other relevant information. There are 93 high priority commercial businesses operating in the City of Imperial Beach. The table below summarizes the types of high priority commercial businesses in operation. A complete watershed-based inventory is included as Attachment 3-2 to this report.

Commercial business activity in Imperial Beach is primarily concentrated in three areas: the Palm Avenue corridor (Highway 75), along Seacoast Drive between Palm Avenue and Imperial Beach Boulevard, and 13th Street between Palm Avenue and Imperial Beach Boulevard. Most high priority businesses (84%) are located within the Otay River Watershed. Over half (56) are eating and drinking establishments or food markets. Other facility types include automotive repair shops (13), gas stations (6), etc. Overall, commercial land uses account for approximately 3% of total land use in Imperial Beach.[1]

[1] www.sandag.org

High Priority Businesses in Imperial Beach by Category	Watershed		
Commercial Business Category	**Tijuana Watershed**	**Otay Watershed**	**Citywide Total**
Eating & Drinking Establishments	8	43	51
Automotive Businesses	0	13	13
Gas Stations	2	4	6
Food Markets	2	4	6
Auto Sales	0	4	4
Car Washes	1	3	4
Large Retail	0	3	3
Trailer Parks	0	3	3
Industrial	0	1	1
Other Commercial	1	3	4
Total	**14**	**81**	**95**

3.2 Establishment of BMP requirements for businesses

Minimum BMP requirements for commercial and industrial businesses are described in two source documents: the City's *Urban Runoff Management and Discharge Control Ordinance* and the Imperial Beach JURMP. Commercial and industrial BMP requirements have been reviewed for applicability and no changes are necessary at this time.

3.3 Outreach and education to business owners and operators

The City recognizes the importance of educating business owners, operators, and employees about effective BMP implementation. Since adoption of the Permit, the City has utilized multiple methods to notify local businesses about their regulatory obligations. These include:

- Distribution of the *"Best Management Practices for Your Business"* brochure (see Attachment 3-3) during routine business inspections and complaint investigations. As previously reported, the City mailed this brochure, which summarizes BMP requirements in a simplified format, to all businesses (approximately 375) in September 2004. The brochure highlights several important BMPs, including tips for proper housekeeping, appropriate disposal of wash water, material storage and handling, and waste management. The City encourages business owners and operators to use the brochure as a training tool for all employees. The brochure has been slightly revised since initial printing and an additional 250 brochures were printed at the end of FY 2006-07. This brochure is also available for viewing on the City's Web site at www.cityofib.com.

- Distribution of the "*Green Wrench Guide*" and "*What's Cookin' Guide*" to automotive businesses and restaurants as appropriate (see Attachment 3-4). The City has ordered a supply of "*What's Cookin' Guides*" translated in Spanish to better serve the needs of its community.

- The JURMP, the Urban Runoff Management and Discharge Control Ordinance, and additional BMP guidance for businesses are available as a resource on the City's Web site.

Other business outreach initiatives during FY 2006-07 included:

- Face-to-face Interaction. The City met with personnel from over 47 high priority businesses during routine business inspections and other complaint investigations.

- City Website. There are several items of information available on the City's Environmental Division website. Materials include: 1) JURMP, 2) Urban Runoff Management and Discharge Control Ordinance, 3) BMPs for Commercial Businesses.

3.4 Oversight of commercial and industrial BMP implementation

The City uses three mechanisms to oversee BMP implementation at commercial and industrial businesses.

- Commercial Business Inspection Program. Routine inspections, which are scheduled in advance, consist of a face-to-face meeting with the business owner or operator, a walk-through of the facility, evaluation of BMPs, and development of a corrective action plan if necessary. At the end of each inspection, the City inspector reviews the "*Best Management Practices for Your Business*" brochure with site managers and encourages its use as a training tool for all on-site employees. Beginning in January 2006, the City began mailing out completed inspection reports to businesses. This is an attempt to memorialize the inspection results in writing.

- Response to Complaints and Field Observations. The City is advised of non-compliant businesses (fixed and mobile) by many sources; residents, City staff, and other businesses are the most common referral sources. Some violations are visually observed by Stormwater staff in the course of day-to-day field activity.

- Review of structural treatment BMP maintenance records. The City requires certain commercial businesses, as part of the development / redevelopment process, to install and maintain structural treatment BMPs to detain and/or treat water runoff before it enters the storm water conveyance system. City staff endeavors to review commercial facilities' BMP maintenance records on a regular basis.

Commercial Business Inspection Program

The City conducted 53 scheduled inspections at 35 businesses during FY 2006-07. Inspections identified a total of 24 deficiencies. One-half of the deficiencies were housekeeping related as illustrated in the figure below. Inspection results are summarized in the table below and described in detail in Attachment 3-7.

Commercial Business BMP Deficiencies as Noted During Inspections FY 2006-07

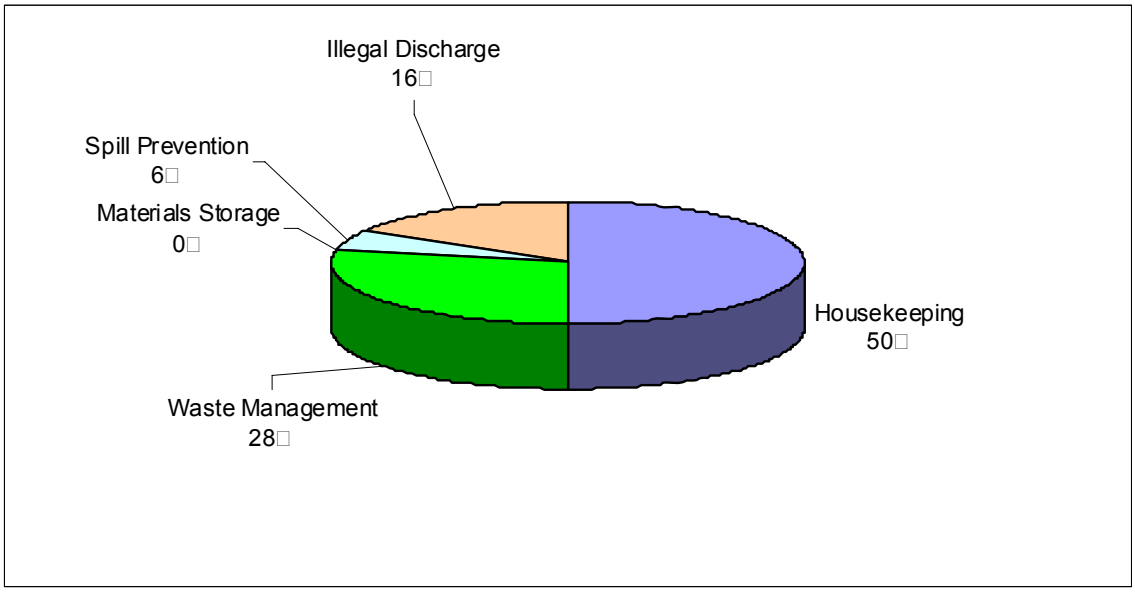

Scheduled Inspections of Commercial Businesses

Category	Businesses	Follow-up Inspections	Total Inspections
Automotive	9	4	13
Eating and Drinking	12	9	21
Gas Stations	6	2	8
Large Retail	1	0	1
Food Market	5	3	8
Other	2	0	2
Total	**35**	**18**	**53**

Response to Complaints and Field Observations

An additional 46 investigations of commercial businesses were conducted as a result of complaint referrals or staff observations in the field. As shown in the table below, field investigations involved 21 fixed businesses and 25 mobile businesses. Discharge types and pollutants of concern varied significantly from case to case, but a violation commonly encountered was the improper use of water to hose down parking lots, sidewalks, and other impervious surfaces, and discharge of wash water into the storm drain system. This will be the focus of future outreach efforts to businesses in Imperial

Beach. Attachment 7-3 presents detailed documentation regarding each illicit discharge investigation involving a commercial business.

Response to Complaints and Field Observations (Commercial Business)
FY 2006-07

FIXED COMMERCIAL BUSINESS	AUTO FLUIDS	1
	CHEMICALS	1
	COOKING OIL & GREASE	2
	DETERGENTS	1
	TRASH & DEBRIS	7
	WASHWATER	5
	SEWER SPILL	2
FIXED COMMERCIAL BUSINESS Total		**19**

MOBILE BUSINESS	AUTO FLUIDS	3
	SEDIMENT	4
	GREEN WASTE	1
	CONSTRUCTION DEBRIS	10
	PAINT	2
	POOL WATER	1
	WASHWATER	2
MOBILE BUSINESS Total		**23**

Review of Structural Treatment BMP Maintenance Records

The following is a summary of known structural BMPs currently in place at commercial businesses in Imperial Beach. Storm drain inlet filters have been installed at the following locations pursuant to either redevelopment conditions imposed by the City or City recommendations following inspection:

- Wally's IGA (836 Palm Avenue) – 4 storm drain filter inserts
- SavOn Drug Store (888 Palm Avenue) – 3 storm drain filter inserts
- 13th Street Market (1126 13th Street) – 4 storm drain filter inserts and 1 parking lot drain capture system
- Tunes & Lubes, Etc. (741 Palm Avenue) – 1 storm drain insert filter.

For those structural treatment BMPs installed pursuant to redevelopment conditions, the City conducts an annual review of maintenance records to verify that the filters are being properly cleaned out. According to the most recent documentation, the filters at the Imperial Beach Promenade (Wally's and SavOn Drug Store) are currently being serviced three times per year. The filters at the 13th Street Market were last serviced in September 2006. Maintenance records are not yet available for the Tunes & Lubes location.

3.5 Enforcement of commercial and industrial non-compliance

This section describes the enforcement actions taken against violating businesses during FY 2006-07. Totals include actions taken in response to observations made during scheduled inspections as well as complaint investigations. Verbal warnings were usually sufficient to encourage a quick return to compliance. Notices of Violation (NOVs) were issued in instances when the violation had a substantial impact on the storm drain conveyance system or receiving waters, or when return to compliance was expected to be more complex or time-consuming. In all cases, a City inspector verified return to compliance. A full accounting of enforcement actions can be found in Attachments 3-7 and 7-3.

Commercial Enforcement Actions (FY 2006-07)

Enforcement Action	Actions Taken Against Businesses in FY 2006-07	
	Fixed Commercial Businesses	Mobile Businesses
Verbal Warnings	8	12
Written Letter & Brochure	6	9
Notice of Abatement	2	1
Notice of Violation	6	7
Total	**22**	**29**

3.6 Revisions to the Commercial and Industrial Components

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

3.7 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Commercial and Industrial Component during FY 2007-08.

<u>Existing Activities</u>

- The City will continue to focus on inspecting high priority commercial businesses. To simplify the process for determining which businesses to target for inspection, the City has developed the following flow diagram:

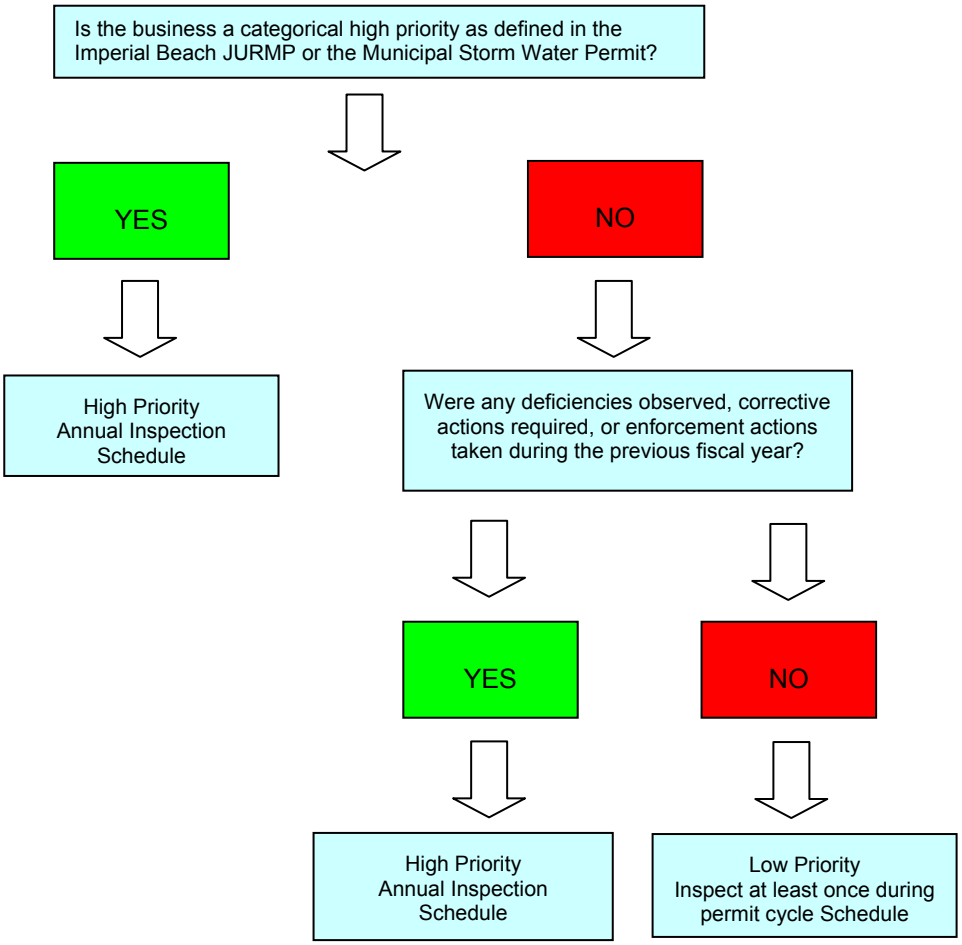

- City staff continues to respond to all complaints of illicit discharge and other non-compliance at commercial and industrial businesses. Enforcement measures are taken as necessary to ensure compliance.

- Continue pro-active surveillance program that entails driving or walking by commercial areas on a regular basis to identify illegal discharges and other violations. This approach supplements routine inspections, and takes advantage of the fact that business activity in Imperial Beach is clustered in a few dense pockets.

New Activities Under Consideration

- In addition to continuing with existing channels for educating businesses, the City is exploring a more permanent venue for distributing information on urban runoff and BMPs to all businesses. One identified venue might be through the business license renewal process.

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4.0 Residential Component

Implementation of the Residential Component involves the following activities intended to reduce pollutants in runoff from residential areas in Imperial Beach:

- Identification of high priority residential areas and activities
- Establishment of best management practice (BMP) requirements for residents
- Outreach and education to residents
- Facilitation of hazardous waste and used oil disposal
- Oversight of residential BMP implementation
- Enforcement of residential non-compliance

This section describes the activities conducted during FY 2006-07 in support of the City's Residential Component. Attachment 4-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

4.1 Identification of high priority residential areas and activities

Residential land uses in the City of Imperial Beach include single-family residences (542.6 acres), multi-family units (17.7 acres), and mobile homes (16.8 acres).[1] The total population was 29,180 as of 2000.[2] Order 2001-01 identifies the residential areas and activities that all cities must, at a minimum, designate as high priorities. These include automobile repair, maintenance, washing, and parking; home and garden care; disposal of household hazardous waste, pet waste, and green waste; and various other residential activities in close proximity to sensitive receiving water bodies. Since most of the City is in close proximity to sensitive receiving waters, all residences are considered high priorities for the purposes of managing urban runoff.

4.2 Establishment of BMP requirements for residents

The City encourages its residents, through public education and other mechanisms, to support and participate in pollution prevention (P2) activities. P2 is emphasized in nearly all outreach to the public (see Section 4.3 below for a complete accounting of residential education during FY 2006-07). The following are just a few examples of the P2 activities that are promoted in City brochures regularly distributed to Imperial Beach residents:

- Limit use of pesticides
- Regularly inspect and maintain vehicles
- Avoid excess lawn watering
- Recycle and buy recycled products (including motor oil)

[1] Figures from 2000 Census as reported on www.sandag.org.
[2] Figure from U.S. Census Bureau (2000)

The City's Urban Runoff Management and Discharge Control Ordinance establishes minimum BMP requirements for the following residential activities:

- Motor Vehicle and Boat Repair and Maintenance
- Motor Vehicle Washing
- Motor Vehicle Parking
- Home and Garden Care Activities and Product Use
- Home Care and Maintenance
- Manure and Pet Waste Management
- Private Sewer Laterals and On-site Wastewater Systems

4.3 Outreach and education to residents

The City recognizes the importance of educating residents about the impacts of urban runoff and the implementation of appropriate BMPs. Education ranges from personal interaction between City staff and residents to the publication of newsletter articles, formal presentations, and brochure distribution. Major educational initiatives targeting residents during FY 2006-07 are summarized below.

- **Personal Interaction** is a highly effective way to educate residents about storm water requirements. In response to complaints or as needed based on visual inspection, City inspectors conducted inspections of residences and provided verbal and written information on BMP implementation. City staff responded to 57 residential violations during FY 2006-07, summarized in Attachment 7-3.

- **BMP Brochures** - City inspectors regularly distribute the following BMP brochures targeting high priority residential activities: *Storm Water Runoff Pollution: Prevention Tips for Homeowners*; *Pet Waste*; *Car Washing*; *Motor Oil*; and *Lawn & Garden Care*. These brochures were made available to residents at libraries, public counters, and during various public events during this reporting period. They were also routinely distributed to homeowners and renters upon identification of non-compliance in the field. All five brochures are included as Attachment 4-2 to this report.

- **Imperial Beach City Newsletter** is a semi-annual publication mailed to all single-family homes in the City. The City has been diligent about ensuring that nearly every edition contains educational information about storm water, urban runoff, or BMPs. The Spring 2006 Newsletter contained an article on recycling. The Winter 2006 edition featured articles on the Tijuana River Watershed; Household Hazardous Waste Disposal Options; the Christmas tree recycling services offered by the City; the Citywide Garage Sale; and advertised the Annual Home Front Cleanup Event sponsored by both the City and EDCO. The Home Front Cleanup Event is an annual opportunity for residents to properly dispose of unwanted household items and debris at no cost, thereby discouraging illegal dumping. All newsletters from FY 2006-07 are included for reference in Attachment 4-3.

- **Habitat Heroes for the South San Diego Bay Wildlife Refuge Restoration Project** is a highly effective way to educate the younger residents of Imperial Beach through a hands-on learning experience out in the South San Diego Bay Wildlife Refuge. Students in grades 2 6 engage in discovering their local environment and how trash and other pollutants affect the flora and fauna at the receiving waters. This program operates throughout the school year and reaches approximately 1,000 students, who in turn take the message home to their parents and guardians.

- **Watershed Modeling** is a hands-on tool the local elementary school teachers use in their classrooms to depict the local watershed and teach BMP education. Teachers are allowed to borrow the watershed model from the City s Public Works throughout the school year.

Storm Water Urban Runoff Educational Events
FY 2006-07

Date	Activity Event	Topics
4/20/07	Distributed 77 Garage Sale Kits	Each set contains pest management tips for the following; spiders, termites, earwigs, lawn insects, gardening with good bugs, fleas and safe use and disposal of pesticides; proper disposal of Household Hazardous Waste; Car Washing brochures; a notepad and pencil advertising 1-800-RECYLING; and a pen encouraging reporting of illegal discharges

- **Special Cleanup and Waste Collection Events** Cleanup events are excellent opportunities to engage City residents in the urban runoff management program. Not only do residents participate in cleaning up their neighborhoods, City staff is also on hand to educate residents about storm water and BMPs.

Special Cleanup and Waste Collection Events
FY 2006-07

Date	Activity Event	Topics
4/28/07	I Love A Clean San Diego s Annual Creek to Bay Cleanup	The City participated with the San Diego Bay Watershed Work Group as a Program Sponsor and contributed 1,000 in sponsorship of this year s event.
4/21/07	Citywide Garage Sale	This annual event is sponsored by the City, and is intentionally scheduled prior to the Home Front Cleanup Event. Residents are encouraged to re-sell unwanted household items or donate them to charity organizations. The event is designed to reduce landfilling of bulky items and to discourage illegal dumping into City streets or waterways. 77 sellers participated in this year s event.

Date	Activity Event	Topics
5/7/07	Citywide Home Front Cleanup Event	This annual event is sponsored by the City in cooperation with EDCO Disposal. Residents are encouraged to dispose of unwanted items, including bulky items, appliances, furniture, yard waste, metal, concrete, asphalt, and home-improvement debris at a centralized location free of charge. 735 residents participated in this year s event. The cleanup resulted in the removal of approximately 130 tons of material, including trash, green waste, furniture, concrete, etc. from residential yards, homes, and properties.

4.4 Facilitation of household hazardous waste and used oil disposal

Household hazardous waste (HHW) includes televisions, computer monitors, automotive fluids, batteries, household cleaners, pesticides, paints, and other materials that are unfit for disposal in traditional landfills. If not disposed of properly, these materials can greatly impact water quality. The City s HHW disposal program is available to all residents of Imperial Beach. The City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options. Imperial Beach residents are encouraged to dispose of hazardous materials by bringing them to the City of Chula Vista s Hazardous Waste Collection Facility located at 1800 Maxwell Road. The facility is open on Saturdays from 9 a.m. to 1 p.m., except holiday weekends. Residents must show a form of identification and are charged a nominal co-payment of 5 for the disposal of up to 15 gallons or 125 pounds of HHW. The City is billed for the remaining cost, which is then reimbursed by EDCO Disposal pursuant to their waste hauling franchise agreement. The HHW Collection Facility in Chula Vista received approximately 9.36 tons (18,720 pounds) of HHW from Imperial Beach residents during FY 2006-07.

The City also offers curbside pickup service for hazardous waste. Residents must call the South Bay HHW Hotline at (619) 691-5122 to arrange for curbside pickup. There is a 10 co-payment for this service. Curbside pickup of used oil, televisions, and computer monitors is handled separately by EDCO and is also subject to a 10 fee.

Residents of Imperial Beach can recycle used motor oil by one of three methods. Curbside pickup can be arranged by calling the South Bay HHW Hotline at the number above. Residents may also take the oil themselves to Kragen Auto Parts (1025 Palm Avenue) or the HHW Collection Facility in Chula Vista. The City also operates a used oil recycling promotion for City residents. The program includes free plastic containers and funnels, which are distributed at City Hall and by EDCO Disposal. These programs assist in the prevention of the illegal discharge and dumping of used motor oil. Approximately 2,440 gallons of used oil and 1,000 used filters were recycled in Imperial Beach during FY 2006-07.

4.5 Oversight of residential BMP implementation

Oversight of residential BMP implementation consists of 1) observations made by municipal employees working in or around residential areas, 2) public complaints received through the storm water reporting hotline, and 3) systematic inspection of residential areas. The latter is a program started in May 2006. Residential inspections consist of City staff physically walking and driving through residential neighborhoods to look for illegal discharges and non-compliance with BMP requirements. Violators are either educated or issued a Notice of Violation to ensure a timely return to compliance. The residential inspection program is designed to supplement the Illicit Discharge Detection and Elimination Component of the City's JURMP. There are 39 grid areas inspected, each of which measures ½-mile in length and width. The initial goal is to inspect each grid area once per month, but this may not always be possible given variable workload over the course of the year. Since the inception of the program, residential inspections led to the detection of 37 illegal discharges, the details of which are summarized in Attachment 7-3.

Through the three mechanisms listed above, City staff identified and mitigated 50 residential violations during FY 2006-07. This compares to 42, 20, 18, and 13 in the previous four years, respectively. A complete description of each violation as well as referral sources and associated enforcement and compliance actions are summarized in Attachment 7-3.

Residential Violations by Pollutant Type FY 2006-07

AUTO FLUIDS	9
CHEMICALS	2
CONSTRUCTION DEBRIS	13
COOKING OIL & GREASE	0
DETERGENTS	3
GREEN WASTE	3
MULTIPLE	0
OVER IRRIGATION	0
PAINT	2
POOL WATER	1
POTABLE WATER	2
SEDIMENT	2
SEWER SPILL	0
TRASH & DEBRIS	3
UNKNOWN	0
OTHER	1
PET WASTE	3
WASHWATER	6
TOTAL	**50**

Residential Enforcement Actions
FY 2006-07

NOTICE OF VIOLATION	14
NOTICE OF ABATEMENT	2
NOT APPLICABLE	1
FINE/CITATION	0
VERBAL / WRITTEN WARNING	33
TOTAL	**50**

4.6 Revisions to the Residential Component

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

4.7 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Residential Component during FY 2007-08.

Existing Activities

- Continue to include articles on pollution prevention, urban runoff issues, and residential BMPs in City newsletters.
- Continue to oversee residential BMP implementation through systematic inspection and as necessary based on observation and complaint referral.
- Continue to distribute residential BMP brochures as appropriate during investigation and community events.
- Continue to participate with other Copermittees in regional and watershed efforts to educate residents about urban runoff and water quality.
- Provide educational materials to large apartment buildings to be included in their internal newsletter or to be distributed by on-site managers.

New Activities Under Consideration

- Staff will assist in the development of a regional outreach plan targeting the residential population.

5.0 Land Development Component

The City ensures that the permitting of both new development and redevelopment projects occurs in an organized and orderly fashion that reflects the vision and needs of the community, assesses the environmental issues associated with the proposed projects, and meets all applicable regulatory standards. In order to protect local receiving waters, the City has put into place several local ordinances that outline the requirements for addressing urban runoff and water quality. All significant new development and redevelopment projects must incorporate appropriate BMPs at the planning phase to prove how they will minimize impervious surfaces on site, how flow and surface waters will be redirected to pervious areas to maximize infiltration, and how storm water runoff will be minimized.

This section describes the activities conducted during FY 2006-07 in support of the City's Land Development Component, including the Standard Urban Storm Water Mitigation Plan (SUSMP). Attachment 5-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

5.1 Assessment of General Plan

The General Plan has been assessed and modified to ensure that the water quality and watershed protection principles and policies required by Order 2001-01 are addressed. The amendments to the General Plan/Local Coastal Program were approved by the City Council in September 2002. The Coastal Commission has previously refused to certify the General Plan / Local Coastal Plan amendment including water quality and watershed protection principles and policies. Staff will seek certification with the revision of the JURMP under the new Municipal Storm Water Permit during the next reporting period. No amendments or revisions to the General Plan Elements were identified this reporting period.

5.2 New Development Redevelopment Project Review

The City requires all new development and redevelopment projects to implement measures to reduce pollutants and runoff to the MEP. Until recently, the City's project review process had required that any new construction or property modification with a valuation of more than 25,000 be subject to implementing public improvements. During this reporting period, the valuation figure was increased to 50,000 to reflect rising home prices and to exclude very minor projects. Projects meeting the minimum valuation threshold are routed from the Community Development Department to the Public Works Department for review with regard to SUSMP applicability and potential storm water and urban runoff issues. Depending upon the nature of the project and the existing conditions on site, a combination of site design, source control, and/or treatment BMPs may be required as conditions of permit issuance. The following is a list of BMPs that the City most commonly requires as conditions of permit approval.

- **Divert Runoff to Pervious Surface**: This is a requirement imposed upon all development and redevelopment projects where applicable. It includes the following provisions:

    - Ensure that the hot water tank discharge is piped to discharge to the sanitary sewer system or a landscaped area. A design that has the water discharge directly into the storm drain conveyance system (onto an impervious surface that flows to the street) is in violation of the Municipal Storm Water Permit Order 2001-01.

    - No building roof or landscape water drains may be piped to the street or onto impervious surfaces that lead to the street. A design that has these water discharges directly into the storm drain conveyance system (onto an impervious surface that flows to the street) is in violation of the Municipal Storm Water Permit Order 2001-01.

    - Relocate site features to drain into landscaped area.

- **Storm Drain Improvements Treatment BMP(s) Needed**: The City frequently requires non-priority development projects to install treatment BMPs. This determination depends entirely on the nature of the site, property layout, etc. Due to the small lot sizes in Imperial Beach, treatment BMP requirements usually consist of the installation and maintenance of storm drain inlet filters.

- **Minimize Impervious Surfaces**: This may involve reducing the amount of impervious surfaces on site by requiring the addition of landscaped areas or prohibiting an increase in impervious surface areas from the property s existing condition.

- **Notification on Construction Post-Construction BMP Maintenance Requirements**: This requirement is imposed upon every development and redevelopment project in the City. It states as follows:

    - Require applicant to provide verification of post-construction BMP maintenance provisions through a legal agreement, covenant, CEQA mitigation requirement, and/or Conditional Use Permit.

    - Advise the property owner that he/she must institute BMPs to prevent contamination of storm drains, groundwater, and receiving waters during both construction and post-construction. The property owner or applicant must provide the following documents to the City of Imperial Beach before project work may begin: 1) checklist of selected BMPs and location of BMPs on project plans for review by the City, 2) certification of intent to maintain selected BMPs, 3) Storm Water Management Plan.

- Contain all construction water used in conjunction with the construction. Contained construction water is to be properly disposed in accordance with Federal, State, and City statutes, regulations, and ordinances.

- All recyclable construction waste must be properly recycled and not disposed in the landfill.

- Water used on site must be prevented from entering the storm drain conveyance system (i.e., streets, gutters, alley, storm drain ditches, storm drain pipes).

- All wastewater resulting from cleaning construction tools and equipment must be contained on site and properly disposed in accordance with Federal, State, and City statutes, regulations, and ordinances.

- Erosion Control All sediment on the construction site must be contained on the construction site and not permitted to enter the storm drain conveyance system. Applicant is to cover disturbed and exposed soil areas of the project with plastic-like material (or equivalent product) to prevent sediment removal into the storm drain system.

The City imposed one or more of the conditions above on 51 discretionary project applications during FY 2006-07 (see Attachment 5-2 for a site-by-site listing). This includes three new priority development projects that will be subject to the City s SUSMP ordinance. All three SUSMP-eligible projects were notified of applicable SUSMP requirements, but none has submitted an adequate Storm Water Management Plan (SWMP) to date. Final permits will not be issued for these priority projects until acceptable SWMPs have been reviewed and approved by City staff. The City s FY 2004-05 Annual Report noted six SUSMP projects that were initiated in FY 2004-05 but were lacking an approved SWMP. Two of these were finalized during FY 2005-06:

- 646-686 Ocean Lane (New Multi-Family Complex)
- 1146 13th Street (New Mixed Use Development)

The City approved a SWMP for the third and fourth SUSMP projects during FY 2006-07:

- 684-686 Ocean Lane (New Multi-Family Complex)
- 198-200 Palm Avenue (New Mixed Use Development)

5.3 Environmental review process

JURMP Section 6.3 continues to accurately describe the City s environmental review process. No revisions to this process were made during FY 2006-07.

5.4 Education for development project applicants

Face-to-face meetings and inspections continued to be the primary mechanisms for imparting information about storm water and urban runoff requirements to development project applicants. At project intake, all applicants are required to file Form 7-A, a checklist used to determine the applicability of storm water requirements. Certain permits involve no outside work and/or no earth disturbance. Permits that involve construction activity are required to complete Form 7-B, which spells out specific storm water requirements, including which BMPs will be implemented. In addition, conditions imposed by various City departments explain in detail the steps necessary to ensure compliance with all applicable ordinance requirements.

A draft SUSMP manual has been prepared and is undergoing revision and modification for use as a how to guide for project applicants. It describes regulatory requirements as well as the City s project review and permitting process including BMP requirements and post-construction maintenance responsibilities.

5.5 Revisions to the Land Development Component

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

5.6 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Land Development Component during FY 2007-08.

<u>Existing Activities</u>

- Continued compliance with the City s SUSMP ordinance for priority development and redevelopment projects.
- Continued compliance with the Urban Runoff Management and Discharge Control Ordinance for all projects within the City.
- Continued face-to-face meetings with applicants to educate them on the City s Storm Water urban runoff management program.

<u>New Activities Underway</u>

- The City is finalizing a SUSMP guide to be used by Community Development staff and contractors during plan review to help project applicants navigate the SUSMP regulatory process.

6.0 Construction Component

Order 2001-01 requires the City to implement a program to reduce pollutants in runoff from construction sites during all construction phases. The Construction Component consists of the following activities:

- Identification and prioritization of construction sites
- Establishment of minimum BMP requirements for construction sites
- Oversight of BMP implementation at construction sites
- Outreach and education to construction project applicants, contractors, etc.
- Enforcement of construction site non-compliance
- Reporting of non-compliant sites

This section describes the activities conducted during FY 2006-07 in support of the City's Construction Component. Attachment 6-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

6.1 Identification and prioritization of construction sites

Most construction projects in Imperial Beach are identified through the building and grading permit application process. At project intake, applicants are required to complete Form 7-A, the Storm Water Requirements Applicability Checklist (see Attachment 6-2). This form is also used to determine each project's threat to water quality, which results in the assignment of a priority designation. Prioritization takes into account several factors, including site slope, amount of disturbed area, proximity to receiving waters, and erosion potential. Since the City is largely built out, construction projects tend to be very small in scale, with most receiving a designation of low priority. Other types of construction projects include encroachment permits for work conducted within the public right-of-way and capital improvement projects (CIPs) that managed by the City.

6.1.1 Building/Grading Permits

In FY 2006-07, there were approximately 121 active discretionary permit projects with the potential to generate runoff and impact water quality as a result of construction activities (see Attachment 6-3 for a full inventory). Examples of projects not included in this inventory are electrical repair, plumbing repair, patio decks, and other projects with a very minor impact on the environment. All building and grading permits were subject to compliance with construction-phase BMPs as defined in the Ordinance, JURMP, and project-specific pollution control plans.

6.1.2 Encroachment Permits

Work performed in the public right-of-way requires prior approval by the City through an encroachment permit. The vast majority of encroachment permit projects are captured in the building / grading permit process described above. Exceptions to this include

work performed by utilities such as undergrounding and trenching. All encroachment permits were subject to compliance with construction-phase BMPs as defined in the Ordinance, JURMP, and project-specific pollution control plans.

6.1.3 Capital Improvement Projects

CIPs are construction projects managed by the City. They include the renovation, repair, or construction of City facilities and infrastructure. Attachment 6-3 contains a list of the three capital improvement projects (CIPs) that were in active construction-phase during FY 2006-07. All CIPs were subject to compliance with construction phase BMPs as defined in the Ordinance, JURMP, and project-specific pollution control plans.

6.2 Establishment of minimum BMP requirements for construction sites

The City requires contractors, homeowners, and other project applicants to comply with pollution prevention requirements and other BMPs throughout the entire course of on-site construction activities. Minimum BMPs are described in two primary source documents: the Imperial Beach JURMP and the Urban Runoff Management and Discharge Control Ordinance. The City requires all discretionary permit applicants to submit Form 7-B for review and approval prior to the start of any on-site construction activities. Form 7-B constitutes the site's Storm Water Management Plan and details the types of BMPs that will be used on site to control erosion and other types of prohibited discharges. Form 7-B was slightly modified this year to ensure ease of use and understanding for project applicants (see Attachment 6-4).

With regard to CIPs, City contractors are all required to provide written BMP plans to be implemented at their respective construction sites before the project was authorized to proceed. Pollution prevention and BMP requirements are re-emphasized at pre-construction meetings prior to the start of each construction project.

6.3 Oversight of BMP implementation at construction sites

During FY 2006-07, all 51 active discretionary permits with the potential to impact water quality were inspected for compliance with storm water BMP requirements. There were three construction sites designated as high priorities during this reporting period. An estimated 242 BMP compliance inspections were performed on these projects.[1] The number of storm water inspections per site ranged from one to three, with an average of two. Attachment 6-3 provides a list of construction inspections during this reporting period. Inspections generally included a review of BMP implementation, including erosion control practices, sediment control practices and sediment tracking controls, waste and disposal management practices, and evidence of past or present unauthorized non-storm water discharges. In addition, if there was evidence of non-

[1] This number includes the total number of inspections performed for BMPs. It occasionally happens that inspections are not entered into the City's tracking database until the end of the project. When this occurs, all inspections conducted on site are coded as occurring on the same date. In preparing this report, duplicate inspection dates were deleted in order to avoid double counting.

compliance, the City re-inspected the site to ensure compliance. All municipal construction projects (CIPs), including encroachment permits without associated building permits (i.e., utilities), were inspected daily by City staff.

6.4 Outreach and education to construction project applicants, contractors, etc.

A list of minimum BMPs addressing common construction activities has been developed and is included in the JURMP Construction Component. This information is provided to all prospective applicants. Additionally, City personnel routinely conduct face-to-face meetings with the contractors on larger projects to discuss implementation of construction BMPs prior to the start of project. All construction BMPs recommended in Forms 7-A and 7-B are also available on the City of Imperial Beach's Web site.

Three contractors performing CIP-related construction were educated about the City's JURMP requirements and minimum BMPs during pre-construction meetings. Specifications on minimum BMPs are always included in the City's public works CIP contracts. Environmental Division staff reviewed and approved all SWMPs prior to authorizing the start of work.

Finally, the City has developed a tri-fold brochure that is provided to all project applicants. The brochure provides an overview of the City's stormwater program and describes construction BMPs in some detail (see Attachment 6-5).

6.5 Enforcement of construction site non-compliance

Enforcement against construction sites typically results from observations during scheduled inspections and complaints about illegal discharges or inadequate BMPs. Through these methods, the City observed 37 violations at construction sites during FY 2006-07. Nine of these violations resulted in the issuance of a Notice of Violation and one in a Notice of Abatement. Verbal warnings or letters were sufficient to ensure a return to compliance in the remaining 27 cases. A description of each violation and the resulting enforcement action is described in full detail in Attachment 7-3.

6.6 Reporting of non-compliant construction sites

No construction sites were reported to the RWQCB as non-compliant during the FY 2006-07 reporting period.

6.7 Revisions to the Construction Component

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

6.8 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Construction Component during FY 2007-08.

Existing Activities

- The City will continue to conduct routine inspections of construction sites. The inspector will document the results of the inspection and any follow up actions, if necessary. During these inspections, the City will provide verbal direction and written materials on pollution prevention, BMP implementation, and training of staff on urban runoff issues.

- The City will continue to participate with other Copermittees in regional outreach efforts to construction contractors by participating in workshops or by preparing written materials to target contractors.

- The City will continue to construct an annual inventory of construction sites and re-evaluate the priority of construction sites.

- The City will continue face-to-face meetings with applicants at the counter to increase their knowledge of construction BMPs.

- The City will continue face-to-face meetings with all public works contractors at pre-construction meetings to provide information about construction BMPs.

- Continue to make the construction BMPs tri-fold brochure available at the City Hall and Public Works business counters.

New Activities Underway

- Improve the tracking of storm water inspections at construction sites.

- Develop a new user-friendly construction BMP brochure.

7.0 Illicit Discharge Detection and Elimination Component

Illicit discharges and connections (ID/ICs) to the MS4 can be a significant source of pollutants. Order 2001-01 requires Copermittees to detect, investigate, and eliminate ID/ICs in a timely manner. This section describes implementation of the City's Illicit Discharge Detection and Elimination Program during FY 2006-07. Attachment 7-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

7.1 Dry Weather Monitoring Program

Dry weather urban runoff monitoring is one of several tools utilized by the City to identify ID/ICs to its MS4. Each year between May 1 and September 30 – the dry weather season – City staff collects samples from storm drain outfalls, street gutters, and other areas where urban runoff is commonly found. Where water volume is sufficient for collection, samples are analyzed in the field for several water quality parameters. This is referred to as "field screening". A sub-set of collected samples is also sent to a certified laboratory for additional analysis. Laboratory analysis is performed for pollutant concentrations that cannot be readily ascertained in the field.

Field Screening Water Quality Parameters

- Nitrate
- Ammonia
- Reactive phosphorous
- Temperature
- pH
- Turbidity
- Electrical conductivity

Laboratory Analytical Parameters

- Dissolved Cadmium
- Dissolved Copper
- Dissolved Zinc
- Dissolved Lead
- Oil & Grease
- Total Hardness
- Bacterial Indicators
- Organophosphate Pesticides
- MBAS (Surfactants)

Timely follow-up investigations are undertaken whenever a sample result exceeds pre-determined action levels that have been established regionally by the San Diego Municipal Storm Water Copermittees. Upstream investigations are intended to identify and eliminate the pollutant source if possible.

This report presents two full years of dry weather monitoring data (2006 and 2007). Consistent with the methods outlined in the JURMP, dry weather sample collection is organized according to a grid system. The City is divided into 39 grid sections (Grid A through Grid MM) each measuring one-quarter mile in length and width. In addition, there are approximately 30 outfalls throughout the City that convey urban runoff from the MS4 to receiving waters. Each grid section is visited at least once per year, and major storm drain outfalls are visited and sampled more frequently. Due to the small size of most drainage areas in the City, it is often the case that outfalls or entire grid

areas are found to be dry during monitoring investigations. Although staff typically schedules its dry weather monitoring activities to coincide with low tides, many outfalls are tidally impacted during both low and high tide conditions. Tidal influence frequently impacts staff's ability to collect urban runoff samples.

Summary of Dry Weather Monitoring Activity	2006	2007
Outfalls/Grids Visited	30	11
Outfall/Grid Visits	45	20
Field Screening Samples Collected	17	10
Samples Submitted for Lab Analysis	11	8

Attachment 7-2 presents all field screening and laboratory data for 2006 and 2007. The "Comments" field also summarizes the results of upstream investigations whenever a water quality parameter was observed to exceed its action level. Attachment 7-2 includes a map displaying sample locations.

2007 Dry Weather Field Screening Results

Total Samples 12 0 Grid Samples 12 Outfall Samples	Water Temp(C)	pH	Ammonia (mg/l NH3-N)	Turbidity (NTU)	Nitrate (mg/l NO2-N)	Conductivity (ms/cm)	Reactive Phosphorus (mg/l)
Exceedances / Field Samples	N/A	0/11	5/11	N/A	0/11	N/A	4/11
Mean	21.0	0.0	3.3	6.4	0.0	2.5	2.9
Median	20.1	0.0	3.6	2.3	0.0	1.3	2.8
Max	26.6	0.0	5.06	25.2	0.0	8.9	3.9
Min	18.8	0.0	1.46	0.9	0.0	1.0	2.0

During the 2007 dry weather season, field screening exceedances were most commonly observed for ammonia (45% of samples) and reactive phosphorous (36% of samples). Not all constituents were sampled during follow up investigations.

2007 Dry Weather Laboratory Analytical Results

Total Samples 9 0 Grid Samples 4 Outfall Samples 4 Manhole Samples 1 Other Sample	Oil Grease (mg l)	MBAS (mg l)	Total Hardness (mg l)	Cadmium (ug l)	Copper (ug l)	Lead (ug l)	Zinc (ug l)	Diazinon (ug l)	Chlorpyrifos (ug l)	TotColiform (mpn 100ml)	FecColiform (mpn 100ml)	Enterococcus (mpn 100ml)
Exceedances Lab Samples	0/5	0/5	N/A	0/5	2/7	0/5	0/5	0/4	0/4	4/7	3/7	1/7
Mean	ND	ND	247	ND	24	ND	45	ND	ND	545185	43555	25400
Median	ND	ND	235	ND	30	ND	49	ND	ND	550150	80065	80250
Max	ND	ND	357	ND	51	ND	72	ND	ND	1100000	160000	160000
Min	ND	ND	169	ND	ND	ND	ND	ND	ND	300	300	500

2006 Dry Weather Field Screening Results

Total Samples 17 5 Grid Samples 12 Outfall Samples	Water Temp(C)	pH	Ammonia (mg l NH3-N)	Turbidity (NTU)	Nitrate (mg l NO2-N)	Conductivity (ms cm)	Org. Phosphorus (mg l)
Exceedances Field Samples	N/A	2/17	7/17	N/A	0/17	N/A	7/17
Mean	24.6	7.40	4.1	33	0.6	1.360	3.2
Median	23.8	7.18	3.0	9	0.0	1.280	2.7
Max	37.0	9.04	10.0	136	3.0	72.850	10.0
Min	17.8	6.35	0.0	0	0.0	0.051	0.0

2006 Dry Weather Laboratory Analytical Results

Total Samples 11 1 Grid Samples 10 Outfall Samples	Oil Grease (mg l)	MBAS (mg l)	Total Hardness (mg l)	Cadmium (ug l)	Copper (ug l)	Lead (ug l)	Zinc (ug l)	Diazinon (ug l)	Chlorpyrifos (ug l)	TotColiform (mpn 100ml)	FecColiform (mpn 100ml)	Enterococcus (mpn 100ml)
Exceedances Lab Samples	0/11	0/11	N/A	0/11	5/11	0/11	0/11	0/11	0/11	3/11	2/11	2/11
Mean	1.4	0.28	647	ND	34	ND	58	ND	ND	187535	26869	16428
Median	0.5	0.25	272	ND	46	ND	41	ND	ND	50000	ND	500
Max	6.2	0.60	4370	ND	126	ND	219	ND	ND	1600000	160000	160000
Min	ND	ND	153	ND	ND	ND	ND	ND	ND	ND	ND	ND

During the 2006 dry weather season, field screening exceedances were most commonly observed for ammonia (41 of samples) and reactive phosphorous (35 of samples). This is consistent with the 2005 results in which follow-up investigations failed to uncover a definitive source of these pollutants.[1] Laboratory analysis was performed for eleven samples. Dissolved copper was the parameter that most commonly exceeded its dry weather action level (45 of samples). However, it should be noted that four of the five dissolved copper exceedances were observed at a single location Outfall E-1B, which drains urban runoff into the Tijuana River Estuary. One or more bacterial indicators exceeded dry weather action levels in a total of three samples.

A close look at the dry weather monitoring data reveals a few trends. Significant findings are presented by major outfall or pollutant source below.

- **Outfall E-1B (Grove 5th Street) Tijuana River Estuary Watershed**
  This outfall has been sampled on a regular basis since 2003. Sample results indicate consistently elevated levels of dissolved copper and periodic detection of chlorine. City staff conducted an in-depth investigation into this drainage area during FY 2006-07. The outfall drains primarily residential areas, portions of Imperial Beach Boulevard, and runoff from Mar Vista High School. On June 20, 2006, during routine dry weather monitoring activity, staff observed over 1,000 gallons of water emptying from the outfall into the Tijuana River Estuary. Sample results indicated high levels of chlorine and dissolved copper. Upstream investigation confirmed that Mar Vista High School maintenance staff had discharged chlorinated water as part of its weekly back flushing of the high

[1] Results from 2005 show that car washing was directly observed or suspected in three instances. Another case involved a resident draining pool water to the MS4. The City's provisional hypothesis is that persistent exceedances of ammonia and reactive phosphorous action levels may be the result of lawn irrigation (fertilizer wash off), car washing activities, or other sources yet to be determined. Too few laboratory samples were analyzed in 2005 to produce any definitive conclusions.

school's swimming pool filters. Subsequent discussions with staff from the Sweetwater Union High School District revealed that the pool maintenance room was designed with a pipe connecting the back flush system to a storm drain pipe that leads to Outfall E-1B. At the City's request, this connection was closed off in early July 2006. In its place, the District constructed a 600-gallon holding tank that now discharges back flush water directly to the sanitary sewer. The new system cost approximately $6,000 to construct and its operation was inspected and verified by City staff on July 13, 2006. It was hypothesized that this solution would remedy both the chlorine and dissolved copper issues (copper-based algaecides being a frequently used pool chemical). However, subsequent dry weather monitoring conducted on August 22, 2006 indicated no chlorine, but a dissolved copper concentration that continued to exceed its hardness-based dry weather action level. The City plans to continue its investigation of dissolved copper inputs in the E-1B drainage area during the FY 2006-07 reporting period.

- **Outfall S-1 (Southeast corner of Ream Field) – Tijuana River Watershed**
  This outfall has been visited regularly since 2003. It drains several blocks of residential neighborhoods in Imperial Beach, a small portion of the City of San Diego, and the eastern edge of Ream Field, a U.S. Navy helicopter training facility. Elevated levels of ammonia and reactive phosphorous have been frequently detected at this site. The City samples at the end of the outfall where runoff accumulates into a large pond of stagnant water. Upstream investigations have yet to be successful in pinpointing a specific source of the elevated pollutant levels; however, it would seem to be consistent with runoff from lawn irrigation (fertilizers). The City will continue to monitor and provide outreach in this area, but due the small size of the Imperial Beach contribution to this drainage basin, further study is not a high priority at this time.

- **Outfall H-3 (Behind Bayside Elementary School) – Otay River Watershed**
  This outfall has been visited on a regular basis since 2003. It is heavily influenced by tidal water and flushing is poor, both of which make isolating the outfall's urban runoff contribution a difficult task. A common observation over the last four years has been the presence of trash and debris around the outfall. It is unclear whether most trash is coming from tidal inputs after rain events, from upstream urban runoff, or from some other source. Potential upstream trash sources in this drainage area are the 9th and Palm shopping center (south of Palm Avenue), the Imperial Beach Promenade shopping center (north of Palm Avenue), and Palm Avenue itself from about 10th Street to Delaware Street. The Imperial Beach Promenade shopping complex installed six catch basin filters pursuant to redevelopment conditions imposed by the City several years ago. It continues to submit filter maintenance documentation to the City on a regular basis. Otherwise, investigation of this drainage area is ongoing. The City's capital improvement project (CIP) budget for FY 2007-08 has money set aside for installation of a structural treatment BMP. Although more study is needed, the H-3 Outfall is currently under consideration for installation of a treatment BMP that would capture trash from upstream sources.

7.2 Investigation of Illicit Discharges and Illicit Connections

Procedural Overview

The City of Imperial Beach Urban Runoff Management and Discharge Control Ordinance (I.B.M.C. 8.30) prohibits discharges and connections to the MS4 with only limited exception. City staff and members of the public are encouraged to report illicit discharges and other urban runoff violations to environmental staff for investigation. A storm water hotline, (619) 424-4095, continues to facilitate this type of reporting. Outside of business hours, the hotline's recorded message refers callers to the County Sheriff's 24-hour dispatch office. The following JURMP sections include an illicit discharge detection and elimination component:

- Municipal Component – The City relies heavily upon field staff to identify and mitigate illicit discharges and connections to the MS4. Especially given the small size of the City, there is ample opportunity for field staff to observe violations and report them to environmental inspectors. Field staff also plays an integral role in responding to spills and cleaning up discharged material.

- Existing Development Components – Routine inspection of residential and commercial areas may reveal illicit discharges resulting from operations and activities being conducted in these areas.

- Construction Component – Routine inspection of construction sites may reveal illicit discharges resulting from construction work being conducted throughout the City.

- Public Education – The City has developed a series of brochures addressing activities that may contribute pollutants to the storm drain system. All brochures publicize the City's storm water hotline to encourage the general public to report illegal discharges and spills.

The six-step procedure outlined in the JURMP is closely followed during all illicit discharge responses. The procedures, as well as a laminated map of the conveyance system, are on-hand in all City work vehicles. The City also boasts dedicated vehicles that are equipped with power washers and vacuum pressure units capable of recovering most spills. Notices of Violation or Abatement are often issued, both of which require the discharger to immediately cease the discharge and clean up discharged material if possible. If the responsible party is unable to clean up the material to the City's satisfaction in a timely manner, City staff will perform the clean up and then recover the cost of the clean up from the property owner.

ID IC Investigations During FY 2006-07

The City performed 234 urban runoff investigations during FY 2006-07. Staff confirmed the presence of an illicit discharge or connection in 199 instances. A responsible party was identified in 156 cases. The following tables and charts summarize the types of violations observed and other informative statistics.

Referral Sources for Urban Runoff Investigations FY 2006-07

Non-Environmental City Staff	56
Environmental Staff	150
General Public	25
Business	3
Total	**234**

Violator and Pollutant Types for Urban Runoff Investigations FY 2006-07

Violator Type	Auto Fluids	Chemicals	Construction Debris	Cooking Oil & Grease	Detergents	Green Waste	Multiple	Over Irrigation	Paint	Pool Water	Potable Water	Sediment	Sewer Spill	Trash & Debris	Unknown	Other	Pet Waste	Wash Water
Construction			16				1					12		2				2
Commercial Business	1	1		2	1								2	7				5
Mobile Business	3		10			1			2	1		4						2
Unknown/Illicit	8					2			4			1		21	1		1	
Resident	9	2	13		3	3			2	1	2	2		3		1	3	6
Property Management	2		1			2		2	2		1			19				
Other	1		2			1						1	1			1		
Totals	**24**	**3**	**42**	**2**	**4**	**9**	**1**	**2**	**10**	**2**	**3**	**20**	**3**	**52**	**1**	**2**	**4**	**15**

Illicit Discharge Violator Classification FY 2006-07

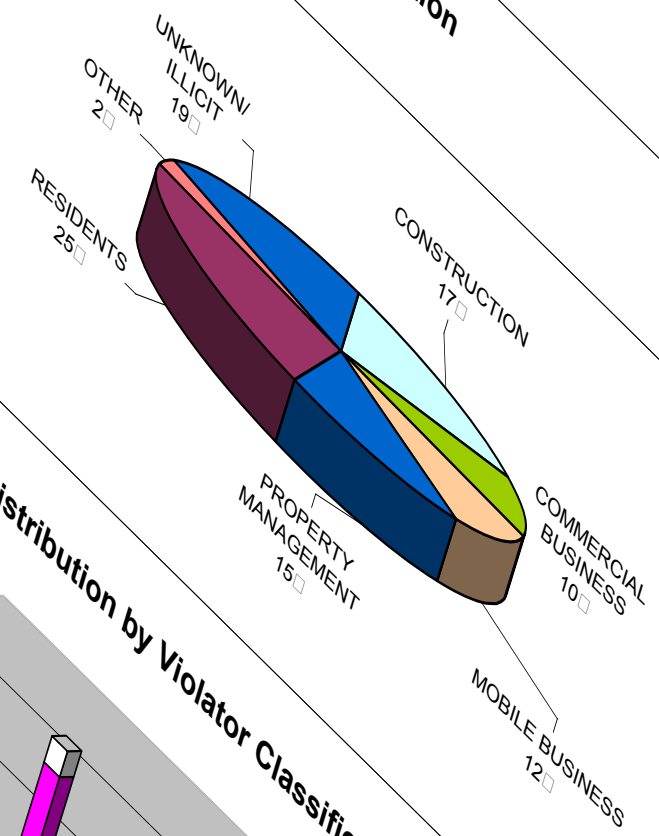

Pollutant Type Distribution by Violator Classification FY 2006-07

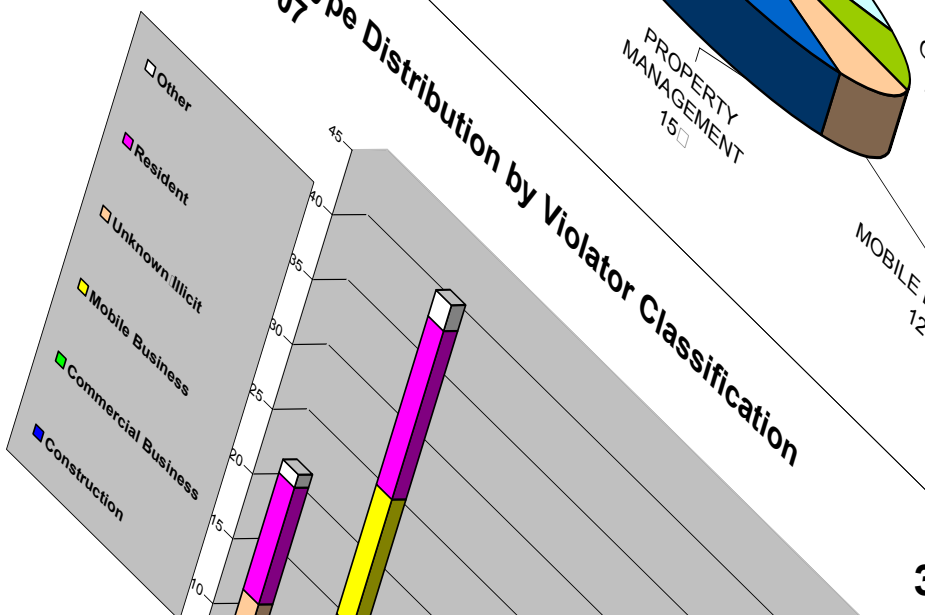

All urban runoff investigations were pursued until a satisfactory outcome could be attained. Usually, this involved remediation of spilled materials, elimination of illicit connections to the MS4, and/or installment of BMPs to prevent future discharges. Unless the illicit discharge is of immediate danger to public health or the environment, violators are typically given the first opportunity to clean up spilled materials. If unable or unwilling to do so, or if a violator cannot be identified, City staff is enlisted to perform the cleanup at the property owner's expense. During FY 2006-07, City staff participated in 22 illicit discharge cleanups. Cost recovery was pursued in three of these cases, recouping approximately $700 in costs.

Attachment 7-3 presents a detailed description of each ID/IC investigation, including remedial steps and enforcement actions if any were taken. The City relies on a host of tools to ensure compliance. The following is a summary of enforcement actions taken during FY 2006-07.

Enforcement Actions Resulting from ID/IC Investigations
FY 2006-07

Verbal Warning	79
Informational Letter	58
Notice of Abatement / Violation	56
Fine / Citation	1
Total	**194**

7.3 Prevention of and Response to Sewage Spills

The City responded to eight sewage spills during FY 2006-07. Approximately 194 gallons of the 1,134 gallons spilled were successfully recovered. Attachment 7.4 presents further details on each sewage spill and the City's response. Section 2 of this report describes the City's efforts to reduce sewage spills in greater detail.

7.4 Disposal of Used Oil and Toxic Materials

City-sponsored disposal and recycling programs resulted in the proper disposal and recycling of 2,440 gallons of used oil, 1,000 used oil filters, and 9.36 tons of household hazardous waste. Both programs are described in more detail in Section 4.3 of this report.

7.5 Revisions to the JURMP

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

7.6 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Illicit Discharge Detection and Elimination Component during FY 2006-07.

Existing Activities

- Continue to conduct annual dry weather monitoring
- Continue to investigate ID/ICs, including appropriate mitigation of materials and enforcement action against violators where appropriate
- Continue to investigate and mitigate sewage spills throughout the City
- Continue to support the highly successful used oil recycling and household hazardous waste collection programs for residents

New Activities Underway

- Continue investigation of elevated dissolved copper levels at Outfall E-1B.
- Continue investigation of the persistent presence of trash at Outfalls E-1, F-1, and H-3.
- City staff is working with property management companies to reduce pollutants from their properties. This includes the installation and maintenance of structural treatment control BMPs and/or treatment control BMPs in the form of landscaping or retention basins to detain and/or treat water runoff before it enters the storm water conveyance system. Thus far, two companies have installed and are maintaining structural treatment control BMPs, and the City will monitor and report on materials collected in future reports.

8.0 EDUCATION PUBLIC PARTICIPATION COMPONENTS

City efforts to educate target audiences about urban runoff, BMPs, and other aspects of water quality are described in Section 2, 3, 4, 5, and 6 along with a variety of public participation events held during FY 2006-07. In addition, the City conducted a public hearing on January 16, 2008 prior to approval of this JURMP Annual Report. The public hearing was noticed in the January 3, 2008 edition of the Imperial Beach *Eagle & Times* Newspaper. Public hearing notices were posted at City Hall and the Imperial Beach Public Library. Finally, a draft final report was made available for public viewing at Imperial Beach City Hall from January 2 through January 16, 2008.

Attachment 8-1 and Section 9 of this report describe effectiveness assessment measures related to the Education and Public Participation program components.

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9.0 EFFECTIVENESS ASSESSMENT

Order 2001-01 requires the City to evaluate the effectiveness of its urban runoff management activities over the short- and long-term. When JURMPs were initially developed in 2002, the San Diego Municipal Storm Water Copermittees agreed to report on a series of programmatic measures that would be tracked over time to demonstrate progress (see Attachments 2-1, 3-1, 4-1, 5-1, 6-1, 7-1, and 8-1). It quickly became apparent that simple measures of program activity, though useful in describing level of effort, were not helpful in describing the effect of program implementation on water quality change. Recognizing this, Copermittees set out to develop a framework that would provide guidance for refining and improving effectiveness assessment strategies. In October 2003, the Copermittees submitted to the RWQCB a *Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. The purpose of this document was threefold. It defined the role of effectiveness assessment in the context of both program planning and implementation. It laid out key management questions that would assist Copermittees in asking and answering the right assessment questions. And perhaps most importantly, it described a hierarchy of program outcomes that attempts to link program implementation activities with other measures of effectiveness such as changes in awareness, behavior, pollutant loadings, and receiving water quality. The hierarchy of outcomes is shown graphically in the figure on the next page.

This section presents both qualitative and quantitative assessment measures for each JURMP component to provide an overall picture of program effectiveness. It is organized according to the hierarchy of outcomes described above. In general, Outcome Levels 1, 2, and 3 can be addressed on a jurisdictional basis. Some Level 4 measurements of load reductions can be addressed at this scale, but for the most part, assessment of changes to water quality (Levels 4, 5, and 6) are best addressed at the watershed or regional scale. It should be noted that methodologies to link lower level outcomes with higher level, water quality-based outcomes are still in their infancy. The Copermittees first attempt at a long-term effectiveness assessment, which involved close analysis of water quality trends at the watershed and sub-watershed scale, was submitted to the RWQCB in August 2005 as part of the Report of Waste Discharge.

9.1 Municipal Component Effectiveness

Review of the City s Municipal Component reveals many strengths and very few weaknesses. A major strength is that field staff receives at least annual training on urban runoff management as it relates to their job duties. This is paying dividends in that 88 (206) of all illicit discharges investigated during FY 2006-07 were uncovered by City employees, up from 61 during the previous reporting period. All municipal facilities and activities are inspected at least annually, and many are inspected on a daily basis. The City has been extremely proactive in identifying opportunities for upgrading its infrastructure with pollution reduction in mind. Among the many treatment BMPs currently in place are: 1) a Vortechs storm water interceptor at 10th Street and Imperial Beach Boulevard; 2) a low-flow urban runoff diverter at Date Avenue and

Seacoast Drive; 3) storm drain inlet filters at twelve locations around the City; and 4) porous pavement incorporated or planned for incorporation into various CIP projects. Additional treatment BMPs are planned for implementation in the future. For example, a second low-flow diversion system is planned for Palm Avenue and Seacoast Drive. The City also conducts daily cleanups of the beach and tidelands area, which helps protect the Pacific Ocean and the Tijuana Estuary from excessive trash and debris. Finally, an intensive preventive maintenance program is in place for the sewer system, which involves daily inspections of pump stations and associated infrastructure, and the development of a Sewer System Management Plan is underway.

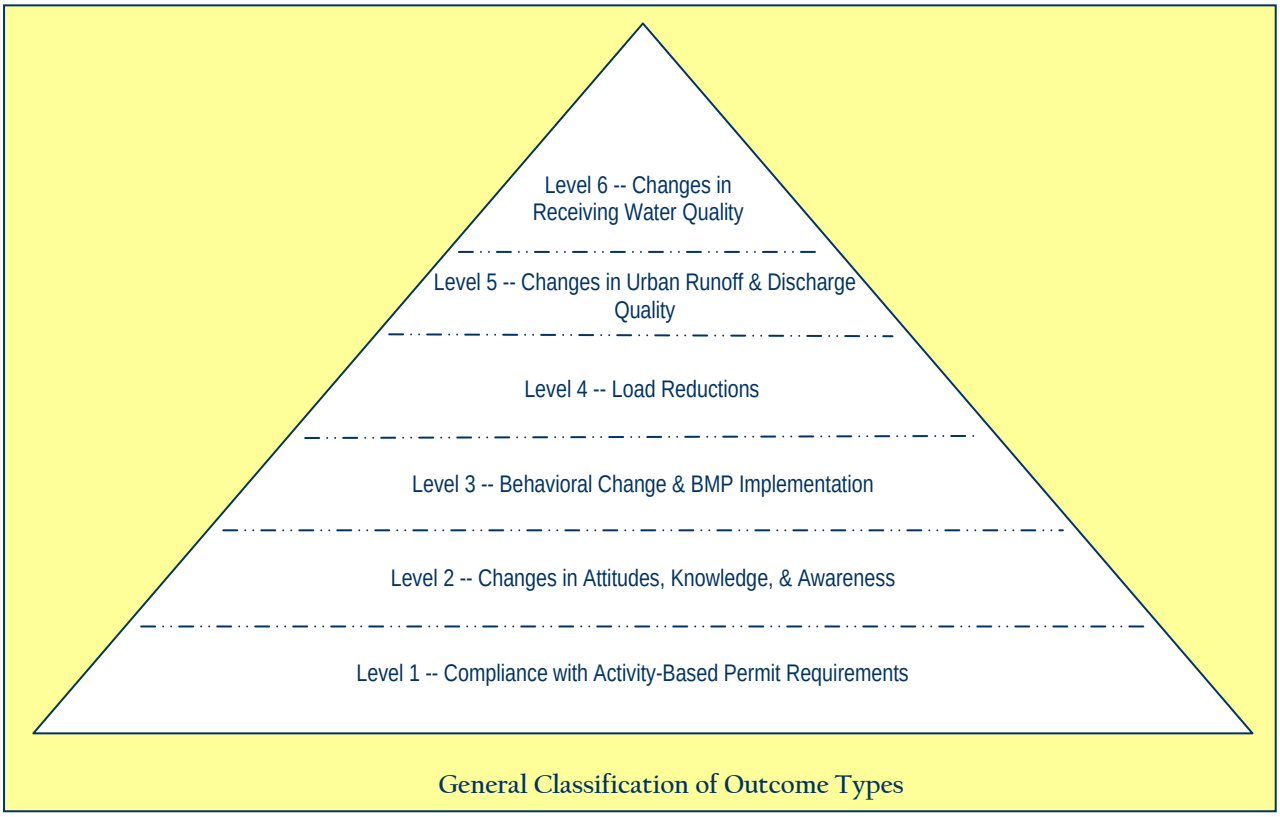

General Classification of Outcome Types

9.1.1 Level 1 Outcomes □ Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Municipal Component requirements:

Permit Section	Requirement	Compliance Measure
F.3.a.1	Municipal staff shall implement P2 methods where appropriate	17 municipal P2 methods were identified in JURMP Table 2-1
F.3.a.2	Annually update watershed-based inventory of municipal land use areas and activities	Municipal inventory updated and included as Attachment 2-2

Permit Section	Requirement	Compliance Measure
F.3.a.3	Prioritize municipal inventory according to threat-to-water quality	18 high priority municipal facilities and 15 medium/low priority facilities are identified in Attachment 2-2
F.3.a.4	Require and implement minimum BMPs for high, medium, and low priority municipal facilities	BMP requirements are specified in JURMP Tables 2-4 through 2-8. Minimum BMPs were implemented at all municipal facilities.
F.3.a.5	Inspection and removal of accumulated waste from MS4 between May 1 and Sept. 30; additional cleaning as necessary between Oct 1 and April 30; record keeping of cleaning and quantity of waste removed; proper disposal of waste; measures to eliminate waste discharge during MS4 maintenance and cleaning	MS4 cleaning completed between: June 2007 Oct 2007 Quantity removed described in Section 2.4.2
F.3.a.6	Implement BMPs during pesticide, herbicide, and fertilizer application	No pesticides/herbicides used. BMPs used during all fertilizer applications.
F.3.a.7	Inspect all high priority municipal facilities at least annually	18 high priority sites inspected 15 medium and low priority sites inspected
F.3.a.8	Conduct enforcement for municipal violations	No enforcement required during this reporting period

9.1.2 Level 2 Outcomes Changes in Knowledge and Awareness

No direct measurement of changes in municipal employee awareness was conducted during this reporting period. However, there are some indirect measures suggesting that field staff is knowledgeable about the principles and practices of urban runoff management. For example, 206 of the 234 illicit discharges and connections investigated during this reporting period (88) were identified and reported by municipal staff. This compares to 69 of 113 reported by municipal staff during FY 2005-06 (61). All field staff also received training on their in-the-field urban runoff management responsibilities. Direct measurement of employee awareness through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because sufficient oversight measures are in place to monitor BMP implementation on a daily basis.

9.1.3 Level 3 Outcomes Changes in Behavior (BMP Implementation)

There are few simple methods for measuring changes in the level and quality of BMP implementation at municipal facilities. All employees are trained in appropriate urban runoff management practices related to their job duties. No violations were uncovered during routine inspection of municipal operations during this reporting period. Due to the small size of the City, oversight of employee activities is usually conducted on a daily basis. Infractions and non-compliance are therefore readily identified and remedied.

9.1.4 Level 4 Outcomes Load Reductions

A number of municipal programs lend themselves to measurement of pollutant loads reduced during the course of routine activities. The table below presents a summary of load reduction estimates for the FY 2006-07 reporting period.

Activity	Total Load Reduction	Load Reduction for Sediment	Load Reduction for Trash	Load Reduction for Debris Organics
MS4 Cleaning	16,500 lbs.	12,045 lbs.	2,310 lbs.	2,145 lbs.
Street Sweeping	296,000 lbs.	236,800 lbs.	29,600 lbs.	29,600 lbs.
Storm Drain Inlet Filters (12)	276 lbs.	127 lbs.	24 lbs.	125 lbs.
Sewage Spill Response	194 gallons	N/A	N/A	N/A

9.2 Commercial Industrial Component Effectiveness

Significant improvements continue to be made to the Commercial and Industrial Components during FY 2006-07. A total of 42 inspections were conducted at 28 high priority businesses. Although some deficiencies continued to be identified, corrective measures were generally implemented in a thorough and timely manner. The City continues to explore innovative approaches for overseeing compliance at commercial businesses. The City began mailing business inspection results and related information on BMPs following each inspection in January 2006. This serves to memorialize the inspection in writing and serve as a guide for businesses in maintaining compliance over time. Staff also performed an additional 19 investigations of commercial businesses and 23 investigations of mobile businesses as a result of complaint referrals or staff observations in the field.

9.2.1 Level 1 Outcomes Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Commercial and Industrial Component requirements:

Permit Section	Requirement	Compliance Measure
F.3.b.1 F.3.c.1	Require implementation of P2 methods by industry and commercial businesses as appropriate	The City emphasizes P2 methods in all outreach to business, including during inspections.
F.3.b.2 F.3.c.2	Annually update inventory of all industrial sites and all high priority businesses	Updated industrial and commercial inventories included as Attachment 3-2.
F.3.b.3	Prioritize inventory of industrial sites	Industrial inventory in Attachment 3-2 is prioritized by threat to water quality
F.3.b.4 F.3.c.3	Require and implement minimum BMPs at industrial and high priority commercial businesses	BMP requirements are specified in the JURMP and Ordinance Sections 8.30.090 and 8.30.100. Minimum BMPs were evaluated during all 33 inspections conducted.
F.3.b.5	Require all high priority industrial facilities to conduct a runoff monitoring program	Monitoring at high priority industrial facilities is required by Ordinance Section 8.30.100. No high priority industrial sites were identified during FY 2006-07.
F.3.b.6	Inspect all high priority industrial sites annually and low/medium priority industrial sites as needed	No high priority industrial sites were identified during FY 2006-07
F.3.c.4	Inspect high priority commercial businesses as needed	42 inspections performed at 28 high priority businesses
F.3.b.7	Enforce storm water ordinance at all commercial and industrial sites	13 Notices of Violation and 3 Notices of Abatement were issued to businesses during FY 2006-07. All identified illicit discharges and connections were required to be stopped and cleaned up.

Permit Section	Requirement	Compliance Measure
F.3.b.8	Report non-compliant industrial sites determined to pose a threat to human or environmental health to the SDRWQCB within 24 hours of discovery of non-compliance	0 Notifications to SDRWQCB regarding non-compliant industrial sites

9.2.2 Level 2 Outcomes Changes in Knowledge and Awareness

No direct measurement of changes in the awareness of commercial and industrial businesses was conducted during this reporting period. However, since 28 of those businesses were subject to inspection during this reporting period, it can be assumed that the level of awareness among the business community is greater than in previous years. Additionally, the City made contact with 23 mobile businesses regarding appropriate BMPs and discharge prohibitions. The mobile business sector continues to be an increased emphasis. Direct measurement of knowledge and awareness through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because sufficient oversight measures are in place to monitor BMP implementation.

9.2.3 Level 3 Outcomes Changes in Behavior (BMP Implementation)

BMP implementation is assessed during routine inspections at commercial and industrial businesses. Over the course of 42 inspections at high priority commercial businesses, City staff observed 18 BMP deficiencies as summarized below. This year s totals are compared to the number of deficiencies observed during 51 inspections at 39 businesses during the previous reporting period (number in parenthesis).

- Illicit Discharge: 1 (1)
- Housekeeping/Waste Management: 14 (25)
- Material Storage/Cover: 0 (3)
- Spill Prevention: 1 (3)
- Grease Management: 1 (0)
- Other: 1 (0)

Another potentially useful measurement of the change in commercial/industrial behavior is the number of illicit discharges identified during a given year. There were a total of 42 illicit discharges identified at commercial or mobile businesses during FY 2006-07 as a result of complaint referrals or field observations. This compares to 28 in FY 2005-06, 10 in FY 2004-05, 13 in FY 2003-04, and 12 in FY 2002-03. As the City s oversight of commercial businesses increases, one would expect the number of identified violations to increase. This continues to be the case during this reporting period.

9.2.4 Level 4 Outcomes Load Reductions

There were no direct measurements of load reductions as a result of BMPs implemented at commercial and industrial facilities during this reporting period. Several storm drain inserts have been installed as conditions on redevelopment imposed by the City; however, the City does not track the quantity of material removed during routine maintenance.

9.3 Residential Component

The City has a very effective program in outreaching to residents about the steps necessary to manage urban runoff from their properties. First, a series of educational brochures is regularly distributed to residents who are observed to be discharging water or pollutants from their property. A comprehensive hazardous waste and used oil disposal program is also made available at no or very low cost to residents. Finally, the City takes advantage of opportunities such as publication of the City Newsletter to remind residents about their obligations to manage runoff and implement BMPs.

The City continues its residential inspection program, which began in May 2005. It is anticipated that increased oversight of residential areas will not only improve the visibility of the City's urban runoff management program, but also lead to the abatement of a greater number of illegal discharges.

9.3.1 Level 1 Outcomes – Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Residential Component requirements:

Permit Section	Requirement	Compliance Measure
F.3.d.1	Encourage residents to implement P2 methods	Examples of P2 methods included in residential outreach material are discussed in Section 4.3
F.3.d.2	Identify high priority residential areas and activities	All residential areas are considered high priority
F.3.d.3	Require residents to implement BMPs during all high priority residential activities	Residential BMPs are specified in the JURMP and Ordinance Section 8.30.080.
F.3.d.4	Enforce storm water ordinance for all residential areas and activities	16 Notices of Abatement or Violation were issued to residents during FY 2006-07. No citations were issued. All identified illicit discharges were required to be stopped immediately and cleaned up to the City's satisfaction.

9.3.2 Level 2 Outcomes – Changes in Knowledge and Awareness

No direct measurement of changes in the awareness of residents was conducted during this reporting period. Direct measurement of knowledge and awareness through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because sufficient oversight measures are in place to monitor BMP implementation. One indirect measure of knowledge change is the number of complaints received from the general public. This year, the City received 25 complaint referrals from City residents, which resulted in 14 notices of violation and 2 notices of abatement.

9.3.3 Level 3 Outcomes – Changes in Behavior (BMP Implementation)

BMP implementation is observed by field staff on a daily basis and in response to complaints of illicit discharges in residential areas. One potentially useful measurement of changes in residential behavior is the number of violations identified during a given

year. There were 50 illicit discharges identified in residential areas during FY 2006-07. This compares to 42 in FY 2005-06, 20 in FY 2004-05, 18 in FY 2003-04 and 13 in FY 2002-03. Violations covered a wide range of activities, but auto fluids (9), wash water (6), and construction debris (13) were the most commonly observed. There are many factors that can influence the total number of violations. For example, as the City s oversight of residential areas increases, one would expect the number of identified violations to increase. This appears to have been the case during this reporting period.

9.3.4 Level 4 Outcomes Load Reductions

Residents recycled or disposed approximately 9.36 tons of household hazardous material and 2,440 gallons of used oil through City-sponsored programs during FY 2006-07.

9.4 Land Development Component Effectiveness

The City has been progressive in requiring all significant development and redevelopment projects to incorporate urban runoff management principles into their design, despite the fact that most projects in the City do not meet the SUSMP threshold. As explained in Section 5.0, all projects with a total valuation of greater than 50,000, and some others under that total, are required to implement a combination of site design and/or treatment BMPs to reduce runoff volumes and/or treat runoff from the site.

9.4.1 Level 1 Outcomes Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Land Use Planning Component requirements:

Permit Section	Requirement	Compliance Measure
F.1.a	Assess General Plan for inclusion of water quality and watershed protection principles	Amendments to the General Plan for inclusion of water quality/watershed protection principles was approved by City Council in 2002 and is awaiting approval by the Coastal Commission
F.1.b	Modify development project approval process to ensure that pollutant discharges and runoff flows are reduced to the maximum extent practicable and that receiving water quality objectives are not violated throughout the life of the project. Require SUSMPs on all priority development projects	Development project approval process has been modified and requires all projects to meet this standard. 51 Discretionary Projects required to implement site design and/or structural treatment BMPs 3 priority development project applications filed during FY 2006-07, all 3 with SWMPs approved. SWMPs for two additional SUSMP projects initiated in FY 2004-05 were also approved during this reporting period.
F.1.c	Revise environmental review process to include requirements for evaluation of water quality effects and identification of appropriate mitigation measures	Environmental review process was reviewed and updated for submittal of JURMP
F.1.d	Educate municipal planning staff and project applicants on regulations, requirements, etc.	All education conducted during project intake

9.4.2 Level 2 Outcomes Changes in Knowledge and Awareness

No direct measurement of changes in the awareness of project applicants was conducted during this reporting period. Direct measurement of knowledge and awareness through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because it is the City s responsibility to dictate project conditions (including runoff management) during the permit issuance process.

9.4.3 Level 3 Outcomes Changes in Behavior (BMP Implementation)

No direct measurement of changes in the behavior of project applicants was conducted during this reporting period. Direct measurement of behavioral through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because it is the City s responsibility to dictate project conditions (including runoff management) during the permit issuance process.

9.4.4 Level 4 Outcomes Load Reductions

There were no direct measurements of load reductions resulting from site design and structural treatment BMPs implemented for development and redevelopment projects during this reporting period. It can be assumed, however, that the 51 projects required to maximize infiltration of runoff on-site and the 3 SUSMP projects required to install structural treatment BMPs will contribute to a reduction in flows and pollutant loadings.

9.5 Construction Component

The City conducted storm water inspections on 121 building permits during this reporting period. The City still needs to improve its tracking of construction inspection results. This is an area where the City hopes to improve under the new Municipal Storm Water Permit. Daily oversight on capital improvement projects ensures that contractors are meeting City objectives with regard to runoff management.

9.5.1 Level 1 Outcomes Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Construction Component requirements:

Permit Section	Requirement	Compliance Measure
F.2.a	Require construction site owners, developers, contractors to implement P2 practices where appropriate	P2 emphasized in all education to these audiences
F.2.b	Update Grading Ordinance to require runoff BMPs	Grading Ordinance updated with submittal of JURMP
F.2.c	Require construction permits to require runoff BMPs	Construction permitting process modified to incorporate runoff management BMPs
F.2.d	Annually update inventory of construction sites	Updated inventory presented in Attachment 6-2
F.2.e	Prioritize construction inventory based on threat to water quality	Vast majority of construction sites in the City are small and, therefore, low priorities.

Permit Section	Requirement	Compliance Measure
F.2.f	Require construction-phase BMPs at all construction sites year-round	Construction-phase BMPs are specified in the JURMP and Ordinance Section 8.30.140
F.2.g	Inspect high priority construction sites annually during the wet season and as needed in the dry season Inspect low/medium priority construction sites twice during the wet season and as needed in the dry season	At least 242 inspections were conducted at 121 sites during this reporting period. No building permits were ranked high priority. CIPs were all high priority and were inspected daily during FY 2006-07.
F.2.h	Enforce storm water ordinances at all construction sites	9 Notices of Violation were issued to construction sites during FY 2006-07. All identified construction site violations were required to be stopped and cleaned up.
F.2.i	Report non-compliant construction sites determined to pose a threat to human or environmental health to the SDRWQCB within 24 hours of discovery of non-compliance	0 non-compliant construction sites reported to SDRWQCB
F.2.j	Educate permit review staff and project applicants, contractors, etc. on applicable BMPs and storm water requirements	Education is conducted during project intake and during construction site inspections.

9.5.2 Level 2 Outcomes Changes in Knowledge and Awareness

No direct measurement of changes in the awareness of residents was conducted during this reporting period. Direct measurement of knowledge and awareness through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because sufficient oversight measures are in place to monitor BMP implementation.

9.5.3 Level 3 Outcomes Changes in Behavior (BMP Implementation)

BMP implementation is observed during routine construction inspections and in response to complaints of illicit discharges at construction sites. It has been observed that contractors are generally aware of storm water requirements, but there seems to be some resistance on the part of some contractors to fully implement BMPs. In response, the City has escalated its use of enforcement tools to ensure compliance. All 33 illicit discharges identified from construction projects during FY 2006-07 were required to immediately stop the discharge and mitigate the discharged material. This number is a significant increase compared to the 12 illicit discharges observed during the previous reporting period, which had been a significant reduction from the 20 illicit discharges reported during FY 2004-05. There are many confounding factors that can influence the total number of violations. For example, as the City s oversight of construction sites increases, one would expect the number of identified violations to increase. This appears to have been the case during FY 2006-07.

9.5.4 Level 4 Outcomes Load Reductions

There were no direct measurements of load reductions as a result of construction site BMPs.

9.6 IC/ID Component

The City's Illicit Discharge Detection and Elimination Component consists of a variety of programs intended to identify and mitigate illegal discharges and connections to the MS4. The program was effective in identifying 199 violations as a result of inspection, observation by field staff, and complaints from residents during this reporting period. This is more than double last year's total of 98. Dry weather monitoring results instigated several follow-up investigations that led to the detection and elimination of several illicit discharges. The City will continue to advertise its storm water hotline to City residents and businesses.

9.6.1 Level 1 Outcomes – Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Illicit Discharge Detection and Elimination Component requirements:

Permit Section	Requirement	Compliance Measure
F.5.a	Implement a program to seek and eliminate illicit discharges and connections to the MS4	199 illicit discharges and connections were identified following the investigation of 234 complaints, staff referrals, and field observations
F.5.b	Conduct dry weather monitoring to detect illicit discharges and connections to the MS4	See Section 7.1
F.5.c	Investigate and follow-up on dry weather monitoring results that indicate a reasonable potential for illicit discharges, connections, or other sources of non-storm water	See Section 7.1
F.5.d	Eliminate all detected illicit discharges, sources, and connections immediately	All detected illicit discharges and connections were required to be stopped immediately. Cleanup was either conducted by the responsible party or the City itself
F.5.e	Enforce storm water ordinance to prevent illicit discharges and connections	56 Notices of Abatement or Violation 1 Administrative Citation 79 Verbal Warnings 58 Informational Letters 194 required cleanups (includes all cases above)
F.5.f	Prevent and respond to sewage spills to prevent entry of spills into MS4	8 sewage spill responses 194 of 1,134 gallons spilled were recovered
F.5.g	Operate a public hotline for storm water complaints	Storm Water Hotline is (619) 424-4095 25 complaint referrals from general public
F.5.h	Facilitate disposal of used oil and toxic materials	City is a member of the South Bay HHW and Used Oil Recycling partnership, which provides a number of collection facilities and curbside pickup services for these materials
F.5.i	Limit infiltration from sanitary sewer to MS4. Conduct preventive maintenance of both	City conducts daily inspections and maintenance on sewage infrastructure and a minimum of annual inspection and maintenance of MS4 infrastructure. All sewer pump stations are now alarmed.

9.6.2 Level 2 Outcomes – Changes in Knowledge and Awareness

This outcome level is not applicable to the Illicit Discharge Detection and Elimination Component.

9.6.3 Level 3 Outcomes Changes in Behavior (BMP Implementation)

This outcome level is not applicable to the Illicit Discharge Detection and Elimination Component.

9.6.4 Level 4 Outcomes Load Reductions

There were no direct measurements of load reductions as a result of efforts to detect and eliminate illicit discharges and connections to the MS4.

9.7 Education Public Participation Components

Assessment of the effectiveness of education and public participation activities is incorporated into the discussion above as it relates to municipal, business, residential, development, and construction target audiences.

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10.0 FISCAL ANALYSIS

Order 2001-01 requires the City to secure the financial resources necessary to implement its JURMP in compliance with all Permit requirements. It further requires the City to report on its projected program budget for the upcoming year. Below is a discussion of the City's budget for FY 2007-08. The total budget for this period is projected to be $1,189,524. A detailed breakdown, including funding sources, is provided in Table 10-1.

Recognizing the significant challenge of maintaining compliance while continuing to rely heavily on its General Fund, the City Council authorized staff to hire an outside consulting firm in November 2004 to seek a more secure funding source for its storm water program. It was estimated at the time that the City's General Fund subsidized slightly more than half of all storm water program costs. Staff determined that a storm water fee would be most appropriately correlated to solid waste collection rates, and initiated a study on that premise. The logic behind assigning a storm water fee to trash collection is that solid waste material collected from users of developed property correlates proportionately to pollutants that are not captured and that enter the MS4 as a result. Moreover, nearly all pollutants of concern are classified as solid waste by definition within existing state and local ordinances. The cost to eliminate, remove, transport, and dispose of such wastes is, therefore, a legitimate solid waste program expenditure recoverable through the collection of fees assessed to solid waste service users throughout the City.

The consulting firm was tasked with developing a rate model that would seek to recover $500,000 in program costs. This represents an approximation of the portion of the existing program that was being subsidized by the General Fund. Analysis of the rate model revealed the need to increase solid waste rates by 28.6% for both residential and commercial customers. Following a public hearing, the City Council approved the fee in October 2005 as recommended. Fee collection began January 1, 2006 and will help offset costs that were previously taken out of the General Fund. The budget estimates presented in the table below will be partially reimbursed through the storm water fee for FY 2006-07. EDCO Disposal, the City's franchise waste hauler, has agreed to collect the fee and reimburse the City at no charge, saving both the City and taxpayers money.

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Storm Water Program Budget for FY 2007-08

Line Item	Budget	Total	Dedicated Funding Source	Notes on Budget Calculation
Enviro. Division Staff - Program Administration - Planning & Assessment - Training of Municipal Staff - Bus / Res Inspection - IC/ID Investigation - Dry Weather Monitoring - Public Education - Regulatory Reporting - Meeting Attendance	93,710	10.5	None	80 Environmental Program Mgr.[1] 60 Environmental Specialist
Sewer Maint. Division - Storm Drain Cleaning - Illicit Discharge Cleanup - Vehicle/Equipment Maint. - Waste Disposal Costs - Training	359,100	29.2	Sewer Enterprise Fund	20 Sewer Budget Less Metro Fees
Street Maint. Division - BMPs for Street Maint. - Materials/Supplies/Equip. - Training	141,780	12.4	Gas Tax / Prop A	15 Street Budget
Tidelands Division - BMPs for Trash Pickup - Public Education - Pressure Washing - Grafitti Removal BMPs - Haz Waste Disposal - Training	81,768	6.7	Port of San Diego	10 Tidelands Budget
Grounds Facilities Div. - BMPs for Maintenance - IPM Compliance - Illicit Discharge Cleanup - Training	36,200	3.0	None	10 Grounds Budget
Graffiti Removal - Graffiti Removal BMPs - Illicit Discharge Cleanup	17,800	1.4	Community Development Block Grant (Partial)	10 Graffiti Budget

[1] Environmental Program Manager position had not been filled prior to the approval of this budget and is not calculated here.

Storm Water Program Budget for FY 2007-08

Line Item	Budget	Total	Dedicated Funding Source	Notes on Budget Calculation
- Waste Disposal - Equipment Wear & Tear - Training				
Recreation Services - Sports Park Maint. BMPs - Public Education - Training	1,900	0.2	None	1 Recreation Budget
Fleet Maint. Division - BMPs for Vehicle Service - Maint Of Env Div Vehicle - Haz Waste Mgmt. - Training	18,267	0.9	None	2 Fleet Budget
Public Works Admin - Project Mgmt. BMPs - Complaints / Inquiries - Project Review - Site Plan Review - Encroachment Permits - Community Relations - Training - Etc.	68,700	6.2	None	15 PW Admin Budget - Public Works Director - PW Superintendent - Project Manager - Office Assistant - Admin Secretary II - Customer Service Spec.
Fire Department - Emergency Response - Administrative Costs - Haz Mat Management - Training	83,500	6.8	None	4.61 Fire Budget
Sheriffs Department - Haz Mat Mgmt/Disposal	3,500	0.3	Port of San Diego (Partial)	0.07 Sheriff Budget
Lifeguard Services - Haz Waste Disposal - Beach Posting	14,500	1.2	Port of San Diego	1.4 Lifeguard Budget
Community Dev Dept. - Project Intake & Review - Permit Processing - Construction Inspection - IC/ID Enforcement - Planning & Zoning	86,500	7.0	Permit Fees	15 Building Inspector 15 Code Enforce Officer 10 City Planner 7 Assistant City Planner 7 Development Director

Storm Water Program Budget for FY 2007-08

Line Item	Budget	Total	Dedicated Funding Source	Notes on Budget Calculation
- Training				
Admin Department - Invoicing - Bill Collection - Contract Review - Bid Specification	27,500	2.4	None	5 Admin Budget
Personnel Department - Employee BMP Indoc - Related Discipline - Record Keeping - Training	1,100	0.1	None	0.5 Personnel Budget
City Attorney's Office - Legal Opinions - Document Reviews - Hearings	11,300	0.9	None	2.5 City Attorney Budget
City Manager's Office - Public Meetings/Hearings - Staff Reports to Council - Citizen Complaints - Training	6,400	0.5	None	2.5 City Manager Budget
City Clerk's Office - Docketing Agenda Items - Staff Reports to Council - Noticing Public Hearings - City Newsletters	4,200	0.3	None	1.66 City Clerk Budget
Mayor City Council - Public Meetings/Hearings - Staff Reports - Citizen Complaints - Training	2,100	0.2	None	2.5 Council Budget
Professional Services - GIS/ Database Services - Evaluate Struct. BMPs	15,000	0.5	None	Includes Engineering Services Consultant

Storm Water Program Budget for FY 2007-08

Line Item	Budget	Total	Dedicated Funding Source	Notes on Budget Calculation
Technical Services - Lab Analysis - Inlet Filter Maintenance - Monitoring of BMPs	47,000	3.6	None	
Fees Licenses - NPDES Permit Fee	7,500	0.7	None	
Regional Shared Costs - Wet Weather Monitoring - Regional Outreach - Regional Assessment - Regional CASQA Fees	28,000	2.0	None	
Operating Supplies - Public Ed Supplies - Monitoring Field Test Kit - Replacement Chemicals - Safety Gear - Spill Cleanup Supplies	12,800	1.3	None	
Citywide Admin Costs ("Overhead")	19,399	1.6	None	
Total Budget	**1,189,524**			

11.0 SPECIAL INVESTIGATIONS

The lone special investigation undertaken during this JURMP was a water quality monitoring study of the Date Avenue Low Flow Urban Runoff Diversion System. This monitoring project lasted from October 2004 through October 2005. Detailed results from that study were presented in the FY 2004-05 JURMP Annual Report. They are not repeated here.

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12.0 CONCLUSIONS RECOMMENDATIONS

The City made outstanding progress in furthering its urban runoff management program during FY 2006-07. The activities and programs described above not only demonstrate compliance with regulatory mandates; they underscore the City s commitment to ensuring clean water and a healthy environment. In many cases the City has exceeded Permit requirements in crafting innovative and pro-active approaches to managing runoff.

Looking forward to FY 2007-08 and beyond, the City is committed to continuing with many of the programs and initiatives described in this report. Refining and redirecting existing efforts is also a high priority. The following is a compilation of the new activities the City is considering for implementation in future reporting periods.

Municipal Component

- Install the second of two dry weather low-flow diversion systems at the Palm Avenue outfall.

- Research and identify a location for a structural treatment control upstream of the H-3 outfall (behind Bayside Elementary in the Otay River Watershed). This control is needed to address trash and debris originating from commercial uses in the upstream drainage area. Design and installation of this structural control are currently included in the City s capital improvement project budget for FY 2007-08.

- Complete sewer capacity study and development of Sewer System Management Plan. Educate the public including employees on proper reporting of spills, including Chain of Communication.

- The City has an identified need to install treatment control BMPs at selected city outfalls to capture trash and other pollutants. Currently, this is an unfunded Capital Improvement Project that the City is actively pursuing grant funding for.

- Tijuana River Bacteria Source Identification Study The City has received a Proposition 50 grant to identify the sources of bacterial pollution in the Tijuana River watershed and potential mitigation projects or BMPs to reduce or eliminate their introduction into the watershed.

Commercial Component

- In addition to continuing with existing channels for educating businesses, the City will explore identification of a more permanent venue for distributing information on urban runoff and BMPs to all businesses, regardless of priority status. One such venue might be through the business license renewal process.

Residential Component

- Continue working with property management groups to provide educational materials to large apartment buildings which will be included in their internal newsletter or to be distributed by on-site managers.

- Staff will assist in the development of a regional outreach plan targeting the residential population.

Land Use Planning Component

- The City is finalizing a SUSMP guide to be used by Community Development staff and contractors during plan review to help project applicants navigate the SUSMP regulatory process.

Construction Component

- Improve the tracking of storm water inspections at construction sites.

- Develop a new user-friendly construction BMP brochure.

Illicit Discharge Detection and Elimination Component

- Continue investigation of elevated dissolved copper levels at Outfall E-1B.

- Continue investigation of the persistent presence of trash at Outfall H-3.

Education & Public Participation Component

- Continue efforts to educate target audiences about urban runoff, BMPs, and other aspects of water quality through a variety of public participation events.

Attachment 2-1
Program Assessment Form - Municipal Component (FY 2006-07)
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Comments
Number of high priority municipal facilities.	18	18	18	18	18	18		11 facilities and 7 parking lots
Number of high priority municipal facilities targeted for inspection	18	18	18	18	18	18		11 facilities and 7 parking lots
Number of high priority municipal facilities inspected.	18	18	18	18	18	18		11 facilities and 7 parking lots
Number of medium and low priority municipal facilities inspected.	8	8	8	15	15	15		Increase is seen because each pump station is now listed as a separate facility.
of Municipal staff (Full Time)		57	55	65	65	74	Employees	
of Municipal staff (Part Time)			50	66	66	81	Employees	
of Municipal staff trained during this reporting period in pollution prevention.	20	70	59	28	70	70	Employees	
of Municipal staff trained during this reporting period in storm water quality as it pertains to the Municipal Component.	20	70	59	28	22	36	Employees	
of Street Miles swept.	2,392	2,392	2,392	2,521	2,392	2,392	Miles	
of tons of material removed by street sweeping	208	144.4	218.13	223.91	135.45	148	Tons	
of street material removed that was trash.	10	11	10	9	10	10		
of street material removed that was sediment.	80	78	80	84	80	80		
of street material removed that was organic debris.	10	11	10	7	10	10		
of street material removed that was other.	0	0	0	0	0	0		
of inlets in the City s jurisdiction.	Approx 100	Approx 100	Approx 100	Approx 100	Approx 100	Approx 100		The number of manholes and outlet and inlet boxes total 217.
of manholes / inlets cleaned.	80	168	168	168	168	168		
Quantity of material removed as a result of MS4 cleaning. (tons)	1.9	6.1	2.4	4.6	2.4	8.25	Tons	Catch basins, brow ditches, and underground portions of the MS4 are cleaned from May 1 through September 30th
of inlet material removed that was trash.	10	11	10	12	2	14		
of inlet material removed that was sediment.	80	78	80	75	87	73		
of inlet material removed that was debris.	10	11	10	13	11	13		
of inlet material removed that was other.	0	0	0	0	0	0		
Amount of Pesticides used.	See comment	See comment		0	0	0		2002-03 15 of fertilizer used contained herbicide 2001-02 20 of fertilizer used contained an herbicide
of parking lots 15 spaces.	6	6	6	6	6	6		
of parking lots 15 spaces retrofitted for SW BMPs.	4	4	4	4	4	4		4 retrofitted in 2002-03

Attachment 2-2. Municipal Facility Inventory

Facility Category	Facility	Address	WMA	Drainage Basin	Activity (A)	Materials Used (B)	Wastes Generated (C)	Pollutant Discharge Potential (D)	Non-Storm Water Discharges (E)	Size (F)	Proximity to Receiving Water Body (G)	Sensitivity of Receiving Water Body (H)	Rank (A+B+C+D+E+F+(G*H))	Priority Rank	Mandatory HIGH?	Parking Lot on Site?
Buildings	Public Works Yard	495 10th St.	Otay	A	10	5	5	3	5	3	5	5	56	H	Yes	Yes
	Fire Station	825 Imperial Beach Blvd.	Tijuana	B,D	10	5	5	3	5	3	2	5	41	M	No	Yes
	City Hall	825 Imperial Beach Blvd.	Tijuana	B,D	1	1	5	3	3	3	2	5	26	L	No	Yes
	Dempsey Holder Safety Center	950 Ocean Lane	Tijuana	B,C	10	5	5	3	5	3	5	5	56	H	No	No
	I.B. Boys & Girls Club	847 Encina Ave.	Tijuana	B,D	5	3	5	3	3	5	2	5	34	M	No	Yes
	Marina Vista Community Center & Senior Center	1075 8th St.	Tijuana	B,D	1	1	5	3	3	3	2	5	26	L	No	Yes
Streets / MS4	Catch Basins / Inlets (approx. 100)	N/A	All	All	10	3	5	3	5	3	3	5	44	H	Yes	No
	Underground Storm Drains (approx. 5 miles)	N/A	All	All	10	3	5	1	5	5	5	5	54	H	Yes	No
	Brow Ditch Channels (approx. 4,000 ft.)	N/A	All	All	10	3	5	3	5	3	3	5	44	H	Yes	No
	MS4 Pump Station	Palm Ave. street end	Otay	B,C	10	5	5	3	3	1	5	5	52	H	Yes	No
	Paved Streets (approx. 200 lane miles)	N/A	All	All	10	3	5	3	5	5	3	5	46	H	Yes	No
Landscaped Areas	Reama Park	Elder Ave. / Elkwood Ave.	Tijuana	B,C	5	3	5	3	3	3	2	5	32	M	No	Yes
	Sports Park	425 Imperial Beach Ave.	Tijuana	B,D	5	3	5	3	3	5	5	5	49	H	No	Yes
	Teeple Park	Calla Ave. / Florida St.	Otay	A	5	3	5	3	3	3	2	5	32	M	No	Yes
	Triangle Park	7th St. / Palm Ave.	Otay	A	5	3	5	3	3	1	2	5	30	M	No	No

Attachment 2-2. Municipal Facility Inventory

Facility Category	Facility	Address	WMA	Drainage Basin	Activity (A)	Materials Used (B)	Wastes Generated (C)	Pollutant Discharge Potential (D)	Non-Storm Water Discharges (E)	Size (F)	Proximity to Receiving Water Body (G)	Sensitivity of Receiving Water Body (H)	Rank (A+B+C+D+E+F+(G*H))	Priority Rank	Mandatory HIGH?	Parking Lot on Site?
Sewage	Sewage Pump Station #1A (Underground)	862 Seacoast Dr.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #1B (Underground)	1098 Seacoast Dr.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #2 (Above ground)	1306 South Seacoast Dr.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #3 (Underground)	501 Elm Ave.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #4 (Underground)	755 Delaware Ave.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #5 (Underground)	133 Dahlia Ave.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #6 (Underground)	498 Rainbow St.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #7 (Underground)	504 Oneonta Ave.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #8 (Underground)	895 Imperial Beach Blvd.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #9 (Above ground)	1025 9th St.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #10 (Above ground)	814 Cypress Ave.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Underground Sewage Pipes (39.5 miles)	N/A	All	All	5	5	5	1	1	1	0	1	18	L	No	No
Misc.	Pier	Evergreen St. / Seacoast Dr.	Tijuana	B,C	10	1	5	3	5	3	5	5	52	H	No	No
	Sandy Beach	Mexican Border to Camp Surf	All	All	1	3	5	3	3	3	5	5	43	M	No	No

Attachment 2-2. Municipal Facility Inventory - Parking Lots

			Curbing Directs Runoff Directly to Storm Drain (A	Proximity to 303(d) Water Body / ESA (B)	Pollutants ©	Pollutant Discharge Potential (D)	Non-Storm Water Discharges (E)	Lot Size (F)	Type of Municipal Area (G)	Total Rank (A+(B*C)+D+E+F+G)	Priority	Mandated High Priority (>15 spaces)
Parking Lots	Public Works Yard Parking Lot	495 10th St.	5	5	5	3	3	3	10	49	H	Yes
	City Hall / Fire Station Parking Lot	825 Imperial Beach Blvd.	5	2	5	3	3	3	10	34	H	Yes
	Reama Park Parking Lot	Elder Ave. / Elkwood Ave.	1	2	5	3	3	1	1	15	L	No
	Sports Park Parking Lot	425 Imperial Beach Ave.	5	5	5	3	3	5	1	42	H	Yes
	Teeple Park Parking Lot	Calla Ave. / Florida St.	5	2	5	3	3	3	1	25	L	No
	Veteran's Park Parking Lot	9th St. / Imperial Beach Blvd.	1	2	5	3	3	3	1	17	H	No
	Dunes Park Parking Lot	700 Seacoast Dr.	5	5	5	3	3	3	1	40	H	No
	I.B. Boys & Girls Club Parking Lot	847 Encina Ave.	1	2	5	3	3	3	1	17	L	Yes

Attachment 2-3

The Journal for Surface Water Quality Professionals
Stormwater

FEATURES

A Measure of PREVENTION

The state of NPDES around the country

By David C. Richardson

StormCon

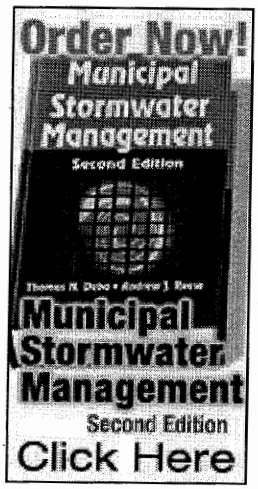

Since earliest times, society has been concerned with issues of stormwater quantity, but only recently have a growing number of initiatives begun to focus attention on stormwater quality. The practice of improving stormwater quality presents a quandary arising from the very nature of water itself. Seeking its own level, water laden with pollutants, if left to its own devices, eventually drains away from its source and becomes, perhaps, someone else's problem. As a further paradox everyone is downstream of someone. Rain can fall anywhere, and anywhere rain falls there are likely to be people; anywhere there are people there is the potential for pollution.

Local Effort, Nationwide Goal

According to the year 2000 census report, 79% of the United States population now resides within urban areas. The National Pollutant Discharge Elimination System (NPDES) Phase I and Phase II permit processes, with their emphasis on controlling nonpoint-source pollution from these urban areas, represent an attempt to address the environmental effects of the current reality: It is not just the exceptional, large-scale, and industrial activities but also the everyday practices and habits of millions of individuals in their communities across the country that are gradually degrading our water resources. The NPDES program mandates that urban communities regulate and control what enters into the environment along with the flow of stormwater.The USEPA administers NPDES programs on a regional basis; however, in most instances, the states within each EPA-designated region in turn administer their respective stormwater pollution prevention programs. Under the states' NPDES permitting authorities, each community or municipality covered is required to develop its own stormwater-quality management plan. These plans contemplate a wide range of

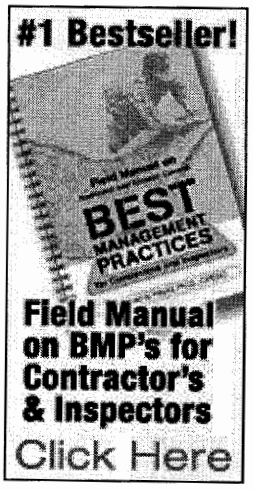

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possibilities, each appropriate to the environmental, social, and economic conditions within their respective locales. Using the 10 EPA-designated regions as a rough guide, we will explore the implementation of NPDES-related stormwater pollution prevention programs across the country. This first installment provides a brief look at four diverse communities in the southwestern area of the country, in the area the EPA designates as Region 9 and which includes the states of Arizona, California, Hawaii, and Nevada. This series of snapshots is not intended to convey the full range of possible responses to pollution control through NPDES, but only to share a range of experiences and programmatic approaches enacted locally to protect the quality of the nation's water as a whole.

A Head Start in California

Many of the smaller municipalities in California got a head start in NPDES compliance. They were issued NPDES permits during Phase I of the program in the early 1990s, a decision Phil Bobel, manager of environmental compliance for the City of Palo Alto, CA, believes was made at the state level to avoid confusion of conflicting mandates across contiguous municipalities in highly urbanized parts of the state. With the goal of pollution prevention, the EPA suggests street sweeping as one of the recommended "good housekeeping" practices associated with NPDES; Bobel believes that is a good idea. "We know for many pollutants the principal source is the automobile. There are too many cars in California; they are polluting not only the air but also the water." However, Bobel is not entirely comfortable referring to street sweeping as a pollution prevention practice. "It's difficult to control what goes out on the streets," he says. "The pollution control results of the program are difficult to quantify because we don't have good data measuring what percentage of pollutants are removed by the practice. Street sweeping is more of a cleanup after the fact of the pollutants that have been introduced. Nevertheless, it represents a big part of what we do." Street sweeping operations had been initiated in Palo Alto many years before the implementation of NPDES, not because of laws mandating this specific practice, but initially for the care and grooming of Palo Alto's 50,000 street trees. According to Bobel, the city began street sweeping as a beautification measure, as well as to prevent flooding by keeping the storm drains clear of leaves. Dave Aro, manager of maintenance operations for the City of Palo Alto, says, "Street sweeping is a 24-hour operation, six days a week, stopping only for 'spare the air days.'" (These are days when smog levels run exceptionally high in the San Francisco Bay Area). The entire city is swept on a weekly basis, and heavily used downtown areas are swept almost daily. Aro says the city's fleet of six sweepers includes both mechanical

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broom sweepers and some newer regenerative air sweepers. The department, he says, is moving toward the regenerative designs and has even deployed a compressed natural gas (CNG)–fueled sweeper, for which Aro is very enthusiastic. "We made the choice not to pollute the air while we clean up the streets," he says, adding that he believes this CNG unit "runs even cleaner than diesel."

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Unintended Benefits

Though the street sweeping program in Palo Alto was initially intended to prevent localized flooding with the start of the spring rainy season, there have always been other environmental benefits. Each fall the city collects 2,400 tons of leaf debris from its streets; Bobel says this debris would otherwise end up in streams and ponds and would eventually find its way to the San Francisco Bay. In many areas of the country, he says, this mass of biological material would pose a nutrient-loading threat. "However, in our area, because San Francisco Bay is not believed to be nutrient limited, we're less concerned about nutrient loading than we are about biological oxygen demand." He says that if the decaying leaves were to become trapped in certain localized areas such as ponds, choked-off streams, or storm drains, they could deplete enough oxygen as they decay to have negative impacts on the ecology of the Bay. Street sweeping, he says, takes care of this problem. "The street sweeping program did not originate for that purpose, but it does address it." He notes that as a side benefit, "80% of the leaves collected can later be used for composting."

Subscribe

Next-Generation Technology

Steve Miller, fleet manager for nearby Mountain View, CA, which shares the San Francisco Bay watershed with Palo Alto, has a similar high regard for the efficacy of street sweeping. But he adds that the capabilities of newer, regenerative air sweepers make pollution control through street sweeping more efficient than ever. "You're able to pick up anything from talcum powder to bricks. A mechanical sweeper will not do that. They tend to spread around the small material and throw the big material up inside the hopper, and what you're left with is a buildup of fine material on the streets. A lot of cities, then, traditionally wash their streets down, and of course, that washes all the fine material, including the asbestos and the heavy metals from brakes and from vehicle exhaust, into the storm drain system and into the bays or rivers."

He adds, "We were one of the first in the San Francisco Bay Area to buy the regenerative sweepers, and since then almost every city in the Bay Area is buying them exclusively."According to Miller, regenerative air sweepers move more air, over a wider head, and the machines have a greater capacity. He says,

"They've even come out with a larger machine, the Schwarze A9000, which can collect 9 cubic yards of material." The mechanical sweepers the city had previously used had a capacity of only 4 cubic yards. "We've done numerous tests, and other cities have as well, and the Schwarze always comes out on top. It carries 440 gallons of water, which is more than most of the others, so you can sweep longer without the operator having to stop to take on water. All these things are important for sweeping cycle time. How fast can you pick it up? How often do you have to stop? How often do you have to dump? And how much does it carry?

"Miller says the manufacturers have been very responsive to suggestions from users in the field, and that he collaboratively had the opportunity to help develop several beneficial design features: "Schwarze incorporated many of our suggestions." He says one of the challenges of the regenerative air technology results from the intensive compression and compacting of the material within the collection hopper. "The debris gets packed into the sweeper so tightly that it won't dump. If you can, imagine 7 yards of leaves all packed in the back of the truck and they won't come out. I worked with Schwarze to completely redesign the configuration of the door so when it opens it all comes out much more quickly and easily, and that was incorporated into the new A9000 unit, which most of the cities around here are buying now."

He says mastering all the capabilities of the regenerative sweepers requires significantly more training than did the older mechanical broom sweepers, but, he adds, "They perform better over a wider range of operational conditions. If you know what you're doing you can do a pretty good job in every circumstance."

Seaside Diversions

Down the California coast in the City of Imperial Beach in the San Diego Bay area, stormwater managers face a different set of concerns. As environmental manager for Imperial Beach, a seaside community whose major attraction is its beachfront, Todd Snyder says during the months from May through September the city must monitor water quality daily at the outfalls to ensure its safety for recreational activities. In addition, the city must contract with laboratories when necessary for more in-depth analysis of its samples. Snyder says the city has installed diversion systems in its stormwater system to direct low flows, with highly concentrated pollutant loadings, away from the coastal outfalls and into the sanitary sewer system for treatment.

However, like Miller and Bobel, Snyder also attributes much of

his concern over urban pollution to the automobile in its various stages of operation or maintenance. He is also concerned about other commonplace sources of pollution that arise from business practices such as restaurant refuse. He says the biggest step a municipality can take to prevent pollution is public education. "The most important part is to get to a level of knowledge where your residents understand the distinction between the stormwater system and the sanitary sewer system."

From the Backyard to the World

A central component of the Imperial Beach approach to stormwater quality, Snyder says, has been the city's inspection program. "We're a relatively small city, so we do a lot of canvassing through the area, a lot of drive-by surveillance, and we'll stop and talk to people who we see are engaging in activities that are contributing pollutants. We also have inspection programs that help us pinpoint when these things are going on." Education alone can't resolve all of the issues. Snyder says the city operates an aggressive in-house preventive maintenance program to prevent leaks from city-operated vehicles. It also has a process to ensure that city vehicles are washed in special wash bays to prevent runoff from entering the storm drain system. Although residential car washing is exempt from regulation under Imperial Beach's permit, he says the inspector does go out to encourage individual residents to have their vehicles washed at commercial facilities, or to pull their cars onto their lawn for washing. He says that through efforts such as these, "Residents and business operators are becoming more aware of how their activities affect water quality." However, he says Imperial Beach shares the San Diego Bay watershed with communities across the border in Mexico, giving the challenge international dimensions over which he says his program has no control. With runoff from both sides of the border mixing in waters along the coast, Snyder says, it's even difficult to give a precise assessment of the progress of pollution control efforts in his own municipality. "Negotiations over those issues," he says, "are going to occur on a much higher level."

Infrastructure Maintenance

Proper maintenance of infrastructure can play an important role in reducing the exposure of receiving waters. By using in-house crews and capabilities, Snyder says, Imperial Beach has set "a goal every year to clean every storm drain in the city between the summer months. That amounts to over 100 catch basins and up to 5 miles of drainpipe." He adds that this cleaning effort is "most effective if you get in there before the first rainfall and clear out the debris."Rick Lewis of American Hydrovac is also a proponent of routine storm drain cleaning. "The last thing you

want is for storm drains to become anaerobic," he notes.

His firm sells HiVac Aquatec combination machines. "The more regularly you clean the drains, the less chance it will become hazardous," he says. "In addition, vector studies have shown that female mosquitoes will fly 1,000 feet down a storm drain to have their young. The longer debris sits, the more likely it is to become a nesting area for mosquitoes and pests. Then during the next storm it washes out as a much more potent pollutant than when it went in there in the first place." Lewis encourages municipalities to invest in the capability to clean storm drains on a regular basis, ideally four times a year. He says the majority of larger communities where his firm operates already have a combination truck or a small jetter that they can use for this purpose.

While the cost for the combination truck is about $205,000, he says small cities have made it affordable by collaborating to arrange lease-purchase deals over the seven- to 10-year serviceable lifespan of the vehicles. However, he suggests there are also options for municipalities with tighter budget constraints. "For about $35,000, they could invest in a unit such as the XVAC, which is a vacuum trailer that has a 500-gallon capacity. That would at least give them some capacity for jetting to dislodge things, and then vacuuming for anything that came back toward the unit."

A New View"

We have a wastewater crew dedicated to waste drainage who also maintains the storm drain inlets," says Dave Serge, utilities services manager for Mountain View. The crew of three work with a Vacon combination truck clearing storm drain inlets and pipes several times a year. But the program has also developed some innovative approaches to maintenance.

For example, Serge says Mountain View has initiated a program to conduct video inspection of its storm drain system. While TV systems are commonly used to evaluate sanitary sewer systems, he says it is unusual to see them used on storm drains. "We've TV'd 30% to 40% of the system over the past five years. We've been able to detect sand buildups, root infiltration, and laterals improperly tapped into the system. This enabled us to go in and change the methodology we used for cleaning. In one case," he says, "we had settling of a road above a storm drain. We TV'd the storm drain using sonar and found a void above the pipe. We injected the cavity with grout, and that saved us from having to excavate." The video system he uses is equipped with GPS and the cost to contract the work is about $1.20 per foot of pipe.

So far, the Mountain View stormwater program has examined about 15,000 feet of pipe using this system. But even the emerging technologies, Serge says, may eventually pose challenges for stormwater managers. In response to regulations, he says, "We're seeing a lot of CDS units going in on private property as developers try to meet their NPDES post-construction stormwater obligations. But it's not clear that the property owners are geared up to maintain them." As a result, he says, "There may come a time when there may be a strong push to have the city come in and maintain them."

Getting Organized

While the larger cities and those along the coastal areas have long been active in water-quality issues, some smaller inland communities are building brand-new stormwater-quality programs. "We've had a stormwater department for only a few years, and right now we're working on ordinances to be able to enforce the policies we've been coming up with," says Eileen Hamlin of the Flagstaff, AZ, Stormwater Department, who says her department received its first stormwater permit under NPDES Phase II. Flagstaff, she says, is a city that "bears few comparisons to others." Considered a gateway for tourism to the Grand Canyon, it stands isolated in high desert. It is an arid environment dotted with Ponderosa pine with few permanent streams. In fact, the waterways that do exist, referred to locally as washes, are dry most of the time.

When it does rain, "It rains hard," says Hamlin, adding that "Flagstaff can expect 7 inches of rain per year, not spread out over 12 months but typically in brief storms." She says these brief storms, known as monsoons, are typically characterized by "microbursts where parts of the city experience a huge downpour, while other areas get no rain at all."

Nevertheless, according to Peter McCullough, environmental manager for the city, wildlife such as blue heron can "occasionally be found within a few of the largest of the washes." He says the idea of a stormwater-quality program in a place like Flagstaff may sound like an unusual proposition. "People often think of it as really dry, but when you go for a month or two with no rain, that's when pollutants really build up, so it's important to keep it as clean as possible."

Diverse Issues, Common Solutions

Hamlin believes it was not leaf fall but snowfall that historically provided the rationale for Flagstaff's street sweeping program. The city, she says, receives about 100 to 110 inches of snow each year. The snow melts very quickly, leaving the roads covered with the cinders placed there to improve traction during icy conditions; the sweepers are employed to remove the

cinders. However, the sweepers continue to operate routinely throughout the year and play an important role in pollution control efforts. Hamlin says the Streets Division has four full-time mechanical Broom Bear sweepers and one backup. "They each have a quadrant of the city to keep clean. We sweep residential areas bimonthly, arterials weekly, and the downtown area is swept Mondays though Fridays."

She adds, "The same division also does drainage maintenance, signing, painting, sidewalk replacement, asphalt repair overlays—they have quite a comprehensive program." Hamlin says programs in many city departments and divisions play a role in stormwater quality. "We have an 'adopt a wash' program as well as a stream team program, managed by Environmental Services. They have 40 different volunteer groups who go out to the washes and do litter cleanup projects."

She says Environmental Services and the street maintenance function within Public Works work closely with the Stormwater Department, which is officially organized separately within the Community Development Department. "Some people think we should be in Public Works since we have an operations element to our program, other people think we should be in the Utilities Department because we have a utility element to our program, and yet we do grading inspections and final drainage reviews—that's a piece of what happens in Community Development. But there's any number of places where you could put a stormwater program." She says these complex relationships between the departments work smoothly, "partly because we're a small community and everybody knows everybody else."

Money Matters

As with many public policy mandates, NPDES compliance can present a funding dilemma for municipalities. In Palo Alto a small fee is levied on all property holders, with a sliding scale for larger parcels. "Stormwater is a relative newcomer to environmental programs," says Bobel. "We have a special fee, fairly small, which mostly covers repairs. It is not enough for pollution prevention or treatment, not enough to do all the things we'd like to do."

However, Bobel says it is often not useful to separate out the cost of stormwater programs from the city's many other operations. He says, "Our program is built up from street sweeping and elements of other programs, some of which were ongoing and others which didn't exist before. We have not tried to add that up to say what the total costs for stormwater would be, because that would make it appear that there was this whole new cost area for government, and that's not the case.

"Dave Serge of Mountain View says there are numerous ways to consider funding for stormwater programs. "When you first start out, as long as you have a good nexus as to why the charges are where they are, then people are pretty reasonable." He says there are multiple benefits to consider as well, even when you look at a specialized activity such as street sweeping. "The drivers are out there, and because they're moving slowly over the pavement they have a chance to observe things: problems with the pavement, cars that have spilled oil, graffiti, abandoned shopping carts, street lights that are out. It's another set of eyes and ears on the street."

After three years of research, discussions, and community outreach, Flagstaff finally settled on a stormwater utility fee as a funding mechanism for its programs. Hamlin says a rate increase, enacted in June 2006, has provided the city with the opportunity to target drainage improvement projects. "The funding allows us to implement some of the stormwater action plans that we've been looking forward to for a long time."

McCullough agrees, adding that Flagstaff has invested in some oil and water separators for its maintenance operations and that it is considering upgrading deicing facilities at the airport. But for now, he says, "A lot of it is behavioral, like at a vehicle shop getting them not to store paint outside in order to prevent spills that eventually end up in the washes." Phil Bobel amplifies the importance of the behavioral component; he says Palo Alto's stormwater programs have had their greatest success through collaborative efforts, when the target group is convinced there is a worthwhile goal.

"Stormwater is largely a low-tech program. It's all about people and their practices. But," he adds, "it's not just telling people what not to do but always talking about what they can do. It's changing people's practices from one set of relatively low-tech practices to a different set of relatively low-tech practices."The next installment in this series will explore the response to NPDES and good housekeeping practices in EPA Region 5, focusing on municipalities surrounding the Great Lakes.

David C. Richardson is a writer based in Baltimore, MD.

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The Folchetti OVERVIEW

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Information for the regulated community

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In coming issues . . .

Monitoring Water Quality Across the Country

Water Quality and Land Use

Bar Raised on Phase I ESA's

Improving Stormwater Quality in EPA-designated Region 9

This article is adapted from the first in a series in *Stormwater* magazine describing the implementation of stormwater pollution prevention programs across the country. As reported in the November/December 2006 issue of *Stormwater*. a growing number of initiatives have begun to focus on stormwater quality in urban areas—where, according to the 2000 census, 79% of the U.S. population now resides. Undertaken in accordance with the National Pollutant Discharge Elimination System (NPDES) Phase I and Phase II permit processes, which emphasize controlling nonpoint-source pollution from urban areas, the initiatives are an attempt to address the everyday practices of people that affect water quality. This first article offers a look at four communities in the area designated by the Environmental Protection Agency (EPA) as Region 9, including Arizona, California, Hawaii and Nevada. Although the USEPA administers NPDES programs on a regional basis, in most instances, the states within each EPA-designated region administer their respective stormwater pollution prevention programs.

The City of Palo Alto initiated street sweeping, one of the recommended good housekeeping practices, to groom the city's 50,000 streets and prevent flooding.

In California, many municipalities were issued Phase I permits in the early 1990s. Years before this, however, the City of Palo Alto had initiated street sweeping, one of the recommended good housekeeping practices associated with NPDES, to groom the city's 50,000 street trees and prevent flooding by keeping the storm drains clear of leaves. Street sweeping is performed 24 hours a day, six days a week, stopping only for "spare the air" days, when smog levels are exceptionally high. Using this cycle, the entire city is swept over the course of six days, with heavily used downtown areas swept daily, using a fleet of six sweepers that includes both mechanical broom sweepers and some newer regenerative air sweepers, such as a compressed natural gas (CNG)-fueled sweeper. Each fall, the city collects 2,400 tons of leaf debris that would otherwise eventually find its way to San Francisco Bay. According to Phil Bobel, manager of environmental compliance, the concern is less about nutrient loading than biological oxygen demand, as trapped decaying leaves in ponds and storm drains could deplete enough oxygen to have a negative impact on the ecology of the Bay.

In nearby Mountain View, fleet manager Steve Miller says that regenerative air sweepers, which move more air and have greater capacity than mechanical broom sweepers, are now being purchased by almost every city in the Bay Area. He touts the Schwarze A9000, developed with input from Mountain View, which can collect nine cubic yards of material, compared to four cubic cards with mechanical sweepers. Mastering all the capabilities of regenerative sweepers requires more training than did the older sweepers, but "they perform better over a wider range of operational conditions," says Miller.

In the City of Imperial Beach in the San Diego Bay area, water quality must be monitored at coast outfalls daily during May-November, to ensure the safety of the beachfront for recreational activities. Diversion systems in the city's stormwater system direct low flows, with highly concentrated pollutant loadings, away from the coastal outfalls and into the sanitary sewer system for treatment. Todd Snyder, environmental manager for Imperial Beach, says the most important step a municipality can take to prevent pollution is public education, which the city accomplishes in part through an inspection program that involves a lot of outreach to citizens. Imperial Beach also operates an in-house preventive maintenance program to prevent leaks from city-operated vehicles. The vehicles are washed in special bays to prevent runoff from entering the storm drain system, and individual residents are encouraged to wash their own cars at commercial facilities or on their lawns.

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Illicit Discharge Detection: The Need for Community Compliance

Dry weather may be the worst time for debris to collect.

As described in an article in the November/December issue of *Stormwater* maga zine, community compliance regarding illicit discharge detection requires public education, cooperation between regulatory authorities and residents, and using the right tools. On the national level, there has been growing popularity for a suggestion that a small tax be levied on the products (mostly personal care) that cause many of the problems, and the money raised put into a national fund. In the meantime, tougher enforcement of federal regulations has resulted into at least two recent cases where violators have agreed to pay large penalties.

For failing to provide adequate stormwater controls for a large highway project, the Idaho Transportation Department and a contractor agreed to pay a penalty of $850,000 and to send their engineers and environmental inspectors for certified stormwater training. To avoid future violations, ITD also agreed to implement new construction management practices. For failing to implement, adequately fund and adequately staff its stormwater management system, the City of Dallas agreed to spend more than $3.5 million to decrease the amount of pollution entering the system. The settlement requires the city to build two wetlands at an estimated cost of $1.2 million, pay a penalty of $800,000, and increase storrmwater staff positions, inspect hundreds of industrial facilities and construction sites, and improve the management systems at several facilities.

Many cities, such as Minneapolis, have made great efforts to meet the requirements of National Pollutant Discharge Elimination System (NPDES) Phase II regulations. Minneapolis's Rainleader Ordinance, passed two years ago, required the disconnection of all roof and area drains or other stormwater or clearwater connections to the city's sanitary sewer system by 2007. Along with sewer separation and sanitary main restoration, projects include the use of hydraulic modeling to identify improvements in the sanitary sewer system that would make the best of storage capacity. Tom Frame, P.E., supervisor of the city's environmental program, notes that it is easier to detect illicit discharges due to faulty systems than those caused by irregular dumping.

The cities under 10,000 that make up most of the nation are also grappling with compliance. In Ohio, many of the state's more than 260 small municipalities have responded by developing a stormwater utility. In Michigan's Upper Peninsula, many communities with under 1,000 inhabitants must deal with a legacy of bad sanitation and water infrastructure from departed mining companies. Huge snowfalls with subsequent quick thaws pose an additional challenge. Although it is difficult, these small communities, many of them low-income, are doing what they can to comply, states the Michigan Department of Environmental Compliance.

Accurate inspections are essential to finding illicit discharges, and tools to find leaks and unwanted flows are available. Envirosight provides visual inspection equipment, from crawlers to portable zoom cameras, that has been used successfully by municipalities, departments of transportation, contractors and engineering companies. The City of Calgary in Alberta, Canada, reports success with closed-circuit television video pipeline inspection systems from Ratech Electronics. Aerial thermal mapping, such as the Thermal MapIR service offered by Stockton Infrared Thermographic Services, Inc. in California, identifies sources of pollution by their thermal infrared signatures and is being used to detect stormwater drain discharges and leaking sewage collector lines and water mains.

Some equipment is helping users save money while controlling stormwater discharges. According to the Dearborn Times-Herald, the City of Dearborn, MI, will save $120 million over original cost estimates by revising its plan for a combined sewer overflow control project. The new plan employs a compact vertical treatment shaft process using the CDS Raked Bar Screen fine screening system. The design of the system relies on gravity, eliminating the need and costs for pumping stations, tunnel and associated shafts and ventilation structures; surge control tanks and screening buildings; and water infiltration. Parker West Mobile Systems, which provides mobile wastewater processing with automatic containment and collection and no storm drain runoff, serves a wide range of customers that have problems of discharge from sites like parking lots. According to one major oil company, Parker West not only helps customers to stay in compliance, but offers prices that are more than fair.

As construction sites have come under increasing scrutiny, and New York City has instituted a "no track-out" policy for vehicles that visit and work on city job sites, Wheelwash has developed Rhino Multi, a self-contained onsite wheel cleaning system, to address the problem of debris on construction sites. According to an environmental engineering firm using the system on a site visited by 60 trucks per day, Rhino Multi cleans a truck's wheels and tires in 30 seconds, and 92% of the water used is recycled.

Dry weather may be the worst time for debris such as pop cans, newspapers, and plastic bags to collect. When the rain finally comes, the debris is washed away along with soil mixed with chemicals, oil, grease, metals and solvents. For this reason, "don't litter" is good advice. Dry weather causes the worst problems for beaches, which often must be closed for health reasons, and one of the states most affected is California. There the Surfrider Foundation has been trying to collect information on the possible reduction in dry-weather flows due to outreach efforts by municipalities and environmental groups. Although little data seems to be available, the environmental group reports there is some evidence of success. Since the City of Dana Point installed an ozone treatment system for Salt Creek, for instance, there have been no dry-weather postings at adjacent beaches.

Whatever equipment and technologies are used to control and detect illicit discharges, the attitude and education of the people involved remain critical. Derek Huff at the Drain Commissioner's Office of Livingston County, MI, says that with a little education, contractors soon understand it's easier to stay in compliance than not. He estimates the number of regulation breakers in his county at no more than 1% to 2%.

Julie Coulter

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Pervious Concrete Pavement: Reducing Stormwater Runoff

In use for more than 150 years, pervious concrete is becoming increasingly popular with developers, permitting agencies, engineers and owners seeking new ways to reduce stormwater runoff and build low-impact, sustainable communities.

According to an article in the October issue of *Stormwater* magazine, typical pervious concrete consists of cement, gravel and water. The absence of fine aggregate permits properly placed concrete to consist of 15% to 20% void space, allowing stormwater to pass through the pavement. This percolation allows for a recharge of groundwater tables, making pervious concrete a key tool in reducing stormwater runoff. Placed within the drip-lines of trees, pervious concrete pavement allows for the passage of air to the tree roots, allowing them to grow out rather than up, thus preventing the surface of the pavement from popping up. Many permitting agencies permit pervious pavements to be used to contribute to the impervious surface ratio, with typical values ranging from 50% to 100%, depending on local regulations.

When using pervious concrete, proper design is essential. A key consideration is the thickness of the concrete, with requirements based on traffic conditions, stormwater storage, or even subgrade conditions. Sections typically vary from six to eight inches, and the higher stress levels around the free edge of pavements may call for a thickened edge or curbing. When the pavement, as well as the subgrade and volume above the pavement, are used to retain a volume of water, curbing may be necessary around the perimeter of the pavement. Local regulations must be consulted to determine what credits can be achieved for each application. Pervious concrete pavement is typically used in light-duty to heavy-duty traffic applications, such as parking lots and sidewalks, but future advances in technology may permit heavier-duty applications. The design must also take into account the minimum percolation rate of a subgrade, which generally controls the overall infiltration rate of a pervious concrete system. An overcompacted subgrade will lead to lower percolation rates. In some cases, a layer of clean rock will need to be installed on top of the subgrade to increase infiltration capacity.

Typical pervious concrete consists of cement, gravel and water.

Successful placement also requires correct installation procedures. Before placement, the properties of the subgrade should be verified for compliance with project plans and specifications. The concrete should be placed as close to its final location as possible, by any method but pumping. After placement, the concrete should be struck off with a vibratory screed to allow for compaction. When rolling the pavement with a steel pipe, care must be taken not to overcompact, which can reduce void space. Joints are typically cut at the time of placement with a hand tool. Curing is the final step, in which pavement should be covered within twenty minutes of the strike-off step and remain covered for at least seven days. (The 522R-06 document from the American Concrete Institute 522 is a guide to the use of pervious concrete. The committee is working to complete the 522.1 specification, which will provide guidance for specifiers incorporating the material into their projects.)

Proper maintenance requires only vacuum sweeping or power washing and will improve the infiltration rate of a pervious concrete system. Some permitting agencies require periodic inspections and maintenance to keep the system running at higher performance levels.

As to the future, many improvements in both the design and construction of pervious concrete have been made in a short time. Extensive research is under way on various aspects of pervious concrete pavements, including freeze/thaw performance, pollutant treatment, and long-term performance.

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Stormwater Quality:

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To maintain its infrastructure, Imperial City has set a goal to clean every storm drain—more than 100 catch basins and up to five miles of drainpipe—during the summer months each year. According to Snyder, cleaning is most effective when debris is cleaned out before the first rainfall. American Hydrovac, which manufactures HiVAc Aquatec combination machines, recommends cleaning storm drains four times a year. The cost for a combination truck is about $205,000, but smaller cities have arranged collaborative lease-purchase deals to obtain them. For $35,000, cities can buy the XVAC, a vacuum trailer with a 500-gallon capacity that provides jetting to dislodge debris.

In Mountain View, a wastewater crew dedicated to waste drainage also maintains the storm drain inlets, clearing them and pipes several times a year with a Vacon combination truck. The city's GPS-enabled video inspection of its storm drain system has changed the methodology used for cleaning. When a road settled above a drain and the video system found a void above the pipe, for example, the cavity was injected with grout, eliminating the need to excavate. At a cost of about $1.20 per foot of pipe, the system has examined about 15,000 feet of pipe.

Further inland, some smaller communities are building brand-new stormwater-quality programs. The high-desert town of Flagstaff, Arizona, instituted a stormwater department a few years ago. Although Flagstaff receives only seven inches of rain per year, Peter McCullough, environmental manager for the city, points out that pollutants really build up when there are periods of a month or more between storms. With four full-time mechanical broom sweepers and one backup, Flagstaff sweeps residential areas bimonthly, arterials weekly, and the downtown area Monday through Friday. The city also has an "adopt a wash" program and a stream team program, which uses 40 volunteer groups to do litter cleanup at the washes (local waterways that are usually dry).

Funding for NPDES compliance can be difficult for municipalities. Dave Serge, utilities manager for Mountain View, says that peo-

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Q & A with John Folchetti

Q: ***What is the status of stormwater pollution prevention programs in our area?***

A: To the best of our knowledge, the bulk of communities are compliant. In some instances, there are monthly meetings on the progress of MS4 programs, and an abundance of fliers and posters are being put up to fulfill the public education requirement. The DEC is emphasizing the adoption of illicit discharge detection and elimination ordinances this year, so that communities can commence implementation before the March 2008 Phase II Stormwater Management Plan deadline.

Q: ***What areas of stormwater pollution prevention are most important to address in our area?***

A: The contaminants that occur most frequently and in the highest volume in our area. These include sand and salt, which typically are used heavily in the winter, leaves in the fall, and because of the high density of motor vehicles in our area, grease and oil year round.

Q: ***What kinds of low-technology, everyday practices are useful here?***

A: Public education on everyday practices is perhaps the most important low-tech component. On the municipal level, simple maintenance, like cleaning catch basins on a regular basis and performing street sweeping, which is still done by hand in some communities, are basic useful practices.

Please give us your suggestions for future Q & A topics and future articles, by emailing them to john.folchetti@jrfa.com.

Stormwater Quality: *continued from page 3*

ple will usually accept charges that are well explained at the outset of a stormwater program. Palo Alto levies a small fee on all property holders, which is not enough for all the pollution prevention that the department of environmental compliance would like to do. Since the stormwater program is built on other city programs, however, the department is reluctant to make stormwater appear as a separate cost. After three years of discussions, Flagstaff decided on a stormwater utility fee as a funding mechanism. Since a rate increase in June 2006, the city has invested in oil and water separators for its maintenance operations and is considering upgrading deicing facilities at the airport. Whatever the source and size of the funding, managers agree that stormwater is primarily a low-tech program in which success depends on getting people to change their daily practices to prevent stormwater pollution.

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THE FUNDING CALENDAR

Grant Name	Funding Agency	Eligible	Deadline	Goals
Local Government Management Improvement Fund	New York State Department of Education	Local governments: municipalities, fire districts, school districts, boards of cooperative educational services	February 1, 2007	Improve record management: inventory and planning, active records: inactive records; historical records and educational uses of local government records projects
Low Income Housing Credit Program	NYS Division of Housing and Community Renewal	Persons and firms that construct and/or rehabilitate rental housing that is reserved for low income households may apply	February 26, 2007	Promote low income housing
Agricultural Fairground Infrastructure Improvements	New York State Department of Agriculture and Markets	Agricultural or Horticultural Corporations and County Extension Service Associations	March 30, 2007	Costs of construction, renovation, alteration, rehabilitation, improvements or repair of fairground buildings or facilities used to house and promote agriculture
Greenway Communities Grant Program	The Hudson River Valley Greenway Communities Council	Approved Greenway Communities	Open	Community planning grants to help communities develop a vision for their future and tools to achieve it by balancing economic development and resource protection objectives
Small Cities - Economic Development Program	New York State Governor's Office for Small Cities	Municipalities With Populations Under 50,000 Excluding Metropolitan Cities, Urban Counties And Indian Tribes	Open	General economic development activities that create and/or retain permanent, private sector job opportunities principally for low and moderate-income persons, through the expansion and retention of business and industry in New York State
Community Facilities Program	US Department of Agriculture, Rural Development	Rural Towns, Villages and Cities of 20,000 people or less	Open	A community facilities loan/and or grant would be approved to finance the following types of activities: Health Care, Public Safety, and Public Services

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Attachment 3-1
Program Assessment Form - Commercial Industrial Components
Effectiveness and Performance Measures

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Explanations (if needed)
COMMERCIAL								
Number of high priority commercial facilities inspected.	0	0	10	32	39	33		
Number of medium and low priority commercial facilities inspected.	0	0	0	0	0	0		Medium and low priority commercial businesses are inspected on a complaint-only basis.
Number of facilities in compliance or on a compliance schedule.	N/A	N/A	10	32	39	33		
of staff supporting the Commercial Component.			2	3	3	3		1 Code Compliance Officer 2 Public Works Employees
of staff supporting the Commercial Component trained in pollution prevention.			2	3	3	3		1 Code Compliance Officer 2 Public Works Employees
of staff supporting the Commercial Component trained in storm water quality as it pertains to the Commercial Component.			2	3	3	3		1 Code Compliance Officer 2 Public Works Employees
of Commercial facilities covered under Order 2001-01.	165	150	127	105	93	94		21 businesses eliminated from inventory for the following reasons: Port of SD jurisdiction (4), out of business (5), all operations indoors (4), no food service (5), single family home (3)
of high priority facilities.	165	150	127	105	93	94		See above
Commercial businesses contacted regarding storm water requirements	0	0	10	375	52	79		
of high priority facilities with enforcement actions.	0	0	5	7	9	16		Includes only Notices of Abatement and Notices of Violation
INDUSTRIAL								
Number of high priority facilities identified.	2	1	0	0	0	0		
Number of high priority facilities targeted for inspection.	2	1	0	0	0	0		
Number of high priority facilities inspected.	0	0	0	0	0	0		
Number of medium and low priority industrial facilities inspected.	0	0	1	1	1	1		Site has a valid Certificate of Non Exposure from the SDRWQCB
Number of facilities in compliance or on a compliance schedule.	2	1	1	1	1	1		

Attachment 3-1
Program Assessment Form - Commercial Industrial Components
Effectiveness and Performance Measures

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Explanations (if needed)
Number of facilities referred to RWQCB for enforcement of State General Industrial Permit.	0	0	0	0	0	0		
of staff supporting the Industrial Component.			2	3	3	3		1 Code Compliance Officer 2 Public Works Employees
of staff supporting the Industrial Component trained in pollution prevention.			2	3	3	3		1 Code Compliance Officer 2 Public Works Employees
of staff supporting the Industrial Component trained in storm water quality as it pertains to the Industrial Component.			2	3	3	3		1 Code Compliance Officer 2 Public Works Employees
of Industrial sites reported to SDRWQCB.	0	0	0	0	0	0		

ATTACHMENT 3-2
INVENTORY OF COMMERCIAL BUSINESSES IN THE CITY OF IMPERIAL BEACH

	BUSINESS	ADDRESS	CLASSIFICATION	WATERSHED	FY 02-03		FY 03-04		FY 04-05		FY 05-06			FY 06-07			INSPECTION SCHEDULED FOR (FY 07-08)
					INSPECT DATE	COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 03-04	COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 04-05	COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 05-06	REPORT LETTER SENT	COMPLAINT INVESTIGATIONS	INSPECTION DATE FY 06-07	REPORT LETTER SENT	COMPLAINT INVESTIGATIONS	
1	ANCHOR MOTORS	740 PALM	AUTO SALES	OTAY										12-Sep-06	18-Sep-06		
2	IMPERIAL BEACH MOTOR CARS	942 PALM	AUTO SALES	OTAY													
3	HS CARS COMPANY INC. (FORMERLY LA COSTA AUTO FINAN	1333 PALM	AUTO SALES	OTAY										23-Aug-06	31-Aug-06		
4	SANTANA MOTORS	942 PALM	AUTO SALES	OTAY										18-Oct-06	30-Oct-06		
5	AL'S AUTOMOTIVE SERVICES	200 PALM	AUTOMOTIVE	OTAY							14-Feb-06	7-Mar-06					
6	DEPENDABLE CARBURETOR EXCHANGE	660 EMORY	AUTOMOTIVE	OTAY							18-Jan-06	16-Feb-06					
7	ECONO LUBE N' TUBE	772 13TH	AUTOMOTIVE	OTAY					9-Feb-05					5-Dec-06	19-Dec-06		
8	GENES' AUTOMOTIVE	1085 PALM	AUTOMOTIVE	OTAY				1			18-Jan-06						YES
9	GENE'S TOWING & STORAGE	753 10TH	AUTOMOTIVE	OTAY							18-Jan-06	16-Feb-06					YES
10	HAWKINS AUTO BODY	519 FLORIDA	AUTOMOTIVE	OTAY					15-Nov-04					20-Sep-06	27-Aug-06		
11	IMPERIAL BEACH AUTOMOTIVE	989 PALM	AUTOMOTIVE	OTAY							18-Oct-05			24-Apr-07	18-May-07		
12	L & M TIRE CO./ EXPRESS TIRE	950 PALM	AUTOMOTIVE	OTAY					24-Jun-04					3-Aug-06	15-Aug-06		
13	M & M TRANSMISSIONS	1335 PALM	AUTOMOTIVE	OTAY					24-May-05					20-Sep-06	27-Sep-06		
14	MASON'S ALIGNMENT-BRAKE-MUFFLE	975 PALM	AUTOMOTIVE	OTAY							22-May-06	5-Jun-06					YES
15	PRECISION FOREIGN	1240 PALM	AUTOMOTIVE	OTAY							5-Jan-06		1	24-Apr-07	10-May-07		
16	SOPHISTICATED AUTO	987 PALM	AUTOMOTIVE	OTAY							10-Jan-06	9-Feb-06					YES
17	TUNES LUBES ETC.	741 PALM	AUTOMOTIVE	OTAY			22-Jun-04		8-Jul-04					29-Aug-06	11-Sep-06		
18	ALL AMERICAN CAR WASH	1158 PALM	CAR WASH	OTAY							2-Jun-06	19-Jun-06					YES
19	MIKE'S CAR WASH (FORMERLY "SELF SERVE CAR WASH")	1117 PALM	CAR WASH	OTAY							14-Feb-06	7-Mar-06					YES
20	RJ's CAR WASH	730 10TH	CAR WASH	OTAY							16-Feb-06	7-Mar-06					YES
21	7-ELEVEN	657 PALM	EATING / DRINKING	OTAY			16-Oct-03						1				
22	7-ELEVEN	197 PALM	EATING / DRINKING	OTAY													
23	AROMA THAI	757 SEACOAST	EATING / DRINKING	OTAY					23-Mar-05								
24	AVATAR HOSP GP DBA SUBMARINA	894 PALM	EATING / DRINKING	OTAY					14-Dec-04								
25	BASKIN 31 ROBBINS	801 PALM	EATING / DRINKING	OTAY					1-Mar-05								
26	BEACH CLUB GRILLE	710 SEACOAST, SUITE F	EATING / DRINKING	OTAY			21-Jan-04										YES
27	BULLPEN TAVERN	706 SR-75	EATING / DRINKING	OTAY					22-Jun-05								
28	BURGER KING 806	1180 PALM	EATING / DRINKING	OTAY							3-Aug-05						
29	CARL'S JR. 585	700 13TH	EATING / DRINKING	OTAY			7-Jan-04										
30	CHAND CORONADO LP DBA SUBWAY	876 SEACOAST	EATING / DRINKING	OTAY			16-Jan-04										YES
31	IMPERIAL BEACH COFFEE & BOOKS (FORMERLY COFFEE BR	704 SEACOAST, SUITE A	EATING / DRINKING	OTAY					5-Aug-04								YES
32	El CILANTRO (FORMERLY COCKTELERIAS)	764 13TH	EATING / DRINKING	OTAY							28-Feb-06	21-Mar-06	1				
33	EL TAPATIO RESTAURANT INC	260 PALM	EATING / DRINKING	OTAY			24-Jun-04										YES
34	FAR EAST ROCK	992 PALM	EATING / DRINKING	OTAY							20-Oct-05						
35	GIANT PIZZA KING 5	600 PALM, SUITE 100	EATING / DRINKING	OTAY					20-Apr-05				1	11-Jan-07	24-Jan-07		
36	IMPERIAL DONUTS	1002 PALM	EATING / DRINKING	OTAY							10-Oct-05			3-May-07	10-May-07		
37	INTERNATIONAL BLENDS	208 PALM	EATING / DRINKING	OTAY					12-Aug-04								YES
38	JACK IN THE BOX 12	890 PALM	EATING / DRINKING	OTAY		1	7-Jan-04										YES
39	KFC CORPORATION	1056 13TH	EATING / DRINKING	OTAY					20-Oct-04				1	11-Jan-07	24-Jan-07		
40	ALIBERTO'S MEXICAN FOOD	1183 13TH	EATING / DRINKING	OTAY					20-May-05								
41	**LA CEIBITA**	1051B 13TH	EATING / DRINKING	OTAY										31-Jul-06	8-Aug-06		
42	LITTLE BONANZA	940 PALM	EATING / DRINKING	OTAY							19-Jun-06	19-Jun-06					
43	MAYRA'S TACO SHOP (FORMERLY LOS NACHOS TACO SHOP)	1004 PALM	EATING / DRINKING	OTAY							10-Oct-05			23-Mar-07	16-Apr-07		
44	LOS PANCHOS TACO SHOP	690 SR-75	EATING / DRINKING	OTAY					9-Mar-05				1	13-Feb-07	1-Mar-07		
45	MARCO'S FAMILY RESTAURANT	763 PALM	EATING / DRINKING	OTAY							10-May-06	5-Jun-06					
46	MCDONALDS/SCAROB INC.	1135 PALM	EATING / DRINKING	OTAY			16-Oct-03						1	8-Aug-06	15-Aug-06		

Bold indicates a new addition to the inventory.

ATTACHMENT 3-2
INVENTORY OF COMMERCIAL BUSINESSES IN THE CITY OF IMPERIAL BEACH

	BUSINESS	ADDRESS	CLASSIFICATION	WATERSHED	FY 02-03		FY 03-04		FY 04-05		FY 05-06			FY 06-07			INSPECTION SCHEDULED FOR (FY 07-08)
					INSPECT DATE	COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 03-04	COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 04-05	COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 05-06	REPORT LETTER SENT	COMPLAINT INVESTIGATIONS	INSPECTION DATE FY 06-07	REPORT LETTER SENT	COMPLAINT INVESTIGATIONS	
47	MEIJO SUSHI	600 PALM, SUITE 300	EATING / DRINKING	OTAY							13-Sep-05			23-Mar-07	16-Apr-07		
48	MI RANCHITO TACO SHOP	805 SEACOAST	EATING / DRINKING	OTAY							23-Sep-05			7-Apr-07	23-Apr-07		
49	MICKIES BAR AND GRILL	220 PALM	EATING / DRINKING	OTAY					6-Jun-05								
50	MZM SEACOAST BISTRO, LP	875 SEACOAST	EATING / DRINKING	OTAY					22-Jun-05								
51	RED HAWK STEAKHOUSE	1205 PALM	EATING / DRINKING	OTAY					9-Dec-04								
52	RODRIGO'S MEXICAN FOOD	600 PALM	EATING / DRINKING	OTAY							1-Mar-06	21-Mar-06					
53	SEACOAST PIZZA	807 SEACOAST	EATING / DRINKING	OTAY			10-Oct-03										YES
54	SILVER SANDS	995 PALM	EATING / DRINKING	OTAY							15-Nov-05						
55	SILVER SEA CHINESE RESTAURANT	600 PALM, SUITE 117	EATING / DRINKING	OTAY					26-May-05								
56	SOMBRERO MEXICAN FOOD	189 PALM	EATING / DRINKING	OTAY							22-Sep-05			7-Apr-07	20-Apr-07		
57	STARDUST DONUT SHOP	698 SR-75	EATING / DRINKING	OTAY							7-Sep-05						
58	TACO BELL 133/ST MAR ENTERPRIS	1337 PALM	EATING / DRINKING	OTAY							24-Aug-05						
59	THE SCOREBOARD	951 PALM	EATING / DRINKING	OTAY							4-Oct-05						
60	THE WAVE CAFE	809 SEACOAST	EATING / DRINKING	OTAY							4-Oct-05						
61	WIENERSCHNITZEL 358	1253 PALM	EATING / DRINKING	OTAY			11-Jan-04										
62	WOODIES	710 SEACOAST, SUITE E	EATING / DRINKING	OTAY							15-Nov-05						
63	YE OLDE PLANK INN	24 PALM	EATING / DRINKING	OTAY							4-Apr-06	24-Apr-06					YES
64	MERCADO SHORES	639 7TH, SUITE A-B	FOOD MARKET	OTAY										4-Dec-06	6-Dec-06		
65	SAVE U FOODS	805 PALM	FOOD MARKET	OTAY										7-Nov-06	14-Nov-06		
66	WALLY'S IGA	836 PALM	FOOD MARKET	OTAY										18-Oct-06	6-Nov-06		
67	WY MARKET	1200 PALM	FOOD MARKET	OTAY										1-Nov-06	6-Nov-06		
68	7-ELEVEN	1311 PALM	GAS STATION	OTAY							3-Aug-05			4-May-07	18-May-07		
69	BEACH SIDE STATION	681 SR-75	GAS STATION	OTAY		1			1-Jun-05				1	15-May-07	1-Jun-07		
70	BP WEST COAST P DBA ARCO 9755	1185 PALM	GAS STATION	OTAY					8-Apr-05					6-Mar-07	15-Mar-07		
71	PALM (SB) 2 EXXON	907 PALM	GAS STATION	OTAY					7-Apr-05					6-Mar-07	15-Mar-07		
72	GOODWILL	849 PALM	LARGE RETAIL	OTAY									1				
73	KRAGEN AUTO PARTS	1025 PALM	LARGE RETAIL	OTAY									1	8-Mar-07	21-Mar-07		
74	SAVEON DRUGS	888 PALM	LARGE RETAIL	OTAY									1				
75	IMPERIAL BEACH PET HOSPITAL	538 12TH	ANIMAL FACILITIES	OTAY													
76	CALIFORNIA-AMERICAN WATER COMPANY	600 3RD	OTHER	OTAY							8-Sep-05						
77	EPISCOPAL COMMUNITY SERVICES	1340 IMPERIAL BEACH	OTHER	OTAY									1				
78	TUCK'S CARPET, INC.	532 FLORENCE	OTHER	OTAY									1				
79	BERNARDO SHORES RV RESORT	500 HWY 75	TRAILER PARK	OTAY							13-Sep-05						
80	IMPERIAL TRAILER PARK	674 PALM	TRAILER PARK	OTAY							30-Aug-05						
81	SIESTA RV PARK	409 PALM	TRAILER PARK	OTAY							22-Sep-05						
82	ANGELA'S MEXICAN FOOD (FORMERLY LA ROSA)	1293 IMPERIAL BEACH	EATING / DRINKING	TIJUANA							11-Aug-05						
83	MARRERO'S CAR WASH (FORMERLY "COIN-OPERATED CAR	1257 IMPERIAL BEACH	CAR WASH	TIJUANA							20-Apr-06	10-May-06					YES
84	C.H. DONUTS	1070 13TH, SUITE A	EATING / DRINKING	TIJUANA					12-May-05								
85	GIANT PIZZA KING 4	1070 13TH, SUITE B	EATING / DRINKING	TIJUANA					14-Apr-05								
86	IB FORUM	1079 SEACOAST	EATING / DRINKING	TIJUANA					23-Mar-05								
87	K-C'S CHINESE FOOD	1299 IMPERIAL BEACH	EATING / DRINKING	TIJUANA					21-Oct-04								
88	OFFICE LOUNGE COCKTAILS	1133 13TH	EATING / DRINKING	TIJUANA							10-Aug-05			23-May-07	7-Jun-07		
89	PIZZA INDUSTRY/DOMINO'S PIZZA	1307 IMPERIAL BEACH	EATING / DRINKING	TIJUANA							10-Jan-06	9-Feb-06					
90	13TH STREET MARKET	1126 13TH	FOOD MARKET	TIJUANA													
91	LA POSTA MARKET (FORMERLY "MARINA VILLAGE MARKET"	1268 IMPERIAL BEACH	FOOD MARKET	TIJUANA									1	13-Feb-07	1-Mar-07		
92	7-ELEVEN	1303 IMPERIAL BEACH	GAS STATION	TIJUANA							18-Aug-05			15-May-07	23-May-07		

Bold indicates a new addition to the inventory.

ATTACHMENT 3-2
INVENTORY OF COMMERCIAL BUSINESSES IN THE CITY OF IMPERIAL BEACH

	BUSINESS	ADDRESS	CLASSIFICATION	WATERSHED	FY 02-03		FY 03-04		FY 04-05		FY 05-06			FY 06-07			INSPECTION SCHEDULED FOR (FY 07-08)
					INSPECT DATE	COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 03-04	COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 04-05	COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 05-06	REPORT LETTER SENT	COMPLAINT INVESTIGATIONS	INSPECTION DATE FY 06-07	REPORT LETTER SENT	COMPLAINT INVESTIGATIONS	
93	FAR EAST ROCK	1300 IMPERIAL BEACH	GAS STATION	TIJUANA					21-Mar-05					21-Mar-07	3-Apr-07		
94	COLWELL REALTY	1398 SEACOAST	OTHER	TIJUANA									1				

Bold indicates a new addition to the inventory.

Storm Water Compliance Inspections

The City of Imperial Beach has developed an inventory of all existing commercial and industrial businesses and has prioritized them according to the type of business, proximity to a receiving water and potential threat to water quality.

Based on these prioritization, the City will be conducting storm water compliance inspections of commercial and industrial facilities within the City.

These inspections will include a meeting with the business owner or operator, a walk through of the facility, a review and evaluation of current best management practices and recommendations for additional measures that may be required to comply with the storm water permit and ordinance.

For additional information or clarification of storm water best management practices call (619) 424-4095

Report all spills immediately to the

Storm Water Hotline: (619) 424-4095 or

the Sheriff Dispatch at (619) 585-7232

REMEMBER
ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program
825 Imperial Beach Boulevard
Imperial Beach, CA 91932

Storm Water Hotline:
(619) 424-4095

Printed on recycled paper

Best Management Practices for your Business

ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program

Storm Water Hotline:
(619) 424-4095

Did you know that urban storm water is the biggest contributor to coastal water pollution?

Whether your business is 2 blocks or 2 miles from the coast, you can unknowingly contribute to storm water pollution through improper housekeeping and maintenance practices.

One of the most common types of pollution from businesses is contaminated water runoff, usually from cleaning and maintenance activities. Simple best management practices (BMPs) can prevent storm water pollution, and prevention is good business. It means clean water, clean beaches and shows your customers you care about the community.

What is storm water pollution?

Storm water pollution is urban runoff water that has picked up pollutants as it flows through the storm drain system–a network of channels, gutters and pipes that collect runoff from city streets, neighborhoods, construction sites, parking lots, etc. –and empties directly into receiving waters.

In the City of Imperial Beach, these receiving waters are the Pacific Ocean, Tijuana Estuary, Tijuana River, Otay River and San Diego Bay.

What can your business do to help?

The following are some ideas on steps you can take in and around your business. They are measures that do not take a lot of time or cost a lot of money, but can do a lot to prevent water pollutants from entering the storm drain.

Good Housekeeping

- Use brooms or mops to clean dumpsters, loading docks, pavements, and sidewalks, instead of using a hose or pressure washing.
- Never disposed of any wash water down the storm drain, streets, sidewalks, parking lots or driveways. Use the sanitary sewer.
- Use non-toxic products for cleaning and gardening maintenance. Avoid or minimize the use of pesticides, herbicides chemicals and toxic cleaning solutions.

Materials Storage and Handling

- When possible store materials indoors or under cover areas not exposed to rain and water.
- Store liquids, oil, hazardous waste, and other chemicals in a designated area with secondary containment.
- Keep liquid waste segregated. Many fluids can be recycled through hazardous waste disposal companies, as long as they are not mixed.

Spill Response

- Use absorbents such as cat litter to clean up small spills and disposed properly.
- Keep rags and absorbents readily accessible.
- Keep a spill response plan current and ensure that employees are trained properly.

Waste Management

- Keep property free of trash and debris. Keep all trash inside dumpsters or containers until it can be hauled away.
- Dumpsters should always be kept closed to prevent rainwater from entering.
- Never place hazardous waste in dumpster or trash bin.
- Recycle cans, bottles, paper, cardboards, and newspaper.
- Recycle motor oil, oil filters, anti-freeze, batteries, solvents, lubricants, tires, etc. These items are not trash, and are illegal to dump. Contact a hazardous waste hauler for proper disposal.

Employee Training

- Conduct regular training with all employees. Train employees on good housekeeping practices and the importance of pollution prevention.
- Inform employees of materials that can be recycled and those that have special disposal requirement. Identify and label containers.
- Post good housekeeping tips and best management practices on visible places such as the kitchen, or employee bulletin boards.
- Inform subcontractors, property managers, gardeners, and maintenance or cleaning crews about the storm water requirements and pollution prevention measures.

Eating and Drinking Establishments: Stormwater Best Management Practices

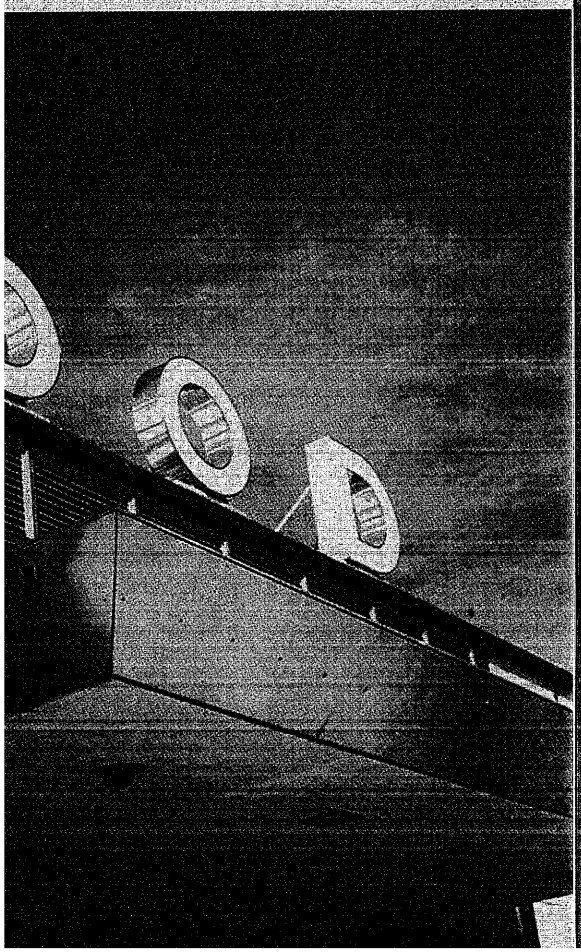

The Green Wrench Guide

Stormwater Best Management Practices for the Automotive Industry

3719

Eating and Drinking Establishments: Stormwater Best Management Practices

3720

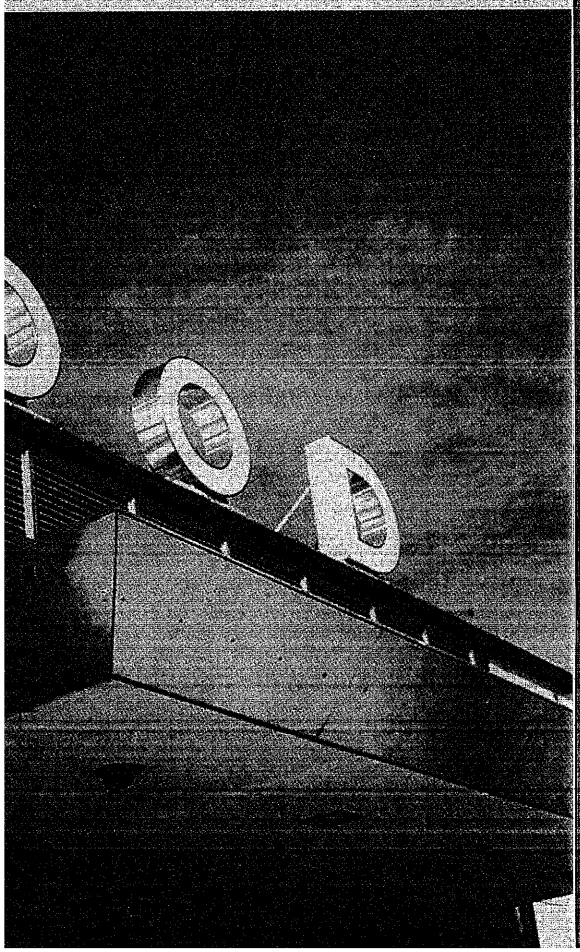

The Green Wrench Guide

Stormwater Best Management Practices for the Automotive Industry

Eating and Drinking Establishments: Stormwater Best Management Practices

3721

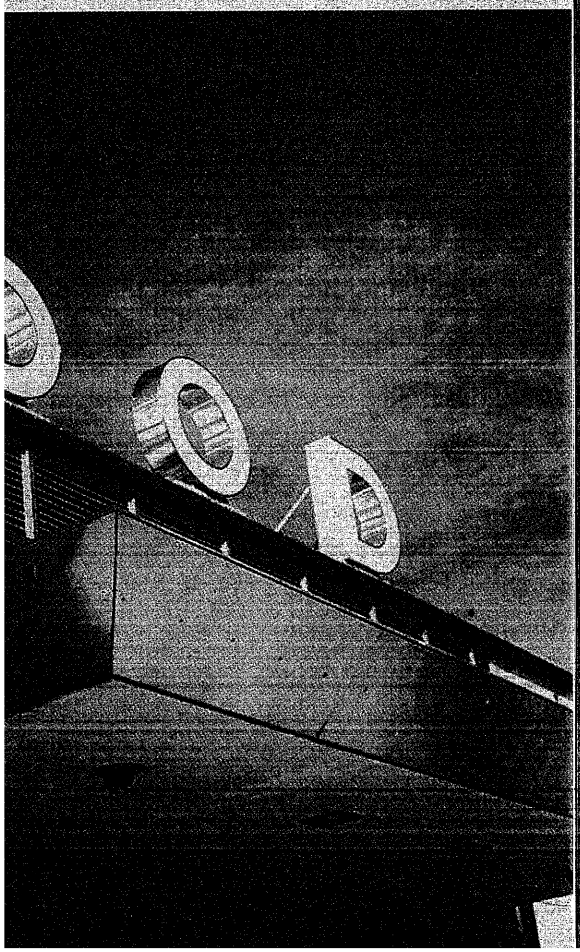

The Green Wrench Guide

Stormwater Best Management Practices for the Automotive Industry

City of Imperial Beach, California

OFFICE OF THE CITY MANAGER

December 12, 2005

Dear Residents & Business Owners:

The purpose of this letter is to tell you about a new fee included on this month's EDCO billing statement. The fee appears as "Imperial Beach Storm Water Management Fee." The fee was placed on the billing statement at the request of the City of Imperial Beach to help fund its storm water management program, required by the Federal government.

The Federal Clean Water Act, regulated by the State of California Regional Water Quality Control Board – San Diego Region, requires all cities in the County to operate storm water management programs. The requirement for the program comes with no Federal or State funds. Rather, cities are expected to bear the full cost of the programs.

The City of Imperial Beach created a monthly fee* to help offset the program's expense—as have most cities in the San Diego County. The City will continue to keep program costs as low as possible. EDCO's willingness to collect the fee, saving the City, residents, and businesses mailing and collection costs, also helps keep the fee lower. The revenue generated from the fee is expected to cover approximately 50 percent of the program's cost in 2006. With this fee, Imperial Beach will do its part to ensure that water in our bays, beaches and ocean are cleaner and healthier.

For more information regarding the City's storm water program, please visit our web site. On our www.cityofib.com home page, click City Departments - Public Works – Environmental - Storm Water. If you have any questions about this fee, please call Mr. Hank Levien, Public Works Director at (619) 423-8311. If you would like to help make a difference in keeping our water clean, please contact Todd Snyder, Environmental Programs Manager, at the number above.

Sincerely,

Gary Brown

Gary Brown, City Manager

*The fee went into effect December 2, 2005. The Jan/Feb/Mar, 2006 solid waste billing reflects the first billing for this service.

825 Imperial Beach Boulevard • Imperial Beach, California • 91932 • (619) 423-8303 • Fax (619) 429-9770

The City of Imperial Beach

(619) 423-8311
(619) 429-4861 Fax

PUBLIC WORKS
825 IMPERIAL BEACH BOULEVARD • IMPERIAL BEACH, CALIFORNIA 91932

January 24, 2007

Joan Jetty
Jetty's Famous Roast Beef Restaurant
800 13th Street
Imperial Beach, CA 91932

Dear Ms. Jetty:

Enclosed is the Commercial Inspection Report that summarizes the results of the urban runoff inspection of Jetty's Famous Roast Beef Restaurant on January 11, 2007. The City appreciated the steps your facility took to maintain compliance with the City's **Urban Runoff Management and Discharge Control Ordinance (Municipal Code 8.30)**. To remain in compliance, please ensure that all employees utilize the required best management practices (pollution prevention methods) listed in the report and in the brochure, "Best Management Practices for Your Business" that was provided to you during the inspection.

The following were positive attributes of your facility's management of urban runoff:

- Housekeeping: Most outside areas were free from trash and debris.
- Waste Management: Jetty's utilizes trash and grease recycling services. Covers to both containers were closed which prevents material contact with rainwater and potential runoff of pollutants.
- Spill Prevention and Response: Jetty's retains frialator grease and management personnel stated that they recently incorporated a maintenance procedure to reduce the grease that enters the sanitary sewer system.

However, the City made the following recommendations in order for your facility to remain in compliance:

- Housekeeping: The City observed trash on the ground within the trash enclosure area and requested that it be picked up to prevent a discharge into the nearby alley. On January 12th, 2007 the City verified that the trash was cleaned up.

Additionally, the City requires that **all employees** be trained annually on best management practices and the importance of pollution prevention. The City recommends that the inspection report and best management practices brochure be used in employee training.

If I can be of further assistance in explaining the City's urban runoff management requirements or for any matter concerning the City's Pollution Prevention program, please don't hesitate to call me at 619-424-4095.

Sincerely,

_____
Doug Coppi
Environmental Program Specialist

cc. Property Owner

Printed on 100% Post Consumer Recycled Paper

ATTACHMENT 3-7
COMMERCIAL INSPECTION LOG
FY 2006-07

	BUSINESS_N	ARC_STREET	SUITE	CLASSIFICATION	WATERSHED	INSPECTION DATE	CORRECTIVE ACTIONS REQUIRED: Illegal Discharge	Pollutant	Housekeeping	Waste Mgmt.	Materials Storage Spill Prevention / Control	Other (See Comments)	ENFORCEMENT ACTIO	CORRECTIVE ACTIONS VERIFIED	# RE-INSPECTIONS	COMMENTS
1	El Cilantro	764 13th St.		Eating & Drinking Facility	OTAY	07/14/06				1			VW	07/20/06	1	Trash was observed on the ground in and around the trash enclosure located in the back parking lot. Trash enclosure gate is kept locked during non-business hours. City consulted with property management to initiate the removal of the trash and debris.
2	La Ceibita	1051 13th St.	Suite B	Eating & Drinking Facility	OTAY	07/31/06										Recommended locks on dumpster to address scavenging problem in dumpsters.
3	McDonald's	1135 Palm Ave.		Eating & Drinking Facility	OTAY	08/08/06				1			VW	08/10/06	1	Cooking grease is stored within the trash area, but the City found the grease bin to have significant grease accumulation on top of the bin. The grease was removed to avoid potential contact with rain water.
4	Express Tire	950 Palm Ave.		Automotive	OTAY	08/03/06										Mop and bucket is used to clean inside areas. A 3-yard cubic bin and blue recycling container is used for trash and recycling. Used oil and engine coolant is stored inside and with proper containment. Absorbent materials are kept on site and are used for any leaks or

ATTACHMENT 3-7
COMMERCIAL INSPECTION LOG
FY 2006-07

	BUSINESS_N	ARC_STREET	SUITE	CLASSIFICATION	WATERSHED	INSPECTION DATE	CORRECTIVE ACTIONS REQUIRED: Illegal Discharge	Pollutant	Housekeeping	Waste Mgmt.	Materials Storage	Spill Prevention / Control	Other (See Comments)	ENFORCEMENT ACTIC	CORRECTIVE ACTIONS VERIFIED	# RE-INSPECTIONS	COMMENTS
10	Hawkin's Auto Body	519 Florida St.		Automotive	OTAY	09/20/06											City observed a powdery polymer primer substance on the ground towards the front of the facility that was the result of sanding operations that were occurring. City recommends continuing with daily sweeping to prevent pollutant discharges into the street. City recommended conducting sanding operations under the outside roofed work area to minimize the potential for pollutant runoff. Auto wastes are properly stored in a sealed drum with secondary containment.
11	Santana Motors	942 Palm		Automotive	OTAY	10/18/06											City recommends continuing with dry sweeping methods on impervious areas. Covers to trash and recycling containers are kept closed when not in use. Businesses does not store any materials outside. Automobiles are cleaned mainly with rags and towels.
						3725											Back loading dock area contains significant trash and debris which may enter the storm drain. Covers to trash and recycling dumpsters

ATTACHMENT 3-7
COMMERCIAL INSPECTION LOG
FY 2006-07

	BUSINESS_N	ARC_STREET	SUITE	CLASSIFICATION	WATERSHED	INSPECTION DATE	CORRECTIVE ACTIONS REQUIRED: Illegal Discharge	Pollutant	Housekeeping	Waste Mgmt.	Materials Storage	Spill Prevention / Control	Other (See Comments)	ENFORCEMENT ACTIO	CORRECTIVE ACTIONS VERIFIED	# RE-INSPECTIONS	COMMENTS
20	General Los Panchos	1337 Palm Ave.		Eating & Drinking Facility	OTAY	02/13/07											The City observed that outside areas including (eating, drive thru and parking lot) were free from trash and debris. Outside areas are maintained by sweeping methods and water is not used in cleaning. The City did not observe any materials that were stored outside. Los Panchos services their grease trap every two weeks or more frequent when necessary.
21	Arco Gas Station	1185 Palm Ave.		Retail Fueling	OTAY	03/06/07											Outside areas were free from trash, debris, and other pollutants. Outside areas are swept 3 times per day. Water is not used to clean outside surfaces. Used gasoline pump filters, absorbent material, and rags are properly stored in 55-gallon drums. Arco utilizes both absorbent material and rags to contain and remove gasoline and automotive fluid spills. Employees are trained annually on proper spill recovery procedures.
																	Outside areas were free from trash, debris, and other pollutants. Employees sweep up trash and debris on a daily basis. A steam

ATTACHMENT 3-7
COMMERCIAL INSPECTION LOG
FY 2006-07

	BUSINESS_N	ARC_STREET	SUITE	CLASSIFICATION	WATERSHED	INSPECTION DATE	CORRECTIVE ACTIONS REQUIRED							ENFORCEMENT ACTIC	CORRECTIVE ACTIONS VERIFIED	# RE-INSPECTIONS	COMMENTS
							Illegal Discharge	Pollutant	Housekeeping	Waste Mgmt.	Materials Storage	Spill Prevention / Control	Other (See Comments)				
25	Meijo Restaurant	600 Palm Avenue		Eating & Drinking Facility	SD BAY	03/23/07			1				1		03/24/07	1	The City observed that most of the outside areas including the front eating section were free from trash, debris and other pollutants. However, the inspector observed an employee throw a cigarette into the parking lot. The City also observed cigarette and other debris on the ground within the trash enclosure area. Manager stated that recyclables are taken to an outside facility for proper recycling. Manager stated that the grease interceptor is serviced regularly per the required maintenance program. Mr. Nguyen immediately instructed one of his employees to pick up the debris that was on the ground within the trash enclosure area (Photo #2). City recommended employee training on the importance of pollution prevention and BMPs to ensure pollutants are prevented from entering the storm water conveyance system. All employees were trained on March 24, 2007.
																	The City observed that outside areas including the front section and

ATTACHMENT 3-7
COMMERCIAL INSPECTION LOG
FY 2006-07

	BUSINESS_N	ARC_STREET	SUITE	CLASSIFICATION	WATERSHED	INSPECTION DATE	CORRECTIVE ACTIONS REQUIRED: Illegal Discharge	Pollutant	Housekeeping	Waste Mgmt.	Materials Storage	Spill Prevention / Control	Other (See Comments)	ENFORCEMENT ACTIO	CORRECTIVE ACTIONS VERIFIED	# RE-INSPECTIONS	COMMENTS
29	Precision Foreign Car Service	1240 Palm Ave		Automotive	OTAY	04/24/07						2		VW	04/26/07	1	The City observed a small antifreeze leak and some used absorbent material on the ground which the City requested that it be removed. Precision utilizes both absorbent material and drip pans to contain and remove automotive leaks.
30	Precision Autobody Collision	989 Palm Ave.		Automotive	OTAY	04/24/07						1	1	VW	05/16/07		Outside areas were free from trash and debris. Periodic sweeping of debris is conducted in outside work areas. Operational wastes are stored in a secure drum inside the facility. Paint is stored in a secured 55 gallon drum within secondary containment. City observed employees working on a vehicle that resulted in paint spillage onto the ground. City recommended drip pans. City observed storm water outlet in outside work area. City discovered this outlet conveys facility runoff through a PVC pipe to the sanitary sewer system at the adjacent business. A sewer cleanout exists within adjacent business

Attachment 4-1
Program Assessment Form - Residential Component
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Comments
Quantity of HHW materials collected.	15	5.1	2.2	1.66	3.27	9.36	Tons	
Quantity of used oil collected.	Unknown	Unknown	Unknown	2,911	4,359	2,440	Gallons	1,000 used oil filters also recycled
of staff supporting the Residential Component.			2	3	3	3		1 Code Compliance Officer 2 Public Works Employees
of staff supporting the Residential Component trained in pollution prevention.			2	3	3	3		1 Code Compliance Officer 2 Public Works Employees
of Residential communities.	6	6	6	6	6	6		The City has 6 identified neighborhoods in its General Plan
of high priority Residential communities.	6	6	6	6	6	6		All residential areas considered high priority
of Residential areas requiring minimum BMPs.	6	6	6	6	6	6		
of Residential areas with minimum BMPs.	6	6	6	6	6	6		
of Education Events				5	8	1		
Attendees at Education Events				698	N/A	325,000	Attendees	
of Public Participation Clean up Events				3	3	2		
of Participants in Clean up Events				1,163	926	137	Attendees	
Residential Enforcement Actions				6	15	16		2 Notices of Abatement 14 Notice of Violation 0 Citations

A clean environment is important to all of us!

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away form developed areas to prevent flooding. Untreated storm water and the pollutants it carries, flows directly into creeks, lagoons and the ocean.

In recent years, sources of water pollution, like industrial waters from factories, have been greatly reduced. However, now the majority of water pollution occurs from things like: cars leaking oil; fertilizer from farms, lawns and gardens; failing septic tanks; pet waste; and residential car washing into the storm drains and into the ocean and waterways.

All these sources add up to a pollution problem! But each of us can do small things to help clean up our water and that adds up to **pollution solution!**

Car washing photo is used courtesy of the Water Quality Consortium, a cooperative venture between the Washington State Department of Ecology, King County and the Cities of Bellevue, Seattle and Tacoma.

Dead fish photo © BBC News World Edition

The content is used courtesy of the City of Carlsbad

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ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program
825 Imperial Beach Boulevard
Imperial Beach, CA 91932

Storm Water Hotline:
(619) 424-4095

Printed on recycled paper

Car Washing

ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program

Storm Water Hotline:
(619) 424-4095

What's the problem with car washing

There's no problem washing your car. It's just how and where you do it.

Most soap contains phosphates and other chemicals that harm fish and water quality. The soap, together with the dirt, metal and oil washed from you car, flows into nearby storm drains which run directly into lakes, rivers or marine waters.

The phosphates from the soap can cause excess algae to grow. Algae looks bad, smells bad, and harms water quality. As algae decays, the process uses up oxygen in the water that fish need.

© BBC News World Edition

How can YOU help keep our environment clean?

Having a clean environment is of primary importance for our health and economy. Clean waterways provide commercial opportunities, recreation, fish habitat and add beauty to our landscape. YOU can help keep our ocean, creeks and lagoons clean by applying the following tips:

- Use soap sparingly.
- Use a hose nozzle with a trigger to save water.
- Pour your bucket of soapy water down the sink when you're done, not in the street.
- Avoid using engine and wheel cleaners or degreasers.
- Take your car to a commercial car wash, especially if you plan to clean the engine or the bottom of your car. Most car washes reuse wash water several times before sending it into the sewer system for treatment.
- Hire only mobile detail operators that will capture wash water and chemicals. It is unlawful for commercial vehicle washing operators to allow wash water to enter the storm drain system.

A clean environment is important to all of us!

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants?

The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water, and the pollutants it carries, flows directly into creeks, lagoons and the ocean.

In recent years, sources of water pollution, like industrial waters from factories, have been greatly reduced. However, now the majority of water pollution occurs from things like: cars leaking oil; fertilizer's from farms, lawns and gardens; failing septic tanks; pet waste; and residential car washing into the storm drains and into the ocean and waterways.

All these sources add up to a pollution problem! But each of us can do small things to help clean up our water and that adds up to **pollution solution!**

What's the problem with fertilizers and pesticides?

Fertilizer isn't a problem - **IF** it's used carefully. If you use too much fertilizer or apply it at the wrong time, it can easily wash off your lawn or garden into storm drains and then flow untreated into lakes or streams.

Just like in your garden, fertilizer in lagoons and streams makes plants grow. In water bodies, extra fertilizer can mean extra algae and aquatic plant growth. Too much algae harms water quality and makes boating, fishing and swimming unpleasant. As algae decay, they use up oxygen in the water that fish and other wildlife need.

Fertilizer photo is used courtesy of the Water Quality Consortium, a cooperative venture between the Washington State Department of Ecology, King County and the Cities of Bellevue, Seattle and Tacoma.

The content is used courtesy of the City of Carlsbad

ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program
825 Imperial Beach Boulevard
Imperial Beach, CA 91932

Storm Water Hotline:
(619) 424-4095

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Lawn & Garden Care

ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program

Storm Water Hotline:
(619) 424-4095

How can YOU help keep the environment clean?

Having a clean environment is of primary importance for our health and economy. Clean waterways provide commercial opportunities, recreation, fish habitat and add beauty to our landscape. YOU can help keep our creeks, lagoons and ocean clean by applying the following tips:

- Don't blow or rake leaves and other yard waste into the street or gutter.
- Recycle yard waste or start your own compost pile.
- Don't over irrigate. Use drip irrigation, soaker hoses or micro-spray system and water early in the morning.
- If you have a spray head sprinkler system, consider adjusting your watering method to a cycle and soak. Instead of watering for 15 minutes straight, break up the session into 5 minutes intervals allowing water to soak in before the next application.
- Keep irrigation system well maintained and water only when needed to save money and prevent over-watering.
- Use fertilizers and pesticides sparingly.
- Have your soil tested to determine the nutrients needed to maintain a healthy lawn.
- Consider using organic fertilizers - they release nutrients more slowly.
- Leave mulched grass clippings on the lawn to act as natural fertilizer.
- Use pesticides only when absolutely necessary. Use the least toxic product intended to target a specific pest, such as insecticide soaps, boric acid, etc. Always read the label and use only as directed.
- Use predatory insects to control harmful pests when possible.
- Properly dispose of unwanted pesticides and fertilizers at Household Hazardous Waste collection facilities.

For more information on landscape irrigation , please call **(619) 423-8311**.

Master Gardeners

San Diego County has a Master Gardener program through the University of California Cooperative Extension. Master Gardeners can provide good information about dealing with specific pests and plants.

You may call the Master Gardener Hotline at (858) 694-2860 or visit their website at

http://www.mastergardenerssandiego.org

The hotline is staffed Monday - Friday, 9 am - 3 pm, by experienced gardeners who are available to answer specific questions. Information from Master Gardeners is free to the public.

A clean environment is important to all of us!

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away form developed areas to prevent flooding. Untreated storm water, and the pollutants it carries, flows directly into creeks, lagoons and the ocean.

In recent years, sources of water pollution, like industrial waters from factories, have been greatly reduced. However, now the majority of water pollution occurs from things like: cars leaking oil; fertilizer from farms, lawns and gardens; failing septic tanks; pet waste; and residential car washing into the storm drains and into the ocean and waterways.

All these sources add up to a pollution problem! But each of us can do small things to help clean up our water and that adds up to **pollution solution!**

Motor oil photo is used courtesy of the Water Quality Consortium, a cooperative venture between the Washington State Department of Ecology, King County and the cities of Bellevue, Seattle and Tacoma.

Oiled duck photo is used courtesy of the Exxon Valdez Oil Spill Trustee Council

The content is used courtesy of the City of Carlsbad

REMEMBER
ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program
825 Imperial Beach Boulevard
Imperial Beach, CA 91932

Storm Water Hotline:
(619) 424-4095

Printed on recycled paper

Motor Oil

ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program

Storm Water Hotline:
(619) 424-4095

What's the problem with motor oil?

Oil does not dissolve in water. It lasts a long time and sticks to everything from beach sand to bird feathers. Oil and other petroleum products are toxic to people, wildlife and plants.

One pint of oil can make a slick larger than a football field. Oil that leaks from our cars onto roads and driveways is washed into storm drains, and then usually flows directly to a creek or lagoon and finally to the ocean.

Used motor oil is the largest single source of oil pollution in our ocean, creeks and lagoons. Americans spill 180 million gallons of used oil each year into our waters. This is **16 times** the amount spilled by the Exxon Valdez in Alaska.

How can YOU help keep our environment clean?

Having a clean environment is of primary importance for our health and economy. Clean waterways provide commercial opportunities, recreation, fish habitat and add beauty to our landscape. YOU can help keep our ocean, creeks and lagoons clean by applying the following tips:

- Stop drips. Check for oil leaks regularly and fix them promptly. Keep your car tuned to reduced oil use.
- Use ground cloths or drip pans beneath your vehicle if you have leaks or are doing engine work.
- Clean up spills immediately. Collect all used oil in containers with tight fitting lids. Do not mix different engine fluids.
- When you change your oil, dispose of it properly. Never dispose of oil or other engine fluids down the storm drain, on the ground or into a ditch.
- Recycle used motor oil. There are several locations in Imperial Beach that accept used motor oil.
- Buy recycled ("refined") motor oil to use in your car.
- Free recycling of oil and filter call 1-800-237-2583 - **OR** -
- Pick up a free funnel and gallon jug at City Hall to recycle your oil!

A clean environment is important to all of us!

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away form developed areas to prevent flooding. Untreated storm water, and the pollutants it carries, flows directly into creeks, lagoons and the ocean.

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Pet Waste photo is used courtesy of the Water Quality Consortium, a cooperative venture between the Washington State Department of Ecology, King County and the Cities of Bellevue, Seattle and Tacoma

Pet Waste clip art is used courtesy of the City of Grand Rapids and The Center f or Environmental Study

The content is used courtesy of the City of Carlsbad

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825 Imperial Beach Boulevard
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Pet Waste

ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program

Storm Water Hotline:
(619) 424-4095

What's the problem with pet waste?

Pet waste is a health risk to pets and people, especially children. It's a nuisance in our neighborhoods. Pet waste is full of bacteria that can make people sick. This bacteria gets washed into the storm drain and ends up in our creeks, lagoons, and ocean. The bacteria ends up in shellfish living in these water bodies. People who eat those shellfish may get very sick.

Preliminary studies show that dog and cat waste can contribute up to 25% of the harmful bacteria found in our local lagoons.

Be responsible and clean up after your pets.

It's easy as **1-2-3!**

1. Bring a bag.
2. Clean it up.
3. Dispose of waste properly in toilet or trash.

How can YOU help keep our environment clean?

Having a clean environment is of primary importance for our health and economy. Clean waterways provide commercial opportunities, recreation, fish habitat and add beauty to our landscape. YOU can help keep our ocean, creeks and lagoons clean by applying the following tips:

- Carry a plastic bag when walking pets and be sure to pick up after them.
- Clean up pet waste in your yard frequently.
- Pick up after your pets before cleaning patios, driveways, and other hard surface areas. Never hose pet waste into the street or gutter.

The best way to dispose of pet waste is to flush it down the toilet because it gets treated by a sewage treatment plant.

Other disposal methods for pet waste include sealing it in a bag and placing the bag in trash or burying small quantities in your yard to decompose. Be sure to keep it away from vegetable gardens.

Storm Water Hotline:
(619) 424-4095

City of Imperial Beach

Public Works Department
495 10th Street
Imperial Beach, CA 91932
Mailing Address:
825 Imperial Beach Blvd.
Imperial Beach, CA 91932
(619) 424-4095
OR
(619) 423-8311
Website: www.cityofib.com

E-mail: ibpworks@cityofib.org

Printed on recycled paper

City of Imperial Beach

STORM WATER RUNOFF POLLUTION

ONLY RAIN IN THE STORM DRAIN!

Prevention Tips for Homeowners

What is Storm Water Pollution?

When it rains or when water flows out of yards over pavement and into streets, it flows through the storm drain system directly into receiving waters. In the City of Imperial Beach, these receiving waters are the Pacific Ocean, Tijuana Estuary, Tijuana River, Otay River and San Diego Bay. The storm drain system consists of driveways, sidewalks, streets, gutters, storm drainpipes and any other structure that directs water to the receiving waters. Obviously, when it rains, water needs to be channeled to these receiving waters to avoid flooding in our streets. However, as water flows through the storm drain system, it picks up pollutants left by us, the residents, visitors and businesses located throughout the City, and deposits them into the receiving waters creating harmful and devastating conditions for wildlife, fish and humans. It also doesn't make Imperial Beach look beautiful. Have you ever seen trash floating in our rivers? This could have been a result of trash being left on the street only to be carried by rainwater to the nearest river!!!

"I spend most of my time in the Tijuana Estuary and depend on clean water for survival."

Storm water pollutants include but are not limited to:

- Leaves, grass, sediment, dirt, and lawn clippings.
- Household toxics used to maintain your home.
- Trash and debris.
- Your pet waste.
- Hazardous waste (oil, antifreeze, etc) from your car.
- Soap you use to wash your car.

Where Does Storm Water Pollution Come From?

AUTOMOTIVE OIL, ANTIFREEZE, GREASE AND EXHAUST Automotive fluids which are hazardous wastes can spill onto the ground during routine maintenance and from leaks, and the air borne pollutants from your car's exhaust. These pollutants then settle onto the ground to be washed into storm drains.

HOUSEHOLD CLEANING PRODUCTS Household cleaning products contain detergents, solvents, aerosol propellants, dyes, perfumes and other chemicals that are hazardous to the environment when allowed to wash into the storm drain system or soak into the ground. (Note: products are considered hazardous if the label contains any of the following words: hazard, caution, danger, poison or flammable.)

PAINTS & SOLVENTS Paints and solvents are hazardous wastes and pollute soil and water if not disposed of properly. Washing brushes, rollers and buckets out in your yard, street or sidewalk causes pollutants to eventually make their way to the storm drain system and pollute storm water.

TRASH, DEBRIS, AND PET WASTE Trash, pet waste, leaves, grass clippings, and sediment which is not either picked up, contained or recycled and left on your property will eventually make its way to the storm drain system by rain or wind. They can clog waterways and degrade water quality. High levels of bacteria are produced which can make people sick and cause beach closures.

LAWN & GARDEN PRODUCTS When pesticides, herbicides and fertilizers are overused, they can wash off your yard and into storm drains. Pesticides can accumulate in fish at levels that threaten their health and our health when we eat them.

Clean Water!! It is the Law

The City of Imperial Beach is regulated by a municipal permit (Order 2001-01) issued to us by the San Diego Regional Water Quality Control Board. Essentially, this permit is a legal mandate that requires us, the City, to prevent storm water pollution to the maximum extent practicable.

Our City's Municipal Code, Section 8.30 "Urban Runoff Management and Discharge Control" mirrors this permit and holds everyone accountable for preventing pollutants from being discharged into the storm drain system.

What can YOU do?

CARING FOR YOUR CAR

1. When you wash your car at home, wash your car on a pervious layer like your yard; use biodegradable soap and water sparingly.
2. Support our Storm Water Program by washing your vehicle at commercial car washes that recycle water and/or discharge into the sanitary sewer.
3. Don't pour used oil or any other fluids onto the ground or into storm drains.
4. Regularly inspect and maintain your car to prevent leaks of oil, antifreeze and other fluids, and tune up your car regularly to reduce emissions.

IN YOUR HOME

1. Whenever possible, use safer substitutes instead of hazardous cleaning products and use only what you need.
2. Contain outside work areas, such as painting areas, where spills might occur by using drop cloths and wash painting equipment in your sink or toilet and never on your yard, driveway or sidewalk.
3. Use kitty litter or other absorbent material to clean up spills and dispose of it as hazardous waste.
4. Recycle when possible.
5. Dispose of household hazardous wastes at our designated facility in Chula Vista or through the curbside household hazardous waste pick up program (call **619-691-5122** for service).

IN YOUR YARD

1. Follow directions (use only what you need!) when using pesticides, herbicides and fertilizers. Preferably, use environmentally safer alternatives, such as soapy water and traps, to control ants rather than using chemicals.
2. Use a broom to sweep lawn debris including grass, leaves, yard clippings and sediment and recycle appropriate items in your green waste bin. Never hose down these pollutants onto your sidewalk or into the street.
3. Do not over water your lawn. Excess water will wash pollutants including sediment and dirt from your yard and into the streets and storm drains.
4. Clean up after your pet and flush waste down the toilet or place it in the trash. Take a disposable litterbag with you when you take your pet for a walk in other areas such as parks.
5. Pick up litter and debris and always contain them by keeping lids on bins as rainwater can wash away these pollutants if there are no covers.
6. Keep the gutter in front of your house clear of leaves, grass and trash and any other pollutants that could pollute storm water.

In addition, Businesses conducting any contractual work on your home need to be aware and educated about how their activities could potentially pollute storm water and what measures they are required to take in order to prevent storm water pollution. The homeowner is responsible for any contractor spills or illegal discharges.

There are many other activities that could pollute, but just remember that only storm water should enter storm drains.

We Need Everyone's Help

We ask and strongly encourage you to educate your neighbors, friends and family members about storm water pollution prevention. Preventing pollutants from entering our rivers, bay and ocean will require every citizen to follow the simple pollution prevention tips presented in this brochure. Keeping our rivers, bay and ocean clean will take a concerted effort by every citizen in our community and we appreciate your help.

For any questions and/or inquiries about our Storm Water Pollution Prevention Program or to report a storm water violation please call the Environmental Programs office at **619-424-4095 or 619-423-8311.**

City of Imperial Beach

Workforce Housing

Workforce housing is a relatively new term that is increasingly popular among planners, government administrators and housing activists, and is gaining status with homebuilders, developers, and lenders.

A workforce housing unit is a home that is affordable to the workforce. The home must not consume more than 30 percent of the household's income (for rental) or fall within owner affordability standards common among lenders in today's mortgage environment. Subsequently, a workforce housing unit is either a rental unit with monthly rent for 3 bedrooms between $1,328 and $2,603 per month, or a single-family home, townhouse, or condominium priced between $185,000 and $411,000.

Workforce housing is intended to appeal to key members of the workforce, such as police officers, teachers, nurses, construction workers, medical technicians, and office and retail workers — the backbone of any successful community.

Workforce housing aims to satisfy the housing needs of a four person household earning between $55,520 and $104,100. Ideally, workforce housing aims to provide for-ownership single-family homes priced and financed in 30-year fixed-rate monthly terms equal to approximately 15 percent to 45 percent of median household income within a given Standard Metropolitan Statistical Area. A lack of affordable workforce housing has a negative effect on quality of life issues, such as the economic development, individual well-being, and community vitality. To effectively solve the affordable workforce housing crisis does not mean addressing the needs of just the poor; it also means addressing the needs of the business community, working and middle class families, and the broader population as a whole.

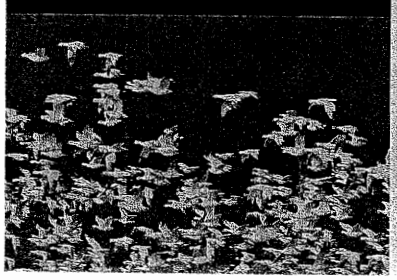

Onward Ho at the Seacoast Inn

To expedite project approval and construction of the Seacoast Inn, Pacifica Companies, the hotel's owner, has hired a new Project Manager, Allison Rolfe. Ms. Rolfe's responsibilities are to ensure that the hotel receives necessary approval as quickly as possible. She has already met with California Coastal Commission staff and they were enthusiastic about the hotel plans, particularly the additional beach area that will be returned for public use.

The existing hotel will be demolished and a brand new "curvilinear" shaped hotel will be constructed in its place. The project not only provides an innovative architectural design, but also will improve views to and along the beach. Amenities in the new hotel design include conference facilities, a fine dining restaurant, and a cocktail lounge with an ocean view. All improvements will incorporate energy-saving and "ecologically" friendly design concepts. The Seacoast Inn's "eco" approach will utilize cutting-edge techniques that lessen the impact on the environment and mark Imperial Beach as an eco-tourism destination. The hotel will be located further east from its current location with underground parking, a design factor that allows the area presently used as a terrace on the beach to become public beach for all visitors. The new hotel will have 78 rooms, compared to the current 38 units. Each room will have an excellent view of either the Coronado Islands or Point Loma.

Ms. Rolfe and Pacifica hope to submit environmental documents so the public review of the Draft Environmental Impact Report (EIR) can begin by the end of July and end by early September. City Council, the Tidelands Advisory Committee, and the Design Review Board will also have a chance to review and comment on the plans during this period. The Final EIR should be completed by the end of October. City Council will have meetings in November to review the new hotel's Specific Plan and Development Agreement. They will also consider certification of the EIR.

There will be plenty of notice about all public meetings and we hope all people interested in the hotel can attend. If all goes well, Pacifica hopes to start construction in July 2008.

Avoid Traffic Hassles, Save Fuel

If you want to avoid the morning traffic rush or are searching transit routes, connect to www.511sd.com, or dial 511. 511 is a free phone and web service that consolidates the San Diego region's transportation information into one source. 511 provides up-to-the-minute information on traffic conditions, driving times, public transportation, rail, carpool and vanpool referrals, bicycling information, airport, border crossing, weather, and more.

511 is available 24 hours a day, 7 days a week, but some operators have limited hours. Hearing impaired individuals can call 711,to be conected to 511 via to the Telecommunications Relay Services (TRS). Give it a try. It can help you save time, money, fuel, and wear and tear on your car.

Graffiti: Public and Private Nuisance

Imperial Beach Municipal Code states that the existence of graffiti in any public place or in any place open to the public or exposed to public view, within the City limits of the City of Imperial Beach, is determined to be a public and private nuisance. Graffiti may be abated in accordance with the nuisance abatement procedures.

The Graffiti Division is responsible for the removal of graffiti in the City's rights-of-way, streets, sidewalks, parks, and signs. Due to the new laws in the disposal of paint products, the recycled paint once available to the City is no longer being distributed to the graffiti abatement programs.

For further information please contact:

- The Graffiti Hotline (619) 575-3745
- Public Works (619) 423-8311
- Public Works Fax (619) 429-4861
- Code Compliance Division (619) 628-1359/ 628-1358

THE FOLLOWING ARE GRAFFITI ABATEMENT GUIDELINES ADOPTED BY THE CITY:

1. Graffiti on private property is the responsibility of the property owners and property managers. It is unlawful for a responsible person to permit property that is defaced with graffiti, to remain so defaced for a period of three days.
2. Property management companies and HOAs are responsible for the removal of graffiti on their property.
3. If a person can demonstrate by a preponderance of evidence financial or physical inability to remove the graffiti from the property, he or she can sign a release form and the City will remove the graffiti.
4. Property owners who wish to provide the paint (to match existing color) to the Graffiti Division for their property can sign a release form (provided by the City) and the graffiti will be removed with the paint provided and the paint will be stored for future graffiti removal.
5. Removal is limited to fences and walls.
6. Trash dumpsters are maintained by EDCO. Please contact EDCO to report graffiti on dumpsters by calling (619) 287-7555.

Seeds Sown for a Farmer's Market

Do seasonal fruits and vegetables, hand-crafted wares and handmade garden venues for local businesses, live musical happenings under the sun with a whiff of salt air sound appealing? If Beautiful is a small group of tireless residents who recently planted the monogram in Triangle Park and created the Triangle garden in Veterans Park, Green Towns, a subsidiary of Keep Beautiful, is collectively hoping to establish a weekly Farmer's Market.

The success of a Farmer's Market, according to board member Kevin Hill, will depend on IB residents and their willingness to volunteer and actively participate in planning and implementation of a weekly market. Keep Beautiful's stated mission is to identify opportunities to beautify, preserve and enhance public landscapes. Members have explored other possibilities that will make Keep Beautiful a more attractive community.

Volunteers are needed for a wide variety of support roles, such as membership, fundraising, marketing and other activities and special projects surrounding the Farmer's Market.

For information, please go to www.keepbeautiful.org or call IB Beautiful President, Pam Talbusion, at (619) 428-9348.

A Better Bike Plan for IB

The City's Bicycle Transportation Plan (BTP) is currently in the policy development phase. The focus of this project is to improve designated bicycle lanes and connect these lanes between the City's open space and environmental reserves, commercial destinations and the Bayshore Bikeway.

Bicycle riding on Palm Avenue will become a calmer experience as a result of the proposed construction of a new Class II (2) bike lane with traffic calming measures on Palm Avenue between 3rd & 7th Streets. Currently this section of Palm Avenue is designated as a sidewalk bicycle route. Sidewalk bicycle routes are no longer recognized within the State of California. The project is designed to reduce the existing four vehicle lanes to one lane east bound and one lane west bound plus a striped Class II bike lane on the shoulders of the two vehicle lanes with pop-outs at intersections intended to reduce the time that pedestrians are exposed to vehicles. The plan includes a pedestrian crosswalk at 5th Street. Consultants are working with the City to develop this new BTP. They will also prepare contract documents for the construction of the Class II bike lanes and traffic calming measures.

Consultants held community meetings and met with the San Diego County Bicycle Transportation Coalition to obtain design comments that will be used for the comprehensive citywide Bicycle Transportation Plan.

For additional information, including existing and proposed bikeways, please visit the City's website at www.cityofib.com.

Bicycle riding on Palm Avenue will become a calmer experience as a result of the proposed construction of a new bike lane with traffic calming measures.

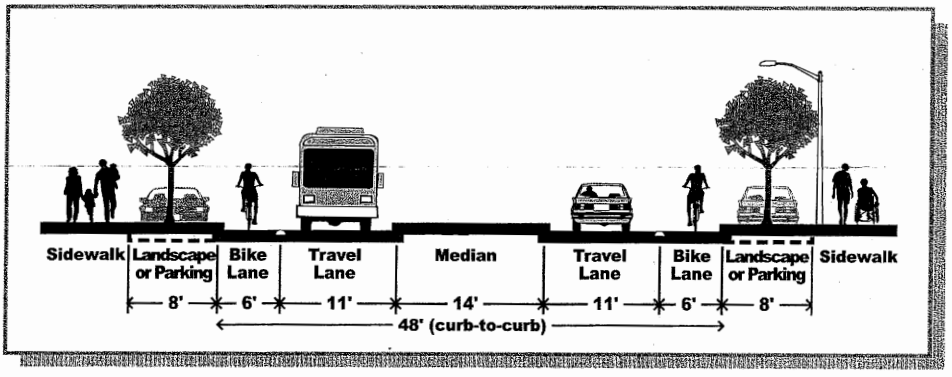

Projected Bicycle riding on Palm Avenue.

The Port of San Diego sponsors annual City of Imperial Beach Concert in the Park.

Saturday, September 29, 2007 at Veterans Park

5:00 to 7:00 p.m. **Society Beat** (Big Band style)

7:30 p.m. to 9:30 p.m. **Liquid Blue** (Top 40)

Bring the Family!
Bring a Picnic!
Bring a Blanket!

IMPERIAL BEACH classic southern california

Unified Port of San Diego

EDCO A WASTE & RECYCLING COMPANY

MTE Event Productions, Inc.

birds in your backyard

If you live in Imperial Beach, the Tijuana Estuary may literally be your backyard. There are 1,100 acres of salt marshes and tide channels in the Estuary and its unique location on the Pacific Flyway attracts over 370 species of birds; 50 of these are resident birds. Right now is the beginning of the nesting season for many of these birds.

For these birds there exists a very real threat to this cycle of life. Off-leash dogs, cats left out of doors, feral dogs and cats and other abandoned pets and wildlife may kill native and migratory species found in the estuary and refuges. Animals released or abandoned in the refuges and the reserve may starve and die and many carry diseases that can harm native wildlife.

What can you do? Keep pets out of our natural habitats. Do not release pets or wildlife anywhere. Dogs on leashes that are less than six feet in length are allowed only on the designated refuge trails south of the 5th and Iris Streets trailhead, and on the beach south of Seacoast Drive, west of the dunes. There is no off-leash recreational beach for dogs within the City of Imperial Beach. It is important that residents of Imperial Beach take responsibility and take an active role to protect the resources unique to the threatened, endangered, and sensitive bird species that inhabit the reserve and refuges. IB's urban environment places wildlife under significant stress.

U.S. Fish and Wildlife and California State Parks contract with Wildlife Services to trap and remove animals that may kill threatened, endangered, and sensitive species at the reserve and refuges. Predator removal occurs year-round with emphasis from March to September. All domestic animals that are live-trapped are taken to the Chula Vista Animal Care Facility at 130 Beyer Way. You may call them at (619) 691-5123. Please contact the refuge at (619) 575-2704 or the reserve at (619) 575-3613 if you have any questions.

fiscal fitness

Two years ago, the City used its reserve funds, its savings account, in order to balance the two-year budget. This is not a practice that can be continued for long. The financial outlook was gloomy, and it seemed likely that the City would have to reduce services or ask voters to approve a tax increase. But now City Council has held its budget hearings and adopted a budget that is balanced for the next two fiscal years, July 1, 2007 through June 30, 2009, without using reserves, without severe service cuts, and without a tax increase.

Over the last two years, City Council and staff constantly sought ways to reduce costs, reduce staff, and raise revenues. Some examples are: City employees, except Firefighters, did not receive salary increases yet; everybody brought forth many ideas on reducing costs and increasing revenues. We signed a new contract with the City's ambulance service that provided an additional $144,000 for paramedic services. The Finance Department carefully reviewed allocated costs and found an improved way to property charge Redevelopment for services. We reduced staffing costs in Finance, Fire, and the City Manager's Office. We also had a good claims record that kept down risk management and workers compensation costs.

General fund expenditures will be held to approximately $14.2M and $14.9M for the two fiscal years and total expenditures will be $28.6M and $29.3M, thus total costs will rise about 2.4% over two years. This is less than inflation. The one big uncertainty is the contract for Sheriff's services. Several months ago, the Sheriff suggested a new formula for charges that would increase our costs by $1,000,000 per year; this would be a 20% increase! Since then, all cities that contract with the Sheriff have been negotiating for a better basis to allocate costs. We've budgeted with the assumption that reason will prevail. If the Sheriff's initial suggestion is adopted, our budget will be thrown for a loop, and we'll have to reduce Sheriff's services.

Though the next two-year budget looks balanced, long-term fiscal health is still not sound. Revenues barely meet expenses over the long run. We must constantly seek greater efficiencies and new revenues. The strategic vision must be to broaden the City's economic base. We've got to expand job opportunities, tourism, and revenues through key projects like the new Seacoast Inn, redevelopment at 9th and Palm, and ecotourism. We've also got to review potential increases in small revenue sources, like service fees, and keep our eyes open for grants.

Budgeting is far more than a numbers exercise. It's a way for a community to express its hopes and dreams. Over the next two years, there will be plenty of challenges, but this budget allows the City to preserve its unique small town character and quality of life that people enjoy.

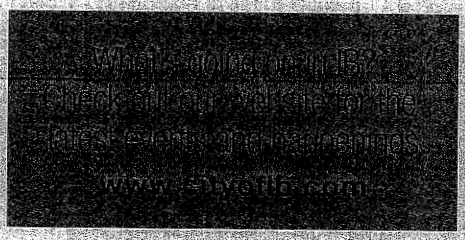

preparing for the worst

Are you prepared to evacuate your home in fifteen minutes or less? If you answered yes, it means you must have an easily accessible and portable "go-kit", including important documents, treasured items, medication, toiletries, and everything you may need to survive outside of your home for an indefinite period of time. A survey recently released by the County Office of Emergency Services shows that many people in our community have neglected simple actions that can protect life and property in the event of a crisis.

By all accounts, experts are predicting a worse than normal fire threat in Southern California this year. Remembering the devastation caused by the Cedar and Paradise Fires in 2003, these warnings are a call to action for Imperial Beach residents to prepare our families, and ultimately the entire community, for a disaster.

Despite the fact that two out of three county residents say they are likely or highly likely to be affected by a disaster, and 96 percent feel it is either somewhat or very important to be prepared for a catastrophic event, merely half of county residents report having a formal family disaster plan, according to a survey of 1,200 county residents commissioned by the Office of Emergency Services. Family Disaster Plans can be downloaded at www.readysandiego.org, or you may request a copy in the mail by calling the Office of Emergency Services, (858) 565-3490.

Prepared and provided by the County of San Diego's Office of Emergency Services.

SUMMER SAFETY TIPS FROM IB LIFEGUARDS

It is almost time to pack up the Radio Flyer wagon and head to the beach. The following are essential safety reminders from your Imperial Beach lifeguards:

1. **Learn to Swim:** Learning to swim is the best defense against drowning. Teach children to swim at an early age – children who are not taught when they are very young tend to keep away from learning how to swim, as they get older.

2. **Swim near a Lifeguard:** Statistics over a ten-year period show that the chance of drowning at a beach without Lifeguard protection is almost five times as great as drowning at a beach with Lifeguards *(source: United States Lifesaving Association Website; www.usla.org, Public Education)*.

3. **Wear sunscreen & cover up:** Always wear sunscreen and cover-up with a hat and t-shirt when coming to the beach. The sun's powerful rays can damage and sunburn skin and may cause sunstroke.

4. **Swim with a friend:** Many drownings involve single swimmers. When you swim with a friend, if one of you has a problem, the other may be able to help, or signal for assistance from others. Children should always have a responsible adult onshore watching them!

5. **Ask a Lifeguard:** Have a question? Just ask! Feel free to approach a Lifeguard tower or vehicle and ask questions ... they're always happy to help.

Call the Imperial Beach Lifeguard Service at (619) 423-8328. For year-round beach, weather, and surf reports, updated daily at 8:00 a.m., call (619) 595-3954.

Shop Local

The Chamber of Commerce is the driving force in Imperial Beach to organize business people and advance their interests. The bottom line purpose of the Chamber is to encourage IB residents to shop local and, above all, support our community. The Chamber also serves as the IB Visitors Bureau and is an important part of the Business Improvement District.

As a Chamber member, the organization is able to showcase and promote the growth of your business. At the same time your business supports the well being of the community. The IB Chamber of Commerce website, www.IB-Chamber.com is full of up-to-date information about members, monthly meetings, and upcoming community events. If you are not currently a member, please consider becoming one. Currently the Chamber needs volunteers for the August 26, 2007 Triathlon/Duathlon.

For more information, please visit the Chamber office at 702 Seacoast Drive. They may also be reached by phone at (619) 424-3151, by fax at (619) 424-3008,

REDUCE, REUSE, RECYCLE, REPEAT!

Save Money on Your Trash Bill

If you are a resident of a single-family home in IB, you can save up to $1.19 per month on your trash bill. How? Increase your recycling efforts and switch to a smaller trash cart. One time a calendar year, at no charge, EDCO allows you to downsize your gray refuse cart. The standard refuse cart holds 90 gallons, and there are two smaller sizes, 35 and 65 gallons. If you decide to downsize, please make sure that the trash you generate each week will fit into the smaller cart. If your gray cart overflows, or if your blue cart contains non-recyclable materials, you will be asked to switch back to a larger size at your expense. Call EDCO at (619) 287-7555 if you are interested in downsizing.

Blue Recycle Cart Guidelines

- Recycle all plastic containers marked with a 1 or 2 inside the chasing arrows symbol.
- Recycle bottles marked with a 3, 4, 5, 6, or 7. Bottles must have a label such as California Redemption Value or CA Cash Refund.
- Do not put plastic grocery bags in your cart. They can be recycled at most large supermarkets.
- Remove plastic shrink-wrap from cardboard boxes and carrying cases before recycling.
- Other materials that can be recycled in your blue cart include: glass bottles, glass jars, aluminum cans, tin cans, newspapers, all varieties of mixed paper, cereal boxes, cake boxes, flour bags, frozen dinner boxes, paper egg cartons, paper grocery bags, gift boxes, shoe boxes, paper gift wrap, calendars, and core tubes from paper towels.

Fast Find

ALL IN THE 619 AREA CODE

City Hall Fax	628-1395
Beach / Ocean Safety	423-8328
Bike and Dog Licenses	628-1365
Building Inspections	628-1360
Business Licenses	628-1423
City Clerk	423-8301
City Manager	423-8303
Code Compliance	628-1359
Community Development	628-1356
Fire Department	423-8223
Garage Sale Permits	628-1365
Job Hotline	338-4331
Mayor & City Councilmembers	423-8303
Parking Tickets	628-1365
Public Safety	423-8223
Public Works	423-8311
Fleet Division	628-1375
Graffiti Hotline	575-3745
Grounds & Facilities Division	628-1374
Sewer Division	628-1372
Storm Water Hotline	424-4095
Street Division	628-1373
Sports Park / Recreation Center	628-1385
Animal Control (Chula Vista)	691-5123
Chamber of Commerce	424-3151
Dead Animal Removal (Chula Vista)	390-8204
Library (IB Branch)	424-6981
Sheriff's Station (IB Branch)	498-2400
Trash Service (EDCO)	287-7555

Don't Drink and Drive

Last year in Imperial Beach 211 drunk drivers were caught, apprehended, and charged with DUI. In addition, close to 20% of the traffic collisions investigated in the city were alcohol related. Over the past three years the number of Driving under the Influence (DUI) arrests in Imperial Beach has continued to gradually rise.

The Sheriff's Department has received a grant from the California Office of Traffic Safety for DUI enforcement in the City of Imperial Beach. Through this grant, traffic deputies will conduct five random DUI checkpoints during the upcoming summer months. In addition to the checkpoints, there will be "saturation DUI patrols" in the city. Saturation patrols, which are legal in all 50 states, are concentrated DUI enforcement by traffic deputies that target impaired drivers by observing moving violations, in an effort to reduce DUI drivers.

DON'T DRINK AND DRIVE! For more information, please contact the Imperial Beach Sheriff's Station, by visiting 845 Imperial Beach Blvd., or calling (619) 498-2400.

Imperial Beach

City of Imperial Beach

E Mail:

City Manager, Mayor, City Council:
ibcmanager@cityofib.org
City Clerk:
ibcclerk@cityofib.org
Community Development:
ibcomdev@cityofib.org
Finance (Administrative Services):
ibadmsrvcs@cityofib.org
Public Safety:
ibpsafety@cityofib.org
Public Works:
ibpworks@cityofib.org
Redevelopment Agency:
ibrda@cityofib.org
Website:
http://www.cityofib.com

City Council:
Jim Janney, Mayor
Mayda Winter, Mayor Pro Tempore
Patricia McCoy, Councilmember
Lorie Bragg, Councilmember
Fred McLean, Councilmember

Community Newsletter
The City of Imperial Beach/Redevelopment Agency
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Imperial Beach, California 91932

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City of

SMART GROWTH

Smart Growth is a topic that all local governments have been discussing as members of the San Diego-area regional government organization, known as SANDAG. It is a compact, efficient, and environmentally sensitive pattern of development that provides people with additional travel, housing, and employment choices.

Smart Growth's options include planning future growth away from rural areas and closer to existing and planned job centers and public facilities. In order of priority, most growth in the region should occur primarily in these locations: in the cities, in unincorporated suburban communities adjacent to cities, and in unincorporated village centers, as opposed to rural or agricultural areas. Smart Growth accommodates higher residential densities and locations that offer frequent transit service.

Smart Growth reduces sprawl by focusing future growth in the cities and in the appropriate unincorporated suburban communities and village centers through new development, redevelopment, infill, emphasizing pedestrian-friendly design, and mixed-use development.

Smart Growth provides a variety of housing types for residents of all incomes. Smart Growth protects the environment by conserving open space and habitat areas, provides environmentally sensitive development that conserves water and energy, protects water quality, and promotes the use of alternative energy sources.

Incorporating Smart Growth designs into new development is paying off for a number of cities and communities throughout the region.

In September 2005, SANDAG approved 14 local projects to receive $19 million in funding as part of the agency's Pilot Smart Growth Incentive Program. The City of Imperial Beach received a $1 million Smart Growth Grant for the Old Palm Avenue Revitalization Project.

This innovative pilot program is using funding incentives to encourage local jurisdictions to bring transit service, housing, and employment together in Smart Growth development. Beginning in 2008, a longer-term Smart Growth Incentive Program, totaling $280 million, will be funded through the local TransNet half-cent sales tax program.

Source: SANDAG

Tijuana River Shed

In North America a watershed is a region of land where water from rain (or snow) drains downhill into a body of water such as a river, dam, estuary, wetland, sea, or ocean. The watershed acts like a funnel—it collects all the water within the specific watershed area and channels it into a waterway.

The Tijuana River Watershed covers approximately 1,750 square miles on both sides of the California-Baja California border. About 27% of the Tijuana River Watershed lies within California and discharges to the Tijuana Estuary and Pacific Ocean. The cities of Imperial Beach and San Diego, and the County of San Diego have portions of their jurisdictions within the watershed. On the Mexican side, Tijuana and Tecate are the most important urban centers.

SAN DIEGO RIVER WATERSHED

KEEP IT CLEAN

Soon you will see this sign but no "sign" of water, nor for that matter a shed. What is a Watershed? How do we keep it clean?

In terms of water quality, degradation of the Tijuana Watershed is the most severely impacted watershed in San Diego County. Population growth and land use changes have brought a number of environmental problems to the Tijuana Watershed. The negative environmental impacts include decline in local groundwater, dependence on imported water, increased land erosion and flood dangers, increased air pollution and the reduction of the amount of open, safe, green areas for urban residents, and an increased number of threatened and endangered plants and animals.

In Imperial Beach there will be signs on southbound Seacoast Drive at Ebony Avenue, on southbound 9th Street at Evergreen Avenue, and on westbound Imperial Beach Boulevard at Florence Avenue. These signs indicate entry into the watershed and remind the public that the ocean, Imperial Beach's most valued natural resource, is at the end of this watershed. This natural resource demands the attention of every IB resident. Anything done within the 1,750 square mile watershed has the potential to affect that resource.

In 2005 the City of Imperial Beach received a grant from the Coastal Conservancy to create an ecotourism program. The City and the Agency seek to thoughtfully and carefully draw on the natural amenities that surround Imperial Beach to stimulate the local economy through tourism. Through Community participation and awareness of the environmental issues, such as the watershed, the City will be a step forward in its efforts to enhance and create a vitality that will draw San Diegans, Californians, and out-of-state visitors to IB.

A Finely Balanced Budget

A balanced budget is one of the City's greatest challenges. Significant steps to close the gap between revenues and expenses have been identified and implemented this year. We have reduced staffing in the Finance Department, cut the public relations contract by 50%, combined the City and Redevelopment Agency newsletters and decreased the number of issues from 4 to 2 per year, and trimmed down the prison labor contract for grounds maintenance by half, for an estimated total savings of $137,300. In the long run, we hope to generate additional funds through an increase in sales and transient occupancy taxes from projects such as the new Seacoast Inn and the development at the southwest corner of 9th Street and Palm Avenue.

In order to identify opportunities to reduce costs and increase income, we will need to continue to be alert and cautious. Uncertainties the City currently faces include the cost of Sheriff's services, the impact of state initiatives, imposed mandates (costs) from state agencies like the Regional Water Quality Control Board, and the need to meet state recycling and air quality goals.

Additional sources of revenue include $140,000 in ambulance rates to pay for paramedics. We are also leasing space in the Fire Station to our ambulance provider, American Medical Response (AMR) for $27,600. The amount of interest paid for a loan from the City to the Re[illegible] Agency is $224,000, bringing

The combined savings and increased revenue come to a net positive impact of $528,900. There are other measures under review that could bring potential additional revenues of $200,000. Though not completely out of the woods and home free for the next two-year budget (7/01/2007 - 6/30/2009), continued strategic planning and attention to detail will enable us to have a balanced budget. If subsequent budget cuts need to be made, it may be necessary to reduce some selected services.

A Pictorial History of Imperial Beach

"The Birth of a City", "Coastal Issues and Coastal Renaissance", "The Landmark Pier", "Wetland of International Importance", and "Legends of Surfing" are titles of just a few chapters in the City's recently published coffee table-style book Imperial Beach, A Pictorial History. It's filled with historic and current photographs and illustrations... you might be surprised to find yourself, your family or friends in this "picture perfect" history of IB.

The book is available at City Hall for $24 and on Amazon.com for $35 plus shipping.

For more information please contact Tessa Wright at (619) 423-8303.

Hazardous Waste Disposal Options

Upcoming Special Events in Imperial Beach

[illegible]
January 2007
(Park closed) Public Works 423-8311
[illegible]
1st Friday of each month
Sports Park 628-1385
[illegible]
Sports Park 628-1385
[illegible]
and 3rd Saturday of each month
Sports Park 628-1385
[illegible]
Sports Park 628-1385
[illegible]
(date to be determined)
Senior Center 424-7077
[illegible]
(date to be determined)
Senior Center 424-7077
[illegible]
Public Works 424-4095
[illegible]
Chamber of Commerce 424-3151
[illegible]
Public Works 424-4095
[illegible]
(date to be determined)
Senior Center 424-7077
[illegible]
Public Works 424-4095
[illegible]
Senior Center 424-7077
[illegible]
The BRIDGE 429-6621
[illegible]
US Open Sandcastle Committee
www.usopensandcastle.com
424-6663

Christmas Tree Recycling

Imperial Beach offers two ways to recycle Christmas trees: Residents of single-family homes can cut the tree in 4-foot lengths and put them in the "Green Waste" recycling containers.

Please do not put trash in the recycle bin; it is for trees and green waste only. Remove all tinsel and ornaments from the trees. Remove plastic or metal stands. Wood stands may be left on the trees. The second way to recycle the trees is to drop them off. Trees may be dropped off at the following locations until January 16, 2007:

Public Works Yard - 495 10th Street
Sports Park - 425 Imperial Beach Boulevard
Imperial Beach Boys & Girls Club - 847 Encina Avenue

Hazardous Waste: What is it and Why and Where to Dispose of it Properly

Hazardous waste is quite simply any material that creates substantial or potential threats to public health or the environment. A state law passed in 2006 now makes it illegal to dispose of common items, such as batteries, electronic equipment, computer equipment, fluorescent light bulbs, and mercury thermometers in household trash. Following are suggestions for proper disposal of universal hazardous wastes:

Universal Waste

Common Batteries
Fluorescent Light Tubes
Thermostats Containing Mercury
Electric Switches/Relays Containing Mercury
Aerosol Cans That Are Not Empty
Televisions
Cell Phones
Telephones
Radios
Microwaves

DROP-OFF LOCATIONS

South Bay HHW Collection Facility
1800 Maxwell Rd., Chula Vista
(619) 691-5122
HOURS: Saturdays, 9:00 a.m. - 1:00 p.m.
ID Required
COST: $5

DOOR-TO-DOOR PICKUP
- Televisions Only -
Call EDCO at (619) 287-7555
COST: $10

Computer Equipment

Hard Drives
Laptops
Monitors
Flat-panels
Keyboards
Mice
Cables
etc.

DROP-OFF LOCATIONS

Goodwill Industries
849 Palm Ave., Imperial Beach
(619) 429-6766
DONATION CENTER HOURS: 8:00 a.m. - 4:30 p.m., 7 days a week
COST: Free

South Bay HHW Collection Facility
1800 Maxwell Rd., Chula Vista
(619) 691-5122
HOURS: Saturdays, excluding holidays
9:00 a.m. - 1:00 p.m.
ID Required
COST: $5

DOOR-TO-DOOR PICKUP
- Monitors Only -
Call EDCO at (619) 287-7555
COST: $10

Used Motor Oil & Filters

Used motor oil & filters

DROP-OFF LOCATIONS

Kragen Auto Parts
1025 Palm Ave., Imperial Beach
(619) 628-8103
COST: Free

South Bay HHW Collection Facility
1800 Maxwell Rd., Chula Vista
(619) 691-5122
HOURS: Saturdays, excluding holidays
9:00 a.m. - 1:00 p.m.
ID Required
COST: $5

Other Hazardous Wastes

Paint
Antifreeze
Car Batteries
Brake Fluid
Drain Cleaners
Solvents
Fertilizers
Pesticides
Herbicides
Household Cleaners
Paint Strippers
Photo Chemicals
Pool Chemicals
Resins
Epoxy
Gasoline
Glue
Adhesives
etc.

DROP-OFF LOCATIONS

South Bay HHW Collection Facility
1800 Maxwell Rd., Chula Vista
(619) 691-5122
HOURS: Saturdays, excluding holidays
9:00 a.m. - 1:00 p.m.
ID Required
COST: $5

DOOR-TO-DOOR PICKUP
- Excluding TV's & Computers Monitors -
Call the city of Chula Vista
(619) 691-5122
COST: $10

Businesses can call: 1-800-CLEANUP

Clean Up 2007

Citywide Garage Sale is planned for Saturday, April 21, 2007 from 8 a.m. to 2 p.m. Remember that "one man's trash is another man's treasure." Participation in the garage sale is encouraged. Items that are resold and reused will not find their way into the landfill to take up valuable space. Registration is free and sellers must register between Monday, April 2nd and Friday, April 6th. To register for the Citywide Garage Sale please call (619) 424-4095.

Home Front Cleanup Event, sponsored by City staff and EDCO, is scheduled for Saturday, May 5, 2007 from 7 a.m. to 2 p.m. at Mar Vista High School on Elm Avenue. EDCO accepts appliances, furniture, yard waste, metal, concrete, asphalt, and home improvement debris. There is no charge for the Home Front Cleanup. Absolutely no items containing hazardous waste, such as gasoline in old lawn mowers, will be accepted unless the hazardous waste is removed from the item.

Hazardous wastes must be properly disposed of at Imperial Beach's designated Household Hazardous Waste facility in Chula Vista.

Single-family residential customers are entitled to two bulky item pickups per calendar year, with a maximum of three items per pickup (call EDCO at (619) 287-7555 for this service). Before you transport your bulky items to Mar Vista High School, consider donating usable items to the local Goodwill or Boys & Girls Club. This helps limit the City's waste and puts the items to good use! Recycle whenever possible. Recycling helps preserve the life of our landfills, reduces pollution, and conserves natural resources.

For more information regarding these events, please call the Public Works Department at (619) 424-4095.

Frequently Asked Questions About Redevelopment

What is redevelopment?
Redevelopment is a process authorized under California law that enables local government entities to identify deteriorated and blighted areas in their jurisdictions in need of revitalization.

Why is redevelopment needed?
Redevelopment serves as a catalyst for private investment by providing the initial plan and seed money that ultimately breathes new life into areas in need of economic revitalization.

What is a redevelopment agency?
State law gives a local government (city or county) the authority to form a redevelopment agency with the specific goal of revitalizing a deteriorated area. In Imperial Beach, City Council acting as the Redevelopment Agency (RDA) oversees redevelopment.

What types of projects do redevelopment agencies take on?
- Build and upgrade roads, water systems, and other public works and infrastructure;
- Build and rehabilitate community centers, parks, libraries, public safety buildings and other community facilities;
- Issue low-cost loans or grants to small businesses that pay for physical improvements to their properties;
- Clear an area of environmental hazards that make the project unattractive to the private sector; and
- Build or rehabilitate affordable housing and helping low- and moderate-income poeple become new homeowners.

How are redevelopment agencies funded?
When redevelopment agencies improve deteriorated areas, property values within those areas rise, thus increasing property tax revenues. The increased property taxes resulting from redevelopment activity are referred to as "tax increment." State law allows redevelopment agencies to pledge tax increment so that they can repay bonds and other types of debt incurred to initiate projects.

What rights do redevelopment agencies have to use eminent domain?
The redevelopment law provides strict guidelines governing when and if eminent domain can be used. A redevelopment agency must first engage in good faith negotiations with the property owner. Only after negotiations break down is the use of eminent domain an option. Eminent domain is a last, not a first, resort; and under all circumstances a property owner must be paid fair market value for his or her property, as well as be provided relocation benefits and assistance. The use of eminent domain is restricted under the Palm Ave./Commercial Redevelopment Plan. The Redevelopment Agency in Imperial Beach cannot use eminent domain on residential uses.

How does redevelopment affect other local jurisdictions (counties, cities, school districts, special districts)?
When a redevelopment project area is established, other taxing jurisdictions continue to receive property taxes levied on the assessed value of property in the project area at the time the redevelopment plan was adopted. Additionally, jurisdictions share in a fixed percentage set by Redevelopment Law of the increase in property tax revenues resulting from redevelopment activities.

What about Schools?
School districts receive a portion of the redevelopment-induced property tax increase the same way that other jurisdictions do.

A Fish Story

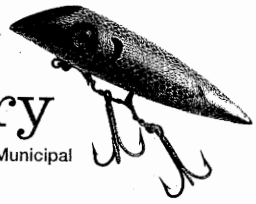

Recreational Use of the Imperial Beach Municipal Fishing Pier

If you are a fish, or fish for fish, or swim like a fish, there are rules of the water designed for your safety. If you fish from the pier, watch out for people in the water. Underhand cast your lines at all times. Overhead casting is not allowed as you may cause your hook to injure a person in the water or standing on the pier.

Be polite and courteous to swimmers and surfers near the pier. Use common sense—weights and hooks can be dangerous. It is illegal to cast a fishing line, lobster trap, crab trap, any mussel hook, or any other such device in the water, adjacent to the pier or on the pier because it could cause harm to swimmers, waders, surfers, skin divers, and those using self-contained underwater breathing apparatuses (SCUBA).

Swimmers, waders, surfers, skin divers, or SCUBA divers near the pier must never be within 20 feet of any side of the pier by law but it's recommended that they stay at least 150 feet from the pier and swim only when lifeguards are on duty.

Swimmers should check in with the lifeguards prior to a pier swim as there may be unforeseen or overlooked hazards. Likewise, divers (SCUBA or skin) need to check in with the lifeguards before any attempted dive to assess and discuss conditions and abilities.

For a full listing of the Municipal Codes referring to the beach and pier, please visit the online database at http://www.cityofib.com. If you have a question, please call the Imperial Beach Lifeguard Service at (619) 423-8328.

Own a piece of history

Please contact Tom Ritter at (619) 423-8615 or Tessa Wright at (619) 423-8303.

What's New on the Street

Revitalization
The City of Imperial Beach Community Development Department received a $150,000 Caltrans grant for Master Planning of the State Route 75/Palm Avenue Corridor. The Redevelopment Agency (RDA) is processing Caltrans documentation and will issue a request for qualifications in January 2007.

Old Palm Streetscape Project
The construction plans are at a 60% completion level and the anticipated start date of construction is May 2007. Staff anticipates requesting authorization to bid the project in January 2007.

Beachfront Hotel Development
In response to a Request for Proposals for Hotel Development at 1080 Seacoast Drive, the RDA received four submissions.
The development of a visitor serving facility is a goal of both the Five-Year Implementation Plan (Implement the Eco-Tourism Study) and the Economic Development Plan (Goal #3: Increase Visitor Serving Uses and Expand the Transient Occupancy Tax Base).
If the owner and the development team proceed with a proposed project, a formal public participation/workshop schedule would be developed to allow opportunities for the public to learn about the proposed project, provide comments, and ask questions.
All public participation events will be noticed with date, time and location. Staff anticipates that these next steps could occur in the next four to six months.

Why, What and How: Neighborhood Watch

Did you know that property crime accounts for about three-quarters of all crimes in the United States?

Did you know that in 6 out of 10 successful burglaries, the burglar came through an unlocked door or open window?

Neighborhood Watch

As part of the community, the Sheriff's Department plays an important role in keeping the community safe. However, there cannot be a deputy on every corner, so citizen involvement is essential to combat crime. You and your neighbors are the people who really know what is going on in your neighborhood. With mutual cooperation between law enforcement and community members, crime can be effectively stopped before it starts. Stickers placed in the windows of Neighborhood Watch members and signs on streets warn criminals that they are in an Active Neighborhood Watch community and that neighbors are watching out for each other.

Why Neighborhood Watch?

The Neighborhood Watch is one of the most successful and least costly crime prevention programs available. Through the program, you will learn how to identify and report suspicious activity and better safeguard your home and property.

How to Start a Neighborhood Watch?

To start a Neighborhood Watch in your area you need to:

- Talk to your neighbors and encourage them to participate in the program.
- Plan your meeting time, date, and location.
- Call the Crime Prevention Unit at least two weeks in advance.
- Publicize your meeting. Printed flyers/invitations are available from the San Diego Sheriff's Department.

Once your Neighborhood Watch is established, continue to watch out for one another and hold regular meetings or neighborhood events at least once or twice a year. It's a great way to get to know your neighbors.

For more information, contact the Crime Prevention Unit at the Imperial Beach Sheriff's Station at (619) 498-2435.

TO REPORT A CRIME IN PROGRESS

DIAL 9-1-1

FOR NON EMERGENCIES

DIAL (619) 585-7232

Fast Find

ALL IN THE 619 AREA CODE

City of *Imperial Beach*

City of Imperial Beach
City Hall Customer Service (619) 423-8300
Fax (619) 429-9770

E Mail:

City Manager, Mayor, City Council:
ibcmanager@cityofib.org
City Clerk:
ibcclerk@cityofib.org
Community Development:
ibcomdev@cityofib.org
Finance (Administrative Services):
ibadmserves@cityofib.org
Public Safety:
ibpsafety@cityofib.org
Public Works:
ibpworks@cityofib.org
Redevelopment Agency:
ibrda@cityofib.org
Website:
http://www.cityofib.com

City Council:
Jim Janney, Mayor
Mayda Winter, Mayor Pro Tempore
Patricia McCoy, Councilmember
Lorie Bragg, Councilmember
Fred McLean, Councilmember

The Community Newsletter is published biannually by the City of Imperial Beach and Redevelopment Agency. Please direct any questions or comments to the City Clerk at 423-8301. Printed on Recycle Paper.

Community Newsletter

The City of Imperial Beach
825 Imperial Beach Boulevard
Imperial Beach, California 91932

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Attachment 5-1
Program Assessment Form - Land Use Planning Component (FY 2006-07)
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Comments
Number of projects subjected to SUSMP requirements.	0	3	5	6	3	3	Projects	
Total number of projects subjected to SUSMP reviewed for SUSMP requirements.		3	5	6	3	3	Projects	
Number of SUSMP projects requiring Treatment BMPs.	0	3	5	6	3	3	Projects	
Number of SUSMP projects with Treatment BMPs requiring groundwater protection.	0	0	5	6	3	3	Projects	
Percent of Project Review Staff trained in SUSMP requirements.			83	100	100	100		The project review staff includes selected members of the Community Development and Public Works Departments. Currently there are 5 employees involved in that review process, all of whom are fully trained in the SUSMP program.
Number of project applicants, developers, contractors, property owners, and community planning groups contacted or educated concerning storm water quality.	280	289	382	287	171	175		

Attachment 5-2

Public Works Conditions Required on Development and Redevelopment Projects (FY 2006-07), Including SUSMP Projects

	File No.	Plan Check No.	SUSMP	Address 1	Address 2	Address 3	Project Type 1		Project Type 2		Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMP Needed	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Construction / Post-construction BMP Notification
1	MF839		No	481 Palm Ave.			Condo Conversion	10				X							X	X
2	MF847		No	581 Florence St.			New SFR	2	Demolition	2		X							X	X
3	MF858		No	1497 13th St.			Commercial Addition(s)	1			Addition to an existing market building	X							X	X
4	MF861			1009 13th St.			Condo Conversion	2				X				X			X	X
5	MF864		No	162-168 Elm Ave.			New SFR	4	Demolition	2		X							X	X
6	MF868		No	1140 Georgia St.			New SFR	1				X							X	X
7	MF870		No	175 Carnation Ave.			New SFR	1	Demolition	1		X							X	X
8	MF872		No	323, 343, 363, 383 Palm Ave.	702 4th St.	705 3rd St.	Condo Conversion	69				X			X				X	X
9	MF876		No	169 Elkwood Ave.	171 Elkwood Ave.		Condo Conversion	2				X				X			X	X
10	MF877		No	174 Elkwood Ave.	176 Elkwood Ave.		Condo Conversion	2				X				X			X	X
11	MF878		No	1037 Seacoast Dr.	1047 Seacoast Dr.		Condo Conversion	37				X							X	X
12	MF887		No	555 Delaware St.			New SFR	1				X							X	X
13	MR818		No	817 Florida St.			New SFR	3	Demolition	2		X							X	X
14		05-512	No	341 Calla Ave.			Residential Addition(s)	5			Kitchen remodel. New shop. New Laundry. New Master Bedroom. Bathroom addition.	X							X	X
15		05-558	No	1220 Palm Ave.			New Commercial	1			Proposed new coin operated laundry.	X				X			X	X
16		06-158	No	234 Daisy Ave.			Condo Conversion									X			X	X
17		06-192	No	1220 Palm Ave.			New Commercial	1			New coin laundry	X							X	X
18		06-211	No	24 Palm Ave.			Other	1			Modifications for ADA access and trash enclosure along Ocean Lane								X	X
19		06-219	No	989 Palm Ave.			Other	1			Installation of spray booth within an existing commercial structure	X				X			X	X
20		06-241	No	600 Palm Ave.			Other	1			Installation of cell tower on top of Powerhouse gym. Soil disturbance involves installation of condensate drywell and grounding rods.				X				X	
21		06-242	No	137 Carnation Ave.			Residential Addition(s)	1			Second floor addition	X							X	X
22		06-255	No	285 Palm Ave.			Other	1			Improvements to existing commercial	X					X	X	X	X
23		06-258	No	816 Iris St.			Other	1			First and second story addition	X				X			X	X
24		06-276	No	1111 Seacoast Dr.			Other	1			Exterior property renovation	X							X	X
25		06-290	No	573 Florence St.			Other	1			Second floor addition with balcony	X				X	X		X	X
26		06-346	No	811 Corvina St.			Residential Addition(s)	1			Bedroom and bath addition	X							X	X
27		06-361	No	852 Delaware St.			Residential Addition(s)	1			Bedroom and bath addition	X							X	X
28	MF885		No	777 Seacoast Dr.			Condo Conversion	16				X							X	X
29		06-316	No	637 10th St.			Residential Addition(s)	2			Bedroom and bath additions	X							X	X
30	MF873		No	150 Palm Ave.			New Commercial	1			Training center in existing commercial	X							X	X
31		06-303	No	363 Date St.			Residential Addition(s)	1			2-car garage addition	X							X	X
32		06-357	No	1340 Imperial Beach Blvd.			Other	1			Convert office building to dentist office	X							X	X

Attachment 5-2

Public Works Conditions Required on Development and Redevelopment Projects (FY 2006-07), Including SUSMP Projects

	File No.	Plan Check No.	SUSMP	Address 1	Address 2	Address 3	Project Type 1		Project Type 2		Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMP Needed	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Construction / Post-construction BMP Notification
33	MF871		No	916 13th St.	918 13th St.	920 13th St.	New SFR	3	Demolition	3		X							X	X
34	MF863			1120 13th St.	1150 13th St.		Other	2			2 new mixed use buildings	X		X		X			X	X
35		06-371	No	861 10th St.			Residential Addition(s)	1			2nd floor addition	X							X	X
36	MF893		No	137 Ebony Ave.			New SFR	2	Demolition	1		X							X	X
37		06-362	No	567 Dahlia Ave.			Residential Addition(s)	1			1st and 2nd floor additions	X							X	X
38	MF891		No	522 7th St.			Condo Conversion	5				X		X			X		X	X
39	MF898		No	1115 Louden Ln.			New SFR	1			Currently vacant lot.	X							X	X
40	MF894		No	254 Elm Ave.			New SFR	2	Demolition	1		X							X	X
41	MF897		No	1186 15th St.			New SFR	1			New SFR behind existing SFR	X							X	X
42	MF896		No	1331 Holly Ave.			New SFR	4	Demolition	1		X				X			X	X
43	MF854		No	854 10th St.			Condo Conversion	2				X							X	X
44	MF907		No	1180 Florida St.			New SFR	1			New SFR with existing SFR	X							X	X
45	MF618/762		No	569 9th St.	571 9th St.		Condo Conversion	2				X								
46	MF799		No	123 Dahlia Ave.	125 Dahlia Ave.		Condo Conversion	2				X				X			X	X
47	MF919		Yes	1335 Imperial Beach Blvd.			New Commercial	2	New MFR	6		X							X	X
48	MF900		No	1278 14th St.			New SFR	2			Currently vacant lot.	X							X	X
49		07-101	No	349 Elkwood Ave.			Residential Addition(s)	1			Add bath, bed, fam rooms and garage	X							X	X
50	MF913		No	136 Donax Ave.			Condo Conversion	2				X							X	X
51	MF924		Yes	1008 Ocean Lane			New SFR	1	Other	2	Renovate 2 existing SFRs	X							X	X

Attachment 6-1
Program Assessment Form - Construction Component (FY 2006-07)
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Explanations (if needed)
Number of high priority construction sites identified.			0	7	6	3		All CIPs
Number of high priority construction sites targeted for inspection.			0	7	6	3		All CIPs
Number of high priority construction sites inspected.			0	7	6	3		All CIPs
Number of medium priority construction sites identified.			0	7	6	3		All CIPs
Number of medium priority construction sites targeted for inspection.			0	7	6	3		All CIPs
Number of medium priority construction sites inspected.			0	7	6	3		All CIPs
Number of low priority construction sites identified.	280	42	86	162	171	121		
Number of low priority construction sites targeted for inspection.	280	42	86	162	171	121		
Number of low priority construction sites inspected.	280	42	86	162	171	121		
Total number of construction sites in compliance or on a compliance schedule.	280	42	86	162	171	121		
Number of facilities referred to RWQCB for enforcement of State General Construction Permit.	0	0	0	0	0	0		
of City staff supporting the Construction Component			9	9	9	9		5 in Community Development Department; 3 in Public Works Department Several administrative and operational staff on an intermittent basis in other Departments
of City staff trained in pollution prevention as it pertains to construction sites			17	25	25	25		
of City staff trained in storm water quality as it pertains to the Construction Component.			9	25	25	25		
Total of permitted projects.			331	287	171	121		

Attachment 6-1
Program Assessment Form - Construction Component (FY 2006-07)
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Explanations (if needed)
of permitted projects with a SWPPP.			0	0	0	0		Projects conducted in Imperial Beach are less than 1 acres and therefore were not subject to the State General Construction Storm Water Permit
of permitted projects required to have BMPs.			331	287	171	121		All outside projects or projects with a potential to effect storm water quality or have no storm water discharges (e.g., store materials outside);
of permitted projects inspected for BMPs.				170	171	121		
of permitted projects inspected for sediment and erosion controls.				170	171	121		
of permitted, inspected projects with enforcement actions			10	15	12	0		
of permitted, inspected projects referred to the SDRWQCB.			0	0	0	0		

Form 7-A
City of Imperial Beach
Storm Water Requirements Applicability Checklist for Building, Grading, and Encroachment Permits

Location of Proposed Project	Permit Type (Building, Grading, or Encroachment)
Owner Name	**Contractor**

A. Site Slope	B. Disturbed Area of Proposed Project
☐ < 3% (1) ☐ 3% - 5% (3) ☐ > 5% (5)	☐ < 5,000 ft^2 (1) ☐ 5,000 - 20,000 ft^2 (5) ☐ 20,000 ft^2 - 1 acre (10) ☐ > 1 acre (15)
C. Receiving Water Body	**D. Distance from Receiving Water Body**
☐ Otay River (5) ☐ Tijuana River (5) ☐ Pacific Ocean (5) ☐ Tijuana Estuary (5) ☐ San Diego Bay (5)	☐ > 1 mile (1) ☐ 200 ft. - 1 mile (3) ☐ < 200 ft. (5) ☐ Direct discharge or adjacent (10)

E. Soil Erosion Potential (Which of the following statements best describes your project?)

- ☐ No grading, sub-surface extractions, or outside demolition/building activities will occur (1)
- ☐ Less than 50% of the site will be graded at any one time <u>and</u> all outside building, demolition, and earthwork will occur between May 1 and September 30 (5)
- ☐ Greater than 50% of the site will be graded at any one time <u>and</u> all outside building, demolition, and earthwork will occur between May 1 and September 30 (10)
- ☐ Less than 50% of the site will be graded at any one time <u>and</u> outside building, demolition, or earthwork will occur between October 1 and April 30 (10)
- ☐ Greater than 50% of the site will be graded at any one time <u>and</u> outside building, demolition, and earthwork will occur between October 1 and April 30 (15)

F. Potential for Non-Stormwater Discharges	Site Prioritization Formula (A+B+(C*D)+E+F)
☐ Site is fully contained (0) ☐ BMPs are proposed to prevent/control non-storm water discharges (1) ☐ Sources of non-stormwater discharges observed without BMPs implemented, but no discharges (3) ☐ Observed/known non-stormwater discharge (5)	☐ > 45 = HIGH PRIORITY ☐ 35 – 45 = MEDIUM PRIORITY ☐ < 35 = LOW PRIORITY *High priority sites will be subject to weekly construction-phase stormwater BMP inspections between October 1 and April 30.* *Medium and low priority sites will be subject to a minimum of two construction-phase stormwater BMP inspections between October 1 and April 30.* *All sites will be subject to construction-phase stormwater BMP inspections as necessary throughout the year.*

Complete Sections A and B of the following checklist to determine your project's construction-phase and permanent, post-construction stormwater best management practice (BMP) requirements.

Section A - Construction-Phase Storm Water BMP Requirements

If the answer to Question A.1 below is "YES", your project is subject to the General Permit for Discharges of Storm Water Associated with Construction Activity issued by the State Water Resources Control Board. You must prepare a Storm Water Pollution Prevention Plan (SWPPP) pursuant to the requirements of that permit. If the answer is "NO", but the answer to any of the remaining questions is "YES", you must complete Form 7-B (Stormwater Management Plan Instructions to Accompany All Construction, Grading, and Encroachment Permit Applications) to indicate which construction-phase BMPs will be implemented as part of your project.

	YES	NO
1. Will your proposed project disturb one or more acres of soil? Or is it part of a larger common plan of development that in total disturbs one or more acres of soil?		
2. Does the project propose grading or soil disturbance?		
3. Would stormwater or urban runoff have the potential to contact any portion of the construction area?		
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete, stucco, etc.)?		

Section B – Permanent, Post-Construction Stormwater BMP Requirements

If your proposed project fits one or more of the "Priority Project Categories" below, you are subject to the requirements of Imperial Beach Municipal Ordinance Chapter 8.32, and must prepare, and submit for approval, a Standard Urban Storm Water Mitigation Plan (SUSMP) prior to permit issuance.*

Priority Project Categories	YES	NO
1. Detached Residential Development of 10 or more units		
2. Attached Residential Development of 10 or more units		
3. Commercial Development greater than 100,000 square feet		
4. Automotive Repair Shop		
5. Restaurant		
6. Hillside Development greater than 5,000 square feet		
7. Project discharging to receiving waters within Environmentally Sensitive Areas		
8. Parking Lots greater than or equal to 5,000 square feet or with at least 15 parking spaces and potentially exposed to urban runoff		
9. Streets, Roads, Highways & Freeways which would create a new paved surface that is 5,000 square feet or greater		
10. Significant Redevelopment projects over 5,000 square feet		

** Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if the project fits one or more of Categories 1-10 above.*

Name of Owner or Agent *(Please Print):* **Title:**

Signature: **Date:**

Attachment 6-3
BUILDING PERMIT CONSTRUCTION SITE INVENTORY AND INSPECTIONS
(FY 2006-07)

	PERMIT NUMBER	INSPECTION DATES	INSPECTIONS (FY 06-07)	ADDRESS			HUNAME	HANAME	RANK
1	0500000038	70306	1	816	DELAWARE	ST	OTAY	Otay Valley	LOW
2	0500000084	60810	1	1004	7TH	ST	TIJUANA	Tijuana Valley	LOW
3	0500000212	60724	2	419	DELAWARE	ST	OTAY	Otay Valley	LOW
	0500000212	60725							
4	0500000213	60726	1	1145	GEORGIA	ST	OTAY	Otay Valley	LOW
5	0500000369	60828	1	1111	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
6	0500000404	61018	2	577	BONITO	AVE	OTAY	Coronado	LOW
	0500000404	61019							
7	0500000449	70111	1	813	CYPRESS	AVE	OTAY	Otay Valley	LOW
8	0500000453	60718	1	753	ELM	AVE	OTAY	Otay Valley	LOW
9	0500000478	60714	1	364	CALLA	AVE	OTAY	Coronado	LOW
10	0500000504	60718	2	517	9TH	ST	TIJUANA	Tijuana Valley	LOW
	0500000504	60726							
11	0500000512	70130	1	341	CALLA	AVE	OTAY	Coronado	LOW
12	0500000529	60906	2	839	CAROLINA	ST	OTAY	Otay Valley	LOW
	0500000529	70503							
13	0500000534	60919	3	856	CALLA	AVE	OTAY	Coronado	LOW
	0500000534	61019							
	0500000534	70109							
14	0500000538	60706	2	1227	GRANGER	ST	TIJUANA	Tijuana Valley	LOW
	0500000538	60720							
15	0500000560	60919	3	1135	11TH	ST	TIJUANA	Tijuana Valley	LOW
	0500000560	70110							
	0500000560	70307							
16	0500000561	70327	1	1280	GRANGER	ST	TIJUANA	Tijuana Valley	LOW
17	0500000562	70327	1	1282	GRANGER	ST	TIJUANA	Tijuana Valley	LOW
18	0500000563	60823	1	1278	GRANGER	ST	TIJUANA	Tijuana Valley	LOW
19	0500000577	61212	1	574	10TH	ST	OTAY	Otay Valley	LOW
20	0500000603	60906	2	569	9TH	ST	OTAY	Otay Valley	LOW
	0500000603	61012							
21	0500000604	60906	2	571	9TH	ST	OTAY	Otay Valley	LOW
	0500000604	61012							
22	0600000023	60719	1	1065	11TH	ST	OTAY	Otay Valley	LOW
23	0600000024	70529	2	714	CHERRY	AVE	OTAY	Otay Valley	LOW
	0600000024	70531							
24	0600000026	70124	1	642	OCEAN	LN	OTAY	Coronado	LOW
25	0600000118	60921	1	1352	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
26	0600000119	60718	2	1430	CALIFORNIA	ST	TIJUANA	Tijuana Valley	LOW
	0600000119	60906							
27	0600000127	61006	1	253	ELM	AVE	OTAY	Otay Valley	LOW
28	0600000128	61006	1	255	ELM	AVE	OTAY	Otay Valley	LOW
29	0600000136	60725	1	947	12TH	ST	OTAY	Otay Valley	LOW
30	0600000147	70227	1	1277	14TH	ST	OTAY	Otay Valley	LOW
31	0600000154	61005	2	908	FLORENCE	ST	OTAY	Otay Valley	LOW
	0600000154	70104							
32	0600000155	70104	2	1247	ELM	AVE	OTAY	Otay Valley	LOW
	0600000155	70109							
33	0600000156	70104	2	1249	ELM	AVE	OTAY	Otay Valley	LOW

Attachment 6-3
BUILDING PERMIT CONSTRUCTION SITE INVENTORY AND INSPECTIONS
(FY 2006-07)

	PERMIT NUMBER	INSPECTION DATES	INSPECTIONS (FY 06-07)		ADDRESS		HUNAME	HANAME	RANK
	0600000156	70109							
34	0600000158	70226		234	DAISY	AVE	OTAY	Coronado	LOW
35	0600000164	60802		367	ELDER	AVE	TIJUANA	Tijuana Valley	LOW
36	0600000192	70110	2	1220	PALM	AVE	OTAY	Otay Valley	LOW
	0600000192	70226							
37	0600000200	60919		1560	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
38	0600000216	60831	2	589	11TH	ST	OTAY	Otay Valley	LOW
	0600000221	60828							
39	0600000222	60814	2	1450	IRIS	AVE	TIJUANA	Tijuana Valley	LOW
	0600000222	60825							
40	0600000225	70109	1	1229	GRANGER	ST	OTAY	Otay Valley	LOW
41	0600000226	60831	3	144	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
	0600000226	70104							
	0600000226	70122							
42	0600000227	60724	2	1340	HOLLY	AVE	TIJUANA	Tijuana Valley	LOW
	0600000227	60810							
43	0600000230	70629	1	1049	FLORIDA	ST	TIJUANA	Tijuana Valley	LOW
44	0600000238	60825	1	120	ELDER	AVE	TIJUANA	Tijuana Valley	LOW
45	0600000241	70504	1	600	PALM	AVE	OTAY	Otay Valley	LOW
46	0600000242	70227	1	137	CARNATION	AVE			
47	0600000247	60724	2	532	CALLA	AVE	OTAY	Coronado	LOW
	0600000247	60919							
48	0600000252	70226	2	133	ELDER	AVE	TIJUANA	Tijuana Valley	LOW
	0600000252	70301							
49	0600000255	70110	2	285	PALM	AVE	OTAY	Coronado	LOW
	0600000255	70131							
50	0600000264	60705	1	1548	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
51	0600000265	60705	1	1540	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
52	0600000272	60711	1	159	DATE	AVE	OTAY	Coronado	LOW
53	0600000274	61117	3	621	FLORENCE	ST	OTAY	Otay Valley	LOW
	0600000274	61205							
	0600000274	61213							
54	0600000280	70314	1	633	5TH	ST			
55	0600000281	70109	1	748	CALLA	AVE	OTAY	Coronado	LOW
56	0600000287	70504	1	1085	CHERRY	AVE	OTAY	Otay Valley	LOW
57	0600000301	61019	1	162	ELM	AVE	OTAY	Otay Valley	LOW
58	0600000303	70226	2	363	DATE	AVE	OTAY	Coronado	LOW
	0600000303	70306							
59	0600000305	60808	1	947	12TH	ST	TIJUANA	Tijuana Valley	LOW
60	0600000308	60831	1	169	EBONY	AVE	TIJUANA	Tijuana Valley	LOW
61	0600000311	61128	1	667	SILVER STRAND	BLVD	OTAY	Coronado	LOW
62	0600000320	60811	1	1239	DELAWARE	ST	OTAY	Otay Valley	LOW
63	0600000325	70504	1	1254	FLORENCE	ST	OTAY	Otay Valley	LOW
65	0600000332	70110	1	1266	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
66	0600000337	70501	1	575	7TH	ST	TIJUANA	Tijuana Valley	LOW
67	0600000345	61129	2	1154	10TH	ST	TIJUANA	Tijuana Valley	LOW
	0600000345	70521							
68	0600000346	61207	3	811	CORVINA	ST	OTAY	Coronado	LOW

Attachment 6-3
BUILDING PERMIT CONSTRUCTION SITE INVENTORY AND INSPECTIONS
(FY 2006-07)

	PERMIT NUMBER	INSPECTION DATES	INSPECTIONS (FY 06-07)		ADDRESS		HUNAME	HANAME	RANK
	0600000346	70416							
	0600000346	70529							
69	0600000347	61012	3	854	10TH	ST	OTAY	Otay Valley	LOW
	0600000347	61019							
	0600000347	61213							
70	0600000350	70627	1	874	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
71	0600000357	70110	1	1340	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
72	0600000361	61122	2	852	DELAWARE	ST	OTAY	Otay Valley	LOW
	0600000361	70104							
73	0600000364	61207	1	614	ALABAMA	ST	OTAY	Coronado	LOW
74	0600000371	70521	1	861	10TH	ST	OTAY	Otay Valley	LOW
75	0600000380	70521	1	211	DATE	AVE	OTAY	Coronado	LOW
76	0600000385	70521	1	817	FLORIDA	ST	OTAY	Otay Valley	LOW
77	0600000386	70521	1	819	FLORIDA	ST	OTAY	Otay Valley	LOW
78	0600000387	70521	1	821	FLORIDA	ST	OTAY	Otay Valley	LOW
79	0600000388	61212	2	543	5TH	ST	OTAY	Coronado	LOW
	0600000388	70419							
80	0600000395	61213	1	1290	5TH	ST	TIJUANA	Tijuana Valley	LOW
81	0600000398	70226	2	162	ELM	AVE	OTAY	Otay Valley	LOW
	0600000398	70227							
82	0600000407	70109	1	1229	GRANGER	ST	OTAY	Otay Valley	LOW
83	0600000409	61116	1	339	DAHLIA	AVE	OTAY	Coronado	LOW
84	0600000414	70521	1	211	ELM	AVE	OTAY	Otay Valley	LOW
85	0600000420	70214	2	538	CITRUS	AVE	OTAY	Otay Valley	LOW
	0600000420	70627							
86	0600000424	70226	1	387	EBONY	AVE	TIJUANA	Tijuana Valley	LOW
87	0600000425	70111	1	100	PALM	AVE	OTAY	Coronado	LOW
88	0600000426	70122	2	1255	ELM	AVE	OTAY	Otay Valley	LOW
	0600000426	70227							
89	0600000430	61212	1	690	HIGHWAY 75		OTAY	Coronado	LOW
90	0600000431	70227	1	1320	EAST	LN	TIJUANA	Tijuana Valley	LOW
91	0600000433	61212	1	511	DAHLIA	AVE	TIJUANA	Tijuana Valley	LOW
92	0600000439	70131	1	1243	9TH	ST	TIJUANA	Tijuana Valley	LOW
93	0600000440	70509	2	1472	14TH	ST	TIJUANA	Tijuana Valley	LOW
	0600000440	70627							
94	0600000451	70301	1	1340	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
95	0600000452	61221	1	880	DONAX	AVE	OTAY	Coronado	LOW
96	0600000456	70122	1	857	HOLLY	AVE	TIJUANA	Tijuana Valley	LOW
97	0600000468	70110	1	540	11TH	ST	OTAY	Otay Valley	LOW
98	0600000469	70227	2	1270	FLORENCE	ST	OTAY	Otay Valley	LOW
	0600000469	70306							
99	0600000473	70226	1	1250	CALIFORNIA	ST	TIJUANA	Tijuana Valley	LOW
100	0700000002	70501	1	1046	8TH	ST	TIJUANA	Tijuana Valley	LOW
101	0700000004	70227	1	175	CARNATION	AVE	OTAY	Coronado	LOW
102	0700000008	70406	1	559	10TH	ST	OTAY	Otay Valley	LOW
103	0700000009	70108	2	110	ELDER	AVE	TIJUANA	Tijuana Valley	LOW
	0700000009	70130							
104	0700000010	70314	1	1140	EBONY	AVE	TIJUANA	Tijuana Valley	LOW

Attachment 6-3
BUILDING PERMIT CONSTRUCTION SITE INVENTORY AND INSPECTIONS
(FY 2006-07)

	PERMIT NUMBER	INSPECTION DATES	INSPECTIONS (FY 06-07)		ADDRESS		HUNAME	HANAME	RANK
105	0700000012	70130	2	1154	10TH	ST	OTAY	Otay Valley	LOW
	0700000012	70521							
106	0700000019	70112	1	1049	FLORIDA	ST	OTAY	Otay Valley	LOW
107	0700000043	70227	1	769	PALM	AVE	OTAY	Coronado	LOW
108	0700000051	70301	1	1031	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
109	0700000053	70226	1	708	BASSWOOD	AVE	TIJUANA	Tijuana Valley	LOW
110	0700000058	70530	1	425	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
111	0700000061	70627	1	1235	12TH	ST	TIJUANA	Tijuana Valley	LOW
112	0700000087	70314	1	319	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
113	0700000088	70406	3	962	12TH	ST	TIJUANA	Tijuana Valley	LOW
	0700000088	70416							
	0700000088	70523							
114	0700000091	70416	2	1163	BOULEVARD	AVE	TIJUANA	Tijuana Valley	LOW
115	0700000091	70504							
116	0700000098	70501	2	458	8TH	ST	OTAY	Otay Valley	LOW
	0700000098	70509							
117	0700000109	70509	1	1610	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
118	0700000126	70501	1	519	8TH	ST	OTAY	Otay Valley	LOW
119	0700000129	70523	1	1252	14TH	ST	TIJUANA	Tijuana Valley	LOW
120	0700000189	70627	1	1070	13TH	ST	TIJUANA	Tijuana Valley	LOW
121	0700000190	70620	1	1360	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW

Capital Improvement Projects In Active Construction Phase (FY 2006-07)

Project	Name	Location	Watershed	Contractor	Start Construction	Notice of Completion	Rank
S04-107	Street Improvements Phase II	Various locations citywide	OTAY/TIJUANA	Portillo Concrete	3/6/2006	9/18/2006	High
S05-301	Street Improvements	Reconfiguration of NOLF entrance	TIJUANA	Coch Armstrong	10/1/2006	2/2/2007	High
W05-103	Pump Station 1B Upgrade	Seacoast Drive	TIJUANA	Newest Construction, Inc.	6/8/2006	8/15/2006	High

Form 7-B
City of Imperial Beach
Storm Water Management Plan Instructions to Accompany
All Construction, Grading Encroachment Permit Applications

In compliance with the federal Clean Water Act, the State Water Code, and local ordinances, the City of Imperial Beach requires property owners to complete a Storm Water Management Plan prior to issuance of any Construction, Grading, or Encroachment Permit. The purpose of the Storm Water Management Plan is to document the Best Management Practices (BMPs) that will be implemented in order to prevent pollutants (e.g., sediment and other wastes) caused by land disturbance and construction from entering storm water conveyances and receiving waters. It also certifies that the project proponent will maintain BMPs once installed to ensure their continued effectiveness. Upon City approval, the Storm Water Management Plan becomes an important part of the Construction, Grading, or Encroachment Permit, and is subject to enforcement by City of Imperial Beach inspectors and others.

The following is an overview of the three sections of the Storm Water Management Plan as well as resources that may be useful in completing the Plan.

Section 1: Required Information - This section is used to provide the City with basic information necessary to evaluate and prioritize project activities. Each of the items in this section must be completed, with the exception that projects with less than 1 acre of disturbed area are not required to provide a Waste Discharge Identification Number (WDID). WDIDs apply only to projects that are subject to the Statewide General Construction Permit issued by the State Water Resources Control Board. These larger sites require a Notice of Intent (NOI) to be filed and a Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the State.

Section 2: Best Management Practices - This section is used to indicate which BMPs will be implemented as part of the project. BMPs must be implemented to prevent erosion and construction-related materials, sediment, wastes, and other spills from entering storm water conveyances and receiving waters. It is the responsibility of the property owner and the contractor to determine the specific types of BMPs that will be used, as well as the levels of application necessary to comply with the City of Imperial Beach s Storm Water, Construction, and Grading Ordinances. Failure to prevent soil erosion and discharges of sediment and other pollutants from construction sites is a violation subject to enforcement by the City and others.

Section 3: Certification Statement - The property owner must sign this statement certifying that he or she understands the City s minimum requirements for storm water and urban runoff management as applicable to construction and land disturbance activities. The signature also certifies that all BMPs proposed in the Storm Water Management Plan will be implemented, monitored, and maintained to ensure their continued effectiveness throughout the life of the project.

Resources for Completing the Storm Water Management Plan

- The City s *Urban Runoff Management and Discharge Control Ordinance (I.B.M.C. 8.30)* establishes the discharge prohibitions and minimum BMP requirements applicable to construction and land disturbance activities. The ordinance can be located on the Internet at http://municipalcodes.lexisnexis.com/codes/imperial/.
- Section 2 of the Storm Water Management Plan contains references to California Stormwater Quality Association (CASQA) guidance manuals, which contain information on appropriate uses for individual BMPs as well as installation and maintenance specifications. Applicants are encouraged to consult these guides in preparing their Storm Water Management Plan. CASQA s *Stormwater Best Management Practice Handbook for Construction* can be accessed free of charge on the Internet at www.cabmphandbooks.com/Construction.asp. Use of the Cal Trans BMP guides is also acceptable.

City of Imperial Beach
Storm Water Management Plan

This form must be submitted with all Construction, Grading, and Encroachment Permit Applications.

SECTION 1. Required Information

Construction/Grading Permit Application Number:

Project Name:

Name of Project Contact Person:

Project address or location:

Title: Phone :

APN :

Start date: Finish date:

Project start date: Project finish date:

Estimated amount of disturbed acreage:_____ acre(s) (If equal to or greater than 1 acre, you must also provide a WDID number from the SWRCB.) WDID (if applicable): _____

Are there any watercourses or waterbodies within 50 feet of the limits of soil disturbance? YES _____ NO _____
Does the soil type have high erosion potential (fine grain soil like sand, silt, fine disintegrated granite)? YES _____ NO _____
Does the project site have or propose slopes higher than 25 feet or steeper than 1:1? YES ____ NO _____
Will the project require any dewatering operations? YES ____ NO _____
Will the project involve any paving or grinding operations? YES ____ NO _____

Construction / Grading Plan BMP Checklist ☐ The following information shall be shown on the Construction / Grading plans:

- The project boundaries
- The footprint of any existing structures and facilities
- The footprint of all structures and facilities to be constructed
- The limits of grading
- The existing and proposed grades of the site, along with any intermediate grades that will significantly affect site drainage patterns
- The location(s) where runoff from the site may enter storm drain(s), channel(s), and/or receiving waters

Section 2: Best Management Practices (BMPs)

Best Management Practices	CASQA Storm Water Handbook Detail	✔ BMP Selected	Comments
Erosion Control BMPs (choose at least one):			
Geotextiles, Plastic Covers, or Erosion Control Blankets *This BMP consists of using plastic, visqueen, or other materials to cover disturbed soil and/or dirt stockpiles to reduce erosion from rainfall impact. The material used for cover must be firmly held in place with sandbags or otherwise keyed into the soil as described in BMP specifications.*	**EC-7**		
Mulch, Straw, Wood Chips, Soil Binders *This BMP consists of applying mulch or other binding material to temporarily protect exposed soils from erosion by rainfall impact or wind. These are temporary methods of protection that must be inspected and reapplied on a frequent basis.*	**EC-3, EC-5, EC-6, EC-8**		
Other Erosion Control BMP (please describe and attach a copy of the BMP specification):			
Perimeter Control BMPs (choose at least one):			
Silt Fence *Silt fences are made of filter fabric that has been entrenched, attached to supporting poles, and is sometimes backed by a plastic or wire mesh for support. The silt fence detains sediment-laden water, promoting sedimentation behind the fence. It is primarily used as a perimeter control and is not effective unless trenched and keyed into the soil.*	**SE-1**		
Fiber Roll / Straw Waddle *Fiber rolls consist of straw, flax, or other similar materials bound into a tight, tubular roll. They are often used on the face of slopes to intercept runoff. They may also be effective as perimeter controls for sites with little to no slope. Fiber rolls are not effective unless properly installed (trenched and staked into the soil per specifications).*	**SE-5**		
Gravel Bag / Sandbag Barrier *This BMP consists of placing a series of gravel- or sand-filled bags on a level contour to intercept sheet flows. Gravel bags pond sheet flow runoff, allowing sediment to settle out, and release runoff slowly as sheet flow. Sandbags also pond sheet flow runoff, but allow little if any runoff to be released. These BMPs are often used around stockpiles or as a perimeter control.*	**SE-6, SE-8**		
Other Perimeter Control BMPs (please describe and attach a copy of the BMP specification):			
Storm Drain Inlet Protection (must implement this BMP if applicable):			
Storm Drain Inlet Protection *Storm drain inlet protection consists of filter fabric covering the opening of the storm drain, drop inlet, or curb inlet. The fabric must be held in place securely with either sandbags or gravel bags. Frequent inspection and maintenance is required.*	**SE-10**	✔	
Tracking Control BMPs (must implement this BMP or other equivalent):			
Stabilized Construction Entrance *This BMP consists of a pad of aggregate underlain with filter cloth at the entrance of a construction site where traffic will be entering and leaving to or from a public right of way. The purpose is to reduce the tracking of sediment onto streets. A stabilized construction entrance is unlikely to be 100% effective, and must be used in conjunction with sweeping and good housekeeping practices to ensure that sediment tracked off-site does not enter the storm drain system.*	**TC-1**	✔	
Other Tracking Control BMPs (please describe and attach a copy of the BMP specification):			

Section 2: Best Management Practices (BMPs)

Best Management Practices	CASQA Storm Water Handbook Detail	✓ BMP Selected	Comments
Wind Erosion Control BMP (must implement this BMP):			
Wind Erosion Control *This BMP consists of applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities. Care should be taken so that water used for dust control is not allowed to move off site.*	**WE-1**	✔	
General Site Management BMPs (must implement all of the following if applicable):			
Good Housekeeping *Good housekeeping ensures that the construction site is kept tidy and free of excessive debris. It also includes ensuring that any sediment or trash tracked from the site onto the public right of way (through whatever means) is swept up or otherwise collected at the end of the business day.*	**-**	✔	
Employee & Sub-contractor Training *All employees and sub-contractors working on site shall be trained with regard to applicable storm water management requirements. Training shall also be provided on proper techniques for installing and maintaining BMPs.*	**-**	✔	
Material Delivery, Storage, & Use *Minimize the storage and use of hazardous materials on site, and store materials in a designated area with secondary containment if appropriate.*	**WM-1, WM-2**	✔	
Stockpile Management *Stockpiles of soil, asphalt, concrete rubble, "cold mix", and wood pressure-treated with metallic products should be covered with plastic or a comparable material at all times during the rainy season, and prior to the onset of precipitation during the dry season.*	**WM-3**	✔	
Spill Prevention & Control *Reduce the chance for spills, cleanup leaks and spills immediately, and report spills to City personnel.*	**WM-4**	✔	
Waste Management *These are a series of BMPs that address the appropriate management of solid wastes, hazardous wastes, contaminated soils, concrete wastes, sanitary wastes, and liquid wastes as specified in the BMP specifications listed to the right.*	**WM-5, WM-6, WM-7, WM-8, WM-9, WM-10**	✔	
Water Conservation *Avoid using water in a way that is likely to cause erosion and/or the transport of pollutants off site.*	**NS-1**	✔	
Vehicle & Equipment Cleaning, Fueling & Maintenance *On-site cleaning, fueling, and maintenance of vehicles is discouraged.*	**NS-8, NS-9, NS-10**	✔	
Additional BMPs (please describe):			
1.			
2.			
3.			
4.			

☐ Secondary perimeter control (i.e., sandbags or gravel bags placed in gutters on either side of the project) is highly recommended and may be required on projects where applicable.

Section 3: Certification Statement

The following certification must be signed before a Construction, Grading, or Encroachment Permit will be issued.

I have read and understand that the City of Imperial Beach has adopted minimum requirements for prohibiting non-storm water discharges urban runoff and for managing storm water runoff from sites associated with construction and other land disturbance activities. I certify that the BMPs proposed in Section 2 of this Storm Water Management Plan will be implemented to effectively prevent off-site runoff as well as any of this project's potentially negative impacts on the environment. I further agree to install, monitor, maintain, or revise the selected BMPs to ensure their effectiveness throughout the life of the project.

I also understand that non-compliance with the City's Storm Water and Construction / Grading Ordinances may result in enforcement by the City, including fines, citations, stop-work orders, cease and desist orders, or other actions.

Property owner _____ *Date* _____

CITY'S GOAL

The City's goal is to gain compliance with all regulations and requirements through a cooperative approach between the City and the business community. The City is providing this information to you to help guide businesses to remain in compliance. We are also available to meet with business owners.

All of these Best Management Practices (BMPs) along with our programs in other parts of the community will help keep the bay and the ocean clean for all of us. For additional information about storm water pollution and prevention, or to report a violation, contact: **Imperial Beach's Department of Public Works Hotline (619)575-3745.**

PLEASE TAKE THE TIME TO SHARE THIS INFORMATION WITH ALL EMPLOYEES AND OTHERS WHO WORK ON YOUR SITE.

Working together we can make a difference!

City of Imperial Beach
PUBLIC WORKS DEPARTMENT
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Email: ibpworks@cityofib.org

City of Imperial Beach

STORM WATER POLLUTION PREVENTION AND THE CONSTRUCTION INDUSTRY

Presented by
Public Work Department

The City of Imperial Beach is educating residents, guests, and businesses about how to control discharges of pollutants into our storm drain systems, San Diego Bay, Tijuana Estuary and River, Otay River and the Pacific Ocean. Unfortunately, storm drains do not filter water or debris, so anything that flows into the storm drain ends up in our rivers, ocean or bay. The construction industry is an important part of our economy and community. Oftentimes, the construction industry unknowingly contributes to storm water pollution by allowing paint, dirt, trash, building materials or liquid building materials to flow into the street, gutter or storm drain. These discharge not only pollute our environment but they are prohibited by law. These and other types of pollutants discharged to the rivers, ocean and bay and can lead to beach closures and additional regulatory requirements. Below are some recommended **Best Management Practices (BMPs)** for the construction industry that we need you to implement these practices on job sites, if you haven't done so already. If you have questions or need additional information sent to you, please contact **Environmental Division at (619)628-1370 or (619) 628-1370.**

EMPLOYEE TRAINING

Most construction firms have employee-training programs. These programs address such areas as health and safety training and fire protection. Training on storm water management and BMPs can be incorporated into these programs. Your employees can be trained by posters, employee meetings, courses, and bulletin boards. Bulletin boards containing messages about storm water management, potential contaminant sources, and prevention of contamination in surface water runoff are very helpful. An employee-training program should be an on-going, yearly process.

EMPLOYEE TRAINING

The City highly recommends that all staging areas be located on the work site or other private property. In all cases, staging areas need to be protected to ensure that materials or any pollutants are contained within the area.

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DIRT/GRADING

Exposed dirt piles are not allowed in the "right-of-way" (street, parkway, gutter and sidewalk). If you must temporarily remove soil, make sure to leave it in a contained, covered area where it cannot be tracked onto the street. If permanently removing dirt, a disposal location must be found prior to excavation. Numerous commercial businesses, listed in the Yellow Pages, are available to handle disposal needs or purchase your clean soil. Vacant lots and lots under construction must be protected to ensure that all dirt remains on the lot under any weather or working condition. Tracking dirt off the site or dirt carried off the site from runoff will, in most cases, be considered a violation and subject to an enforcement action.

TRASH/DEBRIS STORAGE

PAINT/STUCCO

Painting, concrete or stucco tools should never be rinsed out in the street or any area that might flow to the street. If you use a water-based paint, wash all paint brushes, pans, sprayer and other equipment in a sink connected to the sewer. Although we don't recommend their use, oil-based paints and solvents can only be disposed of at a hazardous waste collection site. When you are ready to dispose of any hazardous waste, call the County of San Diego Hazardous Materials Management Division, at (619)338-2222 or (800)253-9933. They will refer you to a list of private companies that will dispose of your hazardous waste for a fee.

BUILDING MATERIALS

Materials and equipment which require

BUILDING MATERIALS (CONTINUED)

These materials and the equipment and tools used to apply these materials should be cleaned in such a manner so as to keep the runoff and residue on the construction site. Additionally, such materials as pipes, flooring, dry wall, wood, bricks, metal bracings, tarpaper, spackle, and asphalt should be covered when rain is expected. All chemicals should be stored either in an enclosed area or at least under cover when not in use.

GROUNDWATER DEWATERING

More and more, the City is receiving requests to discharge groundwater from construction sites. In most cases, the City will not allow groundwater to be pumped into the City's storm drain

SPILLS

If an accidental spill of any liquid material, building material or hazardous waste occurs, absorbents must be applied immediately to prevent the spill from entering the City's street/storm drain conveyance system. When the spill is controlled and absorbed, the absorbent must be cleaned up and disposed of properly. Please have available at all times a spill kit including absorbents.

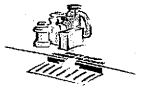

INSPECTION & ENFORCEMENT PROGRAM

The City is required to maintain an inspection and enforcement program to ensure that all businesses operating within the City are in compliance with the City of Imperial Beach's Municipal Code, Chapter 8.30, regarding storm water run-off system

Attachment 7-1
Program Assessment Form - Illicit Discharge Detection and Elimination Component
Effectiveness and Performance Measures

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Comments
Number of dry weather sampling locations monitored.	11	48	50	49	50	17		
Number of dry weather locations requiring a field investigation.	0	0	8	17	15	7	#	
Number of storm water complaints / referrals received.	52	23	41	45	113	234		
Number of storm water complaints / referrals that were verified by field investigation.		23	41	52	98	199	#	
Number of illicit connections eliminated or on a compliance schedule.	2	0	3	3	2	0		
of gallons of used oil recycled from City s recycling program.	368	5,713	4,650	2,911	4,359	2,440	Gallons	
of illicit discharges requiring enforcement.	18	23	41	45	98	156		Includes verbal and written warnings.
of sewage spills.	4	14	11	12	7	8		
of total gallons sewage spilled.	67	2,312	1,051	971	503	1,134	Gallons	
of total gallons sewage recovered	9.5	1,472	901	802	103	194	Gallons	
of tons of HHW properly disposed	1.5	5.1	2.2	1.7	3.27	9.36	Tons	
of mile of sewer lines			84	39.5	39.5	39.5	Miles	More accurate estimate of sewer line miles obtained in FY 04-05
of miles of sewer lines cleaned.			84	39.5	39.5	39.5	Miles	More accurate estimate of sewer line miles obtained in FY 04-05
of miles of sewer lines replaced.	2		0	0.25	0.1	0	Miles	Several hundred feet of pipe replaced as part of pump station construction project FY05-06.

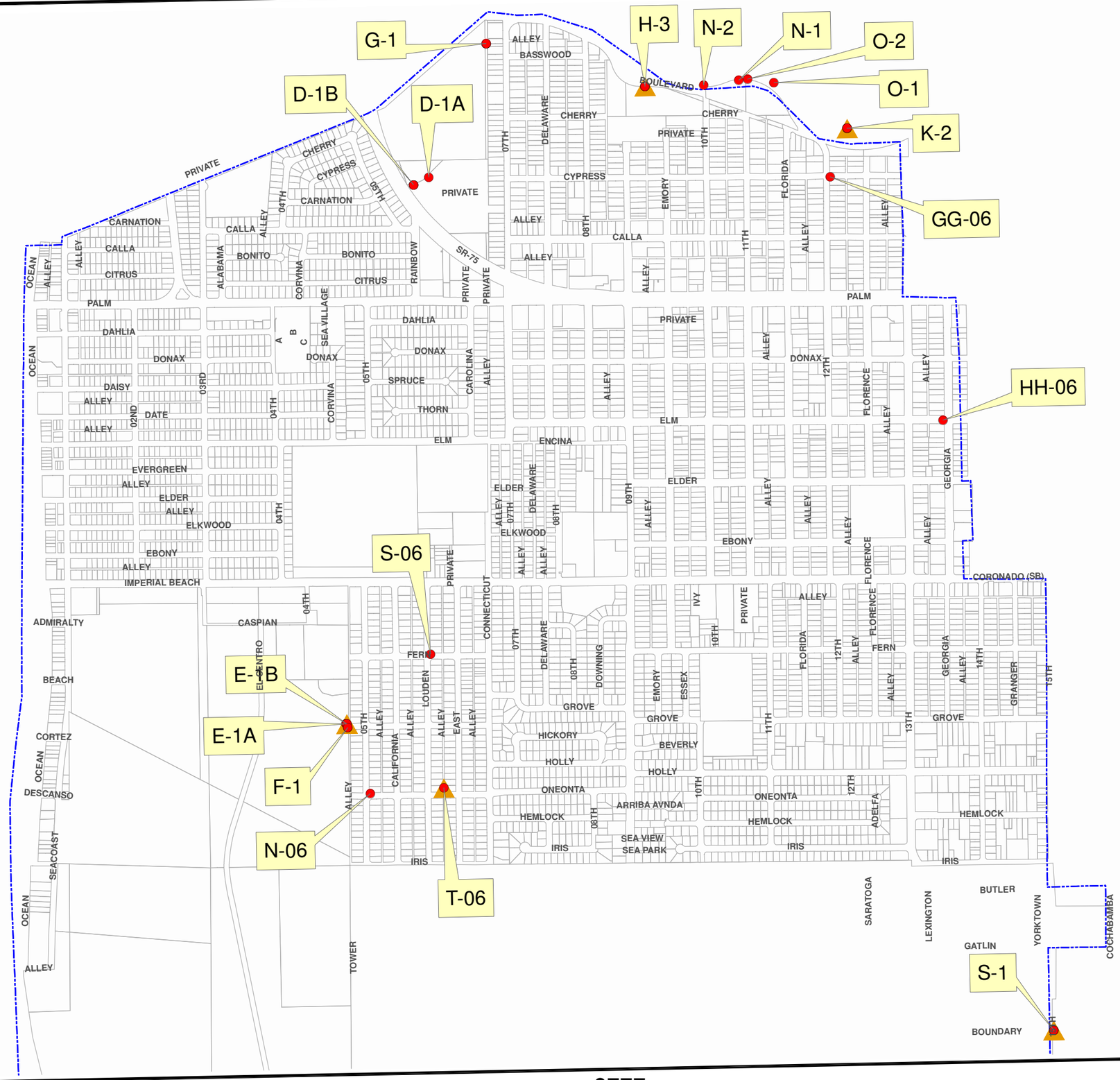

LEGEND

- Parcel Boundary
- Lab Sample Site
- City Boundary
- Field Screening Site

Vicinity Map

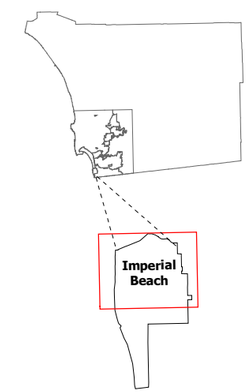

0 250 500 1,000 1,500 Feet

1 inch equals 1,000 feet

2006 Dry Weather Sampling Locations

Public Works Department

Date 1/3/2007

Scale 1:12,000

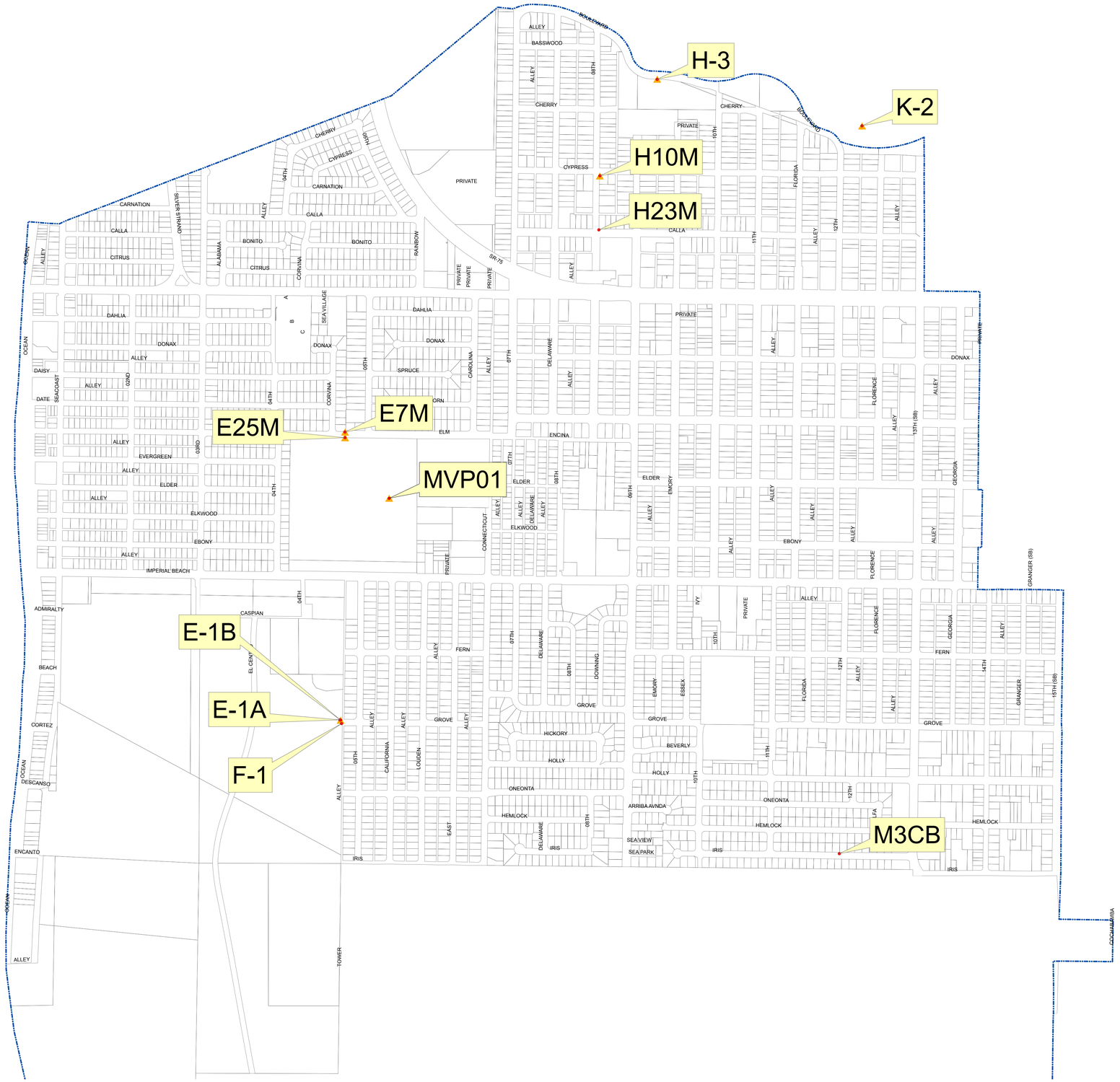

LEGEND

- PARCEL BOUNDARY
- Lab Sample Site
- CITY BOUNDARY
- Field Screening Site

Vicinity Map

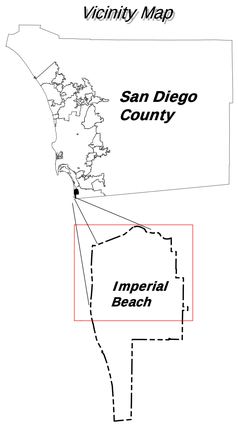

0 125 250 500 750 1,000 Feet

1 inch equals 482.864115 feet

2007 Dry Weather Sampling Locations

Public Works Department

Date 12/18/2007

Scale 1:5,794

2006 Imperial Beach Dry Weather Monitoring Program

Field Screening Results

Site Name	Field Sample Taken	Lab Sample Taken	Loction Type	Sample Date	Sample Time	Observer	Weather	Tide	LastRain	Rainfall	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology	FlowObserved	ReachRecWater	EvidOvrlndFlow	WaterTemp(C)	pH	Ammonia(mg/l NH3-N)	Turbidity(NTU)	Nitrate(mg/l NO2-N)	Cond(ms/cm)	ReactPhosphorus(mg/l)	Upstream Investigation Conducted	Comments
AA-Grid	No	No	Grid	18-Jul-06		DC																						No	No urban runoff to sample.
A-Grid	No	No	Grid	12-Jul-06		DC																						No	No urban runoff to sample.
BB-Grid	No	No	Grid	18-Jul-06		DC																						No	No urban runoff to sample.
D-1A	No	No	Outfall	3-May-06	10:50 PM	DC/TS	Overcast	Low	> 72 Hours	None	None	None		None	None	Normal	None	Dry	N/A	No								No	No urban runoff to sample.
D-1B	No	No	Outfall	3-May-06	10:42 AM	DC/TS	Overcast	Low	> 72 Hours	None	None	None		None	None	None	None	Dry	N/A	No								No	No urban runoff to sample.
D-1B	No	No	Outfall	31-Jul-06	11:40 AM	DC																						No	No urban runoff to sample.
D-1B	No	No	Outfall	8-Sep-06	2:30 PM	DC	Sunny	Outgoing	> 72 Hours	None	None	None	Clear	None	None	None	None	Tidal	No	No								No	No urban runoff to sample.
E-1A	No	No	Outfall	19-May-06	8:45 AM	DC/TS	Sunny	Low	> 72 Hours	None																		No	Tidal influence, no sample taken.

2006 Imperial Beach Dry Weather Monitoring Program

Field Screening Results

Site Name	Field Sample Taken	Lab Sample Taken	Loction Type	Sample Date	Sample Time	Observer	Weather	Tide	LastRain	Rainfall	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology	FlowObserved	ReachRecWater	EvidOvrlndFlow	WaterTemp(C)	pH	Ammonia(mg/l NH3-N)	Turbidity(NTU)	Nitrate(mg/l NO2-N)	Cond(ms/cm)	ReactPhosphorus(mg/l)	Upstream Investigation Conducted	Comments
G-Grid	No	No	Grid	17-Jul-06		DC																						No	No urban runoff to sample.
H-3	Yes	No	Outfall	3-May-06	8:45 AM	DC/TS	Overcast	Low	> 72 Hours	None	None	Yellow	Clear	Trash	None	Normal	Insects/Algae	Ponded	No	No	19.4	7.80	0.8	2	0.0	0.265	0.0	No	Unclear whether ponded water is accumulated storm drain or tidal water.
H-3	Yes	Yes	Outfall	5-Jun-06	11:30 AM	DC/TS	Overcast	Low	> 72 Hours	None	None	None	Clear	Trash	None	Normal	Insects/Algae	Ponded	N/A	No	22.0	6.35	0.0	1	0.0	2.170	1.0	5-Jun-06	No illegal discharge was identified. Ponded water conductivity indicates fresh water. Corresponding river water (downstream)
H-3	Yes	Yes	Outfall	31-Jul-06	8:36 AM	DC/TS	Overcast	Low	< 72 Hours	< 0.1"	Musty	Gray	Slightly Cloudy	Trash	None	Normal	Algae	Ponded	Yes	No	23.1	7.31	0.0	136	0.0	35.530	4.0	31-Jul-06	No illegal discharge was identified. However, grayish cloudy water indicates possible discharge of paint or concrete.
H-3	No	No	Outfall	8-Sep-06	3:30 PM	DC	Sunny	Low	> 72 Hours	None	None	None	Clear	Trash	None	Normal	None	Tidal	N/A	No						46.880		No	Tidal influence, no sample taken.
H-Grid	No	No	Grid	12-Jul-06		DC																						No	No urban runoff to sample.
HH-06	Yes	No	Grid	28-Jun-06	2:15 PM	DC	Sunny	N/A	< 72 Hours	None	Other	None	Clear	None	None	Normal	None	Flowing	No	No	37.0	7.29	1.0	13	0.0	0.948	2.0	28-Jun-06	Residential car washing. Resident was informed about preferred practices.
J-Grid	No	No	Grid	17-Jul-06		DC									**3780**													No	No urban runoff to sample.

2006 Imperial Beach Dry Weather Monitoring Program

Field Screening Results

Site Name	Field Sample Taken	Lab Sample Taken	Loction Type	Sample Date	Sample Time	Observer	Weather	Tide	LastRain	Rainfall	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology	FlowObserved	ReachRecWater	EvidOvrlndFlow	WaterTemp(C)	pH	Ammonia(mg/l NH3-N)	Turbidity(NTU)	Nitrate(mg/l NO2-N)	Cond(ms/cm)	ReactPhosphorus(mg/l)	Upstream Investigation Conducted	Comments
S-06	Yes	No	Grid	28-Jun-06	11:14 AM	DC	Sunny	N/A	> 72 Hours	None	"Detergent Like"	Brown	Clear	None	None	Normal	None	Ponded	No	No	32.7	8.69	6.0	46	0.0	2.230	1.0	28-Jun-06	No illegal discharge was identified.
S-1	Yes	Yes	Outfall	19-May-06	10:45 AM	DC/TS	Sunny	N/A	> 72 Hours	None	Musty	None	Clear	None	None	Normal	Insects/Algae	Ponded	No	No	18.6	7.05	10.0	9	0.0	2.310	2.0	19-May-06	No illegal discharge was identified.
S-1	Yes	Yes	Outfall	20-Jun-06	10:30 AM	DC/TS	Sunny	N/A	> 72 Hours	None	Musty	Yellow	Clear	None	None	Normal	None	Ponded	No	No	19.3	6.70	2.0	5	0.0	0.550	3.5	20-Jun-06	No illegal discharge was identified.
S-1	Yes	Yes	Outfall	22-Aug-06	2:30 PM	DC/TS	Sunny	N/A	> 72 Hours	None	None	Yellow	Clear	Trash	None	Normal	None	Ponded	No	No	23.8	7.02	0.0	5	0.0	1.220	2.7	22-Aug-06	No illegal discharge was identified.
S-1	Yes	No	Outfall	21-Sep-06	4:30 PM	DC/TS	Sunny	N/A	> 72 Hours	None	None	None	Clear	None	None	None	None	Ponded	No	No	20.6	6.84	1.5	10	0.0	1.350	3.0	21-Sep-06	No illegal discharge was identified. Water level was the lowest I have seen it.
T-06	Yes	Yes	Grid	12-Jul-06	9:15 AM	DC	Sunny	N/A	> 72 Hours	None	Musty	Brown	Clear	None	None	None	None	Ponded	No	No	26.9	7.18	8.0	114	1.0	1.280	10.0	12-Jul-06	There was a considerable amount of water and alley is dirt and not paved. No illegal discharge was identified.
U-Grid	No	No	Grid	18-Jul-06		DC																						No	No urban runoff to sample.
V-Grid	No	No	Grid	18-Jul-06		DC																						No	No urban runoff to sample.

FY 2006-07 Illicit Discharge Investigations
City of Imperial Beach

Attachment 7-3

	COMPLAINT / INITIAL OBSERVATION			INVESTIGATION RESULTS								ENFORCEMENT ACTIONS					COST RECOVERY			CASE RESOLUTION	
CASE NUMBER	DATE RECEIVED	REFERRAL SOURCE *(Choose from List)*	COMPLAINT/OBSERVATION DESCRIPTION	DATE INVESTIGATED	INVESTIGATION RESULTS	CONSTITUENT *(Choose from List)*	those sections where BMP's do not exist.	WATERSHED *(Where observed or alleged violation is occurring)*	VIOLATION VERIFIED? (Y,N)	VIOLATOR IDENTIFIED (Y, N, N/A)	VIOLATOR TYPE *(Choose from List)*	VW Only *(Insert Date)*	NOA *(Insert Date)*	NOV *(Insert Date)*	FINE / CITATION *(Insert Date)*	INFORMATIONAL LETTER (Insert Date)	CITY CLEANUP? (Y, N, N/A)	COST RECOVERY? (Y, N, N/A)	COST RECOVERY/FINE AMOUNT	CASE RESOLUTION DATE	CORRECTIVE ACTIONS IMPLEMENTED
1	5-Jul-06	PW-ENV	City's Env. Prog. Specialist observed a lot of water coming off a sidewalk and into the gutter on Louden Lane. A Resident was rinsing off his camping chairs allowing the water to enter the street.	5-Jul-06	N/A	WASHWATER	1411 Louden Lane	TIJUANA ESTUARY	Y	Y	RESIDENT	5-Jul-06				5-Jul-06	N	N/A	N/A	5-Jul-06	Resident terminated activity and City made resident aware of City's obligation to prevent urban runoff pollution.
2	5-Jul-06	PW-ENV	City's Env. Prog. Specialist observed a green liquid in the gutter near Elder Avenue and 13th Street.	5-Jul-06	Investigations revealed that a minor accident occurred resulting in a discharge of engine coolant from one of the vehicles.	AUTO FLUIDS	N/A	OTAY RIVER	Y	Y	RESIDENT						Y	N	N/A	5-Jul-06	City cleaned up engine coolant spill .
3	5-Jul-06	PW-ENV	City's Env. Prog. Specialist observed 3 quarts of motor oil on edge of alley between East lane and Louden Lane.	5-Jul-06	N/A	AUTO FLUIDS	N/A	TIJUANA ESTUARY	Y	N	UNKNOWN						Y	N	N/A	5-Jul-06	Oil was recovered and taken back to City of Imperial Beach Public Works. Oil will be disposed of properly.
4	10-Jul-06	GENERAL PUBLIC	Resident reported that his neighbors at 1203 Louden Lane allowed oil to drip into the gutter and did not bother to clean it up.	10-Jul-06	City found some areas with dried oil spots, but nothing that would indicate a recent oil leak. The City found some cigarette debris in the gutter in front of 1203 Louden Lane and the resident did clean up the cigarette debris.	TRASH & DEBRIS	1203 Louden Lane	TIJUANA ESTUARY	Y	Y	RESIDENT	10-Jul-06				10-Jul-06	N	N/A	N/A	10-Jul-06	The City did not observe any recent oil spills that would warrant a cleanup effort.
		GENERAL	Resident reported that neighbors across the street at 574 11th Street are not picking up after		The City did find some dog feces in the alley but could not determine who the		574 11th Street	OTAY RIVER		N						10-Jul-06	N	N/A	N/A	10-Jul-06	The City did speak with two neighbors across the street from the complaintaints residence and informed them of the City's Pollution Prevention Policy and the

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12	20-Jul-06	PW-ENV	City's Env Prog Specialist observed a lot of trash in alley, car port, and surrounding area at an apartment complex on 10th Street.	20-Jul-06	Property management informed City that area is routinely maintained and the wind can blow a lot of debris in vicinity of apartment complex.	TRASH & DEBRIS	805 10th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT		26-Jul-06			26-Jul-06	N	N/A	N/A	25-Jul-06	City reqested clean up of trash and debris. On 7/25/2006 City verified cleanup. Additionally, City submitted a letter, N.O.A and Business BMP brochure to property management in mail.
13	21-Jul-06	PW-ADMIN	San Diego Gas & Electric employees were discharging water into the gutter at a work site near 9th Street and Calla Avenue.	21-Jul-06	After investigating the City found that San Diego Gas & Electric workers were pumping clean water into the storm water conveyance system from various vaults located in the vicinity of 9th Street and Calla Avenue.	POTABLE WATER	9th Street/Calla Avenue	OTAY RIVER	N	N/A	UTILITY						N/A	N/A	N/A	21-Jul-06	San Diego Gas and Electric are permitted to discharge clean vault water,which is composed mainly of rain and irrigation water, into the storm water conveyance system. Water which shows any signs of contamination (ie. Oil sheen, odor, etc.) is not discharged into a storm water conveyance system, but rather is collected and transported off site for proper disposal.
14	24-Jul-06	PW-PARKS	City Parks employee reported a grease spill coming from KFC restaurant trash enclosure area and into the City's storm water conveyance system.	24-Jul-06	Investigations revealed that there was a grease discharge that originated in KFC's trash enclosure area and extended onto the alley and Imperial Beach Blvd. The City could not determine the cause of the spill.	COOKING OIL & GREASE	1056 13th Street	TIJUANA ESTUARY	Y	Y	FIXED COMMERCIAL BUSINESS		25-Jul-06				N	N/A	N/A	24-Jul-06	KFC contracted with a power washing company to conduct grease recovery efforts using heat, detergents and high pressure washing system. This was completed by Monday night.
15	24-Jul-06	CITY-OTHER	On Friday,, 7/21/06 thePublic Works Director observed paint and water coming out of a curb	25-Jul-06	Investigations revealed that the discharge was most likely the result of painting equipment being washed inside the	PAINT	1100 Seacoast Drive	TIJUANA ESTUARY	Y	Y	PROPERTY			26-Jul-06			Y	Y	$290.64	21-Jul-06	The City immediately gathered the necessary recovery equipment and recovered the paint debris in the gutter. The City will provide further outreach

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22	8-Aug-06	PW-ENV	City Env. Prog. Specialist observed a significant amount of paper blowing in the street near a construction site on 11th Street.	8-Aug-06	The City determined a construction site at 1065 11th Street had a significant pile of trash and debris that was uncovered and not contained resulting in a discharge into the street.	TRASH & DEBRIS	1065 11th Street	TIJUANA ESTUARY	Y	Y	CONSTRUCTION						N	N/A	N/A	8-Aug-06	Observation was communicated to Community Development Department. Trash and debris was subsequently picked up on the street and the construction site by the General Contractor.
23	10-Aug-06	PW-ENV	City's Env. Program Manager observed a white powdery material in the gutter near the intersection of Florence Street and Cypress Avenue.	11-Aug-06	After a City investigation, the City believes a concrete washout occurred since it appears a new approach and sidewalk was constructed at 573 Florence Street.	CONSTRUCTION DEBRIS	573 Florence Street	OTAY RIVER	Y	Y	RESIDENT			11-Aug-06		11-Aug-06	N	N/A	N/A	14-Aug-06	The City requested via a N.O.V form that the material be recovered using appropriate BMP's such as dry sweeping. The City verified the cleanup on Monday, August 14, 2006.
24	10-Aug-06	PW-PARKS	City employee observed individuals washing concrete equipment near the driveway resulting in an illegal discharge.	10-Aug-06	Investigations revealed that a contractor at 1200 Iris Avenue was rinsing his equipment which had dye material from driveway resurfacing work. This resulted in a discharge of pollutants into the gutter and some material did reach the nearby storm drain inlet.	CONSTRUCTION DEBRIS	1200 Iris Avenue	TIJUANA ESTUARY	Y	Y	MOBILE BUSINESS			10-Aug-06		10-Aug-06	N	N/A	N/A	10-Aug-06	Contractor abated all material that existed in the gutter and storm drain inlet. Both the contractor and owner were informed of the City's storm water management policies and BMP requirements.
25	15-Aug-06	PW-SEWER	Sewer supervisor reported that there was an illegal discharge of concrete in the gutter on the 900 block of 10th Street.	16-Aug-06	Investigations revealed that some type of hardscape resurfacing was conducted at 963 10th Street. The City found a dried purplish substance in the gutter starting in front of 963 10th Street down to Ebony Avenue.	CONSTRUCTION DEBRIS	963 10th Street	TIJUANA ESTUARY	Y	Y	RESIDENT			16-Aug-06		16-Aug-06	N	N/A	N/A	17-Aug-06	City wrote Notice of Violation requesting that the material be cleaned up using dry sweeping methods. City verified cleanup on 8/17/2006. Resident confirmed that she cleaned up the material using sweeping methods.

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32	25-Aug-06	RESIDENTIAL INSPECTIONS	During a residential inspection of the LL Grid, the City's Env. Prog. Specialist observed some small amounts of a dried white powdery substance in the gutter in front of 1459 Fern Avenue.	25-Aug-06	Investigations revealed that a pool cleaning contractor at 1459 Fern washed out biodegradable pool filters into the gutter.	POOL WATER	1459 Fern Avenue	OTAY RIVER	Y	Y	MOBILE BUSINESS	25-Aug-06				25-Aug-06	N	N/A	N/A	25-Aug-06	Resident at 1459 Fern Avenue cleaned up the powdery substance in the gutter. City advised resident to have pool company find an alternative to cleaning the filter out into the street as this is a violation of the City's Municipal Code. City recommended washing pool filter in sewer drain or in a landscaped area.
33	25-Aug-06	GENERAL PUBLIC	Resident observed a hydraulic fluid leak from an EDCO trash truck which resulted in a discharge of pollutants onto the street.	25-Aug-06	Investigations revealed that a significant hydraulic fluid leak from an EDCO trash truck did occur on the 4th Street side of 394 Date Avenue.	AUTO FLUIDS	N/A	PACIFIC OCEAN	Y	Y	MOBILE BUSINESS						N	N/A	N/A	25-Aug-06	EDCO Disposal Company initially utilized absorbent material to contain and isolate the small spill and then a EDCO contracted power washing company completed the cleanup by power washing and recovering the oil.
34	28-Aug-06	RESIDENTIAL INSPECTIONS	During a inspection of the EE Grid the City's Env. Prog. Specialist observed a lot of water in the alley near florida Street and Imperial Beach Blvd.	28-Aug-06	Investigations revealed that overirrigation was occuring at 1131 Florida Street.	OVER IRRIGATION	1131 Florida Street	TIJUANA ESTUARY	N	Y	RESIDENT	28-Aug-06				28-Aug-06	N/A	N/A	N/A	28-Aug-06	City provided the resident with a Homeowner Pollution Prevention brochure. City mentioned that although minimal water runoff from irrigation is acceptable excess water runoff exacerbates runoff pollution problems associated with irrigation runoff.
35	28-Aug-06	RESIDENTIAL INSPECTIONS	During an inspection of the Y Grid, the City's Env. Prog. Specialist observed a white	28-Aug-06	Investigations revealed that the washing of concrete equipment at 1251 9th Street	CONSTRUCTION DEBRIS	1251 9th Street	TIJUANA ESTUARY	Y	Y	RESIDENT	28-Aug-06				28-Aug-06	N	N/A	N/A	28-Aug-06	Resident cleaned up material using dry sweeping methods.

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43	31-Aug-06	PW-PARKS	Parks Supervisor reported that the construction site at 1275 Grainger had some potential violations with respect to the City's BMP requirements.	5-Sep-06	The City's Env. Prog. Specialist did not observe any BMP violations at the construction site at 1275 Grainger Street.	CONSTRUCTION DEBRIS	1275 Granger Street	OTAY RIVER	N	N	CONSTRUCTION						N/A	N/A	N/A		None.
44	4-Sep-06	GENERAL PUBLIC	Resident reported that the storm drain channel behind his house contained a lot of weeds and trash and he was concerned with potential flooding problems.	5-Sep-06	Investigations revealed that the storm drain channel was in fact littered with some trash and there were overgrown weeds.	TRASH & DEBRIS	761 Corvina Street	PACIFIC OCEAN	N	N	UNKNOWN						Y	N	N/A	5-Sep-06	On 9/5/07 the City's Sewer Division removed the weeds and trash.
45	5-Sep-06	GENERAL PUBLIC	Resident reported that on 8/31/06 he and a fellow surfer smelled very strong gasonline fumes while they were surfing beyond Descanso Street and Seacoast Drive.	5-Sep-06	The resident believes the gasoline odors were a result of military activities in the vicinity.	AUTO FLUIDS	N/A	PACIFIC OCEAN	Y	N	OTHER						N/A	N/A	N/A		
46	5-Sep-06	BUSINESS	All American Car Wash Company reported that recurring non-profit car washing activities are taking place at Genes Auto Repair Shop resulting in illegal discharges of pollutants.	8-Sep-06	City discussed report with Gene's Auto Repair Shop and was told that all car washing activities are conducted using appropriate best management practices including recovering and disposing of wash water appropriately.	WASHWATER	1085 Palm Avenue	OTAY RIVER	N	N/A	FIXED COMMERCIAL BUSINESS						N/A	N/A	N/A		None.
																					City asked resident to cleanup the soap that was in the gutter and appraised the

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53	13-Sep-06	PW-PARKS	City's Park supervisor reported that there was soapy water in the gutter in the vicinity of Jack and the Box restaurant.	13-Sep-06	Investigations confirmed initial observation that there were soap suds in the gutter at Jack and the Box. The City, however, could not determine the source. The City did observe significant grease accumulations within and infront of Jack and the Box's grease storage area.	COOKING OIL & GREASE	890 Palm Avenue	OTAY RIVER	Y	Y	FIXED COMMERCIAL BUSINESS			13-Sep-06			N	N/A	N/A		City verified on 9/27/06 that all grease on the ground within the grease storage enclosure and infront was cleaned to the satisfaction of the City. Jack in the Box is currently proceeding in purchasing a new grease bin.
54	18-Sep-06	PW-ENV	City's Env. Prog. Specialist observed grass cuttings on the sidewalk on Ebony Avenue.	18-Sep-06	Investigations revealed that the grass was recently cut at 930 & 932 Ebony Avenue, but the cuttings were not cleaned up yet.	GREEN WASTE	930 Ebony Avenue	TIJUANA ESTUARY	Y	Y	PROPERTY MANAGEMENT	18-Sep-06					N	N/A	N/A		City reinspected on 9/19/2006 and found the grass piles were swept up.
55	21-Sep-06	PW-ADMIN	Contractor at a construction site was power washing the back parking lot to a newly converted condominium complex and allowing the runoff to enter the street.	21-Sep-06	Gulf Coast Contractor was conducting power washing operations in the back parking lot at 1340 Holly Avenue allowing the rinse water to enter the gutter on Holly Avenue.	WASHWATER	1340 Holly Avenue	TIJUANA ESTUARY	Y	Y	CONSTRUCTION			21-Sep-06			N	N/A	N/A	21-Sep-06	Gold Coast recovered water in gutter and terminated power washing activity. Supervisor told City that power washing will resume once the proper equipment is obtained.
56	21-Sep-06	CD-CODES	Code Enf. Inspector observed oil, litter, automotive fluids, and used oil containers on the paved rear parking beside the city alleyway.	21-Sep-06	Tenants son was storing and working on inoperable vehicles. The rear parking beside the alleyway was filled with pools of oil and automotive fluids, litter, and used oil containers.	AUTO FLUIDS	830 11th Street	OTAY RIVER	Y	Y	RESIDENT			22-Sep-07			N	N/A	N/A	10-Oct-06	Tenant removed all the oil, auto fluids, litter, and containers of discarded oil from the rear parking area beside the alleyway.
			Muddy water was running down		Subcontractor (Superior Concrete) was responsible for the discharge of concrete																

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66	27-Sep-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed a pile of uncovered sediment on the sidewalk on Elm Avenue.	27-Sep-06	Further investigation revealed that some sediment had discharged onto street a few feet away. The City also observed that fiber rolls had been implemented at the nearby storm drain inlet.	SEDIMENT	777 Elm Avenue	OTAY RIVER	Y	Y	UTILITY	27-Sep-06					N	N/A	N/A	29-Sep-06	SDG&E cleaned up the dirt pile and power washed the remaining dirt on pavement utilizing a water recovery system.
67	27-Sep-06	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed a lot of oil spots that appeared to have been cleaned up using absorbents on Ebony Avenue.	27-Sep-06	Investigations revealed that a tow truck in the vicinity of the oil spots appears to be leaking automobile fluids as evidence from fresh oil spots underneath the truck.	AUTO FLUIDS	1187 Ebony Avenue	TIJUANA ESTUARY	Y	Y	RESIDENT			27-Sep-06		27-Sep-06	N	N/A	N/A	2-Oct-06	Resident utilized more absorbent materials to cleanup the remaining oil on the street and informed the City that he will be using a new, 2006 Tow Truck vehicle which does not possess the same automotive problems.
68	28-Sep-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed oil spots on the ground and in the gutter in front of a residence on Thorn Street.	28-Sep-06	Investigations revealed that wet oil deposits existed in the gutter next to a truck at 572 Thorn Street. Other significant, but dried oil spots existed in the area as well.	AUTO FLUIDS	572 Thorn Street	TIJUANA ESTUARY	Y	Y	RESIDENT			28-Sep-06		27-Sep-06	N	N/A	N/A	16-Oct-06	After further inspection it appears the oil in the gutter was cleaned up. Additionally, the truck, that was leaking the oil has been moved to their driveway to avoid any leaks on the street. The owner is responsible for any discharges to the storm water conveyance system.
69	28-Sep-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed concrete in the gutter on Dahlia Avenue.	28-Sep-06	Investigations revealed that a contractor at 176 Dahlia Avenue discharged concrete material in the gutter during a recent project.	CONSTRUCTION DEBRIS	176 Dahlia Avenue	PACIFIC OCEAN	Y	Y	MOBILE BUSINESS			28-Sep-06		28-Sep-06	N	N/A	N/A	2-Oct-06	Concrete material was abated from the gutter.
					City Contractor for Veterans Park																Contractor (RSM^2) and City placed fiber

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75	12-Oct-06	PW-SEWER	Complaint received from Public Works Sewar division about doge feces that was dumped in the stormwater conveyance system that runs through the rear of the property..	10/12/06	Tenants were throwning dog poop waste from the rear yard, over the fence, into a stormwater conveyance system easement that runs through the rear of the property. **(ANIMAL WASTE ----------)**	ANIMAL WASTE	1271 Essex Street	TIJUANA ESTUARY	Y	Y	RESIDENT			16-Oct-06			N/A	N/A	N/A	16-Oct-06	Tenants removed all of the dog feces from the easement / stormwater conveyance system, and they were to stop disposing of the dog poops in that fashion.
76	12-Oct-06	PW-PARKS	Employee of McDonald's (1135 Palm Ave.) washed gasoline into the street that had leaked from a car in the drive-through lane.	12-Oct-06	Spoke with manager who was not present at time of illegal discharge. Employee hosed down spilled material because he was getting complaints from customers about health and fire risk of gasoline on the ground. Informed him that all employees must be trained in BMPs, and required immediate cleanup of remaining materials in driveway, gutter, and storm drain.	AUTO FLUIDS	1135 Palm Ave.	OTAY RIVER	Y	Y	FIXED COMMERCIAL BUSINESS			12-Oct-06			N	N/A	N/A	12-Oct-06	McDonald's staff cleaned up the remaining gasoline in the driveway, gutter, and storm drain. They were instructed to block off the storm drain during cleaning, and did so.
77	19-Oct-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed a recliner chair in the alley at 1253 Georgia Street.	19-Oct-06	City believes the chair was illegally dumped in alley.	TRASH & DEBRIS	1253 Georgia Street	OTAY RIVER	Y	N	UNKNOWN						N	N/A	N/A	19-Oct-06	This chair will be included on EDCO's alley pickup list for next week, 10/25/2006.
78	19-Oct-06	RESIDENTIAL INSPECTIONS	City observed gray water in above ground storm drain channel near Oneonta Elementary School which was the result of extinguishing a fire	19-Oct-06	City of Imperial Beach Fire department extinguished a small fire at 981 Grove Avenue resulting in the discharge of pollutants into the nearby above ground storm drain channel.	FIRE ASH	981 Grove Avenue	TIJUANA ESTUARY	Y	Y	RESIDENT						Y	N	N/A	19-Oct-06	City's Street's and Graffiti Division used a pressure washer and recovery system to recover the ash and water that entered the storm drain channel.

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85	25-Oct-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed excess water runoff coming from the landscape at Carl's Junior Restaurant.	25-Oct-06	Investigations revealed that there was excess water runoff coming from the irrigation system in two different areas. It appeared that there was a broken water line which caused runoff to enter Palm Avenue.	OVER IRRIGATION	700 13th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT						N	N/A	N/A		No actions were taken.
86	25-Oct-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed an employee hosing down soap from the outside walkway to Wienerschnitzel that caused runoff to flow towards Palm Avenue.		N/A	WASHWATER	1253 Palm Avenue	OTAY RIVER	Y	Y	FIXED COMMERCIAL BUSINESS	25-Oct-06		25-Oct-06		26-Oct-06	N	N/A	N/A	25-Oct-06	City asked employee to stop hosing down sidewalk and discussed this issue and appropriate best management practices with co-workers and owner.
87	26-Oct-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed trash on the ground around the dumpster and some in the alley behind an apartment complex.	26-Oct-06	Potential runoff conditions exist at 750 11th Street.	TRASH & DEBRIS	750 11th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT			26-Oct-06		26-Oct-06	N	N/A	N/A	26-Oct-06	On 11/13/06 City confirmed cleanup of trash that existed around the dumpster.
88	26-Oct-06	RESIDENTIAL INSPECTIONS	City observed demolition work being conducted on Florida Street without the use of appropriate sediment control best management practices.	26-Oct-06	Fiber rolls did exist on site and the Contractor temporarily removed them to conduct work towards the perimeter (Florida Street side).	SEDIMENT	817 Florida Street	OTAY RIVER	N	N/A	CONSTRUCTION						N/A	N/A	N/A	26-Oct-06	Contractor will reposition fiber rolls on the perimeter once he is finished conducting his work there. City discussed City's storm water policies with the contractor.
89	26-Oct-06	GENERAL PUBLIC	Resident reported that she mistakenly directed the discharge of pool water into the alley behind her house.	26-Oct-06	Resident's cleaning lady mistakenly drained the pool into the alley behind the house. Pool water did enter the storm drain at California Street and Grove Avenue. Chlorine level was tested:	POOL WATER	1116 East Lane	TIJUANA EST[illegible]	N	N	RESIDENT						N/A	N/A	N/A	26-Oct-06	As per the City's Municipal Code, the discharge was legal. Resident does utilize a state of the art filtering system which maintains purity of pool water.

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96	8-Nov-06	GENERAL PUBLIC	Resident reported a couch was illegally dumped in the alley at 565 Delaware Street.	8-Nov-06	City's Env. Program Specialist confirmed the resident's report.	TRASH & DEBRIS	565 Delaware Street	OTAY RIVER	Y	N	UNKNOWN						N	N/A	N/A	8-Nov-06	Illegally dumped item will be included on this weeks bulky item alley pickup which is conducted by EDCO Disposal Corporation.
97	13-Nov-06	PW-ENV	City's Env. Prog. Specialist observed a construction site on Imperial Beach Boulevard with inadequate sediment control best management practices.	13-Nov-06	General Contractor at 144 Imperial Beach Blvd was utilizing fiber rolls for partial perimeter sediment control. The City determined that perimeter control was also necessary on the southwestern section of the construction site.	SEDIMENT	144 Imperial Beach Blvd	PACIFIC OCEAN	Y	Y	CONSTRUCTION	13-Nov-06					N/A	N/A	N/A	20-Nov-06	Contractor installed additional fiber rolls.
98	13-Nov-06	PW-ENV	City's Env. Prog. Specialist observed water running down the gutter on 10th Street.	13-Nov-06	Investigations revealed that a resident on 10th Street had rinsed out his trash container in the street and was also in the process of rinsing his broom.	WASHWATER	577 10th Street	OTAY RIVER	Y	Y	RESIDENT	13-Nov-06					N	N/A	N/A	13-Nov-06	City informed resident of City's storm water runoff policies and applicable best management practices appropriate for cleaning household equipment. A homeowner pollution prevention brochure was provided to the resident.
99	14-Nov-06	PW-ADMIN	Public Works Superintendant found a white substance that had been discharged into the gutter in front of Hawaiian Garden apartment complex.	14-Nov-06	Investigations revealed that an Hawaiian Garden employee had washed paint into the street after an accidential paint spill in the tenant parking lot.	PAINT	1031 Imperial Beach Blvd	TIJUANA ESTUARY	Y	Y	PROPERTY MANAGEMENT		16-Nov-06			16-Nov-06	Y	N	N/A	14-Nov-06	City crews abated the paint which had entered the gutter and storm drain on Imperial Beach Blvd. City submitted a Notice of Abatement and discussed City's storm water policy with Hawaiian Garden's Operations Manager.
100	20-Nov-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed trash on the ground in a parking lot on Granger Street.	20-Nov-06	Report was confirmed that trash did exist on the ground of the tenant parking lot at an apartment complex located on Grove Avenue.	TRASH & DEBRIS	1460 Grove Avenue	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT			21-Nov-06		21-Nov-06	N	N/A	N/A		City verified trash cleanup on 11/30/2006. No further enforcement action is necessary.

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107	22-Nov-06	PW-PARKS	City's Park Supervisor reported a concrete discharge occurred at 1020 2nd Street as evidence of concrete material on the street and in the gutter.	22-Nov-06	Resident at 1020 2nd Street had an accidential spill of concrete from the back of his pickup truck. There were minor amounts of concrete on the street and gutter.	CONSTRUCTION DEBRIS	1020 2nd Street	PACIFIC OCEAN	Y	Y	RESIDENT	22-Nov-06					N	N/A	N/A	22-Nov-06	Resident cleaned up concrete residue on the street and in the gutter.
108	22-Nov-06	RESIDENTIAL INSPECTIONS	City's Env. Program Specialist observed a resident washing his trash container out in the street.		N/A	WASHWATER	1471 East Lane	TIJUANA ESTUARY	Y	Y	RESIDENT	22-Nov-06					N	N/A	N/A	22-Nov-06	City made resident aware of the City's Storm Water policies and appropriate best management practices such as washing trash containers on grass to prevent pollutant runoff onto the street.
109	22-Nov-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed sediment in the gutter between 1410 and 1420 California Street.	22-Nov-06	Resident at 1420 California mentioned that his neighbor at 1410 California is currently planting a shrub and that sediment probably entered the street in the process.	SEDIMENT	1410 California Street	TIJUANA ESTUARY	Y	Y	RESIDENT	22-Nov-06					N	N/A	N/A	2-Dec-06	Sediment was cleaned up by the resident.
110	26-Nov-06	CITY-OTHER	Sheriff's dispatch referred complaint of spilled yellow paint in the gutter in front of 306 Dahlia Ave.	27-Nov-06	Investigation revealed a small quantity of paint (less than 2 gallons) in gutter. Residents in vicinity were not home, so no RP could be identified.	PAINT	306 Dahlia Avenue	PACIFIC OCEAN	Y	N	UNKNOWN						Y	N	N/A	27-Nov-06	Rain was imminent, so a Public Works crew was mobilized to clean up the paint spill immediately. Paint was recovered prior to start of rain.
111	25-Nov-06	GENERAL	Complaint submitted on-line: "Numberous times in the last year we have someone dumping car parts computor and electronic components and yard waste. This	27-Nov-06	Investigation revealed a large pile of green waste (palm fronds, shrub clippings, etc.) on the sidewalk and on	GREEN WASTE	1150-1180 Cypress	OTAY RIVER	Y	Y	UNKNOWN						Y	N	N/A	27-Nov-06	A City crew was mobilized to clean up the green waste material in the public right-of-way. Complainant was informed that

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119	30-Nov-06	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed 3 uncovered piles of construction debris located in the alley behind a construction site on 9th Street.		N/A	CONSTRUCTION DEBRIS	615 9th Street	OTAY RIVER	Y	Y	CONSTRUCTION	30-Nov-06					N	N/A	N/A	30-Nov-06	City requested developer to cover piles of debris since current wind conditions may carry debris into the storm water conveyance system. City reinspected site on 11/30 and found all piles securely covered with plastic.
120	30-Nov-06	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed trash and debris on the ground surrounding the onsite trash dumpsters at a construction site on 11th Street.		N/A	CONSTRUCTION DEBRIS	589 11th Street	OTAY RIVER	Y	Y	CONSTRUCTION	30-Nov-06					N	N/A	N/A	30-Nov-06	City requested that all trash be cleaned up soon to prevent trash from entering the alley and storm water conveyance system. City verified cleanup of trash on 11/30/06.
121	1-Dec-06	PW-ENV	City Env. Prog. Specialist observed concrete residue in the gutter infront of 1610 Seacoast Drive and present down to 1640 Seacoast Drive.	1-Dec-06	After further investigation the City found that the condominium property manager discharged concrete residue after repairing a property sign.	CONSTRUCTION DEBRIS	1610 Seacoast Drive	TIJUANA ESTUARY	Y	Y	PROPERTY MANAGEMENT	1-Dec-06					N	N/A	N/A	2-Dec-06	Concrete residue was cleaned up in the gutter. Property management advised maintenance crew of City's storm water policies.
122	6-Dec-06	PW-ENV	City Env. Prog. Specialist observed some graded areas at Veterans Park that did not have a perimeter sediment control device installed.	6-Dec-06	The graded areas that were identified do slope towards Encina Avenue and therefore would warrant the implementation of at least a perimeter control best management practice.	SEDIMENT	847 Encina Avenue	TIJUANA ESTUARY	Y	Y	CONSTRUCTION	6-Dec-06					N	N/A	N/A	6-Dec-06	Contractor to Veterans Park renovation installed fiber rolls as a perimeter control device.
123	15-Dec-06	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed a couch on the sidewalk on Hemlock Avenue.	15-Dec-06	The City determined that the couch was illegally dumped at 1440 Hemlock Avenue.	TRASH & DEBRIS		TIJUANA RIVER	Y	N	UNKNOWN						N	N/A	N/A	15-Dec-06	EDCO Disposal Co. will be removing the couch next week as part of EDCO's weekly alley pickup service.

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133	21-Dec-06	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed dark streaks in the front gutter and tenant parking lot of an apartment complex on 3rd Street.	21-Dec-06	The City observed automotive fluids in the gutter and signs that the fluid discharges came from tenant vehicles on the parking lot.	AUTO FLUIDS	640 3rd Street	PACIFIC OCEAN	Y	Y	PROPERTY MANAGEMENT			2-Jan-07		2-Jan-07	N	N/A	N/A		1/11/07, City found that property management utilized absorbent material to contain and cleanup the oil.
134	21-Dec-06	RESIDENTIAL INSPECTIONS	City observed illegally dumped items in the alley behind a pet store on Palm Avenue.		N/A	TRASH & DEBRIS	775 Palm Avenue	OTAY RIVER	N	N	UNKNOWN						N	N/A	N/A	21-Dec-06	EDCO Disposal Co. will be removing the couch this week as part of EDCO's weekly alley pickup service.
135	10-Jan-07	GENERAL PUBLIC	Construction Company at 144 Imperial Beach Blvd construction site was allowing trash to be blown into the street eventually entering the estuary.	10-Jan-07	The City determined that the construction company did not have any onsite containment system to capture trash which may result in discharges into the conveyance system.	TRASH & DEBRIS	144 Imperial Beach Blvd	TIJUANA ESTUARY	Y	Y	CONSTRUCTION										Public Works refered case to City Building Department.
136	12-Jan-07	GENERAL PUBLIC	Resident reported a sewer spill on 5th Street.	12-Jan-07	Sewer spill was caused by a City sewer main line leak and resulted in a release of approx. 500 gallons of waste to the storm drain system and Tijuana Estuary.	SEWER SPILL	980 5th Street	TIJUANA ESTUARY	Y	Y	FIXED COMMERCIAL BUSINESS						Y	N	N/	12-Jan-07	City Sewer Dept responded immediately and was able to abate most of the waste contaminants from the storm drain system. Prior to responding to the site, it was estimated that approx. 500 gallons of waste was uncaptured and released into the estuary. County Health Department, US Fish and Wildlife, and RWQCB was

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171	28-Feb-07	RESIDENTIAL INSPECTIONS	City observed no perimeter sediment control at certain sections surrounding a construction site on 7th Street.	28-Feb-07	After further investigation the City observed stucco particles in the alley adjacent to those sections where a perimeter control BMP was not present.	CONSTRUCTION DEBRIS	575 7th Street	SAN DIEGO BAY	Y	Y	CONSTRUCTION	28-Feb-07					N	N/A	N/A	8-Mar-07	City reinspected on 3/8/2007 and found gravel material was cleaned up and fiber rolls installed on the perimeter of the construction site.
172	8-Mar-07	DRIVE BY	City's Env. Program Specialist observed what it was believed to have been concrete material in the gutter of the 1100 block of East Lane.	8-Mar-07	An SDG&E contractor discharged concrete material into the gutter at a project site located on 1106 East Lane.	CONSTRUCTION DEBRIS	1106 East Lane	TIJUANA ESTUARY	Y	Y	UTILITY	9-Mar-07					N	N/A	N/A	9-Mar-07	SDG&E crew abated material in gutter using a high pressure water and recovery system. Additionally, SDG&E educated the responsible contractor on storm water requirements.
173	14-Mar-07	PW-PARKS	City Parks Supervisor observed a construction employee washing concrete equipment in the parking lot which resulted in the runoff of pollutants towards the street.		N/A	CONSTRUCTION DEBRIS	285 Palm Avenue	PACIFIC OCEAN	Y	Y	CONSTRUCTION	14-Mar-07					N	N/A	N/A	14-Mar-07	Runoff did not enter the street. Parks Supervisor immediately instructed employee to stop operations and later, the City's Env. Prog. Specialist appraised property owner of BMP requirements to prevent illegal discharges to the conveyance system.
174	19-Mar-07	DRIVE BY	City Env. Prog. Specialist observed grass cuttings in the alley and street in the area surrounding 1257 East Lane.		N/A	GREEN WASTE	1257 East Lane	TIJUANA ESTUARY	Y	Y	RESIDENT		19-Mar-07			19-Mar-07	N	N/A	N/A		On 3/23/07 City verified cleanup of the grass.
					Apparantly, a vehicle leaked oil as it was																

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183	28-Mar-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed inadequate sediment control at a construction site at Elm Avenue and Florence Street.		N/A	SEDIMENT	908 Florence	OTAY RIVER	Y	Y	CONSTRUCTION	28-Mar-07					N	N/A	N/A	29-Mar-07	City reinspected site to verify implementation of additonal sediment control (fiber rolls).
184	28-Mar-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed excessive water entering the alley on Elder Avenue.	28-Mar-07	Investigations revealed that a resident at 1117 Elder was watering his plants which resulted in water runoff into the alley.	POTABLE WATER	1117 Elder Avenue.	OTAY RIVER	N	N/A	RESIDENT	28-Mar-07					N	N/A	N/A		City Env. Prog. Specialist discussed incident with owner and importance of limiting water runoff.
185	29-Mar-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed trash around the dumpster at a business on Florence Street.		N/A	TRASH & DEBRIS	535 Florence Street	OTAY RIVER	Y	Y	FIXED COMMERCIAL BUSINESS						N	N/A	N/A		
186	29-Mar-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed litter in the parking lot of an apartment complex on 12th Street.	29-Mar-07	Apartment manager stated that trash is being consistenly blown by wind onto his property from the another complex located at 1241 Calla Avenue.	TRASH & DEBRIS	631 12th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT	29-Mar-07					N	N/A	N/A	29-Mar-07	Property Manager cleaned up trash. City reinpsected both complexes on 4/4/2007 and found both trash enclosure areas free of litter. City will revisit area during April's City Wide Inspections.
187	29-Mar-07	RESIDENTIAL INSPECTIONS	City observed an uncovered dirt pile on the sidewalk on 12th Street.	29-Mar-07	Resident at 575 12th Street is conducting landscape work on his property. City observed that a temporary berm was installed to prevent runoff of sediment.	SEDIMENT	575 12th Street	OTAY RIVER	N	N/A	RESIDENT	29-Mar-07					N	N/A	N/A	29-Mar-07	City expressed concerns about potential runoff of sediment in the event of a storm. Resident stated he will have pile removed over the weekend.
			City Env. Prog Manager observed white material in the		Property owner at 1290 5th Street stated that his contractor probably discharge	CONSTRUCTION						3-Apr-07					N	N/A	N/A	4-Apr-07	Property owner instructed his contractor to sweep up the concrete. City verified

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195	17-Apr-07	PW-ENV	City Env. Prog. Specialist observed white material in the gutter in front of a residence on Florence Street. Material was present in the gutter from 831 Florence Street to the intersection of Florence and Donax Avenue.	17-Apr-07	Investigations revealed that former tenants washed a paint roller outside which resulted in a discharge of paint into the gutter.	PAINT	831 Florence Street	OTAY RIVER	Y	Y	RESIDENT	17-Apr-07				17-Apr-07	N	N/A	N/A	18-Apr-07	City discussed report and City's storm water policies with tenants who had recently moved out of the property. City also discussed this report with the property owner and provided a pollution prevention brochure. On 4/18 City verified cleanup of paint.
196	17-Apr-07	PW-PARKS	Parks supervisor reported that there is significant amounts of trash surrounding a dumpster behind a liquor store on 13th Street.	17-Apr-07	City Env. Prog. Specialist verified report. The dumpster is located behind the former business, Once Again, located at 1155 13th Street.	TRASH & DEBRIS	1155 13th Street	TIJUANA ESTUARY	Y	Y	FIXED COMMERCIAL BUSINESS	17-Apr-07					N	N/A	N/A	19-Apr-07	On April 19, 2007 the City verfied that the trash was picked up.
197	23-Apr-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed a brownish stain in the gutter and towards the nearby storm drain inlet near 1202 Downing.	23-Apr-07	After further investigation the City determined a small stain on the driveway at 1202 Downing Street which was different in color and assumably in nature than the stain in the gutter. The owner at 1202 Downing had a minor spill from his camper which was contained on his driveway and cleaned up appropriately. The City could not determine the cause or origin of the brown stain (illegal discharge) in the gutter.	UNKNOWN	N/A	TIJUANA ESTUARY	Y	N	UNKNOWN						N/A	N/A	N/A	23-Apr-07	None.
																					City discussed importance of pollution

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205	30-Apr-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed trash scattered around a trash dumpster behind a church located at 631 12th Street.		N/A	TRASH & DEBRIS	631 12th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT		1-May-07			1-May-07	N	N/A	N/A	8-May-07	City verified cleanup of trash on 5/8/07.
206	30-Apr-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed a lot of trash scattered the trash dumpster and parking lot of an apartment complex on Calla Avenue.		N/A	TRASH & DEBRIS	1170 Calla Avenue	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT		1-May-07			1-May-07	N	N/A	N/A	8-May-07	City verified cleanup of trash on 5/8/07.
207	30-Apr-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed trash scattered throughout the tenant parking lot of an apartment complex located at 639 10th Street.		N/A	TRASH & DEBRIS	639 10th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT		1-May-07			1-May-07	N	N/A	N/A	8-May-07	City verified cleanup of trash on 5/8/2007
208	9-May-07	PW-PARKS	Parks and Facility's supervisor observed a contractor power washing a driveway allowing runoff to enter the street.		N/A	WASHWATER	1240 5th Street	TIJUANA ESTUARY	Y	Y	MOBILE BUSINESS	9-May-07				9-May-07	N	N/A	N/A	9-May-07	Contractor was educated on City's BMP requirements and instructed to keep washwater from entering the street. City Env. Prog. Specialist conducted a followup with Property Owner on 5/10/2007 and reiterated City's storm water policies.
209	16-May-07	GENERAL PUBLIC	Report of 5 gallon oil spill behind Kragen Auto Parts to the south.	16-May-07	Upon arrival, absorbent material had been placed on spilled oil.	AUTO FLUIDS	750 11th Street	OTAY RIVER	Y	N	UNKNOWN						N	N/A	N/A	16-May-07	Absorbents were used to contain oil leak.

FY 2006-07 Illicit Discharge Investigations
City of Imperial Beach

	COMPLAINT / INITIAL OBSERVATION			INVESTIGATION RESULTS								ENFORCEMENT ACTIONS					COST RECOVERY			CASE RESOLUTION	
CASE NUMBER	DATE RECEIVED	REFERRAL SOURCE *(Choose from List)*	COMPLAINT/OBSERVATION DESCRIPTION	DATE INVESTIGATED	INVESTIGATION RESULTS	CONSTITUENT *(Choose from List)*	those sections where BMP's do not exist.	WATERSHED *(Where observed or alleged violation is occurring)*	VIOLATION VERIFIED? (Y,N)	VIOLATOR IDENTIFIED (Y, N, N/A)	VIOLATOR TYPE *(Choose from List)*	VW Only *(Insert Date)*	NOA *(Insert Date)*	NOV *(Insert Date)*	FINE / CITATION *(Insert Date)*	INFORMATIONAL LETTER (Insert Date)	CITY CLEANUP? (Y, N, N/A)	COST RECOVERY? (Y, N, N/A)	COST RECOVERY/FINE AMOUNT	CASE RESOLUTION DATE	CORRECTIVE ACTIONS IMPLEMENTED
215	23-May-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed trash scattered on the ground behind Pours Liquor Store on 13th Street.		N/A	TRASH & DEBRIS	1141 13th Street	TIJUANA ESTUARY	Y	Y	FIXED COMMERCIAL BUSINESS	23-May-07					N	N/A	N/A	29-May-07	On May 29, 2007 City verified cleanup of trash.
216	23-May-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed significant cigarette debris on the edge of the alley behind the Office Lounge Bar.		N/A	TRASH & DEBRIS	1133 13th Street	TIJUANA ESTUARY	Y	Y	FIXED COMMERCIAL BUSINESS	23-May-07				23-May-07	N	N/A	N/A	29-May-07	On May 29th City verified cleanup of cigarette debris.
217	30-May-07	GENERAL PUBLIC	Resident reported that a drilling company was discharging water into the storm water conveyance system on 5th Street.	30-May-07	City Env. Prog. Specialist arrived to location where drilling rig was setup and observed water running down the gutter. Drilling company representative stated that water runoff is the result of excess water being drained from the refill line during the refilling of the rig's water tank.	POTABLE WATER	N/A	TIJUANA ESTUARY	N	N/A	UTILITY						N	N/A	N/A	30-May-07	City did not observe any violation but did speak with the drilling company's representative regarding the City's strict storm water polllution prevention program.
218	4-Jun-07	PW-ENV	Env. Prog. Specialist observed dried construction material in the gutter adjacent to the catch basin at 1167 8th Street.	4-Jun-07	Resident did not perform a complete site cleanup of grout after concrete operations were completed.	CONSTRUCTION DEBRIS	1167 8th Street	TIJUANA ESTUARY	Y	Y	RESIDENT					4-Jun-07	N	N/A	N/A	4-Jun-07	Resident had a helper clean up the grout during the investigation. City appraised resident of City's urban runoff management requirements.
219	4-Jun-07	PW-ENV	Env. Prog. Specialist observed grass cuttings in the gutter and around the property at 754 Iris Avenue.		N/A	GREEN WASTE	754 Iris Avenue	TIJUANA ESTUARY	N	N/A	RESIDENT						N	N/A	N/A	5-Jun-07	On the following day, the City observed that the grass cuttings were swept up.
																					M + R construction swept up sediment in

FY 2006-07 Illicit Discharge Investigations
City of Imperial Beach

Attachment 7-3

	COMPLAINT / INITIAL OBSERVATION			INVESTIGATION RESULTS								ENFORCEMENT ACTIONS					COST RECOVERY			CASE RESOLUTION	
CASE NUMBER	DATE RECEIVED	REFERRAL SOURCE *(Choose from List)*	COMPLAINT/OBSERVATION DESCRIPTION	DATE INVESTIGATED	INVESTIGATION RESULTS	CONSTITUENT *(Choose from List)*	those sections where BMP's do not exist.	WATERSHED *(Where observed or alleged violation is occurring)*	VIOLATION VERIFIED? (Y,N)	VIOLATOR IDENTIFIED (Y, N, N/A)	VIOLATOR TYPE *(Choose from List)*	VW Only *(Insert Date)*	NOA *(Insert Date)*	NOV *(Insert Date)*	FINE / CITATION *(Insert Date)*	INFORMATIONAL LETTER (Insert Date)	CITY CLEANUP? (Y, N, N/A)	COST RECOVERY? (Y, N, N/A)	COST RECOVERY/FINE AMOUNT	CASE RESOLUTION DATE	CORRECTIVE ACTIONS IMPLEMENTED
228	27-Jun-07	RESIDENTIAL INSPECTIONS	City Env. Program Specialist observed illegally dumped items in the alley between 8th/9th Streets north of Donax Avenue.		N/A	TRASH & DEBRIS	N/A	OTAY RIVER	Y	N	UNKNOWN						N	N/A	N/A	27-Jun-07	Item will be picked up this week as part of EDCO's alley pickup program.
229	27-Jun-07	RESIDENTIAL INSPECTIONS	City Env. Program Specialist observed an overfull recycling dumpster behind the Wave Café Restaurant.		N/A	TRASH & DEBRIS	809 Seacoast Drive	PACIFIC OCEAN	Y	Y	PROPERTY MANAGEMENT			2-Jul-07			N	N/A	N/A	2-Jul-07	City spoke with property owner who is aware that the recycling bin is consistently overfull. She stated that she recently directed EDCO to increase the frequency of pickups from 1 to 2x/week. City will monitor this business in the future.
230	29-Jun-07	RESIDENTIAL INSPECTIONS	City Env. Program Specialist observed an illegally dumped item in the alley behind Pentecostal Church.		N/A	TRASH & DEBRIS	N/A	OTAY RIVER	Y	N	UNKNOWN						N	N/A	N/A	29-Jun-07	Item will be picked up next week as part of EDCO's alley pickup program.
231	29-Jun-07	RESIDENTIAL INSPECTIONS	City Env. Program Specialist observed significant oil spots on the street at the corner of Delaware Street and Cypress Avenue.	29-Jul-07	City spoke with owner at 538 Delaware who stated that he is experiencing vehicle problems, but will ensure oil gets cleaned up.	AUTO FLUIDS	538 Delaware Street	TIJUANA RIVER	Y	Y	RESIDENT			29-Jun-07			N	N/A	N/A		City discussed storm water policy with resident and emphasized the need to implement BMP's to prevent runoff pollutants. As of 7/2/2007 resident applied absorbent material to spot on Delaware Street.
			A resident reported that an oil		City Env. Prog. Specialist observed some																The City was unable to contact the complaintant since the resident didn't leave an accurate phone message. Regarding the oil spots, no immediate corrective

Sanitary Sewer Overflows (SSO) in Imperial Beach
FY 2006-07

Attachment 7-4

	Date & Time Reported	Reported By	Start Date & Time	End Date & Time	Estimated Overflow Flow Rate (gallons per minute)	Total Overflow Volume (Gallons)	Overflow Volume Recovered (Gallons)	Overflow Volume Released to Environment (Gallons)	SSO Location – Street Address	SSO Structure I.D.	No. of Overflows within 1000 ft. of this location in past 12 months	Dates of Overflows within 1000 ft. of this location in past 12 months	SSO Cause (Short Description)	SSO Correction and Prevention	72-hour period measurable precipitation? (Y or N)	Entered Storm Drain? (Y or N)	Warning Signs Posted (Y or N)	Location of Posting	No. of Days Signs Posted	Remarks
1	9/19/06 0630	Tim Taylor	9/19/06 0625	9/19/06 0635	1.00	2.00	2.00	0.00	814 Cypress Ave	P.S.#10	0	N/A	PUMP STATION FAILURE	Pump Station #10 is an above ground station. The air relief for pump #1 vibrated loose and sprayed in a downward direction into the station when the pump cycled. The station has a six inch lip inside to contain and drain to the wet well all effluent during maintenance. The angular spray from the air relief line directed effluent towards the floor and the lip causing a small amount of splash to escape between the upper lip and the door bottom.	N	Y	N	N/A	0	There is a storm drain catch basin directly adjacent to the pump station. The effluent had just made it to the storm drain, but the pipe was dry. Since the city is in the process of annual storm drain cleaning, the pipe will be cleaned as a precaution and reported as part of the annual storm drain cleaning
2	10/12/06 1000	Sonia Galaviz	10/12/06 1000	10/12/06 1145	1.00	5.00	5.00	0.00	945 13th Street	Private Lateral	0	N/A	PRIVATE PROPERTY	An unknown caller reported sewerage coming from the property at 945 13th Street. Anthony Serrano and the city Vactor crew were dispatched to asess the problem. The Vactor was stationed downstream to protect the storm drain system. A washdown was performed while the owner of the duplex was contacted. The property owner called for a plumber to fix the private property issue.	N	N	N	N/A	0	The spillage from the lateral was intermittant. The one gals per minute was measured at the peak flow. Total Gals reported was based on what was viewed in the gutter. The response by city personel was fantastic. The spill was cleaned up in very short order. This was clearly a private property issue.
3	11/09/06 0910	Sonia Galaviz	11/09/06 0905	11/9/2006 0910 AM	1.00	5.00	5.00	0.00	490 Emory Street	Manhole #211	0	N/A	BLOCKAGE	The public works secretary received a call from a maintenance person for the south bay school district stating there was an overflowing manhole in their parking lot. The Vactor truck was on the same block and responded immediately. The blockage had self relieved and the manhole was flowing free. There appaered to be a spill of apx that had run ten feet through the parking lot into an a storm drain. Tidal influence allowed 250 gallons of ocean water to be vacuumed from the storm drain, ensuring the entire spill volume had been recovered. The upstream and downstream lines were cleaned using the Vactor truck. The recovered effluent and ocean water was	N	Y	N	N/A	0	The spill had self relieved. All effluent was recovered. Quick response was due to the Vactor being on the same block. This sewer line is on the monthly jetting program to ensure it is maintained on a frequent basis. The jetting program is behind this year due to a fifty percent turnover of sewer division personnel.

Attachment 8-1
Program Assessment Form - Education and Public Participation Components
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Explanation (if needed)
EDUCATION COMPONENT								
Number of storm water education/instructional materials/brochures distributed.	500	500	1,500	Unknown	Unknown	Unknown		Brochures outlining BMPs are disseminated during commercial inspections, citywide inspections, and investigations of illicit discharges
Number of municipal employee training events regarding storm water principles.	2	9	11	3	10	7		
Number of storm water-related instructional workshops / outreach events conducted.	0	2	7	5	8	8		
of Municipal Department personnel educated on storm water quality, BMPs, and pollution prevention.	20	70	59	27	70	36	Employees	
of Construction Site Owners and Developers educated on storm water quality, BMPs, and pollution prevention.	280	289	382	285	171	157		
of Industrial Owners and Operators educated on storm water quality, BMPs, and pollution prevention.	0	0	1	1	0	0		
of Commercial Owners and Operators educated on storm water quality, BMPs, and pollution prevention.			127	375	52	47		Through complaint investigation and scheduled inspections
of Residential community, General Public, and School children educated on storm water quality, BMPs, and pollution prevention.			All residents	All residents	All residents	All residents		City newsletter, school classroom presentations, etc.
PUBLIC PARTICIPATION COMPONENT								
Number of opportunities provided which enabled the public to participate.			3	4	4	4		3 large events and 1 JURMP Annual Report Public Hearing. Storm Water Hotline is always available.
of public gatherings where storm water quality was discussed.			3	4	4	4	#	
of public gatherings where solutions to pollution were discussed.			3	4	4	4	#	
of public gatherings where pollution prevention was discussed.			3	4	4	4	#	

Jurisdictional Urban Runoff Management Program Annual Report FY2007-08 for the City of Imperial Beach

Submitted by the
City of Imperial Beach
Department of Public Works
495 10th Street
Imperial Beach, California 91932
September 30, 2008

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EXECUTIVE SUMMARY

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order R9-2007-0001 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2007 and June 30, 2008 (FY2007-08).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following are highlights and major accomplishments for each major JURMP component during this fiscal year.

Development Planning Component

The Development Planning Component involves incorporating storm water and urban runoff management into the development project review process. Major accomplishments during this fiscal year included the following:

Conditioned 48 discretionary permit applications requiring developers to maximize infiltration, minimize impervious surfaces, install treatment devices, etc. This compares to 51 projects during FY2006-07.

Approved Storm Water Management Plans (SWMPs) for three (3) priority development projects subject to the Standard Urban Storm Water Mitigation Plan (SUSMP).

Discussed urban runoff management requirements with all permit applicants at project intake.

Construction Component

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. Major accomplishments during FY2007-08 included:

Inspected 48 active discretionary permit projects for proper deployment of construction-phase BMPs. Approximately 117 inspections were performed.

Performed oversight of construction BMP compliance at all eight (8) capital improvement projects (CIPs) that were in active construction phase.

No notices of violation or abatement to construction developers and contractors as part of the oversight and enforcement process. All projects were able to comply with verbal warnings.

Discussed urban runoff management requirements with all applicants at project intake, and emphasized requirements again during follow-up inspections.

Municipal Component

City employees, particularly field staff, continued to implement best management practices (BMPs) to prevent illegal discharge of water and pollutants to the storm drain system. Examples of BMPs implemented at municipal facilities included:

Vehicle washing in wash bays that drain to the sanitary sewer.

Preventive maintenance of City vehicles to prevent fluid leakage.

Use of high-power vacuums to capture runoff from power washing activities (i.e., during graffiti abatement and spill cleanup).

Hand weeding of street medians instead of herbicide application. Strict limitations on use of fertilizers and pesticides.

Monitoring of sprinkler systems to prevent over-topping onto roadways.

Completed the alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.

Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup at work sites.

Other notable accomplishments during FY2007-08 were:

Removed an estimated 3 tons of material through storm drain cleaning.

Removed an additional 156.5 tons of material through frequent street sweeping.

Continued maintenance of below-ground storm water treatment devices, which trap debris before it reaches receiving waters (10th Street storm water interceptor; 12 storm drain inlet filters).

Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions. Began installation of the Palm Avenue

urban runoff diversion system at Seacoast Avenue. Completion is scheduled for December 2008.

Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Industrial and Commercial Component

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress was made on this front during this fiscal year:

Conducted 27 inspections most of which were high priority businesses, including automotive repair shops, restaurants, bars, gas stations, car washes, etc. Performed an additional 136 investigations of commercial businesses as a result of complaint referrals or staff observations in the field. This was up from 46 during FY2006-07.

Issued 21 enforcement actions to businesses as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings.

Residential Component

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions, and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

Identified and mitigated 46 residential violations. This compares to 18, 13, 42 and 50 in the previous four years, respectively. The most commonly observed violations involved construction debris, automotive fluids, washwater, detergents or chemicals, chlorinated swimming pool water and green waste.

Issued 14 notices of violation and 7 notices of abatement as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings and/or letters. No fines were issued to residents during this reporting period.

Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.

Educated residents on environmental issues including stormwater in the City's semi-annual newsletters and a quarterly newsletter distributed by EDCO. Organized and held an Earth Day at the Pier which was attended by approximately 300 school children from two school districts, and 20 other agencies and organizations, along with many members of the general public.

Approximately 3 tons of household hazardous waste was properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista.

Imperial Beach residents recycled approximately 2,110 gallons of used oil at Kragen Auto Parts and Jiffy Lube, and through EDCO's pick-up service. This is a slight decrease from the previous reporting period in which 2,440 gallons of used oil were recycled.

Illicit Discharge Detection and Elimination Component

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to complaints and referrals of urban runoff discharge violations.

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

Notable accomplishments during FY2007-08 were:

City staff participated in the cleanup of 23 illicit discharges. Cost recovery was pursued in 3 of these cases, recouping approximately $1,000 in costs.

Responded to 6 sewage spills during this reporting period, all of which were from private laterals.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	9/25/08

1.0 INTRODUCTION

The City of Imperial Beach is required to submit its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report each year by September 30th in compliance with the San Diego Regional Board Order Number R9-2007-0001 (Municipal Permit). The Annual Report contains a comprehensive description of all activities conducted by the City to meet all requirements of section D of the Municipal Permit. The reporting period for the Annual Report is the previous fiscal year July 1st to June 30th.

All components of the JURMP are represented in this report with the exception of Section 7.0, Illicit Discharge Detection and Elimination Component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), which extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The City endeavors to reduce the impacts of new development and redevelopment on water quality. This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Program Division of the Department of Public Works, and the contracted engineering firm, BDS Engineering.

2.2 Level 1 Outcomes – Management Program Activities

2.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, amendments to the General Plan, the environmental review process, development project approval processes, and any development project requirements. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Development Planning component is described in the *JURMP Section 4.0*. Figure 2.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

During this reporting period, the City participated in the Copermittee Workgroup responsible for establishing interim Hydromodification Management Plan criteria to be submitted to the Regional Water Quality Control Board for approval. Upon Regional Board approval of the HMP, the City will have 180 days to incorporate the requirements into the program.

2.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 2.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Additional documentation, analysis, and discussion are provided in Table 2.3.

2.3 Outcomes Targeted for Staff Implementing Control Measures

2.3.1 Outcome Level 2 – Knowledge and Awareness

Education is provided to the public through face-to-face interaction with City staff in meetings and at inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. These efforts by the City to educate the public on development planning are discussed in the *JURMP Section 4.0.* The education effort for City staff is discussed in the *JURMP Section 10.0.*

2.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The *JURMP Appendix C* defines minimum BMP requirements applicable to development and redevelopment in the City. BMPs applicable to the Development Planning Component were updated as part of the City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 2.2. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

The City is required to enforce its storm water ordinances for all Development Projects and at all development sites as necessary to maintain compliance with the Municipal Storm Water Permit. The ordinances include appropriate sanctions to achieve compliance including non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance.

2.3.3 Outcome Level 4 – Source Load Reductions

The City imposed one or more conditions of approval on 48 discretionary project applications during FY 2007-08. This includes three new "priority development projects" that will be subject to the City's SUSMP ordinance.

Level 1 Outcomes (Management Program Activities)		Outcomes Targeted for Staff Implementing Control Measures		
		Outcome Level 2	*Outcome Level 3*	*Outcome Level 4*
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Development Projects**
1. FY 2007-08 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. FY 2008-09 Program Review and Update** ▪ Year-end program review ▪ Updated database and inventory of treatment control BMPs	**1. Jurisdictional Requirements for Project Approval** **2. Municipal Staff Training** ▪ Program Administration Staff ▪ Program Implementation Staff **3. Developer Education** **4. Development Inspections** **5. Surveys and Special Investigations** *Not targeted or assessed*	**A. Project Development Responsibilities** *Not targeted or assessed* **B. Core Concepts** *Not targeted or assessed* **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Development Activities** ▪ Procedural and Administrative Behaviors ▪ BMP implementation ▪ Illicit discharge control **B. Public Service Requests** ▪ Response to requests	**A. Treatment control BMPs** **B. Runoff diversion to pervious surfaces and relocation of site features to drain to landscaped areas** **C. Low Impact Development (LID) BMPs** **D. Site Design BMPs**

Figure 2.1 – FY 2007-08 Implementation and Assessment Strategy for the Development Planning Component

Table 2.1 – Overview of Development Planning Inventory by Development Type and Priority Classification

Category	Number	Description
A. Type of Development		
New development	12	All development projects are required to undergo the City's urban runoff approval process and meet applicable requirements.
Redevelopment	39	
B. Priority Classification		
Discretionary Projects	48	No projects received a SUSMP waiver.
Priority Development (SUSMP) Projects	3	
C. Totals		
Discretionary Projects	48	
Priority Development (SUSMP) Projects	3	

JURMP Sections	Description of FY 2007-08 Changes
4.0 and Appendix C	BMP requirements of the JURMP applicable to development planning were modified in accordance with the requirements of the updated Permit in March 2008.

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 4.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed. The City previously modified its General Plan and updated forms associated with its environmental review process.	Update program documentation for consistency with program updates
C) UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) YEAR-END PROGRAM REVIEW				
Complete annual	Review underway	In progress	An annual program review for this element is underway during the	Complete annual

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
year-end program review			development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	year-end program review
B) DEVELOP INVENTORY FOR DEVELOPMENT AND REDEVELOPMENT PROJECTS				
Develop inventory of development and redevelopment projects	Inventory developed	Completion	The City developed an inventory of development projects in progress in FY 2007-08.	Update development and redevelopment inventory
C) DEVELOP DATABASE AND INVENTORY FOR APPROVED TREATMENT CONTROL BMPS AND MAINTENANCE				
Develop watershed-based database and inventory of approved treatment control BMPs and maintenance activities	Database and inventory developed	Completion	The City was required to develop an inventory of development projects subsequent to the completion of FY 2007-08.	Update database and inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Project Approval				
Require projects to implement BMPs	Requirements implemented	Completion	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP.	Condition projects with appropriate BMPs prior to permit approval
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of	Provide training to all staff with

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
			this annual report section.	identified responsibilities
3. Developer Education				
Conduct education through meetings, workshops, brochure dissemination	Counter hours held and meetings conducted throughout reporting period	Confirmation	The Community Development Department held counter hours and face-to-face meetings throughout FY 2007-08 to provide the developers education.	Operate counter hours, meetings, and workshops to provide developers education
4. Development Inspections				
Inspect development activities	117 inspections conducted	Completion	All development and redevelopment projects are formally inspected for applicable BMPs throughout the duration of each project.	Inspect development projects
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element.	Survey developers to ascertain baseline levels of knowledge concerning development BMPs
Not targeted or assessed	---	---	Surveys of staff knowledge were not conducted during FY 2007-08. Beginning in FY 2008-09, surveys will routinely be incorporated before and after training as a means of evaluating training success and of monitoring staff knowledge from year to year.	Survey staff to ascertain baseline levels of knowledge concerning basic principles and specific job responsibilities.

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after development planning staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes BMP knowledge, core concepts of development, and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND DEVELOPERS)				
A. DEVELOPMENT ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2007 through June 30, 2008				
Review projects and prescribe necessary conditions of approval	51 projects conditioned	Completion	The City reviews and conditions all proposed projects to ensure compliance with program.	Review projects prior to approval and issuance of permits
Inspect projects for compliance	51 projects inspected	Completion	The City inspects all projects for violations.	Inspect projects
Enforce compliance and track violations	0 with enforcement actions	Completion	The City enforces compliance at all project sites.	Enforce compliance and track violations
2. BMP Implementation, Operation and Maintenance				
July 1, 2007 through June 30, 2008				
Inspect projects	51 projects in	Completion	The City inspects and verifies BMPs at all proposed projects to	Review projects for

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
and verify BMPs	compliance		ensure compliance with program.	appropriate BMPs prior to approval and issuance of permits
Not targeted or assessed	---	---	The City annually verifies operation and maintenance of treatment control BMPs to ensure compliance with program.	Verify operation and maintenance of treatment control BMPs
3. Illicit Discharge Control				
July 1, 2007 through June 30, 2008				
Inspect development projects at least once during development	51 projects inspected	Completion	The City inspects projects and enforces stormwater ordinances at all development sites.	Inspect projects during development phase
B. PUBLIC SERVICE REQUESTS				
Respond to all development planning requests received	51 projects reviewed	Completion	The City tracks public service requests for development activities.	Respond to all development planning requests received
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)				
A. TREATMENT CONTROL BMPS				
Not targeted	3 projects required installation of treatment control BMPs	---	The City requires and tracks the installation and maintenance of source control BMPs as necessary. Load reductions are not tracked.	Not targeted

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
B. RUNOFF DIVERSION AND RELOCATION OF SITE FEATURES TO DRAIN TO PERVIOUS SURFACES				
Not targeted	47 projects required to divert or relocate site features	---	The City requires diversion or relocation BMPs. Load reductions are not tracked.	Not targeted
C. LOW IMPACT DEVELOPMENT (LID) BMPS				
Not targeted	3 projects required to implement LID BMPs	---	The City requires LID BMPs. Load reductions are not tracked.	Not targeted
D. SITE DESIGN BMPS				
Not targeted	46 projects required to implement site design BMPs	---	The City requires site design BMPs. Load reductions are not tracked.	Not targeted

Table 2.3 – Treatment Control BMP Inventory

ID	Filter Type	Address / Location		Watershed	Date of Installation	Responsible Party for Maintenance	Date of Service	Service Conducted			Volume/Weight of Debris Removed (cu. ft. or lbs)	Materials Collected		
								Inspected	Cleaned	Boom(s) Replaced		Sediment	Trash	Organics
IBP1	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	Wally's IGA, 836 Palm Avenue	Wally's IGA parking lot	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X		X	X	X
							01/04/08	X	X	X		X	X	X
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X		X	X	X
IBP2	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	Wally's IGA, 836 Palm Avenue	Northwest corner of Wally's IGA parking lot	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X		X	X	X
							01/04/08	X	X	X		X	X	X
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X		X	X	X
IBP3	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	Wally's IGA, 836 Palm Avenue	Entrance to Wally's at 8th Street	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X		X	X	X
							01/04/08	X	X	X		X	X	X
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X		X	X	X
IBP4	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	Wally's IGA, 836 Palm Avenue	Loading area at Wally's IGA	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X		X	X	X
							01/04/08	X	X	X		X	X	X
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X		X	X	X

Table 2.3 – Treatment Control BMP Inventory

ID	Filter Type	Address / Location		Watershed	Date of Installation	Responsible Party for Maintenance	Date of Service	Service Conducted			Volume/Weight of Debris Removed (cu. ft. or lbs)	Materials Collected		
								Inspected	Cleaned	Boom(s) Replaced		Sediment	Trash	Organics
IBP 5	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	CVS Pharmacy, 888 Palm Avenue	Southeast corner of back lot	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X				
							01/04/08	X	X	X				
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X		X	X	X
IBP 6	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	CVS Pharmacy, 888 Palm Avenue	Northeast corner of back lot	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X	Total (all)- 4cf	X	X	X
							01/04/08	X	X	X		X	X	X
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X	Total (all)- 4cf	X	X	X
13S M1	Drop Inlet Catch Basin Insert w/ boom	13th Street Market, 1126 13th Street	Front entrance (north)	Tijuana	N/A	Bio Clean Environmental Services	02/08/08	X	X	X	15lbs	8	2	5
13S M2	Drop Inlet Catch Basin Insert w/ boom	13th Street Market, 1126 13th Street	Front entrance (south)	Tijuana	N/A	Bio Clean Environmental Services	02/08/08	X	X	X	15lbs	8	2	5

Table 2.3 – Treatment Control BMP Inventory

ID	Filter Type	Address / Location		Watershed	Date of Installation	Responsible Party for Maintenance	Date of Service	Service Conducted			Volume/Weight of Debris Removed (cu. ft. or lbs)	Materials Collected		
								Inspected	Cleaned	Boom(s) Replaced		Sediment	Trash	Organics
13S M3	Drop Inlet Catch Basin Insert w/ boom	13th Street Market, 1126 13th Street	Back parking lot (north)	Tijuana	N/A	Bio Clean Environmental Services	02/08/08		X	X	10lbs	4	1	5
13S M4	Drop Inlet Catch Basin Insert w/ boom	13th Street Market, 1126 13th Street	Back parking lot (south)	Tijuana	N/A	Bio Clean Environmental Services	02/08/08		X	X	10lbs	4	1	5
IRIS1	Sump Pump and Screen Mesh	1450 Iris Avenue	Back parking lot	Tijuana	2005	Tapestry Maintenance Association	Monthly							
11th ST1	KriStar, Flo Gard Plus Catch Basin Insert one or two	861 11th Street	Driveway approach to condominiums	Otay	N/A	Resident	09/01/07							
							09/12/08		X		4 cu ft.	2	0.8	1.2
TLE1	Grate Inlet Skimmer Box w/ boom	Tunes, Lubes, Etc 741 Palm Avenue	Back Vehicle Storage Area	Otay	1-Jun-05	Tunes, Lubes, Etc.	01/28/08		X		.5 lbs	X		

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City endeavors to reduce the impacts of construction on water quality. This component is primarily applicable to the Community Development Department and requirements that apply to the Building and Planning Division activities related to construction and construction permits, and compliance actions proposed by the City. The Environmental Division of the Public Works Department assists in implementing stormwater requirements of the Municipal Permit.

3.2 Level 1 Outcomes – Management Program Activities

3.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Construction component is described in the *JURMP Section 5.0*. Figure 3.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

3.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 4.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Additional documentation, analysis, and discussion are provided in Table 3.2.

3.3 Outcomes Targeted for Staff Implementing Control Measures

3.3.1 Outcome Level 2 – Knowledge and Awareness

Education is provided to the public through face-to-face interaction with City staff in meetings, workshops, community presentations, and at inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. These efforts by the City to educate the public on construction are discussed in the *JURMP Section 5.0.* The education effort for City staff is discussed in the *JURMP Section 10.0.*

3.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City requires all construction projects to submit a project stormwater management plan for approval and to obtain coverage if necessary under the State Water Resources Control Board's

General Construction Permit during FY 2007-08. The *JURMP Appendix D* defines minimum BMP requirements applicable to construction in the City. BMPs applicable to the Construction Component were updated as part of the City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 3.2. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

3.3.3 Outcome Level 4 – Source Load Reductions

A watershed-based inventory of all construction sites within the City is maintained and updated monthly.

Level 1 Outcomes (Management Program Activities)		Outcomes Targeted for Staff Implementing Control Measures		
		Outcome Level 2	*Outcome Level 3*	*Outcome Level 4*
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Construction Projects**
1. FY 2007-08 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. FY 2008-09 Program Review and Update** ▪ Year-end program review ▪ Updated watershed-based inventory of construction sites	**1. Jurisdictional Requirements for Project Approval** **2. Municipal Staff Training** ▪ Program Administration Staff ▪ Program Implementation Staff **3. Contractor Education** **4. Construction Site Inspections** **5. Surveys and Special Investigations** *Not targeted or assessed*	**A. Construction Responsibilities** *Not targeted or assessed* **B. Core Concepts** *Not targeted or assessed* **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Construction Activities** ▪ Procedural and Administrative Behaviors ▪ BMP implementation ▪ Illicit discharge control **B. Public Service Requests** ▪ Response to requests	**A. General site management requirements** **B. Erosion and sediment controls** **C. Advanced treatment for sediment** **D. Designated minimum BMPs** **E. Additional controls for CWA Section 303(d) waters**

Figure 3.1 – FY 2007-08 Implementation and Assessment Strategy for the Construction Component

Table 3.1 – Overview of Construction Inventory by Priority Classification

Category	Number	Description
A. Type of Construction		
Construction Projects	48	
Priority Development (SUSMP) Projects	3	
B. Priority Classification		
High Priority Projects	12	High priority projects in the City are the new construction projects plus SUSMP projects.
Medium Priority Projects	--	
Low Priority Projects	39	
C. Totals		
Construction Projects	48	
Priority Development (SUSMP) Projects	3	

JURMP Sections	Description of FY 2007-08 Changes
5.0 and Appendix D	BMP requirements of the JURMP applicable to construction were modified in accordance with the requirements of the updated Permit in March 2008.

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 5.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed. The City previously updated its grading ordinance and other applicable ordinances and forms associated with its environmental review process.	Update program documentation for consistency with program updates
C) UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) YEAR-END PROGRAM REVIEW				
Complete annual	Review underway	In progress	An annual program review for this element is underway during the	Complete annual

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
year-end program review			development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	year-end program review
B) DEVELOP INVENTORY FOR CONSTRUCTION PROJECTS				
Develop an inventory of construction projects	Inventory developed	Completion	The City was required to develop an inventory of construction sites subsequent to the completion of FY 2007-08. Additional information for each construction site is provided in Table 3.3.	Update construction project inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Project Approval				
Require projects to implement BMPs	Requirements implemented	Completion	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP.	Condition projects with appropriate BMPs prior to permit approval
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. Construction Contractor Education				
Conduct education through meetings, workshops, brochure dissemination	Counter hours held and meetings conducted throughout reporting period	Confirmation	The Community Development Department held counter hours and meetings throughout FY 2007-08 to provide the contractors education.	Operate counter hours, meetings, and workshops to provide contractors education.

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
4. Construction Inspections				
Inspect construction activities	66 Inspections done throughout project duration	Completion	All construction projects are formally inspected throughout the duration of the project. During the rainy season, all high priority sites will be inspected at least biweekly, medium priority sites will be inspected at least monthly, and low priority sites will be inspected as needed. During the dry season, all construction sites will be inspected as needed. Confirm maximum disturbed area for grading applied if applicable.	Inspect construction sites based on priority of site.
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element.	Not targeted
Not targeted or assessed	---	---	Surveys of staff knowledge were not conducted during FY 2007-08. Beginning in FY 2008-09, surveys will routinely be incorporated before and after training as a means of evaluating training success and of monitoring staff knowledge from year to year.	Survey staff to ascertain baseline levels of knowledge concerning basic principles and specific job responsibilities.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after development planning staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes BMP knowledge, core concepts of development, and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)				
A. CONSTRUCTION ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2007 through June 30, 2008				
Review projects and prescribe necessary conditions of approval	51 projects conditioned	Completion	The City reviews and conditions all proposed projects to ensure compliance with program.	Review projects prior to approval and issuance of permits
2. BMP Implementation				
July 1, 2007 through June 30, 2008				
Review projects and require BMPs	51 projects approved	Completion	The City reviews and requires all proposed projects to comply with program.	Review projects for appropriate BMPs prior to approval and issuance of permits
Inspect projects and verify BMPs	51 projects inspected	Completion	The City inspects and verifies BMPs at all projects to ensure compliance with program.	Review projects for appropriate BMPs prior to approval and issuance of permits

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
3. Illicit Discharge Control				
July 1, 2007 through June 30, 2008				
Inspect development projects at least once during development	51 projects inspected	Completion	The City inspects projects and enforces stormwater ordinances at all construction sites.	Inspect projects during construction phase
B. PUBLIC SERVICE REQUESTS				
Respond to all construction requests received	51 projects reviewed	Completion	The City tracks public service requests for construction activities.	Respond to all construction requests received
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM CONSTRUCTION PROJECTS)				
A. GENERAL SITE MANAGEMENT REQUIREMENTS				
Not targeted	51 projects required to reduce discharges	---	The City requires construction sites to reduce construction site discharges of pollutants to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards.	Not targeted
B. EROSION AND SEDIMENT CONTROLS				
Not targeted	12 projects required installation of erosion and sediment control BMPs	---	The City requires installation of erosion and sediment control BMPs. Load reductions are not tracked.	Not targeted
C. ADVANCED TREATMENT FOR SEDIMENT				
Not targeted	12 projects required	---	The City requires advanced treatment controls for sediment. Load	Not targeted

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
	to apply advanced treatment controls for sediment		reductions are not tracked.	
D. DESIGNATED MINIMUM BMPS				
Not targeted	51 projects required to implement designated minimum BMPs	---	The City requires designated minimum BMPs. Load reductions are not tracked.	Not targeted
E. ADDITIONAL CONTROLS FOR CWA SECTION 303(D) WATERS				
Not targeted	0 projects required to implement additional controls for CWA Section 303(d) waters	---	The City requires additional controls to be implemented for Clean Water Act (CWA) Section 303(d) waters. Load reductions are not tracked.	Not targeted

Table 3.3 – Construction Site Inventory

Permit Number	Advanced Treatment Controls Required (Y/N)	Priority (High, Medium, Low)	Period of Time (# Weeks) Site Active During Rainy Season (October - April)	Total Number of Inspections - Rainy Season	Total Number of Inspections - Dry Season	Total Number of Inspections	General Results of Inspection	Street Number	Street Name	Inspection Status Date	Inspection Results Date	Number of Violations / Enforcement Action Type (VW, NOV, NOA)
4	N	Low	26	2	---	2	BMP SEDIMENT CONTROL	175	CARNATION	02/26/08	02/27/07	---
25	N	Low	26	---	1	1	BMP SEDIMENT CONTROL	762	GEORGIA	08/22/07	08/22/07	---
28	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1270	FLORENCE	12/17/07	02/22/07	---
39	N	High	0	---	2	2	BMP SEDIMENT CONTROL	1500	SEACOAST	06/16/08	06/12/08	---
53	N	Low	0	2	1	3	BMP SEDIMENT CONTROL	1360	EAST	04/14/08	04/08/08	---
										06/17/08	06/17/08	---
69	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	419	CARNATION	05/19/08	05/13/08	---
101	N	Low	15	2	1	3	BMP SEDIMENT CONTROL	349	ELKWOOD	07/17/07	07/17/07	---
			0					1016	12TH	04/18/08	03/26/08	---
			0				BMP MATERIAL DLVRY / STORAGE	1265	11TH	04/18/08	04/03/08	---
104	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1265	11TH	04/18/08	04/03/08	---
105	N	Low	0			---	BMP MATERIAL DLVRY / STORAGE	912	EMORY	04/18/08	03/27/08	---
106	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	383	PALM	04/18/08	04/18/08	---
										06/23/08	06/23/08	---
108	---		0			---	BMP MATERIAL DLVRY / STORAGE	304	DAHLIA	04/18/08	04/10/08	---
109	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1310	FERN	04/18/08	04/04/08	---
113	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	933	EMORY	06/16/08	06/16/08	---
114	N	Low	26	---	2	2	BMP SEDIMENT CONTROL	963	FLORENCE	07/16/07	07/03/07	---
119	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	222	ELM	05/19/08	05/14/08	---
	N	Low	20	2	---	2		254	ELM	10/17/07	10/03/07	---
122	N	Low		2	---	2	BMP SEDIMENT CONTROL	1187	DONAX	04/30/08	04/29/08	---
123	N	Low	26	---	2	2	BMP SEDIMENT CONTROL	830	GEORGIA	08/28/07	08/09/07	---

Table 3.3 – Construction Site Inventory

Permit Number	Advanced Treatment Controls Required (Y/N)	Priority (High, Medium, Low)	Period of Time (# Weeks) Site Active During Rainy Season (October - April)	Total Number of Inspections - Rainy Season	Total Number of Inspections - Dry Season	Total Number of Inspections	General Results of Inspection	Street Number	Street Name	Inspection Status Date	Inspection Results Date	Number of Violations / Enforcement Action Type (VW, NOV, NOA)
125	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	742	3RD	05/28/08	05/28/08	---
129	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	455	PALM	04/30/08	04/28/08	---
130	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	455	PALM	04/30/08	04/29/08	---
	N	Low	0	---	3	3		549	DAHLIA	06/02/08	05/30/08	---
										06/16/08	06/16/08	---
136	N	Low	20	2	---	2	BMP SEDIMENT CONTROL	1242	13TH	10/17/07	10/02/07	---
140	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	992	PALM	05/13/08	05/12/08	---
143	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	383	PALM	05/05/08	05/05/08	---
148	N	Low	0	---	3	3	BMP SEDIMENT CONTROL	1026	IMPERIAL BEACH	05/19/08	05/19/08	---
										05/22/08	04/22/08	---
149	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	764	5TH	05/13/08	05/08/08	---
156	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	815	ENCINA	06/16/08	06/12/08	---
159	N	Low	16	1	---	1	BMP SEDIMENT CONTROL	1140	GEORGIA	11/26/07	11/26/07	---
173	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	646	ALABAMA	06/02/08	05/14/08	---
174	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	714	HICKORY	08/28/07	08/28/07	---
175	N	Low	14	---	1	1	BMP SEDIMENT CONTROL	1101	PALM	11/30/07	11/30/07	---
178	N	Low	19	---	1	1	BMP SEDIMENT CONTROL	737	HEMLOCK	08/16/07	08/16/07	---
187	N	Low	26	---	2	2	BMP SEDIMENT CONTROL	137	EBONY	07/23/07	07/18/07	---
	N	Low	0	---	2	2		1457	HOLLY	06/09/08	06/04/08	---
191	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	1361	IMPERIAL BEACH	06/11/08	06/10/08	---
195	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	455	PALM	06/16/08	06/16/08	---
196	N	High	0	---	2	2	BMP SEDIMENT CONTROL	1460	SEACOAST	06/02/08	05/28/08	---
198	N	High	0	---	2	2	BMP SEDIMENT CONTROL	725	SEACOAST	06/18/08	06/17/08	---
201	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	1000	2ND	06/24/08	06/24/08	---
208	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	363	PALM	06/25/08	06/25/08	---

Table 3.3 – Construction Site Inventory

Permit Number	Advanced Treatment Controls Required (Y/N)	Priority (High, Medium, Low)	Period of Time (# Weeks) Site Active During Rainy Season (October - April)	Total Number of Inspections - Rainy Season	Total Number of Inspections - Dry Season	Total Number of Inspections	General Results of Inspection	Street Number	Street Name	Inspection Status Date	Inspection Results Date	Number of Violations / Enforcement Action Type (VW, NOV, NOA)
213	N	Low	26	---	2	2	BMP SEDIMENT CONTROL	1167	5TH	07/16/07	07/13/07	---
220	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	874	8TH	06/11/08	06/10/08	---
226	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	1373	HEMLOCK	06/23/08	06/23/08	---
237	N	Low	10	2	---	2	BMP SEDIMENT CONTROL	1228	12TH	10/17/07	10/03/07	---
249	N	Low	18	2	---	2	BMP SEDIMENT CONTROL	1044	FERN	10/30/07	10/29/07	---
253	N	Low	20	2	---	2	BMP SEDIMENT CONTROL	1056	13TH	10/17/07	10/05/07	---
258	N	Low	2	1	---	1	BMP SEDIMENT CONTROL	1006	HEMLOCK	09/04/07	09/04/07	---
265	N	Low	18	2	---	2	BMP SEDIMENT CONTROL	140	CALLA	10/31/07	10/30/07	---
271	N	Low	25	1	---	1	BMP SEDIMENT CONTROL	961	FLORENCE	09/11/07	09/11/07	---
286	N	Low	20	2	---	2	BMP SEDIMENT CONTROL	1236	EMORY	10/17/07	10/03/07	---
341	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1277	14TH	04/09/08	04/04/08	---
350	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	625	SILVER STRAND	03/12/08	03/10/08	---
357	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	625	SILVER STRAND	02/13/08	02/12/08	---
358	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1016	12TH	04/30/08	04/28/08	---
391	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1234	LOUDEN	01/07/08	12/27/07	---

4.0 MUNICIPAL COMPONENT

4.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

4.2 Level 1 Outcomes – Management Program Activities

4.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the municipal component is described in the *JURMP Section 6.0*. Figure 4.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

4.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 4.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Additional documentation, analysis, and discussion are provided in Table 4.2, and Figures 4.2 and 4.3.

4.3 Outcomes Targeted for Staff Implementing Control Measures

4.3.1 Outcome Level 2 – Knowledge and Awareness

A training program has been implemented within the City to inform employees of the components and goals of the JURMP. The training program focuses on the use of Best Management Practices in daily operations, and has been designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the *JURMP Section 10.0.*

4.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The *JURMP Appendix E* defines minimum BMP requirements applicable to streets, roads, highways, and municipal parking facilities in the City. BMPs applicable to these facilities were updated as part of the City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 4.2. BMP requirements were reviewed

for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

4.3.3 Outcome Level 4 – Source Load Reductions

The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City during FY 2007-08. Approximately five miles of underground piping, 117 catch basins and inlets, seven open drainage facilities, over 30 acres of park facilities, athletic fields, beach accesses, and landscapes at various civic facilities, and five community parks located throughout the City were maintained during FY 2007-08. In addition, the City has a dedicated Tidelands crew that picks up trash and debris and conducts landscaping duties 7 days a week on the beach and one block inland of the beach. Table 4.2 provides a breakdown of the municipality by type and by priority category, and describes changes made to the inventory since its last update. A history of source load reductions for the Municipal Component is shown in Figures 4.2 and 4.3.

Level 1 Outcomes (Management Program Activities)		Outcomes Targeted for Staff Implementing Control Measures		
		Outcome Level 2	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Streets, Roads, Highways, and Municipal Parking Facilities**
1. FY 2007-08 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. FY 2008-09 Program Review and Update** ▪ Year-end program review ▪ Updated source inventory	**1. Jurisdictional Requirements for Project Approval** **2. Municipal Staff Training** ▪ Program Administration Staff ▪ Program Implementation Staff **3. Maintenance Inspections** **4. Stormwater Hot Line Operation (619-424-4095)** **5. Surveys and Special Investigations** *Not targeted or assessed*	**A. Illicit Discharge Reporting Responsibilities** *Not targeted or assessed* **B. Core Concepts** *Not targeted or assessed* **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Sweeping/Non-sweeping Activities** **B. Municipal Maintenance Activities** ▪ Procedural and Administrative Behaviors ▪ BMP implementation ▪ Illicit discharge control **C. Public Service Requests** ▪ Response to requests **D. Adopt-a-Road Activities** ▪ Public participation and involvement	**A. Debris Removal (Sweeping Activities)** **B. Debris Removal (Non-sweeping Activities)**

Figure 4.1 – FY 2007-08 Implementation and Assessment Strategy for the Municipal Component

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
A. Type of Facility			
Paved Roads	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground piping	5	---	
Catch basins/Inlets	---	117	
Open Drainage Facilities	---	7	
B. Priority Classification			
Streets, Roads, and Highways			This is the first year that municipal inventory statistics have been tracked by priority classification. Future JURMP Annual Reports will provide a description of significant year-to-year changes.
High (Commercial areas)	19.2	---	
Medium (Beachfront residential areas)	9.6	---	
Low (Other residential areas and paved alleys)	99.1	---	
Municipal Parking Facilities			
High (Commercial)		4	
Medium (N/A)	---	---	
Low (N/A)	---	---	
MS4 Facilities			
Underground piping	5	---	
Catch basins/Inlets	---	117	

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
Open Drainage Facilities	---	7	
Sanitary Sewer System			
Pump stations		12	
Underground piping	39.5		
C. Totals			
Streets, Roads, and Highways	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground Piping	5	---	
Catch Basins/Inlets	---	117	
Open Drainage Facilities	---	7	
Sanitary Sewer Pump Stations		12	
Underground Sewer Pipe	39.5		

JURMP Sections	Description of FY 2007-08 Changes
6.0 and Appendix E	BMP requirements of the JURMP applicable to streets, roads, highways, and municipal parking facilities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 6.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed.	Update [develop] road maintenance procedures for consistency with program updates
C) UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for this element is underway during the development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	Complete annual year-end program review
B) UPDATED SOURCE INVENTORY				
Update roads inventory	Update not needed	N/A	The City was required to update its inventory of municipal facilities subsequent to the completion of FY 2007-08. This update was not necessary as the City has been developed, and no new roads or storm drains were added.	Update municipal inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Project Approval				
Require projects to implement BMPs	Requirements implemented	Completion	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP.	Condition projects with appropriate BMPs prior to permit approval
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. Maintenance Inspections				
Inspect road, parking facilities,	Inspections done annually	Completion	All City-maintained roads, parking facilities, and storm drains are formally inspected annually. Other municipal areas and activities	Inspect municipal facilities

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
storm drains, and other municipal areas and activities			not identified as high priority are inspected as needed. During inspection, needed repairs are noted and scheduled, and maintenance is performed as appropriate. In addition to evaluating the road conditions, maintenance crews also evaluated potential stormwater impacts and identified sweeping, cleaning, and maintenance needs. Conveyance system and road right-of-way cleaning conducted as a result of these inspections is included in this section.	
Identify any MS4 facility found to require inspection less than annually	Review underway	In progress	Identify any MS4 facility found to require inspection less than annually following two years of inspection, and include justification for the finding.	Not targeted until FY 2009-10
4. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities to report trash and debris in roadways.	Hotline operated throughout reporting period	Confirmation	A Storm Water Hotline (619-424-4095) was operated throughout FY 2007-08 to provide the public a means of reporting accumulated trash or debris in City-maintained roadways and the MS4. 38 reports of trash and debris were received during the reporting period. See Level 4 Outcomes (below).	Operate a hotline to provide the public opportunities to report trash and debris in the City.
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element. None are planned for FY 2008-09.	Not targeted
Not targeted or assessed	---	---	Surveys of staff knowledge were not conducted during FY 2007-08. Beginning in FY 2008-09, surveys will routinely be incorporated before and after training as a means of evaluating training success and of monitoring staff knowledge from year to year.	Survey staff to ascertain baseline levels of knowledge concerning basic principles and specific job responsibilities.

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after municipal staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes illicit discharge reporting responsibilities, core concepts (e.g., What is a watershed?), and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)				
A. SWEEPING / NON-SWEEPING ACTIVITIES				
1. Improved Streets, Roads, and Highways				
July 1, 2007 through June 30, 2008				
Sweep all High TTWQ facilities at least twice per month	28.7 curb-miles swept at least twice per month	Completion	Commercial areas (19.2 miles of curbed roads and 4 parking lots) are swept weekly. Beachfront residential areas (9.5 miles of curbed roads) are swept bi-weekly (high TTWQ).	Sweep all High TTWQ facilities at least twice per month
Sweep all Moderate TTWQ facilities at least monthly	99.1 curb-miles swept at least monthly	Completion	All other areas (99.1 curb miles) are considered moderate priority and are swept on a monthly basis.	Sweep all Moderate TTWQ facilities at least monthly
Sweep all Low TTWQ facilities at least once (0)	N/A	N/A		Sweep all Low TTWQ facilities at least once
Sweep improved streets, roads, and highways	127.9 curb-miles swept (2,392 total miles)	Completion		Sweep at least the total minimum number of curb-miles required to

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
	swept)			meet Permit-prescribed frequencies for all improved streets
2. Improved Municipal Parking Facilities				
July 1, 2007 through June 30, 2008				
Sweep all High TTWQ parking facilities at least twice per month	4 facilities swept at least twice per month	Completion		Sweep all High TTWQ parking facilities at least twice per month
Sweep all Moderate TTWQ parking facilities at least monthly	0 facilities swept at least monthly	N/A		Sweep all Moderate TTWQ parking facilities at least monthly
Sweep all Low TTWQ parking facilities at least once	0 facilities swept at least once	N/A		Sweep all Low TTWQ parking facilities at least once
3. Municipal Separate Storm Sewer System (MS4)				
July 1, 2007 through June 30, 2008				
Clean accumulations of trash and debris greater than 33% of design capacity	24,481 feet of storm drain cleaned	Completion	There are approximately 117 catch basins and inlets that are inspected annually, and, if necessary, are cleaned if trash is observed.	Clean accumulations of trash and debris greater than 33% of design capacity
Inspect MS4 facilities at least once a year	24,481 feet of storm drain inspected	Completion		Clean accumulations of trash and debris

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
between May 1 and September 30 for all MS4 facilities that receive or collect high volumes of trash and debris. All other facilities shall be inspected at least annually.				greater than 33% of design capacity
Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year	Review underway	In progress		Inspect MS4 facilities not listed as high priority as needed, but not less than every other year.
4. Sewer System Maintenance and Spill Prevention				
July 1, 2007 through June 30, 2008				
Prevent and eliminate infiltration from the sanitary sewer to the MS4	39.5 miles of sanitary sewer system inspected	Completed	The City has conducted a sewer capacity study and identified areas needing improvement. These will be undertaken through the Capital Improvement Projects program. A Sewer System Management Plan was also completed in accordance with Waste Discharge Requirements.	Inspect sanitary sewer system for leaks to MS4
Conduct routine maintenance on sanitary sewer	39.5 miles of sanitary sewer system maintained	Completed	Most sanitary sewer pipelines are cleaned at least annually, and known problem areas are cleaned more frequently. Twelve alarmed sewage pump stations are monitored daily.	Conduct routine maintenance on and cleaning of

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
system				sanitary sewer system to prevent spills and discharges to MS4
5. Management of Pesticides, Herbicides, and Fertilizers				
July 1, 2007 through June 30, 2008				
Implement BMPs to reduce the contribution of pollutants to MS4	Requirements implemented	Completed	The City limits the application of pesticides and herbicides in accordance with Integrated Pest Management Program policy.	Implement IPM BMPs
B. MUNICIPAL MAINTENANCE ACTIVITIES				
Not targeted or assessed	---	---	The City enforces compliance at all municipal facilities, and does not currently consider Level 3 assessment of municipal maintenance activities to be applicable or feasible.	Not targeted
C. PUBLIC SERVICE REQUESTS				
Respond to all road service requests received	N/A	N/A	The City does not currently track public service requests for road maintenance activities.	Respond to all road service requests received
Respond to all sewer spills received and log in appropriate data bases	6 sewer spills reported	Completed	In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. All sewer spills during FY 07-08 were from private laterals.	Respond to and report all sewer spills received
D. ADOPT-A-ROAD ACTIVITIES				
Not targeted	0 volunteers participated in program	---	The City currently does not participate in Adopt-a-Road activities.	Not targeted

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
Not targeted	0 miles of road adopted and cleaned	---		Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM THE MUNICIPALITY INCLUDING THE MS4)				
A. DEBRIS REMOVAL (SWEEPING ACTIVITIES)				
Not targeted	156.5 tons of debris removed through sweeping of streets, roads, highways, and municipal parking facilities		The amounts of debris collected are highly variable from year to year, as shown in Figure 4.2. Therefore, even though the overall yield of debris from sweeping this year was a little higher, this should not be interpreted as a trend. The City will continue to monitor results over a longer period, but believes its existing resources and schedules are properly allocated.	Not targeted
B. REMOVAL (NON-SWEEPING ACTIVITIES)				
Not targeted	---	---	The City does not currently track this element of trash and debris along City-maintained roads.	Not targeted
Clean accumulations of trash and debris in the MS4 greater than 33% of design capacity	3 tons of trash, debris and organic matter removed from MS4		There are approximately 117 catch basins and inlets that are inspected annually, and, if necessary, are cleaned if trash is observed. The amounts of debris collected are highly variable from year to year, as shown in Figure 4.3, and may be attributed to the estimation process used. Therefore, even though the overall yield of debris from cleaning this year was considerably reduced, this should not be interpreted as a trend. The City will continue to monitor results over a longer period, but believes its existing resources and schedules are properly allocated, and has made efforts to improve the estimation process.	Clean accumulations of trash and debris in the MS4 greater than 33% of design capacity

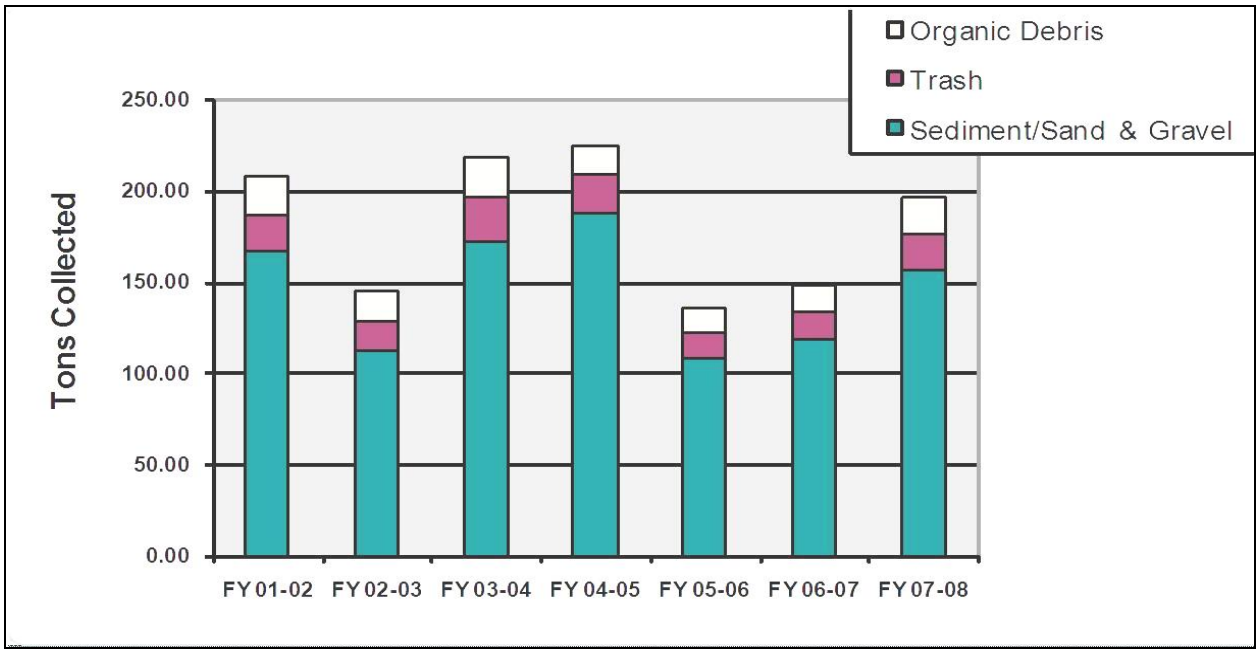

Figure 4.2 – Street Sweeping Removal Totals

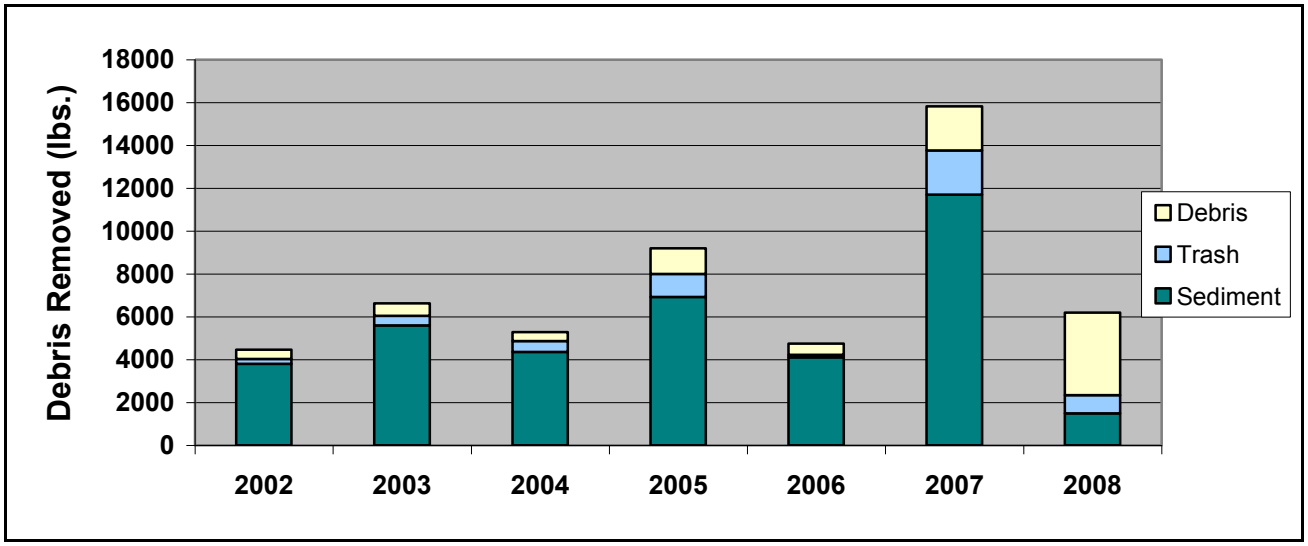

Figure 4.3 – Storm Drain Conveyance System Cleaning Totals

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City endeavors to reduce and prevent industrial and commercial discharges of pollutants to the MS4 and from those discharges causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations at businesses within the City and reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

5.2 Level 1 Outcomes – Management Program Activities

5.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the industrial and commercial component is described in the *JURMP Section 7.0*. Figure 5.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

5.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 5.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Additional documentation, analysis, and discussion are provided in Table 5.2.

5.3 Outcomes Targeted for Staff Implementing Control Measures

5.3.1 Outcome Level 2 – Knowledge and Awareness

A training program has been implemented within the City to inform employees of the components and goals of the JURMP. The training program focuses on the use of Best Management Practices in daily operations, and has been designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the JURMP Section 10.0.

5.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The JURMP Appendix F defines minimum BMP requirements applicable to industrial and commercial projects in the City. BMPs applicable to these facilities were updated as part of the

City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 5.2. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

5.3.3 Outcome Level 4 – Source Load Reductions

The City maintains a watershed-based inventory of all industrial and commercial facilities located within its jurisdiction that could contribute a significant pollutant load to the MS4. Table 5.2 provides a breakdown of the facilities, and describes changes made to the inventory since its last update.

Level 1 Outcomes (Management Program Activities)		Outcomes Targeted for Staff Implementing Control Measures		
		Outcome Level 2	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Industrial and Commercial Sites**
1. FY 2007-08 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. FY 2008-09 Program Review and Update** ▪ Year-end program review ▪ Updated source inventory	**1. Jurisdictional Requirements for Industrial and Commercial Sites** **2. Municipal Staff Training** ▪ Program Administration Staff ▪ Program Implementation Staff **3. Commercial Site Inspections** **4. Stormwater Hot Line Operation (619-424-4095)** **5. Surveys and Special Investigations** *Not targeted or assessed*	**A. Industrial and Commercial Site Responsibilities** *Not targeted or assessed* **B. Core Concepts** *Not targeted or assessed* **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Industrial and Commercial Activities** ▪ Procedural and Administrative Behaviors ▪ BMP implementation ▪ Illicit discharge control **B. Public Service Requests** *Not targeted or assessed*	**A. General site management requirements** **B. BMP maintenance** *Not targeted or assessed* **C. BMP effectiveness** *Not targeted or assessed*

Figure 5.1 – FY 2007-08 Implementation and Assessment Strategy for the Industrial and Commercial Component

Table 5.1 – Overview of Industrial and Commercial Component by Facility Type and Priority Classification

Category	Number	Description
A. Type of Facility		
Industrial	0	Industrial activity is extremely limited. Only one business in operation that can reasonably be classified as "industrial" is a surfboard manufacturing company that performs all of its operations indoors, and is very similar to a commercial facility. The term "commercial" is therefore used for the activities within the City. As such, there is no need in this jurisdiction to identify non-filers under the General Industrial Permit.
Commercial	27	
B. Priority Classification		
High	24	
Medium	3	
Low	---	
C. Totals		
High	24	
Medium	3	
Low	---	

JURMP Sections	Description of FY 2007-08 Changes
7.0 and Appendix F	BMP requirements of the JURMP applicable to industrial and commercial facilities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 7.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed.	Update [develop] road maintenance procedures for consistency with program updates
C) UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) YEAR-END PROGRAM REVIEW				
Complete annual year-end program	Review underway	In progress	An annual program review for this element is underway during the development of this JURMP Annual Report. JURMP modifications	Complete annual year-end program

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
review			recommended or planned as a result of this review are presented herein.	review
B) UPDATED SOURCE INVENTORY				
Update commercial inventory	Update underway	In progress	The City is updating its commercial inventory.	Update commercial inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Industrial and Commercial Sites				
Require sites to implement BMPs	Requirements implemented	Completion	All industrial and commercial sites are required to implement measures to reduce pollutants and runoff to the MEP.	Require sites to use appropriate BMPs
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. Commercial Site Inspections				
Inspect commercial sites and activities	Inspections done annually	Completion	Commercial businesses are inspected as per the Municipal Permit. The City does not contract out inspections; therefore, no third party inspections were conducted. Efforts to address mobile businesses are underway through the Copermittee workgroup, and the City will conduct inspections of mobile sources through the FY 2008-09 as necessary.	Inspect commercial facilities, including mobile sources as necessary
4. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities	Hotline operated throughout reporting period	Confirmation	A Storm Water Hotline (619-424-4095) was operated throughout FY 2007-08 to provide the public a means of reporting businesses not in compliance.	Operate a hotline

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
to report businesses not in compliance.				
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element. None are planned for FY 2008-09.	Not targeted
Not targeted or assessed	---	---	Surveys of staff knowledge were not conducted during FY 2007-08. Beginning in FY 2008-09, surveys will routinely be incorporated before and after training as a means of evaluating training success and of monitoring staff knowledge from year to year.	Survey staff to ascertain baseline levels of knowledge concerning basic principles and specific job responsibilities.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND BUSINESSES)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after municipal staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes illicit discharge reporting responsibilities, core concepts (e.g., What is a watershed?), and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND BUSINESSES)				
A. INDUSTRIAL AND COMMERCIAL ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2007 through June 30, 2008				
Inspect businesses for compliance	27 sites inspected	Completion	The City inspects all inventoried businesses as per the requirements of the Municipal Permit Section D.3.b(3)(b). The City used these factors to develop the threat-to-water-quality (TTWQ) criteria for identifying high and non-high priority facilities. The first year of the Municipal Permit required the City to inspect a minimum of 20% of the sites inventoried, and this requirement increases each year. The City inspected 50% of all high priority businesses during the reporting period FY 2007-08. The City inspects those facilities identified as non-high priority only in the event a stormwater concern or violation is identified.	Inspect businesses
Notify business owners/operators of BMP requirements, including mobile businesses	45 sites notified	Completion	The City notifies business owners and operators, both fixed and mobile, of BMP requirements through a combination of methods including site inspections and follow-up inspection reports, direct mailings, inclusion of BMP information with business license and special event vendor packets, advertisements in newspapers, online resources such as the Project Clean Water website and the City's website, and targeted workshops focused on specific business sectors.	Notify business owners/operators of BMP requirements, including mobile businesses
Enforce compliance and track violations	21 sites with enforcement actions	Completion	The City enforces compliance at all businesses, including mobile sources, using Notices of Abatement and Notices of Violation.	Enforce compliance and track violations

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. BMP Implementation				
July 1, 2007 through June 30, 2008				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating evaluation of business owner and operator knowledge of applicable BMPs, and will determine whether knowledge is being retained over time. Anticipated content includes BMP knowledge and implementation, core concepts of good housekeeping practices, and specific responsibilities including employee training.	Establish a baseline of business operator knowledge regarding applicable BMP implementation
3. Illicit Discharge Control				
July 1, 2007 through June 30, 2008				
Investigate complaints	136 Complaints investigated	Completion	All complaints of illicit discharges from business sources including mobile businesses were conducted.	Investigate illicit discharges from businesses
B. PUBLIC SERVICE REQUESTS				
Not targeted or assessed	---	---	The City does not currently track public service requests for industrial and commercial activities.	Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM INDUSTRIAL AND COMMERCIAL COMPONENT)				
A. GENERAL SITE MANAGEMENT REQUIREMENTS				
Not targeted or assessed	---	---	The City does not currently track this element for industrial and commercial activities.	Not targeted
B. BMP MAINTENANCE				
Not targeted	---	---	The City does not currently track BMP maintenance for industrial and commercial activities.	Not targeted

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

The City endeavors to prevent residential discharges to and from the Municipal Separate Storm Sewer System (MS4) and from those discharges causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations.

6.2 Level 1 Outcomes – Management Program Activities

6.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the education component is described in the *JURMP Section 8.0*. Figure 8.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

During this reporting period, the City participated in the Copermittee Workgroup responsible for developing and implementing the Regional Residential Education Program criteria to be submitted to the Regional Water Quality Control Board for approval.

6.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 6.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Additional documentation, analysis, and discussion are provided in Table 6.2.

6.3 Outcomes Targeted for Staff Implementing Control Measures

6.3.1 Outcome Level 2 – Knowledge and Awareness

A training program has been implemented within the City to inform employees of the components and goals of the JURMP. The training program focuses on the use of Best Management Practices in daily operations, and has been designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the *JURMP Section 10.0.*

6.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The *JURMP Appendix G* defines minimum BMP requirements applicable to residential areas and activities in the City. BMPs applicable to these facilities were updated as part of the City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 8.2. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

6.3.3 Outcome Level 4 – Source Load Reductions

The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City during FY 2007-08. Approximately five miles of underground piping, 117 catch basins and inlets, seven open drainage facilities, over 30 acres of park facilities, athletic fields, beach accesses, and landscapes at various civic facilities, and five community parks located throughout the City were maintained during FY 2007-08. Table 6.2 provides a breakdown of the municipality by type and by priority category, and describes changes made to the inventory since its last update.

Level 1 Outcomes (Management Program Activities)		Outcomes Targeted for Staff Implementing Control Measures		
		Outcome Level 2	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Residential Areas and Activities**
1. FY 2007-08 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. FY 2008-09 Program Review and Update** ▪ Year-end program review ▪ Updated source inventory	**1. BMP Implementation** **2. Municipal Staff Training** ▪ Program Administration Staff ▪ Program Implementation Staff **3. Enforcement of Residential Areas and Activities** **4. Evaluation of Oversight of Residential Areas and Activities** **5. Surveys and Special Investigations** *Not targeted or assessed*	**A. Illicit Discharge Reporting** **B. Core Concepts** *Not targeted or assessed* **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Motor Vehicle and Boat Repair and Maintenance Activities** *Not targeted or assessed* **B. Home and Garden Care and Maintenance Activities and Product Use** *Not targeted or assessed* **C. Pet Waste Management** *Not targeted or assessed* **D. Public Service Requests** ▪ Response to requests ▪ Facilitation of proper BMPs **E. Cleanup Activities** Public participation and involvement	**A. Household Hazardous Waste Collected** **B. Used Oil Collected** **C. Special Event Recycling and Waste Management**

Figure 6.1 – FY 2007-08 Implementation and Assessment Strategy for the Residential Component

Table 6.1 – Overview of Residential Component

Category	Number	Description
A. Threat to Water Quality Prioritization		
High	6	All residential areas of the City are considered high priority.
Medium	---	
Low	---	

JURMP Sections	Description of FY 2007-08 Changes
8.0 and Appendix G	BMP requirements of the JURMP applicable to residential areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 8.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
requirements				modifications
B) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed.	Develop residential education for consistency with program updates
C) UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for this element is underway during the development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	Complete annual year-end program review
B) UPDATED SOURCE INVENTORY				
Identify high threat to water quality areas	Update not needed	N/A	The City has previously identified the high threat to water quality residential areas and activities that were focused on subsequent to the completion of FY 2007-08.	Update as needed

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. BMP Implementation				
Require residents to implement BMPs	Requirements implemented	Completion	All residents are required to implement measures to reduce pollutants and runoff to the MEP.	Provide BMP handouts and outreach
Facilitate proper management and disposal of household hazardous waste (HHW)	2,110 gallons of used oil collected; 3 tons of HHW collected	Completion	The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.	Facilitate proper HHW management and disposal opportunities
Facilitate proper management and disposal of waste	114 tons of trash collected; 18 tons of green waste; 21 tons of metal; 25 tons of concrete	Completion	The City is required to facilitate the proper management and disposal of waste material through educational and public information activities, and establishment of collection sites operated by the City or a private entity. The City partners with EDCO Disposal in an annual Home Front Clean Up drop-off event to collect waste material at Mar Vista High School.	Facilitate proper management and disposal opportunities
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. Enforcement of Residential Areas and Activities				
Enforce BMPs	25 Verbal Warnings, 14 Notices of Violation; 7 Notices of Abatement; 3 Cost	Compliance	The City enforces its stormwater ordinance and the Municipal Permit for all residential areas and activities through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines and civil and/or criminal court actions, including recovery of	Enforce BMPs

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
	Recovery Efforts		compensatory damages for losses to the City of approximately $1,000.	
4. Evaluation of Oversight of Residential Areas and Activities				
Operate a hotline to provide the public opportunities to report trash and debris in roadways.	Hotline operated throughout reporting period	Confirmation	A Storm Water Hotline (619-424-4095) was operated throughout FY 2007-08 to provide the public a means of reporting accumulated trash or debris in City-maintained roadways and the MS4. 38 reports of trash and debris were received during the reporting period. See Level 4 Outcomes (below).	Operate a hotline to provide the public opportunities to report trash and debris in the City.
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element. None are planned for FY 2008-09.	Not targeted
Not targeted or assessed	---	---	Surveys of residential knowledge were not conducted during FY 2007-08. Surveys may be incorporated at educational events as a means of evaluating awareness. This effort is underway through the Copermittee workgroup.	Not targeted
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND RESIDENTS)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after municipal staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes illicit discharge reporting responsibilities, core concepts (e.g., What is a watershed?), and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin evaluating education success and to determine whether changes in knowledge are being retained over time.	Establish a baseline of resident knowledge regarding urban runoff

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY RESIDENTS)				
A. MOTOR VEHICLE AND BOAT REPAIR AND MAINTENANCE ACTIVITIES				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of residential maintenance activities to be applicable or feasible.	Not targeted
B. HOME AND GARDEN CARE AND MAINTENANCE ACTIVITIES AND PRODUCT USE				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of residential maintenance activities to be applicable or feasible.	Not targeted
C. PET WASTE MANAGEMENT ACTIVITIES				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of residential management activities to be applicable or feasible.	Not targeted
D. PUBLIC SERVICE REQUESTS				
Respond to all public service requests received	---	---	The City does not currently consider Level 3 assessment of public service requests to be applicable or feasible.	Not targeted
E. CLEANUP ACTIVITIES				
Not targeted	---	---	The City does not currently consider Level 3 assessment of cleanup activities to be applicable or feasible.	Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM THE RESIDENTIAL COMPONENT)				
A. HOUSEHOLD HAZARDOUS WASTE (HHW) COLLECTED				
Not targeted	3 tons of HHW collected	---	The City's HHW disposal program is available to all residents, and the City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options.	Not targeted

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
B. USED OIL COLLECTED				
Not targeted	2,110 gallons of used oil disposed of by residents	---	The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.	Not targeted
C. SPECIAL EVENT RECYCLING AND WASTE MANAGEMENT				
Not targeted	88 participants in annual Garage Sale; 742 participants in the annual Home Front Clean Up	---	The City is required to facilitate the proper management and disposal of waste materials, used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.	Not targeted

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The City's implementation and assessment strategy for the illicit discharge detection and elimination component is described in the *JURMP Section 9.0*.

8.0 EDUCATION COMPONENT

8.1 Introduction

The City endeavors to reduce the impacts of development on water quality. This component is applicable to all targeted communities. City departments, in particular the departments that have the most contact with the general public, including the Community Development Department, and the Capital Improvement Projects Division and the Environmental Program Division of the Department of Public Works, receive training and education on an annual basis.

8.2 Level 1 Outcomes – Management Program Activities

8.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the education component is described in the *JURMP Section 10.0*. Figure 8.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

8.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 8.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09.

8.3 Outcomes Targeted for Staff Implementing Control Measures

8.3.1 Outcome Level 2 – Knowledge and Awareness

A training program has been implemented within the City to inform employees of the components and goals of the JURMP. The training program focuses on the use of Best Management Practices in daily operations, and has been designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the JURMP Section 10.0.

The City is required to implement an education program for each target community using all media as appropriate to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

8.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The *JURMP Section 10.0* defines requirements to educate each target community on the laws, regulations, permits, requirements, BMPs, general urban runoff concepts, and other topics where appropriate. BMPs applicable to these audiences were updated as part of the City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 8.2. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

8.3.3 Outcome Level 4 – Source Load Reductions

The City encourages the use of pollution prevention methods by the target audiences; however, source load reductions for education are not targeted or assessed.

Level 1 Outcomes (Management Program Activities)		Outcomes Targeted for Staff Implementing Control Measures		
		Outcome Level 2	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Educational Activities**
1. FY 2007-08 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. FY 2008-09 Program Review and Update** ▪ Year-end program review ▪ Updated source inventory	**1. Jurisdictional Designation of Minimum BMPs** **2. Municipal Staff Training** ▪ Program Administration Staff ▪ Program Implementation Staff **3. Stormwater Hot Line Operation (619-424-4095)** **4. Surveys and Special Investigations** *Not targeted or assessed*	**A. Illicit Discharge Reporting** **B. Core Concepts** *Not targeted or assessed* **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Municipal Departments and Personnel** ▪ BMP implementation ▪ Illicit discharge control **B. Construction Site Owners, Contractors, and Developers** ▪ BMP implementation ▪ Illicit discharge control **C. Industrial Site Owners and Operators** ▪ BMP implementation ▪ Illicit discharge control **D. Commercial Site Owners and Operators** ▪ BMP implementation ▪ Illicit discharge control **E. Residential Community, General Public, and School Children** ▪ BMP implementation ▪ Illicit discharge control	*Not targeted or assessed*

Figure 8.1 – FY 2007-08 Implementation and Assessment Strategy for the Education Component

Table 8.1 – Overview of Education

Category	Number	Description
A. Type of Education		
Municipal Departments and Personnel Training	---	
Construction Site Owners and Contractor Training	---	
Industrial Site Owners and Operators Workshops and Inspections	---	
Commercial Site Owners and Operators Workshops and Inspections	---	
Residential Community, General Public, and School Children Outreach	---	
B. Educational Efforts		
Municipal Employees Training Events	3	Employees are trained on the use of BMPs in their daily operations. Events were held in conjunction with the filing of the Annual Report of the JURMP and for the JURMP prepared for the new Municipal Permit, R9-2007-0001. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, in inspections, and in investigations of illegal discharges. Commercial Site Owners and Operators are trained through scheduled inspections by the Public Works Department Environmental Division, and through investigations of illegal discharges. All residents receive educational information in the City's newsletter, a newsletter sent out by the City's waste franchisee, website updates, materials provided at City Hall and the Public Works Department, through community presentations, etc. The City held an Earth Day Fair at the Pier, the first event of its kind, in which over 300 school children and many of the local population participated. School children in Imperial Beach also participate in the Habitat Heroes program offered to 5th and 6th graders. The City
Construction Site Owners, Contractors and Developer Training Events	114	
Industrial Site Owners and Operators Training Events	---	
Commercial Site Owners and Operators Training Events	55	
Residential Community Outreach Events	3	
General Public Outreach Events	2	
School Children Outreach Events	8	

Table 8.1 – Overview of Education

Category	Number	Description
		participated with other Co-Permittees in outreach at the San Diego County Fair, which spanned two fiscal years.

JURMP Sections	Description of FY 2007-08 Changes
10.0 and Appendix I	BMP requirements of the JURMP applicable to educational areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A. MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 10.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B. UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed.	Update and/or develop educational efforts for consistency with program updates
C. UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A. YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for this element is underway during the development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	Complete annual year-end program review
B. UPDATED OUTREACH MATERIALS				
Update outreach materials	Update and development of new underway	In progress	The City is updating and developing new outreach materials for each target community	Update outreach materials
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Designation of Minimum BMPs				
Require minimum BMPs	Requirements implemented	Completion	All components of the JURMP have the requirement to implement measures to reduce pollutants and runoff to the MEP.	Require minimum BMPs
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities to report trash and debris in roadways.	Hotline operated throughout reporting period	Confirmation	A Storm Water Hotline (619-424-4095) was operated throughout FY 2007-08 to provide the public a means of reporting accumulated trash or debris in City-maintained roadways and the MS4. 38 reports of trash and debris were received during the reporting period.	Operate a hotline to provide the public opportunities to report trash and debris in the City.

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
4. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element. None are planned for FY 2008-09.	Not targeted
Not targeted or assessed	---	---	Surveys of staff knowledge were not conducted during FY 2007-08. Beginning in FY 2008-09, surveys will routinely be incorporated before and after training as a means of evaluating training success and of monitoring staff knowledge from year to year.	Survey staff to ascertain baseline levels of knowledge concerning basic principles and specific job responsibilities.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after municipal staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes illicit discharge reporting responsibilities, core concepts (e.g., What is a watershed?), and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND TARGETED AUDIENCES)				
A. MUNICIPAL DEPARTMENTS AND PERSONNEL				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible.	Not targeted
B. CONSTRUCTION SITE OWNERS AND DEVELOPERS				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible.	Not targeted

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. INDUSTRIAL SITE OWNERS AND OEPRATORS				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible.	Not targeted
D. COMMERCIAL SITE OWNERS AND OPERATORS				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible.	Not targeted
E. RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible.	Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM EDUCATIONAL ACTIVITIES)				
Not targeted or assessed	---	---	The City does not currently consider Level 4 assessment of education activities to be applicable or feasible.	Not targeted

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 Introduction

The City is required to incorporate a mechanism for Public Participation in the updating, development, and implementation of the JURMP.

9.2 Public Participation Efforts

The public was allowed to participate in the development of the JURMP under the new Municipal Permit, and the City conducted a public hearing on March 19, 2008 prior to its approval. The public was also noticed on this annual report in the September 4, 2008 edition of the Imperial Beach *Eagle & Times* newspaper. Public hearing notices were posted at City Hall and the Imperial Beach Public Library. A draft of both the revised JURMP and this Annual Report was made available for public viewing at the Imperial Beach City Hall and was posted on the City's website.

Other mechanisms the City uses include the operation of a stormwater hotline to report violations, an e-mail address to report stormwater issues through the City's website, coordination of cleanup activities with local organizations, encouraging environmental groups, civic organizations, and other interested local groups to conduct trash cleanups, and stenciling of storm drains with messages such as "No Dumping, Flows to Ocean".

10.0 PROGRAM EFFECTIVENESS ASSESSMENT

10.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the assessment of the JURMP for effectiveness. Each jurisdictional activity/BMP implemented for each major component of the JURMP is assessed to indirectly gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters.

10.2 Level 1 Outcomes – Management Program Activities

10.2.1 Program Planning and Administration

Program Planning and Administration addresses modifications to the JURMP, updates to program documentation and training content and materials within each element of this Annual Report. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the program effectiveness is described in the *JURMP Section 13.0*.

10.2.2 Management Program Implementation

Management Program Implementation addresses requirements, training, inspections, public awareness and response, and surveys and special investigations for each component of the JURMP within each element of this Annual Report. The tables in each section of the Annual Report present and describe targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09 that are funded by the program.

10.3 Outcomes Targeted for Staff Implementing Control Measures

10.3.1 Outcome Level 2 – Knowledge and Awareness

Knowledge and awareness are targeted and assessed as necessary within each element of this Annual Report independently.

10.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

Behaviors and BMP implementation are assessed within the tables located in each section of this Annual Report.

10.3.3 Outcome Level 4 – Source Load Reductions

Source load reductions are targeted and assessed as necessary within each element of this Annual Report independently.

11.0 FISCAL ANALYSIS COMPONENT

11.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the fiscal analysis of the program. Findings indicate the stormwater program costs are approximately $1M. Revenue sources used by the City to fund the requirements of the Municipal Permit include City user fees on trash and sewer services, State appropriated funds, and Federal/State grant funds.

The City of Imperial Beach previously completed a financial review of its Jurisdictional Urban Runoff Management Program according to the requirements as specified under Regional Board Order No. 2001-001. This review found that the stormwater program costs were approximately $1M. Revenue sources used by the City to fund the requirements outlined in the Municipal Stormwater Permit include:

- City user fee on trash service
- City user fee on sewer usage
- State appropriated funds
- Federal/State grant funds

The City expects costs of the stormwater program implementation to increase incrementally each year with inflation.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	12-11-08

H. A. Levien

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

Illicit discharges and illicit connections to the Municipal Separate Storm Sewer System (MS4) contribute to the violation of water quality standards of receiving waters. Order R9-2007-0001 (Municipal Stormwater Permit) requires Co-Permittees to detect, investigate, and eliminate illicit discharges and illicit connections in a timely manner. The City endeavors to reduce and prevent illicit discharges to the MS4 to the maximum extent practicable (MEP). The City uses targeted education and outreach programs and conducts routine inspections of construction and commercial facilities as preemptive efforts to prevent illegal discharges. In addition, the City conducts dry weather monitoring of major MS4 outfalls May 1st through September 30th with the intent of identifying illegal stormwater discharges. The City also responds to illicit discharges that are reported to the City's Stormwater Hotline or observed by City employees. The Department of Public Works Environmental Division follows through on all reported illegal discharges and ensures that the appropriate best management practices are used and maintained so no further discharges are detected.

The following figure and tables in this section provide an outline of the Illicit Discharge Detection and Elimination Component, an overview of City investigations, and supporting documentation that further explains the City's efforts relevant to this component. Figure 7.1 of this report presents an outline of the FY 2007-08 management program activities relating to the program planning, administration, and implementation of measures to control and reduce sources of pollution. Tables 7.1 and 7.2 present and describe targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Dry weather field screening and laboratory analytical results are presented in Tables 7.3 and 7.4.

7.2 Level 1 Outcomes – Management Program Activities

7.2.1 Program Planning and Administration

The Environmental Division of the Department of Public Works oversees compliance of urban runoff regulations at construction and development sites, residential homes, commercial and industrial facilities[1], and mobile businesses operating within the City. The Program Planning and Administration element of the Annual Report reviews and addresses modifications to the JURMP, updates changes to Program documentation, and updates changes in the dry weather monitoring sites for the next fiscal year.

[1] *The City has no industrial businesses and therefore only conducts commercial inspections*

The City's implementation and assessment strategy for the Illicit Discharge Detection and Elimination component is described in the *JURMP Section 9.0*.

7.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements for illicit discharge, detection and elimination, municipal staff training, public awareness and response, and surveys and special investigations. Table 7.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Dry weather field screening and laboratory analytical results are presented in Tables 7.3 and 7.4.

7.3 Outcomes Targeted for Staff Implementing Control Measures

7.3.1 Outcome Level 2 – Knowledge and Awareness

Education is provided through face-to-face interaction with City staff in meetings, public workshops, community presentations, and inspections. In addition, the City disseminates brochures that outline the requirements for addressing urban runoff and water quality regulations. The efforts by the City to educate the public on detection of illegal discharges and elimination of future discharges are discussed in the *JURMP Section 9.0.* The education effort for City staff is discussed in the *JURMP Section 10.0.*

7.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City is required by the Municipal Stormwater Permit to educate the public and enforce its stormwater ordinances. The City's stormwater ordinances include appropriate sanctions to achieve compliance and influence behavioral change. The City requires residents, commercial and industrial businesses, developers, construction companies, and municipal employees to implement stormwater management BMPs. These BMPs are specific to each particular JURMP component and are tracked and monitored by the City. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

7.3.3 Outcome Level 4 – Source Load Reductions

Investigations of illegal discharges and illegal connections are logged and reported in the City's database. The City monitors and keeps track of treatment control BMPs, conducts stormwater inspections of commercial businesses, and inspects construction and development projects. In 2008 the City started conducting trash assessments in conjunctions with its dry weather monitoring at targeted MS4 outfalls. The trash assessment provides a qualitative rating of each sampling location on a scale of Optimal, Suboptimal, Marginal, Submarginal, or Poor. The trash

assessment program in the City is currently under review to better equip Co-Permittees in a regional effort to identify and eliminate trash. Lastly, the City provides means for residents to recycle used oil and household hazardous wastes (HHW) though the Used Oil Program and Household Hazardous Waste Program; however, both these programs had modification in FY 2007-08. The modifications to these programs are explained further below.

Used Oil Program

Residents can no longer drop off used oil at the Kragen Auto Parts at 1220 Palm Avenue, Imperial Beach. The City and the South Bay Regional Household Hazardous Waste Center are working to develop partnerships with other local businesses where residents can drop off used oil. In the meantime, residents can still get free curbside pickup from the City's waste hauler, EDCO, by calling (619) 287-7555. EDCO also provides containers for used oil. In addition, residents can still drop off used oil at the City's designated Household Hazardous Waste Facility at 1800 Maxwell Rd, Chula Vista.

Household Hazardous Waste Program

Residents can no longer get curbside pickup of HHW by the South Bay Regional Door-to-Door Household Hazardous Waste Collection Program. Residents can still drop off HHW at the City's designated collection facility at 1800 Maxwell Rd, Chula Vista. Residents may also recycle e-waste at Goodwill Industries at 849 Palm Avenue, Imperial Beach. The City is also meeting with agencies to establish a more convenient program that would operate on a regular basis within the City to support e-waste collection within the City.

Other Efforts

The City has also ensured the local grocery stores and CVS pharmacy are participating in the plastic bag recycling effort under Assembly Bill 2449 where they are required to establish an at-store take-back and recycling program for plastic bags.

Level 1 Outcomes (Management Program Activities)		Outcomes Targeted for Staff Implementing Control Measures		
		Outcome Level 2	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions**
1. FY 2007-08 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. FY 2008-09 Program Review and Update** ▪ Year-end program review ▪ Update dry weather monitoring sites ▪ Update trash assessment	**1. Jurisdictional Requirements for Illicit Discharge Detection and Elimination** **2. Municipal Staff Training** ▪ Program Administration Staff ▪ Program Implementation Staff **3. Public Awareness and Response** ▪ Public Education ▪ Ordinance Enforcement **4. Monitoring and Investigations** ▪ Dry Weather and 2008 Trash Assessment ▪ Investigate Illicit Discharges and Illegal Connections **5. Surveys and Special Investigations** ***Not targeted or assessed***	**A. Illicit Discharge Reporting Responsibilities** ***Not targeted or assessed*** **B. Core Concepts** ***Not targeted or assessed*** **C. Implementation Responsibilities** ***Not targeted or assessed***	**A. Illicit Discharge Detection and Elimination Activities** ▪ BMP implementation ▪ Illicit discharge control **B. Dry Weather Monitoring** ▪ MS4 Monitoring ▪ Illicit Discharges ▪ Trash Assessment **C. Public Service Requests** ▪ Respond to requests	**A. General Site Management Requirements** ***Not targeted or assessed*** **B. Source Control** ▪ Trash Assessment ▪ Used oil and hazardous waste collection **C. Treatment Control** ***Not targeted or assessed*** **D. Designated Minimum BMPs** ***Not targeted or assessed***

Figure 7.1 – FY 2007-08 Implementation and Assessment Strategy for the Illicit Discharge Detection and Elimination Component

Table 7.1 – Overview of Illicit Discharge Detection and Elimination Component

Category	Number	Description
A. Type of Investigations		
Dry Weather Monitoring and Trash Assessments	30	The City conducted 30 dry weather monitoring field investigations at 13 major monitoring outfalls. Starting in 2008 the City started conducting trash assessment along with its dry weather monitoring. The City performed one trash assessment at each monitoring location for a total of 13 assessments during the 2008 reporting period.
Illicit Discharge Detections	135	The Environmental Division responded to 135 illicit discharge reports within the City.
Commercial Inspections	27	The City conducted 27 commercial business inspections for stormwater compliance.
Construction Inspections	51	The City had 51 construction projects that required BMPs during the course of development. All construction projects were periodically inspected to ensure proper use of BMPs.
Treatment Control BMPs	13	The City keeps track and ensures maintenance on 13 treatment control BMPs.
B. Priority Classification of Illicit Discharges		
High Priority	10	Illicit discharges are prioritized on whether the discharge poses an immediate threat to receiving waters (high Priority) or potentially poses a threat to receiving waters (low Priority). High priority illicit discharges include sewage overflows, auto fluids and toxic spills, and sediment from construction sites. Low priority discharges include over irrigation, car washing, and power washing.
Low Priority	125	
C. Totals		
Total Investigations	256	
High Priority Illicit Discharges	10	
Low Priority Illicit Discharges	125	

JURMP Sections	Description of FY 2007-08 Changes
9.0 and Appendix H	BMP requirements of the JURMP applicable to illegal discharges detection and elimination were modified in accordance with the requirements of the updated Permit in March 2008.

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
1.A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) Modifications to JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 9.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B) Updates to Program Documentation (Policies, Plans, Procedures, Guidelines, and Forms)				
---	---	---	No program policies, plans, procedures, guidelines, or forms need to be updated.	Update program documentation for consistency with program updates
C) Updates to Training Program				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) Year-End Program Review				
Complete annual year-end program review	Review underway	In progress	An annual program review for this element is underway during the development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	Complete annual year-end program review
B) Dry Weather Monitoring				
Develop an inventory of dry weather monitoring sites	Inventory developed	Completion	The City was required to develop an inventory of dry weather monitoring sites subsequent to the completion of FY 2007-08.	Update dry weather monitoring sites as needed
C) Trash Assessment				
Develop trash assessment form and procedure	Methodology developed	Completion	In 2008, the City started conducting trash assessments at dry weather monitoring locations to identify high trash areas. Current efforts are underway to develop a regional trash assessment form and procedure so analysis can be made regionally and across jurisdictions.	Develop regional trash assessment form and inventory/database with Co-Permittees.
1.B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. JURISDICTIONAL REQUIREMENTS FOR ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT				
Require projects to implement BMPs	Requirements implemented	Completion	All municipal, commercial, and residential projects are required to implement measures to reduce pollutants and runoff to the MEP.	Require sites to have appropriate BMPs and to monitor and maintain BMPs

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. MUNICIPAL STAFF TRAINING				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. PUBLIC AWARENESS AND RESPONSE				
A) Public Education				
Conduct education through meetings, workshops, brochure dissemination, and routine inspections	Education is implemented through various means identified in each component of the JURMP	All education is recorded and tracked within its own JURMP component	Each individual component of the JURMP involves some level of education. All education activities are recorded and documented.	Provide training and education to commercial businesses and residential violators
B) Ordinance Enforcement				
Inspect commercial, residential, and construction sites for compliance with City's Stormwater ordinance (IBMC 8.30)	135 investigations were conducted 14 Notices of Violation 7 Notices of Abatement 1 Administration Citation	Completion	The Municipal Stormwater Permit requires the City to implement and enforce its ordinances, orders, or other legal agreements to prevent illicit discharges and illegal connections to its MS4s. The City of Imperial Beach Urban Runoff Management and Discharge Control Ordinance (I.B.M.C. 8.30) prohibits discharges and connections to the MS4 with only limited exceptions.	Enforce IBMC 8.30 through routine inspections and reports to the City's Stormwater Hotline or by Municipal staff
4. MONITORING AND INVESTIGATIONS				
A) Dry Weather Monitoring and Trash Assessments				
Conduct dry weather monitoring and trash	30 field investigations of 13 targeted MS4s	Completion	The City conducts dry weather monitoring of major MS4 outfalls May 1 through September 30th. In 2008 the City also started conducting trash assessments. The City performed a total of 13	Identify sources of illegal discharges and high trash

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
assessment of targeted MS4s	locations		trash assessments, one at each monitoring location.	areas
B) Illicit Discharge and Illegal Connection Investigations				
Investigate illicit discharges and illegal connection reported to the Stormwater Hotline, residents, municipal staff, or identified from dry weather monitoring	135 illicit discharges investigated	Completion	The City endeavors to eliminate sources of pollution by responding to Stormwater Hotline calls, residential complaints, municipal staff reports, and dry weather monitoring water quality tests.	Investigate illicit discharges and illegal connections
5. SURVEYS AND SPECIAL INVESTIGATIONS				
Not targeted or assessed	---	---	Surveys and special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element.	Identify and take action on areas of high level of FOGs
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND THE COMMUNITY)				
Not targeted	---	---	Starting in FY 2008-09, the City will begin assessing knowledge and awareness of City staff and the community within each component of the JURMP.	Establish a baseline of staff knowledge
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND COMMUNITY)				
A. ILLICIT DISCHARGE DETECTION AND ELIMINATION ACTIVITES				
1. BMP Implementation				
Inspect projects with potential sources of pollutants and	121 site inspections	Completion	The City inspects commercial businesses, residential properties, construction and development sites, and treatment control BMPs to ensure compliance with the JURMP.	Inspect projects and verify compliance

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
require BMPs				
2. Illicit Discharge Control				
Investigate discharges and potential sources of pollutants and require BMPs	256 investigations	Completion	The City actively seeks and eliminates illicit discharges and connections, and ensures appropriate BMPs are in place.	Remediate spills, eliminate discharges or install BMPs
B. DRY WEATHER MONITORING				
1. MS4 Monitoring				
Dry weather monitoring of targeted MS4s	30 field investigations of 13 targeted MS4s	Completion	The City conducted dry weather monitoring at major MS4 outfalls May 1 through September 30th.	Identify sources of illegal discharges
2. Illicit Discharges				
Identify illicit discharges	135 Illicit Discharges (10 High Priority discharges and 125 Low Priority discharges)	Completion	The City endeavors to identify illicit discharges by responding to Stormwater Hotline calls, residential complaints, and municipal staff reports, and by investigating dry weather monitoring water quality tests.	Identify sources of illegal discharges
3. Trash Assessment				
Develop trash assessment form and procedure	Qualitative trash assessment form	Completion	In 2008 the City started conducting trash assessments at dry weather monitoring locations to identify high trash areas. Current efforts are underway to develop a regional trash assessment form and procedure so analysis can be made regionally and across jurisdictions.	Identify high trash areas

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. PUBLIC SERVICE REQUESTS				
Respond to stormwater hotline calls and illicit discharges reported by City employees	135 field investigations of illicit discharges	Completion	The City has a stormwater hotline that the public can report illegal stormwater discharges. City employees also report illegal stormwater discharges. The Environmental Division responds to all reports of illegal discharges.	Identify sources of illegal discharges
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS)				
A. GENERAL SITE MANAGEMENT REQUIREMENTS				
Not targeted	---	---	The City requires all illegal discharges to be eliminated to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards.	Not targeted
B. SOURCE CONTROL				
Not targeted	51 development projects required source control BMPs	---	The City requires source control BMPs for construction and development sites, commercial businesses, and residents. The City conducts routine site investigations and responds to residential discharges.	Not targeted
1. Used Oil and Hazardous Waste Collection				
Not targeted	3 tons HHW and 2,110 gallons of used oil collected	---	The City holds household hazardous waste collection days and provides collection points for used oil.	Not targeted
2. Trash Assessment				
Not targeted	Total trash was not quantified	---	The City conducts trash assessments at dry weather monitoring sites. Assessment is based on qualitative observations (Optimal, Suboptimal, Marginal, Submarginal, Poor).	Develop regional trash assessment that is more quantitative than qualitative.

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. TREATMENT CONTROL				
Not targeted	13 treatment control BMPs are monitored by the City	---	The City requires treatment controls on sites that discharge potentially contaminated runoff to storm drains.	Not targeted
D. DESIGNATED MINIMUM BMPS				
Not targeted	Minimum BMPs not quantified	---	The City requires designated minimum BMPs for commercial, residential, construction and development sites. Load reductions are not tracked.	Not targeted

Table 7.3 – 2008 Dry Weather Field Screening Results

Total Samples = 13 5 Outfall Samples 4 Manhole Samples	Water Temp (C) (best professional judgment)	pH (<6.5 – >9.0)	Ammonia (mg/L NH3-N) (1.0 mg/L)	Turbidity (NTU) (best professional judgment)	Nitrate (mg/L NO2-N) (10.0 mg/L)	Conductivity (ms/cm) (best professional judgment)	Reactive Phosphorus (mg/L) (2.0 mg/L)
# Exceedances / # Field Samples	N/A	2/13	3/13	N/A	0/13	N/A	1/13
Mean	20.2	5.78	2.10	33.3	ND	1.1	ND
Median	19.9	5.78	2.16	28.4	ND	1.1	ND
Max	21.6	5.99	2.20	67.1	ND	1.2	8.5
Min	19.1	5.58	1.93	4.5	ND	1.0	ND

During the 2008 dry weather season, field screening exceedances were most commonly observed for ammonia (23% of samples). Not all constituents were sampled during follow up investigations.

Table 7.4 – 2008 Dry Weather Laboratory Analytical Results

Total Samples = 9 5 Outfall Samples 4 Manhole Samples	Oil & Grease (mg/l)	MBAS (mg/l)	Total Hardness (mg/l)	Cadmium (ug/l)	Copper (ug/l)	Lead (ug/l)	Zinc (ug/l)	Diazinon (ug/l)	Chlorpyrifos (ug/l)	TotColiform (mpn/100ml)	FecColiform (mpn/100ml)	Enterococcus (mpn/100ml)
# Exceedances / # Lab Samples	0/9	0/5	N/A	0/5	6/7	0/5	4/5	0/4	0/4	7/7	6/7	7/7
Mean	ND	ND	237	ND	9	ND	28	ND	ND	900000	900	20
Median	ND	ND	247	ND	20	ND	36	ND	ND	545185	37333	97
Max	ND	ND	357	ND	51	ND	72	ND	ND	1100000	160000	200
Min	ND	ND	169	ND	ND	ND	ND	ND	ND	300	300	20

Laboratory analysis was performed for nine samples. Total coliform was the parameter that most commonly exceeded its dry weather action level (77% of samples).

The City continued its investigation of dissolved copper inputs in the E-1B drainage area (Grove and 5th Street – Tijuana River Watershed) during the FY 2007-08 reporting period, and determined levels had significantly decreased from previous years. The outfall drains primarily residential areas, portions of Imperial Beach Boulevard, and runoff from Mar Vista High School. City staff had conducted an in-depth investigation into this drainage area during FY 2006-07 upon observing over 1,000 gallons of water emptying from the outfall into the Tijuana River Estuary. Sample results indicated high

levels of chlorine and dissolved copper. Upstream investigation confirmed that Mar Vista High School maintenance staff had discharged chlorinated water as part of its weekly back flushing of the high school's swimming pool filters. Subsequent discussions with staff from the Sweetwater Union High School District revealed that the pool maintenance room was designed with a pipe connecting the back flush system to a storm drainpipe that leads to Outfall E-1B. At the City's request, this connection was closed off in early July 2006. In its place, the District constructed a 600-gallon holding tank that now discharges back flush water directly to the sanitary sewer. Staff hypothesized that this solution would remedy both the chlorine and dissolved copper issues (copper-based algaecides being a frequently used pool chemical). However, subsequent dry weather monitoring conducted indicates dissolved copper concentrations that continue to exceed the hardness-based dry weather action level. The City will continue its investigation of dissolved copper inputs in the E-1B drainage area during the FY 2008-09 reporting period.

The outfall S-1 (southeast corner of Ream Field – Tijuana River Watershed) has been sampled regularly since 2003. It drains several blocks of residential neighborhoods in Imperial Beach, a small portion of the City of San Diego, and the eastern edge of Ream Field, a U.S. Navy helicopter training facility. Elevated levels of ammonia and reactive phosphorous have been frequently detected at this site in the past. The City samples at the end of the outfall where runoff accumulates into a large pond of stagnant water. The outfall did not have flowing water and was not sampled in 2008. Upstream investigations have yet to be successful in pinpointing a specific source of the elevated pollutant levels; however, it would seem to be consistent with runoff from lawn irrigation (fertilizers). The City will continue to monitor and provide outreach in this area, and collaborate with the City of San Diego, which composes the majority of the drainage area.

The outfall H-3 (north of Bayside Elementary School – Otay River Watershed) has been visited on a regular basis since 2003. It is heavily influenced by tidal water and flushing is poor, both of which make isolating the outfall's urban runoff contribution a difficult task. A common observation over the last five years has been the presence of trash and debris around the outfall. It is unclear whether most trash is coming from tidal inputs after rain events, from upstream urban runoff, or from some other source. Potential upstream trash sources in this drainage area are the 9th and Palm shopping center (south of Palm Avenue), the Imperial Beach Promenade shopping center (north of Palm Avenue), and Palm Avenue itself from about 10th Street to Delaware Street. The Imperial Beach Promenade shopping complex installed six catch basin filters pursuant to redevelopment conditions imposed by the City several years ago. It continues to submit filter maintenance documentation to the City on a regular basis. Otherwise, investigation of this drainage area is ongoing. The City's capital improvement project (CIP) budget for FY 2008-09 has money set aside for installation of a structural treatment BMP, which is in the design phase for installation that would capture trash from upstream sources.

City of Imperial Beach Jurisdictional Urban Runoff Management Program

Annual Report Fiscal Year 2008-09

Submitted by the
City of Imperial Beach
Department of Public Works
495 10th Street
Imperial Beach, CA 91932

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
	Public Works Director	(619) 628-1369	
H. A. Levien			

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EXECUTIVE SUMMARY

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order R9-2007-0001 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2008 and June 30, 2009 (FY2008-09).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following are highlights and major accomplishments for each major JURMP component during this fiscal year.

Development Planning

The Development Planning Component involves incorporating storm water and urban runoff management into the development project review process. Major accomplishments during this fiscal year included the following:

- Conditioned 24 discretionary projects requiring developers or contractors to implement minimum best management practices (BMPs) and low impact development (LID) requirements to reduce pollutants and runoff to the maximum extent practicable (MEP). This compares to 48 projects during FY 2007-08 and 51 projects during FY2006-07.

- No Water Pollution Control Plans subject to the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements were approved during the reporting period. The City had 2 active SUSMP projects carry over from the previous reporting period, one of which was along the water front and managed by the Port of San Diego. The City also reviewed another 4 SUSMP projects that were not approved during FY 2008-09.

- Verified operation and maintenance of 16 permanent post construction treatment control BMPs including 1 new additional treatment control BMP location.

- Participated with San Diego Copermittees in the development of the Hydromodification Management Plan (HMP), which is currently under review.

- Provided storm water education to developers and contractors through face-to-face interactions with City staff in meetings, during counter hours held at the Community Development Department, and through informative brochures provided during the application process.

Construction Component

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. Major accomplishments during FY2008-09 included the following:

- Inspected a total of 51 active construction projects including 10 Capital Improvement Projects (CIP) and 1 Priority SUSMP project during the reporting period. Approximately 233 inspections were performed to verify the proper installation and maintenance of construction phase BMPs.
- Performed daily oversight of construction BMP compliance at all 10 CIP projects that were in active construction phase.
- Responded to 10 reports of illegal discharges from construction sites. No notices of violations were issued to construction developers or contractors at any discretionary project location. Verbal warnings were sufficient to bring violators into compliance.
- Discussed urban runoff management requirements with all applicants at project intake, and emphasized requirements again during follow-up inspections.

Municipal Component

City employees, particularly field staff, continued to implement best management practices (BMPs) to prevent illegal discharge of water and pollutants to the storm drain system. Examples of BMPs implemented at municipal facilities included:

- Vehicle washing in wash bays that drain to the sanitary sewer.
- Preventive maintenance of City vehicles to prevent fluid leakage.
- Use of high-power vacuum to capture runoff from graffiti abatement, sidewalk grinding, and spill cleanup.
- Strict limitations on the use of fertilizers and pesticides in parks and landscape areas.
- Monitoring of sprinkler systems to prevent over-topping onto roadways.
- Alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.
- Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup.

- Annual storm water training for the Public Works Department on the use of BMPs in daily operations.

Other notable accomplishments during FY2008-09 were:

- Inspected and cleaned 100% of municipal storm drain system and removed 4,130 pounds of sediment, trash, and organic materials through storm drain cleaning.
- Removed an additional 206 tons of material through frequent street sweeping.
- Continued maintenance of the10th St. and Imperial Beach Blvd. vortech storm water interceptor to remove sediment, floating hydrocarbons, and debris from all levels of flow.
- Quarterly maintenance of 13 municipal storm drain filter inserts including one new additional filter installed this reporting period at the Imperial Beach Sports Park parking lot.
- Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions.
- Completed the Palm Avenue urban runoff diversion system at Seacoast Avenue. The City now operates 2 low-flow urban runoff diverters (Palm and Date Ave.) along the beach front. Both diverters have the capacity to divert up to 250 gallons per minute of urban runoff and first flush rain water.
- Completed phase 1 of the City Hall and Fire Station xeriscaping project.
- Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Industrial and Commercial Component

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress continues to be made on increasing knowledge on urban runoff management among local businesses. The following are the major accomplishments achieved during this reporting period:

- Conducted 50 inspections most of which were high priority businesses, including automotive repair shops, restaurants, bars, gas stations, car washes, grocery stores, and mobile home parks. This is 23 more inspections than were conducted last reporting period. Inspections revealed some BMP deficiencies, but on the whole, most

businesses were knowledgeable of the urban runoff management requirements. Following each inspection the City mails the business owner a copy of the inspection form, an inspection report, and a BMP for your business brochure.

- Responded to 21 enforcement actions to businesses and issued 4 notices of violation as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings.

- The City participated with the Copermittees in the Regional development of an online mobile business database tracking system, which will be implemented during next reporting period. The database tracks active mobile businesses and violations issued by other jurisdictions.

Residential Component

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions, and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

- Identified and mitigated 55 residential violations. This compares to 13, 42, 50, and 46 in the previous four years, respectively. The most commonly observed violations involved construction debris, automotive fluids, wash water, detergents or chemicals, chlorinated swimming pool water, and green waste.

- Issued 17 notices of violation and 1 notices of abatement as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings and/or letters. No fines were issued to residents during this reporting period.

- Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.

- Educated residents on environmental issues including storm water in the City's semi-annual newsletters and a quarterly newsletter distributed by EDCO.

- Participated in the Regional Education and Residential Sources workgroup as co-chair of the group and chair of the Underserved Target Audience sub-workgroup.

- Approximately 5,762 pounds of household hazardous waste, 2,433 pounds of universal and e-waste, and 2,172 pounds of used oil and other fluids were properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista.

- The City held its annual Citywide Garage Sale event followed next week by the annual Home Front Clean Up, which resulted in the proper disposal of 154 tons of trash, construction, metal, and green waste.

Illicit Discharge Detection and Elimination Component

The City endeavors to prevent discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to complaints and referrals of urban runoff discharge violations.

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

Education Component

The City endeavors to implement a diverse education program that promulgates the storm water management requirements of the Municipal Permit. Education activities target the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in Imperial Beach) 5) residents, general public, and school children, and 6) underserved community. Education plays an important role in facilitating the necessary behavioral change required to successfully reduce and eliminate pollutants from urban runoff.

1.0 Introduction

1.1 Introduction

The City of Imperial Beach is required to submit its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report each year by September 30th in compliance with the San Diego Regional Board Order Number R9-2007-0001 (Municipal Permit). The Annual Report contains a comprehensive description of all activities conducted by the City to meet all requirements of section D of the Municipal Permit. The reporting period for the Annual Report is the previous fiscal year July 1st to June 30th.

All components of the JURMP are represented in this report with the exception of Section 7.0, Illicit Discharge Detection and Elimination Component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), which extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

1.2 Purpose and Objectives

The purpose of the FY 2008-09 JURMP Annual Report is to provide a comprehensive account of programmatic and management activities conducted by the City of Imperial Beach to meet the requirements of the Water Quality Order No. R9-2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. The following chapters in this Annual Report discuss the measures taken by the City to meet the regulatory requirements of the Municipal Permit and demonstrates that the City has achieved substantial compliance towards reducing sources of pollutants and urban runoff to the maximum extent practicable (MEP).

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The City endeavors to reduce pollutants and runoff from development and redevelopment projects to the maximum extent practicable (MEP). This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Program Division of the Department of Public Works, and the contracted engineering firm, BDS Engineering. This section of the Annual Report discusses program implementation and changes made during FY 2008-09 to the Development Planning Component as it relates to management program activities and outcomes targeted for staff implementing control measures.

2.2 Level 1 Outcomes – Management Program Activities

2.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, amendments to the General Plan, changes to development project approval and verification processes, and modification to any development project requirements. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Development Planning component is described in the *2008 JURMP Section 4.0*. During the reporting period no new changes were made to the JURMP or the program planning, administration, or assessment strategy. The updates to the General Plan made with the 2008 JURMP are still hung up and pending approval with the California Coastal Commission. All development projects under went the appropriate environmental review and verification processes. Development and BMP inventories were maintained on record and site inspections were tracked using the City's database system HTE.

During the reporting period, a draft of the Final Hydromodification Management Plan (HMP) was submitted to the Regional Board and comments were received. Currently, Brown and Caldwell is working to address the Regional Board's comments and submit the Final HMP within the schedule defined in the Municipal Permit. The City participated in the Copermittee Workgroup responsible for establishing interim HMP criteria. Once the Final HMP is approved, the City will have 180 days to incorporate the requirements into the program.

2.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses Jurisdictional requirements for project development, municipal staff training, developer education, public awareness and response, and surveys and special investigations.

The City requires all development and redevelopment projects to implement measures to reduce pollutants and runoff to the MEP. Minimum BMPs and LID requirements were established in the *2008 JURMP Section 4.0* and are required as conditions during the development review process. Priority development projects are given special consideration under the Standard Urban Stormwater Mitigation Plan (SUSMP) and have more stringent requirements. All municipal staff is knowledgeable in the storm water program and receives annual training as described in the 2008 *JURMP Section 10.0*. The Community Development Department also held counter hours and face-to-face meetings throughout FY 2008-09 to provide education and answer questions for developers. In addition, every development or redevelopment project regardless of its prioritization is formally inspected for applicable BMPs throughout the duration of the project. Post construction treatment control BMPs are also inspected annually for operation and maintenance verification. An inventory of treatment control BMPs and inspection records are provided in Table 2.3.

Additional documentation, analysis, and discussion on the implementation of Management Program Activities are provided in the following tables and figures:

- Figure 2.1 presents the implementation and assessment strategy for the Development Planning Component.
- Table 2.1 provides an overview of the development and planning projects as it was implemented during FY 2008-09.
- Table 2.2 presents and describes targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10.
- Table 2.3 provides the updated treatment control BMP inventory.
- Table 2.4 provides an inventory of FY 2008-09 Development Review and SUSMP projects.

2.3 Outcomes Targeted for Staff Implementing Control Measures

2.3.1 Outcome Level 2 – Knowledge and Awareness of Program Implementation by Staff and Contractors

Education is provided to the public through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. These efforts by the City to educate the public on development planning are discussed in the *2008 JURMP Section 4.0.* The

education effort for City staff is discussed in the *2008 JURMP Section 10.0.* Additional information on targeted FY 2008-09 outcomes and results is presented in Table 2.2.

2.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation by Staff and Developers

City staff works with developers to ensure that all development projects and redevelopment project reduce pollutants and runoff to the MEP. The 2008 JURMP Section 4.0 defines minimum BMP and LID requirements applicable to development and redevelopment in the City.

During FY 2008-09 the City continued to facilitate changes in behavior for development and redevelopment projects by reviewing and requiring conditions on projects to ensure program compliance. The City inspects active projects for violations and enforces compliance on all required conditions. All BMPs are verified for proper implementation, operation, and maintenance throughout the duration of construction. Post construction maintenance and operation of treatment control BMPs are also verified and inspected annual by the Environmental Division. Updates to treatment control BMP inventory is provided in Table 2.3.

The City is required to enforce its storm water ordinances for all Development Projects and at all development sites as necessary to maintain compliance with the Municipal Storm Water Permit. City ordinances include appropriate sanctions to achieve compliance including non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance.

Additional information on Behaviors and BMP Implementation by Staff and Developers is presented below in Table 2.2.

2.3.3 Outcome Level 4 – Source Load Reductions

Source load reductions from development and redevelopment projects are achieved through the implementation of BMPs and LID strategies. The City requires specific project conditions for treatment control BMPs, LIDs, and site design BMPs to reduce pollutants and runoff to the MEP. The City imposed one or more conditions of approval on 30 discretionary project applications during FY 2008-09. This includes four new “priority development projects” that will be subject to the City’s SUSMP ordinance.

Management Program Activities		Outcomes Targeted for Staff Implementing Control Measures		
Outcome Level 1a	***Outcome Level 1b***	***Outcome Level 2***	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Development Projects**
1. FY 2008-09 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. Program Review and Update** ▪ Year-end program review ▪ Updated database and inventory of treatment control BMPs	**1. Jurisdictional Requirements for Project Approval** **2. Confirmation of SUSMP Requirements** **3. Municipal Staff Training** **4. Developer Education** **5. Surveys and Special Investigations**	**A. Project Development Responsibilities** **B. Core Concepts** **C. Implementation Responsibilities**	**A. Development Activities** ▪ Procedural and Administrative Behaviors ▪ BMP and LID implementation ▪ Illicit discharge control **B. Public Service Requests** ▪ Respond to requests	**A. Treatment control BMPs** **B. Runoff diversion to pervious surfaces and Site Design BMPs** **C. Low Impact Development (LID)**

Figure 2.1 – FY 2008-09 Implementation and Assessment Strategy for the Development Planning Component

Table 2.1 – Overview of Development Planning Inventory by Development Type and Priority Classification

Category	Number	Description
A. Type of Development		
New development	1	All development projects are required to undergo the City's urban runoff approval process and meet applicable requirements. Administrative procedures for development project review is discussed in *2008 JURMP Section 4.0.*
Redevelopment	29	
B. Priority Classification		
Discretionary Projects	24	No projects received a SUSMP waiver. *All SUSMP-eligible projects were subject to applicable requirements; however, no SUSMP projects were approved during this reporting period. Two SUSMP projects were previously approved for construction, with one of the projects (Palm Ave Street End Improvements and Storm Drain Diverter) managed by the Port of San Diego. The only active SUSMP project managed by the City during the reporting period was the North Island Credit Union Building and the project was completed at the beginning of the reporting period. Permits to begin construction on the other four priority development projects will not be issued until acceptable SUSMP and Water Pollution Control Plans have been submitted and approved.
Priority Development (SUSMP) Projects	6*	
C. Totals		
Discretionary Projects	24	Complete list of development projects that received an environmental review during the reporting period or projects requiring a SUSMP is provided in Table 2.4.
Priority Development (SUSMP) Projects	6	

JURMP Sections	Description of FY 2008-09 Changes
4.0 and Appendix C	No changes were made to the Development Planning Component. Updates were made to the Treatment Control BMP inventory and Development Project inventory.

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per Permit requirements	No updates made during FY 2008-09	Complete	Applicable updates were included in the *2008 JURMP Section 4.0*. The City is still in the process of updating Model SUSMP and Hydro Modification Plan (HMP).	Make changes in accordance to Model SUSMP and HMP
b) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
Update program documentation for consistency with program updates	No updates made during FY 2008-09	Under review	No program policies, plans, procedures, guidelines, or forms were updated this reporting period. The City is currently looking into updating its Environmental Review forms (7-A and 7-B) and updating guidance documents for developers.	Incorporate changes from Model SUSMP and HMP
c) UPDATES TO TRAINING PROGRAM				
Update training materials for consistency with *2008 JURMP Section 10.0*	Made updates to Community Development survey	Under review	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience. The City endeavors to keep education activities exciting, fun, and informative.	Update training materials for consistency with *2008 JURMP Section 10.0*

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for the Development Planning Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b) INVENTORY FOR DEVELOPMENT AND REDEVELOPMENT PROJECTS				
Update development and redevelopment inventory	Updates made throughout the reporting period	Complete	The City maintains a database of active development projects and development review status on the City's database software HTE. Annual inventories are also maintained in excel with the Environmental Division of the Department of Public Works.	Update development and redevelopment inventory
c) INVENTORY FOR APPROVED TREATMENT CONTROL BMPS AND MAINTENANCE				
Update inventory for treatment control BMPs	Updates made and maintenance verified through inspections	Made updates to property owners and contact information for O&M of BMPs	The Environmental Division maintains an inventory of treatment control BMPs. During this reporting period there were changes made to property owners and operation and maintenance of the BMPs. Annual verification is necessary to ensure the O&M of the BMPs.	Update inventory and maintenance for treatment control BMPs

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Project Approval				
Require projects to implement BMPs	BMPs are required as conditions for development projects	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. The City's project review process further requires that any new construction or modification with a valuation more than $50,000 be subject to public improvements. Projects that meet the $50,000 criterion are routed from the Community Development Department to the Public Works Department for a review in regard to storm water and runoff.	Condition projects with appropriate BMPs prior to permit approval
2. Confirmation of Priority Development (SUSMP) Requirements				
Verify that SUSMP-eligible projects are subject to applicable requirements and that BMPs are implemented and verified through inspections	All SUSMP-eligible projects were held to full SUSMP requirements	Verification confirmed	Six SUSMP high priority projects were subject to applicable requirements, with only two in active construction phase during this reporting period. One project was the Palm Ave Street End Improvement and Storm Drain Diverter Project, which fell under the Port of San Diego's jurisdiction for project management. The City of Imperial Beach still provided daily oversight on the project and enforced SUSMP requirements. The second project was the construction of the new North Island Credit Union building. Construction on the project finished at the beginning of this reporting period and the Environmental Division confirmed the installation of the pre-conditioned treatment control BMPs for the storm drains on the property.	Verify that SUSMP-eligible projects are subject to applicable requirements and that BMPs are implemented and verified through inspections

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
3. Municipal Staff Training				
Provide municipal staff training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08	Complete	Training was conducted on 9/23/08 for the Community Development Department (Planning Division, Building Division, Code Compliance Division, and Redevelopment Division) and Public Works Department 9/17/08 on the necessary elements of the storm water program. A survey was also provided to establish a baseline of knowledge. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.	Provide municipal staff training for FY 2009-10
4. Developer Education				
Provide education for developers	Counters hours held and meetings conducted throughout the reporting period	Confirmation of developer education from Community Development	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period.	Provide developer education for FY 2009-10
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2008-09, and are not routinely conducted as part of the implementation strategy for this program element.	Not targeted
Provide a survey to municipal staff	Administered a survey to municipal staff as part of annual training program	Complete	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. A survey was provided to establish a baseline of knowledge. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate.	Survey municipal staff to ascertain baseline knowledge of storm water program

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey municipal staff to assess knowledge of storm water program
Not Targeted	Community Development Department provided education opportunities for developers	---	The Community Development Department held counter hours and face-to-face meetings throughout FY 2008-09 to provide education and answer questions for developers. Inspects of BMPs at project sites by Code Enforcement, Building Division, and Public Works also provides additional education. Surveys were not conducted in FY 2008-09, and are not routinely conducted as part of the implementation strategy for this program element. Changes in knowledge of contractors are evident by the increased level of compliance observed during inspections.	Not Targeted

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND DEVELOPERS)				
A. DEVELOPMENT ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2008 through June 30, 2009				
Review projects and prescribe necessary conditions of approval	30 projects reviewed for conditions of approval	Complete	The City reviews all proposed projects and ensures that all necessary conditions and BMPs are met.	Review projects prior to approval and issuance of permits
Inspect projects for BMP compliance	12 Projects, including the two active SUSMP Projects, were inspected daily by the Public Works Inspector	Complete	The Building Division, Code Enforcement, Environmental Division, and Public Works Inspector conduct inspections at all active development projects for compliance of minimum BMPs. The Public Works Inspector conducts inspections at all CIP and active SUSMP projects daily. The Building Inspector conducts inspections of all Discretionary permit projects and ensures the implementation of BMPs. Code Enforcement and Environmental Division respond to all reports of storm water violations from development projects. Construction inspections of Discretionary Projects are covered in the next Section of this Annual Report.	Inspect projects
2. BMP Implementation, Operation and Maintenance				
July 1, 2008 through June 30, 2009				
Inspect projects and verify BMP implementation	30 projects reviewed and received conditions All active projects inspected for BMPs	Complete	The Department of Public Works reviews and requires conditions on all Discretionary Projects greater than $50,000 in costs. Once a project becomes active the City inspects and verifies that all BMPs are implemented. The Public Works Inspector also provides continual oversight during project management of CIP projects.	Review projects for appropriate BMPs and verify implementation through inspections

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
Verify operation and maintenance of treatment control BMPs	15 out of 16 treatment control BMPs inspected	Complete	The City annually verifies operation and maintenance of treatment control BMPs to ensure compliance with program. All high priority treatment control BMPs are inspected for operation and maintenance annually.	Verify operation and maintenance of treatment control BMPs
3. Illicit Discharge Control				
July 1, 2008 through June 30, 2009				
Inspect development projects and respond to illicit discharges	All active projects inspected 10 verbal warnings	Complete	The City inspects and enforces storm water ordinances at all development projects. The City responds to all illicit discharge reports.	Inspect projects during development phase
B. PUBLIC SERVICE REQUESTS				
Respond to all development planning requests and illegal discharge reports	30 projects reviewed 10 illegal discharge reports from construction sites	Complete	The City tracks public service requests for construction activities. Requests include project reviews and illegal discharge reports. The Environmental Division investigates all illicit discharges that are reported by the storm water hotline, City staff, or from the online reporting form.	Respond to all development planning requests

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)				
A. TREATMENT CONTROL BMPS				
Not targeted	1 new treatment control BMPs installed as a project condition 16 treatment control BMPs are monitored for operation and maintenance by the City	Complete	The City requires the installation of treatment control BMP devices for projects which are deemed necessary. Load reductions are tracked when available. Table 2.3 provides the inventory, inspection records, and source loads of treatment control BMPs.	Track operation and maintenance of treatment control BMPs
B. RUNOFF DIVERSION AND SITE DESIGN BMPS				
Not Targeted	30 projects required to divert or relocate site features	Complete	The City requires the diversion of runoff from development projects to pervious areas. When runoff diversion is not feasible then a treatment control BMP is necessary. Load reductions are not typically tracked.	Not targeted
C. LOW IMPACT DEVELOPMENT (LID) BMPS				
Not targeted	30 projects required LID BMPs	Complete	During the project review the City requires LID BMPs for high priority projects. Load reductions are not tracked for LID BMPs.	Not targeted

Table 2.3 – Post Construction Treatment Control BMP Inventory and Inspection Record

ID	Address/Location		Priority	HU	Date of Installation	Responsible for Maintenance	Date of City Inspection	Service Conducted			Volume/ Weight of Debris Removed (cf or lbs)
								Date of Service	Cleaned	Booms Replaced	
IRIS1	1450 Iris	Back parking lot	Low	911.11	6/27/05	Imperial Beach Property Management		Monthly 4/21/09	X	X	4 lbs
11thST1	861 11th St	Driveway approach	Med	910.20	6/1/07	HOA	4/9/09				
TLE1	741 Palm	Back vehicle storage area	High	910.20	6/1/05	Property Owner	10/27/08 4/8/09	3/1/09	X	X	
13ST1	1372 13th St	Back Parking lot drain	Med	910.20	10/1/08	Property Manager	10/1/08 4/8/09	3/1/09	X		60cf
PALM1	481 Palm	Front parking and back sediment filter	Med	910.20	11/1/08	Property Manager	11/1/08 4/9/09	11/1/08	X	X	
IBP1	836 Palm	Parking lot	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	
IBP2	836 Palm	North corner parking lot	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	
IBP3	836 Palm	Entrance at 8th St	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	
IBP4	836 Palm	Loading area	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	
IBP5	836 Palm	Southeast Corner of lot	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	
IBP6	836 Palm	Northeast corner of lot	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	

Table 2.3 – Post Construction Treatment Control BMP Inventory and Inspection Record

ID	Address/Location		Priority	HU	Date of Installation	Responsible for Maintenance	Date of City Inspection	Service Conducted			Volume/ Weight of Debris Removed (cf or lbs)
								Date of Service	Cleaned	Booms Replaced	
13SM1	1126 13th St	North front entrance	Med	911.11	5/1/05	Property Owner	10/27/08 4/9/09	4/20/09	X	X	
13SM2	1126 13th St	South front entrance	Med	911.11	5/1/05	Property Owner	10/27/08 4/9/09	4/20/09	X	X	
13SM3	1126 13th St	North back parking lot	Med	911.11	5/1/05	Property Owner	10/27/08 4/9/09	4/20/09	X	X	
13SM4	1126 13th St	South back parking lot	Med	911.11	5/1/05	Property Owner	10/27/08 4/9/09	4/20/09	X	X	
NICU1	1101 Palm	Back parking lot and planter box	Med	910.20	9/1/08	Property Owner	4/9/09	9/1/08		X	

Table 2.4 – Development Review and SUSMP Project Inventory FY 2008-09

ID	File No.	SUSMP	Address 1	Project Type	Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMP Needed	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Construction / Post-construction BMP Notification	Loamy soil to minimize runoff	Water Pollution Control Plan
1	MF 881	Yes (Active)	1101 Palm Ave	New Building	North Island Credit Union building				X				X	X		X
2	D03-102	Yes (Active)	Palm Ave street end	Other	Palm Ave improvements and storm drain diverter											X
3	CIP MF 950	Yes (Not Active)	495 10th St	CIP	Public Works yard expansion											X
4	MF 962	Yes (Not Active)	400 7th Street	SFR	New SFR behind existing SFR	X	X	X		X			X	X	X	X
5	MF 779	Yes (Not Active)	221-225 Palm Ave	Building add.	8 unit residential and commercial	X	X			X			X	X	X	X
6	MF 1003	Yes (Not Active)	853 Emory St	Demolition/ new construction	demolition and const of new church	X		X	X	X			X	X		X
7	CIP S08-101	No	Seacoast Drive	CIP	South Seacoast Drive Overlay											X
8	CIP W05-104	No	501 Elm	CIP	Pump Station 3 Upgrade											X
9	MF 984	No	137 Ebony	2- unit condo Conversion	conversion of existing condo	X				X			X	X	X	
10	No MF	No	624 12th street	Low Mod complex	Conv app to low mod complex	X				X			X	X	X	
11	CIP F05-204	No	825 Imperial Beach Blvd	CIP	Fire Station Door Replacement											X
12	MF 987	No	1534-1548 Seacoast Drive	Revetment Maintenance	Repair maintenance of seawall and revetment								X	X		
13	No MF	No	624 12th St	Conversion	App to low-mod complex	X	X			X						
14	MF 986	No	535 7th St	SFR	Teo new SFR	X				X			X	X	X	
15	CIP F05-201	No	825 Imperial Beach Blvd	CIP	City Hall Council Chambers Renovations											X
16	CIP F05-203	No	825 Imperial Beach Blvd	CIP	City Emergency Power Replacement and Upgrade											X
17	CIP P05-601	No	Reama Park	CIP	Reama Park Master Plan											X
18	CIP P06-101	No	Teeple Park	CIP	Teeple Park Master Plan											X
19	CIP P08-701	No	Sports Park	CIP	Sports Park Rec Center Master Plan											X
20	MF 990	No	602 7th Street	SFR	single family residentail	X	X			X			X	X	X	
21	MF 989	No	1233 California St	Building add.	single family residentail	X		X	X	X			X	X	X	
22	MF 992	No	1497 13th St	Wireless communication facility	New wireless communication facility	X				X			X	X	X	
23	MF 994	No	762 Georgia St	2 unit condo conversion	Convert two houses to condominiums	X				X			X	X	X	
24	CIP S07-102	No	City Streets	CIP	CIP Slurry Seal on road											X
25	MF 1000	No	710 Seacost Dr	New roof	new roof over 2nd floor patio	X	X				X					
26	No MF	No	347 Evergreen Ave	New addition and remodel	1-story addition and kitchen remodel	X				X			X	X	X	
27	MF 1006	No	181-183 Ebony	Condo Conversion	Conversion of two residential to condo units	X				X			X	X	X	
28	No MF (City SD)	No	1344 Palm	New Car Wash (City of SD)	Convert empty lot to a new car wash on City of SD property								X	X		
29	MF 1010	No	1245 East Lane	SFR	SFR remodel	X	X			X			X	X		
30	R04-201	No	100-300 Palm Ave	CIP	Old Palm Ave Steet Scape Improvements											X

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City endeavors to reduce pollutants and runoff from construction sites to the MEP. This component is primarily applicable to the Community Development Department and the requirements that apply to the Building and Planning Division activities related to construction and construction permits, and compliance actions proposed by the City. The Environmental Division of the Public Works Department facilitates the implementation of the construction requirements of the Municipal Permit. This section of the Annual Report discusses program implementation and changes made during FY 2008-09 to the Construction Component as it relates to management program activities and outcomes targeted for staff implementing control measures.

3.2 Level 1 Outcomes – Management Program Activities

3.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to local ordinances, program documentation, training content, and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Construction Component is described in the *JURMP Section 5.0*. During FY 2008-09 no new updates were made to the municipal code or the program planning and administration processes. The last updates to the municipal code were made in February 2008 and included amendments to Chapter 8.30 "Urban Runoff Management and Discharge Control", Chapter 8.32 "Standard Urban Stormwater Mitigation Plan (SUSMP)", and Chapter 15.54 "Grading Permits and Plans". Amendments were submitted to the Regional Board as part of the *2008 JURMP Appendix B and C*.

The City maintains an ongoing database of active construction projects and tracks inspections though the City's database software HTE. A more detailed description of the City's inspection frequency, tracking, and verification process is provided in the *2008 JURMP Section 5.0.*

Figure 3.1 presents the implementation and assessment strategy for the Construction Component as it was implemented during FY 2008-09. Table 3.2 provides a complete overview of targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-2010.

3.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses Jurisdictional requirements for construction sites, training of municipal staff and contractors, inspections, public awareness and response, and surveys and special investigations.

The City requires all development and redevelopment projects, including Capital Improvement Projects (CIP), to reduce pollutants and runoff to the MEP through the implementation of BMPs. The designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0* and are required as project conditions prior to the approval and issuance of local construction and grading permits. Construction projects receive a prioritization ranking of high, medium, or low based on the criteria of City form 7-A. Construction projects receive the necessary frequency of BMP inspections once building permits are assigned and construction begins. During the rainy season high priority projects are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority projects are inspected as needed. During the dry season, all construction sites receive inspections as needed. The following tables and figures below provide additional information on the implementation and assessment of the Management Program Activities for the Construction Component:

- Table 3.1 provides an overview of the construction projects as it was implemented during FY 2008-09.
- Figure 3.1 presents the implementation and assessment strategy for the Construction Component.
- Table 3.2 presents and describes targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10.
- Table 3.3 Construction permit inventory and inspection frequency

3.3 Outcomes Targeted for Staff Implementing Control Measures

3.3.1 Outcome Level 2 – Knowledge and Awareness

Education is provided to the public through face-to-face interaction with City staff in meetings, workshops, community presentations, inspections, and through several local ordinances and brochures that outlines the requirements for addressing urban runoff and water quality. These efforts by the City to educate the public on construction are discussed in the *JURMP Section 5.0.* The education effort for City staff is discussed in the *JURMP Section 10.0.*

3.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City facilitates changes in behavior and implementation of BMPs at construction sites by working with developers to ensure that all projects meet the requirements of the Regional Permit. Prior to the issuance of construction and grading permits the City requires developers to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the State Water Resources Control Board's General Construction Permit. The City also inspects projects and enforces storm water ordinances at all construction sites. The *2008 JURMP Section 5.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes. The *2008 JURMP Appendix D* defines minimum BMP requirements applicable to construction in the City. Additional information is presented below in Table 3.2 on the targeted outcomes and results for changes in behavior and BMP implementation as they were implemented in FY 2008-09.

3.3.3 Outcome Level 4 – Source Load Reductions

The primary goal of BMP implementation is to reduce the loading of pollutants and runoff to storm water discharges. During FY 2008-09 the City successfully implemented all program requirements that relate to the Construction Component of the Regional Permit. Source load reductions were achieved at construction sites by implementing erosion and sediment control, requiring minimum BMPs, and enforcing general site management requirements. The City required 41 active construction projects and 10 Capital Improvement Projects to reduce pollutants and runoff to the MEP. Compliance with required minimum BMPs were then verified through 233 site inspections.

Management Program Activities		Outcomes Targeted for Staff Implementing Control Measures		
Outcome Level 1a	***Outcome Level 1b***	***Outcome Level 2***	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Construction Projects**
1. FY 2008-09 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. Program Review and Update** ▪ Year-end program review ▪ Updated watershed-based inventory of construction sites	**1. Jurisdictional Requirements for Project Approval** **2. Construction Project Urban Runoff Approval Process** **3. Municipal Staff Training** **4. Contractor Education** **5. Construction Site Inspections** **6. Surveys and Special Investigations**	**A. Construction Responsibilities** **B. Core Concepts** **C. Implementation Responsibilities**	**A. Construction Activities** ▪ Procedural and Administrative Behaviors ▪ BMP implementation ▪ Illicit discharge control **B. Public Service Requests** ▪ Response to requests	**A. General site management requirements** **B. Erosion and sediment controls** **C. Designated minimum BMPs** **D. Additional controls for CWA Section 303(d) waters**

Figure 3.1 – FY 2008-09 Implementation and Assessment Strategy for the Construction Component

Table 3.1 – Overview of Construction Inventory by Priority Classification

Category	Number	Description
A. Type of Construction		
Construction Projects	40	
Capital Improvement Projects (CIP)	10	
Priority Development (SUSMP) Projects	1	
B. Priority Classification		
High Priority Projects	1	High priority projects are determined by City 7-A form and generally consist of new building construction projects or SUSMP projects. Most development projects in the City are categorized as low priority.
Medium Priority Projects	1	
Low Priority Projects	49	
C. Totals		
Construction Projects	50	*The City had two active SUSMP projects during the reporting period. However, one of the projects, Palm Ave Street End Improvements and Storm Drain Diverter, was along the waterfront and managed by the Port of San Diego. The only active SUSMP project was the North Island Credit Union Building and it finished completion at the beginning of the reporting period.
Priority Development (SUSMP) Projects	2*	

JURMP Sections	Description of FY 2008-09 Changes
5.0 and Appendix D	BMP requirements of the JURMP applicable to construction were modified in accordance with the requirements of the updated Permit in March 2008. No additional changes were made during this reporting period.

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2008-09	Complete	Applicable updates were included in *JURMP Section 5.0*, submitted to the RWQCB on 03-24-08.	Make an necessary updates to the JURMP
b) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms were updated during the reporting period. The City previously updated its ordinance and associated environmental review forms last reporting period.	Update program documentation for consistency with program updates
c) UPDATES TO TRAINING PROGRAM				
---	---	---	*JURMP Section 10.0* establishes updated standards for training municipal staff. The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience.	Update staff training materials for consistency with JURMP

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for the Construction Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b) DEVELOP INVENTORY FOR CONSTRUCTION PROJECTS AND SITE INSPECTIONS				
Develop an inventory of construction projects	Inventory developed	Complete	An inventory of construction projects and inspections is maintained on the City's database software HTE. Constructions site inspection records are also maintained on HTE. The Environmental Division also maintains an inventory of construction projects that require conditions from Public Works. An inventory of Capital Improvement Projects (CIP) is also maintained by the Environmental Division.	Update construction project inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Project Approval				
Require projects to implement BMPs	Construction BMPs are required as conditions for development projects	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. Designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0*.	Condition projects with appropriate BMPs prior to permit approval

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. Construction Project Urban Runoff Approval Process				
Require construction projects to have adequate project review for storm water and pollution control	All construction projects received the necessary project review before being issued City permits	Complete	Prior to the issuance of construction and grading permits the City requires developers to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the State Water Resources Control Board's General Construction Permit. Construction projects with costs greater than $50,000 are channeled through Public Works Department and required to implement public improvements before project completion. Information on the City's project review and approval process is provided in the *2008 JURMP Section 4.0* and in the previous chapter of this report.	Require construction projects to have adequate project review for storm water and pollution control
3. Municipal Staff Training				
Provide training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08	Complete	Training was conducted on 9/23/08 for the Community Development Department (Planning Division, Building Division, Code Compliance Division, and Redevelopment Division) and Public Works Department 9/17/08 on the necessary elements of this component. A survey was also provided to establish a baseline of knowledge. Three staff members from Community Development and two staff members from Public Works also attended a half day workshop on the new Model SUSMP on 6/1/09.	Provide training to all staff with identified responsibilities
4. Construction Contractor Education				
Provide education for contractors	Counter hours held and meetings conducted throughout reporting period	Complete	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Public Works Department oversaw storm water compliance for the Capital Improvement Projects and provided education to contractors during meetings and inspections.	Provide contractor education for FY 2009-10

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
5. Construction Inspections				
Inspect construction activities	The Building Inspector made 58 inspections for BMP compliance at construction sites; and the Public Works Inspector made 175 inspections for BMP compliance at CIP projects.	Complete	All construction projects get formally inspected throughout the duration of the project. During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. The Public Works Department inspects all active CIP projects sites daily, and Discretionary Projects, which are not CIP, receive inspections by the Community Development Department Building Inspector as required by the Permit.	Inspect construction sites based on priority of site
6. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2008-09, and are not routinely conducted as part of the implementation strategy for this program element.	Not targeted
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Complete	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. A survey was also provided to establish a baseline of knowledge. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate.	Survey staff to ascertain baseline levels of storm water program

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey staff and assess results to refine training program
Not targeted	Community Development and Public Works Departments provide education opportunities for contractors	---	The Community Development Department held counter hours and face-to-face meetings throughout FY 2008-09 to provide education and answer questions for contractors. The Public Works Department also held pre construction meetings and provided construction management throughout the duration of all CIP projects. Inspects of BMPs at project sites by Code Enforcement, Building Division, and Public Works Inspector also provided additional opportunities for education. Surveys were not conducted in FY 2008-09, and are not routinely conducted as part of the implementation strategy for this program element.	Not targeted

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)				
A. CONSTRUCTION ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2008 through June 30, 2009				
Review projects and prescribe necessary conditions of approval	All constructions projects (51 projects) reviewed for conditions of approval before getting notice to proceed with construction activities	Complete	The City reviews and conditions all proposed projects to ensure all necessary conditions and BMPs are met before any construction permits are issued. Once a City permit is issued then the project is in active construction phase and receives applicable inspections for BMP compliance.	Review projects prior to approval and issuance of permits
2. BMP Implementation				
July 1, 2008 through June 30, 2009				
Inspect projects and verify BMPs	The Building Division conducted 58 BMP site inspections. The Public Works Inspector provided daily oversight at all CIP construction sites and performed 175 BMP inspections.	Complete	The City inspects and verifies BMPs at all projects to ensure compliance with program. The Building Inspector, Public Works Inspector, Code Enforcement Officer, and Environmental Division share the responsibility of inspecting development projects and verifying BMP compliance.	Inspect projects and verify BMPs

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
3. Illicit Discharge Control				
July 1, 2008 through June 30, 2009				
Inspect active construction projects and respond to illicit discharges	Total of 233 construction site inspections were made during the reporting period. Responded to 10 reports of illegal discharges from construction activities	Complete	The City inspects projects and enforces storm water ordinances at all construction sites. The City responds to all illicit discharges.	Inspect projects during construction phase and respond to illicit discharges
B. PUBLIC SERVICE REQUESTS				
Respond to all construction requests and illegal discharge reports	All active construction projects (51 projects) were reviewed for Permit requirements. The City responded to 10 reports of illegal discharges from construction activities.	Complete	The City tracks public service requests for construction activities. Requests include project reviews and illegal discharge reports. The Environmental Division investigates all illicit discharges that are reported by the storm water hotline, City staff, or from the online reporting form. Most construction related discharges are from private residences and not active construction sites. (i.e. washing paint brushes, landscaping, or power washing). Only One illicit discharge was from an active construction site requiring a City permit.	Respond to all construction requests

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM CONSTRUCTION PROJECTS)				
A. GENERAL SITE MANAGEMENT REQUIREMENTS				
Not targeted	51 projects required to implement BMPs	---	The City requires construction sites to reduce discharges of pollutants to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards. Source load reductions from BMPs are not tracked.	Not targeted
B. EROSION AND SEDIMENT CONTROLS				
Not targeted	12 projects required installation of erosion and sediment control BMPs	---	The City requires installation of erosion and sediment control BMPs. Load reductions are not tracked.	Not targeted
C. DESIGNATED MINIMUM BMPS				
Not targeted	51 projects required to implement designated minimum BMPs	---	The City requires designated minimum BMPs for all construction projects. Load reductions are not tracked.	Not targeted
D. ADDITIONAL CONTROLS FOR CWA SECTION 303(D) WATERS				
Not targeted	No projects required additional controls for CWA 303(d) waters	---	The City requires additional controls to be implemented for Clean Water Act (CWA) Section 303(d) waters. Load reductions are not tracked.	Not targeted

Table 3.3 – FY 2008-09 Active Construction Inventory and Inspection Frequency

Permit or File No.	Priority (High, Medium, Low)	Period of Time (# Weeks) Site Active During Rainy Season (October - April)	Total Number of Inspections Rainy Season	Total Number of Inspections Dry Season	Total Number of Inspections	Address	General Results of Inspections / CIP Project Discription	Number of Violations / Enforcement Action Type (VW, NOV, NOA)
382	Low	27	1	1	2	132 IMPERIAL BEACH	BMP SEDIMENT CONTROL	VW
329	Low	19	1	-	1	163 ELDER	BMP SEDIMENT CONTROL	-
447	Low	27	2	-	2	177 CARNATION	BMP SEDIMENT CONTROL	-
303	Low	2	-	1	1	220 EVERGREEN	BMP SEDIMENT CONTROL	-
261	Low	10	1	-	1	235 DAHLIA	BMP SEDIMENT CONTROL	-
380	Low	25	2	-	2	319 IMPERIAL BEACH	BMP SEDIMENT CONTROL	VW
68	Low	0	-	1	1	347 EVERGREEN	BMP SEDIMENT CONTROL	-
230	Low	0	-	1	1	414 ELM	BMP SEDIMENT CONTROL	-
69	Low	27	2	1	3	419 CARNATION	BMP SEDIMENT CONTROL	-
169	Low	27	-	1	1	458 CHERRY	BMP SEDIMENT CONTROL	VW
277	Low	0	-	1	1	545 11TH	BMP SEDIMENT CONTROL	-
277	Low	1	-	1	1	548 CALLA	BMP SEDIMENT CONTROL	-
130	Low	27	-	1	1	549 DAHLIA	BMP SEDIMENT CONTROL	-
245	Low	7	1	-	1	605 FLORENCE	BMP SEDIMENT CONTROL	-
293	Low	27	-	1	1	624 12TH	BMP SEDIMENT CONTROL	-
323	Low	0	-	1	1	634 OCEAN	BMP SEDIMENT CONTROL	-
173	Low	0	-	2	2	646 ALABAMA	BMP SEDIMENT CONTROL	-
233	Low	27	-	1	1	705 3RD	BMP SEDIMENT CONTROL	-
460	Low	16	1	-	1	729 5TH	BMP SEDIMENT CONTROL	-
339	Low	5	-	1	1	742 5TH	BMP SEDIMENT CONTROL	-
394	Low	27	-	2	2	754 HICKORY	BMP SEDIMENT CONTROL	VW
346	Low	27	-	1	1	811 CORVINA	BMP SEDIMENT CONTROL	-
156	Low	27	-	2	2	815 ENCINA	BMP SEDIMENT CONTROL	-
348	Low	3	-	1	1	821 12TH	BMP SEDIMENT CONTROL	VW
371	Low	27	-	1	1	861 10TH	BMP SEDIMENT CONTROL	-
113	Low	1	-	2	2	933 EMORY	BMP SEDIMENT CONTROL	-
222	Low	0	-	2	2	970 ARRIBA AVENIDA	BMP SEDIMENT CONTROL	-
216	Low	27	1	1	2	975 IRIS	BMP SEDIMENT CONTROL	-
179	Low	22	1	-	1	995 8TH	BMP SEDIMENT CONTROL	-
101	Low	25	-	2	2	1016 12TH	BMP SEDIMENT CONTROL	-
391	Low	20	2	-	2	1121 LOUDEN	BMP SEDIMENT CONTROL	-
355	Low	8	1	-	1	1130 FLORIDA	BMP SEDIMENT CONTROL	-
339	Low	4	1	-	1	1173 GROVE	BMP SEDIMENT CONTROL	-
3	Low	0	-	1	1	1174 EMORY	BMP SEDIMENT CONTROL	-
142	Low	27	-	1	1	1231 PALM	BMP SEDIMENT CONTROL	-
443	Low	6	2	-	1	1233 CALIFORNIA	BMP MATERIAL DLVRY / STORAGE	VW
278	Low	4	-	2	2	1244 GRANGER	BMP SEDIMENT CONTROL	VW
341	Low	25	-	1	1	1277 14TH	BMP SEDIMENT CONTROL	-
228	Low	0	-	2	2	1420 10TH	BMP SEDIMENT CONTROL	-
270	Low	3	-	1	1	1610 SEACOAST	BMP SEDIMENT CONTROL	-
MF-881	High	0	-	3	3	1101 PALM	SUSMP BMP	-
Public Works Capital Improvement Projects								
CIP	Med	4	18	45	63	100-300 PALM	BMP Old Palm Ave Steet Scape Improvements	-
CIP	Low	0	-	13	13	825 Imperial Beach Blvd	BMP City Hall Council Chambers Renovations	-
CIP	Low	0	-	13	13	825 Imperial Beach Blvd	BMP City Emergency Power Upgrade	-
CIP	Low	0	-	14	14	825 Imperial Beach Blvd	BMP Fire Station Door Replacement	-
CIP	Low	0	-	12	12	Reama Park	BMP Reama Park Master Plan	-
CIP	Low	0	-	12	12	Teeple Park	BMP Teeple Park Master Plan	-
CIP	Low	0	-	12	12	Sports Park	BMP Sports Park Rec Center Master Plan	-
CIP	Low	0	-	10	10	City Streets	BMP CIP Slurry Seal on road	-
CIP	Low	0	-	13	13	Seacoast Drive	BMP South Seacoast Drive Overlay	-
CIP	Low	0	-	13	13	501 Elm	BMP Pump Station 3 Upgrade	-

Table 3.3 The Public Works Department and Community Development Department share responsibility for inspecting active construction projects for applicable BMPs. Capital Improvement Projects receive inspection from the Public Works Inspector and discretionary permit projects receive inspections form the Building Inspector. Both Public Works and Community Development Departments share responsibility for SUSMP projects. Enforcement action is taken through verbal warnings (VW), notice of violations (NOV), and notice of abatements (NOA).

4.0 MUNICIPAL COMPONENT

4.1 Introduction

The City endeavors to reduce or eliminate pollutants and runoff from municipal discharges to the MEP. This component is primarily applicable to the Department of Public Works and its efforts to prevent municipal discharges from causing or contributing to a violation of water quality standards. This section of the Annual Report discusses program implementation and changes made during FY 2008-09 to the Municipal Component as it relates to management program activities and outcomes targeted for staff implementing control measures.

4.2 Level 1 Outcomes – Management Program Activities

4.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation, training content, and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the municipal component is described in the *2008 JURMP Section 6.0*. The *JURMP Appendix E* defines minimum BMP requirements applicable to streets, roads, highways, municipal areas, and parking facilities in the City. BMPs applicable to these facilities were updated as part of the City's *2008 JURMP*, submitted on March 24, 2008. During FY 2008-09 no updates were determined necessary to the minimum BMP requirements.

During FY 2008-09 the City expanded the municipal training program to include pre and post tests as part of the effectiveness assessment. The City also updated its municipal facility and activity list, adding Serenity Gardens to the inventory. Table 4.4 provides the updated municipal facility and activity list and Figure 4.1 presents the implementation and assessment strategy for the major elements of the Municipal Component as it was implemented during FY 2008-09.

4.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses Jurisdictional requirements, municipal staff training, municipal facility inspections, public awareness and response, and surveys and special investigations.

The City makes storm water pollution prevention and response a high priority for all Public Works employees. Each Public Works vehicle contains a binder of municipal storm water BMPs and contains a map of the entire MS4 system. The Environmental Division conducts annual training for all Public Works employees and daily interactions with staff ensures that storm water pollution prevention remains a high priory throughout the City. The Public Works Department is

the eyes and ears on the streets and therefore the first line of defense for pollution prevention, response, and cleanup. The *2008 JURMP Section 6.0* provides a complete description of the management programs for the Municipal Component.

Routine maintenance and cleaning of municipal facilities keeps accumulated debris and other potential pollutants from entering the MS4. The City conducts formal inspections of all high priority municipal facilities and actives. All other municipal facilities get inspected as need. Inspection records for FY 2008-09 are provided in Table 4-4. The City also maintains a number of storm drain inlet filters that are cleaned and maintained quarterly by Downstream Services, Inc. Cleaning records are maintained on file and logged in a database on the Environmental Division server. The municipal storm drain filter inventory and maintenance record is provided in Table 4-3. During FY 2008-09 the one additional municipal storm drain inlet filter for a total of 13 now currently maintained by the City.

During FY 2008-09 the City completed work on the Palm Avenue street end improvement and low-flow storm drain diverter. The storm drain diverter project, which was funded by a Clean Beach Initiative grant, has the capacity to divert up to 250 gallons per minute of urban runoff into the sanitary sewer. The City now has two major storm drain diverters along the water front (Date Ave street end and Palm Ave street end).

The City continued operation of its storm water hotline and online citizen requests form. All public correspondence either online, phone or personal communication is tracked on the Environmental Division server.

Table 4.1 presents and overview of the municipal inventory by facility type. Table 4-2 presents and describes details on targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10. Additional documentation, analysis, and discussion are provided in Figure 4.2, and Tables 4.3 and 4.4.

4.3 Outcomes Targeted for Staff Implementing Control Measures

4.3.1 Outcome Level 2 – Knowledge and Awareness

The City conducts annual training for all municipal employees. Training for the Municipal Component is specifically targeted at the Public Works Department because City Streets, Maintenance Workers, and Sewer crews are typically the first line of defense for storm water pollution. The training program focuses on the use of Best Management Practices in daily operations, and is designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the *JURMP Section 10.0.*

4.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City implements minimum BMPs for all municipal activities as described in the *JURMP Appendix E*. Major targeted outcomes for FY 2008-09 included streets and parking lot sweeping, MS4 cleaning, sewer system preventative maintenance, integrated pest management at parks, and implementation of municipal facility BMPs. Additional information on how BMPs were implemented is presented below in Table 4.2.

4.3.3 Outcome Level 4 – Source Load Reductions

The City continues to make impressive source load reductions from municipal facilities and activities. The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City. Approximately 206 tons of trash and debris were collected through street sweeping operations. The City also collected 174 loads of large bulky items illegally dumped in City alleys through its franchise waste hauler EDCO. The annual City-wide Home Front Clean Up event also collected another 154 tons of waste debris.

The Sewer Division also did an outstanding job of cleaning and inspecting the MS4 system and is on track to clean 100 percent of the City's storm drain lines and catch basins for 2009. Approximately five miles of underground piping, 117 catch basins and inlets, and seven open drainage facilities get cleaned between the months of May through October. During this reporting period a total of 4,130 pounds of trash, sediment, and organic matter was collected out of the MS4 system. Figure 4.3 provides the amount of debris collected out of the MS4 broken down by fiscal year.

Lastly, over 30 acres of park facilities, athletic fields, beach accesses, landscapes at various facilities, and five community parks located throughout the City were maintained during FY 2008-09. The City has a dedicated Tidelands crew that picks up trash and debris and conducts landscaping duties 7 days a week on the beach and one block inland of the beach. In addition, the City contracts with Donovan Prison for a weekly crew to pick up trash and conducts landscape duties at City parks, streets, and alleys.

Table 4.2 provides a breakdown of the source load reductions for FY 2008-09 from municipal facilities and activities.

Management Program Activities		Outcomes Targeted for Staff Implementing Control Measures		
Outcome Level 1a	***Outcome Level 1b***	***Outcome Level 2***	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Municipal Facilities**
1. FY 2008-09 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. Program Review and Update** ▪ Year-end program review ▪ Updated municipal inventory	**1. Jurisdictional Requirements for Municipal Areas and Activities** **2. Municipal Staff Training** **3. Maintenance Inspections** **4. Stormwater Hot Line Operation (619-424-4095)** **5. Surveys and Special Investigations**	**A. Illicit Discharge Reporting Responsibilities** *Not targeted or assessed* **B. Core Concepts for Municipal Staff** **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Preventative Maintenance of Sanitary and Storm Sewer Systems** ▪ Improved streets, roads, highway, and parking ▪ MS4 ▪ Sanitary Sewer **B. Municipal Facilities and Maintenance Activities** ▪ BMP implementation **C. Public Service Requests** ▪ Response to requests **D. Municipal Storm Drain Filters and Urban Runoff Diversion**	**A. Debris Removal (Sweeping Activities)** **B. Debris Removal (Non-sweeping Activities)**

Figure 4.1 – FY 2008-09 Implementation and Assessment Strategy for the Municipal Component

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
A. Type of Facility			
Paved Roads	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground storm drain piping	5	---	
Catch basins/Inlets	---	117	
Open Drainage Facilities	---	7	
B. Priority Classification			
Streets, Roads, and Highways			The City also contains 13.3 miles of paves alleys and 2.5 miles of unimproved alleys that are not on the municipal inventory. The alleys are not owned by the City and are maintained by the property owners. The City conducts monthly street sweeping on the paved alleys and provides pick up of large bulky items illegally dumped in the alleys.
High (Commercial areas)	19.2	---	
Medium (Beachfront residential areas)	9.6	---	
Low (Other residential areas and paved alleys)	99.1	---	
Municipal Parking Facilities			
High (Commercial)		4	
Medium (N/A)	---	---	
Low (N/A)	---	---	
MS4 Facilities			
Underground piping	5	---	

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
Catch basins/Inlets	---	117	
Open Drainage Facilities	---	7	
Sanitary Sewer System			
Pump stations		12	
Underground piping	39.5		
C. Totals			
Streets, Roads, and Highways	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground Piping	5	---	
Catch Basins/Inlets	---	117	
Open Drainage Facilities	---	7	
Sanitary Sewer Pump Stations		12	
Underground Sewer Pipe	39.5		

JURMP Sections	Description of FY 2008-09 Changes
6.0 and Appendix E	BMP requirements of the JURMP applicable to streets, roads, highways, and municipal parking facilities were modified in accordance with the requirements of the updated Permit in March 2008. The City made updates to its municipal inventory list adding Serenity Gardens. City made updates to the municipal inventory list adding Serenity Gardens. City made updates to the municipal inspection form.

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per Permit requirements	No updates were made during FY 2008-09	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.	Not targeted
b) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
Update program documentation for consistency with program updates	Updates made to the Municipal Inspection Forms	Complete	The City updated its Municipal Inspection Forms. The City created three new municipal inspection forms: 1.General Municipal Inspection Form, 2. Municipal Parks Inspection Form, 3. Public Works Yard Inspection Form. This reporting period was the first year inspection forms were used.	Make updates to program documentation as needed
c) UPDATES TO TRAINING PROGRAM				
Update training materials for consistency with *2008 JURMP Section 10.0*	Made updates to municipal survey	Under review	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience.	Update training materials for consistency with *2008 JURMP Section 10.0*

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for the Municipal Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b) UPDATES MUNICIPAL INVENTORIES				
Update municipal inventory	Made updates to municipal facilities and activities inventory by adding Serenity Gardens to the inventory.	Complete	The City made updates to the municipal facilities and activities inventory by adding Serenity Gardens to the inventory list. Serenity Gardens was accidentally omitted from the inventory list last reporting period because of its small size.	Update municipal inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Municipal Areas and Activities				
Require municipal areas and activities to implement minimum BMPs	Requirements implemented	Complete	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed regularly and updated as necessary. In addition, each City vehicle contains a binder of Best Management Practices for Public Works activities. The binder is a reference tool for employees to properly implement BMPs for specific job tasks and a reference for responding to illegal discharges.	Implement minimum BMPs for municipal areas and activities

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. Municipal Staff Training				
Provide training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08 and during municipal inspections	Complete	Training was conducted on 9/23/08 for the Community Development Department (Planning Division, Building Division, Code Compliance Division, and Redevelopment Division) and Public Works Department 9/17/08 on the necessary elements of the storm water program. A survey was also provided to establish a baseline of knowledge. Training is also provided to Division supervisors during municipal inspections. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.	Provide municipal staff training for FY 2009-10
3. Maintenance Inspections				
Inspect road, parking facilities, storm drains, and other municipal areas and activities	Inspections done annually	Complete	All City-maintained roads, parking facilities, and storm drains are formally inspected annually. Other municipal areas and activities not identified as high priority are inspected as needed. Inspections include a review of activities and practices, review and inspection of site BMPs, and a review of the overall effectiveness of the BMPs. Inspection records are provided in Table 4.3.	Inspect municipal facilities
Identify any MS4 facility found to require inspection less than annually	Review underway	In progress	The City endeavors to inspect and clean 100% of the accessible portions of the underground storm drain system. The City recognizes that in some years this goal may not be possible. For this reason the City is currently reviewing and identifying portions of the MS4 that collect high volumes of trash and debris in order to prioritize the maintenance and cleaning of the storm drain system.	Inspect and clean MS4

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
4. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities to report illegal storm water discharges	Hotline operated throughout reporting period	In progress	A Storm Water Hotline (619-424-4095) was operated throughout FY 2008-09 to provide the public a means of reporting illegal storm water discharges or report accumulated trash and debris in City-maintained roadways. 174 reports of trash and debris and 95 illegal storm water complaints were received during the reporting period by residents and municipal staff. See Level 4 Outcomes (below).	Operate a hotline to provide the public opportunities to report illegal storm water discharges
5. Surveys and Special Projects				
Provide a survey to municipal staff	Administered a survey to municipal staff as part of annual training program	Complete	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. A survey was provided to establish a baseline of knowledge. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate.	Survey municipal staff to ascertain baseline knowledge of storm water program
Implement special projects that go beyond minimum JURMP requirements	Finished completion of Palm Ave low-flow urban runoff diverter project. Installed one new storm drain treatment control filter at Sports Park.	Projects complete	The City finished completion of the Palm Ave low-flow urban runoff diverter, which diverts up to 250 gallons per minute of urban runoff into the sanitary sewer. The City also added another storm drain inlet filter at the IB Sports Park for a total of 13 municipal storm drain filters maintained by the City. Storm drain filter inventory and maintenance records are provided in Table 4.3.	Not targeted

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
Implement special projects that go beyond minimum JURMP requirements	Completed first phase of the City Hall and Fire Department xeriscaping project	In progress	The City is xeriscaping 6,500 square feet of landscape area in front of City Hall and Fire Department. The first phase of the project in front of the Fire Station was completed during this reporting period. The second phase of the project will be completed during the beginning of next FY. This project involved public participation with two Boy Scout Eagle Projects contributing to the project.	Not targeted
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey municipal staff to assess knowledge of storm water program

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)				
A. PREVENTATIVE MAINTENANCE OF SANITARY AND STORM SEWER SYSTEMS				
1. Improved Streets, Roads, Highways, and Parking Facilities				
July 1, 2008 through June 30, 2009				
Sweep all High trash areas at least twice per month	28.7 curb-miles swept at least twice per month and 4 municipal parking facilities are swept weekly	Complete	Commercial areas (19.2 miles of curbed roads and 4 parking lots) are swept weekly. Beachfront residential areas (9.5 miles of curbed roads) are swept bi-weekly (high trash and debris).	Sweep all High trash areas at least twice per month
Sweep all Moderate trash areas at least monthly	99.1 curb-miles swept at least monthly	Complete	All other areas (99.1 curb miles) are considered moderate priority and are swept on a monthly basis.	Sweep all Moderate trash at least monthly
Sweep all Low trash areas at least once (0)	N/A	N/A		Sweep all Low trash areas at least once
Sweep improved streets, roads, and highways	127.9 curb-miles swept (2,392 total miles) swept)	Complete		Sweep at least the total minimum number of curb-miles required to meet Permit-prescribed frequencies for all improved streets

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. Municipal Separate Storm Sewer System (MS4)				
July 1, 2008 through June 30, 2009				
Clean accumulations of trash and debris greater than 33% of design capacity	117 catch basins inspected	Complete	Storm drain cleaning generally occurs between the months of May and August. In this annual report we provide analysis for the specified reporting period (July 1st – June 30th), which includes records of both the 2008 and 2009 cleaning events for this annual report. It is important to note that the City inspects all of its 117 catch basins and cleans them if necessary on an annual basis. The City also endeavors to clean 100% of the 5 miles of storm drain lines annually.	Clean accumulations of trash and debris greater than 33% of design capacity
Inspect and clean MS4 line	Approximately 5 miles of storm drain lines cleaned and inspected	Complete	City endeavors to clean 100% of the 5 miles of storm drain lines annually. During 2008 the Sewer Division cleaned 100% of the MS4. The Sewer Division is on track to do the same for 2009. The Sever Division uses its vactor truck to jet and clean accumulated debris out of the storm drain.	Clean accumulations of trash and debris greater than 33% of design capacity
Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year	Review underway	In progress	The Environmental Division is performing a review of past storm drain line cleaning records to identify areas of high trash and debris accumulation. Sections of the MS4 that are identified as low trash and debris accumulation areas may be cleaned and inspected less than annually.	Inspect MS4 facilities not listed as high priority as needed, but not less than every other year.

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
3. Sewer System Maintenance and Spill Prevention				
July 1, 2008 through June 30, 2009				
Prevent and eliminate infiltration from the sanitary sewer to the MS4	36 miles of sanitary sewer system inspected	Complete	The City has conducted a sewer capacity study and identified areas needing improvement. These will be undertaken through the Capital Improvement Projects program. A Sewer System Management Plan was also completed in accordance with Waste Discharge Requirements.	Inspect sanitary sewer system for leaks to MS4
Conduct routine maintenance on sanitary sewer system	36 miles of sanitary sewer system maintained	Complete	Most sanitary sewer pipelines are cleaned at least annually, and known problem areas are cleaned more frequently. Twelve alarmed sewage pump stations are monitored daily.	Conduct routine maintenance on and cleaning of sanitary sewer system to prevent spills and discharges to MS4
4. Management of Pesticides, Herbicides, and Fertilizers				
July 1, 2008 through June 30, 2009				
Implement BMPs to reduce the contribution of pollutants to MS4	Requirements implemented	Complete	The City limits the application of pesticides and herbicides in accordance with Integrated Pest Management Program policy.	Implement IPM BMPs
B. MUNICIPAL FACILITIES AND MAINTENANCE ACTIVITIES				
Implement minimum BMPs at municipal facilities and activities	Minimum BMPs implemented	Complete	The City enforces compliance of minimum BMPs at all municipal facilities and maintenance activities. All City vehicles contain a binder on BMPs for Public Works activities. Implementation of BMPs are verified during annual inspections and get reinforced though daily interactions.	Implement minimum BMPs

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. PUBLIC SERVICE REQUESTS				
Respond to all road service requests received	N/A	N/A	The City does not currently track public service requests for road maintenance activities.	Respond to all road service requests received
Respond to all sewer spills received and log in appropriate data bases	6 sewer spills reported	Completed	In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. All but one sewer spill during FY 08-09 were from private laterals. The exception is from a spill occurring from Imperial Beach Pier.	Respond to and report all sewer spills received
D. MUNICIPAL STORM DRAIN INSERTS AND STORM WATER DIVERSIONS				
Maintain municipal treatment control devices	Maintenance implemented for the 10th St interceptor	Complete	The City maintains a vortech storm water interceptor at the intersection of 10th St and Imperial Beach Blvd. The system was installed in December 2002 and is designed to remove sediment, floating hydrocarbons, and debris from storm water during all levels of flow. The City inspects the 10th St interceptor at least quarterly.	Maintain municipal treatment control devices
Maintain municipal storm drain filters	Maintenance implemented for 13 municipal storm drain filters	Complete	The City voluntarily installed storm drain inlet filters at 13 municipal locations. During this reporting period the City added one additional storm drain filter insert at the Imperial Beach Sports Park. Each filter is designed to capture sediment, hydrocarbons, trash, and debris. The filters are inspected and maintained quarterly by contract service. Table 4.3 provides the inventory and cleaning records for the municipal storm drain inserts.	Maintain municipal storm drain filters

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
Maintain urban runoff diverters	Palm Ave street end low-flow urban runoff diverter became operational January 5, 2009; City continued operation of the Date Ave street end diverter	Complete	The City finished completion of the Palm Ave street end low-flow urban runoff diverter on January 5, 2009. The City now operates two low-flow urban runoff diverters along the beach front. Both diverters have the capacity to divert up to 250 GPM into the sanitary sewer.	Maintain urban runoff diverters
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM THE MUNICIPALITY INCLUDING THE MS4)				
A. DEBRIS REMOVAL (SWEEPING ACTIVITIES)				
Not targeted	206 tons of trash and debris removed through sweeping of streets, roads, highways, and municipal parking facilities	---	The amounts of debris collected are highly variable from year to year, as shown in Figure 4.2. Therefore, even though the overall yield of debris from sweeping this year was a little higher, this should not be interpreted as a trend. The City will continue to monitor results over a longer period, but believes its existing resources and schedules are properly allocated.	Not targeted

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
B. REMOVAL (NON-SWEEPING ACTIVITIES)				
Not targeted	Collect trash and debris along City-maintained roads; EDCO collected 174 loads of bulky items illegally dumped in alleys	---	The City has a dedicated Tidelands Maintenance Division, funded by the Port of San Diego, whose mission is to keep the beach and one block inland from the beach free of trash, sand, and other debris. The City also maintains a contract with Donavan Correctional Facility to provide supervised labor for various needs including landscaping and trash pickup. In addition the City has a contract with EDCO to collect items illegally discarded in City alleys. Finally, the Streets and Parks Divisions play a crucial role in keeping the City free of trash. At this time it is not particle for the City to track this element of trash and debris along City-maintained roads.	Not targeted
Clean accumulations of trash and debris in the MS4 greater than 33% of design capacity	4,130 pounds of trash, debris and organic matter removed from MS4		There are approximately 117 catch basins and inlets that are inspected annually, and, if necessary, are cleaned if trash is observed. The amounts of debris collected are highly variable from year to year, as shown in Figure 4.3, and may be attributed to the estimation process used. Therefore, even though the overall yield of debris from cleaning this year was considerably reduced, this should not be interpreted as a trend. The City will continue to monitor results over a longer period, but believes its existing resources and schedules are properly allocated, and has made efforts to improve the estimation process.	Clean accumulations of trash and debris in the MS4 greater than 33% of design capacity
Divert urban low-flow runoff	192,000 gallons of urban runoff was diverted to the sanitary sewer during the first 6 months of operation of the Palm Ave diverter	In progress	The City conducted weekly post construction monitoring for bacteria and tracked diverted flow at the Palm Ave diverter. During the first 6 months 192,000 gallons of urban runoff was diverted to the sanitary sewer and prevented from flowing to the Pacific. Weekly bacterial analysis also revealed elevated levels of bacteria in the diverted flows. Using AB411 monitoring action levels, 85% of the samples were in exceedance of enterococcus and 100% of the samples were in exceedance of total coliform bacteria.	Continue operation of the Palm Ave and Date Ave storm drain diverters

Figure 4.2 – Street Sweeping Totals

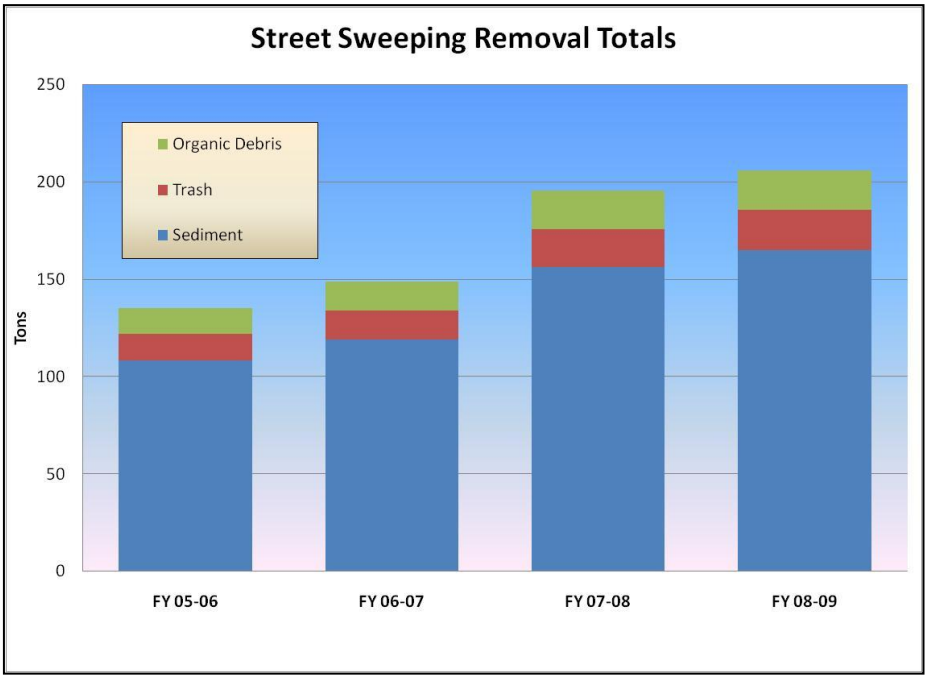

Figure 4.3 – MS4 Cleaning Totals

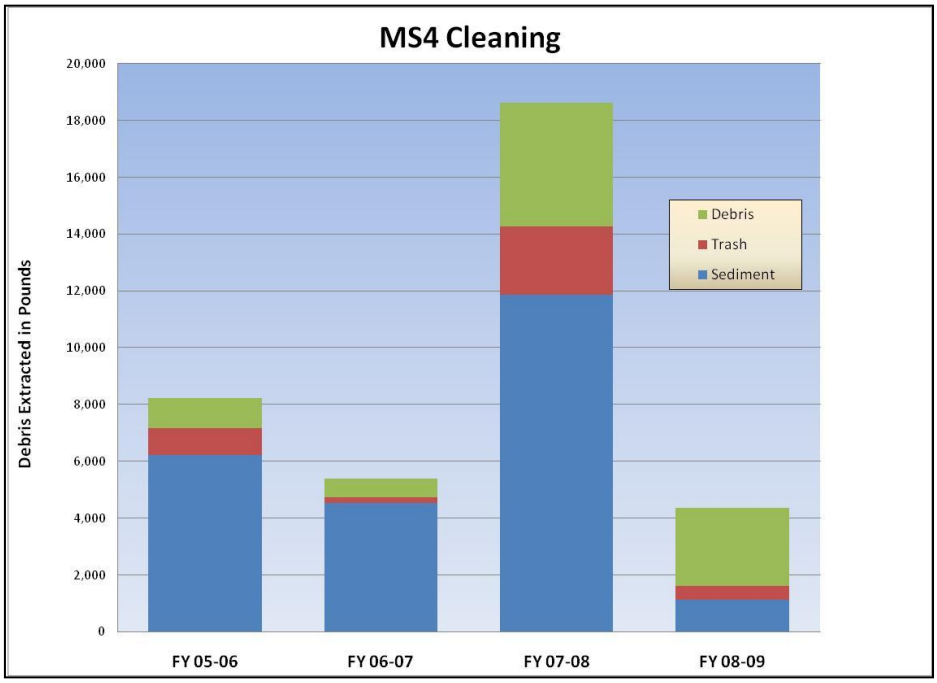

Figure 4.3- The MS4 cleaning totals presented above provide totals by fiscal year. It is important to note that the City endeavors to clean 100% of the MS4 between the months of May-October; therefore, this figure is not a true represetation of the amount removed during an annual cleaning cycle. FY 07-08 also inclues a channel cleaning event, which explains the unusually high totals.

Table 4-3 – Municipal Storm Drain Filter Inventory and Maintenance Records

ID	Filter Type	Address / Location	Watershed	Date of Installation	Date of Service	Service Conducted			Weight of Debris	Materials Collected (lbs.)			Volume Used
						Inspected	Cleaned	Boom(s) Replaced	Removed (lbs.)	Sed	Trash	Org	%
SDF1	Grate Inlet Skimmer Box 18" X 18" Bio-sorb oil absorbing polymers for hydrocarbon removal	495 Tenth St. Public Works Yard (Back of yard)	910.20	13-Oct-03	24-Sep-08	X	X	X	2	X	-	X	5%
					8-Dec-08	X	X	X	5	X	-	X	15%
					16-Mar-09	X	X	X	20	X	-	X	20%
					9-Jun-09	X	X	-	2	X	-	X	10%
SDF2	Grate Inlet Skimmer Box - Round 24" X 24" Bio-sorb oil absorbing polymers for hydrocarbon removal	495 Tenth St. Public Works Yard (Front Parking Area)	910.20	13-Oct-03	24-Sep-08	X	X	-	0.5	X	-	X	3%
					8-Dec-08	X	X	-	2	X	-	X	5%
					16-Mar-09	X	X	X	10	X	-	X	15%
					9-Jun-09	X	X	X	4	X	-	X	10%
SDF3	Grate Inlet Skimmer Box 24" X 36" Bio-sorb oil absorbing polymers for hydrocarbon removal	825 Imperial Beach Blvd. City Hall	911.11	13-Oct-03	24-Sep-08	X	na	na	2	X	-	X	29%
					8-Dec-08	X	na	na	25	X	-	X	25%
					16-Mar-09	X	X	X	40	X	-	X	20%
					9-Jun-09	X	X	-	6	X	-	X	10%
SDF4	Grate Inlet Skimmer Box 12" X 12" Bio-sorb oil absorbing polymers for hydrocarbon removal	865 Imperial Beach Blvd. Fire Station	911.11	13-Oct-03	24-Sep-08	X	X	X	2	X	-	-	15%
					8-Dec-08	X	X	-	0	-	-	-	0%
					16-Mar-09	X	X	X	0.2	X	X	X	1%
					9-Jun-09	X	X	-	0.4	X	X	X	2%
SDF5	Grate Inlet Skimmer Box 24" X 30" Bio-sorb oil absorbing polymers for hydrocarbon removal	8th St. / Marina Vista Marina Vista Center	911.11	13-Jan-03	24-Sep-08	X	X	X	9	-	-	X	5%
					8-Dec-08	X	X	X	25	-	-	X	50%
					16-Mar-09	X	X	X	4	X	-	X	10%
					8-Jun-09	X	X		5	X	-	X	30%

ID	Filter Type	Address / Location	Watershed	Date of Installation	Date of Service	Service Conducted			Weight of Debris	Materials Collected (lbs.)			Volume Used
						Inspected	Cleaned	Boom(s) Replaced	Removed (lbs.)	Sed	Trash	Org	%
SDF6	Grate Inlet Skimmer Box 24" X 36" Bio-sorb oil absorbing polymers for hydrocarbon removal	Seacoast Dr. / Palm Ave. City Parking Lot	910.10	13-Jan-03	3-Jul-08	X	na	na	0	na	na	na	0%
					24-Sep-08	X	na	na	0	na	na	na	0%
					8-Dec-08	X	na	na	0	na	na	na	0%
					16-Mar-09	X	na	na	0	na	na	na	0%
					8-Jun-09	X	X	X	30	X	X	X	25%
SDF7	Pipe Skimmer 24" X 24" Bio-sorb oil absorbing polymers for hydrocarbon removal	Hemlock Ave. / 15th St. City Easement	911.11	12-Jan-05	3-Jul-08	X	na	na	0	na	na	na	0%
					24-Sep-08	X	X		0.8	X	X	-	1%
					8-Dec-08	X	-	-	0	-	-	-	0%
					16-Mar-09	X	X	-	0.125	X	X	X	0%
					9-Jun-09	X	-	-	0.1	X	X	X	0%
SDF8	KriStar, Flo Gard Plus Catch Basin Insert 18" X 36" Hydrocarbon absorption boom	839 10 St. City Alley East of 10 St. between Elm and Donax	910.20	3-Nov-05	3-Jul-08	X	X	-	1	X		X	5%
					24-Sep-08	X	X	X	0.5	X	X	X	3%
					8-Dec-08	X	X	-	0.5	X		X	3%
					16-Mar-09	X	X	X	6	X	X	X	10%
					9-Jun-09	X	X	-	2	X	X	X	10%
SDF9	2 Grate Inlet Skimmer Boxes 24" X 36" Hydrocarbon absorption boom	Alley abutting 8th St City Alley 100 yd South of Palm	910.20	22-Feb-07	3-Jul-08	X	X	-	0.5	X	-	-	0%
					24-Sep-08	X	X	X	1	X	X	X	6%
					8-Dec-09	X	X	-	5	X	-	X	3%
					16-Mar-09	X	X	X	12	X	X	X	15%
					8-Jun-09	X	X	-	5	X	X	X	10%

ID	Filter Type	Address / Location	Watershed	Date of Installation	Date of Service	Service Conducted			Weight of Debris	Materials Collected (lbs.)			Volume Used
						Inspected	Cleaned	Boom(s) Replaced	Removed (lbs.)	Sed	Trash	Org	%
SDF10	Grate Inlet Skimmer Box 32" X 40" Hydrocarbon absorption boom	Alley b/w 8th St. & Delaware St just South of Palm Commercial Ctr.	910.20	5-Feb-07	3-Jul-08	X	X	-	8	X	-	X	5%
					24-Sep-08	X	X	X	0.25	X	-	X	1%
					8-Dec-08	X	X	-	8	X	-	X	5%
					16-Mar-09	X	X	X	45	X	-	X	15%
					8-Jun-09	X	X	-	5	X	-	X	5%
SDF11	Grate-Inlet Box 24" X 36" Hydrocarbon absorption boom	Curb inlet at SW Corner 9th St. and Palm Ave	910.20	22-Feb-07	3-Jul-08	X	X	-	2	X	X	X	16%
					24-Sep-08	X	X	X	2	X	X	X	90%
					8-Dec-08	X	X	-	1	X	X	X	25%
					16-Mar-09	X	X	X	3	X	X	X	80%
					8-Jun-09	X	X	-	5	X	X	X	90%
SDF12	KriStar, Flo Gard Plus Catch Basin Insert	740-798 Florida Street City Alley behind appartment complex	910.20	17-May-07	3-Jul-08	X	X	-	2	X	X	X	10%
					24-Sep-08	X	X	X	3	X	X	X	15%
					8-Dec-08	X	X	-	35	X	X	X	25%
					16-Mar-09	X	X	X	60	X	X	X	40%
					8-Jun-09	X	X	-	5	X	X	X	15%
SDF13	Round Hyrdo Flow Guard Plus and hydrocarbon booms 24" Diameter Grate and 22" Diamerter Inlet	4th Street South end of parking lot at Sports Park	911.11	29-Jun-09	29-Jun-09	X	-	X	-	-	-	-	-

Table 4.4 – Municipal Facility and Activity Inventory and Inspection Record

ID	Name	Inspection Date	Address	Type1	Type2	Type3	Watershed	Receiving Water	303(d) Tributary Status	ESA Status	Inspection Priority
M-1	Public Works Yard	5/14/09	495 10th Street	Office Building	Corporate Yard	Parking Lot	910.20	Otay River	No	Yes	High
M-2	Dempsey Holder Safety Center	Tidelands and Lifeguards Daily, Director yearly	950 Ocean Lane	Office Building	Corporate Yard		911.11	Pacific Ocean	Yes	Yes	High
M-3	Fire Station	5/14/2009 Env	865 Imperial Beach Boulevard	Office Building	Fire Station	Parking Lot	911.11	Tijuana Estuary	Yes	No	High
M-4	City Hall	5/14/2009 Env	825 Imperial Beach Boulevard	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	High
M-5	Marina Vista Center	5/20/2009 Env 3/3/2009 Dir	1075 8th Street	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	Low
M-6	I.B. Boys & Girls Club	5/20/2009 Env	847 Encina Avenue	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	Med
M-7	Veteran's Park	5/20/2009 Env	9th Street / Imperial Beach Boulevard	Park	Parking Lot		911.11	Tijuana Estuary	Yes	No	High
M-8	Reama Park	5/20/2009 Env	Elder Avenue / Elkwood Avenue	Park	Parking Lot		911.11	Pacific Ocean	Yes	No	Med
M-9	Sports Park & Recreation Center	6/4/2009 Env 3/3/2009 Dir	425 Imperial Beach Avenue	Park	Office Building	Parking Lot	911.11	Tijuana Estuary	Yes	No	High
M-10	Teeple Park	5/20/2009 Env	Calla Avenue / Florida Street	Park	Parking Lot		910.20	Otay River	No	No	Med
M-11	Triangle Park	5/20/2009 Env	7th Street / Palm Avenue	Park			910.20	Otay River	No	No	Med
M-12	Dunes Park	5/20/2009 Env	700 Seacoast Drive	Park	Parking Lot		910.10	Pacific Ocean	Yes	Yes	High
M-13	Pier Plaza	Tidelands Daily	Evergreen Street / Seacoast Drive	Park			911.11	Pacific Ocean	Yes	Yes	High
M-14	Imperial Beach Pier	Tidelands Daily	Evergreen Street / Seacoast Drive	Miscellaneous			N/A	Pacific Ocean	Yes	Yes	High
M-15	Beachfront	Tidelands and Lifeguards Daily	Mexican Border to YMCA Camp Surf	Miscellaneous			N/A	Pacific Ocean	Yes	Yes	Med

ID	Name	Inspection Date	Address	Type1	Type2	Type3	Watershed	Receiving Water	303(d) Tributary Status	ESA Status	Inspection Priority
M-16	Seacoast & Palm Parking Lot	6/10/2009 Env Director also inspects yearly	Seacoast Drive & Palm Avenue	Parking Lot			910.10	Pacific Ocean	Yes	Yes	High
M-17	Elkwood Parking Lot	6/10/2009 Env Director also inspects yearly	Seacoast Drive & Elkwood Avenue	Parking Lot			911.11	Pacific Ocean	Yes	Yes	High
M-18	Underground MS4	Sewer and Enviro Div inspect and clean	Citywide	MS4			All	All	Yes	Yes	High
M-19	Pump Station #11 (Storm Drain)	Sewer Daily and Weekly Env Mang	Palm Avenue street end	MS4			910.10	Pacific Ocean	Yes	Yes	High
M-20	Underground Sewer	Sewer vactor once per year	Citywide	Sewer			All	All	Yes	Yes	High
M-21	Pump Station #1A (Underground)	Sewer Weekly Director (June)	862 Seacoast Drive	Sewer			910.10	Pacific Ocean	Yes	Yes	High
M-22	Pump Station #1B (Underground)	Sewer Weekly Director (March)	1098 Seacoast Drive	Sewer			911.11	Pacific Ocean	Yes	Yes	High
M-23	Pump Station #2 (Above ground)	Sewer Weekly Director (July)	1306 South Seacoast Drive	Sewer			911.11	Tijuana Estuary	Yes	Yes	High
M-24	Pump Station #3 (Underground)	Sewer Weekly Director (April)	501 Elm Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-25	Pump Station #4 (Underground)	Sewer Weekly Director (Dec)	755 Delaware Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-26	Pump Station #5 (Underground)	Sewer Weekly Director (May)	133 Dahlia Avenue	Sewer			910.10	Pacific Ocean	Yes	No	High
M-27	Pump Station #6 (Underground)	Sewer Weekly Director (Nov)	498 Rainbow Street	Sewer			910.10	San Diego Bay	Yes	No	High
M-28	Pump Station #7 (Underground)	Sewer Weekly Director (Oct)	504 Oneonta Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High

ID	Name	Inspection Date	Address	Type1	Type2	Type3	Watershed	Receiving Water	303(d) Tributary Status	ESA Status	Inspection Priority
M-29	Pump Station #8 (Underground)	Sewer Weekly Director (Jan)	895 Imperial Beach Boulevard	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-30	Pump Station #9 (Underground)	Sewer Weekly Director (August)	1025 9th Street	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-31	Pump Station #10 (Above ground)	Sewer Weekly Director (Feb)	814 Cypress Avenue	Sewer			910.20	Otay River	No	No	High
M-32	Streets	Citywide inspections monthly Director (Annually)	Citywide	Streets			All	All	Yes	Yes	High
M-33	Alleys	Citywide inspections monthly	Citywide	Streets			All	All	Yes	Yes	High
M-34	Traffic Islands	Inspected by Streets and Parks	Citywide	Streets			All	All	Yes	No	Med
M-35	Special Event Venues	Env and Tidelands for each event	Citywide	Miscellaneous			All	All	Yes	Yes	High
M-36	Graffiti Removal	Annual Training	Citywide	Miscellaneous			All	All	Yes	Yes	High
M-37	Serenity Garden	6/30/2009 Env	Silver Strand Blvd and Citrus Ave	Park			910.10	Otay River	No	No	Med

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from industrial and commercial sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations at businesses within the City and reduce the discharge of pollutants to the MS4 to the maximum extent practicable (MEP). The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. This section of the Annual Report discusses program implementation and changes made during FY 2008-09 to the Industrial and Commercial Component as it relates to management program activities and outcomes targeted for staff implementing control measures.

5.2 Level 1 Outcomes – Management Program Activities

5.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation, training content, and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Industrial and Commercial Component is described in the *2008 JURMP Section 7.0*. During the reporting period the City made routine updates to the Commercial and Industrial business inventory. The inventory is maintained on the Environmental Division Server and identifies all industrial and commercial facilities that could contribute pollutant loads to the MS4. The City currently does not have any industrial facilities on that inventory. As of the most recent update in February 2009, the City had a total of 170 commercial and zero industrial businesses on the inventory. Records are also maintained for each specific business on inspections, corrective actions, and illegal discharges.

The City is also currently in the process of updating the stationary business inventory to match the San Diego Copermittees Standardized Regional Industrial and Commercial Inventory template. The City is collaborating with the San Diego Copermittees in the development of an online Regional Mobile Business database. Both the Standardized Regional Commercial and Industrial Inventory template and online Regional Mobile Business database will be in operation for FY 2009-10.

An overview of the City's industrial and commercial inventory and facility classification is provided in Table 5.1.

During FY 2008-09 additional updates were made to the commercial business inspection program and to the inspection education materials. The City updated its commercial inspection form and started inspecting food service businesses for fats, oils, and grease (FOG) compliance. Updates were also made to the "Best Management Practices for your Business" brochure, which is distributed during every commercial inspection.

Figure 5.1 presents the implementation and assessment strategy for the major elements of the Commercial and Industrial Component as it was implemented during FY 2008-09. Figure 5.2 provides the updated "Best Management Practices for your Business" brochure and Figure 5.3 provides the updated Commercial Inspection Form.

5.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses Jurisdictional requirements, municipal training, commercial site inspections, public awareness and response, and surveys and special investigations.

The Environmental Division performs inspections at all high priority commercial businesses in the City. The City also inspects non-high priority business and mobile businesses during the year as necessary. Commercial inspection records conducted during this reporting period is provided in Table 5.3. Inspections are conducted and documented as outlined in the *2008 JURMP Section 7.0*. Annual training for City staff also addresses BMP requirements for commercial businesses. City staff is encouraged to report to the Environmental Division any illicit discharges or activities observed from businesses. The combination of inspections and observant City staff has contributed to the high success of the commercial inspection program.

In addition to City staff reporting illegal discharges, the Environmental Division also responds to calls to the storm water hotline and from online complaints. However, the vast majority of storm water violation reports are made from City staff. The low number of commercial businesses and relatively contained commercial zoning allows City staff to be the predominant eyes on the street for identifying storm water violations.

Table 5.2 presents and describes targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10.

5.3 Outcomes Targeted for Staff Implementing Control Measures

5.3.1 Outcome Level 2 – Knowledge and Awareness

The City conducts annual training for all municipal employees. The training program for the Industrial and Commercial Component is specifically targeted at the Public Works Department because the Streets, Maintenance, and Sewer Crews are typically the first line of defense for storm water pollution. A training program has been implemented within the City to inform all

employees of the components and goals of the *2008 JURMP*. Training focuses on the use of Best Management Practices in daily operations, and is designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to reinforce the importance of pollution prevention and enhance the program. The education effort relating to the Commercial and Industrial Component is discussed in the *2008 JURMP Section 10.0.*

5.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City facilitates changes in behavior and implementation of BMPs at commercial businesses by providing continuous education efforts through face-to-face interactions, routine inspections, dissemination of brochures, mailing of post inspection letters, and responding to illegal storm water discharges. The *2008 JURMP Appendix F* defines minimum BMP requirements applicable to industrial and commercial projects in the City. The *2008 JURMP Section 7.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes for commercial, industrial, and mobile businesses. Addition information is presented below in Table 5.2 on the targeted outcomes and results for changes in behavior and BMP implementation as they were implemented in FY 2008-09.

5.3.3 Outcome Level 4 – Source Load Reductions

The two step approach of education on storm water pollution and enforcement of BMPs have unquestionably resulted in the source load reductions from commercial businesses. Although the City does not currently track source load reductions from commercial sites, the increased level of knowledge on storm water BMPs and cooperation among the local business community have successfully prevented the release of pollutants from commercial businesses. Table 5.2 provides a breakdown of program implementation and targeted outcomes and results for FY 2008-09.

Management Program Activities		Outcomes Targeted for Staff Implementing Control Measures		
Outcome Level 1a	***Outcome Level 1b***	***Outcome Level 2***	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Industrial and Commercial Sites**
1. FY 2008-09 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. Program Review and Update** ▪ Year-end program review ▪ Updated inventory	**1. Jurisdictional Requirements for Industrial and Commercial Sites** **2. Municipal Staff Training** **3. Commercial Business Inspections** **4. Stormwater Hot Line Operation (619-424-4095)** **5. Surveys and Special Investigations**	**A. Industrial and Commercial Site Responsibilities** *Not targeted or assessed* **B. Core Concepts** **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Industrial and Commercial Activities** ▪ Procedural and Administrative Behaviors ▪ BMP implementation ▪ Illicit discharge control **B. Public Service Requests** ▪ Respond to requests	**A. General Site Management Requirements** **B. BMP Maintenance** *Not targeted or assessed* **C. BMP Effectiveness** *Not targeted or assessed*

Figure 5.1 – FY 2008-09 Implementation and Assessment Strategy for the Industrial and Commercial Component

Table 5.1 – Overview of Industrial and Commercial Component by Facility Type and Priority Classification

Category	Number	Description
A. Type of Facility		
Industrial	0	Industrial activity is extremely limited. Only one business in operation that can reasonably be classified as "industrial" is a surfboard manufacturing company that performs all of its operations indoors, and is very similar to a commercial facility. The term "commercial" is therefore used for the activities within the City. As such, there is no need in this jurisdiction to identify non-filers under the General Industrial Permit.
Commercial	170	
B. Priority Classification Totals		
High	38	High Priority include all businesses conducting outdoor or high threat to water quality activities, businesses known to have one or more treatment control BMP, and any business that had a previous storm water violation in the last reporting cycle. Medium Priority includes similar business but do not have high threat to water quality activities or conduct work outdoors. Low Priority includes all other businesses listed on the Commercial inventory.
Medium	102	
Low	---	
Mobile	30	Mobile business database is tracked and maintained on the new copermittee online Regional Mobile Business Inventory.
C. Inspection Totals		
High	38	The Environmental Division conducts all commercial inspections. Starting this reporting period 100% of high priority commercial businesses receive an annual inspection. The City endeavors to inspect as many businesses as possible during the reporting period.
Medium	12	
Mobile	---	Mobile businesses do not currently receive annual inspections. The Environmental Division informally inspects mobile businesses while responding to illegal discharge reports and public service requests.

JURMP Sections	Description of FY 2008-09 Changes
7.0 and Appendix F	BMP requirements of the JURMP applicable to industrial and commercial facilities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2008-09	Complete	Applicable updates were included in *JURMP Section 7.0*, submitted to the RWQCB on 03-24-08.	Not targeted
b) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
Update program documentation for consistency with program updates	Updates made to Commercial Inspection Form and Mobile Business database. Fats, oils, and grease (FOG) program included with restaurant inspections.	Complete	The City made updates to its commercial inspection form. In addition, the City participated with the Copermittees Industrial and Commercial Workgroup in developing an online Mobile Business database and worked towards developing a standardized commercial business inventory list and standardized inspection form. The City also started incorporating fats, oils, and grease (FOG) management as part of the commercial business inspection for restaurants.	Make updates to program documentation as needed
c) UPDATES TO TRAINING PROGRAM				
Update training materials for consistency with *2008 JURMP Section 10.0*	Made updates to municipal survey	Under review	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience.	Update training materials for consistency with *2008 JURMP Section 10.0*

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for the Industrial and Commercial Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b) UPDATED SOURCE INVENTORY				
Update commercial inventory	Routine updates made to the commercial inventory. Last updates were made February 2009.	Complete	Routine updates are made to the commercial and industrial business inventory. A regional online mobile business database is also maintained as needed.	Update commercial inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Industrial and Commercial Sites				
Require commercial and industrial businesses to implement BMPs	Requirements implemented	Complete	The City requires all commercial and industrial sites/sources to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City's Urban Runoff Management and Discharge Control Ordinance (Chapters: 8.30.070, 8.30.090, and 8.30.100) mandate the implementation of designated BMPs and control measures.	Require commercial and industrial sites to implement appropriate BMPs

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. Municipal Staff Training				
Provide training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08	Complete	Training was conducted on 9/23/08 for the Community Development Department (Planning Division, Building Division, Code Compliance Division, and Redevelopment Division) and Public Works Department 9/17/08 on the necessary elements of the storm water program. A survey was also provided to establish a baseline of knowledge. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.	Provide municipal staff training for FY 2009-10
3. Commercial Business Inspections				
Inspect commercial sites and activities	Conducted inspections at 100% of high priority commercial businesses, at non-high priority businesses, and as needed with mobile businesses	Complete	Commercial businesses are inspected as per the Municipal Permit. The City does not contract out inspections; therefore, no third party inspections were conducted. Efforts to address mobile businesses are underway through the Copermittee workgroup.	Inspect commercial facilities, including mobile sources as necessary
4. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities to report illegal storm water discharges	Hotline operated throughout reporting period	Complete	A Storm Water Hotline (619-424-4095) was operated throughout FY 2008-09 to provide the public a means of reporting illegal storm water discharges from commercial businesses.	Operate a hotline to provide the public opportunities to report illegal storm water discharges

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
5. Surveys and Special Investigations				
Provide a survey to municipal staff	Administered a survey to municipal staff as part of annual training program	Complete	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. A survey was provided to establish a baseline of knowledge. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate.	Survey municipal staff to ascertain baseline knowledge of storm water program
Enhance commercial inspection program	Incorporate fats, oils, and grease (FOG) management into commercial inspection program	Under review	The inspection of FOG management practices at eating and drinking establishments is a new program being implemented into the commercial inspection program to target the prevention of sanitary sewer overflows. The Environmental Division is working closely with the Sewer Division to identify FOG hotspots. The City continues to refine outreach and education efforts with businesses and local community.	Include a FOG management practices as part of the commercial inspection of eating and drinking establishments

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND BUSINESSES)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey municipal staff to assess knowledge of storm water program
Not targeted or assessed	---	---	No attempts have been made to establish a baseline level of knowledge and awareness of core storm water program concepts at local businesses. Anecdotal evidence such as high level of compliance noted during commercial inspections and continual interaction with local business owners suggest a high level of knowledge of basic storm water concepts.	Survey local businesses to assess baseline knowledge of storm water program

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND BUSINESSES)				
A. INDUSTRIAL AND COMMERCIAL ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2008 through June 30, 2009				
Inspect businesses for compliance	50 sites inspected (38 High Priority and 12 Medium Priority)	Complete	The City inspections 100% of high priority commercial businesses, non-high priority businesses, and mobile businesses as needed. Inspections consist of observing business operations, reviewing minimum BMPs, and enforcing pollution prevention practices.	Inspect businesses
Notify business owners/operators of BMP requirements, including mobile businesses	71 sites notified (54 Fixed Commercial and 17 Mobile Businesses)	Complete	The City notifies business owners and operators, both fixed and mobile, of BMP requirements through a combination of methods including site inspections, follow-up inspection reports, direct mailings, inclusion of BMP information with business license and special event vendor packets, advertisements in newspapers, online resources such as the Project Clean Water website and City's website, and targeted workshops focused on specific business sectors. The City only accounts for direct site visits in the implementation results when notifying business owners of BMP requirements. More businesses receive BMP information than are tracked on the City's database.	Notify business owners/operators of BMP requirements, including mobile businesses
Enforce compliance and track violations	71 Verbal contacts 52 Informative letters sent 4 Notice of Violations	Complete	The City enforces compliance at all businesses, including mobile sources, using an escalating series of enforcement actions. Verbal or written warnings are used when violation in question is minor. Notices of Violations (NOVs) may be issued for any observed violation. And escalating administrative penalties, fines, and civil penalties may be enforced for non compliance. Violations are tracked and maintained on the Environmental server database.	Enforce compliance and track violations

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. BMP Implementation				
July 1, 2008 through June 30, 2009				
Not targeted or assessed	---	---	Starting in FY 2009-10, the City will begin incorporating evaluation of business owner and operator knowledge of applicable BMPs, and will determine whether knowledge is being retained over time. Anticipated content includes BMP knowledge and implementation, core concepts of good housekeeping practices, and specific responsibilities including employee training.	Establish a baseline of business operator knowledge regarding applicable BMP implementation
3. Illicit Discharge Control				
July 1, 2008 through June 30, 2009				
Investigate complaints	21 Complaints investigated	Complete	The Environmental Division responds to complaints received from Storm Water Hotline, online complaint form, and City staff. All investigations are documented and	Investigate illicit discharges from businesses
B. PUBLIC SERVICE REQUESTS				
Not targeted or assessed	21 Complaints received and investigated	---	The City does not currently track public service requests for industrial and commercial activities. The City does track reports of illegal discharges from the Storm Water Hotline, online complaint form, and City staff. During this reporting period 21 reports were received and investigated.	Not targeted

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM INDUSTRIAL AND COMMERCIAL COMPONENT)				
A. GENERAL SITE MANAGEMENT REQUIREMENTS				
Not targeted or assessed	---	---	Commercial and industrial facilities are required to implement minimum BMPs which are verified during the commercial inspection process. Source load reductions from minimum BMPs are not tracked.	Not targeted
B. BMP MAINTENANCE				
Not targeted	12 Treatment control BMPs installed at commercial businesses	---	The City does not currently track BMP maintenance for industrial and commercial activities. Maintenance and operation compliance for treatment control BMPs for commercial and industrial locations are managed under the Development Planning Component of this Annual Report.	Not targeted

Figure 5.2 – Best Management Practices for your Business Brochures

Storm Water Compliance Inspections

The City of Imperial Beach has developed an inventory of all existing commercial businesses and has prioritized them according to the type of business, proximity to a receiving water and potential threat to water quality.

Based on this prioritization, the City will be conducting storm water compliance inspections of commercial and industrial facilities within the City. Mobile businesses operating within the City may also be inspected.

These inspections will include a meeting with the business owner or operator, a walk through of the facility, a review and evaluation of current best management practices, and recommendations for additional measures that may be required to comply with the City's storm water permit and ordinance.

Report all spills immediately to the Storm Water Hotline: (619) 424-4095 or the Sheriff Dispatch at (619) 585-7232

REMEMBER ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program
825 Imperial Beach Boulevard
Imperial Beach, CA 91932

Storm Water Hotline: (619) 424-4095

IMPERIAL BEACH
classic southern California

Printed on Recycled Paper

Best Management Practices for your Business

ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach Storm Water Protection Program

Storm Water Hotline: (619) 424-4095

Did you know that urban storm water is the biggest contributor to coastal water pollution?

Whether your business is 2 blocks or 2 miles from the coast, you can unknowingly contribute to storm water pollution through improper housekeeping and maintenance practices.

One of the most common types of pollution from businesses is contaminated water runoff, usually from cleaning and maintenance activities. Simple best management practices (BMPs) can prevent storm water pollution, and prevention is good business. It means clean water, clean beaches and shows your customers you care about the community.

What is storm water pollution?

Storm water pollution is urban runoff water that has picked up pollutants as it flows through the storm drain system–a network of channels, gutters and pipes that collect runoff from city streets, neighborhoods, construction sites, parking lots, etc. –and empties directly into receiving waters.

In the City of Imperial Beach, these receiving waters are the Pacific Ocean, Tijuana Estuary, Tijuana River, Otay River and San Diego Bay.

What can your business do to help?

The following are steps you can take in and around your business to prevent water pollutants from entering the storm drain.

Good Housekeeping

- Use brooms or mops to clean dumpsters, loading docks, pavements, and sidewalks, instead of using a hose or pressure washing.
- Never disposed of any wash water down the storm drain, streets, sidewalks, parking lots or driveways. Use the sanitary sewer.
- Use non-toxic products for cleaning and gardening maintenance.
- Make sure landscape irrigation is properly set to prevent over irrigation. Landscape should be watered in the early morning or evening and for no longer than 10 minutes.

Materials Storage and Handling

- When possible store materials indoors or under cover areas not exposed to rain and water.
- Store liquids, oil, hazardous waste, and other chemicals in a designated area with secondary containment.
- Keep liquid waste segregated. Many fluids can be recycled through hazardous waste disposal companies, as long as they are not mixed.

Spill Response

- Use absorbents such as cat litter to clean up small spills and disposed properly.
- Keep rags and absorbents readily accessible.
- Keep a spill response plan current and ensure that employees are trained properly.

Waste Management

- Keep property free of trash and debris. Keep all trash inside dumpsters or containers until it can be hauled away.
- Dumpster lids should always be kept closed to prevent rainwater from entering.
- Never place hazardous waste in dumpster or trash bin.
- Recycle cans, bottles, paper, cardboards, and newspaper.
- Recycle cooking oil, motor oil and filters, anti-freeze, batteries, solvents, lubricants, tires, etc. These items are not trash, and are illegal to dump. Contact a hazardous waste hauler for proper disposal.

Employee Training

- Conduct regular training with all employees. Train employees on good housekeeping practices and the importance of pollution prevention.
- Inform employees of materials that can be recycled and those that have special disposal requirement. Identify and label containers.
- Post good housekeeping tips and best management practices on visible places such as the kitchen, or employee bulletin boards.
- Inform subcontractors, property managers, gardeners, and maintenance or cleaning crews about the storm water requirements and pollution prevention measures.

Figure 5.3 – Commercial Business Inspection Form

CITY OF IMPERIAL BEACH
JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM
COMMERCIAL INSPECTION REPORT

Name of Facility: **Address**: **Phone Number**:

Contact/Position: **Business Type/Activity**: **Date**:

❑ Initial Inspection ☑ Routine Inspection ❑ Complaint Inspection

BMP IMPLEMENTATION			
Activity	**Observation**	**Corrective Action Required**	**Remarks**
Housekeeping			
Waste Management			
Materials Storage			
Spill Prevention and Response			

1 of 2

CITY OF IMPERIAL BEACH
JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM
COMMERCIAL INSPECTION REPORT

CORRECTIVE ACTIONS IMPLEMENTED
PHOTOGRAPHS (if applicable)

2 of 2

Table 5.3 – Commercial Business Inspections FY 2008-09

BUSINESS NAME	SITE ADDRESS	CLASSIFICATION	SIC Code	METALS	ORGANICS	OIL & GREASE	SEDIMENT	PESTICIDES	NUTRIENTS	GROSS POL	BACTERIA	TRASH	HU AREA	PRIORITY	INSPECTIONS FY 08-09
HAWKINS AUTO BODY	519 FLORIDA ST	AUTO BODY & PAINT	7539	x	x	x	x			x		x	910.20	High	3/10/09
GENES' AUTOMOTIVE	1085 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	3/10/09
TITO AUTO SERVICE	1335 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	3/10/09
MASON'S ALIGNMENT-BRAKE-MUFFLE	975 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	3/10/09
PRECISION FOREIGN	1240 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	3/10/09
SOPHISTICATED AUTO	987 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	3/10/09
TUNES LUBES ETC.	741 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	10/27/08
WALLY'S IGA	836 PALM AVE	FOOD MARKET	5411	x	x	x	x			x	x	x	910.20	High	10/29/08
DEPENDABLE CARBURETOR EXCHANGE	660 EMORY ST	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	4/1/09
ALIBERTO'S MEXICAN FOOD	1183 13TH ST	EATING / DRINKING	5812		x	x				x	x	x	910.20	High	4/1/09
BEACH CLUB GRILLE	710 SEACOAST DR, SUITE F	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/1/09
El CILANTRO	764 13TH ST	EATING / DRINKING	5812		x	x				x	x	x	910.20	High	4/2/09
EL TAPATIO RESTAURANT INC	260 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/1/09
JACK IN THE BOX #12	890 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.20	High	4/1/09
DON PANCHOS TACO SHOP	690 SR-75	EATING / DRINKING	5812		x	x				x	x	x	910.20	High	4/2/09
ROLANDO'S TACO SHOP	805 SEACOAST DR	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/15/09
MICKIES BAR AND GRILL	220 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	5/6/09
SOMBRERO MEXICAN FOOD	189 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	5/18/09

BUSINESS NAME	SITE ADDRESS	CLASSIFICATION	SIC Code	METALS	ORGANICS	OIL & GREASE	SEDIMENT	PESTICIDES	NUTRIENTS	GROSS POL	BACTERIA	TRASH	HU AREA	PRIORITY	INSPECTIONS FY 08-09
WOODIES	710 SEACOAST DR, SUITE E	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/1/09
YE OLDE PLANK INN	24 PALM AVE	EATING / DRINKING	5813		x	x				x	x	x	910.10	High	5/18/09
SUBWAY	876 SEACOAST DR	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/15/09
THE WAVE CAFE	809 SEACOAST DR	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/15/09
7-ELEVEN	1311 PALM AVE	RETAIL FUELING	5541	x	x	x	x			x	x	x	910.20	High	5/6/09
7-ELEVEN	1303 IMPERIAL BEACH BLVD	RETAIL FUELING	5541	x	x	x	x			x	x	x	910.20	High	2/6/09
BEACH SIDE STATION	681 SR-75	RETAIL FUELING	5541	x	x	x	x			x		x	910.10	High	4/2/09
ARCO	1185 PALM AVE	RETAIL FUELING	5541	x	x	x	x			x		x	910.20	High	4/2/09
Valero	1300 IMPERIAL BEACH BLVD	RETAIL FUELING	5541	x	x	x	x			x		x	910.20	High	2/6/09
G & M Oil, 76 STATION	907 PALM AVE	RETAIL FUELING	5541	x	x	x	x			x		x	910.20	High	2/6/09
MARRERO'S CAR WASH	1257 IMPERIAL BEACH BLVD	CARWASH	7542	x	x	x	x			x		x	911.11	High	4/15/09
MIKE'S CAR WASH	1117 PALM AVE	CARWASH	7542	x	x	x	x			x		x	910.20	High	4/15/09
RJ's CAR WASH	730 10TH ST	CARWASH	7542	x	x	x	x			x		x	910.20	High	4/15/09
COW-A-BUNGA CA GLACIER FNAM	10 EVERGREEN	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/15/09
I.B. MEXICAN GRILL, LLC	1337 PALM	EATING / DRINKING	5812		x	x				x	x	x	910.20	High	5/6/09
KATY'S CAFE	704 SEACOAST	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/15/09
KFC CORPORATION	1056 13TH ST	EATING / DRINKING	5812		x	x				x	x	x	911.11	High	10/21/08
LA POSTA MARKET	1268 IMPERIAL BEACH BLVD	FOOD MARKET	5411		x	x				x	x	x	911.11	High	10/20/08
13TH STREET MARKET	1126 13TH ST	FOOD MARKET	5411		x	x				x	x	x	911.11	Non-High	10/27/08
ALL AMERICAN CAR WASH	1158 PALM AVE	CARWASH	7542	x	x	x	x			x		x	910.20	High	10/27/08
BURGER KING #806	1180 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.20	Non-High	10/27/08

BUSINESS NAME	SITE ADDRESS	CLASSIFICATION	SIC Code	METALS	ORGANICS	OIL & GREASE	SEDIMENT	PESTICIDES	NUTRIENTS	GROSS POL	BACTERIA	TRASH	HU AREA	PRIORITY	INSPECTIONS FY 08-09
C.H. DONUTS	1070 13TH ST, SUITE A	EATING / DRINKING	5812		x	x				x	x	x	911.11	Non-High	10/20/08
GIANT PIZZA KING #5	600 PALM AVE, SUITE 100	EATING / DRINKING	5812		x	x				x	x	x	910.2	Non-High	10/20/08
GIANT PIZZA KING #4	1070 13TH ST, SUITE B	EATING / DRINKING	5812		x	x				x	x	x	911.11	Non-High	10/20/08
K-C'S CHINESE FOOD	1299 IMPERIAL BEACH BLVD	EATING / DRINKING	5812		x	x				x	x	x	911.11	Non-High	11/3/08
SIESTA RV PARK	409 PALM AVE	TRAILER PARK	6515		x	x			x	x	x	x	910.20	Non-High	11/3/08
PALM AVENUE LIQUOR & MARKET	1200 PALM	OTHER - FIXED	5411							x		x	910.20	Non-High	10/28/08
MCDONALDS/SCAROB INC.	1135 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.20	Non-High	10/27/08
AROMA THAI	757 SEACOAST DR	EATING / DRINKING	5812		x	x				x	x	x	910.2	Non-High	4/1/09
SEACOAST PIZZA	807 SEACOAST DR	EATING / DRINKING	5812		x	x				x	x	x	910.2	Non-High	4/15/09
PRETZELES AND MORE	10 EVERGREEN #D	EATING / DRINKING	5812		x	x				x	x	x	910.1	High	4/15/09
TIN FISH	910 SEACOAST DR	EATING / DRINKING	5812		x	x			x	x	x	x	910.2	Non-High	5/6/09

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from residential sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and the City's Code Enforcement Division. Efforts are made to educate the public and oversee compliance with local urban runoff regulations to reduce the release of pollutants to the MEP. This section of the Annual Report discusses program implementation and changes made to the Residential Component as it relates to management program activities and outcomes targeted for staff implementing control measures.

6.2 Level 1 Outcomes – Management Program Activities

6.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation, training content, materials, and year-end program review. It also addresses participation in a Regional Education Program.

The City's implementation and assessment strategy for the Residential Component is described in the *2008 JURMP Section 8.0*. During FY 2008-09 no updates were made to the high threat to water quality residential areas or activities. Figure 6.2 provides a map of the City and the high threat to water quality residential areas. Table 6.1 also provides an overview of the residential areas and activities. The only update the City made in regards to program documentation was update the Notice of Violation (NOV) form, which is provided in Figure 6.3. All other program planning and administration elements remain unchanged from the *2008 JURMP Section 8.0*.

Figure 6.1 presents the implementation and assessment strategy for the major elements of the Residential Component. Additional documentation on the targeted outcomes and results for the Residential Component is presented in Table 6.2.

During this reporting period, the City participated in the Education and Residential Sources Workgroup with the San Diego Copermittees and held the responsibility of co-chair for the group. Significant progress continues to be made in the areas of media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment through a county-wide telephone survey.

6.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses Jurisdictional requirements, training activities, residential inspections, public awareness and response, and surveys and special investigations.

The City enforces its storm water ordinances for all residential areas and activities to maintain compliance with the Municipal Storm Water Permit. Public outreach and education as outlined in the *2008 JURMP Section 10.0* encourages residents to comply with the minimum set of BMPs listed in Imperial Beach Municipal Code 8.30.080. The City encourages the use of pollution prevention methods for all residents and provides convenient and cheap house hold hazardous waste disposal. City staff also receives annual training on minimum BMP requirements.

Table 6.2 presents and describes targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10.

6.3 Outcomes Targeted for Staff Implementing Control Measures

6.3.1 Outcome Level 2 – Knowledge and Awareness

The City conducts annual training for all municipal employees. The training program focuses on the use of Best Management Practices in daily operations, and has been designed to create an overall sensitivity to pollution prevention concerns. Open discussions and active involvement in the monitoring and enforcement of minimum BMPs is encouraged for all staff. Filed staff are trained to recognize illegal discharges and BMP deficiencies and to report them to the Environmental Division. The education effort for the Residential Component is discussed in the *JURMP Section 10.0.*

6.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City facilitates changes in behavior and implementation of BMPs for high threat to water quality activities and residential areas by providing education through face-to-face interactions, disseminating education materials through various media, and responding to illegal discharges. The *2008 JURMP Appendix G* defines minimum BMP requirements applicable to residential areas and activities in the City. These minimum BMPs were adopted as part of the *Imperial Beach Municipal Code 8.30.080* and became effective March 24, 2008. BMP requirements were reviewed for necessary updates or modifications during the reporting period and no additional changes were determined to be necessary at this time. The *2008 JURMP Section 8.0* provides additional information on the procedural and administrative mechanisms in the City that promote changes in behavior for residential areas.

6.3.3 Outcome Level 4 – Source Load Reductions

The City does not track individual source load reductions to receiving waters from residential areas or activities. However, increased public awareness about urban runoff and implementation of storm water BMPs among residents has undoubtedly prevented the release of some pollutants.

The City continues to quantify load reductions whenever feasible for disposal of household hazardous waste, used oil, and special clean up events. The City provides residents a variety of options for the collection and disposal of house hold hazardous waste. During FY 2008-09 roughly 4.5 tons of hazardous materials were properly disposed or recycled by City residents at the South Bay HHW location. The City also one again held the annual Home Front Clean-up and Citywide Garage Sale events. Participation was up for both the Citywide Garage Sale with 732 participants and Home Front Clean-up with 93 participants. The final total of waste collected during the Home Front Clean Up event was 154.3 tons of trash, metals, green, and construction waste. Table 6.2 provides an overview of FY 2008-09 source load reductions and results for the Residential Component.

Management Program Activities		Outcomes Targeted for Staff Implementing Control Measures		
Outcome Level 1a	***Outcome Level 1b***	***Outcome Level 2***	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Residential Areas and Activities**
1. FY 2008-09 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. Program Review and Update** ▪ Year-end program review ▪ Updated source inventory	**1. BMP Implementation** **2. Municipal Staff Training** ▪ Program Administration Staff ▪ Program Implementation Staff **3. Enforcement of Residential Areas and Activities** **4. Evaluation of Oversight of Residential Areas and Activities** **5. Regional Residential Education Program** **6. Surveys and Special Investigations** *Not targeted or assessed*	**A. Illicit Discharge Reporting** **B. Core Concepts** *Not targeted or assessed* **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Residential Areas and Activities** ▪ Procedural and Administrative Behaviors **C. Pet Waste Management** **D. Public Service Requests** ▪ Response to requests ▪ Facilitation of proper BMPs **E. Cleanup Activities** Public participation and involvement	**A. Household Hazardous Waste Collected** **B. Used Oil Collected** **C. Universal and Electronic Waste Collected** **D. Pet Waste** **E. Special Event Recycling and Waste Management**

Figure 6.1 – FY 2008-09 Implementation and Assessment Strategy for the Residential Component

Table 6.1 – Overview of Residential Component

Category	Pounds	Number	Description of Changes
A. Residential Threat to Water Quality Prioritization			
High	---	6	All residential areas in the City are considered high priority.
Medium	---	---	
Low	---	---	
B. House Hold Hazardous, Electronic, and Universal Waste Disposal			
Flammable and Poison	2,557	---	Imperial Beach residents have a variety of options for the collection and disposal of house hold hazardous waste. Most residents utilize the South Bay HHW Collection center at the City of Chula Vista. The amount of waste dropped off by Imperial Beach residents is provided in the table to the left. The City also offers curbside pickup of HHW, used oil, and a number of regional collection events for electronic and universal waste. The disposal totals for these additional activities are not provided in this report.
Acid, Base, Oxidizer, and PCB-containing	135	---	
Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters)	2,172	---	
Other HHW	3,070		
Universal and Electronic Waste	2,433		
Total Waste Disposed	10,367		

JURMP Sections	Description of FY 2008-09 Changes
8.0 and Appendix G	BMP requirements of the JURMP applicable to residential areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2008-09	Complete	Applicable updates were included in the *2008 JURMP Section 8.0*, submitted to the RWQCB on 03-24-08.	Not targeted
b) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
Update program documentation for consistency with program updates	Updates were made to the storm water notice of violation (NOV) form	Complete	The City developed a storm water specific Notice of Violation form that is used for code enforcement for both Public Works Department and Community Development Department. The form is provided in Figure 6.3.	Update program documentation for consistency with program updates
c) UPDATES TO TRAINING PROGRAM				
Update training materials for consistency with *2008 JURMP Section 10.0*	Made updates to municipal survey	Under review	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the targeted audience.	Update training materials for consistency with *2008 JURMP Section 10.0*

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for Residential Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b) UPDATED SOURCE INVENTORY				
Identify high threat to water quality areas	Update not needed	---	The City has previously identified the high threat to water quality residential areas and activities. All residential areas in the City are considered high threat to water quality areas. Figure 6.2 provides a map of the high priority residential areas. The *2008 JURMP Section 8.0* provides a list of high threat to water quality activities.	Update as needed
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. BMP Implementation				
Require residents to implement BMPs	Requirements implemented	Complete	The City requires all residential areas to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City enforces its *Urban Runoff Management and Discharge Control Ordinance* and provides education and outreach to local residents.	Provide BMP handouts and outreach
Facilitate proper management and disposal of household hazardous waste (HHW)	Provided a variety of disposal options for used oil, toxic materials, and other hazardous waste	Complete	The City provides a variety of options for the proper management and disposal of used oil, toxic materials, and other HHW. Residents are generally directed to drop off hazardous materials at the South Bay HHW center at the City of Chula Vista. The City also provides curb side pickups and a number of regional collection events for HHW, used oil, electronic waste, and universal waste.	Facilitate proper HHW management and disposal opportunities

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
Facilitate proper management and disposal of waste	Provided proper waste management at special events and held annual Home Front Clean Up drop-off event	Complete	The City partners with EDCO Disposal to proved proper waste management and disposal for residents. The City also ensures proper waste management and storm water compliance at special events. Additionally, the City once again held its annual Home Front Clean Up drop-off event to collect waste material.	Facilitate proper management and disposal opportunities
2. Municipal Staff Training				
Provide training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08	Complete	Training was conducted on 9/23/08 for the Community Development Department (Planning Division, Building Division, Code Compliance Division, and Redevelopment Division) and Public Works Department 9/17/08 on the necessary elements of the storm water program. A survey was also provided to establish a baseline of knowledge. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.	Provide municipal staff training for FY 2009-10
3. Enforcement of Residential Areas and Activities				
Enforce minimum BMPs in residential areas	Responded to storm water violations reported by staff and public	Complete	The City enforces its storm water ordinance and the Municipal Permit for all residential areas and activities through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines and civil and/or criminal court actions. The Environmental Division responds to storm water violations, which are reported by City staff and public.	Enforce BMPs

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
4. Evaluation of Oversight of Residential Areas and Activities				
Evaluate methods of oversight and enforcement for residential areas and activities	Operate storm water hotline and utilizes monthly sewer and street inspections to identify BMP deficiencies or storm water violations	Complete	A Storm Water Hotline (619-424-4095) was operated throughout FY 2008-09. The City received 15 reports on the Storm Water Hotline (619-424-4095) for storm water violations in residential areas. The Environmental Division responded to another 40 residential violations reported by City staff. The City also operates an online complaint form that does not get utilized very often. No reports for storm water violations were received during this reporting period from the online complaint form.	Evaluate methods of oversight for residential areas and activities
5. Regional Residential Education Program				
Participate in Regional Residential Education Program	Held co-chair position of the Education and Residential Sources Workgroup and chair position of the Underserved Target Audience Sub-workgroup	On going	During this reporting period, the City participated in the Education and Residential Sources Workgroup with the San Diego Copermittees and held the responsibility of co-chair for the group. Significant progress continues to be made in the areas of media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment through a county-wide telephone survey.	Participate in Regional Residential Education Program
6. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2008-09, and are not routinely conducted as part of the implementation strategy for this program element.	Not targeted
Not targeted or assessed	Surveys incorporated into regional educational events	---	Surveys were not included during this reporting period for City based special events. However, surveys were included as part of municipal training and regional education efforts by the Education and Residential Sources Workgroup.	Incorporate surveys into local special events and education activities

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND RESIDENTS)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey municipal staff to assess knowledge of storm water program
Not targeted or assessed	---	---	Starting in FY 2009-10, the City will begin evaluating education success and to determine whether changes in knowledge are being retained over time.	Establish a baseline of resident knowledge regarding urban runoff

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND RESIDENTS)				
A. RESIDENTIAL AREAS AND ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2008 through June 30, 2009				
Enforce minimum BMPs and track violations	32 Verbal Warnings, 1 Notice of Abatement, 17 Notice of Violations, 11 informative letters, and 3 cleanup cost recoveries	Complete	The City enforces its storm water ordinance and the Municipal Permit for all residential areas and activities through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines, including recovery of costs for compensatory damages. The Environmental Division investigates and tracks all storm water violations which are then tracked on the Environmental Division server. The most common violations were over watering, wash water, excessive trash or sediment, and leaking auto fluids. The City's *Urban Runoff Management and Discharge Control Ordinance* establishes minimum BMP requirements for the following residential activities: 1) motor vehicle and boat repair and maintenance; 2) motor vehicle washing; 3) motor vehicle parking; 4) home and garden care activities and product use; 5) home care and maintenance; 6) manure and pet waste management; and 7) private sewer laterals and on-site waste water systems.	Enforce minimum BMPs and track violations
B. PET WASTE MANAGEMENT ACTIVITIES				
Not targeted or assessed	10 pet waste bag dispensers are maintained by the Ocean Blue Foundation	---	The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding.	Not targeted

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. PUBLIC SERVICE REQUESTS				
Respond to public service requests and reports of storm water violations	Responded to 15 storm water Hotline calls and 40 storm water violations reports from municipal staff	Complete	The City does not currently track public service requests for residential areas and activities. The City does track reports for storm water violations. The City received 15 reports on the Storm Water Hotline (619-424-4095) for storm water violations in residential areas. The Environmental Division responded to another 40 residential violations reported by City staff. The City also operates an online complaint form that does not get utilized very often.	Respond to public serve requests and storm water violations
D. CLEANUP ACTIVITIES				
Not targeted	---	---	The City does not currently consider Level 3 assessment of cleanup activities to be applicable or feasible.	Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM THE RESIDENTIAL COMPONENT)				
A. HOUSEHOLD HAZARDOUS WASTE (HHW) COLLECTED				
Not targeted	5,762 pounds of HHW collected	---	The City's HHW disposal program is available to all residents, and the City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options.	Not targeted
B. USED OIL COLLECTED				
Not targeted	2,172 pounds of Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters) collected	---	The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.	Not targeted

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. UNIVERSAL AND ELECTRONIC WASTE COLLECTED				
Not targeted	2,433 pounds of electronic and universal waste collected	---	The City facilitates the proper management and disposal of universal and electronic wastes.	Not targeted
D. PET WASTE COLLECTED				
Not targeted	10 pet waste bag dispensers; 72,800 bags replaced, and an estimate of 18,200 lbs of pet waste collected	---	The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. If the average pet waste weighs 4 ounces then an estimate of 18,200 lbs of waste was collected.	Not targeted
E. SPECIAL EVENT RECYCLING AND WASTE MANAGEMENT				
Not targeted	93 participants in annual Garage Sale; 732 participants in the annual Home Front Clean Up	---	The City holds an annual Citywide Garage Sale followed the next weekend by the annual Home Front Cleanup event for the purpose of facilitating reuse and the proper disposal of waste materials. The Home Front Clean Up had 732 participants and disposed of 154.3 tons of trash, construction, metals, and green waste.	Not targeted

Figure 6.2 High Priority Residential Neighborhoods

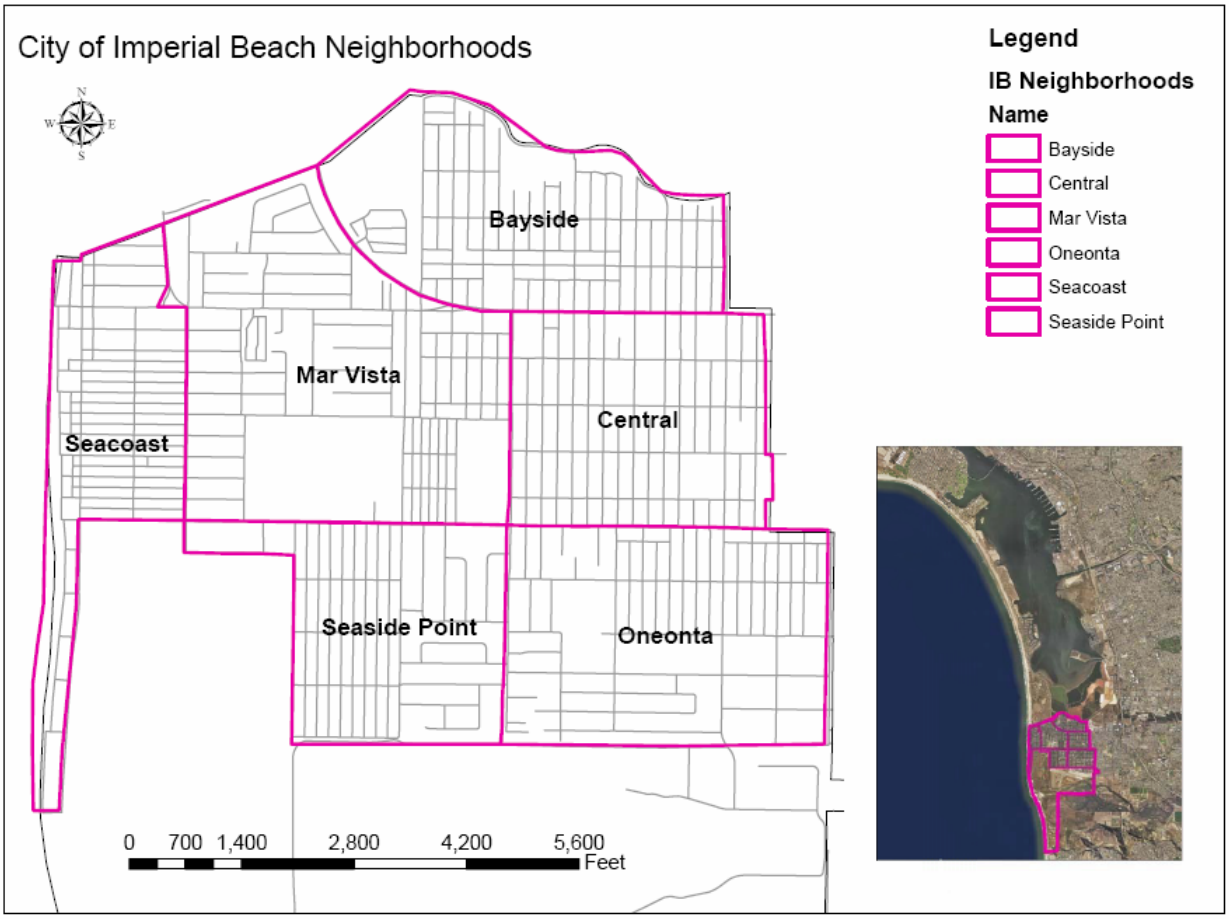

Figure 6.2 – The entire urbanized area of the City is designated as high priority residential neighborhoods. The map above identifies the six high priority residential neighborhoods in the City.

Figure 6.3 Notice of Violation for Storm Water

City of Imperial Beach
Public Works Department
825 Imperial Beach Blvd
Imperial Beach, CA 91932
Tel. (619) 423-8311 / Fax. (619) 429-4861

Case No. _____

NOTICE OF VIOLATION

Case Type Code:_____

The City of Imperial Beach is very concerned about eliminating any illegal discharges to the storm water conveyance system. Our storm water system drains directly into the Pacific Ocean, Tijuana River & Estuary, San Diego Bay, and the Otay River. In order to carry out this objective, the City's Storm Water Pollution Prevention Program has made an inspection of this property and the below violations of the Imperial Beach Municipal, Building, Zoning, and State Codes were found. If you have any questions regarding this matter, please contact the Storm Water Pollution Prevention Program at Tel. (619) 424-4095.

Correction of the violation(s) indicted below must be completed by: **Correction Date:** _____ **Time:** _____

IMPORTANT INFORMATION: This notice is a WARNING NOTICE. If you fail to correct the violations by the correction date, or re-violate anytime within 18-months, an Administrative Citation may be issued:

1st Administrative Citation - $100 / 2nd Citation - $200 / 3rd Citation - $500 / 4th and Subsequent Citation(s) - $1000

These civil fines are calculated per violation, per occurrence, and are cumulative. Payment does not excuse correction of the violation(s), nor shall it bar further enforcement action by the City as specified by the Imperial Beach Municipal Code.

Date Notice Issued:	Date Violation Observed:	Time of Violation: A.M. / P.M.	Day of Week	Origination Code:

Location of Violation *(Address)*:			**Assessor's Parcel Number:**
Property Owner's Name: Last	**First**	**Middle**	**Phone No.**
Mailing Address:	**City/State:**	**Zip:**	**Business or Contractor Name:**
Occupant / Recipient Name *(If different from owner)*:	**Title/Relationship to the Violation *(i.e. Property Owner, Tenant, Contractor….)*:**		

Code Section(s) Violated	Description of Violation(s) *(See Reverse)*
❑	
❑	
❑	

- ❑ **IBMC 12.04.010.** Work performed in any public right-of-way – Permit Required
- ❑ **IBMC 12.48.120.** Maintenance of vegetation in public right-of-way by adjacent property owner.
- ❑ **IBMC 8.36.040.** Solid waste remaining on property and illegal dumping – Unlawful
- ❑ **IBMC 8.36.160.** Owner or occupant duty to keep sidewalk litter free.
- ❑ **IBMC 8.30.160.A.** Residential, commercial, industrial, municipal dischargers shall maintain BMP's.
- ❑ **IBMC 8.30.050.A.** Illegal discharges.
- ❑ **IBMC 8.30.050.B.** Illegal connection.
- ❑ **IBMC 8.30.050.C.** Litter, dumps, stockpiles.
- ❑ **IBMC 8.30.160.B.** Maintenance of BMP's
- ❑ **IBMC 8.30.160.C.** Post Construction BMP's

CORRECTIONS REQUIRED:

ISSUING ENFORCEMENT OFFICER: **Telephone:** **Date:**
Officer's Name (Print):

✓ **Recipient's Signature:** ✓ **Date:**

(Note: Signing this notice acknowledges receipt only, and is not an admission of guilt.)

Notice Served: ☐ In Person To: _____ ☐ Posted on Property ☐ By Mail ☐ Other _____

SEE REVERSE SIDE FOR ADDITIONAL DETAILS AND INFORMATION

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Storm Water Pollution Prevention Program
The illegal discharge of pollutants into the City's street/storm water conveyance system constitutes a violation of the City's Municipal Code and is declared a nuisance subject to abatement. The City is bound through a permit issued by the California Regional Water Quality Control Board, San Diego Region, to eliminate any illegal discharges to the storm water conveyance system. Our storm water system drains directly into the Pacific Ocean, Tijuana River & Estuary, San Diego Bay, and the Otay River. It is imperative that only storm water enters the storm water conveyance system. Except as provided in section 8.30.060 of the City's Municipal Code discharges into the street/storm water conveyance system is a violation of the Federal Clean Water Act, State Porter-Cologne Act, and the City of Imperial Beach Municipal Code.

It is the City's policy to hold the responsible party(ies), including property owners, business owners, tenants, or contractors, liable for any illegal discharges to the storm water conveyance system. This responsibility may include satisfying requirements for any citation issued to the property owner or responsible person (violator) and payment for costs incurred by the City as a result of the violations. It is also the City's policy to issue a lien, in the event that the responsible party fails to reimburse the City for costs incurred.

IBMC 8.30.050. Urban Runoff Mgmt. & Discharge Prohibitions.
A. Illegal Discharges. The discharge of pollutants directly or indirectly into the stormwater conveyance system or receiving waters in non-stormwater is prohibited, except as exempted in Section 8.30.060 of this chapter. The discharge of pollutants directly or indirectly into the stormwater conveyance system or receiving waters in stormwater is prohibited, unless the applicable requirements of this chapter have been met.
B. Illegal Connection. The establishment of illegal connections is prohibited. The use of illegal connections is prohibited, even if the connection was established pursuant to a valid city permit and was legal at the time it was constructed.
C. Litter, Dumps, and Stockpiles. Throwing, depositing, leaving, abandoning, maintaining or keeping materials or wastes on public or private lands in a manner and place where they may result in an illegal discharge is prohibited unless written authorization is provided by the city.
D. Emergency Flares. The non-emergency use of flares is prohibited unless written authorization is provided by the city. (Ord. 2002-978 § 1 (part), 2002)

IBMC 8.30.060. Discharges exempted from discharge prohibitions.
A. Categorically Allowed Discharges. The following categories of non-stormwater discharges are exempt from discharge prohibitions established by this chapter and are not subject to Section 8.30.070. Dischargers must, however, comply with any order issued pursuant to Section 8.30.040(I) of this chapter; and must install, implement and maintain the specifically applicable minimum BMPS, if any, set out in the city urban runoff standards manuals:
1. Discharges from potable water sources other than water main breaks;
2. Air conditioning condensation;
3. Flows from emergency fire fighting activities;
4. Springs;
5. Water line flushing;
6. Diverted stream flows (provided required permits are obtained);
7. Flows from riparian habitats and wetlands;
8. Foundation drains (not including active groundwater dewatering systems);
9. Individual residential washing of vehicles;
10. Irrigation water including recycled water used for irrigation;
11. Landscape irrigation;
12. Lawn watering;
13. Rising groundwater;
14. Swimming pool and spa discharges (if dechlorinated to less than one PPM chlorine);
15. Uncontaminated groundwater infiltration to storm drains;
16. Uncontaminated pumped groundwater;
17. Water from crawl space pumps; and
18. Water from footing drains (not including active groundwater dewatering systems).
B. Exemptions to Protect Public Health and Safety. Discharges determined by any authorized enforcement official or by authorized enforcement staff to be necessary to protect public health and safety are exempt from discharge prohibitions established by this chapter, provided any conditions on such discharges imposed by the authorized enforcement official authorized enforcement staff are satisfied. In emergency circumstances, the determination of an authorized enforcement official or authorized enforcement staff that a discharge is necessary may initially be oral but must be promptly confirmed in writing by an authorized enforcement official or by authorized enforcement staff. In non-emergency situations, a prior written determination is required to exempt a discharge.
C. On-site wastewater systems. Discharges to the subsurface from permitted properly functioning on-site wastewater systems are not prohibited by this chapter.
D. Exemptions Not Absolute. Any discharge category described in Section 8.30.060(A) above that is a significant source of pollutant to waters of the United States shall be prohibited from entering the stormwater conveyance system, or shall be subjected to a requirement to implement additional BMPS to reduce pollutants in that discharge to the MEP. Such prohibitions shall be effective on a schedule specified by an authorized enforcement official in a written notice to the discharger. That schedule may take into account the nature and severity of any effects caused by the discharge; and the time required to design, engineer, fund, procure, construct and make appropriate BMPS operational. (Ord. 2002-978 § 1 (part), 2002)

IBMC 8.30.070. Best management practice requirements and general requirements of all dis-chargers.
A. Applicable Requirements. All dischargers in the city must comply with the generally applicable prohibitions and requirements in Sections 8.30.010 through 8.30.070 of this chapter, and must also comply with any other parts of this chapter that are applicable to the type of facility or activity owned or operated by that discharger.
B. Minimum Best Management Practices for All Dischargers. All dischargers in the city must install, implement and maintain at least the following minimum BMPS:
1. Eroded soils. Prior to the rainy season, dischargers must remove or secure any significant accumulations of eroded soils from slopes previously disturbed by clearing or grading, if those eroded soils could otherwise enter the stormwater conveyance system or receiving waters during the rainy season.
2. Pollution Prevention. Dischargers employing ten or more persons on a full-time basis shall implement those stormwater pollution prevention practices that are generally recognized in that discharger's industry or business as being effective and economically advantageous.
3. Prevention of Illegal Discharges. Illicit connections must be eliminated (even if the connection was established pursuant to a valid permit and was legal at the time it was constructed), and illegal discharge practices eliminated.
4. Slopes. Completed slopes that are more than five feet in height, more than two hundred fifty square feet in total area, and steeper than three to one (run-to-rise) that have been disturbed at any time by clearing, grading, or landscaping, shall be protected from erosion prior to the first rainy season following completion of the slope, and continuously thereafter.
5. Storage of Materials and Wastes. All materials and wastes with the potential to pollute urban runoff shall be stored in a manner that either prevents contact with rainfall and stormwater, or contains contaminated runoff for treatment and disposal.
6. Use of Materials. All materials with the potential to pollute urban runoff (including but not limited to cleaning and maintenance products used outdoors, fertilizers, pesticides and herbicides, etc.) shall be used in accordance with label directions. No such product may be disposed of or rinsed into receiving waters or the stormwater conveyance system.
C. Inspection, Maintenance, Repair and Upgrading of BMPS. The discharger before and following predicted rain events must inspect BMPS at manned facilities. The discharger must inspect BMPS at unmanned facilities at least once during the rainy season and at least once between each rainy season. These BMPS must be maintained so that they continue to function as designed. BMPS that fail must be repaired as soon as it is safe to do so. If the failure of a BMP indicates that the BMPS in use are inappropriate or inadequate to the circumstances, the BMPS must be modified or upgraded to prevent any further failure in the same or similar circumstances.
D. Stormwater Pollution Prevention Plan. An authorized enforcement official may require a commercial, industrial or land disturbance activities discharger to prepare and submit a SWPPP for approval by that official if (1) the discharger does not come into compliance with this chapter after one or more warnings or other enforcement action, because BMPS are inadequate or are not being adequately maintained; or (2) the facility or activity at issue is a significant source of contaminants to receiving waters despite compliance with this chapter. Any discharger required to submit and to obtain approval of a SWPPP shall install, implement and maintain the BMPS specified in the approved SWPPP.
The SWPPP shall identify the BMPS that will be used by the discharger to prevent or control pollution of stormwater to the MEP. If the facility is an industrial facility, the SWPPP submitted to the city shall at a minimum meet the requirements of the state NPDES general industrial stormwater permit. If the activity at issue is a construction or land disturbance activity, the SWPPP submitted to the city shall at a minimum meet the requirements of the state NPDES general construction stormwater permit. If a facility required to submit a SWPPP to the city discharges non-stormwater to groundwater, the facility shall obtain an RWQCB permit as required by the state Water Code, and shall describe the requirements of that permit in the SWPPP.
Whenever submission of a SWPPP is required pursuant to this chapter, an authorized enforcement official or authorized enforcement staff may take existing city guidance documents into account when determining whether the practices proposed in the SWPPP are BMPS that will prevent or control pollution to the required level of MEP.
E. Notification of Spills, Releases and Illegal Discharges. Spills, releases, and illegal discharges of pollutants to receiving waters or to the stormwater conveyance system shall be reported by the discharger as required by all applicable state and federal laws. In addition, any such spills, releases and illegal discharges with the potential to endanger health, safety or the environment shall be reported to the city within twenty-four hours after discovery of the spill, release or discharge. If safe to do so, necessary actions shall be taken to contain and minimize the spill, release or illegal discharge.
F. Sampling, Testing, Monitoring, and Reporting. Commercial, industrial or land disturbance activities dischargers shall perform the sampling, testing, monitoring and reporting required by this chapter. In addition, an authorized enforcement official or authorized enforcement staff may order a discharger to conduct testing or monitoring and to report the results to the city if (1) the authorized enforcement official determines that testing or monitoring is needed to determine whether BMPS are effectively preventing or reducing pollution in stormwater to the MEP, or to determine whether the facility is a significant source of contaminants to receiving waters; or (2) the authorized enforcement official or authorized enforcement staff determines that testing or monitoring is needed to assess the impacts of an illegal discharge on health, safety or the environment; or (3) an illegal discharge has not been eliminated after written notice by an authorized enforcement official or authorized enforcement staff; or (4) repeated violations have been documented by written notices from authorized enforcement officials or authorized enforcement staff; or (5) the RWQCB requires the city to provide any information related to the discharger's activities.
Testing and monitoring ordered pursuant to this subsection may include the following:
1. Visual monitoring of dry weather flows, wet weather erosion, and/or BMPS;
2. Visual monitoring of premises for spills or discharges;
3. Laboratory analyses of stormwater or non-stormwater discharges for pollutants;
4. Background or baseline monitoring or analysis; and
5. Monitoring of receiving waters or sediments that may be affected by pollutant discharges by the discharger (or by a group of dischargers including the discharger).
The authorized enforcement official or authorized enforcement staff may direct the manner in which the results of required testing and monitoring are reported, and may determine when required sampling, testing or monitoring may be discontinued.
G. Mitigation. All illegal discharges must be mitigated within a reasonable period of time to correct or compensate for all damage to the environment caused by the illegal discharge. The authorized enforcement official or authorized enforcement staff, who issued notice to the discharger that a discharge was illegal, or authorized enforcement staff designated by that official, shall determine whether mitigation measures proposed or completed by the discharger meet this standards of this chapter, applicable permit conditions on other applicable laws. In cases of ongoing activity that would potentially lead to repeated illegal discharges, the authorized enforcement official or authorized enforcement staff shall require the discharger to submit a mitigation plan and schedule by a specified date prior to taking action, and to submit a summary of completed mitigation by a specified date. (Ord. 2002-978 § 1 (part), 2002)

IBMC 8.30.160. Maintenance of BMPS.
A. Existing Development. Residential, commercial, industrial, agricultural and municipal dischargers shall maintain the BMPS they rely upon to achieve and maintain compliance with this chapter.
B. New Development. The owners and occupants of lands on which structural post-construction BMPS have been installed to meet the requirements of this chapter shall ensure the maintenance of those BMPS, and shall themselves maintain those BMPS if other persons or entities who are also obliged to maintain those BMPS (by contract or covenant, or pursuant to this chapter) fail to do so.
C. Maintenance Obligations Assumed by Contract or Other Agreement. Primary responsibility to maintain a BMP may be transferred through a contract or other agreement. If that contract provides that it will be submitted to the city pursuant to this chapter as part of a development permit application, and if that contract is so submitted, the person or entity accepting a maintenance obligation in such a contact or agreement will also be legally obliged to maintain that BMP pursuant to this chapter.
D. Obligation to Maintain BMPS Not Avoided by Contracts or Other Agreements. For purposes of city enforcement, no contract or other agreement imposing an obligation to maintain a BMP can relieve a person or entity of any obligation to maintain a BMP imposed by this chapter.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extending the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The City's implementation and assessment strategy for the illicit discharge detection and elimination component is described in the *JURMP Section 9.0*.

8.0 EDUCATION COMPONENT

8.1 Introduction

The City endeavors to implement a diverse education program in the community to reduce the impacts of urbanization on water quality. Education activities are targeted at the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in the City of Imperial Beach), 5) residents, general public, and school children, and 6) underserved community. This component is applicable to all City departments, in particular the Environmental Program Division of the Department of Public Works, which spearheads the City's education efforts and is responsible for the annual training for municipal employees on the components and goals of the JURMP. This section of the Annual Report discusses program implementation and changes made to the Education Component as it relates to management program activities and outcomes targeted for staff implementing control measures. Note that each section of this JURMP Annual Report already includes a description of education activities for each element. The City recognizes the importance education plays in facilitating the necessary behavioral changes to successfully reduce and eliminate pollutants from urban runoff.

8.2 Level 1 Outcomes – Management Program Activities

8.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Education Component is described in the *2008 JURMP Section 10.0*. During FY 2008-09 the City made no significant updates to the education program. The City continues to focus education efforts at the five targeted community groups. The City tailors each individual education activity to best suit the message and content for the target community; however, the overall message is consistent with the *2008 JURMP Section 10.0*. Minor changes to the program include changes to materials such as handouts, surveys, and promotional items, which are continuously updated throughout the year. The City also actively seeks for ways to expand and improve the effectiveness of the education program. For example the City started a new education campaign for resident to adopt the use of reusable bags. The City is also looking for ways to expand the education program by developing education partnerships with existing groups in the community. New education partnerships are being explored with the YMCA Surf Camp, Fish and Wildlife Service, and

Tijuana Estuary. Figure 8.1 provides an overview of the major elements of this strategy as it was implemented during FY 2008-09.

8.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses JURMP requirements, training and education activities, public awareness and response, and surveys and special investigations.

The Environmental Division oversaw the implementation of the Education Component during FY 2008-09. The City successfully achieved the JURMP requirement and provided education for the six targeted communities. Table 8.1 provides an overview of the education efforts during this reporting period. Table 8.2 also presents and describes targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10. Additional documentation, analysis, and discussion are provided in Table 8.3.

8.3 Outcomes Targeted for Staff Implementing Control Measures

8.3.1 Outcome Level 2 – Knowledge and Awareness

A training program has been implemented within the City to inform employees of the components and goals of the 2008 JURMP. The training program focuses on the use of Best Management Practices in daily operations, and designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the *2008 JURMP Section 10.0*.

The City is required to implement an education program for each target community using all media as appropriate to 1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and 2) to measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment. During FY 2008-09 the City started implementing pre and post tests and surveys in attempts to capture changes in knowledge and awareness. A description of these efforts is captured in Table 8.2 with additional documentation, analysis, and discussion provided in Table 8.3.

8.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The *2008 JURMP Section 10.0* defines requirements to educate each target community on the laws, regulations, permits, requirements, BMPs, general urban runoff concepts, and other topics where appropriate. Education is the largest mechanism the City uses to facilitate changes in behavior and implementation of BMPs. Each chapter presented in this Annual Report touches on how changes in behaviors and implementation of BMPs were achieved.

8.3.3 Outcome Level 4 – Source Load Reductions

The City encourages the use of pollution prevention methods by the target audiences; however, source load reductions for education are not targeted or assessed.

Management Program Activities		Outcomes Targeted for Staff Implementing Control Measures		
Outcome Level 1a	***Outcome Level 1b***	***Outcome Level 2***	***Outcome Level 3***	***Outcome Level 4***
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Municipal Facilities**
1. FY 2008-09 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. Program Review and Update** ▪ Year-end program review ▪ Updated outreach materials	**1. Jurisdictional Requirements for Minimum BMPs** **2. Municipal Staff Training** **3. Maintenance Inspections** **4. Stormwater Hot Line Operation (619-424-4095)** **5. Surveys and Special Investigations**	**A. Illicit Discharge Reporting** *Not targeted or assessed* **B. Core Concepts for Municipal Staff** **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Municipal Departments and Personnel** **B. Construction Site Owners, Contractors, and Developers** **C. Industrial and Commercial Site Owners and Operators** **D. Underserved Community** **E. Residential Community, General Public, and School Children**	*Not targeted or assessed*

Figure 8.1 – FY 2008-09 Implementation and Assessment Strategy for the Education Component

Table 8.1 – Overview of Education

Category	Number	Description
A. Educational Efforts		
Municipal Departments and Personnel Events	5	Employees are trained annually on the use of BMPs in their daily operations. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, in inspections, and in investigations of illegal discharges. Commercial Site Owners and Operators are trained through scheduled inspections by the Public Works Department Environmental Division, and through investigations of illegal discharges. All residents receive educational information in the City's newsletter, a newsletter sent out by the City's waste franchisee, website updates, materials provided at City Hall and the Public Works Department, through community presentations, etc. The City held an information booth at the U.S. Open Sand Castle competition and Auto Show. The City also participated with other Co-Permittees in regional outreach events that target the underserved community.
Construction Site Owners, Contractors and Developer Training Events	2	
Industrial Site Owners and Operators Training Events	---	
Commercial Site Owners and Operators Training Events	4	
Residential Community and General Public Outreach Events	10	
Underserved Community	1	
School Children Outreach Events	6	

JURMP Sections	Description of FY 2008-09 Changes
10.0 and Appendix I	BMP requirements of the JURMP applicable to educational areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a. MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2008-09	Complete	Applicable updates were included in *2008 JURMP Section 10.0*, submitted to the RWQCB on 03-24-08.	Not targeted
b. UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
Update educational efforts for consistency with program updates	Minor updates made to program	---	The City started implementing surveys when feasible at education events to establish a baseline level of knowledge. Minor program updates are also made throughout the year to program content to most effectively present education materials.	Update and/or develop educational efforts for consistency with program updates
c. UPDATES TO TRAINING PROGRAM				
Update staff training materials for consistency with *2008 JURMP Section 10.0*	Made updates to presentation and survey	Under review	The City makes annual updates to training content and materials so that each education activity provides appropriate information for the target audience.	Update staff training materials for consistency with *2008 JURMP Section 10.0*

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a. YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for the Education Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b. UPDATED OUTREACH MATERIALS				
Update outreach materials	Updates made to BMP practices for your Business brochure	In progress	The City is updating and developing new outreach materials for each target community.	Update outreach materials
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Designation of Minimum BMPs				
Require minimum BMPs	Requirements implemented	Complete	All components of the JURMP have the requirement to implement measures to reduce pollutants and runoff to the MEP.	Require minimum BMPs
2. Municipal Staff Training				
Provide training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08 and during indoctrination of new employees	Complete	The Environmental Division provides annual training to all City Departments as well as during the indoctrination of new employees. Daily interactions with City staff ensure that storm water pollution prevention remains a high priority throughout the City.	Provide training to all staff with identified responsibilities

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
3. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities to report illegal storm water discharges	Hotline operated throughout reporting period	Complete	A Storm Water Hotline (619-424-4095) was operated throughout FY 2008-09 to provide the public a means of reporting storm water violations in City-maintained roadways and the MS4.	Operate a storm water hotline
4. Surveys and Special Investigations				
Provide a survey to municipal staff	Administered a survey to municipal staff as part of annual training program	Complete	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. A survey was provided to establish a baseline of knowledge. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate.	Survey municipal staff to ascertain baseline knowledge of storm water program

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps refine training programs for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey municipal staff to assess knowledge of storm water program
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND TARGETED AUDIENCES)				
A. MUNICIPAL DEPARTMENTS AND PERSONNEL				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible. Please refer to Table 8.1 and Table 8.3 for a description of municipal education activities.	Not targeted
B. CONSTRUCTION SITE OWNERS AND DEVELOPERS				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible. Please refer to Table 8.1 and Table 8.3 for education activities that target construction site owners and developers.	Not targeted

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. COMMERCIAL AND INDUSTRIAL SITE OWNERS AND OEPRATORS				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible. Please refer to Table 8.1 and Table 8.3 for a description of commercial business education activities.	Not targeted
D. UNDERSERVED COMMUNITY				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible. Please refer to Table 8.1 and Table 8.3 for a description of education activities targeting the underserved community.	Not targeted
E. RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible. Please refer to Table 8.1 and Table 8.3 for a description of education activities that target residential community, general public, and school children.	Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM EDUCATIONAL ACTIVITIES)				
Not targeted or assessed	---	---	The City does not currently consider Level 4 assessment of education activities to be applicable or feasible.	Not targeted

Table 8.3 FY 2008-09 Jurisdictional Education Activities

Education Activity	Date	Activity or Event Description	Topics	Participants
Municipal Departments and Personnel				
Public Works Department Training	9/17/2008	Annual municipal training	JURMP Components	23
Community Development Training	9/23/2008	Annual municipal training	JURMP Components	12
SUSMP Workshop	6/1/2009	Model SUSMP Workshop	Implementation of Model SUSMP	5
New Employee Training	On going	Indoctrination of new employees on storm water program	Storm water program	4
City FYI articles	On going	10 different FYI articles	Storm water pollution prevention on various topics	200+ each article
Construction Site Owners and Developers				
Copy of storm water/grading/erosion control requirements attached to Imperial Beach issued permits	On going	Community Development Department disseminates BMP and storm water information with permits	BMP, pollution prevention, City storm water requirements	---
Community Development counter hours	On going	Counter hour for education relating to construction and development in the City	BMPs, pollution prevention, City storm water regulations	---
Commercial Owners and Operators				
Sand Castle vender packet and inspections	7/16th-20th/2008	Provided education materials for street venders and conducted commercial inspections during event	Mobile business, pollution prevention recycling	54
Commercial Inspection	On going	Commercial business inspections	Pollution prevention, BMPs, storm water regulations	50
Follow up inspection report and letter	On going	Each commercial inspection is followed up with summary report and BMP brochures by mail	Commercial BMPs, recycling and pollution prevention	50
Residents and General Public				
Annual Home Front Clean up	5/2/2009	Large bulky item collection at Mar Vista HS	Recycling, reuse, pollution prevention	689
Citywide Garage Sale	4/25/2009	City promotes reuse of materials through a one day Citywide garage sale event	Reuse and public participation	93
Day Without a Bag	12/15/2008	City partnered with local businesses to promote "Day without a plastic bag".	Reuse and pollution prevention	---
City of Imperial Beach storm water booth at U.S. Open Sand Castle competition	7/19th-20th/2008	City booth for storm water and pollution prevention	Pollution prevention, HHW, recycling, and storm water regulations	300,000

Education Activity	Date	Activity or Event Description	Topics	Participants
City of Imperial Beach storm water booth at Auto Show	7/26/2008	City booth for storm water and pollution prevention	Pollution prevention, HHW, recycling	1,000
City Semi-Annual news letter	Bi-annually	Summer and Winter City news letter sent to all residents	Pollution prevention, storm water BMPs, Recycling	27,000
EDCO Environmental Times	Quarterly	Summer , Fall, Winter, and Spring news letters sent to all residents	Pollution prevention, HHW, recycling, and storm water regulations	27,000
Eagle and Times newspaper	7/9/08; 11/1/08; 12/15/08; 4/1/09; 5/10/09	Articles on variety of topics advising the community on storm water related issues	Storm water pollution, reusable bag day, pollution prevention, City pollution prevention efforts	Citywide newspaper
Coastal Clean Up Day	4/25/2009	7th Annual Creek to Bay Clean Up sponsored by ILACSD	Pollution prevention	4,000
Website	On going	Information about storm water program, recycling, and online reporting	Pollution prevention, storm water BMPs, Recycling	---
Underserved Community				
Underserved Target Audience Sub-workgroup	On going	Co-chair of Education Residential Sources Workgroup, Chair of Underserved Target Audience sub-workgroup.	Regional education materials and regional activities for the underserved community	---
School Children				
Central Elementary 5th and 6th Grade presentations	6/16/2009	Three individual presentations for 5th and 6th graders at Central Elementary School by ILACSD	Presentation on storm water pollution, pollution prevention, BMPs, watersheds	100
Imperial Beach Elementary 5th Grade presentations	5/20/2009	Three individual presentations for 5th Graders at Imperial Beach Elementary School by ILACSD	Presentation on storm water pollution, pollution prevention, BMPs, watersheds	54

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 Introduction

The City is required to incorporate a mechanism for Public Participation in the updating, development, and implementation of the JURMP. In working with the public, the City gains a better understanding of public perception and attitudes towards the problem of storm water pollution. The implementation of the 2008 JURMP naturally includes an element of public participation. The Environmental Division of the Department of Public Works regularly interacts with residents, commercial businesses, municipal staff, and developers while conducting inspections, education activities, BMP enforcement, and other JURMP implementation components. The City also makes additional efforts to include public participation in the implementation and development of the JURMP. These efforts are discussed below.

9.2 Public Participation Efforts

The City holds a public hearing and solicits public comments prior to the adoption and submittal of the JURMP and its Annual Reports. The public was notified on this Annual Report in the Imperial Beach *Eagle & Times and Union Tribune* newspapers and through public hearing notices that were posted at City Hall and the Imperial Beach Public Library. A draft of this JURMP Annual Report was made available for public viewing at the Imperial Beach City Hall, posted on the City's website, and presented at a public hearing to City Council on September 2, 2009.

Other public participation mechanisms the City uses include the operation of a storm water hotline and online reporting tool to report violations, coordination of cleanup activities such as the pet waste bag program and trash clean ups with local organizations, involvement with local environmental groups to spread awareness of urban runoff pollution, participation with civic organizations, City special events; and the City Hall xeriscaping Eagle Scout projects.

10.0 FISCAL ANALYSIS COMPONENT

10.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the fiscal analysis of the storm water program. Implementation costs for the JURMP are approximately $1,000,000. Revenue sources used by the City to fund the storm water program include a solid waste fee for storm water management services, sewer enterprise funds, building permit fees, State grants, and City Redevelopment Agency funds.

10.2 General Budget Information

The costs of implementing the JURMP are spread across the whole City. Each Department and associated Division has an established role in implementing the components of the JURMP. However, the primary responsibility of implementing the storm water program is split between the Department of Public Works and Community Development Department.

10.3 Fiscal Analysis Methods

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis Methods document was submitted to the San Diego RWQCB by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009. The Standardized Fiscal Analysis Methods will be worked into FY 2009-10 Annual Report for next reporting period.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

Detailed analysis of expenditures is currently underway and will be provided in the next Annual Report for FY 2009-10.

10.4.2 Funding Source

Revenue sources used by the City to fund the requirements of the Municipal Permit include a solid waste fee for storm water management services, sewer enterprise funds, and building permit fees. Other storm water pollution prevention projects were funded from State Clean Beaches Initiative funds and the City Redevelopment Agency funds.

11.0 PROGRAM EFFECTIVENESS ASSESSMENT

11.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the assessment of the JURMP for effectiveness. Each jurisdictional activity/BMP implemented for each major component of the *2008 JURMP* is assessed to indirectly gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters.

The structure of this Annual Report evaluates the level of effectiveness for each JURMP component in the context of program planning, management, and implementation. The City uses the structural hierarchy of levels that were established in the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. Within each section of this Annual Report the City assesses program effectiveness on Outcome Level 1- Outcome Level 4. The hierarchy of outcomes is shown graphically in Figure 11.1.

In general, Outcome Levels 1, 2, and 3 can be addressed on a Jurisdictional scale. Some Outcome Level 4 measurements of load reductions can be addressed at this scale, but for the most part, assessment of changes to water quality (Levels 4, 5, and 6) are best addressed at the watershed or regional scale. The City therefore only assesses program effectiveness on Outcome Level 1through Outcome Level 4.

Figure 11.1 – Effectiveness Outcome Levels

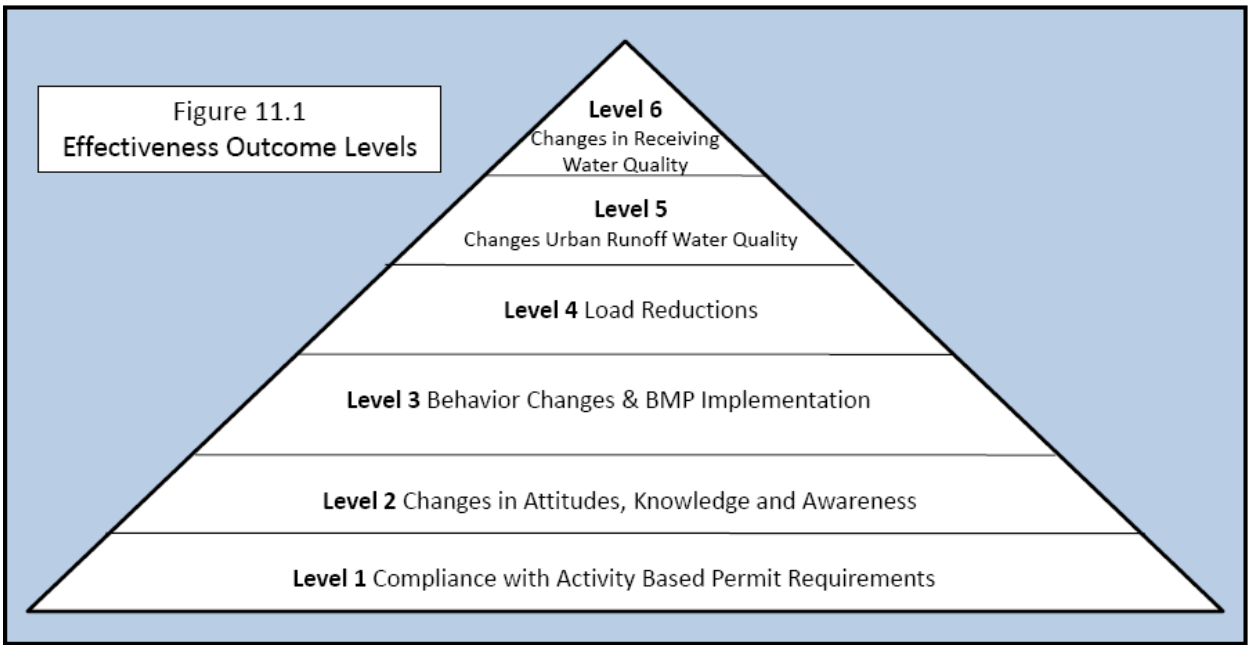

11.2.1 Program Planning and Administration

Program Planning and Administration addresses modifications to the *2008 JURMP*, updates to program documentation and training content and materials within each element of this Annual Report. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the program effectiveness is described in the *JURMP Section 13.0*.

11.2.2 Management Program Implementation

Management Program Implementation addresses requirements, training, inspections, public awareness and response, and surveys and special investigations for each component of the *2008 JURMP* within each element of this Annual Report. The tables in each section of the Annual Report present and describe targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10 that are funded by the program.

11.3 Outcomes Targeted for Staff Implementing Control Measures

11.3.1 Outcome Level 2 – Knowledge and Awareness

Knowledge and awareness are targeted and assessed as necessary within each element of this Annual Report independently.

11.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

Behaviors and BMP implementation are assessed within the tables located in each section of this Annual Report.

11.3.3 Outcome Level 4 – Source Load Reductions

Source load reductions are targeted and assessed as necessary within each element of this Annual Report independently.

12.0 Special Investigations

12.1 Introduction

This section describes special investigations that were conducted above and beyond Permit requirements, but with the ultimate goal of better understanding and controlling urban runoff and storm water pollution. Surveys and special investigations relevant to each JURMP component are assessed in the tables of each section of this Annual Report. The discussion presented in this section provides additional details on the special investigation for the Palm Avenue Low Flow Urban Runoff Diverter and the Tijuana River Bacterial Source Identification Study, both of which were funded under Clean Beach Initiative (CBI) grants.

12.2 Palm Avenue Low Flow Urban Runoff Diverter

In January 2009 the Palm Avenue Low Flow Urban Runoff Diverter became operational. The diverter project, which was mostly funded under a Prop 50 CBI Grant, diverts nuisance flow urban runoff and first-flush rain water into the sanitary sewer. The Palm Avenue diverter is fed by four curb inlets and 15 grated drains. The inlets drain approximately 72.1 acres of residential and light commercial land uses. Prior to the construction of the Palm Ave Diverter, all flows from these inlets discharged directly onto the beach. Operating at maximum capacity, the Palm Ave diverter can divert flows up to 250 gallons per minute into the sanitary sewer.

As part of the condition on the Grant, the City is conducting weekly post construction water quality monitoring for a one year period from January 2009 through December 2009. Samples are analyzed for bacteria, temperature, pH, conductivity, and filed observations. The volume of diverted runoff is also being tracked. During the first 6 months of monitoring, 192,000 gallons of urban runoff wad diverted into the sanitary sewer and prevented from flowing to the Pacific. Results from the weekly bacterial analysis also revealed elevated levels of bacteria in the diverted flows. Compared to AB411 monitoring action levels, 85% of the samples were in exceedance of enterococcus and 100% of the samples were in exceedance of total coliform bacteria.

The initial data from the post construction monitoring of the Palm Ave Diverter project confirms the same results from the previously completed monitoring from the Date Ave Diverter in 2004. The results show that the coastal drainage areas have persistently high levels of bacteria in the urban runoff, which could have contributed to the high levels of bacteria observed off the coast. With the completion of the Palm Avenue Diverter project and the continued operation of the Date Avenue Diverter, the vast majority (137.2 acres) of the low flow urban runoff is diverted before reaching the beach. The only coastal outfall in Imperial Beach not on a diverter system is at the Ebony Street end, which consists of a 12 inch outfall and drains a residential area of 2.2 acres.

12.3 Tijuana River Bacterial Source Identification Study

During this reporting period, the City with funding from a Proposition 50 Clean Beach Initiative (CBI) Grant, initiated a source identification survey to identify sources of bacterial contamination in the U.S. portion of the Tijuana River Watershed. The purpose of the study is to contribute to the regional efforts to identify domestic sources of bacterial contamination and recommend appropriate actions and activities to reduce the input of those sources to the Tijuana River and adjacent Pacific Ocean.

In October 2008 the first sanitary survey was complete and the project was on track to perform the dry and wet weather components of the study. Unfortunately, on December 22, 2008 the City was notified that the State Water Board would not be processing invoices for the period of December 15th onward. After discussions with the State Water Board and the contractors, further work on the project was limited to administration and maintenance until the matter could be resolved. During the first quarter of 2009 the State budget situation did not improve and starting April 1, 2009, the Tijuana River Source Identification Study was put permanently on hold until funding for the CBI Grant is restored. As of this Annual Report, CBI Grant funds and project work are still on hold.

13.0 Non-Emergency Fire Fighting

13.1 Introduction

The City requires pollution prevention measures and BMPs to reduce or eliminate non-emergency fire fighting flows. The Environmental Division assists the Fire Department in implementing control measures to prevent or control pollutants from both emergency and non-emergency fire fighting activities. The *2008 JURMP Section 2.2* identifies the BMPs that are implemented as part of fire fighting activities.

Non-emergency fire fighting activities, such as training activities that simulate emergency responses, are performed in a manner that eliminates discharges to the storm water system whenever practicable, and minimizes discharges to the storm water conveyance system when elimination of discharges is practicably unavoidable. The following best management practices are implemented as part of these activities:

- Water flows are directed to landscaped areas whenever possible
- When flowing water to an area where landscaping does not prevent runoff, the area selected shall be surveyed by the Officer in charge prior to training activities to ensure that debris will not enter into the storm water system as a result of the drill
- Areas that have debris, which could potentially enter the storm water system as a result of the drill activities, will not be used for training until debris has been removed. Referrals to the Department responsible for the debris removal will be made as needed
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff, which could contribute to storm water discharges
- Discharges from maintenance of equipment and restoration of hoses, vehicles, tools, ladders and other emergency response equipment are directed to the sewage, and dry methods are used whenever practical
- Staff is trained on good housekeeping practices to be used during standard facility maintenance procedures
- The fire fighting personnel and inspectors receive annual pollution prevention training
- Vehicle washing or equipment cleaning is conducted over a wash bay that drains to the sewer

14.0 JURMP Revisions

14.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible to maximize program effectiveness by identifying and describing any JURMP modifications that are made during the reporting period, or that are proposed or planed for the next reporting period. Under the reporting format of this Annual Report, any modification or proposed changes made to the *2008 JURMP* are identified in the Program Planning and Administration subsection within each preceding Section of this report.

15.0 Conclusions and Recommendations

15.1 Introduction

The City made great progress in further developing and refining its urban runoff and management program during FY 2008-09. The management programs and activities implemented by municipal staff demonstrate a high level of compliance with the regulatory mandates of the Municipal Storm Water Permit, and underscore the City's commitment to reducing and eliminating pollutants related to urban runoff. The Components of the JURMP require the City to reduce to the maximum extent practicable sources of pollutants from three distinct phases of urban development: 1) planning and design phase, 2) construction and development phase, and 3) existing development phase. The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

Looking forward to FY 2009-10 and beyond, the City is committed to continuing with many of the programs and management activities implemented in this report. Recommendations for future Reports is to enhance the program's end-of-year review and effectiveness assessment in order to further refine and improve each JURMP Component and to most effectively target sources of pollutants. The JURMP and all the Annual Reports are a living document that evolve over time and build upon the success and sometimes failure of management program activities. The City endeavors to implement the most effective storm water program possible, building upon the existing program, and given the resources that are available to the City.

7.0 Illicit Discharge Detection and Elimination Component

Illicit discharges and connections to the MS4 can be a significant source of pollutants. The Municipal Stormwater Permit (R9-2007-0001) requires the City of Imperial Beach to establish an illegal discharge and illicit connection (ID/IC) program to actively seek and eliminate illicit discharges. The primary goal of the ID/IC component is the development and implementation of a program, which will enable the City to find and eliminate illegal discharges and connections. The City's ID/IC program includes dry weather monitoring of the MS4, investigation of illicit discharges and connections, and spill response and prevention. This section describes implementation of the City's Illicit Discharge Detection and Elimination Program during FY 2008-09. Attachment 7-2 provides the City of Imperial Beach Field Screening and Water Sample Collection Standard Operating Procedure and Section 7.6 of this report describes effectiveness assessment measures related to this program component.

7.1 Dry Weather Monitoring Program

Dry weather urban runoff monitoring is one of several tools utilized by the City to identify ID/ICs to its MS4. Each year between May 1 and September 30 – the dry weather season – City staff collects samples from storm drain outfalls, manholes, catch basins, and other areas where urban runoff is commonly found. Where water volume is sufficient for collection, samples are analyzed in the field for several water quality parameters. This is referred to as "field screening". A sub-set of collected samples is also sent to a certified laboratory for additional analysis. Whenever field screening or lab analysis results exceed the dry weather monitoring Action Levels, then a timely follow up investigation is undertaken to identify and eliminate the pollutant source. Additionally, a trash assessment is conducted for each sampling location using the San Diego Copermittees Trash Assessment form. The complete overview of the dry weather monitoring program is provided in Attachment 7-3, City of Imperial Beach Dry Weather Monitoring Program 2009.

Summary of Dry Weather Monitoring Activity

	2009
Monitoring Site Locations Sampled	9
Field Screening Samples Collected	14
Samples Submitted for Lab Analysis	8

The tables below present the field screening and laboratory data for 2009. Monitoring was conducted at nine sample locations with a total of fourteen field screening samples and eight laboratory samples collected and analyzed. Nine field screening samples were collected from ponded catch basins and five field screening samples were collected from flowing water in the MS4. From these samples, four of the five flowing water events and four of the nine ponded water events were submitted for laboratory analysis.

Table 7-1. 2009 Field Screening Results

Station ID	Water Flow	Flow Rate L/sec	Date	Time	pH	Ortho P (PO4-P) mg/L	Nitrate (NO3-N) mg/L	Ammonia (NH3-N) mg/L	Detergents (MBAS)	Turbidity NTU	Temp (◦C)	Electrical Cond. mS/cm
K	Dry		5/11/09	9:15								
H	Tidal		5/11/09	9:15								
E1A	Tidal		5/11/09	9:30								
E1B	Dry		5/11/09	9:30								
F	Tidal		5/11/09	9:30								
M3	Dry		5/11/09	10:00								
E25	Ponded		5/11/09	10:30	7.72	**4.38***	0.138	ND	0.5	4.62	23.1	1.49
H2	Ponded		5/12/09	7:00							18.3	50.56
K	Dry		5/12/09	7:00								
E1B	Dry		5/12/09	7:15								
E25	Ponded		5/12/09	8:00	7.58	**3.36***	ND	ND		12.1	18.8	1.49
E1B	Dry		5/13/09	8:10								
E1B	Dry		5/13/09	12:00								
K	Flowing	0.029	5/13/09	11:40	8.03	0.961	ND	ND	0.75	4.68	22.1	1.26
K	Dry		5/26/09	8:30								
E1B	Dry		5/26/09	8:50								
E25	Ponded		5/26/09	1:15	7.84	1.61	ND	ND	0.75		22.5	1.53
F10	Ponded		5/26/09	9:00	7.83					8.57	21.3	41.3
E1B	Dry		5/27/09	7:45								
K	Dry		5/27/09	8:15								
H12	Flowing	0.010	5/27/09	8:45	8.15	0.81	ND		0.75	4.76	20.2	1.06
K	Dry		6/2/09	8:30								
E1B	Dry		6/2/09	8:45								
K	Dry		6/3/09	9:00								
E1B	Dry		6/3/09	9:30								
E1B	Dry		6/10/09	8:30								
E1B	Dry		6/15/09	7:45								
K	Dry		6/29/09	8:50								
E1B	Dry		6/29/09	9:15								
H6	Ponded		7/6/09	2:00	7.55	1.354	0.275	**3.72***	**2***	4.79	23.4	33.58
K	Dry		7/8/09	9:30								
E1B	Dry		7/8/09	10:30								
E1B	Dry		7/13/09	9:30								
E25	Ponded		7/13/09	10:20		1.09		**1.341***	0.75			
D2	Ponded		7/13/09	11:15	7.35	0.724	0.192	**1.164***	0.25	13.5		0.12
K	Flowing	0.0067	7/13/09	11:30	8.32	1.632	0.19	0.435	0.25	1.42		0.11
F7	Ponded		7/13/09	12:00	8.13	1.437	0.132	**2.85***	**1***	11.3		18.93
E1B	Flowing	0.016	9/4/09	8:30	7.8	0.648	0.342	0.082	0	0.69		0.39
E1B	Flowing	0.050	9/16/09	1:50	8.2	1.82	0.188	**1.013***	0.5	1.93		0.928

*** - Exceeded Action Levels**
ND- Non Detect

During the 2009 dry weather season, field screening exceedances were observed for ammonia, orthophosphates, and detergents. The necessary follow up investigations were conducted to identify and abate the sources of pollutants. When conditions are appropriate, follow up investigations are conducted in the field by identifying the sources of water and assessing the conditions that may have contributed to the observed exceedances. Follow up investigations were conducted in the field for the exceedances observed at site locations F7, D2, and H6. When necessary, additional water quality samples are collected to identify the sources of pollutants. Additional samples were collected to identify the exceedances at site locations E1B and E25. The next section presents information on the results of the follow up investigations.

Table 7-2. 2009 Lab Analysis Results

Station ID	Water Flow	Date	Time	Phos Mg/L	Oil & Gr. mg/L	Diaz. ug/L	Mala-Thion ug/L	Chlor-pyrif. ug/L	Tot. Hard (mgCA CO3/L)	Cad. Diss mg/L	Copper Diss mg/L	Lead Diss mg/L	Zinc Diss mg/L	Total MPN/100 ml	Fecal MPN/100 ml	Entero MPN/100 ml
K	Flowing	5/13/09	11:40	-	ND	ND	ND	ND	322	ND	ND	ND	0.094	**90000***	1300	9000
H12	Flowing	5/27/09	8:45	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	**170000***	**30000***	**50000***
K	Flowing	7/13/09	12:00	-	ND	ND	ND	ND	323	ND	0.003	ND	ND	**80000***	**30000***	**50000***
E1B	Flowing	9/16/09	13:50	-	ND	ND	ND	ND	307	ND	**0.165***	ND	0.07	**80000***	3500	300
F7	Ponded	7/13/09	12:00	-	ND	ND	ND	ND	2160	ND	ND	ND	ND	**240000***	3000	1700
D2	Ponded	7/13/09	11:15	-	ND	ND	ND	ND	363	ND	0.003	ND	ND	**1600000***	**90000***	**50000***
E25	Ponded	7/13/09	10:20	-	ND	ND	ND	ND	319	ND	0.003	ND	ND	3500	90	34
E25	Ponded	5/12/09	8:00	**2.82**	ND	ND	ND	ND	412	ND	ND	ND	0.056	**170000***	1300	3000

*** - Exceeded Action Levels**
ND- Non Detect

Laboratory analysis was performed for eight samples and resulted in exceedances of bacteria, dissolved copper, and phosphorus. As in previous years, bacteria were elevated in the samples taken in the MS4 and metals testing exceeded action levels in copper at Station E1B. The high phosphorus level is also related to the follow up investigation that identified elevated phosphorus levels from a catch basin during the field screening analysis. The next section presents information on the results of the follow up investigations.

Trash Assessment

In 2008 the City started conducting trash assessments in conjunctions with its dry weather monitoring at targeted MS4 sites. The San Diego Copermittees developed a standardized Trash Assessment Form that provides a qualitative rating of each sampling location on a scale of Optimal, Suboptimal, Marginal, Submarginal, or Poor. Figure 7-1 below provides the results for the 2009 Dry Weather monitoring season.

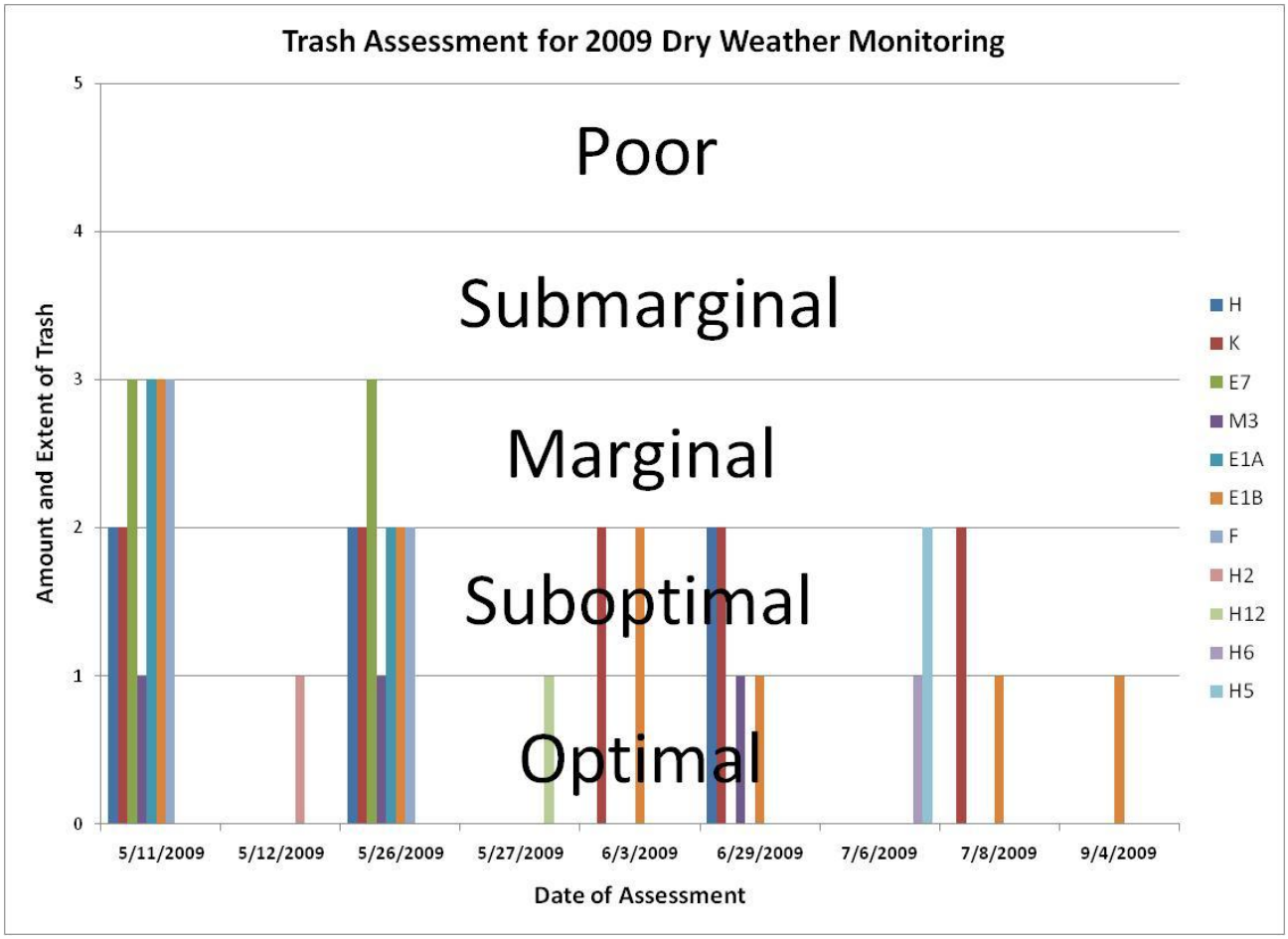

Figure 7-1. The graph above shows trash assessment results for 2009. According to the data, trash is not a serious problem for human or aquatic health at dry weather monitoring stations in Imperial Beach. Twenty-Seven trash assessments were conducted. Of those, most were in the optimal or suboptimal category, meaning that at first glance, little or no trash was visible. Only five locations reached the marginal category, meaning trash was evident at low to medium levels and the appropriate actions were taken to clean up those areas.

Follow Up Investigations and Analysis

Follow up investigations to identify and abate the sources of pollutants were conducted when water quality samples exceeded the Copermittees Action Levels. The City follows the guidelines for eliminating illegal discharges or connections set forth in Chapter 9 of the JURMP and outlined in Attachment 7-3, City of Imperial Beach Dry Weather Monitoring Program 2009. This section provides the results of the 2009 dry weather monitoring follow up investigations and also presents analysis of data to reveal possible pollutant trends. Significant findings are presented by major outfall or pollutant source below:

- **Outfall E-1B (Grove & 5th Street) – Tijuana River Estuary Watershed**

This outfall drains runoff primarily from Mar Vista High School, some residential areas, and portions of Imperial Beach Boulevard and discharges into the Tijuana Estuary. This outfall was completely dry for most of the 2009 dry weather monitoring period, and then in September began to start having a low volume, intermittent flow. Initial investigations by City staff were unable to locate any easily observable source for the discharge other than originating somewhere on Mar Vista High School. Field screening results indicated slightly elevated ammonia and detergents and lab analysis indicated slightly elevated dissolved copper and total coliform bacteria.

City staff took a number of steps to locate the source of the water discharging from Mar Vista High School that continued past the end of the dry weather monitoring season. The City cleaned the E1B storm drain line for the second time during the year to ensure that the pipe was completely free of any debris. City staff also met with Mar Vista High School management to discuss the problem and conducted site investigations with the custodian on numerous occasions. On November 10, 2009, during the third site investigation with the custodian, City staff identified the source of water originating from an outdoor shower at the School's swimming pool. At the City's request, Mar Vista High School turned off the water to the outdoor showers until the drainage problem is fixed.

The E1B outfall has been sampled on a regular basis since 2003 and has consistently shown an elevated level of dissolved copper as seen in Figure 7.2 below. During the dry weather monitoring season of 2006, staff observed over 1,000 gallons of water emptying from the outfall into the Tijuana River Estuary. Sample results indicated elevated levels of dissolved copper. Upstream investigation confirmed that Mar Vista High School maintenance staff had discharged pool water as part of its weekly back flushing of the high school's swimming pool filters. Subsequent discussions with staff from the Sweetwater Union High School District revealed that the pool maintenance room was designed with a pipe connecting the back flush system to a storm drain pipe that leads to the E1B outfall. At the City's

request, this connection was closed off in early July 2006. In its place, the District constructed a 600-gallon holding tank that now discharges back flush water directly to the sanitary sewer. It was hypothesized that this solution would remedy the dissolved copper issues (copper-based algaecides being a frequently used pool chemical). However, despite these previous solutions, Environmental Staff continues to observe a fairly steady flow of water coming from this outfall. The most recent identification of the illegal connection from the outdoor pool shower at Mar Vista High School may finally resolve the problem of dry weather flows and elevated copper loads.

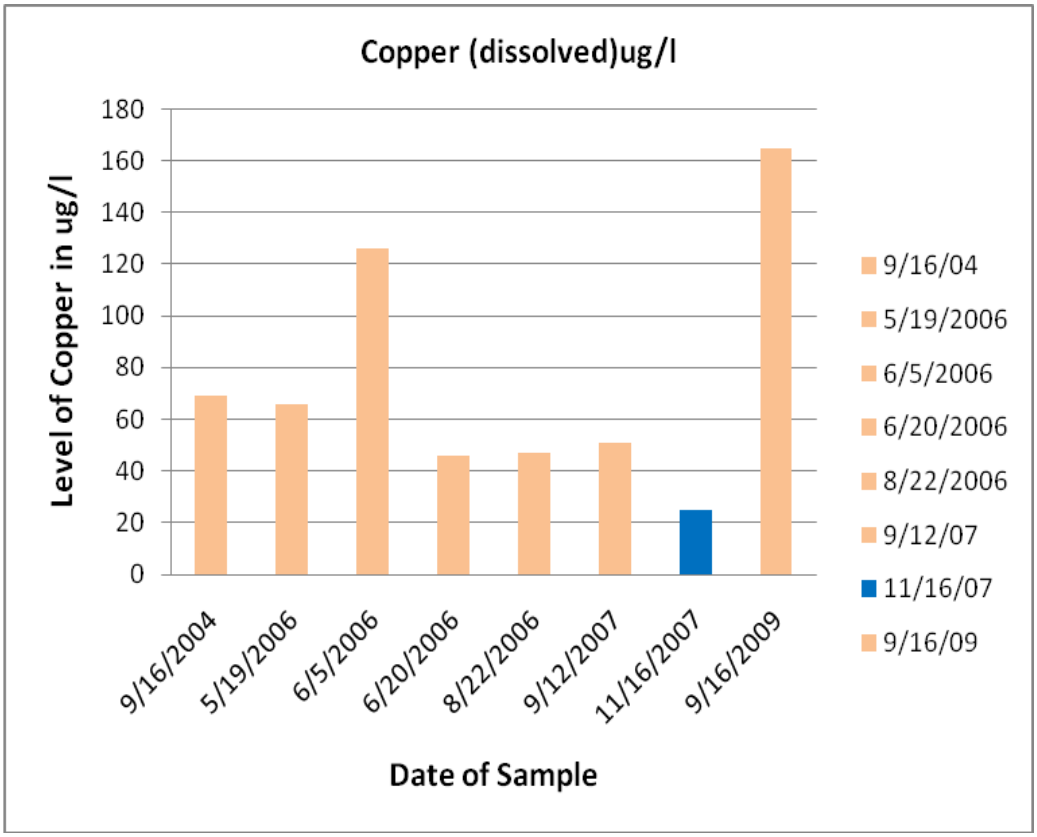

Figure 7-2. The graph above shows the elevated dissolved copper from outfall E1B over time. Since 2004 the outfall has only had one test for copper that was below action levels. The identification of the illegal shower connection at Mar Vista pool may finally resolve this problem.

- **Station E25 (South side of Elm in front of Mar Vista High) – Tijuana River Watershed**

The E25 catch basin captures runoff from primarily residential areas and runoff from Mar Vista High School. This location is one of the few in the City that consistently has ponded water due to the design of the drop box inlet. The ponded water is most likely the result of runoff from irrigation from either Mar Vista High School or local residents. The elevated phosphorus, ammonia, and total coliform during the 2009 dry weather monitoring season was most likely from residential fertilizers and over irrigation; however, no cause was identified in follow up investigations. Follow up monitoring showed a rapid drop in phosphorus indicating that the source was only a onetime input. Total coliform is also most likely from natural sources due to non elevated fecal and enterococcus. The elevated ammonia levels would also be consistent with the observed ponded water from irrigation runoff. The E25 outfall has been sampled regularly over the last three dry weather season and has shown elevated phosphorus and ammonia levels as seen in Figure 7.3.

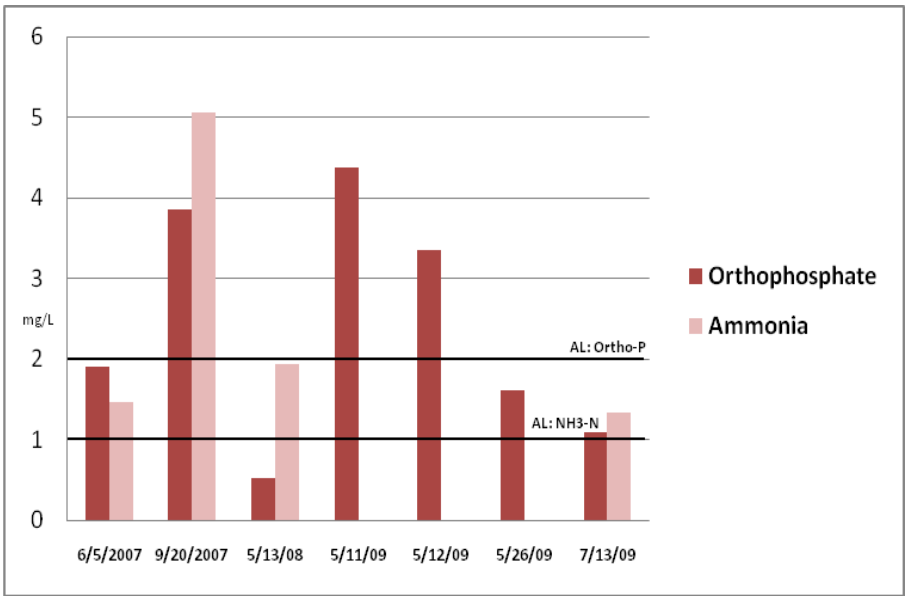

Figure 7-3. The graph above shows elevated levels of ammonia and phosphorus at the E25 station. The possible sources include Mar Vista High School, residential homes in the immediate vicinity, and the ponding of water in the drop box. The City has a close working relationship with Mar Vista High School in regards to urban runoff management and pollution prevention. The specific source for the elevated ammonia and phosphorus is still unknown and the city continues to investigate the problem.

- **Outfall K (Florence and 12th) – Otay River (San Diego Bay) Watershed**

The K outfall drains runoff from 120 acres and has a mix of residential and commercial land uses. The site is located between Florence and 12th Street along the San Diego Bay Shore bike path. This outfall is usually dry during the monitoring season. During 2009 the outfall had flowing water only 2/10 visits and only had exceedances in bacteria as seen in Figure 7-4 below.

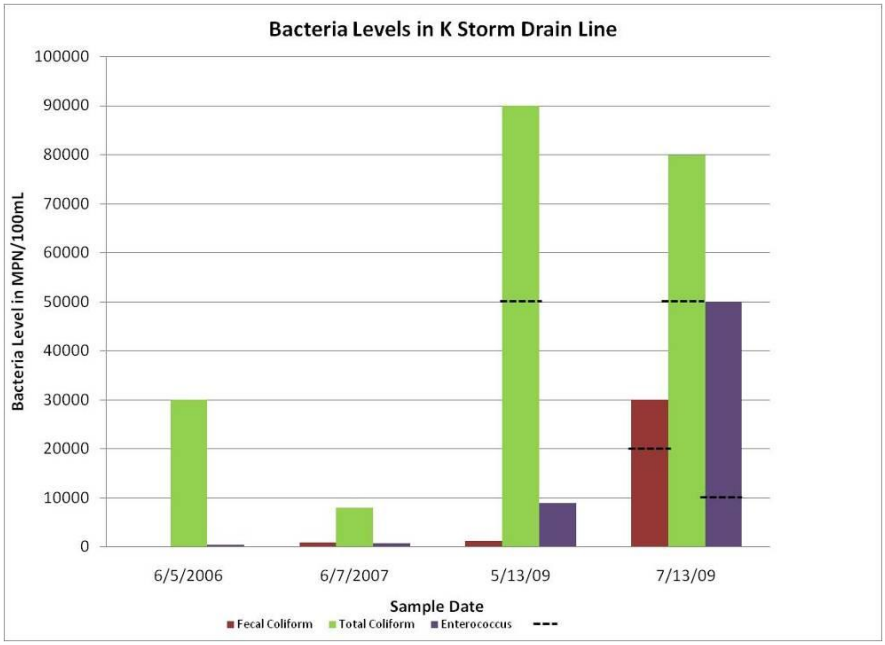

Figure 7-4. Follow up investigations up pipe during 2009 identified the two discharge sources. The 5/13/09 event was related to a resident washing a car and the 7/13/09 event was related to water flowing off a resident's property. The bacteria spikes are most likely related to the conditions in the storm drain and related to the one time discharge events. Rodents are also frequently spotted running in and out of the drain, so it is plausible that fecal bacteria come from animals.

- **Station D2 (Palm and Rainbow) – Otay River (San Diego Bay) Watershed**

The D2 outfall drains runoff from a mix area of residential and commercial land uses. The outfall discharges into a ditch along Highway 75 to a low laying area with dense vegetation and standing ground water. When there is sufficient enough flow, runoff will flow into a slightly elevated drainage pipe and discharges to the southwest end of San Diego Bay. This outfall has not been sampled in the past.

During the 2009 monitoring season a sample was collected from the standing ground water because the storm drain pipe leading into the area was completely dry. The sample had elevated ammonia and high bacteria, which is most likely related to the standing groundwater, dense vegetation, and aquatic organisms in the water. No necessary follow up investigations were needed at this location.

- **Station F7 (Connecticut and Grove) – Tijuana River Estuary**

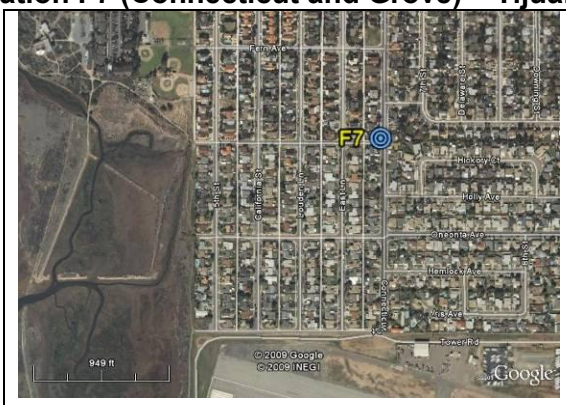

Station F7 is a manhole along the F storm drain line that captures runoff from residential and commercial land uses before discharging into the Tijuana River Estuary. The F outfall gets inundated by tidal water during all tides and the sampling at Station F7 was an attempt to capture possible runoff flowing into the F storm drain. Unfortunately, the sample taken during 2009 indicates that the location is impacted by tidal water and the results of elevated ammonia and total choliform would be expected from an area of salt water, standing water, and organic debris. The manhole upstream (F10) did not have enough water to sample. Tree leaves, pollen, and trash in the curb gutter upstream may have also contributed to the elevated ammonia and choliform.

- **Station H6 (Cypress and 9th) – Otay River (San Diego Bay) Watershed**

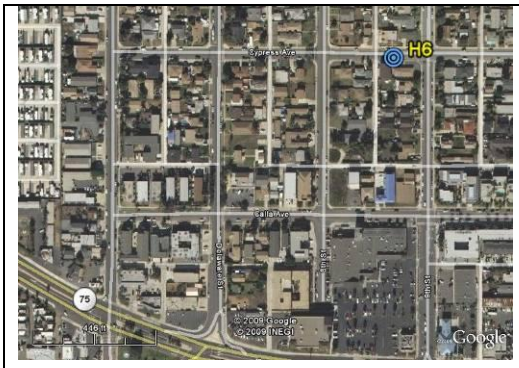

Station H6 is a catch basin upstream from the tidally influenced H outfall location. The catch basin captures runoff water from a residential neighborhood before flowing into the H storm drain line. Monitoring results indicated elevated ammonia and MBAS, which are likely contaminates from residential areas. City staff responded to a storm water hotline tip that identified a resident using water to wash down impervious surfaces on a property that drains into H6. The City will continue to monitor the catch basin at H6.

- **Station H12 (8th between Calla and Cypress) – Otay River (San Diego Bay) Watershed**

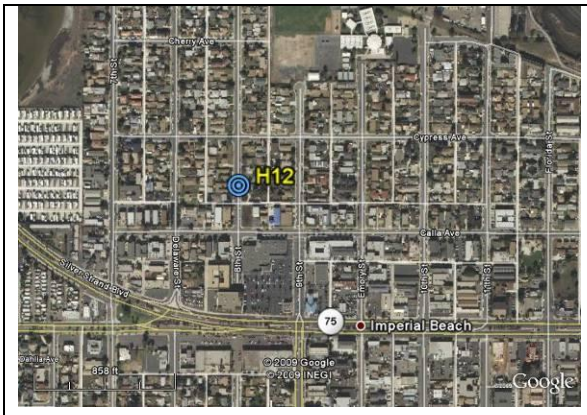

Station H12 is a manhole that primarily drains commercial and small residential areas. A sample was collected during very low flow conditions and allowed for only bacterial analysis. The sample indicated elevated bacteria loads, which were most likely from the over irrigation of two nearby apartment complexes combined with

excessive trash from those complexes along the curb. The City followed up by notifying the property management firm of the necessary corrective actions.

7.2 Investigation of Illegal Discharges and Illicit Connections

Procedural Overview

The City of Imperial Beach Urban Runoff Management and Discharge Control Ordinance (I.B.M.C. 8.30) prohibits discharges and connections to the MS4 with only limited exception. City staff and members of the public are encouraged to report illicit discharges and other urban runoff violations to environmental staff for investigation. A storm water hotline, (619) 424-4095, and online reporting continue to facilitate this type of reporting.

ID/IC Investigations During FY 2008-09

The City performed 95 urban runoff investigations during FY 2008/09. Staff confirmed the presence of an illicit discharge or connection in 83 instances. A responsible party was identified in 71 cases. The following tables and figures summarize the types of violations observed and other informative statistics.

Referral Sources for Urban Runoff Investigations FY 2008-09

Code Enforcement	6
Streets	14
Other City Staff	2
General Public	15
Environmental Staff	48
Residents	10
Total	**95**

Table 7-3. Violator and Pollutant Types for Urban Runoff Investigations FY 2008-09

Violator Type	Auto Fluids	Auto Wash	Chemicals	Con. Debris	Oil & Grease	Detergents	Green Waste	Multiple	Over Irrigation	Paint	Pool Water	Potable Water	Sediment	Sewer Spill	Trash Debris	Unknown	Other	Pet Waste	Wash Water	**Total**
Construction			1	4									3						2	**10**
Commercial Business			1						1			1	1		2	2				**8**
Mobile Business				1	4								1				1		1	**8**
Unknown/Illicit	2			3											1					**6**
Resident	5	2			2				2	4	1	1	3		5	3	2		1	**31**
Property Management	1		1					1	6			2	2			3			1	**17**
Other																				**0**
Municipal	1												1		1					**3**
Totals	**9**	**2**	**3**	**8**	**6**	**0**	**0**	**1**	**9**	**4**	**1**	**4**	**11**	**0**	**9**	**8**	**3**	**0**	**5**	**83**

Illicit Discharge Violator Classification FY 2008-09

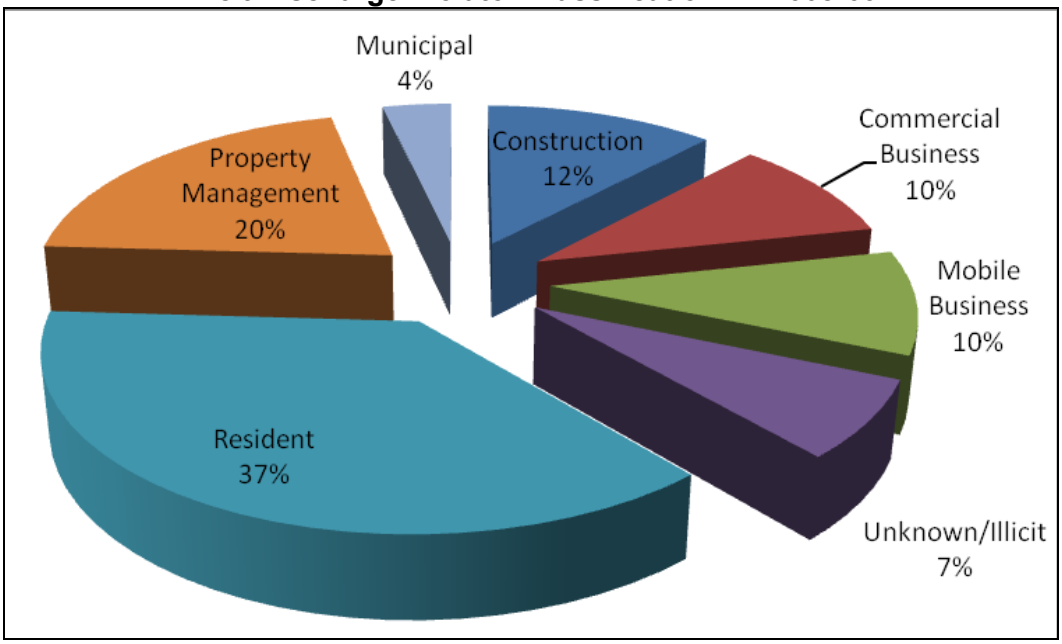

Figure 7-5. The graph above identifies the violator type identified during FY 2008-09. Over half of the identified violators were from residents.

Pollutant Type Distribution by Violator Classification FY 2008-09

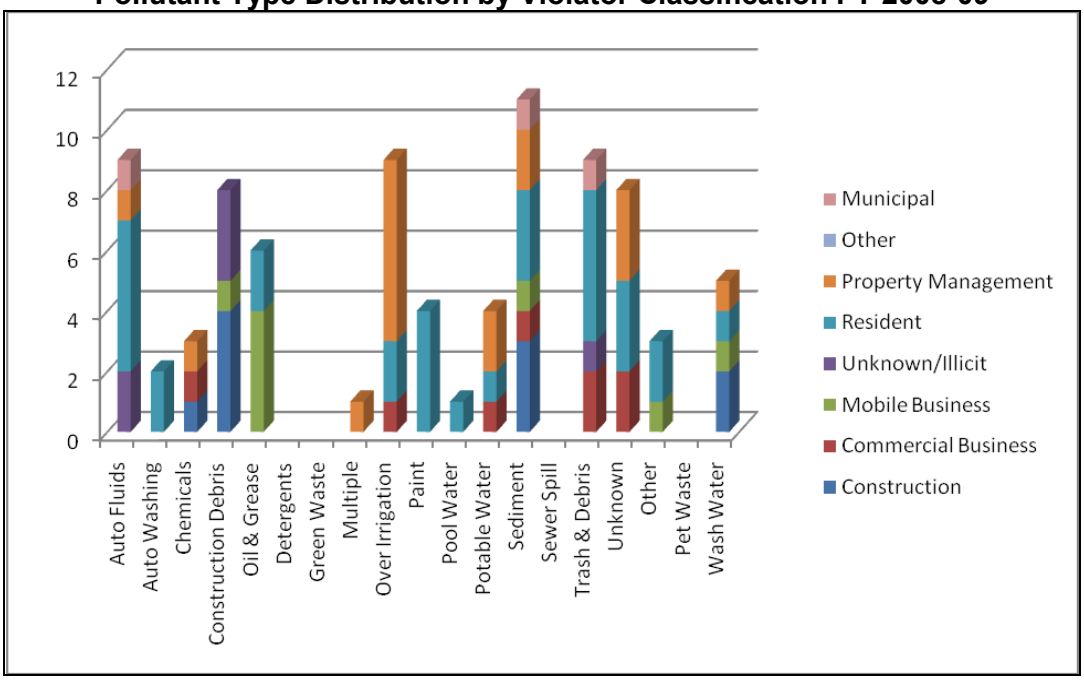

Figure 7-6. The graph above identifies the distribution of violator types broken down by types of pollutants. A lot of information is presnted on this graph but through a closer analysis some emerging trends start to appear. Over irrigation for exampe is a larger problem for appartment complexes than for house hold residents. Oil and grease is also a persistant problem for mobile businesses.

All urban runoff investigations were pursued until a satisfactory outcome could be attained. Usually, this involved remediation of spilled materials, elimination of illicit connections to the MS4, education of violtors, and/or installment of BMPs to prevent future discharges. Unless the illicit discharge is of immediate danger to public health or the environment, violators are typically given the first opportunity to clean up spilled materials. If unable or unwilling to do so, or if a violator cannot be identified, City staff is enlisted to perform the cleanup at the property owner's expense.

Attachment 7-5 presents a detailed description of each ID/IC investigation, including remedial steps and enforcement actions if any were taken. The City relies on a host of tools to ensure compliance. The following is a summary of enforcement actions taken during FY 2008-09.

Enforcement Actions Resulting from ID/IC Investigations FY 2008-09

Verbal Warning	12
Informational Letter	21
Notice of Abatement / Violation	23
Fine / Citation	4
Total	**60**

Historical Record of ID/IC Investigations Over the Past Three Reporting Periods (2006-09)

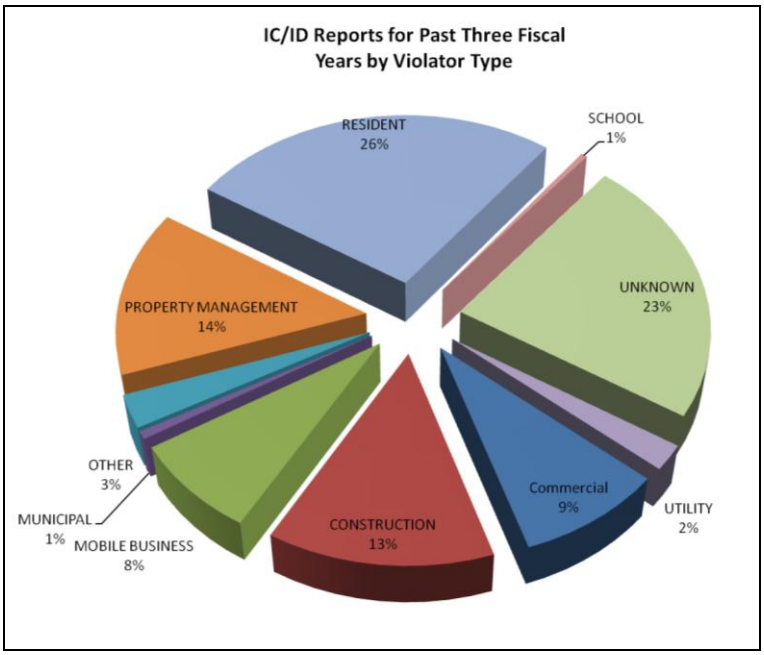

Figure 7-7. The graph above illustrates the types of violators observed over the past three fiscal reporting periods. Residents are shown to be the most common violator, but the number of unknown violators is also high. The results indicate that better descriptions and faster response times are needed to identify and educate violators on storm water issues

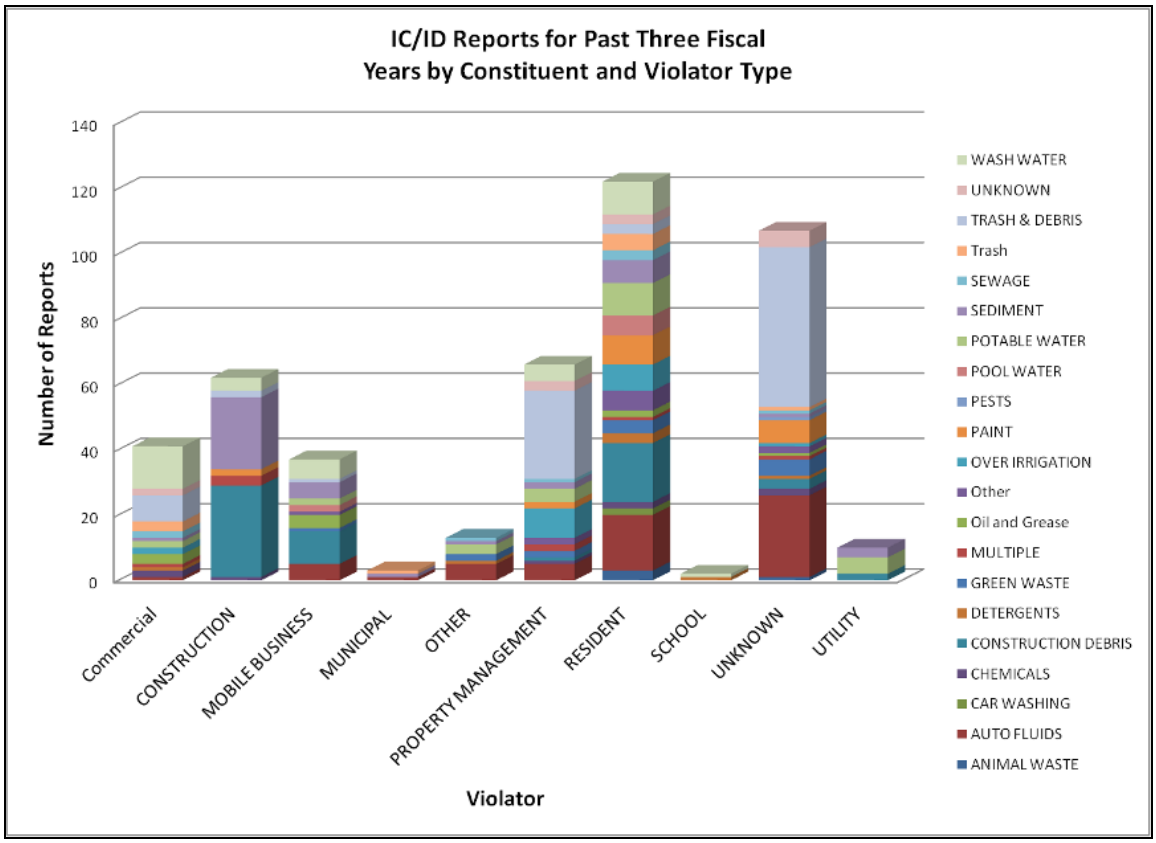

Figure 7-8. The above graph gives a more complex look over the past three fiscal reporting periods (FY 06-07, FY 07-08, and FY 08-09) of the pollutants being reported as discharges distributed by the violator type. By analyzing the data, trends start to appear. For example, residents at apartment complexes (Property Management category) generate significantly more trash than house hold residents. Apartment complexes, residents, and unknown sources receive over twice as many reports than commercial, construction, and mobile businesses. This type of analysis also helps support the general understanding of the types of pollutants and number of violators being generated by different sources.

7.3 Prevention of and Response to Sewage Spills

The City endeavors to clean 100% of the municipal sewer lines each year. More troublesome sewer lines around commercial areas may be cleaned more frequently if needed. The City responded to 5 sewage spills during FY 2008-09, all of which were on private laterals. Approximately 200 gallons were spilled and successfully recovered. Attachment 7-1 presents further details on each sewage spill and the City's response.

7.4 Program Review and Modifications

The following is a list of activities that the City anticipates implementing as part of its Illicit Discharge Detection and Elimination Component during FY 2009-10.

Existing Activities

- Continue to conduct annual dry weather monitoring
- Continue to investigate ID/ICs, including appropriate mitigation of materials and enforcement action against violators where appropriate
- Continue to investigate and mitigate sewage spills throughout the City
- Continue to support the highly successful used oil recycling and household hazardous waste collection programs for residents
- Continue investigation of suspicious dry weather flow at Outfall E-1B.
- City staff is working with property management companies to reduce pollutants from their properties.

New Activities Underway

- Environmental staff is working to reduce improperly discarded trash and other storm water pollutants at multi-family apartments and trailer parks. This will be conducted in conjunction with a program to increase solid waste diversion at these locations.
- Environmental staff is looking into the feasibility of using the same computer system as code compliance for more efficient enforcement of illegal connections and discharges.

Revisions to the JURMP

The Regional Monitoring Workgroup in November 2008 requested the Dry Weather Monitoring Sub-workgroup to evaluate dry weather action levels that were submitted in April 2003 by the County of San Diego on behalf of the Copermittees. The Dry Weather Sub-workgroup determined that the bacterial indicators action levels required additional analysis. All other action levels were deemed appropriate and will not change. The Dry Weather Sub-workgroup contracted the services of D-Max Engineering through the City of La Mesa to conduct the evaluation of historical bacterial data collected from dry weather monitoring from 2002 through 2007. Details of their evaluation are posted on the Project Clean Water Website at http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf. The Regional Monitoring Workgroup on May 19, 2009 evaluated the recommendations of the Dry Weather Sub-workgroup and selected the 80th percentile values to

be proposed as the dry weather action levels for bacterial indicators beginning on May, 2010. The current levels and the levels proposed to effective as of May 1, 2010 are presented below.

Table 7-4. Bacterial Indicators Action Levels for Dry Weather Monitoring Program

	Total Coliform (MPN/100mL)	**Fecal Coliform** (MPN/100mL)	**Enterococcus** (MPN/100mL)
2003-2009 Action Levels	50,000	20,000	10,000
Proposed 2010-2012 Action Levels	130,000	13,000	7,000

7.5 Effectiveness Assessment

Order R9-2007-0001 (Municipal Stormwater Permit) requires Copermittees to detect, investigate, and eliminate illicit discharges and illicit connections in a timely manner. The City endeavors to reduce and prevent illicit discharges to the MS4 to the maximum extent practicable (MEP). The City uses targeted education and outreach programs and conducts routine inspections of construction and commercial facilities as preemptive efforts to prevent illegal discharges. In addition, the City conducts dry weather monitoring of major MS4 outfalls and locations May 1st through September 30th with the intent of identifying illegal storm water discharges. The City also responds to illicit discharges that are reported to the City's Stormwater Hotline or observed by City employees. The Department of Public Works Environmental Division follows through on all reported illegal discharges and ensures that the appropriate best management practices are used and maintained so no further discharges are detected.

The following section provides a description of the effectiveness of the ID/IC program using the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* that utilizes the hierarchy of outcome levels. (Outcome Levels 1 through Outcome Level 6). Outcome Levels 1, 2, 3, and to some degree Outcome Level 4 can be addressed on a jurisdictional scale, while Outcome Levels 4, 5, and 6 are best addressed at the watershed or regional scale.

<u>Level 1 Outcomes- Compliance with Activity-based Permit Requirements</u>

The City of Imperial Beach successfully met all Outcome Level 1 compliance with activity-based permit requirements. Table 7-5 below demonstrates compliance with all Order R9-2007-0001 (Municipal Stormwater Permit) Illegal Discharge Detection and Elimination Component requirements:

Table 7-5. Outcome Level 1 Permit Compliance

Permit Section	Requirement	Compliance Measure
J.3.a.(3)(f)i.	Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	Spatial map of MS4 and monitoring locations is provided in a number of locations: 2008 JURMP, 2009 Dry Weather Monitoring Program provided in the attachments of this report, and within this section.
J.3.a.(3)(f)ii.	Reporting of all dry weather field screening and analytical monitoring results.	Dry weather monitoring results are reported within this section of the annual report and conducted in a manner consistent with the requirement in Attachment B of Order No. R9-2007-0001. The Imperial Beach SOP and 2009 Dry Weather Monitoring Program are provided in Attachment 7-2 and Attachment 7-3.
J.3.a.(3)(f)iii.	Any dry weather field screening and analytical monitoring consultant reports generated.	All field screening and analytical monitoring were conducted by Imperial Beach staff.
J.3.a.(3)(f)iv.	A brief description of any other investigations and follow-up activities for ID/IC	Summary of all follow up investigations are provided within this section of the annual report.
J.3.a.(3)(f)v.	Number and brief description of illicit discharges and connections identified.	The summary of ID/IC is provided in this section of the annual report and provided in the Attachments of this report.
J.3.a.(3)(f)vi.	The number of illicit discharges and connections eliminated.	The summary of ID/IC including the number eliminated is provided in this section of the report.
J.3.a.(3)(f)vii.	Identification and description of all spills to the MS4 and response to the spills.	The summary of spills to the MS4 and response is provided within this section of the annual report.
J.3.a.(3)(f)viii.	A description of activities implemented to prevent sewage and other spills from entering the MS4.	The City endeavors to clean 100% of the sewer system each year. A description of activities is provided within this section of the report.
J.3.a.(3)(f)ix.	A description of the mechanism whereby notification of sewage spills from private laterals.	The City follows the notification procedure as identified by the General Waste Discharge Requirements for Sanitary Sewer Over Flows (Order No. N2006-0003 DWQ as amended by Order No. WQ 2008-0002-EXEC)
J.3.a.(3)(f)x.	Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	Analysis of ID/IC reporting is provided within this section of the report.
J.3.a.(3)(f)xi.	A description of efforts to publicize and facilitate public reporting of illicit discharges.	Education and outreach as describe in previous sections of the report, inspections, and regional programs all publicize the efforts for the public to report ID/ICs either to the Storm Water Hotline 619-424-4095 or online reporting form.
J.3.a.(3)(f)xii.	The number of violations and enforcement actions taken for ID/ICs including information on any necessary follow-up actions taken.	Descriptions of ID/ICs and follow up actions are provided within this section and in Attachment 7-4.
J.3.a.(3)(f)Xiii.	A description of notable activities conducted to manage illicit discharges and connections.	One notable activity was the identification and elimination of an illegal outdoor shower connection at Mar Vista High School. A description is provided in this section.

Level 2 Outcomes- Changes in Knowledge and Awareness

Education is provided through face-to-face interaction with City staff in meetings, public workshops, community presentations, and inspections. In addition, the City disseminates brochures that outline the requirements for addressing urban runoff and water quality regulations. The efforts by the City to educate the public on detection of illegal discharges and elimination of future discharges are discussed in the JURMP Section 9.0. The education effort for City staff is discussed in the JURMP Section 10.0.

Level 3 Outcomes- Changes in Behavior (BMP Implementation)

The City is required by the Municipal Stormwater Permit to educate the public and enforce its storm water ordinances. The City's storm water ordinances include appropriate sanctions to achieve compliance and influence behavioral change. The City requires residents, commercial and industrial businesses, developers, construction companies, and municipal employees to implement storm water management BMPs. These BMPs are specific to each particular JURMP component and are tracked and monitored by the City. The City performed 95 urban runoff investigations during FY 2008-09. Staff confirmed the presence of an illicit discharge or connection in 83 instances and a responsible party to implement a correct BMP was identified in 71 cases.

Level 4 Outcomes- Load Reductions

Investigations of illegal discharges and illegal connections are logged and reported in the City's database. The City monitors and keeps track of treatment control BMPs, conducts storm water inspections of commercial businesses, and inspects construction and development projects. In 2008 the City started conducting trash assessments in conjunctions with its dry weather monitoring at targeted MS4 sites. The trash assessment provides a qualitative rating of each sampling location on a scale of Optimal, Suboptimal, Marginal, Submarginal, or Poor. The City also responds to sewer system overflows and other illegal discharges and uses a vactor truck if necessary to recover the spill. During FY 08-09 the City recovered 200 gallons of sewage from a private lateral spill. Lastly, the City provides means for residents to recycle used oil and household hazardous wastes (HHW) .The totals of which are provided in the Residential Component Section of the annual report.

Attachment 7-1 Spill Summary Table

AGENCY	SSO EVENT ID	SPILL TYPE	Spill Location	Address	City	Zip	Spill Reach Surface	Spill Reach Storm Drain	Spill Volume	Volume Recovered	SPILL RATE	Date	Fallure Occurred	OVERALL SPILL DESCRIPTION
IMPERIAL BEACH, CITY OF	730667	Category 2	831 13th Street	831 13th Street	Imperial Beach	91932	No	No	15	15	0	12/14/2008	Lower Lateral	This was a partial blockage first noticed by a renter who called the Sheriff. The Sheriff called the Sewer Division staff. Upon staff arrival, the renters had ceased using water and the lateral had stopped flowing. Sewer Division staff contacted Barker Plumbing to clear the partial blockage. The city Vactor truck was used to pressure wash and collect the spill.
IMPERIAL BEACH, CITY OF	732759	Category 2	Bernardo Shores RV Park Clean out	500 Hwy 75 State Hwy 75 Highway	Imperial Beach	91932	No	No	100	100	1	1/24/2009	Main	Upon arrival of city staff at manhole # 145, there was limited flow going through the manhole. This indicates that either we were receiving flow from the rest of the trailer park or that there was a partial blockage or both. The cleanout cap on the end of the city line was removed and no water was evident indicating a partial blockage or the problem was inside the trailer park. The Vactor truck cleaned the city main to 185 feet multiple times with no change in flow and the problem persisted. This was the full length of city main. The P.W Director was called to the site to observe was happening inside the trailer park for reporting purposes. The maintenance man at Bernardo shores was informed the problem was not in the city main and the recommendation was given for him to contact a local plumber. The Vactor water tanks were refilled and city staff took the cleaning hose to 200 feet. This additional distance was beyond the city line and into private property. Additional flow was seen inside the manhole indicating the blockage was alleviated. The maintenance man for Bernardo shores gave a “thumbs up” to indicate the problem was corrected. Maintenance
IMPERIAL BEACH, CITY OF	733487	Category 2	284 Imperial Beach Blvd	284 Imperial Beach Blvd Boulevard	Imperial Beach	91932	No	No	5	5	1	2/11/2009	Lower Lateral	City Staff Manuel Casas found the spill. Manuel spoke with residents and requested they use no water. The spill had appeared at the clean out and flowed to the concrete alley behind the property. The spill then flowed west where it was collected and the alley washed using the city vactor truck.
IMPERIAL BEACH, CITY OF	733993	Category 2	Private lateral clean out servicing 1113 Cypress Ave	1113 Cypress Avenue	Imperial Beach	91932	No	No	20	20	1	2/22/2009	Lower Lateral	
IMPERIAL BEACH, CITY OF	735017	Category 2	1360 Donax Ave	1360 Donax Avenue	Imperial Beach	91932	No	No	55	55	1	3/14/2009	Lower Lateral	The spill was intermittant. At operator arrival, the clean out was not spilling. Spill amount was based on visual of ponded water at the site.

City of Imperial Beach

Field Screening and Water Sample Collection Standard Operating Procedure

April 28, 2009

INTRODUCTION:

Under the Municipal Storm Water Permit (Order No. R9-2007-0001), the City is required to conduct water quality monitoring of urban runoff to identify, locate, and eliminate potential sources of pollutants that are either intentionally or inadvertently discharged into the City's municipal separate storm sewer system (MS4). This Standard Operating Procedure covers the procedures on conducting field observations, filed screening monitoring, and laboratory analytical sampling, which is required under Order No. R9-2007-0001. Investigative procedures for determining illegal discharges and source identification are not covered in this S.O.P., but are referred to in the 2008 City of Imperial Beach Jurisdictional Urban Runoff Management Program and in the 2009 City of Imperial Beach Dry Weather Monitoring Program.

FIELD SCREENING PROCEDURE

Field screening consists of filed observations, flow measurements, and field analysis of selected water quality parameters. Field screening will occur at all locations having ponded or flowing water. Water quality samples may also be sent to a professionally certified laboratory for analysis. The procedures for collecting laboratory samples are covered in the next section of this S.O.P. Visual observations will also be made at each site using the standardized copermittee field data sheet and trash assessment form. The following procedure is applicable for all urban runoff field screening:

1. Gather all necessary equipment and supplies (See attached Sampling Equipment Checklist)
2. Perform any equipment calibration before each sampling event and test the viability of test kit reagents. Refer to the equipment's manual.
3. Mobilize to the water quality monitoring location.
4. Take a picture of the sampling point and other areas of interest. For example; a picture of the outfall and drainage area to record pollutants discharged downstream.
5. Make visual observations of the sample location including general site description, atmospheric conditions, and runoff characteristics. Visual observations can be recorded on the San Diego Copermittees Monitoring Field Data Sheet. Additionally, make qualitative assessment of trash using the Copermittees Trash Assessment Form. (See attached Dry Weather Monitoring Field Datasheet and 2009 Trash Assessment Form).
6. Wear gloves during all sample collection.
7. At each site with ponded or flowing water, collect grab samples for analysis with the field test kit. Grab samples may be collected by hand, with the bailer method, or sampling pole depending on the site location.

Note: Field screening should be conducted at locations that have ponded or flowing water. Conductivity may be measured to determine if the water source is tidal or urban runoff in nature. Urban runoff normally has conductivities of 2 mS/cm or less. Salt water normally has high conductivities (i.e. 20- 40 mS/cm). Other factors might need to be considered in determining the source of the water. Water samples should **not** be screened or collected if tidal water is present.

8. Measure Flow Rate. If there is no flow check the appropriate "water flow" category (ponded, dry or tidal) on the Dry Weather Monitoring Field Datasheet. Place a container with a known quantity (ex. 1000 milliliter beaker) in the flow stream and record the time it takes to fill the container. Use a large container (ex. 5 gal bucket) to measure very high flow rates, common during the wet weather season. Record information on the Field Datasheet. Convert results to gallons per minute (gpm).
9. Prior to field screening measurements rinse all equipment probes 3x with the sample medium. Measure Temperature, Turbidity, PH, Conductivity, NH_3N, NO_3N, Ortho-PO_4. Measure Temperature and Turbidity followed by the remaining parameters. Follow measurement procedures listed in the sampling equipment manuals. Record all measurements on the Field Data Sheet.
10. Store all ampules used in testing in a small tightly secured container. Dispose of ampules following the disposal requirements listed in the testing manuals or Materials Safety Data Sheets.

WATER SAMPLE COLLECTION PROCEDURE FOR LAB ANALYSIS

The City also collects and sends off urban runoff samples for laboratory analysis. The City's Dry Weather Monitoring Program requires that at a minimum 25% of the locations with ponded or flowing water be tested for additional contaminates at an EPA-certified laboratory. At a minimum the following contaminates will be tested: a) dissolved cadmium, copper, lead, and zink; b) oil and grease; c) bacterial indicators; D) total hardness; E) organophosphate; F) pesticides –diazinon and chlorpyrifos.

1. Don safety glasses and latex gloves.
2. Ensure laboratory supplied sample containers match the analyte that is being sampled. Check integrity of containers and replace those that are defected.
3. With a fine point sharpie write the appropriate information on all sample container labels (Sample Date, Sample Time, Location, Preservative, etc.). Affix an appropriate label if a label does not exist.
4. Tape around labels with transparent tape.
5. Slowly fill a clean and rinsed (w/ sample medium 3x) High Density Polyethylene container (large beaker or sampling pole/beaker) with the sample medium. This container will be used to transfer the sample medium to the laboratory supplied sampling containers. Direct filling technique (no transfer container is used) may

be used during appropriate flow conditions, but caution is needed to prevent overspill of preservative. Refer to the notes below.

Note: *Check sample bottles to see if they contain any preservatives. Preserved sample containers should **not** be overfilled since this may result in the dilution of the preservative.
***Samples for Oil and Grease analysis should be collected at the top of the water surface since hydrocarbons, which are less dense than water, float at the top. This can be done by skimming the surface with the transfer container.

6. Slowly transfer the sample medium to the appropriate laboratory supplied container. The appropriate sampling containers are as follows:

Contaminate	Sampling Bottle
Hardness, Metals, and Phosphorus	Plastic HNO3 bottle, separate bottle for phosphorus
Pesticides/Organophosphate	1L glass bottle w/out HCL
Oil and Grease	Glass 1L with HCL
MBAS	Plastic bottle under pressure
Bacteria	Preservative plastic bottles
Ammonia	With H2SO4 preservative
Nitrate	Additional bottle with no preservatives

7. Ensure all sample container covers are properly secured to prevent sample spillage. Place all sample containers into a zip-lock bag(s) and seal.
8. Place bag(s) on ice in cooler.
9. Complete a Chain of Custody Form (See Attached).
10. Decontaminate all HDPE transfer containers, graduated cylinders, and equipment probes following the Decontamination Procedure listed in this S.O.P.
11. Site breakdown: Ensure manhole or other access points are locked and/or secure. Remove debris from site and ensure all equipment is turned off.
12. Transport samples to a designated Laboratory. Relinquish samples to the appropriate personnel and retain a copy of the C.O.C for your records.

Note: Bacteria samples have a holding time of 6 hours. Samples should be transported to the Laboratory within 4 hours after sample collection.

DECONTAMINATION PROCEDURES:

Decontaminating field screening equipment:

1. Using a small spray bottle filled with de-ionized (DI) water, rinse all equipment probes.

2. For a more thorough clean use a small spray bottle with a mixture of phosphate free liquinox and water. Rinse all small graduated cylinders (used with Chemetrics Sampling Kits) with a combination of phosphate free soap (liquinox) and water. Next, rinse cylinders with distilled or DI water using a designated pressurized water sprayer.

3. Dry containers, wrap completely with aluminum foil, and store in a clean storage bin.

QUALITY ASSURANCE/QUALITY CONTROL

The City of Imperial Beach may implement several types of QA/QC measures to assess the accuracy and precision of field and laboratory analysis. Additional samples such as replicates, field blanks, laboratory blanks, duplicates, or spiked samples may be collected during monitoring events. These samples are optional and are used to ensure the consistency and accuracy in the analytical results.

The City uses an ELAP certified lab- Enviro Matrix Analytical, Inc. for all laboratory analysis. Analytical methods and detection limits are included in all laboratory reports. As an ELAP certified lab, Enviro Matrix performs all the necessary QA/QC measures to ensure consistency and accuracy.

Replicates

Replicate samples are used to assess laboratory or field precision. They may be collected in the field in on container and split into two samples for analysis. Sample results should be within an acceptable standard deviation.

Field Blanks

Blanks are used to identify errors or contamination in sample collection and analysis. Field blanks are prepared by filling normal sample bottles with DI water and then submitting them to the laboratory with the normal batch of samples for analysis. Field blanks should be noted and marked with special notation (such as “B”) that indicates they are blanks. Analysis should then be performed with the regular samples. Lab analysis should result in non-detection of analytes.

Laboratory Blanks
Laboratory blanks are similar to field blanks with the distinction of being prepared and processed in the laboratory. The blank is used to identify errors or contamination in the laboratory analysis method or contaminates present in the laboratory environment.

Duplicates
Duplicates are used to estimate sampling and laboratory analysis precision. An internal field duplicate is an additional sample collected at the same time/place by the sampler. The duplicate is labeled as a regular sample but with special notation (such as "D") that indicates it is a duplicate. The duplicate is then analyzed with the regular samples. Lab analysis should produce comparable results for duplicates and regular samples.

Spiked Samples
Spiked samples are used to validate whether the laboratory method can accurately recover an artificially contaminated sample with a known amount of an analyte. The volume of the added spike should be small compared to the volume of the sample to which is adder.

GLOSSARY OF TERMS

Accuracy: Conforming closely to an exact value or a standard.

Ammonia: An inorganic form of nitrogen produced through bacteriological processes, decay of dead organisms, excretion of waste products by living animals, and fertilizer manufacturing. In Water, ammonia dissociates and exists in equilibrium of un-ionized and ionized ammonia. Determining how much of the total ammonia is in the un-ionized and ionized forms is important because organisms have different sensitivities to the different forms. The way in which ammonia is partitioned between the two forms is dependent on pH and temperature.

Beneficial Uses: The uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote tangible and intangible economic, social, and environmental goals. "Beneficial Uses" of the waters of the State that may be protected against include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)].

Biological Oxygen Demand (BOD): A measure of the amount of biodegradable organic matter present in an aquatic system or water sample. Low levels of BOD are always present in natural waters, but when large amounts are introduced, bacteria growth is stimulated. Because bacteria require oxygen to metabolize organic matter, the

expanding bacterial populations create a large demand for dissolved oxygen, and as a result, DO levels decline.

Chain of Custody (COC): A form that documents who has had authority and control over the samples from the time of collection to the time of analysis.

Chlorpyrifos: An organophosphate used in insecticides for agricultural applications, extermination, and residential lawn treatment.

Diazinon: An organophosphate used in agricultural applications and residential control of insects indoors and outdoors.

Enterococcus: A subgroup within the fecal streptococcus group. These bacteria are distinguished by their ability to survive in salt water, and in this respect they more closely mimic many pathogens than do other bacteriological indicators. Enterococci are typically more human-specific than the larger fecal streptococcus group, and seem to be consistently associated with warm blooded animals subsequent diseases. EPA recommends enterococci as the best indicator of health risk in salt water used for recreation.

Environmental Laboratory Accreditation Program (ELAP): A division of the California Department of Health Services that provides certification to qualified laboratories.

Fecal Coliform: A specific subgroup of total coliform bacteria. These organisms are separated from the total coliform group by their ability to grow at elevated temperatures, and are associated only with the fecal material of warm-blooded animals. Fecal coliform bacteria indicate the presence of sewage contamination in a waterway and the possible presence of other pathogenic organisms that can exist in fecal material. The presence of fecal coliform bacteria is an indicator that potential health risk exists for individuals exposed to contaminated water.

Heavy Metals: Copper, zinc, lead, mercury, cadmium, and chromium are all regarded as “heavy metals.” Depending on their concentrations, heavy metals can be toxic pollutants that are hazardous to aquatic biota. Dissolved metals usually occur as cations, which tend to form complexes with anions to produce different chemical “species.” This is important because the uncomplexed “free ion” is often more toxic than the complexed ion. The percentage of total metal ion that is “free” varies with the chemical properties of the water (i.e., pH).

Holding Time: Holding time is the time between sample collection and the time that sample analysis must begin. Exceedances of holding times will result in data being flagged and may contribute to inaccurate sample results.

Illegal Discharge (ID): A point source discharge of pollutants to the MS4, which is not comprised entirely of stormwater and not authorized by a NPDES permit. Wash water, sediment, spilled chemicals, and other pollutants allowed to enter the MS4 either intentionally or unintentionally contribute to the degradation of the local water quality. Illegal discharges include sewage spills. Releases from the sanitary sewer or private laterals can allow pathogens, ammonia, detergents, and other contaminants to enter the MS4.

Illicit Connections (IC): Conveyances that have been illegally connected to the MS4 system. These connections provide pathways for pollutants to enter the MS4. Improperly installed or defective rain diversion systems or devices that release pollutants into the stormwater conveyance system are also considered illicit connections.

Municipal Separate Storm Sewer System (MS4): A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains) that is owned or operated by any public body having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes. It is designated or used for collection of conveying storm water.

Nitrates: The chemically stable form of inorganic nitrogen in natural water. Nitrates occur in almost all aquatic systems, and are not considered to be a water contaminant at low concentrations.

Non-point Source Discharge: Discharge from a diffuse pollution source (i.e., without a single point of origin or not introduced into a receiving water from a specific outlet).

Non-Storm Water Discharge: Any discharge to a storm drain system or receiving water that is not composed entirely of storm water.

Nutrients: Any substance assimilated by living things that promote growth. The term generally refers to nitrogen and phosphorus in wastewater, but is also applied to other essential and trace elements.

Orthophosphate (Ortho-P): Sometimes referred to as soluble reactive phosphorus (SRP) because phosphate in this form is a readily available nutrient and is easily metabolized by green plants. Its presence in water can contribute to water pollution problems such as algal blooms and aquatic weed growth. Waters having high levels of Ortho-P are susceptible to eutrophication problems especially in warmer seasons of the year.

Outfall: The point source where a municipal storm sewer discharges to waters of the United States.

pH: A potentially critical factor in aquatic environments that can influence the chemistry and biology of the system. It can affect the solubility of chemical substances, chemical equilibria, availability of nutrients, relative toxicity of environmental contaminants, and the leechability of trace elements (i.e., cadmium, lead, copper, and zinc) from sediments and suspended material. The normal pH of surface marine waters is 8.1.

Sanitary Sewer: Underground pipes that carry only domestic or industrial wastewater, not storm water.

Sediment: Organic or inorganic material that is carried by or suspended in water and that settles out to form deposits in the storm drain system or receiving waters.

Specific Conductance (Conductivity): A measure of the ability of water to conduct electricity. Conductivity is dependent on the concentration of ions in water, and it is thus a rapid method of estimating the total dissolved solids (TDS) content of a water supply.

Conversion: mS/cm x 1 000 = µS/cm

Absolute pure water - 0.055 µS/cm
Distilled water - 0.5 µS/cm
Mountain water - 1.0 µS/cm
Most drinking water sources - 500 to 800 µS/cm
Sea water - 56 mS/cm (56000 µS/cm)
Max for potable water - 1055 µS/cm

Storm Drain Inlet: A drainage structure that collects surface runoff and funnels it into the conveyance system.

Storm Water (or Stormwater): Urban runoff and snowmelt runoff consisting only of those discharges that originates from precipitation events. Storm water is the portion of precipitation that flows across a surface to the storm drain systems or receiving waters. In general, runoff increases as the perviousness of a surface decreases. During precipitation events in urban areas, rain water picks up and transports pollutants through storm water conveyance systems, and ultimately to a receiving water body.

Storm Water Drainage (Conveyance) System: Streets, gutters, inlets, conduits, natural or artificial drains, channels and watercourses, or other facilities that are owned, operated, maintained and used for the purpose of collecting, storing, transporting, or disposing of storm water.

Surface Runoff: Precipitation, snow-melt or irrigation water that flows off of a surface when rainfall exceeds the rate at which it can infiltrate the surface or be stored in small surface depressions.

Surfactants (MBAS): Surfactants are substances that are typically found in cleaning chemicals and detergents. These substances operate by preventing dirt and debris from adhering to items. When introduced to the environment, surfactants can negatively impact an organism's normal biological processes.

Temperature: A physical parameter of water quality that is necessary in order to assess the significance of other parameters and to calculate the values of parameters that vary with temperature. It has an important influence on water density, DO saturation, the solubility and toxicity of constituents in water, pH, specific conductance, rate of chemical reactions, biological activity, and the type of biota found in an area.

Total Coliform: A natural part of the microbiology of the intestinal tract of cold- and warm blooded animals, including man. Because they are relatively easy to culture in the lab, the total coliform group has been selected as the primary indicator bacteria for the presence of disease causing organisms. If large numbers of coliforms are found in the water, there is a high probability that other pathogenic bacteria or organisms may be present.

Total Dissolved Solids (TDS): Inorganic salts and small amounts of organic matter that are dissolved in water. Potential sources include natural inputs, sewage, urban runoff, and industrial wastewater.

Total Hardness: A measure of the cations, most commonly calcium and magnesium that are dissolved in water. Water hardness increases with an increasing concentration of cations. Port JURMP Appendix G – Field Sampling Manual 26

Total Organic Carbon (TOC): TOC is associated with decaying organic matter. It is generally present in elevated levels when other harmful organic compounds are present. Testing for TOC is generally an effective tool for assessing the potential for these other harmful compounds.

Total Suspended Solids (TSS): TSS consists of any particles or substances that are neither dissolved nor settled in a water sample. They can originate from silt, decaying organic matter, industrial wastes, or sewage. In high concentrations, the particles result in turbid water.

Turbidity: Turbidity is a measure of water cloudiness, or the concentration of suspended solids in the water column. High levels of turbidity can block light from reaching submerged vegetation, trap infra-red (heat) waves which subsequently increase water temperature, and can result in an overload of particulates to filter-feeding organisms.

Water Quality Standards: The water quality objectives necessary to protect the beneficial uses of a water body.

City of Imperial Beach 2009 Dry Weather Monitoring Program

April 28, 2009

1.0 Introduction

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9-2007-0001 Section II.B.3., the City of Imperial Beach (City) has developed a dry weather analytical and field screening monitoring program as part of its JURMP. The program aims to detect and eliminate illicit connections and illegal discharges to the municipal separate storm sewer system (MS4) during the dry season by conducting (1) field observations; (2) field screening monitoring; and (3) analytical monitoring at selected stations. The results will provide the City with another tool to further identify and eliminate illegal dischargers and connections into the MS4 system.

2.0 Municipal Separate Storm Sewer (MS4)

The City has developed a comprehensive set of MS4 maps in its GIS database complete with hydrologic subunits, receiving waters, sub-drainage areas, storm drains, MS4 outfalls, dry weather monitoring outfall locations, and alternative monitoring locations.

The City has a total drainage area of 2755 acres and falls into two major hydrologic units (Otay and Tijuana River). The boundary for these hydrologic unit areas bisects in the middle of the generally urbanized northern portion of the City (Attachment-2). For the most part, the City is completely built out and only has an estimated 4 acres of potentially developable land. The land use characteristics are estimated as follows:

- Residential 1,019 acres (37%)
- Commercial 118 acres (4%)
- Industrial 0 acres (0%)
- Navy Property and Schools 484 acres (18%)
- Permanent Open Space 1,134 acres (41%)

The existing MS4 system consists of open surface gutters, drainage ditches, and reinforced underground concrete storm drains. The City has approximately 5 miles of underground storm drain lines and 117 catch basin inlets. The MS4 system conveys storm water to the Otay River, San Diego Bay, Tijuana River and Estuary, or the Pacific Ocean. During the dry season it is often the case that outfalls and other conveyance structures are found to be completely dry. Because of the City's low elevation and coastal location, many of the outfalls are also impacted by tidal flows, which require investigations and monitoring further up the storm drain line.

3.0 Dry Weather Monitoring Station Locations

3.1 Station Criteria

Dry weather urban runoff monitoring is one of several tools utilized by the City to identify illicit discharges and illegal connections to its MS4. City staff collects samples at various conveyance structures including storm drain outfalls, manholes, catch basins, and other areas where urban runoff is commonly found each year between May 1 and September 30 (the dry weather season).

The City modified its dry weather field screening and analytical monitoring stations based on a review of its past Dry Weather Monitoring Program. Prior to FY 2007-08, the City used a grid system to identify monitoring stations. This proved to be inefficient because the City continually spent excessive amount

of time and resources searching for urban runoff throughout the entire grid system, only to find that in many instances the stations were dry. This updated dry weather monitoring program diverges away from the past grid system to a non-random targeted approach, which is outlined in Order No. 2007-0001 (Receiving Waters and Urban Runoff Monitoring and Reporting Program). The City now conducts field screening and analytical monitoring at targeted non-random monitoring stations that provides a comprehensive coverage of the entire MS4 system.

3.2 Dry Weather Monitoring Locations

After a through analysis of MS4 system, drainage basins, land uses, and past sampling experiences the City has selected six dry weather sampling sites that covers 65% of the total combined residential and commercial land use drainage areas in the City. If the coastal drainage areas that are served by the City's two storm drain diverters (Palm Ave and Date Ave) are subtracted from the land uses then the dry weather monitoring locations listed below cover 78% of the total residential and commercial drainage areas in the entire City.

Using guidelines written in the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.a.), the City selected six sampling locations that best represents the land uses and spatial coverage of the entire MS4 system. These selected sites represent the furthest accessible outfall or manhole within each major drainage area and also includes all the major MS4 drainage lines in the City. Because of the low elevation in the City, most of the MS4 sampling outfalls are tidally influenced and therefore require an adaptive monitoring/sampling strategy. Even during low tides samples may need to be taken further up the storm drain line from manholes. Therefore, if an outfall is inundated by tidal water, field investigation will start at the furthest downstream manhole from the outfall location. Outfall naming strategy will always be based on where the sample is taken along the storm drain line. For example, storm drain line K outfall represents location site K. The first manhole upstream of the K outfall is K-2, second manhole K-3, and so forth.

The City may also decide to take additional dry weather samples from any alternative location where water is present. This includes the smaller storm drain lines at D, P, and S, and grabs samples from open surface drains or street gutter.

K Outfall

The K outfall drains runoff from 120 acres and has a mix of residential and commercial land uses. The site is located between Florence and 12th Street along the San Diego Bay Shore bike path. This outfall discharges into the Otay River and is affected by tidal variations. Samples may be taken from the outfall during low tides. Samples may also be taken further up pipe at K-2 or K-3 when the outfall is affected by tidal conditions.

H Outfall

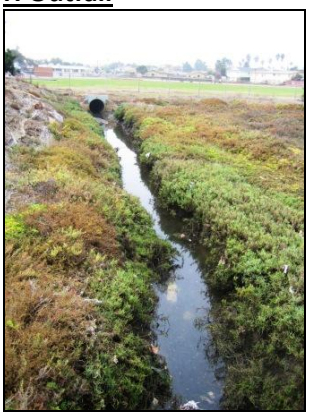

This outfall drains runoff from 139 acres and has a mix of commercial and residential land uses. This outfall received a large portion of runoff from the City's commercial businesses located along Palm Ave. The H outfall is located behind the Bayside School playground fence at 490 Emory. The outfall discharges into a ditch that leads to the Oray River. This outfall is affected by tidal flows during all tides and therefore requires samples to be taken up pipe at site H-3.

E-B Outfall (Collocated with E-A Outfall)

The E-B outfall is collocated with E-A outfall and share a combined drainage area of 119 acres. Both storm drain lines run parallel to one another but provide stormwater conveyance to uniquely different land uses. The E-B outfall primarily drains Mar Vista High School and the City of Imperial Beach Recreation Sports Park. The outfalls are located at the West end of Grove Avenue and discharge into the Tijuana Estuary. The E-B outfall is not affected by tidal water and may be sampled directly from the outfall.

E-25 Manhole

To capture the potential flow from the E-A outfall, the E-25 manhole sampling location was selected as a sampling site because it is above the tidal influence and has easy access to the sampling location. The E-25 manhole captures runoff from primarily residential areas. It is also located adjacent to Mar Vista HS (on the south side of Elm Ave) and captures some runoff from the street in front of the school. The E-25 sampling location eventually discharges in to the Tijuana Estuary out the E-1A outfall, which is seen in the previous sample location photo.

F Outfall

The F outfall location is immediately adjacent to the E-A and E-B outfalls at the end of Grove Avenue and discharges into the Tijuana Estuary. The outfall drains runoff from 298 acres of residential and commercial land uses. The F outfall is affected by tidal variations even at low tides and therefore requires samples to be taken up pipe. Samples may need to be collected as far up pipe as F-13.

M-3 Catch Basin

The M-3 sampling location is a catch basin along the M-storm drain line that discharges into the Tijuana River. Access to the M-1 outfall is not possible due to Ream Field Navy Base. Samples are therefore taken at the next easily accessible sampling location at M-3 catch basin located on Iris between 11th and 12th Streets just before the storm drain crosses onto Ream Field. The sampling site captures runoff from 54 acres of residential land use.

4.0 Sampling Frequencies

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.), the City will conduct dry weather monitoring at each site identified above during the period May 1 through September 30. Each site will be visited twice during the dry weather monitoring period. All site visits will include: field observations and trash assessment of outfall locations, field screening analysis at all locations where water is present, and lab analysis at a minimum of 25% of the sites. Dry weather monitoring will not be performed during a rain event or within 72 hours after the end of a rain event.

5.0 Field Screening and Laboratory Analytical Sampling

5.1 Procedures

Field screening and laboratory analytical sampling will be conducted in accordance with the City's Standard Operating Procedures (SOP). The City's SOP covers details on sample collection, equipment preparation and maintenance, QA/QC, COC forms, and guidance for completing field data forms. All field personnel will have a copy of this dry weather monitoring program and the SOP manual for reference during field investigations.

5.2 Field Screening

Field screening will consist of qualitative field observations, flow measurement, and field analysis of selected water quality parameters. Information will be recorded on a standard field data form (Attachment-3), trash assessment form(Attachment-4), and logged on the City's database. The field screening process will involve the following:

1. Qualitative Observations

Qualitative field observations will be made during each site visit using the standardized San Diego Stormwater Copermittees Dry Weather Monitoring Field Datasheet (Attachment-3). Observations will be recorded whether or not water is present at the site. These observations are intended to provide a general assessment of the site. The following observations will be recorded:

a) General Site Description
b) Atmospheric Conditions
c) Runoff Characteristics
d) Flow Estimation
e) Trash Assessment using the Regional Trash Assessment Form

2. Field Water Quality Analysis

If water is present then field screening samples will be taken using the dry weather monitoring field test kits. The City of Imperial Beach uses Chemetric field test kits and Hatch Turbidimeter while conducting field analysis. If water is observed to be ponded or flowing then a grab sample will be collected and analyzed for the following constituents:

a) Nitrate
b) Amonnonia
c) Reactive Phosphorous
d) Temperature
e) pH
f) Surfactants (MBAS)
g) Turbidity
h) Electro Conductivity

Field personnel will be adequately trained to achieve consistent and accurate water quality analytical results. Field instruments will be calibrated as needed and the variability of test kits will be checked periodically. The City may also analyze duplicate samples in the field to assess precision. In addition, field staff may submit periodic sample splits and blanks for laboratory analysis to assess the accuracy of field testing methods and/or equipment. Documentation of calibration and sampling records will be kept in order to maintain high level of quality control.

5.3 Laboratory Analytical Monitoring

Grab samples will be collected and submitted to an EPA-certified laboratory for analysis at a minimum of 25% of sites where flowing or ponded water is observed. At a minimum, the following constituents will be analyzed:

a) Dissolved Cadmium, Copper, Lead, and Zink
b) Oil and Grease
c) Total Hardness
d) Bacterial Indicators
e) Organophosphate
f) Pesticides (Diazinon and Chlorpyrifos)

Field staff will follow strict sampling and chain-of-custody protocols when collecting dry weather laboratory analytical samples.

5.4 Trash Assessment

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.c.), an assessment of the amount and extent of trash will be conducted at each dry weather screening or analytical monitoring station. The evaluation of trash will include an area surrounding the MS4 and receiving waters. The amount and extent of trash will be estimated upon first glance of the site. A qualitative ranking of optimal, suboptimal, marginal, submarginal, or poor will be assigned to each site. In addition, sites will also be evaluated on whether there is a threat to aquatic and/or human health. To aid in the assessment of trash, the San Diego Copermittees have developed a regional trash assessment form for dry weather monitoring, which will be used by the City (Attachment-4).

6.0 Source Identification Follow-Up Investigations

The primary objective of the dry weather monitoring program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the MS4 as required in Section D.4.c of the Permit. The City has established an IC/ID program presented in Chapter 9 of the JURMP Document. An IC/ID investigation is triggered by exceedances of field screening and laboratory monitoring results or from exceedances of qualitative observations. When an exceedance is triggered, the City had two business days to conduct an investigation to identify the source of the discharge or provide rational as to why the discharge does not pose a threat to water quality and does not need further investigation. The criteria to determine if monitoring results or qualitative observations necessitate an IC/ID investigation are described below.

6.1 Action Levels

The action levels for initiating a source identification investigation for field screening and laboratory analytical parameters are summarized in Attachment-1. These action levels will provide guidance when interpreting results of field and laboratory sampling. However, there may be instances when exceedances in actions levels may be misleading as a result of natural conditions such as influence of ground water, tidal influence, results of existing physical condition, or time of day. The use of best professional judgment will be utilized when interpreting water quality data. When exceedances are discovered using field test kits, the City typically follows up with an immediate investigation upstream to identify the source. Similarly when laboratory analysis results in the exceedance of action levels, the City will conduct a follow up investigation within two working days of receiving laboratory results.

6.2 Qualitative Observations

Qualitative observations such as dead animals, strong odor, and visual observations may indicate that a discharge of pollutants has occurred and that serious water quality problems are present. Qualitative observations may indicate serious water quality problems when field and analytical monitoring results are within action level limits or not immediately available. These observations will help the City in assessing the health and safety of the site.

7.0 Elimination of Illegal Connections and Discharges

The City will follow guidelines for eliminating illegal discharges or connections set forth in Chapter 9 of the JURMP. Once the discharge has been detected and stopped, the City may utilize escalating enforcement actions to ensure that the responsible party does not continue to discharge into the MS4 and receiving waters. If the discharge is wide spread or poses an immediate and severe threat to the public or environment, then other agencies will be notified (FWS, Tijuana River National Estuarine Research Reserve, Department of Environmental Health, Fire Department, ect.). In the case of a sewage spill or other pollutants which endanger environmental health, the RWQCB will be notified within 24 hours of detection.

8.0 Program Assessment

The dry weather monitoring program will be evaluated annually prior to May 1st and get updated as needed. A summary of findings will be included in the City's Jurisdictional URMP Annual Report. The criteria for evaluating the effectiveness of the dry weather monitoring program will include the number of sites monitored, frequency of monitoring, frequency of observed dry weather runoff, number of field screening and laboratory samples collected, number of follow up investigations conducted, and number of pollution sources identified and eliminated.

The City will use the annual assessment of the dry weather monitoring program to refine and focus its approach for the next dry season. Sampling locations that indicate the presence of contaminates may need to be monitored at a higher frequency, and monitoring locations that do not appear to have dry weather flows may be monitored less frequently.

Attachment-1

Table 6-1 Action Levels for Field Screening and Laboratory Parameters

Field Screening Analytes	Action Levels	Source / Notes
pH	<6.5 or >9.0	Basin Plan, with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia-nitrogen.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on workgroup experience. May also consider unionized ammonia fraction
Surfactants (MBAS) (mg/L)	1.0	Basin Plan with allowance based on workgroup field experience and possible field reagent interferences
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observations (e.g. unusual color and lack of clarity), and unusual odors.
Temperature (^oC)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, ect.
Conductivity (mS/cm)	Best Professional Judgment	Values >5 mS/cm may indicate IC/ID however; EC maybe highly elevated in some regions due to high TDS groundwater exfiltation to surface water, mineral dissolution, drought, and sea water intrusion. Values < 0.75 mS/cm may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source / Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector Feneral Permit. If petroleum sheen is observed, the sample should be collected from the surface. Visual observations may justify immediate investigation.
Diazinon (µg/L) **Chlorpyrifos (µg/L)**	0.5 0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus education and outreach to potential dischargers in the targeted drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Dissolved Cadmium (µg/L) **Dissolved Copper (µg/L)** **Dissolved Lead (µg/L)** **Dissolved Zinc (µg/L)**	California Toxic Rule California Toxic Rule California Toxic Rule California Toxic Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentrations, For example, at 300 mg/L hardness the following action levels would apply: Cd – 14ppb; Cu – 38ppb; Pb – 209 ppb; and Zn – 297 ppb.
Total Coliform (MPN/100mL) **Fecal Coliform (MPN/100MmL)** **Enterococcus (MPN/100ml)**	50,000 20,000 10,000	Action levels are based on upper 90% confidence level of Copermittees 2002 dry weather analytical monitoring data.

Attachment-2

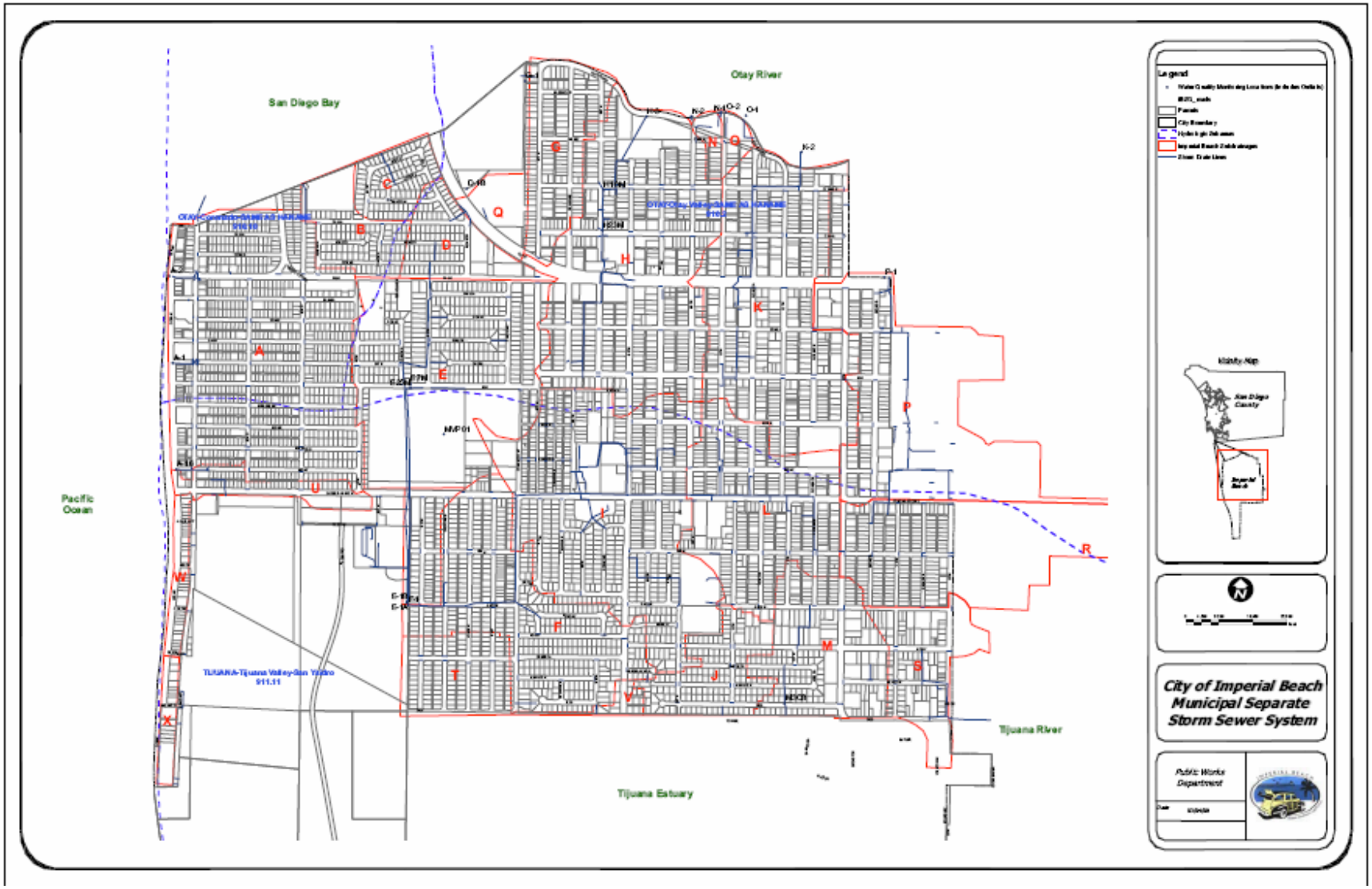

Attachment-3

San Diego Stormwater Copermittees

Dry Weather Monitoring Field Datasheet

☐ **Routine Investigation** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID		**Latitude**		**Watershed**	**Hydrologic Unit**	
Location		**Longitude**			**Hydrologic Area**	
Date		**TB Page**			**Hydrologic Subarea** (Optional)	
Time		**Observer**			**Discharge Area** (Optional)	

Land Use (Primary) (Check one only)	☐ Residential	☐ Commercial	☐ Industrial	☐ Agricultural	☐ Parks	☐ Open	
Land Use (Secondary) (Optional, greater than 10%)	☐ Residential	☐ Commercial	☐ Industrial	☐ Agricultural	☐ Parks	☐ Open	☐ None
Conveyance (Check one only)	☐ Manhole	☐ Catch Basin	☐ Outlet	☐ Concrete Channel	☐ Natural Creek	☐ Earthen Channel	☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☐ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☐ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	**Tide Height:**_____ft.
Last Rain	☐ > 72 hours	☐ < 72 hours				
Rainfall	☐ None	☐ < 0.1”	☐ > 0.1”			

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)			

Analytical Lab Samples Collected? ☐ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Attachment-4

2009 Trash Assessment Form

SITE ID: _____ DATE: _____

LOCATION: _____ TIME: _____

OBSERVER: _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____ ____

ESTIMATED AREA OF ASSESSMENT L x W (FT):_____ __

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Attachment-4

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

Type	Ranking or Count by Type *	Potential Route (check up to 2)				Potential Source (check up to 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash present in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

IDIC NUMBER	DATE RECEIVED	REFERRAL SOURCE *(Choose from List)*	COMPLAINT/OBSERVATION DESCRIPTION	INVESTIGATION RESULTS	CONSTITUENT *(Choose from List)*	RECEIVING WATER *(Where observed or alleged violation is occurring)*	VIOLATOR TYPE *(Choose from List)*	FINE / CITATION *(Insert Date)*	INFORMATIONAL LETTER (Insert Date)	CITY CLEANUP? (Y, N, N/A)	COST RECOVERY? (Y, N, N/A)	COST RECOVERY/FINE AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
1	07/02/08	GENERAL PUBLIC	Resident called PW Admin to report trash, etc. at IB Liquor Market	801 Seacoast - Trash, litter, junk, liquor bottles, beer containers accumulated around commercial bldg.	Trash	Pacific Ocean	commercial	2-Jul-08	07/08/08	N	N	N/A	Administrative Citation issued by Code Compliance Officer; to be corrected by 7/9/08.
2	07/03/08	GENERAL PUBLIC	Resident called PW Admin to report a concrete washout occurring along 7th & Cypress	562 Delaware - contractor cut drywall and washed material into street	CONSTRUCTION DEBRIS	SD Bay	RESIDENT			Y	Y		Env Prog Mgr and Parks supervisor instructed owner to clean up site.
3	07/03/08	PW - Streets	PW employees reported discharge from vicinity of 7th and IB	1105 7th Street - auto leak from old truck □ automotive repair discharged power steering fluid (per telecon with owner) to street at 1114 7th; some washing occurred around corner on IB Blvd	AUTO FLUIDS	Pacific Ocean	RESIDENT		07/07/08	N	N	N/A	VW to worker and to resident, Russ Peeples 254-7929, about 1105 7th Street re proper BMPs; no discharges allowed; no auto repairs to be done in streets
4	07/07/08	PW - Streets	PW employees reported discharge from vicinity of 1481 5th St	Old discharge of construction material washout	CONSTRUCTION DEBRIS	Tijuana Estuary	MOBIILE BUSINESS			N	N	N/A	
5	07/09/08	DRIVE BY	Env Prog Mgr noted bag of trash next to can at 13th and Bike path	13th & Bike path	Trash	Otay River	unknown			Y	N	N/A	PW-Streets picked up bag.
6	07/13/08	PW-ENV	cooking oil leaking in street	verified	COOKING OIL & GREASE	Pacific Ocean	MOBIILE BUSINESS		07/22/08	N	N/A		business owner cleaned it up
7	07/13/08	PW-ENV	cooking oil leaking in street	verified	COOKING OIL & GREASE	Pacific Ocean	MOBIILE BUSINESS		07/22/08	N	N/A		business owner cleaned it up
8	07/13/08	PW-ENV	cooking oil leaking in street	verified	COOKING OIL & GREASE	Pacific Ocean	MOBIILE BUSINESS		07/22/08	N	N/A		business owner cleaned it up

9	07/15/08	GENERAL PUBLIC	Env Staff observed grey concrete slurry originating from **737 Hemlock** and following gutter to the end of the block at Connecticut	Concrete slurry and residue originates from freshly poured and stamped driveway at **737 Hemlock**	CONSTRUCTION DEBRIS	Estuary	Construction		07/22/08	N	N/A		property owner cleaned it up
10	07/15/08	GENERAL PUBLIC	maggots in the gutter in front of 1461 Fern	observed 5-6 maggots-no trash, or rotting matter- gutters clean otherwise - resident thinks someone washed out trash can and maggots were washed down the gutter	Other	Tijuana River	Resident			N	N		vehicle was cited by the sheriff
11	07/15/08	GENERAL PUBLIC	observed large oil stain in middle of street in front of 1185 12th and another next door at 1177 12th resident Said he believes EDCO truck was leaking oil 3 weeks ago - resident called EDCO and they said it wasn't their spill - resident wants stain removed	Env. Program Mgr. observed both large stains and drips in between- stains are at least 3 wks. Old	AUTO FLUIDS	Tijuana River	unknown			N	N	N/A	resident was notified by telephone and thanked for the info and told there was no way after 3 wks. To remove the stain
12	07/15/08	GENERAL PUBLIC	report of over irrigating at property to the right of 833 9th	No extra water observed- resident admits that sprinkler head was broken - actual site of violation was tri-plex at 845,847,849 9th	OVER IRRIGATION	Estuary	RESIDENT			N	N		
13	07/15/08	PW - ENV	fresh oil residue observed in Municipal parking spot	reported to PW superintendent and PW Director	AUTO FLUIDS	Otay River	MUNICIPAL			Y	N		

14	07/17/08	resident	household hazardous waste containers in gutter	paint spilled in gutter	PAINT	Pacific Ocean	RESIDENT			Y	Y	106.23	
15	07/23/08	code enf.	dirt & construction residue discharged in the street	findings verified	CONSTRUCTION DEBRIS	Pacific Ocean	RESIDENT		07/31/08	N	N/A		verbal warning to remove all illegally discharged material
16	08/07/08	PW-ENV	water running down Palm from 2nd to Seacoast pooling at storm drain at corner of Palm and Seacoast	verified and followed stream to source	CAR WASHING	Pacific Ocean	RESIDENT		08/07/08	N	N/A		verbal education and flyer
17	08/07/08	PW-ENV	excessive amounts of water in parking lot of Carls Jr. & Hollywood Video	verified	WASH WATER	Otay River	MOBIILE BUSINESS			N	N/A		talked to mgr. at Carl's - they hire a mobile power washing company every 6 mo. to clean parking lot
18	08/11/08	PW-ENV	water coming out of cut in wall from pool sump	findings verified	POOL WATER	Otay River	RESIDENT			N	N/A		Property owner stopped disposal of water in street.
19	08/25/08	GENERAL PUBLIC	Below grade drainage sump in apartment parking lot was discharging untreated water onto the street	findings verified	unknown	Tijuana River	Property Manager			N	N/A		Property wet vacuumed out detention basin and installed hydrocarbon filters in the drain
20	09/04/08	PW - ENV	Mobile home leaking oil	findings verified	Auto Fluids	Otay River	unknown			N			the case was left with the sheriff
21	09/05/08	PW - Streets	Resident digging up dirt and depositing at sea wall	Reported to Env Div.	Sediment	Pacific Ocean	Resident			N			Construction inspector educated and informed the violator to clean up action
22	09/05/08	PW-ENV	Property owner scraping paint off vehicle in the street	findings verified	PAINT	Pacific Ocean	Resident			N			Immediately ceased paint scraping and cleaned all paint chip. Violator was educated and informed
23	09/12/08	PW - Streets	Automobile leaking radiator	finding verified	AUTO FLUIDS	San Diego Bay	Resident			N			Violator educated and informed to clean up spill
24	09/15/08	PW - Streets	Paint Spill during fight	findings verified	Paint	Pacific Ocean	RESIDENT			N			Sheriff took command of situation
25	09/19/08	PW - ENV	construction material being washed in the street	findings verified	Sediment	Pacific Ocean	Construction			N			PW-ENV educated and informed

26	09/23/08	resident	illegal dumping trash and past dumping of oil	findings verified	Trash	Tijuana River	Resident			N			The resident installed a fence around dumpster and repaved concrete area
27	09/25/08	PW-ENV	Washing driveway, walkway with water	findings verified	sediment	Tijuana Estuary	Property Manager			N			Educated and informed
28	10/02/08	PW-ENV	illegal dumping of concrete residue/debris into curb and storm drain	findings verified	Construction debris	Tijuana River	Construction	15-Oct-08		Y	Y		The property owner did not clean debris from curb and was assessed the charges for the city clean up efforts
29	10/07/08	PW-ENV	Owner of building was power washing the building and runoff was flowing to the storm drain	Findings verified	Sediment	Tijuana Estuary	Resident			N	N		The power washing was immediately ceased and the owner returned the next day to finish the job with the proper BMPs installed
30	10/07/08	PW - ENV	Sprinklers were stuck on and left running all day	findings verified	OVER IRRIGATION	Tijuana River	RESIDENT			N	N		United water was called to turn off water and the apartment complex owner immediately fixed the problem by the next day
31	10/08/08	PW-ENV	Power washing paint off building	findings verified	CONSTRUCTION DEBRIS	Tijuana Estuary	Residential			Y	N		Was ordered to stop all work until all BMPs are in place
32	10/15/08	PW - Streets	Pile of sediment on private resident's yard was uncovered and was spilling over onto the sidewalk	findings verified	Sediment	San Diego Bay	Resident			N			Educated and informed resident on corrective BMPs and event was fixed by the next day
33	10/15/08	PW-ENV	Excessive water because hose on private residence was left on and runoff was flowing down the street	findings verified	WASH WATER	Tijuana River	Residence			N			Informed resident at which time he immediately fixed the violation
34	10/23/08	PW-ENV	Construction site not in compliance with control BMPs and property was littered with trash	findings verified	CONSTRUCTION DEBRIS	Otay River	Construction			N			All Phase Drywall company was cited and educated on proper construction BMPs

35	10/27/08	PW - ENV	Resident power washing vehicle and water was flowing down the street	findings verified	CAR WASHING	Otay River	Residence			N			Educated and informed resident at which time he stopped and moved his washing onto a permeable area
36	10/28/08	PW - ENV	Roejack Roofing company (440-5600) was using a power washer to spray down the outside of building	findings verified	WASH WATER	Otay River	Construction			N			Workers were educated on proper BMPs and in the regulations required by the City's storm water permit
37	10/29/08	PW-ENV	Washington Mutual over irrigating and significant water was following off property and into the street	findings verified	OVER IRRIGATION	Otay River	Business		10/29/08	N			Hand delivered a letter and verbally instructed reasons and remedies for the offense
38	10/29/08	resident	Resident complained of neighbor watering down back dirt alley	Dirt was wet	OVER IRRIGATION	none	RESIDENT			N			Made a visit to the property and found no city code violation and no egregious wasting of water
39	11/03/08	PW - ENV	Broken sprinkler at apartment complex	findings verified	OVER IRRIGATION	Otay River	Property Manager			N			Made visit to property and made a call to Cal Am who immediately got the property manager to fix the problem
40	11/03/08	PW-ENV	Apartment complex over irrigating and flooding construction on Palm Ave	findings verified	OVER IRRIGATION	Pacific Ocean	Property Manager		11/03/08	N			Contacted HOA about violation by phone and letter
41	11/03/08	PW-ENV	Apartment complex over irrigating and flooding construction on Palm Ave	findings verified	OVER IRRIGATION	Pacific Ocean	Property Manager		11/03/08	N			Contacted property owner about violation and sent a letter
42	11/03/08	PW-ENV	Apartment complex over irrigating and flooding construction on Palm Ave	findings verified	OVER IRRIGATION	Pacific Ocean	Property Manager		11/03/08	N			Contacted the HOA about violation and sent letter

43	11/06/08	resident	Complaint from resident on over irrigation on apartment complex that was already on our warning list	findings verified	OVER IRRIGATION	Otay River	Property Manager			N			Contacted property manager
44	11/06/08	PW - ENV	Resident working on vehicle in the street and had leaking auto fluids	findings verified	AUTO FLUIDS	Pacific Ocean	Residential	6-Nov-08		N			The vehicle was ticketed for working on vehicle in the street and also issued a NOV for leaking auto fluids in street and gutter. The violator has until the next day at 9:00am to clean up and remove the vehicle from the street. Verbally educated and I informed the resident on proper spill clean up and storm water regulations
45	11/17/08	PW - Streets	Resident property overwatering and flowing to the storm drain	findings verified	OVER IRRIGATION	Otay River	RESIDENT			N			Letter is to be sent to the property owner
46	11/17/08	PW - Streets	Edco trucks spilling trash while conducting collection service	findings verified	Trash	Otay River	MUNICIPAL			N	N		Contacted Edco who immediately responded to clean up. Edco then contacted the street crew responsible for the poor collection and took appropriate actions to educate and inform
47	11/25/08	PW-ENV	Pool draining	Findings verified	unknown	Otay River	Property Manager			N	N		Educated on storm water regulations pertaining to pool water
48	11/25/08	PW-ENV	Over irrigation with excessive trash	Findings verified	OVER IRRIGATION	Otay River	Property Manager			N	N		Made a site visit to the property managers and educated and informed on city code and storm water regulations

49	11/26/08	PW-ENV	Improperly installed construction BMPs and illegal discharge of water pumped off construction site	Findings verified	Sediment	Otay River	Construction			N	N		Talked with contractors and delegated case over to the building inspector. I also talked with Pacific Point Property Mgr who own the property
50	12/02/08	resident	resident washing concrete down driveway into street	findings verified	Sediment	Tijuana Estuary	Property Manager		12/03/08	Y	Y		The City came across discharge after the fact. The City to clean the discharge and contacted the Property Manager
51	12/02/08	code enf.	Mobile business tracking dirt and soil in the street	findings verified	sediment	Otay River	MOBILE BUSINESS			N	N	N/A	Code enforcement officer issued a NOV to "All Phase Drywall" Note this was the second NOV to this Business
52	01/05/09	PW - ENV	hydraulic fluid from elevator discharged into the street	findings verified	Chemical	Tijuana Estuary	Property Manager	5-Jan-09		Y	Y		City cleaned and contacted FWS about discharge. Contacted property owner fined by FWS and corrective actions required
53	01/05/09	PW - ENV	Resident working on vehicle in the street and had leaking auto fluids	findings verified	AUTO FLUIDS	Otay River	Residential			N	N	N/A	Educated and informed resident on Storm water violation
54	01/05/09	code enf.	plant debris in street	findings verified	Trash	Tijuana Estuary	resident			N	N		street crew investigated and informed resident of storm water
55	01/12/09	GENERAL PUBLIC	report of RV dumping septic into street	report not verified	Multiple	Otay River	-			N	N	N/a	report not verified
56	01/12/09	PW - Streets	Water leaking out of wall and into street from business (7-11 Dominos)	findings verified	unknown	Tijuana Estuary	commercial			N	N		City and commercial businesses are working together to identify the source of the leaking water
57	01/21/09	code enf.	resident with garbage, and vegetation piled in gutter	findings verified	Trash	Otay River	resident			N	N	N	code enforcement contacted and informed

58	01/29/09	code enf.	pressure washing Kentucky fried chicken trash area	findings verified	Trash	Tijuana Estuary	commercial	29-Jan-09		N	N	N	Kentucky fried chicken management has been a continued problem. Increase frequency of inspections
59	02/04/09	PW-ENV	residential property with leaking pipe	findings verified	unknown	Otay River	resident		02/05/09	N	N	N	Contacted Cal Am Water and sent letter to resident
60	02/04/09	PW - ENV	sump pump kicked on at Tropical fish store when hose was left on too long	findings verified	unknown	Otay River	Business			N	N	N	talked with business owner and workers and educated about storm water code
61	03/02/09	PW - Streets	hydraulic hose blew on a dump truck	findings verified	Chemical	Otay River	Construction			Y	Y		Driver of the truck contained the spill from getting into the storm drains. At which time the city responded to cleanup the spill. Educated and informed driver.
62	03/03/09	GENERAL PUBLIC	maintenance worker blowing trash into the street	findings non conclusive	trash	Tijuana River	Commercial			N	N	N	na
63	03/09/09	GENERAL PUBLIC	excessive amounts of water running down the street	findings non conclusive	water	Tijuana River	Resident			N	N	N	na
64	03/10/09	code enf.	cigarette butts and litter around property	findings verified	Trash	Pacific Ocean	Resident			N	N	N	informed and educated about trash and storm water
65	03/17/09	GENERAL PUBLIC	Washing machine waste water discharges into alley	Findings still under investigation	WASH WATER	Otay River	Resident			N	N	N	still under investigation
66	03/18/09	PW - Streets	Burger King washing parking area with hose and degreaser	Findings verified	Chemical	Otay River	commercial			N	N	N	Violator approached and informed to stop action. Further actions still pending.
67	03/19/09	PW - Streets	Portillo Concrete (Forman Dave) instructing crew to wash down sidewalk with water	findings verified	WASH WATER	Otay River	Contractor		03/23/09	N	N	N	contacted, educated and informed

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

68	04/15/09	GENERAL PUBLIC	Resident auto painting in driveway	findings non conclusive	PAINT	Otay River	Resident			N	N	N	Citizen online complaint, responded to by code enf and env manager
69	04/15/09	GENERAL PUBLIC	Excessive Trash from apartments	findings verified	Trash	Tijuana River	Residents			N	N	N	Trash form this residents is a persistent problem. Need to contact HOA and each resident at apartment.
70	04/21/09	PW-ENV	Hosing down outside area	findings verified	WASH WATER	Pacific Ocean	Property Manager		04/21/09	N	N	N	Hand delivered NOV and storm water educational brochure
71	04/21/09	PW - Streets	Oil leaking from vehicle	findings verified	Oil and Grease	Otay River	Resident			Y	N	N	Env Specialist responded to event. Leaking vehicle is on private property however the car does not belong to anyone on the property. Contact info for apartment complex is wrong. Env contained the spill.
72	04/22/09	DRIVE BY	Water coming up from the ground	findings verified	potable Water	Pacific Ocean	Property Manager			N	N	N	Director identified the leak. City followed up with Tyco Property Mgr, Cal Am, and maintenance Tessie Clark.
73	05/04/09	PW - Streets	Water flowing down street from irrigation	findings verified	Potable Water	Otay River	Resident			N	N	N	Contacted Cal Am
74	05/13/09	PW-ENV	auto fluid spills at auto zone/ City of San Diego	findings verified	AUTO FLUIDS	Otay River	Property Manager			N	N	N	Passed info onto City of SD storm water
75	05/13/09	PW-ENV	Roach Coach on 13th St City of SD	Findings Verified	Oil and Grease	Otay River	MOBIILE BUSINESS			N	N	N	Passed info onto City of SD storm water
76	05/13/09	PW-ENV	Excessive trash, paint, oil, and debris on property	Findings Verified	Multiple	Pacific Ocean	Property Manager	13-May-09		N	N	N	Passed onto Dave Garcias b/c property management is repeat offenders

77	05/13/09	PW-ENV	Construction crew getting ready to power wash without BMPs	Contacted workers and called contractor on cell phone	Other	Pacific Ocean	MOBIILE BUSINESS			N	N	N	Spent time to educate all the construction workers on the site about construction BMPs. Also contacted owner and made him aware of the situation and the City's BMP requirements
78	05/18/09	resident	Neighbor grass clippings in street	inconclusive findings	none	na	Resident			N	N	N	The report was unfounded
79	05/21/09	PW-ENV	Water leaking out of main down street	Finding Verified	potable Water	Pacific Ocean	Business			N	N	N	Contacted Cal American water and they responded to leak
80	05/21/09	PW - ENV	Sediment in gutter from water leak	Findings Verified	Sediment	Pacific Ocean	Business			N	N	N	Called Cal American and made them clean up after the water leak
81	05/26/09	PW - ENV	Over watering and trash	Findings Verified	potable Water	Otay River	Property Manager			N	N	N	sent letter to property management and contacted Cal Am about the over watering
82	05/21/09	resident	Over watering	Findings Under Investigation	Potable Water	Otay River	Property Manager			N	N	N	still under investigation
83	05/21/09	resident	Power washing paint off building	Findings Under Investigation	WASH WATER	Otay River	Business			N	N	N	still under investigation
84	05/28/09	resident	Washing Paint in the street. Wash water was contained before making it to the storm drain	Findings Verified	Paint	Otay River	Resident			N	N	N	resident was Chinese and did not speak English. Through the use of hand gestures and acting I was able to educate resident on storm water pollution.
85	05/29/09	PW-ENV	Oil puddle in street	Findings Verified	Oil	Tijuana Estuary	unknown			Y	N	N	Had the graffiti truck vacuum up the oil
86	06/03/09	PW-ENV	Over irrigation	Findings Verified	potable Water	Pacific Ocean	Resident		06/04/09	N	N	N	investigated and found over irrigation. Sent letter to and NOV to owner of property
87	06/04/09	PW - ENV	Washing boat and fish guts down street	Findings Verified	Other	Tijuana Estuary	Resident		06/04/09	N	N	N	Sent letter to property owner about boat washing and fish cleaning

88	06/10/09	PW - ENV	white substance coming from back of property	Findings Verified	unknown	Tijuana Estuary	Resident		06/10/09	N	N	N	Send letter and brochure on storm water pollution and BMPs
89	06/10/09	PW - ENV	oil in driveway	Findings Verified	Oil and Grease	Otay River	Resident		06/10/09	N	N	N	Sent letter and brochure on storm water pollution. Educate and informed
90	06/10/09	PW-ENV	sediment in parking lot	Findings Verified	sediment	Pacific Ocean	Construction			N	N	N	Contacted Edco to get parking lot back on the street sweeping list.
91	06/12/09	PW - ENV	Contractors power washing street with solvent spray to dissolve asphalt	Findings Verified	CONSTRUCTION DEBRIS	Pacific Ocean	Construction			N	N	N	Contacted and informed and also sent Larry Martin out to manage with the contractors
92	06/15/09	resident	Street sweeping not occurring at 234 Daisy	findings non conclusive	Sediment	Pacific Ocean	MUNICIPAL		06/15/09	N	N	N	Contacted Edco who immediately responded an investigation. Edco then contacted the street sweeping service to verify that the street is being swept. PW also made a site visit for verification.
93	06/15/09	PW - ENV	Contractors power washing street with solvent spray to dissolve asphalt	Findings Verified	CONSTRUCTION DEBRIS	Pacific Ocean	Construction			N	N	N	Contractors were using a vacuum to collect water however wash water was still washing into the wet well at the end of Seacoast. Made contractors correct recovery method.
94	06/16/09	GENERAL PUBLIC	Fire dept was called out on a discharge of blackish water into the street. Leaking sprinklers triggered a sump pump which then kicked on arching back water out from the curb and into the street	Findings Verified	unknown	Tijuana Estuary	Property Manager			N	N	N	Contacted the owner 423-8402 who was already aware of the leaking sprinkler and was working on the problem. The issue on the sump pump is still under investigation.

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

95	06/22/09	GENERAL PUBLIC	Inoperable wrecked vehicle leaking fluids	Findings Verified	AUTO FLUIDS	Otay River	Resident			N	N	N	Owner was cited and advised

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	8-25-10

2009-2010 JURMP Annual Report

City of Imperial Beach

9/14/2010

This Jurisdictional Urban Runoff Management Plan Annual Report contains a comprehensive description of the activities conducted during FY 2009-10 by the City to meet all requirements of section D of the Municipal Permit R9-2007-0001.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
	Public Works Director	(619) 628-1369	
H. A. Levien			

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Executive Summary

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order R9-2007-0001 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2009 and June 30, 2010 (FY2009-10).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following are highlights and major accomplishments for each major JURMP component during this fiscal year.

Development Planning

The Development Planning Component involves incorporating storm water and urban runoff management into the development review process. This includes reviewing priority and non-priority development projects for necessary best management practices (BMPs) to manage storm water runoff prior to the issuance of grading or construction permits. Major accomplishments during this fiscal year included the following:

- Conditioned 24 discretionary projects requiring developers or contractors to implement minimum best management practices (BMPs) and low impact development (LID) requirements to reduce pollutants and runoff to the maximum extent practicable (MEP). This compares to 51 projects during FY2006-07, 48 projects during FY 2007-08, and 24 projects during FY2008-09.
- No Water Pollution Control Plans subject to the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements were approved during the reporting period. The City has 2 potential SUSMP projects in the planning stage and 4 SUSMP projects that are still going through the plan check process and have not been approved for development.
- Verified operation and maintenance of 22 permanent post construction treatment control BMPs.
- Participated with San Diego Copermittees in the development of the Hydromodification Management Plan (HMP). The Copermittees submitted the Final HMP to the Regional Board on 12/29/09. The HMP Plan received Regional Board revisions, public comments, and Copermittee revisions. The Regional Board is scheduled to vote on the final plan on 7/14/10.
- Provided storm water education to developers and contractors through face-to-face interactions with City staff in meetings, during counter hours held at the Community Development Department, and through informative brochures provided during the application process.

Construction Component

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. All construction projects are required to have a City approved Storm Water Management Plan prior to the start of the project. Projects over 1 acre in size are also required to obtain coverage under the State General Construction Permit. Major accomplishments during FY2009-10 included the following:

- Inspected a total of 72 active construction projects including 5 Capital Improvement Projects (CIP) during the reporting period. Approximately 495 inspections were performed to verify the proper installation and maintenance of construction phase BMPs.
- Performed daily oversight of construction BMP compliance at all 5 CIP projects that were in active construction phase.
- Responded to 15 reports of illegal discharges from construction sites. Only 4 notices of violations (NOVs) were issued to achieve compliance. Verbal warnings are usually sufficient to bring violators into compliance.
- Discussed urban runoff management requirements with all applicants during the plan check process and verified BMP requirements during follow-up inspections.

Municipal Component

City employees continued to implement best management practices (BMPs) to prevent the discharge of water and pollutants from municipal facilities and activities. Examples of BMPs implemented during the reporting period include:

- Vehicle washing in wash bays that drain to the sanitary sewer.
- Preventive maintenance of City vehicles to prevent fluid leakage.
- Use of high-power vacuum to capture runoff from graffiti abatement, sidewalk grinding, and spill cleanup.
- Strict limitations on the use of fertilizers and pesticides in parks and landscape areas.
- Monitoring of sprinkler systems to prevent over-topping onto roadways.
- Alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.
- Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup.

- Annual storm water training for the Public Works Department on the use of BMPs in daily operations.

Other notable accomplishments during FY2009-10 include:

- Inspected and cleaned 100% of municipal storm drain system and removed 8,230 pounds of sediment, trash, and organic materials through storm drain cleaning.
- Removed an additional 177 tons of material through frequent street sweeping.
- Continued maintenance of the10th St. and Imperial Beach Blvd. vortech storm water interceptor to remove sediment, floating hydrocarbons, and debris from all levels of flow.
- Quarterly maintenance of 13 municipal storm drain filter inserts that prevented 852 pounds of material from getting into the storm drain system.
- Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions.
- Continued operation of the Palm Avenue urban runoff diversion system at Seacoast Avenue and diverted 156,000 gallons of urban runoff and first flush rain water into the sanitary sewer.
- Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Industrial and Commercial Component

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress continues to be made on increasing knowledge on urban runoff management among local businesses. The following are the major accomplishments achieved during this reporting period:

- Conducted 71 inspections at high priority businesses, which include automotive repair shops, restaurants, bars, gas stations, car washes, grocery stores, and mobile home parks. This is 21 more inspections than were conducted last reporting period. Inspections revealed some BMP deficiencies, but on the whole, most businesses were knowledgeable of the urban runoff management requirements. Following each inspection the City mails the business owner a copy of the inspection form, an inspection report, and a BMP for your business brochure.
- Responded to 26 enforcement actions at businesses and issued 6 notices of violation as part of the enforcement and case resolution process. The City also conducted 9 follow up inspections as part of the annual storm water inspection program
- The City participated with the Copermittees in the Regional online mobile business database tracking system that became operational this reporting period. The database tracks active

mobile businesses and violations issued by other jurisdictions. The City also notified 46 mobile businesses of minimum BMP requirements through an educational mailer.

Residential Component

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions, and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

- Identified and mitigated 94 residential violations. The most commonly observed violations involved construction debris, automotive fluids, wash water, detergents or chemicals, chlorinated swimming pool water, and green waste.
- Issued 24 notices of violations as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings and/or letters. No fines were issued to residents during this reporting period.
- Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.
- Educated residents on environmental issues including storm water in the City's semi-annual newsletters and a quarterly newsletter distributed by EDCO.
- Participated in the Regional Education and Residential Sources workgroup as co-chair of the group and chair of the Underserved Target Audience sub-workgroup.
- Approximately 10,337 pounds of household hazardous waste, universal and e-waste, and used oil and other fluids were properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista.
- The City held its annual Citywide Garage Sale event followed next week by the annual Home Front Clean Up, which resulted in the proper disposal of 175.6 tons of trash, construction, metal, and green waste.

Illicit Discharge Detection and Elimination Component

The City endeavors to prevent discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to complaints and referrals of urban runoff discharge violations.

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

Education Component

The City endeavors to implement a diverse education program that promulgates the storm water management requirements of the Municipal Permit. Education activities target the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in Imperial Beach) 5) residents, general public, and school children, and 6) underserved community. The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs.

1.0 Introduction

1.1 Introduction

The City of Imperial Beach is required to submit its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report each year by September 30th in compliance with the San Diego Regional Board Order Number R9-2007-0001 (Municipal Permit). The Annual Report contains a comprehensive description of all activities conducted by the City to meet all requirements of section D of the Municipal Permit. The annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. The reporting period for the Annual Report is the previous fiscal year July 1st to June 30th.

The following chapters in this Annual Report discuss the measures taken by the City to meet the regulatory requirements of the Municipal Permit and demonstrates that the City has achieved substantial compliance towards reducing sources of pollutants and urban runoff to the maximum extent practicable (MEP). All components of the JURMP are represented in this report with the exception of Section 7.0, Illicit Discharge Detection and Elimination Component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), which extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The City endeavors to reduce pollutants and runoff from development and redevelopment projects to the maximum extent practicable (MEP). This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Program Division of the Department of Public Works, and the contracted engineering firm, BDS Engineering. This section of the Annual Report discusses program management, implementation, and changes made during FY 2009-10 to the JURMP Development Planning Component.

2.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Development Planning component is described in the *2008 JURMP Section 4.0*. This section has been updated to include the implementation of the Countywide Model SUSMP into the operations of the City. Municipal Code Chapter 8.32 was amended on February 3, 2010 to include the new requirements of the Model SUSMP. In addition, all development projects under went the appropriate environmental review and verification processes. Development and BMP inventories were maintained on record and site inspections were tracked using the City's database system HTE.

2.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all development and redevelopment projects to implement measures to reduce pollutants and runoff to the MEP. Minimum BMPs and LID requirements were established in the *2008 JURMP Section 4.0* and are required as conditions during the development review process. Priority development projects are given special consideration under the Standard Urban Stormwater Mitigation Plan (SUSMP) and have more stringent requirements. All municipal staff is knowledgeable in the storm water program and receives annual training as described in the 2008 *JURMP Section 10.0*. The Community Development Department also held counter hours and face-to-face meetings throughout FY 2009-10 to provide education and answer questions for developers. In addition, every development or redevelopment project regardless of its prioritization is formally inspected for applicable BMPs throughout the duration of the project. Post construction treatment control BMPs are also inspected annually for operation and maintenance verification. Finally, the City participated in the development of the Hydromodification Plan (HMP) through the Copermittee Land Development Workgroup.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Development Planning program element:

- Table 2.1 provides an overview of the development and planning projects as it was implemented during FY 2009-10.
- Table 2.2 presents and describes targeted FY 2009-10 outcomes and results
- Table 2.3 provides the updated treatment control BMP inventory.

- Table 2.4 provides an inventory of FY 2009-10 Development Review and SUSMP projects.

2.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Developers

Education is provided to the public through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. The efforts by the City to educate the public on development planning are discussed in the *2008 JURMP Section 4.0.* The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

2.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Developers

City staff works with developers to ensure that all development projects and redevelopment project reduce pollutants and runoff to the MEP. The *2008 JURMP Section 4.0* defines minimum BMP and LID requirements applicable to development and redevelopment in the City. The County Model SUSMP also requires additional controls for priority development projects.

During FY 2009-10 the City continued to facilitate changes in behavior for development and redevelopment projects by reviewing and requiring conditions on projects to ensure program compliance. The City inspects active projects for violations and enforces compliance on all required conditions. All BMPs are verified for proper implementation, operation, and maintenance throughout the duration of construction. Post construction maintenance and operation of treatment control BMPs are also verified and inspected annual by the Environmental Division.

The City is required to enforce its storm water ordinances for all Development Projects and at all development sites as necessary to maintain compliance with the Municipal Storm Water Permit. City ordinances include appropriate sanctions to achieve compliance including non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance.

2.6 Outcome Level 4: Source Load Reductions

Source load reductions from development and redevelopment projects are achieved through the implementation of BMPs and LID strategies. The City requires specific project conditions for treatment control BMPs, LIDs, and site design BMPs to reduce pollutants and runoff to the MEP. Source load reductions may not be directly measured but can be implied by the proper implementation and maintenance of storm water BMPs.

Table 2.1 – Overview of Development Planning Inventory by Development Type and Priority Classification

Category	Number	Description
A. Type of Development		
New development	0	All development projects are required to undergo the City's urban runoff approval process and meet applicable requirements. Administrative procedures for development project review is discussed in *2008 JURMP Section 4.0.*
Redevelopment	24	
B. Priority Classification		
Discretionary Projects	18	No projects received a SUSMP waiver. All SUSMP-eligible projects were subject to applicable requirements. No SUSMP projects were approved for construction during the reporting period. SUSMP projects were either in the planning stage or plan check stage. Permits to begin construction on the six priority development projects will not be issued until acceptable SUSMP and Water Pollution Control Plans have been submitted and approved.
Priority Development (SUSMP) Projects	6	
C. Totals		
Discretionary Projects	18	Complete list of development projects that received an environmental review for storm water during the reporting period or projects requiring a SUSMP is provided in Table 2.4.
Priority Development (SUSMP) Projects	6	

JURMP Sections	Description of FY 2009-10 Changes
4.0 and Appendix C	I.B.M.C. 8.32 Standard Urban Storm Water Mitigation Plan was updated to include the elements of the Countywide Model SUSMP. Updates were made to the Treatment Control BMP inventory and Development Project inventory.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	Incorporated Model SUSMP into Municipal Code	Complete	Updates made to the Imperial Beach Municipal Code 8.32 on February 3, 2010 to include the elements of the Countywide Model SUSMP.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	City project review procedures were updated as a result of the SUSMP	Complete	Updates made to Imperial Beach Municipal Code 8.32 to include the requirements of the SUSMP. The City is also looking into updating its Environmental Review forms (7-A and 7-B) and updating guidance documents to include further guidance for SUSMP, HMP, and General Construction Permits.
c) Year-End Program Review			
Complete annual year-end program review	Reviewed program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Inventory of Development and Redevelopment Projects			
Update development and redevelopment inventory	Updates made to the inventory throughout the reporting period	Complete	The City maintains a database of active development projects and development review status on the City's database system HTE. Annual inventories are also maintained in excel with the Environmental Division.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Inventory of Treatment Control BMPs and Maintenance			
Update inventory for treatment control BMPs	Updates made to inventory and maintenance verified	Complete	The Environmental Division maintains an inventory of treatment control BMPs. During this reporting period there were changes made to the inventory layout, property owners, and operation and maintenance of the BMPs. One location was removed from the list (Tunes Lube & Ect.) because the building is in the process of being redeveloped.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Project Approval			
Require development projects to implement applicable project requirements, BMPs, and track information	BMPs are required as conditions for all development projects and BMPs are verified through the project application process	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. The City's project review process further requires that any new construction or modification with a valuation more than $50,000 be subject to public improvements. Projects that meet the $50,000 criterion are routed from the Community Development Department to the Public Works Department for a review in regard to storm water and runoff. SUSMP projects are also required to implement additional storm water management controls and BMPs. SUSMP projects are reviewed by Community Development, Public Works, and contract Engineer BDS for compliance with all storm water regulations. All project applications are tracked through the permit approval process and recorded in HTE, excel databases, and Master File system.
b) Confirmation of SUSMP and HMP BMPs			
Verify that all applicable SUSMP and HMP BMPs are applied to priority projects and that the BMPs are inspected prior to occupancy	All SUSMP eligible projects were held to full SUSMP requirements. No projects required HMP interim criterion.	Complete	Six SUSMP high priority projects were subject to applicable requirements, with no project in active construction phase during this reporting period. Storm water BMPs are reviewed during the plan check process. BMPs are then verified during construction through field inspections. The final sign off on the project is not complete until the City receives a signed maintenance agreement for continuous maintenance of the BMPs from the property owner.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
c) Example of a Priority Development Project and SUSMP BMPs			
List one example of a priority development project that was conditioned to meet SUSMP requirements	Seacoast Inn Redevelopment Project	Complete	The Seacoast Inn redevelopment project is in the final project review stage before demolition and construction begins. The SUSMP component of the project received review and comments from Community Development, Public Works, and contracted engineering firm BDS. The project is required to implement LID, source control, and treatment control BMPs and provide a post construction BMP maintenance agreement. All SUSMP components are required to be shown on the building plans before permits are approved for the project.
d) Priority Development Projects implementing BMPs with low removal efficiency rankings			
Listing and feasibility analysis of SUSMP projects using BMPs with low removal efficiency rankings	No projects implemented BMPs with low removal efficiency rankings	Complete	Development projects are required to implement BMPs that target priority pollutants. The selection of BMPs is verified during the plan check process. The City only allows less efficient BMPs after a feasibility analysis proves there is no better alternative.
e) HMP Collaboration			
Description of HMP development and collaboration	Participated in the development of the Copermittee HMP efforts	Complete	Participated in the development of the Countywide HMP through the Land Development Copermittee Workgroup. The Copermittees submitted the Final HMP to the Regional Board 12/29/09. The HMP Plan received Regional Board revisions, public comments, and Copermittee revisions. The Regional Board is scheduled to vote on the final plan on 7/14/10.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
f) Municipal Staff Training			
Ensure that municipal staff are knowledgeable on storm water BMPs, SUSMP, and HMP requirements	Staff educated through meetings, workshops, and training s	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. In addition the Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received training outside the City on multiple storm water issues. Training topics include SUSMP, HMP, TMDLs, General Construction Permit, and code enforcement. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.
g) Developer Education			
Provide education for developers	Counters hours held and meetings conducted during project review and throughout project	Complete	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Educational items are also proved online and through brochures.
h) Special Investigations			
Not Targeted	None	None	Special investigations were not conducted in FY 2009-10 and are not routinely conducted as part of the implementation strategy for this program element.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)			
Establish a baseline of staff and developer knowledge regarding applicable program content	Surveys were provided to Community Development staff during the previous two reporting periods. Staff is educated through meetings, workshops, and trainings.	Complete	The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. The surveys administered during training sessions provide a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The overall results show a high level of knowledge on core storm water management concepts in the City. Knowledge and awareness of developers is implied through the implementation of appropriate storm water BMPs. Inspections of BMPs by Code Enforcement, Building Division, and Public Works also provides reinforcement on BMP requirements and strengthens knowledge and awareness. Surveys were not conducted in FY 2009-10 and are not routinely conducted as part of the implementation strategy for this program element. Changes in knowledge of contractors are evident by the increased level of compliance observed during inspections.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND DEVELOPERS)			
a) Procedural and Administrative Behaviors			
Review projects and prescribe necessary conditions of approval and BMPs	24 projects reviewed for conditions of approval	Complete	The City reviews all proposed projects and ensures that all necessary conditions and BMPs are met. High priority development projects are held to more stringent requirements including SUSMP, HMP, and General Construction Permit. The Department of Public Works reviews and requires conditions on all Discretionary Projects greater than $50,000 in costs. Once a project becomes active the City inspects and verifies that all BMPs are implemented. The Public Works Inspector also provides continual oversight during project management of CIP projects.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) BMP Implementation, Operation and Maintenance			
Inspect projects for BMP compliance and verify BMP implementation	24 Projects, including the six SUSMP Projects were reviewed and received conditions All active projects inspected for BMPs	Complete	The Building Division, Code Enforcement, Environmental Division, and Public Works Inspector conduct inspections at all active development projects for compliance of minimum BMPs. The Public Works Inspector conducts inspections at all CIP and active SUSMP projects daily. The Building Inspector conducts inspections of all Discretionary permit projects and ensures the implementation of BMPs. Code Enforcement and Environmental Division respond to all reports of storm water violations from development projects. Construction inspections of Discretionary Projects are covered in the next Section of this Annual Report.
Verify operation and maintenance of treatment control BMPs	22 out of 22 or 100% compliance. Corrections were made on a voluntary basis without need for administrative enforcement.	Complete	The City annually verifies operation and maintenance of treatment control BMPs to ensure compliance with program. Verification is made through written contact with property owner or manager and followed up with an inspection. At a minimum all high priority treatment control BMPs are inspected for operation and maintenance annually.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)			
a) Treatment Control BMPs			
Maintenance of treatment control BMPs	201.51 pounds of material removed from treatment control BMPs	Complete	The City verifies maintenance of treatment control BMPs and when possible tracks the amount of material collected during maintenance activities.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) Low Impact Development (LID) and Site Design BMPs			
Implement LID and site design BMPs	No priority development projects were implemented during the reporting period	Complete	During the project review the City requires LID and site design BMPs for high priority projects. Non-priority development projects are required to implement public improvements such as source control BMPs and in some cases engineered LIDs and treatment control BMPs. Load reductions are not tracked but are implied for LID BMPs.

Table 2.3 - Treatment Control BMP Inventory and Maintenance Tracking

ID	Type	LOCATION	HU and WATERSHED	Installation Date	Party Responsible	Affiliation	Priority	Maintenance Verifications or Inspections	Findings Summary	Corrective Actions Summary	Waste (lbs)
1372-13-1	Drain Guard, sediment and hydrocarbon filters	1372 13TH ST	910.20 Otay	10/1/08	Cha-Cha Cervantes	Property Manager	High	3	No corrections needed		2
1450-IR-1	Sump Pump and Screen Mesh	1450 IRIS AVE	911.11 Tijuana	6/27/05	Alan Jurlina	Property Manager	High	2	No corrections needed		10
861-11-1	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	2	No corrections needed		1
861-11-2	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	2	No corrections needed		1.5
861-11-3	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	2	No corrections needed		2
481-PA-1	Drain Guard in back	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	0	No corrections needed		
481-PA-2	sediment trap IN BACK	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	0	No corrections needed		
481-PA-3	hydrocarbon filter in front parking area	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	0	No corrections needed		
836-PA-1	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	2	Repair and maintenance required	Repaired and maintained	14.01
836-PA-2	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	2	Repair and maintenance required	Repaired and maintained	20.95
836-PA-3	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	2	Repair and maintenance required	Repaired and maintained	27.74

Table 2.3 - Treatment Control BMP Inventory and Maintenance Tracking

ID	Type	LOCATION	HU and WATERSHED	Installation Date	Party Responsible	Affiliation	Priority	Maintenance Verifications or Inspections	Findings Summary	Corrective Actions Summary	Waste (lbs)
836-PA-4	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	2	Repair and maintenance required	Repaired and maintained	8.49
836-PA-5	KriStar, Flo Gard Plus Catch Basin Insert w/ boom.	888 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	Low	2	No corrections needed		7.59
836-PA-6	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	888 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	Low	2	No corrections needed		12.23
1101-PA-1	KriStar, Catch Basin with insert	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	1	No corrections needed		
1101-PA-2	KriStar, Catch Basin with insert	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	1	No corrections needed		
1101-PA-3	KriStar FGP-0002	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	1	No corrections needed		
1101-PA-4	KriStar FLOGARD Downspout Filter FG-DS4	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	0	No corrections needed		
1126-13-1	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	2	Maintenance required	Maintained	17
1126-13-2	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	2	Maintenance required	Maintained	23
1126-13-3	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	2	Maintenance required	Maintained	28
1126-13-4	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	2	Maintenance required	Maintained	26
							Totals	**34**			**201.51**

Table 2.4 - Development Review and SUSMP Project Inventory FY 2009-10

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Type	Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMP Needed	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Construction / Post-construction BMP Notification	Loamy soil to minimize runoff	Water Pollution Control Plan/SWPPP	Construction BMPs
No Date	1	MF 779	Yes	Planning	221-225 Palm Ave	Building add.	8 unit residential and commercial	X	X			X			X	X	X	X	X
No Date	2	MF 1034	Yes	Planning	536 13th 535 Florence St	Bike Village	Bay Shore Bike Path Bike Village and Hostel											X	X
5/29/2010	3	-270, 09-050, 09-0	Yes	Plan Check	800 Seacost	Hotel	Seacoast Inn demolition and development	X	X	X	X	X	X	X	X	X	X	X	X
11/9/2009	4	CIP MF 950	Yes	Plan Check	495 10th St	CIP	Public Works yard expansion											X	X
11/14/2007	5	MF 962	Yes	Plan Check	400 7th Street	SFR	New SFR behind existing SFR	X	X	X		X			X	X	X	X	X
6/1/2010	6	MF 1003	Yes	Plan Check	853 Emory St	Demolition/ new construction	demolition and const of new church	X		X	X	X			X	X		X	X
7/29/2009	7	CIP R05-201	No	Active	735 Palm Ave	NICU Demolition	Building demolition											X	X
7/10/2009	8	CIP F05-204	No	Active	865 Imperial Beach Blvd	Fire Department Kitchen	Kitchen remodel for fire department											X	X
12/17/2009	9	CIP P03-502	No	Active	Veterans Park	Soccer Field terf	Installed new artificail terf soccer field			X								X	X
4/9/2009	10	CIP	No	Active	825 Imperial Beach	Xeriscape City Hall	Xeriscape City Hall with drout tolerant plants											X	X
5/2/2010	11	CIP F05-50A	No	Active	1075 8th	Xeriscape Marina Vista Center	Xeriscape Marnia Vista Center											X	X
9/1/2009	12	MF 999	No	Plan Check	808 13th St	Remodel of church	Redevelopment of Church	X	X			X			X	X	X	X	X
40109	13	09-411	No	Plan Check	1468-1472 Holly	Building Conversion	Convert 4 existing units, garage conversion, and construction of car port to three remodel units	X	X			X			X	X	X	X	X
12/15/2009	14	09-411	No	Plan Check	1460 Holly	SFR Remodel	Home remodel	X	X	X		X			X	X	X	X	X
12/28/2009	15	MF 1030	No	Plan Check	1194 Connecticut	New SFR Unit	New SFR	X	X			X			X		X	X	X
3/2/2010	16	10-169	No	Plan Check	302 Calla	Building Add	Addition of second story	X	X			X			X			X	X
3/9/2010	17	MF 1034	No	Plan Check	536 13th and535 Florence	Building Conversion	Convert warehouse buildings into retail. commercial	X	X			X			X		X	X	X
4/22/2010	18	MF 1037 MF 788	No	Plan Check	253-255 Elm	Condo Conversion	Convert 2 units to condos	X	X			X			X		X	X	X
40302	19	MF 1040	No	Plan Check	1258 IB Blvd	Wireless Communication Facility	New wireless communication facility		X			X			X		X	X	X
5/27/2010	20	MF 1045	No	Plan Check	1174 Seacoast	Demolition	Demolition 5 unit complex	X	X			X			X		X	X	X
40330	21	MF 974	No	Plan Check	933 Seacoast	Wireless Communication Facility	New wireless communication facility					X			X		X	X	X
40331	22	MF 963	No	Plan Check	750 13th	Wireless Communication Facility	New wireless communication facility					X			X		X	X	X
No Date	23	09-543	No	Plan Check	311 Evergreen	SFR Remodel	Building addition	X	X			X			X		X	X	X
No Date	24	10-149	No	Plan Check	523 Spruce	Building Add	Building addition	X	X			X			X		X	X	X

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City endeavors to reduce pollutants and runoff from construction sites to the MEP. This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Division, and requirements that apply to the Building and Planning Division activities related to construction and construction permits, and compliance actions proposed by the City. This section of the Annual Report discusses program management, implementation, and changes made during FY 2009-10 to the JURMP Construction Component.

3.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Construction component is described in the *2008 JURMP Section 5.0*. This section has ben updated to include the implementation of the Countywide Model SUSMP into the operations of the City. Municipal Code Chapter 8.32 was amended on February 3, 2010 to include the new requirements of the Model SUSMP. The City is currently in the process of updating construction application forms and education materials. The City also maintains an ongoing database of active construction projects and tracks inspections though the City's database software HTE.

3.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all development and redevelopment projects, including Capital Improvement Projects (CIP), to reduce pollutants and runoff to the MEP through the implementation of BMPs. The designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0* and are required as project conditions prior to the approval and issuance of local construction and grading permits. All construction projects are formally inspected throughout the duration of the project. During the rainy season all priority projects were inspected at least biweekly, medium priority sites were inspected at least monthly, and low priority projects were inspected as needed. During the dry season, all construction sites were inspected as needed.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Construction program element:

- Table 3.1 provides an overview of the Construction element as it was implemented during FY 2009-10.
- Table 3.2 presents and describes targeted FY 2009-10 outcomes and results
- Table 3.3 FY 2009-10 active construction inventory and inspection frequency

3.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Contractors

Education is provided to contractors through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff, BMP implementation, and water quality. The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

3.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Contractors

The City facilitates changes in behavior and implementation of BMPs at construction sites by working with developers to ensure that all projects meet the requirements of the Regional Permit. Prior to the issuance of construction and grading permits the City requires developers to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the General Construction Permit. The City also inspects projects and enforces storm water ordinances at all construction sites. The *2008 JURMP Section 5.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes. The *2008 JURMP Appendix D* defines minimum BMP requirements applicable to construction in the City.

3.6 Outcome Level 4: Source Load Reductions

The primary goal of BMP implementation is to reduce the loading of pollutants and runoff to storm water discharges. During the reporting period the City successfully implemented all program requirements that relate to the Construction Component of the Regional Permit. Source load reductions were achieved at construction sites by implementing erosion and sediment control, requiring minimum BMPs, and enforcing general site management requirements. The City required 67 active construction projects and 5 Capital Improvement Projects to reduce pollutants and runoff to the MEP. Compliance with required minimum BMPs were then verified through 495 site inspections. Source load reductions may not be directly measured but can be implied by the proper implementation and maintenance of storm water BMPs.

Table 3.1 – Overview of Construction Inventory by Priority Classification

Category	Number	Description
A. Type of Construction		
Discretionary Projects	67	
Capital Improvement Projects (CIP)	5	
Priority Development (SUSMP) Projects	0	
B. Priority Classification		
High Priority Projects (SUSMP)	0	High priority projects are determined by City 7-A form and generally consist of new building construction projects plus SUSMP projects. Most development projects in the City are categorized as low priority.
Medium Priority Projects	2	
Low Priority Projects	70	
C. Totals		
Construction Projects	72	*The City no active SUSMP or Priority projects during the reporting period. All active construction projects were discretionary in nature or capital improvements.
Priority Development (SUSMP) Projects	0*	

JURMP Sections	Description of FY 2009-10 Changes
5.0 and Appendix D	BMP requirements of the JURMP applicable to construction were modified in accordance with the requirements of the updated Permit in March 2008.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2009-10	Complete	Applicable updates were included in *JURMP Section 5.0*.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	Updates made to City SUSMP	Complete	Updates made to Imperial Beach Municipal Code 8.32 to include the requirements of the SUSMP. The City is also looking into updating its Environmental Review forms (7-A and 7-B) and updating guidance documents to include further guidance for SUSMP, HMP, and General Construction Permits.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Inventory of Construction Projects and Inspections			
Update inventory for construction projects and track inspections	Updates made to the inventory throughout the reporting period and inspections tracked	Complete	An inventory of construction projects and inspections is maintained on the City's database software HTE. Constructions site inspection records are also maintained on HTE. The Environmental Division also maintains an inventory of construction projects that require conditions from Public Works. An inventory of Capital Improvement Projects (CIP) is also maintained by the Environmental Division.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Project Approval			
Require construction projects to implement BMPs	BMPs are required as conditions for development projects	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. Designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0*. Construction BMPs are verified through the Project Review process and during site inspections.
b) Confirmation of Urban Runoff Approval Process			
Require construction projects to have adequate project review for storm water and pollution control	All construction projects received the necessary project review before being issued City permits	Complete	Prior to the issuance of construction and grading permits the City requires developers to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the State Water Resources Control Board's General Construction Permit. Construction projects with costs greater than $50,000 are channeled through Public Works Department and require additional public improvements before approval. Information on the City's project review and approval process is provided in the *2008 JURMP Section 4.0* and information on construction activities is provided in the *2008 JURMP Section 5.0*. Information is tracked in the City's HTE database and in excel spread sheets.
c) Confirmation of Designated BMPs			
Verify that designated BMPs were implemented, or required to be implemented	Construction projects undergo project review before being issued City permits. Construction projects are inspected for BMP compliance.	Complete	Designated minimum BMPs are required as project conditions during the urban runoff approval process. Projects then receive inspections during the construction phase to verify the proper implementation of BMPs. Projects are inspected for adequate storm water construction BMPs and project design, and source control BMPs.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
d) Confirmation of Maximum Disturbed Area			
Verify that maximum disturbed area for grading was applied to applicable construction sites	Apply conditions for maximum disturbed area during project review and verify through inspections	Complete	Project applicants are made aware of storm water requirements during the grading and construction permit application process. The grading permit specifies conditions to control the erosion of sediment off the property.
e) Municipal Staff Training			
Ensure that municipal staff are knowledgeable on storm water BMPs related to construction activities, SUSMP, and HMP	Staff educated through meetings, workshops, and training s	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received training outside the City on multiple storm water issues. Training topics include SUSMP, HMP, TMDLs, General Construction Permit, and code enforcement. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.
f) Construction Contractor Education			
Provide education for contractors	Counter hours held, meetings conducted throughout reporting period and provided construction brochure	Complete	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Public Works Department oversaw storm water compliance for the Capital Improvement Projects and provided education to contractors during meetings and inspections. A new construction brochure was also created to provide additional information on proper BMP implementation.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
g) Confirmation of Construction Inspections			
Inspect construction activities	The Building Inspector, Public Works Inspector, and Environmental Division conducted inspections for BMP compliance at construction sites	Complete	All construction projects get formally inspected throughout the duration of the project. During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. The Public Works Department inspects all active CIP projects sites daily. The Community Development Department Building Inspector inspects discretionary projects that are not CIPs. The Environmental Division follows up an complaints and violations at construction sites.
h) Special Investigations			
Not Targeted	None	None	Special investigations were not conducted in FY 2009-10, and are not routinely conducted as part of the implementation strategy for this program element.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)			
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/30/10 of Public Works Department as part of annual training.	Survey consisted of 18 challenging questions. Public Works Department (20 surveys completed) average score of 84%.	The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. The surveys administered during training sessions provide a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The overall results show a high level of knowledge on core storm water management concepts in the City. Surveys were only administered to Public Works employees in FY 2009-10. Surveys conducted for Community Development during the past two reporting periods scored very high on knowledge of storm water concepts.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Establish a baseline of contractor knowledge regarding applicable program content	Community Development and Public Works Departments provide education opportunities for contractors	Knowledge and awareness through proper BMP implementation	The Community Development Department held counter hours and face-to-face meetings throughout FY 2009-10 to provide education and answer questions for contractors. The Public Works Department also held pre construction meetings and provided construction management throughout the duration of all CIP projects. Inspects of BMPs at project sites by Code Enforcement, Building Division, and Public Works Inspector also provided additional opportunities for education. Surveys were not conducted in FY 2009-10, and are not routinely conducted as part of the implementation strategy for this program element.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)			
a) Procedural and Administrative Behaviors			
Review projects and prescribe necessary conditions of approval	All constructions projects (72 projects) were reviewed for conditions of approval and designated high, medium, or low priority ranking	Complete	The City reviews and conditions all proposed projects to ensure all necessary conditions and BMPs are met before any construction permits are issued. After a City permit is issued the project is in active construction phase and receives the necessary frequency of inspections for BMP compliance. Inspection frequency is based on high, medium, or low priority ranking. Storm water compliance is a component of every site inspection for a given project.
b) BMP Implementation			
Inspect projects and verify BMPs	Building Division conducted 306 BMP site inspections and PW performed 198 BMP inspections.	Complete	The City inspects and verifies BMPs at all projects to ensure compliance with storm water program. The Building Inspector, Public Works Inspector, Code Enforcement Officer, and Environmental Division share the responsibility of inspecting development projects and verifying BMP compliance. The Building Division conducted 306 BMP site inspections and the Public Works Inspector provided daily oversight at all CIP construction sites and performed 198 BMP inspections.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Verify construction sites with advance treatment	No construction sites required advance treatment	Complete	No construction sites during the reporting period required the implementation of advanced treatment for sediment control. The City requires all construction sites to implement BMPs to contain sediment on the property during all stages of development. Advance treatment is required for high threat to water quality projects.
c) Inspections for Wet and Dry Weather			
Identify active construction and inspection frequencies for wet and dry season	The City conducted 495 BMP site inspections and exceeded the required minimum inspection frequency	Complete	During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. Most development projects are redevelopment and are less than one acre in size. The City generally inspects construction sites more frequently than the minimum requirement.
d) Inspection Results			
Provide general inspection results	Conducted the necessary minimum BMP inspections at construction sites	Complete	Most contractors are aware of the storm water BMP requirements and properly implement BMPs. Problems arise during the wet season when heavy rain or wind results in the blowout of poorly implemented BMPs. The highest numbers of storm water violations are reported by observant City staffs who observe inadequate BMPs or illegal discharges.
e) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	The City responded to 15 construction related storm water violations. Only 4 violations were from discretionary projects.	Complete	Most construction related violations observed during the reporting period were from small home improvement projects that did not require a project review. Most violations were reported to City staff and followed up on by the Environmental Division. Typical violations include improper washing of equipment, power washing, stock piles of sediment, and trash. Each enforcement case is different but generally involves a verbal or written warning, a notice of violation for a repeat offender or blatant illegal discharger, and a follow up investigation.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)			
a) Erosion and Sediment Control			
Require erosion and sediment control when soil is disturbed	72 projects required installation of erosion and sediment control BMPs	Complete	The City requires installation of erosion and sediment control BMPs for all construction sites with a grading or building permit. Load reductions from construction sites can be implied through the proper implementation of BMPs.
b) Designated Minimum BMPs			
Require minimum BMPs and treatment control BMPs	72 projects required to implement BMPs. No projects required post construction treatment control BMPs	Complete	The City requires all construction sites to reduce discharges of pollutants to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards. Source load reductions from construction sites can be implied through the proper implementation of BMPs. Public Works requires source control and LID BMPs for all projects over $50,000 as conditions for approval. Treatment control BMPs are required for priority development projects or in cases when it is infeasible for runoff to be diverted to a permeable area. Through the implementation of construction BMPs, source control BMPs, and LIDs source load reductions can be implied.
c) Addition Controls for CWA 303(d) Waters			
Additional BMPs for projects discharging directly to 303(d) waters	No projects required to implement additional controls for CWA Section 303(d) waters	Complete	The City requires additional controls to be implemented for Clean Water Act (CWA) Section 303(d) waters. Load reductions are not tracked but can be implied.

Table 3.3 - FY 2009-10 Active Construction Inventory and Inspection Frequency

APPLICATION	PROPERTY ADDRESS	Priority	Weeks Active During Rainy Season (Oct.-Apr.)	Rainy Season Inspections	Dry Season Inspections	Total Inspections	General Results	Enforcement Action Type	Resolved
06 00000245	605 FLORENCE ST	Low	0	0	1	1	Approved		
06 00000246	1022 ELM AVE	Low	30	0	1	1	Approved		
06 00000346	811 CORVINA ST	Low	30	1	3	4	Approved		
06 00000371	861 10TH ST	Low	0	1	0	1	Approved		
06 00000447	177 CARNATION AVE	Low	0	0	1	1	Approved		
07 00000101	349 ELKWOOD AVE	Low	0	0	1	1	Approved		
07 00000277	545 11TH ST	Low	22	6	6	12	Approved		
07 00000394	754 HICKORY CT	Low	30	5	2	7	Insufficient BMPs	Stop Work	Yes
08 00000003	1174 EMORY ST	Low	2	1	3	4	Approved		
08 00000038	602 7TH ST	Low	24	2	1	3	Approved		
08 00000063	1470 5TH ST	Low	0	0	1	1	Approved		
08 00000156	815 ENCINA AVE	Low	30	2	3	5	Approved		
08 00000186	1461 5TH ST	Low	9	1	0	1	Approved		
08 00000225	1185 PALM AVE	Low	0	0	2	2	Approved		
08 00000428	1085 CHERRY AVE	Low	15	11	9	20	Approved		
08 00000443	1233 CALIFORNIA ST	Low	30	4	1	5	Approved		
09 00000017	646 ALABAMA ST	Low	30	1	0	1	Approved		
09 00000068	347 EVERGREEN AVE	Low	21	2	8	10	Approved		
09 00000123	1331 HOLLY AVE	Low	0	0	1	1	Approved		
09 00000160	776 10TH ST	Low	0	0	1	1	Approved		
09 00000221	784 8TH ST	Low	0	0	2	2	Approved		
09 00000233	280 PALM AVE	Low	24	7	13	20	Approved		
09 00000264	1311 CONNECTICUT ST	Low	1	1	4	5	Approved		
09 00000268	1100 PALM AVE	Low	1	2	3	5	Approved		
09 00000290	894 PALM AVE A	Low	0	0	1	1	Approved		
09 00000316	1245 EAST LN	Low	20	5	4	9	Approved		
09 00000330	834 FLORIDA ST	Low	30	8	2	10	Approved		
09 00000346	813 EMORY ST	Low	30	0	1	1	Approved		
09 00000349	735 PALM AVE	Low	3	1	0	1	Approved		
09 00000409	309 DAHLIA AVE	Low	9	2	3	5	Approved		
09 00000411	1468 HOLLY AVE	Low	12	5	6	11	Approved		
09 00000428	309 DAHLIA AVE	Low	9	4	1	5	Approved		
09 00000432	172 CITRUS AVE	Low	13	9	0	9	Approved		
09 00000439	834 HOLLY AVE	Low	27	8	0	8	Approved		
09 00000443	1274 11TH ST	Low	25	7	0	7	Approved		
09 00000445	659 SILVER STRAND BLVD	Low	0	1	0	1	Approved		
09 00000451	565 BONITO AVE	Low	16	13	0	13	No BMPs in Place	NOV	Yes
09 00000476	399 8TH ST	Low	0	1	0	1	Approved		
09 00000489	1178 14TH ST	Low	12	7	0	7	Approved		
09 00000508	739 FLORIDA ST	Low	9	7	0	8	No BMPs; ICID	NOV	Yes
09 00000510	747 FLORIDA ST	Low	21	7	0	1	Approved		
09 00000511	975 HEMLOCK AVE	Low	5	7	2	6	Approved		
09 00000535	1295 13TH ST	Low	5	7	1	4	Approved		
09 00000536	741 3RD ST	Low	12	7	0	8	Approved		
09 00000537	632 DAHLIA AVE	Low	6	7	0	7	Approved		
09 00000543	311 EVERGREEN AVE	Low	8	7	4	8	Approved		
09 00000544	941 ARRIBA AVENIDA	Low	13	7	1	4	Approved		
09 00000545	776 FLORENCE ST	Low	11	7	7	9	Approved		
10 00000011	1450 IRIS AVE	Low	2	7	2	6	Insufficient BMPs; Permits needed	Stop Work	Yes
10 00000027	1194 CONNECTICUT ST	Low	0	7	4	4	Approved		
10 00000076	941 ARRIBA AVENIDA	Low	3	7	0	1	Approved		
10 00000078	1410 10TH ST	Low	9	7	0	1	Approved		
10 00000082	527 BONITO AVE	Low	0	7	4	4	Approved		
10 00000099	425 IMPERIAL BEACH BLVD	Low	8	7	0	1	Approved		
10 00000106	538 CITRUS AVE	Low	1	7	0	1	Approved		
10 00000147	795 DELAWARE ST	Low	5	7	0	1	Approved		
10 00000158	1025 3RD ST	Low	0	7	4	4	Approved		
10 00000162	343 ELDER AVE	Low	0	7	6	6	Approved		
10 00000169	302 CALLA AVE	Low	0	7	1	1	Approved		
10 00000180	1440 CALIFORNIA ST	Low	0	7	5	5	Approved		
10 00000198	417 CALLA AVE	Low	0	7	2	2	Approved		
10 00000239	816 IRIS AVE	Low	0	7	1	1	Approved		
10 00000253	526 9TH ST	Low	0	7	2	2	Approved		
10 00000256	828 FLORENCE ST	Low	0	7	1	1	Approved		
10 00000264	311 EVERGREEN AVE	Low	0	7	2	2	Approved		
10 00000275	569 10TH ST	Low	0	7	3	3	Approved		
10 00000304	1124 CONNECTICUT ST	Low	0	7	2	2	Approved		
Public Works Capital Improvement Projects								**Project Discription**	
CIP R05-201	735 Palm Ave	Med	4	8	12	48		NICU Demolition	
CIP F05-204	865 Imperial Beach Blvd	Low	10	10	20	20		Fire Department Kitchen	
CIP P03-502	Veterans Park	Med	12	12	24	96		Soccer Field terf	
CIP	825 Imperial Beach	Low	0	20	20	20		Xeriscape City Hall	
CIP F05-50A	1075 8th	Low	0	5	5	5		Xeriscape Marina Vista Cen	

4.0 MUNICIPAL COMPONENT

4.1 Introduction

The City endeavors to reduce or eliminate pollutants and runoff from municipal discharges to the MEP. This component is primarily applicable to the Department of Public Works and its efforts to prevent municipal discharges from causing or contributing to a violation of water quality standards. This section of the Annual Report discusses program management, implementation, and changes made during FY 2009-10 to the JURMP Municipal Component.

4.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the municipal component is described in the 2008 JURMP Section 6.0. During FY 2009-10 the City continued implementation of its municipal training program that included significant updates and revisions to the BMP guidance documents for Municipal Facilities and Activities. This guidance document for employees can be found in a binder within every City vehicle. Updates were also made to the municipal facilities and activities inventory to match the regional reporting standard in development by the Copermittee Municipal Workgroup. Lastly, updates were made to Municipal Inspection Forms and MS4 maintenance forms to improve efficiency and effectiveness analysis in reporting.

4.3 Outcome Level 1b: Implementation of Management Program Activities

The City makes storm water pollution prevention and response a high priority for all Public Works employees. Each Public Works vehicle contains a binder of municipal storm water BMPs and contains a map of the entire MS4 system. The Environmental Division conducts annual training for all Public Works employees and daily interactions with staff ensures that storm water pollution prevention remains a high priory throughout the City. The Public Works Department provides the eyes and ears on the street and serve as the first line of defense for pollution prevention, response, and cleanup. The *2008 JURMP Section 6.0* provides a complete description of the management programs for the municipal component.

Routine maintenance, cleaning, and implementation of BMPs for municipal facilities and activities keep accumulated debris and other potential pollutants from entering the MS4. At a minimum the City conducts annual formal inspections of high priority municipal facilities and actives. The City also maintains a number of storm drain inlet filters that are cleaned and maintained quarterly by Downstream Services, Inc. Cleaning records are maintained on file and logged in a database on the Environmental Division server.

During FY 2009-10 the City conducted two projects categorized as Special Studies. The first was completion of the post construction monitoring and assessment of the Palm Ave low flow storm drain diverter. The storm drain diverter project, which was funded by a Clean Beach Initiative grant, has the capacity to divert up to 250 gallons per minute of urban runoff into the sanitary sewer. The second special study was an update to the Storm Drain Master Plan that will be complete in August 2010. Updates to the Master Plan include a review of previous storm drain studies (i.e. 1960 and 1991), GIS

and mapping updates, hydrologic and hydraulic modeling of the MS4, identification of system deficiencies, and recommendations.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 4.1 Provides an overview of the Municipal inventory by facility type and priority classification
- Table 4.2 presents and describes targeted FY 2009-10 outcomes and results
- Figure 4.1 Street sweeping removal totals
- Figure 4.2 MS4 cleaning totals
- Table 4.3 Municipal storm drain filter inventory and maintenance records
- Table 4.4 Municipal facility and activity inventory and inspection records

4.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff

The City conducts annual training for all municipal employees. Training for the Municipal Component is specifically targeted at the Public Works Department because City Streets, Maintenance Workers, and Sewer crews are typically the first line of defense for storm water pollution. The training program focuses on the use of Best Management Practices in daily operations, and is designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. Pre training surveys are also conducted to assess the level of knowledge and effectiveness of the annual training events. This education effort for City staff is discussed in the *JURMP Section 10.0.*

4.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff

The *JURMP Appendix E* defines minimum BMP requirements applicable to streets, roads, highways, municipal areas, municipal activities, and parking facilities in the City. Major targeted outcomes for FY 2009-10 included streets and parking lot sweeping, MS4 cleaning, sewer system preventative maintenance, municipal storm drain BMP maintenance, integrated pest management at parks, and implementation of BMPs at municipal facilities. All BMPs are inspected and enforced for compliance.

4.6 Outcome Level 4: Source Load Reductions

The City continues to make source load reductions from municipal facilities and activities. The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City. Approximately 177 tons of trash and debris were collected through street sweeping operations. The City also collected 132 loads of large bulky items illegally dumped in City alleys through its franchise waste hauler EDCO.

The Sewer Division maintains the City's storm drain lines and catch basins. Approximately five miles of underground piping, 117 catch basins and inlets, and seven open drainage facilities were cleaned

through the year. A total of 8,230 pounds of trash, sediment, and organic matter was collected out of the MS4 system during the reporting period. Storm drain cleaning occurs between the months of May through September.

Lastly, over 30 acres of park facilities, athletic fields, beach accesses, landscapes at various facilities, and five community parks located throughout the City were maintained during FY 2009-10. The City has a dedicated Tidelands crew that picks up trash and debris and conducts landscaping duties 7 days a week on the beach and one block inland of the beach. In addition, the City contrast with Donovan Prison for a weekly crew to pick up trash and conducts landscape duties at City parks and unmaintained areas. The City tracks source loads whenever possible.

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
A. Type of Facility			
Paved Roads	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground storm drain piping	5	---	
Catch basins/Inlets	---	117	
Open Drainage Facilities	---	7	
B. Priority Classification			
Streets, Roads, and Highways			The City also contains 13.3 miles of paves alleys and 2.5 miles of unimproved alleys that are not on the municipal inventory. The alleys are not owned by the City and are maintained by the property owners. The City conducts monthly street sweeping on the paved alleys and provides pick up of large bulky items illegally dumped in the alleys.
High (Commercial areas)	19.2	---	
Medium (Beachfront residential areas)	9.6	---	
Low (Other residential areas and paved alleys)	99.1	---	
Municipal Parking Facilities			
High (Commercial)		4	
Medium (N/A)	---	---	
Low (N/A)	---	---	
MS4 Facilities			

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
Underground piping	5	---	
Catch basins/Inlets	---	117	
Open Drainage Facilities	---	7	
Sanitary Sewer System			
Pump stations		12	
Underground piping	39.5		
C. Totals			
Streets, Roads, and Highways	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground Piping	5	---	
Catch Basins/Inlets	---	117	
Open Drainage Facilities	---	7	
Sanitary Sewer Pump Stations		12	
Underground Sewer Pipe	39.5		

JURMP Sections	Description of FY 2009-10 Changes
6.0 and Appendix E	BMP requirements of the JURMP applicable to streets, roads, highways, and municipal parking facilities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates were made	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	Updates made to Municipal Inspection Forms, MS4 maintenance forms, and Municipal BMP guidance document	Complete	The City made updates to its Municipal Inspection Forms and MS4 maintenance forms to improve efficiency in reporting. Updates were also made to the BMP guidance document for Municipal Facilities and Activities. Every City vehicle contains a binder with a storm drain map and information on proper BMPs for municipal facilities and activities.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Updates to Training Program			
Update training materials for municipal staff	Made updates to the Municipal Facility and Activity BMP program document	Complete	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience. This year updates were made to the BMP guidance document for municipal facilities and activities. Every City vehicle contains a binder with a storm drain map and information on proper BMPs for municipal facilities and activities.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Updates to Municipal Inventor or Prioritization			
Update municipal inventory	The municipal inventory was updated to match the Copermittee regional reporting standard	Complete	The City made updates to the municipal facilities and activities inventory to match the regional reporting standard developed by the Copermittee Municipal Workgroup. The new standardized reporting template will allow for greater collaboration between jurisdictions and may eventually lead to a regional reporting format.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Municipal Facilities and Activities			
Require municipal areas and activities to implement minimum BMPs	Implemented BMPs and verified through inspections and reinforced through annual training	Complete	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed regularly and updated as necessary. In addition, each City vehicle contains a binder of Best Management Practices for Municipal Facilities and Activities that were updated in 2009. The binder is a reference tool for employees to properly implement BMPs for specific job tasks and a reference for responding to illegal discharges.
b) Confirmation of Designated Minimum BMPs			
Verify the implementation of minimum BMPs for municipal areas and activities	BMPs are implemented and verified through inspections and reinforced through annual training	Complete	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed regularly and updated as necessary. In addition, each City vehicle contains a binder of Best Management Practices for Municipal Facilities and Activities that were updated in 2009. The binder is a reference tool for employees to properly implement BMPs for specific job tasks and a reference for responding to illegal discharges.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
c) Confirmation of Municipal Inspections			
Verify that municipal inspections achieve BMP compliance	BMPs are verified through inspections and reinforced through annual training	Complete	Municipal inspections are used as means to verify the implementation of BMPs at municipal facilities and activities. Inspections also serve to educate staff, reinforce storm water concepts, and improve communication across City Divisions.
d) Municipal Staff Training			
Provide training opportunities for municipal staff	Staff educated through meetings, workshops, and trainings	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Annual training is provided to Public Works staff and was conducted on 9/30/09. Municipal inspections serve as one-on-one training for Division supervisors. Regional workshops on SUSMP, HMP, GCP, TMDLs, and code enforcement made available to staff. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.
e) Confirmation of Pesticide, Herbicide, and Fertilizer Management			
Verify designated BMPs for pesticides, herbicides, and fertilizer	IPM and BMPs implemented	Complete	The City limits the application of pesticides and herbicides applied to park and landscaping facilities in accordance with Integrated Pest Management Program policy.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
f) Confirmation of Maintain for Municipal BMPs			
Verify maintenance of municipal storm water BMPs	Maintained operation and maintenance of existing storm water BMPs	Complete	The City maintains a number of storm water BMPs along the storm water conveyance system including two urban low flow and first flush storm drain diverters, 13 storm drain filters, 1 CDS unit, vegetated ditches, and infiltration areas with french drains.
g) Special Investigations			
No targeted	2010 update to the Storm Drain Master Plan	Partially Complete	The update of the Storm Drain Master Plan will be complete in August 2010. Updates include review of previous storm drain studies (i.e. 1960 and 1991), GIS and mapping, hydrologic and hydraulic modeling, identification of system deficiencies, and recommendations.
Not targeted	Palm Ave Diverter CBI Grant Final Report	Complete	The Final Monitoring Report for the Palm Ave Diverter Project was submitted to the State Water Board on January 20, 2010 in compliance with the Clean Beaches Initiative Prop 50 grant agreement.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF)			
Establish a baseline of staff knowledge regarding applicable program content	Performed a pre training survey on 9/30/10 of Public Works Department	Survey consisted of 18 challenging questions. Public Works Department (20 surveys completed) average score of 84%.	The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. The surveys administered during training sessions provide a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The overall results show a high level of knowledge on core storm water management concepts in the City. Surveys were only administered to Public Works employees in FY 2009-10 and scores indicated an increase in knowledge from the previous reporting period (81% to 84%). Surveys conducted for Community Development during the past two reporting periods scored very high on knowledge of storm water concepts.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF)			
a) BMP Implementation for Streets, Roads, Highway, and Parking Facilities			
Sweep all High trash areas at least twice per month	28.7 curb-miles swept at least twice per month and 4 municipal parking facilities swept weekly	Complete	Commercial areas (19.2 miles of curbed roads and 4 parking lots) are swept weekly. Beachfront residential areas (9.5 miles of curbed roads) are swept bi-weekly (high trash and debris). All other areas (99.1 curb miles) are considered moderate priority and are swept on a monthly basis. The City has a dedicated Tidelands Maintenance Division, funded by the Port of San Diego, whose mission is to keep the beach and one block inland from the beach free of trash, sand, and other debris. The City also maintains a contract with Donavan Correctional Facility to provide supervised labor for various needs including landscaping and trash pickup. The Streets and Parks Divisions play a crucial role in keeping the City free of trash. EDCO also conducts alley sweeps for large bulky items upon request from the City. Finally, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste.
Sweep all Moderate trash areas at least monthly	99.1 curb-miles swept at least monthly	Complete	
Sweep improved streets, roads, and highways	127.9 curb-miles swept (2,392 total miles) swept)	Complete	
Collect trash and debris from non-sweeping activities	Collected trash and debris from parks, alleys, and tideland area	Complete	

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) BMP Implementation for Municipal Separate Storm Sewer System (MS4)			
Clean accumulations of trash and debris greater than 33% of design capacity	117 catch basins inspected (100%)	Complete	Storm drain cleaning generally occurs between the months of May and September. In this annual report we provide analysis for the specified reporting period (July 1st – June 30th), which includes records of both the 2009 and 2010 cleaning events. It is important to note that the City inspects all of its 117 catch basins and cleans them if necessary on an annual basis.
Inspect and clean MS4 line	100% of the MS4 inspected and 29,435 feet of storm drain cleaned	Complete	The City cleans and inspects 100% of the catch basins and endeavors to clean 100% of the 5 miles of storm drain lines annually. The Sever Division uses the vactor truck to jet and clean accumulated debris out of the MS4. Cleaning for the 2010 season will be finished in September.
Prioritization of MS4 system maintenance	Review underway	Partially Complete	Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year The Environmental Division is performing a review of past storm drain line cleaning records to identify areas of high trash and debris accumulation. Sections of the MS4 that are identified as low trash and debris accumulation areas may be cleaned and inspected less than annually.
Prevent and eliminate infiltration from the sanitary sewer to the MS4	Implementation of the 2008 Sewer System Maintenance Plan	Complete	The City has conducted a sewer capacity study and identified areas needing improvement. These will be undertaken through the Capital Improvement Projects program. A Sewer System Management Plan was also completed in accordance with Waste Discharge Requirements. The City is in the 3rd year of a 5-year CIP to CCTV the entire sewer system.
Conduct routine maintenance on sanitary sewer system	36 miles of sanitary sewer system maintained	Complete	Most sanitary sewer pipelines are cleaned at least annually, and known problem areas are cleaned more frequently. Twelve alarmed sewage pump stations are monitored daily.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Respond to all sewer spills received and log in appropriate data bases	6 sewer spills reported with 3 from private laterals	Completed	In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. The City experienced 6 sewer spills during FY 2009-10 and 3 of those were from private laterals.
c) BMP Implementation for Municipal Facilities and Activities			
Implement BMPs and maintain municipal treatment control BMPs	Maintained 13 storm drain or catch basin filters, 2 storm drain diverters, 1 CDS unit, vegetated swales, and infiltration areas	Complete	The City enforces compliance of minimum BMPs at all municipal facilities and maintenance activities. In addition, the City maintains 13 storm drain filters that are maintained quarterly by contract. The City also operates 2 storm drain diverters, one CDS unit, and a number of vegetated swales and infiltration areas.
d) Municipal Facilities and Activities Inspection Results			
Provide general inspection results for municipal areas and activities	Inspected 100% of municipal facilities and provided training on BMPs for municipal activities	Complete	General inspection results include the following: quarterly maintenance of municipal storm drain filters, proper implementation of minimum BMPs by staff, internal review and training on BMPs for municipal areas and activities.
e) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	No enforcement actions necessary to achieve compliance	Complete	Minor violations were noted during municipal inspects and corrected without enforcement actions. Such violations include replacement of old BMPs (i.e. straw waddles, spill response kits, drip pans). A sediment trap was also installed at the Public Works yard to prevent the traction of sediment into the street.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)			
a) Street Sweeping			
Track debris collected from street sweeping activities	Trash: 17.7 tons Debris: 141.6 tons Organics: 17.7 tons	Complete	The City collected a total of 177 tons of material from street sweeping activities. The City sweeps 19.2 miles of commercial area and 4 municipal parking lots weekly (high priority), 9.6 miles of beach front biweekly (medium priority), and 99.1 miles of residential area monthly (low priority).
b) Cleanup Activities			
Track EDCO alley sweeps and Home Front Clean Up totals	EDCO Alley Sweeps: 132 callouts Home Front Clean Up: 175.64 tons	Complete	EDCO conducts alley sweeps for large bulky items upon request from the City. In addition, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste. The City also conducts a number of other cleanup activities to collect trash and debris from municipal areas; however, this waste is not tracked at this time.
c) MS4 Cleaning			
Track debris collected through MS4 cleaning	Trash: 1,056 lbs Debris: 2,012 lbs Organics: 5,161 lbs	Complete	There are approximately 117 catch basins and approximately 5 miles of storm drain pipe that is maintained and cleaned annually. The Sewer Division has successfully cleaned 100% of the MS4 system annually over the past 3 years and is on track to achieve the same results for 2010. MS4 cleaning starts in May and continues through September. During FY 2009-10 the Sewer Division cleaned a total of 8,230 lbs of material out of the MS4.
d) **Municipal Storm Drain Filters**			
Track debris collected from 13 municipal storm drain filters	Trash: 345.9 lbs Debris: 114.9 lbs Organic: 390.7 lbs	Complete	Downstream Services maintains 13 municipal storm drain filters quarterly. During the reporting period 851.5 pounds of debris was captured through municipal storm drain filters.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Storm Water Diverters			
Monitor storm water diversion from Palm Ave Diverter	Palm Ave Diverter: 156,000 gallons diverted into the sanitary sewer	Complete	The City operates two storm drain diverters (Palm Ave and Date Ave). Only the diverted flow from Palm Ave is monitored and tracked.

Figure 4.2-Street Sweeping Totals

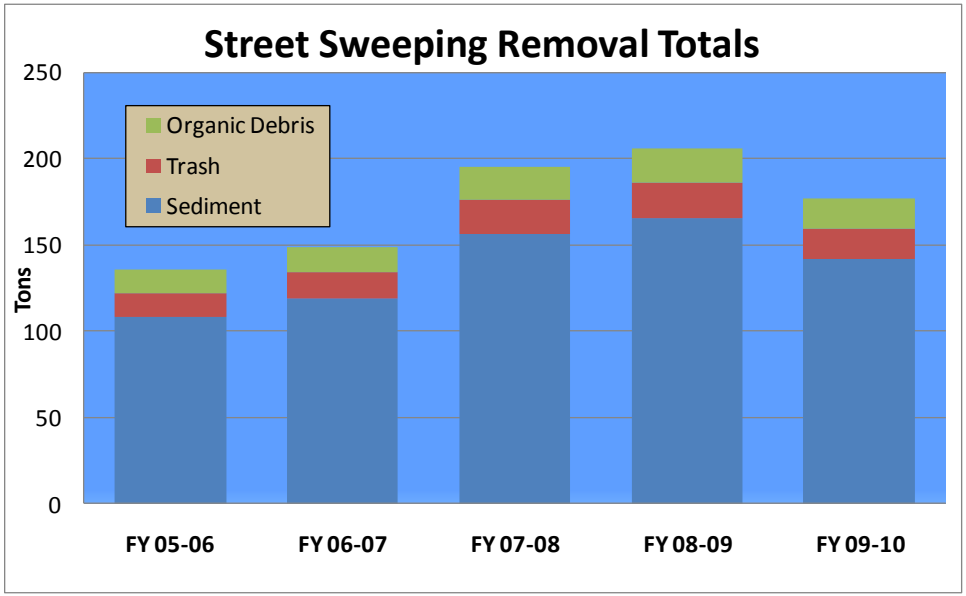

Figure 4.1- The street sweeping totals above are presented by fiscal year. Street sweeping is contracted through Clean Streets and EDCO. The City maintains approximately 127.5 miles of curbed streets and uncurbed roads located throughout the City. Sweeping activities collected 177 tons of materials during the reporting period.

Figure 4.3-MS4 Cleaning Totals

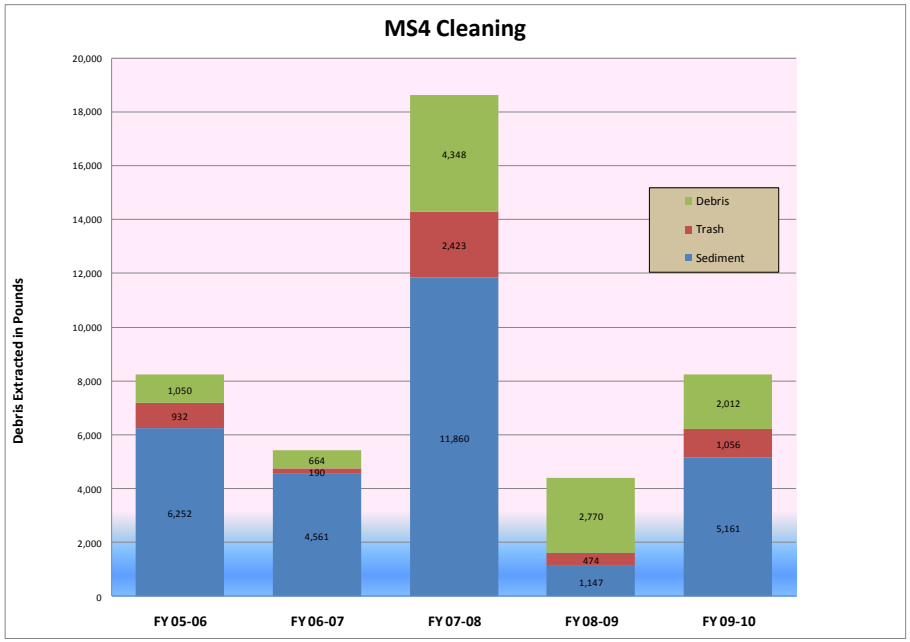

Figure 4.2- The MS4 cleaning totals above are presented by fiscal year. The City endeavors to clean 100% of the MS4 between the months of May through September. The MS4 system includes 117 catch basins, 7 open drain facilities, and approximately 5 miles of underground pipe. The Sewer Division cleaned 8,230 pounds of materials out of the MS4 system during FY 2009-10.

Table 4.3 - Municipal Storm Drain Filter Inventory and Maintenance Records

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted			Weight of Debris Removed (lbs.)	Materials Collected (lbs.)				Volume Used % of Total
							Inspected	Cleaned	Boom(s) Replaced		Sediment	Trash	Organics	Other	
SDF1	Grate Inlet Skimmer Box	495 Tenth St.	Public Works Yard	910.20	13-Oct-03	23-Sep-09	X	X	X	0.1	0.0		0.0		1%
	18" X 18"		(Rear of Yard)			2-Dec-09	X	X		0.1	0.0		0.0		2%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-10	X	X	X	0.1	0.0	0.0	0.0		0%
						22-Jun-10	X	X		1.0	0.3	0.3	0.3		10%
SDF2	Grate Inlet Skimmer Box - Round	495 Tenth St.	Public Works Yard	910.20	13-Oct-03	23-Sep-09	X	X	X	0.1	0.0		0.0		1%
	24" X 24"		(Front Parking Lot)			2-Dec-09	X	X		0.1	0.0		0.0		1%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X	X	50.0	46.7		3.3		30%
						22-Jun-10	X	X		10.0	5.0		5.0		5%
SDF3	Grate Inlet Skimmer Box	825 Imperial Beach Blvd.	City Hall	911.11	13-Oct-03	23-Sep-09	X	X	X	4.0	0.4		3.6		10%
	24" X 36"					2-Dec-09	X	X		18.0	4.5		13.5		20%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X	X	50.0	16.7		33.3		30%
						22-Jun-10	X	X		45.0	11.3		33.8		20%
SDF4	Grate Inlet Skimmer Box	865 Imperial Beach Blvd.	Fire Station	911.11	13-Oct-03	23-Sep-09	X	X	X	0.2	0.1	0.1	0.1		2%
	12" X 12"					2-Dec-09	X	X		0.1	0.0		0.0		1%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X	X	0.1	0.0	0.0	0.0		1%
						22-Jun-10	X	X		0.5	0.2	0.2	0.2		10%
SDF5	Grate Inlet Skimmer Box	1075 8th St.	Marina Vista Center	911.11	13-Jan-03	23-Sep-09	X	X	X	3.0	0.2		2.8		30%
	24" X 30"					2-Dec-09	X	X	X	21.0	14.0		7.0		30%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X	X	15.0	11.3		3.8		20%
						22-Jun-10	X	X		8.0	2.7	2.7	2.7		10%
SDF6	Grate Inlet Skimmer Box	Seacoast Dr. / Palm Ave.	City Parking Lot	910.10	13-Jan-03	23-Sep-09	X	X		1.5	0.2		1.4		10%
	24" X 36"					2-Dec-09	X	X		0.0	0.0		0.0		1%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X	X	6.0	0.6		5.4		20%
						22-Jun-10	X	X		1.0	0.3	0.3	0.3	0.3	5%
SDF7	Pipe Skimmer	1459 Hemlock	Behind Apartment	911.11	12-Jan-05	23-Sep-09	X			0.0					0%
	24" X 24"		City Easement			2-Dec-09	X	X		0.1		0.0	0.0		0%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X		0.4	0.1	0.1	0.1		10%
						22-Jun-10	X	X		0.4	0.2		0.2		10%
SDF8	KriStar, Flo Guard Plus Catch Basin Insert	839 10 St.	City Alley	910.20	3-Nov-05	23-Sep-09	X	X	X	1.0	0.2	0.4	0.4		5%
	18" X 36"	Alley east of 10th St.				2-Dec-09	X	X		1.0	0.3	0.3	0.3		1%
	Hydrocarbon absorption boom	between Elm & Donax				18-Mar-09	X	X	X	6.0	1.2	1.8	3.0		10%
						22-Jun-10	X	X		6.0	3.0		3.0		10%
SDF9	2 Grate Inlet Skimmer Boxes	Alley abutting 8th St	City Alley	910.20	22-Feb-07	23-Sep-09	X	X	X	0.5	0.3	0.1	0.1		1%
	24" X 36"	100 yd. south of Palm				2-Dec-09	X	X		15.0	1.5	1.5	12.0		10%
	Hydrocarbon absorption boom					18-Mar-09	X	X	X	50.0	16.7	16.7	16.7		30%
						22-Jun-10	X	X		20.0	6.7	6.7	6.7		10%
SDF10	Grate Inlet Skimmer Box	Alley b/w 8th St. &	City Alley	910.20	5-Feb-07	23-Sep-09	X	X	X	0.8	0.3	0.3	0.3		1%
	32" X 40"	Delaware St. just south				2-Dec-09	X	X		4.0	1.3	1.3	1.3		1%
	Hydrocarbon absorption boom	of Palm Commercial Ctr.				18-Mar-09	X	X	X	140.0	70.0		70.0		10%
						22-Jun-10	X	X		30.0	7.5		22.5		20%
SDF11	Grate-Inlet Box	Curb inlet at SW Corner	Curb Inlet	910.20	22-Feb-07	23-Sep-09	X	X	X	3.0	0.1	2.7	0.2		50%
	24" X 36"	9th St. / Palm Ave.				2-Dec-09	X	X		25.0	0.5	19.5	5.0		100%
	Hydrocarbon absorption boom					17-Mar-09	X	X	X	20.0	1.7	15.0	3.3		60%
						22-Jun-10	X	X		35.0	2.2	30.6	2.2		80%
SDF12	KriStar, Flo Guard Plus Catch Basin Insert	740-798 Florida Street	City Alley	910.20	17-May-07	23-Sep-09	X	X	X	1.0	0.2	0.5	0.3		6%
		alley behind apartment				2-Dec-09	X	X		15.0	6.0	3.0	6.0		25%
		complex				18-Mar-09	X	X	X	130.0	54.2	10.8	65.0		60%
						22-Jun-10	X	X		25.0	12.5		12.5		10%
SDF13	Round Hydro Flow Guard Plus and hydrocarbon booms	4th Street at Sports Park	South end of parking	911.11	29-Jun-09	23-Sep-09	X	X	X	3.0	1.0		2.0		15%
	24" Diameter Grate and 22" Diameter Inlet		lot at Sports Park			2-Dec-09	X	X		15.0	9.0		6.0		25%
						18-Mar-09	X	X	X	70.0	35.0		35.0		80%
						22-Jun-10	X	X		0.1	0.1	0.0	0.0		50%
									Totals	**851.8**	**345.9**	**114.9**	**390.7**	**0.3**	

Table 4.4 - Municipal Facility and Activity Inventory and Inspection Record

ID	Name	Inspection Date	Address	Type1	Type2	Type3	Watershed	Receiving Water	303(d) Tributary Status	ESA Status	Inspection Priority
M-1	Public Works Yard	2/18/10	495 10th Street	Office Building	Corporate Yard	Parking Lot	910.20	Otay River	No	Yes	High
M-2	Dempsey Holder Safety Center	3/15/10	950 Ocean Lane	Office Building	Corporate Yard		911.11	Pacific Ocean	Yes	Yes	High
M-3	Fire Station	3/11/10	865 Imperial Beach Boulevard	Office Building	Fire Station	Parking Lot	911.11	Tijuana Estuary	Yes	No	High
M-4	City Hall	3/11/10	825 Imperial Beach Boulevard	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	High
M-5	Marina Vista Center	3/15/10	1075 8th Street	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	Low
M-6	I.B. Boys & Girls Club	6/15/10	847 Encina Avenue	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	Med
M-7	Veteran's Park	3/11/10	9th Street / Imperial Beach Boulevard	Park	Parking Lot		911.11	Tijuana Estuary	Yes	No	High
M-8	Reama Park	6/15/10	Elder Avenue / Elkwood Avenue	Park	Parking Lot		911.11	Pacific Ocean	Yes	No	Med
M-9	Sports Park & Recreation Center	3/17/10	425 Imperial Beach Avenue	Park	Office Building	Parking Lot	911.11	Tijuana Estuary	Yes	No	High
M-10	Teeple Park	3/11/10	Calla Avenue / Florida Street	Park	Parking Lot		910.20	Otay River	No	No	Med
M-11	Triangle Park	6/15/10	7th Street / Palm Avenue	Park			910.20	Otay River	No	No	Med
M-12	Dunes Park	3/11/10	700 Seacoast Drive	Park	Parking Lot		910.10	Pacific Ocean	Yes	Yes	High
M-13	Pier Plaza	3/11/10	Evergreen Street / Seacoast Drive	Park			911.11	Pacific Ocean	Yes	Yes	High
M-14	Imperial Beach Pier	3/11/10	Evergreen Street / Seacoast Drive	Miscellaneous			N/A	Pacific Ocean	Yes	Yes	High
M-15	Beachfront	3/11/10	Mexican Border to YMCA Camp Surf	Miscellaneous			N/A	Pacific Ocean	Yes	Yes	Med
M-16	Seacoast & Palm Parking Lot	5/15/10	Seacoast Drive & Palm Avenue	Parking Lot			910.10	Pacific Ocean	Yes	Yes	High
M-17	Elkwood Parking Lot	3/15/10	Seacoast Drive & Elkwood Avenue	Parking Lot			911.11	Pacific Ocean	Yes	Yes	High
M-18	Underground MS4	Annually	Citywide	MS4			All	All	Yes	Yes	High
M-19	Pump Station #11 (Storm Drain)	3/11/10	Palm Avenue street end	MS4			910.10	Pacific Ocean	Yes	Yes	High
M-20	Underground Sewer	Annually	Citywide	Sewer			All	All	Yes	Yes	High
M-21	Pump Station #1A (Underground)	6/21/10	862 Seacoast Drive	Sewer			910.10	Pacific Ocean	Yes	Yes	High
M-22	Pump Station #1B (Underground)	3/18/10	1098 Seacoast Drive	Sewer			911.11	Pacific Ocean	Yes	Yes	High
M-23	Pump Station #2 (Above ground)	7/16/09	1306 South Seacoast Drive	Sewer			911.11	Tijuana Estuary	Yes	Yes	High
M-24	Pump Station #3 (Underground)	4/22/10	501 Elm Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-25	Pump Station #4 (Underground)	12/17/10	755 Delaware Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-26	Pump Station #5 (Underground)	5/20/10	133 Dahlia Avenue	Sewer			910.10	Pacific Ocean	Yes	No	High
M-27	Pump Station #6 (Underground)	11/19/09	498 Rainbow Street	Sewer			910.10	San Diego Bay	Yes	No	High
M-28	Pump Station #7 (Underground)	10/15/09	504 Oneonta Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-29	Pump Station #8 (Underground)	1/21/10	895 Imperial Beach Boulevard	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-30	Pump Station #9 (Underground)	8/21/09	1025 9th Street	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-31	Pump Station #10 (Above ground)	2/13/10	814 Cypress Avenue	Sewer			910.20	Otay River	No	No	High
M-32	Streets	Annually	Citywide	Streets			All	All	Yes	Yes	High
M-33	Alleys	Annually	Citywide	Streets			All	All	Yes	Yes	High
M-34	Traffic Islands	Annually	Citywide	Streets			All	All	Yes	No	Med
M-35	Special Event Venues	As needed	Citywide	Miscellaneous			All	All	Yes	Yes	High
M-36	Graffiti Removal	Annually	Citywide	Miscellaneous			All	All	Yes	Yes	High
M-37	Serenity Garden	6/15/10	Silver Strand Blvd and Citrus Ave	Park			910.10	Otay River	No	No	Med

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from industrial and commercial sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations at businesses within the City and reduce the discharge of pollutants to the MS4 to the maximum extent practicable (MEP). The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements.

5.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Industrial and Commercial Component is described in the *2008 JURMP Section 7.0*. During the reporting period the City made routine updates to the Commercial and Industrial business inventory and implemented the use of the new regional inventory template developed by the Industrial Commercial Copermittee Workgroup. The inventory is maintained on the Environmental Division Server and identifies all industrial and commercial facilities that could contribute pollutant loads to the MS4. The City currently does not have any industrial facilities on that inventory. Records are also maintained on each specific business for inspections, corrective actions, and illegal discharges. During the reporting period the City continued to incorporate fats, oils, and grease (FOG) management into the commercial business inspection for restaurants. Lastly, the Environmental Division incorporated an interactive effectiveness assessment into the commercial inspection program to assess the level of knowledge and effectiveness of BMP implementation.

5.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division provides notification and verification of minimum BMPs for commercial businesses, in addition to performing inspections at all high priority commercial businesses in the City. The City also inspects non-high priority business and mobile businesses during the year as necessary. Inspections are conducted and documented as outlined in the *2008 JURMP Section 7.0*.

In addition to City staff reporting illegal discharges, the Environmental Division also responds to calls to the storm water hotline and from online complaints. However, the vast majority of storm water violation reports are made from City staff. The low number of commercial businesses and relatively contained commercial zoning allows City staff to be the predominant eyes on the street for identifying storm water violations.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Commercial Industrial program element:

- Table 5.1 Provides an overview of the Industrial and Commercial inventory by facility type and priority classification
- Table 5.2 presents and describes targeted FY 2009-10 outcomes and results
- Table 5.3 Commercial Business Inventory FY 2009-10
- Table 5.4 Commercial Business Inspections FY 2009-10
- Table 5.5 Interactive Effectiveness Assessment of Commercial Businesses

5.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Businesses

Commercial businesses receive education on storm water BMPs through a number of different methods including direct mail before scheduled inspections, face-to-face interaction with City staff during commercial inspections, through dissemination of education material, and through a follow up inspection letter that summarizes the results of the commercial inspection. The City also provides education to businesses during ICID investigations.

Starting this reporting period the Environmental Division incorporated an interactive effectiveness assessment of commercial businesses during the annual storm water inspection at 21 of the 71 high priority businesses. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness at commercial businesses in the City. General results showed a high level of knowledge among the businesses inspected. The results are outlined in Table 5.5.

5.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Businesses

The City facilitates changes in behavior and implementation of BMPs at commercial businesses by providing continuous education efforts through face-to-face interactions, routine inspections, dissemination of brochures, mailing of post inspection letters, and responding to illegal storm water discharges. The *2008 JURMP Appendix F* defines minimum BMP requirements applicable to industrial and commercial projects in the City. The *2008 JURMP Section 7.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes for commercial, industrial, and mobile businesses.

5.6 Outcome Level 4: Source Load Reductions

The two step approach of education on storm water pollution and enforcement of BMPs have unquestionably resulted in the source load reductions from commercial businesses. Although the City does not currently track source load reductions from commercial sites, the increased level of knowledge on storm water BMPs and cooperation among the local business community have successfully prevented the release of pollutants from commercial businesses. Source load reductions can be implied from commercial businesses through the proper implementation of BMPs.

Table 5.1 – Overview of Industrial and Commercial Component by Facility Type and Priority Classification

Category	Number	Description
A. Type of Facility		
Industrial	0	Industrial activity is extremely limited. Only one business in operation that can reasonably be classified as "industrial" is a surfboard manufacturing company that performs all of its operations indoors, and is very similar to a commercial facility. The term "commercial" is therefore used for the activities within the City. As such, there is no need in this jurisdiction to identify non-filers under the General Industrial Permit.
Commercial	327	
B. Priority Classification Totals		
High	71	Imperial Beach Municipal Code 8.30.090 defines commercial businesses as either high or non-high (low) priority. High priority businesses include all food service and auto service related businesses.
Low	256	
Mobile	46	Mobile business database is tracked and maintained on the new copermittee online Regional Mobile Business Inventory.
C. Inspection Totals		
Commercial Business Inspections	71	The Environmental Division conducts all commercial inspections. All high priority businesses receive inspections annually for storm water compliance. Commercial businesses that have a significant storm water violation receive a follow up investigation.
Follow Up Inspections	9	
Mobile	---	Mobile businesses do not currently receive annual inspections. The Environmental Division informally inspects mobile businesses while responding to illegal discharge reports and public service requests.

JURMP Sections	Description of FY 2009-10 Changes
7.0 and Appendix F	BMP requirements of the JURMP applicable to industrial and commercial facilities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates were made during reporting period	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	Updates made to Commercial Inspection Form and Fats, oils, and grease (FOG) inspection program	Complete	The commercial inspection and assessment form was updated to include an interactive effectiveness assessment to assess the level on knowledge and effectiveness of BMP implementation. The assessment method was originally developed and implemented by Dmax Engineering in past reporting periods and modified for use in Imperial Beach. This was the first time Imperial Beach incorporated an effectiveness assessment into its commercial inspection program. The City also incorporating fats, oils, and grease (FOG) management as part of the commercial business inspection for restaurants.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Updates to Training Program			
Update training materials for consistency with *2008 JURMP Section 10.0*	Made updates to education materials and staff	Under review	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience. During the reporting period the City also hired a new Environmental Specialist who provided education to commercial businesses while conducting annual inspections.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Updates to Commercial Inventor or Prioritization			
Update commercial inventory and prioritization	Routine updates made to the commercial inventory	Complete	Regular updates were made to the commercial and industrial business inventory. Starting this reporting period the City updated its commercial inventory to match the regional copermittee standard template. Updates were also made to the prioritization ranking so that all food or automotive related businesses get categorized as high priority. The regional online mobile business database was also maintained online.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Commercial Businesses			
Require commercial and industrial businesses to implement BMPs and verify through inspections	Notified businesses through mail, conducted inspections, responded to ICIDs, and provided education materials	Complete	The City requires all commercial and industrial sites/sources to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City's Urban Runoff Management and Discharge Control Ordinance (Chapters: 8.30.070, 8.30.090, and 8.30.100) mandate the implementation of designated BMPs and control measures. The commercial inspection program and ICID program are the mechanisms used to educate businesses on BMPs.
b) Confirmation of Designated Minimum BMPs			
Verify the implementation of minimum BMPs for commercial businesses	Conducted commercial inspections and follow up inspections to verify BMPs	Complete	The City verifies the implementation of minimum BMPs at commercial businesses through the implementation of the commercial inspection program.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
c) Confirmation of Commercial Inspections			
Verify that commercial inspections achieve BMP compliance	Inspected all high priority commercial businesses	Complete	Starting this reporting period the Environmental Division incorporated an interactive effectiveness assessment of commercial businesses during the annual storm water inspection. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness.
d) Justification for Commercial Inspection Prioritization			
Provide rationale for the businesses that were inspected	IBMC 8.30.090 defines commercial businesses as either high or non-high (low) priority	Complete	High priority businesses include at a minimum all food service and auto service related businesses in the City. Businesses that have a treatment control BMPs also receive inspections as well as businesses that cause an ICID.
e) Efforts Made to Notify Businesses of BMPs			
Describe efforts made to notify businesses of BMPs	Notification made through pre mail notification, inspections, follow up inspections, and follow up letter	Complete	During this reporting period the City notified all high priority and mobile businesses of minimum BMPs through mail. High priority businesses then received a storm water inspection and a follow up inspection in the case of a violation. A post inspection letter is then mailed to the business outlining the results of the inspection.
f) Third Party Inspections			
Describe third party inspection results	None	None	All commercial inspections are conducted through the Environmental Division

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
g) General Industrial Permit Non-Filers			
Describe steps taken to identify non-filers under the General Industrial Permit	None	Complete	The City did not have any industrial businesses during the reporting period.
h) Mobile Businesses			
Describe efforts made to address mobile businesses	Mailed letter and brochure of minimum BMPs to mobile businesses	Complete	The City contacted each mobile business through mail with a letter and brochure that outlines the minimum BMP requirements. Mobile businesses do not typically receive annual inspections. The Environmental Division informally inspects mobile businesses while responding to illegal discharge reports and public service requests.
i) Special Investigations			
Not targeted	Conducted interactive assessment of commercial businesses during inspections	Complete	Starting this reporting period the Environmental Division incorporated an interactive effectiveness assessment of commercial businesses during the annual storm water inspection. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY COMMERCIAL BUSINESSES)			
Establish a baseline for knowledge of BMPs by commercial businesses	Conducted interactive assessment of commercial businesses during annual inspections	Assessment results provided in Table 5.5	Starting this reporting period the Environmental Division incorporated an interactive effectiveness assessment of commercial businesses during the annual storm water inspection. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY COMMERCIAL BUSINESSES)			
a) Commercial Business BMP Implementation			
Inspect businesses for compliance	71 sites inspected and 9 follow up inspections	Complete	The City inspections 100% of high priority commercial businesses, non-high priority businesses, and mobile businesses as needed. Inspections consist of observing business operations, reviewing minimum BMPs, and enforcing pollution prevention practices.
Notify mobile and fixed commercial businesses of BMP requirements	71 fixed commercial and 46 Mobile Businesses contacted through mail	Complete	The City notifies business owners and operators, both fixed and mobile, of BMP requirements through a combination of methods including site inspections, follow-up inspection reports, direct mailings, inclusion of BMP information with business license and special event vendor packets, advertisements in newspapers, online resources such as the Project Clean Water website and City's website, and targeted workshops focused on specific business sectors.
b) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	Follow up inspections required at 9 businesses. City also had 26 ICID cases which resulted in 6 NOVs	Complete	The City enforces compliance at all businesses, including mobile sources, using an escalating series of enforcement actions. Verbal or written warnings are used when violation in question is minor. Notices of Violations (NOVs) may be issued for any observed violation. And escalating administrative penalties, fines, and civil penalties may be enforced for non compliance. Violations are tracked and maintained on the Environmental server database.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)			
a) BMP Implementation			
Load reductions from proper BMP implementation	60 out of 69 high priority businesses implemented proper storm water BMPs	Complete	Source load reductions are not easily tracked from commercial businesses but can be implied through proper implementation of BMPs.

Table 5.3 - Commercial Business Inventory FY 2009-10

No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Product/ Service	Business	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pathogens	Sediment	Tributary to 303(d) Listed	Threat to water quality	APN	Latitude	Longitude	Establishment Class	Business Phone Number - Calc
1	10TH ST MARKET	1126 13TH ST	911.11	5921	445310	LIQU	+		+		+	+	+	+			4330221600	32.57943	-117.109562	O	(619) 424-8255
2	7 ELEVEN 18322/RAJ ENTERPRISES	657 PALM AVE	910.20	5999	453998	RETL											6250541000	32.58339	-117.118031	O	(619) 498-0440
3	7 ELEVEN #33652-2131	197 PALM AVE	910.20	5999	453998	RETL											6250500100	32.58367	-117.128628	O	(619) 424-6231
4	7 ELEVEN 33652 # 24348-2131	1311 PALM AVE	910.20	5999	453998	RETL	+	+	+		+	+	+	+			6270111800	32.58364	-117.103344	H	(619) 575-6081
5	7 ELEVEN STORE 33652A-2131	1303 IMPERIAL BEACH BL	911.11	5999	453998	RETL	+	+	+		+	+	+	+			6330210100	32.57422	-117.109577	O	(619) 690-0000
6	AB BRITE CLEANERS & LAUNDRY	674 PALM AVE	910.20	7299	561728	SERVICE											6250405700	32.58408	-117.118554	O	(619) 424-8088
7	ADEPT PROCESS SERVICES LLC	706 SEACOAST DR	910.10	5999	453998	RETL											6250413007	32.58429	-117.103854	O	(619) 423-3400
8	ALBERTO'S TACO SHOP	1183 13TH ST	911.11	5812	722511	EATING	+	+	+		+	+	+	+			6330210600	32.57422	-117.108547	HF	(619) 429-4802
9	ALL AMERICAN CAR WASH IB	1158 PALM AVE	910.20	7299	561720	SERVICE	+	+	+		+	+	+	+			6250200500	32.58413	-117.108042	M	(619) 429-7000
10	ALL PHASE DRYWALL	1187 13TH ST	911.11	1742	238310	CONCONT											6330105500	32.57426	-117.108547	O	(619) 424-0373
11	ALLSTATE INSURANCE	1228 PALM AVE	910.20	7389	561499	PROF											6250411800	32.58412	-117.10235	O	(619) 424-6990
12	AMANDA'S HAIRSTYLING	837 9TH ST	910.20	7299	561499	SERVICE											6250121400	32.58487	-117.114135	O	(619) 575-0463
13	AMERICAN LEGION POST NO 820	1268 PALM AVE	910.20	5812	72211	EATING											6250420600	32.58403	-117.108402	O	(619) 423-7992
14	AMERICAN OMBUDSMAN ENTERPRISES	150 PALM AVE	910.10	7389	561499	PROF											6250140700	32.58408	-117.130038	O	(800) 541-9275
15	AMERICA'S FINEST DRIVINGSCHOOL	938 PALM AVE	910.20	8299	611691	EDUC											6250122400	32.58418	-117.13035	O	(619) 424-3007
16	AMOR FLOWERS & TUX	181 PALM AVE	910.20	5999	453998	RETL											6251917700	32.58365	-117.13104	O	(619) 628-0446
17	ANCHOR MOTORS	740 PALM AVE	910.20	5521	441120	AUTO			+		+	+	+	+			6250321000	32.58403	-117.17569	M	(858) 945-0762
18	ANJIE GERSTUNG	704 SEACOAST DR	910.10	7299	561499	SERVICE											6251813301	32.58355	-117.13954	O	(619) 437-4135
19	AROMA THAI RESTAURANT	757 SEACOAST DR	910.10	5812	72211	EATING	+	+	+		+	+	+	+			6251602400	32.5825	-117.13542	HF	(619) 941-1656
20	ARTICO PICTURE FRAMES	716 BUSKWOOD AVE	910.20	5999	453998	RETL											6250121200	32.58043	-117.12504	O	(619) 423-2070
21	AUNT ELLEN'S WATER	600 PALM AVE	910.20	5999	453998	RETL											6251401400	32.58407	-117.129029	O	(619) 423-5269
22	BEACH SHOP	710 SEACOAST DR	910.10	5999	453998	RETL											6251821048	32.58376	-117.1318	O	(619) 252-3911
23	BEACH SIDE STATION	681 HIGHWAY 75	910.20	5541	447110	GAS	+	+	+		+	+	+	+			6250520300	32.58403	-117.118803	O	(619) 424-3366
24	BERNARDO SHORES	500 HIGHWAY 75	910.20	7033	721211	RV/MOBIL	+										6251402000	32.58034	-117.129221	O	(619) 429-9000
25	BEST IB CENT	621 PALM AVE	910.20	5999	453998	RETL											6250506600	32.58403	-117.118402	O	(619) 575-0997
26	BIBBEY'S GIFT SHOP	903 SEACOAST DR	910.10	5999	453998	RETL											6250301000	32.58039	-117.119501	O	(619) 423-0133
27	BIBBEY'S SHELLS AND ROCKS	903 SEACOAST DR	910.10	5999	453998	RETL											6250301000	32.58039	-117.119501	O	(619) 423-5133
28	BEACH CLUB GRILL	710 SEACOAST DR	910.10	5812	722511	EATING	+	+	+		+	+	+	+			6251821048	32.58376	-117.1318	O	
29	BIG KAHUNAS PIZZA N STUFFS	600 PALM AVE	910.20	5812	72211	EATING	+	+	+		+	+	+	+			6251401900	32.58407	-117.129029	HF	(619) 429-5224
30	BILIBAY TAX SERVICE	970 SEACOAST DR	910.10	7389	561499	PROF											6251401600	32.58407	-117.129029	HF	(619) 424-3340
31	BILLIE JEANS HAIRSTYLING	144 PALM AVE	910.20	7299	561499	SERVICE											6251705500	32.58413	-117.108957	O	(619) 423-7811
32	BILLS HAPPY HAIR	839 PALM AVE	910.20	7299	561499	SERVICE											6250506600	32.58403	-117.118025	O	(619) 423-4311
33	BOWMANS MARKET	1008 PALM AVE	910.20	5999	453998	RETL											6250221300	32.58403	-117.11372	O	(619) 424-3723
34	BOYS & GIRLS CLUB OF IB	847 ENCINA AVE	910.20	7999	713299	BINGO											6250401200	32.58074	-117.11705	O	(619) 424-2266
35	BOYS & GIRLS CLUB OF IB	847 ENCINA AVE	910.20	7299	561499	SERVICE											6250401200	32.58074	-117.11705	O	(619) 424-2266
36	BRENT JACKMAN CONSTRUCTION	708 BASSWOOD AVE	910.20	1799	238990	CONCONT											6250211400	32.58042	-117.1765	O	(619) 300-0712
37	BRYANTS AUTO REGISTRATION SVS	1235 PALM AVE	910.20	7299	561499	SERVICE											6251311400	32.5834	-117.107237	O	(619) 424-6669
38	BULL PEN	766 HIGHWAY 75	910.20	5812	722511	EATING	+	+	+		+	+	+	+			6250201100	32.58407	-117.11799	O	(619) 575-3444
39	BURGER KING #806	1180 PALM AVE	910.20	5812	72211	EATING	+	+	+		+	+	+	+			6250302000	32.58413	-117.108568	HF	(619) 429-3180
40	CAR, S JR. #535	1055 13TH ST	911.11	5812	72211	EATING	+	+	+		+	+	+	+			6250421100	32.58303	-117.108275	O	(619) 423-5050
41	CA ALUMINUM/VINYL WINDOWS INC	754 10TH ST	910.20	5999	453998	RETL											6250821500	32.5839	-117.11994	O	(619) 429-9700
42	CALIFORNIA AMERICAN WATER COMP	1019 CHERRY	910.20	7299	561499	SERVICE											6251921300	32.58033	-117.11495	O	(619) 479-7750
43	CARL'S JR. #535	755 13TH ST	911.11	5812	72211	EATING	+	+	+		+	+	+	+			6331210600	32.58303	-117.108275	HF	(619) 423-5050
44	CHAT COMM	1223 PALM AVE	910.20	5999	453998	RETL											6251311400	32.5834	-117.107528	O	(800) 634-4092
45	CHICO'S HAIRCUTTING	1256 IMPERIAL BEACH BL	911.11	7299	561499	SERVICE											6250506600	32.58403	-117.118025	O	(619) 429-7940
46	CHRISTINA SCHUBERT	704 SEACOAST DR	910.10	7299	561499	SERVICE											6251813301	32.58355	-117.13954	O	(619) 575-7047
47	CHURCH OF CHRIST OF IB	640 10TH ST	910.20	8661	813110	NONPROF											6250121800	32.58427	-117.11994	O	(619) 423-9450
48	CITY H LIQUOR	600 PALM AVE	910.20	5921	445310	LIQU											6251401400	32.58407	-117.129029	O	(619) 423-0901
49	CITY NAILS	750 13TH ST	910.20	7299	561499	SERVICE											6331214400	32.58304	-117.108302	O	(619) 423-1439
50	COCO AND GABOON	152 PALM AVE	910.20	5999	453998	RETL											6250400700	32.58427	-117.13004	O	(619) 434-0560
51	COLWELL REALTY	134 PALM AVE	910.10	5999	453998	PROF											6251402500	32.58481	-117.130069	O	(619) 423-2444
52	COMPREHENSIVE TRAINING SYSTEMS	497 11TH ST	910.20	7299	561499	SERVICE											6250600600	32.587617	-117.104622	O	(619) 424-6660
53	COMPUTERVILLE	740 10TH ST	910.20	7299	561499	SERVICE											6250500600	32.58316	-117.11993	O	(619) 575-0216
54	CORONADO BAY URGENT CARE	600 PALM AVE	910.20	8011	621111	HEALTH											6251401900	32.58407	-117.129029	O	(619) 423-0100
55	CORY-A-BUNGA CC SOCIAL CHAIR	10 EVERGREEN AVE	910.20	5812	72211	EATING											6250121400	32.58418	-117.114135	O	(619) 628-0050
56	COX BAIT & TACKLE	996 PALM AVE	910.20	5999	453998	RETL											6252211100	32.58403	-117.12008	O	(619) 429-8942
57	CRAZY LADY'S	600 PALM AVE	910.20	5999	453998	RETL											6251401900	32.58407	-117.129029	O	(619) 421-4438
58	CRISIS CROSS SALON	1115 PALM AVE	910.20	7299	561499	SERVICE											6250121400	32.58418	-117.114135	O	(619) 424-9322
59	CROSSROAD PETROLEUM INC	1185 PALM AVE	910.20	5541	447110	GAS	+	+	+	+	+	+	+	+			6330210600	32.58375	-117.10857	O	(619) 429-4628
60	CRYSTAL COVE COCKTAILS	995 PALM AVE	910.20	7299	722410	BAR											6250222100	32.58403	-117.11883	O	(619) 888-8000
61	CVS/PHARMACY #9125	800 PALM AVE	910.20	5999	453998	RETL											6250119000	32.58154	-117.11976	O	(619) 424-8989
62	CYNTHIA SEPULVEDA	637 9TH ST	910.20	7299	561499	SERVICE											6250121400	32.58487	-117.114135	O	(619) 575-7269
63	D & L LOCKSMITH	1148 PALM AVE	910.20	7299	561499	SERVICE											6250200500	32.58316	-117.11993	O	(619) 424-3399
64	DAMES FITNESS	704 SEACOAST DR	910.10	7299	561499	SERVICE											6251813301	32.58355	-117.13954	O	(619) 922-4184
65	DAWN SWANSON POINDEXTER	704 SEACOAST DR	910.10	7299	561499	SERVICE											6251813301	32.58355	-117.13954	O	(619) 279-0227
66	DEPENDABLE CARBURETOR EXCHANGE	660 DROWRY ST	910.20	7299	561499	SERVICE	+	+	+		+	+	+	+			6331214400	32.58303	-117.11313	O	(619) 424-7453
67	DESPHY'S CLEANERS	600 PALM AVE	910.20	7299	561499	SERVICE											6251401900	32.58407	-117.129029	O	(619) 825-8827
68	DON PANCHO'S MEXICAN FOOD	690 HIGHWAY 75	910.20	5812	722511	EATING	+	+	+		+	+	+	+			6250705500	32.58403	-117.118402	O	(619) 429-7034
69	DOS MUNDOS TACO SHOP	1004 PALM AVE	910.20	5812	72211	EATING	+	+	+		+	+	+	+			6250221100	32.58405	-117.11452	HF	(619) 397-9750
70	D & S PRODUCE	1177 13TH ST	911.11	5431	445230	FRUIT											6330213000	32.57418	-117.107546	O	(619) 474-6360
71	D.N.S. COIN LAUNDRY	167 13TH ST	911.11	7299	561499	SERVICE											6330213000	32.57418	-117.107546	O	(619) 429-5483
72	EAZY TAN	206 PALM AVE	910.10	7299	561499	SERVICE											6250230300	32.58403	-117.122023	O	(619) 429-5944
73	ECONO LUBE 'N' TUBE	772 13TH ST	910.20	7549	811118	AUTO	+	+	+		+	+	+	+			6331210100	32.58278	-117.109035	O	(619) 429-6662
74	EDI'S SIDE REPAIR	638 9TH ST	910.20	7299	561499	SERVICE											6251214500	32.58481	-117.114135	O	(619) 423-2970
75	EL CLARITO MEXICAN FOOD	794 13TH ST	911.11	5812	72211	EATING											6331210100	32.58278	-117.109035	HF	(619) 429-7462
76	EL TAPATIO CATERING	667 SILVER STRAND BL	910.10	5812	72211	EATING											6250421200	32.58455	-117.11313	O	(619) 423-2446
77	EL TAPATIO RESTAURANT INC	260 PALM AVE	910.10	5812	72211	EATING	+	+	+		+	+	+	+			6250261000	32.58399	-117.128037	HF	(619) 423-3443
78	EL JASON	633 9TH ST	910.20	5812	72211	EATING	+	+	+		+	+	+	+			6251214400	32.58487	-117.114135	HF	(619) 462-6350
79	ELM ADULT DAY HEALTH CARE CTR	1220 ELM AVE	910.20	8351	624410	DAYCARE											6250412000	32.58065	-117.1276	O	(619) 827-0573
80	EPISCOPAL COMMUNITY SERVICES	485 IMPERIAL BEACH BL	911.11	8351	624410	DAYCARE											6330841100	32.57548	-117.117453	O	(619) 228-0800
81	EPISCOPAL COMMUNITY SERVICES	1340 IMPERIAL BEACH BL	911.11	8011	621111	HEALTH											6372200400	32.57548	-117.114746	O	(619) 946-1001
82	EVERYDAY FURNITURE	986 PALM AVE	910.20	5712	442110	RETL											6250211200	32.58418	-117.112033	O	(619) 423-3685
83	EVERYDAY FURNITURE	1003 PALM AVE	910.20	5712	442110	RETL											6250304100	32.58403	-117.11743	O	(619) 228-0800
84	FACTORY 2 U #631	880 PALM AVE	910.20	5999	453998	RETL											6251107500	32.58153	-117.114876	O	(310) 324-9952
85	FAMILY BARBER SHOP	934 PALM AVE	910.20	7241	561421	SERVICE											6250123300	32.58418	-117.13479	O	(619) 424-6440
86	FAMILY HAIRCUTTERS	770 13TH ST	910.20	7299	561499	SERVICE											6331210100	32.58278	-117.109035	O	(619) 424-9797
87	FARMERS INSURANCE	932 PALM AVE	910.20	7389	561499	PROF											6250123200	32.58418	-117.11352	O	(619) 423-0903
88	FIRST ASSEMBLY OF GOD	988 9TH ST	910.20	8661	813110	NONPROF											6251412400	32.58481	-117.114414	O	(619) 424-6452
89	FITNESS WORLD	750 13TH ST	910.20	7299	561499	SERVICE											6331214400	32.58303	-117.108302	O	(619) 423-6000
90	FLEET RESERVE CLUB	659 SILVER STRAND BL	910.10	5812	72211	EATING											6250410300	32.58444	-117.128104	O	(619) 429-3485
91	FLESH SKIN GRAPHICS	1155 PALM AVE	910.20	7299	561499	TATOO											6250200500	32.58316	-117.11993	O	(619) 424-6965
92	FURNITURE 2000	817 PALM AVE	910.20	5712	442110	RETL											6250500600	32.58376	-117.119235	O	(619) 424-5701
93	G & M OIL #177	507 PALM AVE	910.20	5541	447110	GAS	+	+	+		+	+	+	+			6250121000	32.58427	-117.114135	O	(619) 429-0200
94	G.E. BROWN SERVICE	497 11TH ST	910.20	1799	238990	SUBCONT											6250500600	32.58376	-117.119542	O	(619) 575-1552
95	GENESIS AUTOMOTIVE	1085 PALM AVE	910.20	7299	561499	SERVICE											6250214400	32.58343	-117.118176	O	(619) 408-0822
96	GENE'S TOWING SERVICE	750 10TH ST	910.20	7549	811118	AUTO											6250121400	32.58418	-117.11075	O	(619) 423-3000
97	GENE'S UNIAL	1085 PALM AVE	910.20	7299	561499	SERVICE											6250214400	32.58343	-117.118176	O	(619) 424-8000
98	GIANT PIZZA KING #4	1075 13TH ST	911.11	5812	72211	EATING	+	+	+		+	+	+	+			6330421400	32.57573	-117.108325	O	(619) 575-2622
99	GIANT PIZZA KING #5	600 PALM AVE	910.20	5812	72211	EATING	+	+	+		+	+	+	+			6251401400	32.58407	-117.129029	HF	(619) 423-7601
100	GUAD CORP DBA PACIFIC POINT	857 10TH ST	910.20	7389	561499	PROF											6250221200	32.58427	-117.11874	O	(619) 424-0072
101	GLORIA BARRIOS	770 13TH ST	910.20	7299	561499	SERVICE											6331210100	32.58278	-117.109035	O	(619) 890-7316
102	GOODWILL INDUSTRIES OF SD	849 PALM AVE	910.20	5999	453998	RETL											6250200600	32.58376	-117.11403	O	(619) 225-2200
103	GREG MIKON	280 PALM AVE	910.20	7389	561499	PROF											6250121200	32.58427	-117.11874	O	(619) 424-0072
104	H & R BLOCK	1313 PALM AVE	910.20	7389	561499	PROF											6331210100	32.58365	-117.10951	O	(619) 267-1040
105	HAWKINS AUTO BODY	519 FLORIDA ST	910.20	7299	561499	SERVICE											6331221300	32.58723	-117.109165	O	(619) 429-3460
106	HEALING WAVE HOLISTIC H.C.	667 PALM AVE	910.20	8299	621399	MAS/TEC											6250600600	32.58376	-117.119542	O	(619) 392-0883
107	HELFON HANCHO, OPTOMETRIST	894 PALM AVE	910.20	8042	621320	HEALTH											6331210700	32.58439	-117.114504	O	(619) 423-9333
108	HERRERA & ASSOCIATES/LAUNDCAL	600 PALM AVE	910.20	7389	561499	PROF											6251401900	32.58407	-117.129029	O	(619) 200-8415
109	HOLLYWOOD VIDEO #005-580	720 13TH ST	910.20	7841	532230	SE/CHANG											6331210500	32.58303	-117.109443	O	(619) 409-8063
110	HONG DEIP TH LLC	755 13TH ST	910.20	5812	722511	EATING											6331210100	32.58278	-117.109035	O	(619) 789-9000
111	HS CARS COMPANY INC	1333 PALM AVE	910.20	5521	441120	AUTO	+	+	+		+	+	+	+			6251911900	32.58355	-117.10403	O	(619) 429-4983
112	HUTCHINS REALTY	1138 PALM AVE	910.20	7389	561499	PROF											6251700600	32.58413	-117.109951	O	(619) 423-6262
113	IB GROSSIN	600 PALM AVE	910.20	7299	561499	RETL											6251401400	32.58407	-117.129029	O	(619) 429-3797
114	IB LIQUOR	801 SEACOAST DR	910.10	5921	445310	RETL											6372291500	32.58153	-117.113952	O	(619) 424-9836
115	IB FLOWERS BY DESIGN	498 10TH ST	910.20	5999	453998	RETL											6250211000	32.58491	-117.11992	O	(619) 423-1964
116	IB. PIZZA	1293 IMPERIAL BEACH BL	911.11	5812	72211	EATING	+	+	+		+	+	+	+			6250121400	32.58418	-117.114135	O	(619) 575-3335
117	IB. UNITED METHODIST CHURCH	455 PALM AVE	910.20	8661	813110	NONPROF											6250230300	32.58377	-117.122135	O	(619) 424-6181
118	IB BEAUTIFUL INC	600 PALM AVE	910.20	7299	561499	SERVICE											6251401400	32.58407	-117.129029	O	(619) 969-2103
119	IB BY THE SEA GIFTS	862 SEACOAST DR	910.10	5999	453998	RETL											6330321500	32.58278	-117.11954	O	(619) 423-9632
120	IB CHAMBER OF COMMERCE	702 SEACOAST DR	910.10	7299	561499	SERVICE											6251813301	32.58355	-117.13954	O	(619) 423-3033
121	IB COIN LAUNDERLAND NO. 3	1010 PALM AVE	910.20	7299	561499	SERVICE											6250221100	32.58405	-117.11452	O	(619) 423-6008
122	IB COIN LAUNDRY #5	765 13TH ST	910.20	7299	561499	SERVICE											6331211100	32.58287	-117.109337	O	(619) 423-7227
123	IB DIVERS	641 9TH ST	910.20	7299	561499	SERVICE											6251214400	32.58487	-117.114135	O	(619) 424-0547
124	IB FITNESS	600 PALM AVE	910.20	7299	561499	SERVICE											6251401900	32.58407	-117.129029	O	(619) 423-9002
125	IB FORUM	1079 SEACOAST DR	911.11	5812	72211	EATING	+	+	+		+	+	+	+			6250922300	32.57938	-117.11594	HF	(619) 423-7507
126	IB GIFTS & BEACH GEAR	750 SEACOAST DR	910.10	5999	453998	RETL											6251813301	32.58355	-117.13954	O	(619) 575-0050
127	IB MORTGAGE & REALTY	1258 IMPERIAL BEACH BL	911.11	7389	561499	PROF											6250420900	32.57959	-117.108558	O	(619) 429-9474
128	IB NUTRITION STORE	888 PALM AVE	910.20	5122	446110	RETL											6251307500	32.58403	-117.118402	O	(619) 585-3002
129	IB PET	600 PALM AVE	910.20	5999	453910	RETL											6251401400	32.58407	-117.129029	O	(619) 822-1910
130	IB SUPER WASH N DRY	1220 PALM AVE	910.20	7215	812310	RETL											6250412300	32.58412	-117.107485	O	(619) 565-5285
131	IDEAL CHOICE INSURANCE AGENCY	1233 PALM AVE	910.20	7389	561499	PROF											6331114400	32.58418	-117.107336	O	(619) 423-7172
132	IMPERIAL BEACH DENTALGROUP	1340 IMPERIAL BEACH BL	911.11	8021	621210	HEALTH											6372200400	32.57957	-117.104613	O	(619) 429-6600
133	IMPERIAL BEACH EAGLE & TIMES	664 10TH ST	910.20	2711	511110	PRINTING											6250211000	32.58316	-117.11947	O	(619) 423-3251
134	IMPERIAL BEACH HAIR DESIGNS	205 PALM AVE	910.20	7299	561499	SERVICE											6250210500	32.58376	-117.118753	O	(619) 424-6065
135	IMPERIAL BEACH HEALTH CENTER	949 PALM AVE	910.20	8011	621111	HEALTH											6250811700	32.58372	-117.113021	O	(619) 423-5387
136	IMPERIAL BEACH MANAGEMENT CO	120 ELDER AVE	910.20	7389	561499	PROF											6250420500	32.58403	-117.108402	O	(619) 423-1290
137	IMPERIAL BEACH PET HOSPITAL	538 12TH ST	910.20	7299	561499	PROF											6250121800	32.58427	-117.11994	O	(619) 424-5991
138	IMPERIAL BEACH PRESCHOOL NORTH	658 10TH ST	910.20	8351	624410	DAYCARE											6250211000	32.58316	-117.11947	O	(619) 423-3251
139	IMPERIAL BEACH PRESCHOOL SOUTH	1179 IMPERIAL BEACH BL	911.11	8351	624410	DAYCARE											6331214400	32.57538	-117.108431	O	(619) 575-0325
140	IMPERIAL BEACH ULTRAMAR	1300 IMPERIAL BEACH BL	911.11	5541	447110	GAS	+	+	+		+	+	+	+			6372291100	32.57957	-117.113952	O	(619) 423-7770
141	IMPERIAL DONUTS #	1002 PALM AVE	910.20	5812	72211	EATING	+	+	+		+	+	+	+			6250421300	32.58403	-117.118402	HF	(619) 575-1600
142	IMPERIAL GUEST HOME	1245 FLORIDA ST	911.11	7299	561499	SERVICE											6330820500	32.57843	-117.108504	O	(619) 424-9791
143	IMPERIAL NAILS	600 PALM AVE	910.20	7299	561499	SERVICE											6251401400	32.58407	-117.129029	O	(619) 423-7304
144	IMPERIAL TRAILER PARK	874 PALM AVE	910.20	7033	721211	RV/MOBIL											6251401700	32.58408	-117.118584	O	(619) 423-9882
145	INNER VISIONS	803 PALM AVE	910.20	5999	453998	RETL											6250500600	32.58376	-117.119355	O	(619) 575-1216
146	INTERNATIONAL BLENDS	208 PALM AVE	910.20	5812	72211	EATING	+	+	+		+	+	+	+			6250200300	32.58403	-117.122023	O	(619) 429-0240
147	J & T NAILS	635 9TH ST	910.20	7299	561499	SERVICE											6251214400	32.58481	-117.114135	O	(619) 424-9052
148	JA POSTA MARKET #2	497 11TH ST	910.20	7299	561499	SERVICE											6250600600	32.58376	-117.119542	O	(619) 424-6300
149	JESSIOP & SON LANDSCAPE	425 IMPERIAL BEACH BL	911.11	7299	561499	SERVICE											6330422500	32.58475	-117.104108	O	(619) 840-4492
150	JOEY/NICHOLE/CHICK CHRISTMASTREE	N UNASSIGNED	NA	5999	453998	RETL											6250211000	32.57943	-117.118912	O	(541) 480-5916
151	JORGE AGUILA	277 EVERGREEN AVE	911.11	7299	561499	SERVICE											6251821400	32.58376	-117.11318	O	(619) 427-7542
152	JP MORGAN CHASE BANK, N.A.	1100 PALM AVE	910.20	6021	52211	BANK											6251621700	32.58391	-117.119573	O	(619) 424-8640
153	KATY'S CAFE	704 SEACOAST DR	910.10	5812	722511	EATING	+	+	+		+	+	+	+			6251813301	32.58355	-117.13954	O	(619) 423-7300
154	K-CS CHINESE FOOD	1299 IMPERIAL BEACH BL	911.11	5812	72211	EATING	+	+	+		+	+	+	+			6330222300	32.57475	-117.107507	HF	(619) 429-5418
155	KEYSTONE ESCROW INC	1100 PALM AVE	910.20	7389	561499	PROF											6251212800	32.58391	-117.11003	O	(619) 424-8182
156	KFC CORP #-045025	1058 13TH ST	911.11	5812	72211	EATING	+	+	+		+	+	+	+			6250210500	32.58376	-117.118753	O	(619) 424-3492
157	K & M TIRE CO / EXPRESS TIRE	955 PALM AVE	910.20	7549	561499	SERVICE	+	+	+		+	+	+	+			6250210500	32.58403	-117.118753	O	(619) 429-3600
158	LA POSTA MARKET #3	1266 IMPERIAL BEACH BL	911.11	5999	453998	RETL	+	+	+		+	+	+	+			6250420900	32.57959	-117.108558	HF	(619) 423-8600
159	LEADINGHAU REALTY	1062 PALM AVE	910.20	7389	561499	PROF											6250221200	32.58475	-117.118912	O	(619) 424-6666
160	LENS WIRELESS	639 7TH ST	910.20	4812	517310	RETL											6250211200	32.58107	-117.11783	O	(619) 581-2061
161	LEON DISCOUNT

Table 5.4 - Commercial Business Inspections FY 2009-10

Facility Name	Address	Business Phone Number - Calc	Establishment Class	Date Inspected	Result	Follow Up Inspect
13TH ST MARKET	1126 13TH ST	(619) 424-8255	High	12/2/2009	Follow Up	
7-ELEVEN STORE # 24344B-2131	1311 PALM AVE	(619) 575-6081	High	12/9/2009	Follow Up	1/4/2010
7-ELEVEN STORE #23982A-2131	1303 IMPERIAL BEACH BL	(619) 000-0000	High	12/15/2009	OK	
ALBERTO'S TACO SHOP	1183 13TH ST	(619) 429-4802	High	12/15/2009	OK	
ALL AMERICAN CAR WASH IB	1158 PALM AVE	(619) 429-7000	High	12/17/2009	OK	
ANCHOR MOTORS	740 PALM AVE	(858) 945-7762	High	11/17/2009	OK	
AROMA THAI RESTAURANT	757 SEACOAST DR	(619) 941-1656	High	10/27/2009	OK	
BEACH SIDE STATION	681 HIGHWAY 75	(619) 424-3366	High	12/16/2009	Follow Up	12/16/2009
BERNARDO SHORES	500 HIGHWAY 75	(619) 429-9000	High	11/17/2009	OK	
BEACH CLUB GRILLE	710 SEACOAST DR	0	High	12/21/2009	OK	
BIG KAHUNA'S PIZZA N STUFFS	600 PALM AVE	(619) 429-5224	High	11/16/2009	OK	
BURGER KING #806	1180 PALM AVE	(619) 429-3180	High	12/17/2009	OK	
C.H. DONUTS	1070 13TH ST	(619) 575-3001	High	12/2/2009	OK	
CARL'S JR. #585	700 13TH ST	(619) 423-5025	High	12/9/2009	OK	
COW-A-BUNGA CA GLACIER FNAM	10 EVERGREEN AVE	(619) 628-0508	High	10/26/2009	OK	
CROSSROAD PETROLEUM INC.	1185 PALM AVE	(619) 429-4628	High	12/17/2009	Follow Up	
DEPENDABLE CARBURETOR EXCHANGE	660 EMORY ST	(619) 424-7453	High	11/19/2009	OK	
DON PANCHO'S MEXICAN FOOD	690 HIGHWAY 75	(619) 429-7034	High	12/16/2009	OK	
DOS MUNDOS TACO SHOP	1004 PALM AVE	(619) 397-9750	High	12/16/2009	OK	
ECONO LUBE N' TUBE	772 13TH ST	(619) 429-8882	High	12/1/2009	OK	
EL CILANTRO MEXICAN FOOD	764 13TH ST	(619) 429-7492	High	12/1/2009	OK	
EL TAPATIO CATERING	667 SILVER STRAND BL	(619) 423-2440	High	12/15/2009	OK	
EL TAPATIO RESTAURANT INC	260 PALM AVE	(619) 423-3443	High	12/15/2009	OK	
EL ZASON	633 9TH ST	(619) 462-6350	High	12/16/2009	OK	
G & M OIL #177	907 PALM AVE	(619) 429-3962	High	12/16/2009	OK	
GENES' AUTOMOTIVE	1085 PALM AVE	(619) 498-0820	High	12/17/2009	OK	
GIANT PIZZA KING #4	1070 13TH ST	(619) 575-2622	High	12/16/2009	OK	
GIANT PIZZA KING #5	600 PALM AVE	(619) 423-7601	High	12/17/2009	Follow Up	12/17/2009
HAWKINS AUTO BODY	519 FLORIDA ST	(619) 429-3960	High	11/30/2009	OK	
HS CARS COMPANY INC	1333 PALM AVE	(619) 429-4983	High	11/30/2009	OK	
I.B. PIZZA	1293 IMPERIAL BEACH BL	(619) 575-3330	High	12/1/2009	OK	
IB FORUM	1079 SEACOAST DR	(619) 429-7507	High	10/26/2009	OK	
IMPERIAL BEACH ULTRAMAR	1300 IMPERIAL BEACH BL	(619) 423-7770	High	12/15/2009	OK	
IMPERIAL DONUTS +	1002 PALM AVE	(619) 575-1830	High	12/16/2009	OK	
KATY'S CAFE	704 SEACOAST DR	(619) 863-5524	High	12/21/2009	OK	
K-C'S CHINESE FOOD	1299 IMPERIAL BEACH BL	(619) 429-5418	High	12/1/2009	OK	
KFC CORP #Y450025	1056 13TH ST	(619) 424-3492	High	12/1/2009	OK	
L & M TIRE CO./ EXPRESS TIRE	950 PALM AVE	(619) 429-3600	High	11/19/2009	OK	
LA POSTA MARKET #2	1266 IMPERIAL BEACH BL	(619) 423-6363	High	12/16/2009	Follow Up	1/4/2009
MARCO'S & RED HAWK	1205 PALM AVE	(611) 424-3636	High			
MARISA'S MEXICAN SEAFOOD GRILL	285 PALM AVE	(619) 227-7424	High	12/15/2009	OK	
MASON'S ALIGNMENT-BRAKE-MUFFLE	975 PALM AVE	(619) 424-5161	High	8/24/2009	OK	
MCDONALDS/SCAROB INC.	1135 PALM AVE	(619) 423-8811	High	12/17/2009	OK	
MEIJO SUSHI, INC.	600 PALM AVE	(619) 429-4373	High	11/16/2009	OK	
MICKIES BAR AND GRILL	220 PALM AVE	(619) 575-9805	High	12/22/2009	OK	
MZM SEACOAST BISTRO, LP	875 SEACOAST DR	(619) 424-5800	High	12/23/2009	OK	
NFAROOQI ENT. LLC/JACK IN BOX	890 PALM AVE	(619) 325-1801	High	8/21/2009	OK	
PIZZA INDUSTRY/DOMINO'S PIZZA	1307 IMPERIAL BEACH BL	(619) 575-2226	High	12/15/2009	OK	
PRECISION AUTO BODY & COLLISIO	989 PALM AVE	(619) 726-7932	High	12/16/2009	OK	
PRECISION FOREIGN	1240 PALM AVE	(619) 575-1767	High	12/9/2009	OK	
PRETZLES AND MUCH MORE	10 EVERGREEN AVE	(619) 591-9344	High	10/26/2009	OK	
RODRIGO'S MEXICAN FOOD	600 PALM AVE	(619) 425-9076	High	11/16/2009	OK	
ROLANDO'S TACO SHOP #5	805 SEACOAST DR	(619) 239-9825	High	12/21/2009	OK	
SANTANA MEXICAN FOOD	1337 PALM AVE	(619) 251-6743	High	11/30/2009	OK	
SEACOAST PIZZA	807 SEACOAST DR	(619) 423-1111	High	12/21/2009	OK	
SIESTA RV PARK, INC.	409 PALM AVE	(619) 420-7090	High	12/22/2009	OK	
SOMBRERO MEXICAN FOOD	189 PALM AVE	(619) 424-8822	High	12/22/2009	OK	
SOPHISTICATED AUTO	987 PALM AVE	(619) 423-7729	High	3/10/2009	OK	
STARDUST DONUT SHOP	698 HIGHWAY 75	(424) 000-6200	High	12/17/2009	OK	
SUBSMART DELI-FRESH	1231 PALM AVE	(619) 829-1780	High	12/9/2009	OK	
SUBWAY 20578	876 SEACOAST DR	(858) 337-1539	High	10/26/2009	OK	
THE BRIDGE	874 SEACOAST DR	(619) 423-6610	High	10/26/2009	OK	
THE SCOREBOARD	951 PALM AVE	(619) 424-9909	High	12/15/2009	OK	
THE TINFISH RESTAURANT	910 SEACOAST DR	(619) 628-8414	High	10/26/2009	OK	
THE WAVE CAFE	809 SEACOAST DR	(619) 423-9900	High	12/21/2009	OK	
TITO AUTO SERVICE	1335 PALM AVE	(619) 423-8690	High	11/30/2009	OK	
TNT SURFBOARDS	536 13TH ST	(619) 575-2303	High	11/30/2009	OK	
TUNES LUBES ETC.	741 PALM AVE	(619) 575-6087	High	11/17/2009	Follow Up	12/16/2009
WALLY'S IGA	836 PALM AVE	(619) 424-8129	High	12/16/2009	OK	
WIENERSCHNITZEL #358	1253 PALM AVE	(619) 423-7211	High	12/9/2009	Follow Up	1/4/2010
WOODYS AUTO CARE	200 PALM AVE	(619) 279-6525	High	12/22/2009	Follow Up	
YE OLDE PLANK INN	24 PALM AVE	(423) 000-5976	High	12/22/2009	OK	

Table 5.5 - Interactive Effectiveness Assessment of Commercial Businesses

Name of Facility	Type	Have you heard of our storm water program before? What have you heard?	When water leaves your site, where does it go?	Is Runoff Treated	What is the difference between the storm drain system and the sanitary sewer?	Runoff from your site eventually reaches what water body.	Name some key pollutants?	What are examples of actions you can take?	Overall Survey	BMP Implementation	Outcome Level Achieved
Beach Club Grille	Food Service	5	5	5	5	5	5	5	5	5	4
Katy's Café	Food Service	5	5	5	5	5	5	5	5	5	4
Wienerschnitzel	Food Service	5	2	0	0	0	0	0	1	4.5	3
Subsmart	Food Service	3	3	0	0	0	0	3	1.2857	5	3
Econo Lube N' Tube	Auto Service	0	0	5	5	5	0	3	2.5714	5	3
CH Donuts	Food Service	0	5	5	5	5	0	5	3.5714	5	4
Santana Mexican	Food Service	0	0	0	0	0	5	1	0.8571	5	3
Hawkins Auto Body	Auto Service	2	5	5	5	1	5	5	4	5	4
TNT Surfboard	Manufacturing/Finishing	0	5	5	5	5	5	5	4.2857	5	4
Tito Auto Service	Auto Service	4	5	4	5	5	5	5	4.7143	5	4
L&M Tire	Auto Service	0	5	5	5	4	5	5	4.1429	5	4
Dependable Carburator Exchange	Auto Service	5	5	5	5	5	0	2	3.8571	5	4
Imperial Donuts	Food Service	5	5	0	5	5	5	5	4.2857	4.5	4
Wally's IGA	Food Service	5	5	5	5	4	5	3	4.5714	4.5	4
Anchor Motors	Auto Service	5	5	5	1	5	5	1	3.8571	5	4
Tunes Lubes ETC	Auto Service	1	2	1	1	1	0	5	1.5714	5	3
Bernardo Shores	RV	5	5	5	5	5	0	5	4.2857	5	4
Beach Side Station	Gas Station	1	3	5	5	5	5	1	3.5714	4.5	4
Dominos Pizza	Food Service	0	5	5	5	4	5	3	3.8571	5	4
7 Eleven (IB BL)	Gas Station	5	5	5	5	5	5	5	5	5	4
Sombrero Mexican	Food Service	5	5	5	5	5	5	5	5	5	4
	Average	2.904761905	4.047619048	3.80952381	3.904761905	3.761904762	3.333333333	3.666666667	3.6327	4.90476190	3.8
	STD Deviation	2.27826166	1.687488977	2.08851736	2.022492569	1.972429008	2.415229458	1.74164673	1.3579	0.201186	0.436435

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from residential sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and the City's Code Enforcement Division. Efforts are made to educate the public and oversee compliance with local urban runoff regulations to reduce the release of pollutants to the MEP.

6.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Residential Component is described in the *2008 JURMP Section 8.0*. During the reporting period no updates were made to the high priority residential area inventory. All other program planning and administration elements remain unchanged from the *2008 JURMP Section 8.0*.

6.3 Outcome Level 1b: Implementation of Management Program Activities

The City enforces its storm water ordinances for all residential areas and activities to maintain compliance with the Municipal Storm Water Permit. Public outreach and education as outlined in the *2008 JURMP Section 10.0* encourages residents to comply with the minimum set of BMPs listed in Imperial Beach Municipal Code 8.30.080. The City encourages the use of pollution prevention methods for all residents and provides convenient and cheap house hold hazardous waste disposal. The City also participated as Co-Chair in the Education and Residential Sources Workgroup and Chair of the Underserved Target Audience sub-workgroup.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 6.1 Provides an overview of the residential component as it was implemented
- Table 6.2 presents and describes targeted FY 2009-10 outcomes and results
- Figure 6.1 Show the referral source for ICIDs investigations

6.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Residents

Knowledge and awareness of the storm water program by residents is best assessed through the City's response to illegal connections and illicit discharge (ICID) investigations. Figure 6.1 below shows that 21% of the City's ICID cases continue to come from the public. When expanded to include sources other than the Environmental Division, the number of referrals increases to 66%. This shows that the City is effective in making different stakeholders aware of the importance of reporting storm water violations and more importantly aware of how their own actions effect water quality.

Figure 6.1 - Referral Source for ICID Investigations

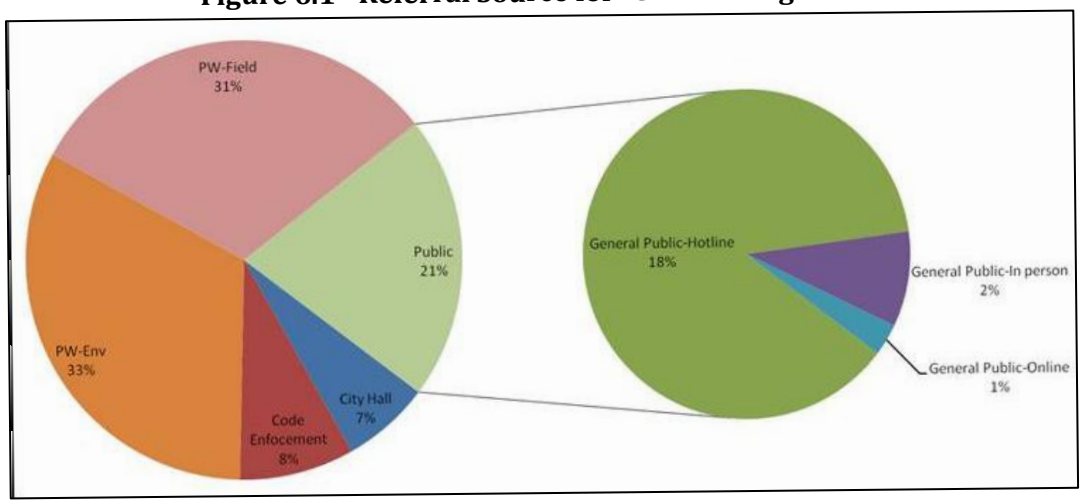

6.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Residents

The City facilitates changes in behavior and implementation of BMPs for high threat to water quality activities and residential areas by providing education through face-to-face interactions, disseminating education materials through various media, and responding to illegal discharges. The *2008 JURMP Appendix G* defines minimum BMP requirements applicable to residential areas and activities in the City.

6.6 Outcome Level 4: Source Load Reductions

The City continues to quantify load reductions whenever feasible for disposal of household hazardous waste, used oil, and special clean up events. Pest waste collected by the Ocean Blue foundation is also estimated. The City does not normally track individual source load reductions to receiving waters from residential areas or activities but load reductions can be implied by proper implementation of BMPs.

Table 6.1 – Overview of Residential Component

Category	Pounds	Number	Description
A. Residential Threat to Water Quality Prioritization			
High	---	6	All residential areas in the City are considered high priority.
Medium	---	---	
Low	---	---	
B. House Hold Hazardous, Electronic, and Universal Waste Disposal			
Flammable and Poison	2,637	---	Imperial Beach residents have a variety of options for the collection and disposal of house hold hazardous waste. Most residents utilize the South Bay HHW Collection center at the City of Chula Vista. Residents can also drop off used oil at the Auto Zone located at 13th and Palm. The City coordinates used oil disposal that is part of CalRecycle Used Oil Block Grant with the City of Chula Vista. The amount of waste dropped off by Imperial Beach residents is provided in the table to the left. The City also offers curbside pickup of HHW, used oil, and a number of regional collection events for electronic and universal waste. The disposal totals for these additional activities are not provided in this report.
Acid, Base, Oxidizer, and PCB-containing	96	---	
Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters)	3,763	---	
Other HHW	816		
Universal and Electronic Waste	3,025		
Total Waste Disposed	10,337		

JURMP Sections	Description of FY 2009-10 Changes
8.0 and Appendix G	BMP requirements of the JURMP applicable to residential areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates made during FY 2009-10	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	No updates made during FY 2009-10	Complete	No updates made this reporting period.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	In progress	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Residential Areas			
Identify high threat to water quality areas	Update not needed	Complete	The City has previously identified the high threat to water quality residential areas and activities. All residential areas in the City are considered high threat to water quality areas. Figure 6.2 provides a map of the high priority residential areas. The *2008 JURMP Section 8.0* provides a list of high threat to water quality activities.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) Confirmation of Designated Minimum BMPs			
Require residents to implement BMPs	Requirements implemented	Complete	The City requires all residential areas to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City enforces its *Urban Runoff Management and Discharge Control Ordinance* and provides education and outreach to local residents.
c) Facilitate Proper Disposal of Household Hazardous Waste and Used Oil			
Facilitate proper management and disposal of used oil and household hazardous waste (HHW)	Provided a variety of disposal options for used oil, toxic materials, and other hazardous waste	Complete	The City provides a variety of options for the proper management and disposal of used oil, toxic materials, and other HHW. Residents are generally directed to drop off hazardous materials at the South Bay HHW center at the City of Chula Vista. The City also provides curb side pickups and a number of regional collection events for HHW, used oil, electronic waste, and universal waste.
d) Enforcement of Residential Areas and Activities			
Enforce minimum BMPs in residential areas	Responded to storm water violations reported by staff and public	Complete	The City enforces its storm water ordinance and the Municipal Permit for all residential areas and activities through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines and civil and/or criminal court actions. The Environmental Division responds to storm water violations, which are reported by City staff and public.
e) Evaluate Methods of Oversight for Residential Areas and Activities			
Evaluate methods of oversight and enforcement for residential areas and activities	Operate storm water hotline and utilizes monthly sewer and street inspections to identify deficiencies	Complete	Operated a Storm Water Hotline (619-424-4095) during the reporting period. The City received 28 reports on the Storm Water Hotline (619-424-4095) for storm water violations in residential areas. The Environmental Division responded to another 65 residential violations reported by City staff. The City also operates an online complaint form and received 1 residential complaint. City staff also identified storm water BMP deficiencies or violations while conducting residential neighborhood inspections for sewer and street maintenance.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
f) Regional Residential Education Program			
Participate in Regional Residential Education Program	Held co-chair position of the Education and Residential Sources Workgroup and chair position of the Underserved Target Audience Sub-workgroup	On going	During this reporting period, the City participated in the Education and Residential Sources Workgroup with the San Diego Copermittees and held the responsibility of co-chair for the group. Significant progress continues to be made in the areas of media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment through a county-wide telephone survey.
g) Special Investigations			
Not targeted	None	None	Special investigations were not conducted in FY 2009-10, and are not routinely conducted as part of the implementation strategy for this program element.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY RESIDENETS			
Establish a baseline for knowledge of BMPs implementation by residents	No additional assessments were targeted at residents outside of education activities	Assessment results provided in Section 8.0 for residential and general public outreach	Knowledge and awareness of storm water issues by residents is assessed through the education program. The City uses brochures, special events, presentations, and ICID investigations as tools to educate local residents on storm water.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2009-10 Results				
Targeted Outcome	Implementation Result	Assessment Result		Explanation
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY RESIDENTS)				
a) BMP Implementation				
Facilitate pet waste program with the Ocean Blue Foundation	10 pet waste bag dispensers are maintained by the Ocean Blue Foundation	Complete		The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. The City Council supports the foundation through an annual community grant.
Cleanup activities in residential areas	Implemented cleanup activities as part of the Municipal Component	Complete		Under the Municipal Component of the JURMP the City conducts street sweeping, alley sweeps, and cleanup activities in residential neighborhoods.
b) Violations and Enforcement Actions				
Number of violations and enforcement actions to achieve compliance	Responded to a total of 94 ICID cases from residents and issued 24 NOVs	Complete		The City tracks statistics for storm water violations. The City received 28 reports on the Storm Water Hotline (619-424-4095) for storm water violations in residential areas. The Environmental Division responded to another 65 residential violations identified by City staff. The City also operates an online complaint form and complaints reported in person. Most violations were corrected by verbal warnings but the City did issue 24 NOVs.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM RESIDENTIAL AREAS AND ACTIVITIES)				
a) BMP Implementation				
Household hazardous waste (HHW) collection	10,377 pounds of HHW collected	**Year**	**Pounds**	The City's HHW disposal program is available to all residents, and the City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options.
		2008	6,000	
		2009	10,367	
		2010	10,377	

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2009-10 Results					
Targeted Outcome	Implementation Result	Assessment Result			Explanation
Used oil collection	3,763 pounds of Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters) collected	**Year**	**Pounds**		The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.
		2008	2,110		
		2009	2,173		
		2010	3,763		
Universal and electronic waste collection	3,025 pounds of electronic and universal waste collected	**Year**	**Pounds**		The City facilitates the proper management and disposal of universal and electronic wastes.
		2009	2,433		
		2010	3,025		
Pet waste collection	10 pet waste bag dispensers; 72,800 bags replaced, and an estimate of 18,200 lbs of pet waste collected	Complete			The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. If the average pet waste weighs 4 ounces then an estimate of 18,200 lbs of waste was collected. The City Council supports the foundation through an annual community grant.
Special event recycling and waste management	Home Front Cleanup event had 822 participants and collected 175.6 tons of materials	**Year**	**No.**	**Tons**	The City holds an annual Home Front Cleanup event. The Home Front Clean Up had 822 participants and disposed a total of 175.6 tons of materials. That includes 19.7 tons of green waste, 33.4 tons of metal, and 32.4 tons of concrete that was recycled.
		2009	732	154.3	
		2010	822	175.6	

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extending the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The City's implementation and assessment strategy for the illicit discharge detection and elimination component is described in the *JURMP Section 9.0*.

8.0 EDUCATION COMPONENT

8.1 Introduction

The City endeavors to implement a diverse education program in the community to reduce the impacts of urbanization on water quality. Education activities are targeted at the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in the City of Imperial Beach), 5) residents, general public, and school children, and 6) underserved communities. This component is applicable to all City departments, in particular the Environmental Program Division of the Department of Public Works, which spearheads the City's education efforts and is responsible for the annual training for municipal employees on the components and goals of the JURMP. Note that each section of this JURMP Annual Report already includes a description of education activities for each element. The City recognizes the importance education plays in facilitating the necessary behavioral changes to successfully reduce and eliminate pollutants from urban runoff.

8.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Education Component is described in the *2008 JURMP Section 10.0*. During the reporting period the City made no significant updates to the education program. The City continues to focus education efforts at the five targeted community groups. The City tailors each individual education activity to best suit the message and content for the target community; however, the overall message is consistent with the *2008 JURMP Section 10.0*. Minor changes to the program include changes to materials such as handouts, surveys, and educational guidance documents, which are continuously updated throughout the year. The City also continues to seek for ways to expand and improve the effectiveness assessment of the education program.

8.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division oversees the implementation and assessment of the Education Component for the five targeted communities. The following tables and figures presented in this section provide additional information on the implementation and assessment of the Education program element:

- Table 8.1 Provides an overview of the Education program
- Table 8.2 presents and describes targeted FY 2009-10 outcomes and results
- Table 8.3 provides the education activity inventory by target community for FY 2009-10

8.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Target Community

The City implements an education program for each target community using all media as appropriate to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably

change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment. During the reporting period the Environmental Division implemented a variety of techniques to capture changes in knowledge and awareness among the targeted communities. These techniques include the use of surveys, pre and post test, interactive assessments and evaluations during inspections, and regional assessment programs through the Education and Residential Sources (ERS) Workgroup.

8.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Target Community

The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs. Gauging the level of effectiveness of the education program from one year to the next is a challenging task because of the gradual nature of behavior change, but the City strives to measure this level of effectiveness and behavior change for each target audience whenever possible. Table 8.3 provides a description of how outcome level 3 is assessed for each targeted community.

8.6 Outcome Level 4: Source Load Reductions

Education is a key component of getting to source load reductions through the implementation of BMPs. Source load reductions are not easily tracked from education activities but can be implied through the proper implementation of BMPs.

Table 8.1 – Overview of Education

Category	Number	Description
A. Educational Efforts		
Municipal Departments and Personnel Events	15	Employees are trained annually on the use of BMPs in their daily operations. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations.
Construction Site Owners, Contractors and Developer Training Events	2	Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, in inspections, and in investigations of illegal discharges.
Public Participation	8	
Commercial Site Owners and Operators Training Events	3	Commercial Site Owners and Operators are trained through scheduled inspections by the Public Works Department Environmental Division, and through investigations of illegal discharges.
Residential Community and General Public Outreach Events	15	All residents receive educational information in the City's newsletter, a newsletter sent out by the City's waste franchisee, website updates, materials provided at City Hall and the Public Works Department, through community presentations, etc. The City held an information booth at the U.S. Open Sand Castle competition and Auto Show. The City also participated with other Co-Permittees in regional outreach events that target the underserved community.
Underserved Community	2	
School Children Outreach Events	6	

JURMP Sections	Description of FY 2009-10 Changes
10.0 and Appendix I	BMP requirements of the JURMP applicable to educational areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates made during the reporting period	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	Minor updates made to program	Complete	The City implements surveys when feasible at education events to establish a baseline level of knowledge. Minor program updates were made throughout the year to program content to more effectively present education materials.
c) Updates to Training Program			
Update training materials for consistency with *2008 JURMP Section 10.0*	Minor updates made to program including brochures	Complete	The City makes annual updates to training content and materials so that each education activity provides appropriate information for the target audience. For example the City developed a new construction site BMP brochure and made minor updates to the commercial business, car washing, pet waste, and residential brochures. The Environmental Division also made updates to the Municipal Facility and Activity BMP workbook that is kept in each City vehicle.
d) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Education Component			
Provide education to construction site owners and developers	Provided education to construction site owners and developers	Complete	Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process. Community Development holds counter hours for project applicant. Education is reinforced through inspections and in investigations of illegal discharges. The City also developed a new construction BMP brochure.
Provide education for municipal staff	Provided annual training and additional education opportunities to municipal staff	Complete	The Environmental Division provided 15 municipal training activities including the annual storm water training for Public Works on 9/30/09. All new employees receive one-on-one training for storm water at the beginning of employment. City staffs are encouraged to attend training activities for storm water program outside the City. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Updates also made to the Municipal Facility and Activity BMP workbook that is kept inside every City vehicle.
Provide education to industrial and commercial owners and operators	Provided education to commercial businesses and owners	Complete	Commercial businesses receive education on storm water BMPs through a number of different methods including direct mail before scheduled inspections, face-to-face interaction with City staff during commercial inspections, through dissemination of education material, and through a follow up inspection letter that summarizes the results of the commercial inspection. The City also provides education to businesses during ICID investigations.
Provide education to underserved community	Provided education to underserved community	Complete	Education materials are provided in both English and Spanish. The environmental division also works with underserved youth at the Imperial Beach Job Corps through presentations and community projects. The City also Co-chairs the ERS Workgroup and Chairs the Underserved Target Audience Sub-Workgroup.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Provide education to residential community, general public, and school children	Provided education to residential community, general public, and school children	Complete	The Environmental Division provided 22 education activities targeted to residential community, general public, and school children. Some of the activities included presentation to schools, County splash lab, after school activities at IB Sports Park, media education, Recycling All-Star award, and City Council proclamation for Environmental Awareness Month in April. The Tijuana Estuary, State Park, FWS, YMCA Camp Surf, and Wildcoast also conduct environmental education and community outreach that is not currently tracked by the City but represents a significant effort to promote clean water.
Provide opportunity for public participation	Provided opportunities for public education	Complete	Public participation is encouraged in the development and implementation of the JURMP. The annual JURMP Report is presented at City Council during an open public hearing process. The Environmental Division also facilitates and participates in public cleanup activities that serve as mechanism for public participation in watershed activities.
b) Special Investigations			
Not targeted	Council Proclamation for the month of April as Environmental Awareness Month	Complete	Starting this reporting period the Imperial Beach proclaimed the month of April as "Environmental Awareness Month". Environmental Division scheduled a number of education activities for the month with the afterschool youth at IB Sports Park and selected a weekly recipient for the Recycling All-Star award for the month. These activities were in addition to the normal Earth Day celebrations in the region.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION)			
a) Construction Site Owners and Developers			
Assess knowledge and awareness for construction site owners and operators	Assessed knowledge whenever possible	Complete	Most construction activity in the City is from small discretionary projects and CIPs. Knowledge and awareness is achieved through proper submittal of storm water documents and proper implementation of BMPs. All projects are required to submit the necessary storm water documents and implement BMPs. Deficient projects receive proper education from staff. General outcomes reveal a high level of knowledge from larger contractors and a lesser understanding of BMPs from smaller general contractors.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) Municipal Departments and Personnel			
Assess knowledge and awareness for municipal staff	Assessed knowledge though surveys and regular meetings	Public Works survey score of 84% correct answers	Surveys are administered during annual storm water training events. The surveys are generally challenging in nature because personnel staff are expected to have a high level of understanding of storm water program. Surveys are administered at the beginning of the training session and used as a tool to highlight specific topics during the training session.
c) Industrial and Commercial Site Owners and Operators			
Assess knowledge and awareness for commercial businesses	Assessed through interactive assessment process	Assessment results provided in Table 5.5 in the Industrial Commercial Section	Starting this reporting period the Environmental Division incorporated an interactive effectiveness assessment of commercial businesses during the annual storm water inspection. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness.
d) Underserved Community			
Assess knowledge and awareness for underserved community	Assessed though Regional Copermittee group	Complete	The Education and Residential Sources Workgroup provides targeted assessment of the underserved community through event surveys and a countywide phone survey.
e) Residential Community, General Public, and School Children			
Assess knowledge and awareness for residential community, general public, and school children	Assessed through surveys during presentations and at events	Complete	The City hired ILACSD to conduct targeted education and assessment for school children in elementary schools. The City also provided event surveys at the US Open Sandcastle Competition and Auto Show special events. Results indicated a change in knowledge from school presentations based on pre and post test scores. Event surveys also revealed a 69% understanding among the general public of the difference between storm water and sewer systems.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION FROM EDUCATION ACTIVITIES)			
a) Construction Site Owners and Developers			
Number of construction projects that were not in compliance with BMPs	5 of 72 construction projects were out of compliance with BMPs	93% of active construction projects in compliance with site BMPs	Most construction projects (93%) implemented the necessary BMPs to contain potential contaminates on site. Non-compliant projects received additional education and a follow up investigation to ensure the proper BMPs were implemented and maintained.
b) Municipal Departments and Personnel			
Number of ICIDs identified and reported by municipal staff	Municipal Staff identified 98 out of 153 ICID during the reporting period	Total ICID: 153 PW Env: 50 PW Other: 48	One component of the annual municipal training is the proper identification of ICIDs. During FY 2009-10 64% of the identified ICIDs were reported by Public Works staff with the Environmental Division only making up 50 cases and the non-environmental Public Works staff making up 48 cases.
c) Industrial and Commercial Site Owners and Operators			
Number of commercial businesses not in compliance with minimum BMPs	9 out of 71 commercial businesses were out of minimum BMP compliance	87% of high priority businesses in compliance with minimum BMPs	The City inspects 100% of high priority commercial businesses annually for proper implementation of BMPs. During the reporting period the city inspected 71 commercial businesses with the result of 9 businesses out of compliance for minimum BMPs. Those 9 businesses were educated and then subsequently re-inspected at a later date and found to be incompliance with the minimum BMPs.
d) Underserved Community			
Not targeted	None	None	The underserved community is not specifically targeted by the city when assessing behaviors and BMP implementation because this task is more effectively addressed through the Regional Copermittee group.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Residential Community, General Public, and School Children			
Number of education activities that target behavior change	29 education activities during the reporting period	Complete	Assessing changes in behavior and BMP implementation across the whole community is best addressed through regional programs. Imperial Beach focuses on targeting education through a variety of media and interactive programs that target the most people possible. Anecdotal observations from City staff reveal a continuous improvement in BMP implementation across all targeted audiences as the persistent storm water education message gradually changes public behavior.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM EDUCATION ACTIVITIES)			
a) BMP Implementation			
Not targeted	None	None	Source load reductions are not easily tracked from education activities but can be implied through proper implementation of BMPs. Source load reductions from cleanup activities are tracked and reported separately.

Table 8.3 - Education Activity Inventory by Targeted Community

Education Activity	Date	Activity or Event Description	Topics	No.	Effectiveness Assessment	Comments
Municipal Departments and Personnel						
FYI to City Staff and Council	Weekly	Provided updates on the storm water program and Environmental Division through a weekly email newsletter sent to City staff and Council	Storm Water program	130	No	25 FYIs for the year
Code Enforcement Meeting	Monthly	Monthly meeting with Code Enforcement, Fire Inspector, Building Inspector, Community Development, and Environmental Division	Code enforcement issues many of which pertain to storm water	8	No	
Emergency Response Training	8/21/2009	Annual training of PW staff on emergency response including vactor truck use, spill response, municipal BMPs	Stormwater training on spill response, municipal BMPs, and pollution prevention.	24	No	
LTEA Workshop for Environmental Division	8/27/2009	Copermittee workshop for combining the LTEA and Diamond rating systems	JURMP and WURMP effectiveness assessment	1	No	
Supervisor Meeting	9/4/2009	Environmental Manager updated PW Supervisors on SDGE vault dewatering	Vault dewatering, BMPs, illegal discharge response	6	No	
Public Works Annual Storm Water Training	9/30/2009	Annual training for PW staff on components of the JURMP and BMPs for municipal facilities and activities	Pollution prevention and response, BMPs for municipal facilities and activities	22	Yes	Survey
New Employee Storm Water Training	9/28/2009	Indoctrination for new Environmental Specialist employee Guy Nelson	Review the requirements of the MS4 Permit and tour	1	No	
CASQA Conference	11/2-11/4/09	Annual storm water conference	Storm water program development	3	No	
New Employee Storm Water Training	11/23/2009	Indoctrination for new PW Administrator Bobbie Ortero	Review the requirements of the MS4 Permit and tour	1	No	
SCCWRP Symposium	1/20/2010	Symposium	Presentation on yearly culmination of work by SCCWRP	1	No	
Construction General Permit Training	2/25/2010	Training on the new Construction General Permit	Overview of the new Construction General Permit	2	No	
SUSMP Workshop	3/3/2010	Workshop on new Countywide Model SUSMP	Overview of new SUSMP requirements and LIDs and BMPs	4	No	
New Employee Storm Water Training	3/23/2010	Indoctrination for new PW sewer division Maintenance Worker Eric Bennet	Review the requirements of the MS4 Permit and tour	1	No	
EPA Enforcement Workshop	3/23/2010	EPA enforcement workshop hosted by the commercial industrial workgroup	Enforcement strategies, standards, and methods	1	No	
SWAMP Webinar	6/3/2010	Online Webinar training	Overview of SWAMP program and projects in SD	1	No	
Construction Site Owners and Developers						
Grading and Building permits with BMP Construction brochure	On going	Community Development Department disseminates BMP and storm water information with permits	BMP, pollution prevention, City storm water requirements	---	No	
Community Development counter hours	On going	Counter hour for education relating to construction and development in the City	BMPs, pollution prevention, City storm water regulations	---	No	
Commercial Owners and Operators						
Sand Castle vender packed and inspections	7/17th-19th/2009	Provided education materials for street venders and conducted commercial inspections during event	Mobile business, pollution prevention recycling	---	No	
Commercial Inspection	On going	Commercial business inspections	Pollution prevention, BMPs, storm water regulations	71	Yes	Interactive Assessment
Follow up inspection report and letter	On going	Each commercial inspection is followed up with summary report and BMP brochures by mail	Commercial BMPs, recycling and pollution prevention	9	No	
Residents and General Public						
FY 2008-09 JURMP Public Hearing	8/2/2009	Public hearing at City Council meeting	Overview of the FY 2008-09 JURMP AR components	---	No	
Annual Home Front Cleanup	5/1/2010	EDCO bulky item collection at Mar Vista HS	Trash, recycling and waste	822	No	175.6 tons
Booth at U.S. Open Sand Castle competition	7/18th-19th/2009	City booth for storm water and pollution prevention; Conducted survey	Pollution prevention, HHW, recycling, and storm water	300,000	Yes	Survey
Booth at Auto Show	8/1/2009	City booth for storm water and pollution prevention; Conducted survey	Pollution prevention, HHW, recycling	1,000	Yes	Survey
City Semi-Annual news letter (Winter)	12/1/2009	5 Articles in City' winter news letter sent to all residents	Storm water BMPs; Recycling HHW; FOG, street sweeping	27,000	No	

EDCO Environmental Times	Quarterly	Published a variety of environmental articles in the Summer , Fall, Winter, and Spring EDCO news letters sent to all residents	Pollution prevention, special events, HHW, recycling, and storm water regulations	27,000	Na	
Eagle and Times newspaper	On going	Articles on variety of topics advising the community on storm water related issues	Storm water pollution, reusable bag day, City	City wide	No	
San Diego Union Tribune	8/29/2009	Request for public comment on JURMP	Public comment on JURMP	Region	No	
Ewaste and Universal Waste Event	10/24/09	Collection of e-waste and universal waste at Civic Center parking lot. Post card advertisement sent to all residents	HHW and recycling information provided during Citywide event	150	No	
Ewaste and Universal Waste Event	2/20/2010	Collection of e-waste and universal waste at the Chula Vista old PW Yard. Partnered with Chula Vista. Post card advertisement.	HHW and recycling information provided during Citywide event	---	No	
Community Bulletin Board (Channel 24-Cox)	On going	The Community Bulletin Board broadcasts seven-days a week	Storm water pollution, special events, general info	City wide	No	
Fix a Leak Week	3/1/2010	Public outreach with Cal Am Water company to raise awareness about water leaks	Water conservation and storm water pollution	Region wide	No	
Environmental Awareness Month	4/1/2010	City Council dedicated the month of April as Environmental Awareness Month	Promote public awareness on environmental issues	City wide	No	
Website	On going	Information about storm water program, recycling, and online reporting	Pollution prevention, storm water BMPs, Recycling	---	No	
Recycling All-Star	Monthly	Award a Recycling All-Star from the community at City Council meeting	Recycling and waste management	12	No	
Underserved Community						
Underserved Target Audience Sub workgroup	On going	Co-chair of Education Residential Sources Workgroup, Chair of Underserved Target Audience sub-workgroup	Representation of the underserved community in all ERS sub-workgroups	---	No	
Presentation to Job Corps	10/20/09	Storm water presentation to Job Corps (Federal education program for 16-25 yrs to earn GED and job training)	Watershed and basics on storm water pollution.	30	No	
School Children						
Mar Vista HS Presentation	2/10/2010	ILACSD gave 2 presentation for 10th-12th graders at Mar Vista HS	Storm Water, watersheds, urban runoff	50	Yes	Pre and Post
Mar Vista HS Presentation	2/24/2010	ILACSD gave 4 presentation for 9th-12th graders at Mar Vista HS	Storm Water, watersheds, urban runoff	65	Yes	Pre and Post
Mar Vista HS Presentation	3/10/2010	ILACSD gave 1 presentation for 9th-12th graders at Mar Vista HS	Storm Water, watersheds, urban runoff	25	Yes	Pre and Post
Splash Lab at IB Sports Park	4/21/2010	County Splash education lab	Storm Water, watersheds, urban runoff	45	No	
TJ Estuary Education Staff at IB Sports Park	4/27-28/10	Geocashing with GPS with TJ Estuary Education Staff	Watersheds, storm water pollution	65	No	
Imperial Beach Elementary	5/27/10	Watershed model presentation to 3rd and 5th graders	Watersheds, storm water pollution for 3rd and 5th grade	135	No	
Public Participation						
Coastal Clean Up Day	9/19/2009	ILACSD and Coastkeeper Coastal Cleanup Day. Multiple sites in IB	Watershed awareness and public participation	Region wide	Yes	Per and Post tests
Make a Difference Day (Job Corps Volunteers)	10/20-22/09	Unimproved alley sweep for trash and debris. Bike path and South Seacoast trash collection	Appreciation of clean streets and clean environment	30	Yes	185 trash bags, 15 truck loads and 6 tons
Tijuana River Valley Clean up (Wildcoast)	10/24/09	Clean up of tires and trash off Dairy Mart road bridge. Provided supplies and support	Bi-national watershed stewardship	300	Yes	700 tires and 5 tons of trash
Community Service Training (Job Corps)	11/15/09	Indoctrination for Job Corps for community service projects that improve water quality	Pollution preventions and watershed awareness	1	No	
Job Corps Bike Path Clean up (Braxton Ford)	2/10/10	Worked with Job Corps student to organize a community clean up event	Watershed awareness and pollution prevention	20	Yes	200 lbs of trash
Creek to Bay Clean Up	4/24/2010	ILACSD sponsorship for annual Creek to Bay Clean up. Participated at two cleanup locations	Pollution prevention and storm water	---	No	
Citywide Garage Sale	4/24/2010	Citywide garage sale	Reuse	96	No	
Wildcoast Tijuana River Valley Clean Up	6/5/2010	Wildcoast Clean up event in TJ River	Bi-national watershed stewardship	60	Yes	1000 lbs trash and 100 tires

9.0 Public Participation

9.1 Introduction

The City is required to incorporate a mechanism for Public Participation in the updating, development, and implementation of the JURMP. Public involvement in the JURMP leads to a greater understanding of public perception and attitudes towards the problem of storm water pollution and helps the City implement a more effective storm water program. The Environmental Division regularly interacts with residents, commercial businesses, municipal staff, and developers while conducting inspections, education activities, BMP enforcement, and other JURMP implementation components. The City also makes additional efforts to include public participation in the implementation and development of the JURMP by providing opportunities throughout the year to provide comments and feedback.

9.2 Public Participation Efforts

The City holds a public hearing and solicits public comments prior to the adoption and submittal of the JURMP and its Annual Reports. The public was notified on this Annual Report in the Imperial Beach *Eagle & Times* newspaper and through public hearing notices that were posted at City Hall and the Imperial Beach Public Library. A draft of this JURMP Annual Report was made available for public viewing at the Imperial Beach City Hall, posted on the City's website, and presented at a public hearing to City Council on September 22, 2010.

Other public participation mechanisms the City uses include the operation of a storm water hotline and online reporting tool to report violations, coordination of cleanup activities such as the pet waste bag program and trash clean ups with local organizations, involvement with local environmental groups to spread awareness of urban runoff pollution, participation with civic organizations, and City special events.

10.0 Fiscal Analysis Component

10.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the fiscal analysis of the storm water program. Implementation costs for the JURMP are approximately $1,000,000. The revenue source used by the City to fund the requirements of the Municipal Permit is the City general fund.

10.2 General Budget Information

The costs of implementing the JURMP are spread across the whole City. Each Department and associated Divisions has an established role in implementing the components of the JURMP. However, the primary responsibility of implementing the storm water program is split between the Department of Public Works and Community Development Department.

10.3 Fiscal Analysis Methods

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis Methods document was submitted to the San Diego RWQCB by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

The expenditures for FY 2009-10 are provided in the tables below. The standardized fiscal analysis method does not exactly correspond to the line item budget maintained by the City. The values presented in Table 10.1 are therefore an extrapolation of the expenditures made that correspond to the itemized categories. Table 10.2 is also provided for the expenditures related to the two Prop 50 Clean Beach Initiative grants during the reporting period.

The implementation of all the JURMP Components involves every City Department and Division and the actual implementation costs for the program may exceed the amount posted below.

Table 10.1 - Expenditures on JURMP for FY 2009-10

Administration	$236,427
Development Planning	$79,900
Construction	---
Municipal	$292,580
Industrial Commercial	$8,725
Residential	---
IDDE	$49,921
Education	$9,415
Public Participation	---
Special Investigations	$13,270
Non-Emergency Firefighting	$102,385
Regional Costs	$42,413
Total	**$835,036**

Table 10.2 - Clean Beach Initiative Grant Projects and Expenditures FY 2009-10

Palm Ave Low Flow Diverter	$50,867
Tijuana River Bacteria Study	$13,498

10.4.2 Funding Source

The general fund provides the only revenue source used by the City to fund the requirements of the Municipal Stormwater Permit. The City also relies on grant funding for additional studies or infrastructure projects that are above and beyond the requirements of the Permit. Other revenue sources such as building permit fees and redevelopment agency funds contribute to infrastructure projects that are indirectly related to the storm water program, but these expenditures are not enumerated above.

11.0 Program Effectiveness Assessment

11.1 Introduction

The Environmental Program Division is responsible for the effectiveness assessment of JURMP activities and implementation of BMPs for each major component of the storm water program. Effectiveness assessments are incorporated into the storm water program when ever feasible is to gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters.

The structure of this Annual Report evaluates the level of effectiveness for each JURMP component in the context of program planning, management, and implementation. The City uses the structural hierarchy of levels that were established in the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. Each section of this Annual Report incorporates program effectiveness on Outcome Level 1through Outcome Level 4. In general, Outcome Levels 1, 2, and 3 are best addressed on a Jurisdictional scale. Outcome Level 4 measurements of load reductions are provided whenever possible, but for the most part, assessment of changes to water quality (Levels 4, 5, and 6) are best addressed at the watershed or regional scale.

11.2 Outcome Level 1a: Administration of Management Program Activities

The administration of management program activities addresses modifications to the *2008 JURMP*, updates to program documentation or procedures, end of the year program review, and updates to inventories for next fiscal year.

The City's implementation and assessment strategy for the program effectiveness is described in the *JURMP Section 13.0*.

11.3 Outcome Level 1b: Implementation of Management Program Activities

The implementation of management program activities addresses BMP confirmation requirements, proper documentation, training, inspections, public awareness and response, and special investigations for each component of the *2008 JURMP*. The tables in each section of the Annual Report present and describe targeted outcomes and results based on program implementation for the reporting period.

11.4 Outcome Level 2: Knowledge and Awareness of Program Implementation

Knowledge and awareness are targeted and assessed as necessary within each element of this Annual Report independently.

11.5 Outcome Level 3: Behaviors and Best Management Practice (BMP)

Behaviors and BMP implementation are assessed within the tables located in each section of this Annual Report.

11.6 Outcome Level 4 – Source Load Reductions

Source load reductions are targeted and assessed as necessary within each element of this Annual Report independently.

12.0 Special Investigations

12.1 Introduction

This section describes special investigations that were conducted above and beyond Permit requirements, but with the ultimate goal of better understanding and controlling urban runoff and storm water pollution. Special investigations relevant to each JURMP component are assessed in the tables of each section of this Annual Report. The discussion presented in this section provides additional details on the special investigation for the Palm Avenue Low Flow Urban Runoff Diverter and the Tijuana River Bacterial Source Identification Study, and 2010 Storm Drain Master Plan.

12.2 Palm Avenue Low Flow Urban Runoff Diverter Project

The Palm Avenue Low Flow Urban Runoff Diverter became operational in the beginning of 2009. The diverter project, which was mostly funded under a Prop 50 CBI Grant, diverts up to 250 gallons per minute of nuisance flow urban runoff and first-flush rain water into the sanitary sewer. As part of the conditions on the Grant, the City conducted weekly post construction water quality monitoring for a one year period from January 2009 through December 2009. The final monitoring report for the project was submitted to the State Water Resource Control Board in February 2010.

The following bullet points summaries the effectiveness and benefits from the project:

- Bacterial data collected during the monitoring phase shows that, in the absence of the Palm Avenue Diverter, low-flow urban runoff and first-flush stormwater with high levels of bacteria would have been discharged to the receiving waters.
- Comparison of the concentration of bacteria in the wet well with the AB411 water quality benchmarks indicates that for total coliform 98% of the samples exceeded benchmarks, and for *Enterococcus* 91% of the readings exceeded the benchmarks.
- Data analysis shows that 100% of the samples collected at the diverter wet well exceeded at least one of the bacterial indicator benchmarks.
- The Palm Avenue Diverter directs an average of 23,000 gallons per month of urban runoff to the sanitary sewer.
- Only the Carnation Avenue receiving water sampling station had exceedances of bacterial indicators during the project's monitoring period. On February 17 and 18, 2009, during a storm event greater than 1/10th of an inch, when the diverter operated in storm discharge mode, water quality exceeded AB411 benchmarks. During the same period, the southern-most sampling location at Seacoast Drive also provides evidence of high bacteria levels likely originating from other sources including the Tijuana River Valley and Mexico.
- This project was successful in combining access to recreation, aesthetic improvements, public infrastructure, and water quality benefits. It received the "Project of the Year" award from the San Diego & Imperial Counties Section of the American Public Works Association (APWA).

12.3 Tijuana River Bacteria Source Identification Study

During last reporting period State funding was pulled from the Tijuana River Bacteria Source Identification Study. The City was forced to halt a grant project to identify and quantify the sources of bacterial contamination along the U.S. portion of the Tijuana River Watershed. The purpose of the study is to contribute to the regional efforts to identify sources of bacterial contamination and recommend appropriate actions and activities to reduce the input of those sources to the Tijuana River and adjacent Pacific Ocean.

The Bacteria Study was stalled for 15 months until March 2010 when the City received notification from the State that funding was available to restart the project. The project is now in full implementation and is on track to finish by March 2012.

12.4 2010 Storm Drain Master Plan

During the reporting period the City took on the task of updating its Storm Drain Master Plan. The purpose of the 2010 Storm Drain Study is to update the previous drainage study for Imperial Beach conducted in 1991 by BDS Engineering *(Bement-Dainwood-Sturgeon, August 1991)*. The results from the Study provide the preliminary analysis in the Storm Drain Master Planning process that will lead to the identification and prioritization of capital improvement projects that increase the capacity of the storm drain system. The project is on track to be complete September 2010. The scope of work for the Study includes the following tasks:

- Review of Existing Data
- GIS Mapping and Field Verification
- Hydraulic and Hydrologic Modeling
- Identification of System Deficiencies

This Storm Drain Study is intended to be used as a planning tool for evaluating impacts to the storm drain system whether it is from new developments, capital improvement projects, or collection system improvements. The report provides hydraulic and hydrologic analysis for 7 large drainage areas and 15 smaller drainage areas in the City for the 2-year, 5-year, and 10-year storm flow conditions. This report identifies the existing capacity for each drainage area and provides preliminary recommendations on how to increase the capacity for the system.

13.0 Non-Emergency Fire Fighting

13.1 Introduction

The City requires pollution prevention measures and BMPs to reduce or eliminate non-emergency fire fighting flows. The Environmental Division assists the Fire Department in implementing control measures to prevent or control pollutants from both emergency and non-emergency fire fighting activities. The 2008 JURMP Section 2.2 identifies the BMPs that are implemented as part of fire fighting activities.

Non-emergency fire fighting activities, such as training activities that simulate emergency responses, are performed in a manner that eliminates discharges to the storm water system whenever practicable, and minimizes discharges to the storm water conveyance system when elimination of discharges is practicably unavoidable. The following best management practices are implemented as part of these activities:

- Water flows are directed to landscaped areas whenever possible
- When flowing water to an area where landscaping does not prevent runoff, the area selected shall be surveyed by the Officer in charge prior to training activities to ensure that debris will not enter into the storm water system as a result of the drill
- Areas that have debris, which could potentially enter the storm water system as a result of the drill activities, will not be used for training until debris has been removed. Referrals to the Department responsible for the debris removal will be made as needed
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff, which could contribute to storm water discharges
- Discharges from maintenance of equipment and restoration of hoses, vehicles, tools, ladders and other emergency response equipment are directed to the sewage, and dry methods are used whenever practical
- Staff is trained on good housekeeping practices to be used during standard facility maintenance procedures
- The fire fighting personnel and inspectors receive annual pollution prevention training
- Vehicle washing or equipment cleaning is conducted over a wash bay that drains to the sewer

14.0 JURMP Revisions

14.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible to maximize program effectiveness by identifying and describing any JURMP modifications that are made during the reporting period, or that are proposed or planed for the next reporting period. Under the reporting format of this Annual Report, any modification or proposed changes made to the *2008 JURMP* are identified in the Program Planning and Administration subsection within each preceding Section of this report.

15.0 Conclusions and Recommendations

15.1 Introduction

The City made great progress in further developing and refining its urban runoff and management program during FY 2009-10. The management programs and activities implemented by municipal staff demonstrate a high level of compliance with the regulatory mandates of the Municipal Storm Water Permit, and underscore the City's commitment to reducing and eliminating pollutants related to urban runoff. The Components of the JURMP require the City to reduce to the maximum extent practicable sources of pollutants from three distinct phases of urban development: 1) planning and design phase, 2) construction and development phase, and 3) existing development phase. The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

Looking forward to FY 2010-11 and beyond, the City is committed to continuing with many of the programs and management activities implemented in this report. Recommendations for future Reports is to enhance the program's end-of-year review and effectiveness assessment in order to further refine and improve each JURMP Component and to most effectively target sources of pollutants. The JURMP and all the Annual Reports are a living document that evolve over time and build upon the success and sometimes failure of management program activities. The City endeavors to implement the most effective storm water program possible, building upon the existing program, and given the resources that are available to the City.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	12-8-10

7.0 Illicit Discharge Detection and Elimination Component

7.1 Introduction

Illicit discharges and connections to the MS4 can be a significant source of pollutants. The Municipal Stormwater Permit (R9-2007-0001) requires the City of Imperial Beach to establish an illegal discharge and illicit connection (ID/IC) program to actively seek and eliminate illicit discharges. Section 9.0 in the JURMP describes the complete illegal discharge detection and elimination program in the City. The primary goal of the ID/IC component is the implementation of a program, which will enable the City to find and eliminate illegal discharges and connections. The City's ID/IC program includes dry weather monitoring of the MS4, investigation of illicit discharges and connections, and spill response and prevention. This section describes implementation of the City's Illicit Discharge Detection and Elimination Program during FY 2009-10. Attachment 7-2 in the appendix provides the City of Imperial Beach Field Screening and Water Sample Collection Standard Operating Procedure and Section 7.6 of this report describes effectiveness assessment measures related to this program component.

7.2 Investigation and Response to Illegal Discharges and Illicit Connections

The City of Imperial Beach Urban Runoff Management and Discharge Control Ordinance (I.B.M.C. 8.30) prohibits discharges and connections to the MS4 with only limited exception. City staff and members of the public are encouraged to report illicit discharges and other urban runoff violations to environmental staff for investigation. A storm water hotline, (619) 424-4095, online reporting, and constant communication with Public Work field staff continue to facilitate this type of reporting.

All urban runoff investigations were pursued until a satisfactory outcome could be attained. Usually, this involved remediation of spilled materials, elimination of illicit connections to the MS4, education of violators, and/or installment of BMPs to prevent future discharges. Unless the illicit discharge is of immediate danger to public health or the environment, violators are typically given the first opportunity to clean up spilled materials. If unable or unwilling to do so, or if a violator cannot be identified, City staff is enlisted to perform the cleanup at the property owner's expense. Attachment 7-4 presents a detailed description of each ID/IC investigation, including remedial steps and enforcement actions if any were taken.

7.2.1 ID/IC Investigations and Enforcement

The City performed 153 urban runoff investigations during FY 2009-10. Staff confirmed the presence of an illicit discharge in 126 instances that resulted in 60 enforcement actions. The City identified no illegal connections to the storm drain system. The following tables and figures summarize the types of violations, enforcement actions, and other informative statistics over the reporting period.

Referral Sources for Urban Runoff Investigations FY 2009-10

Referral Source	FY 08-09 Qty	FY 09-10 Qty
City Hall	2	10
Code Enforcement	6	13
General Public-Hotline	15	28
General Public-In person	10	3
General Public-Online	NA	1
PW-Env	48	50
PW-Field	14	48
Grand Total	**95**	**153**

Table 7- 1 A summary of referral sources for FY 2009-10. The table represents how ICID's get reported to the Environmental Division. Most ICIDs are identified by Public Works employees in the field.

Violator and Pollutant Types for Urban Runoff Investigations FY 2009-10
Illicit Discharge Violator Classification FY 2009-10

Violator Type	Auto Fluids	Construction Debris	Oil & Grease	Green Waste	Multiple	Over Irrigation	Paint	Pool Water	Potable Water	Sediment	Sewer Spill	Trash & Debris	Unknown	Pet Waste	Wash Water	Total
Construction	0	6			1					5		2			1	**15**
Commercial Business	1		2	1	1	1			3	1	2	5			2	**19**
Mobile Business							1		3		1		1		1	**7**
Residential	10	5	8	1	3	4	3	2	9	9	6	13	7	2	12	**94**
Municipal						1			1		2					**4**
Utility									3	1						**4**
School						1			2						2	**5**
Unknown			1													**1**
Other	1			1						1		1				**4**
Totals	**12**	**11**	**11**	**3**	**5**	**7**	**4**	**2**	**21**	**17**	**11**	**21**	**8**	**2**	**18**	**153**

Table 7- 2 A cross tabulation of pollutant types with violator classification is shown. The table shows most violators are residents discharging potable water, sediment, trash, and wash water.

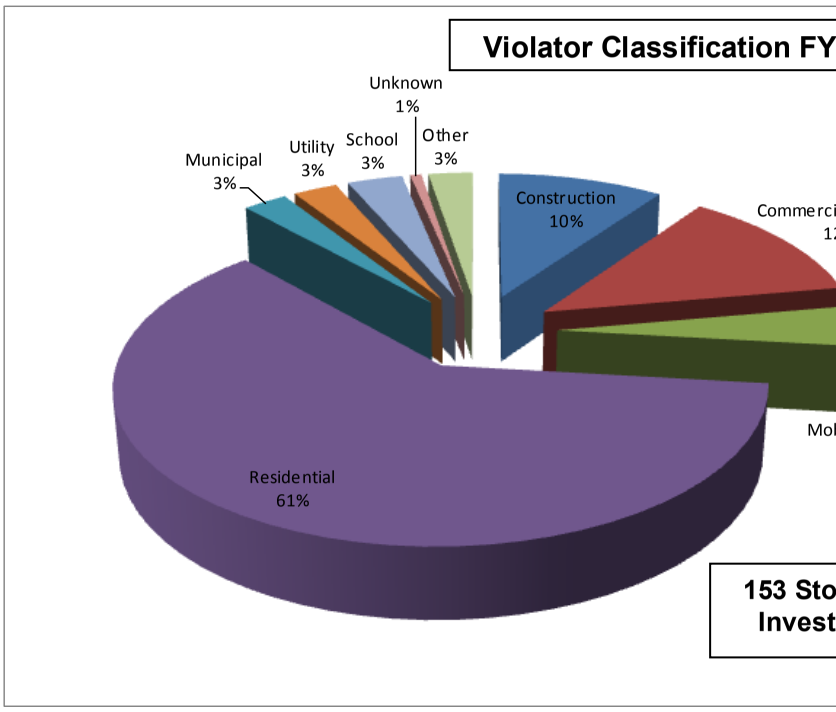

Figure 7-1 The graph above identifies the violator type identified during FY
percent of the identified violators were residents. Our number of unknown
one percent, showing an increase in our abilities to respond to and track vi
source.

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Pollutant Type Distribution by Violator Classification FY 20

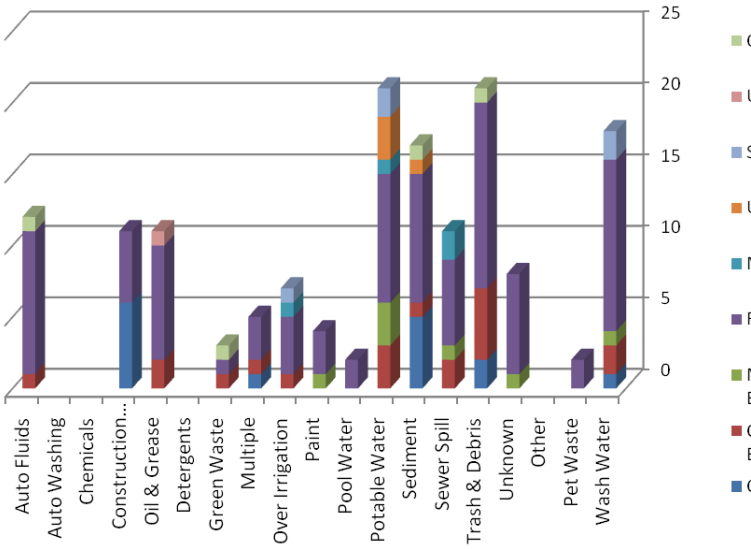

Figure 7- 2 The graph above identifies the distribution of violator types bro
pollutants. The top four common pollutants include potable water, wash wa
and sediment. The City also had 11 sewer system overflows from sources
laterals, main line spills, and illegal dumping. The number of sewer spills w
this reporting period.

Enforcement Actions Resulting From ID/IC Investigations FY 2009-10

Enforcement Action	Qty
Verbal Warning	12
Informational Letter	21
Notice of Abatement / Violation	23
Fine / Citation	4
Total	**60**

Table 7- 3 A summary of enforcement actions is shown. Enforcement actions are taken when appropriate to abate pollution or prevent future violations. The City reposned to 60 incedents that required enforcment actions.

7.2.2 Assessment of IC/ID Program

Analysis of data over the last four reporting periods yields few significant changes in the referral source, pollutant type, or watershed location of incidents reported to the Environmental Division as shown in the tables below. The City very rarely comes across violators who intentionally dump into a storm drains or wash materials into the street. Most ICID investigations are preventative in nature such as responding to over irrigation, sediment stock pile BMPs, accumulation of trash and debris on private property, or vehicle maintenance in the street.

Referral Sources For ID/IC Investigations FY 2006-07 Through 2009-10

FISCAL YEAR	Code Enforcement	General Public	Other City Staff	PW-ENV	PW-Field	Total
FY 2006-07	3	28	11	142	48	232
FY 2007-08	2	30	17	46	41	136
FY 2008-09	6	25	2	48	14	95
FY 2009-10	13	32	10	50	48	153
Total	**24**	**115**	**40**	**286**	**151**	**616**

Table 7- 4 Table shows consistent resident involvement in the process as well as a consistent commitment from City staff in all divisions to reducing storm water pollution.

Pollutants Type for ID/IC Investigations FY 2006-07 Through 2009-10

Fiscal Year	Oil & Grease	Auto Fluids	Chemicals	Construction	Green Waste	Multiple	Other	Over Irrigation	Paints	Pet Waste	Pool Water	Potable Water	Sediment	Sewage	Trash & Debris	Unknown	Wash Water	Total
FY 2006-07	2	28	4	44	12	2	1	5	10	4	4	9	24	4	52	2	25	232
FY 2007-08	1	22	1	9	2	4	6	4	5		3	10	8	4	38	4	14	136
FY 2008-09	7	9	3	9		2	4	11	5		1	7	11		10	7	9	95
FY 2009-10	11	12		11	3	5		7	4	2	2	22	17	11	21	7	18	153
Total	**21**	**71**	**8**	**73**	**17**	**13**	**11**	**27**	**24**	**6**	**10**	**48**	**60**	**19**	**121**	**20**	**66**	**616**

Table 7- 5 Table shows a significant reduction in incidents where auto fluids and construction debris is discharged over the last four reporting periods. The number of incidents remains consistent with previous years.

Watershed Location For ID/IC Investigations FY 2006-07 Through 2009-10

Fiscal Year	Otay River	Pacific Ocean	San Diego Bay	Tijuana Estuary	Tijuana River	Not Documented	Total
FY 2006-07	91	42	10	83	5	1	232
FY 2007-08	50	28	10	40	6	2	136
FY 2008-09	37	28	3	15	11	1	95
FY 2009-10	48	22	11	49	23		153
Total	**226**	**120**	**34**	**187**	**45**	**4**	**616**

Table 7- 6 Table shows the watershed affected by illegal discharges and connections. Over time, no trends can be seen indicating one watershed is more impacted than others.

7.3 Sewer Spill Reporting, Response, and Prevention

The City endeavors to clean 100% of the municipal sewer lines each year. More troublesome sewer lines around commercial areas may be cleaned more frequently if needed. The City responded to 11 sewage incidents during FY 2009-10 that included 3 SSO occurring on the City main line, 4 SSO occurring from private laterals, and 4 additional miscellaneous sewer related incidents that did not result in a SSO. In total, approximately 1340 gallons were spilled and 129 gallons successfully recovered. Attachment 7-1 presents further details on each sewage spill and Attachment 7-4 presents the City's response for each ICID incident.

7.4 Dry Weather Urban Runoff Monitoring

Dry weather urban runoff monitoring is one of several tools utilized by the City to identify ID/ICs to its MS4. Each year between May 1 and September 30 – the dry weather season – City staff collects samples from storm drain outfalls, manholes, catch basins, and other areas where urban runoff is commonly found. Where water volume is sufficient for collection, samples are analyzed in the field for several water quality parameters. This is referred to as "field screening". A sub-set of collected samples is also sent to a certified laboratory for additional analysis. Whenever field screening or lab analysis results exceed the dry weather monitoring Action Levels a timely follow up investigation is undertaken to identify and eliminate the pollutant source. Additionally, a trash assessment is conducted for each sampling location using the San Diego Copermittees Trash Assessment form. The complete overview of the dry weather monitoring program is provided in Attachment 7-3, City of Imperial Beach Dry Weather Monitoring Program 2010 and in Table 7-7 below. Attachment 7-5 presents a map of the dry weather monitoring locations in the City.

Summary of Dry Weather Monitoring Activity

Activity	Qty
Monitoring Site Locations	20
Field Screening Samples Analyzed	11
Samples Submitted for Lab Analysis	4
Trash Assessments Conducted	31

Table 7- 7 Dry weather monitoring was conducted as outlined in the 2010 Dry Weather Monitoring Program in Attachment 7-3. Attachment 7-5 provides a map of the dry weather monitoring site locations. Field screening samples were collected when ever water was present and lab analysis was only conducted when flowing water was present. The preferred procedure is to take samples from outfall locations whenever possible but due to the tidal influence at most outfalls and unpredictable nature of dry weather flows in Imperial Beach, samples were generally taken whenever and where ever water was encountered. Ponded water in catch basins were also sampled.

7.4.1 Dry Weather Monitoring Field Screening and Lab Results

Table 7-8, Table 7-9, Table 7-10, and Table 7-11 present the field screening and laboratory data for 2010. Monitoring was conducted at 20 sample locations with a total of 11 field screening samples and four laboratory samples collected and analyzed. Attachment 7-5 provides a map of the dry weather monitoring sample locations. Field samples were collected whenever water was present and lab samples were collected when water was flowing. The City also conducted 4 ICID follow up investigations and one sampling event at M6A from an illegal discharge.

During the 2010 dry weather season, field screening exceedances were observed for ammonia, orthophosphates and detergents. Follow up investigations were conducted to identify and abate the sources of pollutants. Follow up investigations were conducted in the field for the exceedances observed at site locations D2, E8, E1B, M6A, H23, K, A3, and H6. Additional samples were collected to identify the exceedances at site locations E1B, D2, H6, and E8. Section 7.5 presents information on the results of the follow up investigations.

Laboratory analysis was performed for four samples and resulted in exceedances of bacteria at E1B and H23 and copper at E1B. Section 7.5 presents information on the results of the follow up investigations for exceedances found at E1B and H23.

The following tables below present the results for the 2010 dry weather field screening and lab analysis.

Table 7-8 Field Screening Analysis

Date	Station ID	Station Type	Sample Event Type	Water Flow	pH	Temp	Conductivity	Turbidity	Ammonia (NH3-N)	Nitrate (NO3-N)	Orthophosphate (PO4-P)	Detergents (MBAS)
					(pH unit)	(oC)	(mS/cm)	(NTU)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
5/12/2010	D2	DWM	Field Screening	Ponded	7.140	22.900	1.103	27.300	*1.491	0.057	0.465	
5/12/2010	K	DWM	Field Screening	Dry								
5/17/2010	E8	DWM	Field Screening	Ponded	7.890	19.300	1.246	37.200	*4.936	0.370	1.984	
5/17/2010	M3	DWM	Field Screening	Dry								
5/19/2010	D2	DWM	IC/ID	Ponded					*1.524			
5/19/2010	D4	DWM	ID/IC	Ponded					*2.157			
5/19/2010	E17	DWM	ID/IC	Ponded					*3.651		0.771	
5/19/2010	E8	DWM	IC/ID	Ponded					*7.534		*2.519	
5/25/2010	H6	DWM	Field Screening	Ponded	7.780	21.000	24.500	54.500	*7.365	0.322	1.116	*2.500
5/25/2010	K	DWM	Field Screening	Dry								
6/1/2010	K	DWM	Field Screening	Dry								
6/2/2010	K	DWM	Field Screening	Dry								
6/2/2010	F48	DWM	Field Screening	Dry								
6/3/2010	E1B	DWM	Field Screening	Flowing	8.610	19.200	1.200	5.660	0.647	1.263	0.406	*1.750
6/8/2010	K	DWM	Field Screening	Dry								
6/8/2010	H6	DWM	Field Screening	Ponded	7.920	21.000	19.050	10.200	*14.000	0.340	1.217	*1.500
6/9/2010	A18G	DWM	Field Screening	Flowing	8.800	26.400	1.215	21.600	0.843	0.704	0.705	0.875
6/10/2010	(blank)	(blank)	Field Blank	(blank)						0.359	0.040	
6/10/2010	(blank)	(blank)	Field Blank	(blank)						0.375	0.048	
6/14/2010	H23	DWM	Field Screening	Flowing	8.310	22.000	1.064	14.100	*1.401	0.228	0.552	*1.000
6/24/2010	M6A	ID/IC*	Field Screening	Ponded	8.110	27.600	1.551	153.000	*5.661	1.287	1.502	0.000
7/14/2010	K	DWM	Field Screening	Dry								
7/14/2010	H23	DWM	Field Screening	Flowing	8.940	28.000	1.404	13.900	*2.992	0.787	0.549	0.750
8/2/2010	K	DWM	Field Screening	Dry								
8/2/2010	E1B	DWM	Field Screening	Dry								
8/2/2010	S1	DWM	Field Screening	Dry								
8/4/2010	K	DWM	Field Screening	Flowing	8.440	21.800	1.274	1.810	*2.251	0.537	0.852	0.500
8/5/2010	E1B	DWM	Field Screening	Dry								
8/5/2010	H12	DWM	Field Screening	Dry								
8/5/2010	P4	DWM	Field Screening	Dry								
8/5/2010	F48	DWM	Field Screening	Dry								
8/5/2010	F7	DWM	Field Screening	Dry								
8/9/2010	A3	DWM	Field Screening	Ponded	7.890	27.300	36.300	5.740	*1.425	3.516	0.333	*3.00

Table 7- 8 Table shows dry weather field screening data for the 2010 dry weather monitoring season. During the reporting period not every sampling location was noted when the conditions were dry. The City does not have a persistent level of dry weather flow, which made a challenge for dry weather sampling. Sample results showed that ammonia continued to be an issue especially where water was ponded or had high conductivity. The City will take a closer look at the issue on ammonia exceedances during the 2011 dry weather season to determine possible sources or causes for the high results.

Analytical Lab Results for Metals

Station ID	Station Type	Sample Event Type	Date	Cadmium, Diss (mg/L)	Copper, Diss (mg/L)	Hardness, Total as CaCO3 (mg/L)	Lead, Diss (mg/L)	Zinc, Diss (mg/L)
E1B	DWM	Field Screening	6/3/2010	ND	***0.061**	307	ND	0.147
H23	DWM	Field Screening	6/14/2010	ND	ND	265	ND	0.108
K	DWM	Field Screening	8/4/2010	ND	0.010	343	ND	0.031
A3	DWM	Field Screening	8/9/2010	ND	ND	5280	ND	ND

Table 7- 9 Table shows the lab results for samples submitted for metals analysis. Only one exceedance in copper was found at the E1B outfall. The E1B outfall drains from mar Vista HS. All other metals tests were below action levels including cadmium and lead which consistently produced no detectable amounts.

Analytical Lab Results for Pesticides and Oil And Grease

Station ID	Station Type	Sample Event Type	Date	Chlorpyrifos (µg/L)	Diazinon (µg/L)	Malathion (µg/L)	Oil & Grease (mg/L)
E1B	DWM	Field Screening	6/3/2010	ND	ND	ND	ND
H23	DWM	Field Screening	6/14/2010	ND	ND	ND	ND
K	DWM	Field Screening	8/4/2010	ND	ND	ND	ND
A3	DWM	Field Screening	8/9/2010	ND	ND	ND	ND

Table 7- 10 Table shows lab results for pesticides, oil, and grease. No pesticides, oil, or grease was found during the 2010 dry weather monitoring season.

ANALYTICAL LAB RESULTS FOR BACTERIA

Station ID	Station Type	Sample Event Type	Date	Fecal Coliform (MPN/100 mL)	Total Coliform (MPN/100 mL)	Enterococcus (MPN/100 mL)
E1B	DWM	Field Screening	6/3/2010	5000	***170000**	1300
H23	DWM	Field Screening	6/14/2010	5000	110000	***30000**
K	DWM	Field Screening	8/4/2010	3000	17000	3500
A3	DWM	Field Screening	8/9/2010	11000	28000	51

Table 7- 11 Table shows lab results for bacteria tests conducted during the 2010 dry weather monitoring season. Two exceedances were found for total coliform and enterococcus bacteria. These exceedances are largely due to ponding of water and animal waste.

7.4.2 Trash Assessment

The city continued performing trash assessments in conjunctions with its dry weather monitoring at targeted MS4 sites. Trash assessments are done on the following scale: Optimal, Suboptimal, Marginal, Submarginal, or Poor. Table 7-12 below provides the results for the 2010 Dry Weather monitoring season.

Trash Rating at 31 Sites

Overall Rating (Amount and Extent)	Total
Optimal	29
Suboptimal	2
Grand Total	31

Table 7- 12 Trash ratings are shown. Very little trash was seen around dry weather monitoring sites. Only two suboptimal ratings were reported at location A18G and S1. When the results of the trash assessment are suboptimal then the City performs a cleanup of the area.

7.5 Follow Up Investigations and Analysis For Dry Weather Monitoring

Follow up investigations to identify and abate the sources of pollutants were conducted when water quality samples exceeded the Copermittees Action Levels. The City follows the guidelines for eliminating illegal discharges or connections set forth in Chapter 9 of the JURMP and outlined in Attachment 7-3, City of Imperial Beach Dry Weather Monitoring Program 2010. This section provides the results of the 2010 dry weather monitoring follow up investigations and also presents analysis of data to reveal possible pollutant trends. Significant findings are presented by major outfall or pollutant source.

Outfall E-1B (Grove & 5th Street) – Tijuana River Estuary Watershed

During the recent dry weather season, the E1B outfall was closely monitored for continued flow that was observed during last reporting period. The drainage area for E1B primarily collects runoff from Mar Vista High School. The outfall continued to have a slow and intermittent flow occurring whenever school was in session. Lab samples indicated elevated levels of total

coliform and copper, which is consistent with previous samples at this location. These results lead the City to conduct a follow up investigation at Mar Vista HS.

On November 10th a site investigation on Mar Vista HS revealed a previously unknown drainage connection from the school's pool deck that received over spray from an adjacent outdoor shower. The issue was corrected by maintenance crews and for a period of time after the incident no flows were observed. However, a slow trickle of intermittent flow has returned to this outfall which indicates there is still another possible discharge at Mar Vista HS. It is possible that flows are from underground leaking irrigation, air conditioning condensation, or possibly still from the pool area. Investigations will continue into next reporting period with a focus at the pool area because that location has been the source of previous discharges.

Station E8 (South side of Elm in front of Mar Vista High) – Tijuana River Watershed

In an attempt to find possible sources of orthophosphate and ammonia in the E Storm Drain Line, sites were chosen upstream of E25 for investigation and follow up. Only one orthophosphate exceedance was found in these tests. Ammonia exceedances for 2010 remained consistent as in previous years for this storm drain line. Elevated ammonia exceedances were observed in ponded samples where the conductivity was also elevated.

Upstream investigations focused on a channel north of the E8 sample site where large amounts of pet waste and grass clippings may be a factor in the ammonia exceedances. No identifiable illicit sources of water were found on the E line during follow up investigations. Some backyard drainage pipes were found leading from properties along the open channel near the E8 site. These pipes were fitted with collectors to determine if there was discharge coming from the pipes. After several months of observation, no discharges were discovered and no water was ever observed flowing through the open ditch. Ammonia exceedances were found throughout the City during this dry weather season and will be addressed later in this section.

Station D2 (Palm and Rainbow) – Otay River (San Diego Bay) Watershed

Testing confirmed last year's findings of high ammonia at D2. Follow up investigations showed exceedances of ammonia at site D4 as well. Higher levels upstream indicate there may be other sources including dead vegetation and animal waste consistently found in the drainage ditch at D2. Ammonia exceedances were found throughout the City during this dry weather season and will be addressed later in this section.

Station H6 (Cypress and 9th) – Otay River (San Diego Bay) Watershed

Testing of the H6 station during 2010 confirmed previous reports of elevated ammonia levels combined with high amounts of detergents and conductivity. Follow up investigations identified a drainage pipe into the City alley from a private resident at 568 9th Street. This discharge point was identified as a persistent source of intermittent dry weather flow and was required to be removed by the City. However, analysis of the water discharging from that drainage pipe only indicated clean water.

Analysis of the H23 line, upstream from H6 showed no exceedances in detergents, but did show an exceedance in enterococcus bacteria. The presence of bacteria indicates that decomposing vegetation may be raising the ammonia levels in this storm drain line. High conductivity levels may also be impacting the test results. Further investigations will continue into next reporting period.

Ammonia Exceedances at Multiple Dry Weather Stations

The 2010 dry weather season persistently indicated ammonia exceedances to be a problem throughout the City. The highest exceedances during 2010 correlates with samples high in conductivity indicating there might be an issue using the field test kit method when the water is brackish. Ponded samples also had higher ammonia levels most likely as a result of decomposing organic material. An attempt was made to find illicit sources in each and every case, but no conclusive source for ammonia was found. Fortunately, the overall contribution of ammonia to the receiving waters is small because exceedances were primarily observed in ponded catch basins.

During the 2011 dry weather season, steps will be taken to identify and eliminate exceedances. In order to do this we will use multiple testing procedures, inspect storm drain lines more intensely for sources we may have missed, and conduct more intensive neighborhood investigations such as along the E line. Information on our efforts will be included in the next JURMP annual report.

7.6 Effectiveness Assessment

Order R9-2007-0001 (Municipal Stormwater Permit) requires Co-Permittees to detect, investigate, and eliminate illicit discharges and illicit connections in a timely manner. The City endeavors to reduce and prevent illicit discharges to the MS4 to the maximum extent practicable (MEP). The City uses targeted education and outreach programs and conducts routine inspections of construction and commercial facilities as preemptive efforts to prevent illegal discharges. In addition, the City conducts dry weather monitoring of major MS4 outfalls and locations May 1st through September 30th with the intent of identifying illegal storm water discharges. The City also responds to illicit discharges that are reported to the City's Stormwater Hotline or observed by City employees. The Department of Public Works Environmental Division follows through on all reported illegal discharges and ensures that the appropriate best management practices are used and maintained so no further discharges are detected.

The following section provides a description of the effectiveness of the ID/IC program using the 2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs that utilizes the hierarchy of outcome levels. (Outcome Levels 1 through Outcome Level 6). Outcome Levels 1, 2, 3, and to some degree Outcome Level 4 can be addressed on a jurisdictional scale, while Outcome Levels 4, 5, and 6 are best addressed at the watershed or regional scale.

7.6.1 Level 1 Outcomes- Compliance with Activity-based Permit Requirements

The City of Imperial Beach successfully met all Outcome Level 1 compliance with activity-based permit requirements. Table 7-13 below demonstrates compliance with all Order R9-2007-0001 (Municipal Stormwater Permit) Illegal Discharge Detection and Elimination Component requirements:

Outcome Level 1 Permit Compliance Requirements and Measures

Permit Section	Requirement	Compliance Measure
J.3.a.(3)(f)i.	Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	Spatial map of MS4 and monitoring locations is provided in a number of locations: 2008 JURMP, 2010 Dry Weather Monitoring Program provided in the appendix of this report, and within the text of this section.
J.3.a.(3)(f)ii.	Reporting of all dry weather field screening and analytical monitoring results.	Dry weather monitoring results are reported within this section of the annual report and conducted in a manner consistent with the requirement in Attachment B of Order No. R9-2007-0001. The Imperial Beach SOP and 2010 Dry Weather Monitoring Program are provided in Attachment 7-2 and Attachment 7-3.
J.3.a.(3)(f)iii.	Any dry weather field screening and analytical monitoring consultant reports generated.	All field screening and analytical monitoring were conducted by Imperial Beach staff. Supporting documents are provided in the Appendix.
J.3.a.(3)(f)iv.	A brief description of any other investigations and follow-up activities for ID/IC	Summary of all follow up investigations are provided within this section of the annual report and in Attachment 7-4 of the appendix.
J.3.a.(3)(f)v.	Number and brief description of illicit discharges and connections identified.	The summary of ID/IC is provided in provided in this section of the annual report and provided in the Appendix of this report.
J.3.a.(3)(f)vi.	The number of illicit discharges and connections eliminated.	The summary of ID/IC including the number eliminated is provided in this section of the report.
J.3.a.(3)(f)vii.	Identification and description of all spills to the MS4 and response to the spills.	The summary of spills to the MS4 and response is provided within this section of the annual report.
J.3.a.(3)(f)viii.	A description of activities implemented to prevent sewage and other spills from entering the MS4.	The City endeavors to clean 100% of the sewer system each year. A description of activities is provided within this section of the report.
J.3.a.(3)(f)ix.	A description of the mechanism whereby notification of sewage spills from private laterals.	The City follows the notification procedure as identified by the City's Sanitary Sewer Maintenance Plan (SSMP)
J.3.a.(3)(f)x.	Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	Analysis of ID/IC reporting is provided within this section of the report.
J.3.a.(3)(f)xi.	A description of efforts to publicize and facilitate public reporting of illicit discharges.	Education and outreach as describe in previous sections of the report, inspections, and regional programs all publicize the efforts for the public to report ID/ICs either to the Storm Water Hotline 619-424-4095 or online reporting form.
J.3.a.(3)(f)xii.	The number of violations and enforcement actions taken for ID/ICs including information on any necessary follow-up actions taken.	Descriptions of ID/ICs and follow up actions are provided within this section and in Attachment 7-4.
J.3.a.(3)(f)Xiii.	A description of notable activities conducted to manage illicit discharges and connections.	One notable activity was the identification and elimination of an illegal outdoor shower connection at Mar Vista High School. A description is provided in this section.

Table 7- 13 Order R9-2007-0001 (Municipal Stormwater Permit) Illegal Discharge Detection and Elimination Component compliance requirements and measures.

7.6.2 Level 2 Outcomes- Changes in Knowledge and Awareness

Education is provided through face-to-face interaction with City staff in meetings, public workshops, community presentations, and inspections. In addition, the City disseminates brochures that outline the requirements for addressing urban runoff and water quality regulations. The efforts by the City to educate the public on detection of illegal discharges and elimination of future discharges are discussed in the JURMP Section 9.0. The education effort for City staff is discussed in the JURMP Section 10.0.

7.6.3 Level 3 Outcomes- Changes in Behavior (BMP Implementation)

The City is required by the Municipal Stormwater Permit to educate the public and enforce its storm water ordinances. The City's storm water ordinances include appropriate sanctions to achieve compliance and influence behavioral change. The City requires residents, commercial and industrial businesses, developers, construction companies, and municipal employees to implement storm water management BMPs. These BMPs are specific to each particular JURMP component and are tracked and monitored by the City. The City performed 153 urban runoff investigations during FY 2009-10. Staff confirmed the presence of an illicit discharge or connection in 126 instances and a responsible party to implement a correct BMP was identified in 152 cases.

7.6.4 Level 4 Outcomes- Load Reductions

Investigations of illegal discharges and illegal connections are logged and reported in the City's database. The City monitors and keeps track of treatment control BMPs, conducts storm water inspections of commercial businesses, and inspects construction and development projects. In 2010 the City conducted trash assessments in conjunctions with its dry weather monitoring at targeted MS4 sites. The trash assessment provides a qualitative rating of each sampling location on a scale of Optimal, Suboptimal, Marginal, Submarginal, or Poor. The City also responds to sewer system overflows and other illegal discharges and uses a vactor truck if necessary to recover the spill. See section 7.3 for further information.

7.7 Program Review and Modifications

No significant changes or modifications are proposed for the IC/ID program for next fiscal year. Minor changes in the administration and management to improve the efficiency and effectiveness of the program is anticipated based on lessons learned from multiple years of implementation. The following is a highlight of activities that the City anticipates implementing as part of its Illicit Discharge Detection and Elimination Component for next reporting period.

- Continue to conduct annual dry weather monitoring
- Continue to investigate and abate ID/ICs
- Continue investigation of suspicious dry weather flow at Outfall E-1B.
- Step up investigations to find sources of ammonia throughout the City of Imperial Beach.

- Environmental staff is working to reduce improperly discarded trash and other storm water pollutants at multi-family apartments and trailer parks. This is conducted in conjunction with a program to increase solid waste diversion at these locations.
- Environmental staff using the same computer system as code compliance for more efficient enforcement of illegal connections and discharges.

Attachment 7-1 Sewer System Overflows in FY 2009-10

AGENCY	SSO EVENT ID	SPILL CAT	SPILL LOC NAME	SPILL ADDRESS	CITY	ZIP	REACH SURFACE	REACH STORM DRAINPIPE	VOLUME	VOLUME RECOVERED	SPILL RATE	WHERE FAILURE OCCUR	DATE	Overall Spill Description
City Of Imperial Beach CS	748982	2	600 Palm Ave	600 Palm Avenue	Imperial Beach	91932	No	No	15	0	0	clean out	1/31/2010	<Debri-General> caused 15 gallons of sewage to spill from <Manhole;seeping from the clean out in front of the liquor store in the Silver Strand Plaza> at <600 Palm Ave> to <Street/curb and gutter>. No surface water body affected.; Cleaned-up (mitigated effects of spill)
City Of Imperial Beach CS	748651	1	1128-1130 12th Street	1128-1130 12th Street	Imperial Beach	91932	Yes	Yes	900	4	0	Private Lateral	1/14/2010	; Educated and informed the property owner; Tijuana River Estuary; Na; No; 40198.5833333333; Using the vactor truck; the street was pressure washed and sanitized with heat.; Cleaned-up (mitigated effects of spill);Contained all or portion of spill; Private lateral that was clogged with debris.
City Of Imperial Beach CS	748334	2	1260 Calla Ave	1260 Calla Avenue	Imperial Beach	91932	No	No	30	30	0	Private Lateral	1/13/2010	; Resonded to call and identified a private lateral spill. Had the property management turn the water off to the building and call a plumber. The City contained and cleaned up all of the spill that reached the street and curb gutter.; Cleaned-up (mitigated effects of spill);Contained all or portion of spill
City Of Imperial Beach CS	748204	1	7th Stree and Basswood	7th Street	Imperial Beach	91932	Yes	Yes	300	0	0	Main	1/7/2010	<Grease deposition (FOG);Spill occured in a residential neighborhood where there was no imput of grease from commercial businesses.> caused 300.0 gallons of sewage to spill from <Manhole> at <7th Stree and Basswood> to <Storm drain;Street/curb and gutter;Other (specify below);The spill reached the storm drain system. Once the plug was cleared the Sewer division pumped out the storm drain catch basin and recovered some of the spill; however; most of the spill made it into Pond 10A on the south end of San Diego Bay where it was unrecoverable.>. Surface water body affected.; Adjusted schedule/method of preventive maintenance; Pond 10A; NA; No; 40185.3541666667; Once the plug was cleared the Sewer division pumped out the storm drain catch basin and recovered some of the spill; however; most of the spill made it into Pond 10A on the south end of San Diego Bay where it was unrecoverable.; Restored flow;Other (specify below); Spill occured in a residential neighborhood where there was no imput of grease from commercial businesses.
City Of Imperial Beach CS	746798	2	753 13th Street	753 13th Street	Imperial Beach	91932	No	No	15	15	0	Camper Trailer	11/14/2009	; No affect/impact to receiving waters; Cleaned-up (mitigated effects of spill);Contained all or portion of spill;Returned all or portion of spill to sanitary sewer system; Sewage spilled as a result of the resident disconnecting the camper trailer's drainage piping; Blockage in resident's camper trailer plumbing system
City Of Imperial Beach CS	745493	2	Fern Ave - MH 434	Fern Avenue	Imperial Beach	91932	No	Yes	75	75	0	Main	10/8/2009	(Debri-General) caused 75 gallons of sewage to spill from (Manhole) at "Fern Ave - MH 434" to (Storm drain) . No surface water body affected.; Spill did not reach receiving waters. All fluids were contained within storm drain pipe; Cleaned-up (mitigated effects of spill);Contained all or portion of spill;Restored flow;Returned all or portion of spill to sanitary sewer system
City Of Imperial Beach CS	741943	2	MH 168	856 Seacoast Drive	Imperial Beach	91932	No	No	5	5	0	Main	7/18/2009	Spill occurred at manhole #168. Approximately 5 gallons of liquid seeped from the mahole cover. The spill was due to a failure at pump station 1B.; Spill did not reach receiving water; Cleaned-up (mitigated effects of spill);Contained all or portion of spill;Restored flow;Returned all or portion of spill to sanitary sewer system

Attachment 7-2

City of Imperial Beach

Field Screening and Water Sample Collection Standard Operating Procedure

January 5, 2010

Attachment 7-2

INTRODUCTION:

Under the Municipal Storm Water Permit (Order No. R9-2007-0001), the City is required to conduct water quality monitoring of urban runoff to identify, locate, and eliminate potential sources of pollutants that are either intentionally or inadvertently discharged into the City's municipal separate storm sewer system (MS4). This Standard Operating Procedure covers the procedures on conducting field observations, filed screening monitoring, and laboratory analytical sampling, which is required under Order No. R9-2007-0001. Investigative procedures for determining illegal discharges and source identification are not covered in this S.O.P., but are referred to in the 2008 City of Imperial Beach Jurisdictional Urban Runoff Management Program and in the 2010 City of Imperial Beach Dry Weather Monitoring Program.

FIELD SCREENING PROCEDURE

Field screening consists of filed observations, flow measurements, and field analysis of selected water quality parameters. Field screening will occur at all locations having ponded or flowing water. Water quality samples may also be sent to a professionally certified laboratory for analysis. The procedures for collecting laboratory samples are covered in the next section of this S.O.P. Visual observations will also be made at each site using the standardized copermittee field data sheet and trash assessment form. The following procedure is applicable for all urban runoff field screening:

1. Gather all necessary equipment and supplies (See attached Sampling Equipment Checklist)
2. Perform any equipment calibration before each sampling event and test the viability of test kit reagents. Refer to the equipment's manual.
3. Mobilize to the water quality monitoring location.
4. Take a picture of the sampling point and other areas of interest. For example; a picture of the outfall and drainage area to record pollutants discharged downstream.
5. Make visual observations of the sample location including general site description, atmospheric conditions, and runoff characteristics. Visual observations can be recorded on the San Diego Copermittees Monitoring Field Data Sheet. Additionally, make qualitative assessment of trash using the Copermittees Trash Assessment Form. (See attached Dry Weather Monitoring Field Datasheet and 2009 Trash Assessment Form).
6. Wear gloves during all sample collection.
7. At each site with ponded or flowing water, collect grab samples for analysis with the field test kit. Grab samples may be collected by hand, with the bailer method, or sampling pole depending on the site location.

Attachment 7-2

Note: Field screening should be conducted at locations that have ponded or flowing water. Conductivity may be measured to determine if the water source is tidal or urban runoff in nature. Urban runoff normally has conductivities of 2 mS/cm or less. Salt water normally has high conductivities (i.e. 20- 40 mS/cm). Other factors might need to be considered in determining the source of the water. Water samples should **not** be screened or collected if tidal water is present.

8. Measure Flow Rate. If there is no flow check the appropriate "water flow" category (ponded, dry or tidal) on the Dry Weather Monitoring Field Datasheet. Place a container with a known quantity (ex. 1000 milliliter beaker) in the flow stream and record the time it takes to fill the container. Use a large container (ex. 5 gal bucket) to measure very high flow rates, common during the wet weather season. Record information on the Field Datasheet. Convert results to gallons per minute (gpm).
9. Prior to field screening measurements rinse all equipment probes 3x with the sample medium. Measure Temperature, Turbidity, PH, Conductivity, NH_3N, NO_3N, Ortho-PO_4. Measure Temperature and Turbidity followed by the remaining parameters. Follow measurement procedures listed in the sampling equipment manuals. Record all measurements on the Field Data Sheet.
10. Store all ampules used in testing in a small tightly secured container. Dispose of ampules following the disposal requirements listed in the testing manuals or Materials Safety Data Sheets.

WATER SAMPLE COLLECTION PROCEDURE FOR LAB ANALYSIS

The City also collects and sends off urban runoff samples for laboratory analysis. The City's Dry Weather Monitoring Program requires that at a minimum 25% of the locations with ponded or flowing water be tested for additional contaminates at an EPA-certified laboratory. At a minimum the following contaminates will be tested: a) dissolved cadmium, copper, lead, and zink; b) oil and grease; c) bacterial indicators; D) total hardness; E) organophosphate; F) pesticides –diazinon and chlorpyrifos.

1. Don safety glasses and latex gloves.
2. Ensure laboratory supplied sample containers match the analyte that is being sampled. Check integrity of containers and replace those that are defected.
3. With a fine point sharpie write the appropriate information on all sample container labels (Sample Date, Sample Time, Location, Preservative, etc.). Affix an appropriate label if a label does not exist.
4. Tape around labels with transparent tape.
5. Slowly fill a clean and rinsed (w/ sample medium 3x) High Density Polyethylene container (large beaker or sampling pole/beaker) with the sample medium. This container will be used to transfer the sample medium to the laboratory supplied sampling containers. Direct filling technique (no transfer container is used) may

be used during appropriate flow conditions, but caution is needed to prevent overspill of preservative. Refer to the notes below.

Note: *Check sample bottles to see if they contain any preservatives. Preserved sample containers should **not** be overfilled since this may result in the dilution of the preservative.
***Samples for Oil and Grease analysis should be collected at the top of the water surface since hydrocarbons, which are less dense than water, float at the top. This can be done by skimming the surface with the transfer container.

6. Slowly transfer the sample medium to the appropriate laboratory supplied container. The appropriate sampling containers are as follows:

Contaminate	Sampling Bottle
Hardness, Metals, and Phosphorus	Plastic HNO3 bottle, separate bottle for phosphorus
Pesticides/Organophosphate	1L glass bottle w/out HCL
Oil and Grease	Glass 1L with HCL
MBAS	Plastic bottle under pressure
Bacteria	Preservative plastic bottles
Ammonia	With H2SO4 preservative
Nitrate	Additional bottle with no preservatives

7. Ensure all sample container covers are properly secured to prevent sample spillage. Place all sample containers into a zip-lock bag(s) and seal.
8. Place bag(s) on ice in cooler.
9. Complete a Chain of Custody Form (See Attached).
10. Decontaminate all HDPE transfer containers, graduated cylinders, and equipment probes following the Decontamination Procedure listed in this S.O.P.
11. Site breakdown: Ensure manhole or other access points are locked and/or secure. Remove debris from site and ensure all equipment is turned off.
12. Transport samples to a designated Laboratory. Relinquish samples to the appropriate personnel and retain a copy of the C.O.C for your records.

Note: Bacteria samples have a holding time of 6 hours. Samples should be transported to the Laboratory within 4 hours after sample collection.

Attachment 7-2

DECONTAMINATION PROCEDURES:

Decontaminating field screening equipment:

1. Using a small spray bottle filled with de-ionized (DI) water, rinse all equipment probes.

2. For a more thorough clean use a small spray bottle with a mixture of phosphate free liquinox and water. Rinse all small graduated cylinders (used with Chemetrics Sampling Kits) with a combination of phosphate free soap (liquinox) and water. Next, rinse cylinders with distilled or DI water using a designated pressurized water sprayer.

3. Dry containers, wrap completely with aluminum foil, and store in a clean storage bin.

QUALITY ASSURANCE/QUALITY CONTROL

The City of Imperial Beach may implement several types of QA/QC measures to assess the accuracy and precision of field and laboratory analysis. Additional samples such as replicates, field blanks, laboratory blanks, duplicates, or spiked samples may be collected during monitoring events. These samples are optional and are used to ensure the consistency and accuracy in the analytical results.

The City uses an ELAP certified lab- Enviro Matrix Analytical, Inc. for all laboratory analysis. Analytical methods and detection limits are included in all laboratory reports. As an ELAP certified lab, Enviro Matrix performs all the necessary QA/QC measures to ensure consistency and accuracy.

Replicates

Replicate samples are used to assess laboratory or field precision. They may be collected in the field in on container and split into two samples for analysis. Sample results should be within an acceptable standard deviation.

Field Blanks

Blanks are used to identify errors or contamination in sample collection and analysis. Field blanks are prepared by filling normal sample bottles with DI water and then submitting them to the laboratory with the normal batch of samples for analysis. Field blanks should be noted and marked with special notation (such as “B”) that indicates they are blanks. Analysis should then be performed with the regular samples. Lab analysis should result in non-detection of analytes.

Attachment 7-2

Laboratory Blanks

Laboratory blanks are similar to field blanks with the distinction of being prepared and processed in the laboratory. The blank is used to identify errors or contamination in the laboratory analysis method or contaminates present in the laboratory environment.

Duplicates

Duplicates are used to estimate sampling and laboratory analysis precision. An internal field duplicate is an additional sample collected at the same time/place by the sampler. The duplicate is labeled as a regular sample but with special notation (such as "D") that indicates it is a duplicate. The duplicate is then analyzed with the regular samples. Lab analysis should produce comparable results for duplicates and regular samples.

Spiked Samples

Spiked samples are used to validate whether the laboratory method can accurately recover an artificially contaminated sample with a known amount of an analyte. The volume of the added spike should be small compared to the volume of the sample to which is adder.

GLOSSARY OF TERMS

Accuracy: Conforming closely to an exact value or a standard.

Ammonia: An inorganic form of nitrogen produced through bacteriological processes, decay of dead organisms, excretion of waste products by living animals, and fertilizer manufacturing. In Water, ammonia dissociates and exists in equilibrium of un-ionized and ionized ammonia. Determining how much of the total ammonia is in the un-ionized and ionized forms is important because organisms have different sensitivities to the different forms. The way in which ammonia is partitioned between the two forms is dependent on pH and temperature.

Beneficial Uses: The uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote tangible and intangible economic, social, and environmental goals. "Beneficial Uses" of the waters of the State that may be protected against include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)].

Biological Oxygen Demand (BOD): A measure of the amount of biodegradable organic matter present in an aquatic system or water sample. Low levels of BOD are always present in natural waters, but when large amounts are introduced, bacteria growth is stimulated. Because bacteria require oxygen to metabolize organic matter, the

expanding bacterial populations create a large demand for dissolved oxygen, and as a result, DO levels decline.

Chain of Custody (COC): A form that documents who has had authority and control over the samples from the time of collection to the time of analysis.

Chlorpyrifos: An organophosphate used in insecticides for agricultural applications, extermination, and residential lawn treatment.

Copper: Copper is a natural occurring metal that has historically been used in a variety of products. Copper is used in the manufacturing of electronic equipment, but also as a product used in automobiles (e.g., brake pads) and building construction (e.g., piping and wiring). Additionally, copper has a wide spectrum of effectiveness against the many biological agents of timber and fabric decay. It renders them unpalatable to insects and protects them from fungus attack. Copper sulphate has been in use since 1838 for preserving timber and is today the base for many proprietary wood preservatives. Copper is also present in some algaecides used in fountains, spas and swimming pools.

Diazinon: An organophosphate used in agricultural applications and residential control of insects indoors and outdoors.

Enterococcus: A subgroup within the fecal streptococcus group. These bacteria are distinguished by their ability to survive in salt water, and in this respect they more closely mimic many pathogens than do other bacteriological indicators. Enterococci are typically more human-specific than the larger fecal streptococcus group, and seem to be consistently associated with warm blooded animals subsequent diseases. EPA recommends enterococci as the best indicator of health risk in salt water used for recreation.

Environmental Laboratory Accreditation Program (ELAP): A division of the California Department of Health Services that provides certification to qualified laboratories.

Fecal Coliform: A specific subgroup of total coliform bacteria. These organisms are separated from the total coliform group by their ability to grow at elevated temperatures, and are associated only with the fecal material of warm-blooded animals. Fecal coliform bacteria indicate the presence of sewage contamination in a waterway and the possible presence of other pathogenic organisms that can exist in fecal material. The presence of fecal coliform bacteria is an indicator that potential health risk exists for individuals exposed to contaminated water.

Heavy Metals: Copper, zinc, lead, mercury, cadmium, and chromium are all regarded as “heavy metals.” Depending on their concentrations, heavy metals can be toxic pollutants that are hazardous to aquatic biota. Dissolved metals usually occur as cations, which tend to form complexes with anions to produce different chemical “species.” This

is important because the uncomplexed "free ion" is often more toxic than the complexed ion. The percentage of total metal ion that is "free" varies with the chemical properties of the water (i.e., pH).

Holding Time: Holding time is the time between sample collection and the time that sample analysis must begin. Exceedances of holding times will result in data being flagged and may contribute to inaccurate sample results.

Illegal Discharge (ID): A point source discharge of pollutants to the MS4, which is not comprised entirely of stormwater and not authorized by a NPDES permit. Wash water, sediment, spilled chemicals, and other pollutants allowed to enter the MS4 either intentionally or unintentionally contribute to the degradation of the local water quality. Illegal discharges include sewage spills. Releases from the sanitary sewer or private laterals can allow pathogens, ammonia, detergents, and other contaminants to enter the MS4.

Illicit Connections (IC): Conveyances that have been illegally connected to the MS4 system. These connections provide pathways for pollutants to enter the MS4. Improperly installed or defective rain diversion systems or devices that release pollutants into the stormwater conveyance system are also considered illicit connections.

Mercury: Mercury is a naturally occurring persistent, bioaccumulative metal that does not degrade in the environment. Historically, mercury has been used in a variety of products. In 1976, U.S. consumption of mercury was 2240 metric tons, and since that time, the consumption of mercury in the US has drastically decreased to 346 metric tons in 1997 (USGS, 2002). Primary among the over 3000 historical industrial uses in the US were battery manufacturing and chlorine-alkali production. Paints and industrial instruments have also been among the major uses. Until paint manufacturers agreed to eliminate the use of mercury in interior paints, 480,000 pounds of mercury were used in paints and coatings each year. Mercury is also used in laboratories for making thermometers, barometers, diffusion pumps, and many other instruments, including mercury switches and other electrical apparatuses. Mercury is used as an electrode in some types of electrolysis and in some types of batteries (mercury cells). Gaseous mercury is used in mercury-vapor lamps (e.g., fluorescent tubes) and advertising signs. Mercury is also the basis of dental amalgams and preparations, and can be a byproduct of burning fossil fuels and refining petroleum.

Municipal Separate Storm Sewer System (MS4): A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains) that is owned or operated by any public body having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes. It is designated or used for collection of conveying storm water.

Attachment 7-2

Nickel: Like mercury and copper, nickel is a naturally occurring hard, malleable, ductile, silvery-white metal that is used in alloys, magnets, coinage, and stainless steel. Nickel is also used for armor plate, plating, and produces a green color in glass. Nickel is an alloy metal, and its chief use is in the nickel steels and nickel cast irons, of which there are many varieties. It is also widely used for many other alloys, such as nickel brasses and bronzes, and alloys with copper, chromium, aluminum, lead, cobalt, silver and gold.

Nitrates: The chemically stable form of inorganic nitrogen in natural water. Nitrates occur in almost all aquatic systems, and are not considered to be a water contaminant at low concentrations.

Non-point Source Discharge: Discharge from a diffuse pollution source (i.e., without a single point of origin or not introduced into a receiving water from a specific outlet).

Non-Storm Water Discharge: Any discharge to a storm drain system or receiving water that is not composed entirely of storm water.

Nutrients: Any substance assimilated by living things that promote growth. The term generally refers to nitrogen and phosphorus in wastewater, but is also applied to other essential and trace elements.

Orthophosphate (Ortho-P): Sometimes referred to as soluble reactive phosphorus (SRP) because phosphate in this form is a readily available nutrient and is easily metabolized by green plants. Its presence in water can contribute to water pollution problems such as algal blooms and aquatic weed growth. Waters having high levels of Ortho-P are susceptible to eutrophication problems especially in warmer seasons of the year.

Outfall: The point source where a municipal storm sewer discharges to waters of the United States.

PBDEs: Polybrominated diphenyl ethers (or PBDEs) are flame-retardants in the sub-family of the brominated flame-retardant group. They have been used in a wide array of household products, including fabrics, furniture, and electronics. There are three main types, referred to as penta, octa and deca for the number of bromine atoms in the molecule. The manufacture, distribution and processing of products containing pentabrominated diphenyl ether (pentaBDE) and octabrominated diphenyl ether (octaBDE) flame retardants were prohibited in California as of June 1, 2006. This prohibition was prompted by findings that exposures to PBDEs are widespread, and may pose health risks.

PCBs: Polychlorinated biphenyls are mixtures of up to 209 individual chlorinated compounds (known as congeners). PCBs were manufactured in the United States and used widely from the late 1920s through the 1970s. Due to their non-flammability,

chemical stability, high boiling point and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics and rubber products; in pigments, dyes and carbonless copy paper and many other applications. Because of their persistent qualities, and physical and chemical characteristics, PCBs are found in environmental media worldwide.

pH: A potentially critical factor in aquatic environments that can influence the chemistry and biology of the system. It can affect the solubility of chemical substances, chemical equilibria, availability of nutrients, relative toxicity of environmental contaminants, and the leechability of trace elements (i.e., cadmium, lead, copper, and zinc) from sediments and suspended material. The normal pH of surface marine waters is 8.1.

Pyrethroid Pesticides: Pyrethroids are a category of insecticides that have recently gained a large market share of the overthe- counter insecticides that are used in urban areas (TDC Environmental, 2003). Pyrethroids are usually broken down by sunlight and the atmosphere in one or two days, and do not significantly affect groundwater quality, although surface water quality effects have been documented (Amweg and Weston 2006).

Sanitary Sewer: Underground pipes that carry only domestic or industrial wastewater, not storm water.

Sediment: Organic or inorganic material that is carried by or suspended in water and that settles out to form deposits in the storm drain system or receiving waters.

Specific Conductance (Conductivity): A measure of the ability of water to conduct electricity. Conductivity is dependent on the concentration of ions in water, and it is thus a rapid method of estimating the total dissolved solids (TDS) content of a water supply.

Conversion: mS/cm x 1 000 = µS/cm

Absolute pure water - 0.055 µS/cm
Distilled water - 0.5 µS/cm
Mountain water - 1.0 µS/cm
Most drinking water sources - 500 to 800 µS/cm
Sea water - 56 mS/cm (56000 µS/cm)
Max for potable water - 1055 µS/cm

Storm Drain Inlet: A drainage structure that collects surface runoff and funnels it into the conveyance system.

Storm Water (or Stormwater): Urban runoff and snowmelt runoff consisting only of those discharges that originates from precipitation events. Storm water is the portion of

precipitation that flows across a surface to the storm drain systems or receiving waters. In general, runoff increases as the perviousness of a surface decreases. During precipitation events in urban areas, rain water picks up and transports pollutants through storm water conveyance systems, and ultimately to a receiving water body.

Storm Water Drainage (Conveyance) System: Streets, gutters, inlets, conduits, natural or artificial drains, channels and watercourses, or other facilities that are owned, operated, maintained and used for the purpose of collecting, storing, transporting, or disposing of storm water.

Surface Runoff: Precipitation, snow-melt or irrigation water that flows off of a surface when rainfall exceeds the rate at which it can infiltrate the surface or be stored in small surface depressions.

Surfactants (MBAS): Surfactants are substances that are typically found in cleaning chemicals and detergents. These substances operate by preventing dirt and debris from adhering to items. When introduced to the environment, surfactants can negatively impact an organism's normal biological processes.

Temperature: A physical parameter of water quality that is necessary in order to assess the significance of other parameters and to calculate the values of parameters that vary with temperature. It has an important influence on water density, DO saturation, the solubility and toxicity of constituents in water, pH, specific conductance, rate of chemical reactions, biological activity, and the type of biota found in an area.

Total Coliform: A natural part of the microbiology of the intestinal tract of cold- and warm blooded animals, including man. Because they are relatively easy to culture in the lab, the total coliform group has been selected as the primary indicator bacteria for the presence of disease causing organisms. If large numbers of coliforms are found in the water, there is a high probability that other pathogenic bacteria or organisms may be present.

Total Dissolved Solids (TDS): Inorganic salts and small amounts of organic matter that are dissolved in water. Potential sources include natural inputs, sewage, urban runoff, and industrial wastewater.

Total Hardness: A measure of the cations, most commonly calcium and magnesium that are dissolved in water. Water hardness increases with an increasing concentration of cations. Port JURMP Appendix G – Field Sampling Manual 26

Total Organic Carbon (TOC): TOC is associated with decaying organic matter. It is generally present in elevated levels when other harmful organic compounds are present. Testing for TOC is generally an effective tool for assessing the potential for these other harmful compounds.

Attachment 7-2

Total Suspended Solids (TSS): TSS consists of any particles or substances that are neither dissolved nor settled in a water sample. They can originate from silt, decaying organic matter, industrial wastes, or sewage. In high concentrations, the particles result in turbid water.

Turbidity: Turbidity is a measure of water cloudiness, or the concentration of suspended solids in the water column. High levels of turbidity can block light from reaching submerged vegetation, trap infra-red (heat) waves which subsequently increase water temperature, and can result in an overload of particulates to filter-feeding organisms.

Water Quality Standards: The water quality objectives necessary to protect the beneficial uses of a water body.

Attachment 7-3

City of Imperial Beach 2010 Dry Weather Monitoring Program

May 1, 2010

1.0 Introduction

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9-2007-0001 Section II.B.3., the City of Imperial Beach (City) has developed a dry weather analytical and field screening monitoring program as part of its JURMP. The program aims to detect and eliminate illicit connections and illegal discharges to the municipal separate storm sewer system (MS4) during the dry season by conducing (1) field observations; (2) field screening monitoring; and (3) analytical monitoring at selected stations. The results will provide the City with another tool to further identify and eliminate illegal dischargers and connections into the MS4 system.

2.0 Municipal Separate Storm Sewer (MS4)

The City maintains a GIS database of the MS4 that includes hydrologic subunits, receiving waters, sub-drainage areas, storm drains, MS4 outfalls, dry weather monitoring outfall locations, and alternative monitoring locations.

Imperial Beach is located in the southwestern portion of San Diego County and includes a total area of 2755 acres that falls within two major hydrologic units: Otay HU 910.0 and Tijuana HU 911.0. The City's MS4 system collects runoff from roughly 1,400 acres of urban residential and light commercial land uses located in the northern portion of the City (Attachment – 2). This northern portion of the City is completely built out and only has an estimated 4 acres of potentially developable land. The land use in the southern portion of the City includes permanent open space and Navy property that is not maintained by the City. The land use characteristics are estimated as follows:

- Residential 1,019 acres (38%)
- Commercial 118 acres (4%)
- Industrial 0 acres (0%)
- Navy Property and Schools 484 acres (18%)
- Permanent Open Space 1,134 acres (41%)

The existing MS4 system consists of open surface gutters, drainage ditches, and reinforced underground concrete storm drains. The City has approximately 5 miles of underground storm drain lines and 117 catch basin inlets. The MS4 system conveys storm water to the Otay River, San Diego Bay, Tijuana River and Estuary, or the Pacific Ocean. During the dry season it is often the case that outfalls and other conveyance structures are found to be completely dry. Because of the City's low elevation and coastal location, many of the outfalls are also impacted by tidal flows, which require investigations and monitoring further up the storm drain line.

3.0 Dry Weather Monitoring Station Locations

3.1 Station Criteria

Dry weather urban runoff monitoring is one of several tools utilized by the City to identify illicit discharges and illegal connections to its MS4. City staff collects samples at various conveyance structures including storm drain outfalls, manholes, catch basins, and other areas where urban runoff is commonly found each year between May 1 and September 30 (the dry weather season).

The City modified its dry weather field screening and analytical monitoring stations based on a review of its past Dry Weather Monitoring Program. Prior to FY 2007-08, the City used a grid system to identify

monitoring stations. This proved to be inefficient because the City continually spent excessive amount of time and resources searching for urban runoff throughout the entire grid system, only to find that in many instances the stations were dry. This updated dry weather monitoring program diverges away from the past grid system to a non-random targeted approach, which is outlined in Order No. 2007-0001 (Receiving Waters and Urban Runoff Monitoring and Reporting Program). The City now conducts field screening and analytical monitoring at targeted non-random monitoring stations that provides a comprehensive coverage of the entire MS4 system.

3.2 Dry Weather Monitoring Locations

After a thorough analysis of the MS4 system, drainage basins, land uses, and past sampling experiences the City has selected six dry weather sampling sites that covers 65% of the total combined residential and commercial land use drainage areas in the City. If the coastal drainage areas that are served by the City's two storm drain diverters (Palm Ave and Date Ave) are subtracted from the land uses then the dry weather monitoring locations listed below cover 78% of the total residential and commercial drainage areas in the entire City.

Using guidelines written in the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.a.), the City selected six sampling locations that best represents the land uses and spatial coverage of the entire MS4 system. These selected sites represent the furthest accessible outfall or manhole within each major drainage area and also includes all the major MS4 drainage lines in the City. Because of the low elevation in the City, most of the MS4 sampling outfalls are tidally influenced and therefore require an adaptive monitoring/sampling strategy. Even during low tides samples may need to be taken further up the storm drain line from manholes. Therefore, if an outfall is inundated by tidal water, field investigation will start at the furthest downstream manhole from the outfall location.

Outfall naming strategy is based on the Imperial Beach Storm Drain Master Plan Study (1991) where each storm drain line is assigned a letter and each man hole or catch basin is assigned a number. For example, the storm drain outfall on the K line represents the location site K-1. The first manhole upstream of the K outfall is K-2, second manhole K-3, and so forth.

The City may also decide to take additional dry weather samples from any alternative location where water is present. This includes the smaller storm drain lines at D, P, and S, and grabs samples from open surface drains or street gutters.

K-Outfall

Land Use and Site Information: The K-outfall collects runoff from approximately 120 acres of mixed commercial and residential land uses. The primary land use in the drainage area is residential with some contributing flow from Highway 75 (Palm Ave). The outfall discharges into the tidally influenced area of the lower Otay River. The outfall location is located between Florence and 12th Street along the San Diego Bay Shore bike path.

Sampling Location: Samples can be collected directly from the outfall location. The outfall gets partially inundated at high tide so tidal conditions will need to be considered when sampling.

H-Outfall, H-6, and H-12

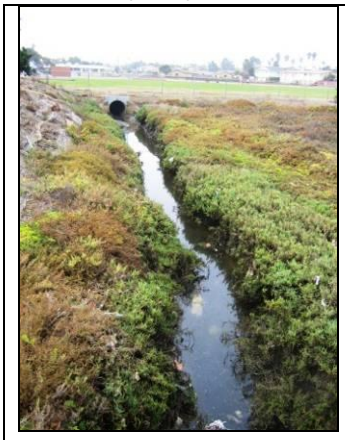

Land Use and Site Information: The H-outfall collects runoff from 139 acres and has a mix of commercial and residential land uses. This outfall received a large portion of runoff from the City's commercial businesses located along Palm Ave. The outfall location is situated between Bayside Elementary, Public Works Yard, and Bay Shore Bike Path. The outfall discharges into a ditch that leads under the Bay Shore Bike Path and into the Otay River. This outfall is affected by tidal flows during all tides and therefore not an appropriate sampling location.

Sampling Location: The H-outfall is affected by tidal flows during all tides and therefore requires samples to be taken up pipe in a catch basin at site H-6 or from a manhole at site H-12. Site H-6 collects runoff into a ponded catch basin from the surrounding residential area. Site H-12 is a sampling location from a shallow manhole that collects flow from a commercial shopping center as well as flow from Highway 75.

E-1A and E-1B Outfall, E-8, and E-25

Land Use and Site Information: The E-1B outfall is collocated with E-1A outfall and shares a combined drainage area of 119 acres. Both storm drain lines run parallel to one another but provide storm water conveyance to uniquely different land uses. The E-1B outfall primarily drains Mar Vista High School and a small portion of the Imperial Beach Recreation Sports Park. The E-1A outfall primarily collects runoff from residential neighborhoods and some commercial from lower Palm Ave. The outfalls are located at the West end of Grove Avenue and discharge into the Tijuana Estuary.

Sampling Location: The E-1A outfall is affected by tidal flows during all tides and therefore requires samples to be taken up pipe from a manhole at site E-8. Sampling location E-8 is located behind the Baptist church in a city right of way off 5th St. The E-1B samples can be collected directly from the outfall location as well as a catch basin where water ponds in front of Mar Vista High School at site E-25.

F Outfall

Land Use and Site Information: The F outfall location is immediately adjacent to the E-1A and E-1B outfalls at the end of Grove Avenue and discharges into the Tijuana Estuary. The outfall drains runoff from 298 acres of residential and commercial land uses, as well as runoff from Imperial Beach Blvd.

Sampling Location: The F outfall is affected by tidal variations even at low tides and therefore requires samples to be taken up pipe. Samples can be collected at site F-48 at 11th and Imperial Beach Blvd. where runoff consists of mixed commercial and residential.

M-3 Catch Basin

Land Use and Site Information: The M-3 sampling location is a catch basin along the M-storm drain line that discharges into the Tijuana River. Access to the M-1 outfall is not possible due to Ream Field Navy Base. Samples are therefore taken at the M-3 catch basin before the flow enters onto Navy property. Sampling site M-3 captures runoff from 54 acres of residential land use and is located between 11th and 12 St on Iris.

Sampling Location: The M-3 sampling location collects runoff from open channels and surface flows from a residential area. Water does not pond in this catch basin and can only be sampled with flow.

4.0 Sampling Frequencies

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.), the City will conduct dry weather monitoring at each site identified above during the period May 1 through September 30. Each site will be visited at least twice during the dry weather monitoring period. All site visits will include: field observations and trash assessment of outfall locations, field screening analysis at all locations where water is present, and lab analysis at a minimum of 25% of the sites. Dry weather monitoring will not be performed during a rain event or within 72 hours after the end of a rain event.

5.0 Field Screening and Laboratory Analytical Sampling

5.1 Procedures

Field screening and laboratory analytical sampling will be conducted in accordance with the City's Standard Operating Procedures (SOP). The City's SOP covers details on sample collection, equipment preparation and maintenance, QA/QC, COC forms, and guidance for completing field data forms. All field personnel will have a copy of this dry weather monitoring program and the SOP manual for reference during field investigations.

5.2 Field Screening

Field screening will consist of qualitative field observations, flow measurement, and field analysis of selected water quality parameters. Information will be recorded on a standard field data form (Attachment-3), trash assessment form(Attachment-4), and logged on the City's database. The field screening process will involve the following:

1. Qualitative Observations

Qualitative field observations will be made during each site visit using the standardized San Diego Stormwater Copermittees Dry Weather Monitoring Field Datasheet (Attachment-3). Observations will be recorded whether or not water is present at the site. These observations are intended to provide a general assessment of the site. The following observations will be recorded:

a) General Site Description
b) Atmospheric Conditions
c) Runoff Characteristics
d) Flow Estimation
e) Trash Assessment using the Regional Trash Assessment Form

2. Field Water Quality Analysis

If water is present then field screening samples will be taken using the dry weather monitoring field test kits. The City of Imperial Beach uses Chemetric field test kits and Hatch Turbidimeter while conducting field analysis. If water is observed to be ponded or flowing then a grab sample will be collected and analyzed for the following constituents:

a) Nitrate
b) Amonnonia
c) Reactive Phosphorous
d) Temperature
e) pH
f) Surfactants (MBAS)
g) Turbidity
h) Electro Conductivity

Field personnel will be adequately trained to achieve consistent and accurate water quality analytical results. Field instruments will be calibrated as needed and the variability of test kits will be checked periodically. The City may also analyze duplicate samples in the field to assess precision. In addition, field staff may submit periodic sample splits and blanks for laboratory analysis to assess the accuracy of field testing methods and/or equipment. Documentation of calibration and sampling records will be kept in order to maintain high level of quality control.

5.3 Laboratory Analytical Monitoring

Grab samples will be collected and submitted to an EPA-certified laboratory for analysis at a minimum of 25% of sites where flowing or ponded water is observed. At a minimum, the following constituents will be analyzed:

a) Dissolved Cadmium, Copper, Lead, and Zink
b) Oil and Grease
c) Total Hardness
d) Bacterial Indicators
e) Organophosphate
f) Pesticides (Diazinon and Chlorpyrifos)

Field staff will follow strict sampling and chain-of-custody protocols when collecting dry weather laboratory analytical samples.

5.4 Trash Assessment

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.c.), an assessment of the amount and extent of trash will be conducted at each dry weather screening or analytical monitoring station. The evaluation of trash will include an area surrounding the MS4 and receiving waters. The amount and extent of trash will be estimated upon first glance of the site. A qualitative ranking of optimal, suboptimal, marginal, submarginal, or poor will be assigned to each site. In addition, sites will also be evaluated on whether there is a threat to aquatic and/or human health. To aid in the assessment of trash, the San Diego Copermittees have developed a regional trash assessment form for dry weather monitoring, which will be used by the City (Attachment-4).

6.0 Source Identification Follow-Up Investigations

The primary objective of the dry weather monitoring program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the MS4 as required in Section D.4.c of the Permit. The City has established an IC/ID program presented in Chapter 9 of the JURMP Document. An IC/ID investigation is triggered by exceedances of field screening and laboratory monitoring results or from exceedances of qualitative observations. When an exceedance is triggered, the City had two business days to conduct an investigation to identify the source of the discharge or provide rational as to why the discharge does not pose a threat to water quality and does not need further investigation. The criteria to determine if monitoring results or qualitative observations necessitate an IC/ID investigation are described below.

6.1 Action Levels

The action levels for initiating a source identification investigation for field screening and laboratory analytical parameters are summarized in Attachment-1. These action levels will provide guidance when interpreting results of field and laboratory sampling. However, there may be instances when exceedances in actions levels may be misleading as a result of natural conditions such as influence of ground water, tidal influence, results of existing physical condition, or time of day. The use of best professional judgment will be utilized when interpreting water quality data. When exceedances are discovered using field test kits, the City typically follows up with an immediate investigation upstream to identify the source. Similarly when laboratory analysis results in the exceedance of action levels, the City will conduct a follow up investigation within two working days of receiving laboratory results.

6.2 Qualitative Observations

Qualitative observations such as dead animals, strong odor, and visual observations may indicate that a discharge of pollutants has occurred and that serious water quality problems are present. Qualitative observations may indicate serious water quality problems when field and analytical monitoring results are within action level limits or not immediately available. These observations will help the City in assessing the health and safety of the site.

7.0 Elimination of Illegal Connections and Discharges

The City will follow guidelines for eliminating illegal discharges or connections set forth in Chapter 9 of the JURMP. Once the discharge has been detected and stopped, the City may utilize escalating enforcement actions to ensure that the responsible party does not continue to discharge into the MS4 and receiving waters. If the discharge is wide spread or poses an immediate and severe threat to the public or environment, then other agencies will be notified (FWS, Tijuana River National Estuarine Research Reserve, Department of Environmental Health, Fire Department, ect.). In the case of a sewage spill or other pollutants which endanger environmental health, the RWQCB will be notified within 24 hours of detection.

8.0 Program Assessment

The dry weather monitoring program will be evaluated annually prior to May 1st and get updated as needed. A summary of findings will be included in the City's Jurisdictional URMP Annual Report. The criteria for evaluating the effectiveness of the dry weather monitoring program will include the number of sites monitored, frequency of monitoring, frequency of observed dry weather runoff, number of field screening and laboratory samples collected, number of follow up investigations conducted, and number of pollution sources identified and eliminated.

The City will use the annual assessment of the dry weather monitoring program to refine and focus its approach for the next dry season. Sampling locations that indicate the presence of contaminates may need to be monitored at a higher frequency, and monitoring locations that do not appear to have dry weather flows may be monitored less frequently.

Attachment-1

Table 6-1 Action Levels for Field Screening and Laboratory Parameters

Field Screening Analytes	Action Levels	Source / Notes
pH	<6.5 or >9.0	Basin Plan, with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia-nitrogen.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on workgroup experience. May also consider unionized ammonia fraction
Surfactants (MBAS) (mg/L)	1.0	Basin Plan with allowance based on workgroup field experience and possible field reagent interferences
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observations (e.g. unusual color and lack of clarity), and unusual odors.
Temperature (^oC)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, ect.
Conductivity (mS/cm)	Best Professional Judgment	Values >5 mS/cm may indicate IC/ID however; EC maybe highly elevated in some regions due to high TDS groundwater exfiltation to surface water, mineral dissolution, drought, and sea water intrusion. Values < 0.75 mS/cm may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source / Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector Feneral Permit. If petroleum sheen is observed, the sample should be collected from the surface. Visual observations may justify immediate investigation.
Diazinon (µg/L) **Chlorpyrifos (µg/L)**	0.5 0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus education and outreach to potential dischargers in the targeted drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Dissolved Cadmium (µg/L) **Dissolved Copper (µg/L)** **Dissolved Lead (µg/L)** **Dissolved Zinc (µg/L)**	California Toxic Rule California Toxic Rule California Toxic Rule California Toxic Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentrations, For example, at 300 mg/L hardness the following action levels would apply: Cd – 14ppb; Cu – 38ppb; Pb – 209 ppb; and Zn – 297 ppb.
Total Coliform (MPN/100mL) **Fecal Coliform (MPN/100MmL)** **Enterococcus (MPN/100ml)**	130,000 13,000 7,000	Action levels based on Copermittee Dry Weather Monitoring levels 2009.

Attachment-2

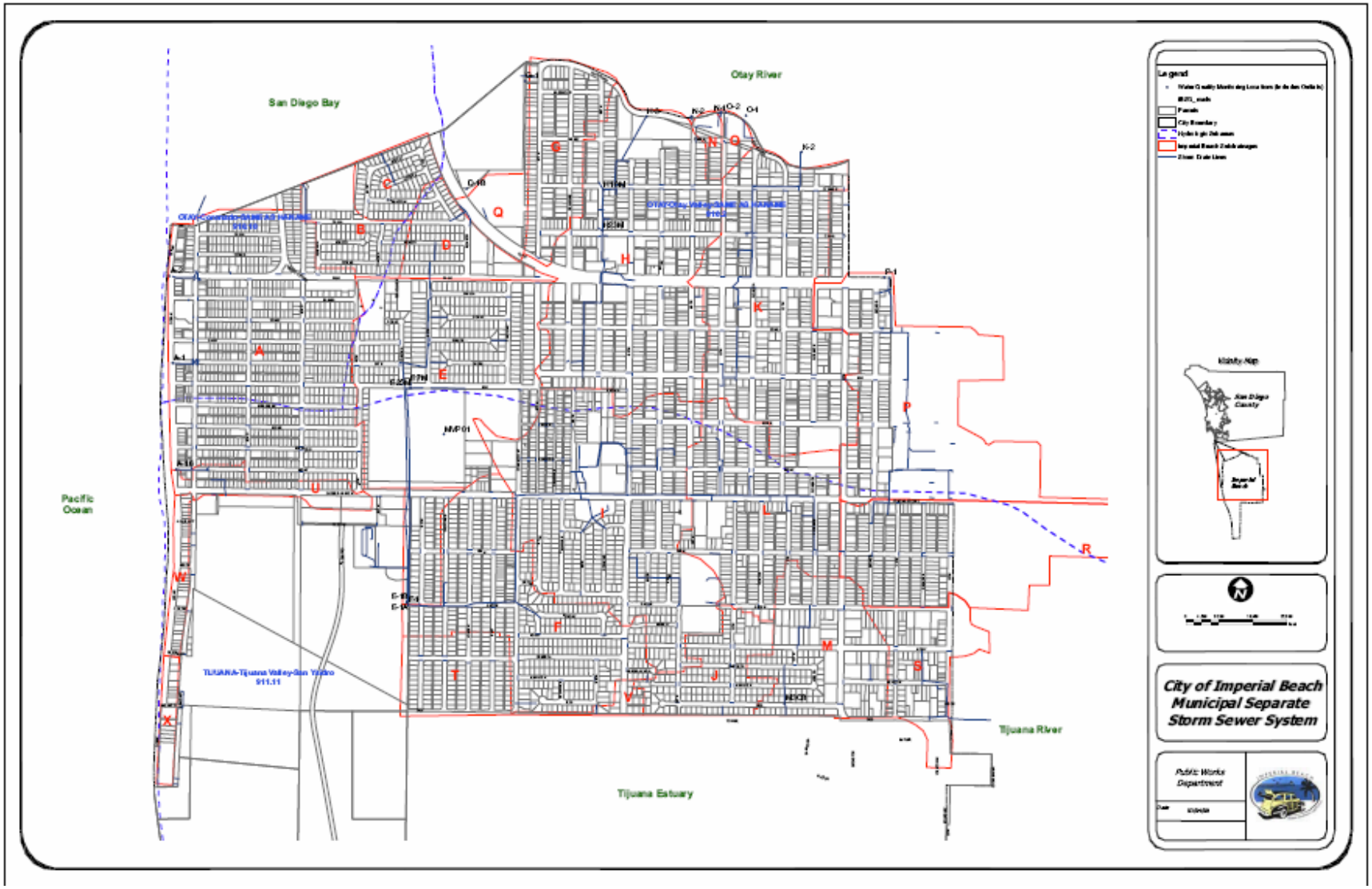

Attachment-3

San Diego Stormwater Copermittees

Dry Weather Monitoring Field Datasheet

☐ **Routine Investigation** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID		**Latitude**		**Watershed**	**Hydrologic Unit**	
Location		**Longitude**			**Hydrologic Area**	
Date		**TB Page**			**Hydrologic Subarea** (Optional)	
Time		**Observer**			**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☐ > 72 hours ☐ < 72 hours
Rainfall ☐ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other
Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other
Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other
Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other
Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other
Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)			

Analytical Lab Samples Collected? ☐ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Attachment-4

2009 Trash Assessment Form

SITE ID: _____ **DATE:** _____

LOCATION: _____ **TIME:** _____

OBSERVER: _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____ ____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____ __

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Attachment-4

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

Type	Ranking or Count by Type *	Potential Route (check up to 2)				Potential Source (check up to 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash present in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Attachment 7-4

IDIC NUMBER	DATE	REFERRAL SOURCE	COMPLAINT/ OBSERVATION DESCRIPTION	CONSTITUENT	LOCATION	RECEIVING WATER	VIOLATION VERIFIED	VIOLATOR TYPE	VERBAL WARNING	INFORMATIVE LETTER (Date)	NOV (Date)	CITY CLEANUP	COST RECOVERY AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
1	7/1/2009	PW-Field	Power washing parking lot	Wash Water	9th and Palm	Otay River	Yes	Construction	Yes			No		Contractor was sweeping water from the parking lot into the vegetation upon arrival. He was informed that the water could not enter the storm drain and encouraged to continue sweeping it into the vegetation. He was also informed of current regulations to capture the water if powerwashing.
2	7/2/2009	City Hall	Power washing dry paint	Wash Water	IB Elementary School 650 IB Blvd.	Tijuana Estuary	No	Schools	No			No		Environmental Specialist visited elementary school. Found painters and power washer, but no evidence of runoff.
3	7/2/2009	PW-Env	Power washing gymnasium bathrooms	Wash Water	Mar Vista High School	Tijuana Estuary	Yes	Schools	Yes			No		School employees were asked to prevent water from entering the storm drain with a barrier. Employees were thanked for sweeping water into bathroom drains, which they were already doing, and educated about storm drains.
4	7/6/2009	PW-Env	Loyd Pest Control discharging water sock used for footings on termite tents	Potable Water	300 Block Daisy	Pacific Ocean	Yes	Mobile	Yes			No		Loyd Pest Control workers were removing a termite tent over a house. A plastic tube (sock) of water is use to secure the footing of the termite tent. After each project water is discharged. This may be a region issue to address with the copermittees. Corrective actions were made to educate and inform.
5	7/10/2009	General Public-Hotline	Homeless encampment behind Bayside School with needles	Trash & Debris	Bayside School	Otay River	No	Other	No			Yes		Superintendent of Baside School contacted the City about a homeless encampment between the school fence and PW property. The PW-env responded immediately to clean up needles, trash, and debris.
6	7/18/2009	PW-Field	Field overflow from failure at pump station 1B	Field Spill	1098 Seacoast	Pacific Ocean	No	Municipal	No			Yes		Pump station 1B failed and spilled 5 gallons of sewage. All overflow was contained and cleaned up with the vacuum truck.

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7	7/20/2009	PW-Env	Grass from yard work being blown into street	Green Waste	200 I.B. Blvd	Tijuana Estuary	Yes	Residential	No	7/20/2009		No		Residents were not home. A letter was left in their mailbox. Tony Serrano reported violation and took pictures. Grass dispersed by the time Env department investigated, but still evident.
8	7/20/2009	PW-Env	Tipped over portapotty	Field Spill	20 Date Ave	Pacific Ocean	No	Mobile	No			No		Portapotty company came out to clean up the spill. By the looks most of the spill was contained in the street. Any liquid that coupld have escapped into the storm drain would have been diverted at the Date Ave storm drain diverter.
9	7/20/2009	Code Enfoce ment	Resident doing construction making an illigal connection through a curb cut	Construction Debris	1370 5th St	Tijuana Estuary	Yes	Residential	Yes	7/20/2009	Stop Work Notice	No		Resident was given a stop work notice. The case was refered to PW. The Street supervisor contacted the owner and informed of City code and illigal connections to the storm drain system.
10	7/24/2009	PW-Env	Resident cleaning driveway with hose and letting copious amounts of water run into the street	Wash Water	Cheery Ave	Otay River	Yes	Residential	Yes			No		Residence was told to keep water on in grass and not let it run off into street. Resident was handed a brochure.
11	7/24/2009	PW-Field	A mess in the alley behind KFC	Potable Water	13th and Imperial Blvd		No	Fixed Commercial	No					"A big mess" was reported. The only runoff I witnessed upon investigation was from KFC. Appeared to be fresh water from condensation that had been dripping consistently for more than a few days.
12	7/29/2009	PW-Env	Thick auto oil spots in two locations on street in front of house	Auto Fluids	1430 California Street	Tijuana Estuary	Yes	Residential	No					

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13	7/29/2009	PW-Env	Water Runoff from Tree Cutting Cleanup	Potable Water	1137 5th Street/ Mobile Business Arriola Tree Services 585-2352	Tijuana Estuary	Yes	Mobile	Yes	No				Talked to manager of Arriola Tree Services and told him as a mobile business he needs to know that water runoff into the street is prohibited. Told him to direct water into the lawn or vegetated areas.
14	7/29/2009	PW-Env	Water into stormdrain	Potable Water	Seacoast Drive and Beach Ave	Tijuana Estuary	Yes	Mobile	Yes	No				Talked to two guys working. They said water runoff was Potable water, not wash water, and complained that the same thing happens when it rains. They knew they were supposed to be capturing wash water, which they said they were doing earlier. I told them it was illegal to let even Potable water run into storm drains and encouraged them to direct into lawn or put a barrier around the storm drain.
15	7/30/2009	PW-Field	oil container outside with no secondary containment	Oil & Grease	Cherry Ave Warehouse next to Public Works. "Express Appliance Delivery"	Otay River	Yes	Fixed Commercial	Yes	No				Spoke with woman at front desk. Explained that oil containers need to be stored inside in a secondary container. She appologized and said they should have taken oil directly to auto center to recycle as soon as they collected it. Workers changed oil in truck and then left it there in containers. She said she would take it to recycling within next few hours.
16	8/4/2009	PW-Field	cooking oil from Tin Fish leaking out of storage container and poor cleanup attempt with kitty litter	Oil & Grease	Alley behind Pier Plaza	Pacific Ocean	Yes	Fixed Commercial	Yes	No	No	No		Contacted the Tin Fish and passed the case onto the Port of San Diego for enforcement actions.
17	8/4/2009	General Public-Hotline	CalAm water main break	Potable Water	Delaware and Grove	Tijuana Estuary	Yes	Utility	Yes	No	No	No		Contacted CalAm and they reported to the water main break and cleaned up any debris left along the curb.
18	8/10/2009	PW-Env	Over Irrigation	Potable Water	284 Elm Street		Yes	Residential	No	8/10/2009	No	No		Letter

IDIC NUMBER	DATE	REFERRAL SOURCE	COMPLAINT/ OBSERVATION DESCRIPTION	CONSTITUENT	LOCATION	RECEIVING WATER	VIOLATION VERIFIED	VIOLATOR TYPE	VERBAL WARNING	INFORMATIVE LETTER (Date)	NOV (Date)	CITY CLEANUP	COST RECOVERY AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
19	8/10/2009	PW-Env	Kitty Litter and Oily Water in Street from Oil Spot Cleanup attempt	Multiple	1430 California Street		Yes	Residential	Yes	8/10/2009	No	No		Follow up from 07-29-09 letter request to clean up oil spots on street. Follow up investigation revealed attempted clean up, with water and kitty litter remaining in gutter. Knocked on door and spoke with child of resident. Sent a second letter asking them to pick up the kitty litter and use absorbent towels or pans to prevent further leaks.
20	8/10/2009	PW-Env	Heavy Oil Spots on Street	Oil & Grease	1341 5th Street		Yes	Residential	No	8/10/2009	No	No		Letter
21	8/10/2009	PW-Env	Heavy Oil Spots on Street	Oil & Grease	1353 5th Street		Yes	Residential	No	8/10/2009	No	No		Letter
22	8/11/2009	Code Enfoce ment	Sediment in curb and gutter from resident	Sediment	1120 13th St	Tijuana Estuary	Yes	Residential	Yes	8/11/2009	Yes	No		Code enforcement case. Contacted Mr Nona who also owns 13th St market about his rental property and tenants parking on the lawn and tracking dirt into the roadway. Proper education on stormwater and sediment made.
23	8/11/2009	PW-Field	Charity Car Wash	Wash Water	3rd and Palm	Diverter	Yes	Residential	Yes	8/11/2009	No	No		Just spoke with them about using non-toxic soaps. They were conducting car wash in parking lot and letting water run into small drains. Small drains said to lead to sewage outside old building. (see pics) They said they had called the city about car wash. I gave them a copy of our charity car wash letter for future reference.
24	8/12/2009	PW-Env	Oil spots in street	Oil & Grease	1054 and 1056 12th Street	Tijuana Estuary	Yes	Residential	No	8/12/2009	No	No		Letter and Pictures
25	8/12/2009	PW-Env	trash	Trash & Debris	1174 Imperial Beach Blvd	Tijuana Estuary	Yes	Residential	No	8/12/2009	No	No		Letter and Pictures

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26	8/12/2009	PW-Env	Sedimen in curb and gutter from over irrigation runoff	Sediment	13th and Calla apartment complex (1265-1299 Calla Ave) and New Triplex on Florence and Calla (1255 Calla, 1265 Calla, and 605 Florence)	Otay River	Yes	Residential	Yes	8/12/2009	No	No		Hand Delivered Letter and Pictues
27	8/13/2009	General Public-Hotline	Hosing down driveway, oil sheens in water going to storm drain 5 houses down.	Sediment	754 Hickory Ct.	Tijuana Estuary	No	Residential	No	8/13/2009	No	No		Spoke with the homeowner at 754 Hickory while investigating a misspoken address (755 Hickory). Therefore, I did not speak to him with the knowledge that he was the one in violation. I did not take any pictures. His house is completely under construction and he is doing the construction himself. There was evidence of sediment in the gutter and on the driveway, but no water runoff. He claimed to be aware that power washing the driveway is illegal. A storm drain inlet exists 5 houses downhill of his house in line with his gutter.
28	8/17/2009	General Public-Hotline	Street sweeper is missing the street	Sediment	1207 Downing St	Tijuana Estuary	Na	Other	Na	No	No	No		Contacted EDCO John Snyder to follow up on the street sweeping activities and to follow up with the resident
29	8/17/2009	PW-Field	Grass clippings in the street	Green Waste	1056 13th	Tijuana Estuary	Yes	Fixed Commercial	Yes	No	No	No		Contacted landscape company and required them to clean up grass clipings in the street. Also contacted KFC tolet them know their landcapers were blowing grass clippings into the street.

IDIC NUMBER	DATE	REFERRAL SOURCE	COMPLAINT/ OBSERVATION DESCRIPTION	CONSTITUENT	LOCATION	RECEIVING WATER	VIOLATION VERIFIED	VIOLATOR TYPE	VERBAL WARNING	INFORMATIVE LETTER (Date)	NOV (Date)	CITY CLEANUP	COST RECOVERY AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
30	8/17/2009	PW-Env	Over Irrigation	Potable Water	Sandpiper II Apartments 0110-1015 Calla Ave	Otay River	Yes	Residential	No					Wrote a letter, but waiting to find out the property management company associated with complex so I can mail letter. Barzal & Scotti Sandpiper 1333 Camino Del Rio South, #302 San Diego, CA 92108-3520 Tel. (619) 291-2230 Alt. (619) 481-2690
31	8/17/2009	PW-Env	greasy transmission and vehicle refuse dumped in alley	Trash & Debris	1380 East Lane	Tijuana Estuary	Yes	Residential	Yes	8/17/2009	No	No		When I arrived, a guy was loading the refuse into his truck and the homeowners were in the alley trying to communicate with him. Due to language barrier, it was difficult to determine why he was loading the refuse into his truck, but it's likely that he was the person who originally dumped it. The homeowner of the house bordering the alley is Judy Creveling. The person who picked up the refuse had a Baja License plate = BM-22-575 and reportedly lived at 1401 Lauden around the corner. No grease remained behind, just some rusted metal. (see pics)
32	8/17/2009	PW-Field	Pool Draining	Pool Water	9th and Calla	Otay River	Yes	Residential	No	No				No evidence of any wrong doing. Did not see pool water being discharged, but did see the water in the street. The water in the street looked murkey and gray, but no way of knowing if murkeyness was from pool water or street. The pool water at time of investigation looked clear and clean.
33	8/17/2009	PW-Field	Pile of dirt in Right of Way	Construction Debris	11th and Calla	Otay River	Yes	Construction	No	No	No	No		Approached construction manager and he said it would be removed within the hour. Debris was from digging up the streets associated with utility work.
34	8/17/2009	General Public-Hotline	4 Piles of Masonry Debris in alley	Construction Debris	Alley behind 1380 East Lane	Tijuana Estuary	Yes	Residential	No	No				Suzanne took pictures and put on list for EDCO pickup. Not sure exactly who is responsible, but residents at 1308 East Lane complained about it.
35	8/18/2009	PW-Env	Water runoff	Wash Water	9th and Palm	Otay River	Yes	Fixed Commercial						Will perform a commercial inspection

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36	8/20/2009	General Public-Hotline	Broken Sprinkler	Potable Water	363 Citrus	San Diego Bay	Yes	Residential	No	No	No	No		PW responded because resident broke sprinkler in the City right-of-way
37	9/3/2009	PW-Field	Poor BMP at KFC. Employees dumping wash water	Wash Water	1056 13th	Tijuana Estuary	Yes	Fixed Commercial	Yes	No	9/4/2009	No		
38	9/3/2009	General Public-Hotline	Over Irrigation	Potable Water	152 Date	Pacific Ocean	No	Residential	No	--	No	No		Report of over irrigation is still under investigation.
39	10/1/2009	PW-Field	hosing down sidewalk	Wash Water	564 13th	Otay River	Yes	Residential	No	10/5/2009	No	no		Sent letter informing resident of proper bmp's
40	10/1/2009	PW-Field	Property has illigal connection and white discharge	Unknown	568 5th Street	San Diego Bay	Yes	Residential	No	10/5/2009	10/5/2009	No		Sent letter informing resident of proper bmp's and issued NOV. Follow up to occur Oct. 20
41	9/23/2009	General Public-Hotline	Neighbor reported a number of complaints including insufficient BMPs	Construction Debris	754 Hickory Ct.	Tijuana Estuary	Yes	Residential	Yes	No	9/24/2009	No		Community dev inspector contacted owner and educated and informed on constrution BMPs
42	9/10/2009	Code Enfoce ment	broken sprinkler and sprinkler timing	Over Irrigation	1224 Georgia	Tijuana Estuary	Yes	Residential	Yes	No	9/10/2009	No		Contacted owner and educated and informed on proper BMPs
43	9/28/2009	PW-Field	Trash and stock pile of material	Trash & Debris	255 Elm	Pacific Ocean	Yes	Residential	No	No	9/28/2009	No		Issued a NOV with correction date
44	10/5/2009	General Public-Hotline	Neighbor sweeping water into the street	Unknown	1300 Block East Lane	Tijuana Estuary	No	Residential	No	No				The violation was unverified. Env Div will keep a closer eye on the 1300 block of East Lane
45	10/5/2009	PW-Env	Excessive water emanating from property into storm drain.	Over Irrigation	572 Emory	San Diego Bay	Yes	Residential	No	10/6/2009				Sent email and photos informing property management company of the issue. Colwell realty informs us sprinkler was mis timed and will be fixed.
46	10/6/2009	PW-Env	Illegal connection spotted by Field employees and confirmed by env.		272 Elm	Pacific Ocean	Yes	Residential	No	10/6/2009	10/6/2009			Sent letter and NOV to tenant and owner. Follow up to occur October 21.

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47	10/13/2009	PW-Field	Streets sight illicit discharge	Wash Water	981 Cypress	San Diego Bay	Yes	Residential	Yes		10/13/2009			Issued a NOV with correction date
48	10/19/2009	Code Enfoce ment	Construction activity and sediment in the right of way	Construction Debris	1254 15th	Tijuana Estuary	Yes	Construction	Yes		10/19/09 (Stop Work)			Code enforcement issued a Stop Work Notice
49	10/12/2009	Code Enfoce ment	Trash and debris stockpiled on property	Trash & Debris	981 Cypress	Otay River	Yes	Residential	Yes		10/13/2009			Code enforcement issued a nov for trash, abondon vehicle, and vehicle parking
50	10/21/2009	General Public-Hotline	Hosing off driveway and excessive water	Wash Water	553 9th	Otay River	Yes	Residential	No	10/21/2009				Resonded to hotline call and found residence with a wet driveway and water flowing all the way to the storm drain. Sent letter to resident
51	10/20/2009	General Public-Hotline	Illegally dummped waste in alley	Green Waste	13th - Georgia on Elder	Tijuana Estuary	No	Other	No			Yes		City reponded to collect the waste. The used the resources of Job Corps who were volunteering at the time.
52	10/22/2009	PW-Env	Leaking planter box on SE corner putting trash and excess water into storm drain.	Trash & Debris	1185 Palm	Otay River	Yes	Fixed Commercial	Yes	10/22/2009	10/22/2009			Tony Cerrano reported broken planter box. Confirmed by GN. Sent letter and NOV to owner and establishment.
53	10/27/2009	General Public-Online	excessive trash on property and cars parking on lawn	Trash & Debris	625 Corvina	San Diego Bay	Yes	Residential	No	10/27/2009				Code enforcement tracked down the property owner and informed of the messy tennants.
54	10/28/2009	PW-Env	Pile of dirt not covered and accessible at Marcos and Red Hawk	Multiple	1205 Palm Ave	Otay River	Yes	Fixed Commercial	Yes					Warned owners of Marcos and Red Hawk about leaving dirt uncovered. They agreed to put tarp over dirt. I will be heading back to check.
55	10/29/2009	PW-Field	person observed illegally dumping into storm drain on south side of cypress between 12th and florence	Wash Water	between 12th and florence in street	Otay River	Yes	Mobile	No			yes		None because suspect got away.

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56	11/9/2009	PW-Field	Dynamic concrete coatings observed discharging small amount of water with dirt and possibly concrete into street	Sediment	1385 5th Street	Tijuana Estuary	Yes	Construction	Yes			no		Tony Cerrano told them to clean up mess and they agreed. Environmental staff arrived shortly thereafter and made sure they knew it had to be cleaned to avoid fine.
57	11/10/2009	Code Enfoce ment	Vehicles parked off a paved surface.Dischargi ngs oil and other pollutants into the stormwater	Multiple	604 Dahlia	Tijuana Estuary	Yes	Residential	Yes			no		Cited by Code enforcement, told to pay 100 dollar penalty.
58	11/14/2009	PW-Field	Waste discharge into storm drain	Field Spill	753 13th	Otay River	Yes	Residential	No			yes		AJ Moeler responded to incident; cost recovery pending; asked Dave Garcias to add stormwater to violation to citation
59	11/17/2009	General Public-Hotline	Construction activity on roof discharged into drain	Construction Debris	1140 Seacoast	Pacific Ocean	No	Construction	No					
60	11/18/2009	PW-Field	Rock pile in right of way constitutes an illegal stockpile	Construction Debris	1221 Emory	Tijuana River	Yes	Residential	Yes		11/18/2009			Peter Lau issued NOV in person.
61	11/18/2009	PW-Field	Transmission fluid leaking into street	Auto Fluids	1120 Oneonta	Tijuana River	Yes	Residential			11/18/2009	no		Tony Cerrano issued NOV and instructed cleanup.
62	11/19/2009	General Public-Hotline	Pool Draining	Pool Water	1146 East Lane	Tijuana Estuary	No	Residential	No					None; investigation showed discharge was within limits of the storm water permit. PH levels did not show chlorine and flow was reduced by vegetation. No odors from water.
63	11/23/2009	PW-Field	No Construction BMPs	Sediment	739 Florida	Otay River	Yes	Construction	Yes		11/23/2009	no		Investigation showed no bmps in place and small amount of discharge. Mess was cleaned up by specified time.
64	12/1/2009	General Public-Hotline	Pipe with illegal connection to storm drain.	Unknown	571 Thorn	Otay River	Yes	Residential	No	12/1/2009	12/1/2009	No		Issued NOV with correction date of 12/15 for illicit discharge and connection.

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65	12/1/2009	Code Enfoce ment	Storage of hazardous waste.	Multiple	1425 Fern	Tijuana Estuary	Yes	Residential	Yes		12/1/2009			David Garcias issued NOV to clean up by 12/3.
66	12/9/2009	PW-Field	suspicious substance under motorhome	Unknown	Approx. 1300 Seacoast	Pacific Ocean	No	Mobile	No					
67	12/9/2009	PW-Env	Soapy water from power washer at apartment	Wash Water	637 10th Street	Otay River	Yes	Residential	No	12/10/2009				Informative letter sent, no specific violator found.
68	12/14/2009	Code Enfoce ment	Transient Camp with trash and debris on vacant property	Trash & Debris	550 HWY 75	Otay River	Yes	Fixed Commercial	Yes		12/14/2009			Code Enforcement contacted the owner of abandonded El Camino Motel to clean up the trash and remove the dead and over grown vegetation that has allowed the site to become a harbor for transients.
69	12/17/2009	PW-Env	Transient camp behind all american car wash	Trash & Debris	APN: 626 230 13 00 Vacant Lot	Otay River	Yes	Residential	No	12/21/2009				Sent letter (with NOV language) to property owner, dorothy baker, requested monthly clean up.
70	12/21/2009	PW-Env	Trash area at 1002 Palm	Trash & Debris	1002 Palm AVE	Otay River	Yes	Fixed Commercial	Yes	12/21/2009				Sent letter to property owner stating need to have area cleaned up.
71	12/23/2009	General Public-Hotline	Elementary School at IB and Conn	Over Irrigation	650 IB BL	Tijuana River	No	Schools	No					
72	12/28/2009	General Public-Hotline	Car severely leaking oil in street	Oil & Grease	711 Oneonta	Tijuana River	No	Residential	No			yes		By the time the city responded the vehicle had already left but oil was visible in the street. The PW Superintendent used the 529 vaccum truck to clean the spill.
73	1/5/2010	City Hall	Excessive Overwater	Over Irrigation	207 Elkwood	Pacific Ocean	Yes	Fixed Commercial	Yes			no		Called property manager to stop sprinkler from flowing. Manager eventually complied
74	1/7/2010	PW-Field	Field Spill	Field Spill	Drain between basswood and boulevard on 7th	San Diego Bay	Yes	Municipal	No					Field staff removed some material from catch basin. Flow was seen going into outfall at pond 10A
75	1/7/2010	General Public-Hotline	Water leak	Potable Water	12th and Florence	Otay River	Yes	Utility	No					Notified cal am and they are implementing bmps

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76	1/8/2010	General Public-Hotline	Water Leak	Sediment	586 7th	Otay River	Yes	Residential	Yes			no		Notified owner via phone and got cal am to turn off water. Water was turned off. Owner also told to clean up sediment.
77	1/8/2010	City Hall	Illegal Connection	Unknown	527 Delaware	Otay River	Yes	Residential	No			no		Working with property owner. None taken, pump seems to be fine
78	1/8/2010	Code Enfoce ment	Construction BMPs	Construction Debris	1450 Iris	Tijuana Estuary	Yes	Construction	No		1/7/2010	no		Stop work notice issued by code enforcement
79	1/11/2010	General Public-Hotline	Dog feces not being cleaned up	Pet Waste	145 Evergreen	Pacific Ocean	Yes	Residential	No	1/12/2010		no		SENT information to all tenants in the buildings at 134 and 140 regarding pet waste.
80	1/11/2010	General Public-Hotline	Car washing	Wash Water	1132 IVY	Tijuana Estuary	No	Residential	No					None taken. Vehicle washing was taking place in parking lot of residence, which is legal.
81	1/12/2010	General Public-Hotline	Private lateral leak from water meter box	Sewer Spill	1260 Calla	Otay River	Yes	Residential	Yes			yes		Recovering cost from owner for city clean up. (4562/2)
82	1/19/2010	PW-Env	Construction BMPs	Sediment	Vetrans Park	Tijuana Estuary	Yes	Construction	Yes			no		Heavy rains washed out BMPs at the construction site for the new soccer field. The contractor was notified via the PW inspector and Superintendent.
83	1/20/2010	PW-Field	Private lateral leak from cleanout	Field Spill	1128-1130 12th	Tijuana River	Yes	Residential	Yes			yes		Recovering cost from owner for city clean up.
84	1/21/2010	PW-Field	Discharge from Driveway	Sediment	1146 Georgia Street	Tijuana River	Yes	Residential	Yes		1/21/2010	no		Told resident to maintain driveway to prevent discharge; returned to issue NOV for BMPs. Correction for 4:30; BMPS IMPLEMENTED
85	1/22/2010	City Hall	suspicious substance in storm water	Auto Fluids	197 Palm Ave	Pacific Ocean	No	Other	No			no		None taken, as it was impossible to determine if sheen was from more than standard storm water runoff
86	1/27/2010	PW-Field	Spill on street; blue liquid	Paint	381 Calla	Otay River	Yes	Residential	Yes		1/27/2010			Issued NOV for 1pm cleanup. Job Completed
87	1/27/2010	PW-Field	Rusty discharge into street at Precision Foreign	Sediment	1240 Palm Ave	Otay River	Yes	Fixed Commercial	Yes		1/27/2010	no		Issued NOV for 3pm cleanup. Job Completed
88	1/28/2010	PW-Field	Possible vehicle repair	Auto Fluids	1023 Florida	Tijuana River	No	Residential	Yes					None, vehicle being towed. Resident informed of risk for storm water pollution.

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89	1/31/2010	PW-Field	Sewage Spill	Field Spill	600 Palm	San Diego Bay	Yes	Fixed Commercial	No	2/1/2010				City crew removed 15 gallons of sewage near the silver strand plaza shopping center.
90	2/1/2010	City Hall	Vehicle Fire leaks fuel	Auto Fluids	1310 Connecticut	Tijuana River	Yes	Residential	Yes			yes		Fire responded and put out fire. Fuel leak flow was stopped and little to none entered storm drain. Sewer crew removed waste from street. Cost recovery to be made.
91	2/3/2010	General Public-In person	Small sewer leak	Sewer Spill	533 8th	San Diego Bay	Yes	Residential	Yes		1/3/2010	no		Issued NOV with correction date of 2/10.
92	2/5/2010	PW-Field	Washing construction driveway	Construction Debris	739 Florida	San Diego Bay	No	Construction	Yes					Tony Cerrano issued verbal warning. I will write letter once I obtain an address.
93	2/5/2010	PW-Env	Washing sidewalk	Wash Water	852 9th street	Otay River	Yes	Residential	Yes					Told unidentified individual to discontinue washing into the sidewalk.
94	2/8/2010	Code Enfoce ment	Construction BMPs	Sediment	134 Date	Pacific Ocean	Yes	Residential	Yes		2/9/2010			Admin Cite by Tommy Simmons for 200 for bmps and ID
95	2/16/2010	PW-Field	Water coming from sidewalk drain	Potable Water	740 Georgia	Otay River	Yes	Fixed Commercial	Yes					Informed Maintenance person, George, of our issue with it. He is working to solve the problem. Problem solved on 2/18
96	2/18/2010	General Public-In person	Spilled oil from vehicle repair	Oil & Grease	553 9th	San Diego Bay	Yes	Residential	Yes		2/18/2010			Issued NOV at property with 8am correction time. Resident Denies, has cleaned up mess. I will be sweeping up the residue. No further enforcement possible.
97	2/19/2010	City Hall	Leaking backflow valve on sprinkler system.	Potable Water	1070 Georgia	Otay River	No	Residential	No					Will send advisory letter informing landowner that if leak grows a violation could exist.
98	2/19/2010	PW-Env	Roofing company doing work before rain and generating a considerable amount of debris	Trash & Debris	1600 Seacoast	Tijuana Estuary	Yes	Construction	Yes					Warned roofing company of impending rain and they cleaned up the debris around the area.

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99	2/19/2010	PW-Env	Water line break on Mar Vista HS from construction activity	Potable Water	505 Elm - Mar Vista High School	Tijuana Estuary	Yes	Schools	Yes					Contacted Francisco the 24hr maintenance person. Francisco was off site so he directed another maintenance worker, David to meet me at the site of the water discharge. I was told at 4:20 p.m. that the problem would be taken care of or the water would be turned off to the area. Water was flowing out of a curb cut on Elm into an immediate storm drain at a rate of about 25 gpm.
100	3/2/2010	PW-Env	Foam tiles breaking off sea wall	Trash & Debris	714 Seacoast	Pacific Ocean	Yes	Residential	No			yes		Tidelands cleaned debris from beach.
101	3/3/2010	PW-Env	Gasoline coming out of outfall H3	Oil & Grease	9th and Cypress	San Diego Bay	Yes	Residential	No					Environmental attempted to clean oil. No violator found
102	3/5/2010	PW-Env	Paint Spill on sidewalk	Paint	163-199 Elder	Pacific Ocean	Yes	Residential	No					Spill appears to have been cleaned up. No proof of responsible party.
103	3/5/2010	PW-Env	Pipes entering alley and discharging	Unknown	566 9th	Otay River	Yes	Residential	No	3/5/2010				Sent letter requiring explaination or removal.
104	3/9/2010	PW-Field	Grass clippings in the street and in yard	Trash & Debris	1370 11th	Tijuana Estuary	Yes	Residential	No	3/9/2010				Sent letter to owner and copy to Tenant
105	3/10/2010	PW-Env	Sprinkler discharging large amount of water into storm drain	Potable Water	584 11th	Otay River	Yes	Residential	Yes					Called property manager to stop sprinkler from flowing. Called owner. Landscaper is coming to fix.
106	3/15/2010	General Public-Hotline	Concern over piles from cable burying	Sediment	740 Georgia	Otay River	No	Construction	No					Explained to property owner at 740 that work was being done legally and there was no legal issue.
107	3/15/2010	PW-Field	Oil pan is leaking in driveway	Oil & Grease	835 Corvina	Tijuana Estuary	Yes	Residential	No					None taken. Oil pan is only leaking slightly. All oil is still on driveway. Will re inspect.
108	3/18/2010	PW-Env	Excessive water emanating from property into storm drain.	Over Irrigation	1401 13th	Tijuana River	Yes	Residential	Yes					Warned leasing office about over watering in IB
109	3/19/2010	City Hall	Diesel Fuel Leak	Auto Fluids	155 Carnation	Pacific Ocean	Yes	Residential	No			yes		Fire ended up cleaning the spill. Chief Sotelo let them know to make responsible party clean up in future.

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110	3/22/2010	PW-Field	Vault Dewatering	Potable Water	1220 Elm	Tijuana Estuary	No	Residential	No					ATandT followed proper procedures of testing before legally dishcharging into the storm drain.
111	3/23/2010	General Public-Hotline	Concrete residue along curb	Construction Debris	268 Elkwood	Pacific Ocean	Yes	Residential	No	3/23/2010	3/23/2010			Sent NOV. No correction date.
112	3/23/2010	PW-Field	Poor construction BMPs	Sediment	Georgia and Palm	Otay River	Yes	Utility	Yes					Contacted CalAm because water main contractors had inpropperly set up BMPs around storm drain inltes.
113	3/23/2010	PW-Env	Power Washing	Multiple	705 3rd	Pacific Ocean	Yes	Construction	Yes					While on inspection came across a contractor who was power washing a fense in preparation for painting. Notified contractor of clean water regulations.
114	3/24/2010	PW-Field	Rust and Sediment into street via contractor	Sediment	1500 Seacoast DR	Tijuana Estuary	Yes	Construction	Yes	3/24/2010	3/24/2010	yes		Verbally warned contractor and told them to continue work when proper BMPs could be implemented to capture water. Also issued NOV to HOA and NUFlow
115	3/24/2010	Code Enfoce ment	Paint Chips washed into street	Paint	967 Iris	Tijuana Estuary	Yes	Mobile	Yes					Told Vance to be more careful when washing van. Suggested fiber roll
116	3/30/2010	PW-Field	Kitchen Drain Leak	Wash Water	1421 Louden LN	Tijuana Estuary	Yes	Residential	Yes					Verbally warned property owner to clean up mess by the end of the day. No NOV issued. Compliance achieved
117	4/1/2010	PW-Field	Trash, debris, and greenwaste in the public right of way	Trash & Debris	1251 12th St.	Tijuana Estuary	Yes	Residential	Yes		4/1/2010			Dave Garcias issues NOV for 5pm clean up. Dumpster to be removed by 10am 4/2/10
118	4/1/2010	PW-Env	Rust and Sediment into street	Sediment	Cortez and Seacoast	Tijuana Estuary	Yes	Residential	No					No violator located.
119	4/7/2010	Code Enfoce ment	Trash at site	Trash & Debris	1083 Cherry Ave.	Otay River	Yes	Construction	Yes		4/7/2010			NOV issued by Josh Lane with 4/12 correction date.
120	4/12/2010	City Hall	Cars parked on sidewalk and some leakage onto street	Auto Fluids	200 Palm Ave	Pacific Ocean	Yes	Fixed Commercial	Yes		4/12/2010			NOV issued by Josh Lane
121	4/12/2010	General Public-Hotline	Overgrown vegetation on sidewalk and property	Trash & Debris	1104 9th	Tijuana Estuary	Yes	Residential	Yes		4/12/2010			NOV issued by GN for correction on 4/19

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122	4/14/2010	PW-Env	Litter in ms4 and stockpiles on property	Trash & Debris	1402 Hemlock Ave.	Tijuana Estuary	Yes	Fixed Commercial	No		4/14/2010			
123	4/14/2010	General Public-Hotline	Oil pan is leaking in driveway and into storm drain. Also oil in street unchecked; Rain allowed to wash oil into ms4	Auto Fluids	835 Corvina	Tijuana Estuary	Yes	Residential	No		4/15/2010			
124	4/20/2010	Code Enfoce ment	WASHING CARPETS INTO ALLEY	Wash Water	757 7th st.	Tijuana Estuary	Yes	Residential	Yes		4/20/2010			NOV issued by Dave Garcias
125	4/20/2010	PW-Field	Broken Sprinkler/Overwa tering	Over Irrigation	1446 15th St.	Tijuana River	Yes	Residential	No					Violation was corrected by the time I arrived.
126	4/26/2010	PW-Field	Concrete cutting and wash water	Construction Debris	1486 Seacoast	Tijuana Estuary	Yes	Construction	Yes					Educated and informed violator on violation. The discharge was cleaned up and proper BMPs installed before any concrete cutting resumed.
127	4/27/2010	PW-Field	Water Line Leak	Potable Water	1025 9th	Tijuana Estuary	Yes	Utility	Yes					Cal Am Notified by Peter Lau and is responding
128	4/28/2010	PW-Field	Trash at La Posta et al. Alley	Trash & Debris	1266 IB Blvd	Tijuana Estuary	Yes	Fixed Commercial						Tony Cerrano reported "messy marvins" at la posta. I found unacceptable amount of debris. Final NOV to be issued to elminate regular problem.
129	4/29/2010	PW-Env	Barrel of haz waste in alley	Unknown	1104 Florence	Tijuana Estuary	Yes	Residential	Yes					Will be calling number on barrel to determine ownership.
130	4/30/2010	PW-Env	Bin of Gas	Auto Fluids	1049 12th	Tijuana Estuary	Yes	Residential	No					No owner identified. Resident told by fire to have it removed.
131	5/12/2010	PW-Env	Over Irrigation	Trash & Debris	805 10th	Otay River	Yes	Residential	No	5/14/2010				Sent to owner of property, business, and AMI property management advising them to discontinue
132	5/19/2010	PW-Field	Field ponding	Field Spill	533 8th st	Otay River	Yes	Residential			5/19/2010			Previous case involved resident not repairing Field lateral and leak. Repair was unpermitted and unsuccessful, so Tommy issued stop work.
133	5/20/2010	PW-Env	Over Irrigation	Trash & Debris	573 Delaware	Otay River	Yes	Residential		5/20/2010				Obvious over watering. Good opportunity for education.

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134	5/26/2010	PW-Field	Toilet Overflow	Field Spill	741 Palm	Otay River	Yes	Fixed Commercial	Yes			yes		Owners of Tunes and Lubes were informed of problem and cut water off immediately.
135	5/26/2010	City Hall	Pet waste in the alley and encroaching on others property	Pet Waste	1351 IB	Otay River	No	Residential	No					None. Citizen complaint cannot be verified. Will keep an eye on it.
136	5/26/2010	PW-Env	Driveway Washing	Wash Water	1207 5th	Tijuana River	Yes	Residential	Yes					Informed cleaning lady of rules regarding driveway washing. Encouraged use of broom to sweep driveway.
137	5/28/2010	PW-Env	Dog Washing	Wash Water	204 Evergreen	Pacific Ocean	Yes	Residential	Yes					Educated resident about washing pets over the grass.
138	6/3/2010	General Public-In person	sewer pit on property	Sewer Spill	533 8th	Otay River	Yes	Residential	Yes					Previous case involved resident not repairing sewer lateral and leak. Case was turned back over to code enforcement. 6/3 update -- code enforcement to order correct sewer violation
139	6/9/2010	PW-Field	Broken irrigation	Potable Water	182 Elkwood	Pacific Ocean	Yes	Residential	No	6/10/2010				Owner of complex unaware of problem. Spoke to cal am and problem was solved. I am not sure how.
140	6/11/2010	PW-Env	Irrigation sprays in street	Potable Water	847 Encina	Otay River	Yes	Municipal	Yes			yes		Spoke with Superintendant who had sprinklers adjusted accordingly
141	6/17/2010	PW-Env	hose left running	Potable Water	998 7th	Tijuana River	Yes	Residential	Yes					Spoke with resident, who did not realize hose was on. He turned it off.
142	6/17/2010	PW-Env	Broken irrigation	Potable Water	505 Elm	Tijuana River	Yes	Schools	Yes					Spoke with construction manager and francisco, maintenance supervisor. They deposited remaining water over landcaping and stopped the leak. Fiber roll was installed while leak was being taken care of.
143	6/21/2010	PW-Env	Broken irrigation	Potable Water	1187 13th	Tijuana River	Yes	Fixed Commercial	No					No need to correct problem. Once I arrive water was turned off.
144	6/21/2010	PW-Field	Vehicle repair in street	Auto Fluids	300 Daisy	Pacific Ocean	No	Residential	No					No evidence found
145	6/21/2010	PW-Env	Trash at dumpster	Trash & Debris	584 11th	Otay River	Yes	Residential	Yes					6/22: Left message with property manager to have mess cleaned up by tomorrow. Recived confirmation that it will be cleaned. 6/23: mess cleaned

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146	6/22/2010	PW-Field	Auto Repair in Street	Auto Fluids	13th St. at Palm Ave.	Otay River	Yes	Residential	Yes					Warned gentlemen conducting repair that they would have to do that off of the street. Upon reinspection repair was ceased.
147	6/22/2010	PW-Field	Auto Repair in Street	Auto Fluids	13th St. at Palm Ave.	Otay River	Yes	Residential	Yes					Warned gentlemen conducting repair that they would have to do that off of the street. Upon reinspection repair was ceased.
148	6/23/2010	PW-Field	Paint spill	Paint	Seacoast Dr and Citrus Ave	Otay River	Yes	Residential	No			yes		City graffiti crew cleaned spill.
149	6/24/2010	General Public-Hotline	City planter improperly irrigated	Over Irrigation	815 Encina	Tijuana River	No	Municipal	Yes			yes		City to investigate and readjust sprinkler.
150	6/24/2010	City Hall	Dirt being discarded in the street	Sediment	953 and 976 Holly Ave	Tijuana River	Yes	Residential	Yes					Verbally warned two workers to have cleaned up within two hours.
151	6/24/2010	PW-Env	Suspected pool leak causes large sediment dump into streets and storm drain	Sediment	1258/1260 13th St.	Tijuana River	Yes	Residential	Yes					after talking with residents of duplex I could not determine if they were at fault. No action to be taken other then to educate owner.
152	6/25/2010	General Public-Hotline	2 gallons of chain oil tossed from vehicle onto street/curb gutter	Oil & Grease	IB Blvd between 11th and Florida	Tijuana Estuary	No	Unknown	No			Yes		City contained the spill and used graffiti crew to clean the spill.
153	6/25/2010	General Public-Hotline	Vehicle maintenance in street	Oil & Grease	1211 Grainger	Tijuana River	No	Residential	No					Investigated report of vehicle maintenance in the street but no violation was observed. There was an old grease spot in the street.

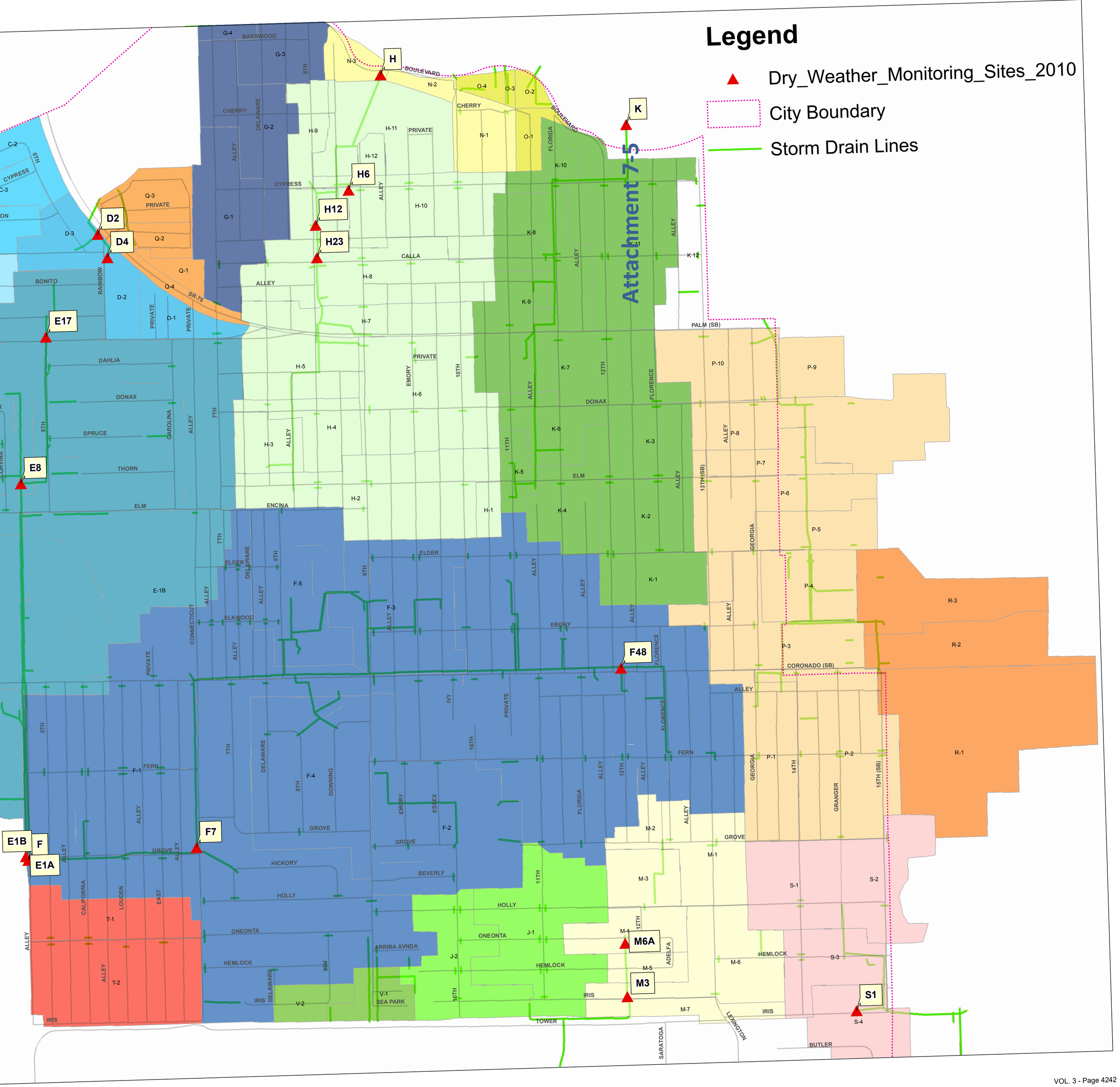
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City Boundary
Storm Drain Lines
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BONITO
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SPRUCE
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ELKWOOD
EBONY
CORONADO (SB)
FERN
GROVE
HICKORY
BEVERLY
HOLLY
ONEONTA
HEMLOCK
IRIS
TOWER
BUTLER
PALM (SB)
CALLA
ARRIBA AVNDA
SEA PARK
ALLEY
PRIVATE
BASSWOOD
DELAWARE
RAINBOW
CAROLINA
CONNECTICUT
CALIFORNIA
LOUDEN
EAST
DOWNING
EMORY
ESSEX
IVY
FLORIDA
FLORENCE
GEORGIA
GRANGER
ADELFA
SARATOGA
LEXINGTON
SR-75
4243

2010-2011 JURMP Annual Report

City of Imperial Beach

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9/7/2011

This Jurisdictional Urban Runoff Management Plan Annual Report contains a comprehensive description of the activities conducted during FY 2010-11 by the City to meet all requirements of section D of the Municipal Permit R9-2007-0001.

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CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	9-16-11

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Executive Summary

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order R9-2007-0001 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2010 and June 30, 2011 (FY2010-11).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following presents the highlights and major accomplishments for each JURMP component during this fiscal year.

Development Planning Component Section 2.0

The Development Planning Component involves incorporating storm water and urban runoff management into the development review process. This includes reviewing priority and non-priority development projects for necessary best management practices (BMPs) to manage storm water runoff prior to the issuance of grading or construction permits. Major accomplishments during this fiscal year included the following:

- Provided conditions for 13 discretionary projects and 7 CIP projects through Public Works requiring developers or contractors to implement minimum best management practices (BMPs) and low impact development (LID) to reduce pollutants and runoff to the maximum extent practicable (MEP). This compares to 24 for FY 2009-10, 24 projects during FY2008-09, 48 projects during FY 2007-08, and 51 projects during FY 2006-07.
- One high priority SUSMP project (Seacoast Inn redevelopment project) received final review and started construction during the reporting period. The project includes LID features and site design BMPs that meet the SUSMP requirements.
- Verified operation and maintenance of 22 permanent post construction treatment control BMPs which prevented 88 lbs of debris from entering the storm drain system.
- Incorporated the final Hydromodification Management Plan (HMP) criteria into the Imperial Beach SUSMP through resolution 2010-1112 on November 17, 2010.
- Developed an educational guidance document for meeting SUSMP requirements.
- Updated the City's Storm Water Management Plan form.
- Provided storm water education to developers and contractors through face-to-face interactions with City staff in meetings, during counter hours held at the Community Development Department, and through informative brochures provided during the application process.

Construction Component Section 3.0

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. All construction projects are required to have a City approved Storm Water Management Plan prior to the start of the project. Projects over 1 acre in size are also required to obtain coverage under the State General Construction Permit and be in compliance with the City's SUSMP. Major accomplishments during FY2010-11 included the following:

- Inspected a total of 104 active construction projects including 8 Capital Improvement Projects (CIP) and 1 high priority SUSMP project during the reporting period.
- Conducted 580 inspections to verify the proper installation and maintenance of construction phase BMPs.
- Responded to 7 reports of illegal discharges from construction sites, which resulted in 1 notices of violation (NOV), 3 stop work notices, and 3 verbal warnings.
- Discussed urban runoff management requirements with all applicants during the plan check process and verified BMP requirements during follow-up inspections.

Municipal Component Section 4.0

City employees continued to implement best management practices (BMPs) to prevent the discharge of water and pollutants from municipal facilities and activities. Examples of BMPs implemented during the reporting period include:

- Vehicle washing in wash bays that drain to the sanitary sewer.
- Preventive maintenance of City vehicles to prevent fluid leakage.
- Use of high-power vacuum to capture runoff from graffiti abatement, sidewalk grinding, and spill cleanup.
- Strict limitations on the use of fertilizers and pesticides in parks and landscape areas.
- Monitoring of sprinkler systems to prevent over-topping onto roadways.
- Alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.
- Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup.
- Annual storm water training for the Public Works Department on the use of BMPs in daily operations.
- Annual department training on storm water.

Other notable accomplishments during FY2010-11 include:

- Updated the Storm Drain Master Plan 2010.
- Updated GIS database for storm drainage basins and MS4 inventory.
- Inspected and cleaned 100% of catch basins and open grates and 80% of City storm drain lines through jetting. In total 6,585 pounds of sediment, trash, and organic materials were removed through storm drain cleaning activities. This compares to 8,230 pounds from last reporting period.
- Removed an additional 174.95 tons of material through frequent street sweeping of 127.9 curb miles of road. This compares to 177 tons from last reporting period.
- Removed 800 lbs of material from of the vortech storm water interceptor on Imperial Beach Blvd. The vortex separator removes sediment, floating hydrocarbons, and debris from all levels of flow.
- Quarterly maintenance of 13 municipal storm drain filter inserts that prevented 398 pounds of material from getting into the storm drain system.
- Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions.
- Continued operation of the Palm Avenue urban runoff diversion system at Seacoast Avenue and diverted 495,650 gallons of urban runoff and first flush rain water into the sanitary sewer.
- Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Industrial and Commercial Component Section 5.0

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress continues to be made on increasing knowledge on urban runoff management among local businesses. The following are the major accomplishments achieved during this reporting period:

- Conducted 65 inspections and 45 follow up inspections at high priority businesses, which include automotive repair shops, restaurants, bars, gas stations, car washes, grocery stores, and mobile home parks. Following each inspection the City mails the business owner a copy of the inspection form, an inspection report, and educational material for BMPs.
- Conducted 33 enforcement actions at businesses and issued 11 notices of violation as part of the enforcement and case resolution process. The City also conducted 45 follow up inspections as part of the annual storm water inspection program

Residential Component Section 6.0

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions,

and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

- Identified and mitigated 127 residential violations. The most commonly observed violations involved construction debris, automotive fluids, wash water, detergents or chemicals, chlorinated swimming pool water, and green waste.
- Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.
- Educated residents on environmental issues including storm water in the City's semi-annual newsletters and a quarterly newsletter distributed by EDCO.
- Participated in the Regional Education and Residential Sources workgroup as co-chair of the group and chair of the Underserved Target Audience sub-workgroup.
- Approximately 16,697 pounds of household hazardous waste, universal and e-waste, and used oil and other fluids were properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista. This compares to 10,377 from last reporting period.
- The City held its annual Citywide Garage Sale event followed next week by the annual Home Front Clean Up, which had 153 participants resulted in the proper disposal of 178.8 tons of trash, construction, metal, and green waste.

Illicit Discharge Detection and Elimination Component Section 7.0

The City endeavors to prevent discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to illicit discharges of urban runoff. This section of the report is due by December 15th per San Diego RWQCB Addendum No. 2 to Order No. R9-2007-0001 and therfore will be reported at that time.

Education Component Section 8.0

The City endeavors to implement a diverse education program that promulgates the storm water management requirements of the Municipal Permit. Education activities target the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in Imperial Beach) 5) residents, general public, and school children, and 6) underserved community. The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs.

Public Participation Component Section 9.0

Public involvement is an important component of implementing an effective JURMP program. Each year the JURMP annual reports are presented to City council through a public hearing process. The FY 2010-11 JURMP annual report was presented at the September 7th council meeting.

Fiscal Analysis Component Section 10.0

The approximate cost for implementing the components of the FY 2010-11 JURMP is $831,000.

Program Effectiveness Assessment Component Section 11.0

The Environmental Program Division is responsible for the effectiveness assessment of JURMP activities and implementation of BMPs for each major component of the storm water program. Effectiveness assessments are incorporated into the storm water program when ever feasible to gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters. Each section of this Annual Report incorporates a discussion on program effectiveness when applicable.

Special Investigation Component Section 12.0

This section provides additional details on special investigations during the reporting period that go above and beyond the JURMP requirements. The report contains information on the Tijuana River Bacteria Source Identification Study and the 2010 update for the City's Storm Drain Master Plan.

Non Emergency Fire Fighting Component Section 13.0

Pollution prevention activities related to non emergency fire fighting are reported in this section.

JURMP Revisions Section 14.0

Revisions made to any of the components of the JURMP are reported in this section.

JURMP Conclusions and Recommendations Section 15.0

The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

1.0 Introduction

The City of Imperial Beach is required to submit its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report each year by September 30th in compliance with the San Diego Regional Board Order Number R9-2007-0001 (Municipal Permit). The Annual Report contains a comprehensive description of all activities conducted by the City to meet all requirements of section D of the Municipal Permit. The annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. The reporting period for the Annual Report is the previous fiscal year July 1st to June 30th.

The following chapters in this Annual Report discuss the measures taken by the City to meet the regulatory requirements of the Municipal Permit and demonstrates that the City has achieved substantial compliance towards reducing sources of pollutants and urban runoff to the maximum extent practicable (MEP). All components of the JURMP are represented in this report with the exception of Section 7.0, Illicit Discharge Detection and Elimination Component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), which extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The City endeavors to reduce pollutants and runoff from development and redevelopment projects to the maximum extent practicable (MEP). This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Program Division of the Department of Public Works, and the contracted engineering firm, BDS Engineering. This section of the Annual Report discusses program management, implementation, and changes made during FY 2010-11 to the JURMP Development Planning Component.

2.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Development Planning component is described in the *2008 JURMP Section 4.0*. All development projects under went the appropriate environmental review and verification processes, treatment control BMP inventories were maintained on record, and each project including site inspections were tracked using the City's database system HTE. During last reporting period the City adopted the Countywide Model SUSMP into the local municipal code. The code was once again amended this reporting period through Ordinance Resolution 2010-1112 to include the final hydromodification requirements contained in the Model SUSMP. And finally, an update to the local building code was made through Ordinance Resolution 2010-1113 that further strengthens the ability of the City to require the implementation of BMPs by clarifying the authority of the City to regulate development from "all property, facilities, and structures".

2.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all development and redevelopment projects to implement measures to reduce pollutants and runoff to the MEP. Minimum BMPs and LID requirements were established in the *2008 JURMP Section 4.0* and are required as conditions during the development review process. In addition, discretionary projects valued over $50,000 get channeled through Public Works for enhanced pubic improvement conditions related to storm water. Priority development projects are also given special consideration under the Standard Urban Stormwater Mitigation Plan (SUSMP). All municipal staff is knowledgeable in the storm water program and receives annual training as described in the 2008 *JURMP Section 10.0*. The Community Development Department also held counter hours and face-to-face meetings throughout the reporting period to provide education and answer questions for developers. In addition, every development or redevelopment project regardless of its prioritization is formally inspected for applicable BMPs throughout the duration of the project. Continued maintenance of post construction treatment control BMPs are also verified annually. Finally, the City participated in the development of the regional Hydromodification Plan (HMP) and incorporated the final plan into the Imperial Beach municipal code through resolution ordinance number 2010-1112.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Development Planning program element:

- Table 2.1 provides an overview of the development and planning projects as it was implemented during FY 2010-11.
- Table 2.2 presents and describes targeted FY 2010-11 outcomes and results
- Table 2.3 provides the updated treatment control BMP inventory.
- Table 2.4 provides an inventory of FY 2010-11 Development Review and SUSMP projects.
- Attachment 2A and 2B include Resolutions for Municipal Code updates
- Attachment 2C presents the new Storm Water Management Plan form
- Attachment 2D presents the new guidance document for meeting SUSMP requirements

2.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Developers

Education is provided to the public through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. The efforts by the City to educate the public on development planning are discussed in the *2008 JURMP Section 4.0.* The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

2.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Developers

City staff works with developers to ensure that all development projects and redevelopment project reduce pollutants and runoff to the MEP. The *2008 JURMP Section 4.0* defines minimum BMP and LID requirements applicable to development and redevelopment in the City. The County Model SUSMP also requires additional controls for priority development projects.

During the reporting period the City continued to facilitate changes in behavior for development and redevelopment projects by reviewing and requiring conditions on projects to ensure program compliance. All BMPs are verified for proper implementation, operation, and maintenance throughout the duration of construction. City ordinances include appropriate sanctions to achieve compliance including non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance. Post construction maintenance and operation of treatment control BMPs are also verified and inspected annual by the Environmental Division.

2.6 Outcome Level 4: Source Load Reductions

Source load reductions from development and redevelopment projects are achieved through the implementation of BMPs and LID strategies. The City requires specific project conditions for treatment control BMPs, LIDs, and site design BMPs to reduce pollutants and runoff to the MEP. Source load reductions may not be directly measured in every case but can be implied by the proper implementation and maintenance of storm water BMPs.

Table 2.1 – Overview of Development Planning Inventory by Development Type and Priority Classification

Category/Project Type	Number	Description
A. Discretionary Development		
Discretionary projects reviewed for public enhancements for storm water	13	All development projects are required to undergo the City's urban runoff approval process and meet applicable requirements. Administrative procedures for development project review is discussed in *2008 JURMP Section 4.0.*
Capital Improvement Projects (CIP)	7	All CIP projects are required to complete a Storm Water Management Plan. Projects include street repairs, ADA ramps, sewer maintenance, and park improvements.
B. Priority Development (SUSMP)		
Sea Coast Inn (MF-616, 09-270, 09-050)		The redevelopment of the Sea Coast Inn was the only active SUSMP project during the reporting period that received a final plan check and approval for a building permit. Six other SUSMP projects are still in the planning stages and have not received a final plan check and therefore not being reported in this annual report.
C. Totals		
Discretionary Projects	13	These totals only represent development and redevelopment that were channeled through Public Works for review. Smaller discretionary projects (less than $50,000) are reviewed by Community Development for storm water compliance and do not generally require public enhancements. Complete list of development and SUSMP projects that received an environmental review for storm water during the reporting period is provided in Table 2.4.
Priority Development (SUSMP) Projects	1	

JURMP Sections	Description of FY 2010-11 Changes
4.0 and Appendix C	I.B.M.C. 8.32 Standard Urban Storm Water Mitigation Plan was updated again this reporting period to include the Final Hydromodicifation requirements of the Countywide Model SUSMP (Attachment 2A). The City building code was also amended to include greater authority to require BMPs for redevelopment projects (Attachment 2B). The City also updated its Storm Water Management Plan form for development projects (Attachment 2C) and developed a guidance document for meeting SUSMP compliance for priority development projects (Attachment 2D).

Table 2.2 - Development Planning Component Targeted Outcomes and Results

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	Incorporated Final HMP into Municipal Code	Complete	Updates made to the Imperial Beach Municipal Code 8.32 on November 17th, 2010 to include the elements of the Countywide Model SUSMP Final Hydromodification requirements. An update to the City Building Code 15.02 was also on November 17th, 2010 to provide greater authority to the City to require the implementation of BMPs. (Attachment 2A and 2B)
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update Storm Water program for consistency with program updates	Municipal code, storm water forms, and procedures were updated as a result of the HMP and CGP update.	Complete	Updates made to Imperial Beach Municipal Code 8.32 to include the requirements of the HMP and to Municipal Building Code 15.02. The City also updated its Storm Water Management Plan (Form 7A and 7B) to provide further guidance for SUSMP, HMP, and General Construction Permits. This update created one simplified form called the Imperial Beach Storm Water Management Plan (Attachment 2C). The City also developed a guidance document for meting SUSMP compliance, which is also presented in Attachment 2D.
c) Year-End Program Review			
Complete annual year-end program review	Reviewed program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Inventory of Development and Redevelopment Projects			
Update development and redevelopment inventory	Updates made to the inventory throughout the reporting period	Complete	The City maintains a database of active development projects and development review status on the City's database software HTE. Annual inventories are also maintained in excel with the Environmental Division.
e) Inventory of Treatment Control BMPs and Maintenance			

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Update inventory for treatment control BMPs	Updates made to inventory and maintenance verified	Complete	The Environmental Division maintains an inventory of treatment control BMPs and ensures annual maintenance compliance through inspections and contact with property owners.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Project Approval			
Require development projects to implement applicable project requirements, BMPs, and track information	BMPs are required as conditions for all development projects and BMPs are verified through the project application process	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. The City's project review process further requires that any new construction or modification with a valuation more than $50,000 be subject to public improvements. Projects that meet the $50,000 criterion are routed from the Community Development Department to the Public Works Department for a review in regard to storm water quality public improvements. SUSMP projects are also required to implement additional storm water management controls and BMPs. SUSMP projects are reviewed by Community Development, Public Works, and contract Engineer BDS for compliance with all storm water regulations. All project applications are tracked through the permit approval process and recorded in HTE, excel databases, and Master File system.
b) Confirmation of SUSMP and HMP BMPs			
Verify that all applicable SUSMP and HMP BMPs are applied to priority projects and that the BMPs are inspects prior to occupancy	All SUSMP eligible projects were held to full SUSMP requirements and verified through inspections during construction and prior to occupancy. No projects required HMP interim criterion.	Complete	One SUSMP high priority project (Seacoast Inn) received a final plan check and was approved for a building permit during the reporting period. Six other SUSMP projects are still in the planning stage and have not received a final plan check and therefore not reported in this annual report. Storm water BMPs are reviewed during the plan check process. BMPs are then verified during construction through field inspections. The final sign off on the project is not complete until the City receives a signed maintenance agreement for continuous maintenance of the BMPs from the property owner.

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
c) Example of a Priority Development Project and SUSMP BMPs			
List one example of a priority development project that was conditioned to meet SUSMP requirements	Seacoast Inn Redevelopment Project	Complete	Construction on the Seacoast Inn commenced this reporting period. The SUSMP component of the project received multiple reviews and comments from Community Development, Public Works, and contracted engineering firm BDS prior to the issuance of construction permits. The project is required to implement LID, source control, and treatment control BMPs and provide a post construction BMP maintenance agreement. The building plans include applicable BMPs that will be in construction during the next reporting period. Weekly inspections will ensure that the site is built according to approved plans.
d) Priority Development Projects implementing BMPs with low removal efficiency rankings			
Listing and feasibility analysis of SUSMP projects using BMPs with low removal efficiency rankings	No projects implemented BMPs with low removal efficiency rankings	Complete	Development projects are required to implement BMPs that target priority pollutants. The selection of BMPs is verified during the plan check process. The City only allows less efficient BMPs after a feasibility analysis proves there is no better alternative.
e) HMP Collaboration			
Description of HMP development and collaboration	Participated in the development of the Final HMP	Complete	Participated in the development of the Countywide HMP through the Land Development Copermittee Workgroup. The Final HMP was approved by the Regional Board on 7/14/10 and subsequently incorporated in the Imperial Beach Municipal Code on 11/17/10.
f) Municipal Staff Training			

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Ensure that municipal staff are knowledgeable on storm water BMPs, SUSMP, and HMP requirements	Staff educated through meetings, workshops, and training	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. In addition the Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received training outside the City on multiple storm water issues. Training topics include SUSMP, HMP, TMDLs, General Construction Permit, and code enforcement. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.
g) Developer Education			
Provide education for developers	Counters hours held and meetings conducted during project review and throughout project	Complete	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Educational material is also available online, at City Hall, Public Works, and provide during building application process.
h) Special Investigations			
---	---	---	Special investigations are not routinely conducted as part of the implementation strategy for this program element.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)			
Increase staff and developer knowledge regarding applicable program content	Surveys were provided to Community Development staff during the first three reporting periods.	See Education Component Section 8.0.	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND DEVELOPERS)			
a) Procedural and Administrative Behaviors			

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Review projects and prescribe necessary conditions of approval and BMPs	13 discretionary projects, 7 CIPs, and 1 SUSMP project reviewed for conditions of approval	Complete	The City reviews all proposed projects and ensures that all necessary conditions and BMPs are met. High priority development projects are held to more stringent requirements including SUSMP, HMP, and General Construction Permit. The Department of Public Works reviews and requires additional conditions on all Discretionary Projects greater than $50,000 in costs. Once a project becomes active the City inspects and verifies that all BMPs are implemented. The Public Works Inspector also provides continual oversight during project management of CIP projects.
b) BMP Implementation, Operation and Maintenance			
Inspect projects for BMP compliance and verify BMP implementation	13 Projects, 7 CIPs, and 1 SUSMP Project reviewed and received project conditions All active projects inspected for BMPs	Complete	The Building Division, Code Enforcement, Environmental Division, and Public Works Inspector conduct inspections at active development projects for compliance of minimum BMPs. The Public Works Inspector conducts inspections at all CIP projects daily. The Building Inspector conducts inspections of all Discretionary permit projects and ensures the implementation of BMPs for SUSMP projects. Code Enforcement and Environmental Division also respond to reports of storm water violations from development projects. Construction inspections of Discretionary Projects are covered in the next Section of this Annual Report.
Verify operation and maintenance of treatment control BMPs	22 out of 22 or 100% compliance. Corrections were all made on a voluntary basis without need for administrative enforcement.	Complete	The City annually verifies operation and maintenance of treatment control BMPs to ensure compliance with program. Verification is made through written contact with property owner or manager and often followed up with an inspection. At a minimum all high priority treatment control BMPs are inspected for operation and maintenance annually.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)			
a) Treatment Control BMPs			

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Maintenance of treatment control BMPs	88.08 pounds of material removed from treatment control BMPs	Complete	The City verifies maintenance of treatment control BMPs and when possible tracks the amount of material collected during maintenance activities.
b) Low Impact Development (LID) and Site Design BMPs			
Implement LID and site design BMPs	No projects required LID BMPs during the reporting period	Complete	During the project review the City requires LID and site design BMPs for high priority projects. Load reductions are not tracked but are implied for LID BMPs.

Table 2.3
Treatment Control BMP Inventory and Maintenance Tracking

ID	Type	LOCATION	HU and WATERSHED	Installation Date	Party Responsible	Affiliation	Priority	Maintenance Verification Date	# Inspections	Findings Summary	Corrective Actions Summary	Waste (lbs)
1372-13-1	Drain Guard, sediment and hydrocarbon filters	1372 13TH ST	910.20 Otay	10/1/08	Cha-Cha Cervantes	Property Manager	High	3/8/11	1	Cleaning and Maintenance Required	Cleaned and Maintained	4
1450-IR-1	Sump Pump and Screen Mesh	1450 IRIS AVE	911.11 Tijuana	6/27/05	Alan Jurlina	Property Manager	High	6/30/11	1	Cleaning and Maintenance Required	Cleaned and Maintained	8
861-11-1	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	6/30/11	2	Cleaning Required	Extension due to military deployment	0
861-11-2	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	6/30/11	2	Cleaning Required	Extension due to military deployment	0
861-11-3	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	6/30/11	2	Cleaning Required	Extension due to military deployment	0
481-PA-1	Drain Guard in back	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	6/3/11	1	Maintenance required	Corrections Required	n/a
481-PA-2	sediment trap IN BACK	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	6/3/11	3	Maintenance required	Maintained after enforcement action	n/a
481-PA-3	hydrocarbon filter in front parking area	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	6/3/11	3	Maintenance required	Maintained after enforcement action	n/a
836-PA-1	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	3/5/11	2	Repair and maintenance required	Repaired and maintained	1.7
836-PA-2	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	3/5/11	2	Cleaning Required	Cleaned and Maintained	3.25

ID	Type	LOCATION	HU and WATERSHED	Installation Date	Party Responsible	Affiliation	Priority	Maintenance Verification Date	# Inspections	Findings Summary	Corrective Actions Summary	Waste (lbs)
836-PA-3	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	3/5/11	2	Cleaning Required	Cleaned and Maintained	3.5
836-PA-4	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	3/5/11	2	Cleaning Required	Cleaned and Maintained	2.75
836-PA-5	KriStar, Flo Gard Plus Catch Basin Insert w/ boom.	888 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	Low	3/5/11	2	Cleaning Required	Cleaned and Maintained	2
836-PA-6	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	888 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	Low	3/5/11	2	Cleaning Required	Cleaned and Maintained	2.35
1101-PA-1	KriStar, Catch Basin with insert	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	3/22/11	3	Cleaning and Maintenance Required	Cleaned and Maintained	28.4165
1101-PA-2	KriStar, Catch Basin with insert	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	3/22/11	2	Cleaning Required	Cleaned	1.702
1101-PA-3	KriStar FGP-0002	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	3/22/11	2	Cleaning and Maintenance Required	Cleaned and Maintained	28.4165
1101-PA-4	KriStar FLOGARD Downspout Filter FG-DS4	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	3/22/11	2	Cleaning and Maintenance Required	Cleaned and Maintained	0
1126-13-1	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	3/15/11	2	Cleaning Required	Cleaned	0.5
1126-13-2	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	3/15/11	2	Cleaning Required	Cleaned	0.5
1126-13-3	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	3/15/11	2	Cleaning Required	Cleaned	0.5

ID	Type	LOCATION	HU and WATERSHED	Installation Date	Party Responsible	Affiliation	Priority	Maintenance Verification Date	# Inspections	Findings Summary	Corrective Actions Summary	Waste (lbs)
1126-13-4	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	3/15/11	2	Cleaning Required	Cleaned	0.5
								Totals	**44**			**88.08**

Table 2.4 Development Review and SUSMP Project Inventory FY 2010-11

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Water Pollution Control Plan/SWPPP	Construction BMPs
No Date	1	-270, 09-050, 09-0	Yes	Plan Check	800 Seacost	Hotel	X	X	X	X	X	X	X	X	X	X	X
10/5/2010	2	MF1058	No	Plan Check	555 Florence	SFR	X	X			X				X	X	X
7/19/2010	3	MF1047	No	Plan Check	508 11th	Detached dwelling	X	X			X			X		X	X
7/22/2010	4	MF1044	No	Plan Check	825 Imperial Beach	Wireless Unit	X				X			X			
10/15/2010	5	10-299	No	Plan Check	979 Connecticut	remodel	X	X			X			X		X	X
10/15/2010	6	10-525	No	Plan Check	357 Elkwood	Remodel	X	X			X			X		X	X
10/15/2010	7	10-579	No	Plan Check	315 Ebony	Building addition	X	X			X			X		X	X
3/2/2011	8	BP#11-13	No	Plan Check	539 Calla	Building addition	X	X			X			X		X	X
3/2/2011	9	MF863	No	Plan Check	1120 and 1150 13th	Comemrcial remodel	X	X			X			X		X	X
3/2/2011	10	11-118	No	Plan Check	622 Ocean Lane	Remodel SFR	X	X			X			X		X	X
3/7/2011	11	MF 1064	No	Plan Check	829 Emory	Residental Care Facility	X	X			X			X		X	X
3/7/2011	12	11-119	No	Plan Check	880 Palm	Office Retail Remodel	X	X	X		X			X		X	X
4/3/2011	13	11-224	No	Plan Check	823 Corvina	SFR Remodel	X	X			X			X	X	X	X
5/12/2011	14	11-185	No	Plan Check	351 Elder	Building Addition	X	X			X			X	X	X	X
12/20/11	CIP 1	S10-201	No	Plan Check	13th and Ebony	Ped ADA Ramps										X	
4/26/11	CIP 2	S09-102	No	Plan Check	825 Imperial Beach	Civic Center Crosswalk (CDBG)										X	
6/6/11	CIP 3	S11-102	No	Plan Check	IB and Louden Lane	Crosswalk (CDBG)										X	
9/21/10	CIP 4	W06-101	No	Plan Check	504 Oneonta	PS 7 Wet Well Replacement										X	
1/21/11	CIP 5	S10-101	No	Plan Check	Mutiple	RTIP (Street Improvements)										X	
9/21/10	CIP 6	W05-401	No	Plan Check	Multiple	Sealing & Repair Sewer										X	
8/18/10	CIP 7	P07-101	No	Plan Check	Sports Park	Skate Park Element										X	

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Attachment 2A
Municipal Code Update for HMP

ORDINANCE NO. 2010-1112

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IMPERIAL BEACH, CALIFORNIA, UPDATING CHAPTER 8.32 AMENDING THE CITY'S STANDARD URBAN STORMWATER MITIGATION PLAN (SUSMP) TO INCLUDE CRITERIA FOR HYDROMODIFICATION MANAGEMENT

WHEREAS, the City of Imperial Beach, pursuant to the Water Quality Permit issued on January 24, 2007, is required to develop and implement a program to address urban runoff pollution issues in development planning for public and private projects as mandated by the Regional Water Quality Control Board (San Diego Region).

WHEREAS, the requirement to implement a program for development planning is based on Federal and State Statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA"), and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The municipal permit requires the implementation of a Jurisdictional Urban Runoff Management Program (JURMP), which has been adopted by the City of Imperial Beach pursuant to Resolution No. 2008-6602, and subsequently amended.

WHEREAS, pursuant to the mandates established under the Water Quality Permit, state and federal statutes that ensure discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards; that effectively prohibit non-stormwater discharges in urban runoff; and reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

WHEREAS, the adoption of this Ordinance shall implement policies that establish a hydromodification management criteria applicable to new development and redevelopment applications that fall under priority project categories to ensure that development does not increase urban runoff flow rates and velocities that would adversely impact downstream habitat or conditions.

WHEREAS, policies contained in this Ordinance amendment will incorporate into the Imperial Beach Municipal Code the *Hydromodification Management Plan located in Appendix B of the Countywide Model SUSMP (Standard Urban Stormwater Mitigation Plan Requirements for Development Applications)*, dated October 18, 2010, and any subsequent amendments as part of the required iterative process mandated under state and federal law.

NOW, THEREFORE, IT IS ORDAINED BY THE CITY COUNCIL OF THE CITY OF IMPERIAL BEACH AS FOLLOWS:

Section 1. Chapter 8.32 of the Imperial Beach Municipal Code is hereby amended to read as shown in Attachment "A".

EFFECTIVE DATE: This Ordinance shall be effective thirty (30) days after its adoption. Within fifteen (15) days after its adoption, the City Clerk of the City of Imperial Beach shall cause a summary of this Ordinance to be published pursuant to the provisions of Government Code section 36933.

INTRODUCED AND FIRST READ at a regular meeting of the City Council of the City of Imperial Beach, California, on the 17th day of November 2010; and **THEREAFTER ADOPTED** at a regular meeting of the City Council of the City of Imperial Beach, California, on the 1st day of December 2010, by the following vote:

AYES:	**COUNCILMEMBERS:**	**BRAGG, MCCOY, ROSE, KING, JANNEY**
NOES:	**COUNCILMEMBERS:**	**NONE**
ABSENT:	**COUNCILMEMBERS:**	**NONE**

James C. Janney
JAMES C. JANNEY, MAYOR

ATTEST:

Jacqueline M. Hald
JACQUELINE M. HALD, CMC
CITY CLERK

APPROVED AS TO FORM:

Jennifer M. Lyon
JENNIFER M. LYON
CITY ATTORNEY

Attachment 2B
Municipal Code Update for Building Code

ORDINANCE NO 2010-1113

AN ORDINANCE OF THE CITY OF IMPERIAL BEACH AMENDING TITLES 8 AND 15 OF THE IMPERIAL BEACH MUNICIPAL CODE BY AMENDING CHAPTERS 8.50, 15.06, 15.16, 15.28, AND 15.32, ADDING CHAPTERS 15.02, 15.04, 15.38, AND 15.40 AND REPEALING CHAPTERS 8.88, 15.18, AND 15.36, ALL BY ADOPTING THE CALIFORNIA BUILDING STANDARDS CODE, 2010 EDITION, WITH CERTAIN AMENDMENTS, ADDITIONS, AND DELETIONS, AND ADOPTING THE UNIFORM CODE FOR THE ABATEMENT OF DANGEROUS BUILDINGS, 1997 EDITION

WHEREAS, Health & Safety Code Section 17958 mandates that the City of Imperial Beach shall adopt ordinances or regulations imposing the same requirements as are contained in the regulations adopted by the State pursuant to Health & Safety Code Section 17922; and

WHEREAS, the State of California is mandated by Health & Safety Code Section 17922 to impose the same requirements as are contained in the 2010 California Building Standards Code, Title 24 of the California Code of Regulations; and

WHEREAS, the State of California is mandated by Health & Safety Code Section 17922 to impose the same requirements as are contained in the 2010 California Building Standards Code, together with the City of Imperial Beach amendments, which collectively shall be the City of Imperial Beach Building Code, for the purpose of prescribing regulations in the City of Imperial Beach; and

WHEREAS, local amendments adopted by the City of Imperial Beach shall take precedence over the 2010 California Building Standards Code; and

WHEREAS, Health & Safety Code Section 17958.5 permits the City of Imperial Beach to make such changes or modifications to the 2010 California Building Standards Code as are reasonably necessary because of local conditions; and

WHEREAS, Health & Safety Code Section 17958.7 requires that the City of Imperial Beach before making any changes or modifications to building standards pursuant to Section 17958.5 make express findings that such changes or modifications are needed due to climatic, geographic, or topographic conditions and files the same with the California Building Standards Commission; and

WHEREAS, the City Council of the City of Imperial Beach does herewith find that the city has certain climatic, geologic, and topographical features that can have a deleterious effect on the safety and fitness of property, buildings and structures; and

WHEREAS, the City of Imperial Beach finds that the modifications and changes to the 2010 California Building Standards Code are reasonably necessary because of the local climatic, geological, and topographical conditions as identified in each Attachment; and

WHEREAS, certain amendments to the 2010 California Building Standards Code serve to mitigate to the extent possible said deleterious effects; and

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WHEREAS, Sections 50022.1 through 50022.10, inclusive, of the Government Code provide authority for the adoption by reference of codes, or portion of such codes; and

WHEREAS, if a city does not make changes then the California Building Standards Code becomes effective in such city 180 days after publication of the California Building Standards Code by the California Building Standards Commission; and

WHEREAS, amendments to provisions relating to civil, administrative, or criminal procedures and remedies available for enforcing violations do not require findings pursuant to Health & Safety Code Section 17958.7.

NOW THEREFORE, the City Council of the City of Imperial Beach does ordain as follows:

SECTION 1

That a certain document, one (1) copy of which is on file in the office of the Building Official of the City of Imperial Beach, being marked and designated as the 2010 California Building Standards Code, including Appendix Chapters, as published by the International Code Council, be and is hereby adopted as the Building Code of the City of Imperial Beach, in the State of California regulating and governing the conditions and maintenance of all property, facilities, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Building Code on file in the office of the City of Imperial Beach are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Sections 2-9 of this ordinance.

SECTION 2: Chapter 8.50 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment A.

SECTION 3: Chapter 15.02 is added to the Imperial Beach Municipal Code to read as set forth in Attachment B.

SECTION 4: Chapter 15.04 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment C.

SECTION 5: Chapter 15.06 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment D.

SECTION 6: Chapter 15.16 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment E.

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SECTION 7: Chapter 15.28 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment F.

SECTION 8: Chapter 15.32 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment G.

SECTION 9: Chapter 15.38 is added to the Imperial Beach Municipal Code to read as set forth in Attachment H.

SECTION 10: Chapter 15.40 is added to the Imperial Beach Municipal Code to read as set forth in Attachment I.

SECTION 11: Chapter 8.88 of the Imperial Beach Municipal Code is hereby repealed in its entirety.

SECTION 12: Chapter 15.18 of the Imperial Beach Municipal Code is hereby repealed in its entirety.

SECTION 13: Chapter 15.36 of the Imperial Beach Municipal Code is hereby repealed in its entirety.

SECTION 14

That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The City of Imperial Beach hereby declares that it would have passed this ordinance, and each section, subsection, clause, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, and phrases be declared unconstitutional.

SECTION 15

That nothing in this ordinance or in the Building Standards Code hereby adopted shall be construed to affect any suit or proceeding pending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Sections 11, 12 and 13 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

SECTION 16

The City Clerk is directed to prepare and have published a summary of this ordinance no less than five days prior to the consideration of its adoption and again within 15 days following adoption indicating votes cast pursuant to the provisions of Government Code section 36933. Upon passage, the City Clerk shall transmit a copy of this Ordinance to the California Building Standards Commission pursuant to Health and Safety Code section 17958.7.

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SECTION 17
That this ordinance and the rules, regulations, provisions, requirements, orders, and matters established and adopted hereby shall take effect and be in full force and effect **30 days** from and after the date of its final passage and adoption.

INTRODUCED AND FIRST READ at a regular meeting of the City Council of the City of Imperial Beach, California, on the 17th day of November 2010; and **THEREAFTER ADOPTED** at a regular meeting of the City Council of the City of Imperial Beach, California, on the 1st day of December 2010, by the following vote:

AYES:	**COUNCILMEMBERS:**	**BRAGG, MCCOY, ROSE, KING, JANNEY**
NOES:	**COUNCILMEMBERS:**	**NONE**
ABSENT:	**COUNCILMEMBERS:**	**NONE**

James C. Janney
JAMES C. JANNEY, MAYOR

ATTEST:

Jacqueline M. Hald
JACQUELINE M. HALD, CMC
CITY CLERK

APPROVED AS TO FORM:

Jennifer M. Lyon
JENNIFER M. LYON
CITY ATTORNEY

Attachment 2C
Storm Water Management Plan Form

City of Imperial Beach Approval
Approved: _____ Date: _____

City of Imperial Beach
Storm Water Management Plan

Section 1: Required Informaion

Location/Address of Proposed Project		Permit Type (Building, Grading, or Encroachment)	
		Property Owner Name	Phone Number
Projected Start Date:	Projected End Date:	Contractor	Phone Number

Overview of Storm Water Pollution Prevention requirements

The City reviews all proposed development and redevelopment projects, including Public Works Capital Improvement Projects, to ensure that construction activities are in compliance with the federal Clean Water Act, the State Water Code, and local storm water ordinances. Proposed projects must complete a Storm Water Management Plan prior to issuance of any Construction, Grading, or Encroachment Permit.

The purpose of the Storm Water Management Plan is to document the Best Management Practices (BMPs) that will be implemented in order to prevent pollutants (e.g., sediment and other wastes) caused by land disturbance and construction from entering storm water conveyances and receiving waters. It also certifies that the project proponent will maintain construction site BMPs to ensure their continued effectiveness. Upon City approval, the Storm Water Management Plan becomes an important part of the Construction, Grading, or Encroachment Permit, and is subject to enforcement by City of Imperial Beach inspectors and others.

Determine if the project meets the category of "Priority" or "Standard" Development Project

Most projects in the City that require a building, grading, or encroachment permit fall under the category of Standard Development Project. However, larger projects that meet the following criteria are considered Priority Development Projects and require the preparation of a Standard Urban Storm Water Mitigation Plan (SUSMP) as part of the project design submittals:

1. Redevelopment project that adds or replaces 5,000 ft^2 of impervious area
2. Housing development of 10 or more units
3. Commercial development greater than 5,000 ft^2
4. Automotive repair shop
5. Restaurant
6. Parking lot greater than 5,000 ft^2
7. Street, road, or highway that add or replace 5,000 ft^2
8. Project discharging directly to or adjacent to an Environmentally Sensitive Area (ESA)

Select one box below that identifies the project category

☐ **Priority Development Project** *(SUSMP and Storm Water Management Plan required)*	☐ **Standard Development Project** *(Storm Water Management Plan required)*

Priority Development Projects over 1 acre in size

Priority Development Projects that disturb one or more acres of soil also need to have coverage under the State Water Resource Control Board General Construction Permit (Order No. 20009-009-DWQ), which requires the development of a Storm Water Pollution Prevention Plan (SWPPP) that is prepared by a qualified SWPPP developer (QSD). The SWPPP can substitute for the Storm Water Management Plan requirements in Section 2 of this application.

Projects equal to or greater than 1 acre must provide a WDID number from the SWRCB.
WDID (if applicable): _____

Identify construction storm water site inspection prioritization

Construction site inspections are conducted as necessary throughout the year to verify the proper implementation of storm water BMPs. Additional inspections during the rainy season (October 1 - April 30) are required for project sites that have an increased potential to cause or contribute to storm water pollution. Inspection frequencies are based on a prioritization ranking of High, Medium, or Low.

High priority sites will be subject to weekly construction-phase storm water BMP inspections during the rainy season, Medium priority sites will be subject to monthly construction-phase storm water BMP inspections during the rainy season, and Low priority sites will continue to receive inspections as needed and not subject to increased inspections during the rainy season.

Select one box from below that best identifies the inspection priority

☐ **High Priority**	☐ **Medium Priority**	☐ **Low Priority**
Project is greater than one acre and includes grading, excavation, or outside demolition.	Project is less than one acre and includes grading, excavation, or outside demolition.	No grading, excavation, or outside demolition will occur.

Determine if the project is exempt from completing Section 2

Projects that meet one of the criteria below may be exempt from complete a detailed Storm Water Management Plan outlined in Section 2 of this application. Please note that if your project is exempt from Section 2 you are still required to adhere to the Imperial Beach storm water ordinance in Municipal Code 8.30 and implement good housekeeping BMPs to prevent storm water pollution from your project site. Projects that meet one of the following categories can skip Section 2 of this Storm Water Management Plan:

1. The project has already prepared a SWPPP under the Construction General Permit.
2. The project is not a construction or redevelopment project.
3. Project involves the construction of underground or overhead linear utility lines less than one acre in total area.
4. Project does not disturb soil and involves construction inside an existing building.
5. The project qualifies as routine maintenance that replaces or renews existing materials because of failed or deteriorating condition:
   - Roof, deck, or fence replacement
   - Pavement spot repair, resurfacing asphalt, slurry seal, pedestrian ramps, or sidewalk

☐ **Project not required to complete Section 2 of Storm Water Management Plan document**

(Check box if applicable and sign the Certification Statement in Section 3)

Indicate which exemption applies: _____

Section 2: Addional Project Information and Best Management Practices

Estimated amount of disturbed project area:_____ acre(s)

Project Description:

(Include project site description information on location, watershed drainage, 303(d) listed pollutants, potential contaminates generated from project, and references to applicable drawings or plans.)*

*303(d) Listed Pollutants: **Pacific Shoreline**: PCBs, Bacteria; **Tijuana River and Estuary**: Bacteria, Nutrients, Metals, Pesticides, Trash, Sediment

Construction / Grading Plan BMP Checklist

The following information shall be shown on plans:

- ☐ The project boundaries
- ☐ The footprint of any existing structures and facilities
- ☐ The footprint of all structures and facilities to be constructed
- ☐ The limits of grading
- ☐ The existing and proposed grades of the site
- ☐ The location(s) where runoff from the site may enter storm drain(s), channel(s), and/or receiving waters
- ☐ Location of proposed storm water BMPs

Best Management Practices	CASQA Storm Water BMP Fact Sheet	✓ BMP Selected	Comments
Select each of the BMP fact sheets that apply. Include selected BMPs on Plans and/or provide sufficient explanation as comments.			
Erosion Control BMPs			
Geotextiles, Plastic Covers, or Erosion Control Blankets *This BMP consists of using plastic, visqueen, or other materials to cover disturbed soil and/or dirt stockpiles to reduce erosion from rainfall impact. The material used for cover must be firmly held in place with sandbags or otherwise keyed into the soil as described in BMP specifications.*	EC-7		
Mulch, Straw, Wood Chips, Soil Binders, Compost *This BMP consists of applying mulch or other binding material to temporarily protect exposed soils from erosion by rainfall impact or wind. These are temporary methods of protection that must be inspected and maintained.*	EC-3, EC-5, EC-6, EC-8, EC-14, EC-16		
Perimeter Control BMPs			
Silt Fence *Silt fences are made of filter fabric that has been entrenched, attached to supporting poles, and is sometimes backed by a plastic or wire mesh for support. The silt fence detains sediment-laden water, promoting sedimentation behind the fence. It is primarily used as a perimeter control and is not effective unless trenched and keyed into the soil.*	SE-1		
Fiber Roll / Straw Waddle *Fiber rolls consist of straw, flax, or other similar materials bound into a tight, tubular roll. They are often used on the face of slopes to intercept runoff. They may also be effective as perimeter controls for sites with little to no slope. Fiber rolls are not effective unless properly installed (trenched and staked into the soil per specifications).*	SE-5		
Gravel Bag / Sandbag Barrier *This BMP consists of placing a series of gravel- or sand-filled bags on a level contour to intercept sheet flows. Gravel bags pond sheet flow runoff, allowing sediment to settle out, and release runoff slowly as sheet flow. Sandbags also pond sheet flow runoff, but allow little if any runoff to be released. These BMPs are often used around stockpiles or as a perimeter control.*	SE-6, SE-8, SE-9		
Wind Erosion Control BMP			
Wind Erosion Control *This BMP consists of applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities. Care should be taken so that water used for dust control is not allowed to move off site.*	WE-1		
Storm Drain Inlet Protection			
Storm Drain Inlet Protection *Storm drain inlet protection consists of filter fabric covering the opening of the storm drain, drop inlet, or curb inlet. The fabric must be held in place securely with either sandbags or gravel bags. Frequent inspection and maintenance is required.*	SE-10		

Tracking Control BMPs			
Stabilized Construction Entrance *This BMP consists of a pad of aggregate underlain with filter cloth at the entrance of a construction site where traffic will be entering and leaving to or from a public right of way. The purpose is to reduce the tracking of sediment onto streets. A stabilized construction entrance is unlikely to be 100% effective, and must be used in conjunction with sweeping and good housekeeping practices to ensure that sediment tracked off-site does not enter the storm drain system.*	TC-1		
Entrance/Outlet Tire Wash *A tire wash is an area located at stabilized construction access points to remove sediment from tires and under carriages and to prevent sediment from being transported onto public roadways.*	TC-3		
Street Sweeping and Vacuuming *Street sweeping and vacuuming includes use of self-propelled and walk-behind equipment to remove sediment from streets and roadways, and to clean paved surfaces in preparation for final paving. Sweeping and vacuuming prevents sediment from the project site from entering storm drains or receiving waters.*	SC-7		

General Site Management BMPs			
Good Housekeeping *Good housekeeping ensures that the construction site is kept tidy and free of excessive debris. It also includes ensuring that any sediment or trash tracked from the site onto the public right of way (through whatever means) is swept up or otherwise collected at the end of the business day.*	-	✔	
Employee & Sub-contractor Training *All employees and sub-contractors working on site shall be trained with regard to applicable storm water management requirements. Training shall also be provided on proper techniques for installing and maintaining BMPs.*	-	✔	
Material Delivery, Storage, & Use *Minimize the storage and use of hazardous materials on site, and store materials in a designated area with secondary containment if appropriate.*	WM-1, WM-2		
Stockpile Management *Stockpiles of soil, asphalt, concrete rubble, "cold mix", and wood pressure-treated with metallic products should be covered with plastic or a comparable material at all times during the rainy season, and prior to the onset of precipitation during the dry season.*	WM-3		
Spill Prevention & Control *Reduce the chance for spills, cleanup leaks and spills immediately, and report spills to City personnel.*	WM-4, NS-6		
Waste Management *These are a series of BMPs that address the appropriate management of solid wastes, hazardous wastes, contaminated soils, concrete wastes, sanitary wastes, and liquid wastes as specified in the BMP specifications listed to the right.*	WM-5, WM-6, WM-7, WM-8, WM-9, WM-10		
Water Conservation *Avoid using water in a way that is likely to cause erosion and/or the transport of pollutants off site.*	NS-1	✔	
Vehicle & Equipment Cleaning, Fueling & Maintenance *On-site cleaning, fueling, and maintenance of vehicles is discouraged.*	NS-8, NS-9, NS-10		
Concrete Paving Activities *Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent runon and runoff pollution, properly disposing of wastes, and training employees and subcontractors.*	NS-3		

Additional Storm Water BMPs (please describe):
1.
2.
3.
4.

(Attach storm water BMP fact sheets as an appendix to your Storm Water Management Plan)

Storm Water BMP Narrative:
(Identify the schedule for deployment of BMPs. BMPs must be implemented, modified, and maintained to reflect the phase of construction and weather conditions. Include a statement about BMP inspection and maintenance on site.)

Section 3: Certification Statement

The following certification must be signed before a Construction, Grading, or Encroachment Permit will be issued.

I have read and understand that the City of Imperial Beach has adopted minimum requirements for prohibiting non-storm water discharges of urban runoff and for managing storm water runoff from sites associated with construction and other land disturbance activities. I certify that the BMPs proposed in this Storm Water Management Plan will be implemented to effectively prevent off-site runoff as well as any of this project's potentially negative impacts on the environment. I further agree to install, monitor, maintain, or revise the selected BMPs to ensure their effectiveness throughout the life of the project.

I also understand that non-compliance with the City's Storm Water and Construction / Grading Ordinances may result in enforcement by the City, including fines, citations, stop-work orders, cease and desist orders, or other actions.

Property owner
Applicant _____ *Date* _____

Contractor _____ *Date* _____

Attachment 2D

Guidance for Meeting SUSMP Compliance for Priority Development Projects

Guidance For Meeting SUSMP Compliance for Priority Development Projects

City of Imperial Beach
825 Imperial Beach Blvd.

Getting Started

Standard Urban Stormwater Mitigation Plan (SUSMP) requirements apply to new development and redevelopment projects that meet the criteria of a Priority Development project as defined by Municipal Code 8.32.040. These requirements for storm water runoff are mandates by the San Diego Regional Water Quality Control Board (RWQCB) and apply to the entire San Diego area through the Countywide Model SUSMP.

The purpose for the Imperial Beach SUSMP is to mitigate for the impact of urban runoff from new and redevelopment projects by integrating low impact development (LID) designs into the management of storm water runoff. Urban development can unintentionally introduce pollutants from every day activities into the environment. The increase of impervious areas also increases the volume and rate of runoff from storm events entering the storm drain conveyance system. The result is a negative impact on downstream habitat and water quality.

Suggested Steps For SUSMP Preparation

1. Assemble needed information for existing site conditions
2. Identify constraints and opportunities for treating storm water on site
3. Prepare and document LID design and storm water treatment facilities for project site
4. Specify source control BMPs
5. Prepare long term storm water facility O&M Plan
6. Assemble and complete SUSMP project submittal document

The goal of the SUSMP is to develop and implement countywide policies that ensure to the maximum extent possible (MEP) that development sites achieve a new design standard to infiltrate, filter, or treat runoff in a manner that captures urban pollutants and controls runoff flow rates, durations, and velocities on downstream habitat and conditions.

This guidance document provides a 'how to' guide for project applicants to achieve compliance with the SUSMP (I.B.M.C. Chapter 8.32) in the City of Imperial Beach.

Step 1: Assemble Needed Information

In order to select the appropriate types and locations for storm water treatment facilities, the applicant will need to assemble information on site characteristics that will contribute to the landscape and site design for the project. The applicant will need to identify the following site characteristics:

- Existing natural and hydrologic features for the project site location and for the downstream drainage area. These features may include contiguous natural areas, wetlands, receiving waters, watercourses, seeps, or springs.
- Priority pollutants for the downstream receiving water body (these are 303(d) listed or TMDL pollutants) and the pollutants potentially generated by the proposed development project (reference Table 2 in IBMC 8.32.130).
- Existing vegetation, impervious areas, and direction of surface drainage.
- Existing site topography that includes contours of any slopes greater than 4% and any significant geologic features.
- Existing site drainage. For undeveloped sites the applicant should inspect the site and examine topographic maps and survey data. Previous developed sites should also consider existing structures, connections to the municipal storm drain system, and plans for previous development.
- Regional design standards or other local codes that govern zoning or minimum setback requirements for open space, street widths, and sidewalk construction. Additional Public Works standards may apply to site drainage and allowable building materials.
- Soil types and depth to groundwater, which will help to determine the capacity for storm water infiltration and selection of LID treatment and flow control facilities.

Step 2: Identify Constraints and Opportunities

Review the information assembled in Step 1. Identify the principal constraints on site design and selection of treatment and flow control devices that best address the project's priority pollutants and pollutants of concern. Look for opportunities to reduce imperviousness and incorporate facilities into the site landscape and design. **Constraints** might include impermeable soils, high groundwater, contaminated soils, geotechnical instability, high intensity land use, heavy pedestrian or vehicle traffic, restricted right-of-way, or safety concerns. **Opportunities** might include existing natural areas, depressed topography, easements, open space buffers, and landscape amenities.

Prepare a brief narrative that describes the site opportunities and constraints. This narrative will help in the selection and design of appropriate storm water treatment facilities.

Step 3: Prepare and Document Storm Water Treatment Facilities

The following types of storm water treatment facilities are appropriate for treatment of runoff potentially containing most pollutants of concern.

Bioretention facilities (LID)	Infiltration facilities or practices	Higher-rate media filters
Settling basins (dry ponds)	Media filters	Trash racks and hydrodynamic devices
Wet ponds and constructed	Higher-rate biofilters	Vegetated swales

These storm water treatment facilities should be used independently or in combination to meet the water quality treatment and hydromodification flow control requirements of the NPDES Stormwater Permit with the preference on low impact development (LID) design strategies.

Applicants should use the Low Impact Development Design Guide in the Countywide Model SUSMP-Chapter 4, to analyze the project for applicable LIDs. The detailed instructions in Chapter 4 provide guidance for designing and documenting LIDs and integrated management practices that achieve both storm water treatment and flow control requirements. The LID Design Guide includes calculation procedures and formats for submitting LID sizing calculations. This guide has been developed to provide the applicant with step-by-step instructions that will achieve the flow and treatment control requirement.

Project submittals will need to include a drawing or multiple drawings showing:

1. The entire site divided into separate drainage management areas (DMAs), with each area identified as one of the following:
   - Self-treating area,
   - Self-retaining area,
   - Draining to a self-retaining area, or
   - Draining to an integrated management practice (IMP) area
2. For each drainage area, the types of impervious area proposed, and the area of each.
3. Proposed locations and sizes of treatment facilities. Each feature should be clearly marked so it can be easily identified.

Proprietary Devices
Many currently available proprietary media filters do not meet the NPDES Permit requirements when used alone for storm water treatment.

In addition to a site map, project submittals will need to include:

1. Tabulation of proposed self-treating areas, self-retaining areas, areas draining to self-retaining areas, areas draining to IMP areas, and corresponding IMPs indentified on the exhibit.
2. Calculations, in the format shown in the LID Design Guide (Countywide Model SUSMP, Chapter 4), showing the minimum square footage required and proposed square footage for each IMP.
3. Preliminary designs for each IMP. The design sheets and drawings in the LID Design Guide may be used or adapted for this purpose.
4. A narrative overview of the proposed LID designs and how they optimize the site layout, use pervious surfaces, disperse runoff from pervious surfaces, and drain impervious surfaces to engineered IMPs.
5. A narrative briefly describing each DMA, its drainage, and where the drainage will be directed.

Compliance
Design criteria in the Countywide Model SUSMP ensure the required volume of flow from all developed portions of the project, including landscaped areas, is infiltrated, filtered, or treated.
Provision D.1.d.(6)(a)

Step 4: Specify Source Control BMPs

Source control BMPs minimize the contact between pollutants and urban runoff. They are land use or site planning practices that can be structural or non-structural measures that prevent urban runoff pollution by reducing the potential for contamination at the source.

Project applicants must include permanent source control BMPs that are identified in the IBMC 8.32.250 through 8.32.310 into the design of the project. In addition, the project applicant must identify operational source control BMPs, such as regular sweeping and good housekeeping measures that must be implemented by the site's occupant or user.

Permanent source control BMPs must be identified on submittal drawings with a corresponding narrative that explains any special features, materials, or methods of construction that will be used to implement these permanent structural BMPs. In addition, project applicants must submit a table that identifies the potential sources of runoff pollution with the corresponding permanent source control or operation source control BMPs to prevent pollutants from entering run-off.

Applicants should strongly consider using the Pollutant Sources/Source Control Checklist (Appendix-A of the County-wide Model SUSMP) as a guide for meeting the source control BMP requirements of the NPDES Stormwater Permit.

Step 5: Storm Water Facility Long-Term Maintenance

The most important component of these SUSMP requirements is the continued long-term operation and maintenance of the project's storm water treatment facilities and source control measures. Prior to the issuance of any discretionary permits, the applicant will submit a project specific SUSMP that will identify the proposed storm water BMPs for the site and an Operation and Maintenance (O&M) Plan that will outline the long-term continued maintenance requirements for the proposed BMPs. In order to receive a notice of completion for the project the applicant must submit a signed maintenance agreement that is provided by the City to ensure that the BMPs will be maintained in perpetuity. The agreement will have the approved O&M Plan as an attachment and will include the following:

- A means to finance and implement facility maintenance in perpetuity.
- Acceptance of responsibility for maintenance from the time the facilities are constructed until responsibility for operation and maintenance is legally transferred.
- The identified responsible party to management the storm water BMPs.
- An outline of general maintenance requirements for the treatment and flow-control facilities on site.
- Schedule of routine service frequency and identification of specific maintenance activities.

Step 6: Finalize Project Submittal

The City does not provide a specific format for SUSMP project submittals. Applicants are expected to provide a clear, complete, and well organized project submittal that will make it possible for City staff to confirm the selected storm water treatment facilities and meet the minimum requirements of the NPDES Stormwater Permit, IBMC 8.32, and the Countywide Model SUSMP.

Frequently Asked Questions

Why do I have to use BMPs, LIDs, and hydromodification management practices for my project?

- In January 2007, the San Diego Region Water Quality Control Board reissued a municipal Stormwater NPDES Permit to the San Diego area storm water Copermittees. The reissued permit updates and expands storm water requirements for new development and redevelopment projects, including requirements for LIDs, source control BMPs, and HMP.

What are the different types of BMPs that might be required for my project?

- Site Design: A project design feature that reduces the amount of impervious surfaces or disconnects impervious surfaces from the municipal storm drain system.
- LID BMPs: An integrated site design methodology that uses small-scale detention and retention facilities to mimic pre-existing site hydrologic conditions. LID BMPs are often referred to as integrated management practices (IMPs).
- Source Control: Structural or non-structural measures that reduce the potential for pollution at the source, such as roof structures over trash or material storage areas and berms around fuel dispensing areas.
- Treatment Control BMP: Any engineered system designed and constructed to remove pollutants. These BMPs encompass most types of storm water treatment facilities required for priority development projects.

What is hydromodification management (HMP)?

- It is the management of post-project runoff flows and durations to the levels of the pre-project conditions.

How do I meet the HMP requirements?

- By implementing properly sized LID facilities as outlined in the Countywide Model SUSMP, your project will automatically meet the HMP criteria of the NPDES Stormwater Permit.

Who can I contact with specific question regarding my project?

- The Community Development Department at 619-628-1356 can assist in SUSMP preparation and final submittal.

References and Resources

- Imperial Beach Municipal Code, Chapter 8.32 Standard Urban Runoff Mitigation Plan
- RWQCB Order R9-2007-0001
- Countywide Model SUSMP
- CASQWA Stormwater Handbooks or Web Portal

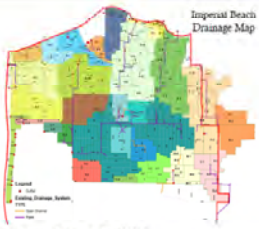

Imperial Beach Drainage Map

City of Imperial Beach · 825 Imperial Beach Blvd · Imperial Beach, CA 91932

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3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City endeavors to reduce pollutants and runoff from construction sites to the MEP. This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Division, and requirements that apply to the Building and Planning Division activities related to construction and construction permits, and compliance actions proposed by the City. This section of the Annual Report discusses program management, implementation, and changes made during FY 2010-11 to the JURMP Construction Component.

3.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Construction component is described in the *2008 JURMP Section 5.0*. The City updated its construction brochure that identifies and illustrates the use of construction site BMPs. The City also maintains an ongoing database of active construction projects and tracks inspections though the City's database software HTE.

3.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all construction projects to implement site control BMPs that reduce pollutants and runoff to the MEP. The designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0* and are required as project conditions prior to the approval and issuance of local construction and grading permits. All construction projects are formally inspected throughout the duration of the project to ensure adequate implementation and maintenance of BMPs. During the rainy season all priority projects were inspected at least biweekly, medium priority sites were inspected at least monthly, and low priority projects were inspected as needed. During the dry season, all construction sites were inspected as needed.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Construction program element:

- Table 3.1 provides an overview of the Construction element as it was implemented during FY 2010-11.
- Table 3.2 presents and describes targeted FY 2010-11 outcomes and results
- Table 3.3 FY 2010-11 active construction inventory and inspection frequency

3.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Contractors

Education is provided to contractors through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances, storm water forms, and brochures that outline the requirements for addressing urban runoff, BMP implementation, and water quality. The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

3.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Contractors

The City facilitates changes in behavior and implementation of BMPs at construction sites by working with developers to ensure that all projects meet the requirements of the Regional Permit. Prior to the issuance of construction and grading permits the City requires developers to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the General Construction Permit. The City also inspects projects and enforces storm water ordinances at all construction sites. The *2008 JURMP Section 5.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes. The *2008 JURMP Appendix D* defines minimum BMP requirements applicable to construction in the City.

3.6 Outcome Level 4: Source Load Reductions

The primary goal of BMP implementation is to reduce the loading of pollutants and runoff to storm water discharges. During the reporting period the City successfully implemented all program requirements for implementing and inspecting BMPs to control runoff sources related to construction activities. Source load reductions were achieved at construction sites by implementing erosion and sediment control, requiring minimum BMPs, and enforcing general site management requirements. The City required 94 active construction projects, 1 SUSMP project, and 8 Capital Improvement Projects to reduce pollutants and runoff to the MEP. Compliance with required minimum BMPs were then verified through 580 site inspections. Source load reductions may not be directly measured but can be implied by the proper implementation and maintenance of storm water BMPs.

Table 3.1 – Overview of Construction Inventory by Priority Classification

Category	Number	Description
A. Type of Active Construction		
Discretionary Projects	94	Most projects in the City are low priority discretionary projects. The City only had one active SUSMP project for the new Sea Coast Inn along the beach front. Capital improvement projects that were active during the year are also reported in this section.
Capital Improvement Projects (CIP)	8	
Priority Development (SUSMP) Projects	1	
B. Priority Classification		
High Priority Projects (SUSMP)	1	High priority projects are projects that are over 1 acre in size and require additional storm water controls for post construction.
Medium Priority Projects	1	The only medium priority project was the construction of a Skate Park.
Low Priority Projects	101	Most development projects in the City are categorized as low priority.
C. Totals		
Construction Projects	103	The City no active SUSMP projects during the reporting period. All active construction projects were discretionary in nature or capital improvements.
Priority Development (SUSMP) Projects	1	

JURMP Sections	Description of FY 2010-11 Changes
5.0 and Appendix D	BMP requirements of the JURMP applicable to construction were modified in accordance with the requirements of the updated Permit in March 2008.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2010-11	Complete	Applicable updates were included in *JURMP Section 5.0*.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	Updates made to City SUSMP as identified in previous section	Complete	Updates to the Model SUSMP and Storm Water Management Plan form were made as identified in the previous section. The Environmental Division also purchased a new field computer that will be used to conduct inspections and issue violations. Forms and procedures will be updated as necessary to accommodate the use of field computers.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Inventory of Construction Projects and Inspections			
Update inventory for construction projects and track inspections	Updates made to the inventory throughout the reporting period and inspections tracked	Complete	An inventory of construction projects and inspections is maintained on the City's database software HTE. Constructions site inspection records are also maintained on HTE. The Environmental Division also maintains an inventory of construction projects that require conditions from Public Works. An inventory of Capital Improvement Projects (CIP) is also maintained by the Environmental Division.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Project Approval			

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Require construction projects to implement BMPs	BMPs are required as conditions for development projects	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. Designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0*. Construction BMPs are verified through the Project Review process and during site inspections.
b) Confirmation of Urban Runoff Approval Process			
Require construction projects to have adequate project review for storm water and pollution control	All construction projects received the necessary project review before being issued City permits	Complete	Information on the City's project review and approval process is provided in the previous section of this annual report, in the *2008 JURMP Section 4.0,* and information on construction activities is provided in the *2008 JURMP Section 5.0*. Information on construction projects and inspections is tracked in the City's HTE database and in excel spread sheets.
c) Confirmation of Designated BMPs			
Verify that designated BMPs were implemented, or required to be implemented	Construction projects undergo project review before being issued City permits. Construction projects are inspected for BMP compliance.	Complete	Designated minimum BMPs are required as project conditions during the urban runoff approval process. Projects then receive inspections during the construction phase to verify the proper implementation of BMPs. Projects are inspected for adequate storm water construction BMPs and project design, and source control BMPs.
d) Confirmation of Maximum Disturbed Area			
Verify that maximum disturbed area for grading was applied to applicable construction sites	Apply conditions for maximum disturbed area during project review and verify through inspections	Complete	Project applicants are made aware of storm water requirements during the grading and construction permit application process. The grading permit specifies conditions to control the erosion of sediment off the property.

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Municipal Staff Training			
Ensure that municipal staff are knowledgeable on storm water BMPs related to construction activities, SUSMP, and HMP	Staff educated through meetings, workshops, and training s	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received training outside the City on multiple storm water issues. Training topics include SUSMP, HMP, TMDLs, General Construction Permit, and code enforcement. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory.
f) Construction Contractor Education			
Provide education for contractors	Counter hours held, meetings conducted throughout reporting period and provided construction brochure	Complete	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Public Works Department oversaw storm water compliance for the Capital Improvement Projects and provided education to contractors during meetings and inspections. A new construction brochure was also created to provide additional information on proper BMP implementation.
g) Confirmation of Construction Inspections			
Inspect construction activities	The Building Inspector, Public Works Inspector, and Environmental Division conducted inspections for BMP compliance	Complete	All construction projects get formally inspected throughout the duration of the project. During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. The Public Works Department inspects all active CIP projects sites daily. The Community Development Department Building Inspector inspects discretionary projects that are not CIPs. The Environmental Division follows up an complaints and violations at construction sites.
h) Special Investigations			
---	---	---	Special investigations were not conducted during the reporting period.

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)			
Maintain high level of staff knowledge regarding storm water program	Conducted annual municipal training, held weekly department meetings, and attended outside training events.	See Education Component Section 8.0.	See Education Component Section 8.0.
Increase contractor knowledge regarding storm water program	Community Development and Public Works Departments provide education opportunities for contractors	See Education Component Section 8.0.	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)			
a) Procedural and Administrative Behaviors			
Confirm active construction projects required conditions to protect water quality	All constructions projects (103 projects) were reviewed for conditions of approval.	Complete	The City reviews and conditions all proposed projects to ensure all necessary conditions and BMPs are met before any construction permits are issued. Projects over $50,000 also get routed through Public Works for additional storm water BMP review. After a City permit is issued the project is in active construction phase and receives the necessary frequency of inspections for BMP compliance. Inspection frequency is based on high, medium, or low priority ranking. Storm water compliance is a component of every site inspection for a given project.
b) BMP Implementation			

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Inspect projects and verify BMPs	The Building Division conducted 452 BMP site inspections. The Public Works Inspector provided daily oversight at all CIP construction sites and performed 128 BMP inspections.	Complete	The City inspects and verifies BMPs at all projects to ensure compliance with storm water program. The Building Inspector, Public Works Inspector, Code Enforcement Officer, and Environmental Division share the responsibility of inspecting development projects and verifying BMP compliance.
Verify construction sites with advance treatment	No construction sites required advance treatment	Complete	No construction sites during the reporting period required the implementation of advanced treatment for sediment control. The City requires all construction sites to implement BMPs to contain sediment on the property during all stages of development. Advance treatment is required for high threat to water quality projects.
c) Inspections for Wet and Dry Weather			
Identify active construction and inspection frequencies for wet and dry season	The City conducted 580 BMP site inspections and exceeded the required minimum inspection frequency	Complete	During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. Most development projects are redevelopment and are less than one acre in size. The City generally inspects construction sites more frequently than the minimum requirement. See Table 3.3 for inspection frequency per project.
d) Inspection Results			
Provide general inspection results	Conducted the necessary minimum BMP inspections at construction sites	Complete	Most contractors are aware of the storm water BMP requirements and properly implement BMPs. Problems arise during the wet season when heavy rain or wind results in the blowout of poorly implemented BMPs. The highest numbers of storm water violations are reported by observant City staffs who observe inadequate BMPs or illegal discharges.

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	The City responded to 8 construction related storm water violations	Complete	Typical violations include improper washing of equipment, power washing, stock piles of sediment, and trash. Each enforcement case is different but generally involves a verbal or written warning, a notice of violation for a repeat offender or blatant illegal discharger, and a follow up investigation. The City issued 3 verbal warnings, 3 stop works, and 1 NOV.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM ACTIVE CONSTRUCTION PROJECTS)			
a) Erosion and Sediment Control			
Require erosion and sediment control when soil is disturbed	103 projects required installation of erosion and sediment control BMPs	Complete	The City requires installation of erosion and sediment control BMPs for all construction sites with a grading or building permit. Load reductions from construction sites can be implied through the proper implementation of BMPs.
b) Designated Minimum BMPs			
Require minimum BMPs for construction sites	103 projects required to implement BMPs.	Complete	The City requires all construction sites to reduce discharges of pollutants to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards. Source load reductions from construction sites can be implied through the proper implementation of BMPs.
c) Addition Controls for CWA 303(d) Waters			
Additional BMPs for projects discharging directly to 303(d) waters	No projects required to implement additional controls for CWA Section 303(d) waters	Complete	The City requires additional controls to be implemented for Clean Water Act (CWA) Section 303(d) waters. Load reductions are not tracked but can be implied.

Table 3.3 FY 2010-11 Active Construction Inventory and Inspection Frequency

ID	Application	Address	Priority	Weeks Active During Wet Season	Total Wet Season Inspections	Total Dry Season Inspections	Total Inspections	General Results	Enforcement Action Type	Resolved
46	10-595	622 OCEAN LN	Low	7	2	0	2	Approved		
47	10-605	822 CAROLINA ST	Low	1	1	1	2	Approved		
48	10-613	1488 SEACOAST DR	Low	1	1	0	1	Approved		
49	10-626	940 EMORY ST	Low	1	2	0	2	Approved		
50	10-640	1590 SEACOAST DR	Low	10	2	0	2	Approved		
51	10-641	1590 SEACOAST DR	Low	10	2	0	2	Approved		
52	10-646	1210 CALIFORNIA ST	Low	8	9	6	15	Approved		
53	10-660	795 DELAWARE ST	Low	0	0	1	1	Approved		
54	10-661	1250 5TH ST	Low	3	3	0	3	Approved		
55	10-688	951 13TH ST	Low	7	3	8	11	Approved		
56	10-690	1227 5TH ST	Low	1	1	0	1	Approved		
57	10-697	864 DELAWARE ST	Low	9	3	7	10	Approved		
58	10-701	152 DAHLIA AVE	Low	2	0	6	6	Approved		
59	10-702	552 DELAWARE ST	Low	6	3	0	3	Approved		
60	10-78	1410 10TH ST	Low	1	3	7	10	Approved		
61	10-82	527 BONITO AVE	Low	11	3	7	10	Approved		
62	10-97	1304 GROVE AVE	Low	18	5	0	5	Approved		
63	11-121	1007 CALLA AVE	Low	1	3	0	3	Approved		
64	11-127	1560 SEACOAST DR	Low	1	1	0	1	Approved		
65	11-131	177 ELM AVE	Low	2	2	0	2	Approved		
66	11-139	1146 13TH ST	Low	0	0	4	4	Approved		
67	11-140	823 CORVINA ST	Low	1	0	2	2	Approved		
68	11-144	1210 CALIFORNIA ST	Low	3	2	3	5	Approved		
69	11-18	622 OCEAN LN	Low	1	0	4	4	Approved		
70	11-218	1079 SEACOAST DR	Low	1	0	2	2	Approved		
71	11-225	325 ELKWOOD AVE	Low	1	0	3	3	Approved		
72	11-274	910 ARRIBA AVENIDA	Low	0	0	4	4	Approved		
73	11-280	1180 FLORIDA ST	Low	0	0	1	1	Approved		
74	11-297	955 11TH ST	Low	0	0	1	1	Approved		
75	11-298	816 5TH ST	Low	0	0	1	1	Approved		
76	11-322	154 CALLA AVE	Low	0	0	2	2	Approved		
77	11-329	830 IRIS AVE	Low	0	0	3	3	Approved		
78	11-382	753 12TH ST	Low	0	0	1	1	Approved		
79	11-49	219 DAISY AVE	Low	1	2	0	2	Approved		
80	11-58	985 IMPERIAL BEACH BLVD	Low	1	1	0	1	Approved		
81	11-80	1275 GRANGER ST	Low	2	2	1	3	Approved		
82	11-92	437 SEA VILLAGE DR	Low	4	3	5	8	No Permits, Insufficient BMPs	Stop Work	Yes
83	11-93	1330 LOUDEN LN	Low	3	1	4	5	Approved		
84	11-98	782 DELAWARE ST	Low	0	1	0	1	Approved		
85	6-246	1022 ELM AVE	Low	20	11	13	24	Insufficient BMPs	NOV	Yes
86	7-394	754 HICKORY CT	Low	5	1	5	6	Approved		
87	8-42	1218 GRANGER ST	Low	0	1	0	1	Approved		
88	9-363	813 EMORY ST	Low	1	1	0	1	Approved		
89	9-393	930 2ND ST	Low	1	1	0	1	Approved		
90	9-402	1293 FLORENCE ST	Low	1	1	3	4	Approved		
91	9-411	1468 HOLLY AVE	Low	0	0	4	4	Approved		
92	9-477	1266 IMPERIAL BEACH BLVD	Low	10	10	1	11	Approved		
93	9-478	1409 9TH ST	Low	19	5	3	8	Approved		
94	9-530	946 FLORENCE ST	Low	0	0	4	4	Approved		

Table 3.3 FY 2010-11 Active Construction Inventory and Inspection Frequency

ID	Application	Address	Priority	Weeks Active During Wet Season	Total Wet Season Inspections	Total Dry Season Inspections	Total Inspections	General Results	Enforcement Action Type	Resolved
95	9-543	311 EVERGREEN AVE	Low	21	4	3	7	Approved		
96	CIP S10-201	13th Street & Ebony Ave Ped ADA Ramps	Low	4	16		16	Approved		
97	CIP S09-102	Civic Center Crosswalk (CDBG)	Low			16	16	Approved		
98	CIP S11-102	Imperial Beach/Louden Crosswalk (CDBG)	Low			8	8	Approved		
99	CIP W06-101	PS 7 Wet Well Replacement	Low	2	8		8	Approved		
100	CIP S10-101	RTIP FY 09-10 (Street Improvements)	Low	4	16		16	Approved		
101	CIP W05-401	Sealing & Repair Wet Wells & Manholes	Low	4	16	4	20	Approved		
102	CIP F05-50A	Marina Vista Center Xeriscape Project	Low			4	4	Approved		
103	CIP P07-101	Skate Park Element	Med	6	24	16	40	Approved		
	Total				**298**	**282**	**580**			

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4.0 MUNICIPAL COMPONENT

4.1 Introduction

The City endeavors to reduce or eliminate pollutants and runoff from municipal discharges to the MEP. This component is primarily applicable to the Department of Public Works and its efforts to prevent municipal discharges from causing or contributing to a violation of water quality standards. This section of the Annual Report discusses program management, implementation, and changes made during FY 2010-11 to the JURMP Municipal Component.

4.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the municipal component is described in the 2008 JURMP Section 6.0. During the reporting period the City continued implementation of its municipal training program which provides education opportunities for storm water to all staff throughout the year. Continual updates were also maintained on the municipal facilities and activities inventory to match the regional reporting standard in development by the Copermittee Municipal Workgroup. Updates were made to the storm water GIS database files as a result of the Storm Water Master Plan Update 2010 (Attachment 4A Storm Water GIS Map). Lastly, the Environmental Division also purchased a field notebook computer and made updates were made to municipal inspection and MS4 maintenance forms (Attachment 4B) to improve efficiency and effectiveness analysis in reporting.

4.3 Outcome Level 1b: Implementation of Management Program Activities

The City makes storm water pollution prevention and response a high priority for all Public Works employees. Each Public Works vehicle contains a binder of municipal storm water BMPs and contains a map of the entire MS4 system. The Environmental Division conducts annual training for all Public Works employees and daily interactions with staff ensures that storm water pollution prevention remains a high priory throughout the City. The Public Works Department provides the eyes and ears on the street and therefore the first line of defense for pollution prevention, response, and cleanup. The *2008 JURMP Section 6.0* provides a complete description of the management programs for the municipal component.

Routine maintenance, cleaning, and implementation of BMPs for municipal facilities and activities keep accumulated debris and other potential pollutants from entering the MS4. At a minimum the City conducts annual formal inspections of high priority municipal facilities and actives. The City also maintains a number of storm drain inlet filters that are cleaned and maintained quarterly by Downstream Services, Inc. Cleaning records are maintained on file and logged in a database on the Environmental Division server.

During the reporting period the City completed an update to its Storm Drain Master Plan. Updates to the Master Plan include a review of previous storm drain studies (i.e. 1960 and 1991), GIS and mapping updates, hydrologic and hydraulic modeling of the MS4, identification of system deficiencies, and recommendations.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 4.1 Provides an overview of the Municipal inventory by facility type and priority classification
- Table 4.2 presents and describes targeted FY 2010-11 outcomes and results
- Figure 4.1 Street sweeping removal totals
- Figure 4.2 MS4 cleaning totals
- Table 4.3 Municipal storm drain filter inventory and maintenance records
- Table 4.4 Municipal facility and activity inventory and inspection records
- Attachment 4A Updated Storm Water GIS Map
- Attachment 4B Annual Storm Drain Maintenance Form update

4.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff

The City conducts annual training for all municipal employees. Training for the Municipal Component is specifically targeted at the Public Works Department because City Streets, Maintenance Workers, and Sewer crews are typically the first line of defense for storm water pollution. The training program focuses on the use of Best Management Practices in daily operations, and is designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort for City staff is discussed in the *JURMP Section 10.0.*

4.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff

The *JURMP Appendix E* defines minimum BMP requirements applicable to streets, roads, highways, municipal areas, municipal activities, and parking facilities in the City. Major targeted outcomes for the JURMP municipal component included streets and parking lot sweeping, MS4 cleaning, sewer system preventative maintenance, municipal storm drain BMP maintenance, integrated pest management at parks, and implementation of BMPs at municipal facilities. All BMPs are inspected and enforced for compliance.

4.6 Outcome Level 4: Source Load Reductions

The City continues to make impressive source load reductions from municipal facilities and activities. The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City. Approximately 174.95 tons of trash and debris were collected through street sweeping operations. The City also collected 293 loads of large bulky items illegally dumped in City alleys through its franchise waste hauler EDCO.

The Sewer Division maintains the City's storm drain lines and catch basins. During this reporting period the Sewer Division inspected 100% of the catch basins and open grates and cleaned approximately 80%

of the entire MS4 system, which includes five miles of underground piping, 92 catch basins, 143 open grates, and 7 open drainage facilities. A total of 6,586 pounds of trash, sediment, and organic matter was collected out of the MS4 system during the reporting period. Storm drain cleaning occurs between the months of May through September.

Lastly, over 30 acres of park facilities, athletic fields, beach accesses, landscapes at various facilities, and five community parks located throughout the City were maintained in a manner that best prevents storm water pollution. The City has a dedicated Tidelands crew that picks up trash and debris and conducts landscaping duties 7 days a week on the beach and one block inland of the beach. In addition, the City contrast with Donovan Prison for a weekly crew to pick up trash and conducts landscape duties at City parks and unmaintained areas. The City tracks source loads whenever possible.

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
A. Type of Facility			
Paved Roads	127.9	---	The City updated its Storm Drain Master Plan. The update changed the total number of catch basins and open grates. The City maintains 127.9 miles of paved roads, 4 municipal parking lots, 5 miles of storm drain pipes, 92 catch basins, 143 open grates, 7 open drainage culverts, 2 storm drain diverters, 1 Vortex trash separator, and 13 municipal storm drain filters.
Municipal Parking Facilities	---	4	
Underground storm drain piping	5	---	
Catch basins	---	92	
Open Grates	---	143	
Open Drainage Facilities	---	7	
Storm Drain Diverters	---	2	
Cortex Storm Drain CDS	---	1	
Municipal Storm Drain Filters	---	13	
B. Priority Classification			
Streets, Roads, and Highways	(127.9	Miles)	The City also contains 13.3 miles of paves alleys and 2.5 miles of unpaved alleys that are not on the municipal inventory. The alleys are not owned by the City and are maintained by the property owners. The City conducts monthly street sweeping on the paved alleys and provides pick up of large bulky items illegally dumped in the alleys.
High (Commercial areas)	19.2	---	
Medium (Beachfront residential areas)	9.6	---	
Low (Other residential areas and paved alleys)	99.1	---	
Municipal Parking Facilities			
High (Commercial)	---	4	

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
Medium (N/A)	---	---	
Low (N/A)	---	---	
Sanitary Sewer System			
Pump stations	---	12	
Underground piping	39.5	---	

JURMP Sections	Description of FY 2010-11 Changes
6.0 and Appendix E	BMP requirements of the JURMP applicable to streets, roads, highways, and municipal parking facilities were modified in accordance with the requirements of the updated Permit in March 2008. Updates also made to the City's Storm Drain Master Plan and storm water GIS inventory, hired an in house GIS position, and updated the annual MS4 cleaning form (Attachment 4A).

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	Updated Storm Drain Master Plan	Complete	Applicable updates were included in *JURMP Section 6.0*. Updates made to GIS that include greater accuracy for delineated sub-basins and storm drain facilities.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	So significant updates	Complete	The City made updates as necessary to Municipal Inspection Forms and MS4 maintenance forms to improve efficiency in reporting. Every City vehicle contains a binder with a storm drain map and information on proper BMPs for municipal facilities and activities.
c) Year-End Program Review			
Complete annual year-end program review	End of year program review on MS4 annual maintenance	Complete	Over the past 3 reporting periods the City cleaned 100% of storm drain lines and 100% of catch basins even if they were not in need of maintenance. The year-end program review focused on prioritizing MS4 maintenance to achieve operational efficiencies. Catch basins will still be cleaned annually but the jetting of storm drain lines will only be conducted as needed. Cleaning records will be used to identify and priorities storm drain lines to clean. This year approximately 80% if the storm drain lines were jetted with 100% of the catch basins maintained.
d) Updates to Training Program			
Update training materials for municipal staff	No significant updates	Complete	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience.
e) Updates to Municipal Inventor or Prioritization			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Update municipal inventory	No significant updates.	Complete	During last reporting period the City made updates to the municipal facilities and activities inventory to match the regional reporting standard developed by the Copermittee Municipal Workgroup.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Municipal Facilities and Activities			
Require municipal areas and activities to implement minimum BMPs	Implemented BMPs and verified through inspections and reinforced through annual training	Complete	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed with staff regularly and updated as necessary. In addition, each City vehicle contains a binder of Best Management Practices for Municipal Facilities and Activities that were updated in 2009.
b) Confirmation of Designated Minimum BMPs			
Verify the implementation of minimum BMPs for municipal areas and activities	Implemented BMPs and verified through inspections and reinforced through annual training	Complete	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed regularly and updated as necessary
c) Confirmation of Municipal Inspections			
Verify that municipal inspections achieve BMP compliance	BMPs are verified through inspections and reinforced through annual training	Complete	Municipal inspections are used as means to verify the implementation of BMPs at municipal facilities and activities. Inspections also serve to educate staff, reinforce storm water concepts, and improve communication across City Divisions. Table 4.4 provides the annual Municipal Facility and Activity Inventory and Inspection Records results.
d) Municipal Staff Training			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Provide training opportunities for municipal staff	Conducted annual municipal training, weekly department meetings, outside training events, and provided education materials.	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Municipal inspections also serve as one-on-one training for Division supervisors. Annual training is provided to Public Works staff and was conducted on 11/3/10. Regional workshops on SUSMP, HMP, GCP, TMDLs, and code enforcement made available to staff. Daily interaction with City staff and abundant education material on storm water ensures that storm water pollution prevention remains a high priory throughout the City.
e) Confirmation of Pesticide, Herbicide, and Fertilizer Management			
Verify designated BMPs for pesticides, herbicides, and fertilizer	IPM and BMPs implemented	Complete	The City limits the application of pesticides and herbicides applied to park and landscaping facilities in accordance with Integrated Pest Management Program policy.
f) Confirmation of Maintain for Municipal BMPs			
Verify maintenance of municipal storm water BMPs	Maintained operation and maintenance of existing storm water BMPs	Complete	The City maintains a number of storm water BMPs along the storm water conveyance system including two urban low flow and first flush storm drain diverters, 13 storm drain filters, 1 CDS unit, and multiple vegetated ditches, and infiltration areas.
g) Special Investigations			
No targeted	2010 update to the Storm Drain Master Plan	Partially Complete	The update of the Storm Drain Master Plan was completed in August 2010. Updates include review of precious storm drain studies (i.e. 1960 and 1991), GIS and mapping, hydrologic and hydraulic modeling, identification of system deficiencies, and recommendations.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF)			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Maintain high level of staff knowledge regarding storm water program	Conducted annual municipal training, weekly department meetings, outside training events, and provided education materials.	See Education Component Section 8.0.	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF)			
a) BMP Implementation for Streets, Roads, Highway, and Parking Facilities			
Sweep all High trash areas at least twice per month	28.7 curb-miles swept at least twice per month and 4 municipal parking facilities swept weekly	Complete	Commercial areas (19.2 miles of curbed roads and 4 parking lots) are swept weekly. Beachfront residential areas (9.5 miles of curbed roads) are swept bi-weekly (high trash and debris).
Sweep all Moderate trash areas at least monthly	99.1 curb-miles swept at least monthly	Complete	All other areas (99.1 curb miles) are considered moderate priority and are swept on a monthly basis.
Sweep paved streets, roads, and highways	127.9 curb-miles swept (2,392 total miles) swept)	Complete	The City has a dedicated Tidelands Maintenance Division, funded by the Port of San Diego, whose mission is to keep the beach and one block inland from the beach free of trash, sand, and other debris. The City also maintains a contract with Donavan Correctional Facility to provide supervised labor for various needs including landscaping and trash pickup. The Streets and Parks Divisions play a crucial role in keeping the City free of trash. EDCO also conducts alley sweeps for large bulky items upon request from the City (293 loads for FY 2010-11). Finally, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste.
Collect trash and debris from non-sweeping activities	Collected trash and debris from parks, alleys, and tideland area	Complete	
b) BMP Implementation for Municipal Separate Storm Sewer System (MS4)			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Clean accumulations of trash and debris greater than 33% of design capacity	92 catch basins and 143 open grates inspected (100%)	Complete	Storm drain cleaning generally occurs between the months of May and September It is important to note that the City inspects all of its catch basins and cleans them if necessary on an annual basis.
Inspect and clean MS4 line	100% of the MS4 inspected and 29,435 feet of storm drain cleaned	Complete	The City cleans and inspects 100% of the catch basins and endeavors to clean 100% of the 5 miles of storm drain lines annually. This year approximately 80% of the storm drain lines were jetted. The Sever Division uses the vactor truck to jet and clean accumulated debris out of the MS4. Cleaning for the 2011 season will be finished in September.
Prioritization of MS4 system maintenance	Review underway	Complete	Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year The Environmental Division is performing a review of past storm drain line cleaning records to identify areas of high trash and debris accumulation. Sections of the MS4 that are identified as low trash and debris accumulation areas may be cleaned and inspected less than annually.
Prevent and eliminate infiltration from the sanitary sewer to the MS4	Implementation of the 2008 Sewer System Maintenance Plan	Complete	The City has conducted a sewer capacity study and identified areas needing improvement. These will be undertaken through the Capital Improvement Projects program. A Sewer System Management Plan was also completed in accordance with Waste Discharge Requirements. The City is in the 4th year of a 5-year CIP to CCTV the entire sewer system.
Conduct routine maintenance on sanitary sewer system	36 miles of sanitary sewer system maintained	Complete	Most sanitary sewer pipelines are cleaned at least annually, and known problem areas are cleaned more frequently. Twelve alarmed sewage pump stations are monitored daily.
Respond to all sewer spills received and log in appropriate data bases	8 sewer spills reported with 6 being from private laterals	Completed	In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. The City experienced 8 sewer spills during FY 2010-11 and 6 of those were from private laterals.
c) BMP Implementation for Municipal Facilities and Activities			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Implement BMPs and maintain municipal treatment control BMPs	Maintained 13 storm drain or catch basin filters, 2 storm drain diverters, 1 CDS unit, vegetated swales, and infiltration areas	Complete	The City enforces compliance of minimum BMPs at all municipal facilities and maintenance activities. In addition, the City maintains 13 storm drain filters that are maintained quarterly by contract. The City also operates 2 storm drain diverters, one CDS unit, and a number of vegetated swales and infiltration areas.
d) Municipal Facilities and Activities Inspection Results			
Provide general inspection results for municipal areas and activities	Inspected 100% of municipal facilities and provided training on BMPs for municipal activities	Complete	General inspection results include the following: quarterly maintenance of municipal storm drain filters, proper implementation of minimum BMPs by staff, internal review and training on BMPs for municipal areas and activities.
e) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	No enforcement actions necessary to achieve compliance	Complete	Minor violations were noted during municipal inspects and corrected without enforcement actions. For example a new storage shed for street paint was purchased as the result of municipal inspections identifying an old and worn-out storage area that lacked secondary containment. Municipal storm water violations are extremely rare as a result of continued education.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)			
a) Street Sweeping			
Track debris collected from street sweeping activities	Trash: 17.5 tons Debris: 139.95 tons Organics: 17.5 tons	Complete	The City collected a total of 174.95 tons of material from street sweeping activities. The City sweeps 19.2 miles of commercial area and 4 municipal parking lots weekly (high priority), 9.6 miles of beach front biweekly (medium priority), and 99.1 miles of residential area monthly (low priority).
b) Cleanup Activities			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Track EDCO alley sweeps and Home Front Clean Up totals	EDCO Alley Sweeps: 293 large bulky items Home Front Clean Up: 178.83 tons	Complete	EDCO conducts alley sweeps for large bulky items upon request from the City. The City made 293 requests this year which was up from 132 from the previous year. In addition, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste. The City also conducts a number of other cleanup activities to collect trash and debris from municipal areas using the Street, Tidelands, and Donavan Prison crews; however, this waste is not tracked at this time.
c) MS4 Cleaning			
Track debris collected through MS4 cleaning	Trash: 522 lbs Debris: 5,517 lbs Organics: 547 lbs	Complete	There are approximately 93 catch basins, 143 open grates, and approximately 5 miles of storm drain pipe that is maintained and cleaned annually. The Sewer Division inspected and cleaned 100% of the catch basins, open grates, and open channels in addition to jetting 80% of the MS4 lines during the reporting period. MS4 cleaning starts in May and continues through September. During the reporting period the Sewer Division cleaned a total of 6,586 lbs of material out of the MS4.
d) **Municipal Storm Drain Filters**			
Track debris collected from 13 municipal storm drain filters	Trash: 65 lbs Debris: 168.5 lbs Organic: 160.5 lbs	Complete	Downstream Services maintains 13 municipal storm drain filters quarterly. During the reporting period 394 pounds of debris was captured through municipal storm drain filters.
e) Storm Water Diverters			
Monitor storm water diversion from Palm Ave Diverter	Palm Ave Diverter: 459,650 gallons diverted into the sanitary sewer	Complete	The City operates two storm drain diverters (Palm Ave and Date Ave). Only the diverted flow from Palm Ave is monitored and tracked.
f) Vortex Separator at 10th and Imperial Beach Blvd			
Track debris collected from vortex separator	Trash: 25 lbs Sedi: 750 lbs Organic: 25 lbs	Complete	The City operates a CDS Vortex storm water separator at 10th and Imperial Beach Blvd to capture debris from all the commercial areas that drain into the Tijuana River watershed. The unit is inspected quarterly and cleaned as needed.

Figure 4.1-Street Sweeping Totals

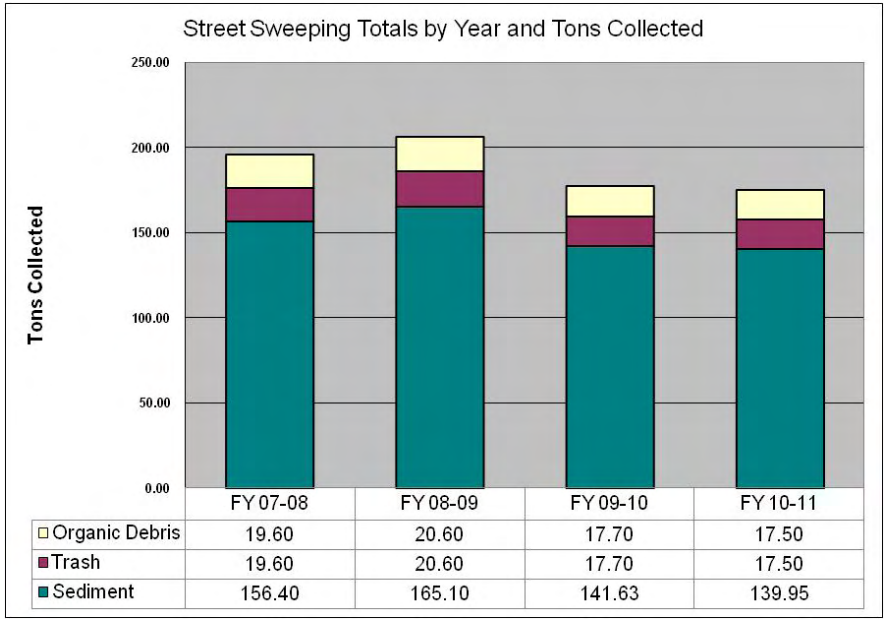

Figure 4.1- The street sweeping totals above are presented by fiscal year. Street sweeping is contracted through Clean Streets and EDCO. The City maintains approximately 127.9 miles of curbed streets and uncurbed roads located throughout the City. Sweeping activities collected 174.95 tons of materials during the reporting period.

Figure 4.2-MS4 Cleaning Totals

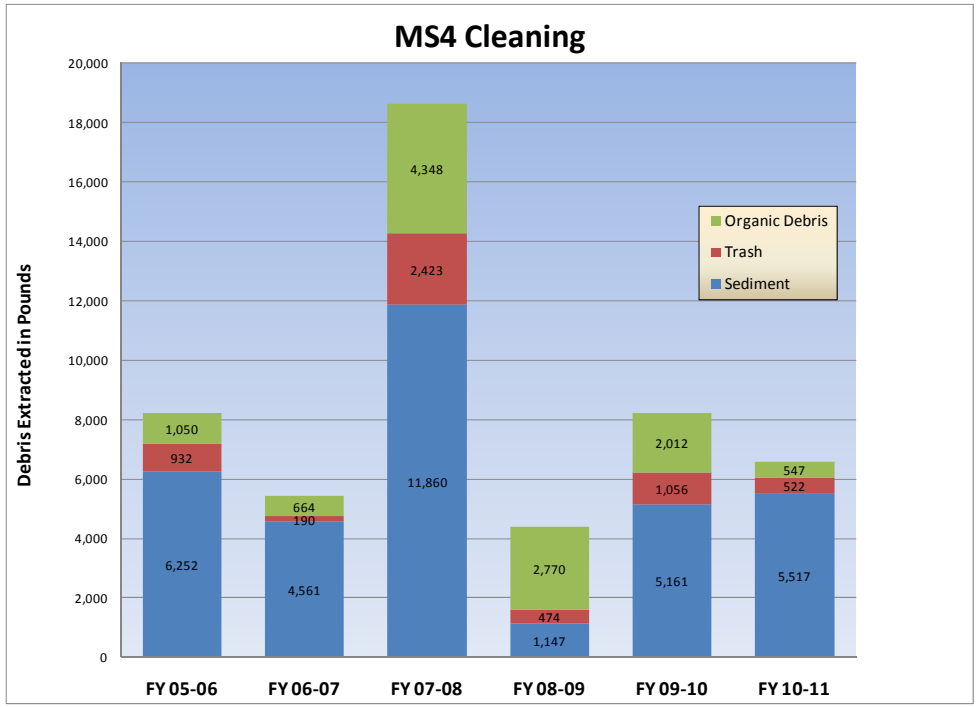

Figure 4.2- The MS4 cleaning totals above are presented by fiscal year. The City endeavors to clean 100% of the MS4 between the months of May through September. The MS4 system includes 117 catch basins, 7 open drain facilities, and approximately 5 miles of underground pipe. The Sewer Division cleaned 6,585 pounds of materials out of the MS4 system during FY 2010-11.

Table 4.3 Municipal Storm Drain Filter Inventory and Maintenance Records

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted			Weight of Debris	Materials Collected (lbs.)				Volume Used
							Inspected	Cleaned	Boom(s) Replaced	Removed (lbs.)	Sediment	Trash	Organics	Other	% of Total
SDF1	Grate Inlet Skimmer Box	495 Tenth St.	Public Works Yard	910.20	10/13/2003	9/20/2010	X	X		5.0	2.5		2.5		0%
	18" X 18"		(Rear of Yard)			1/4/2011	X	X		5.0	2.5		2.5		5%
	Bio-sorb oil absorbing polymers for					3/25/2011	X			0.0	0.0	0.0	0.0		0%
	hydrocarbon removal					6/1/2011	X	X		3.0	0.3	0.3	0.3		0%
SDF2	Grate Inlet Skimmer Box - Round	495 Tenth St.	Public Works Yard	910.20	10/13/2003	9/20/2010	X	X		1.0	0.5		0.5		0%
	24" X 24"		(Front Parking Lot)			1/4/2011	X	X		3.0	1.5		1.5		3%
	Bio-sorb oil absorbing polymers for					3/24/2011	X	X	X	5.0	2.5		2.5		0%
	hydrocarbon removal														
SDF3	Grate Inlet Skimmer Box	Seacoast Dr. / Palm Ave.	City Parking Lot	910.10	1/13/2003	9/20/2010	X	X		3.0	1.5		1.5		0%
	24" X 36"					1/4/2011	X	X		1.0			1.0		1%
	Bio-sorb oil absorbing polymers for					3/25/2011	X	X	X	5.0	2.5		2.5		0%
						6/1/2011	X	X		5.0	2.5		2.5		0%
SDF4	Grate Inlet Skimmer Box	825 Imperial Beach Blvd.	City Hall	911.11	10/13/2003	9/20/2010	X	X		3.0	1.5		1.5		0%
	24" X 36"					1/4/2011	X	X		30.0	15.0		15.0		25%
	Bio-sorb oil absorbing polymers for					3/25/2011	X	X	X	6.0	3.0		3.0		0%
	hydrocarbon removal					6/1/2011	X	X		10.0	5.0		5.0		0%
SDF5	Grate Inlet Skimmer Box	865 Imperial Beach Blvd.	Fire Station	911.11	10/13/2003	9/20/2010	X	X		5.0	1.7	1.7	1.7		0%
	12" X 12"					1/4/2011	X	X		2.0	0.7	0.7	0.7		2%
	Bio-sorb oil absorbing polymers for					3/25/2011	X	X	X	3.0	1.5		1.5		0%
	hydrocarbon removal					6/1/2011	X	X		5.0	2.5		2.5		0%
SDF6	Grate Inlet Skimmer Box	1075 8th St.	Marina Vista Center	911.11	1/13/2003	9/20/2010	X	X		5.0	1.7	1.7	1.7		0%
	24" X 30"					1/4/2011	X	X	X	10.0	3.3	3.3	3.3		10%
	Bio-sorb oil absorbing polymers for					3/25/2011	X	X	X	8.0	4.0		4.0		0%
	hydrocarbon removal														
SDF7	Pipe Skimmer	1459 Hemlock	Behind Apartment	911.11	1/12/2005	9/20/2010	X			0.0					0%
	24" X 24"		City Easement			1/4/2011	X	X		3.0	1.5		1.5		3%
	Bio-sorb oil absorbing polymers for					3/25/2011	X	X		10.0	10.0				0%
	hydrocarbon removal					6/1/2011	X	X		1.0			1.0		0%
SDF8	KriStar, Flo Guard Plus Catch Basin Insert	839 10 St. Alley east of 10th St. between Elm & Donax	City Alley	910.20	11/3/2005	9/20/2010	X	X		3.0	1.5		1.5		0%
	18" X 36"					1/4/2011	X	X		2.0	0.7	0.7	0.7		2%
	Hydrocarbon absorption boom					3/25/2011	X	X	X	10.0	5.0		5.0		0%
						6/1/2011	X	X		10.0	5.0		5.0		0%
SDF9	2 Grate Inlet Skimmer Boxes	Alley abutting 8th St 100 yd. south of Palm	City Alley	910.20	2/22/2007	9/20/2010	X	X		5.0	2.5		2.5		0%
	24" X 36"					1/4/2011	X	X		10.0	3.3	3.3	3.3		10%
	Hydrocarbon absorption boom					3/25/2011	X	X	X	10.0	5.0		5.0		0%
						6/1/2011	X	X		12.0	6.0		6.0		0%
SDF10	Grate Inlet Skimmer Box	Alley b/w 8th St. & Delawater St	City Alley	910.20	2/5/2007	9/20/2010	X	X	X	5.0	2.5		2.5		0%
	32" X 40"					1/4/2011	X	X		10.0	3.3	3.3	3.3		10%
	Hydrocarbon absorption boom					3/25/2011	X	X	X	10.0	5.0		5.0		0%
						6/1/2011	X	X		12.0	6.0		6.0		0%
SDF11	Grate-Inlet Box	Curb inlet at SW Corner 9th St. / Palm Ave.	Curb Inlet	910.20	2/22/2007	9/20/2010	X	X	X	10.0	3.3	3.3	3.3		0%
	24" X 36"					1/4/2011	X	X		5.0	1.7	1.7	1.7		0%
	Hydrocarbon absorption boom					3/25/2011	X	X	X	10.0	3.3	3.3	3.3		0%
						6/1/2011	X	X		15.0	5.0	5.0	5.0		0%
SDF12	KriStar, Flo Guard Plus Catch Basin Insert	740-798 Florida Street alley behind apartment	City Alley	910.20	5/17/2007	9/20/2010	X	X		5.0	2.5	0.0	2.5		0%
						1/4/2011	X	X		40.0	13.3	13.3	13.3		40%
						3/25/2011	X	X	X	15.0	5.0	5.0	5.0		0%
						6/1/2011	X	X		0.0	0.0		0.0		0%
SDF13	24" Diameter Grate and 22" Diameter Inlet	4th Street at Sports Park	South end of parking lot at Sports Park	911.11	6/29/2009	9/20/2010	X	X	X	5.0	2.5		2.5		15%
						1/4/2011	X	X		20.0	6.7	6.7	6.7		25%
	Round Hydro Flow Guard Plus and					3/25/2011	X	X	X	20.0	6.7	6.7	6.7		80%
	hydrocarbon booms					6/1/2011	X	X		15.0	5.0	5.0	5.0		50%
									Totals	**396.0**	**168.5**	**65.0**	**160.5**		

Table 4.4 Municipal Facility and Activity Inventory and Inspection Record

Agency	Facility Name	Address Number	Suite	Street Name	City	State	Zip	Hydrologic Area	SIC	NAICS	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	Threat to water quality	APN	Latitude	Longitude	Inspected	Comments
IB	Pump Station #10 (Above ground)	814		Cypress Ave.	Imperial Beach	CA	91932	910.20	4952	221300	SS	x	x		x	x	x	x	x		NO	High	6260905500	32.587228	-117.115014	2/24/2011	None
IB	Pump Station #1A (Underground)	862		Seacoast Dr.	Imperial Beach	CA	91932	910.10	4952	221300	SS	x	x		x	x	x	x	x		NO	High		32.580551	-117.131772	6/23/2011	None
IB	Pump Station #1B (Underground)	1098		Seacoast Dr.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.576639	-117.131879	3/24/2011	None
IB	Pump Station #2 (Above ground)	1306		Seacoast Dr.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.57303	-117.131766	7/22/2010	None
IB	Pump Station #3 (Underground)	501		Elm Ave.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.580104	-117.122348	4/28/2011	None
IB	Pump Station #4 (Underground)	755		Delaware Ave.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.583055	-117.116603	12/16/2010	None
IB	Pump Station #5 (Underground)	133		Dahlia Ave.	Imperial Beach	CA	91932	910.10	4952	221300	SS	x	x		x	x	x	x	x		NO	High		32.583113	-117.130964	5/26/2011	None
IB	Pump Station #6 (Underground)	498		Rainbow St.	Imperial Beach	CA	91932	910.10	4952	221300	SS	x	x		x	x	x	x	x		NO	High		32.586156	-117.12068	12/9/2010	None
IB	Pump Station #7 (Underground)	504		Oneonta Ave.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.570987	-117.122064	10/28/2010	None
IB	Pump Station #8 (Underground)	895		Imperial Beach Bl	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.576374	-117.114931	1/27/2011	None
IB	Pump Station #9 (Underground)	1025		9th St.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.578243	-117.114069	8/20/2010	None
IB	Underground Sewer	n/a		Citywide	Imperial Beach	CA	91932	All	4952	221300	SS	x	x		x	x	x	x	x		NO	High				Annually	None
IB	Graffiti Removal	n/a		Citywide	Imperial Beach	CA	91932	All	7349	561790	MA										N/A	High				5/16/2011	Inspection done during cost recovery event. All runoff collected.
IB	Pump Station #11 (Storm Drain)	Int.		Palm Ave. and Ocean Ln.	Imperial Beach	CA	91932	910.10	4952	221300	MS4	x	x		x	x	x	x	x		NO	High		32.583963	-117.132611	5/11/2011	None
IB	Special Event Venues	n/a		Citywide	Imperial Beach	CA	91932	All		921190	MU										N/A	High				Per Event	Sand Castle event in 2010 resulted in one NOV for illegal dumping.
IB	Underground MS4	n/a		Citywide	Imperial Beach	CA	91932	All	4952	221300	MS4	x	x	x	x	x	x	x	x	x	N/A	High				Annually	None
IB	Fire Station	865		Imperial Beach Bl	Imperial Beach	CA	91932	911.11		922160	PS	x	x	x	x	x	x	x	x	x	YES	High	6321112700	32.576135	-117.115677	5/12/2011	None
IB	Beachfront	n/a		Int. Border to Camp Surf	Imperial Beach	CA	91932	911.11	7999	713990	BF									x	YES	High				5/11/2011	None
IB	Imperial Beach Pier	Int.		Evergreen Ave. and Seacoast Dr.	Imperial Beach	CA	91932	911.11	7999	713990	PK									x	YES	High		32.579578	-117.137124	5/11/2011	None
IB	Pier Plaza	Int.		Evergreen Ave. and Seacoast Dr.	Imperial Beach	CA	91932	911.11	7999	713990	PK	x	x		x			x	x	x	YES	High	6253402000	32.579209	-117.13213	5/11/2011	None
IB	Seacoast & Palm Parking Lot	105		Palm Ave.	Imperial Beach	CA	91932	910.10	7521	812930	PL	x	x	x	x	x	x		x	x	NO	High	6251910100	32.58378	-117.131418	5/11/2011	None
IB	I.B. Boys & Girls Club	847		Encina Avenue	Imperial Beach	CA	91932	911.11	7999	713990	PK	x			x			x	x	x	YES	Low	6264007100	32.577109	-117.116187	5/12/2011	Trash container left open and green waste in the trash: Requested regular closure of the container and use of of green waste bins.
IB	Sports Park & Recreation Center	425		Imperial Beach Bl	Imperial Beach	CA	91932	911.11	7999	713990	PK	x			x			x	x	x	YES	High	6324003500	32.576314	-117.123641	5/12/2011	Recycling cover open: Requested regular closure. Debris in trash enclosure: requested cleanup. Greenwaste in trash: requested use of greenwaste bin.
IB	Marina Vista Center	1075		8th Street	Imperial Beach	CA	91932	911.11	8322	624120	AD	x			x			x	x	x	YES	High	6264007100	32.577109	-117.116187	5/12/2011	Grate on 8th St. needs stencil: will include this in our educational stenciling.
IB	Alleys	n/a		Citywide	Imperial Beach	CA	91932	All		926120	RD		x	x	x	x	x		x	x	N/A	High				Annually	Trash illegally dumped in alleys: EDCO removes weekly

Agency	Facility Name	Address Number	Suite	Street Name	City	State	Zip	Hydrologic Area	SIC	NAICS	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	Threat to water quality	APN	Latitude	Longitude	Inspected	Comments
IB	Streets	n/a		Citywide	Imperial Beach	CA	91932	All		926120	RD		x	x	x	x	x		x	x	N/A	High				Annually	None
IB	Traffic Islands	n/a		Citywide	Imperial Beach	CA	91932	All		926120	RD		x	x	x	x	x		x	x	N/A	Low				Annually	None
IB	City Hall	825		Imperial Beach Bl	Imperial Beach	CA	91932	911.11		921190	AD	x			x			x	x	x	YES	High	6321112700	32.576135	-117.11568	5/12/2011	Stencil needed on inlet grate in parking lot: will include this in our educational stenciling.
IB	Public Works Yard	495		10th Street	Imperial Beach	CA	91932	910.20		921190	CY			x		x	x			x	NO	High	6260600500	32.589236	-117.111108	5/12/2011	None
IB	Dempsey Holder Safety Center	950		Ocean Ln	Imperial Beach	CA	91932	911.11		922120	PS	x	x	x	x	x	x	x	x	x	YES	High	6253401800	32.578694	-117.132217	5/12/2011	None
IB	Dunes Park	750		Seacoast Dr.	Imperial Beach	CA	91932	910.10	7999	713990	PK	x			x			x	x	x	NO	High	6251821100	32.582283	-117.132179	5/12/2011	Bags of garbage left on grounds:Tidelands removed.
IB	Elkwood Parking Lot	102		Elkwood Ave.	Imperial Beach	CA	91932	911.11	7521	812930	PL	x	x	x	x	x	x		x	x	YES	High	6253532200	32.578392	-117.131412	5/11/2011	Irrigation results in excessive runoff: Irrigation adjustment requested.
IB	Reama Park	201		Elder Avenue	Imperial Beach	CA	91932	911.11	7999	713990	PK	x			x			x	x	x	YES	High	6254012600	32.578683	-117.129327	5/12/2011	None
IB	Serenity Garden	270		Palm Ave.	Imperial Beach	CA	91932	910.10	7999	713990	PK	x			x			x	x	x	NO	Low		32.58422	-117.127879	5/11/2011	None
IB	Teeple Park	600		Florida St.	Imperial Beach	CA	91932	910.20	7999	713990	PK	x			x			x	x	x	NO	High	6261702400	32.585276	-117.109699	5/12/2011	None
IB	Triangle Park	Int.		Hwy 75 at 7th St.	Imperial Beach	CA	91932	910.20	7999	713990	PK	x			x			x	x	x	NO	High		32.584057	-117.117621	5/9/2011	None
IB	Veteran's Park	1075		8th Street	Imperial Beach	CA	91932	911.11	7999	713990	PK	x			x			x	x	x	YES	High	6264007100	32.577109	-117.116187	5/12/2011	None

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Attachment 4A Storm Water GIS Map

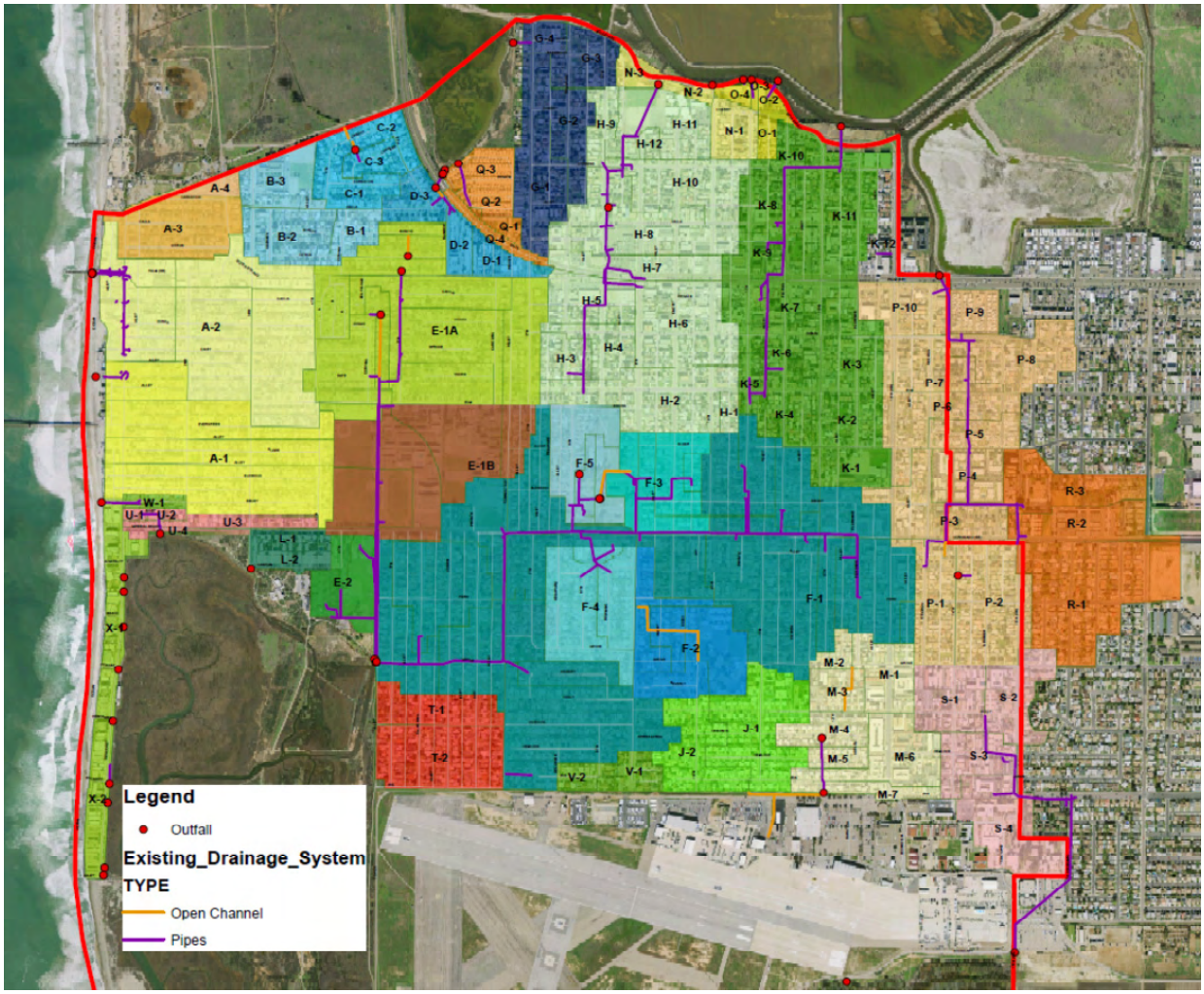

Attachment 4B Storm Drain Maintenance Form Example

Annual Catch Basin and MS4 Storm Drain Maintenance Form **Drainage Area: A**

Date: _____

Drainage Basin Information

Receiving Water: Tijuana Estuary and Pacific Ocean
Number of catch basins: 8
Underground storm drain MS4 system: #### feet
Aboveground storm drain channels: #### feet
Other MS4 features: Storm drain diverters at Palm Ave and Date Ave prevent low flow runoff from discharging onto the beach. Trash grates also cover the inlets on lower Seacoast Dr that drain into the Tijuana Estuary.

Catch Basins (all catch basins with debris and sediment need to be cleaned):

Inspected	Cleaned	Catch Basin Node
_____	_____	A-22 (MH 139)
_____	_____	A-21 (MH 32)
_____	_____	A-20 (MH 33)
_____	_____	A-15 (MH 49)
_____	_____	A-14 (MH 50)
_____	_____	A-10a (MH 53)
_____	_____	A-9 (MH 149)
_____	_____	A-3 (MH 137)

Percent of storm drain line cleaned through jetting: _____ %

Amount of Material Removed		
Trash	Sediment	Organic
lbs.	lbs.	lbs.

Comments:

Annual Catch Basin and MS4 Storm Drain Maintenance Form **Drainage Area: A**

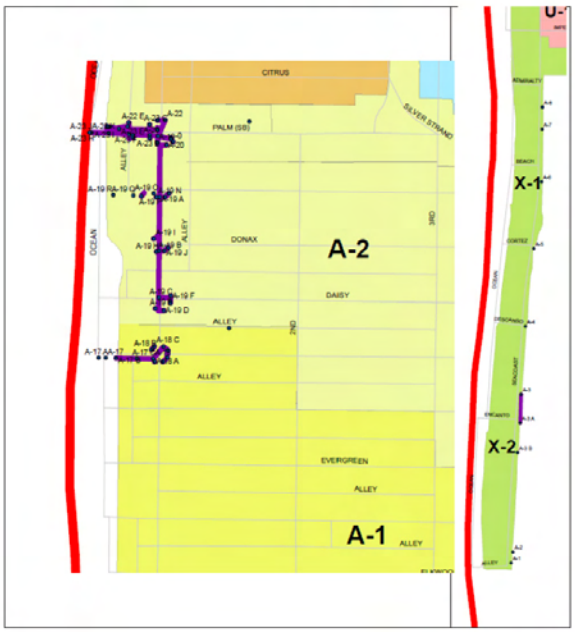

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5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from industrial and commercial sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations at businesses within the City and reduce the discharge of pollutants to the MS4 to the maximum extent practicable (MEP). The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements.

5.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Industrial and Commercial Component is described in the *2008 JURMP Section 7.0*. During the reporting period the City made routine updates to the Commercial and Industrial business inventory which follows the Copermittee's inventory template. The inventory is maintained on the Environmental Division server and identifies all industrial and commercial facilities that could contribute pollutant loads to the MS4. The City currently does not have any industrial facilities on that inventory. Records are also maintained on each specific business for inspections, corrective actions, and illegal discharges. During the reporting period the City continued to incorporate fats, oils, and grease (FOG) management into the commercial business inspection program for restaurants.

5.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division provides notification and verification of minimum BMPs for commercial businesses, in addition to performing inspections at all high priority commercial businesses in the City. The City also inspects non-high priority business and mobile businesses during the year as necessary. Inspections are conducted and documented as outlined in the *2008 JURMP Section 7.0*.

In addition to City staff reporting illegal discharges, the Environmental Division also responds to calls to the storm water hotline and from online complaints. However, the vast majority of storm water violation reports are made from City staff. The low number of commercial businesses and relatively contained commercial zoning allows City staff to be the predominant eyes on the street for identifying storm water violations.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Commercial Industrial program element:

- Table 5.1 Provides an overview of the Industrial and Commercial inventory by facility type and priority classification
- Table 5.2 presents and describes targeted FY 2010-11 outcomes and results
- Table 5.3 Commercial Business Inspections FY 2010-11
- Table 5.4 and Figure 5.1 Interactive Effectiveness Assessment of Commercial Businesses

- Table 5.5Complete Commercial Business Inventory FY 2010-11

5.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Businesses

Commercial businesses receive education on storm water BMPs through a number of different methods including direct mail, face-to-face interaction with City staff during inspections, through dissemination of education material, and through follow up inspections to ensure compliance. The City also provides education to businesses during ICID investigations.

The Environmental Division also incorporates an interactive effectiveness assessment of commercial businesses during the annual storm water inspection at randomly selected businesses to gauge level of knowledge and awareness. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness at commercial businesses in the City. General results showed a moderate level of knowledge among the businesses. The results are outlined in Table 5.4 and Figure 5.1.

5.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Businesses

The City facilitates changes in behavior and implementation of BMPs at commercial businesses by providing continuous education efforts through face-to-face interactions, routine inspections, dissemination of brochures, mailing of post inspection letters, and responding to illegal storm water discharges. The *2008 JURMP Appendix F* defines minimum BMP requirements applicable to industrial and commercial projects in the City. The *2008 JURMP Section 7.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes for commercial, industrial, and mobile businesses.

5.6 Outcome Level 4: Source Load Reductions

The two step approach of education on storm water pollution and enforcement of BMPs have unquestionably resulted in the source load reductions from commercial businesses. Although the City does not currently track source load reductions from commercial sites, the increased level of knowledge on storm water BMPs and cooperation among the local business community have successfully prevented the illegal discharge of pollutants from commercial businesses. Source load reductions can be implied from commercial businesses through the proper implementation of BMPs.

Table 5.1 – Overview of Industrial and Commercial Component by Facility Type and Priority Classification

Category	Number	Description
A. Type of Facility		
Industrial	0	Industrial activity is extremely limited. Only one business in operation that can reasonably be classified as "industrial" is a surfboard manufacturing company that performs all of its operations indoors, and is very similar to a commercial facility. The term "commercial" is therefore used for the activities within the City. As such, there is no need in this jurisdiction to identify non-filers under the General Industrial Permit.
Commercial	328	
B. Priority Classification Totals		
High	63	Imperial Beach Municipal Code 8.30.090 defines commercial businesses as either high or non-high (low) priority. High priority businesses include all food service and auto service related businesses.
Low	258	
Mobile	51	Mobile business database is tracked and maintained on the new copermittee online Regional Mobile Business Inventory.
C. Inspection Totals		
Commercial Business Inspections	65	The Environmental Division conducts all commercial inspections. All high priority businesses receive inspections annually for storm water compliance. Commercial businesses that have a significant storm water violation receive a follow up investigation.
Follow Up Inspections	45	
Mobile	0	Mobile businesses do not currently receive annual inspections. The Environmental Division inspects mobile businesses while responding to illegal discharge or public service requests.
D. Enforcement Actions		
Notice of Violations (NOVs)	11	Businesses with multiple BMP violations generally receive a NOV and 2 follow up investigations.
Minor Violations (Follow Up)	22	Minor violations generally receive a follow up investigation and written warning.

JURMP Sections	Description of FY 2010-11 Changes
7.0 and Appendix F	BMP requirements of the JURMP applicable to industrial and commercial facilities were modified with the requirements of the updated Permit in March 2008. During this reporting period the City purchased a filed computer in order to more effectively conduct inspections, education, and enforcement operations.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates were made during reporting period	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	No updates were made during reporting period	Complete	No significant updates made to this program component.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Updates to Training Program			
Update training materials for businesses	No updates to education materials and staff	Complete	The City makes updates to commercial inspection training content as necessary. Education activities include brochures, hand outs, informative letters, and inspections.
e) Updates to Commercial Inventor or Prioritization			
Update commercial inventory and prioritization	Annual updates made to the commercial inventory	Complete	Regular updates were made to the commercial and industrial business inventory. Starting this reporting period the City updated its commercial inventory to match the regional copermittee standard template. Currently all food or automotive related businesses get categorized as high priority and receive annual inspections. The regional online mobile business database was also maintained online.

Industrial and Commercial FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Commercial Businesses			
Require commercial and industrial businesses to implement BMPs and verify through inspections	Notified businesses through mail, conducted inspections, responded to ICIDs, and provided education materials	Complete	The City requires all commercial and industrial sites/sources to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City's Urban Runoff Management and Discharge Control Ordinance (Chapters: 8.30.070, 8.30.090, and 8.30.100) mandate the implementation of designated BMPs and control measures. The commercial inspection program and ICID program are the mechanisms used to educate businesses on BMPs. All high priority businesses receive annual inspections for storm water.
b) Confirmation of Designated Minimum BMPs			
Verify the implementation of minimum BMPs for commercial businesses	Conducted commercial inspections and follow up inspections to verify BMPs	Complete	The City verifies the implementation of minimum BMPs at commercial businesses through the implementation of the commercial inspection program. The environmental division conducts annual inspections of all high priority businesses, which include all food and automotive facilities in the City.
c) Confirmation of Commercial Inspections			
Verify that commercial inspections achieve BMP compliance	Inspected all high priority commercial businesses	Complete	The Environmental Division incorporates an interactive effectiveness assessment at a random selection of commercial businesses during the annual storm water inspection to assess program effectiveness. The goal of the assessment is to get beyond BMP verification and assess the level of BMP knowledge.
d) Justification for Commercial Inspection Prioritization			
Provide rationale for the businesses that were inspected	IBMC 8.30.090 defines commercial businesses as either high or non-high (low) priority	Complete	High priority businesses include at a minimum all food service and auto service related businesses in the City. Businesses that have a treatment control BMPs also receive inspections as well as businesses that cause an ICID.

Industrial and Commercial FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Efforts Made to Notify Businesses of BMPs			
Describe efforts made to notify businesses of BMPs	Notification made through education material, inspections, follow up inspection, and follow up letters	Complete	High priority businesses receive storm water inspections and follow up inspections in the case of a violation. A post inspection letter is also mailed to the business outlining the results of the visit. Education material is provided at the time of inspection and in some cases mailed with the post inspection letter.
f) Third Party Inspections			
Describe third party inspection results	None	---	The City conducts all commercial inspections through the Environmental Division
g) General Industrial Permit Non-Filers			
Describe steps taken to identify industrial non-filers	None	Complete	The City did not have any industrial businesses during the reporting period.
h) Mobile Businesses			
Describe efforts made to address mobile businesses	Inspected mobile businesses as necessary	Complete	The City contacted each mobile business through mail with a letter and brochure that outlines the minimum BMP requirements during the last reporting period. The Environmental Division informally inspects mobile businesses while responding to illegal discharge reports and public service requests.
i) Special Investigations			
Not targeted	Interactive assessment	Complete	The Environmental Division incorporates an interactive effectiveness assessment of commercial businesses and rates businesses on a scale of 1 out of 5. The results of the assessment are presented in Table 5.4 and Figure 5.1.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY COMMERCIAL BUSINESSES)			

Industrial and Commercial FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Assess storm water program implementation knowledge from commercial businesses	Conducted interactive assessment of commercial businesses during annual inspections	Assessment results provided in Table 5.4 and figure 5.1	The goal of the assessment is to get beyond BMP verification and assess the level of BMP knowledge among a random selection of commercial businesses in the City.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY COMMERCIAL BUSINESSES)			
a) Commercial Business BMP Implementation			
Inspect businesses for compliance	65 sites inspected and 45 follow up inspections	Complete	The City inspections 100% of high priority commercial businesses, non-high priority businesses, and mobile businesses as needed. Inspections consist of observing business operations, reviewing minimum BMPs, and enforcing pollution prevention practices.
Notify mobile and fixed commercial businesses of BMP requirements	65 fixed commercial and 0 Mobile Businesses contacted through mail	Complete	The City notifies business owners and operators, both fixed and mobile, of BMP requirements through a combination of methods including site inspections, follow-up inspection reports, direct mailings, inclusion of BMP information with business license and special event vendor packets, online resources such as the Project Clean Water website, and City's website. During last reporting period all mobile businesses were notified of BMPs through the mail.
b) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	Follow up inspections required at 33 businesses. City also issued 11 NOVs	Complete	The City enforces compliance at all businesses, including mobile sources, using an escalating series of enforcement actions. Verbal or written warnings are used when violation in question is minor. Notices of Violations (NOVs) may be issued for any observed violation. And escalating administrative penalties, fines, and civil penalties may be enforced for non compliance
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)			
a) BMP Implementation			

Industrial and Commercial FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Load reductions from proper BMP implementation	All high priority businesses were educated on BMPs	---	Source load reductions are not easily tracked from commercial businesses but can be implied through proper implementation of BMPs.

Table 5.3 Commercial Business Inspections FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Establishment Class	Date Inspected	Result	Cleared
1	7-ELEVEN STORE # 24344B-2131	1311	0	PALM AVE	Imperial Beach	CA	91932	HIGH	4/4/2011	Follow Up	4/27/2011
2	7-ELEVEN STORE #23982A-2131	1303	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	2/16/2011	NOV	3/4/2011
3	ALBERTO'S TACO SHOP	1183	0	13TH ST	Imperial Beach	CA	91932	HIGH	4/28/2011	NOV	5/3/2011
4	ALL AMERICAN CAR WASH IB	1158	0	PALM AVE	Imperial Beach	CA	91932	LOW	2/24/2011	Cleared	2/24/2011
5	AROMA THAI RESTAURANT	757	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	10/14/2010	Follow Up	11/8/2010
6	BEACH SIDE STATION	681	0	HIGHWAY 75	Imperial Beach	CA	91932	HIGH	10/27/2010	Cleared	10/27/2010
7	BERNARDO SHORES	500	0	HIGHWAY 75	Imperial Beach	CA	91932	HIGH	10/27/2010	Cleared	10/27/2010
8	BEACH CLUB GRILLE	710	0	SEACOAST DR	IMPERIAL BEACH	CA	91932	HIGH	2/2/2011	Cleared	2/2/2010
9	BIG KAHUNA'S PIZZA N STUFFS	600	0	PALM AVE	Imperial Beach	CA	91932	HIGH	10/14/2010	Cleared	10/14/2010
10	BURGER KING #806	1180	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/24/2011	Cleared	2/24/2011
11	C.H. DONUTS	1070	0	13TH ST	Imperial Beach	CA	91932	HIGH	3/10/2011	NOV	4/4/2011
12	CARL'S JR. #585	700	0	13TH ST	Imperial Beach	CA	91932	HIGH	2/24/2011	Cleared	2/24/2011
13	COW-A-BUNGA CA GLACIER FNAM	10	0	EVERGREEN AVE	Imperial Beach	CA	91932	HIGH	10/7/2010	Cleared	10/7/2010
14	CROSSROAD PETROLEUM INC.	1185	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/4/2011	NOV	6/9/2011
15	DEPENDABLE CARBURETOR EXCHANGE	660	0	EMORY ST	Imperial Beach	CA	91932	HIGH	2/1/2011	Cleared	2/1/2011
16	DON PANCHO'S MEXICAN FOOD	690	0	HIGHWAY 75	Imperial Beach	CA	91932	HIGH	3/17/2011	NOV	5/3/2011
17	ECONO LUBE N' TUBE	772	0	13TH ST	Imperial Beach	CA	91932	HIGH	11/12/2010	NOV	12/9/2010
18	EL CILANTRO MEXICAN FOOD	764	0	13TH ST	Imperial Beach	CA	91932	HIGH	11/12/2010	Follow Up	12/9/2010
19	EL TAPATIO CATERING	667	0	SILVER STRAND BL	Imperial Beach	CA	91932	HIGH	2/9/2011	Follow Up	4/27/2011
20	EL TAPATIO RESTAURANT INC	260	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/9/2011	Follow Up	4/27/2011
21	G & M OIL #177	907	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/2/2011	Follow Up	4/13/2011
22	GENES' AUTOMOTIVE	1085	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/16/2011	NOV	4/27/2011
23	GIANT PIZZA KING #4	1070	0	13TH ST	Imperial Beach	CA	91932	HIGH	3/10/2011	NOV	4/4/2011
24	GIANT PIZZA KING #5	600	0	PALM AVE	Imperial Beach	CA	91932	HIGH	10/14/2010	Cleared	10/14/2010
25	GUISEPPES PIZZA	1293	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	3/10/2011	NOV	4/4/2011
26	IB FORUM	1079	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	10/14/2010	Follow Up	11/8/2010
27	IMPERIAL BEACH ULTRAMAR	1300	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	2/16/2011	Cleared	2/16/2011
28	IMPERIAL DONUTS +	1002	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/1/2011	Cleared	2/1/2010
29	KATY'S CAFE	704	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	2/2/2011	Cleared	2/2/2011
30	K-C'S CHINESE FOOD	1299	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	3/10/2011	NOV	4/4/2011
31	KFC CORP #Y450025	1056	0	13TH ST	Imperial Beach	CA	91932	HIGH	11/18/2010	Citation	12/9/2010
32	L & M TIRE CO./ EXPRESS TIRE	950	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/1/2011	Cleared	2/1/2011
33	LA POSTA MARKET #2	1266	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	11/18/2010	Follow Up	12/9/2010
34	MARCO'S & RED HAWK	1205	0	PALM AVE	Imperial Beach	CA	91932	HIGH	4/27/2011	NOV	5/11/2011
35	MARISA'S MEXICAN SEAFOOD GRILL	285	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/9/2011	Follow Up	4/27/2011
36	MASON'S ALIGNMENT-BRAKE-MUFFLE	975	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/30/2011	Follow Up	3/30/2011
37	MCDONALDS/SCAROB INC.	1135	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/2/2011	Follow Up	4/27/2011
38	MEIJO SUSHI, INC.	600	0	PALM AVE	Imperial Beach	CA	91932	HIGH	10/27/2010	Cleared	10/27/2010
39	MICKIES BAR AND GRILL	220	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/9/2011	Cleared	2/9/2011
40	NFAROOQI ENT. LLC/JACK IN BOX	890	0	PALM AVE	Imperial Beach	CA	91932	HIGH	12/9/2010	Cleared	12/9/2010
41	Olive Oil Café	600	109	PALM AVE	Imperial Beach	CA	91932	HIGH	10/15/2010	Follow Up	10/25/2010
42	PIZZA INDUSTRY/DOMINO'S PIZZA	1307	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	2/16/2011	NOV	3/4/2011
43	PRECISION AUTO BODY & COLLISIO	989	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/30/2011	Follow Up	4/28/2011
44	PRECISION FOREIGN	1240	0	PALM AVE	Imperial Beach	CA	91932	HIGH	4/4/2011	Follow Up	4/4/2011
45	PRETZLES AND MUCH MORE	10	0	EVERGREEN AVE	Imperial Beach	CA	91932	HIGH	10/7/2010	Cleared	10/7/2010
46	RODRIGO'S MEXICAN FOOD	600	0	PALM AVE	Imperial Beach	CA	91932	HIGH	10/27/2010	Cleared	10/27/2010
47	ROLANDO'S TACO SHOP #5	805	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	2/2/2011	Cleared	2/2/2011
48	SANTANA MEXICAN FOOD	1337	0	PALM AVE	Imperial Beach	CA	91932	HIGH	11/18/2010	Follow Up	12/9/2010
49	SEACOAST PIZZA	807	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	2/2/2011	Cleared	2/2/2011
50	SIESTA RV PARK, INC.	409	0	PALM AVE	Imperial Beach	CA	91932	HIGH	4/7/2011	Follow Up	4/7/2011
51	SOMBRERO MEXICAN FOOD	189	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/1/2011	Cleared	2/1/2011
52	SOPHISTICATED AUTO	987	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/30/2011	Follow Up	4/28/2011
53	STARDUST DONUT SHOP	698	0	HIGHWAY 75	Imperial Beach	CA	91932	HIGH	2/9/2011	Cleared	2/9/2011
54	SUBSMART DELI-FRESH	1231	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/24/2011	Cleared	2/24/2011
55	SUBWAY 20578	876	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	10/7/2010	Cleared	10/7/2010
56	THE BRIDGE	874	0	SEACOAST DR	Imperial Beach	CA	91932	LOW	10/7/2010	Cleared	10/7/2010
57	THE SCOREBOARD	951		PALM AVE	Imperial Beach	CA	91932	HIGH	3/2/2011	Follow Up	4/27/2011
58	THE TINFISH RESTAURANT	910	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	3/17/2011	Cleared	3/17/2011
59	THE WAVE CAFE	809	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	3/17/2011	Follow Up	4/4/2011
60	The Wright Way	1051	Suite D	13TH ST	Imperial Beach	CA	91932	HIGH	11/3/2010	Cleared	11/3/2010
61	TITO AUTO SERVICE	1335	0	PALM AVE	Imperial Beach	CA	91932	HIGH	11/18/2010	Cleared	11/18/2010
62	TNT SURFBOARDS	536	0	13TH ST	Imperial Beach	CA	91932	HIGH	11/29/2010	Follow Up	1/6/2011
63	WALLY'S IGA	836	0	PALM AVE	Imperial Beach	CA	91932	HIGH	12/9/2010	Cleared	12/9/2010
64	WIENERSCHNITZEL #358	1253	0	PALM AVE	Imperial Beach	CA	91932	HIGH	4/4/2011	Cleared	4/4/2011
65	WOODYS AUTO CARE	200	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/9/2011	Follow Up	2/24/2011

Table 5.4 and Figure 5.1 Interactive Effectiveness Assessments of Commercial Businesses

Facility	HAVE YOU HEARD OF OUR PROGRAM	IS RUNOFF TREATED	FINAL DESTINATION OF STORM WATER
Mexican Restaurant	2	3	5
Automobile Service	5	5	4
Mexican Deli	5	5	5
Fried Chicken Restaurant	3	3	3
Surfboard Manufacturer	3	2	3
Mexican Restuarant	1	1	1
Automobile Service	5	5	5
Seafood Restaurant	2	3	1
Catering Company	3	3	5
Automobile Service	5	5	5
Average	3.4	3.5	3.7
	Employee awareness of our programs	**Employee awareness that runoff is not treated**	**Employees awareness of the final destination of storm water**
Average	**3.4**	**3.5**	**3.7**

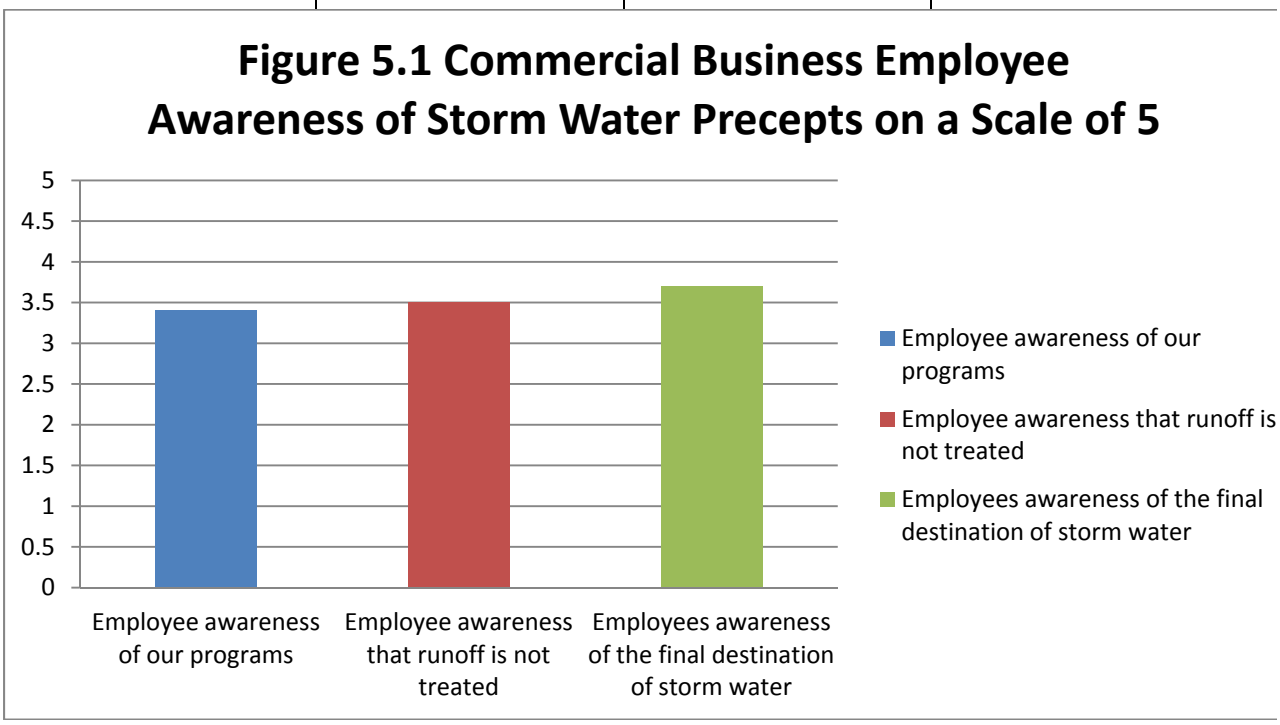

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Table 5.5 - Commercial Business Inventory FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Hydrologic Area	SIC Code Numeric	NAICS Code Numeric	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
1	13TH ST MARKET	1126		13TH ST	Imperial Beach	CA	91932	911.11	5921	445310	LIQU	x	x		x	x	x	x	x		Yes	Yes	6330221900	32.575943	-117.105862
2	7 ELEVEN 18322/RNJ ENTERPRISES	657		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6252541100	32.58376	-117.118931
3	7-ELEVEN #13563G-2131	197		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251912500	32.583807	-117.129828
4	7-ELEVEN STORE # 24344B-2131	1311		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL	x	x	x		x	x		x	x	No	No	6270111800	32.58364	-117.105344
5	7-ELEVEN STORE #23982A-2131	1303		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5999	453998	RETL	x	x	x		x	x		x	x	Yes	No	6330310100	32.576412	-117.105527
6	AB BRITE CLEANERS & LAUNDRY	674		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401700	32.58408	-117.118594
7	ADEPT PROCESS SERVICES LLC	706		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251811307	32.583429	-117.131854
8	ALBERTO'S TACO SHOP	1183		13TH ST	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x			x	x			x	Yes	No	6330313000	32.575108	-117.105547
9	ALL AMERICAN CAR WASH IB	1158		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262300500	32.58413	-117.109042
10	ALL PHASE DRYWALL	1187		13TH ST	Imperial Beach	CA	91932	911.11	1742	238310	GENCONT										Yes	No	6330311500	32.575049	-117.105547
11	ALLSTATE INSURANCE	1228		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262411900	32.58412	-117.10735
12	AMANDA'S HAIRSTYLING	637		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584887	-117.114135
13	AMERICAN LEGION POST NO 820	1268		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING										No	No	6262420900	32.58412	-117.106402
14	AMERICAN OMBUDSMAN ENTERPRISES	150		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6250140700	32.58408	-117.130638
15	AMERICA'S FINEST DRIVINGSCHOOL	936		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262123200	32.584118	-117.113439
16	AMOR FLOWERS & TUX	181		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251911700	32.583808	-117.130104
17	ANCHOR MOTORS	740		PALM AVE	Imperial Beach	CA	91932	910.20	5521	441120	AUTO		x	x		x			x		No	No	6262021900	32.5841	-117.117599
18	ANTJE GERSTUNG	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
19	AROMA THAI RESTAURANT	757		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6251920400	32.58251	-117.131642
20	ARTCO PICTURE FRAMES	716		BASSWOOD AVE	Imperial Beach	CA	91932	910.20	5023	423220	WHOL										No	No	6260212300	32.590411	-117.117504
21	AUNT ELLEN'S WATER	600	101	PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
22	BEACH CLUB GRILLE	710	F	SEACOAST DR	IMPERIAL BEACH	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6251821000	32.583076	-117.1318
23	BEACH SHOP	710		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251821046	32.583076	-117.1318
24	BEACH SIDE STATION	681		HIGHWAY 75	Imperial Beach	CA	91932	910.20	5541	447190	GAS		x	x		x	x		x	x	No	No	6262501200	32.584501	-117.118603
25	BEAN THERE BREWED THAT	600	112	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6251401900	32.584072	-117.120629
26	BERNARDO SHORES	500		HIGHWAY 75	Imperial Beach	CA	91932	910.20	7033	721211	RVMOBIL		x								No	No	6251402000	32.586034	-117.120221
27	BEST 99 CENT	821		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500600	32.583755	-117.115196
28	BIBBEY'S GIFT SHOP	903		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6253510100	32.580109	-117.131601
29	BIBBEY'S SHELLS AND ROCKS	903		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6253510100	32.580109	-117.131601
30	BIG KAHUNA'S PIZZA N STUFFS	600	117	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6251401900	32.584072	-117.120629
31	BILBRAY TAX SERVICE	970		SEACOAST DR	Imperial Beach	CA	91932	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891
32	BILLIE JEANS HAIRSTYLING	1144		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6261700500	32.58413	-117.109567
33	BILL'S HAPPY HAIR	839		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262500600	32.583749	-117.115025
34	BOWMAN'S MARKET	1008		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262221100	32.584072	-117.111372
35	BOYS & GIRLS CLUB OF IB	847		ENCINA AVE	Imperial Beach	CA	91932	910.20	7999	713290	BINGO										No	No	6264001200	32.580074	-117.115705
36	BOYS & GIRLS CLUB OF IB	847		ENCINA AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6264001200	32.580074	-117.115705
37	BRENT JACKMAN CONSTRUCTION	708		BASSWOOD AVE	Imperial Beach	CA	91932	910.20	1799	238990	GENCONT										No	No	6260211400	32.590412	-117.11766
38	BRYANTS AUTO REGISTRATION SVS	1235		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263111400	32.58364	-117.107297
39	BULL PEN	706		HIGHWAY 75	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6262011100	32.584607	-117.117769
40	BURGER KING #806	1180		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6262302000	32.58413	-117.108598
41	C.H. DONUTS	1070		13TH ST	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x		x	x	x	x	x		Yes	Yes	6265421100	32.577073	-117.105853
42	CA ALUMINUM&VINYL WINDOWS INC	754		10TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262821500	32.58299	-117.111994
43	CAFE DI ROMA	633		9TH ST	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6262121400	32.584935	-117.114134
44	CALIFORNIA-AMERICAN WATER COMP	1019		CHERRY	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6261021000	32.588539	-117.111495
45	CARL'S JR. #585	700		13TH ST	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6263121300	32.583631	-117.105846
46	CHAT COMM	1223		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6263111400	32.58364	-117.107528
47	CHOCO'S HAIRCUTTING	1256		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900	32.576671	-117.106592
48	CHRISTINA SCHUBERT	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
49	CHURCH OF CHRIST OF IB	640		10TH ST	Imperial Beach	CA	91932	910.20	8661	813110	NONPROF										No	No	6262212800	32.584827	-117.111994
50	CIRCLE H LIQUOR	600	113	PALM AVE	Imperial Beach	CA	91932	910.20	5921	445310	RETL										No	No	6251401400	32.584072	-117.120629
51	CITY NAILS	750		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
52	COCO AND GABOON	152		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6250140700	32.584079	-117.130604

Table 5.5 - Commercial Business Inventory FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Hydrologic Area	SIC Code Numeric	NAICS Code Numeric	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
53	COLWELL REALTY	134		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6250140500	32.584081	-117.130909
54	COMPREHENSIVE TRAINING SYSTEMS	497		11TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
55	COMPUTERVILLE	740		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262822500	32.58316	-117.111993
56	CORONADO BAY URGENT CARE	600	108	PALM AVE	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6251401900	32.584072	-117.120629
57	COW-A-BUNGA CA GLACIER FNAM	10		EVERGREEN AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	7602420903	32.579651	-117.132455
58	COX BAIT & TACKLE	996		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262211100	32.584093	-117.112008
59	CRAZY LADY'S	600	105	PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6251401900	32.584072	-117.120629
60	CRISS CROSS SALON	1115		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263012300	32.58365	-117.110177
61	CROSSROAD PETROLEUM INC.	1185		PALM AVE	Imperial Beach	CA	91932	910.20	5541	447190	GAS	x	x		x	x	x	x	x		No	No	6263021600	32.583675	-117.10857
62	CRYSTAL COVE COCKTAILS	995		PALM AVE	Imperial Beach	CA	91932	910.20	5813	722400	BAR										No	No	6262822200	32.583793	-117.111898
63	CVS/PHARMACY #9120	800		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262110600	32.584154	-117.115976
64	CYNTHIA SEPULVEDA	637		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584887	-117.114135
65	D & L LOCKSMITH	1148		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6261700500	32.584078	-117.109484
66	D'AMES FITNESS	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
67	DAWN SWANSON- POINDEXTER	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
68	DEPENDABLE CARBURETOR EXCHANGE	660		EMORY ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262122400	32.584593	-117.113213
69	DESPHY'S CLEANERS	600	104	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
70	DON PANCHO'S MEXICAN FOOD	690		HIGHWAY 75	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6260705800	32.584833	-117.118321
71	DOS MUNDOS TACO SHOP	1004		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6262221100	32.584048	-117.111402
72	E & S PRODUCE	1177		13TH ST	Imperial Beach	CA	91932	911.11	5999	453998	RETL										Yes	No	6330313000	32.575198	-117.105546
73	E.N.S. COIN LAUNDRY	1167		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575346	-117.105546
74	EAZY TAN	206		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6250230300	32.584073	-117.129323
75	ECONO LUBE N' TUBE	772		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x		No	No	6263121100	32.582738	-117.105835
76	ED'S SHOE REPAIR	635		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
77	EL CILANTRO CAFÉ	764		13TH ST	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6263121100	32.582838	-117.105836
78	EL TAPATIO CATERING	667		SILVER STRAND BL	Imperial Beach	CA	91932	910.10	5812	722110	EATING										No	No	6250241200	32.584428	-117.12804
79	EL TAPATIO RESTAURANT INC	260		PALM AVE	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6250250100	32.584068	-117.128037
80	ELM ADULT DAY HEALTH CARE CTR	1220		ELM AVE	Imperial Beach	CA	91932	910.20	8351	624410	DAYCARE										No	No	6263412000	32.580809	-117.1076
81	EPISCOPAL COMMUNITY SERVICES	485		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8351	624410	DAYCARE										Yes	No	6320841100	32.576485	-117.122693
82	EPISCOPAL COMMUNITY SERVICES	1340		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8011	621111	HEALTH										Yes	No	6272201400	32.576657	-117.104813
83	EVERYDAY FURNITURE	986		PALM AVE	Imperial Beach	CA	91932	910.20	5712	442110	RETL										No	No	6262211200	32.584108	-117.112203
84	EVERYDAY FURNITURE	1003		PALM AVE	Imperial Beach	CA	91932	910.20	5712	442110	RETL										No	No	6262910100	32.583741	-117.111743
85	FACTORY 2 U- #631	880		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262110700	32.584153	-117.114678
86	FAMILY BARBER SHOP	934		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262123200	32.584118	-117.113479
87	FAMILY HAIRCUTTERS	770		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121100	32.582763	-117.105835
88	FARMERS INSURANCE	932		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262123200	32.584118	-117.11352
89	FIRST ASSEMBLY OF GOD	588		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6261412200	32.585916	-117.114414
90	FITNESS WORLD	750		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
91	FLEET RESERVE CLUB	659		SILVER STRAND BL	Imperial Beach	CA	91932	910.10	5812	722110	EATING										No	No	6250241000	32.584744	-117.128104
92	FLESH SKIN GRAPHICS	1155		PALM AVE	Imperial Beach	CA	91932	910.20	7299	812199	TATOO										No	No	6263022000	32.58365	-117.109153
93	FURNITURE 2000	817		PALM AVE	Imperial Beach	CA	91932	910.20	5712	442110	RETL										No	No	6262500600	32.583756	-117.115235
94	G & M OIL #177	907		PALM AVE	Imperial Beach	CA	91932	910.20	5541	447190	GAS		x	x		x	x		x	x	No	No	6262810100	32.583717	-117.114056
95	G.E. BROWN SERVICE	497		11TH ST	Imperial Beach	CA	91932	910.20	1799	238990	SUBCONT										No	No	6260600600	32.587617	-117.110422
96	GENES' AUTOMOTIVE	1085		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262911400	32.583743	-117.111075
97	GENE'S TOWING SERVICE	753		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262910500	32.583013	-117.111675
98	GENE'S U'HAUL	1085		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262911400	32.583743	-117.111075
99	GIANT PIZZA KING #4	1070		13TH ST	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x		x	x	x	x	x		Yes	Yes	6265421100	32.577073	-117.105853
100	GIANT PIZZA KING #5	600	100	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6251401400	32.584072	-117.120629
101	GJAG CORP DBA PACIFIC POINT	657		10TH ST	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262221200	32.584637	-117.111674
102	GLORIA BARRIOS	770		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121100	32.582763	-117.105835
103	GOODWILL INDUSTRIES OF SD	849		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500600	32.583746	-117.11493
104	GREG MIXON	280		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768

Table 5.5 - Commercial Business Inventory FY 2010-11

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105	GUISEPPE'S PIZZA	1293		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x		x	x	x	x	x		Yes	Yes	6330222300	32.576394	-117.105869
106	H & R BLOCK	1313		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6270111800	32.583665	-117.10531
107	HAWKINS AUTO BODY	519		FLORIDA ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6261221300	32.587323	-117.109195
108	HEALING WAVE HOLISTIC H.C.	667		PALM AVE	Imperial Beach	CA	91932	910.20	8049	621399	MASSTEC										No	No	6262500900	32.58376	-117.118744
109	HELFON HANONO, OPTOMETRIST	894		PALM AVE	Imperial Beach	CA	91932	910.20	8042	621320	HEALTH										No	No	6262110700	32.584139	-117.114504
110	HOLLYWOOD VIDEO #005-580	720		13TH ST	Imperial Beach	CA	91932	910.20	7841	532230	SECHAND										No	No	6263121500	32.583383	-117.105843
111	HONG DIEP THI LE	750		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
112	HS CARS COMPANY INC	1333		PALM AVE	Imperial Beach	CA	91932	910.20	5521	441120	AUTO		x	x		x			x		No	No	6270111900	32.583656	-117.104908
113	HUTCHINS REALTY	1138		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6261700600	32.58413	-117.109691
114	I B GROOMIN	600	114	PALM AVE	Imperial Beach	CA	91932	910.20	752	812910	RETL										No	No	6251401400	32.584072	-117.120629
115	I B LIQUOR	801		SEACOAST DR	Imperial Beach	CA	91932	910.10	5921	445310	RETL										No	No	6252720100	32.581626	-117.131662
116	I.B. FLOWERS BY DESIGN	668		10TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262211000	32.584491	-117.111992
117	I.B. UNITED METHODIST CHURCH	455		PALM AVE	Imperial Beach	CA	91932	910.20	8661	813110	NONPROF										No	No	6252302300	32.58377	-117.123135
118	IB BEAUTIFUL INC	600	222	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
119	IB BY THE SEA GIFTS	862		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6253302100	32.580768	-117.131864
120	IB CHAMBER OF COMMERCE	702		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811303	32.583681	-117.131854
121	IB COIN LAUNDERLAND NO. 3	1010		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262221100	32.584084	-117.111357
122	IB COIN LAUNDRY #5	760		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121100	32.582887	-117.105837
123	IB DIVERS	641		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584839	-117.114136
124	IB FITNESS	600	121	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
125	IB FORUM	1079		SEACOAST DR	Imperial Beach	CA	91932	911.11	5812	722110	EATING		x	x		x			x		Yes	Yes	6253922300	32.576938	-117.131594
126	IB GIFTS & BEACH GEAR	700		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251811302	32.583808	-117.131833
127	IB MORTGAGE & REALTY	1258		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7389	561499	PROF										Yes	No	6265420900	32.57669	-117.106558
128	IB NUTRITION STORE	888		PALM AVE	Imperial Beach	CA	91932	910.20	5122	446191	RETL										No	No	6262110700	32.584145	-117.114578
129	IB PET	600	127	PALM AVE	Imperial Beach	CA	91932	910.20	5999	453910	RETL										No	No	6251401400	32.584072	-117.120629
130	IB SUPER WASH N DRY	1220		PALM AVE	Imperial Beach	CA	91932	910.20	7215	812310	RETL										No	No	6262412700	32.58412	-117.107485
131	IDEAL CHOICE INSURANCE AGENCY	1233		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6263111400	32.58364	-117.107336
132	IMPERIAL BEACH DENTALGROUP	1340		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
133	IMPERIAL BEACH EAGLE & TIMES	664		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262211000	32.584539	-117.111992
134	IMPERIAL BEACH HAIR DESIGNS	235		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6252010500	32.583798	-117.128753
135	IMPERIAL BEACH HEALTH CENTER	949		PALM AVE	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6262811700	32.583725	-117.113201
136	IMPERIAL BEACH MANAGEMENT CO	120		ELDER AVE	Imperial Beach	CA	91932	911.11	7389	561499	PROF										Yes	No	6253522600	32.578962	-117.131147
137	IMPERIAL BEACH PET HOSPITAL	538		12TH ST	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6261810800	32.587145	-117.108206
138	IMPERIAL BEACH PRESCHOOL NORTH	608		10TH ST	Imperial Beach	CA	91932	910.20	8351	624410	DAYCARE										No	No	6262212700	32.585211	-117.111997
139	IMPERIAL BEACH PRESCHOOL SOUTH	1179		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8351	624410	DAYCARE										Yes	No	6330122400	32.57638	-117.108431
140	IMPERIAL BEACH ULTRAMAR	1300		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5541	447190	GAS	x	x		x	x	x	x	x		Yes	Yes	6272201100	32.57662	-117.105562
141	IMPERIAL DONUTS +	1002		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6262221100	32.584049	-117.111598
142	IMPERIAL GUEST HOME	1245		FLORIDA ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330820500	32.573843	-117.108804
143	IMPERIAL NAILS	600	107	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
144	IMPERIAL TRAILER PARK	674		PALM AVE	Imperial Beach	CA	91932	910.20	7033	721211	RVMOBIL										No	No	6251401700	32.58408	-117.118594
145	INNER VISIONS	803		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500600	32.583796	-117.115366
146	J & T NAILS	635		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
147	JAMES ROWLES STUDIO	497		11TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
148	JESSOP & SON LANDSCAPE	425		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6324002100	32.576475	-117.124108
149	JORDYNHORDICHOK CHRISTMASTREE	0		*UNASSIGNED	Imperial Beach	CA	91932	N/A	5999	453998	RETL										No	No	6261700900	32.57912	-117.116912
150	JORGE AGUILA	277		EVERGREEN AVE	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6253621400	32.579403	-117.128026
151	JP MORGAN CHASE BANK, N.A.	1100		PALM AVE	Imperial Beach	CA	91932	910.20	6021	52211	BANK										No	No	6261621700	32.583991	-117.110573
152	KATY'S CAFE	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6251811306	32.583555	-117.131854
153	K-C'S CHINESE FOOD	1299		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x		x	x	x	x	x		Yes	Yes	6330222300	32.576476	-117.105767
154	KEYSTONE ESCROW INC	129		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6251912601	32.583812	-117.131003
155	KFC CORP #Y450025	1056		13TH ST	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x			x	x			x	Yes	Yes	6265421000	32.577288	-117.105851
156	K-PASTA	775		13TH ST	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6270112100	32.582442	-117.105302

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157	L & M TIRE CO./ EXPRESS TIRE	950		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x		No	No	6262212000	32.584074	-117.112906
158	LA POSTA MARKET #2	1266		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5999	453998	RETL	x	x			x	x			x	Yes	Yes	6265420900	32.57669	-117.10642
159	LEADINGHAM REALTY	1062		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262222500	32.58413	-117.110966
160	LENS WIRELESS	639		7TH ST	Imperial Beach	CA	91932	910.20	4812	517310	RETL										No	No	6262011200	32.585107	-117.117833
161	LEON DISCOUNT TOBACCO FOOD MAR	185		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251911700	32.583808	-117.130035
162	LINDA WHEELOCK WILLIS	204		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
163	LITTLE BONANZA	940		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING										No	No	6262123500	32.584117	-117.113357
164	LOIS FUSCO	204		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
165	LUIS A CONTRERAS, DDS	1340		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
166	LUIS FLORES	1325		IRIS AVE	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	0000000000	32.568958	-117.1049
167	LUNA'S BEAUTY DESIGNERS	204		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
168	LUXURIOUS NAILS & SPA	710		HIGHWAY 75	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262011100	32.584596	-117.117714
169	MAI BUTON SEWING	1175		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575227	-117.105546
170	MAR VISTA BAPTIST CHURCH	888		5TH ST	Imperial Beach	CA	91932	910.20	8661	813110	NONPROF										No	No	6253111500	32.580544	-117.122547
171	MARCO'S & RED HAWK	1205		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6263110100	32.583672	-117.107867
172	MARIA E SALAS	235		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6252010500	32.583798	-117.128753
173	MARISA'S MEXICAN SEAFOOD GRILL	285		PALM AVE	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6252011100	32.583802	-117.127733
174	MARJO'S HAIR DESIGN	742		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262822500	32.583136	-117.111993
175	MARRERO'S CAR WASH	1257		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330222700	32.576389	-117.106592
176	MARY ANN V. SANVICTORES, DDS	600	116	PALM AVE	Imperial Beach	CA	91932	910.20	8021	621210	HEALTH										No	No	6251401900	32.584072	-117.120629
177	MASON'S ALIGNMENT-BRAKE-MUFFLE	975		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262820300	32.58368	-117.112424
178	MCDONALDS/SCAROB INC.	1135		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6263011800	32.58365	-117.109781
179	MEIJO SUSHI, INC.	600	300	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6251401900	32.584072	-117.120629
180	MERCADO SHORES	639		7TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262011200	32.585107	-117.117833
181	MICHAEL GUTHRIE	1256		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900	32.576671	-117.106592
182	MICHAEL ROGERS DDS	1340		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
183	MICKIES BAR AND GRILL	220		PALM AVE	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6250230500	32.58407	-117.128987
184	MIKE'S CAR WASH	1117		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263012300	32.58365	-117.110138
185	MIKE'S UPHOLSTERY	1152		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330221600	32.575556	-117.105864
186	MISTY DAWN'S SALON	710		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251821050	32.583076	-117.1318
187	MODERN TEE	1059		3RD ST	Imperial Beach	CA	91932	911.11	5999	453998	RETL										Yes	No	6254212200	32.577118	-117.127263
188	MONEYTREE INC.	1070		13TH ST	Imperial Beach	CA	91932	911.11	6099	522390	CKCASH										Yes	No	6265421100	32.577073	-117.105853
189	MORENO DENTAL LAB	1258		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900	32.57669	-117.106558
190	MUNI TEMPS/MUNICIPAL STAFFING	600	115	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401400	32.584072	-117.120629
191	MYA'S FLOWER DESIGN	245		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6252010600	32.583841	-117.128554
192	MZM SEACOAST BISTRO, LP	875		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6252730100	32.58063	-117.131594
193	NAIL TECH	938		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262123200	32.584117	-117.113398
194	NAKAWATASE & CO, CPA	923		SEACOAST DR	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6253522700	32.57943	-117.131641
195	NEIGHBOR MARKET	1497		13TH ST	Imperial Beach	CA	91932	911.11	5999	453998	RETL										Yes	No	6332234700	32.569207	-117.10548
196	NESTOR WATCH REPAIR CENTER	635		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
197	NFAROOQI ENT. LLC/JACK IN BOX	890		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6262110800	32.584143	-117.114553
198	NGOC THAO DANG NGUYEN	750		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
199	NICK PHAM	750		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
200	NINI'S SALON	668		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262211000	32.584491	-117.111992
201	NORTH ISLAND C.U.	1101		PALM AVE	Imperial Beach	CA	91932	910.20	6061	522130	CRED										No	No	6262500300	32.583611	-117.117071
202	NOVAK SURFBOARD DESIGNS	536		13TH ST	Imperial Beach	CA	91932	910.20	3599	333999	MANUF										No	No	6261920400	32.586426	-117.105794
203	OCHOA ELECTRIC	731		EMORY ST	Imperial Beach	CA	91932	910.20	1731	238210	SUBCONT										No	No	6262820600	32.583288	-117.112914
204	OFFICE LOUNGE	1133		13TH ST	Imperial Beach	CA	91932	911.11	5813	722400	BAR										Yes	No	6330312000	32.575852	-117.105543
205	OLIVE OIL	600	109	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6251401900	32.584072	-117.120629
206	OLLIE ANGEL SKATE SHOP	743		8TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500600	32.583085	-117.115374
207	ORCA MARITIME INC	497		11TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
208	OTAY MESA REALTY	970		SEACOAST DR	Imperial Beach	CA	91932	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891

Table 5.5 - Commercial Business Inventory FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Hydrologic Area	SIC Code Numeric	NAICS Code Numeric	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
209	PACIFIC BELL	1288		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262421000	32.58412	-117.106008
210	PACIFIC LEGACY PROPERTIES	702		SEACOAST DR	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6251811303	32.583681	-117.131854
211	PACIFIC REALTY	992		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262211100	32.584107	-117.112086
212	PACIFIC REALTY SALES & MGT INC	280		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
213	PALM AVENUE BOOKS DBA ROMANTIX	1177		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6263020200	32.58365	-117.108721
214	PALM AVENUE LIQUOR & MARKET	1200		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262412700	32.584013	-117.108023
215	PALM COIN LAUNDRY	187		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251912500	32.583807	-117.130001
216	PALM GLASS INC	754		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262821500	32.58299	-117.111994
217	PAN AM TAE KWON DO	730		HIGHWAY 75	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262010600	32.584507	-117.117457
218	PARTY MART	1070		13TH ST	Imperial Beach	CA	91932	911.11	5999	453998	RETL										Yes	No	6265421100	32.577073	-117.105853
219	PAT'S LAWN CARE	448		DONAX AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6252300500	32.582584	-117.123757
220	PAUL MCNALLY REALTY	280		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
221	PAULINA RIDDLE	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
222	PENTECOSTAL CHURCH OF GOD	1402		HEMLOCK AVE	Imperial Beach	CA	91932	911.11	8661	813110	NONPROF										Yes	No	6332311500	32.570446	-117.103273
223	PHIL'S BARBERSHOP	1305		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330310100	32.576394	-117.10549
224	PHIL'S DANCE STUDIO	1305		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330310100	32.576394	-117.10549
225	PHOEBE'S 99 C & PLUS	766		13TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6263121100	32.582813	-117.105836
226	PIZZA INDUSTRY/DOMINO'S PIZZA	1307		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x		x	x	x	x	x		Yes	Yes	6330310100	32.576393	-117.105453
227	POUR'S LIQUOR	1141		13TH ST	Imperial Beach	CA	91932	911.11	5921	445310	RETL										Yes	No	6330312000	32.575733	-117.105544
228	PRECISION AUTO BODY & COLLISIO	989		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x		No	No	6262822100	32.583677	-117.112136
229	PRECISION FOREIGN	1240		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262412800	32.58412	-117.107148
230	PRETZLES AND MUCH MORE	10		EVERGREEN AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	7602420902	32.579651	-117.132455
231	PRICED RITE PETS	775		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453910	RETL										No	No	6262500500	32.583738	-117.116147
232	PRO HAIRCUT BY LISA	600	102	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401400	32.584072	-117.120629
233	R J CAR WASH	730		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262822600	32.583282	-117.111992
234	R&C SCHAUMBURG/COLDWELL BANKER	862		SEACOAST DR	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6253302100	32.580768	-117.131864
235	REGENERATIONVILLE	740		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262822500	32.58316	-117.111993
236	RODRIGO'S MEXICAN FOOD	600	106	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6251401400	32.584072	-117.120629
237	ROLANDO'S TACO SHOP #5	805		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6252720100	32.58158	-117.131625
238	ROYAL CLEANER'S	1181		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575138	-117.105547
239	SAGE TRADITIONS ACUPUNCTURE	667		PALM AVE	Imperial Beach	CA	91932	910.20	8049	621399	HEALTH										No	No	6262500900	32.58376	-117.118744
240	SALTWATER MAGIC	226		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6250230600	32.584068	-117.128843
241	SAN DIEGO GYMNASTICS ACADEMY	600	127	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401400	32.584072	-117.120629
242	SAN DIEGO MANUFACTURED HOUSING	206		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6250230300	32.584073	-117.129323
243	SANDCASTLE INN	785		SEACOAST DR	Imperial Beach	CA	91932	910.10	7011	72111	HOTEL										No	No	6252710100	32.581984	-117.131594
244	SANDCASTLE REALTY	672		10TH ST	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262211100	32.584443	-117.111992
245	SANTANA MEXICAN FOOD	1337		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING		x	x		x			x		No	No	6270120900	32.583657	-117.104829
246	SAVE A LOT #916	805		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500600	32.583782	-117.115348
247	SAWHNEY, PARMELA MD	705		PALM AVE	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6262500200	32.58377	-117.117773
248	SEA BREEZE COMMUNITY CHURCH	1220		ELM AVE	Imperial Beach	CA	91932	910.20	8661	813110	NONPROF										No	No	6263412000	32.580809	-117.1076
249	SEACOAST INN	800		SEACOAST DR	Imperial Beach	CA	91932	910.10	7011	72111	HOTEL										No	No	6252620100	32.581626	-117.131796
250	SEACOAST PET CLINIC	600	103	PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
251	SEACOAST PIZZA	807		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6252720100	32.581557	-117.131607
252	SEACOAST VITAMINS & HERBS	600	109	PALM AVE	Imperial Beach	CA	91932	910.20	5122	446191	RETL										No	No	6251401900	32.584072	-117.120629
253	SEASIDE BARBER & BEAUTY SHOP	702		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811304	32.583681	-117.131854
254	SHARON GRACE DALBERISTE	235		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6252010500	32.583798	-117.128753
255	SIESTA RV PARK, INC.	409		PALM AVE	Imperial Beach	CA	91932	910.10	7033	721211	RVMOBIL		x								No	No	6252302400	32.583846	-117.124483
256	SILVER STRAND FAMILY MEDICINE	707		PALM AVE	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6262500200	32.583768	-117.117727
257	SILVER STRAND SEA SPORTS	188		DATE AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6252722409	32.58115	-117.129959
258	SJ TRANSPORT INC	535		FLORENCE ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6261920300	32.587203	-117.106757
259	SKINNART	1221		PALM AVE	Imperial Beach	CA	91932	910.20	7299	812199	TATOO										No	No	6263111400	32.583666	-117.107576
260	SMILES OF IMPERIAL BEACH	743		EMORY ST	Imperial Beach	CA	91932	910.20	8021	621210	HEALTH										No	No	6262820700	32.583141	-117.112914

Table 5.5 - Commercial Business Inventory FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Hydrologic Area	SIC Code Numeric	NAICS Code Numeric	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
261	SOLARA MEDICAL SUPPLIES, INC	639		7TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262011200	32.585107	-117.117833
262	SOLARA MEDICAL/IB PHARMACY	720		HIGHWAY 75	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6262010600	32.584552	-117.117585
263	SOMBRERO MEXICAN FOOD	189		PALM AVE	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6251912500	32.583807	-117.129966
264	SOPHISTICATED AUTO	987		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262822100	32.583678	-117.112177
265	SOUND OF BEACH	10		EVERGREEN AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	7602420901	32.579651	-117.132455
266	SOUTH COAST ENVIRONMENTAL SERV	1258		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7389	561499	CONS										Yes	No	6265420900	32.57669	-117.106558
267	SOUTH COAST TILE CO.	1258		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	1799	238990	SUBCONT										Yes	No	6265420900	32.57669	-117.106558
268	SOUTHBAY REXALL DRUGS	779		PALM AVE	Imperial Beach	CA	91932	910.20	5122	446110	HEALTH										No	No	6262500500	32.583737	-117.116083
269	SOUTHWEST WETLANDS INTERPRETIV	708		SEACOAST DR	Imperial Beach	CA	91932	910.10	99	99	NONPROF										No	No	6251811308	32.583302	-117.131833
270	SPIRIT REAL ESTATE	700		SEACOAST DR	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6251811301	32.583808	-117.131833
271	ST. JAMES LUTHERAN CHURCH	866		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8661	813110	NONPROF										Yes	No	6264006900	32.576692	-117.115129
272	ST. JAMES LUTHERAN PRESCHOOL	866		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8351	624410	DAYCARE										Yes	No	6264006900	32.576692	-117.115129
273	ST. MARY'S/ SANTA MARIA LA VIR	485		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8661	813110	NONPROF										Yes	No	6320841100	32.576485	-117.122693
274	STARDUST DONUT SHOP	698		HIGHWAY 75	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6260705900	32.584795	-117.118228
275	STATE FARM INSURANCE	1144		13TH ST	Imperial Beach	CA	91932	911.11	7389	561499	PROF										Yes	No	6330221800	32.575675	-117.105863
276	STATE FARM INSURANCE	1239		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6263111500	32.58364	-117.10722
277	STEVEN Y. LUO, DDS APC	629		9TH ST	Imperial Beach	CA	91932	910.20	8021	621210	HEALTH										No	No	6262121400	32.584982	-117.114133
278	STL TECH DETALING, INC.	600	224	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
279	STRONG TOWER COMMUNITY CHURCH	1439		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330412800	32.576427	-117.102576
280	SUBSMART DELI-FRESH	1231		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6263111400	32.58364	-117.107374
281	SUBWAY 20578	876		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6253302200	32.580607	-117.131864
282	SUN & SEA MANOR	740		7TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262501000	32.583219	-117.118156
283	T WIRELESS	1295		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	4812	517310	RETL										Yes	No	6330222300	32.576421	-117.105835
284	TAKING CARE OF BUSINESS	1146		13TH ST	Imperial Beach	CA	91932	911.11	6099	522390	CKCASH										Yes	No	6330221700	32.575645	-117.105863
285	TAX PLUS	662		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262211000	32.584563	-117.111993
286	TERRA NOVA REALTY	600	225	PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
287	THAT'S A WRAP	1146		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330221700	32.575645	-117.105863
288	THE B.D. BARR COMPANY	1144		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330221800	32.575675	-117.105863
289	THE BOSN'S LOCKER	238		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6250230700	32.584024	-117.128556
290	THE BOXING ZONE, LLC	1351		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6270121000	32.583698	-117.104554
291	THE BRIDGE	874		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6253302200	32.58063	-117.131864
292	THE CHECK CASHING PLACE, INC.	894		PALM AVE	Imperial Beach	CA	91932	910.20	6099	522390	CKCASH										No	No	6262110700	32.584139	-117.114504
293	THE FINE AUTO STORE	942		PALM AVE	Imperial Beach	CA	91932	910.20	5521	441120	AUTO		x	x		x			x		No	No	6262123500	32.584117	-117.113317
294	THE MAIL ROOM	757		EMORY ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262820800	32.582969	-117.112914
295	THE PAPER SHACK	1237		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6263111500	32.58364	-117.107259
296	THE SALTY FROG	992		PALM AVE	Imperial Beach	CA	91932	910.20	5813	722400	BAR										No	No	6262211100	32.584107	-117.112086
297	THE SCOREBOARD	951		PALM AVE	Imperial Beach	CA	91932	910.20	5813	722400	BAR										No	No	6262820100	32.583729	-117.112917
298	THE SURF HUT	710		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251821049	32.583076	-117.1318
299	THE TINFISH RESTAURANT	910		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x				No	No	7600820500	32.580008	-117.131864
300	THE VIP CLEANERS	1070		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265421100	32.577073	-117.105853
301	THE WAVE CAFE	809		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6252720100	32.581534	-117.131594
302	THE WRIGHT WAY	1051	D	13TH ST	Imperial Beach	CA	91932	910.20	5812	722110	EATING										No	No	6272200200	32.577378	-117.105584
303	THOMAS LINDLEY PARKING LOT	915		OCEAN LN	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6253301100	32.58006	-117.132435
304	TITO AUTO SERVICE	1335		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6270111900	32.583657	-117.104868
305	TNT SURFBOARDS	536		13TH ST	Imperial Beach	CA	91932	910.20	3599	333999	MANUF										No	No	6261920400	32.586426	-117.105794
306	TO MARKET TO MARKET	921		SEACOAST DR	Imperial Beach	CA	91932	910.10	5921	445310	LIQU										No	No	6253522700	32.579456	-117.131662
307	TOLMOSOFF, JOHN M., D.C.	667		PALM AVE	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6262500900	32.58376	-117.118744
308	TOMMY'S TOBACCO	1297		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5494	424940	RETL										Yes	No	6330222300	32.576448	-117.105801
309	TONY'S HOTEL & APT LIQUIDATORS	536		13TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6261920400	32.586426	-117.105794
310	TRINITY FINANCIAL SERVICES	1025		GEORGIA ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6272404400	32.578274	-117.104294
311	TUNES LUBES ETC.	741		PALM AVE	Imperial Beach	CA	91932	910.20	7538	811111	RETL		x	x		x	x		x	x	No	No	6262500400	32.583785	-117.116929
312	U.S. SANDCASTLE COMMITTEE, INC	970		SEACOAST DR	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6253400700	32.578645	-117.131891

Table 5.5 - Commercial Business Inventory FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Hydrologic Area	SIC Code Numeric	NAICS Code Numeric	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
313	UNION BANK OF CALIFORNIA	900		PALM AVE	Imperial Beach	CA	91932	910.20	6021	56145	BANK										No	No	6262123600	32.584088	-117.114171
314	UNITED PENTECOASTAL CHURCH	631		12TH ST	Imperial Beach	CA	91932	910.20	8661	813110	NONPROF										No	No	6262414100	32.58494	-117.107942
315	VERNON AU D.D.S.	1340		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
316	VICKY HAIR & ACCESORIES	986		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262211200	32.584108	-117.112203
317	VIC'S BARBERSHOP	986		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262211200	32.584108	-117.112203
318	VIDEO 4 YOU	1051		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6272200200	32.577378	-117.105584
319	WALLY'S IGA	836		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL	x	x	x		x	x		x	x	No	No	6262110700	32.58419	-117.11523
320	WEST COAST KITCHEN	208		PALM AVE	Imperial Beach	CA	91932	910.10	5812	722110	EATING										No	No	6250230300	32.584072	-117.129275
321	WIENERSCHNITZEL #358	1253		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6263120100	32.583658	-117.106711
322	WILDCOAST	925		SEACOAST DR	Imperial Beach	CA	91932	910.10	99	99	NONPROF										No	No	6253522700	32.579404	-117.131621
323	WOODYS AUTO CARE	200		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE		x	x		x	x		x		No	No	6250230200	32.584076	-117.129791
324	WORLD CHOICE NUTRITION	600	221	PALM AVE	Imperial Beach	CA	91932	910.20	5149	425120	WHOL										No	No	6251401900	32.584072	-117.120629
325	WYLDE SYDES BOUTIQUE	771		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500500	32.583738	-117.11621
326	YAROSLAV KUSHNIR, M.D., INC.	184		PALM AVE	Imperial Beach	CA	91932	910.10	8011	621111	HEALTH										No	No	6250141000	32.584077	-117.130062
327	YE OLDE PLANK INN	24		PALM AVE	Imperial Beach	CA	91932	910.10	5813	722400	BAR	x	x			x	x			x	No	No	6250111800	32.583973	-117.132151
328	YOUR T-SHIRT STORE	1181		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6263020200	32.58365	-117.108642

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from residential sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and the City's Code Enforcement Division. Efforts are made to educate the public and oversee compliance with local urban runoff regulations to reduce the release of pollutants to the MEP.

6.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Residential Component is described in the *2008 JURMP Section 8.0*. During the reporting period no updates were made to the high priority residential area inventory. All other program planning and administration elements remain unchanged from the *2008 JURMP Section 8.0*.

6.3 Outcome Level 1b: Implementation of Management Program Activities

The City enforces its storm water ordinances for all residential areas and activities to maintain compliance with the Municipal Storm Water Permit. Public outreach and education as outlined in the *2008 JURMP Section 10.0* encourages residents to comply with the minimum set of BMPs listed in Imperial Beach Municipal Code 8.30.080. The City encourages the use of pollution prevention methods for all residents and provides convenient and cheap house hold hazardous waste disposal. The City also participated as Co-Chair in the Education and Residential Sources Workgroup and Chair of the Underserved Target Audience sub-workgroup.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 6.1 Provides an overview of the residential component as it was implemented
- Table 6.2 presents and describes targeted FY 2010-11 outcomes and results
- Figure 6.1 Show the referral source for ICIDs investigations

6.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Residents

Knowledge and awareness of the storm water program by residents is best assessed through the City's response to illegal connections and illicit discharge (ICID) investigations. Figure 6.1 below shows that 24% of the City's ICID cases come from the public. This is a slight increase from the previous year. This shows that the City is effective in making different stakeholders aware of the importance of reporting storm water violations and more importantly aware of how their own actions effect water quality. Continued commitment to preventing storm water pollution is also seen from City staff. Forty-six percent of all cases came from non environmental City staff. We continue to encourage City staff to report violations to the Environmental Division.

Figure 6.1 Referral Source for ICID Investigations

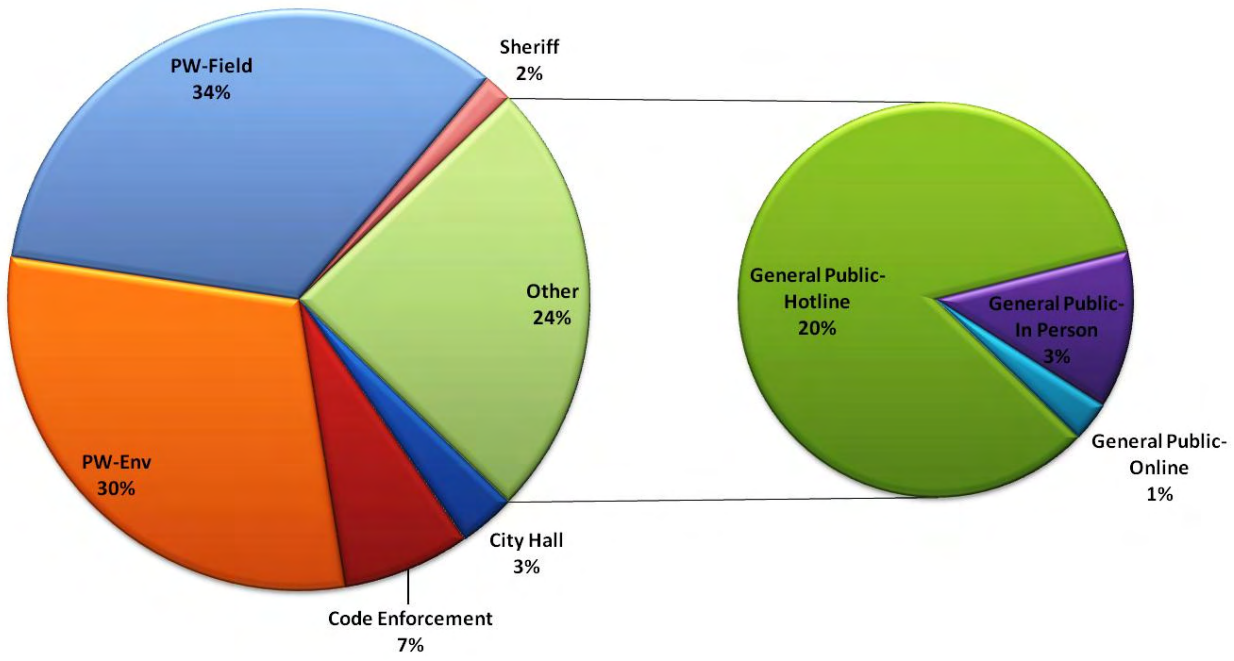

6.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Residents

The City facilitates changes in behavior and implementation of BMPs for high threat to water quality activities and residential areas by providing education through face-to-face interactions, disseminating education materials through various media, and responding to illegal discharges. The *2008 JURMP Appendix G* defines minimum BMP requirements applicable to residential areas and activities in the City.

6.6 Outcome Level 4: Source Load Reductions

The City continues to quantify load reductions whenever feasible for disposal of household hazardous waste, used oil, and special clean up events. Pest waste collected by the Ocean Blue foundation is also estimated. The City does not normally track individual source load reductions to receiving waters from residential areas or activities but load reductions can be implied by proper implementation of BMPs.

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Table 6.1 – Overview of Residential Component

Category	Pounds	Number	Description
A. Residential Threat to Water Quality Prioritization			
High	---	6	All residential areas in the City are considered high priority.
Medium	---	---	
Low	---	---	
B. House Hold Hazardous, Electronic, and Universal Waste Disposal			
Flammable and Poison	6,121	---	Imperial Beach residents have a variety of options for the collection and disposal of house hold hazardous waste. Most residents utilize the South Bay HHW Collection center at the City of Chula Vista. Residents can also drop off used oil at the Auto Zone located at 13th and Palm. The City coordinates used oil disposal that is part of CalRecycle Used Oil Block Grant with the City of Chula Vista. The amount of waste dropped off by Imperial Beach residents is provided in the table to the left. The City also offers curbside pickup of HHW, used oil, and a number of regional collection events for electronic and universal waste. The disposal totals for these additional activities are not provided in this report.
Acid, Base, Oxidizer, and PCB-containing	368	---	
Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters)	4,329	---	
Other HHW	1,508		
Universal and Electronic Waste	4,371		
Total Waste Disposed	16,697		

JURMP Sections	Description of FY 2010-11 Changes
8.0 and Appendix G	BMP requirements of the JURMP applicable to residential areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates made during reporting period	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	No updates made	Complete	No updates made this reporting period.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Residential Areas			
Identify high threat to water quality areas	Update not needed	Complete	The City has previously identified the high threat to water quality residential areas and activities. All residential areas in the City are considered high threat to water quality areas. The *2008 JURMP Section 8.0* provides a list of high threat to water quality activities.
b) Confirmation of Designated Minimum BMPs			

Residential FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Require residents to implement BMPs	Requirements implemented	Complete	The City requires all residential areas to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City enforces its *Urban Runoff Management and Discharge Control Ordinance* and provides education and outreach to local residents.
c) Facilitate Proper Disposal of Household Hazardous Waste and Used Oil			
Facilitate proper management and disposal of used oil and household hazardous waste (HHW)	Provided a variety of disposal options for used oil, toxic materials, and other hazardous waste	Complete	The City provides a variety of options for the proper management and disposal of used oil, toxic materials, and other HHW. Residents are generally directed to drop off hazardous materials at the South Bay HHW center at the City of Chula Vista. The City also provides curb side pickups and a number of regional collection events for HHW, used oil, electronic waste, and universal waste.
d) Enforcement of Residential Areas and Activities			
Enforce minimum BMPs in residential areas	Responded to storm water violations reported by staff and public	Complete	The City enforces its storm water ordinance and the Municipal Permit for all residential areas and activities through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines and civil and/or criminal court actions. The Environmental Division responds to storm water violations, which are reported by City staff and public.
e) Evaluate Methods of Oversight for Residential Areas and Activities			
Evaluate methods of oversight and enforcement for residential areas and activities	Operate storm water hotline and utilizes monthly sewer and street inspections to identify BMP or storm water violations	Complete	Operated a Storm Water Hotline (619-424-4095) during the reporting period. The City received 26 reports on the Storm Water Hotline (619-424-4095), 4 in-person reports, and 1 online report for storm water violations in residential areas. The Environmental Division responded to another 96 residential violations reported by City staff.
f) Regional Residential Education Program			

Residential FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Participate in Regional Residential Education Program	Held co-chair position of the Education and Residential Sources Workgroup and chair position of the Underserved Target Audience Sub-workgroup	On going	During this reporting period, the City participated in the Education and Residential Sources Workgroup with the San Diego Copermittees and held the responsibility of co-chair for the group. Significant progress continues to be made in the areas of media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment through a county-wide telephone survey. During the next reporting period the County will assume lead responsibility for the workgroup and a consultant will provide as needed support for the group.
g) Special Investigations			
---	---	---	Special investigations were not conducted and are not routinely conducted as part of the implementation strategy for this program element.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY RESIDENETS			
Establish a baseline for knowledge of BMPs implementation by residents	No additional assessments were targeted at residents outside of education activities	Assessment results provided in Section 8.0 for residential and general public outreach	Knowledge and awareness of storm water issues by residents is assessed through the education program. The City uses brochures, special events, presentations, and ICID investigations as tools to educate local residents on storm water.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY RESIDENTS)			
a) BMP Implementation			
Facilitate pet waste program with the Ocean Blue Foundation	10 pet waste bag dispensers are maintained by the Ocean Blue Foundation	Complete	The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. The City Council supports the foundation through an annual community grant.

Residential FY 2010-11 Results				
Targeted Outcome	Implementation Result	Assessment Result		Explanation
Cleanup activities in residential areas	Implemented cleanup activities as part of the Municipal Component	Complete		Under the Municipal Component of the JURMP the City conducts street sweeping, alley sweeps, and cleanup activities in residential neighborhoods.
b) Violations and Enforcement Actions				
Number of violations and enforcement actions to achieve compliance	Responded to a total of 127 ICID cases	Complete		The City operates a Storm Water Hotline (619-424-4095). The City received 26 reports on the Storm Water Hotline (619-424-4095), 4 in-person reports, and 1 online report for storm water violations in residential areas. The Environmental Division responded to another 96 residential violations reported by City staff. In total the Environmental Division responded to 127 ICID cases.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM RESIDENTIAL AREAS AND ACTIVITIES)				
a) BMP Implementation				
Household hazardous waste (HHW) collection	16,697 pounds of HHW collected	**Year**	**Pounds**	The City's HHW disposal program is available to all residents, and the City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options.
		2008	6,000	
		2009	10,367	
		2010	10,377	
		2011	16,697	
Used oil collection	4,329 pounds of Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters) collected	**Year**	**Pounds**	The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.
		2008	2,110	
		2009	2,173	
		2010	3,763	
		2011	4,329	

Residential FY 2010-11 Results					
Targeted Outcome	Implementation Result	Assessment Result			Explanation
Universal and electronic waste collection	4,371 pounds of electronic and universal waste collected	**Year**	**Pounds**		The City facilitates the proper management and disposal of universal and electronic wastes.
		2009	2,433		
		2010	3,025		
		2011	4,371		
Pet waste collection	10 pet waste bag dispensers; 72,800 bags replaced, and an estimate of 18,200 lbs of pet waste collected	Complete			The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. If the average pet waste weighs 4 ounces then an estimate of 18,200 lbs of waste was collected. The City Council supports the foundation through an annual community grant.
Special event recycling and waste management	Home Front Cleanup event had 753 participants and collected 178.8 tons of materials	**Year**	**No.**	**Tons**	The City holds an annual Home Front Cleanup event. The Home Front Clean Up had 753 participants and disposed a total of 178.8 tons of materials. That includes 20.72 tons of green waste, 23.31 tons of metal, and 43.72 tons of concrete that was recycled.
		2009	732	154.3	
		2010	822	175.6	
		2011	753	178.8	

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7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extending the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The City's implementation and assessment strategy for the illicit discharge detection and elimination component is described in the *JURMP Section 9.0*.

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8.0 RESIDENTIAL COMPONENT

8.1 Introduction

The City endeavors to implement a diverse education program in the community to reduce the impacts of urbanization on water quality. Education activities are targeted at the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in the City of Imperial Beach), 5) residents, general public, and school children, and 6) underserved community. This component is applicable to all City departments, in particular the Environmental Program Division of the Department of Public Works, which spearheads the City's education efforts and is responsible for the annual training for municipal employees on the components and goals of the JURMP. Note that each section of this JURMP Annual Report already includes a description of education activities for each element. The City recognizes the importance education plays in facilitating the necessary behavioral changes to successfully reduce and eliminate pollutants from urban runoff.

8.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Education Component is described in the *2008 JURMP Section 10.0*. During the reporting period the City made no significant updates to the education program. The City continues to focus education efforts at the five targeted community groups. The City tailors each individual education activity to best suit the message and content for the target community; however, the overall message is consistent with the *2008 JURMP Section 10.0*. Minor changes to the program include changes to materials such as handouts, surveys, and educational guidance documents, which are continuously updated throughout the year. The City also continues to seek for ways to expand and improve the effectiveness of the education program.

8.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division oversees the implementation and assessment of the Education Component for the five targeted communities. The following tables and figures presented in this section provide additional information on the implementation and assessment of the Education program element:

- Table 8.1 Provides an overview of the Education program
- Table 8.2 presents and describes targeted FY 2010-11 outcomes and results
- Table 8.3 provides the education activity inventory by target community for FY 2010-11

8.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Target Community

The City implements an education program for each target community using all media as appropriate to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban

runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment. During the reporting period the Environmental Division implemented a variety of techniques to capture changes in knowledge and awareness among the targeted communities. These techniques include the use of surveys, pre and post test, interactive assessments and evaluations during inspections, and regional assessment programs through the Education and Residential Sources (ERS) Workgroup.

8.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Target Community

The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs. Gauging the level of effectiveness of the education program from one year to the next is a challenging task because of the gradual nature of behavior change, but the City strives to measure this level of effectiveness and behavior change for each target audience whenever possible. Table 8.3 provides a description of how outcome level 3 is assessed for each targeted community.

8.6 Outcome Level 4: Source Load Reductions

Education is a key component of getting to source load reductions through the implementation of BMPs. Source load reductions are not easily tracked from education activities but can be implied through the proper implementation of BMPs.

Table 8.1 – Overview of Education

Category	Number	Description
A. Educational Efforts		
Municipal Departments and Personnel Events	10	Employees are trained annually on the use of BMPs in their daily operations. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations.
Construction Site Owners, Contractors and Developer Training Events	2	Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, in inspections, and in investigations of illegal discharges.
Public Participation	9	
Commercial Site Owners and Operators Training Events	3	Commercial Site Owners and Operators are trained through scheduled inspections by the Public Works Department Environmental Division, and through investigations of illegal discharges.
Residential Community and General Public Outreach Events	11	All residents receive educational information in the City's newsletter, a newsletter sent out by the City's waste franchisee, website updates, materials provided at City Hall and the Public Works Department, through community presentations, etc. The City held an information booth at Fiesta del Rio. The City also participated with other Co-Permittees in regional outreach events that target the underserved community.
Underserved Community	3	
School Children Outreach Events	3	

JURMP Sections	Description of FY 2010-11 Changes
10.0 and Appendix I	BMP requirements of the JURMP applicable to educational areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates made during the reporting period	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	No updates made during the reporting period	Complete	The City implements surveys when feasible at education events to establish a baseline level of knowledge. Minor program updates were made throughout the year to program content to more effectively present education materials.
c) Updates to Training Program			
Update training materials for consistency with *2008 JURMP Section 10.0*	New content added as necessary to training program	Complete	The City makes annual updates to training content and materials so that each education activity provides appropriate information for the target audience. For example a new topic for this year included the SUSMP and HMP requirements. The Environmental Division coordinates training program for all targeted audiences.
d) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Education Component			

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Provide education to construction site owners and developers	Provided education to construction site owners and developers	Complete	Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process. Community Development holds counter hours for project applicant. Education is reinforced through inspections and in investigations of illegal discharges. The City also developed a new construction BMP brochure.
Provide education for municipal staff	Provided annual training and additional education opportunities to municipal staff	Complete	The Environmental Division provided 10 municipal training activities including the annual storm water training for Public Works on 1/3/10. Each division also received refresher training by the Env Specialist during the year. All new employees receive one-on-one training for storm water at the beginning of employment. City staffs are encouraged to attend training activities for storm water program outside the City for example HMP, SUSMP, and GCP. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Every City vehicle also contains a binder of Municipal Facility and Activity BMPs and MS4 map.
Provide education to industrial and commercial owners and operators	Provided education to commercial businesses and owners	Complete	Commercial businesses receive education on storm water BMPs through a number of different methods inspections, face-to-face interaction with City staff during commercial inspections, through dissemination of education material, and through a follow up inspection letter that summarizes the results of the commercial inspection. The City also provides education to businesses during ICID investigations and educational materials to street vendors for special events.
Provide education to underserved community	Provided education to underserved community	Complete	Education materials are provided in both English and Spanish. The environmental division incorporates the underserved community in most education activities, which is particularly important to IB due to the large Spanish speaking community. The City also Co-chairs the ERS Workgroup and Chairs the Underserved Target Audience Sub-Workgroup.

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Provide education to residential community, general public, and school children	Provided education to residential community, general public, and school children	Complete	The Environmental Division provided 14 education activities targeted to residential community, general public, and school children. Some of the activities included presentation to schools, after school activities at IB Sports Park, media education, Recycling All-Star award, and City Council proclamations. The Tijuana Estuary, State Park, FWS, YMCA Camp Surf, Surfrider, and Wildcoast also conduct environmental education and community outreach that is not currently tracked by the City but represents a significant effort to promote clean water in the region.
Provide opportunity for public participation	Provided opportunities for public education	Complete	Public participation is encouraged in the development and implementation of the JURMP. The annual JURMP Report is presented at City Council during an open public hearing process. The Environmental Division also facilitates and participates in public cleanup activities that serve as mechanism for public participation in watershed activities.
b) Special Investigations			
Not targeted	Mayor Proclamation for April as Environmental Awareness Month and Oct as TJ River Action Month	Complete	Imperial Beach proclaimed the month of April as "Environmental Awareness Month". Environmental Division scheduled a number of education activities for the month with the afterschool youth at IB Sports Park and selected a weekly recipient for the Recycling All-Star award for the month. These activities were in addition to the normal Earth Day celebrations in the region. The month of October was also proclaimed as Tijuana River Action Month.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION)			
a) Construction Site Owners and Developers			
Assess knowledge and awareness for construction site owners and operators	Assessed knowledge whenever possible	Complete	Most construction activity in the City is from small discretionary projects and CIPs. Knowledge and awareness is achieved through proper submittal of storm water documents and proper implementation of BMPs. All projects are required to submit the necessary storm water documents and implement BMPs. Prior to commencement of construction; developers are made aware of all storm water requirements at pre construction meetings. Deficient projects receive proper education from staff. General outcomes reveal a high level of knowledge from larger contractors and a lesser understanding of BMPs from smaller general contractors.

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) Municipal Departments and Personnel			
Assess knowledge and awareness for municipal staff	Assessed knowledge though surveys and regular meetings	Public Works survey score of 93% correct answers	Surveys are administered during annual storm water training events. The surveys are generally challenging in nature because personnel staff are expected to have a high level of understanding of storm water program. Surveys are administered at the begging of the training session and used as a tool to highlight specific topics during the training session.
c) Industrial and Commercial Site Owners and Operators			
Assess knowledge and awareness for commercial businesses	Assessed through interactive assessment process	Assessment results provided in Table 5.5 and figure 5.1 in the Commercial Section	The Environmental Division incorporates an interactive effectiveness assessment of commercial businesses and rates businesses on a scale of 1 out of 5. The results of the assessment are presented in Table 5.4 and Figure 5.1 in Section 5 for Industrial and Commercial Component.
d) Underserved Community			
Assess knowledge and awareness for underserved community	Assessed though Regional Copermittee group	Complete	The Education and Residential Sources Workgroup provides targeted assessment of the underserved community through event surveys and a countywide phone survey. The second countywide phone survey was completed this reporting period.
e) Residential Community, General Public, and School Children			
Assess knowledge and awareness for residential community, general public, and school children	Assessed through surveys during presentations and at events	Complete	The City hired ILACSD to conduct targeted education and assessment for high school children. The City also provided event surveys at the Fiesta del Rio special event. Results of pre and post test indicate only a minor change in knowledge with the high school audience (3% points).
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION FROM EDUCATION ACTIVITIES)			
a) Construction Site Owners and Developers			

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Number of construction projects that were not in compliance with BMPs	8 of 103 construction projects were out of compliance with BMPs	92% of active construction projects in compliance with site BMPs	Most construction projects (92%) implemented the necessary BMPs to contain potential contaminates on site. Non-compliant projects received additional education and a follow up investigation to ensure the proper BMPs were implemented and maintained.
b) Municipal Departments and Personnel			
Number of ICIDs identified and reported by municipal staff	Municipal Staff identified 96 out of 127 ICID during the reporting period	Total ICID: 127 Public Works: 81	One component of the annual municipal training is the proper identification of ICIDs. During FY 2010-11 City Staff identified 76% of the reported ICIDs with Public Works staff identifying 64% of the over incidents. General pubic reporting either through online complaint form or hotline made up only 24% of the overall cases.
c) Industrial and Commercial Site Owners and Operators			
Number of commercial businesses not in compliance with minimum BMPs	34 out of 65 commercial businesses were out of minimum BMP compliance	48% of high priority businesses in complete compliance with minimum BMPs	The City inspects 100% of high priority commercial businesses annually for proper implementation of BMPs. During the reporting period the city inspected 65 commercial businesses with the result of 13 businesses receiving an NOV for non compliance with minimum BMPs and 21 additional businesses having minor violations that required a follow up inspection. In total 34/65 businesses required some type of enforcement action and reinsertion for minimum BMPs.
d) Underserved Community			
Not targeted	Included in existing targeted audiences and regional program	Regional program conducted the second countywide phone survey reported in RURMP	The underserved community is not specifically targeted but rather included in all existing education programs. The city does work with Wildcaost to target Spanish speaking and underserved residents as well as underserved youth through after school programs at the IB Sports Park. Behaviors and BMP implementation are more effectively addressed through the Regional Copermittee group.
e) Residential Community, General Public, and School Children			

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Number of education activities that target behavior change	14 education activities during the reporting period	Complete	Assessing changes in behavior and BMP implementation across the whole community is best addressed through regional programs. Imperial Beach focuses on targeting education through a variety of media and interactive programs that target the most people possible. Anecdotal observations from City staff reveal a continuous improvement in BMP implementation across all targeted audiences as the persistent storm water education message gradually changes public behavior.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM EDUCATION ACTIVITIES)			
a) BMP Implementation			
Source load reduction	Provided education to targeted audiences	Total number of education activities:41	Source load reductions are not easily tracked from education activities but can be implied through proper implementation of BMPs. Source load reductions from cleanup activities are tracked and reported separately.

Table 8.3 Education Activity Inventory by Targeted Community

Education Activity	Date	Activity or Event Description	Topics	Participants	Effectiveness Assessment	Comments
Municipal Departments and Personnel						
FYI to City Staff and Council	Weekly	Provided updates on the storm water program and Environmental Division through a weekly email newsletter sent to City staff and Council	Storm Water Program	City Staff and Council		
Code Enforcement Meeting	Monthly	Monthly meeting with Code Enforcement, Fire Inspector, Building Inspector, Community Development, and Environmental Division	Code enforcement issues many of which pertain to storm water	Env, Code, Fire, and Building Divisions		
Community Development Meeting	Weekly	Weekly staff meeting with community development related to interdepartmental issues including storm water	new buildings, BMPs, storm water program	PW and CD		
Emergency Reponses Plan Training	7/27/2010	Review City's emergency response plan	Emergency shut off for fuel, equipment operations, spill response	16		
EPA Code Enforcement Workshop	9/13-16/10	Detailed workshop on code compliance hosted by the Regional Commercial and Industrial group	Code enforcement, documentation, methods of compliance and reporting	1		
Public Works Hazardous Communication and Emergency Response Training	9/22/2010	Review of communications and response during emergencies	Spill containment, equipment operation, communication	15		
Public Works Annual JURMP Training	11/3/2010	Annual Storm Water JURMP training for Public Works	Annual training on PW facility and activities BMPs, LIDs, and Tijuana River update	20	Survey and post assessment	
QSP/QSD Certification GCP	multiple	QSP and QSD General Construction Permit training (JS Storm water, URS, and RBF)	QSP/QSD certification	4		
BMP Inspection and Maintenance of LID Workshop	4/6/2011	City of San Diego all day workshop on LID maintenance and inspection workshop (attended by both PW and Community Development)	LID, BMPs, inspections, maintenance	3		
Fire Department Inspection and Training	5/12/2011	Inspected fire station with Chief, and fire inspector and storm water training	storm water program and pollution prevention	2		Chief will pass information onto staff
Construction Site Owners and Developers						
Copy of storm water/grading/erosion control requirements attached to Imperial Beach issued permits. Developed new construction BMP brochure.	On going	Community Development Department disseminates BMP and storm water information with permits	BMP, pollution prevention, City storm water requirements	---		
Community Development counter hours	On going	Counter hour for education relating to construction and development in the City	BMPs, pollution prevention, City storm water regulations	---		
Commercial Owners and Operators						
Sand Castle vender packed and inspections	8/6-9/2010	Education to Vendors and inspections during the event	Storm water pollution prevention, ICIDs	40	no violations	
Commercial Inspection	On going	Commercial business inspections	Pollution prevention, BMPs, storm water regulations	65		
Follow up inspection report and letter	On going	Each commercial inspection is followed up with summary report and BMP brochures by mail	Commercial BMPs, recycling and pollution prevention	63		
Residents and General Public						
Imperial Beach Classic Car Show	7/24/2010	Staffed a booth at the car show with Chula Vista HHW	Used oil, storm water	---		
FY 2009-10 JURMP AR Public Hearing	9/22/2009	Public hearing at City Council meeting	Overview of the FY 2009-10 JURMP AR components	---		
City Semi-Annual E-news letter	Summer/ Winter	Included articles on storm water, FOG, HHW, and street sweeping	Pollution prevention; storm water BMPs; Recycling HHW; Fats, oil, and grease; Special Events; Street sweeping	Citywide		
EDCO Environmental Times	Quarterly	Published a variety of environmental articles in the Summer , Fall, Winter, and Spring EDCO news letters sent to all residents	Pollution prevention, special events, HHW, recycling, and storm water regulations	Citywide		
Eagle and Times newspaper	On going	Articles on variety of topics advising the community on storm water related issues	Storm water pollution, reusable bag day, pollution prevention, City pollution prevention efforts, JURMP	Citywide newspaper		
Beach Closure Workshop	12/7/2010	Public workshop on beach closures in Imperial Beach. Presentation by Scripps SCCOOS, County DEH, Coastkeeper, IB Lifeguard and Environmental, and Q&A session.	Plum tracker, bacteria testing, available information, storm water, and public safety	60		
City Council Presentation on TMDL Reference Condition Study	12/15/2010	Presentation to City Council	TMDLs, Watersheds, storm water program	---		
Street Banners	2/1/2011	installed new environmentally themed street banners on HW75, Palm Ave, and Seacoast	Environmental awareness of Imperial Beach	Citywide		

Citywide Garage Sale	4/30/2011	Annual citywide garage sale to promote reuse of items	Recycle and reuse	118	All received training material from Env Division	
Home Front Cleanup	5/7/2011	Citywide annual home front cleanup event	trash, recycling, HHW	753	Trash: 91 tons; Green waste: 20.7 tons; metal: 23.3 tons; con-demo: 43.7 tons	
Update to City Council on Storm Water Program	5/18/2011	Presentation to City Council	Storm water permit, ROWD, TMDLs, and Tijuana River	---		
Underserved Community						
Underserved Target Audience Sub workgroup	On going	Co-chair of Education Residential Sources Workgroup, Chair of Underserved Target Audience sub-workgroup	Representation of the underserved community in all aspects of the regional education program	---		
Spanish Calendars	1/1/2011	Developed storm water Spanish calendars and distributed 2000 through Wildcaost as part of regional Education program	Multiple storm water themes	2000		
Storm Drain Stenciling	5/28 6/10 2011	Wildcoast storm drain stenciling in Imperial Beach	Pollution prevention	30		2 weekend events
School Children						
ILACSD Mar Vista High School Presentations	1/27-28/11	Mar Vista HS 9th and 12th grade presentations	Storm water, watersheds, Tijuana River estuary, San Diego Bay	91	Pre test: 50%, Post-test: 53%	
Watershed Presentation IB Elementary	3/30/2011	Watershed model presentation to 3rd grade class	Storm water, watersheds, Tijuana River estuary, San Diego Bay	48		
IB Sports Park for April as environmental awareness month	5/4/2011	games and activities with education staff from the Tijuana Estuary	watershed, storm water, environmental	25		
Public Participation						
Mayor proclamation (Oct Tijuana River Action Month)	10/1/2010	Proclamation by mayor to support and recognize the efforts to cleanup and restore the TJ River Valley	Tijuana River Valley	---		
JURMP Annual Report Public Hearing	9/22/2010	Presentation of JURMP annual report at City Council meeting	JURMP components and program effectiveness	---		
Coastal Cleanup Day	9/25/2010	Cleanup activity and education along SD Bay	Salt Pond restoration, trash, storm water pollution	48	56 pounds of trash	
Fiesta Del Rio Event	10/10/2010	Staffed education booth at fiesta del Rio	storm water and multiple others related to environmental themes	---		
Tijuana River Cleanups for Tijuana River Action Month	10/18/2010	Multiple cleanups with Wildcoast, coastkeep, and JobCorps part of Tijuana River Action Month	Trash, Tijuana River Valley	50	2,300 tires and 56 tons of trash	
Mayor proclamation (Day without a Bag)	12/16/2010	Proclamation by the Mayor to support reusable bags	Trash, recycling, plastic bag use	---		
Fish and Wildlife volunteer cleanup bikeway	1/8/2011	Cleanup event with FWS along SD Bay	Trash, recycling, watersheds	25		
San Diego Bay and Tijuana WURMP Public Hearing	1/26/2011	Public hearing at City Council meeting	Overview of the FY 2009-10 WURMP for San Diego Bay and Tijuana River	---		
Mayor proclamation (April as Environmental awareness month)	4/22/2011	Proclamation by mayor to support and recognize the environment	Multiple storm water education programs for the month	---		

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9.0 Public Participation

9.1 Introduction

The City is required to incorporate a mechanism for Public Participation in the updating, development, and implementation of the JURMP. Public involvement in the JURMP leads to a greater understanding of public perception and attitudes towards the problem of storm water pollution and helps the City implement a more effective storm water program. The Environmental Division regularly interacts with residents, commercial businesses, municipal staff, and developers while conducting inspections, education activities, BMP enforcement, and other JURMP implementation components. The City also makes additional efforts to include public participation in the implementation and development of the JURMP by providing opportunities throughout the year to provide comments and feedback.

9.2 Public Participation Efforts

The City holds a public hearing and solicits public comments prior to the adoption and submittal of the JURMP and its Annual Reports. The public was notified on this Annual Report in the Imperial Beach *Eagle & Times* newspaper and through public hearing notices that were posted at City Hall and the Imperial Beach Public Library. A draft of this JURMP Annual Report was made available for public viewing at the Imperial Beach City Hall, posted on the City's website, and presented at a public hearing to City Council on September 7, 2011.

Other public participation mechanisms the City uses include the operation of a storm water hotline and online reporting tool to report violations, coordination of cleanup activities such as the pet waste bag program and trash clean ups with local organizations, involvement with local environmental groups to spread awareness of urban runoff pollution, the City's storm water education program, participation with civic organizations, and City special events.

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10.0 Fiscal Analysis Component

10.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the fiscal analysis of the storm water program. Implementation costs for the JURMP are approximately $831,000. Revenue sources used by the City to fund the requirements of the Municipal Permit include City general fund, sewer enterprise fund, building permit fees, redevelopment agency funds and State grant funds.

10.2 General Budget Information

The costs of implementing the JURMP are spread across the whole City. Each Department and associated Division has an established role in implementing the components of the JURMP. However, the primary responsibility of implementing the storm water program is split between the Department of Public Works and Community Development Department.

10.3 Fiscal Analysis Methods

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. This section of the JURMP report follows the standardized Regional Fiscal Analysis Methods adopted by all Copermittees.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

The expenditures for FY 2010-11 are provided in the tables below. The standardized fiscal analysis method does not exactly correspond to the line item budget maintained by the City. The values presented in Table 10.1 are therefore an extrapolation of the expenditures made that correspond best to the itemized categories. Table 10.2 is also provided for the expenditures related to the Prop 50 Clean Beach Initiative grants for the Tijuana River Bacteria Source Identification Study.

The implementation of all JURMP Components involves every City Department and Division and the actual implementation costs for the program may exceed the amount posted below. The costs being reported only cover the expenditures by the City of Imperial Beach Environmental Division budget.

Table 10.1 Expenditures on JURMP for FY 2010-11

Administration	$253,044
Development Planning	$79,900
Construction	$287,980
Municipal	$8,133
Industrial Commercial	
Residential	$42,855
IDDE	$8,945
Education	
Public Participation	$2,228
Special Investigations	$102,384
Non-Emergency Firefighting	$45,871
Regional Costs	$253,044
Total	**$831,399**

Table 10.2 Clean Beach Initiative Grant Tijuana River Bacteria Source Identification Study FY 2010-11

Tijuana River Bacteria Study	$437,356.07

10.4.2 Funding Source

Revenue sources used by the City to fund the requirements of the Municipal Stormwater Permit include the City general fund, sewer enterprise fund, building permit fees, redevelopment agency funds, and State grant funds. The City's general fund provides the primary funding source for implementation of the JURMP components.

11.0 Program Effectiveness Assessment

11.1 Introduction

The Environmental Program Division is responsible for the effectiveness assessment of JURMP activities and implementation of BMPs for each major component of the storm water program. Effectiveness assessments are incorporated into the storm water program when ever feasible to gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters.

The structure of this Annual Report evaluates the level of effectiveness for each JURMP component in the context of program planning, management, and implementation. The City uses the structural hierarchy of levels that were established in the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. Each section of this Annual Report incorporates program effectiveness on Outcome Level 1through Outcome Level 4. In general, Outcome Levels 1, 2, and 3 are best addressed on a Jurisdictional scale. Outcome Level 4 measurements of load reductions are provided whenever possible, but for the most part, assessment of changes to water quality (Levels 4, 5, and 6) are best addressed at the watershed or regional scale.

11.2 Outcome Level 1a: Administration of Management Program Activities

The administration of management program activities addresses modifications to the *2008 JURMP*, updates to program documentation or procedures, end of the year program review, and updates to inventories for next fiscal year.

The City's implementation and assessment strategy for the program effectiveness is described in the *JURMP Section 13.0*.

11.3 Outcome Level 1b: Implementation of Management Program Activities

The implementation of management program activities addresses BMP confirmation requirements, proper documentation, training, inspections, public awareness and response, and special investigations for each component of the *2008 JURMP*. The tables in each section of the Annual Report present and describe targeted outcomes and results based on program implementation for the reporting period.

11.4 Outcome Level 2: Knowledge and Awareness of Program Implementation

Knowledge and awareness are targeted and assessed as necessary within each element of this Annual Report independently.

11.5 Outcome Level 3: Behaviors and Best Management Practice (BMP)

Behaviors and BMP implementation are assessed within the tables located in each section of this Annual Report.

11.6 Outcome Level 4 – Source Load Reductions

Source load reductions are targeted and assessed as necessary within each element of this Annual Report independently.

12.0 Special Investigations

12.1 Introduction

This section describes special investigations that were conducted above and beyond Permit requirements, but with the ultimate goal of better understanding and controlling urban runoff and storm water pollution. Special investigations relevant to each JURMP component are assessed in the tables of each section of this Annual Report. The discussion presented in this section provides additional details on the special investigation for the Imperial Beach Storm Drain Master Plan 2010 Update and the Tijuana River Bacterial Source Identification Study.

12.2 2010 Storm Drain Master Plan

During the reporting period the City finalized its update of the Storm Drain Master Plan and presented it to City Council on September, 1 2010. The first citywide storm drain study was prepared in 1960 by Curie Engineering Company and Merrill B. Wittman Engineers. The study was subsequently updated in 1991 by Bement-Dainwood-Sturgen (BDS) Civil Engineers. The purpose of the storm drain study is to evaluate the effectiveness of the existing storm drain system, identify problem areas, and recommend improvements that will reduce flooding or damage to the city during peak storm flows.

The 2010 Storm Drain Study is an update to the 1991 BDS report and utilizes the most resent hydrologic and geospatial data for the region to update drainage basin maps, storm drain capacity limitations, and preliminary recommendations for improvements to the storm drain system. Work on the update started in August 2009. The scope of work for the study includes the following:

- Review of existing data
- Field verification and GIS mapping of system
- Hydraulic and hydrologic modeling for the 2-year, 5-year, and 10-year model storm flow
- Identification of system deficiencies and recommendations for improvements

This Storm Drain Study is a useful planning tool that identifies system deficiencies and limitations that are important to consider when evaluating future redevelopment projects whether it is from new developments, capital improvement projects, or collection system improvements. The report provides hydraulic, hydrologic, and capacity analysis for 7 large drainage areas and 15 smaller drainage areas in the City and provides preliminary recommendations on how to increase the capacity for the system where feasible. Geospatial data relating to drainage basins and storm drain infrastructure was also updated into the City's GIS database.

12.3 Tijuana River Bacteria Source Identification Study

In April 2008, the City of Imperial Beach (City) was awarded a Clean Beach Initiative (CBI) Grant to assess the potential sources of bacterial impacts on the United States (US) side of the Tijuana River Watershed (TRW) under the Grant Program Agreement No. 07-584-550-0. The resultant study was named the *Tijuana River Bacterial Source Identification Study*. In January 2008, the City contracted Weston

Solutions, Inc. (WESTON®) to undertake the study. In December 2008, the project was placed on hold due to budgetary constraints in the State of California. The project was reinstated in February 2010 and is now operating under the new Grant Program Agreement No. 07-584-550-1 and is on track to finish by March 2012.

The goals of this study are as follows:

- Identify anthropogenic sources of bacteria;
- Identify non-anthropogenic sources of bacteria;
- Assess annual bacteria loads into the Tijuana River;
- Identify point sources (PSs) and non-point sources (NPSs) of bacterial pollutants; and
- Better understand mitigation strategies aimed at the reduction of bacteria loads.

The project uses standard culturing of fecal indicator bacteria and molecular tests (including the presence of Bacteroides as an indicator of recent human fecal pollution) to assess the presence of fecal indicator bacteria within the watershed during both dry weather and wet weather to identify PSs and NPSs of elevated bacteria concentrations, which may lead to beach postings at adjacent recreational beaches. Specific assessments focus on areas such as residential, commercial, agricultural and ranches, and groundwater transport as well as sewage flows from Mexico. The study includes detailed analysis of flows and loads of bacteria, nutrients, and general chemistry parameters. The final report is scheduled to be complete in March 2012 and will include BMP recommendations for the Tijuana River Watershed.

13.0 Non-Emergency Fire Fighting

13.1 Introduction

The City requires pollution prevention measures and BMPs to reduce or eliminate non-emergency fire fighting flows. The Environmental Division assists the Fire Department in implementing control measures to prevent or control pollutants from both emergency and non-emergency fire fighting activities. The 2008 JURMP Section 2.2 identifies the BMPs that are implemented as part of fire fighting activities.

Non-emergency fire fighting activities, such as training activities that simulate emergency responses, are performed in a manner that eliminates discharges to the storm water system whenever practicable, and minimizes discharges to the storm water conveyance system when elimination of discharges is unavoidable. The following best management practices are implemented as part of these activities:

- Water flows are directed to landscaped areas whenever possible
- When flowing water to an area where landscaping does not prevent runoff, the area selected shall be surveyed by the Officer in charge prior to training activities to ensure that debris will not enter into the storm water system as a result of the drill
- Areas that have debris, which could potentially enter the storm water system as a result of the drill activities, will not be used for training until debris has been removed. Referrals to the Department responsible for the debris removal will be made as needed
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff, which could contribute to storm water discharges
- Discharges from maintenance of equipment and restoration of hoses, vehicles, tools, ladders and other emergency response equipment are directed to the sewage, and dry methods are used whenever practical
- Staff is trained on good housekeeping practices to be used during standard facility maintenance procedures
- The fire fighting personnel and inspectors receive annual pollution prevention training from Environmental Specialist
- Vehicle washing or equipment cleaning is conducted over a wash bay that drains to the sewer
- The fire inspector participates in monthly code enforcement meetings

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14.0 JURMP Revisions

14.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible to maximize program effectiveness by identifying and describing any JURMP modifications that are made during the reporting period, or that are proposed or planed for the next reporting period. Under the reporting format of this Annual Report, any modification or proposed changes made to the *2008 JURMP* are identified in the Program Planning and Administration subsection within each preceding Section of this report.

14.2 JURMP Updates

The Table 14.1 below provides a summary of the modifications made to the JURMP over the reporting period. Changes to the JURMP were all considered minor.

Table 14.1 – Overview JURMP Modification

Development Planning Component
• Updated municipal code with final Hydromodiciation criteria (Attachment 2A) • Updated City building code to provide greater authority to require BMPs (Attachment 2B) • Updated the City's Storm Water Management Plan form for development projects (Attachment 2C) • Developed a guidance document for SUSMP projects (Attachment 2D)
Municipal Component
• Hired on a GIS Analyst position that will enhance the City's capabilities to use geographic information for storm water management • Purchased a field computer for the Environmental Division to use while conducting inspection and enforcement activities • Updated Storm Drain Mater Plan 2010 • Updated MS4 GIS database and Map (Attachment 4A) • Updated annual storm drain maintenance form (Attachment 4B)

14.3 Updates to FY 2009-10 Annual Report

The City of Imperial Beach received a letter on August 11, 2011 from Coastkeeer requesting a modification to the Industrial and Commercial inventory from last reporting period. They requested that the City make the following corrections:

1. Clarify whether the business is tributary to a 303(d) listed water body and if that businesses generates a 303(d) pollutant.

2. Increase the size of the font in the inventory so that it is readable when printed and not just in electronic form.

The City has addressed these issues by adding an additional column to clarify whether a business generates a 303(d) listed pollutant. The revised commercial inventory from FY 09-10 is provided below in a printable format (Table14.2 Industrial and commercial Inventory for FY 2009-10). These changes were also incorporated into this year's industrial and commercial Inventory which is proved in Section 5 Table 5.5. A copy of the FY 2009-10 commercial and industrial inventory was also mailed to Coastkeeper to satisfy their request.

Table 14.2 - FY 2009-10 Updated Commercial Inventory

No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
IB 1	13TH ST MARKET	1126 13TH ST	911.11	5921	445310	LIQU	x	x		x	x	x	x	x		Yes	Yes	6330221900	32.575943	-117.105862
IB 2	7 ELEVEN 18322/RNJ ENTERPRISES	657 PALM AVE	910.20	5999	453998	RETL										No	No	6252541100	32.58376	-117.118931
IB 3	7-ELEVEN #13563G-2131	197 PALM AVE	910.10	5999	453998	RETL										No	No	6251912500	32.583807	-117.129828
IB 4	7-ELEVEN STORE # 24344B-2131	1311 PALM AVE	910.20	5999	453998	RETL	x	x	x		x	x		x	x	No	No	6270111800	32.58364	-117.105344
IB 5	7-ELEVEN STORE #23982A-2131	1303 IMPERIAL BEACH BL	911.11	5999	453998	RETL	x	x	x		x	x		x	x	Yes	Yes	6330310100	32.576412	-117.105527
IB 6	AB BRITE CLEANERS & LAUNDRY	674 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401700	32.58408	-117.118594
IB 7	ADEPT PROCESS SERVICES LLC	706 SEACOAST DR	910.10	5999	453998	RETL										No	No	6251811307	32.583429	-117.131854
IB 8	ALBERTO'S TACO SHOP	1183 13TH ST	911.11	5812	72211	EATING	x	x			x	x			x	Yes	Yes	6330313000	32.575108	-117.105547
IB 9	ALL AMERICAN CAR WASH IB	1158 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262300500	32.58413	-117.109042
IB 10	ALL PHASE DRYWALL	1187 13TH ST	911.11	1742	238310	GENCONT										Yes	No	6330311500	32.575049	-117.105547
IB 11	ALLSTATE INSURANCE	1228 PALM AVE	910.20	7389	561499	PROF										No	No	6262411900	32.58412	-117.10735
IB 12	AMANDA'S HAIRSTYLING	637 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584887	-117.114135
IB 13	AMERICAN LEGION POST NO 820	1268 PALM AVE	910.20	5812	72211	EATING										No	No	6262420900	32.58412	-117.106402
IB 14	AMERICAN OMBUDSMAN ENTERPRISES	150 PALM AVE	910.10	7389	561499	PROF										No	No	6250140700	32.58408	-117.130638
IB 15	AMERICA'S FINEST DRIVINGSCHOOL	936 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262123200	32.584118	-117.113439
IB 16	AMOR FLOWERS & TUX	181 PALM AVE	910.10	5999	453998	RETL										No	No	6251911700	32.583808	-117.130104
IB 17	ANCHOR MOTORS	740 PALM AVE	910.20	5521	441120	AUTO		x	x		x			x		No	No	6262021900	32.5841	-117.117599
IB 18	ANTJE GERSTUNG	704 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811305	32.583555	-117.131854
IB 19	AROMA THAI RESTAURANT	757 SEACOAST DR	910.10	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6251920400	32.58251	-117.131642
IB 20	ARTCO PICTURE FRAMES	716 BASSWOOD AVE	910.20	5023	423220	WHOL										No	No	6260212300	32.590411	-117.117504
IB 21	AUNT ELLEN'S WATER	600 PALM AVE	910.20	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
IB 22	BEACH SHOP	710 SEACOAST DR	910.10	5999	453998	RETL										No	No	6251821046	32.583076	-117.1318
IB 23	BEACH SIDE STATION	681 HIGHWAY 75	910.20	5541	44719	GAS		x	x		x	x		x	x	No	No	6262501200	32.584501	-117.118603
IB 24	BERNARDO SHORES	500 HIGHWAY 75	910.20	7033	721211	RVMOBIL		x								No	No	6251402000	32.586034	-117.120221
IB 25	BEST 99 CENT	821 PALM AVE	910.20	5999	453998	RETL										No	No	6262500600	32.583755	-117.115196
IB 26	BIBBEY'S GIFT SHOP	903 SEACOAST DR	910.10	5999	453998	RETL										No	No	6253510100	32.580109	-117.131601
IB 27	BIBBEY'S SHELLS AND ROCKS	903 SEACOAST DR	910.10	5999	453998	RETL										No	No	6253510100	32.580109	-117.131601
IB 28	BEACH CLUB GRILLE	710 SEACOAST DR	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6251821000	32.583076	-117.1318
IB 29	BIG KAHUNA'S PIZZA N STUFFS	600 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6251401900	32.584072	-117.120629
IB 30	BILBRAY TAX SERVICE	970 SEACOAST DR	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891
IB 31	BILLIE JEANS HAIRSTYLING	1144 PALM AVE	910.20	7299	56199	SERVICE										No	No	6261700500	32.58413	-117.109567
IB 32	BILL'S HAPPY HAIR	839 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262500600	32.583749	-117.115025
IB 33	BOWMAN'S MARKET	1008 PALM AVE	910.20	5999	453998	RETL										No	No	6262221100	32.584072	-117.111372
IB 34	BOYS & GIRLS CLUB OF IB	847 ENCINA AVE	910.20	7999	713290	BINGO										No	No	6264001200	32.580074	-117.115705
IB 35	BOYS & GIRLS CLUB OF IB	847 ENCINA AVE	910.20	7299	56199	SERVICE										No	No	6264001200	32.580074	-117.115705
IB 36	BRENT JACKMAN CONSTRUCTION	708 BASSWOOD AVE	910.20	1799	238990	GENCONT										No	No	6260211400	32.590412	-117.11766
IB 37	BRYANTS AUTO REGISTRATION SVS	1235 PALM AVE	910.20	7299	56199	SERVICE										No	No	6263111400	32.58364	-117.107297
IB 38	BULL PEN	706 HIGHWAY 75	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6262011100	32.584607	-117.117769
IB 39	BURGER KING #806	1180 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6262302000	32.58413	-117.108598
IB 40	C.H. DONUTS	1070 13TH ST	911.11	5812	72211	EATING	x	x		x	x	x	x	x		Yes	Yes	6265421100	32.577073	-117.105853
IB 41	CA ALUMINUM&VINYL WINDOWS INC	754 10TH ST	910.20	5999	453998	RETL										No	No	6262821500	32.58299	-117.111994
IB 42	CALIFORNIA-AMERICAN WATER COMP	1019 CHERRY	910.20	7299	56199	SERVICE										No	No	6261021000	32.588539	-117.111495
IB 43	CARL'S JR. #585	700 13TH ST	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6263121300	32.583631	-117.105846
IB 44	CHAT COMM	1223 PALM AVE	910.20	5999	453998	RETL										No	No	6263111400	32.58364	-117.107528
IB 45	CHOCO'S HAIRCUTTING	1256 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6265420900	32.576671	-117.106592
IB 46	CHRISTINA SCHUBERT	704 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811305	32.583555	-117.131854
IB 47	CHURCH OF CHRIST OF IB	640 10TH ST	910.20	8661	813110	NONPROF										No	No	6262212800	32.584827	-117.111994
IB 48	CIRCLE H LIQUOR	600 PALM AVE	910.20	5921	445310	RETL										No	No	6251401400	32.584072	-117.120629
IB 49	CITY NAILS	750 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121400	32.583011	-117.105839
IB 50	COCO AND GABOON	152 PALM AVE	910.10	5999	453998	RETL										No	No	6250140700	32.584079	-117.130604
IB 51	COLWELL REALTY	134 PALM AVE	910.10	7389	561499	PROF										No	No	6250140500	32.584081	-117.130909
IB 52	COMPREHENSIVE TRAINING SYSTEMS	497 11TH ST	910.20	7299	56199	SERVICE										No	No	6260600600	32.587617	-117.110422
IB 53	COMPUTERVILLE	740 10TH ST	910.20	7299	56199	SERVICE										No	No	6262822500	32.58316	-117.111993

Table 14.2 - FY 2009-10 Updated Commercial Inventory

No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
IB 54	CORONADO BAY URGENT CARE	600 PALM AVE	910.20	8011	621111	HEALTH										No	No	6251401900	32.584072	-117.120629
IB 55	COW-A-BUNGA CA GLACIER FNAM	10 EVERGREEN AVE	910.20	5812	72211	EATING	x	x			x	x			x	No	No	7602420903	32.579651	-117.132455
IB 56	COX BAIT & TACKLE	996 PALM AVE	910.20	5999	453998	RETL										No	No	6262211100	32.584093	-117.112008
IB 57	CRAZY LADY'S	600 PALM AVE	910.20	5999	453998	RETL										No	No	6251401900	32.584072	-117.120629
IB 58	CRISS CROSS SALON	1115 PALM AVE	910.20	7299	56199	SERVICE										No	No	6263012300	32.58365	-117.110177
IB 59	CROSSROAD PETROLEUM INC.	1185 PALM AVE	910.20	5541	44719	GAS	x	x		x	x	x	x	x		No	No	6263021600	32.583675	-117.10857
IB 60	CRYSTAL COVE COCKTAILS	995 PALM AVE	910.20	5813	722400	BAR										No	No	6262822200	32.583793	-117.111898
IB 61	CVS/PHARMACY #9120	800 PALM AVE	910.20	5999	453998	RETL										No	No	6262110600	32.584154	-117.115976
IB 62	CYNTHIA SEPULVEDA	637 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584887	-117.114135
IB 63	D & L LOCKSMITH	1148 PALM AVE	910.20	7299	56199	SERVICE										No	No	6261700500	32.584078	-117.109484
IB 64	D'AMES FITNESS	704 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811305	32.583555	-117.131854
IB 65	DAWN SWANSON- POINDEXTER	704 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811305	32.583555	-117.131854
IB 66	DEPENDABLE CARBURETOR EXCHANGE	660 EMORY ST	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262122400	32.584593	-117.113213
IB 67	DESPHY'S CLEANERS	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401900	32.584072	-117.120629
IB 68	DON PANCHO'S MEXICAN FOOD	690 HIGHWAY 75	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6260705800	32.584833	-117.118321
IB 69	DOS MUNDOS TACO SHOP	1004 PALM AVE	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6262221100	32.584048	-117.111402
IB 70	E & S PRODUCE	1177 13TH ST	911.11	5999	453998	RETL										Yes	No	6330313000	32.575198	-117.105546
IB 71	E.N.S. COIN LAUNDRY	1167 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330313000	32.575346	-117.105546
IB 72	EAZY TAN	206 PALM AVE	910.10	7299	56199	SERVICE										No	No	6250230300	32.584073	-117.129323
IB 73	ECONO LUBE N' TUBE	772 13TH ST	910.20	7299	56199	SERVICE		x	x		x	x		x		No	No	6263121100	32.582738	-117.105835
IB 74	ED'S SHOE REPAIR	635 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584911	-117.114135
IB 75	EL CILANTRO MEXICAN FOOD	764 13TH ST	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6263121100	32.582838	-117.105836
IB 76	EL TAPATIO CATERING	667 SILVER STRAND BL	910.10	5812	72211	EATING										No	No	6250241200	32.584428	-117.12804
IB 77	EL TAPATIO RESTAURANT INC	260 PALM AVE	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6250250100	32.584068	-117.128037
IB 78	EL ZASON	633 9TH ST	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6262121400	32.584935	-117.114134
IB 79	ELM ADULT DAY HEALTH CARE CTR	1220 ELM AVE	910.20	8351	624410	DAYCARE										No	No	6263412000	32.580809	-117.1076
IB 80	EPISCOPAL COMMUNITY SERVICES	485 IMPERIAL BEACH BL	911.11	8351	624410	DAYCARE										Yes	No	6320841100	32.576485	-117.122693
IB 81	EPISCOPAL COMMUNITY SERVICES	1340 IMPERIAL BEACH BL	911.11	8011	621111	HEALTH										Yes	No	6272201400	32.576657	-117.104813
IB 82	EVERYDAY FURNITURE	986 PALM AVE	910.20	5712	442110	RETL										No	No	6262211200	32.584108	-117.112203
IB 83	EVERYDAY FURNITURE	1003 PALM AVE	910.20	5712	442110	RETL										No	No	6262910100	32.583741	-117.111743
IB 84	FACTORY 2 U- #631	880 PALM AVE	910.20	5999	453998	RETL										No	No	6262110700	32.584153	-117.114678
IB 85	FAMILY BARBER SHOP	934 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262123200	32.584118	-117.113479
IB 86	FAMILY HAIRCUTTERS	770 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121100	32.582763	-117.105835
IB 87	FARMERS INSURANCE	932 PALM AVE	910.20	7389	561499	PROF										No	No	6262123200	32.584118	-117.11352
IB 88	FIRST ASSEMBLY OF GOD	588 9TH ST	910.20	7299	56199	SERVICE										No	No	6261412200	32.585916	-117.114414
IB 89	FITNESS WORLD	750 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121400	32.583011	-117.105839
IB 90	FLEET RESERVE CLUB	659 SILVER STRAND BL	910.10	5812	72211	EATING										No	No	6250241000	32.584744	-117.128104
IB 91	FLESH SKIN GRAPHICS	1155 PALM AVE	910.20	7299	812199	TATOO										No	No	6263022000	32.58365	-117.109153
IB 92	FURNITURE 2000	817 PALM AVE	910.20	5712	442110	RETL										No	No	6262500600	32.583756	-117.115235
IB 93	G & M OIL #177	907 PALM AVE	910.20	5541	44719	GAS		x	x		x	x		x	x	No	No	6262810100	32.583717	-117.114056
IB 94	G.E. BROWN SERVICE	497 11TH ST	910.20	1799	238990	SUBCONT										No	No	6260600600	32.587617	-117.110422
IB 95	GENES' AUTOMOTIVE	1085 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262911400	32.583743	-117.111075
IB 96	GENE'S TOWING SERVICE	753 10TH ST	910.20	7299	56199	SERVICE										No	No	6262910500	32.583013	-117.111675
IB 97	GENE'S U'HAUL	1085 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262911400	32.583743	-117.111075
IB 98	GIANT PIZZA KING #4	1070 13TH ST	911.11	5812	72211	EATING	x	x		x	x	x	x	x		Yes	Yes	6265421100	32.577073	-117.105853
IB 99	GIANT PIZZA KING #5	600 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6251401400	32.584072	-117.120629
IB 100	GJAG CORP DBA PACIFIC POINT	657 10TH ST	910.20	7389	561499	PROF										No	No	6262221200	32.584637	-117.111674
IB 101	GLORIA BARRIOS	770 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121100	32.582763	-117.105835
IB 102	GOODWILL INDUSTRIES OF SD	849 PALM AVE	910.20	5999	453998	RETL										No	No	6262500600	32.583746	-117.11493
IB 103	GREG MIXON	280 PALM AVE	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
IB 104	H & R BLOCK	1313 PALM AVE	910.20	7389	561499	PROF										No	No	6270111800	32.583665	-117.10531
IB 105	HAWKINS AUTO BODY	519 FLORIDA ST	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6261221300	32.587323	-117.109195
IB 106	HEALING WAVE HOLISTIC H.C.	667 PALM AVE	910.20	8049	621399	MASSTEC										No	No	6262500900	32.58376	-117.118744

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IB 107	HELFON HANONO, OPTOMETRIST	894 PALM AVE	910.20	8042	621320	HEALTH										No	No	6262110700	32.584139	-117.114504
IB 108	HERRERA & ASSOCIATES-MUNICIPAL	600 PALM AVE	910.20	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
IB 109	HOLLYWOOD VIDEO #005-580	720 13TH ST	910.20	7841	532230	SECHAND										No	No	6263121500	32.583383	-117.105843
IB 110	HONG DIEP THI LE	750 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121400	32.583011	-117.105839
IB 111	HS CARS COMPANY INC	1333 PALM AVE	910.20	5521	441120	AUTO		x	x		x			x		No	No	6270111900	32.583656	-117.104908
IB 112	HUTCHINS REALTY	1138 PALM AVE	910.20	7389	561499	PROF										No	No	6261700600	32.58413	-117.109691
IB 113	I B GROOMIN	600 PALM AVE	910.20	752	812910	RETL										No	No	6251401400	32.584072	-117.120629
IB 114	I B LIQUOR	801 SEACOAST DR	910.10	5921	445310	RETL										No	No	6252720100	32.581626	-117.131662
IB 115	I.B. FLOWERS BY DESIGN	668 10TH ST	910.20	5999	453998	RETL										No	No	6262211000	32.584491	-117.111992
IB 116	I.B. PIZZA	1293 IMPERIAL BEACH BL	911.11	5812	72211	EATING	x	x		x	x	x	x	x		Yes	Yes	6330222300	32.576394	-117.105869
IB 117	I.B. UNITED METHODIST CHURCH	455 PALM AVE	910.20	8661	813110	NONPROF										No	No	6252302300	32.58377	-117.123135
IB 118	IB BEAUTIFUL INC	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401900	32.584072	-117.120629
IB 119	IB BY THE SEA GIFTS	862 SEACOAST DR	910.10	5999	453998	RETL										No	No	6253302100	32.580768	-117.131864
IB 120	IB CHAMBER OF COMMERCE	702 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811303	32.583681	-117.131854
IB 121	IB COIN LAUNDERLAND NO. 3	1010 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262221100	32.584084	-117.111357
IB 122	IB COIN LAUNDRY #5	760 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121100	32.582887	-117.105837
IB 123	IB DIVERS	641 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584839	-117.114136
IB 124	IB FITNESS	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401900	32.584072	-117.120629
IB 125	IB FORUM	1079 SEACOAST DR	911.11	5812	72211	EATING		x	x		x			x		Yes	No	6253922300	32.576938	-117.131594
IB 126	IB GIFTS & BEACH GEAR	700 SEACOAST DR	910.10	5999	453998	RETL										No	No	6251811302	32.583808	-117.131833
IB 127	IB MORTGAGE & REALTY	1258 IMPERIAL BEACH BL	911.11	7389	561499	PROF										Yes	No	6265420900	32.57669	-117.106558
IB 128	IB NUTRITION STORE	888 PALM AVE	910.20	5122	446191	RETL										No	No	6262110700	32.584145	-117.114578
IB 129	IB PET	600 PALM AVE	910.20	5999	453910	RETL										No	No	6251401400	32.584072	-117.120629
IB 130	IB SUPER WASH N DRY	1220 PALM AVE	910.20	7215	812310	RETL										No	No	6262412700	32.58412	-117.107485
IB 131	IDEAL CHOICE INSURANCE AGENCY	1233 PALM AVE	910.20	7389	561499	PROF										No	No	6263111400	32.58364	-117.107336
IB 132	IMPERIAL BEACH DENTALGROUP	1340 IMPERIAL BEACH BL	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
IB 133	IMPERIAL BEACH EAGLE & TIMES	664 10TH ST	910.20	7299	56199	SERVICE										No	No	6262211000	32.584539	-117.111992
IB 134	IMPERIAL BEACH HAIR DESIGNS	235 PALM AVE	910.10	7299	56199	SERVICE										No	No	6252010500	32.583798	-117.128753
IB 135	IMPERIAL BEACH HEALTH CENTER	949 PALM AVE	910.20	8011	621111	HEALTH										No	No	6262811700	32.583725	-117.113201
IB 136	IMPERIAL BEACH MANAGEMENT CO	120 ELDER AVE	911.11	7389	561499	PROF										Yes	No	6253522600	32.578962	-117.131147
IB 137	IMPERIAL BEACH PET HOSPITAL	538 12TH ST	910.20	7389	561499	PROF										No	No	6261810800	32.587145	-117.108206
IB 138	IMPERIAL BEACH PRESCHOOL NORTH	608 10TH ST	910.20	8351	624410	DAYCARE										No	No	6262212700	32.585211	-117.111997
IB 139	IMPERIAL BEACH PRESCHOOL SOUTH	1179 IMPERIAL BEACH BL	911.11	8351	624410	DAYCARE										Yes	No	6330122400	32.57638	-117.108431
IB 140	IMPERIAL BEACH ULTRAMAR	1300 IMPERIAL BEACH BL	911.11	5541	44719	GAS	x	x		x	x	x	x	x		Yes	Yes	6272201100	32.57662	-117.105562
IB 141	IMPERIAL DONUTS +	1002 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6262221100	32.584049	-117.111598
IB 142	IMPERIAL GUEST HOME	1245 FLORIDA ST	911.11	7299	56199	SERVICE										Yes	No	6330820500	32.573843	-117.108804
IB 143	IMPERIAL NAILS	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401900	32.584072	-117.120629
IB 144	IMPERIAL TRAILER PARK	674 PALM AVE	910.20	7033	721211	RVMOBIL										No	No	6251401700	32.58408	-117.118594
IB 145	INNER VISIONS	803 PALM AVE	910.20	5999	453998	RETL										No	No	6262500600	32.583796	-117.115366
IB 146	INTERNATIONAL BLENDS	208 PALM AVE	910.10	5812	72211	EATING										No	No	6250230300	32.584072	-117.129275
IB 147	J & T NAILS	635 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584911	-117.114135
IB 148	JAMES ROWLES STUDIO	497 11TH ST	910.20	7299	56199	SERVICE										No	No	6260600600	32.587617	-117.110422
IB 149	JESSOP & SON LANDSCAPE	425 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6324002100	32.576475	-117.124108
IB 150	JORDYNHORDICHOK CHRISTMASTREE	1441 5th St.	911.11	5999	453998	RETL										Yes	No	6261700900	32.57912	-117.116912
IB 151	JORGE AGUILA	277 EVERGREEN AVE	911.11	7299	56199	SERVICE										Yes	No	6253621400	32.579403	-117.128026
IB 152	JP MORGAN CHASE BANK, N.A.	1100 PALM AVE	910.20	6021	52211	BANK										No	No	6261621700	32.583991	-117.110573
IB 153	KATY'S CAFE	704 SEACOAST DR	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6251811306	32.583555	-117.131854
IB 154	K-C'S CHINESE FOOD	1299 IMPERIAL BEACH BL	911.11	5812	72211	EATING	x	x		x	x	x	x	x		Yes	Yes	6330222300	32.576476	-117.105767
IB 155	KEYSTONE ESCROW INC	129 PALM AVE	910.10	7389	561499	PROF										No	No	6251912601	32.583812	-117.131003
IB 156	KFC CORP #Y450025	1056 13TH ST	911.11	5812	72211	EATING	x	x			x	x			x	Yes	Yes	6265421000	32.577288	-117.105851
IB 157	L & M TIRE CO./ EXPRESS TIRE	950 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x		No	No	6262212000	32.584074	-117.112906
IB 158	LA POSTA MARKET #2	1266 IMPERIAL BEACH BL	911.11	5999	453998	RETL	x	x			x	x			x	Yes	Yes	6265420900	32.57669	-117.10642
IB 159	LEADINGHAM REALTY	1062 PALM AVE	910.20	7389	561499	PROF										No	No	6262222500	32.58413	-117.110966

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No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
IB 160	LENS WIRELESS	639 7TH ST	910.20	4812	517310	RETL										No	No	6262011200	32.585107	-117.117833
IB 161	LEON DISCOUNT TOBACCO FOOD MAR	185 PALM AVE	910.10	5999	453998	RETL										No	No	6251911700	32.583808	-117.130035
IB 162	LINDA WHEELOCK WILLIS	204 PALM AVE	910.10	7299	56199	SERVICE										No	No	6250230300	32.584064	-117.129371
IB 163	LITTLE BONANZA	940 PALM AVE	910.20	5812	72211	EATING										No	No	6262123500	32.584117	-117.113357
IB 164	LOIS FUSCO	204 PALM AVE	910.10	7299	56199	SERVICE										No	No	6250230300	32.584064	-117.129371
IB 165	LUIS A CONTRERAS, DDS	1340 IMPERIAL BEACH BL	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
IB 166	LUIS FLORES	1325 IRIS AVE	911.11	7299	56199	SERVICE										Yes	No	0000000000	32.568958	-117.1049
IB 167	LUNA'S BEAUTY DESIGNERS	204 PALM AVE	910.10	7299	56199	SERVICE										No	No	6250230300	32.584064	-117.129371
IB 168	LUXURIOUS NAILS & SPA	710 HIGHWAY 75	910.20	7299	56199	SERVICE										No	No	6262011100	32.584596	-117.117714
IB 169	LUXURY LAUNDRY	1146 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330221700	32.575645	-117.105863
IB 170	MAI BUTON SEWING	1175 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330313000	32.575227	-117.105546
IB 171	MAR VISTA BAPTIST CHURCH	888 5TH ST	910.20	8661	813110	NONPROF										No	No	6253111500	32.580544	-117.122547
IB 172	MARCO'S & RED HAWK	1205 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6263110100	32.583672	-117.107867
IB 173	MARIA E SALAS	235 PALM AVE	910.10	7299	56199	SERVICE										No	No	6252010500	32.583798	-117.128753
IB 174	MARISA'S MEXICAN SEAFOOD GRILL	285 PALM AVE	910.10	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6252011100	32.583802	-117.127733
IB 175	MARJO'S HAIR DESIGN	742 10TH ST	910.20	7299	56199	SERVICE										No	No	6262822500	32.583136	-117.111993
IB 176	MARRERO'S CAR WASH	1257 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6330222700	32.576389	-117.106592
IB 177	MARY ANN V. SANVICTORES, DDS	600 PALM AVE	910.20	8021	621210	HEALTH										No	No	6251401900	32.584072	-117.120629
IB 178	MASON'S ALIGNMENT-BRAKE-MUFFLE	975 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262820300	32.58368	-117.112424
IB 179	MCDONALDS/SCAROB INC.	1135 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6263011800	32.58365	-117.109781
IB 180	MEIJO SUSHI, INC.	600 PALM AVE	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6251401900	32.584072	-117.120629
IB 181	MERCADO SHORES	639 7TH ST	910.20	5999	453998	RETL										No	No	6262011200	32.585107	-117.117833
IB 182	MICHAEL GUTHRIE	1256 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6265420900	32.576671	-117.106592
IB 183	MICHAEL ROGERS DDS	1340 IMPERIAL BEACH BL	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
IB 184	MICKIES BAR AND GRILL	220 PALM AVE	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6250230500	32.58407	-117.128987
IB 185	MIKE'S CAR WASH	1117 PALM AVE	910.20	7299	56199	SERVICE										No	No	6263012300	32.58365	-117.110138
IB 186	MIKE'S UPHOLSTERY	1152 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330221600	32.575556	-117.105864
IB 187	MISTY DAWN'S SALON	710 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251821050	32.583076	-117.1318
IB 188	MODERN TEE	1059 3RD ST	911.11	5999	453998	RETL										Yes	No	6254212200	32.577118	-117.127263
IB 189	MONEYTREE INC.	1070 13TH ST	911.11	6099	522390	CKCASH										Yes	No	6265421100	32.577073	-117.105853
IB 190	MORENO DENTAL LAB	1258 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6265420900	32.57669	-117.106558
IB 191	MUNI TEMPS/MUNICIPAL STAFFING	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401400	32.584072	-117.120629
IB 192	MYA'S FLOWER DESIGN	245 PALM AVE	910.10	5999	453998	RETL										No	No	6252010600	32.583841	-117.128554
IB 193	MZM SEACOAST BISTRO, LP	875 SEACOAST DR	910.10	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6252730100	32.58063	-117.131594
IB 194	NAIL TECH	938 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262123200	32.584117	-117.113398
IB 195	NAKAWATASE & CO, CPA	923 SEACOAST DR	910.10	7389	561499	PROF										No	No	6253522700	32.57943	-117.131641
IB 196	NEIGHBOR MARKET	1497 13TH ST	911.11	5999	453998	RETL										Yes	No	6332234700	32.569207	-117.10548
IB 197	NESTOR WATCH REPAIR CENTER	635 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584911	-117.114135
IB 198	NFAROOQI ENT. LLC/JACK IN BOX	890 PALM AVE	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6262110800	32.584143	-117.114553
IB 199	NGOC THAO DANG NGUYEN	750 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121400	32.583011	-117.105839
IB 200	NICK PHAM	750 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121400	32.583011	-117.105839
IB 201	NINI'S SALON	668 10TH ST	910.20	7299	56199	SERVICE										No	No	6262211000	32.584491	-117.111992
IB 202	NORTH ISLAND C.U.	1101 PALM AVE	910.20	6061	522130	CRED										No	No	6262500300	32.583611	-117.117071
IB 203	NOVAK SURFBOARD DESIGNS	536 13TH ST	910.20	3599	333999	MANUF										No	No	6261920400	32.586426	-117.105794
IB 204	OCHOA ELECTRIC	731 EMORY ST	910.20	1731	238210	SUBCONT										No	No	6262820600	32.583288	-117.112914
IB 205	OFFICE LOUNGE	1133 13TH ST	911.11	5813	722400	BAR										Yes	No	6330312000	32.575852	-117.105543
IB 206	OLLIE ANGEL SKATE SHOP	743 8TH ST	910.20	5999	453998	RETL										No	No	6262500600	32.583085	-117.115374
IB 207	ORCA MARITIME INC	497 11TH ST	910.20	7299	56199	SERVICE										No	No	6260600600	32.587617	-117.110422
IB 208	OTAY MESA REALTY	970 SEACOAST DR	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891
IB 209	PACIFIC BELL	1288 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262421000	32.58412	-117.106008
IB 210	PACIFIC LEGACY PROPERTIES	702 SEACOAST DR	910.10	7389	561499	PROF										No	No	6251811303	32.583681	-117.131854
IB 211	PACIFIC REALTY	992 PALM AVE	910.20	7389	561499	PROF										No	No	6262211100	32.584107	-117.112086
IB 212	PACIFIC REALTY SALES & MGT INC	280 PALM AVE	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768

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IB 213	PALM AVENUE BOOKS DBA ROMANTIX	1177 PALM AVE	910.20	5999	453998	RETL										No	No	6263020200	32.58365	-117.108721
IB 214	PALM AVENUE LIQUOR & MARKET	1200 PALM AVE	910.20	5999	453998	RETL										No	No	6262412700	32.584013	-117.108023
IB 215	PALM COIN LAUNDRY	187 PALM AVE	910.10	7299	56199	SERVICE										No	No	6251912500	32.583807	-117.130001
IB 216	PALM GLASS INC	754 10TH ST	910.20	7299	56199	SERVICE										No	No	6262821500	32.58299	-117.111994
IB 217	PAN AM TAE KWON DO	730 HIGHWAY 75	910.20	7389	561499	PROF										No	No	6262010600	32.584507	-117.117457
IB 218	PARTY MART	1070 13TH ST	911.11	5999	453998	RETL										Yes	No	6265421100	32.577073	-117.105853
IB 219	PAT'S LAWN CARE	448 DONAX AVE	910.20	7299	56199	SERVICE										No	No	6252300500	32.582584	-117.123757
IB 220	PAUL MCNALLY REALTY	280 PALM AVE	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
IB 221	PAULINA RIDDLE	704 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811305	32.583555	-117.131854
IB 222	PENTECOSTAL CHURCH OF GOD	1402 HEMLOCK AVE	911.11	8661	813110	NONPROF										Yes	No	6332311500	32.570446	-117.103273
IB 223	PHIL'S BARBERSHOP	1305 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6330310100	32.576394	-117.10549
IB 224	PHIL'S DANCE STUDIO	1305 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6330310100	32.576394	-117.10549
IB 225	PHOEBE'S 99 C & PLUS	766 13TH ST	910.20	5999	453998	RETL										No	No	6263121100	32.582813	-117.105836
IB 226	PIZZA INDUSTRY/DOMINO'S PIZZA	1307 IMPERIAL BEACH BL	911.11	5812	72211	EATING	x	x		x	x	x	x	x		Yes	Yes	6330310100	32.576393	-117.105453
IB 227	POUR'S LIQUOR	1141 13TH ST	911.11	5921	445310	RETL										Yes	No	6330312000	32.575733	-117.105544
IB 228	PRECISION AUTO BODY & COLLISIO	989 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x		No	No	6262822100	32.583677	-117.112136
IB 229	PRECISION FOREIGN	1240 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262412800	32.58412	-117.107148
IB 230	PRETZLES AND MUCH MORE	10 EVERGREEN AVE	910.20	5812	72211	EATING	x	x			x	x			x	No	No	7602420902	32.579651	-117.132455
IB 231	PRICED RITE PETS	775 PALM AVE	910.20	5999	453910	RETL										No	No	6262500500	32.583738	-117.116147
IB 232	PRO HAIRCUT BY LISA	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401400	32.584072	-117.120629
IB 233	R J CAR WASH	730 10TH ST	910.20	7299	56199	SERVICE										No	No	6262822600	32.583282	-117.111992
IB 234	R&C SCHAUMBURG/COLDWELL BANKER	862 SEACOAST DR	910.10	7389	561499	PROF										No	No	6253302100	32.580768	-117.131864
IB 235	REGENERATIONVILLE	740 10TH ST	910.20	7299	56199	SERVICE										No	No	6262822500	32.58316	-117.111993
IB 236	RODRIGO'S MEXICAN FOOD	600 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6251401400	32.584072	-117.120629
IB 237	ROLANDO'S TACO SHOP #5	805 SEACOAST DR	910.10	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6252720100	32.58158	-117.131625
IB 238	ROYAL CLEANER'S	1181 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330313000	32.575138	-117.105547
IB 239	SAGE TRADITIONS ACUPUNCTURE	667 PALM AVE	910.20	8049	621399	HEALTH										No	No	6262500900	32.58376	-117.118744
IB 240	SALTWATER MAGIC	226 PALM AVE	910.10	5999	453998	RETL										No	No	6250230600	32.584068	-117.128843
IB 241	SAN DIEGO GYMNASTICS ACADEMY	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401400	32.584072	-117.120629
IB 242	SAN DIEGO MANUFACTURED HOUSING	206 PALM AVE	910.10	7299	56199	SERVICE										No	No	6250230300	32.584073	-117.129323
IB 243	SANDCASTLE INN	785 SEACOAST DR	910.10	7011	72111	HOTEL										No	No	6252710100	32.581984	-117.131594
IB 244	SANDCASTLE REALTY	672 10TH ST	910.20	7389	561499	PROF										No	No	6262211100	32.584443	-117.111992
IB 245	SANTANA MEXICAN FOOD	1337 PALM AVE	910.20	5812	72211	EATING		x	x		x			x		No	No	6270120900	32.583657	-117.104829
IB 246	SAVE A LOT #916	805 PALM AVE	910.20	5999	453998	RETL										No	No	6262500600	32.583782	-117.115348
IB 247	SAWHNEY, PARMELA MD	705 PALM AVE	910.20	8011	621111	HEALTH										No	No	6262500200	32.58377	-117.117773
IB 248	SEA BREEZE COMMUNITY CHURCH	1220 ELM AVE	910.20	8661	813110	NONPROF										No	No	6263412000	32.580809	-117.1076
IB 249	SEACOAST INN	800 SEACOAST DR	910.10	7011	72111	HOTEL										No	No	6252620100	32.581626	-117.131796
IB 250	SEACOAST PET CLINIC	600 PALM AVE	910.20	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
IB 251	SEACOAST PIZZA	807 SEACOAST DR	910.10	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6252720100	32.581557	-117.131607
IB 252	SEACOAST VITAMINS & HERBS	600 PALM AVE	910.20	5122	446191	RETL										No	No	6251401900	32.584072	-117.120629
IB 253	SEASIDE BARBER & BEAUTY SHOP	702 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811304	32.583681	-117.131854
IB 254	SHAKETA PETERSON "CHE STYLES"	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401400	32.584072	-117.120629
IB 255	SHARON GRACE DALBERISTE	235 PALM AVE	910.10	7299	56199	SERVICE										No	No	6252010500	32.583798	-117.128753
IB 256	SIESTA RV PARK, INC.	409 PALM AVE	910.10	7033	721211	RVMOBIL		x								No	No	6252302400	32.583846	-117.124483
IB 257	SILVER STRAND FAMILY MEDICINE	707 PALM AVE	910.20	8011	621111	HEALTH										No	No	6262500200	32.583768	-117.117727
IB 258	SILVER STRAND SEA SPORTS	188 DATE AVE	910.10	7299	56199	SERVICE										No	No	6252722409	32.58115	-117.129959
IB 259	SJ TRANSPORT INC	535 FLORENCE ST	910.20	7299	56199	SERVICE										No	No	6261920300	32.587203	-117.106757
IB 260	SKINNART	1221 PALM AVE	910.20	7299	812199	TATOO										No	No	6263111400	32.583666	-117.107576
IB 261	SMILES OF IMPERIAL BEACH	743 EMORY ST	910.20	8021	621210	HEALTH										No	No	6262820700	32.583141	-117.112914
IB 262	SOLARA MEDICAL SUPPLIES, INC	639 7TH ST	910.20	7299	56199	SERVICE										No	No	6262011200	32.585107	-117.117833
IB 263	SOLARA MEDICAL/IB PHARMACY	720 HIGHWAY 75	910.20	8011	621111	HEALTH										No	No	6262010600	32.584552	-117.117585
IB 264	SOMBRERO MEXICAN FOOD	189 PALM AVE	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6251912500	32.583807	-117.129966
IB 265	SOPHISTICATED AUTO	987 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262822100	32.583678	-117.112177

Table 14.2 - FY 2009-10 Updated Commercial Inventory

No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
IB 266	SOUND OF BEACH	10 EVERGREEN AVE	910.20	5999	453998	RETL										No	No	7602420901	32.579651	-117.132455
IB 267	SOUTH COAST ENVIRONMENTAL SERV	1258 IMPERIAL BEACH BL	911.11	7389	561499	CONS										Yes	No	6265420900	32.57669	-117.106558
IB 268	SOUTH COAST TILE CO.	1258 IMPERIAL BEACH BL	911.11	1799	238990	SUBCONT										Yes	No	6265420900	32.57669	-117.106558
IB 269	SOUTHBAY REXALL DRUGS	779 PALM AVE	910.20	5122	446110	HEALTH										No	No	6262500500	32.583737	-117.116083
IB 270	SOUTHWEST WETLANDS INTERPRETIV	708 SEACOAST DR	910.10	99	99	NONPROF										No	No	6251811308	32.583302	-117.131833
IB 271	SPIRIT REAL ESTATE	700 SEACOAST DR	910.10	7389	561499	PROF										No	No	6251811301	32.583808	-117.131833
IB 272	ST. JAMES LUTHERAN CHURCH	866 IMPERIAL BEACH BL	911.11	8661	813110	NONPROF										Yes	No	6264006900	32.576692	-117.115129
IB 273	ST. JAMES LUTHERAN PRESCHOOL	866 IMPERIAL BEACH BL	911.11	8351	624410	DAYCARE										Yes	No	6264006900	32.576692	-117.115129
IB 274	ST. MARY'S/ SANTA MARIA LA VIR	485 IMPERIAL BEACH BL	911.11	8661	813110	NONPROF										Yes	No	6320841100	32.576485	-117.122693
IB 275	STARDUST DONUT SHOP	698 HIGHWAY 75	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6260705900	32.584795	-117.118228
IB 276	STATE FARM INSURANCE	1144 13TH ST	911.11	7389	561499	PROF										Yes	No	6330221800	32.575675	-117.105863
IB 277	STATE FARM INSURANCE	1239 PALM AVE	910.20	7389	561499	PROF										No	No	6263111500	32.58364	-117.10722
IB 278	STEVEN Y. LUO, DDS APC	629 9TH ST	910.20	8021	621210	HEALTH										No	No	6262121400	32.584982	-117.114133
IB 279	STL TECH DETALING, INC.	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401900	32.584072	-117.120629
IB 280	STRONG TOWER COMMUNITY CHURCH	1439 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6330412800	32.576427	-117.102576
IB 281	SUBSMART DELI-FRESH	1231 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6263111400	32.58364	-117.107374
IB 282	SUBWAY 20578	876 SEACOAST DR	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6253302200	32.580607	-117.131864
IB 283	SUN & SEA MANOR	740 7TH ST	910.20	7299	56199	SERVICE										No	No	6262501000	32.583219	-117.118156
IB 284	T WIRELESS	1295 IMPERIAL BEACH BL	911.11	4812	517310	RETL										Yes	No	6330222300	32.576421	-117.105835
IB 285	TAKING CARE OF BUSINESS	1146 13TH ST	911.11	6099	522390	CKCASH										Yes	No	6330221700	32.575645	-117.105863
IB 286	TAX PLUS	662 10TH ST	910.20	7299	56199	SERVICE										No	No	6262211000	32.584563	-117.111993
IB 287	TERRA NOVA REALTY	600 PALM AVE	910.20	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
IB 288	THE B.D. BARR COMPANY	1144 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330221800	32.575675	-117.105863
IB 289	THE BOSN'S LOCKER	238 PALM AVE	910.10	5999	453998	RETL										No	No	6250230700	32.584024	-117.128556
IB 290	THE BOXING ZONE, LLC	1351 PALM AVE	910.20	7299	56199	SERVICE										No	No	6270121000	32.583698	-117.104554
IB 291	THE BRIDGE	874 SEACOAST DR	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6253302200	32.58063	-117.131864
IB 292	THE CHECK CASHING PLACE, INC.	894 PALM AVE	910.20	6099	522390	CKCASH										No	No	6262110700	32.584139	-117.114504
IB 293	THE FINE AUTO STORE	942 PALM AVE	910.20	5521	441120	AUTO		x	x		x			x		No	No	6262123500	32.584117	-117.113317
IB 294	THE MAIL ROOM	757 EMORY ST	910.20	7299	56199	SERVICE										No	No	6262820800	32.582969	-117.112914
IB 295	THE PAPER SHACK	1237 PALM AVE	910.20	5999	453998	RETL										No	No	6263111500	32.58364	-117.107259
IB 296	THE SALTY FROG	992 PALM AVE	910.20	5813	722400	BAR										No	No	6262211100	32.584107	-117.112086
IB 297	THE SCOREBOARD	951 PALM AVE	910.20	5813	722400	BAR										No	No	6262820100	32.583729	-117.112917
IB 298	THE SURF HUT	710 SEACOAST DR	910.10	5999	453998	RETL										No	No	6251821049	32.583076	-117.1318
IB 299	THE TINFISH RESTAURANT	910 SEACOAST DR	910.10	5812	72211	EATING	x	x		x	x	x				No	No	7600820500	32.580008	-117.131864
IB 300	THE VIP CLEANERS	1070 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6265421100	32.577073	-117.105853
IB 301	THE WAVE CAFE	809 SEACOAST DR	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6252720100	32.581534	-117.131594
IB 302	THE WRIGHT WAY	1051 13TH ST	910.20	5812	72211	EATING										No	No	6272200200	32.577378	-117.105584
IB 303	THOMAS LINDLEY PARKING LOT	915 OCEAN LN	910.10	7299	56199	SERVICE										No	No	6253301100	32.58006	-117.132435
IB 304	TITO AUTO SERVICE	1335 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6270111900	32.583657	-117.104868
IB 305	TNT SURFBOARDS	536 13TH ST	910.20	3599	333999	MANUF										No	No	6261920400	32.586426	-117.105794
IB 306	TO MARKET TO MARKET	921 SEACOAST DR	910.10	5921	445310	LIQU										No	No	6253522700	32.579456	-117.131662
IB 307	TOLMOSOFF, JOHN M., D.C.	667 PALM AVE	910.20	8011	621111	HEALTH										No	No	6262500900	32.58376	-117.118744
IB 308	TOMMY'S TOBACCO	1297 IMPERIAL BEACH BL	911.11	5494	424940	RETL										Yes	No	6330222300	32.576448	-117.105801
IB 309	TONY'S HOTEL & APT LIQUIDATORS	536 13TH ST	910.20	5999	453998	RETL										No	No	6261920400	32.586426	-117.105794
IB 310	TRINITY FINANCIAL SERVICES	1025 GEORGIA ST	910.20	7299	56199	SERVICE										No	No	6272404400	32.578274	-117.104294
IB 311	TUNES LUBES ETC.	741 PALM AVE	910.20	7538	811111	RETL		x	x		x	x		x	x	No	No	6262500400	32.583785	-117.116929
IB 312	U.S. SANDCASTLE COMMITTEE, INC	970 SEACOAST DR	911.11	7299	56199	SERVICE										Yes	No	6253400700	32.578645	-117.131891
IB 313	UNION BANK OF CALIFORNIA	900 PALM AVE	910.20	6021	56145	BANK										No	No	6262123600	32.584088	-117.114171
IB 314	UNITED PENTECOASTAL CHURCH	631 12TH ST	910.20	8661	813110	NONPROF										No	No	6262414100	32.58494	-117.107942
IB 315	VERNON AU D.D.S.	1340 IMPERIAL BEACH BL	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
IB 316	VICKY HAIR & ACCESORIES	986 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262211200	32.584108	-117.112203
IB 317	VIC'S BARBERSHOP	986 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262211200	32.584108	-117.112203
IB 318	VIDEO 4 YOU	1051 13TH ST	910.20	7299	56199	SERVICE										No	No	6272200200	32.577378	-117.105584

Table 14.2 - FY 2009-10 Updated Commercial Inventory

No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
IB 319	WALLY'S IGA	836 PALM AVE	910.20	5999	453998	RETL	x	x	x		x	x		x	x	No	No	6262110700	32.58419	-117.11523
IB 320	WIENERSCHNITZEL #358	1253 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6263120100	32.583658	-117.106711
IB 321	WILDCOAST	925 SEACOAST DR	910.10	99	99	NONPROF										No	No	6253522700	32.579404	-117.131621
IB 322	WOODYS AUTO CARE	200 PALM AVE	910.10	7299	56199	SERVICE		x	x		x	x		x		No	No	6250230200	32.584076	-117.129791
IB 323	WORLD CHOICE NUTRITION	600 PALM AVE	910.20	5149	425120	WHOL										No	No	6251401900	32.584072	-117.120629
IB 324	WYLDE SYDES BOUTIQUE	771 PALM AVE	910.20	5999	453998	RETL										No	No	6262500500	32.583738	-117.11621
IB 325	YAROSLAV KUSHNIR, M.D., INC.	184 PALM AVE	910.10	8011	621111	HEALTH										No	No	6250141000	32.584077	-117.130062
IB 326	YE OLDE PLANK INN	24 PALM AVE	910.10	5813	722400	BAR	x	x			x	x			x	No	No	6250111800	32.583973	-117.132151
IB 327	YOUR T-SHIRT STORE	1181 PALM AVE	910.20	5999	453998	RETL										No	No	6263020200	32.58365	-117.108642

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15.0 Conclusions and Recommendations

15.1 Introduction

The City continues to made progress in further developing and refining its urban runoff and management program. The City believes that the management programs and activities implemented by municipal staff demonstrate a high level of compliance with the regulatory mandates of the Municipal Storm Water Permit, and underscore the City's commitment to reducing and eliminating pollutants related to urban runoff. The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

Significant enhancements to the urban runoff and management program during the year include the purchase of a field computer, the hiring of an in house GIS Analyst position, and an update to the City's Storm Drain Master Plan. Minor updates were also made to City forms and documentation processes in order to improve the efficiency and effectiveness of program implementation.

The JURMP and all the Annual Reports are a living document that evolve over time and build upon the success and sometimes failure of management program activities. The City endeavors to implement the most effective storm water program possible, building upon the existing program, and given the resources that are available to the City. Looking forward to FY 2011-12 and beyond, the City is committed to continuing with many of the programs and management activities implemented in this report. The City is also looking ahead to the next reissued storm water permit for 2012. The City is committed to working with the Copermittees, Regional Board, and local stakeholders on the next permit to implement a sustainable storm water management program that balances environmental, economic, and social needs.

City of Imperial Beach

2011-2012 JURMP ANNUAL REPORT

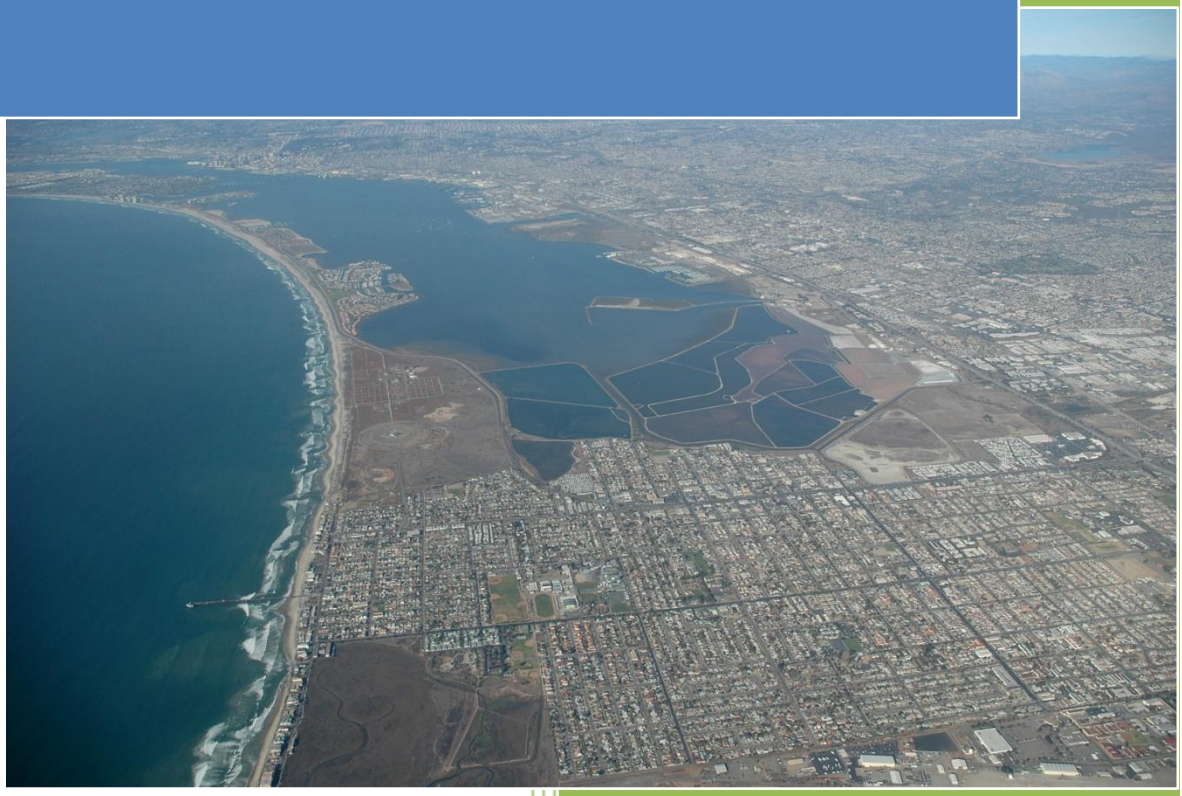

City of Imperial Beach

825 Imperial Beach Blvd

Imperial Beach, CA 91932

City of Imperial Beach

9/30/2012

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	9/24/12

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Executive Summary

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order R9-2007-0001 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2011 and June 30, 2012 (FY2011-12).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following presents the highlights and major accomplishments for each JURMP component during this fiscal year.

Development Planning Component Section 2.0

The Development Planning Component involves incorporating storm water and urban runoff management into the development review process. This includes reviewing priority and non-priority development projects for necessary best management practices (BMPs) to manage storm water runoff prior to the issuance of grading or construction permits. Major accomplishments during this fiscal year included the following:

- Provided storm water conditions on 19 discretionary projects, 2 CIP projects and 4 SUSMP projects through the Public Works Department. Discretionary projects greater than $50,000 in improvements require additional public improvements for storm water such as source control best management practices (BMPs) and low impact development (LID). The Community Development Department also performed an additional 123 plan checks for smaller discretionary projects that required a Storm Water Management Plan. In total 144 projects were reviewed during the plan check process for storm water compliance. This compares to 20 projects for FY2010-11, 24 projects for FY 2009-10, 24 projects during FY2008-09, 48 projects during FY 2007-08, and 51 projects during FY 2006-07.

- Verified operation and maintenance of all high priority post construction treatment control BMPs and received compliance at 19 out of 22 permanent post construction BMPs. Post construction BMPs captured 120 pounds of debris that were prevented from entering the storm drain system.

- Provided storm water education to developers and contractors through face-to-face interactions with City staff in meetings, during counter hours held at the Community Development Department, through updates on the City's web page, and through informative brochures provided during the application process.

Construction Component Section 3.0

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. All construction projects are required to have a City approved Storm Water Management Plan prior to the start of the project. Projects over 1 acre in size are also required to obtain coverage under the State General Construction Permit and be in compliance with the City's SUSMP. Major accomplishments during FY2011-12 included the following:

- Inspected a total of 71 active construction projects including 13 Capital Improvement Projects (CIP) and 2 high priority SUSMP project during the reporting period.
- Conducted 746 inspections to verify the proper installation and maintenance of construction phase BMPs.
- Issued 7 enforcement actions for storm water at construction sites which resulted in 3 notices of violation (NOV), 1 stop work notices, and 3 verbal warnings.
- Discussed urban runoff management requirements with all applicants during the plan check process and verified BMP requirements during follow-up inspections.

Municipal Component Section 4.0

City employees continued to implement best management practices (BMPs) to prevent the discharge of water and pollutants from municipal facilities and activities. Examples of BMPs implemented during the reporting period include:

- Vehicle washing in wash bays that drain to the sanitary sewer.
- Preventive maintenance of City vehicles to prevent fluid leakage.
- Use of high-power vacuum to capture runoff from graffiti abatement, sidewalk grinding, and spill cleanup.
- Strict limitations on the use of fertilizers and pesticides in parks and landscape areas.
- Monitoring of sprinkler systems to prevent over-topping onto roadways.
- Alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.
- Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup.
- Annual storm water training for the Public Works Department on the use of BMPs in daily operations.

- Annual department training on storm water.

Other notable accomplishments during FY2011-12 include:

- On track to complete inspection and cleaning of 100% of catch basins and open grates and jet nearly 100% of MS4 storm drain lines. As of September 1st the sewer division has inspected and cleaned 31% of catch basins and open grates and jetted 9,125 feet of storm drain line.
- Removed an additional 143.69 tons of material through frequent street sweeping of 127.9 curb miles of road. This compares to 174 tons last reporting period and 177 tons in FY 2009-10.
- Removed 220 lbs of material from of the Vortech storm water interceptor on Imperial Beach Blvd. The vortex separator removes sediment, floating hydrocarbons, and debris from all levels of flow.
- Quarterly maintenance of 13 municipal storm drain filter inserts that prevented 346 pounds of material from getting into the storm drain system. This compares to 398 pounds from the previous reporting period.
- Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions.
- Continued operation of the Palm Avenue urban runoff diversion system at Seacoast Drive and diverted 1,042,416 gallons of urban runoff and first flush rain water into the sanitary sewer.
- Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Industrial and Commercial Component Section 5.0

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress continues to be made on increasing knowledge on urban runoff management among local businesses. The following are the major accomplishments achieved during this reporting period:

- Conducted 71 inspections and 40 follow up inspections (111 total) at high priority businesses, which include automotive repair shops, restaurants, bars, gas stations, car washes, grocery stores, and mobile home parks. Following each inspection the City mails the business owner a copy of the inspection form, an inspection report, and educational material for BMPs.
- Conducted 44 enforcement actions at businesses and issued 13 notices of violation as part of the enforcement and case resolution process. The City also conducted 40 follow up inspections as part of the annual storm water inspection program

Residential Component Section 6.0

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions, and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

- Identified and mitigated 137 residential violations compared to 127 from last reporting period. The most commonly observed violations involved construction debris, automotive fluids, wash water, detergents or chemicals, chlorinated swimming pool water, and green waste.
- Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.
- Participated in the Regional Education and Residential Sources workgroup as co-chair of the group and chair of the Underserved Target Audience sub-workgroup.
- Properly disposed 23,912 pounds of household hazardous waste, universal and e-waste, and used oil and other fluids were properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista. This compares to 16,697 from last reporting period and 10,377 from FY 2009-10.
- The City held its annual Home Front Clean Up, which had 714 participants and resulted in the proper disposal of 148.95 tons of trash, construction, metal, and green waste.

Illicit Discharge Detection and Elimination Component Section 7.0

The City endeavors to prevent discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to illicit discharges of urban runoff. This section of the report is due by December 15th per San Diego RWQCB Addendum No. 2 to Order No. R9-2007-0001 and therefore will be reported at that time.

Education Component Section 8.0

The City endeavors to implement a diverse education program that promulgates the storm water management requirements of the Municipal Permit. Education activities target the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial and industrial business owners and operators (no industrial businesses in the City), 4) residents, general public, and school children, and 5) underserved community. The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually

leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs.

Public Participation Component Section 9.0

Public involvement is an important component of implementing an effective JURMP program. Each year the JURMP annual reports are presented to City council through a public hearing process. The FY 2011-12 JURMP annual report was presented at a public hearing at the September 19th council meeting.

Fiscal Analysis Component Section 10.0

The approximate cost for implementing the components of the FY 2011-12 JURMP was $773,075.

Program Effectiveness Assessment Component Section 11.0

The Environmental Program Division is responsible for the effectiveness assessment of JURMP activities and implementation of BMPs for each major component of the storm water program. Effectiveness assessments are incorporated into the storm water program whenever feasible to gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters. Each section of this Annual Report incorporates a discussion on program effectiveness when applicable.

Special Investigation Component Section 12.0

This section provides additional details on special investigations during the reporting period that go above and beyond the JURMP requirements. The report contains information on special investigations for the Tijuana River Bacteria Source Identification Study and the Los Laureles Trash Tracking Study.

Non-Emergency Fire Fighting Component Section 13.0

Pollution prevention activities related to non-emergency fire fighting are reported in this section.

JURMP Revisions Section 14.0

Revisions made to any of the components of the JURMP are reported in this section.

JURMP Conclusions and Recommendations Section 15.0

The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

1.0 Introduction

1.1 Introduction

The City of Imperial Beach is required to submit its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report each year by September 30th in compliance with the San Diego Regional Board Order Number R9-2007-0001 (Municipal Permit). The Annual Report contains a comprehensive description of all activities conducted by the City to meet all requirements of section D of the Municipal Permit. The annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. The reporting period for the Annual Report is the previous fiscal year July 1st to June 30th.

The following chapters in this Annual Report discuss the measures taken by the City to meet the regulatory requirements of the Municipal Permit and demonstrates that the City has achieved substantial compliance towards reducing sources of pollutants and urban runoff to the maximum extent practicable (MEP). All components of the JURMP are represented in this report with the exception of Section 7.0, Illicit Discharge Detection and Elimination Component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), which extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The structure of this Annual Report evaluates each JURMP component in the context of program planning, management, and implementation. Each section of this Annual Report provides a narrative and when appropriate, tabular tables that summarize program implementation, assessment, and effectiveness using the structural hierarchy of outcome levels established in the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The City endeavors to reduce pollutants and infiltrate runoff from development and redevelopment projects to the maximum extent practicable (MEP). This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Program Division, and the City's contracted engineering consultant. This section of the Annual Report discusses program management, implementation, and changes made during FY 2011-12 to the JURMP Development Planning Component.

2.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Development Planning component is described in the *2008 JURMP Section 4.0*. All discretionary development projects and priority SUSMP projects received the appropriate plan check for storm water, existing treatment control BMPs were verified and inventories maintained, and each development project was tracked using the City's database system HTE.

2.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all development and redevelopment projects to implement measures to reduce pollutants and runoff to the MEP. Minimum BMPs and LID requirements for standard development projects were established in the *2008 JURMP Section 4.0.* Priority development projects received additional LIDs and flow control requirements when the City updated its municipal ordinance through resolution 2010-1094 and 2010-1112 to include the San Diego County Copermittees' Standard Urban Stormwater Mitigation (SUSMP) and Hydromodification Plan (HMP) regional standards.

During the reporting period all development projects were required to meet the appropriate storm water conditions during the development review process. Discretionary projects valued over $50,000 get channeled through Public Works for enhanced pubic improvement conditions related to storm water. Priority development projects also get special consideration under the SUSMP. Each development or redevelopment project, regardless of its prioritization, is formally inspected for applicable BMPs throughout the duration of the project. Continued maintenance of post construction treatment control BMPs are also verified annually.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Development Planning program element:

- Table 2.1 provides an overview of the development and planning projects as it was implemented during FY 2011-12.
- Table 2.2 presents and describes targeted FY 2011-12 outcomes and results
- Table 2.3 provides the updated treatment control BMP inventory.
- Table 2.4 provides an inventory of FY 2011-12 Development Review and SUSMP projects.

2.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Developers

Education is provided to the public through face-to-face interaction with City staff at the Community Development office counter hours, during predevelopment meetings, through site inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. The efforts by the City to educate the public on development planning are discussed in the *2008 JURMP Section 4.0.* The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

2.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Developers

City staff works with developers to ensure that all development projects and redevelopment project reduce pollutants and runoff to the MEP. The *2008 JURMP Section 4.0* defines minimum BMP and LID requirements applicable to development and redevelopment in the City. The City's adopted SUSMP and HMP also require specific storm water controls for priority development projects.

During the reporting period the City continued to facilitate changes in behavior for development and redevelopment projects by reviewing and requiring conditions on projects to ensure program compliance. All BMPs are verified for proper implementation, operation, and maintenance throughout the duration of construction. City ordinances include appropriate sanctions to achieve compliance including non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance. Post construction maintenance and operation of treatment control BMPs are also verified and inspected annual by the Environmental Division.

2.6 Outcome Level 4: Source Load Reductions

Source load reductions from development and redevelopment projects are achieved through the implementation of BMPs and LID strategies. The City requires specific project conditions for treatment control BMPs, LIDs, and site design BMPs to reduce pollutants and runoff to the MEP. Source load reductions may not be directly measured in every case but can be implied by the proper implementation and maintenance of storm water BMPs.

Table 2.1 – Overview of Development Planning Inventory by Development Type and Priority Classification

Category/Project Type	Number	Description
A. Discretionary Development		
Discretionary projects reviewed for public enhancements for storm water	142	All development projects are required to undergo the City's urban runoff approval process and meet applicable requirements. Administrative procedures for development project review is discussed in *2008 JURMP Section 4.0.*
Capital Improvement Projects (CIP)	2	All CIP projects are required to complete a Storm Water Management Plan. Projects include street repairs, ADA ramps, sewer maintenance, and park improvements.
B. Priority Development (SUSMP)		
New Church MF 1003; American Legion MF 1072; Shopping Center MF 1062; and Retail Commercial MF 1034	4	The City had 4 SUSMP projects under review during the reporting period. The City requires all priority development projects to meet the LID and treatment control BMPs under the storm water permit. For example the new church MF 1003 required retention and linear bio swales along the perimeter of the property to treat storm water.
C. Totals		
Discretionary Projects	142	These totals include development and redevelopment projects > $50,000 that were channeled through Public Works for review and smaller discretionary projects (less than $50,000) that reviewed by Community Development. All projects require a storm water management plan at a minimum. Complete list of development and SUSMP projects that received an environmental review for storm water during the reporting period is provided in Table 2.4.
Priority Development (SUSMP) Projects	4	

JURMP Sections	Description of FY 2011-12 Changes
4.0 and Appendix C	No changes made during the reporting period.

Table 2.2 - Development Planning Component Targeted Outcomes and Results

Development Planning FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per Permit requirements	No significant updates needed	No significant updates during reporting period
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update Storm Water program for consistency with program updates	No significant updates	No significant updates during reporting period
c) Year-End Program Review		
Complete annual year-end program review	Reviewed program for effectiveness and efficiency	The City continues to improve the implementation of the JURMP by conducting an annual review of each component. Interdepartmental storm water coordination continues to improve as City staff become familiar with SUSMP, HMP, construction general permit, and source control BMPs.
d) Inventory of Development and Redevelopment Projects		
Update development and redevelopment inventory	Updates made to the inventory throughout the reporting period	The City maintains a database of active development projects and development review status on the City's database software HTE. Annual inventories are also maintained in excel with the Environmental Division.
e) Inventory of Treatment Control BMPs and Maintenance		
Update inventory for treatment control BMPs	Updates made to inventory and maintenance verified at all but one location	The Environmental Division maintains an inventory of treatment control BMPs and ensures annual maintenance compliance through notification through annual letters, inspections, and contact with property owners.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Project Approval		

Development Planning FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Require development projects to implement applicable project requirements, BMPs, and track information	Plan check for storm water is required for all development projects (discretionary, CIP, and priority projects)	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. The City's project review process further requires that any new construction or modification with a valuation more than $50,000 be subject to public improvements. Projects that meet the $50,000 criterion are routed from the Community Development Department to the Public Works Department for a review in regard to storm water quality public improvements. SUSMP projects are also required to implement additional storm water management controls and BMPs. SUSMP projects are reviewed by Community Development, Public Works, and contract Engineer BDS for compliance with all storm water regulations. All project applications are tracked through the permit approval process and recorded in HTE, excel databases, and Master File system.
b) Confirmation of SUSMP and HMP BMPs		
Verify that all applicable SUSMP and HMP BMPs are applied to priority projects and that the BMPs are inspects prior to occupancy	All SUSMP eligible projects were held to full SUSMP requirements and verified through inspections during construction and prior to occupancy. No projects required HMP interim criterion.	Four SUSMP high priority project (MF 1003, 1072, 1062, and 1034) received a final plan check and was approved for a building permit during the reporting period. Storm water BMPs for priority projects receives review from Public Works, Community Development, and City contract Engineer for SUSMP compliance. BMPs are then verified during construction through field inspections. The final sign off on the project is not complete until the City receives a signed maintenance agreement for continuous maintenance of the BMPs from the property owner.
c) Example of a Priority Development Project and SUSMP BMPs		
List one example of a priority development project that was conditioned to meet SUSMP requirements	New Church Development (MF 1003)	Construction of a new church at 853 Emory St commenced this reporting period. The SUSMP component of the project received multiple reviews and comments from Community Development, Public Works, and contracted engineering firm BDS prior to the issuance of construction permits. The project is required to implement LIDs and source control BMPs and provide a post construction BMP maintenance agreement. The project site treats storm water runoff through a system of bio swales and retention areas. Weekly inspections will ensure that the site is built according to approved plans.
d) Priority Development Projects implementing BMPs with low removal efficiency rankings		

Development Planning FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Listing and feasibility analysis of SUSMP projects using BMPs with low removal efficiency rankings	No projects implemented BMPs with low removal efficiency rankings	Development projects are required to implement BMPs that target priority pollutants. The selection of BMPs is verified during the plan check process. The City only allows less efficient BMPs after a feasibility analysis proves there is no better alternative.
e) HMP and SUSMP Collaboration		
Description of HMP and SUSMP development and collaboration	Collaborated through the Land Development Workgroup	The City participates in the Copermittees' Land Development Workgroup on technical discussions related to the regional implementation of the SUSMP and HMP. Collaboration was made on the implementation of the HMP monitoring requirements.
f) Municipal Staff Training		
Ensure that municipal staff are knowledgeable on storm water BMPs, SUSMP, and HMP requirements	Staff educated through meetings, workshops, and training	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. In addition the Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received training outside the City on multiple storm water issues. Training topics include SUSMP, HMP, TMDLs, General Construction Permit, and code enforcement. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.
g) Developer Education		
Provide education for developers	Counters hours held and meetings conducted during project review and throughout project	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Educational material is also available online, at City Hall, Public Works, and provided during building application process.
h) Special Investigations		
Implementation of special investigations	No special jurisdictional investigations performed	Special investigations are not routinely conducted as part of the implementation strategy for jurisdictional development planning. Special investigations are generally performed under the context of the Regional Program in order to achieve maximum benefit.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)		

Development Planning FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Increase staff and developer knowledge regarding applicable program content	Provided opportunities for education	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND DEVELOPERS)		
a) Procedural and Administrative Behaviors		
Review projects and prescribe necessary conditions and BMPs for approval	142 discretionary projects, 2 CIPs, and 4 SUSMP project reviewed for conditions of approval	The City reviews all proposed projects and ensures that all necessary conditions and BMPs are met for CIP, discretionary projects, and priority projects. The City inspects and verifies that all BMPs and project conditions are implemented during construction. Successful completion of development projects will improve storm water quality through the implementation of site BMPs, which also contributes to the incremental change in community behavior towards reducing storm water pollution.
b) BMP Implementation, Operation and Maintenance		
Inspect projects for BMP compliance and verify BMP implementation	142 discretionary projects, 2 CIPs, and 4 SUSMP Project reviewed and received project conditions All active projects inspected for BMPs	The Building Division, Code Enforcement, Environmental Division, and Public Works Inspector conduct inspections at active development projects for compliance of minimum BMPs. The Public Works Inspector conducts inspections at all CIP projects daily. The Building Inspector conducts inspections of all Discretionary permit projects and ensures the implementation of BMPs for SUSMP projects. Code Enforcement and Environmental Division also respond to reports of storm water violations from development projects. Construction inspections of Discretionary Projects are covered in the next Section of this Annual Report.
Verify operation and maintenance of treatment control BMPs	100% of all high priority BMPs verified and19 out of 22 BMPs verified.	The City annually verifies operation and maintenance of treatment control BMPs to ensure compliance with program. Verification is made through written contact with property owner or manager and often followed up with an inspection. At a minimum all high priority treatment control BMPs are inspected for operation and maintenance annually but the City usually tries to verify operation at every site. The three BMPs not confirmed during this reporting period were from a non-responsive property owner at one site.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)		
a) Treatment Control BMPs		

Development Planning FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Maintenance of treatment control BMPs	120 pounds of material removed from treatment control BMPs	The City verifies maintenance of treatment control BMPs and when possible tracks the amount of material collected during maintenance activities.
b) Low Impact Development (LID) and Site Design BMPs		
Implement LIDs, site design BMPs, and treatment control BMPs	High priority projects are required to implement BMPs	During the project review the City requires LIDs, treatment control BMPs, and site design BMPs for high priority projects. No high priority projects completed construction during the reporting period and therefore no additional BMPs were added to the treatment control BMP inventory.

Table 2.3 Treatment Control BMP Inventory and Maintenance Tracking

No.	Type	ID	Location	Hydrologic Area	Date Installed	Responsible Party	Priority	Date Verified	Comments	Est. Lbs. Removed
1	KriStar, Catch Basin with insert	1101-PA-1	1101 PALM AVE	910.20	9/1/2008	NORTH ISLAND C.U.	Low	10/5/2011	Cleaned	Weight not recorded
2	KriStar, Catch Basin with insert	1101-PA-2	1101 PALM AVE	910.20	9/1/2008	NORTH ISLAND C.U.	Low	10/5/2011	Cleaned	Weight not recorded
3	KriStar FGP-0002	1101-PA-3	1101 PALM AVE	910.20	9/1/2008	NORTH ISLAND C.U.	Low	10/5/2011	Cleaned	Weight not recorded
4	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126-13-1	1126 13TH ST	910.11	5/1/2005	13th Street Market	Low	12/12/2011	Cleaned	0.375
5	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126-13-2	1126 13TH ST	910.11	5/1/2005	13th Street Market	Low	12/12/2011	Cleaned	0.375
6	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126-13-3	1126 13TH ST	910.11	5/1/2005	13th Street Market	Low	12/12/2011	Cleaned	0.375
7	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126-13-4	1126 13TH ST	910.11	5/1/2005	13th Street Market	Low	12/12/2011	Cleaned	0.375
8	Drain Guard, sediment and hydrocarbon filters	1372-13-1	1372 13TH ST	911.11	10/1/2008	CASA DE ORO APTS	High	2/9/2012	Expected replacement on 06/12	4
9	Sump Pump and Screen Mesh	1450-IR-1	1450 IRIS AVE	911.11	6/27/2005	IMPERIAL CREST APTS LLC	High	12/8/2011	Cleaned	3.5
10	Sump Pump and Screen Mesh	1450-IR-1	1450 IRIS AVE	911.11	6/27/2005	IMPERIAL CREST APTS LLC	High	5/2/2012		21
11	Drain Guard in back	481-PA-1	481 PALM AVE	910.20	11/1/2008	IB PALM PROPERTIES LLC	Low	5/17/2012	No cleaning or maintenance conducted.	

No.	Type	ID	Location	Hydrologic Area	Date Installed	Responsible Party	Priority	Date Verified	Comments	Est. Lbs. Removed
12	sediment trap	481-PA-2	481 PALM AVE	910.20	11/1/2008	IB PALM PROPERTIES LLC	Low	5/17/2012	No cleaning or maintenance conducted.	
13	hydrocarbon filter in front parking area	481-PA-3	481 PALM AVE	910.20	11/1/2008	IB PALM PROPERTIES LLC	Low	5/17/2012	No cleaning or Maintenance Conducted	
14	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836-PA-1	836 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	High	10/3/2011	Cleaned	20
15	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836-PA-2	836 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	High	10/3/2011	Cleaned	30
16	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836-PA-3	836 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	High	10/3/2011	Cleaned	15
17	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836-PA-4	836 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	High	10/3/2011	Cleaned	15
18	KriStar, Flo Gard Plus Catch Basin Insert w/ boom.	836-PA-5	888 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	Low	10/3/2011	Cleaned	10
19	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836-PA-6	888 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	Low	12/3/2011	Not serviced	
20	KriStar, Flo Gard Plus Catch Basin Insert	861-11-1	861 11TH ST	910.20	6/1/2007	Property Owners	Low	--	Non-responsive	
21	KriStar, Flo Gard Plus Catch Basin Insert	861-11-2	861 11TH ST	910.20	6/1/2007	Property Owners	Low	--	Non-responsive	
22	KriStar, Flo Gard Plus Catch Basin Insert	861-11-3	861 11TH ST	910.20	6/1/2007	Property Owners	Low	--	Non-responsive	

Table 2.4 Development Review and SUSMP Project Inventory FY 2011-12

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
7/18/2012	PW 1	MF 1003	Yes	Plan Check	853 Emory St	Demolition and construction of Church	X	X	X		X			X	X	X	X
7/20/2012	PW 2	MF 1072	Yes	Plan Check	Plan Check 1252, 1268, and 655 Florence	American Legion redevelopment	X	X	X		X			X	X	X	X
12/5/2011	PW 3	MF 1062	Yes	Plan Check	9th and Palm Breakwater	Redevelopment Shopping Center	X	x	X	X	X	X	X	X	X	X	X
12/12/2011	PW 4	MF 1034	Yes	Plan Check	535 Florence	New retail and commercial area	X	X	X		X			X	X	X	X
7/18/2011	PW 5	MF 1068	No	Plan Check	600 Palm Ave	Roof antennas					X					X	X
8/8/2011	PW 6	MF 1073	No	Plan Check	380 Date Ave	Remodel SFR	X	X			X			X	X	X	X
8/8/2011	PW 7	11-416	No	Plan Check	720 13th St	Interior commercial remodel		X	X					X		X	X
8/8/2011	PW 8	MF 1066	No	Plan Check	260 Palm Ave	Commercial remodel	X	X			X	X		X	X	X	X
8/8/2011	PW 9	11-396	No	Plan Check	1221 East Lane	2-Story SFR	X	X			X			X	X	X	X
8/8/2011	PW 10	MF 999	No	Plan Check	808 13th St	Church use in existing building	X	X							X	X	X
12/12/2011	PW 11	MF 1080	No	Plan Check	1174-80 Florida	4 new detached dwellings	X	X	X		X			X	X	X	X
1/4/2011	PW 12	MF 1082	No	Plan Check	730 Basswood	Redevelopment of 2 dwelling units	X	X	X		X			X	X	X	X
2/1/2012	PW 13	MF 1077	No	Plan Check	1105 Donax	2 new dwelling units	X	X			X			X	X	X	X
2/1/2012	PW 14	12-099	No	Plan Check	754 Oneonta Ave	Remodel SFR	X	X			X			X	X	X	X
2/1/2012	PW 15	12-156	No	Plan Check	364 Calla	SFR addition	X	X			X			X	X	X	X
6/5/2012	PW 16	MF 1094	No	Plan Check	1225 East Lane	New SFR	X	X			X			X	X	X	X

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
6/18/2012	PW 17	12-161	No	Plan Check	434 Calla	Remodel SFR	X	X			X			X	X	X	X
6/19/2012	PW 18	12-205	No	Plan Check	486 Carnation	Remodel SFR	X	X			X			X	X	X	X
6/19/2012	PW 19	12-180	No	Plan Check	358 Elder	SFR addition	X	X			X			X	X	X	X
12/22/2011	CIP1	S04-108	No	Plan Check	Street 3B incl Ph 3A	Street Repair										X	X
11/14/2011	CIP2	S12-103	No	Plan Check	13th and Ebony	Ped Access Ramp			X							X	X
7/5/2011	CD 1	11-397	No	Plan Check	1143 IMPERIAL BEACH BLVD	demolition of garage improvements										X	
7/18/2011	CD 3	11-417	No	Plan Check	1230 SEACOAST DR	Stucco repair and vents										X	
7/21/2011	CD 4	11-427	No	Plan Check	532 DONAX AVE	Replace conduit and add fireplace										X	
7/22/2011	CD 5	11-431	No	Plan Check	1176 GEORGIA ST	replace toilet										X	
7/22/2011	CD 6	11-430	No	Plan Check	212 CALLA AVE	Drywall, framing and plumbing										X	
7/22/2011	CD 7	11-432	No	Plan Check	373 ELM AVE	Room addition										X	
7/25/2011	CD 8	11-435	No	Plan Check	578 FLORENCE ST	bathroom addition										X	
7/26/2011	CD 9	11-438	No	Plan Check	829 EMORY ST	accessibility upgrades										X	
7/27/2011	CD 10	11-440	No	Plan Check	1401 9TH ST	stucco repair										X	
7/28/2011	CD 11	11-441	No	Plan Check	1182 HOLLY AVE	guardrail and decking replacement										X	
8/1/2011	CD 12	11-445	No	Plan Check	882 CYPRESS AVE	Remove bathroom in garage										X	
8/4/2011	CD 13	11-454	No	Plan Check	1248 GRANGER ST	Bathroom remodel										X	
8/5/2011	CD 14	11-458	No	Plan Check	965 HOLLY AVE	windows and roof										X	
8/9/2011	CD 15	11-464	No	Plan Check	1274 FLORENCE ST	gas leak repair										X	
8/9/2011	CD 16	11-465	No	Plan Check	935 FLORENCE ST	new roof and windows.										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
8/10/2011	CD 17	11-468	No	Plan Check	748 HICKORY CT	new patio cover										X	
8/10/2011	CD 18	11-467	No	Plan Check	704 SEACOAST DR A	Remove hood and repair wall										X	
8/15/2011	CD 19	11-471	No	Plan Check	1029 HEMLOCK AVE	enclose carport to make garage										X	
8/16/2011	CD 20	11-474	No	Plan Check	898 5TH ST	FAU, water heater, and insulation										X	
8/16/2011	CD 21	11-472	No	Plan Check	1156 EAST LN	Demo patio and rebuild										X	
8/17/2011	CD 22	11-481	No	Plan Check	246 DONAX AVE	reroof and new exterior siding										X	
8/18/2011	CD 23	11-482	No	Plan Check	559 DAHLIA AVE	new home office addition 360 sq. ft.										X	
8/22/2011	CD 24	11-485	No	Plan Check	1370 CONNECTICUT ST	new drywall and bathroom repairs.										X	
8/23/2011	CD 25	11-488	No	Plan Check	1312 CALIFORNIA ST	add patio cover										X	
8/29/2011	CD 26	11-494	No	Plan Check	474 CHERRY AVE	new deck and stairs.										X	
9/1/2011	CD 27	11-498	No	Plan Check	24 PALM AVE	new overhang with lights										X	
9/2/2011	CD 28	11-502	No	Plan Check	196 CALLA AVE	Convert portion of garage to bathroom										X	
9/7/2011	CD 29	11-505	No	Plan Check	1018 EMORY ST	Convert to back to garage										X	
9/8/2011	CD 30	11-508	No	Plan Check	1319 FERN AVE	repair garage roof and restore carport.										X	
9/12/2011	CD 31	11-511	No	Plan Check	532 7TH ST	gas line repair										X	
9/14/2011	CD 32	11-513	No	Plan Check	1690 SEACOAST DR A	Replace framing and deck system										X	
9/14/2011	CD 33	11-515	No	Plan Check	1047 SEACOAST DR	Replace windows in all units										X	
9/14/2011	CD 34	11-514	No	Plan Check	1126 GRANGER ST	new deck and stairs										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
9/15/2011	CD 35	11-516	No	Plan Check	1292 15TH ST	replace 2nd story siding										X	
9/19/2011	CD 36	11-522	No	Plan Check	1026 HEMLOCK AVE	electrical and drywall										X	
9/20/2011	CD 37	11-525	No	Plan Check	1327 HEMLOCK AVE	repair roof sheeting and reroof house										X	
9/30/2011	CD 38	11-539	No	Plan Check	725 GROVE AVE	gas leak repair										X	
10/4/2011	CD 39	11-543	No	Plan Check	1003 13TH ST	add new patio										X	
10/5/2011	CD 40	11-545	No	Plan Check	10 EBONY AVE	Exterior gas line repair										X	
10/5/2011	CD 41	11-544	No	Plan Check	551 BONITO AVE	new room addition										X	
10/11/2011	CD 42	11-552	No	Plan Check	729 CYPRESS AVE	gas leak repair										X	
10/13/2011	CD 43	11-558	No	Plan Check	1266 IMPERIAL BEACH BLVD	patio addition										X	
10/17/2011	CD 44	11-565	No	Plan Check	220 DAISY AVE	main sewer repair at rear of property										X	
10/17/2011	CD 45	11-567	No	Plan Check	662 DAHLIA AVE	new sewer clean outs at rear of house										X	
10/28/2011	CD 46	11-589	No	Plan Check	172 CITRUS AVE	addition of habitable space and porch										X	
10/31/2011	CD 47	11-593	No	Plan Check	284 ELDER AVE	replace roof rafters and reroof										X	
10/31/2011	CD 48	11-592	No	Plan Check	351 IMPERIAL BEACH BLVD	Termite repairs										X	
11/2/2011	CD 49	11-600	No	Plan Check	167 CITRUS AVE	Reroute gas line										X	
11/2/2011	CD 50	11-599	No	Plan Check	576 11TH ST	gas leak repair										X	
11/2/2011	CD 51	11-598	No	Plan Check	748 HICKORY CT	patio enclosure and windows										X	
11/2/2011	CD 52	11-601	No	Plan Check	856 12TH ST	Gas leak repair										X	
11/3/2011	CD 53	11-602	No	Plan Check	1303 IMPERIAL BEACH BLVD	new hazardous waste containment pad										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
11/7/2011	CD 54	11-603	No	Plan Check	963 GEORGIA ST	reroof: shingles										X	
11/10/2011	CD 55	11-609	No	Plan Check	1254 ESSEX ST	Convert Illegal Dining area back to a garage.										X	
11/14/2011	CD 56	11-612	No	Plan Check	1220 ELM AVE	Remove two doorways and add one										X	
11/14/2011	CD 57	11-614	No	Plan Check	370 ELM AVE	convert garage to garage and water heater										X	
11/14/2011	CD 58	11-611	No	Plan Check	846 HICKORY CT	construct new block wall										X	
11/15/2011	CD 59	11-617	No	Plan Check	603 DELAWARE ST	gas leak repair										X	
11/16/2011	CD 60	11-622	No	Plan Check	1257 EAST LN	balcony post, vent w/h, final expired permit										X	
11/16/2011	CD 61	11-618	No	Plan Check	866 IMPERIAL BEACH BLVD	gas leak repair										X	
11/23/2011	CD 62	11-628	No	Plan Check	309 DAHLIA AVE	New covered patio 10 X 18 at rear of structure										X	
11/28/2011	CD 63	11-633	No	Plan Check	501 CALLA AVE	Remodel and enclose unpermitted patio										X	
12/1/2011	CD 64	11-640	No	Plan Check	1690 SEACOAST DR C	add new windows, and laundry room.										X	
12/5/2011	CD 65	11-648	No	Plan Check	1219 GRANGER ST	Replace underground gas line										X	
12/5/2011	CD 66	11-650	No	Plan Check	817 DELAWARE ST	gas leak repair										X	
12/13/2011	CD 67	11-660	No	Plan Check	532 THORN ST	create new opening and add header										X	
12/19/2011	CD 68	11-666	No	Plan Check	1174 FLORIDA ST	construct new SFD										X	
12/19/2011	CD 69	11-667	No	Plan Check	1176 FLORIDA ST	construct new SFD										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
12/19/2011	CD 70	11-668	No	Plan Check	1178 FLORIDA ST	construct new SFD										X	
12/19/2011	CD 71	11-669	No	Plan Check	1180 FLORIDA ST	construct new SFD										X	
1/10/2012	CD 72	12-13	No	Plan Check	1451 5TH ST	new concrete pad and elect for spa										X	
1/11/2012	CD 73	12-15	No	Plan Check	908 DELAWARE ST	reroute gas line over roof.										X	
1/12/2012	CD 74	12-18	No	Plan Check	1345 11TH ST	gas line repair										X	
1/17/2012	CD 75	12-23	No	Plan Check	1011 CALLA AVE	gas leak repair										X	
1/17/2012	CD 76	12-22	No	Plan Check	520 7TH ST	repair gas leak										X	
1/18/2012	CD 77	12-24	No	Plan Check	218 DAISY AVE	Reroute water lines to kitchen										X	
1/23/2012	CD 78	12-31	No	Plan Check	352 BONITO AVE	Install kitchen skylight										X	
1/24/2012	CD 79	12-34	No	Plan Check	251 EBONY AVE	repipe of water system for three units										X	
1/30/2012	CD 80	12-40	No	Plan Check	1386 HEMLOCK AVE	Legalize carport and reframe roof/wall										X	
2/3/2012	CD 81	12-53	No	Plan Check	721 12TH ST	new trash enclosure and new electric gate										X	
2/3/2012	CD 82	12-52	No	Plan Check	345 DELAWARE ST	Removing temp walls/restore garage										X	
2/7/2012	CD 83	12-57	No	Plan Check	391 ELM AVE	remove unpermitted wall at front of carport										X	
2/8/2012	CD 84	12-60	No	Plan Check	1020 9TH ST	repair garage wing wall										X	
2/8/2012	CD 85	12-58	No	Plan Check	1110 IVY LN	Repair stairs stringer, guardrail and handrail										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
2/9/2012	CD 86	12-62	No	Plan Check	1157 13TH ST	replace windows and wall board										X	
2/14/2012	CD 87	12-64	No	Plan Check	730 ONEONTA AVE	Enclose Carport to garage front / side										X	
2/14/2012	CD 88	12-65	No	Plan Check	873 CAROLINA ST	Install sewer clean out										X	
2/17/2012	CD 89	12-72	No	Plan Check	529 9TH ST	remove 3 unpermitted patio covers										X	
2/22/2012	CD 90	12-74	No	Plan Check	748 4TH ST	Enlarge existing kitchen										X	
2/23/2012	CD 91	12-76	No	Plan Check	557 FLORENCE ST	Add cleanout to sewer lateral										X	
2/27/2012	CD 92	12-79	No	Plan Check	392 BONITO AVE	reroof and sewer line										X	
3/12/2012	CD 93	12-99	No	Plan Check	754 ONEONTA AVE	Addition: Master suite / bath over 2car garage										X	
3/19/2012	CD 94	12-108	No	Plan Check	1091 DELAWARE ST	Replace gas line										X	
3/21/2012	CD 95	12-110	No	Plan Check	1164 13TH ST	Gas meter release and board up windows.										X	
3/22/2012	CD 96	12-112	No	Plan Check	345 DELAWARE ST	install stairway										X	
3/26/2012	CD 97	12-114	No	Plan Check	1215 CONNECTICUT ST	Repair gas line										X	
3/26/2012	CD 98	12-115	No	Plan Check	854 11TH ST	gas leak repair										X	
4/3/2012	CD 99	12-134	No	Plan Check	939 13TH ST	windows, gas line, rebuild wall, header/post.										X	
4/4/2012	CD 100	12-137	No	Plan Check	1266 IMPERIAL BEACH BLVD	Replace overhead light poles										X	
4/5/2012	CD 101	12-139	No	Plan Check	1120 11TH ST	new lattice patio cover										X	
4/5/2012	CD 102	12-138	No	Plan Check	526 9TH ST	addition on north of house										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
4/12/2012	CD 103	12-148	No	Plan Check	1180 HOLLY AVE	replace windows, restucco, and termite repairs										X	
4/23/2012	CD 104	12-167	No	Plan Check	823 CORVINA ST	remodel bath, kitchen and elect service										X	
4/23/2012	CD 105	12-165	No	Plan Check	1112 12TH ST	Repair corner of house from vehicle damage										X	
5/1/2012	CD 106	12-176	No	Plan Check	620 13TH ST A	Repair studs, stucco and drywall.										X	
5/3/2012	CD 107	12-181	No	Plan Check	749 GROVE AVE	remove existing window										X	
5/7/2012	CD 108	12-184	No	Plan Check	1026 10TH ST	sewer line, reroof, and new water heater										X	
5/7/2012	CD 109	12-185	No	Plan Check	1175 11TH ST	Install new sewer line										X	
5/10/2012	CD 110	12-193	No	Plan Check	1266 PALM AVE	demo existing motel										X	
5/10/2012	CD 111	12-195	No	Plan Check	655 FLORENCE ST	demo existing mixed use building										X	
5/10/2012	CD 112	12-192	No	Plan Check	1252 PALM AVE	demo of existing structure										X	
5/15/2012	CD 113	12-204	No	Plan Check	375 DELAWARE ST	final permit #03-166 for garage conversion.										X	
5/21/2012	CD 114	12-212	No	Plan Check	1361 EAST LN	gas line and tankless W/H										X	
5/23/2012	CD 115	12-217	No	Plan Check	1174 SEACOAST DR	Demo 490 sq. ft. building										X	
5/23/2012	CD 116	12-218	No	Plan Check	751 ELM AVE	Remodel bathroom										X	
5/29/2012	CD 117	12-231	No	Plan Check	725 SEACOAST DR	install new window at corner										X	
5/31/2012	CD 118	12-237	No	Plan Check	1187 DONAX AVE	new roofing for mansard										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
6/4/2012	CD 119	12-242	No	Plan Check	1368 14TH ST	restucco whole house										X	
6/4/2012	CD 120	12-239	No	Plan Check	823 CORVINA ST	Lattice patio cover										X	
6/4/2012	CD 121	12-240	No	Plan Check	1319 FERN AVE	restucco and replace door and window.										X	
6/4/2012	CD 122	12-243	No	Plan Check	1326 SEACOAST DR	stucco repair										X	
6/5/2012	CD 123	12-244	No	Plan Check	1116 ELM AVE (N)	repair joist and new bathroom fixtures										X	

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City endeavors to reduce pollutants and runoff from construction sites to the MEP. This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Division, and requirements that apply to the Building and Planning Division activities related to construction and construction permits, and compliance actions proposed by the City. This section of the Annual Report discusses program management, implementation, and changes made during FY 2011-12 to the JURMP Construction Component.

3.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Construction component is described in the *2008 JURMP Section 5.0*. The City maintains an ongoing database of active construction projects and tracks inspections though the City's database software HTE. During the reporting period the only notable change in the administration of active construction projects was the implementation of the new Construction General Permit, which required education of staff and new procedures for the management of capital improvement projects.

3.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all construction projects to implement site control BMPs that reduce pollutants and runoff to the MEP. The designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0* and are required as project conditions prior to the approval and issuance of local construction and grading permits. All construction projects are formally inspected throughout the duration of the project to ensure adequate implementation and maintenance of BMPs. During the rainy season all priority projects were inspected at least biweekly, medium priority sites were inspected at least monthly, and low priority projects were inspected as needed. During the dry season, all construction sites were inspected as needed.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Construction program element:

- Table 3.1 provides an overview of the Construction element as it was implemented during FY 2011-12.
- Table 3.2 presents and describes targeted FY 2011-12 outcomes and results
- Table 3.3 FY 2011-12 active construction inventory and inspection frequency

3.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Contractors

Education is provided to contractors through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances, storm water forms, and brochures that outline the requirements for addressing urban runoff, BMP implementation, and water quality. Additional training was provided to staff during this reporting period on the implementation of the new Construction General Permit. The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

3.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Contractors

The City facilitates changes in behavior and implementation of BMPs at construction sites by working with developers and private residents to ensure that all projects meet the requirements of the Regional Permit. Prior to the issuance of construction and grading permits the City requires applicants to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the General Construction Permit. The City also inspects projects and enforces storm water ordinances at all construction sites. Project applicants are made aware of the storm water requirements multiple times in the development planning process and then follows up with inspection and enforcement of storm water BMPs during the construction phase. The *2008 JURMP Section 5.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes. The *2008 JURMP Appendix D* defines minimum BMP requirements applicable to construction in the City.

3.6 Outcome Level 4: Source Load Reductions

The primary goal of BMP implementation is to reduce the loading of pollutants and runoff to storm water discharges. During the reporting period the City successfully implemented all program requirements for implementing and inspecting BMPs to control runoff sources related to construction activities. Source load reductions were achieved at construction sites by implementing erosion and sediment control, requiring minimum BMPs, and enforcing general site management requirements. The City required 71 active construction projects, 2 SUSMP project, and 9 Capital Improvement Projects to reduce pollutants and runoff to the MEP. Compliance with required minimum BMPs were then verified through 746 site inspections. Source load reductions may not be directly measured but can be implied by the proper implementation and maintenance of storm water BMPs on construction sites.

Table 3.1 – Overview of Construction Inventory by Priority Classification

Category	Number	Description
A. Type of Active Construction		
Discretionary Projects	71	Most projects in the City are low priority discretionary projects. The City only had two active SUSMP projects that included the new Sea Coast Inn along the beach front and new church building over an acre. Capital improvement projects that were active during the year are also reported in this section.
Capital Improvement Projects (CIP)	13	
SUSMP Development Projects	2	
B. Priority Classification		
High Priority Projects	1	High priority projects are projects that are over 1 acre in size and tributary to 303(d).
Medium Priority Projects	9	Medium priority projects include CIP projects during the wet season and discretionary projects over one acre in size.
Low Priority Projects	61	Most development projects in the City are categorized as low priority.
C. Totals		
Construction Projects	71	The City had two active SUSMP projects in construction during the reporting period. All other active construction projects were discretionary in nature or capital improvements.
Priority Development (SUSMP) Projects	2	

JURMP Sections	Description of FY 2011-12 Changes
5.0 and Appendix D	No substantive changes were made to the Construction component of the JURMP during the reporting period. Internal management and administrative changes were made in order to adapt to the new regulations in the General Construction Permit.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2011-12	No updates made to the JURMP this reporting period. Internal procedural updates were made to the management of capital improvement projects with the implementation of the new General Construction Permit.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update program documentation for consistency with program updates	No updates made during FY 2011-12	No programmatic changes during the reporting period.
c) Year-End Program Review		
Complete annual year-end program review	Review program for effectiveness and efficiency	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period. The use of the Environmental Division's new field computer allowed for improvements in efficiency while performing inspections and ICID response.
d) Inventory of Construction Projects and Inspections		
Update inventory for construction projects and track inspections	Updates made to the inventory throughout the reporting period and inspections tracked	An inventory of construction projects and inspections is maintained on the City's database software HTE. Constructions site inspection records are also maintained on HTE. The Environmental Division also maintains an inventory of construction projects that require conditions from Public Works. An inventory of Capital Improvement Projects (CIP) is also maintained by the Environmental Division.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Project Approval		

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Require construction projects to implement construction site BMPs	Completion of Storm Water Management Plans or verify SWPPPs as required conditions for all projects	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. Development projects that received storm water review as part of the plan check process were presented in the previous section. Designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0*. Construction BMPs are verified through the Project Review process and during site inspections while construction is underway.
b) Confirmation of Urban Runoff Approval Process		
Require construction projects to have adequate project review for storm water and pollution control	All construction projects received the necessary project review before being issued City permits	Information on the City's project review and approval process is provided in the previous section of this annual report, in the *2008 JURMP Section 4.0,* and information on construction activities is provided in the *2008 JURMP Section 5.0*. Information on construction projects and inspections is tracked in the City's HTE database and by excel spread sheets. The summary of active construction projects and inspections during the reporting period in provided in Table 3.3.
c) Confirmation of Designated BMPs		
Verify that designated BMPs were implemented, or required to be implemented	Construction projects undergo project review before being issued City permits. Construction projects are inspected for BMP compliance.	Designated minimum BMPs are required as project conditions during the urban runoff approval process. Projects then receive inspections during the construction phase to verify the proper implementation of BMPs. Projects are inspected for adequate storm water construction BMPs and project design, and source control BMPs.
d) Confirmation of Maximum Disturbed Area		
Verify that maximum disturbed area for grading was applied to applicable construction sites	Apply conditions for maximum disturbed area during project review and verify through inspections	Project applicants are made aware of storm water requirements during the grading and construction permit application process. The grading permit specifies conditions to control the erosion of sediment off the property. Most projects in the City are under an acre in size and consist of redevelopment of existing structures.
e) Municipal Staff Training		

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Ensure that municipal staff are knowledgeable on storm water BMPs related to construction activities, SUSMP, and HMP	Staff educated through meetings, workshops, and trainings	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received regional training outside the City on multiple storm water issues. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory.
f) Construction Contractor Education		
Provide education for contractors	Counter hours held, face-to-face meetings, education materials, contract documents, and inspections	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Public Works Department oversaw storm water compliance for the Capital Improvement Projects and provided education to contractors during meetings and inspections. Brochures and City website also provide additional information on proper BMP implementation.
g) Confirmation of Construction Inspections		
Inspect construction activities	The Building Inspector, Public Works Inspector, and Environmental Division conducted inspections for BMP compliance	All construction projects get formally inspected throughout the duration of the project. During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. The Public Works Department inspects all active CIP projects sites daily. The Community Development Department Building Inspector inspects discretionary projects that are not CIPs. The Environmental Division follows up on complaints and violations at construction sites.
h) Special Investigations		
Implementation of special investigations	No special jurisdictional investigations performed	Special investigations are not routinely conducted as part of the implementation strategy for the JURMP. Special investigations are generally performed under the context of the Regional Program in order to achieve maximum benefit.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)		

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Maintain high level of staff knowledge regarding storm water program	Conducted annual municipal training, held weekly department meetings, and attended outside training events.	See Education Component Section 8.0.
Increase contractor knowledge regarding storm water program	Community Development and Public Works Departments provide education information to contractors	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)		
a) Procedural and Administrative Behaviors		
Confirm active construction projects required conditions to protect water quality	All constructions projects (71) were reviewed for conditions of approval.	The City reviews and conditions all proposed projects to ensure all necessary conditions and BMPs are met before any construction permits are issued. Projects over $50,000 also get routed through Public Works for additional storm water BMP review. After a City permit is issued the project is in active construction phase and receives the necessary frequency of inspections for BMP compliance. Inspection frequency is based on high, medium, or low priority ranking. Storm water compliance is a component of every site inspection for both Community Development and Public Works.
b) BMP Implementation		
Inspect projects and verify BMPs	The Building Division conducted 170 BMP site inspections. The Public Works Inspector provided daily oversight at all CIP construction sites and performed 576 BMP inspections.	The City inspects and verifies BMPs at all projects to ensure compliance with storm water program. The Building Inspector, Public Works Inspector, Code Enforcement Officer, and Environmental Division share the responsibility of inspecting development projects and verifying BMP compliance.

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Verify construction sites with advance treatment	No construction sites required advance treatment	No construction sites during the reporting period required the implementation of advanced treatment for sediment control. The City requires all construction sites to implement BMPs to contain sediment on the property during all stages of development. Advance treatment is required for high threat to water quality projects.
c) Inspections for Wet and Dry Weather		
Identify active construction and inspection frequencies for wet and dry season	The City conducted 746 BMP site inspections and exceeded the required minimum inspection frequency	During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. Most development projects are redevelopment and are less than one acre in size. The City generally inspects construction sites more frequently than the minimum requirement. See Table 3.3 for inspection frequency per project.
d) Inspection Results		
Provide general inspection results	Conducted the necessary minimum BMP inspections at construction sites	Most contractors are aware of the storm water BMP requirements and properly implement BMPs. Problems arise during the wet season when heavy rain or wind results in the blowout of poorly implemented BMPs. The highest numbers of storm water violations are reported by observant City staffs who observe inadequate BMPs or illegal discharges.
e) Violations and Enforcement Actions		
Number of violations and enforcement actions to achieve compliance.	The City responded to 7 construction related storm water violations	Typical violations include improper washing of equipment, power washing, stock piles of sediment, and trash. Each enforcement case is different but generally involves a verbal or written warning, a notice of violation for a repeat offender or blatant illegal discharger, and a follow up investigation. The City issued 3 verbal warnings, 1 stop works, and 3 NOV. One example of enforcement was the redesign of the final site stabilization plan for the 9th and Palm demolition project after the existing BMPs failed during a storm event.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)		
a) Erosion and Sediment Control		

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Require erosion and sediment control BMPs	71 projects required installation of erosion and sediment control BMPs as required in their Storm Water Management Plan	The City requires installation of erosion and sediment control BMPs for all construction sites with a grading or building permit. Load reductions from construction sites can be implied through the proper implementation of BMPs.
b) Designated Minimum BMPs		
Require minimum BMPs for construction sites	71 projects required to implement BMPs. All permitted construction sites are required to implement minimum BMPs as required by IBMC	The City requires all construction sites to reduce discharges of pollutants to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards. Source load reductions from construction sites can be implied through the proper implementation of BMPs.
c) Addition Controls for CWA 303(d) Waters		
Additional BMPs for projects discharging directly to 303(d) waters	No projects required to implement additional controls for CWA Section 303(d) waters	The City requires additional controls to be implemented for Clean Water Act (CWA) Section 303(d) waters. Load reductions are not tracked but can be implied.

Table 3.3 FY 2011-12 Active Construction Inventory and Inspection Frequency

Project	Address	Total Insp.	Dry Weather Insp.	Wet Weather Insp.	Weeks Active During Wet Season	Priority	General Results	Enforcement Action Type	Resolved
4-79	1227 CONNECTICUT ST	1	1	0	**0**	Low	Approved		
6-246	1022 ELM AVE	8	5	3	**8**	Low	Insufficient BMPs	NOV	Yes
7-394	754 HICKORY CT	4	2	2	**30**	Low	Approved		
8-186	1461 5TH ST	6	1	5	**30**	Low	Approved		
8-377	755 GROVE AVE	4	2	1	**30**	Low	Approved		
9-270	800 SEACOAST DR	52	14	38	**30**	High	Approved		
9-477	1266 IMPERIAL BEACH BLVD	4	0	4	**30**	Low	Insufficient BMPs	Stop Work/Citation	Yes
9-478	1409 9TH ST	2	0	2	**4**	Low	Approved		
10-78	1410 10TH ST	1	1	0	**30**	Low	Approved		
10-82	527 BONITO AVE	2	0	2	**30**	Low	Approved		
10-149	523 SPRUCE ST	6	0	6	**30**	Low	Approved		
10-328	1001 CALLA AVE	1	1	0	**0**	Low	Discharge	NOV	Yes
10-336	944 FLORENCE ST	2	2	0	**0**	Low	Approved		
10-378	710 SEACOAST DR F	1	0	1	**14**	Low	Approved		
10-499	1497 13TH ST	1	0	1	**17**	Low	Approved		
10-521	1079 SEACOAST DR	1	1	0	**30**	Low	Approved		
10-529	357 ELKWOOD AVE	2	0	2	**30**	Low	Approved		
10-608	508 11TH ST	6	0	6	**30**	Low	Insufficient BMPs	Inspection Correction	Yes
10-647	975 HEMLOCK AVE	1	0	1	**8**	Low	Approved		
10-651	1120 13TH ST	9	0	9	**30**	Low	Approved		
10-652	1150 13TH ST	3	0	3	**30**	Low	Approved		
10-658	951 13TH ST	1	0	1	**7**	Low	Approved		
10-688	951 13TH ST	1	0	1	**7**	Low	Approved		
10-701	152 DAHLIA AVE	2	1	1	**30**	Low	Approved		
11-13	539 CALLA AVE	1	0	1	**30**	Low	Approved		
11-18	622 OCEAN LN	2	1	1	**30**	Low	Approved		
11-64	717 SEACOAST DR	2	0	2	**30**	Low	Insufficient BMPs	Inspection Correction	Yes

Project	Address	Total Insp.	Dry Weather Insp.	Wet Weather Insp.	Weeks Active During Wet Season	Priority	General Results	Enforcement Action Type	Resolved
11-140	823 CORVINA ST	2	0	2	**30**	Low	Approved		
11-185	351 ELDER AVE	6	2	4	**30**	Low	Approved		
11-236	508 11TH ST	1	0	1	**21**	Low	Approved		
11-247	204 PALM AVE	1	1	0	**3**	Low	Approved		
11-274	910 ARRIBA AVENIDA	1	1	0	**0**	Low	Approved		
11-312	1417 GROVE AVE	1	1	0	**0**	Low	Approved		
11-362	211 CITRUS AVE	1	1	0	**2**	Low	Approved		
11-382	753 12TH ST	1	1	0	**0**	Low	Approved		
11-384	853 EMORY ST	3	0	3	**30**	Med	Approved		
11-387	1111 CALIFORNIA ST	1	1	0	**24**	Low	Approved		
11-395	1247 ESSEX ST	3	0	3	**30**	Low	Approved		
11-396	1221 EAST LN	2	0	2	**24**	Low	Approved		
11-432	373 ELM AVE	1	0	1	**30**	Low	Insufficient BMPs	Inspection Correction	Yes
11-438	829 EMORY ST	2	0	2	**2**	Low	Approved		
11-439	903 HOLLY AVE	1	1	0	**0**	Low	Approved		
11-465	935 FLORENCE ST	1	0	1	**10**	Low	Approved		
11-482	559 DAHLIA AVE	1	1	0	**11**	Low	Approved		
11-514	1126 GRANGER ST	1	0	1	**7**	Low	Approved		
11-568	1245 FLORIDA ST	1	0	1	**27**	Low	Approved		
11-590	391 ELM AVE	1	0	1	**1**	Low	Approved		
11-595	1252 PALM AVE	1	0	1	**25**	Low	Approved		
11-602	1303 IMPERIAL BEACH BLVD	1	0	1	**0**	Low	Approved		
11-603	963 GEORGIA ST	3	0	3	**25**	Low	Approved		
11-633	501 CALLA AVE	1	0	1	**15**	Low	Approved		
12-53	721 12TH ST	1	0	1	**7**	Low	Approved		
12-64	730 ONEONTA AVE	1	0	1	**7**	Low	Approved		
12-76	557 FLORENCE ST	1	0	1	**4**	Low	Insufficient BMPs	NOV	Yes
12-192	1252 PALM AVE	1	0	1	**0**	Low	Approved		
12-204	375 DELAWARE ST	1	0	1	**0**	Low	Approved		
12-240	1319 FERN AVE	1	0	1	**0**	Low	Approved		
S10-101	RTIP FY 09-10 (Streets)	18	18	0	**0**	Low	Approved		

Project	Address	Total Insp.	Dry Weather Insp.	Wet Weather Insp.	Weeks Active During Wet Season	Priority	General Results	Enforcement Action Type	Resolved
W05-401	Wet Well & Manhole Repairs	20	20	0	**0**	Low	Approved		
W06-101	Wet well Replacement	30	30	0	**0**	Low	Approved		
W10-201	Sewer Main Line No.1 Rep	40	35	5	**2**	Med	Approved		
S11-102	Crosswalk Louden Lane	35	31	4	**2**	Med	Approved		
P03-50B	Tot lot Veterans Park	18	14	4	**2**	Low	Approved		
W10-101	Sewer Main N0.1 Replace	54	50	4	**2**	Med	Approved		
S09-102	Crosswalk Civic Center	75	48	27	**10**	Med	Approved		
P07-10A	Skate Park Fence	62	0	62	**19**	Med	Approved		
R05-20A	9th & Palm Demo	121	5	116	**28**	Med	Approved		
S04-108	Streets 3B	45	18	27	**8**	Med	Approved		
S11-105	Streets 4/5	48	18	30	**9**	Med	Approved		
S12-103	CDBG Ped Ramps	10	10	0	**0**	Low	Approved		
	Totals:	**746**	**339**	**406**					

4.0 MUNICIPAL COMPONENT

4.1 Introduction

The City endeavors to reduce or eliminate pollutants and runoff from municipal discharges to the MEP. This component is primarily applicable to the Department of Public Works and its efforts to prevent municipal discharges from causing or contributing to a violation of water quality standards. This section of the Annual Report discusses program management, implementation, and changes made during FY 2011-12 to the JURMP Municipal Component.

4.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the municipal component is described in the 2008 JURMP Section 6.0. During the reporting period the City continued implementation of its municipal training program which provides education opportunities for storm water to all staff throughout the year. The City also continued to implement and maintain BMPs for municipal facilities and activities during the reporting period.

4.3 Outcome Level 1b: Implementation of Management Program Activities

The City makes storm water pollution prevention and response a high priority for all Public Works employees. Each Public Works vehicle contains a binder of municipal storm water BMPs and contains a map of the entire MS4 system. The Environmental Division conducts annual training for all Public Works employees and daily interactions with staff ensures that storm water pollution prevention remains a high priory throughout the City. The Public Works Department provides the eyes and ears on the street and therefore the first line of defense for pollution prevention, response, and cleanup. The *2008 JURMP Section 6.0* provides a complete description of the management programs for the municipal component.

Routine maintenance, cleaning, and implementation of BMPs for municipal facilities and activities keep accumulated debris and other potential pollutants from entering the MS4. At a minimum the City conducts annual formal inspections of high priority municipal facilities and actives. The City also maintains a number of storm drain inlet filters that are cleaned and maintained quarterly by Downstream Services, Inc. Cleaning records are maintained on file and logged in a database on the Environmental Division server. The City continues to implement its street sweeping program, MS4 cleaning program, and participates in the Regional Copermittee's program planning activities with the Industrial, Commercial, and Municipal Workgroup.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 4.1 Provides an overview of the Municipal inventory by facility type and priority classification
- Table 4.2 presents and describes targeted FY 2011-12 outcomes and results
- Figure 4.1 Street sweeping removal totals

- Table 4.3 Municipal storm drain filter inventory and maintenance records
- Table 4.4 Municipal facility and activity inventory and inspection records

4.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff

The City conducts annual training for all municipal employees. Training for the Municipal Component is specifically targeted at the Public Works Department because City Streets, Maintenance Workers, and Sewer crews are typically the first line of defense for storm water pollution. The training program focuses on the use of Best Management Practices in daily operations, and is designed to create an overall sensitivity to pollution prevention concerns.

4.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff

The *JURMP Appendix E* defines minimum BMP requirements applicable to streets, roads, highways, municipal areas, municipal activities, and parking facilities in the City. Major targeted outcomes for the JURMP municipal component included streets and parking lot sweeping, MS4 cleaning, sewer system preventative maintenance, municipal storm drain BMP maintenance, integrated pest management at parks, and implementation of BMPs at municipal facilities. All BMPs are inspected and enforced for compliance.

4.6 Outcome Level 4: Source Load Reductions

The City continues to make impressive source load reductions from municipal facilities and activities. The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City. Approximately 143.69 tons of debris was collected through street sweeping operations. The City also collected 170 loads of large bulky items illegally dumped in City alleys through its franchise waste hauler EDCO.

The Sewer Division maintains the City's storm drain lines and catch basins. During this reporting period the Sewer Division inspected 31% of the catch basins and open grates and cleaned any inlets with large obstructions or had exceeded 33% of design capacity. The MS4 includes five miles of underground piping, 92 catch basins, 143 open grates, and 7 open drainage facilities. Storm drain cleaning occurs between the months of May through September. This report contains the amount of storm drains inspected and cleaned between May 2012 and the writing of the report (September 1st). Starting with the FY 13 report, the entire cleaning period will be reported including this years reported numbers.

Lastly, over 30 acres of park facilities, athletic fields, beach accesses, landscapes at various facilities, and five community parks located throughout the City were maintained in a manner that best prevents storm water pollution. The City has a dedicated Tidelands crew that picks up trash and debris and conducts landscaping duties 7 days a week on the beach and one block inland of the beach. In addition, the City contrast with Donovan Prison for a weekly crew to pick up trash and conducts landscape duties at City parks and unmaintained areas. The City tracks source loads whenever possible.

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description
A. Type of Facility			
Paved Roads	127.9	---	
Municipal Parking Facilities	---	4	
Underground storm drain piping	5	---	
Catch basins	---	92	
Open Grates	---	143	
Open Drainage Facilities	---	7	
Storm Drain Diverters	---	2	
Vortex Storm Drain CDS	---	1	
Municipal Storm Drain Filters	---	13	
B. Priority Classification			
Streets, Roads, and Highways	(127.9	Miles)	The City also contains 13.3 miles of paves alleys and 2.5 miles of unimproved alleys that are not on the municipal inventory. The alleys are not owned by the City and are maintained by the property owners. The City conducts monthly street sweeping on the paved alleys and provides pick up of large bulky items illegally dumped in the alleys.
High (Commercial areas)	19.2	---	
Medium (Beachfront residential areas)	9.6	---	
Low (Other residential areas and paved alleys)	99.1	---	
Municipal Parking Facilities			
High (Commercial)	---	4	

Category	Miles	Number	Description
Medium (N/A)	---	---	
Low (N/A)	---	---	
Sanitary Sewer System			
Pump stations	---	12	
Underground piping	39.5	---	

JURMP Sections	Description of FY 2011-12 Changes
6.0 and Appendix E	BMP requirements of the JURMP applicable to streets, roads, highways, and municipal parking facilities were modified in accordance with the requirements of the updated Permit in March 2008. No significant updates made during the reporting period.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per Permit requirements	No updates necessary	The City continued to implement its Municipal Component of the JURMP and did not make any significant updates during the reporting period.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update program documentation for consistency with program updates	No significant updates	No significant updates during the reporting period.
c) Year-End Program Review		
Complete annual year-end program review	End of year program review on MS4 annual maintenance	The end of the year program review focused on looking to the future and the implementation of adaptive management strategies as proposed in the 2012 draft MS4. No programmatic changes to the Municipal Component are proposed to the current JURMP program until the new permit is released.
d) Updates to Training Program		
Update training materials for municipal staff	No significant updates	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience.
e) Updates to Municipal Inventor or Prioritization		
Update municipal inventory	No significant updates.	The City continues to maintain the municipal facilities and activities inventory that was developed in collaboration with the Commercial, Industrial, and Municipal Workgroup.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Municipal Facilities and Activities		

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Require municipal areas and activities to implement minimum BMPs	Implemented BMPs and verified through inspections and reinforced through annual training	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed with staff regularly and updated as necessary. In addition, each City vehicle contains a binder of Best Management Practices for Municipal Facilities and Activities that get reviewed each year during annual training.
b) Confirmation of Designated Minimum BMPs		
Verify the implementation of minimum BMPs for municipal areas and activities	Implemented BMPs and verified through inspections and reinforced through annual training	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed regularly and updated as necessary.
c) Confirmation of Municipal Inspections		
Verify that municipal inspections achieve BMP compliance	Municipal areas and act ivies get formally inspected each reporting cycle	Municipal inspections are used as means to verify the implementation of BMPs at municipal facilities and activities. Inspections also serve to educate staff, reinforce storm water concepts, and improve communication across City Divisions. Table 4.4 provides the annual Municipal Facility and Activity Inventory and Inspection Records results.
d) Municipal Staff Training		
Provide training opportunities for municipal staff	Conducted annual municipal training, weekly department meetings, outside training events, and provided education materials.	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Municipal inspections also serve as one-on-one training for Division supervisors. Annual training is provided to Public Works staff and was conducted on 10/26/11. Regional workshops Construction General Permit. Daily interaction with City staff and abundant education material on storm water ensures that storm water pollution prevention remains a high priory throughout the City.
e) Confirmation of Pesticide, Herbicide, and Fertilizer Management		

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Verify designated BMPs for pesticides, herbicides, and fertilizer	IPM and BMPs implemented	The City limits the application of pesticides and herbicides applied to park and landscaping facilities in accordance with Integrated Pest Management Program policy.
f) Confirmation of Maintain for Municipal BMPs		
Verify maintenance of municipal storm water BMPs	Maintained operation and maintenance of existing storm water BMPs	The City maintains a number of storm water BMPs along the storm water conveyance system including two urban low flow and first flush storm drain diverters, 13 storm drain filters, 1 CDS unit, and multiple vegetated ditches, and infiltration areas.
g) Special Investigations		
Implementation of special investigations	No special jurisdictional investigations performed	Special investigations are not routinely conducted as part of the implementation strategy for the JURMP. Special investigations are generally performed under the context of the Regional Program in order to achieve maximum benefit.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF)		
Maintain high level of staff knowledge regarding storm water program	Conducted annual municipal training, weekly department meetings, outside training events, and provided education materials.	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF)		
a) BMP Implementation for Streets, Roads, Highway, and Parking Facilities		
Sweep all High trash areas at least twice per month	28.7 curb-miles swept at least twice per month and 4 municipal parking facilities swept weekly	Commercial areas (19.2 miles of curbed roads and 4 parking lots) are swept weekly. Beachfront residential areas (9.5 miles of curbed roads) are swept bi-weekly (high trash and debris). All other areas (99.1 curb miles) are considered moderate priority and are swept on a monthly basis.
Sweep all Moderate trash areas at least monthly	99.1 curb-miles swept at least monthly	

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Sweep improved streets, roads, and highways	127.9 curb-miles swept (2,392 total miles) swept)	The City has a dedicated Tidelands Maintenance Division, funded by the Port of San Diego, that keep the beach and one block inland from the beach free of trash, sand, and other debris. The City also maintains a contract with Donavan Correctional Facility to provide supervised labor for various needs including landscaping and trash pickup. The Streets and Parks Divisions play a crucial role in keeping the City free of trash. EDCO also conducts alley sweeps for large bulky items upon request from the City (170 loads for FY 2011-12). Finally, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste.
Collect trash and debris from non-sweeping activities	Collected trash and debris from parks, alleys, and tideland area	
b) BMP Implementation for Municipal Separate Storm Sewer System (MS4)		
Clean accumulations of trash and debris greater than 33% of design capacity	City is on track to inspect and clean 92 catch basins and 143 open grates inspected by the end of the dry season September 30th.	Storm drain cleaning generally occurs between the months of May and September and is still ongoing at the time of writing this report. It is important to note that the City inspects 100% of its catch basins and cleans them if necessary every year.
Inspect and clean MS4 line	31% of the MS4 inspected and 9124.85 feet of storm drain cleaned	The City cleans and inspects 100% of the catch basins and endeavors to clean 100% of the 5 miles of storm drain lines annually. The Sever Division uses the vactor truck to jet and clean accumulated debris out of the MS4. Cleaning for the 2012 season will be finished in September and still ongoing while writing this report.
Prioritization of MS4 system maintenance	Part of annual assessment of program	Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year The Environmental Division reviews past MS4 cleaning records to identify areas of high trash and debris accumulation. Sections of the MS4 that are identified as low trash and debris accumulation areas may be cleaned and inspected less than annually.
Prevent and eliminate infiltration from the sanitary sewer to the MS4	Implementation of the 2008 Sewer System Maintenance Plan	The City developed a Sewer System Management Plan (SSMP) in 2008 and has a proactive operation and maintenance program to prevent sewer system overflows. The Environmental Division helps in this endeavor by coordinating the response to any SSO, performing biennial SSMP audits, and implementing the FOG control program.
Conduct routine maintenance on sanitary sewer system	36 miles of sanitary sewer system maintained	Most sanitary sewer pipelines are cleaned at least annually, and known problem areas are cleaned more frequently. Twelve alarmed sewage pump stations are monitored daily.

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Respond to all sewer spills and log in appropriate data bases	7 sewer spills reported with 6 being from private laterals	In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. The City experienced 7 sewer spills during FY 2011-12 and 6 of those were from private laterals.
c) BMP Implementation for Municipal Facilities and Activities		
Implement BMPs and maintain municipal treatment control BMPs	Maintained 13 storm drain or catch basin filters, 2 storm drain diverters, 1 CDS unit, vegetated swales, and infiltration areas	The City enforces compliance of minimum BMPs at all municipal facilities and maintenance activities. In addition, the City maintains 13 storm drain filters that are maintained quarterly by contract. The City also operates 2 storm drain diverters, one CDS unit, and a number of vegetated swales and infiltration areas.
d) Municipal Facilities and Activities Inspection Results		
Provide general inspection results for municipal areas and activities	Inspected 100% of municipal facilities and provided training on BMPs for municipal activities	General inspection results include the following: quarterly maintenance of municipal storm drain filters, proper implementation of minimum BMPs by staff, internal review and training on BMPs for municipal areas and activities.
e) Violations and Enforcement Actions		
Number of violations and enforcement actions to achieve compliance.	No enforcement actions necessary to achieve compliance	Minor violations were noted during municipal inspects and corrected without enforcement actions. For example old BMPs for material storage were replaced at the Public Works Yard. Municipal storm water violations are extremely rare as a result of continued education.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)		
a) Street Sweeping		
Track debris collected from street sweeping activities	Trash: 14.369 tons Debris: 114.952 tons Organics: 14.369 tons	The City collected a total of 143.69 tons of material from street sweeping activities. The City sweeps 19.2 miles of commercial area and 4 municipal parking lots weekly (high priority), 9.6 miles of beach front biweekly (medium priority), and 99.1 miles of residential area monthly (low priority).
b) Cleanup Activities		

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Track EDCO alley sweeps and Home Front Clean Up totals	EDCO Alley Sweeps: 170 large bulky items Home Front Clean Up: 148.95 tons	EDCO conducts alley sweeps for large bulky items upon request from the City. The City made 170 requests this year which was down from 293 from the previous year. In addition, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste. The City also conducts a number of other cleanup activities to collect trash and debris from municipal areas using the Street, Tidelands, and Donavan Prison crews; however, this waste is not tracked at this time.
c) MS4 Cleaning		
Track debris collected through MS4 cleaning	Annual cleaning records are tracked on a form and entered into excel	There are approximately 93 catch basins, 143 open grates, and approximately 5 miles of storm drain pipe that is maintained and cleaned annually. The Sewer Division inspected and cleaned 31% of the catch basins, open grates, and open channels. MS4 cleaning starts in May and continues through September. Totals for the entire 2012 cleaning will be given in next year's report.
d) **Municipal Storm Drain Filters**		
Track debris collected from 13 municipal storm drain filters	Trash: 43 lbs. Sediment: 168.5 lbs. Organic: 125 lbs.	Downstream Services maintains 13 municipal storm drain filters quarterly. During the reporting period 346 pounds of debris was captured through municipal storm drain filters.
e) Storm Water Diverters		
Monitor storm water diversion from Palm Ave Diverter	Palm Ave Diverter: 1,042,416 gallons diverted into the sanitary sewer	The City operates two storm drain diverters (Palm Ave and Date Ave). Only the diverted flow from Palm Ave is monitored and tracked. The jockey pump for Palm Ave burned out this reporting period and was rebuilt in April.

Figure 4.1-Street Sweeping Totals

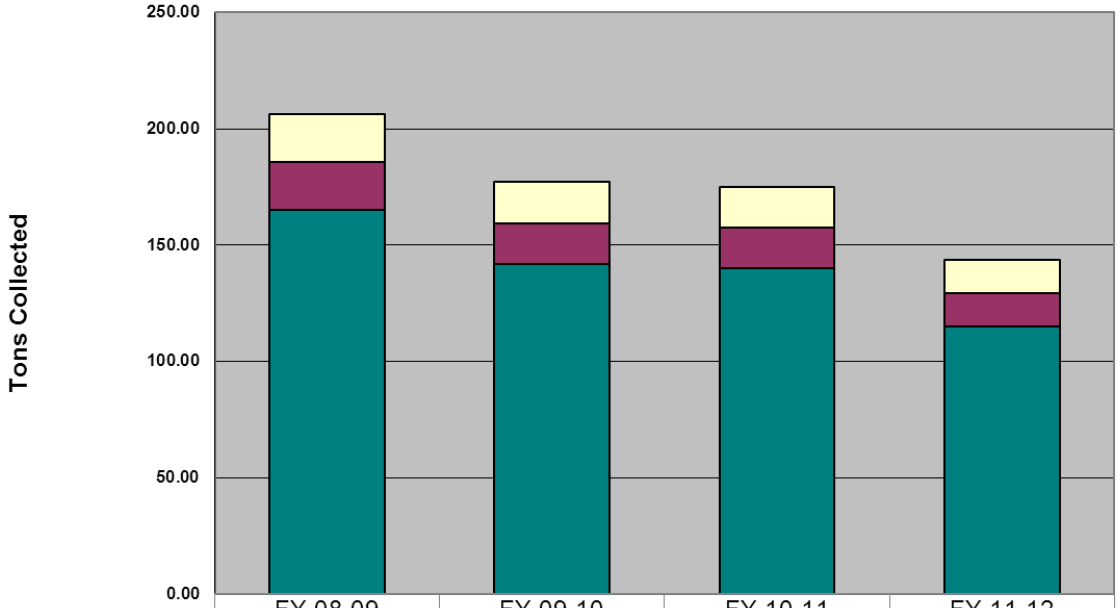

	FY 08-09	FY 09-10	FY 10-11	FY 11-12
Organic Debris	20.60	17.70	17.50	14.369
Trash	20.60	17.70	17.50	14.369
Sediment	165.10	141.63	139.95	114.952

Figure 4.1- The street sweeping totals above are presented by fiscal year. Street sweeping is contracted through Clean Streets and EDCO. The City maintains approximately 127.9 miles of curbed streets and uncurbed roads located throughout the City. Sweeping activities collected 143.69 tons of materials during the reporting period.

Table 4.3 Municipal Storm Drain Filter Inventory and Maintenance Records

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted				Weight of Debris	Materials Collected (lbs.)				Volume Used
							Inspected	Cleaned	Filter Replaced	Repaired	Removed (lbs.)	Sediment	Trash	Organics	Other	% of Total
SDF1	Grate Inlet Skimmer Box 18" X 18" Bio-sorb oil absorbing polymers for hydrocarbon removal	495 Tenth St.	Public Works Yard (Rear of Yard)	910.20	10/13/2003	9/22/2011	x	x			2.000	1.000		1.000		2%
						12/21/2011	x	x			10.000	7.000	1.000	2.000		10%
						3/23/2012					0.000	0.000	0.000	0.000		0%
						6/14/2012	x	x			5.000	2.000	1.000	2.000		5%
SDF2	Grate Inlet Skimmer Box - Round 24" X 24" Bio-sorb oil absorbing polymers for hydrocarbon removal	495 Tenth St.	Public Works Yard (Front Parking Lot)	910.20	10/13/2003	9/22/2011	x	x			3.000	1.500		1.500		3%
						12/21/2011	x	x			6.000	3.000	1.000	2.000		6%
						3/23/2012	x	x			4.000	3.000		1.000		4%
						6/14/2012	x	x	x		4.000	2.000		2.000		4%
SDF3	Grate Inlet Skimmer Box 24" X 36" Bio-sorb oil absorbing polymers for hydrocarbon removal	Seacoast Dr. / Palm Ave.	City Parking Lot	910.10	1/13/2003	9/22/2011	x	x			8.000	5.000	0.000	3.000		8%
						12/21/2011	x	x			8.000	5.000	1.000	2.000		8%
						3/23/2012	x	x			9.000	5.000	1.000	3.000		9%
						6/14/2012	x	x	x		6.000	2.000	1.000	3.000		6%

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted				Weight of Debris	Materials Collected (lbs.)				Volume Used
							Inspected	Cleaned	Filter Replaced	Repaired	Removed (lbs.)	Sediment	Trash	Organics	Other	% of Total
SDF4	Grate Inlet Skimmer Box 24" X 36" Bio-sorb oil absorbing polymers for hydrocarbon removal	825 Imperial Beach Blvd.	City Hall	911.11	10/13/2003	9/22/2011	x	x			5.000	2.000	0.000	3.000		5%
						12/21/2011	x	x	x		11.000	5.000	1.000	5.000		11%
						3/23/2012	x	x	x		9.000	5.000	1.000	3.000		9%
						6/14/2012	x	x	x		9.000	3.000	1.000	5.000		9%
SDF5	Grate Inlet Skimmer Box 12" X 12" Bio-sorb oil absorbing polymers for hydrocarbon removal	865 Imperial Beach Blvd.	Fire Station	911.11	10/13/2003	9/22/2011	x	x	x		3.000	1.000	0.000	1.000	1.000	3%
						12/21/2011	x	x	x		6.000	2.500	0.000	1.000	2.500	6%
						3/23/2012	x	x	x		4.000	1.500	0.000	1.000	1.500	4%
						6/14/2012	x	x	x		4.000	1.500	0.000	1.000	1.500	4%
SDF6	Grate Inlet Skimmer Box 24" X 30" Bio-sorb oil absorbing polymers for hydrocarbon removal	1075 8th St.	Marina Vista Center	911.11	1/13/2003	9/22/2011	x	x			8.000	3.000	0.000	5.000		8%
						12/21/2011	x	x	x		11.000	7.000	1.000	3.000		11%
						3/23/2012	x	x			11.000	5.000	2.000	4.000		11%
						6/14/2012	x	x	x		9.000	5.000	1.000	3.000		9%

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted				Weight of Debris	Materials Collected (lbs.)				Volume Used
							Inspected	Cleaned	Filter Replaced	Repaired	Removed (lbs.)	Sediment	Trash	Organics	Other	% of Total
SDF7	Pipe Skimmer 24" X 24" Bio-sorb oil absorbing polymers for hydrocarbon removal	1459 Hemlock	Behind Apartment City Easement	911.11	1/12/2005	9/22/2011	x	x			1.000	0.500	0.000	0.500		1%
						12/21/2011	x	x			1.000	0.333	0.333	0.333		1%
						3/23/2012	x	x			1.000	0.333	0.333	0.333		0%
						6/14/2012	x				1.000	0.333	0.333	0.333		0%
SDF8	KriStar, Flo Guard Plus Catch Basin Insert 18" X 36" Hydrocarbon absorption boom	839 10 St. Alley east of 10th St. between Elm & Donax	City Alley	910.20	11/3/2005	9/22/2011	x	x			6.000	3.000	0.000	3.000		3%
						12/21/2011	x	x			6.000	3.000	1.000	2.000		6%
						3/23/2012	x	x			5.000	2.000	1.000	2.000		5%
						6/14/2012	x	x			4.000	2.000	1.000	1.000		4%
SDF9	2 Grate Inlet Skimmer Boxes 24" X 36" Hydrocarbon absorption boom	Alley abutting 8th St 100 yd. south of Palm	City Alley	910.20	2/22/2007	9/22/2011	x	x			10.000	5.000	0.000	5.000		10%
						12/21/2011	x	x			9.000	5.000	1.000	3.000		9%
						3/23/2012	x	x			12.000	5.000	2.000	5.000		12%
						6/14/2012	x	x			10.000	3.000	1.000	6.000		10%
SDF10	Grate Inlet Skimmer Box 32" X 40" Hydrocarbon absorption boom	Alley b/w 8th St. & Delaware St. just south of Palm Commercial Ctr.	City Alley	910.20	2/5/2007	9/22/2011	x	x			9.000	3.000	0.000	6.000		9%
						12/21/2011	x	x			7.000	5.000	1.000	1.000		7%
						3/12/2012	x	x			10.000	5.000	2.000	3.000		10%
						6/14/2012	x	x	x		8.000	3.000	1.000	4.000		8%

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted				Weight of Debris	Materials Collected (lbs.)				Volume Used
							Inspected	Cleaned	Filter Replaced	Repaired	Removed (lbs.)	Sediment	Trash	Organics	Other	% of Total
SDF11	Grate-Inlet Box 24" X 36" Hydrocarbon absorption boom	Curb inlet at SW Corner 9th St. / Palm Ave.	Curb Inlet	910.20	2/22/2007	9/22/2011	x	x			13.000	5.000	5.000	3.000		13%
						12/21/2011	x	x			11.000	5.000	3.000	3.000		11%
						3/23/2012	x	x			7.000	3.000	2.000	2.000		7%
						6/14/2012	x	x			10.000	2.000	5.000	3.000		0%
SDF12	KriStar, Flo Guard Plus Catch Basin Insert	740-798 Florida Street alley behind apartment complex	City Alley	910.20	5/17/2007	9/22/2011					0.000					0%
						12/21/2011	x	x			4.000	4.000				4%
						3/23/2012					0.000					0%
						6/14/2012					0.000					0%
SDF13	Round Hydro Flow Guard Plus and hydrocarbon booms 24" Diameter Grate and 22" Diameter Inlet	4th Street at Sports Park	South end of parking lot at Sports Park	911.11	6/29/2009	9/22/2011	x	x			8.000	5.000	0.000	3.000		8%
						12/21/2011	x	x			12.000	8.000	1.000	3.000		12%
						3/23/2012	x	x			15.000	10.000	1.000	4.000		14%
						6/14/2012	x	x	x		11.000	3.000	1.000	4.000	3.000	11%
									Totals		**346**	**168.5**	**43**	**125**	**9.5**	

Table 4.4 Municipal Facility and Activity Inventory and Inspection Record

Facility Name	Address	Hydrologic Area	SIC	NAICS	Principal Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	Threat to water quality	APN	Latitude	Longitude	Inspection Date	CORRECTIVE ACTIONS REQUIRED	CORRECTIVE ACTIONS
Alleys	Citywide			926120	Road		x	x	x	x	x		x	x	N/A	High				4/5/2012	NO	
City Hall	825 Imperial Beach Bl	911.11		921190	Administration	x			x			x	x	x	YES	High	6321112700	32.576135	-117.115677	4/5/2012	NO	
Fire Station	865 Imperial Beach Bl	911.11		922160	Fire Station	x	x	x	x	x	x	x	x	x	YES	High	6321112700	32.576135	-117.115677	4/5/2012	NO	
Marina Vista Center	1075 8th Street	911.11	8322	624120	Administration	x			x			x	x	x	YES	High	6264007100	32.577109	-117.116187	4/5/2012	NO	
Public Works Yard	495 10th Street	910.20		921190	Public Works Yard			x		x	x			x	NO	High	6260600500	32.589236	-117.111108	4/5/2012	YES	Please remember to close all waste containers after depositing waste.
Dempsey Holder Safety Center	950 Ocean Ln	911.11		922120	Sheriff's Station	x	x	x	x	x	x	x	x	x	YES	High	6253401800	32.578694	-117.132217	3/29/2012	NO	
Sports Park & Recreation Center	425 Imperial Beach Bl	911.11	7999	713990	Park	x			x			x	x	x	YES	High	6324003500	32.576314	-117.123641	4/5/2012	NO	
Pocket Park	266 Palm Ave.	910.10	7999	713990	Park	x			x			x	x	x	NO	Low		32.58422	-117.127879	4/5/2012	NO	
Reama Park	210 Elkwood Ave.	911.11	7999	713990	Park	x			x			x	x	x	YES	High	6254012600	32.578683	-117.129327	4/5/2012	NO	
Teeple Park	1121 Calla Ave.	910.20	7999	713990	Park	x			x			x	x	x	NO	High	6261702400	32.585276	-117.109699	4/5/2012	NO	
Veteran's Park	1065 8th Street	911.11	7999	713990	Park	x			x			x	x	x	YES	High	6264007100	32.577109	-117.116187	4/5/2012	NO	
Pump Station #10 (Above ground)	814 Cypress Ave.	910.20	4952	221300	Sewer System	x	x		x	x	x	x	x		NO	High	6260905500	32.587228	-117.115014	3/22/2012	NO	
Pump Station #1A (Underground)	862 Seacoast Dr.	910.10	4952	221300	Sewer System	x	x		x	x	x	x	x		NO	High		32.580551	-117.131772	12/15/2011	NO	

Facility Name	Address	Hydrologic Area	SIC	NAICS	Principal Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	Threat to water quality	APN	Latitude	Longitude	Inspection Date	CORRECTIVE ACTIONS REQUIRED	CORRECTIVE ACTIONS
Pump Station #1B (Underground)	1098 Seacoast Dr.	911.11	4952	221300	Sewer System	x	x		x	x	x	x	x		YES	High		32.576639	-117.131879	3/29/2012	NO	
Pump Station #2 (Above ground)	1306 Seacoast Dr.	911.11	4952	221300	Sewer System	x	x		x	x	x	x	x		YES	High		32.57303	-117.131766	7/28/2011	NO	
Pump Station #6 (Underground)	498 Rainbow St.	910.10	4952	221300	Sewer System	x	x		x	x	x	x	x		NO	High		32.586156	-117.12068	11/17/2011	NO	
Pump Station #7 (Underground)	504 Oneonta Ave.	911.11	4952	221300	Sewer System	x	x		x	x	x	x	x		YES	High		32.570987	-117.122064	10/27/2011	NO	
Pump Station #8 (Underground)	895 Imperial Beach Bl	911.11	4952	221300	Sewer System	x	x		x	x	x	x	x		YES	High		32.576374	-117.114931	1/26/2012	NO	
Pump Station #9 (Underground)	1025 9th St.	911.11	4952	221300	Sewer System	x	x		x	x	x	x	x		YES	High		32.578243	-117.114069	9/22/2011	NO	
Streets	Citywide			926120	Road		x	x	x	x	x		x	x	N/A	High				12/1/2011	NO	
Dunes Park	750 Seacoast Dr.	910.10	7999	713990	Park	x			x			x	x	x	NO	High	6251821100	32.582283	-117.132179	3/29/2012	NO	
Elkwood Parking Lot	102 Elkwood Ave.	911.11	7521	812930	Parking Lot	x	x	x	x	x	x		x	x	YES	High	6253532200	32.578392	-117.131412	3/29/2012	NO	
Imperial Beach Pier	10 Evergreen Ave.	911.11	7999	713990	Park										YES	High		32.579578	-117.137124	3/29/2012	NO	
Pier Plaza	10 Evergreen Ave.	911.11	7999	713990	Park	x	x		x			x	x	x	YES	High	6253402000	32.579209	-117.13213	3/29/2012	NO	
Seacoast & Palm Parking Lot	105 Palm Ave.	910.10	7521	812930	Parking Lot	x	x	x	x	x	x		x	x	NO	High	6251910100	32.58378	-117.131418	3/29/2012	NO	

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from industrial and commercial sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations at businesses within the City and reduce the discharge of pollutants to the MS4 to the maximum extent practicable (MEP). The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements.

5.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Industrial and Commercial Component is described in the *2008 JURMP Section 7.0*. During the reporting period the City made routine updates to the Commercial and Industrial business inventory which conforms to the Copermittee's standard inventory template. The inventory is maintained on the Environmental Division server and identifies all industrial and commercial facilities that could contribute pollutant loads to the MS4. The City currently does not have any industrial facilities on that inventory. Records are also maintained on each specific business for inspections, corrective actions, and illegal discharges. During the reporting period the City continued to incorporate fats, oils, and grease (FOG) management into the commercial business inspection program for restaurants.

5.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division provides notification and verification of minimum BMPs for commercial businesses, in addition to performing inspections at all high priority commercial businesses in the City. The City also inspects non-high priority business and mobile businesses during the year as necessary. Inspections are conducted and documented as outlined in the *2008 JURMP Section 7.0*.

In addition to City staff reporting illegal discharges, the Environmental Division also responds to calls to the storm water hotline and from online complaints. However, the vast majority of storm water violation reports are made from well-trained City staff. The low number of commercial businesses and centralized commercial zoning allows City staff to be the predominant eyes on the street for identifying storm water violations.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Commercial Industrial program element:

- Table 5.1 Provides an overview of the Industrial and Commercial inventory by facility type and priority classification
- Table 5.2 presents and describes targeted FY 2011-12 outcomes and results
- Table 5.3 Commercial Business Inspections FY 2011-12
- Table 5.4 and Figure 5.1 Interactive Effectiveness Assessment of Commercial Businesses

- Appendix 1 Complete Commercial Business Inventory FY 2011-12

5.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Businesses

Commercial businesses receive education on storm water BMPs through a number of different methods including direct mail, face-to-face interaction with City staff during inspections, through dissemination of education material, and through follow up inspections to ensure compliance. The City also provides education to businesses during ICID investigations.

The Environmental Division also incorporates an interactive effectiveness assessment of commercial businesses during the annual storm water inspection at randomly selected businesses to gauge level of knowledge and awareness. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness at commercial businesses in the City. General results showed a moderate level of knowledge among the businesses. The results are outlined in Table 5.4 and Figure 5.1.

5.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Businesses

The City facilitates changes in behavior and implementation of BMPs at commercial businesses by providing continuous education efforts through face-to-face interactions, routine inspections, dissemination of brochures, mailing of post inspection letters, and responding to illegal storm water discharges. City staff conducts all commercial inspections and have a good working relationship with business owners. The *2008 JURMP Appendix F* defines minimum BMP requirements applicable to industrial and commercial projects in the City. The *2008 JURMP Section 7.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes for commercial, industrial, and mobile businesses.

5.6 Outcome Level 4: Source Load Reductions

The two step approach of education on storm water pollution and enforcement of BMPs have unquestionably resulted in the source load reductions from commercial businesses. Although the City does not currently track source load reductions from commercial sites, the increased level of knowledge on storm water BMPs and cooperation among the local business community have successfully prevented the illegal discharge of pollutants from commercial businesses. Source load reductions can be implied from commercial businesses through the proper implementation of BMPs.

Table 5.1 – Overview of Industrial and Commercial Component by Facility Type and Priority Classification

Category	Number	Description
A. Type of Facility		
Industrial	0	Industrial zoning is limited to a small area in the City. Currently, no industrial businesses that require an industrial general permit reside in the community. The term "commercial" is therefore used for the activities within the City. As such, there is no need in this jurisdiction to identify non-filers under the General Industrial Permit.
Commercial	342	
B. Priority Classification Totals		
High	71	Imperial Beach Municipal Code 8.30.090 defines commercial businesses as either high or non-high (low) priority. High priority businesses include all food service and auto service related businesses.
Low	271	
Mobile	51	Mobile business database is tracked and maintained in house.
C. Inspection Totals		
Commercial Business Inspections	111	The Environmental Division conducts all commercial inspections. All high priority businesses receive inspections annually for storm water compliance. Commercial businesses that have a significant storm water violation receive a follow up investigation.
Follow Up Inspections	40	
Mobile	0	Mobile businesses do not currently receive annual inspections. The Environmental Division inspects mobile businesses while responding to illegal discharge or public service requests.
D. Enforcement Actions		
Notice of Violations (NOVs)	14	Businesses with multiple BMP violations generally receive a NOV and 2 follow up investigations.
Minor Violations (Follow Up)	1	Minor violations generally receive a follow up investigation and written warning.

JURMP Sections	Description of FY 2011-12 Changes
7.0 and Appendix F	BMP requirements of the JURMP applicable to industrial and commercial facilities were modified with the requirements of the updated Permit in March 2008. No significant changes were made during the reporting period.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per Permit requirements	No updates were made during reporting period	The City continued to implement its Commercial Component of the JURMP and did not make any significant updates during the reporting period.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update program documentation for consistency with program updates	No updates were made during reporting period	No significant updates made to this program component.
c) Year-End Program Review		
Complete annual year-end program review	Review program for effectiveness and efficiency	The use of the new field computer from last reporting period resulted in improved efficiencies and quicker response for inspections and enforcements. It also allowed for in the field printing of case specific BMP information.
d) Updates to Training Program		
Update training materials for businesses	No updates to education materials and staff	The City makes updates to commercial inspection training content as necessary. Education activities include brochures, handouts, informative letters, and inspections.
e) Updates to Commercial Inventor or Prioritization		
Update commercial inventory and prioritization	Annual updates made to the commercial inventory	Regular updates were made to the commercial and industrial business inventory, which follows the regional copermittee standard template. Currently all food or automotive related businesses get categorized as high priority and receive annual inspections. The regional online mobile business database was also maintained online.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Commercial Businesses		

Industrial and Commercial FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Require commercial and industrial businesses to implement BMPs and verify through inspections	Notified businesses through mail, conducted inspections, responded to ICIDs, and provided education materials	The City requires all commercial and industrial sites/sources to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City's Urban Runoff Management and Discharge Control Ordinance (Chapters: 8.30.070, 8.30.090, and 8.30.100) mandate the implementation of designated BMPs and control measures. The commercial inspection program and ICID program are the mechanisms used to educate businesses on BMPs. All high priority businesses receive annual inspections for storm water.
b) Confirmation of Designated Minimum BMPs		
Verify the implementation of minimum BMPs for commercial businesses	Conducted commercial inspections and follow up inspections to verify BMPs	The City verifies the implementation of minimum BMPs at commercial businesses through the implementation of the commercial inspection program. The environmental division conducts annual inspections of all high priority businesses, which include all food and automotive facilities in the City.
c) Confirmation of Commercial Inspections		
Verify that commercial inspections achieve BMP compliance	Inspected all high priority commercial businesses	The Environmental Division conducts inspections at all high priority businesses, as needed inspections at lower priority businesses, and follow up inspections after ICIDs. The City achieved higher inspection frequency than the minimum established in the Permit.
d) Justification for Commercial Inspection Prioritization		
Provide rationale for the businesses that were inspected	IBMC 8.30.090 defines commercial businesses as either high or non-high (low) priority	High priority businesses include at a minimum all food service and auto service related businesses in the City. Businesses that have a treatment control BMPs also receive inspections as well as businesses that cause an ICID.
e) Efforts Made to Notify Businesses of BMPs		
Describe efforts made to notify businesses of BMPs	Notification made through education material, inspections, follow up inspection, and follow up letters	High priority businesses receive storm water inspections and follow up inspections in the case of a violation. A post inspection letter is also mailed to the business outlining the results of the visit. Education material is provided at the time of inspection and in some cases mailed with the post inspection letter. New businesses also receive BMP information through the business license application process.
f) Third Party Inspections		

Industrial and Commercial FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Describe third party inspection results	None	The City conducts all commercial inspections through the Environmental Division
g) General Industrial Permit Non-Filers		
Describe steps taken to identify industrial non-filers	None	The City did not have any industrial businesses during the reporting period.
h) Mobile Businesses		
Describe efforts made to address mobile businesses	Inspected mobile businesses as necessary	The City contacted each mobile business during the previous reporting period through mail with a letter and brochure that outlines the minimum BMP requirements. The Environmental Division informally inspects mobile businesses while responding to illegal discharge reports and public service requests.
i) Special Investigations		
Not targeted	Interactive assessment	The Environmental Division incorporates an interactive effectiveness assessment of commercial businesses and rates businesses on a scale of 1 out of 5. The results of the assessment are presented in Table 5.4 and Figure 5.1.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY COMMERCIAL BUSINESSES)		
Assess storm water program implementation knowledge from commercial businesses	Conducted interactive assessment of commercial businesses during annual inspections	The goal of the assessment is to get beyond BMP verification and assess the level of BMP knowledge among a random selection of commercial businesses in the City. Assessment results provided in Table 5.4 and figure 5.1
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY COMMERCIAL BUSINESSES)		
a) Commercial Business BMP Implementation		
Inspect businesses for compliance	71 sites inspected and 40 follow up inspections	The City inspections 100% of high priority commercial businesses, non-high priority businesses, and mobile businesses as needed. Inspections consist of observing business operations, reviewing minimum BMPs, and enforcing pollution prevention practices.

Industrial and Commercial FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Notify mobile and fixed commercial businesses of BMP requirements	71 fixed commercial and 0 Mobile Businesses contacted through mail	The City notifies business owners and operators, both fixed and mobile, of BMP requirements through a combination of methods including site inspections, follow-up inspection reports, direct mailings, inclusion of BMP information with business license and special event vendor packets, online resources such as the Project Clean Water website, and City's website. During the FY 09-10 reporting period all mobile businesses were notified of BMPs through the mail.
b) Violations and Enforcement Actions		
Number of violations and enforcement actions to achieve compliance.	Follow up inspections required at 31 businesses. City also issued 14 NOVs	The City enforces compliance at all businesses, including mobile sources, using an escalating series of enforcement actions. Verbal or written warnings are used when violation in question is minor. Notices of Violations (NOVs) may be issued for any observed violation. And escalating administrative penalties, fines, and civil penalties may be enforced for non-compliance
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)		
a) BMP Implementation		
Load reductions from proper BMP implementation	Most businesses implemented correct BMPs	Source load reductions are not easily tracked from commercial businesses but can be implied through proper implementation of BMPs.

Table 5.3 Commercial Business Inspections FY 2011-12

ID	FACILITY NAME	STREET NUMBER	SUITE NUMBER	STREET NAME	Establishment Class	Inspection Date	Follow Up Action
47	7-ELEVEN 24344	1311		PALM AVE	H	12/12/2011	Follow Up
69	7-ELEVEN 24344	1311		PALM AVE	H	1/3/2012	Cleared
79	7-ELEVEN STORE #23982A-2131	1303		IMPERIAL BEACH BLVD	H	1/6/2012	NOV
88	7-ELEVEN STORE #23982A-2131	1303		IMPERIAL BEACH BLVD	H	1/17/2012	Cleared
41	7-ELEVEN STORE #23982A-2131	1303		IMPERIAL BEACH BLVD	H	12/7/2011	Follow Up
86	ALBETO'S TACO SHOP	1183		13TH ST	HF	1/11/2012	Cleared
44	ALBETO'S TACO SHOP	1183		13TH ST	HF	12/7/2011	Follow Up
70	ALBETO'S TACO SHOP	1183		13TH ST	HF	1/3/2012	NOV
27	ALL AMERICAN CAR WASH IB	1158		PALM AVE	H	11/17/2011	Cleared
6	ALL AMERICAN CAR WASH IB	1158		PALM AVE	H	11/1/2011	Follow Up
4	AMERICAN LEGION POST NO 820	1268		PALM AVE	HF	11/1/2011	Cleared
73	AROMA THAI RESTAURANT	757		SEACOAST DR	HF	1/4/2012	Follow Up
91	AROMA THAI RESTAURANT	757		SEACOAST DR	HF	1/18/2012	Cleared
31	BEACH CLUB GRILLE	710	F	SEACOAST DR	HF	11/29/2011	Cleared
68	BEACH SIDE STATION	681		HIGHWAY 75	H	1/3/2012	Cleared
62	BEACH SIDE STATION	681		HIGHWAY 75	H	12/20/2011	Follow Up
45	BERNARDO SHORES	500		HIGHWAY 75	H	12/8/2011	Follow Up
98	BIG KAHUNA'S PIZZA N STUFFS	600	#117	PALM AVE	HF	1/24/2012	Cleared
81	BOWMAN'S MARKET	1008		PALM AVE		1/6/2012	NOV
95	BOWMAN'S MARKET	1008		PALM AVE		1/19/2012	Cleared
52	BOWMAN'S MARKET	1008		PALM AVE		12/14/2011	Follow Up
13	C.H. DONUTS	1070	A	13TH ST	HF	11/9/2011	Cleared
54	CAFE DI ROMA	633		9TH ST	HF	12/15/2011	Cleared
32	CARL'S JR. #585	700		13TH ST	HF	12/1/2011	NOV
16	CARL'S JR. #585	700		13TH ST	HF	11/10/2011	Follow Up
57	CARL'S JR. #585	700		13TH ST	HF	12/15/2011	Cleared
106	COW-A-BUNGA CA GLACIER FNAM	10	#E	EVERGREEN AVE	HF	1/26/2012	Cleared
8	CROSSROAD PETROLEUM INC.	1185		PALM AVE	H	11/2/2011	Follow Up
25	CROSSROAD PETROLEUM INC.	1185		PALM AVE	H	11/17/2011	Cleared
56	DEPENDABLE CARBURETOR EXCHANGE	660		EMORY ST	H	12/15/2011	Cleared
60	DON PANCHO'S MEXICAN FOOD	690		HIGHWAY 75	HF	12/19/2011	Cleared
18	ECONO LUBE N' TUBE	772		13TH ST	H	11/10/2011	Cleared
33	EL CILANTRO CAFE	764		13TH ST	HF	12/1/2011	Cleared
17	EL CILANTRO CAFE	764		13TH ST	HF	11/10/2011	Follow Up
78	EL TAPATIO CATERING	667		SILVER STRAND BLVD	HF	1/5/2012	Cleared
77	EL TAPATIO RESTAURANT INC	260		PALM AVE	HF	1/5/2012	Follow Up
51	ESTHER'S MEXICAN FOOD	1004		PALM AVE	HF	12/14/2011	Follow Up
84	ESTHER'S MEXICAN FOOD	1004		PALM AVE	HF	1/6/2012	NOV
97	ESTHER'S MEXICAN FOOD	1004		PALM AVE	HF	1/19/2012	Cleared
120	FLEET RESERVE CLUB 289	659		SILVER STRAND BLVD	HF	3/5/2012	Cleared
23	G & M OIL #177	907		PALM AVE	H	11/16/2011	Cleared
20	GENE'S AUTOMOTIVE	1085		PALM AVE	H	11/16/2011	Cleared

ID	FACILITY NAME	STREET NUMBER	SUITE NUMBER	STREET NAME	Establishment Class	Inspection Date	Follow Up Action
14	GIANT PIZZA KING #4	1070	B	13TH ST	HF	11/9/2011	Cleared
110	GIANT PIZZA KING #5	600	#100	PALM AVE	HF	2/8/2012	NOV
114	GIANT PIZZA KING #5	600	#100	PALM AVE	HF	2/17/2012	Cleared
99	GIANT PIZZA KING #5	600	#100	PALM AVE	HF	1/24/2012	Follow Up
12	GUISEPPE'S PIZZA	1293		IMPERIAL BEACH BLVD	HF	11/9/2011	Cleared
75	IB FORUM	1079		SEACOAST DR	HF	1/4/2012	Follow Up
93	IB FORUM	1079		SEACOAST DR	HF	1/18/2012	Cleared
43	IMPERIAL BEACH ULTRAMAR	1300		IMPERIAL BEACH BLVD	H	12/7/2011	Cleared
50	IMPERIAL DONUTS +	1002		PALM AVE	HF	12/14/2011	Follow Up
85	IMPERIAL DONUTS +	1002		PALM AVE	HF	1/6/2012	NOV
96	IMPERIAL DONUTS +	1002		PALM AVE	HF	1/19/2012	Cleared
94	JERSEY BOYS DINER	875		SEACOAST DR	HF	1/18/2012	Cleared
74	JERSEY BOYS DINER	875		SEACOAST DR	HF	1/4/2012	Follow Up
72	KATY'S CAFE	704	A	SEACOAST DR	HF	1/4/2012	Follow Up
92	KATY'S CAFE	704	A	SEACOAST DR	HF	1/18/2012	Cleared
11	K-C'S CHINESE FOOD	1299		IMPERIAL BEACH BLVD	HF	11/9/2011	Cleared
65	KFC IMPERIAL BEACH	1056		13TH ST	HF	12/21/2011	Cleared
49	K-PASTA	775		13TH ST	HF	12/14/2011	Cleared
55	L & M TIRE CO./ EXPRESS TIRE	950		PALM AVE	H	12/15/2011	Cleared
66	LA POSTA MARKET #2	1266		IMPERIAL BEACH BLVD	H	12/21/2011	Cleared
9	MARCO'S & RED HAWK	1205		PALM AVE	HF	11/2/2011	Follow Up
90	MARISA'S MEXICAN SEAFOOD GRILL	285		PALM AVE	HF	1/17/2012	Cleared
40	MARISA'S MEXICAN SEAFOOD GRILL	285		PALM AVE	HF	12/6/2011	Follow Up
76	MARISA'S MEXICAN SEAFOOD GRILL	285		PALM AVE	HF	1/5/2012	NOV
30	MASON'S ALIGNMENT-BRAKE-MUFFLE	975		PALM AVE	H	11/29/2011	Cleared
24	MCDONALDS/SCAROB INC.	1135		PALM AVE	HF	11/17/2011	NOV
7	MCDONALDS/SCAROB INC.	1135		PALM AVE	HF	11/2/2011	Follow Up
102	MEIJO SUSHI, INC.	600	#300	PALM AVE	HF	1/24/2012	Follow Up
108	MEIJO SUSHI, INC.	600	#300	PALM AVE	HF	2/8/2012	Cleared
39	MICKIES BAR AND GRILL	220		PALM AVE	HF	12/6/2011	Cleared
58	NFAROOQI ENT. LLC/JACK IN BOX	890		PALM AVE	HF	12/19/2011	Cleared
123	OLIVE OIL CAFE	600	#109	PALM AVE	HF	4/3/2012	Cleared
116	OLIVE OIL CAFE	600	#109	PALM AVE	HF	2/29/2012	NOV
113	OLIVE OIL CAFE	600	#109	PALM AVE	HF	2/17/2012	NOV
101	OLIVE OIL CAFE	600	#109	PALM AVE	HF	1/24/2012	Follow Up
42	PIZZA INDUSTRY/DOMINO'S PIZZA	1307		IMPERIAL BEACH BLVD	HF	12/7/2011	Follow Up
89	PIZZA INDUSTRY/DOMINO'S PIZZA	1307		IMPERIAL BEACH BLVD	HF	1/17/2012	Cleared
80	PIZZA INDUSTRY/DOMINO'S PIZZA	1307		IMPERIAL BEACH BLVD	HF	1/6/2012	NOV
26	PRECISION FOREIGN	1240		PALM AVE	H	11/17/2011	Cleared
5	PRECISION FOREIGN	1240		PALM AVE	H	11/1/2011	Follow Up
105	PRETZLES AND MUCH MORE	10	#D	EVERGREEN AVE	HF	1/26/2012	Cleared
115	RODRIGO'S MEXICAN FOOD	600	#106	PALM AVE	HF	2/17/2012	Cleared
109	RODRIGO'S MEXICAN FOOD	600	#106	PALM AVE	HF	2/8/2012	Follow Up
100	RODRIGO'S MEXICAN FOOD	600	#106	PALM AVE	HF	1/24/2012	Follow Up
35	ROLANDO'S TACO SHOP IB	805		SEACOAST DR	HF	12/1/2011	Cleared

ID	FACILITY NAME	STREET NUMBER	SUITE NUMBER	STREET NAME	Establishment Class	Inspection Date	Follow Up Action
46	SANTANA MEXICAN FOOD	1337		PALM AVE	HF	12/12/2011	Follow Up
37	SEACOAST PIZZA	807		SEACOAST DR	HF	12/1/2011	Cleared
121	SIESTA RV PARK, INC.	409		PALM AVE	H	3/5/2012	Cleared
122	SOMBRERO MEXICAN FOOD	189		PALM AVE	HF	3/20/2012	NOV
111	SOMBRERO MEXICAN FOOD	189		PALM AVE	HF	2/17/2012	Follow Up
124	SOMBRERO MEXICAN FOOD	189		PALM AVE	HF	3/22/2012	Cleared
29	SOPHISTICATED AUTO	987		PALM AVE	H	11/29/2011	Cleared
61	STARDUST DONUT SHOP	698		HIGHWAY 75	HF	12/19/2011	Follow Up
10	SUBSMART DELI-FRESH	1231		PALM AVE	HF	11/2/2011	Cleared
103	SUBWAY 20578	876		SEACOAST DR	HF	1/26/2012	Cleared
63	THAT'S A WRAP	1146	102	13TH ST	HF	12/21/2011	Cleared
104	THE BRIDGE	874		SEACOAST DR	HF	1/26/2012	Cleared
22	THE SCOREBOARD	951		PALM AVE	H	11/16/2011	Cleared
107	THE TIN FISH RESTAURANT	910		SEACOAST DR	HF	1/26/2012	Cleared
36	THE WAVE CAFE	809		SEACOAST DR	HF	12/1/2011	Cleared
64	THE WRIGHT WAY	1051	D	13TH ST	HF	12/21/2011	Cleared
48	TITO AUTO SERVICE	1335		PALM AVE	H	12/12/2011	Cleared
71	WALLY'S MARKETPLACE, INC	836		PALM AVE	H	1/4/2012	NOV
59	WALLY'S MARKETPLACE, INC	836		PALM AVE	H	12/19/2011	Follow Up
87	WALLY'S MARKETPLACE, INC	836		PALM AVE	H	1/11/2012	Cleared
38	WEST COAST KITCHEN	208		PALM AVE	HF	12/6/2011	Cleared
67	WIENERSCHNITZEL #358	1253		PALM AVE	HF	12/22/2011	Cleared
15	WIENERSCHNITZEL #358	1253		PALM AVE	HF	11/10/2011	Follow Up
112	WOODYS AUTO CARE	200		PALM AVE	H	2/17/2012	Cleared

Table 5.4 and Figure 5.1 Interactive Effectiveness Assessments of Commercial Businesses

FACILITY NAME	HAVE YOU HEARD OF OUR STORM WATER PROGRAM BEFORE	IS STORM WATER RUNOFF TREATED WATER IN THIS AREA	WHAT IS THE FINAL DESTINATION OF RAIN
AMERICAN LEGION POST NO 820	5	5	5
BERNARDO SHORES	5	0	5
CARL'S JR. #585	0	0	3
GENE'S AUTOMOTIVE	5	0	5
GUISEPPE'S PIZZA	0	0	0
KATY'S CAFE	5	0	3
K-PASTA	5	0	3
MCDONALDS/SCAROB INC.	0	5	0
NFAROOQI ENT. LLC/JACK IN BOX	0	0	0
SOPHISTICATED AUTO	5	0	0
SUBWAY 20578	5	0	3
WEST COAST KITCHEN	5	0	3
	3.333333333	0.833333333	2.5

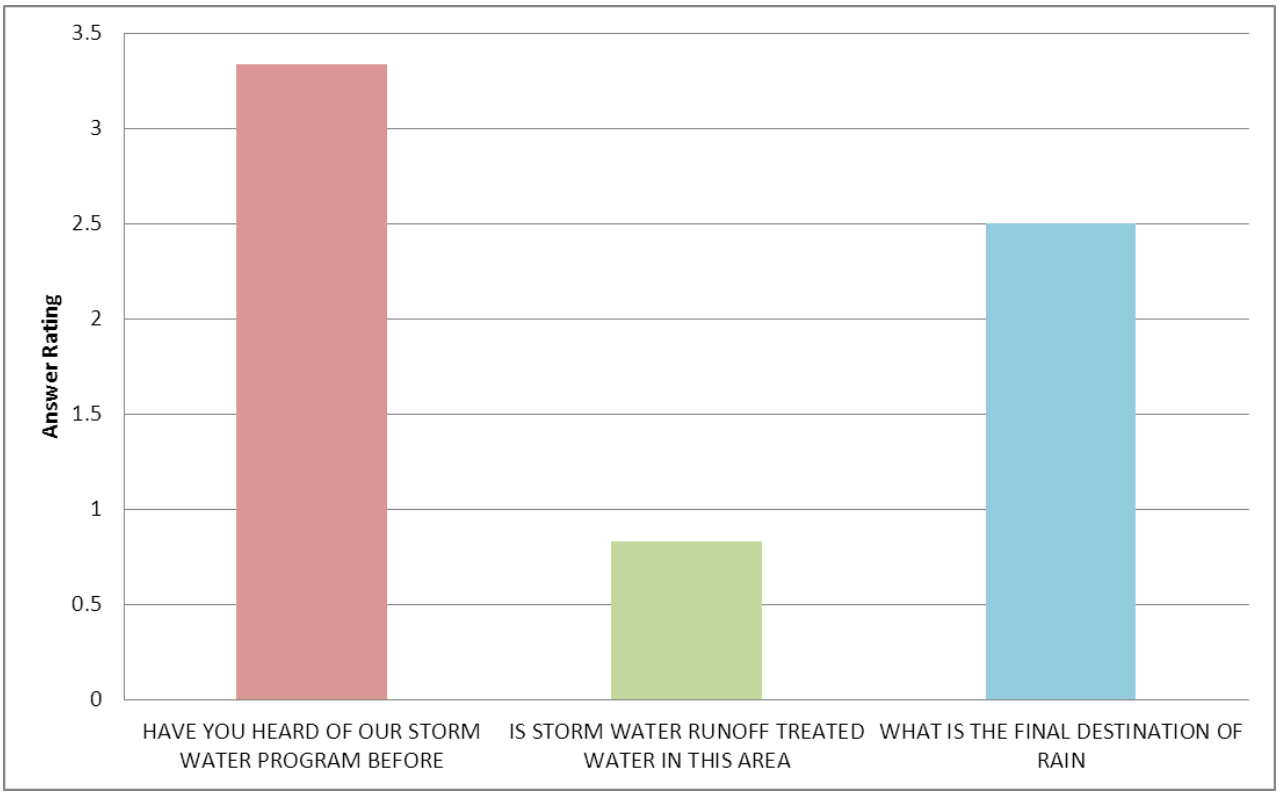

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from residential sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and the City's Code Enforcement Division. Efforts are made to educate the public and oversee compliance with local urban runoff regulations to reduce the release of pollutants to the MEP.

6.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Residential Component is described in the *2008 JURMP Section 8.0*. During the reporting period no updates were made to the high priority residential area inventory. All other program planning and administration elements remain unchanged from the *2008 JURMP Section 8.0*.

6.3 Outcome Level 1b: Implementation of Management Program Activities

The City enforces its storm water ordinances for all residential areas and activities to maintain compliance with the Municipal Storm Water Permit. Public outreach and education as outlined in the *2008 JURMP Section 10.0* encourages residents to comply with the minimum set of BMPs listed in Imperial Beach Municipal Code 8.30.080. The City encourages the use of pollution prevention methods for all residents and provides convenient and cheap house hold hazardous waste disposal. The City also participated as Co-Chair in the Education and Residential Sources Workgroup and Chair of the Underserved Target Audience sub-workgroup.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 6.1 Provides an overview of the residential component as it was implemented
- Table 6.2 presents and describes targeted FY 2011-12 outcomes and results
- Figure 6.1 Show the referral source for ICIDs investigations

6.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Residents

Knowledge and awareness of the storm water program by residents is best assessed through the City's response to illegal connections and illicit discharge (ICID) investigations. Figure 6.1 below shows that twenty-three percent of the City's ICID cases come from the public. This is statistically the same as the previous year. This shows that the City is effective in making different stakeholders aware of the importance of reporting storm water violations and more importantly aware of how their own actions effect water quality. Continued commitment to preventing storm water pollution is also seen from City staff. Fifty-seven percent of all cases came from non-environmental City staff. City staff is encouraged to

report violations directly to the Environmental Division. This is an eleven percent increase from the previous year, showing storm water awareness by City staff is increasing.

Figure 6.1 Referral Source for ICID Investigations

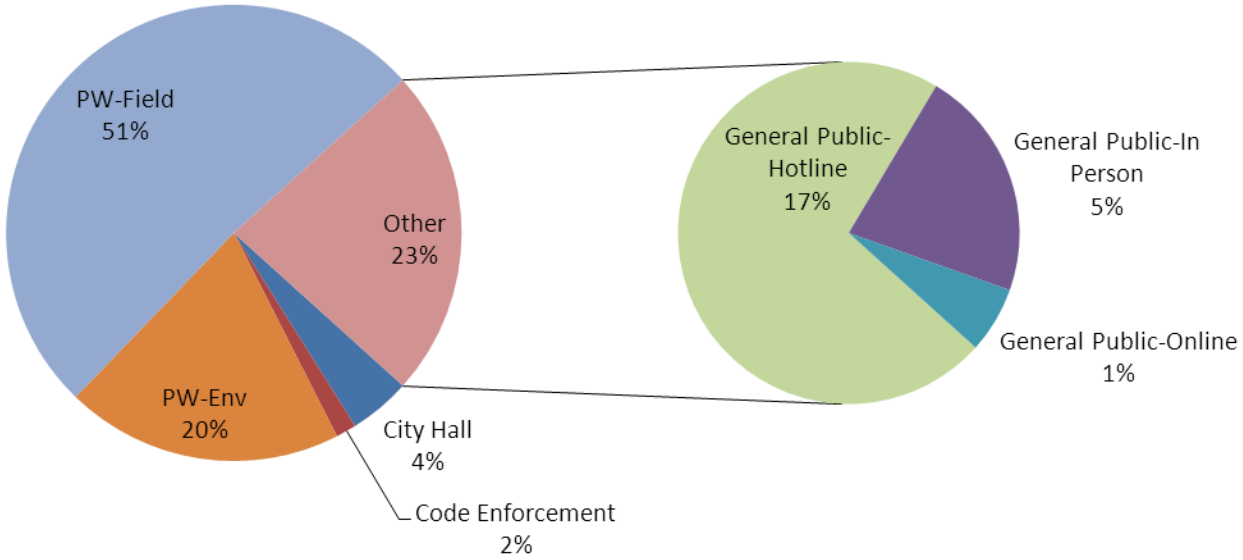

6.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Residents

The City facilitates changes in behavior and implementation of BMPs for high threat to water quality activities and residential areas by providing education through face-to-face interactions, disseminating education materials through various media, and responding to illegal discharges. The *2008 JURMP Appendix G* defines minimum BMP requirements applicable to residential areas and activities in the City.

6.6 Outcome Level 4: Source Load Reductions

The City continues to quantify load reductions whenever feasible for disposal of household hazardous waste, used oil, and special clean up events. Pest waste collected by the Ocean Blue foundation is also estimated. The City does not normally track individual source load reductions to receiving waters from residential areas or activities but load reductions can be implied by proper implementation of BMPs.

Table 6.1 – Overview of Residential Component

Category	Pounds	Number	Description
A. Residential Threat to Water Quality Prioritization			
High	---	6	All residential areas in the City are considered high priority.
Medium	---	---	
Low	---	---	
B. House Hold Hazardous, Electronic, and Universal Waste Disposal			
Flammable and Poison	5728	---	Imperial Beach residents have a variety of options for the collection and disposal of house hold hazardous waste. Most residents utilize the South Bay HHW Collection center at the City of Chula Vista. Residents can also drop off used oil at the Auto Zone located at 1344 Palm Ave. and at Express Tire 950 Palm Avenue. The City coordinates used oil disposal that is part of CalRecycle Used Oil Block Grant with the City of Chula Vista. The amount of waste dropped off by Imperial Beach residents is provided in the table to the left. EDCO offers drop off of E-Waste. The City offers curbside pickup of HHW, used oil, and a number of regional collection events for electronic and universal waste. The disposal totals for these additional activities are not provided in this report.
Acid, Base, Oxidizer, and PCBs	321	---	
Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters)	6081	---	
Asbestos	3		
E-Waste, Aerosols, Other Universal Waste	10082		
Other HHW	1697		
Total Waste Disposed	23912		

JURMP Sections	Description of FY 2011-12 Changes
8.0 and Appendix G	BMP requirements of the JURMP applicable to residential areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per Permit requirements	No updates made during reporting period	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update program documentation for consistency with program updates	No updates made	No updates made this reporting period.
c) Year-End Program Review		
Complete annual year-end program review	Review program for effectiveness and efficiency	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Residential Areas		
Identify high threat to water quality areas	Update not needed	All residential areas in the City are considered high threat to water quality areas. The *2008 JURMP Section 8.0* provides a list of high threat to water quality activities.
b) Confirmation of Designated Minimum BMPs		
Require residents to implement BMPs	The City provides education and responds to ICIDs in residential areas	The City requires all residential areas to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City enforces its *Urban Runoff Management and Discharge Control Ordinance IBMC 8.30* and provides education and outreach to local residents.
c) Facilitate Proper Disposal of Household Hazardous Waste and Used Oil		

Residential FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Facilitate proper management and disposal of used oil and HHW	Provided a variety of disposal options for used oil, toxic materials, and other hazardous waste	The City provides a variety of options for the proper management and disposal of used oil and HHW. Residents are generally directed to drop off hazardous materials at the South Bay HHW center at 1800 Maxwell Rd. The City also provides home pickups of HHW for disabled residents. EDCO also provides pickup of used oil. The City also hosts regional collection events for HHW, used oil, electronic waste, and universal waste.
d) Enforcement of Residential Areas and Activities		
Enforce minimum BMPs in residential areas	Responded to storm water violations reported by staff and public	The Environmental Division responds to storm water violations that are reported by City staff or general public in residential areas and provides enforcement through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines and civil and/or criminal court actions
e) Evaluate Methods of Oversight for Residential Areas and Activities		
Evaluate methods of oversight and enforcement for residential areas and activities	Operate storm water hotline and utilizes monthly sewer and street inspections to identify violations	Operated a Storm Water Hotline (619-424-4095) during the reporting period. The City received 23 reports on the Storm Water Hotline (619-424-4095), 7 in-person reports, and 2 online reports for storm water violations in residential areas. The Environmental Division responded to another 105 residential violations reported by City staff.
f) Regional Residential Education Program		
Participate in Regional Residential Education Program	Participated in the Education and Residential Sources Workgroup and chair position of the Underserved Target Audience	During this reporting period the County took the lead on the Education and Residential Sources Workgroup. Significant progress continues to be made in the areas of media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment through a county-wide telephone survey.
g) Special Investigations		
Implementation of special investigations	No special jurisdictional investigations performed	Special investigations for the Residential component are generally performed through the Regional Copermittee group to maximize the benefit.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY RESIDENETS		

Residential FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Establish a baseline for knowledge of BMPs by residents	No additional assessments were targeted at residents outside of education activities	Knowledge and awareness of storm water issues by residents is assessed through the education program. The City uses brochures, special events, presentations, and ICID investigations as tools to educate local residents on storm water. Assessment results provided in Section 8.0 for residential and general public outreach.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY RESIDENTS)		
a) BMP Implementation		
Facilitate pet waste program with the Ocean Blue Foundation	10 pet waste bag dispensers are maintained by the Ocean Blue Foundation	The pet waste bag dispenser program has been maintained and operated by the Ocean Blue Foundation NGO for the last 10 years but starting next reporting period the Public Works Department will be taking over responsibility for the program.
Cleanup activities in residential areas	Implemented cleanup activities as part of the Municipal Component	Under the Municipal Component of the JURMP the City conducts street sweeping, alley sweeps, and cleanup activities in residential neighborhoods. Under the Education Component the City participates in community cleanup events.
b) Violations and Enforcement Actions		
Number of violations and enforcement actions to achieve compliance	Responded to a total of 137 ICID cases	The City operates a Storm Water Hotline (619-424-4095). The City received 23 reports on the Storm Water Hotline, 7 in-person reports, and 2 online report for storm water violations in residential areas. The Environmental Division responded to another 105 residential violations reported by City staff. In total the Environmental Division responded to 137 ICID cases.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM RESIDENTIAL AREAS AND ACTIVITIES)		
a) BMP Implementation		
Household hazardous waste (HHW) collection	16.697 pounds of HHW collected **Year Pounds** 2008 6,000 2009 10,367 2010 10,377 2011 16,697 2012 23,912	The City's HHW disposal program is available to all residents, and the City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options.

Residential FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Used oil collection	6,081 pounds of Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters) collected **Year Pounds** 2008 2,110 2009 2,173 2010 3,763 2011 4,329 2012 6,081	The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.
Universal and electronic waste collection	10,082 pounds of electronic and universal waste collected **Year Pounds** 2009 2,433 2010 3,025 2011 4,371 2012 10,082	The City facilitates the proper management and disposal of universal and electronic wastes trough both EDCO and the South Bay Regional HHW Program.
Pet waste collection	10 pet waste bag dispensers; 72,800 bags replaced, and an estimate of 18,200 lbs. of pet waste collected	The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. If the average pet waste weighs 4 ounces then an estimate of 18,200 lbs. of waste was collected. The City Council supports the foundation through an annual community grant.

Residential FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Special event recycling and waste management	Home Front Cleanup event had 714 participants and collected 148.95 tons of materials **Year No. Tons** 2009 732 154.3 2010 822 175.6 2011 753 178.8 2012 714 148.9	The City holds an annual Home Front Cleanup event. The Home Front Clean Up had 714 participants and disposed a total of 148.95 tons of materials. That includes93.58 tons of diverted materials (green waste, metal, concrete, and e-waste) that was recycled.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extending the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The City's implementation and assessment strategy for the illicit discharge detection and elimination component is described in the *JURMP Section 9.0*.

8.0 EDUCATION COMPONENT

8.1 Introduction

The City endeavors to implement a diverse education program in the community to reduce the impacts of urbanization on water quality. Education activities are targeted at the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial and industrial business owners and operators, 4) residents, general public, and school children, and 5) underserved community. This component is applicable to all City departments, in particular the Environmental Program Division of the Department of Public Works, which spearheads the City's education efforts and is responsible for the annual training for municipal employees on the components and goals of the JURMP. Note that each section of this JURMP Annual Report already includes a description of education activities for each element. The City recognizes the long term importance education plays in facilitating the necessary behavioral changes to successfully reduce and eliminate pollutants from urban runoff.

8.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Education Component is described in the *2008 JURMP Section 10.0*. During the reporting period the City made no significant updates to the education program. The City continues to focus education efforts at the five targeted community groups. The City tailors each individual education activity to best suit the message and content for the target community; however, the overall message is consistent with the *2008 JURMP Section 10.0*. Minor changes to the program include changes to materials such as handouts, surveys, and educational guidance documents, which are continuously updated throughout the year. The City also continues to seek for ways to expand and improve the effectiveness of the education program.

8.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division oversees the implementation and assessment of the Education Component for the five targeted communities. The following tables and figures presented in this section provide additional information on the implementation and assessment of the Education program element:

- Table 8.1 Provides an overview of the Education program
- Table 8.2 presents and describes targeted FY 2011-12 outcomes and results
- Table 8.3 provides the education activity inventory by target community for FY 2011-12

8.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Target Community

The City implements an education program for each target community using all media as appropriate to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the

environment. During the reporting period the Environmental Division implemented a variety of techniques to capture changes in knowledge and awareness among the targeted communities. These techniques include the use of surveys, pre and post test, interactive assessments and evaluations during inspections, and regional assessment programs through the Education and Residential Sources (ERS) Workgroup.

8.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Target Community

The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs. Gauging the level of effectiveness of the education program from one year to the next is a challenging task because of the gradual nature of behavior change, but the City strives to measure this level of effectiveness and behavior change for each target audience whenever possible. Table 8.3 provides a description of how outcome level 3 is assessed for each targeted community.

8.6 Outcome Level 4: Source Load Reductions

Education is a key component of getting to source load reductions through the implementation of BMPs. Source load reductions are not easily tracked from education activities but can be implied through the proper implementation of BMPs.

Table 8.1 – Overview of Education

Category	Number	Description
A. Educational Efforts		
Municipal Departments and Personnel Events	7	Employees are trained annually on the use of BMPs in their daily operations. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations.
Construction Site Owners, Contractors and Developer Training Events	4	Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, in inspections, and in investigations of illegal discharges.
Public Participation	7	
Commercial Site Owners and Operators Training Events	3	Commercial Site Owners and Operators are trained through scheduled inspections by the Public Works Department Environmental Division, and through investigations of illegal discharges.
Residential Community and General Public Outreach Events	12	All residents receive educational information in the City's newsletter, a newsletter sent out by the City's waste franchisee, website updates, materials provided at City Hall and the Public Works Department, through community presentations, etc. The City also participated with other Co-Permittees in regional outreach events that target the underserved community.
Underserved Community	3	
School Children Outreach Events	2	

JURMP Sections	Description of FY 2011-12 Changes
10.0 and Appendix I	BMP requirements of the JURMP applicable to educational areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per Permit requirements	No major updates during the reporting period	So significant programmatic changers were made to the Education Component during the reporting year. The City is no longer the co-chair of the Education and Residential Sources workgroup because the County is taking the lead to better facilitate consultant contracts for the workgroup.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update program documentation for consistency with program updates	No updates made during the reporting period	The City implements surveys when feasible at education events to establish a baseline level of knowledge. Minor program updates were made throughout the year to program content to more effectively present education materials.
c) Updates to Training Program		
Update training materials for consistency with *2008 JURMP Section 10.0*	New content added as necessary to training program	The City makes annual updates to training content and materials so that each education activity provides appropriate information for the target audience. For example a new topic for this year included the requirements in the new Construction General permit. The Environmental Division coordinates training program for all targeted audiences.
d) Year-End Program Review		
Complete annual year-end program review	Review program for effectiveness and efficiency	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Education Component		
Provide education to construction site owners, contractors, and developers	Educated and reinforced minimum BMP requirements for projects	Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development and the Publics Works Departments during the permitting process and pre construction meetings. Community Development holds counter hours for project applicant. Education is reinforced through inspections and in investigations of illegal discharges. The City also provides construction BMP info through brochures and on the City's website.

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Provide education for municipal staff	Provided annual training and additional education opportunities to municipal staff	The Environmental Division provided 7 municipal training activities including the annual storm water training for Public Works on 10/26/11. Each division also received refresher training by the Env Specialist during the year. All new employees receive one-on-one training for storm water at the beginning of employment. City staffs are encouraged to attend training activities for storm water program outside the City for example HMP, SUSMP, and GCP. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Annual municipal inspections involve face time with each Division supervisor. Every City vehicle also contains a binder of Municipal Facility and Activity BMPs and MS4 map that get review during annual training.
Provide education to industrial and commercial owners and operators	Provided education to commercial businesses and owners	Commercial businesses receive education on storm water BMPs through a number of different methods inspections, face-to-face interaction with City staff during commercial inspections, through dissemination of education material, and through a follow up inspection letter that summarizes the results of the commercial inspection. The City also provides education to businesses during ICID investigations and educational materials to street vendors for special events. New businesses receive storm water BMP indoctrination when applying for a business permit.
Provide education to underserved community	Provided education to underserved community	Education materials are provided in both English and Spanish. The environmental division incorporates the underserved community in most education activities, which is particularly important to IB due to the large Spanish speaking community. The City also chairs the Underserved Target Audience Sub-Workgroup of the ERS workgroup.
Provide education to residential community, general public, and school children	Provided education to residential community, general public, and school children	The Environmental Division provided 14 education activities targeted to residential community, general public, and school children. Some of the activities included presentation to schools, after school activities at IB Sports Park, media education, Recycling All-Star award, and ILACSD school presentations. The Tijuana Estuary, State Park, FWS, YMCA Camp Surf, Surfrider, and Wildcoast also conduct environmental education and community outreach within Imperial Beach that is not currently tracked by the City but represents a significant effort to promote clean water in the region.

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Provide opportunity for public participation	Provided opportunities for public education	Public participation is encouraged in the development and implementation of the JURMP. The annual JURMP Report is presented at City Council during an open public hearing process. The Environmental Division also facilitates and participates in public cleanup activities that serve as mechanism for public participation in watershed activities and provides proclamations from the Mayor to encourage such efforts.
b) Special Investigations		
Not targeted	Mayor Proclamation for April as Environmental Awareness Month and Oct as TJ River Action Month and Recycle All Star Award	Imperial Beach proclaimed the month of April as "Environmental Awareness Month". Environmental Division scheduled a number of education activities for the month with the afterschool youth at IB Sports Park and selected a weekly recipient for the Recycling All-Star award for the month. These activities were in addition to the normal Earth Day celebrations in the region. The month of October was also proclaimed as Tijuana River Action Month. The City and EDCO also encourage recycling through the Recycle All Star program that awards $100 to a select resident each month that demonstrates good recycling practices (which also includes clean curb and gutters in front of home).
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION)		
a) Construction Site Owners and Developers		
Assess knowledge and awareness for construction site owners and operators	Assessed knowledge whenever possible	Most construction activity in the City is from small discretionary projects and CIPs. Knowledge and awareness is achieved through proper submittal of storm water documents and proper implementation of BMPs. All projects are required to submit the necessary storm water documents and implement BMPs. Deficient projects receive proper education from staff. General outcomes reveal a high level of knowledge from larger contractors and a lesser understanding of BMPs from smaller general contractors.
b) Municipal Departments and Personnel		
Assess knowledge and awareness for municipal staff	Assessed knowledge though surveys and regular meetings. Public Works survey average score of 9.58/10 correct answers.	Surveys are administered during annual storm water training events. The surveys are generally challenging in nature because personnel staff are expected to have a high level of understanding of storm water program. Surveys are administered at the begging of the training session and used as a tool to highlight specific topics during the training session.

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
c) Industrial and Commercial Site Owners and Operators		
Assess knowledge and awareness for commercial businesses	Assessed through interactive assessment process. Assessment results provided in Table 5.4 and figure 5.1 in the Commercial Section.	The Environmental Division incorporates an interactive effectiveness assessment of commercial businesses and rates businesses on a scale of 1 out of 5. The results of the assessment are presented in Table 5.4 and Figure 5.1 in Section 5 for Industrial and Commercial Component.
d) Underserved Community		
Assess knowledge and awareness for underserved community	Assessed though Regional Copermittee group	The Education and Residential Sources Workgroup provides targeted assessment of the underserved community through event surveys and a countywide phone survey. The ERS workgroup have completed two countywide phone surveys that provide a pre and post assessment during the past 5 year permit cycle.
e) Residential Community, General Public, and School Children		
Assess knowledge and awareness for residential community, general public, and school children	Assessed through surveys during presentations and at events	The City worked with ILACSD to conduct targeted education and assessment for high school children. Results of pre and post test indicate a change in knowledge of high school students of 35% points between pre and post test. After the presentation students also indicated a higher likelihood of taking action to keep their watershed clean.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION FROM EDUCATION ACTIVITIES)		
a) Construction Site Owners and Developers		
Number of construction projects that were not in compliance with BMPs	7 of 71 construction projects were out of compliance with BMPs. 90% of active construction projects in compliance with site BMPs	Most construction projects (90%) implemented the necessary BMPs as prescribed in conditions to contain potential contaminates on site. Non-compliant projects received additional education and a follow up investigation to ensure the proper BMPs were implemented and maintained.
b) Municipal Departments and Personnel		

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Number of ICIDs identified and reported by municipal staff	Municipal Staff identified 105 out of 137 ICID during the reporting period. Total ICID: 137 Public Works: 97 City Hall Staff: 8	One component of the annual municipal training is the proper identification of ICIDs. During FY 2011-12 City Staff identified 77% of the reported ICIDs with non-storm water staff identifying 57% of the incidents, which again reinforces the high results from municipal staff training. General pubic reporting through online complaint form or hotline calls made up only 23% of the overall cases.
c) Industrial and Commercial Site Owners and Operators		
Number of commercial businesses not in compliance with minimum BMPs	31 out of 71 commercial businesses were out of minimum BMP compliance. 56% of high priority businesses in complete compliance with minimum BMPs (up from 48% last year)	The City inspects 100% of high priority commercial businesses annually for proper implementation of BMPs. During the reporting period the city inspected 71 commercial businesses with the result of 14 businesses receiving an NOV for non-compliance with minimum BMPs and 31 additional businesses having minor violations that required a follow up inspection. In total 31/71 businesses required some type of enforcement action and reinsertion for minimum BMPs. A total of 111 inspections were performed.
d) Underserved Community		
Not targeted	Regional ERS Workgroup conducted the second countywide phone survey reported in RURMP.	The underserved community is not specifically targeted but rather included in all existing education programs. The city does work with Wildcoast to target Spanish speaking and underserved residents as well as underserved youth through after school programs at the IB Sports Park. Behaviors and BMP implementation are more effectively addressed through the Regional Copermittee group where 2 Countywide phone surveys have been conducted.
e) Residential Community, General Public, and School Children		
Number of education activities that target behavior change	14 education activities during the reporting period	Assessing changes in behavior and BMP implementation across the whole community is best addressed through regional programs. Imperial Beach focuses on targeting education through a variety of media and interactive programs that target the most people possible. Anecdotal observations from City staff reveal a continuous improvement in BMP implementation across all targeted audiences as the persistent storm water education message gradually changes public behavior.

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM EDUCATION ACTIVITIES)		
a) BMP Implementation		
Source load reduction	Provided education to targeted audiences. Total number of education activities:38	Source load reductions are not easily tracked from education activities but can be implied through proper implementation of BMPs. Source load reductions from cleanup activities are tracked and reported separately.

Table 8.3 Education Activity Inventory by Targeted Community

Education Activity	Date	Activity or Event Description	Topics	Participants	Effectiveness Assessment
Municipal Departments and Personnel					
Public Works Annual JURMP Training	10/26/2011	Annual Storm Water JURMP training for Public Works	Annual training on PW facility and activities BMPs, LIDs, and Tijuana River update	26	Survey and post assessment (Avg.: 9.58/10)
FYI to City Staff and Council	Weekly	Provided multiple updates on various storm water topics and current events through a weekly email newsletter sent to City staff and Council	Storm Water Program	City Staff and Council	
Code Enforcement Meeting	Monthly	Monthly meeting with Code Enforcement, Fire Inspector, Building Inspector, Community Development, and Environmental Division	Code enforcement issues many of which pertain to storm water	Env, Code, Fire, and Building Divisions	
Community Development Meeting	Weekly	Weekly staff meeting with managers from community development related to interdepartmental issues including storm water	new buildings, BMPs, storm water program	6	
Emergency Reponses Plan Training	8/10/2011	Review City's emergency response plan	Emergency shut off for fuel, equipment operations, spill response	23	
Complete Streets Workshop	6/22/2012	All day workshop on complete streets	Green streets, complete streets, and regional planning	2	
Construction General Permit	multiple	QSP and QSD General Construction Permit training (JS Storm water, URS, and RBF)	QSP/QSD certification	4	Passed test exam QSP
Construction Site Owners and Developers					
Copy of storm water/grading/erosion control requirements attached to Imperial Beach issued permits and construction BMP brochure.	On going	Community Development Department disseminates BMP and storm water information with permits	BMP, pollution prevention, City storm water requirements	---	
Community Development counter hours	On going	Counter hour for education relating to construction and development in the City	BMPs, pollution prevention, City storm water regulations	---	
Streets 3B Pre Construction Meeting	12/14/2011	Review project and BMP requirements with contractors and subs	BMPs and project schedule	14	
Streets 4/5 Pre Construction Meeting	1/5/2012	Review project and BMP requirements with contractors and subs	BMPs and project schedule	14	
Commercial Owners and Operators					
Commercial Inspection	On going	Commercial business inspections	Pollution prevention, BMPs, storm water regulations		

Education Activity	Date	Activity or Event Description	Topics	Participants	Effectiveness Assessment
Follow up inspection report and letter	On going	Each commercial inspection is followed up with summary report and BMP brochures by mail	Commercial BMPs, recycling and pollution prevention		
Sand Castle vender packed and inspections	7/21-24/2011	Education to Vendors and inspections during the event	Storm water pollution prevention, ICIDs	35	
Residents and General Public					
EDCO Shredding Event	7/9/2011	EDCO collected paper to shred at Mar Vista HS	Proper waste management	54	1.06 tons of paper recycled
Water Quality Workshop (When is it safe to swim?)	10/12/2011	Community workshop on beach water quality	County DEH, SCCOOS, Regional Board, Lifeguards, Coastkeeper presentations	40	
Day Without a Bag	12/15/2011	Surfrider handout reusable bags at Wally's IGA	Trash	250	
Day Without a Bag	12/15/2011	City staff handout bags at City Hall and Library	Trash	50	
City Council presentations on Tijuana River	7/6/2011 8/17/2011 2/15/2012 4/4/2012 4/18/2012 6/6/2012	Multiple updates at City Council Meetings on topics related to the environmental issues in the Tijuana River.	Over view of regulatory agencies in US and Mexico; wastewater treatment in Mexico; SCCOOS; TJ River Bacteria Study; IBWC	Public City Council Meeting	
FY 2010-11 JURMP AR Public Hearing	9/7/2011	Public hearing at City Council meeting	Overview of the FY 2010-11 JURMP AR components	Public City Council Meeting	
City Semi-Annual E-news letter	Summer / Winter	Included articles on storm water, Recycling, HHW, and street sweeping	Pollution prevention; storm water BMPs; Recycling HHW; Special Events; Street sweeping	Citywide	
EDCO Environmental Times Mailer	Quarterly	Published a variety of environmental articles in the Summer , Fall, Winter, and Spring EDCO news letters sent to all residents	Pollution prevention, special events, HHW, recycling, and storm water regulations	Citywide	
Citywide Garage Sale	4/28/2012	Annual citywide garage sale to promote reuse of items	Recycle and reuse	90	90 participants received training material from Env Division
Home Front Cleanup	5/5/2012	Citywide annual home front cleanup event	trash, recycling, HHW	714	Trash: 35.8 tons; Green waste: 20.7 tons; metal: 16.4 tons; con-demo: 72.2 tons; e-waste 7.4 tons
Christmas Tree Recycling	12/27/11 - 1/17/12	City provides 3 locations for xmas tree recycling with info	trash, recycling, and BMPS	Citywide	

Education Activity	Date	Activity or Event Description	Topics	Participants	Effectiveness Assessment
Eagle and Times and UT newspaper	Multiple	Articles from City PR on variety of topics advising the community on storm water related issues	Go green in IB for Environmental Awareness Month; Tijuana River Action Month	Citywide newspaper	
Underserved Community					
Underserved Target Audience Sub workgroup	On going	Co-chair of Education Residential Sources Workgroup, Chair of Underserved Target Audience sub-workgroup	Representation of the under community in all aspects of the regional education program	Region wide	
Spanish Calendars	2012	Developed 2011 storm water Spanish calendars and distributed 2000 through Wildcoast as part of regional Education program	Multiple storm water themes	2000	
Storm Drain Stenciling	4/21/2012 4/28/2012	Wildcoast storm drain stenciling in Imperial Beach for Env Awareness Month	Pollution prevention	20	
School Children					
ILACSD Mar Vista High School Presentations	3/23/2012	Mar Vista HS 9th, 10th, and 11th grade presentations	Storm water, watersheds, Tijuana River estuary, San Diego Bay	95	Pre and Post Tests (35% improvement)
IB Sports Park for April as environmental awareness month	4/25/2012 4/26/2012	After school activities with education staff from the Tijuana Estuary at IB Sports Park	watershed, storm water, environmental	30	
Public Participation					
Mayor Proclamation Tijuana River Action Month	10/5/2011	Public presentation at City council meeting and designation of Sep-October as TJ River Action Month	Volunteer appreciation and recognition of agency efforts in TJ River	Public City Council Meeting	
Mayor Proclamation Environmental Awareness Month	3/21/2012	Public presentation at City Council meeting and designation of April as Environmental Awareness Month in IB	Multiple environmental education activities for the month of April	Public City Council Meeting	
Coastal Cleanup Day	9/17/2011	Multiple location in TJ watershed on both sides of the border	Trash cleanup event with Wildcoast, Surfrider, and ILACSD	200+	
Fiesta del Rio	9/11/2011	All day event at Pier Plaza hosted by the TJ Estuary education staff.	Multiple topics that include storm water education	1000+	
Tijuana River Cleanup	10/15/2011	Cleanup at Dairy Mart Road	Cleanup coordinated by Wildcoast and Surfrider	45	
Creek to Bay Cleanup	4/28/2012	Annual Coastkeeper Creek to Bay cleanup	Cleanup of multiple location in the region including IB	Region wide	
Sand Castle Event	7/21-24/2011	Annual Sandcastle event with church group providing volunteers for trash and recycling service and enforcement of BMPs for street vendors	Trash, Recycling, and storm water BMPS	Large Event	

9.0 Public Participation

9.1 Introduction

The City is required to incorporate a mechanism for Public Participation in the updating, development, and implementation of the JURMP. Public involvement in the JURMP leads to a greater understanding of public perception and attitudes towards the problem of storm water pollution and helps the City implement a more effective storm water program. The Environmental Division regularly interacts with residents, commercial businesses, municipal staff, and developers while conducting inspections, education activities, BMP enforcement, and other JURMP implementation components. The City also makes additional efforts to include public participation in the implementation and development of the JURMP by providing opportunities throughout the year to provide comments and feedback.

9.2 Public Participation Efforts

The City holds a public hearing and solicits public comments prior to the adoption and submittal of the JURMP and its Annual Reports. The public was notified on this Annual Report in the Imperial Beach *Eagle & Times* newspaper and through public hearing notices that were posted at City Hall and the Imperial Beach Public Library. A draft of this JURMP Annual Report was made available for public viewing at the Imperial Beach City Hall, posted on the City's website, and presented at a public hearing to City Council on September 19, 2012.

Other public participation mechanisms the City uses include the operation of a storm water hotline and online reporting tool to report violations, coordination of cleanup activities such as the pet waste bag program and trash clean ups with local organizations, involvement with local environmental groups to spread awareness of urban runoff pollution, the City's storm water education program, participation with civic organizations, Mayor proclamations for Tijuana River Action Month and Environmental Awareness Month, and City special events.

10.0 Fiscal Analysis Component

10.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the fiscal analysis of the storm water program. Implementation costs for the JURMP are approximately $773.075. Revenue source used by the City to fund the requirements of the Municipal Permit is the City general fund. The City also administered two grant projects in the approximate amount of $577,247 for the Tijuana River Bacteria Source Identification Study and the Los Laureles Trash Tracking Study

10.2 General Budget Information

The costs of implementing the JURMP are spread across the whole City. Each Department and associated Division has an established role in implementing the components of the JURMP. However, the primary responsibility of implementing the storm water program is split between the Department of Public Works and Community Development Department.

10.3 Fiscal Analysis Methods

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. This section of the JURMP report follows the standardized Regional Fiscal Analysis Methods adopted by all Copermittees.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

The expenditures for FY 2011-12 are provided in the tables below. The standardized fiscal analysis method does not exactly correspond to the line item budget maintained by the City. The values presented in Table 10.1 are therefore an extrapolation of the expenditures made that correspond best to the itemized categories. Table 10.2 also provides the expenditures related to City grant funded projects which included the Prop 50 Clean Beaches Initiative grant for the Tijuana River Bacteria Source Identification Study and the Cleanup and Abatement funding for the Los Laureles Trash Tacking Study.

The implementation of all JURMP Components involves every City Department and Division and the actual implementation costs for the program may exceed the amount posted below. The costs being reported only cover the expenditures tracked by the City of Imperial Beach Environmental Division budget.

Table 10.1 Expenditures on JURMP for FY 2011-12

Administration	$142,906
Development Planning	$80,295
Construction	$11,150
Municipal	$287,020
Industrial Commercial	$6,920
Residential	$16,695
IDDE	$34,440
Education	$16,447
Public Participation	$9,420
Special Investigations	$0
Non-Emergency Firefighting	$99,656
Regional Costs	$68,124
Total	**$773,075**

Table 10.2 Grant Funded City Projects FY 2011-12

Tijuana River Bacteria Study	$ 562,247
Los Laureles Trash Tacking	$15,000

10.4.2 Funding Source

Revenue source used by the City to fund the requirements of the Municipal Stormwater Permit is exclusively from the City's general fund.

11.0 Program Effectiveness Assessment

11.1 Introduction

The Environmental Program Division is responsible for the effectiveness assessment of JURMP activities and implementation of BMPs for each major component of the storm water program. Effectiveness assessments are incorporated into the storm water program whenever feasible to help inform the adaptive management process.

The structure of this Annual Report evaluates the level of effectiveness for each JURMP component in the context of program planning, management, and implementation. The City uses the structural hierarchy of levels that were established in the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. Each section of this Annual Report incorporates program effectiveness on Outcome Level 1through Outcome Level 4. In general, Outcome Levels 1, 2, and 3 are best addressed on a Jurisdictional scale. Outcome Level 4 measurements of load reductions are provided whenever possible, but for the most part, assessment of changes to water quality (Levels 4, 5, and 6) are best addressed at the watershed or regional scale.

11.2 Outcome Level 1a: Administration of Management Program Activities

The administration of management program activities addresses modifications to the *2008 JURMP*, updates to program documentation or procedures, end of the year program review, and updates to inventories for next fiscal year.

The City's implementation and assessment strategy for the program effectiveness is described in the *JURMP Section 13.0*.

11.3 Outcome Level 1b: Implementation of Management Program Activities

The implementation of management program activities addresses BMP confirmation requirements, proper documentation, training, inspections, public awareness and response, and special investigations for each component of the *2008 JURMP*. The tables in each section of the Annual Report present and describe targeted outcomes and results based on program implementation for the reporting period.

11.4 Outcome Level 2: Knowledge and Awareness of Program Implementation

Knowledge and awareness are targeted and assessed as necessary within each element of this Annual Report independently.

11.5 Outcome Level 3: Behaviors and Best Management Practice (BMP)

Behaviors and BMP implementation are assessed within the tables located in each section of this Annual Report.

11.6 Outcome Level 4 – Source Load Reductions

Source load reductions are targeted and assessed as necessary within each element of this Annual Report independently.

12.0 Special Investigations

12.1 Introduction

This section describes special investigations that were conducted above and beyond Permit requirements, but with the ultimate goal of better understanding and controlling urban runoff and storm water pollution. Special investigations relevant to each JURMP component are assessed in the tables of each section of this Annual Report. The discussion presented in this section provides additional details on the special investigation for the Tijuana River Bacterial Source Identification Study and Los Laureles Trash Tracking Study.

12.2 Tijuana River Bacteria Source Identification Study

In April 2008, the City of Imperial Beach (City) was awarded a Clean Beach Initiative (CBI) grant by the State Water Resources Control Board (SWRCB) (Grant Program Agreement No. 07-584-550-0) to assess the potential sources of indicator bacteria on the United States (U.S.) side of the Tijuana River Watershed that may be impacting the Tijuana River Estuary and adjacent beaches. The resultant project was named the *Tijuana River Bacterial Source Identification Study*. The contract timeline for the work identified for the study was as follows:

- The SWRCB Contract for the City of Imperial Beach was awarded in February 28, 2008.
- The Contract was closed by the SWRCB due to the State-wide funding crisis on December 17, 2008.
- The Project was reopened on May 6, 2010.
- The Project end date is October 1, 2012.

The overall goal of the study was to identify sources of indicator bacteria in the Tijuana River Watershed within the U.S. side of the U.S./Mexico border that have the potential to impact the Tijuana River Estuary and adjacent beaches. Within this larger framework, the study had several specific objectives:

1. Identify anthropogenic sources of bacteria,
2. Identify non-anthropogenic sources of bacteria,
3. Assess annual bacteria loads into the Tijuana River,
4. Identify point and non-point sources (NPSs) of bacterial pollutants, and
5. Develop best management practices (BMPs) to reduce bacterial loads originating in from the U.S. side of the border.

To address these objectives, the project had several elements:

- Multiple Sanitary and Dry Weather Surveys,
- Wet Weather Assessments of multiple storm events,
- A Series of Special Studies (Groundwater, Goat Canyon Sediment, and Seacoast Dr. sewer line)
- BMP Concept Designs and Prioritization for urban areas in the US.

There were numerous findings from this multi-year, multi-faceted study. The final report will be submitted to the State Water Board in October and available on the City's website. The major conclusions drawn from the results of the monitoring and special studies are summarized below.

- The pollution sources and their impact on the Tijuana River Estuary vary dramatically by season. During dry weather, the estuary is relatively un-impacted from the watershed, and the estuary is a healthy, vibrant and vital ecosystem. During storm events, flows from Mexico transform the estuary into a severely impacted, polluted and hazardous water body with extremely elevated bacterial concentrations and elevated potential health risk to the environment and the public.
- Extensive dry weather and sanitary surveys revealed several locations in the watershed where indicator bacterial concentrations were high, or there was evidence of human fecal contamination, but the contamination was determined to be ephemeral and not related to a consistent source (such as leaking infrastructure).
- Dry weather surveys also revealed that there is very little hydrologic connection between watershed surface waters and the estuary (with the exception of some small drainages).
- Semi-natural BMPs such as soft-bottom sediments and ponds at the base of the major sub-drainages prevent the large majority of dry weather flows from entering the estuary.
- During wet weather, approximately 99% of the indicator bacterial loads entering the Tijuana River Estuary and Pacific Ocean originate from un-diverted flows from the Tijuana River main stream and tributary channels from Mexico.
- Proactive steps to reline the sewage system along Seacoast Drive by the City of Imperial Beach appear to have eliminated a suspected source of human fecal contamination from entering the northern arm of the estuary.
- Groundwater associated with the main stream of the Tijuana River at the U.S. Mexico Border may have elevated bacterial and nutrient levels compared to relatively clean sites closest to the estuary, suggesting the groundwater may not be a likely source of bacterial contamination to the estuary. However, the presence of enterovirus at sites closest to the estuary suggest that further studies may be needed to better understand surface groundwater interactions and the potential risk to estuary surface waters from groundwater resources.
- Sediments within the Goat Canyon Sediment Basins appear to act as a reservoir for indicator bacteria that has the potential to impact receiving waters for several days if the sediment were used for beach replenishment. Further studies are needed to clarify potential impacts indicated by this initial, small-scale study.
- Based on the findings of these studies, BMPs were designed and prioritized on their ability to reduce bacterial loads and will serve as a tool for managers to reduce potential impacts to the Tijuana River Estuary.

12.3 Los Laureles Trash Tracking Study

In June 2011 the City was awarded $15,000 in funds from the State Water Board Cleanup and Abatement Account for the Los Laurels Trash Tracking Study. The purpose of the study was to scientifically document the trans-border flow of trash into the Tijuana River Valley from illegal stockpiles originating in Mexico. The results of this study provide an important step towards developing bi-national policy to address cross border sources of trash that ends up in the Tijuana River Valley. The project was a joint effort by UCSD, City of Imperial Beach, and Tijuana River National Estuarine Research Reserve.

The goals and objectives of this project are as follows:

1. To Produce a Scientific Record of unmanaged Open Dump Sites in Los Laureles Canyon
   a. Objective – Geo-locate and map all significant open dump sites using GPS and ArcGIS software
   b. Objective – Record spatial attributes, land-use, and soil conditions of dump sites (in an effort to qualify conditions that stimulate waste flows)
   c. Objective – Create database of sites attributes and geography including descriptive attributes of waste found at dump sites

2. Track the Flow of Trash from Los Laureles Canyon to TRNERR during Coastal Storms
   a. Objective – Deploy 2,000 Trash-Tracker Probes housing RFID tags at significant dump sites in canyon (approx. 100 sites)
   b. Objective – Map the course of trash-flows using ArcGIS software
   c. Objective – Geo-locate Trash-Tracker Probes on the U.S. side of the border (post-storms) using RFID technology and map resting places

3. Share Scientific Record with Stakeholders: Community Members/Policy Makers/Government Officials
   a. Objective – Provide database of baseline data
   b. Objective – Provide map of canyon dump site locations
   c. Objective – Provide map of trash-flow (initial site, progress, resting place)
   d. Objective – Provide stakeholders with final analysis of case study

Work started on the project in the fall of 2011 prior to the first winter storms with the placement of trash probes in Mexico at identified illegal dumpsites. The trash probes that made it across the border were then collected in the spring of 2012 on the US side of the border from the Goat Canyon sediment basin. The results of the study demonstrated the hypothesized link between illegal trash dumpsites in Mexico and the trash that makes it across the border into the Tijuana Estuary every winter. The results of the study were presented to officials in Mexico and United States and lead to increased efforts in 2012 by Mexican authorities to clean up trash from illegal dumpsites and create constructive dialogue between both countries to better manage the trans-border flow of trash.

13.0 Non-Emergency Fire Fighting

13.1 Introduction

The City requires pollution prevention measures and BMPs to reduce or eliminate non-emergency firefighting flows. The Environmental Division assists the Fire Department in implementing control measures to prevent or control pollutants from both emergency and non-emergency firefighting activities. The 2008 JURMP Section 2.2 identifies the BMPs that are implemented as part of firefighting activities.

Non-emergency firefighting activities, such as training activities that simulate emergency responses, are performed in a manner that eliminates discharges to the storm water system whenever practicable, and minimizes discharges to the storm water conveyance system when elimination of discharges is practicably unavoidable. The following best management practices are implemented as part of these activities:

- Water flows are directed to landscaped areas whenever possible
- When flowing water to an area where landscaping does not prevent runoff, the area selected shall be surveyed by the Officer in charge prior to training activities to ensure that debris will not enter into the storm water system as a result of the drill
- Areas that have debris, which could potentially enter the storm water system as a result of the drill activities, will not be used for training until debris has been removed. Referrals to the Department responsible for the debris removal will be made as needed
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff, which could contribute to storm water discharges
- Discharges from maintenance of equipment and restoration of hoses, vehicles, tools, ladders and other emergency response equipment are directed to the sewage, and dry methods are used whenever practical
- Staff is trained on good housekeeping practices to be used during standard facility maintenance procedures
- The firefighting personnel and inspectors receive annual pollution prevention training from Environmental Specialist
- Vehicle washing or equipment cleaning is conducted over a wash bay that drains to the sewer
- The fire inspector participates in monthly code enforcement meetings

14.0 JURMP Revisions

14.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible to maximize program effectiveness by identifying and describing any JURMP modifications that are made during the reporting period, or that are proposed or planned for the next reporting period. Under the reporting format of this Annual Report, any modification or proposed changes made to the *2008 JURMP* are identified in the Program Planning and Administration subsection within each preceding Section of this report.

14.2 JURMP Updates

During the reporting period the City did not make any significant changes to the JURMP storm water program. No significant updates are anticipated until the Regional Board adopts a new region wide MS4 permit. The release of the next draft permit is anticipated for the fall of 2012. The City is currently working with Regional Board staff and the San Diego County Copermittees, Riverside, and Orange County on the next update to the MS4 permit. It is anticipated that the next permit will allow for a more adaptive and watershed approach based permit. Until the next permit is released, the City will continue to implement the current JURMP program.

15.0 Conclusions and Recommendations

15.1 Introduction

The City continues to made progress in further developing and refining its urban runoff and management program. The City believes that the management programs and activities implemented by municipal staff demonstrate a high level of compliance with the regulatory mandates of the Municipal Storm Water Permit, and underscore the City's commitment to reducing and eliminating pollutants related to urban runoff. The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

The JURMP and all the Annual Reports are a living document that evolve over time and build upon the success and sometimes failure of management program activities. The City endeavors to implement the most effective storm water program possible, building upon the existing program, and given the resources that are available to the City. Looking forward to FY 2012-13 and beyond, the City is committed to continuing with many of the programs and management activities implemented in this report. The City is also looking ahead to the next reissued storm water permit for 2013 that will include adaptive management and a watershed approach to program implementation as guiding principles. The City is committed to working with the Copermittees, Regional Board, and local stakeholders on the next permit to implement a sustainable storm water management program that balances environmental, economic, and social needs.

APPENDIX 1

Commercial Business Inventory FY 2011 – 12

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
13TH ST MARKET	1126	13TH ST	I.B.	CA	91932	911.11	6162	522390	CKCASH									X	Yes	Yes	6330221900	32.575943	-117.105862
7 ELEVEN 18322/RNJ ENTERPRISES	657	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL	X				X	X			X	No	No	6252541100	32.58376	-117.118931
7-ELEVEN 13563	197	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL	X				X	X			X	No	No	6251912500	32.583807	-117.129828
7-ELEVEN 24344	1311	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL	X	X	X		X	X			X	No	No	6270111800	32.58364	-117.105344
7-ELEVEN STORE #23982A-2131	1303	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5999	453998	RETL	X	X	X		X	X			X	Yes	Yes	6330310100	32.576412	-117.105527
AB BRITE CLEANERS & LAUNDRY	674	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE									X	No	No	6251401700	32.58408	-117.118594
AFTER SCHOOL UNLIMITED	497	11TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
ALBETO'S TACO SHOP	1183	13TH ST	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6330313000	32.575108	-117.105547
ALL AMERICAN CAR WASH IB	1158	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X			X			X	No	No	6262300500	32.58413	-117.109042
ALL PHASE DEVELOPMENT	1187	13TH ST	I.B.	CA	91932	911.11	1799	238990	GENCONT										Yes	No	6330311500	32.575049	-117.105547
ALL PRO HOME IMPROVEMENTS	1258	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900		
ALLSTATE INSURANCE	1228	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262411900	32.58412	-117.10735
AMANDA'S HAIRSTYLING	637	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584887	-117.114135
AMERICAN LEGION POST NO 820	1268	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262420900	32.58412	-117.106402
AMERICAN OMBUDSMAN ENTERPRISES	150	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6250140700	32.58408	-117.130638
AMOR FLOWERS & TUX	181	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6251911700	32.583808	-117.130104
ANCHOR MOTORS	740	PALM AVE	I.B.	CA	91932	910.2	5012	421110	AUTO					X					No	No	6262021900	32.5841	-117.117599
ANN PHAM	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
AROMA THAI RESTAURANT	757	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6251920400	32.58251	-117.131642
ARTCO PICTURE FRAMES	716	BASSWOOD AVE	I.B.	CA	91932	910.2	5046	421440	WHOL										No	No	6260212300	32.590411	-117.117504
ARTWHEEL	133	ELDER AVE	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6253530400	32.578692	-117.13094
ASHLEY DE FRATES	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
ASHUR LIQUOR	750	13TH ST	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6263121400	32.583011	-117.105839
AT&T	1497	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6332234700	32.569207	-117.10548
AT&T MOBILITY	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
AT&T MOBILITY	825	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	7602421200	32.576429	-117.116015
AUNT ELLEN'S WATER	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
BEACH CLUB GRILLE	710	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6251821051	32.583076	-117.1318
BEACH SIDE STATION	681	HIGHWAY 75	I.B.	CA	91932	910.2	5541	447190	GAS	X	X	X		X	X			X	No	No	6262501200	32.584501	-117.118603
BEAN THERE BREWED THAT	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6251401400	32.584072	-117.120629
BERNARDO SHORES	500	HIGHWAY 75	I.B.	CA	91932	910.2	7033	721211	RVMOBIL		X			X				X	No	No	6251402000	32.586034	-117.120221
BIBBEY'S GIFT SHOP	903	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL									X	No	No	6253510100	32.580109	-117.131601
BIBBEY'S SHELLS AND ROCKS	903	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL									X	No	No	6253510100	32.580109	-117.131601
BIG KAHUNA'S PIZZA N STUFFS	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X				No	No	6251401900	32.584072	-117.120629
BILBRAY TAX SERVICE	970	SEACOAST DR	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891
BILLIE JEAN'S HAIRSTYLING	1144	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6261700500	32.58413	-117.109567
BOCA RIO PRINT	497	11TH ST	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6260600600	32.587617	-117.110422
BOWMAN'S MARKET	1008	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6262221100	32.584072	-117.111372
BOYS & GIRLS CLUB OF IB	847	ENCINA AVE	I.B.	CA	91932	910.2	7999	713990	BINGO										No	No	6264001200	32.580074	-117.115705

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
BOYS & GIRLS CLUB OF IB	847	ENCINA AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6264001200	32.580074	-117.115705
BRIDGET FAIRFIELD	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
BRYANTS AUTO REGISTRATION SVS	1235	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263111400	32.58364	-117.107297
BULLPEN TAVERN	706	HIGHWAY 75	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262011100	32.584607	-117.117769
BY THE SEA RESIDENTIAL CARE	829	EMORY ST	I.B.	CA	91932	910.2	8361	623990	DAYCARE										No	No	6263220400	32.581758	-117.112893
C.H. DONUTS	1070	13TH ST	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6265421100	32.577073	-117.105853
CA ALUMINUM&VINYL WINDOWS INC	754	10TH ST	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262821500	32.58299	-117.111994
CA STATE PARKS/TJ RIVER ESTUAR	301	CASPIAN WAY	I.B.	CA	91932		7299	561990	SERVICE										No	No	6324003200		
CAFE DI ROMA	633	9TH ST	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262121400	32.584935	-117.114134
CALIFORNIA-AMERICAN WATER COMP	1019	CHERRY AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6261021000	32.588539	-117.111495
CAMP, CATHY	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
CARL'S JR. #585	700	13TH ST	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263121300	32.583631	-117.105846
CARMEN'S BEAUTY SALON	1177	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000		
CHARLENE HEGARTY	710	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251821050	32.583076	-117.1318
CHOCO'S HAIRCUTTING	1256	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900	32.576671	-117.106592
CHURCH OF CHRIST OF IB	640	10TH ST	I.B.	CA	91932	910.2	8699	813410	NONPROF										No	No	6262212800	32.584827	-117.111994
CIRCLE H LIQUOR	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6251401400	32.584072	-117.120629
CITY NAILS	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
COLWELL REALTY	134	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6250140500	32.584081	-117.130909
COMPREHENSIVE TRAINING SYSTEMS	497	11TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
COMPUTERVILLE	740	10TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262822500	32.58316	-117.111993
CORONADO BAY URGENT CARE	600	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6251401900	32.584072	-117.120629

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
COW-A-BUNGA CA GLACIER FNAM	10	EVERGREEN AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	7602420903	32.579651	-117.132455
COX BAIT & TACKLE	996	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262211100	32.584093	-117.112008
CRAZY LADY'S	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401900	32.584072	-117.120629
CRISS CROSS SALON	1115	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263012300	32.58365	-117.110177
CROSSROAD PETROLEUM INC.	1185	PALM AVE	I.B.	CA	91932	910.2	5541	447190	GAS	X	X			X	X			X	No	No	6263021600	32.583675	-117.10857
CROW SANTIAGO JR	1155	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263022000	32.58365	-117.109153
CRYSTAL COVE COCKTAILS	995	PALM AVE	I.B.	CA	91932	910.2	7299	711120	DANCE										No	No	6262822200	32.583793	-117.111898
CVS/PHARMACY #9120	800	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262110600	32.584154	-117.115976
CYNTHIA SEPULVEDA	637	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584887	-117.114135
D & L LOCKSMITH	1148	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6261700500	32.584078	-117.109484
D'AMES FITNESS	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
DARMA DESIGNS	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
DEPENDABLE CARBURETOR EXCHANGE	660	EMORY ST	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6262122400	32.584593	-117.113213
DESPHY'S CLEANERS	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
DIEP LE	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
DIVINE RENEWAL	668	10TH ST	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262211000	32.584491	-117.111992
DOLLAR STORE	894	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262110700	32.584139	-117.114504
DON PANCHO'S MEXICAN FOOD	690	HIGHWAY 75	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6260705800	32.584833	-117.118321
DREW LINDEN MEIER	1155	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263022000	32.58365	-117.109153
E.N.S. COIN LAUNDRY	1167	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575346	-117.105546
ECONO LUBE N' TUBE	772	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6263121100	32.582738	-117.105835
ED'S SHOE REPAIR	635	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
EL CILANTRO CAFE	764	13TH ST	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263121100	32.582838	-117.105836
EL TAPATIO CATERING	667	SILVER STRAND BLVD	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6250241200	32.584428	-117.12804
EL TAPATIO RESTAURANT INC	260	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6250250100	32.584068	-117.128037
ELM ADULT DAY HEALTH CARE CTR	1220	ELM AVE	I.B.	CA	91932	910.2	8361	623990	DAYCARE										No	No	6263412000	32.580809	-117.1076
EPIFANIA A HENRY	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401400	32.584072	-117.120629

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
EPISCOPAL COMMUNITY SERVICES	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400	32.576657	-117.104813
EPISCOPAL COMMUNITY SERVICES	485	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8361	623990	DAYCARE										Yes	No	6320841100	32.576485	-117.122693
ESTHER'S MEXICAN FOOD	1004	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262221100	32.584048	-117.111402
EVERGREEN II	1258	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6265420900	32.57669	-117.106558
EVERYDAY FURNITURE	986	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262211200	32.584108	-117.112203
EVERYDAY FURNITURE	1003	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262910100	32.583741	-117.111743
EXPRESS APPLIANCE DELIVERY	497	11TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6260600600		
FAMILY BARBER SHOP	934	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262123200	32.584118	-117.113479
FAMILY HAIRCUTTERS	770	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121100	32.582763	-117.105835
FARMERS INSURANCE	932	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262123200	32.584118	-117.11352
FIRST ASSEMBLY OF GOD	588	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6261412200	32.585916	-117.114414
FIRST NATIONS SECURITY/ THE BR	874	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6253302200	32.58063	-117.131864
FITNESS WORLD	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
FLEET RESERVE CLUB 289	659	SILVER STRAND BLVD	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6250241000	32.584744	-117.128104
FLESH SKIN GRAPHICS	1155	PALM AVE	I.B.	CA	91932	910.2	7299	812199	TATOO										No	No	6263022000	32.58365	-117.109153
FRIENDS OF SD WILDLIFE REFUGES	301	CASPIAN WAY	I.B.	CA	91932		7299	561990	SERVICE										No	No	6324003200		
FRIENDS OF THE IB BRANCH LIBRA	810	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8699	813410	NONPROF										Yes	No	6264005400	32.576701	-117.116254
G & M OIL #177	907	PALM AVE	I.B.	CA	91932	910.2	5541	447190	GAS	X	X	X		X	X			X	No	No	6262810100	32.583717	-117.114056
G.E. BROWN SERVICE	497	11TH ST	I.B.	CA	91932	910.2	1799	235990	SUBCONT										No	No	6260600600	32.587617	-117.110422
GENE'S AUTOMOTIVE	1085	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6262911400	32.583743	-117.111075
GENE'S TOWING SERVICE	753	10TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6262910500	32.583013	-117.111675
GENE'S U'HAUL	1085	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6262911400	32.583743	-117.111075

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
GERALDINE VEDRENE	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
GIANT PIZZA KING #4	1070	13TH ST	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6265421100	32.577073	-117.105853
GIANT PIZZA KING #5	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6251401400	32.584072	-117.120629
GJAG CORP DBA PACIFIC POINT	657	10TH ST	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262221200	32.584637	-117.111674
GL ACCOUNTING SERVICES INC	662	10TH ST	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262211000	32.584563	-117.111993
GLORIA BARRIOS	770	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121100	32.582763	-117.105835
GOLDEN FINANCIAL	600	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
GOODWILL INDUSTRIES OF SD	880	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6262110700	32.584153	-117.114678
GRAND PLAZA STUDIO DENTISTRY	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400		
GREG MIXON	280	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
GUISEPPE'S PIZZA	1293	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6330222300	32.576394	-117.105869
H & R BLOCK/ HRB TAX GROUP ING	1313	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6270111800	32.583665	-117.10531
HEALTHYKICKS INC	1025	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262911500	32.58365	-117.111602
HELFON HANONO, OPTOMETRIST	894	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262110700	32.584139	-117.114504
HOMESTART	1290	EBONY AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6265000900	32.577627	-117.105983
HS CARS COMPANY INC	1333	PALM AVE	I.B.	CA	91932	910.2	5012	421110	AUTO					X					No	No	6270111900	32.583656	-117.104908
HUTCHINS REALTY	1138	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6261700600	32.58413	-117.109691
I B GROOMIN	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
I B LIQUOR	801	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL									X	No	No	6252720100	32.581626	-117.131662
I.B. UNITED METHODIST CHURCH	455	PALM AVE	I.B.	CA	91932	910.2	8699	813410	NONPROF										No	No	6252302300	32.58377	-117.123135
IB BEAUTIFUL INC	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
IB BY THE SEA GIFTS	862	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL									X	No	No	6253302100	32.580768	-117.131864
IB COIN LAUNDRY #5	760	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE									X	No	No	6263121100	32.582887	-117.105837

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IB DIVERS	641	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584839	-117.114136
IB FITNESS	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
IB FORUM	1079	SEACOAST DR	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6253922300	32.576938	-117.131594
IB GIFTS & BEACH GEAR/US INVES	710	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6251821046	32.583076	-117.1318
IB MORTGAGE & REALTY	1258	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6265420900	32.57669	-117.106558
IB NUTRITION STORE	888	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262110700	32.584145	-117.114578
IB PET	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
IB PRINTING	706	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6251811307	32.583429	-117.131854
IB SUPER WASH N DRY	1220	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262412700	32.58412	-117.107485
IDEAL CHOICE INSURANCE AGENCY	1233	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6263111400	32.58364	-117.107336
IMPERIAL BEACH CHAMBER OF COMM	702	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811303	32.583681	-117.131854
IMPERIAL BEACH HEALTH CENTER	949	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262811700	32.583725	-117.113201
IMPERIAL BEACH MANAGEMENT CO	120	ELDER AVE	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6253522600	32.578962	-117.131147
IMPERIAL BEACH PET HOSPITAL	538	12TH ST	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6261810800	32.587145	-117.108206
IMPERIAL BEACH PRESCHOOL NORTH	608	10TH ST	I.B.	CA	91932	910.2	8361	623990	DAYCARE										No	No	6262212700	32.585211	-117.111997
IMPERIAL BEACH PRESCHOOL SOUTH	1179	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8361	623990	DAYCARE										Yes	No	6330122400	32.57638	-117.108431
IMPERIAL BEACH SENIOR CITIZENS	1075	8TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6264005300	32.57721	-117.116392
IMPERIAL BEACH STUDIO DENTISTR	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400	32.576657	-117.104813

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IMPERIAL BEACH ULTRAMAR	1300	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	6162	522390	CKCASH									X	Yes	Yes	6272201100	32.57662	-117.105562
IMPERIAL BEACH WOMAN'S CLUB	1075	8TH ST	I.B.	CA	91932	911.11	8699	813410	NONPROF										Yes	No	6264005300	32.57721	-117.116392
IMPERIAL DONUTS +	1002	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262221100	32.584049	-117.111598
IMPERIAL NAILS	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900		
IMPERIAL TRAILER PARK	674	PALM AVE	I.B.	CA	91932	910.2	7033	721211	RVMOBIL										No	No	6251401700	32.58408	-117.118594
J & T NAILS	635	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
JACKMAN INDUSTRIES INC	708	BASSWOOD AVE	I.B.	CA	91932	910.2	1799	238990	GENCONT										No	No	6260211400	32.590412	-117.11766
JAMES ROWLES STUDIO	497	11TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
JEFFREY D. POINDEXTER LAW OFFI	936	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262123200	32.584118	-117.113439
JERSEY BOYS DINER	875	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6252730100	32.58063	-117.131594
JESSOP & SON LANDSCAPE	425	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6324002100	32.57645	-117.124119
JP MORGAN CHASE BANK, N.A.	1100	PALM AVE	I.B.	CA	91932	910.2	7323	561450	CRED										No	No	6261621700	32.583991	-117.110573
KATY'S CAFE	704	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6251811306	32.583555	-117.131854
K-C'S CHINESE FOOD	1299	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6330222300	32.576476	-117.105767
KEYSTONE ESCROW INC	129	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6251912601	32.583812	-117.131003
KFC IMPERIAL BEACH	1056	13TH ST	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6265421000	32.577288	-117.105851
K-PASTA	775	13TH ST	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6270112100	32.582716	-117.105515
L & M TIRE CO./ EXPRESS TIRE	950	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X			X	X			X	No	No	6262212000	32.584074	-117.112906
LA POSTA MARKET #2	1266	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5999	453998	RETL	X	X			X	X			X	Yes	Yes	6265420900	32.57669	-117.10642
LA TAPATIA	1295	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5999	453998	RETL										Yes	No	6330222300	32.576421	-117.105835

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LA'SHONDA MALDONADO	1155	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330311900	32.575525	-117.105545
LATTER RAIN MISSIONS & TRAININ	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
LAURA BECKER TATTOO	1155	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263022000	32.58365	-117.109153
LEADINGHAM REALTY	1062	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262222500	32.58413	-117.110966
LENS WIRELESS	639	7TH ST	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262011200		
LEON DISCOUNT TOBACCO FOOD MAR	185	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6251911700	32.583808	-117.130035
LINDA WHEELOCK WILLIS	204	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
LITTLE BONANZA	940	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262123500	32.584117	-117.113357
LOIS FUSCO	204	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
LORRAINE WEIMER	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
LUIS A CONTRERAS, DDS	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400	32.576657	-117.104813
LUNA'S BEAUTY DESIGNERS	204	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
LUPE MORENO SKIN CARE	235	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6252010500	32.583798	-117.128753
LUXURIOUS NAILS & SPA	710	HIGHWAY 75	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262011100	32.584596	-117.117714
MAI BUTON SEWING	1175	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575227	-117.105546
MAR VISTA BAPTIST CHURCH	888	5TH ST	I.B.	CA	91932	910.2	8699	813410	NONPROF										No	No	6253111500	32.580544	-117.122547
MARCO'S & RED HAWK	1205	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263110100	32.583672	-117.107867
MARIA E. SALAS RETCHLESS	235	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6252010500	32.583798	-117.128753
MARIA ESTHER VALDEZ MEZA	702	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811304	32.583681	-117.131854
MARISA'S MEXICAN SEAFOOD GRILL	285	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6252011100	32.583802	-117.127733
MARJO'S HAIR DESIGN	742	10TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262822500	32.583136	-117.111993
MARRERO'S CAR WASH	1257	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330222700	32.576389	-117.106592
MARY ANN V. SANVICTORES, DDS	600	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6251401900	32.584072	-117.120629

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MASON'S ALIGNMENT-BRAKE-MUFFLE	975	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X			X			X	No	No	6262820300	32.58368	-117.112424
MCDONALDS/SCAROB INC.	1135	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263011800	32.58365	-117.109781
MEIJO SUSHI, INC.	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6251401900	32.584072	-117.120629
MERCADO SHORES	639	7TH ST	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6262011200	32.585107	-117.117833
MICHAEL ROGERS DDS	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400	32.576657	-117.104813
MICHELLE RUBANO	1155	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263022000	32.58365	-117.109153
MICKIE'S BAR & GRILL	220	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING										No	No	6250230500		
MICKIES BAR AND GRILL	220	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6250230500	32.58407	-117.128987
MID ATLANTIC PROFESSIONALS, IN	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
MID ATLANTIC PROFESSIONALS, IN	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
MIKE'S CAR WASH	1117	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263012300	32.58365	-117.110138
MIKE'S UPHOLSTERY	1152	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330221600	32.575556	-117.105864
MISTY DAWN'S SALON	710	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251821050	32.583076	-117.1318
MOBILITIE, LLC	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
MONEYTREE INC.	1070	13TH ST	I.B.	CA	91932	911.11	6162	522390	CKCASH									X	Yes	Yes	6265421100	32.577073	-117.105853
MYA'S FLOWER DESIGN	245	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6252010600	32.583841	-117.128554
NAIL TECH	938	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262123200	32.584117	-117.113398
NAKAWATASE & CO, CPA	923	SEACOAST DR	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6253522700	32.57943	-117.131641
NATURAL SELECTION SURFBOARDS	536	13TH ST	I.B.	CA	91932	910.2	3569	333999	MANUF										No	No	6261920400		
NESTOR WATCH REPAIR CENTER	635	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
NEW BEGINNINGS FAMILY CHIROPRA	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400	32.576657	-117.104813
NFAROOQI ENT. LLC/JACK IN BOX	890	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262110800	32.584143	-117.114553
NICK PHAM	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
NOHEMI'S STUDIO	1260	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900	32.57669	-117.106523
NORTH ISLAND C.U.	1101	PALM AVE	I.B.	CA	91932	910.2	7323	561450	CRED										No	No	6263013300	32.583695	-117.110455
NOVAK SURFBOARD DESIGNS	536	13TH ST	I.B.	CA	91932	910.2	3569	333999	MANUF										No	No	6261920400		
OCHOA ELECTRIC	731	EMORY ST	I.B.	CA	91932	910.2	1799	235990	SUBCONT										No	No	6262820600	32.583288	-117.112914
OLIVE OIL CAFE	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6251401900	32.584072	-117.120629
OLLIE ANGEL SKATE SHOP	235	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6252010500	32.583798	-117.128753
ORCA MARITIME INC	497	11TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
OTAY MESA REALTY	970	SEACOAST DR	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891
PACIFIC BELL	1288	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262421000	32.58412	-117.106008
PACIFIC LEGACY PROPERTIES	702	SEACOAST DR	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6251811303	32.583681	-117.131854
PACIFIC REALTY	672	10TH ST	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262211100	32.584443	-117.111992
PACIFIC REALTY SALES & MGT INC	280	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
PALM AVENUE BOOKS DBA ROMANTIX	1177	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6263020200	32.58365	-117.108721
PALM AVENUE LIQUOR & MARKET	1200	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262412700	32.584013	-117.108023
PALM COIN LAUNDRY	187	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251912500	32.583807	-117.130001
PALM GLASS INC	754	10TH ST	I.B.	CA	91932	910.2	1799	235990	SUBCONT										No	No	6262821500	32.58299	-117.111994
PAN AM TAE KWON DO	730	HIGHWAY 75	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262010600	32.584507	-117.117457
PARMELA SAWHNEY, M.D., INC.	705	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262500200	32.58377	-117.117773
PARTY MART	1070	13TH ST	I.B.	CA	91932	911.11	5999	453998	RETL									X	Yes	Yes	6265421100	32.577073	-117.105853
PAUL MCNALLY REALTY	280	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
PENTECOSTAL CHURCH OF GOD	1402	HEMLOCK AVE	I.B.	CA	91932	911.11	8699	813410	NONPROF										Yes	No	6332311500	32.570446	-117.103273
PHIL AM BARBERSHOP	1305	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330310100	32.576394	-117.10549
PHIL VILLALOBOS BARBER SHOP	1051	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6272200200	32.577378	-117.105584

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
PHIL VILLALOBOS FAMILY BARBER	1070	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265421100		
PIZZA INDUSTRY/DOMINO'S PIZZA	1307	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6330310100	32.576393	-117.105453
POUR'S LIQUOR	1141	13TH ST	I.B.	CA	91932	911.11	5999	453998	RETL									X	Yes	Yes	6330312000	32.575733	-117.105544
PRECISION FOREIGN	1240	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6262412800	32.58417	-117.10717
PRETZLES AND MUCH MORE	10	EVERGREEN AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	7602420902	32.579651	-117.132455
PRO HAIRCUT BY LISA	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401400	32.584072	-117.120629
R J CAR WASH	730	10TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262822600	32.583282	-117.111992
R&C SCHAUMBURG/COLDWELL BANKER	862	SEACOAST DR	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6253302100	32.580768	-117.131864
REGENERATIONVILLE	740	10TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262822500	32.58316	-117.111993
RODRIGO'S MEXICAN FOOD	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6251401400	32.584072	-117.120629
ROLANDO'S TACO SHOP IB	805	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6252720100	32.58158	-117.131625
ROYAL CLEANER'S	1181	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575138	-117.105547
SAGE TRADITIONS ACUPUNCTURE	667	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262500900	32.58376	-117.118744
SALTWATER MAGIC	226	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6250230600	32.584068	-117.128843
SAN DIEGO PET FOOD DELIVERY	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
SAN YSIDRO HEALTH CENTER WIC P	886	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262110700	32.584147	-117.114603
SANDCASTLE REALTY	672	10TH ST	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262211100	32.584443	-117.111992
SANTANA MEXICAN FOOD	1337	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X				No	No	6270120900	32.583657	-117.104829
SAVE A LOT #916	805	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262500600	32.583782	-117.115348
SEA BREEZE COMMUNITY CHURCH	1220	ELM AVE	I.B.	CA	91932	910.2	8699	813410	NONPROF										No	No	6263412000	32.580809	-117.1076
SEACOAST PET CLINIC	600	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
SEACOAST PIZZA	807	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6252720100	32.581557	-117.131607
SEACOAST VITAMINS & HERBS	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401900	32.584072	-117.120629

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
SEASIDE BARBER & BEAUTY SHOP	702	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811304	32.583681	-117.131854
SIESTA RV PARK, INC.	409	PALM AVE	I.B.	CA	91932	910.1	7033	721211	RVMOBIL					X				X	No	No	6252302400	32.583846	-117.124483
SILVER STRAND FAMILY MEDICINE	707	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262500200	32.583768	-117.117727
SILVER STRAND SPINE & SPORT	667	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262500900	32.58376	-117.118744
SJ TRANSPORT INC	535	FLORENCE ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6261920300	32.587203	-117.106757
SKINNART	1221	PALM AVE	I.B.	CA	91932	910.2	7299	812199	TATOO										No	No	6263111400	32.583666	-117.107576
SMILES OF IMPERIAL BEACH	743	EMORY ST	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262820700	32.583141	-117.112914
SOFT WHISPERS	137	EVERGREEN AVE	I.B.	CA	91932	911.11	5999	453998	RETL										Yes	No	6253520500	32.579401	-117.130871
SOLARA MEDICAL SUPPLIES, INC	639	7TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262011200	32.585107	-117.117833
SOLARA MEDICAL/IB PHARMACY	720	HIGHWAY 75	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262010600	32.584552	-117.117585
SOMBRERO MEXICAN FOOD	189	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6251912500	32.583807	-117.129966
SOPHISTICATED AUTO	987	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE					X				X	No	No	6262822100	32.583678	-117.112177
SOUND OF BEACH	10	EVERGREEN AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	7602420901	32.579651	-117.132455
SOUTH COAST TILE CO.	1258	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	1799	235990	SUBCONT										Yes	No	6265420900	32.57669	-117.106558
SOUTHBAY TAX SERVICE	1064	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262222500	32.58413	-117.110951
SOUTHWEST WETLANDS INTERPRETIV	708	SEACOAST DR	I.B.	CA	91932	910.1	8699	813410	NONPROF										No	No	6251811308	32.583302	-117.131833
SPIRIT REAL ESTATE	700	SEACOAST DR	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6251811301	32.583808	-117.131833
ST. JAMES LUTHERAN CHURCH	866	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8699	813410	NONPROF										Yes	No	6264006900	32.576689	-117.115026
ST. JAMES LUTHERAN PRESCHOOL	866	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8361	623990	DAYCARE										Yes	No	6264006900	32.576689	-117.115026
STAINEDGLASSWINDOWS.COM	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629

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STAINEDGLASSWINDOWS.COM	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
STARDUST DONUT SHOP	698	HIGHWAY 75	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6260705900	32.584795	-117.118228
STATE FARM INSURANCE	1144	13TH ST	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6330221800	32.575675	-117.105863
STATE FARM INSURANCE	1239	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6263111500	32.58364	-117.10722
STEVEN Y. LUO, DDS APC	629	9TH ST	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262121400	32.584982	-117.114133
STL TECH DETALING, INC.	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
STRONG TOWER COMMUNITY CHURCH	1439	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330412800	32.576427	-117.102576
STYLISH MOMENTS SALON AND SUPP	1155	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330311900	32.575525	-117.105545
SUBSMART DELI-FRESH	1231	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263111400	32.58364	-117.107374
SUBWAY 20578	876	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6253302200	32.580607	-117.131864
SUN & SEA MANOR	740	7TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262501000	32.583219	-117.118156
SUSAN KIDDER	1155	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263022000	32.58365	-117.109153
SUZANNE ADAMS HAIR DESIGN	710	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251821050	32.583076	-117.1318
TAKING CARE OF BUSINESS	1146	13TH ST	I.B.	CA	91932	911.11	6162	522390	CKCASH										Yes	No	6330221700	32.575645	-117.105863
TERRA NOVA REALTY	600	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
THAT'S A WRAP	1146	13TH ST	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6330221700	32.575645	-117.105863
THE B.D. BARR COMPANY	1144	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330221800	32.575675	-117.105863
THE BOSN'S LOCKER	238	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL									X	No	No	6250230700	32.584024	-117.128556
THE BRIDGE	874	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6253302200	32.58063	-117.131864
THE CHECK CASHING PLACE, INC.	894	PALM AVE	I.B.	CA	91932	910.2	6162	522390	CKCASH									X	No	No	6262110700	32.584139	-117.114504
THE CONCEPTS & DESIGN	600	PALM AVE	I.B.	CA	91932	910.2	1799	238990	GENCONT										No	No	6251401900	32.584072	-117.120629
THE FINE AUTO STORE	942	PALM AVE	I.B.	CA	91932	910.2	5012	421110	AUTO					X					No	No	6262123500	32.584117	-117.113317
THE MAIL ROOM	757	EMORY ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262820800	32.582969	-117.112914
THE SCOREBOARD	951	PALM AVE	I.B.	CA	91932	910.2	7299	711120	DANCE									X	No	No	6262820100	32.583729	-117.112917
THE SURF HUT	710	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6251821049	32.583076	-117.1318

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THE TIN FISH RESTAURANT	910	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	7600820500	32.580008	-117.131864
THE VIP CLEANERS	1070	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265421100	32.577073	-117.105853
THE WAVE CAFE	809	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6252720100	32.581534	-117.131594
THE WRIGHT WAY	1051	13TH ST	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6272200200	32.577378	-117.105584
THOMAS GIBSON/DC EXC CORP	425	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6324002100	32.57645	-117.124119
THOMAS LINDLEY PARKING LOT	915	OCEAN LN	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6253301100	32.58006	-117.132435
TIM TOWNSLEY SURFBOARDS	206	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6250230300	32.584073	-117.129323
TITO AUTO SERVICE	1335	PALM AVE	I.B.	CA	91932	910.2	5012	421110	AUTO					X				X	No	No	6270111900	32.583657	-117.104868
TJ INFINITY	1220	PALM AVE	I.B.	CA	91932	910.2	7215	812310	COIN										No	No	6262412700	32.58412	-117.107485
T-MOBILE	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
T-MOBILE	1473	GROVE AVE	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6331713201	32.572689	-117.102051
TNT SURFBOARDS	536	13TH ST	I.B.	CA	91932	910.2	3569	333999	MANUF		X	X						X	No	No	6261920400		
TO MARKET TO MARKET	921	SEACOAST DR	I.B.	CA	91932	911.11	5999	453998	RETL										Yes	No	6253522700	32.579456	-117.131662
TOMMY'S TOBACCO	1297	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5999	453998	RETL										Yes	No	6330222300	32.576448	-117.105801
TONY'S HOTEL & APT LIQUIDATORS	536	13TH ST	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6261920400	32.586426	-117.105794
TOOLING AROUND INC	1461	5TH ST	I.B.	CA	91932	911.11	1799	238990	GENCONT										Yes	No	6322520700	32.570009	-117.122444
TRACY MICHELLE GUTIERREZ	1223	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263111400	32.58364	-117.107528
TUYET THI HA	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
U.S. SANDCASTLE COMMITTEE, INC	970	SEACOAST DR	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6253400700	32.578645	-117.131891
UNION BANK OF CALIFORNIA	900	PALM AVE	I.B.	CA	91932	910.2	7323	561450	CRED										No	No	6262123600	32.584088	-117.114171
UNITED PENTECOASTAL CHURCH	631	12TH ST	I.B.	CA	91932	910.2	8699	813410	NONPROF										No	No	6262414100	32.58494	-117.107942
VFW SILVER STRAND #5477	123	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X				No	No	6251912400		
VICKY HAIR & ACCESORIES	1223	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263111400	32.58364	-117.107528

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
VICTOR HERNANDEZ	1223	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263111400	32.58364	-117.107528
VIDEO 4 YOU	1051	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6272200200	32.577378	-117.105584
WALLY'S MARKETPLACE, INC	836	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL	X		X		X	X			X	No	No	6262110700	32.58419	-117.11523
WATERMILL EXPRESS	1261	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X				Yes	Yes	6330222700	32.57637	-117.106523
WEST COAST KITCHEN	208	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6250230300	32.584072	-117.129275
WIENERSCHNITZEL #358	1253	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263120100	32.583658	-117.106711
WILDCOAST	925	SEACOAST DR	I.B.	CA	91932	911.11	8699	813410	NONPROF										Yes	No	6253522700	32.579404	-117.131621
WOODYS AUTO CARE	200	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE		X	X		X	X			X	No	No	6250230200	32.584076	-117.129791
YAROSLAV KUSHNIR, M.D., INC.	184	PALM AVE	I.B.	CA	91932	910.1	8049	621399	HEALTH										No	No	6250141000	32.584077	-117.130062
YE OLDE PLANK INN	24	PALM AVE	I.B.	CA	91932	910.1	7299	711120	DANCE									X	No	No	6250111800	32.583973	-117.132151
YOUR T-SHIRT STORE	1181	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6263020200	32.58365	-117.108642

DECLARATION OF SERVICE BY EMAIL

I, the undersigned, declare as follows:

I am a resident of the County of Sacramento and I am over the age of 18 years, and not a party to the within action. My place of employment is 980 Ninth Street, Suite 300, Sacramento, California 95814.

On March 29, 2024, I served the:

- **Current Mailing List dated March 28, 2024**
- **Notice of Waiver of Procedural Requirements, Extension Request Approval, and Postponement of Hearing issued March 29, 2024**
- **Claimants' Comments on the Draft Proposed Decision and Parameters and Guidelines (Volumes 1-14) filed February 20, 2024**

  San Diego Regional Water Quality Control Board Order No. R9-2007-0001, Permit CAS0108758, Parts D.3.a.(3)(b)(iii), D.5.a.(1), D.5.a.(2), D.5.b.(1)(a), D.5.b.(1)(b)(iii-vi), D.5.b.(1)(c), D.5.b.(1)(d), D.5.b.(2), D.5.b.(3), E.2.f., E.2.g., F.1., F.2., F.3., I.1., I.2., I.5., J.3.a.(3)(c)(iv)-(viii), (x)-(xv), the first sentence of L.1. as it applies to the newly mandated activities, and L.1.a.(3)-(6), 07-TC-09-R County of San Diego, Cites of Carlsbad, Del Mar, Imperial Beach, Lemon Grove, Poway, San Marcos, Santee, Solana Beach, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, San Diego, and Vista, Claimants

by making it available on the Commission's website and providing notice of how to locate it to the email addresses provided on the attached mailing list.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this declaration was executed on March 29, 2024 at Sacramento, California.

Jill Magee

Jill Magee
Commission on State Mandates
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COMMISSION ON STATE MANDATES

Mailing List

Last Updated: 3/28/24

Claim Number: 07-TC-09-R

Matter: San Diego Regional Water Quality Control Board Order No. R9-2007-0001 Permit CAS0108758 Parts D.1.d.(7)-(8), D.1.g., D.3.a.(3), D.3.a.(5), D.5, E.2.f, E.2.g, F.1, F.2, F.3, I.1, I.2, I.5, J.3.a.(3)(c)iv-viii & x-xv, and L.

Claimants: City of Carlsbad
City of Chula Vista
City of Del Mar
City of Encinitas
City of Escondido
City of Imperial Beach
City of La Mesa
City of Lemon Grove
City of National City
City of Oceanside
City of Poway
City of San Diego
City of San Marcos
City of Santee
City of Solana Beach
City of Vista

TO ALL PARTIES, INTERESTED PARTIES, AND INTERESTED PERSONS:

Each commission mailing list is continuously updated as requests are received to include or remove any party or person on the mailing list. A current mailing list is provided with commission correspondence, and a copy of the current mailing list is available upon request at any time. Except as provided otherwise by commission rule, when a party or interested party files any written material with the commission concerning a claim, it shall simultaneously serve a copy of the written material on the parties and interested parties to the claim identified on the mailing list provided by the commission. (Cal. Code Regs., tit. 2, § 1181.3.)

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CITY OF
LA MESA
JEWEL of the HILLS

SANDRA L. KERL
CITY MANAGER

RECEIVED
February 20, 2024
Commission on
State Mandates

January 2008

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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CITY OF LA MESA

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM

2006/2007 ANNUAL REPORT

JANUARY 2008

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ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
303(d) List	2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
BIA	Building Industry Association
BMP	Best Management Practice
Calsense	Calsense Computerized Irrigation Control
Caltrans	California Department of Transportation
CASQA	California Stormwater Quality Association
CEQA	California Environmental Quality Act
CIP	Capital Improvement Project
City	City of La Mesa
COC	Constituents of Concern
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
COLD	Cold Water Habitat
CMP	Corrugated Metal Pipe
CTR	California Toxics Rule
D-MAX	D-MAX Engineering, Inc.
DAB	Development Advisory Board
Development Manual	City of La Mesa Storm Water BMP Manual, Part II
DPR	California State Department of Pesticide Regulation
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FOG	Fats, Oils, and Grease
gpm	Gallons Per Minute
HA	Hydrologic Area
HDPE	High Density Polyethylene
HHW	Household Hazardous Waste
IC/ID	Illicit Connection/Illegal Discharge
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
LTEA	Long Term Effectiveness Assessment
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable
mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) Per 100 Milliliters
MS4	Municipal Separate Storm Sewer System
Municipal Permit	San Diego Regional Water Quality Control Board Order No. 2001-01
NEC	No Exposure Certification

ACRONYMS AND ABBREVIATIONS (CONTINUED)

nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
nt	Not Tested
NTC	Notice to Comply
NTU	Nephelometric Turbidity Unit
PDPA	Pollutant Discharge Potential Assessment
PW	Public Works
RCP	Round Concrete Pipe
REC-1	Contact Recreation
REC-2	Non-Contact Recreation
RWQCB	Regional Water Quality Control Board
SIC	Standard Industrial Classification
Solana Center	Solana Center for Environmental Innovations
SSO	Sanitary Sewer Overflow
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TSS	Total Suspended Solids
WARM	Warm Water Habitat
WILD	Wildlife Habitat
WQO	Basin Plan Water Quality Objectives
WQTR	Water Quality Technical Report
WURMP	Watershed Urban Runoff Management Program
µg/L	Micrograms Per Liter
µmhos/cm	Micromhos Per Centimeter (equivalent to microsiemens per centimeter: µS/cm)

EXECUTIVE SUMMARY

In February 2001, the San Diego Regional Water Quality Control Board (RWQCB) issued Order No. 2001-01, a National Pollutant Discharge Elimination System (NPDES) Permit regulating discharges to storm drain systems within 18 municipalities in San Diego County, the County of San Diego, and the San Diego Unified Port District (collectively referred to a "Copermittees"). After the San Diego County Regional Airport Authority was created as a separate entity from the Port District in 2003, it was added as the twenty-first Copermittee. Order No. 2001-01, generally referred to as the Municipal Permit, required each Copermittee, including the City of La Mesa (City), to develop a comprehensive storm water management program known as a Jurisdictional Urban Runoff Management Program (JURMP). The City's JURMP includes storm water management strategies and protocols related to planning, construction, and existing developments. Major components include the implementation of Best Management Practices (BMP), water quality monitoring, and educational outreach efforts.

Each fiscal year, the City prepares an annual report on the implementation of its JURMP, as required by Municipal Permit Section I.1. The following JURMP Annual Report presents the activities implemented during the 2006/2007 fiscal year (July 1, 2006 through June 30, 2007). A brief summary of each of the 14 sections of the Annual Report is presented below.

Introduction
The introduction presents an overview of the City's storm water pollution prevention program and includes a bulleted summary of key accomplishments for the 2006/2007 reporting period. Also included in this section are responses to the RWQCB comments on the 2005/2006 JURMP Annual Report.

Municipal
The City continues to invest significant resources in further development and implementation of the municipal component of its storm water management program. The City has continued to install the Calsense Computerized Irrigation Control, which helps reduce water use, at various municipal facilities throughout the City and has continued to provide pet waste bags in all City parks. The City continues to implement an aggressive street sweeping schedule and Municipal Separate Storm Sewer System (MS4) maintenance schedule removing approximately 692 tons of material from street sweeping and 225.75 cubic yards of material from MS4 maintenance during 2006/2007. Catch basin filter inserts installed by the City prevented four cubic yards of pollutants from entering the MS4 and the City removed 77.5 cubic yards of material through non-mechanical open channel maintenance. The City continued to use the $14.5 million dollar low interest loan from the State Water Resources Control Board to install, rehabilitate, or replace 3,741 linear feet of sewer line and continued maintenance of the sanitary system to prevent sanitary sewer overflows. The City's Environmental Specialist conducted inspections at all high priority municipal facilities during 2006/2007.

The City held 20 training sessions for City staff, and the City's Environmental Specialist attended a number of different training sessions, meetings, and outreach events. The City continued to provide new Public Works Operation Center employees with the City's Municipal Program Storm Water Best Management Practices Notebook. A variety of other educational information, fliers, and brochures were made available on the City's Storm Water Bulletin Board, which is displayed in City Hall. A notable achievement during the 2006/2007 reporting period was the adoption of an ordinance prohibiting smoking in public parks, which is anticipated to significantly reduce cigarette debris. The ordinance will go into effect in 2007/2008.

Industrial/Commercial

During 2006/2007 the City inspected all high priority industrial facilities and provided corrective actions to each facility based on inspection findings. Based on inspection findings and complaints received to the City's storm water hotline, the City issued Notices of Violation (NOV) to 4 industrial facilities. The City responded to 23 complaints received by the City's storm water hotline regarding commercial facilities. The City issued 10 NOVs to commercial facilities as a result of complaint investigations. The City ensured that all complaints were investigated immediately and resolved. The City continued to provide educational outreach material to industrial and commercial businesses. In response to the findings of the City's Dry Weather Field Screening and Analytical Monitoring Program, the City sent exceedance notification letters and educational material to hundreds of commercial facilities. The letters described the pollutants found and BMPs to prevent discharge of such pollutants.

Residential

Residential areas comprise much of the land-use in the City of La Mesa. For this reason, the City has implemented a variety of programs aimed at encouraging residents to implement pollution prevention practices, BMPs, to dispose of wastes properly, and to be involved in the City's storm water program. The City continued to include storm water-related articles in the quarterly newsletter, the *La Mesa Focus*. Each issue of the *La Mesa* Focus newsletter is sent to over 27,500 residential addresses in the City. The newsletter is also mailed to 2,500 business addresses, and additional copies are available at City Hall, the library, the Adult Enrichment Center, and on the City's website. The City held six household hazardous waste (HHW) events to facilitate the proper disposal of HHW in the City. The City provided door-to-door pickup for seniors and disabled residents. The City sent letters in response to the 2006 Dry Weather Field Screening and Analytical Monitoring Program to hundreds of residents in the City notifying them of pollutant exceedances in their neighborhoods. The letters described the exceedances and BMPs to prevent discharge of pollutants. Educational flyers and fact sheets were mailed with the letters. Throughout 2006/2007 the City continued to encourage residents to report storm water violations to the City's storm water hotline. The City issued one verbal warning, three written warnings, and seven NOVs to residents in the City.

Development Planning/Construction

During 2006/2007 the City continued to utilize a checklist to help determine which storm water requirements are applicable to each development project and which projects are priority projects. The City continued to require the development and implementation of

Water Quality Technical Reports (WQTR) as defined in the City's Standard Urban Storm Water Mitigation Plan (SUSMP) Ordinance for Priority Projects. WQTRs provide post construction BMP plans to mitigate storm water pollution in perpetuity. Project proponents and City inspectors continued to meet with the Development Advisory Board to discuss projects. Eleven development projects were designated as Priority Projects requiring WQTRs. The City continued to inspect high priority construction sites weekly during the wet season and at least twice for medium and low priority sites during this reporting period. All construction sites subject to the General Construction Permit were required to develop and implement site-specific Storm Water Pollution Prevention Plans. The City continued to provide educational material to developers, construction site owners and operators, and City inspectors. The City developed a brochure for the construction community with information regarding the SANCO Resource Recovery Facility in Lemon Grove.

Illicit Discharge Detection and Elimination

The Dry Weather Monitoring Program and the Storm Water Hotline continue to be the primary sources through which illicit connections and illegal discharges (IC/ID) are detected. During this reporting period, 89 complaints were received through the City's storm water hotline and website. The City conducted its Dry Weather Field Screening and Analytical Monitoring Program during the summer of 2006 and the summer of 2007. Visual observations and field screening were conducted at 18 Dry Weather Monitoring Program sites, and water samples from over 25 percent of the sites underwent laboratory analysis for additional parameters. Based on the results of the monitoring, eight follow-up visits were made. The City responded immediately to eliminate the source(s) of pollution identified by these investigations. All IC/IDs detected in 2006/2007 were eliminated during the reporting period.

Education/Public Participation

During 2006/2007 the City continued to provide the general public with educational outreach material and opportunities to participate in the implementation of the storm water program. The City conducted numerous training sessions for municipal personnel and the City's Environmental Specialist attended a number of training sessions. The City generated 375,569 impressions. The City collaborated with local environmental groups to host the Creek to Bay Clean Up and the California Coastal Clean Up Day, both at two locations in the City. The City also hosted a Park Appreciation Day where 400 volunteers removed five tons of trash and debris. The Adopt-a-Park, Adopt-a-Block, and Canine Corners programs continued during this reporting period. These programs involve residents in keeping their community free of trash and debris, including pet waste. The City also provided residents with a number of opportunities for large item and HHW disposal.

Assessment of JURMP Effectiveness

The regionally developed approach to program effectiveness assessment includes program planning, BMP selection, and evaluation of six tiered levels of targeted outcomes. Proceeding from Level 1 to Level 6, targeted outcomes become less focused on activities conducted and more focused on changes in water quality. The higher levels typically require considerably more data and are generally harder to make definitive conclusions about. The City used this regionally developed approach to assess its program,

incorporating some City-specific components such as analysis of water usage for park irrigation, inspection data, and historical water quality monitoring data. The City has also continued to employ a numeric scoring system to assess BMP implementation and the level of storm water knowledge during industrial and commercial inspections.

Fiscal Analysis
The fiscal analysis of the City's storm water program is presented in Section 12 of this JURMP Annual Report. The expenditures for the 2006/2007 fiscal year were $575,477 and the proposed budget for the 2007/2008 fiscal year is $742,615.

Special Investigations
The City continued collaborations with the RWQCB on inspection and enforcement of the industrial business Rainbow Steel. As a result of the joint efforts of the City and the RWQCB, the business has begun to come into compliance with storm water regulations. To better understand the quality of water flowing out of the City at its major discharge points, the City also conducted additional water quality monitoring studies during wet and dry weather conditions. The wet weather study involved sampling at six sites, and the dry weather study collected data from seven sites. Collection of this information should help the City more effectively target its program implementation.

Conclusions and Recommendations
General conclusions and recommendations are presented in Section 14. During 2006/2007, the City continued to improve the planning and implementation of its program and began to prepare for the new requirements of the recently reissued Municipal Permit, Order No. R9-2007-0001. Since 2002 when the JURMP was initially adopted, the City has made a number of notable achievements. Some of these include raising the level of awareness of residents and businesses, regularly putting on cleanup programs, establishing new water quality monitoring programs, eliminating IC/IDs, and requiring higher levels of BMP implementation for construction projects, new development, and existing development. During 2007/2008, the City will continue to refine and adjust existing programs and will develop new programs to meet the requirements of Order No. R9-2007-0001.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____

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City Manager

Date: January 2008

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1 INTRODUCTION

In early 2001, the San Diego Regional Water Quality Control Board (RWQCB) issued Order No. 2001-01 (Municipal Permit), a National Pollutant Discharge Elimination System (NPDES) permit that regulates urban runoff discharges from Municipal Separate Storm Sewer Systems (MS4) in the San Diego area. The Municipal Permit regulates urban runoff discharges of 21 jurisdictions within the County of San Diego, including the City of La Mesa, which are collectively referred to as "Copermittees."

The Municipal Permit required each Copermittee to prepare a Jurisdictional Urban Runoff Management Program (JURMP), which the City developed and finalized in early 2002. The JURMP includes program implementation and management strategies, Best Management Practice (BMP) requirements, education outreach methods and strategies, strategies to verify compliance with applicable regulations, and enforcement protocols. The JURMP includes components for development projects and the maintenance of various types of existing development, including both public and private facilities. Overall, the programs set forth in the JURMP document are intended to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP).

As required by the Municipal Permit Section I.1, each year the City develops an Annual Report to present information on the implementation of its JURMP during the past fiscal year. The City received RWQCB comments on its 2005/2006 JURMP Annual Report in a letter dated September 21, 2007. Those comments and the City's response are presented in Attachment 1.1 of this Annual Report.

This Annual Report describes the City's implementation of its Storm Water Program during the 2006/2007 reporting period. The reporting period is from July 1, 2006 through June 30, 2007. A summary of the major accomplishments during 2006/2007 is provided below, and more detailed discussions of the City's activities are provided in the following sections of this Annual Report.

SUMMARY OF ACCOMPLISHMENTS IN 2006/2007 REPORTING PERIOD

During 2006/2007 the City both initiated new programs and continued to implement and refine existing programs. The following bullets briefly summarize notable achievements and activities from the 2006/2007 reporting period. Additional detail can be found in the following sections of this Annual Report.

- Completed annual storm water compliance inspections of all high priority municipal facilities.
- Continued maintenance of 22 filter inserts along University Avenue. Four cubic yards of sediment, trash, and debris were recovered from the filters during 2006/2007.

- Continued the use of Hydrotex lubricant for oil changes for municipal vehicles. In some cases, this helps reduce oil change frequency to every 9,000 miles instead of every 5,000 miles, which reduced the quantity of waste oil generated.
- Provided 20 training sessions for municipal personnel. The City's Environmental Specialist attended additional training sessions and meetings.
- Continued to maintain and update the NPDES Storm Water Bulletin Board at City Hall. The bulletin board is located in a high traffic area near the front desk of the Engineering Division.
- Continued distribution of a Municipal Program Storm Water BMP Notebook for newly-hired City employees.
- Continued to install Calsense Computerized Irrigation Control (Calsense) at City facilities, which helps reduce water use and over-irrigation. Calsense is now in operation at 21 locations in the City.
- Swept 8,280 curb miles of streets, removing 692 tons of sediment and debris.
- The City maintained 100 percent of the MS4 cleanout locations and removed 225.75 cubic yards of debris. An additional 77.5 cubic yards of debris was removed from open channels in the City through non-mechanical means.
- Continued to use a $14.5 million grant from the State Water Resources Control Board (SWRCB) to fund sanitary sewer improvements. The sewer improvements constitute the largest infrastructure project in City history and are expected to be completed in 2008. These upgrades are a preventative maintenance measure that will help ensure sewer overflows remain an infrequent occurrence in the City.
- Continued to maintain sewer laterals known to be prone to grease blockages monthly.
- Replaced approximately 150 linear feet of storm drain piping from corrugated metal pipe (CMP) with high density polyethylene (HDPE) pipe or round concrete pipe (RCP).
- Inspected all high priority industrial facilities.
- Began developing forms to more accurately track verbal warnings and written warnings.
- Issued 14 NOVs to industrial and commercial businesses. These enforcement actions were mainly related to discharges of wash water investigated during responses to complaints. In each case, the City resolved the issue in a timely manner.
- Continued distribution of educational fact sheets on La Mesa's two watersheds, San Diego Bay and San Diego River.
- Completed the installation of one storm water kiosk at La Mesita Park. The City plans to install one more kiosk during 2007/2008.
- Maintained the 26 pet waste bag dispensers at City parks. A total of 9,000 pet waste bags were used during 2006/2007.

- Published storm water articles in four *La Mesa Focus* newsletters. Topics included BMPs, public participation events, and waste disposal information. Approximately 30,000 copies of each issue were distributed to industrial and commercial businesses and residents in the City.
- Continued to collaborate with Target and Dixieline Lumber in the City to distribute Integrated Pest Management (IPM) cards at garden center check out stands.
- Mailed over 1,212 letters to City residents and businesses in response to recommendations associated with the 2006 Dry Weather Monitoring Program findings. The letters provided information on BMPs for residents and businesses.
- Collected over 83,000 pounds of household hazardous waste (HHW) at six disposal events and through door-to-door collections for the disabled and senior citizens.
- Continued distribution of construction educational materials, including guides for construction activity and for construction and demolition.
- Developed a brochure on construction waste recycling at the SANCO Resource Recovery Facility.
- Continued with the Development Advisory Board (DAB) meetings for development projects. Eight Priority Projects submitted Water Quality Technical Reports (WQTR) for review during this reporting period.
- Continued to use a SUSMP requirements checklist while reviewing WQTR for Priority Projects.
- Inspected all high priority construction sites during the wet season (October through April) each week and medium and low priority twice during the wet season. City building inspectors now check BMP implementation during building inspections.
- Completed the 2006 Dry Weather Monitoring Program and follow-up investigations. The City implemented the recommendations listed in the 2006 Dry Weather Monitoring Program final report. The City also initiated its 2007 Dry Weather Monitoring Program during the reporting period.
- Continued to receive complaints via the storm water hotline and the City website. A total of 89 public complaints were recorded, investigated, and resolved during this reporting period.
- Worked with I Love a Clean San Diego (ILACSD) and San Diego Coastkeeper to host Creek to Bay Cleanup and Coastal Clean Up Day. A total of 53 volunteers removed 427 pounds of debris during these events.
- Hosted Park Appreciation Day, which was a cleanup of City parks involving 400 volunteers and removing over five tons of debris.
- Made 375,569 impressions through outreach efforts.

- Continued the Adopt-a-Park Program and the Adopt-a-Block Program. The City also continued its Canine Corners Program, through which residents clean up pet waste at Harry Griffen Park on a daily basis.
- Passed an ordinance prohibiting smoking at all City parks. This ordinance is anticipated to reduce the amount of cigarette debris deposited at City parks and eventually carried to the MS4.
- Participated in Project Clean Water regional outreach group and San Diego River and San Diego Bay Watershed Urban Runoff Management Program (WURMP) groups.

JURMP ANNUAL REPORT ORGANIZATION

This annual report is divided into the following 14 Sections.

Section 1	Introduction
Section 2	Municipal
Section 3	Industrial
Section 4	Commercial
Section 5	Residential
Section 6	Development Planning
Section 7	Construction
Section 8	Illicit Discharge Detection and Elimination
Section 9	Education
Section 10	Public Participation
Section 11	JURMP Effectiveness Assessment
Section 12	Fiscal Analysis
Section 13	Special Investigations
Section 14	Conclusions and Recommendations

The municipal, industrial, commercial, residential, and construction components were addressed and organized by presenting priority sources, BMP Requirements, BMP Implementation, Pollution Prevention, Inspections, and Compliance and Enforcement. Utilizing the aforementioned format facilitated in addressing the same elements presented in the Municipal Permit. The remaining sections focused on general program activities.

2 MUNICIPAL

The City of La Mesa owns and operates a variety of municipal facilities including parks and recreational facilities, public works facilities, public roads, administrative facilities, and the City's extensive MS4. The City sets a good example for City residents and businesses by implementing BMPs at all municipal facilities to reduce the discharge of pollutants to the MEP. While all City divisions are involved in storm water responsibilities related to each specific division, the City's Engineering and Operations Divisions manage and oversee the bulk of the City's storm water program, including the management of the municipal component.

The City initially emphasizes preventing pollutants from entering receiving waters through the implementation of pollution prevention measures and source control BMPs, although structural BMPs may be implemented where necessary. The City requires that minimum BMPs be implemented at each fixed municipal facility and during mobile municipal activities. BMPs must be implemented during routine activities that take place at municipal facilities and during emergency situations when practicable. The City inspects all high priority municipal facilities on an annual basis to ensure BMPs are implemented correctly and functioning properly. Public Works employees maintain and implement a Storm Water Management Plan (SWMP) at the Public Works Operation Center. In addition to the BMPs implemented at municipal areas and during municipal activities, the City maintains a rigorous street sweeping program and MS4 and sewer maintenance programs to further reduce or eliminate pollutants from entering the storm water conveyance system.

PRIORITY SOURCES

The City continues to maintain a prioritized, watershed-based inventory of municipal facilities. These facilities have been prioritized based on threat to water quality into one of three categories: high, medium, or low. The City updates the inventory and prioritizations annually. Included on the City's inventory, Table 2-1 at the end of this section, are 22 public parks and recreational facilities, four administrative facilities, three fire stations, one police station, three community service buildings, seven City Public Works Facilities, and four parking facilities. Additionally, City roads, streets, and highways and the City's MS4 are included on the inventory. City roads, streets, and highways do not include Interstate 8 and State Route 125, both of which are under California Department of Transportation (Caltrans) jurisdiction.

As previously mentioned, each facility is assigned a prioritization based on its threat to water quality. The inventory includes 10 high priority facilities that include the Public Works Operations Center, public parking lots, the MS4, and roads, streets, and highways. The inventory lists nine medium priority facilities, including the fire stations, the community pool, the pump house, police station, some of the City parks, and the community service buildings. Low priority sites include smaller parks and administration or recreational buildings.

POLLUTION PREVENTION

The City continues to implement pollution prevention measures, such as good housekeeping measures, at all municipal facilities and during municipal activities. Pollution prevention measures are practiced to minimize generating pollutants from a variety of sources. Pollution prevention measures are presented to municipal personnel during regular training sessions, refresher sessions, in print material, on the City's bulletin board, and are discussed during routine municipal activities, when applicable. Pollution prevention concepts are also presented during storm water compliance inspections of municipal facilities and during departmental meetings. City staff are encouraged to perform regular sweeping of pervious outdoor areas, schedule landscaping activities based on weather conditions and forecasts, reduce the use of toxic materials by selecting less toxic ones. The City did not change any pollution prevention measures during 2006/2007. Municipal personnel are encouraged to pass on any information provided to them about pollution prevention measures to other employees, and to business owners and residents of the City.

BMP REQUIREMENTS

BMPs for municipal facilities and activities were developed as part of the City's JURMP. Table 2.4 in the City's JURMP presents a summary of the minimum BMPs for municipal facilities and activities. The table shows which classes of BMPs, such as Employee Training or Material Storage Practices, are applicable to each facility or activity type, such as Landscape and Recreational Facilities or Roads and Street Maintenance. Appendix C of the City's JURMP describes, in detail, information regarding non-storm water discharges, BMPs for spill prevention, control and cleanup, vehicle and equipment repair, cleaning, and fueling, waste handling and disposal, good housekeeping practices, landscape maintenance, and drainage system maintenance. During this reporting period, there were no changes or modifications to the City's municipal BMP requirements.

BMP IMPLEMENTATION

As previously mentioned, the City's JURMP includes an established set of minimum BMPs for municipal areas and municipal activities. City personnel are required to implement BMPs for specific areas and activities at all times. Additionally, City personnel are expected to substitute other, equally effective BMPs if for some reason the designated minimum BMPs cannot be implemented. The City continues to provide training and refresher sessions to municipal personnel to ensure that BMP implementation and operation are understood as well as the importance of BMP implementation.

In addition to the activity-specific BMP requirements for municipal facilities and activities in the JURMP, the Public Works Operation Center also implements a site-specific SWMP. The purpose and the design of the SWMP is similar to the Storm Water Pollution Prevention Plans (SWPPP) developed for industrial sites, but the Public Works Operation Center is not subject to the Industrial Permit. The City developed the SWMP to provide site-specific BMP implementation guidelines. The plan was developed by the City's storm water consultant, D-MAX Engineering, Inc. (D-MAX), based on field visits and review of site plans. In addition to pollution prevention measures and source control BMPs, which are emphasized in the plan, the drainage inserts have been installed to provide additional pollutant removal.

Education is a key component of a successful municipal NPDES program. The City conducts a number of training sessions, tailgate meetings, and refresher sessions for municipal employees. Additionally, print material is made available and a bulletin board in the Engineering Department building is dedicated to storm water-related topics, brochures, and photos. The City's municipal education program is discussed in more detail later in this section and in Section 9 of this document.

As required by the Municipal Permit, the City inspects high priority municipal facilities annually. Municipal facility inspections are designed to assess whether changes in BMP implementation are necessary and to ensure that BMPs are being implemented properly. Inspections of municipal facilities and the associated findings are discussed in more detail later in this section.

MUNICIPAL ACTIVITIES

Municipal areas and activities have the potential to discharge pollutants when BMPs are not implemented properly. City personnel are provided with training and materials that stress the importance of BMP implementation and that describe how to properly implement BMPs for specific areas and activities. Descriptions of municipal areas and activities and their associated BMPs are listed below.

Public Works Operation Center

Though listed separately on the City's inventory, the City's Public Works Yard, Public Works Fleet, Public Works Storage and Maintenance Yard, and the Public Works Storage Yard are located at the same location, and are collectively referred to as the Public Works Operation Center. In 2003, a SWMP was developed for the Public Works Operation Center to outline BMPs for specific activities and areas of the site. During the annual inspections of the facilities that make up the Public Works Operation Center, the City's Environmental Specialist makes sure that BMPs detailed in the SWMP are being implemented. Listed below are some of the site specific BMPs that are detailed in the SWMP.

- Patch and oil trucks should be stored under canopies.
- Material stockpiles should be kept in covered and bermed areas.
- Material inventories should be limited to prevent long term storage.
- Stored containers should be properly labeled.
- Vehicles should be washed in the designated covered, contained wash pit. The wash pit drains first to a clarifier and then to the sanitary sewer system.
- The seven catch basin filters installed at the Public Works Operation Center should be maintained regularly including regular clean outs of material captured during storm events.

To ensure that the SWMP is being implemented properly, meetings and training sessions are conducted for personnel at the Public Works Operation Center. Additionally, all new Public Works Operation Center employees are provided a City of La Mesa Municipal

Program Storm Water Best Management Practices Notebook (Attachment 2.1), which includes BMP fact sheets relevant to municipal activities and facilities. The Public Works Operation Center supervisors regularly hold meetings at which storm water pollution prevention and BMP implementation topics are discussed. Supervisors conduct routine inspections of the Public Works Operation Center including monthly inspections of the catch basin filters, and inspections before and after rain events.

The City has installed storm drain filter inserts at seven catch basins at the Public Works Operation Center. The inserts are designed to catch sediment and other large debris and hydrocarbons before entering the MS4. In addition to the storm drain filters installed throughout the site, the City continues to sweep the area once or twice a week as deemed necessary.

Erosion and Sediment Control

The City implements a number of different erosion and sediment control BMPs to stabilize soil and prevent the transport of sediment to receiving waters. In many municipal areas, simply preserving vegetative ground cover or mulching bare ground is effective in controlling erosion. Where necessary, the City implements BMPs such as geotextiles, silt fencing, and fiber rolls to prevent sediment transport. City personnel routinely inspect permanent erosion control BMPs installed at municipal facilities to ensure that they are placed or installed properly and are functioning properly. Good housekeeping measures, such as regular sweeping, at municipal facilities help mitigate sediment discharges. Additionally, the City has installed filter inserts at the Public Works Operations Center and in several drains along University Avenue. City personnel routinely inspect and maintain the inserts to ensure that they are functioning properly. Irrigation controls have been installed at many municipal facilities to prevent transport of pollutants, such as sediment resulting from over-irrigation.

Roadway and Bridge Maintenance

The City sweeps all public streets. The City employs a contractor for sweeping activities monitored by the City's Street Maintenance Supervisor.

The street sweeping schedule is as follows:

- Downtown areas weekly
- Residential areas weekly or monthly
- Parking lots and parking areas at municipal parks weekly
- Center islands twice per month
- Public Works Operation Center once or twice weekly

In addition to the aggressive street sweeping schedule already implemented by the City, all City streets can receive additional sweeping on request or after spills or automobile accidents.

To facilitate the street sweeping program and ensure the entire street area can be reached, the City maintains 19 permanent posted signs to inform the public that parking is prohibited during certain hours on designated street sweeping days. The City issues tickets

to vehicles that remain parked on streets during the posted times. If additional sweeping is requested, the City posts temporary no parking signs.

During 2006/2007, 8,280 curb miles were swept removing approximately 692 tons of trash and debris. As similar to previous years, the Street Maintenance Supervisor estimated that approximately 80 percent of the debris collected was sediment, and 20 percent was composed of trash and organic debris.

Material Management
Since materials management activities have the potential to introduce pollutants and possibly affect the pH of receiving waters, steps must be taken during the storage and handling of paving-related materials to reduce the discharge of pollutants to the MEP. The City implements the following materials management pollution prevention measures and BMPs.

- Patch and oil trucks are typically stored under canopies.
- Stored materials such as sand, soil, gravel, cold mix, and decomposed granite are stored in a permanent material separator.
- Concrete handling procedures include storing material in bermed, covered areas and away from drainage areas.
- Material inventories are limited to prevent long-term storage.
- All stored containers are labeled properly.
- Paving materials are stored away from drainage areas if possible.
- Concrete and asphalt materials recovered during routine repairs are recycled.
- Paving does not take place during rain events and is minimized during the wet season.
- Paving equipment is cleaned off site or in designated cleaning areas.
- Concrete trucks are cleaned off site or at designated areas on site. When necessary, drains are blocked off with appropriate BMPs to prevent discharge of concrete wash water from entering storm drain inlets.

Although all concrete work is done with contracted staff, the City requires that the work be completed in a manner that complies with the required BMPs in Appendix C of the City's JURMP. City inspectors also monitor BMP implementation by the contractors to verify compliance.

Municipal Vehicle Maintenance
The municipal vehicle maintenance facility is located at the City's Public Works Operation Center. Since the vehicle maintenance facility is part of the Public Works Operation Center, BMPs for all maintenance activities are included in the Public Works Operation Center SWMP.

Vehicle maintenance and cleaning activities can potentially introduce pollutants such as oil, grease, metals, and detergents into the City's MS4 if BMPs are not effectively implemented. Spill response kits are available throughout the facility. Absorbent material is commonly used to treat oil stains. Oil changes are conducted every 5,000 miles under typical fleet maintenance procedures. The City continues to use formulated Hydrotex lubricants to minimize the frequency of oil changes, and depending on the type of vehicle and its use, oil changes may be conducted every 9,000 miles rather than every 5,000 miles depending on the vehicle type. Less frequent oil changes helps minimize the quantity of used oil generated.

The City implements preventative maintenance measures to reduce the risk of an operational problem with any of the vehicles that may discharge pollutants to the MS4. Vehicle operators check their vehicles every Monday for leaks and vehicle maintenance checks occur every 5,000 miles or annually, whichever comes first.

The City implements BMPs to prevent the discharge of wash water, and associated pollutants such as oil and grease, metals, sediment, and surfactants, from vehicle washing activities. Vehicles are washed using a wash rack to capture all wastewater. The wastewater is directed to a clarifier and then discharged to the sanitary sewer system.

This reporting period, the City maintained 200 municipal vehicles, which include the following vehicle types:

- Dump Trucks
- Fire Trucks
- Pavers
- Street Sweepers
- Police Cars
- Rider Mowers
- Tree Service Trucks
- Trailers
- Heavy Duty Trucks, Medium Duty Trucks, and Light Duty Trucks

Landscaping Maintenance

The City maintains 22 public parks and recreational areas, including a community pool, and a large sports field complex. Personnel from the Parks Division of the City's Public Works department are responsible for maintenance activities at these facilities, including landscaping. Parks maintenance staff mow, mulch, and apply landscaping chemicals as necessary. Additionally Parks Maintenance staff re-stock the pet waste bag dispensers and ensure they work properly. The City continues to support the Adopt-a-Park Program for volunteers to participate in keeping City parks clean. The City also supports the Canine Corners Program, which involves park patrons volunteering to keep the designated dog area at Harry Griffen Park free of pet waste. Parks maintenance staff also work with St. Madeline's Sophie Center to employ developmentally disabled individuals for park

maintenance activities. Both the Adopt-a-Park and the partnership with St. Madeline's Sophie Center are discussed in Section 9 of this Annual Report. The City passed an ordinance that prohibits smoking in public parks, which should decrease the amount of cigarette debris throughout City parks.

City personnel involved with landscaping activities are trained in proper handling, application, and disposal techniques for chemical materials, and practicing IPM techniques during maintenance activities. Additionally, the Parks Department implements BMPs to minimize trash, organic debris, and other pollutants from entering the City's MS4. During this reporting period, the City implemented the following landscaping-related BMPs and activities to prevent storm water pollution:

- Landscaped irrigation areas throughout the City are monitored by licensed City personnel to ensure the systems are operating properly. The irrigation systems are adjusted regularly to minimize over-irrigation and runoff. Nearly all of the City parks have been brought online with the computerized irrigation system Calsense, which is described in detail later in this section.
- Drip irrigation is used when possible.
- The City continues to maintain native vegetation as the landscaping in portions of Briercrest Park to minimize the need for pesticides, fertilizers, and irrigation.
- City personnel maintain the appropriate certification necessary for fertilizer, herbicide, pesticide, and irrigation application. To maintain certification, personnel must attend refresher training courses during the year.
- The City uses only herbicides that are very quickly absorbed into the plant material and are inert once in contact with the soil.
- Landscaping chemicals are not applied prior to storm events or when there is a likelihood of potential transport to the MS4. Applications are only made using low pressure and low volume to minimize overspray and to prevent any pollutants from accidentally being spilled.
- Pesticides and herbicides continued to be used for weed and rodent control only as needed. The program is strictly monitored by the California State Department of Pesticide Regulation (DPR) through several sections of the California Code of Regulations. Approximately 26.1 pounds of rodent control substances were used during this reporting period, which is less than the 71 pounds used in 2005/2006. A total of 117.6 gallons of herbicides were used during this reporting period.
- A Licensed Pest Control Advisor and Qualified Applicator Certificate holder continued to conduct inspections to monitor the storage, handling, and disposal of pesticides during each application. No other pesticides besides the herbicides mentioned above were used during this reporting period.
- The City continues to mulch bare ground areas as a method to reduce the need for pesticides, excessive irrigation, and to reduce erosion potential.
- Weed control is also performed by manual techniques such as weed whips and hoeing for weed control, where practicable.

- The City continues to use pressure and soapy water sprays for insect control in place of pesticides, when practicable.
- Fertilizers continue to only be applied to turf areas during the growing seasons: spring, summer, and fall. Application is conducted as per label instructions dealing with amounts per acre and the needs of the area involved. City staff ensures that any spills of fertilizer are swept up immediately. This reporting period, the City used 10.3 tons of fertilizer, which is less than the 11.3 tons of fertilizer used during 2005/2006.
- Green waste is mulched and reused when possible.

Calsense Computerized Central Irrigation Control
The City continues to utilize Calsense, an advanced automated irrigation system to prevent over irrigation from several municipal facilities. The use of this program reduces the use of faulty manual irrigation methods and allows the City to monitor irrigation activities from a central computer. The use of Calsense has streamlined irrigation activities for the City and has reduced the potential for over-irrigation or an undetected leak in the system and any pollutants that may be carried in such discharges.

The Calsense system monitors irrigation by including the use of master valves and flow sensing to prevent over-irrigation and also decrease water usage. By decreasing water usage and the amount of labor that needs to be invested in irrigation, Calsense benefits the City by reducing costs. A break in the system is recognized as a high flow, and the system is shut off until it is repaired. The use of this technology allows the City to prevent major leaks by detecting smaller leaks that may otherwise go undetected earlier than with a manual system. The automatic shutoff by Calsense saves thousands of gallons of water and prevents the runoff from carrying pollutants from the parks, streets, and municipal facilities into the storm drain system. The irrigation system can be controlled by a central computer, which calculates the best time for irrigation based on moisture readings, weather, and real time flow rates at every valve. Additionally, the system allows staff to manage the system more efficiently and with less chance of over-irrigation. The irrigation schedules can be designed for a long period of time or easily modified for weekly or daily needs if necessary. The system allows for the most efficient usage of water while minimizing the chance of over-irrigation and consequent introduction of pollutants to the City's MS4.

The City continues to work to convert the irrigation systems of City facilities, particularly parks, to the Calsense system. This reporting year, four new Calsense systems were installed throughout the City. A total of 21 locations have now been equipped with Calsense; Attachment 2.2 provides a list of those facilities and indicates the sites that have been newly equipped with Calsense in 2006/2007.

Trash and Debris
The City continues to remove trash and debris from municipal areas as part of the regular maintenance schedule. City personnel at municipal facilities are reminded to implement BMPs during normal facility activities, including trash disposal. City personnel implement practices such as keeping the dumpster lids closed to prevent trash from entering the City's MS4. In addition to the City's efforts, volunteers as part of the Adopt-a-Park and Adopt-a-

Block programs contribute to keeping City parks and neighborhoods free of trash and debris. The City also hosted Park Appreciation Day, where 400 volunteers removed 5 tons of trash.

As a means to prevent pet waste from entering the MS4 from municipal facilities such as parks, the City continues to maintain pet waste bag dispensers. There are 26 pet waste bag dispensers throughout the City's 14 parks that make the bags easily accessible to park patrons to clean up after their pets. During the reporting period, 9,000 bags were used. The City will continue to maintain and stock the pet waste bag dispensers as needed. As previously mentioned, a number of volunteers assist in keeping the designated dog area at Harry Griffen Park free of pet waste, as part of the Canine Corners Program.

In addition to other methods of outreach to the patrons of public facilities, the City completed the installation of one educational storm water kiosk in La Mesita Park. This kiosk, installed as part of an individual's Eagle Scout project is intended to present general storm water information. The City plans to install one more kiosk in another City park. More information about the kiosks is included in Section 9 of this Annual Report.

MS4

The City continued to implement an aggressive MS4 inspection and maintenance schedule for the 400 curb inlets and catch basins and more than 50 miles of pipes and channels. The following bullets summarize the City's efforts.

- All MS4 drainage facilities were inspected and maintained twice during the reporting period, once before the rainy season and again in the spring.
- The City maintained, inspected and cleaned 100 percent of the cleanout locations in the City's MS4, including 22 filter inserts installed in the University Drainage Basin.
- A total of 225.75 cubic yards of trash and debris, dirt and rocks, sediment, and vegetation were removed from the City's clean-out locations.
- A total of 77.5 cubic yards of similar material was removed from the City's improved channels.
- A total of 4 cubic yards of trash and debris and sediment were removed from the 22 filter inserts within the University Drainage Basin. The composition of the material removed from the filter inserts was approximately 80 percent sediment and 20 percent trash. Information from the manufacturer also suggests that these inserts may be successful in removing oil and grease from storm water runoff.

As with previous years, the City continued to maintain two vactor trucks, one dedicated to MS4 cleaning maintenance and one dedicated to sanitary sewer cleaning and maintenance. All waste removed during MS4 maintenance activities is handled and disposed of appropriately. The City continues to keep records of MS4 maintenance activities.

The City maintains seven open improved channels, and the debris from the channels is removed by hand, not by mechanical equipment. The City continued to utilize probation crews to maintain portions of improved channels by removing trash and debris. Approximately eight to 13 individuals participated in each event for a total of eight days during the 2006/2007 reporting period. As previously mentioned, the City cleans the

channels twice a year, and this year collected approximately 77.5 cubic yards of trash and debris. The City also continues to participate in the regional Channel Maintenance Workgroup, which is working with the RWQCB, the California Department of Fish and Game, United States Fish and Wildlife Service, and the Army Corps of Engineers to develop a process to obtain permits for maintenance of sediment and vegetation in channels.

In addition to regular MS4 cleaning activities, City personnel responded to a number of MS4 maintenance requests that were called in to the City's Public Works Service Request hotline. The City investigated these reports, and maintenance was performed where necessary. Descriptions of the calls to the Public Works Service Request hotline and the City's response to each are included in Table 8.4 of this Annual Report. Nine catch basins were repaired during 2006/2007 and approximately 150 linear feet of CMP was replaced with HDPE or RCP.

Wastewater Operations
The City continues to maintain a Sewer Overflow Prevention Plan and a Sewer Overflow Response Plan. No spills were reported during the 2006/2007 reporting period.

The City continues to maintain 33 posted signs at various canyon locations providing emergency contact information to report illegal discharges. These signs aid the City in responding to illegal discharges and Sanitary Sewer Overflows (SSO) quickly and efficiently to reduce or eliminate illegal discharges into receiving waters.

The City inspects and maintains the sanitary sewer system as part of regular wastewater maintenance activities. This includes monthly maintenance in areas of the City known to be "hot spots" for grease blockages. The City is currently working to develop a Fats, Oils, and Grease (FOG) program that will target grease-producing facilities, such as restaurants. The program is intended to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs.

Sanitary Sewer System Condition and Assessment
The City continues to inspect and clean the sanitary sewer system to prevent SSOs by clearing blockages and repairing leaks in a timely manner. The physical condition of the sewer system continues to be monitored by a private contractor. During 2006/2007, the contractor was able to use a video camera system to assess 39,000 linear feet of sewer line for potential blockages as well as other potential problems. The City continues to use a $14.5 million low-interest loan from the SWRCB to rehabilitate and upgrade the City's sanitary sewer system in older and hillside sections of the City. The City installed, rehabilitated, or replaced approximately 3,741 linear feet of public sewer lines. The project is scheduled to be completed in 2008. Overall, this project represents the largest infrastructure project ever undertaken by the City.

San Diego County Municipal Storm Water Copermittee Meetings
San Diego County Municipal Storm Water Copermittee meetings are designed to provide a forum for Copermittees to meet and discuss recent activities and progress in implementing storm water programs. These meetings also provide a time for Copermittees to discuss the direction of regional programs. The City's Environmental Specialist continues to attend

such meetings and gather information to maximize the success of the City's NPDES Storm Water Program.

San Diego Bay and San Diego River WURMP Group Meetings
In addition to participation in San Diego County Municipal Storm Water Copermittee meetings, the City continues to participate in the WURMP group meetings for both the San Diego River and San Diego Bay. The WURMP meetings are designed to coordinate watershed-related activities in the cities within each Watershed.

INSPECTIONS

The 2005/2006 inspections of facilities at the Public Works Operation Center were completed in June 2006. The recommended corrective actions noted during these inspections were relatively minor and did not require follow-up inspections. However, the City's Environmental Specialist coordinated a meeting during this reporting period to go over the inspection findings in July 2006 with the superintendent and department supervisors. Good housekeeping measures and effective BMP implementation were emphasized during this meeting.

Throughout the 2006-2007 reporting period, the City's Environmental Specialist conducted several un-announced walk-through of the Public Works Operation Center to ensure good housekeeping measures and BMPs were being implemented. Verbal recommendations were provided to the superintendent.

In June 2007, the City's Environmental Specialist conducted and completed the annual inspections of eight high priority municipal facilities as required by the Municipal Permit. A meeting with the superintendent and department supervisors was scheduled and conducted in July 2007 to go over the recommended corrective actions. Follow-up inspections were not required; however, the City's Environmental Specialist continues to conduct unannounced walk-throughs at the facility to check for effective BMP implementation.

The City's Environmental Specialist did not observe any violations at any municipal facilities during this reporting period, although most facilities did require minor corrective actions. The following lists the common problems/recommended corrective actions noted during inspections.

- Minor oil stains were observed in parking areas.
- Some equipment required coverage or drip pans underneath.
- Some liquid storage did was lacking secondary containment.
- Minor sediment and/or organic debris accumulations were observed in parking areas, and increased sweeping frequency was recommended.
- Some trash cans/and or dumpsters were observed open.

The City's Environmental Specialist provided copies of the completed inspection forms to the City's Public Works supervisors and plans to meet with the supervisors during early 2007/2008 to discuss the 2006/2007 corrective actions.

In addition to the eight high priority municipal facilities inspected in June 2007, the City continued to inspect and clean its MS4 and roads, streets, and highways throughout the reporting period. The MS4 and roads, streets, and highways are the other two listings on the high priority municipal inventory.

COMPLIANCE & ENFORCEMENT

The City's enforcement mechanism is included in Section 2.8 of the City's JURMP. The City's Environmental Specialist continues to conduct inspections at municipal facilities and provides corrective actions to ensure that facilities are in compliance with the City's BMP requirements and City Ordinances. Furthermore, inspections of the Public Works Operation Center verify that the BMPs in the SWMP are being implemented. As previously mentioned, municipal facilities are notified of their BMP deficiencies and provided verbal and written documentation of necessary corrective actions. The City's Environmental Specialist actively follows up with facilities to ensure that they have effectively implemented corrective actions. There were no SSOs or circumstances observed to be a threat to human or environmental health during the reporting period; therefore the City did not submit any reports to the RWQCB.

The City continued to distribute an NOV procedural handout (Attachment 2.3), which is used to guide enforcement personnel in issuing an NOV for a storm water-related violation. The City began developing verbal and written warning forms (Attachments 2.4 and 2.5, respectively) to provide better tracking of when verbal and/or written warnings are issued. The City plans to begin using these forms in 2007/2008.

As previously mentioned, the City's Environmental Specialist noted minor corrective actions for the four facilities that make up the Public Works Operation Center and for the four publicly owned parking facilities. Many corrective actions were addressed at the time of the inspection. In all locations, the corrective actions were generally related to good housekeeping measures, such as keeping the sites free of sediment and organic debris, and keeping dumpster lids closed. The City's Environmental Specialist met with the Public Works Operation Center Superintendent and other supervisors in July 2007, early in the 2007/2008 reporting period, to discuss corrective actions related to the 2006/2007 inspections.

TRAINING, EDUCATION, AND OUTREACH

Education is key in implementing a successful NPDES program. The City provides numerous training and refresher sessions, tailgate meetings, and educational material to municipal personnel. Proper implementation of BMPs during municipal activities helps prevent pollutant discharges to the MS4 and sets a good example for residents since many of these activities occur in areas visible to the public. The City continues to display a Storm Water Bulletin Board at City Hall and also continues to distribute educational fact sheets and brochures, including the Municipal Program Storm Water BMP Notebook (Attachment 2.1) as described below. The following is a list of training, education, and outreach activities

conducted for municipal personnel during this reporting period. This list also includes meetings and training sessions attended by the City's Environmental Specialist. Sign in sheets from all training sessions, including municipal training sessions, are included as Attachment 2.6.

- The City's Environmental Specialist attended a number of Municipal Permit re-issuance meetings and was active in the Industrial and Commercial Component review subcommittee.
- The City's Environmental Specialist attended a number of Copermittee Workgroup meetings including those for education and outreach, channel maintenance, regional monitoring, dry weather monitoring, and the development hydromodification plan (HMP).
- In December 2006, the City's Environmental Specialist conducted joint high and medium priority construction inspections with a RWQCB staff member.
- The City's Environmental Specialist attended a TMDL workshop held by PBS&J Consulting on 7/17/2006.
- The City's Environmental Specialist attended a training session on how to deal with an upset public on 7/27/2006.
- The City's Environmental Specialist attended a County-hosted porous paving presentation on 8/17/2006.
- The City's Environmental Specialist and an Administrative Analyst in the City's Environmental Services Division attended a two-day workshop entitled "Fostering Sustainable Development" on 2/7/2007 and 2/8/2007.
- The City's Environmental Specialist attended a Pueblo San Diego Watershed and Organic Toxicants Workshop and Sustainability Initiative as part of the Regional Ecology Network and Environmental Workbench for Sustainable Development (RENEW) Project.
- The City's Environmental Specialist attended a RWQCB meeting regarding new SSO reporting requirements.
- The City's Environmental Specialist attended a Watershed Education Planning meeting hosted by Lois Humphrey of TRG & Associates.
- The City's Environmental Specialist attended a University of California, San Diego (UCSD) workshop on TMDLs on 4/28/2007.
- The City's Environmental Specialist attended Chollas Creek TMDL stakeholder meetings.
- The City's Environmental Specialist attended Copermittee Management Meetings throughout the reporting period.
- The City's Environmental Specialist attended a seminar entitled "Community Based Social Marketing."

- The City's Environmental Specialist attended the City's Community Services Department Annual Meeting to better understand the existing community activities and programs and to investigate how storm water concerns could be addressed by those programs. The City's Environmental Specialist also informed all attending parties about general storm water regulations and how to report storm water violations.
- The City conducted a BMP training session on spill containment for street maintenance employees on 7/10/2006, five employees attended.
- The City conducted a BMP training session for street maintenance employees on 7/31/2006, four employees attended.
- The City conducted a BMP training session for park maintenance employees on 8/1/2006, 17 employees attended.
- The City conducted a BMP training session for park maintenance employees on 8/8/2006, 16 employees attended.
- The City conducted a training session on the CWA for street maintenance employees on 8/14/2006, four employees attended.
- The City conducted a training session on the CWA for street maintenance employees on 8/21/2006, six employees attended.
- The City conducted a training session on storm water management for street maintenance employees on 9/5/2006, five employees attended.
- The City conducted a BMP training session for park maintenance employees on 10/31/2006, 16 employees attended.
- The City conducted a BMP training session for park maintenance employees on 11/7/2006, 13 employees attended.
- The City conducted a BMP training session for park maintenance employees on 11/28/2006, 16 employees attended.
- The City conducted a BMP training session on outdoor storage for wastewater employees on 12/6/2006, six employees attended.
- The City conducted a BMP training session on material handling for fleet maintenance employees 12/12/2006, five employees attended.
- The City conducted a BMP training session on spill prevention for wastewater employees on 12/13/2006, eight employees attended.
- The City conducted a BMP training session on spill prevention and cleanup for building maintenance employees on 1/16/2007, two employees attended.
- The City conducted annual pesticide training for park maintenance employees on 1/16/2007, 15 employees attended.
- The City conducted a BMP training session on good housekeeping measures for park maintenance employees on 1/30/2007, 14 employees attended.

- The City conducted a BMP training session on vehicle and equipment cleaning for fleet maintenance employees 2/27/2007, six employees attended.
- The City conducted a BMP training session on outdoor loading/unloading for traffic safety employees on 3/6/2007, six employees attended.
- The City conducted a BMP training session for park maintenance employees on landscape maintenance on 3/27/2007, 17 employees attended.
- Three members of the City's parks maintenance staff attended an IPM training session at the Port of San Diego in May 2007.
- As previously mentioned, the City has continued to distribute a BMP notebook entitled the "City of La Mesa Municipal Program Storm Water Best Management Practices Notebook" (Attachment 2.1) to new Public Works Operation Center staff. This notebook contains BMP fact sheets relating to municipal activities and is designed to be kept by staff members as a reference guide when needed.
- The City's Storm Water Bulletin Board continued to provide information for both residents and businesses. Information on BMPs, watershed concepts, HHW and electronic disposal events, and other upcoming community events are presented on the bulletin board. It also offers various brochures and information available to take home including the "Litter Bugs" brochure, an informational storm water door hanger, IPM cards, preventing urban runoff brochures, and a construction BMP brochure. A photo of the bulletin board and all aforementioned media available at the bulletin board is included as Attachment 2.7.
- The City distributed Pool and Spa Fact Sheets to 260 City employees (Attachment 2.8). The fact sheet describes the conditions for which discharging pool and spa water is allowed as well as other pool maintenance information.
- The City continued to make the Construction SWPPP Information (Attachment 2.9) trifold available to project proponents. The brochure is also available at the City's Storm Water Bulletin Board in City Hall.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. Updates to the municipal program will be presented in the updated JURMP. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2002.

Table 2.1
Municipal Facility Inventory – Updated for 2006/2007

#	MUNICIPAL FACILITY	FACILITY ADDRESS	DRAINAGE BASIN	WATERSHED	PRIORITY
1	Public Works (PW) Yard	8152 Commercial Street	AC	San Diego River	High
2	PW Fleet	8152 Commercial Street, Building 400	AC	San Diego River	High
3	PW Storage and Maintenance	8152 Commercial Street, Building 200	AC	San Diego River	High
4	PW Storage Yard	8152 Commercial Street	AC	San Diego River	High
5	Palm Avenue Lot (Parking Facility)	Palm & Lemon Avenues	AC	San Diego Bay	High
6	Allison Avenue Lot (Parking Facility)	Palm & Allison Avenues	AC	San Diego Bay	High
7	La Mesa Blvd (Parking Facility)	La Mesa Blvd & Acacia Avenue	UC	San Diego Bay	High
8	Lemon Ave Lot (Parking Facility)	Lemon Avenue & 3rd Street	SV	San Diego Bay	High
9	Municipal Separate Storm Sewer	53 miles of pipes, storm drains, storm drain boxes, and open channel sections throughout the City	Throughout City	San Diego Bay/ San Diego River	High
10	Roads, Streets, and Highways	400 miles of roadways throughout the City	Throughout City	San Diego Bay/ San Diego River	High
11	Collier Park and Pump House	4401 Palm Avenue	SV	San Diego Bay	Medium
12	Community Pool	5100 Memorial Drive	AC/UC/SV	San Diego River/ San Diego Bay	Medium
13	Fire Station No. 11	8034 Allison Avenue	UC	San Diego Bay	Medium
14	Fire Station No. 12	8834 Dallas Street	AC	San Diego River	Medium
15	Fire Station No. 13	9110 Grossmont Boulevard	AC/SV	San Diego River/ San Diego Bay	Medium
16	MacArthur Park	University Avenue and Memorial Drive	AC/UC/SV	San Diego River/ San Diego Bay	Medium
17	Police Station	8181 Allison Avenue	AC	San Diego River	Medium
18	PW Maintenance Building	8152 Commercial Street, Building 100	AC	San Diego River	Medium

Table 2.1 (Continued)
Municipal Facility Inventory – Updated for 2006/2007

#	MUNICIPAL FACILITY	FACILITY ADDRESS	DRAINAGE BASIN	WATERSHED	PRIORITY
19	PW Traffic Operation Trailer	8152 Commercial Street, Building 600	AC	San Diego River	Medium
20	Aztec Park	Corner of Aztec Drive and Morocco Dr.	AC	San Diego River	Low
21	Briercrest Park	9000 block Wakarusa Street	AC	San Diego River	Low
22	City Hall and Modular Buildings	8130 Allison Avenue	UC	San Diego Bay	Low
23	City Hall Annex	8130 Allison Avenue	UC	San Diego Bay	Low
24	Community Center	4975 Memorial Drive	AC/UC/SV	San Diego River/ San Diego Bay	Low
25	Harry Griffin Park	9550 Milden Street	AC	San Diego River	Low
26	Helix Water District	7911 University Avenue	UC	San Diego Bay	Low
27	Highwood Park	4200 Parks Avenue	AC	San Diego River	Low
28	Historical Society	8369 University Avenue	AC/UC	San Diego River/ San Diego Bay	Low
29	Jackson Park	Jackson Drive and Laird Street	AC	San Diego River	Low
30	Junior Seau Sports Complex	9001 Park Plaza Drive	AC	San Diego River	Low
31	La Mesita Park and Gardener's Shack	8855 Dallas Street	AC	San Diego River	Low
32	Library/Fine Arts	8055 University Avenue	UC	San Diego Bay	Low
33	Nan Couts Cottage (Recreational Bldg)	4875 Memorial Dr.	AC/UC/SV	San Diego River/ San Diego Bay	Low
34	Northmont Park	Severin Drive and Amaya Drive	AC	San Diego River	Low
35	Porter Hall	4910 Memorial Drive	AC/UC/SV	San Diego River/ San Diego Bay	Low
36	Porter Park	8425 University Avenue	UC/SV	San Diego Bay	Low
37	Postal Facility	4800 Nebo Drive	UC	San Diego Bay	Low
38	PW Administration	8152 Commercial Street, Building 300	AC	San Diego River	Low

Table 2.1 (Continued)
Municipal Facility Inventory – Updated for 2006/2007

#	MUNICIPAL FACILITY	FACILITY ADDRESS	DRAINAGE BASIN	WATERSHED	PRIORITY
39	PW Document Storage	8152 Commercial Street, Building 500	AC	San Diego River	Low
40	Recreation Center	4975 Memorial Drive	AC/UC/SV	San Diego River/ San Diego Bay	Low
41	Rolando Park	Alamo Way and Vigo Street	UC	San Diego Bay	Low
42	Senior Adult Center, Shuffle Board Building and Gardener's Shack	8450 La Mesa Boulevard	UC/SV	San Diego Bay	Low
43	Shuffle Board Club	8425 La Mesa Boulevard	UC/SV	San Diego Bay	Low
44	Sunset Park, Gardener's Shack and Recreational Building	5540 Lake Park Way	AC	San Diego River	Low
45	Sunshine Park	70th and Tower Street	AC	San Diego River	Low
46	Vista La Mesa Park	King and Hoffman Street	UC/LG	San Diego Bay	Low

Notes
AC = Alvarado Channel
UC = University Channel
SV = Spring Valley
LG = Lemon Grove

3 INDUSTRIAL

Throughout the 2006/2007 reporting period, the City continued to mitigate urban runoff pollution by implementing the industrial program that is described in the City's JURMP. This program includes site identification and prioritization, education, the implementation of activity and site-specific pollution prevention measures and BMPs, routine and follow-up compliance inspections, and as-needed enforcement actions. The City also requires that all high priority industrial sites conduct monitoring during qualifying rain events in accordance with the Municipal Permit and Industrial Permit. Industrial inspections were conducted at a total of seven facilities during the reporting period. Wedo Wedo was added to the high priority industrial inventory during 2006/2007.

Figure 3.1, below, depicts the high, medium, and low priority industrial facilities in the City of La Mesa. Purple areas delineate the industrial areas, and commercial areas are shown in red as a reference. The seven high priority industrial facilities that received annual inspections by the City's Environmental Specialist are shown as orange dots. Medium priority industrial facilities are shown as green dots, and low priority facilities as yellow dots. Most of the industrial facilities are fairly small, and some are in areas zoned for commercial land use.

Figure 3.1
La Mesa Industrial Facilities

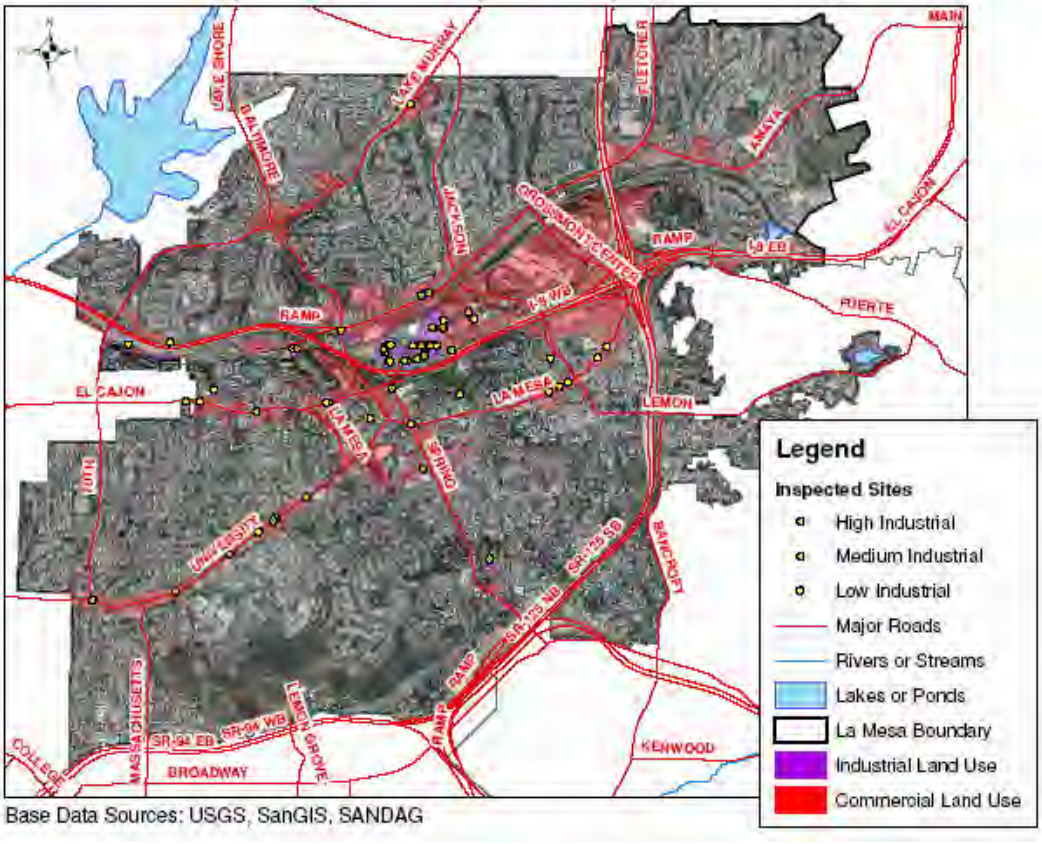

PRIORITY SOURCES

During this reporting period, the City's watershed-based, prioritized inventory consisted of seven high industrial facilities, 25 medium industrial facilities, and 39 low industrial facilities. As previously mentioned, Wedo Wedo was added to the City's high priority industrial inventory during 2006/2007. The City's inventory was developed and prioritized based on SIC codes, proximity to sensitive water bodies, whether they had filed an NOI to obtain coverage under the Industrial Permit, and the findings of the most recent storm water compliance inspections. Facilities with mandatory SIC codes, facilities within 200 feet of a sensitive water body, and other facilities deemed to be a high threat to water quality comprise the high priority industrial inventory. Most facilities included in the City's medium priority industrial inventory are conditionally subject to the Industrial Permit based on their SIC codes. These businesses may qualify for a Notice of Non-Applicability/No Exposure Certification (NONA/NEC) if they do not have any outdoor exposure, exempting them from the requirements of the Industrial Permit. The remaining industrial businesses in La Mesa are mostly contractors or wholesalers and have been classified as low priority industrial.

As noted in previous years' Annual Reports, the State of California's database of businesses subject to the Industrial Permit lists two *Dixieline Lumber* facilities in the City of La Mesa. Although *Dixieline Rancho San Diego* is listed with a La Mesa address, the facility is located in unincorporated area outside the City's jurisdiction. For this reason the City's high priority industrial inventory does not include this facility.

The inventory of high, medium, and low priority facilities are presented in tables 3.1, 3.2, and 3.3, respectively, at the end of this section.

POLLUTION PREVENTION

The City continues to require the implementation of pollution prevention measures at all industrial facilities. Pollution prevention methods are BMPs that eliminate or reduce the generation of pollutants at their sources. Examples include using smaller quantities of toxic material by substituting with less toxic material, changing production processes to reduce waste, decreasing waste water flow, and recycling waste as part of the production process. The City ensures that businesses are made aware of how to implement pollution prevention measures through targeted educational materials and face-to-face during storm water compliance inspections. The City also reserves the authority to require the development and implementation of a SWPPP for any industrial facility within its jurisdiction that is determined to be discharging significant pollutants into receiving water bodies regardless of whether the facility is subject to the Industrial Permit.

BMP REQUIREMENTS AND IMPLEMENTATION

The City has established minimum BMPs that are required to be implemented at all industrial facilities. Industrial facilities are required to use an effective combination of general BMPs that are applicable to virtually all facilities, such as good housekeeping, and activity-specific BMPs. Section 3 of the City of La Mesa's JURMP summarizes the required BMPs for industrial facilities, and further detail is presented in Appendix C of the JURMP. The general BMPs, including structural and non-structural BMPs, required of all facilities

are included in Appendix C.2 of the City's JURMP. The additional, activity-specific BMPs are presented in Appendix C.3 of the City's JURMP. The City's program promotes non-structural BMPs as a preventative and cost-effective step to preventing storm water pollution. When non-structural BMPs alone are insufficient to adequately protect water quality, structural BMPs are required.

The City continues to conduct annual storm water inspections to ensure facilities do not have any IC/IDs to the MS4 and that BMPs are being implemented properly. Inspectors are trained to look for any evidence of IC/IDs, which includes, but is not limited to staining along drainage pathways and direct visual observations of improper activities conducted at the time of inspection. Prompt action is taken to eliminate observed and identified IC/IDs. During the inspections, the City inspector stresses the importance of proper BMP implementation, particularly good housekeeping measures. Many of the common problems seen during compliance inspections are dumpster lids being open and sediment build up in outdoor areas. The City emphasizes good housekeeping measures and educating employees to reduce the frequency of these common problems. During inspections, it has been noted that the majority of the City's industrial facilities conduct their intensive industrial activities, such as cutting countertops or maintaining buses, indoors. The outdoor industrial activities are usually limited to material storage, loading and unloading, and/or similar activities. This practice is effective in preventing many of the largest sources of pollutants from contacting storm water. At facilities where intensive industrial activities are conducted outdoors, more extensive structural or treatment control BMPs may be recommended to reduce the pollutant load to the MEP.

All inspection findings are entered into the City's industrial/commercial database. Figure 3.2, on the following page, presents an example page from the database. This particular page illustrates the page in the database in which facility information is entered. During 2006/2007, some changes were made to the standard industrial/commercial inspection form and the industrial/commercial database was updated to reflect those changes. Notably the form was changed to collect the title of the responsible person and the name of the facility personnel present during the inspection, since many times the responsible party is not the same as the facility personnel present during the inspection. Additionally, fields were added to collect information regarding the property management company, if applicable. This information may be useful if an issue is observed in a business complex where many areas of the facility may be either the responsibility of the property management company or are communal areas.

Figure 3.2
Example Page from the City's Industrial/Commercial Database

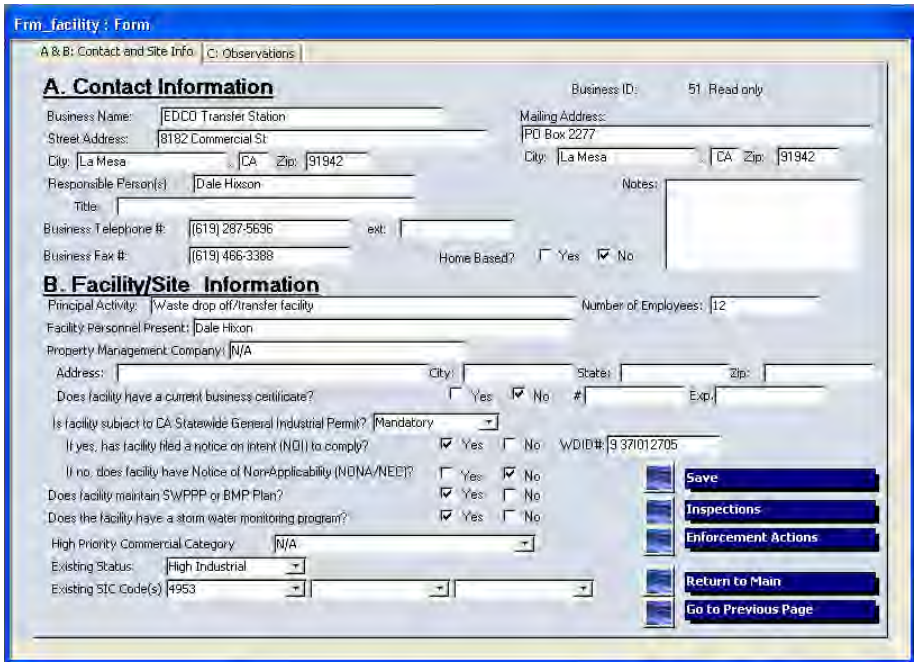

The City continued to use the BMP assessment during the 2006/2007 reporting period. BMP scores were assigned during inspections based on a scale of 1 (low) to 5 (high). Since only a small number of businesses were inspected, the data does not allow for overall statistical analyses to be performed. Scores for five inspections during 2006/2007 can be compared to the scores recorded during inspections conducted at the same facilities in 2005/2006. No BMP assessment score was assigned during the 2005/2006 inspection of Rainbow Steel because the RWQCB conducted the inspection, but the 2006/2007 score can be compared to the 2004/2005 score. Since Wedo Wedo is a new facility and the 2006/2007 inspection was its first inspection, there are no previous scores with which to compare it. Overall, scores either increased or remained the same. As more data is collected in future years, more sophisticated program assessments may be possible. To standardize evaluations, inspectors use the following rubric:

- Level 5: All required general and activity specific BMPs have been implemented effectively.
- Level 4: BMPs have been implemented effectively but the dumpster lid was observed open and/or oil stains were noted in the general parking lot not associated with this business's activities.
- Level 3: BMPs have been implemented with the exception of two corrective actions noted aside from dumpster lids being open or oil stains in the general parking lot.
- Level 2: Minimal BMP implementation is noted. Three or more corrective actions, with the exception of dumpster lids being open or oil stains in the general parking lot. No illegal discharge or illicit connection was noted.

- Level 1: Violation of the City's Storm Water Ordinances (illegal discharge, illicit connection, complete failure to implement BMPs, and/or significant littering).

TRAINING, EDUCATION AND OUTREACH

The City continues to use its inspection program as a means to provide one-on-one interaction and education with the facility owner/operators. During storm water compliance inspections, the inspector informs the facility owner or operator about the City's storm water program and encourages them to educate employees regarding good housekeeping measures. Because the inspector is on site, BMPs and pollution prevention tailored to each industrial facility may be recommended, and any corrective actions are discussed with the facility's owner or operator at the end of the inspection. The business is also provided with a copy of the inspection form including the results of the inspection. The following educational materials are also distributed during inspections, as applicable.

- "Preventing Urban Runoff Pollution," an educational guide for both commercial and industrial businesses (Attachment 3.1)
- "San Diego Bay Watershed Fact Sheet" or "San Diego River Watershed Fact Sheet" (Attachment 3.2 and Attachment 3.3, respectively), distributed as applicable.

During this reporting period, the City continued to use the verbal knowledge assessment quiz at the beginning of the inspection as a means of evaluating the storm water knowledge of the facility manager/owner. The number of questions answered correctly is assigned a rating score of 1 (no questions answered correctly) to 5 (all questions answered correctly). This assessment also provides a standardized outline of topics that will be discussed during the inspection. These scores are intended to help the City to conduct a more quantitative assessment of business' knowledge. Similar to the BMP implementation scores, knowledge assessment scores were compared for the five high priority industrial facilities inspected by the City in both 2005/2006 and 2006/2007. The scores generally either increased or stayed the same. More sophisticated program assessments may be possible as more data is collected in future years. In addition, areas with low scores may be targeted to receive education in order to improve their understanding of storm water issues for future reporting periods. Each facility representative was asked the following series of questions:

- What is storm water?
- What is the difference between storm drain system and the sanitary sewer system?
- Where does storm water flow?
- Is storm water treated prior to discharge?
- What are examples of pollutants?
- Is sediment a pollutant?
- Do you know what good house keeping or best management practices are?
- Do you know what NPDES is or means?

The questions are aimed to engage the facility owner or operator and the inspector in a conversation about storm water, and allow any misconceptions or concepts to be explained. The knowledge can then be passed on to other employees at the facility.

Articles regarding storm water issues are another way in which the City educates businesses. The *La Mesa Focus* newsletter is mailed to several thousand businesses in the City, including industrial businesses. In this reporting period, the City published many storm water-related articles in the *La Mesa Focus* newsletters, which can be found as attachments 3.4, 3.5, 3.6, and 3.7, respectively. The City's storm water hotline telephone number is also advertised in the newsletter. The *La Mesa Focus* articles are discussed in detail later sections of this Annual Report.

INSPECTIONS

As previously mentioned, the City uses inspections as a means to determine if facilities are in compliance with the City's BMP requirements and the Industrial Permit. The City conducts routine, follow-up, and/or complaint investigation inspections at industrial facilities. During each site visit, inspectors complete a storm water compliance inspection form (Attachment 3.8) or follow-up inspection form (Attachment 3.9), if necessary. The forms are used to document the inspection and to assess BMP implementation, compliance with the City's Storm Water Ordinance, compliance with the Industrial Permit, and list of recommended corrective actions if necessary. In addition, monitoring data and SWPPPs are evaluated at sites that have filed NOIs. Upon inspection, businesses are verbally informed of any corrective actions. They are provided a copy of their inspection form and are encouraged to ask questions to clarify items on the form that may not be clear. The inspection form data are then entered into the City's commercial and industrial inspection database. Further details about the City's inspection method can be found in Section 3.6 of the JURMP.

The City conducted seven full industrial inspections during this reporting period. All high priority industrial facilities were inspected during the 2006/2007 reporting period. Table 3.4, at the end of this section, lists the results of all industrial inspections conducted during the reporting period, including any recommended corrective actions. All industrial facilities on the City's inventory have been inspected at least once during the life of the Municipal Permit.

COMPLIANCE AND ENFORCEMENT

As previously mentioned, each inspected facility was notified of required corrective actions via a copy of the completed inspection forms, and verbally during the inspection. Below is a summary of some of the inspection findings during the 2006/2007 reporting period.

Interamerica Stone Design, Inc. was found to be in violation of the Industrial Permit in 2005/2006 and again during 2006/2007. During previous inspections this business had been instructed to obtain coverage under the Permit and to develop and maintain a SWPPP and monitoring program. Due to its failure to comply with Permit requirements, Interamerica Stone Design, Inc. was issued an NOV after the inspection conducted in June 2007. Unfortunately the owner passed away in July 2007, and the City is working with the new owner to fill out an NOI to bring this business into compliance.

The City inspected a new business, Wedo Wedo, which is a stone cutting facility. The business was found to be in violation of the Industrial Permit, and it was instructed to file an NOI and to develop and implement a SWPPP and storm water monitoring program.

In accordance with the requirements of the Municipal Permit and the Industrial Permit, the City requires all high priority industrial sites to collect and analyze storm water samples. Storm water monitoring was conducted at five of the seven high priority industrial facilities in the 2006/2007 reporting period. Two businesses were not in compliance with the storm water monitoring requirements: Interamerica Stone Design, Inc. and Wedo Wedo. The City issued an NOV to both of these businesses and informed Don Perrin at the RWQCB on their compliance status.

Additionally, two industrial businesses were issued NOVs based on complaints received by the City's storm water hotline. These complaints and the manner in which they were resolved are included in Table 8.4 of Section 8 of this document.

The City regularly corresponds with RWQCB staff on industrial compliance issues, including the situations observed at Interamerica Stone Design Inc. and Wedo Wedo. The City's Environmental Specialist has sent several emails to Don Perrin at the RWQCB to give periodic compliance status reports for these businesses, such as the progress Wedo Wedo has made toward obtaining Industrial Permit coverage and preparing a SWPPP. Aside from these reports, no other reports related to industrial facilities were made to the RWQCB. No industrial facilities were found to present a significant threat to human or environmental health in 2006/2007.

This reporting period, the City began developing developed forms to document verbal warnings and written warnings, which it hopes will enable the City to better track problem facilities. These forms are included as Attachment 2.4 and Attachment 2.5. Follow-up inspections will be conducted at businesses deemed to need them based on the results of the 2006/2007 inspections, such as Dixieline Lumber. The City's follow-up inspection form will be used for these inspections, and results will be presented in the 2007/2008 Annual Report.

IMPLEMENTATION PLANS AND JURMP UPDATE FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City had been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. Updates to the industrial program will be presented in the updated JURMP. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2002.

Table 3.1
High Priority Industrial Facility Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
1	California Countertop, Inc	7811 Alvarado Rd, La Mesa, CA 91942	3089	San Diego River	Alvarado Channel
2	Dixieline Lumber & Home Centers	8372 Center Dr, La Mesa, CA 91942	2439	San Diego River	Alvarado Channel
3	EDCO Station	8182 Commercial St, La Mesa, CA 91942	4953	San Diego River	Alvarado Channel
4	Interamerica Stone Design, Inc.	8227 Commercial St., La Mesa, CA 91942	1741/3281	San Diego River	Alvarado Channel
5	Rainbow Steel, Inc.	8332 Case St., La Mesa, CA 91942	3499/3281	San Diego River	Alvarado Channel
6	Schaefer Ambulance Service, Inc.	7285 University Ave, La Mesa, CA 91941	4119	San Diego Bay	University Channel
7	Wedo Wedo	8169 Center Street, La Mesa, CA 91942	3281	San Diego River	Alvarado Channel

Table 3.2
Medium Priority Industrial Facility Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC	Watershed	Drainage Basin
1	A A Printing, Inc.	7323 El Cajon Blvd, La Mesa, CA 91941	2759	San Diego River	Alvarado
2	A-1 Self Storage	4981 Spring St., La Mesa, CA 91942	4225	San Diego River	Alvarado
3	A-1 Self Storage, Center Dr	8328 Center Dr, La Mesa, CA 91942	4225	San Diego River	Alvarado
4	ABSKO Products	8200 Commercial St, La Mesa, CA 91942	3641	San Diego River	Alvarado
5	American Tanks	8111 Commercial St, La Mesa, CA 91942	3444	San Diego River	Alvarado
6	Barnes Printers, Inc.	8237 La Mesa Blvd, La Mesa, CA 91941	2759	San Diego Bay	University
7	Classic Screen Print	8176 Center St, Ste. C, La Mesa, CA 91942	2759	San Diego River	Alvarado
8	Continuous Wave Tech, Inc. (Charter Delivery Service)	4350 Palm Ave, 27, La Mesa, CA 91941	4215	San Diego Bay	Spring Valley
9	Dasina Building Group	8204 Parkway Dr., #5, La Mesa, CA 91942	2434	San Diego River	Alvarado
10	Embroidery Express	7640 University Ave #B, La Mesa, CA 91941	2395	San Diego Bay	University
11	Equality Plating Co.	8172 Center St, La Mesa, CA 91942	3471	San Diego River	Alvarado
12	Insty Prints	8186 Center St C, La Mesa, CA 91942	2759	San Diego River	Alvarado
13	Joe's Signs	7016 University Ave, La Mesa, CA 91941	3993	San Diego Bay	University
14	L & R Neon	8200 Commercial St., La Mesa, CA 91942	3993	San Diego River	Alvarado
15	La Mesa Printing Center	7468 University Ave, La Mesa, CA 91941	2759	San Diego Bay	University
16	La Mesa Transfer & Storage, Inc.	8336 Case St, La Mesa, CA 91942	4225	San Diego River	Alvarado
17	Lyons & O'Haver, Inc. Taxidermy	8180 Parkway Drive, La Mesa, CA 91942	3999	San Diego River	Alvarado
18	Moran Canvas Products	8135 Center Dr., La Mesa, CA 91942	3444	San Diego River	Alvarado
19	Paul The Greek's Limo Service, Inc.	7589 El Cajon Blvd E, La Mesa, CA 91941	4119	San Diego River	Alvarado
20	Printing By Gwen	7640 University Ave C, La Mesa, CA 91941	2732	San Diego Bay	University
21	Susan G. Holtz Photo Research	8204 Center Dr #20, La Mesa, CA 91942	2741	San Diego River	Alvarado

Table 3.2 (Continued)
Medium Priority Industrial Facility Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC	Watershed	Drainage Basin
22	The Little Warehouse	5175 Baltimore Dr, La Mesa, CA 91941	4225	San Diego River	Alvarado
23	Village Awards & Engraving	7769 University Ave, La Mesa, CA 91941	2796	San Diego Bay	University
24	Western Plastics	8183 Center St, La Mesa, CA 91942	3999	San Diego River	Alvarado
25	Wood Design West	8333 Case Street, Ste. C, La Mesa, CA 91942	3999	San Diego River	Alvarado

Table 3.3
Low Priority Industrial Facility Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC	Watershed	Drainage Basin
1	A D M Construction	7171 Alvarado Rd #101, La Mesa, CA 91941	1521	San Diego River	Alvarado
2	A-Aairco Air Conditioning	8203 University Ave, Ste A, La Mesa, CA 91941	1711	San Diego Bay	University
3	Ace Coating Co.	8333 Case St., La Mesa, CA 91942	1799	San Diego River	Alvarado
4	Air Best Inc.	8760 La Mesa Blvd., La Mesa, CA 91942	1711	San Diego River	Alvarado
5	Brady Co. / San Diego, Inc.	8100 Center St., La Mesa, CA 91942	1742	San Diego River	Alvarado
6	Bronco Electric	8188 Commercial St, La Mesa, CA 91942	5013	San Diego River	Alvarado
7	C & C Glass, Inc.	8712 La Mesa Boulevard, La Mesa, CA 91942	1793	San Diego River	Alvarado
8	Campbell Exteriors, Inc.	8179 Center St., La Mesa, CA 91942	1761	San Diego River	Alvarado
9	Carini Electric, Inc.	8104 Center St., La Mesa, CA 91942	1731	San Diego River	Alvarado
10	Center Glass Co. #3	7853 El Cajon Blvd., La Mesa, CA 91942	1793	San Diego River	Alvarado
11	Centex Glazing	8260 Commercial St., La Mesa, CA 91942	1793	San Diego River	Alvarado
12	Coast Restaurant Supply	8120 Commercial St., La Mesa, CA 91942	5046	San Diego River	Alvarado
13	Collins Plumbing, Inc.	8130 Commercial St., La Mesa, CA 91942	1711	San Diego River	Alvarado
14	Earl W. Fite & Sons, Inc.	8878 La Mesa Blvd, La Mesa, CA 91942	1711	San Diego River	Alvarado
15	Fox & Turner Construction Co., Inc.	7371 Mohawk St., La Mesa, CA 91942	1742	San Diego River	Alvarado
16	Greater San Diego Air Conditioning	8141 Center St., La Mesa, CA 91942	1711	San Diego River	Alvarado
17	Hallman's Wholesale Jewelry Co	7777 Alvarado Rd. #200, La Mesa, CA 91941	5094	San Diego River	Alvarado
18	Helix Construction Co., Inc.	8103 Commercial St., La Mesa, CA 91942	1751	San Diego River	Alvarado
19	Hunters Construction Co.	7374 El Cajon Blvd., La Mesa, CA 91942	1522	San Diego River	Alvarado
20	I Deal Door & Window Company	7859 El Cajon Blvd., La Mesa, CA 91942	1751	San Diego River	Alvarado
21	J.A. MacDonald, Inc.	8338 Center Dr., La Mesa, CA 91942	1522	San Diego River	Alvarado

Table 3.3 (Continued)
Low Priority Industrial Facility Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC	Watershed	Drainage Basin
22	Jackson and Blane Heating and A/C	7576 University Avenue, La Mesa, CA 91941	1711	San Diego Bay	University
23	La Mesa Carpet & Linoleum, Inc.	8674 La Mesa Boulevard, La Mesa, CA 91942	1752/ 5713	San Diego River	Alvarado
24	La Tourrette Painting	8675 Hayes St., La Mesa, CA 91942	1721	San Diego River	Alvarado
25	Lifesighs Cards	8265 Commercial St., #15, La Mesa, CA 91941	5112	San Diego Bay	University
26	Master Electric Company, Inc.	8055 El Capitan Dr., La Mesa, CA 91941	1731	San Diego Bay	University
27	MLS Construction Co.	4950 Pine Street, La Mesa, CA 91941	1522	San Diego Bay	University
28	Pacific Homeworks	7200 Parkway Drive, 105, La Mesa, CA 91942	1751	San Diego River	Alvarado
29	Pacific Southwest Structures	8140 Commercial Street, La Mesa, CA 91942	1771	San Diego River	Alvarado
30	Palmer Painting Company	8104 Center St., La Mesa, CA 91941	1721	San Diego River	Alvarado
31	Primary Mechanical, Inc.	5345 Timken St., Ste E & I, La Mesa, CA 91942	1711	San Diego River	Alvarado
32	Raindance Roofing	8176 Commercial St., La Mesa, CA 91942	1761	San Diego River	Alvarado
33	Residential Heating & AC	7574 University Ave., La Mesa, CA 91941	1711	San Diego Bay	University
34	Shower Walls of San Diego	6063 Lake Murray Blvd., La Mesa, CA 91942	1521	San Diego River	Alvarado
35	Sunset Glazing, Inc.	8834 La Mesa Blvd., La Mesa, CA 91942	1793	San Diego River	Alvarado
36	Talon Auto Adjusters	8163 Commercial Street, La Mesa, CA 91942	5012	San Diego River	Alvarado
37	Thomas Taylor Construction	8189 Center St., La Mesa, CA 91942	1500	San Diego River	Alvarado
38	Tri-Co Floors	7658 University Ave., La Mesa, CA 91941	1752	San Diego Bay	University
39	Walter H. Barber	8179 Center St., La Mesa, CA 91942	1629	San Diego River	Alvarado

Table 3.4
Industrial Inspections

#	Facility	Inspection	Current Priority	Current SIC	Recommended Corrective Actions
1	California Countertop, Inc., 7811 Alvarado Rd	6/28/2007	High Industrial	3089	• Consider covering scrap metal during rainy season or store material in warehouse. Ensure dumpster lid is closed. • Maintain employee training log in SWPPP.
2	Dixieline Lumber & Home Centers, 8372 Center Dr	6/27/2007	High Industrial	2439	• Consider covering storm drain inlet during dry season to prevent wood shaving from entering. • Clean out storm drain inlets/ remove sediment and wood debris. • Keep trash area free of debris and lids closed. • Place liquid containers stored outside within secondary containment. • Berm off area where vehicles are washed and discharge wastewater into sewer system or take vehicle to car wash facility. • Change/decrease irrigation water from potted plants from entering storm drain. • Train staff on SWPPP/ Storm Water Pollution Prevention. • Reassess BMPs to address. • Update SWPPP to address changes in personnel and BMP implementation.
3	EDCO Station, 8182 Commercial St	6/27/2007	High Industrial	4953	• Reassess BMPs to address high TSS and other analytes. • Minimize over irrigation.
4	Interamerica Stone Design, Inc., 8227 Commercial St.	6/27/2007	High Industrial	1741/ 3281	• File for an NOI and prepare a SWPPP/Monitoring Program. • Place solvents in secondary containment. • Note: this facility was instructed to file for an NOI and develop a SWPPP and monitoring program during previous inspections. The business was issued an NOV on the date of inspection for failure to comply with the Industrial Permit.

Table 3.4
Industrial Inspections (Continued)

#	Facility	Inspection	Current Priority	Current SIC	Recommended Corrective Actions
5	Schaefer Ambulance, Inc., 7285 University Ave	6/27/2007	High Industrial	4119	• Ensure good housekeeping measures are implemented including regular sweeping of parking lot, treatment of oil stains, dumpster lids closed. • Address low pH at South site and TSS at North site.
6	Rainbow Steel, Inc., 8332 Case St.	6/28/2007	High Industrial	3499	• Provide secondary containment and coverage for liquids stored outside and secondary containment for 55 gallon drums stored inside warehouse. • Vacuum fine dust particles at the southeast area. • Place sand bags on the exterior of warehouse where water leaks past building to prevent water from flowing into parking lot. • Reassess BMPs to address metals, nitrate, and conductivity. • Provide training list in SWPPP.
7	Wedo Wedo, 8169 Center St.	6/29/2007	High Industrial	3281	• Store oil/liquids in closed container, labeled, and under overhead cover. • Prevent tracking of white dust/ sweep regularly. • Keep waste/debris in dumpster with lid closed. Increase waste pickup as needed. • File NOI, develop SWPPP and monitoring program ASAP.

4 COMMERCIAL

Many different categories of commercial businesses, such as auto repair shops and restaurants, have the potential to discharge pollutants to storm water runoff. While these sites are typically smaller than industrial facilities, commercial businesses still have the potential to be significant sources of pollutants if BMPs are not implemented properly. Activities that pose a potential threat to water quality include vehicle repair activities, power washing, improper grease handling and disposal, and improper trash management. To reduce or eliminate potential pollutant discharge from commercial businesses, the City investigates complaints regarding commercial businesses and implements an education program targeting commercial businesses. The City's educational information reaches commercial facilities through media such as the *La Mesa Focus* newsletter, fact sheets, and brochures and through one-on-one interaction during complaint investigations.

Figure 4.1 presents the commercial zones located within the City and mostly concentrated along main roads. The yellow dots represent high priority commercial businesses, all of which have been inspected during the life of the current Municipal Permit. Because the yellow dots are based on GIS data, the dots for businesses in the Grossmont Center Mall, located north of Interstate 8 and west of Grossmont Center Drive, are on the streets around the mall rather than on the buildings in the mall. The commercial area north of Interstate 8 and close to SR-125 is Grossmont Hospital, which is not a high priority commercial business and thus does not have a corresponding yellow dot.

Figure 4.1
La Mesa Commercial Facilities

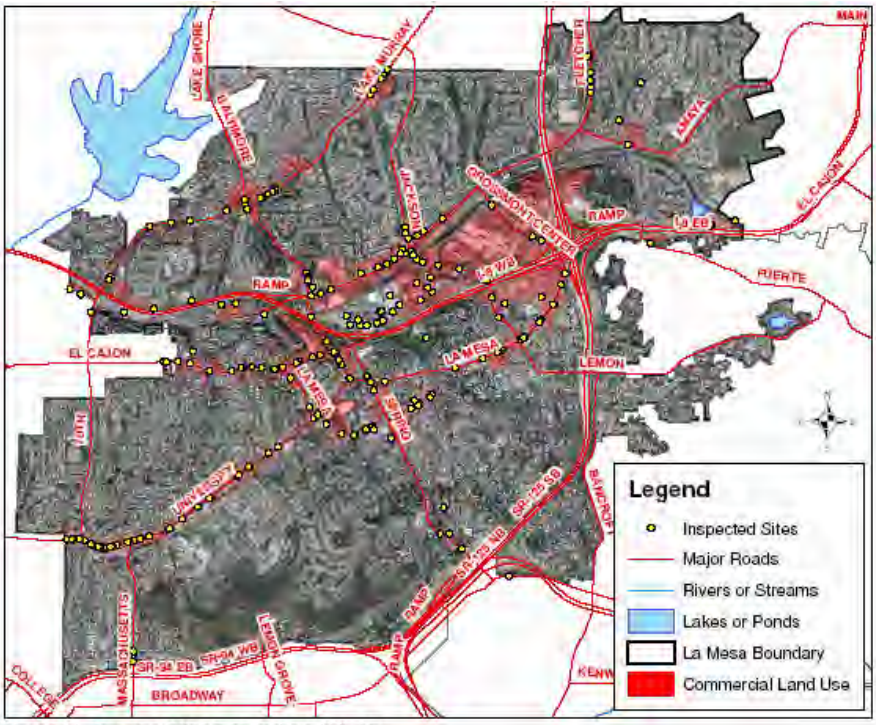

Base Data Sources: USGS, SanGIS, SANDAG

PRIORITY COMMERCIAL SOURCES

The City is required to maintain an updated JURMP inventory of high priority commercial businesses. The City's 2006/2007 high priority commercial inventory, which is presented in Table 4.1 at the end of this section, contains 266 businesses. Please note that the City's JURMP update will include a more up to date inventory that accounts for some changes after the end of 2006/2007.

POLLUTION PREVENTION

The City continues to require the implementation of pollution prevention measures, such as good housekeeping practices, at all commercial businesses and during commercial activities. Pollution prevention methods are BMPs that eliminate or reduce the generation of pollutants at their sources. The City provides information regarding pollution prevention measures through targeted educational materials and one-on-one during storm water compliance inspections and complaint investigations.

Because many food establishments typically deal with a large amount of waste oil and grease, food establishments are regarded as a high threat to water quality. The City continued to emphasize the importance of proper waste oil and grease disposal since a grease blockage in the sewer line can cause or contribute to SSOs. As with industrial facilities, business owners and/or managers are encouraged to share storm water knowledge with employees through educational materials, training sessions, and good housekeeping instruction.

BMP REQUIREMENTS AND IMPLEMENTATION

Section 4.3 of the JURMP outlines both general and activity-specific BMPs for commercial areas and activities. The City has made an effort to simplify the way in which business managers select and implement these BMPs to match their business's needs via inspections, educational materials, and outreach events. All commercial businesses are required to implement general and activity-specific BMPs, where applicable, which are described in Appendix C.2 of the City's JURMP. The City emphasizes the use of non-structural BMPs, such as good housekeeping techniques to prevent the need for more costly structural BMPs. The City may require structural BMPs when non-structural BMPs alone are not effective.

TRAINING, EDUCATION AND OUTREACH

Since some types of commercial businesses, particularly restaurants, are more likely to have a high turnover rate of employees, the City works with businesses to facilitate the distribution of storm water educational material to new employees by providing businesses educational outreach material and encouragement to pass along storm water-related information and material to employees. Education of employees is important because many lack sufficient knowledge regarding BMPs, which can result in otherwise preventable discharges of pollutants.

When an inspector visits a commercial site, the inspector immediately begins to engage the business manager/owner in a conversation about storm water. The inspector explains the storm water program goals and objectives, and then discusses BMP requirements and good housekeeping methods. The inspector ensures that the business manager/owner

understands the activity-specific BMPs necessary for the business. The inspector also provides the business manager/owner with any corrective actions both verbally and written via the inspection form or follow-up form. Educational materials such as the "Preventing Urban Runoff Pollution" brochure (Attachment 3.1), and the San Diego Bay and San Diego River Watershed fact sheets (Attachments 3.2 and 3.3, respectively) are provided to the business owner at the time of inspection. These fact sheets help business owners and managers become more aware of which constituents are considered a higher priority in the watershed in which their businesses are located.

Similar to previous years, the City continued to publish storm water related articles in the *La Mesa Focus* newsletter, which is distributed to several thousand addresses in the City, including many commercial businesses. The newsletters can be found as attachments 3.4, 3.5, 3.6, and 3.7, respectively. Summaries of the newsletters are described in later sections of this document.

The City continued to work with Target and Dixieline Lumber in La Mesa to make English and Spanish IPM cards (Attachment 4.1) available to the public at each business's garden center. The cooperation of each business with the City's Environmental Specialist to distribute educational material is valuable to the City's storm water program. The City plans to continue the partnerships with the Target and Dixieline Lumber to distribute educational materials to patrons of each business.

In response to exceedances noted during the 2006 Dry Weather Monitoring Program, the City sent 16 letters to businesses on Parkway Drive (east of Jackson Drive) regarding waste disposal and littering (Attachment 4.2). Educational materials sent with the letter included a San Diego River Watershed Fact Sheet (Attachment 3.3) and a Preventing Urban Runoff Pollution brochure (Attachment 3.1). Seven letters were sent to businesses located in the vicinity of Jackson Drive and Grossmont Boulevard regarding over watering and pet waste disposal (Attachment 4.3). Other BMPs were also mentioned in the letter as general pollution prevention measures. Educational materials sent with the letter were Preventing Urban Runoff Pollution brochure (Attachment 3.1), an Over Irrigation Fact Sheet (Attachment 4.4), and a San Diego River Watershed Fact Sheet (Attachment 3.3).

A total of 148 letters were sent to residents and commercial businesses in the Grossmont Shopping Center in the area surrounding Normal Avenue and Olive Avenue (Attachment 4.5). Dry Weather Monitoring Program results indicated high levels of bacteria in the storm drain system, which were likely to be caused by littering and over irrigation in the area. The letter included the following educational materials: San Diego River Watershed Fact Sheet (Attachment 3.3), Over Irrigation Fact Sheet (Attachment 4.4), and a Preventing Urban Runoff Pollution brochure (Attachment 3.1).

Action level exceedances were noted in the runoff from the area surrounding the Grossmont Shopping Center during the 2006 Dry Weather Monitoring Program. A letter was sent to the facility manager at the shopping center with direction to inform the landscape maintenance company that the irrigation should be limited to avoid over-irrigation and overspray from fertilizer and pesticides should be minimized (Attachment 4.6). The City also sent a San Diego River Watershed Fact Sheet (Attachment 3.3), an Over Irrigation Fact

Sheet (Attachment 4.4), and a Preventing Urban Runoff Pollution brochure (Attachment 3.1) with the letter. The Grossmont Center manager informed the City's Environmental Specialist that an irrigation system had been upgraded and installed to comply with the City's request to reduce the amount of irrigation runoff, and that the janitorial company had assured the manager that they were aware of and in full compliance with local regulations.

INSPECTIONS

As previously mentioned, all high priority commercial businesses on the City's inventory have been inspected once during the life of the current Municipal Permit. The City completed all routine inspections of high priority commercial businesses during previous reporting periods and continues to remain vigilant by conducting follow-up inspections and responding to complaints regarding commercial businesses as needed.

The City received a total of 23 commercial business related complaints. All complaints were investigated in a timely manner. Of these, there were five instances where businesses were washing vehicles without collecting washwater. The City responded to these incidents promptly and required that active discharges be ceased immediately. Overall, the City issued two verbal warnings, one written warning, and 10 NOVs to commercial businesses. Educational materials were also provided to businesses, where appropriate. All complaints made to the City's storm water hotline, including all commercial complaints, and their resolutions are discussed in Section 8 of this document.

The City continued to take a proactive approach in confronting mobile business activities. The City requires mobile businesses to sign two affidavits (Attachment 4.7) and meet with the City's Environmental Specialist prior to being granted a business license. The affidavits are signed to acknowledge that proper disposal is necessary for any water generated by mobile business activities such as mobile car detailing and power washing. Additionally, the business owner agrees to implement required BMPs as presented in Appendix C of the City's JURMP and failure to do so will result in enforcement action and possible legal action.

During this reporting period, three mobile car detailing businesses applied for a business license and signed affidavits. The business owner is also provided with the San Diego Bay and San Diego River watershed fact sheets. If a mobile business from another city is found to be discharging water into the storm drain system in the City of La Mesa, violations for not having a City business license and an NOV for illegal storm water discharge are issued. In addition, the City's Environmental Specialist has made it a practice to contact the business' city of origin (if not La Mesa) to inform the other city's storm water department of the violation. The City has taken a very proactive role in cooperating with other cities in the region to prevent storm water pollution. During 2006/2007 one potential mobile detailing business called the City's storm water hotline to inquire about mobile detailing requirements.

COMPLIANCE & ENFORCEMENT

During an inspection or complaint investigation the commercial business manager/owner is notified of necessary corrective actions based on storm water inspection findings. In many cases, BMP deficiencies are corrected and it is not necessary for the City to take further

action. In the case that a business does not cooperate with necessary corrective actions after being notified to do so, the City sends corrective action letters, notices to comply (NTC), and NOVs, as applicable, and may pursue further legal action, including potential fines. Any sites found to pose significant threats to human health or the environment are reported to the RWQCB immediately. The City's JURMP includes more detail about the City's enforcement approach for commercial businesses.

During this reporting period the City received a complaint about one mobile business, Southcoast Building Service, which was observed power washing without implementing adequate BMPs. The City's Environmental Specialist issued an NOV and described the BMPs that needed to be implemented, and the business stopped the illegal activity immediately.

As previously mentioned, the City issued two verbal warnings, one written warning, and 10 NOVs to non-compliant commercial businesses during 2006/2007. The City received complaints that Henry's Marketplace, a grocery store in the City, was pumping water from the loading dock area into the street. The complaints were received from a City resident who lives close to the business and is very vigilant about storm water issues. The City sent two NTCs to the business and talked with Henry's representatives about the importance of implementing proper BMPs. Since then no complaints have been received and no discharges have been observed. No commercial sites were found to pose a significant threat to human or environmental health during the reporting period, so no reports about commercial sites were made to the RWQCB during 2006/2007.

IMPLEMENTATION PLANS AND JURMP UPDATE FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. Updates to the commercial program will be presented in the updated JURMP. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2002.

Table 4.1
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
1	24 Hour Fitness, Inc. #101	7450 University Avenue, La Mesa, CA 91941	7997	San Diego Bay	University
2	24 Hour Fitness, Inc. 178	5601 Grossmont Drive, La Mesa, CA 91942	7997	San Diego River	Alvarado
3	A & W Restaurants	5500 Grossmont Center Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
4	A A A Auto Repair & Transmission	7025 University Ave, La Mesa, CA 91941	7539	San Diego Bay	University
5	A-1 Hire, Ltd.	7190 University Ave., La Mesa, CA 91941	7359	San Diego Bay	University
6	Al & EDS Autosound	5208 Jackson Dr. 117, La Mesa, CA 91942	7549	San Diego River	Alvarado
7	Aliberto's Mexican Food	7819 El Cajon Blvd., La Mesa, CA 91941	5812	San Diego Bay	University
8	All Italiana	8356 Allison Ave, La Mesa, CA 91941	5812	San Diego Bay	University
9	All Lines Dealer Alds Inc.	7373 Mohawk St., La Mesa, CA 91942	7549	San Diego River	Alvarado
10	All Pro Pool Services	7935 El Cajon Boulevard, La Mesa, CA 91942	5999	San Diego River	Alvarado
11	Aloha City Pest Control, Inc.	7317 El Cajon Boulevard 203, La Mesa, CA 91942	7342	San Diego River	Alvarado
12	Anthony's Fish Grotto La Mesa	9530 Murray Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
13	Antica Trattoria Inc.	5654 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
14	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr, La Mesa, CA 91942	7542	San Diego River	Alvarado
15	Arby's 5822	5341 Jackson Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
16	Arco Sunshine Food Store #9543	7594 University Ave, La Mesa, CA 91941	5541	San Diego Bay	University
17	Arco Sunshine Food Store #9596	7974 University Ave, La Mesa, CA 91941	5541	San Diego Bay	University

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
18	Arigato Japanese Restaurant	5575 Baltimore Dr # 110, La Mesa, CA 91942	5812	San Diego River	Alvarado
19	Aswan African Cafe	7404 University Ave, La Mesa, CA 91942	5812	San Diego Bay	University
20	Auto Center	8203 University Ave, La Mesa, CA 91941	7539	San Diego Bay	University
21	Auto Finance Group	7474 University Ave., La Mesa, CA 91941	5521	San Diego Bay	University
22	Auto Repair Specialists	8120 Center St, La Mesa, CA 91942	7539	San Diego River	Alvarado
23	Auto World	4949 Baltimore Drive, La Mesa, CA 91942	5521	San Diego River	Alvarado
24	Autozone 2809	7791 El Cajon Boulevard, La Mesa, CA 91942	5531	San Diego River	University
25	B A S Starting Systems, Inc.	8186 Commercial St, La Mesa, CA 91942	7539	San Diego River	Alvarado
26	B J's Pizza & Grill	5500 Grossmont Ctr Dr #M1, La Mesa, CA 91942	5812	San Diego River	Alvarado
27	Baker's Square #474	5270 Baltimore Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
28	Baldwin Auto Sales	8174 Center St., La Mesa, CA 91942	5521	San Diego River	Alvarado
29	Baltimore Texaco	5261 Baltimore Drive, La Mesa, CA 91942	5541	San Diego River	Alvarado
30	Bancroft Motors	8760 Campo Rd., La Mesa, CA 91941	5521	San Diego Bay	Spring Valley
31	Baskin-Robbins 31 Flavors	8807 La Mesa Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
32	Beck's Repair Shop	8838 La Mesa Blvd, La Mesa, CA 91941	7539	San Diego River	Alvarado
33	Best-Top Auto Service	7633 El Cajon Blvd #110-A, La Mesa, CA 91941	7538	San Diego River	Alvarado
34	Big O Tires	7589-A El Cajon Blvd, La Mesa, CA 91941	7534	San Diego River	Alvarado
35	Bill's Lock and Key	7368 El Cajon Boulevard, La Mesa, CA 91942	7699	San Diego River	Alvarado

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
36	Bob Bowen's Auto Service	7191 Alvarado Rd, La Mesa, CA 91941	7538	San Diego River	Alvarado
37	Bob Stahl Chevrolet	7601 Alvarado Road, La Mesa, CA 91942	5511	San Diego River	Alvarado
38	Boll Weevil Systems Inc	9104 Fletcher Pkwy, La Mesa, CA 91942	5812	San Diego River	Alvarado
39	Bond's Automotive	8418 La Mesa Blvd, La Mesa, CA 91941	7539	San Diego River	Alvarado
40	Brigantine Restaurant	9350 Fuerte Drive, La Mesa, CA 91941	5812	San Diego River	Alvarado
41	Broding's Battery Warehouse	8188 Commercial St., La Mesa, CA 91942	5531	San Diego River	Alvarado
42	Broyles Construction, Inc.	8101 Commercial St, La Mesa, CA 91942	0782	San Diego River	Alvarado
43	Bruce's Auto Repair	7633 El Cajon Blvd., La Mesa, CA 91941	7538	San Diego River	Alvarado
44	Budget R V Repair & Mobile Service	7860 El Cajon Blvd, La Mesa, CA 91942	7539	San Diego River	Alvarado
45	Bulls Eye Custom	8186 Center Street, Suite H, La Mesa, CA 91942	7336	San Diego River	Alvarado
46	C & D Auto Care	7163 University Avenue, La Mesa, CA 91941	7538	San Diego Bay	University
47	C & D Towing Specialists	8332 Case St., La Mesa, CA 91942	7549	San Diego River	Alvarado
48	Caliber Collision Centers	8310 Center Drive, La Mesa, CA 91942	7532	San Diego River	Alvarado
49	Callari's Italian Deli & Bakery	7670 El Cajon Blvd, La Mesa, CA 91941	5812	San Diego River	Alvarado
50	Cappuccino House	7334 University Avenue, La Mesa, CA 91941	5812	San Diego Bay	University
51	Car Mart	7640 El Cajon Boulevard, La Mesa, CA 91942	5211	San Diego River	Alvarado
52	Carl Burger Dodge World	8355 Hercules Street, La Mesa, CA 91942	5511	San Diego River	Alvarado
53	Carl Burgers Jeep Eagle World	8333 Hercules St., La Mesa, CA 91942	5511	San Diego River	Alvarado
54	Carl's Jr. #284	8110 Parkway Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
55	Carruso's Coffee Corner	8201 La Mesa Blvd, La Mesa, CA 91941	5812	San Diego Bay	University
56	Center City Shell #2	3810 Massachusetts Ave, La Mesa, CA 91941	5541	San Diego Bay	Lemon Grove

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
57	Charcoal House	9566 Murray Dr., La Mesa, CA 91942	5812	San Diego River	Alvarado
58	Chevy's Fresh Mex #513	5500 Grossmont Center Drive, La Mesa, CA 91942	5812	San Diego River	Alvarado
59	Chili's Bar & Grill #454	8285 Fletcher Pkwy, La Mesa, CA 91942	5812	San Diego River	Alvarado
60	Chipotle Mexican Grill	8005 Fletcher Parkway, La Mesa, CA 91942	5812	San Diego River	Alvarado
61	Chopsticks Inn Restaurant	8687 La Mesa Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
62	Christy's Donuts	7953 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
63	Chuck E. Cheese's	5500 Grossmont Center Dr J 34, La Mesa, CA 91941	5812	San Diego River	Alvarado
64	CI Customs	7147 University, Suite A, La Mesa, CA 91941	7549	San Diego Bay	University
65	Ciao Bella	5263-65 Baltimore Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
66	Circle K Stores, Inc. # 8675	8899 La Mesa Blvd, La Mesa, CA 91942	5541	San Diego River	Alvarado
67	Claim Jumper Restaurant La Mesa	5500 Grossmont Ctr. Drive, La Mesa, CA 91942	5812	San Diego River	Alvarado
68	Classy Cards, Etc.	8080 La Mesa Blvd 105, La Mesa, CA 91941	7374	San Diego Bay	University
69	Coco's #132	5550 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
70	Coffee Indulgences	8900 Grossmont Blvd #7, La Mesa, CA 91941	5812	San Diego River	Alvarado
71	Cold Stone Creamery	5500 Grossmont Center Dr. #F1, La Mesa, CA 91942	5812	San Diego River	Alvarado
72	Commercial Electric Appliance Service	8110 Commercial St., La Mesa, CA 91942	7699	San Diego River	Alvarado

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
73	Constant Cravings Coffeehouse	5575 Baltimore Dr #108, La Mesa, CA 91942	5812	San Diego River	Alvarado
74	Continental Catering	8232 Parkway Drive, La Mesa, CA 91942	5812	San Diego River	Alvarado
75	Cosmoprof Professional Salon Center	5208 Jackson Dr #115, La Mesa, CA 91941	5999	San Diego River	Alvarado
76	D'amato's Pizza	8807 La Mesa Blvd., La Mesa, CA 91941	5812	San Diego River	Alvarado
77	Dan's Automotive	7501 University Ave., La Mesa, CA 91941	7538	San Diego Bay	University
78	Dante's Pizza	5500 Grossmont Center Dr # 135, La Mesa, CA 91942	5812	San Diego River	Alvarado
79	De Albas Spring St.	4867 Spring St., La Mesa, CA 91941	7539	San Diego Bay	University
80	Dennis Sherman Foreign Car Service	8620 La Mesa Boulevard, La Mesa, CA 91942	7538	San Diego River	Alvarado
81	Denny's Restaurant #6488	4235 Spring St, La Mesa, CA 91941	5812	San Diego Bay	Spring Valley
82	Denny's, Inc. #1743	6970 Alvarado Rd, La Mesa, CA 92120	5812	San Diego River	Alvarado
83	Detailing Concepts by Laura	6152 Horton Drive, La Mesa, CA 91942	7542	NA - Mobile Business	NA - Mobile Business
84	Deters Inc.	8180 Commercial Street, La Mesa, CA 91942	7359	San Diego River	Alvarado
85	Dieter Fischer's Star Car Service	8699 La Mesa Blvd, La Mesa, CA 91941	7539	San Diego River	Alvarado
86	Domino's Pizza	7960 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
87	Don Keating Service	8381 La Mesa Boulevard, La Mesa, CA 91941	7538	San Diego Bay	University
88	Don Keating Used Cars	8381 La Mesa Boulevard, La Mesa, CA 91941	5521	San Diego Bay	University
89	Don Primos Bolivian Restaurant	9570 Murray Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
90	Doug Tucker Texaco Station	5151 70th St, La Mesa, CA 91941	5541	San Diego River	Alvarado

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
91	Dragon House	6062 Lake Murray Blvd #201, La Mesa, CA 91942	5812	San Diego River	Alvarado
92	Drew Ford / Drew Hyundai	8970 La Mesa Blvd., La Mesa, CA 91942	5511	San Diego River	Alvarado
93	Eastridge Veterinary Clinic	7750 University Avenue, Suite A, La Mesa, CA 91941	0742	San Diego Bay	University
94	El Cerrito Veterinary Hospital	6911 University Avenue, La Mesa, CA 91941	0742	San Diego Bay	University
95	El Compadre Taco Shop	7327 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
96	El Torito	5024 Baltimore Dr, La Mesa, CA 91941	5812	San Diego River	Alvarado
97	Elite Auto Collision Repair Center	4949 Baltimore Drive, La Mesa, CA 91941	7532	San Diego River	Alvarado
98	Engraving Pros	5500 Grossmont Center Drive, La Mesa, CA 91942	5999	San Diego River	Alvarado
99	Equilon Enterprises, LLC (Texaco - Car Wash)	9090 Dallas St, La Mesa, CA 91942	5541	San Diego River	Alvarado
100	Euclid Motors	4969 Baltimore Dr., La Mesa, CA 91942	5521	San Diego River	Alvarado
101	European Car Service	8855 La Mesa Blvd, La Mesa, CA 91942	7539	San Diego River	Alvarado
102	Express Auto Service	7633 El Cajon Blvd., La Mesa, CA 91941	7538	San Diego River	Alvarado
103	Family Chef Restaurant	6155 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
104	Filiberto's Mexican Food	7102 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
105	Firestone Tire & Service Centers	8784 Grossmont Blvd, La Mesa, CA 91942	7534	San Diego River	Alvarado
106	Fletcher Hills Pet Clinic	9160 Fletcher Hills Parkway, La Mesa, CA 91942	0742	San Diego River	Alvarado
107	Fuddrucker's	5500 Grossmont Center Drive, La Mesa, CA 91942	5812	San Diego River	Alvarado

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
108	German Auto Repair	4654 Nebo Dr, La Mesa, CA 91941	7539	San Diego Bay	University
109	Giant Pizza King #11	8302 Parkway Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
110	Gold Star Taco Shop	5416 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
111	Golden State Auto of La Mesa, Inc.	7224 University Avenue, La Mesa, CA 91941	5521	San Diego Bay	University
112	Golden Wok	8342 Parkway Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
113	Greg's Sharpening and Cutlery	4691 Date Ave, La Mesa, CA 91941	7699	San Diego Bay	University
114	Halsey Design Group, Inc.	9340 Fuerte Dr., Suite 303, La Mesa, CA 91942	0781	San Diego River	Alvarado
115	Harloff Automotive	7445 University Avenue, La Mesa, CA 91941	5531, 7538	San Diego Bay	University
116	Harold's Automotive	8202 Parkway Dr, La Mesa, CA 91941	7538	San Diego River	Alvarado
117	Hearth House	5505 Jackson Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
118	Helix Pet Hospital	4223 Palm Ave., La Mesa, CA 91941	0742	San Diego Bay	Spring Valley
119	Hoxsey Corporation/Shell Station	5302 Lake Murray Blvd., La Mesa, CA 91942	5541	San Diego River	Alvarado
120	J Ks Greek Cafe	7749 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
121	J.B. Auto & Truck Sales	4999 Baltimore Drive, La Mesa, CA 91942	5521	San Diego River	Alvarado
122	Jack In The Box, Jackson	5141 Jackson Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
123	Jack In The Box, Lake Murray	6140 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
124	Jack In The Box, University	6987 University Ave, La Mesa, CA 91942	5812	San Diego Bay	University
125	Jack Orr Auto Body, Inc.	7253 University Ave, La Mesa, CA 91941	7539	San Diego Bay	University
126	Jamar Restaurant	7777 University Avenue, La Mesa, CA 91941	5812	San Diego Bay	University

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
127	Jamba Juice #143	5500 Grossmont Ctr Dr., La Mesa, CA 91942	5812	San Diego River	Alvarado
128	JC Brooks Construction	8383 Cente Dr. #A, La Mesa, CA 91942	7349	San Diego River	Alvarado
129	Jolt 'N Joes	8076 La Mesa Boulevard, La Mesa, CA 91941	5812	San Diego Bay	University
130	Judy Eppler's Chevron and Food Mart	8200 University Ave, La Mesa, CA 91941	5541	San Diego Bay	University
131	Kentucky Fried Chicken	5358 Jackson Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
132	Knott's Pest Control, Inc.	5141 Guild St., La Mesa, CA 91942	7342	San Diego River	Alvarado
133	Kragen CSK Auto, Inc. #789	5350 Jackson Dr., La Mesa, CA 91942	5531	San Diego River	Alvarado
134	Kwong's Wok	7918 El Cajon Blvd, Ste P, La Mesa, CA 91942	5812	San Diego River	Alvarado
135	La Fogata Mexican Restaurant	7303 El Cajon Blvd, La Mesa, CA 91941	5812	San Diego River	Alvarado
136	La Mesa Auto Care	8692 La Mesa Blvd, La Mesa, CA 91941	7539	San Diego River	Alvarado
137	La Mesa Car Co.	7658 University Ave., La Mesa, CA 91941	5511	San Diego Bay	University
138	La Mesa Car Wash	5322 Jackson Dr, La Mesa, CA 91942	5541	San Diego River	Alvarado
139	La Mesa Chevron	5600 Baltimore Dr, La Mesa, CA 91942	5541	San Diego River	Alvarado
140	La Mesa Lumber	8255 University Ave, La Mesa, CA 91941	5211	San Diego Bay	University
141	La Mesa Motor Clinic, Inc.	5120 Guild St, La Mesa, CA 91942	7539	San Diego River	Alvarado
142	La Mesa Ocean Grille	5465 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
143	La Mesa Paint & Body	8170 Parkway Dr, La Mesa, CA 91942	7539	San Diego River	Alvarado
144	La Mesa Racquetball, Inc.	4330 Palm Ave., La Mesa, CA 91941	7997	San Diego Bay	Spring Valley
145	La Mesa Smog	3824 Massachusetts Ave., Suite A, La Mesa, CA 91942	7549	San Diego Bay	Lemon Grove

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
146	La Mesa Submarina	5454 Grossmont Center Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
147	La Mesa Texaco/Chula Vista Entertainment	4925 Spring St, La Mesa, CA 91941	5541	San Diego River	Alvarado
148	La Mesita Mexican Food	7012 University Avenue, La Mesa, CA 91941	5812	San Diego Bay	University
149	La Salsa Restaurants	4990 Baltimore Dr, La Mesa, CA 91941	5812	San Diego River	Alvarado
150	La Torta Mexican Café/Deli	8350 La Mesa Blvd, La Mesa, CA 91941	5812	San Diego Bay	University
151	Lake Murray Blvd #1 Exxon	6085 Lake Murray Blvd, La Mesa, CA 91942	5541	San Diego River	Alvarado
152	Lake Murray Village Veterinarian	5644 Lake Murray Blvd., La Mesa, CA 91942	0742	San Diego River	Alvarado
153	Lakeside Motors	8090 University Avenue, La Mesa, CA 91941	5521	San Diego Bay	University
154	Los Pinos Taco Shop	5660 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
155	Lotus Pond Restaurant	8260 Parkway Dr, La Mesa, CA 91941	5812	San Diego River	Alvarado
156	Manhattan Pizza	6195-D Lake Murray Blvd., La Mesa, CA 91942	5812	San Diego River	Alvarado
157	Marie Callender's #74	6950 Alvarado Rd, La Mesa, CA 91941	5812	San Diego River	Alvarado
158	Marieta's	8949 La Mesa Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
159	Mario's De La Mesa	8425 La Mesa Blvd., La Mesa, CA 91941	5812	San Diego River	Alvarado
160	McDonald's	8045 Fletcher Pkwy, La Mesa, CA 91942	5812	San Diego River	Alvarado
161	Metro Vacuum & Cleaning Supply	7938 La Mesa Blvd, La Mesa, CA 91941	5999	San Diego Bay	University
162	Midas Mufflers	7207 University Ave, La Mesa, CA 91941	7539	San Diego Bay	University
163	Mike's Custom T-Shirts	7141 University Ave, La Mesa, CA 91941	5699	San Diego Bay	University
164	Motel 6 #1319	7621 Alvarado Road, La Mesa, CA 91942	7011	San Diego River	Alvarado

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
165	Nacho's Taco Shop	7589 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
166	Natasha Deli	6126 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
167	Neil's Auto Center	7633 El Cajon Blvd., La Mesa, CA 91941	7539	San Diego River	Alvarado
168	New York Giant Pizza	9083 Dallas St, La Mesa, CA 91942	5812	San Diego River	Alvarado
169	Nonnos Pizza	5314 Baltimore Drive, La Mesa, CA 91942	5812	San Diego River	Alvarado
170	Office Depot #846	8481 Fletcher Parkway, La Mesa, CA 91942	5999	San Diego River	Alvarado
171	Old Country Deli	7097 University Avenue, La Mesa, CA 91941	5812	San Diego Bay	University
172	Olive Garden G M R I, Inc. #1301	5500 Grossmont Center Dr J 2, La Mesa, CA 91942	5812	San Diego River	Alvarado
173	Oram's Auto Repair & Electric	7801 El Cajon Blvd, La Mesa, CA 91942	7539	San Diego River	Alvarado
174	Outback Steakhouse	5628 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
175	P S I Prestige Stations, Inc. # 9578	9600 Murray Dr, La Mesa, CA 91942	5541	San Diego River	Alvarado
176	P.G. King	5575 Baltimore Dr #105-A, La Mesa, CA 91942	5812	San Diego River	Alvarado
177	Pacific Repair Services Int'l, Inc.	5345 Timken St., Suite E, La Mesa, CA 91942	7699	San Diego River	Alvarado
178	Panda Express #226	8011 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
179	Panda Express #606	5500 Grossmont Center Drive E-1, La Mesa, CA 91942	5812	San Diego River	Alvarado
180	Panda Land	9200 Fletcher Pky, La Mesa, CA 91942	5812	San Diego River	Alvarado
181	Parkway Pet Hospital	8200 Parkway Drive, La Mesa, CA 91942	0742	San Diego River	Alvarado
182	Parkway Upholstery Co.	8333 Case Street, La Mesa, CA 91942	7641	San Diego River	Alvarado

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
183	Peanuts Auto Repair	5387 Lake Murray Blvd, La Mesa, CA 91942	7539	San Diego River	Alvarado
184	Performance Automotive	7227 University Avenue, La Mesa, CA 91941	7538	San Diego Bay	University
185	Performance Choppers	4999 Baltimore Dr., Suite 1, La Mesa, CA 91942	5571	San Diego River	Alvarado
186	Performance Motoring	8620 La Mesa Blvd., La Mesa, CA 91941	5521	San Diego River	Alvarado
187	Pet Emergency Clinic East County	5232 Jackson Dr., Suite 105, La Mesa, CA 91942	0742	San Diego River	Alvarado
188	Phillip's Maytag	8495 La Mesa Boulevard, La Mesa, CA 91942	5722	San Diego River	Alvarado
189	Pick Up Stix La Mesa	8025 Fletcher Pkwy, La Mesa, CA 91942	5812	San Diego River	Alvarado
190	Pietros Cucina Italiana	8378 Parkway Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
191	Pizza Hut	8011 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
192	Plaza Deli	7777 Alvarado Rd 400 A, La Mesa, CA 91942	5812	San Diego River	Alvarado
193	Por Favor Restaurant	8302 La Mesa Blvd, La Mesa, CA 91941	5812	San Diego Bay	University
194	Prestige Stations, Inc. # 695, AM PM Mini Mart	3775 Massachusetts Ave, La Mesa, CA 91941	5541	San Diego Bay	Lemon Grove
195	Prestigious Automotive	5301 Lake Murray Blvd, La Mesa, CA 91942	5521	San Diego River	Alvarado
196	Public Auto Wholesale	8260 Commercial Street, La Mesa, CA 91942	5521	San Diego River	Alvarado
197	Pykles Plumbing & True Value Hardware	6127 Lake Murray Blvd., La Mesa, CA 91942	5251	San Diego River	Alvarado
198	Rancho Mobil #2	5450 Jackson Dr, La Mesa, CA 91942	5541	San Diego River	Alvarado
199	Red Lobster G M R I, Inc. #504	8703 Murray Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
200	Red Oak Steakhouse #804	5130 Baltimore Drive, La Mesa, CA 91941	5812	San Diego River	Alvarado
201	Road Pros Tire & Lube	7151 University Ave., La Mesa, CA 91941	5531, 7534	San Diego Bay	University
202	Rosaritos Mexican Food #3	7941 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
203	Round Table Pizza	8032 La Mesa Blvd, La Mesa, CA 91941	5812	San Diego Bay	University
204	Round Table Pizza Restaurant	5999 Severin Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
205	Rubio's Restaurants. Inc.	5500 Grossmont Center Dr, # D 22, La Mesa, CA 91942	5812	San Diego River	Alvarado
206	Russian Palace	6130 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
207	San Diego's Finest Donuts	6062 Lake Murray Blvd, La Mesa, CA 91942	5812	San Diego River	Alvarado
208	Sandwiches N Stuff	8363 Center Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
209	Sanfilippo's Pizza	8141 La Mesa Blvd, La Mesa, CA 91941	5812	San Diego Bay	University
210	Schlotzsky's	5500 Grossmont Center Dr 219, La Mesa, CA 91942	5812	San Diego River	Alvarado
211	Select Cars, Inc.	7699 El Cajon Blvd., La Mesa, CA 91942	5521	San Diego Bay	University
212	Sergio's Café	7380 Parkway Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
213	Severin Mobil	5900 Severin Dr, La Mesa, CA 91942	5541	San Diego River	Alvarado
214	Shirley's Kitchen	7868 El Cajon Blvd, La Mesa, CA 91941	5812	San Diego River	Alvarado
215	Shirley's Kitchen, University	7118 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
216	Shizuoka Japanese Restaurant	9118 Fletcher Pky, La Mesa, CA 91942	5812	San Diego River	Alvarado
217	Sid's Auto Body, Inc.	7473 El Cajon Blvd., La Mesa, CA 91941	7532	San Diego River	Alvarado
218	Smog Pros	8303 Parkway Drive, La Mesa, CA 91942	5541	San Diego River	Alvarado

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
219	Smog R Us / California Inspection Station	9089 Dallas St., La Mesa, CA 91942	7549	San Diego River	Alvarado
220	Smoke & Save	9138 Fletcher Pkwy, La Mesa, CA 91942	5993	San Diego River	Alvarado
221	Souplantation/Garden Fresh	9158 Fletcher Pky #3, La Mesa, CA 91942	5812	San Diego River	Alvarado
222	Southern California Discount Tire	8867 Grossmont Blvd., La Mesa, CA 91942	7534	San Diego River	Alvarado
223	Sparky's Transmissions	8861 La Mesa Blvd, La Mesa, CA 91941	7539	San Diego River	Alvarado
224	Srltn Inc. dba Bomar Business	8141 Center St., La Mesa, CA 91942	7629	San Diego Bay	University
225	Sterling Motor Escort	7589 El Cajon Blvd., Suite D, La Mesa, CA 91942	5571	San Diego River	Alvarado
226	Street Smart Vehicle Protection/Premium	7633 El Cajon Blvd., La Mesa, CA 91942	7549	San Diego River	Alvarado
227	Submarina - La Mesa	5454 Grossmont Ctr. Drive, La Mesa, CA 91942	5812	San Diego River	Alvarado
228	Subway Sandwiches	8142 La Mesa Blvd., La Mesa, CA 91941	5812	San Diego Bay	University
229	Subway Sandwiches, Lake Murray	5307 Lake Murray Blvd A, La Mesa, CA 91942	5812	San Diego River	Alvarado
230	Sun Valley Golf Course	5080 Memorial Drive, La Mesa, CA 91942	7992	San Diego River	Alvarado
231	Sunny Donuts	4199 Spring St, La Mesa, CA 91941	5812	San Diego Bay	Spring Valley
232	Sunny Garden Cuisine Of China	5500 Grossmont Center Dr, La Mesa, CA 91941	5812	San Diego River	Alvarado
233	Super China Buffet	7984 La Mesa Blvd, La Mesa, CA 91941	5812	San Diego Bay	University
234	Sushi Fun Teriyaki Express	5500 Grossmont Center Dr #303, La Mesa, CA 91942	5812	San Diego River	Alvarado
235	Tamarind Thai Restaurant	7970 University Avenue, La Mesa, CA 91941	5812	San Diego Bay	University

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
236	The Baltimore Café	5620 Baltimore Dr., La Mesa, CA 91941	5812	San Diego River	Alvarado
237	The Boxing Club (A&C Real Box, Inc.)	5290 Baltimore Dr., La Mesa, CA 91942	7999	San Diego River	Alvarado
238	The Car Shop	4999 Baltimore Dr, La Mesa, CA 91941	7532	San Diego River	Alvarado
239	The Charcoal House	9566 Murray Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
240	The Chickenest 95, Inc.	7200 Parkway Dr #111, La Mesa, CA 91942	5812	San Diego River	Alvarado
241	The Dashboard Store/Expert Window Tinting	7147 University Ave., La Mesa, CA 91941	5531	San Diego Bay	University
242	The Godfather II Sorrento Italian Restaurant	8273 La Mesa Blvd, La Mesa, CA 91941	5812	San Diego Bay	University
243	The Greek Gyros II	5500 Grossmont Ctr. Drive, La Mesa, CA 91942	5812	San Diego River	Alvarado
244	The Pet Hospital of La Mesa	5336 Jackson Dr., La Mesa, CA 91942	0742	San Diego River	Alvarado
245	The Rush Group	7633 El Cajon Blvd, Suite 210 B, La Mesa, CA 91941	5531	San Diego River	Alvarado
246	The Yogurt Mill	8158 La Mesa Blvd, La Mesa, CA 91941	5812	San Diego Bay	University
247	Thrifty Transmission	7633 El Cajon Blvd., La Mesa, CA 91941	7537	San Diego River	Alvarado
248	Top Flite Darts	6942 University Ave, La Mesa, CA 91941	5941	San Diego Bay	University
249	Town & Country T.V.	7115 University Ave., La Mesa, CA 91941	7699	San Diego Bay	University
250	Tratorria Tiramisu	8273 La Mesa Blvd., La Mesa, CA 91941	5812	San Diego Bay	University
251	Trolley Stop Deli	8150 La Mesa Blvd, La Mesa, CA 91941	5812	San Diego Bay	University
252	Trophy's	5500 Grossmont Ctr Dr, La Mesa, CA 91942	5812	San Diego River	Alvarado
253	Tune Craft, Inc.	8802 La Mesa Blvd, La Mesa, CA 91941	7539	San Diego River	Alvarado

Table 4.1 (Continued)
High Priority Commercial Business Inventory--Updated for Fiscal Year 2006/2007

#	Business Name	Street Address	SIC Code	Watershed	Drainage Basin
254	University Animal Clinic	7134 University Ave., La Mesa, CA 91941	0742	San Diego Bay	University
255	Valvoline Instant Oil Change	7981 El Cajon Blvd, La Mesa, CA 91941	7539	San Diego River	Alvarado
256	VCA Grossmont Animal Hospital	8274 Parkway Dr., La Mesa, CA 91942	0742	San Diego River	Alvarado
257	Village Garden Restaurant & Bakery	8384 La Mesa Blvd, La Mesa, CA 91941	5812	San Diego Bay	University
258	Wally's II Diagnostic Auto Repair	7393 El Cajon Blvd, La Mesa, CA 91942	7539	San Diego River	Alvarado
259	West Coast Car Sales	6942 University Ave., Suite C, La Mesa, CA 91941	5511	San Diego Bay	University
260	Wienerschnitzel #58	6949 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
261	Williams Enterprises	7840 La Mesa Blvd., La Mesa, CA 91941	5561	San Diego Bay	University
262	Wollman, Rick Gallery & Framing, LLC	8808 La Mesa Blvd., La Mesa, CA 91941	5999	San Diego River	Alvarado
263	Wongs Golden Palace, Inc.	7126 University Ave, La Mesa, CA 91941	5812	San Diego Bay	University
264	Worldwide Auto Parts Inc.	9089 Dallas St., La Mesa, CA 91942	5531	San Diego River	Alvarado
265	Yogurt Express	6195 Lake Murray Blvd C, La Mesa, CA 91942	5812	San Diego River	Alvarado
266	Zodiak Café	9158 Fletcher Parkway #3, La Mesa, CA 91942	5812	San Diego River	Alvarado

5 RESIDENTIAL

As shown in Figure 5.1, below, residential areas comprise over half of the land use in the City of La Mesa. Since residential areas comprise such a large area of the City, activities that take place in residential areas have the potential to impact the quality of receiving waters. Residential activities such as vehicle washing, over irrigation, home maintenance, and HHW disposal can potentially contribute pollutants to the City's MS4 if BMPs are not implemented. Pollutants of concern include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has implemented a range of programs to address these residential activities with the aim to reduce pollutant loads associated with such activities.

Figure 5.1 depicts the residential land use in the City. Yellow areas are single-family homes, orange areas are multi-family housing such as duplexes or apartment buildings, brown areas are mobile home parks, and purple areas are other residential areas such as nursing homes.

Figure 5.1
Residential Land Use in the City of La Mesa

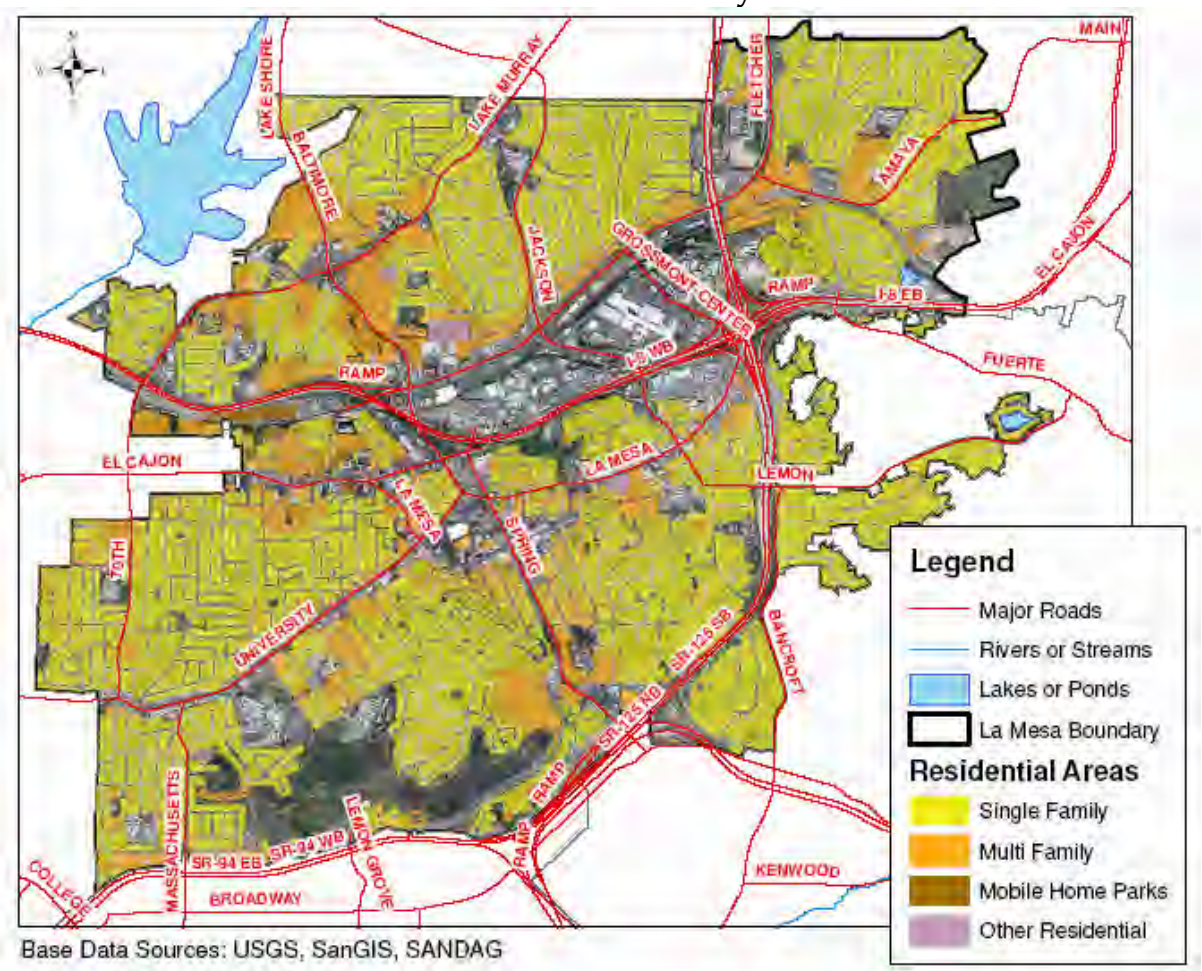

The following subsections provide details about activities performed during this reporting period with respect to priority residential sources, BMP requirements and implementation, pollution prevention, inspections, compliance and enforcement, and training, education, and outreach activities.

PRIORITY RESIDENTIAL SOURCES

During the 2006/2007 reporting period, the City continued to identify high priority residential sources. As in previous reporting periods, the City of La Mesa elected to classify the following activities as high priorities.

- Automobile repair maintenance
- Automobile washing
- Automobile parking
- Home and garden care activities and product use
- Disposal of pet waste

In addition to the above activity-based prioritization, the City has noted several residential areas that, relatively speaking, pose higher threats to water quality. High priority residential areas are designated by considering visual observations, institutional knowledge, and Dry Weather Monitoring Program data. The following residential areas were designated as being high threat to water quality:

- Lake Murray Basin
- Lower University Channel and surrounding areas
- Baltimore Drive and surrounding areas
- Severin Drive and surrounding areas

In response to exceedances noted during the 2006 Dry Weather Monitoring Program, letters were sent to residents detailing the kinds of pollutants found in their neighborhoods as well as ways to prevent such pollutants from being discharged. Letters were tailored to target the action level exceedances noted in specific areas. The letters reminded residents that hosing down the sidewalk/driveway area, washing cars on the street, over-irrigating, over-fertilizing, and improperly disposing of pet waste will contribute to storm water pollution. Residents were encouraged to implement BMPs for these activities and to encourage friends and family to do the same. The letters also noted that residents were welcome to call the City's Environmental Specialist if they had additional questions. More detailed information about the priority residential sources, exceedances noted, and the letters sent to residents in response to such exceedances is presented below.

Lake Murray Basin

Runoff from a small portion of northern La Mesa drains into Lake Murray, which eventually drains to the San Diego River. The lake is commonly used for recreational activities such as boating and fishing, and is home to a variety of flora and fauna. Although no evidence was found to suggest that residential activities impacted the water quality in the Lake Murray

Basin area, the City continues to regard the area as a high threat to water quality as a proactive measure.

Lower University Channel and Surrounding Areas
During the 2006 Dry Weather Monitoring Program, a decrease in the amount of bacteria in samples from the open channel between Harbinson Avenue and Massachusetts Avenue was noted. An action level exceedance was still noted though, and the upstream investigation found that the area around the intersection of Olive Avenue and Normal Avenue was the most likely source. There were several instances of over-irrigation noted in that area, including one that was causing a steady stream of turbid surface flow and litter to enter a curb inlet in the southeast corner of Olive Avenue and Normal Avenue. A total of 148 letters were sent to residents and commercial businesses in the Grossmont Shopping Center in the area surrounding Normal Avenue and Olive Avenue (Attachment 4.5). Educational materials sent with the letter included a San Diego River Watershed Fact Sheet (Attachment 3.3), an Over Irrigation Fact Sheet (Attachment 4.4), and a Preventing Urban Runoff Pollution brochure (Attachment 3.1).

Baltimore Drive and Surrounding Areas
This area consists of largely residential areas surrounding Dallas Street, Nagel Street, Sarita Street, and Blain Place. Runoff from this area of the City eventually drains to Alvarado Channel. Similar to the previous reporting period, the Dry Weather Monitoring Program findings indicated high concentrations of bacteria in non-storm water discharges. During the 2006 Dry Weather Monitoring Program, the highest total coliform count was found in a small surface flow entering a grated curb inlet at the corner of Nagel Street and Sarita Street.

A total of 413 letters and educational materials were sent to residents living in the areas surrounding Nagel Street, Sarita Street, and Marengo Avenue near Morrow Way (Attachment 5.1). The letter described the urban runoff sampling done in these areas as part of the City's Dry Weather Monitoring Program and indicated that high levels of bacteria were recorded. The letter also explained possible causes of high bacteria levels, such as organic debris from landscaping/garden waste, bacteria from pet waste, and over irrigation. BMPs were recommended to residents, and educational material was provided. The educational material enclosed with the letter included a Preventing Urban Runoff Pollution brochure (Attachment 3.1), an Over Irrigation Fact Sheet (Attachment 4.4), and a San Diego River Watershed Fact Sheet (Attachment 3.3).

A letter and educational materials were sent to the property owner at the intersection of Alvarado Channel and the SR-125 underpass to encourage the owner to carry out periodic cleaning of the channel to reduce algal growth and bacteria. The letter can be found as Attachment 5.2.

Severin Drive and Surrounding Areas
Severin Drive and the surrounding streets, which include Amaya Drive and Water Street, contain large high-density and suburban residential areas that drain to the Alvarado Channel. During the 2006 Dry Weather Monitoring Program, high levels of bacteria were found, mostly attributed to excess vegetation in the channel and over-irrigation in the area, causing stagnant water and promoting algal growth. It was therefore concluded that the

primary sources of bacteria in this area were surface flow along Amaya Drive caused by over-irrigation and the stagnation of water in channel resulting from excess vegetation.

A total of 596 letters were sent to residents living in the vicinity of Amaya Drive, north of Water Street. The letter described the high levels of bacteria found in the area, which was linked to over-irrigation, improper green waste disposal, and the potential presence of animal waste occurring in the area (Attachment 5.3). A San Diego River Watershed Fact Sheet (Attachment 3.3), an Over Irrigation Fact Sheet (Attachment 4.4), and a Preventing Urban Runoff Pollution brochure (Attachment 3.1) accompanied the letter.

POLLUTION PREVENTION

The City continues to provide information regarding the implementation of pollution prevention measures, such as good housekeeping practices, for residential areas and activities. Pollution prevention methods are BMPs that eliminate or reduce the generation of pollutants at the source. The City provides information regarding pollution prevention methods through targeted educational materials and one-on-one interaction during complaint investigations.

BMP REQUIREMENTS AND IMPLEMENTATION

The City recognizes that preventative measures such as the implementation of BMPs are an integral part of the City's storm water pollution prevention program. The City requires the implementation of residential BMPs as described in Section 5.2 and in Appendix C of the City's JURMP. The City encourages the public to implement pollution prevention measures and BMPs through a variety of educational outreach activities and materials. Details of storm water related articles published in the *La Mesa Focus* newsletter are provided later in this section. The City has an extensive educational and public outreach program, details of which are given in Section 9 and Section 10 of this Annual Report, respectively.

The City continues to encourage residents to report observed illegal discharges and report other potential violations to the City's Storm Water Hotline. The number for this hotline is published on the City's website, in storm water brochures distributed to the public, and in storm water articles in the *La Mesa Focus* newsletter, with the intent to reach as many residents as possible. Complaints received from residents are the primary mechanism for notification of non-compliance with the City's Storm Water Ordinance in residential areas. Every effort is made to identify the responsible parties and to educate them regarding the NPDES Storm Water Program and City ordinances. The City addressed and documented 89 complaints during this reporting period. Section 8 provides a summary of the public complaints received, all of which were investigated and resolved. About one quarter of the complaints were regarding residential activities. The complaints were received from individuals or City staff that witnessed activities that posed a threat to storm water quality. Each complaint received was verified and resolved.

TRAINING, EDUCATION AND OUTREACH

The City continued to conduct training, education, and outreach activities for residents during this reporting period as described below.

***La Mesa Focus* Newsletter Articles**

As mentioned previously, the City publishes storm water related articles in the quarterly *La Mesa Focus* newsletter. Approximately 30,000 copies of each newsletter were distributed during the 2006/2007 reporting period: 27,500 to residential addresses and 2,500 to business addresses. Copies are also available at many City businesses and electronic copies can be found on the City's website. The articles have been summarized below and copies can be found as attachments 3.4, 3.5, 3.6, and 3.7.

The August 2006 newsletter contained the following storm water-related articles:

- **"DON'T TRASH LA MESA!"** encouraged residents to report instances of illegal dumping to the Public Works department, and informed residents on refuse collection centers located throughout the City.
- **"SUMMER STORM WATER REMINDERS"** provided information about summer-specific BMPs (e.g., discharging pool water, over irrigation, vehicle wastes and washing, garden care and soil erosion prevention).
- **"BECOMING A "GREEN BUSINESS" IS GOOD BUSINESS"** reported the benefits of the restaurant targeted workshop held in April 2006 and encouraged businesses to learn more about the Green Business Program.
- **"APRIL CREEK TO BAY CLEANUP A SUCCESS IN LA MESA"** described the outcome of the April cleanup at the Alvarado Channel, and advertised the California Coastal Cleanup Day held in September 2006.
- **"RESPONSIBLE PET OWNERSHIP"** encouraged pet owners to clean up their pet waste, be aware of the requirements of City's Municipal Code, and other useful tips for residents and pet owners.
- **"LA MESA APPRECIATION DAY GET INVOLVED"** advertised the La Mesa Appreciation Day held in November 2006, which aims to clean up the City's parks.
- **"CALSENSE MAKES SENSE IN CITY PARKS"** gave details on water conservation through a computerized irrigation system that has been installed in City parks.
- **"LA MESA'S PARKS ARE NOW TOBACCO FREE"** informed residents that the City's parks have been designated as tobacco free environments as a result of public response, which will hopefully reduce potentially harmful cigarette butt debris in these areas.

The November 2006 newsletter contained the following storm water-related articles:

- "**RECYCLE YOUR CHRISTMAS TREE AT EDCO STATION**" advertised the City's program to reduce the amount of unwanted Christmas trees being dumped in the City.
- **"STORM WATER POLLUTION – TAKE THE QUIZ"** was an article which aimed to raise awareness about water quality issues, and encouraged residents to implement BMPs to reduce storm water related pollution.

- **"REPORT ABANDONED SHOPPING CARTS"** encourages the public to report discarded shopping carts that sometimes end up in nearby waterways, contributing to pollution in those neighborhoods.
- **"JOIN THE LA MESA ARTS ALLIANCE"** encourages residents to get involved with the "Beautify La Mesa" campaign to keep their neighborhoods clean and help foster a sense of community and pride.

The February 2007 newsletter contained the following storm water-related articles:

- **"ANNOUNCING SPRING CLEAN-UP 2007!"** encouraged residents to lawfully dispose of unwanted bulky items and other non-HHW items at two upcoming disposal events in April 2007.
- **"WATER QUALITY MONITORING CONTINUES IN LA MESA"** was an article that made residents aware of the City's water quality monitoring programs, and encouraged residents to use BMPs to reduce storm water pollution.
- **"DO THE RIGHT THING!"** advertised quarterly HHW events held in the City to encourage residents to dispose of HHW correctly, in an effort to curb illegal dumping.

The May 2007 newsletter contained the following storm water-related articles:

- **"NEW STORM WATER PERMIT ADOPTED"** explained to residents the adoption of the new Municipal Permit, and summarized the more stringent measures required of the Permit, and suggested BMPs that residents and businesses should implement.
- **"EAST COUNTY REGIONAL HOUSEHOLD HAZARDOUS WASTE COLLECTION EVENT"** encouraged residents to dispose of HHW at an event held on Saturday, May 19, 2007.
- **"WASTE NOT, WANT NOT, EDCO OPENS NEW "C&D" FACILITY"** encouraged residents to recycle unwanted products, which may help reduce trash in landfills and surrounding areas, and hopefully reduce trash in water bodies downstream.
- **"LA MESA RECYCLES. DO YOU?"** informed residents about the different types of products that can be recycled and collected from EDCO along with regular trash collections.
- **"DO THE RIGHT THING!"** encouraged residents to dispose of HHW properly through a free program organized by the City, at any of the four HHW events held throughout the year.

Community Services Programs and Activities Schedule Articles
The City's Community Services division publishes a programs and activities schedule that is similar to the format of the *La Mesa Focus* newsletter. The schedule includes information regarding City hosted community events such as parades, organized recreational events, and classes. The spring 2007 Programs and Activities Schedule (Attachment 5.4) included

information regarding La Mesa Appreciation Day and parks in the City becoming smoke-free.

HHW Events
Six HHW collection events were held by the City throughout the reporting period at the EDCO Station on Commercial Street. These events occurred on 7/22/2006, 9/16/2006, 11/18/2006, 1/13/2007, 3/24/2007, and 5/12/2007. Door-to-door pickup was also offered to residents age 65 and older and to disabled residents. A total of 83,050 pounds of HHW were collected through these programs; a breakdown of the collected HHW is included in Attachment 5.5.

Other Educational Outreach Materials and Activities

- Continued to work with Target and Dixieline Lumber in La Mesa to make IPM cards available at the checkout stands in each business's garden center (Attachment 4.1). The IPM cards were developed as part of a regional effort to reduce pollution from pesticide use and increase use of IPM techniques.
- Distributed several hundred letters to residential areas in response to Dry Weather Monitoring results and recommendations. These letters addressed the pollutants found in the areas to which the letters were mailed. Various BMPs that can be implemented to reduce discharges of the pollutants were discussed in the letters. These letters were accompanied by educational material.
- Provided educational outreach materials, including BMP information, on the City's website. Storm water related articles in past issues of the *La Mesa Focus* can also be accessed through the newsletter archives on the City's website. The City has been including articles with storm water pollution prevention information in the *La Mesa Focus* for several years now.
- Provided door-to-door collection of HHW from residents who are 65 and older or disabled.
- Partnered with ILACSD and San Diego Coastkeeper to host cleanup sites for California Coastal Cleanup Day and ILACSD to host cleanup sites for the Creek to Bay Cleanup. Watershed fact sheets and Preventing Urban Runoff Pollution brochures were distributed to participants.
- Hosted Park Appreciation Day, a cleanup event for all City Parks. A total of 400 volunteers removed over five tons of debris.
- Continued implementation of the Adopt-a-Park and Adopt-a-Block programs, which help foster a sense of community responsibility. Residents involved in these programs are encouraged to pick up trash and debris on a regular basis from the City's parks and open spaces and residential areas.
- Adopted an ordinance that bans smoking in City parks. The ordinance was adopted in August 2006 and will go into effect in 2007/2008.
- Continued the development of storm water educational kiosks for two City parks. The first kiosk was installed during this reporting period. The City will continue to

partner with local Eagle Scouts to build the other kiosk, which should be completed in 2007/2008.

- The City continued to provide storm water information on the City's Storm Water Bulletin Board, located at City Hall, to visitors and municipal personnel. A photo of the bulletin board is included as Attachment 2.7.

COMPLIANCE & ENFORCEMENT

The City continues to implement compliance and enforcement measures, as described in the City's JURMP. These measures include identifying potential sources of pollutants in residential areas through information gained through the City's Dry Weather Monitoring Program, complaints received by the City's storm water hotline, and observations from the City's municipal personnel. If there is a potential impact to water quality, the City provides a verbal warning, written warning, NTCs, and NOVs, as applicable. The City received 22 residential-related complaints during this reporting period, which can be found in Table 8.4 in Section 8 of this Annual Report. Complaints were submitted through the storm water hotline and internally through the Public Works Department.

During this reporting period, one verbal warning, three written warnings, and seven NOVs were issued to residents and/or landlords. Many of the complaints verified involved residents who were unaware of residential BMPs. These issues were resolved with a verbal warning and distribution of educational material. The City issued NOVs to more serious violations such as vehicle maintenance without BMPs or washing debris into the street. City personnel also cleaned areas in the public right of way as necessary to resolve complaints. All residential complaints were resolved as described in Section 8 of this Annual Report, and no further action, such as fines or reports to the RWQCB aside from this Annual Report were deemed necessary.

IMPLEMENTATION PLANS AND JURMP UPDATE FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. Updates made to the residential program will be presented in the updated JURMP. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2002.

6 DEVELOPMENT PLANNING

One of the requirements of the Municipal Permit is to minimize pollutant discharges from new development and redevelopment projects in order to improve overall storm water quality. Development projects have the potential to contribute pollutants to the City's MS4 from demolition, construction, and post-development activities. Pre-construction planning has been shown to reduce the potential of pollutant discharge after construction. Pre-construction planning activities can include identifying potential pollutants from the site, minimizing the potential for the development to negatively impact downstream channels and/or habitats, and establishing appropriate post-construction BMPs.

After the issuance of the Municipal Permit, the City revised its General Plan, made changes to the City's development approval process, and established educational programs for project proponents. The City routinely evaluates and modifies its development-related processes in order to minimize storm water pollution to the MEP. This section of the Annual Report presents the efforts and activities undertaken by the City to ensure implementation of post-construction BMPs for development projects, while Section 7 of this Annual Report describes measures taken to mitigate potential water quality impacts associated with the construction phase of development.

ASSESSMENT OF GENERAL PLAN

The Municipal Permit (Section F.1.a) requires all Copermittees to include water quality and watershed protection principles in their general plans. The City conducted a thorough review of its General Plan, and in 2002 the City council approved amendments to the General Plan that included water quality and water body protection principles. The revisions to the General Plan presented in the JURMP 2001/2002 Annual Report continue to be applied by the City. No amendments to the General Plan have been made during this reporting period.

DEVELOPMENT PROJECT APPROVAL PROCESS

The City continues to implement the development project approval process outlined in the City's Local SUSMP. The Local SUSMP has been incorporated into the City of La Mesa Storm Water BMP Manual Part II (Development Manual). The approval process requires all development projects to comply with the guidelines and requirements set forth in the City's Development Manual. The City's Water Quality Technical Report (WQTR) review and approval process has been designed to aid project proponents in preparing a document that meets the City's requirements before permits can be issued. The City continues to use Appendix A of the City's Development Manual (Attachment 6.1) to determine the specific storm water requirements applicable to each development project. Appendix A is a checklist that is used to determine both construction and post-construction BMP requirements. Key steps in the City's review process include the following:

- If a development project requires a grading permit, the applicant must complete Appendix A of the City's local SUSMP to determine what storm water related documents must be prepared. Grading project over one acre must prepare a SWPPP,

and projects subject to the City's post-construction BMP requirement must submit a WQTR.

- Grading permits are only issued once the submitted SWPPP and WQTR, as applicable, have been reviewed and approved.
- For development projects that do not require grading, the applicant must complete a Site Plan Checklist. Item A of the checklist requires the applicant to complete Appendix A of the City's Local SUSMP.

Projects designated as Priority Projects must prepare and submit a WQTR as detailed in the City's Local SUSMP. Development projects that are not Priority Projects but still involve soil disturbance or will potentially expose materials to storm water must also implement post-construction BMPs according to the requirements in Development Manual. These projects are subject to some, but not all, of the requirements that are applicable to Priority Projects. For example, non Priority Projects are not required to implement treatment control BMPs. All WQTRs submitted by project applicants are reviewed thoroughly by the City's storm water consultant, D-MAX. For more information regarding these reviews, refer to the Technical Review of Post-Construction BMP Plans subsection found below.

Furthermore, the DAB is responsible for granting approval to development projects. The DAB reviews project plans, evaluates the feasibility of the project, and ensures that all requirements have been met. An additional meeting between the DAB and the project proponent may take place to resolve concerns raised by the initial DAB review before approval is given.

Twelve projects submitted WQTRs for review during this reporting period, 11 of which were Priority Projects. Summaries of these projects can be found in the Redevelopment/Development Project Descriptions subsection and in Table 6.1 at the end of this section. WQTRs were only approved for three of the 12 development projects that submitted them during this reporting period.

REVISIONS TO ENVIRONMENTAL REVIEW PROCESS

The City has not made revisions to its environmental review process during this reporting period. The City's environmental review process consists of the Environmental Assessment and Initial Study Application and the Environmental Initial Study Checklist. The initial study application is completed by the project applicant and identifies various potential environmental impacts of the proposed project, including any threats to water quality. The initial study checklist is used by City Staff to determine which California Environmental Quality Act (CEQA) requirements apply to proposed projects. If the City determines a project has the potential to significantly impact the environment, the project applicant must prepare and submit an Environmental Impact Report (EIR). Projects that do not need to prepare EIRs may still need to prepare mitigated negative declarations. Once the appropriate CEQA requirements have been satisfied, the project is allowed to continue through the development project approval process.

NEW DEVELOPMENT AND REDEVELOPMENT EDUCATION

Effective education, outreach, and training are an integral part of the development planning component of the City's Storm Water Program. The development community is educated on the potential impacts of their activities on storm water quality and onto the applicable City, state, and federal requirements. The City works diligently to educate project proponents on these topics by providing detailed review comments on submitted WQTRs and holding DAB meetings with project proponents.

During this reporting period, the City distributed Appendix C of the JURMP, various storm water brochures, and San Diego Bay and River Watershed fact sheets (Attachment 3.2 and 3.3, respectively) to the development community. Additionally, the Development Manual was made available on the City's website and at City Hall.

TECHNICAL REVIEW OF POST-CONSTRUCTION BMP PLANS

The City of La Mesa retains D-MAX to conduct thorough technical reviews of all WQTRs submitted to the City. D-MAX uses the City's SUSMP Review Checklist (Attachment 6.2) when reviewing each of the WQTRs. After completion of the checklist, D-MAX prepares a letter summarizing key features of the project, discussing deficiencies in the document, and providing a list of comments to be addressed by the project proponent where necessary. If a WQTR is not found to meet the City's Local SUSMP requirements, a revised document addressing the deficiencies noted in the review letter must be prepared and resubmitted by the project proponent to the City for an additional review. This process continues until the WQTR meets the City's requirements and appropriate permits may be issued. The City also requires that each project proponent submit a covenant that describes what steps will be taken to maintain permanent BMPs, specifically treatment control BMPs, at the site. The covenants are then recorded with the County; the requirements in the covenant transfer whenever the site changes owners.

During the 2006/2007 reporting period, only the Civic Center Improvements project met the minimum requirements of the City upon the initial report submission. Table 6.1, at the end of this section, lists all development projects that submitted WQTRs for review during the 2006/2007 reporting period.

Common problems noted during technical reviews of WQTRs are listed below.

- Calculations of pre- and post-development peak runoff rates are not present or not properly calculated.
- Conditions of concern are either not discussed or not sufficiently addressed.
- Site drainage patterns from impervious areas are not sufficiently described or shown on the site map.
- Site design and source control BMP descriptions are generic or otherwise not site specific.
- Site design BMPs are not implemented to the MEP and there is no explanation of why more effective site design BMPs are not proposed.

- Individual Priority Project BMPs for applicable Priority Project categories are not proposed.
- Calculation of SUSMP flow or volume for treatment control BMP sizing is either not present or is not properly calculated.
- Details on the proposed treatment control BMPs, such as model numbers of proprietary BMPs and dimensions of natural BMPs, are not given. The City currently refers project proponents to CASQA and/or Caltrans fact sheets for guidance in properly designing treatment control BMPs.
- It is unclear whether runoff from the entire project footprint will be directed to a treatment control BMP, or the report states that some areas will not receive treatment at all. Also, the locations of these BMPs are not always clearly indicated.
- Discussion of operation and maintenance of structural BMPs and the party responsible for maintenance is missing or insufficient.

Although a number of common problems are noted above, WQTRs reviewed during this reporting period have demonstrated that project proponents are gaining a stronger understanding of the City's storm water requirements. In general, project proponents are proposing more effective treatment control BMPs than they have in the past. "Natural" treatment controls like grass swales are being proposed more frequently in projects' WQTRs.

Despite these improvements, multiple reviews are often necessary before WQTRs are approved and permits are issued. This is largely because the City's review process, including the review process for treatment control BMPs, has also become more stringent during the past several years.

DEVELOPMENT/REDEVELOPMENT PROJECT DESCRIPTIONS

Development projects that submitted WQTRs during this reporting period are described below. Some of these WQTRs were initial submissions, while others were second or third versions of a document that was previously reviewed and did not meet the City's minimum requirements. The City maintains an electronic spreadsheet that tracks WQTR reviews and their current approval status. Table 6.1 shows the number of reviews performed for each WQTR document during this reporting period and notes whether or not the project was approved.

Christ Lutheran Church

This project involves demolishing existing apartment buildings to create a private school with an artificial turf playground. The existing parking lot is being left as is, so construction will only take place on 0.67 acres.

Civic Center Improvements

The construction of an interim library and post office in addition to a new police station are proposed at the existing Civic Center site. The project will be built on 35,000 square feet of existing parking lot.

Grossmont Hospital
This project includes the construction of an office building and a multi-story parking lot on an estimated 2.2 acres of the existing site of Grossmont Hospital.

Grossmont Terrace
This project involves the demolition of existing apartment buildings and the construction of a new, 58-unit condominium complex on a 3.47 acre site.

John A. Davis Family YMCA Expansion
The existing John A. Davis Family YMCA will be expanded to include additional building area, parking, and a play area. The expansion will create 8,700 square feet of additional impervious area.

La Mesa Live/Work Village
This project involves the construction of 15 attached town homes on an undeveloped 0.52 acre site.

La Mesa Townhomes, Sites 1, 2, and 3
The La Mesa Townhomes projects involve development at three noncontiguous sites from 7353 to 7604 El Cajon Boulevard. Sites 1, 2, and 3 each have separate SUSMP reports and propose to construct 49, 19, and 10 townhomes, respectively. The project proponent proposes to remove existing buildings and a used car dealership from these parcels prior to construction.

Palm Avenue
This project involves the construction of 12 single-family condominiums on a 0.74 acre site.

Palm Terrace
This project involves construction of a commercial building with 26 condominiums on a 0.63 acre site.

Park Grossmont
This redevelopment project will involve demolition of existing residential units, surface parking, and driveways to construct new attached residential units.

INSPECTIONS AND ENFORCEMENT

Verification inspections of post-construction BMPs are conducted by the City's inspector. Structural BMPs such as treatment control BMPs are checked to ensure they have been constructed and implemented as depicted on City-approved design plans. The project proponent signs off on a covenant affirming responsibility in the operation and maintenance of post-construction BMPs. No enforcement related to the installation of structural post-construction BMPs was necessary during this reporting period.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit,

Order No. 2007-0001. Updates made to the development planning program will be presented in the updated JURMP. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2002.

Table 6.1
Projects Submitting WQTRs to the City for Review

#	Project Name	Location	Description	Type	# of Reviews	Approved* (Yes/No)
1	Christ Lutheran Church	W. side of La Mesa Boulevard, N. of University Ave	Commercial	Non-Priority	2	Yes
2	Civic Center Improvements	8132 Allison Avenue	CIP Project	Priority	1	Yes
3	Grossmont Hospital	Health Care Dr. and Center Dr.	Hospital Addition	Priority	3	Yes
4	Grossmont Terrace	Buckman St.	Attached Residential	Priority	3	No
5	John A. Davis Family YMCA Expansion	East of 125, S. of Dallas St and La Mesita Park	Commercial	Priority	2	No
6	La Mesa Live/Work Village	La Mesa Blvd. and El Paso St.	Attached Residential	Priority	1	No
7	La Mesa Townhomes Site 1	7353 El Cajon Blvd.	Attached Residential	Priority	2	No
8	La Mesa Townhomes Site 2	7561 El Cajon Blvd	Attached Residential	Priority	2	No
9	La Mesa Townhomes Site 3	7604 El Cajon Blvd	Attached Residential	Priority	2	No
10	Palm Avenue	Palm Avenue and Pasadena	Attached Residential	Priority	3	No
11	Palm Terrace	Palm Ave. between Echo Rd. and Pasadena Ave.	Attached Residential Commercial	Priority	2	No
12	Park Grossmont	North and South sides of Campina Drive	Attached Residential	Priority	1	No

* By the end of the 2006/2007 reporting period

7 CONSTRUCTION

Construction and grading activities have the potential to negatively impact storm water quality as a result of erosion and sediment transport. Furthermore, sediment may also carry other pollutants such as metals and nutrients into the storm drain system and ultimately to receiving waters. Effective sediment control and soil stabilization are key in preventing sediment and other pollutants associated with construction sites from entering the storm drain system. The City requires implementation of BMPs to reduce the potential for sediment discharge from construction sites. Appropriate pollution prevention measures and/or other BMPs related to material management and equipment cleaning can also help prevent materials like concrete, fuel, paint, and detergents from being transported from construction sites into the storm drain system.

Construction projects within the City undergo strict approval and monitoring throughout the life of the project. The City prioritizes each construction site's threat to water quality based on the size and proposed activities using the approach presented in the City's JURMP. The checklist in Appendix A of the City's Local SUSMP, which projects complete prior to construction, includes a section used to determine construction site prioritization. As mandated by the Municipal Permit, during the wet season (October 1 through April 30) all high priority sites are inspected at least weekly, while medium and low are inspected twice throughout the season. This section presents the construction-related activities performed by the City during this reporting period.

PRIORITY SOURCES

The City reviews all construction project plans before grading permits are issued. Construction project activities typically involve demolishing, grading, excavating, paving, clearing, and building. The City maintains a watershed-based inventory of all construction projects within its jurisdiction. Each construction project in the City's inventory is prioritized as high, medium, or low using the prioritization criteria outlined in Section 7.5 of the JURMP. These criteria include size, site slope, erosion potential, and the proximity and sensitivity of receiving water bodies. Other factors, such as potential for non-storm water discharges may also be used for prioritization on a project by project basis. The inventories of the City's private construction projects and Capital Improvement Projects (CIP) during the reporting period are found in Tables 7.1 and 7.2, respectively, at the end of this section.

POLLUTION PREVENTION

The City requires construction projects to implement pollution prevention measures to help avoid illegal discharges and potentially costly cleanups. Furthermore, projects of at least one acre are subject to the pollution prevention requirements specified in the General Construction Permit. Well-planned project scheduling, such as coordinating grading activities with the dry season, can reduce the threat of pollutant discharge from construction sites. Proper management of material and waste is also an effective pollution prevention measure. The City provides a Construction and Demolition Recycling Guide (Attachment 7.1) at the Building Department counter to assist project proponents in implementing pollution prevention practices.

The City also requires a certain percentage of construction waste to be recycled to help mitigate the environmental hazards associated with construction waste. This requirement went into effect during the 2005/2006 reporting period as an ordinance and was discussed in detail in the 2005/2006 Annual Report. The requirement continued to be implemented during this reporting period.

Specific pollution prevention requirements for construction activities are detailed in Section 7.1 of the JURMP. The City uses the application process and pre-construction meetings to educate project proponents about pollution prevention before permits are issued and construction commences.

BMP REQUIREMENTS AND IMPLEMENTATION

Section 7.6 of the City's JURMP details the minimum required BMPs for construction sites regardless of their assigned priorities. The City requires all construction sites to prevent discharges to the MEP through effective project planning, erosion prevention, sediment containment, materials and equipment management, and non-storm water discharge and drainage control. In some cases, additional BMPs beyond those specifically required by the City's JURMP must be implemented to meet the City's MEP standard. To ensure these requirements are met, the City performs inspections of construction sites to evaluate if project proponents are correctly implementing required BMPs. The major categories of BMP requirements outlined in Section 7.6 of the City's JURMP are as follows:

- Project planning
- Erosion prevention
- Sediment containment
- Materials and equipment management
- Non-storm water discharge and drainage control

Fact sheets on the aforementioned BMPs and fact sheets related to pollution prevention and good house keeping are included in Appendix C of the JURMP. The City also uses Appendix C of the JURMP as an educational material, sometimes giving copies of the Appendix to construction project proponents.

All construction projects of at least one acre are subject to the General Construction Permit and are required to prepare a SWPPP. The SWPPP includes a list of the BMPs that will be implemented at the construction site. Construction projects less than one acre that include grading are required to submit erosion control plans. No changes were made to the City's construction BMP requirements during this reporting period.

INSPECTIONS

Construction site inspections involve City inspectors verifying proper BMP implementation and maintenance as presented in the project's erosion control plans, SWPPPs, or other applicable BMP documents. The City conducted construction site inspections per the frequency required by the Municipal Permit. High priority construction sites were visited

and inspected by the City weekly during the wet season. Medium and low priority sites were inspected twice during the wet season unless the project was completed before the second inspection could be performed. During this reporting period there were 36 private construction projects and six CIPs. The updated inventories for private construction projects and CIP projects are found in Tables 7.1 and 7.2, respectively.

In December 2006, Dat Quach, a RWQCB staff member, conducted joint inspections of high priority construction sites with the City's Environmental Specialist. Participating in these joint inspections helps both the City inspectors and regulated construction site managers better understand the RWQCB's implementation process. Maintaining a cooperative relationship with the RWQCB is an important part of an effective inspection and compliance program.

The City's building inspector has become involved in the BMP inspection process as a means to ensure that smaller construction building projects, such as tenant improvements and room editions, are properly implementing required BMPs. The building inspector places a stamp on the building permit with boxes indicating whether or not all BMPs are properly implemented. If any potential BMP problems are noted, the inspector works with the site manager or owner to resolve them. If any major problems are observed, the City's Environmental Specialist is notified to conduct further enforcement as necessary to obtain compliance. The building inspector did not need to refer any construction building sites to the City's Environmental Specialist for further enforcement.

During this reporting period three construction sites were assigned a "high" priority and inspected weekly for a total of 90 inspections. Two of these high priority sites were initially medium priority sites that were changed to high priority at the City's discretion. The condo construction project at 7378 Orien Avenue was changed to high priority during the 2004/2005 reporting period and has remained high priority throughout the 2005/2006 and 2006/2007 reporting years. The site had received multiple written warnings and an NOV for an observed illegal discharge during the 2005/2006 reporting year. During the 2006/2007 reporting year the construction site demonstrated an improved level of compliance with City BMP requirements. On one occasion an illegal discharge was noted and an NOV was issued, but corrective actions were implemented the same day the NOV was issued. No major BMP violations were observed at the site for the remainder of the reporting period nor at the remaining two high priority construction sites.

There were a total of 102 inspections of medium and low priority public and private construction sites during the 2006/2007 reporting year. Of these 102 inspections, 85 were routine inspections and 17 were follow-up inspections. Out of the 17 follow-up inspections, 11 required no additional corrective actions.

COMPLIANCE, AND ENFORCEMENT

Section 7.8 of the JURMP outlines the mechanism for construction site compliance and enforcement. Enforcement actions include verbal warnings, written warnings, stop work orders, denial and revocation of permits, and civil and/or criminal court action. The City will report a site to the RWQCB if the site operator refuses to comply with the City's enforcement process; however, this action was not necessary during the 2006/2007

reporting period. These enforcement methods maximize compliance and the proper implementation of storm water BMPs.

City storm water inspectors and other City employees follow the protocol outlined in the City's JURMP and the Notice of Violation Procedural Sheet (Attachment 2.3) when conducting inspections and implementing enforcement measures. The City's JURMP outlines wet and dry season inspection frequencies, proper inspection procedures, and how to report a threat to human or environmental health to the RWQCB. The Notice of Violation Procedural Sheet informs inspectors when it is appropriate to issue an NOV, recommended corrective actions, other available enforcement procedures, and necessary follow-up actions. Inspectors will recommend corrective actions and educate project proponents about effective BMP implementation as necessary, and revisit sites that require significant corrective actions.

During the reporting period, the City issued 16 NOVs to construction sites. Of the 16 NOVs, 14 were issued to private construction sites, while two were issued to CIP projects. The majority of the NOVs were issued for failure to implement required BMPs. The most common BMP deficiencies were improper perimeter protection, uncovered stockpiles, and insufficient stabilization of construction entrances. Additionally, in response to reports received by the City's storm water hotline, the City issued four verbal warnings, one written warning, and one NOV to construction sites. The City issued two stop work notices during this reporting period. The orders were issued to two separate sites, both of which were found engaging in construction activity without appropriate City permits. Once the appropriate permits were obtained and perimeter protection was installed per the sites' erosion control plans, construction was allowed to continue. The City's enforcement actions were effective in bringing about better BMP implementation and compliance with applicable regulations, so no further enforcement actions were necessary. For example, see the discussion earlier in this section of inspections and associated enforcement actions successfully applied at the site at 7378 Orien Avenue.

In this reporting period, no construction sites were deemed to present a threat to human or environmental health, and thus no reports were made to the RWQCB.

TRAINING, EDUCATION AND OUTREACH

The following training, education, and outreach activities were conducted by the City during this reporting period:

- Continued to educate project proponents during the project approval process
- Continued to distribute applicable sections of Appendix C of the JURMP document
- Continued to distribute the SWPPP preparation trifold (Attachment 2.9)
- The City's Environmental Specialist worked with inspectors and visited construction sites
- Continued to educate site managers on effective BMP implementation during the NPDES storm water compliance inspections

- Continued to distribute a Guide for Construction Activity (Attachment 7.2), available at the City's front desk
- Continued to distribute a general brochure entitled, "Construction and Demolition Guide" (Attachment 7.1), which is available to the public at www.cityoflamesa.com.
- Distributed a brochure with information about the SANCO Resource Recover Facility (Attachment 7.3), where can construction waste, including wood, metals, rock dirt, concrete, asphalt, drywall, and cardboard, can be disposed of properly.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. Updates made to the construction program will be presented in the updated JURMP. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2002.

Table 7.1
Private Construction Project Inventory - Updated for Fiscal Year 2006/2007

#	Project	Location	Priority	Watershed
1	Eastridge Subdivision	3957 Murray Hill Road	High	San Diego Bay
2	Condos (30 Condo Units)	7378 Orien Avenue	*Medium changed to* High	San Diego Bay
3	Condo 30 units	5090 Guava Ave	Medium	San Diego River
4	Condos (Aragon)	7701 El Cajon Blvd	Medium	San Diego River
5	16 Condos (Bougainvillea Walk Subdivision)	9535 Milden Street	Medium	San Diego River
6	SFH	4344 Date Avenue	Medium	San Diego Bay
		4450 Date Avenue		
		4460 Date Avenue		
		4470 Date Avenue		
7	SFH	7531 Ohio Place	Medium	San Diego Bay
		7533 Ohio Place		
		7535 Ohio Place		
		7537 Ohio Place		
8	Addition to Existing Home/Retaining Wall	4292 Merritt Blvd	Low	San Diego Bay
9	Grading RV Parking	4661 Maple Ave	Low	San Diego Bay
10	Retaining Wall	5137 Guava Ave	Low	San Diego River

Table 7.1 (Continued)
Private Construction Project Inventory - Updated for Fiscal Year 2006/2007

#	Project	Location	Priority	Watershed
11	SFH	9530 Jiola Way	Low	San Diego Bay
12	SFH	9535 Grossmont Blvd	Low	San Diego River
13	Wendy's	5450 Jackson Drive	Low	San Diego River
14	SFH	9038 Mollywoods Ave	Low	San Diego Bay
15	Residential	6351 Falmouth Dr	Low	San Diego River
16	SFH	9320 Madison Avenue	Low	San Diego Bay
17	MFH	4241 Lowell St	Low	San Diego Bay
18	SFH	4780 Lee Ave	Low	San Diego Bay
19	MFH	7360 La Mesita Place	Medium	San Diego River
		7370 La Mesita Place		
20	50 Multi Units (Briercrest)	9000 Murray Drive	Medium	San Diego River
21	Residential	4356 Valle Drive	Low	San Diego Bay
22	Residential-Yard	9740 Lake Helix Terrace	Low	San Diego Bay
23	Commercial Med/Parking Structure	8860 & 8870 Center Drive	*Medium changed to* High	San Diego River
24	SFH	9222 Briercrest Drive	Low	San Diego River
25	SFH	6145-55 Primrose Dr	Low	San Diego River
26	Multi-Condos (3)	5816 Pawnee Dr	Low	San Diego River

Table 7.1 (Continued)
Private Construction Project Inventory - Updated for Fiscal Year 2006/2007

#	Project	Location	Priority	Watershed
27	SFH	4415 Dale Ave	Low	San Diego Bay
28	Residential-Retaining Wall	9240 Brier Rd	Low	San Diego River
29	Multi-Apartment (25)	8725 Fletcher Parkway	Medium	San Diego River
30	Residential-Garage/House	3917 Quarry Rd	Low	San Diego Bay
31	Residential	6731 Alamo Way	Low	San Diego Bay
32	Residential-Grading	5082 Guava Ave	Low	San Diego River
33	SFH (3)	3714 Carona St	Low	San Diego Bay
34	SFH	9035 Lemon Ave	Low	San Diego Bay
35	MFG-Homes	4524 Palm Ave	Low	San Diego River
36	Commercial	8555 Fletcher Parkway	Low	San Diego River

Table 7.2
Capital Improvement Project Inventory - Updated for Fiscal Year 2006/2007

#	Project	Location	Priority	Watershed
1	I & I Mitigation Project Phase I	City-Wide	Medium	San Diego River San Diego Bay
2	Porter Hall	Memorial Drive/ University Ave	Low	San Diego River
3	Briercrest Park	Wakarusa	Low	San Diego Bay
4	Annex II	Date	Low	San Diego Bay
5	Intersection Improvement	Grossmont Center/Center Drive	Low	San Diego River
6	La Mesa Teen Center	Junior High Drive	Low	San Diego Bay

8 ILLICIT DISCHARGE DETECTION AND ELIMINATION

The City of La Mesa actively works to identify, eliminate and prevent IC/IDs. Illicit connections and illicit discharges can result in unauthorized discharges of pollutants to the City's MS4. Illicit discharges may be associated with activities such as vehicle washing or dewatering without appropriate BMPs. Illicit connections may include sewer pipes that have purposefully or mistakenly been configured to discharge into the MS4 as well as other prohibited connections to the MS4. Unless promptly detected, contained, and captured, IC/IDs may flow untreated into receiving waters. The City works with residents and businesses to make them aware of BMPs to prevent IC/IDs and to encourage reporting of IC/IDs. Three different mechanisms by which this can be accomplished are described in Section 8 of the City's JURMP and listed below:

- Inspecting Local Businesses, Construction Sites, and Municipal Facilities
- Conducting the Dry Weather Monitoring Program
- Operating a Public Complaint Hotline

These three mechanisms enable the City to provide a comprehensive system to better the quality of storm water and urban runoff throughout the City. A more detailed description of the inspection program and its results can be found in sections 2, 3, 4 and 7 of this Annual Report. This section includes a detailed discussion of both the Dry Weather Monitoring Program and the Public Complaint Hotline.

DRY WEATHER MONITORING PROGRAM

The City has continued to conduct a Dry Weather Monitoring Program, as required by the Municipal Permit, to detect and eliminate IC/IDs to the storm drain system. As mentioned earlier, the City uses the Dry Weather Monitoring Program as one of its key methods to detect IC/IDs. Letters and educational materials are sent to neighboring residents and businesses where pollutants have been found. The letters summarize dry weather exceedances found in the subject area and describe BMPs to prevent such discharges that contribute to these exceedances. There are three components to the Dry Weather Monitoring Program:

- Field observations (site description and qualitative observations)
- Field screening monitoring (testing of sample while at site and flow estimation)
- Analytical monitoring (performing further tests of sample later at a laboratory)

The report for the 2006 Dry Weather Field Screening and Analytical Monitoring Program, which was completed during 2006/2007, is included as Attachment 8.1 of this report. The 2007 program was completed after the end of 2006/2007, but the results are briefly summarized later in this section, and the report is included as Attachment 8.2.

Numeric action levels are used as the primary approach for interpreting constituent concentrations measured in the field and the laboratory, and whether there is potentially an IC/ID. The action levels were adopted in 2003 and were based on statistical analysis of previous Dry Weather Monitoring Program data. The California Toxics Rule (CTR) Criteria Maximum Concentration (CMC) is used as the action level for dissolved trace metals. Best professional judgment is used when determining whether or not certain field parameters such as temperature or turbidity warrant upstream investigations.

The City visited a total of 18 primary monitoring stations to collect Dry Weather Monitoring Program data. Table 8.1 includes these stations and their locations within La Mesa. In the instance that a primary monitoring site may be dry or not possible for sampling, the City designated nine alternate monitoring stations specified in the JURMP that can be used as alternate sites. The City of La Mesa's Dry Weather Monitoring Program sites are located within the following drainage basins.

- Alvarado Channel Basin
- Lemon Grove Basin
- Spring Valley Basin
- University Channel Basin

2006 DRY WEATHER MONITORING PROGRAM

The City's storm water consultant, D-MAX, began the 2006 Dry Weather Monitoring Program in late June 2006 and completed the program early in 2006/2007 reporting period. Of the 18 visited sites, 17 sites had measurable flow and one site was observed to have ponded water. All site visits included qualitative observations, flow measurement, and field water quality analyses of specific conductance, temperature, pH, turbidity, detergents (measured as Methylene Blue Active Substance, or MBAS), nitrate nitrogen, ammonia nitrogen and orthophosphate phosphorus. Laboratory analysis was conducted using water samples from five sites, representing over 25 percent of total number of sites. Laboratory analysis was conducted for total hardness, surfactants, oil and grease, diazinon, chlorpyrifos, dissolved metals (cadmium, copper, lead, and zinc), total coliform bacteria, fecal coliform bacteria, and *Enterococcus* bacteria.

Field screening of physical parameters found that all measurements of pH fell between 6.9 and 8.9, temperature from 22.9 to 29 °C, conductivity from 0.9 to 5.56 mS/cm, and turbidity from 1.02 to 47.13 NTU. Field screening of chemical parameters detected an ammonia nitrogen concentration at or above the action level of 1.0 mg/L NH_3-N at three sites; however, the concentrations at all three sites fell below 1.0 mg/L during the time of the follow-up visit. The nitrate nitrogen concentration ranged from 1.25 to 7.5 mg/l. There were no sites with nitrate concentrations at or above the action level of 10.0 mg/L NO_3-N. Detergent concentration ranged from 0.25 to 1.5 mg/L MBAS. Only Site 64 had a detergent concentration of 1.5 mg/L, which is above the action level of 1.0 mg/L. This concentration fell below the action level during follow-up visit. Orthophosphate phosphorus concentration ranged from 0.07 to 1.14 mg/L. No Orthophosphate phosphorous

concentrations exceeded the action level of 2.0 mg/L PO_4-P at all visited sites. Data for field screening results is presented in Table 8.2.

The result from laboratory analysis indicated that four of the five sites had at least one bacterial indicator measured above its action level. Site 4A, 14A and 57 had a total coliform count of 130,000, 80,000, and 240,000 Most Probable Number of colony-forming units per 100 milliliter (MPN/100mL) , respectively. Site 12A had a total coliform count of 50,000 and a fecal coliform count of 30,000 MPN/100mL. *Enterococcus* bacteria were not detected at the sampling sites. Dissolved copper and zinc were detected at Sites 4A and 39, but not at concentrations exceeding the California Toxic Rule (CTR) Criteria Maximum Concentration. Dissolved cadmium and lead were not detected at any sampling sites. Surfactants, oil and grease, diazinon and chlorpyrifos were not detected at any of the sampled sites for laboratory analysis. Data for the laboratory results is presented in Table 8.3.

2006 FOLLOW-UP INVESTIGATIONS

The 2006 Dry Weather Monitoring Program for the City of La Mesa began in late June 2006, during the end of the 2005/2006 reporting period. The follow-up (upstream) investigations were conducted at the beginning of the 2006/2007 reporting period, and they are described in this report as follows.

The purpose of the upstream investigations is to find the sources of the pollutants that exceeded action levels during initial field screening and laboratory testing. The 2006 Dry Weather Monitoring Program revealed elevated levels of pollutants at four sites. Ammonia nitrogen concentrations above the action level (1.0 mg/L) were measured at Sites 35, 40, and 61. A detergent concentration of 1.5 mg/L was detected at Site 64. The concentrations of all these constituents fell below the action level of 1.0 mg/L by the time of the follow-up visit. In depth upstream investigations were not warranted or triggered. Upstream investigations were conducted at sites 4A, 12A, 14A, and 57 to locate potential sources of the elevated bacteria levels indicated by laboratory analyses.

Site 4A is located in the Alvarado Channel, at the southwest corner of Fletcher Parkway and Baltimore Drive intersection. As in previous years, sources of bacteria to Site 4A include contaminated surface flows coming from many lateral flows into the channel rather than one main point source. These areas included Jackson Drive, Nagel Street, Sarita Street, Parkway Drive, and the residential neighborhood near the Marengo Avenue/Morrow Way intersection. Decomposing trash and organic material, and stagnant water in the channel from Site 57 also contributed to the high bacteria levels. As described in Section 5, letters and educational materials were sent to residents living in the neighborhoods of Nagel Street, Sarita Street, and Marengo Avenue near Morrow Way. This information described the monitoring results of the Dry Weather Program and BMPs that should be implemented by residents.

Site 12A is a manhole on the south side of Jackson Drive, just west of Murray Drive. Results from the upstream investigation found that the likely cause of elevated total coliform and fecal coliform levels at Site 12A was from bacteria transported to the storm drain system via irrigation water near the Jackson Drive and Grossmont Boulevard intersection. Dog waste in the lawns around the shopping center at 5232 Jackson Drive was identified as a problem

by businesses at that address, and over-irrigation was visually observed there by the field crew. The dog waste is likely the source of the fecal coliforms, while total coliforms may come from soil and organic material in landscaping and on streets. Letters were sent to businesses on Parkway Drive (east of Jackson Drive), targeting waste disposal and littering, and educational materials were sent with each letter.

Site 14A is an outlet into an open channel running parallel to and north of Boulevard Drive. The sampling point is between Harbinson Avenue and Massachusetts Avenue. Although several upstream sources of bacteria were identified, the neighborhood around Normal Avenue and Olive Avenue was found to be the one with the highest bacteria levels. Several instances of surface flow caused by excess irrigation water were observed transporting litter and decomposing organic material to the storm drain system. It is also possible that pollutants originating from Helix High School area may be contributing to elevated bacteria levels in this area, although this could not be ascertained by the field crew. Letters and accompanying educational materials were sent to residents living in the area around Normal Avenue and Olive Avenue.

As in 2005, the source of ammonia at Site 35 was deemed to be fertilization and over-irrigation of flowerbeds inside Grossmont Center Mall. Site 35 is a manhole inside the Grossmont Center Mall, in front of the mall information stand near Bath and Body Works. Irrigation water appears to be transporting fertilizer to drains within the Mall. The ammonia and phosphate levels in 2006 were much lower than those recorded in 2005. As described in Section 4, a letter was sent to the facility manager at the shopping center urging them to provide an adequate plan to ensure that over irrigation and poor fertilizer application techniques would be remedied, along with educational materials.

Site 57 is an earthen channel running along Amaya Drive, east of Severin Drive and across from Howell Drive. The elevated level of total coliforms at Site 57 is mainly influenced by surface flow on Amaya Drive as it approaches Water Street. While the exact origin of this surface flow could not be located, it appears to come from over-irrigation of lawn areas. A consistent flow along the street, algae and decomposing organic matter were observed in curb gutters. Soil and organic matter in conjunction with over-irrigation appear to be the sources of the total coliform bacteria. Letters were sent to residents living along Amaya Drive, north of Water Street. The letter described the high levels of bacteria found in the area, possible causes, and BMP recommendations; additional educational materials were also included with the letter.

2007 DRY WEATHER MONITORING PROGRAM

The City's storm water consultant, D-MAX, conducted the 2007 Dry Weather Monitoring Program in June 2007. During the Dry Weather Program, nineteen sites were visited, and one of the sites was observed to be dry (Site 61). An alternate site (Site 60) was chosen. Only one site required a follow up investigation due to a field testing exceedances, compared to four in 2006. Follow-up investigations of the sites were conducted shortly afterwards, during the 2007/2008 reporting period. Because follow-up investigations and recommendations for the 2007 Dry Weather Monitoring Program were not completed by the end of 2007/2008, a more detailed discussion of the 2007 Dry Weather Monitoring Program

will be covered in the 2006/2007 JURMP Annual Report. A brief summary of the 2007 Dry Weather Monitoring Program is presented below.

The only field exceedance measured was a pH value of 10.0 at one site. All measurements of ammonia, phosphorus, and nitrate were below their respective action levels. Only one bacteria exceedance was recorded. *Enterococcus* bacteria were detected above the action level at Site 39, and a follow up investigation was conducted. Dissolved copper was detected at one site, but it was below the action level. Similar to 2006, no chlorpyrifos, diazinon, oil and grease, or surfactants were detected by laboratory analyses at any sites. The 2007 Dry Weather Field Screening and Analytical Monitoring program report is provided as Attachment 8.2.

COMPLAINT REPORTING OF IC/IDS, INVESTIGATION AND ENFORCEMENT

The City recognizes that both public and municipal involvement is critical to the prevention and elimination of IC/IDs to the storm water conveyance system. The storm water public complaint hotline provides an effective means for individuals in the community to report suspected IC/IDs. The number for this hotline is published on the City's website, in storm water brochures available in public locations, and in storm water articles in the *La Mesa Focus* newsletter. Residents can also report complaints online via the City's website. All complaints received through the hotline and the website are logged onto a spreadsheet for documentation and tracking purposes. Each of the complaints logged are then investigated by City personnel to determine if there is an IC/ID requiring action to be taken. All attempts are made to find the responsible parties for any IC/ID that is confirmed. The responsible parties are educated and/or cited as necessary and required to cease all and any illegal discharges. The Public Works department is also frequently contacted regarding storm water related complaints, often related to infrastructure concerns. All complaints reported to the Public Works department are tracked and investigated in a similar manner to those reported through the hotline. The City considers tracking and resolving these complaints an integral part of JURMP implementation.

A summary of the reported complaints that were investigated by the City between July 1, 2006 and June 30, 2007 is shown in Table 8.4. A total of 89 complaints were documented during the 2006/2007 reporting period, a decrease from 133 documented the previous reporting period. This may indicate that residents and business owners are taking note of the City's educational program and that more residents are aware of their impact on their environment and are implementing by BMPs. Table 8.4 includes both the complaints made via the storm water hotline or website and the relevant complaints made to the City Public Works Department. The table also includes a description of how each complaint was resolved during the reporting period.

RESPONSE TO SPILLS

The City maintains a Sewer Overflow Prevention Plan and a Sewer Overflow Response Plan as required by the Municipal Permit. The City regularly conducts preventative maintenance on its sanitary sewer system. Sewer surveys and ongoing video inspections are employed to monitor the condition of public sewer lines and determine where maintenance is needed. Preventative maintenance is not conducted on private laterals, as they are private property,

but the City will assist in containment and cleanup of sewer spills from private laterals if the sewage is a threat to the MS4.

The general public is encouraged to report any SSOs to the City's storm water hotline. As mentioned above, information for the hotline can be found online and at various municipal locations. During this reporting period, no spills occurred, an improvement from two spills last year.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. Updates made to the IDDE program will be presented in the updated JURMP. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No.2001-01) and the associated JURMP document developed in 2002.

Table 8.1
2006 Dry Weather Monitoring Locations

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
4A	Alvarado channel, intersection of Fletcher Parkway and Baltimore Drive	Concrete Channel	Commercial	Commercial	907	32.77364	-117.02771
12	Jackson Drive, 100 feet west of Murray Drive, north side of street	Manhole	Commercial	Commercial	907	32.77641	-117.01414
12A	Jackson Drive, 100 feet west of Murray Drive, south side of street	Manhole	Commercial	Residential	907	32.77611	-117.01453
13B	Southwest corner of Lowell Street and University Avenue	Manhole	Commercial	Residential	908	32.75688	-117.03738
13C	Intersection of University Avenue and Parks Avenue	Manhole	Commercial	Residential	908	32.76004	-117.03346
14A	Across from 7105 – 7033 Boulevard Drive between Harbinson Avenue and Massachusetts Avenue	Outlet	Commercial	Residential	908	32.75438	-117.04535
34	Grossmont Shopping Center, in front of Sports Authority	Manhole	Commercial	Commercial	907	32.77694	-117.01077
35	Inside Grossmont Shopping Center, in front of Bath and Body Works	Manhole	Commercial	Commercial	907	32.77841	-117.01070
39	Grossmont Shopping Center parking lot between Staples & Mattress Discounters	Manhole	Commercial	Commercial	907	32.77733	-117.00713
40	N.E. corner of Grossmont Center Drive and Murray Drive, south of Trader Joe's parking lot	Manhole	Commercial	Commercial	907	32.77848	-117.00639
50	Harbinson Avenue and University Avenue intersection, west sidewalk, east of CB Hair and Nails	Manhole	Residential	Commercial	908	32.75516	-117.04584
52	Massachusetts Avenue, Waite Drive, south end of Harris Street	Outlet	Residential	Residential	908	32.74514	-117.03931
55	Bancroft Drive, east of residential address 9132 Madison Avenue	Natural Creek	Residential	Residential	909	32.76970	-117.00019

Table 8.1 (Continued)
2006 Dry Weather Monitoring Locations

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
57	Amaya Drive, east of Severin Drive, across from Howell Drive	Earthen Channel	Residential	Residential	907	32.78532	-116.99744
58	Northeast corner of Amaya Drive. Amaya Court intersection	Manhole	Residential	Residential	907	32.78625	-117.00143
59	Southeast corner of Parkway Drive and Amarillo Avenue intersection	Natural Creek	Residential	Residential	907	32.78180	-117.01328
61	Center Drive, Commercial Street, west of Industrial Lane in front of City Public Works	Catch Basin	Commercial	Industrial	907	32.77259	-117.02238
64	North side of Seton Hall Street, between Swarthmore Street and Wheaton Street	Concrete Channel	Residential	Residential	907	32.77651	-117.03462

Table 8.2
Summary of Field Analytical Results

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Detergents mg/L MBAS	Ammonia mg/L NH_3-N	Nitrate mg/L NO_3-N	Orthophosphate-P PO_4-P mg/L
4A	6/26/06	10:50	156	25.0	8.3	1.83	2.16	0.25	0.3	3.75	0.10
12	6/27/06	14:25	5	23.8	6.9	47.13	1.95	0.25	0.6	3.75	0.26
12A	6/27/06	11:15	10	23.4	7.7	9.94	2.31	0.50	0.2	5.00	0.10
13B	6/27/06	15:00	10	24.4	7.9	2.02	5.16	0.25	0.6	6.25	0.26
13C	6/27/06	8:50	10	24.3	7.8	4.43	2.44	0.50	0.1	3.75	0.33
14A	6/26/06	12:25	28	25.5	7.8	1.02	2.51	0.25	0.1	5.00	0.07
34	6/26/06	16:10	10	24.5	8.2	10.09	1.94	0.25	0.3	5.00	0.20
35	6/24/06	13:50	1	25.6	6.9	7.77	2.50	0.25	**1.5**	2.50	0.07
35 (follow-up)	6/28/06	8:50	<1	24.7	8.6	na	0.42	na	0.2	na	na
39	6/26/06	11:45	8	24.4	7.7	11.93	1.55	0.50	0.2	2.50	0.07
40	6/23/06	13:35	5	24.5	7.5	22.31	2.19	0.50	**1.0**	2.50	0.20
40 (follow-up)	6/26/06	9:00	3	23.5	7.2	na	2.08	na	0.8	na	na
50	6/27/06	15:00	3	25.3	7.7	1.64	5.56	0.50	0.2	7.50	0.26
52	6/26/06	14:40	1	29.7	8.4	8.27	2.40	0.50	0.4	3.75	0.33
55	6/23/06	11:50	10	22.9	8.1	4.56	2.62	0.25	0.2	1.25	0.10
57	6/27/06	10:25	2	27.5	7.7	3.51	1.71	0.25	0.8	2.50	0.26
58	6/23/06	11:05	5	23.7	7.4	13.32	2.33	0.50	0.8	2.50	0.10

Table 8.2 (Continued)
Summary of Field Analytical Results

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Detergents mg/L MBAS	Ammonia mg/L NH_3-N	Nitrate mg/L NO_3-N	Orthophosphate-P PO_4-P mg/L
59	6/26/06	15:20	3	29.5	8.0	2.34	1.86	0.25	0.4	2.50	0.07
61	6/26/06	10:00	Ponded	24.3	7.4	9.37	2.30	0.25	**2.5**	3.75	1.14
61 (follow-up)	6/27/06	8:20	Ponded	22.2	7.5	na	0.75	na	0.8	na	na
64	6/23/06	10:00	<1	27.0	8.9	6.24	0.90	**1.5**	0.8	2.50	0.49
64 (follow-up)	6/26/06	8:20	1	25.4	8.8	na	0.84	0.25	0.4	na	na

Note
na = not analyzed
Red values were at or above the measured constituent's action level

denotes a follow-up visit

denotes a location sampled for laboratory analysis

Table 8.3
Summary of Laboratory Analytical Results

Site No.	Date	Time	Surfactants mg/L MBAS	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms MPN/100 mL	Fecal Coliforms MPN/100 mL	Enterococci MPN/100 mL
4A	6/26/06	10:50	nd	nd	524	nd	0.008	nd	0.028	nd	nd	**130,000**	5,000	5000
12A	6/27/06	11:15	nd	nd	686	nd	nd	nd	nd	nd	nd	**50,000**	**30,000**	500
14A	6/26/06	12:25	nd	nd	508	nd	nd	nd	nd	nd	nd	**80,000**	3,000	80
39	6/26/06	11:45	nd	nd	434	nd	0.005	nd	0.028	nd	nd	23,000	220	40
57	6/27/06	10:25	nd	nd	438	nd	nd	nd	nd	nd	nd	**240,000**	20	900
ANALYTICAL REPORTING LIMITS			**0.5**	**5**	**10**	**0.005**	**0.005**	**0.005**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**
ACTION LEVELS			**1.0**	**15**	*	**CTR**	**CTR**	**CTR**	**CTR**	**0.5**	**0.5**	**50,000**	**20,000**	**10,000**

Notes

Red Bold Type = Values that exceed action levels

nd = not detected

CTR = California Toxics Rule (based on hardness)

*= Total hardness is not considered a pollutant (see Section 3.4 for details) and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependant on the total hardness value of the water sample. Total hardness measurements are thus required to calculate action levels for dissolved metals.

Table 8.4
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
1	7/10/06	City Personnel	Helix Charter High School	7323 University Ave, off Lowell Street	Storm drain inlet not protected	Verify Complaint	7/10/06 MT issues written warning requesting BMP implementation. 7/21/06 BMP implementation verified/completed.
2	7/10/06	Telephone Call to Public Works	Loren Drive	9315 Loren Drive	Storm drain located to the side of 9315 Loren needs to be cleared - it is starting to smell.	Verify Complaint	Work Order 18124: Private brow ditch, no further action.
3	7/11/06	Storm Water Hotline	Gerardo Herrera, Pacific Bill/Southcoast Building Service / La Mesa Village Plaza 7250 Engineering Road Suite D, SD 92111	La Mesa Village Plaza	Pressure washing side walk without BMPs	Verify Complaint	7/11/06 MT issues NOV and requires BMPs implemented before continuing with pressure washing activities. Pressure washing ceased/No further action.
4	7/11/06	Telephone Call to Public Works	La Mesa Blvd	La Mesa Blvd	Storm drain out in front of San Fillipos is plugged up. Owner sweeping last night into street and plugged up storm drain.	Verify Complaint	Work Order 18131: Cleared trash and debris from drain.
5	7/13/06	City Personnel	Helix Charter High School/Parking Lot	Helix High School off of Lowell Street	Trenching with no BMPs	Verify Complaint	7/13/06 MT contacts Facility Manager and request BMPs implemented. 7/17/06 MT notes some BMP implementation at site. No further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
6	7/13/06	City Personnel	Simac Construction	Grossmont Center	Wastewater discharge in parking lot	Verbal Warning	7/13/06 HH gives verbal warning to berm off area in parking lot and recover wastewater for proper disposal. No further action.
7	7/18/06	Storm Water Hotline	EDCO/Blackton Drive	Blackton Drive	Oil leak on asphalt	Verify Complaint	7/18/06 MT verifies complaint and contacts EDCO. MT issues NOV. Cleanup commences by steam cleaning asphalt. No further action.
8	7/18/06	Storm Water Hotline	Juan Villa/ Colony Drive	7440 Colony Drive	Working on Vehicle in Street/Oil discharge	Verify Complaint	7/18/06 MT verifies complaint and issues NOV and 24 hours to cleanup. 7/19/06 MT verifies clean up. No further action.
9	7/19/06	Storm Water Hotline	Resident, Shirley Court	9217 Shirley Court	Cement discharge to street	Verify Complaint	7/19/06 MT verifies complaint and issues NOV with request for cleanup. Cleanup observed no further action.
10	7/19/06	Storm Water Hotline	5800 Bertro, La Mesa	5800 Bertro, La Mesa	Complaint of oil along curb	Verify Complaint	7/19/06 MT verifies complaint. No oil noted. Some leaf debris and water along curb. No further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
11	7/19/06	Telephone Call to Public Works	Orien Avenue	7856 Orien Avenue	Drainage ditch Behind 7856 Orien (accessed from alley – last house)	Verify Complaint	Work Order 18208: Private ditch, no further action.
12	7/20/06	Telephone Call to Public Works	Golondrina Drive	9161 Golondrina Drive	Gravel bags left in front of storm drain across from 9161 Golondrina have broken open and made a mess. Work in area has been completed and bags should probably be picked up. [Message left with Laslo to contact Contractor]	Verify Complaint	Word Order 18679: Bags were picked up.
13	7/24/06	Storm Water Hotline	Gregg Torwick, 6051 Amarillo Ave	6051 Amarillo Ave	Wastewater from washing machine discharged onto driveway	Send Notice to Comply	7/24/06 MT sends letter to comply with education outreach information. No further action.
14	7/24/06	Telephone Call to Public Works	Judson Way	4604 Judson Way	Storm drain clogged with debris causing property to become flooded at 4604½ Judson Way (Homeowner is Kathy (619-462-4684)	Verify Complaint	Work Order 18210: Private open ditch was made.
15	7/31/06	Storm Water Hotline	Henry's Market Place	Spring Street/Finely	Pumping water from loading dock	Verify Complaint	7/31/06 MT visited site and will be drafting letter requesting BMP Plan.
16	7/31/06	City Personnel	Guava Street Construction	Guava Street	Tracking sediment	Verify Complaint	7/31/06 MT visits site after DL gives verbal warning. Site had been cleaned.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
17	7/31/06	City Personnel	Lowell Construction Project	Lowell Street	Tracking sediment/minimal BMPs	Verify Complaint	7/31/06 MT contacts designated site inspector to implement BMPs/ give verbal warning to implement BMPs. Inspector verified deficiencies as part of construction site inspections. No further action.
18	8/21/06	City Personnel	The Auto Center, Claudio Arzillo	8203 University Avenue	Discharge of degreaser/cream colored water into storm drain	Verify Complaint	8/21/06 MT verifies complaint, has manager stop discharge immediately. MT contacts public works to flush storm drain inlet and capture wastewater. Estimate less than 25 gallons discharged. MT issues NOV and provides education outreach material. No further action.
19	8/22/06	City Personnel	Mario Arellano, Resident	3839 Murray Hill Rd	Discharge wastewater to curb with stucco waste	Issue NOV	8/22/06 MT issues NOV requesting cleanup of waste along curb. Education outreach material provided. Site cleaned no further action.
20	8/22/06	Storm Water Hotline	8870 Bowling Drive	8870 Bowling Drive	Sediment discharge	Verify Complaint	8/22/06 DG verifies complaint and provide educational/outreach material. Site cleaned up/no further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
21	8/23/06	City Personnel	Kenneth Steele, 8870 Echo Drive	8870 Echo Drive	Sediment on street	Verify Complaint	8/23/06 MT verified complaint, request cleanup and provided educational material. Site cleaned up, no further action.
22	8/24/06	City Personnel	City Hall, Public Works/Landscape Maintenance 8130 Allison Ave	8130 Allison Ave	Over-irrigation	Verbal Warning	8/24/06 MT gives Public Works verbal warning and request irrigation time reduced. No further action.
23	8/25/06	Anonymous	Firestone, 5577 Lake Murray Blvd	5577 Lake Murray Blvd	Car washing no BMPs	Verify Complaint	8/30/06 MT receives written complaint and meets with firestone manager same day and discusses BMPs/provides education outreach material and request no car washing activities at facility.
24	8/29/06	City Personnel	Henry's Farmers Market 4630 Palm Avenue	4630 Palm Avenue	Pumping water from loading dock	Written Notice to Comply	8/29/06 MT prepares written notice to comply and to prepare storm water management plan. 10/30/06 MT sends out a second notice to comply by 11/9/06. 11/9/06 MT receives a legal letter responding to request for storm water management plan. Statement that they will continue using best practices guidelines provided by the city.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
25	9/15/06	City Personnel	Pezanoski Residence 6201 Falmouth Drive	6201 Falmouth Drive	Over-irrigation	Verify Complaint	9/15/06 MT sends out written notice and education outreach material.
26	9/18/06	City Personnel	Firestone (8784 Grossmont & Jackson)	8784 Grossmont & Jackson	Church Fundraiser Car Wash	Verify Complaint	9/18/06 AE visits Firestone Site, gives verbal warning to manager to have Church Fundraiser stopped. No further action.
27	9/28/06	City Personnel	Blue Dolphin Auto Detailing 4213 Kansas St #1, SD 92104	Grossmont Summit Drive Cul-de-sac	Car washing no BMPs	Issued NOV	9/28/06 SM issues NOV for mobile auto detailing business not using BMPs. Prevent runoff/capture wastewater immediately. No further action.
28	10/5/06	Telephone Call to Public Works	Palm Avenue	4401 Palm Avenue	Storm drain behind tot lot at Collier Park needs to be cleaned out	Verify Complaint	Work Order 18671: Cleaned ditch.
29	10/11/06	City Personnel	Pizza Hut 8011 University Ave	8011 University Avenue	Washing equipment outside	Verify Complaint	10/11/06 MT notes Pizza Hut employee washing equipment in parking lot. MT issues NOV and provides education outreach material. No further action. Issued NOV.
30	10/11/06	Anonymous	Murray Hill & Waite	Murray Hill & Waite	Oil dumping	Verify Complaint	10/11/06 MT verifies complaint. No oil dumping. Environmental team collecting groundwater samples as part of monitoring program. No further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
31	10/16/06	Telephone Call to Public Works	Lemon Avenue	8535 Lemon Avenue	Storm drain out in front of 8535 Lemon Ave. is clogged (resident left message at City Hall)	Verify Complaint	Work Order 18644: Cleaned open ditch.
32	10/19/06	City Personnel	Resident, 6820 Rosefield	6820 Rosefield	Illicit Connection of washing machine wastewater into yard	Verify Complaint	10/19/06 AE gives verbal warning to remove washing machine hose and reconnect to sink/sewer. AE verified hose removed. No further action
33	10/26/06	Resident	Henry's Farmers Market 4630 Palm Avenue	4630 Palm Avenue	Pumping Water from Loading Dock	Written Notice to Comply	10/30/06 MT sends out a second notice to comply by 11/9/06. 11/9/06 MT receives a legal letter responding to request for storm water management plan. Statement that they will continue using best practices guidelines provided by the city.
34	10/26/06	City Mayor	Resident, 7545 Orien	7545 Orien	Washing machine wastewater discharged into yard	Verify Complaint	10/26/06 MT does not note discharge but observes hose connected to washing machine and into yard. MT gives verbal warning and request hose removed. Education outreach material provided. Drove by to verify hose still removed after a week. No further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
35	10/30/06	City Personnel	Pacific Homes International, 7879 El Cajon Blvd	7879 El Cajon Blvd	Over-irrigation	Verify Complaint	10/30/06 MT sends written warning to minimize over-irrigation. 11/2/06 City contacted that irrigation is being fixed. No further action.
36	10/30/06	City Personnel	Action RV 8090 University Avenue	8090 University Avenue	Washing vehicles/runoff onto street	Written Warning	10/30/06 MT sends written warning requesting BMPs implemented per education outreach material provided. No further action.
37	11/6/06	Telephone Call to Public Works	Fortune Lane	9415 Fortune Lane	Concrete drainage ditch is clogged with debris between 9415 and 9435 Fortune Lane	Verify Complaint	Work Order 18908: Cleaned pipe opening at private location
38	11/9/06	City Personnel	Thrift Residence, 4150 Hurley Drive	4150 Hurley Drive	Pumping water out onto street	Verify Complaint	11/9/06 MT verifies complaint and issues NOV/request water not pumped into street. Thrift contacts MT to further discuss and removes hose. No further action.
39	11/28/06	Telephone Call to Public Works	Pasadena	8308 Pasadena	Debris is blocking sewer drain (no water involved)	Verify Complaint	Work Order 18898: Cleaned inlet.
40	11/30/06	City Personnel	Nacho's Taco Shop 7389 University Avenue	7389 University Avenue	Washing around exterior of restaurant	Verified Complaint	11/30/06 MT issues NOV and provides educational outreach material (trifold). No further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
41	12/11/06	City Personnel	La Mesa Seventh Day Adventist Church	4207 Spring Garden Drive	Over-irrigation	Written Warning	12/11/06 MT sends written warning to monitor/stop over-irrigation. Urban Runoff Trifold and SD Bay Watershed Fact Sheet provided.
42	12/15/06	City Personnel	Ronald Crites 9110 Fletcher Parkway	9110 Fletcher Parkway	Soil Stockpile in right of way	Verify Complaint	DL visited site on 12/15/06 and issued NOV for no BMP implementation. Site re-inspected on 12/19/06 with BMPs implemented and no further action.
43	12/19/06	Anonymous	4750/70th Street	4750/70th Street	Slurry water discharge	Verified Complaint	12/19/06 MT verifies complaint. Storm drain inlet protected/slurry water discharge not observed. No further action.
44	12/21/06	City Personnel	Shell Service Station 4925 Spring Street	4925 Spring Street	Over-irrigation/water flowing onto street	Verify Complaint	12/21/06 MT gives verbal warning to minimize over-irrigation to reduce potential runoff. No further action.
45	12/27/06	Telephone Call to Public Works	Memorial Dr	4975 Memorial Dr	The drain outside the Community Center by the dumpster backed up during the rain but is ok now. Joan is worried that the drain is plugged and will back up again with the next rain.	Verify Complaint	Work Order 19265: Rodded drain pipe to clear pipe.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
46	1/8/07	Resident	Henry's Market/ Fresno	Fresno	Pesticides sprayed on parking lot	Verify Complaint	1/8/07 MT verifies complaint and provides IPM information to Henry's.
47	1/11/07	Resident	8410 Dallas	8410 Dallas	Cement slurry on curb	Verify Complaint	1/11/07 MT verified complaint. Some cement residue observed but no point source. No discharge into storm drain. Cleanup requested.
48	1/12/07	City Personnel	Marilyn Gunner, 7820 Carter Place	7820 Carter Pl	Soil stockpile in right of way	Verify Complaint	1/12/07 DL verifies complaint/request containment of soil stockpile. Site cleaned up and no further action.
49	1/17/07	Telephone Call to Public Works	Harris	Harris	Curb outlet needs to be cleared of dirt and grass.	Verify Complaint	Work Order 19280: Cleared the portion of the outlet that is on City property and notified Caltrans to clean its portion.
50	1/23/07	Telephone Call to Public Works	Spring Street	Spring Street	Walk-in when Kurt at desk. Comment that drain is not correct at Shell Station on Spring St. Public Works staff called Malik. He said that he inspected it on 12/21/06, but he requested that Public Works staff make sure it is proper drain.	Verify Complaint	Work Order 19284: Per Malik, drain conveys runoff from property from landscaping.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
51	2/6/07	Storm Water Hotline	6100 Bradmore Drive	6100 Bradmore Drive	Sewer cover	Verify Complaint	2/6/07 MT verifies sewer cover. No issues noted, no further action.
52	2/19/07	Telephone Call to Public Works	Nebo	Nebo	Rain water is slow do drain, water up to the curb	Verify Complaint	Work Order 19242: Cleared inlet.
53	2/21/07	Telephone Call to Public Works	Park Plaza Dr.	9001 Park Plaza Dr.	Jr. Seau Park, the Fletcher Pkwy side of the soccer field, next to the fence, Sharon confirmed drain needs clearing****this SR came in earlier this morning***	Verify Complaint	Work Order 19507: Cleared all drains along the field.
54	2/21/07	Telephone Call to Public Works	Jefferson	8750 Jefferson	Storm drain on Easement plugged/expecting more rain tomorrow. Her alternate phone: 619/444-1123	Verify Complaint	Work Order 19508: Cleared inlet of vegetation.
55	2/23/07	City Personnel	Mike Logsden, 9565 Lemon Ave	9565 Lemon Ave	Construction project no permit/BMPs	Verify Complaint	2/23/07 DL issues NOV due to no BMP implementation/permit. Site re-inspected on 2/27/07 and BMPs implemented, not further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
56	3/4/07	City Personnel	Kirk Paving Inc. Rick Cota, Date Avenue	Date Avenue	Post construction cleanup	Written Warning	3/6/07 MT drafts letter as written warning to Rick Cota to implement BMPs. MT spoke with Rick to further discuss to ensure understanding of BMPs to implement. No further action.
57	3/8/07	City Personnel	Apartment Complex 4500 Block off Nebo Drive	4584 Nebo Drive	Nuisance water	Verify Complaint	3/8/07 MT verifies complaint and notes that nuisance water is raising groundwater. This is same location investigated on 8/29/05. No further action.
58	3/8/07	Resident	Cul-de-sac 6100 Block Sarita	6130 Sarita	Nuisance water	Verify Complaint	3/8/07 MT verified complaint. Rising groundwater noted. No further action.
59	3/14/07	Storm Water Hotline	Harloff Foreign Auto/ Lowell & University Avenue	Lowell and University Avenue	Gray water runoff	Verify Complaint	3/14/07 MT verifies complaint. No gray water noted. MT to monitor and provide education outreach material.
60	3/27/07	Resident	3700 Harris Street	3700 Harris Street	Pothole in street	Verify Complaint	3/27/07 MT verified complaint. Reports pothole to public works. Pothole permanently filled. No further action.
61	3/30/07	City Personnel	Shell Service Station 4925 Spring Street	4925 Spring Street	Car wash overflow	Talk to Owner	3/30/07 AE & MT talk to owner to block soapy water from leaving site. Owner blocked of drain. No further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
62	4/5/07	City Personnel	Dennis Sotelo, Kar-Teks 2034 Hidden Crest Drive, Collier Park	Palm Avenue	Mobile car wash discharge	Verify Complaint	4/5/07 MT verifies complaint and issues NOV to Dennis with Kar-Teks. MT provides educational material trifold brochure and has wastewater vacuumed. No further action.
63	4/12/07	City Personnel	Jordan/Larry, Nulite Inc. P.O. Box 1017 Poway, CA 92074 (858) 486-6700	7450 University Avenue Parking Lot	Discharge from maintenance activities	Verify Complaint	4/12/07 MT verifies complaint. Parking lot noted as wet with sediment. No discharge noted to storm drain. MT gives verbal warning and provides educational outreach material. MT request dry sweeping for waste.
64	4/12/07	City Personnel	Randy Baillergeon/Sherrie, Greater San Diego Air Conditioning Company, Inc. 8141 Center Street	8141 Center Street	Hosing down exterior	Verify Complaint	4/12/07 MT issues NOV and request only dry sweeping and to cleanup sediment along curb. No further action.
65	4/13/07	City Personnel	Dan Morrin, 8560 Tia Maria	8560 Tia Maria	Tracking soil	Verify Complaint	4/13/07 MT verifies complaint, issues NOV and request immediate cleanup. MT verified cleanup on 4/16/06. No further action.
66	4/16/07	City Personnel	7195 Colony Drive	7195 Colony Drive	Construction/No BMPs	Issue NOV	4/16/07 DL issues NOV. DL re-inspects on 4/19/07, BMPs implemented. No further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
67	4/17/07	Storm Water Hotline	Sarita Cul-de-sac	Sarita Cul-de-sac	Algae along curb	Verified Complaint	MT visited site in past and is aware that there is rising groundwater and some algal growth. No further action
68	4/24/07	City Personnel	Souplantation, 9158 Fletcher Parkway	9158 Fletcher Parkway	Washing sidewalk	Issue NOV	4/25/07 MT issues NOV for illegal discharge. Educational material distributed. No further action.
69	5/1/07	Telephone Call to Public Works	Thorn Drive	5016 Thorn Drive	Request a drain at driveway entrance where puddle forms	Verify Complaint	Work Order 19519: This is a drainage issue only, not a storm water issue.
70	5/2/07	Telephone Call to Public Works	Primrose Drive	6200 Primrose Drive	Storm drain box is filled with dirt	Verify Complaint	Work Order 19492: Cleared inlet of dirt.
71	5/5/07	Anonymous	Auto Zone 7791 El Cajon Blvd	7791 El Cajon Blvd	Washing vehicles without BMPs	Verify Complaint	5/25/07 MT verifies complaint, issues NOV and requests all wastewater to be captured and disposed in sewer system. Education outreach material provided.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
72	5/9/07	Storm Water Hotline	Cul-de-sac on Sarita	Sarita	High Bacteria in Water	Verify Complaint	EJ has been to site prior to complaint. MT has been to site prior to complaint. Surfacing groundwater in conjunction with irrigation is accumulating along curb. No documentation of high levels of bacteria. Surfacing groundwater is not prohibited from drainage into the storm water conveyance system as long as pollutants are not being transported. No further action.
73	5/11/07	County of San Diego	5 Star Liquor 7495 University Ave	5 Star Liquor 7495 University Ave	Dumping mop water into storm drain	Meet with manager/store owner	5/15/07 HH meets with store manager to educate him that mop wastewater should be disposed of in sink or toilet and not storm drain. No further action.
74	5/15/07	City Personnel	Harbinson/University Ave	Harbinson/University Ave	Accident/oil dripping	Verify Complaint	5/15/07 HH verifies complaint, goes out to site. DL blocked anti-freeze from flowing into the storm drain. Pollutants were cleaned up/no further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
75	5/17/07	Storm Water Hotline	5065 Guava Ave	5065 Guava Ave	Dripping oil/hydraulic fluid	Verify Complaint	5/17/07 HH verifies complaint and requests cleanup of oil stains/placement of kitty litter/cleanup. Kitty litter applied.
76	5/17/07	Telephone Call to Public Works	Lemon Avenue	8360 Lemon Avenue	Street was resurfaced and the storm drain was covered caller states	Verify Complaint	Work Order 19564: Street Department helped by re-grading in front of house. This was a private issue.
77	5/23/07	Telephone Call to Public Works	Wakarusa Street	9001 Wakarusa Street	The storm drain at Briercrest Park is clogged	Verify Complaint	Work Order 19629: Cleared debris from storm drain.
78	5/23/07	Telephone Call to Public Works	Golendrina	9260 Golendrina	At 9260 Golondrina Dr drain is blocked due to tree growth	Verify Complaint	Work Order 19628: Cleared private drain.
79	5/24/07	Telephone Call to Public Works	King Street	3611 King Street	Caller says that water is leaking from 3610 King street to her complex at 3611-15 and the water does not drain	Verify Complaint	Work Order 19627: This is a private drainage issue and does not involve the public storm drain system.
80	5/24/07	Telephone Call to Public Works	Binney Place	8155 Binney Place	Caller states drain is plugged	Verify Complaint	Work Order 19626: Cleared drain.
81	5/29/07	Telephone Call to Public Works	Purdue Avenue	7351 Purdue Avenue	Caller states that since streets been resurface water just sits at curb at 7351 Purdue Ave and across the street as well	Verify Complaint	Work Order 19625: This is a drainage issue only, not a storm water issue.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
82	5/31/07	Telephone Call to Public Works	Campina Drive	4900 Campina Drive	Caller say at 4900 and Campina Dr. the drain is clogged	Verify Complaint	Work Order 19658: Cleared drain of vegetation
83	6/5/07	City Personnel	Shell Station 4925 Spring Street	4925 Spring Street	Discharge onto side walk	Verify Complaint	6/5/07 MT verifies complaint and speaks with facility manager to cleanup sediment on sidewalk and minimize over-irrigation. Sediment on sidewalk cleaned 6/5/07. No further action.
84	6/6/07	City Personnel	Lee Ladley, YMCA 8881 Dallas Street	8881 Dallas Street	Pool water discharge/filter cleaning	Issue NOV	6/6/07 MT issues NOV and sends Pool & Spa BMP Fact Sheet. No further action.
85	6/6/07	City Personnel	Wedo Wedo, Jorge Urquidi, 8169 Center Drive	8169 Center Drive	White residue on sidewalk	Verify Complaint	6/6/07 MT verifies complaint, issues NOV, requests cleanup, and provides education outreach material (trifold). Cleanup observed at the end of day. No further action.

Table 8.4 (Continued)
Summary of Documented Public Complaints

No.	Date Received	Complaint Origin	Responsible Party/Location	Location: Address	Issue/Problem	Action Needed	Response to Caller, Date, Time
86	6/8/07	City Personnel	Douglas Engelhorn 7889 Highwood Avenue	7889 Highwood Avenue	Discharge of pool water into street	Verify Complaint	6/7/07 MT verifies complaint. Resident states water was tested ok for discharge. MT contacts pool company to verify. Pool water discharge stopped. Pool company to verify water condition to ensure pH and chlorine is acceptable before discharging. (Allpro Tom 479-5692.) Resident connects line to sewage for discharge. No further action.
87	6/27/07	Telephone Call to Public Works	Palm Avenue	Palm Avenue	Caller says at corner of Palm & Lemon the manhole is filled with cigarettes.	Verify Complaint	Work Order 20043: Vacuumed out cigarettes.
88	6/27/07	Telephone Call to Public Works	Wetherly Street	7910 Wetherly Street	Caller says there is a storm drain in front of residents that is missing it's cover	Verify Complaint	Work Order 20042: Replaced cover for storm drain.
89	4/19/07	Storm Water Hotline	Sarita Cul-de-sac	Sarita Cul-de-sac	Algae along curb	Verified Complaint	MT visited site in past and is aware that there is rising groundwater and some algal growth. No Further Action

9 EDUCATION

The City continues to implement a comprehensive storm water education program that targets residents, businesses, construction site owners and operators, and municipal staff. The focus of the City's education program is to encourage storm water awareness and the implementation of pollution prevention measures and BMPs. The City may reduce or eliminate storm water pollution by increasing public awareness and encouraging a change in both the attitude and the behavior of the general public and the regulated community.

MUNICIPAL

The City provides extensive training and educational outreach to its municipal personnel. Since many municipal personnel are out in the field on a daily basis, it is important that they are knowledgeable about storm water pollution prevention and implementing appropriate BMPs. Municipal personnel are encouraged to report any IC/IDs observed while working in the field to the appropriate staff at the City and to educate other municipal personnel and the general public about storm water pollution prevention. Listed below are training sessions that were provided for different municipal departments during 2006/2007:

- The City conducted a BMP training session on spill containment for street maintenance employees on 7/10/2006, five employees attended.
- The City conducted a BMP training session for street maintenance employees on 7/31/2006, four employees attended.
- The City conducted a BMP training session for park maintenance employees on 8/1/2006, 17 employees attended.
- The City conducted a BMP training session for park maintenance employees on 8/8/2006, 16 employees attended.
- The City conducted a training session on the CWA for street maintenance employees on 8/14/2006, four employees attended.
- The City conducted a training session on the CWA for street maintenance employees on 8/21/2006, six employees attended.
- The City conducted a training session on storm water management for street maintenance employees on 9/5/2006, five employees attended.
- The City conducted a BMP training session for park maintenance employees on 10/31/2006, 16 employees attended.
- The City conducted a BMP training session for park maintenance employees on 11/7/2006, 13 employees attended.
- The City conducted a BMP training session for park maintenance employees on 11/28/2006, 16 employees attended.
- The City conducted a BMP training session on outdoor storage for wastewater employees on 12/6/2006, six employees attended.

- The City conducted a BMP training session on material handling for fleet maintenance employees 12/12/2006, five employees attended.
- The City conducted a BMP training session on spill prevention for wastewater employees on 12/13/2006, eight employees attended.
- The City conducted a BMP training session on spill prevention and cleanup for building maintenance employees on 1/16/2007, two employees attended.
- The City conducted annual pesticide training for park maintenance employees on 1/16/2007, 15 employees attended.
- The City conducted a BMP training session on good housekeeping BMPs for park maintenance employees on 1/30/2007, 14 employees attended.
- The City conducted a BMP training session on vehicle and equipment cleaning for fleet maintenance employees 2/27/2007, six employees attended.
- The City conducted a BMP training session on outdoor loading/unloading for traffic safety employees on 3/6/2007, six employees attended.
- The City conducted a BMP training session for park maintenance employees on landscape maintenance on 3/27/2007, 17 employees attended.
- Three members of the City's parks maintenance staff attended an IPM training session at the Port of San Diego in May 2007.

The City continues to maintain the Storm Water Bulletin Board at City Hall with updated information on topics such as BMPs for residents and businesses, watershed concepts, HHW disposal events, and upcoming community events, along with other resources. The bulletin board is visible to City personnel, project proponents, and other visitors to City Hall. A photo of the bulletin board as well as some materials that are available through the bulletin board display is included as Attachment 2.7. The Construction SWPPP Information trifold (Attachment 2.9) was also made available at the bulletin board.

The City continues to provide new Public Works Operation Center employees a copy of the "City of La Mesa Municipal Program Storm Water Best Management Practices Notebook" (Attachment 2.1). A new City storm water inspector received an NOV Procedural Handout (Attachment 2.3). The City began developing a verbal warning form and a written warning form to document enforcement actions (Attachment 2.4) and plans to educate the City storm water inspectors with the new procedures during 2007/2008. Additionally, the City distributed 260 Pool and Spa Fact Sheets (Attachment2.8) to municipal employees. The fact sheet describes BMPs for pool and spa maintenance and draining activities. Furthermore, the City's Environmental Specialist provided training for City construction inspectors and attended training events.

INDUSTRIAL/COMMERCIAL

The City of La Mesa continues to provide education and outreach to industrial and commercial businesses to promote awareness on the City's storm water pollution prevention requirements. The City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provide site-specific one-on-one

education outreach to business owners and operators. The City regards violations seriously and takes enforcement actions as necessary to bring non-compliant businesses into compliance. Educational materials relating to specific activities were given to businesses during routine inspections and were distributed during complaint investigations. These included a general guide for commercial and industrial businesses entitled "Preventing Urban Runoff Pollution" (Attachment 3.1), which explains the difference between the sanitary sewer and storm drain systems, listed BMPs, and provided the City's storm water hotline number. A residential version of the "Preventing Urban Runoff Pollution" brochure is also included in Attachment 3.1. Fact sheets relating to the San Diego Bay and San Diego River watersheds (Attachments 3.2 and 3.3, respectively) were also distributed and included information about the receiving water bodies in the City and how upstream activities of industrial and commercial businesses can produce negative effects downstream.

The City's quarterly newsletter, *La Mesa Focus,* was mailed to approximately 2,500 businesses in the City. The newsletter was also made available on the City's website and various locations City-wide. During this reporting period, the newsletter featured several articles with storm water related topics, which were aimed at both residents and businesses throughout the City. Examples of storm water focused articles include "SUMMER STORM WATER REMINDERS", "WATER QUALITY MONITORING CONTINUES IN LA MESA", "EAST COUNTY REGIONAL HOUSEHOLD HAZARDOUS WASTE COLLECTION EVENT", and "STORM WATER POLLUTION – TAKE THE QUIZ". Detailed summaries of the articles are in Section 5 of this report. The articles can be found as attachments 3.4, 3.5, 3.6, and 3.7. Additionally, letters were also sent to businesses in certain areas of the City based on the results of 2006 Dry Weather Monitoring Program; more information about these letters can be found in Section 8 of this Annual Report.

Mobile Businesses

Mobile businesses, particularly mobile car detailers or power washers, are considered a high threat to water quality due to the nature of the mobile businesses' activities and the likelihood of prohibited non-storm water discharges. Because mobile businesses are not confined to one location and many do not have City businesses licenses, they can be difficult to identify. Once identified, the City requires individuals seeking a business license to sign an affidavit stating that they both understand the BMP requirements of the City and will implement such BMPs to prevent the discharge of wastewater. To sign the affidavit, the applicant must meet with the City's Environmental Specialist who provides one-on-one education regarding the importance of implementing BMPs as described in the City's JURMP and storm water ordinance. The City requires all mobile businesses to sign an affidavit to commit to proper wastewater disposal and BMP implementation before a business license is granted. This reporting period, representatives for three mobile car detailing businesses signed affidavits.

RESIDENTIAL

As previously mentioned, more than half of the City comprises of residential areas. The City has continued to provide educational material to residents of the City through the *La Mesa Focus* newsletters and follow-up letters based on Dry Weather Monitoring Program results sent to residential areas, which can be found as attachments 4.5, 5.1, 5.2, and 5.3. The City also included articles regarding the annual La Mesa Appreciation Day and notification

that an ordinance had been passed to make the parks tobacco free in the Spring 2007 Community Programs and Activities Schedule (Attachment 5.4).

Additionally, the City continued to partner with Target and Dixieline Lumber in La Mesa to provide IPM cards at the checkouts at each business's garden center (Attachment 4.1). The IPM cards were developed as part of a regional effort to combat pesticide pollution and encourage the use of IPM techniques. The packet of bound cards includes topics such as "Ants," "Gardening with Good Bugs," "Safe Use and Disposal of Pesticides," "Spiders," "Termites," "Lawn Insects," "Snails and Slugs," and "Head Lice." The IPM cards were also available to be downloaded from the City's website.

The Pool and Spa fact sheet was made available to the public during this reporting period (Attachment 2.8) at the front desk at City Hall and through the Storm Water Bulletin Board. This handout outlines the requirements for discharge of pool and spa water to the storm drain system and provides BMPs for pool and spa maintenance activities. Other educational information at City offices included the informational Storm Water Bulletin Board at City Hall (Attachment 2.7). The Storm Water Bulletin Board includes BMP information, watershed concepts, HHW disposal events, and upcoming community events. The Bulletin Board also includes tip cards about IPM techniques and a trifold brochure that explains common residential BMPs.

In addition to the educational materials that were provided at various locations, the City continued the development of storm water educational kiosks for two City parks. The first kiosk was installed at La Mesita Park (see Figures 9.1 and 9.2) during the reporting period. The City will continue to partner with local Eagle Scouts to construct the remaining kiosk, which should be completed in 2007/2008. Information about additional outreach programs that involved residents, such as cleanup events, can be found in Section 10 of this report. Such programs also educate residents about storm water pollution prevention.

Figure 9.1 – Installation of kiosk at La Mesita Park

Figure 9.2 – Kiosk at La Mesita Park

DEVELOPMENT AND CONSTRUCTION

Construction site owners and developers alter the landscape and natural flow of storm water runoff and generally create increased amounts of impervious surface. During such activities, construction site owners, developers, and contractors have the potential to discharge a number of different types of pollutants to receiving waters, notably sediment.

The City continued to provide educational information regarding BMPs during construction site inspections, and followed up to determine if BMP deficiencies were resolved.

Since many developers and construction personnel visit the City's Engineering Department to apply for necessary permits, the City provides construction site BMP information on the Storm Water Bulletin Board (Attachment 2.7). Construction site owners and operators are encouraged to ask questions and attend available training sessions to learn more about proper BMP implementation.

Educational materials were made available to project proponents at City Hall and included the County of San Diego Construction & Demolition Recycling Guide and EDCO's SANCO Resource Recovery facility in Lemon Grove. This brochure was new for 2006/2007 and can be found as Attachment 7.3. The City continued to require development applicants to complete the Storm Water Requirements Applicability Checklist, which is Appendix A of the City's Local SUSMP (Attachment 6.1). Printed materials about SWPPP preparation and construction BMP implementation are also made available (attachments 2.9, 7.1, and 7.2). Furthermore, the City provided project proponents applicable sections of the City's JURMP to inform them of the City's minimum BMP requirements.

In addition to printed materials, contractors, property owners, and other parties involved in planning a new development must complete an educational session with the DAB as part of the approval process for the project. The DAB is made up of representatives from the Planning, Engineering, Building, and Fire departments. The project proponents are informed of all the necessary storm water requirements and referred to the City's website for more information regarding the City's requirements and relevant BMPs.

PUBLIC OUTREACH MATERIAL

As described above, the City provided a variety of outreach material designed for different communities in the City. The City recognized that the *La Mesa Focus* newsletters are one of the most widely circulated documents in the City and included more storm water information this reporting period than previous years.

WEBSITE

The City website, www.cityoflamesa.com, is another way in which City residents can become familiar with the design and intended use of the storm drain system, HHW, alternatives to hazardous household products, find information regarding volunteer opportunities, applicable City contact information, including the City's Storm Water Hotline Number, City Ordinances and Codes, BMPs for construction, commercial, and residential activities, and IPM cards. The City also provides electronic copies of current and archived copies of past newsletters on the website.

LEADERSHIP ACTIVITIES & PARTNERSHIPS

The City of La Mesa strives to be an active participant in storm water pollution prevention within the region. City staff attended various regional meetings and forums to maintain involvement in regional activities. The City believes that involvement in regional storm

water activities will help to eliminate storm water pollution on a larger scale. The City's Environmental Specialist also attended a number of training sessions, which are described below:

- The City's Environmental Specialist attended a number of Municipal Permit re-issuance meetings and was active in the industrial and commercial component review subcommittee.
- The City's Environmental Specialist attended a number of Copermittee Workgroup meetings including those for education and outreach, channel maintenance, regional monitoring, dry weather monitoring, and the development of the hydromodification plan (HMP).
- In December 2006, the City's Environmental Specialist was accompanied by a RWQCB staff member during high priority construction inspections.
- The City's Environmental Specialist attended a TMDL workshop held by PBS&J Consulting on 7/17/2006.
- The City's Environmental Specialist attended a training session on how to deal with an upset public on 7/27/2006.
- The City's Environmental Specialist attended a County-hosted porous paving presentation on 8/17/2006.
- The City's Environmental Specialist and an Administrative Analyst in the City's Environmental Services Division attended a two-day workshop entitled "Fostering Sustainable Development" on 2/7/2007 and 2/8/2007. The workshop included a discussion of a community based social marketing strategy to promote sustainable behavior.
- The City's Environmental Specialist attended a Pueblo San Diego Watershed and Organic Toxicants Workshop and Sustainability Initiative as part of the Regional Ecology Network and Environmental Workbench for Sustainable Development (RENEW) Project.
- The City's Environmental Specialist attended a RWQCB meeting regarding new SSO reporting requirements.
- The City's Environmental Specialist attended a Watershed Education Planning meeting hosted by Lois Humphrey of TRG & Associates.
- The City's Environmental Specialist attended a University of California, San Diego (UCSD) workshop on TMDLs on 4/28/2007.
- The City's Environmental Specialist attended Chollas Creek TMDL stakeholder meetings.
- The City's Environmental Specialist attended Copermittee Management Meetings throughout the reporting period.
- The City's Environmental Specialist attended a seminar entitled "Community Based Social Marketing."

- The City's Environmental Specialist attended the City's Community Services Department Annual Meeting to better understand the existing community activities and programs and to investigate how storm water concerns could be addressed by those programs. The City's Environmental Specialist also informed all attending parties about general storm water regulations and how to report storm water violations.

During this reporting period, the City continued to work with other Copermittees to form the San Diego HHW Partnership, which works to utilize HHW Grant funding to increase public outreach and education throughout the region with a coordinated, more effective approach.

MEASURING CHANGES IN KNOWLEDGE AND BEHAVIOR

The City continues to gauge the effectiveness of the NPDES program by determining whether an increase in public knowledge is correlated with their behavior to storm water pollution. During this reporting period there were 89 public complaints related to the storm drain system (Table 8.4) compared to 74 complaints in 2004/2005 and 133 complaints in 2005/2006. A large number of complaints is an indication that both the public and City personnel are taking an active role with respect to storm water pollution prevention. Additionally, providing individuals with the mechanism to be directly involved in the implementation of the storm water program fosters a sense of shared responsibility for protecting water quality.

IMPRESSIONS MADE

The City continued to provide residents and businesses storm water-related education through inspections, distribution and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials given out. Reasonable, conservative estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections, which usually involve more personnel and have been assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees because it is likely that the attendees will discuss the content with others after the training. Printed educational material distributed in mass numbers are assumed to generate three impressions each, and materials distributed in person during inspections likely generated five impressions since multiple people will likely view them. Table 9.1 details the number of impressions made by the City.

Table 9.1
Impressions Made by the City

Impression Type	Count	Unit	Estimated Impressions
Municipal Inspection	10	Inspections	50
Industrial Inspection	7	Inspections	21
Commercial Investigations	21	Inspections	63
Construction Inspection	42	Inspections	126
Training Session/ Activities and Events	188	Attendees	564
Guide for Construction Activity Trifold	25	Brochure	75
Storm Water Pollution Prevention: Pools and Spas	300	Brochure	600
Dry Weather Exceedance Letters	1,212	Letter	3636
Storm Water Door Hanger	40	Door Hanger	120
Preventing Urban Runoff Pollution	1,294	Brochure	3882
San Diego Bay Watershed Fact Sheet	259	Brochure	777
San Diego River Watershed Fact Sheet	1,219	Brochure	3,657
Mobile Business Affidavits	3	Forms	15
IPM Cards	437	Informational cards	874
Construction SWPPP Information Brochure	40	Brochure	120
Construction and Demolition Guide	291	Brochure	873
SANCO Resource and Recovery	250	Brochure	750
La Mesa Focus Newsletter	120,000	Newsletter	360,000
Storm Water Bulletin Board	80	Visits	240
City of La Mesa Total			***375, 569***

IMPLEMENTATION PLANS AND JURMP UPDATE FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. Updates to the City's education program will be detailed in the JURMP update. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No.2001-01) and the associated JURMP document developed in 2002.

10 PUBLIC PARTICIPATION

In addition to providing education to encourage residents to implement pollution prevention measures and BMPs, the City encourages business owners and operators and the general public to get involved in public participation programs. Public participation includes, but is not limited to, cleanup events, special community projects such as construction of educational kiosks, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Providing the community with opportunities to participate in the implementation of the City's storm water program helps foster a sense of shared responsibility in keeping the environment clean. City personnel both facilitate and participate in many of the public participation events, which also provides a platform for municipal personnel to share storm water-related information with the general public.

The City of La Mesa continues to partner with outside agencies to provide public participation events and outreach to the general public. During 2006/2007, the City partnered with other jurisdictions, the Solana Center, San Diego Coastkeeper, and ILACSD to host a variety of events, discussed in the following subsections.

COMMUNITY ACTIVITIES

Cleanup Events

Similar to previous reporting periods, the City hosted a number of cleanup events in the City. Not only do cleanup events provide a direct benefit to water quality, the events provide a platform for which the City can provide educational material to the volunteers.

The City hosted "Park Appreciation Day," a cleanup event for 14 City parks, on 11/14/2006 (Figure 10.1). A total of 400 people volunteered for the event, which is an increase from the 75 volunteers for the same event the previous year. Collectively, over five tons of trash and debris were recovered during the public event.

Figure 10.1 - Park Appreciation Day

The City partnered with ILACSD to involve the public in the large scale Creek to Bay Cleanup and the California Coastal Cleanup Day. Coastal Cleanup Day, which San Diego Coastkeeper also helped coordinate, was held at two sites in the City on 9/16/2006, one at Alvarado Channel and one at University Channel (Figures 10.2 and 10.3, respectively). Three volunteers collected 141 pounds of trash from University Channel. Thirty-three volunteers, many of which were girl scouts, removed 69 pounds of trash from Alvarado Channel. San Diego Bay Watershed Fact Sheets (Attachment 3.2) were distributed at the University Channel location and San Diego River Watershed Fact Sheets (Attachment 3.3) were distributed at the Alvarado Channel location. Preventing Urban Runoff Pollution trifolds (Attachment 3.1) were also distributed to participants at both sites.

Figure 10.2 - California Coastal Cleanup Day at Alvarado Channel

Figure 10.3 - California Coastal Cleanup Day at University Channel

The Creek to Bay Cleanup was held on 4/28/2007 the same locations in the City as the Coastal Cleanup Day, one in Alvarado Channel and one in University Channel. Fourteen volunteers removed 84 pounds of trash and 33 pounds of recycling at the site located in the Alvarado Channel (Figure 10.4) and three volunteers collected 100 pounds of trash at the site located in the University Channel. EDCO donated dumpsters for the event. San Diego Bay Watershed Fact Sheets (Attachment 3.2) were distributed at the University Channel location and San Diego River Watershed Fact Sheets (Attachment 3.3) were distributed at the Alvarado Channel location. Preventing Urban Runoff Pollution trifolds (Attachment 3.1) were also distributed to participants at both sites.

Figure 10.4 - Creek to Bay Cleanup at Alvarado Channel

On 4/15/2007, six volunteers representing a number of different organizations in the City including churches, the La Mesa Rotary Club, and Cub Scout Troops participated in La Mesa Community Park Clean Up Day. The volunteers removed trash and debris from Aztec Park, Harry Griffen Park, La Mesita Park, MacArthur Park, and Porter Park.

Community Hazardous Waste Collection and Used Oil Recycling Program
The City's Community Hazardous Waste Collection and Used Oil Recycling Program continues to encourage City residents and business owners to dispose of HHW properly. During 2006/2007, the City hosted six HHW collection events at EDCO's disposal transfer station facility, located near the geographic center of the City. Events were advertised in the City's *La Mesa Focus* newsletters (attachment 3.4, 3.5, 3.6, and 3.7), which are circulated to thousands of residents and businesses in the City. A door-to-door pickup service is also provided for the senior and disabled community. Overall, approximately 666 people participated in the events, and 83,050 pounds of HHW were collected. Universal waste and flammable and poisonous wastes were the two largest characteristic-based groups of HHW collected (37 percent and 34 percent, respectively). Latex paint and Flammable solid/liquid were the two largest waste volumes of specific materials collected (19 percent and 16 percent, respectively). A detailed list of HHW collection totals is included in Attachment 5.5.

Other Waste Disposal
The City hosted the La Mesa Spring Clean Up event on two consecutive Saturdays in April, 4/14/2007 and 4/21/2007. The events provided residents with the opportunity to dispose of unwanted household materials (not including HHW) and green waste. An estimated 1,501 participants disposed of 622.73 tons of waste, which consisted of large household items, furniture, and green waste. Each participant was presented with IPM information cards (Attachment 4.1) to encourage them to use pollution prevention techniques for lawn care activities, particularly pesticide application.

Adopt-a-Park and Adopt-a-Block Programs
The City's Adopt-a-Park Program has continued to involve local businesses, schools, service organizations, families, and other individuals in keeping City parks free of trash. Volunteers in this program are encouraged remove trash on regular basis from the City's parks and open spaces. During the reporting period, 32 volunteers spent over 2,500 hours removing trash from a number of different City parks.

Similar to the Adopt-a-Park program, the City's Adopt-a-Block program encourages residents in the City to work to keep neighborhoods clean and free of trash and debris. Typically, volunteers pick up trash during normal daily activities such as walking their dog through the neighborhood. Individuals may either use a trash bag provided by the City to collect trash and debris, or individuals may choose to collect trash the night prior to trash collection day so that litter and debris can be deposited to any available trash can along the street. During this reporting period, six individuals reported 391 hours of volunteer time as part of the Adopt-a-Block program in the following areas:

- Village area around the Village condos

- Mt Nebo/Windsor Hill area around Valle Drive
- Baltimore Drive and toward Lake Murray
- Porter Hill Terrace & vicinity
- 4400 block of Spring Street

A luncheon was held for participants in the Adopt-a-Park and Adopt-a-Block programs as a gesture of thanks from the City. The Adopt-a-Park and Adopt-a-Block volunteers gave 2,978.5 hours of combined service.

Canine Corners
Similar to the Adopt-a-Park program, volunteers pick up pet waste in areas of Harry Griffen Park. Volunteers also encourage patrons of the park to pick up after their pets. This practice prevents pet waste, and associated bacteria and viruses, from being discharged to the City's MS4.

Public Reporting
Complaints are received through the City's Storm Water Hotline and online website reporting system. The number for the hotline is advertised in articles published in the *La Mesa Focus* newsletter and on various educational materials given out at public outreach events. The City investigates each complaint and keeps track of reports in a complaint log. Section 8 of the Annual Report presents the complaint log.

Saint Madeline's Sophie Center
The City maintains a contract with Saint Madeline's Sophie Center, which employs developmentally disabled individuals to aid in picking up trash and debris at various parks throughout the City. The scope of services includes trash and debris cleanup, emptying trash receptacles and replacement of plastic liners, sweeping/cleaning picnic area tables, as well as some janitorial responsibilities at the park restrooms. Crews consist of three individuals and one job coach working 3.5 hours a day, five days a week at select parks. Parks included in this program are Aztec Park, Collier Park, Highwood Park, Jackson Park, La Mesita Park, Northmont Park, Rolando Park, Sunset Park, Sunshine Park, and Vista La Mesa Park. A similar program is conducted at the Jr. Seau Sports Complex. Crews consist of three people and one job coach working three hours per day, five days a week at the Jr. Seau Sports Complex only.

OUTREACH EVENTS
The City contracted ILACSD to provide education outreach at the Intergenerational Games at La Mesa Middle School on 10/13/2006. ILACSD gave brief demonstrations of the Enviroscape watershed model (Figure 10.5) to adults and youth, and emphasized storm water pollution prevention concepts. The booth attracted 56 visitors, of which 36 were adults, and 20 of which were children. A total of 19 Preventing Urban Runoff Pollution brochures (Attachment 3.1), 17 San Diego Bay Watershed Fact Sheets (Attachment 3.2), and 17 San Diego River Watershed Fact Sheets (Attachment 3.3) were provided to visitors to the booth.

The City's Environmental Specialist also hosted a booth at Kids Care Fest on 9/30/2006 and gave demonstrations of the Enviroscape watershed model. A total of 91 IPM cards (Attachment 4.1), 80 Preventing Urban Runoff brochures (Attachment 3.1), 80 San Diego Bay Watershed Fact Sheets (Attachment 3.2), and 80 San Diego River Watershed Fact Sheets (Attachment 3.3) were distributed during the event.

Figure 10.5 – Enviroscape Watershed Model

Oktoberfest, one of the largest festivals in the City, was held 10/6/2006 through 10/8/2006. The City hosted a storm water educational booth that provided a range of educational materials for visitors. The City distributed a total of 111 IPM cards (Attachment 4.1), five Preventing Urban Runoff brochures (Attachment 3.1), six San Diego Bay Watershed Fact Sheets (Attachment 3.2), and six San Diego River Watershed Fact Sheets (Attachment 3.3).

Storm Water Information Kiosks

As mentioned in the previous section, the City continued to work with local Eagle Scouts to construct a storm water kiosk. One more kiosk is targeted for installation in 2007/2008. The intent of the kiosks is to post storm water pollution prevention information to educate the public.

Commercial Participation

The City's Environmental Specialist has continued to work with two commercial businesses in La Mesa, Target and Dixieline Lumber, to make IPM cards (Attachment 4.1) in each business's garden center. The IPM cards were developed as part of a regional effort to combat pesticide pollution and increase use of IPM techniques. The educational materials are provided in the garden centers because individuals in that portion of those stores are likely to purchase fertilizers, pesticides, and/or herbicides. Providing educational materials that these customers may take home and review before using the products they have purchased may mitigate impacts that improper use of pesticides and fertilizers can have on receiving waters.

STORM WATER COPERMITTEE MEETINGS

The Storm Water Copermittee meetings provide a forum for representatives from the various jurisdictions within the San Diego County and other interested parties, including the general public, to exchange information and ideas regarding the management of storm

water programs. The City of La Mesa continued to attend these meetings during this reporting period and will continue to do so during the 2007/2008 reporting period.

IMPLEMENTATION PLANS AND JURMP UPDATE FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. Updates to the public participation component of the City's storm water program will be described in the JURMP update. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2002.

11 ASSESSMENT OF JURMP EFFECTIVENESS

The City's storm water program consists of three major components, listed below:

- Program Planning: Includes source characterization, BMP selection, targeted outcomes, and measures of indicators.
- Program Implementation: Includes implementation of selected measures.
- Effectiveness Assessment: Includes water quality assessment, program assessment, and integrated assessment. Effectiveness is evaluated using a tiered process with six increasingly complex levels.

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. Assessment of the planning and implementation steps provides important information that in turn can be used to improve future planning and implementation efforts. Data is collected from a number of different sources for the assessment, including new water quality monitoring programs recently initiated by the City. The following subsections present the City's approach and activities in assessing the effectiveness of the JURMP.

PROGRAM PLANNING

When designing and modifying proposed storm water program activities, the City obtains and reviews information from inspections, water quality monitoring, complaint records, and institutional knowledge. Inventories of potential pollutant sources have been compiled based on this data; the most recent versions for the 2006/2007 reporting period have been presented earlier in this annual report. The City has also related known priority sources across various types of dischargers to key constituents, as shown in Table 11.1. Program planning involves ensuring that the City's actions will meet the minimum activity based Municipal Permit requirements and that City resources are used to reduce pollutant discharges as effectively as possible. Because La Mesa has a high percentage of residential land use, activities that target residents such as cleanup events and partnerships with local environmental groups are key components of the City's Program.

BMP SELECTION

To reduce discharges of pollutants from identified sources, the City requires implementation of BMPs. More detail about BMPs required for all identified sources of pollution is provided in the City's JURMP. Key BMPs for selected priority sources are also shown in Table 11.2 later in this section. Data from inspection and monitoring programs as well as overall land use information was used in preparing this table.

The City informs target audiences of the BMP requirements through general distribution of educational materials, focused distribution of specifically targeted materials, reviews of submitted plans, and direct interaction with City staff. Direct interaction may take place during inspections, when discussing comments on submitted plans, and/or when encountering City staff in the field. Providing material to the public broadly through

mailings, the City's website, and information stations in public places allows for a broader reach. Installation of kiosks that display educational material at parks also helps reach the public with storm water pollution prevention messages. Targeted programs help provide more tailored information to key audiences, and direct interaction has often proven to be a helpful means of increasing awareness levels.

TARGETED OUTCOMES

At the beginning of each reporting year, the City sets targets for its program. The actual numbers recorded during the year are then compared to the targets at the end of the year to assess progress. Typically, items mandated by the Permit, such as conducting the Dry Weather Monitoring Program or investigating storm water complaints, are relatively easy to measure. Conversely, goals such as significant improvements in receiving water quality are more difficult to assess.

The effectiveness assessment approach jointly developed by the Copermittees recognizes this distinction by defining six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1:	Compliance with Activity-Based Permit Requirements
Level 2:	Changes in Knowledge/Awareness
Level 3:	Behavioral Change/BMP Implementation
Level 4:	Load Reductions
Level 5:	Changes in Discharge Quality
Level 6:	Changes in Receiving Water Quality

Level 1: Compliance with Activity-Based Permit Requirements

The Municipal Permit describes the requirements that Copermittees must meet. Examples of these types of requirements include, but are not limited to, inspecting construction sites on certain minimum frequencies, conducting the Dry Weather Monitoring Program, and reporting spills to the RWQCB within given time frames.

A summary of the City's efforts toward meeting activity-based Permit requirements in 2006/2007 is presented in Table 11.3. One hundred percent of cleanout locations in the MS4 were maintained, City streets were swept, and landscaping was maintained using IPM techniques. All high priority municipal and industrial facilities were inspected at least once during this reporting period, and high priority construction sites were inspected at least weekly during the wet season. Medium and low priority construction sites were generally inspected twice, although in certain instances, low priority construction sites were inspected only once because the project was completed in a short period of time. The Dry Weather Monitoring Program, including follow-up investigations for recorded exceedances, was completed. The City then took action to address sources of pollutants identified during the monitoring. The City maintained two hotlines to receive reports of storm water related incidents: one line by Public Works maintenance staff, and one line by the City's Environmental Specialist. The complaints received were investigated and resolved as described earlier in this document.

All of the inventoried industrial and high priority commercial sites have been inspected during the life of the Municipal Permit. Tables 11.4 and 11.5 present watershed-based summaries of the numbers of businesses in various categories of industrial and commercial businesses, respectively. The numbers of facilities inspected and the total number of inspections are also included in the tables. The total numbers of inspections are often greater than the numbers of facilities because facilities have been inspected multiple times.

Level 2: Changes in Knowledge/Awareness

To increase storm water-related awareness and knowledge, the City provides a variety of educational outreach materials including, but not limited to training sessions, workshops, cleanup events, and the distribution of print media such as brochures, handouts, and newsletters.

The City continues to maintain a storm water hotline and online reporting system by which residents may report potential storm water violations. Over the years, a general increasing trend has been observed, although the number of complaints recorded in 2006/2007 was somewhat lower than the 2005/2006 number. The overall upward trend indicates that City staff and residents are more aware of storm water requirements and how to report observed potential problems. Data from the City's Dry Weather Monitoring Program also indicates decreases in the levels of ammonia and detergents, which are typically good indicators of IC/IDs. Information regarding the City's storm water hotline is available on the City's website and is printed on a variety of print media distributed by the City, including in the quarterly *La Mesa Focus* newsletter, which reaches approximately 120,000 residences and businesses each year. Figure 11.1 shows the trend in storm water complaints over the past few years.

Figure 11.1
Storm Water Complaints Logged

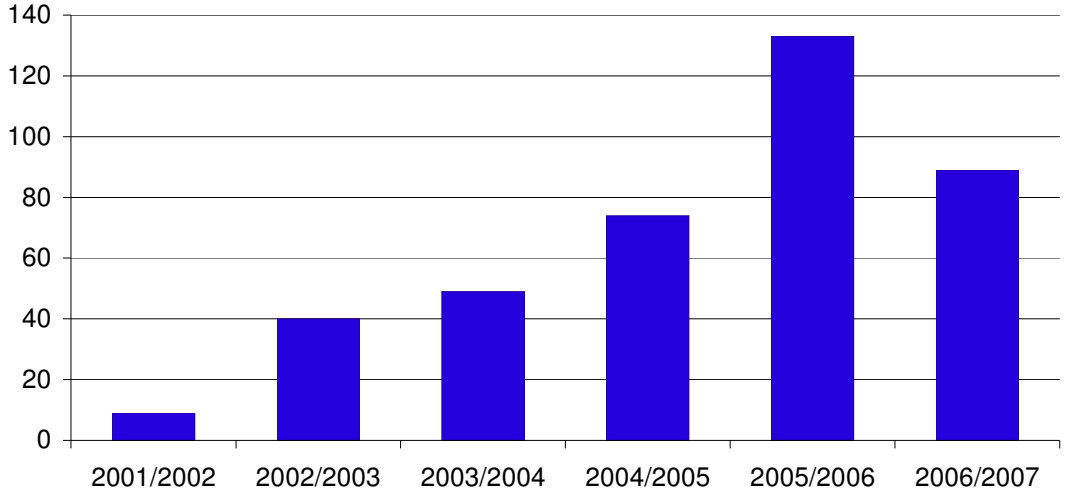

There were 20 training sessions held for City staff in 2006/2007, and the Municipal Storm Water BMP Notebook continued to be distributed to new Public Works Operation Center

employees. Parks and Recreation Landscape Maintenance Staff continue to receive regular training and refresher sessions regarding chemical management and irrigation and maintain up-to-date certifications, as applicable. Additionally, the City's Environmental Specialist attended a number of training sessions, workshops, and informational meetings.

Throughout the life of the Municipal Permit, the City has conducted storm water compliance inspections at industrial and commercial businesses to determine if businesses in the City are meeting the BMP requirements set forth in the JURMP and to provide a one-on-one discussion of storm water-related topics. Inspectors educate business owners on the difference between the storm drain system and the sanitary sewer system, potential pollutants, pollution prevention measures, BMP implementation, and applicable permit and ordinance requirements. As described previously in this Annual Report, the City has implemented a knowledge assessment for its industrial and commercial inspections. The system rates the storm water knowledge of the responsible person at the facility on a scale of one (1) to five (5), with five representing the highest level of knowledge. This approach was used at five facilities that were inspected in both 2005/2006 and 2006/2007. As described in Section 3, the knowledge score at most of the facilities was typically the same or higher in 2006/2007.

Interaction with the City staff and the DAB enables project proponents to learn more about the development planning and construction requirements that apply to their projects. Review comments on submitted WQTRs are also provided to project proponents. After receiving review comments parties preparing the WQTRs became more aware of the City's SUSMP requirements, which was then reflected in subsequent submittals.

During 2006/2007, the City mailed over 1,212 letters to businesses and residents in response to recommendations from the Dry Weather Monitoring Program. These letters alerted residents of pollution found in their neighborhoods/areas and informed them of BMPs that could be implemented to prevent such pollutants from being discharged. The City sent a letter to Grossmont Center Mall, a shopping center in the City, regarding over-irrigation from the site. In response, the real estate manager for Grossmont Center sent a letter to the City's Environmental Specialist notifying him that the shopping center installed and upgraded the irrigation system to reduce or eliminate over irrigation.

The City continued to implement the Adopt-a-Park and Adopt-a-Block programs, for which residents of the City volunteer to pick up trash from their neighborhoods and local parks. Similarly, volunteers for the Canine Corners Program remove pet waste from a designated area in Harry Griffen Park. Furthermore, La Mesa residents participated in a number of cleanups, including the Creek to Bay Cleanup, California Coastal Cleanup Day, and Park Appreciation Day. The City also held several collection events for proper disposal of HHW.

Level 3: Behavioral Change/BMP Implementation

The City continues to provide education to the regulated community, municipal personnel, and the general public to not only increase knowledge regarding storm water issues, but to foster a behavioral change in regards to storm water-related activities. Such change is an important goal of the storm water program in the City.

The City's construction inspection program has resulted in proper BMP implementation at regularly inspected construction sites. Property owners and developers are compelled to be proactive in implementing proper BMPs at their sites because of the City's supervision and strict enforcement program. During the 2006/2007 reporting period, the City inspected high priority construction sites on a weekly basis. This oversight likely led to more consistent and improved BMP implementation, which indicates a positive change in the behavior of developers and property owners directly responsible for the quality of storm water discharging from their sites.

As discussed earlier in this Annual Report, the City continued to assign a BMP assessment score during industrial and commercial inspections. The BMP implementation at inspected businesses is rated on a scale of one (1) to five (5), with five being the highest level. BMP implementation was scored at seven facilities in 2006/2007. BMP scores were also recorded at five of those same sites in 2005/2006. For the most part, scores increased or stayed the same, with one site experiencing a decreased score. The City continued to require mobile detailing and power washing businesses to sign storm water BMP implementation affidavits when applying for business licenses. This program is likely to result in improved BMP implementation among these types of businesses.

The City continues to maintain 26 pet waste collection bag-dispensing birdhouses throughout all of the City parks. During 2006/2007, approximately 9,000 bags were used, which is more than the 4,500 bags used during 2005/2006. The dispensers not only provide a reminder for patrons of the park to clean up after their pets, the conveniently located dispensers make it easy to do so. Based on the increase in bag usage, it is likely that the continued implementation of the pet waste collection bag dispensing birdhouses has increased the number of residents that clean up after their pets at City parks.

Level 4: Load Reduction

The City can qualitatively conclude that load reductions occur in many instances, although accurate estimation of numeric loads is often not possible. Numeric load data can be obtained through data from programs such as street sweeping and cleanup events.

The City reviews the SWPPP or erosion control plan that each grading project submits prior to the start of construction. This process furthers the implementation of more effective BMPs. The City's regular inspections then help ensure that the proposed BMPs are effectively implemented when construction is underway, ultimately reducing the potential load of sediment and other pollutants such as concrete waste and petroleum products.

The City's efforts to reduce irrigation runoff also likely result in smaller pollutant loads being transported to the MS4. Broken sprinkler heads or line breaks can cause erosion and transport sediment and other pollutants. The City's Calsense systems minimize these effects, resulting in a decrease in pollutant discharges. Further, Calsense minimizes over-irrigation, which although typically not a source of pollutants itself, can transport pollutants to the MS4. Figure 11.2 demonstrates a historical pattern of decreasing water consumption for irrigation. Implementation of Calsense is believed to be the main driver of the reduction in water used.

The City continues to implement street sweeping and storm drain inlet cleaning programs to reduce pollutants loads the MS4. During 2006/2007, 692 tons of debris was collected from street sweeping, while 225.75 cubic yards was collected from the MS4. A larger amount of debris was collected from the MS4 in this reporting period compared to the previous reporting period. Less debris was collected from street sweeping activities this reporting period compared to the last. The City's street sweeping schedule has not changed and the distance swept during 2006/2007 was the same as in 2005/2006, so the decrease may suggest that there was less debris on the City's streets this reporting period as compared to last. To provide additional pollutant removal, the City continued to maintain the 22 catch basin filter inserts installed in the University Channel basin, which prevented four cubic yards of debris from entering the City's MS4. Similar to previous reporting periods, the estimated composition of the material removed from the filter inserts was 80 percent sediment and 20 percent trash. An additional 77.5 cubic yards of debris was removed from channel maintenance activities.

As previously mentioned, approximately 9,000 pet waste bags were used at City parks, an increase from the 4,500 used during the last reporting period. Proper pet waste disposal results in a reduction of the amount of pet waste and associated pollutants that may be discharged to the City's storm drain system. The City's Canine Corners program also contributes to a decrease in the amount of pet waste discharged to the City's MS4. Removal of trash and debris through the City's Adopt-a-Park and Adopt-a-Block program also contributed to load reductions. The City-hosted Park Appreciation Day resulted in the collection of 5 tons of trash and debris. Other clean-up events in the City, including California Coastal Cleanup Day and Creek to Bay Cleanup, removed a combined 427 pounds of trash, debris, and recycling. During 2006/2007, over 83,000 pounds of HHW were collected and 622.73 tons of trash and debris were collected during a large item and green waste disposal event. These events reduced the load of various hazardous materials, trash and debris, and green waste that may have otherwise been discharged to the City's MS4.

Level 5: Changes in Discharge Quality

Changes in storm water discharge quality are based on direct measurement of water quality. The main local, historical monitoring records are provided by the City's Dry Weather Monitoring Program, which has been in place since 1993. Figure 11.3 provides a graph with historical data. The City has recently began additional water quality studies conducted in both dry and wet weather, as described in Section 13 of this annual report. However, these programs have not been in place long enough to collect sufficient data to make meaningful statements about changes in discharge quality.

In reviewing Dry Weather Monitoring Program data, it is notable that most pollutants show relatively low exceedance rates. Ammonia and detergents have been measured since 1993, and both pollutants are considered good indicators of IC/IDs. General downward trends in the measured values and numbers of exceedances for these pollutants have been observed, as shown in figures 11.4 and 11.5. Figure 11.6 presents the trends in measured levels of fecal coliform and *Enterococcus* bacteria, which are typically considered indicators of pathogens. Fecal coliform readings have shown general downward trends, and action level

exceedances for these parameters have been relatively infrequent. For example, in 2006 only one fecal coliform exceedance was noted, and there were no *Enterococcus* exceedances.

Some downward trends in pollutant levels have been noted based on Dry Weather Monitoring Program data, which is a positive sign. The elimination of IC/IDs discovered during the reporting year also likely led to improvement in the quality of the discharge. As more data is collected by the City's additional monitoring programs, it is anticipated that more robust evaluations of changes in discharge quality will be possible.

Level 6: Changes in Receiving Water Quality

The City's jurisdiction only includes a portion of one relatively minor receiving water body, Alvarado Canyon. Major downstream receiving water bodies such as the San Diego River and Chollas Creek do not pass through the City, so local City monitoring data does not provide information that can help assess changes in their water quality. The City does work collaboratively with other Copermittees to help design and fund regional monitoring efforts which are targeted at assessing changes in receiving water quality. The results of those monitoring programs can be found in regional monitoring program report and in WURMP Annual Reports. Data from the City's recently initiated additional studies should also help the City assess changes in the quality of the water in Alvarado Canyon over time, although at this point the amount of data available is not sufficient to determine if changes in water quality have occurred.

IMPLEMENTATION PLANS AND JURMP UPDATE FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. As of this writing, the City is participating in a regional workgroup that is developing a revised approach for jurisdictional storm water program effectiveness assessment. The City plans to use this revised approach once it is finalized. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No.2001-01) and the associated JURMP document developed in 2002.

Table 11.1
Source Characterization, 2006/2007

Constituent of Concern	Geographical Area	Land-Use	Potential High Priority Source	Estimated Number and Percent of Total Sources	Priority
Sediment	In the vicinity of University Channel/ In the area surrounding Nagel St. and Sarita St.	Residential	Planters, Street	5%	Low
	Grossmont Shopping Center	Commercial	Landscape, Parking Lots, Streets	35%	Low
	Jurisdictional	Open Space	Slopes	60%	High
Fertilizer (Nitrate, Phosphate)	Vicinity of University Channel	Residential	Planter, Landscape	40%	High
	Grossmont Shopping Center	Commercial	Landscape, Parking Lots, Streets	40%	Medium
	Jackson Drive	Commercial	Landscape, Parking Lots, Streets	20%	Medium
Bacteria	South of I-8 Jackson Dr.	Residential	Individual homes	20%	Low
	Along Alvarado Cr. up to Amaya Dr./ Grossmont Hospital / Grossmont Shopping Center / Jackson Drive and Vicinity	Commercial	Streets, Curbs	20%	Medium
			Landscape	50%	High
	Northeast of Fletcher PKWY and Amaya Dr. intersection	Open Space	Parks, Open Channels	10%	Low
Oil and Grease	Jurisdictional	Residential	Driveways, Streets, Parking lots	10%	Low
	Along Alvarado Cr. up to Amaya Dr./ Grossmont Hospital / Grossmont Shopping Center / Chollas Cr. surrounding	Commercial	Restaurants,	20%	Medium
			Parking lots	20%	Medium
			Streets, Curbs	30%	Low
	Jackson Drive and vicinity of Commercial St.	Industrial	Automobiles, Repair Shops	20%	High
Metals (Copper,	Boulevard Drive	Residential/ Commercial	Streets, Curbs, Parking lots	20%	Low

Table 11.1 (Continued)
Source Characterization, 2006/2007

Constituent of Concern	Geographical Area	Land-Use	Potential High Priority Source	Estimated Number and Percent of Total Sources	Priority
	Shopping Centers, Surrounding Area of Alvarado Channel	Commercial	Parking Lots	20%	Low
	Jurisdictional	Various	Automobiles	40%	Medium
	In the vicinity of Commercial St.	Industrial	Repair Shops, Machine Shops	20%	High
Organics (Surfactants)	North of I-8, West of Baltimore Dr./ Massachusetts Ave	Residential	Washing Cars, Households and Driveway	40%	Medium
	In the vicinity of Grossmont Shopping Center / In the area surrounding Grossmont Hospital / Along Alvarado Cr.	Commercial	Car Washing	40%	Medium
	Harbinson Avenue Vicinity	Residential	Car Washing	20%	Low
Pesticides	Jurisdictional	Residential	Individual homes	80%	Medium
	Along Alvarado Cr., Boulevard Drive	Commercial	Planter, Landscape	20%	Medium
Gross pollutants (Trash, Debris)	In the area surrounding Harbinson Ave./ In the vicinity of Nagel Sarita St.	Residential	Individual homes, Streets	30%	Low
	Along Alvarado Cr./ University Channel surrounding and along lower stretches of University Ave	Commercial	Streets, Parking Lots, Illegal Dumping	70%	High
Ammonia	North of I-8, West of Baltimore Dr	Residential	Decomposed Materials / Cleaner	20%	Low
	In the vicinity of Grossmont Shopping Center / In the area surrounding Grossmont Hospital / Along Alvarado Cr.	Commercial	Decomposed Materials / Cleaner	80%	High

Table 11.2
BMP Selection, 2006/2007

Constituent of Concern	Geographical Area	Potential High Priority Source	Specific Activity	Potential BMP
Sediment	In the vicinity of University Channel, In the area surrounding Nagel Sarita St.	Planters, Street	Soil erosion	Street Sweeping BMP(SC-7)*, Storm Drain Inlet Protection BMP(SC-10), soil stabilization
	Grossmont Shopping Center	Landscape, Parking Lots, Streets	Soil erosion, washing and blowing parking lots	Sediment Trap BMP(SC-3), Street sweeping BMP(SC-7), Storm Drain Inlet Protection BMP(SC-10)
	Jurisdictional	Slopes	Soil erosion	Desiltation Basins (SC-2), Fiber Rolls BMP(SC-5), Street Sweeping BMP(SC-7), Preservation of Existing Vegetation BMP(SS-2), Hydraulic Mulch BMP(SS-3)
Fertilizer (Nitrate, Phosphate)	In the vicinity of University Channel, Jackson Drive	Planter, Landscape	Fertilizer application	minimize use of fertilizers, keep chemicals in a covered storage, irrigation control
	Grossmont Shopping Center	Landscape	Fertilizer application	minimize use of fertilizers, keep chemicals in a covered storage, irrigation control
		Parks	Fertilizer application	minimize use of fertilizers, keep chemicals in a covered storage, irrigation control

Table 11.2 (Continued)
BMP Selection, 2006/2007

Constituent of Concern	Geographical Area	Potential High Priority Source	Specific Activity	Potential BMP
Bacteria	South of I-8 Jackson Dr.	Individual homes	Animal excrement, Sewer overflow	Collecting and removing waste for proper disposal, Street sweeping, irrigation control, divert the sewage from storm drains, encourage residents to clean up after their pets and dispose properly
	Along Alvarado up to Amaya Dr., Grossmont Hospital, Grossmont Shopping Center, Jackson Drive surrounding	Streets, Curbs	Animal excrement, Sewer overflow	Collecting and removing waste for proper disposal, Street sweeping BMP(SC-7), irrigation control, divert the sewage from storm drains, encourage residents to clean up after their pets and dispose properly
		Landscape		
		Parking Lots		
	Northeast of Fletcher PKWY and Amaya Dr. intersection	Parks, Open Channels	Animal excrement, Sewer overflow	Collecting and removing waste for proper disposal, Street sweeping BMP(SC-7), irrigation control, divert the sewage from storm drains, encourage residents to clean up after their pets and dispose properly
Oil and Grease	Jurisdictional	Driveways, Streets, Parking lots	Oil change, Oil leak, Spill	Spill Prevention and Control BMP(WM-4)
	Along Alvarado Cr. up to Amaya Dr., Grossmont Hospital, Grossmont Shopping Center, Jackson Drive surroundings	Restaurants	Oil storages, washing, Spill	Spill Prevention and Control BMP(WM-4)
		Parking lots	Oil change, Oil leak, Spill	
		Streets, Curbs	Oil change, Oil leak, Spill	
	In the vicinity of Commercial St.	Automobiles, Repair Shops	Oil change, Oil leak, Spill	Spill Prevention and Control BMP(WM-4)

Table 11.2 (Continued)
BMP Selection, 2006/2007

Constituent of Concern	Geographical Area	Potential High Priority Source	Specific Activity	Potential BMP
Metals (Copper, Zinc)	Jurisdictional	Streets, Curbs, Parking lots	Painting shops, Car's tires, Machine shops, Auto repair shops	Street sweeping BMP(SC-7), collect runoff from working area inside the berm and dispose as a waste, Perform all painting, material fabrication and auto repair activities inside a covered area
	Shopping Centers, Boulevard Drive, and Alvarado Creek	Parking Lots	Painting shops, Car's tires, Machine shops, Auto repair shops	Street sweeping BMP(SC-7), collect runoff from working area inside the berm and dispose as a waste, Perform all painting, material fabrication and auto repair activities inside a covered area
		Automobiles	Brake Pads	Street sweeping BMP(SC-7)
	In the vicinity of Commercial St.	Repair Shops, Machine Shops	Repair Shop and Machine Shop Activities	Street sweeping BMP(SC-7), collect runoff from working area inside the berm and dispose as a waste
Organics (Surfactants)	North of I-8, West of Baltimore Dr., Massachusetts Ave	Washing Cars, Households and Driveway	Application of Cleaners, solvents	Stop washing vehicles outdoor, dispose wash water properly, minimize use of detergents and solvents
	In the vicinity of Grossmont Shopping Center, In the area surrounding Grossmont Hospital, Along Alvarado Creek, Harbinson Ave surroundings	Car Washing, Cleaner	Application of Cleaners, solvents	Stop washing vehicles outdoor, dispose wash water properly, minimize use of detergents and solvents
Pesticides	Jurisdictional	Individual homes	Pesticide application	keep chemicals in a covered storage, proper use of pesticides, irrigation control
	Along Alvarado Cr. And Boulevard Drive	Planter, Landscape	Pesticide application	keep chemicals in a covered storage, proper use of pesticides, irrigation control

Table 11.2 (Continued)
BMP Selection, 2006/2007

Constituent of Concern	Geographical Area	Potential High Priority Source	Specific Activity	Potential BMP
Gross pollutants (Trash, Debris)	In the area surrounding Harbinson Ave., In the vicinity of Nagel Sarita St.	Individual homes, Streets	Plant debris, lawn-clippings	Solid Waste Management BMP(WM-5), regularly sweep liter and debris, pick up animal waste when walking pets
	Along Alvarado Cr., University Channel surrounding	Streets, Parking Lots, Illegal Dumping	Street litter, animal excrement	Solid Waste Management BMP(WM-5), regularly sweep liter and debris, pick up animal waste when walking pets
Ammonia	North of I-8, West of Baltimore Dr	Sewage overflow, Decomposed Materials, Cleaner	Sewage overflow, Decomposed Materials, Cleaner	Street sweeping BMP(SC-7), collect decomposed material and trash periodically, check sewage system for overflow periodically, divert runoff from dealer parking lot after using cleaner materials
	In the vicinity of Grossmont Shopping Center, In the area surrounding Grossmont Hospital, Along Alvarado Cr.	Sewage overflow, Decomposed Materials, Cleaner	Sewage overflow, Decomposed Materials, Cleaner	Street sweeping BMP(SC-7), collect decomposed material and trash periodically, check sewage system for overflow periodically, divert runoff from dealer parking lot after using cleaner materials

* BMPs can be found in Appendix C of the City of La Mesa JURMP.

Table 11.3
Targeted Outcomes, 2006/2007

Level 1: Compliance with Activity-Based Permit Requirements					
Permit Section	**Activity / Source Type**	**Targeted Outcome**	**Actual**	**Measures of Success**	
				Actual / Target	**%**
F.1 Land Use	Development Projects	# sites needing SUSMP **11**	# sites subjected to SUSMP **11**	**11 / 11**	**100**
F.2 Construction	Construction Sites	# sites targeted for inspection **42**	# sites inspected **42**	**42 / 42**	**100**
	All Sites	Total sites identified **42**	# in compliance or on a schedule for compliance **42**	**42 / 42**	**100**
F.3.a Municipal	High Priority Facilities	# facilities targeted for inspection **8**	# facilities inspected **8**	**8 / 8**	**100**
	High Priority Sites	Total sites identified **8**	# in compliance or on a schedule for compliance **8**	**8 / 8**	**100**
	MS4	Estimated quantity of material targeted for removal from MS4 (cubic yards) **200**	Quantity of material removed from MS4 (cubic yards) **225.75**	**225.75 / 200**	**113**
	Streets, Parking Lots	Estimated quantity of material to be prevented from entering MS4 (tons) **700**	Quantity of material prevented from entering MS4 (tons) **692**	**692 / 700**	**99**

Table 11.3 (Continued)
Targeted Outcomes, 2006/2007

Level 1: Compliance with Activity-Based Permit Requirements					
Permit Section	**Activity / Source Type**	**Targeted Outcome**	**Actual**	**Measures of Success**	
				Actual / Target	**%**
F.3.b Industrial	Industrial Sites	# sites targeted for inspection **7**	# sites inspected **7**	**7 / 7**	**100**
F.3.c Commercial	High Priority Sites	# sites targeted for inspection **10**	# sites inspected* **0**	**0 / 10**	**0**
F.3.d Residential	Household Hazardous Waste	Quantity of waste targeted for collection (lbs.) **100,000**	Quantity of waste collected (lbs.) **83,050**	**83,050 / 150,000**	**83**
F.4 Education	Outreach (External)	# materials, brochures targeted for distribution **52,000**	# materials, brochures distributed **125,290**	**125,290 / 52,000**	**241**
		# targeted workshops, outreach events **0**	# training workshops, outreach events conducted **0**	**0 / 0**	**N/A**
	Staff Training	# targeted training events **5**	# training events conducted **20**	**20 / 5**	**400**
F.5 IC/ID	Dry Weather Sampling	# locations targeted for monitoring **18**	# locations monitored **18**	**18 / 18**	**100**
		# locations requiring follow-up investigations **4**	# follow-up investigations conducted **4**	**4 / 4**	**100**

Table 11.3 (Continued)
Targeted Outcomes, 2006/2007

Level 1: Compliance with Activity-Based Permit Requirements					
Permit Section	**Activity / Source Type**	**Targeted Outcome**	**Actual**	**Measures of Success**	
				Actual / Target	**%**
IC/ID	Illicit connections	# identified **1**	# eliminated or on a compliance schedule **1**	**1 / 1**	**100**
	Illegal discharges	# identified **31**	# eliminated or on a compliance schedule **31**	**31 / 31**	**100**
	Complaints / referrals	# received **89**	# resolved or on a compliance schedule **89**	**89 / 89**	**100**
F.6 Public Participation	Opportunities for participation	Estimated # of opportunities to be provided **3**	# provided **22**	**22 / 3**	**733**

Notes
* To avoid double counting numbers referenced later with respect to IC/ID requirements, the number of commercial inspections does not include complaint investigations.

N/A – Not applicable

Table 11.4
Inspections of Industrial Facilities During the Current Municipal Permit Cycle
JURMP Inception through 2006/2007

	HA 907.1			HA 908.2			HA 909.1			Entire City		
Priority	**Facilities**	**Facilities Inspected**	**Number of Inspections**	**Facilities**	**Facilities Inspected**	**Number of Inspections**	**Facilities**	**Facilities Inspected**	**Number of Inspections**	**Total Facilities**	**Total Facilities Inspected**	**Total Inspections**
High Industrial	6	6	31*	1	1	6	-	-	-	**7**	**100%**	**37**
Medium Industrial	18	18	36	6	6	11	1	1	1	**25**	**100%**	**48**
Low Industrial	32	32	37	7	7	7	-	-	-	**39**	**100%**	**44**
Totals	**56**	**56**	**104**	**15**	**15**	**24**	**1**	**1**	**1**	**71**	**100%**	**129**

* The RWQCB conducted the inspection of Rainbow Steel in 2005/2006, and not all high priority industrial sites have been present on the inventory over the entire Municipal Permit cycle.

Table 11.5
Inspections of Commercial Businesses During the Current Municipal Permit Cycle
JURMP Inception through 2006/2007

	HA 907.1			HA 908.2			HA 909.1			ENTIRE CITY		
CATEGORY	FACILITIES	FACILITIES INSPECTED	NUMBER OF INSPECTIONS	FACILITIES	FACILITIES INSPECTED	NUMBER OF INSPECTIONS	FACILITIES	FACILITIES INSPECTED	NUMBER OF INSPECTIONS	TOTAL FACILITIES	TOTAL FACILITIES INSPECTED	TOTAL INSPECTIONS
Auto Repair	37	37	50	16	16	26	-	-	-	**53**	**100%**	**76**
Equipment Repair	4	4	4	3	3	3	-	-	-	**7**	**100%**	**7**
Auto Paint/Body	4	4	9	-	-	-	-	-	-	**4**	**100%**	**9**
Auto Parking Lots	10	10	11	5	5	5	1	1	1	**16**	**100%**	**17**
Fueling	13	13	17	5	5	6	-	-	-	**18**	**100%**	**23**
Pest Control	2	2	2	-	-	-	-	-	-	**2**	**100%**	**2**
Eating Places	87	87	114	34	34	49	2	2	3	**123**	**100%**	**166**
Landscaping	2	2	4	-	-	-	-	-	-	**2**	**100%**	**4**
Golf Courses & Other Rec. Facilities	3	3	3	1	1	1	1	1	1	**5**	**100%**	**5**
Port-A-Potty	1	1	1	-	-	-	-	-	-	**1**	**100%**	**1**
Other	21	21	23	12	12	15	1	1	1	**34**	**100%**	**39**
Totals	**184**	**184**	**238**	**75**	**75**	**103**	**5**	**5**	**6**	**265***	**100%**	**349****

Notes
* One mobile business included in the commercial inventories is not presented in this table because it cannot easily be classified as operating in one designated watershed. That business has been inspected once during the present Municipal Permit Cycle.
** Complaint investigations at commercial businesses are not included in this total.

Figure 11.2
Water Consumption at Parks in the City of La Mesa

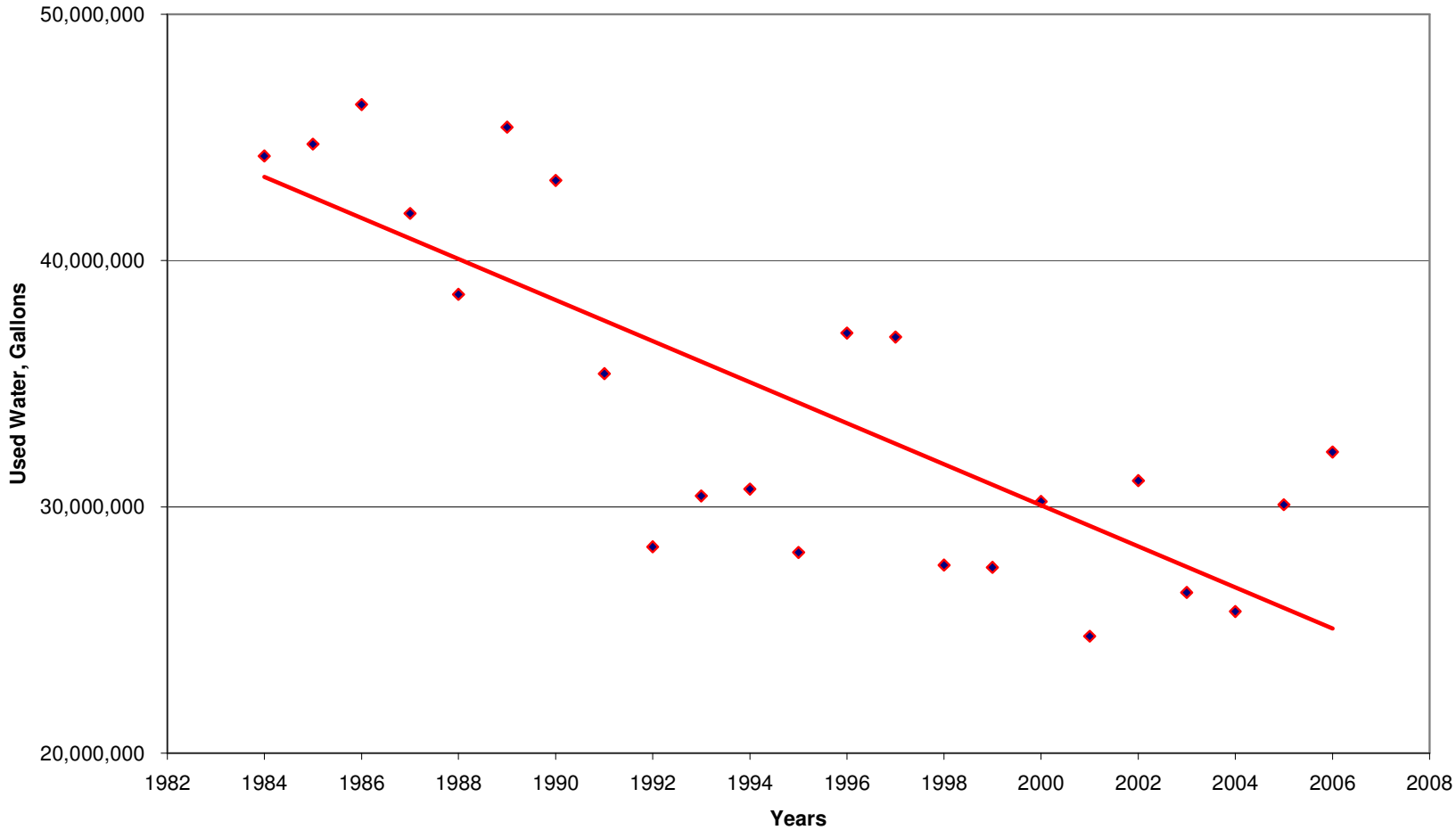

Note: to maintain comparability with historical data, water consumption numbers from Harry Griffen Park and Briercrest Park, which were built relatively recently, are not included in this graph.

Figure 11.3
Dry Weather Results, Averages of Tested Constituents 1993-2007

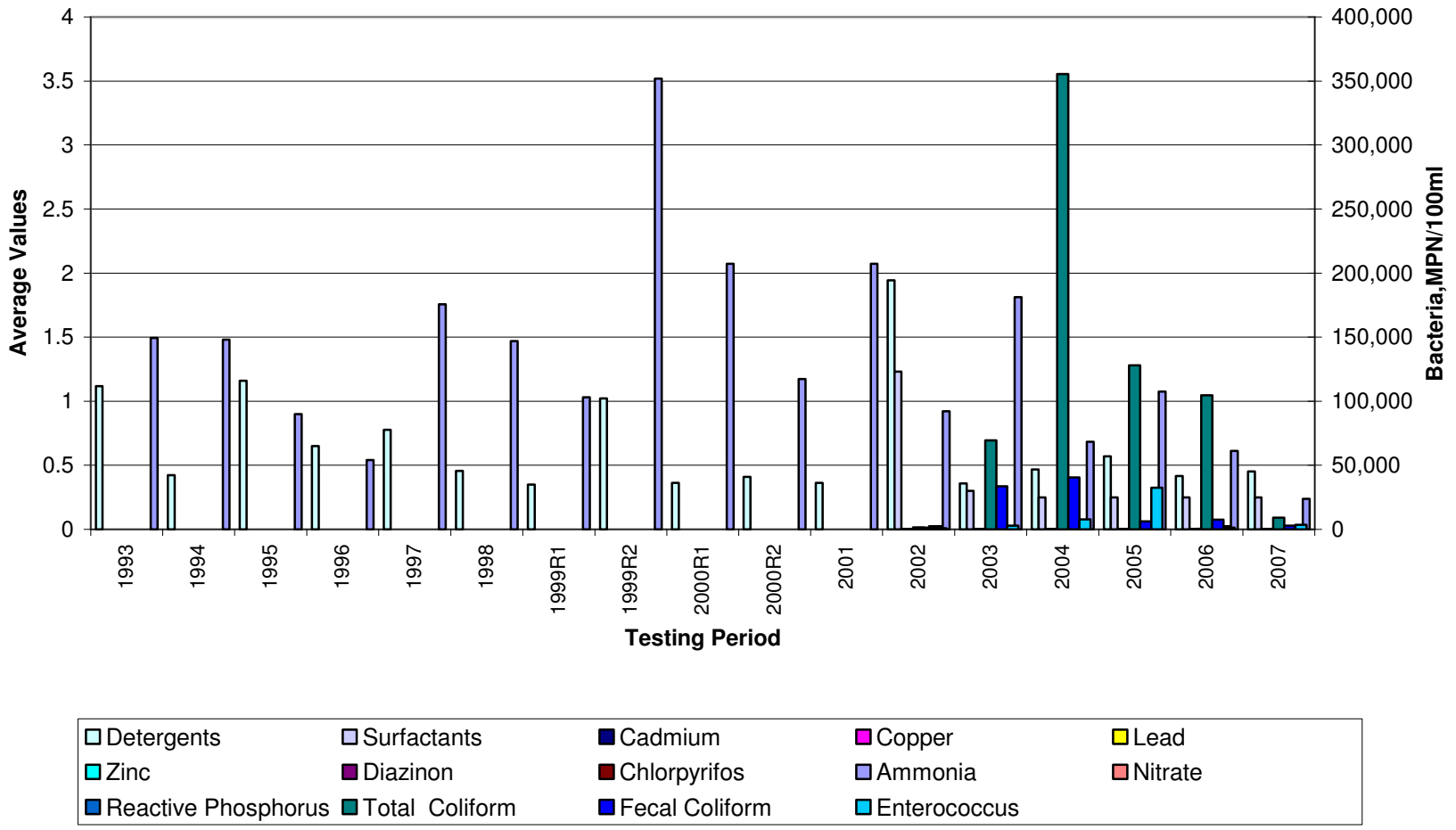

Figure 11.4
Dry Weather Results, Ammonia 1993-2007

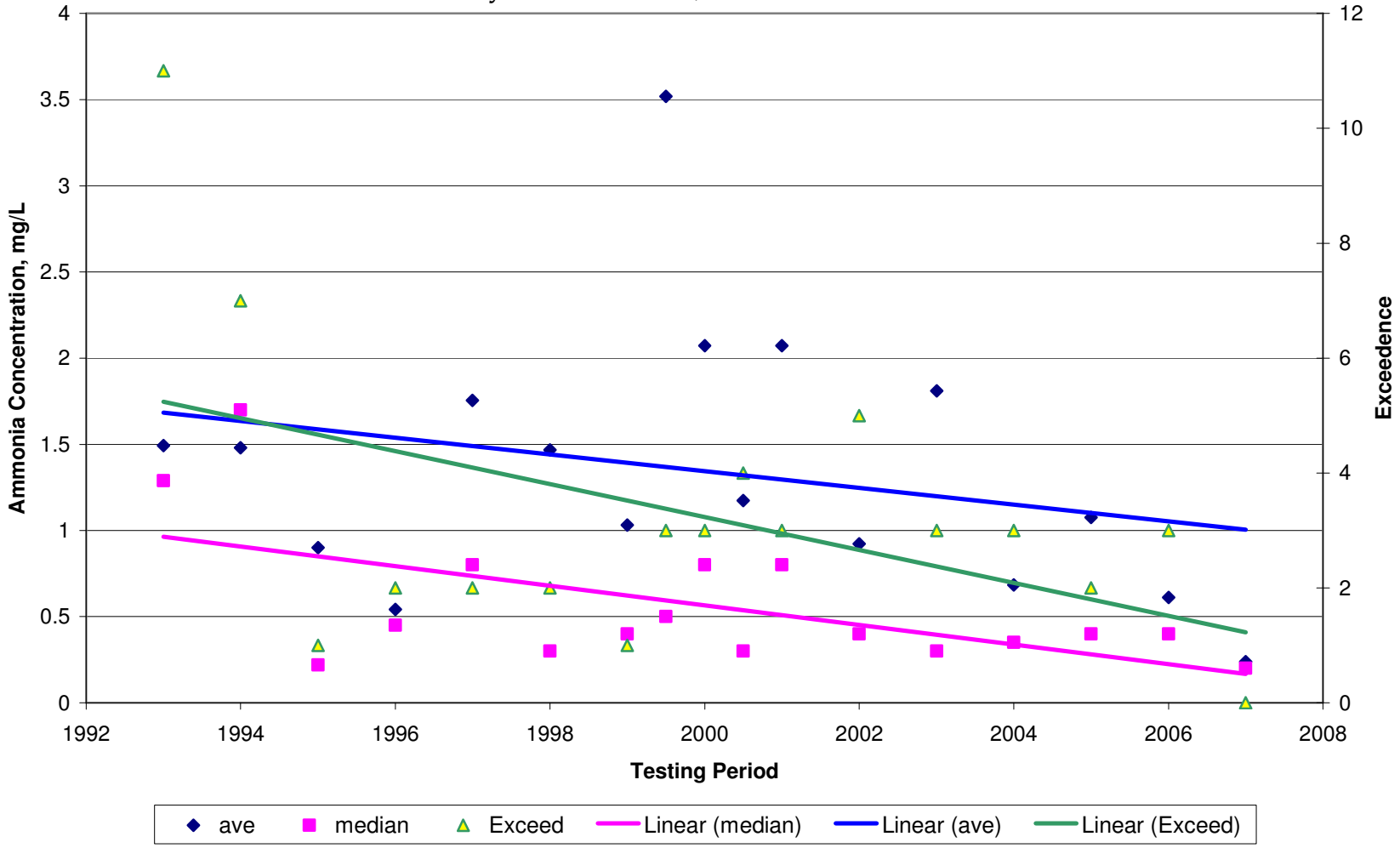

Figure 11.5
Dry Weather Results, Detergents 1993-2007

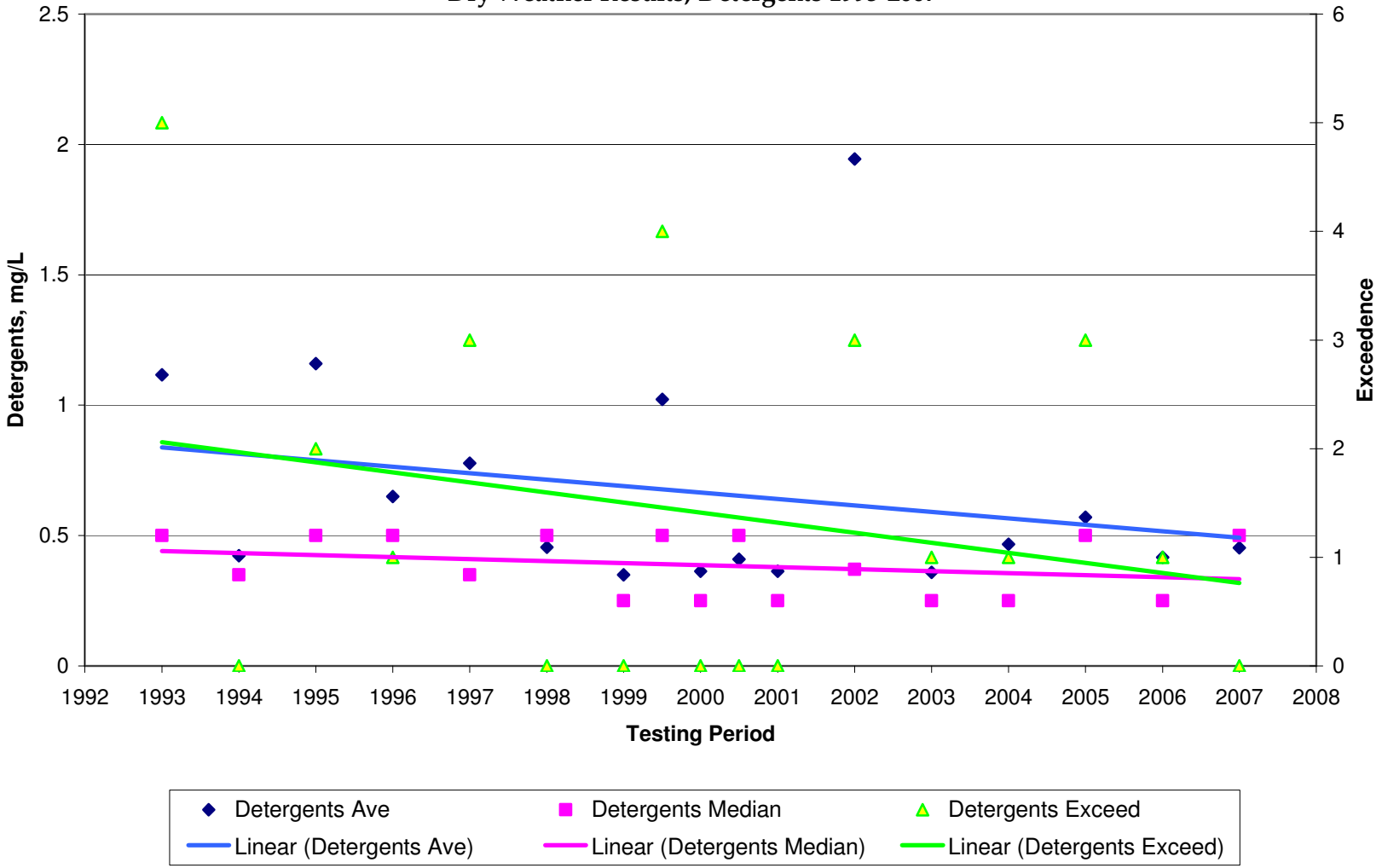

Figure 11.6
Dry Weather Results, Fecal Coliform and *Enterococcus* Bacteria 2002-2007

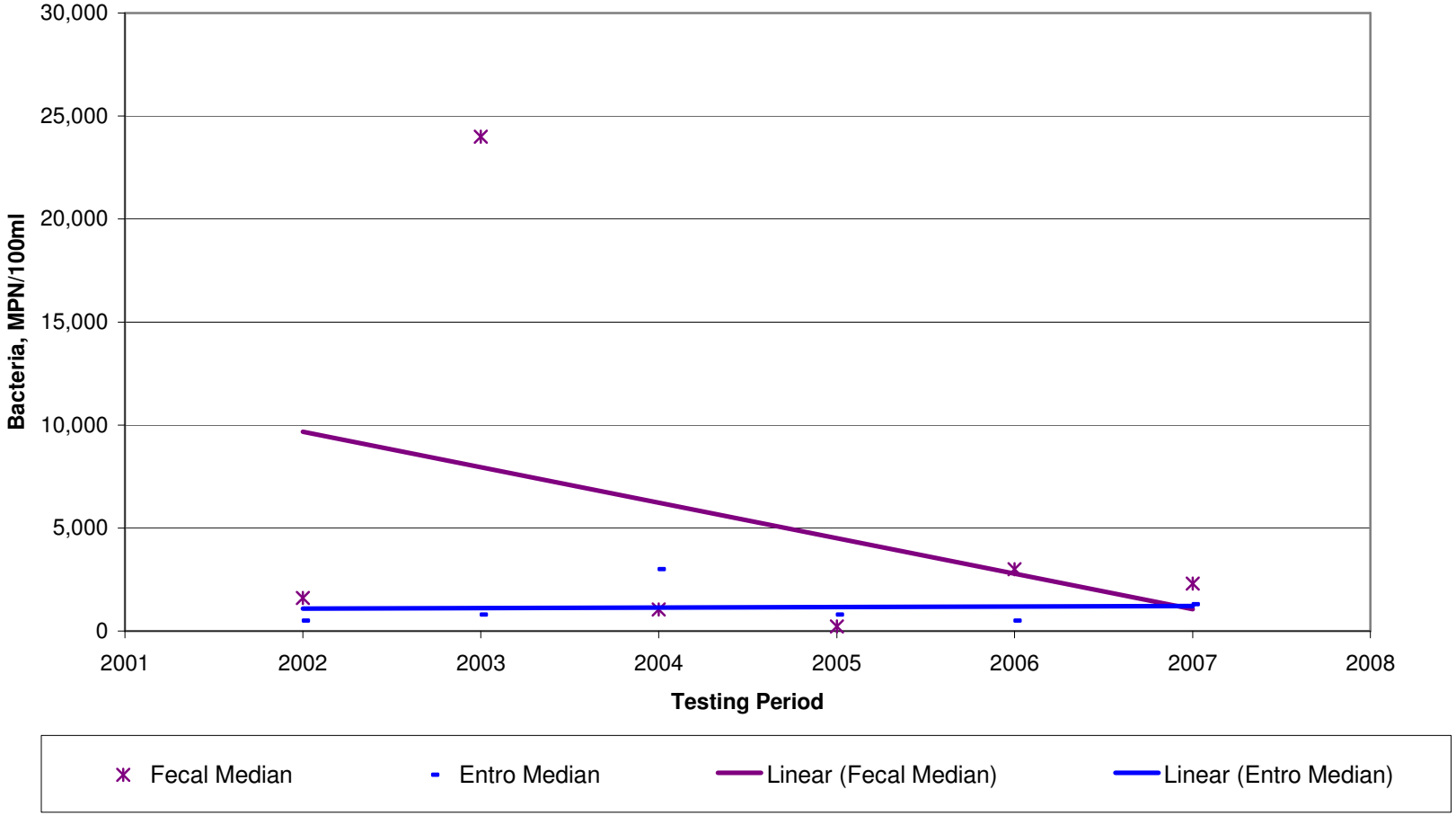

12 FISCAL ANALYSIS

The City's Sanitation Fund provides funding for the Storm Water Program. There have not been any changes to this funding mechanism during this reporting period. The total expenditures in 2006/2007 were $575,477. Note that the City's payment for the 2006/2007 regional wet weather monitoring costs was not paid until after the end of the 2006/2007 reporting period, resulting in a low expenditure for the Permit Fees & Wet Weather Monitoring line item, which is typically around $60,000. The pattern of one year's wet weather monitoring fees being paid in the following reporting period is expected to continue. The proposed budget for the 2007/2008 Fiscal Year is $742,615. The itemized costs within six different categories are presented in Table 12.1, below.

Table 12.1
Itemized Expenditures and Budget
for Fiscal Years 2006/2007 and 2007/2008

Storm Water Program Fiscal Analysis	Expenditures FY 2006/2007	Budget FY 2007/2008
Engineering Division	$ 143,849	$ 150,795
Program Mgmt.	$ 71,500	$ 74,930
Land Use	$ 9,810	$ 10,370
Construction	$ 13,568	$ 14,585
Existing Development	$ 24,920	$ 25,830
Education	$ 8,071	$ 8,590
IC/ID	$ 15,000	$ 15,480
Admin	$ 980	$ 1,010
Public Works Operations	$ 114,301	$ 119,990
SSO/MS4 Cleaning	$ 107,930	$ 113,300
Streets Division	$ 3,907	$ 4,103
Parks Division	$ 2,464	$ 2,587
Equipment and Supplies	$ 46,904	$ 51,750
Storm Drain Pipe and Supplies	$ 22,663	$ 21,070
Vactor	$ 24,241	$ 30,680
BMPs	$ 149,700	$ 181,360
Street Sweeping	$ 145,114	$ 165,360
WURMP - San Diego River	$ 2,293	$ 8,000
WURMP - San Diego Bay	$ 2,293	$ 8,000
Consultant Services	$ 155,568	$ 166,720
Jurisdictional Dry Weather Monitoring	$ 26,500	$ 40,000
Jurisdictional Wet Weather Monitoring	$ 42,000	$ 45,000
Inspections	$ 25,944	$ 25,000
JURMP Annual Report and Update	$ 59,750	$ 25,000
WURMP - San Diego River	$ -	$ 5,000

Table 12.1 (Continued)
Itemized Expenditures and Budget
for Fiscal Years 2006/2007 and 2007/2008

Storm Water Program Fiscal Analysis	Expenditures FY 2006/2007	Budget FY 2007/2008
WURMP - San Diego Bay	$ -	$ 5,000
Public Education/Outreach Program	$ 1,362	$ 16,720
Training & Development	$ 12	$ 5,000
Permit Fees and Regional Shared Costs	$ 34,845	$ 72,000
Annual Permit Fee to RWQCB	$ 11,109	$ 18,000
NPDES Regional Shared Costs	$ 22,431	$ 50,000
MOU San Diego River WURMP	$ 1,305	$ 2,000
MOU San Diego Bay WURMP	$ -	$ 2,000
TOTAL	**$ 575,477**	**$ 742,615**

13 SPECIAL INVESTIGATIONS

RAINBOW STEEL

Rainbow Steel is a steel fabrication business located at 8332 Case Street in the City of La Mesa. This facility has a history of non compliance with local and state storm water regulations and had been unresponsive to enforcement actions imposed by the City during previous reporting periods, dating back to their first inspection in May 2003. Details on the City's inspection and enforcement history with Rainbow Steel were discussed in detail in Section 13 of the 2005/2006 Annual Report.

In August 2005, the City requested the assistance of the RWQCB in regards to enforcing storm water requirements at Rainbow Steel. The RWQCB conducted its own inspection of Rainbow Steel, and sampling was performed at the site during two separate rain events during the 2005/2006 reporting period. In April 2006 the RWQCB issued Cleanup and Abatement Order No. R9-2006-0026, which required the facility to develop and implement BMPs, a SWPPP, and a monitoring program.

During the 2006-2007 reporting period, the City conducted a routine inspection of Rainbow Steel as part of the City's industrial and commercial inspection program. The site now maintains a SWPPP and has begun a monitoring program. The inspector issued written corrective actions to the site but did not note any violations. This was the first inspection since the site's initial inspection in 2003 that the site has not received a violation for improper BMP implementation or for non-compliance with the General Industrial Permit. The City will continue to inspect Rainbow Steel as part of its industrial and commercial inspection program in future reporting years to verify that the site remains in compliance with applicable storm water regulations.

ADDITIONAL WATER-QUALITY MONITORING

During 2005/2006, the City initiated an additional study of selected locations in the City during dry weather conditions. In 2006/2007, the City developed and began implementing a wet weather water quality monitoring program and also again completed an additional study during dry weather conditions. Sites chosen for the City's additional monitoring programs are presented in Figure 13.1. Note that the site names on the figure represent the site names used during 2006/2007. The City has since adopted a new site naming system, which is described in the program's monitoring plan (Attachment 13.2). Most sites are within the Alvarado and University drainage basins, which are the two main drainage basins within the City. Seven sites are shown in Figure 13.1. All seven were monitored as part of the dry weather additional study, and all of them except Site Spring Valley Downstream, West were monitored during the wet weather study.

The wet weather monitoring program was designed to help the City to assess the types and quantities of specific pollutants discharged in the City's main drainage basins when it rains, with a focus on pollutants associated with downstream 303(d) listings. This data, along with information gathered during dry weather conditions, will provide a more complete characterization of the water being discharged from the City year round. The information

gained should help guide the City when making future planning decisions regarding storm water program implementation.

Dry weather additional study samples were collected on June 26 and 27, 2007, and wet weather samples were collected on April 20, 2007. Results of analyses from the samples collected under dry weather and wet weather conditions are presented in Attachment 13.1 and Attachment 13.2, respectively. The sampling plan for the wet weather monitoring program is also included in Attachment 13.2. The data from these sampling events were also provided to the Regional Monitoring Workgroup for use in preparing the annual regional monitoring report. As of this writing the City is conducting further analysis of its data and working to finalize a report summarizing the collected information.

FUTURE PLANS FOR SPECIAL INVESTIGATIONS

The City plans to continue to collect and analyze wet weather data in 2007/2008. The analyte list for the program will most likely be expanded to include synthetic pyrethroids, which have been identified as a causative agent of toxicity observed in samples from Chollas Creek. Beyond these water quality monitoring efforts, as it has in the past, the City will also conduct additional special investigations if found to be necessary.

Figure 13.1
Additional Monitoring Site Locations

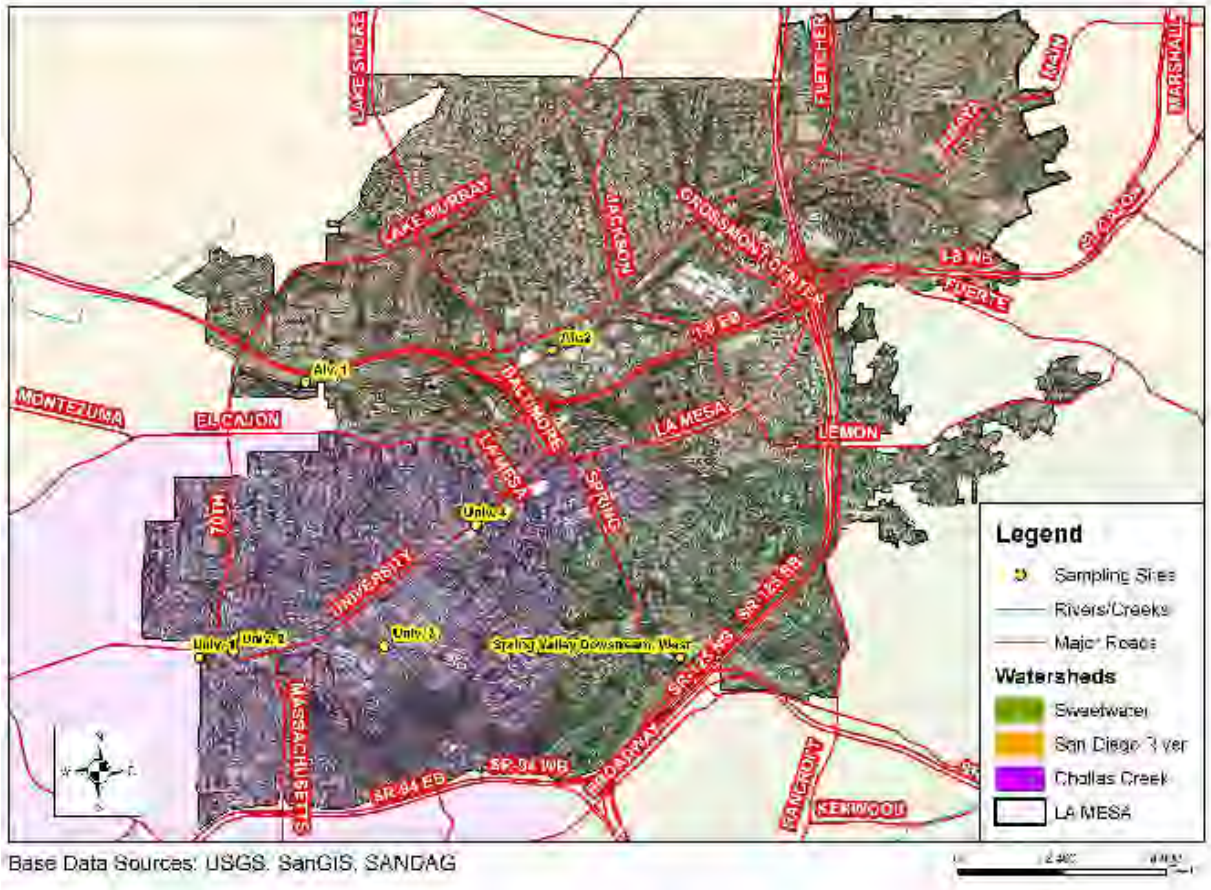

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14 CONCLUSIONS AND RECOMMENDATIONS

The City has implemented its storm water program in accordance with Municipal Permit requirements since 2002. RWQCB Order No. 2007-0001, a revised municipal storm water permit, was issued on January 24, 2007. During the 2006/2007 reporting period the City began adjusting its program in anticipation of the new requirements of this permit and continued to refine programs already required under the existing Municipal Permit. Some of the major accomplishments during the present permit cycle include the following:

- Implemented Calsense, a sophisticated irrigation control system, for a number of parks and medians. This system has helped reduce irrigation runoff and associated transport of pollutants.
- Developed and implemented a BMP plan for the Public Works Operation Center.
- Developed and implemented a process to require post-construction BMPs from Priority Projects.
- Inspected 100 percent of its inventoried industrial and commercial businesses. The City has also worked collaboratively with the RWQCB on issues of Industrial Permit compliance.
- Regularly inspected construction sites, often more frequently than required by the Municipal Permit.
- Developed standardized, easily accessible filing systems for records associated with the various components of the storm water program.
- Identified IC/IDs through receipt of calls to the Storm Water Hotline and through the Dry Weather Monitoring Program. The City then worked to eliminate the identified IC/IDs in a timely manner. Figure 11.1 presents the total number of calls received during each of the last several reporting periods.
- Implemented a comprehensive storm water pollution prevention education outreach program. The program has included components such as working with environmental groups to put on clean up events, collaborating with Eagle Scouts to construct educational kiosks, development of new fact sheets, regularly including educational articles in the City's newsletter, and providing special HHW pick-up services for disabled residents and senior citizens.
- Developed and implemented an additional water quality monitoring program to assess wet and dry weather discharges from the City's main drainage basins. Data from these programs will be used to help the City address current and upcoming TMDL requirements.

During 2007/2008, the City will transition into implementing the requirements of the new permit. Additionally, the City will continue to work with other jurisdictions in the Chollas Creek watershed and the RWQCB to address TMDL requirements. The City will continue to refine implementation of existing programs and create new programs as needed to improve its ability to reduce or eliminate pollutant discharges and meet regulatory requirements. The City also plans to collaborate with other Copermittees to develop new programs, further refine existing programs, and develop methods for which program effectiveness may more accurately be assessed.

California Regional Water Quality Control Board

San Diego Region

Over 50 Years Serving San Diego, Orange, and Riverside Counties
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Arnold Schwarzenegger
Governor

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http:// www.waterboards.ca.gov/sandiego

RECEIVED
SEP 24 2007
CITY MANAGER

September 21, 2007

CERTIFIED MAIL
7006 3450 0003 7392 7077

In reply refer to:
WPS:10-5009.02:carias

Ms. Sandra L. Kerl
City Manager
City of La Mesa
8130 Allison Avenue
La Mesa, CA 91941

Dear Ms. Kerl:

SUBJECT: REVIEW OF JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM 2005-2006 ANNUAL REPORT FOR THE CITY OF LA MESA, ORDER NO. 2001-01, NPDES NO. CAS0108758.

The Regional Water Quality Control Board San Diego Region (Regional Board) has completed its review of the "City of La Mesa (City) Urban Runoff Management Plan Fiscal Year 2005-2006 Annual Report". This year the Regional Board focused on the following sections: Municipal, Industrial, Commercial, Land Use, Construction, Illicit Discharges Detection and Elimination, Education and Outreach, and Special Projects. Our comments are generally requests for additional information needed to fully assess program implementation and compliance during the reporting period. Some comments may also request information in order to help ensure program compliance for future reporting periods. Revisions and any responses to comments should be addressed in the Fiscal Year 2006-2007 Annual Report, which is due in January of 2008.

The following comments reveal significant instances of incomplete and/or unclear reporting in the Annual Report of required actions and activities by your agency. If such required actions and activities actually did not occur during the reporting period, these serious deficiencies in your storm water program would be a basis for determining noncompliance with Order No. 2001-01 and would be subject to enforcement action by the Regional Board. All comments are numbered to provide you the ability to track responses.

COMMENTS ON THE CITY OF LA MESA 2005-2006 ANNUAL REPORT

Annual Report Section 3 (Industrial):

1. On January 9, 2006 the City performed an Industrial inspection of Interamerica Stone Design, Inc. and found that this business was in violation of the Statewide

General industrial Stormwater permit and City ordinances. A follow-up inspection on June 28, 2006 found that the business was still out of compliance, and a Notice of Violation (NOV) was issued for failure to comply with the Industrial Permit. In the case of known non-filers, coordination with the Regional Board to bring these businesses into compliance with the Statewide Industrial Stormwater Permit can expedite the process. It is recommended that in the future you coordinate with the Regional Board when non-filers are discovered. Other municipalities frequently provide copies of inspection reports NOV's issued to non-filers to the Regional Board, which can enable Regional Board staff to assist in bringing these industries into compliance.

2. In our previous year's comment letter (January 2, 2007) it was noted that the Annual Report did not include a summary of any necessary follow-up actions that were conducted as a result of the inspections of industrial facilities as required by Permit section F.3.b.5. The Regional Board requested that in subsequent Annual Report submittals follow-up actions be reported.

   During this reporting period a majority of the industrial inspections performed by the City took place on June 28, 2006, a few days before the end of the reporting period. The Regional Board is unable to determine if appropriate and timely follow-up has occurred to address the recommended corrective actions identified by your inspectors. In your response to this letter please provide updates on any follow-up actions, to date, the City has taken to address the deficiencies noted during the industrial inspections, and provide this information in all future reports.

Annual Report Section 4 (Commercial):

3. The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections of commercial sites resulting from public complaints.

   A review of Table 8.4 in the Annual Report shows that during the reporting period four NOV's were issued to four mobile auto detailers (entry No. 12, 30, 73 and 82 in table), and six NOV's were issued to other various commercial enterprises (entry No. 31, 32, 107, 118, 121 and 122 in table). It is unclear whether timely follow-up action was taken by the City to address the violations. Follow-up activities are required by Permit section F.3.c.4; therefore such actions must be reported on per Permit section I.1.a. In your response to this letter please provide information on all follow-up activities that the City took to ensure that the recipients of these NOV's had corrected the violations.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence, please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

If you have any questions regarding this letter, please contact Christina Arias at (858) 627-3931 or email: Carias@waterboards.ca.gov.

Respectfully,

Brian D. Kelley

Brian D. Kelley
Senior Engineer
Watershed Branch

cc: Malik Tamimi
Public Works Department
City of La Mesa
8130 Allison Avenue
La Mesa, CA 91941

RWQCB COMMENTS REGARDING 2005/2006 JURMP ANNUAL REPORT

RWQCB comments on the City's 2005/2006 JURMP Annual Report were received in a letter dated September 21, 2007. The comments are listed below in italics and numbered in the same order they appear in the RWQCB comment letter; the City's response follows each RWQCB comment. A copy of the RWQCB comment letter is provided in Attachment 1.1.

1. *On January 9, 2006 the City performed an Industrial inspection of Interamerica Stone Design, Inc. and found that this business was in violation of the Statewide General Industrial Stormwater permit and City ordinances. A follow-up inspection on June 28, 2006 found that the business was still out of compliance, and a Notice of Violation (NOV) was issued for failure to comply with the Industrial Permit. In the case of known non-filers, coordination with the Regional Board to bring these businesses into compliance with the Statewide Industrial Stormwater Permit can expedite the process. It is recommended that in the future you coordinate with the Regional Board when non-filers are discovered. Other municipalities provide copies of inspection reports NOV's issued to non-filers to the Regional Board, which can enable Regional Board staff to assist tin bringing these industries into compliance.*

   Response

   The City of La Mesa appreciates the willingness of RWQCB staff to assist the City in bringing industrial businesses into compliance. The City has worked with the RWQCB in the past on such issues; see, for example, the discussion about Rainbow Steel in Section 13 of the 2005/2006 JURMP Annual Report. With respect to the specific case of Interamerica Stone Design Inc., the City and RWQCB staff corresponded in more detail via email in the fall of 2007. RWQCB staff notified the City that the information that the City provided in those discussions was sufficient to answer this comment. Please see Attachment 1.1 of this JURMP Annual Report for copies of the emails.

2. *In our previous year's comment letter (January 2, 2007) it was noted that the Annual Report did not include a summary of any necessary follow-up actions that were conducted as a result of the inspections of industrial facilities as required by Permit section F.3.b.5. The regional Board requested that in subsequent Annual Reports submittals follow-up actions be reported.*

   During this reporting period a majority of the Industrial inspections preformed by the City took place on June 28, 2006, a few days before the end of the reporting period. The Regional Board is unable to determine if appropriate and timely follow-up has occurred to address the recommended corrective actions identified by your inspectors. In your response to this letter please provide updates on any follow-up actions, to date, the City has taken to address the deficiencies noted during the industrial inspections, and provide this information in all future reports.

   Response

   The follow-up process for non-compliance observed at Interamerica Stone Design Inc. is discussed in the response to comment 1 above. The follow-up

process for non-compliance found at Rainbow Steel was discussed in Section 13 of the 2005/2006 JURMP Annual Report. The other industrial sites inspected during 2005/2006 were not found to be in violation of City ordinances. The implementation status of the corrective actions recommended for those sites is verified during the next routine inspection; routine inspections are conducted annually for all high priority industrial sites.

3. *The Annual Report does not include a summary of any necessary follow-up activities that were conducted as a result of inspections of commercial sites resulting from public complaints.*

   A review of Table 8.4 in the Annual Report shows that during the reporting period four NOV's were issued to four mobile auto detailers (entry No. 12, 30, 73, and 82 in table), and six NOV's were issued to other various commercial enterprises (entry No. 31, 32, 107, 118, 121 and 122 in table). It is unclear whether timely follow-up action was taken by the City to address the violations. Follow-up activities are required by Permit section F.3.c.4; therefore such actions must be reported on per Permit section I.1.a. In your response to this letter please provide information on all follow-up activities that the City took to ensure that the recipients of these NOV's had corrected the violations.

   <u>Response</u>
   The City's enforcement process includes a number of different tools, which are typically used in an escalating fashion as described in the City's JURMP. All of the NOVs issued to commercial businesses were related to illegal discharges. In each case, the City required the business to stop the discharge if it was still active at the time of the visit and to clean up discharged water if feasible. City staff ensured that the issues were resolved at the time of the site visits, and no additional follow-up actions were needed. In most cases the City has found that the issuance of an NOV is effective in impressing the significance of the violation on the responsible party and in bringing about compliance. In cases where persistent noncompliance is noted, increasingly strict enforcement measures are taken until compliance is achieved, such as in the example of Rainbow Steel. No further non-compliance was observed at the commercial businesses to which NOVs were initially issued in 2005/2006, so no further enforcement actions were taken.

From: Christina Arias [mailto:CArias@waterboards.ca.gov]
Sent: Friday, October 05, 2007 2:45 PM
To: Malik Tamimi
Subject: RE: Inspection memo

hi Malik,

Thank you for the information. As far as I am concerned, your email below has sufficiently responded to the comment #1 on our letter to the City Manager dated September 21, 2007. Therefore you need not address it in the 06-07 Annual Report. Thanks for taking the time to get me up to speed on the item.

Have a nice weekend,
Christina

Christina Arias
Water Resource Control Engineer
San Diego Regional Water Quality Control Board
(858) 627-3931
FAX (858) 571-6972
CArias@waterboards.ca.gov

>>> "Malik Tamimi" <mtamimi@ci.la-mesa.ca.us> 10/1/2007 10:57 AM >>>

Hi Christina,

Good talking to you today and thank you for the memo!

I re-read the comment again and looked into what we presented in the annual report. You are right, it is vague. We did specify that the facility was non-compliance due to non-filing of NOI in our annual report to the RWQCB. I did request that the owner contact the RWQCB to see if they would be exempt for no exposure certification /possibly not have to conduct monitoring. I did a second inspection of the facility in June 06 to follow-up to the January Inspection and to see what the RWQCB decided/and if the facility filed an NOI and prepared a SWPPP. I was told during the inspection that he had contacted the RWQCB and that they would not exempt him. Again, I issued an NOV for failure to comply with the permit and conduct the required water monitoring. I followed up again in August/September 06 and was told that he was working on it. Then I found out he was diagnosed with cancer in the winter 06/was not in the shop. Then he was better in the Spring 07/I still could not get in touch with him and when I did he still had not filed. I contacted Don Perrin to help me in May 07 because I could not get the facility owner to file the NOI. In June I saw his facility was open and stopped by. We read through the Boards Letter/I conducted an inspection/issued an NOV again for no NOI/monitoring. I helped him fill out the NOI form providing him information such as the SIC Code and Receiving Water Body. In the end of July/August 07, I stopped by to follow-up only to find out that he had a massive heart attack and passed on. I forwarded this information onto Don. I also asked the potential new owner to come to the City to meet with me and discuss permit requirements. I provided them with a copy of the industrial permit/filled out the NOI form with them and suggested they contact environmental

consultant to prepare the SWPPP. They had mentioned that they still are not operating and waiting for a City license.

Interamerica stone was definitely an interesting experience/very unique.

Hope this helps. If you feel the comment still stands for lack of information, I do understand; however, I would like to emphasize that we do work closely with the RWQCB and look to you all for assistance in getting facilities into compliance. Thank you for your consideration.

-Malik

CITY OF LA MESA

MUNICIPAL PROGRAM

STORM WATER

BEST MANAGEMENT PRACTICES

NOTEBOOK

City of La Mesa Municipal Best Management Practices Notebook

This notebook presents best management practices (BMPs) for numerous municipal activities. The BMP fact sheets have been selected from the California Stormwater BMP Handbook, January 2003. The following table is an index of the BMPs that are presented in this notebook.

BMP Number	***BMP Description***
SC-10	Non-Stormwater Discharges
SC-11	Spill Prevention, Control and Cleanup
SC-20	Vehicle and Equipment Fueling
SC-21	Vehicle and Equipment Cleaning
SC-22	Vehicle and Equipment Repair
SC-30	Outdoor Loading/Unloading
SC-31	Outdoor Container Storage
SC-32	Outdoor Equipment Maintenance
SC-33	Outdoor Storage of Raw Materials
SC-34	Waste Handling and Disposal
SC-41	Building and Grounds Maintenance
SC-43	Parking/Storage Area Maintenance
SC-60	Housekeeping Practices
SC-61	Safer Alternative Products
SC-70	Road and Street Maintenance
SC-71	Plaza and Sidewalk Cleaning
SC-72	Fountains and Pool Maintenance
SC-73	Landscape Maintenance
SC-74	Drainage System Maintenance
SC-75	Waste Handling and Disposal
SC-76	Water and Sewer Utility Maintenance

The BMP fact sheets can be found at www.cabmphandbooks.com.

Calsense Installations

	Installed
Adult Center	05/2005
Aztec Park	02/2001
Briercrest Park	05/2005
City Hall	Future
Collier Park	2/2001
Community Center	**07/2006**
Fire Station 11	**09/2006**
Fire Station 12	12/2004
Fire Station 13	Future
Harry Griffin Park 1	10/2005
Harry Griffen Park 2	**10/2006**
Highwood Park	**10/2006**
Kuhlken Field/ Porter Hall	05/2004
Jackson Park	03/2006
Junior Seau Sports Complex 1	04/2001
Junior Seau Sports Complex 2	03/2006
La Mesita Park	02/2001
Nan Couts Cottage	03/2006
Northmont Park	05/2004
Police Station	Future
Rolando Park	08/2002
Sunset Park	10/2005
Sunshine Park	02/2001
Vista La Mesa Park	12/2001

NEW - Bold

Notice of Violation Procedural Sheet

When Do You Use It?

The Notice of Violation or NOV should be used any time you see the following:

1. **Illegal Discharge to a Storm Drain System** (storm drains are only for storm water)
2. **Illicit Connection to a Storm Drain System** (Pipe connected to storm drain that does not convey storm water ie sewage)
3. **BMP Implementation**: Improper BMP implementation in which pollutants have either left the site or the potential for pollutants to leave the site is highly likely in the event of a rain storm.
4. **Other:** Any other activities that may inadvertently result in the contamination of storm water and receiving water bodies.

Recommended Corrective Actions?

List what needs to be done to remedy the situation.

- Illegal discharge: immediately stop the discharge/ clean up
- Illicit connection: immediately disconnect
- Improper BMPs: fix existing or select new BMPs

Distribution?

White Copy: Provide to Storm Water Technician

Yellow Copy: Provide to Violator

Pink Copy: Inspector keeps and files

Procedures

Once you have filled out the form and provided a copy to the violator. Please be informed that the violator will receive a formal second written notice. The following presents the City's Enforcement Measures as presented in Chapter 7 of the City's JURMP.

Verbal Warning/Notice of Violation Form
Written Notice
Enforcement of Contracts
Stop Work Orders
Denial or Revocation of Permits
Civil and Criminal Court Actions

Follow-Up

The Storm Water Technician is responsible for following up to ensure corrective actions have been implemented, unless there is a full time inspector assigned to the project.

MASTERPIECE PRINTING COMPANY / La Mesa, California / (619) 466-6588

CITY OF LA MESA
DEPARTMENT OF PUBLIC WORKS
Storm Water Management Program

NOTICE OF VIOLATION

Site Name: _____ **Phone** _____

Address: _____ **La Mesa, CA** _____

Owner/Manager: _____ **Date:** _____

The Public Works Department is responsible for regulating all discharges into the City's storm water conveyance system pursuant to Chapter 7.18 of the Municipal Code. The purpose of this Storm Water Management And Discharge Control Ordinance is to:

A) Prohibit non-storm water discharges.
B) Eliminate pollutants in storm water to the maximum extent practical.
C) Protect watercourses from pollution in order to comply with water quality control laws, including the federal Clean Water Act.

It is the responsibility of the property owner at the address above to implement Best Management Practices (BMPs) in order to comply with the City's Storm Water Ordinance. A recent inspection of your home/business found one, or more, of the following deficiencies:

____ Illegal discharge(s) of pollutants into the storm water conveyance system.

____ Illegal connection(s) to the storm water conveyance system.

____ Failure to implement Best Management Practices (BMPs) as recommended by City inspector/contractor.

____ Other: _____

Recommended Corrective Actions: _____

_____

_____

_____ **Implement By:** _____

Previous Notification Date(s): _____ **Re-inspectionDate:** _____

Thank you for your prompt attention to this matter and helping to keep the City's waterways free of pollution. If you have questions regarding this correction notice, or if we can be provide assistance, please call (619) 667-1134.

Inspector: _____ **Signature:** _____

*** * * Failure to correct this violation may result in further legal action * * ***

City of La Mesa Storm Water Program • 8130 Allison Ave. • La Mesa, CA 91941

White SWMP Copy *Yellow Responsible Party Copy* *Pink Inspector Copy*

(7/05)

NPDES STORMWATER – VERBAL WARNINGS

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

Date/Time:	
Inspector Name:	

Category ***(Place an "x" beneath applicable category)***

Construction	Municipal	Industrial	Commercial	Mobile	Residential	Other

Project or Business Name *(if applicable)*:	
Location:	
Point of Contact:	

Verbal Warning Description:

Follow-up Action ***(place "x" in box and date resolved)***

	Resolved at Time of Verbal Warning
	Resolved on (date)_____
	Further Enforcement Action Required

NPDES STORMWATER – WRITTEN WARNING

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

Date/Time: _____ **Inspector Name:**_____

Category ***(Place an "x" beneath applicable category)***

Construction	Municipal	Industrial	Commercial	Mobile	Residential	Other

Project or Business Name *(if applicable)*:	
Location:	
Point of Contact:	

Written Warning Description (place "x" in applicable box)

_____ Failure to implement Best Management Practices (BMPs). (*Describe*)
_____
_____
_____

_____ Failure to maintain Best Management Practices (BMPs). (*Describe*)
_____
_____
_____

_____ Failure to implement Best Management Practices (BMPs) per Caltrans or CASQA specification. (*Describe*)
_____
_____
_____

_____ Failure to comply with Construction, Industrial, or Municipal Permit Requirements. (*Describe*)
_____
_____
_____

_____ Other (*Describe*)
_____
_____

Follow-up Action ***(place "x" in box and date resolved)***

	Resolved at Time of Written Warning
	Resolved on (date)_____
	Further Enforcement Action Required (ie NOV)

CITY OF LA MESA

PUBLIC WORKS DEPARTMENT

TO: Superintendent of Public Works

FROM: David Liesberg

RE: TAILGATE SAFETY SESSION on the topic of: Spill Prevention

DATE/TIME: 7/10/06 LENGTH: .5 (Min/Hrs)

The employees attending this session have so indicated by their signature below:

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. Robert L. Graham
7.
8.
9.
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David Liesberg
Safety Session Leader (Signature)

Lead Worker
(Title)

admin/forms/tailgate

CITY OF LA MESA

PUBLIC WORKS DEPARTMENT

TO: Superintendent of Public Works

FROM: David Lusby

RE: TAILGATE SAFETY SESSION on the topic of: BMPs

DATE/TIME: 7/31/06 LENGTH: .5 (Min/Hrs)

The employees attending this session have so indicated by their signature below:

1. Robert D Graham
2. Mathew Jones
3. Mike Doerhoefer
4. Ed Murray
5.
6.
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40.

David Lusby
Safety Session Leader (Signature)

Lead Worker
(Title)

admin/forms/tailgate

CITY OF LAMESA
Park Safety Meeting

PRESENTOR: Randy Goodell, Park Maintenance Supervisor

DATE: August 1, 2006 TIME: 6:00 am to 6:30am
SUBJECT: BMP's

1. Justin Ahlgren
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. Keith Chapman
7. [illegible]
8. Dick Hollis
9. [illegible]
10. Frank J Vitale
11. ABE CORRALES.
12. [illegible]
13. DAVID CASTILLO
14. Oscar Mecinto
15. [illegible]
16. [illegible]
17. [illegible]
18.
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21.
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26.

CITY OF LAMESA
Park Safety Meeting

PRESENTOR: Randy Goodell, Park Maintenance Supervisor

DATE: August 8, 2006 TIME: 6:00 am to 6:30am
SUBJECT: BMP's

1. Willie E Smith
2. [illegible]
3. [illegible]
4. David Castillo
5. [illegible]
6. Keith Chapman
7. [illegible]
8. [illegible]
9. [illegible]
10. [illegible]
11. [illegible]
12. [illegible]
13. Dick Roberts
14. B Stewart
15. Oscar Mercado
16.
17.
18.
19.
20.
21.
22.
23.
24.
25.
26. Jose [illegible]

CITY OF LA MESA

PUBLIC WORKS DEPARTMENT

TO: Superintendent of Public Works

FROM: Ed Manning

RE: TAILGATE SAFETY SESSION on the topic of: Clean Water Act

DATE/TIME: 8/14/06 6AM LENGTH: 15 (Min/Hrs)

The employees attending this session have so indicated by their signature below:

1. [illegible]
2. [illegible]
3.
4. Matthew Jones
5. Robert G. Bedham
6.
7.
8.
9.
10.
11.
12.
13.
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Ed Manning

Safety Session Leader (Signature)

H.E.O.

(Title)

admin/forms/tailgate

CITY OF LA MESA

PUBLIC WORKS DEPARTMENT

TO: Superintendent of Public Works

FROM: Ed Manning

RE: TAILGATE SAFETY SESSION on the topic of: CLEAN Water Act

DATE/TIME: 8/21/06 6AM LENGTH: 15 (Min/Hrs)

The employees attending this session have so indicated by their signature below:

1. [illegible]
2. [illegible]
3. [illegible]
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Ed Manning
Safety Session Leader (Signature)

HEO
(Title)

admin/forms/tailgate

Robbie PW freq.

CITY OF LAMESA
Park Safety Meeting

PRESENTOR: Randy Goodell, Park Maintenance Supervisor

DATE: October 31, 2006 TIME: 6:00 am to 6:30am

SUBJECT: BMP's

1. [illegible]
2. [illegible]
3. Keith Chapman
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible] COLLAMER
9. [illegible]
10. David M. Castillo
11. Robert Alex
12. Nick Luther
13. [illegible]
14. [illegible]
15. [illegible]
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CITY OF LA MESA **PUBLIC WORKS DEPARTMENT**

TO: Superintendent of Public Works

FROM: Tracy Clark

RE: **TAILGATE SAFETY SESSION on the topic of:** BMP SC-30

DATE/TIME: 3-6-07 **LENGTH:** 15 (Min/Hrs)

The employees attending this session have so indicated by their signature below:

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Safety Session Leader (Signature)

Lead Worker
(Title)

admin/forms/tailgate

CITY OF LAMESA
Park Tailgate Safety Meeting

PRESENTOR: Randy Goodell, Park Maintenance Supervisor

DATE: January 30, 2007 TIME: 6:00 am to 6:30am
SUBJECT: House keeping

1. Keith Chapman
2. FRANK VITALE
3. Paul Ener
4. - 1825
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7. ABEL CORRALES.
8. Robert Alex
9. CHAD
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CITY OF LA MESA

PUBLIC WORKS DEPARTMENT

TO: Superintendent of Public Works

FROM: DAVID SCHOOLCRAFT

RE: TAILGATE SAFETY SESSION on the topic of: Spill prevention, Control + Clean up

DATE/TIME: 1-16-07 6:00 am LENGTH: 20 (Min/Hrs)

The employees attending this session have so indicated by their signature below:

1. DAVID SCHOOLCRAFT
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[illegible]
Safety Session Leader (Signature)

B.M. SUPERVISOR
(Title)

admin/forms/tailgate

CITY OF LA MESA

PUBLIC WORKS DEPARTMENT

TO: Superintendent of Public Works

FROM: STEVEN MAURER

RE: TAILGATE SAFETY SESSION on the topic of: BMP's Spill Prevention

DATE/TIME: 12-13-06 LENGTH: _____ (Min/Hrs)

The employees attending this session have so indicated by their signature below:

1. Jesus Ramirez
2. Mark Fitzsimmons
3. John Hill
4. Michael C. Geary
5. [illegible]
6. Keith Alexander
7. Joe R. [illegible]
8. [illegible]
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Steve Maurer
Safety Session Leader (Signature)

P.W. Maint. Supervisor
(Title)

admin/forms/tailgate

CITY OF LA MESA **PUBLIC WORKS DEPARTMENT**

TO: Superintendent of Public Works

FROM: GRANT MITCHELL

RE: **TAILGATE SAFETY SESSION on the topic of:** MATERIAL HANDLING

DATE/TIME: 12/12/06 **LENGTH:** 10 **(Min/~~Hrs~~)**

The employees attending this session have so indicated by their signature below:

1. [illegible]
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[illegible]
Safety Session Leader (Signature)

PW SUPERVISOR
(Title)

admin/forms/tailgate

CITY OF LA MESA

PUBLIC WORKS DEPARTMENT

TO: Superintendent of Public Works

FROM: STEVEN MAURER

RE: TAILGATE SAFETY SESSION on the topic of: BMP's Outdoor Storage

DATE/TIME: 12-6-06 LENGTH: _____ (Min/Hrs)

The employees attending this session have so indicated by their signature below:

1. JACK CHIARAMONTE
2. JESUS FIMBRES
3. Michael Byerly
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6. Pasquale LoCoco
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Safety Session Leader (Signature)

S.W. Maint. Supervisor
(Title)

admin/forms/tailgate

CITY OF LAMESA
Park Tailgate Safety Meeting

PRESENTOR: Randy Goodell, Park Maintenance Supervisor

DATE: November 28, 2006 TIME: 6:00 am to 6:30am

SUBJECT: BMP's

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3. Keith Chapman
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7. ABE CORRALES.
8. CHAD
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10. Robert Alegria
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15. David M. Castillo
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CITY OF LAMESA
Park Tailgate Safety Meeting

PRESENTOR: Randy Goodell, Park Maintenance Supervisor

DATE: November 7, 2006 TIME: 6:00 am to 6:30am
SUBJECT: BMP's

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. ROBERT ALFQUIN
6. [illegible]
7. ABE CORCALES.
8. [illegible]
9. [illegible]
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11. [illegible]
12. [illegible]
13. DAVID CASTILLO
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CITY OF LAMESA
Park Tailgate Safety Meeting

PRESENTOR: Randy Goodell, Park Maintenance Supervisor

DATE: March 27, 2007 TIME: 6:15 am to 7:00 am
SUBJECT: BMP's Landscape maintenance

1. [illegible]
2. David Castillo
3. [illegible]
4. Keith Chapman
5. Bobby Bruner
6. [illegible]
7. Abe Corrales -
8. [illegible] 1825
9. [illegible]
10. [illegible]
11. [illegible]
12. [illegible]
13. Robert [illegible]
14. [illegible]
15. [illegible]
16. [illegible]
17. Paul [illegible]
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STORM WATER BULLETIN BOARD

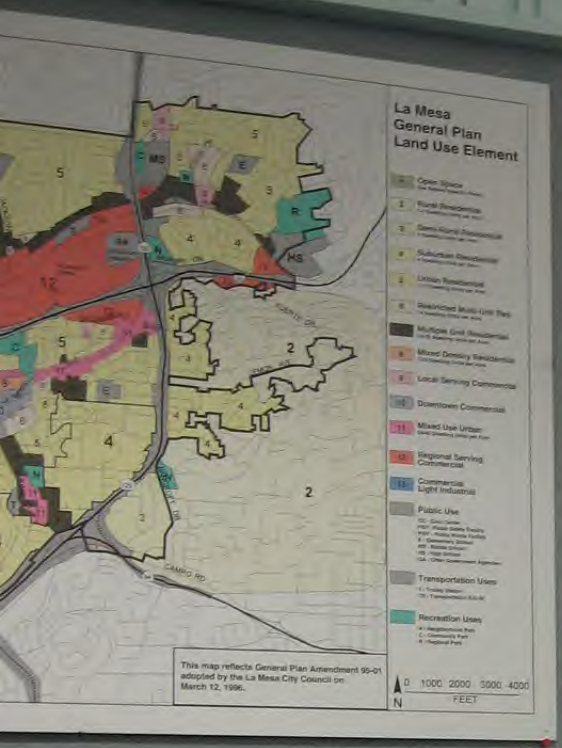

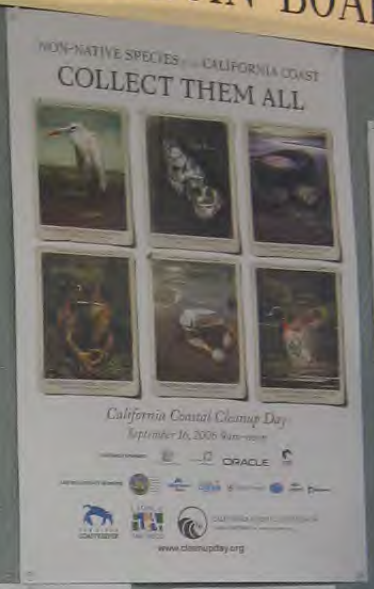

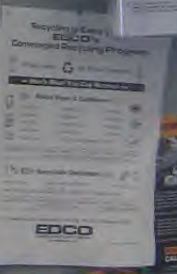

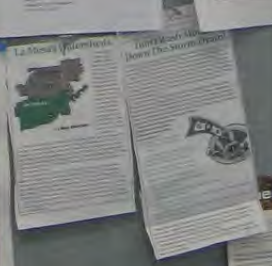

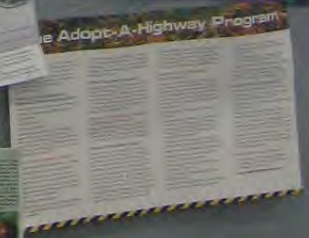

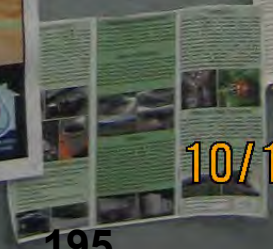

10/10/2007 13:20

City of La Mesa
Storm Water Pollution Prevention
Pools & Spas

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

Discharging of pool or spa water is not prohibited; however, the following measures are required.

1. Water shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Pool water must be dechlorinated
3. Water pH acceptable range from 7 to 8
4. No algae present in water
5. Water shall not contain chemicals to counteract the chlorine
6. Water does not contain hydrogen peroxide based products
7. Controlled discharge eliminating potential for erosion

Chlorine

Test pool or spa water for chlorine prior to discharge. Chlorine naturally dissipates overtime and if pool or spa water is left 3 to 5 days, it will become dechlorinated. Pool water needs to be drained before it turns green. Draining pool water gradually over landscaped areas will help prevent erosion problems.

Pool Filters

Pool filters should be cleaned over landscaped areas or anything that will absorb the discharge. Material may be collected over a filter cloth and disposed of in the trash. Filter backwash must be discharged into the sewer system with a pH of 5 to 12.5.

Pool Construction

Material must be contained and disposed of appropriately. Waste generated from plaster, gunite, cement, sediment, and other construction materials is prohibited from entering the storm drain system.

Do the Right Thing, Stay in Compliance and Protect Our Environment. For more information, contact the City's Storm Water Hotline (619) 667-1134.

SEDIMENT CONTROL	**A.8**
Description/Illustration of BMPs to prevent increase of sediment load in discharge	A.8
Construction phase / BMP sequencing schedule including supplemental pre-rain action plan for sediment control measures	A.8
NON-STORM WATER	**A.9**
Description of non-storm water discharges to receiving waters	A.9
Locations of discharges	A.9
Description of BMPs	A.9
Name and phone number of qualified person responsible for non-storm water management	A.9
POST-CONSTRUCTION	**A.10**
Description and location of BMPs	A.10
Operation/Maintenance of BMPs after project completion (including funding)	A.10
MAINTENANCE, INSPECTIONS, AND REPAIR	**A.11**
Name and phone number of qualified person responsible for inspections	A.11
Inspection checklist: date, weather, inadequate BMPs, visual observations of BMPs, corrective action, inspector's name, title, signature	A.11.a-f
OTHER REQUIREMENTS	**A.12-16**
Documentation of all training	A.12
List of Contractors/Subcontractors	A.13

Section B. Monitoring and Reporting Requirements	
Description of site inspection plans	B.3
Compliance certification (annually 7/1) if project is under active construction	B.4
Noncompliance reporting	B.5
Records of all inspections; compliance certifications; noncompliance reports, etc. should be kept for at least three years	B.6
Monitoring program for sediment contribution from direct discharges to impaired water bodies	B.7
Monitoring program for pollutants not visually detectable in storm water (non-visible pollutants)	B.8
Section C. Standard Provisions Construction Activities	
Signed Certification for SWPPP, reports, amendments, etc. Who is authorized to sign and by what authority has the duly authorized representative been assigned?	C.9,10
Location of General Permit and SWPPP on site during construction activities	C. 17

City of La Mesa
8130 Allison Avenue
La Mesa, CA 91941
(619) 667-1134
www.cityoflamesa.com

CONSTRUCTION SWPPP INFORMATION

State General Construction Permit

Your construction project may be subject to the State of California General Construction Permit. Construction activities subject to this permit include clearing, grading, disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of a at least one acre of total land area. Construction activity that result in soil disturbances of less than one acre is subject to this permit if the construction activity is part of a larger common plan of development that encompasses one or more acres of soil disturbance or if there is significant water quality impairment as a result.

Planning Document Review

If your project is subject to the General Construction Permit, a Notice of Intent (NOI) and filing fee, and preparation of a Storm Water Pollution Prevention Plan (SWPPP) and Monitoring Program are required prior to commencement with project activities. The SWPPP is required to be submitted to the City of La Mesa for review. Prior to submitting a SWPPP to the City for Review, ensure that the following items are addressed

Common Problems

- ☑ Provide a copy of the NOI Application, letter sent to you by the State Water Resources Control Board with Waste Discharge Identification Number (WDID).
- ☑ Ensure the owner and or contractor sign the certification forms.
- ☑ Ensure personnel assigned to various tasks i.e. inspections are presented in the SWPPP and their role is clearly defined.

- ☑ Ensure vicinity map shows the general topography.
- ☑ Provide selected Best Management Practices (BMPs) specifically for the project.
- ☑ Place BMPs on the map.
- ☑ Provide site-specific information for materials list.
- ☑ Ensure text correspond with appendices and is consistent.
- ☑ Provide information on Post-Construction BMPs and funding source.
- ☑ Review the General Construction Permit to ensure all components have been addressed.

Ensure the following items are incorporated into your SWPPP & Monitoring Program:

	Permit Section
Vicinity Map (graphic)	***A.5.a.1***
Major roadways, geographic features or landmarks	A.5.a.1
Site perimeter	A.5.a.1
Geographic features	A.5.a.1
General topography	A.5.a.1
Site Map (graphic) (can modify Parcel Map)	***A.5.a.2***
Site perimeter	A.5.a.2
Existing and proposed buildings, lots, and roadways	A.5.a.2
Storm water collection and discharge points	A.5.a.2
General topography before and after construction	A.5.a.2
Anticipated discharge location(s)	A.5.a.2
Drainage patterns	A.5.a.2
Relevant drainage areas	A.5.a.2
Temporary on-site drainage	A.5.a.2
Drainage (graphic)	***A.5.b.1***
Drainage patterns	A.5.b.1
Slopes after major grading	A.5.b.1
Calculations for storm water run-on	A.5.b.1
BMPs that divert off-site drainage from going through site	A.5.b.1
Storm Water Inlets (graphic)	***A.5.b.2***
Drainage patterns to storm water inlets or receiving water	A.5.b.2
BMPs that protect storm water inlets or receiving water	A.5.b.2
Site History/Past Site Usage (Real Estate Broker Disclosure may be sufficient)	***A.5.b.3***
Description of toxic materials treated, stored, or spilled on site	A.5.b.3
BMPs that minimize contact of contaminants with storm water	A.5.b.3
Location of Areas Designated for: (graphic)	***A.5.b.4***
Soil or waste storage	A.5.b.4
Vehicle storage & service	A.5.b.4
Construction material loading, unloading, and access	A.5.b.4
Equipment storage, cleaning, maintenance	A.5.b.4
BMP Descriptions for: (graphic or narrative)	***A.5.b.5***
Waste handling and disposal areas	A.5.b.5
On-site storage and disposal of construction materials and waste	A.5.b.5
BMPs to minimize exposure of storm water to construction materials, equipment, vehicles, waste	A.5.b.5
Post Construction BMPs	***A.5.b.6 See A. 10***
Additional Information	***A.5. c***
Description of other pollutant sources and BMPs that cannot be shown graphically	A.5.c.1
Pre-construction control practices	A.5.c.1
Inventory of materials and activities that may pollute storm water	A.5.c.2
BMPs to reduce/eliminate potential pollutants listed in the inventory	A.5.c.2
Runoff coefficient (before & after)	A.5.c.3
Percent impervious (before & after)	A.5.c.3
Copy of the NOI and WDID #	A.5.c.4
Construction activity schedule	A.5.c.5
Contact information	A.5.c.6
EROSION CONTROL	**A.6**
SWPPP shall include: (graphic)	***A.6.a-c***
Areas of vegetation on site	A.6.a.1
Areas of soil disturbance that will be stabilized during rainy season	A.6.a.2
Areas of soil disturbance which will be exposed during any part of the rainy season	A.6.a.3
Construction phase / BMP sequencing schedule including supplemental pre-rain action plan for erosion control measures	A.6.a.4
BMPs for erosion control	A.6.b
BMPs to control wind erosion	A.6.c

Pollutants of Concern

As rainfall flows over the ground, it picks up a variety of pollutants and deposits them into our watersheds. The following pollutants are commonly transported in the storm drain system and have been found to degrade water quality.

- Sediments
- Fertilizers
- Metals
- Detergents
- Pesticides
- Organic Compounds (solvents)
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

The following **B**est **M**anagement **P**ractices (**BMPs**) are required to be used at all industrial and commercial businesses, where applicable, to reduce urban runoff pollution in our streams and waterways. To do your part in protecting our water quality, please implement the following BMPs, where applicable or checked by the City inspector.

Maintenance & Good Housekeeping

- ❑ Regularly, dry sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- ❑ If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- ❑ Water used for cleaning exterior surfaces must be contained and disposed of into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the storm drain or leave the property.
- ❑ Regularly inspect and maintain storm drain inlets.

Landscaping

- ❑ Only irrigate during early morning or late evening to avoid evaporation.
- ❑ Aim sprinklers to avoid watering other areas.
- ❑ Time sprinklers to avoid over watering and causing runoff.
- ❑ Minimize pesticide, herbicide and fertilizer use, which are harmful to animals downstream.
- ❑ Hand pull weeds instead of using herbicides.
- ❑ Do not use pesticides that eliminate beneficial insects (i.e., Integrated Pest Management).

Outdoor Material Storage

- ❑ Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid material.
- ❑ Have a spill response kit available to clean up potential spills such as kitty litter or other absorbents.
- ❑ Keep material storage areas free from rainwater accumulation.
- ❑ Keep lids closed on all outdoor storage containers and ensure containers are labeled.

Waste Management

- ❑ Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- ❑ Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- ❑ Fix any leaks in garbage cans or dumpsters.
- ❑ Schedule regular waste pick-up.

Vehicle /Equipment Maintenance

- ❑ Perform all vehicle maintenance indoors when possible.
- ❑ Use drip-pans to collect fluids from leaky vehicles.
- ❑ Clean up spills immediately using kitty litter or other absorbents. Properly dispose of used absorbents.

Vehicle /Equipment Washing

- ❑ Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- ❑ Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- ❑ Minimize the use of soaps and water while washing.
- ❑ Protect storm drains or curb inlets and then collect all wash water by vacuum. Recycle or dispose of wash water via the sanitary sewer system.
- ❑ Drain excess wash water to the sanitary sewer (sink or toilet), not to storm drains.

Loading Areas & Operations

- ❑ Load and unload in designated areas.
- ❑ Regularly dry sweep loading and unloading areas.
- ❑ If possible, cover loading areas.
- ❑ Divert storm water away from all loading and unloading areas.
- ❑ Check shipments and trucks for leaks and spills.
- ❑ Cleanup spills/leaks immediately and dispose of properly.
- ❑ If you must use water for cleaning, use a mop and bucket and dispose of wash water into the sanitary sewer.
- ❑ Major cleaning of exterior surfaces must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water should not be allowed to enter the street gutter or storm drains.

What's the difference?

Sanitary Sewer vs. Storm Drain System

The water that drains down a sink or toilet in a home or business flows to the sanitary sewer and is treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – terminating at the Pacific Ocean!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our watersheds.

Who can you contact?

REPORT ILLEGAL DUMPING
City of La Mesa.
(619) 667-1134

(After Hours Hotline)
County Storm Water Hotline
1-888-846-0800

HOUSEHOLD HAZARDOUS WASTE DISPOSAL
EDCO
8184 Commercial Street
By Appointment
Questions: (619) 466-3355

RECYCLING
EDCO: (619) 466-3355

QUESTIONS AND COMMENTS
City of La Mesa Storm Water Program
(619) 667-1340

LOOK ON THE WEB

USED OIL RECYCLING CENTERS
http://www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
http://www.ipm.ucdavis.edu/

County of San Diego Storm Water Management Program
www. co.san-diego.ca.us/deh/stormwater/stormwater.html

State Water Resources Control Board (SWRCB) Storm Water Program
www.swrcb.ca.gov/stormwtr/construction.html

US Environmental Protection Agency
www.epa.gov/OWOW/NPS/

Clean Water Network
www.cwn.org

Preventing Urban Runoff Pollution

A Guide for Commercial and Industrial Businesses

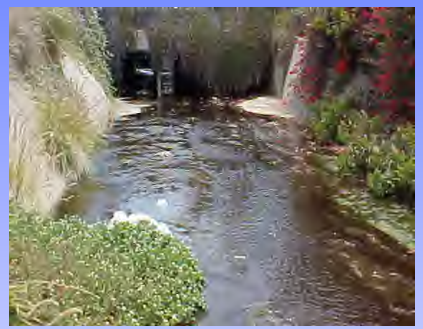

Urban storm water runoff is the **largest contributor** to **watershed pollution** in San Diego County.

Beginning in 2002, your business is **required** to prevent urban runoff pollution by implementing **B**est **M**anagement **P**ractices (**BMPs**).

The City will be conducting inspections to ensure that BMPs are being used and water quality is protected.

Pollutants of Concern

As rainfall flows over the ground, it picks up a variety of pollutants and deposits them into our watersheds. The following pollutants are commonly transported in the storm drain system and have been found to degrade water quality.

- Sediments
- Fertilizers
- Metals
- Detergents
- Pesticides
- Organic Compounds (solvents)
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

The following Best Management Practices (BMPs) are required to be used in residential areas to reduce urban runoff pollution in our streams and waterways. To do your part in protecting our water quality, please implement the following BMPs, where applicable or checked by the City inspector.

Maintenance & Good Housekeeping

- ❑ Regularly, dry sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- ❑ If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- ❑ Water used for cleaning exterior surfaces must be contained and disposed of into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the storm drain or leave the property.
- ❑ Regularly inspect and maintain storm drain inlets.

Landscaping

- ❑ Only irrigate during early morning or late evening to avoid evaporation.
- ❑ Aim sprinklers to avoid watering other areas.
- ❑ Time sprinklers to avoid over watering and causing runoff.
- ❑ Minimize pesticide, herbicide and fertilizer use, which are harmful to animals downstream.
- ❑ Hand pull weeds instead of using herbicides.
- ❑ Do not use pesticides that eliminate beneficial insects (i.e., Integrated Pest Management).

Outdoor Material Storage

- ❑ Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid material.
- ❑ Have a spill response kit available to clean up potential spills such as kitty litter or other absorbents.
- ❑ Keep material storage areas free from rainwater accumulation.
- ❑ Keep lids closed on all outdoor storage containers and ensure containers are labeled.

Waste Management

- ❑ Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- ❑ Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- ❑ Fix any leaks in garbage cans or dumpsters.
- ❑ Schedule regular waste pick-up.

Vehicle /Equipment Maintenance

- ❑ Perform all vehicle maintenance indoors when possible.
- ❑ Use drip-pans to collect fluids from leaky vehicles.
- ❑ Clean up spills immediately using kitty litter or other absorbents. Properly dispose of used absorbents.

Vehicle /Equipment Washing

- ❑ Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- ❑ Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- ❑ Minimize the use of soaps and water while washing.
- ❑ Protect storm drains or curb inlets and then collect all wash water by vacuum. Recycle or dispose of wash water via the sanitary sewer system.
- ❑ Drain excess wash water to the sanitary sewer (sink or toilet), not to storm drains.

Loading Areas & Operations

- ❑ Load and unload in designated areas.
- ❑ Regularly dry sweep loading and unloading areas.
- ❑ If possible, cover loading areas.
- ❑ Divert storm water away from all loading and unloading areas.
- ❑ Check shipments and trucks for leaks and spills.
- ❑ Cleanup spills/leaks immediately and dispose of properly.
- ❑ If you must use water for cleaning, use a mop and bucket and dispose of wash water into the sanitary sewer.
- ❑ Major cleaning of exterior surfaces must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water should not be allowed to enter the street gutter or storm drains.

What's the difference?

Sanitary Sewer vs. Storm Drain System

The water that drains down a sink or toilet in a home or business flows to the sanitary sewer and is treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – terminating at the Pacific Ocean!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our watersheds.

Who can you contact?

REPORT ILLEGAL DUMPING
City of La Mesa.
(619) 667-1134

(After Hours Hotline)
County Storm Water Hotline
1-888-846-0800

HOUSEHOLD HAZARDOUS WASTE DISPOSAL
EDCO
8184 Commercial Street
By Appointment
Questions: (619) 466-3355

RECYCLING
EDCO: (619) 466-3355

QUESTIONS AND COMMENTS
City of La Mesa Storm Water Program
(619) 667-1340

LOOK ON THE WEB

USED OIL RECYCLING CENTERS
http://www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
http://www.ipm.ucdavis.edu/

County of San Diego Storm Water Management Program
www. co.san-diego.ca.us/deh/stormwater/stormwater.html

State Water Resources Control Board (SWRCB) Storm Water Program
www.swrcb.ca.gov/stormwtr/construction.html

US Environmental Protection Agency
www.epa.gov/OWOW/NPS/

Clean Water Network
www.cwn.org

Preventing Urban Runoff Pollution

A Guide for Residents

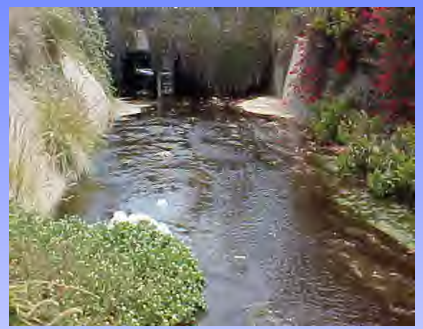

Urban storm water runoff is the **largest contributor** to **watershed pollution** in San Diego County.

The City of La Mesa's Storm Water Ordinance Requires the implementation of **Best Management Practices** (BMPs) to prevent urban runoff pollution.

The City monitors activities within the City's jurisdiction and may take enforcement measures to ensure the prevention of urban runoff pollution.

San Diego Bay Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego Bay and the San Diego River. Your business or facility is located within the San Diego Bay Watershed.

San Diego Bay Watershed

The San Diego Bay Watershed is comprised of 415 square miles. It extends from the Laguna Mountains to San Diego Bay. The watershed falls within the cities of La Mesa, Chula Vista, Coronado, Imperial Beach, Lemon Grove, National City, San Diego, and unincorporated areas of the County. Approximately 4 square miles in the southern portion of the City of La Mesa is part of this watershed. The major discharge sources to San Diego Bay include Sweetwater River, Otay River, Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek.

Three drainage basins in the City of La Mesa are part of the San Diego Bay Watershed. Runoff from the Spring Valley Basin flows to the Sweetwater River. Runoff from the University Channel and Lemon Grove Basin contribute to Chollas Creek. The aforementioned creek and river flow into San Diego Bay.

Pollutants of concern associated with the watershed include diazinon, copper and zinc, fecal coliform, turbidity, and total suspended solids. The sources of these pollutants are a result of residential, agriculture or commercial pesticide application, automobiles and industrial waste, sewer spills, encampments, wildlife, erosion, suspended sediment, and fertilizers. Pollutants of concern for Chollas Creek in particular include metals such as copper, lead, zinc, cadmium, and coliform bacteria.

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Moreover, store materials properly to ensure it is not exposed to storm water and do not over-irrigate your landscape. If you observe storm water pollution or illegal dumping into a storm drain, you should call the City's Storm Water Pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

San Diego River Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego River and the San Diego Bay. Your business or facility is located within the San Diego River Watershed.

San Diego River Watershed

The San Diego River Watershed is comprised of 443 square miles. It extends from the mountains near Julian to the Pacific Ocean. Portions of the watershed fall within the cities of El Cajon, Poway, San Diego, Santee, several unincorporated areas, and the City of La Mesa. Primary tributaries to the San Diego River include Boulder Creek, Conejos Creek, Los Coches Creek, San Vicente Creek, and Forester Creek. Alvarado Creek in La Mesa is also tributary to the San Diego River. Alvarado Creek flows into the San Diego River and ultimately into the Pacific Ocean between South Mission Beach and Ocean Beach near Dog Beach.

Pollutants of concern listed in the 2002 Clean Water Act Section 303(d) List Of Water Quality for the lower San Diego River Watershed include fecal coliform (sewage/urban runoff), low dissolved oxygen (decay of organic matter), total dissolved solids (industrial waste/chemical spills), and phosphorus (phosphate based detergents). Between 1996 and 1999, coliform bacteria more than doubled due to urban runoff and sewage.

Other pollutants of concern not listed above include pesticides such as Diazinon and Chlorpyrifos (commercial, agricultural, and residential application), Total Suspended Solids/Turbidity (suspended sediment/solids, construction, sewage, eutrophication), Copper and Zinc (industrial waste or automobiles), and pH/Phosphate (industrial waste, automobiles, sewage, fertilizers, eutrophication, hardening/concrete of creeks).

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Store materials properly to ensure it is not exposed to storm water. Do not over-irrigate your landscape. If you observe illegal dumping into a storm drain, you should call the City's storm water pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

CITY OF LA MESA
Jewel of the Hills

La Mesa FOCUS

A Newsletter for the Citizens of La Mesa • August 2006

JOIN US AT THE NEW FIRE STATION 11

OPEN HOUSE!

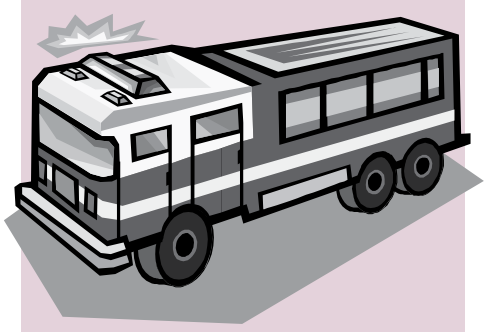

The La Mesa Fire Department invites all residents to an Open House at the new Fire Station 11. The event will be held on Saturday, August 5, from 9 a.m. to 3 p.m. The new station is located at 8034 Allison Avenue on the site of the old Station 11.

Guests are welcome to stop by and join in the celebration. There will be plenty of activities for all, including tours of the new station and administrative offices, food, a photographic display of the construction, public education giveaways for the kids, and a special appearance by the Santee Fire Clowns from noon to 2 p.m.

Bring the family and come celebrate the completion of the project that voters so generously approved with Proposition D.

GIVE US YOUR OPINION ON LA MESA'S DOWNTOWN!

Log on to www.cityoflamesa.com and take the Downtown Village Survey.

NEW LIBRARY/POST OFFICE
BUILDING PLANNED FOR THE CIVIC CENTER

Residents will continue to see exciting changes in the La Mesa Civic Center. With completion of the new fire station 11, the City is now focusing on a new building that will house a 7,000 square foot retail-only post office and the La Mesa branch library in about 10,500 square feet.

The building, which will be located in the current City Hall parking lot, is needed to facilitate construction of a new police station that will be built on the site of the current library. The old Tweed & Gambrell warehouse located behind the current post office is being demolished to make way for replacement City Hall parking.

The fire and police stations are being funded by Proposition D, a bond measure approved by La Mesa voters in March 2004. Proposition D funds will not be used to pay for the new 17,500 square foot building.

The architecture of the library/post office facility will complement the new fire station and will fit into the overall design of the Civic Center Master Plan (see architect's rendering below). Construction, which is anticipated to begin in the fall of 2006, will be done in conjunction with planned street improvements that include street trees, new sidewalks and diagonal street parking.

LA MESA RECEIVES THE
HELEN PUTNAM AWARD FOR EXCELLENCE
The PARKS Project is a Big Winner!

The City of La Mesa is a 2006 award recipient of the California League of Cities Helen Putnam Award for Excellence. La Mesa's award is in the League Partners Award for Excellence in City-Business Relationships category. The League only honors programs that are successful and have a proven track record. All winning programs must have been in existence for one year or more. This is the first time La Mesa has been named as a finalist.

The City will be acknowledged as one of three cities across the state that is a finalist for this award category at the League's annual conference in San Diego in September. The grand prizewinner in each category will also be named at the conference. The Excellence in City-Business Relationships award category honors municipalities who engage and develop respectful relationships with the private, non-profit and labor sectors in addressing community problems. The award further honors cities that foster a unique synergy and pride in their city or in a neighborhood and use partnerships to plan their community programs.

La Mesa was awarded this honor for The PARKS Project. The idea behind The PARKS Project was to fulfill an urgent need for sports fields and updated parks in a built-out city with no open land and no funding for park infrastructure. The PARKS Project is a collaborative of public and private agencies working together to enhance recreational facilities in La Mesa. Two facilities were created for the community. One is the grass youth sports fields at Parkway Middle School, also called the Junior Seau Sports Complex. The other is a new passive, accessible park at Briercrest Park (pictured at left).

The PARKS Project Master Plan was approved by the City Council in 1995. It was a daring, multifaceted project and an ambitious, creative plan. During the late 1990s extensive community input occurred to help design the two park projects. Focus groups,

Continued on page 7

TOUR HISTORIC LA MESA HOMES

On November 4, from 10 a.m. until 3 p.m., the La Mesa Historical Society (LMHS), along with the City's Historic Preservation Commission, will sponsor the first ever Historic Home Tour of La Mesa.

The tour will feature homes that made La Mesa what it was in the first half of the 20th century. Six east-side homes and buildings dating from 1894 will be highlighted. Five of the properties are official La Mesa landmarks, and all are carried in the Inventory of Historic Resources. Each will have displays of La Mesa history and the buildings as they once were, and each will be decorated in a fall motif and have artists working in the yards.

An art show/art mart, co-sponsored by the Foothills Art Association, will display original art by local artists featuring the theme "Historic La Mesa." The artwork will be available for sale.

Free shuttle buses will operate from the tour center at the corner of Palm Ave. and Lemon Ave. in the downtown Village of La Mesa. There is limited parking and vehicle access for most of the homes. Abundant parking is available adjacent to the tour center and in nearby City parking lots.

Mark your calendar now! Call 619-465-1883 for additional information or to reserve your spot on the tour. Full-day tickets on the day of the tour will be $15 for individuals 10 and older. Advance sale tickets and tickets for LMHS members will be $12 ($5 of the ticket price may be applied to a new membership in LMHS at time of purchase). Coupons will be included for discounts at Village merchants, restaurants and coffee shops, together with a prize drawing for a free antiques appraisal session with an accredited appraiser.

Built in 1910, the James Morrison House at 8415 Grant Avenue was designated an historic landmark in 1992.

DOES YOUR HOME QUALIFY FOR A BRONZE MARKER?

Each year, more and more La Mesa residents are buying and restoring historic properties. A sizable pre-1940s housing stock, conveniently located within walking distance of the downtown village, offers a desirable option for many homebuyers.

Much of the thanks for the picturesque tree-lined neighborhoods go to early visionaries such as Robert Allison, A. S. Crowder, Sherman Grable, and C. C. Park, who encouraged development of the area known as La Mesa Springs in the late 1890s and early 1900s. Long before the City's incorporation in 1912, subdivision maps for Grables Addition and Parks Addition had laid out streets and provided investment opportunities that allowed scores of residents to settle in the area. By 1912, there were 700 people living here. By 1930, La Mesa's population had swelled to 2,500.

Of course, not all of La Mesa's historic buildings are located downtown. Ed Fletcher and William B. Gross subdivided Grossmont Park in 1910 with an eye toward establishing an artist's colony on Grossmont. In the 1920s and 1930s, avocado farms were common along the foothills of Mount Helix.

In total, there are over 250 pre-1940 structures representing over a dozen distinct architectural styles in La Mesa. Many of these are largely unmodified structures in excellent condition, resulting in a varied and well-preserved inventory. Of these, 23 have been designated local historic landmarks. Landmarks are easily identifiable by a prominent bronze marker near the front door. Property owners who agree to preserve historic landmarks are eligible for property tax discounts that can be significant.

If you own a qualifying historic house, you might consider designating your property a historic landmark. If you have questions or would like more information about the landmark nomination process, contact Allyson Kinnard in the Community Development Department at 619-667-1196.

LA MESA EMPLOYEES IMPROVE CUSTOMER SERVICE SKILLS

Nearly 100 City employees will be receiving their Superior Service Certificate for completing a series of three customer service training classes offered in conjunction with Cuyamaca College's Professional Development Academy. City Manager Sandra Kerl selected "Service First" as the name of the City's new training program to stress its importance to the organization.

The City contracted with Cuyamaca College to customize the Professional Development Academy's Customer Appreciation, Mastering Communication and Dealing with Difficult People classes to meet the needs of local government. The classes explore key attitudes, techniques and communication skills employees need to provide the very best service to customers.

City Manager Kerl said that the bottom line is to invest in employees and give them the training, the tools and the authority they need to get their job done.

The three-hour classes were held at the City's fire station 12 training room to make it convenient for employees. In addition to the Customer Service series of classes, the City is also considering future on-site, customized classes in the Academy's Team Work series and Personal Best series.

SKATEBOARDERS – DON'T GET BUSTED!

Chapter 10.21 of the La Mesa Municipal Code regulates skateboarding in the City. On June 27, the City Council strengthened the chapter to prohibit the use of ramps on public property and to prescribe penalties for violations of the chapter.

Specifically, new Municipal Code Section 10.21.020 states: "It shall be unlawful for any person to use, construct or place upon any public property a ramp, jump platform, rail, or similar device intended for use by a person upon a skateboard, roller-skates or other similarly wheeled devices." Section 10.21.030 provides that any person who violates a provision of the chapter is guilty of a misdemeanor.

Police officers, for evidentiary purposes, may confiscate skateboards belonging to persons who violate Chapter 10.21.

DON'T TRASH LA MESA!

The City of La Mesa takes illegal dumping seriously. La Mesa Municipal Code Section 7.20.185 expressly prohibits the disposal of refuse into containers owned or rented by any other person, firm or agency. This applies to City as well as private or commercial property.

La Mesa's parks are particularly vulnerable to illegal dumping. If you spot someone dumping bags of trash, construction debris or bulky items into a park or commercial dumpster, jot down the vehicle license number and call the Public Works department at 619-667-1450 with the information. Residents can also submit the information online via the City Hall Action Center on the City's website.

Residents and commercial businesses with locations in La Mesa should contact EDCO Disposal Corporation at 619-287-7555 to sign up for regular trash and recycling collection services. Contractors or individuals who self-haul their own refuse or refuse belonging to others can drop off trash, construction materials or bulky items at EDCO Station, 8184 Commercial Street, at a reasonable cost.

SUMMER STORM WATER REMINDERS

The City of La Mesa's National Pollutant Discharge Elimination System (NPDES) Storm Water Program requires residents and business owners to implement various "good housekeeping" measures and best management practices. You can help protect the environment by considering the following tips:

- Swimming pool water must be tested before being discharged. Chlorine should be less than 1 mg/L with pH between 7 to 8. No algae should be present in the water, and filter debris is prohibited from entering the storm drain system. (A Swimming Pools & Spas Fact Sheet is available at City Hall and on the City's website.)
- Check your irrigation system and do not over-irrigate. Water landscaping during the morning or late afternoon.
- Do not hose down driveways or sidewalks; dry sweep instead.
- Clean up oil spills and other liquids with absorbent material and place in your trash cart for disposal.
- Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff. Consider taking vehicles to a commercial car wash.
- Keep residential trash carts and commercial dumpsters closed.
- Store pesticides and herbicides in a covered and contained area away from pets and children.
- Protect areas with bare soil from eroding during rain by placing fiber rolls or silt fencing, or by hydroseeding or vegetating the areas prior to the rainy season.

GOT QUESTIONS?

Check the City's website at www.cityoflamesa.com or call the La Mesa Storm Water Hotline at 619-667-1134. There is also a Storm Water bulletin board in the City Hall lobby. The bulletin board contains educational and outreach material.

BECOMING A "GREEN BUSINESS" IS GOOD BUSINESS

SAN DIEGO AREA GREEN BUSINESS PROGRAM PARTICIPANT

A Green Business Workshop targeting East County restaurants was held in April at the La Mesa Community Center. Highlights of the two-hour workshop, a collaboration of multiple municipalities and agencies, included a general overview of the Green Business Program; a business perspective; and information on storm water requirements, solid waste management for food facilities, key health permit compliance issues, and rebate and voucher programs for food facilities.

Business owners and managers who attended the workshop were introduced to ways to save money on energy, water and materials. They also learned how to receive free environmental compliance and conservation assistance by becoming a Green Business.

La Mesa residents are encouraged to support businesses that proudly display the Green Business logo in their windows. If you are interested in learning more about the Green Business Program, call 619-667-1340 or e-mail mtamimi@ci.la-mesa.ca.us.

APRIL CREEK TO BAY CLEANUP A SUCCESS IN LA MESA

Next Event Planned for September

Working with I Love A Clean San Diego, the City of La Mesa sponsored and hosted a creek cleanup site on April 29 as part of the Creek to Bay Cleanup Day. Volunteers from La Mesa and nearby communities demonstrated their true concern for protecting the environment by collecting trash and debris at the Alvarado Channel that runs along Fletcher Parkway.

The Alvarado Channel flows into the San Diego River and is part of the San Diego River Watershed. Overall, 35 bags of trash and recyclables were collected. Miscellaneous large items included carpeting and wood siding. The most unique item found was a giant stuffed panda bear!

Prizes were given to the individuals who collected the most trash and found the most unique item. Volunteers were also educated on watershed concepts, pollutants of concern and how the pollutants impact water quality.

The City of La Mesa plans to host a similar event in September for California Coastal Cleanup Day. For more information or to volunteer, contact Malik Tamimi, La Mesa's Environmental Specialist, at 619-667-1340 or mtamimi@ci.la-mesa.ca.us.

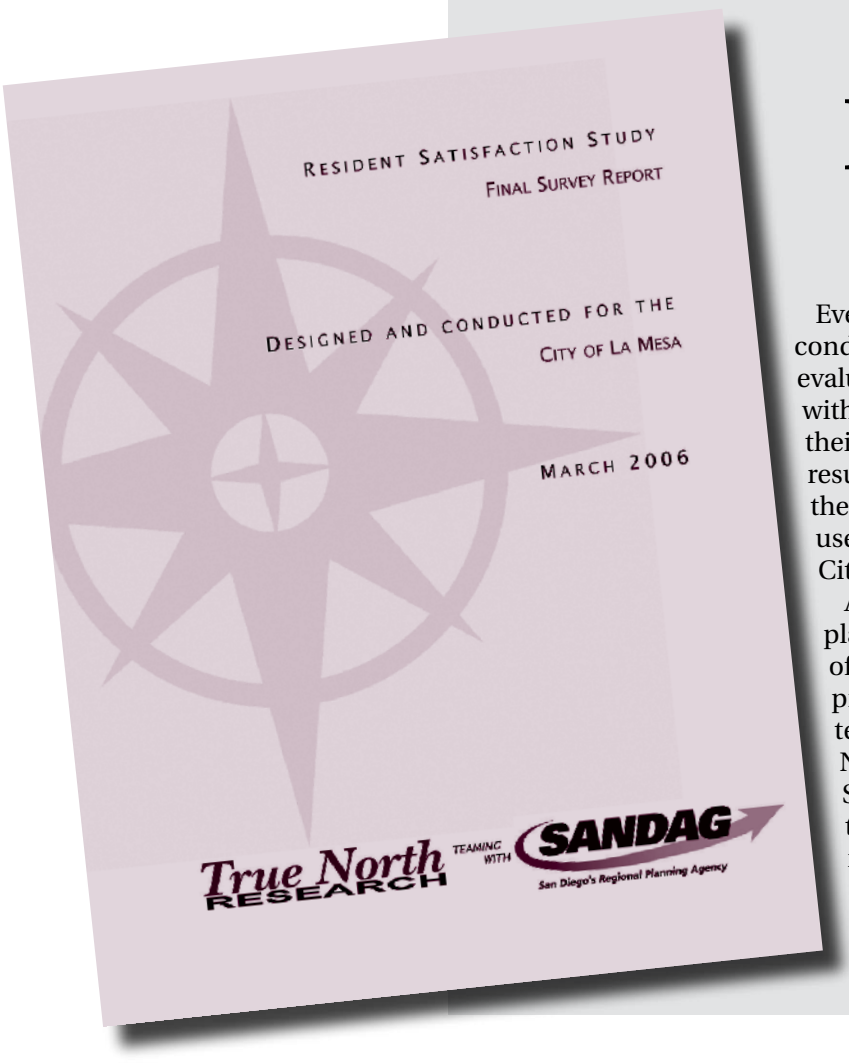

La Mesa Gets High Marks on Citizen Satisfaction Survey

Every two years the City of La Mesa conducts a public opinion survey to evaluate residents' use of and satisfaction with City services, as well as priorities for their neighborhoods and the City. Survey results provide a framework for guiding the organization's work efforts and are used by the City Council to help shape City budget priorities.

At the City Council's annual strategic planning workshop, La Mesa elected officials and department heads were presented with the results of the 2006 telephone survey. Conducted by True North Research in conjunction with SANDAG, the focus of the study was to measure the City's performance in meeting the needs of residents, determining the effectiveness of communication, assessing opinions in a variety of service areas, and identifying key issues of concern.

Nearly 90 percent of respondents rated their quality of life in La Mesa as either excellent or good, while more than 93 percent indicated their overall satisfaction with City services. Residents identified five service areas as the best candidates for improvement. Topping the list were maintaining and repairing local streets and providing neighborhood police patrols.

Dr. Timothy McLarney, president of True North Research, told the City Council that, compared with other cities, resident satisfaction in La Mesa is exceptionally high. He urged the City's elected officials to "stay the course" and to focus on the areas identified for improvement.

The complete survey report may be viewed on the City's website, www.cityoflamesa.com. Click on the "News/Events" link.

JOIN THE TEAM FOR THE 2006 INTERGENERATIONAL GAMES

The City of La Mesa is stepping up to the plate this fall to present the 2006 Intergenerational Games. The event will take place on Friday, October 13, from 9 a.m. until 1 p.m. on the La Mesa Middle School athletic fields.

Intergenerational Games brings together elementary school kids and mature, active adults for an energetic half-day event. The focus is on non-competitive fun, physical activity, wellness and healthy lifestyle.

Active adults age 55 or older are encouraged to sign up for this enjoyable and rewarding event. Adults will be paired with students from grades 4 through 6, and teams will be made up of one student and one adult. Each team will take part in a circuit of eight games and two knowledge challenges. Activities will include basketball shoot, street hockey shoot, skeeball, soccer shoot, bocce, horseshoe throw and similar games. There is no charge to participate and the rewards are endless.

The event will kick off with a motivational opening address, and the day concludes with a group picnic-style lunch and awards ceremony. Everyone is a winner in the Intergenerational Games!

For information and registration, call the La Mesa Community Center at 619-667-1300 or the Adult Enrichment Center at 619-464-0505. Intergenerational Games is sponsored by the City of La Mesa, La Mesa Commission on Aging, County of San Diego Aging & Independence Services, La Mesa-Spring Valley School District and many other community partners. For sponsorship opportunities, call Judy Stern at 619-667-1490.

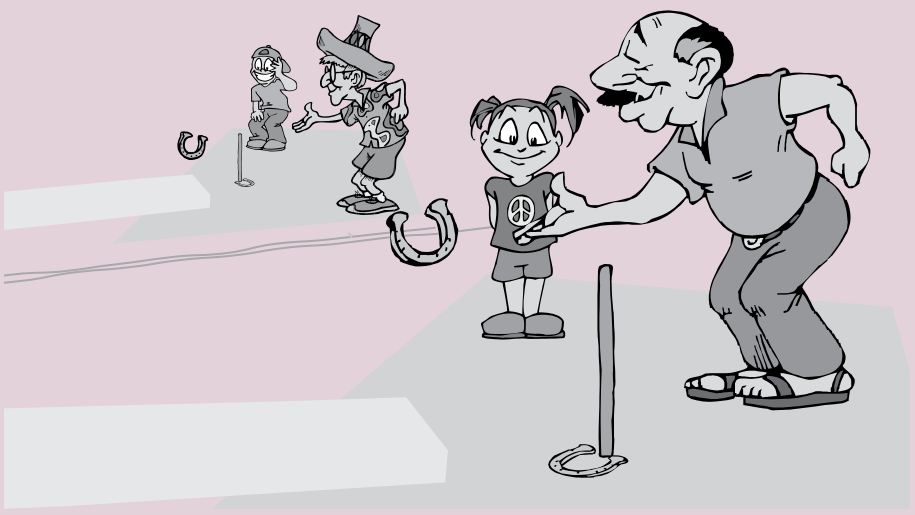

"THANK YOU" FROM PUBLIC WORKS

The Public Works Department would like to thank La Mesa residents who responded to the Parks Maintenance Division's request to trim private growth that encroaches on the City's right-of-ways. Your assistance allows the Parks Division to focus staffing on other parks issues and helps to "Keep La Mesa Beautiful."

FOLLOW THE LA MESA WALKING ART TRAIL

Students studied a live Macaw as part of their art instruction to create a tropical feeling in the final design of their artwork.

Murray Manor Elementary School students showed off their artistic talent as they added their own colorful touches to the first utility box on the La Mesa Walking Art Trail. Several utility boxes on University Avenue have been chosen to be canvases for local artists to transform into works of art. The walking route marked by these urban works of art will be painted in phases and when complete will create a walking route through downtown La Mesa. Phase one of the Walking Art Trail will begin on University Avenue between Memorial Drive and Spring Street. Some 10 utility boxes will be painted in the first phase. Later phases will include utility boxes along Allison Avenue and around the Civic Center.

To kick off the Walking Art Trail and as part of the La Mesa Parks and Recreation Foundation's mission to support youth projects, a group of students from Murray Manor Elementary School painted the first box as part of an art education lesson. The students, under the direction of artist Penny Quirk, jointly created a design and painted the two utility boxes in front of the La Mesa Community Center.

The La Mesa Arts Alliance, a support group of the Foundation, is sponsoring this project. The project is designed to promote a healthy vibrant atmosphere, encourage artistic expression, and inspire a sense of civic pride within the community of La Mesa.

The first artwork in the La Mesa Walking Art Trail is located in the parking lot of the La Mesa Community Center at 4975 Memorial Drive.

HOMELESSNESS IN LA MESA

From time to time, the La Mesa Police Department (LMPD) receives reports about people on City streets, in parks or in other areas of the city who appear to be homeless. The presence of homeless people in our community is not new and is an issue that impacts more than just La Mesa. In July 2004 the Regional Task Force on the Homeless estimated that there were nearly 10,000 homeless people in the San Diego region.

The immediate concern of many residents and visitors is the potential risk posed by the homeless or that the homeless themselves may face. Based on contacts that police officers have had with the homeless, LMPD knows that many have criminal histories, issues with various types of substance abuse, and may commit various crimes to help support their day-to-day existence.

Being homeless presents a whole set of dangers to the homeless themselves, including poor health, lack of any health care, and a greater danger of being victimized by crime. Make-shift shelters set up by the homeless in secluded areas pose certain dangers to both the homeless and the public, primarily due to uncontrolled trash and waste, as well as small fires or stoves used for cooking and warmth.

Due to these concerns, a number of City departments are working together in an effort to address homeless issues in La Mesa. Members of the Police, Fire, and Community Development departments recently identified and closed several homeless encampments in the City. Police Officers make periodic checks of areas where encampments are typically found and respond to citizen reports of new encampments.

The officers' first goal is to address public safety issues, but officers also provide information to the homeless on where they can obtain services. Both government agencies and private service providers in the San Diego region offer a variety of programs to assist the homeless. Services include providing food, short-term lodging, and counseling and education services.

It is important to keep the following in mind when you see or encounter the homeless:

- Do not give food or money to the homeless; instead, encourage them to seek assistance through government or private agency providers.
- Generally, it is not illegal to ask for food or money, or offer to work for food or money, but it is unlawful to do so in an aggressive or harassing manner.
- It is illegal to offer to work for food or money in close proximity to a freeway on-ramp or off-ramp.
- Stopping your car on a street or at an intersection to give money to a homeless person creates a hazard for other vehicles and for the homeless person who steps into the street to accept the money.

More information on the homeless issue in the San Diego region can be found on the Regional Task Force on the Homeless website at www.rtfhsd.org.

Responsible Pet Ownership

SCOOP IT UP!

Any time a pet uses a public area as a "bathroom," the owner or responsible person must clean up the pet waste immediately. Not only is it common courtesy to pick up after your pet, it helps keep our ocean, waterways and beaches clean and free of harmful bacteria.

Pet waste left in yards, lawns, sidewalks and parks gets washed into storm drains when it rains. These wastes are harmful because they contain bacteria, parasites and viruses, which end up in lakes, streams, rivers and the ocean.

Doing your part to keep waterways clean is easy. When walking your dog, carry a plastic bag, pick up the waste and dispose of it in a trash receptacle.

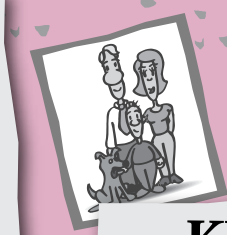

KEEP YOUR PETS SAFE AND HEALTHY

Here are a few tips. . .

Protect pets from the elements. Pets that spend a portion of the day outdoors need a dry warm place to protect them from inclement weather and cold temperatures. As temperatures heat up, animals need a cool place out of the sun. With warmer weather comes the need to have greater amounts of fresh water available at all times.

Doggie workouts. Exercise is an important part of a dog's health. A portion of Harry Griffen Park has been fenced off and designated as a dog run area. There are three separate areas for dogs of all sizes and temperaments. Canine Corners volunteers do a great job of keeping the area stocked with dog toys and bags for dog waste. There is even a bulletin board with all the latest doggie news. Please remember that dogs are not allowed to run off-leash in any other City parks.

Rabies vaccine. Rabies continues to be a concern in some parts of our state and in many other states. It is important that all domestic pets receive their vaccines and that wildlife populations remain in check. All dogs are required by law to have current rabies vaccination proof and a valid dog license.

Know Your Municipal Code

Title 8 of the La Mesa Municipal Code covers City regulations that all pet owners should be aware of. Chapters include animal licensing, impounding, and dangerous or vicious dogs, as well as general topics such as leash requirements, picking up after your pet, and keeping animals other than ordinary household pets.

The La Mesa Municipal Code is available online at www.cityoflamesa.com. Click on "City Services A-Z," then select "M" for Municipal Code.

Not All Critters Are Pets

There are many types of wildlife in La Mesa. All neighborhoods have skunks and opossums. Most neighborhoods have coyotes, and some neighborhoods receive regular visits from raccoons and foxes. As cute as some of these visitors might be, it is important that we don't encourage them to live in our yards or provide a regular source of food.

Keep openings under your home, deck and out buildings secured so that no animals can take up residence. Remove any outdoor pet food supplies at dusk, and keep all trash in plastic bags inside your trash cart. Skunks and opossums will enter a home through pet doors, so secure them at night. Taking these precautions will help keep your family, pets and home safe from furry intruders.

BARKING DOGS

The La Mesa Animal Control Division of the Police Department receives many complaints about barking dogs. La Mesa has an ordinance against barking dogs, which states that any time the barking is "excessive" the animal/owner is in violation.

Dogs are social animals. When they are left alone for many hours a day, a typical response is to bark excessively. Take time to train your dog against excessive barking. Routine activities with your pet such as walks or visits to the dog park are essential, and there are interactive toys available to keep pets busy during the day. You might even consider obedience classes or dog sports. Information on dog sports is available on the American Kennel Club website at www.akc.org.

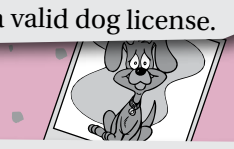

License Your Dog

All dogs are required to be licensed at four months of age or within 30 days of entering La Mesa (Municipal Code 8.09.010). Licensing ensures that dogs have current rabies vaccinations and provides one of the best ways of returning a lost dog to its family. A current license is also required for canine entrance at many locations throughout the United States, including national parks. While microchips are another good means of pet identification, they do not replace the effectiveness of a license tag. Most people will attempt to return an animal wearing identification, while it takes a trip to a veterinarian or animal shelter to read a microchip. License tags must be worn at all times and it is against the law to remove a license tag from an animal. You will need to provide proof of a current rabies vaccination to obtain the license. And don't forget to keep all registration information current. More information can be found on the City's website or by calling 619-667-1117.

Watch Your City Council in Action!

Tune in to Cox cable channel 24 and watch the La Mesa City Council in action. Televised meetings make City Council deliberations available to residents who are unable to attend meetings, making government more accessible to the community.

La Mesa residents can view La Mesa City Council meetings each month on the second Tuesday at 4 p.m. and on the fourth Tuesday at 6 p.m.

Have you been watching?
We would like to know.
Please call City Hall at 619-667-1191 and give us your feedback.

Keep Kids Safe this Summer!

Children are out playing in the neighborhood, going to the park, riding bikes, walking to the pool, visiting grandparents. Each of us can help keep kids safe this summer. We can begin by paying attention to our driving habits.

- Observe the speed limit (and go slower than the limit when conditions warrant)
- Obey all stop signs and signals
- Be sure to buckle up everyone, every trip

Make sure your own kids and grandkids have safe places to play, and make sure they wear helmets when riding bikes and scooters.

PHASE 2 OF SEWER SYSTEM UPGRADE TO START FALL 2006

The City of La Mesa has secured a $14.5 million low-interest loan from the State Water Resources Control Board. The grant is being used to rehabilitate and upgrade the City's aging sewer system in older and hillside sections of La Mesa.

The project has been divided into four phases. Phase 1 construction is currently underway and is scheduled for completion in spring 2007. Phase 2 construction is scheduled to start in fall 2006. The timetable for Phases 3 and 4 is 2007 and 2008, respectively. The combined phases represent the largest infrastructure project ever undertaken by the City.

During construction, residents may be inconvenienced by restricted traffic flows and construction noise in areas close to the construction zones. The City apologizes in advance for any inconvenience. However, this project will enhance health and safety for La Mesa residents for many years.

Phase 2 construction will take place on the following streets: Lee Ave., Grape St., Normal Ave., Colina Dr., Maiden Ln., Alley between Colina Dr. and Mills St., Palm Ave., Spring St., Chevy Chase Dr., Boulder Dr., Boulder Pl., Hillcrest Ave., Crowder Ln., in easements between Valle Dr. and Beverly Dr., and between Summit Dr. and Valle Dr.

The accompanying diagram shows the locations of the proposed work. Residents in each neighborhood affected by the work will be notified of the start dates 48 hours prior to the start of construction.

SOLICITING IN LA MESA

Know the Regulations

Solicitors are regulated by the City of La Mesa and must abide by specific city ordinances. Individuals and businesses are required to have a solicitor license issued by the City in order to sell merchandise or services door-to-door. Non-profit organizations are not exempt from this requirement. Getting the license requires each solicitor to undergo a background check by the La Mesa Police Department. The license includes a color picture, as well as the solicitor's name, address and phone number.

Solicitors are not allowed to do business on sidewalks, streets or other public property and may only operate between the hours of 9 a.m. and 8 p.m. Solicitors do not need to be carrying their product or providing their service at that time to be considered a solicitor.

For more information, or to complain or inquire about a solicitor, call the City's business licensing division at 619-667-1118 during normal business hours or leave a message after hours. You can also send us your concern online by using the City Hall Action Center at www.cityoflamesa.com. Provide the solicitor's name, business, time and location of the occurrence and the product or service being offered.

If you feel harassed or threatened by a solicitor's activities, call the La Mesa Police Department at 619-667-1400.

ATTENTION ALL TEENS!

The City is seeking La Mesa teens between the ages of 13 and 20 who want to make an impact and help our community by becoming a member of the Youth Advisory Commission.

This commission serves as an advisory body to the La Mesa City Council on matters pertaining to programs, projects and issues that address the concerns of youth in La Mesa. It is the responsibility of the Youth Commission to explore and develop activities and issues that will promote positive youth relations in the City. Commission meetings are held the second Monday of each month at 4:30 p.m. at the Community Center.

Projects organized by the Youth Commission each year include the reading program held at La Mesa Dale Elementary School, the national youth service day project each April, and the annual yard clean-up for La Mesa's older adults. This year's clean-up event will be on November 4. Youth Commissioners also oversee the City's teen website. Check out the website at www.cityoflamesa.com/teen.

Applications for the Youth Commission are available at La Mesa City Hall, 8130 Allison Avenue, by calling the City Clerk's office at 619-667-1120 or by visiting the City's website. Applications must be received in the City Clerk's office no later than 5:30 p.m., Thursday, September 7, 2006.

HELP YOUR NEIGHBORHOOD ON ELECTION DAY

If you are willing and able, why not consider being a poll worker on Election Day, November 7. Those who have already volunteered to serve at the polls are willing and committed but, at this point, are too few in number.

If you've ever given thought to serving your neighborhood and community in this way, now would be a good time. The Registrar of Voters will give you the training, the opportunity to work side by side with your neighbors or friends; and, more than likely, you will meet some new neighbors.

It is a long day–usually 6 a.m. to about 9:30 p.m.–but you will play perhaps the most fundamental and vital role in the democratic process by assisting the voters in your neighborhood to cast their ballots. Poll workers receive a stipend–recently increased to $75 up to $150, depending on the assignment–for being part of a team of fellow poll workers helping to "make democracy happen" in your area.

For details, call the Registrar of Voters office, Monday through Friday, 8 a.m. to 5 p.m. at 858-565-5800.

LA MESA APPRECIATION DAY GET INVOLVED

Is your civic organization, church or business looking for a team-building day or a way to give back to the community? Do you know a teen who is looking for a rewarding community service project? Are you an older adult who needs some help around the yard? Then La Mesa Appreciation Day is for you!

This year's event will take place from 8 a.m. until noon on Saturday, November 4. The location? All of La Mesa's 14 parks and at select older adult homes.

There are several ways that you can be involved. All ages are welcome to participate in La Mesa Appreciation Day.

- Help make La Mesa's parks shine. Recruit your organization to come to a La Mesa neighborhood park at 8 a.m. on November 4. Any size group is welcome. Projects range from light raking, trimming and weeding to planting, painting and litter control. Email commservices@ci.la-mesa.ca.us to sign up a group.
- Help La Mesa's older adults. It will make you feel good! Youth volunteers age 13-18, working in teams, will help seniors by sweeping walkways, porches and patios; raking; weeding; and trimming bushes and shrubs. An adult volunteer will supervise each team. Download a participation sheet at www.cityoflamesa.com.
- Are you an older adult who needs an extra hand? The project is also seeking La Mesa homeowners age 62 or older who need help with yard clean up. Only applications from seniors residing within La Mesa city limits will be accepted. Applications will be considered on the basis of need, such as chronic illness or functional limitations. Senior adult residents wishing to request help, or anyone who would like to refer an elderly neighbor or relative, may contact the La Mesa Adult Enrichment Center at 619-464-0505 to request an application form, or download a form at www.cityoflamesa.com.

La Mesa Appreciation Day is a project of the City of La Mesa, La Mesa Youth Advisory Commission, Commission on Aging and EDCO Disposal Corporation. For more information, call 619-667-1300.

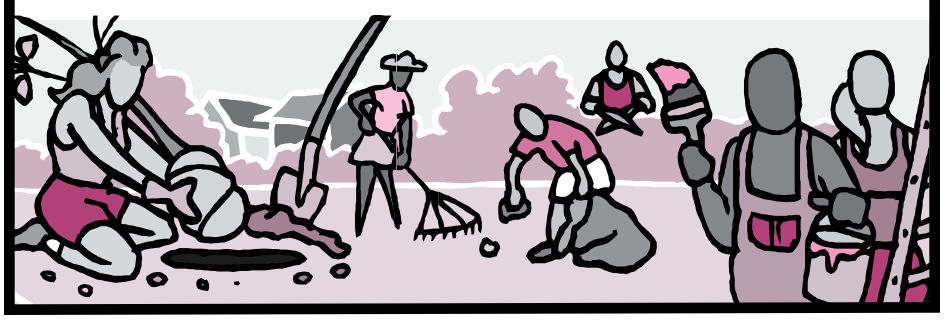

CALSENSE MAKES SENSE IN CITY PARKS

Water conservation continues to be a focus of the City's Public Works Parks Maintenance Division through the use of a computerized irrigation control system. Calsense Centralized Control System was first installed in 2001 at Aztec Park. The system uses flow and valve monitoring to isolate stations that are running over a learned flow rate. The system also monitors for flow at unexpected times and shuts down the system while sending an alert to the central controls. The alerts allow Parks personnel to pinpoint and isolate problems to minimize water usage. The system also assists in managing staff scheduling.

Currently, Calsense controls water usage in a majority of the City's parks. By the end of September, all parks and several City facilities will be on the system. The Parks Maintenance Division is also researching the installation of several weather-related system components to further lessen overall water usage.

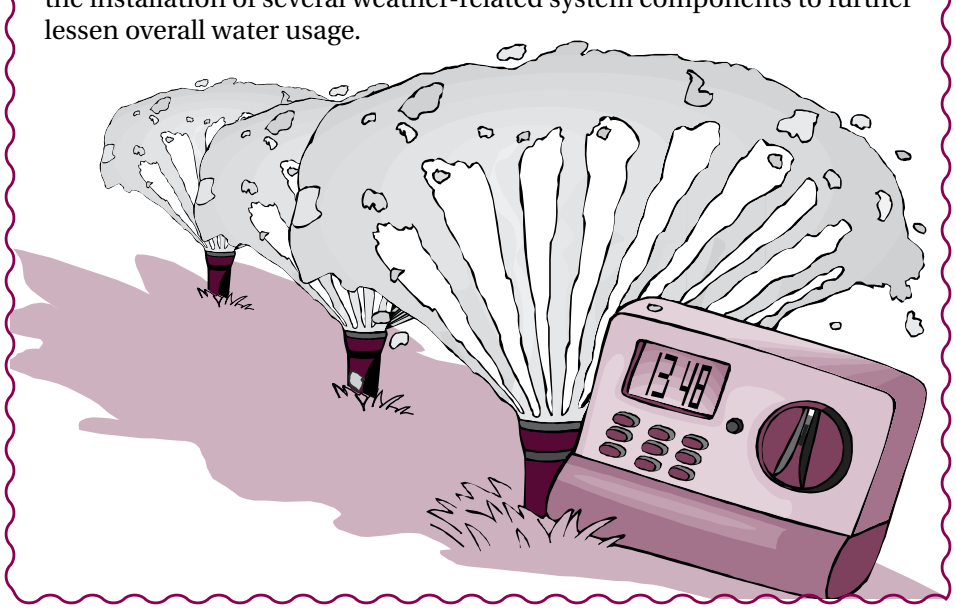

The Parks Projects is a Big Winner...*Continued from page 1*

community surveys, leadership interviews and neighborhood meetings drove the ultimate design of the project. Due to the size and estimated cost of the project, the City needed to recruit other public and private partners to join forces to complete the project. In supporting the creation of a separate non-profit foundation to assist with the fundraising, the City took a leap of faith that community partnerships would work. It did and it is still working today. It was truly a long-term focus and accomplished only through the unrelenting efforts of the City's public and private partners and the determination of those involved.

The PARKS Project began as a collaboration of five partners: the City of La Mesa, East County Family YMCA, La Mesa-Spring Valley School District, the Challenge Center and the La Mesa Athletic Council. In 1999, a non-profit foundation, the La Mesa Parks and Recreation Foundation, was created to spearhead the private fundraising efforts to enhance the public dollars. The resources of all the partners were leveraged to build two parks that improve community health through organized and individual sports, fitness, and recreation. The PARKS Project is providing recreational, social and physical activities for everyone for today and tomorrow.

The Results Of The PARKS Project Have Been Outstanding

- Over $6.9 million dollars was raised toward the completion of The PARKS Project. $1.2 million in private dollars was raised to support the overall effort. Of the total raised, the City of La Mesa has contributed only $500,000, with the remaining dollars coming from outside sources. The community partnerships have opened the door to alternative funding, eliminating total dependence on the City's tax base.
- Private business can bring revenue, attractive development and community clout in support of efforts that benefit their business and the City. A partnership with a developer who will build on City property adjacent to the park will support the daily maintenance costs at Briercrest Park on a long-term basis.
- The joint vision of the community partners solved a pressing community need that was too large for one entity to accomplish on its own.
- Volunteer involvement creates a respectful working relationship and a better understanding between public entities such as the City, the School District and private non-profit entities such as the YMCA or the local garden club. Their ownership creates a positive synergy and pride in the work they do for their community parks.
- The creation of a separate private non-profit foundation provides a long-term strategy for the protection of community recreational services regardless of the ebb and flow of the City's tax base. Their support of major capital improvement projects for the City leverages public funds with private dollars.
- The Foundation Board of Directors creates opportunities to develop volunteer leadership that will ultimately enrich the entire community.

The Helen Putnam Award was created in 1982 to honor cities that deliver the highest quality and level of service in an effective and efficient way. Since it's inception 24 years ago only seven of San Diego County's 18 cities have been award winners.

LA MESA'S PARKS ARE NOW TOBACCO FREE

Thanks to everyone who responded to the questionnaire regarding smoke-free parks that appeared in the April 2006 issue of La Mesa FOCUS. As a result of the total responses received through the public input process, the La Mesa City Council adopted Section 9.08.074 of the La Mesa Municipal Code designating all La Mesa City parks as smoke free and tobacco free environments. The new ordinance will go into effect August 10. Watch for new educational signs to be posted in your favorite La Mesa park.

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 3:00 PM
Fourth Tuesday - 5:00 PM

PLANNING COMMISSION
First and Third
Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM
(as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:00 PM

PARKING COMMISSION
First Thursday - 8:00 AM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM
The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM
The above meetings are held at the
Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM
(except July, August, November, December)
The above meeting is held at the
Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS

Adult Enrichment Center	619-464-0505
Animal Control	619-667-1436
Building Inspection	619-667-1176
Business Licenses	619-667-1118
Cable TV	619-262-1122
City Attorney	619-667-1128
City Clerk	619-667-1120
City Council	619-667-1106
City Hall	619-463-6611
City Manager	619-667-1105
Crime Prevention	619-667-1445
Dog Licenses	619-667-1117
Engineering	619-667-1166
Fire (Business)	619-667-1355
Human Resources	619-667-1175
Library	619-469-2151
Mayor	619-667-1100
Municipal Pool	619-466-4177
Parking Citations	619-667-1117
Planning	619-667-1158
Police (Business)	619-667-1400
Public Works	619-667-1450
Recreation	619-667-1300
Recycling/Trash	619-287-7555
Sewer Charges	619-667-1126
Storm Water Hotline	619-667-1134
Traffic Control	619-667-1144
Zoning	619-667-1177

CITY COUNCIL ACTIONS

March 7, 2006
Adopted a resolution approving a Real Property Agreement and Joint Escrow Instructions between the City of La Mesa and the County of San Diego for the transfer of the library property from the County to the City of La Mesa.

Adopted a resolution authorizing the acceptance of the FY 2004 State Homeland Security (SHS) grant of $38,858.96 for terrorism preparedness.

March 14, 2006
Adopted a resolution authorizing execution of a Second Amendment to the Community Recreation Agreement between the City of La Mesa and the Grossmont Union High School District.

Adopted an ordinance amending Chapter 10.23 to the La Mesa Municipal Code to regulate proximity of sex offenders to children's facilities.

Appointed members to the Youth Advisory Commission.

March 28, 2006
Ratified the Design Review Board's approval of DRB 05 21, a redesign of a previously approved multi-story parking structure located within the Grossmont Medical Campus.

Adopted a resolution amending Section 12.44.130 of the La Mesa Municipal Code to install a disabled persons parking space at 7311 Waite Drive.

Approved the designation of the Sara A. & Milo W. McNeil House located on 3rd Street as an historic landmark.

April 11, 2006
Adopted a resolution authorizing the execution of the Fourth Amendment to a contract for management and implementation of a Home Investment Partnerships Program Project allowing the La Mesa Loan Committee for Real Estate Rehabilitation to approve Housing Rehabilitation loans for health and safety repairs of up to $100,000.

Ratified the Design Review Board's approval of Design Review DRB-05-30 and the Planning Commission's approval of a Tentative Tract Map and Site Development Plan for a proposed two-lot subdivision of property located at 8442-8490 Parkway Drive and 8430-8478 and 8437-8487 Buckland Street to demolish 60 existing apartment units and construct 58 new condominium units on the property.

Adopted a resolution approving a Joint Exercise of Powers Agreement between the City of La Mesa and the La Mesa Redevelopment Agency creating the La Mesa Public Financing Authority for the issuance of Certificates of Participation to finance the construction of the interim library and post office building.

April 25, 2006
Appointed a member to the Youth Advisory Commission.

Adopted the Fee Schedule for Fiscal Year 2006-2007.

Upheld the Planning Commission's approval and denied an appeal of a proposed Site Plan Review to consider a modification to parking provisions to charge for parking at the Grossmont Medical Arts Building, DAB-05-13.

Approved the appeals of the Planning Commission's denial of eight Special Permits, SP 05-09 through SP-05-16 (Lucas & Mercier), to construct 5.5-foot fencing within front setback areas in the Serramar Development.

May 9, 2006
Adopted a resolution amending Section 12.24.020 of the La Mesa Municipal Code designating the alley between Spring Street and Palm Avenue as one-way in a southerly direction from Lemon Avenue to Finley Avenue.

Approved the application for an outdoor assemblage permit for the La Mesa Village Merchants' Association Classic Car Show.

Adopted a resolution authorizing the execution and delivery of Certificates of Participation (COPS) to finance the acquisition, construction, furnishing and equipping of a building to initially house a library and a United States Post Office.

May 23, 2006
Adopted the final amendment to the Blasting Regulations.

Adopted copy fees for Fiscal Year 2006-2007.

Adopted a resolution approving the La Mesa Terrace Mobile Home Relocation Impact Report as sufficient and requiring the provisions of the report to be implemented as a condition of approval of the closure of the Park.

Adopted a resolution authorizing the acceptance of the California Office of Traffic Safety mini-grant for the enforcement of the seatbelt campaign "Click It or Ticket."

June 13, 2006
Ratified the Design Review Board's approval of DRB 06-02, for a proposed wireless communications facility at 7484 University Avenue.

Adopted a resolution approving the allocation of FY 2005-2006 State of California 9-1-1 Emergency Communications Office Funds for the purchase of equipment to be used in the Police Department's Communications Center.

Adopted a resolution accepting an offer from Caltrans to design and construct a 100 meter long soundwall on the north side of highway 94 from the east end of their safety sound wall project easterly.

June 27, 2006
Adopted a resolution amending Section 12.64.010 of the La Mesa Municipal Code to reflect approved speed limits on six City streets.

Adopted resolutions pertaining to the General Municipal election to be held in the City on Tuesday, November 7, 2006, for the election of certain officers of the City.

Adopted an ordinance amending regulations pertaining to skateboard activity.

SEE INSIDE

BLUE PULLOUT SECTION
for Community Services Programs & Activities Schedule

La Mesa COMMUNITY SERVICES

Fall 2006

La Mesa FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619-463-6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS

This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Contact your elected officials at 619-667-1106.

Mayor..... Art Madrid
Vice Mayor ..... Dave Allan
Councilmember..... Ernie Ewin
Councilmember..... Barry Jantz
Councilmember..... Ruth Sterling
City Manager..... Sandra Kerl
Focus Editor ..... Carol McLaughlin
Community Services Editor.. Käaren McElroy
Editorial Staff .....Heather Moore Byerley

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CITY OF LA MESA
Jewel of the Hills

La Mesa FOCUS

A Newsletter for the Citizens of La Mesa • November 2006

For more City of La Mesa news, check the City's website at

www.cityoflamesa.com.

DON'T FORGET TO VOTE!

NOVEMBER 7 IS ELECTION DAY.

DON'T MISS

the tour of
historic La Mesa homes on

November 4
from
10 a.m. until 3 p.m.

Call 619-465-1883
for information or to reserve your spot on the tour.

Cost is $15
for individuals 10 and older.

Recycle your Christmas tree at EDCO Station. Call 619-466-3355.

COME ONE COME ALL!

LA MESA COUNCIL PLANS TOWN HALL MEETINGS

The La Mesa City Council invites residents to participate in an open forum to share their ideas about La Mesa. How would you like to see City resources expended? These Town Hall meetings will be your opportunity to tell the Mayor and City Council what you like about La Mesa and how you envision the City in the future.

Connecting with the citizens of La Mesa continues to be one of the City Council's core values. Your attendance and participation at a Town Hall meeting is very important. The community input received during the two Town Hall meetings will establish the foundation on which the City Council will develop the next two-year budget for the years 2007-2009. The better your elected officials understand what residents think about La Mesa, the better able they will be to match budget dollars and City programs with citizens' concerns and their vision for La Mesa's future.

Two Town Hall meetings are scheduled. Choose the one that is most convenient for you. See the meeting schedule below. If you have any questions about the meetings, you may call the City Manager's Office at 619-667-1105.

Town Hall Meeting #1		*Town Hall Meeting #2*	
Date:	Monday, December 4, 2006	Date:	Tuesday, January 30, 2007
Time:	6 pm – 8 pm	Time:	6 pm – 8 pm
Location:	Parkway Middle School 9009 Park Plaza Dr.	Location:	La Mesa Middle School 4200 Parks Ave.

LA MESA TO FORM CITIZEN AD HOC COMMITTEES ON SIDEWALKS

Do you currently not have sidewalks on your street but would like to have them? Do you prefer the rural look of your neighborhood without sidewalks? Are you concerned about safety when you are walking or jogging? Are you tired of pushing strollers in the street? Should La Mesa have sidewalks in some areas of the City and not in other areas?

On August 29, 2006, the City Council directed staff to set up citizen ad hoc committees to discuss where sidewalks should or should not be constructed. The committees will help answer questions such as:

- How do sidewalks affect your quality of life?
- What should the criteria be for determining where sidewalks should or should not be constructed?
- Which streets need/don't need sidewalks and other improvements?
- Should sidewalks be installed in hillside areas?
- How walkable is your community?
- How important is a walkable community to health and safety?

Please consider applying for a position on an Ad Hoc Citizen Committee on Sidewalks. We need representation from all parts of the City of La Mesa, and we are looking for people with opinions both "for" and "against" sidewalks. Meetings will be held at convenient times.

WE NEED YOU! Contact Dirk Epperson, Assistant Engineer, at 619-667-1152 or depperson@ci.la-mesa.ca.us for more information on becoming a member of one of these committees. You may also apply online at www.cityoflamesa.com. Click on City News & Events.

KIDZ WATCH – A FREE SAFETY ACADEMY FOR CHILDREN AGES 6 TO 11

Does your child know what to do in case of an emergency? Does your child know how to stay safe?

Police officers, dispatchers, firefighters, lifeguards and park rangers, in partnership with many community-based organizations, will help teach your children to become safer, stronger individuals at the Kidz Watch Safety Academy. Geared for children ages 6 to 11, the program is offered free of charge.

Safety classes include: Stranger Danger, Neighborhood Watch, Nature Awareness, Fire Safety, Water Safety, Bike Safety and 9-1-1 & Kids. Classes are held weekly, and some classes may be held in the evening or on weekends. Parents are required to attend with their children.

Applications are available at the La Mesa Police Department. For more information, contact Marla Kingkade, Crime Prevention Specialist, at 619-667-1441.

LIVING WITH COYOTES

Coyote sightings are not uncommon in La Mesa. The range of the coyote covers the entire state. Being adaptable animals, you can find them anywhere from the middle of the desert to downtown city streets.

Coyotes play an important role in the ecosystem, helping to keep rodent populations under control. They are by nature fearful of humans; but, when coyotes are given access to human food and garbage, their behavior changes. They lose their sense of caution and fear, and this creates numerous problems including possible threats to human and coyote safety.

Statistically speaking, the risk of coyote harm to humans is almost non-existent. Most, if not all, of the few coyote bites that occur nationally each year are directly related to coyotes being fed by humans and include both intentional bites and accidental bites.

Here are important facts that everyone should know about coyotes:

- Coyotes are brownish gray in color. They have pointed ears, slender muzzles and bushy tails.
- Coyotes are active mainly at night but can be moving around at any time of day. It is not unusual to see a coyote in broad daylight.
- They will eat ANYTHING. Snakes, doughnuts, rodents, fruits and veggies, birds, pet cats and dogs, grass, pet food, carrion, grasshoppers and garbage are all on their menu.

You can help lessen conflict between coyotes and humans by taking a few simple precautions:

- Never feed or attempt to tame a coyote. Not only is feeding wildlife illegal in the City of La Mesa; attracting coyotes can lead to deadly conflicts with neighborhood pets. Coyotes can also carry diseases such as rabies and distemper.
- Do not leave small children or pets outside unattended.
- Trim ground level shrubbery to reduce hiding places.
- Put garbage in tightly closed containers.
- Remove sources of water, especially during drier times of the year.
- Bring in pets at night and do not leave pet food outside.
- Pick up fallen fruit from under your fruit trees.
- Ask your neighbors to follow these tips.

Coyotes can only be legally trapped if they meet certain criteria to be considered a public hazard. They must have chased or bitten someone or taken a domesticated pet within ten feet of a human being. If a coyote meets these standards, contact La Mesa Animal Control at 619-667-1436 or the Department of Agriculture Wildlife Management Unit at 858-694-2518. The Wildlife Management Unit has responded to coyote complaints in La Mesa in the past and follows State of California requirements for humane trapping procedures.

PEDESTRIAN TRAFFIC SIGNAL SAFETY – *A Primary City Concern*

Traffic safety is a primary concern of City elected officials and staff. This concern includes the safety and convenience of both vehicular and pedestrian traffic. We attempt to fairly balance the needs of all road users to meet these goals.

At intersections where pushbuttons are provided, pedestrians must push the button and wait for the WHITE WALKING PERSON light to appear. The traffic signal is programmed to respond to pedestrian demand and allow enough walk time for pedestrians to safely get across an intersection. DO NOT begin crossing the street if the RED HAND is ON or FLASHING. It is against the law to do so. If the RED HAND is FLASHING there is not enough walk time available to permit safe crossing.

Some of the City's newer signals are equipped with COUNTDOWN timers. These are designed to give the pedestrian more information, but they operate by the same rules as standard pedestrian signals.

When no pedestrian pushbuttons are available, the pedestrian sequence is pre-programmed and will occur at the beginning of a green light for each direction. Wait for the WHITE WALKING PERSON light to appear to begin crossing.

At some older traffic signals, where no pedestrian signals are installed, you are still required to push the pedestrian button and wait for a new green light to cross. This will hold the green light to allow enough time for a pedestrian to cross the intersection.

STORM WATER POLLUTION – TAKE THE QUIZ

1. What percent of water quality problems in the United States is a result of storm water pollution?

2. How many gallons of drinking water can be contaminated by just one gallon of illegally dumped motor oil?

Take a moment to look at the answers to the above questions at the end of this article. Do the answers surprise you? Is there something each of us can do to prevent storm water pollution? Yes, there is! Please consider the following prevention measures:

- Dry sweep exterior paved areas instead of using water.
- If water must be used for cleaning, use a mop and bucket.
- Avoid over-irrigation, and adjust timers accordingly.
- Minimize the use of pesticides, herbicides and fertilizers. If they must be used, ensure that instructions are followed.
- Perform vehicle maintenance indoors and use drip pans.
- Wash vehicles at a commercial car wash or over an area that prevents wastewater from entering the storm drain system.

Unlike the sewer system, where wastewater is treated, the storm drain system is designed to carry rainwater from City streets and driveways to prevent flooding. This water is not treated. It flows directly to creeks and rivers and, ultimately, the Pacific Ocean.

If you observe an illegal discharge, contact La Mesa's Storm Water Hotline at 619-667-1134. You may also file a complaint online. Additional educational materials are available on the City's website at www.cityoflamesa.com and on the Storm Water Bulletin Board at City Hill.

Do your part to help protect the environment and our quality of life in La Mesa and the greater San Diego area. Please pass this information along to friends and neighbors.

The City of La Mesa hosted two cleanup sites as part of the annual statewide California Coastal Cleanup Day on September 16. There were over 40 participants involved, including local Brownies and Girl Scouts. More than 200 pounds of trash and debris was collected during the event.

(Answers to questions: 1. 50 percent; 2. One million gallons)

Complaints About Low Flying Aircraft? Here's What To Do . . .

The local Federal Aviation Administration (FAA) Office handles complaints about low flying aircraft in the San Diego Region through the FAA's Flight Standards District Office (FSDO). If you have a complaint, this is what you need to do:

1. *Send a signed statement (no e-mail) describing the incident.*
2. *Gather as many witnesses as possible and have them provide signed statements.*
3. *Provide as much detail as possible (date, time, type of aircraft, N-number, direction of travel, estimated height, and how determined).*
4. *Send statements to:*
   San Diego FSDO
   Attn: Operations Unit Supervisor
   8525 Gibbs Drive, Suite 120
   San Diego, CA 92123
5. *You may be required to appear at a federal hearing to testify to what you observed.*

Before you submit your complaint, here are a few things to keep in mind. Aircraft in the process of taking off or landing are not subject to minimum altitude rules. Helicopters have no minimum altitude flight rules, but they may not endanger persons and property on the ground. Public use helicopters (police, fire) have wide latitude in the conduct of their operations.

"SLOW DOWN" SIGNS ARE AVAILABLE

Signs proclaiming "It's Our Neighborhood…Slow Down…Thanks!" are available to residents who wish to place them in their front yards. The signs, which are part of the City's Traffic Calming Program, are designed to serve as a reminder to speeding drivers to slow down.

Signs (one per residence, please) may be picked up during normal business hours at the following locations:
City Hall–8130 Allison Ave.
Community Center–4975 Memorial Dr.
Adult Enrichment Center–
8450 La Mesa Blvd
Police Department Storefront–
6119 Lake
Murray Blvd

FREE

Personal Finance Workshop for Kids and Their Parents

Young adults, grades 7-12, and their parents are invited to a FREE personal finance workshop. Give your kids a solid understanding of personal finance, earning, saving and spending income by attending this family workshop. You will learn the principals of personal economics using real life problems. In addition, participants will take home personal finance workbooks for ongoing education.

The workshop will be held Thursday, January 18, 2007, from 6-7 p.m. at the La Mesa Community Center, 4975 Memorial Drive. Although there is no charge for the workshop, registration is required. Call 619-667-1300 or email commservices@ci.la-mesa.ca.us.

The Personal Finance Workshop is sponsored by the La Mesa Park and Recreation Foundation and the EconEd Foundation in partnership with the City of La Mesa.

KNOW LA MESA'S SKATEBOARDING LAWS

Recently, the La Mesa City Council made modifications and additions to the La Mesa Municipal Code regulations that deal with skateboarding within City limits. These changes were made in response to complaints received by business owners.

Below is a summary of the skateboarding laws in La Mesa:

- It is unlawful for any person to skateboard upon the sidewalk in any business district within the City of La Mesa or upon any City roadway.
- No person shall ride on any sidewalk in such a manner as to interfere with pedestrians.
- It shall also be unlawful for any person to skateboard within any public property except within areas designated for such activities.
- It is unlawful for any person to skateboard within any privately owned property without written permission from the property owner.
- It is unlawful for any person to use, construct, or place upon any public property a ramp, jump platform, rail or similar device intended for use by a skateboard.
- Any person who violates a provision in the skateboarding ordinance is guilty of a misdemeanor.
- The City Attorney may request the performance of community service, as deemed appropriate by the court, as a result of committing a skateboarding offense.
- Any person who violates a provision in the skateboarding ordinance is subject to having their skateboard seized by law enforcement officers for evidentiary purposes.

The City encourages the use of the skateboarding facility at La Mesita Park, located at 8855 Dallas Street, La Mesa. The skate park is operated by the YMCA. The skateboarding ordinance (LMMC 10.21.010) can be viewed on the City website at www.cityoflamesa.com.

SENIOR HOUSING EXPO RETURNS

The City of La Mesa will host the third annual Senior Housing Expo on Wednesday, January 31, 2007. The FREE event will take place at the La Mesa Community Center, 4975 Memorial Drive, from 10:00 a.m. to 1:30 p.m. It is open to area seniors as well as to adult children of aging parents.

The event will feature more than 50 exhibitors, interesting speakers, and valuable resources on housing alternatives such as assisted living, 55+ residential communities, low-income senior and disabled rental housing, reverse mortgages, granny flat construction, home modifications, shared housing, and housing-related legal concerns. Other topics will include safety preparedness, energy savings, housing benefits for veterans and more. Jeff Isaac, the "Lawyer in Blue Jeans," will be the featured keynote presenter.

Shuttle service will be available from the parking areas. For other event information, call the La Mesa Adult Enrichment Center at 619-464-0505.

Event sponsors include Union Bank of California and MDC Development Corporation. The Housing Expo is hosted by the City of La Mesa, the La Mesa Park and Recreation Foundation and the La Mesa Commission on Aging, in partnership with Aging and Independence Services, AARP and other community organizations.

Event sponsorship and exhibitor opportunities are still available. Interested businesses and organizations may direct inquiries to Judy Stern, Human Services Manager, at 619-667-1490.

Report Abandoned Shopping Carts

The City of La Mesa contracts with a private company to collect abandoned shopping carts in La Mesa. If you see abandoned carts in your neighborhood, call the California Shopping Cart Retrieval Corporation at 800-252-4613. They will retrieve the cart within 48 hours. It is a crime to remove shopping carts from local businesses and violators will be prosecuted.

JOIN THE LA MESA ARTS ALLIANCE

The La Mesa Arts Alliance believes that a diverse community of artists and arts organizations is essential to the cultural, educational, social and economic vitality of our community.

Have you seen the colorfully painted utility boxes in the downtown area? This is just one of the public art projects that the Arts Alliance supports. If you have seen the boxes, enjoyed them, and would like to see more, the Arts Alliance needs your help.

Please join them in their goal to continue beautifying La Mesa. For information on how you can get involved, contact Kristen Blankenship at 619-248-6254 or Yvonne Garrett at 619-667-1300.

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 3:00 PM
Fourth Tuesday - 5:00 PM

PLANNING COMMISSION
First and Third
Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM
(as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:00 PM

PARKING COMMISSION
First Thursday - 8:00 AM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM
The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM
The above meetings are held at the
Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM
(except July, August, November, December)
The above meeting is held at the
Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS

Adult Enrichment Center	619-464-0505
Animal Control	619-667-1436
Building Inspection	619-667-1176
Business Licenses	619-667-1118
Cable TV	619-262-1122
City Attorney	619-667-1128
City Clerk	619-667-1120
City Council	619-667-1106
City Hall	619-463-6611
City Manager	619-667-1105
Crime Prevention	619-667-1445
Dog Licenses	619-667-1117
Engineering	619-667-1166
Fire (Business)	619-667-1355
Human Resources	619-667-1175
Library	619-469-2151
Mayor	619-667-1100
Municipal Pool	619-466-4177
Parking Citations	619-667-1117
Planning	619-667-1158
Police (Business)	619-667-1400
Public Works	619-667-1450
Recreation	619-667-1300
Recycling/Trash	619-287-7555
Sewer Charges	619-667-1126
Storm Water Hotline	619-667-1134
Traffic Control	619-667-1144
Zoning	619-667-1177

CITY COUNCIL ACTIONS

July 11, 2006
Ratified the Design Review Board's approval of DRB 06 06, for a proposed wireless communications facility at 9550 Murray Drive.

Approved a Caltrans District 11 Landscape Maintenance Provisions Agreement for work and maintenance of a portion of the Caltrans SR 125 right-of-way adjacent to the City owned Briercrest Park site that is being developed for the senior residential care/assisted living facility.

Adopted an Ordinance adding Section 9.08.074 of the La Mesa Municipal Code entitled Smoking Prohibited In Parks.

Approved the final Community Plan design concept for the University Avenue Revitalization Project and the Negative Declaration.

July 25, 2006
Ratified the Design Review Board's Approval of DRB 06-05 for a proposed wireless communications facility at 8851 Center Drive.

Adopted a Resolution amending Section 12.44.130 of the La Mesa Municipal Code for the installation of a disabled persons parking space at 7000 Hybeth Drive.

August 8, 2006
Ratified the Design Review Board's approval of DRB 06-09 for a proposed remodel to a single-family residence at 4567 Acacia Avenue.

Ratified the Design Review Board's approval of DRB 06-12 for a proposed addition of a second unit and garage to an existing single-family residence at 8345 Pasadena Avenue.

August 22, 2006
Adopted a Resolution approving a Lease Agreement with American Medical Response (AMR) for use of Fire Station 11.

Adopted an Ordinance amending Chapter 2.32 of the La Mesa Municipal Code to reestablish the Community Services Commission pursuant to the authority of the City Council.

Approved the annual report on the Neighborhood Traffic Management Program.

Denied the appeal and upheld the Planning Commission's approval of TTM 05-02/DAB 05-07, and SP 05-18, La Mesa Meadows (Reynolds Communities), for the proposed construction of 31 single-family residences on a 37-lot subdivision of an approximately 11-acre site located on the west side of State Route 125, on the north and south sides of Highfield Avenue.

September 12, 2006
Ratified the Design Review Board's approval of DRB-06-01, for a proposed wireless communications facility at 7840 El Cajon Boulevard.

Ratified the Design Review Board's approval of DRB-06-03, for a proposed wireless communications facility at 5575 Lake Park Way.

Ratified the Design Review Board's approval of DRB-06-08, for a proposed wireless communications facility at 8691 Echo Drive.

Adopted a Resolution in support of Proposition 83, "The Sexual Predator Punishment and Control Act: Jessica's Law," on the November 2006 Ballot

Denied a 178-unit condominium development proposed by William Lyon Homes, Inc. (Portola) located at 7380 Parkway Drive and 5315 Maryland Avenue.

September 26, 2006
Adopted Resolutions pertaining to the final approval of a proposed development of 527 apartments and supporting commercial space by Fairfield Grossmont Trolley LLC on a site located on the south side of Fletcher Parkway at the Grossmont Center Drive Bridge.

La Mesa Community Redevelopment Agency adopted a Resolution approving the First Amendment to an Affordable Housing Agreement with Fairfield Grossmont Trolley LLC.

Adopted an Ordinance amending Chapter 10.38 of the La Mesa Municipal Code to update regulations pertaining to the consumption of alcohol by minors.

WALK LA MESA...

JUST FOR THE FUN OF IT!

The La Mesa Wellness Task Force wants you to know that there are organized walks nearby every day of the week. Find out where by picking up a brochure at City Hall, the Community Center or the Adult Enrichment Center. The brochure is also available online at www.cityoflamesa.com/Departments/Community Services.

SEE INSIDE

BLUE PULLOUT SECTION
for Community Services Programs & Activities Schedule

La Mesa
COMMUNITY SERVICES
Spring 2007
Registration begins November 6th!

La Mesa FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619-463-6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS

This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Contact your elected officials at 619-667-1106.

Mayor..... Art Madrid
Vice Mayor ..... Ruth Sterling
Councilmember.....Dave Allan
Councilmember..... Ernie Ewin
Councilmember..... Barry Jantz
City Manager..... Sandra Kerl
Focus Editor ..... Carol McLaughlin
Community Services Editor.. Käaren McElroy
Editorial Staff .....Heather Moore Byerley

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CITY OF LA MESA
Jewel of the Hills

La Mesa FOCUS

A Newsletter for the Citizens of La Mesa • February 2007

For more City of La Mesa news, check the City's website at

www.cityoflamesa.com

DO YOU LOVE A PARADE?

If your answer is YES, the La Mesa Flag Day Parade Committee needs you! Volunteers are now being recruited to assist with organization of the 2007 parade, which will be held on Saturday, June 2. Volunteer meetings are held once a month from January to June. To volunteer call Yvonne Garrett at 619-667-1300 or email commservices@ci.la-mesa.ca.us.

"SUNDAYS AT SIX" SUMMER CONCERTS TO LAUNCH 6TH YEAR OF FREE SUMMER MUSIC

For six Sunday evenings in June and July, the sound of music fills the air at the Harry Griffen Park Amphitheatre. These free summer concerts are brought to you by a dedicated group of community volunteers who secure the services of quality musical entertainment for your enjoyment.

The 2007 concert committee is looking for a few good volunteers to assist with the organization of the concert series. The committee is also seeking community sponsors to support the cost of printing schedules, rental of sound equipment for the bands, and refreshments for the musicians who donate their time.

To volunteer or to provide financial support for the concert series please contact La Mesa Community Services at 619-667-1300 or commservices@ci.la-mesa.ca.us.

WHAT IS HAPPENING AT THE GROSSMONT TRANSIT STATION?

Architect's rendering of the view from the top of the elevator bridge structure overlooking the apartment community.

The Grossmont Transit Station, located on the south side of Fletcher Parkway at Grossmont Center Drive, is the site of much activity of late. The long awaited groundbreaking for this smart growth project took place on December 14, 2006. The transit-oriented development project is the result of a partnership of the City of La Mesa, MTS, SANDAG, and Fairfield Residential. La Mesa has a history of building smart growth projects throughout the community. The Grossmont Transit Station project will be the latest planned award-winning development along the green and orange lines of the trolley.

Architect's rendering of the apartment project with commercial space oriented toward the trolley platform.

The development consists of two levels of structured parking on both sides of the Grossmont Center Drive bridge topped by three to four levels of apartments. The lower level of the parking structure will replace the transit station parking spaces and the second level of parking will serve the apartments. There will be a small amount, approximately 3,000 square feet, of commercial use at ground level oriented to the transit station platform.

Fairfield Residential is building 527 apartment units, consisting of 279 one-bedroom units and 248 two-bedroom units. Of the 527 units, 15 percent (80 units) will be made available to very low- and moderate-income households. These units will be funded by the La Mesa Community Redevelopment Agency in the amount of $2.7 million of housing set-aside money. The project will be developed in two phases, starting with the west side of the Grossmont Center Drive bridge. The first phase, to be named Pravada, will have 230 apartments. The second phase construction of 297 apartments will start on the east side of the bridge in late 2007; this development will be named Alterra.

The transit platform will also be improved to include many pedestrian amenities. This station currently has only a steep staircase to provide access from the trolley platform to the employment/entertainment centers at the top of the hill. Starting construction in 2007, two elevators and a bridge structure will greatly improve access to the top of the hill. These trolley platform improvements will be funded by a grant that the City of La Mesa received from SANDAG in 2006.

The public improvements, complemented by the planned private improvements, will transform this transit station into a well-used, pedestrian-friendly regional transit center exemplifying smart growth principles. Anyone interested in the apartment community can call Fairfield Residential at 858-824-6464.

CITY UPDATES BLOCK PARTY PERMIT POLICY

The La Mesa Municipal Code (Section 10.50.020) specifies that Block Party/Temporary Street Closure permits are required any time a special event takes place that has an impact on public lands or thoroughfares; that occurs on a city street, sidewalk, alley or other street right-of-way; and that is likely to obstruct, delay or interfere with the normal flow of pedestrian or vehicular traffic.

The City requires this permit in order to inform the public, other agencies and City forces, while minimizing impacts to the neighboring community, traffic, and citizen safety during the temporary closure.

In our continuing effort to provide the best service possible to the community, the City has revised the process for obtaining temporary street closures for block parties. The policy changes will provide better direction concerning the application process and reduce the number of times an applicant needs to visit City Hall.

A few of the more important changes that will help streamline the process are: making the forms and instructions available on the City's website; having City staff be responsible for obtaining authorized signatures from the police and fire departments; allowing the use of vehicles as barricades; and not charging additional fees in conjunction with obtaining a permit for sound amplification for private use.

The City would like to thank community members for taking the time to provide valuable feedback and offer us the opportunity to address your concerns.

ANNOUNCING SPRING CLEAN-UP 2007!

The City of La Mesa and EDCO Disposal Corporation will be holding Spring Clean-Up 2007 on two Saturdays in April. This is your opportunity to dispose of reusable items, unwanted furniture, large appliances, landscape material, waste debris from improvement projects, and just plain junk – ***all for FREE!***

The event will be held between 7 a.m. and 2 p.m. at EDCO Station, 8184 Commercial Street.

If you live SOUTH of Interstate 8, your clean-up day is APRIL 14.
If you live NORTH of Interstate 8, your clean-up day is APRIL 21.

This annual event is for residents who live within the incorporated city limits ONLY. You MUST bring a California driver's license showing your La Mesa address. DO NOT bring items from a household outside La Mesa city limits.

There are some restrictions on the items that can be accepted. This is NOT a household hazardous waste (HHW) collection event. We will NOT accept televisions; computer monitors; home electronics; tires; or items labeled poison, flammable, corrosive or explosive. To dispose of HHW for free, call 619-287-5696 ext. 4270.

We also will NOT accept waste from businesses, contractors or professional landscapers.

A limited amount of free mulch will be available on a self-loading, first-come, first-served basis.

WATER QUALITY MONITORING CONTINUES IN LA MESA

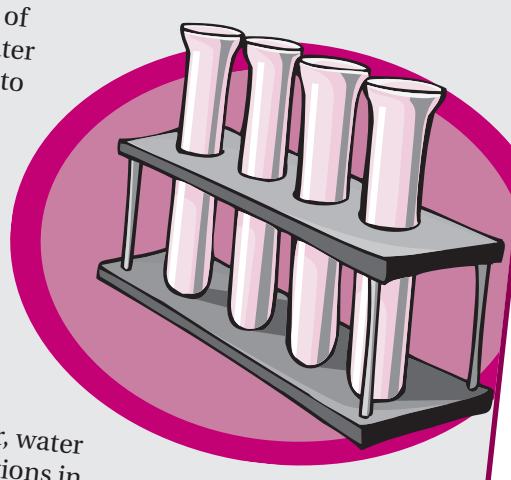

For the past 13 years the City of La Mesa has been collecting water samples from the environment to assess the City's water quality. When the process began, the samples collected were tested for elevated concentrations of pollutants such as ammonia, chlorine, copper, detergents and phenol. The water sampling process has evolved to include testing for concentrations of metals, nutrients, pesticides, oil and grease, and bacteria. Each year, water samples are collected from 18 locations in La Mesa. The samples are tested in the field and are also sent to a state-certified laboratory for analysis.

Recent results show some increase in concentrations of ammonia, detergents and bacteria. However, metals, pesticides, oil and grease, nitrates, and phosphates have remained at lower concentrations. What does this mean?

Everything that we do may have a potential impact on water quality, the environment and our overall quality of life. Sources of ammonia include sewage, household cleaners and fertilizers; detergent sources include compounds used for cleaning such as soap; while bacteria includes sewage, pet waste and decaying material.

Implementing good housekeeping measures is a great way to bring down concentrations of ammonia, detergents and bacteria. Such measures will also help maintain lower concentrations of other pollutants. Here are a few ways that you can help decrease or maintain low pollutant concentrations:

1. Pick up after your pet and place waste in trash cans.
2. Dry sweep exterior paved areas instead of using water.
3. If water must be used for outdoor cleaning, use a mop and bucket; then dispose of wash water in the sanitary sewer.
4. Avoid over-irrigation and adjust timers accordingly. (The added benefits are a lower water bill and a more efficient use of water.)
5. Minimize use of pesticides, herbicides, and fertilizers. If they must be used, ensure that instructions are followed and that over-spray is minimized. (Proper application could actually save you money.)
6. Keep trash receptacle lids closed and schedule regular pick-ups.
7. Perform vehicle maintenance indoors and use drip pans.
8. Wash vehicles at a commercial car wash or over an area that prevents wastewater from entering the storm drain system. Minimize the amount of soap used.

Storm drains are different than the sewer system. Water entering the storm drain system does not get treated. It flows directly to creeks and rivers and, ultimately, the Pacific Ocean. Please do your part to help protect the environment and our quality of life in La Mesa and neighboring communities. If you have questions or concerns or would like storm water educational materials, call La Mesa's Storm Water Hotline at 619-667-1134 or access the City's website at www.cityoflamesa.com.

CITY OF LA MESA

Independent Citizens' Bond Oversight Committee

2006 Annual Report to the Community — January 2007

A Letter from the Chair –

The Independent Citizens' Bond Oversight Committee (ICBOC) is pleased to provide this 2006 Annual Report. The ICBOC hopes you find the information both useful and a validation of the process overwhelmingly approved by La Mesa voters on March 2, 2004.

The ICBOC is responsible for ensuring that the bond proceeds are expended in compliance with Proposition D and are not used for administrative salaries or other City operating expenses including the preparation and submittal of this Annual Report. The ICBOC has determined that this criteria has been successfully met on all proceeds expended to date.

After being in existence for one year, the ICBOC issued its Initial Report, which was presented to the community in September 2005. The first Annual Report for Calendar Year 2005 was presented in January 2006. This report represents the second Annual Report following ICBOC review of the City's annual audited financial statements for Fiscal Year 2005-2006. The audit reports can be viewed on the City's website at www.cityoflamesa.com/Departments/AdministrativeServices/Audits.htm. Subsequent reports will be issued on an annual basis following the committee's review of each fiscal year's audited financial statements.

The ICBOC continues to meet quarterly in an open, publicly noticed environment and addresses items from a formal agenda with Minutes transcribed. Your attendance is welcome as we collectively ensure that the City of La Mesa invests your tax dollars in

continued on last page

Your Tax Dollars At Work – Proposition D Project Updates

New Fire Station Is Open for Business

La Mesa Fire personnel moved into their new $7.4 million headquarters on August 16, approximately two and one-half years following the passage of Proposition D. The project was completed on time and on budget with change orders held to a minimum due to extensive up-front work and good project management. The station opening was delayed several weeks by some vandalism and a problem with the driveway design which caused the driveway to have to be re-poured at the cost of approximately $36,000.

The new Fire Station 11 is more than 6,000 square feet larger than its 14,000 square foot predecessor. More important, the new building replaces a cramped and outdated one, which could not have withstood a major earthquake or other disaster, with a seismically safe facility.

The new station boasts a state-of-the-art emergency operations center equipped with the latest technology, a commercial grade kitchen, a fitness room, and private bedroom and bathroom facilities that can house both male and female firefighters. This is a major upgrade from the old station where emergency vehicles were kept outside, firefighters' exercise equipment shared floor space in the apparatus bay with fire engines, personnel slept in one common room, and only a few computers could access the city's network at any one time due to old and insufficient wiring.

In the new station, a computer system will alert only the necessary fire personnel instead of one alarm waking everyone. Other technologically advanced features will cause the TV volume to be decreased when dispatch calls come into the station and will automatically shut off the gas stove when crews leave. Similarly, motion sensors in all common rooms will turn off lights when the room is no longer in use. These safety features are time savers as well. In fact, the greatest benefit for residents is the expected improvement in response times. Valuable seconds were sometimes lost at the old station because emergency vehicles were parked outside and had to be kept locked.

continued on last page

– Read About The Police Station Project On The Next Page –

ICBOC PRESENTS 2006 ANNUAL REPORT TO THE COMMUNITY

In March 2004, the citizens of La Mesa overwhelmingly approved Proposition D, the City of La Mesa Fire, Police and Emergency Services Measure. Along with authorizing the sale of general obligation bonds to construct or rehabilitate the City's public safety facilities, the measure also created the Independent Citizens' Bond Oversight Committee (ICBOC).

The ICBOC is tasked with ensuring that bond proceeds are expended in compliance with Proposition D and are not used for administrative salaries or other City operating expenses. The ICBOC is also responsible for an annual report to the community, outlining the progress made and any challenges encountered.

The ICBOC presented their 2006 Annual Report to the Community at the January 9, 2007 City Council meeting. The report contains a project update and a financial report, which concludes that the City spent bond money as required on allowable voter-approved projects.

Copies of the report are available on the City's website or at La Mesa City Hall, Community Center and Adult Enrichment Center. Also available on the website are ICBOC meeting agendas, minutes and expenditure summaries.

Members of the community are welcome to attend the quarterly ICBOC meetings. For meeting dates, times and locations, check the City website at www.cityoflamesa.com, call 619-667-1162, or send an email to ICBOC@ci.la-mesa.ca.us.

FIRE STATION 13 REMODEL UNDERWAY

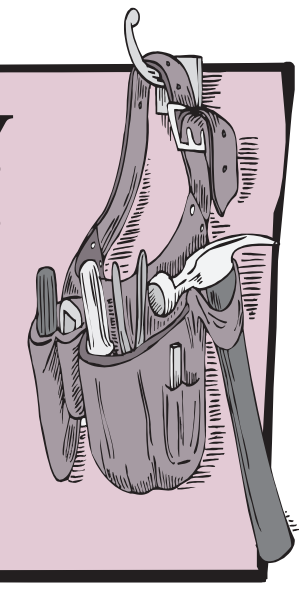

The City is working with Jeff Katz Architecture to develop plans on a remodel project to upgrade the livability of Fire Station 13 as well as bring the station up to current earthquake standards. Construction will begin in early 2007 and will be completed within 6 to 8 months. Some of the proposed highlights include:

- **individual bunk rooms**
- **new roof**
- **improved landscaping and visual sightlines**
- **dedicated physical fitness room**
- **new HVAC system**

The original station was built in 1961 to house an engine company and three firefighters. Today the station houses a front line pumper and a reserve engine as well as three firefighters. Fire department personnel are eagerly awaiting the completion of the remodel and are looking forward to serving the community from a new and improved Fire Station 13. The department is grateful to the La Mesa voters who passed Proposition D, which provided funding for a new Station 11 and remodel of Station 13.

PREPARING FOR THE PANDEMIC FLU

This is the first in a series of articles intended to prepare you, your family and the community for the potential arrival of a pandemic flu outbreak. The article covers the differences between the seasonal flu we see each year and a pandemic flu. It also provides links to additional information and offers tips on how to protect yourself.

WHAT CAN YOU DO TO PROTECT YOURSELF?

Preparing for a pandemic flu can reduce your chances of getting sick and help limit the spread of disease. Stay healthy by eating a balanced diet, exercising daily, getting enough rest and drinking fluids. And . . . get your seasonal flu shot.

Stay informed by keeping up to date on a possible pandemic by listening to radio and television, reading news stories and checking out the web. These common-sense steps can help stop the spread of influenza germs:

- Wash hands frequently using soap and water.
- Cover coughs and sneezes with tissues. Cough or sneeze into your sleeve. Put used tissues in the trash and then wash your hands.
- If you get sick, stay home and away from others as much as possible.
- Avoid close contact with people who are sick.

A FREQUENTLY ASKED QUESTION—

Will the seasonal flu shot protect me against pandemic influenza?

- No, it won't protect you against pandemic influenza. But flu shots can help you to avoid seasonal flu.
- Get a flu shot to help protect you from seasonal flu.
- Get a pneumonia shot to prevent secondary infection if you are over the age of 65 or have a chronic illness such as diabetes or asthma. For specific guidelines, talk to you your health care provider.
- Make sure that your family's immunizations are up to date.

FOR MORE INFORMATION GO TO:

- www.cdc.gov: General information about pandemic flu and other health-related information.
- www.redcross.org: All the information you will need to make your own emergency preparation plan.
- www.pandemicflu.gov: Provides updates on national and international pandemic flu.
- www.sdbirdflu.com: General information and preparedness steps from the County of San Diego.

OR CALL:

- The Centers for Disease Control and Prevention (CDC) hotline, 1-800-232-6348.

Some Differences Between Seasonal Flu and Pandemic Flu

(Information Provided by the U.S. Department of Health and Human Services)

SEASONAL FLU

Caused by influenza viruses that are similar to those already circulating among people.

Symptoms include fever, headache, tiredness, dry cough, sore throat, runny nose and muscle pain. Deaths can be caused by complications such as pneumonia. Healthy adults are usually not at risk for serious complications; the very young, the elderly, and those with certain underlying health conditions are at increased risk for serious complications.

Every year in the United States, on average:

- 5% to 20% of the population gets the flu
- More than 200,000 people are hospitalized from flu complications
- About 36,000 people die from flu

PANDEMIC FLU

Caused by a new influenza virus that people have not been exposed to before. Likely to be more severe, affect more people and cause more deaths than seasonal influenza because people will not have immunity to the new virus. Symptoms similar to the common flu but may be more severe and complications more serious.

Healthy adults may be at increased risk for serious complications.

The effects of a severe pandemic could be much more damaging than those of a regular flu season. It could lead to high levels of illness, death, social disruption, and economic loss. Everyday life could be disrupted because so many people in so many places become seriously ill at the same time. Impacts could range from school and business closings to the interruption of basic services such as public transportation and food delivery.

The next article in the series will provide information on preventing the spread of disease at home, caring for sick family members and preparedness measures.

PLAN – PREPARE - STAY INFORMED

CITIZENS SHARE THEIR IDEAS AND CONCERNS AT TOWN HALL MEETINGS

The La Mesa City Council invited residents to two Town Hall meetings to share their ideas and concerns about La Mesa. The first open forum was held on December 4, 2006, at Parkway Middle School; the second (as this issue of the FOCUS goes to press) is scheduled for January 30, 2007, at La Mesa Middle School.

The community input received during the two Town Hall meetings will be compiled and reported to the City Council during their annual strategic planning workshop in March. Moreover, the citizen input will establish the foundation on which the City Council will develop the next two-year budget for the years 2007-2009.

Watch for a complete Town Hall Meeting report in the May 2007 issue of La Mesa FOCUS. The report will also be available on the City's website.

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 3:00 PM
Fourth Tuesday - 5:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 8:00 AM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM
The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM
The above meetings are held at the
Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM
(except July, August, November, December)
The above meeting is held at the
Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS

(Area code 619)

Adult Enrichment Center	464-0505
Animal Control	667-1436
Building Inspection	667-1176
Business Licenses	667-1118
Cable TV	262-1122
City Attorney	667-1128
City Clerk	667-1120
City Council	667-1106
City Hall	463-6611
City Manager	667-1105
Crime Prevention	667-1445
Dog Licenses	667-1117
Engineering	667-1166
Fire (Business)	667-1355
Human Resources	667-1175
Library	469-2151
Mayor	667-1100
Municipal Pool	466-4177
Parking Citations	667-1117
Planning	667-1158
Police (Business)	667-1400
Public Works	667-1450
Recreation	667-1300
Recycling/Trash	287-7555
Sewer Charges	667-1126
Sidewalk Maintenance	667-1450
Storm Water Hotline	667-1134
Streetlight Maintenance	667-1450
Traffic Engineering Hotline	667-1144
Traffic Signal Maintenance	667-1166
Zoning	667-1177

CITY COUNCIL ACTIONS

October 10, 2006
Ratified the Design Review Board's approval of DRB 05-37 for a proposed wireless communications facility at 6952 University Avenue.

Adopted a resolution authorizing the acceptance of the Urban Area Security Initiative Grant (UASI)of $51,000 for terrorism preparedness.

Appointed six members to the Youth Advisory Commission.

October 24, 2006
Ratified the Design Review Board's approval of DRB 06-15 for proposed alterations to a commercial building at 8555 Fletcher Parkway.

Adopted a resolution authorizing a Memorandum of Understanding with the San Diego County Sheriff's Department for membership in the Regional "Anti-Human Trafficking Task Force."

Adopted a resolution authorizing the acceptance and expenditure of the 2005 Law Enforcement Terrorism Prevention Program grant funds.

Adopted an ordinance adjusting Mayor and City Council compensation.

Designated the Harry and Vada Robertson house located at 4582 Palm Avenue as a historic landmark and entered into a Historic Landmark Property Preservation Agreement with the property owners.

November 14, 2006
Adopted a resolution authorizing the acceptance of Commercial Landscape Incentive Program grants from the San Diego Water Authority and the Helix Water District for irrigation system upgrades.

Adopted a resolution adding Subsection 12.28.030 (74.15) to the La Mesa Municipal Code, establishing King Street as a stop street at Lois Street.

Adopted a resolution authorizing the continuing use of Supplemental Law Enforcement's Citizens Option for public safety (COPS) funds for the San Diego County 800 mhz Regional Communications System (RCS).

Adopted a resolution authorizing a grant application to SANDAG for the New Freedom Federal Transportation Funding program.

November 28, 2006
Approved the first amendment to a ground lease with Briercrest Development, L.P., for the development of property at Briercrest Park for a senior care facility.

Adopted a resolution approving grant of easement to San Diego Gas & Electric Company over a portion of lots 81, 82, 83 and 84 of Murray Hill, map 1342 (Harry Griffen Park access road).

Adopted an ordinance amending Chapter 22.03 of the La Mesa Municipal Code regulating the conversion of existing residential development (condominium conversion).

December 12, 2006
Adopted a resolution reciting the fact of the General Municipal election held on November 7, 2006, declaring the results and such other matters as provided by law.

Ratified the Design Review Board's approval of DRB-06-19 for proposed exterior alterations to a commercial building at 8341 La Mesa Boulevard.

Ratified the Design Review Board's approval of DRB-06-20 for an approximately 10,700 square foot addition and a remodel to the existing John A. Davis Family YMCA building located at La Mesita Park, 8881 Dallas Street.

Adopted a resolution authorizing execution of a lease agreement with the Foothills Art Association for use of the building known as Porter Hall at 9410 Memorial Drive.

Adopted a resolution authorizing the renewal of the Police Department Storefront lease for a three-year term.

Adopted a resolution approving the Expense and Use of Public Resources Policy in compliance with Assembly Bill 1234.

DO THE RIGHT THING!

Do you want to do the right thing and dispose of household hazardous waste properly? If you reside within the City limits of La Mesa, you are eligible to participate in the City's free Household Hazardous Waste Drop-off Program. Events during 2007, available by appointment ONLY, will be held on:
March 24, May 19, July 21, September 15 and November 17.
Call EDCO Disposal Corporation at 619-287-5696, extension 4270, to schedule an appointment or to request additional information.
Not sure what "household hazardous waste" or "HHW" is? Log on to www.cityoflamesa.com, click on "City Services A-Z," then click on "H." This will direct you to the Environmental Services Division web pages and information about HHW, electronic waste (e-waste), and more.

SEE INSIDE

BLUE PULLOUT SECTION
for Community Services Programs & Activities Schedule

La Mesa
COMMUNITY SERVICES
Spring 2007
Registration begins April 1st!

La Mesa FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619-463-6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS

This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Contact your elected officials at 619-667-1106.

Mayor..... Art Madrid
Vice Mayor ..... Ruth Sterling
Councilmember.....Dave Allan
Councilmember..... Mark Arapostathis
Councilmember..... Ernie Ewin
City Manager..... Sandra Kerl
Focus Editor ..... Carol McLaughlin
Community Services Editor.. Käären McElroy
Editorial Staff .....Heather Moore Byerley

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CITY OF LA MESA
Jewel of the Hills

La Mesa FOCUS

A Newsletter for the Citizens of La Mesa • May 2007

For more City of La Mesa news, check the City's website at

www.cityoflamesa.com

WALK LA MESA

Just for the Fun of It

The La Mesa Wellness Task Force wants you to know that there are organized walks nearby every day of the week. Check the City's website at www.cityoflamesa.com/News for a list of options, or pick up a flyer at La Mesa City Hall or Community Center. Call 619-667-1300 for more information.

La Mesa – it's made for walking!

SPECIAL PROPERTY TAX ISSUE

It's May. Do you know where your property taxes went?

See Pages 4 & 5 for Details!

THE RESULTS ARE IN!

TOWN HALL MEETINGS RATED A SUCCESS

The results of two recent "town hall meetings" conducted by the La Mesa City Council have been compiled. In an open invitation to residents that appeared on the front page of the November 2006 *La Mesa FOCUS* as well as on the City website home page, the City Council asked residents to participate in one of two open forums to share their ideas and concerns about La Mesa. The initial meeting on December 4, 2006, was held at Parkway Middle School; the second meeting was held at La Mesa Middle School on January 30, 2007. Nearly 100 people attended the two open forums.

In addition to the opportunity to provide verbal comments, participants were asked to complete a brief written survey. Asked what they like most about the City and their neighborhood, La Mesa's "small town atmosphere" was cited most often at both forums (26.5%). What one thing could be improved? Again, participants at both meetings agreed: The City's infrastructure is of greatest concern, with sidewalk and street repair mentioned most often (39.3%).

When asked what one, big change participants would like to see happen in La Mesa over the next five to ten years, infrastructure improvements (such as sidewalks and walkability, additional traffic-calming measures, undergrounding of utilities) and redevelopment (for example, revitalizing the downtown village, improving old commercial and residential areas, encouraging infill and mixed-use projects), were most often cited at both forums. At Parkway Middle School, residents rated infrastructure concerns (44.7%) higher than redevelopment (21.3%); while the reverse was true at La Mesa Middle School, with redevelopment (37.3%) outranking infrastructure needs (23.7%). (See the accompanying graph.)

At their annual strategic planning workshop on March 20, the City Council discussed the town hall meeting results. Overall, the Council felt the town hall meeting format was highly successful. In fact, the Council decided to hold two such meetings each year in the future in various locations to cover all areas of the City. Also, to encourage as many people as possible to attend, future town hall meetings will be scheduled at different times during the day.

The community input received at the recent town hall meetings establishes the foundation on which the Council will develop the next two-year budget for the fiscal years 2007-2009.

Watch for your invitation to future town hall meetings in the *La Mesa FOCUS* and on the City's website, because connecting with La Mesa residents continues to be very important to the Council.

(See complete town hall meeting results at www.cityoflamesa.com.)

Survey Question 7: **Over the next 5 to 10 years, what one big change would you like to see happen in the City of La Mesa/your neighborhood?**

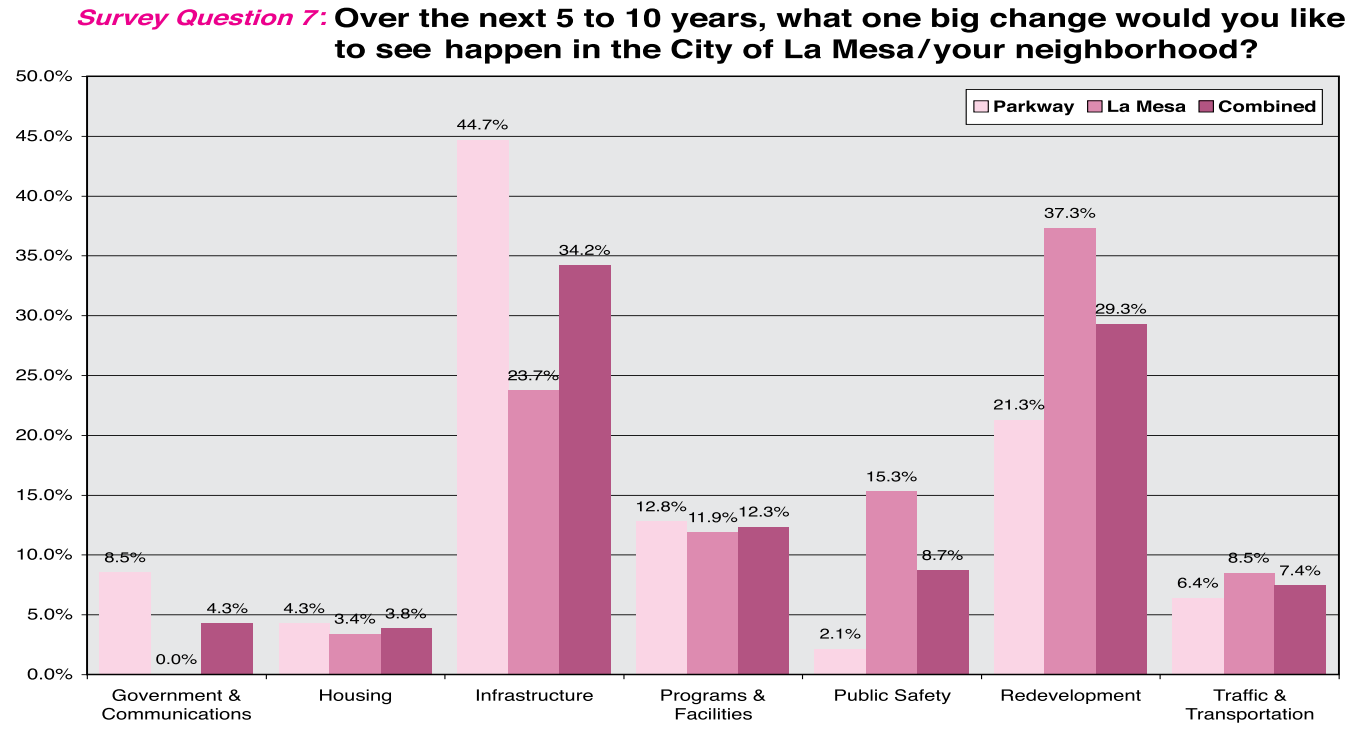

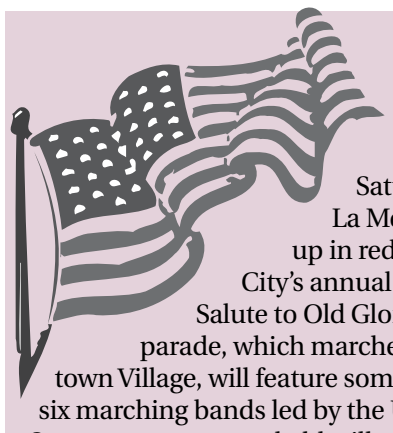

"A SALUTE TO OLD GLORY!"

La Mesa Celebrates Its Annual Flag Day Parade

Saturday, June 2, at 10 a.m., La Mesa's downtown will dress up in red, white and blue for the City's annual Flag Day Parade, "A Salute to Old Glory!" The traditional parade, which marches through the downtown Village, will feature some 75 entries, including six marching bands led by the U.S. Marine Corps Band. Spectators young and old will enjoy floats, military vehicles, equestrian units and youth groups. Active and retired war heroes will participate, and a parade highlight will be a 20-foot-wide flag carried by community volunteers. Don't forget to stop by the KSON Radio listener booth located at Palm Avenue and La Mesa Boulevard to pick up a free flag while supplies last.

There will be two free patriotic pre-parade concerts, with the La Mesa Middle School band performing at La Mesa Boulevard and Palm Avenue, and the Granger Middle School jazz band performing at La Mesa Boulevard and Nebo Drive. Each band will play from 9 a.m. to 10 a.m. Spectators are encouraged to dress in patriotic attire and cheer on parade participants.

The City of La Mesa thanks the La Mesa Flag Day sponsors including: La Mesa Rotary, Wal-Mart, KSON 97.3 and 92.1 Country Radio, La Mesa Community Welfare Association, La Mesa Women's Club and the La Mesa Spring Valley Education Foundation.

For more information, log onto www.cityoflamesa.com or call the parade hotline at 619-464-3761.

This year the parade will honor La Mesa military recently returned from the war. To participate call 619-667-1300.

VOLUNTEER YOUR TIME AND TALENT

Public involvement is crucial to the City's decision-making process; and you can help make the best, most informed decisions possible for the benefit of the entire community. Volunteer your time and talent by becoming a member of one of the City's boards, commissions or committees. You will provide input and make recommendations to the City Council and staff, help your City, and meet and work with people with similar interests and knowledge.

The following is a brief summary of the roles and responsibilities of the City's advisory bodies for which vacancies will exist in June. (Youth Advisory Commission terms expire in September.) With a few exceptions, most advisory groups meet only once a month for a couple of hours.

- **COMMISSION ON AGING** advises the City Council on programs, projects and issues that address the concerns and needs of older adults in the community. The commission plans and coordinates community education and information forums on senior topics and issues; provides support to projects and activities for the elderly; and advises on the development of senior programs and initiatives. Members must be at least 55 years of age at the time of appointment.
- **DESIGN REVIEW BOARD** reviews and approves development plans for compliance with the Urban Design Program and makes recommendations on development proposals and other design-related issues as directed by the City Council.
- **HISTORIC PRESERVATION COMMISSION** advises the City Council on historic preservation, including review of development plans and the La Mesa Historic Resources Inventory; nominates structures to the register of designated landmarks; encourages private efforts to protect historic resources; and provides advice and guidance to property owners of historic resources.
- **HUMAN RELATIONS ADVISORY COMMISSION** advises the City Council on matters that promote goodwill in the community. The Commission explores issues and develops activities that respect diversity and promote positive human relations.
- **LA MESA COMMUNITY PARKING COMMISSION** advises the City Council regarding parking issues within the Parking District. The Commission ensures cost-effective public parking that meets the needs of the City's businesses, residents and patrons by involving the community in parking management decisions.
- **LOAN COMMITTEE FOR REAL ESTATE REHABILITATION** approves or disapproves all loan and grant applications for the rehabilitation of qualifying homes in the City of La Mesa. It reviews and makes disposition of all cases involving deferred payment loans and lead-based paint grants.
- **PLANNING COMMISSION** advises the City Council on land use matters, including review of development plans for consistency with the General Plan, Zoning Ordinance, Subdivision Ordinance and Sign Ordinance; reviews Special Permits, Conditional Use Permits and Variances; reviews appeals from staff and Development Advisory Board determinations; and addresses other duties as required by state law.
- **YOUTH ADVISORY COMMISSION** advises the City Council on matters that address the concerns of youth in the community. The Commission explores and develops activities and issues that promote positive youth relations in La Mesa. Members must be at least 13 years and not more than 20 years of age at the time of appointment.

Please give serious consideration to serving on a board, commission or committee. Applications and specific information regarding qualifications, requirements for serving and meeting days and times are available by accessing the City's website at www.cityoflamesa.com or visiting the City Clerk's office at City Hall, 8130 Allison Avenue, or calling 619-667-1120. Applications must be submitted to the City Clerk's office no later than Tuesday, June 5, to be included in the June interview and selection process.

DON'T BE A VICTIM OF AUTO THEFT!

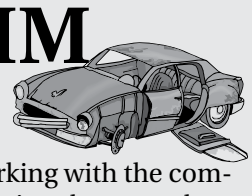

The La Mesa Police Department is committed to working with the community to combat crime. Based on current crime statistics, these are the top five vehicles stolen in San Diego County during 2006:

#1 – Honda Accord #2 – Honda Civic #3 – Acura Integra
#4 – Saturn SL #5 – Ford Explorer and Toyota Camry

Take the following preventative measures to help protect your vehicle:

- Park your car in a garage if possible.
- Use security devices such as a club or alarm. Thieves don't like to draw attention to themselves.
- Take car keys with you. A large number of stolen vehicles had keys left in them.
- Lock your car. Often, stolen vehicles are left unlocked.
- Completely close vehicle windows when parking. Don't make it easier for a thief to enter your vehicle.
- Park in well-lit areas.
- Report suspicious activity. Most law enforcement arrests start with a call from a concerned citizen.

For additional information, contact the La Mesa Police Department Crime Prevention Unit at 619-667-1445 or 619-667-1441.

"SUNDAYS AT SIX"

CELEBRATES SIXTH SEASON

A Free Summer Concert Series at Harry Griffen Park

The popular "Sundays at Six" summer concert series launches its sixth season June 10 at 6 p.m. in the Amphitheatre at Harry Griffen Park, 9550 Milden Street, La Mesa.

The one-hour concerts are free, and spectators are welcome to bring picnics (no glass, please). Spend a wonderful evening in the company of friends and family at "Sundays at Six."

The season kicks off with the popular Fleet Jazz Band from Navy Southwest. Following is a listing of the 2007 season concerts:

June 10 .....Navy Jazz Band Southwest
June 17 .....San Diego Concert Band
June 24 .....Marsha Foreman Band (Swing/Standards)
July 8.....Ron Jermain Big Band
July 15..... Breez'n Variety Band
July 22.....Mark Jackson Country Band

"Sundays at Six" is sponsored by Wells Fargo Bank and Central Park Luxury Condominiums in collaboration with the City of La Mesa and the La Mesa Arts Alliance. For additional information, call 619-667-1300.

NEW STORM WATER PERMIT ADOPTED

New environmental requirements in La Mesa are on the horizon, and they will affect industrial facilities, commercial businesses, construction sites and residential areas. They also require everyone to be aware of storm water pollution prevention.

On January 24, the San Diego Regional Water Quality Control Board (RWQCB) adopted Order No. R9-2007-0001, the renewal of the San Diego County Municipal Storm Water Permit. The order increases requirements to further protect water quality within the 22 cities and various agencies in San Diego County, including, but not limited to, the following:

1. Capture and treatment of runoff at new development and redevelopment project sites.
2. Storm water pollution prevention inspections on an annual basis at industrial and commercial facilities.
3. Additional water quality monitoring and enforcement requirements.
4. Adoption of a Hydromodification Management Plan (control of post-project runoff to ensure only pre-project runoff is discharged).
5. A Regional Urban Runoff Management Program for a unified regional approach to storm water pollution prevention.
6. Enforcement of a storm water ordinance for all residential areas.
7. A Program Effectiveness Assessment to directly address water quality concerns.

SOME HELPFUL HINTS:

- Dry sweep your property instead of hosing.
- Store materials under cover.
- Provide secondary containment for liquids.
- Do not over-irrigate.
- Place trash in trash cans and keep covered.

Should you have questions, feel free to contact La Mesa's Environmental Specialist, Malik Tamimi, at 619-667-1134, or stop by City Hall and pick up a storm water pollution prevention form from the City's storm water bulletin board.

Remember – only rain down the storm drain!

CHILDREN AND FIREPLAY

A DANGEROUS COMBINATION

Juvenile firesetting has been identified as the fastest growing fire threat in the United States. Annual statistics show that more than 300 people die each year and approximately $1 billion in property is destroyed in fires set by children. More than 30 percent of the victims in these fires are the children themselves.

What exactly is juvenile firesetting? It is the unsupervised use of fire by those under age 18. Children play with fire for many reasons such as curiosity, boredom, lack of supervision or lack of fire safety awareness. Many adults think nothing of a child lighting a candle, stove, fireplace or campfire if they are there to watch them. Statistics show that children will use matches or lighters for play when adults are not present. This is when children and fire can become a dangerous combination, an issue that surely warrants our attention.

What can parents, community members and the fire service do to prevent fireplay? Most importantly, talk to your children about fire safety. Discuss how dangerous matches and lighters can be and keep them out of sight and out of reach of children, stored in a secure place in your home. Do not ask children to retrieve matches or lighters, or allow them to light candles, incense, fireplaces, BBQs, stoves, etc. When children are much older, only allow them to light fires for a specific use and with an adult's permission and guidance. Remember that matches, lighters and fire are used as a tool, not a toy.

Educating children early about fire safety can help avoid bodily injury, property damage or worse. Contact the Fire Department at 619-667-1355 or the San Diego Burn Institute at 858-541-2277 about La Mesa juvenile firesetter intervention programs. These programs help educate children and parents about the dangers of fireplay and the consequences associated with fireplay behavior.

For your family's safety, keep your smoke detectors in good working condition and change the batteries twice a year.

EAST COUNTY REGIONAL HOUSEHOLD HAZARDOUS WASTE COLLECTION EVENT

Who: ..... East County Residents

Where: ..... Bethel Christian Assembly Church
1929 Arnold Way (parking lot)
Alpine CA 91901

When: ..... Saturday, May 19, 2007

Time: ..... 9 a.m. to 2 p.m.

NO APPOINTMENT NECESSARY!

Household Hazardous Waste includes: batteries, fluorescent lights, electronics, paints, cleaners, pool & garden products and propane. You may bring up to 15 gallons or 125 pounds of waste per vehicle.

We Can NOT Accept:
business waste, ammunition, explosive or radioactive material, large appliances or medical waste.
Visit www.cityoflamesa.com
or call 619-667-1338 for more information.

This collection event is a community service funded by a grant from the California Integrated Waste Management Board.

LA MESA YOUTH CHOOSE HEALTH AND WELLNESS

"Show ur Skillz!" is how La Mesa's Youth Advisory Commission recognized National Youth Service Day on April 20. Teens from the La Mesa Teen Center, operated by the Boys & Girls Club of East County, and La Mesa Middle School's after-school program gathered with youth commissioners to learn the benefits of health, exercise and nutrition while participating in relay races and other activities. Pictured are participants from the Teen Center.

National Youth Service Day is the largest service event in the world that mobilizes youth to identify and address the needs of their communities through service. This is the La Mesa Youth Commission's third year participating in this rewarding service event. The first year the commissioners cooked dinner for the families staying at the Ronald McDonald House at Children's Hospital. Besides the yummy dinner, each family received a care bag to make their stay more comfortable. The second year the commissioners read stories to children at La Mesa Dale Elementary School and gave each child a book to start his or her own library at home.

The Youth Advisory Commission is a City Council-appointed committee made up of area youth from La Mesa schools. The commissioners provide input to the Council on youth-related issues, oversee the Teen Scene website and provide community service.

5TH ANNUAL

Soap Box Derby Race — June 9, 9 a.m. - 6 p.m.
Junior High Dr. by La Mesa Middle School

ALL-AMERICAN SOAP BOX DERBY

Winners will be sent to the National All-American Soap Box Derby in Akron, Ohio, in July. Youngsters ages 8 to 17 wishing to enter the race should contact Dennis Wilkes at 619-469-7353.

LA MESA KIWANIS CLUB

ADA ACCESS FOR BUSINESSES –
Information Available on City Website

The City of La Mesa hosted an Americans With Disability Act (ADA) Informational Seminar on December 12, 2006, at the La Mesa Community Center. The seminar featured a panel of experts, who discussed the following topics:

- The difference between Federal and State laws as they relate to ADA
- The role of local government in encouraging ADA compliance
- Access improvements that should be made to business locations

A presentation by David Warren Peters from Lawyers Against Lawsuit Abuse is available on the City's website. Click on "ADA Access Compliance" under the Business section on the website home page at www.cityoflamesa.com.

The presentation is not intended to provide legal advice regarding the subject matter. The information is used with permission of the presenter for the benefit of any business person who may be interested in the subject matter but did not attend the presentation.

YOUR PROPERTY TAXES – THE COMPLEXITIES

Historically, property taxes were the largest single source of revenue for cities in California. Cities had the authority under state law to establish property tax rates in accordance with their needs. Each year, city councils across the state examined the service demands of their community, reviewed revenue projections, and increased (or decreased) the property tax rate to generate the required funding level within the limits of what they believed the community was willing to pay. These tax levies were then spread to the assessment rolls based on the current market value (known as assessed value) of each property in the taxing jurisdiction. Up to this point, property taxes were relatively easy to explain and understand. This changed dramatically with the passage of Proposition 13 in 1978.

Impact of Proposition 13

Proposition 13 established a uniform 1% property tax rate throughout the state resulting in local government property tax revenues being reduced by about 60%. As part of Proposition 13, the assessed value of each property was limited to the value of the property at the time that it changed hands, plus a 2% growth factor each subsequent year. Because the assessed value of property is now only "trued up" to the full market value when it changes owners, there is disparate treatment of similar properties. For example, two identical homes built in the same year in the same development may have very different property tax bills depending on how many times each property has been sold.

Proposition 13 also established the requirement for two-thirds voter approval for tax increases and it transferred the authority to allocate property tax revenues from local government to the state. This last provision led to legislation in 1979 (AB 8) which allowed cities to receive the same share of property tax revenues they had received prior to the passage of Proposition 13. As a result of AB 8, cities that had been consistently increasing their property tax rates ended up in much better shape than cities that had been more conservative with their rate increases. AB 8 also benefited cities as it shifted a portion of the tax previously collected by schools to local government, with the state taking on more of the responsibility of funding schools.

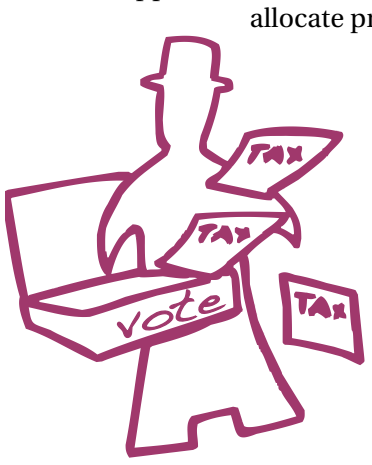

ERAF Shifts and Proposition 172

In fiscal years 1992-1993 and 1993-1994, the state created the Education Revenue Augmentation Fund (ERAF) in response to budget deficits. The ERAF shifts (now known as ERAF I and ERAF II) reallocated property tax revenues from local government to schools. Cities on average saw a 24% reduction in their property tax shares.

In La Mesa, the Proposition 172 sales tax generated more than $6.1 million in 2005-2006, yet the City received only $257,000.

In response to these shifts, in 1993 voters approved Proposition 172 which extended an existing one-half cent sales tax that was expiring. The purpose was to lessen the impact of the ERAF shifts on local government, with the one-half cent sales tax monies restricted for public safety purposes. In accordance with the language in the proposition, the vast majority of the monies are distributed to counties, with cities, on average, only regaining about 17% of the monies lost in the ERAF shifts. In San Diego County, the County of San Diego retains over 94% of all Proposition 172 taxes collected, with cities sharing the remaining 5.6% according to a formula set in state law. In La Mesa, the Proposition 172 sales tax generated more than $6.1 million in 2005-2006, yet the City received only $257,000. After 13 years in existence, the tax has generated an estimated $63.6 million in La Mesa; while our city has received only $2.2 million – less than 4% of what was collected. The rest has been retained by the County of San Diego.

Additional State Takeaways Lead to Constitutional Amendment

In fiscal year 2003-2004, the state once again faced a significant budget deficit and came calling on local government to help bail them out. Governor Schwarzenegger negotiated an additional two-year ERAF shift with local government (known as ERAF III) in exchange for his support for Proposition 1A which passed in 2004. This two-year shift cost the City of La Mesa about $1.4 million from its General Fund and about $0.4 million from its Redevelopment Agency over fiscal years 2004-2005 and 2005-2006.

Proposition 1A provided constitutional protection for local government property taxes and other locally controlled revenue sources, and limited the state to "borrowing" rather than "taking" from local government in the future. In addition, Proposition 1A also permanently reduced the vehicle license fee (VLF) from 2% of the depreciated value of the vehicle to two-thirds of 1% of the value. In exchange for this reduction in city revenues, the state replaced the loss to cities with an equal amount of property taxes, thereby increasing the percentage cities receive from the overall property tax pie. This is a permanent shift. The state also took one-quarter of the 1% city sales tax and provided a like amount of property taxes from the monies previously allocated to schools in exchange. The state then made up for the shift from schools with other monies. This shift, known as the "triple flip," will continue through the term of deficit reduction bonds that the state issued to help them through their budget crisis.

How Property Taxes are Distributed

The amount and percentage of property taxes a city receives varies throughout the state. The reasons for the variances include whether the city was growing or was largely built out prior to Proposition 13, whether services are provided by the city or by a county or special district (e.g., library or fire services), whether redevelopment is used extensively, and whether the city's property tax rate in the 1970s was higher or lower than other cities. For example, within San Diego County, the amount of property taxes received per resident varied from a low of $41 per resident in National City to a high of $506 per resident in Del Mar (based on 2003-2004 property taxes – before the Proposition 1A changes). La Mesa received $70 per resident. The statewide average was $166.12 per resident. In terms of percent of property taxes paid, the amount also varies by city. Across the state, the average city receives about 11.6% of the property tax pie. In fiscal year 2006-2007, the average city in San Diego County received 12.4% of the base property tax (in La Mesa, we received close to 11%), an additional 5.3% as a result of the VLF swap, and an additional 3.3% as a result of the triple flip. Other shares went to schools with 43.3%, the County with 22.1%, redevelopment agencies with 10.0%, and special districts with 3.6%.

OF THIS IMPORTANT REVENUE SOURCE

Special Levies

In November 2004, La Mesa voters overwhelmingly approved Proposition D, the City of La Mesa Fire, Police and Emergency Services Measure. Proposition D authorized the City to issue $25 million of General Obligation Bonds to construct and rehabilitate our public safety facilities. The first project constructed, the new Fire Station 11 and Administration in the Civic Center, opened in August 2006. The next project will be the rehabilitation of Fire Station 13 on Grossmont Boulevard. The final project will be a new Police Station built in the Civic Center. Proposition D, and other locally passed property tax measures, increase property taxes beyond the 1% of valuation cap imposed by Proposition 13. On your property tax bill, you will see separate lines for each of these special levies along with their tax rates.

Putting It Into Perspective

As this article describes, the distribution of property taxes is much more complicated than most people realize. The amount of taxes levied is based on state law and special elections. Your individual tax share is based on the assessed value of your property (as determined by the County of San Diego Assessor/Recorder/County Clerk's Office) and the tax rates approved by voters. Your taxes are paid to and distributed by the County of San Diego Treasurer-Tax Collector, with the City of La Mesa receiving a relatively small share of the overall property tax pie. These monies are unrestricted revenues to the City and are used to cover a portion of the cost of providing basic services that are enjoyed by all La Mesa residents, businesses and visitors.

To provide some perspective, the amount of money that the City received in regular property taxes in fiscal year 2005-2006 was $4.9 million. In the same fiscal year, the City spent $7.2 million on providing fire protection and emergency medical services and $11.0 million providing police protection. Clearly, the amount of property taxes received is not sufficient to cover the cost of providing fire and police protection services. For fiscal year 2006-2007, even when the property tax in lieu of VLF component is included, property taxes are expected to provide only 24% of General Fund sources, while the cost of providing fire and police protection services is expected to be 50% of General Fund expenditures.

As you pay your property taxes, we hope that you will do so with an enhanced understanding of how your property tax bill is computed, where the dollars go, and how they are used.

Clearly, the amount of property taxes received is not sufficient to cover the cost of providing fire and police protection services.

General Fund Sources Fiscal Year 2006-2007

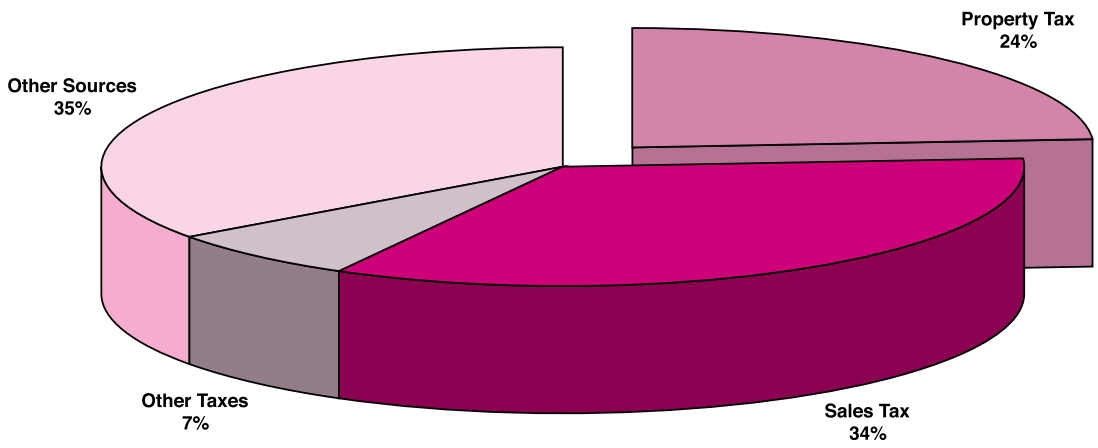

Source: City of La Mesa Administrative Services Department

...the distribution of property taxes is much more complicated than most people realize.

General Fund Uses Fiscal Year 2006-2007

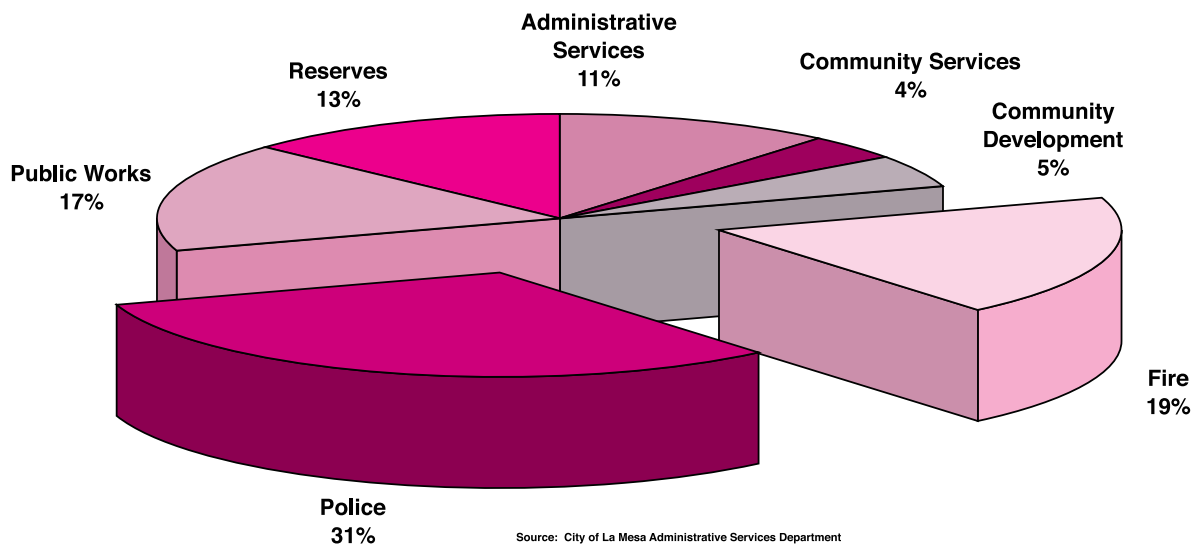

Source: City of La Mesa Administrative Services Department

San Diego County 1% Property Tax Allocation Fiscal Year 2006-2007

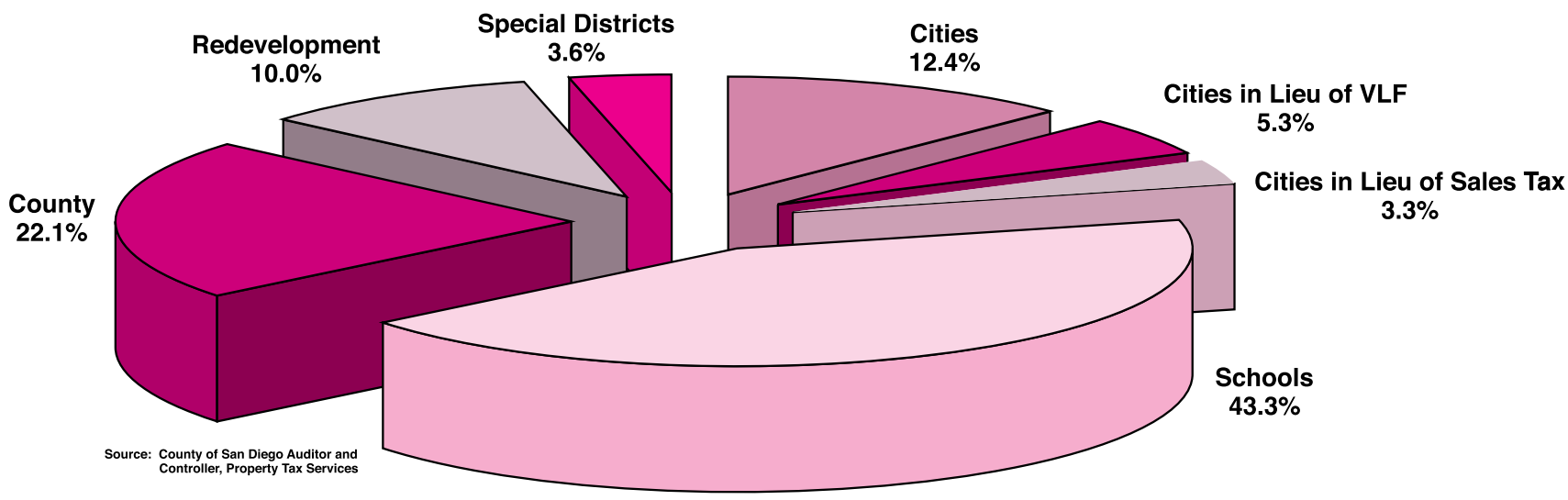

Source: County of San Diego Auditor and Controller, Property Tax Services

PREPARING FOR THE PANDEMIC FLU

– Second in a Series of Articles –

The first installment of Preparing for the Pandemic Flu, which appeared in the February 2007 issue of *La Mesa FOCUS*, discussed the differences between the seasonal flu and a pandemic flu, steps to protect yourself, and sources for obtaining additional information. In this issue, you will be presented with guidelines for caring for individuals and preventing the spread of the disease.

In the event of a pandemic flu, the impact to our community could be severe; and services you depend on may become limited or unavailable, including medical care. With the potential for hospitals and physicians to be operating at a level beyond their capacity, it may be necessary for you to care for family members and neighbors who become ill.

Because of monitoring efforts, the community will have been alerted to the presence of a pandemic flu strain within the population; and you should be alert to the signs and symptoms of the disease. The expected influenza will likely present with fever, nausea, diarrhea and difficulty breathing. Look to the media and announcements from the County Health Department for more specifics about the disease, how to treat it and how to obtain assistance.

If you are directed to care for an individual, prevent the spread of the disease by following these basic guidelines:

- Isolate ill persons within the home.
- Persons who are ill should not leave the house unless they are being taken to a medical appointment. Sick individuals will have to stay home for two weeks after their symptoms begin, even if they are feeling better. Do not have visitors while sick persons are in the home.
- Designate a separate room for a sick individual so he or she is separated from other household members. The room should have a door that can be closed.
- Ill persons should wear protective masks when anyone is in the same room or car. People in the room or car with a sick individual should also wear protective masks. Disposable gloves should be used when cleaning or disinfecting any room or area where sick persons have been.
- Wash hands with soap or use alcohol-based hand rubs.
- Everyone in the household – and it is important to remind children – should wash their hands with soap between contacts with others, before preparing food and before eating.
- Wash hands after touching tissues or surfaces soiled with saliva or nose drainage.
- Keep the household environment clean.
- On a daily basis, clean surfaces and commonly shared items like microwave ovens, refrigerator handles, phones, remote controls, doorknobs and handles, toilet seats and handles, faucets, light switches and toys. Use a labeled household disinfectant or chlorine bleach mixture.
- Chlorine bleach can be used as a disinfectant by mixing ¼ cup chlorine bleach with 1 gallon of cool water.
- Cover noses and mouths when sneezing or coughing.
- Remind children and others to cover their noses and mouths with a tissue when sneezing or coughing, or to sneeze or cough into their sleeves. Put used tissues in a wastebasket, and then wash hands with soap or use an alcohol-based rub.
- Even when a person is wearing a mask, he or she should cough or sneeze into a sleeve.
- Watch all household members for symptoms of respiratory illness.
- Contact your healthcare provider if a fever or other symptoms such as chills, cough, sore throat, headache or muscle aches develop.
- Make sure supplies are on hand.
- Keep masks, gloves, soap, tissues, paper towels and cleaning supplies on hand.
- Make sure all sinks and bathrooms are stocked with soap and paper towels.
- Make sure that tissues are available in all bedrooms, kitchen, and other common areas like living, dining, family and computer rooms.

Utilize the following web links to obtain additional information about protecting you and your family from the effects of influenza and steps you can take to prepare for its potential arrival.

- http://www.cdc.gov/germstopper/home_work_school.htm
- http://www.pandemicflu.gov/plan/individual/index.html
- http://www.sdbirdflu.org
- http://www.sccphd.org

For information over the phone, contact:

- The Centers for Disease Control and Prevention (CDC) hotline – 1-800-232-6348
- The San Diego County Department of Public Health – 1-888-551-4636

The next article in the series will provide suggestions from various health organizations on preparing your family for a pandemic flu.

PLAN – PREPARE - STAY INFORMED

FIGURING OUT 9-1-1 Internet Phone Service

Consumers interested in buying Internet-based telephone services should be aware that not all such services provide access to the 9-1-1 network.

When a person calls 9-1-1 from a wired telephone, dispatchers automatically know the caller's location and can direct emergency personnel to that location even when the caller is unable to articulate that information.

When considering an Internet-based telephone service, ask whether or not the offer includes enhanced 9-1-1. If so, ask whether the 9-1-1 calls are routed to the appropriate law enforcement or fire agency. If the answer is yes, ask if the agency you are routed to will be able to locate you. If so, the service is just like traditional 9-1-1.

The provider may say traditional 9-1-1 service is voluntary, which means you may be required to go online and enter your name and address so you can be located in an emergency. It is very important to enter that information accurately and keep it up to date, especially if you travel with your Internet phone service.

If you are considering a telephone service which does not include traditional 9-1-1 service, ask yourself how members of your household, including children, visitors and babysitters, will call for help in an emergency. Don't forget that they will have to know your address and be able to communicate it to emergency personnel.

For more information, contact Christine McMillen, Police Services Manager, at 619-667-1408.

La Mesa Beautiful's 27th Annual

PLANT SALE

Saturday, May 5, 2007
9 a.m. – 4 p.m.

Sunday, May 6, 2007
9 a.m. – 2 p.m.

Saint Andrews Episcopal Church
4816 Glen St., La Mesa
Corner of Lemon Ave. & Glen St.
(Lemon Ave. Courtyard)

Trees – Shrubs – Bedding Plants
Cacti – Succulents
Donations of potted plants or fruits and vegetables from your garden will be gratefully accepted.

2007 LA MESA GARDEN AWARDS NOMINATION FORM

How Does Your Garden Grow?

La Mesa Beautiful is conducting its annual contest involving property owners within the city limits of La Mesa who have done a great job landscaping their property. Nominate any property. Include blocks or even neighborhoods which have helped make La Mesa the "Jewel of the Hills."

Winners will be recognized at the 27th Annual Garden Awards Luncheon held in October at the La Mesa Community Center. A team of judges will evaluate all nominations. Their decision is final. Nominations may be filed throughout the year. Winners will be notified prior to the award luncheon. For consideration this year, nominations should be submitted before July 1st.

1. **Single Family Residence (Best Design)**

   Name _____

   Address _____

   Telephone No. _____

2. **Single Family Residence (Best Use of Color)**

   Name _____

   Address _____

   Telephone No. _____

3. **Low Water Use (Best Design)**

   Name _____

   Address _____

   Telephone No. _____

4. **Low Water Use (Attractive Landscape)**

   Name _____

   Address _____

   Telephone No. _____

5. **Multi-Family Residential**

   Name _____

   Address _____

   Telephone No. _____

6. **Business, Commercial or Industrial**

   Name _____

   Address _____

   Telephone No. _____

7. **Public Facility (School, Hospital, Rest Home, Church, Park, Block or Neighborhood, etc.)**

   Name _____

   Address _____

   Telephone No. _____

8. **Individual who has contributed most to the beautification of La Mesa. (Please submit a letter stating the reason(s) for the nomination.)**

   Name _____

   Address _____

   Telephone No. _____

Please clip out and mail to:

LA MESA GARDEN AWARDS
La Mesa Beautiful
P.O. Box 127
La Mesa, CA 91944

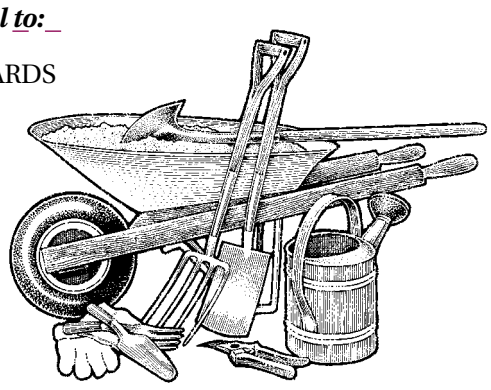

La Mesa Beautiful Is A Non-profit Corporation. Its Sole Purpose Is To Encourage The Development Of A More Attractive Community.

WASTE NOT, WANT NOT

EDCO Opens New "C&D" Facility

The City of La Mesa is constantly looking for ways to increase diversion of waste from landfills, especially by reusing and recycling waste materials generated by La Mesa's residences and businesses.

EDCO Disposal Corporation has helped La Mesa and other East County cities take a big step forward with the opening of the SANCO Resource Recovery Facility in Lemon Grove, which processes construction and demolition (C&D) debris for recycling and reuse. The facility has the capability of diverting 700,000 to 1,000,000 cubic yards of debris from landfills per year – approximately the same amount of household trash produced by 250,000 people.

La Mesa's C&D ordinance, approved in 2005, required that 50 percent of debris from most construction and remodeling projects be diverted. With the opening of the SANCO C&D facility, that diversion rate now is set at 75 percent. Construction crews, contractors and property owners can bring wood, dirt, asphalt, gypsum board and carpet to the facility in mixed loads. Loads do not need to be separated by material type, but they must be free of trash. Workers then sort the materials for recycling.

The SANCO C&D facility is located at 6750 Federal Blvd. in Lemon Grove and is open to the public six days per week, Monday-Friday from 6:30 a.m. to 5:30 p.m. and Saturdays from 7:00 a.m. to 3:00 p.m. There are no long lines and appointments are not necessary. Customers can just show up with mixed loads and EDCO will do the rest!

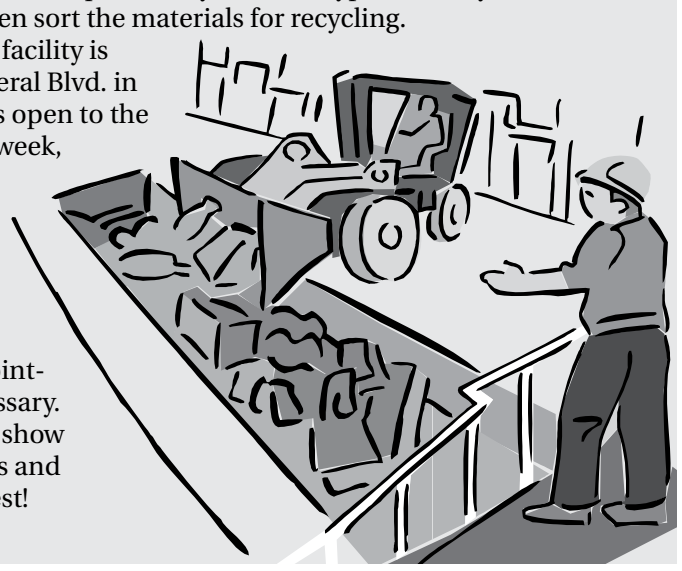

LA MESA RECYCLES. DO YOU?

Here is a friendly reminder of the types of items you can recycle in your blue EDCO recycling cart:

Glass Bottles & Jars — Recycle all food and beverage containers—clear and colored glass. Please rinse. No need to remove labels.

Cardboard — Flatten or cut boxes to a maximum size of 3 ft. x 3 ft.

Newspapers — Recycle your newspaper and everything that is delivered with it, including inserts, coupons, etc.

Cans — Recycle aluminum cans and steel cans, including clean and dry paint cans and empty aerosol cans. Also recycle aluminum foil.

Plastic Containers — Recycle plastic bottles, jugs, jars marked 1 or 2 and all beverage containers labeled "CA Redemption Value" or "CA Cash Refund."

These include:

- Food & Beverage Containers — Milk, soda, water, salad dressing, cooking oil, etc.
- Jars & Canisters — Peanut butter jars, mayonnaise jars, aspirin bottles and 35 mm film canisters.
- Cleaning Products & Detergents — Bleach, detergent, soap, shampoo, drain cleaners, etc. (Containers must be empty.)
- Automotive & Yard Care Products — EMPTY motor oil, antifreeze, plant food and herbicide containers.

Mixed Paper — Recycle virtually all clean and dry paper including: writing paper (all colors), computer paper, copier paper, "no carbon required" (NCR) forms, window envelopes, catalogs, brochures, magazines, junk mail, phone books, sticky notes and shredded paper.

EDCO accepts them all. PLUS, if those items have staples or small metal fasteners, they're OK, too! But, please, no large metal items like clasps on notebooks or three-ring binders.

You can also recycle cereal boxes and other clean food packaging, including: cake boxes, flour bags, frozen dinner boxes, paper egg cartons, and soda/beer 12-pack carrying boxes. Also recycle paper grocery bags, gift boxes, shoe boxes, paper gift wrap, calendars, and core tubes from paper towels, etc.

Before you know it, recycling becomes second nature!

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 8:00 AM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM
The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM
The above meetings are held at the
Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM (except July, August, November, December)
The above meeting is held at the
Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS

(Area code 619)

Adult Enrichment Center	464-0505
Animal Control	667-1436
Building Inspection	667-1176
Business Licenses	667-1118
Cable TV	262-1122
City Attorney	667-1128
City Clerk	667-1120
City Council	667-1106
City Hall	463-6611
City Manager	667-1105
Crime Prevention	667-1445
Dog Licenses	667-1117
Engineering	667-1166
Fire (Business)	667-1355
Human Resources	667-1175
Library	469-2151
Mayor	667-1100
Municipal Pool	466-4177
Parking Citations	667-1117
Planning	667-1158
Police (Business)	667-1400
Public Works	667-1450
Recreation	667-1300
Recycling/Trash	287-7555
Sewer Charges	667-1126
Sidewalk Maintenance	667-1450
Storm Water Hotline	667-1134
Streetlight Maintenance	667-1450
Traffic Engineering Hotline	667-1144
Traffic Signal Maintenance	667-1166
Zoning	667-1177

CITY COUNCIL ACTIONS

January 9, 2007
Adopted a resolution authorizing a contract for management and implementation of a Home Investment Partnerships Program with the County of San Diego to fund the La Mesa Down Payment and Closing Cost Assistance (DCCA) Loan Program; a contract for management and implementation of a Home Investment Partnerships Project with the County of San Diego to reimburse the City for administrative costs it incurs for work on the La Mesa DCCA Loan Program; and an amendment to the American Dream Down Payment Initiative (ADDI) Agreement with the County of San Diego.

Adopted a resolution authorizing the acceptance of a County of San Diego Community Projects Award of $75,000 from Supervisor Dianne Jacob for Emergency Operations Center Equipment.

January 23, 2007
Ratified the Design Review Board's approval of DRB 06-22 for the proposed exterior alterations to a commercial building at 8890 La Mesa Boulevard.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a local Seat Belt Compliance Traffic Safety Project.

Established Underground Utility District No. 25 in the City of La Mesa on Spring Street from the City of La Mesa/County of San Diego boundary to Palm Avenue.

Approved Tentative Parcel Map TPM-06-09 (Health Care Group) for a proposed one-lot subdivision of property for 76 residential condominium units at 9000 Murray Drive.

February 13, 2007
Ratified the Planning Commission's approval of Tentative Tract Map TTM-05 09 and Site Development Plan DAB-05-23, for 19 residential condominium units with 1 commercial suite at 7561 El Cajon Boulevard.

Adopted a resolution authorizing the City of La Mesa to commit $87,500 of Transportation Development Act reserves to fund one half the cost of installation of security cameras at the Amaya Trolley Station.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a Selective Traffic Enforcement program.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct an Anti-DUI Safe Ride program.

February 27, 2007
Adopted a resolution authorizing the submission of a claim for Article 3 Transportation Development Act (TDA) funding for construction of pedestrian improvements at the intersection of Spring Street and High Street adjacent to the Spring Street trolley station.

Adopted a resolution authorizing the submission of a claim for Article 3 Transportation Development Act (TDA) funding for construction of pedestrian improvements at the intersection of El Cajon Boulevard and La Mesa Boulevard.

Adopted a resolution amending Section 12.44.130 of the La Mesa Municipal Code installing a disabled persons parking space on the Pasadena Avenue frontage of 8099 Fairview Avenue.

March 13, 2007
Adopted a resolution authorizing an agreement for the "California Multi-Jurisdictional Methamphetamine Enforcement Team (Cal-MMET)" with the County of San Diego and the San Diego County Sheriff's Department.

Adopted a resolution authorizing the acceptance and expenditure of the 2006 Law Enforcement Terrorism Prevention Program grant funds.

March 27, 2007
Adopted a resolution authorizing the acceptance of the FY06 Urban Area Security Initiative (UASI) grant of $20,000 for terrorism preparedness training.

Adopted a resolution authorizing the acceptance of the FY06 State Homeland Security Grant Program (SHSGP) grant of $34,000 for terrorism preparedness.

Approved the designation of the property located at 8393-95 La Mesa Boulevard as a historical landmark and a Historic Landmark Property Preservation Agreement.

DO THE RIGHT THING!

Do you want to do the right thing and dispose of household hazardous waste (HHW) properly? HHW consists of products labeled "hazardous," "toxic" or "corrosive" that cannot be placed in landfills due to their contents. Examples of HHW are:

General: ***Batteries, Fluorescent Lights, Latex & Oil Based Paints, Solvents, Cleaners, Pesticides & Garden Products, Pool Products, Propane, Small Quantities of Asbestos***
Electronic: ***TVs, Computer Monitors/Hardware, Telephones, VCRs, Radios***
Automotive: ***Used Oil & Filters, Batteries, Antifreeze***

If you reside within the city limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program. Upcoming events, available by appointment only, will be held on May 12, July 21, September 15 and November 17.

Call EDCO at 619-287-5696, extension 4270, to schedule an appointment or to request additional information.

For more information on HHW, log on to www.cityoflamesa.com and click on the Trash, Recycling & Hazardous Waste link under City Services. This link will also provide information on electronic waste, energy conservation and recycling.

SEE INSIDE

BLUE PULLOUT SECTION
for Community Services Programs & Activities Schedule

La Mesa
COMMUNITY SERVICES
Summer 2007
Registration begins May 1st!

La Mesa FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619-463-6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS

This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Contact your elected officials at 619-667-1106.

Mayor ..... Art Madrid
Vice Mayor ..... Ruth Sterling
Councilmember ..... Dave Allan
Councilmember ..... Mark Arapostathis
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CITY OF LA MESA

STORM WATER QUALITY INSPECTION FOR INDUSTRIAL/COMMERCIAL FACILITIES

Inspected by D-MAX Engineering, Inc.

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine Result: ☐ Full Insp. ☐ Could not Contact ☐ Low Commercial ☐ Moved, Vacant
☐ Follow-up ☐ Complaint ☐ Moved, Replaced by_____ ☐ Refused ☐ Duplicate

A. CONTACT INFORMATION

Original	Changes
Business Name_____	Business Name_____
_____	_____
Street Address_____	Street Address_____
_____	_____
Responsible Person(s)_____	Responsible Person(s)_____
Business Telephone # (____) _____ -_____ext._____	Business Telephone # (____) _____ -_____ext._____
Business Fax # (_____) _____ - _____	Business Fax # (_____) _____ - _____

Home Based? ☐ Yes ☐ No

B. FACILITY/SITE INFORMATION

Principal activity:_____

Assigned JURMP Classification: ☐ High Ind ☐ Medium Ind ☐ Low Ind ☐ High Comm ☐ Unassigned

Is this facility currently listed in the City's JURMP Inventories? ☐ Yes ☐ No

Assigned SIC Code(s)_____ _____ ☐ Unassigned

Does SIC Code best represent principal activity: ☐ Yes ☐ No

Recommended change of SIC Code(s)?_____ _____

New JURMP Classification?_____

Does facility have a current business certificate? ☐ Yes ☐ No #_____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID#_____

If no, does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☐ No

High Priority Commercial Category (circle): (a) (e) (j) (q) Other_____ ☐ N/A

Existing Status: ☐ High Ind ☐ Med Ind ☐ Low Ind ☐ High Com ☐ Moved/Out of Business ☐ Dup ☐ Low Com
☐ Not in City Jurisdiction

Existing SIC code(s) _____ _____

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____ HA:_____ Basin:_____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft. Watershed:_____

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate % impervious surface of this area_____%

Exposed areas of intensive outdoor activity: _____

D. BMP ASSESSMENT

D.1 General

BMPs	N/A	Yes	No	Comments
Is the site free of litter and debris?				
Are discharge locations free of sediment and debris?				
Are parking lots, sidewalks and streets free of sediment and debris?				
Is pressure washing of outdoor areas conducted at this facility, directly or indirectly as part of the operations?				
Is pressure washing waste water captured and disposed appropriately?				
Pressure Washing Company: _____ Telephone: __(____)_____				
Are roof downspouts directly away from areas of potential pollutants?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area enclosed and free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor material storage areas adequate (covered area with secondary containment)?				
Are outdoor storage containers properly labeled?				
Is there an accessible spill response kit?				
Are storage tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				
Are heavy equipment and vehicles stored in garages or under canopies?				
Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				
Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
Are biodegradable soaps used for cleaning activities?				
D.5 Food Establishments				
Does facility have a grease trap or grease interceptor?				
When was the last time the grease trap was maintained? _____				
Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
How many grease fryers are at the facility? _____				

About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually

BMPs	N/A	Yes	No	Comments
How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Do oil-recycling/grease bins have overhead coverage?				
Do oil-recycling/grease bins have secondary containment?				
Are deep fryer oil-recycling drums stored properly?				
At what time is cleaning performed? _____				
What is the cleaning method? _____				
Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
Where is used cleaning water discharged? _____				
Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.7 Other				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
Were any educational materials distributed?				

D.8 BMP Summary

E. SWPPP REVIEW

Does facility maintain a SWPPP: ☐ **Yes** ☐ **No** ☐ **Not Applicable**

SWPPP Component	Provided	Adequate	Comments
Site Map/Description……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Materials List……..	☐ Yes ☐ No	☐ Yes ☐ No	_____
Significant Spills/Leaks…….	☐ Yes ☐ No	☐ Yes ☐ No	_____
Pollution Prevention……..	☐ Yes ☐ No	☐ Yes ☐ No	_____
Industrial Activities……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Pollutant Sources/Risks……..	☐ Yes ☐ No	☐ Yes ☐ No	_____
Compliance Activity Schedule.	☐ Yes ☐ No	☐ Yes ☐ No	_____
Employee Training……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Accessible to staff…..……..	☐ Yes ☐ No	☐ Yes ☐ No	_____
Existing BMPs……	☐ Yes ☐ No	☐ Yes ☐ No	_____

Does this facility have a storm water monitoring program? ☐ Yes ☐ No ☐ N/A

Was appropriate monitoring conducted during the most recent wet season? ☐ Yes ☐ No

If not, does the facility have documentation of no qualifying rain events? ☐ Yes ☐ No

If not, is the facility in a GMP and not scheduled for most recent year ? ☐ Yes ☐ No

Do monitoring results show that existing BMPs are effective in removing pollutants? ☐ Yes ☐ No

Exceedances/Other Notes:

_____

_____

_____

F. CORRECTIVE ACTION

Is corrective action needed? ☐ Yes ☐ No

If **BMP-related** corrective action is required, describe below. If other corrective action, check the appropriate box in section G.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax

G. VIOLATIONS

- ☐ No violations have been noted at this time
- ☐ No violations have been noted, but recommend taking corrective action described in Section F.
- ☐ Violation of the City's storm water ordinance:
  - ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
    Description_____
  - ☐ Illegal connection(s) to the storm drain system
    Location_____
  - ☐ Littering
  - ☐ Failure to properly implement required BMPs
- ☐ Failure to comply with the requirements of applicable State or Regional Permit(s):
  - ☐ Non-compliance with the State Industrial Storm Water General Permit.
    Subjectivity, based on SIC Code: ☐ Mandatory ☐ Conditional
    - ☐ In the future, under a new Industrial Permit which has not yet been adopted, this facility may be able to qualify for a No Exposure Certification (NEC) and exemption from Permit coverage.
  - ☐ Non-compliance with the Municipal Storm Water Permit (NPDES NO. CAS0108758).
- ☐ Other Violation_____

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

- ☐ Implement the recommended corrective actions listed in Section F.
- ☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit—see Attachment 3 of the Industrial Permit (http://www.waterboards.ca.gov/stormwtr/industrial.html).
  - ☐ For "Conditional" facilities only: if you implement all the recommended BMPs and eliminate outdoor exposure, contact the City to request a re-inspection. If it is determined that you qualify, NONA/NEC paperwork will be provided for you to complete, and you will not have to file an NOI.
- ☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP)—see Section A of the Industrial Permit.
- ☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.
- ☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional actions required:_____

_____

_____

_____

H. RECOMMENDED CITY ACTIONS*

- ☐ None
- ☐ Follow-up to ensure the observed violation is corrected (see Section G)
- ☐ Follow-up to ensure recommended corrective actions in Section F have been implemented.
- ☐ Update the following: ☐ JURMP priority ☐ SIC code ☐ Facility Contact Information
- ☐ Add this business to the City's JURMP inventories.
- ☐ Based on the observed business activities, this facility may be reclassified as "low priority commercial" and may be removed from the City's JURMP inventories.
- ☐ This business is no longer at its listed address. If further investigation does not determine that it is still operating at another address within City jurisdiction, it should be removed from the JURMP inventories.
- ☐ No current business license was available. Review City business license records to determine if this business has a current license on file.

Other:_____

_____

_____

_____

Does this business require a follow-up inspection? ☐ **Yes** ☐ **No**

ASSESSMENT

Level of knowledge regarding stormwater issues: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Level of cleanliness, BMP implementation, orderliness of site: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

*Recommended City Actions listed at the time of inspection are subject to change based on later review by office staff

CITY OF LA MESA
STORM WATER PROGRAM FOLLOW-UP INSPECTION FORM

Inspector Name _____ Date____/____/_____Time_____AM / PM

☐ City Inspector or ☐ Consultant (Name of Company) _____

Type of Follow-Up Inspection: ☐ Municipal ☐ Industrial ☐ Commercial ☐ Construction ☐ Complaint

Is this Follow-Up Inspection: ☐ First Follow-Up ☐ Second Follow-Up ☐ Third Follow-Up ☐ Fourth Follow-Up

History: Previous Inspection Date____/____/_____ and Type of Inspection ☐ Initial ☐ Annual ☐ 1st Follow-Up ☐ 2nd Follow-Up ☐ 3rd Follow-Up ☐ Other Explain: _____

1. CONTACT INFORMATION

Original	Changes
Business Name_____	Business Name_____
_____	_____
Street Address_____	Street Address_____
_____	_____
Responsible Person(s)_____	Responsible Person(s)_____
Business Telephone # (____) _____ -_____ext._____	Business Telephone # (____) _____ -_____ext._____
Business Fax # (_____) _____ - _____	Business Fax # (_____) _____ - _____
Home Based? ☐ Yes ☐ No	

2. FACILITY/SITE INFORMATION

Principal Activity:_____

Assigned JURMP Classification: ☐ High ☐ Medium ☐ Low ☐ Unassigned ☐ Not Applicable

Is this facility/site currently listed in the City's JURMP Inventories? ☐ Yes ☐ No ☐ Not Applicable

Assigned SIC Code(s)_____ _____ ☐ Not Applicable

Does SIC Code best represent principal activity: ☐ Yes ☐ No ☐ Not Applicable

Recommended change of SIC Code(s)?_____ _____

New JURMP Classification?_____

3. FOLLOW-UP INSPECTION

Corrective and Enforcement Actions: ☐ Verbal Warning ☐ Written Notice to Comply & Date Issued _____

☐ NOV & Date Issued _____ ☐ Other Explain _____

Violation/Deficiency Description:

1._____

Corrective Action: ☐ Fully Implemented No Further Action ☐ Partially Implemented No Further Action ☐ Partially Implemented Follow-Up Required ☐ Not Implemented In Violation ☐ Other Explain_____

2._____

Corrective Action: ☐ Fully Implemented No Further Action ☐ Partially Implemented No Further Action ☐ Partially Implemented Follow-Up Required ☐ Not Implemented In Violation ☐ Other Explain_____

3. Follow-Up Inspection (Continued)

Violation/Deficiency Description (Continued):

3._____

Corrective Action: ☐ Fully Implemented No Further Action ☐ Partially Implemented No Further Action ☐ Partially Implemented Follow-Up Required ☐ Not Implemented In Violation ☐ Other Explain_____

4._____

Corrective Action: ☐ Fully Implemented No Further Action ☐ Partially Implemented No Further Action ☐ Partially Implemented Follow-Up Required ☐ Not Implemented In Violation ☐ Other Explain_____

5._____

Corrective Action: ☐ Fully Implemented No Further Action ☐ Partially Implemented No Further Action ☐ Partially Implemented Follow-Up Required ☐ Not Implemented In Violation ☐ Other Explain_____

6._____

Corrective Action: ☐ Fully Implemented No Further Action ☐ Partially Implemented No Further Action ☐ Partially Implemented Follow-Up Required ☐ Not Implemented In Violation ☐ Other Explain_____

7._____

Corrective Action: ☐ Fully Implemented No Further Action ☐ Partially Implemented No Further Action ☐ Partially Implemented Follow-Up Required ☐ Not Implemented In Violation ☐ Other Explain_____

8._____

Corrective Action: ☐ Fully Implemented No Further Action ☐ Partially Implemented No Further Action ☐ Partially Implemented Follow-Up Required ☐ Not Implemented In Violation ☐ Other Explain_____

9._____

Corrective Action: ☐ Fully Implemented No Further Action ☐ Partially Implemented No Further Action ☐ Partially Implemented Follow-Up Required ☐ Not Implemented In Violation ☐ Other Explain_____

10._____

Corrective Action: ☐ Fully Implemented No Further Action ☐ Partially Implemented No Further Action ☐ Partially Implemented Follow-Up Required ☐ Not Implemented In Violation ☐ Other Explain_____

Recommended City Actions

☐ No Further Action

☐ Recommended Corrective Actions Not Fully Implemented, Follow-Up Suggested

☐ Recommended Corrective Actions Not Fully Implemented, Follow-Up Required

☐ No Recommendations Implemented, Enforcement Action Needed

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax

Owner/Operator Signature: _____

Ants

Ants are one of the most prevalent pests in California. Although ants are annoying when they come indoors, they can be beneficial by feeding on fleas, termites, and other pests in the garden. While spraying chemicals inside the house may seem effective, it won't prevent more ants from entering your home, which is essential for control because most ants nest outside. Focus management efforts on excluding ants from buildings or valuable plants.

Make your house less attractive to ants:

- Caulk cracks and crevices that provide entry inside.
- Store attractive food in closed containers.
- Clean up grease and spills.
- Look for and remove indoor nesting sites, such as inside potted plants.
- Ant-proof kitchen garbage pails with sticky barriers such as petroleum jelly under the lip and pet dishes by placing them in a moat of water.
- Remove sweet food sources next to your house such as aphid-infested bushes and ripened fruit on trees.

When ants invade your house, take these steps:

- Sponge invaders with soapy water as soon as they enter.
- Plug up ant entryways with caulk or petroleum jelly.
- Remove infested potted plants.
- Clean up food sources.
- Rely on baits to control the ant colony.
- Indoor sprays are not usually necessary.

How and why baits work best:

When using bait, place it along ant trails and at nest openings. Worker ants will be attracted to bait and take it back to the nest where the entire colony, including queens, may be killed. The bait must be slow-acting so workers won't be killed before they get back to the nest. It may take several weeks for results to be evident. Just killing workers foraging in your home or garden does little to control the colony, because as few as one percent of a colony's foraging worker ants are able to provide sufficient food to support nestbound queens and larvae. Baits in bait stations or ant stakes are easiest to use and safest for the environment.

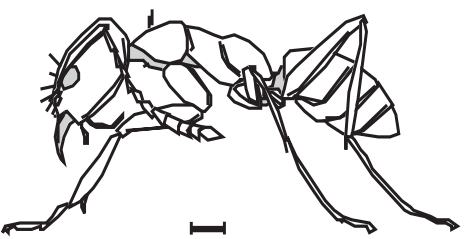

(actual size)

*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

Learn more about San Diego regional water quality at: www.ThinkBlueSD.org & www.ProjectCleanWater.org. For more pest information visit the University of California IPM website at: www.ipm.ucdavis.edu or the UCCE Master Gardeners at: (858) 694-2860, Mon - Fri, 9 am to 3 pm

UC IPM
University of California Cooperative Extension

UNIVERSITY of CALIFORNIA

MASTER GARDENER ASSOCIATION SAN DIEGO COUNTY

It's the water that connects us!

Aphids

Almost every plant has one or more aphid species that occasionally feeds on it, but low to moderate numbers of aphids are usually not damaging in gardens or on landscape trees. Although aphids can curl leaves and produce sticky honeydew, they rarely kill plants and can often be washed off with water. When aphid numbers get high, natural enemies frequently feed on them, eliminating the need for pesticides. Insecticidal soaps and oils are less toxic pesticides that can be used when treatment is necessary.

Aphids are common in your garden because:

- Aphids like lush new growth. Don't over fertilize. Use organic fertilizers or slow-release products.
- Aphids build up on flowering plums, roses, tulip trees, crape myrtles, apples, and many vegetables. Expect aphids when you grow these plants.
- Ants protect aphids from their natural enemies. Keep ants off plants to get more benefit from these beneficial insects.

To reduce aphids:

- Prune out infested leaves and stems.
- Knock aphid populations off plants by shaking or spraying with a strong stream of water.
- Protect seedlings with covers or aluminum soil mulches.
- Wait for hot weather; most aphids are heat-intolerant and will be gone by mid-June.

Protect aphids' natural enemies:

- Lady beetles, both adults and larvae
- Lacewings
- Syrphid fly larvae
- Soldier beetles
- Parasitic mini-wasps that turn aphids into crusty mummies (look for exit holes or insect drawings)

Natural enemies of aphids such as lady beetles and lacewings will come into your garden naturally when aphids are abundant. Protect these good bugs by avoiding the use of insecticides that may be toxic to a broad variety of insects.

If insecticides seem necessary, use the safest products:

- Nonchemical pest control methods should be used first to manage aphid populations. However, if you feel insecticides are necessary, choose less toxic products.
- Insecticidal oils and soaps are the safest products. When properly used, these materials solve most pest problems.
- Oils and soaps work by smothering aphids, so application must be thorough. Don't apply to drought-stressed plants or when it is very hot. A few plants are sensitive to these products.
- Insecticidal soaps, soap-pyrethrum mixtures, or neem oils are often applied on vegetables or small bushes like roses.
- Narrow range oils, like parafinic, supreme or superior oils, are appropriate for larger trees.
- Oils and soaps don't kill aphids hidden within curled leaves. Prune these out. Systemic insecticides can kill hidden aphids, but they are much more toxic and not registered for use on garden vegetables or fruit trees.

aphid

lady beetle

parasitic mini-wasp killing aphid

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Cockroaches

Cockroaches thrive in warm environments that provide food, water, and shelter. Roaches hide in cracks, crawl spaces, and other dark places during the day and come out at night to feed. Pesticide sprays alone will not control roaches and are not usually required. Baits provide better control. You must integrate several strategies to make your home a less roach-friendly environment. Thoroughness is essential for effective control.

Identify your cockroach species first:

- Effective management options vary according to species.
- Cockroach traps provide an easy way to catch roaches for identification.
- Control practices for outdoor invaders (American, oriental roaches) and indoor residents (brownbanded and German roaches) differ.
- For help with identification go to www.ipm.ucdavis.edu.

Remove food and water sources:

- Even tiny crumbs or liquids in cracks provide good food sources.
- Store food in sealed containers.
- Keep trash in containers with tight lids.
- Eliminate plumbing leaks.
- Vacuum cracks and crevices and clean floors and counters daily.

Remove roach hiding places:

- Seal cracks and other openings to prevent invaders from the outside.
- Seal cracks in false bottoms of cupboards and other indoor hiding places.
- Seal or clean up other areas where you find roaches or their egg cases hiding.
- Remove old newspapers, boxes, and other clutter in kitchens and bathrooms.
- The oriental cockroach hides outdoors under ivy and other shelter. Check to see if you have this roach and remove outdoor hiding places or bait.

Use traps to identify and track cockroach populations:

- Cockroach traps are available in hardware stores.
- Place traps on the floor around edges of walls, in cupboards and other places where you think roaches are foraging. Place bait stations at locations where you trap roaches.
- Check traps daily.
- Sticky traps with pheromones may provide some control of German cockroaches.

Using chemicals to control cockroaches:

- Avoid use of foggers, bombs, or aerosol sprays — they just disperse populations.
- Boric acid powder blown into cracks, crevices, hollow walls, under refrigerators, or other undisturbed hiding places is very effective (allow 7 days or more for an effect to be seen).
- Bait stations containing boric acid, abamectin, fipronil, or hydramethylnon placed near hiding places can be effective if other food sources are removed (allow 7 days or more for an effect to be seen). Replace stations as needed as long as roaches are being caught.
- Insecticide sprays alone do not give long-term control. They are not necessary if other methods such as baits and boric acid powder are combined along with cleanup and removal of hiding places.
- Contact a professional pest control operator for very serious infestations, but be sure they use an integrated program as described above.

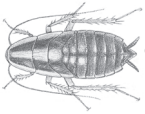

German cockroach nymph

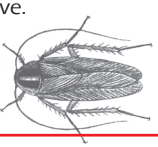

German cockroach adult

*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

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ANR University of California

Master Gardener Association San Diego County

It's the water that connects us!

Earwigs

HEALTHY GARDEN HEALTHY HOME

While their prominent tail-end pincers may look ferocious, earwigs are not harmful to people. Earwigs may seriously damage seedling vegetables and chew holes in annual flowers, soft fruit, and corn silks, but earwigs also play a beneficial role by feeding on aphids and other insects. Nocturnal in habit, earwigs feed at night and hide during the day in dark, cool, moist places in the yard or within flowers or vegetables. To manage earwigs, reduce hiding places and moisture, and employ a vigilant trapping program.

Should you be concerned about earwigs in your garden?

- Yes, if you are growing vegetables, herbaceous flowering plants, sweet corn, or plants with soft fruits like strawberries and apricots.
- No, if your garden is primarily lawn, trees, and woody ornamentals or native plants.

Reduce outdoor hiding places:

- Eliminate dense undergrowth of vines, ground cover and weeds around vegetable and flower gardens.
- Prune away fruit tree suckers.
- Remove leaves, boards, boxes, trash, and other debris from planting areas.
- Move flower pots and other garden objects and structures that can harbor earwigs.
- Check plastic or organic mulches and remove them to limit earwig numbers.

Trap earwigs until they are gone!

- Trap earwigs with rolled newspaper, bamboo tubes, or short pieces of hose. Place these traps on the soil near plants just before dark, and shake accumulated earwigs out into a pail of soapy water in the morning. A low-sided can filled with oil and a drop of bacon grease or fish oil also makes a good trap. Daily trapping will reduce earwig populations to tolerable levels.

Other ways to reduce earwig problems:

- Drip irrigate where possible to reduce surface moisture.
- Keep earwigs out of stone fruit trees with a band of sticky substance like Tanglefoot, around the trunk, and harvest fruit as soon as it ripens.
- Insecticides should rarely be needed.

Inside the home:

Earwigs may seek refuge indoors when conditions outside are too dry, hot, or cold. Large accumulations of earwigs can be annoying but present no health hazards. When earwigs invade your home follow these steps:

- Sweep or vacuum up invading earwigs.
- Seal up cracks or other entry points.
- Remove debris from gutters and around entryways.
- Keep water and moisture away from structures.
- Replace white outdoor lights with yellow ones, which are less attractive to earwigs.
- Indoor application of pesticides is not recommended.

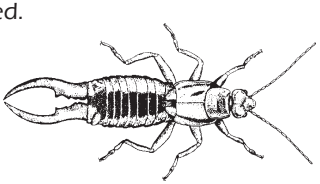

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Fleas

Fleas are particularly annoying to people and pets, especially during spring and early summer when their numbers tend to increase dramatically. The common flea in California is the cat flea. Despite its name, it attacks both dogs and cats and will also bite humans. To keep fleas out of your home, control fleas on your pet and regularly clean pet sleeping areas.

On the pet:

Recently, a number of very effective and safe new products for flea control on the pet have become available. Remember to supplement pet treatments with regular cleaning of your home and periodic combing with a pet flea comb to detect new infestations.

- Spot-on formulations are applied to the animal's coat, providing flea control for 1 to 3 months. Available from veterinarians or over-the-counter.
- Systemic flea control products, available from vets, are given as a pill or food additive. While they do not kill adult fleas, they prevent reproduction.
- Flea collars containing insect growth regulators (IGRs) give protection for up to 6 months on dogs and up to a year on cats. Be sure to choose collars containing methoprene or pyriproxyfen.
- Flea shampoos and soaps, powders and dusts, spray-on liquids, and dips are less effective and more hazardous to pets, people, and the environment than the three types of products above.

In the yard:

Outdoor treatment is rarely needed, but if your pet regularly sleeps outside and flea numbers are high, these areas can be treated with a spray containing pyriproxyfen. If possible, open sleeping areas to sunlight by removing low hanging vegetation. Immature fleas are unlikely to survive in areas with exposure to sunlight.

Inside the home:

Whether or not you are aware of fleas in your home, regularly vacuum and launder areas where your pet rests to avoid flea buildup. If you have a major flea problem, treat your pet with one of the options on the front of this card and follow the steps below.

- Locate heavily infested areas (usually areas where the pet rests) and concentrate treatment there.
- Wash throw rugs and pet bedding.
- Vacuum upholstered furniture, cleaning under cushions and in crevices.
- Vacuum carpets, especially beneath furniture.
- Use a hand sprayer or aerosol to treat all carpets and unwashable upholstered furniture with an insecticide that contains an IGR (methoprene or pyriproxyfen). This treatment kills larvae but not pupae, so fleas may continue to emerge for up to 2 weeks.
- Over the next 2 weeks vacuum regularly to remove adult fleas that emerge from pupae. Do not reapply pesticides.
- Seal vacuum bags and discard them so fleas don't escape.

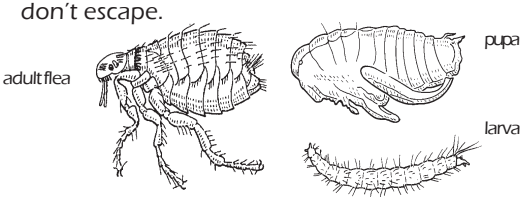

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Gardening with Good Bugs

HEALTHY GARDEN HEALTHY HOME

Most gardens contain far more types of good bugs,or beneficial insects, than pest insects. Beneficial insects and other organisms that kill pest insects are called natural enemies. In any pest management or plant care program, it is important to encourage these natural enemies by avoiding pesticides that kill them. You can also encourage beneficial insects by choosing plants that provide them with pollen, nectar, and shelter and keeping ants out of pest-infested plants. Learn to identify good bugs, both in their adult forms and immature (larval) stages.

Common good bugs found in California gardens include:

- Lady beetles: Both adults and larvae consume aphids.
- Lacewings: Lacewing larvae feed on many insect pests; adults are often seen around lights.
- Syrphid flies: Syrphid fly larvae consume aphids; adults hover around flowers.
- Parasitic mini-wasps: Many species of tiny wasps lay their eggs in pests like aphids or caterpillars; their hatching larvae consume the pest and kill it.
- Spiders: All spiders feed on insects or other arthropods and are beneficial in the garden.

(See reverse for drawings of good bugs mentioned above.)

What is Integrated Pest Management?

Integrated pest management (IPM) uses environmentally sound, yet effective, ways to keep pests from annoying you or damaging plants. IPM programs usually combine several pest control methods for long- term prevention and management of pest problems without harming you, your family, or the environment — IPM also reduces pollution in California waterways. Successful IPM begins with correct identification of the pest. Only then can selection of the appropriate IPM methods and materials be made.

Preferred IPM methods include:

- Planting pest-resistant or well-adapted plant varieties like native plants.
- Discouraging pests by modifying the way you design, irrigate, fertilize, and manage your garden.
- Altering the garden or home environment to deprive pests of the food, water, shelter or other requirements they need to thrive.
- Keeping pests out of the home and garden using barriers, screens, and caulking.
- Squashing, trapping, washing off or pruning out pests.
- Relying on good bugs in your garden to eat pests, thereby eliminating the need for insecticides that may end up in our waterways.

Turning to pesticides:

- Only use pesticides when non-chemical controls are ineffective and pests are reaching intolerable levels.
- Use pesticides in combination with the methods described above.
- Choose pesticides carefully so that the least toxic, most effective material is used to protect human health and the environment.

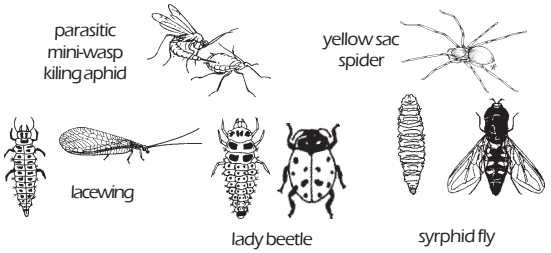

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Head Lice

HEALTHY GARDEN HEALTHY HOME

Head lice can infest anybody, but children are prone to infestations because they play closely and share items that come in contact with the head like hats, headphones, and combs. Head lice are not known to transmit any infectious diseases; they are more of a nuisance than a health risk. Children with head lice, however, are generally not allowed to attend school as long as nits are found in their hair.

Head lice facts:

- Head lice cannot hop, fly, or jump; they crawl. Lice spread only through direct contact with an infested object or person.
- Head lice spend their entire life in head hair and can only survive off a human head for about 1 or 2 days.
- A newly hatched louse must ingest blood within minutes of birth to survive.
- Head lice cannot live on family pets.
- Nits (eggs) that are more than 1 1/4 inch from the scalp probably are dead or have already hatched.

What to look for:

- Intense scratching on the back of the head or neck.
- Tiny white eggs (nits) glued to hair near the scalp.
- Small, rapidly crawling flat insects.

Four steps necessary to manage an infestation of head lice:

1 Use a head louse shampoo if you observe active lice or viable eggs.

- Avoid shampoo products containing lindane, which are available by prescription only. Pyrethrin and permethrin are safer, more effective, and less polluting to wastewater than lindane. Not all eggs will be killed.
- To avoid insecticides entirely, use soap shampoos that contain coconut or olive oils. Most soap shampoos kill all stages of the louse except the egg. Because they are not as effective as products containing pesticides, you must be sure to comb and repeat these shampoos four times at 3-day intervals. Successive shampooing kills newly hatched lice.

2 Remove nits from the head by combing with a specially designed nit comb.

- This step is the key to successful control. Repeat daily as long as you find live lice or nits within 1¦4 inch of the scalp. Use a metal comb specially designed for removing head lice and their eggs. Combs sold with head lice shampoos are not generally effective. Infested hair can also be cut out with small safety scissors.

3 Remove lice and nits from the household.

- Wash clothing and bedding of the infested person in hot water (at least 140°F) and dry in a hot dryer or have them dry cleaned. Place other items (earphones, bike helmets) in plastic and put in a freezer that is 5°F or lower for at least 10 hours. Clean any object that might have come in contact with the infested person's head (stuffed animals, car seats). Vacuum carpets and upholstery. Pesticide sprays are not recommended.

4 Check heads and remove nits daily until infestation is gone. Follow with weekly head checks to detect reinfestation.

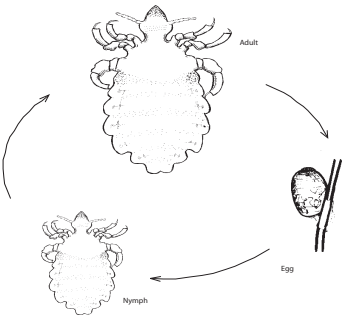

For more information see Pest Notes: Head Lice, available at Cooperative Extension offices and at www.ipm.ucdavis.edu

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Lawn Insects

HEALTHY GARDEN HEALTHY HOME

Contrary to popular belief, insects are not a common cause of residential lawn damage in California. Poor lawn care, especially improper watering and planting inappropriate grass species, are more likely causes of unhealthy or dying lawns. Disease-causing agents, excess orinappropriate use of chemicals such as fertilizer and herbicides, or dog urine also produce lawn damage resembling that of insects. Many insects in the lawn are beneficial. Never apply an insecticide unless a damaging level of a known insect pest is confirmed. Insecticides are only effective if applied at the right time and in the right manner. Some insecticides may kill good bugs too.

How do you know if insects are causing damage?

- Brown spots in lawns can be caused by over- or under-irrigation, plant disease, improper use of chemicals, or dog urine as well as insects.
- Confirm presence of insects before applying an insecticide. For grubs, dig around roots, for other insects perform a drench test. (See reverse.)

Keep your lawn healthy by:

- Planting grass species that do well in your area
- Irrigating deeply and infrequently
- Doing routine maintenance on sprinkler heads
- Applying only 3 to 6 pounds of actual nitrogen per 1000 square feet per year when fertilizing
- Aerating your lawn annually; remove thatch if it exceeds 1/2 inch
- Cutting only one-third to one-half of grass height at each mowing and keeping lawnmower blades sharp

See the UC Guide to Healthy Lawns at www.ipm.ucdavis.edu

If a damaging level of insects is confirmed, do the following:

- Choose an insecticide based on the pest you're targeting.
- Find out which insecticide ingredients target specific lawn insects:
  - *Bacillus thuringiensis* (Bt) kills only caterpillars, including cutworms, lawn moths, and skippers.
  - Insect-attacking nematodes control caterpillars or grubs.
  - Azadirachtin controls cutworms, armyworms, and larvae of lawn moths.
  - Imidacloprid is effective against young lawn grubs.
  - Pyrethroids (e.g., cyfluthrin, bifenthrin) are broadly toxic insecticides that kill chinch bugs, lawn moths, and cutworms, but also kill beneficial insects and should be avoided.
- Get help from UC Cooperative Extension.

HOW TO PERFORM A DRENCH TEST

- Mix 3–4 tablespoons of dishwashing liquid to 2 gallons of water.
- Evenly apply the 2 gallons to 1 square yard of your lawn.
- Monitor the area for 10 minutes and count the number of armyworms, cutworms, or lawn moth larvae that rise to the surface.
- Treat the area only if insect numbers exceed 5 armyworms or cutworms or 15 lawn moths per square yard.

chinch bug

sod webworm larva

cutworm larva

grub larva

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Safe Use & Disposal of Pesticides

HEALTHY GARDEN HEALTHY HOME

Pesticides are designed to be toxic to the pests they target — insects, weeds, and other unwanted home and garden invaders. Always read pesticide product labels carefully and follow all directions on proper use, storage, and disposal of empty pesticide containers. Product labels are your main source of information on how to use a product safely and legally. They include guidelines needed to protect you, your family, and pets. The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For the site nearest you in San Diego County call 1-877-713-2784 .

If you must use pesticides, follow these tips to reduce pesticide effects on your local waterways:

- Identify your pest problem and choose the least toxic pesticide that targets your pest and achieves the results you want. If you need help identifying the least toxic pest control method, contact your University of California Cooperative Extension office.
- Determine the right amount of pesticide to purchase. Purchasing exactly the amount you need for the application eliminates the need for storing unused pesticides.
- Use spot treatments whenever possible.

Outdoors

- Avoid overwatering after applying pesticides. Never let pesticide runoff flow into storm drains.
- Do not apply pesticides outdoors when rain is forecast or when it is windy.
- Avoid applying pesticides on paved areas.

Indoors

- Avoid applying pesticides in or near floor drains or sinks.
- Avoid applying pesticides on areas that will be washed or mopped with water, or where food is prepared or stored.

When using and storing pesticides take these precautions:

- Always wear a long-sleeved shirt, pants, and eye protection, and other equipment suggested on the label.
- Store products tightly capped in a locked cabinet out of reach from children and pets.
- Always keep pesticides in their original container.
- Know where to call for help in an emergency!

Pesticide disposal:

- If you cannot use up your pesticides, fertilizers, and weed killers, give them to a friend who may need them.
- Sewage treatment plants are not designed to treat for certain toxic pesticides like diazinon and chlorpyrifos — dumping pesticides into the stormdrain or down the sink is never an option.
- The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For household pesticide disposal information for San Diego County, call 877-713-2784.

Finding active ingredients on a pesticide label:

Pesticide labels are required by law to show the active ingredient and its percentage. Minimize or avoid the use of products that contain diazinon and chlorpyrifos – these materials are polluting our waterways. Always read the label before you buy!

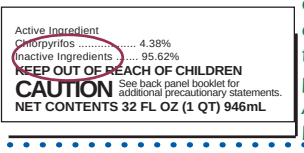
Active Ingredient
Chlorpyrifos 4.38%
Inactive Ingredients 95.62%
KEEP OUT OF REACH OF CHILDREN
CAUTION See back panel booklet for additional precautionary statements.
NET CONTENTS 32 FL OZ (1 QT) 946mL

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Snails & Slugs

Snails and slugs rank among our most despised garden pests. These slimy mollusks emerge from hiding at night and chew holes in leaves and flowers of many succulent garden plants and fruit. Slugs and snails are similar in structure and biology, except slugs lack the snails' external spiral shell. Management requires a vigilant and integrated approach that includes eliminating moisture and hiding spots, trapping, barriers, and handpicking. Baits can be helpful, but by themselves, don't provide adequate control in gardens that contain plenty of shelter, food, and moisture.

How do you know snails and slugs are causing damage?

- You may not observe these pests at first because they feed at night and hide during the day. Go out at night or early morning to view them in action.
- Other pests can cause holes in leaves, flowers, and fruit. Look for the shiny, slimy trails slugs and snails leave behind.

What must be done to reduce snails and slugs?

- Remove daytime hiding places — ivy, weedy areas, debris, or boards.
- Regularly remove snails from shelters you cannot eliminate such as low ledges on fences, undersides of decks, meter boxes.
- Place traps in your garden and dispose of trapped snails and slugs daily.
- Reduce moist surfaces by switching to drip irrigation or sprinkling in the morning rather than later in the day.
- Consider snail-proof plants such as impatiens, geraniums, begonias, lantana, nasturtiums, and many plants with stiff leaves and highly scented foliage like sage, rosemary,and lavender.

How can I manage snails and slugs without using pesticides?

- Make sure the garden is mollusk-free before planting. Then erect a copper barrier around it. Use a 4- to 6-inch-wide band of copper, buried an inch below the soil and bent over at the top or attach it around the edge of a raised bed.
- Place your garden in the sunniest spot possible. Remove garden objects or adjacent plants or ground cover that may serve as shady shelter. Reduce moist surfaces as much as possible.
- Build a trap using a 12"x15" board raised off the ground by 1-inch runners. As the mollusks collect under the board, scrape them off and destroy them daily.

What about baits?

- Baits will not be very effective unless you also remove shelter, food, and moisture.
- Metaldehyde baits are especially poisonous to dogs and birds. Metaldehyde also loses its effectiveness rapidly in sunlight and after rain or irrigation.
- Iron phosphate baits are safe for use around dogs, children, and wildlife.
- Irrigate before applying bait and apply in evening on warm days when mollusks are active.
- Scatter bait around sprinklers and in moist and protected areas where snails and slugs travel.

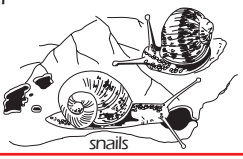

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Spiders

Spiders are mostly beneficial because they feed on pest insects. However, many people think that all spiders are dangerous and aggressive. In California, the main spider capable of causing serious injury is the black widow, which generally remains outdoors and out of sight. Spiders seen out in the open during the day are unlikely to bite people. Focus pest management efforts on removing webs and hiding places. Pesticides are not generally recommended.

What to know about spiders:

- In California, the main spider capable of causing serious injury is the black widow:
  - The poisonous black widow spider is commonly found outdoors, in sheltered, dry, undisturbed areas such as wood piles.
  - Female black widows have shiny black bodies with a red hourglass marking on the underside.
  - Only large female black widows can injure people.

    Anyone bitten by a black widow spider should remain calm and seek medical advice, or call California's Poison Control Center at 1-800-8-POISON (1-800-876-4766).
- The brown recluse spider does not live in California.
- The jaws of most spiders are too small to bite humans.
- Some other spiders bite when trapped in clothing, but the reaction is usually no more severe than itching or a bee sting. See www.ipm.ucdavis.edu for more information about these spiders.

To prevent spiders from entering your house, take these steps:

- Seal home foundation cracks and other access holes.
- Inspect window and door screens for good seals that keep out spiders and the insects they prey on.
- Keep areas around home foundations free of clutter.

Manage spiders using these tips:

- Indoors, regular housecleaning provides adequate spider control.
- Vacuum up the spider and its web.
- Prevent clutter buildup that can provide hiding places.
- Remove spider webs from the exterior of the house with a broom or high pressure hose.
- Indoors, squash spiders or capture them in a jar and release them outdoors.

When removing spiders, don't overlook the fact that spiders eat a large number and variety of nuisance and pest insects. Spiders also have natural enemies — wasps, other spiders, birds, reptiles, and others — that sometimes keep them from becoming too numerous.

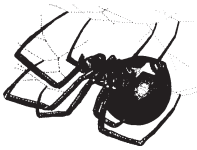

black widow spider

longbodied cellar spider

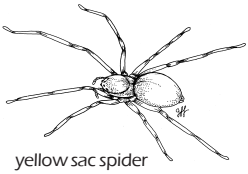

yellow sac spider

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Termites

Because of the serious damage they can cause to wooden structures, termites are among the pests most feared by homeowners. However, swarms of flying termites do not always mean your building is infested. A careful inspection of the structure is required to confirm an infestation. People also frequently mistake swarms of flying ants for termites. If you suspect that your house is infested, call a professional. Do-it-yourself sprays cannot be relied on to reduce a damaging infestation. Common termites in California are the subterranean termites that build nests in soil, dampwood termites that nest in moist wood and soil, and drywood termites that nest above ground in dry wood. Management of each termite species is different.

Distinguish flying ants from termites:

- Check the antennae, wings and waist to confirm that pest insects are termites. (Please refer to ant vs. termite drawing on back.)

Design your building to keep termites out:

- Keep a 12-inch barrier of smooth concrete, sand, or other material between the soil surface and substructure wood beneath a building.
- Choose termite-resistant wood for fences or other structures that must contact soil.
- Remove wood piles, untreated fence posts, and buried scrap wood near structures.
- Provide adequate ventilation to substructures and keep them dry.
- Immediately repair foundation cracks.

If termites are invading your home:

- Destroy shelter tubes that subterranean termites build between soil and wood structures.
- If dampwood termite nests are accessible, remove infested wood and eliminate excess moisture.
- Drywood termites can be controlled with heat, freezing, electricity, microwaves, fumigation, or spot treatments of chemicals.
- For any infestation, contact a professional for help. Pesticides licensed only for use by a pest control operator are usually necessary to control subterranean and dampwood infestations.

Using pesticides for termite control:

- Pesticides may be injected into the soil by professional applicators through drilling or rodding. Special procedures must be followed to prevent contamination of ground or surface water.
- For soil injections, ask your applicator to use a product other than chlorpyrifos. Newer types of products such as fipronil and chloronicotinyls are safer for your health and the environment.
- Baits can be effective in some cases, but may take several months to control the problem and must be followed up with constant monitoring.

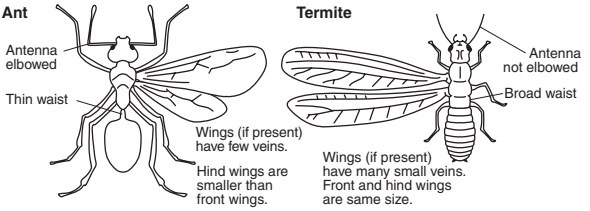

*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

Learn more about San Diego regional water quality at: www.ThinkBlueSD.org & www.ProjectCleanWater.org. For more pest information visit the University of California IPM website at: www.ipm.ucdavis.edu or the UCCE Master Gardeners at: (858) 694-2860, Mon - Fri, 9 am to 3 pm

UC IPM
University of California Cooperative Extension

UNIVERSITY of CALIFORNIA

MASTER GARDENER ASSOCIATION SAN DIEGO COUNTY

It's the water that connects us!

Giant Whitefly

HEALTHY GARDEN HEALTHY HOME

Giant whiteflies can cover a beautiful plant with white fuzzy wax and sticky honeydew, turning it into an unsightly mess. First discovered in San Diego County in October 1992, this whitefly has spread northward into other areas of California. Since its introduction into San Diego, giant whitefly has spread rapidly northward along the coast. Although affected plants may be weakened, they rarely die. To manage giant whitefly, wash plants off with water and encourage natural enemies.

What plants are affected?

- Many ornamentals including hibiscus, giant bird of paradise, begonia, Xylosma.
- Fruit trees including citrus, avocado, mulberry and banana.

Look for these damage symptoms on affected plants:

- Long, white, waxy filaments produced by the whitefly give the leaf surface a bearded appearance. These hairlike strands may be mistaken for a fungal infection.
- Large amounts of sticky honeydew excreted by the whitefly as it feeds on plant sap.
- Black sooty mold growing on the honeydew.

How to recognize the whitefly:

- Adults are small (3/16") and white with light brown markings on wings and usually found in groups on undersides of leaves.
- Nymphs are yellowish, small, oval, have no legs and don't move.

To reduce problems, use an integrated program that includes:

- Removing infested leaves.
- Washing giant whiteflies off leaves with a strong stream of water.
- Planting species less susceptible to giant whitefly.
- Avoiding insecticides that injure natural enemies, such as lacewings, lady beetles, syrphid flies, and parasitic wasps.

What about insecticides?

- **Don't use insecticides if beneficial insects, including parasites and predators, are present in the area.**
- **To confirm the presence of parasitic wasps, use a magnifying glass to look for parasite exit holes on giant whitefly nymphs or darkened nymphs as indicated in drawings below.**
- **If you do choose to use an insecticide, select least toxic products such as insecticidal soaps or oils. Remember to follow label directions and spray the undersides of the leaves where whitefly colonies are found.**

(adult) (actual size) I

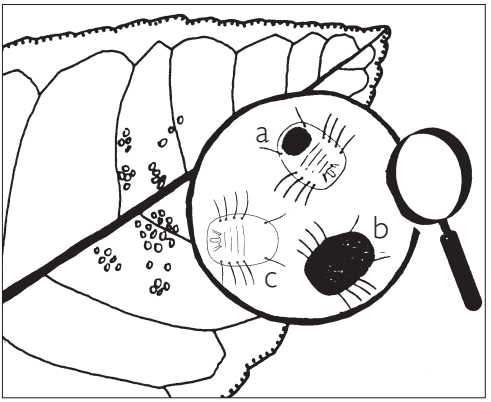

Examine whitefly colonies for grayish-black or yellow nymphs with exit holes (a), or darkened nymphs (b), or healthy nymphs (c).

Use NON-CHEMICAL methods & LEAST TOXIC pesticides. WHY? Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes, and oceans.

Learn more about San Diego regional water quality at www.ThinkBlueSD.org & www.ProjectCleanWater.org.
For more pest information, visit the University of California IPM Web site at **www.ipm.ucdavis.edu**. or contact the UCCE Master Gardeners at (858) 694-2860, Mon-Fri, 9 am to 3 pm.

UC IPM University of California Cooperative Extension

ANR University of California

Master Gardener Association San Diego County

It's the water that connects us!

City of La Mesa

DEPARTMENT OF PUBLIC WORKS

June 28, 2007

Subject: Storm Water Pollution Prevention

Dear Business Owner,

As part of a state mandate, the City of La Mesa is required to develop and implement a Storm Water Pollution Prevention Program. Ensuring compliance with the state mandate includes collecting urban runoff samples at various locations through out the jurisdiction during the summer months. Urban runoff samples are tested for pollutants such as (1) Oil & Grease, (2) Metals, (3) Ammonia/Nitrate, (4) Phosphorus, (5) Surfactant, (6) Pesticides, and (7) Bacteria. Field observations to document trash and debris are also recorded.

The City of La Mesa selected a runoff sampling location within your neighborhood. Results from the sampling and monitoring efforts conducted during the summer of 2006 indicated significant amount of trash and debris in the vicinity of your business. Trash and debris maybe sources of harmful bacteria when flushed into the storm drain system.

Please ensure that your business maintains good house keeping measures. This includes:

1. Routinely sweeping the premise and disposing of sediment and trash into the dumpster. No not hose down the property.
2. Keeping dumpster lids closed at all times.
3. Train employees on pollution prevention/good house keeping measures.
4. Cover and contain material stored outside (as applicable to your business)
5. Prevent over-irrigation which may transport debris into the storm drain.

We all want to preserve our quality of life, please take the appropriate action to help prevent harmful pollutants from entering our environment. If you have been taking action already to keep your business tidy, the City would like to thank you for your help in protecting our natural resources.

Should you have any questions, please feel free to contact me at (619) 667-1134.

Sincerely,

Malik Tamimi

Malik Tamimi
Environmental Specialist

DIRECTOR AND ENGINEERING DIVISION:
8130 ALLISON AVENUE, LA MESA, CALIFORNIA 91941 / PHONE 619.667.1166, FAX 619.667.1380
www.ci.la[illegible]a.us

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City of La Mesa

DEPARTMENT OF PUBLIC WORKS

June 28, 2007

Subject: Storm Water Pollution Prevention

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The City of La Mesa selected a runoff sampling location within your neighborhood. Results from the sampling and monitoring efforts conducted during the summer of 2006 indicate high levels of bacteria in the water. Sources of bacteria include organic debris flushed in the storm drain such as green waste/leaf debris as well as animal waste.

Animal waste is a source of harmful bacteria that is conveyed through the storm water conveyance system into our creeks and eventually to our beaches. If you do own a pet or maintain a pet facility, please ensure that you collect and dispose of pet waste in your trash receptacle. Similarly with green waste and litter, please collect or have landscaping companies collect and dispose of green waste/litter and debris in a trash receptacle and not down the storm drain inlet. Ensure that over-irrigation is eliminated. The only water that should be entering the storm water conveyance system should be rainwater.

Additionally, hosing down your business premise, washing vehicles in the street/or parking lot, over-fertilizing and over-spray of pesticides/herbicides all result in storm water pollution. The above activities enable harmful pollutants to enter our storm water conveyance system to our creeks and eventually the ocean and our beaches.

We all want to preserve our quality of life, please take the appropriate action to help prevent these harmful pollutants from entering our environment. If you have been taking action already, the City would like to thank you for your help in protecting our natural resources.

Should you have any questions, please feel free to contact me at (619) 667-1134.

Sincerely,

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City of La Mesa
Storm Water Pollution Prevention
Over-Irrigation

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

With La Mesa's clay soils, it doesn't take much to moisten the ground before water starts running off your property to the curb, down the street and into the storm drain. Runoff from over-irrigation may transport pollutants such as sediment, pesticides, fertilizers, pet waste, bacteria, and automobile fluids. These pollutants enter our local creeks and streams and discharge into the ocean.

Over-irrigation is not prohibited; however, the following measures are recommended.

1. Over-irrigation runoff shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Irrigate to meet site-specific conditions to prevent over-watering.
3. Ensure that your irrigation system has control devices, sensors or shut-off switches to address malfunctions.
4. Place or group plants with similar water needs within the same area.
5. Don't irrigate non-planted areas.
6. Inspect your irrigation system regularly for potential problems
7. Consider drip irrigation to save water and prevent over-irrigation and runoff.
8. Adjust irrigation rates according to seasons, weather conditions and the soil's ability to absorb water. Instead of watering for 15-minutes straight, break up the session into 5-minute intervals, allowing water to soak in before the next application.
9. Irrigate in the early morning; it's the most efficient time to water plants with minimal evaporation.
10. Refrain from irrigation during hot, windy periods of the day. Do not let water run out into the street.

Do the right thing, stay in compliance and protect our environment. For more information contact the City's Storm Water Hotline (619) 667-1134.

City of La Mesa

DEPARTMENT OF PUBLIC WORKS

June 28, 2007

Subject: Storm Water Pollution Prevention

Dear Resident,

As part of a state mandate, the City of La Mesa is required to develop and implement a Storm Water Pollution Prevention Program. Ensuring compliance with the state mandate includes collecting urban runoff samples at various locations through out the jurisdiction during the summer months. Urban runoff samples are tested for pollutants such as (1) Oil & Grease, (2) Metals, (3) Ammonia/Nitrate, (4) Phosphorus, (5) Surfactant, (6) Pesticides, and (7) Bacteria.

The City of La Mesa selected a runoff sampling location within your neighborhood. Results from the sampling and monitoring efforts conducted during the summer of 2006 indicate high levels of bacteria in the water as well as a lot of trash and debris. Sources of bacteria include organic debris flushed in the storm drain such as green waste/leaf debris as well as animal waste. Over-irrigation is consistently high and transports bacteria from lawns and landscaped areas to the nearby storm drains ultimately making its way to Alvarado Channel/San Diego River. Please ensure the following:

1. Collect and dispose of pet waste in your trash receptacle.
2. Collect or have landscaping companies collect and dispose of green waste/litter and debris in a trash receptacle and not down the storm drain inlet.
3. Prevent over-irrigation, over-fertilizing and over-spray of pesticides/herbicides, and hosing down your driveway.

Ensuring that the above actions are taken will help prevent harmful pollutants from entering our storm water conveyance system to our creeks and eventually the ocean and our beaches. The only water that should be entering the storm water conveyance system (storm drain) should be rainwater.

We all want to preserve our quality of life, please take the appropriate action to help prevent these harmful pollutants from entering our environment. Please talk to family members, neighbors and friends. If you have been taking action already, the City would like to thank you for your help in protecting our natural resources.

Should you have any questions, please feel free to contact me at (619) 667-1134.

Sincerely,

Malik Tamimi

Malik Tamimi
Environmental Specialist

DIRECTOR AND ENGINEERING DIVISION:
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www.ci.la-mesa.ca.us

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City of La Mesa

DEPARTMENT OF PUBLIC WORKS

June 28, 2007

Facility Management
Grossmont Shopping Center
5500 Grossmont Center Drive Ste. 213
La Mesa, CA 91941

Subject: Storm Water Pollution Prevention Landscape Maintenance Grossmont Shopping Center, La Mesa

Dear Facility Manager,

As part of a state mandate, the City of La Mesa is required to develop and implement a Storm Water Pollution Prevention Program. Ensuring compliance with the state mandate includes collecting urban runoff samples at various locations through out the jurisdiction during the summer months. Urban runoff samples are tested for pollutants such as (1) Oil & Grease, (2) Metals, (3) Ammonia/Nitrate, (4) Phosphorus, (5) Surfactant, (6) Pesticides, and (7) Bacteria.

The City of La Mesa selected a runoff sampling location within the vicinity of the Grossmont Shopping Center. Results from the sampling and monitoring efforts conducted during the summer of 2005 and 2006 indicated high levels of ammonia in the urban runoff. Improper plant food application and irrigation practices in flowerbeds from Grossmont Shopping Center may have transported the pollutants into the storm water conveyance system. The only water that should be entering the storm water conveyance system is rainwater.

Please inform the landscape maintenance company that the irrigation system should be limited to avoid over-irrigation. Ensure over-spray from fertilizing and pesticide application should be minimized. If fertilizer pellets are spilled on the sidewalk or pavement, it should be swept up and collected for proper application/disposal. Sediment (soil or potting mix) is also considered a pollutant and should be swept up.

As you are aware, we all want to preserve our quality of life and want to take the appropriate action to help prevent these harmful pollutants from entering our environment. Failure to comply with our storm water pollution prevention requirements may result in a Notice of Violation. This is the second year that we have had elevated concentrations of ammonia from the shopping center. Please provide a plan that will address the aforementioned issue. You may contact me at (619) 667-1340.

Sincerely,

Malik Tamimi

Malik Tamimi
Environmental Specialist

DIRECTOR AND ENGINEERING DIVISION:
8130 ALLISON AVENUE, LA MESA, CALIFORNIA 91941 / PHONE 619.667.1166 / FAX 619.667.1180

STORM WATER BEST MANAGEMENT PRACTICES IMPLEMENTATION AFFIDAVIT

(*MUNICIPAL CODE 17.18 STORMWATER MANAGEMENT AND DISCHARGE CONTROL*)

I _____(Business Owner Name) owner/authorized officer of _____ (Business Name) located at _____ (Address) have hereby read the attached Pollution Prevention Section 4.1 and Best Management Practices (BMP) Implementation Section 4.3 of the City of La Mesa's Jurisdictional Urban Runoff Management Program (JURMP). Furthermore, I have reviewed and will implement the Best Management Practices as applicable in Table(s)_____ presented in Appendix C of the City's JURMP. Should the aforementioned business be inspected by the City and observed not to be implementing the recommended Best Management Practices, fines/further action will be taken against the business owner per Municipal Code Chapter 7.18.230 "Enforcement of this chapter".

Signature: _____
(By Owner or Authorized Officer Only)

Date: _____

For Official Use Only	
Business SIC Code:	_____
Business Activity:	_____
JURMP Priority:	_____

E:\0780 NPDES\2004 NPDES Folder\BMP Agreement.doc

AFFIDAVIT OF DISPOSAL

I _____ (business name) located at _____

_____ (address) on _____(date)

Certify under penalty of law that all waste generated (hazardous and non-hazardous) from the aforementioned business's activities will be disposed of appropriately in compliance with federal, state. and local regulations. I further understand disposal of any unauthorized waste into the sewer and storm drain systems is prohibited. I am aware that there are significant penalties for non-compliance with the said regulations that may result in penalties including fines and further legal actions for knowing violations.

_____
Authorized Signature

_____
Date

City of La Mesa

DEPARTMENT OF PUBLIC WORKS

June 28, 2007

Subject: Storm Water Pollution Prevention

Dear Resident,

As part of a state mandate, the City of La Mesa is required to develop and implement a Storm Water Pollution Prevention Program. Ensuring compliance with the state mandate includes collecting urban runoff samples at various locations through out the jurisdiction during the summer months. Urban runoff samples are tested for pollutants such as (1) Oil & Grease, (2) Metals, (3) Ammonia/Nitrate, (4) Phosphorus, (5) Surfactant, (6) Pesticides, and (7) Bacteria.

The City of La Mesa selected a runoff sampling location within your neighborhood. Results from the sampling and monitoring efforts conducted during the summer of 2006 indicate high levels of bacteria in the water. Sources of bacteria include organic debris flushed in the storm drain such as green waste/leaf debris as well as animal waste.

Please collect or have landscaping companies collect and dispose of green waste/litter and debris in a trash receptacle and not down the storm drain inlet or channel area. Upstream investigation results also indicated that the source of bacteria observed was from excess vegetation in the area causing backup of water and algal growth. The backing up of water and algal growth supports bacterial growth. Consider periodic cleaning and maintenance of the channel area.

We all want to preserve our quality of life, please take the appropriate action to help prevent these harmful pollutants from entering our environment. Please talk to family members, neighbors and friends. If you have been taking action already, the City would like to thank you for your help in protecting our natural resources.

Should you have any questions, please feel free to contact me at (619) 667-1134.

Sincerely,

Malik Tamimi

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Environmental Specialist

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City of La Mesa

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CITY OF LA MESA
Jewel of the Hills

Programs & Activities SCHEDULE

La Mesa COMMUNITY SERVICES

Spring 2007

GRAND OPENING FINAL PHASE

Junior Seau Sports Complex

A grand opening celebration was held to mark completion of the final phase of the Junior Seau Sports Complex. The complex is located on the grounds of Parkway Middle School at 9009 Park Plaza Drive in La Mesa. This phase includes three lighted baseball/softball fields, accompanying bleacher seating, additional parking, an entry plaza, and an access roadway from adjacent La Mesita Park. This phase completes the $6 million project that also includes a lighted football field, multi-purpose soccer field, and restroom/concession building completed in earlier phases.

City Manager Sandra Kerl addresses audience at the Grand Opening Celebration held September 18.

La Mesa Appreciation Day

Saturday, November 4
8:00AM to Noon

Get Involved!

Help make La Mesa parks shine. Recruit family and friends to join you and spruce up your neighborhood park. This is a great community service project for youth groups, scouts, church groups, and service clubs. Projects range from light raking, trimming, and weeding, to planting, painting, and litter control.

For more information call La Mesa Community Services at 619-667-1300.

Reap Benefits from Daily Activities

A moderate amount of physical activity is roughly equivalent to physical activity that uses approximately 150 Calories (kcal) of energy per day, or 1,000 Calories per week. This chart shows a variety of activities that you can incorporate into your daily physical activity schedule for a healthier lifestyle.
Chart is extracted from Promoting Physical Activity – A Guide for Community Action, U. S. Department of Health and Human Services, Human Kinetics 1999.

Less Vigorous More Time	Washing and waxing a car for 45-60 minutes
	Washing windows or floors for 45-60 minutes
	Playing volleyball for 45 minutes
	Playing touch football for 30-45 minutes
	Gardening for 30-45 minutes
	Wheeling self in wheelchair for 30-40 minutes
	Walking 1 ¾ miles in 35 minutes (20 min/mile)
	Basketball (shooting baskets) for 30 minutes
	Bicycling 5 miles in 30 minutes
	Dancing fast (social) for 30 minutes
	Pushing a stroller 1 ½ miles in 30 minutes
	Raking leaves for 30 minutes
	Walking 2 miles in 30 minutes (15 min/mile)
	Water aerobics for 30 minutes
	Swimming laps for 20 minutes
	Wheelchair basketball for 20 minutes
	Basketball (playing a game) for 15-20 minutes
	Bicycling 4 miles in 15 minutes
	Jumping rope for 15 minutes
	Running 1 ½ miles in 15 minutes (10 min/mile)
Less Time More Vigorous	Shoveling snow for 15 minutes
	Stairwalking for 15 minutes

SMOKE-FREE PARKS IN LA MESA

Section 9.08.074 of the La Mesa Municipal Code designates all City of La Mesa park facilities smoke-free environments. The new code took effect on August 10, 2006 and was announced at an unveiling of the new informational sign at the MacArthur Park playground. Look for these reminder signs in all City parks.

City officials and representatives from Communities Against Substance Abuse of East County unveiled the new signs designating La Mesa parks smoke-free.

Signs bearing this logo have been installed in all City parks.

Live a Healthy Life... Recreate!

La Mesa is a member of the Greater San Diego Recreation and Parks Coalition for Health and Wellness.

GRAND OPENING

LA MESA TEEN CENTER

The La Mesa Teen Center held grand opening festivities on October 18 and officially opened its doors to area teens on October 23, 2006. The center is located in Highwood Park, adjacent to La Mesa Middle School and serves City of La Mesa and surrounding area teens. The City has contracted with the Boys and Girls Club of East County to operate the facility. Activities in the 3,000 square foot facility will include after school programs, seasonal camp programs, and athletic activites. Amenities include computers, video games, a music recording room, kitchen facility, and study room. The Boys and Girls Club is also working with the La Mesa-Spring Valley School District to refurbish outdoor recreational facilities at the school site for use by Teen Center participants after school.

A portion of the La Mesa Teen Center modular structure being installed earlier this year.

SPRING 2007 ENRICHMENT SCHEDULE

PRE-ENROLLMENT REQUIRED - USE FORM ON PAGE 8.

Enroll online or by mail
November 6, 2006 through January 27, 2007.

Activities listed for February 5 through June 9, 2007.
See listings for individual class dates and times.

Youth Classes ~ Art

NEW. ANIMAL ART. Lions, tigers, and bears…OH MY! Create a marvelous menagerie of colorful creatures using a potpourri of mixed media. Try collage, mosaics, pen and ink, and more. Learn to paint without a brush. If you love animals, make this your pet project. A supply fee of $10 is payable to the instructor, Artist Alena Batson, at the first class.
➤ Location: MacArthur Room Contractor: Alena Batson FEE: $83 RES/$88 NON-RES

Wed	**5:00 - 6:00PM**	**6-12 yrs**	**Wed**	**5:00 - 6:00PM**	**6-12 yrs**
Feb 7 – Apr 4		#2000	Apr 11 – Jun 6		#2001

ART ENRICHMENT. ART ENRICHMENT. A variety of classes consisting of: portraits, florals, landscapes, designing note cards, paper-making, and crafts using various media such as pencil, pastels, watercolors, and collage. A $15 supplies fee is payable to the instructor, Artist Penny Quirk, at the first class.
➤ Location: Recreation Center Kitchen Contractor: Penny Quirk FEE: $90 RES/$95 NON-RES

Thu	**4:00 - 5:00PM**	**7-12 yrs**
Apr 12 – Jun 7		#2100

CARTOONING. Get the inside story on the art of cartooning. Practice drawing people and animals from head to toe (or paw). Experiment with humor and action. Sharpen your storytelling skills while creating original comic strips starring your own characters. Instructor Alena Batson has been an art educator for over 20 years. A $10 supply fee is payable to the instructor, Artist Alena Batson, at the first class.
➤ Location: MacArthur Room Contractor: Alena Batson FEE: $83 RES/$88 NON-RES

Wed	**6:00 – 7:00PM**	**6-12 yrs**	**Wed**	**6:00 – 7:00PM**	**6-12 yrs**
Feb 7 – Apr 4		#2200	Apr 11 – Jun 6		#2201

Activity fees are subject to change at any time per City Council direction.

AMERICANS WITH DISABILITIES ACT
The City of La Mesa encourages the participation of disabled individuals in the services, activities, and programs provided by the City. Individuals with disabilities who require reasonable accommodation in order to participate in our programs should contact the Classes and Events Supervisor at (619) 667-1333.

Youth Classes ~ Dance

BALLET. Tiny Tots: Basic ballet and tap is introduced with emphasis on coordination, musicality and rhythm. Basic moves are introduced and imagination is encouraged through activities such as skipping, marching, music interpretation, and tumbling. Students need to wear a leotard, tights, and ballet shoes to class – no specific color.
Ballet A: Basic technique is introduced. The emphasis is on coordination, musicality, and rhythm. Students are taught basic ballet positions as an introduction. Imagination is encouraged through activities such as skipping, marching, music interpretation, and tumbling. Students need to wear red tights, red leotard, and black ballet shoes.
Ballet B: The emphasis is basically the same as Ballet A but more terminology, positions, and movements are incorporated as the body and mind develop. Students need to wear red tights, red leotard and black ballet shoes.
Ballet C: The emphasis is the same as Ballet B but with more depth. Students need to wear pink tights, light blue leotard and pink ballet shoes.
Ballet D: Emphasis is similar to Ballet C with more depth and is preparation for Ballet I. Students need to wear pink tights, light blue leotard, and pink ballet shoes.
BALLET 1 & 2: Covers basic fundamentals and ballet technique including stretching, exercises at barre, center, & across the floor. Ballet I students need to wear pink tights, white leotard and pink ballet shoes. Instructor will have correct uniforms available for purchase.
Required dance clothing specified above can be purchased either through California Ballet or any dancewear shop.
NOTE: The All School Concert is June 1 – 2, 2007 at North Park Theater. All students are invited to participate. The registration fee is $50. Use of a costume, to be provided by California Ballet, is included. Tickets to the concert are $10 each pre-sale or $12 at the door. Participants must sign up for both sessions to participate in the All School Concert.
➤ Location: Performing Arts Room Contractor: California Ballet FEE: $65 RES/$70 NON-RES

Tue	**2:00 – 3:00PM**	**A 4 yrs w/exp. 5 yrs w/o exp.**
Feb 6 – Apr 3		#2300
Apr 10 – Jun 5		#2301
Tue	**3:00 - 4:00PM**	**B A 4 yrs w/exp. 5 yrs w/o exp.**
Feb 6 – Apr 3		#2302
Apr 10 – Jun 5		#2303
Tue	**4:00 - 5:00PM**	**D A 7 yrs w/exp. 8 yrs w/o exp.**
Feb 6 – Apr 3		#2304
Apr 10 – Jun 5		#2305
Tue	**5:00 - 6:00PM**	**1 & 2**
Feb 6 – Apr 3		#2306
Apr 10 – Jun 5		#2307
Thu	**2:00 - 3:00PM**	**Tiny Tots 3 yrs**
Feb 8 – Apr 5		#2308
Apr 12 – Jun 7		#2309
Thu	**3:00 - 4:00PM**	**A 4 yrs w/exp. 5 yrs w/o exp.**
Feb 8 – Apr 5		#2310
Apr 12 – Jun 7		#2311
Thu	**4:00 - 5:00PM**	**C A 6 yrs w/exp. 7 yrs w/o exp.**
Feb 8 – Apr 5		#2312
Apr 12 – Jun 7		#2313

NO REFUNDS.
There is a $10 fee for each requested change.

Holiday Open House

Come join the La Mesa Adult Enrichment Center

"Family of Friends"

Tuesday, December 19
10:00 AM – Noon

La Mesa Adult Enrichment Center
8450 La Mesa Boulevard
RSVP 619-464-0505
This is a free event!

Entertainment
Holiday Sing-a-Long with the Thursday Night Singers

Refreshments

Event sponsors:
Community Convalescent Hospital of La Mesa
Secure Horizons

New Year's Eve Party!

Sunday, December 31, 2006
8:00 PM until midnight

Live dance band – The Vidals

Sandwiches, salads, snacks,
non-alcoholic beverages, and dessert
Party favors and noisemakers

FUN! FUN! FUN!

La Mesa Adult Enrichment Center
8450 La Mesa Boulevard, La Mesa
$20 per ticket

Call 619-464-0505 for ticket info

Tickets go on sale late October.
Space is limited.
First come—first served.

Pay at the Adult Enrichment Center office or at the Friday Night Dance.

ITS GREAT TO BE A KID IN LA MESA

Kids Care Fest 2006 was held at Briercrest Park and the Dr. William C. Herrick Community Health Care Library on Saturday, September 30. More than 1100 children and their families participated in a day of hands-on art, science, theater, sports, safety, and health screenings. Joining the City of La Mesa as event co-sponsors were the Grossmont Healthcare District, La Mesa Park & Recreation Foundation, and La Mesa Arts Alliance.

The first 500 kids who attended received a free lunch sponsored by Ralph's Grocery Company. *Other event sponsors included: The San Diego Union-Tribune, Sharp Grossmont Hospital, EDCO Disposal, Golden Acorn Casino, North Island Credit Union, Cox Communications, La Mesa Athletic Council, Troy Glaus and Major League Baseball, La Mesa Rotary Club, and Friends of East County Arts. This annual event is offered free to the community.*

Looking for teen programs?
This symbol denotes classes suitable for teens or pre-teens.

Look for this symbol next to classes that provide physical activity benefits.

Youth Classes ~ Dance

TDC COMPANY — The Dance Company offers the opportunity to be a part of their national award winning competition company. Company members are selected and placed based on age, ability level, and level of competition desired. Whether you're a beginner or a pro, we have a place for you in our company. A strong emphasis is placed on personal achievement and team values, not on the size of the trophy. This is a year-long commitment with the season lasting from September to July. Please email thedanceco@cox.net for more information and to set up a tryout day and time.

THE DANCE COMPANY offers classes to boys and girls, ages 1½ and up, in tap, jazz, hip-hop, and many other dance disciplines. An emphasis is placed on self-confidence, self-discipline, poise, and coordination through music and movement. Many children will have performance opportunities. Please email thedanceco@cox.net if you have any questions regarding TDC classes or placement in appropriate levels. Visit www.tdcdance.net for more information about The Dance Company. **All classes will perform at the San Diego County Fair. Participants must enroll in both sessions to participate at Fair. Costume cost is approximately $40. Instructor will provide additional information in class.**

NEW. MOMMY DANCE WITH ME (ages 1½ - 2½). Introduce your child to dance and movement along side their best teacher… Mommy. Boys and girls will learn basic tap sounds and skills as well as basic ballet and across the room movement. Simple combinations to familiar children's songs will be taught for practice outside of the class.

➤ Location: West Terrace Contractor: The Dance Company FEE: $70 RES/$75 NON-RES

Tue	**11:30 – 12noon**	**1½-2½ yrs**	**Tue**	**11:30 – 12noon**	**1½-2½ yrs**
Feb 6 – Apr 3		#2400	Apr 10 – Jun 5		#2401

PRESCHOOL DANCE (ages 2½ - 4). Introduction to dance through movement, music, and fun. Children will learn basic tap, jazz, and ballet technique through creative activity and role-play. Class becomes more structured as age level increases. Both tap shoes and black ballet shoes are required. Black or pink dance attire must be worn. PS Dance II requires instructor approval to enroll.

➤ Location: West Terrace Room Contractor: The Dance Company FEE: $70 RES/$75 NON-RES

Tue	**10:00 - 10:30AM**	**Level I 2½-4 yrs**	**Sat**	**9:00 – 9:30AM**	**Level I 2½-4 yrs**
Feb 6 – Apr 3		#2402	Feb 10 – Apr 7		#2408
Apr 10 – Jun 5		#2403	Apr 14 – Jun 9		#2409
Thu	**10:30 – 11:00AM**	**Level I 2½-4 yrs**	**Sat**	**9:30 - 10:00AM**	**Level I 2½-4 yrs**
Feb 8 – Apr 5		#2404	Feb 10 – Apr 7		#2410
Apr 12 – Jun 7		#2405	Apr 14 – Jun 9		#2411
Thu	**11:00 – 11:30**	**Level I 2½-4 yrs**			No class Jun 2.
Feb 8 – Apr 5		#2406			
Apr 12 – Jun 7		#2407			

➤ Location: West Terrace Room Contractor: The Dance Company FEE: $90 RES/$95 NON-RES

Tue	**10:30 – 11:30AM**	**Level II 3-5 yrs**	**Sat**	**10:30 – 11:30AM**	**Level II 3-5 yrs**
Feb 6 – Apr 3		#2412	Feb 10 – Apr 7		#2416
Apr 10 – Jun 5		#2413	Apr 14 – Jun 9		#2417
Tue	**4:00 – 5:00PM**	**Level II 3-5 yrs**			No class Jun 2.
Feb 6 – Apr 3		#2414			
Apr 10 – Jun 5		#2415			

PLEASE NOTE: Classes may fill quickly. Please ask to be placed on a waiting list if you do not get a spot in the class desired. If time and demand warrant, a new class may be added.

MINI DANCE (ages 4 – 7). Children will learn tap, ballet, and jazz dance. Like PS Dance, children will learn dance and musicality in a fun and exciting manner. Stronger focus will be placed on proper body position and technical skill. Stretching and flexibility will be introduced as well as performance skills. Black or pink dance attire must be worn. Both black tap shoes and black jazz shoes are required. Mini Dance II requires instructor approval to enroll.

➤ Location: Nan Couts Cottage Contractor: The Dance Company FEE: $70 RES/$75 NON-RES

Mon	**3:00 – 3:30PM**	**Level I 4-7 yrs**	**Mon**	**3:00 – 3:30PM**	**Level I 4-7 yrs**
Feb 5 – Apr 2		#2418	Apr 9 – Jun 4		#2419

➤ Location: West Terrace Room Contractor: The Dance Company FEE: $70 RES/$75 NON-RES

Sat	**10:00 - 10:30AM**	**Level I 4-7 yrs**	**Sat**	**10:00 - 10:30AM**	**Level I 4-7 yrs**
Feb 10 – Apr 7		#2420	Apr 14 – Jun 9		#2421
					No class Jun 2.

➤ Location: West Terrace Room Contractor: The Dance Company FEE: $90 RES/$95 NON-RES

Thu	**4:30 – 5:30PM**	**Level II 4-7 yrs**	**Sat**	**12Noon – 1:00PM**	**Level II 5-8 yrs**
Feb 8 – Apr 5		#2422	Feb 10 – Apr 7		#2424
Apr 12 – Jun 7		#2423	Apr 14 – Jun 9		#2425
					No class Jun 2.

MINI AND JUNIOR COMPANY (ages 4 – 7 yrs.) Children who have demonstrated advanced skill in tap and/or jazz will be invited to participate in these classes. Children will perform in all company recitals and performances as well as have the opportunity to compete locally if desired. Please email thedanceco@cox.net for tryout information.

TAP (ages 6 & up). Children will learn basic steps, rhythms, and combinations as well as musicality and agility following the outline set in the Al Gilbert tap syllabus. Tap shoes and proper dance attire are required. It is strongly recommended that tap classes be taken concurrently with jazz classes. Some Level II and all Level III and IV classes are competitive. *Instructor approval required to enroll in any Tap II, III, or IV level classes. Instructor reserves the right to reclassify children at instructor's discretion.

➤ Location: West Terrace Room Contractor: The Dance Company FEE: $90 RES/$95 NON-RES

Wed	**3:00 – 4:00PM**	**MiniTap II 6-8 yrs**	**Thu**	**6:00 – 7:00PM**	**Jr.Tap II 8-11 yrs**
Feb 7 – Apr 4		#2426	Feb 8 – Apr 5		#2428
Apr 11 – Jun 6		#2427	Apr 12 – Jun 7		#2429

➤ Location: Nan Couts Cottage Contractor: The Dance Company FEE: $90 RES/$95 NON-RES

Mon	**4:30 – 5:30PM**	**Jr.Tap III 9-14 yrs**	**Mon**	**4:30 – 5:30PM**	**Jr.Tap III 9-14 yrs**
Feb 5 – Apr 2		#2430	Apr 9 – Jun 4		#2431

➤ Location: West Terrace Room Contractor: The Dance Company FEE: $90 RES/$95 NON-RES

Mon	**7:30 – 8:30PM**	**Tn.Tap IV 11-15 yrs**
Feb 5 – Apr 2		#2432
Apr 9 – Jun 4		#2433

Youth Classes ~ Dance

JAZZ (ages 6 & up). Children will learn basic steps, isolations, turns, leaps, and across-the-floor progressions of jazz dance. As level increases, flexibility and strength are emphasized in conjunction with more difficult turns and sequences. Jazz shoes and proper dance attire are required. **It is strongly recommended that tap classes be taken concurrently with jazz classes. Some Level II and all Level III and IV classes are competitive and students must have instructor approval to enroll. Instructor reserves the right to reclassify children at instructor's discretion.

➤ Location: Performing Arts Room Contractor: The Dance Company FEE: $90 RES/$95 NON-RES

Wed	**4:00 – 5:00PM**	**Mini Jazz II 6-8 yrs**	**Wed**	**5:00 – 6:00PM**	**Jr. Jazz II 8 – 11 yrs**
Feb 7 – Apr 4		#2434	Feb 7 – Apr 4		#2436
Apr 11 – Jun 6		#2435	Feb 11 – Jun 6		#2437

➤ Location: West Terrace Room Contractor: The Dance Company FEE: $90 RES/$95 NON-RES

Tue	**5:00 - 6:00PM**	**Jr. Jazz III 9-14 yrs**	**Tue**	**5:00 - 6:00PM**	**Jr. Jazz III 9-14 yrs**
Feb 6 – Apr 3		#2438	Apr 10 – Jun 5		#2439

➤ Location: Performing Arts Room Contractor: The Dance Company FEE: $90 RES/$95 NON-RES

Tue	**7:30 – 8:30PM**	**Tn Jazz IV 11-15 yrs**	**Tue**	**7:30 – 8:30PM**	**Tn Jazz IV 11-15 yrs**
Feb 6 – Apr 3		#2440	Apr 10 – Jun 5		#2441

HIP-HOP (ages 4 & up). The "coolest" and most contemporary of dance styles, hip-hop encourages self-expression through freedom of movement. Children will learn how to dance to the beat and be funky! Age appropriate music will be used in class. Children should wear tennis or dance shoes and comfortable clothing. Younger children may enroll in more advanced classes with instructor approval.

➤ Location: Nan Couts Cottage Contractor: The Dance Company FEE: $70 RES/$75 NON-RES

Mon	**3:30 – 4:00PM**	**Hip-Hop I 4-7 yrs**	**Mon**	**3:30 – 4:00PM**	**Hip-Hop I 4-7 yrs**
Feb 5 – Apr 2		#2442	Apr 9 – Jun 4		#2443

➤ Location: West Terrace Room Contractor: The Dance Company FEE: $70 RES/$75 NON-RES

Sat	**11:30 – 12noon**	**Hip-Hop I 4-7 yrs**	**Thu**	**7:00 - 7:30PM**	**Jr. Hip-Hop 8-13 yrs**
Feb 10 – Apr 7		#2444	Feb 8 – Apr 5		#2448
Apr 14 – Jun 9		#2445	Apr 12 – Jun 7		#2449
		No class Jun 2.			
Thu	**4:00 - 4:30PM**	**Hip-Hop II 5-7 yrs**			
Feb 8 – Apr 5		#2446			
Apr 12 – Jun 7		#2447			

NEED IMMEDIATE CONFIRMATION?

Enroll online at www.cityoflamesa.com

Click on Recreation Classes, scroll down and click on the Register Online icon leading you to our class schedule on Active.com

NO REFUNDS.

There is a $10 fee for each requested change.

ROLANDO PARK GETS A NEW PLAYGROUND

In October, the City proudly opened a new playground in Rolando Park. The playground site was relocated to a lower portion of the park to provide greater accessibility and visibility for park users. Utilizing a grant from the California Integrated Waste Management Board, resilient rubber surfacing manufactured from California waste tires was installed underneath the equipment. This "green project" provides an enhanced recreational facility for the neighborhood and helps divert waste tires from the landfill, making it environmentally friendly as well. Our thanks go to residents of the surrounding neighborhood who provided input for the project.

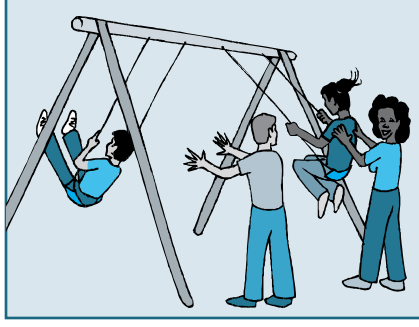

Planning a child's party?

Save wear and tear on your house - use ours.

Nan Couts Cottage

Perfect for parties of up to 100 people

Features: tile floor, fenced patio access, kitchen, and fireplace.

Front lawn has room for games,relays and party jumps.

Park playground adjacent to the facility.

Call 619-667-1307 for details and availability.

After School Reading Program

LA MESA DALE ELEMENTARY

WHO DO WE NEED?	Teen volunteers like you!
WHAT WOULD YOU DO?	Read to 2nd through 4th grade students after school.
WHEN?	Fridays from 3:15 to 3:45 PM
WHY?	To help kids read and to make a difference in their lives!
INTERESTED?	Need more info? Call Michele Greenberg-McClung at 619-667-1333.

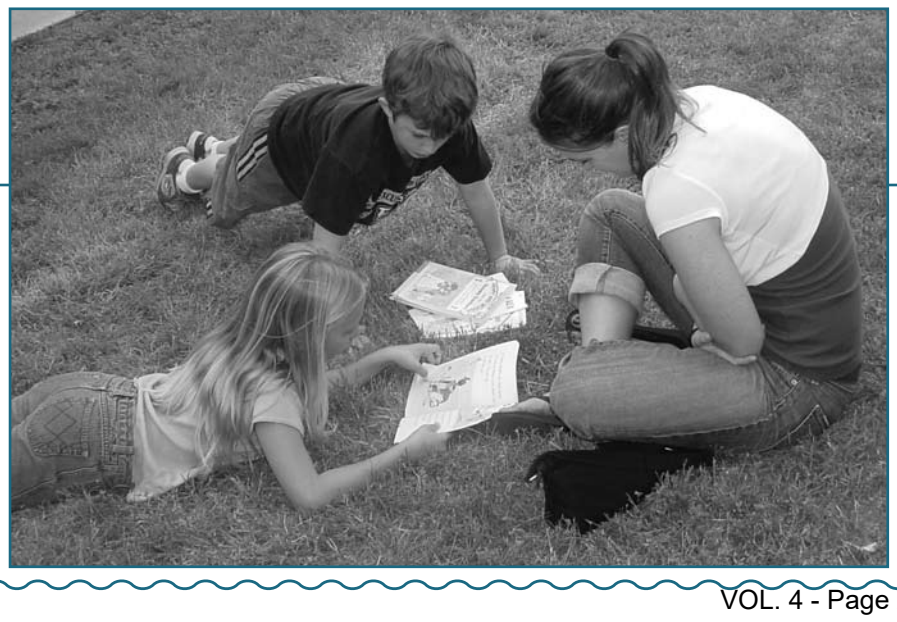

Youth Classes ~ Gymnastics

BOYS GYMNASTICS. Includes basic tumbling skills - cartwheels, rolls and handstands.
➤ Location: West Terrace Room Contractor: GymTrix FEE: $70 RES/$75 NON-RES

Mon	**4:30 - 5:00PM**	**4-6 yrs**	**Mon**	**4:30 - 5:00PM**	**4-6 yrs**
Feb 5 – Apr 2		#2500	Apr 9 – Jun 4		#2501

?Location: West Terrace Room Contractor: GymTrix FEE: $80 RES/$85 NON-RES

Mon	**5:00 - 6:00PM**	**7 yrs & up**	**Mon**	**5:00 - 6:00PM**	**7 yrs & up**
Feb 5 – Apr 2		#2502	Apr 9 – Jun 4		#2503

GYMNASTICS. Beginning I - beginning skills taught for ages 5 and up - no prerequisites for this class. Beginning II - must be able to do forward & backward straddle rolls, handstands, cartwheels & round-offs. Intermediate I - must have mastered front & back straddle rolls, both side cartwheels, one-arm cartwheels, roundoffs & handstands over into a backbend. Intermediate II - must have mastered Beginning & Intermediate I skills plus have a mastery of front limbers & backbend kickovers. Advanced I - mastered front walkovers & back walkovers. NOTE: Classes #2606, #2607, #2608, #2609, #2610, and #2611 need instructor approval, and will need "Release of Liability" completed and returned at the first class. **Classes #2606, #2607, #2608, #2609, #2610, & #2611 must sign up for both sessions and will perform at the San Diego County Fair. Costume cost approximately $30 - $45.**
➤ Location: Performing Arts Room Contractor: GymTrix FEE: $80 RES/$85 NON-RES

Sat	**11:15-12:15PM**	**Beg I 5 yrs & up**	**Sat**	**12:15-1:15PM**	**Beg II 5 yrs & up**
Feb 10 – Apr 7		#2600	Feb 10 – Apr 7		#2602
Apr 14 – Jun 16		#2601	Apr 14 – Jun 16		#2603
		No class Jun 2.			No class Jun 2.

➤ Location: Performing Arts Room Instructor: Tricia Ochs FEE: $65 RES/$70 NON-RES

Fri	**4:05-5:05PM**	**Beg I/II 6 yrs & up**	**Fri**	**4:05-5:05PM**	**Beg I/II 6 yrs & up**
Feb 9 – Apr 6		#2604	Apr 13 – Jun 8		#2605

➤ Location:Performing Arts Room Instructor: Tricia Ochs FEE: $80 RES/$85 NON-RES

Mon	**5:15-6:15PM**	**Int I**	**Fri**	**6:15-7:15PM**	**Adv II & III**
Feb 5 – Apr 2		#2606	Feb 9 – Apr 6		#2610
Apr 9 – Jun 4		#2607	Apr 13 – Jun 8		#2611
Fri	**5:10 – 6:10PM**	**Int II/Adv I**			
Feb 9 – Apr 6		#2608			
Apr 13 – Jun 8		#2609			

KINDERGYM. This ½ hour gymnastic class will go over elementary gymnastic skills on the floor, low balance beam and junior bar. Level II requires instructor approval to enroll.
➤ Location: Performing Arts Room Contractor: GymTrix FEE: $70 RES/$75 NON-RES

Mon	**11:00 - 11:30AM**	**I 3-4 yrs**	**Sat**	**10:15 - 10:45AM**	**I 3-4 yrs**
Feb 5 – Apr 2		#2700	Feb 10 – Apr 7		#2704
Apr 9 – Jun 4		#2701	Apr 14 – Jun 16		#2705
Wed	**11:00 - 11:30AM**	**I 3-4 yrs**			No class Jun 2.
Feb 7 – Apr 4		#2702	**Sat**	**10:45 - 11:15AM**	**I 3-4 yrs**
Apr 11 – Jun 6		#2703	Feb 10 – Apr 7		#2706
			Apr 14 – Jun 16		#2707
					No class Jun 2.

PARENT & TOT GYM. Introduces gymnastics skills. Games are used to aid in the development of motor skills & interaction with other toddlers. Parent participation is required.
➤ Location: Performing Arts Room Instructor: Tricia Ochs FEE: $33 RES/$38 NON-RES

Tue	**10:00 - 10:30AM**	**1-2 yrs**	**Thu**	**10:00 - 10:30AM**	**1-2 yrs**
Feb 6 – Apr 3		#2800	Feb 8 – Apr 5		#2804
Apr 10 – Jun 5		#2801	Apr 12 – Jun 7		#2805
Tue	**10:35 - 11:05AM**	**2-3 yrs**	**Thu**	**10:35 - 11:05AM**	**2-3 yrs**
Feb 6 – Apr 3		#2802	Feb 8 – Apr 5		#2806
Apr 10 – Jun 5		#2803	Apr 12 – Jun 7		#2807

PRE-GYMNASTICS. Exposure to gymnastic equipment, basic tumbling skills, coordination, flexibility and balance. Classes #2912, #2913, #2914, & #2915 must have instructor approval, must sign up for both sessions, and will perform at the San Diego County Fair. Costume cost is approximately $30.
➤ Location: Performing Arts Room Instructor: Tricia Ochs FEE: $33 RES/$38 NON-RES

Mon	**3:00 - 3:30PM**	**Level I 3-4 yrs**	**Tue**	**11:45 - 12:15PM**	**Level I 4-6 yrs**
Feb 5 – Apr 2		#2900	Feb 6 – Apr 3		#2906
Apr 9 – Jun 4		#2901	Apr 10 – Jun 5		#2907
Mon	**3:35 - 4:05PM**	**Level I 4-6 yrs**	**Thu**	**11:10 - 11:40AM**	**Level I 3-4 yrs**
Feb 5 – Apr 2		#2902	Feb 8 – Apr 5		#2908
Apr 9 – Jun 4		#2903	Apr 12 – Jun 7		#2909
Tue	**11:10 - 11:40AM**	**Level I 3-4 yrs**	**Thu**	**11:45 - 12:15PM**	**Level I 4-6 yrs**
Feb 6 – Apr 3		#2904	Feb 8 – Apr 5		#2910
Apr 10 – Jun 5		#2905	Apr 12 – Jun 7		#2911

➤ Location:Performing Arts Room Instructor: Tricia Ochs FEE: $48 RES/$53 NON-RES

Fri	**3:30 - 4:00PM**	**Level II 4-6 yrs**	**Fri**	**3:30 - 4:00PM**	**Level II 4-6 yrs**
Feb 9 – Apr 6		#2912	Apr 13 – Jun 8		#2913

➤ Location: Performing Arts Room Instructor: Tricia Ochs FEE: $80 RES/$85 NON-RES

Mon	**4:10 - 5:10PM**	**Level III 4-7 yrs**	**Mon**	**4:10 - 5:10PM**	**Level III 4-7 yrs**
Feb 5 – Apr 2		#2914	Apr 9 – Jun 4		#2915

TUMBLING FOR CHEER. This class is geared toward students wanting to learn tumbling for cheer, such as handsprings, tucks, and aerials.
➤ Location: West Terrace Room Contractor:GymTrix FEE: $80 RES/$85 NON-RES

Mon	**3:30 - 4:30PM**	**9-16 yrs**	**Mon**	**6:00 - 7:00PM**	**9-16 yrs**
Feb 5 – Apr 2		#3000	Feb 5 – Apr 2		#3002
Apr 9 – Jun 4		#3001	Apr 9 – Jun 4		#3003

WEE GYM. A half-hour parent participation gymnastic class. Students and parents will go over basic gymnastic skills as well as games. Parent participation required.
➤ Location: Performing Arts Room Contractor:GymTrix FEE: $70 RES/$75 NON-RES

Mon	**10:00 - 10:30AM**	**1-2 yrs**	**Sat**	**9:00 - 9:30AM**	**1-2 yrs**
Feb 5 – Apr 2		#3100	Feb 10 – Apr 7		#3108
Apr 9 – Jun 4		#3101	Apr 14 – Jun 16		#3109
Mon	**10:30 - 11:00AM**	**2-3 yrs**			No class Jun 2.
Feb 5 – Apr 2		#3102	**Sat**	**9:30 - 10:00AM**	**2-3 yrs**
Apr 9 – Jun 4		#3103	Feb 10 – Apr 7		#3110
Wed	**10:00 - 10:30AM**	**2-3 yrs**	Apr 14 – Jun 16		#3111
Feb 7 – Apr 4		#3104			No class Jun 2.
Apr 11 – Jun 6		#3105			
Wed	**10:30 - 11:00AM**	**1-2 yrs**			
Feb 7 – Apr 4		#3106			
Apr 11 – Jun 6		#3107			

Youth Classes ~ Specialty

NEW. TODDLERS TANGO/BABIES BOOGIE. A creative music and movement class. The children will sing and dance to music from around the world. We use instruments and props to enhance the lyrics and invite movement. Come and join the fun. Let's use our imaginations! [A class demo will be held at 11:45 AM on March 30 in the West Terrace Room.]
➤ Location: West Terrace Room Contractor: Kendra Brownsberger FEE: $90 RES/$95 NON-RES

Mon	**9:45 – 10:30AM**	**2-5 yrs**	**Fri**	**10:50 – 11:35PM**	**2-5 yrs**
Feb 5 – Apr 2		#3200	Feb 9 – Apr 6		#3204
Apr 9 – Jun 4		#3201	Apr 13 – Jun 8		#3205
Fri	**10:00 – 10:45AM**	**8 mos-24 mos**			
Feb 9 – Apr 6		#3202			
Apr 13 – Jun 8		#3203			

NEW. DRAMA FUN. For ages 3 – 5 years. Children love the world of make-believe! In this class children will use their imaginations to express themselves through voice and body. They will play simple acting games and practice imitative skills. Children should wear clothing that allows for easy movement.
➤ Location: West Terrace Room Contractor: Eva Kvaas FEE: $45 RES/$50 NON-RES

Wed	**1:00 – 1:30PM**	**3-5 yrs**	**Thu**	**9:45 – 10:15AM**	**3-5 yrs**
Feb 7 – Apr 4		#3300	Apr 12 – Jun 6		#3301

NEW. ACT IT OUT! For ages 5 – 7 years. Play acting is great fun and gives children an opportunity to express themselves. In this class young actors will play drama games and learn acting exercises. Each week they will hear a story and get a chance to act it out. On the last day of class young actors will have the opportunity to demonstrate their talents for family and friends. Young actors should wear clothing that allows for easy movement.
➤ Location: Nan Couts Cottage Contractor: Eva Kvaas FEE: $67 RES/$72 NON-RES

Wed	**3:15 - 4:15PM**	**5-7 yrs**	**Wed**	**3:15 - 4:15PM**	**5-7 yrs**
Feb 7 – Apr 4		#3304	Apr 11 – Jun 6		#3305

NEW. JUNIOR ACTING. For ages 8-12 years. Young actors of different levels will have the opportunity to develop their acting skills through scene work and improvisation. Using a variety of drama exercises, games, and techniques they will work on vocal clarity, stage movement and creating a believable character. Young actors will practice improvisation as well as perform scenes in class from a variety of childrens' plays. Young actors should wear clothing that allows for easy movement. At last class the young actors will put on a performance for family and friends.
➤ Location: Nan Couts Cottage Contractor Eva Kvaas FEE: $67 RES/ $72 NON-RES

Wed	**4:15 – 5:15PM**	**8-12 yrs**	**Wed**	**4:15 – 5:15PM**	**8-12 yrs**
Feb 7 – Apr 4		#3306	Apr 11 – Jun 6		#3307

FUN WITH PHONICS. A is for alphabet and F is for fun! Children ages 4 and up can acquire great pre-reading skills through games, books, puzzles, flash cards, and crafts. Come have fun learning the alphabet. This class is not parent participation. Participants must be minimum age by first day of class.
➤ Location: Nan Couts Cottage Instructor: Debbie Schlerf FEE: $54 RES/$59 NON-RES

Wed	**11:35AM - 12:35PM**	**4 yrs & up**	**Thu**	**11:35AM - 12:35PM**	**4 yrs & up**
Feb 7 – Apr 4		#3400	Feb 8 – Apr 5		#3402
Apr 11 – Jun 6		#3401	Apr 12 – Jun 7		#3403

MISH MASH FUN. A fun new class featuring different exciting activities each week. We will be exploring music, arts and crafts, animals, cooking, and much more. Come join the fun. All supplies are included in the class fee.
➤ Location: Nan Couts Cottage Instructor: Debbie Schlerf FEE: $59 RES/$64 NON-RES

Mon	**11:35 – 12:35PM**	**4 – 5 yrs**	**Mon**	**11:35 – 12:35PM**	**4 – 5 yrs**
Feb 5 – Apr 2		#3500	Apr 9 – Jun 4		#3501

SAY & PLAY IN ESPANOL. Parent and child join this class together to learn basic Spanish skills and introduce a second language into the child's life. Parents will learn Spanish words and phrases to use with their child. The activities are introduced in a fun setting using traditional songs, stories and games. Younger siblings are welcome to attend. Fee is for adult and child in immediate family.
➤ Location: Fire Station 12 (8844 Dallas Street) Contractor: Alicia Bianchi FEE: $63 RES/$68 NON-RES

Tue	**1:15 - 2:00PM**	**9 mos –5 yrs**	**Tue**	**1:15 - 2:00PM**	**9 mos –5 yrs**
Feb 6 – Apr 3		#3600	Apr 10 – Jun 5		#3601

SIGN, SING, & PLAY! American Sign Language class for babies. This is the same class you have seen featured again and again on Fox 6 News, KPBS Full Focus, KUSI News and 10 News in the Morning and it was also rated "Best Parenting Class" in The Lila Guide! More than just a play class, Sign, Sing, and Play was developed by Monta Briant, best selling author of Baby Sign Language Basics and Sign, Sing, and Play, to help parents bond with their babies and open a window into babies' minds and personalities. Parents and children learn effective two-way communication using a fun and simple combination of play, music, and American Sing Language signs. Our weekly themed class engages the whole child by including signs in activities that stimulate social, cognitive, language, and motor development. Fun group activities and one-on-one interactions between parents and children make it easy to remember the new signs, concepts, and strategies introduced each week. You'll have fun playing with your baby and making new friends in this relaxed, semi-structured class. Our small intimate classes ensure plenty of one-on-one attention from your certified Sign2Me instructor and we offer separate classes for babies and toddlers. Most babies will begin using their first sign by the end of the 9-week series and will go on to learn many more! Come Sign, sing, and Play with us! Fee includes handouts and book (Spanish or English).
➤ Location: Fire Station 12 (8844 Dallas Street) Contractor: Monta Briant FEE: $145 RES/$150 NON-RES

Mon	**9:00 – 9:45**	**6-24 mos**	**Mon**	**10:00 – 10:45AM**	**6-24 mos**
Feb 5 – Apr 2		#3700	Feb 5 – Apr 2		#3702
Apr 9 – Jun 11		#3701	Apr 9 – Jun 11		#3703

➤ Location: Fire Station 12 (8844 Dallas Street) Contractor: Noreen Cabrara FEE: $145 RES/$150 NON-RES

Sat	**9:00 - 9:45AM**	**6-24 mos**	**Sat**	**10:00 - 10:45AM**	**6-24 mos**
Feb 10 – Apr 7		#3704	Feb 10 – Apr 7		#3706
Apr 14 – Jun 9		#3705	Apr 14 – Jun 9		#3707
		Class will meet on Jun 2.			Class will meet on Jun 2.

Parent workshops:
#3700, #3702, #3704, & #3706 Tuesday, Feb 6 7:00 - 8:30 PM at Fire Station 12, 8844 Dallas St.
#3701, #3703, #3705 and #3707 Tuesday, Apr 10 7:00 - 8:30 PM at Fire Station 12, 8844 Dallas St.

SMALL FRIENDS. This class is for pre-school age children. Children learn social skills while participating in group activities, arts and crafts, story time, music, outdoor activities, holiday activities and much more. This is not a parent participation class; however, parents will be asked to participate at specific times. Individual parents will be requested to supply a snack for the entire class one time during the session. Participants must be minimum age by first day of class and must be potty trained. All participants are expected to have current immunizations.
➤ Location: Nan Couts Cottage Instructor: Debbie Schlerf FEE: $108 RES/$113 NON-RES

Tue	**9:00 - 11:30AM**	**3-4 yrs**	**Mon**	**9:00 - 11:30AM**	**4-5 yrs**
Feb 6 – Apr 3		#3800	Feb 5 – Apr 2		#3804
Apr 10 – Jun 5		#3801	Apr 9 – Jun 4		#3805
Thu	**9:00 - 11:30AM**	**3-4 yrs**	**Wed**	**9:00 - 11:30AM**	**4-5 yrs**
Feb 8 – Apr 5		#3802	Feb 7 – Apr 4		#3806
Apr 12 – Jun 6		#3803	Apr 11 – Jun 6		#3807

Sun Valley
The Friendliest Course A-Round

7 AM to dark Mon thru Fri
$8 for 9 holes
$12 for 18 holes

6:30 AM to dark Sat & Sun
$10 for 9 holes
$14 for 18 holes

Clinics, lessons, and special programs are available.

Sun Valley Golf Course
5080 Memorial Dr., La Mesa, CA 91941
619-466-6102

For additional details visit our website at: www.sunvalleygolfclub.com

Youth Classes – Sports

NEW. TOTAL BODY WORKOUT FOR MOM AND BABY. Do you want to exercise but don't have childcare? This Total Body Workout is the answer for you! The workout includes yoga, pilates and strength training. It's a great way to exercise and bond with your baby. Class is for a parent and infant (up to 18 months) who will not crawl away. Bring your own yoga mat and wear sturdy shoes.

➤ Location: Performing Arts Room Contractor: Fit X San Diego FEE: $64 RES/$69 NON-RES

Fri	**9:00-10:00AM**	**Adult/Infant**	**Fri**	**9:00-10:00AM**	**Adult/Infant**
Feb 9 – Apr 6		#1300	Apr 13 – Jun 8		#1301

TENNIS. Beginning, Advanced/Beginning, Intermediate, and Advanced tennis classes for boys & girls - bring tennis racquet & one unopened can of tennis balls to class. Advanced level must have instructor approval to enroll. During rainy weather only, please call 667-1332 only for class updates. For other class info call 619-667-1300.

➤ Location: La Mesita Park Contractor: Tom Draffan FEE: $63 RES/$68 NON-RES

Tue	**5:00 - 6:00PM**	**Beg 9 yrs & up**	**Thu**	**5:00 - 6:00 PM**	**Int 9 yrs & up**
Feb 6 – Apr 3		#3900	Feb 8 – Apr 5		#3904
Apr 10 – Jun 5		#3901	Apr 12 – Jun 7		#3905
Tue	**6:00 - 7:00PM**	**Adv/Beg 9 yrs & up**	**Thu**	**6:00 -7:00 PM**	**Adv 9 yrs & up**
Feb 6 – Apr 3		#3902	Feb 8 – Apr 5		#3906
Apr 10 – Jun 5		#3903	Apr 12 – Jun 7		#3907

SATURDAY TENNIS CLASSES

➤ Location: La Mesita Park Contractor: Nathan Welden, USPTA Certified FEE: $63 RES/$68 NON-RES

Sat	**9:00 - 10:00AM**	**Beg/AdvBeg 9 yrs & up**	**Sat**	**10:00 - 11:00AM**	**Int 12 yrs & up**
Feb 10 – Apr 7		#3908	Feb 10 – Apr 7		#3910
Apr 14 – Jun 9		#3909	Apr 14 – Jun 9		#3911

TINY SPORTS. Children will learn basic skills in soccer, tee-ball, and basketball. This class will include games, stretching, motor skills, teamwork, and sportsmanship. Adult involvement is welcome as team helpers. Children of all ability levels will play and learn together. During rainy weather only, call 619-667-1332 for class updates.

➤ Location: Aztec Park (Aztec and Morocco Drive) Contractor: Alicia Bianchi FEE: $60 RES/$65 NON-RES

Thu	**9:15 - 10:00AM**	**2½-3 yrs**	**Thu**	**10:05 - 10:50AM**	**4-5 yrs**
Feb 8 – Apr 5		#4000	Feb 8 – Apr 5		#4002
Apr 12 – Jun 7		#4001	Apr 12 – Jun 7		#4003

ICE SKATING. All ice skating classes will be held at the Salvation Army, Ray & Joan Kroc Corps Community Center, 6737 University Avenue, San Diego. Please dress warmly with gloves or mittens. Skate rental is included in class fee.

FEE: FOR ALL CLASSES AT THE KROC CENTER $88 RES/$93 NON-RES

PARENT & ME ICE SKATING. Learn to skate with your child. For parents and children 3 - 5 years of age.

Wed	**5:45 - 6:15PM**	**3-5 yrs**	**Sat**	**12:30 - 1:00PM**	**3-5 yrs**
Feb 28 – Apr 18		#4100	Mar 3 – Apr 21		#4104
Apr 25 – Jun 13		#4101	Apr 28 – Jun 16		#4105
Fri	**10:30 - 11:00AM**	**3-5 yrs**			
Mar 2 – Apr 20		#4102			
Apr 27 – Jun 15		#4103			

TOTS ICE SKATING. This course introduces the 3 to 5-year old skater to the ice through fun and games.

Mon	**4:30 - 5:00PM**	**3-5 yrs**	**Fri**	**4:30 - 5:00PM**	**3-5 yrs**
Feb 26 – Apr 16		#4106	Mar 2 – Apr 20		#4110
Apr 23 – Jun 11		#4107	Apr 27 – Jun 15		#4111
Wed	**5:45 - 6:15PM**	**3-5 yrs**	**Sat**	**12:30 - 1:00PM**	**3-5 yrs**
Feb 28 – Apr 18		#4108	Mar 3 – Apr 21		#4112
Apr 25 – Jun 13		#4109	Apr 28 – Jun 16		#4113

TOTS HOCKEY. This course continues teaching ice hockey skating fundamentals to skaters who have completed Tots Ice Skating. Class is for ages 3 to 5 years.

Wed	**5:45 - 6:15PM**	**3-5 yrs**	**Wed**	**5:45 - 6:15PM**	**3-5 yrs**
Feb 28 – Apr 18		#4114	Apr 25 – Jun 13		#4115

BEGINNING HOCKEY. This introductory course teaches ice hockey and skating skills for beginners age 5 and up. Forward and backward skating, form turns, glides and hockey stops will be taught.

Wed	**6:15 - 6:45PM**	**5 yrs & up**	**Wed**	**6:15 - 6:45PM**	**5 yrs & up**
Feb 28 – Apr 18		#4116	Apr 25 – Jun 13		#4117

BEGINNING FIGURE SKATING. Discover the sport of figure skating for ages 6 to 13 years. Geared toward the older beginner, this course includes the fundamentals of forward and backward skating, stopping, turns and spins.

Mon	**4:30 - 5:00PM**	**6-13 yrs**	**Fri**	**4:30 - 5:00PM**	**6-13 yrs**
Feb 26 – Apr 16		#4118	Mar 2 – Apr 20		#4122
Apr 23 – Jun 11		#4119	Apr 27 – Jun 15		#4123
Wed	**5:45 - 6:15PM**	**6-13 yrs**	**Sat**	**12:30 - 1:00PM**	**6-13 yrs**
Feb 28 – Apr 18		#4120	Mar 3 – Apr 21		#4124
Apr 25 – Jun 13		#4121	Apr 28 – Jun 16		#4125

ADULT SKATING CLUB. See listing under Adult Classes - Fitness & Sports.

ACTIVITY FEES ARE SUBJECT TO CHANGE AT ANY TIME PER CITY COUNCIL DIRECTION.

NO REFUNDS.
There is a $10 fee for each requested change.

NEED IMMEDIATE CONFIRMATION?

Enroll online at www.cityoflamesa.com

Click on Recreation Classes, scroll down and click on the Register Online icon leading you to our class schedule on Active.com

AMERICANS WITH DISABILITIES ACT

The City of La Mesa encourages the participation of disabled individuals in the services, activities, and programs provided by the City. Individuals with disabilities who require reasonable accommodation in order to participate in our programs should contact the Classes and Events Supervisor at (619) 667-1333.

Teen Communication Committee – Developers of Teen Scene

Visit Teen Scene

A website designed by teens and for teens!

Find out about: *Volunteer opportunities, Restaurant Raves, Fashion Craze, Important phone numbers, Teen Reel, and more at……..*

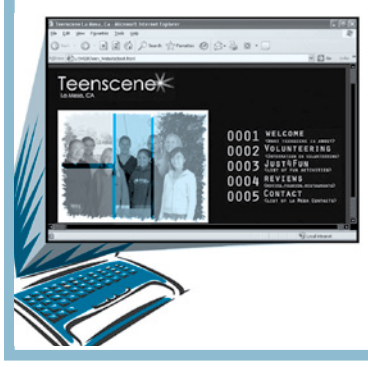

www.cityoflamesa.com/teen

e-mail us at lmteens@ci.la-mesa.ca.us

Need more information on Teen Scene or want to become a reviewer?

Contact Michele Greenberg-McClung at 619-667-1333.

Good Outdoor La Mesa Fun!

Free Youth Golf Clinic • La Mesa Residents Only

Saturday, March 17 , 2007 at 3:00 PM

Name:_____

Address:_____

Phone: _____

Complete this coupon and return to: Sun Valley Golf Club
5080 Memorial Dr., La Mesa CA 91941
Space is limited. Register now!

LA MESA RESIDENTS ONLY AGES 6 TO 16

Skate Mesa Skate Park, 8881 Dallas Street, La Mesa

CIRCLE ONE!

SATURDAY, JANUARY 13, 2007 OR
SATURDAY, MARCH 24, 2007

11:00 AM to 12:00 NOON (Sign in10:30 AM*)

Name:_____ Age: _____

Address:_____

Phone: _____ Session Time: _____

Complete this coupon and return to:
Attn: Skateboard Clinic, East County Family YMCA
8881 Dallas Street, La Mesa CA 91942

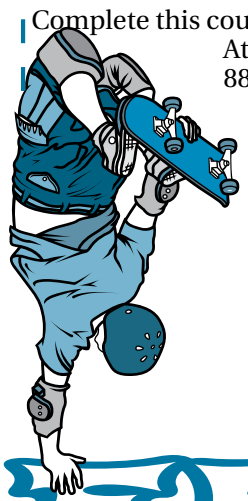

Space is limited to first 20 coupons received for each session.

Participants must bring own skateboard, helmet, elbow and knee pads.

Parent/guardian required to sign participants in and complete medical release documents immediately prior to the clinic.

Skate Mesa is a City of La Mesa recreational facility operated in partnership with the East County Family YMCA.

FREE YOUTH SKATEBOARD CLINIC

Adult Classes ★ Dance

BELLY DANCING I (Beg). Want to improve posture & muscle tone in a low-impact environment? Want to learn to move gracefully? Then Belly Dancing is for you! This ancient & creative form of dance is perfect for women of all sizes & shapes, regardless of your current fitness level. Classes include stretching, basic belly dance moves, some history of belly dance, and costuming suggestions. Wear comfortable clothes that you can move around in & come join the fun!
BELLY DANCING II (Adv). Using the movements learned in Belly Dance I as a foundation, new moves and combinations will be added. Finger cymbals (zills) and basic rhythms will be introduced. Must have taken Belly Dance I. Please bring a veil and zills.

➤ Location: West Terrace Room Contractor: Rebecca Long FEE:$45 RES/$50 NON-RES

Wed	**6:30 - 7:30 PM**	**I-15 yrs & up**	**Wed**	**6:30 - 7:30 PM**	**I-15 yrs & up**
Feb 7 – Apr 4		#1000	Apr 11 – Jun 6		#1001

➤ Location: West Terrace Room Contractor: Rebecca Long FEE:$53 RES/$58 NON-RES

Wed	**7:30 - 8:30PM**	**II-15 yrs & up**	**Wed**	**7:30 - 8:30PM**	**II-15 yrs & up**
Feb 7 – Apr 4		#1002	Apr 11 – Jun 6		#1003

Adult Classes ★ Sports

ADULT SK8 CLUB. Make new friends while learning how to ice skate. Classes will be held at the Salvation Army, Ray & Joan Kroc Corps Community Center, 6737 University Avenue, San Diego. Please dress warmly with gloves or mittens. Skate rental is included in class fee.

➤ Location: Kroc Corps Community Center FEE: $88 RES/$93 NON-RES

Fri	**11:15 - 1145AM**	**15 yrs & up**	**Fri**	**11:15 - 1145AM**	**15 yrs & up**
Mar 2 – Apr 20		#1100	Apr 27 – Jun 15		#1101

ADULT BEGINNING FIGURE SKATING. This course includes the fundamentals of forward and backward skating, stopping, turns, and spins.

➤Location: Kroc Corps Community Center FEE: $88 RES/$93 NON-RES

Wed	**6:45 - 7:15PM**	**15 yrs & up**	**Sat**	**12:30 - 1:00PM**	**15 yrs & up**
Feb 28 – Apr 18		#1200	Mar 3 – Apr 21		#1202
Apr 25 – Jun 13		#1201	Apr 28 – Jun 16		#1203

ADULT ICE HOCKEY. This course teaches ice hockey and skating skills. Learn forward and backward skating, form turns, glides, and hockey stops.

➤ Location: Kroc Corps Community Center FEE $88 RES/$93 NON-RES

Wed	**6:45 - 7:15PM**	**15 yrs & up**	**Wed**	**6:45 - 7:15PM**	**15 yrs & up**
Feb 28 – Apr 18		#1204	Apr 25 – Jun 13		#1205

NEW. EVENING YOGA The goal of this course is to promote health and happiness through stretching and meditation. Yoga is based on an ancient system of exercises. It begins with a warm-up and transitions from one seated pose to another. Yoga practice has many benefits. It has been known to eliminate pain, cure depression, and reduce stress. No uniform required. Students should dress in comfortable clothing. No shoes worn during class.

➤ Location: Performing Arts Room Contractor: Fix-X San Diego FEE: $64 RES/$69 NON-RES

Thu	**6:00 – 6:50PM**	**13 yrs & up**	**Thu**	**6:00 – 6:50PM**	**13 yrs & up**
Feb 8 – Apr 5		#1600	Apr 12 – Jun 7		#1601

NEW. TOTAL BODY WORKOUT FOR MOM AND BABY. Do you want to exercise but don't have childcare? This Total Body Workout is the answer for you! The workout includes yoga, pilates and strength training. It's a great way to exercise and bond with your baby. Class is for a parent and infant (up to 18 months) who will not crawl away. Bring your own yoga mat and wear sturdy shoes.

➤ Location: Performing Arts Room Contractor: Fit X San Diego FEE: $64 RES/$69 NON-RES

Fri	**9:00-10:00AM**	**Adult/Infant**	**Fri**	**9:00-10:00AM**	**Adult/Infant**
Feb 9 – Apr 6		#1300	Apr 13 – Jun 8		#1301

PILATES MAT EXERCISE. Pilates will flatten and strengthen the abdominals, firm the hips and thighs, increase flexibility, improve posture, coordination and balance, and develop stronger, streamlined muscles without adding bulk. The movement series are designed to stretch and strengthen muscles without undue strain on the joints. Please wear comfortable clothing that will stretch and move with you as you work out. No belts or restrictive clothing please. Participants must meet ONE of the following prerequisites to register: Participation in previous La Mesa Community Services Pilates classes OR Minimum of 3 private or semi-private mat sessions, OR instructor approval at Pilates Mind and Body Studio, 8282 La Mesa Blvd., La Mesa, 619-337-3700.
Call Pilates Mind and Body studio at 619-337-3700 for additional class times.

➤ Location: Pilates Mind & Body Studio Contractor: Pilates Mind & Body FEE: $135 RES/$140 NON-RES

Mon	**12:00 – 12:50PM**	**18 yrs & up**	**Thu**	**9:30 – 10:20AM**	**18 yrs & up**
Feb 5 – Apr 2		#1400	Feb 8 – Apr 5		#1410
Apr 9 – Jun 4		#1401	Apr 12 – Jun 7		#1411
Mon	**6:30 – 7:20PM**	**18 yrs & up**	**Thu**	**5:00 – 5:50PM**	**18 yrs & up**
Feb 5 – Apr 2		#1402	Feb 8 – Apr 5		#1412
Apr 9 – Jun 4		#1403	Apr 12 – Jun 7		#1413
Tue	**9:30 – 10:20AM**	**18 yrs & up**	**Thu**	**6:00 – 6:50PM**	**18 yrs & up**
Feb 6 – Apr 3		#1404	Feb 8 – Apr 5		#1414
Apr 10 – Jun 5		#1405	Apr 12 – Jun 7		#1415
Tue	**6:00 – 6:50PM**	**18 yrs & up**	**Sat**	**10:00 – 10:50AM**	**18 yrs & up**
Feb 6 – Apr 3		#1406	Feb 10 – Apr 7		#1416
Apr 10 – Jun 15		#1407	Apr 14 – Jun 9		#1417
Wed	**12Noon – 12:50PM**	**18 yrs & up**			
Feb 7 – Apr 4		#1408			
Apr 11 – Jun 6		#1409			

Participants who cannot attend class on May 28 and give advance notice may schedule one make-up session within 2 weeks.

Adult Classes ★ Sports

TENNIS. Beginning, intermediate, and advanced tennis classes - bring tennis racquet and one unopened can of tennis balls to class. During rainy weather only, please call 667-1332 for class updates.

➤ Location: La Mesita Park Contractor: Tom Draffen FEE: $63 RES/$68 NON-RES

Mon	**5:00 - 6:00PM**	**Beg 15 yrs & up**	**Wed**	**5:00 - 6:00PM**	**Beg 15 yrs & up**
Feb 5 – Apr 2		#1500	Feb 7 – Apr 4		#1506
Apr 9 – Jun 4		#1501	Apr 11 – Jun 6		#1507
Mon	**6:00 - 7:00PM**	**Int 15 yrs & up**	**Wed**	**6:00 - 7:00PM**	**Int 15 yrs & up**
Feb 5 – Apr 2		#1502	Feb 7 – Apr 4		#1508
Apr 9 – Jun 4		#1503	Apr 11 – Jun 6		#1509
Mon	**7:00 - 8:00PM**	**Adv 15 yrs & up**	**Wed**	**7:00 - 8:00PM**	**Adv 15 yrs & up**
Feb 5 – Apr 2		#1504	Feb 7 – Apr 4		#1510
Apr 9 – Jun 4		#1505	Apr 11 – Jun 6		#1511

WALK & TALK LA MESA. Enjoy walking around La Mesa. Stretch and tone before each walk. This class meets each week. The first Tuesday of each month meets at Harry Griffen Park (8550 Milden Street) by the entry gate. Other weekly walking locations will vary. Call 619-667-1333 for starting locations. Participants will be required to sign a release of liability prior to the start of the walking program. This is a FREE activity!
Walking Hosts: Gary Baldwin and Marcie Atkisson

Tue	**9:00 - 10:30AM**	**Adults**

No need to sign up. Just show up and enjoy!

YOGA. (All levels) Gentle, relaxing hatha yoga formatted for various levels. A slow movement, mind-body format for enhancing flexibility, balance, and strength. Requires a yoga or exercise mat and comfortable, loose clothing.

➤ Location: Adult Enrichment Center Main Hall Contractor: Fit-X San Diego FEE: $28 RES/$33 NON-RES

Mon	**1:30-2:30PM**	**Adults & Seniors**	No class May 28
Feb 5 – Apr 2		#1700	
Apr 9 – Jun 11		#1701	

Adult Classes ★ Speciality

NEW. ART OF HENNA Learn the ancient art of Mehndi known as Henna Body Art. In this class you will learn how to choose and mix the right ingredients for a natural henna paste, how to apply designs using modern techniques, and the basic visual vocabulary from Asia, Africa, and the Middle East. Learn the history, traditions,and mystique of henna use throughout time. This class is for both teens and adults. A henna kit is required and can be purchased for $15 from instructor Natasha Papousek. Kit includes: henna recipes, basic designs, techniques learned in class, modern cone with metal tip, 30g premeasured henna powder.

➤ Location: Recreation Center Kitchen Contractor: Natasha Papousek FEE: $24 RES/$29 NON-RES

Mon	**7:00 – 8:30PM**	**14 & up**	**Mon**	**7:00 – 8:30PM**	**14 & up**
Feb 5 – 19		#1800	May 7 – 21		#1801

NEW. DOG OBEDIENCE. Tired of your dog walking you? Have a new dog in your home? Then basic dog obedience is just right for you! Instructor Rob Kuty is the owner of San Diego Pet Training. He has been a professional animal trainer for the past eight years. He has managed the "Pets Rule" show at Sea World and currently works at the Helen Woodward Animal Center. In Basic Dog Obedience, dogs will learn how to Sit, Stay, Lay Down, Heel, and Come while on a leash. Dogs will also learn a release command. This course meets once a week for a one-hour session. Training will be conducted at the parking lot of Nan Couts Cottage. Dogs must be at least six months of age and must show proof of license and current vaccinations. Only eight dogs will be enrolled in each course. Enroll today to reserve your spot. For more information visit www.sdpettraining.com or call or email Rob at 619-200-1567 or rob@sdpettraining.com.

➤ Location: Nan Couts Cottage Parking Lot Contractor: Rob Kuty FEE: $150 RES/$155 NON-RES

Sat	**8:00 – 9:00AM**	**14 & up**	**Sat**	**8:00 – 9:00AM**	**14 & up**
Feb 10 – Apr 7		#1900	Apr 14 – Jun 16		#1901

La Mesa Adult Enrichment Center
8450 La Mesa Blvd., La Mesa, CA • 619-464-0505

Classes are offered on a variety of interest areas including Fine and Applied Arts, Physical Fitness and Dance, Cultural, Historical Studies and Current Perspectives.

Other popular senior activities include: trips and tours, discussion forums, support groups, chess, movies, sing-a-longs, and Friday night dances.

Special senior services include: daily luncheon, health screenings, legal and tax counseling, and information and assistance with other local service providers.

ADULT SOFTBALL

(18 years and older)

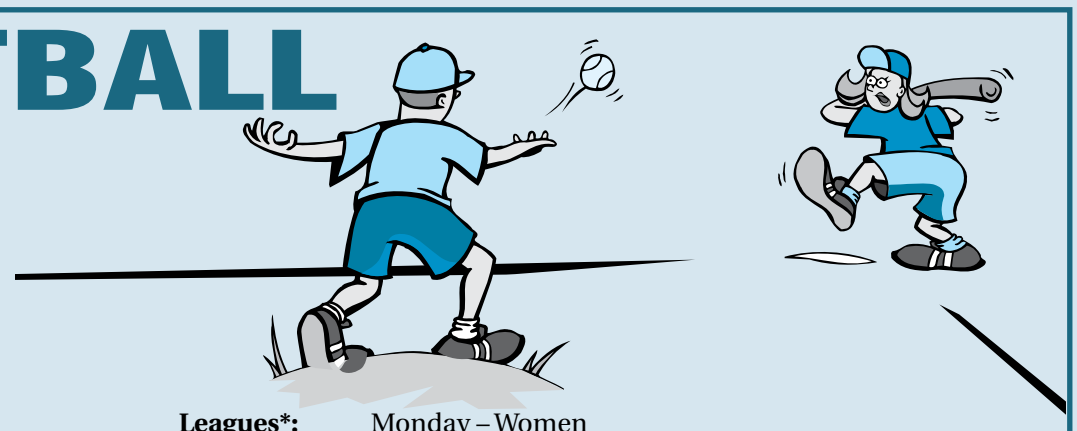

Registration: La Mesa Community Center, 4975 Memorial Drive
February 7, 2007, 4:00 – 7:00 PM

Sports Information Line: 619-667-1319

Fee: $525 for season. Umpire fees not included
$15/game each team

The entire fee must be paid at time of registration.
No partial payments. Payment options:
a) one check b) one check and the remainder in cash
c) all cash d) Visa or Mastercard
A $25 service charge and postage will be required on all returned checks. Payees will have one day to correct the problem to guarantee a position.

A waiting list will be taken after reaching the maximum number of teams.

Season: Mid March – Mid June (weather permitting)

Location: Junior Seau Complex, Field #1, 9009 Park Plaza Drive, entrance from La Mesita Park

Leagues*:
Monday – Women
Tuesday – Men
Wednesday – Men
Thursday – Coed
Friday – Men
Sunday – Coed
Minimum 4 teams required per day/night or league day/night subject to change or cancellation.

Game Times:	Monday – Thursday	6:00 – 9:00PM
	Friday	6:00 – 10:00PM
	Sunday	8:00AM – 12:00PM

La Mesa Municipal Pool and Spa

5100 Memorial Drive, La Mesa, California 91941

Becky Jackman, Aquatics Supervisor | Recording: 619-466-4177 | Enrollment: 619-667-1494

Office Hours: Monday - Friday....11:30 AM - 6:00 PM (through Nov 22)

ADMISSION FEES

Adults (18 & over) $4.00
Senior/Youth/Disabled..... $3.00
(Senior = 55 & over/Youth = 17 & under)
20 Swim Pass
Adults $70
Senior/Youth/Disabled $45
Annual Pass
Adults $220
Senior/Disabled $110

Adult Lap Swim/Therapy Spa... *18 Years and Over*
Monday through Friday .....6:30 AM - 7:45 AM
11:30 AM - 1:30 PM
6:00 PM - 7:15 PM
Saturday.....11:45 AM – 1:15 PM
(through Nov. 22)

A complete set of pool rules is available at the Municipal Pool office.

AMERICANS WITH DISABILITIES ACT
The City of La Mesa encourages the participation of disabled individuals in the services, activities, and programs provided by the City. Individuals with disabilities who require reasonable accommodation in order to participate in our Aquatics programs should contact the Aquatics Supervisor at (619) 667-1495.

Lifeguard Training and Water Safety Instructor Courses

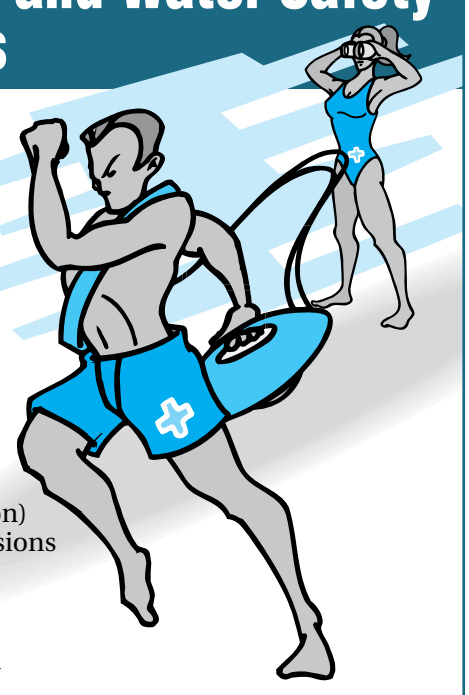

Call 667-1494 for enrollment details and requirements.
Book fees paid for by the American Red Cross scholarship program.

WSI course will be held
January 2 through January 20, 2007
(T, TH 4:00 - 8:00 PM, Saturdays: 8:00 AM-12 noon)
Attendance is required at all class sessions
FEES: $60 La Mesa Residents / $65 Non-Residents

Lifeguard Training course will be held
January 20 through February 10, 2007
(T, TH 5:00-8:00 PM, Saturdays: January 20 1:00 PM - 5:00 PM, January 27 8:00 AM - 5:00 PM, February 3 8:00 AM - 5:00 PM, February 10 8:00 AM - 12 noon)

Attendance is required at all class sessions
FEES: $105 La Mesa Residents / $110 Non-Residents

Observed Holidays & Pool Closures

THE POOL WILL BE CLOSED FOR ANNUAL MAINTENANCE:
Thursday, November 23 - Sunday, January 7

The pool will re-open on January 8

THE POOL CLOSES AT 1:30 PM ON:
Friday, November 10 – Veteran's Day (observed)

FREE PASS — CLIP & SAVE

SENIOR HOUSING EXPO

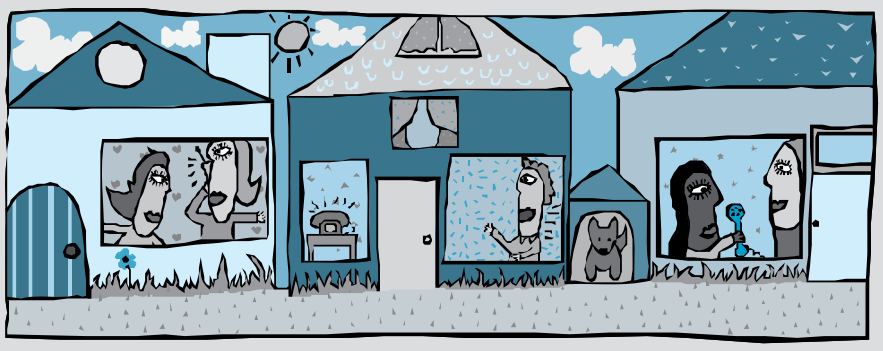

Wed, Jan 31 — 10 AM – 1:30 PM

La Mesa Community Center, 4975 Memorial Dr., La Mesa

Call 464-0505 for info!

More than 50 exhibitors and guest speakers on housing alternatives, reverse mortgages, assisted living, home safety, home modifications, granny flats, subsidized housing and more!

Sponsored by: Union Bank of California & MDC Development Corporation.

FREE PASS — CLIP & SAVE

SEEKING MATURE VOLUNTEERS

Do you like fun, laughter, kids, sharing, learning, and celebrations?

We are looking for mature volunteers (55 and older) who enjoying working with elementary age school children and can commit to 2 or more hours per week during the school year.

Project KAST (Kids and Seniors Together) is an after-school program pairing caring older adults with elementary students who are at risk for educational failure. Adult volunteers act as mentors, encouraging students to do their best and helping them with homework completion. Volunteers will share their life experience with students in a safe, nurturing environment that encourages a love of lifelong learning and boosts self-esteem. Seasonal holiday activities and end of year picnic are just a couple of the special events volunteers and students celebrate together.

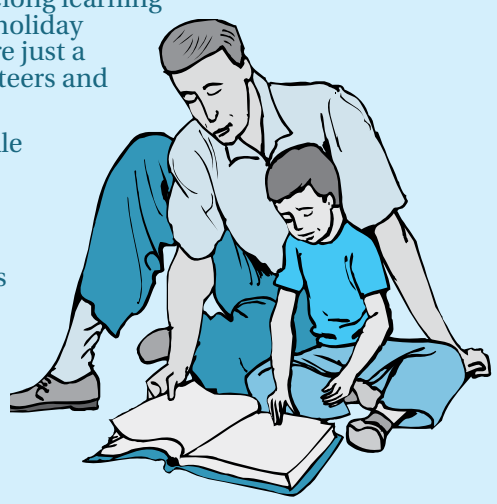

The program meets at La Mesa Dale Elementary School in 10-week sessions during the school year, Monday through Friday, for 2 hours each afternoon. Volunteers are asked to commit to the 2 hours at least one day per week and are welcome to sign up for as often as you like!

For more information call Michele Greenberg-McClung at 619-667-1333.

ENROLLMENT INFORMATION

MARK YOUR CALENDAR!

Enroll Online: See our new improved online system. Now it's easier and convenient to enroll online and receive immediate confirmation of your class enrollment! Please let us know how you like our new look.

Classes are available online beginning November 6. Go to www.cityoflamesa.com, click first on Recreation Classes, then on Spring 2007 Class Information & Enrollment. Scroll down and click on the online enrollment icon. Remeber to print your class confirmation when you enroll online.

November 6 — January 27: **Enroll online, fax, or mail completed enrollment forms along with payment** (checks, money orders, VISA or MasterCard) to: Attn: Enrollment Processing
La Mesa Community Center
4975 Memorial Drive, La Mesa CA 91941
(Fax to 619-464-3761, or use convenient drop-box in the Community Center lobby)

ROSTERS

January 31: Class rosters available at the Community Center. You must be enrolled and on the roster to attend class.

PROGRAMS

February 5: Spring enrichment programs begin. Check individual listings for specific dates and times. Late enrollments can only be accepted during the first two weeks of classes on a space available basis.

CLOSED HOLIDAYS

Regular activities will not be held on dates listed below. Check with individual class instructors to see if special class sessions will be scheduled.

November 10 Veteran's Day (obs)
December 18 – Jan 1 Winter Break
May 28 – Memorial Day
November 20 – 25 Thanksgiving Week
January 15 – Martin Luther King Day
June 2 – Flag Day Parade

WRITE IT DOWN!

Make a note of your enrollment information. Online enrollment allows you to check availability and offers an email confirmation check box. Confirmation is not available for mail-in or drop box enrollments; your cancelled check or credit card bill is your receipt. We will make every attempt to enroll you in your first choice selection; however, activities fill quickly. If class selections are no longer available, you will be notified by mail.

CHOOSE classes carefully. There is a $10 fee for requested changes. Change requests must be received in the office at least three (3) working days prior to class start date. Changes are subject to availability. Instructors reserve the right to reclassify the level of any participant at any time and participants pay only the difference in class fee. NO REFUNDS.

RESIDENTS NOTE: Participants residing within the incorporated city limits of La Mesa pay the first listed class fee marked RES. All others, including those with addresses in the unincorporated area of La Mesa, pay the second listed class fee marked NON-RES.

DON'T DELAY. Classes not meeting minimum enrollment will be cancelled. Late enrollments can only be accepted during the first two weeks of classes on a space available basis. If you miss the enrollment period, check for class availability online (see online enrollment instructions above).

Late enrollments for all other classes and camps are processed at the Community Center office, Monday through Thursday, 8:30 AM to 4:30 PM the first two weeks of classes. Most City offices are closed on alternate Fridays (call 619-667-1300 for specific dates).

QUESTIONS?

Call the Community Center office at 619-667-1300 for information or referral to the appropriate staff contact.

LA MESA COMMUNITY SERVICES DIRECTORY

Adult Enrichment Center	619-464-0505
Adult/Coed Softball	619-667-1319
Community Center	619-667-1300
Facilities Rental	619-667-1307
AYSO Region 89 Soccer	619-466-2976
Fletcher Hills Little League	619-465-0888
GLM Youth Football & Cheer	619-520-4216
Grossmont/La Mesa Pony League	619-303-5622
Lake Murray Little League	619-465-1903
La Mesa Athletic Council	www.lmac.biz
La Mesa National Little League	619-400-7392
Little League District 33	619-787-7593
Municipal Pool	619-466-4177
National Youth Sports	619-660-7388
Pool Registration	619-667-1494
Pop Warner Football	619-303-0367
Rolando Little League	619-463-1928
Senior Olympics	619-466-6764
Senior Softball	619-465-8758
Sun Valley Golf Course	619-466-6102
Valley Mesa Fast Pitch	619-697-3148

NEW!

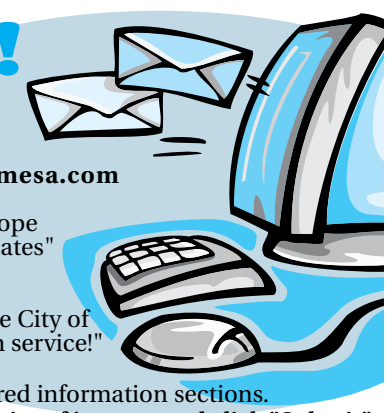

Email notification of important dates

Go to www.cityoflamesa.com

Click on the red envelope "Receive email updates"

Scroll down to: "Subscribe now to the City of La Mesa notification service!"

Complete the required information sections.
Select your topics of interest and click "Submit"

ENROLLMENT FORM

CITY OF LA MESA COMMUNITY SERVICES
4975 Memorial Drive, La Mesa, CA 91941 • 619-667-1300

Please print clearly. Note: If you need special accommodations, please contact us at least two weeks in advance of the program.

Parent/Payee Last Name _____ First _____

Address _____ City _____ Zip _____

Day Phone: (_____) _____ Email Address: _____

Evening: (_____) _____

Alternate: (_____) _____

Are you a new participant? Yes_____ No_____

OFFICE USE ONLY
F/N _____
RCT# _____
PAGE _____ OF _____
D/SI _____

Note class dates and times. No confirmations sent; you will be notified if class is filled or cancelled.

CHOOSE CLASSES CAREFULLY. THERE ARE NO REFUNDS.

Last Name	First Name	Date of Birth	Class Name	*1st Choice* Class #	*2nd Choice* Class #	*3rd Choice* Class#	Fee

Yes! I would like to donate to the following funds: Youth Scholarship Fund $ _____ Youth Golf Fund $_____ The PARKS Project $_____ DONATIONS TOTAL _____

TOTAL _____

DISCLAIMER: I will not hold the instructor, contractors, sponsors, officials, or members of the City of La Mesa Department of Community Services responsible for any injury which any participant might incur while in the program. I grant full permission for use of the participant's name, voice, and/or picture in any related media or other promotional materials for any purpose without compensation. Community Services staff reserves the right to refuse service for disruptive behavior. I understand and agree that my non-compliance with any facility policies or procedures may result in refusal of service by Community Services.

REQUIRED Responsible Adult SIGNATURE _____ PLEASE PRINT Responsible Adult Name _____

METHOD OF PAYMENT: No cash via mail. We are not responsible for cash sent through the mail or drop-box.

Check # _____ or Money Order Make checks payable to **City of La Mesa** • A fee of $25 plus postage will be charged for all returned checks.

Please charge my: ☐ Visa ☐ MasterCard Account Number: ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ Exp. (month/year) ☐☐ / ☐☐

SIGNATURE OF CARD HOLDER (Required) _____ DATE _____ PRINT CARD HOLDER NAME _____

City of La Mesa
Storm Water Pollution Prevention
Pools & Spas

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

Discharging of pool or spa water is not prohibited; however, the following measures are required.

1. Water shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Pool water must be dechlorinated
3. Water pH acceptable range from 7 to 8
4. No algae present in water
5. Water shall not contain chemicals to counteract the chlorine
6. Water does not contain hydrogen peroxide based products
7. Controlled discharge eliminating potential for erosion

Chlorine

Test pool or spa water for chlorine prior to discharge. Chlorine naturally dissipates overtime and if pool or spa water is left 3 to 5 days, it will become dechlorinated. Pool water needs to be drained before it turns green. Draining pool water gradually over landscaped areas will help prevent erosion problems.

Pool Filters

Pool filters should be cleaned over landscaped areas or anything that will absorb the discharge. Material may be collected over a filter cloth and disposed of in the trash. Filter backwash must be discharged into the sewer system with a pH of 5 to 12.5.

Pool Construction

Material must be contained and disposed of appropriately. Waste generated from plaster, gunite, cement, sediment, and other construction materials is prohibited from entering the storm drain system.

Do the Right Thing, Stay in Compliance and Protect Our Environment. For more information, contact the City's Storm Water Hotline (619) 667-1134.

H. WASTE VOLUMES COLLECTED

		Weight (in pounds)	DI	FI	L	N	RC	RU	S	
			Management Method(s) Include percentage if more than one method was used							
1. Flammable & Poison	Flammable solid/liquid	13,200.00	5%	95%						16%
	Bulked flammable liquids	3,000.00		100%						4%
	Oil-base paint	8,200.00		100%						10%
	Poison (excl.aerosols)	4,200.00	95%		5%					5%
	Reactive and explosive	0.00	100%							0%
	Subtotal	28,600.00								34%
2. Acid	Inorganic and organic acid	800.00	50%			50%				1%
3. Base	Inorganic and organic base	1,000.00	50%			50%				1%
4. Oxidizer	Neutral oxidizers, organic peroxid	200.00	5%			95%				0%
	Oxidizing acid, oxidizing base									0%
5. PCB-containing	PCB-containing paint	0.00	40%	60%						0%
	Other PCB waste	0.00	20%		60%		20%			0%
	Subtotal	0.00								0%
6. Reclaimable	Antifreeze	510.00					100%			1%
	Car batteries	0.00					100%			0%
	Latex paint	15,600.00		10%	10%		80%			19%
	Motor oil/oil products	2,763.00					100%			3%
	Oil filters	300.00					100%			0%
	Subtotal	19,173.00								23%
7. Asbestos		0.00			100%					0%
8. Universal Waste (UW	Mercury containing waste	40.00					100%			0%
	Thermostats/switches/thermomet	0.00					100%			0%
	Lamps	3,800.00					100%			5%
	Rechargeable batteries	2,800.00					100%			3%
	Household batteries	0.00					100%			0%
	Subtotal	6,640.00								8%
Electronic Waste (UW)	SB20/50 video display devices	9,800.00					100%			12%
	Non SB20/50 video display devic	10,930.00					100%			13%
	Consumer electronic devices	2,053.00					100%			2%
	Subtotal	22,783.00								27%
Aerosol Containers (UW	Non-empty aerosol containers	0.00	70%	30%						0%
	Other	1,000.00					100%			1%
	All UW subtotal	30,423.00								37%
9. Other HHW	Home-generated sharps	0.00	100%							0%
	Pharmaceutical Waste	0.00								0%
	Compressed gas cylinder	170.00	70%	10%			20%			0%
	Non - UW aerosol containers (corrosive, flammable, poison)	1,184.00					100%			1%
	Treated Wood	0.00			100%					0%
	Other	1,500.00	5%	80%	10%		5%			2%
	Subtotal	2,854.00								3%
10. Grand Total		83,050.00								0%

CITY OF LA MESA
JEWEL of the HILLS

STORM WATER PROJECT DATA SHEET

Public Works Department / Engineering Division
8130 Allison Avenue, P.O. Box 937, La Mesa, CA 91944-0937
Telephone: (619) 667-1166 • Fax: (619) 667-1380

PROJECT DATA:

Owner's Name & Phone No: _____

Address: _____ **Permit No:** _____

Project: _____ **Date Applied:** _____

PROJECT SITE DATA:

1. Area of the lot/parcel = _____ sf
2. Existing impervious area (roof/building foot print) = _____ sf
3. Existing impervious area (driveway, parking, walkway, hardscape etc.) = _____ sf
4. Impervious area after development (roof/building foot print) = _____ sf
5. Impervious area after development (driveway, parking, walkway, hardscape etc.) = _____ sf
6. Total area to be disturbed = _____ sf
7. Storm water runoff based on Hydrology Study

   Existing runoff = _____ cfs, Post construction runoff = _____ cfs
8. Identify if the runoff from the site discharged to the public street or storm drain or open channel, detention or retention basin: _____
9. Water Shed (Check One): San Diego River _____ San Diego Bay _____

---

a. Total disturbed area includes impervious area, construction material storage, staging area, graded slopes, new slopes and landscape areas.

b. The information shall be shown on the site/grading plans.

c. Complete APPENDIX A

Notes:

- Items I through 9 shall be shown on the site development plan/grading plan.
- The applicant may be required to submit SWPPP and SUSMP depending on the "Priority" as stated in **Appendix A**.
- A Hydrology report may be required.

CITY OF LA MESA
JEWEL of the HILLS

APPENDIX A - STORM WATER REQUIREMENTS

Public Works Department / Engineering Division
8130 Allison Avenue, P.O. Box 937, La Mesa, CA 91944-0937
Telephone: (619) 667-1166 • Fax: (619) 667-1380

Complete Sections 1 and 2 of the checklist to determine which permanent best management practices (BMPs) and which construction BMPs are required for your project for storm water. *This form must be completed and submitted with your permit application.*

SECTION 1. PERMANENT STORM WATER BMP REQUIREMENTS:

PART A: DETERMINE PRIORITY PROJECT PERMANENT STORM WATER BMP REQUIREMENTS.

DOES THE PROJECT MEET THE DEFINITION OF ONE OR MORE OF THE PRIORITY PROJECT CATEGORIES AS DEFINED IN THE *STORM WATER STANDARDS?* (APPENDIX I)*	**YES**	**NO**
1. Detached residential development of 10 or more units?	☐	☐
2. Attached residential development of 10 or more units?	☐	☐
3. Commercial development greater than 100,000 square feet?	☐	☐
4. Automotive repair shop?	☐	☐
5. Restaurant?	☐	☐
6. Steep hillside development greater than 5,000 square feet? (Other criteria) (Definition- 25% and steeper)	☐	☐
7. Project discharging to receiving waters within "*Environmentally Sensitive Areas*?"	☐	☐
8. "Parking lot" greater than or equal to 5,000 square feet or with at least 15 parking spaces, and potentially exposed to urban runoff?	☐	☐
9. "Streets, roads, highways, and freeways" that would create a new paved surface that is 5,000 square feet or greater?	☐	☐
10. "Significant redevelopment" over 5,000 square feet? (Explain)	☐	☐
**** Refer to the definitions section in the Storm Water Standards for expanded definitions of the priority project categories.***		
Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if one or more of the criteria in Part A is met. If all answers to Part A are "No", continue to Part B. (sidewalk, bikeway)		

PART B: DETERMINE STANDARD PERMANENT STORM WATER REQUIREMENTS.

DOES THE PROJECT PROPOSE:	**YES**	**NO**
1. New impervious areas such as rooftops, roads, parking lots, driveways, paths and sidewalks?	☐	☐
2. New pervious landscape areas and irrigation systems?	☐	☐
3. Permanent structures within 100 feet of any natural water body?	☐	☐
4. Trash storage areas?	☐	☐
5. Liquid or solid material loading and unloading areas?	☐	☐
6. Vehicle or equipment fueling, washing, or maintenance areas?	☐	☐

7. Require a General NPDES Permit for storm water discharges associated with industrial activities* (Except construction)?	☐	☐
8. Commercial/ industrial waste handling or storage, excluding typical office or household waste?	☐	☐
9. Any grading or ground disturbance during construction?	☐	☐
10. Any new storm drains, or alteration to existing storm drains?	☐	☐
**To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/stormwtr/industrial.html.*		

If any of the answers provided in Section 1, Part A are "Yes," the project is subject to the "Priority Project Permanent Storm Water BMP Requirements". A standard urban storm water mitigation plan (SUSMP) shall be submitted; the requirements of the City of La Mesa Storm Water Best Management Practices Manual-Part 2 shall be satisfied. In particular, Section III must be completed.

If all answers provided in Section 1, Part A are "No," and any answers to Part B are "Yes," the project is only subject to the Standard Permanent Storm Water BMP Requirements. Section III is to be complete through III.2.B.17.

If every question in Part A and B is answered "No," the project is exempt from permanent storm water requirements.

SECTION 2. CONSTRUCTION STORM WATER BMP REQUIREMENTS:

PART C: DETERMINE CONSTRUCTION PHASE STORM WATER REQUIREMENTS.

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	YES	NO
1. Is the project subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities?	☐	☐
2. Does the project propose grading or soil disturbance?	☐	☐
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	☐	☐
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete and stucco)?	☐	☐

If the answer to question 1 of Part C is answered "Yes," your project is subject to Construction Storm Water BMP Performance Standards, and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared.

If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Construction Storm Water BMP Performance Standards and a local Water Pollution Control Program (WPCP) must be prepared.

If every question in Part C is answered "No," your project is exempt from any construction storm water BMP requirements. If any of the answers to the questions in Part C are "Yes," complete the construction site prioritization in Part D, below.

PART D: DETERMINE CONSTRUCTION SITE PRIORITY

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans and included in the SWPPP or WPCP.

Indicate the project's priority in one of the check boxes using the criteria below, existing and surrounding conditions of the project, the type of activities necessary to complete the construction and any other extenuating circumstances that may pose a threat to water quality. The City Engineer may adjust the priority of the projects both before and during construction.

[Note: The construction priority DOES NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority DOES affect the frequency of inspections that will be conducted by the City.]

☐ A) High Priority

1. Projects where the site is 50 acres or more and grading will occur during the wet season.
2. Projects that are 5 acres or more and tributary to an impaired water body for sediment by the most current Clean Water Act Section 303(d) list (e.g., Chollas Creek).
3. Projects that are 5 acres or more within or directly adjacent to or discharging directly to water within a water quality sensitive area.
4. Projects, active or inactive, adjacent or tributary to sensitive water bodies.

☐ B) Medium Priority

1. Capital improvement projects where grading occurs. However, a Storm Water Pollution Prevention Plan (SWPPP) is not required under the State General Construction Permit (i.e., water and sewer replacement projects, intersection and street re-alignments, widening, comfort stations, etc.)
2. Permit projects in the public right-of-way where grading occurs. However, SWPPPs are not required, such as installation of sidewalk, substantial retaining walls, curb and gutter for an entire street frontage, etc.
3. Permit projects on private property where grading permits are required. However, Notice Of Intents (NOIs) and SWPPPs are not required.

☐ C) Low Priority

1. Capital projects where minimal to no grading occurs, such as signal light and loop installations, street light installations, etc.
2. Permit projects in the public right-of-way where minimal to no grading occurs, such as pedestrian ramps, small sidewalks, driveway additions, small retaining walls, etc.
3. Permit projects on private property where grading permits are not required, such as small retaining walls, single-family homes, small tenant improvements, etc.

Completed By: _____

Name, Address & Phone

CITY OF LA MESA
SUSMP REVIEW CHECKLIST
D-MAX Engineering, Inc.

A. PROJECT INFORMATION

Project Name _____ Type: ☐ Private ☐ Public

Street Address _____ ZIP

Project Size (ft^2) _____ paved surfaces (ft^2) _____ roofs (ft^2) _____ pervious (ft^2) _____

SUSMP Preparer _____ SUSMP Report Date _____

Project Description _____

_____

_____

B. SUSMP CATEGORY

Is this a Priority Project? ☐ Yes ☐ No

If yes, check all SUSMP categories that apply to the project:

- ☐ Residential Development: 100+ units Type: ☐ Attached ☐ Detached
- ☐ Residential Development: 10-99 units Type: ☐ Attached ☐ Detached
- ☐ Commercial Development > 100,000 ft^2
- ☐ Automotive Repair Shop
- ☐ Restaurant
- ☐ Hillside Development > 5,000 ft^2
- ☐ Parking Lot > 5,000 ft^2 or with > 15 parking spaces and potentially exposed to urban runoff
- ☐ Streets, Highways, or Freeways
- ☐ Discharges to ESA and creates $\geq$ 2,500 ft^2 of impervious surfaces or increases impervious area to 10% or more of its naturally occurring condition and
  - ☐ Is located within 200 feet of an ESA **OR**
  - ☐ Discharges urban runoff to ESA without mixing with flows from adjacent land
- ☐ Redevelopment that creates or adds $\geq$ 5,000 ft^2 of impervious surfaces on an already developed site

C. HYDROLOGIC SETTING

Receiving water body: _____ Hydrologic Area: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Non-sensitive ☐ ESA ☐ 303(d)/ESA (all 303(d) are by definition also ESAs)

If 303(d) list impairments _____

D. POLLUTANTS OF CONCERN (as listed in the report)

Pollutant	A*	Listed Correctly?		Comments
		Yes	No	
Sediments				
Nutrients				
Heavy Metals				
Organic Compounds				
Trash & Debris				
Oxygen Demanding Substances				
Oil & Grease				
Bacteria & Viruses				
Pesticides				
Others (list):				

Pollutant	A*	Listed Correctly? Yes	Listed Correctly? No	Comments

*A = Anticipated Pollutant

E. Conditions of Concern

Was a drainage study report prepared? ☐ Yes ☐ No

Was the report prepared by a registered Civil Engineer? ☐ Yes ☐ No

If yes list the engineer's name _____

Does the study state that field reconnaissance was conducted? ☐ Yes ☐ No

Relevant findings _____

Drainage study includes (check all that apply):

☐ Calculation 1: based on (indicate one: ☐ 2 ☐ 10 ☐ 50 ☐ 100)-year, (indicate one: ☐ 6 ☐ 24)-hour storm

- ☐ Peak flow rate — existing (cfs): _____ proposed (cfs): _____
- ☐ Flow velocity
- ☐ Runoff volume
- ☐ Time of concentration
- ☐ Retention volume

☐ Calculation 2: based on (indicate one: ☐ 2 ☐ 10 ☐ 50 ☐ 100)-year, (indicate one: ☐ 6 ☐ 24)-hour storm

- ☐ Peak flow rate — existing (cfs): _____ proposed (cfs): _____
- ☐ Flow velocity
- ☐ Runoff volume
- ☐ Time of concentration
- ☐ Retention volume

Were conditions of concern adequately identified? ☐ Yes ☐ No

If so, has the project implemented sufficient site design, source control, and/or treatment control BMPs to maintain pre-project hydrologic conditions affecting downstream conditions of concern? ☐ Yes ☐ No

BMPs	N/A	Yes	No	Comments
"Yes" means incorporated and adequate; "No" means not incorporated or not adequate				
F Site Design BMPs (All Projects)				
F.1 Maintain Pre-Development Runoff Conditions				
Minimize project's impervious footprint				
Conserve natural areas				
Construct low traffic areas (walkways, trails, patios, parking lots, alleys, etc.) using permeable surfaces				
Construct streets, sidewalks, and parking lot aisles to minimum widths				
Maximize canopy interception by preserving existing trees and shrubs				
Minimize use of impervious surfaces, such as decorative concrete, in landscape design				
Preserve natural drainage systems				
Other (list in comments box)				
F.2 Minimize Directly Connected Impervious Areas				
Drain rooftops into landscaping				
Drain sidewalks, walkways, trails, and patios into landscaping				

BMPs	N/A	Yes	No	Comments
"Yes" means incorporated and adequate; "No" means not incorporated or not adequate				
Other (list in comments box)				
F.3 Protect Slopes and Channels				
G. Source Control BMPs				
Provide storm drain stenciling				
Design outdoor material storage areas to reduce pollution introduction				
Design trash storage areas to reduce pollution introduction				
Use efficient irrigation systems and landscape design				
H. Individual Project Category BMPs				
H.1 Private Roads				
At least one of the following (check all that apply): ☐ Rural swale system ☐ Dual drainage system ☐ Urban curb/swale system ☐ Other equivalent method: _____				
H.2 Residential Driveways & Guest Parking				
At least one of the following (check all that apply): ☐ Driveways: shared access, flared, with wheelstrips, or drain to landscaping ☐ Temporary or guest parking: pervious paving or drain to landscaping ☐ Other equivalent method: _____				
H.3 Dock Areas				
All of the following (check all that apply): ☐ Covered or designed to prevent run-on and runoff ☐ No direct connections from depressed loading dock areas to the storm drain system ☐ Other equivalent method: _____				
H.4 Maintenance Bays				
All of the following (check all that apply): ☐ Indoors or designed to prevent run-on and runoff ☐ Drainage system designed to capture all wash water, leaks, and spills; bay is not directly connected to the storm drain system ☐ Other equivalent method: _____				
H.5 Vehicle Wash Areas				
All of the following (check all that apply): ☐ Self-contained, or covered with roof or overhang ☐ Equipped with clarifier or other pretreatment device ☐ Properly connected to sanitary sewer ☐ Other equivalent method: _____				
H.6 Outdoor Processing Areas				

BMPs	N/A	Yes	No	Comments
"Yes" means incorporated and adequate; "No" means not incorporated or not adequate				
All of the following (check all that apply): ☐ Covered or enclosed, sloped toward dead-end sump, or discharge to sanitary sewer with permit ☐ Graded or bermed to prevent run-on from surrounding areas ☐ No storm drains to be installed in equipment repair areas ☐ Other equivalent method: _____				
H.7 Equipment Wash Areas				
All of the following (check all that apply): ☐ Self-contained, or covered with roof or overhang ☐ Equipped with clarifier, grease trap, or other pretreatment device, as appropriate ☐ Properly connected to sanitary sewer ☐ Other equivalent method: _____				
H.8 Parking Areas				
Incorporate as applicable and feasible (check all that apply): ☐ Incorporate landscaping into drainage design ☐ Overflow parking constructed with pervious paving ☐ Other equivalent method: _____				
H.9 Roadways				
☐ Appropriate treatment control BMP selected				
H.10 Fueling Areas				
All of the following (check all that apply): ☐ Overhead coverage greater than or equal to size of area within grade break, with downspouts routed to not drain into fueling area. ☐ Drains to project's treatment control BMPs prior to entering MS4 ☐ Paved with Portland Cement or equivalent; not paved with asphalt ☐ Have an appropriate slope to prevent ponding; grade break to prevent run-on ☐ Other equivalent method: _____				
H.11 Hillside Landscaping				
☐ Disturbed areas landscaped with deep-rooted, drought tolerant plant species for erosion control				

H. TREATMENT CONTROL BMPS

The following treatment control BMPs have been selected for this project (check all that apply):

☐ Biofilter

☐ Detention Basin

☐ Infiltration

Indicate Type: ☐ Basin ☐ Trench or Swale ☐ Porous Paving

Groundwater table height: _____ feet

Have appropriate groundwater protection measures been proposed? ☐ Yes ☐ No

☐ Wet Pond

☐ Wetland

☐ Drainage Insert manufacturer & model number: _____

☐ Filtration System

☐ Hydrodynamic Separator System manufacturer & model number : _____

Do proposed BMPs effectively address primary pollutants of concern (high or med. removal efficiency)? ☐ Yes ☐ No

Have the BMPs with the highest removal efficiencies for the anticipated pollutants been selected? ☐ Yes ☐ No

If not, does the report justify the use of the proposed BMPs? ☐ Yes ☐ No

Treatment Control BMP Design

Design based on ☐ Flow ☐ Volume

Are the calculations based on the appropriate size and frequency storm event? ☐ Yes ☐ No

Is all runoff from the site directed to at least one treatment control BMP? ☐ Yes ☐ No

Are the selected BMPs capable of treating the calculated SUSMP flow or volume? ☐ Yes ☐ No

Are the selected treatment control BMPs designed properly? ☐ Yes ☐ No

If design is flawed, list flaws here: _____

I. MAINTENANCE REQUIREMENTS

Is an operation and maintenance (O&M) plan attached? ☐ Yes ☐ No

List the party identified as responsible for implementing the O&M plan _____

Does the plan require adequate inspection and maintenance of all structural BMPs? ☐ Yes ☐ No

Is an access easement or agreement included? ☐ Yes ☐ No

J. SITE MAP

Are all proposed structural BMPs (site design, source control, and/or treatment) identified on the map? ☐ Yes ☐ No

Does the map adequately show the proposed property drainage? ☐ Yes ☐ No

K. SUMMARY

Does the submitted SUSMP report meet the City's requirements? ☐ Yes ☐ No

Major concerns regarding this submittal are summarized (check one) ☐ Below ☐ On attached sheet

County of San Diego

CONSTRUCTION & DEMOLITION RECYCLING GUIDE

Unincorporated County Recycling and
Household Hazardous Waste Hotline
1-877-R-1-EARTH (toll free)
http://www.sdcounty.ca.gov/dpw/
management/recycling.htm

2004 – 2005

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This guide is a public service to help reduce pollution and the amount of materials landfilled. Listing in this directory is not a recommendation or endorsement by the **County of San Diego**.

To add your business in future editions of this directory, please call:

1-877-R-1-EARTH

Special thanks to I Love A Clean San Diego, the Alameda County Waste Management Authority and the Sonoma County Waste Management Agency for their assistance in developing this guide. Brochure design by Paul Ruiz and illustrations by Sheryl Chapman.

This guide is printed on 100% post-consumer recycled content paper with soy-based inks

The County of San Diego Recycles

It's In Our Nature!

In 1990 San Diego County residents and businesses recycled just 20% of their waste. Thanks to your efforts, the 2002 recycling rate was over 50%. But we can still do more.

WHY RECYCLE?

As the County of San Diego continues to grow, the recycling of construction and demolition materials is vital to preserving our existing landfill space. Construction and demolition debris (not including metals or yardwaste) comprises 35% of materials disposed in San Diego landfills. In 2002, residents and businesses in the unincorporated San Diego County landfilled 575,000 tons of material. 189,000 tons of that was construction and demolition material. Most of those materials landfilled, including dirt, rock, concrete and carpet could have been recycled.

By choosing durable, rather than disposable, products and using energy efficient appliances for remodels and new home construction, the amount of waste generated can be greatly reduced. Remodeling or retrofitting existing buildings can greatly reduce the amount of waste generated from new construction. If you have to demolish a structure, consider SALVAGE and DECONSTRUCTION.

The **County of San Diego's Solid Waste Ordinance**, and several jurisdictions' within the county, prohibits placing the following industrial materials in the trash:

ASPHALT, CONCRETE, DIRT, ROCK, SAND AND BRUSH.

WHAT CONSTRUCTION AND DEMOLITION WASTE IS SENT TO THE LANDFILL?

Source: 1999 Miramar Landfill Waste Characterization Study

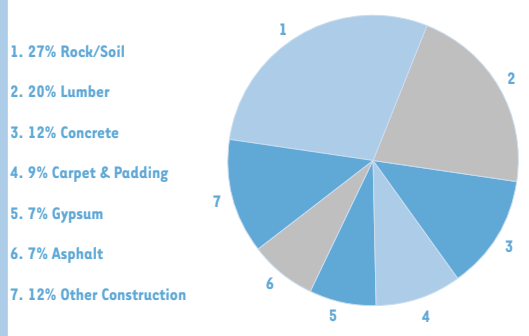

For more information, call **1-877-R-1-EARTH** (toll free).

STOP WASTE BEFORE IT STARTS

REDUCE WASTE... USE LESS!

- Be precise! Measure twice, cut once.
- Use standard size materials.
- Choose durable rather than disposable.
- Use energy efficient practices and products for construction, operation and maintenance of building.

REUSE MATERIALS

- Consider remodeling or retrofitting existing buildings for new use.
- Instead of DEMOLITION, consider SALVAGE and DECONSTRUCTION.
- Asphalt and concrete can be crushed and reused on-site.
- Use salvaged products or products made from recycled materials.

RECYCLING SAVES MONEY!

- Haulers generally charge less for recycling metal, concrete and clean wood than for normal trash collection. You can also use a scrap metal dealer or concrete facility for recycling collection.
- By diverting wastes from trash bins into recycling bins, you can reduce your trash bin size and the number of weekly collections.
- Extra time spent separating materials usually costs less than landfill fees.

HAVE A WASTE MANAGEMENT PLAN

Before you start, identify what materials are used in your project. Work with your contractor, hauler or recycler to determine what materials should be separated for recycling. Use the chart on the next page to help you get started.

According to the National Association of Home Builders (NAHB) Research Center, the following natural resources are required to build a 1,700 square feet home in this country:

- *9,700 board feet of lumber*
- *4,850 square feet of sheathing*
- *2,528 square feet of siding*
- *2,000 square feet of shingles*
- *55 cubic yards of concrete*
- *2,500 square feet of insulation*
- *6,484 square feet of drywall*
- *300 pounds of nails*
- *750 feet of copper wire*
- *170 feet of copper pipe*
- *55 gallons of paint*

Source: www.nahbrc.org

CLEAN LOADS SAVE YOU $$! CHECK WITH YOUR HAULER AND RECYCLER TO BE SURE WHAT A "CLEAN LOAD" IS.

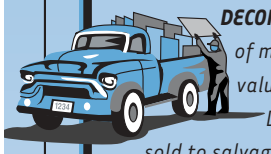

DECONSTRUCTION *is the careful removal of materials from structures to recover valuable building resources. Deconstructed materials can be sold to salvage companies, which eliminates landfill disposal fees.*

SALVAGE *is using and saving reusable items, including doors, hardware, appliances and fixtures (preferably before construction begins, to avoid damaging anything). These items are often rare like old-growth lumber or antique fixtures.*

Call 1-877-R-1-EARTH (1-877-713-2784) for more information.

WASTE MANAGEMENT PLAN

TIPS FOR A SUCCESSFUL PLAN:

- Appoint a recycling supervisor.
- Educate all workers on the project to keep lunch bags, caulking tubes and other trash out of the recycling bins.
- Require subcontractors to participate in your recycling program.
- Allow time for deconstruction and salvage.
- Sort materials by type.
- Place recycling bins in a location that will prevent misuse or contamination by the public. Even a small amount of trash can make the entire load unacceptable for recycling.

MATERIAL TYPE	QUANTITY (tons or containers)	SALVAGE OR REUSE	RECYCLE	DISPOSE
Asphalt & Concrete				
Brick/Masonry/Tile				
Cabinets, Doors, Fixtures, Windows				
Carpet				
Carpet Padding				
Cardboard				
Ceiling Tile (acoustic)				
Dirt (clean)				
Drywall (new, unpainted sheets or scrap)				
Drywall (used)				
Landscape Debris (brush, trees, stumps, etc.)				
Plastic Buckets				
Rock				
Roofing Materials				
Scrap Metal/Appliances				
Stucco				
Unpainted Wood & Pallets				
Remaining Trash				
Recycled Mixed Debris				
Other				
Hazardous Materials: Call 1-800-714-1195				

Call 1-877-R-1-EARTH (1-877-713-2784) for more information.

HAZARDOUS WASTES KEEP OUR WATER CLEAN

PUT TOXIC WASTE IN ITS PLACE!

SOME HAZARDOUS MATERIALS YOU MAY HAVE:

- ACIDS & CAUSTICS
- AEROSOL CANS
- ANTIFREEZE
- ASBESTOS
- CONTAMINATED SOILS
- FLUORESCENT LIGHTING TUBES & BALLASTS
- FUEL/GASOLINE KEROSENE
- GLUES
- HERBICIDES
- MOTOR OIL & FILTERS
- MERCURY
- NICKEL-CADMIUM (NI-CAD) BATTERIES
- PAINT (LEAD, OIL, LATEX)
- PAINTED WOOD
- PAINT THINNERS
- PCBs
- PESTICIDES
- POISONS
- POOL CHEMICALS
- PROPANE TANKS
- RAILROAD TIES
- RECHARGEABLE BATTERIES
- SOLVENTS
- THINNERS
- TREATED WOOD

Toxic wastes cannot be disposed of in the trash. There is AFFORDABLE, SAFE, LEGAL and CONVENIENT disposal of hazardous waste for homeowners and qualifying small businesses throughout San Diego County. If you are a homeowner, call **1-877-R-1-EARTH**.

If you are a small business that generates 27 gallons or 220 lbs. of hazardous waste each month, or 2.2 lbs. of acutely hazardous waste each month, you may qualify as a Conditionally Exempt Small Quantity Generator (CESQG), and be able to use certain Household Hazardous Waste Facilities. Call 1-800-714-1195 for information and to determine whether your business qualifies.

For large businesses and general information about hazardous waste call the County of San Diego Hazardous Materials Division at 1-800-253-9933.

Sponsored by the **County of San Diego Department of Environmental Health**.

The County of San Diego Watershed Protection Ordinance prohibits the discharge, either directly or indirectly, of anything but rainwater to the storm drains or water bodies. Best Management Practices (BMPs) help prevent illegal discharges of debris to nearby storm drains, creeks, rivers and the ocean.

BMPS FOR CONSTRUCTION AND DEMOLITION

- Whenever possible, schedule demolition, excavation and grading activities for dry weather.
- Designate staging areas for materials, soil stockpiles and wastes away from storm drains.
- Store materials and wastes covered with a tarp or plastic sheeting to shield them from wind or rain.
- Use dry clean up methods, such as sweeping and vacuuming whenever possible.
- Never bury waste. Contact your hauler for proper disposal of wastes and recyclable materials.

For more information or to report stormwater pollution, call the Regional Stormwater Hotline at 1-888-846-0800 or www.projectcleanwater.org.

BUILD SMARTER... BUILD GREEN

Each of us has a stake in preventing pollution and preserving resources for future generations. Buildings have a tremendous impact on the environment, both during construction and through their operation.

"Green" building is a strategy of land-use, building design and construction activities that reduce environmental impacts. Benefits of building green include reduced energy consumption and protection of ecosystems and occupant health. Green building reduces dependence on natural resources such as trees, oil and minerals. It creates less pollution and greenhouse gasses by reducing manufacturing and transportation related emissions. For more information: http://www.usgbc.org/chapters/sandiego/meet_the_chapter.asp

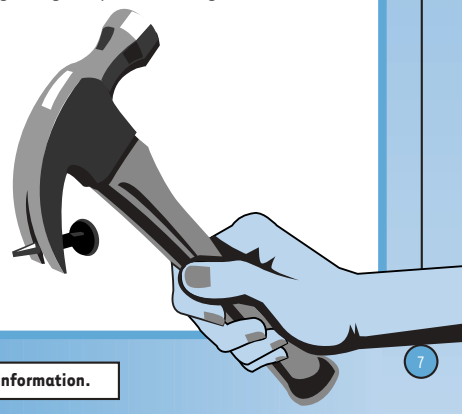

Call 1-877-R-1-EARTH (1-877-713-2784) for more information.

HAZARDOUS WASTE AND RECYCLING CONTACTS

	HAZARDOUS WASTE CONTACT	RECYCLING CONTACT
City of San Diego	858-694-7000	Same/Mismo
Carlsbad	800-714-1195	760-929-9400
Chula Vista	619-691-5122	Same/Mismo
Coronado	619-522-7382	619-287-7555
Del Mar	800-714-1195	760-929-9400
El Cajon	619-596-5100	Same/Mismo
Encinitas	800-714-1195	760-436-4151
Escondido	760-839-4818	Same/Mismo
Imperial Beach	619-691-5122	619-287-7555
La Mesa	619-287-5696 x4270	619-287-7555
Lemon Grove	800-449-7587	619-287-7555
National City	619-691-5122	619-474-8855
Oceanside	760-439-2824	Same/Mismo
Poway	800-714-1195	858-679-5402
San Marcos	760-744-1050	1-800-CLEANUP
Santee	619-596-5100	Same/Mismo
Solana Beach	800-714-1195	858-350-8544
Unincorporated County	1-877-713-2784	Same/Mismo
Vista	800-714-1195	760-744-5615

OTHER RECYCLING GUIDES FROM THE COUNTY OF SAN DIEGO

GUÍAS ACERCA DEL RECICLAJE OFRECIDAS POR EL CONDADO DE SAN DIEGO

Call **1-877-R-1-EARTH** or visit our website at **http://www.co.san-diego.ca.us/dpw/management/recycling.htm** for a copy of any of the following guides.

RESIDENTIAL GUIDE TO RECYCLING AND REUSE

RECICLAJE Y RE-UTILIZACIÓN: GUÍA RESIDENCIAL

Provides information on general household recycling and drop-off locations.

Proporciona información general acerca del reciclaje doméstico y sitios donde se pueden llevar los reciclables.

HOUSEHOLD HAZARDOUS WASTE RECYCLING GUIDE

DESECHOS TÓXICOS DOMÉSTICOS GUÍA RESIDENCIAL

How to safely store and dispose of household toxics.

Como almacenar y disponer con seguridad los tóxicos domésticos.

JUNK MAIL REDUCTION KIT

KIT PARA LA REDUCCIÓN DEL CORREO BASURA

Reduce unwanted mail.

Reducir el correo no solicitado.

AUTOMOTIVE RECYCLING GUIDE

GUÍA PARA EL RECICLAJE AUTOMOTRIZ

Find places to recycle everything auto. Includes information on care and recycling of tires, motor oil, auto parts and hazardous materials.

Encuentre lugares para reciclar todo lo relacionado con el automóvil. Incluye información acerca del manejo y reciclaje de llantas, aceite de motor, refacciones de auto y materiales tóxicos.

APARTMENT AND CONDOMINIUM RECYCLING GUIDE

GUÍA PARA EL RECICLAJE EN APARTAMENTOS Y CONDOMINIOS

The 1,2,3's of multi-family complex recycling.

El 1,2 y 3 del reciclaje en complejos multifamiliares.

1-877-R-1-EARTH

Call 1-877-R-1-EARTH (1-877-713-2784) for more information.

RECYCLING CENTERS | CENTROS DE RECICLAJE

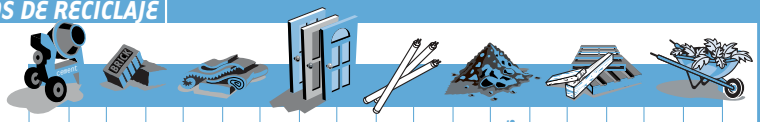

KEY

B = BUY BACK

D = DONATION

F = FEE

	Asphalt	Bath Fixtures	Bricks	Cabinets	Carpet/Carpet Padding	Clean Fill Dirt	Concrete	Doors	Insulation	Lumber	Scrap Metals	Rock	Salvage Materials	Sand	Tile	Windows	Wood Pallets	Yardwaste/Brush
A-1 Alloys Recycling Center 724 Civic Center Dr. National City, CA 91950 619-474-4878											B/D							
Agri-Service 3210 Oceanside Blvd. Oceanside, CA 92056 760-439-9920										F							F	F
Architectural Salvage 1971 India St. San Diego, CA 92101 619-696-1313 *Drop-off by appt.; interesting unique re-usable items*		B/D		B/D				B/D					B/D			B/D		
Campo Transfer Station (Rural Bin) 1515 Buckman Springs Rd. Campo, CA 91906 619-478-5523																		F
Canyon Rock 7500 Mission Gorge Rd. San Diego, CA 92120 619-265-0296	F																	
California Commercial Asphalt 387 Hollister San Diego, CA 92154 619-429-3301	F		F				F											
	Asfalto	Artículos Accesorios de Baño	Ladrillo	Gabinetes	Alfombra/Relleno de Alfombra	Tierra Limpia	Cemento	Puertas	Aislamiento	Madera	Trozos de Metal	Piedra	Materiales de Salvamento	Arena	Baldosa	Ventanas	Calzo de Madera	Desperdicio de Yarda/Matorrales

Call center for hours of operation and materials accepted. Because the industry is constantly changing, some facilities may have reduced or expanded the types of materials they take. Make sure you find out the terms and conditions that are required.

For items not listed, including paint, motor oil, televisions, tires, etc., Call **1-877-R-1-EARTH** (toll free).
Con lo relacionado a los artículos no listados, incluyendo pintura, aceite de motor, televisores, llantas, etc., Llame al 1-877-R-1-EARTH (llamada sin cobrar).

RECYCLING CENTERS | CENTROS DE RECICLAJE

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Carpet Pad Collections 2501 Commercial St. San Diego, CA 92113 619-230-1174					X													
Ennis Inc. 12421 Vigilante Rd. Lakeside, CA 92040 619-443-9024	F		F			F	F					F		F	F			
Escondido Recycling Yard 1350 W. Mission Rd. Escondido, CA 92029 760-745-4832											B							
Escondido Sand & Gravel, LLC 500 N. Tulip St. Escondido, CA 92025 760-432-4690	F						F											
Evergreen Nursery 7150 Black Mountain Rd. San Diego, CA 92130 858-481-0622																		F
Evergreen Nursery 3231 Oceanside Blvd. Oceanside, CA 92056 760-754-0340																		F
Fallbrook Refuse & Recycling 550 W. Aviation Rd. Fallbrook, CA 92028 760-728-6114		F									F							
	Asfalto	Artículos Accesorios de Baño	Ladrillo	Gabinetes	Alfombra/Relleno de Alfombra	Tierra Limpia	Cemento	Puertas	Aislamiento	Madera	Trozos de Metal	Piedra	Materiales de Salvamento	Arena	Baldosa	Ventanas	Calzo de Madera	Desperdicio de Yarda/Matorrales

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Hanson Aggregates 5330 Main St. Chula Vista, CA 91911 858-967-8072 *On-site crushing*	F						F											
Hanson Aggregates 3701 Haymar Dr. Carlsbad, CA 92008 858-967-8072 *On-site crushing*	F						F											
Hanson Aggregates 9229 Harris Plant Rd. San Diego, CA 92163 858-967-8072 *On-site crushing*	F					F	F											
Inland Pacific Resource Recovery, Inc. 12650 Slaughterhouse Canyon Rd. Lakeside, CA 92040 619-390-1418										F							F	F
IMS Recycling Services 2697 Main St. San Diego, CA 92113 619-231-2521											B							
J. Cloud Inc. 2094 Willow Glen Dr. El Cajon, CA 92019 619-593-1856	F					F	F					F		F				
Julian Recycling 3578 Hwy. 78 (Turn left on Newman) Julian, CA 92036 760-765-0062 *Masonry, porcelain*	F					F	F					F			F			
	Asfalto	Artículos Accesorios de Baño	Ladrillo	Gabinetes	Alfombra/Relleno de Alfombra	Tierra Limpia	Cemento	Puertas	Aislamiento	Madera	Trozos de Metal	Piedra	Materiales de Salvamento	Arena	Baldosa	Ventanas	Calzo de Madera	Desperdicio de Yarda/Matorrales

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RECYCLING CENTERS | CENTROS DE RECICLAJE

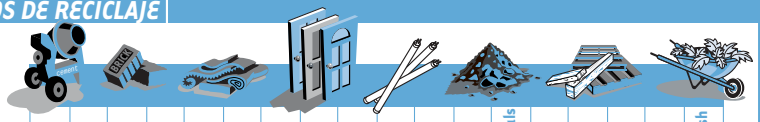

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California Metals 297 S. Marshall Ave. El Cajon, CA 92020 619-444-3111											B							
Julian Transfer Station (Rural Bin) 500 Pleasant View Dr. Julian, CA 92036 760-765-2963																		F
L.E. Morrison Co. 332 Elkelton Place Spring Valley, CA 91977 619-479-5888 *Rebar*	F		F			F	F					F		F				
Lakeside Land Co. 10101 Riverford Rd. Lakeside, CA 92040 619-449-9083 *Pick-up, clay*	F					F	F					F						
LTS Recycling 1682 Mountain View Rd Crest, CA 92021 619-895-4844 *Masonry, porcelain*	F	X				F	F								F			
Miller Metals 636 Front St. El Cajon, CA 92020 619-444-2136											B/F							
Miramar Greenery 5180 Convoy St. San Diego, CA 92111 858-573-1420																		F
	Asfalto	Artículos Accesorios de Baño	Ladrillo	Gabinetes	Alfombra/Relleno de Alfombra	Tierra Limpia	Cemento	Puertas	Aislamiento	Madera	Trozos de Metal	Piedra	Materiales de Salvamento	Arena	Baldosa	Ventanas	Calzo de Madera	Desperdicio de Yarda/Matorrales

Call center for hours of operation and materials accepted. Because the industry is constantly changing, some facilities may have reduced or expanded the types of materials they take. Make sure you find out the terms and conditions that are required.

For items not listed, including paint, motor oil, televisions, tires, etc., Call **1-877-R-1-EARTH** (toll free).
Con lo relacionado a los artículos no listados, incluyendo pintura, aceite de motor, televisores, llantas, etc., Llame al 1-877-R-1-EARTH (llamada sin cobrar).

RECYCLING CENTERS | CENTROS DE RECICLAJE

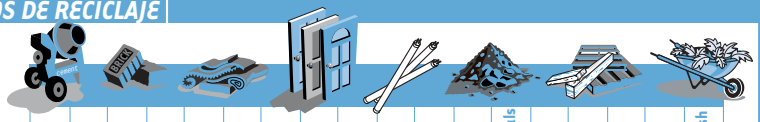

KEY
B = BUY BACK
D = DONATION
F = FEE

	Asphalt	Bath Fixtures	Bricks	Cabinets	Carpet/Carpet Padding	Clean Fill Dirt	Concrete	Doors	Insulation	Lumber	Scrap Metals	Rock	Salvage Materials	Sand	Tile	Windows	Wood Pallets	Yardwaste/Brush
Otay Landfill 1700 Maxwell Rd. Chula Vista, CA 91910 619-421-3773	F						F					F						F
Organic Recycling West, Inc. 1202 La Media Rd. San Diego, CA 92154 619-661-6712 ***Pick-up; on-site crushing, drywall, manure, sawdust***						F				F				F			F	F
Paul Brown's South Bay Recycle Center 120 Reed Ct. Chula Vista, CA 91911 619-425-7197											B							
Quality Recycling 10197 Riverford Rd. Ste. A Lakeside, CA 92040 619-596-CANS											B/D							
Quality Recycling 149 Nettleton Rd. Vista, CA 92084 760-724-3623											B/D							
ReStore (Habitat for Humanity) 10222 San Diego Mission Rd. San Diego, CA 92108 619-516-5269 ***Pick-up***		D	D	D				D		D			D		D	D		
Romero General Construction Corp. 8354 Nelson Way Escondido, CA 92026 760-749-9312 ***On-site crushing***	F						F					F						
	Asfalto	Artículos Accesorios de Baño	Ladrillo	Gabinetes	Alfombra/Relleno de Alfombra	Tierra Limpia	Cemento	Puertas	Aislamiento	Madera	Trozos de Metal	Piedra	Materiales de Salvamento	Arena	Baldosa	Ventanas	Calzo de Madera	Desperdicio de Yarda/Matorrales

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RECYCLING CENTERS | CENTROS DE RECICLAJE

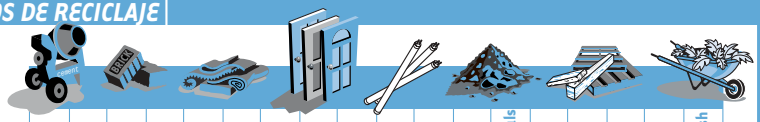

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	Asfalto	Artículos Accesorios de Baño	Ladrillo	Gabinetes	Alfombra/Relleno de Alfombra	Tierra Limpia	Cemento	Puertas	Aislamiento	Madera	Trozos de Metal	Piedra	Materiales de Salvamento	Arena	Baldosa	Ventanas	Calzo de Madera	Desperdicio de Yarda/Matorrales
Sycamore Landfill 8514 Mast Blvd. Santee, CA 92071 619-562-9426	F						F				F	F						F
Universal Recycling 8514 Mast Blvd. Santee, CA 92072 619-448-4295		D/F									B/F							
Viejas Transfer Station (Rural Bin) 7850 Cambell Ranch Rd. Alpine, CA 91901 619-445-8472																		F
Vintage Architectural 1861 Main St. Ste. B San Diego, CA 92113 619-239-7636 *Light Fixtures*		D		D				D					D			D		
Vulcan Materials Landfill 3605 Dehesa Rd. El Cajon, CA 92019 619-440-2363 *On-site crushing*	F		F			F	F					F		F	F			
Vulcan Materials Landfill 10051 Black Mountain Rd. San Diego, CA 92126 858-536-9684 *On-site crushing*	F		F			F	F					F		F	F			
Waste Management 1001 W. Bradley Ave. El Cajon, CA 92020 619-596-5100		F									D							

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Condado de San Diego

GUÍA PARA EL RECICLAJE DE CONSTRUCCIÓN Y DEMOLICIÓN

Línea del Reciclaje y Desechos Tóxicos
Domésticos del Condado no incorporado
1-877-R-1-EARTH (llamada sin cobrar)
http://www.sdcounty.ca.gov/dpw/management/recycling.htm

2004 – 2005

ÍNDICE

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Gracias especiales a I Love A Clean San Diego, la Autoridad administrativa del desecho del Condado de Alameda y a la Agencia administrativa del desecho del Condado de Sonoma por su ayuda en el desarrollo de esta guía. El diseño de este folleto por Paul Ruiz y las ilustraciones por Sheryl Chapman.

Para incluir su negocio en ediciones futuras de este directorio, haga el favor de llamar

1-877-R-1-EARTH

Estar incluido en este directorio no es una recomendación o aprobación del **Condado de San Diego**, el que está proporcionando la información como un servicio público para ayudar a reducir la contaminación y la cantidad de materiales que se transportan al relleno sanitario.

Este guía se ha impreso en papel reciclado con un contenido del 100% de pos-consumidor y con tintas con base de soya.

El Condado de San Diego Recicla
¡es nuestra naturaleza!

En 1990 los residentes y comercios en el Condado de San Diego reciclaron sólo el 20% de sus desechos. Gracias a sus esfuerzos, la tasa de reciclaje en el año 2002 fue de más del 50%. Pero todavía podemos hacer más.

Este guía proporciona información sobre el reciclaje y la prevención de los desechos para todos los constructores, desde el constructor aficionado y los que se ocupan en modelar de nuevo, hasta los constructores de grandes proyectos comerciales. Este es su manual para ahorrar dinero y recursos en el sitio de la obra.

¿POR QUÉ RECICLAR?

Conforme el Condado de San Diego continua creciendo, el reciclaje de materiales de construcción y demolición es vital para la preservación de nuestro espacio existente del relleno sanitario. Los escombros de construcción y demolición (sin incluir los metales y desechos de jardines) consta del 35% de materiales tirados en los rellenos sanitarios de San Diego. En el año 2002, los residentes y negocios en el área no incorporada del Condado de San de San Diego, dispusieron de 575.000 toneladas de material en los rellenos sanitarios. De esa cantidad, 189.000 toneladas fue material de construcción y demolición. La mayor cantidad de esos materiales, incluyendo tierra, piedra, concreto y alfombras se pudo haber reciclado.

La cantidad del desecho generado puede ser grandemente reducida si se escogen productos durables, en lugar de los desechables, y si se usan aparatos electrodomésticos con eficiencia de energía para la nueva modelación o para la construcción de viviendas nuevas. La remodelación o retro-acondicionamiento de los edificios en existencia puede reducir grandemente la cantidad de desechos generados en la nueva construcción. Si tiene usted que echar abajo una estructura, considere el SALVAMENTO y la DESCONSTRUCCIÓN.

El Reglamento de Residuos Sólidos del Condado (**County Solid Waste Ordinance**), y varias jurisdicciones dentro del condado prohibe colocar los materiales industriales enumerados a continuación:

ASFALTO, CONCRETO, TIERRA, PIEDRA, ARENA
BROZA (DESPOJO DE PLANTAS)

¿QUÉ DESECHO DE CONSTRUCCIÓN Y DEMOLICIÓN ES ENVIADO AL RELLENO SANITARIO?

Fuente: Estudio de caracterización del relleno sanitario de desechos de Miramar de 1999

1. 27% Piedra/Tierra
2. 20% Madera
3. 12% Concreto
4. 9% Alfombra y alcochonado para alfombras
5. 7% Yeso
6. 7% Asfalto
7. 12% Otra construcción

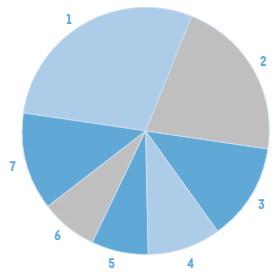

Para mayor información, llame al **1-877-R-1-EARTH** (libre de costo.)

DETENGA EL DESECHO ANTES DE QUE EMPIECE

REDUCIR LOS RESIDUOS...¡UTILICE MENOS!

- ¡Ser preciso! Medir dos veces, cortar una sola vez.
- Utilice materiales de tamaño normal.
- Utilizar durables en lugar de desechables.
- Usar prácticas eficientes de energía y productos para construcción, operación y mantenimiento de un edificio.

REUTILICE LOS MATERIALES

- Considerar la remodelación o el refuerzo de edificios existentes para un uso nuevo.
- En lugar de DEMOLICIÓN, considerar la RECOBRACIÓN y DESCONSTRUCCIÓN.
- El asfalto y el concreto puede triturarse y utilizarse de nuevo en otra construcción.
- Utilizar los productos recobrados o productos hechos de materiales reciclados.

¡EL RECICLAJE AHORRA $$!

- Los acarreadores generalmente cobran menos por el reciclaje del metal, el concreto, y la madera limpia que por la recolección normal de la basura. Usted puede también contratar a un comerciante en chatarra o a una empresa de recolección de reciclables.
- Desviando los desechos de los botes de la basura a los botes de los reciclables, usted puede reducir el tamaño de su bote de basura al igual que las veces de la recolección semanal.
- El tiempo extra que se ocupa en separar los materiales cuesta menos que lo que se pague en el relleno sanitario.

PLAN ADMINISTRATIVO DE RESIDUOS

Antes de empezar, identifique qué materiales serán parte de su proyecto. Póngase de acuerdo con su acarreador, su contratista o reciclador para determinar los materiales que deberán separarse para su reciclaje. Use el gráfico en la siguiente página para obtener la ayuda necesaria para empezar.

De acuerdo con la National Association of Home Builders (NAHB) Research Center "Centro de investigación de la asociación nacional de constructores de viviendas (ANCV)", se necesitan los siguientes recursos naturales para construir una casa de 1.700 pies cuadrados en este país:

- 9.700 pies lineales de madera
- 4.850 pies cuadrados de revestimiento
- 2.528 pies cuadrados de material para la fachada
- 2.000 pies cuadrados de tablilla para el techo
- 55 yardas cúbicas de concreto
- 2.500 pies cuadrados de aislamiento
- 6.484 pies cuadrados de hojas de yeso para paredes
- 300 libras de clavos
- 750 pies de alambre de cobre
- 170 pies de tubería de cobre
- 55 galones de pintura

Fuente: www.nahbrc.org

¡CARGAMENTOS LIMPIOS LE AHORRAN $$!

INFÓRMESE CON SU ACARREADOR Y/O RECICLADOR PARA ESTAR SEGURO DE QUÉ ES UN "CARGAMENTO LIMPIO"

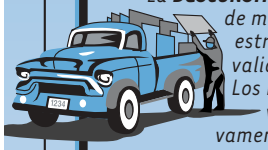

*La **DESCONSTRUCCIÓN** es la remoción cuidadosa de materiales de las estructuras para el recobro de fuentes valiosas de construcción. Los materiales desconstruidos pueden venderse a las compañías de salvamento de material, eliminando así las cuotas del relleno sanitario.*

*El **SALVAMENTO** es la utilización y la recuperación de artículos que se pueden volver a usar, incluyendo puertas, ferretería, artefactos y accesorios (preferiblemente antes de que se inicie la construcción, para evitar los daños a cualesquiera de esos objetos). Estos objetos a menudo son raros, como madera o accesorios de antigüedad.*

Llame al 1-877-R-1-EARTH (1-877-713-2784) para obtener mayor información.

PLAN PARA LA ADMINISTRACIÓN DEL DESECHO

PUNTOS PARA UN PLAN EFICIENTE:

- Designe un supervisor de reciclaje.
- Eduque a todos los trabajadores en el proyecto que no tiren en los contenedores del reciclaje las bolsas de papel de su almuerzo, los tubos de calafateo y otra basura.
- Requiérale a sus subcontratistas que participen en su pro grama de reciclaje.
- Dé tiempo para la desconstrucción y para la recobración.
- Separe los materiales por tipo o categoría.
- Coloque los contenedores de reciclaje en un sitio en el que se pueda evitar el uso inapropiado o la contaminación del público. Tan sólo una mínima cantidad de basura hará que toda la carga sea inaceptable para reciclarse.

TIPO DE MATERIAL	CANTIDAD (tons or containers)	RECOBRAR O RE-USAR	RECICLAR	DESECHAR
Asfalto y concreto				
Ladrillo/albañilería/mosaico				
Gabinetes, puertas, accesorios, ventanas				
Alfombra				
Almohadín de alfombra/espuma solamente				
Cartón				
Teja acústica para cielo				
Tierra (limpia)				
Tabla de yeso (usada)				
Tabla de yeso (nueva, sin pintar o en pedazos)				
Despojos de jardín (plantas, árboles, troncos, etc.)				
Cubetas de plástico				
Piedra				
Estiroespuma/remanentes de plástico				
Materiales para techos				
Residuos de metal/Accesorios				
Yeso				
Madera sin pintar y plataformas				
Basura restante/Basura				
Escombro mixto reciclable				
Otro				
Materiales Peligrosos: Llame al (800) 714-1195				

Llame al 1-877-R-1-EARTH (1-877-713-2784) para obtener mayor información.

RESIDUOS PELIGROSOS

¡COLOQUE LOS RESIDUOS TOXICOS EN SU LUGAR!

ALGUNOS MATERIALES PELIGROSOS QUE USTED PUEDE TENER:

- ÁCIDOS Y CÁUSTICOS
- LATAS DE AEROSOL
- ANTICONGELANTE
- ASBESTO
- TIERRA CONTAMINADA
- TUBOS FLUORESCENTE Y BALASTO
- COMBUSTIBLE/ GASOLINA/PETRÓLEO
- PEGAMENTOS
- HERBICIDAS PELIGROSOS
- ACEITE DE MOTOR Y FILTROS DE ACEITE
- MERCURIO
- PILAS (BATERÍAS) DE CADMIUM
- PINTURA PLOMADA, DE ACEITE, LÁTEX
- LATAS VACÍAS DE PINTURA
- MADERA PINTADA
- ADELGAZADORES DE PINTURA (AGUARRÁZ, ETC.)
- PCBs
- PESTICIDAS
- VENENOS
- PRODUCTOS QUÍMICOS PARA PISCINAS
- TANQUES DE PROPANO
- DURMIENTES
- PILAS (BATERÍAS) RECARGABLES
- SOLVENTES
- MADERA TRATADA CON ADELGAZADORES

Desechos tóxicos no se deben tirar en la basura regular. Existen medios por todo el Condado de San Diego para la disposición de los desechos peligrosos para los dueños de casas y para los pequeños negocios que califiquen, que son ASEQUIBLES, SEGUROS, LEGALES, y CÓMODOS. Si es usted un dueño de casa, llame al **1-877-R-1-EARTH**.

Si usted es un pequeño negocio que genera 27 galones o 220 libras de desechos peligrosos por mes, o 2.2 libras de desechos extremadamente peligros por mes, usted puede calificar como un Conditionally Exempt Small Quantity Generator (CESQG) "Generador de pequeña cantidad exento condicionalmente (GPCEC)", y así poder hacer uso de ciertas instalaciones de desechos domésticos peligrosos. Llame al **1-800-714-1195** para mayor información y para determinar si su empresa califica.

Para empresas mayores y para información general con respecto a residuos peligrosos, llame por favor a la División de Materiales Peligrosos del **Condado de San Diego al 1-800-253-9933**.

Auspiciado por el **Departamento de Salubridad Ambiental del Condado de San Diego**.

MANTENGA NUESTRA AGUA LIMPIA

El Reglamento de Protección de Cuencas de San Diego (The County of San Diego Watershed Protection Ordinance) prohibe el descargue, directo o indirecto, de cualquier cosa excepto el agua de lluvia por el sistema de desagües (alcantarillados) públicos o urbanos. El (MMP) Manejo de Mejores Prácticas (Best Management Practices –BMPs) ayuda a prevenir descargas ilegales de escombros en los desagües cercanos, arroyos, ríos y el océano.

BMPS (MMPS) PARA LA CONSTRUCCIÓN Y DEMOLICIÓN:

- Siempre que sea posible, programe las actividades de demolición, excavación, y explanación durante el tiempo de secas.
- Designe zonas de embarque para materiales, pilas de tierra, y residuos lejos de los desagües públicos.
- Guarde materiales y residuos cubiertos con una lona impermeable o de plástico, para protegerlos del viento y de la lluvia.
- Siempre que sea posible, use métodos secos de limpieza, ya sea mediante una escoba o una aspiradora eléctrica.
- Nunca entierre los residuos. Contacte a su acarreador para la disposición apropiada de residuos y los materiales reciclables.

Para mayor información o para reportar sobre la contaminación urbana de agua de desagüe, llame a Regional Stormwater Hotline al (888) 846-0800 o www.projectcleanwater.org.

CONSTRUYA INTELIGENTEMENTE... CONSTRUYA VERDE

Cada uno de nosotros tenemos intereses en la prevención de la contaminación y la preservación de los recursos para las generaciones futuras. Las construcciones tienen un tremendo impacto en el ambiente—tanto durante su construcción como durante su operación.

Construyendo "Verde" es una estrategia del uso de la tierra, diseño del edificio, y la construcción de actividades que reducen los impactos ambientales. Los beneficios de edificar verde incluye: la reducción del consumo de la energía, la protección de los ecosistemas y la salud de los ocupantes. La construcción verde reduce la dependencia en los recursos naturales como los árboles, el aceite, y los minerales. Crea menos contaminación y gases de efecto invernadero al reducir la manufactura y transportación de emisiones relacionadas. Para mayor información acceda a: http://www.usgbc.org/chapters/sandiego/meet_the_chapter.asp

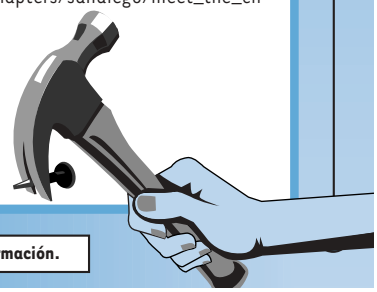

Llame al 1-877-R-1-EARTH (1-877-713-2784) para obtener mayor información.

6) **Sediment Tracking** – Construct a stabilized construction entrance and conduct frequent street sweeping to keep sediment off of roadways.

7) **Materials Management** – Protect stockpiles of soil and paving materials from wind and water erosion. Have a spill prevention and control plan for hazardous materials such as fuel, paints and solvents.

8) **Waste Management** – properly store and dispose of solid, hazardous, concrete, and sanitary wastes. Cleanup spills immediately.

9) **Non-Storm Water Discharges**

- **Paving/grinding** – Protect inlets from slurry seal operations and vacuum saw cut slurry and grinding residue.
- **De-watering** – Use accumulated water for dust suppression or consult with City staff and the Regional Water Quality Control Board when dewatering operation is proposed.
- **Potable Water/Irrigation** – Shut off water source to broken lines, sprinklers or valves as soon as possible and direct water away from pollutant sources.

For further assistance, detailed BMP information from the above list can be downloaded from the City's Storm Water Pollution Prevention website.

Additional Resources

City of La Mesa Departments

Storm Water Program	(619) 667-1134
Engineering Division	(619) 667-1166
Building Division	(619) 667-1176

Best Management Practices (BMPs)

La Mesa Storm Water Page
www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm

California Storm Water Quality Association (CASQA) www.cabmphandbooks.com

International BMP Database
www.bmpdatabase.org

Regulatory

State Water Resources Control Board
www.swrcb.ca.gov/stormwtr/index.html

California Regional Water Quality Control Board, San Diego Region
www.swrcb.ca.gov/rwqcb9/

US Environmental Protection Agency, NPDES Program
http://cfpub.epa.gov/npdes/index.cfm

Waste Management

EDCO (solid waste)	(619) 287-5696
County Hazardous Materials Division	(619) 338-2222
Sanitary Sewer Overflows	
(Mon-Fri 6am-3:30pm)	(619) 667-1450
(Non-working hours)	(619) 469-6111

Storm Water Best Management Practices (BMPs)

A Guide for Construction Activity

Provided by the City of La Mesa
Department of Public Works
Storm Water Program

8130 Allison Ave
La Mesa, CA
91941

(619) 667-1134
www.cityoflamesa.com

Storm Water Pollution

Construction activities can have a significant impact on water quality due to soil disturbances and the types of materials and equipment used. As storm water flows over a construction site, it can pick up pollutants such as sediment, oil, fuels, paints, adhesives, trash, debris and fertilizers. Polluted storm water runoff can harm or kill fish and other wildlife, and can destroy aquatic habitat.

Best Management Practices (BMPs)

In order to reduce, or eliminate, erosion and pollutant discharges into La Mesa's storm drain system, owners and operators of all construction sites are required to implement Best Management Practices (BMPs). BMPs are techniques or physical controls utilized to prevent pollution.

Permit/Regulatory Requirements

The following permits and ordinances must be considered before construction or grading activity commences:

- **State Construction General Permit** – Projects which disturb one acre or more of soil must obtain coverage by submitting a Notice of Intent to the State Water Resources Control Board and preparing a Storm Water Pollution Prevention Plan (SWPPP).
- **Storm Water Management Ordinance -** Review Chapter 7.18 of the La Mesa Municipal Code (LMC) for local storm water requirements and penalties for noncompliance.
- **Grading Ordinance** – Chapter 14.05 of the LMC requires additional erosion control requirements during grading activities. Consult with the Engineering Division to determine if a grading permit is needed.
- **Building Permits** – Contact the Building Division to determine what building permits may be needed. Storm water BMP notes must be shown on site plans.
- **Encroachment Permits** – A permit is needed when working in the public right-of-way. Please contact the Engineering Division for specific requirements.

Inspection Program

City staff monitors constructions sites for proper erosion and sediment controls all year long, with more frequent inspections occurring during the wet season (October 1 through April 30). Inspectors will evaluate BMP implementation, effectiveness and maintenance.

Sites Covered Under State Construction General Permit (Over 1 Acre):

- These sites are also subject to inspections by the Regional Water Quality Control Board (RWQCB).
- Self-inspections are required before forecasted rain events, during each 24-hour rain event, and following a rain event.

Minimum BMPs

Construction projects within the City will be required to implement at least one of the BMPs from each category below when applicable to the site. Please refer to the following list while planning your project to ensure compliance with City and State requirements and to prevent storm water pollution. Brief examples of BMPs have been mentioned within each category, but do not represent a complete list.

1) **Planning and Scheduling** – Minimize land disturbance during the wet season.

2) **Slope Stabilization** – Preserve existing vegetation and stabilize slopes with hydraulic mulch or erosion control blankets.

3) **Site Drainage** – Install outlet protection devices to reduce velocity and erosion potential of storm water flows.

4) **Sediment Perimeter Protection** – Install silt fencing, straw rolls or a gravel bag barrier to prevent sediment discharges.

5) **Sediment Capture** Protect all storm drain inlets with gravel bags. For sites over an acre, inlet controls should be used in conjunction with a sediment basin/trap.

No Waiting in Long Lines!

How to Dispose of CDI

- 1. Off the 94 heading East, take the Federal Blvd. off-ramp and continue straight on Federal Blvd. enter the last gate of the facility. If you're heading West on the 94, take College Avenue. Go left under the bridge and right onto Federal Blvd. EDCO/SANCO is on the FWY side of Federal Blvd between San Miguel Avenue and Central Avenue, Lemon Grove.
- 2. Pull into the EDCO/SANCO driveway closest to Bob Baker Toyota.
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- 7. The cashier will present your ticket for payment.

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- 1044 W Washington Ave, Escondido
Phone: (760) 745-3332

EDCO Recovery & Transfer
- 3660 Dalbergia St. San Diego
Phone: (619) 234-7774

EDCO Station
- 8184 Commercial St.
Phone: (619) 466-3355

Ramona Transfer Station
- 324 Maple Street, Ramona
Phone: (760) 789-0516

EDCO

CITY OF LA MESA
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2006

Submitted to:

CITY OF LA MESA
Engineering Department
8130 Allison Avenue
La Mesa, CA 91941

Prepared by:

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January 3, 2007
Project No. 200609W-1

Mr. Hamed Hashemian, P.E.
Engineering Project Manager
City of La Mesa
8130 Allison Avenue
P.O. Box 937
La Mesa, CA 91944-0937

Re: 2006 Dry Weather Field Screening and Analytical Monitoring Program City of La Mesa, California

Dear Mr. Hashemian:

Enclosed please find the final report for the City of La Mesa 2006 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of La Mesa during the 2006 dry weather season. The contents include field screening data and analytical laboratory test results, analysis of the collected data, and photographs of the sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions. Review comments on the draft report previously submitted to the City have been incorporated into this final report.

It has been our pleasure working with the City of La Mesa on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

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2 Historical Data Graphs: San Diego Bay Watershed

ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
µg/L	Micrograms per liter
303(d)	Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
CFR	Code of Federal Regulations
COC	Constituent of Concern
Copermittees	The 18 cities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority.
CTR	California Toxics Rule
D-MAX	D-MAX Engineering, Inc.
EC	Electrical Conductivity
EMA	EnviroMatrix Analytical, Inc.
gpm	Gallons per minute
GPS	Global Positioning System
HSA	Hydrologic Subarea
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illegal Discharge
JURMP	Jurisdictional Urban Runoff Management Program
MLS	Mass Loading Station
MBAS	Methylene Blue Active Substances
mg/L	Milligrams per liter
MPN/100mL	Most probable number (of colony-forming units) per 100 milliliters
mS/cm	Millisiemens per centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order 2001-01
NTU	Nephelometric Turbidity Unit
ppb	Parts per billion
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TNTC	Too Numerous To Count
USEPA	United States Environmental Protection Agency
WQO	Water Quality Objective
WURMP	Watershed Urban Runoff Management Program

1 INTRODUCTION

1.1 Regulatory Requirements

The current Municipal Storm Water Permit (Municipal Permit), San Diego Regional Water Quality Control Board (RWQCB) Order No. 2001-01, requires that the 18 cities within San Diego County, the County of San Diego, the Port of San Diego and the San Diego County Region Airport Authority (Copermittees) conduct annual dry weather monitoring of discharges into the storm drain system within their jurisdictions. As one of these Copermittees, the City of La Mesa is subject to this order. The main parts of the permit that discuss the dry weather monitoring program are sections F.5.b, F.5.c, and F.5.d, as well as Attachment E. The primary goal of this program is the detection and identification of illicit connections and illegal discharges (IC/ID). The Municipal Permit requires flow estimates, field observations, and field analyses. Copermittees also must conduct laboratory analyses for 25 percent of the sites with flowing or ponded water. For each sampling location that exhibits no flow, an alternate sampling station must be selected and sampled. If the results of the field or laboratory analysis exceed established action levels, follow-up investigations are required.

1.2 Hydrologic Setting

The City of La Mesa, located just east of the City of San Diego, has an area of approximately nine square miles. Land use in La Mesa is mainly residential with about 55,000 residents; other land uses in La Mesa include roads and streets, commercial, mixed use, schools, and industrial.

About 52% of La Mesa is in the San Diego River Watershed, Hydrologic Unit (HU) 907 and the remaining 48% is located in the San Diego Bay Watershed. The San Diego Bay Watershed is comprised of three hydrologic units: Pueblo San Diego (HU 908), Sweetwater (HU 909), and Otay (HU 910). Each hydrologic unit is essentially a separate watershed, but since these three watersheds all drain to San Diego Bay, they have been combined into one watershed management area, referred to as the San Diego Bay Watershed, for regulatory purposes. The City of La Mesa includes areas within two of those hydrologic units, the Pueblo San Diego Watershed and the Sweetwater Watershed. Runoff generated in the City is conveyed through five drainage basins. The boundaries of these drainage basins are illustrated in Figure 1. Table 1-1 lists the drainage basins along with the approximate percentage of drainage area in La Mesa, the corresponding hydrologic unit of the basin, and the receiving water body to which each basin drains:

TABLE 1-1
CITY OF LA MESA DRAINAGE BASINS

Drainage Basin	Percentage of City Area	Hydrologic Unit	Receiving Water Body	Watershed
Alvarado	51	907	San Diego River	San Diego River
University	28	908	Chollas Creek	San Diego Bay
Spring Valley	14	909	Sweetwater River	San Diego Bay
Lemon Grove	6	908	Chollas Creek	San Diego Bay
Lake Murray	1	907	San Diego River	San Diego River

Runoff collected in the Lake Murray Basin eventually enters the Alvarado Drainage Basin, which drains to the San Diego River. In addition to runoff from La Mesa, the San Diego River carries water from other large portions of San Diego County and eventually terminates at the Pacific Ocean, south of Mission Bay. Runoff from the Spring Valley Basin eventually enters the Sweetwater River, which terminates in San Diego Bay. Runoff collected in the University and Lemon Grove basins drains to Chollas Creek, which also flows into San Diego Bay.

In both the San Diego Bay and the San Diego River watersheds, the City of La Mesa makes up about one percent of the overall land area of the watershed respectively. Based primarily on wet weather monitoring data from mass loading stations (MLS) located on Chollas Creek, bioassessments, the 2004-2005 San Diego Bay Watershed Urban Runoff Management Program (WURMP) Annual Report, and the Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) List), diazinon, copper, zinc, bacterial indicators, trash, and turbidity have been established as targeted pollutants in the Pueblo San Diego Watershed. Total Maximum Daily Load (TMDL) regulations for diazinon and for dissolved metals have been adopted. Monitoring in recent years, however, indicates that the recent ban on diazinon use has essentially eliminated diazinon as a pollutant of concern. The Sweetwater Watershed, which is significantly less urbanized than the Pueblo San Diego watershed, does not have any 303(d) Listings. Turbidity and bacteria were identified as constituents of concern in the WURMP Annual Report.

In the San Diego River Watershed, constituent data have been collected annually. The 2004-2005 San Diego River WURMP Annual Report lists bacterial indicators, pH, total dissolved solids (TDS), phosphorus, and dissolved oxygen as high priority Constituents of Concern (COC). These listings appear to be mainly based on 303(d) Listings in the watershed, principally Forester Creek and the lower San Diego River. There are no 303(d) Listed water bodies within the borders of the City of La Mesa. The WURMP Annual Report also notes that diazinon, eutrophication, benthic degradation, turbidity, and copper are non-high priority COCs. The 2004-2005 WURMP Annual Report states that chlorpyrifos was less apparent as a COC during that reporting period, while fecal coliforms, total coliforms/enterococci, TDS and turbidity were more apparent.

1.3 Program Overview

The current Municipal Permit adopted by the San Diego RWQCB requires all Copermittees, including the City of La Mesa, to conduct field screening and analytical monitoring at different sampling locations throughout the City during the dry weather season (May 1st through September 30th). The purpose of the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) is to detect and eliminate IC/IDs to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following three components:

- Field screening observations
- Field screening analytical monitoring
- Laboratory analytical monitoring

Information collected from the Dry Weather Monitoring Program is also used to characterize dry weather discharges in the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as necessary to detect and eliminate the sources of these pollutants. This report presents the results of the City of La Mesa 2006 Dry Weather Monitoring Program conducted by D-MAX Engineering, Inc. (D-MAX).

1.4 Previous Work

The City of La Mesa has conducted an annual Dry Weather Monitoring Program since 1993. A summary of the screening results obtained for each year (1993 through 2005) is discussed below and presented in Table 1-2. Before 2002, laboratory analyses were not required. Laboratory testing was added to the program in 2002 as required by the current Municipal Permit. The same laboratory and field tests used in 2006 were also used from 2002 through 2005. Graphical representations of the data for both the San Diego River and San Diego Bay watersheds have also been prepared and are included as Attachments 1 and 2, respectively. The graphs display the results of both field and laboratory analyses for the 2002 through 2006 Dry Weather Monitoring Programs. Where applicable, averages for each constituent have been calculated, and error bars displaying average plus and minus one standard deviation have also been included on the graphs. Trend lines have been prepared for constituents where multiple values above the method reporting limit were recorded. The equations and R^2 values for the lines have been indicated on the graphs. Note that an R^2 value of 0.0 indicates a very poor fit and 1.0 indicates a perfect fit. Since the trend lines have been based on only five years of data, conclusions regarding pollution trends cannot be drawn with a large degree of certainty.

In 1993, all 15 of the visited sites showed concentrations of Ammonia at or above 1.0 milligrams per liter (mg/L) NH_3-N. Of these sites, 13 showed concentrations of copper at or above 1.0 mg/L, and six had concentrations of detergents greater than 1.0 mg/L. Concentrations of chlorine and phenols greater than 1.0 mg/L were recorded at three and five sites, respectively.

In 1994, 11 of the 16 visited sites had ponded or flowing water. Ammonia was detected at 10 of these sites, with seven showing concentrations above 1.0 mg/L. Concentrations of detergents ranging between 0.3 mg/L and 0.8 mg/L were detected at all 11 sites. Copper was detected at nine sites with concentrations ranging between 0.0 mg/L and 3.0 mg/L, and concentrations of phenols ranged between 0.04 mg/L and 4.9 mg/L at eight of the sites. Chlorine was detected at all 11 sites but no concentrations were above 1.0 mg/L.

In 1995, ammonia was detected at all 11 sites with ponded or flowing water, but only one site showed a concentration above 1.0 mg/L. Detergents were also detected at all 11, but only two concentrations were at or above 1.0 mg/L. Chlorine was detected at 10 sites but in very low concentrations (0.1 to 0.4 mg/L), and phenols were not detected at any sites.

In 1996, the Dry Weather Monitoring Program consisted of seven previously screened sites along with eight new sites. Six sites showed concentrations of ammonia above 0.5 mg/L, with only two of those being at or above 1.0 mg/L. Five of these sites were located along Jackson Drive and Grossmont Shopping Center. Detergent concentrations of 0.5 mg/L and greater were observed at seven sites, with one site showing a detergent concentration of >3.0 mg/L. In general, the concentrations of phenols, copper and chlorine were very low or below the reporting limits.

In 1997, the Dry Weather Monitoring Program consisted of six previously screened sites and six new sites. Detergents and ammonia were detected throughout the City. All ammonia concentrations were between 0.0 mg/L and 1.0 mg/L except one, which exceeded 10 mg/L, and only one site showed a concentration of detergents above 1.0 mg/L. Chlorine in low concentrations (< 0.5 mg/L) was also detected at the majority of the sites visited. Copper was detected at a concentration of 0.1 mg/L at three sites, and only one site showed a detectable phenols concentration of 0.3 mg/L. During visual observations, a strong odor was observed at most of the sites located within the Grossmont Shopping Center. This odor, along with the presence of high levels of ammonia and low levels of copper, prompted an investigation within

the Grossmont Center. The investigation found the primary source of the ammonia to be fertilizers used on the lawns and flowerbeds. Copper concentrations could be attributed to the chemicals used to control algae, and by the pennies thrown into the fountains, where they remain until periodic cleaning of the pools.

In 1998, the City conducted one round of dry weather field screening at 14 sites. Ammonia was detected at all 11 sites with ponded or flowing water, and concentrations ranged from below the field test detection limit to 9.5 mg/L. Detergent concentrations ranging from 0.25 to 0.75 mg/L were also detected at 11 sites . Copper was detected at only one site inside Grossmont Shopping Center. Chlorine concentrations at a low range of 0.1 to 0.2 mg/L were detected at five sites. Phenols were not detected at any of the sites visited.

In 1999, the City conducted two rounds of field screening at 14 sites. In round one, the ammonia levels ranged from 0.2 to 7.0 mg/L. Detergent concentrations were in the 0.25 to 0.75 mg/L range for this round, and were detected at all visited sites with ponded or flowing water. Phenols and copper were detected at five and nine sites, respectively, at concentrations of 0.1-0.2 mg/L. Chlorine concentrations were detected at a maximum of 0.3 mg/L, and a minimum of non-detect.

In round two of the 1999 sampling, ammonia concentrations generally ranged from 0.2 to 4.0 mg/L NH_3-N, although one site was found to have a concentration of 30 mg/L. An upstream investigation revealed that a sewer overflow was the cause of this elevated value, and later sampling showed that the concentration had dropped to 1.0 mg/L. This site also had the highest recorded detergent concentration, >3.0 mg/L, which later fell to 0.25 mg/L. Detergent concentrations between 0.25 and 2.0 mg/L were detected at all other tested sites. Phenols, copper and chlorine all had minimum values of non-detect. The maximum value measured for phenols was 0.1 mg/L. The maximum copper concentration value was 0.6 mg/L, and the maximum chlorine concentration was 0.5 mg/L.

In 2000, the City performed two rounds of the field screening program at 15 sites. In round one, ammonia concentrations ranged between 0.2 and 2.0 mg/L NH_3-N, detergent concentrations ranged from 0.25 to 2.5 mg/L, and chlorine ranged from non-detect to 0.4 mg/L. Copper and phenol levels were only detected at two sites each; the copper concentration peaked at 0.7 mg/L and the phenol concentration peaked at 0.2 mg/L.

During round two, ammonia concentrations ranged from 0.1 to 5.0 mg/L NH_3-N, detergent concentrations ranged from 0.25 to 0.75 mg/L, and chlorine ranged from non-detect to 0.6 mg/L. As found in round one, copper and phenols concentrations were typically undetectable but several sites showed traces of these constituents. The copper concentration reached a maximum of 0.4 mg/L and the phenol concentration reached a maximum of 0.1 mg/L.

In 2001, two rounds of field screening were performed throughout the City, at 15 and 16 sites, respectively. Detergent concentrations ranged from 0.25 to 0.75 mg/L. Ammonia concentrations ranged from 0.1 to 8.0 mg/L NH_3-N. Only one site showed a detectable concentration of Copper (0.2 mg/L), and a Chlorine concentration of 0.1 mg/L was also only detected at one site. Phenols were detected only during the second visit to Site No. 35, where field analysis resulted in a concentration of 0.1 mg/L.

During round two, detergent concentrations ranged from 0.25 to 1.5 mg/L. Ammonia was detected between 0.1 and 5.0 mg/L NH_3-N. Chlorine concentrations ranged from non-detect to 0.4 mg/L. Copper was not detected during this round of sampling. Phenols were only detected during the second visit to Site No. 13C, at a concentration of 1.0 mg/L.

In 2002, the City conducted one round of field screening at a total of 19 sites. As one of the stations was observed dry, an alternate site (Site No. 14) was selected for monitoring with this site having measurable flow. Ammonia concentrations of 1.0 mg/L NH_3-N or higher were found at five of the sites, with the highest concentration reaching 8.0 mg NH_3-N/L at Site No. 4A. The ammonia concentration at Site No. 4A dropped to 0.4 upon a follow-up visit. Nitrate concentrations at all the sites were found below 5.0 mg/L NO_3-N, with two sites having concentrations below the detection limit. Orthophosphate-P concentrations generally were measured below 1.0 mg/L PO_4-P, but Site No. 40 had a phosphate concentration reaching 7.83 mg/L PO_4-P. Upon a return visit to Site No. 40, the phosphate concentration had dropped to 0.82 mg/L PO_4-P. Detergent concentrations exceeded 1.0 mg/L at three of the sites. The maximum detergent concentration was recorded greater than 24 mg/L at Site No. 40, but dropped to 0.75 mg/L on a return visit. Laboratory analysis for detergents detected contamination at one site (Site No. 4A) with a concentration of 4.8 mg/L. Oil and grease was detected at three of the sites, with the maximum concentration reaching 8.0 mg/L. Laboratory results for dissolved metals and pesticides found all concentrations below the method detection limit.

In 2003, the City conducted one round of field screening at a total of 18 sites. Alternate Site 14 was substituted for primary Site 61, which was dry. 16 sites had measurable flowing water; the flow rate ranged from 1.0 gallons per minute (gpm) to 118.5 gpm. Two of the sites had ponded water. An ammonia concentration of 1.0 mg/L NH_3-N or higher was found at three sites. There were no sites with nitrate concentrations at or above the action level of 10 mg/L NO_3-N. A reactive phosphorous concentration exceeding the action level of 2.0 mg/L PO_4-P was found at one site, while the rest of the sites had detectable phosphorus concentrations at low levels. A detergent concentration of 1.0 mg/L was measured at one of the sites. Laboratory analyses were conducted at five sites and indicated bacterial contamination at three sites. The organophosphate pesticide diazinon was detected at one of the sites but was below the action level of 0.5 micrograms per liter (µg/L). Chlorpyrifos was not detected at any of the sites. Surfactants were detected at one site, but the concentration was below the action level of 1.0 mg/L. None of the laboratory samples had detectable amounts of dissolved metals or oil and grease.

In 2004, the City conducted one round of field screening at the 18 primary monitoring stations, all of which had ponded or flowing water. Ammonia was detected above the action level at two sites, which were found to have the common upstream source of an illicit sewage connection. No sites were found to have orthophosphate-P or detergent concentrations above the respective action levels. Laboratory analyses were again conducted for five sites, and as in 2003, three sites were found to have bacterial indicators in excess of established action levels. No other constituents assessed by laboratory analysis were found to be in excess of established action levels.

In 2005, the City again conducted one round of field screening at all 18 primary monitoring stations since none of the sites were dry. Detergents were detected above the action level at one site, but had fallen below the action level by the time of a follow-up visit the next day. Ammonia action level exceedances were detected at two sites. For one site, the ammonia level dropped below the action level by the following day. For the other site, located in Grossmont Center mall, the ammonia concentration had dropped significantly by the time of a follow-up visit but remained above the action level. Three of the five sites receiving laboratory analysis had bacterial indicators exceeding action levels; no other constituents tested for in the lab were above set action levels.

1.5 Report Outline

Section 1, Introduction, includes regulatory background, the City of La Mesa hydrologic setting, objectives of the Dry Weather Monitoring Program, previous monitoring results, and a report outline.

Section 2, Sampling Locations, describes the field screening sampling locations and the criteria used to select sampling locations.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and results of the field screening analyses.

Section 5, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 6, Data Analysis, provides an analysis and description of each site with evidence of physical, chemical or biological pollution.

Section 7, Upstream Investigations, includes follow-up investigations of sites with recurring evidence of physical, chemical or biological pollution.

Section 8, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Photographs of the investigated sites

Appendix B Laboratory analytical reports

Appendix C Copies of the original field data sheets

Attachment 1 Historical Data Graphs: San Diego River Watershed

Attachment 2 Historical Data Graphs: San Diego Bay Watershed

2 SAMPLING LOCATIONS

The City of La Mesa created a Jurisdictional Urban Runoff Management Program (JURMP) in 2002. Table 8-1 in Section 8 of the JURMP identifies 18 primary monitoring stations where data will be collected during the Dry Weather Monitoring Program. Table 8-2 lists nine alternate stations to be monitored if any of the primary stations do not have flowing or ponded water. Sampling sites are located in HU 907, HU 908, and HU 909.

During the 2006 Dry Weather Monitoring Program, all 18 primary sampling locations were visited and had flowing or ponded water. No sites were observed to be dry. Table 2-1 provides the site number, location, conveyance configuration, primary and secondary land uses, hydrologic unit, and Global Positioning System (GPS) coordinates of the sampling locations that were visited. Figure 1 displays the sampling locations on a map of the City that also shows storm drain lines, roads, and drainage basin boundaries. Photographs of all the sampling locations are included as Appendix A. Laboratory analytical reports are included in Appendix B, and Appendix C contains the field data sheets for each site visit. A map of the watersheds in and around the City of La Mesa broken down into Hydrologic Subareas (HSA), is included as Figure 2.

TABLE 2-1
2006 DRY WEATHER MONITORING STATIONS

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
4A	Alvarado channel, intersection of Fletcher PKWY and Baltimore	Concrete Channel	Commercial	Commercial	907	32.77364	-117.02771
12	Jackson Drive, 100 feet west of Murray Drive, north side of street	Manhole	Commercial	Commercial	907	32.77641	-117.01414
12A	Jackson Drive, 100 feet west of Murray Drive, south side of street	Manhole	Commercial	Residential	907	32.77611	-117.01453
13B	Southwest corner of Lowell Street and University Avenue	Manhole	Commercial	Residential	908	32.75688	-117.03738
13C	Intersection of University Avenue and Parks Avenue	Manhole	Commercial	Residential	908	32.76004	-117.03346
14A	Boulevard Drive between Harbinson Ave. and Massachusetts Ave. across from 7105 – 7033	Outlet	Commercial	Residential	908	32.75438	-117.04535
34	Grossmont Shopping Center, in front of Sportmart	Manhole	Commercial	Commercial	907	32.77694	-117.01077
35	Inside Grossmont Shopping Center, in front of Bath and Body Works	Manhole	Commercial	Commercial	907	32.77841	-117.01070
39	Grossmont Shopping Center parking lot between Staples & Mattress Discounters	Manhole	Commercial	Commercial	907	32.77733	-117.00713
40	N.E. corner of Grossmont Center Drive and Murray Drive, south of Trader Joe's parking lot.	Manhole	Commercial	Commercial	907	32.77848	-117.00639
50	Harbinson Ave. and University Ave. intersection, west sidewalk, east of CB Hair and Nails	Manhole	Residential	Commercial	908	32.75516	-117.04584
52	Massachusetts Ave., Waite Dr., south end of Harris St.	Outlet	Residential	Residential	908	32.74514	-117.03931
55	Bancroft Dr., Madison Ave., east of residential address 9132	Natural Creek	Residential	Residential	909	32.76970	-117.00019
57	Amaya Dr., east of Severin Dr., across from Howell Dr.	Earthen Channel	Residential	Residential	907	32.78532	-116.99744

TABLE 2-1 (CONTINUED)
2006 DRY WEATHER MONITORING STATIONS

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
58	Northeast corner of Amaya Dr. Amaya Ct. intersection	Manhole	Residential	Residential	907	32.78625	-117.00143
59	Southeast corner of Parkway Dr. and Amarillo Ave. intersection	Natural Creek	Residential	Residential	907	32.78180	-117.01328
61	Center Dr., Commercial St., west of Industrial Lane in front of City Public Works	Catch Basin	Commercial	Industrial	907	32.77259	-117.02238
64	North side of Seton Hall St., between Swarthmore St. and Wheaton St.	Concrete Channel	Residential	Residential	907	32.77651	-117.03462

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consisted of qualitative field observations, flow measurement, and field analyses of selected water quality parameters. Information relating to weather conditions, the amount of time since last rainfall, and the type of storm water conveyance was recorded. Specific observations and results of the field water quality analyses were recorded on the field data sheets, which are included as Appendix C. The data sheets also serve as a record of the field visit and were completed for every site visit regardless of whether or not samples were collected.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Qualitative field observations were made during each site visit whether or not ponded or flowing water was observed. These observations are intended to provide a general assessment of the site and include variables like odor, water clarity, the presence of floatables, visible deposits, stains and biological status. Evidence of present or past illicit connections and illegal discharges to the storm drain system may be ascertained by careful field observations. Each field screening location was photographed to provide additional information and documentation of site conditions. Photos are included in Appendix A.

Flow Measurement

Flow measurements can be used to estimate pollutant mass loading, prioritize storm drains for future investigation, and to identify significant changes in discharge that may be indicative of an illegal release upstream. Various field methods can be used to estimate the discharge rate. These include measuring the velocity, depth and width of the flowing water, or recording the amount of time required to fill a bottle of known volume with sample water.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific conductance
- Temperature
- pH
- Turbidity
- Surfactants, measured as Methylene Blue Active Substances (MBAS)*
- Nitrate-N
- Ammonia-N
- Orthophosphate-P (Reactive Phosphorus)

* Surfactants are also referred to as detergents, specifically with respect to discussion of field test kit results. Due to the importance of surfactants, the City conducted analyses for this parameter in both the field and laboratory. Surfactants concentrations were measured using the MBAS method.

The methods that were used to perform the above field analyses along with the detection limit, range, and accuracy, are listed in Table 3-1.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Detection Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter**	0.01 mS/cm	0 – 20.000 mS/cm	± 2% of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter**	0.1ºC	0.0ºC – 60.0ºC	± 0.5ºC
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter**	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703-11 Portable Turbidity Meter**	0.01 NTU	0.01 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading[2]
Surfactants	CHEMetrics CHEMets Kit (K-9400), methylene blue active substances method	0.13 mg/L	0.0 mg/L – 3.0 mg/L*	± 0.13 & ± 0.5 mg/L[3]
Nitrate-N	CHEMetrics CHEMets Kit (K-6902D), cadmium reduction method	1.25 mg/L	0.0 mg/L - 125 mg/L*	± 1.25 & ± 6.25 mg/L[4]
Ammonia-N	CHEMetrics CHEMets Kit (K-1510), Nesslerization	0.05 mg/L	0.0 mg/L – 10.0 mg/L*	± 0.05 & ± 0.5 mg/L[5]
Orthophosphate-P	CHEMetrics CHEMets Kit (K-8510), molybdenum blue/stannous chloride method[6]	0.016 mg/L	0.016 mg/L – 3.26 mg/L*	± 0.016 & ± 0.16 mg/L[7]

Notes:

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] ± 0.5 NTU or 5% of reading (whichever is greater).

[3] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L, and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[4] ± 1.25 for the range of 0.0 to 25.0 mg/L, ± 6.25 for the range of 25.0 to 125.0 mg/L.

[5] ± 0.05 for the range of 0.0 to 1.0 mg/L, ± 0.5 for the range of 1.0 to 10.0 mg/L.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of reactive phosphorus, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The detection limit for orthophosphate is 0.05mg/L; however, the detection limit for reactive phosphorus is lowered due to the conversion.

[7] ± 0.05 for the range of 0.0 to 1.0 mg/L, ± 0.5 for the range of 1.0 to 10.0 mg/L for orthophosphate (multiplied by 0.326 correction factor—see note 6).

*Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

**Detection limit, range, and accuracy information taken from Hanna Instruments manuals, available online at www.hannainst.com

3.2 Laboratory Analytical Methods

In accordance with Order 2001-01 requirements, water samples were collected at five sites (greater than 25 percent of the sites) where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc., a California Department of Health Services certified laboratory, for analysis of the following constituents:

- Total hardness
- Surfactants, measured as MBAS
- Oil and grease
- Diazinon
- Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Total Coliform bacteria
- Fecal Coliform bacteria
- Enterococcus bacteria

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Detection Limit	Maximum Holding Time**
Surfactants, measured as MBAS	SM 5540 C	0.5 mg/L	48 hours
Oil and Grease	USEPA 1664	5 mg/L	28 days
Total Hardness	USEPA 200.7	10 mg/L	14 days
Cadmium	USEPA 6010, 6020, 200.8	0.005 mg/L	6 months
Copper	USEPA 6010, 6020 200.8	0.005 mg/L	6 months
Lead	USEPA 6010, 6020 200.8	0.005 mg/L	6 months
Zinc	USEPA 6010, 6020, 200.8	0.020 mg/L	6 months
Diazinon	USEPA 8141A	0.05 µg/L	7 days
Chlorpyrifos	USEPA 8141A	0.05 µg/L	7 days
Total Coliforms	SM 9221	20* – 1,600,000 MPN/100 mL	6 hours
Fecal Coliforms	SM 9221	20* – 160,000 MPN/100 mL	6 hours
Enterococci	SM 9230	20* – 160,000 MPN/100 mL	6 hours

Notes:

*For D-Max's Dry Weather Monitoring Program, EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 MPN/100 mL. For fecal coliforms and enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20 and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.

**Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the QA/QC procedures listed in Section 3.3.2.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project included the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters were calibrated periodically with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass

electrode tube was kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter was calibrated and periodically checked for accuracy using standard solutions. The conductivity meter was checked periodically with standard solutions and calibrated as necessary.

Field sample collection containers were first rinsed with distilled water and then with the sample water before sample collection. Upon completion of sampling at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water.

The accuracy of field analytical techniques was assessed at the beginning of the sampling program by analyzing solutions of known concentrations for ammonia, detergents, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration	Field Test Kit Results
6/23/06	Ammonia	1.0 mg/L	1.0 mg/L
6/23/06	Detergents	2.0 mg/L	2.0 mg/L
6/23/06	Nitrate	1.0 mg/L	1.0 mg/L
6/23/06	Orthophosphate	3.0 mg/L	3.0 mg/L

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis were collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles were obtained from the laboratory and thus did not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples were kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures were followed, and samples were delivered and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain of custody forms are included in Appendix B.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation was necessary, numeric action levels and best professional judgment (described below) were used to interpret the field screening results. If visual and/or analytical evidence of gross contamination was present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation was initiated. For sites that exceeded numeric action levels but were not perceived as an immediate threat to water quality, a re-sampling was conducted within 24 hours. A comprehensive source investigation was conducted thereafter if elevated concentrations persisted. The results of these investigations are included in Section 7 of this report. Recommendations based on these investigations are included in Section 8.

If elevated levels of pollutants were detected after laboratory analyses, a comprehensive follow-up investigation including re-sampling was conducted. The following three methods were employed to determine whether immediate or comprehensive follow-up investigations were necessary: (1) Numeric action levels; (2) California Toxics Rule (CTR); and (3) best professional judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels were used as the primary approach for interpreting pH, orthophosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total

coliforms, fecal coliforms, and enterococcus analytical results (Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels, which are based on county-wide sampling data and have been used by all Copermittees since the 2003 dry weather season. If pH, reactive phosphorus, nitrate, ammonia, or detergents were observed above the numeric action level, a follow-up investigation was conducted within 24 hours to investigate the source unless best professional judgment indicated otherwise. If oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, or enterococcus laboratory analytical results exceeded numeric action levels, then source investigations were conducted.

California Toxics Rule

The CTR 1-hour criteria was used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases.

Best Professional Judgment

Best professional judgment was utilized as the primary approach for interpreting turbidity, conductivity, and water temperature. Best professional judgment was also the secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew due to their familiarity with the City of La Mesa Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters. Best professional judgment may indicate that results which either exceed certain action levels or are statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
pH	<6.5 or >9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Turbidity (NTU)[2]	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity), and unusual odors.
Temperature (^{o}C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Conductivity may be highly elevated in some regions due to high TDS groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values <0.75 may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Surfactants (mg/L MBAS)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	California Toxics Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)	California Toxics Rule	
Dissolved Lead (µg/L)	California Toxics Rule	
Dissolved Zinc (µg/L)	California Toxics Rule	
Total Coliforms (MPN/100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	20,000	
Enterococci (MPN/100 mL)	10,000	

Notes

[1]The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

[2]Basin Plan = Water Quality Control Plan for the San Diego Basin

4 FIELD SCREENING RESULTS

The Dry Weather Monitoring Program commenced on June 23, 2006, and was completed on June 28, 2006. 18 monitoring stations were visited, all of which had ponded or flowing water. Field screening was thus conducted at all 18 sites. A total of 22 site visits were performed, including four follow-up visits to sites where one or more constituents were found to exceed accepted action levels. Completed field data sheets for each site visit are included in Appendix C.

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the Dry Weather Monitoring Program. Weather conditions were recorded at each site, and any evidence of dry weather flows was documented. Visual observations of the sample water and the vicinity of the sampling location such as odor, color, clarity, floatable materials, vegetation and biological organisms were also recorded. Observations are summarized below and presented in Table 4-1.

Atmospheric Conditions
Samples were collected during sunny, partly cloudy, and overcast conditions.

Odor
Most of the visited sites had no observable odor, with the exception of a slightly musty odor at Site 61.

Color
Water samples collected from most of the sites were colorless, with the exception of five sites that had water with a yellowish hue.

Clarity
The majority of water samples collected from visited sites were clear with negligible suspended particles observed. Only the sample taken from Site 12 was slightly cloudy.

Floatable Materials
During routine field screening visits, eight of the sites that had flowing or ponded water were observed to have trash in or around the sampling location. The trash observed included materials such as paper, plastics, Styrofoam, aluminum cans, and glass bottles.

Vegetation
Vegetative growth ranged from no growth to naturally vegetated riparian areas. No growth was observed at 12 sites, which include concrete channels with no soil, and manholes or catch basins which receive limited sunlight. Site 64 had limited vegetation consisting of just a few plants due to growth constraints caused by concrete. Five of the 18 sites had normal vegetation; that is, vegetation not considered significantly limited by man-made structures, such as a manhole which blocks sunlight and access to soil, or so excessive that it significantly impaired flow at the site.

Biology
Many of the sites exposed to sunlight had algal growth, which indicates that water flow is consistent at the site. Insects were observed at eight sites and larvae at Site 61.

Deposits
Sediment deposition was observed at all at the sampling location sites except sites 12A and 39.

TABLE 4-1
SUMMARY OF FIELD OBSERVATIONS

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
4A	6/26/06	10:50	Partly Cloudy	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae
12	6/27/06	14:25	Overcast	None	Yellow	Slightly Cloudy	Trash	Fine Particulates	None	None
12A	6/27/06	11:15	Overcast	None	None	Clear	None	None	None	None
13B	6/27/06	15:00	Sunny	None	None	Clear	Trash	Fine Particulates	None	None
13C	6/27/06	8:50	Overcast	None	None	Clear	Trash	Coarse & Fine Particulates	None	None
14A	6/26/06	12:25	Overcast	None	None	Clear	None	Coarse & Fine Particulates	Normal	Insects, Algae
34	6/26/06	16:10	Partly Cloudy	None	None	Clear	None	Fine Particulates	None	None
35	6/24/06	13:50	Overcast	None	None	Clear	None	Coarse & Fine Particulates	None	None
35 (follow-up)	6/28/06	8:50	Partly Cloudy	None	None	Clear	None	Coarse & Fine Particulates	None	None
39	6/26/06	11:45	Partly Cloudy	None	None	Clear	None	None	None	None
40	6/23/06	13:35	Sunny	None	None	Clear	None	Fine Particulates	None	None
40 (follow-up)	6/26/06	9:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
50	6/27/06	15:00	Sunny	None	None	Clear	Trash	Fine Particulates	None	None
52	6/26/06	14:40	Partly Cloudy	None	Yellow	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae
55	6/23/06	11:50	Sunny	None	None	Clear	None	Fine Particulates	Normal	Insects
57	6/27/06	10:25	Partly Cloudy	None	None	Clear	None	Coarse & Fine Particulates	Normal	Insects
58	6/23/06	11:05	Sunny	None	Yellow	Clear	None	Fine Particulates	None	None
59	6/26/06	15:20	Partly Cloudy	None	Yellow	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae

TABLE 4-1
SUMMARY OF DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
61	6/26/06	10:00	Overcast	Musty	None	Clear	Trash	Fine Particulates	None	Insects, Larvae
61 (follow-up)	6/27/06	8:20	Overcast	Musty	None	Clear	Trash	Fine Particulates	None	Insects, Larvae
64	6/23/06	10:00	Sunny	None	Yellow	Clear	None	Fine Particulates	Limited	Insects, Algae
64 (follow-up)	6/26/06	8:20	Sunny	None	Yellow	Clear	None	Fine Particulates	Limited	Insects, Algae

4.2 Field Analytical Results

Field analyses were conducted at all sites with ponded or flowing water. Chemical analyses were conducted using CHEMetrics field test kits; pH, specific conductance, and temperature were measured using a Hanna Instruments Portable pH/EC/TDS/Temperature Meter (HI 991301), and turbidity was measured using a Hanna Instruments Turbidity Meter (HI 93203-11). Flow was estimated either visually, or, when possible, by measuring the velocity, depth, and width of the flowing water. A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 presents the results of all field analyses conducted at the sampled sites. Graphs of each parameter analyzed and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median
Flow Rate (gpm)	156	<1.0	15.1	5
Temperature (º Celsius)	29.7	22.9	25.1	24.5
pH	8.9	6.9	7.8	7.8
Conductivity (mS/cm)	5.56	0.90	2.00	2.18
Turbidity (NTU)	47.13	1.02	9.30	7.01
Ammonia (mg/L NH_3-N)	2.5	0.1	0.6	0.4
Detergents (mg/L MBAS)	1.5	0.25	0.4	0.25
Nitrate (mg/L NO_3-N)	7.5	1.25	3.7	3.75
Orthophosphate-P (mg/L PO_4-P)	1.14	0.07	0.2	0.2

The **flow rates** at sites with measurable flow ranged from less than 1.0 gpm to 156 gpm, with an average of 15.1 gpm and a median of 5 gpm, as shown in Table 4-2. The highest flow rate of 156 gpm was measured at Site 4A.

Water temperature is an important physical parameter because it is needed to assess the significance of other parameters such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. Water temperature was measured in the field immediately upon sample collection at each site with ponded or flowing water. During routine visits, temperature readings ranged from 22.9 to 29.7 degrees Celsius (°C), with an average of 25.1°C and a median of 24.5°C. The maximum temperature of 29.7°C was recorded at Site 52. The minimum temperature recorded during routine visits was Site 55, a lower temperature of 22.2°C was measured at Site 61 during a follow-up investigation. Graph 4-1 presents the results of temperature readings at all sites.

The **pH** is a measure of whether a water body is acidic or basic. This is a critical factor in determining water quality, as the pH of an aquatic system will drive a multitude of chemical reactions, including the availability of nutrients or the solubility of chemical substances. The pH values ranged from 6.9 to 8.9, with an average of 7.8 and median of 7.8. The highest pH reading of 8.9 was observed at Site 64, while the lowest pH of 6.9 was recorded at sites 12 and 35. Graph 4-2 presents the results of pH readings at all sites.

Specific Conductance (Conductivity) values indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water or potentially help indicate the presence of dissolved pollutants. Conductivity readings ranged from 0.90 to 5.56 millisiemens per centimeter

(mS/cm) during routine field screening, with an average of 2.0 mS/cm and a median of 2.18 mS/cm. The highest conductivity measured during the program, 5.56 mS/cm, was observed at Site 50, while the lowest reading during a routine visit was recorded at Site 64. Follow-up visits at sites 35, 61, and 64 found conductivity values below 0.90. Graph 4-3 illustrates the results of conductivity measurements at all sites.

Turbidity indicates the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation (thus reducing photosynthetic capacity), but excessive suspended particles can also absorb heat and elevate water temperatures. Turbidity measurements ranged from 1.02 to 47.13 Nephelometric Turbidity Unit (NTU), with an average of 9.3 NTU and a median of 7.01 NTU. The highest turbidity reading of 47.13 NTU was recorded at Site 12, which has historically had the highest turbidity of all sampled sites, and the lowest measurement of 1.02 NTU was documented at Site 14A. Graph 4-4 presents the results of turbidity measurements at all sites.

Ammonia is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms. Ammonia concentrations measured in the water samples ranged from 0.1 to 2.5 mg/L NH_3-N, with an average of 0.6 mg/L and a median of 0.4 mg/L. The highest ammonia concentration of 2.5 mg/L was observed at Site 61, while the lowest ammonia concentration of 0.1 mg/L was found at sites 13C and 14A. Graph 4-5 shows the results of the ammonia analyses at all sampling locations.

Nitrate is a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, which will later cause the suffocation of fish and other aquatic organisms by depleting oxygen from the water during decomposition. Nitrate concentrations measured in the water samples ranged from 1.25 to 7.5 mg/L NO_3-N, with an average of 3.7 mg/L and a median of 3.75 mg/L. The highest nitrate concentration of 7.5 mg/L was observed at Site 50. Nitrate was measured at the lowest detectable concentration, 1.25 mg/L, at one site. Graph 4-6 presents the results of nitrate analyses at all sampling locations.

Orthophosphate-P (Reactive Phosphorus) is also a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate, phosphate pollution can cause nutrient enrichment (eutrophication), stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of phosphate can cause significant algal growth, as it is commonly the limiting nutrient in plant growth. During the field analysis, orthophosphate was measured in mg/L PO_4 and converted into mg/L reactive phosphorus (orthophosphate-P) using a conversion factor of 0.326 (See Note 6 to Table 3-1). Reactive phosphorus was found at concentrations ranging from 0.07 to 1.14 mg/L PO_4-P, with an average of 0.2 mg/L and a median of 0.2 mg/L. The highest concentration of 1.14 mg/L was found at Site 61. The lowest orthophosphate-P concentration of 0.07 mg/L was observed at four sites. Graph 4-7 illustrates the results of orthophosphate-P at all sampling locations.

Detergent concentrations in water samples often indicate illegal discharge from either industrial, commercial or residential sources. Pollution resulting from detergents alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms. During field analysis, detergent concentrations ranged from 0.25 mg/L to 1.5 mg/L, with an average of 0.4 mg/L and a median of 0.25 mg/L. The highest concentration of

1.5 mg/L was found at Site 64. The lowest concentration of 0.25 mg/L was found at 10 sites. Graph 4-8 reflects the results of the detergents analyses at all sampling locations.

TABLE 4-3
SUMMARY OF FIELD ANALYTICAL RESULTS

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Detergents mg/L MBAS	Ammonia mg/L NH_3-N	Nitrate mg/L NO_3-N	Orthophosphate-P PO_4-P mg/L
4A	6/26/06	10:50	156	25.0	8.3	1.83	2.16	0.25	0.3	3.75	0.10
12	6/27/06	14:25	5	23.8	6.9	47.13	1.95	0.25	0.6	3.75	0.26
12A	6/27/06	11:15	10	23.4	7.7	9.94	2.31	0.50	0.2	5.00	0.10
13B	6/27/06	15:00	10	24.4	7.9	2.02	5.16	0.25	0.6	6.25	0.26
13C	6/27/06	8:50	10	24.3	7.8	4.43	2.44	0.50	0.1	3.75	0.33
14A	6/26/06	12:25	28	25.5	7.8	1.02	2.51	0.25	0.1	5.00	0.07
34	6/26/06	16:10	10	24.5	8.2	10.09	1.94	0.25	0.3	5.00	0.20
35	6/24/06	13:50	1	25.6	6.9	7.77	2.50	0.25	**1.5**	2.50	0.07
35 (follow-up)	6/28/06	8:50	<1	24.7	8.6	na	0.42	na	0.2	na	na
39	6/26/06	11:45	8	24.4	7.7	11.93	1.55	0.50	0.2	2.50	0.07
40	6/23/06	13:35	5	24.5	7.5	22.31	2.19	0.50	**1.0**	2.50	0.20
40 (follow-up)	6/26/06	9:00	3	23.5	7.2	na	2.08	na	0.8	na	na
50	6/27/06	15:00	3	25.3	7.7	1.64	5.56	0.50	0.2	7.50	0.26
52	6/26/06	14:40	1	29.7	8.4	8.27	2.40	0.50	0.4	3.75	0.33
55	6/23/06	11:50	10	22.9	8.1	4.56	2.62	0.25	0.2	1.25	0.10
57	6/27/06	10:25	2	27.5	7.7	3.51	1.71	0.25	0.8	2.50	0.26
58	6/23/06	11:05	5	23.7	7.4	13.32	2.33	0.50	0.8	2.50	0.10
59	6/26/06	15:20	3	29.5	8.0	2.34	1.86	0.25	0.4	2.50	0.07
61	6/26/06	10:00	Ponded	24.3	7.4	9.37	2.30	0.25	**2.5**	3.75	1.14
61 (follow-up)	6/27/06	8:20	Ponded	22.2	7.5	na	0.75	na	0.8	na	na

TABLE 4-3
SUMMARY OF FIELD ANALYTICAL RESULTS (CONTINUED)

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Detergents mg/L MBAS	Ammonia mg/L NH_3-N	Nitrate mg/L NO_3-N	Orthophosphate-P PO_4-P mg/L
64	6/23/06	10:00	<1	27.0	8.9	6.24	0.90	**1.5**	0.8	2.50	0.49
64 (follow-up)	6/26/06	8:20	1	25.4	8.8	na	0.84	0.25	0.4	na	na

Red Bold Type = Values that exceed action levels

na = not analyzed

denotes a follow-up visit

denotes a location sampled for laboratory analysis

5 LABORATORY ANALYTICAL RESULTS

5.1 Summary

Laboratory analyses were conducted at five sites, representing over 25 percent of all sites with ponded or flowing water. A summary of the laboratory analytical results is presented in Table 5-1. Table 5-2 presents all of the results from the laboratory analyses. The laboratory reports are included in Appendix B.

TABLE 5-1
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Minimum	Maximum
Surfactants (mg/L MBAS)	nd	nd
Oil and grease (mg/L)	nd	nd
Total hardness (mg/L $CaCO_3$)	434	686
Cadmium (dissolved, mg/L)	nd	nd
Copper (dissolved, mg/L)	nd	0.008
Lead (dissolved, mg/L)	nd	nd
Zinc (dissolved, mg/L)	nd	0.028
Diazinon (µg/L)	nd	nd
Chlorpyrifos (µg/L)	nd	nd
Total Coliforms (MPN/100 mL)	23,000	240,000
Fecal Coliforms (MPN/100 mL)	20	30,000
Enterococcus bacteria (MPN/100 mL)	40	5,000

nd = not detected

Surfactants (MBAS) are analyzed to detect detergent pollution from residential, commercial or industrial washing activities. Surfactants were not detected at any sites during the 2006 Dry Weather Monitoring Program.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources including parking lots, washing activities, illegal discharges and automobile repair facilities. Oil and grease were not detected at or above the reporting limit at any of the sampled sites.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with results expressed in mg/L of $CaCO_3$. Although it is not itself considered a pollutant, total hardness is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals, as well as other minerals and ions. Total hardness values varied from 434 to 686 mg/L $CaCO_3$. The highest total hardness value of 686 mg/L $CaCO_3$ was found at Site 12A, while the lowest value of 434 mg/L was observed at Site 39.

Diazinon and **chlorpyrifos** are organophosphate pesticides that can be harmful to aquatic organisms if transported in urban runoff. Diazinon and chlorpyrifos are highly toxic to birds, mammals, and insects. They are also highly toxic to freshwater fish and invertebrates following acute exposure. Diazinon and Chlorpyrifos were not detected at any of the sampled sites during the 2006 Dry Weather Monitoring Program.

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Metal concentrations in the environment can originate from a variety of sources including automobile operation, automobile repair facilities, car washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms, including fish and waterfowl. The laboratory samples collected during the 2006 Dry Weather Monitoring Program were analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Cadmium and lead were not detected at any site. Dissolved zinc was detected at sites 4A and 39 with concentrations of 0.028 mg/L. According to the CTR (1-hour) for Dissolved Metals in Fresh Waters,[1] which defines metal toxicity as a function of water hardness, the action level for dissolved zinc in water samples with hardness values of 434 and 524 mg/L $CaCO_3$ are 0.407 and 0.477 mg/L, respectively. Dissolved copper was detected at the same sites (sites 4A and 39) with concentrations of 0.008 and 0.005 mg/L respectively. The action level for dissolved copper with the aforementioned hardness values are 0.054 and 0.064 mg/L. Therefore, since measured zinc and copper concentrations were significantly below the action levels corresponding to the measured hardness values, source investigations were not deemed necessary.

Coliform bacteria are relatively harmless to humans and are present in all mammalian digestive tracts. They are also present in soil and decomposing organic matter, so measurements of total coliforms are not typically considered to be very accurate indicators of fecal contamination. Water samples are analyzed for total coliform bacteria because it is a historically accepted public health practice and because the Municipal Permit requires it. During the 2006 Dry Weather Monitoring Program, total coliform counts ranged from 23,000 to 240,000 MPN/100 mL. The highest level, 240,000 MPN/100 mL was found at Site 57. sites 4A, 12A and 14A also had total coliform counts at or above the action level of 50,000 MPN/100 mL. Upstream investigations were conducted at all four sites; the results are detailed in Section 7.

Fecal coliforms, a subset of coliform bacteria, and **enterococci** are found primarily in the gastro-intestinal tracts of humans and animals, so they are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material was human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain. Fecal coliform counts ranged from 20 MPN/100 mL at Site 57 to 30,000 MPN/100 mL at Site 12A, which was the only site with a fecal coliform count above the action level of 20,000 MPN/100 mL. Enterococcus counts ranged from 40 to 5,000 MPN/100 mL, which is below the action level of 10,000 MPN/100mL.

[1] For equations and constants used in CTR calculations, see http://www.USEPA.gov/ost/standards/ctr/toxic.pdf

TABLE 5-2
SUMMARY OF LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Surfactants mg/L MBAS	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms MPN/100 mL	Fecal Coliforms MPN/100 mL	Enterococci MPN/100 mL
4A	6/26/06	10:50	nd	nd	524	nd	0.008	nd	0.028	nd	nd	**130,000**	5,000	5000
12A	6/27/06	11:15	nd	nd	686	nd	nd	nd	nd	nd	nd	**50,000**	**30,000**	500
14A	6/26/06	12:25	nd	nd	508	nd	nd	nd	nd	nd	nd	**80,000**	3,000	80
39	6/26/06	11:45	nd	nd	434	nd	0.005	nd	0.028	nd	nd	23,000	220	40
57	6/27/06	10:25	nd	nd	438	nd	nd	nd	nd	nd	nd	**240,000**	20	900
ANALYTICAL REPORTING LIMITS			**0.5**	**5**	**10**	**0.005**	**0.005**	**0.005**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**
ACTION LEVELS			**1.0**	**15**	*****	**CTR**	**CTR**	**CTR**	**CTR**	**0.5**	**0.5**	**50,000**	**20,000**	**10,000**

Notes

Red Bold Type = Values that exceed action levels

nd = Not detected

CTR = California Toxics Rule (based on hardness)

*= Total hardness is not considered a pollutant (see Section 3.4 for details) and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependant on the total hardness value of the water sample. Total hardness measurements are thus required to calculate action levels for dissolved metals.

6 DATA ANALYSIS

When contaminant levels were detected above established action levels during field screening, upstream investigations were conducted to identify the source(s) of the contaminants. Since the laboratory requires several days to analyze samples, sites with contamination detected by laboratory analyses were investigated during a later round of visits. A rain event in mid summer also delayed the beginning of the upstream investigation. Based on the visual observations and the field and laboratory analytical testing that was conducted, the following sites demonstrated physical and chemical evidence of possible illegal discharges and/or illicit connections:

Site 4A

Site 4A (Photo 12), located in the Alvarado Channel, is at the intersection of Fletcher Parkway and Baltimore Drive. Alvarado Channel runs east to west across the City of La Mesa, and most commercial and residential areas located on and around Fletcher Parkway flow to this major drainage structure. During the initial visit, the 156 gpm flow was noted to be fairly clean, and no constituents tested were above their respective action levels.

Laboratory analysis of water from Site 4A detected total coliforms at a concentration of 130,000 MPN/100 mL, which is well above the action level of 50,000 MPN/100 mL. Details of an upstream investigation conducted in this area are presented in Section 7.

Site 12A

Site 12A is a manhole on the south side of Jackson Drive, just west of Murray Drive (Photo 24). During the initial site investigation, the water was clear, with no deposits or floatables. Laboratory analysis of the water sample detected a total coliform count at the action level of 50,000 MPN/100 mL, and a fecal coliform count of 30,000 MPN/100 mL, which is above the action level of 20,000 MPN/100 mL for that bacterial indicator. An upstream investigation was later conducted for this site to identify sources of fecal and total (see Section 7).

Site 14A

Site 14A is an outlet into an open channel running parallel to Boulevard Drive (Photo14). The sample point lies between Harbinson Avenue and Massachusetts Avenue. The clear flow at the site passes over a semi-natural channel bottom, and there is a significant amount of vegetation present. Laboratory analysis found the total coliform count to be 80,000 MPN/100 mL. An upstream investigation was conducted for this site to identify potential sources of total coliforms. The investigation is detailed in Section 7.

Site 35

Site 35 is a manhole inside the Grossmont Center Mall, in front of the mall information stand near Bath and Body Works (Photo 26). Approximately one gpm of water was flowing into the junction box beneath the manhole, which contained about an inch of standing water. The field crew found a slightly elevated ammonia concentration of 1.5 mg/L at this site during the routine investigation. Similar to what was found the previous year, the field crew hypothesized that the source of ammonia could be fertilizer transported by irrigation water. Again, the field crew alerted the mall's Chief Engineer, who was present for a follow-up investigation the next

day. By the time of the follow-up investigation, the ammonia concentration had dropped significantly below the action level. Details regarding the follow-up investigation are discussed in Section 7.

Site 40

Site 40 is a manhole in the northeast corner of Grossmont Center Drive and Murray Drive, south of the Trader Joe's parking lot (Photo 6). During a routine investigation, the field crew observed a slightly yellow flow of 3 gpm and measured an ammonia concentration matching the action level of 1.0 mg/L. An upstream investigation commenced immediately, since in previous years, high ammonia concentrations had been measured at this site due to a sewer leakage. This investigation is discussed in Section 7, and did not yield any definitive sources of ammonia. During a follow-up investigation the next day, the ammonia concentration had gone down slightly and was below the action level, leading the field crew to deem the previously high ammonia concentration a result of a transient flow.

Site 57

Site 57 is an earthen channel running along Amaya Drive, east of Severin Drive and across from Howell Drive (Photo 23). Water in the channel flows west toward the Alvarado Channel. Water sampled during an initial visit to this site had a total coliform density of 240,000 MPN/100 mL, so the field crew later returned to conduct an upstream investigation, detailed in Section 7.

Site 61

Site 61 is a catch basin located on Commercial Street in front of the La Mesa Public Works Department (Photo 9). During a routine investigation of this site, the field crew measured an ammonia concentration above the action level of 1.0 mg/L. The field crew also observed that the ponded water contained a substantial amount of organic matter and a large population of what appeared to be mosquito larvae. An upstream investigation was conducted immediately following the routine visit to this site, but no specific upstream sources of ammonia were noted. A follow-up investigation was also conducted the following day, and by that time the ammonia level had dropped to 0.8 mg/L, which is slightly below the action level for ammonia. The field crew hypothesized that the decomposing organic matter building up in the ponded water at Site 61 is the primary source of ammonia.

Site 64

Site 64 is a concrete channel on the north side of Seton Hall Street, between Swarthmore Street and Wheaton Street (Photo 1). The field crew noted an elevated level of detergents, 1.5 mg/L, during a routine visit, and an upstream investigation was conducted to try to locate the source of the detergents. The channel in which Site 64 is located runs between various residential and commercial areas. While some evidence of foam was found upstream, this was in ponded water that did not reach the sample point, and the exact source could not be located. When the field crew returned for a follow-up visit the next day, the detergent concentration was below the action level. Therefore, the field crew hypothesized that the previous detergents level had been the result of a transient flow likely caused by uncontained outdoor washing.

7 UPSTREAM INVESTIGATIONS

7.1 Purpose

The purpose of the upstream investigations is to find the sources of the pollutants that exceeded action levels during initial field screening and laboratory testing.

The 2006 Dry Weather Monitoring Program revealed elevated levels of pollutants at four sites, as described in Section 6. When field analyses detected a pollutant surpassing the action level, the sites received a follow-up visit within 24 hours of the initial visit. Upstream investigations are typically conducted when field screening parameters are measured above their respective action levels during both visits. In 2006, field screening did not reveal any sites to have a constituent in excess of its established action level on consecutive visits. Because the initial ammonia exceedance at Site 35 seemed to have the same source as had been observed in 2005, a brief follow-up investigation was performed there.

Samples were collected for laboratory analysis at five sites during the initial round of field screening. Complete results of these analyses showed bacteria in excess of their established action levels at sites 4A, 12A, 14A, and 57. Upstream investigations were undertaken at each of these sites to identify the source(s) of the high bacteria counts.

7.2 Investigation Procedure

Upstream investigations were conducted in two rounds. The first upstream investigations were for the sites at which field tests indicated elevated constituent levels. These investigations were conducted immediately after confirming the elevated concentrations via additional field testing. The second round of upstream investigations were carried out for the sites at which laboratory testing had found elevated constituent levels. These investigations were conducted after receiving the test results from the laboratory.

During the investigations, the D-MAX field crew measured flow rates, performed visual observations, and conducted field testing. Visual observations, such as water color, clarity, odor, floatable materials, vegetation and biology, and physical parameters, such as temperature, pH and conductivity, were recorded on field data sheets at each official sampling site. Observations and data for locations upstream of the official sites were recorded in the field crew's log notebooks. Field data sheets are included in Appendix C.

In order to determine the potential sources of bacteria to sites with high bacteria, the D-MAX field crew used 3M Petrifilm *E. coli*/Coliform Count plates as a rapid method to trace sources of both total coliform bacteria and *E. coli* bacteria in the storm water conveyance system. Because laboratory microbiological analyses take a significant amount of time, relying primarily on laboratory analyses can significantly delay an upstream investigation for bacteria. Also, due to the cost of these tests, often only a few locations can be examined, giving a less comprehensive picture. Using the Petrifilm plates allowed the field crew to quickly sample numerous branches or locations upstream of the sites.

Samples were taken in the field and preserved with Butterfield's phosphate buffer to keep the pH close to 7. Sample containers were kept on ice in a cooler and then plated within 6 hours of collection to ensure proper holding times were observed. The plates were then incubated at 35°C ± 1°C. After 24 hours of incubation, total coliform bacterial concentrations were enumerated, and after an additional 24 hours (48 hours incubation total) *E. coli* levels could be

read from the same plates, helping investigators identify potential bacterial sources over a large area in a timely manner.

This method is an improvement over the technique used in the past because it now also tests for *E. coli* bacteria. *E. coli* bacteria, a subset of fecal coliform bacteria, are better indicators of fecal contamination than total coliforms alone. Additionally, since total coliforms and *E. coli* are enumerated on the same plate, a rough ratio of *E. coli* (more likely to be from fecal sources) to total coliforms can be ascertained. While not unequivocally conclusive, this information allows for a better determination as to whether observed high bacteria levels likely come from fecal or non-fecal sources. Note that although *E. coli* are a major subset of fecal coliform bacteria, they are not enumerated for upstream analyses as an equivalent replacement for laboratory fecal coliform testing.

It should be noted that although laboratory analyses are done for total coliforms, fecal coliforms, and enterococcus bacteria, field bacteria analyses using Petrifilm plates are used to test only for total coliform bacteria and *E. coli*. As noted in Section 4, total coliform bacteria are generally harmless to humans but are a commonly-used indicator of harmful, pathogenic organisms, especially those found in fecal matter. Because the total coliform group of bacteria includes many species of bacteria of non-fecal origin, it is not as precise an indicator of fecal contamination as fecal coliforms or enterococci. A high total coliform count does not necessarily indicate fecal contamination of water, as total coliforms can also be found in soil, grain, and water, especially stagnant water. Therefore, a water sample with a high level of total coliform bacteria does not necessarily have a correspondingly high level of pathogens.

Fecal coliforms and enterococci are found mainly (but not solely) in the digestive tracts of humans and warm-blooded animals. With a few notable exceptions, fecal coliforms and enterococci are not hazardous to humans, but their presence is usually a good indication of the presence of animal or human waste. Fecal contamination from animal sources may be less hazardous to humans than fecal contamination from human sources; however, standard tests for fecal coliforms and enterococcus bacteria cannot reliably distinguish between human and animal sources.

Field bacteria tests using Petrifilm plates use Colony Forming Units per milliliter (CFU/ml) as the measurement unit, rather than the Most Probable Number (of colony forming units) per 100 milliliters (MPN/100 mL) unit used in laboratory analyses. These units are generally comparable, although the laboratory volume, and thus value, is one hundred times greater. D-MAX has created a stringent field protocol to control sample development as consistently as possible. Sterile dilution vials containing pre-measured amounts of sterile buffer solution for dilution are used for sample collection, the diluted samples are kept on ice in a cooler while in the field, and chilled samples are collected from the field crew twice daily to be plated within the proper holding time. Plated samples are then developed in an incubator for a total of 48 hours. While this method is not conducted at a certified laboratory, it is still useful for determining which locations have relatively higher or relatively lower bacteria levels. The action level for total coliform bacteria is 50,000 MPN/100 mL, which roughly corresponds to 500 CFU/mL. However, only about 150 or fewer colony forming units can be accurately enumerated using a Petrifilm plate. This would correspond to 15,000 MPN/100 mL. Therefore, all samples were first diluted 1:10 with sterile buffer solution before Petrifilm analysis, thus adjusting the detection limits for Petrifilm plates from the standard value of 1-150 CFU/mL to 10-1,500 CFU/mL. This adjusted range corresponds to approximately 10,000 to 150,000 MPN/100 mL, a much more useful range when dealing with total coliform bacteria levels around the action level of 50,000 MPN/mL.

Field investigators began the source identification investigations by testing the water at the site itself.; they then gradually worked upstream until potential pollutant sources could be identified. If follow-up field testing at a site resulted in constituent concentrations below specified action levels, it was concluded that the pollution found during the initial field screening and laboratory analysis was due to a transient flow.

7.3 Investigated Sites

Site 4A

Site 4A is located in the Alvarado Channel near the intersection of Fletcher Parkway and Baltimore Drive. The Alvarado Channel is a major drainage structure in the City of La Mesa, transporting runoff generated from commercial and residential areas around Fletcher Parkway from east to west across the City. Laboratory analysis detected a total coliform reading of 130,000 MPN/100 mL in the first sample taken at this site, which is lower than in 2005 (240,000 MPN/100 mL). Fecal coliforms and enterococci, which were above their action levels in 2005, were below their respective action levels during this year's monitoring program. The field crew conducted a follow-up investigation of the channel and several of the lateral branches that join it along Fletcher Parkway to better understand the origins of bacterial contamination in this area. The locations and results of follow-up sampling events are summarized in the Table 7-1 and Figure 7-1.

Photo 7-1 Surface flow entering a grated curb inlet on Nagel Street at Sarita Street

Since Site 4A received follow-up investigations for total coliforms in both 2004 and 2005, the field crew was able to narrow down the upstream sites to those that have previously shown high levels of total coliforms. The elevated bacteria levels in most of the upstream samples were consistent with those found in previous samples taken in those areas.

Interestingly, Site 4A had a relatively low bacteria count at the time of the follow-up investigation. Historically, bacteria levels in the channel tend to fluctuate due to the large volume of water and variety of upstream areas. However, several of the upstream areas were found to have relatively high levels of bacteria. The highest total coliform count was found in a small surface flow entering a grated curb inlet at the corner of Nagel Street and Sarita Street, in the northeastern part of the City (Photo 7-1). This area had consistently high bacteria levels in 2004 and 2005 as well. The surface flow was sampled because it appeared to be a fairly established flow; there was significant algae and sediment deposition along its path, which was traced for several blocks up Nagel Street to a point where it began to dry up. Slightly farther up the street, the field crew observed an over-irrigated front yard where water had washed mud into the gutter and street. It is likely that bacteria present in the soil are being transported to the street, where the shallow flow and significant amount of algae provide an excellent platform for bacterial growth. This is consistent with the bacteria data from the site which showed a relatively high level of total coliforms but no detectable *E. coli*.

The field crew also opened a manhole on the corner of Nagel Street and Sarita Street to sample flow from Sarita Street. This flow had elevated bacteria counts as well. As in 2005, the origin of the flow coming from Sarita Street could not be located. This neighborhood should be targeted in order to address consistently high bacteria levels. See Section 8 for recommendations.

Photo 7-2 Sediment deposition, litter, and organic debris in a manhole on the corner of Jackson Drive and Parkway Drive

Also consistently high are total coliform levels in the underground pipe draining the residential neighborhood around Marengo Avenue (Site 4A-4), and in surface flow on Parkway Drive as it flows toward Jackson Drive (Site 4A-5). While no specific sources of coliforms or instances of over-watering were noted in the area around Marengo Avenue, this is another neighborhood where consistently high bacteria levels should be addressed.

Surface flow on Parkway Drive has been noted for several years and seems to be seeping from beneath Grossmont Center North commercial plaza. The 1 gpm flow had transported a significant amount of mud, litter, and decomposing organic debris into the manhole on the corner of Jackson Drive and Parkway Drive (Photo 7-2).

The field crew also sampled the Alvarado Channel itself toward the eastern edge of the City, where it crosses under SR-125 (Site 4A-8). The water in the channel is slow moving and brackish at this point due to back-up caused by excessive vegetation and sediment deposits (Photo 7-3). Site 57, which also had a high total coliform count (see below for the upstream investigation for that site), drains to this part of the Alvarado Channel, likely contributing to high bacteria levels. *E. coli* was present in the sample taken at Site 4A-8 at a density of 10 CFU/mL, but no specific sources of *E. coli* were noted in the area.

Photo 7-3 The Alvarado Channel where it passes under SR-125

Some bacteria also appear to be entering the Alvarado Channel from the southwestern area of the City. Two outfalls in a junction box in the Costco parking lot drain some of this commercial and industrial area, and elevated total coliform readings were found for samples taken from both outfalls (sites 4A-2 and 4A-3). Relatively low *E. coli* readings were also present in both samples. The field crew was unable to locate the origin(s) of bacterial contamination, but the southwest area of the City includes an industrial area where further investigation may be useful in determining possible bacteria sources.

In general, an elevated total coliform count in the Alvarado Channel is not surprising as it drains such a significant portion of the City. However, the presence of consistently high levels of bacteria in several upstream areas should be addressed. See Section 8 for recommendations.

Sampling Locations for Site 4A Upstream Investigation

Base Data Sources: USGS, SanGIS, SANDAG

Figure 7-1 Map of Sampling Locations for Site 4A Upstream Investigation

TABLE 7-1
SAMPLING LOCATIONS FOR SITE 4A UPSTREAM INVESTIGATION

ID	Location	Flow (gpm)	Total Coliforms (CFU/mL)	*E. coli* (CFU/mL)
4A	Alvarado Channel at Baltimore Drive and Fletcher Parkway	156	90	<10
4A-1	Surface flow entering inlet at the corner of Baltimore Drive and Aztec Drive	<1	30	<10
4A-2	Western outfall in junction box on southern edge of the Costco parking lot	2	390	30
4A-3	Eastern outfall in junction box on southern edge of the Costco parking lot	1	170	10
4A-4	Manhole on Marengo Avenue, ~100' south of Morro Way.	<1	400	<10
4A-5	Manhole on the corner of Jackson Drive and Parkway Drive	1	360	<10

4A-6	Manhole at the Nagel Street and Sarita Street intersection, flow from Sarita	2	390	<10
4A-7	Surface flow entering curb inlet at corner of Nagel Street and Sarita Street, coming from Nagel Street	<1	800	<10
4A-8	Alvarado Channel under SR-125	50	550	10
4A-9	Site 58, manhole at the corner of the Amaya Drive/Amaya Court intersection	2	40	<10

Site 12A

Site 12A is a manhole on the south side of Jackson Drive, west of Murray Drive. Runoff generated within the area southwest of the I-8 and Highway SR-125 intersection flows through Site 12A before eventually flowing into the Alvarado Channel. While this site had an elevated total coliform reading in 2005, this year both total coliform and fecal coliform levels were 50,000 MPN/100mL and 30,000 MPN/100mL, above their respective action levels. The field crew therefore carried out an upstream investigation, the locations and results of which are summarized in Figure 7-2 and Table 7-2. The field crew began by sampling the two major lines that join before flowing through Site 12A. The bacteria analysis results, presented in Table 7-2, show that the highest bacteria counts were coming from the area up along Jackson Drive and Grossmont Boulevard, and that bacteria levels generally decreased as the distance from the site increased. These results are similar to those from 2005. The field crew returned to the site to look for possible sources in that area. They noted that during both days of investigation there was flow entering a curb inlet in the parking lot of a shopping center at the corner of Jackson Drive and Grossmont Boulevard (Photo 7-4). The flow lines for this runoff are clearly visible in the parking lot and they contain significant sediment deposits and algae. The water appears to be a result of irrigation water which has saturated the soil in the shopping center lawn and is allowed to drain into the parking lot. A sample of this surface flow had a total coliform count of 130 CFU/mL, but it did not contain a detectable amount of *E. coli*. A catch basin in the lawn upstream of this area appeared to be draining irrigation water directly into the storm water system. However, water in the catch basin was ponded at the time of this investigation and was too shallow to be sampled. Dog feces were noted on the lawn in close proximity to the catch basin. There is an animal hospital located in the shopping center, and a sign posted on one of the lawns asks dog owners to pick up after their pets. This sign was

Photo 7-4 Surface flow originating from irrigation water in a shopping center parking lot of Jackson Drive and Grossmont Boulevard

posted by ReMax, which is located next door to the animal hospital, and a ReMax employee mentioned that dog feces on the various lawn areas have been a problem in the past.

Since most of the bacteria seems to originate from the shopping center area and no other sources of fecal coliforms were noted, the field crew hypothesized that fecal contamination at Site 12A had likely originated from the shopping center, where fecal matter on the lawn appears to be transported to the storm drain system via over-irrigation. The lawn appeared to be recently mowed and cleaned at the time of the upstream investigation, which is perhaps the reason why no *E. coli* was found in samples taken at that time. Total coliform bacteria also seemed to origine mainly from this area, since samples taken southeast of the Jackson Drive and Grossmont Boulevard intersection did not have particularly elevated bacteria counts. Most likely, coliforms present in the lawn soils are being transported to the storm drain system via the irrigation water draining into the parking lot. Recommendations regarding Site 12A can be found in Section 8.

Sampling Locations for Site 12A Upstream Investigation

Base Data Sources: USGS, SanGIS, SANDAG

Figure 7-2 Map of Sampling Locations for Site 12A Upstream Investigation

TABLE 7-2
SAMPLING LOCATIONS FOR SITE 12A UPSTREAM INVESTIGATION

ID	Location	Flow (gpm)	Total Coliforms (CFU/mL)	*E. coli* (CFU/mL)
12A	Jackson Drive, 100 feet west of Murray Drive, south side of street	10	220	<10

12A-1	Manhole in parking lot at northwest corner of Jackson Drive/Grossmont Boulevard intersection	1	220	<10
12A-2	Manhole, south side of Jackson, north of I-8	1	140	<10
12A-3	Manhole, Wilson Street and La Mesa Boulevard intersection	15	90	<10
12A-4	Grated concrete box, north end of Barona Way	15	10	<10
12A-5	Surface flow draining from lawn area near Site 12A-1	<1	130	<10

Site 14A

Site 14A is an outlet into an open channel running parallel to and north of Boulevard Drive. The sampling point is between Harbinson Avenue and Massachusetts Avenue. Laboratory analysis found the total coliform count in the channel to be 80,000 MPN/100 mL, lower than in 2005. Only low concentrations of fecal coliforms and enterococci were present.

Photo 7-5 Turbid surface flow and litter entering a grated curb inlet on Normal Avenue

The field crew conducted an upstream investigation for Site 14A, taking samples along the main channel and on lateral branches. The locations and bacterial counts of these sampling points are summarized below in Table 7-3 and Figure 7-3. The Petrifilm count was quite low at Site 14A itself during the follow-up visit, but many upstream sampling sites had fairly high levels of both total coliforms and *E. coli* bacteria. One branch of the upstream system, that come from the La Mesa Boulevard area around the City Hall buildings, had a somewhat high level of total coliform bacteria (Site 14A-6). However, the area near the intersection of Olive Avenue and Normal Avenue had the highest bacteria counts, which is consistent with the data from the 2005 upstream investigation at this site. There were several instances of over-irrigation noted in that area, including one that was causing a steady stream of turbid (74 NTU) surface flow and litter to enter a curb inlet in the southeast corner of Olive Avenue and Normal Avenue (Photo 7-5). The field crew took a sample of this flow, and the total coliforms were too numerous to count (TNTC), while the *E. coli* count was 800 CFU/mL. The field crew traced this flow along Normal Avenue to an apartment complex where Accurate Carpet Care was draining a hose from its van while an employee was shampooing the carpet of one of the apartments (Photo 7-6). The water was running down the driveway and out to the street, transporting a

Photo 7-6 Accurate Carpet Care draining water onto Normal Avenue

significant amount of mud from the lawn area of the complex. The field crew informed the employee that such a discharge is illegal, and he stopped soon after, although he claimed that Accurate Carpet Care has been draining water to the street for as long as he could remember, and that it is a common business practice.

Although this transient flow was probably not contributing to elevated bacteria levels during the original site visit, all of the upstream sites sampled near to the Olive Avenue and Normal Avenue intersection had fairly high bacteria counts. Also, Site 14A-2, the point just before all of the runoff from that neighborhood joins with the branch coming from La Mesa Boulevard, had a total coliform level TNTC and an *E. Coli* density of 570 CFU/mL, indicating that the entire area has significant bacteria contamination. Several instances of irrigation water entering the storm drain system were observed by the field crew, including one on Olive Avenue entering the curb inlet at Site 14A-3 and 14A-4 (Photo 7-7). This flow contained decomposing algae, and both 14A-3 and 14A-4 had fairly high total coliform bacteria counts. Also, sites 14A-1 and 14A-2 may have been affected by their close proximity to Helix High School; while the field crew was unable to enter the school in order to inspect it, there are often potential sources of bacteria located on school grounds, such as food wastes, litter, and organic debris.

Photo 7-7 Surface flow on Olive Avenue

The field crew therefore concluded, as in 2005, that the most significant upstream source of bacteria to Site 14A was the neighborhood around Olive Avenue and Normal Avenue. Recommendations regarding this site can be found in Section 8.

Sampling Locations for Site 14A Upstream Investigation

Base Data Sources: USGS, SanGIS, SANDAG

Figure 7-3 Map of Sampling Locations for Site 14A Upstream Investigation

TABLE 7-3
SAMPLING LOCATIONS FOR SITE 14A UPSTREAM INVESTIGATION

ID	Location	Flow (gpm)	Total Coliforms (CFU/mL)	*E. coli* (CFU/mL)
14A	Boulevard Drive between Harbinson Avenue and Massachusetts Avenue, across from 7105-7033	5	70	10
14A-1	Manhole on Yale Avenue, just south of University	5	1600	400
14A-2	Manhole in parking lot at corner of Lowell Street and University	10	TNTC	570
14A-3	Curb inlet on Olive Avenue south of Muriel, flow from northeast	3	300	20
14A-4	Curb inlet on Olive Avenue south of Muriel, flow from southeast	1	1500	150
14A-5	Surface flow entering curb inlet on Normal and Olive	<1	TNTC	800
14A-6	Curb inlet on Lee Avenue between Quince and University	1	260	<10

Site 35

Site 35 is a manhole in an outdoor walkway inside Grossmont Center Mall. The field crew detected an ammonia concentration of 1.5 mg/L during the regular site visit and hypothesized that, like last year, the pollutants originated from fertilizer used on new plants in planters on the mall walkway, transported to the storm drains by irrigation water.

The mall's Chief Engineer, Dan Rourke, accompanied the field crew for the follow-up visit. The flow into the junction box had slowed to less than 1 gpm. The ammonia concentration in the junction box had decreased to 0.2 mg/L, and another sample taken from the east pipe just before it joins the junction box had an ammonia concentration of 0.3 mg/L. There was no evidence of any contamination farther east, and a second manhole at the west upstream end of the walkway was observed to be dry, therefore suggesting that the source of the ammonia was coming from within the shopping center. In 2005 the field crew identified granular plant food used on planter boxes as the source of elevated ammonia levels; according to Mr. Rourke, this fertilizer is no longer used at the shopping center, although a liquid fertilizer is used. While it appears that there has been some improvement in the mall's watering and fertilizing practices, it is still possible that some fertilizer is being transported to the storm drains during watering. Recommendations regarding Site 35 are discussed in Section 8.

Site 57

Photo 7-8 Surface flow on Amaya Drive upstream of Site 57-3

Site 57 is an earthen channel that runs parallel to Amaya Drive at the point where it is sampled. The channel originates at an outlet on Water Street, east of the Amaya Drive and Water Street intersection. The residential areas along and between Amaya Drive and Janfred Way drain to this channel, which flows west and eventually joins with the Alvarado Channel. Laboratory analysis initially detected a total coliform count of 240,000 MPN/100 mL at this site, which has not had bacterial action level exceedances during dry weather monitoring programs in recent years. The field crew carried out a follow-up investigation, sampling the two upstream lines along Amaya Drive and Janfred Way to try to locate possible sources of coliform bacteria. The sampling locations and results are presented in Table 7-4 and Figure 7-4.

Bacterial analysis results showed the highest bacteria count originating from a manhole at the east corner of the Amaya Drive and Water Street intersection (Site 57-3). The flow was less than 1 gpm at this site, but contained a total coliform count of 680 CFU/mL. The only flow noted to be entering the storm drain system upstream of this point was surface flow coming down Amaya Drive (Photo 7-8). This flow contained decomposing organic material, and was traced down to around Gregory Street, where it started to dry out. Most likely, this is irrigation water from one or more of the residences on Amaya Drive, and coliforms associated with soil and decomposing organic material are being transported from lawns and gutter areas into the storm drain system.

Photo 7-9 Litter and algae in the slow-moving water at Site 57-1

Site 57-1, located 200 yards east of Site 57 in the same channel, had a moderate total coliform bacteria count. This is where the two upstream branches join, and the conditions in the channel at this point are fairly conducive to bacterial growth. The flow is quite slow, backed up by excessive vegetation and sedimentation, and the warm water contains a significant amount of algae and litter (Photo 7-9). It seems likely that this site provides an excellent platform for growth of bacteria.

The field crew therefore concluded that the primary sources of bacteria to Site 57 are surface flow along Amaya Drive caused by over-irrigation and the

conditions in the channel itself upstream of Site 57. Recommendations regarding Site 57 can be found in Section 8.

Sampling Locations for Site 57 Upstream Investigation

Base Data Sources: USGS, SanGIS, SANDAG

Figure 7-4 Map of Sampling Locations for Site 57 Upstream Investigation

TABLE 7-4
SAMPLING LOCATIONS FOR SITE 57 UPSTREAM INVESTIGATION

ID	Location	Flow (gpm)	Total Coliforms (CFU/mL)	*E. coli* (CFU/mL)
57	Amaya Drive, east of Severin, across from Howell	2	370	20
57-1	Upper end of the channel, on Water Street just past Amaya Drive	2	180	50
57-2	Wolff Court and Janfred intersection, grated curb inlet at northwest corner	<1	80	<10
57-3	Manhole at east corner of Amaya Drive/Water Street intersection	<1	680	10

8 SUMMARY AND RECOMMENDATIONS

8.1 Summary

8.1.1 Summary of Field Screening and Laboratory Analysis Data

Of the 18 visited sites, 17 had measurable flow and one was ponded. The flow rate ranged from a trickle of less than 1 gallon per minute to 156 gpm with the highest flow rate recorded in the Alvarado Channel.

All measurements of pH fell between 6.5 and 9.0. In the best professional judgment of the field crew, no conductivity readings were indicative of a threat to water quality.

An ammonia concentration of 1.0 mg/L NH_3-N or higher was found at three sites, although the concentrations at all three sites fell below 1.0 mg/L by the time of the follow-up visit. Two of these sites had had elevated ammonia concentrations in previous years.

As in previous years, there were no sites with nitrate concentrations at or above the action level of 10.0 mg/L NO_3-N. The highest nitrate concentration, measured at Site 50, was 7.50 mg/L NO_3-N. Furthermore, no reactive phosphorous concentrations exceeded the action level of 2.0 mg/L PO_4-P.

Site 64 had a temporary detergent concentration of 1.5 mg/L, which is above the action level of 1.0 mg/L. This concentration fell below the action level within 24 hours.

Laboratory analyses were conducted at five sites. Results indicated that bacteria levels in water from sites 4A, 14A, and 57 exceeded the established action level for total coliforms, and the action levels for both total coliforms and fecal coliforms were exceeded at Site 12A.

Concentrations of dissolved copper and dissolved zinc were detected at sites 4A and 39, but they were below the CTR action level. No other dissolved metals were detected at any of the sites. Chlorpyrifos, diazinon, oil and grease, and surfactants were also not detected at any of the sites.

Notable trash was recorded at eight of the visited sites, up from four sites in 2005. Sediment was noted at most of the sites, but no other sheens, floatables, or deposits were noted.

Vegetative growth ranged from no growth to normal growth. Many of the sites located in sunny areas had natural vegetation, while sites located in dark structures, such as manholes, generally had no vegetation.

A variety of biological organisms were observed at the visited sites, including algae, insects, and insect larvae.

8.1.2 Summary of Upstream Investigation Data

Whenever field tests showed one or more parameters above their respective action levels at the initial field screening visit, follow-up visits were performed the following business day. During 2006, four sites required follow-up visits. However, none of the parameters tested at the revisited sites exceeded their respective action levels during the follow-up visits. The field crew initiated an upstream investigation for ammonia at Site 35 for reasons explained earlier in this report.

Upstream investigations were conducted at sites 4A, 12A, 14A, and 57 to locate potential sources of the elevated bacteria levels indicated by laboratory analyses. To facilitate a prompt, comprehensive survey of potential sources of bacterial contamination, Petrifilm plates were used to conduct field microbacterial analyses. Note that total coliforms levels alone are considered a poor indicator of fecal material and an even poorer indicator of pathogens. Based on the results of the upstream investigations and follow-up actions conducted at five sites for the City of La Mesa 2006 Dry Weather Monitoring Program, the following conclusions have been developed:

- Sources of bacteria to Site 4A include contaminated surface flow coming from Nagel Street and an underground flow of unknown origin coming from Sarita Street at the intersection of Nagel and Sarita; decomposing trash and organic material from Parkway Drive being transported to the storm drain system via constant surface flow along Parkway; the residential neighborhood near the Marengo Avenue/Morro Way intersection; the eastern end of the Alvarado Channel, mainly due to stagnation of water in the channel around Site 57; and, possibly, sources in the industrial and commercial areas at the southwest corner of the City.

- Bacteria transported to the storm drain system via irrigation water near the Jackson Drive and Grossmont Boulevard intersection is the likely cause of elevated total coliform and fecal coliform levels at Site 12A. Dog waste in the lawns around the shopping center at 5232 Jackson Drive has been identified as a problem by businesses at that address, and over-watering was visually observed there by the field crew. The dog waste is likely the source of the fecal coliforms, while total coliforms may come from soil and organic material in landscaping and on streets.

- Site 14A had several upstream sources of bacteria; however, the neighborhood around Normal Avenue and Olive Avenue was identified as the one with the highest bacteria levels. Several instances of surface flow caused by excess irrigation water were observed, transporting litter and decomposing organic material to the storm drain system. It is also possible that pollutants originating from Helix High School may be contributing to elevated bacteria levels in this area, although this could not be ascertained by the field crew.

- As in 2005, the source of ammonia at Site 35 was deemed to be fertilization and over-irrigation of flower beds inside Grossmont Center mall. Irrigation water appears to be transporting fertilizer to drains within the mall. The ammonia and phosphate levels in 2006 were much lower than those recorded in 2005, probably because the type of fertilizer has been changed.

- The elevated level of total coliforms at Site 57 is mainly influenced by surface flow on Amaya Drive as it approaches Water Street. While the exact origin of this surface flow could not be located, it appears to come from over-watering of lawn areas. A consistent flow along the street, algae and decomposing organic matter were observed in curb gutters. Soil and organic matter on concrete with irrigation water, appear to be the sources of the total coliform bacteria.

8.2 Recommendations

Based on the results of the 2006 Dry Weather Monitoring Program for the City of La Mesa, these follow-up actions are recommended for consideration:

Inspection and Maintenance

- Consider increasing the frequency of street sweeping for Marengo Avenue, Jackson Drive, and Parkway Drive. Also consider implementing a more frequent street sweeping schedule in the area around Olive Avenue and Normal Avenue.

- Notify the owner of the property where Alvarado Channel passes under the SR-125 underpass (upstream investigation location 4A-8; see Table 7-1 and Figure 7-1) that excess vegetation in this area is causing a backup of water and algal growth, likely facilitating bacterial growth. Encourage the property owner to carry out a periodic cleaning of the channel in this area.

- Periodically inspect sites 4A, 12, 13B, 13C, 50, 52, 59, 61, the channel upstream of Site 57, and Sarita Street upstream of Site 4A to ensure that trash and debris are not accumulating in those locations.

Education

- Provide educational material for residents in the area of Nagel Street and Sarita Street and in the neighborhood on Marengo Avenue near Morro Way (both upstream of Site 4A) regarding littering and over-watering; bacteria levels in these areas are consistently high and are in some cases resulting from surface flow from excess irrigation water.

- Continue to target businesses along Parkway Drive east of Jackson Drive, upstream of Site 4A, regarding waste disposal and littering. Also consider inspections of businesses in the area.

- Provide educational material for businesses upstream of Site 12A in the area of Jackson Drive and Grossmont Boulevard regarding over-watering and proper pet waste disposal. Specifically target the shopping center at 5232 Jackson, where waste from animals, likely those being treated at the animal hospital located there, was observed on shopping center lawns.

- Provide educational material to residents in the area around Normal Avenue and Olive Avenue, upstream of Site 14A, regarding littering and over-irrigating; surface flow caused by over-watering is fairly common in this area and appears to be transporting bacteria to the storm drain system.

- Continue to work with Grossmont Shopping Center management to keep ammonia levels at Site 35 below the action level. Specifically, inform the employees responsible for maintenance of landscaped areas about irrigation practices and fertilizer use.

- Provide educational material regarding over-irrigation to residents along Amaya Drive northeast of Water Street. This area appears to be the most significant source of bacteria to Site 57, and surface flows on Amaya Drive seem to be fairly consistent.

9 References

City of San Diego, City of El Cajon, City of La Mesa, et al. 2005. San Diego River Watershed: Watershed Urban Runoff Management Program 2004-05 Annual Report.

USEPA. October 30, 2000. *Multi-Sector General Permit for Storm Water*.

USEPA. May 18, 2000. *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California*. 40 CFR Part 131.

San Diego Regional Water Quality Control Board (RWQCB). 1994. *Water Quality Control Plan for the San Diego Basin*.

Appendix A

Photographs of Sampling Locations

Appendix B

Laboratory Analytical Reports

Appendix C

Field Data Sheets

Attachment 1

Historical Data Graphs:
San Diego River Watershed

Attachment 2

Historical Data Graphs:
San Diego Bay Watershed

Site No 4A Photo 12	
Site No 12 Photo 27	

Site No 12A Photo 24	
Site No 13B Photo 8	

Site No 13C Photo 20	
Site No 14A Photo 14	

Site No 34 Photo 19	
Site No 35 Photo 26	

Site No 39 Photo 13	
Site No 40 Photo 13	

Site No 50 Photo 28	
Site No 52 Photo 16	

Site No 55 Photo 4	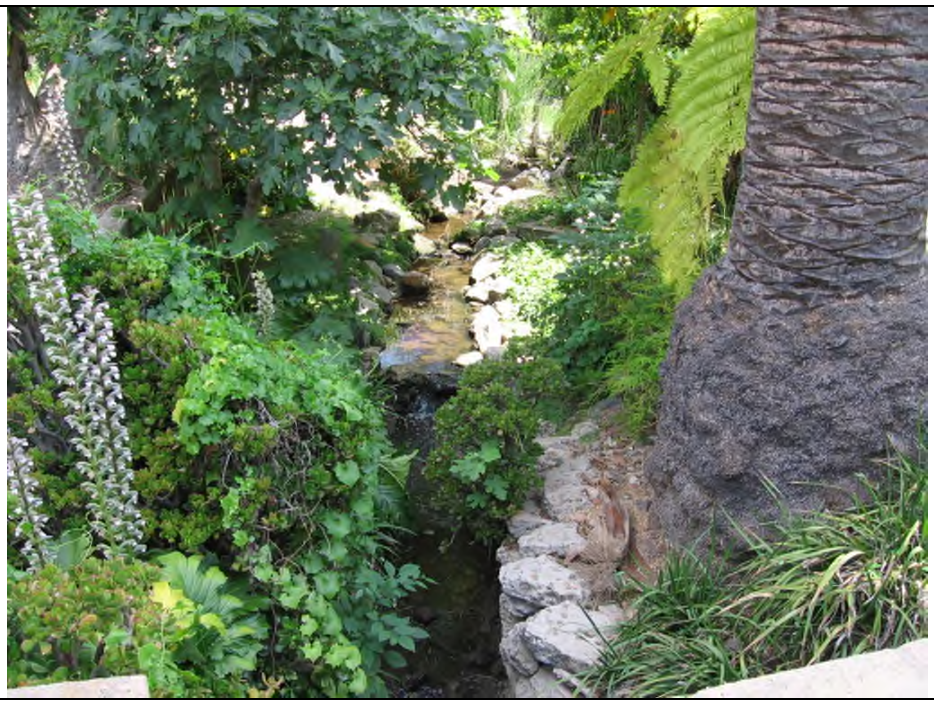
Site No 57 Photo 23	

Site No 58 Photo 3	

Site No 59 Photo 18	

Site No 61 Photo 9	
Site No 64 Photo 1	

EnviroMatrix Analytical, Inc.

05 July 2006

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0606430

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200609W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/27/06 12:26. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606430

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 57	0606430-01	Water	06/27/06 10:25	06/27/06 12:26
Site 12A	0606430-02	Water	06/27/06 11:15	06/27/06 12:26

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606430

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 57 (0606430-01) Water Sampled: 06/27/06 10:25 Received: 06/27/06 12:26									
Zinc	ND	0.020	mg/l	1	6062917	06/29/06	06/29/06	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Site 12A (0606430-02) Water Sampled: 06/27/06 11:15 Received: 06/27/06 12:26									
Zinc	ND	0.020	mg/l	1	6062917	06/29/06	06/29/06	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606430

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 57 (0606430-01) Water Sampled: 06/27/06 10:25 Received: 06/27/06 12:26									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	6062709	06/27/06	06/30/06	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*126 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*128 %*	*60-130*		"	"	"	"	
Site 12A (0606430-02) Water Sampled: 06/27/06 11:15 Received: 06/27/06 12:26									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	6062709	06/27/06	06/30/06	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*129 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*187 %*	*60-130*		"	"	"	"	*S-02, S-04*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606430

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 57 (0606430-01) Water Sampled: 06/27/06 10:25 Received: 06/27/06 12:26									
Hardness (Total)	**438**	100	mg CaCO3/L	10	6062925	06/29/06	07/03/06	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	6062919	06/27/06	06/29/06	SM5540 C	
Oil & Grease	ND	5	"	"	6062921	06/29/06	06/30/06	EPA 1664	
Site 12A (0606430-02) Water Sampled: 06/27/06 11:15 Received: 06/27/06 12:26									
Hardness (Total)	**686**	100	mg CaCO3/L	10	6062925	06/29/06	07/03/06	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	6062919	06/27/06	06/29/06	SM5540 C	
Oil & Grease	ND	5	"	"	6062921	06/29/06	06/30/06	EPA 1664	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606430

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 57 (0606430-01) Water Sampled: 06/27/06 10:25 Received: 06/27/06 12:26									
Total Coliforms	**240000**	2000	MPN/100 ml	1000	6070408	06/27/06	07/01/06	SM 9221 B, E	
Fecal Coliforms	**20**	20	"	10	"	"	06/30/06	"	
Enterococcus	**900**	20	"	"	6070407	"	07/01/06	SM 9230 A, B	
Site 12A (0606430-02) Water Sampled: 06/27/06 11:15 Received: 06/27/06 12:26									
Total Coliforms	**50000**	2000	MPN/100 ml	1000	6070408	06/27/06	07/01/06	SM 9221 B, E	
Fecal Coliforms	**30000**	200	"	100	"	"	06/30/06	"	
Enterococcus	**500**	20	"	10	6070407	"	07/01/06	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606430

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6062917										
Blank (6062917-BLK1)				Prepared & Analyzed: 06/29/06						
Cadmium	ND	0.005	mg/l							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
LCS (6062917-BS1)				Prepared & Analyzed: 06/29/06						
Zinc	0.095	0.020	mg/l	0.100		95	75-125			
Lead	0.098	0.005	"	0.100		98	75-125			
Cadmium	0.097	0.005	"	0.100		97	75-125			
Copper	0.095	0.005	"	0.100		95	75-125			
LCS Dup (6062917-BSD1)				Prepared & Analyzed: 06/29/06						
Copper	0.095	0.005	mg/l	0.100		95	75-125	0	20	
Lead	0.097	0.005	"	0.100		97	75-125	1	20	
Zinc	0.095	0.020	"	0.100		95	75-125	0	20	
Cadmium	0.096	0.005	"	0.100		96	75-125	1	20	
Duplicate (6062917-DUP1)		**Source: 0606430-01**		Prepared & Analyzed: 06/29/06						
Zinc	0.012	0.020	mg/l		0.014			15	20	
Copper	0.001	0.005	"		0.002			67	20	QR-04
Cadmium	ND	0.005	"		ND				20	
Lead	ND	0.005	"		ND				20	
Matrix Spike (6062917-MS1)		**Source: 0606430-01**		Prepared & Analyzed: 06/29/06						
Copper	0.112	0.005	mg/l	0.100	0.002	110	75-125			
Cadmium	0.107	0.005	"	0.100	ND	107	75-125			
Lead	0.119	0.005	"	0.100	ND	119	75-125			
Zinc	0.122	0.020	"	0.100	0.014	108	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606430

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6062917										
Matrix Spike Dup (6062917-MSD1)		**Source: 0606430-01**		Prepared & Analyzed: 06/29/06						
Lead	0.106	0.005	mg/l	0.100	ND	106	75-125	12	20	
Copper	0.101	0.005	"	0.100	0.002	99	75-125	10	20	
Cadmium	0.085	0.005	"	0.100	ND	85	75-125	23	20	QM-04
Zinc	0.113	0.020	"	0.100	0.014	99	75-125	8	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606430

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6062709										
Blank (6062709-BLK1)				Prepared: 06/27/06 Analyzed: 06/30/06						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.308*		*"*	*0.250*		*123*	*60-130*			
Surrogate: Tribuytlphosphate	*0.309*		*"*	*0.250*		*124*	*60-130*			
LCS (6062709-BS1)				Prepared: 06/27/06 Analyzed: 06/30/06						
Bolstar	0.38	0.10	ug/l	0.500		76	60-130			
Diazinon	0.48	0.05	"	0.500		96	60-130			
Ethoprop	0.54	0.05	"	0.500		108	60-130			
Mevinphos	0.45	0.25	"	0.500		90	60-130			
Methyl parathion	0.41	0.10	"	0.500		82	60-130			
Phorate	0.42	0.05	"	0.500		84	60-130			
Ronnel	0.42	0.25	"	0.500		84	60-130			
Trichlorinate	0.47	0.05	"	0.500		94	60-130			
Surrogate: Triphenyl phosphate	*0.262*		*"*	*0.250*		*105*	*60-130*			
Surrogate: Tribuytlphosphate	*0.211*		*"*	*0.250*		*84*	*60-130*			
LCS Dup (6062709-BSD1)				Prepared: 06/27/06 Analyzed: 06/30/06						
Bolstar	0.43	0.10	ug/l	0.500		86	60-130	12	30	
Diazinon	0.47	0.05	"	0.500		94	60-130	2	30	
Ethoprop	0.48	0.05	"	0.500		96	60-130	12	30	
Mevinphos	0.58	0.25	"	0.500		116	60-130	25	30	
Methyl parathion	0.41	0.10	"	0.500		82	60-130	0	30	
Phorate	0.43	0.05	"	0.500		86	60-130	2	30	
Ronnel	0.41	0.25	"	0.500		82	60-130	2	30	
Trichlorinate	0.47	0.05	"	0.500		94	60-130	0	30	
Surrogate: Triphenyl phosphate	*0.309*		*"*	*0.250*		*124*	*60-130*			
Surrogate: Tribuytlphosphate	*0.251*		*"*	*0.250*		*100*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606430

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6062919										
Blank (6062919-BLK1)				Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (6062919-BS1)				Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	0.8	0.5	mg/l	1.00		80	80-120			
LCS Dup (6062919-BSD1)				Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120	12	20	
Duplicate (6062919-DUP1)		**Source: 0606406-01**		Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	ND	0.5	mg/l		0.1				20	
Matrix Spike (6062919-MS1)		**Source: 0606406-01**		Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	0.1	100	80-120			
Matrix Spike Dup (6062919-MSD1)		**Source: 0606406-01**		Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	0.1	90	80-120	10	20	
Batch 6062921										
Blank (6062921-BLK1)				Prepared: 06/29/06		Analyzed: 06/30/06				
Oil & Grease	ND	5	mg/l							
LCS (6062921-BS1)				Prepared: 06/29/06		Analyzed: 06/30/06				
Oil & Grease	78	5	mg/l	93.7		83	75-125			
LCS Dup (6062921-BSD1)				Prepared: 06/29/06		Analyzed: 06/30/06				
Oil & Grease	78	5	mg/l	87.4		89	75-125	0	20	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606430

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6062925										
Blank (6062925-BLK1)				Prepared: 06/29/06	Analyzed: 07/03/06					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (6062925-DUP1)		**Source: 0606406-03**		Prepared: 06/29/06	Analyzed: 07/03/06					
Hardness (Total)	490	100	mg CaCO3/L		508			4	20	

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Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
QM-04	Visual evaluation of the sample indicates the RPD is above the control limit due to a non-homogeneous sample matrix.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego, CA 92121

Attn: Arsalan Dadkhah Phone: (858) 586-6600

Sampled by: Fax: (858) 586-6644

Billing Address: Same

Project: La Mesa Dry Weather 20060 9W-1 PO #:

EMA ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container(s) #	Container(s) Type*	418.1 (TRPH)	Oil & Grease 413.1___ 413.2___ 1664	TPH (8015B) Gas___ Diesel___	TPH-Extended 8015B___ ASTM D2887	602 / 8021 BTXE___ MTBE___	601 / 8021 (Purgeable Halocarbons)	608 / 8081 (Pesticides)	608 / 8082 (PCB's)	624 / 8260 (Volatile Organics)	625 / 8270 (Semi Volatile Organics)	TTLC Metals (CAC Title 22)	STLC Metals (CAC Title 22)	TCLP (RCRA) Metals___ Organics___	Cd Cr Cu Pb Ni Ag Zn di
1	site 57	6/27/06	10:25	water	2/4	G/P		X												X
2	site 12A	6/27/06	11:15	Water	"	"		X												X
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

*Container Types: B=Brass Tube; V=VOA; G=Glass; P=Plastic; O=Other (list)

Tamper-Proof Seals Intact: Yes No N/A Correct Containers: Yes No

Sample(s): Cold Ambient Warm VOAs w/ZHS: Yes No N/A

All Samples Properly Preserved: Yes No N/A

Disposal: N/C (aqueous) *EMA (@$5.00/sample) Return Hold

Turnaround Time: 24 hr 48 hr 3 day 4 day 5 day Normal

Comments:

RELINQUISHED BY	DATE/TIME
Signature: Manouchehr Dadkhah	6/27/06 12:04
Print: Manouchehr Dadkhah	
Company: D-Max Eng.	
Signature: James Pack	6/27/06 12:26
Print: James Pack	
Company: EMA	
Signature	
Print	
Company:	

*EMA reserves the right to return samples that do not match our waste profile. White - EMA Canary - Accounting Pink - Client (w/Report) Golden

EnviroMatrix Analytical, Inc.

07 July 2006

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0606406

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200609W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/26/06 13:27. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606406

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 4A	0606406-01	Water	06/26/06 10:50	06/26/06 13:27
Site 39	0606406-02	Water	06/26/06 11:45	06/26/06 13:27
Site 14A	0606406-03	Water	06/26/06 12:25	06/26/06 13:27

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606406

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 4A (0606406-01) Water Sampled: 06/26/06 10:50 Received: 06/26/06 13:27									
Cadmium	ND	0.005	mg/l	1	6062704	06/27/06	07/06/06	EPA 6020	
Copper	**0.008**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	**0.028**	0.020	"	"	"	"	"	"	
Site 39 (0606406-02) Water Sampled: 06/26/06 11:45 Received: 06/26/06 13:27									
Copper	**0.005**	0.005	mg/l	1	6062704	06/27/06	07/06/06	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	**0.028**	0.020	"	"	"	"	"	"	
Site 14A (0606406-03) Water Sampled: 06/26/06 12:25 Received: 06/26/06 13:27									
Zinc	ND	0.020	mg/l	1	6062704	06/27/06	07/06/06	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606406

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 4A (0606406-01) Water Sampled: 06/26/06 10:50 Received: 06/26/06 13:27									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	6062709	06/27/06	06/30/06	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*128 %*	*60-130*		"	"	"	"	
Site 39 (0606406-02) Water Sampled: 06/26/06 11:45 Received: 06/26/06 13:27									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	6062709	06/27/06	06/30/06	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*126 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*134 %*	*60-130*		"	"	"	"	*S-02, S-04*
Site 14A (0606406-03) Water Sampled: 06/26/06 12:25 Received: 06/26/06 13:27									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	6062709	06/27/06	06/30/06	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*142 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*130 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606406

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 4A (0606406-01) Water Sampled: 06/26/06 10:50 Received: 06/26/06 13:27									
Hardness (Total)	**524**	100	mg CaCO3/L	10	6062925	06/29/06	07/03/06	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	6062919	06/27/06	06/29/06	SM5540 C	
Oil & Grease	ND	5	"	"	6062921	06/29/06	06/30/06	EPA 1664	
Site 39 (0606406-02) Water Sampled: 06/26/06 11:45 Received: 06/26/06 13:27									
Hardness (Total)	**434**	100	mg CaCO3/L	10	6062925	06/29/06	07/03/06	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	6062919	06/27/06	06/29/06	SM5540 C	
Oil & Grease	ND	5	"	"	6062921	06/29/06	06/30/06	EPA 1664	
Site 14A (0606406-03) Water Sampled: 06/26/06 12:25 Received: 06/26/06 13:27									
Hardness (Total)	**508**	100	mg CaCO3/L	10	6062925	06/29/06	07/03/06	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	6062919	06/27/06	06/29/06	SM5540 C	
Oil & Grease	ND	5	"	"	6062921	06/29/06	06/30/06	EPA 1664	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606406

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 4A (0606406-01) Water Sampled: 06/26/06 10:50 Received: 06/26/06 13:27									
Total Coliforms	**130000**	2000	MPN/100 ml	1000	6063024	06/26/06	06/30/06	SM 9221 B, E	
Fecal Coliforms	**5000**	200	"	100	"	"	06/29/06	"	
Enterococcus	**5000**	200	"	"	6063025	"	06/30/06	SM 9230 A, B	
Site 39 (0606406-02) Water Sampled: 06/26/06 11:45 Received: 06/26/06 13:27									
Total Coliforms	**23000**	2000	MPN/100 ml	1000	6063024	06/26/06	06/30/06	SM 9221 B, E	
Fecal Coliforms	**220**	20	"	10	"	"	06/29/06	"	
Enterococcus	**40**	20	"	"	6063025	"	06/30/06	SM 9230 A, B	
Site 14A (0606406-03) Water Sampled: 06/26/06 12:25 Received: 06/26/06 13:27									
Total Coliforms	**80000**	2000	MPN/100 ml	1000	6063024	06/26/06	06/30/06	SM 9221 B, E	
Fecal Coliforms	**3000**	200	"	100	"	"	06/29/06	"	
Enterococcus	**80**	20	"	10	6063025	"	06/30/06	SM 9230 A, B	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606406

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6062704										
Blank (6062704-BLK1)				Prepared & Analyzed: 06/27/06						
Copper	ND	0.005	mg/l							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
Cadmium	ND	0.005	"							
LCS (6062704-BS1)				Prepared & Analyzed: 06/27/06						
Cadmium	0.099	0.005	mg/l	0.100		99	75-125			
Copper	0.098	0.005	"	0.100		98	75-125			
Lead	0.102	0.005	"	0.100		102	75-125			
Zinc	0.100	0.020	"	0.100		100	75-125			
LCS Dup (6062704-BSD1)				Prepared & Analyzed: 06/27/06						
Cadmium	0.100	0.005	mg/l	0.100		100	75-125	1	20	
Copper	0.098	0.005	"	0.100		98	75-125	0	20	
Lead	0.102	0.005	"	0.100		102	75-125	0	20	
Zinc	0.101	0.020	"	0.100		101	75-125	1	20	
Duplicate (6062704-DUP1)		**Source: 0606330-01**		Prepared & Analyzed: 06/27/06						
Lead	ND	0.005	mg/l		ND				20	
Zinc	0.059	0.020	"		0.056			5	20	
Copper	ND	0.050	"		0.004				20	
Cadmium	ND	0.005	"		0.002				20	
Matrix Spike (6062704-MS1)		**Source: 0606330-01**		Prepared & Analyzed: 06/27/06						
Copper	0.125	0.005	mg/l	0.100	0.004	121	75-125			
Lead	0.122	0.005	"	0.100	ND	122	75-125			
Zinc	0.172	0.020	"	0.100	0.056	116	75-125			
Cadmium	0.106	0.005	"	0.100	0.002	104	75-125			

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606406

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6062704										
Matrix Spike Dup (6062704-MSD1)		**Source: 0606330-01**		Prepared & Analyzed: 06/27/06						
Copper	0.123	0.005	mg/l	0.100	0.004	119	75-125	2	20	
Lead	0.116	0.005	"	0.100	ND	116	75-125	5	20	
Cadmium	0.105	0.005	"	0.100	0.002	103	75-125	0.9	20	
Zinc	0.167	0.020	"	0.100	0.056	111	75-125	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606406

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6062709										
Blank (6062709-BLK1)				Prepared: 06/27/06 Analyzed: 06/30/06						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.308*		*"*	*0.250*		*123*	*60-130*			
Surrogate: Tribuytlphosphate	*0.309*		*"*	*0.250*		*124*	*60-130*			
LCS (6062709-BS1)				Prepared: 06/27/06 Analyzed: 06/30/06						
Bolstar	0.38	0.10	ug/l	0.500		76	60-130			
Diazinon	0.48	0.05	"	0.500		96	60-130			
Ethoprop	0.54	0.05	"	0.500		108	60-130			
Mevinphos	0.45	0.25	"	0.500		90	60-130			
Methyl parathion	0.41	0.10	"	0.500		82	60-130			
Phorate	0.42	0.05	"	0.500		84	60-130			
Ronnel	0.42	0.25	"	0.500		84	60-130			
Trichlorinate	0.47	0.05	"	0.500		94	60-130			
Surrogate: Triphenyl phosphate	*0.262*		*"*	*0.250*		*105*	*60-130*			
Surrogate: Tribuytlphosphate	*0.211*		*"*	*0.250*		*84*	*60-130*			
LCS Dup (6062709-BSD1)				Prepared: 06/27/06 Analyzed: 06/30/06						
Bolstar	0.43	0.10	ug/l	0.500		86	60-130	12	30	
Diazinon	0.47	0.05	"	0.500		94	60-130	2	30	
Ethoprop	0.48	0.05	"	0.500		96	60-130	12	30	
Mevinphos	0.58	0.25	"	0.500		116	60-130	25	30	
Methyl parathion	0.41	0.10	"	0.500		82	60-130	0	30	
Phorate	0.43	0.05	"	0.500		86	60-130	2	30	
Ronnel	0.41	0.25	"	0.500		82	60-130	2	30	
Trichlorinate	0.47	0.05	"	0.500		94	60-130	0	30	
Surrogate: Triphenyl phosphate	*0.309*		*"*	*0.250*		*124*	*60-130*			
Surrogate: Tribuytlphosphate	*0.251*		*"*	*0.250*		*100*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606406

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6062919										
Blank (6062919-BLK1)				Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (6062919-BS1)				Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	0.8	0.5	mg/l	1.00		80	80-120			
LCS Dup (6062919-BSD1)				Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120	12	20	
Duplicate (6062919-DUP1)		**Source: 0606406-01**		Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	ND	0.5	mg/l		0.1				20	
Matrix Spike (6062919-MS1)		**Source: 0606406-01**		Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	0.1	100	80-120			
Matrix Spike Dup (6062919-MSD1)		**Source: 0606406-01**		Prepared: 06/27/06		Analyzed: 06/29/06				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	0.1	90	80-120	10	20	
Batch 6062921										
Blank (6062921-BLK1)				Prepared: 06/29/06		Analyzed: 06/30/06				
Oil & Grease	ND	5	mg/l							
LCS (6062921-BS1)				Prepared: 06/29/06		Analyzed: 06/30/06				
Oil & Grease	78	5	mg/l	93.7		83	75-125			
LCS Dup (6062921-BSD1)				Prepared: 06/29/06		Analyzed: 06/30/06				
Oil & Grease	78	5	mg/l	87.4		89	75-125	0	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0606406

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6062925										
Blank (6062925-BLK1)				Prepared: 06/29/06	Analyzed: 07/03/06					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (6062925-DUP1)		**Source: 0606406-03**		Prepared: 06/29/06	Analyzed: 07/03/06					
Hardness (Total)	490	100	mg CaCO3/L		508			4	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Address: 1220 Trade Ste Suite 114
San Diego, CA 92121

Attn: Arsalan Dadkhah Phone: (858) 586-6600

Sampled by: Fax: (858) 586-6644

Billing Address: Same

Project: La Mesa Dry Weather 200609W-1 PO #:

EMA ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container(s) #	Container(s) Type*	418.1 (TRPH)	Oil & Grease 413.1 ___ 413.2 ___ 1664 X	TPH (8015B) Gas ___ Diesel ___	TPH-Extended 8015B ___ ASTM D2887 ___	602 / 8021 BTXE ___ MTBE ___	601 / 8021 (Purgeable Halocarbons)	608 / 8081 (Pesticides)	608 / 8082 (PCB's)	624 / 8260 (Volatile Organics)	625 / 8270 (Semi Volatile Organics)	TTLC Metals (CAC Title 22)	STLC Metals (CAC Title 22)	TCLP (RCRA) Metals ___ Organics ___	Cd Cr Cu Pb Ni Ag Zn diss
1	site 4A	6/26/06	10:50	water	2/4	G/P		X												X
2	site 39	"	11:45	"	"	"		X												X
3	site 14A	"	12:25	"	"	"		X												X
4																				
5																				
6																				
7																				
8																				
9																				
10																				

*Container Types: B=Brass Tube; V=VOA; G=Glass; P=Plastic; O=Other (list)

Tamper-Proof Seals Intact: Yes No N/A Correct Containers: Yes No

Sample(s): Cold Ambient Warm VOAs w/ZHS: Yes No N/A

All Samples Properly Preserved: Yes No N/A

Disposal: N/C (aqueous) *EMA (@$5.00/sample) Return Hold

Turnaround Time: 24 hr 48 hr 3 day 4 day 5 day Normal

Comments:

RELINQUISHED BY	DATE/TIME
Signature: Manouchehr Dadkhah	6/26/06 13:08
Print: Manouchehr Dadkhah	
Company: D-Max Eng.	
Signature: James Pack	6/26/06 13:27
Print: James Pack	
Company: EMA	
Signature	
Print	
Company:	

White - EMA Canary - Accounting Pink - Client (w/Report)

GRAPH 4-1: Temperature

Action Level is Best Professional Judgment

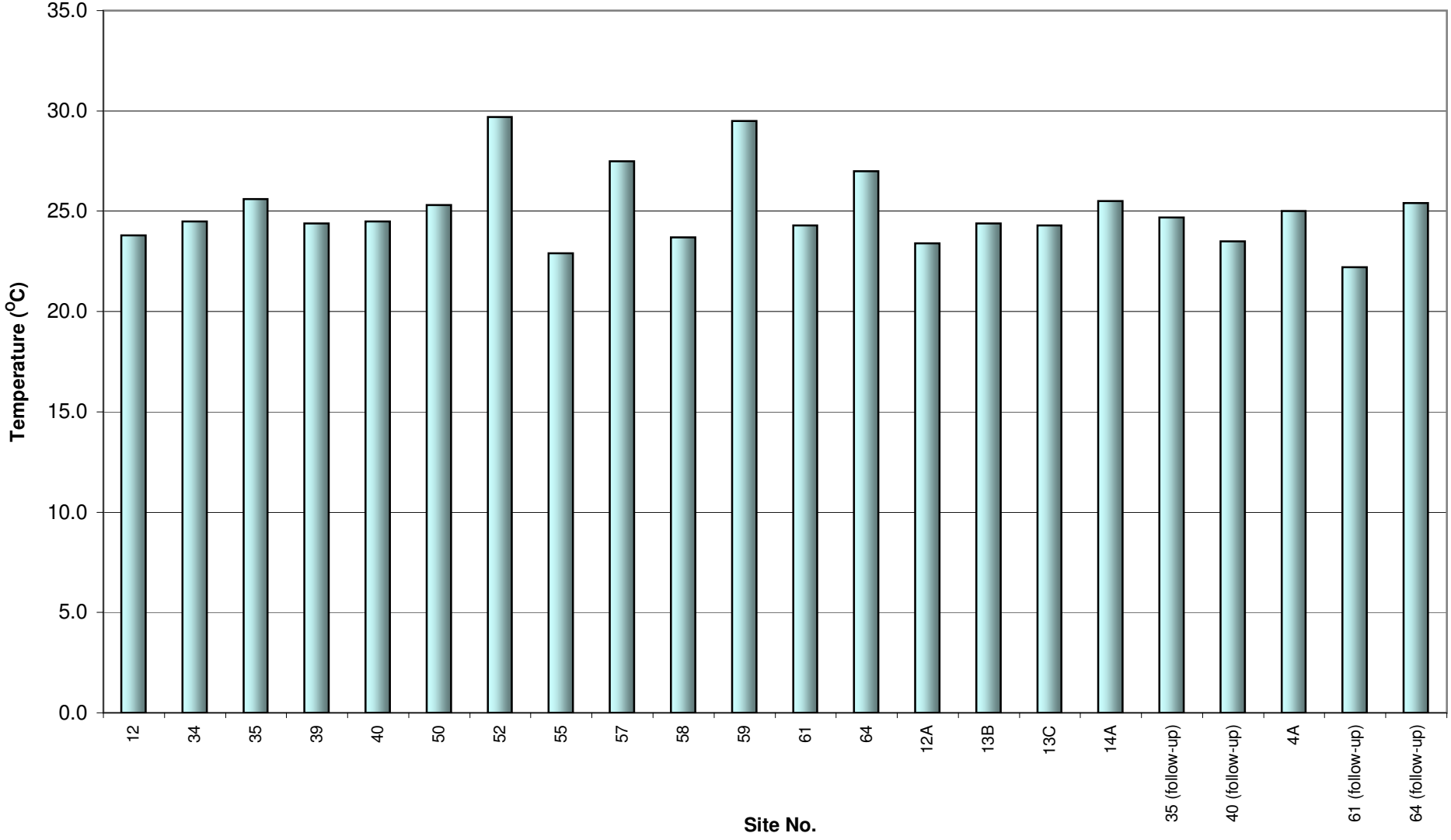

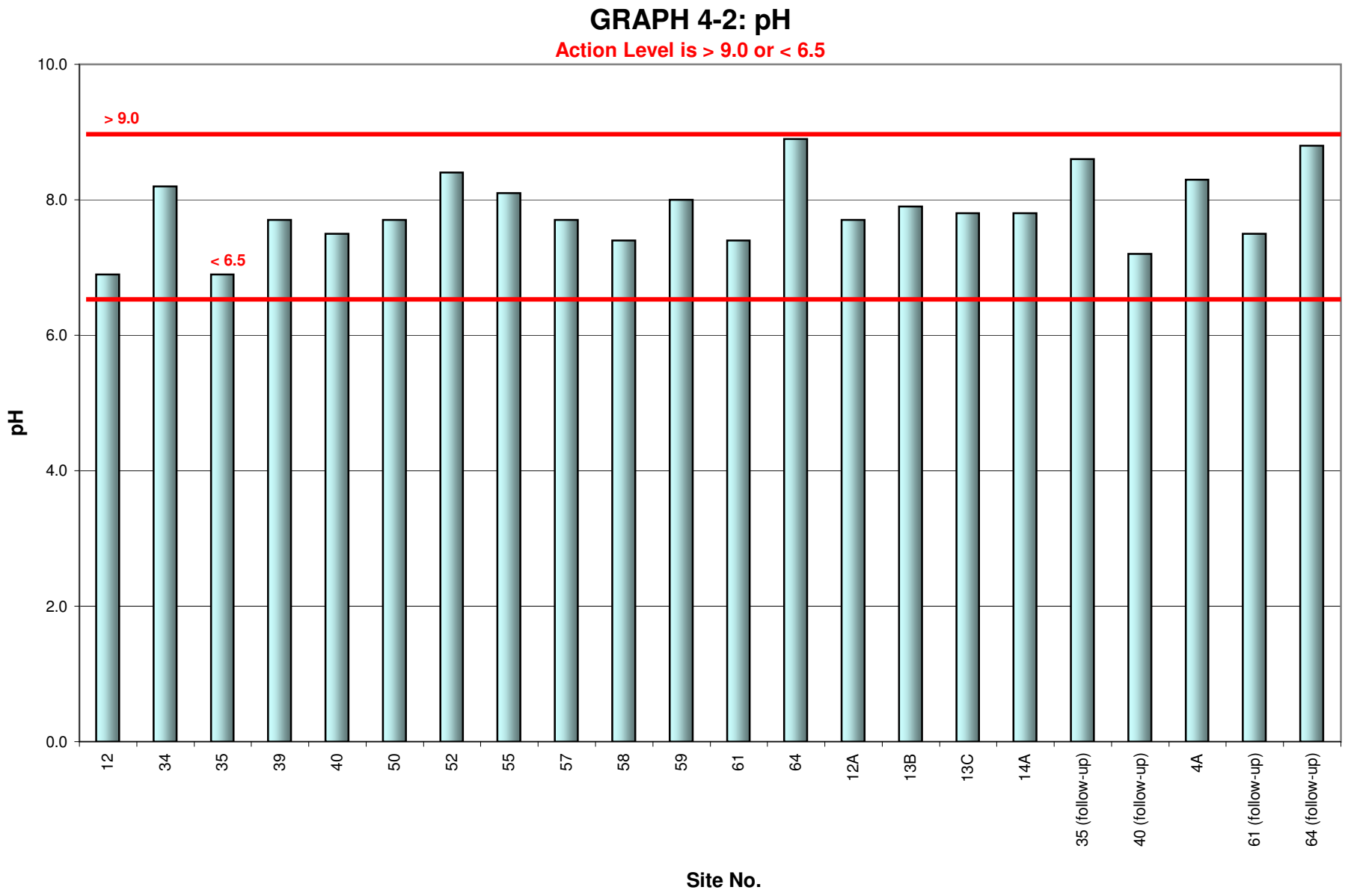
GRAPH 4-2: pH
Action Level is > 9.0 or < 6.5
> 9.0
< 6.5
10.0
8.0
6.0
4.0
2.0
0.0
pH
12
34
35
39
40
50
52
55
57
58
59
61
64
12A
13B
13C
14A
35 (follow-up)
40 (follow-up)
4A
61 (follow-up)
64 (follow-up)
Site No.

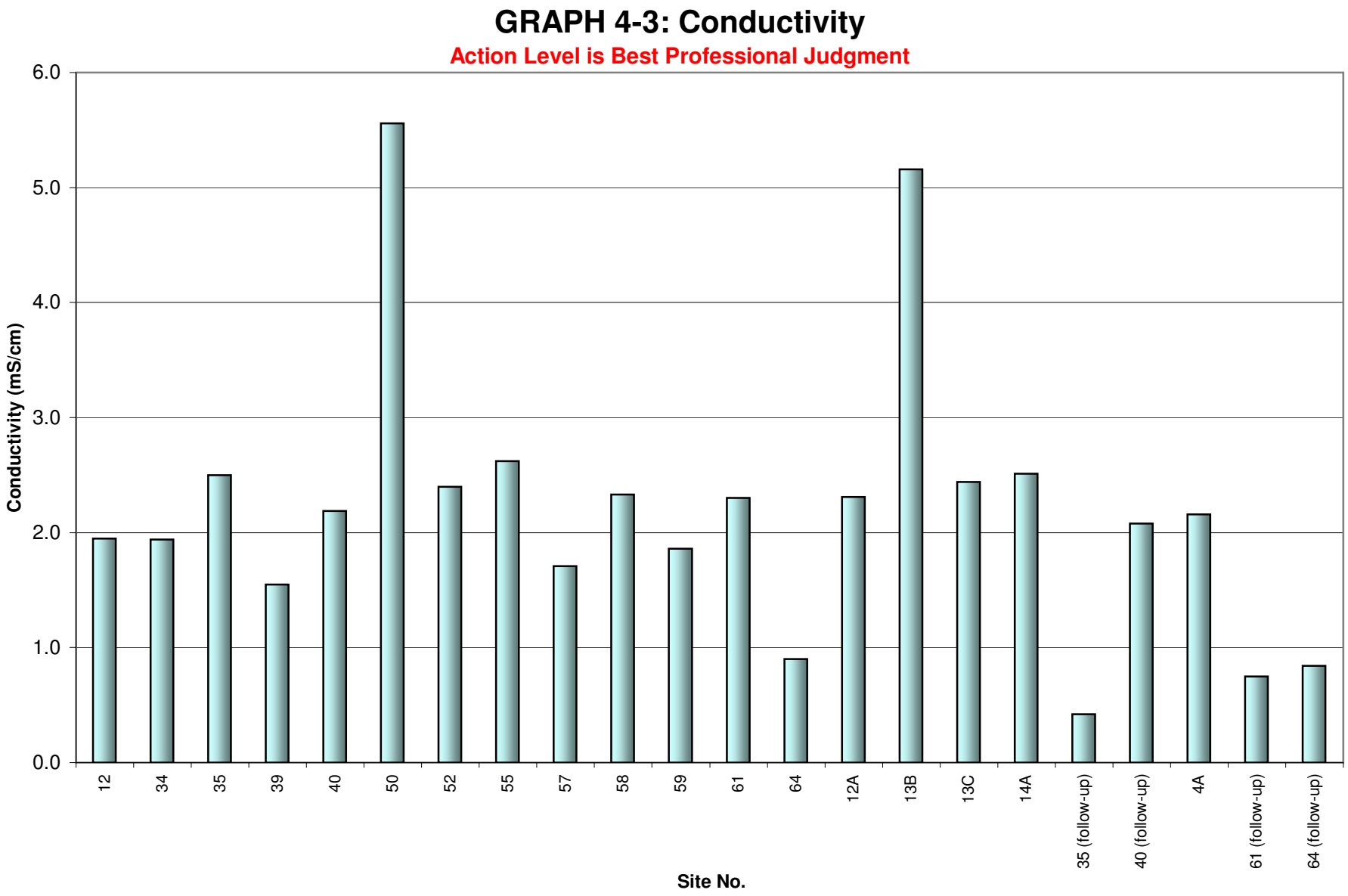
GRAPH 4-3: Conductivity
Action Level is Best Professional Judgment
Conductivity (mS/cm)
6.0
5.0
4.0
3.0
2.0
1.0
0.0
12
34
35
39
40
50
52
55
57
58
59
61
64
12A
13B
13C
14A
35 (follow-up)
40 (follow-up)
4A
61 (follow-up)
64 (follow-up)
Site No.

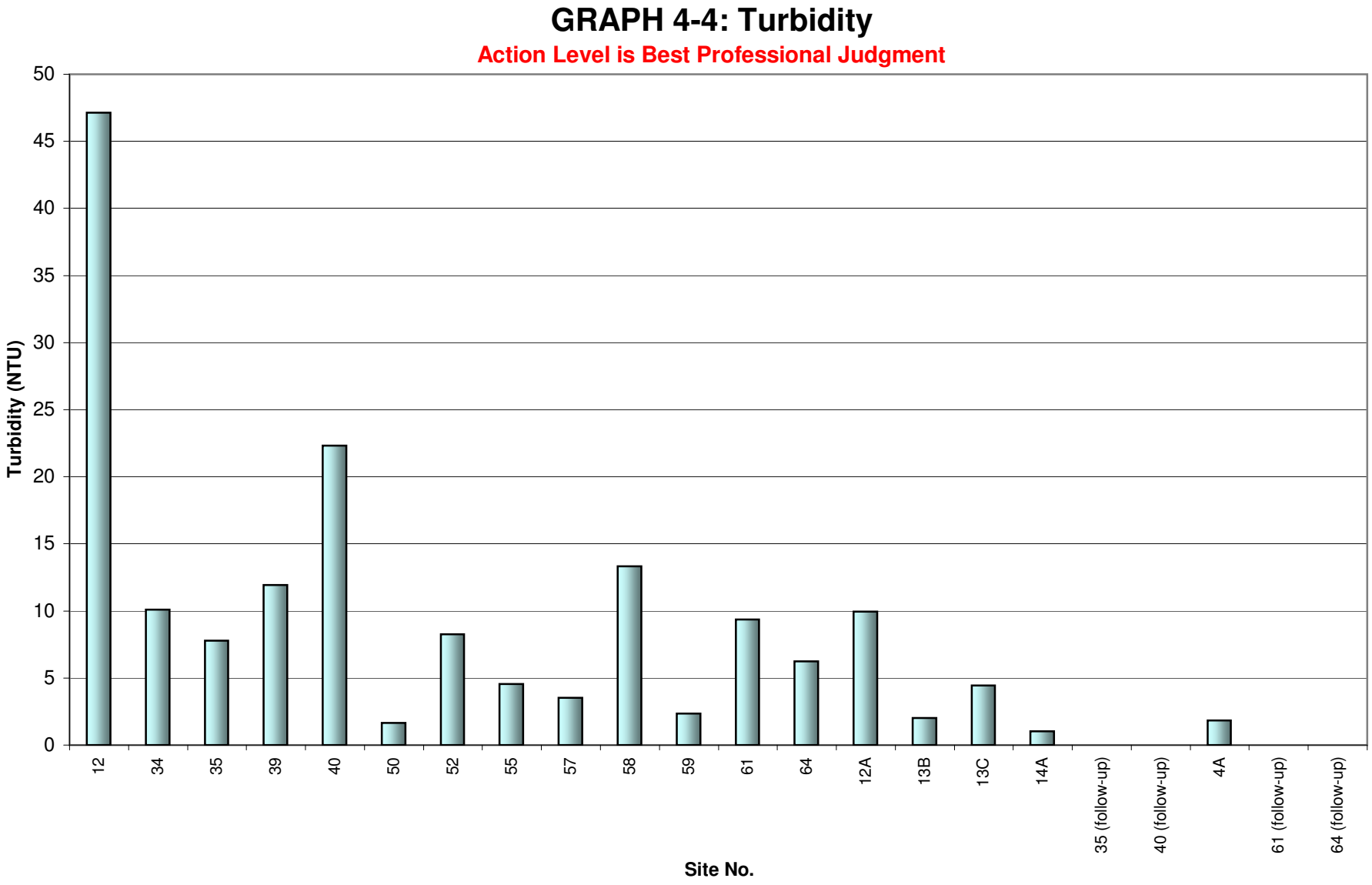
GRAPH 4-4: Turbidity
Action Level is Best Professional Judgment
Turbidity (NTU)
50
45
40
35
30
25
20
15
10
5
0
12
34
35
39
40
50
52
55
57
58
59
61
64
12A
13B
13C
14A
35 (follow-up)
40 (follow-up)
4A
61 (follow-up)
64 (follow-up)
Site No.

GRAPH 4-5: Ammonia (NH_3-N)

Action Level = 1.0 mg/L

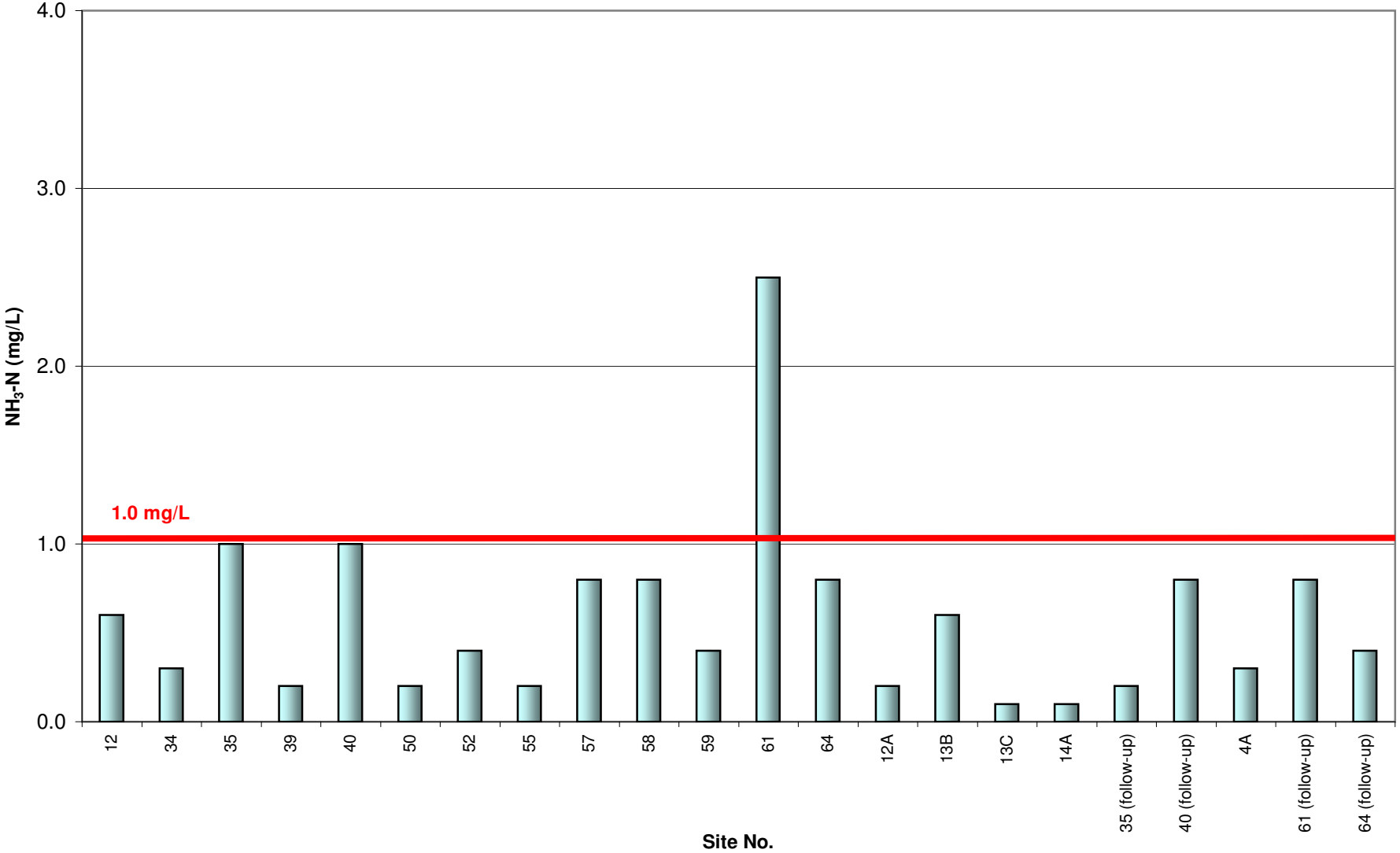

GRAPH 4-6: Nitrate (NO_3-N)

Action Level = 10.0 mg/L

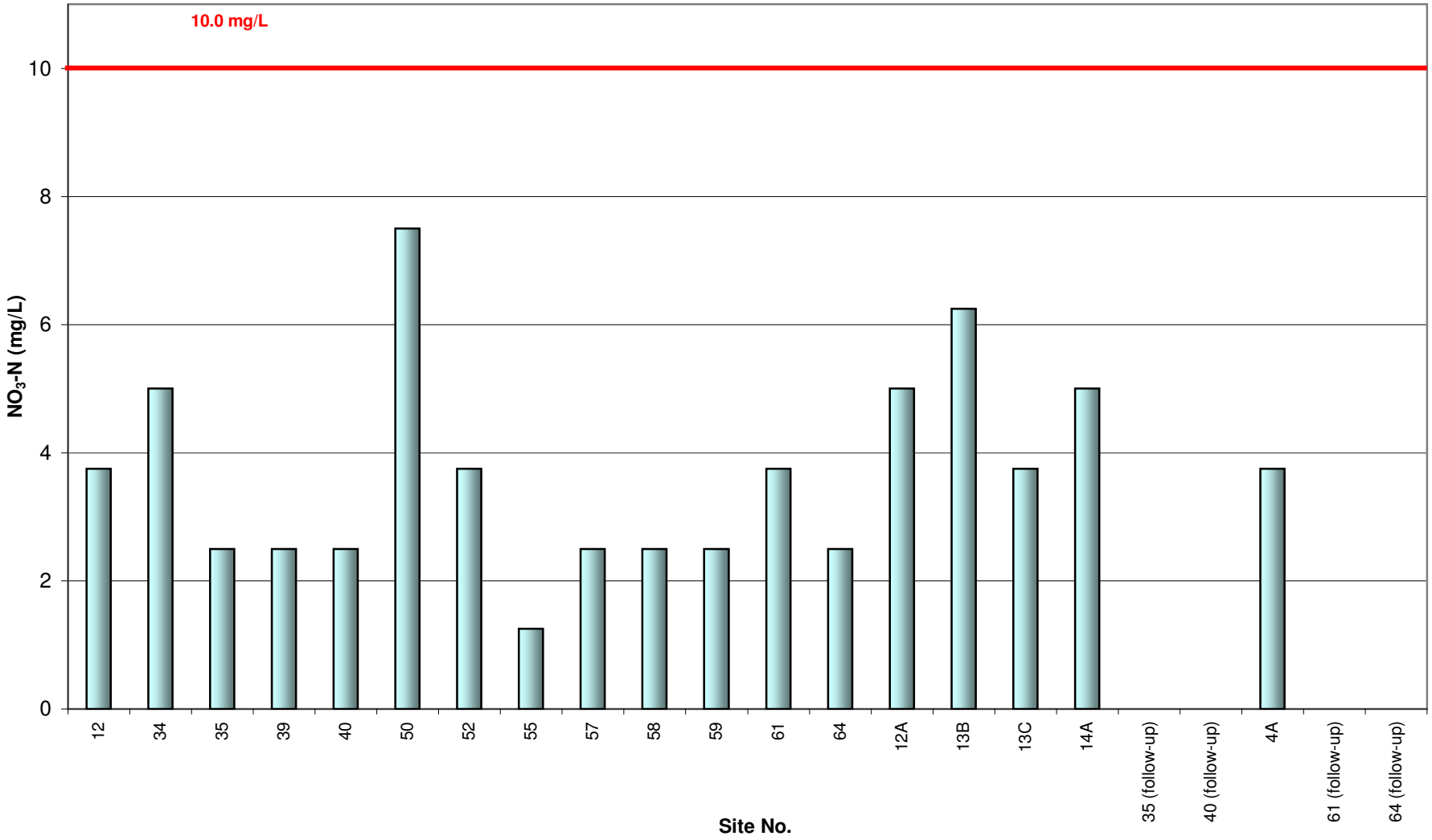

GRAPH 4-7: Orthophophosphate-P (PO_4-P)

Action Level = 2.0 mg/L

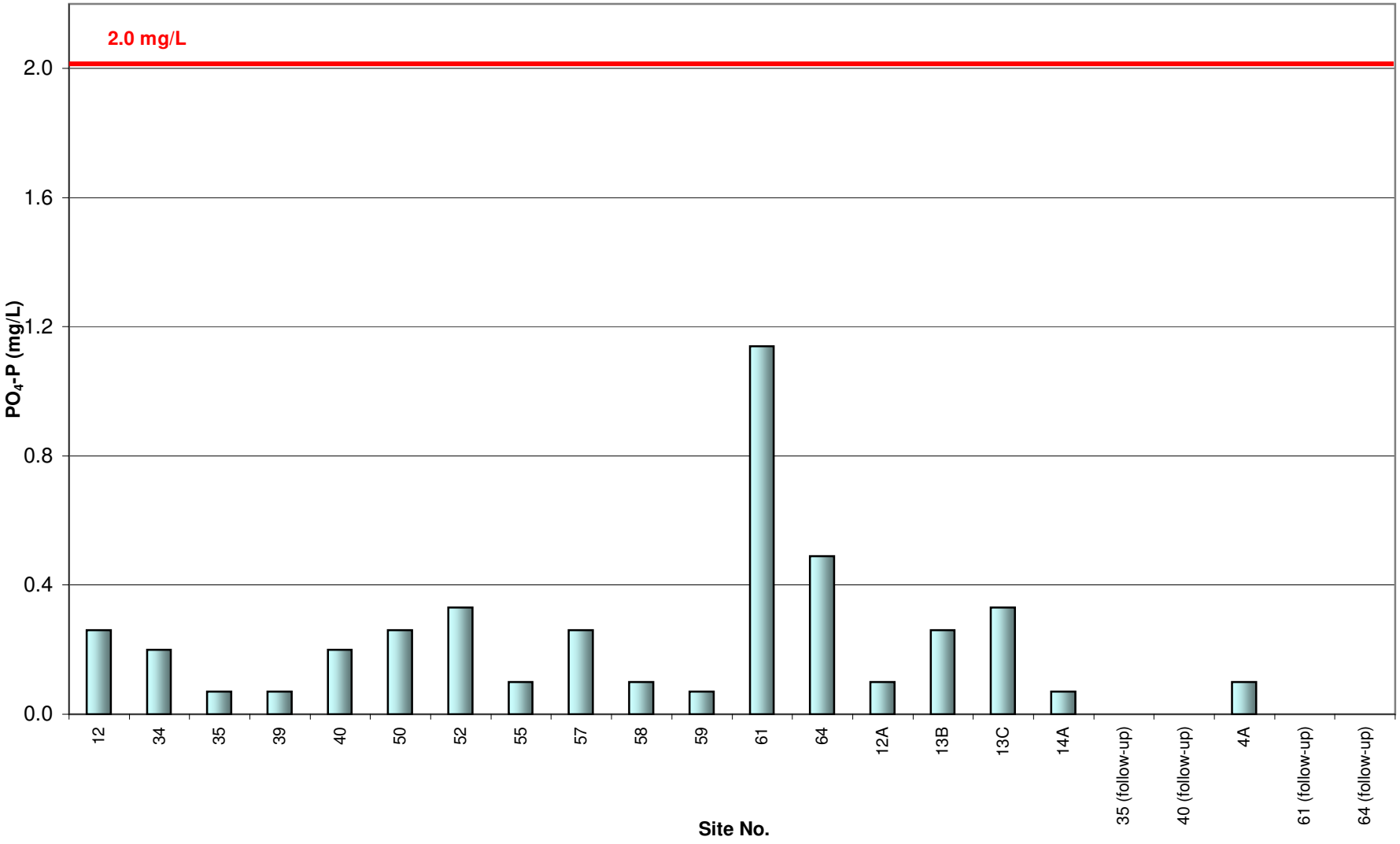

GRAPH 4-8: Detergents (Methylene Blue Active Substances)

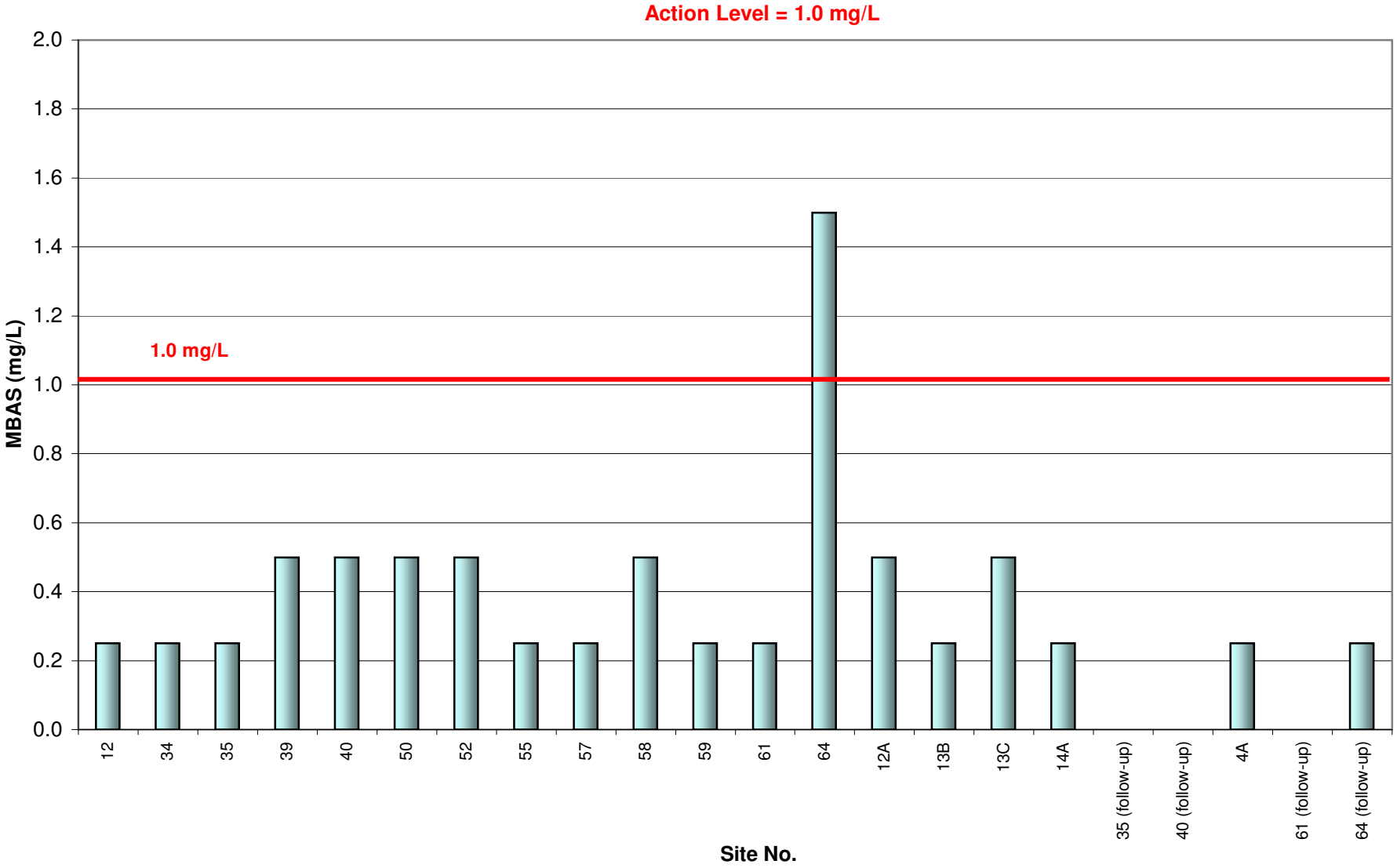

TABLE 1-2
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site No.	1	2	3	4	4A	5	6	7	7A	8	9	10	10A	11	12	12A	13	13A	13B	13C	14	14A	15	16	17	18	19
1993																											
Ammonia mg/l	1.4	1.4	4.5	2.2		1.3	1.4	1.1		0.7	0.7	0.5		1.1	2.2		0.8				2.1		1.0				
Chlorine mg/l	0.6	0.4	1.3	0.7		0.9	1.0	1.1		0.6	0.5	0.9		0.4	0.6		0.6				0.7		0.4				
Copper mg/l	1.0	1.4	1.6	1.5		1.0	0.6	2.5		2.2	2.5	1.8		1.1	0.7		2.1				2.2		2.8				
Detergents mg/l	1.0	1.0	6.0	0.5		0.5	0.3	0.5		0.3	3.0	0.5		1.0	0.5		0.5				0.8		0.5				
Phenols mg/l	0.6	0.1	0.7	0.4		0.04	2.8	2.3		3.3	3.0	0.5		1.0	0.5		0.5				0.8		0.5				
1994																											
Ammonia mg/l			1.7	2.1				1.7	na	3.4	0.3						na				0.9			0.5	2.0	1.8	na
Chlorine mg/l			0.2	0.3				0.5	na	0.2	0.3						na				0.1			0.3	0.7	0.2	na
Copper mg/l			1.1	0.0				0.3	na	0.5	0.0						na				3.0			1.4	0.2	nd	na
Detergents mg/l			0.5	0.5				0.8	na	0.5	0.4						na				0.4			0.4	0.6	0.3	na
Phenols mg/l			0.2	0.1				4.9	na	1.7	0.04						na				0.1			nd	0.5	0.1	na
1995																											
Ammonia mg/l			0.2	na											0.7						0.1					0.3	
Chlorine mg/l			0.2	na											nd						0.4					0.1	
Copper mg/l			nd	na											nd						nd					nd	
Detergents mg/l			1.0	na											0.5						0.5					0.5	
Phenols mg/l			nd	na											nd						nd					nd	
1996																											
Ammonia mg/l			0.7		0.2				na	0.6			0.4		1.5	1.0		0.4	0.1		0.5			na			
Chlorine mg/l			0.1		0.4				na	0.2			0.1		nd	nd		0.1	0.3		0.3			na			
Copper mg/l			nd		0.1				na	nd			nd		0.1	0.1		0.1	nd		nd			na			
Detergents mg/l			0.5		0.4				na	0.5			0.5		0.5	>3.0		0.3	0.6		0.8			na			
Phenols mg/l			0.1		0.1				na	0.3			0.1		0.1	0.1		0.1	0.1		0.1			na			
1997																											
Ammonia mg/l			0.6												0.6	0.8			0.9	0.6	0.8						
Chlorine mg/l			0.1												nd	0.4			0.9	0.3	0.5						
Copper mg/l			nd												0.1	0.1			nd	nd	nd						
Detergents mg/l			0.3												1.0	0.3			>3.0	0.4	0.5						
Phenols mg/l			nd												nd	nd			nd	nd	0.3						
1998																											
Ammonia mg/l			0.3		0.3										9.5	0.3			0.2	0.2	0.3						
Chlorine mg/l			nd		nd										nd	nd			0.2	0.1	nd						
Copper mg/l			nd		nd										nd	nd			nd	nd	nd						
Detergents mg/l			0.4		0.3										0.8	0.8			0.3	0.6	0.5						
Phenols mg/l			nd		nd										nd	nd			nd	nd	nd						
1999, Round One																											
Ammonia mg/l			0.5		0.2										0.6	0.4			0.4	0.2	0.3						
Chlorine mg/l			nd		0.1										nd	0.1			0.1	0.2	0.1						
Copper mg/l			0.2		0.1										0.2	nd			0.1	0.1	0.1						
Detergents mg/l			0.25		0.25										0.25	0.5			0.25	0.75	0.25						
Phenols mg/l			0.2		nd										0.1	nd			nd	0.1	0.1						
1999, Round Two																											
Ammonia mg/l			0.4		30.0										1.5	0.2			0.5	0.6	0.2						
Chlorine mg/l			0.1		nd										0.2	0.2			0.1	0.1	<0.1						
Copper mg/l			nd		0.1										0.2	nd			0.1	0.1	0.1						
Detergents mg/l			0.75		>3.0										2.0	0.25			0.25	0.25	0.25						
Phenols mg/l			nd		0.1										nd	nd			0.1	0.1	nd						
2000, Round One																											
Ammonia mg/l					6.0										0.8	0.4			0.2	0.4	0.8						
Chlorine mg/l					nd										nd	nd			nd	nd	nd						
Copper mg/l					nd										nd	nd			nd	nd	nd						
Detergents mg/l					0.75										0.5	0.25			0.25	0.5	0.25						
Phenols mg/l					nd										nd	nd			nd	nd	nd						
2000, Round Two																											
Ammonia mg/l					0.1										0.6	0.3			0.2	0.3	0.2						
Copper mg/l					nd										nd	nd			nd	nd	nd						
Chlorine mg/l					nd										nd	nd			nd	0.1	nd						
Detergents mg/l					0.25										0.5	0.5			0.25	0.5	0.5						
Phenols mg/l					nd										nd	nd			nd	nd	nd						
2001																											
Ammonia mg/l					6.0										0.8	0.4			0.2	0.4	0.8						
Chlorine mg/l					nd										nd	nd			nd	nd	nd						
Copper mg/l					nd										nd	nd			nd	nd	nd						
Detergents mg/l					0.75										0.5	0.25			0.25	0.5	0.25						
Phenols mg/l					nd										nd	nd			nd	nd	nd						
2002																											
Temp.°C					22										20	19			21	22	20	21					
pH					7.9										6.9	7.5			7.4	7.6	7.5	7.8					
Turbidity,NTU					8.35										36	19.1			5.35	4.48	15.51	2.66					
Conductivity,µmhos/cm					2710										2810	2850			3910	3730	4710	4100					
Detergents,mg/l					4.0										0.25	0.25			0.5	0.37	0.25	0.37					
Ammonia,mg/l					8.0										1.0	0.4			0.4	0.3	0.5	0.2					
Nitrate,mg/l					1.5										1.0	5.0			2.5	2.5	3.0	1.0					
Reactive Phosphorus,mg/l					0.65										0.65	0.13			0.26	0.20	0.49	0.13					
Surfactants,mg/l					4.8										nd				0.6		nd						
Oil and Grease, mg/l					8.0										1.0				nd		1.0						
Total Hardness,mg/l					608										614				864		1060						
Cadmium,mg/l					nd										nd				nd		nd						
Copper, mg/l					nd										nd				nd		nd						
Lead, mg/l					nd										nd				nd		nd						
Zinc, mg/l					nd										nd				nd		nd						
Diazinon, µg/L					nd										nd				nd		nd						
Chlorpyrifos, µg/L					nd										nd				nd		nd						
Total Coliform, MPN/100ml					> 1,600										> 1,600				> 1,600		> 1,600						
Fecal Coliform, MPN/100ml					> 1,600										> 1,600				> 1,600		500						
Enterococcus, MPN/100ml					500										500				> 1,600		240						
2003																											
Temp.°C					23										23	21.5			25	23	22.5	26					
pH					8.3										7.9	8.2			7.8	8.4	8.5	8.2					
Turbidity,NTU					2.57										15.00	11.81			3.73	2.76	1.05	1.23					
Conductivity,µmhos/cm					2550										2690	2730			2760	3270	4180	3090					
Detergents,mg/l					0.25										0.63	0.50			0.25	0.25	0.38	0.25					
Ammonia,mg/l					0.3										0.6	0.3			0.1	0.2	0.2	0.2					
Nitrate,mg/l					1.0										4.5	6.4			3.0	3.0	2.5	0.6					
Reactive Phosphorus,mg/l					0.20										1.30	0.10			0.13	0.13	0.13	0.20					
Surfactants,mg/l					nd											nd						nd					
Oil and Grease, mg/l					nd											nd						nd					
Total Hardness,mg/l					545											647						616					
Cadmium,mg/l					nd											nd						nd					
Copper, mg/l					nd											nd						nd					
Lead, mg/l					nd											nd						nd					
Zinc, mg/l					nd											nd						nd					
Diazinon, µg/L					0.05											nd						nd					
Chlorpyrifos, µg/L					nd											nd						nd					
Total Coliform, MPN/100ml					90,000											90,000						5,000					
Fecal Coliform, MPN/100ml					50,000											24,000						2,300					
Enterococcus, MPN/100ml					800											300						80					
2004																											
Temp.°C					25										23	24			27	25		24					
pH					8.4										7	7.6			7.8	7.9		7.8					
Turbidity,NTU					2.71										12.5	14.01			2.18	3.9		0.82					
Conductivity,µmhos/cm					2230										2350	2630			3180	2880		3120					
Detergents,mg/l					0.1										0.7	0.3			0.2	0.2		0.1					
Ammonia,mg/l					3.75										6.25	6.25			6.25	3.75		5					
Nitrate,mg/l					0.23										0.26	0.1			0.26	0.2		0.33					
Reactive Phosphorus,mg/l					0.5										0.38	0.5			0.75	0.5		0.25					
Surfactants,mg/l					nd											nd						nd					
Oil and Grease, mg/l					2											2						nd					
Total Hardness,mg/l					522											687						676					
Cadmium,mg/l					nd											nd						nd					
Copper, mg/l					0.005											nd						nd					
Lead, mg/l					nd											nd						nd					
Zinc, mg/l					nd											nd						0.029					
Diazinon, µg/L					nd											nd						nd					
Chlorpyrifos, µg/L					nd											nd						nd					
Total Coliform, MPN/100ml					80000											80000						8000					
Fecal Coliform, MPN/100ml					1400											700						220					
Enterococcus, MPN/100ml					1300											3000						1700					
2005																											
Temp.°C					20.3										22.0	20.5			24.2	22.8		21.1					
pH					8.1										6.8	7.4			7.5	7.8		7.6					
Turbidity,NTU					10.71										22.94	7.86			15.14	17.87		0.52					
Conductivity,µmhos/cm					1891										1670	1740			1590	2830		2200					
Detergents,mg/l					0.75										0.50	0.50			0.38	0.38		0.50					
Ammonia,mg/l					1.0										0.7	0.8			0.3	0.2		0.2					
Nitrate,mg/l					2.50										5.00	7.50			5.00	3.75		3.75					
Reactive Phosphorus,mg/l					0.33										0.26	0.10			1.63	0.20		0.20					
Surfactants,mg/l					nd											nd						nd					
Oil and Grease, mg/l					nd											nd						nd					
Total Hardness,mg/l					791											794						871					
Cadmium,mg/l					nd											nd						nd					
Copper, mg/l					nd											nd						nd					
Lead, mg/l					nd											nd						nd					
Zinc, mg/l					nd											nd						0.026					
Diazinon, µg/L					nd											nd						nd					
Chlorpyrifos, µg/L					nd											nd						nd					
Total Coliform, MPN/100ml					240,000											130,000						240,000					
Fecal Coliform, MPN/100ml					24,000											230						170					
Enterococcus, MPN/100ml					160,000											800						80					

TABLE 1-2
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site No.	20	21	22	23	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	50	52	55	57	58	59	61	64
1993																												
Ammonia mg/l																												
Chlorine mg/l																												
Copper mg/l																												
Detergents mg/l																												
Phenols mg/l																												
1994																												
Ammonia mg/l	na	nd	na	2.0																								
Chlorine mg/l	na	0.0	na	0.2																								
Copper mg/l	na	nd	na	0.2																								
Detergents mg/l	na	0.3	na	0.3																								
Phenols mg/l	na	nd	na	nd																								
1995																												
Ammonia mg/l		0.3			0.1	0.4	0.0	7.6	na	0.1	0.2																	
Chlorine mg/l		0.3			0.3	0.4	0.4	0.3	na	0.1	0.2																	
Copper mg/l		nd			nd	nd	nd	nd	na	nd	nd																	
Detergents mg/l		0.3			0.8	0.5	0.3	7.5	na	0.5	0.5																	
Phenols mg/l		nd			nd	nd	nd	nd	na	nd	nd																	
1996																												
Ammonia mg/l			na					0.1				0.2	0.9															
Chlorine mg/l			na					0.1				0.3	0.4															
Copper mg/l			na					nd				nd	0.3															
Detergents mg/l			na					0.3				0.4	0.3															
Phenols mg/l			na					0.1				0.1	0.1															
1997																												
Ammonia mg/l													0.5	>10	na	na	na	1.0										
Chlorine mg/l													0.3	0.3	na	na	na	0.9										
Copper mg/l													0.1	nd	na	na	na	nd										
Detergents mg/l													1.0	0.3	na	na	na	0.4										
Phenols mg/l													nd	nd	na	na	na	nd										
1998																												
Ammonia mg/l								0.1					0.6	0.4	na	na	na	4.0										
Chlorine mg/l								0.1					0.1	0.2	na	na	na	nd										
Copper mg/l								nd					nd	0.4	na	na	na	nd										
Detergents mg/l								0.3					0.5	0.3	na	na	na	0.5										
Phenols mg/l								nd					nd	nd	na	na	na	nd										
1999, Round One																												
Ammonia mg/l								0.2					0.5	na	na	na	na	7.0										
Chlorine mg/l								0.3					0.1	na	na	na	na	nd										
Copper mg/l								0.1					0.2	na	na	na	na	0.2										
Detergents mg/l								0.25					0.25	na	na	na	na	0.5										
Phenols mg/l								nd					nd	na	na	na	na	0.1										
1999, Round Two																												
Ammonia mg/l								0.5					0.6	0.2	na	na	na	4.0										
Chlorine mg/l								0.3					0.5	0.1	na	na	na	nd										
Copper mg/l								0.1					0.3	0.6	na	na	na	0.1										
Detergents mg/l								2.0					0.5	0.25	na	na	na	1.75										
Phenols mg/l								0.1					nd	nd	na	na	na	0.1										
2000, Round One																												
Ammonia mg/l								0.2					0.8	0.2	na	na	na	8.0	5.0	na								
Chlorine mg/l								nd					nd	nd	na	na	na	0.1	nd	na								
Copper mg/l								nd					nd	0.2	na	na	na	nd	nd	na								
Detergents mg/l								0.25					0.25	0.25	na	na	na	0.5	0.25	na								
Phenols mg/l								nd					nd	0.1	na	na	na	nd	nd	na								
2000, Round Two																												
Ammonia mg/l								0.2					1.0	1.0	Dry	Dry	Dry	4.0	5.0	Dry								
Copper mg/l								nd					0.1	0.4	Dry	Dry	Dry	nd	nd	Dry								
Chlorine mg/l								0.1					nd	0.6	Dry	Dry	Dry	nd	nd	Dry								
Detergents mg/l								0.25					0.25	0.25	Dry	Dry	Dry	0.5	0.75	Dry								
Phenols mg/l								0.1					nd	nd	Dry	Dry	Dry	nd	nd	Dry								
2001																												
Ammonia mg/l								0.2					0.8	0.2	na	na	na	8.0	5.0	na								
Chlorine mg/l								nd					nd	nd	na	na	na	0.1	nd	na								
Copper mg/l								nd					nd	0.2	na	na	na	nd	nd	na								
Detergents mg/l								0.25					0.25	0.25	na	na	na	0.5	0.25	na								
Phenols mg/l								nd					nd	0.1	na	na	na	nd	nd	na								
2002																												
Temp.°C													19	20				19	22		22	20	23	23	21	19	Dry	26
pH													6.9	7.8				7.4	7.3		7.4	6.8	7.9	8.1	7.4	7.5	Dry	8.9
Turbidity,NTU													5.23	11.32				23.29	463		6.18	35.08	7.4	11.49	19.87	12.05	Dry	6.7
Conductivity,µmhos/cm													1938	1906				2530	2350		5010	1394	3180	3500	2420	1594	Dry	1403
Detergents,mg/l													0.25	0.25				0.25	24		0.5	1.5	0.25	0.5	0.25	0.75	Dry	0.5
Ammonia,mg/l													0.4	0.2				1.0	0.2		0.2	1.0	0.2	0.6	0.6	0.4	Dry	1
Nitrate,mg/l													5.0	4.0				1.0	0.2		5.0	nd	0.3	0.2	0.2	0.8	Dry	nd
Reactive Phosphorus,mg/l													0.26	0.10				0.26	7.83		0.65	0.82	nd	0.13	0.33	0.49	Dry	0.16
Surfactants,mg/l																												nd
Oil and Grease, mg/l																												nd
Total Hardness,mg/l																												331
Cadmium,mg/l																												nd
Copper, mg/l																												nd
Lead, mg/l																												nd
Zinc, mg/l																												nd
Diazinon, µg/L																												nd
Chlorpyrifos, µg/L																												nd
Total Coliform, MPN/100ml																												>1600
Fecal Coliform, MPN/100ml																												>1600
Enterococcus, MPN/100ml																												>1600
2003																												
Temp.°C													23.5	29				23	27		25	31	24.5	20	23	28	NA	33
pH													8.1	8.4				8.2	8.5		8.4	7.8	8.2	8.3	8.2	8.2	NA	8.8
Turbidity,NTU													11.53	1.33				24.46	66.0		0.54	64.0	4.34	10.54	17.17	2.32	NA	29.04
Conductivity,µmhos/cm													2360	1310				2280	2760		7030	1290	620	1690	2680	2290	NA	3040
Detergents,mg/l													0.50	nd				0.50	1.0		0.38	0.25	0.13	0.13	0.25	0.25	NA	0.5
Ammonia,mg/l													0.8	0.2				12.0	10.0		0.3	0.8	0.3	0.3	0.6	0.4	NA	5
Nitrate,mg/l													6.4	2.4				0.3	0.3		4.8	0.1	0.6	0.1	1.0	0.2	NA	nd
Reactive Phosphorus,mg/l													1.63	0.07				3.26	1.63		0.33	0.65	0.07	0.49	0.07	0.26	NA	0.49
Surfactants,mg/l																		0.5						nd				
Oil and Grease, mg/l																		nd						nd				
Total Hardness,mg/l																		387						460				
Cadmium,mg/l																		nd						nd				
Copper, mg/l																		nd						nd				
Lead, mg/l																		nd						nd				
Zinc, mg/l																		nd						nd				
Diazinon, µg/L																		nd						nd				
Chlorpyrifos, µg/L																		nd						nd				
Total Coliform, MPN/100ml																		160,000						1,700				
Fecal Coliform, MPN/100ml																		90,000						1,300				
Enterococcus, MPN/100ml																		13,000						800				
2004																												
Temp.°C													26	23				23	26		26	26	27	25	26	29	20	31
pH													7.8	7.9				7.5	7.3		7.8	8.1	8.2	8.3	7.5	7.4	7.7	8.5
Turbidity,NTU													15.29	3.02				26.98	48.15		2.95	4.85	7.75	4.29	19.67	0.45	20.94	7.52
Conductivity,µmhos/cm													2400	1880				2280	2070		5470	980	2900	1830	2300	2070	1000	1080
Detergents,mg/l													0.8	0.4				1.5	5		0.1	0.2	0.2	0.4	0.4	0.8	0.6	0.3
Ammonia,mg/l													6.25	1.25				3.8	1.25		6.25	1.25	1.25	1.25	2.5	1.25	1.25	nd
Nitrate,mg/l													0.33	0.33				0.65	0.98		1.3	0.98	0.1	0.98	0.07	0.82	0.1	0.65
Reactive Phosphorus,mg/l													0.25	0.25				0.63	0.63		0.75	0.75	0.25	0.25	0.25	0.38	0.63	0.5
Surfactants,mg/l																		nd						nd				
Oil and Grease, mg/l																		nd						nd				
Total Hardness,mg/l																		392						504				
Cadmium,mg/l																		nd						nd				
Copper, mg/l																		nd						nd				
Lead, mg/l																		nd						nd				
Zinc, mg/l																		nd						nd				
Diazinon, µg/L																		nd						0.052				
Chlorpyrifos, µg/L																		nd						nd				
Total Coliform, MPN/100ml																		1600000						9000				
Fecal Coliform, MPN/100ml																		160000						nd				
Enterococcus, MPN/100ml																		30000						3000				
2005																												
Temp.°C													21.1	22.9				21.2	22.1		23.6	25.7	21.2	19.2	21.4	26.1	19.9	25.7
pH													7.5	7.6				7.4	7.2		7.6	7.2	8.0	7.6	7.2	8.4	7.4	8.8
Turbidity,NTU													6.49	15.81				9.02	14.74		1.01	15.43	1.70	1.18	17.57	0.32	4.78	2.35
Conductivity,µmhos/cm													1457	1039				990	977		2110	3050	2690	1736	2010	1980	900	930
Detergents,mg/l													0.50	0.13				0.50	0.25		0.50	1.00	1.25	1.25	0.25	0.25	0.88	0.50
Ammonia,mg/l													0.4	10.0				0.3	0.8		0.2	0.7	0.1	0.3	0.6	0.2	0.4	0.4
Nitrate,mg/l													6.25	1.25				1.25	1.25		3.75	1.25	0.25	0.25	1.25	2.50	1.25	1.25
Reactive Phosphorus,mg/l													0.26	2.12				0.10	0.13		0.33	0.49	0.13	0.26	0.07	0.20	0.10	0.49
Surfactants,mg/l																		nd						nd				
Oil and Grease, mg/l																		nd						nd				
Total Hardness,mg/l																		461						521				
Cadmium,mg/l																		nd						nd				
Copper, mg/l																		nd						nd				
Lead, mg/l																		nd						nd				
Zinc, mg/l																		0.027						nd				
Diazinon, µg/L																		nd						0.11				
Chlorpyrifos, µg/L																		nd						nd				
Total Coliform, MPN/100ml																		30,000						30,000				
Fecal Coliform, MPN/100ml																		nd						230				
Enterococcus, MPN/100ml																		500						800				

		1		2	3	4	7	9		10	11	12		13	14
	Site No.	4A	12	12A	13B	13C	14A	34	35	39	40	50	52	55	57
Temp.°C	Temp.	20.3	22.0	20.5	24.2	22.8	21.1	21.1	22.9	21.2	22.1	23.6	25.7	21.2	19.2
pH	pH	8.1	6.8	7.4	7.5	7.8	7.6	7.5	7.6	7.4	7.2	7.6	7.2	8.0	7.6
Turbidity,N	Turbidity	10.71	22.94	7.86	15.14	17.87	0.52	6.49	15.81	9.02	14.74	1.01	15.43	1.70	1.18
Conductivit	Conductivity	1891	1670	1740	1590	2830	2200	1457	1039	990	977	2110	3050	0.1	0.3
Detergents,	Detergents	0.75	0.50	0.50	0.38	0.38	0.50	0.50	0.13	0.50	0.25	0.50	1.00	1.25	1.25
Ammonia,m	Ammonia	1.0	0.7	0.8	0.3	0.2	0.2	0.4	10.0	0.3	0.8	0.2	0.7		
Nitrate,mg/	Nitrate	2.50	5.00	7.50	5.00	3.75	3.75	6.25	1.25	1.25	1.25	3.75	1.25	0.25	0.25
Reactive Pl	Reactive Phosphorus	0.33	0.26	0.10	#REF!	0.20	0.20	0.26	2.12	0.10	0.13	0.33	0.49	0.13	0.26
Surfactants	urfactants (MBAS	ND		nd			ND			ND					nd
Oil and Gre	Oil and Grease	ND		nd			ND			ND					nd
Total Hardn	Total Hardness	791		794			871			461					521
Cadmium,m	Cadmium (diss)	ND		nd			ND			ND					nd
Copper, mg	Copper (diss)	ND		nd			ND			ND					nd
Lead, mg/l	Lead (diss)	ND		nd			ND			ND					nd
Zinc, mg/l	Zinc (diss)	ND		nd			0.026			0.027					nd
Diazinon, µ	Diazinon	ND		nd			ND			ND					0.11
Chlorpyrifo	Chlorpyrifos	ND		nd			ND			ND					nd
Total Colif	Total Coliform	240,000		130,000			240,000			30,000					30.000
Fecal Colifo	Fecal Coliform	24,000		230			170			ND					230
Enterococc	Enterococcus	160,000		800			80			500					800

	15	17	18	19	
		58	59	61	64
Temp.°C	temp	21.4	26.1	19.9	25.7
pH	ph	7.2	8.4	7.4	8.8
Turbidity,N	turb	17.57	0.32	4.78	2.35
Conductivit	cond	2010	1980	900	930
Detergents,	deter	0.25	0.25	0.88	0.50
Ammonia,m	amon	0.6	0.2	0.4	0.4
Nitrate,mg/l	nitrate	1.25	2.50	1.25	1.25
Reactive Pl	reac	0.07	0.20	0.10	0.49

CITY OF LA MESA
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2007

Submitted to:

CITY OF LA MESA
Engineering Department
8130 Allison Avenue
La Mesa, CA 91941

Prepared by:

D-MAX Engineering, Inc.
7220 Trade Street, Suite 119
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Tel: (858) 586-6600
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October 3, 2007
Project No. 200703W-5

Mr. Hamed Hashemian, P.E.
Engineering Project Manager
City of La Mesa
8130 Allison Avenue
P.O. Box 937
La Mesa, CA 91944-0937

Re: 2007 Dry Weather Field Screening and Analytical Monitoring Program City of La Mesa, California

Dear Mr. Hashemian:

Enclosed please find the final report for the City of La Mesa 2007 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of La Mesa during the 2007 dry weather season. The contents include field screening data and analytical laboratory test results, analysis of the collected data, and photographs of the sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions. Your reviewed comments have been incorporated in this final report.

It has been a pleasure working with the City of La Mesa on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

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1 HISTORICAL DATA GRAPHS: SAN DIEGO RIVER WATERSHED
2 HISTORICAL DATA GRAPHS: SAN DIEGO BAY WATERSHED

ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
303(d)	Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
CFR	Code of Federal Regulations
CFU/mL	Colony Forming Units per milliliter
CMC	Criterion maximum concentration
COC	Constituent of Concern
Copermittees	The 18 cities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority.
CTR	California Toxics Rule
CV	Coefficient of Variance
D-MAX	D-MAX Engineering, Inc.
EMA	EnviroMatrix Analytical, Inc.
FS	Functional Sensitivity
gpm	Gallons per minute
GPS	Global Positioning System
HSA	Hydrologic Subarea
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illegal Discharge
JURMP	Jurisdictional Urban Runoff Management Program
MLS	Mass Loading Station
MBAS	Methylene blue active substances
mg/L	Milligrams per liter
MPN/100mL	Most probable number (of colony-forming units) per 100 milliliters
mS/cm	Millisiemens per centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order 2001-01
nd	Not detected
ns	Not sampled (dry site)
nt	Not tested
NTU	Nephelometric Turbidity Unit
PDL	Practical Detection Limit
ppb	Parts per billion
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TNTC	Too Numerous To Count
USEPA	United States Environmental Protection Agency
WQO	Water Quality Objective
WURMP	Watershed Urban Runoff Management Program

1 INTRODUCTION

1.1 Regulatory Requirements

San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (the recently adopted Municipal Permit) requires that the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) in 2007 be conducted in accordance with RWQCB Order 2001-01 (the previous Municipal Permit) requirement. Under Order No. 2001-01, each of the Copermittees, including the City of La Mesa, must annually conduct dry weather field screening of discharges into its storm drain system. This procedure consists of recording field observations, estimating observed flow rates, and conducting field testing at selected locations along the storm drain conveyance system during the dry weather season (May 1st through September 30th). The Permit also requires Copermittees to conduct laboratory analysis for at least 25 percent of the visited sites that have flowing or ponded water. At each sampling location that exhibits no flowing or ponded water, an alternate sampling station must be selected and sampled. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required. The results from the current year's Dry Weather Field Screening and Analytical Monitoring Program, including both field screening and analytical monitoring, are presented herein.

1.2 Hydrologic Setting

The City of La Mesa encompasses an area of nine square miles just east of the City of San Diego. The primary land use in La Mesa is residential with 55,000 residents. Other land uses in La Mesa include roads and streets, commercial, mixed use, schools, and industrial. An estimated 52 percent of La Mesa falls within the San Diego River Watershed, Hydrologic Unit (HU) 907, while the remaining 48 percent is located in the San Diego Bay Watershed. In both the San Diego Bay and the San Diego River watersheds, the City of La Mesa makes up about one percent of the overall land area of the watershed respectively. Runoff generated in the City is conveyed through five drainage basins. The boundaries of these drainage basins are illustrated in Figure 1. Table 1-1 lists the drainage basins along with the approximate percentage of drainage area in La Mesa, the corresponding hydrologic unit of the basin, and the receiving water body to which each basin drains.

TABLE 1-1
CITY OF LA MESA DRAINAGE BASINS

Drainage Basin	Percentage of City Area	Hydrologic Unit	Receiving Water Body	Watershed
Alvarado	51	907	San Diego River	San Diego River
University	28	908	Chollas Creek	San Diego Bay
Spring Valley	14	909	Sweetwater River	San Diego Bay
Lemon Grove	6	908	Chollas Creek	San Diego Bay
Lake Murray	1	907	San Diego River	San Diego River

The San Diego Bay Watershed is comprised of three hydrologic units: Pueblo San Diego (HU 908), Sweetwater (HU 909), and Otay (HU 910). Each hydrologic unit is essentially a separate watershed, but these three watersheds all drain to San Diego Bay. For regulatory purposes, they have been combined into one watershed management area, referred to as the San Diego Bay Watershed. The City of La Mesa includes areas within two of those hydrologic units, the

Pueblo San Diego Watershed and the Sweetwater Watershed. Runoff from the Spring Valley Basin eventually enters the Sweetwater River, which terminates in San Diego Bay. Runoff collected in the University and Lemon Grove basins drains to Chollas Creek, which also flows into San Diego Bay.

The San Diego River Watershed is the second largest hydrologic unit in San Diego County. It also has the highest population (~475,000) of the County's watersheds. In addition to runoff from La Mesa, the San Diego River carries water from other large portions of the cities of San Diego, El Cajon, Poway, and Santee and several unincorporated jurisdictions. The mouth of the river eventually discharges into the Pacific Ocean, south of Mission Bay. Runoff collected in the Lake Murray Basin eventually enters the Alvarado Drainage Basin, which drains to the San Diego River.

1.3 Constituents of Concern

Based primarily on wet weather monitoring data from mass loading stations (MLS) located on Chollas Creek, bioassessments, the 2005-2006 San Diego Bay Watershed Urban Runoff Management Program (WURMP) Annual Report, and the Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) List), the constituents that have been established as targeted pollutants in the Pueblo San Diego Watershed are diazinon, copper, zinc, bacterial indicators, trash, and turbidity. Total Maximum Daily Load (TMDL) regulations have continued for diazinon and for dissolved metals. Monitoring in recent years, however, indicates that the recent ban on diazinon use has essentially eliminated diazinon as a pollutant of concern. The Sweetwater Watershed, which is significantly less urbanized than the Pueblo San Diego watershed, does not have any 303(d) Listings. Turbidity and bacteria were identified as constituents of concern in the WURMP Annual Report for the Sweetwater watershed.

In the San Diego River Watershed, constituent data have been collected annually. The 2005-2006 San Diego River WURMP Annual Report lists bacterial indicators, copper and zinc as high priority Constituents of Concern (COC). The WURMP Annual Report also notes that diazinon, turbidity, and trash are non-high priority COCs.

1.4 Program Overview

The Municipal Permit adopted by the San Diego RWQCB requires all Copermittees, including the City of La Mesa, to conduct field screening and analytical monitoring at different sampling locations throughout the City during the dry weather season (May 1st through September 30th). The purpose of the Dry Weather Monitoring Program is to detect and eliminate illicit connections and illicit discharges (IC/ID) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following three components:

- Field screening observations
- Field screening analytical monitoring
- Laboratory analytical monitoring

Information collected from the Dry Weather Monitoring Program is also used to characterize dry weather discharges in the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as necessary to detect and eliminate the sources of these pollutants. This report presents the results of the City of La Mesa 2007 Dry Weather Monitoring Program conducted by D-MAX Engineering, Inc. (D-MAX).

1.5 Previous Work

The City of La Mesa has conducted an annual Dry Weather Monitoring Program since 1993. A summary of the screening results obtained for each year (1993 through 2006) is discussed below and presented in Table 1-2. Before 2002, laboratory analyses were not required. Laboratory testing was added to the program in 2002 as required by the current Municipal Permit. The same laboratory and field tests used in 2007 were also used from 2002 through 2006. Graphical representations of the data for both the San Diego River and San Diego Bay watersheds have also been prepared and are included as Attachments 1 and 2, respectively. The graphs display the results of both field and laboratory analyses for the 2002 through 2007 Dry Weather Monitoring Programs. Where applicable, averages for each constituent have been calculated, and error bars displaying average plus and minus one standard deviation have also been included on the graphs. Trend lines have been prepared for constituents where multiple values above the method reporting limit were recorded. The equations and R^2 values for the lines have been indicated on the graphs. Note that an R^2 value of 0.0 indicates a very poor fit and 1.0 indicates a perfect fit. Since the trend lines have been based on only five years of data, conclusions regarding pollution trends cannot be drawn with a large degree of certainty.

In 1993, all 15 of the visited sites showed concentrations of ammonia at or above 1.0 milligrams per liter (mg/L) NH_3-N. Of these sites, 13 showed concentrations of copper at or above 1.0 mg/L, and six had concentrations of surfactants greater than 1.0 mg/L. Concentrations of chlorine and phenols greater than 1.0 mg/L were recorded at three and five sites, respectively.

In 1994, 11 of the 16 visited sites had ponded or flowing water. Ammonia was detected at 10 of these sites, with seven showing concentrations above 1.0 mg/L. Concentrations of surfactants ranging between 0.3 mg/L and 0.8 mg/L were detected at all 11 sites. Copper was detected at nine sites with concentrations ranging from the detection limit to 3.0 mg/L, and concentrations of phenols ranged between 0.04 mg/L and 4.9 mg/L at eight of the sites. Chlorine was detected at all 11 sites, but no concentrations were above 1.0 mg/L.

In 1995, ammonia was detected at all 11 sites with ponded or flowing water, but only one site showed a concentration above 1.0 mg/L. Surfactants were also detected at all 11 sites, but only two concentrations were at or above 1.0 mg/L. Chlorine was detected at 10 sites but in very low concentrations (0.1 to 0.4 mg/L), and phenols were not detected at any sites.

In 1996, the Dry Weather Monitoring Program consisted of seven previously-screened sites along with eight new sites. Six sites showed concentrations of ammonia above 0.5 mg/L, with only two of those being at or above 1.0 mg/L. Five of these sites were located along Jackson Drive and Grossmont Shopping Center. Surfactant concentrations of 0.5 mg/L and greater were observed at seven sites, with one site showing a surfactant concentration of >3.0 mg/L. In general, the concentrations of phenols, copper, and chlorine were very low or below the reporting limits.

In 1997, the Dry Weather Monitoring Program consisted of six previously-screened sites and six new sites. Surfactants and ammonia were detected throughout the City. All ammonia concentrations were between 0.0 mg/L and 1.0 mg/L except one, which exceeded 10 mg/L, and only one site showed a concentration of surfactants above 1.0 mg/L. Chlorine in low concentrations (< 0.5 mg/L) was also detected at the majority of the sites visited. Copper was detected at a concentration of 0.1 mg/L at three sites, and only one site showed a detectable phenol concentration of 0.3 mg/L. During visual observations, a strong odor was observed at most of the sites located within the Grossmont Shopping Center. This odor, along with the presence of high levels of ammonia and low levels of copper, prompted an investigation within

the Grossmont Center. The investigation found the primary source of the ammonia to be fertilizers used on the lawns and flowerbeds. Copper concentrations could be attributed to the chemicals used to control algae and to the pennies thrown into the fountains, where they remain until periodic cleaning of the pools.

In 1998, the City conducted one round of dry weather field screening at 14 sites. Ammonia was detected at all 11 sites with ponded or flowing water, and concentrations ranged from below the field test detection limit to 9.5 mg/L. Surfactant concentrations ranging from 0.25 to 0.75 mg/L were also detected at 11 sites. Copper was detected at only one site inside Grossmont Shopping Center. Chlorine concentrations at a low range of 0.1 to 0.2 mg/L were detected at five sites. Phenols were not detected at any of the sites visited.

In 1999, the City conducted two rounds of field screening at 14 sites. In round one, the ammonia levels ranged from 0.2 to 7.0 mg/L. Surfactant concentrations were in the 0.25 to 0.75 mg/L range for this round and were detected at all visited sites with ponded or flowing water. Phenols and copper were detected at five and nine sites, respectively, at concentrations of 0.1-0.2 mg/L. Chlorine concentrations were detected at a maximum of 0.3 mg/L and a minimum that was below the detection limit.

In round two of the 1999 sampling, ammonia concentrations generally ranged from 0.2 to 4.0 mg/L, although one site was found to have a concentration of 30 mg/L. An upstream investigation revealed that a sewer overflow was the cause of this elevated value, and later sampling showed that the concentration had dropped to 1.0 mg/L. This site also had the highest recorded surfactant concentration, >3.0 mg/L, which later fell to 0.25 mg/L. Surfactant concentrations between 0.25 and 2.0 mg/L were detected at all other tested sites. Phenols, copper, and chlorine all had minimum values below the detection limit. The maximum value measured for phenols was 0.1 mg/L. The maximum copper concentration value was 0.6 mg/L, and the maximum chlorine concentration was 0.5 mg/L.

In 2000, the City performed two rounds of the field screening program at 15 sites. In round one, ammonia concentrations ranged between 0.2 and 2.0 mg/L, surfactant concentrations ranged from 0.25 to 2.5 mg/L, and chlorine ranged from a value below the detection limit to 0.4 mg/L. Copper and phenol levels were only detected at two sites each; the copper concentration peaked at 0.7 mg/L, and the phenol concentration peaked at 0.2 mg/L.

During round two, ammonia concentrations ranged from 0.1 to 5.0 mg/L, surfactant concentrations ranged from 0.25 to 0.75 mg/L, and chlorine ranged from a value below the detection limit to 0.6 mg/L. As found in round one, copper and phenols concentrations were typically undetectable, but several sites showed traces of these constituents. The copper concentration reached a maximum of 0.4 mg/L, and the phenol concentration reached a maximum of 0.1 mg/L.

In 2001, two rounds of field screening were performed throughout the City, at 15 and 16 sites, respectively. Surfactant concentrations ranged from 0.25 to 0.75 mg/L. Ammonia concentrations ranged from 0.1 to 8.0 mg/L. Only one site showed a detectable concentration of copper (0.2 mg/L), and a chlorine concentration of 0.1 mg/L was also only detected at one site. Phenols were detected only during the second visit to Site 35, where field analysis resulted in a concentration of 0.1 mg/L.

During round two, surfactant concentrations ranged from 0.25 to 1.5 mg/L. Ammonia was detected between 0.1 and 5.0 mg/L. Chlorine concentrations ranged from a value below the detection limit to 0.4 mg/L. Copper was not detected during this round of sampling. Phenols were only detected during the second visit to Site 13C, at a concentration of 1.0 mg/L.

In 2002, the City conducted one round of field screening at a total of 19 sites. As one of the stations was observed dry, an alternate site (Site 14) was selected for monitoring with this site having measurable flow. Ammonia concentrations of 1.0 mg/L or higher were found at five of the sites, with the highest concentration reaching 8.0 mg/L at Site 4A. The ammonia concentration at Site 4A dropped to 0.4 upon a follow-up visit. Nitrate concentrations at all the sites were found below 5.0 mg/L NO_3-N, with two sites having concentrations below the detection limit. Orthophosphate-P concentrations generally were measured below 1.0 mg/L PO_4-P, but Site 40 had an orthophosphate-P concentration reaching 7.83 mg/L. Upon a return visit to Site 40, the orthophosphate-P concentration had dropped to 0.82 mg/L. Surfactant concentrations exceeded 1.0 mg/L at three of the sites. The maximum surfactant concentration was recorded greater than 24 mg/L at Site 40, but dropped to 0.75 mg/L on a return visit. Laboratory analysis for surfactants detected contamination at one site (Site 4A) with a concentration of 4.8 mg/L. Oil and grease were detected at three of the sites, with the maximum concentration reaching 8.0 mg/L. Laboratory results for dissolved metals and pesticides found all concentrations below the method detection limit.

In 2003, the City conducted one round of field screening at a total of 18 sites. Alternate Site 14 was substituted for primary Site 61, which was dry. 16 sites had measurable flowing water; the flow rate ranged from 1.0 gallons per minute (gpm) to 118.5 gpm. Two of the sites had ponded water. An ammonia concentration of 1.0 mg/L or higher was found at three sites. There were no sites with nitrate concentrations at or above the action level of 10 mg/L. An orthophosphate-P concentration exceeding the action level of 2.0 mg/L was found at one site, while the rest of the sites had detectable orthophosphate-P concentrations at low levels. A surfactant concentration of 1.0 mg/L was measured at one of the sites. Laboratory analyses were conducted at five sites and indicated bacterial contamination at three sites. The organophosphate pesticide diazinon was detected at one of the sites but was below the action level of 0.5 micrograms per liter (µg/L). Chlorpyrifos was not detected at any of the sites. Surfactants were detected at one site, but the concentration was below the action level of 1.0 mg/L. None of the laboratory samples had detectable amounts of dissolved metals, oil, or grease.

In 2004, the City conducted one round of field screening at the 18 primary monitoring stations, all of which had ponded or flowing water. Ammonia was detected above the action level at two sites, which were found to have the common upstream source of an illicit sewage connection. No sites were found to have orthophosphate-P or surfactant concentrations above the respective action levels. Laboratory analyses were again conducted for five sites and, as in 2003, three sites were found to have bacterial indicators in excess of established action levels. No other constituents assessed by laboratory analysis were found to be in excess of established action levels.

In 2005, the City again conducted one round of field screening at all 18 primary monitoring stations. All of the visited sites had either flowing or ponded water. Surfactants were detected above the action level at one site during the first visit, but had fallen below the action level by the time of a follow-up visit the next day. Ammonia action level exceedances were detected at two sites. For one site, the ammonia level dropped below the action level by the following day. For the other site, located in Grossmont Shopping Center, the ammonia concentration had dropped significantly by the time of a follow-up visit but remained above the action level. Three of the five sites receiving laboratory analysis had bacterial indicators exceeding action levels; no other constituents tested for in the lab were above set action levels.

In 2006, the City conducted one round of field screening at all 18 primary monitoring stations. All of the visited sites had either flowing or ponded water. Surfactants were detected above the action level at one site during the first visit, but had fallen below the action level by the time

of a follow-up visit the next day. Ammonia action level exceedances were detected at three, although the concentrations at all three sites fell below the action level by the time of the follow-up visits. Two of these sites had had elevated ammonia concentrations in previous years. As in previous years, there were no sites with nitrate concentrations at or above the action level. Furthermore, there were no sites that exceeded the action level for orthophosphate-P concentrations. Four of the five sites receiving laboratory analysis had bacterial indicators exceeding action levels. No other constituents tested in the lab were above set action levels.

1.6 Report Outline

Section 1, Introduction, includes regulatory background, the City of La Mesa hydrologic setting, previous monitoring results, and a report outline.

Section 2, Sampling Locations, describes the field screening sampling locations and the criteria used to select sampling locations.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and results of the field screening analyses.

Section 5, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 6, Data Analysis, provides an analysis and description of each site with evidence of physical, chemical or biological pollution.

Section 7, Upstream Investigations, includes follow-up investigations of sites with recurring evidence of physical, chemical or biological pollution.

Section 8, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Photographs of the investigated sites

Appendix B Laboratory analytical reports

Appendix C Copies of the original field data sheets

Attachment 1 Historical Data Graphs: San Diego River Watershed

Attachment 2 Historical Data Graphs: San Diego Bay Watershed

Site No.	1	2	3	4	4A	5	6	7	7A	8	9	10	10A	11	12	12A	13	13A	13B	13C	14	15	16	17	18	19	20	21	22	23	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1993																																														
Ammonia mg/l	1.4	1.4	4.5	2.2		1.3	1.4	1.1		0.7	0.7	0.5		1.1	2.2		0.8				2.1	1.0																								
Chlorine mg/l	0.6	0.4	1.3	0.7		0.9	1.0	1.1		0.6	0.5	0.9		0.4	0.6		0.6				0.7	0.4																								
Copper mg/l	1.0	1.4	1.6	1.5		1.0	0.6	2.5		2.2	2.5	1.8		1.1	0.7		2.1				2.2	2.8																								
Surfactants mg/l	1.0	1.0	6.0	0.5		0.5	0.3	0.5		0.3	3.0	0.5		1.0	0.5		0.5				0.8	0.5																								
Phenols mg/l	0.6	0.1	0.7	0.4		0.04	2.8	2.3		3.3	3.0	0.5		1.0	0.5		0.5				0.8	0.5																								
1994																																														
Ammonia mg/l			1.7	2.1				1.7	na	3.4	0.3						na				0.9		0.5	2.0	1.8	na	na	nd	na	2.0																
Chlorine mg/l			0.2	0.3				0.5	na	0.2	0.3						na				0.1		0.3	0.7	0.2	na	na	0.0	na	0.2																
Copper mg/l			1.1	0.0				0.3	na	0.5	0.0						na				3.0		1.4	0.2	nd	na	na	nd	na	0.2																
Surfactants mg/l			0.5	0.5				0.8	na	0.5	0.4						na				0.4		0.4	0.6	0.3	na	na	0.3	na	0.3																
Phenols mg/l			0.2	0.1				4.9	na	1.7	0.04						na				0.1		nd	0.5	0.1	na	na	nd	na	nd																
1995																																														
Ammonia mg/l			0.2	na											0.7						0.1				0.3			0.3			0.1	0.4	0.0	7.6	na	0.1	0.2									
Chlorine mg/l			0.2	na											nd						0.4				0.1			0.3			0.3	0.4	0.4	0.3	na	0.1	0.2									
Copper mg/l			nd	na											nd						nd				nd			nd			nd	nd	nd	nd	na	nd	nd									
Surfactants mg/l			1.0	na											0.5						0.5				0.5			0.3			0.8	0.5	0.3	7.5	na	0.5	0.5									
Phenols mg/l			nd	na											nd						nd				nd			nd			nd	nd	nd	nd	na	nd	nd									
1996																																														
Ammonia mg/l			0.7		0.2				na	0.6			0.4		1.5	1.0		0.4	0.1		0.5		na						na					0.1				0.2	0.9							
Chlorine mg/l			0.1		0.4				na	0.2			0.1		nd	nd		0.1	0.3		0.3		na						na					0.1				0.3	0.4							
Copper mg/l			nd		0.1				na	nd			nd		0.1	0.1		0.1	nd		nd		na						na					nd				nd	0.3							
Surfactants mg/l			0.5		0.4				na	0.5			0.5		0.5	>3.0		0.3	0.6		0.8		na						na					0.3				0.4	0.3							
Phenols mg/l			0.1		0.1				na	0.3			0.1		0.1	0.1		0.1	0.1		0.1		na						na					0.1				0.1	0.1							
1997																																														
Ammonia mg/l			0.6												0.6	0.8			0.9	0.6	0.8																		0.5	>10	na	na	na	1.0		
Chlorine mg/l			0.1												nd	0.4			0.9	0.3	0.5																		0.3	0.3	na	na	na	0.9		
Copper mg/l			nd												0.1	0.1			nd	nd	nd																		0.1	nd	na	na	na	nd		
Surfactants mg/l			0.3												1.0	0.3			>3.0	0.4	0.5																		1.0	0.3	na	na	na	0.4		
Phenols mg/l			nd												nd	nd			nd	nd	0.3																		nd	nd	na	na	na	nd		
1998																																														
Ammonia mg/l			0.3		0.3										9.5	0.3			0.2	0.2	0.3													0.1					0.6	0.4	na	na	na	4.0		
Chlorine mg/l			nd		nd										nd	nd			0.2	0.1	nd													0.1					0.1	0.2	na	na	na	nd		
Copper mg/l			nd		nd										nd	nd			nd	nd	nd													nd					nd	0.4	na	na	na	nd		
Surfactants mg/l			0.4		0.3										0.8	0.8			0.3	0.6	0.5													0.3					0.5	0.3	na	na	na	0.5		
Phenols mg/l			nd		nd										nd	nd			nd	nd	nd													nd					nd	nd	na	na	na	nd		

nd = not detected
na = not applicable

Site No.	1	2	3	4	4A	5	6	7	7A	8	9	10	10A	11	12	12A	13	13A	13B	13C	14	15	16	17	18	19	20	21	22	23	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1999, Round One																																														
Ammonia mg/l			0.5		0.2										0.6	0.4			0.4	0.2	0.3													0.2					0.5	na	na	na	na	7.0		
Chlorine mg/l			nd		0.1										nd	0.1			0.1	0.2	0.1													0.3					0.1	na	na	na	na	nd		
Copper mg/l			0.2		0.1										0.2	nd			0.1	0.1	0.1													0.1					0.2	na	na	na	na	0.2		
Surfactants mg/l			0.3		0.3										0.3	0.5			0.3	0.8	0.3													0.3					0.3	na	na	na	na	0.5		
Phenols mg/l			0.2		nd										0.1	nd			nd	0.1	0.1													nd					nd	na	na	na	na	0.1		
1999, Round Two																																														
Ammonia mg/l			0.4		30.0										1.5	0.2			0.5	0.6	0.2													0.5					0.6	0.2	na	na	na	4.0		
Chlorine mg/l			0.1		nd										0.2	0.2			0.1	0.1	<0.1													0.3					0.5	0.1	na	na	na	nd		
Copper mg/l			nd		0.1										0.2	nd			0.1	0.1	0.1													0.1					0.3	0.6	na	na	na	0.1		
Surfactants mg/l			0.8		>3.0										2.0	0.3			0.3	0.3	0.3													2.0					0.5	0.3	na	na	na	1.8		
Phenols mg/l			nd		0.1										nd	nd			0.1	0.1	nd													0.1					nd	nd	na	na	na	0.1		
2000, Round One																																														
Ammonia mg/l					6.0										0.8	0.4			0.2	0.4	0.8													0.2					0.8	0.2	na	na	na	8.0	5.0	na
Chlorine mg/l					nd										nd	nd			nd	nd	nd													nd					nd	nd	na	na	na	0.1	nd	na

TABLE 1-2 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Copper mg/l	nd	nd	nd	nd	nd	nd	nd	nd	0.2	na	na	na	nd	nd	na
Surfactants mg/l	0.8	0.5	0.3	0.3	0.5	0.3	0.3	0.3	0.3	na	na	na	0.5	0.3	na
Phenols mg/l	nd	nd	nd	nd	nd	nd	nd	nd	0.1	na	na	na	nd	nd	na
2000, Round Two															
Ammonia mg/l	0.1	0.6	0.3	0.2	0.3	0.2	0.2	1.0	1.0	Dry	Dry	Dry	4.0	5.0	Dry
Copper mg/l	nd	nd	nd	nd	nd	nd	nd	0.1	0.4	Dry	Dry	Dry	nd	nd	Dry
Chlorine mg/l	nd	nd	nd	nd	0.1	nd	0.1	nd	0.6	Dry	Dry	Dry	nd	nd	Dry
Surfactants mg/l	0.3	0.5	0.5	0.25	0.5	0.5	0.3	0.3	0.3	Dry	Dry	Dry	0.5	0.8	Dry
Phenols mg/l	nd	nd	nd	nd	nd	nd	0.1	nd	nd	Dry	Dry	Dry	nd	nd	Dry
2001															
Ammonia mg/l	6.0	0.8	0.4	0.2	0.4	0.8	0.2	0.8	0.2	na	na	na	8.0	5.0	na
Chlorine mg/l	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na	na	0.1	nd	na
Copper mg/l	nd	nd	nd	nd	nd	nd	nd	nd	0.2	na	na	na	nd	nd	na
Surfactants mg/l	0.75	0.5	0.25	0.25	0.5	0.25	0.25	0.25	0.25	na	na	na	0.5	0.25	na
Phenols mg/l	nd	nd	nd	nd	nd	nd	nd	nd	0.1	na	na	na	nd	nd	na

nd = not detected
na = not applicable

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	61	64
2002																			
Temp. ℃	22	20	19	21	22	20	21	19	20	19	22	22	20	23	23	21	19	Dry	26
pH	7.9	6.9	7.5	7.4	7.6	7.5	7.8	6.9	7.8	7.4	7.3	7.4	6.8	7.9	8.1	7.4	7.5	Dry	8.9
Turbidity,NTU	8.35	36	19.1	5.35	4.48	15.51	2.66	5.23	11.32	23.29	463	6.18	35.08	7.4	11.49	19.87	12.05	Dry	6.7
Conductivity,µmhos/cm	2710	2810	2850	3910	3730	4710	4100	1938	1906	2530	2350	5010	1394	3180	3500	2420	1594	Dry	1403
Surfactants mg/l	4.0	0.25	0.25	0.5	0.37	0.25	0.37	0.25	0.25	0.25	24	0.5	1.5	0.25	0.5	0.25	0.75	Dry	0.5
Ammonia,mg/l	**8.0**	**1.0**	0.4	0.4	0.3	0.5	0.2	0.4	0.2	**1.0**	0.2	0.2	1.0	0.2	0.6	0.6	0.4	Dry	**1**
Nitrate,mg/l	1.5	1.0	5.0	2.5	2.5	3.0	1.0	5.0	4.0	1.0	0.2	5.0	nd	0.3	0.2	0.2	0.8	Dry	nd
Orthophosphate-P, mg/L	0.65	0.65	0.13	0.26	0.20	0.49	0.13	0.26	0.10	0.26	**7.83**	0.65	0.82	nd	0.13	0.33	0.49	Dry	0.16
Surfactants,mg/l	**4.8**	nd		0.6		nd													nd
Oil and Grease, mg/l	8.0	1.0		nd		1.0													nd
Total Hardness,mg/l	608	614		864		1060													331
Cadmium,mg/l	nd	nd		nd		nd													nd
Copper, mg/l	nd	nd		nd		nd													nd
Lead, mg/l	nd	nd		nd		nd													nd
Zinc, mg/l	nd	nd		nd		nd													nd

TABLE 1-2 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Diazinon, µg/L	nd	nd		nd		nd													nd
Chlorpyrifos, µg/L	nd	nd		nd		nd													nd
Total Coliform, MPN/100ml	> 1,600	> 1,600		> 1,600		> 1,600													>1600
Fecal Coliform, MPN/100ml	> 1,600	> 1,600		> 1,600		500													>1600
Enterococcus, MPN/100ml	500	500		> 1,600		240													>1600
2003																			
Temp. ℃	23	23	21.5	25	23	22.5	26	23.5	29	23	27	25	31	24.5	20	23	28	NA	33
pH	8.3	7.9	8.2	7.8	8.4	8.5	8.2	8.1	8.4	8.2	8.5	8.4	7.8	8.2	8.3	8.2	8.2	NA	8.8
Turbidity,NTU	2.57	15.00	11.81	3.73	2.76	1.05	1.23	11.53	1.33	24.46	66.0	0.54	64.0	4.34	10.54	17.17	2.32	NA	29.04
Conductivity,µmhos/cm	2550	2690	2730	2760	3270	4180	3090	2360	1310	2280	2760	7030	1290	620	1690	2680	2290	NA	3040
Surfactants mg/l, field screening	0.25	0.63	0.50	0.25	0.25	0.38	0.25	0.50	nd	0.50	**1.0**	0.38	0.25	0.13	0.13	0.25	0.25	NA	0.5
Ammonia,mg/l	0.3	0.6	0.3	0.1	0.2	0.2	0.2	0.8	0.2	**12.0**	**10.0**	0.3	0.8	0.3	0.3	0.6	0.4	NA	**5**
Nitrate,mg/l	1.0	4.5	6.4	3.0	3.0	2.5	0.6	6.4	2.4	0.3	0.3	4.8	0.1	0.6	0.1	1.0	0.2	NA	nd
Orthophosphate-P, mg/L	0.20	1.30	0.10	0.13	0.13	0.13	0.20	1.63	0.07	**3.26**	1.63	0.33	0.65	0.07	0.49	0.07	0.26	NA	0.49
Surfactants,mg/l	nd		nd				nd			0.5					nd				
Oil and Grease, mg/l	nd		nd				nd			nd					nd				
Total Hardness,mg/l	545		647				616			387					460				
Cadmium,mg/l	nd		nd				nd			nd					nd				
Copper, mg/l	nd		nd				nd			nd					nd				
Lead, mg/l	nd		nd				nd			nd					nd				
Zinc, mg/l	nd		nd				nd			nd					nd				
Diazinon, µg/L	0.05		nd				nd			nd					nd				
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd				
Total Coliform, MPN/100ml	**90,000**	-	**90,000**	-		-	5,000	-		**160,000**					1,700				
Fecal Coliform, MPN/100ml	**50,000**	-	**24,000**	-			2,300			**90,000**					1,300				
Enterococcus, MPN/100ml	800		300	-			80			**13,000**					800				

NTU = Nephelometric Turbidity Units
µmhos/cm = micromhos per centimeter
MPN/100mL = most probable number (of colony forming units) per 100 milliliters
nd = not detected
na = not applicable
Red values were at or above the measured constituent's action level

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	61	64
2004																			
Temp. ℃	25	23	24	27	25		24	26	23	23	26	26	26	27	25	26	29	20	31
pH	8.4	7	7.6	7.8	7.9		7.8	7.8	7.9	7.5	7.3	7.8	8.1	8.2	8.3	7.5	7.4	7.7	8.5
Turbidity,NTU	2.71	12.5	14.01	2.18	3.9		0.82	15.29	3.02	26.98	48.15	2.95	4.85	7.75	4.29	19.67	0.45	20.94	7.52
Conductivity,µmhos/cm	2230	2350	2630	3180	2880		3120	2400	1880	2280	2070	5470	980	2900	1830	2300	2070	1000	1080
Ammonia,mg/l	0.1	0.7	0.3	0.2	0.2		0.1	0.8	0.4	**1.5**	**5**	0.1	0.2	0.2	0.4	0.4	0.8	0.6	0.3
Nitrate,mg/l	3.75	6.25	6.25	6.25	3.75		5	6.25	1.25	3.8	1.25	6.25	1.25	1.25	1.25	2.5	1.25	1.25	nd
Orthophosphate-P, mg/L	0.23	0.26	0.1	0.26	0.2		0.33	0.33	0.33	0.65	0.98	1.3	0.98	0.1	0.98	0.07	0.82	0.1	0.65
Surfactants mg/l, field screening	0.5	0.38	0.5	0.75	0.5		0.25	0.25	0.25	0.63	0.63	0.75	0.75	0.25	0.25	0.25	0.38	0.63	0.5
Surfactants,mg/l	nd		nd				nd			nd					nd				
Oil and Grease, mg/l	2		2				nd			nd					nd				
Total Hardness,mg/l	522		687				676			392					504				
Cadmium,mg/l	nd		nd				nd			nd					nd				
Copper, mg/l	0.005		nd				nd			nd					nd				
Lead, mg/l	nd		nd				nd			nd					nd				
Zinc, mg/l	nd		nd				0.029			nd					nd				

TABLE 1-2 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Diazinon, µg/L	nd		nd			nd			nd					0.052				
Chlorpyrifos, µg/L	nd		nd			nd			nd					nd				
Total Coliform, MPN/100ml	**80000**		**80000**			8000			**1600000**					9000				
Fecal Coliform, MPN/100ml	1400		700			220			**160000**					nd				
Enterococcus, MPN/100ml	1300		3000			1700			**30000**					3000				
2005																		
Temp. ℃	20.3	22.0	20.5	24.2	22.8	21.1	21.1	22.9	21.2	22.1	23.6	25.7	21.2	19.2	21.4	26.1	19.9	25.7
pH	8.1	6.8	7.4	7.5	7.8	7.6	7.5	7.6	7.4	7.2	7.6	7.2	8.0	7.6	7.2	8.4	7.4	8.8
Turbidity,NTU	10.71	22.94	7.86	15.14	17.87	0.52	6.49	15.81	9.02	14.74	1.01	15.43	1.70	1.18	17.57	0.32	4.78	2.35
Conductivity,µmhos/cm	1891	1670	1740	1590	2830	2200	1457	1039	990	977	2110	3050	2690	1736	2010	1980	900	930
Surfactants mg/l, field screening	0.75	0.50	0.50	0.38	0.38	0.50	0.50	0.13	0.50	0.25	0.50	**1.00**	**1.25**	**1.25**	0.25	0.25	0.88	0.50
Ammonia,mg/l	**1.0**	0.7	0.8	0.3	0.2	0.2	0.4	**10.0**	0.3	0.8	0.2	0.7	0.1	0.3	0.6	0.2	0.4	0.4
Nitrate,mg/l	2.50	5.00	7.50	5.00	3.75	3.75	6.25	1.25	1.25	1.25	3.75	1.25	0.25	0.25	1.25	2.50	1.25	1.25
Orthophosphate-P, mg/L	0.33	0.26	0.10	1.63	0.20	0.20	0.26	2.12	0.10	0.13	0.33	0.49	0.13	0.26	0.07	0.20	0.10	0.49
Surfactants,mg/l	nd		nd			nd			nd					nd				
Oil and Grease, mg/l	nd		nd			nd			nd					nd				
Total Hardness,mg/l	791		794			871			461					521				
Cadmium,mg/l	nd		nd			nd			nd					nd				
Copper, mg/l	nd		nd			nd			nd					nd				
Lead, mg/l	nd		nd			nd			nd					nd				
Zinc, mg/l	nd		nd			0.026			0.027					nd				
Diazinon, µg/L	nd		nd			nd			nd					0.11				
Chlorpyrifos, µg/L	nd		nd			nd			nd					nd				
Total Coliform, MPN/100ml	**240,000**		**130,000**			**240,000**			30,000					30,000				
Fecal Coliform, MPN/100ml	**24,000**		230			170			nd					230				
Enterococcus, MPN/100ml	**160,000**		800			80			500					800				

NTU = Nephelometric Turbidity Units
µmhos/cm = micromhos per centimeter
MPN/100mL = most probable number (of colony forming units) per 100 milliliters
nd = not detected
na = not applicable
Red values were at or above the measured constituent's action level

TABLE 1-2 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	61	64
2006																			
Temp. ℃	25.0	23.8	23.4	24.4	24.3		25.5	24.5	25.6	24.4	24.5	25.3	29.7	22.9	27.5	23.7	29.5	24.3	27.0
pH	8.3	6.9	7.7	7.9	7.8		7.8	8.2	6.9	7.7	7.5	7.7	8.4	8.1	7.7	7.4	8.0	7.4	8.9
Turbidity,NTU	1.83	47.13	9.94	2.02	4.43		1.02	10.09	7.77	11.93	22.31	1.64	8.27	4.56	3.51	13.32	2.34	9.37	6.24
Conductivity,µmhos/cm	2.16	1.95	2.31	5.16	2.44		2.51	1.94	2.50	1.55	2.19	5.56	2.40	2.62	1.71	2.33	1.86	2.3	0.90
Surfactants mg/l, field screening	0.25	0.25	0.50	0.25	0.50		0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.25	0.25	0.50	0.25	0.25	**1.5**
Ammonia,mg/l	0.3	0.6	0.2	0.6	0.1		0.1	0.3	**1.50**	0.2	1.0	0.2	0.4	0.2	0.8	0.8	0.4	**2.5**	0.8
Nitrate,mg/l	3.75	3.75	5.00	6.25	3.75		5.00	5.00	2.50	2.50	2.50	7.50	3.75	1.25	2.50	2.50	2.50	3.75	2.50
Orthophosphate-P, mg/L	0.10	0.26	0.10	0.26	0.33		0.07	0.20	0.07	0.07	0.20	0.26	0.33	0.10	0.26	0.10	0.07	1.14	0.49
Surfactants,mg/l	nd		nd				nd			nd					nd				
Oil and Grease, mg/l	nd		nd				nd			nd					nd				
Total Hardness,mg/l	524		686				508			434					438				
Cadmium,mg/l	nd		nd				nd			nd					nd				
Copper, mg/l	0.008		nd				nd			0.005					nd				
Lead, mg/l	nd		nd				nd			nd					nd				
Zinc, mg/l	0.028		nd				nd			0.028					nd				
Diazinon, µg/L	nd		nd				nd			nd					nd				
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd				
Total Coliform, MPN/100ml	**130,000**		**50,000**				**80,000**			23,000					**240,000**				
Fecal Coliform, MPN/100ml	5,000		**30,000**				3,000			220					20				
Enterococcus, MPN/100ml	5000		500				80			40					900				

NTU = Nephelometric Turbidity Units
µmhos/cm = micromhos per centimeter
MPN/100mL = most probable number (of colony forming units) per 100 milliliters
nd = not detected
na = not applicable
Red values were at or above the measured constituent's action level

2 SAMPLING LOCATIONS

The City of La Mesa prepared a Jurisdictional Urban Runoff Management Program (JURMP) in 2002. Table 8-1 in Section 8 of the JURMP identifies 18 primary monitoring stations where data will be collected during the Dry Weather Monitoring Program. Table 8-2 of the JURMP lists nine alternate stations to be monitored if any of the primary stations do not have flowing or ponded water. Sampling sites are located in hydrologic unit (HU) 907, HU 908, and HU 909.

During the 2007 Dry Weather Monitoring Program, all 18 primary sampling locations were visited, and 17 of them had flowing or ponded water. Site 61 at Center Drive, Commercial Street, west of Industrial Lane, in front of City Public Work was dry, and thus Site 60 at Jackson Drive, north of Fletcher Parkway, across from Mesa Ridge Apartments was selected as an alternate location for monitoring.

Table 2-1 provides the site number, location, conveyance configuration, primary and secondary land uses, hydrologic unit, and Global Positioning System (GPS) coordinates of the sampling locations that were visited. Figure 1 displays the sampling locations on a map of the City that also shows storm drain lines, roads, and drainage basin boundaries. Photographs of all the sampling locations are included as Appendix A. Laboratory analytical reports are included in Appendix B, and Appendix C contains the field data sheets for each site visit. A map of the watersheds in and around the City of La Mesa is included as Figure 2.

TABLE 2-1
2007 DRY WEATHER MONITORING STATIONS

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
4A	Alvarado channel, intersection of Fletcher Parkway and Baltimore Drive	Concrete Channel	Commercial	Commercial	907	32.77364	-117.02771
12	Jackson Drive, 100 feet west of Murray Drive, north side of street	Manhole	Commercial	Commercial	907	32.77641	-117.01414
12A	Jackson Drive, 100 feet west of Murray Drive, south side of street	Manhole	Commercial	Residential	907	32.77611	-117.01453
13B	Southwest corner of Lowell Street and University Avenue	Manhole	Commercial	Residential	908	32.75688	-117.03738
13C	Intersection of University Avenue and Parks Avenue	Manhole	Commercial	Residential	908	32.76004	-117.03346
14A	Across from 7105 – 7033 Boulevard Drive between Harbinson Avenue and Massachusetts Avenue	Outlet	Commercial	Residential	908	32.75438	-117.04535
34	Grossmont Shopping Center, in front of Sports Authority	Manhole	Commercial	Commercial	907	32.77694	-117.01077
35	Inside Grossmont Shopping Center, in front of Bath and Body Works	Manhole	Commercial	Commercial	907	32.77841	-117.01070
39	Grossmont Shopping Center parking lot between Staples & Mattress Discounters	Manhole	Commercial	Commercial	907	32.77733	-117.00713
40	N.E. corner of Grossmont Center Drive and Murray Drive, south of Trader Joe's parking lot	Manhole	Commercial	Commercial	907	32.77848	-117.00639
50	Harbinson Avenue and University Avenue intersection, west sidewalk, east of CB Hair and Nails	Manhole	Residential	Commercial	908	32.75516	-117.04584
52	Massachusetts Avenue, Waite Drive, south end of Harris Street	Outlet	Residential	Residential	908	32.74514	-117.03931
55	Bancroft Drive, east of residential address 9132 Madison Avenue	Natural Creek	Residential	Residential	909	32.76970	-117.00019

TABLE 2-1 (CONTINUED)
2007 DRY WEATHER MONITORING STATIONS

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
57	Amaya Drive, east of Severin Drive, across from Howell Drive	Earthen Channel	Residential	Residential	907	32.78532	-116.99744
58	Northeast corner of Amaya Drive. Amaya Court intersection	Manhole	Residential	Residential	907	32.78625	-117.00143
59	Southeast corner of Parkway Drive and Amarillo Avenue intersection	Natural Creek	Residential	Residential	907	32.78180	-117.01328
60*	Jackson Drive, north of Fletcher Parkway, across from Mesa Ridge Apartments	Manhole	Residential	Commercial	907	32.78079	-117.01904
61	Center Drive, Commercial Street, west of Industrial Lane in front of City Public Works	Catch Basin	Commercial	Industrial	907	32.77259	-117.02238
64	North side of Seton Hall Street, between Swarthmore Street and Wheaton Street	Concrete Channel	Residential	Residential	907	32.77651	-117.03462

Note
* Alternate Site 60 was substituted for dry primary monitoring Site 61.

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consisted of qualitative field observations, flow measurement, and field analyses of selected water quality parameters. Information relating to weather conditions, the amount of time since last rainfall, and the type of storm water conveyance was recorded. Specific observations and results of the field water quality analyses were recorded on the field data sheets, which are included as Appendix C. The data sheets also serve as a record of the field visit and were completed for every site visit regardless of whether or not samples were collected.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Qualitative field observations were made during each site visit whether or not ponded or flowing water was observed. These observations are intended to provide a general assessment of the site and include variables like odor, water clarity, the presence of floatables, visible deposits, stains and biological status. Evidence of present or past illicit connections and illegal discharges to the storm drain system may be ascertained by careful field observations. Each field screening location was photographed to provide additional information and documentation of site conditions. Photos are included in Appendix A.

Flow Measurement

Flow measurements can be used to estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative of an illegal release upstream. Various field methods can be used to estimate the discharge rate. These include measuring the velocity, depth, and width of the flowing water, or recording the amount of time required to fill a bottle of known volume with sample water.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Surfactants, measured as methylene blue active substances (MBAS)*
- Nitrate-N
- Ammonia-N
- Orthophosphate Phosphorus (Orthophosphorus- P)

* Surfactants are also referred to as detergents, specifically with respect to discussion of field test kit results. Due to the importance of surfactants, the City conducted analyses for this parameter in both the field and laboratory.

The methods that were used to perform the above field analyses along with the detection limit, range, and accuracy, are listed in Table 3-1.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01 mS/cm	0 – 20 mS/cm	± 2% of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.1°C	0.0°C – 60.0°C	± 0.5°C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703-11 Portable Turbidity Meter***	0.01 NTU	0.01 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.0 mg/L – 3.0 mg/L*	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[3]***	2.26 mg/L**	2.26 mg/L –13.6 mg/L**	± 30%
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate***	0.10 mg/L**	0.10 mg/L – 3.00 mg/L**	Varies with measured concetration[4,5]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[6]***	0.25 mg/L**	0.25 mg/L – 2.61 mg/L**	Varies with measured concetration[4,5]

Notes:

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The detection limit for nitrate is 10.0 mg/L; however, the detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The detection limit for orthophosphate is 0.75 mg/L; however, the detection limit for orthophosphate phosphorus is lowered due to the conversion.

*Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Reporting limit, range, and accuracy information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

3.2 Laboratory Analytical Methods

In accordance with Order 2001-01 requirements, water samples were collected at five sites (greater than 25 percent of the sites) where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc., a California Department of Health Services certified laboratory, for analysis of the following constituents:

- Total hardness
- Surfactants, measured as MBAS
- Oil and grease
- Diazinon
- Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus*

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Detection Limit	Maximum Holding Time**
Surfactants, measured as MBAS	SM 5540 C	0.5 mg/L	48 hours
Oil and Grease	USEPA 1664	5 mg/L	28 days
Total Hardness	USEPA 200.7	10 mg/L	14 days
Cadmium	USEPA 6010, 6020, 200.8	0.005 mg/L	6 months
Copper	USEPA 6010, 6020, 200.8	0.005 mg/L	6 months
Lead	USEPA 6010, 6020, 200.8	0.005 mg/L	6 months
Zinc	USEPA 6010, 6020, 200.8	0.020 mg/L	6 months
Diazinon	USEPA 8141A	0.05 µg/L	7 days
Chlorpyrifos	USEPA 8141A	0.05 µg/L	7 days
Total Coliforms	SM 9221	20* – 1,600,000 MPN/100 mL	6 hours
Fecal Coliforms	SM 9221	20* – 160,000 MPN/100 mL	6 hours
Enterococci	SM 9230	20* – 160,000 MPN/100 mL	6 hours

Notes:

*For D-Max's Dry Weather Monitoring Program, EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100mL). For fecal coliforms and enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.

**Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the QA/QC procedures listed in Section 3.3.2.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project included the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters were calibrated periodically with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube was kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter was calibrated and periodically checked for accuracy using standard solutions. The conductivity meter was checked periodically with standard solutions and calibrated as necessary.

Field sample collection containers were first rinsed with distilled water and then with the sample water before sample collection. Upon completion of sampling at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water.

The accuracy of field analytical techniques was assessed at the beginning of the sampling program by analyzing solutions of known concentrations for ammonia, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration	Field Test Kit Results
6/12/07	Ammonia Nitrogen	1.0 mg/L	1.0 mg/L
6/12/07	Surfactants	1.0 mg/L	1.0 mg/L
6/12/07	Nitrate Nitrogen	10.0 mg/L	10.0 mg/L
6/12/07	Orthophosphate	3.0 mg/L	3.0 mg/L

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis were collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles were obtained from the laboratory and thus did not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples were kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures were followed, and samples were delivered and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain of custody forms are included in Appendix B.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation was necessary, numeric action levels and best professional judgment (described below) were used to interpret the field screening results. If visual and/or analytical evidence of gross contamination was present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation was initiated. For sites that exceeded numeric action levels but were not perceived as an immediate threat to water quality, a re-sampling was conducted within 24 hours. A comprehensive source investigation was conducted thereafter if elevated concentrations persisted.

The results of these investigations are included in Section 7 of this report. Recommendations based on these investigations are included in Section 8.

If elevated levels of pollutants were detected after laboratory analyses, a comprehensive follow-up investigation including re-sampling was conducted. The following three methods were employed to determine whether immediate or comprehensive follow-up investigations were necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels were used as the primary approach for interpreting pH, orthophosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels, which are based on county-wide sampling data and have been used by all Copermittees since the 2003 dry weather season. If pH, orthophosphate-P, nitrate, ammonia, or surfactants were observed above the numeric action level, a follow-up investigation was conducted within 24 hours to investigate the source unless best professional judgment indicated otherwise. If oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, or *Enterococcus* laboratory analytical results exceeded numeric action levels, then source investigations were conducted.

California Toxics Rule

The CTR criterion maximum concentration (CMC) was used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases.

Best Professional Judgment

Best professional judgment was utilized as the primary approach for interpreting turbidity, conductivity, and water temperature. Best professional judgment was also the secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew due to their familiarity with the City of La Mesa Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters. Best professional judgment may indicate that results which either exceed certain action levels or are statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
pH	<6.5 or >9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Turbidity (NTU)[2]	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Temperature (°C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values <0.75 may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Surfactants (mg/L MBAS)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	California Toxics Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)	California Toxics Rule	
Dissolved Lead (µg/L)	California Toxics Rule	
Dissolved Zinc (µg/L)	California Toxics Rule	
Total Coliforms (MPN/100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	20,000	
Enterococci (MPN/100 mL)	10,000	

Notes

[1]The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

[2]Basin Plan = Water Quality Control Plan for the San Diego Basin

WQO = Water Quality Objective

TDS = Total Dissolved Solids

ppb = parts per billion

4 FIELD SCREENING RESULTS

The Dry Weather Monitoring Program commenced on June 12, 2007 and was completed on June 14, 2007. A total of 19 monitoring stations were visited; however, field screening was only conducted at the 18 sites where ponded or flowing water was observed. Since primary sampling Site 61 was observed to be dry, alternate Site 60 was selected as a replacement. In addition, one follow-up visit was performed at a site where one constituent was found to exceed accepted action levels. Completed field data sheets for each site visit are included in Appendix C.

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the Dry Weather Monitoring Program. Weather conditions were recorded at each site, and any evidence of dry weather flows was documented. Visual observations of the sample water, such as odor, color, clarity, floatable materials, vegetation, organisms, and the condition of the sampling location, were also recorded. Observations are summarized below and presented in Table 4-1.

Atmospheric Conditions
Sunny weather was the dominant light condition during field screening.

Odor
None of the visited sites had noticeable odors during field screening.

Color
Water samples collected from most of the sites were colorless, with the exception of five sites that had water with a yellowish hue.

Clarity
The majority of water samples collected from visited sites were clear with negligible suspended particles observed.

Floatable Materials
During routine field screening visits, 10 of the sites that had flowing or ponded water were observed to have small amounts of trash in or around the sampling location. The trash observed included materials such as paper, plastics, Styrofoam, aluminum cans, glass bottles, and shopping carts.

Vegetation
Vegetative growth ranged from no growth to naturally vegetated riparian areas. No growth was observed at 14 sites, which included concrete channels with no soil and manholes or catch basins that received limited sunlight. Five of the 19 visited sites had normal vegetation; that is, vegetation not considered significantly limited by man-made structures (e.g., a manhole which blocks sunlight and access to soil) nor so overgrown that it significantly impaired flow at the site.

Biology
Many of the sites exposed to sunlight had algal growth, which indicates that water flow is consistent at the site. Insects were observed at six sites.

Deposits
Sediment deposition was observed at all the sampling location sites except Site 12A.

TABLE 4-1
SUMMARY OF FIELD OBSERVATIONS

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
4A	6/13/07	9:20	Sunny	None	None	Clear	Trash	Coarse & Fine Particulates	None	Insects, Algae
12	6/14/07	14:30	Sunny	None	None	Clear	None	Fine Particulates	None	None
12A	6/14/07	10:00	Sunny	None	Yellow	Clear	None	None	None	None
13B	6/12/07	11:55	Sunny	None	None	Clear	Trash	Fine Particulates	None	None
13C	6/14/07	9:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
14A	6/14/07	11:00	Sunny	None	None	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae
34	6/14/07	15:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
35	6/13/07	13:45	Sunny	None	None	Clear	None	Fine Particulates	None	Insects
39	6/13/07	11:30	Sunny	None	Yellow	Clear	None	Fine Particulates	None	None
40	6/12/07	14:45	Sunny	None	None	Clear	None	Fine Particulates	None	None
50	6/12/07	11:15	Sunny	None	None	Clear	Trash	Fine Particulates	None	None
52	6/13/07	14:50	Sunny	None	Yellow	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae
55	6/12/07	13:55	Sunny	None	None	Clear	None	Coarse & Fine Particulates	Normal	Algae
57	6/13/07	10:45	Sunny	None	Yellow	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae

TABLE 4-1
SUMMARY OF DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
58	6/13/07	16:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
59	6/12/07	16:15	Sunny	None	None	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae
60	6/14/07	13:30	Sunny	None	None	Clear	Trash	Fine Particulates	None	None
61	6/14/07	13:10	Sunny	ns	ns	ns	Trash	Fine Particulates	None	None
64	6/12/07	10:10	Sunny	None	Yellow	Clear	Trash	Fine Particulates	None	Insects, Algae
64 (follow-up)	6/13/07	8:40	Sunny	None	Yellow	Clear	Trash	Fine Particulates	None	Insects, Algae

Note
ns = not sampled (dry site)

4.2 Field Analytical Results

Field analyses were conducted at all sites with ponded or flowing water. Chemical analyses were conducted using a CHEMetrics field test kits for surfactants and CHEMetrics V-2000 Multi-Analyte LED Photometer and Vacu-vials® for nitrate, ammonia, and ortho-phosphate; pH, specific conductance, and temperature were measured using a Hanna Instruments Portable pH/EC/TDS/Temperature Meter (HI 991301). Turbidity was measured using a Hanna Instruments Turbidity Meter (HI 93203-11). Flow was estimated either visually or, when possible, by measuring the velocity, depth, and width of the flowing water. A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 presents the results of all field analyses conducted at the sampled sites. Graphs of each parameter analyzed and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median
Flow Rate (gpm)	162	<1.0	14.5	4.0
Temperature (° Celsius)	26.4	20.0	23.0	22.8
pH	10.0	7.2	8.2	8.0
Conductivity (mS/cm)	5.3	1.08	2.0	2.19
Turbidity (NTU)	14.63	1.27	5.4	3.74
Ammonia (mg/L NH_3-N)	0.5	0.1	0.2	0.2
Surfactants (mg/L MBAS)	0.75	0.25	0.5	0.5
Nitrate (mg/L NO_3-N)	5.85	0.1	2.1	1.76
Orthophosphate-P (mg/L PO_4-P)	0.52	0.03	0.2	0.23

The **flow rates** at sites with measurable flow ranged from less than 1.0 gpm to 162 gpm, with an average of 14.5 gpm and a median of 4.0 gpm, as shown in Table 4-2. The highest flow rate of 162 gpm was measured at Site 4A.

Water temperature is an important physical parameter and can help interpret the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. Water temperature was measured in the field immediately upon sample collection at each site with ponded or flowing water. During routine visits, temperature readings ranged from 20.0 to 26.4 degrees Celsius (°C), with an average of 23.0°C and a median of 22.8°C. The minimum temperature of 20.0°C was recorded at Site 64 during the second visit to the site. The maximum temperature of 26.4°C was recorded at Site 59. Graph 4-1 presents the results of temperature readings at all sites.

The **pH** is a measure of whether a water body is acidic or basic. This is a critical factor in determining water quality, as the pH of an aquatic system will drive a multitude of chemical reactions, including the availability of nutrients or the solubility of chemical substances. The pH values ranged from 7.2 to 10.0, with an average of 8.2 and median of 8.0. The lowest pH reading of 7.2 was observed at Site 12, while the highest pH of 10.0 was recorded at Site 64. Graph 4-2 presents the results of pH readings at all sites.

Specific Conductance (Conductivity) values indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water or potentially help indicate the presence of dissolved pollutants. Conductivity readings ranged from 1.08 to 5.30 millisiemens per centimeter (mS/cm) during routine field screening, with an average of 2.0 mS/cm and a median of 2.19 mS/cm. The lowest reading of 1.08 mS/cm was recorded at Site 64 during follow-up investigation, while the highest conductivity of 5.30 mS/cm measured during routine field screening at Site 50. Graph 4-3 illustrates the results of conductivity measurements at all sites.

Turbidity indicates the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation (thus reducing photosynthetic capacity), but excessive suspended particles can also absorb heat and elevate water temperatures. Turbidity measurements ranged from 1.27 to 14.63 Nephelometric Turbidity Unit (NTU), with an average of 5.4 NTU and a median of 3.74 NTU. The lowest measurement of 1.27 NTU was documented at Site 14A. The highest turbidity reading of 14.63 NTU was recorded at Site 58. Graph 4-4 presents the results of turbidity measurements at all sites.

Ammonia is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms. Ammonia concentrations measured in the water samples ranged from 0.1 to 0.5 mg/L NH_3-N, with an average of 0.2 mg/L and a median of 0.2 mg/L. The lowest ammonia concentration of 0.1 mg/L was found at sites 55 and 64, while the highest ammonia concentration of 0.5 mg/L was observed at Site 12. Graph 4-5 shows the results of the ammonia analyses at all sampling locations.

Nitrate is a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, which will later cause the suffocation of fish and other aquatic organisms by depleting oxygen from the water during decomposition. During the field analysis, nitrate was measured in mg/L NO_3 and converted into mg/L nitrate-N using a conversion factor of 0.226. This process is explained above in footnote 4 of Table 3-1. Nitrate concentrations measured in the water samples ranged from 0.1 to 5.85 mg/L NO_3-N, with an average of 2.1 mg/L and a median of 1.76 mg/L. Nitrate was measured at the lowest detectable concentration, 0.10 mg/L, at sites 57 and 64. The highest nitrate concentration of 5.85 mg/L was observed at Site 50. Graph 4-6 presents the results of nitrate analyses at all sampling locations.

Orthophosphate Phosphorus (orthophosphate-P) is also a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate, orthophosphate-P pollution can cause nutrient enrichment (eutrophication), stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient in plant growth. During the field analysis, orthophosphate was measured in mg/L PO_4 and

converted into mg/L orthophosphate-P using a conversion factor of 0.326 (See Note 6 to Table 3-1). Orthophosphate-P was found at concentrations ranging from 0.03 to 0.52 mg/L PO_4-P, with an average of 0.2 mg/L and a median of 0.23 mg/L. The lowest orthophosphate-P concentration of 0.03 mg/L was observed at sites 35 and 58. The highest concentration of 0.52 mg/L was found at Site 13B. Graph 4-7 illustrates the results of orthophosphate-P at all sampling locations.

Surfactant concentrations in water samples often indicate illegal discharge from industrial, commercial or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms. During field analysis, surfactant concentrations ranged from 0.25 mg/L to 0.75 mg/L, with an average of 0.5 mg/L and a median of 0.5 mg/L. The lowest concentration of 0.25 mg/L was found at four sites. The highest concentration of 0.75 mg/L was found at Site 13B. Graph 4-8 reflects the results of the surfactants analyses at all sampling locations.

TABLE 4-3
SUMMARY OF FIELD ANALYTICAL RESULTS

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants MBAS mg/L	Ammonia NH_3-N mg/L	Nitrate NO_3-N mg/L	Orthophosphate-P PO_4-P mg/L
4A	6/13/07	9:20	162.0	20.2	8.5	4.05	2.22	0.50	0.2	1.81[1]	0.16[1]
12	6/14/07	14:30	10.0	23.1	7.2	12.51	2.14	0.50	0.5	2.00[1]	0.26
12A	6/14/07	10:00	5.0	20.8	7.7	10.85	2.25	0.50	0.3	3.96	0.13[1]
13B	6/12/07	11:55	10.0	22.2	8.0	2.22	3.94	0.75	0.3	5.49	0.52
13C	6/14/07	9:00	5.0	22.4	8.0	8.07	3.32	0.50	0.2	2.67	0.26
14A	6/14/07	11:00	22.0	23.0	8.3	1.27	2.56	0.38	0.2	3.25	0.13[1]
34	6/14/07	15:00	8.0	22.2	8.0	6.47	2.00	0.38	0.3	3.77	0.36
35	6/13/07	13:45	1.0	25.7	8.7	2.36	1.78	0.25	0.2	1.72[1]	0.03[1]
39	6/13/07	11:30	5.0	22.8	7.9	9.24	1.90	0.62	0.3	0.68[1]	0.20[1]
40	6/12/07	14:45	2.0	25.2	7.6	4.91	1.79	0.38	0.2	0.45[1]	0.33
50	6/12/07	11:15	3.0	22.5	8.0	2.25	5.30	0.50	0.2	5.85	0.34
52	6/13/07	14:50	1.0	24.1	8.3	4.95	3.72	0.50	0.2	2.98	0.49
55	6/12/07	13:55	4.0	22.7	8.2	3.34	2.65	0.25	0.1	0.41[1]	0.11[1]
57	6/13/07	10:45	2.0	21.1	7.7	2.52	2.19	0.38	0.2	0.10[1]	0.33

TABLE 4-3
SUMMARY OF FIELD ANALYTICAL RESULTS (CONTINUED)

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants MBAS mg/L	Ammonia NH_3-N mg/L	Nitrate NO_3-N mg/L	Orthophosphate-P PO_4-P mg/L
58	6/13/07	16:00	3.0	23.1	7.5	14.63	2.14	0.25	0.4	0.23[1]	0.03[1]
59	6/12/07	16:15	3.0	26.4	8.1	1.54	2.00	0.25	0.2	1.63[1]	0.16[1]
60	6/14/07	13:30	<1	23.9	8.0	3.18	2.63	0.63	0.2	0.81[1]	0.29
61	6/14/07	13:10	Dry	ns	ns	ns	ns	ns	ns	ns	ns
64	6/12/07	10:10	<1	26.0	**10.0**	3.43	1.12	0.63	0.1	0.10[1]	0.10[1]
64 (follow-up)	6/13/07	8:40	1.0	20.0	**9.3**	nt	1.08	nt	nt	nt	nt

Note
nd= not detected
ns = not sampled (dry site)
nt = not tested
[1] value reported is below the Practical Detection Limit (PDL)
Red values were at or above the measured constituent's action level

denotes a follow-up visit

denotes a location sampled for laboratory analysis

GRAPH 4-1: Temperature

Action Level is Best Professional Judgment

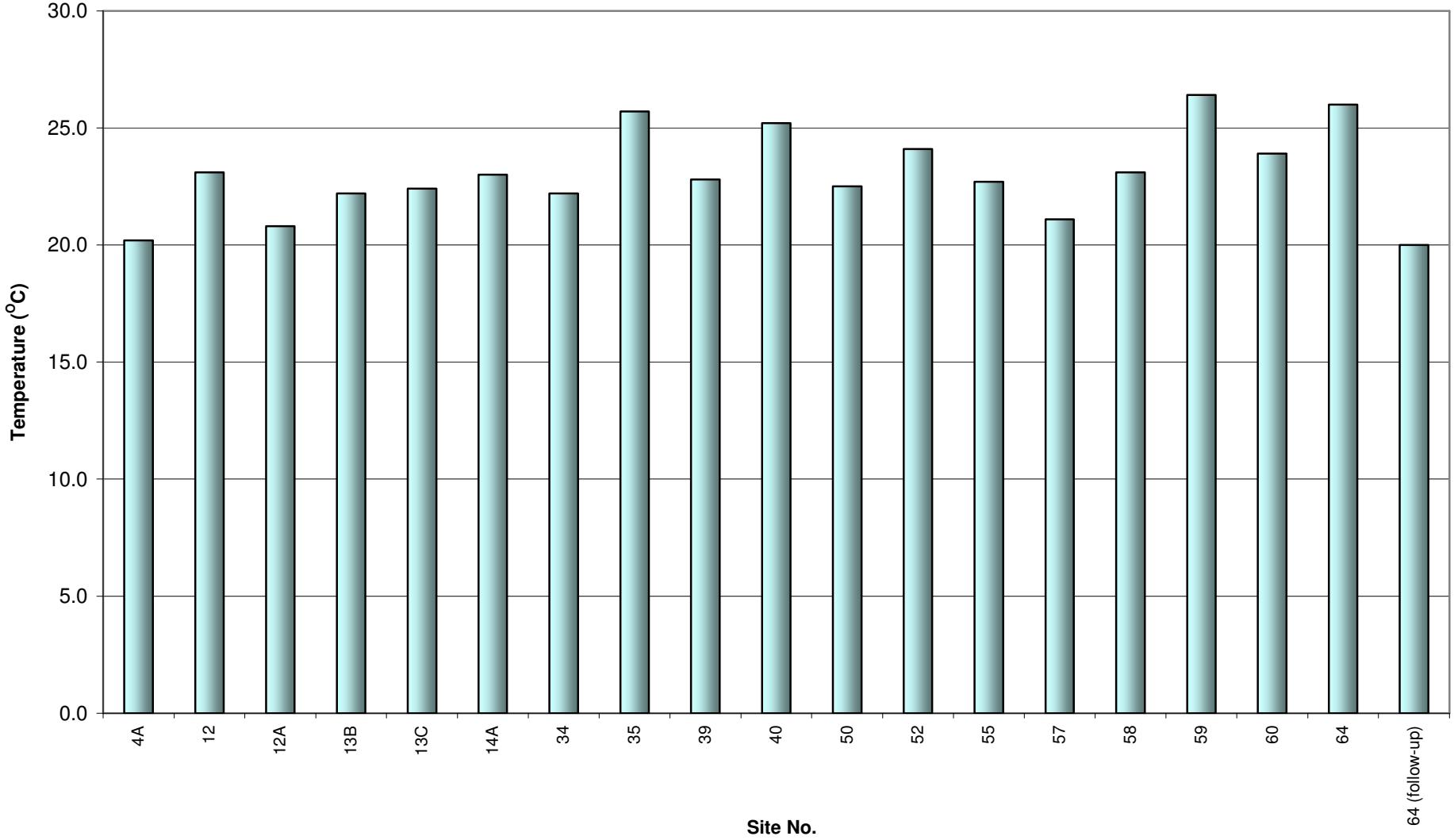

Note: Site 61 is dry in 2007.

GRAPH 4-2: pH

Action Level is > 9.0 or < 6.5

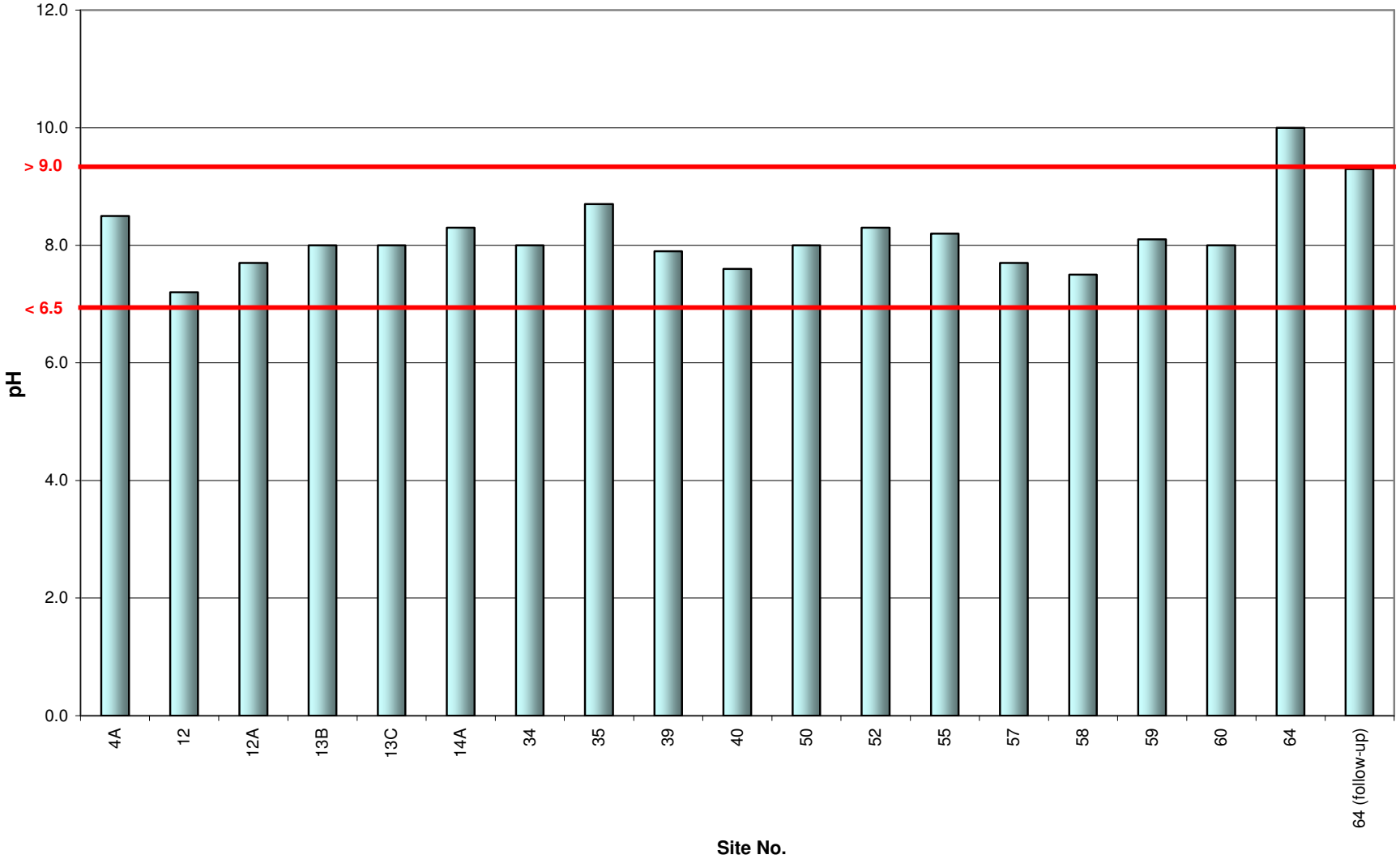

Note: Site 61 is dry in 2007.

GRAPH 4-3: Conductivity

Action Level is Best Professional Judgment

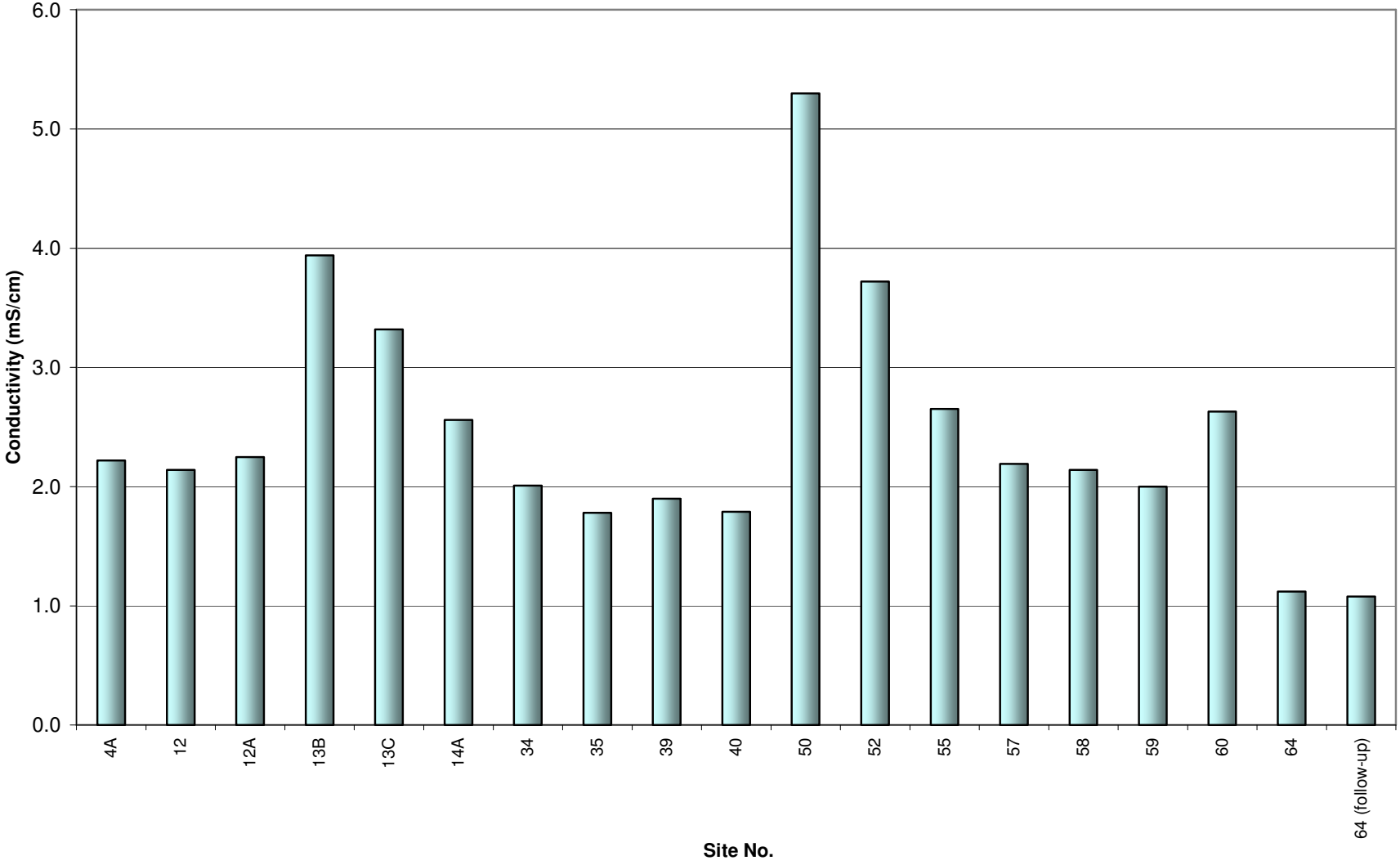

Note: Site 61 is dry in 2007.

GRAPH 4-4: Turbidity

Action Level is Best Professional Judgment

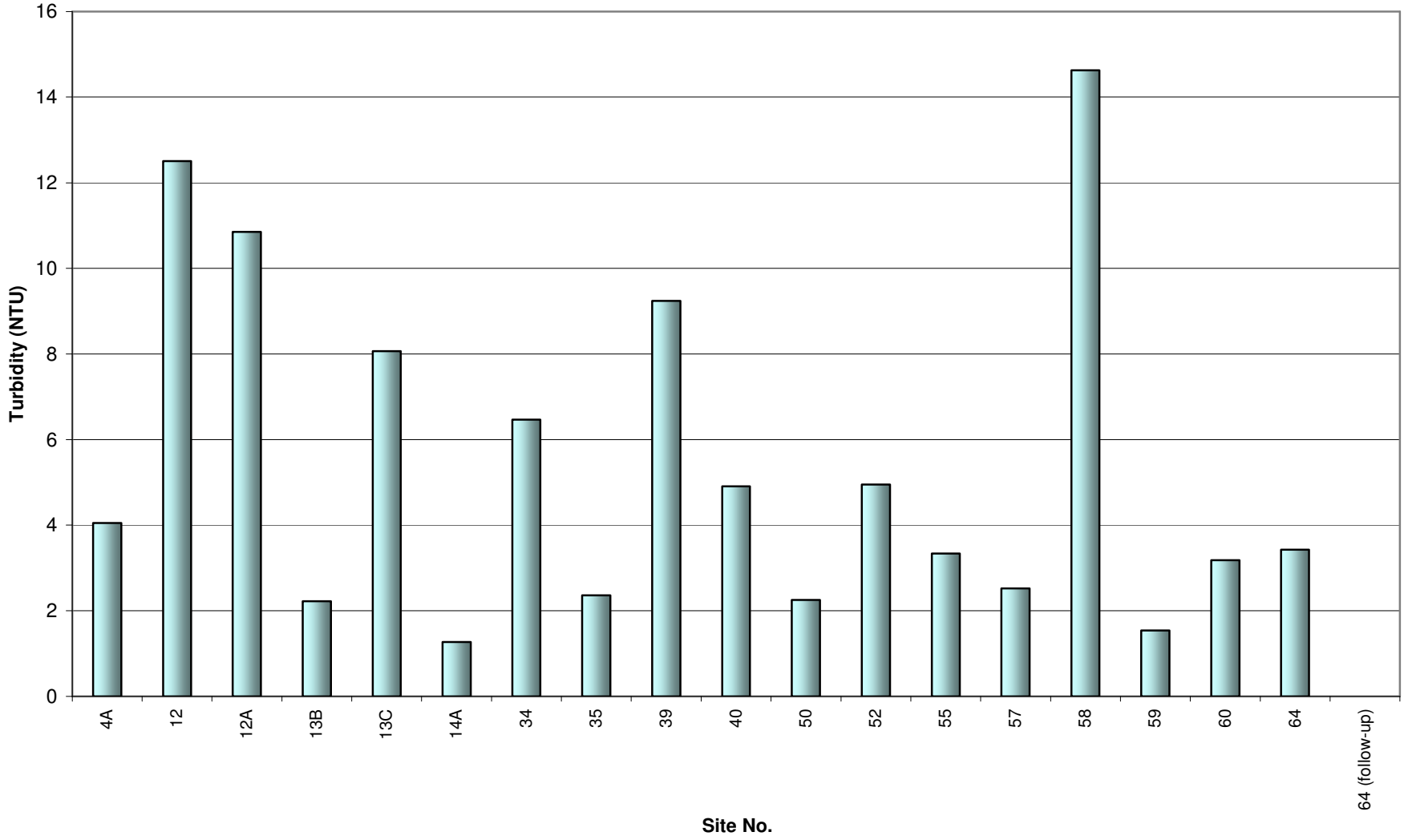

Note: Site 61 is dry in 2007.

GRAPH 4-5: Ammonia (NH_3-N)

Action Level = 1.0 mg/L

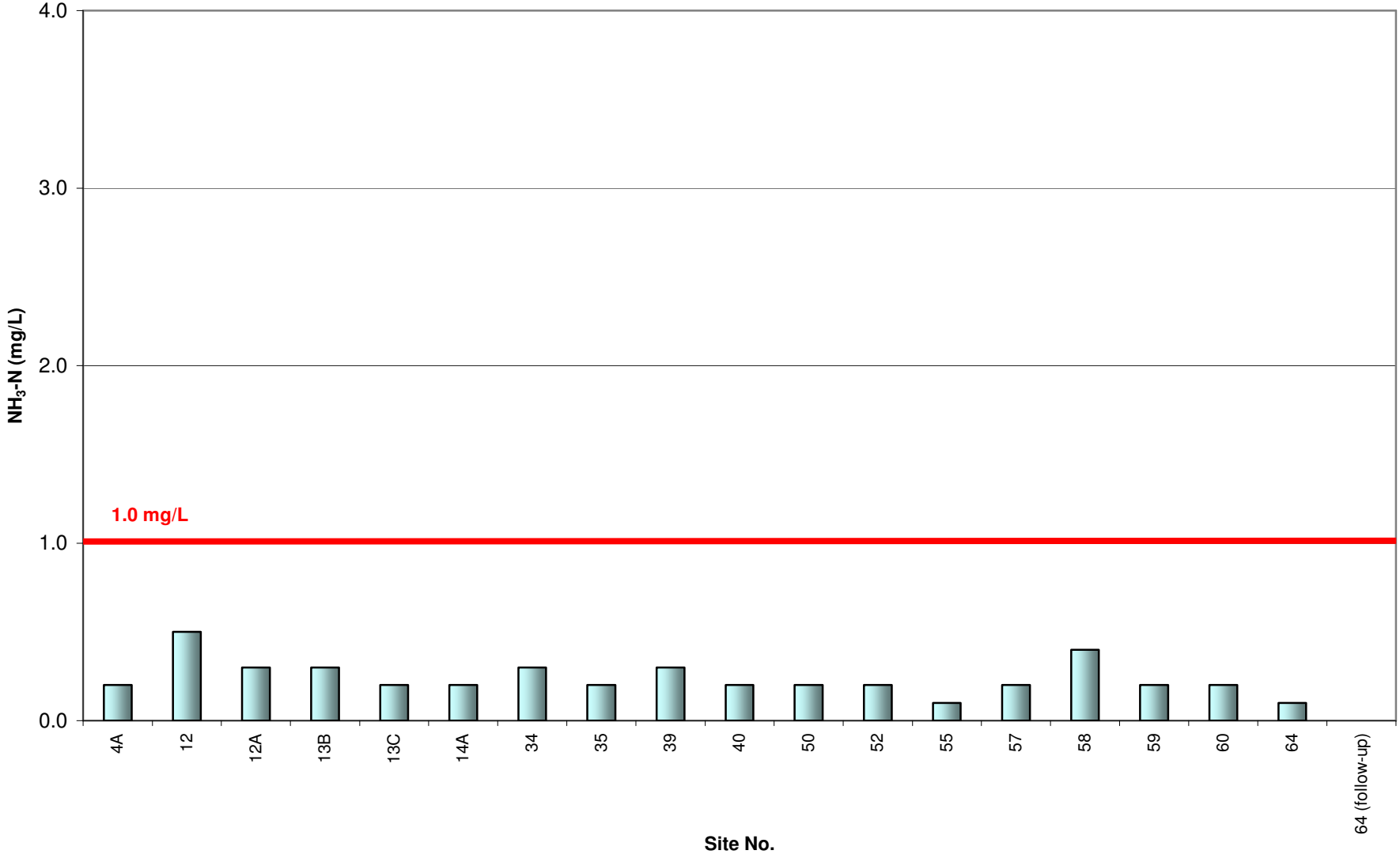

Note: Site 61 is dry in 2007.

GRAPH 4-6: Nitrate (NO_3-N)

Action Level = 10.0 mg/L

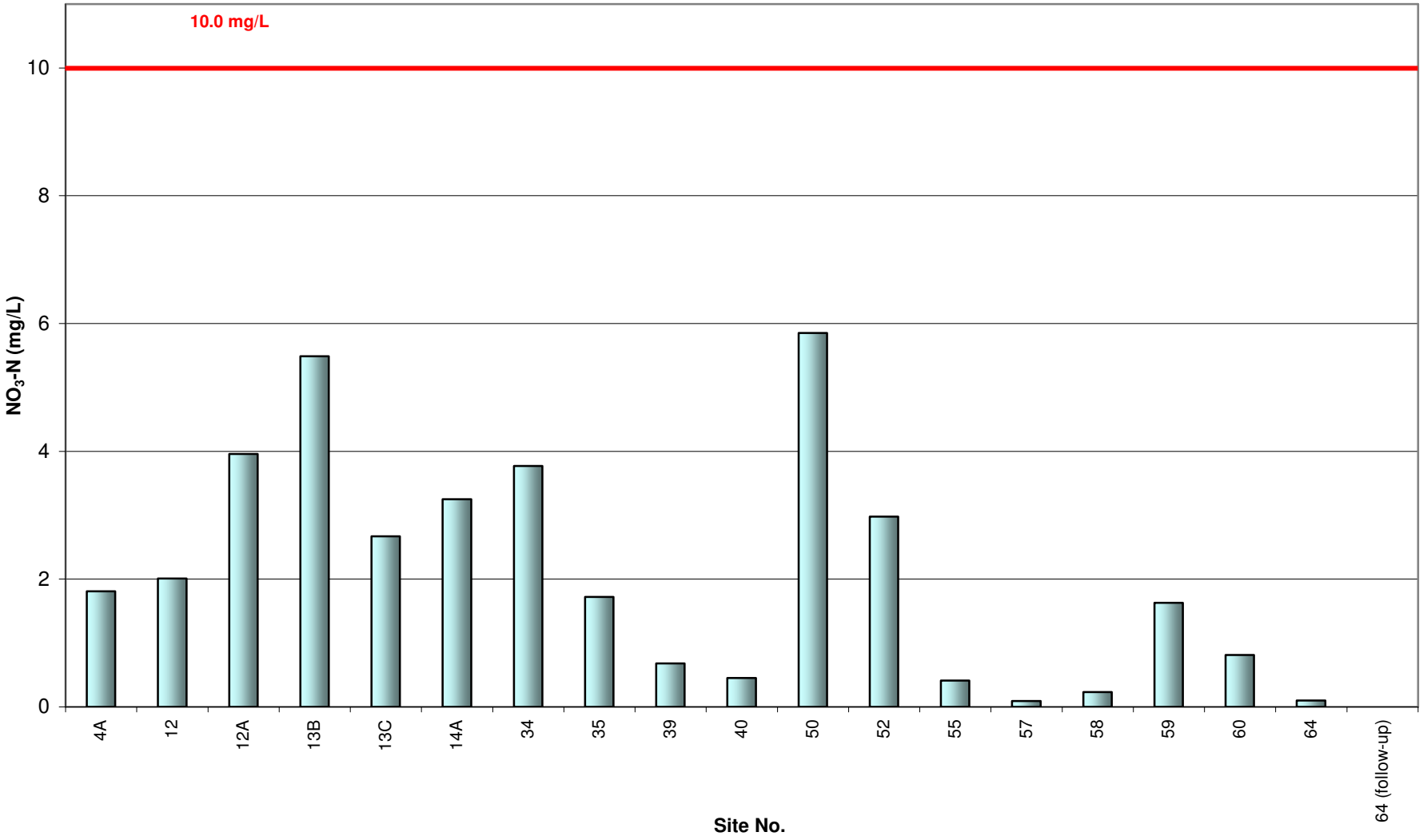

Note: Site 61 is dry in 2007.

GRAPH 4-6: Nitrate (NO_3-N)

Action Level = 10.0 mg/L

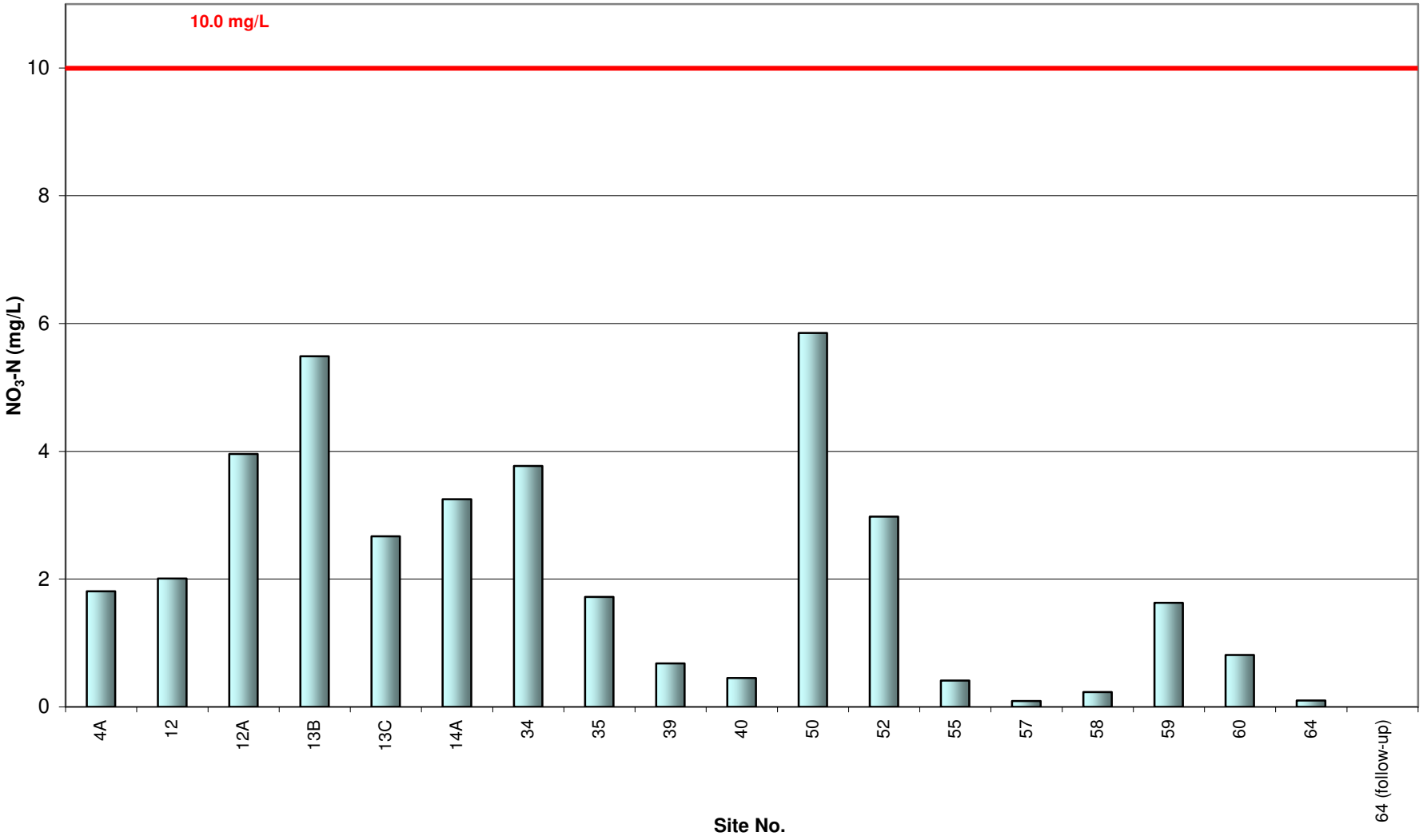

Note: Site 61 is dry in 2007.

GRAPH 4-8: Surfactants (Methylene Blue Active Substances)

Action Level = 1.0 mg/L

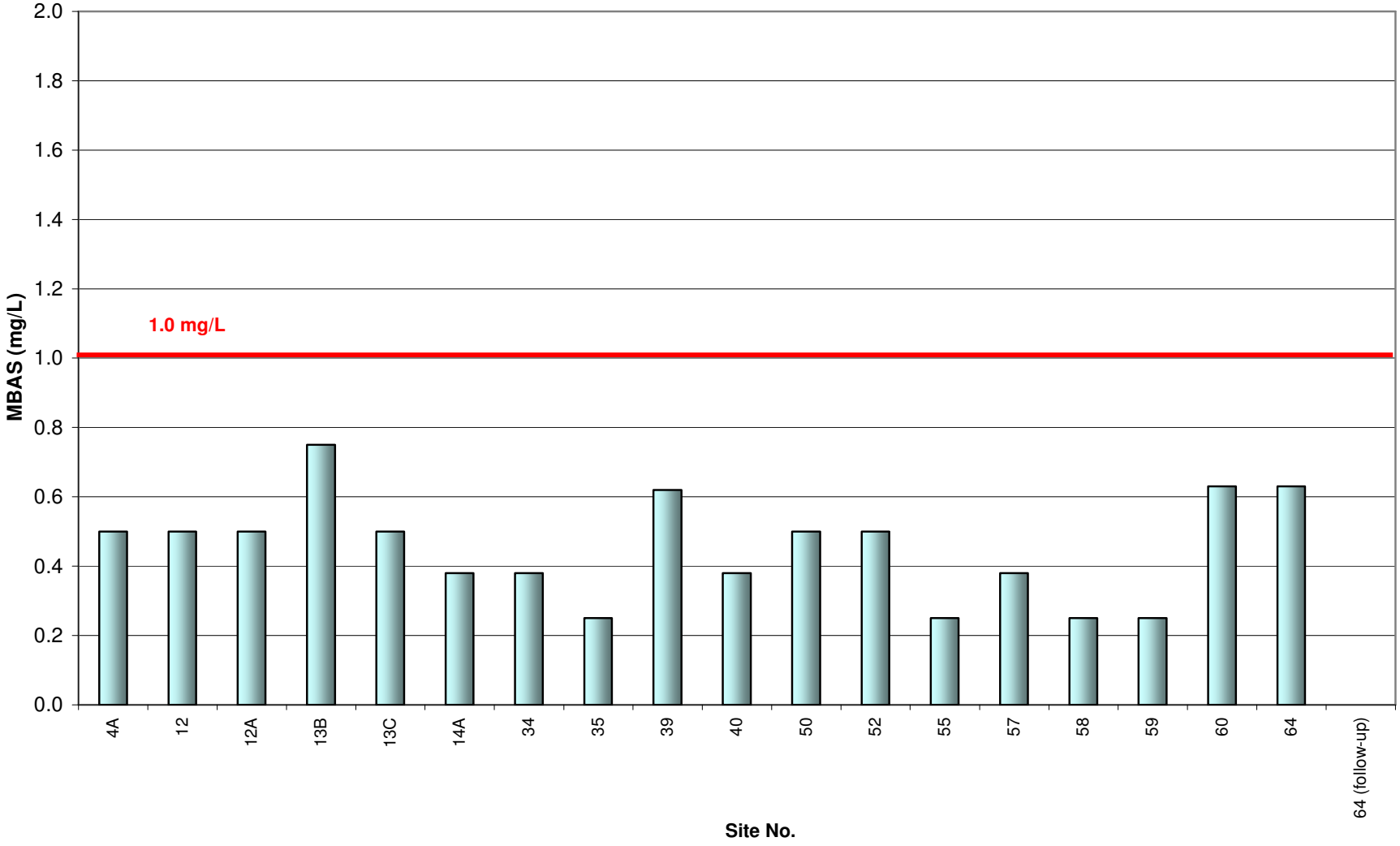

Note: Site 61 is dry in 2007

5 LABORATORY ANALYTICAL RESULTS

5.1 Summary

Laboratory analyses were conducted at five sites, representing over 25 percent of all sites with ponded or flowing water. A summary of the laboratory analytical results is presented in Table 5-1. Table 5-2 presents all of the results from the laboratory analyses. The laboratory reports are included in Appendix B.

TABLE 5-1
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum
Surfactants (mg/L MBAS)	nd	nd
Oil and grease (mg/L)	nd	nd
Total hardness (mg/L $CaCO_3$)	688	564
Cadmium (dissolved, mg/L)	nd	nd
Copper (dissolved, mg/L)	0.005	nd
Lead (dissolved, mg/L)	nd	nd
Zinc (dissolved, mg/L)	nd	nd
Diazinon (µg/L)	nd	nd
Chlorpyrifos (µg/L)	nd	nd
Total Coliforms (MPN/100 mL)	17,000	2,200
Fecal Coliforms (MPN/100 mL)	8,000	nd
Enterococcus (MPN/100 mL)	14,000	170

nd = not detected

Surfactants (MBAS) are analyzed to detect detergent pollution from residential, commercial or industrial washing activities. Surfactants were not detected at any sites during the 2007 Dry Weather Monitoring Program.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources including parking lots, washing activities, illegal discharges, and automobile repair facilities. Oil and grease were not detected at or above the reporting limit at any of the sampled sites.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with results expressed in mg/L of $CaCO_3$. Although it is not itself considered a pollutant, total hardness is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals, as well as other minerals and ions. Total hardness values varied from 564 to 688 mg/L $CaCO_3$. The lowest value of 564 mg/L was observed at Site 39, while the highest total hardness value of 688 mg/L $CaCO_3$ was found at Site 12A.

Diazinon and **chlorpyrifos** are organophosphate pesticides that can be harmful to aquatic organisms if transported in urban runoff. Diazinon and chlorpyrifos are highly toxic to birds, mammals, and insects. They are also highly toxic to freshwater fish and invertebrates following acute exposure. Diazinon and Chlorpyrifos were not detected at any of the sampled sites during the 2007 Dry Weather Monitoring Program.

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Metal concentrations in the environment can originate from a variety of sources including automobile operation, automobile repair facilities, car washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms, including fish and waterfowl. The laboratory samples collected during the 2007 Dry Weather Monitoring Program were analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Cadmium, lead, and zinc were not detected at any site. Dissolved copper was detected at Site 4A with a concentration of 0.005 mg/L. According to the CTR (1-hour) for Dissolved Metals in Fresh Waters,[1] which defines metal toxicity as a function of water hardness, the action level for dissolved copper in water samples with hardness values of 631 mg/L $CaCO_3$ is 0.076 mg/L. Therefore, since measured copper concentration was significantly below the action levels corresponding to the measured hardness values, source investigations were not deemed necessary.

Coliform bacteria are relatively harmless to humans and are present in all mammalian digestive tracts. They are also present in soil and decomposing organic matter, so measurements of total coliforms are not typically considered to be very accurate indicators of fecal contamination. Water samples are analyzed for total coliform bacteria because it is a historically accepted public health practice and because the Municipal Permit requires it. During the 2007 Dry Weather Monitoring Program, total coliform counts ranged from 2,200 to 17,000 MPN/100 mL. The highest level, 17,000 MPN/100 mL was found at Site 4A, which is below the action level of 50,000 MPN/100 mL.

Fecal coliforms, a subset of coliform bacteria, and **enterococci** are found primarily in the gastro-intestinal tracts of humans and animals, so they are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material was human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain. Fecal coliform counts were below the action level of 20,000 MPN/100 mL and ranged from a value below the detection limit to 8,000 MPN/100 mL. *Enterococcus* counts ranged from 170 to 14,000 MPN/100 mL. Site 39, was the only site with an *Enterococcus* count above the action level of 10,000 MPN/100 mL.

[1] For equations and constants used in CTR calculations, see http://www.USEPA.gov/ost/standards/ctr/toxic.pdf

TABLE 5-2
SUMMARY OF LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Surfactants mg/L MBAS	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms MPN/100 mL	Fecal Coliforms MPN/100 mL	Enterococci MPN/100 mL
4A	6/13/07	9:20	nd	nd	631	nd	0.005	nd	nd	nd	nd	17,000	8,000	1,300
12A	6/14/07	10:00	nd	nd	688	nd	nd	nd	nd	nd	nd	5,000	1,700	500
14A	6/14/07	11:00	nd	nd	592	nd	nd	nd	nd	nd	nd	8,000	2,300	1,300
39	6/13/07	11:30	nd	nd	564	nd	nd	nd	nd	nd	nd	13,000	3,000	**14,000**
39(follow-up)	6/27/07	14:30	nt	nt	nt	nt	nt	nt	nt	nt	nt	13,000	13,000	800
57	6/13/07	10:45	nd	nd	664	nd	nd	nd	nd	nd	nd	2,200	nd	170
ANALYTICAL REPORTING LIMITS			**0.5**	**5**	**10**	**0.005**	**0.005**	**0.005**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**
ACTION LEVELS			**1.0**	**15**	*****	**CTR**	**CTR**	**CTR**	**CTR**	**0.5**	**0.5**	**50,000**	**20,000**	**10,000**

Notes

Red Bold Type = Values that exceed action levels
nd = Not detected
nt = Not tested
CTR = California Toxics Rule (based on hardness)
*= Total hardness is not considered a pollutant (see Section 3.4 for details) and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependant on the total hardness value of the water sample. Total hardness measurements are thus required to calculate action levels for dissolved metals.

6 DATA ANALYSIS

When contaminant levels were detected above established action levels during field screening, upstream investigations were conducted to identify the source(s) of the contaminants. Since the laboratory requires several days to analyze samples, sites with contamination detected by laboratory analyses were investigated during a later round of visits. Based on the visual observations and the field and laboratory analytical testing that was conducted, the following sites demonstrated physical and chemical evidence of possible illegal discharges and/or illicit connections:

Site 39

Site 39 is located in a manhole junction box about 25 feet deep located in the Grossmont Shopping Center parking lot between Staples and Mattress Discounters. Approximately halfway down the walls of the manhole, lateral pipes carrying drainage from the immediate commercial area discharge into the manhole. The main pipe at the bottom of the manhole carries flow westward and eventually discharges to the Alvarado Channel. No constituents were above their respective action levels during field screening. Laboratory analysis of the water sample detected an *Enterococcus* count above the established action level of 10,000 MPN/100 mL. An upstream investigation was later conducted at this site to identify potential source(s) of this bacterial indicator (see Section 7).

Site 64

Site 64 is a concrete channel on the north side of Seton Hall Street, between Swarthmore Street and Wheaton Street (see Appendix A). The concrete channel had algal growth throughout its length. A pH level of 10.0 and a water temperature of 26.0° C were observed during the initial visit. The field crew returned the next morning to observe a pH level of 9.3, still above the action level of 9.0. An investigation upstream in the concrete channel found lower pH readings when samples were taken from water located in shaded areas where temperatures were decreased. Approximately 500 yards upstream from the sampling site, a pH reading was taken from an outlet that was the main source of the flow observed. The pH reading was 7.9 with a temperature of 17.0. The field crew believes that the high pH at the sampling site resulted primarily from algal photosynthesis and increased temperature, which removes carbon dioxide from the water. Because carbon dioxide forms carbonic acid when dissolved in water, removal of carbon dioxide from water makes the water more basic and results in higher pH readings. Typically the pH increases during daylight hours as sunlight stimulates algal photosynthesis and carbon dioxide is removed from water. During the night when algae is not photosynthesizing, the carbon dioxide level in the water increases due to biological respiration and physical diffusion of carbon dioxide from air into water, and the pH decreases. Because the solubility of gas in water is inversely proportional to the water temperature, carbon dioxide is less soluble in warmer water. Sunlight heats the shallow, unshaded water in the concrete channel, resulting in lower solubility for carbon dioxide later in the day when the water is warmer. The effects of temperature and algal photosynthesis lead to lower pH values in the morning and higher values in the afternoon. Since the majority of the concrete channel was not shaded, even in the earlier hours of the day, the pH reading continued to be elevated from increased summer temperatures.

7 UPSTREAM INVESTIGATIONS

7.1 Purpose

The purpose of the upstream investigations is to find the sources of the pollutants that exceeded action levels during initial field screening and laboratory testing.

Dry Weather Monitoring in 2007 revealed elevated levels of pollutants at only one site, as described in Section 6. In addition, Site 64 was investigated for pH levels above the action level and received a follow-up visit within 24 hours of the initial visit.

Five sites of the 18 were sampled for laboratory analysis during the initial round of field screening. Only one site had one analyte observed above established action levels. Site 39 showed *Enterococcus* above action levels. Upstream investigations were undertaken at this site to identify potential source(s) of the high bacteria count.

7.2 Investigation Procedures

7.2.1 General Procedures

Upstream investigations were conducted in two rounds. The first upstream investigations were for the sites at which field tests indicated elevated constituent levels. These investigations were conducted immediately after confirming the elevated concentrations via additional field testing. The second round of upstream investigations was carried out for the sites at which laboratory testing had found elevated constituent levels. These investigations were conducted after receiving the test results from the laboratory.

During the investigations, the D-MAX field crew measured flow rates, performed visual observations, and conducted field testing. Visual observations, such as water color, clarity, odor, floatable materials, vegetation and biology, and physical parameters, such as temperature, pH and conductivity, were recorded on field data sheets at each official sampling site. Field data sheets are included in Appendix C.

Field investigators began the source identification investigations by testing the water at the site itself; they then gradually worked upstream until potential pollutant sources could be identified. If follow-up field testing at a site resulted in constituent concentrations below specified action levels, it was concluded that the pollution found during the initial field screening and laboratory analysis was due to a transient flow.

7.2.2 Bacterial Investigation Procedures

In order to determine potential sources for sites with high bacteria, the D-MAX field crew used 3M Petrifilm *Escherichia coli* / Coliform Count plates as a rapid method to trace sources of both total coliform bacteria and *E. coli* bacteria in the storm water conveyance system. Because laboratory microbiological analyses take a significant amount of time, relying primarily on laboratory analyses can significantly delay an upstream investigation for bacteria. Also, due to the cost of these tests, often only a few locations can be examined, giving a less comprehensive picture. The Petrifilm plates allowed the field crew to quickly sample numerous branches or locations upstream of the sites.

Samples were taken in the field and preserved with Butterfield's phosphate buffer to keep the pH close to 7. Sample containers were kept on ice in a cooler and then plated within 6 hours of collection to ensure proper holding times were observed. The plates were then incubated at

35℃ ± 1℃. After 24 hours of incubation, total coliform bacterial concentrations were enumerated and, after an additional 24 hours (48 hours incubation total), *E. coli* levels could be read from the same plates, helping investigators identify potential bacterial sources over a large area in a timely manner.

This method is an improvement over the technique used in the past because it tests for *E. coli* bacteria. *E. coli* bacteria are a subset of fecal coliform bacteria and are better indicators of fecal contamination than total coliforms. Additionally, since total coliforms and *E. coli* are enumerated on the same plate, a rough ratio of *E. coli* (more likely to be from fecal sources) to total coliforms can be ascertained. While not unequivocally conclusive, this information allows for a better determination as to whether observed high bacteria levels likely come from fecal or non-fecal sources. Note that although *E. coli* are a major subset of fecal coliform bacteria, they are not enumerated for upstream analyses as an equivalent replacement for laboratory fecal coliform testing.

It should be noted that although laboratory analyses are done for total coliforms, fecal coliforms, and *enterococcus*, field bacteria analyses using Petrifilm plates are used to test only for total coliform bacteria and *E. coli*. As noted in Section 4, total coliform bacteria are generally harmless to humans but are a commonly-used indicator of harmful, pathogenic organisms, especially those found in fecal matter. Because the total coliform group of bacteria includes many species of bacteria of non-fecal origin, it is not as precise an indicator of fecal contamination as fecal coliforms or enterococci. A high total coliform count does not necessarily indicate fecal contamination of water, as total coliforms can also be found in soil, grain, and water, especially stagnant water. Therefore, a water sample with a high level of total coliform bacteria does not necessarily have a correspondingly high level of pathogens.

Fecal coliforms and enterococci are found mainly (but not solely) in the digestive tracts of humans and warm-blooded animals. With a few notable exceptions, fecal coliforms and enterococci are not hazardous to humans, but their presence is usually a good indication of the presence of animal or human waste. Fecal contamination from animal sources may be less hazardous to humans than fecal contamination from human sources; however, standard tests for fecal coliform and *Enterococcus* cannot reliably distinguish between human and animal sources.

Field bacteria tests using Petrifilm plates use Colony Forming Units per milliliter (CFU/mL) as the measurement unit, rather than the Most Probable Number (of colony forming units) per 100 milliliters (MPN/100 mL) unit used in laboratory analyses. These units are generally comparable, although the laboratory volume, and thus value, is one hundred times greater. D-MAX has created a stringent field protocol to control sample development as consistently as possible. Sterile dilution vials containing pre-measured amounts of sterile buffer solution for dilution are used for sample collection, the diluted samples are kept on ice in a cooler while in the field, and chilled samples are collected from the field crew twice daily to be plated within the proper holding time. Plated samples are then developed in an incubator for a total of 48 hours. While this method is not conducted at a certified laboratory, it is still useful for determining which locations have relatively higher or relatively lower bacteria levels. The action level for total coliform bacteria is 50,000 MPN/100 mL, which roughly corresponds to 500 CFU/mL. However, only about 150 or fewer colony forming units can be accurately enumerated using a Petrifilm plate. This would correspond to 15,000 MPN/100 mL. Therefore, all samples were first diluted 1:10 with sterile buffer solution before Petrifilm analysis, thus adjusting the detection limits for Petrifilm plates from the standard value of 1-150 CFU/mL to 10-1,500 CFU/mL. This adjusted range corresponds to approximately 10,000

to 150,000 MPN/100 mL, a much more useful range when dealing with total coliform bacteria levels around the action level of 50,000 MPN/mL.

7.3 Investigated Sites

7.3.1 Site 39

Site 39 is a manhole junction box about 25 feet deep located in the Grossmont Shopping Center. Laboratory analysis of the water sample at Site 39 detected an *Enterococcus* count of 14,000 MPN/100 mL, above the established action level of 10,000 MPN/100 mL. After receiving the results from the laboratory, the field crew conducted a follow-up investigation of the area and several of the lateral branches that join the main pipe at Site 39 to attempt to locate the source(s) of the exceedance in this area.

The total coliform bacterial count from the follow-up investigations at Site 39 was 10 CFU/mL. To the northeast of Site 39, upstream locations 39-1 and 39-2 were visited next. Both of those sites are located near the Murray Drive and Grossmont Center Drive intersection; see Figure 7-1 and Table 7-1 for more specific information. The total coliform level at 39-1 was higher than Site 39, with a count of 300 CFU/mL. The water sample from the loading dock at Sharp Grossmont Hospital (location 39-2) indicated very high levels of total coliform bacteria, as the bacteria growth on the plate was too numerous to count (TNTC). No *E. coli* was detected at either of those two upstream locations or at Site 39. No flow was observed further upstream from upstream locations 39-1 and 39-2.

A sample was taken from a manhole along the exit ramp of Interstate-8 just northwest of the Ford dealership, Site 39-3, where the storm drain map indicated a line from the south that drains toward Site 39 is located. The flow was observed traveling northwest at about 1 gpm. The total coliform bacteria count for this site was 90 CFU/mL, but *E. coli* was still fairly low.

To investigate whether the bacteria levels at the site extended to areas farther downstream, a sample was taken downstream from Site 39 at a manhole located in front of Sports Authority. A sample was taken from the eastern line at this location, which comes from Site 39. The sample was taken from this line that would consist of only water from Site 39 unless there is an additional, unknown connection. The total coliform count was 20 CFU/mL, which is similar to Site 39.

An additional sample was taken from Site 39 for laboratory analysis on June 27, 2007 to confirm the bacterial concentrations. Results were 13,000 MPN/100 mL for both total and fecal coliforms, both of which are below their respective action levels. *Enterococcus* bacterial counts were 800 MPN/100 mL, which is significantly lower than the initial reading of 14,000 MPN/100 mL and well below the action level. Nonetheless, because the analyses indicated that essentially all the total coliforms were fecal coliforms and an illicit sewer connection had been detected upstream of this site in the past at Sharp Grossmont Hospital, an additional sample was taken at upstream location 39-2. That location also had a high total coliform count during the upstream investigation. That additional sample was submitted for laboratory analysis for total coliforms, fecal coliforms, and enterococci, and ammonia, which is an indicator of sewage releases. The laboratory reported total coliform and *Enterococcus* counts of 40 MPN/100 mL and 300 MPN/100 mL, respectively. Fecal coliforms were not detected. Ammonia was measured at a concentration of 0.47 mg/L, these results do not suggest a sewage leak or other illegal discharge. The overall results of the investigation suggest that bacteria levels are not consistently high at Site 39, and relatively higher levels may be the result of transient flows. The locations and results of follow-up sampling events are summarized in the Table 7-1 and Figure 7-1.

FIGURE 7-1
SAMPLING LOCATIONS FOR SITE 39 UPSTREAM INVESTIGATION

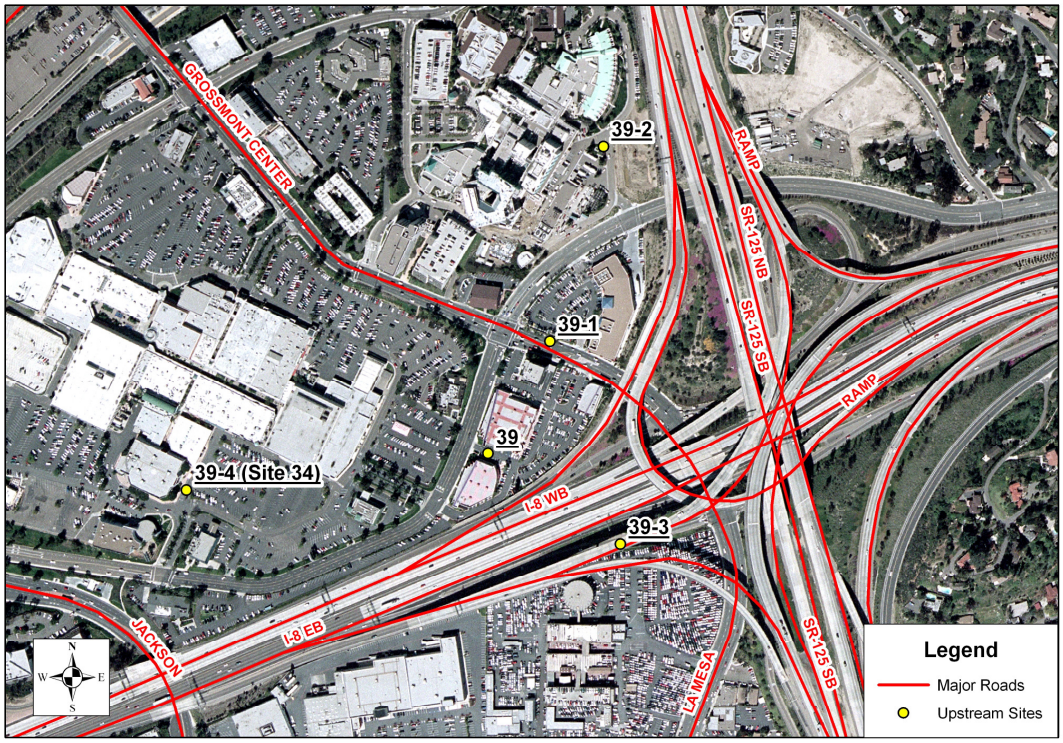

Base Data Sources: USGS, SanGIS, SANDAG

TABLE 7-1
SAMPLING LOCATIONS FOR SITE 39 UPSTREAM INVESTIGATION

ID	Location	Flow (gpm)	Total Coliforms (CFU/mL)	*E. coli* (CFU/mL)
39	Grossmont Shopping Center parking lot between Staples & Mattress Discounters	5	10	< 10
39-1	N.E. corner of Grossmont Center Drive and Murray Drive, south of Trader Joe's parking lot.	2	300	< 10
39-2	Sharp Grossmont Hospital, at loading dock, entrance G	<1	TNTC	< 10
39-3	Exit ramp from I-8 East to Grossmont Center Drive, northwest of the Ford dealership	1	90	20
39-4	Grossmont Shopping Center, in front of Sports Authority, (Site 34) sampling from east pipe connection	5	20	< 10

TNTC = too numerous to count

8 SUMMARY AND RECOMMENDATIONS

8.1 Summary

8.1.1 Summary of Field Screening and Laboratory Analysis Data

During the course of dry weather monitoring, 19 sites were visited, of which 18 had measurable flow and one was dry. The 2007 field screening was resulted in only one follow-up investigation, compared to four in 2006 and three in 2005. Flow rates at the observed sites ranged from a trickle of less than 1 gallon per minute to 162 gpm. As in the past, the highest flow rate was recorded in the Alvarado Channel.

All but one site had measurements of pH that fell between 6.5 and 9.0. Site 64 had a pH of 10.0 during the initial visit and a reading of 9.3 on the following day. Elevated pH levels were likely a result of algal photosynthetic activity (see Section 6). Conductivity readings were not considered an indication of threat to water quality based on the field crew's best professional judgment.

All measurements of ammonia were below concentrations of 0.50 mg/L, below the action level of 1.0 mg/L.

As in the past five years, nitrate concentrations among all sites were below the action level of 10.0 mg/L. The highest nitrate concentration, measured at Site 50, was 5.85 mg/L. The action level for reactive phosphorous concentrations, 2.0 mg/L, was not exceeded at any of the sites.

The highest concentration of surfactants among all sites was 0.75 mg/L, below the action level of 1.0 mg/L, which was detected at Site 13B.

As per the Permit, laboratory analyses were conducted at five sites. Results detected bacteria levels in water sampled from Site 39 that exceeded the established action level for *Enterococcus*, which is 10,000 MPN/100 mL.

Dissolved copper was detected at Site 4A, but it was below the CTR action level. No other dissolved metals were detected at any of the sites. As it was for 2006, no chlorpyrifos, diazinon, oil and grease, and surfactants were detected at any sites.

Trash was observed at 10 of the visited sites, up from eight sites in 2006 and up from four sites in 2005. Sediment was present at all but one of the sites visited, but no other floatables were observed.

Vegetation was present at many of the sites where sunlight was accessible to the site. Those sites located in darker areas, normally had no vegetation.

8.1.2 Summary of Upstream Investigation Data

Follow-up visits were performed on the following business day whenever field tests showed one or more parameters above their respective action levels at the initial field screening visit. During the Dry Weather Monitoring Program in 2007, only one site required a follow-up visit for a pH reading that exceeded action levels. Only one site required upstream investigations after laboratory results were concluded.

Site 39 required upstream investigations to locate potential sources of the elevated bacteria levels indicated by laboratory analyses. To facilitate a prompt, comprehensive survey of potential sources of bacterial contamination, Petrifilm plates were used to conduct field

microbacterial analyses. Note that total coliforms levels alone are considered a poor indicator of fecal material and an even poorer indicator of pathogens. Based on the results of the upstream investigations and follow-up actions conducted at Site 39,the elevated bacterial count observed was transient.

8.2 Recommendations

Based on the results of the 2007 Dry Weather Monitoring Program for the City of La Mesa, the following follow-up actions are recommended for consideration:

Inspection and Maintenance

- Consider checking sites where trash was noted during the 2007 Dry Weather Monitoring Program for trash and debris accumulation as deemed necessary. A notable amount of trash was observed in the following three locations: Site 52, the channel upstream of Site 57, and the conveyance along Sarita Street (upstream of Site 4A).

- Retrieve the shopping cart from the channel at Site 4A and contact California Shopping Cart Retrieval Corporation (1-800-667-4613) to pick up the cart.

9 References

City of San Diego, City of El Cajon, City of La Mesa, et al. 2007. San Diego River Watershed: Watershed Urban Runoff Management Program 2005-06 Annual Report.

USEPA. October 30, 2000. *Multi-Sector General Permit for Storm Water*.

USEPA. May 18, 2000. *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California*. 40 CFR Part 131.

San Diego Regional Water Quality Control Board (RWQCB). 1994. *Water Quality Control Plan for the San Diego Basin*.

FIGURE 2

WATERSHED MAP OF THE LA MESA AREA

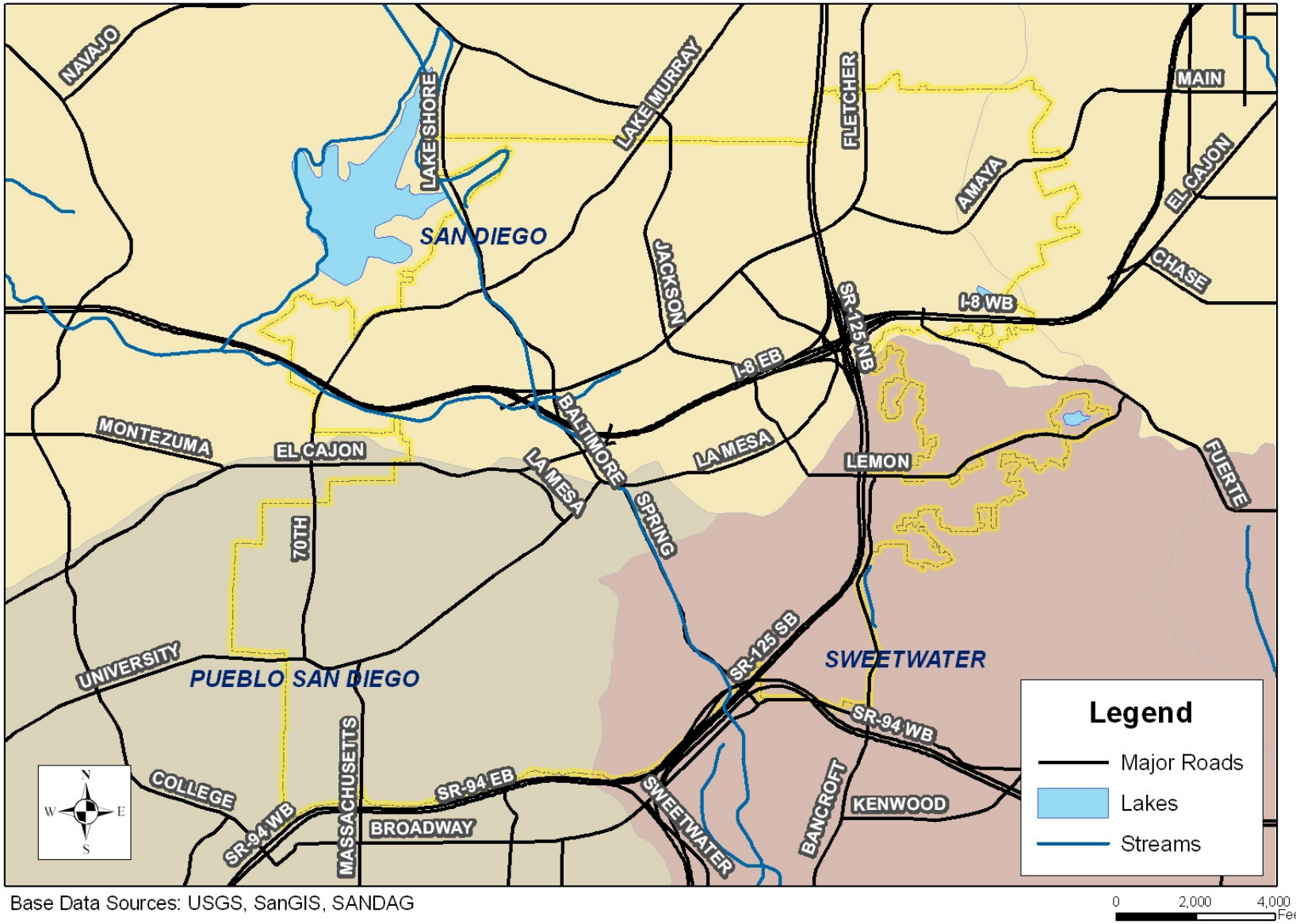

Base Data Sources: USGS, SanGIS, SANDAG

0 2,000 4,000 Feet

Appendix A

Photographs of Sampling Locations

Appendix B

Laboratory Analytical Reports

* Site “University 2” was part of a separate project, but the lab results are shown because they are inseparable from the follow-up analysis results of Site 39.

Appendix C

Field Data Sheets

Attachment 1

Historical Data Graphs:
San Diego River Watershed

Attachment 2

Historical Data Graphs:
San Diego Bay Watershed

Site No 4A (Photo 10)	
Site No 12 (Photo 27)	

Site No 12A (Photo 22)	
Site No 13B (Photo 4)	

Site No 13C (Photo 21)	
Site No 14A (Photo 23)	

Site No 34 (Photo 28)	
Site No 35 (Photo 15)	

Site No 39 (Photo 14)	
Site No 40 (Photo 7)	

Site No 50 (Photo 3)	
Site No 52 (Photo 17)	

Site No 55 (Photo 6)	
Site No 57 (Photo 13)	

Site No 58 (Photo 19)	

Site No 59 (Photo 9)	

Site No 60 (Photo 26)	
Site No 61 (Photo 25)	

Site No 64 (Photo 1)	

EnviroMatrix Analytical, Inc.

21 June 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0706207

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200703W-5

Enclosed are the results of analyses for samples received by the laboratory on 06/13/07 12:36. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
4A	0706207-01	Water	06/13/07 09:20	06/13/07 12:36
57	0706207-02	Water	06/13/07 10:45	06/13/07 12:36
39	0706207-03	Water	06/13/07 11:30	06/13/07 12:36

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4A (0706207-01) Water Sampled: 06/13/07 09:20 Received: 06/13/07 12:36									
Cadmium	ND	0.005	mg/l	1	7062008	06/20/07	06/20/07	EPA 6020	
Copper	**0.005**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
57 (0706207-02) Water Sampled: 06/13/07 10:45 Received: 06/13/07 12:36									
Copper	ND	0.005	mg/l	1	7062008	06/20/07	06/20/07	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
39 (0706207-03) Water Sampled: 06/13/07 11:30 Received: 06/13/07 12:36									
Zinc	ND	0.020	mg/l	1	7062008	06/20/07	06/20/07	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4A (0706207-01) Water Sampled: 06/13/07 09:20 Received: 06/13/07 12:36									
Chlorpyrifos	ND	0.05	ug/l	1	7061807	06/18/07	06/20/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*96 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*81 %*	*60-130*		"	"	"	"	
57 (0706207-02) Water Sampled: 06/13/07 10:45 Received: 06/13/07 12:36									
Chlorpyrifos	ND	0.05	ug/l	1	7061807	06/18/07	06/20/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*82 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*		"	"	"	"	
39 (0706207-03) Water Sampled: 06/13/07 11:30 Received: 06/13/07 12:36									
Chlorpyrifos	ND	0.05	ug/l	1	7061807	06/18/07	06/20/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*110 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*119 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4A (0706207-01) Water Sampled: 06/13/07 09:20 Received: 06/13/07 12:36									
Hardness (Total)	**631**	100	mg CaCO3/L	10	7061429	06/14/07	06/19/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7061924	06/15/07	06/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7061805	06/18/07	06/18/07	EPA 1664	
57 (0706207-02) Water Sampled: 06/13/07 10:45 Received: 06/13/07 12:36									
Hardness (Total)	**664**	100	mg CaCO3/L	10	7061429	06/14/07	06/19/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7061924	06/15/07	06/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7061805	06/18/07	06/18/07	EPA 1664	
39 (0706207-03) Water Sampled: 06/13/07 11:30 Received: 06/13/07 12:36									
Hardness (Total)	**564**	100	mg CaCO3/L	10	7061429	06/14/07	06/19/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7061924	06/15/07	06/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7061805	06/18/07	06/18/07	EPA 1664	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4A (0706207-01) Water Sampled: 06/13/07 09:20 Received: 06/13/07 12:36									
Total Coliforms	**17000**	200	MPN/100 ml	100	7061408	06/13/07	06/17/07	SM 9221 B, E	
Fecal Coliforms	**8000**	200	"	"	"	"	06/16/07	"	
Enterococcus	**1300**	20	"	10	7061409	"	06/17/07	SM 9230 A, B	
57 (0706207-02) Water Sampled: 06/13/07 10:45 Received: 06/13/07 12:36									
Total Coliforms	**2200**	20	MPN/100 ml	10	7061408	06/13/07	06/17/07	SM 9221 B, E	
Fecal Coliforms	ND	20	"	"	"	"	06/16/07	"	
Enterococcus	**170**	20	"	"	7061409	"	06/17/07	SM 9230 A, B	
39 (0706207-03) Water Sampled: 06/13/07 11:30 Received: 06/13/07 12:36									
Total Coliforms	**13000**	200	MPN/100 ml	100	7061408	06/13/07	06/17/07	SM 9221 B, E	
Fecal Coliforms	**3000**	200	"	"	"	"	06/16/07	"	
Enterococcus	**14000**	200	"	"	7061409	"	06/17/07	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062008										
Blank (7062008-BLK1)				Prepared & Analyzed: 06/20/07						
Copper	ND	0.005	mg/l							
Lead	ND	0.005	"							
Cadmium	ND	0.005	"							
Zinc	ND	0.020	"							
LCS (7062008-BS1)				Prepared & Analyzed: 06/20/07						
Zinc	0.098	0.020	mg/l	0.100		98	75-125			
Lead	0.114	0.005	"	0.100		114	75-125			
Copper	0.111	0.005	"	0.100		111	75-125			
Cadmium	0.121	0.005	"	0.100		121	75-125			
LCS Dup (7062008-BSD1)				Prepared & Analyzed: 06/20/07						
Cadmium	0.124	0.005	mg/l	0.100		124	75-125	2	20	
Copper	0.113	0.005	"	0.100		113	75-125	2	20	
Lead	0.116	0.005	"	0.100		116	75-125	2	20	
Zinc	0.097	0.020	"	0.100		97	75-125	1	20	
Duplicate (7062008-DUP1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Cadmium	ND	0.005	mg/l		ND				20	
Copper	0.005	0.005	"		0.005			0	20	
Lead	ND	0.005	"		ND				20	
Zinc	0.016	0.020	"		0.014			13	20	
Matrix Spike (7062008-MS1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Lead	0.099	0.005	mg/l	0.100	ND	99	75-125			
Copper	0.092	0.005	"	0.100	0.005	87	75-125			
Cadmium	0.102	0.005	"	0.100	ND	102	75-125			
Zinc	0.112	0.020	"	0.100	0.014	98	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062008										
Matrix Spike Dup (7062008-MSD1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Zinc	0.114	0.020	mg/l	0.100	0.014	100	75-125	2	20	
Copper	0.093	0.005	"	0.100	0.005	88	75-125	1	20	
Lead	0.098	0.005	"	0.100	ND	98	75-125	1	20	
Cadmium	0.100	0.005	"	0.100	ND	100	75-125	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061807										
Blank (7061807-BLK1)				Prepared: 06/18/07 Analyzed: 06/20/07						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.205*		*"*	*0.250*		*82*	*60-130*			
Surrogate: Tribuytlphosphate	*0.225*		*"*	*0.250*		*90*	*60-130*			
LCS (7061807-BS1)				Prepared: 06/18/07 Analyzed: 06/21/07						
Bolstar	0.48	0.10	ug/l	0.500		96	60-130			
Diazinon	0.47	0.05	"	0.500		94	60-130			
Ethoprop	0.49	0.05	"	0.500		98	60-130			
Mevinphos	0.51	0.25	"	0.500		102	60-130			
Methyl parathion	0.48	0.10	"	0.500		96	60-130			
Phorate	0.47	0.05	"	0.500		94	60-130			
Ronnel	0.49	0.25	"	0.500		98	60-130			
Trichlorinate	0.46	0.05	"	0.500		92	60-130			
Surrogate: Triphenyl phosphate	*0.233*		*"*	*0.250*		*93*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061429										
Blank (7061429-BLK1)				Prepared: 06/14/07	Analyzed: 06/19/07					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7061429-DUP1)		**Source: 0706220-01**		Prepared: 06/14/07	Analyzed: 06/19/07					
Hardness (Total)	ND	10	mg CaCO3/L		ND				20	
Batch 7061805										
Blank (7061805-BLK1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	ND	5	mg/l							
LCS (7061805-BS1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	86	5	mg/l	103		83	75-125			
LCS Dup (7061805-BSD1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	84	5	mg/l	104		81	75-125	2	20	
Batch 7061924										
Blank (7061924-BLK1)				Prepared: 06/15/07	Analyzed: 06/19/07					
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7061924-BS1)				Prepared: 06/15/07	Analyzed: 06/19/07					
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120			
LCS Dup (7061924-BSD1)				Prepared: 06/15/07	Analyzed: 06/19/07					
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120	0	20	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061924										
Duplicate (7061924-DUP1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7061924-MS1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120			
Matrix Spike Dup (7061924-MSD1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120	0	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Address: 7220 Trade St. Suite 119
San Diego, CA 92121

Phone (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather

Project #: 200703W-5 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1 413.2 1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel Ext ASTM	624 / 8260 (VOC) Full BTXE MTBE Oxy	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) Via/C	TBT (Organotin Compounds)	pH Conductivity (EC) TSS TDS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) X Dissolved	Coliform, X Total (MTF) X Fecal (MTF) Colilert, T	Enterococcus, X MTF Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	MBAS
01	4A	6/13/07 9:20	Water	2/4 G/P	X							X							X	X	X		X	X
02	57	" 10:45	"	"	X							X							X	X	X		X	X
03	39	" 11:30	"	"	X							X							X	X	X		X	X
04																								
05																								
06																								
07																								
08																								
09																								
10																								

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day 5 day X STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other

[1]**Sample Disposal:** By Laboratory [2]Return to client: P/U or Delivery Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: Client EMA Autosampler

Project Comments:

T = 2°C

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature: [illegible]
Print: Manouchehr Dadkhah	Print: Tony [illegible]
Company: D-Max Eng.	Company: E[illegible]
Signature: [illegible]	Signature: [illegible]
Print: Jose Pack	Print: W. Lucer[illegible]
Company: EMA	Company: E[illegible]
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Go[illegible]

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 da[illegible] disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

21 June 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0706235

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200703W-5

Enclosed are the results of analyses for samples received by the laboratory on 06/14/07 12:10. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
12A	0706235-01	Water	06/14/07 10:00	06/14/07 12:10
14A	0706235-02	Water	06/14/07 11:00	06/14/07 12:10

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
12A (0706235-01) Water Sampled: 06/14/07 10:00 Received: 06/14/07 12:10									
Zinc	ND	0.020	mg/l	1	7062008	06/20/07	06/20/07	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
14A (0706235-02) Water Sampled: 06/14/07 11:00 Received: 06/14/07 12:10									
Zinc	ND	0.020	mg/l	1	7062008	06/20/07	06/20/07	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
12A (0706235-01) Water Sampled: 06/14/07 10:00 Received: 06/14/07 12:10									
Chlorpyrifos	ND	0.05	ug/l	1	7061807	06/18/07	06/20/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*82 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*81 %*	*60-130*		"	"	"	"	
14A (0706235-02) Water Sampled: 06/14/07 11:00 Received: 06/14/07 12:10									
Chlorpyrifos	ND	0.05	ug/l	1	7061807	06/18/07	06/20/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*80 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*82 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
12A (0706235-01) Water Sampled: 06/14/07 10:00 Received: 06/14/07 12:10									
Hardness (Total)	**688**	100	mg CaCO3/L	10	7061824	06/18/07	06/20/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7061924	06/15/07	06/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7061805	06/18/07	06/18/07	EPA 1664	
14A (0706235-02) Water Sampled: 06/14/07 11:00 Received: 06/14/07 12:10									
Hardness (Total)	**592**	100	mg CaCO3/L	10	7061824	06/18/07	06/20/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7061924	06/15/07	06/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7061805	06/18/07	06/18/07	EPA 1664	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
12A (0706235-01) Water Sampled: 06/14/07 10:00 Received: 06/14/07 12:10									
Total Coliforms	**5000**	200	MPN/100 ml	100	7061501	06/14/07	06/18/07	SM 9221 B, E	
Fecal Coliforms	**1700**	20	"	10	"	"	06/17/07	"	
Enterococcus	**500**	20	"	"	7061502	"	06/18/07	SM 9230 A, B	
14A (0706235-02) Water Sampled: 06/14/07 11:00 Received: 06/14/07 12:10									
Total Coliforms	**8000**	200	MPN/100 ml	100	7061501	06/14/07	06/18/07	SM 9221 B, E	
Fecal Coliforms	**2300**	200	"	"	"	"	06/17/07	"	
Enterococcus	**1300**	20	"	10	7061502	"	06/18/07	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062008										
Blank (7062008-BLK1)				Prepared & Analyzed: 06/20/07						
Zinc	ND	0.020	mg/l							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
Cadmium	ND	0.005	"							
LCS (7062008-BS1)				Prepared & Analyzed: 06/20/07						
Zinc	0.098	0.020	mg/l	0.100		98	75-125			
Cadmium	0.121	0.005	"	0.100		121	75-125			
Lead	0.114	0.005	"	0.100		114	75-125			
Copper	0.111	0.005	"	0.100		111	75-125			
LCS Dup (7062008-BSD1)				Prepared & Analyzed: 06/20/07						
Lead	0.116	0.005	mg/l	0.100		116	75-125	2	20	
Zinc	0.097	0.020	"	0.100		97	75-125	1	20	
Copper	0.113	0.005	"	0.100		113	75-125	2	20	
Cadmium	0.124	0.005	"	0.100		124	75-125	2	20	
Duplicate (7062008-DUP1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Copper	0.005	0.005	mg/l		0.005			0	20	
Cadmium	ND	0.005	"		ND				20	
Zinc	0.016	0.020	"		0.014			13	20	
Lead	ND	0.005	"		ND				20	
Matrix Spike (7062008-MS1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Lead	0.099	0.005	mg/l	0.100	ND	99	75-125			
Zinc	0.112	0.020	"	0.100	0.014	98	75-125			
Copper	0.092	0.005	"	0.100	0.005	87	75-125			
Cadmium	0.102	0.005	"	0.100	ND	102	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062008										
Matrix Spike Dup (7062008-MSD1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Copper	0.093	0.005	mg/l	0.100	0.005	88	75-125	1	20	
Zinc	0.114	0.020	"	0.100	0.014	100	75-125	2	20	
Cadmium	0.100	0.005	"	0.100	ND	100	75-125	2	20	
Lead	0.098	0.005	"	0.100	ND	98	75-125	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061807										
Blank (7061807-BLK1)				Prepared: 06/18/07 Analyzed: 06/20/07						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.205*		*"*	*0.250*		*82*	*60-130*			
Surrogate: Tribuytlphosphate	*0.225*		*"*	*0.250*		*90*	*60-130*			
LCS (7061807-BS1)				Prepared: 06/18/07 Analyzed: 06/21/07						
Bolstar	0.48	0.10	ug/l	0.500		96	60-130			
Diazinon	0.47	0.05	"	0.500		94	60-130			
Ethoprop	0.49	0.05	"	0.500		98	60-130			
Mevinphos	0.51	0.25	"	0.500		102	60-130			
Methyl parathion	0.48	0.10	"	0.500		96	60-130			
Phorate	0.47	0.05	"	0.500		94	60-130			
Ronnel	0.49	0.25	"	0.500		98	60-130			
Trichlorinate	0.46	0.05	"	0.500		92	60-130			
Surrogate: Triphenyl phosphate	*0.233*		*"*	*0.250*		*93*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061805										
Blank (7061805-BLK1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	ND	5	mg/l							
LCS (7061805-BS1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	86	5	mg/l	103		83	75-125			
LCS Dup (7061805-BSD1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	84	5	mg/l	104		81	75-125	2	20	
Batch 7061824										
Blank (7061824-BLK1)				Prepared: 06/18/07 Analyzed: 06/20/07						
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7061824-DUP1)		**Source: 0706244-01**		Prepared: 06/18/07 Analyzed: 06/20/07						
Hardness (Total)	ND	10	mg CaCO3/L		ND				20	
Batch 7061924										
Blank (7061924-BLK1)				Prepared: 06/15/07 Analyzed: 06/19/07						
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7061924-BS1)				Prepared: 06/15/07 Analyzed: 06/19/07						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120			
LCS Dup (7061924-BSD1)				Prepared: 06/15/07 Analyzed: 06/19/07						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120	0	20	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061924										
Duplicate (7061924-DUP1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7061924-MS1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120			
Matrix Spike Dup (7061924-MSD1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120	0	20	

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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Address: 7220 Trade St. Suite 114
San Diego, CA 92121

Phone: (858)586-6600 Fax: (858)586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather

Project #: 200703W-5 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1	413.2	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel Ext ASTM	624 / 8260 (VOC) Full BTXE MTBE	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) Dia/Chl	TBT (Organotin Compounds)	pH Conductivity (EC) TSS TDS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	Cd Cr Cu Pb Ni Ag Zn Dissolved	Coliform, Total (MTF) Fecal (MTF) Colilert	Enterococcus, MTF Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	
01	12A	6/14/07	10:00	Water	2/4 G/P	X								X							X	X	X		X
02	14A	"	11:00	"	" "	X								X							X	X	X		X
03																									
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other_____

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day 5 day X STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other _____

[1]**Sample Disposal:** By Laboratory [2]Return to client: P/U or Delivery Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: Client EMA Autosampler

Project Comments:

T=6°C

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature: [illegible]
Print: Manouchehr Dadkhah	Print: Jorge
Company:	Company: EMA
Signature: [illegible]	Signature: [illegible]
Print: James Peck	Print: JAMES THA
Company: EMA	Company: EMA
Signature:	Signature:
Print:	Print:
Company:	Company:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Go

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 da disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

06 July 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0706438

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200703W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/27/07 15:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
University 2	0706438-01	Water	06/27/07 13:40	06/27/07 15:00
site 39	0706438-02	Water	06/27/07 14:30	06/27/07 15:00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
University 2 (0706438-01) Water Sampled: 06/27/07 13:40 Received: 06/27/07 15:00									
Cadmium	ND	0.005	mg/l	1	7070210	07/02/07	07/02/07	EPA 6020	
Zinc	**0.031**	0.020	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
University 2 (0706438-01) Water Sampled: 06/27/07 13:40 Received: 06/27/07 15:00									
Chlorpyrifos	ND	0.05	ug/l	1	7070209	07/02/07	07/04/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*97 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*84 %*	*60-130*		"	"	"	"	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
University 2 (0706438-01) Water Sampled: 06/27/07 13:40 Received: 06/27/07 15:00									
Hardness (Total)	**1740**	100	mg CaCO3/L	10	7062844	06/28/07	07/02/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7062920	06/28/07	06/28/07	SM5540 C	
Oil & Grease	ND	5	"	"	7062816	06/28/07	06/29/07	EPA 1664	
Total Suspended Solids	ND	20	"	"	7070216	07/02/07	07/03/07	SM2540 D	
Turbidity	**1.26**	0.05	NTU	"	7070215	06/28/07	06/28/07	SM2130 B	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
University 2 (0706438-01) Water Sampled: 06/27/07 13:40 Received: 06/27/07 15:00									
Total Coliforms	**23000**	2000	MPN/100 ml	1000	7062822	06/27/07	07/01/07	SM 9221 B, E	
Fecal Coliforms	**1100**	20	"	10	"	"	06/30/07	"	
Enterococcus	**500**	20	"	"	7062823	"	07/01/07	SM 9230 A, B	
site 39 (0706438-02) Water Sampled: 06/27/07 14:30 Received: 06/27/07 15:00									
Total Coliforms	**13000**	200	MPN/100 ml	100	7062822	06/27/07	07/01/07	SM 9221 B, E	
Fecal Coliforms	**13000**	200	"	"	"	"	06/30/07	"	
Enterococcus	**800**	20	"	10	7062823	"	07/01/07	SM 9230 A, B	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070210										
Blank (7070210-BLK1)				Prepared & Analyzed: 07/02/07						
Zinc	ND	0.020	mg/l							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
Cadmium	ND	0.005	"							
LCS (7070210-BS1)				Prepared & Analyzed: 07/02/07						
Zinc	0.105	0.020	mg/l	0.100		105	75-125			
Cadmium	0.108	0.005	"	0.100		108	75-125			
Lead	0.107	0.005	"	0.100		107	75-125			
Copper	0.098	0.005	"	0.100		98	75-125			
LCS Dup (7070210-BSD1)				Prepared & Analyzed: 07/02/07						
Zinc	0.113	0.020	mg/l	0.100		113	75-125	7	20	
Lead	0.120	0.005	"	0.100		120	75-125	11	20	
Copper	0.101	0.005	"	0.100		101	75-125	3	20	
Cadmium	0.114	0.005	"	0.100		114	75-125	5	20	
Duplicate (7070210-DUP1)		**Source: 0706421-01**		Prepared & Analyzed: 07/02/07						
Zinc	ND	0.020	mg/l		ND				20	
Cadmium	ND	0.005	"		ND				20	
Copper	0.002	0.005	"		0.002			0	20	
Lead	ND	0.005	"		ND				20	
Matrix Spike (7070210-MS1)		**Source: 0706421-01**		Prepared & Analyzed: 07/02/07						
Cadmium	0.102	0.005	mg/l	0.100	ND	102	75-125			
Copper	0.095	0.005	"	0.100	0.002	93	75-125			
Lead	0.112	0.005	"	0.100	ND	112	75-125			
Zinc	0.101	0.020	"	0.100	ND	101	75-125			

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070210										
Matrix Spike Dup (7070210-MSD1)		**Source: 0706421-01**		Prepared & Analyzed: 07/02/07						
Copper	0.095	0.005	mg/l	0.100	0.002	93	75-125	0	20	
Lead	0.113	0.005	"	0.100	ND	113	75-125	0.9	20	
Cadmium	0.103	0.005	"	0.100	ND	103	75-125	1	20	
Zinc	0.101	0.020	"	0.100	ND	101	75-125	0	20	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070209										
Blank (7070209-BLK1)				Prepared: 07/02/07	Analyzed: 07/03/07					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.193*		*"*	*0.250*		*77*	*60-130*			
Surrogate: Tribuytlphosphate	*0.199*		*"*	*0.250*		*80*	*60-130*			
LCS (7070209-BS1)				Prepared: 07/02/07	Analyzed: 07/03/07					
Bolstar	0.37	0.10	ug/l	0.500		74	60-130			
Diazinon	0.38	0.05	"	0.500		76	60-130			
Ethoprop	0.38	0.05	"	0.500		76	60-130			
Mevinphos	0.40	0.25	"	0.500		80	60-130			
Methyl parathion	0.37	0.10	"	0.500		74	60-130			
Phorate	0.35	0.05	"	0.500		70	60-130			
Ronnel	0.38	0.25	"	0.500		76	60-130			
Trichlorinate	0.37	0.05	"	0.500		74	60-130			
Surrogate: Triphenyl phosphate	*0.195*		*"*	*0.250*		*78*	*60-130*			
Surrogate: Tribuytlphosphate	*0.198*		*"*	*0.250*		*79*	*60-130*			
LCS Dup (7070209-BSD1)				Prepared: 07/02/07	Analyzed: 07/03/07					
Bolstar	0.35	0.10	ug/l	0.500		70	60-130	6	30	
Diazinon	0.37	0.05	"	0.500		74	60-130	3	30	
Ethoprop	0.40	0.05	"	0.500		80	60-130	5	30	
Mevinphos	0.36	0.25	"	0.500		72	60-130	11	30	
Methyl parathion	0.35	0.10	"	0.500		70	60-130	6	30	
Phorate	0.39	0.05	"	0.500		78	60-130	11	30	
Ronnel	0.36	0.25	"	0.500		72	60-130	5	30	
Trichlorinate	0.36	0.05	"	0.500		72	60-130	3	30	
Surrogate: Triphenyl phosphate	*0.193*		*"*	*0.250*		*77*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*		*"*	*0.250*		*80*	*60-130*			

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062816										
Blank (7062816-BLK1)				Prepared: 06/28/07	Analyzed: 06/29/07					
Oil & Grease	ND	5	mg/l							
LCS (7062816-BS1)				Prepared: 06/28/07	Analyzed: 06/29/07					
Oil & Grease	98	5	mg/l	108		91	75-125			
LCS Dup (7062816-BSD1)				Prepared: 06/28/07	Analyzed: 06/29/07					
Oil & Grease	81	5	mg/l	92.5		88	75-125	19	20	
Batch 7062844										
Blank (7062844-BLK1)				Prepared: 06/28/07	Analyzed: 07/02/07					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7062844-DUP1)		**Source: 0706433-01**		Prepared: 06/28/07	Analyzed: 07/02/07					
Hardness (Total)	569	10	mg CaCO3/L		666			16	20	
Batch 7062920										
Blank (7062920-BLK1)				Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7062920-BS1)				Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120			
LCS Dup (7062920-BSD1)				Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120	11	20	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062920										
Duplicate (7062920-DUP1)		**Source: 0706415-01**		Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7062920-MS1)		**Source: 0706415-01**		Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120			
Matrix Spike Dup (7062920-MSD1)		**Source: 0706415-01**		Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120	0	20	
Batch 7070215										
Duplicate (7070215-DUP1)		**Source: 0706463-01**		Prepared & Analyzed: 06/28/07						
Turbidity	0.30	0.05	NTU		0.29			3	20	
Reference (7070215-SRM1)				Prepared & Analyzed: 06/28/07						
Turbidity	1.57	0.05	NTU	1.59		99	82.39-117.6			
Batch 7070216										
Duplicate (7070216-DUP1)		**Source: 0706424-02**		Prepared: 07/02/07 Analyzed: 07/03/07						
Total Suspended Solids	214	20	mg/l		232			8	20	
Reference (7070216-SRM1)				Prepared: 07/02/07 Analyzed: 07/03/07						
Total Suspended Solids	84	20	mg/l	94.9		89	84.5-103.47			

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Notes and Definitions

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NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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Address: 7220 Trade St. Suite 111
San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

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Billing Address: SAME

Project ID: LA MESA DRY WEATHER F-UP

Project #: 200703W-3 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1	413.2	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel Ext ASTM	624 / 8260 (VOC) Full BTXE MTBE O	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Dia/Ch	TBT (Organotin Compounds)	pH Conductivity (EC) TSS TDS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	Cd Cu Cr Ni Ag Zn Dissolved	Coliform, Total (MTF) Fecal (MTF) Colilert,	Enterococcus, MTF Idexx	Heterotrophic Plate Count (HPC)	Total Hardness
01	University 2	6/27/07 13:40	Water	2/5 G/P	X								X		X					X	X	X		X
02	Site 39	6/27/07 14:30	water	2 P																	X	X		
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day 5 day X STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other

[1]**Sample Disposal:** ✓ By Laboratory [2]Return to client: P/U or Delivery Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Custody Seals Intact: Yes No N/A

COC/Labels Agree: Yes No N/A

Containers Properly Preserved: Yes No N/A

Temperature @ Receipt: 3.6

Sampled By: ✓ Client EMA Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature:
Print: Manouchehr Dadkhah	Print: W. Lucer
Company: D-Max Eng.	Company: EMA
Signature	Signature
Print	Print
Company	Company
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Gol

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 day disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

13 August 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0708020

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200703W-7

Enclosed are the results of analyses for samples received by the laboratory on 08/01/07 13:20. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0708020

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 39, Upstream	0708020-01	Water	08/01/07 09:45	08/01/07 13:20

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0708020

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 39, Upstream (0708020-01) Water	**Sampled: 08/01/07 09:45**		**Received: 08/01/07 13:20**						
Ammonia as N	**0.47**	0.10	mg/l	1	7081102	08/10/07	08/13/07	SM4500 NH3 B,C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0708020

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 39, Upstream (0708020-01) Water Sampled: 08/01/07 09:45 Received: 08/01/07 13:20									
Total Coliforms	**40**	20	MPN/100 ml	10	7080208	08/01/07	08/05/07	SM 9221 B, E	
Fecal Coliforms	ND	20	"	"	"	"	08/04/07	"	
Enterococcus	**300**	20	"	"	7080209	"	08/05/07	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0708020

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7081102										
Blank (7081102-BLK1)				Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	ND	0.10	mg/l							
LCS (7081102-BS1)				Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	0.75	0.10	mg/l	0.820		91	80-120			
LCS Dup (7081102-BSD1)				Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	0.71	0.10	mg/l	0.820		87	80-120	5	20	
Duplicate (7081102-DUP1)		**Source: 0708040-05**		Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	0.10	0.10	mg/l		0.12			18	20	
Matrix Spike (7081102-MS1)		**Source: 0708040-05**		Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	0.90	0.10	mg/l	0.820	0.12	95	80-120			
Matrix Spike Dup (7081102-MSD1)		**Source: 0708040-05**		Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	0.85	0.10	mg/l	0.820	0.12	89	80-120	6	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Address: 1220 Trade Street, Suite 119, San Diego, CA 92121

Phone: 858-586-6600 Fax: 858-586-6644

Email:

Billing Address: Same

Project ID: LaMesa DW - Fup

Project #: 200703W-7 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1	413.2	1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel Ext ASTM	624 / 8260 (VOC) Full BTXE MTBE O	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	pH Conductivity (EC) TSS TDS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	Cd Cr Cu Pb Ni Ag Zn Dissolved	Coliform, Total (MTF) Fecal (MTF) Colilert,	Enterococcus, MTF Idexx	Heterotrophic Plate Count (HPC)		
01	Site 39, Upstream	8/1/07	9:45	Water	3 P												X					X	X		
02																									
03																									
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other _____

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day 5 day STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other _____

[1]**Sample Disposal:** By Laboratory [2]Return to client: P/U or Delivery Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Custody Seals Intact: Yes No N/A

COC/Labels Agree: Yes No N/A

Containers Properly Preserved: Yes No N/A

Temperature @ Receipt: 5°C

Sampled By: Client EMA Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature Manouchehr Dadkhah	Signature
Print Manouchehr Dadkhah	Print Rose Meehan
Company D-Max	Company DMax Engine
Signature	Signature
Print Rose Meehan	Print W. Luce
Company DMax Engineering Inc	Company EM
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Gold

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

July 30, 2007
Project No. 200703W-7

Mr. Hamed Hashemian, P.E.
Engineering Project Manager
City of La Mesa
8130 Allison Avenue
P.O. Box 937
La Mesa, CA 91944-0937

Re: Non-Storm Water Quality in the City of La Mesa

Dear Mr. Hashemian,

Per your request, D-MAX Engineering Inc. (D-MAX) has conducted a sampling and analysis study at seven locations in the three major drainage basins of the City of La Mesa. The purpose of the study was to evaluate the water quality of the discharged flow. Water flowing out of these basins joins the three main receiving water bodies downstream of the City. The sampling was conducted on June 26 and 27, 2007. The sampling locations were jointly selected by the City of La Mesa and D-MAX. Sampling locations are listed in the attached Table 1.

Six of the locations (Alvarado 1, Alvarado 2, University. 1, University 2, University 3, and University 4) are those locations that previously have been sampled for wet weather program on April 20, 2007. Three of the locations (Alvarado 1, University 1, and Spring Valley Downstream West) had been sampled for non-storm water discharge leaving the City in 2005.

The water samples from six of the above mentioned sampling locations have been tested for similar constituents tested for the wet weather program. Sampling site Spring Valley Downstream West, which was not included in the wet weather sampling, was analyzed for the same suite of constituents measured in the City's annual Dry Weather Field Screening and Analytical Monitoring Program.

The field analyses results are presented in the attached Table 2. Laboratory results are tabulated in attached Table 3. Field data sheets and laboratory results are attached.

Please call me at (858) 586-6600 x22 with any questions.

Sincerely,

D- MAX Engineering, Inc.

Arsalan Dadkhah Ph.D., P.E.
Project Manager

Table 1: Specifications of Sampling Locations

Site ID	Location	Conveyance	Land Use Primary	Land Use Secondary	Hydrologic Unit	Latitude	Longitude
Alv. 1	Alvarado Road, east of the trolley station, on the channel	Concrete Channel	Commercial	Residential	907	32.77209	-117.04136
Alv. 2	Manhole along south edge of Costco parking lot. Just south of the Marengo Avenue and Fletcher Parkway intersection	Manhole	Industrial	Commercial	907	32.77414	-117.02287
Univ. 1	69th Street and Boulevard Drive intersection	Natural Creek	Commercial	Residential	908	32.75473	-117.04813
Univ. 2	Harbison Avenue and University Avenue intersection, west sidewalk, east of CB Hair and Nails	Manhole	Residential	Commercial	908	32.75516	-117.04584
Univ. 3	Along Lowell Street, south of University Avenue	Manhole	Residential	Commercial	908	32.75544	-117.03527
Univ. 4	Manhole approximately at 7851 University Avenue, along south side of street	Manhole	Commercial	Commercial	908	32.76309	-117.02853
Spring Valley Downstream – West	Spring Street and Spring Gardens Road intersection, inside La Mesa Seventh-Day Adventist Church	Concrete Channel	Residential	Parks	909	32.75483	-117.01311

Notes
Alv. 1: Alvarado 1, also know as Alvarado Downstream
Alv. 2: Alvarado 2
Univ. 1: University 1, also known as University Downstream
Univ. 2: University 2
Univ. 3: University 3
Univ. 4: University 4

Table 2: Summary of Field Analytical Results

Site	Date	Time	Flow	Temp.	pH	Turbidity	Conductivity	Detergents	Ammonia	Nitrate	Ortho-phosphate	Dissolved Oxygen
			gpm	°C		NTU	µmhos/cm	mg/L MBAS	mg/L NH_3-N	mg/L NO_3-N	mg/L PO_4-P	mg/L
Alv. 1	06/26/07	15:00	62	26.6	8.2	2.39	2.80	0.38	0.2	0.88	0.07	9.85
Alv. 2	06/27/07	9:00	5	19.7	7.8	11.58	1.98	0.5	0.3	1.15	0.36	6.32
Univ. 1	06/26/07	12:30	15	23.3	8.1	0.98	2.49	0.25	0.2	2.15	0.20	4.8
Univ. 2	06/27/07	13:40	2	23.8	8.0	1.73	5.75	0.63	0.2	6.15	0.49	6.90
Univ. 3	06/27/07	11:25	10	22.5	8.2	1.97	1.68	0.25	ND	3.33	0.10	6.80
Univ. 4	06/27/07	10:15	3	23.0	7.7	2.58	2.39	0.5	0.1	1.72	0.29	5.95
Spring Valley Downstream – West	06/26/07	11:20	10	22.4	7.6	2.94	2.35	0.25	0.2	2.33	0.29	5.41

ND = not detected

Table 3: Summary of Laboratory Analytical Results

Site	Alv. 1	Alv. 2	Univ. 1	Univ. 2	Univ. 3	Univ. 4	Spring Valley Downstream - West	RL
Date	**06/26/07**	**06/27/07**	**06/26/07**	**06/27/07**	**06/27/07**	**06/27/07**	**06/26/07**	
Time	**15:00**	**9:00**	**12:30**	**13:40**	**11:25**	**10:15**	**11:20**	
Total Metals								
Total Silver (mg/L)			ND					0.01
Total Arsenic (mg/L)			0.005					0.005
Total Cadmium (mg/L)			ND					0.010
Total Chromium (mg/L)			ND					0.050
Total Copper (mg/L)			ND					0.050
Total Mercury (mg/L)			ND					0.0001
Total Nickel (mg/L)			ND					0.050
Total Lead (mg/L)			ND					0.010
Total Zinc (mg/L)			ND					0.050
Dissolved Metals								
Dissolved Zinc (mg/L)	ND	ND	ND	0.031	ND	0.025	ND	0.02
Dissolved Copper (mg/L)	ND	0.006	ND	ND	ND	ND	ND	0.005
Dissolved Lead (mg/L)	ND	ND	ND	ND	ND	ND	ND	0.005
Dissolved Cadium (mg/L)	ND	ND	ND	ND	ND	ND	ND	0.005
Organochlorine Pesticides								
Aldrin (µg/L)			ND					0.10
alpha-BHC (µg/L)			ND					0.05
beta-BHC (µg/L)			ND					0.05
gamma-BHC (Lindane) (µg/L)			ND					0.05
delta-BHC (µg/L)			ND					0.05
alpha-Chlordane (µg/L)			ND					0.10
gamma-Chlordane (µg/L)			ND					0.10
Chlordane (Total) (µg/L)			ND					0.10
4,4´-DDD (µg/L)			ND					0.10
4,4´-DDE (µg/L)			ND					0.10
4,4´-DDT (µg/L)			ND					0.10

Table 3: Summary of Laboratory Analytical Results (Continued)

Site	Alv. 1	Alv. 2	Univ. 1	Univ. 2	Univ. 3	Univ. 4	Spring Valley Downstream West	RL
Date	**06/26/07**	**06/27/07**	**06/26/07**	**06/27/07**	**06/27/07**	**06/27/07**	**06/26/07**	
Time	**15:00**	**9:00**	**12:30**	**13:40**	**11:25**	**10:15**	**11:20**	
Dieldrin (µg/L)			ND					0.10
Endosulfan I (µg/L)			ND					0.05
Endosulfan II (µg/L)			ND					0.10
Endosulfan Sulfate (µg/L)			ND					0.10
Endrin (µg/L)			ND					0.10
Endrin aldehyde (µg/L)			ND					0.10
Endrin ketone (µg/L)			ND					0.10
Heptachlor (µg/L)			ND					0.05
Heptachlor epoxide (µg/L)			ND					0.05
Methoxychlor (µg/L)			ND					0.50
Toxaphene (µg/L)			ND					1.00
Polychlorinated Biphenyls (PCBs)								
Aroclor 1016 (µg/L)			ND					0.50
Aroclor 1221 (µg/L)			ND					0.50
Aroclor 1232 (µg/L)			ND					0.50
Aroclor 1242 (µg/L)			ND					0.50
Aroclor 1248 (µg/L)			ND					0.50
Aroclor 1254 (µg/L)			ND					0.50
Aroclor 1260 (µg/L)			ND					0.50
Organophosphorus Pesticides								
Chlorpyrifos (µg/L)	ND	ND	ND	ND	ND	ND	ND	0.05
Diazinon (µg/L)	ND	ND	ND	ND	ND	ND	ND	0.05
Malathion (µg/L)	ND	ND	ND	ND	ND	ND	ND	0.05
Polynuclear Aromatic Compounds (PAHs)								
Acenaphthene (µg/L)			ND					2.0
Acenaphthylene (µg/L)			ND					2.0
Anthracene (µg/L)			ND					2.0

Table 3: Summary of Laboratory Analytical Results (Continued)

Site	Alv. 1	Alv. 2	Univ. 1	Univ. 2	Univ. 3	Univ. 4	Spring Valley Downstream West	RL
Date	**06/26/07**	**06/27/07**	**06/26/07**	**06/27/07**	**06/27/07**	**06/27/07**	**06/26/07**	
Time	**15:00**	**9:00**	**12:30**	**13:40**	**11:25**	**10:15**	**11:20**	
Benzo (a) Anthracene (µg/L)			ND					2.0
Benzo (b) Fluoranthene (µg/L)			ND					2.0
Benzo (k) Fluoranthene (µg/L)			ND					2.0
Benzo (g,h,i) Perylene (µg/L)			ND					2.0
Benzo (a) Pyrene (µg/L)			ND					2.0
Chrysene (µg/L)			ND					2.0
Dibenz (a,h) Anthracene (µg/L)			ND					2.0
Fluoranthene (µg/L)			ND					2.0
Fluorene (µg/L)			ND					2.0
Indeno (1,2,3-cd) Pyrene (µg/L)			ND					2.0
Naphthalene (µg/L)			ND					2.0
Phenanthrene (µg/L)			ND					2.0
Pyrene (µg/L)			ND					2.0
Conventional Constituents, Oil and Grease, and Microbiology								
Total Hardness (mg/L $CaCO_3$)	714	666	589	1740	435	635	636	10
Surfactants (mg/L MBAS)	ND	ND	ND	ND	ND	ND	ND	0.5
Nitrate/Nitrite as N (mg/L)	1.58	1.58						0.05
Total Kjeldahl Nitrogen (mg/L)	2.5	1.4						0.5
Total Nitrogen (mg/L)	4.1	3.0						0.5
Oil and Grease (mg/L)	ND	ND	ND	ND	ND	ND	ND	5
Phosphorus, Total (mg/L)	0.31	0.86						0.05
Total Dissolved Solids (mg/L)	1760	1040					1590	20
Total Suspended Solids (mg/L)	ND	ND	ND	ND	ND	ND		20
Turbidity (NTU)	3.57	19.5	0.64	1.26	1.12	1.72	1.61	0.05
Total Coliform (MPN/100 mL)	7000	22000	23000	23000	700	5000	17000	20
Fecal Coliform (MPN/100 mL)	800	5000	1700	1100	230	2300	230	20
Enterococcus (MPN/100 mL)	500	17000	170	500	170	2300	800	20

Notes
RL: Reporting Limit; ND: not detected
Blank cells indicate that the sample collected from the site was not tested for the parameter in the corresponding row

CITY OF LA MESA

2007/2008 JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

SEPTEMBER 2008

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

CITY OF LA MESA
JEWEL of the HILLS

DMAX

CITY OF LA MESA

2007/2008 JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

SEPTEMBER 2008

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

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ACRONYMS AND ABBREVIATIONS

Acronym	Abbreviation
℃	Degrees Celsius
303(d) List	2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments
Appendix A	Appendix A of BMP Manual Part I
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
BMP Manual Part I	The City of La Mesa Storm Water Best Management Practices Manual – Part I
BMP Manual Part II	The City of La Mesa Storm Water Best Management Practices Manual – Part II
Calsense	Calsense Computerized Irrigation Control
CASQA	California Stormwater Quality Association
CEQA	California Environmental Quality Act
CIP	Capital Improvement Project
City	City of La Mesa
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CMC	Criteria Maximum Concentration
CMP	Corrugated Metal Pipe
CSWMP	Construction Storm Water Management Plan
CTR	California Toxics Rule
CWA	Clean Water Act/Federal Water Pollution Control Act
D-MAX	D-MAX Engineering, Inc.
DAB	Development Advisory Board
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FOG	Fats, Oils, and Grease
General Construction Permit	State of California General Construction Permit
gpm	Gallons Per Minute
HA	Hydrologic Area
HDPE	High Density Polyethylene
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HOA	Home Owners' Association
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illicit Discharge
IDDE	Illicit Discharge Detection and Elimination

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
IHC	Interim Hydromodification Criteria
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
LID	Low Impact Development
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable
mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) Per 100 Milliliters
MS4	Municipal Separate Storm Sewer System
mS/cm	MilliSiemens Per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
nt	Not Tested
NTU	Nephelometric Turbidity Unit
PCWQTR	Post Construction Water Quality Technical Report
PDPA	Pollutant Discharge Potential Assessment
Priority Project	Priority Development Project
RCP	Reinforced Concrete Pipe
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Government
SIC	Standard Industrial Classification
Solana Center	Solana Center for Environmental Innovations
SPCBMPP	Standard Post Construction Best Management Practices Plan
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 7.18 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TSS	Total Suspended Solids
TTWQ	Threat to Water Quality
WDID	Waste Discharge Identification Number

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
WQO	Basin Plan Water Quality Objectives
WQTR	Water Quality Technical Report
WURMP	Watershed Urban Runoff Management Program
µg/L	Micrograms Per Liter

CITY OF
LA MESA
JEWEL of the HILLS

SANDRA L. KERL
CITY MANAGER

September 2008

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sandra L. Kerl
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EXECUTIVE SUMMARY

The City of La Mesa (City) has been actively developing and implementing storm water pollution prevention measures since 1990. The City's Jurisdictional Urban Runoff Management Program (JURMP) was updated and submitted to the San Diego Regional Water Quality Control Board (RWQCB) in March 2008. The JURMP update was required by the recently re-issued storm water permit, RWQCB Order No. R9-2007-0001 (Municipal Permit). The Municipal Permit was jointly issued to 18 municipalities in San Diego County, including the City; the County of San Diego; the San Diego County Regional Airport Authority; and the San Diego Unified Port District (collectively referred to as "Copermittees").

The City's JURMP includes Best Management Practices (BMP) standards for businesses, construction and development projects, residents, and the City's own activities. The JURMP also includes programs for water quality monitoring and educational outreach.

This JURMP Annual Report presents the City's activities to implement its JURMP during the 2007/2008 fiscal year, which began on July 1, 2007 and ended on June 30, 2008. Two different storm water permits were in effect during this reporting period: the previous permit issued to the Copermittees, Order No. 2001-01, and the current Municipal Permit. The City was required to implement its newly updated JURMP to comply with the Municipal Permit no later than March 24, 2008, but the City began implementing some aspects of the new program prior to this deadline. Each section of this JURMP Annual Report discusses how the City's efforts during 2007/2008 met the requirements of the applicable permit and when the requirements of the new Municipal Permit were implemented. Key actions taken for the major components of the City's storm water program are summarized below.

Development Planning Component

During 2007/2008, the City continued to oversee development activities occurring in the City to mitigate potential threats to water quality due to such activities. The City developed a treatment control BMP operation and maintenance verification program, which included the development of a treatment control BMP database, an inspection program, and an annual maintenance verification program. Eleven sites in the City with approved treatment control BMPs were inspected. The City also updated BMP requirements for all development projects to include the addition of Low Impact Development (LID) principles, and relevant documents and forms were updated in accordance with the new development planning requirements.

Construction Component

During 2007/2008, a total of 91 construction inspections were completed at 38 sites; these inspections were done at a frequency meeting the requirements of the new Municipal Permit. Enforcement actions were taken where necessary and were effective in bringing about compliance. The City's plan check and inspection program required projects to comply with the City's minimum BMP requirements.

Municipal Component
The City inspected all high threat to water quality (TTWQ) municipal fixed facilities and continued its rigorous street sweeping and MS4 maintenance programs. A total of 692 tons of trash and debris was removed from street sweeping activities, and 175.5 cubic yards of debris was removed from standard MS4 maintenance. An additional nine cubic yards of debris was removed from the cleaning of 23 filter inserts installed along University Avenue. The City also replaced or rehabilitated 12,136 linear feet of sewer line and continued to maintain its sanitary sewer system to decrease the potential for a sanitary sewer overflow (SSO). City personnel were regularly trained regarding storm water pollution prevention concepts and practices.

Industrial and Commercial Component
During 2007/2008 the City met the Municipal Permit requirement to inspect at least 20 percent of the City's industrial and commercial inventory. The City inspected all high threat to water quality (TTWQ) sites on the City's industrial and commercial inventory as well as additional medium TTWQ sites. The City's watershed-based industrial and commercial inventory was updated based on information gained since the development of the inventory in March 2008. During the inspections conducted during 2007/2008, the City notified industrial and commercial businesses of the City's new BMP requirements through a variety of outreach materials provided to facility personnel during the inspections. Inspectors also assessed each facility's compliance with the General Industrial Permit (Industrial Permit); the City notified the RWQCB when potential non-filers were discovered. The City also initiated special additional data collection programs focused on pollutant discharge potential assessment and watershed-specific issues.

Residential Component
Residential areas comprise more than half of the City's land use, and the City worked to educate residents in the City through a variety of means. The City provided its quarterly *La Mesa Focus* newsletter to City residents via email and the City's website. Each newsletter published during 2007/2008 contained storm water articles relating to residential activities. One example is the article "One Phone Call Can Help Stop Storm Water Pollution" in the August 2007 issue, which was distributed to 30,000 residential and business addresses in the City. During 2007/2008 the City hosted a variety of waste disposal events and encouraged residents to participate in these events. The City also responded to complaints made to the City Storm Water Hotline regarding residential areas. The complaint investigations were used as opportunities to enforce BMP requirements and to educate residents.

Illicit Discharge Detection and Elimination Component
On September 10, 2008, the RWQCB adopted Addendum No. 2 to the Municipal Permit. This addendum requires the City to wait to submit the illicit discharge detection and elimination (IDDE) section of its JURMP Annual Report until the report for 2008 Dry Weather Monitoring Program, which took place after July 1, 2008, is finalized. The section must be submitted to the RWQCB no later than December 15, 2008.

While the full section will not be submitted until after September 30, 2008, the City did still implement its IDDE program component during 2007/2008. During this period, the City responded to and resolved 137 complaints made to its Storm Water Hotline and the Public Works maintenance hotline. The City completed its 2007 Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program), during which only two relatively minor action level exceedances were noted. The recommendations in the final report for the Dry Weather Monitoring Program were addressed during this reporting period. The City continued maintenance of the sanitary sewer system to prevent SSOs, and there were no SSOs during 2007/2008.

Education Component

As a means to raise storm water awareness in various communities, the City continued to conduct various education and outreach activities throughout 2007/2008. The City's efforts results in an estimated 200,324 impressions. City staff held or attended 34 training sessions, and the City continued to circulate the quarterly *La Mesa Focus* newsletter to businesses and residents. Each newsletter sent during 20007/2008 included storm water-related articles aimed at both residents and businesses in the City. Additionally, the City continued to maintain a storm water bulletin board at City Hall, which is strategically located to maximize exposure to both City personnel and project proponents that visit the Engineering Division. To better serve the City's diverse population, a variety of educational materials were distributed in Spanish and English.

Public Participation Component

Public participation activities in 2007/2008 included cleanup events, which have a direct effect on water quality, and outreach activities, through which the City works to increase general knowledge and awareness regarding storm water issues. A total of 1,648 people attended such events. The City participated in Coastal Cleanup Day and the Creek to Bay Cleanup, with two sites in the City for each event. During these events 475 pounds of trash and debris were collected. Other cleanup activities completed during 2007/2008 included Park Appreciation Day and the Adopt-a-Park and Adopt-a-Block programs. The City partnered with local Eagle Scouts to install a storm water information kiosk at Vista La Mesa Park. A variety of waste disposal events, including household hazardous waste (HHW) disposal events, were also held in the City.

Fiscal Analysis Component

The City continued to fund its storm water program though the City's Sanitation Fund. Itemized expenditures for 2007/2008 were $745,867, and $792,645 has been budgeted for 2008/2009.

Effectiveness Assessment Component

The City began evaluating the effectiveness of its storm water program based on the revised approach presented in the City's March 2008 JURMP update. The City has seen lower amounts of pollutants in its Dry Weather Monitoring Program in recent years. The City has also implemented additional treatment control BMPs for University Avenue and its Public Works Operation Center, and it conducts additional street sweeping to aid in meeting watershed requirements. The City has identified parties

responsible for treatment control BMP maintenance as an audience in need of additional education and outreach through its new treatment control BMP operation and maintenance verification and inspection programs.

Special Investigations

The City continued implementation of an additional water quality monitoring program, which includes sampling at two sites in the San Diego River Watershed and four sites in the San Diego Bay Watershed during both wet and dry weather conditions. Based in part on the results of this monitoring program, some additional inspections of industrial and commercial businesses were conducted. The City also completed additional data gathering during industrial and commercial inspections to assess knowledge of watershed-specific storm water concepts and to assess the potential for inspected sites to be significant sources of watershed pollutants of concern.

Conclusions and Recommendations

The City began implementing its newly updated March 2008 JURMP toward the end of 2007/2008. The City will continue to implement the new and updated programs in its JURMP during 2008/2009; it is anticipated that some program refinements will be made as implementation progresses. The City will also collaborate with the other Copermittees to improve the efficiency of its program and to develop updated methods of assessing program effectiveness.

1.0 INTRODUCTION

1.1 BACKGROUND

This Jurisdictional Urban Runoff Management Program (JURMP) Annual Report presents a summary of the activities of the City of La Mesa (City) during the 2007/2008 fiscal year. Preparation and submittal of the JURMP Annual Report is required by San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit).

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act (also known as the Clean Water Act, or CWA) established a framework for regulating Municipal Separate Storm Sewer System (MS4) discharges under the National Pollutant Discharge Elimination System (NPDES). The RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region in 1990, followed by a revised permit in 2001. The current Municipal Permit in turn replaced the 2001 permit, RWQCB Order No. 2001-01, in 2007.

Like all the other regulated municipalities in the San Diego region, collectively referred to as Copermittees, the City developed and submitted a JURMP to the RWQCB in 2002. As required by the Municipal Permit, the City submitted an updated JURMP in March 2008. The JURMP includes management measures for a variety of different sectors and activity types such as municipal, industrial, commercial, construction, and significant development and re-development.

Annual reports on the implementation of the JURMP are required to be submitted to the RWQCB September 30 of each year. This JURMP Annual Report presents information from the 2007/2008 fiscal year, which extended from July 1, 2007 to June 30, 2008.

1.1.2 CITY SETTING

The City of La Mesa includes an area of approximately nine square miles and has a population of over 56,000 residents. The primary land use in La Mesa is residential. Grossmont Center and businesses along major roads in the City make up the bulk of the commercial development, and a small light industrial area is located close to the geographic center of the City, just north of Interstate 8.

Approximately 52 percent of La Mesa is located within the San Diego River Watershed, while the remaining 48 percent is located in the San Diego Bay Watershed. The City of La Mesa makes up about one percent of the overall land area in both the San Diego Bay and the San Diego River watersheds. Runoff generated in La Mesa is conveyed through five drainage basins. Figure 1-1 on the following page shows the drainage basins and the land uses in the City. Table 1-1 lists the drainage basins along with the approximate

percentage of drainage area in La Mesa, the corresponding hydrologic unit (HU) of the basin, and the receiving water body to which each basin drains.

Table 1-1
City of La Mesa Drainage Basins

Drainage Basin	Percent of City Area	Hydrologic Unit	Receiving Water Body	Watershed
Alvarado	51	907	San Diego River	San Diego River
University	28	908	Chollas Creek	San Diego Bay
Spring Valley	14	909	Sweetwater River	San Diego Bay
Lemon Grove	6	908	Chollas Creek	San Diego Bay
Lake Murray	1	907	San Diego River	San Diego River

Please note that while runoff from the City drains to these water bodies, the actual water bodies are not themselves located within the City.

Figure 1-1
City of La Mesa Land Use and Drainage Basins

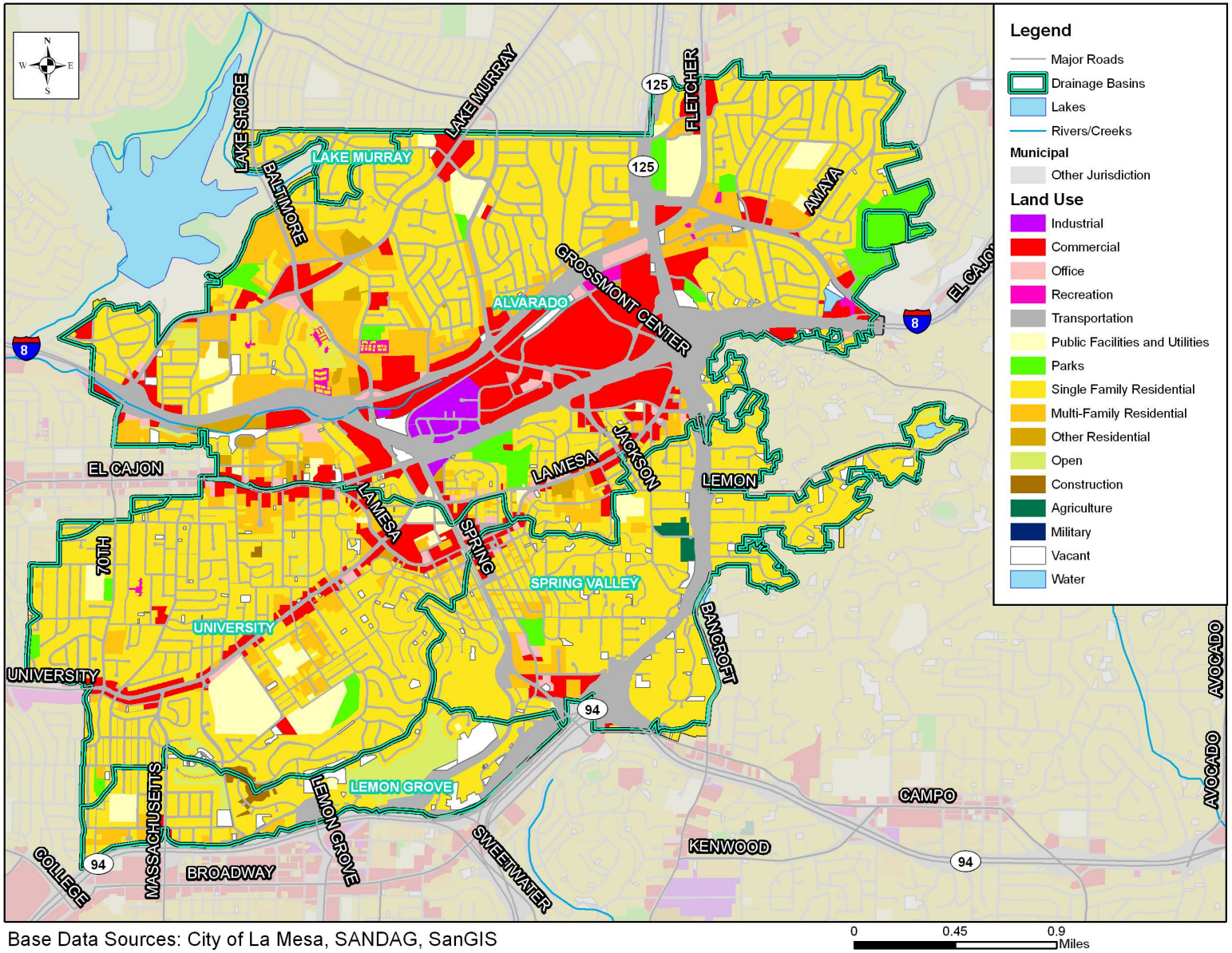

Base Data Sources: City of La Mesa, SANDAG, SanGIS

0 0.45 0.9 Miles

1.2 Purpose and Objectives

The City's JURMP presents a strategy to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The JURMP includes a variety of programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the City's implementation of its JURMP during the 2007/2008 reporting period.

1.3 Report Organization

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning Component**
Section 3	**Construction Component**
Section 4	**Municipal Component**
Section 5	**Industrial and Commercial Component**
Section 6	**Residential Component**
Section 7	**Illicit Discharge Detection and Elimination Component**
Section 8	**Education Component**
Section 9	**Public Participation Component**
Section 10	**Fiscal Analysis Component**
Section 11	**Effectiveness Assessment Component**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all the sections required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a clearer explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Subsection 1.1, Background, has been divided into subsections 1.1.1, Regulatory Background, and 1.1.2, City Setting, for the sake of clarity.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of pollutants from development projects to the MEP and managing increase in runoff from development project that have the potential to negatively affect downstream water bodies. During the 2007/2008 fiscal year, the City accomplished these goals through implementation of its JURMP document. During the reporting period, a new Municipal Permit went into effect, and the development planning component of the City's JURMP was updated accordingly.

The City began implementing new Municipal Permit requirements for development planning on March 24, 2008. The overall structure of the City's processes for incorporating post-construction BMPs into the development planning process remained similar throughout the reporting period. The most significant changes to the City's program apply to the implementation of the City's development project approval and verification process. For example, the City's Standard Urban Storm Water Mitigation Plan (SUSMP) requirements were updated to include Low Impact Development (LID) and hydromodification concepts, and the City began a treatment control BMP inspection and a BMP maintenance verification program.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- Updated the City's SUSMP and the City of La Mesa Storm Water Best Management Practices Manual Part II (BMP Manual Part II), including addition of new Priority Development Project (Priority Project) categories required by the Municipal Permit.
- Updated the City's development requirements checklist (Appendix A of BMP Manual Part II) to reflect changes made to the City's updated JURMP and distributed updated checklist starting late March 2008.
- Updated minimum BMP requirements for all development projects, including addition of LID principles.
- Collaborated with the Copermittee hydromodification management workgroup to discuss key Hydromodification Management Plan (HMP) development issues.
- Developed a treatment control BMP operation and maintenance verification program, which included the development of a treatment control BMP database, an inspection program, and an annual maintenance verification program.

- Conducted maintenance inspections of treatment control BMPs at 11 completed development projects throughout the City.
- Conducted trainings for City staff and developed educational materials for the development community regarding new Municipal Permit requirements related to development projects.

2.2 Land Use Planning

2.2.1 Background

The City's General Plan was last updated in 2002 and contains water quality and watershed protection principles in its Public Services and Facilities Element. The comprehensive principles established in 2002 provide an ample framework for implementing the requirements of both the old permit and the new Municipal Permit, and no changes to these policies were necessary during the reporting period.

2.2.2 Source Characterization

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts to the surrounding environment. No changes to the development restrictions in the City's General Plan for storm water purposes were implemented during the reporting period.

2.2.3 Best Management Practice Requirements

Please refer to the City's updated JURMP document for a list of the water protection policies included in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 Program Implementation

The City implemented its water protection related land use policies during the reporting period mainly through the City's Municipal Code. During this time, the City's Storm Water Ordinance was updated to meet new Municipal Permit requirements. The City's BMP Manual Part II was also updated as part of the City's Storm Water Ordinance update. Descriptions of the changes made, as well as complete copies of the amended documents, can be found in the City's updated JURMP. Implementation of these new development requirements began on March 24, 2008. Prior to that date, the City implemented the Storm Water Ordinance and BMP Manual Part II as detailed in the 2006/2007 JURMP Annual Report.

Details on how the City implemented its established water protection policies through its environmental review process and its development project approval and verification processes during the reporting period are provided in Sections 2.3 and 2.4 of this JURMP Annual Report document.

2.3 Environmental Review Process

The City's current environmental review process is detailed in the City's updated JURMP. While changes to specific requirements of the City's environmental review process were made during the reporting period as part of the JURMP update, the overall structure of the review process, such as the City's departments involved and the document submissions required, remains the same as in previous reporting years. No further modifications to the City's environmental review process have been made since the submittal of the updated JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

During the 2007/2008 fiscal year, the City implemented the watershed protection principles in the City's General Plan through various aspects of the City's development project approval and verification process, as detailed below. As previously discussed, the development project approval and verification process implemented prior to March was identical to the process described in the 2006/2007 JURMP Annual Report. The approval and verification process implemented after March 24, 2008 followed the process described in the City's updated JURMP.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's BMP Manual Part II. Please note that the City's BMP Manual Part II contains the City's SUSMP regulations. Prior to March 2008, the BMP Manual Part II included in the City's 2006/2007 JURMP Annual Report document was used by the City and development community, while the updated BMP Manual Part II, revised as part of the JURMP update, was implemented starting in late March 2008. Details on changes to the City's BMP Manual Part II, such as the addition of retail gas outlets (RGO) and industrial development as Priority Project categories, can be found in Section 4 of the updated JURMP.

2.4.3 Best Management Practice Requirements

No changes were made to the development BMP requirements presented in the 2006/2007 JURMP Annual Report prior to March 2008. The City's new BMP requirements, implemented after March 2008, are similar to the requirements prior to that date, with a few exceptions. In some cases, the new BMPs were already being required by the City, but the update provided an opportunity for the language in the JURMP to be strengthened for clarity. For example, the LID BMP requirements added to the City's BMP Manual Part II are similar to site design concepts that were already

required in the original BMP Manual Part II developed in 2002 as part of the City's SUSMP requirements. The City's BMP Manual Part II was only changed to stress the importance of a few of these design principles, such as draining runoff from impervious surfaces to adjacent landscaping. Similarly, the City had already begun requiring project proponents to include justification whenever a treatment control BMP that did not have a high or medium removal efficiency for key pollutants associated with the project. The new BMP Manual Part II provided more explicit language in support of this requirement. All changes to BMP requirements made during the reporting period are detailed in the City's updated JURMP.

2.4.4 Program Implementation

During the 2007/2008 fiscal year, the City required implementation of its BMP requirements for all development projects through education, a comprehensive development project approval process, and a new treatment control BMP inspection and maintenance verification program.

2.4.4.1 Outreach and Staff Training

The City continually trains staff involved in the planning and review of development projects within the City and works closely with the development community to communicate its development requirements throughout the entire approval process. During the reporting period, staff and industry training was focused on changes being made to the City's JURMP in response to new Municipal Permit requirements. Details on trainings conducted and educational materials developed and distributed related to the new development during the reporting period can be found in Section 8 of this JURMP Annual Report document. Distribution of maintenance verification letters to parties responsible for maintenance of treatment control BMPs at completed projects, which began in July 2008, is also expected to increase the level of knowledge of regulated parties.

2.4.4.2 Urban Runoff Approval Process for Development Projects

All development projects that required City permits were required to undergo the City's urban runoff approval process as detailed in the City's JURMP. Forms completed by project applicants are kept with the project's file at the City for future reference. As discussed in the City's JURMP, the City required all projects applying for construction and building permits to complete an "Appendix 'A' –Storm Water Requirements and Project Data Sheet" that guides project applicants to submit proper documents to the City for review. Prior to March 2008, the City distributed the Appendix A form included in the City's 2006/2007 JURMP Annual Report. Starting in March 2008, the City began distributing an updated version of the Appendix A form that included changes necessary to comply with the new Municipal Permit requirements. Features of the

updated Appendix A form are discussed in the City's updated JURMP. A copy of the updated form is included as Attachment 2.1 to this JURMP Annual Report document.

The updated Appendix A form distributed starting March 2008 now prompts certain non-priority development projects to complete a Standard Post-Construction BMP Plan (SPCBMPP, Attachment 2.2). This form includes a list of all standard permanent storm water BMPs required by the City's SUSMP and requires project proponents to indentify which BMPs will be implemented at the development. Note that the standard permanent storm water BMPs do not include treatment control BMPs. If any BMP is not selected, the project proponent must provide an explanation why the BMP is not applicable or feasible for the project. The City developed the Standard Post-Construction BMP Plan Preparation Instructions (Attachment 2.3) sheet to guide project proponents on how to correctly complete the Standard Post-Construction BMP Plan. During the period from March 24, 2008 through June 30, 2008, no development projects required submittal of a SPCBMPP.

All development projects determined to be Priority Projects after completing the Appendix A form were required to implement the City's SUSMP requirements and prepare a Water Quality Technical Report (WQTR). Note that after March 2008, the City began referring to WQTRs as Post Construction Water Quality Technical Reports (PCWQTR). The City developed a Post Construction WQTR Report Guidelines sheet to detail all the information required to be included in a project's PCWQTR (Attachment 2.4). In the past, the majority of deficiencies found in document reviews were missing information or sections not having enough detail about proposed BMPs. The guideline sheet provides a more detailed resource for project proponents to use when writing the PCWQTR, and the City hopes that the guidelines will reduce the number of document reviews required for development project before they are approved. Since the document change occurred late in March 2008, only one development project submitted a PCWQTR for review during the reporting period. Prior to March 24, 2008 but still during the reporting period, some additional WQTRs were submitted for review. Table 2-1 lists the development projects subject to the City's SUSMP requirements during the 2007-2008 reporting period, the number of document reviews for each project, and their current approval statuses as of the end of the 2007/2008 reporting period.

Table 2-1
Development Projects Subject to SUSMP Requirements During 2007/2008

#	Project Name	Location	Project Type	Number of Reviews	Approved? (Yes/No)
1	Heidi St. Residence	5475 Heidi Street	Non-Priority	2	Yes
2	Davis Family YMCA Expansion	8881 Dallas	Priority	1	Yes
3	KFC /Taco Bell	Jackson Drive	Priority	3	No
4	Montbello South	7699 El Cajon Blvd	Priority	1	No

The Davis Family YMCA Expansion project, which involved construction of a small additional building and parking area, was reviewed during the 2006/2007 reporting period. The project was not approved during this period due to a few clarifications that needed to be made in the project's WQTR. These clarifications were made and the project was approved early in the 2007/2008 reporting period. Since construction on this Priority Project began before the new Municipal Permit requirements were implemented within the City, the project was approved under the requirements of the City's SUSMP detailed in the 2006/2007 JURMP Annual Report.

Heidi St. Residence was also approved during the reporting period but prior to the adoption of the updated BMP Manual Part II. While this project was not a Priority Project, the project was still reviewed for compliance with the City's standard permanent BMP requirements, which apply to all development projects. No treatment control BMPs were approved as part of this development project.

In preparation of the new BMP requirements going into effect during the middle of the reporting period, all development projects that submitted documents to the City for review were educated on upcoming changes to the City's SUSMP requirements. KFC/Taco Bell is one project the City worked with during the reporting period to meet new Municipal Permit requirements. The first WQTR for KFC/Taco Bell was submitted to the City for review in October of 2007. At this time, the project did not meet the City's established minimum BMP requirements due to the vague descriptions of proposed site design and source control BMPs and lack of treatment control BMP sizing calculations. The project proponents were informed that if the project did not obtain lawful approval prior to March 24, 2008, the project would be subject to the City's new LID requirements. When the second report for the project was submitted in late March 2008, the project was reviewed against the City's updated BMP Manual Part II. The project was once again found to not meet the City's new minimum BMP requirements for various reasons, but the project now proposed to incorporate permeable pavement and grass swales into the project design. The City will continue to work closely with the project to ensure all applicable BMPs are designed effectively and meet the City's minimum requirements before approval is given.

The Civic Center Improvements project was approved during the 2006/2007 reporting period and began construction early in the 2007/2008 fiscal year. During construction minor changes were made to the proposed BMPs for the project. The City reviewed the proposed changes before they were implemented and determined the changes met the City's SUSMP requirements.

The majority of the development projects that submitted documents to the City for review during the 2006/2007 reporting period did not submit revised documents during this 2007/2008 reporting period. Due to the slow housing market in the San Diego region, many planned development projects were abandoned or were placed on hold during the reporting period. If any of these projects are resumed in the future, they will be subject to the City's updated SUSMP requirements and the document review process detailed in the updated JURMP.

No Priority Projects were allowed to implement treatment control BMPs with low removal efficiency rankings during the reporting period. The City makes every effort to encourage development projects to select treatment controls with high and medium pollutant removal efficiencies and does not expect to approve many projects with low removal efficiency BMPs. However, if projects proposing a low removal efficiency treatment control BMP with a defensible infeasibility analysis are approved, details of those projects and their feasibility analyses will be reported as required in future JURMP annual reports.

During the reporting period, no projects received a SUSMP waiver for implementation of treatment control BMPs. The City has never issued a SUSMP waiver in the past either, and at this time the City has no plans to develop a SUSMP waiver mitigation program.

Hydromodification Management Plan
During the reporting period the Copermittee hydromodification management workgroup met regularly to discuss key HMP development issues and provide updates on the status of consultant work products. The City of La Mesa regularly participated in the hydromodification management workgroup during 2007/2008. Note that in the summer of 2008 the workgroup name was officially changed to the Land Development Workgroup.

The City's current Development Manual contains detailed Interim Hydromodification Criteria (IHC) which the City will continue to implement until the HMP is finalized. None of the development projects undergoing the City's review process during the reporting period were subject to the IHC since all of these projects are less than 50 acres. Final HMP requirements have not yet been established by the Land Development Workgroup. Once the HMP is developed and approved by the RWQCB, the City will incorporate the HMP into its BMP Manual Part II.

BMP Installation Verification
No Priority Projects under construction during the 2007/2008 fiscal year were completed prior to the end of the reporting period. Once construction of Priority Projects is completed in the future, verification that the BMPs proposed have been installed in accordance with approved documents will be performed prior to occupancy of the site. Once BMP installation is verified, the project will be assigned a threat to water quality (TTWQ) priority using the prioritization flow chart presented in the City's JURMP, and the project will be added to the City's treatment control BMP inventory.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

The City's treatment control BMP inspection program did not go into effect until March 24, 2008, significantly after the start of the 2007/2008 wet season, which began on October 1, 2007. Therefore, the City did not have the opportunity to inspect the high TTWQ development projects included on its inventory prior to the start of the wet season

during the reporting period. The City did, however, contract D-MAX Engineering, Inc. (D-MAX) to conduct inspections of all projects with treatment control BMPs, regardless of their TTWQ, during the 2007/2008 fiscal year after March 24, 2008.

D-MAX utilized information included in the City's treatment control BMP database to determine what BMPs should be present at the individual project sites. Each BMP was visually inspected, and the City of La Mesa Treatment Control BMP Inspection form in the City's JURMP was completed by the inspector for each site visited. Table 2-2 lists the development projects inspected, the number of BMPs installed at each site, the number of BMPs inspected, the number of BMPs found in need of maintenance, and brief descriptions of inspection findings. Public Priority Projects are indicated with the marker "(CIP)", which is short for capital improvement project. The BMP types installed at these sites and the sites' TTWQ priorities are included in the City's treatment control BMP inventory, which is included in Appendix A.1 of this JURMP Annual Report.

Table 2-2
Summary of Treatment Control BMP Inspection Results

#	Project Name	BMP(s) Installed	BMP(s) Inspected	BMPs Requiring Maintenance	Inspection Notes
1	Aragon	2	2	0	No BMP maintenance deficiencies observed.
2	Bougainvillea Walk	3	3	2	Drainage inserts on site contained sediment and debris.
3	Briercrest Park (CIP)	1	1	0	No BMP maintenance deficiencies observed.
4	Car Dealership (McClelland Auto Sales)	1	1	1	No vegetation observed in proposed vegetated buffer strip. Some of the pipes conveying runoff to buffer strip from parking lot were clogged with sediment.
5	Eastridge	3	3	0	No BMP maintenance deficiencies observed
6	La Mesa Teen Center (CIP)	2	2	2	Leaf debris observed in swale and drainage insert contained trash and debris.
7	Lowell Street Condominiums	4	4	1	Drainage insert installed in 15" catch basin on site contained sediment and debris
8	Parkview	16	16	14	14 porous pavement driveways appeared clogged with sediment and organic debris.
9	Talmadge East Apartments	4	4	4	All drainage inserts on site contained sediment and debris.
10	Fire Station (CIP)	1	1	0	No BMP maintenance deficiencies observed.
11	Kaiser	1	1	0	No BMP maintenance deficiencies observed

Follow-up actions were recommended for all development projects with BMPs observed in need of maintenance. A copy of the completed inspection form, which details the actions required to correct the violation(s) observed, if any, was sent to the property owner or manager of each site visited. A Notice of Violation (NOV) was issued to the party responsible for the "Car Dealership" site in response to the poor condition of its

vegetated buffer strip. The City has had further correspondence with the responsible party in early 2008/2009, after the issuance of the NOV, and is working to ensure the buffer strip is properly maintained. Since inspections were conducted at the end of the reporting period, not all follow-up actions were able to be conducted during the 2007/2008 fiscal year. The City will continue to follow up with these sites during 2008/2009. No sites were observed to present a significant threat to human health or the environment during inspections, so none were reported to the RWQCB.

In addition to City-conducted maintenance inspections, the Municipal Permit requires annual verification of operation and maintenance of treatment control BMPs installed within the City's jurisdiction. Annual verification must be provided by the party responsible for treatment control BMP maintenance and must be returned to the City prior to the start of the wet season (October 1st). Since this portion of the City's program did not go into effect until March 2008, towards the end of the wet season, the City was not able to require annual maintenance verification of treatment control BMP maintenance prior to the 2007/2008 wet season, which began October 1, 2007. The City did, however, begin the process of obtaining annual BMP maintenance verifications for the 2008/2009 fiscal year.

A BMP maintenance verification form, frequently asked questions (FAQ) sheet, and introductory letter were developed during the 2007/2008 reporting period. Using the property owner names and addresses recorded in the City's BMP database, BMP maintenance verification forms were mailed to all the projects included in the City's BMP database in early 2008/2009. The template letter, BMP maintenance verification form, and FAQ sheet are included as Attachment 2.5 to this JURMP Annual Report. As maintenance verification forms are returned to the City, results will be documented in the City's BMP database. The City will follow up with projects that do not return the annual maintenance verifications as described in the City's JURMP.

2.5 Development Planning Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 Program Review and Modification

The City's JURMP was recently updated in March 2008. No changes to the City's development planning component have been made since that time.

3.0 CONSTRUCTION

3.1 INTRODUCTION

The City began implementation of new Municipal Permit requirements related to construction activities on October 1, 2007. New inspection frequencies and minimum BMP requirements were implemented through the remainder of the fiscal year. As a result, the overall implementation of the City's construction program remained largely the same throughout the reporting period. The City made some modifications to improve its program in late March 2008 as part of its JURMP update. These changes included additions of requirements limiting maximum disturbed area and calling for the use of advanced treatment methods in certain instances. Some modifications to standard forms used in the construction program were also made.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- Distributed appropriate checklists to all projects applying for grading and building permits.
- Conducted plan checks of erosion control plans to ensure construction projects comply with the City's minimum BMP requirements.
- Conducted training for applicable City staff regarding the construction requirements in the City's updated JURMP.
- Conducted 88 construction inspections at 38 sites per the frequency in the updated JURMP. During the wet season, high TTWQ sites were inspected bi-weekly, medium TTWQ sites monthly, and at least once for low TTWQ sites with grading activity.
- Issued 18 verbal warnings, nine written warnings, five follow-up inspections, eight NOVs, and one stop work order to construction sites in response to violations of the City's minimum BMP requirements.
- As part of the updated JURMP, required construction sites less than one acre to complete a Construction Storm Water Management Plan (CSWMP), similar to a Storm Water Pollution Prevention Plan, that details the planned BMPs for the project.

3.2 SOURCE CHARACTERIZATION

An inventory of active construction projects during the reporting period is presented in

Appendix A.2 of this JURMP Annual Report document. The City's inventory was maintained throughout the reporting period by the City's Engineering Division. New construction projects were added to the inventory at the start of construction, and projects were removed from the inventory after construction was completed. Since construction projects were continually being added and removed throughout the fiscal year, inventory updates were usually performed more frequently than the minimum once per month.

3.3 Updates to Ordinances and Approval Processes

The City updated its Grading and Storm Water Management and Discharge Control ordinances during the reporting period as part of the City's JURMP update. Details on these revisions can be found in Section 5 of the City's updated JURMP. The construction requirements in the City's BMP Manual Part II were also updated to be consistent with the ordinance changes. Details on any changes to the City's approval process during the reporting period are discussed in Section 3.5 of this document.

3.4 Best Management Practice Requirements

The City's updated construction and grading project requirements are detailed in the City's updated BMP Manual Part II, which can be found as Appendix C in the City's updated JURMP document. The City's new BMP requirements were implemented starting in March 2008. The construction component of the updated BMP Manual Part II is not significantly different than the construction element of the previous BMP Manual Part II that was in effect prior to March 2008. The main differences are that the updated BMP Manual Part II includes a provision that allows the City to require advanced treatment at sites that pose an exceptional threat to water quality, a provision that limits the maximum disturbed area to 17 acres unless special approval is obtained, and language that clarifies the City's requirements for stockpile management.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below.

3.5.1 Education and Staff Training

Education and staff training implemented during the 2007/2008 fiscal year focused on communicating changes made to the City's construction requirements to both City staff and the construction community. Please see Section 8 of this JURMP Annual Report document for details on trainings performed and educational materials distributed related to construction and grading activities.

3.5.2 Construction and Grading Approval Process

During the reporting period, City personnel verified that all construction projects planned to implement the City's minimum BMP requirements prior to issuing any building or grading permits. The City's grading approval process is described thoroughly in Section 5 of the City's updated JURMP. The primary changes made during 2007/2008 were related to forms and required report submittals. As discussed in Section 2 of this document, prior to March 2008, the City distributed and required completion of the Appendix A form included in the 2006/2007 JURMP Annual Report for all projects applying for construction or grading permits. A section of the Appendix A form helps the City and project proponents identify whether coverage under State of California General Construction Permit (General Construction Permit) is needed. After March 2008, the City started distributing an updated version of the Appendix A form and began requiring construction projects that are not subject to the General Construction Permit to complete a Construction Storm Water Management Plan (CSWMP), which details the BMPs planned for construction sites not required to develop a Storm Water Pollution Prevention Plan (SWPPP). Prior to the development of the CSWMP requirement, construction sites less than an acre applying for permits were still subject to a review process via the submittal of erosion control plans and were required to implement the City's minimum construction BMP requirements. A copy of the City's CSWMP form is included as Attachment 3.1 to this JURMP Annual Report document. Approved forms and documents completed by project proponents are kept with the each project's file at the City for reference.

During the reporting period, the City began enforcing a 17 acre maximum disturbed area for grading activities. None of the City's active construction sites were larger than 17 acres, and the maximum disturbed area limitation did not apply. However, all construction sites were still required to limit exposed cleared or graded areas to the amount of area that could be protected prior to a rain event, as prescribed in the City's seasonal BMP requirements.

The City also began implementing advanced treatment requirements during the reporting period. Criteria for determining when advanced treatment is required are detailed in the City's updated JURMP. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites within the City's jurisdiction, and advanced treatment methods were not required at any construction sites.

3.5.3 Inspection of Construction Sites

Appendix A.2 of this JURMP Annual Report contains a list of construction projects that were active during the reporting period, along with their assigned TTWQ priorities, the number of weeks the site was active within the rainy season, the numbers of inspections conducted during the wet and dry seasons, the number of follow-up inspections, and the total number of inspections for each site. In total, 91 construction inspections were

performed for 38 construction sites.

Construction inspections conducted during the reporting period were performed as described in the City's updated JURMP. Key components of the inspections include checks for coverage under the General Construction Permit during the initial inspection and assessments of compliance with the City's BMP and discharge requirements during all inspections. Responsible parties at the sites are educated as needed during inspections. Copies of the inspection forms are kept on file at the City. The City conducted inspections at high TTWQ construction sites bi-weekly during the wet season and monthly for medium TTWQ sites. While the Municipal Permit only requires construction inspections at low TTWQ on an "as needed" basis year round, the City conducted at least one round of inspections at low TTWQ construction projects with grading activities during the wet season.

When violations were noted during routine or follow-up inspections, these violations were noted on the project's inspection form, and the sites were given a list of corrective actions necessary to fix the observed violation. When necessary, a verbal or written warning was issued for the violation, and the City inspector followed up with the site until compliance was achieved. In most cases, violations were corrected while the inspector was still at the site, and follow-up visits were not necessary. Details on the enforcement actions taken for construction sites during the implementation period are described below.

3.5.4 Enforcement Measures

Table 3-1 includes the number of violations and enforcement actions taken during the reporting period in response to violations of the City's minimum construction BMP requirements. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP.

Table 3-1
Total Number of Violations and Enforcement Actions Taken

Verbal Warnings	Written Warnings	Follow-Up Inspections	NOVs	Stop Work Orders
18	9	5	9	0

Copies of the forms utilized to administer the above enforcement actions can be found in Appendix D of the City's updated JURMP.

None of the violations observed at construction sites during the reporting period were found to endanger human health or the environment. The City was able to bring about compliance at all sites for which enforcement actions were taken, and it was not necessary to report any of these sites to the RWQCB.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 Program Review and Modification

The City's JURMP was recently updated in March 2008. No changes to the City's construction component have been made since that time.

4.0 MUNICIPAL COMPONENT

4.1 INTRODUCTION

Throughout 2007/2008, the City of La Mesa continued to manage municipal areas and activities to reduce municipal discharges of pollutants to the MS4 to the MEP. As required by the Municipal Permit, the City updated its JURMP document in March 2008. Any changes made to the City's Municipal Component were implemented by the formal adoption date required by the Municipal Permit, March 24, 2008.

As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and activities. Public parks and recreation facilities, administrative buildings, fire stations, and public works facilities make up the bulk of the municipal areas in the City. Municipal activities conducted by the City or City contractors include but are not limited to power washing, graffiti abatement, building maintenance, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. Information about the City's prioritized street sweeping program can be found in Table 4-1, and information about the City's MS4 maintenance program can be found in Table 4-2. The City continued to respond to complaints made to the City's storm water hotline. All complaints made to the hotline are included in Appendix B; enforcement actions taken in response to complaint investigations are included in Table 4-3. Though some changes have been made to the program since the first JURMP was written in 2002, the overall goal of the program has remained the same—implementing preventative BMPs at the source to reduce the need for costly treatment farther downstream.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- The City inspected all high TTWQ fixed municipal facilities.
- The City hosted 34 training events/meetings for municipal personnel and agencies working closely with the City; over 200 City personnel participated in these training sessions.
- The City continued to keep the informational storm water bulletin board in City Hall.
- The City removed a total of 692 tons from street sweeping activities.
- The City removed a total of 175.5 cubic yards from standard MS4 cleaning activities, not including drainage insert maintenance.

- The City removed nine cubic yards from filter inserts in University drainage basin; the City installed one more of these inserts in 2007/2008 for a total of 23.
- City personnel continued to restock the pet waste bag dispensers in City parks, using 180,000 pet waste bags during 2007/2008.
- A total of 30,810 linear feet of sewer line were televised during 2007/2008, which led to the discovery of some areas of the sanitary sewer in need of repair. The City replaced 1,150 linear feet of storm drain pipe during 2007/2008 and replaced or rehabilitated 12,136 linear feet of sewer line. This prevented these areas from becoming future seepage points.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities. As mentioned in the City's JURMP, municipal fixed facilities have been grouped under one category, fixed facilities, because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar. For the purposes of organization, municipal fixed facilities are divided into the following categories: Parks and Recreational Facilities, Public Works Facilities, Fire Stations, and Other Fixed Facilities, which includes fixed facilities that could not be placed into another category.

4.2.2 SOURCE CHARACTERIZATION

All fixed facilities are included on the City's municipal inventory, which was revised during the JURMP update in early 2008. The JURMP includes detailed descriptions of each of the categories mentioned in the previous subsection and a discussion of activities beyond what is suggested by the facility's category or facility name. There were no changes to the City's municipal inventory nor were there any updates to the discussions of any fixed facilities on the City's inventory. The City's inventory is included as Appendix A.3.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City continues to implement and assess the effectiveness of BMPs at all fixed municipal facilities. As mentioned in the City's JURMP, the City uses the California Stormwater Quality Association (CASQA) Municipal BMP Handbook to establish appropriate BMPs for fixed municipal facilities. Table 6-2 in the City's JURMP describes the CASQA fact sheets that are used for specific facility types.

The City continues to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. The City also continues to use Calsense Computerized Irrigation Control (Calsense) at a

number of fixed municipal facilities to reduce water use and decrease the chance of transporting pollutants to the City's MS4 by over-irrigation. BMP implementation for parks and recreational facilities, as described in the City's JURMP, has not changed.

City public works employees, fire station employees, and employees at other fixed facilities in the City continue to implement BMPs appropriate to the facility type as described in the City's JURMP. City fire response personnel continue to be trained in implementing BMPs for non-emergency fire fighting activities as described in Section 3 of the City's JURMP. There have been no changes in BMP requirements for public works facilities, fire stations, and other fixed facilities.

4.2.4 PROGRAM IMPLEMENTATION

As mentioned above, the City's BMP requirements have not changed since the development of the revised JURMP. Some notable examples of implementation of those BMPs are provided below.

Calsense Computerized Central Irrigation Control
The City continues to use Calsense, an advanced automated irrigation system designed to prevent over irrigation at several fixed municipal facilities. Since Calsense is automated, it has a lower chance of malfunction than manual irrigation systems and allows the City to monitor irrigation activity from a central computer.

The Calsense system monitors irrigation by including the use of master valves and flow sensing to prevent over-irrigation and also decrease the amount of water that is used. A break in the system is recognized as a high flow, and the system is shut off until it is repaired. The use of this technology allows the City to prevent major leaks by detecting smaller leaks that might otherwise go undetected earlier than with a manual system. The automatic shutoff by Calsense saves thousands of gallons of water and prevents the runoff generated by a leak from carrying pollutants from parks and other fixed municipal facilities to the storm drain system. The irrigation system can be controlled by a central computer, which calculates the best time for irrigation based on moisture readings, weather, and real time flow rates at every valve. Additionally, the system allows staff to manage the system more efficiently and with less chance of over-irrigation. The irrigation schedules can be designed for a long period of time or easily modified for weekly or daily needs if necessary. The system allows for the most efficient usage of water while minimizing the chance of over-irrigation and consequent introduction of pollutants to the City's storm drain system. A total of 21 fixed facilities have been equipped with Calsense technology.

Parks and Recreational Facilities
During 2007/2008, City parks personnel installed eight new pet waste bag dispensers in City parks. The City now has a total of 34 pet waste bag dispensers in 14 parks. City personnel restock the dispensers as necessary; 180,000 pet waste bags were used during the reporting period. This is significantly more than during previous reporting periods. As mentioned in the City's JURMP, a number of volunteers continue to assist in keeping

the designated dog area at Harry Griffin Park free of pet waste as part of the Canine Corners Program. The City also continues to host the Adopt-A-Park program, which engages residents of the City in volunteering to pick up trash throughout local parks. The City further continued its partnership with the St. Madeline's Sophie Center, which employs developmentally disabled individuals in park maintenance activities. Kiosks in two City parks are another means of public outreach. The kiosks, one in La Mesita Park, the other in Vista La Mesa Park, present storm water information. The City plans to install one more kiosk in Jackson Park in 2008/2009. The Adopt-A-Park program, the partnership with St. Madeline's Sophie Center, and the storm water kiosks are also discussed in Section 9 of this Annual Report.

Public Works Facilities, Fire Stations, Other Fixed Facilities

As previously mentioned, City personnel continued to implement appropriate BMPs for municipal fixed facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance (i.e. landscaping, building maintenance, etc.) as necessary. Parking facilities associated with fixed municipal facilities are conducted as part of the regular sweeping activities and were swept weekly during 2007/2008. The large paved area at the City's Public Works Operation Center was swept at least once weekly during 2007/2008, and twice weekly if needed. Public Works employees continued to implement the storm water management plan (SWMP) at the Public Works Operations Center. Public Works employees also continued to maintain the seven filter inserts on the property; these inserts are cleaned twice annually.

Municipal Inspections

All high TTWQ fixed municipal facilities received an routine annual inspection in 2007/2008. Table 4-4 at the end of this section lists all 21 high TTWQ municipal fixed facilities requiring inspection in 2007/2008, the date the inspection was performed, and the recommended corrective actions from the inspection. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2007/2008. The City's municipal inspection form is included as Attachment 4.1.

Four fixed facilities were observed to have BMP deficiencies requiring follow-up action: the Community Pool, Harry Griffin Park, Northmont Park, Rolando Park, and the Public Works Storage Yard. The BMP deficiencies were not severe but were serious enough to warrant a follow-up inspection. During the initial inspection, facility personnel were notified of the deficiencies. Since most of the inspections were close to the end of the reporting period, the follow-up actions will be completed in the 2008/2009 reporting period. In future years the City plans to conduct inspections earlier in the reporting period.

During 2007/2008, the City's Stormwater Program Manager observed a broken irrigation valve at Porter Hall. The City's Stormwater Program Manager notified the responsible Public Works personnel with a verbal warning, and the valve was repaired immediately.

4.3 Roads, Streets, Highways, and Parking Facilities

4.3.1 Background

Roads, streets, highways, and parking facilities are often one of the first components of the City's MS4 to collect and convey runoff. These areas can collect a variety of pollutants due to routine vehicle use and use of the surrounding areas. The City conducts regular maintenance of roads, streets, highways, and parking facilities in the City to control pollutants such as sediment, metals, and litter and debris that may accumulate and then be discharged with runoff.

4.3.2 Source Characterization

The City maintains roads, streets, and highways in the City; the City also maintains four stand-alone parking facilities. Roads, streets, highways, are included as one entity on the City's municipal inventory and each individual stand-alone parking facility is also included on the city's municipal inventory, which is included in Appendix A.3.

4.3.3 Best Management Practices

The City's primary BMP for roads, streets, highways, and parking facilities is street sweeping. Other BMPs are chosen as needed based on the CASQA Municipal Handbook. The City's sweeping frequency is outlined in the JURMP and described in the following subsection. There were no changes to the BMPs implemented for roads, streets, highways, and parking facilities in 2007/2008.

4.3.4 Program Implementation

During 2007/2008, the City swept a total of 8,285 curb miles, removing approximately 692 tons of debris. Similar to previous reporting periods, the debris removed by sweeping activities was approximately 80 percent sediment and 20 percent leaves, debris, and trash. Table 4-1, below, describes the areas assigned high, medium, and low sweeping priorities, and the associated sweeping frequency. The City met the sweeping frequency requirements of the high, medium, and low priority streets as described in both the JURMP and in the table below. Parking lots associated with City parks were swept every two weeks; parking lots associated with all other fixed facilities in the City were swept every week during 2007/2008.

As a means to address priority pollutants in the San Diego Bay and the San Diego River Watersheds, the City conducted additional sweepings of some City streets. Designated residential areas that are low priority were swept monthly during 2007/2008 and selected high priority streets were swept weekly.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
Low	Designated residential areas	140 miles	As needed, at least annually
Medium	Center islands	9 miles	At least once per month
High	Downtown areas, designated residential areas, designated commercial areas, stand-alone parking facilities	10.6 miles	At least every two weeks
Fixed Facilities	Parking lots associated with municipal fixed facilities	N/A*	Weekly
Fixed Facilities - Parks	Parking lots associated with parks	N/A*	Every two weeks
Fixed Facilities – PW Operations Center	Public Works Operation Center	N/A*	At least weekly, twice weekly if needed
Total Amount of Debris Collected from Street Sweeping Activities: 692 tons			

* Mileage data is not available for the swept area of stand-alone parking facilities, parking facilities associated with municipal facilities, and the PW Operations Center. Mileage accrued while sweeping these facilities is included in the total mileage.

Inspections

As previously mentioned, there are four stand-alone parking facilities in the City, each high TTWQ. Routine, annual inspections were completed at each of the four parking facilities and results of the inspections are included in Table 4-4, at the end of this section.

4.4 MS4

4.4.1 Background

The City's extensive storm water conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during a rain event. The City's MS4 consists of approximately 56 miles of pipes of varying materials, natural channels, concrete channels, and culverts and over 400 curb inlets and catch basins.

4.4.2 SOURCE CHARACTERIZATION

The City's MS4 as one complete entity is included on the City's high TTWQ municipal inventory.

4.4.3 BEST MANAGEMENT PRACTICES

The City maintains a strict MS4 maintenance and cleaning schedule. Maintenance and cleaning are conducted to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. As described in the City's JURMP, BMPs for MS4 maintenance activities are chosen based on the CASQA Municipal Handbook and have not changed during 2007/2008.

The City has installed and maintains 23 filter inserts in catch basins in the University drainage basin, which are designed to prevent debris from entering the MS4. These filter inserts are maintained as part of the routine MS4 maintenance schedule.

4.4.4 PROGRAM IMPLEMENTATION

The City implemented a rigorous MS4 inspection and cleaning schedule during 2007/2008. The City inspected and cleaned all MS4 cleanout locations twice in 2007/2008, as described in Table 4-2, below.

Table 4-2
MS4 Maintenance Data

	Percent Inspected and/or Cleaned*	Percent of Open Channels Found with Anthropogenic Litter	Amount of Debris Removed from Cleaning Activities
Catch Basins/Self Cleaning MS4 Facilities	100%	N/A	58.5 cubic yards
Open Channels	100%	100%	117 cubic yards
Drainage Inserts	100%	N/A	9 cubic yards
Total Debris Removed From MS4 Maintenance Activities: 184.5 cubic yards			

* No structures were observed at least 33% of capacity during the reporting period. However, the City cleans out any structures, including self-cleaning structures, in which trash and debris is observed at the time of inspection.

The City's cleanout locations are access points to various sections in the City's MS4, so no additional pipe beyond the cleanout location is typically cleaned. The City may flush the MS4 line and then reclaim the water in the event of a spill. During 2007/2008, there was no need to flush any MS4 line, so there is no data to report for additional MS4 cleanout activities. The City continued to maintain the filter inserts installed in the University drainage basin and installed an additional insert in 2007/2008. A total of 23 catch basins or inlets in the University drainage basin are equipped with filter inserts.

During 2007/2008, the City continued to inspect the open channels in the City and remove trash and debris as necessary. If litter or debris is observed during the routine inspections, it is removed immediately. The total length of the channel segments inspected and cleaned by City staff is approximately 4,930 feet.

As described in Table 4-2, 184.5 cubic yards of debris was removed during MS4 maintenance activities. The weight of the material removed was not recorded. The volumes were converted to estimated weights using the percent composition estimates from City maintenance staff and conversion factors of 2,300 pounds per cubic yard of rocks and soil and 400 pounds per cubic yard of trash, leaves, and similar material. The total weight of material removed was estimated at 120 tons.

4.5 Sanitary Sewer System

4.5.1 Background

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. A spill that introduces untreated sewage to receiving waters can contain high concentrations of bacteria, viruses, and even hazardous chemicals. Routine inspection and maintenance of the sanitary sewer system works to reduce the potential for a spill or sanitary sewer overflow (SSO) and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 Source Characterization

The City maintains a system of public sanitary sewer pipes to convey wastewater from the City to be treated. The sanitary sewer system, as one complete entity, is included on the City's high TTWQ municipal inventory.

4.5.3 Best Management Practices

The City implements BMPs from the CASQA Municipal Handbook, as described in the City's JURMP, during sanitary sewer maintenance. There have been no changes to these BMPs during 2007/2008. The City inspects and maintains the sanitary sewer system as part of regular wastewater activities. The City clears blockages and repairs leaks as needed.

4.5.4 Program Implementation

The City continued to maintain 33 posted signs at various canyon locations providing emergency contact information to report possible SSOs. These signs help the City in responding to illegal discharges and SSOs that may otherwise go unnoticed for a longer period of time.

As part of the City's regular maintenance schedule, the City maintains areas known to be "hot spots" for grease buildup on a monthly basis. The City has also worked to develop a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs. The City conducted initial FOG evaluations at a number of eating establishments during 2007/2008 and plans to fully implement the program in 2008/2009.

In addition to the monthly maintenance at known grease "hot spots," the City seeks to eliminate seepage from the sanitary sewer system to the MS4 by routine preventative maintenance of both systems. Routine maintenance of both systems allows the City to find areas that are likely to become problems in the future and make the necessary repairs/replacements before any larger issues arise. The City also continued to conduct flow metering in its sanitary sewer system to monitor for evidence of potential problems. The City cleans out or repairs any identified problem areas as necessary. The City continued to use the $14.5 million dollar low-interest loan it has obtained from the State Water Resources Control Board (SWRCB) to rehabilitate sections of the City's sanitary sewer system. The program is anticipated to be completed in the 2008/2009 reporting period. During 2007/2008, the City replaced 1,150 linear feet of storm drain pipe and replaced or rehabilitated 12,136 linear feet of sewer line. A total of 30,810 linear feet of sewer line was televised during 2007/2008, which led to the discovery of some areas of the sanitary sewer in need of repair. This prevented these areas from becoming future seepage points.

In case of an SSO, the City maintains a spill response plan that establishes procedures for responding to an SSO. Detailed information about the City's SSO spill response plan is included in the City's JURMP. There were no SSOs during 2007/2008.

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City conducts a variety of different mobile municipal activities, typically involving infrastructure maintenance, landscape maintenance, graffiti removal, and power washing. Power washing is not considered a part of any normal maintenance activities, but it is used when other methods of cleaning or graffiti removal are not effective.

4.6.2 Source Characterization

Both power washing and graffiti removal are listed on the City's high TTWQ municipal inventory. Infrastructure maintenance and landscape maintenance are listed on the City's medium TTWQ municipal inventory.

4.6.3 Best Management Practices

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel are trained to implement BMPs for the specific activity in which they are involved. For example, City personnel performing power washing are trained to collect all waste water and City personnel conducting graffiti removal are trained to store and handle any chemicals properly. New City employees are also provided with a copy of the municipal BMP handbook. The handbook includes the municipal BMPs from the City of La Mesa Storm Water Best Management Practices Manual – Part I (BMP Manual Part I). A more detailed discussion of BMPs for specific mobile activities is included in the City's JURMP, which also includes BMP Manual Part I as an attachment.

4.6.4 Program Implementation

Power washing and graffiti removal, both high TTWQ activities, are conducted on an as needed basis and are therefore not on a set schedule. These activities were not available for inspection after the formal adoption of the JURMP in March 2008, so an inspection could not be conducted during the 2007/2008 reporting period. In the event that these activities are conducted during the 2008/2009 reporting period they will be inspected.

During the 2007/2008, a few minor BMP infractions were observed by City staff but were resolved in a timely manner. During routine activities, the City's Stormwater Program Manager observed over-irrigation from City property near La Mesa Boulevard. The City's Stormwater Program Manager issued a written warning to Public Works personnel responsible for landscaping in that area and provided them with an over-irrigation fact sheet. No other issues with over-irrigation have been observed in this area. A City employee reported to the City's Stormwater Program Manager that City landscaping activities had left some grass clippings on a sidewalk at the Adult Enrichment Center. The appropriate public works employees were notified with a verbal warning, and the grass clippings were cleaned up immediately.

4.7 Special Events

4.7.1 Background

There is one annual special event in La Mesa: Oktoberfest, which is an annual three-day celebration occurring in early October each year. There are no other regular major special events, although smaller events may occur from time to time.

4.7.2 Source Characterization

As required by the Municipal Permit, special events are included on the city's high TTWQ municipal inventory.

4.7.3 BEST MANAGEMENT PRACTICES

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter/debris from the event, and raise storm water awareness among the vendors and patrons of the event, as applicable.

4.7.4 PROGRAM IMPLEMENTATION

The City did not host any special events after the formal adoption of the updated JURMP, so there were no special events available for inspection during 2007/2008. The City did host clean-up events after the formal adoption of the updated JURMP, but since the purpose of the clean-up events is to remove trash and debris, the City does not consider it necessary to implement BMPs for clean-up events.

During 2007/2008, the City provided vendors of the Oktoberfest event set to occur in 2008/2009, a handout entitled "Tips for Outdoor Vendors." This fact sheet informed the vendors of the difference between the storm drain system and the sanitary sewer system and the effects of polluted urban runoff. The sheet also included event-specific BMPs, such as using dry cleaning methods, having spill response materials if using cooking grease, and managing trash and other wastes properly. The City distributed 311 of the aforementioned fact sheet.

4.8 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

Reporting and Response

Public and municipal involvement are crucial to preventing and eliminating illicit connections and illegal discharges (IC/ID) from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is provided on the City's website, in distributed storm water educational material, in storm water articles in the *La Mesa Focus* newsletter, and on the Storm Water Bulletin Board. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged onto a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges. The Public Works Department also receives complaints regarding storm water, often due to infrastructure concerns. Complaints to the Public Works Department are also tracked and investigated.

Complaints received by the City during the 2007/2008 reporting period and the City's response to each are listed in Appendix B. One hundred thirty-seven complaints were

documented this year, an increase from the 89 recorded last year. The increase in documented complaints may indicate that individuals in the City are more aware of the impact of certain activities on the storm drain system as well as the need to report such activities to the Storm Water Hotline and/or the City website.

Enforcement

As previously stated, investigated complaints from the Storm Water Hotline, City website, and Public Works hotline are included in a table in Appendix B. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, violations, and/or educational material. Table 4-3 summarizes the enforcement actions taken in response to complaints received.

Table 4-3
Enforcement Actions Resulting from Complaints Received by the Storm Water Hotline

	Verbal Warning	Written Notice to Comply	Written Warning	NOV
Commercial	6	1	1	9
Industrial	0	0	1	0
Mobile	0	0	0	6
Municipal	4	0	0	0
Residential	4	2	17	5
Construction	2	0	0	2

4.9 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to sanitary sewer overflows. Preventative maintenance is regularly conducted on the City's sanitary sewer system, and video inspections and sewer surveys are regularly conducted to monitor the condition of the public sewer lines and to determine the necessity of maintenance. Private lateral lines do not receive preventative maintenance, but the City assists in the containment and cleanup of sewer spills if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report any SSOs to the City's Storm Water Hotline. During the 2007/2008 reporting period, only one spill occurred and was reported to the RWQCB within 24 hours. A detailed email regarding the spill was sent to by the City, and the RWQCB deemed it unnecessary to produce a formal report on the event:

- On 6/4/2008, the City received a complaint about a homeowner discharging a 500 gallon tank from his residence at 4950 Pine Street. When the La Mesa Fire Department arrived at the site no active discharge was observed, but red staining was apparent on the curb of the street. The hazmat team advised the

homeowner to place kitty litter along the curb and issued an NOV for the illegal discharge. Educational material and instructions for proper disposal of the kitty litter were provided to the resident.

4.10 Education and Outreach

During 2007/2008, the City continued to educate municipal personnel regarding proper BMP implementation and other storm water and watershed concepts. The City held a variety of training sessions for City personnel. During 2007/2008 the City hired three new employees that were provided a copy of the City's municipal BMP handbook. Additionally, the City sent an e-mail to all its employees about the adoption of the new JURMP and the new programs associated with the update. The City also continued to maintain a storm water bulletin board in City Hall, which provided storm water information and brochures. Detailed information regarding the education and outreach conducted for City personnel is described in detail in Section 8 of this Annual Report. Information about the municipal tailgate training sessions, a copy of the municipal BMP handbook, a copy of the Citywide e-mail, and a photo of the storm water bulletin board are included in Attachment 4.2.

4.11 Municipal Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.12 Program Modification and Review

The City's JURMP was recently updated in March 2008. No changes to the City's municipal component have been made since that time.

Table 4-4
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Municipal Category	Inspection Date	Recommended Corrective Actions
1	Allison Avenue Lot (Parking Facility)	Palm & Allison Avenues	High	Roads, Streets, Highways, and Parking Facilities	5/16/2008	• Provide secondary containment for portable toilet and sink since they are stored liquid.
2	Aztec Park	Corner of Aztec Dr and Morocco Dr	High	Parks and Recreation Facilities	6/20/2008	• None
3	Briercrest Park	9000 Block Wakarusa Street	High	Parks and Recreation Facilities	6/4/2008	• None
4	Collier Park and Pump House	4401 Palm Avenue	High	Parks and Recreation Facilities	6/20/2008	• Inspect the upper area of the park and remove litter. • Remove leaves and sediment from the culvert and the open channel. • Provide additional vegetative or physical stabilization to prevent sediment transport into the channel. • Keep dumpster lids closed when not in use.
5	Community Pool	5100 Memorial Drive	High	Parks and Recreation Facilities	5/22/2008	• Use dry methods or collect all water used to cleanup pool chemicals and dispose of appropriately to a sewer drain. Provide some documentation of this change of practice. • Minimize discharge of water to deck chains that are not directed to the sewer. • Stabilize loose soil in the parking lot landscaping to prevent erosion and sediment transport.
6	Harry Griffin Park	9550 Milden Street	High	Parks and Recreation Facilities	6/24/2008	• Clean out leaves and litter from catch basins and parking lots and trash enclosures. • Keep loose soil out of the parking lot from the horseshoe pit and gopher soil mounds. • Keep dumpster lids closed when not in use. • Provide secondary containment for the port-o-potty units as is feasible.

Table 4-4 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Municipal Category	Inspection Date	Recommended Corrective Actions
7	Highwood Park	4200 Parks Avenue	High	Parks and Recreation Facilities	5/16/2008	• Collect organic debris that has accumulated in the parking lot, trench drain, catch basin and on sidewalks. • Pick up litter and keep the site free of litter. • Properly store stockpiles with covered containment to prevent soil transport to the trench drain and catch basin. • Consider replacing pet waste bags in the dispenser(s).
8	Jackson Park	Jackson Drive & Laird Stree	High	Parks and Recreation Facilities	5/21/2008	• Ensure that the sidewalks and parking lot remain free of sediment, and stabilize the planter soil as necessary. • Keep dumpster lids closed when not in use. Consider re-labeling the pet waste bag dispenser.
9	Junior Sean Sports Complex	9001 Park Plaza Drive	High	Parks and Recreation Facilities	6/20/2008	• Clean out litter from the curb inlet. • Remove sediment regularly from catch basins around the perimeter or otherwise prevent sediment transport to the storm drain.
10	La Mesa Blvd (Parking Facility)	La Mesa Blvd & Acacia Avenue	High	Roads, Streets, Highways, and Parking Facilities	5/16/2008	• Clean up organic debris in the parking lot.
11	La Mesita Park and Gardener's Shack	8855 Dallas Street	High	Parks and Recreation Facilities	6/20/2008	• Remove litter regularly in high traffic/use areas of the park. • Collect vegetative debris from the parking lot and clean out catch basins.

Table 4-4 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Municipal Category	Inspection Date	Recommended Corrective Actions
12	Lemon Ave Lot (Parking Facility)	Lemon Avenue & 3rd Street	High	Roads, Streets, Highways, and Parking Facilities	5/16/2008	• Keep the parking lot free of litter and debris. • Keep all dumpster lids closed when not in use. • If the couches do not belong to the thrift shop, remove and dispose of them appropriately.
13	MacArthur Park	University Avenue and Memorial Drive	High	Parks and Recreation Facilities	5/22/2008	• Keep the parking lots free of organic debris. • Keep dumpster lids closed when not in use. • Provide secondary containment for the port-o-potty.
14	Northmont Park	Severin Drive and Amaya Drive	High	Parks and Recreation Facilities	6/20/2008	• Clean out leaves and debris from storm drain inlets. • Regularly check the site for litter and pick it up. • Ensure that storm drains are protected when applying herbicide to prevent these chemicals from entering the storm drain system. • Cover the soil stockpile as long as it must remain on the site.
15	Palm Avenue Lot (Parking Facility)	Palm Avenue and Lemon Ave	High	Roads, Streets, Highways, and Parking Facilities	5/16/2008	• None
16	Porter Hall	4610 Memorial Drive	High	Parks and Recreation Facilities	5/22/2008	• None
17	Porter Park	8425 University Avenue	High	Parks and Recreation Facilities	5/22/2008	• Keep the dumpster lids closed when not in use and regularly place litter in the dumpster.

Table 4-4 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Municipal Category	Inspection Date	Recommended Corrective Actions
18	Public Works (PW) Yard	8152 Commercial Street	High	Public Works Facilities	5/22/2008	• Clean up and treat leaked fluids and stains. • Keep area free of sediment. • Provide drip pans or other effective method to contain leaks from heavy equipment.
19	PW Fleet	8152 Commercial Street, Building 400	High	Public Works Facilities	5/22/2008	• Clean out sediment or debris from the inlet filter basket and nearby area. • Consider providing overhead over for the fueling area.
20	PW Storage and Maintenance	8152 Commercial Street, Building 200	High	Public Works Facilities	5/22/2008	• Clean up sediment under parked equipment and at the NW inlet. • Keep secondary containment free of spilled liquids. • Prevent fluid leaks or catch them with a drip pan or other effective method. • Consider providing overhead cover for the fueling area.
21	PW Storage Yard	8152 Commercial Street	High	Public Works Facilities	5/22/2008	• Clean up sediment in the stockpile area, storage area and near the inlet. • Clean sediment out of the filter basket in the inlet. • Cover the stockpiles when not in use and keep the area free of loose sediment. • Consider providing overhead cover for the fueling area.

Table 4-4 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Municipal Category	Inspection Date	Recommended Corrective Actions
22	Rolando Park	Alamo Way & Vigo Street	High	Parks and Recreation Facilities	6/6/2008	• Replace and improve implementation of construction BMPs intended to prevent sediment transport to the storm drain catch basin and curb inlet at the cul-de-sac. • Clean up sediment and plant debris in the parking lot and on paved walkways. • Remove plant debris from all storm drains. • Vegetate or otherwise stabilize the slope between the east ramp and the upper field and consider extending the retaining wall or wood boards as are used downhill. • Provide cover and containment for stockpiles stored at the park.
23	Sunset Park, Gardener's Shack and Recreational Building	5540 Lake Park Way	High	Parks and Recreation Facilities	5/21/2008	• Provide some form of soil stabilization for the slope west of the park to prevent erosion to the parking lot. • Level the mounds of soil in the planters that would otherwise be able to spill onto the sidewalk. • Keep the parking areas free of oil leaks and stains.
24	Sunshine Park	70th & Tower St	High	Parks and Recreation Facilities	6/10/2008	• Clean out the sediment and debris in the catch basin south of the field
25	Vista La Mesa Park	King Street & Hoffman Avenue	High	Parks and Recreation Facilities	5/16/2008	• Keep the parking area and swale free of sediment and organic debris. • Consider repairing and refilling the pet waste bag dispenser.

Note: Roads, streets, highways, and parking lots; the MS4; and the sanitary sewer system were inspected via the maintenance effort described earlier in this section.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During 2007/2008, the City continued to implement a storm water program to mitigate urban runoff pollution from the areas and activities of industrial and commercial businesses. As part of the JURMP revision, updates were made to the City's industrial and commercial site/source prioritization process, minimum BMP requirements, and inspection frequencies. The City's updated program was implemented after the formal adoption date of the JURMP in March 2008. Through various aspects of the industrial and commercial program, the City aims to reduce the amount of pollutants discharged from these facilities.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the industrial and commercial component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- The City met the Municipal Permit requirement of inspecting at least 20 percent of its stationary industrial and commercial inventory.
- The City inspected all high TTWQ industrial and commercial facilities.
- The City completed pollutant discharge potential assessment (PDPA) forms and additional watershed-specific questionnaires at inspections to aid watershed management and source identification efforts.
- The City prepared a Chollas Creek Total Maximum Daily Load (TMDL) educational fact sheet and distributed it to businesses in the Chollas Creek Watershed during inspections.
- Based on inspection findings and complaints made to the hotline, the City issued 50 NOVs, two written warnings, one written notice to comply, and six verbal warnings to industrial and commercial businesses.
- One mobile business signed the City's mobile business affidavit acknowledging that it was aware of the City's BMP requirements.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 BACKGROUND

The City's industrial and commercial inventories, which can be found in appendices A.4 and A.5, include all stationary facilities known to be operating in the City that are

required to be included on the City's inventories. Stationary facilities in the City include, but are not limited to, manufacturing facilities, wholesalers, auto dealerships, auto repair shops, and restaurants. The City requires industrial and commercial businesses to implement pollution prevention measures and designated minimum BMPs to mitigate the impacts of business activities on water quality.

5.2.2 Source Characterization

As previously mentioned, the City's industrial and commercial inventories are included as appendices A.4 and A.5. The inventories include both stationary and mobile businesses, as required by the Municipal Permit. The inventories were updated in mid 2007/2008 as part of the JURMP update using applicable data from the City's business license registry, the then existing inventory and inspection records, and the State's list of industrial sites covered under the State of California Industrial General Permit (Industrial Permit).

Information on how the City prioritizes the industrial and commercial inventories based on TTWQ is discussed in detail in the City's JURMP. The City considers factors including those listed below when prioritizing the inventories:

- Industrial Permit subjectivity
- Consideration of downstream waterbody and whether the business is likely to discharge pollutants for which the waterbody is impaired
- Results from previous inspections and institutional knowledge
- Proximity to the receiving waterbody

The City's updated inventory includes 511 stationary industrial and commercial facilities.

5.2.3 Best Management Practice Requirements

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other BMPs to reduce or potentially eliminate the generation of pollutants from business areas/activities. The City has established a set of minimum BMPs based on the CASQA Industrial and Commercial Handbook. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. The City's BMP requirements are described in more detail in the City's BMP Manual Part I, which is an attachment to the City's JURMP.

5.2.4 Program Implementation

Industrial and Commercial Inspections

During 2007/2008, the City conducted storm water compliance inspections at selected stationary industrial and commercial facilities; Table 5-1 provides a summary of the industrial and commercial site visits. The purpose of the inspections is to confirm that the City's minimum BMPs are being implemented at stationary industrial and commercial facilities. The City also checks for Industrial Permit subjectivity and reviews SWPPPs and monitoring results when applicable.

Since requirements of the new Municipal Permit did not go into effect until March 2008, the industrial and commercial component of the City's storm water program was conducted under the Order No. 2001-01 requirements for the first part of the 2007/2008 fiscal year and under the new Municipal Permit requirements for the latter part of the 2007/2008 fiscal year. Though the new Municipal Permit only required 50 percent of the high TTWQ sites to be inspected during the first year of implementation, the City chose to inspect 100 percent of its inventoried high TTWQ industrial and commercial businesses. The City also met the new Municipal Permit requirement that 20 percent of the total number of facilities on the City's inventory be inspected during the first year of program implementation. All facilities in the City with Industrial Permit coverage were also all inspected in 2007/2008, which meets the requirements of the previous municipal permit. During the inspection process, the City also checked Industrial Permit compliance status when applicable. Businesses observed to be in violation of the Industrial Permit are included in Table 5-2 on the following page.

Table 5-1 below provides a summary of the industrial and commercial site visits. As shown in the table, all high TTWQ sites were selected for inspection, and additional medium TTWQ sites were also selected for routine inspection. Additional sites selected for inspections were medium TTWQ and were typically restaurants and auto-related facilities. The City chose to select mainly restaurants and auto-related facilities for the additional industrial and commercial inspections due to those industry categories' potential to discharge bacteria and heavy metals, respectively. Table 5-3 at the end of this section summarizes the results of the 88 full inspections conducted at 87 facilities as part of the routine inspection program; note that one facility was inspected twice during 2007/2008. The remainder of the sites were visited, but during the visit they were found to have moved, be duplicates of other businesses, or not to be conducting activities for which inclusion on the City's inventory is necessary. Several sites were also selected as part of an additional study to help characterize a light industrial area of the City. The inspections conducted as part of the additional study are discussed in detail in Section 12 and are not included in Table 5-3.

Table 5-1
Summary of Industrial and Commercial Site Visits

Facility Category	Initial List	Accounted For*	Percentage of Total Inventory
High TTWQ Industrial	12	12	2%
High TTWQ Commercial	20	20	4%
Additional Sites Selected for Inspection	72	72	14%
Additional Study "Light Industrial" Area	6	6	1%
All Stationary Inventoried Sites	**530****	**--**	**21%**

* "Accounted For" means that the business was inspected, assessed during a site visit and found to not need an inspection, or found to not need an inspection when called to schedule a site visit.

** The number of sites selected for inspection in 2007/2008 was based on the inventory presented in the JURMP, which included 530 businesses. The final inventory presented in this JURMP Annual Report has been updated to account for inspection results during 2007/2008 and includes only 511 stationary businesses.

Facility inspections were conducted in accordance with the protocol set in the City's JURMP. Inspections involved a through examination of the facility and all outdoor activities. BMP deficiencies and corrective actions were recorded on the City's industrial and commercial inspection form, which is included in the City's JURMP, and discussed with facility personnel present during the inspection. The City also completed PDPA forms and supplemental watershed questionnaire forms during the inspections as part of an additional data collection effort. These forms are included with the City's inspection form, which is included in Attachment 5.1. More information about the results of this process is presented in Section 12 of this JURMP Annual Report.

The City did not rely on third party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third party inspection program.

General Industrial Permit

Industrial Permit compliance status was evaluated during the industrial and commercial inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector gathered information about the business activities that occur on site and assigned or reassigned the business' standard industrial classification (SIC) code(s). The inspector then determined Industrial Permit subjectivity based on SIC code. Violations of any aspect of Industrial Permit requirements were recorded on the standard industrial and commercial inspection form and are presented in Table 5-2 on the following page. The table includes businesses directed to file a Notice of Intent (NOI) and develop a Storm Water Pollution Prevention Plan (SWPPP) and monitoring program, as well as businesses that

had filed an NOI but had failed to develop a SWPPP and monitoring program. The table also includes facilities that could potentially gain exemption from Industrial Permit requirements by completing notice of non-applicability/no exposure certification (NONA/NEC) paperwork.

Table 5-2
Violations of the Industrial Permit

#	Business Name	Street Address	Permit Subjectivity	Action to Correct Violation				
				File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC	Other
1	Albert J. Becker, Inc. dba Wood Design West	8333 Case Street Suite C	Conditional				✔	
2	Amazing Stone and Tile	8227 Commercial Street	Mandatory	✔	✔	✔		
3	American Tanks	8111 Commercial St	Conditional	✔	✔	✔		
4	Centex Glazing	8260 Commercial St.	Conditional	✔	✔	✔		
5	Classic Screen Print*	8176 Center St, Ste. C	Conditional				✔	
6	Rainbow Steel Inc.	8332 Case St.	Conditional					Keep a copy of the SWPPP on site at all times. Perform storm water monitoring as required by the Industrial Permit.
7	Wedo Wedo	8169 Center Street	Mandatory					Keep a copy of the SWPPP on site at all times. Perform storm water monitoring during the next wet season.

* Completed NONA/NEC paperwork has been received by the City in 2008/2009

Each business was notified of any Industrial Permit-related non-compliance by the inspector. Each business observed to be in violation of the Industrial Permit was issued an NOV. Details of NOVs issued in response to the findings of the 2007/2008 inspection program are discussed later in this section. During 2007/2008, the City's Stormwater Program Manager maintained correspondence with the RWQCB regarding industrial non-filers and other Industrial Permit-related instances of non-compliance. Don Perrin

of the RWQCB was notified via email of all three non-filers in the above list and of the compliance deficiencies at Rainbow Steel during the reporting period.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to provide site-specific one-on-one education regarding storm water concepts and BMPs. Inspectors distributed a variety of educational material covering topics such as watershed concepts, San Diego County Water Authority (SDCWA) water conservation efforts, and the City's new BMP requirements. Copies of the industrial and commercial component of the City's JURMP, which detail the City's BMP requirements, was provided to businesses that received full storm water compliance inspections. A description of the specific educational material provided to industrial and commercial facilities is included below. Educational materials distributed during the 2007/2008 industrial and commercial storm water compliance inspections are included in Attachment 5.1.

- Inspected facilities in the Alvarado drainage basin received the following educational material:
    - Letter from the City – "Re: Storm Water Compliance Inspections" informed business owners of the inspection program and provided notification that D-MAX inspectors were to perform the inspections.
    - Trifold – "Preventing Urban Runoff Pollution" discussed the activities that create storm water pollution and the BMPs required to prevent it.
    - San Diego River Watershed Factsheet outlined watershed concepts, priority pollutants and required BMPs for the San Diego River Watershed.
    - BMP Manual Part I – "3.0 – BMP Requirements for all Dischargers" discussed the types of discharging activities and all relevant BMP requirements.
    - Over-Irrigation Stormwater Pollution Prevention Factsheet outlined the contribution of over-irrigation to storm water pollution as well as guidelines to prevent over-irrigation.
    - SDCWA Water Efficiency Discounts provided information on discounts for water efficient devices for restrooms and HVAC systems.
    - SDCWA Smart Landscape provided information on irrigation evaluations, artificial turf, and smart controllers and provided guidelines on how to purchase and qualify for a new controller.

- Inspected facilities in the University drainage basin received the following educational material:
    - Letter from the City – "Re: Storm Water Compliance Inspections" informing business owners of the inspection program and notification that D-MAX inspectors were to perform the inspections.
    - Trifold – "Preventing Urban Runoff Pollution" discussed the activities that create storm water pollution and the BMPs required to prevent it.

- San Diego Bay Watershed Factsheet outlined watershed concepts, priority pollutants and required BMPs for the San Diego Bay Watershed.
- BMP Manual Part I – "3.0 – BMP Requirements for all Dischargers" discussed the types of discharging activities and all relevant BMP requirements.
- Over-Irrigation Stormwater Pollution Prevention Factsheet outlined the contribution of over-irrigation to storm water pollution as well as guidelines to prevent over-irrigation.
- SDCWA Water Efficiency Discounts provided information on discounts for water efficient devices for restrooms and HVAC systems.
- SDCWA Smart Landscape provided information on irrigation evaluations, artificial turf, and smart controllers and provided guidelines on how to purchase and qualify for a new controller.
- Chollas Creek TMDL Fact Sheet discussed the TMDLs for Chollas Creek as well as BMPs to employ to ensure that no pollutants enter the drainage system.

- All eating establishments received SDCWA "20 Gallon Challenge" informational cards and a table tent describing the SDCWA's 20 gallon challenge campaign. Eating establishments received information brochures entitled "Grease Interceptors and Grease Traps, How to Keep Cooking Grease Out of the Drain" and "What's Cookin'" brochures, as applicable. Both brochures were also available in Spanish.
- Auto shops received the "Green Wrench Guide" as applicable. The brochure discussed storm water concepts, required BMPs, good housekeeping techniques, and City contact information. This brochure was also available in Spanish.

The City continued to partner with Target and Dixieline Lumber in the City to provide English and Spanish Integrated Pest Management (IPM) cards (Attachment 5.2) available to the public at each business's garden center. This continued collaboration between the businesses and the City's Stormwater Program Manager in distributing educational material is valuable to the city's storm water program. During 2007/2008, a total of 120 packets of English IPM cards and 115 packets of Spanish IPM cards were distributed through Target and Dixieline Lumber.

Similar to previous years, the City continued to publish storm water-related articles in the widely distributed *La Mesa Focus* newsletter. The 2007 issues were mailed to residents and businesses in the City, and the 2008 issues were distributed electronically. Summaries of the articles in the newsletter can be found in Section 6; the newsletters are included as Attachment 5.3 to this JURMP Annual Report.

Enforcement

Based on the 2006/2007 inspection, the City conducted a follow-up inspection at Dixieline Lumber in the fall of 2007. Many of the corrective actions had been implemented, but additional corrections were still necessary. The City inspected

Dixieline Lumber again in the spring of 2008, and again some improvement was noted, with only relatively minor corrective actions noted. The City also coordinated with the RWQCB regarding Industrial Permit noncompliance noted in the City in 2006/2007 and 2007/2008. More information about the sites out of compliance and enforcement actions taken is available both in the Industrial Permit compliance discussion earlier in this section and in a bulleted list later in this enforcement subsection.

Several industrial and commercial facilities were also observed to be out of compliance with the City's municipal storm water ordinance and/or the Industrial Permit during inspections conducted in 2007/2008. Most of the inspections were conducted close to the end of the 2007/2008 reporting period, so actions to bring the sites into compliance will continue into the 2008/2009 reporting period. The City did, however, send NOVs to businesses in violation of the City's municipal storm water ordinance and/or the Industrial Permit during 2007/2008. A total of 35 NOVs were mailed in response to the 2007/2008 inspections. A summary of NOVs issued in response to the 2007/2008 inspections is included below:

- Five industrial facilities were in violation of an aspect of the Industrial Permit related to filing an NOI and/or a SWPPP and monitoring program and were mailed an NOV. Three of these facilities were also in violation of the City's storm water ordinance for failing to properly implement BMPs. Permit-related and City ordinance-related violations were included on the same NOV, and the RWQCB was notified of Industrial Permit noncompliance.
- Thirty industrial and commercial facilities, not including the three above that were also issued NOVs for noncompliance with the Industrial Permit, were issued NOVs for failing to properly implement BMPs.

Three industrial and commercial IC/IDs were discovered during routine inspections. All three were due to a lack of proper BMP implementation when performing car washing activities. All three facilities were given NOVs after they were inspected toward the end of 2007/2008, and follow-up inspections will be conducted during the 2008/2009 reporting period. In addition to these three IC/IDs, two inspected facilities were noted as having potential IC/IDs. The City is following up with these facilities to ensure they come into compliance with the City's requirements:

- On 5/28/2008, Chili's Bar and Grill #454, located at 8285 Fletcher Parkway, received a routine inspection. During which the inspector observed a poorly maintained enclosed area behind the restaurant where the waste grease bin and bags of trash waiting to go to the dumpster are stored. Three drains were observed in this general area, each appearing to regularly receive a greasy discharge. During the inspection, the facility personnel present were under the assumption that each of the three drains was connected to the sanitary sewer system. Facility personnel checked the building plans and determined that only one of the drains is connected to the sanitary sewer system. Facility personnel reported that deck brushing and power washing the area and with discharge to

the three drains in that area was a regular occurrence at the facility. Because no discharge was observed at the time of inspection, no violation for illegal discharge was noted. Facility personnel were notified that wash water cannot be allowed to discharge to the drains that are connected to the storm drain system, which would be an illegal discharge.

- On 6/10/2008, Marie Callender's #72, located at 6950 Alvarado Road, received a routine inspection. During which the inspector observed two trench drains in the loading and disposal areas that had evidence of grease discharge (grease buildup in the grates). The general manager, who was present for the inspection, reported that the drains were installed approximately five years ago to collect water from washing activities in the parking lot and are connected to the sanitary sewer system. The general manager provided D-MAX a cost estimate from a contractor hired to route the drains to the sanitary sewer system, but no other documentation that the drains are connected to the sanitary sewer system, such as final building plans, could be provided. The business was issued an NOV directing it not to discharge to the drain, and the issue was also referred to the appropriate City staff to investigate whether the drain was a sewer drain and, if so, if the proper permits had been obtained.

During the course of the 2007/2008 reporting period, the City received a number of complaints through the City's storm water hotline regarding industrial and commercial businesses. Based on the results of the complaint investigations, the City took enforcement actions for stationary commercial and industrial facilities. Details of the industrial and commercial complaint investigations are included in Appendix B and Section 7 of this JURMP Annual Report. The City took the following enforcement actions in response to complaints.

- Issued two written warnings and one notice to comply
- Issued six verbal warnings
- Issued nine NOVs

There were no instances of noncompliance at stationary businesses found to present a significant threat to human health or the environment observed during 2007/2008. Other than the non-filers discussed earlier in this section, no other businesses were reported to the RWQCB.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Due to the nature of activities of most mobile businesses, a major area of concern tends to be illegal discharges. In general, mobile businesses can be hard to identify, as many may not have City business licenses. Additionally, because many mobile businesses may be home based and activities do not occur in one fixed location, inspections of such facilities are impractical.

5.3.2 Source Characterization

Known mobile industrial and commercial businesses, as described in the City's JURMP, are included on the City's inventory and are marked as mobile.

5.3.3 Best Management Practice Requirements

BMPs for stationary industrial and commercial facilities, as discussed earlier in this section, are required to be implemented for mobile activities, as applicable. BMPs for mobile businesses, including key principles, such as proper collection and disposal of any discharge, are discussed in the City's JURMP. The City has also established a program that requires mobile businesses operating in the City to sign an affidavit that makes them aware of the City's BMP requirements and commits the businesses to implementing them. There have been no updates to the BMP requirements as described in the JURMP.

5.3.4 Program Implementation

Throughout the course of 2007/2008, the City responded to eight calls to the City's storm water hotline regarding mobile businesses. Notable occurrences of non-compliance as well as the City's response are discussed below:

- City personnel reported to the storm water hotline that a mobile pool plastering business discharged plaster into the street in front of a private residence where work was being conducted. The City's Stormwater Program Manager investigated the complaint and issued an NOV to the business owner. Educational material and direction on clean up were provided. The City's Stormwater Program Manager verified the street had been cleaned.
- An anonymous caller reported a property management company power washing building awnings without any BMPs. The City's Stormwater Program Manager investigated and verified the complaint, and issued an NOV to the property management company conducting the power washing. Educational material was also provided.

Several other mobile businesses were reported to the storm water hotline. In each case the City responded to investigate and verify the complaint. Enforcement action was taken and educational material was distributed as applicable. More detail about the complaints made to the City's storm water hotline regarding mobile businesses is included in Appendix B and Section 7 of this Annual Report.

Mobile Affidavits

During 2007/2008, the City required one mobile business to sign an affidavit (Attachment 5.4) to acknowledge that proper disposal is necessary for any waste water generated by mobile business activities such as car detailing and power washing. Additionally, the affidavit states that the business owner agrees to implement BMPs as

required by the City's JURMP and acknowledges that failure to do so will result in enforcement action and possible legal action.

Education and Outreach and Enforcement
As previously mentioned, eight complaints were made to the City's Storm Water Hotline regarding mobile businesses. Of those eight complaints, seven were verified by City personnel. No issues were observed upon investigation of the eighth complaint, so no further action was necessary. A total of six NOVs were issued to mobile businesses. In each instance, City personnel discussed the BMP requirements of mobile businesses with business personnel and provided educational material such as the City's watershed fact sheets and the "Preventing Urban Runoff Pollution" brochures, which can be found in Attachment 5.2. For the seventh verified complaint, Public Works personnel cleaned the area as necessary, and an NOV was not issued.

There were no instances of noncompliance of mobile businesses that were believed to present potential threats to human health or the environment observed during 2007/2008, so none were reported to the RWQCB.

5.4 Industrial and Commercial Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 Program Review and Modification

The City's JURMP was recently updated in March 2008. No changes to the City's industrial and commercial component have been made since that time.

Table 5-3
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
1	5 Star Market & Liquor	7495 University Avenue	5/9/2008	• Keep dumpster lids closed when not in use.
2	7 Eleven Food Store 17945	7602 University Avenue	5/23/2008	• Keep dumpster lids closed when not in use.
3	A & B Auto Electric	7801 El Cajon Blvd, Ste 2	5/15/2008	• Obtain a lid for the trash can and keep it closed when not in use.
4	A & W Restaurants	5500 Grossmont Center Dr	6/6/2008	• Ensure parking lot area is free of litter.
5	A A A Auto Repair & Transmission	7025 University Ave	5/9/2008	• Provide secondary containment for the used oil filter drum and the spare waste oil drum, if used. • Provide overhead cover for all drums containing waste oil/filters and for other oily equipment stored outside. • Keep outside areas free of oil spills and leaks and pick up absorbent after if has been used.
6	A To Z Auto Repair	7159 University Avenue	5/8/2008	• Keep liquid storage away from shop doors and consider secondary containment to prevent drips and spills. • Clean up small oil leaks in the parking areas as they occur to prevent contact with storm water. • Do not conduct vehicle/equipment washing in a location or manner that would allow runoff to the storm drain system. • Keep dumpster lids closed when not in use.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
7	A-1 Hire, Ltd.	7190 University Ave.	5/8/2008	• Clean up sediment, sand and debris throughout the site and keep paved areas free of sediment and debris. • Clean up the large puddle of oil on the east side of the site and properly dispose of all used absorbent or other materials used to remove oil. • Provide secondary containment for liquid storage containers, particularly used oil, coolant or diesel. • Appropriately label liquid storage containers such as used oil or diesel. • Cover equipment with exposed rust or tar and store elevated off the ground if possible to prevent contact of rainwater or run-on with rusty metal.
8	Aliberto's Mexican Food	7819 El Cajon Blvd.	5/15/2008	• Clean the area around the grease bin outside and keep it free of stains and oil residue. • Do not hose the patio unless all water can be collected to prevent runoff to the storm drain. • Clean and keep the parking area free of litter, leaves and sediment. • Ensure that the grease bin is covered and contained.
9	All Italiana	8356 Allison Ave	6/5/2008	• None
10	Amazing Stone and Tile	8227 Commerical Street	5/6/2008	• Ensure that sediment and dust remain inside the building and are kept away from contact with storm water.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
11	American Tanks	8111 Commercial St	5/5/2008	• Ensure that all wash water is collected and appropriately disposed of to the sanitary sewer system. • Clean up and contain all scrap metal pieces and keep rusty metal under cover. • Keep outdoor areas, particularly the front entrance and street, free of metal shavings. • Close dumpster lids when not in use.
12	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr	6/6/2008	• Obtain absorbent and/or an emergency spill kit for oil. • Ensure that no water other than rain runoff enters the storm drains. • Keep site free of litter.
13	Arby's 5822	5341 Jackson Dr	6/5/2008	• Clean up discarded grease in grease bin area. • Ensure sediment from concrete work and landscaping work are cleaned up and do not reach the storm drain system. • Consider providing overhead cover and/or secondary containment for grease bins.
14	Big O Tires	7589 El Cajon Blvd Suite A	5/27/2008	• Provide overhead cover for outdoor tire storage area to prevent contact with storm water. • Ensure that any drums of fluid or oil filters temporarily moved outside are brought inside each night and before predicted rainfall.
15	Bob Stall Chevrolet	7601 Alvarado Road	6/13/2008	• Ensure that all wash water is captured and does not enter the storm drain system. • Clear debris from drainage channel and ensure that is stays free of litter and debris.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
16	Brigantine Restaurant	9350 Fuerte Drive	6/11/2008	• Clear drains of vegetation, debris and sediment, and ensure that they stay clean. • Provide secondary containment for bulk cleaning solvents that are stored outside.
17	Budget R V Repair & Mobile Service	7860 El Cajon Blvd	5/12/2008	• Contain and collect all wash water or take vehicles to a professional wash facility. Minimize the use of soap and bleach and dispose of water to the sanitary sewer system if conducted on site. • Keep the lot and RV parking area free of sediment, leaves, litter, and loose aggregate using dry methods. • Obtain trash removal service appropriate to the needs of the business to prevent accumulation. • Move rusty metal (including racks) under the canopy or provide cover for the rusty materials. • Obtain a spill kit appropriate to the automotive and other fluids present on site. • Determine whether the drain under the canopy leads to the sanitary sewer system or to the storm drain system and educate employees appropriately.
18	C & D Auto Care	7163 University Avenue	5/8/2008	• Regularly clean inside the waste automotive fluid secondary containment to keep it free of spills. • Keep the dumpster lids closed when not in use.
19	California Countertop, Inc	7811 Alvarado Rd	5/6/2008	• Clean up the corian dust and vegetative debris, and keep the site free of litter/debris. • Keep loose gravel and planter soil from exiting the site using housekeeping, and consider physical stabilization.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
20	Carl Burger Dodge World	8355 Hercules Street	5/8/2008	• Move the engine cores to an area not exposed to storm water and ensure all auto parts with oil residue are kept in covered and contained areas. • Provide appropriate labels for all waste containers and move those containing waste entirely under the overhead container. • Close the dumpster lids when not in use and at the end of the work day. • Clean out the concrete swale in the service area parking lot and prevent runoff from contamination with oil or tire residue. Consider replacing absorbent material before drain. • Do not conduct washing activities (even with plain water) in a manner or in a location where runoff will enter the storm drain system or exit the property.
21	Carl Burgers Jeep Eagle World	8333 Hercules St.	5/8/2008	• Clean up sediment that may be transported from planters onsite and keep paved areas free of sediment. • Provide a form of containment for the material/waste storage area that would prevent run on water from the car wash area and roof downspouts. • Ensure that water from the wash area does not runoff to the storm drain system or exit the property. • Close the dumpster lids when not in use and at the end of the day.
22	Carl's Jr. #284	8110 Parkway Dr	6/9/2008	• Clean liquid from trash area and ensure area stays free of spills; liquids should not be disposed of in dumpster. • Clear litter from parking lot and landscaping and ensure that site stays free of litter.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
23	Centex Glazing	8260 Commercial St.	5/5/2008	• Keep the site free of sawdust and aluminum shavings. • Consider providing overhead cover and containment for the aluminum cutting area in the north storage yard to prevent storm water from contacting aluminum cutting activities and shavings.
24	Centifontis	8209 La Mesa Blvd	6/11/2008	• None
25	Chefaxel Inc. Bistro	7097 University Avenue	6/6/2008	• Keep dumpster lids closed when not in use.
26	Chili's Bar & Grill #454	8285 Fletcher Pkwy	5/28/2008	• Clean the grease bin and surrounding area and keep it free of grease residue. • Adjust the location off the grease bin as needed to keep it away from roof downspout discharge and storm drains. • Properly dispose of all trash and cardboard immediately when bringing it outside to prevent discharge of trash liquids to the storm drain. • Increase frequency of cardboard recycling pick up if needed to keep the dumpster lid closed when not in active use. • Conduct any necessary washing of outdoor areas in such a manner that no water is discharged to the storm drains. • Keep the storm drains free of grease, food debris, litter, and liquids using good operational behaviors as well as potentially protecting the drains with a mat or other effective method. • Ensure that the grease bin is covered and contained.
27	Chipotle Mexican Grill	8005 Fletcher Parkway	5/28/2008	• Modify the current outdoor cleaning method so that neither clean nor dirty water is discharged to the storm drain system. • Keep the outside of the grease bin and the surrounding area free of grease residue and stains. • Work with property management and neighbors to keep the storm drain inlet and catch basin free of grease stains and debris. • Ensure that the grease bin is covered and contained.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
28	Citlalli Mexican Food	7327 University Avenue	5/20/2008	• Clean up any oil residue on the ground near the outdoor grease bins. • Keep the site free of litter and sediment, including the sidewalk by the planter. • Provide a low wall or other soil stabilization to prevent erosion and sediment transport. • Consider providing secondary containment and/or overhead cover for grease bins.
29	Claim Jumper Restaurant La Mesa	5500 Grossmont Ctr. Drive #406	6/6/2008	• Keep storm drain basins free of sediment. • Ensure parking area is free of litter. • Ensure no grease leaves waste area via runoff.
30	Costco Wholesale #469	8125 Fletcher Pkwy	6/5/2008	• Ensure landscaping in parking lot is free of litter.
31	Dan's Automotive	7501 University Ave.	5/9/2008	• Clean the parking lot using dry methods and keep the area clean of sediment and oil spills. • Provide cover and secondary containment for the drum of used oil filters and clean up and oil in the existing secondary containment trays. • Keep spill kits for the fluids stored onsite available at all times. • Store the engine core and other rusty or greasy parts off of the ground and protected from storm water until they are picked up.
32	Denny's, Inc. #1743	6970 Alvarado Rd	6/6/2008	• Ensure that the grease bin and nearby pavement remain free of grease residue and stains and that grease bin is covered/contained.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
33	Dixieline Lumber & Home Centers	8372 Center Dr	11/13/2007	• Prevent the water used during the irrigation of potted plants from entering the storm water conveyance system. • Ensure all members of the local staff are trained on the Storm Water Pollution Prevention Plan. Documentation and training records should be kept up to date and provided along with the SWPPP. • Update SWPPP to accurately reflect any changes in BMP implementation and ensure all personnel responsible for the implementation of the SWPPP are included in the SWPPP. The SWPPP should include any materials and BMPs that pertain to the regulated component of the business. The SWPPP should include the secondary containment structure and a list of materials typically stored within the containment, as well as all materials stored outdoors. The use of covers to protect storm drains during dry weather conditions should also be documented in the SWPPP. A list of local personnel that are responsible for the implementation of the SWPPP should also be included.
34	Dixieline Lumber & Home Centers	8372 Center Dr	5/12/2008	• Clean out sediment from the trench drain and from the area around the northwest inlet. • Cover the rusty metal wire products on the northwest side of the lot to prevent rust transport. • Ensure that cover is provided for railroad ties and treated lumber products. • Address the high COD monitoring results.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
35	EDCO Transfer Station	8182 Commercial St	5/20/2008	• Paint or remove the metal plate over the storm drain opening to prevent rust transport. • Cover the large rusty metal bucket or move it to be store indoors. • Ensure that over irrigation is not the cause of the water puddled in the parking lot, and consider capturing the condensation water if feasible.
36	El Torito	5024 Baltimore Dr	6/12/2008	• Work with neighbors and property management to clear parking lot and hillside of litter ad ensure that site remains litter free. • Clean exterior of grease bin and ground and ensure that area remains free of grease residue. • Provide coverage and secondary containment for grease bin. • Ensure that wash water from pressure washing is disposed of appropriately either captured or discharged to landscaping (if appropriate).
37	Elite Auto Collision Repair Center	4949 Baltimore Drive	6/12/2008	• Clean litter and cigarette butts from site and ensure that site remains litter free. • Ensure that storage drums are labeled properly.
38	Express Auto Service	7633 El Cajon Blvd. suite 300	5/12/2008	• Provide secondary containment for drums of fluid and used oil filters or else move the drums to the interior of the building where applicable. • Work with the property management to adjust sprinklers and stabilize soil in the landscaping to prevent sediment laden runoff to the storm drain. • Keep the dumpster lids closed when not in use.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
39	Filiberto's Mexican Food	7102 University Ave	5/14/2008	• Keep the parking lot and driveways and drains free of sediment and loose gravel. • Do not pressure wash or use a hose to wash the patio unless all wash water can be collected and properly disposed of to an indoor sewer drain. • Repair the sprinkler system as necessary to ensure that sprinklers are adjusted appropriately to minimize over watering and runoff. • Keep dumpster lids closed when not in use and keep all food litter in the dumpster. • Keep the area around the grease bin and the grease bin itself free of grease residue, but do not allow any wash water to flow to the street or storm drain. • Remove or cover the nonfunctional fryer stored in the trash enclosure to prevent rainwater from contacting grease residue. • Ensure waste grease bin is covered and contained.
40	Five Star Collision Center Inc	7643 University Avenue Suite H	6/11/2008	• Ensure that wash water is not leaving the site. • Provide building plans/verification that trench drains lead to sewer do not discharge to these drains until this has been verified. • Use dry methods to clean trash, debris, and sediment from the site and ensure that site remains litter free.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
41	Golden State Auto of La Mesa, Inc.	7224 University Avenue	5/14/2008	• Provide secondary containment and cover for all liquid storage, including waste oil, car batteries and other automotive fluids. • Label containers appropriately. • Keep a spill kit onsite at all times that is adequate for materials stored onsite. • Provide adequate trash containers and remove trash frequently enough that it does not overflow. • Clean up sediment, wood shavings, litter and oil leaks in the parking and work areas and keep it clean. • Conduct any car washing so that no wash water (even with soap) is discharged to the street; contain and dispose of wash water down the sanitary sewer system (e.g. toilet).
42	Groceryworks.Com Operating Company	8011 University Avenue	5/23/2008	• Work with Vons to keep the dock drain free of litter, sediment, and debris using a rubber mat or other method. • Keep trash dumpster lids closed when not in use.
43	Growers Direct	7055 University Avenue	5/23/2008	• Keep the sidewalk and street free of sediment through regular housekeeping. • Consider acquiring a larger or another recycling container for cardboard, if necessary.
44	Hearth House	5505 Jackson Dr	6/6/2008	• Ensure that wash water is collected or disposed of to sanitary sewer system and does not reach the storm drain system. • Clean the litter from the front landscaping area and ensure that the entire site stays free of litter. • Obtain a designated container for waste oil disposal unless you can provide written verification from your waste disposal company that it is permitted to dispose of waste oil/grease in your dumpster.
45	J Ks Greek Cafe	7749 University Ave	5/21/2008	• Keep the parking area and back area free of sediment and gravel.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
46	Jack In The Box, University	6987 University Ave	5/14/2008	• Clean the outside of the grease bin and the surrounding area and keep it free of grease residue to prevent grease from entering the storm drain. • Prevent any liquids from being placed in or leaking from the dumpster, and clean up these liquids if they do leak. • Ensure that the grease bin is covered and contained.
47	Jack Orr Auto Body, Inc.	7253 University Ave	5/9/2008	• None
48	Kentucky Fried Chicken	5358 Jackson Dr	6/5/2008	• Clean up oil residue from ground in trash/grease bin area. • Keep site free of litter and sediment. • Consider providing secondary containment and/or overhead cover for grease bins.
49	La Fogata Mexican Restaurant	7303 El Cajon Blvd	6/10/2008	• Keep the outside of the grease bin free of oil residue. • Consider full overhead cover and containment for the grease bin. • Keep the dumpster lids closed when not in use.
50	La Mesa Smog Check	7801 El Cajon Blvd, Ste 1	5/12/2008	• None
51	La Mesita Mexican Food	7012 University Avenue	5/23/2008	• Keep the outside of the grease bin/box and the ground free of grease residue. • Consider contacting the property management about a recycling container for the boxes. • Keep dumpster lids closed when not in use. • Consider providing secondary containment for the grease bin.
52	Lotus Pond Restaurant	8260 Parkway Dr	6/13/2008	• Ensure that grease is cleaned from ground surface and that containers have secondary containment.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
53	Marie Callender's #74	6950 Alvarado Rd	6/10/2008	• Eliminate all discharges to the trench drains in the loading/trash area unless documentation can be provided to show that these drains are connected to the sanitary sewer system. Contain wash water. • Similarly, remove all grease and debris from the trench drains without discharging to them. • Remove grease residue from the exterior surfaces of all the grease bin and surrounding area and keep them clean. • Ensure that the grease bin is covered and contained.
54	Marieta's	8949 La Mesa Blvd	6/10/2008	• Clear the trash enclosure of the litter and ensure that it stays free of litter and ensure lids are closed when not in use. • Clean the grease residue from the exterior of grease bin and ground and ensure that area stays free of grease spills/splashes. • Provide secondary containment and overhead coverage for grease bin. • On 6/13 business reported to have stopped refrigerator discharge to parking lot.
55	McDonald's	8045 Fletcher Pkwy	5/28/2008	• Clean the grease bin and ground below, and keep them free of grease residue. • Ensure that the grease bin covered and contained. • If outdoor areas must be cleaned using water, conduct cleaning so that all wash water (with or without cleaning chemicals) is collected and disposed of properly to an inside sewer drain. • Work with the other tenants and the property management to keep the parking lot, sidewalks, and curb inlets free of black grease stains.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
56	MD Auto Group	7840 La Mesa Blvd	6/10/2008	• Implement BMP's to ensure that wash/rinse water is contained onsite, either collected or discharged to landscaping. • Ensure that outdoor repair work is performed in a contained area. • Clean litter up in the trash area and ensure that site remains free of litter. • The facility does not have a spill response kit for automotive fluids; obtain one and keep on site.
57	Mi Casita Taco Shop	8038 La Mesa Blvd	6/10/2008	• Ensure that parking lot and sidewalks are kept free of litter
58	Midas Mufflers	7207 University Ave	5/9/2008	• Keep the parking lot free of sediment and debris. • Keep the trash enclosure clean and all litter properly disposed of. • Cover used tires stored outside until they can be recycled or disposed of.
59	Nacho's Taco Shop	7589 University Ave	5/21/2008	• Keep the site free of trash and sediment. • Clean the grease bin and surrounding area and keep it free of grease residue. • Close the grease bin lid when not in use as well as the dumpster lids. • Ensure the grease bin is covered and contained.
60	Pacific Southwest Structures	8140 Commercial Street	5/5/2008	• Keep dumpster lids closed when not in use.
61	Pacific Tire & Brake	7633 El Cajon Blvd, Suite 100	5/27/2008	• Work with the property management company to keep the parking lot free of sediment and vegetative debris. • Keep the dumpster lids closed when not in use.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
62	Panda Express #226	8011 University Ave	5/21/2008	• Keep the dumpster lids closed when not in use. • Work with the property management company to clean thoroughly the outside surfaces of the grease bin or obtain a new grease bin with attached lid and keep it free of grease spills and residue. Clean greasy absorbent off the ground. • Consider moving the grease bin to be less conspicuous than the trash dumpsters such that customers are not likely to dump trash into it. • Consider providing secondary containment and/or overhead cover for the grease bin to prevent spills on the ground and contact with rainwater.
63	Pick Up Stix La Mesa	8025 Fletcher Pkwy	5/28/2008	• Clean the area around and the outside of the grease bin drums and keep them free of grease. • Ensure all trash is placed appropriately into the dumpster and the lids are closed. • Cover and contain grease bins. • Work with other tenants and property management to keep the storm drain inlet free of grease stains and debris.
64	Pizza Hut	8011 University Ave	5/24/2008	• Work with the property management company to keep the trash area free of loose litter, perhaps through increased pick up frequency of the trash cans used by customers on the sidewalk.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
65	Rainbow Steel Inc.	8332 Case St.	6/5/2008	• Clean and organize storage areas so that litter, debris and sediment may be cleaned out from around and under them. Keep the site free of litter, debris and sediment. • Conduct metal work inside, in contained areas or at minimum as far away from the storm drain channel as is feasible to prevent grindings from entering the channel. • Store rusty metal beams and parts off of the ground, and provide cover to prevent rainwater from contacting them. • Use drop pans if vehicles leak oil and clean up any leaks as soon as possible. • Provide secondary containment for the diesel fuel tank or, if not used, remove or label as such.
66	Rob's Automotive	7589 El Cajon Blvd Unit E	5/24/2008	• Work with property management to unclog the drain pipes and keep the site free of vegetative debris and sediment. • Conduct maintenance activities inside or under cover whenever feasible. • Elevate the transmission stored outside or store it on a pervious (soil) surface until it may be removed.
67	Rosaritos Mexican Food #3	7941 University Ave	5/23/2008	• Clean the grease bin and wall and keep the area free of grease residue. • Keep the dumpster lids closed when not in use. • Consider providing overhead cover and/or containment for the grease bin.
68	Round Table Pizza	8032 La Mesa Blvd	6/10/2008	• Clean up the trash area and keep dumpster lids closed when not in use. Keep enclosure free of spills/stains. • Ensure that parking lot and sidewalks are free of litter.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
69	Sam's Market	7587 University Avenue	5/15/2008	• Clean up the outside areas, and keep them free of sediment, gravel and litter. • Close dumpster lids when not in use. • Regularly check for oil leaks and spills in the parking lot and clean them up.
70	Sanfilippo's Pizza	8141 La Mesa Blvd	6/10/2008	• Clear back storm drain of debris & clear litter from site. • Ensure that site and drains are kept free of litter and debris. • Ensure that discharge from cleaning kitchen floor racks does not reach storm drain.
71	Schaefer Ambulance Service, Inc.	7285 University Ave	5/6/2008	• Address the high total suspended solids results in both water samples using additional housekeeping, and determine if loose sediment originates onsite. • Fix the leak from the vehicle in the parking lot.
72	Shirley's Kitchen, University	7118 University Ave	5/20/2008	• Clean up sediment, black deposits, and litter that have covered the storm drain in the parking lot, and keep it clean. • Keep the site free of litter and sediment. • Clean up grease residue on the grease bin lid and surrounding area. • Ensure the grease bin is covered and contained. • Cover or remove the rusty metal filters stored outside.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
73	Sid's Auto Body, Inc.	7473 El Cajon Blvd.	5/27/2008	• Ensure that the oil water separator/interceptor is appropriately maintained to prevent clogging. • Ensure that trash removal frequency and containers are sufficient to keep all trash inside with lids closed. • Keep the site free of litter. • Clean up the oily residue outside the air compressor condensation outlet pipe, and consider trapping the liquid to prevent future staining. • Keep the areas outside the bay doors for the paint and the grinding shop areas free of sediment, particularly due to any spilled rinse water or dust deposition.
74	Subway (Jaspal Enterprises)	7404 University Avenue	6/6/2008	• If water must be used to clean outdoor surfaces minimize use of detergents and capture all wash water for disposal at an inside drain to prevent runoff to the storm drain. • Work with the property management to keep the parking lot free of sediment and gravel.
75	Summit Transmissions	7633 El Cajon Blvd. #208	5/12/2008	• Keep the dumpster lids closed when not in use. • Work with the property management company to adjust the sprinklers and stabilize loose soil to prevent sediment laden runoff to the storm drain.
76	Sun Valley Golf Course	5080 Memorial Drive	6/28/2008	• Provide cover and containment for stockpiles when they are not actively being used. • Keep a spill kit onsite for small oil leaks or spills from equipment (e.g. kitty litter or other absorbent material). • At the back gate, prevent sand/sediment from being tracked onto the parking lot and/or increasing housekeeping to clean the area.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
77	Tamarind Thai Restaurant	7970 University Avenue	5/15/2008	• Do not wash floor mats or other equipment in a manner that would cause wash water to go to patio or parking lot drains. • Use dry methods to clean the patio or prevent wash water from discharging to drains and collect it for disposal to inside drains. • Dispose of wash water from mopping to inside drains or toilet. • Keep dumpster lids closed when not in use and keep the area free of sediment and litter.
78	Tasty Garden Buffet	7984 La Mesa Blvd	6/9/2008	• Ensure that trash dumpster and grease bin lids are kept closed. • Ensure that site is kept free of litter. • Clean grease residue from outdoor grease bin area and keep ground surface and exterior of bin free of grease. • Ensure grease bin is covered.
79	The Chickenest 95, Inc.	7200 Parkway Dr #111	6/9/2008	• Ensure that site is free of litter. • Clean ground and wall surface around grease bin and ensure area is kept clean and free of oil and grease. • Ensure grease bin is covered & contained.
80	The Greek Gyros II	5500 Grossmont Ctr. Drive	6/6/2008	• Ensure parking lot area is free of litter
81	The Truck and SUV Center	5301 Lake Murray Boulevard	6/12/2008	• Ensure that waste oil storage area has overhead coverage and water tight secondary containment. • Obtain a spill response kit and/or absorbent. • Ensure that any residue/sediment from car washing/rinsing is cleaned up and that there is no discharge of water or cleaning chemicals to the storm drain system. • Contain sediment on hillside clean up litter ands ensure site remains litter free.
82	The Yogurt Mill	8158 La Mesa Blvd	6/11/2008	• None
83	Trattoria Tiramisu	8273 La Mesa Blvd.	6/10/2008	• Ensure that site is free of litter.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Corrective Actions
84	Vons Companies Inc #2093	8011 University Avenue	5/23/2008	• Protect the dock drain with a rubber mat or other method to prevent debris, litter and sediment from entering the drain. • Keep dumpster lids closed when not in use.
85	Walter H. Barber & Sons, Inc.	8179 Center St.	5/5/2008	• Keep the front paved area free of sediment, gravel and leaves. • Cover railroad tires and oil stored outside and provide secondary containment for liquids (including oil) stored outside. Alternatively, these materials may be moved indoors. • Clean up the oil that had leaked from the truck and use a drip pan until the truck may be repaired.
86	Wedo Wedo	8169 Center Street	5/5/2008	• Clean up soil, sediment, litter and stone debris from the front sidewalk, loading area, and the slab storage area. • Prevent tracking of sediment and keep outdoor areas clean. • Close the dumpster lids when not in use. • Obtain a spill kit or materials sufficient to clean up any anticipated spill risks.
87	Wienerschnitzel #58	6949 University Ave	5/14/2008	• None
88	Wongs Golden Palace, Inc.	7126 University Ave	5/14/2008	• Obtain a grease removal service to take the bottles of used grease instead of putting them in the dumpster unless it can be varied that EDCO allows this form of grease disposal.

6.0 RESIDENTIAL

6.1 INTRODUCTION

Land use in the City of La Mesa is largely residential; over half the land use in the City is residential. Due to the large residential area, activities that take place in residential areas have the potential to impact the quality of receiving waters. Residential activities such as vehicle washing, over-irrigation, home maintenance, and Household Hazardous Waste (HHW) disposal can potentially contribute pollutants to the City's MS4 if BMPs are not implemented. Pollutants of concern include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has worked to implement a range of programs to address these residential activities with the goal of reducing pollutant loads associated with such activities.

Figure 6-1 depicts the residential land use in the City. Yellow areas signify single-family homes, orange areas are multi-family homes such as duplexes and apartment buildings, brown areas are mobile home parks, and purple areas are other residential areas such as nursing homes.

Figure 6-1
Residential Land Use in the City

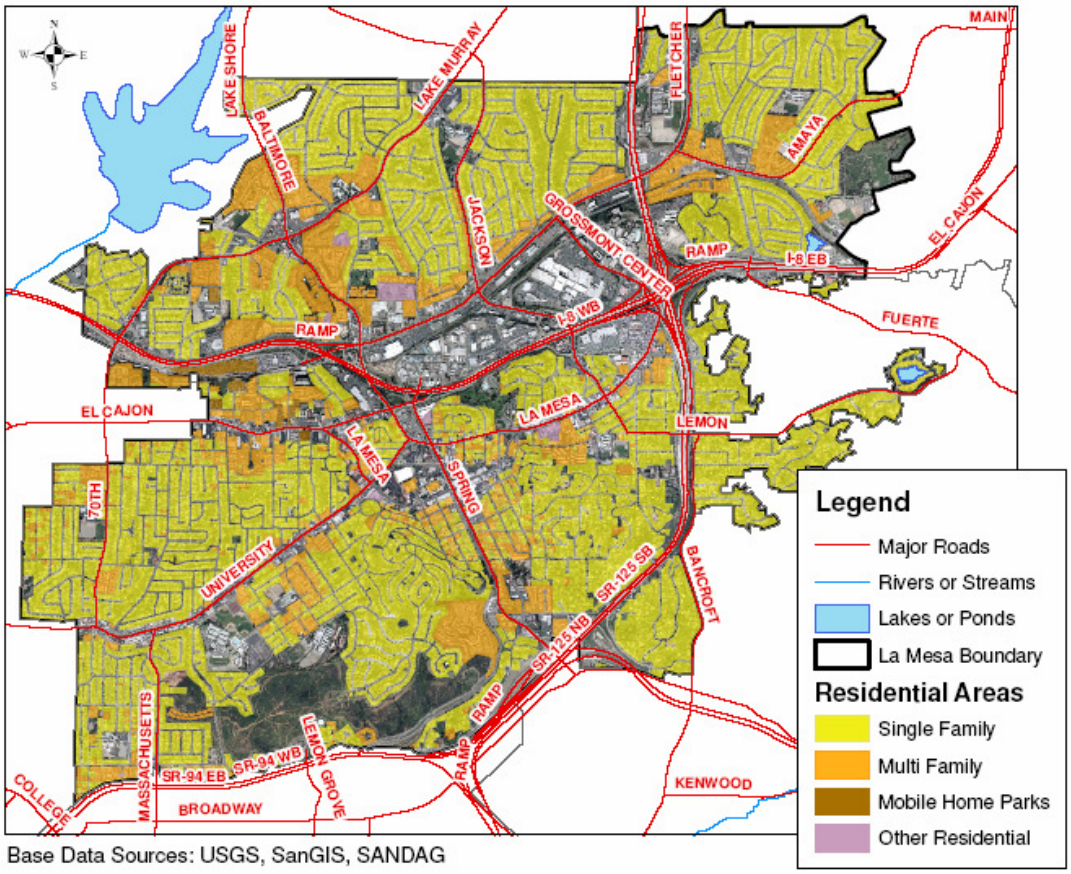

Base Data Sources: USGS, SanGIS, SANDAG

6.1.1 Summary of Notable Accomplishments

Some notable achievements for the residential component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- The City has worked with local Eagle Scouts to construct and install a storm water kiosk in Vista La Mesa Park.
- The City hosted eight HHW events; 1,044 participants dropped off 1,100 loads of HHW. Door-to-door pick up service was available for the disabled and senior communities.
- The Solana Center hosted the La Mesa Oil Filter Exchange at Kragen Auto Parts. A total of 44 people disposed of 55 used oil filters and five gallons of used oil for recycling.
- The City continued to distribute the *La Mesa Focus* newsletter to residents in the City.
- The City hosted the La Mesa Spring Clean Up on two consecutive Saturdays. The event was held at the City's EDCO station and allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste without charge.

6.2 Source Characterization

The City has identified high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities. To reduce pollutant discharges from these high TTWQ areas and activities, the City has designated specific BMPs.

6.2.1 High TTWQ Activities

During the 2007/2008 reporting period, as outlined in the City's JURMP, the City continued to identify the following activities as high priority:

- Automobile repair and maintenance
- Automobile washing
- Automobile parking
- Home and garden care activities and product use
- Disposal of pet waste

6.2.2 High Threat to Water Quality Areas

In addition to these activity-based priorities, the City has noted several residential areas that pose higher threats to water quality. High priority residential areas are designated

by considering complaint investigations, institutional knowledge, Dry Weather Monitoring data, and criteria as defined in the Municipal Permit. The following residential areas have been designated as being a high threat to water quality.

East of Helix High School
This area drains to University Channel and includes the residential area east of Helix High School in the area around Lowell Street, Normal Avenue, and Olive Avenue. University Channel serves as a part of the storm water conveyance system for the City and is part of the Chollas Creek Watershed. Previous Dry Weather Monitoring Program upstream investigations have traced high total coliform counts to this area and found several instances of irrigation runoff. Storm Water Hotline calls related to this area have been recorded in recent years as well.

Baltimore Drive, North of Interstate 8
The area surrounding Baltimore Drive is largely composed of high-density housing. Runoff from this area drains to Alvarado Channel via two storm drain networks that run through the area. Storm Water Hotline calls related to activities in this area have been recorded in recent years. Some past Dry Weather Monitoring results have indicated that this area could be a source of bacteria, although that has not been found in monitoring programs over the past couple years. The area is still classified as high TTWQ to be conservative, although the City may reevaluate the prioritization in future years if recent dry weather monitoring trends continue. Potential runoff sources include residences located on Parkway Drive, Aztec Drive, and Baltimore Drive.

Nagel Street and Sarita Street
The residential area around the intersection of Nagel Street and Sarita Street drains to Alvarado Channel. Previous Dry Weather Monitoring Program upstream investigations have indicated that this area is a source of bacteria. A relatively high number of Storm Water Hotline calls have been recorded for this area.

6.3 Best Management Practice Requirements

The City has continued to provide information regarding the implementation of pollution prevention measures, such as good housekeeping practices, for residential areas and activities. The City's BMP Manual Part I includes lists of general residential BMP requirements and BMP requirements for specific residential activities. The manual is included in Appendix C of the JURMP. General residential BMPs include erosion control; non-storm water discharge management, including elimination of IC/IDs; and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Specific BMPs for the high priority activities outlined above are also included in the City's BMP Manual Part I.

6.4 Program Implementation

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted. This ensures that pollutants associated with residential activities and areas are minimized.

The residential program has an education component so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities.

6.4.1 Training, Education, and Outreach

The City has continued to conduct training, education, and outreach activities for residents, which are described below.

***La Mesa Focus* Newsletter Articles**

The City publishes storm water related articles in the quarterly *La Mesa Focus* newsletter. Four newsletters were printed during the reporting period. Two issues, August and November 2007, were each mailed to approximately 27,500 residential addresses. These issues were also archived on the City's website. The February and May 2008 issues were not mailed, but were made available on the City's website. Approximately 630 copies of both the February and May 2008 newsletters were distributed during the 2007/2008 reporting period to both the industrial and commercial and residential communities in the City. A total of 592 individuals receive e-mail notification when a new newsletter has been added to the City's website, and about 40 hard copies of each issue are made available in City Hall, which yields a total approximate circulation of 630 copies for both the February and May 2008 issues of the newsletter. The articles published in 2007/2008 are summarized below. All newsletters published during the 2007/2008 reporting period are included as Attachment 5.3.

The August 2007 newsletter contained the following storm water-related articles and announcements:

- "LA MESA APPRECIATION DAY: GET INVOLVED!" encouraged residents to participate in the clean up of designated City parks.
- "ONE PHONE CALL CAN HELP STOP STORM WATER POLLUTION" informed residents of the Storm Water Hotline, potential pollutants to be aware of, and what to look for and report based on the facility or area type.
- "LA MESA RECYCLES USED OIL & OIL FILTERS" stressed the importance of recycling oil and provided a telephone number and website to research local drop off locations for used oil and oil filters.

The November 2007 newsletter contained the following storm water-related articles and announcements:

- "ENVIRONMENTAL PROGRAM UPDATE – PRESERVING YOUR QUALITY OF LIFE" provided a two page informational section with four storm water specific articles and announcements including:
    - "DISPOSE OF OLD ELECTRONIC DEVICES, PAINT AND OTHER TOXIC ITEMS…BUT DO IT SAFELY AND RESPONSIBLY" which highlighted examples of HHW as well as drop off dates and locations.

- "RECYCLING CONTAINERS MAKING THEIR WAY INTO PARKS" informed residents of recycling container placement, and encouraged use of the containers.
- "FREE OIL FILTERS!" notified residents of the La Mesa Oil Filter Exchange.
- "BE AWARE OF WHAT YOU WASH DOWN THE STORM DRAIN" informed residents of the causes of storm water pollution and how to prevent it.

The February 2008 newsletter contained the following storm water-related articles and announcements:

- "PROPERLY DISPOSE OF OR RECYCLE YOUR HAZARDOUS ITEMS!" described different types of HHW and notified residents of drop-off dates and locations to recycle HHW items free of charge.
- "ANNOUNCING SPRING CLEAN-UP 2008" informed residents of the upcoming cleanup event and what could be disposed of or recycled at the event.
- "STORM WATER: DID YOU KNOW?" discussed the local watersheds, channels and inlets in the City and promoted the use of pollution prevention measures.
- "CITY OF LA MESA PARK APPRECIATION DAY" provided the date of the event and the types of activities volunteers would be involved in for the event.

The May 2008 newsletter contained the following storm water-related articles and announcements:

- "DON'T FORGET ABOUT HOUSEHOLD HAZARDOUS WASTE!" reminded City residents of the remaining HHW events and what could be disposed of and recycled at them.
- "LA MESA VOLUNTEERS MAKE THEIR PARK JEWELS SHINE" reported the number of volunteers and the type of work they performed at La Mesa Park Appreciation Day.
- "UPDATES TO THE CITY'S STORM WATER PROGRAM" notified readers of the updates made to the JURMP and gave a break down of requirements and prohibited activities by area type.

6.4.1.1 HHW Events

The City hosted seven HHW collection events throughout the 2007/2008 reporting period at the City's EDCO station on Commercial Street. An additional HHW event was held in Rancho San Diego at the Skyline Church; though not located in the City, residents from the City participated in the event. Door-to-door pick-up was also offered for disabled and senior residents. Overall, 1,044 people participated in the events, and 1,100 loads of HHW were collected.

Other Educational Outreach Materials and Activities
When discovering instances of over-irrigation in residential areas, the City provided an over-irrigation door hanger as well as a tri fold entitled "Preventing Urban Runoff Pollution," both of which are included in Attachment 6.1. Other educational outreach materials and activities are highlighted in the Education and Public Participation sections of this report (Sections 8 and 9, respectively). Most notably, the City has continued to provide storm water information and contacts on their website (www.cityoflamesa.com). The City's storm water hotline also provides a medium for City residents to obtain storm water information and file storm water related complaints.

6.4.2 Compliance and Enforcement

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the Storm Water Hotline, and observations made by the City's municipal personnel. If a potential to impact water quality is present the City provides a verbal warning, written warning, NTCs, and NOVs as applicable. The City received 26 residential-related complaints during this reporting period. Complaints were submitted through the Storm Water Hotline and internally through the Public Works Department; see Appendix B of this JURMP Annual Report for details.

Seventeen written warnings, five NOVs, three verbal warnings and two NTCs were issued to residents and/or landlords during this reporting period. Many of the complaints verified involved residents who were unaware of residential BMPs. These issues were resolved with a verbal warning and distribution of educational materials. The City issued NOVs to more serious violations such as vehicle maintenance without BMPs or washing debris into the street. City personnel also cleaned areas in the public right of way as necessary to resolve complaints. One spill was noted and reported to the RWQCB; see Section 7 of this JURMP Annual Report for details. All other residential complaints were resolved and no further actions, such as fines or reports to the RWQCB aside from this JURMP Annual Report, were deemed necessary.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 Program Review and Modification

The City's JURMP was recently updated in March 2008. No changes to the City's residential component have been made since that time.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008 RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the 2007/2008 illicit discharge detection and elimination section and attachments to the RWQCB no later than December 15, 2008.

8.0 EDUCATION COMPONENT

8.1 INTRODUCTION

During 2007/2008, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, residents, and underserved audiences. The City aims to reduce storm water pollution by increasing awareness about storm water and promoting the implementation of pollution prevention measures and BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- The City has hosted 34 training events/meetings for municipal personnel and agencies working closely with the City; over 200 City personnel participated in these training sessions.
- During 2007/2008, the City's quarterly newsletter, the *La Mesa Focus*, featured several articles highlighting storm water topics aimed at businesses and residents of the City.
- Educational materials were made available to project proponents and City personnel at City Hall through the informational storm water bulletin board. A total of 30 construction site management tri folds, 20 English/Spanish door hangers, and 10 construction SWPPP tri folds were distributed to construction site owners and developers from the bulletin board.
- The City worked closely with the local Eagle Scouts to construct and install a storm water kiosk at Vista La Mesa Park.
- Various educational materials were made available in Spanish and English. The City has provided English and Spanish educational materials at events and during inspections this year. The City's storm water hotline also accepts calls in both Spanish and English.
- The City contracted with I Love a Clean San Diego (ILACSD) to provide education outreach at the Intergenerational Games at the La Mesa Middle School on 10/12/2007. ILACSD gave brief demonstrations of the Enviroscape watershed model to adults and youth and presented storm water pollution prevention concepts.

- The City provided financial support and educational materials for a booth hosted by the Solana Center for Environmental Innovations (Solana Center) at Earth Fair on 4/20/2008.

8.2 STAFF TRAINING ELEMENT

The City has provided extensive training and educational outreach to its municipal personnel. Many municipal personnel are out in the field on a daily basis, so it is important that they understand the importance of implementing BMPs. Additionally, municipal personnel are encouraged to report any IC/IDs observed to the appropriate City staff and to educate other municipal personnel and the general public about storm water pollution prevention.

The informational storm water bulletin board at City Hall is continually updated with information on storm water topics such as BMPs. The bulletin board is visible to City personnel, project proponents, and other City Hall visitors. A photo of the bulletin board is included in Attachment 4.2.

In addition to the materials available at the informational storm water bulletin board, the City also provided three new Public Works employees a copy of the "City of La Mesa Municipal Program Storm Water Best Management Practices Notebook". This notebook is included in Attachment 4.2.

Table 8-1 below includes all training sessions that were provided for various municipal departments during 2007/2008. The table also includes meetings with outside agencies regarding project collaboration (e.g., meetings with Helix Water District on how to work together to eliminate over-irrigation in the City).

Table 8-1
Training Sessions

#	Date	Event	Topic(s)	Participants
1	1/17/2007	Tailgate Training	BMPs - Housekeeping	5 Streets Division Employees
2	5/12/2007	Pre-Development Advisory Board Meeting	Code update workshop discussion, dumpsters at commercial, industrial, multi-family sites	Development Advisory Board Members
3	7/10/2007	Tailgate Training	BMPs - Material Storage	14 Parks Division Employees
4	7/19/2007	Low Impact Development Manual Training/Presentation	Presentation of county's proposed Low Impact Development Manual	Stormwater Program Manager

Table 8-1
Training Sessions

#	Date	Event	Topic(s)	Participants
5	8/15/2007	Meeting for 06/07 Follow-Up Municipal Inspections	Discussion of high priority municipal inspections, form revisions, corrective actions and implementation methods.	4 Public Works Operations Division Employees
6	8/17/2007	Advanced SWPPP Training - presented by Associated General Contractors	SWPPP requirements, NPDES, implementing BMPs, effective SWPPP development, keeping projects in compliance	3 City Employees
7	8/17/2007	Meeting at City Hall – Discussion of Strategies for Irrigation Problems	Discussion of over-irrigation prevention methods within the City	Stormwater Program Manager and Helix Water District
8	8/28/2007	Tailgate Training	BMPs - Over Irrigation/Runoff	13 Parks Division Employees
9	10/2/2007	Email From Community Development	Power washing without water reclamation is not allowed, direction to notify merchant members that hired power washers must reclaim water	Managers at businesses located on La Mesa Blvd and Date Ave (where Oktoberfest is hosted)
10	10/11/2007	Training/Presentation: Storm Water Management for Construction Projects – Presented by Stormwater Program Manager	Regulatory overview, developer responsibilities, construction BMPs, JURMP construction section, San Diego River and San Diego Bay watershed maps	4 Engineering Staff Employees
11	10/16/2007	Tailgate Training	BMPs - Outdoor Storage	18 Parks Division Employees
12	10/29/2007	Tailgate Training	BMPs - Outdoor Storage	6 Streets Division Employees
13	10/30/2007	Tailgate Training	BMPs - Outdoor Storage	18 Parks Division Employees
14	11/9/2007	Meeting with Helix	City's JURMP and Helix's discharge permit requirements, ensure compliance with water quality objectives and address any potential issues related to non-storm water discharges	Stormwater Program Manager and 4 Helix Managers

Table 8-1
Training Sessions

#	Date	Event	Topic(s)	Participants
15	11/9/2007	Tailgate Training	BMPs - Outdoor Storage	8 Wastewater Division Employees
16	11/19/2007	Hydromodification / SUSMP Workshop	Requirements of permit, timeline for implementation, SUSMP updates, interim hydromodification management criteria	5 Community Development and Engineering Staff Employees (including Stormwater Program Manager)
17	11/19/2007	Tailgate Training	BMPs - Spill Containment	4 Streets Division Employees
18	11/21/2007	Tailgate Training	BMPs - General Storage	13 Parks Division Employees
19	12/10/2007	Tailgate Training	Storm Water	5 Streets Division Employees
20	1/7/2008	Tailgate Training	BMPs - Outdoor Storage	6 Streets Division Employees
21	1/16/2008	Tailgate Training	Annual Pesticide Training	16 Parks Division Employees
22	1/29/2008	Tailgate Training	Rain and Drains	18 Parks Division Employees
23	2/26/2008	Tailgate Training	General Housekeeping	15 Parks Division Employees
24	3/5/2008	E-mail From Stormwater Program Manager	Notification of new permit requirements, attached manual, directed to become familiar with requirements of Low Impact Development	Community Development and Engineering Staff
25	3/18/2008	Tailgate Training	BMPs - Runoff	6 Streets Division Employees
26	3/18/2008	Tailgate Training	BMPs - Runoff	16 Parks Division Employees
27	3/25/2008	E-mail From Stormwater Program Manager	Programs adopted and incorporated in Municipal Code: JURMP updates, ordinance updates.	All City Employees
28	4/1/2008	Tailgate Training	BMPs - Runoff	13 Parks Division Employees
29	4/9/2008	Tailgate Training	NPDES	7 Wastewater Division Employees

Table 8-1
Training Sessions

#	Date	Event	Topic(s)	Participants
30	4/14/2008	Pre-Development Advisory Board Meeting – Presented by Stormwater Program Manager and City Staff	Storm water training, code update, specific projects	~10 Participants
31	4/16/2008	Process Improvement Team Meeting – Presented by Stormwater Program Manager	Construction/Post-construction BMP requirements, required forms, Low Impact Development/site design, source control, other new requirements	~ 12 City Building Department, Engineering Staff, Community Development, and City Hall Employees
32	5/9/2008	CASQA Meeting - "Opportunities and Challenges for Stormwater Programs"	Source control, control of copper, pesticide regulation, plastic bag and food container ban, architectural sources of metals	Stormwater Program Manager
33	5/30/2008	CASQA Municipal Stormwater Program Effectiveness Assessment Manual Training	Principals of effectiveness measurement, impact of implementation, effectiveness measurement tools, interpreting results, water quality assessments	Stormwater Program Manager
34	6/4/2008	Integrated Pest Management Seminar	Integrated pest management	2 Park Maintenance Employees

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, residential areas, and underserved audiences. These efforts promote storm water awareness and BMP implementation.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Violations to the City's BMP requirements are corrected through enforcement actions as necessary. Educational materials relating to specific activities were given to businesses during inspections.

These materials are included as Attachment 5.1; the quantities distributed are included in Table 8-2 below.

Many of the educational materials listed in the table below were distributed in packets according to the facility location and principal activity. All facilities received an informational letter from the City, the Preventing Urban Runoff Tri fold, San Diego River Watershed Factsheet or San Diego Bay Factsheet, BMP Manual Part I, Over-Irrigation Stormwater Pollution Prevention Factsheet, SDCWA Water Efficiency Discounts, and SDCWA Smart Landscape. Facilities in the Chollas Creek Subwatershed received an additional handout about the TMDL for Chollas Creek and what that may mean for businesses in the City. Additionally, an English and Spanish packet of the Grease Interceptors and Grease Traps and How to Keep Cooking Grease Out of the Drain (Spanish title: Cómo Mantener la Grasa de Cocinar Fuera del Desagüe) brochures were provided for applicable eating establishments. English and Spanish versions of the "What's Cookin'" and "Green Wrench" guides were distributed to eating establishments and auto shops, respectively, as necessary.

Table 8-2
Industrial and Commercial Business Educational Materials

Type of Educational Material Distributed	Number of Facilities
SDCWA Water Efficiency Discounts	92
SDCWA Smart Landscape	92
Letter from the City – "Re: Storm Water Compliance Inspections"	92
Tri fold - "Preventing Urban Runoff Pollution"	92
BMP Manual Part I – "3.0 – BMP Requirements for all Dischargers"	92
Over-Irrigation Stormwater Pollution Prevention Factsheet	92
San Diego Bay Watershed Factsheet	49
San Diego River Watershed Factsheet	43
Chollas Creek TMDL Fact Sheet	40
Grease Interceptors and Grease Traps	38
SDCWA The 20 Gallon Challenge (Card and Table Tent)	28
How to Keep Cooking Grease Out of the Drain	28
The Green Wrench Guide	15
Cómo Mantener la Grasa de Cocinar Fuera del Desagüe	10
What's Cookin'?	5

Table 8-2
Industrial and Commercial Business Educational Materials

Type of Educational Material Distributed	Number of Facilities
NOI Paperwork	2
NONA/NEC Paperwork	2
Guía Ecológica Para la Industria Automotriz (Green Wrench Guide, Spanish)	1
¿Qué Pasa en la Cocina? (What's Cookin', Spanish)	1
Industrial Permit	1

During the 2007/2008 reporting period, the City's quarterly *La Mesa Focus* newsletter featured several articles highlighting storm water topics that were aimed at businesses and residents of the City. Examples of such articles include "One Phone Call Can Help Stop Storm Water Pollution," "Be Aware of What You Wash Down the Storm Drain," "Storm Water: Did You Know?," and "Updates to the City's Storm Water Program." These articles are included as Attachment 6.1. Letters were also sent to businesses in certain areas of the City.

During 2007/2008, the City distributed a handout with tips for outdoor vendors to commercial vendors that had booths at Oktoberfest. A total of 311 of these brochures were distributed (Attachment 8.1). The handout detailed specific BMPs that could be implemented by the vendors at the event and detailed the difference between the storm drain system and the sanitary sewer system.

8.3.1.1 Mobile Businesses

Mobile businesses, specifically mobile car detailers or power washers, are considered a high threat to water quality due to the nature of the business activities and the likelihood of prohibited non-storm water discharges. Mobile businesses are not confined to a single area and many do not have City business licenses, making them difficult to identify. Once mobile businesses are identified, the City requires individuals seeking a City business license to sign an affidavit stating that they understand the BMP requirements of the City and will implement BMPs to prevent the discharge of wastewater. To sign the affidavit, the applicant must meet with the City's Stormwater Program Manager, who provides one-on-one education regarding the importance of implementing the City's required BMPs. The City requires all mobile businesses to sign an affidavit to commit to proper wastewater disposal and BMP implementation before a license is granted. The City's mobile affidavit is included as Attachment 5.4.

8.3.2 Construction Site Owners and Developers

Due to the nature of activities, construction sites have the potential to discharge many types of pollutants to receiving waters if not managed properly. Many construction site

owners, contractors, and developers visit the City's Engineering Division to apply for necessary permits. The Storm Water Bulletin Board (Attachment 4.2), located across from the front counter where permits are issued, includes material about construction BMPs to provide education for these parties. Several construction related brochures, specifically the construction site management tri fold and a construction SWPPP tri fold (Attachments 8.2 and 8.3) are available for project proponents to take from the bulletin board. A total of 30 construction site management tri folds, 20 English/Spanish door hangers, and 10 construction SWPPP tri folds were distributed to construction site owners and developers.

8.3.3 Residential Areas

Since residential areas make up more than half the City, the City understands the importance of reaching this particular audience through educational outreach programs. The City continued to send the *La Mesa Focus* newsletter (Attachment 5.3) to residents in the City. As previously mentioned, several storm water articles were included in the newsletters distributed in 2007/2008. The City also continued to partner with Target and Dixieline Lumber in La Mesa to provide IPM cards at the checkouts of each business's garden center. These cards are included as Attachment 5.2. Other educational materials distributed to City residents include San Diego Bay and San Diego River Factsheets as well as the Green Wrench Guide and the residential Preventing Urban Runoff Pollution tri fold. Most educational materials were distributed at City events, at specific locations in the City, or during complaint investigations. The San Diego and San Diego Bay Factsheets can be found in Attachment 5.1; the City's residential Preventing Urban Runoff Pollution tri fold is included as Attachment 6.1. The quantity and location of the materials that were distributed are included in Table 8-3.

Table 8-3
Residential Area Educational Materials

Educational Material	Location	Number Distributed
IPM Cards	Oktoberfest	98 English, 2 Spanish
IPM Cards	Target Garden Center	75 English, 75 Spanish
IPM Cards	Dixieline Lumber	45 English, 40 Spanish
IPM Cards	Intergenerational Games	11 English, 8 Spanish
SDR Factsheets	Household Hazardous Waste at Rancho San Diego*	700
Residential Preventing Urban Runoff Pollution	Household Hazardous Waste at Rancho San Diego*	700
SDB Factsheets	Household Hazardous Waste at Rancho San Diego*	700
SDR Factsheets	Strawberry Hill Apt Complex	180
Residential Preventing Urban Runoff Pollution	Strawberry Hill Apt Complex	180
SDR Factsheets	Earth Fair	100
SDB Factsheets	Earth Fair	100

Table 8-3
Residential Area Educational Materials

Educational Material	Location	Number Distributed
Residential Preventing Urban Runoff Pollution	Household Hazardous Waste	72
SDR Factsheets	Solana Center at Kragen in La Mesa (oil filter exchange)	40
Residential Preventing Urban Runoff Pollution	Solana Center at Kragen in La Mesa (oil filter exchange)	40
SDB Factsheets	Solana Center at Kragen in La Mesa (oil filter exchange)	40
SDR Factsheets	Coastal Clean Up Day	30
SDB Factsheets	Coastal Clean Up Day	30
Green Wrench Guide	Solana Center at Kragen in La Mesa (oil filter exchange)	20
SDB Factsheets	Oktoberfest	16
Residential Preventing Urban Runoff Pollution	Intergenerational Games	7

Note
* Rancho San Diego is a location close to the City where residents chose to participate in HHW disposal.

In addition to the educational materials that were provided at various locations, the City continued the development of the storm water kiosks at selected City parks. The first constructed kiosk is located at La Mesita Park and was completed during the 2006/2007 reporting period. The second kiosk is located in Vista La Mesa Park (see Figure 8-1) and was completed during the 2007/2008 reporting period. The City will continue to partner with local Eagle Scouts to complete construction of a third kiosk to be completed during the 2008/2009 reporting period.

Figure 8-1 – Kiosk at Vista La Mesa Park

The City website, www.cityoflamesa.com, is another way in which City residents can become familiar with the design and intended utilization of the storm drain system, HHW, alternatives to hazardous household products, find information regarding volunteer opportunities, applicable City contact information, and IPM cards. As

previously noted, the City also provides electronic copies of current and archived *La Mesa Focus* newsletters on the website.

8.3.4 UNDERSERVED COMMUNITIES

As discussed in the City's JURMP, the City has identified the several residential areas along University Avenue as "underserved" communities. Two residential areas have been identified as Low/Moderate Income Block Groups. A third area has been identified as a Hispanic Household Concentration area. A disproportionately large number of calls to the City's storm water hotline involve these areas. In an effort promote outreach and education in these underserved communities, the City has developed Spanish versions of educational materials distributed to residential areas. Another effort implemented by the City is the utilization of the Spanish language option on the City's storm water hotline. The City plans to continue outreach to these underserved communities through more educational programs to be implemented in future reporting years.

8.3.5 COMPLAINT INVESTIGATIONS

To further aid the process of identifying illicit discharges, the City encourages the public and City staff to report IC/IDs. In addition to the City's storm water hotline, Public Works also has a maintenance hotline for complaints regarding issues with the MS4 and sewer lines. These complaints are followed up by Public Works personnel. If a representative for the business, residential area, or construction site is present, the inspector will provide site-specific information regarding storm water issues including applicable educational materials. Included in Table 8-4 are the name and the quantity of each of the educational materials distributed during complaint investigations in 2007/2008.

Table 8-4
Complaint Investigation Educational Materials

Educational Material	Number Distributed
San Diego Bay Watershed Factsheets	18
Over-Irrigation Fact Sheet	15
Industrial/Commercial Preventing Urban Runoff Pollution	14
San Diego River Watershed Factsheets	10
Construction Tri fold	6
Green Wrench Guide	5
Green Wrench Guide (Spanish)	3
Over-Irrigation Door Hanger	3

8.4 OUTREACH COMPONENT EFFECTIVENESS ASSESSMENT

The estimated number of impressions made by the City's education and outreach efforts during 2007/2008 is presented and described below. Please refer to Section 11 of this JURMP Annual Report for the remainder the effectiveness assessment for this program component.

Impressions Made

The City has continued to provide residents and businesses storm water-related education through inspections, distribution and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees because it is likely that the attendees will discuss the content with others after the training session. Printed educational materials distributed are assumed to generate three impressions each. Table 8-5 details the number of impressions made by the City during this reporting year.

Table 8-5
Impressions Made by the City

Impression Type	Count	Unit	Estimated Impressions
Municipal Inspections	25	Inspections	125
Industrial/Commercial Inspections	92	Inspections	276
Construction Inspections	91	Inspections	273
San Diego River Watershed Factsheets	1,103	Brochures	3,309
Residential Preventing Urban Runoff Pollution	999	Brochures	2,997
San Diego Bay Watershed Factsheets	953	Brochures	2,859
IPM Cards (English/Spanish)	354	Informational Cards	708
Tips for outdoor vendors	311	Brochures	933
BMP Manual Part I – "3.0 – BMP Requirements for all Dischargers"	92	Brochures	276
Letter from the City – "Re: Storm Water Compliance Inspections"	92	Letters	276
Over-Irrigation Stormwater Pollution Prevention Factsheet	92	Brochures	276

Impression Type	Count	Unit	Estimated Impressions
SDCWA Smart Landscape	93	Brochures	279
SDCWA Water Efficiency Discounts	93	Brochures	279
Tri fold - "Preventing Urban Runoff Pollution"	92	Brochures	276
Chollas Creek TMDL Fact Sheet	40	Brochures	120
Construction Site Management Tri fold	36	Brochures	108
Grease Interceptors and Grease Traps	28	Brochures	84
Green Wrench Guide (English/Spanish)	43	Brochures	129
How to Keep Cooking Grease Out of the Drain	28	Brochures	84
SDCWA The 20 Gallon Challenge (Card and Table Tent)	28	Brochures	84
English/Spanish Door Hanger	23	Door Hangers	69
Over-Irrigation Fact Sheet	15	Brochures	45
Industrial/Commercial Preventing Urban Runoff Pollution	14	Brochures	42
Cómo Mantener la Grasa de Cocinar Fuera del Desagüe	10	Brochures	30
Construction SWPPP Tri fold	10	Brochures	30
Grease Interceptors and Grease Traps	10	Brochures	30
What's Cookin'?	5	Brochures	15
NOI Paperwork	2	Brochures	6
NONA/NEC Paperwork	2	Brochures	6
¿Qué Pasa en la Cocina?	1	Brochures	3
Guía Ecológica Para la Industria Automotriz	1	Brochures	3
Industrial Permit	1	Brochures	3
La Mesa Focus Newsletter	61,260	Newsletters	183,780
Storm Water Bulletin Board	80	Visits	240
Training Session/Activities and Events	257	Attendees	771
E-mails	500	E-Mails	1,500
Total City Impressions			***200,324***

8.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was recently updated in March 2008. No changes to the City's education component have been made since that time.

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to foster storm water awareness and improve water quality. Public participation includes, but is not limited to, cleanup events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Collaboration between the City and the community should help encourage a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed in this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- During 2007/2008, the City hosted a variety of cleanup events throughout the City. Over 110 volunteers removed over 475 pounds of trash and debris during these events.
- The City hosted 8 HHW collection events. Door-to-door pick up service was available for the disabled and senior communities. A total of 1,044 individuals disposed of 1,100 loads of HHW.
- On 11/10/2007 the Solana Center hosted the La Mesa Oil Filter Exchange at Kragen Auto Parts. A total of 44 people participated and received a new oil filter. Five gallons of used oil and 55 used oil filters were collected for recycling.
- On 4/12/2008 and 4/19/2008 the City hosted the La Mesa Spring Clean Up. The event was held at the City's EDCO station and allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste without charge.
- Volunteers for the City's Adopt-A-Block and Adopt-A-Park programs, which involve residents in keeping local streets and parks free of litter, logged over 2,700 hours.
- On 3/29/2008, the city held Park Appreciation Day, a clean up even held throughout the 14 parks in the City.

9.2 Public Participation Activities

Cleanup Events and Programs

During 2007/2008, the City hosted various cleanup events and activities at various locations in the City. Cleanup events provide a direct benefit to water quality and provide an opportunity for the City to distribute educational materials and information to the event's volunteers.

California Coastal Cleanup Day

The City hosted the California Coastal Cleanup Day in the Alvarado and University channels on 9/15/2007. A total of 65 volunteers removed over 200 pounds of trash at the Alvarado site, and 25 volunteers removed 80 pounds of trash at the University site. EDCO donated dumpsters for the event. Public participation in this event has grown from previous years; only five volunteers participated during 2006/2007. The City's Stormwater Program Manager presented an overview of storm water pollution prevention and watershed concept topics to participating volunteers.

Park Appreciation Day

Park Appreciation Day was a cleanup event held throughout the 14 parks in the City on 3/29/2008. Normally this event is held earlier in the fiscal year, however, due to the 2007 fires the event was pushed back several months. A short presentation was given by the site captain regarding watershed concepts, pollutants of concern in local watersheds, the benefits of cleanups, and applicable information available on the City's website.

Creek to Bay Cleanup

The City also hosted the Creek to Bay Cleanup at two locations in the City. Fifteen volunteers, including Mayor Art Madrid, participated in removing 135 pounds of trash from the site at Alvarado Channel (Figure 9-1). Five volunteers removed 25 pounds of trash and five pounds of recycling from the site at University Channel. An additional 30 pounds of trash were collected from University Avenue during the event. The City's Stormwater Program Manager briefly explained watershed concepts, pollutants of concern, and required BMPs to all event volunteers. At the University Channel site, event volunteers were also presented information on the TMDL for Chollas TMDLs. These cleanup events were advertised on the City website and in the Union Tribune. The results of the cleanup were posted on the City website, announced on the City's storm water bulletin board, in the community center and the public library, and in a press release.

Figure 9-1 – Creek to Bay Cleanup at Alvarado Channel

Adopt-a-Park and Adopt-a-Block

The City's Adopt-a-Park Program has continued to involve local businesses, schools, service organizations, families and other individuals in keeping the City's parks free of trash. Volunteers involved in this program are encouraged to remove trash on a regular basis from the City parks and open spaces. Volunteers spent 2,338 hours removing trash from various parks throughout the City.

Similarly, the City's Adopt-a-Block Program promotes cleanliness in the City by encouraging City residents to keep neighborhoods free of trash and debris. Volunteers pick up trash during normal daily activities, such as daily walks in their neighborhood. Individuals utilize City-provided trash bags or may choose to collect trash prior to trash collection day so that litter and debris can be deposited into any available trash can along the street. During this reporting period, participants reported 456 hours of volunteer time as part of this program.

Canine Corners

Canine Corners volunteers pick up pet waste in designated areas of Harry Griffin Park. Volunteers also advocate patrons of the park to pick up after their pets. This prevents pet waste and associated bacteria and viruses from being discharged to the City's MS4.

Saint Madeline's Sophie Center

The City maintains a contract with Saint Madeline's Sophie Center, which employs developmentally disabled individuals to aid in picking up trash and debris at various parks throughout the City. The scope of services includes trash and debris cleanup, emptying trash receptacles and replacement of plastic liners, sweeping/cleaning picnic area tables, as well as some janitorial responsibilities at the park restrooms. Crews consist of three individuals and one job coach. Parks included in this program are Aztec Park, Collier Park, Highwood Park, Jackson Park, La Mesita Park, Northmont Park, Rolando Park, Sunset Park, Sunshine Park, and Vista La Mesa Park. A similar program is conducted at the Jr. Seau Sports Complex, also with a crew consisting of three individuals and one job coach.

Hazardous Waste Collection and Used Oil Recycling Program
The City's Community Hazardous Waste Collection and Used Oil Recycling Program encourages City residents and business owners to properly dispose of HHW. The City hosted eight HHW collection events at EDCO's disposal transfer station facility, which is located near the center of the City. One of these collection events was hosted in Rancho San Diego, about 5 miles southeast of the City, at the Skyline Church. Forty-nine of the participants at this location were from the City. Events were advertised in the City's *La Mesa Focus* newsletter (Attachment 5.3), which was circulated to thousands of residents and businesses in the City. A door-to-door pickup service was also provided for the senior and disabled communities. A total of 1,044 people participated in the events, and 1,100 loads of HHW were collected.

On 11/10/2007 the Solana Center hosted the La Mesa Oil Filter Exchange at Kragen Auto Parts, located in the City. A total of 44 people brought in 55 used oil filters and 5 gallons of oil for recycling. A new filter was distributed to each participant. Educational outreach materials were distributed to all participants. The event was advertised in the *La Mesa Focus* newsletter, the *Penny Saver* and by Kragen Auto Parts employees.

Other Waste Disposal
The City hosted the La Mesa Spring Clean Up event on two consecutive Saturdays in April, 4/12/2008 and 4/19/2008. Residents were allowed residents to bring large items, unwanted household materials (not including HHW), and green waste to the EDCO location in the City for free disposal. Participants were provided with IPM information to encourage the utilization of pollution prevention techniques for lawn care activities, particularly pesticide application.

Public Reporting
As discussed in Section 7, complaints are received through the City's Storm Water Hotline and online website reporting system. The number for the hotline is advertised in articles published in the *La Mesa Focus* newsletter and on various educational materials given out at public outreach events. The residential, industrial and commercial, construction, and municipal communities are encouraged to utilize the hotline to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable.

9.3 Outreach Events

The City has continued to provide educational outreach programs for variety of different communities in the City. Since it is an effective way of reaching large numbers of individuals, educational outreach is typically associated with an event. Other outreach events in the City include the participation of commercial businesses in distributing educational materials and the City's participation in regional meetings and events.

Intergenerational Games

The City contracted ILACSD to provide education outreach at the Intergenerational Games at the La Mesa Middle School on 10/12/2007. ILACSD gave brief demonstrations of the Enviroscape watershed model to adults and youth and emphasized storm water pollution prevention concepts (Figures 9-2 and 9-3). A total of seven Residential Preventing Urban Runoff Pollution brochures and 19 IPM cards were distributed to booth visitors (Attachments 5.4 and 5.2, respectively).

Figure 9-2 – Enviroscape Watershed Model

Figure 9-3 – Demonstration at Intergenerational Games

Oktoberfest

Oktoberfest is one of the largest festivals in the City and was held from 10/5/2007 through 10/7/2007. The City hosted a storm water educational booth that provided various educational materials for its visitors; 100 IPM cards and 16 San Diego Bay Watershed Factsheets (Attachments 5.2 and 5.1) were distributed during this event. Additionally, vendors at the event were provided a handout entitled "Tips for Outdoor Vendors" (Attachment 8.1).

Storm Water Information Kiosks

As mentioned in the previous section, the City has continued to work with local Eagle Scouts to construct storm water kiosks. One kiosk was installed during 2007/2008. The City plans to install an additional kiosk in 2008/2009 for a total of three kiosks in three different City parks. The kiosks present storm water pollution prevention information to park patrons.

Business Participation

The City's Stormwater Program Manager has continued to work with two businesses in La Mesa, Target and Dixieline Lumber, to distribute IPM cards (Attachment 5.2). The IPM cards were developed as part of a regional effort to combat pesticide pollution and increase the utilization of IPM techniques. Target keeps the educational materials in its garden center due to the likelihood of individuals visiting that portion of the store purchasing pesticides. Dixieline Lumber keeps the cards at the registers for those checking out to take. Providing educational materials that customers may take home and review before using the purchased products may mitigate the negative impacts they have on receiving water bodies.

Chollas Creek TMDL Stakeholder Meetings
The jurisdictions named as dischargers for Chollas Creek TMDLs regularly meet to share information, develop reports, and discuss strategies. The City actively participated in these meetings during the reporting period.

Storm Water Copermittee Meetings and Other City Participation
The meetings of various storm water Copermittee workgroups provide a forum for representatives from various jurisdictions within San Diego County and other interested parties, including the general public, to exchange information and ideas regarding the management of storm water programs. The City continued to attend these meetings during the reporting period and will continue to do so during the 2008/2009 reporting period. The City has taken on the responsibility of serving as Co-Chair of the Dry Weather Monitoring Subworkgroup.

During 2007/2008, the City provided funding and educational materials for the Solana Center for a regional collection event at Earth Day on 4/20/2008. Over 60,000 people from all over San Diego County attended the event.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

The City's Sanitation Fund provides funding for the Storm Water Program. There have not been any changes to this funding mechanism during this reporting period. The total expenditures in 2007/2008 were $745,867. The proposed budget for the 2007/2008 Fiscal Year is $792,645. The itemized costs within six different categories are presented in Table 12.1, below. Note that 2007/2008 contractor costs in the table below are based on funds encumbered during the reporting period. The "Miscellaneous As-Needed Services" line item includes various as-needed services from consultants.

Table 10-1
Itemized Expenditures and Budget
For Fiscal Years 2006/2007 and 2007/2008

Storm Water Program Fiscal Analysis	Expenditures FY 07/08	Budget FY 08/09
Engineering Division	$ 185,880	$ 184,900
Program Mgmt.	$ 85,530	$ 89,910
Land Use	$ 25,755	$ 15,850
Construction	$ 16,880	$ 17,650
Existing Development	$ 29,480	$ 30,680
Education	$ 9,275	$ 10,960
IC/ID	$ 17,830	$ 18,720
Admin	$ 1,130	$ 1,130
Public Works Operations	$ 113,620	$ 124,005
SSO/MS4 Cleaning	$ 107,620	$ 116,370
Streets Division	$ 4,450	$ 4,860
Parks Division	$ 1,550	$ 2,775
Equipment and Supplies	$ 36,581	$ 54,760
Storm drain pipe and supplies	$ 7,677	$ 21,770
Vactor	$ 28,904	$ 32,990
BMPs	$ 163,976	$ 193,980
Street Sweeping	$ 161,785	$ 173,980
WURMP - San Diego River	$ 2,159	$ 10,000
WURMP - San Diego Bay	$ 32	$ 10,000
Consultant Services	$ 190,232	$ 175,000
Jurisdictional Dry Weather Monitoring	$ 33,858	$ 40,000
Jurisdictional Wet Weather Monitoring	$ 23,494	$ 50,000
Inspections	$ 49,620	$ 30,000
JURMP Annual Report and Update	$ 48,180	$ 30,000
WURMP - San Diego River	$ 8,900	$ 5,000

Table 10-1 (Continued)
Itemized Expenditures and Budget
For Fiscal Years 2006/2007 and 2007/2008

Storm Water Program Fiscal Analysis	Expenditures FY 07/08	Budget FY 08/09
WURMP - San Diego Bay	$ -	$ 5,000
Public Education/Outreach Program	$ 1,500	$ 10,000
Training & Development	$ 644	$ 5,000
Miscellaneous As-Needed Services	$ 24,036	$ -
Permit fees and Regional Shared Costs	$ 55,578	$ 60,000
Annual Permit Fee to RWQCB	$ 11,109	$ 20,000
NPDES Regional Shared Costs	$ 44,469	$ 40,000
MOU San Diego River WURMP	$ -	$ -
MOU San Diego Bay WURMP	$ -	$ -
TOTAL	**$ 745,867**	**$ 792,645**

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City began using the standardized program effectiveness assessment soon after it was developed by the Copermittees during the last permit cycle. The City also participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs. Due to a variety of complications on a regional level, that process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures.

Since the submittal of the JURMP in March 2008, no additional progress has been made on regionally standardized approaches to program effectiveness assessment. It is likely that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will revisit the issue of standardized assessment metrics and procedures in the near future. The City anticipates participating in the process of developing such regional standards and incorporating work products produced into its own local program effectiveness assessment system.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

The City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted

outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 Effectiveness Assessment Results

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome Level Assessments

Level 1
Level 1 outcomes essentially are measures of permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix C of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement.

Levels 2 and 3
See the tables 11-1 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Please note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

Level 4
The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed. Note that the City has installed Calsense in various City parks and medians, as described in Section 4. Calsense has resulted in decreases in water usage for City-maintained landscaping; see

Figure 11-4. This is likely to have reduced the load of pollutants potentially transported by irrigation runoff.

Level 5

The Dry Weather Monitoring Program is the City's primary mechanism of measuring the quality of discharges. The City also has established an additional monitoring program that includes six sites. Five of these sites are located in the City's MS4, and one is located in an improved channel that has also been identified as a receiving water body. The City will also begin collecting MS4 monitoring data in 2008/2009, which should also provide information about discharge quality.

Several graphs demonstrating historical Dry Weather Monitoring results are provided at the end of this section as figures 11-5 through 11-8. Ammonia and detergents, the two constituents with the longest historical data record, both show decreasing trends over time. Relatively few action level exceedances have been noted in recent monitoring years; only two measurements from the 2007 Dry Weather Monitoring Program exceeded their respective action levels.

A comparatively short data set is available for the City's additional monitoring program. Based on initial results, it appears that sediment and metals values in runoff from the area upstream of Site 907-ALV-002 may be somewhat higher than those recorded at the other sites. The City has initiated some additional inspections in the light industrial area upstream of this site; more information about that effort is available in Section 12 of this JURMP Annual Report. The City plans to continue its additional monitoring work during wet and dry weather in 2008/2009.

Level 6

No Regional Monitoring Program stations are located within or close to the City of La Mesa. The western portion of Alvarado Channel is the only receiving water body within City limits. The City has placed a special study monitoring site in Alvarado Channel at the point where the channel exits the City. Three wet weather samples and two dry weather samples have been collected at this site, 907-ALV-002, over the past two years. For 2008 it has been made a primary Dry Weather Monitoring Program site in order to collect each year. To date, the amount of data collected is not sufficient to determine any trends for water quality at the site. Several years of data are needed before any trends become apparent. The City plans to continue collecting both dry and wet weather data at this site in 2008/2009. The City will also continue to work with the San Diego River and San Diego Bay WURMP workgroups to improve the quality of water bodies downstream of the City of La Mesa.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency BMPs. Based on some interaction with responsible parties after the end of the reporting period and the results of the treatment control inspections, it appears that there is a low level of awareness of the need for regular treatment control BMP maintenance. The City will work with the parties responsible for maintenance of treatment control BMPs to address this issue during 2008/2009.

Construction

The available data indicate that on the whole the City's construction program effectively requires BMP implementation. Any BMP deficiencies noted are typically remedied promptly. The City has received some hotline calls about poor BMP implementation at a few small projects, so the City will continue its efforts to notify small projects and homeowners of the City's BMP requirements.

Municipal

The City's municipal activities effectively implement BMPs and reduce pollutant loading. The City's municipal staff are regularly trained on storm water issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit frequency requirements. In particular, the City sweeps its streets more often than the permit requirements to aid in WURMP efforts. The City has also installed drainage inserts along University Avenue and at the Public Works Operation Center to mitigate discharges of pollutants. The City has implemented a sophisticated system, Calsense, to control irrigation runoff from parks and medians. The City also distributes pet waste bags through dispensers in its parks.

Industrial and Commercial

The City has a comprehensive inspection program that utilizes experienced consultant inspectors. Results are tracked through a database. A comparatively high number of noncompliant sites were identified in 2007/2008. While this indicates the City correctly identified high TTWQ sites when prioritizing its inventory, the City will also need to follow up with these sites in 2008/2009 so that they comply with the City's regulations. The City has recently begun charging businesses for inspections, and it appears that this practice has stimulated more interest in and a higher desire for awareness about the program. Businesses also have an increased incentive to comply with the regulations, as compliant businesses will be inspected less frequently. The City will be holding an educational workshop in early 2008/2009.

Residential

The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. The City is also conducting additional monitoring studies to help identify and mitigate residential sources of pollution more effectively.

Illicit Discharge Detection and Elimination
The City's IDDE program has effectively responded to complaints. No IC/IDs were identified during the 2007 Dry Weather Monitoring Program. There were no SSOs during the reporting period, indicating sanitary sewer system maintenance efforts were effective. The City will continue to take action to prevent and eliminate IC/IDs.

Education
The City has expanded its education program over each of the last several years. Data from 2007/2008 indicate that two key target audiences in need of additional education are industrial and commercial businesses and parties responsible for treatment control BMP maintenance.

Public Participation
New clean-up events have been added over the years, and the City will continue looking for new opportunities for public involvement. The number of hotline calls increased in 2007/2008, which may indicate an increased level of awareness of the hotline rather than an increase in the number of storm water issues occurring in the City. Dry Weather Monitoring Program results did not indicate an increase in pollutant levels from 2006/2007 to 2007/2008.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-1
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review and approve project plans	External A relatively small number of projects submitted reports during 2008/2009. Based on meetings with applicants and BMPs proposed, it appears that the level of knowledge is increasing. Internal The City's storm water consultant and the City's Stormwater Program Manager worked with engineers in the City to improve their level of understanding of the SUSMP program. City personnel also attended training sessions—see Section 8. The City's consultant reviews WQTRs submitted to the City.	Overall WQTR approval rate during reporting period	17%	N/A, addressed through other significant activities for this component
		Individual firm WQTR approval rate	N/A, insufficient number of projects	
		Number of projects requiring three or more reviews prior to WQTR approval	1	
		Percent of projects proposing BMPs besides filter inserts	100%	
		Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	See Section 2	
Verify BMPs are properly maintained	External N/A, verification letters were not sent out until 2008/2009. Internal N/A, verification letters were prepared by the City's consultant.	Percent of sites properly maintaining BMPs	45%	Additional load reduction could be achieved through improved BMP maintenance.
		Resolution status of enforcement actions	See Section 2	
		Percent of sites submitting proper verification forms	N/A	
		Percent of sites certifying proper maintenance	N/A	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-2
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs by end of reporting period	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of projects in compliance with BMP requirements during all inspections	50%	
		Resolution status of enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff are regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	81%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4	Number of pet waste bags distributed	180,000
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.		Amount of sediment and debris removed (weight or volume)	692 tons
				Amount of sediment and debris removed per length of street swept (weight or volume per curb mile)	0.08 tons/ curb mile
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume)	175.5 cubic yards
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons)	0
Maintain municipal treatment control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment BMPs	9 cubic yards
				BMP effectiveness studies	N/A
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal The City contracts with a qualified consultant to perform industrial and commercial inspections.	Percent of inspected sites in compliance with BMP requirements (not including additional study)	63%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	0	Number of IC/IDs eliminated (inspections and complaint investigations)	24
		Consistent with the intentional selection of sites with the highest TTWQ potential, many sites had a low BMP score of 1. Aside from those problem sites, the most common score was three. See Figure 11-2 on the following page for a score distribution.			
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores, 2007/2008 Inspections

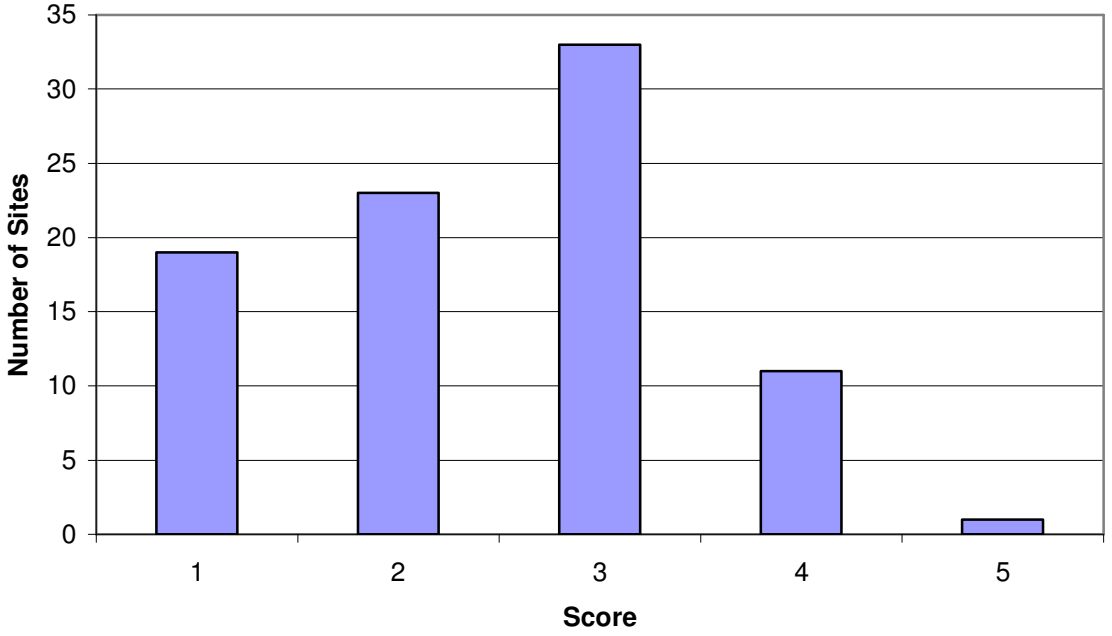

Figure 11-2
BMP Assessment Scores, 2007/2008 Inspections

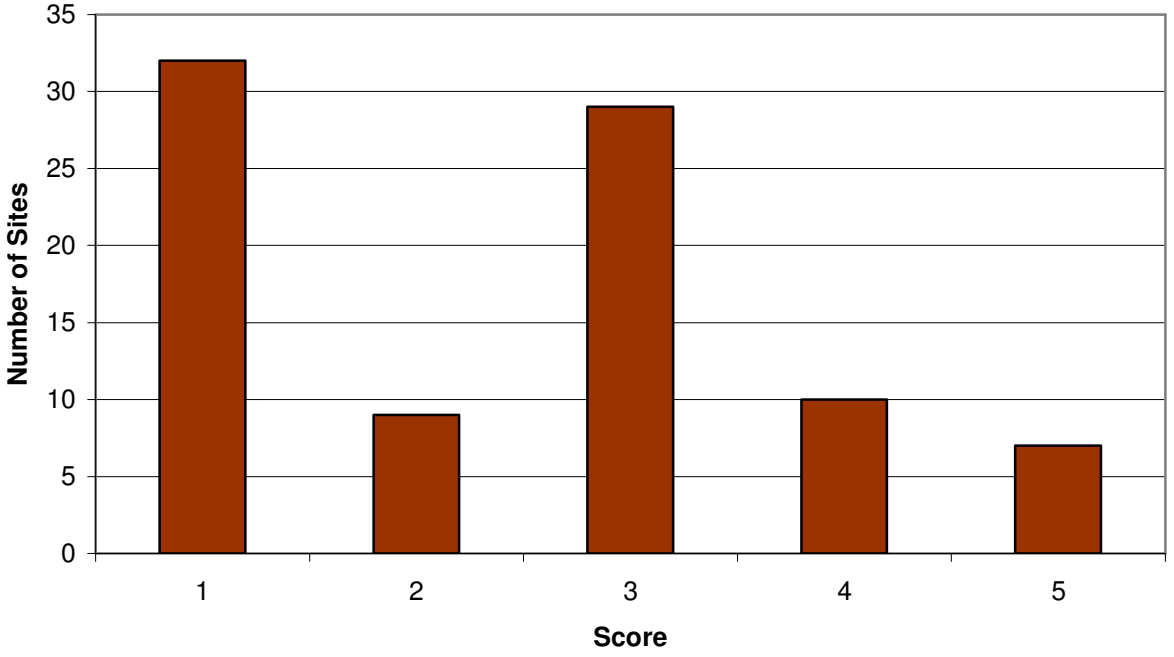

Table 11-5: Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External Residents were educated in variety of ways in 2007/2008; see sections 6 and 8 for details. Internal The City's Stormwater Program Manager is heavily involved in the implementation of the residential component. Other City staff involved in the program also have a good understanding of the goals of the storm water program.	Number of residential incidents reported to storm water hotline	26	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation..
		Resolution of enforcement actions	See Section 6	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6: Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were eliminated, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to storm water hotline	The City's Stormwater Program Manager trains City staff as needed. See sections 4 and 8. City staff were responsible for many of the reports made to the hotline, as shown in Section 7.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 7 are likely to have resulted a pollutant loading reduction.
Respond to and clean up SSOs	City staff are thoroughly trained on how to respond to SSOs.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems. See Section 4 for details.	There were no SSOs during the reporting period.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-7: Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for 2007/2008.
	Estimated number of impressions made	200,324		

Notes
Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8: Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details. See Figure 11-3 for a summary of hotline reports in recent years.	Number of attendees at events	1,648	Amount of trash and debris collected at cleanup events	475 lbs.
		Number of calls received to the storm water hotline	137	Amount of HHW collected	1,100 loads, 55 oil filters, and 5 gallons of used oil

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-3
Storm Water Complaints Logged

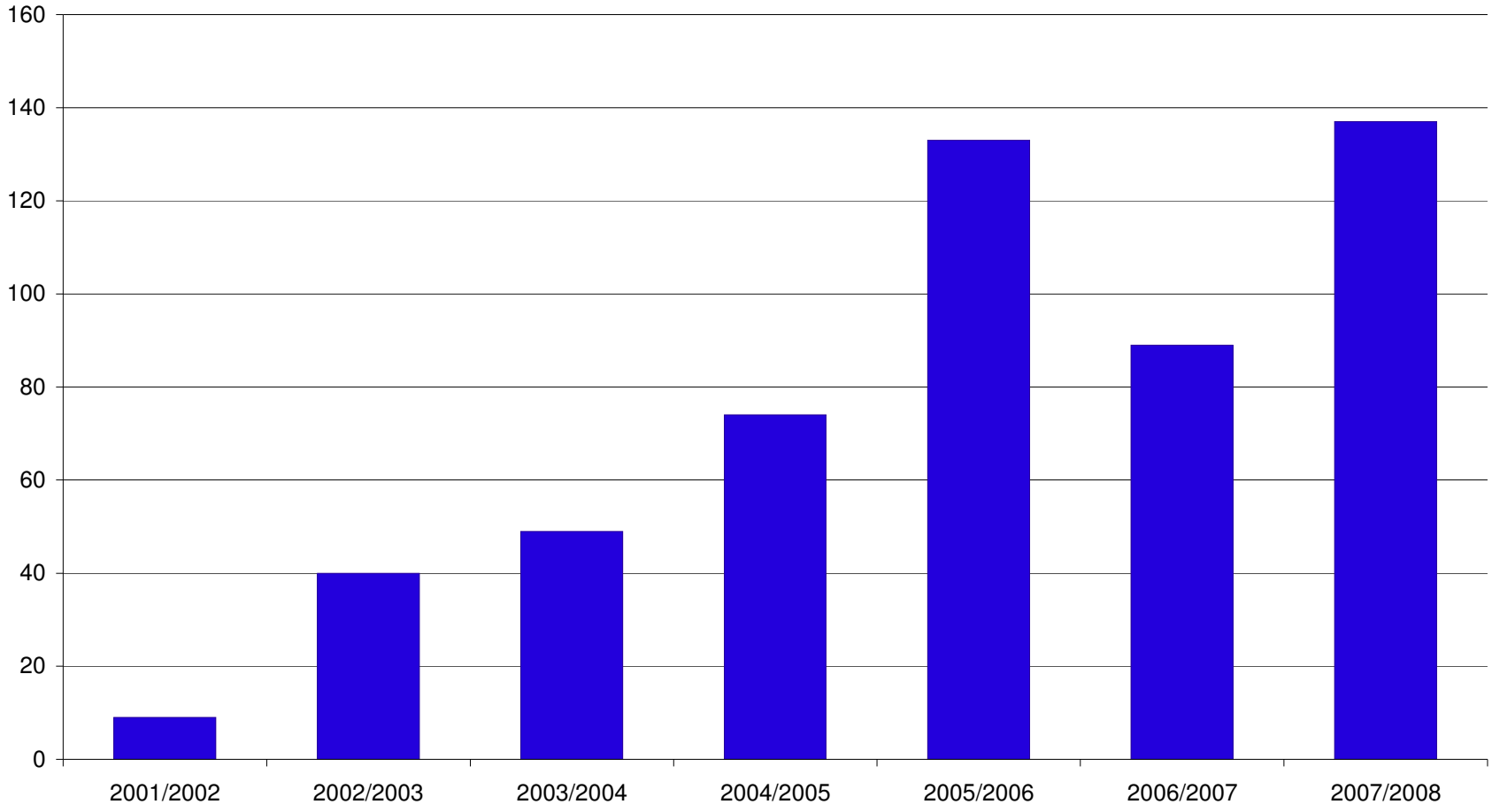

Figure 11-4
Water Consumption at Parks in the City of La Mesa

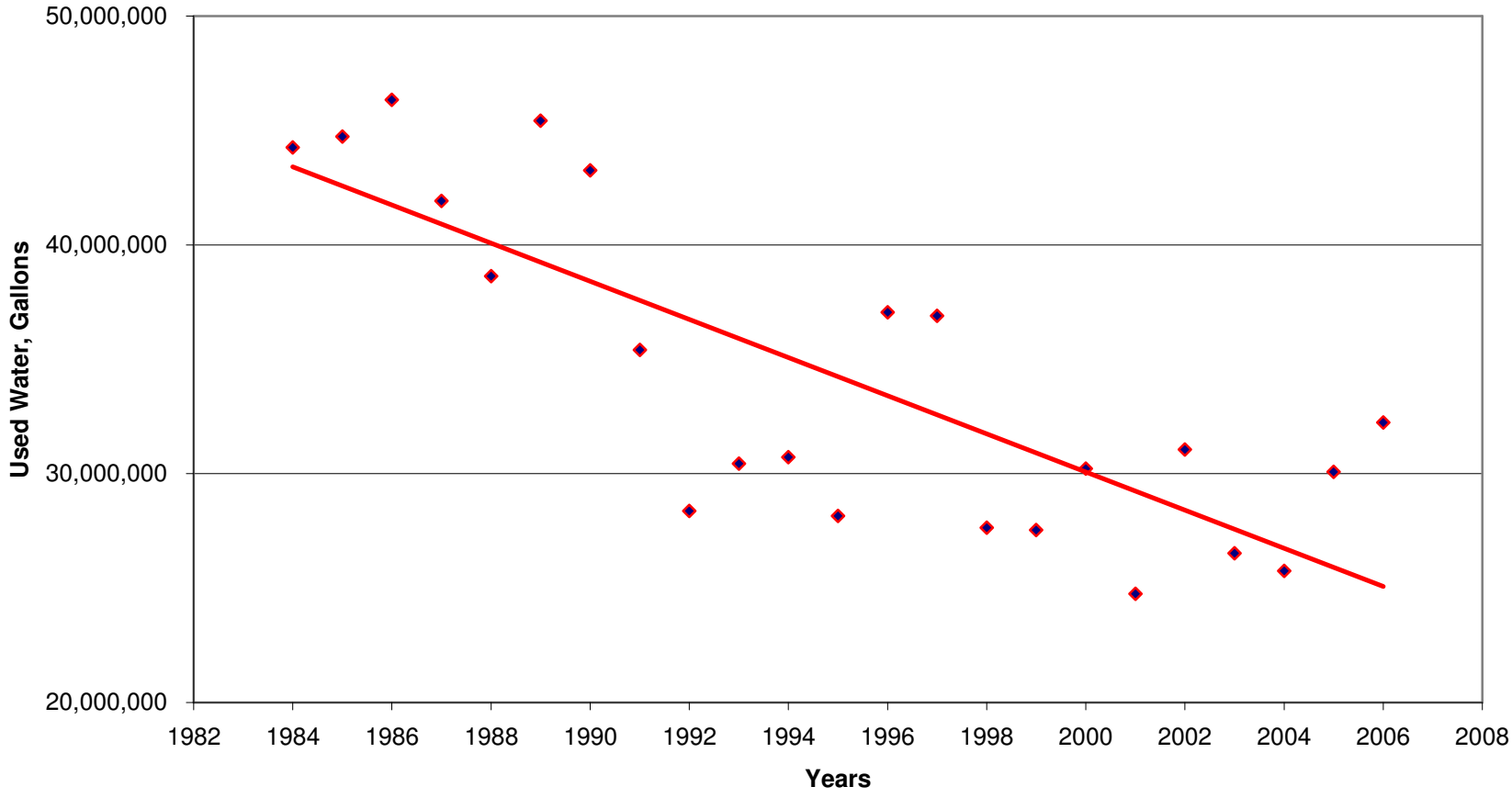

Note: to maintain comparability with historical data, water consumption numbers from Harry Griffin Park and Briercrest Park, which were built relatively recently, are not included in this graph.

Figure 11-5
Dry Weather Results, Averages of Tested Constituents 1993-2007

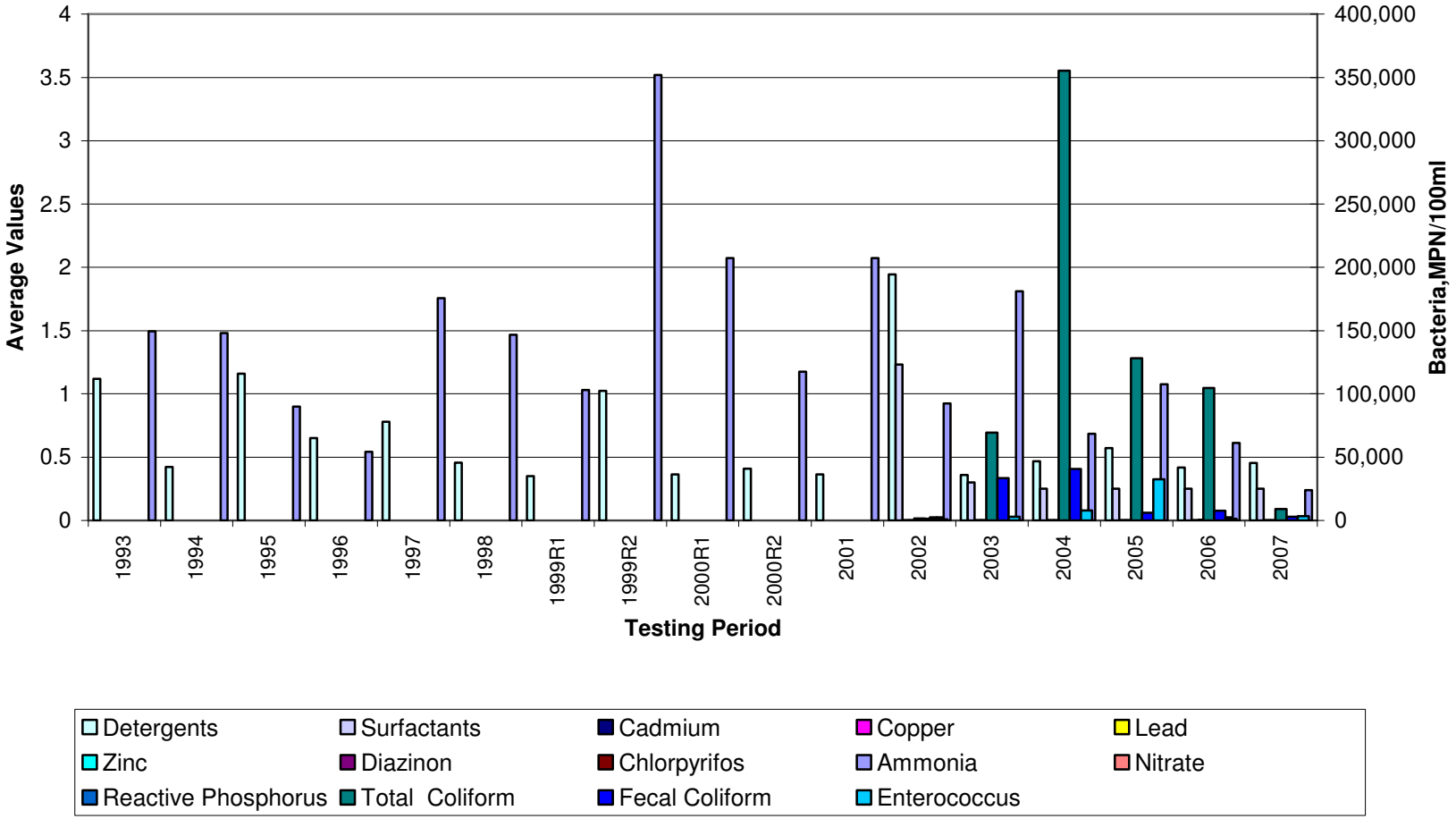

Figure 11-6

Dry Weather Results, Ammonia 1993-2007

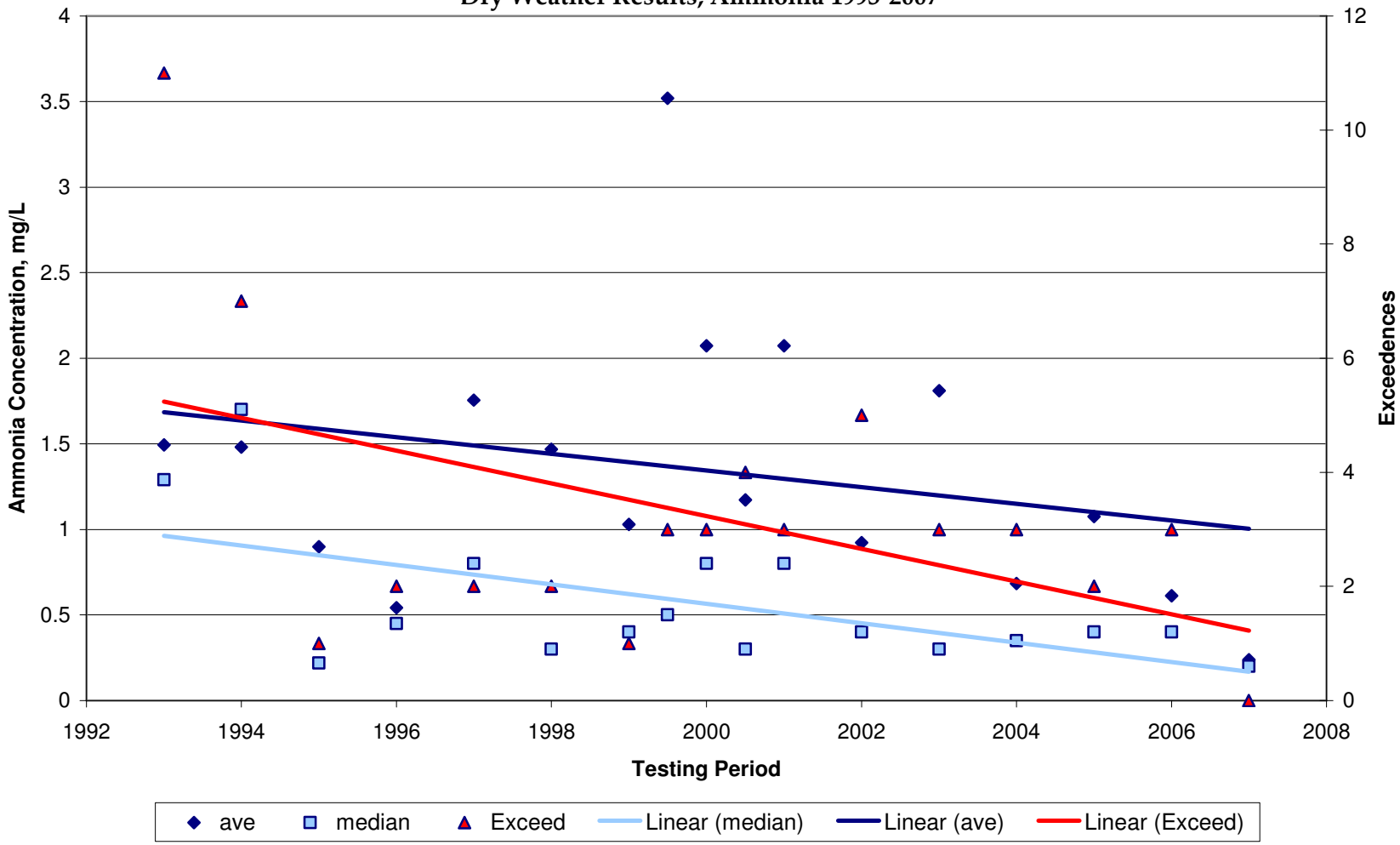

Figure 11-7

Dry Weather Results, Detergents 1993-2007

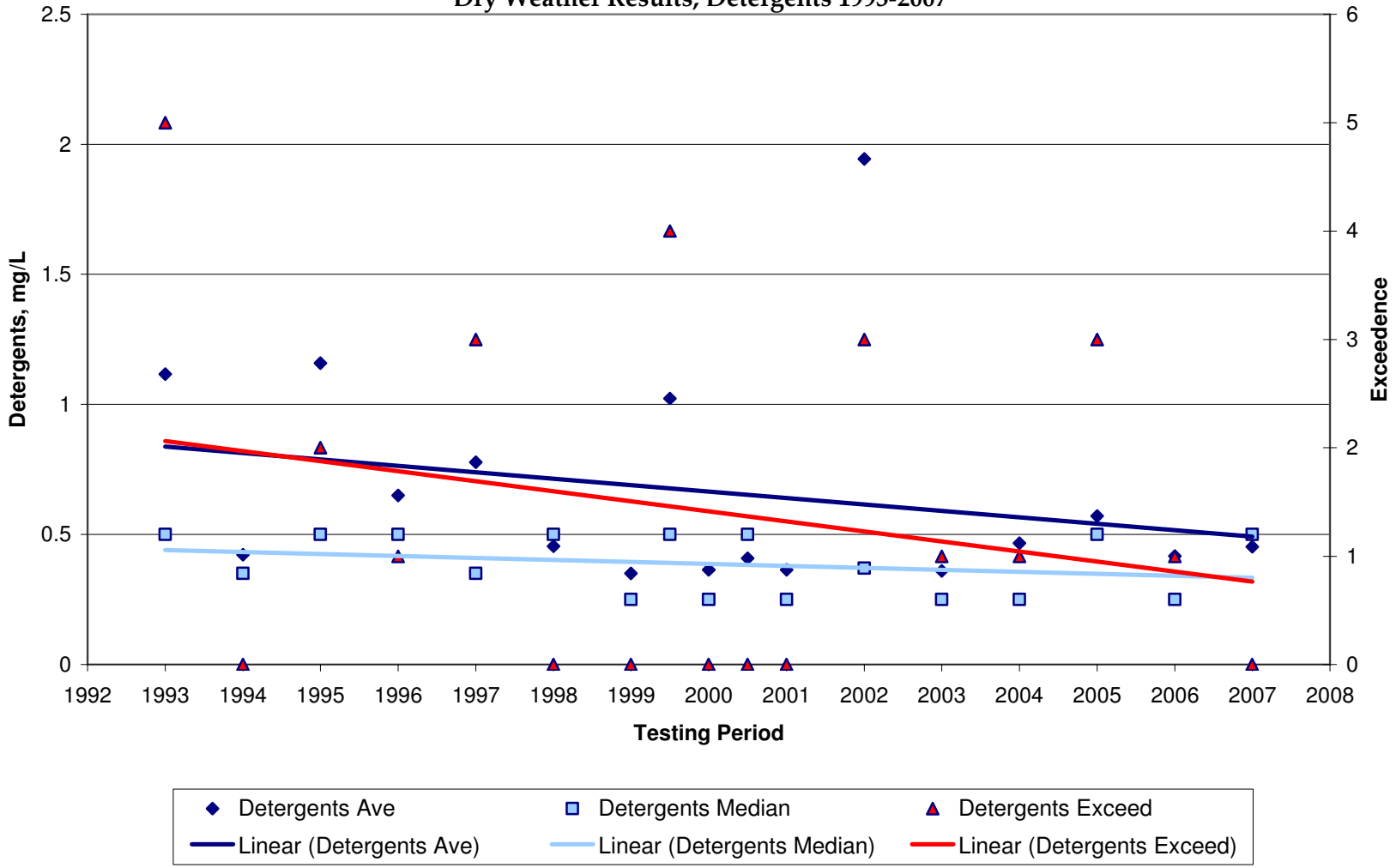

Figure 11-8
Dry Weather Results, Fecal Coliform and *Enterococcus* Bacteria 2002-2007

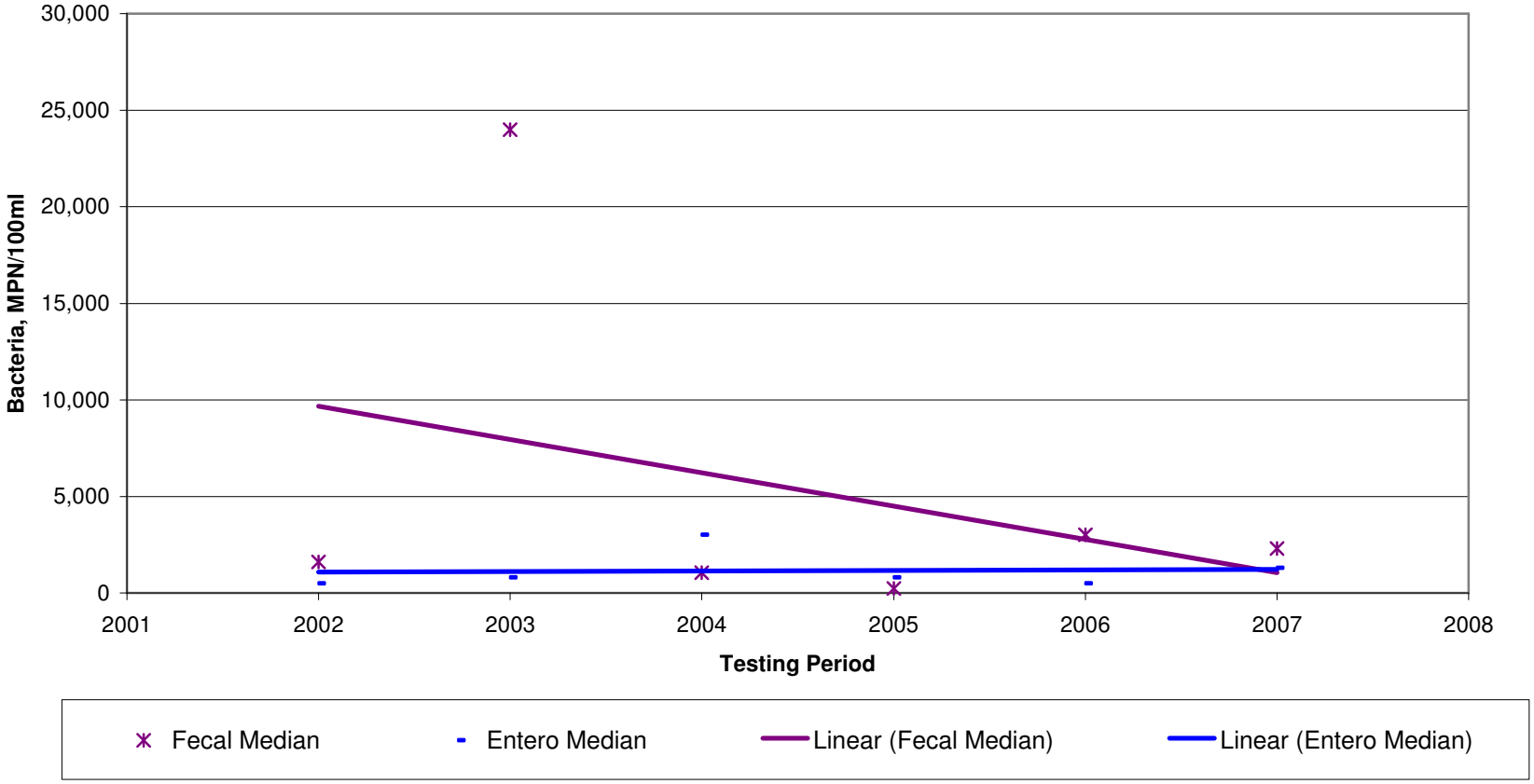

12.0 SPECIAL INVESTIGATIONS

During the reporting period the City conducted two special investigations: wet weather water quality monitoring and additional industrial and commercial inspections. Details of these investigations are presented below.

12.1 ADDITIONAL WATER QUALITY MONITORING

During the reporting period, the City continued the additional wet and dry weather water quality monitoring program it initiated during the 2006/2007 fiscal year. Figure 12-1 presents the locations of the sampling sites during the 2007/2008 reporting period. While the sampling locations have not changed since the previous year, the sampling site names on the figure differ from those presented in the 2006/2007 JURMP Annual Report. The site names in Figure 12-1 have been updated based on the naming system presented in the City's March 2008 JURMP update. All six sites shown on Figure 12-1 were sampled during the 2007/2008 reporting period.

Wet weather monitoring samples were taken on November 30, 2007 and December 7, 2007. Time-weighted composite samples were taken at all six sampling sites on November 30, 2007 and tested for the constituents listed in the monitoring plan—see the 2006/2007 JURMP Annual Report for a copy of the monitoring plan. The two sites at the base of the Alvarado and University drainage basins, 907-ALV-001 and 908-UNI-001, were also sampled on December 7, 2007. Time-weighted composites were taken and analyzed for all the constituents in the monitoring plan. Additional monitoring at all six sites was also conducted concurrently with the Dry Weather Monitoring Program during the summer of 2007.

Recent regional monitoring data from Chollas Creek has shown that pyrethroids are an emerging issue in the Chollas Creek subwatershed. It is believed that they are being used as replacement pesticides for the banned pesticide Diazinon. These recent findings prompted the City to also test the composite sample at site 908-UNI-001 for pyrethroids to collect local data to compare with regional findings. To collect additional pyrethroid data, the City also collected samples from site 908-UNI-001 during a rain event on December 7, 2007. Downstream site 907-ALV-001 was also sampled and tested for pyrethroids on December 7, 2007 to gain additional data in anticipation of upcoming regional pyrethroid testing beyond the Chollas Creek subwatershed.

The results from the wet weather monitoring conducted during the reporting period showed somewhat higher levels of metals and Total Suspended Solids (TSS) in the composite sample from site 907-ALV-002 in comparison to the other monitored sites. In response to these results, the City conducted additional industrial and commercial inspections upstream of the sampling site to identify possible sources of the elevated pollutants. Results from the additional industrial and commercial inspections are presented below in Section 12.2. The City also developed forms designed to collect data that might help identify upstream sources during industrial and commercial inspections.

These supplemental forms were completed during 2007/2008 inspections, and the results are summarized in Section 12.3.

The City has not yet produced an official report analyzing the data from the wet weather sampling conducted during the reporting period, but is planning to prepare a report next fiscal year, which will include results from an additional round of wet weather sampling planned for the 2008/2009 fiscal year. An electronic file of data collected through additional monitoring programs during 2007/2008 is included as Attachment 12.1. During the next round of sampling, the City plans to conduct flow-weighted composite samples at both of the downstream sampling sites, 908-UNI-001 and 907-ALV-001. Samples taken at other sites farther upstream in the basins will be time-weighted composite samples as they have been during previous years.

Figure 12-1
Additional Water Quality Monitoring Site Locations

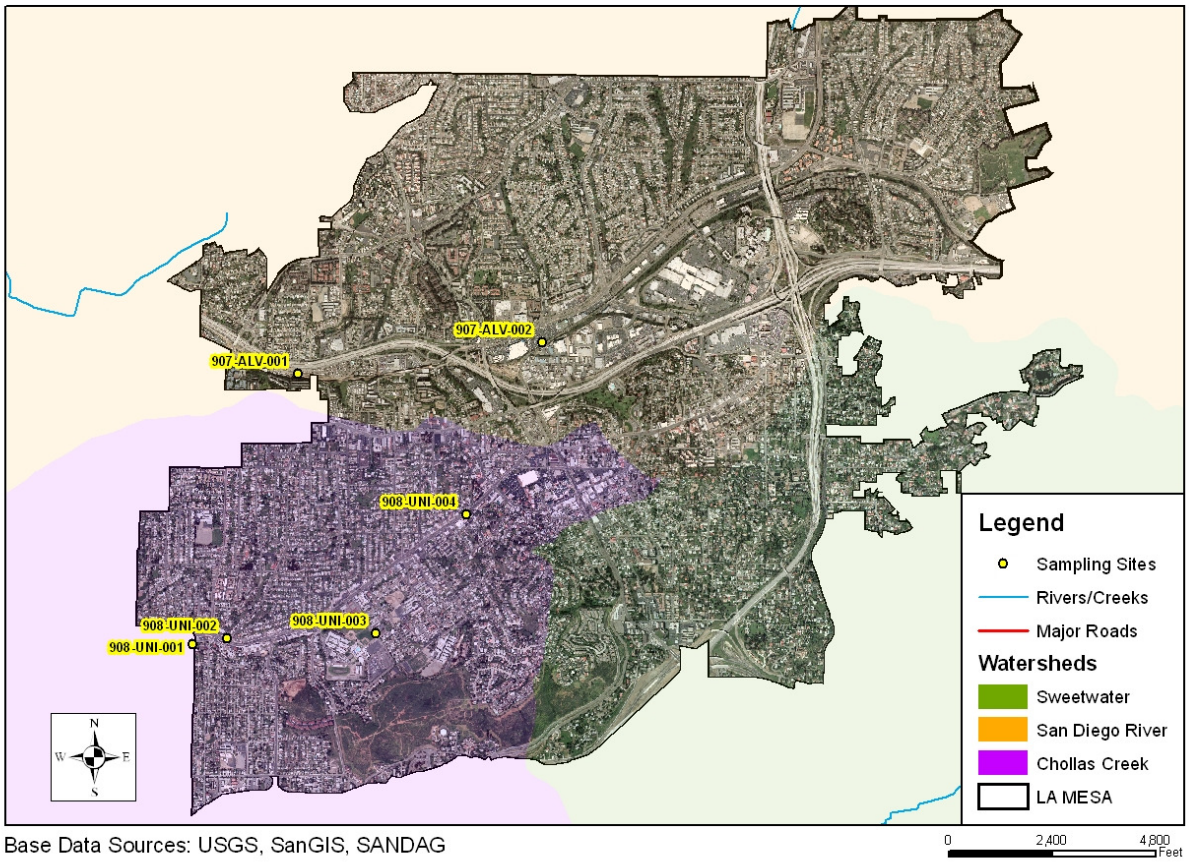

12.2 Additional Industrial and Commercial Inspections

As mentioned previously in this section and earlier in Section 5, the City conducted additional industrial and commercial inspection in a "light industrial" zone of the City in an effort to characterize the area and search for potential sources of elevated pollutants observed during wet weather sampling. Inspections were conducted as described in the industrial and commercial section of the JURMP and as described in Section 5 of this JURMP Annual Report. A total of five facilities received full storm water compliance inspections; one additional facility was visited, but a full inspection was not conducted because it was a duplicate of another business on the City's routine inspection list. The businesses inspected as part of the additional study, as well as the corrective actions recommended during the inspection are included in Table 12-1 later in this section.

Due to the small number of inspections that were completed as a part of this special study, it is difficult to make larger assumptions about the area as a whole. In general, BMP recommendations were relatively minor. The City conducted additional inspections as part of its special investigation in early 2008/2009. Findings from these additional inspections will be analyzed along with the data collected from the 2007/2008 and any relevant findings will be reported in the 2008/2009 JURMP Annual Report.

Table 12-1
Industrial and Commercial Facilities Visited as Part of an Additional Study

#	Business Name	Address	Corrective Actions
1	Albert J Becker, Inc. dba Wood Design West	8333 Case Street Suite C	• Keep dumpster lids closed when not in use.
2	Broding's Battery Warehouse	7860 El Cajon Blvd Suite A	• Do not wash vehicles on the site unless all water can be collected to prevent runoff to the storm drain system.
3	Cape-Able Canines	8150 Commercial Street	• None
4	Classic Screen Print	8176 Center Street, Suite C	• None
5	Diversified Materials Company, Inc	8250 Commercial Street	• Talk to the property owner and work to fix the storm drain on the property to prevent flooding. Do not pump the dirty water to the street. • Wash hands only in locations that drain to the sanitary sewer system, such as the bathroom sink. • Clean up the aluminum debris and keep the site free of leaves and debris. • Close the dumpster lids when not in use.

12.3 ADDITIONAL DATA COLLECTED DURING INDUSTRIAL AND COMMERCIAL INSPECTIONS

The City requested that D-MAX collect additional information during the 2007-2008 industrial and commercial inspections. Several of the questions were asked to gauge the level of knowledge of the facility contact person, and other questions were based on inspector observations.

The last question on the Supplemental Watershed Assessment Questionnaire and Inspection Form prompts the inspector to assign either significant or not significant to the overall source ranking for watershed pollutants of concern. This box was checked "Significant" when two or more of the watershed pollutants of concern were assigned a pollutant discharge potential (PDP) of three (3) or higher or one watershed pollutant of concern was assigned a PDP of a four (4) or higher. If the site did not meet the aforementioned criteria, the box was checked "Not Significant."

If the site was ranked as a "Significant" source for watershed pollutants of concern, the site was marked as being in violation of the City's Municipal Storm Water Ordinance. Note that a small number of sites were observed to be in violation of the City's Municipal Storm Water Ordinance but were ranked as "Not Significant" sources for watershed pollutants of concern. In these cases, any high PDP scores for the businesses were assigned to pollutant categories that are not considered watershed pollutants of concern and therefore did not meet the criteria of "Significant." More information on enforcement actions for industrial and commercial businesses is present in Section 5 of this JURMP Annual Report.

Information gathered from the questionnaire is discussed below, and split up between the San Diego River and San Diego Bay Watersheds. The City will take these results into account when planning and preparing for its 2008/2009 inspection program.

12.3.1 SAN DIEGO RIVER WATERSHED RESULTS

Most facility personnel (approximately 62%) did not have any knowledge of receiving any information or education about what businesses should be doing to prevent pollution from entering the environment. Other information gathered from the questions asked to facility personnel are presented in the following tables.

Table 12-2
Question: When water (from rain, sprinklers, etc.) leaves your site where does it go?

Answer	Frequency of Answer
A Water Body (Any)	31%
Don't Know/Unsure	10%
Storm Drain System	57%
Storm Drain System, A Water Body (any)	2%

Table 12-3
Question: Runoff leaving your site eventually reaches what water body?

Answer	Frequency of Answer
Don't Know/Unsure	24%
Pacific Ocean	45%
Pacific Ocean, San Diego River	10%
Pacific Ocean, San Diego River, Alvarado Channel	2%
San Diego River	17%
San Diego River, Mission Bay	2%

Table 12-4
Question: What is your impression of the water quality/condition of the downstream water body?

Answer	Frequency of Answer
Don't Know	12%
Fair	19%
Good	24%
Poor	45%

Table 12-5
Question: In General, what do you think are the main areas or activities at local businesses that could contribute to pollution of runoff (more than one answer is checked in some instances)?

Answer	Frequency of Answer
Washing Activities	33%
Washing Activities Done by Mobile Businesses	2%
Material Storage	10%
Material Processing	10%
Landscaping	10%
Repair Services	10%
Illegal Dumping	17%
Trash Area	21%
Don't Know	19%
Other	38%

Most facility personnel (approximately 76%) were receptive in their attitude toward compliance with storm water regulations. Other information regarding observations recorded during the inspection is included in the tables below:

Table 12-6
Observation: Was evidence of any non-storm water discharges (including allowable discharges) observed?

Observation	Frequency of Answer
Minimal	31%
No	45%
Significant	24%

Table 12-7
Observation: If irrigation system is present, which sprinkler head types are present (more than one answer is checked in some instances)?

Observation	Frequency of Answer
Spray	55%
Rotor	2%
Microspray	2%
Drip	12%
Bubblers	0%
Water by Hand	7%
Other	0%
N/A	26%

Table 12-8
Sites observed to be a significant source for watershed pollutants of concern in the San Diego River Watershed

#	Business Name	Business Address
1	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr
2	Arby's 5822	5341 Jackson Dr
3	Budget R V Repair & Mobile Service	7860 El Cajon Blvd
4	Centex Glazing	8260 Commercial St.
5	Chili's Bar & Grill #454	8285 Fletcher Pkwy
6	Chipotle Mexican Grill	8005 Fletcher Parkway
7	Diversified Materials Company, Inc	8250 Commercial Street
8	El Torito	5024 Baltimore Dr
9	Hearth House	5505 Jackson Dr
10	Kentucky Fried Chicken	5358 Jackson Dr
11	Marie Callender's #74	6950 Alvarado Rd
12	McDonald's	8045 Fletcher Pkwy
13	Pick Up Stix La Mesa	8025 Fletcher Pkwy
14	Rainbow Steel Inc.	8332 Case St.
15	The Truck and SUV Center	5301 Lake Murray Boulevard
16	Wedo Wedo	8169 Center Street

12.3.2 SAN DIEGO BAY WATERSHED

Similar to the San Diego River Watershed, most facility personnel (approximately 69%) did not have any knowledge of receiving any information or education about what businesses should be doing to prevent pollution from entering the environment. Other information gathered from the questions asked to facility personnel are presented in the following tables. Please note that a language barrier at one business, Aliberto's Mexican Food, prevented some information from being collected.

Table 12-9
Question: When water (from rain, sprinklers, etc.) leaves your site where does it go?

Answer	Frequency of Answer
Storm Drain System	57%
A Water Body (Any)	14%
Don't Know/Unsure	22%
Treatment Plant/Sewer	6%

Table 12-10
Question: Runoff leaving your site eventually reaches what water body?

Answer	Frequency of Answer
Pacific Ocean	49%
Chollas Creek	10%
San Diego Bay	4%
Don't Know/Unsure	36%

Table 12-11
Question: What is your impression of the water quality/condition of the downstream water body?

Answer	Frequency of Answer
Don't Know	47%
Fair	22%
Good	6%
Poor	24%

Table 12-12
Question: In General, what do you think are the main areas or activities at local businesses that could contribute to pollution of runoff (more than one answer is checked in some instances)?

Answer	Frequency of Answer
Washing Activities	14%
Washing Activities Done by Mobile Businesses	2%
Material Storage	4%
Material Processing	2%
Landscaping	4%
Repair Services	16%
Illegal Dumping	22%
Trash Area	22%
Don't Know	33%
Other	18%

Most facility personnel (approximately 64%) were receptive in their attitude toward compliance with storm water regulations. Other information regarding observations recorded during the inspection is included in the tables below:

Table 12-13
Observation: Was evidence of any non-storm water discharges (including allowable discharges) observed?

Observation	Frequency of Answer
Minimal	34%
No	46%
Significant	20%

Table 12-14
Observation: If irrigation system is present, which sprinkler head types are present?

Observation	Frequency of Answer
Spray	40%
Rotor	0%
Microspray	0%
Drip	2%
Bubblers	0%
Water by Hand	22%
Other	2%
N/A	34%

Table 12-15
Sites observed to be a significant source for watershed pollutants of concern in the Chollas Creek subwatershed of the San Diego Bay Watershed

#	Business Name	Business Address
1	A A A Auto Repair & Transmission	7025 University Ave
2	A-1 Hire, Ltd.	7190 University Ave.
3	Aliberto's Mexican Food	7819 El Cajon Blvd.
4	Dan's Automotive	7501 University Ave.
5	Filiberto's Mexican Food	7102 University Ave
6	Five Star Collision Center Inc	7643 University Avenue Suite H
7	Golden State Auto of La Mesa, Inc.	7224 University Avenue
8	Jack In The Box, University	6987 University Ave
9	MD Auto Group	7840 La Mesa Blvd
10	Nacho's Taco Shop	7589 University Ave
11	Panda Express #226	8011 University Ave
12	Rob's Automotive	7589 El Cajon Blvd Unit E
13	Round Table Pizza	8032 La Mesa Blvd
14	Shirley's Kitchen, University	7118 University Ave
15	Sid's Auto Body, Inc.	7473 El Cajon Blvd.

13.0 NON-EMERGENCY FIRE FIGHTING

Please reference Section 4.2.3 of this JURMP Annual Report for information about BMPs and procedures associated with non-emergency fire fighting activities.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 in response to new Municipal Permit requirements. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes to the JURMP made since the overall JURMP update in the spring of 2008 are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 CONCLUSIONS AND RECOMMENDATIONS

During the 2007/2008 reporting period the City of La Mesa updated its JURMP, which was finalized and submitted to the RWQCB in March 2008. The City has begun implementing the new and revised programs in its updated JURMP. The Copermittees have created several new regional workgroups to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City of La Mesa will work collaboratively with the other Copermittees in this process and continue to refine its program implementation as needed to improve its ability to reduce or eliminate pollutant discharges and meet regulatory requirements. The City has initiated additional monitoring and other special studies to help it better identify and address sources of pollutants, with a view toward meeting TMDL requirements. The City will also continue its efforts related to existing and pending TMDLs for both Chollas Creek and the San Diego River.

16.0 REFERENCES

California Regional Water Quality Control Board, 2007. Order No. R9-2007-0001. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Construction.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Industrial & Commercial.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Municipal.*

California Storm Water Quality Association, 2007. *Municipal Stormwater Program Effectiveness Assessment Guidance.*

Caltrans Storm Water Quality Handbooks, 2003. *Construction Site Best Management Practices Manual.*

City of La Mesa, 2008. *Jurisdictional Urban Runoff Management Program.*

County of San Diego, 2007. *Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Report.*

APPENDIX A.1

Appendix A.1
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Date Finaled	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Filtration	Hydrodynamic Separators	Other	
1	Aragon	7701 El Cajon Blvd	University	2006	N								X		Medium
2	Bougainvillea Walk	Milden Street	Alvarado	2007	N						X				Medium
3	Briercrest Park (CIP)	9051 Wakarusa Street	Alvarado	2005	Y					X					Medium
4	Car Dealership (McClelland Auto Sales)	7604 El Cajon Blvd	Alvarado	2003	Y		X								Medium
5	Eastridge	3957 Murray Hill Road	University and Spring Valley	2007	N			X					X		Medium
6	La Mesa Teen Center (CIP)	7775 Junior High Drive	University	2007	Y		X								Medium
7	Lowell Street Condominiums	4241 Lowell Street	University	2006	N		X				X				Medium
8	Parkview	4111 Massachusetts Ave	University	2004	N			X			X			Porous concrete	Medium
9	Talmadge East Apartments	5090 Guava Street	Alvarado	2007	N						X				Medium

Appendix A.1 (Continued)
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Date Finaled	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Filtration	Hydrodynamic Separators	Other	
10	Fire Station (CIP)	8054 Allison Avenue	University	2006	Y									Storm screens	High
11	Kaiser	8010 Parkway Drive	Alvarado	2007	Y								X		High

APPENDIX A.2

Appendix A.2
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	Follow-Up Insp.	# of Insp. (Dry Season)	Total Insp.
Public Projects									
1	Interim Library Post Office (ILPO)	8132 Allison Ave	SD Bay	Medium	31	7	3	0	10
2	I&I Mitigation Project Phase II	City-Wide	SD Bay, SD River	Low	31	1	0	0	1
3	CIP Bid #07-11 Alamo Way	Alamo Way	SD Bay	Low	11	1	0	0	1
4	Relocate utilities for future CIP	University Ave / Baltimore Dr.	SD Bay	Low	31	1	0	0	1
5	Bid # 06-29 Smarth Growth	Allison Ave	SD Bay	Low	4	1	0	0	1
Private Projects									
6	Eastridge Subdivision	3957 Murray Hill Road	SD Bay	High	31	14	0	0	14
7	Condos (30 Condo Units, Hilltop View)	7378 Orien Avenue	SD Bay	Medium	31	7	0	0	7
8	50 Multi Units (Briercrest)	9000 Murray Dr	SD River	Medium	31	7	0	0	7
9	Commercial Med/Parking Structure (Grossmont Hospital)	8860/8870 Center Dr	SD Bay	Medium	31	7	0	0	7

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	Follow-Up Insp.	# of Insp. (Dry Season)	Total Insp.
10	Multi-Apartment (25)	8725 Fletcher Pkwy	SD River	Medium	31	7	0	0	7
11	YMCA Expansion	8881 Dallas	SD River	Medium	31	7	2	0	9
12	SFH	7531, 7533, 7535, 7537 Ohio Place	SD River	Medium	15	4	0	0	4
13	Alvarado Channel[1]	Fletcher Parkway	SD River	Medium	0	0	0	0	0
14	Condos (Aragon)[2]	7701 El Cajon Blvd	SD Bay	Low	0	1	0	0	1
15	Addition to Existing Home/Retaining Wall	4292 Merritt Blvd	SD Bay	Low	31	2	0	0	2
16	Grading RV Parking	4661 Maple Ave	SD Bay	Low	31	1	0	0	1
17	Retaining Wall[3]	5137 Guava Ave	SD River	Low	0	1	0	0	1
18	Wendy's[4]	5450 Jackson Dr	SD River	Low	0	1	0	0	1
19	SFH	9038 Mollywoods Ave	SD River	Low	31	1	0	0	1
20	SFH	9320 Madison Avenue	SD Bay	Low	31	1	0	0	1
21	SFH	9222 Briercrest Dr	SD River	Low	31	1	0	0	1
22	SFH[5]	6145 Primrose Dr	SD River	Low	0	0	0	0	0

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	Follow-Up Insp.	# of Insp. (Dry Season)	Total Insp.
23	Multi-Condos (3)	5816 Pawnee Dr	SD River	Low	31	1	0	0	1
24	SFH	4415 Dale Ave	SD Bay	Low	31	1	0	0	1
25	Residential-Garage/House[6]	3917 Quarry Rd	SD Bay	Low	0	0	0	0	0
26	SFH (3)	3714 Carona St	SD Bay	Low	31	1	0	0	1
27	SFH	9035 Lemon Ave	SD Bay	Low	31	1	0	0	1
28	Commercial (Trolley Theaters)[7]	8555 Fletcher Parkway	SD River	Low	0	0	0	0	0
29	Improvement	4979 Garfield	SD Bay	Low	31	1	0	0	1
30	SFH	9223 Lovell	SD Bay	Low	0	1	0	0	1
31	SFH[8]	6155 Primrose Dr	SD River	Low	0	0	0	0	0
32	SFH	6147 Primrose Dr	SD River	Low	25	1	0	0	1
33	Improvement	6980 Wisconsin	SD River	Low	31	1	0	0	1
34	Christ Lutheran Church	7915 La Mesa Blvd	SD Bay	Low	31	1	0	0	1
35	Helix Water District Pipeline Replacement	68th and Alamo Way	SD Bay	Low	31	1	0	0	1

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	Follow-Up Insp.	# of Insp. (Dry Season)	Total Insp.
36	Helix Water District Pipeline Replacement	Commanche Drive & El Cajon Blvd	SD River	Low	31	1	0	0	1
37	SFH	9227 Madison Ave	SD Bay	Low	31	1	0	0	1
38	SFH	6151 Primrose Dr	SD River	Low	31	1	0	0	1

Notes and Definition

[1]Alvarado Channel did not begin construction during the reporting period. This project was included on the construction inventory in the City's updated JURMP and was left on the inventory for clarity purposes.

[2]Condos (Aragon) was not active during the wet season but one inspection was performed during the wet season to ensure proper perimeter protection.

[3,4]These projects completed grading prior to the start of the 2007-2008 fiscal year. Construction is currently on hold; however, the City conducted one inspection at each site during the wet season to check for signs of erosion.

[5,6,7,8]These construction projects were completed prior to the start of the 2007-2008 wet season.

APPENDIX A.3

Appendix A.3
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category
1	Allison Avenue Lot (Parking Facility)	Palm & Allison Avenues	High	San Diego River	Roads, Streets, Highways, and Parking Facilities
2	Aztec Park	Corner of Aztec Drive and Morocco Dr.	High	San Diego River	Parks and Recreation Facilities
3	Briercrest Park	9000 Block Wakarusa Street	High	San Diego River	Parks and Recreation Facilities
4	Collier Park and Pump House	4401 Palm Avenue	High	San Diego Bay	Parks and Recreation Facilities
5	Community Pool	5100 Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities
6	Graffiti Removal	Throughout City	High	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing
7	Harry Griffin Park	9550 Milden Street	High	San Diego River	Parks and Recreation Facilities
8	Highwood Park	4200 Parks Avenue	High	San Diego Bay	Parks and Recreation Facilities
9	Jackson Park	Jackson Drive and Laird Street	High	San Diego River	Parks and Recreation Facilities
10	Junior Seau Sports Complex	9001 Park Plaza Drive	High	San Diego River	Parks and Recreation Facilities
11	La Mesa Blvd (Parking Facility)	La Mesa Blvd & Acacia Avenue	High	San Diego Bay	Roads, Streets, Highways, and Parking Facilities
12	La Mesita Park and Gardener's Shack	8855 Dallas Street	High	San Diego River	Parks and Recreation Facilities
13	Lemon Ave Lot (Parking Facility)	Lemon Avenue & 3rd Street	High	San Diego Bay	Roads, Streets, Highways, and Parking Facilities
14	MacArthur Park	University Avenue and Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category
15	Municipal Separate Storm Sewer	53 miles of pipes, storm drains, storm drain boxes, and open channel sections throughout the City	High	San Diego Bay/ San Diego River	MS4
16	Northmont Park	Severin Drive and Amaya Drive	High	San Diego River	Parks and Recreation Facilities
17	Palm Avenue Lot (Parking Facility)	Palm & Lemon Avenues	High	San Diego River	Roads, Streets, Highways, and Parking Facilities
18	Porter Hall	4910 Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities
19	Porter Park	8425 University Avenue	High	San Diego Bay	Parks and Recreation Facilities
20	Power Washing	Throughout City	High	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing
21	Public Works (PW) Yard	8152 Commercial Street	High	San Diego River	Public Works Facilities
22	PW Fleet	8152 Commercial Street, Building 400	High	San Diego River	Public Works Facilities
23	PW Storage and Maintenance	8152 Commercial Street, Building 200	High	San Diego River	Public Works Facilities
24	PW Storage Yard	8152 Commercial Street	High	San Diego River	Public Works Facilities
25	Roads, Streets, and Highways	149 miles of roadways throughout the City	High	San Diego Bay/ San Diego River	Roads, Streets, Highways, and Parking Facilities
26	Rolando Park	Alamo Way and Vigo Street	High	San Diego Bay	Parks and Recreation Facilities
27	Sanitary Sewer Maintenance	Throughout City	High	San Diego Bay/ San Diego River	Sanitary Sewer Maintenance
28	Special Events	Throughout City	High	San Diego Bay/ San Diego River	Special Events

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category
29	Sunset Park, Gardener's Shack, and Recreational Building	5540 Lake Park Way	High	San Diego River	Parks and Recreation Facilities
30	Sunshine Park	70th and Tower Street	High	San Diego Bay	Parks and Recreation Facilities
31	Vista La Mesa Park	King Street and Hoffman Avenue	High	San Diego Bay	Parks and Recreation Facilities
32	Fire Station No. 11	8034 Allison Avenue	Medium	San Diego Bay	Fire Stations
33	Fire Station No. 12	8834 Dallas Street	Medium	San Diego River	Fire Stations
34	Fire Station No. 13	9110 Grossmont Boulevard	Medium	San Diego River/ San Diego Bay	Fire Stations
35	Infrastructure Maintenance	Throughout City	Medium	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing
36	Landscape Maintenance	Throughout City	Medium	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing
37	Police Station	8181 Allison Avenue	Medium	San Diego River	Other Fixed Facilities
38	PW Maintenance Building	8152 Commercial Street, Building 100	Medium	San Diego River	Public Works Facilities
39	PW Traffic Operation Trailer	8152 Commercial Street, Building 600	Medium	San Diego River	Public Works Facilities
40	Adult Enrichment Center	8450 La Mesa Boulevard	Low	San Diego Bay	Other Fixed Facilities
41	Adult Enrichment Center Clubhouse	8425 La Mesa Boulevard	Low	San Diego Bay	Other Fixed Facilities
42	City Hall and Modular Buildings	8130 Allison Avenue	Low	San Diego Bay	Other Fixed Facilities
43	City Hall Annex	8130 Allison Avenue	Low	San Diego Bay	Other Fixed Facilities

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category
44	Community Center	4975 Memorial Drive	Low	San Diego River/ San Diego Bay	Other Fixed Facilities
45	Helix Water District	7911 University Avenue	Low	San Diego Bay	Other Fixed Facilities
46	Historical Society	8369 University Avenue	Low	San Diego River/ San Diego Bay	Other Fixed Facilities
47	Library/Fine Arts	8055 University Avenue	Low	San Diego Bay	Other Fixed Facilities
48	Nan Couts Cottage (Recreational Bldg)	4875 Memorial Dr.	Low	San Diego River/ San Diego Bay	Other Fixed Facilities
49	Postal Facility	4800 Nebo Drive	Low	San Diego Bay	Other Fixed Facilities
50	PW Administration	8152 Commercial Street, Building 300	Low	San Diego River	Other Fixed Facilities
51	PW Document Storage	8152 Commercial Street, Building 500	Low	San Diego River	Other Fixed Facilities
52	Recreation Center	4975 Memorial Drive	Low	San Diego River/ San Diego Bay	Other Fixed Facilities

APPENDIX A.4

Appendix A.4
Industrial Inventory

#	Business	Street Address:	City	TTWQ	SIC Code	Category	Basin	WDID	< 200 ft.	Likely Source
1	Amazing Stone and Tile	8227 Commercial Street	La Mesa	High	3281	Manufacturing, Stone/Glass	Alvarado			
2	American Tanks	8111 Commercial St	La Mesa	High	3444	Manufacturing, Fabricated Metal	Alvarado			
3	California Countertop, Inc	7811 Alvarado Rd	La Mesa	High	3089	Manufacturing, Plastic/Rubber	Alvarado	9 37I019697	X	
4	Centex Glazing	8260 Commercial St.	La Mesa	High	3442	Other Contractor	Alvarado			X
5	Dixieline Lumber & Home Centers	8372 Center Dr	La Mesa	High	2432	Manufacturing, Wood/Furniture	Alvarado	9 37I015243		
6	EDCO Transfer Station	8182 Commercial St	La Mesa	High	4953	Waste Management	Alvarado	9 37I012705		
7	Rainbow Steel Inc.	8332 Case St.	La Mesa	High	3499	Manufacturing, Fabricated Metal	Alvarado	9 37I018321		X
8	Schaefer Ambulance Service, Inc.	7285 University Ave	La Mesa	High	4119	Ground Transportation	University	9 37I019735		
9	Walter H. Barber & Sons, Inc.	8179 Center St.	La Mesa	High	1629	Other Contractor	Alvarado			

Appendix A.4 (Continued)
Industrial Inventory

#	Business	Street Address:	City	TTWQ	SIC Code	Category	Basin	WDID	< 200 ft.	Likely Source
10	Wedo Wedo	8169 Center Street	La Mesa	High	3281	Manufacturing, Stone/Glass	Alvarado			X
11	A-1 Self Storage, Center Dr	8328 Center Dr	La Mesa	Medium	4225	Wholesale/Storage/ Warehousing	Alvarado			
12	ABSKO Products	8200 Commercial St	La Mesa	Medium	3641	Manufacturing, Equipment	Alvarado			
13	Albert J. Becker, Inc. dba Wood Design West	8333 Case Street Suite C	La Mesa	Medium	2434	Manufacturing, Misc	Alvarado			
14	Broke Hardware	8111 Commercial Street	La Mesa	Medium	3949	Manufacturing, Plastic/Rubber	Alvarado			
15	Classic Screen Print	8176 Center St, Ste. C	La Mesa	Medium	2759	Printing	Alvarado			
16	Community Mobile	7825 La Mesa Blvd	La Mesa	Medium	4119	Ground Transportation	University			X
17	E T A Pacific L L C	4440 Olive Avenue	La Mesa	Medium	4215	Ground Transportation	University			X
18	Exotic Wedding Cake	8400 Center Drive	La Mesa	Medium	2064	Manufacturing, Food/Drink	Alvarado			X
19	Insty Prints	8186 Center St C	La Mesa	Medium	2759	Printing	Alvarado			

Appendix A.4 (Continued)
Industrial Inventory

#	Business	Street Address:	City	TTWQ	SIC Code	Category	Basin	WDID	< 200 ft.	Likely Source
20	La Mesa Transfer & Storage, Inc.	8336 Case St	La Mesa	Medium	4225	Wholesale/Storage/ Warehousing	Alvarado			
21	M & M Patisserie	7668 El Cajon Blvd	La Mesa	Medium	2051	Manufacturing, Food/Drink	Alvarado			X
22	Moran Canvas Products	8135 Center Dr.	La Mesa	Medium	3444	Manufacturing, Fabricated Metal	Alvarado			
23	Western Plastics	8183 Center St	La Mesa	Medium	3999	Manufacturing, Misc	Alvarado			
24	A A Printing, Inc.	7323 El Cajon Blvd	La Mesa	Low	2759	Printing	University			
25	A-1 Self Storage	4981 Spring St.	La Mesa	Low	4225	Wholesale/Storage /Warehousing	Alvarado			
26	Barnes Printers, Inc.	8237 La Mesa Blvd	La Mesa	Low	2759	Printing	University			
27	Continuous Wave Tech, Inc. (Charter Delivery Servi	4350 Palm Avenue Suite 27	La Mesa	Low	4215	Ground Transportation	Spring Valley			
28	Dasina Building Group	8204 Parkway Dr., #5	La Mesa	Low	2434	Manufacturing, Wood/Furniture	Alvarado			
29	Embroidery Express	7640 University Ave #B	La Mesa	Low	2395	Manufacturing, Fabric/Clothes	University			
30	Equality Plating Co.	8172 Center St	La Mesa	Low	3471	Manufacturing, Fabricated Metal	Alvarado			
31	Joe's Signs	7889 University Avenue	La Mesa	Low	3993	Printing	University			

Appendix A.4 (Continued)
Industrial Inventory

#	Business	Street Address:	City	TTWQ	SIC Code	Category	Basin	WDID	< 200 ft.	Likely Source
32	L & R Neon	8200 Commercial St.	La Mesa	Low	3993	Printing	Alvarado			
33	La Mesa Printing Center	7468 University Ave	La Mesa	Low	2759	Printing	University			
34	Lyons & O'Haver, Inc. Taxidermy	8180 Parkway Drive	La Mesa	Low	3999	Manufacturing, Misc	Alvarado			
35	Printing By Gwen	7640 University Ave C	La Mesa	Low	2732	Printing	University			
36	Susan G. Holtz Photo Research	8204 Center Dr #20	La Mesa	Low	2741	Printing	Alvarado			
37	The Little Warehouse	5175 Baltimore Dr	La Mesa	Low	4225	Wholesale/Storage/ Warehousing	Alvarado			
38	Village Awards & Engraving	7769 University Ave	La Mesa	Low	2796	Printing	University			

Notes

TTWQ – Threat to Water Quality

SIC –Standard Industrial Classification Code

Basin – City of La Mesa drainage basin. HSAs are as follows: Alvarado and Lake Murray (907.12; San Diego River Watershed), University and Lemon Grove (908.22, San Diego Bay Watershed), Spring Valley (909.12, San Diego Bay Watershed)

WDID – Waste Discharge Identification Number

<200 ft -- Less than 200 feet from the nearest receiving water body

Likely Source – Based on category, has pollutant discharge potential of "Likely" (see Table 7-1) for pollutant(s) associated with impairments of downstream receiving water bodies located outside the City but within the same watershed as the business. Pollutants considered for HSA 908.22 were heavy metals, bacteria, pesticides, and trash. Pollutants considered for HSA 907.11 were nutrients, oxygen demanding substances, and bacteria. There are no impaired water bodies or ESAs in the City of La Mesa.

APPENDIX A.5

Appendix A.5
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1	A A A Auto Repair & Transmission	7025 University Ave	La Mesa	High	7537	Auto Repair	University		X	
2	A-1 Hire, Ltd.	7190 University Ave.	La Mesa	High	7359	Vehicle/Equipment Rental	University		X	
3	Aliberto's Mexican Food	7819 El Cajon Blvd.	La Mesa	High	5812	Eating/Drinking Establishments	University		X	
4	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr	La Mesa	High	7542	Vehicle Washing	Alvarado	X	X	
5	Arby's 5822	5341 Jackson Dr	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado		X	
6	Bob Stall Chevrolet	7601 Alvarado Road	La Mesa	High	5511	Vehicle Dealers	Alvarado	X		
7	Budget R V Repair & Mobile Service	7860 El Cajon Blvd	La Mesa	High	7539	Auto Repair	Alvarado		X	
8	Carl Burger Dodge World	8355 Hercules Street	La Mesa	High	5511	Vehicle Dealers	Alvarado			
9	Carl Burgers Jeep Eagle World	8333 Hercules St.	La Mesa	High	5511	Vehicle Dealers	Alvarado			
10	Carl's Jr. #284	8110 Parkway Dr	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado			
11	Chili's Bar & Grill #454	8285 Fletcher Pkwy	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado		X	
12	Chipotle Mexican Grill	8005 Fletcher Parkway	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado	X	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
13	Dan's Automotive	7501 University Ave.	La Mesa	High	7538	Auto Repair	University		X	
14	Diversified Materials Company, Inc	8250 Commercial Street	La Mesa	High	5085	Wholesale/Storage/Warehousing	Alvarado		X	
15	El Torito	5024 Baltimore Dr	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado	.	X	
16	Elite Auto Collision Repair Center	4949 Baltimore Drive	La Mesa	High	7532	Auto Paint/Body	Alvarado	.		
17	Filiberto's Mexican Food	7102 University Ave	La Mesa	High	5812	Eating/Drinking Establishments	University		X	
18	Five Star Collision Center Inc	7643 University Avenue Suite H	La Mesa	High	7532	Auto Paint/Body	University		X	
19	Golden State Auto of La Mesa, Inc.	7224 University Avenue	La Mesa	High	5521	Vehicle Dealers	University		X	
20	Hearth House	5505 Jackson Dr	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado		X	
21	Jack In The Box, University	6987 University Ave	La Mesa	High	5812	Eating/Drinking Establishments	University		X	
22	Kentucky Fried Chicken	5358 Jackson Dr	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado	.	X	
23	Marie Callender's #74	6950 Alvarado Rd	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado	X	X	
24	Marieta's	8949 La Mesa Blvd	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
25	McDonald's	8045 Fletcher Pkwy	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado	X	X	
26	MD Auto Group	7840 La Mesa Blvd	La Mesa	High	5511	Vehicle Dealers	University		X	
27	Nacho's Taco Shop	7589 University Ave	La Mesa	High	5812	Eating/Drinking Establishments	University		X	
28	Pacific Southwest Structures	8140 Street	La Mesa	High	1771	Cement Mixing/Cutting	Alvarado	.		
29	Panda Express #226	8011 University Ave	La Mesa	High	5812	Eating/Drinking Establishments	University		X	
30	Pick Up Stix La Mesa	8025 Fletcher Pkwy	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado	X	X	
31	Rob's Automotive	7589 El Cajon Blvd Unit E	La Mesa	High	7538	Auto Repair	University		X	
32	Round Table Pizza	8032 La Mesa Blvd	La Mesa	High	5812	Eating/Drinking Establishments	University		X	
33	Shirley's Kitchen, University	7118 University Ave	La Mesa	High	5812	Eating/Drinking Establishments	University		X	
34	Sid's Auto Body, Inc.	7473 El Cajon Blvd.	La Mesa	High	7532	Auto Paint/Body	University		X	
35	Sun Valley Golf Course	5080 Memorial Drive	La Mesa	High	7992	Golf Courses/Parks	Alvarado			
36	The Greek Gyros II	5500 Grossmont Ctr. Drive	La Mesa	High	5812	Eating/Drinking Establishments	Alvarado			
37	The Truck and SUV Center	5301 Lake Murray Boulevard	La Mesa	High	5521	Vehicle Dealers	Alvarado	.	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
38	Trattoria Tiramisu	8273 La Mesa Blvd.	La Mesa	High	5812	Eating/Drinking Establishments	University			
39	Denny's, Inc. #1743	6970 Alvarado Rd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado	X		
40	5 Star Market & Liquor	7495 University Avenue	La Mesa	Medium	5411	Eating/Drinking Establishments	University			
41	7 Eleven Food Store 13649 E-2121	5746 Amaya Drive	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
42	7 Eleven Food Store 17945	7602 University Avenue	La Mesa	Medium	5411	Eating/Drinking Establishments	University			
43	7-Eleven Store #16119-2111	5255 Baltimore	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
44	7-Eleven Store 13647 G-2121	8300 Parkway Drive	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
45	7-Eleven Store 21453	5650 Baltimore Drive	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
46	A & A Garden Equip Parts Service	7243 University Avenue	La Mesa	Medium	5261	Nurseries/ Greenhouses	University		X	
47	A & B Auto Electric	7801 El Cajon Blvd, Ste 2	La Mesa	Medium	7539	Auto Repair	University			
48	A & W Restaurants	5500 Grossmont Center Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado			
49	A And D Hawaiian B.B.Q.	7918 El Cajon Blvd Suite D	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
50	A D M Construction	7171 Alvarado Rd #101	La Mesa	Medium	1521	Other Contractor	Alvarado	X		
51	A To Z Auto Repair	7159 University Avenue	La Mesa	Medium	7538	Auto Repair	University			
52	Ace Coating Co.	8333 Case St.	La Mesa	Medium	1799	Other Contractor	Alvarado			
53	Affordable Paint And Body	8181 Center Street	La Mesa	Medium	7532	Auto Paint/Body	Alvarado			
54	Albertsons #6710	8920 Fletcher Parkway	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
55	All American Carpets	8186 Center Street Suite E	La Mesa	Medium	1742	Painting/Coating	Alvarado			
56	All Italiana	8356 Allison Ave	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
57	Amira Auto Sales 2 Broker	6942 University Avenue Suite C	La Mesa	Medium	5511	Vehicle Dealers	University		X	
58	Anthony's Fish Grotto La Mesa	9530 Murray Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
59	Antica Trattora Inc.	5654 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
60	Aquahouse	7705 El Cajon Blvd. Suite 14	La Mesa	Medium	2086	Manufacturing, Food/Drink	University		X	
61	Arco Sunshine Food Store #9543	7594 University Ave	La Mesa	Medium	5541	Fueling	University		X	
62	Arco Sunshine Food Store #9596	7974 University Ave	La Mesa	Medium	5541	Fueling	University		X	
63	Are Con, Inc.	8171 Center Street	La Mesa	Medium	1771	Cement	Alvarado			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
						Mixing/Cutting				
64	Arigato Japanese Restaurant	5575 Baltimore Dr # 110	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
65	Audio Associates	8200 Center Drive	La Mesa	Medium	1742	Painting/Coating	Alvarado			
66	Auto Authority	7601 University Avenuee Suite B	La Mesa	Medium	5521	Vehicle Dealers	University		X	
67	Auto Finance Group	7474 University Ave.	La Mesa	Medium	5521	Vehicle Dealers	University		X	
68	Auto Repair Specialists	8120 Center St	La Mesa	Medium	7539	Auto Repair	Alvarado	.		
69	B A S Starting Systems, Inc.	8186 St	La Mesa	Medium	7539	Auto Repair	Alvarado	.		
70	B J's Pizza & Grill	5500 Grossmont Ctr Dr #M1	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
71	B M H Italian L L C	7670 El Cajon Blvd	La Mesa	Medium	5499	Eating/Drinking Establishments	Alvarado		X	
72	Baldwin Auto Sales	8174 Center St.	La Mesa	Medium	5521	Vehicle Dealers	Alvarado			
73	Baskin-Robbins 31 Flavors	8807 La Mesa Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
74	Big O Tires	7589 El Cajon Blvd Suite A	La Mesa	Medium	7534	Auto Repair	University			
75	Bluecrystalherbs.Com	4409 68 Street	La Mesa	Medium	5499	Eating/Drinking Establishments	University		X	
76	Bob Bowen's Auto Service	7191 Alvarado Rd	La Mesa	Medium	7538	Auto Repair	Alvarado	X		

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
77	Boll Weevil Systems Inc	9104 Fletcher Pkwy	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
78	Brady Co. / San Diego, Inc.	8104 Street	La Mesa	Medium	1742	Painting/Coating	Alvarado	.		
79	Brewbanks Coffeehouse	8697 La Mesa Blvd Suite A	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
80	Brigantine Restaurant	9350 Fuerte Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado			
81	Broding's Battery Warehouse	8188 St.	La Mesa	Medium	5013	Auto Supplies	Alvarado			
82	Bronco Electric	8188 St	La Mesa	Medium	5013	Auto Supplies	Alvarado	.		
83	Broyles Construction, Inc.	8101 Commerical St	La Mesa	Medium	0782	Landscaping	Alvarado		X	
84	Buenos Dias In California	5100 Jackson Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
85	C & D Auto Care	7163 University Avenue	La Mesa	Medium	7538	Auto Repair	University			
86	C & D Towing Specialists	8332 Case St.	La Mesa	Medium	7549	Auto Repair	Alvarado			
87	Caffe Bar E Restoranti	5263 Baltimore Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
88	Caliber Collision Centers	8310 Center Drive	La Mesa	Medium	7532	Auto Paint/Body	Alvarado	.		
89	Callari's Italian Deli & Bakery	7670 El Cajon Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
90	Campbell Exteriors, Inc.	8179 Center St.	La Mesa	Medium	1761	Other Contractor	Alvarado			
91	Candy Island	5500 Grossmont Center Drive	La Mesa	Medium	5441	Eating/Drinking Establishments	Alvarado		X	
92	Cappuccino House	7334 University Avenue	La Mesa	Medium	5812	Eating/Drinking Establishments	University		X	
93	Carini Electric, Inc.	8104 Center St.	La Mesa	Medium	1731	Other Contractor	Alvarado			
94	Carruso's Coffee Corner	8201 La Mesa Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	University		X	
95	Casa De Pico Restaurant	5500 Grossmont Center Drive 404	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
96	Casual Cafe	8881 Fletcher Parkway	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
97	Centifontis	8209 La Mesa Blvd	La Mesa	Medium	5441	Eating/Drinking Establishments	University			
98	Centre City Shell #2	3810 Massachusetts Ave	La Mesa	Medium	5541	Fueling	Lemon Grove		X	
99	Chang's Express	5500 Grossmont Center Drive # Fc4	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
100	Charcoal House	9566 Murray Dr.	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
101	Chef Taka Restaurant	7520 El Cajon Blvd Suite 300	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
102	Chefaxel Inc. Bistro	7097 University Avenue	La Mesa	Medium	5812	Eating/Drinking Establishments	University			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
103	Chevy's Fresh Mex #513	5500 Grossmont Center Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
104	Chopsticks Inn Restaurant	8687 La Mesa Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
105	Chuck E. Cheese's	5500 Grossmont Center Dr J 34	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
106	CI Customs	7147 University, Suite A	La Mesa	Medium	7549	Auto Repair	University		X	
107	Ciao Bella	5263-65 Baltimore Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado	.	X	
108	Citlalli Mexican Food	7327 University Avenue	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
109	Claim Jumper Restaurant La Mesa	5500 Grossmont Ctr. Drive #406	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado			
110	Coast Restaurant Supply	8120 St.	La Mesa	Medium	5046	Wholesale/Storage/Warehousing	Alvarado			
111	Coco's #132	5550 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
112	Coffee Indulgences	8900 Grossmont Blvd #7	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
113	Cold Stone Creamery	5500 Grossmont Center Dr. #F1	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
114	College/La Mesa Smog Test Only	7643 University Avenue Suite G	La Mesa	Medium	7549	Auto Repair	University		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
115	Collins Plumbing, Inc.	8130 St.	La Mesa	Medium	1711	Other Contractor	Alvarado	.		
116	Electric Appliance Service	8110 St.	La Mesa	Medium	7699	Equipment Repair	Alvarado			
117	Continental Catering	8232 Parkway Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado	.	X	
118	Cosmos Coffee Cafe'	8278 La Mesa Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	University		X	
119	Costco Wholesale #469	8125 Fletcher Pkwy	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado	X		
120	D'amato's Pizza	8807 La Mesa Blvd.	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
121	Dante's Pizza	5500 Grossmont Center Dr # 135	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
122	Deters Inc.	8180 Street	La Mesa	Medium	7359	Vehicle/Equipment Rental	Alvarado			
123	Discount Smog Centers	7633 El Cajon Blvd Suite 200	La Mesa	Medium	7549	Auto Repair	University		X	
124	Domino's Pizza	7960 University Ave	La Mesa	Medium	5812	Eating/Drinking Establishments	University		X	
125	Dragon House	6062 Lake Murray Blvd #201	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
126	Dream Dinners	5208 Jackson Drive Suite 116	La Mesa	Medium	5499	Eating/Drinking Establishments	Alvarado		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
127	Drew Ford / Drew Hyundai	8970 La Mesa Blvd.	La Mesa	Medium	5511	Vehicle Dealers	Alvarado			
128	Eastridge Veterinary Clinic	7750 University Avenue, Suite A	La Mesa	Medium	0742	Animal Facilities	University		X	
129	El Azteca Taco Shop Mexican Food	8306 Parkway Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
130	El Cerrito Veterinary Hospital	6911 University Avenue	La Mesa	Medium	0742	Animal Facilities	University		X	
131	Elite Auto Group	7643 University Avenue	La Mesa	Medium	5521	Vehicle Dealers	University		X	
132	Elite Auto Group	7658 University Avenue	La Mesa	Medium	5511	Vehicle Dealers	University		X	
133	Eloquent Auto	7147 University Avenue	La Mesa	Medium	7549	Auto Repair	University		X	
134	Enterprise Rent-A-Car #3241	8363 Center Drive Suite 6 H	La Mesa	Medium	7514	Vehicle/Equipment Rental	Alvarado			
135	Esquire Landscape, Inc.	8186 Center Street Suite G	La Mesa	Medium	0782	Landscaping	Alvarado		X	
136	European Bistro	6062 Lake Murray Blvd Suite 102-105	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
137	European Delicatessen	6062 Lake Murray Blvd Suite 101	La Mesa	Medium	5461	Eating/Drinking Establishments	Alvarado		X	
138	Express Auto Service	7633 El Cajon Blvd. suite 300	La Mesa	Medium	7538	Auto Repair	University			
139	Falcon's Lure	7745 University Avenue	La Mesa	Medium	5813	Eating/Drinking Establishments	University		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
140	Family Chef Restaurant	6155 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
141	Fast Seafood And Mexican Food	5525 Jackson Drive Suite B	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
142	Fish Tacos And More	5525 Jackson Drive Suite B	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
143	Fix Me A Plate Cafe	9168-9172 Fletcher Parkway	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
144	Fletcher Hills Pet Clinic	9160 Fletcher Hills Parkway	La Mesa	Medium	0742	Animal Facilities	Alvarado		X	
145	Fuddrucker's	5500 Grossmont Center Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
146	Gold Coast Bagel	5658 Lake Murray Blvd	La Mesa	Medium	5461	Eating/Drinking Establishments	Alvarado		X	
147	Golden Jade Chinese Cafe	7918 El Cajon Blvd Suite P	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
148	Golden Spoon Yogurt	5640 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
149	Golden Wok	8342 Parkway Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
150	Gounev Automotive	7633 El Cajon Blvd Suite 300	La Mesa	Medium	5511	Vehicle Dealers	University		X	
151	Greater San Diego Air Conditioning	8141 Center St.	La Mesa	Medium	1711	Other Contractor	Alvarado			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
152	Groceryworks.Com Operating Company	8011 University Avenue	La Mesa	Medium	5411	Eating/Drinking Establishments	University			
153	Growers Direct	7055 University Avenue	La Mesa	Medium	5431	Eating/Drinking Establishments	University			
154	Gus's Subs & Pizza #2	5620 Baltimore Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
155	Hayes Furniture	8270 La Mesa Blvd	La Mesa	Medium	7359	Vehicle/Equipment Rental	University		X	
156	Heather Loraine Cosmetics Of	8139 Center Street	La Mesa	Medium	5199	Wholesale/Storage/Warehousing	Alvarado			
157	Hickory Farms, Inc. #13292	5500 Grossmont Center Drive 197	La Mesa	Medium	5499	Eating/Drinking Establishments	Alvarado		X	
158	Hollenbeck Enterprises	8160 Center Street	La Mesa	Medium	7359	Vehicle/Equipment Rental	Alvarado			
159	J And S Sound Systems	5170 Guild Street	La Mesa	Medium	7359	Vehicle/Equipment Rental	Alvarado			
160	J Ks Greek Cafe	7749 University Ave	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
161	J.A. MacDonald, Inc.	8338 Center Drive	La Mesa	Medium	1522	Other Contractor	Alvarado			
162	Jack In The Box, Jackson	5141 Jackson Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
163	Jack Orr Auto Body, Inc.	7253 University Ave	La Mesa	Medium	7539	Auto Repair	University			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
164	Jamba Juice #143	5500 Grossmont Ctr Dr.	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
165	James L. Yancy	8336 Case Street	La Mesa	Medium	4789	Ground Transportation	Alvarado			
166	Java Mama Cafe	8250 La Mesa Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	University		X	
167	Jitters Coffee Shop	8201 La Mesa Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	University		X	
168	Jolt 'N Joes	8076 La Mesa Boulevard	La Mesa	Medium	5812	Eating/Drinking Establishments	University		X	
169	La Casa Blanca Mexican Restaurant	9570 Murray Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
170	La Fogata Mexican Restaurant	7303 El Cajon Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
171	La Mesa Motor Clinic, Inc.	5120 Guild St	La Mesa	Medium	7539	Auto Repair	Alvarado	.		
172	La Mesa Nine Diamonds L L C	3775 Massachusetts Avenue	La Mesa	Medium	5411	Eating/Drinking Establishments	Lemon Grove			
173	La Mesa Ocean Grille	5465 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
174	La Mesa Smog	3824 Massachussetts Ave., Suite A	La Mesa	Medium	7549	Auto Repair	Lemon Grove		X	
175	La Mesa Smog Check	7801 El Cajon Blvd, Ste 1	La Mesa	Medium	7549	Auto Repair	University			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
176	La Mesa Submarina	5454 Grossmont Center Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
177	La Mesita Mexican Food	7012 University Avenue	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
178	La Salsa Restaurants	4990 Baltimore Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
179	Lake Murray Cafe	5465 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
180	Lake Murray Shell	5302 Lake Murray Blvd	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
181	Lake Murray Village Veterinarian	5644 Lake Murray Blvd.	La Mesa	Medium	0742	Animal Facilities	Alvarado		X	
182	Lew's Gourmet Creations, Inc.	8302 Parkway Drive	La Mesa	Medium	5149	Wholesale Food	Alvarado		X	
183	Lisa Osthues	6060 Lubbock Avenue	La Mesa	Medium	5499	Eating/Drinking Establishments	Alvarado		X	
184	Little Roma Italian Cuisine	5575 Baltimore Drive Suite 104	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
185	Logistics International, Inc.	4670 Nebo Drive Suite 100	La Mesa	Medium	4789	Ground Transportation	University		X	
186	Los Pinos Taco Shop	5660 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
187	Lotus Pond Restaurant	8260 Parkway Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado			
188	Manhattan Pizza	6195 Lake Murray Blvd Suite D	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
189	Manhattan Pizza	6195-D Lake Murray Blvd.	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
190	Mario's De La Mesa	8425 La Mesa Blvd.	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
191	Mc Donald's Corp	8045 Fletcher Parkway	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
192	McDonalds	5500 Grossmont Center Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
193	McDonald's	5500 Grossmont Center Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
194	Mesa Plaza	7520 El Cajon Blvd Suite 301	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
195	Mi Casita Taco Shop	8038 La Mesa Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
196	Midas Mufflers	7207 University Ave	La Mesa	Medium	7539	Auto Repair	University			
197	Mr G'S Tavern	7081 University Avenue	La Mesa	Medium	5813	Eating/Drinking Establishments	University		X	
198	Mr. D'S Mini Mart	8292 La Mesa Blvd	La Mesa	Medium	5411	Eating/Drinking Establishments	University		X	
199	Mrs. Field's	5500 Grossmont Center Drive	La Mesa	Medium	5441	Eating/Drinking Establishments	Alvarado		X	
200	Mystic Grill & Bakery	6990 University Ave	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
201	New York Giant Pizza	9083 Dallas St	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
202	Nfarooqi Enterprises L L C	6140 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
203	Nonnos Pizza	5314 Baltimore Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado	.	X	
204	Norma Jeans	5286 Baltimore Dr	La Mesa	Medium	5813	Eating/Drinking Establishments	Alvarado		X	
205	Norm's Cocktails	7403 El Cajon Blvd	La Mesa	Medium	5813	Eating/Drinking Establishments	University		X	
206	Olive Garden G M R I, Inc. #1301	5500 Grossmont Center Dr J 2	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
207	Outback Steakhouse	5628 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
208	Oz's Pub	8758 La Mesa Blvd	La Mesa	Medium	5813	Eating/Drinking Establishments	Alvarado		X	
209	P. G. King	5575 Baltimore Drive Suite 105-A	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
210	P.G. King	5575 Baltimore Dr #105-A	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
211	Pacific Repair Services Int'l, Inc.	5345 Timken St., Suite E	La Mesa	Medium	7699	Equipment Repair	Alvarado			
212	Pacific Tire & Brake	7633 El Cajon Blvd, Suite 100	La Mesa	Medium	7564	Auto Repair	University			
213	Palm Springs Deli	8363 Center Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
214	Palmer Painting Company	8104 Center St.	La Mesa	Medium	1721	Painting/Coating	Alvarado			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
215	Panda Express #606	5500 Grossmont Center Drive E-1	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
216	Panda Land	9200 Fletcher Pky	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
217	Panera Bread	5500 Grossmont Center Drive Suite 145	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
218	Parkway Bar	9188 Fletcher Parkway	La Mesa	Medium	5813	Eating/Drinking Establishments	Alvarado		X	
219	Parkway Market	9085 Dallas Street	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
220	Parkway Pet Hospital	8200 Parkway Drive	La Mesa	Medium	0742	Animal Facilities	Alvarado	.	X	
221	Parky's	6149 Lake Murray Blvd	La Mesa	Medium	5813	Eating/Drinking Establishments	Alvarado		X	
222	Paula Jean's Coffee Bean	5565 Grossmont Center Drive	La Mesa	Medium	5499	Eating/Drinking Establishments	Alvarado		X	
223	Pet Emergency Clinic East County	5232 Jackson Dr., Suite 105	La Mesa	Medium	0742	Animal Facilities	Alvarado		X	
224	Pietros Cucina Italiana	8378 Parkway Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
225	Pizza Hut	8011 University Ave	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
226	Plaza Deli	7777 Alvarado Rd 400 A	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado	.	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
227	Preston's Tire & Wheel	8300 Center Drive	La Mesa	Medium	7538	Auto Repair	Alvarado			
228	Pretzel Maker	5500 Grossmont Center Drive	La Mesa	Medium	5461	Eating/Drinking Establishments	Alvarado		X	
229	Primary Mechanical, Inc.	5345 Timken St., Suite E & I	La Mesa	Medium	1711	Other Contractor	Alvarado			
230	Public Auto Wholesale	8220 Street	La Mesa	Medium	5521	Vehicle Dealers	Alvarado			
231	Quiznos Sub 10552	8555 Fletcher Parkway Suite 103	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
232	R S M2 Contractors, Inc.	8191 Center Street	La Mesa	Medium	1521	Other Contractor	Alvarado			
233	Raindance Roofing	8176 St.	La Mesa	Medium	1761	Other Contractor	Alvarado			
234	Ralph's Grocery Company 104	8800 Grossmont Blvd	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
235	Red Lobster G M R I, Inc. #504	8703 Murray Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
236	Rita's Fine Food	8900 Grossmont Blvd Suite 5	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
237	Rosaritos Mexican Food	6062 Lake Murray Blvd Suite 204	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
238	Rosaritos Mexican Food #3	7941 University Ave	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
239	Round Table Pizza Restaurant	5999 Severin Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado	.	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
240	Rowe's La Mesa Pet Hotel	8126 Center Street	La Mesa	Medium	0752	Animal Facilities	Alvarado		X	
241	Rubio's Restaurants. Inc.	5500 Grossmont Center Dr, # D 22	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
242	Russian Palace	6130 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
243	Sam's Market	7587 University Avenue	La Mesa	Medium	5411	Eating/Drinking Establishments	University			
244	Samuel Auto Sales	8191 Center Street	La Mesa	Medium	5012	Vehicle Dealers	Alvarado			
245	San Diego's Finest Donuts	6062 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
246	Sandwiches N Stuff	8363 Center Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado	.	X	
247	Sanfilippo's Pizza	8141 La Mesa Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
248	Schlotzsky's	5500 Grossmont Center Dr 219	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
249	Select Cars, Inc.	7699 El Cajon Blvd.	La Mesa	Medium	5521	Vehicle Dealers	University		X	
250	Sergio's Café	7380 Parkway Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado	.	X	
251	Severin Mobil	5900 Severin Dr	La Mesa	Medium	5541	Fueling	Alvarado	X		
252	Shakey's Pizza La Mesa	5500 Grossmont Center Drive Suite 267	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
253	Shenanigan's Irish Pub	7030 University Avenue	La Mesa	Medium	5813	Eating/Drinking Establishments	University		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
254	Shizuoka Japanese Restaurant	9118 Fletcher Pky	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
255	Silvia's Windows	8176 Center Street Suite D	La Mesa	Medium	5039	Building Materials	Alvarado			
256	Simply Unforgettable	7668 El Cajon Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
257	Sloter Enterprises	7830 La Mesa Blvd	La Mesa	Medium	5012	Vehicle Dealers	University		X	
258	Souplantation/Garden Fresh	9158 Fletcher Pky #3	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
259	Starbucks Coffee #5222	5500 Grossmont Center Drive	La Mesa	Medium	5499	Eating/Drinking Establishments	Alvarado		X	
260	Starbucks Coffee #5953	8497 Fletcher Parkway	La Mesa	Medium	5499	Eating/Drinking Establishments	Alvarado		X	
261	Starbucks Coffee #6876	5416 Lake Murray Blvd	La Mesa	Medium	5499	Eating/Drinking Establishments	Alvarado		X	
262	Starbucks Coffee #8905	5020 Baltimore Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
263	Steak Daddy Corp.	7777 University Ave	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado			
264	Sterling Motor Escort	7589 El Cajon Blvd., Suite D	La Mesa	Medium	5571	Vehicle Dealers	University		X	
265	Street Smart Vehicle Protection/Premium	7633 El Cajon Blvd.	La Mesa	Medium	7549	Auto Repair	University		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
266	Submarina - La Mesa	5454 Grossmont Ctr. Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
267	Subway	8396 Parkway Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
268	Subway #32859	7900 El Cajon Blvd Suite L/M	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
269	Subway #32859	7900 El Cajon Blvd Suite L	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
270	Subway (Jaspal Enterprises)	7404 University Avenue	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
271	Subway Sandwiches	8142 La Mesa Blvd.	La Mesa	Medium	5812	Eating/Drinking Establishments	University		X	
272	Subway Sandwiches, Lake Murray	5307 Lake Murray Blvd A	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado	.	X	
273	Summit Transmissions	7633 El Cajon Blvd. #208	La Mesa	Medium	7537	Auto Repair	University			
274	Sushi Fun Teriyaki Express	5500 Grossmont Center Dr #303	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
275	Talon Auto Adjusters	8163 Street	La Mesa	Medium	5012	Vehicle Dealers	Alvarado			
276	Tamarind Thai Restaurant	7970 University Avenue	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
277	Thai Dragon House	6062 Lake Murray Blvd Suite 201	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
278	The Charcoal House	9566 Murray Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
279	The Chickenest 95, Inc.	7200 Parkway Dr #111	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado	.		
280	The Chico Club	7366 El Cajon Blvd	La Mesa	Medium	5813	Eating/Drinking Establishments	Alvarado		X	
281	The Coffee Merchant	5500 Grossmont Center Drive Ste 321	La Mesa	Medium	5499	Eating/Drinking Establishments	Alvarado		X	
282	The Hot Pot	5525 Grossmont Center Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
283	The Pet Hospital of La Mesa	5336 Jackson Dr.	La Mesa	Medium	0742	Animal Facilities	Alvarado	.	X	
284	The Yogurt Mill	8158 La Mesa Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
285	Thomas J. Taylor Construction	8189 Center St.	La Mesa	Medium	1500	Other Contractor	Alvarado			
286	Touch Of Class	5322 Jackson Drive	La Mesa	Medium	7542	Vehicle Washing	Alvarado			
287	Trader Joe's #24	5475 Grossmont Center Drive Suite A	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
288	Trolley Stop Deli	8150 La Mesa Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	University		X	
289	Trophy's	5500 Grossmont Ctr Dr	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
290	United Brands Co., Inc.	5360 Jackson Drive Suite 208	La Mesa	Medium	5149	Wholesale Food	Alvarado		X	
291	University Animal Clinic	7134 University Ave.	La Mesa	Medium	0742	Animal Facilities	University		X	
292	VCA Grossmont Animal Hospital	8274 Parkway Drive	La Mesa	Medium	0742	Animal Facilities	Alvarado	.	X	
293	Villa's Mexican Food	5500 Grossmont Center Drive F C-9	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
294	Vine Ripe Market	8191 Fletcher Parkway	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
295	Vons Companies Inc #2093	8011 University Avenue	La Mesa	Medium	5411	Eating/Drinking Establishments	University			
296	Vons Grocery Co #2137	5630 Lake Murray Blvd	La Mesa	Medium	5411	Eating/Drinking Establishments	Alvarado		X	
297	West Coast Barbecue & Catering	6126 Lake Murray Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
298	West Coast Car Sales	6942 University Ave., Suite C	La Mesa	Medium	5511	Vehicle Dealers	University		X	
299	Wheel & Deal, Inc.	7675 University Avenue	La Mesa	Medium	5521	Vehicle Dealers	University		X	
300	Wienerschnitzel #58	6949 University Ave	La Mesa	Medium	5812	Eating/Drinking Establishments	University			
301	Williams Enterprises	7840 La Mesa Blvd.	La Mesa	Medium	5561	Vehicle Dealers	University		X	
302	Wongs Golden Palace, Inc.	7126 University Ave	La Mesa	Medium	5812	Eating/Drinking Establishments	University			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
303	Yogurt Express	6195 Lake Murray Blvd C	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
304	Yum Yum Donut Franchise #5228	7550 El Cajon Blvd	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
305	Zodiak Café	9158 Fletcher Parkway #3	La Mesa	Medium	5812	Eating/Drinking Establishments	Alvarado		X	
306	10,000 R V	5500 Grossmont Center Drive	La Mesa	Low	5561	Vehicle Dealers	Alvarado			
307	7 Eleven Food Store 20884 D 2121	4253 Palm Avenue	La Mesa	Low	5411	Eating/Drinking Establishments	Spring Valley			
308	70th Street Service Station	5151 70th Street	La Mesa	Low	5541	Fueling	Alvarado	.		
309	A M E X Petroleum	8303 Parkway Drive	La Mesa	Low	5541	Fueling	Alvarado			
310	A-Aairco Air Conditioning	7227 University Avenue	La Mesa	Low	1711	Other Contractor	University			
311	Above & Beyond Carpet Care	7878 La Mesa Blvd	La Mesa	Low	7217	Carpet/Furniture Cleaning	University			
312	Ace Parking Management	5500 Grossmont Center Drive	La Mesa	Low	7521	Vehicle Parking/Storage	Alvarado			
313	Action R V, Inc.	8090 University Avenue	La Mesa	Low	5561	Vehicle Dealers	Alvarado			
314	Advance Medical Supply	7710 University Avenue	La Mesa	Low	5047	Wholesale/Storage/Warehousing	University			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
315	Affordable Duplication Services	7840 El Cajon Blvd Suite 205	La Mesa	Low	5065	Wholesale/Storage/Warehousing	Alvarado			
316	Air Best Inc.	8760 La Mesa Blvd.	La Mesa	Low	1711	Other Contractor	Alvarado			
317	Al & EDS Autosound	5208 Jackson Dr. 117	La Mesa	Low	7549	Auto Repair	Alvarado			
318	All Lines Dealer Alds Inc.	7373 Mohawk St.	La Mesa	Low	7549	Auto Repair	Alvarado	.		
319	April's Mosaics	8341 Lemon Avenue Suite C	La Mesa	Low	1743	Masonry	Spring Valley			
320	Arco # 09578	9600 Murray Drive	La Mesa	Low	5541	Fueling	Alvarado			
321	Art Of Nature	8816 La Mesa Blvd	La Mesa	Low	5193	Wholesale/Storage/Warehousing	Alvarado			
322	Auto Center	8203 University Ave	La Mesa	Low	7539	Auto Repair	Alvarado			
323	Automobile Freight Forwarding	7590 El Cajon Blvd Suite H	La Mesa	Low	4731	Ground Transportation	Alvarado			
324	Autozone 2809	7791 El Cajon Boulevard	La Mesa	Low	5531	Auto Supplies	University			
325	Azure Construction, Inc.	7423 El Cajon Blvd	La Mesa	Low	1799	Other Contractor	University			
326	B F S Retail &	5577 Lake Murray Blvd	La Mesa	Low	5531	Auto Supplies	Alvarado			
327	Babies "R" Us	8150 Fletcher Parkway	La Mesa	Low	5137	Wholesale/Storage/Warehousing	Alvarado			
328	Bancroft Motors	8760 Campo Rd.	La Mesa	Low	5521	Vehicle Dealers	Spring			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
							Valley			
329	Beck's Repair Shop	8838 La Mesa Blvd	La Mesa	Low	7539	Auto Repair	Alvarado			
330	Benintende And Son's Painting	8341 Lemon Avenue Suite C	La Mesa	Low	1721	Painting/Coating	Spring Valley			
331	Best Produce	6957 University Avenue	La Mesa	Low	5141	Wholesale Food	University			
332	Billiards Direct	8223 La Mesa Blvd	La Mesa	Low	5091	Wholesale/Storage/Warehousing	University			
333	Bill's Lock and Key	7368 El Cajon Boulevard	La Mesa	Low	7699	Equipment Repair	Alvarado			
334	Bob Stall Chevrolet	7631-7651 Alvarado Road	La Mesa	Low	5599	Vehicle Dealers	Alvarado			
335	Bond's Automotive	8418 La Mesa Blvd	La Mesa	Low	7539	Auto Repair	Spring Valley			
336	C & C Glass	8772 La Mesa Blvd	La Mesa	Low	1793	Other Contractor	Alvarado			
337	C & C Glass, Inc.	8712 La Mesa Boulevard	La Mesa	Low	1793	Other Contractor	Alvarado			
338	C J'S Interiors, Inc.	8265 Street Suite 5-7	La Mesa	Low	1752	Other Contractor	Alvarado			
339	California Cars & Credit	8760 Campo Road	La Mesa	Low	5521	Vehicle Dealers	Spring Valley			
340	California Park R V Sales	7407 Alvarado Road	La Mesa	Low	5561	Vehicle Dealers	Alvarado			
341	Center Glass Co. #3	7853 El Cajon Blvd.	La Mesa	Low	1793	Other Contractor	Alvarado			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
342	Centifonti	8365 La Mesa Blvd	La Mesa	Low	5812	Eating/Drinking Establishments	Spring Valley			
343	Circle K Stores, Inc. # 8675	8899 La Mesa Blvd	La Mesa	Low	5541	Fueling	Alvarado			
344	Condoconversions.Com, Inc.	4817 Palm Avenue Suite I	La Mesa	Low	1522	Other Contractor	University			
345	Countywide Machine Tool Repair	8030 La Mesa Blvd Suite 314	La Mesa	Low	1731	Other Contractor	University			
346	Dave Wallace Roofing	8900 Grossmont Blvd Suite 3	La Mesa	Low	1761	Other Contractor	Alvarado			
347	Davis Framing, Inc.	8103 Street	La Mesa	Low	1521	Other Contractor	Alvarado	.		
348	De Albas Spring St.	4867 Spring St.	La Mesa	Low	7539	Auto Repair	Alvarado			
349	Dennis Sherman Foreign Car Service	8620 La Mesa Boulevard	La Mesa	Low	7538	Auto Repair	Alvarado			
350	Denny's Restaurant #6488	4235 Spring St	La Mesa	Low	5812	Eating/Drinking Establishments	Spring Valley			
351	Dieter Fischer's Star Car Service	8699 La Mesa Blvd	La Mesa	Low	7539	Auto Repair	Alvarado			
352	Don Keating Service	8381 La Mesa Boulevard	La Mesa	Low	7538	Auto Repair	Spring Valley			
353	Don Keating Used Cars	8381 La Mesa Boulevard	La Mesa	Low	5521	Vehicle Dealers	Spring Valley			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
354	Ducastel L L C	4350 Palm Avenue # 13	La Mesa	Low	5065	Wholesale/Storage/Warehousing	Spring Valley			
355	Earl W. Fite & Sons, Inc.	8878 La Mesa Blvd	La Mesa	Low	1711	Other Contractor	Alvarado			
356	El Guapo's	8350 La Mesa Blvd	La Mesa	Low	5812	Eating/Drinking Establishments	Spring Valley			
357	Elite Trade Enterprise	8030 La Mesa Blvd #156	La Mesa	Low	1799	Other Contractor	University			
358	Emerald Oil Co.	5600 Baltimore Drive	La Mesa	Low	5541	Fueling	Alvarado			
359	Essential Flooring	8216 Parkway Drive	La Mesa	Low	1752	Other Contractor	Alvarado			
360	Euclid Motors	4969 Baltimore Dr.	La Mesa	Low	5521	Vehicle Dealers	Alvarado			
361	European Car Service	8855 La Mesa Blvd	La Mesa	Low	7539	Auto Repair	Alvarado			
362	Family Carpets & Drapes, Inc.	7111 University Avenue	La Mesa	Low	1542	Other Contractor	University			
363	Firestone Tire & Service Centers	8784 Grossmont Blvd	La Mesa	Low	7534	Auto Repair	Alvarado			
364	Forever Memories	8801 La Mesa Blvd	La Mesa	Low	7359	Vehicle/Equipment Rental	Alvarado			
365	Fox Auto Sales	7480 El Cajon Blvd	La Mesa	Low	5521	Vehicle Dealers	Alvarado			
366	German Auto Repair	4654 Nebo Dr	La Mesa	Low	7539	Auto Repair	Spring Valley			
367	Gomez Handyman Services	7584 Ohio Place	La Mesa	Low	1521	Other Contractor	University			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
368	Grossmont Drain Cleaning	8949 Alpine Avenue	La Mesa	Low	1711	Other Contractor	Spring Valley			
369	H & J Contracting, Inc.	8820 La Mesa Blvd	La Mesa	Low	1799	Other Contractor	Alvarado			
370	Hanger 94, Inc	5270 Jackson Drive	La Mesa	Low	5137	Wholesale/Storage/Warehousing	Alvarado			
371	Harloff Automotive	7445 University Avenue	La Mesa	Low	5531	Auto Supplies	University			
372	Harold's Automotive	8202 Parkway Dr	La Mesa	Low	7538	Auto Repair	Alvarado	.		
373	Harris Concrete, Inc.	8265 Street Suite 9	La Mesa	Low	1771	Cement Mixing/Cutting	Alvarado			
374	Hearx	8066-68 La Mesa Blvd	La Mesa	Low	3845	Manufacturing, Electronics	University			
375	Helfers Electric Company, Inc.	8186 Street Suite A	La Mesa	Low	1731	Other Contractor	Alvarado			
376	Helix Pet Hospital	4223 Palm Ave.	La Mesa	Low	0742	Animal Facilities	Spring Valley			
377	Henry's Marketplace	4630 Palm Avenue	La Mesa	Low	5499	Eating/Drinking Establishments	Spring Valley			
378	Holt Industrial Services	5638 Lake Murray Blvd #182	La Mesa	Low	7699	Equipment Repair	Alvarado			
379	Hunters Construction Co.	7374 El Cajon Blvd.	La Mesa	Low	1522	Other Contractor	Alvarado			
380	I Deal Door & Window Company	7859 El Cajon Blvd.	La Mesa	Low	1751	Other Contractor	Alvarado			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
381	Ideal Door & Window Co.	7859 El Cajon Blvd	La Mesa	Low	1793	Other Contractor	Alvarado			
382	Innova Energy Baltimore Shell	5261 Baltimore Drive	La Mesa	Low	5541	Fueling	Alvarado			
383	Intelligent Solutions	8374 Allison Avenue	La Mesa	Low	5045	Wholesale/Storage/Warehousing	University			
384	J. W. Smart Construction	8130 La Mesa Blvd 174	La Mesa	Low	1522	Other Contractor	University			
385	J.B. Auto & Truck Sales	4999 Baltimore Drive	La Mesa	Low	5521	Vehicle Dealers	Alvarado			
386	Jackson and Blane Heating and A/C	7576 University Avenue	La Mesa	Low	1711	Other Contractor	University			
387	Jackson Pendo Development Company	8530 La Mesa Blvd Suite 306	La Mesa	Low	1521	Other Contractor	Alvarado			
388	Jiffy Lube #831	5540 Lake Murray Blvd	La Mesa	Low	7549	Auto Repair	Alvarado			
389	Joe N Andy's Hole In The Wall	8344 La Mesa Blvd	La Mesa	Low	5813	Eating/Drinking Establishments	Spring Valley			
390	Johnny B'S Bar & Grill	8393 La Mesa Blvd	La Mesa	Low	5813	Eating/Drinking Establishments	Spring Valley			
391	K 1 Tire	7159 University Avenue	La Mesa	Low	5531	Auto Supplies	University			
392	Ken Gwin Landscape, Inc	4350 Palm Avenue Suite 6	La Mesa	Low	0782	Landscaping	Spring Valley			
393	Kennedy Electric	5884 Samuel Street	La Mesa	Low	1742	Painting/Coating	Alvarado			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
394	Kevin Flynn	6226 Primrose Drive	La Mesa	Low	5084	Wholesale/Storage/Warehousing	Alvarado			
395	Kragen CSK Auto, Inc. #789	5350 Jackson Dr.	La Mesa	Low	5531	Auto Supplies	Alvarado	.		
396	La Mesa Auto Care	8692 La Mesa Blvd	La Mesa	Low	7539	Auto Repair	Alvarado			
397	La Mesa Back Comfort	8760 A La Mesa Blvd	La Mesa	Low	2514	Manufacturing, Wood/Furniture	Alvarado			
398	La Mesa Car Wash	5322 Jackson Dr	La Mesa	Low	5541	Fueling	Alvarado	.		
399	La Mesa Lumber	8255 University Ave	La Mesa	Low	5211	Building Materials	Alvarado			
400	La Mesa Paint & Body	8170 Parkway Dr	La Mesa	Low	7539	Auto Repair	Alvarado	.		
401	La Mesa Texaco/Chula Vista Entertainment	4925 Spring St	La Mesa	Low	5541	Fueling	Alvarado			
402	La Torta Mexican Café/Deli	8350 La Mesa Blvd	La Mesa	Low	5812	Eating/Drinking Establishments	Spring Valley			
403	Lake Murray Blvd #1 Exxon	6085 Lake Murray Blvd	La Mesa	Low	5541	Fueling	Alvarado			
404	Lakeside Motors	8090 University Avenue	La Mesa	Low	5521	Vehicle Dealers	Alvarado			
405	Lars Construction Co	4703 Spring Street	La Mesa	Low	1799	Other Contractor	University			
406	Lifesighs Cards	8265 St. Suite #15	La Mesa	Low	5112	Wholesale/Storage/Warehousing	Alvarado			
407	M J Medical, Incorporated	5310 Baltimore Drive	La Mesa	Low	5047	Wholesale/Storage/W	Alvarado			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
						arehousing				
408	Matrix Builders Inc.	8265 Street Suite 12	La Mesa	Low	1521	Other Contractor	Alvarado			
409	McNeill Development Corp	8419 La Mesa Blvd Suite C	La Mesa	Low	1542	Other Contractor	Spring Valley			
410	Medical Arts Pharmacy Inc.	8851 Center Drive Suite 110	La Mesa	Low	2834	Manufacturing, Biotech/Pharmaceutic al	Alvarado			
411	Mercedesparts.Com Inc	6035 Lake Murray Blvd	La Mesa	Low	5531	Auto Supplies	Alvarado			
412	Microfiber Solutions	7484 University Avenue Suite 230	La Mesa	Low	5169	Wholesale/Storage/W arehousing	University			
413	Nicks Autos Group	4949 Baltimore Drive	La Mesa	Low	5521	Vehicle Dealers	Alvarado			
414	P A W Service Center	8230 Street	La Mesa	Low	7538	Auto Repair	Alvarado			
415	P L M & Associates, Inc.	8115 Street	La Mesa	Low	1799	Other Contractor	Alvarado			
416	Pacific Homeworks	7200 Parkway Drive, 105	La Mesa	Low	1751	Other Contractor	Alvarado	.		
417	Palm Springs Market	4301 Palm Avenue	La Mesa	Low	5411	Eating/Drinking Establishments	Spring Valley			
418	Para Quality Construction Inc	7853 El Cajon Blvd	La Mesa	Low	1742	Painting/Coating	Alvarado			
419	Paradise Auto Sales, L L C	7640 El Cajon Blvd	La Mesa	Low	5521	Vehicle Dealers	Alvarado			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
420	Peanuts Auto Repair	5387 Lake Murray Blvd	La Mesa	Low	7539	Auto Repair	Alvarado			
421	Performance Choppers	4999 Baltimore Dr., Suite 1	La Mesa	Low	5571	Vehicle Dealers	Alvarado			
422	Performance Motoring	8620 La Mesa Blvd.	La Mesa	Low	5521	Vehicle Dealers	Alvarado			
423	Pete's Place	8330 La Mesa Blvd	La Mesa	Low	5813	Eating/Drinking Establishments	Spring Valley			
424	Pham Thu Trang	7140 University Avenue Suite D	La Mesa	Low	5087	Wholesale/Storage/Warehousing	University			
425	Phil J. Maynard	8653 Washington Avenue	La Mesa	Low	1521	Other Contractor	Alvarado			
426	Pinos Mexican Food	4233 Spring Street	La Mesa	Low	5812	Eating/Drinking Establishments	Spring Valley			
427	Por Favor Restaurant	8302 La Mesa Blvd	La Mesa	Low	5812	Eating/Drinking Establishments	Spring Valley			
428	Postal Annex	8030 La Mesa Blvd	La Mesa	Low	7389	Pool/Fountain Cleaning	University			
429	R D E Company, Inc.	4730 Palm Avenue	La Mesa	Low	1742	Painting/Coating	Spring Valley			
430	R L T Sims Enterprises Inc	5335 Jackson Drive	La Mesa	Low	5521	Vehicle Dealers	Alvarado			
431	Rancho Mobil #2	5450 Jackson Dr	La Mesa	Low	5541	Fueling	Alvarado	.		
432	Residential Heating & AC	7574 University Avenue	La Mesa	Low	1711	Other Contractor	University			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
433	Richard Communications	8262 University Avenue Suite A	La Mesa	Low	3651	Manufacturing, Electronics	Alvarado			
434	Riha Construction Company	8173 Street	La Mesa	Low	1542	Other Contractor	Alvarado			
435	Road Pros Tire & Lube	7151 University Ave.	La Mesa	Low	5531	Auto Supplies	University			
436	Ron's Automotive	4951 Clearview Way	La Mesa	Low	7538	Auto Repair	Alvarado			
437	Roy Johnson Contractor	7830 La Mesa Blvd	La Mesa	Low	1521	Other Contractor	University			
438	San Diego Adaptive Sports Fund	8255 University Avenue	La Mesa	Low	7521	Vehicle Parking/Storage	Alvarado			
439	San Diego R V	7407 Alvarado Road	La Mesa	Low	5561	Vehicle Dealers	Alvarado			
440	San Diego Shirt Works	7729 University Avenue	La Mesa	Low	2396	Manufacturing, Fabric/Clothes	University			
441	Shell Gas Station	9090 Dallas St	La Mesa	Low	5541	Fueling	Alvarado			
442	Shower Walls of San Diego	6063 Lake Murray Blvd	La Mesa	Low	1521	Other Contractor	Alvarado			
443	Smogs R Us / California Inspection Station	9089 Dallas St.	La Mesa	Low	7549	Auto Repair	Alvarado			
444	Software Systems Associates	7484 University Avenue Suite 320	La Mesa	Low	5045	Wholesale/Storage/Warehousing	University			
445	Sonus- U S A, Inc.	5565 Grossmont Center Drive 3-153	La Mesa	Low	5047	Wholesale/Storage/Warehousing	Alvarado			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
446	Southern California Discount Tire	8867 Grossmont Blvd.	La Mesa	Low	7534	Auto Repair	Alvarado			
447	Sparky's Transmissions	8861 La Mesa Blvd	La Mesa	Low	7539	Auto Repair	Alvarado			
448	Spectrum Audio	8841 La Mesa Blvd Suite A	La Mesa	Low	7359	Vehicle/Equipment Rental	Alvarado			
449	Speedy Smog Of California	7482 El Cajon Blvd	La Mesa	Low	7538	Auto Repair	Alvarado			
450	Spring Chevron	8200 University Avenue	La Mesa	Low	5541	Fueling	Alvarado			
451	Steves Bancroft Motors	8760 Campo Road Suite A	La Mesa	Low	5521	Vehicle Dealers	Spring Valley			
452	Steve's Delivery Service	9320 Earl Street Unit 8	La Mesa	Low	4215	Ground Transportation	Alvarado			
453	Street Smart Auto Sound	7482 El Cajon Blvd	La Mesa	Low	7549	Auto Repair	Alvarado			
454	Sunny Donuts	4199 Spring St	La Mesa	Low	5812	Eating/Drinking Establishments	Spring Valley			
455	Sunset Glazing, Inc.	8834 La Mesa Blvd.	La Mesa	Low	1793	Other Contractor	Alvarado			
456	Sunshine Carpet And Upholstery	9145 Dillon Drive	La Mesa	Low	7217	Carpet/Furniture Cleaning	Spring Valley			
457	T J'S Auto Repair	8090 University Ave Suite B	La Mesa	Low	7532	Auto Paint/Body	Alvarado			
458	The Car Shop	4999 Baltimore Dr	La Mesa	Low	7532	Auto Paint/Body	Alvarado	.		

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
459	The Dashboard Store/Expert Window Tinting	7147 University Avenue	La Mesa	Low	5531	Auto Supplies	University			
460	The Rush Group	7633 El Cajon Blvd, Suite 210 B	La Mesa	Low	5531	Auto Supplies	University			
461	The Village Garden Restaurant &	8384 La Mesa Blvd	La Mesa	Low	5812	Eating/Drinking Establishments	Spring Valley			
462	The Vine At The Village Garden	8384 La Mesa Blvd.	La Mesa	Low	5812	Eating/Drinking Establishments	Spring Valley			
463	Timberwolf Construction, Inc.	7323 El Cajon Blvd	La Mesa	Low	1521	Other Contractor	University			
464	Translatin Productions	5706 Baltimore Drive Suite 345	La Mesa	Low	3911	Manufacturing, Fabricated Metal	Alvarado			
465	Tune Craft, Inc.	8802 La Mesa Blvd	La Mesa	Low	7539	Auto Repair	Alvarado			
466	University Air Conditioning &	8203 University Avenue	La Mesa	Low	1711	Other Contractor	Alvarado			
467	V S P I	5500 Grossmont Center Drive	La Mesa	Low	5521	Vehicle Dealers	Alvarado			
468	Valvoline Instant Oil Change	7981 El Cajon Blvd	La Mesa	Low	7539	Auto Repair	Alvarado			
469	Village Garden Restaurant & Bakery	8384 La Mesa Blvd	La Mesa	Low	5812	Eating/Drinking Establishments	Spring Valley			
470	W E Bedding Corp	5200 Jackson Drive	La Mesa	Low	5021	Wholesale/Storage/Warehousing	Alvarado			
471	West Coast D B I, Inc	4240 Francis Way	La Mesa	Low	1522	Other Contractor	University			

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
472	Worldwide Auto Parts Inc.	9089 Dallas St.	La Mesa	Low	5531	Auto Supplies	Alvarado			
473	Z-Coil Pain Relief Footwear	8803 La Mesa Blvd	La Mesa	Low	5139	Wholesale/Storage/Warehousing	Alvarado			
474	Abundant Life Landscape	5484 Wellesley Street E	La Mesa	Medium	0782	Landscaping	Alvarado		X	X
475	All Star Powerwash	3123 Reservoir Drive	Jamul	Medium	7349	Power Washing				X
476	Aqua Pool Plastering	1137 Naranca	El Cajon	Medium	7389	Pool/Fountain Cleaning				X
477	Belle Saveur	7040 Neri Drive	La Mesa	Medium	5812	Eating/Drinking Establishments	University		X	X
478	Blue Dolphin	4213 Kansas St. #1	San Diego	Medium	7542	Vehicle Washing				X
479	Bonded Carpet & Drapery Service	7831 Ostrow Street	San Diego	Medium	7217	Carpet/Furniture Cleaning				X
480	Bright Side Detail	10325 Baron Drive	San Diego	Medium	7542	Vehicle Washing				X
481	Charlies Carpet Cleaning	10707 Jamacha Blvd #182	Spring Valley	Medium	7217	Carpet/Furniture Cleaning				X
482	Classic Image Mobile Detailing	Not Listed	La Mesa	Medium	7542	Vehicle Washing				X
483	Coastal Chem Dry	4901 Morena Blvd Suite 316	San Diego	Medium	7217	Carpet/Furniture Cleaning				X
484	Coles Carpets	1170 W Morena Blvd	San Diego	Medium	7217	Carpet/Furniture Cleaning				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
485	Complete Car Care Pros	2703 Rhoades Road	San Diego	Medium	7542	Vehicle Washing				X
486	Crystal Pool Service	1109 N 2nd Street	El Cajon	Medium	7389	Pool/Fountain Cleaning				X
487	Custom Landscaping And Irrigation	9461 Grossmont Summit Drive Suite A	La Mesa	Medium	0782	Landscaping	Alvarado		X	X
488	Deep Cleaning And Restoration	Not Listed	La Mesa	Medium	7217	Carpet/Furniture Cleaning				X
489	Detailing Concepts By Laura	Not Listed	La Mesa	Medium	7549	Auto Repair				X
490	Detailing Concepts by Laura	6152 Horton Drive	La Mesa	Medium	7542	Vehicle Washing	Alvarado	NA		X
491	Exquisite Mobile Detailing	Not Listed		Medium	7542	Vehicle Washing				X
492	Finn Pool & Spa	Not Listed	La Mesa	Medium	7389	Pool/Fountain Cleaning				X
493	Fitzgerald Carpet & Upholstery	5500 Grossmont Center Drive 111	La Mesa	Medium	7217	Carpet/Furniture Cleaning	Alvarado			X
494	Foothills Pool Service	Not Listed	La Mesa	Medium	7389	Pool/Fountain Cleaning				X
495	Halsey Design Group, Inc.	9340 Fuerte Dr., Suite 303	La Mesa	Medium	0781	Landscaping	Alvarado		X	X
496	JC Brooks Construction	8383 Center Drive Suite A	La Mesa	Medium	7349	Power Washing	Alvarado	.		X
497	Jerry Frazee	Not Listed	La Mesa	Medium	7542	Vehicle Washing				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
498	John Guevera Clear Water Pool	3533 Harris Street	La Mesa	Medium	7389	Pool/Fountain Cleaning	Lemon Grove			X
499	Kar Tek	2034 Hidden Crest Drive	El Cajon	Medium	7542	Vehicle Washing				X
500	Ken Myers Pool Service & Repair	Not Listed	La Mesa	Medium	7389	Pool/Fountain Cleaning				X
501	Knott's Pest Control, Inc.	5141 Guild St.	La Mesa	Medium	7342	Pest Control	Alvarado			X
502	La Bahn's Landscaping	5000 Thorne Drive Suite B	La Mesa	Medium	0782	Landscaping	University		X	X
503	Mikes Mobile Auto Detailing	Not Listed	La Mesa	Medium	7542	Vehicle Washing				X
504	Mike's Mobile Detailing	Not Listed	La Mesa	Medium	7542	Vehicle Washing				X
505	Mobile Airbag Installation	Not Listed	La Mesa	Medium	7549	Auto Repair				X
506	My Carpet Guy	9074 Prospect Avenue	Lakeside	Medium	7217	Carpet/Furniture Cleaning				X
507	Ocean Blue Pool Service	13983 Chicarita Creek Road	San Diego	Medium	7389	Pool/Fountain Cleaning				X
508	Olympic Carpet Cleaning	538 Front Street	El Cajon	Medium	7217	Carpet/Furniture Cleaning				X
509	Pacific Sun Pool N Spa Center	8550 Production Avenue Suite B	San Diego	Medium	7389	Pool/Fountain Cleaning				X
510	Paradise Power Washing	Not Listed	La Mesa	Medium	7349	Power Washing				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
511	Patons Pond Service	5308 Camino Playa Malaga	San Diego	Medium	7389	Pool/Fountain Cleaning				X
512	Pool Rite Service	1129 Whitsett Drive	El Cajon	Medium	7389	Pool/Fountain Cleaning				X
513	R J C Window Cleaning Company	1642 Folkestone Street	Spring Valley	Medium	7349	Power Washing				X
514	Rods & Customs Unlimited	Not Listed	La Mesa	Medium	7549	Auto Repair				X
515	Rosendo's Pool Service	Not Listed	La Mesa	Medium	7389	Pool/Fountain Cleaning				X
516	Shawn Hillman	Not Listed	La Mesa	Medium	7549	Auto Repair				X
517	Stanley Steemer Carpet Cleaners	9655 Via Excelencia	San Diego	Medium	7217	Carpet/Furniture Cleaning				X
518	Superior Carpet Care	Not Listed	La Mesa	Medium	7217	Carpet/Furniture Cleaning				X
519	Swains Mobile Auto Detailing	11988 Via Granero	El Cajon	Medium	7542	Vehicle Washing				X
520	Swim Service Company	5171 Guild Street	La Mesa	Medium	7389	Pool/Fountain Cleaning	Alvarado			X
521	Tates Mobile Detailing	5500 Grossmont Center Suite 213	La Mesa	Medium	7542	Vehicle Washing	Alvarado			X
522	The Water's Edge Pool & Spa	Not Listed	La Mesa	Medium	7389	Pool/Fountain Cleaning				X
523	Tony Lawrence Care (T L C)	Not Listed	La Mesa	Medium	7389	Pool/Fountain Cleaning				X
524	Triton Power Clean	1930 Quidort Ct	El Cajon	Medium	7349	Power Washing				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
525	Trujillo Auto Detail	208 Tremont Street	Chula Vista	Medium	7542	Vehicle Washing				X
526	Villa Pool & Spa	Not Listed	La Mesa	Medium	7389	Pool/Fountain Cleaning				X
527	Warrens Carpet Cleaning Service	7343 Ronson Road Suite S	San Diego	Medium	7217	Carpet/Furniture Cleaning				X
528	Water Tech Pool Service	1533 Greenfield Drive	El Cajon	Medium	7389	Pool/Fountain Cleaning				X
529	Wins Pools	13227 Idyl Drive	Lakeside	Medium	7389	Pool/Fountain Cleaning				X
530	1 800 Anytyme	1410 S Santa Fe	Vista	Low	1731	Other Contractor				X
531	1st Choice Signs	610 Rock Springs Road	Escondido	Low	1731	Other Contractor				X
532	A & P Plumbing	6940 Schilling Avenue	San Diego	Low	1711	Other Contractor				X
533	A & S Construction	4130 Bancroft Drive	La Mesa	Low	1521	Other Contractor	Spring Valley			X
534	A C S Construction, L P	1235 W Collins Avenue	Orange	Low	1521	Other Contractor				X
535	A D S Environmental Services	4820 Mercury Street Suite C	San Diego	Low	1799	Other Contractor				X
536	A Hardwood Floor Co.	12025 Lemon Crest Drive	Lakeside	Low	1752	Other Contractor				X
537	A M G Demolition & Environmental	1102 Fleetridge Drive	San Diego	Low	1795	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
538	A M S Paving, Inc.	10400 Banana Avenue	Fontana	Low	1611	Cement Mixing/Cutting				X
539	A Michael Mallow Const	8629 Via Del Luz Drive	El Cajon	Low	1521	Other Contractor				X
540	A O Reed & Company	4777 Ruffner St	San Diego	Low	1799	Other Contractor				X
541	A P Southwest, L L C	5002 S Ash Avenue	Tempe,AZ 85282	Low	1521	Other Contractor				X
542	A R B, Inc.	26000 Commercentre Drive	Lake Forest	Low	1799	Other Contractor				X
543	A R C Roofing	451 Marshall Avenue	El Cajon	Low	1761	Other Contractor				X
544	A S C Builders	5190 Rebel Road	San Diego	Low	1521	Other Contractor				X
545	A S I Hastings, Inc.	1250 Greenfield Drive	El Cajon	Low	1711	Other Contractor				X
546	A To Z Plumbing, Inc.	7811 Mission Gorge Road Suite L	San Diego	Low	1711	Other Contractor				X
547	A&D Steel, Inc.	10520 Kenney Street	Santee	Low	1791	Other Contractor				X
548	A-1 Budget Roofing, Inc.	1980 Summit Drive	Escondido	Low	1761	Other Contractor				X
549	A-1 Lawns	4536 Nebo Drive	La Mesa	Low	0782	Landscaping	Spring Valley			X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
550	Aardvark Ant & Pest Control Inc	2514 Jamacha Road #502-40	El Cajon	Low	7342	Pest Control				X
551	Absolutely Electric	3146 L Street	San Diego	Low	1731	Other Contractor				X
552	Access Professional Systems, Inc.	8250 Vickers Street Suite E	San Diego	Low	1522	Other Contractor				X
553	Accu Air Inc.	1318 Bermuda View	El Cajon	Low	1799	Other Contractor				X
554	Action Air Conditioning & Heating	2750 Santa Fe Avenue	San Marcos	Low	1799	Other Contractor				X
555	Adolfson And Peterson	5002 S Ash Avenue	Tempe,AZ 85282	Low	1521	Other Contractor				X
556	Adrian's Custom Woodworks	5925 Warren Place	La Mesa	Low	1751	Other Contractor	Alvarado			X
557	Advanced Electronic Solutions	1830 John Towers Avenue	El Cajon	Low	1731	Other Contractor				X
558	Advanced Engery Insulation, Inc.	14368 Olde Highway 80 Suite A	El Cajon	Low	1521	Other Contractor				X
559	Affordable Raingutters	1402 N Magnolia Avenue	El Cajon	Low	1761	Other Contractor				X
560	Affordable Water Heaters And	24707 San Fernando Road	Newhall	Low	1711	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
561	Air Doc Inc	1444 Pioneer Way, Ste 8	El Cajon	Low	1711	Other Contractor				X
562	Air Plus Mechanical, Inc	9191 Chesapeake Drive	San Diego	Low	1799	Other Contractor				X
563	Air Systems Mechanical, Inc	6101 Jackson Drive	La Mesa	Low	1711	Other Contractor	Alvarado			X
564	Air Tek	9424 Chesapeake Drive Suite 1302	San Diego	Low	1711	Other Contractor				X
565	Akenson Electric	8843 Prospect Avenue	Santee	Low	1731	Other Contractor				X
566	Al T. Sejut Electrical	4060 Vista Calaveras	Oceanside	Low	1731	Other Contractor				X
567	Alarms Unlimited, Inc.	4584 Park Blvd	San Diego	Low	1799	Other Contractor				X
568	Alcal Arcade Contracting, Inc.	31164 Huntwood Avenue	Hayward	Low	1761	Other Contractor				X
569	Alcoa Signage	9535 Arjons Dr E	San Diego	Low	1799	Other Contractor				X
570	Alessio Heating & Air, Inc	740 Metcalf Street 14	Escondido	Low	1711	Other Contractor				X
571	All American Mechanical	431 Park Industrial Drive	La Habra	Low	1711	Other Contractor				X
572	All American Sewer & Drain	PO Box 1482	El Cajon	Low	7699	Equipment Repair				X
573	All Drains Plumbing	7541 Girard Avenue #533	La Jolla	Low	1623	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
574	All Pro Air	1265 Avocado Blvd Suite 104-148	El Cajon	Low	1711	Other Contractor				X
575	All Star Water Heaters	30300 Puerto Vallarta	Menifee	Low	1711	Other Contractor				X
576	Aloha City Pest Control, Inc.	8100 Broadway Suite C	La Mesa	Low	7342	Pest Control				X
577	Al's T L C Landscape	9255 Magnolia Avenue Space 240	Santee	Low	0782	Landscaping				X
578	American Asphalt & Concrete Inc	9011 Memory Lane	Spring Valley	Low	1611	Cement Mixing/Cutting				X
579	American Asphalt South, Inc	14436 Santa Ana Avenue	Fontana	Low	1611	Cement Mixing/Cutting				X
580	American Automatic Fire	9510 Pathway Street B	Santee	Low	1799	Other Contractor				X
581	American Fence Co, Inc.	9944 Prospect Ave	Santee	Low	1799	Other Contractor				X
582	American Fireplaces, Inc.	9938 Mesa Rim Road	San Diego	Low	1799	Other Contractor				X
583	American Leak Detection	656 Metcalf Street	Escondido	Low	1799	Other Contractor				X
584	American Mechanical Services Of Ca	2664 Vista Pacific Drive	Oceanside	Low	1799	Other Contractor				X
585	American Pest Control	8100 Broadway Suite E	Lemon Grove	Low	7342	Pest Control				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
586	American Residential Services Of	6162 Nancy Ridge Drive Suite 100	San Diego	Low	1799	Other Contractor				X
587	American Residential Services,L L	9895 Olson Drive	San Diego	Low	1711	Other Contractor				X
588	American Technologies	8444 Miralani Drive	San Diego	Low	1522	Other Contractor				X
589	Ampam Parks Mechanical	1060 N Wilmington Blvd.	Wilmington	Low	1711	Other Contractor				X
590	Ampolos Construction	4979 Paguera Street	San Diego	Low	1522	Other Contractor				X
591	Amtech Lighting Service	13350 Gregg Street	Poway	Low	1611	Cement Mixing/Cutting				X
592	Anderson Drilling	10303 Channel Road	Lakeside	Low	1781	Other Contractor				X
593	Anderson Piping Contractors, Inc.	339 Cypress Lane	El Cajon	Low	1711	Other Contractor				X
594	Andrade & Company	2123 Vuelta Court	Carlsbad	Low	1721	Painting/Coating				X
595	Angus Asphalt Inc	9959 Prospect Avenue	Santee	Low	1611	Cement Mixing/Cutting				X
596	Anthony & Son Painting	4175 Avocado Blvd	La Mesa	Low	1721	Painting/Coating				X
597	Antimite	4017 42nd Street	San Diego	Low	1521	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
598	Any Hour Septic Service	10119 Prince Charming Lane	Santee	Low	7699	Equipment Repair				X
599	Apex Lighting & Electric	1939 A Friendship Drive	El Cajon	Low	1731	Other Contractor				X
600	Applied Waterproofing Technology	3562 Grove Street	Lemon Grove	Low	1799	Other Contractor				X
601	Aristocrat Landscape	PO Box 15601	San Diego	Low	0782	Landscaping				X
602	Armando Jara Almanza	1461 Remembrance Drive	Perris	Low	1542	Other Contractor				X
603	Arrow Swimming Pool Construction	15525 Old Hwy 80	El Cajon	Low	1799	Other Contractor				X
604	Asaro Construction Co.	6924 Hyde Park Drive 214	San Diego	Low	1542	Other Contractor				X
605	Aspen Cooling & Heating, Inc.	3720 Oceanic Way Suite 207	Oceanside	Low	1711	Other Contractor				X
606	Asplundh Tree Expert	708 Blair Mill Road	Willow Grove,PA 1909	Low	0783	Landscaping				X
607	Astra Flooring Company	3402 Kurtz St	San Diego	Low	1752	Other Contractor				X
608	Astro Mechanical Contractors, Inc.	603 S Marshall Avenue	El Cajon	Low	1521	Other Contractor				X
609	Atlantis Pools And Spas	1106 Leonard Avenue	Oceanside	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
610	Atlas Fence Company	1211 32nd Street Suite S	San Diego	Low	1799	Other Contractor				X
611	Atlas Footing Repair Inc	1136 Greenfield Drive	El Cajon	Low	1799	Other Contractor				X
612	Atlas Termite Co	25 2nd Avenue	Chula Vista	Low	7342	Pest Control				X
613	Avalanche Mechanical	5575 Magnatron Blvd Suite C	San Diego	Low	1711	Other Contractor				X
614	Award Roofing Services	8731 Winter Gardens Blvd	Lakeside	Low	1761	Other Contractor				X
615	Axium Electric	6042 Carol Street	San Diego	Low	1731	Other Contractor				X
616	Ayala Boring, Inc.	10150 Poplar Avenue	Fontana	Low	1799	Other Contractor				X
617	Aztec Landscaping, Inc.	7980 Lemon Grove Way	Lemon Grove	Low	1521	Other Contractor				X
618	B & J Jackson-Stone Enterprises,	345 Vernon Way	El Cajon	Low	1741	Masonry				X
619	B & W Precast Construction, Inc.	2511 Harmony Grove Road	Escondido	Low	1623	Other Contractor				X
620	B A E Co Builder	Not Listed	La Mesa	Low	1521	Other Contractor				X
621	B B C Construction	Not Listed	La Mesa	Low	1521	Other Contractor				X
622	B D R Communications, Inc.	1944 Kellogg Avenue	Carlsbad	Low	1731	Other Contractor				X
623	B E Kaylor Restoration Inc.	4820 Mercury Street Suite D	San Diego	Low	1522	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
624	B E T Construction	Not Listed	La Mesa	Low	1742	Painting/Coating				X
625	B T Construction	5711 Lancaster Drive	San Diego	Low	1521	Other Contractor				X
626	B&B Acoustics, Inc.	12115 Lakeside Avenue	Lakeside	Low	1742	Painting/Coating				X
627	B. O' Brien Electric Service	13655 Highway 8 Business 52	El Cajon	Low	1799	Other Contractor				X
628	Banker Insulation Of Ca, Inc.	2357 Vineyard Avenue	Escondido	Low	1742	Painting/Coating				X
629	Banner Builders Inc	1530 Jamacha Road Suite P	El Cajon	Low	1521	Other Contractor				X
630	Barner Electric	9435 Wheatlands Court Suite K	Santee	Low	1731	Other Contractor				X
631	Barratt American Inc.	5950 Priestly Drive	Carlsbad	Low	1521	Other Contractor				X
632	Basile Construction Inc	7840 Dunbrook Road	San Diego	Low	1623	Other Contractor				X
633	Bath Co. Shower Door	613 W Main Street	El Cajon	Low	1799	Other Contractor				X
634	Bauer Cabling Solutions, Inc.	1027 S Claremont Street	San Mateo	Low	1623	Other Contractor				X
635	Bay City Electric Works Inc.	12208 Industry Road	Lakeside	Low	1799	Other Contractor				X
636	Bay Sheet Metal, Inc	1263 Greenfield Drive	El Cajon	Low	1761	Other Contractor				X
637	Beach Cities Landscape, Inc.	8911 Olive Drive	Spring Valley	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
638	Beck Electric	3707 5th Avenue Suite 556	San Diego	Low	1731	Other Contractor				X
639	Belfor Property Restoration	11545 Sorrento Valley Road Suite 308	San Diego	Low	1799	Other Contractor				X
640	Ben Martindill	Not Listed	La Mesa	Low	1751	Other Contractor				X
641	Benchmark Landscape, Inc.	12575 Stowe Drive	Poway	Low	1799	Other Contractor				X
642	Bernard's Plumbing, Inc.	1884 Powell Drive	El Cajon	Low	1711	Other Contractor				X
643	Besek Electric	525 F Street	Chula Vista	Low	1731	Other Contractor				X
644	Best Interiors, Inc.	2100 E Via Burton	Anaheim	Low	1521	Other Contractor				X
645	Best Rain Gutters	550 Ramon Avenue	Spring Valley	Low	1761	Other Contractor				X
646	Best Value Glass, Inc.	1517 N Cuyamaca Street	El Cajon	Low	1793	Other Contractor				X
647	Betz Concrete, Inc.	2301 Vineyard Avenue	Escondido	Low	1771	Cement Mixing/Cutting				X
648	Bill Hutson Installations & Repair	622 Margarita Avenue	Coronado	Low	1522	Other Contractor				X
649	Bill's Construction Assistance	2222 Escondido Avenue	Vista	Low	1521	Other Contractor				X
650	Bill's Home Repair	5401 Pennsylvania Lane	La Mesa	Low	1521	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
651	Blaine Tech Services	20735 Belshaw Avenue	Carson	Low	1781	Other Contractor				X
652	Blasingame Custom Building	81 Matscher Street	Chula Vista	Low	1521	Other Contractor				X
653	Bledsoe Masonry, Inc.	4680 Felspar Street	Riverside	Low	1741	Masonry				X
654	Blue Diamond Plumbing And	16382 Pauhaska Road	Apple Valley	Low	1711	Other Contractor				X
655	Blue Fountain Pools	6136 Mission Gorge Road #117	San Diego	Low	1799	Other Contractor				X
656	Blue Haven Pools	655 Venture Street Suite 101	Escondido	Low	1799	Other Contractor				X
657	Bluewater Environmental Services,	2075 Williams Street	San Leandro	Low	1521	Other Contractor				X
658	Bob Jenson A/C & Heating	1347 Broadway	El Cajon	Low	1711	Other Contractor				X
659	Bob Piva Roofing	1192 Industrial Avenue	Escondido	Low	1761	Other Contractor				X
660	Bornholdt Construction, Inc.	1027 Greenfield Drive #2	El Cajon	Low	1521	Other Contractor				X
661	Bostrom Landscaping	Not Listed	La Mesa	Low	0782	Landscaping				X
662	Bowie Handyman Service	Not Listed	La Mesa	Low	1522	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
663	Boyce Construction Co., Inc.	10463 Austin Drive Suite D	Spring Valley	Low	1799	Other Contractor				X
664	Brabazon's Alpine Paving &	5738 Willows Road A	Alpine	Low	1799	Other Contractor				X
665	Brad L. Stoner Painting, Inc.	9245 Dowdy Drive #112	San Diego	Low	1721	Painting/Coating				X
666	Bray Construction	Not Listed	La Mesa	Low	1522	Other Contractor				X
667	Brett Lanz Construction	10705 Prince Lane	La Mesa	Low	1700	Other Contractor				X
668	Brookstone Telecom, Inc.	43300 Business Park Drive Suite B-106	Temecula	Low	1522	Other Contractor				X
669	Brookwood Plastering, Inc.	13675 Choisser Lane	Lakeside	Low	1742	Painting/Coating				X
670	Brundage Bone Concrete Pumping	1630 W Pellessier Road	Colton	Low	1771	Cement Mixing/Cutting				X
671	Buckskin Welding	2480 Bass Rd	Campo	Low	7692	Equipment Repair				X
672	Budge- It Home Remodeling, Inc	9150 Sesi Lane	Lakeside	Low	1521	Other Contractor				X
673	Budget Lawn Maintenance	9204 Sombria Road	Lakeside	Low	0782	Landscaping				X
674	Buildercraft Construction	1820 Avenida Del Mundo Suite 406	Coronado	Low	1521	Other Contractor				X
675	Builders Termite & Pest Control,	1139 S Placentia Avenue	Fullerton	Low	7342	Pest Control				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
676	Building Restorations, Inc.	6975 North Avenue Suite A	Lemon Grove	Low	1799	Other Contractor				X
677	Burgio Plastering	1937 Friendship Drive Suite C	La Mesa	Low	1742	Painting/Coating	City Limit	NA		X
678	Bycor General Contractor	6867 Nancy Ridge Drive	San Diego	Low	1522	Other Contractor				X
679	C & J Builders, Inc.	Not Listed	La Mesa	Low	1521	Other Contractor				X
680	C & R Systems, Inc.	1835 Capital Street	Corona	Low	1731	Other Contractor				X
681	C A Skyhook, Inc	8733 Magnolia Avenue Suite 134	Santee	Low	1751	Other Contractor				X
682	C C M Enterprises	10848 Wheatlands Avenue	Santee	Low	1799	Other Contractor				X
683	C E Wilson Corporation	662 Grand Avenue	Spring Valley	Low	1522	Other Contractor				X
684	C G P Maintenance And Construction	7270 Engineer Road Suite D	San Diego	Low	1700	Other Contractor				X
685	C M I Plumbing And Piping Inc.	1029 Vernon Way	El Cajon	Low	1711	Other Contractor				X
686	C P C Mechanical, Inc.	13664 Willow Road	Lakeside	Low	1623	Other Contractor				X
687	C W A Development, Inc.	3494 Harris Street	Lemon Grove	Low	1521	Other Contractor				X
688	C. L. Anderson Company	Not Listed	La Mesa	Low	1731	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
689	C. Leafdale Plumbing	2775 Kurtz Street	San Diego	Low	1711	Other Contractor				X
690	C. Lilley Construction Inc	592 Westwind Dr N	El Cajon	Low	1500	Other Contractor				X
691	California Comfort Systems U S A,	9750 Distribution Avenue	San Diego	Low	1711	Other Contractor				X
692	California Concrete Cutting &	388 Citrus Avenue	Imperial Beach	Low	1771	Cement Mixing/Cutting				X
693	California Construction Clean-Up	3336 Adams Avenue	San Diego	Low	1799	Other Contractor				X
694	California Delta Mechanical	1235 Grand Avenue	Spring Valley	Low	1711	Other Contractor				X
695	California Scenic Landscape	Not Listed	La Mesa	Low	0782	Landscaping				X
696	Calsoft Water Service Inc.	4635 Ruffner Street	San Diego	Low	1799	Other Contractor				X
697	Campbell Construction	6550 Van Buren Blvd	Riverside	Low	1521	Other Contractor				X
698	Can-Do Electric	1100 N Magnolia Avenue Suite J	El Cajon	Low	1731	Other Contractor				X
699	Capacity Construction Inc.	9323 Chesapeake Drive Suite A-1	San Diego	Low	1799	Other Contractor				X
700	Carol E. Patterson	Not Listed	La Mesa	Low	1742	Painting/Coating				X
701	Carolyn E. Scheidel, Contractor	PO Box 1796	La Mesa	Low	1742	Painting/Coating				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
702	Carpet Club	518 W Washington Avenue	Escondido	Low	1752	Other Contractor				X
703	Carpet Trend	Not Listed	La Mesa	Low	1752	Other Contractor				X
704	Carrion Construction, Inc.	312 W Laurel Street	San Diego	Low	1521	Other Contractor				X
705	Carter Installation Services, Inc.	594 Front Street Suite A	El Cajon	Low	1751	Other Contractor				X
706	Cartwright Termite & Pest Control	1376 Broadway	El Cajon	Low	7342	Pest Control				X
707	Casady Electric Inc	275 Camino Del Cerro Grande	Bonita	Low	1799	Other Contractor				X
708	Casper's Concrete Cutting	3825 Bancroft Drive 105	Spring Valley	Low	1799	Other Contractor				X
709	Cass Plumbing & Heating	4569 30th Street Suite C	San Diego	Low	1711	Other Contractor				X
710	Cay-Lor Construction	Not Listed	La Mesa	Low	1522	Other Contractor				X
711	Cecilio Ramirez Landscaping	328 S 30th Street	San Diego	Low	0782	Landscaping				X
712	Cement Cutting, Inc.	3610 Hancock Street	San Diego	Low	1771	Cement Mixing/Cutting				X
713	Central Plumbing Heating Cooling	6152 Mission Gorge Road Suite H	San Diego	Low	1711	Other Contractor				X
714	Century Shower Door Co.	20100 S Normandie Avenue	Torrance	Low	1751	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
715	Certified Electric Incorporated	14781 Pomerado Road 101	Poway	Low	1731	Other Contractor				X
716	Charco Construction Company	7065 El Cajon Blvd	San Diego	Low	1521	Other Contractor				X
717	Charlie Hughes Tile	Not Listed	La Mesa	Low	1743	Masonry				X
718	Charrua Painting	1163 Marline Avenue	El Cajon	Low	1721	Painting/Coating				X
719	Christie Construction	10006 Country View Road	La Mesa	Low	1521	Other Contractor				X
720	Chula Vista Electric Co	127 Press Lane	Chula Vista	Low	1731	Other Contractor				X
721	Ciani Communications Construction	Not Listed	La Mesa	Low	1731	Other Contractor				X
722	City-Wide Electronic Systems, Inc.	1540 N Pioneer Way	El Cajon	Low	1731	Other Contractor				X
723	Clardy Construction	15225 Sleepy Creek Road	El Cajon	Low	1799	Other Contractor				X
724	Clark Home Improvement And	Not Listed	La Mesa	Low	1521	Other Contractor				X
725	Clean Edge Painting	9906 Mission Vega Road #1	Santee	Low	1721	Painting/Coating				X
726	Clean Power Systems, Inc.	13230 Evening Creek Drive Suite 203	San Diego	Low	1711	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
727	Clear Sign & Design, Inc.	170 Navajo Street	San Marcos	Low	1799	Other Contractor				X
728	Clearview Windows & Doors	28106 Ave Crocker	Valencia	Low	1793	Other Contractor				X
729	C-Me Plumbing & Drain Service	10828 Charing Cross Road	Spring Valley	Low	1711	Other Contractor				X
730	Coast Sign	1500 W Embassy Street	Anaheim	Low	1799	Other Contractor				X
731	Coastal Property Care & Const,	Not Listed	La Mesa	Low	1542	Other Contractor				X
732	Coating Creations	Not Listed	La Mesa	Low	1721	Painting/Coating				X
733	Code 3 Electrical	10934 Greencastle Street	Santee	Low	1731	Other Contractor				X
734	College Works Painting	1682 Langley Avenue	Irvine	Low	1721	Painting/Coating				X
735	Columbia Pest Control Co. Of San	127 W 9th Street	National City	Low	7342	Pest Control				X
736	Comanche Contractors, Inc.	15467 Chemical Ln	Huntrington Beach	Low	1521	Other Contractor				X
737	Command Communication	Not Listed	La Mesa	Low	1731	Other Contractor				X
738	& Industrial Roofing	9239 Olive Drive	Spring Valley	Low	1761	Other Contractor				X
739	Communications Plus	1675 Morena Blvd	San Diego	Low	1731	Other Contractor				X
740	Concrete Concepts, Inc.	2317 Vineyard Avenue	Escondido	Low	1771	Cement Mixing/Cutting				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
741	Concrete Cutting Company	PO Box 910503	San Diego	Low	1799	Other Contractor				X
742	Connie Jo's Services Unlimited	21000 Plummer Street	Chatsworth	Low	1521	Other Contractor				X
743	Considerate Tree Care, Inc	PO Box 2595	El Cajon	Low	0783	Landscaping				X
744	Continental Western Transportation	9235 Harris Plant Road	San Diego	Low	1771	Cement Mixing/Cutting				X
745	Contreras Landscape	856 Morrison Street	San Diego	Low	0782	Landscaping				X
746	Copper Electric, Inc.	10054 Prospect Avenue	Santee	Low	1731	Other Contractor				X
747	Corky's Pest Control, Inc.	909 Rancheros Drive	San Marcos	Low	7342	Pest Control				X
748	Corlett Electrical Construction	8315 Tommy Drive	San Diego	Low	1731	Other Contractor				X
749	Coronado Heating & A C	1512 Palm Avenue	San Diego	Low	1521	Other Contractor				X
750	Cortez Tree Service	2527 Guajowe Lake Road	Vista	Low	0783	Landscaping				X
751	Cosco Fire Protection, Inc.	10695 Treena Street Suite 105	San Diego	Low	1799	Other Contractor				X
752	Countywide Mechanical	1997 Friendship Drive Unit G	El Cajon	Low	1711	Other Contractor				X
753	Cox Roofing	5429 Alpine Blvd	Alpine	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
754	Creative Touch Interiors, Inc.	7720 Kenamar Court C	San Diego	Low	1752	Other Contractor				X
755	Crew Builders	5752 Oberilin Drive Suite 105	San Diego	Low	1521	Other Contractor				X
756	Crisler Electric	539 Telegraph Canyon Road #636	Chula Vista	Low	1731	Other Contractor				X
757	Cromwell Contracting, Inc.	9540 Palomino Ridge	Lakeside	Low	1521	Other Contractor				X
758	Crossman Landscape & Maintenance	8617 Cuyamaca Street	Santee	Low	0781	Landscaping				X
759	Crown Point Clippers, Inc.	PO Box 177108	San Diego	Low	0783	Landscaping				X
760	Curto Const Co.	Not Listed	La Mesa	Low	1522	Other Contractor				X
761	Custom Antenna & Garage Door	5833 El Cajon Blvd	San Diego	Low	1731	Other Contractor				X
762	Custom Electrical	10739 Oak Creek Drive	Lakeside	Low	1731	Other Contractor				X
763	Custom Media Mfg Sign Co.	136 Neptune Place	Escondido	Low	1799	Other Contractor				X
764	Cut N Core, Inc.	9194 Chesapeake Drive	San Diego	Low	1799	Other Contractor				X
765	D & M Welding	7952 North Avenue	Lemon Grove	Low	1799	Other Contractor				X
766	D & S Termite Control	3638 Bancroft Drive	Spring Valley	Low	7342	Pest Control				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
767	D C Construction	14789 Bonita Vista Way	Jamul	Low	1794	Other Contractor				X
768	D F S Flooring	15651 Saticoy Street	Van Nuys	Low	1752	Other Contractor				X
769	D G A M, Inc	1961 Main Street	San Diego	Low	1799	Other Contractor				X
770	D G Behrens Pool Construction	13031 Poway Road	Poway	Low	1799	Other Contractor				X
771	D G Plumbing	206 Greenfield Drive Suite G	El Cajon	Low	1711	Other Contractor				X
772	D P R Construction	6333 Greenwich Drive Suite 170	San Diego	Low	1521	Other Contractor				X
773	D S H Solar Electric	2785 Kurtz Street Suite 5	San Diego	Low	1731	Other Contractor				X
774	D.G. Handyman	Not Listed	La Mesa	Low	1522	Other Contractor				X
775	Daniel Heisinger Plumbing	Not Listed	La Mesa	Low	1711	Other Contractor				X
776	Dan's Maintenance	8901 Zencaro Avenue	San Diego	Low	0782	Landscaping				X
777	Darby Painting Plus+, Inc	1626 Onyx Court	El Cajon	Low	1721	Painting/Coating				X
778	Daryl Griffis Acoustics, Inc.	4958 Naples Street	San Diego	Low	1742	Painting/Coating				X
779	Dave Wallace, General	8039 Golden Avenue	Lemon Grove	Low	1521	Other Contractor				X
780	Dave's Home Repair	Not Listed	La Mesa	Low	1522	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
781	David Spinks	2146 Lemon Avenue	Escondido	Low	1741	Masonry				X
782	Davies Electric Co., Inc.	9085 Kenamar Drive	San Diego	Low	1731	Other Contractor				X
783	Davis & Adams Construction, Inc.	7986 Dagget Street	San Diego	Low	1799	Other Contractor				X
784	Davis Roofing	10027 Beck Drive	Santee	Low	1799	Other Contractor				X
785	De Marco Plumbing & Drain, Inc.	4401 Twain Avenue Suite 11	San Diego	Low	1711	Other Contractor				X
786	Dean Toneys Heating & Air	401 Washingtonia Drive	San Marcos	Low	1711	Other Contractor				X
787	Democo, Inc.	2386 N Batavia Street	Orange	Low	1795	Other Contractor				X
788	Dennis Cook Roofing	8824 Lakeview Road	Lakeside	Low	1761	Other Contractor				X
789	Dennis Design	Not Listed	La Mesa	Low	1721	Painting/Coating				X
790	Dennis R. Williams	13392 Johnson Road	Phelan	Low	1799	Other Contractor				X
791	Dewey Pest Control	9386 Bond Avenue	El Cajon	Low	7342	Pest Control				X
792	Diamond Pools	10520 Kenney Street	Santee	Low	1799	Other Contractor				X
793	Diamond Termite & Pest Control	12038 Woodside Avenue Suite D	Lakeside	Low	7342	Pest Control				X
794	Diego Puga Vargas	3828 Cherokee Street #5	San Diego	Low	0782	Landscaping				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
795	Dietrich Corporation	1243 Greenfield Druve Suite H	El Cajon	Low	1799	Other Contractor				X
796	Digital Voice & Data	3621-96 Avocado Village Court	La Mesa	Low	1731	Other Contractor				X
797	Dillard Builders, Inc.	262 Garden Grove Lane	El Cajon	Low	1521	Other Contractor				X
798	Diroma, Inc.	13838 Poway Road	Poway	Low	1521	Other Contractor				X
799	Diversified Window Coverings, Inc.	8410 Juniper Creek Lane	San Diego	Low	1799	Other Contractor				X
800	Doan's Landscape	9550 Mavin Drive	Santee	Low	0782	Landscaping				X
801	Dock Pros, Inc.	2870 Ragle Way	Corona	Low	1796	Other Contractor				X
802	Don Wallingsford, Inc.	4741 E Hunter C	Anaheim	Low	7623	Equipment Repair				X
803	Double B Concrete Cutting, Inc.	1532 Plover Street	San Diego	Low	1771	Cement Mixing/Cutting				X
804	Doug Lister Construction	1655 Laslo Drive	Escondido	Low	1521	Other Contractor				X
805	Downstream Services, Inc	2855 Progress Place	Escondido	Low	1623	Other Contractor				X
806	Drain Medic, Inc.	7868 Lester Drive	Lemon Grove	Low	1742	Painting/Coating				X
807	Drain Patrol	7764 Arjons Drive	San Diego	Low	1799	Other Contractor				X
808	Drum Plumbing	2550 Fortune Way	Vista	Low	1711	Other Contractor				X
809	Drywall Specialties	6512 El Cajon Blvd. Suite C	San Diego	Low	1742	Painting/Coating				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
810	Dynalectric Co.	9505 Chesapeake Drive S	San Diego	Low	1799	Other Contractor				X
811	E B C O Steel Inc.	1355 Presioca Street	Spring Valley	Low	1791	Other Contractor				X
812	Eagle Landscape Maintenance	2924 Poinsettia Drive	San Diego	Low	0782	Landscaping				X
813	Earl K. Powers Construction	678 Enterprise Street	Escondido	Low	1741	Masonry				X
814	East County Grading & Paving, Inc.	PO Box 712020	Santee	Low	1794	Other Contractor				X
815	East County Handyman	1232 Portola Avenue	Spring Valley	Low	1521	Other Contractor				X
816	East County Heating & Air	721 S Lincoln Avenue	El Cajon	Low	1711	Other Contractor				X
817	East County Tile And Marble, Inc.	9855 Prospect Avenue	Santee	Low	1743	Masonry				X
818	Easy-Turf, Inc.	750 N Citracado Parkway Suite 17	Escondido	Low	1799	Other Contractor				X
819	Eberhard Benton Roof Company	3691 Hancock Street	San Diego	Low	1761	Other Contractor				X
820	Ecosse Electric	Not Listed	La Mesa	Low	1731	Other Contractor				X
821	Edick & Watt, Inc.	270 Millar Avenue	El Cajon	Low	1521	Other Contractor				X
822	Ehinger Electric	Not Listed	La Mesa	Low	1731	Other Contractor				X
823	El Cajon Electric Co	985 Greenfield Drive	El Cajon	Low	1731	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
824	El Cajon Roofing Inc	1354 Broadway Avenue	El Cajon	Low	1761	Other Contractor				X
825	Electric Required	6118 Hersholt Ave	Lakewood	Low	1731	Other Contractor				X
826	Ellis Mc Kinney, Inc.	1410 Monument Hill Road	El Cajon	Low	1751	Other Contractor				X
827	Emergency Plumbing & Drain	Not Listed	La Mesa	Low	1711	Other Contractor				X
828	Emig Construction Company	9915 Tangor Way	Spring Valley	Low	1522	Other Contractor				X
829	Emilio	Not Listed	La Mesa	Low	0782	Landscaping				X
830	Environmental Landscape Engineers	9210 Grossmont Blvd	La Mesa	Low	0781	Landscaping				X
831	Equitable Construction & Remodel	4724 Divine Way	La Mesa	Low	1522	Other Contractor	City Limit			X
832	Erickson - Hall Construction	500 Corporate Drive	Escondido	Low	1522	Other Contractor				X
833	Estrada Land Planning, Inc.	755 Broadway Circle Suite 300	San Diego	Low	0781	Landscaping				X
834	European Natural Stone Co., Inc.	10051 Prospect Avenue	Santee	Low	1741	Masonry				X
835	Exceptional Restorations	Not Listed	La Mesa	Low	7699	Equipment Repair				X
836	Exit Light Co	3525 Del Mar Heights Road #304	Del Mar	Low	1731	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
837	Express/ Champion Harwood Floors	Not Listed	La Mesa	Low	1752	Other Contractor				X
838	F T Emory Plumbing Co., Inc.	4340 Viewridge Avenue Suite C	San Diego	Low	1711	Other Contractor				X
839	F. J. Willert Contracting Co.,	1869 Nirvana Avenue	Chula Vista	Low	1500	Other Contractor				X
840	F. R. Ghianni Drywall	1937A Friendship Drive	El Cajon	Low	1742	Painting/Coating				X
841	Farwest Insulation Contracting	1375 S Acacia Avenue Suite A	Fullerton	Low	1742	Painting/Coating				X
842	Fast Water Heaters, Inc.	275 N Marshall Avenue	El Cajon	Low	1711	Other Contractor				X
843	Finest City Heating & Air	1069 Vernon Way	El Cajon	Low	1711	Other Contractor				X
844	Fire & Ice Heating & Air	9911 Maine Avenue	Lakeside	Low	1799	Other Contractor				X
845	First Line Security Inc.	370 W Center Street	Orem,UTAH 84057	Low	1731	Other Contractor				X
846	First Page	3280 Olive Street #18	Lemon Grove	Low	1521	Other Contractor				X
847	First Quality Painting, Inc.	13933 Sycamore Way	Chino	Low	1721	Painting/Coating				X
848	Fischbeck Plumbing Co.	277 Blanchard Road	El Cajon	Low	1711	Other Contractor				X
849	Fix Plumbing And Drains	180 Mace Street Suite C15	Chula Vista	Low	1711	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
850	Flores Air	2931 Adrian Street	San Diego	Low	1711	Other Contractor				X
851	Floyd & Howerton Plumbing Inc	1269 Greenfield Drive	El Cajon	Low	1711	Other Contractor				X
852	Focus Landscape	Not Listed	La Mesa	Low	0782	Landscaping				X
853	Force Electric	8201 Winter Gardens Blvd	Lakeside	Low	1731	Other Contractor				X
854	Foshay Electric Company, Inc.	7676 Engineer Road	San Diego	Low	1731	Other Contractor				X
855	Fox & Turner Construction Co., Inc.	Not Listed	La Mesa	Low	1742	Painting/Coating	Alvarado			X
856	Frontier Concrete Inc.	717 Mercantile Street	Vista	Low	1771	Cement Mixing/Cutting				X
857	Fudge's Carpets & Blinds, Inc.	314 S Johnson Avenue	El Cajon	Low	1752	Other Contractor				X
858	Fueling & Service Technologies,	7050 Village Drive Suite D	Buena Park	Low	1799	Other Contractor				X
859	G And H Electric	345 First Avenue	Chula Vista	Low	1521	Other Contractor				X
860	G D T Construction	701 B Street Suite 340	San Diego	Low	1521	Other Contractor				X
861	G E Brown Service, Inc.	497 11th Street Suite 7	Imperial Beach	Low	1799	Other Contractor				X
862	G M G Stone, Inc.	165 Denny Way	El Cajon	Low	1741	Masonry				X
863	G M W Drywall, Inc.	272 Gemini Avenue	Brea	Low	1742	Painting/Coating				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
864	G. Agundez Concrete	3211 Peg Leg Mine Road	Jamul	Low	1771	Cement Mixing/Cutting				X
865	G. Scott Asphalt, Inc	358 Trousdale Drive	Chula Vista	Low	1611	Cement Mixing/Cutting				X
866	G.G. Landscaping, Inc.	9737 Jeremy Street	Santee	Low	0782	Landscaping				X
867	Garcia's Precision Acoustics	3162 Carlsbad Blvd Suite B	Carlsbad	Low	1742	Painting/Coating				X
868	Garden Design	Not Listed	La Mesa	Low	0782	Landscaping				X
869	Garden Environmentals	9415 Los Coches Road	Lakeside	Low	0781	Landscaping				X
870	Gardner Pool Plastering, Inc.	801 Gable Way	El Cajon	Low	1799	Other Contractor				X
871	Gary F. Hoyt Landscape	13625 Adrian Street	Poway	Low	0781	Landscaping				X
872	Generation Contracting & Emergency	13750 Danielson Street Suite 100	Poway	Low	1799	Other Contractor				X
873	Genesis Power Management	2455 La Ramada Lane	Escondido	Low	1731	Other Contractor				X
874	Geoff Waugh Construction	13149 Lakeview Granda Drive	Lakeside	Low	1751	Other Contractor				X
875	Geogrid Retaining Wall Systems Inc	1295 Distribution Way	Vista	Low	1799	Other Contractor				X
876	Gerry Roy, Inc.	2030 Dale Street	San Diego	Low	1731	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
877	Gifford's Home Repair	8730 Our Way	Santee	Low	1521	Other Contractor				X
878	Gilbert Construction	9699 Carta Lane	El Cajon	Low	1799	Other Contractor				X
879	Global Power Group, Inc.	202 Greenfield Drive Suite C	El Cajon	Low	1731	Other Contractor				X
880	Goins Landscaping	Not Listed	La Mesa	Low	0782	Landscaping				X
881	Golden State Garage Doors, Inc.	10540 Kenney Street	Santee	Low	1799	Other Contractor				X
882	Good And Roberts	1330 Park Center Drive	Vista	Low	1521	Other Contractor				X
883	Good Guys Painting Company	Not Listed	La Mesa	Low	1721	Painting/Coating				X
884	Gossmeyer Construction	3021 Ridgecliff Lane	Spring Valley	Low	1522	Other Contractor				X
885	Gould Electric Inc.	12130 Dearborn Place	Poway	Low	1731	Other Contractor				X
886	Grass Doctor Landscape Inc	9600 Campo Road Suite C	Spring Valley	Low	0781	Landscaping				X
887	Greenbrier Lawn & Tree Expert	3616 Bancroft Drive	Spring Valley	Low	1799	Other Contractor				X
888	Greene & St. John Inc.	Not Listed	La Mesa	Low	1521	Other Contractor				X
889	Gregg Drilling & Testing, Inc.	2726 Walnut Avenue	Signal Hill	Low	1781	Other Contractor				X
890	Groundwater And Environmental	6160 Fairmount Avenue Suite A	San Diego	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
891	Grove Plumbing, Inc.	7637 Lemon Avenue	Lemon Grove	Low	1711	Other Contractor				X
892	Gudino Electric	824 Santa Isabel Drive	San Diego	Low	1799	Other Contractor				X
893	Gula Roofing Co.	1352 Hillcrest Drive	Alpine	Low	1761	Other Contractor				X
894	Gulf Engineering & Construction	675 S 2nd Street	El Cajon	Low	1521	Other Contractor				X
895	H & A Construction	191 Glover Avenue	Chula Vista	Low	1521	Other Contractor				X
896	H & H Steel Enterprises, Inc.	16891 Sunrise Vista	Ramona	Low	1799	Other Contractor				X
897	H & W Custom Builders, Inc.	14511 Olde Highway 80	El Cajon	Low	1521	Other Contractor				X
898	H B Shaffer	968 Waterloo Avenue	El Cajon	Low	1521	Other Contractor				X
899	H H S Construction, Inc.	14455 Ramona Avenue Unit D	Chino	Low	1731	Other Contractor				X
900	H L Masonary Builders Inc.	20891 Viento Valle	Escondido	Low	1741	Masonry				X
901	H M Construction	1530 Jamacha Road Suite Z	El Cajon	Low	1522	Other Contractor				X
902	H M S Construction, Inc.	1225 Linda Vista Drive	San Marcos	Low	1522	Other Contractor				X
903	H P Communications	13341 Temescal Canyon Road	Corona	Low	1731	Other Contractor				X
904	H S B Real Estate And Investments,	4481 Palo Verde Terrace	San Diego	Low	1521	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
905	Hackouts Glass Co.	747 W Main Street	El Cajon	Low	1793	Other Contractor				X
906	Haenggi Heating And Air	1179 N Cuyamaca Avenue Suite C	El Cajon	Low	1711	Other Contractor				X
907	Hamel's Refrigeration, A/C & Heat	1909 Sonett Street	El Cajon	Low	1711	Other Contractor				X
908	Hammer Construction Company	1294 Cardinal Place	Chula Vista	Low	1771	Cement Mixing/Cutting				X
909	Hammond & Masing General	9770 Carroll Centre Road Suite E	San Diego	Low	1521	Other Contractor				X
910	Handyman Matters	2820 Via Orange Way Suite A	Spring Valley	Low	1521	Other Contractor				X
911	Hannibal Painting	9325 Goyette Place	Santee	Low	1721	Painting/Coating				X
912	Hans Construction Mechanical, Inc.	Not Listed	La Mesa	Low	1711	Other Contractor				X
913	Happy Landscaping	Not Listed	La Mesa	Low	0782	Landscaping				X
914	Harbor Pest Control Inc	6160 Fairmount Avenue Suite K	San Diego	Low	7342	Pest Control				X
915	Har-Bro Construction	7192 Clairemont Mesa Blvd	San Diego	Low	1521	Other Contractor				X
916	Hawkins Construction, Inc.	Not Listed	La Mesa	Low	1522	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
917	Hawkins Door & Trim, Inc.	1320 Grand Avenue Suite 5	San Marcos	Low	1799	Other Contractor				X
918	Hazard Construction Company	6465 Marindustry Drive	San Diego	Low	1771	Cement Mixing/Cutting				X
919	Hec's Construction	1708 Horseshoe Court	Bonita	Low	1799	Other Contractor				X
920	Heiman Construction Co.	742 Genevieve Street Suite M	Solana Beach	Low	1521	Other Contractor				X
921	Heintschel Plastering, Inc.	475 Corporate Drive	Escondido	Low	1742	Painting/Coating				X
922	Helix Mechanical, Inc.	1100 N Magnolia Avenue Suite G	El Cajon	Low	1711	Other Contractor				X
923	Hersum Construction Inc	6365 Marindustry Drive Suite A	San Diego	Low	1522	Other Contractor				X
924	Hess Roofing, Inc.	1681 Magnolia Avenue N	El Cajon	Low	1761	Other Contractor				X
925	Hillcrest Contracting, Inc.	1467 Circle City Drive	Corona	Low	1611	Cement Mixing/Cutting				X
926	Hitt Contracting, Inc.	2704 Dorr Avenue	Fairfax,VA 22031	Low	1522	Other Contractor				X
927	Hodge General Contractors	3815 Linda Vista Drive	San Marcos	Low	1521	Other Contractor				X
928	Hofstee Drywall	1491 Curtis Lane	Alpine	Low	1799	Other Contractor				X
929	Holland's Custom Kitchens, Inc.	14511 Olde Highway 80	El Cajon	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
930	Home Energy Systems	6996 Convoy Court	San Diego	Low	1711	Other Contractor				X
931	Homestead Sheet Metal	9031 Memory Lane	Spring Valley	Low	1761	Other Contractor				X
932	Hometeam Pest Defense	10070 Carrol Canyon Road Suite 105	San Diego	Low	7342	Pest Control				X
933	Hondo Electric, Inc.	420 K Street Suite 261	San Diego	Low	1731	Other Contractor				X
934	Honeywell International, Inc.	6 Centerpointe Drive Suite 300	La Palma	Low	1731	Other Contractor				X
935	Horizon Solar Systems, Inc	120 N Pacific Street Suite G7	San Marcos	Low	1799	Other Contractor				X
936	Howards Rug Co Of San Diego Inc	6110 Nancy Ridge Drive	San Diego	Low	1799	Other Contractor				X
937	Hughes Heating & Air Conditioning	PO Box 2965	El Cajon	Low	1711	Other Contractor				X
938	Hydrex Pest Control	PO Box 261127	San Diego	Low	7342	Pest Control				X
939	I-Con Electric	4109 Morning Star Court	La Mesa	Low	1731	Other Contractor				X
940	Ideal Mechanical	8524 Ablette Road	Santee	Low	1711	Other Contractor				X
941	Ideal Plumbing & Heating	5161 Waring Road	San Diego	Low	1711	Other Contractor				X
942	Imperial Custom Cabinets	8093 Lemon Grove Way	Lemon Grove	Low	1751	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
943	Ink Electric, Inc.	7845 North Avenue	Lemon Grove	Low	1731	Other Contractor				X
944	Inland Plaster, Inc.	38372 Innovation Court Suite C-301	Murrieta	Low	1742	Painting/Coating				X
945	Integrated Sign Associates	1160 M Pioneer Way	El Cajon	Low	1799	Other Contractor				X
946	Integrity Concrete	540 Opper Street	Escondido	Low	1771	Cement Mixing/Cutting				X
947	Integrity Home Improvements	5725 Kearny Villa Road Suite A	San Diego	Low	1521	Other Contractor				X
948	Integrity Restoration Inc	4901 Morena Blvd Suite 502	San Diego	Low	1522	Other Contractor				X
949	Interior Specialists, Inc.	1630 Faraday Avenue	Carlsbad	Low	1752	Other Contractor				X
950	International Iron Products	10883 Thornmint Road	San Diego	Low	1791	Other Contractor				X
951	Interstate Striping Of Calif.,	8511-B Ablette Road	Santee	Low	1771	Cement Mixing/Cutting				X
952	Interwest Electric	8135 Engineer Road	San Diego	Low	1799	Other Contractor				X
953	Irish Setters Inc.	674 Rancheros Drive	San Marcos	Low	1743	Masonry				X
954	Irriscape Construction, Inc.	20182 Carancho Road	Temecula	Low	0781	Landscaping				X
955	Issac Sanders Company	4752 68th Street #A	San Diego	Low	1743	Masonry				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
956	J & L Insulation, Inc.	10035 Maine Avenue	Lakeside	Low	1742	Painting/Coating				X
957	J & M Keystone Inc	2709 Via Orange Way Suite A	Spring Valley	Low	1799	Other Contractor				X
958	J & S Maintenance	Not Listed	La Mesa	Low	1521	Other Contractor				X
959	J & S Sealing & Striping	6121 Fairmount Ave	San Diego	Low	1799	Other Contractor				X
960	J C Electric	24857 Abalar Way	Ramona	Low	1731	Other Contractor				X
961	J C Landscaping & Maintenance	Not Listed	La Mesa	Low	0782	Landscaping				X
962	J N Horn Construction Co., Inc.	1301 Pepper Drive	El Cajon	Low	1521	Other Contractor				X
963	J P Plumbing	9051 La Mar Street	Spring Valley	Low	1711	Other Contractor				X
964	J P Witherow Roofing Company	1001 Morena Blvd	San Diego	Low	1761	Other Contractor				X
965	J R Electric	1717 Wind River Road	El Cajon	Low	1731	Other Contractor				X
966	J R Masonry, Inc.	1447 Peach Avenue	El Cajon	Low	1741	Masonry				X
967	J. D. Paving, Inc.	1412 Barham Road	San Marcos	Low	1611	Cement Mixing/Cutting				X
968	J. Munoz Concrete	6160 Seascape Drive	San Diego	Low	1771	Cement Mixing/Cutting				X
969	J. W. Warren Construction, Inc	3113 Calle Allejandro	Jamul	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
970	J.H. O'Brien Landscaping &	3435 Ocean Park Blvd Suite 103	Santa Monica	Low	1799	Other Contractor				X
971	Jackpot Painting Contractors, Inc.	391 Olive Avenue	Vista	Low	1721	Painting/Coating				X
972	Jackson & Blanc	7929 Arjons Drive	San Diego	Low	1711	Other Contractor				X
973	Jackson Design & Remodeling	4797 Mercury Street Suite B	San Diego	Low	1521	Other Contractor				X
974	Jacobs Construction	4244 Spring Court	La Mesa	Low	1521	Other Contractor				X
975	Jamar Electric, Inc.	9830 Prospect Avenue Suite D	Santee	Low	1731	Other Contractor				X
976	James Dennis Mc Alexander	Not Listed	La Mesa	Low	1522	Other Contractor				X
977	James Grey Construction	9960 Estrella Drive	Spring Valley	Low	1521	Other Contractor				X
978	Jason Will Do It	1390 Ryan Ridge Road	El Cajon	Low	1721	Painting/Coating				X
979	Jensen Electric	9101 Heatherdale Street	Santee	Low	1731	Other Contractor				X
980	Jerry's Heating & Air	9717 Airport Vista Road	Santee	Low	1711	Other Contractor				X
981	Jessee Fence	24061 N Viejas Grade	Descanso	Low	1799	Other Contractor				X
982	Jie Da Handyman	Not Listed	La Mesa	Low	1522	Other Contractor				X
983	Jim Simmons Electric	13439 Samantha Avenue	San Diego	Low	1731	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
984	Joe Sherlock Construction, Inc.	16290 Summer Sage Road	Poway	Low	1521	Other Contractor				X
985	Joe Silva Plumbing	16951 Old Coach Road	Poway	Low	1711	Other Contractor				X
986	Joe Vaughn Drywall	Not Listed	La Mesa	Low	1742	Painting/Coating				X
987	John H. Pearce Construction	Not Listed	La Mesa	Low	1521	Other Contractor				X
988	John Tessitore Concrete, Inc	5574 Pray Street	Bonita	Low	1771	Cement Mixing/Cutting				X
989	John Weber Construction &	334 Mulberry Drive	San Marcos	Low	1629	Other Contractor				X
990	Johnson Controls, Inc.	12393 Slauson Avenue	Whittier	Low	1799	Other Contractor				X
991	Johnson Electric, Inc.	1650 Maple Drive	Chula Vista	Low	1731	Other Contractor				X
992	Juice Electric	4005 Citradora Drive	Spring Valley	Low	1731	Other Contractor				X
993	Just Water Heaters, Inc.	3400 Investment Blvd	Hayward	Low	1711	Other Contractor				X
994	Justo Huezo Landscaping	1824 Teton Pass Street	El Cajon	Low	0782	Landscaping				X
995	Just-Star Construction, Inc.	9292 Chesapeake Drive Suite 100	San Diego	Low	1741	Masonry				X
996	K & J Construction	8864 Ellsworth Circle	Santee	Low	1522	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
997	K T M Construction	10020 Prospect Avenue	Santee	Low	1521	Other Contractor				X
998	K.P. Electric	1423 E Washington Avenue #36	El Cajon	Low	1731	Other Contractor				X
999	Kalabat Building Company	980 E Chase Avenue Suite 2	El Cajon	Low	1521	Other Contractor				X
1000	K-Designers	7472 Orangewood Avenue	Garden Grove	Low	1799	Other Contractor				X
1001	Keith Monroe & Co.	3186 Adams Avenue Suite 200	San Diego	Low	1721	Painting/Coating				X
1002	Keith Okonski Construction Inc.	Not Listed	La Mesa	Low	1521	Other Contractor				X
1003	Ken Bojok Tree Service Inc.	12443 Gay Rio Drive	Lakeside	Low	0782	Landscaping				X
1004	Kenard Construction, Inc.	1830 Gillespie Way Suite 105	El Cajon	Low	1542	Other Contractor				X
1005	Kennedy Masonry, Inc	7313 Melodia Terrace	Carlsbad	Low	1741	Masonry				X
1006	Kimball Construction	1804 Garnet Avenue Suite 508	San Diego	Low	1521	Other Contractor				X
1007	Kincade Excavation	774 Muirwood Drive	Oceanside	Low	1794	Other Contractor				X
1008	King Of The Painters Co	4155 Camino Alegre	La Mesa	Low	1711	Other Contractor				X
1009	Kiowa Construction Services	1601 Plantation Way	El Cajon	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1010	Kirk Paving Incorporated	8722 Winter Gardens Blvd	Lakeside	Low	1611	Cement Mixing/Cutting				X
1011	Kostos Tree Service, Inc.	12810 Wildcat Canyon Road	Lakeside	Low	0783	Landscaping				X
1012	Krushensky's Construction Co.,	1988 Alpine Creek Lane	Alpine	Low	1542	Other Contractor				X
1013	Kunkel Heating Service	7445 Roosevelt Avenue	Lemon Grove	Low	1799	Other Contractor				X
1014	Kyler Construction, Inc.	38725 Calle De Companero	Murrieta	Low	1742	Painting/Coating				X
1015	L 2 Specialties, Inc.	3613 W Macarthur Blvd. Suite 611	Santa Ana	Low	1521	Other Contractor				X
1016	L A County Masonry	27811 Avenue Hopkins Unit 2	Santa Clarita	Low	1741	Masonry				X
1017	L D I Mechanical Inc.	1740 Delilah Street	Corona	Low	1711	Other Contractor				X
1018	L T Handyman Company	Not Listed	La Mesa	Low	1522	Other Contractor				X
1019	L. B. Powers & Sons, Inc.	1705 W Lewis Street	San Diego	Low	1799	Other Contractor				X
1020	L. W. Carson Construction	11855 Sorrento Valley Road	San Diego	Low	1521	Other Contractor				X
1021	La Jolla Electric, Inc.	9153 Chesapeake Drive	San Diego	Low	1731	Other Contractor				X
1022	La Mesa Glass, Inc.	6691 Federal Blvd	Lemon Grove	Low	1793	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1023	La Mesa Management And Maintenance	Not Listed	La Mesa	Low	1522	Other Contractor				X
1024	La Mesa Stucco, Inc.	976 Leland Street	Spring Valley	Low	1799	Other Contractor				X
1025	La Tourrette Painting	8675 Hayes St.	La Mesa	Low	1721	Painting/Coating	Alvarado			X
1026	Lampert Murray M Company Inc	3545 Camino Del Rio South Suite C	San Diego	Low	1541	Other Contractor				X
1027	Landsmith Landscape Construction	Not Listed	La Mesa	Low	1799	Other Contractor				X
1028	Landsystems	8720 Miramar Place	San Diego	Low	1799	Other Contractor				X
1029	Lang Electric	47900 Oasis Court	Palm Desert	Low	1731	Other Contractor				X
1030	Lanier Construction, Inc.	10888 Buggywhip Drive	Spring Valley	Low	1521	Other Contractor				X
1031	Larry's Electrical Service, Inc.	1043 Worthington Street	San Diego	Low	1731	Other Contractor				X
1032	Lasco Bathware, Inc.	3255 E Miraloma Avenue	Anaheim	Low	1711	Other Contractor				X
1033	Le Perv Landscape, Inc.	5002 Santa Fe Street Suite A	San Diego	Low	1799	Other Contractor				X
1034	Ledcor Petty Construction, L.P.	9466 Black Mountain Road Suite 200	San Diego	Low	1542	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1035	Lee Landscaping	4511 Cannington Drive	San Diego	Low	0782	Landscaping				X
1036	Lehnert General Contracting	17125 Skyline Truck Trail	Jamul	Low	1521	Other Contractor				X
1037	Lekos Electric, Inc.	1370 Pioneer Way	El Cajon	Low	1731	Other Contractor				X
1038	Lemon Grove Stucco Inc	1057 Elkelton Blvd	Spring Vally	Low	1771	Cement Mixing/Cutting				X
1039	Lester's Plumbing	9733 Saint George Street	Spring Valley	Low	1711	Other Contractor				X
1040	License-To-Kill Inc.	4618 Avocado Blvd	La Mesa	Low	7342	Pest Control				X
1041	Life Deck	770 Gateway Center Drive	San Diego	Low	1771	Cement Mixing/Cutting				X
1042	Lightning Electric	1707 Coronado Avenue	Spring Valley	Low	1731	Other Contractor				X
1043	Lightworks Architectural Lighting	9883 Pacific Heights Blvd Suite E	San Diego	Low	1731	Other Contractor				X
1044	Linda Clark Roseworks	10656 Fuerte Drive	La Mesa	Low	0782	Landscaping				X
1045	Linear Electric Inc	7676 Engineer Road Unit L	San Diego	Low	1731	Other Contractor				X
1046	Lloyd Pest Control Company, Inc.	935 Sherman Street	San Diego	Low	7342	Pest Control				X
1047	Lockard Electric, Inc.	Not Listed	La Mesa	Low	1731	Other Contractor				X
1048	Los Angeles Signal Construction,	15100 E Nelson Avenue	Industry,LA 91744	Low	1731	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1049	Lot Management, Inc.	7200 Ponto Drive Suite B	Carlsbad	Low	1521	Other Contractor				X
1050	Lucas & Mercier Construction	29712 Avenida De Las Banderas	Rancho Santa Margari	Low	1751	Other Contractor				X
1051	Lucas And Mercier Development	630 Alta Vista Suite 203	Vista	Low	1521	Other Contractor				X
1052	Lundco Cleaning Systems	Not Listed	La Mesa	Low	1799	Other Contractor				X
1053	Luzaich Striping Inc.	14219 Olde Highway 80	El Cajon	Low	1611	Cement Mixing/Cutting				X
1054	M C Communications, Inc.	199 E 27th Street	National City	Low	1799	Other Contractor				X
1055	M D Painting	Not Listed	La Mesa	Low	1721	Painting/Coating				X
1056	M D Plumbing	3793 35th Street	San Diego	Low	1711	Other Contractor				X
1057	M J B Heating & Air Conditioning,	1348 La Mirada Drive Suite A	San Marcos	Low	1711	Other Contractor				X
1058	M J Kennedy Electric	2032 Diamond Street	San Diego	Low	1731	Other Contractor				X
1059	M J M Handyman	Not Listed	La Mesa	Low	1522	Other Contractor				X
1060	M W Reynolds Construction Co.,	1908 Friendship Drive Suite A	El Cajon	Low	1521	Other Contractor				X
1061	M. C. Brown Construction&	10777 Eureka Road	Spring Valley	Low	1521	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1062	M. Gehring Construction	Not Listed	La Mesa	Low	1799	Other Contractor				X
1063	M.C. McMurray Painting &	Not Listed	La Mesa	Low	1721	Painting/Coating				X
1064	Macord Construction Corp	101-H Copperwood Way	Oceanside	Low	1742	Painting/Coating				X
1065	Magna Window Corporation	1879 Lincoln Avenue	Banning	Low	1793	Other Contractor				X
1066	Magnum Electric Inc.	1174 Pierre Way	El Cajon	Low	1731	Other Contractor				X
1067	Mallucci Builders	Not Listed	La Mesa	Low	1521	Other Contractor				X
1068	Marathon General Inc	130 S Hale Avenue	Escondido	Low	1799	Other Contractor				X
1069	Mark Snyder Electric	12900 Brookprinter Place Suite 200	Poway	Low	1731	Other Contractor				X
1070	Marrokal Construction Company	9842 River Street	Lakeside	Low	1522	Other Contractor				X
1071	Marshall Roofing Company	11729 Calle Albara	El Cajon	Low	1761	Other Contractor				X
1072	Martin Electric II	1841 Westward Ho Circle	El Cajon	Low	1731	Other Contractor				X
1073	Martin Roofing Co Inc	6608 Federal Blvd	Lemon Grove	Low	1761	Other Contractor				X
1074	Marzola Construction Co., Inc.	17025 Industry Place	La Mirada	Low	1771	Cement Mixing/Cutting				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1075	Master Electric Company, Inc.	8055 El Capitan Dr.	La Mesa	Low	1731	Other Contractor	Alvarado			X
1076	Master Plumbing And Leak Detection	8726 Production Avenue Suite B	San Diego	Low	1711	Other Contractor				X
1077	Masterpiece Leaded Windows	13831 Danielson Street	Poway	Low	1751	Other Contractor				X
1078	Mastersev Inc.	560 Library Street	San Fernando	Low	1623	Other Contractor				X
1079	Mattia Concrete Cleaning	Not Listed	La Mesa	Low	1799	Other Contractor				X
1080	Maxim Floor Systems	1189 N Grove Street Bldg. C	Anaheim	Low	1752	Other Contractor				X
1081	Mayer Roofing, Inc.	490 Corporate Drive	Escondido	Low	1761	Other Contractor				X
1082	Mc Bride Electric	9919 Hibert Street Suite F	San Diego	Low	1731	Other Contractor				X
1083	Mc Guire Electric	8605 Fiona Way	Santee	Low	1731	Other Contractor				X
1084	Mc Kay Roofing Company, Inc.	10622 Keeney Street	Santee	Low	1761	Other Contractor				X
1085	Mc Millan Water Treatment	8450 Tamarind Avenue Suite D	Fontana	Low	1522	Other Contractor				X
1086	Mc Minn Contruction Inc.	13350 Birch Tree Lane	Poway	Low	1521	Other Contractor				X
1087	Mc Neil Construction	5009 Gasconade Avenue	San Diego	Low	1799	Other Contractor				X
1088	McClain, Inc.	1272 Tuttle Lane	El Cajon	Low	0783	Landscaping				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1089	Mechanical Industries, Inc.	314 Yampa Street	Bakersfield	Low	1791	Other Contractor				X
1090	Michael M. Carson Const. Co.	946 S Lincoln Avenue	El Cajon	Low	1521	Other Contractor				X
1091	Mickey's Electric	1513 Winsome Drive	Escondido	Low	1799	Other Contractor				X
1092	Mike Jackson Electrical	11464 Crazy Horse Drive	Lakeside	Low	1731	Other Contractor				X
1093	Mike Oliver Plumbing, Inc.	Not Listed	La Mesa	Low	1711	Other Contractor				X
1094	Mike Simpson Plumbing	Not Listed	La Mesa	Low	1711	Other Contractor				X
1095	Mike's Home Repair & Maintenance	Not Listed	La Mesa	Low	1522	Other Contractor				X
1096	Milgard Manufacturing Inc	26879 Diaz Road	Temecula	Low	1799	Other Contractor				X
1097	Milholland Electric, Inc.	9169 Chespeake Drive	San Diego	Low	1799	Other Contractor				X
1098	Miller Brooks Environmental, Inc	2124 Main Street Suite 200	Huntington Beach	Low	1522	Other Contractor				X
1099	Miller Construction	Not Listed	La Mesa	Low	1521	Other Contractor				X
1100	Miller Paving Corp	9236 Olive Drive	Spring Valley	Low	1611	Cement Mixing/Cutting				X
1101	Milton Electric	5167 Hilda Road	San Diego	Low	1731	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1102	Minute Man Pest Management, Inc.	1625 Cuyamaca Avenue	Spring Valley	Low	7342	Pest Control				X
1103	Mirstone Plastering Inc.	1374 Presioca Street	Spring Valley	Low	1742	Painting/Coating				X
1104	Mission Pools Of Escondido	755 W Grand Avenue	Escondido	Low	1799	Other Contractor				X
1105	Mission Valley Roofing, Inc.	9908 Prospect	Santee	Low	1761	Other Contractor				X
1106	MLS Construction Co.	Not Listed	La Mesa	Low	1522	Other Contractor	University			X
1107	Mo Mo's Trees	Not Listed	La Mesa	Low	0783	Landscaping				X
1108	Mocon Pipebursting	82204 Hihgway 111 C201	Indio	Low	1542	Other Contractor				X
1109	Monterey Park Roofing Co.	10 Scrub Oak	Aliso Viejo	Low	1761	Other Contractor				X
1110	Mow Blow N Go	Not Listed	La Mesa	Low	0782	Landscaping				X
1111	Mr. Crabgrass Santos Landscape	10426 Park Avenue	Santee	Low	0782	Landscaping				X
1112	My Electrician Online	Not Listed	La Mesa	Low	1731	Other Contractor				X
1113	My Plumber S.D., L L P	9975 Pennsylvania Avenue	Manassas,VA 20110	Low	1711	Other Contractor				X
1114	N E C Unified Solutions, Inc.	6535 N State Hwy 161	Irving,TX 75039	Low	1731	Other Contractor				X
1115	N P L Mechanical	731 Terra Lane	El Cajon	Low	1761	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1116	National Air, Inc.	2053 Kurtz Street	San Diego	Low	1711	Other Contractor				X
1117	National Electric Works, Inc.	4440 Rainier Avenue	San Diego	Low	1731	Other Contractor				X
1118	Natural Environmental, Inc	1162 N Marshall Avenue	El Cajon	Low	1799	Other Contractor				X
1119	Neal Electric Inc	13250 Kirkham Way	Poway	Low	1731	Other Contractor				X
1120	Network Pavers	Not Listed	La Mesa	Low	1611	Cement Mixing/Cutting				X
1121	Newman Replacement Windows, Inc.	6110 Yarrow Drive	Carlsbad	Low	1751	Other Contractor				X
1122	Nicholas Grant Corporation Dba	5370 Eastgate Mall	San Diego	Low	1611	Cement Mixing/Cutting				X
1123	Nielsen Development	1224 Greenfield Street	El Cajon	Low	1522	Other Contractor				X
1124	Nissho Of California, Inc.	1902 S Santa Fe Avenue	Vista	Low	0781	Landscaping				X
1125	Normac Kitchens, Inc.	607 N Central Avenue	Locust,NC 28097	Low	1799	Other Contractor				X
1126	North County Acoustics	8315 Miralani Drive	San Diego	Low	1742	Painting/Coating				X
1127	North County Gunite Company	12562 Highway 67	Lakeside	Low	1611	Cement Mixing/Cutting				X
1128	Northbrook Inc	3101 G Orange Grove Avenue	North Highlands	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1129	O J Insulation, Inc.	600 S Vincent Avenue	Azusa	Low	1742	Painting/Coating				X
1130	On Time Construction & Landscape	Not Listed	La Mesa	Low	1521	Other Contractor				X
1131	One Way Audio Video &	Not Listed	La Mesa	Low	1796	Other Contractor				X
1132	Orestano Painting And Decorating	Not Listed	La Mesa	Low	1721	Painting/Coating				X
1133	Orion Construction Corp.	1232 Keystone Way	Vista	Low	1799	Other Contractor				X
1134	Orkin Exterminating Company	2420 Grand Avenue Suite J	Vista	Low	7342	Pest Control				X
1135	Orozco's Tree Trimming	138 Richfield Avenue	El Cajon	Low	0781	Landscaping				X
1136	Oscar & Sons Co.	1512 Altadena Avenue	San Diego	Low	0781	Landscaping				X
1137	Ozzy's Plumbing & Drain Services	2695 Calle Quebrada	San Diego	Low	1711	Other Contractor				X
1138	P.w. Marsh & Sons, Inc	1068 Broadway 220	El Cajon	Low	1521	Other Contractor				X
1139	Pacific Building Group	5754 Pacific Center Blvd Suite 203	San Diego	Low	1522	Other Contractor				X
1140	Pacific Edge Landscape Maintenance	Not Listed	La Mesa	Low	0782	Landscaping				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1141	Pacific Electric Co	9328 Lakeview Road	Lakeside	Low	1799	Other Contractor				X
1142	Pacific Green Landscape, Inc.	8834 Winter Gardens Blvd	Lakeside	Low	0782	Landscaping				X
1143	Pacific Lath And Plaster	360 S Spruce Street	Escondido	Low	1742	Painting/Coating				X
1144	Pacific Production Plumbing	1584 Pioneer Way	El Cajon	Low	1711	Other Contractor				X
1145	Pacific Refrigeration, Inc.	1440 Broadway	El Cajon	Low	7623	Equipment Repair				X
1146	Pacific Rim Mechanical, Inc.	7655 Convoy Court	San Diego	Low	1799	Other Contractor				X
1147	Pacific Sewer Maintenance Corp.	8244 W Hillsdale Court Unit #3	Visalia	Low	1623	Other Contractor				X
1148	Pacific Structures Construction,	101 State Place Suite E	Escondido	Low	1771	Cement Mixing/Cutting				X
1149	Pacific Sundance Construction Inc.	2911 W Warner Avenue	Santa Ana	Low	1521	Other Contractor				X
1150	Pacifica Glass Co., Inc.	1997 Friendship Drive Suite G	El Cajon	Low	1793	Other Contractor				X
1151	Pac-West Sheet Metal	528 Amigas Drive Suite C	Redlands	Low	1761	Other Contractor				X
1152	Padre Pools	9679 Marilla Drive	Lakeside	Low	1799	Other Contractor				X
1153	Paint Plus, Inc.	1647 Dewitt Estates Road	Alpine	Low	1721	Painting/Coating				X
1154	Palm Engineering Construction	3770 Hancock Street Suite H	San Diego	Low	1521	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1155	Par Electrical Contractors, Inc.	2410 Vineyard Avenue	Escondido	Low	1731	Other Contractor				X
1156	Paradise Custom Pools	Po Box 900454	San Diego	Low	1799	Other Contractor				X
1157	Paramount R & R, Inc.	9340 Hazard Way	San Diego	Low	1771	Cement Mixing/Cutting				X
1158	Paramount Scaffold, Inc.	16631 S Avalon Blvd	Casron	Low	1799	Other Contractor				X
1159	Passage Supply Inc.	1505 S Dupont Avenue #F	Ontario	Low	1751	Other Contractor				X
1160	Patriot Plumbing, Inc.	870 N Second Street	El Cajon	Low	1711	Other Contractor				X
1161	Patterson Brothers Lighting, Inc	12047 Riverside Drive	Lakeside	Low	1731	Other Contractor				X
1162	Paul Hansen Equipment	603 S Marshall Avenue	El Cajon	Low	1521	Other Contractor				X
1163	Pavement Recycling Systems	121 N Main Street	Riverside	Low	1611	Cement Mixing/Cutting				X
1164	Payco Specialties Inc	120 N 2nd Avenue	Chula Vista	Low	1799	Other Contractor				X
1165	Pebble Paving Co.	7954 Convoy Court	San Diego	Low	1611	Cement Mixing/Cutting				X
1166	Perry Plumbing	2810 Sandover Court	Bonita	Low	1799	Other Contractor				X
1167	Pete Paniagua Termite & Pest	3736 Grove Street	Lemon Grove	Low	7342	Pest Control				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1168	Peterbuilt Corporation	6235 Lusk Blvd	San Diego	Low	1521	Other Contractor				X
1169	Peterson Roofing, Inc.	549 W Central Park Avenue	Anaheim	Low	1522	Other Contractor				X
1170	Phazer Electric Inc	Not Listed	La Mesa	Low	1731	Other Contractor				X
1171	Phillips Welding	Not Listed	La Mesa	Low	1799	Other Contractor				X
1172	Plant House Landscaping	1633 Fuerte Knolls Lane	El Cajon	Low	0781	Landscaping				X
1173	Plumbing Solutions, Inc.	17701 W Danielson Street Apartment 102	Canyon Country	Low	1711	Other Contractor				X
1174	Porterfield Home Enhancements	7827 Segovia Way	Carlsbad	Low	1521	Other Contractor				X
1175	Portillo Concrete, Inc.	3528 Harris Street	Lemon Grove	Low	1771	Cement Mixing/Cutting				X
1176	Pota Landscape	6344 Arms Lake Avenue	San Diego	Low	1799	Other Contractor				X
1177	Power Communication Systems	4643 Mission Gorge Place Suite A	San Diego	Low	1542	Other Contractor				X
1178	Power Drain Service	5622 Meade Avenue	San Diego	Low	1711	Other Contractor				X
1179	Power Fabricating Inc.	625 S Fee Ana Street	Placentia	Low	1731	Other Contractor				X
1180	Power Plus - S. R. Bray Corp	1005 N Edward Court	Anaheim	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1181	Precision Concrete Cutting	32428 Campo Drive	Temecula	Low	1771	Cement Mixing/Cutting				X
1182	Precision Electric Co	8137 Winter Gardens Blvd	Lakeside	Low	1731	Other Contractor				X
1183	Premier Roofing	9054 Olive Drive	Spring Valley	Low	1761	Other Contractor				X
1184	Pro Coat Systems, Inc.	1131 N Citrus Street	Orange	Low	1799	Other Contractor				X
1185	Pro Drain & Plumbing Service Inc.	7440 Central Avenue	Lemon Grove	Low	1799	Other Contractor				X
1186	Pro Line Construction	13240 Morning Glory Drive	Lakeside	Low	1522	Other Contractor				X
1187	Pro Tech Insulation, Inc.	2041 Skyview Glen	Escondido	Low	1799	Other Contractor				X
1188	Pro Wall Lath & Plaster, Inc.	360 S Spruce Street	Escondido	Low	1771	Cement Mixing/Cutting				X
1189	Progressive Investments, Inc.	1168 Greenfield Drive	El Cajon	Low	1741	Masonry				X
1190	Promark Roofing	302 Hunter Court	Alpine	Low	1761	Other Contractor				X
1191	Pro-Vlad	Not Listed	La Mesa	Low	1522	Other Contractor				X
1192	Pullman Comm Inc	2530 Lynn Way	Vista	Low	1731	Other Contractor				X
1193	Purser Construction, Inc.	9474 Kearny Villa Road Suite 101	San Diego	Low	1799	Other Contractor				X
1194	Quality Interiors, Inc.	803 E Parkridge Avenue	Corona	Low	1742	Painting/Coating				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1195	Quality Patio & Sunrooms	8388 Mary Dean Lane	Lakeside	Low	1521	Other Contractor				X
1196	Quality Rooter And Plumbing, Inc.	1798 Pepper Villa Drive	El Cajon	Low	1711	Other Contractor				X
1197	Quick Plumbing	1692 N Mollison Avenue	El Cajon	Low	1711	Other Contractor				X
1198	Quintessa Construction, Inc.	2210 Encinitas Blvd Suite S	Encinitas	Low	1521	Other Contractor				X
1199	R & C Structures, Inc.	1615 La Mirada Drive	San Marcos	Low	1799	Other Contractor				X
1200	R & M Electrical Contractor, Inc.	4912 E Florence Circle	Anaheim	Low	1731	Other Contractor				X
1201	R A D Construction, Inc.	3479 Citrus Street Suite A	Lemon Grove	Low	1799	Other Contractor				X
1202	R B E	1177 Greefield Drive Suite B	El Cajon	Low	1721	Painting/Coating				X
1203	R B Electrical	1248 Andover Road	El Cajon	Low	1731	Other Contractor				X
1204	R C Grading, Inc.	1650 W Pellisier Road	Colton	Low	1611	Cement Mixing/Cutting				X
1205	R C Morse General Contractor	Not Listed	La Mesa	Low	1521	Other Contractor				X
1206	R D Hammond Builders	10041 Medina Drive	Santee	Low	1521	Other Contractor				X
1207	R L I	1967 Brockhurst Drive	El Cajon	Low	1731	Other Contractor				X
1208	R. E. Paxton Contracting	Not Listed	La Mesa	Low	1542	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1209	R. J. Dutch Devos	Not Listed	La Mesa	Low	7699	Equipment Repair				X
1210	R.C. Young Roofing Co., Inc.	875 34th Street	San Diego	Low	1761	Other Contractor				X
1211	Race Way Electric, Inc.	PO Box 710885	Santee	Low	1731	Other Contractor				X
1212	Radford Doors U S A, Inc.	2130 Newton Avenue	San Diego	Low	1751	Other Contractor				X
1213	Rafael Gardening Landscape Svc	8843 Cottonwood Avenue	Santee	Low	0782	Landscaping				X
1214	Rain For Rent	3404 State Road	Bakersfield	Low	1799	Other Contractor				X
1215	Ram Electric	12365 Lakeshore Dr	Lakeside	Low	1731	Other Contractor				X
1216	Ramona Paving & Construction	1303 Olive Street	Ramona	Low	1611	Cement Mixing/Cutting				X
1217	Ranbar Plumbing Contractors, Inc.	10149 Channel Road Suite A	Lakeside	Low	1711	Other Contractor				X
1218	Ranbar Plumbing Contractors, Inc.	10149 Channel Road Suite A	Lakeside	Low	1521	Other Contractor				X
1219	Rapid Plumbing	5595 Magnatron Blvd Suite Q	San Diego	Low	1711	Other Contractor				X
1220	Raver Contruction, Inc.	14978 Skyline Truck Trail	Jamul	Low	1521	Other Contractor				X
1221	Rawson Enterprises, Inc.	10233 Jefferson Street	Yucaipa	Low	1521	Other Contractor				X
1222	Raymar Construction	43931 Via Montalban	Temecula	Low	1700	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1223	Ray's Cement Work	2477 1/2 Hardy Drive	Lemon Grove	Low	1741	Masonry				X
1224	Ray's Plumbing	10346 Bosque Drive	Lakeside	Low	1711	Other Contractor				X
1225	Real Time Plumbing	180 Mace Street Suite B7	Chula Vista	Low	1711	Other Contractor				X
1226	Reasonable Drain And Plumbing	1765 Garnet Avenue Suite 104	San Diego	Low	1711	Other Contractor				X
1227	Renewable Energy Concepts, Inc.	684 Clarion Court	San Luis Obispo	Low	1731	Other Contractor				X
1228	Republic I T S	371 Bel Marin Keys Blvd #200	Novato	Low	1731	Other Contractor				X
1229	Rescom Overhead Doors, Inc.	1738 Brackett Street	La Verne	Low	1751	Other Contractor				X
1230	Reuben's Plumbing	1759 Linwood Street	San Diego	Low	1711	Other Contractor				X
1231	Richard Murray Painting	Not Listed	La Mesa	Low	1721	Painting/Coating				X
1232	Rick Skinner Construction	6965 Endens Avenue	San Diego	Low	1521	Other Contractor				X
1233	Ricks Sign & Lighting Service	Po Box 219	Alpine	Low	1799	Other Contractor				X
1234	Rightway Landscaping	898 Galopago Street	Spring Valley	Low	0782	Landscaping				X
1235	Ritch Builder Co	4629 Calle De Vida	San Diego	Low	1521	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1236	Rivera's Iron Works, Inc.	2534 S Santa Fe Avenue	Vista	Low	1799	Other Contractor				X
1237	Robeck Electrical Maintenance	1070 Commerce Street Suite C	San Marcos	Low	1799	Other Contractor				X
1238	Robert Brown Electric	455 Pepper Drive	El Cajon	Low	1521	Other Contractor				X
1239	Robert Rubidoux Roofing	1261 La Paloma Glen	Escondido	Low	1761	Other Contractor				X
1240	Robinson Electric	8871 Troy Street	Spring Valley	Low	1731	Other Contractor				X
1241	Robinson Roofing & Consulting	PO Box 902	Rialto	Low	1761	Other Contractor				X
1242	Roejack Roofing, Inc.	1107 Petree Street	El Cajon	Low	1761	Other Contractor				X
1243	Roel Construction Co Inc	3366 Kurtz Street	San Diego	Low	1799	Other Contractor				X
1244	Rogelio Valdez Gardening	2655 1/2 Broadway Suite A	San Diego	Low	0782	Landscaping				X
1245	Roger H. Proulx & Co.	6833 E Rosecrans Avenue Suite C	Paramount	Low	1799	Other Contractor				X
1246	Roger L. Ballantyne	Not Listed	La Mesa	Low	1742	Painting/Coating				X
1247	Rojas Garden Services	2858 Beatrice Street	San Diego	Low	0781	Landscaping				X
1248	Romero's Roofing Service, Inc.	1827 Cleveland Avenue	National City	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1249	Ronald Jay Cappello	Not Listed	La Mesa	Low	1711	Other Contractor				X
1250	Ronces-McKinney Painting, Inc	4418 Avocado Blvd	La Mesa	Low	1721	Painting/Coating				X
1251	Ron's Plumbing	9962 Prospect Avenue	Santee	Low	1711	Other Contractor				X
1252	Roofcorp Of C A, Inc.	2130 S Dupont Drive	Anaheim	Low	1761	Other Contractor				X
1253	Roofing Services Of San Diego	8285 Buckhorn Street	San Diego	Low	1742	Painting/Coating				X
1254	Rossi Painting Co, Inc.	4025 E 6th Street	Long Beach	Low	1721	Painting/Coating				X
1255	Roth Construction Corporation	4850 Talmadge Park Row	San Diego	Low	1522	Other Contractor				X
1256	Roto Rooter Sewer Service	180 Denny Way	El Cajon	Low	7699	Equipment Repair				X
1257	Royster Group Construction, Inc.	696 State Street	San Diego	Low	1521	Other Contractor				X
1258	Ruiz Tree Service	2016 E Avenue	National City	Low	0782	Landscaping				X
1259	Russell Plumbing & Supplies Inc	9030 Wintergardens Blvd	Lakeside	Low	1711	Other Contractor				X
1260	Rye Built Construction Corp	6319 Badger Lake Avenue	San Diego	Low	1521	Other Contractor				X
1261	S E Pipeline Construction Company	11832 S Bloomfield Avenue	Santa Fe Springs	Low	1623	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1262	S G Plastering	14475 Olde Highway 80 Suite A	El Cajon	Low	1742	Painting/Coating				X
1263	S O S Rooter	3485 Pickwick Street	San Diego	Low	1711	Other Contractor				X
1264	Sadler Roofing	125 Grand Canal	Balboa Island	Low	1799	Other Contractor				X
1265	Safway Steel Products	1107 Petree Street Suite 103	El Cajon	Low	1799	Other Contractor				X
1266	Salvador Flores, Jr.	Not Listed	La Mesa	Low	1721	Painting/Coating				X
1267	San Diego Electric Co.	7906 Linen Drive	Santee	Low	1731	Other Contractor				X
1268	San Diego Erosion Control	6920 Miramar Road Suite 303	San Diego	Low	0781	Landscaping				X
1269	San Diego Fence Co., Inc.	7920 Engineer Road	San Diego	Low	1799	Other Contractor				X
1270	San Diego Mirror & Window	2515 Industry Street	Oceanside	Low	1793	Other Contractor				X
1271	San Diego Pool Plastering	10750 Valle Vista Road	Lakeside	Low	1799	Other Contractor				X
1272	San Diego Preferred Plumbing Inc	8898 Clairemont Mesa Blvd Suite J	San Diego	Low	1711	Other Contractor				X
1273	San Diego Roofing, Inc.	7364 El Cajon Blvd	San Diego	Low	1761	Other Contractor				X
1274	San Diego Stucco Company Inc	625 North Avenue	Vista	Low	1771	Cement Mixing/Cutting				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1275	San Diego Trane Company	9555 Chesapeake Drive Suite 201	San Diego	Low	1799	Other Contractor				X
1276	San Marcos Roofing	1580 Grapevine Lane	Vista	Low	1799	Other Contractor				X
1277	Santa Fe Plaster	620 Alpine Way	Escondido	Low	1742	Painting/Coating				X
1278	Santee Electric Company	8461 Melrose Lane	El Cajon	Low	1731	Other Contractor				X
1279	Saw Core Inc.	12111 Lakeside Avenue	Lakeside	Low	1795	Other Contractor				X
1280	Schearing Construction Company	4339 Mount Putman Avenue	San Diego	Low	1799	Other Contractor				X
1281	Schilling Corporation	697 Greenfield Drive	El Cajon	Low	1799	Other Contractor				X
1282	Schillreff Mechanical Inc.	Not Listed	La Mesa	Low	1711	Other Contractor				X
1283	Schindler Elevator Corporation	16450 Foothill Blvd Suite 200	Sylmar	Low	1796	Other Contractor				X
1284	Schmid Building Products	13000 Kirkham Way Suite 101	Poway	Low	1742	Painting/Coating				X
1285	Schmidt Fire Protection Co, Inc.	4760 Murphy Canyon Road	San Diego	Low	1731	Other Contractor				X
1286	Seal Electric Inc.	9216 Abraham Way Suite C	Santee	Low	1731	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1287	Sears Home Improvement Product	10415 Slusher Drive	Santa Fe Springs	Low	1799	Other Contractor				X
1288	Secure Roof, Inc.	976 B Andreasen Drive	Escondido	Low	1761	Other Contractor				X
1289	Sedco Plumbing	1265 Hayden Lane	El Cajon	Low	1711	Other Contractor				X
1290	Select Electric, Inc	1425 Presioca Street	Spring Valley	Low	1731	Other Contractor				X
1291	Service Master All Phase	1466 Pioneer Way Suite 6	El Cajon	Low	1521	Other Contractor				X
1292	Sherwood Mechanical, Inc.	13630 Danielson	Poway	Low	1799	Other Contractor				X
1293	Sid's Carpet Barn, Inc.	132 W 8th Street	National City	Low	1752	Other Contractor				X
1294	Sierra Painting	11389 Reidy Canyon Place	Escondido	Low	1721	Painting/Coating				X
1295	Sierra Window Concepts, Ltd.	5252 Balboa Avenue Suite 304	San Diego	Low	1751	Other Contractor				X
1296	Sign Ad Corporation	9540 Waples Street Suite C	San Diego	Low	1799	Other Contractor				X
1297	Signtech Electrical Advertising	4444 Federal Blvd	San Diego	Low	1731	Other Contractor				X
1298	Silva And Silva Asphalt	9642 Prospect Avenue	Lakeside	Low	1611	Cement Mixing/Cutting				X
1299	Silverthorn Construction, Inc.	1674 Alpine Terrace Road	Alpine	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1300	Sim J. Harris, Inc.	4375 Jutland Drive Suite 260	San Diego	Low	1611	Cement Mixing/Cutting				X
1301	Simmons Sheet Metal Fab. Inc.	2950 San Luis Rey Road	Oceanside	Low	1761	Other Contractor				X
1302	Simonsen Solutions	Not Listed	La Mesa	Low	1522	Other Contractor				X
1303	Simplexgrinnell L P	9855 Carroll Canyon Road	San Diego	Low	1731	Other Contractor				X
1304	Smart Systems Technologies, Inc.	9 Goodyear	Irvine	Low	1731	Other Contractor				X
1305	Smith Roofing Co, Inc	4211 Whittier Street	San Diego	Low	1761	Other Contractor				X
1306	So Cal Custom Roofing	625 North Avenue	Vista	Low	1761	Other Contractor				X
1307	Soclaris Contracting	Not Listed	La Mesa	Low	1521	Other Contractor				X
1308	Solomon Electrical Services	3812 Superior Street	San Diego	Low	1731	Other Contractor				X
1309	Source Refrigeration & H V A C,	800 E Orangethorpe Avenue	Anaheim	Low	1711	Other Contractor				X
1310	South Bay Fence Inc	3084 Main St	Chula Vista	Low	1799	Other Contractor				X
1311	South Coast Erosion Control, Inc.	1014 E Washington Avenue	El Cajon	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1312	South Coast Patio	8927 Lakeview Road	Lakeside	Low	1799	Other Contractor				X
1313	Southern Contracting Company	559 Twin Oaks Valley Road N	San Marcos	Low	1799	Other Contractor				X
1314	Southern Lighting & Graphics Inc.	10370 Regis Court	Rancho Cucamonga	Low	1521	Other Contractor				X
1315	Southwest Window Co., Inc.	8666 Production Avenue	San Diego	Low	1793	Other Contractor				X
1316	Spectra Contract Flooring	8320 Caminto Santa Fe 1	San Diego	Low	1799	Other Contractor				X
1317	Sperry Construction & Electric,	9938 Blossom Valley Road	El Cajon	Low	1731	Other Contractor				X
1318	Spooner's Woodworks, Inc.	12305 Crosthwaite Circle	Poway	Low	1751	Other Contractor				X
1319	Sprekelmeyer & Muessigmann	522 Trailridge Drive	Bonita	Low	1731	Other Contractor				X
1320	Spring Valley Insulation	3151 Bancroft Drive	Spring Valley	Low	1742	Painting/Coating				X
1321	Spurlock Poirier Landscape	2122 Hancock Street	San Diego	Low	0781	Landscaping				X
1322	Stabler Building Company Inc.	11496 Cypress Terrace Place	San Diego	Low	1521	Other Contractor				X
1323	Stanley Access Technologies	244 Miller Avenue	El Cajon	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1324	Steele Plumbing Inc.	1304 Pepper Drive	El Cajon	Low	1711	Other Contractor				X
1325	Steve Fox Plumbing, Inc.	4172 Cartagena	San Diego	Low	1711	Other Contractor				X
1326	Steve Wolff And Associates, Inc.	9602 Santiago Blvd	Villa Park	Low	0782	Landscaping				X
1327	Stillson General Contracting	Not Listed	La Mesa	Low	1521	Other Contractor				X
1328	Stokely Construction, Inc	Not Listed	La Mesa	Low	1521	Other Contractor				X
1329	Strauwald Co. And Supply	9449 Calle Del Lago	Santee	Low	1521	Other Contractor				X
1330	Streamline Plumbing, Inc	Not Listed	La Mesa	Low	1799	Other Contractor				X
1331	Strickland Brothers Carpet	728 Hawthorne	El Cajon	Low	1752	Other Contractor				X
1332	Summit Steel Fabrications, Inc.	4468 Parkhurst Street	Mira Loma	Low	1791	Other Contractor				X
1333	Sunlite Landscape	567 Anderson Road	Alpine	Low	1799	Other Contractor				X
1334	Sunrise Concrete	12012 Riverside Drive	Lakeside	Low	1771	Cement Mixing/Cutting				X
1335	Sunshine Communications, Inc	10981 San Diego Mission Road Suite 100	San Diego	Low	1731	Other Contractor				X
1336	Sunwest Plumbing	9899 Hibert Unit E	San Diego	Low	1711	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1337	Superior Door Systems Inc	8059 Wing Avenue	El Cajon	Low	1799	Other Contractor				X
1338	Superior Gunite	12306 Van Nuys Blvd	Lakeview Terrace	Low	1771	Cement Mixing/Cutting				X
1339	Sweetwater Plumbing & Hardware	8300 Paradise Valley Road Suite 120	Spring Valley	Low	1799	Other Contractor				X
1340	Sylvania Lighting Services Corp.	2851 Pomona Blvd	Pomona	Low	1731	Other Contractor				X
1341	T & M Framing, Inc.	1224 Greenfield Drive	El Cajon	Low	1751	Other Contractor				X
1342	T C Construction	10540 Prospect Avenue	Santee	Low	1799	Other Contractor				X
1343	T C P Company	7080 Mt Vernon	Lemon Grove	Low	1521	Other Contractor				X
1344	T D Construction	319 River Trail Place	Santee	Low	1521	Other Contractor				X
1345	T F Kaiser Construction, Inc.	4525 Mount Frissell Drive	San Diego	Low	1521	Other Contractor				X
1346	T G C Builders	Not Listed	La Mesa	Low	1521	Other Contractor				X
1347	T L C Plumbing, Inc.	4569 Mission Gorge Place Suite E	San Diego	Low	1711	Other Contractor				X
1348	T- Mar Construction Inc	2340 Meyers Avenue	Escondido	Low	1742	Painting/Coating				X
1349	T P Acoustics Inc	9225 Mira Este Court Suite A	San Diego	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1350	T R C	9471 Ridgehaven Court Suite E	San Diego	Low	1521	Other Contractor				X
1351	T R Construction Co	13100 Kirkham Way Suite 204	Poway	Low	1761	Other Contractor				X
1352	Tanknology, Inc.	8501 N Mopac Expressway Suite 400	Austin,TX 78759	Low	1799	Other Contractor				X
1353	Taylor Signs And Graphics	14537 Kittery Street	Poway	Low	1731	Other Contractor				X
1354	Taylor Trim & Supply, Inc.	2057 Aldergrove Avenue	Escondido	Low	1751	Other Contractor				X
1355	Team C Construction	1208 N 2nd Street	El Cajon	Low	1771	Cement Mixing/Cutting				X
1356	Tejeda & Tejeda Asphalt &	9714 Sutton Crt	Santee	Low	1771	Cement Mixing/Cutting				X
1357	Temecon Gen. Bldg. Contractor,	9715 Carroll Centre Road Suite 108	San Diego	Low	1522	Other Contractor				X
1358	Temecula Valley Drywall, Inc.	41228 Raintree Court	Murrieta	Low	1799	Other Contractor				X
1359	Temperature Design Energy Systems	9141 Hillman Way	Lakeside	Low	1799	Other Contractor				X
1360	Temperatures Unlimited, Inc.	26841 Ruether Avenue Suite G	Santa Clarita	Low	1711	Other Contractor				X
1361	Terminix International Company	1736 N Magnolia Avenue	El Cajon	Low	7342	Pest Control				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1362	Terra West Grading	37035 Yuma Ln	Temecula	Low	1611	Cement Mixing/Cutting				X
1363	Terry Lindquist Roofing	877 Hale Court	El Cajon	Low	1799	Other Contractor				X
1364	Testamerica Drilling Corp.	1016 E Katella Avenue	Anaheim	Low	1781	Other Contractor				X
1365	The Brickman Group, Ltd	6218 Fairmount Avenue	San Diego	Low	1521	Other Contractor				X
1366	The Davey Tree Expert Company	6914 Mission Gorge Road	San Diego	Low	0783	Landscaping				X
1367	The Ghianni-Larussa Group, Inc.	13880 Stowe Drive Suite A	Poway	Low	1742	Painting/Coating				X
1368	The Whole Nine Yards	Not Listed	La Mesa	Low	1522	Other Contractor				X
1369	The Wright Painting Co.	12642 Casa Vista Road	Lakeside	Low	1721	Painting/Coating				X
1370	Thomas' Handyman Services	2570 Granada Circle	Spring Valley	Low	1521	Other Contractor				X
1371	Thomas Lukasiewicz Construction	8874 Gowdy Avenue	San Diego	Low	1542	Other Contractor				X
1372	Thompson Heating & Air	888 Rancheros Drive Suite E	San Marcos	Low	1799	Other Contractor				X
1373	Thornton Steel & Iron Works, Inc.	1323 State College Parkway	Anaheim	Low	1799	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1374	Tidwell Masonry	Not Listed	La Mesa	Low	1741	Masonry				X
1375	Tierra Verde Resources, Inc.	1545 Lake Drive	Encinitas	Low	1799	Other Contractor				X
1376	Tile King, Inc.	595 N Smith #A	Corona	Low	1743	Masonry				X
1377	Tim Walford Roofing	10699 San Diego Mission Road Apt 313	San Diego	Low	1761	Other Contractor				X
1378	Timberline Building Services	418 Edmard Street	El Cajon	Low	1521	Other Contractor				X
1379	Timberwood Landscape, Inc.	2731 Via Orange Way Suite 111	Spring Valley	Low	1799	Other Contractor				X
1380	Todd Enterprises, Inc.	3040 Clairemont Drive Suite C	San Diego	Low	1522	Other Contractor				X
1381	Todd F. Metcalf	630 W Foothill Blvd Suite C	Glendora	Low	1742	Painting/Coating				X
1382	Tom Reed General Contractor	1721 Yale Street	Chula Vista	Low	1521	Other Contractor				X
1383	Tom's Handyman Service	Not Listed	La Mesa	Low	1522	Other Contractor				X
1384	Tony Gallo Painting	20 Surfbird Lane	Aliso Viejo	Low	1721	Painting/Coating				X
1385	Tool Time Construction, Inc	7546 Trade Street	San Diego	Low	1522	Other Contractor				X
1386	Top Notch Termite Company, Inc	6041 Fairmount Avenue	San Diego	Low	7342	Pest Control				X
1387	Torres General, Inc.	10783 Jamacha Blvd. Suite 8	Spring Valley	Low	1751	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1388	Torres Tile, Inc.	1255 Linda Vista Drive	San Marcos	Low	1752	Other Contractor				X
1389	Torresdey Landscaping	Not Listed	La Mesa	Low	0782	Landscaping				X
1390	Town & Country Construction	Not Listed	La Mesa	Low	1522	Other Contractor				X
1391	Town & Country Custom Pools	9920 Prospect Avenue Suite 106	Santee	Low	1799	Other Contractor				X
1392	Traffic Control Service, Inc	584 N Marshall Avenue	El Cajon	Low	1799	Other Contractor				X
1393	Transcal Construction	3622 Eagle Street	San Diego	Low	1521	Other Contractor				X
1394	Travcon Builders, Inc.	Not Listed	La Mesa	Low	1542	Other Contractor				X
1395	Treebeard Landscape	9917 Campo Road	Spring Valley	Low	1799	Other Contractor				X
1396	Tri City Glass Of S D, Inc.	2555-B Sweerwater Springs Blvd.	Spring Valley	Low	1793	Other Contractor				X
1397	Tri Com Telecommunications Inc.	2845 Bancroft Drive	Sping Valley	Low	1521	Other Contractor				X
1398	Tri County Drilling	9631 Candida Street	San Diego	Low	1799	Other Contractor				X
1399	Tribal Painting, Inc.	1263 Bermuda Place	El Cajon	Low	1721	Painting/Coating				X
1400	Triple D Concrete Pumping	Not Listed	La Mesa	Low	1771	Cement Mixing/Cutting				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1401	True Lawn Care, Inc.	9820 Maine Avenue	Lakeside	Low	1799	Other Contractor				X
1402	Truly Nolen Of America	7170 University Avenue	La Mesa	Low	1742	Painting/Coating				X
1403	Truong Gardener	2960 Murray Ridge Road	San Diego	Low	0782	Landscaping				X
1404	Tubbs Enterprises, Inc.	2620 Aurora Glen	Escondido	Low	1742	Painting/Coating				X
1405	Tupper's Custom Works	Not Listed	La Mesa	Low	1542	Other Contractor				X
1406	Ulm Plumbing & Heating	7525 Mission Gorge Road Suite B	San Diego	Low	1711	Other Contractor				X
1407	Ultrasigns Inc.	5458 Complex Street Suite 401	San Diego	Low	1799	Other Contractor				X
1408	V I C O	Not Listed	La Mesa	Low	1521	Other Contractor				X
1409	V W C	425 W La Cadena Suite 12	Riverside	Low	1521	Other Contractor				X
1410	Valley Crest Landscape Maint., Inc	8500 Miramar Road	San Diego	Low	1799	Other Contractor				X
1411	Valleycrest Tree Company	12087-40 N Lopez Canyon Road	Sylmar	Low	1799	Other Contractor				X
1412	Van Con Builders Inc.	1301 Pepper Drive Suite D	El Cajon	Low	1521	Other Contractor				X
1413	Van Deutch Refrigeration	Not Listed	La Mesa	Low	7623	Equipment Repair				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1414	Vanberg Constuction	2521 B Street Suite 102	San Diego	Low	1799	Other Contractor				X
1415	Vanguard Fire Protection, Inc.	1604 La Mirada Del Suite 105	San Marcos	Low	1799	Other Contractor				X
1416	Ventura's Plumbing & Drain	8425 Pueblo Road	Lakeside	Low	1711	Other Contractor				X
1417	Viacom Outdoor, Inc.	1731 Workman Street	Los Angeles	Low	1799	Other Contractor				X
1418	Vic's Plumbing	687 Alveda Avenue	El Cajon	Low	1711	Other Contractor				X
1419	Vigil Handyman Service	Not Listed	La Mesa	Low	1522	Other Contractor				X
1420	Viking Electric	1549 Fair Valley Rd	El Cajon	Low	1731	Other Contractor				X
1421	Viking Insulation Co., Inc.	3014 Floyd Street	Burbank	Low	1742	Painting/Coating				X
1422	Vinyard Doors, Inc.	3605 Pacific Highway	San Diego	Low	1799	Other Contractor				X
1423	Vision Apartment Landscape &	Not Listed	La Mesa	Low	0782	Landscaping				X
1424	Volks Electric	6646 Julie Street	San Diego	Low	1731	Other Contractor				X
1425	W & S Electric	1050 Pioneer Way Suite K	El Cajon	Low	1731	Other Contractor				X
1426	Walker Wood Products	43195 Business Park Drive	Temecula	Low	1751	Other Contractor				X
1427	Walldesign Inc.	2350 SE Bristol Street	Newport Beach	Low	1521	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1428	Walter Anderson Plumbing Inc	1150 N Marshall Avenue	El Cajon	Low	1711	Other Contractor				X
1429	Water Heaters Only, Inc.	970 E Main Street Suite 200	Grass Valley	Low	1711	Other Contractor				X
1430	Wavecrest Construction, Inc.	5333 Mission Center Road	San Diego	Low	1522	Other Contractor				X
1431	Wayne Perry Construction Inc	8281 Commonwealth	Buena Park	Low	1522	Other Contractor				X
1432	Weather Machines	9858 Hawley Road	El Cajon	Low	1799	Other Contractor				X
1433	Wedcon Systems, Inc.	1660 Chicago Avenue Suite N9	Riverside	Low	1799	Other Contractor				X
1434	West Co Construction	1212 S Pacific Street #1	Oceanside	Low	1521	Other Contractor				X
1435	West Coast Appliance Service	10744 Prospect Avenue Suite B	Santee	Low	1731	Other Contractor				X
1436	West Coast Arborists, Inc	2200 E Via Burton Street	Anaheim	Low	0781	Landscaping				X
1437	Western Cable Construction	3420 University Avenue	San Diego	Low	1799	Other Contractor				X
1438	Western Exterminator Co	1320 Hill Street	El Cajon	Low	7342	Pest Control				X
1439	Western Foundations & Shoring	10875 Highway 67	Lakeside	Low	1799	Other Contractor				X
1440	Western Pump, Inc.	3235 F Street	San Diego	Low	1521	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1441	Western Tree Service	815 Telegraph Canyon Road 815	Chula Vista	Low	0783	Landscaping				X
1442	Westmac Enterprises, Inc.	9830 Vine Street Suite 100	Lakeside	Low	1799	Other Contractor				X
1443	Weststar Landscape Services	3553 Harris Street	Lemon Grove	Low	0782	Landscaping				X
1444	Whillock Contracting Inc	PO Box 2322	La Mesa	Low	1542	Other Contractor				X
1445	Whitson C M	10603 Rancho Bernardo Road	San Diego	Low	1521	Other Contractor				X
1446	Wilfrido Concrete Construction	303 H Street Suite 407	Chula Vista	Low	1771	Cement Mixing/Cutting				X
1447	Winfield Floor Window Covering	7031 Carroll Road	San Diego	Low	1752	Other Contractor				X
1448	Wire Pros Electric, Inc.	1753 Kyrsten Terrace Court	Alpine	Low	1731	Other Contractor				X
1449	Wittmayer Landscape Maintenance	1400 Country Crest Drive	El Cajon	Low	0782	Landscaping				X
1450	Woodruff Trenching, Inc.	9735 Prospect Avenue	Santee	Low	1629	Other Contractor				X
1451	Xunda Handyman	Not Listed	La Mesa	Low	1522	Other Contractor				X
1452	Yard Man	Not Listed	La Mesa	Low	0782	Landscaping				X
1453	Ye Olde Handyman Service	Not Listed	La Mesa	Low	1522	Other Contractor				X

Appendix A.5 (Continued)
Commercial Inventory

#	Business	Street Address	City	TTWQ	SIC	Category	Basin	< 200 ft.	Likely Source	Mobile
1454	Your Way Fumigation	41880 Kalmia Street Suite 170	Murrieta	Low	7342	Pest Control				X
1455	Zeller Drain Cleaning	Not Listed	La Mesa	Low	7699	Equipment Repair				X

Notes

TTWQ – Threat to Water Quality

SIC –Standard Industrial Classification Code

Basin – City of La Mesa drainage basin. HSAs are as follows: Alvarado and Lake Murray (907.12; San Diego River Watershed), University and Lemon Grove (908.22, San Diego Bay Watershed), Spring Valley (909.12, San Diego Bay Watershed)

<200 ft -- Less than 200 feet from the nearest receiving water body

Likely Source – Based on category, has pollutant discharge potential of "Likely" (see Table 7-1) for pollutant(s) associated with impairments of downstream receiving water bodies located outside the City but within the same watershed as the business. Pollutants considered for HSA 908.22 were heavy metals, bacteria, pesticides, and trash. Pollutants considered for HSA 907.11 were nutrients, oxygen demanding substances, and bacteria. There are no impaired water bodies or ESAs in the City of La Mesa.

Mobile – Mobile business

APPENDIX B

Appendix B
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
1	7/3/2007	City Personnel	Donny Gammon, Gammon Pools (842 Fessler Street, El Cajon 92020) 5930 Odessa Avenue, La Mesa	Mobile Business	Plaster/Gunite Discharge into Street	7/3/07 MT verifies complaint. Provides instructions for Cleanup. Follow-up end of day. Site not completely cleaned. Follow-up 7/5/07 with more cleaning necessary/contacted owner. 7/6/07 verified cleanup.	NOV Issued, San Diego River Watershed, Urban Runoff Trifold - Industrial/Commercial
2	7/5/2007	Hotline Caller	Brady's Carpet Cleaning Parkway Drive/Camarillo	Mobile Business	Dumping Carpet Cleaning Wastewater into the Street	7/5/07 HH respond to call and drives out to site. No discharge was observed.	N/A
3	7/10/2007	Hotline Caller	John Benson 8128 Kato Street	Residential	Occasionally Dumping Wastewater from RV	7/12/07 MT takes photos/sends notice to comply. 7/17/07 Homeowner contact City to reassure City that this would not occur again.	Written Notice to Comply, San Diego River Watershed, Urban Runoff Trifold
4	7/11/2007	Public Works	6969 Rolando Knolls	Municipal	Caller says that the storm drain has things growing out at Rolando and 6969 Tower.	WO#20033	N/A
5	7/11/2007	Hotline Caller	5558 Rab Street	Residential	Decaying 55 Gallon Drum in back yard	7/12/07 MT contact complainant and City's HHW Contact for potential pickup and recommended the County Department of Environmental Health.	N/A

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
6	7/11/2007	City Personnel	Helix High School University Avenue	School	Construction with no BMPs	DL issues NOV on 7/11/07. DL follows-up on 7/12/07. No further action.	Written Notice of Violation.
7	7/12/2007	Hotline Caller	Helen Haro 5440 Baltimore Drive 176	Residential-Strawberry Hill Apartment Complex	Oil in Parking Area	7/12/07 MT sends notice to comply/recommended corrective actions to mitigate for oil staining/leaking from vehicle. 7/16/07 MT contacts property management Laura Mullen at PPM1 to send out educational outreach to 180 Units at Strawberry Hill Complex	Written Notice to Comply, San Diego River Watershed, Urban Runoff Trifold (Note property management to send 180 of the above outreach to residents)
8	7/14/2007	Hotline Caller	The Palms of La Mesa 7481 Mohawk Street La Mesa, CA 91941	Residential-Apt Complex	Water Discharge from Apartment Complex	7/16/07 MT contacts Gail to gather additional information. MT visits site to verify discharge. Discharge may be result of over-irrigation. MT contacts Helix Water District 7/24/07 to check if pipe leaking. Helix states its irrigation water. 7/25/07 MT sends written Notice/company responds/slab leak fixed.	Written Warning, Over-irrigation Fact Sheet, Urban Runoff Trifold, San Diego River Watershed Fact Sheet
9	7/17/2007	Public Works	Veemac Avenue	Municipal	Caller says at Veemac Avenue the storm drain does not catch the water it goes onto property at end of culdesac. She wants someone to call before responding to the SR.	WO#20025	N/A
10	7/18/2007	Hotline Caller	Elite Autobody Nebo Street	Commercial	Waste discharge to street	7/19/07 MT contacts Elite Autobody/verbal warning.	Verbal Warning

Appendix B (Continued)
Summary of Documented Public Complaints

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11	7/20/2007	Hotline Caller	Nachos 7589 University Avenue	Commercial-Restaurant	Washing parking lot/exterior	7/20/07 MT verifies complaint and issues NOV. Note this is second time for NOV.	Written NOV
12	7/20/2007	Malik Tamimi	City of La Mesa Public Works/ Landscaping	Municipal	Over-irrigation	7/20/07 MT notes over-irrigation near La Mesa Blvd. MT contacts Public Works to address/reduce irrigation time.	Verbal Warning, Over-irrigation Fact Sheet
13	7/24/2007	Hotline Caller	The Helm Mgt. Company 4668 Nebo Street Violation Address 4676-4686 Nebo Street	Mobile-Power Washing Commercial Business	Washing Awnings/No BMPs	7/24/07 MT verifies complaint and issues NOV	Written NOV, Urban Runoff Trifold, San Diego Bay Watershed Fact Sheet
14	7/25/2007	Hotline Caller	7800 Block Normal	Residential-(over-irrigation)	Over-irrigation	7/25/07 MT contacts Sam, Public Works responded/turned off irrigation valve.	No Further Action
15	7/30/2007	Public Works	4137 Massachusetts	Municipal	Caller says every morning his storm drain and sidewalk is flooded. July 31: 8:09 a.m. Mr. Prine asked for a call back.	WO#20019	N/A
16	7/31/2007	Hotline Caller	Not Provided	Residential	Oil residue flowing along curb	MT calls back Donna to get address/additional information. No response	No Further Action
17	7/31/2007	Hotline Caller	7237 Cornell Avenue La Mesa, CA 91941	Residential-(over-irrigation)	Over-irrigation	8/6/07 MT sends letter to minimize over-irrigation.	Written Warning, Over-irrigation Fact Sheet, San Diego Bay Watershed Fact Sheet
18	8/1/2007	Public Works	9550 Milden St.	Municipal	Malik requesting source of drainage	WO#20135	N/A

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
19	8/1/2007	Malik Tamimi	Porter Hall/La Mesa Blvd	Municipal	Irrigation Valve	8/1/07 MT contacts Public Works regarding broken irrigation valve. Public Works immediately fixes valve.	Verbal Warning
20	8/1/2007	Public Works	Harry Griffen Park	Residential	Significant volume of water discharge in storm drain	8/1/07 MT verifies complaint. Contacts nearby Grossmont High School to verify pool is not the source. MT contacts Public Works to track storm drain line.	None
21	8/2/2007	Hotline Caller	6000 Block of Henderson Drive	Residential	Oil Discharge	8/3/07 MT verifies complaint but does not find oil stained area.	No Further Action
22	8/4/2007	Public Works	8960Lemon Avenue	Municipal	Drainage ditch problems	WO#20133	N/A
23	8/6/2007	Hotline Caller	4878 73rd Street	Residential-(over-irrigation)	Over-irrigation	8/6/07 MT sends notice to resident.	Written Warning, Over-irrigation Fact Sheet, San Diego Bay Watershed Fact Sheet
24	8/7/2007	Hotline Caller	6805 Rolando Knolls Drive	Residential-(over-irrigation)	Over-irrigation	8/7/07 MT sends notice to resident	Written Warning, Over-irrigation Fact Sheet, San Diego Bay Watershed Fact Sheet
25	8/7/2007	Hotline Caller	7834 Highwood Ave	Residential	Kids dumped logs in storm drain	8/9/07 MT makes service request to Public Works to clean storm drain.	No Further Action
26	8/8/2007	Public Works	Amaya	Municipal	Hamed with Engineering called and needs Steve Maurer and his crew to have storm drain inlet at corner of Amaya and Primrose cleaned. The leaves also have to be removed from gutter.	WO#20163	N/A

Appendix B (Continued)
Summary of Documented Public Complaints

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27	8/8/2007	Hotline Caller	Cross Walk La Mesa Blvd and Porter Hill	Commercial	French drain/water discharge into street	8/9/07 MT verifies complaint. Water from French drain/algae observed.	No Further Action
28	8/8/2007	Hamed Hashemian	6165 Primrose Drive	Residential-(over-irrigation)	Over-irrigation	8/9/07 MT verifies complaint and sends written notice. 8/13/07 MT receives message that irrigation schedule has been changed/adjusted. 8/29/07 MT re-inspects and observes no issues.	Written Warning, Over-irrigation Fact Sheet, San Diego River Fact Sheet
29	8/9/2007	Hotline Caller	Katherine Place	Residential	Slurry Seal/Oil	8/9/07 MT verifies complaint and does not note potential storm water pollution.	No Further Action
30	8/13/2007	Public Works	6165 Primrose	Municipal	In between curb and asphalt, water and debris is collecting front of his house. Gutter needs to be cleaned out. 8/14: Second Call: Resident called back. Requested a call.	WO#20160	N/A
31	8/14/2007	Hotline Caller	6135 Primrose Drive	Residential – (over-irrigation)	Over-irrigation	8/14/07 MT sent notice. 8/29/07 MT talked to owner/developer at the site to reset irrigation timer.	Written Warning, Over-irrigation Fact Sheet, San Diego River Fact Sheet
32	8/14/2007	Hotline Caller	6145 Primrose Drive	Residential – (over-irrigation)	Over-irrigation	8/14/07 MT sent notice. 8/29/07 MT talked to owner/developer at the site to reset irrigation timer.	Written Warning, Over-irrigation Fact Sheet, San Diego River Watershed Fact Sheet
33	8/14/2007	Hotline Caller	6155 Primrose Drive	Residential – (over-irrigation)	Over-irrigation	8/14/07 MT sent notice. 8/29/07 MT talked to owner/developer at the site to reset irrigation timer.	Written Warning, Over-irrigation Fact Sheet, San Diego River Watershed Fact Sheet
34	8/20/2007	Hotline Caller	3745 Costa Bella Drive	Residential	Plaster Dumping Storm Drain	8/20/07 MT verifies complaint. No signs of dumping observed. No Further Action	No Further Action

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
35	8/27/2007	Public Works	Center Drive	Municipal	Dave stated that you were aware of leaves cleaned from this storm drain. Requested that we VACTOR-SE corner of intersection.	WO#20318	N/A
36	8/27/2007	Public Works	Avon Drive	Municipal	Jane from Helix Water District said a customer called and said the lid to the storm drain that is sitting on the sidewalk where Avon, Windsor, and Normal intersect; the lid to the storm drain is one inch above grade and is a trip hazard.	WO#20317	N/A
37	8/30/2007	Public Works	9475 Janfred Way	Municipal	On Water St. before Janfred there is a 24" grate missing on easement	WO#20315	N/A
38	8/30/2007	Public Works	3615 King Street	Municipal	Caller says the state is putting in a drainage ditch along the freeway and the caller was wondering if the city could put in a small drainage ditch at the bend of King Street and have it be connected to the state drainage ditch because rain runoff is going into her yard.	WO#20314	N/A

Appendix B (Continued)
Summary of Documented Public Complaints

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39	8/31/2007	Public Works	Water	Municipal	Dan from Helix Water called about a missing grate lid from a storm drain at the corner of Water Street and Janfred Way	WO#20313	N/A
40	9/4/2007	Public Works	7834 Highwood Avenue	Municipal	Caller stated she called on 8/10 and no one has come to clean out her storm drain behind her house. No previous SR was located.	WO#20310	N/A
41	9/10/2007	Hamed Hashemian	City Landscaping, Adult Enrichment Center La Mesa Blvd	Municipal	Grass Clippings on sidewalk	Hamed contacts Public Works. Public works responded with cleaning up the grass clippings.	Verbal Warning
42	9/12/2007	Public Works	9475 Janfred Way	Municipal	The storm drain that you barricaded off, original SR#10165, he found the grate for the top and would like the barricade to be removed.	WO#20378	N/A
43	9/13/2007	Public Works	4700 Williamsburg Lane	Municipal	The apartment complex on the cul-de-sac of Willamsburg has a storm drain that smells bad. The storm drain is located at the end of the cul-de-sac near the fire hydrant.	WO#20377	N/A

Appendix B (Continued)
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#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
44	9/14/2007	Public Works	9295 Lemon Avenue	Municipal	Drainage ditch full of debris and blocking all drainage. It is the house on the corner of Lemon and Marguerita.	WO#20375	N/A
45	9/17/2007	Public Works	4469 Toni Lane	Municipal	The drainage ditch at the top of the hill is full of leaves and backing up. Caller is afraid the overflow will come down the hill into her property. The ditch is between Toni Lane and Rolando.	WO#20373	N/A
46	9/19/2007	Hotline Caller	A-Z Auto 7159 University Avenue	Commercial	Vehicle Repair/Washing outside	Verified Complaint and took education outreach material to owner	Verbal Warning, Urban Runoff Trifold, San Diego Bay Watershed Fact Sheet, Green Wrench Guide Spanish and English Copy
47	9/20/2007	Public Works	8995 Highfield Ave.	Municipal	Resident concerned about palm frond and other debris dumped next to her property may impede water drainage should we receive a heavy downpour	WO#20533	N/A
48	9/20/2007	Hotline Caller	Ron Gier 7440 Colony #27	Residential	Leaky Vehicles	Verified Complaint. Vehicle had kitty litter under to absorb oil stains.	No Further Action, Urban Runoff Trifold
49	9/25/2007	Public Works	4352 Sheldon Drive	Municipal	Caller has a back up to his clean out in the backyard. Not sure if it is his responsibility or ours.	WO#20529	N/A

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
50	9/25/2007	Public Works	9295 Lemon Avenue	Municipal	2nd Call. Resident is now upset that the drain still has not been cleaned out, and he never received a phone call from his 1st complaint on 9/14 SR#10270, WO#20375. Please contact resident.	WO#20530	N/A
51	9/28/2007	Public Works	8671 Larsen Way	Municipal	Caller has a drain on the back of his property that floods his yard every time it rains.	WO#20540	N/A
52	10/2/2007	Hotline Caller	Helix Water District Alamo Way/Toni Lane	Construction	Oil in unprotected containers	Contacted Contractor/fix problem and follow-up on 10/3/07. BMPs observed to be implemented during follow-up.	Verbal Warning, No Further Action
53	10/3/2007	Hotline Caller	Darin Wilkson	Residential	Oil Leak from vehicle on street	10/3/07 MT verified complaint/issued NOV. 10/16/07 Darin contacts to the City to inform site cleaned up but requires additional cleaning. 10/26/07 DK visits site/site cleaned up/no further action.	Written NOV
54	10/4/2007	City Personnel	Elite Auto 4949 Baltimore Drive	Commercial (car repair)	Discharge to storm drain	10/4/07 MT observes discharge to storm drain from facility. MT issues NOV/stops discharge. MT follow-up on 10/10/07 Plumber to fix illicit connection and redirect to sewer.	Written NOV, Urban Runoff Trifold

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
55	10/8/2007	City Personnel	Melvin Rupe 6850 Tower Street	Residential	Soil excavation/no BMPs	10/8/07 MT issues NOV. 10/26/07 DK inspect site/no BMPs implemented/further action required. MT meets with building department and 11/5/07 contacts Melvin Rupe/leaves message. 11/6/07 MT meets with Melvin at City Hall and discussed applicable BMPs. Melvin to place fiber rolls immediately and contact MT.	Written NOV, Urban Runoff Trifold, Construction Trifold, San Diego Bay Watershed Factsheet
56	10/9/2007	Hotline Caller	South Coast Building Services 7250 Engineering Road Suite D Location 8200 La Mesa Boulevard	Mobile	Pressure washing, no BMP implementation/illegal discharge	Verify Complaint	Written NOV, Urban Runoff Trifold, San Diego Bay Watershed Fact Sheet
57	10/12/2007	City Personnel	A-1 Self Storage 4981 Spring Street	Commercial/Mobile Business	Illegal discharge	Issue NOV to stop discharge.	Written NOV, San Diego River Watershed Fact Sheet, Urban Runoff Trifold
58	10/18/2007	City Personnel	Dossmann/Jarman 6944 Wyoming Avenue La Mesa, CA 91942	Residential-Construction	Soil Stockpile in front of house/no BMPs	10/20/07 MT issues NOV. S. Jarman contacted city at 10/25/07 and plans to place fiber rolls. Soil already spread for landscaping. 10/30/07 DK verifies BMP implementation. No further action.	Written NOV, Urban Runoff Trifold, Construction Trifold, San Diego River Watershed Factsheet
59	10/26/2007	Public Works	6030 Cowles Mountain Boulevard	Municipal	Is the canyon behind her house maintained by La Mesa or San Diego?	WO#20553	N/A

Appendix B (Continued)
Summary of Documented Public Complaints

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60	10/26/2007	City Personnel	8705 Jefferson Ave	Residential-Over-irrigation	Over-irrigation	10/26/07 MT contacts Helix Water District for incentive Program/inspection. 10/30/07 MT sends out over-irrigation letter.	Written Warning, Over-irrigation Fact Sheet, San Diego Bay Watershed Fact Sheet, Helix Water District Survey Program
61	10/29/2007	City Personnel	TJ's Auto Repair 8090 University Avenue	Commercial	Illegal Discharge	10/29/07 MT observed illegal discharge stains and issued NOV and provided education outreach material. No further action.	Written NOV, Urban Runoff Trifold, Green Wrench Guid English and Spanish Copies, San Diego River Watershed Fact Sheet
62	10/31/2007	Hotline Caller	8058 El Capitan	Residential-Over-irrigation	Over-irrigation	11/15/07 DK verifies over-irrigation in the morning after failed verification previous week. 11/29/07 MT issues written warning.	Written Warning, Over-irrigation Fact Sheet, San Diego Bay Watershed Fact Sheet
63	11/1/2007	City Personnel	Boll Weevil 9104 Fletcher Parkway	Commercial	Illegal Discharge	11/1/07 MT issues written NOV and provides education outreach material.	Written NOV, Urban Runoff Trifold, San Diego River Watershed Fact Sheet
64	11/1/2007	Hotline Caller	9523 Grossmont Blvd	Residential	Bubbling Manhole	10/31/07 MT verifies/does not note bubbling. No further action.	No Further Action
65	11/7/2007	Public Works	4905 73rd Street	Municipal	At the Mesa Manor Apartments, there is water running over the sidewalk into the gutter and down into the alley. Caller not sure where the water is coming from. Malik was advised about issue yesterday, and told caller to put in an SR for wastewater to make sure it is not sewer.	WO#20759	N/A

Appendix B (Continued)
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#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
66	11/9/2007	Public Works	Palm Avenue	Municipal	Helix water called in a bent storm drain at the NW corner of Palm and Pasadena. Patty from City Hall called me about it.	WO#20755	N/A
67	11/9/2007	Hotline Caller	Karsten Joehnk Real Estate PO Box 1983 San Diego, CA 92038 4905 73rd Street	Apartment Complex-Over irrigation	Over-irrigation	10/9/07 MT contacts Helix Water District to check on over-irrigation water. 11/15/07 DK takes photos of over-irrigation. 11/29/07 MT sends out letter to property owner.	Written Warning, Over-irrigation Fact Sheet, San Diego Bay Watershed Fact Sheet
68	11/9/2007	Hotline Caller	4637 Edenvale Avenue	Residential	Working on vehicle on road/oil stain on road	11/15/07 DK verifies complaint, some minor oil stains. 11/29/07 MT sends letter to resident to report to City when individual works on vehicle on street.	Written Warning, Urban Runoff Trifold, San Diego Bay Watershed Fact Sheet
69	11/15/2007	City Personnel	The Auto Center 8203 University Avenue	Commercial-Auto Repair	Illegal Discharge	11/15/07 MT issues NOV and requires cleanup of wastewater while at site. No further action.	Written NOV, Green Wrench Guide
70	11/26/2007	Public Works	9001 Park Plaza Dr.	Municipal	The storm drain on the E side of the football field at Junior Seau Sports Complex is clogged with sand. Mike Kinnard called it in.	WO#20749	N/A
71	12/3/2007	Public Works	5630 Amaya Drive	Municipal	The storm drain in the far right corner of the project is plugged and flooding the parking lot. Project is called "Central Parks of La Mesa."	WO#20744	N/A

Appendix B (Continued)
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72	12/5/2007	Hotline Caller	Helix Water District 68th & Tower	Construction	BMP Implementation	12/5/07 MT verifies complaint and meets with Helix Water District. MT discusses BMPs and gives verbal warning.	Construction Trifold
73	12/6/2007	Public Works	Primrose Drive	Municipal	The drainage ditch on the easement between 6196 Primrose and the house facing Gregory (off Amaya) is clogged up with dirty and debris.	WO#20743	N/A
74	12/6/2007	Public Works	4792 Garfield	Municipal	In water drainage ditch along Highfield Avenue, caller claims City maintains, there are papyrus and palms growing, impeding water flow	WO#20742	N/A
75	12/7/2007	Hotline Caller	4757 Jessie Street	Residential	Working on Cars/potential fluid spills	12/7/07 MT verifies complaint. No issues noted/no further action.	No Further Action
76	12/11/2007	Public Works	4284 Summit Drive	Municipal	Hamed called this in for a resident he spoke with. She was told we could clean and clear the storm drain on an easement. He said the headwall would be cleaned out, and he would like you to call her to discuss any further issue she may have.	WO#20739	N/A
77	12/13/2007	Hotline Caller	Platinum Mobile Detailing 1879 Fuerte Valley Drive	Mobile	Auto detail/no BMPs	12/13/07 HH investigates complaint, issues NOV. Recommends coming to City Hall to meet with MT to discuss BMP requirements.	Written NOV

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78	12/17/2007	Public Works	Normal Ave.	Municipal	There is a sewer odor coming from the storm drain in the driveway of the apartment complex next door to 7646 Normal Avenue.	WO#21017	N/A
79	12/18/2007	Hotline Caller	Colony Road & Zelda	Residential	Oil dripping on street	12/18/07 MT verifies complaint with no significant oil stains on street.	No Further Action
80	12/31/2007	City Personnel	Martin Montoya 8203 University Avenue	Construction-Tenant Improvement	Illegal Discharge	12/31/07 MT receives complaint and issues NOV. Paint chips and sand along curb and in storm drain inlet. MT requested immediate cleanup by vacuum. Curb and storm drain inlet vacuumed. MT also contacts County DEH regarding potential for lead based paint chips to visit site. No further action.	Written NOV, Construction Trifold, San Diego Bay Watershed Fact Sheet
81	1/3/2008	Public Works	Parkway Dr	Municipal	There is debris in/on the storm drain on Parkway Drive and Amarillo. Steve was paged.	WO#21027	N/A
82	1/4/2008	Public Works	5016 Thorn Drive	Municipal	Please install a new storm drain inlet in front of the apartment building. Talk to or meet on site with Hamed about the details.	WO#21028	N/A
83	1/7/2008	Public Works	4301 70th Street	Municipal	The storm drain just past the house at 4301 70th Street is flooding and the grate is coming off. Steve was advised.	WO#21029	N/A

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84	1/7/2008	Public Works	Amaya Drive	Municipal	At about 1 house in (E of Gregory) on Amaya Drive. There is water clogged up in the ditch, and it will not drain. The water is just pooled there now. Steve was paged.	WO#21030	N/A
85	1/10/2008	City Personnel	Seaman Family Trust 7051 Alvarado Road c/o 2655 Camino Del Rio N #450, San Diego, CA 92108	Commercial	Illegal Discharge	1/10/08 MT issues NOV and request all wastewater to be captured and disposed of appropriately. No further action.	Written NOV, Urban Runoff Trifold, San Diego River Watershed Fact Sheet
86	1/18/2008	Public Works	8959 Johnson Drive	Municipal	He has a storm drain on the side of his property. He says it has collapsed from the bottom. Steve paged.	WO#21014	N/A
87	1/18/2008	Hotline Caller	La Mesa Blvd/Jackson Drive	Illegal Dumping	Verify Complaint	1/18/08 MT verifies complaint and observed two discarded containers with grease/oil substance. MT reports abandoned buckets to County for pickup and disposal. MT receives call from County on 1/28/08 stating buckets were picked up, filled with grease and disposed of appropriately at EDCO. No further action.	N/A
88	1/22/2008	Public Works	9138 Lemon Avenue	Municipal	Storm drain blocked in front of this location.	WO#21013	N/A

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89	1/22/2008	Public Works	9138 Lemon Avenue	Municipal	Per La Mesa Listens: The storm drain at 9138 Lemon Avenue is full of mud and debris from the last rain.	WO#21012	N/A
90	1/28/2008	Public Works	5575 Lake Park Way	Municipal	The storm drain is clogged at 5575 Lake Park Way (between Baltimore and Lake Murray). Steve was paged.	WO#21008	N/A
91	1/29/2008	Public Works	8691 Echo Drive	Municipal	Don says this is of an urgent nature: This location is a church. Located right past Core Sano. Asphalt work was done previously. The asphalt has eroded and in the pipe and flooded the church. There is a clean out. Don requested a camera to take a look at it. Please contact him when you are ready, as he and possible Hamed will want to view results.	WO#21007	N/A
92	1/31/2008	City Personnel	TJ Auto Repair 8090 University Avenue	Commercial Business	Illegal Discharge	1/31/08 MT observes illegal washing of vehicle at automotive repair shop. MT has employee stop washing vehicle and issues NOV. No further action.	Written NOV, Green Wrench Guide English and Spanish Copies, Urban Runoff Trifold, San Diego Bay Watershed Fact Sheet

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93	1/31/2008	City Personnel	Rainbow Steel 8332 Case Street	Industrial Facility	BMP Implementation	1/31/08 MT observes deficient BMP implementation onsite. MT issues written warning with recommended corrective actions. RWQCB contacted. Facility slated to be inspected through Industrial/Commercial Inspection Program. Enforcement shall occur through Industrial Program.	Written Warning
94	2/6/2008	Hotline Caller	4761 Jessie Street	Residential	Working on Vehicle/No BMPs	2/6/08 MT verifies complaint and provides education outreach material. No further action.	Verbal Warning, Green Wrench Guide, Urban Runoff Trifold, San Diego Bay Watershed Fact Sheet
95	2/11/2008	Public Works	Dallas/Fletcher Park Way Shell Station	Commercial	Water flowing on street from Shell Station property	2/11/08 MT verifies complaint. Sewer flow noted and Public Works contacted cleanup/address blockage. No discharge noted into storm drain. No further action.	N/A
96	2/13/2008	City Personnel	4473 Maple	Construction	Grading without proper permits	2/13/08 TM issues NOV and informs site that construction will not be allowed to continue until proper City permits are obtained. 2/15/08 MT follows up; construction not allowed to resume until permits obtained. BMPs found partially implemented, additional BMPs recommended.	Written NOV, Construction Trifold, San Diego Bay Watershed Fact Sheet
97	2/15/2008	Public Works	8689 Mariposa Street	Municipal	Her property has an old culvert for water run off, and it is deteriorating, now flooding her yard. She has standing water at the lower part of her property now.	WO#21079	N/A

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
98	2/15/2008	City Personnel	8090 University Avenue, Action RV	Commercial	Washing RV on property, runoff onto Nebo Street	2/15/08 MT issues NOV and provides education outreach to eliminate discharge.	Written NOV, Urban Runoff Trifold, San Diego River Watershed Fact Sheet
99	2/18/2008	Hotline Caller	4625 Katherine Place	Residential	Unknown substance discharge to gutter	2/18/08 MT verifies source but can't identify discharge location. MT sends correspondence to 4625 Katherine Place to address issue/cleanup.	Written Warning, Construction Trifold, San Diego Bay Watershed Fact Sheet, Verbal Warning
100	2/25/2008	Public Works	68th Street	Municipal	Per La Mesa Listens: The drainage ditches need to be unclogged above the homes on the left side of the street as you come down 68th towards the park. Water is out of hand and has nowhere to go. This is causing instability and damage to properties.	WO#21125	N/A
101	3/3/2008	Hotline Caller	6355 Kinney Lane	Residential	White Paint Residue	3/3/08 MT verifies complaint and asks homeowner to sweep up residue. 3/4/08 MT verifies cleanup.	Verbal Warning
102	3/6/2008	Malik Tamimi	Par Electric University Avenue	Mobile	Water discharge no BMPs	3/6/08 MT issues NOV & has discharge stopped until proper BMPs implemented.	Written NOV
103	3/10/2008	Hotline Caller	3849 Violet Street	Residential	Over-irrigation	3/11/08 MT sends out over-irrigation letter.	Verbal Warning
104	3/10/2008	Hotline Caller	Mohawk Garden Complex 7482 Mohawk	Residential	Over-irrigation	3/11/08 MT does not observe over-irrigation.	N/A

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
105	3/11/2008	Public Works	8348 Center Drive	Municipal	Caller states that we have cleaned this culvert before. She works at Snipes Dye & Associates.	WO#21338	N/A
106	3/11/2008	Hotline Caller	Chevron Jackson/Center Drive	Commercial	Smelly Water at Car Wash	3/11/08 MT contact Chevron. Wastewater is recycled. Water not discharged to street. No further action	N/A
107	3/12/2008	Hotline Caller	6942 University Avenue	Commercial	Discharge Curve Cut	3/12/08 MT verifies complaint and does not note discharge at time of inspection.	N/A
108	3/17/2008	Public Works	4855 Harbinson Avenue	Municipal	Don Palmer spoke with this person: There is a tree growing up through the storm drain just south of 4855 Harbinson.	WO#21362	N/A
109	3/28/2008	Hotline Caller	9467 Block Tropico Drive	Residential	Concrete Washwater discharge	3/28/08 MT verifies complaint. Source of discharge could not be identified. Public Works notified for cleanup.	N/A
110	3/31/2008	Public Works	6030 Nagel Street	Municipal	Per La Mesa Listens: In the drainage ditch behind 6030 Nagel Street there are overgrown weeds. It is causing pools of standing water and a possible fire hazard.	WO#21458	N/A
111	4/2/2008	Hotline Caller	7761 Highwood Avenue	Residential	Five gallon paint on to street	4/3/08 DK did not observe paint. No further action.	N/A

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
112	4/3/2008	Public Works	Dugan Avenue	Municipal	There are 4-5 paint cans dumped into the gutter and the storm drain. This is at the corner of Dugan & St. Onge Place. Steve was paged.	WO#21510	N/A
113	4/7/2008	Hotline Caller	MD Auto Group	Commercial	Washing cars/engines in car lot	4/8/08 MT contacts facility and requests that car washing and engine washing be stopped. Owner receptive to request.	Verbal Warning
114	4/8/2008	Dave Liesberg	MD Auto Group	Mobile	Stucco discharge to street.	4/9/08 DL has Public Works cleanup. No further action.	N/A
115	4/8/2008	Hotline Caller	MD Auto Group	Residential	Water running down curb	4/8/08 MT verified complaint, irrigation system dysfunction/turned off. No further action	N/A
116	4/16/2008	Hotline Caller	MD Auto Group	Residential	Over-irrigation	4/17/08 DK verified compliant and placed door hanger.	Over-irrigation Door Hanger
117	4/23/2008	Hotline Caller	MD Auto Group	Commercial	Dumping Dirty Mop Water Along Curb	4/24/08 DK spoke with manager to stop discharge of wastewater.	Verbal Warning, Urban Runoff Trifold
118	4/26/2008	Hotline Caller	MD Auto Group	Other	Water discharging from manhole	4/28/08 RG verifies complaint, discharge not observed.	N/A
119	4/30/2008	Hotline Caller	MD Auto Group	Residential (homeowners association)	Car Washing on property, over-irrigation, no storm drain protection	5/1/08 ER verifies complaint. 5/7/08 MT sends out written warning and BMP education outreach. 6/4 MT contacted and provided preliminary data on BMPs to be implemented. 6/18/08 Association sends letter confirming bmp implementation. No further action.	Written Warning, Over-irrigation Fact Sheet, Urban Runoff Trifold

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
120	5/1/2008	Public Works	Riviera Drive	Municipal	Per Contact Us Form: There are plastic bags full of trash in the culvert on Riviera, just E of High Street.	WO#21726	N/A
121	5/8/2008	Storm Water Complaince Inspector	Carlsburger Dodge Rocky Bleier 8355 Hercules Street	Commercial	Washing cars/runoff	5/12/08 DK verbal warning and educational material.	Verbal Warning, Urban Runoff Trifold
122	5/12/2008	Hamed Hashemian	Shell Service Station 5261 Baltimore	Commercial	Over-irrigation	5/12/08 DK talks to manager to eliminate over-irrigation.	Verbal Warning
123	5/13/2008	Hotline Caller	Gus' Subs & Pizza #12 5620 Baltimore Drive, La Mesa	Commercial-Restaurant	Washing equipment outside	5/13/08 MT issues NOV. 6/6/08 MT further discusses NOV with owner/BMPs implemented.	Written NOV, Urban Runoff Trifold, What's Cookin', San Diego River Watershed Fact Sheet
124	5/13/2008	Hotline Caller	4342 Elma Lane	Residential	Oil Stains/Cigarette Butt	5/15/08 MT sends written warning for cleanup. No further action.	Written Warning
125	5/13/2008	Hotline Caller	Lemon Avenue/Fuerte	Residential	Storm Water Runoff	5/15/08 DK verifies. MT verifies that groundwater is resurfacing through asphalt. No further action.	N/A
126	5/15/2008	Hotline Caller	Harbinson and University	Commercial/Residential	Red Substance Reported in Channel	5/15/08 DK verifies complaint. Red substance not observed. No further action.	N/A
127	5/29/2008	Hotline Caller	4410 Date Ave	Residential	Paint chips washed into street	5/29/08 MT verifies complaint. Paint chips not observed. No further action	N/A

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
128	6/4/2008	La Mesa PD	4950 Pine Street	Residential	Washing 500 gallon diesel tank	6/4/08 Fire Department and MT respond to call. County Dept Environmental Health Hazmat Team/and City of San Diego Hazmat contacted. Wastewater discharged into storm drain with volume less than 500 gallons. Kitty litter placed a long curb to absorb diesel residue. Staining in storm drain not observed. MT issues NOV to owner. RWQCB contacted within 24 hours. Five day written report waived by RWQCB. No further action.	Written NOV
129	6/6/2008	Public Works	4459 Summit Drive	Residential	Antifreeze spill onto road	6/4/08 Public Works responded to help control antifreeze from entering storm drain. No antifreeze made it into storm drain. Curb cleaned. No further action.	Written NOV, Urban Runoff Trifold
130	6/9/2008	Public Works	5364 Swarthmore Street	Municipal	There is graffiti in the cement drainage ditch (canyon) behind 5364 Swarthmore Street	WO#21928	N/A
131	6/9/2008	Hotline Caller	6120 Horton Drive	Residential	Over-irrigation	6/9/08 MT verifies complaint, door hanger placed at resident's home. No further action.	Over-irrigation Door Hanger
132	6/11/2008	Eric Johnson	6201 Falmouth Drive	Residential	Over-irrigation	6/11/08 EJ sends written warning. 6/22/08 Resident responds that over-irrigation is being monitored/minimized. No further action.	Written Warning
133	6/11/2008	Hotline Caller	Nick's Auto Group 4949 Baltimore Drive	Commercial	Car Washing	6/14/08 MT verifies complaint and issues written warning/notice to comply. No further action.	Written Warning

Appendix B (Continued)
Summary of Documented Public Complaints

#	Date Received	Complaint Origin	Responsible Party/Location of Problem	Responsible Party Type	Issue/Problem	Response to Caller	Enforcement Type/Educational Material Distributed
134	6/12/2008	Public Works	5418 Wellesley	Municipal	Debris from empty rental house pitched in a ditch that will cause a drainage problem. His address is 5432 Wellesley. The rental is the address on SR.	WO#21924	N/A
135	6/18/2008	Hotline Caller	A1 Storage 4981 Spring Street	Commercial	Pressure Washing	6/18/08 MT verifies complaint and sends out written notice to comply. No further action.	Written Notice to Comply
136	6/20/2008	Public Works	5282 Maryland Avenue	Municipal	The sidewalk drain needs to be removed and repaired.	WO#21985	N/A
137	6/23/2008	Hotline Caller	4533 Toni Lane	Residential	Washing Driveway	7/7/08 MT sends written warning. 7/16/08 MT follows up with complainant to see if washing continues. No washing activities, no further action.	Written Warning, Urban Runoff Trifold

APPENDIX C

Appendix C
JURMP Annual Report Requirements Checklist

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location in Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.3
iii. A listing of the development projects to which SUSMP requirements were applied.	Table 2-1
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	Appendix A (inventory)
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-2
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.2

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.2
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3
xviii. A description of notable activities conducted to manage urban runoff from development projects.	Throughout Section 2

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A (inventory)
viii. A description of the general results of the inspections.	3.5
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5 Table 3-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix A (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	2.4.3.2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.4, Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4, Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4, Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	**(N/A for 07-08)**
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-2
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3.4, Table 4-1
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4, Table 4-1 (
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.35.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.3.4, Table 4-3
xviii. A description of the general results of the inspections.	Table 4-3
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4,
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	Throughout Section

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.2 (mobile), Appendix A (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	5.2.4 (will be N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4 (will be N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4, Table 5-2
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	Throughout Section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Location in Report**
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	7.4, Table 7-2, 7-3, and 7-4
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	7.4, Attachment 7.1
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	7.5
v. The number and brief description of illicit discharges and connections identified.	7.5, Appendix B
vi. The number of illicit discharges and connections eliminated.	7.5, Appendix B
vii. Identification and description of all spills to the MS4 and response to the spills.	7.3, Appendix B
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2, Appendix B
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5, Table 7-1, Appendix B

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
xiii. A description of notable activities conducted to manage illicit discharges and connections.	7.5, Table 7-1

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	7.4
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	7.4
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	7.4
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	7.4
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	7.4
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	7.4
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	7.4

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	7.4
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	7.4
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	7.4
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	7.4
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.4
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	7.4

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	**Location in Report**
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.3
iv. A description of education efforts conducted for the new development and construction communities.	8.3
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3

Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	**Location in Report**
i. A description of public participation efforts conducted.	9.2 and 9.3

Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	**Location in Report**
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11

Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	**Location in Report**
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order. (For 2007-2008, the requirements that apply are essentially the same as those found in Order No. 2001-01)	10

Same as old Permit for 2007-2008

Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	**Location in Report**
i. A description of any special investigations conducted.	12

Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	4.2.3, 13

JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14 and each program component section

ATTACHMENT 2.1

APPENDIX A – STORM WATER REQUIREMENTS AND PROJECT DATA SHEET

CITY OF LA MESA
JEWEL of the HILLS

APPENDIX 'A' – STORM WATER REQUIREMENTS AND PROJECT DATA SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

PROJECT DATA:

Owner's Name & Phone No: _____

Address: _____ **Permit No:** _____

Project: _____ **Date Applied:** _____

PROJECT SITE DATA:

1. Area of the lot/parcel = _____ sf
2. Existing impervious area (roof/building foot print) = _____ sf
3. Existing impervious area (driveway, parking, walkway, hardscape etc.) = _____ sf
4. Impervious area after development (roof/building foot print) = _____ sf
5. Impervious area after development (driveway, parking, walkway, hardscape etc.) = _____ sf
6. Total area to be disturbed = _____ sf
7. Storm water runoff based on Hydrology Study

   Existing runoff = _____ cfs, Post construction runoff = _____ cfs
8. Identify if the runoff from the site discharged to the public street or storm drain or open channel, detention or retention basin: _____
9. Water Shed (Check One): San Diego River _____ San Diego Bay _____

---

a. Total disturbed area includes impervious area, construction material storage, staging area, graded slopes, new slopes and landscape areas.

b. The information shall be shown on the site/grading plans.

c. Complete Storm Water Requirements Applicability Checklist.

Notes:

- Items 1 through 9 shall be shown on the site development plan/grading plan.
- The applicant may be required to submit SWPPP or CSWMP, and PCWQTR or SPCBMPP depending on the "Priority" as stated below.
- A Hydrology report may be required.

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the checklist to determine which permanent best management practices (BMPs) and which construction BMPs are required for your project for storm water. *This form must be completed and submitted with your permit application.*

Section 1. Permanent Storm Water BMP Requirements:

Part A: Determine Priority Project Permanent Storm Water BMP Requirements.

*Does the project meet the definition of one or more of the priority project categories as defined in the Storm Water Standards (Appendix I)?**	Yes	No
1. Residential development of 10 or more attached or detached dwelling units?	☐	☐
2. Commercial development greater than one acre?	☐	☐
3. Industrial development greater than one acre?	☐	☐
4. Automotive repair shop?	☐	☐
5. Restaurant?	☐	☐
6. Hillside development greater than 5,000 square feet? (Definition- 25% and steeper)	☐	☐
7. Project located within or directly adjacent to or discharging directly to receiving waters within "Environmentally Sensitive Areas?"	☐	☐
8. "Parking lot" greater than or equal to 5,000 square feet or with at least 15 parking spaces, and potentially exposed to urban runoff?	☐	☐
9. "Streets, roads, highways, and freeways" that would create a new paved surface that is 5,000 square feet or greater?	☐	☐
10. "Retail Gasoline Outlets" either 5,000 square feet or greater or with a projected "Average Daily Traffic" of 100 or more vehicles per day	☐	☐

** Refer to the definitions section in La Mesa's Storm Water BMP Manual Part II for expanded definitions of the priority project categories.*

Limited Exclusion: Trenching and resurfacing work associated with utility projects, such as resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, bike lanes on existing roads, and routine replacement of damaged pavement, such as pothole repair, are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if one or more of the criteria in Part A is met. If all answers to Part A are "No", continue to Part B.

Part B: Determine Standard Permanent Storm Water Requirements.

Does the project propose:	Yes	No
1. New impervious areas such as rooftops, roads, parking lots, driveways, paths and sidewalks?	☐	☐
2. New pervious landscape areas and irrigation systems?	☐	☐
3. Permanent structures within 100 feet of any natural water body?	☐	☐
4. Trash storage areas?	☐	☐
5. Liquid or solid material loading and unloading areas?	☐	☐

Does the project propose (cont'd.):	Yes	No
6. Vehicle or equipment fueling, washing, or maintenance areas?	☐	☐
7. Vehicle or equipment fueling, washing, or maintenance areas?	☐	☐
8. Require a General NPDES Permit for storm water discharges associated with industrial activities* (Except construction)?	☐	☐
9. Commercial/ industrial waste handling or storage, excluding typical office or household waste?	☐	☐
10. Any grading or ground disturbance during construction?	☐	☐
11. Any new storm drains, or alteration to existing storm drains?	☐	☐
**To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/stormwtr/industrial.html.*		

If any of the answers provided in Section 1, Part A are "Yes," the project is subject to the "Priority Project Permanent Storm Water BMP Requirements". A Post Construction Water Quality Technical Report (PCWQTR) shall be submitted; the requirements of the City's Storm Water BMP Manual Part II be satisfied. In particular, Section III must be completed. If a Priority Project is over 50 acres, the project is also subject to the City's Interim Hydromodification Criteria (IHC) as discussed in Section III.C of the *Storm Water Standard Manual.*

If all answers provided in Section 1, Part A are "No," and any answers to Part B are "Yes," the project is only subject to the Standard Permanent Storm Water BMP Requirements and shall submit a Standard Post-Construction BMP Plan (SPCBMPP). Section III is to be complete through III.2.B.11.

If every question in Part A and B is answered "No," the project is exempt from permanent storm water requirements.

Section 2. Construction Storm Water BMP Requirements:

Part C: Determine Construction Phase Storm Water Requirements.

Would the project meet any of these criteria during construction?	Yes	No
1. Does the project proposed grading or soil disturbance over one acre?	☐	☐
2. Does the project propose any grading or soil disturbance?	☐	☐
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	☐	☐
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete and stucco)?	☐	☐

If the answer to question 1 of Part C is answered "Yes," your project is subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities and the City's Construction Storm Water BMP Performance Standards. A Storm Water Pollution Prevention Plan (SWPPP) must be prepared and Parts D and E of this form must be completed.

If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Construction Storm Water BMP Performance Standards and a Construction Storm Water Management Plan (CSWMP) must be prepared and Part E of this form must be completed.

If every question in Part C is answered "No," your project is exempt from any construction storm water BMP requirements and you do not need to completed Parts D and E of this form.

Part D: Determine Advance Treatment Subjectivity

Would The Project Meet Any Of These Criteria During Construction?	Yes	No
1. Is the project located within, adjacent to, or a portion of the site within 200 feet of waters listed on the CWA Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation or turbidity?	☐	☐
2. Will the project disturb more than five acres, including all phases of the development?	☐	☐
If the answers to 1 and 2 are both "yes", please answer questions 3 and 4 below. If any of the answers to 1 or 2 are "no", the project is not subject to advanced treatment requirements.		
3. Will the project disturbed slopes steeper than 4:1 (horizontal: vertical) and higher than 10 feet that drain toward the 303(d) listed receiving water?	☐	☐
4. Does the project contain a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4?	☐	☐

If all answers to part D are "yes", the project is subject to the City's advanced treatment requirements for construction. Advanced treatment requirements are detailed in Section IV of the Storm Water BMP Manual Part II. Note that even if the above criteria do not apply, advanced treatment may be required at the discretion of the City Engineer based on the slope of the site and a record of noncompliance.

Part E: Determine Construction Site Priority

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans and included in the SWPPP or CSWMP.

Indicate the project's priority in one of the check boxes using the criteria below, existing and surrounding conditions of the project, the type of activities necessary to complete the construction and any other extenuating circumstances that may pose a threat to water quality. The City Engineer may adjust the priority of the projects both before and during construction.

[Note: The construction priority DOES NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority DOES affect the frequency of inspections that will be conducted by the City.]

☐ A) High Priority

1. Projects where the site is 50 acres or more and grading will occur during the wet season.
2. Projects that are 1 acre or more and tributary to an impaired water body for sediment by the most current Clean Water Act Section 303(d) list (e.g., Chollas Creek).
3. Projects that are 1 acre or more within or directly adjacent to or discharging directly to water within a water quality sensitive area.
4. Projects, active or inactive, adjacent or tributary to sensitive water bodies.

☐ B) Medium Priority

1. Capital improvement projects where grading occurs. However, a Storm Water Pollution Prevention Plan (SWPPP) is not required under the State General Construction Permit (i.e., water and sewer replacement projects, intersection and street re-alignments, widening, comfort stations, etc.)

2. Permit projects in the public right-of-way where grading occurs. However, SWPPPs are not required, such as installation of sidewalk, substantial retaining walls, curb and gutter for an entire street frontage, etc.

3. Permit projects on private property where grading permits are required. However, Notice Of Intents (NOIs) and SWPPPs are not required.

☐ C) Low Priority

1. Capital projects where minimal to no grading occurs, such as signal light and loop installations, street light installations, etc.

2. Permit projects in the public right-of-way where minimal to no grading occurs, such as pedestrian ramps, small sidewalks, driveway additions, small retaining walls, etc.

3. Permit projects on private property where grading permits are not required, such as small retaining walls, single-family homes, small tenant improvements, etc.

Completed By: _____

Name, Address & Phone Number

ATTACHMENT 2.2

STANDARD POST-CONSTRUCTION BMP PLAN (SPCBMPP) PREPARATION INSTRUCTIONS

CITY OF LA MESA
JEWEL of the HILLS

STANDARD POST-CONSTRUCTION BMP PLAN (SPCBMPP) PREPARATION INSTRUCTIONS

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

Introduction

Projects that answered "Yes" to any of the items in Section I Part B of the City's Appendix A document are subject to the City's standard post-construction BMP requirements. The goal of these requirements is to reduce the amount of storm water entering the City's storm drain system by retaining storm water onsite and to prevent storm water from contacting and transporting pollutants off the site once construction is completed. The City of La Mesa Storm Water Best Management Practices Manual--Part II (BMP Manual Part II) states that "projects subject to only standard permanent BMP requirements need only to prepare a Standard Post Construction BMP Plan (SPCBMPP), which requires applicants to incorporate the requirements in Section III.2.A, "LID site Design BMPs" and Section III.2.B, "Source Control BMPs". Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. Analysis of the project's anticipated pollutants of concern must also be included with the project submittal."

Standard Post-Construction BMP Plan (SPCBMPP)

To meet the City's requirements, applicants subject to standard post-construction BMP requirements need to complete the attached SPCBMPP form which lists all the requirements in Section III.2.A and B in the BMP Manual Part II. Applicants are required to incorporate all BMPs listed on the SPCBMPP form where applicable and feasible. For minor development project, many of these BMPs will not be applicable to the site. For BMPs not applicable or feasible for the project, a brief explanation should be written in the appropriate space provided on the SPCBMPP form. Any project plans submitted to the City need to be consistent with the information in the SPCBMPP.

Applicants are also responsible for identifying anticipated pollutants on the SPCBMPP form. Use the table below from the City's BMP Manual Part II to identify what anticipated and potential pollutants are expected from your project based on the land use most applicable to the proposed project. Enter this information where indicated on the SPCBMPP form.

Anticipated and Potential Pollutants Generated by Land Use Type

Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development > One Acre	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Industrial Development > One Acre	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		

Restaurants					X	X	X	X	
Hillside Development >5,000 ft²	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

ATTACHMENT 2.3

STANDARD POST-CONSTRUCTION BMP PLAN STANDARD PERMANENT STORM WATER BMPS

CITY OF LA MESA
JEWEL of the HILLS

STANDARD POST-CONSTRUCTION BMP PLAN
Standard Permanent Storm Water BMPs

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

Project Name: _____ Project Address: _____
Person completing form: _____ Telephone number: (_____)_____-_____
Signature: _____ Date: ____/_____/_____
Proposed land use: _____
Anticipated/potential pollutants (list all): _____
_____

In order to address the anticipated pollutants listed above, the following planning, design, and post-construction BMPs are required for all land development and redevelopment projects in the City of La Mesa. All BMPs listed below shall be selected and implemented where applicable and feasible.

Each selected BMP must be shown on the applicable plan(s) for the project.

Required BMPs	Check if Selected	If the BMP is not selected, explain why below (attach additional pages if necessary).
1. BMPs for permanent control of erosion from slopes.		
a. Convey runoff safely from the tops of slopes		
b. Vegetate slopes with native or drought tolerant vegetation		
c. Other (describe):		
2. BMPs to control flows, velocity and erosion. Flow control and downstream erosion protection measures shall prevent any significant increase in downstream erosion as a result of the new development, but shall not prevent flows needed to sustain downstream riparian habitats or wetlands.		
a. Minimize disturbances to Natural Drainages		
b. Stabilize permanent channel crossings		
c. Install energy dissipaters, riprap, at outlets of new storm drains, culverts, conduits, or channels that enter unlined channels		
d. Provide buffer zones for natural water bodies		
e. Other (describe):		
3. Low Impact Development (LID) and site design BMPs.		
a. Conserve natural areas, soils, and vegetation where feasible		
b. Construct walkways, trails, patios. overflow parking lots, alleys, and other low-traffic areas with permeable surfaces		
c. Construct impervious surfaces to minimum widths necessary		
d. Use natural drainage systems		
e. Minimize soil compaction in areas that will remain pervious after development		
f. Drain runoff from impervious roofs into adjacent landscaping		
g. Drain runoff from impervious sidewalks and/or walkways into adjacent landscaping		

h. Drain runoff from impervious parking lots into adjacent landscaping		
i. Drain runoff from other impervious areas into adjacent landscaping		
j. Other (describe):		
Source Control BMPs		
4. Storm drain stenciling and signage		
5. BMPs for outdoor materials storage and exposed work areas, to reduce pollution introduction.		
a. Provide overhead coverage for outdoor storage or work areas		
b. Divert storm water run-on away from outdoor storage or work areas		
6. BMPs for trash storage areas, to reduce pollution introduction. Store trash containers on an impervious surface in a screened or walled area designed to prevent run-on from flowing through the trash area, and provide a roof or awning to prevent direct contact with rain.		
7. BMPs for irrigation systems and landscape design, to minimize the runoff of excess irrigation water into the storm water conveyance system. (Limited exclusion: detached residential developments)		
a. Use rain shutoff devices		
b. **Design** irrigation system to each landscape area's water requirements		
c. Use flow reducers		
d. Other (describe):		
8. Structural BMPs[1] to treat and/or to infiltrate storm water where a development project would otherwise cause or contribute to a violation of water quality standards in receiving waters.		

[1] Off-site structural BMPs may be used for treatment and infiltration necessary to meet water quality standards only if the conveyance of run-off to those facilities prior to treatment will not cause or contribute to an exceedance of water quality standards or deprive wetlands or riparian habitats of needed flows. Offsite facilities shall not substitute for the use of any on-site source control BMPs required by the manual. When an infiltration BMP is used, related BMPs set out in the manual (including but not limited to siting constraints), to protect present uses of ground water and future uses of that ground water as currently designated in the applicable RWQCB Basin Plan. (Discharges to infiltration BMPs may also require an RWQCB permit and additional state requirements may also be applicable to these discharges.)

City Use Only

If structural BMPs are proposed, a maintenance agreement is required. Has a maintenance agreement for this project been submitted? □ Yes □ No □ NA

Approved □ Yes □ No

_____ ____/____/____ _____

Signature Date Department

ATTACHMENT 2.4

POST-CONSTRUCTION WQTR REPORT GUIDELINES

POST CONSTRUCTION WQTR REPORT GUIDELINES

CITY OF LA MESA
JEWEL of the HILLS

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

Purpose

To describe the permanent storm water Best Management Practices (BMPs) that will be incorporated in the project to mitigate the impacts of urban runoff due to the development.

Minimum Requirements

- Prepared by Registered Civil Engineer

General Information - Title Page

- Name of project
- Application and/or Tract Number
- Lot number(s) if site is a portion of a Tract
- Site address(es) and planning area number
- Owner/Developer name
- Owner/Developer address & telephone number
- Consulting/Engineering firm that prepared WQTR
- Consulting/Engineering firm address & phone number
- Date WQTR was prepared/revised

Owner's Certification

- Following the Title Page, a signed certification statement, in which the project owner acknowledges and accepts the provisions of the WQTR.

Table of Contents, including a list of all figures and attachments

Section 1.0, Permit Numbers and Conditions of Approval

- Lists the Discretionary Permit(s).
- The lot & tract/parcel map number describing the subject property.
- Lists, verbatim, the Water Quality Conditions, including condition(s) requiring preparation of WQTR, if applicable.
- Final Resolution of Approval, Conditional Use Permit, etc. is included as an Attachment to the WQTR.

Section 2.0, Project Description

1. **For All Projects:**
   - Narrative of project activities
   - Identifies planning area or community name.
   - Does the project description completely and accurately describe where facilities will be located, what activities will be conducted and where on the site, what kinds of materials and products will be used, how and where materials will be received and stored, and what kinds of wastes will be generated?
   - Describes all paved areas, including the type of parking areas.
   - Describes all landscaped areas.

2. **Requirement Satisfied?**

- Describes ownership of all portions of project and site.
  a) Will any infrastructure transfer to public agencies (City, County, Caltrans, etc.)?
  b) Will a homeowner's or property owner's association be formed?
  c) Will the association be involved in long term maintenance?
- Identifies the potential storm water or urban runoff pollutants reasonably expected to be associated with the project.

Pollutants and Conditions of Concern

- Pollutants based upon land use
- Project located in which Watershed
- Impaired water bodies downstream of the project and impairment
- Impacts to hydrologic regime

3. **For Commercial and Industrial Projects:**

- Provides Standard Industrial Classification (SIC) Code which best describes the facilities operations?
- Describes the type of use (or uses) for each building or tenant space
- Does project include food preparation, cooking, and eating areas (specify location and type of area)
- Describes delivery areas and loading docks (specify location and design and if below grade and types of materials expected to be stored
- Describes outdoor materials storage areas (describe and depict location(s), specify type(s) of materials expected to be stored)
- Describes activities that will be routinely conducted outdoors
- Describes any activities associated with equipment or vehicle maintenance and repair, including washing or cleaning.
- Indicates number of service bays or number of fueling islands/fuel pumps, if applicable.

4. **Residential Projects**

- Range of lot and home sizes
- Describes all community facilities such as, laundry, car wash, swimming pools, jacuzzi, parks, open spaces, tot lots, etc.

Section 3.0, Site Description

- Vicinity Map
- Describes project area and surrounding planning areas in sufficient detail to allow project location to be plotted on a base map.
- Provides site address and site size to nearest tenth acre.
- Identifies the zoning or land use designation.
- Identifies soil types and the quantity and percentage of pervious and impervious surface for pre-project and post project conditions.
- Describes pre-project site drainage and how it ties into drainage of surrounding or adjacent areas and describes how planned project drainage and how it will tie into drainage of surrounding or adjacent areas.
- Identifies the watershed in which the project is located and the:
  a) downstream receiving waters
  b) known water quality impairments as included in the 303(d) List
  c) applicable Total Maximum Daily Loads (TMDLs)
  d) hydrologic conditions of concern, if any.
- Identifies known Environmentally Sensitive Areas (ESAs) and Areas of Special Biological Significance (ASBSs) within the vicinity and their proximity to the project.

Section 4.0, Best Management Practices

- Includes narrative describing how LID design concepts were considered and incorporated into project plans.
  a) Reduce impervious surfaces

b) Conserve natural Areas
c) Minimize directly connected areas
d) Protect slopes and channels

- Lists and describes all Routine Source Control BMPs (Non-structural and Structural).
  a) Inlet stenciling and signage
  b) Materials Storage
  c) Trash storage
  d) Efficient irrigation
  e) Other controls (as applicable)
- Describes the implementation frequency and identifies the entity or party responsible for implementation of each Non-Structural BMP.
- If applicable Routine Source Control BMPs were not included, was a reasonable explanation provided?
- Lists and describes appropriate Treatment Control BMPs and identifies the design basis (SQDF or SQDV) for the Treatment Control BMPs.
  a) Basis for selection (include targeted pollutants, justification, and alternative analysis)
  b) Design criteria (include calculations)
  c) Pollutant removal information (other than vendor specifications)
  d) Literature References
  e) Maintenance Condition(s)
- For Routine Non-Structural BMPs N1 (Education for Property Owners, Tenants, and Occupants) and N12 (Employee Training), does the WQTR describe the concepts that will be addressed by the education and training? Is a list of educational materials that will be used provided? Are copies of the educational materials included in an Attachment to the WQTR?

Section 5.0, Inspection and Maintenance Responsibility for BMPs

- Identifies the entity (or entities) responsible for the long-term inspection and maintenance of all structural source control BMPs and all Treatment Control BMPs, including name, title, company, address, and phone number.
- Describes the minimum frequency for inspection and maintenance to ensure the effectiveness of each structural source control BMP and each Treatment Control BMP.
- If ownership of the Treatment Control BMPs will be transferred to a public agency, does the WQTR include an Attachment indicating the public agency's intent to accept the Treatment Control BMPs as designed?
- Is an appropriate mechanism for the long-term operation and maintenance, including funding, in place?

Section 6.0, Location Map and Plot Plan

- Provide an 11" by 17" plot plan
- All figures, maps, plot plans, etc. should have a legend, including a North arrow and scale?
- Are all facilities labeled for the intended function?
- Are all areas of outdoor activity labeled?
- Are all structural BMPs indicated?
- Is drainage flow information, including general surface flow lines, concrete or other surface ditches or channels, as well as storm drain facilities such as catch basins and underground storm drain pipes depicted?
- Depicts where and how on-site drainage ties into the off-site drainage system.
- Entire property included on one map (use key map if multi-sheets)
- Nearby water bodies and municipal storm drain inlets
- Location of existing and proposed storm water controls
- Location of "impervious" areas- paved areas, buildings, covered areas
- Locations where materials would be directly exposed to storm water
- Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)
- Areas of potential soil erosion (including areas downstream of project)

ATTACHMENT 2.5

ANNUAL MAINTENANCE VERIFICATION LETTER TEMPLATE, ANNUAL MAINTENANCE VERIFICATION FORM, AND FREQUENTLY ASKED QUESTIONS SHEET

Responsible Party
Responsible Party Street Address
Responsible Party City, State, Zip

Or Current Party Responsible for Maintenance of
Project Name
Project Street Address
Project City, State, Zip

Re: Treatment Control BMP Maintenance Verification, Maintenance Agreement Number Agreement Number

Dear Property Owner or Manager,

The City of La Mesa (City) has been conducting inspections and tracking inventory of all completed new and redevelopment projects with permanent storm water treatment devices, also known as treatment control best management practices (BMPs). **This is a requirement of the San Diego Municipal Storm Water Permit, issued by the Regional Water Quality Control Board (RWQCB) as Order No. R9-2007-0001 in January 2007.**

In addition to the City's inspections and tracking of these treatment control BMPs, the Municipal Permit also requires that the parties responsible for the BMPs conduct their own regular inspections, perform maintenance as needed, and submit documentation of these activities to the City (see attached form). You are receiving this notice because City records indicate you are responsible for the treatment control best management practices (BMPs) located at the project referenced above. The recorded maintenance agreement associated with your site, if applicable, is referenced above.

Please complete and return the attached BMP Inspection & Maintenance Verification Form **no later than August 25, 2008**. Please also correct any information on the form or this letter (responsible party, address, etc.) that is inaccurate, and the City will update its records. In the future, you will need to complete this form annually. The form should be mailed to the following address:

City of La Mesa
Storm Water Pollution Prevention Program
8130 Allison Avenue
La Mesa, CA 92141

You are required to submit a signed copy of the completed form under City of La Mesa Municipal Code section 7.18.140.F. Failure to submit the required information could result in enforcement actions such as the issuance of a "Notice of Violation".

A "Frequently Asked Questions" (FAQ's) Sheet and a completed example BMP Inspection & Maintenance Verification Form have been included to assist you with completion of the form. If you have further inquiries, please contact me at (619) 667-1340 or via email at mtamimi@ci.la-mesa.ca.us.

We appreciate your cooperation with the City's storm water pollution prevention program. Your efforts help make our region's waterways and oceanfront safe and enjoyable for everyone.

Sincerely,

Malik Tamimi
Stormwater Program Manager

Enclosures:
1. Frequently Asked Questions (FAQ's)
2. BMP Operation and Maintenance Verification Form
3. Example BMP Operation and Maintenance Form

FREQUENTLY ASKED QUESTIONS
(FAQ'S) SHEET

Q. What are Permanent Treatment Control Best Management Practices (BMPs)?

A. Permanent Treatment Control BMPs are designed to remove pollutants contained in storm water runoff. The pollutants of concern include sand, silt, and other suspended solids; metals such as copper, lead, and zinc; nutrients (e.g., nitrogen and phosphorus); certain bacteria and viruses; and organics such as petroleum hydrocarbons and pesticides. Methods of pollutant removal include sedimentation settling, filtration, plant uptake, ion exchange, adsorption, and bacterial decomposition. Floatable pollutants such as oil, debris, and scum can be removed with separator structures. Treatment control facilities may need to be used in series as a "Treatment Train" to achieve the desired level of pollutant removal for different pollutants.

Q. How may I find out what type of Permanent Treatment Control Best Management Practices (BMPs) I have and where they are located?

A. An Operation & Maintenance Agreement was required, at time of installation, if you have Treatment Control BMPs on your property. BMP Type, Location and Required Maintenance may be found in this document.

BMP Type & Location may also be found in the "As-Built" Construction Drawings and within the Water Quality Technical Report (WQTR) prepared for the project. The City's Engineering Division may have these files on record. To determine if the City has copies of the applicable documents and to purchase copies, please contact the Development Services Section of the Engineering Division at (619) 667-1166.

Q. How may I find out what type of maintenance my Treatment Control BMPs require?

A. Please refer to your property's recorded Maintenance Agreement and/or Water Quality Technical Report for details on required maintenance for the Treatment Controls BMPs for which you are responsible. For further information on maintenance of treatment control BMPs, refer to the documentation provided from the manufacturer (for commercially sold treatment control BMPs) or the California's Storm Water Quality Association's (CASQA) New Development and Redevelopment Handbook . You can access the handbook on CASQA's website at:
http://www.cabmphandbooks.com/Development.asp (See Section 5)

Q. Where may I acquire a copy of my Maintenance Agreement?

A. Maintenance Agreements may be acquired through the County Recorder's Office at the web-site below or by contacting the County Recorder directly at (619) 236-3771.
http://arcc.co.san-diego.ca.us/services/grantorgrantee/search.aspx

Q. How can I get more information from the City regarding this request?

A. You can contact the City's Stormwater Program Manager at (619) 667-1340.

TC-10 Infiltration Trench				
TC-11 Infiltration Basin				
TC-12 Retention/Irrigation				
TC-20 Wet Ponds				
TC-21 Constructed Wetlands				
TC-22 Extended Detention				
TC-30 Vegetated Swale				
TC-31 Vegetated Buffer Strip				
TC-32 Bio-filtration				
TC-40 Media Filter				
TC-50 Water Quality Inlet				
TC-60 Multiple Systems				
MP-20 Wetland				
MP-40 Media Filter				
MP-50 Wet Vault				
MP-51 Vortex Separator				
MP-52 Drain Inserts				

Definitions and maintenance guidelines for the above BMP Types can be found online at http://www.cabmphandbooks.com/Development.asp

Printed Name of Responsible Party Title Signature of Responsible Party

Mailing Address of Responsible Party (Only update if the address on the letter is inaccurate; otherwise, this item may be left blank)

Daytime Phone Email (optional)

Project Name

ATTACHMENT 3.1

CONSTRUCTION STORM WATER MANAGEMENT PLAN

CITY OF LA MESA
JEWEL of the HILLS

CONSTRUCTION STORM WATER MGMT. PLAN

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

Project Name: _____ Project Address: _____
Person completing form: _____ Telephone number: (_____)_____-_____
Signature: _____ Date: ____/____/_____

Construction projects less than one acre but answer "Yes" to questions 2, 3, or 4 in Section 2 Part C of the City's Appendix A document are required to prepare a Construction Storm Water Management Plan (CSWMP). Completion of this form along with submittal of a site map with the features described at the end of this form can adequately meet this requirement.

Planning and Organization

Person responsible for implementing items in this CSWMP:_____

Is this project subject to other construction regulations? ~ Yes ~ No
If yes, please list: _____

Significant Materials

List all significant materials that will be stored and handled at the site in the table below.
Include a brief description of the location where the materials will be stored and expected quantities.

Material	Storage Location	Expected Quantity

Potential Pollutant Sources

Provide a brief narrative description of the site's activities and list the potential pollutants that could be transported from the site by storm water in the following table.

Activity	Potential Pollutants Sources and Pollutants Generated by Activity

Best Management Practices

Every construction site within the City's jurisdiction is required to select, install, and maintain construction BMPs to reduce, retain, and manage pollutant discharges to the maximum extent practicable. The BMPs listed below are required by the City where applicable. The corresponding Caltrans fact sheet for the listed BMPs is indicated in parenthesis. These fact sheets are obtainable from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual (2003) and provide additional details on how to implement the BMP.

Please check all BMPs below that are applicable and feasible for the construction that will be implemented and maintained for the length of construction.

- ☐ Preserve natural hydrologic features where feasible
- ☐ Preserve riparian buffers and corridors where feasible
- ☐ Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction
- ☐ Minimize exposure time of disturbed soil areas
- ☐ Minimize grading during the wet season and correlate grading with seasonal dry weather periods to the extent feasible
- ☐ Temporarily stabilize and reseed disturbed soil areas as rapidly as feasible
- ☐ Preserve existing vegetation where feasible (SS-2)
- ☐ Establish permanent re-vegetation or landscaping as early as feasible

Prevent the contamination of storm water from vehicles and equipment through proper management of the following types of activities:

- ☐ Cleaning (NS-8)
- ☐ Fueling (NS-9)

☐ Maintenance (NS-10)

Prevent the contamination of storm water from construction materials through proper management of the following types of activities:

☐ Material Delivery and Storage (WM-1)
☐ Material Use (WM-2)
☐ Stockpile Management1 (WM-3)
☐ Spill Prevention and Control (WM-4)

Prevent the contamination of storm water by wastes through proper management of the following types of wastes:

☐ Solid Waste (WM-5)
☐ Hazardous Waste (WM-6)
☐ Contaminated Soil (WM-7)
☐ Concrete (WM-8)
☐ Sanitary Waste (WM-9)
☐ Liquid (WM-10)

Prevent the contamination of storm water through proper management of the follow activities:

☐ Water Conservation Practices (NS-1)
☐ Dewatering Operations (NS-2)
☐ Paving and Grinding (NS-3)
☐ Potable Water/Irrigation and Flushing (NS-7)

Prevent erosion and sediment runoff from exposed graded areas through physical stabilization and/or vegetation stabilization[2] by implementing <u>one or more</u> of the following BMPs:

☐ Hydraulic Mulch (SS-3)
☐ Hydroseeding (SS-4)
☐ Soil Binders (SS-5)
☐ Straw Mulch (SS-6)
☐Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats (SS-7)
☐ Wood Mulch (SS-8)
☐ Earth Dikes/Drainage Swales (SS-9)

Reduce the velocity of storm water by using <u>one or more</u> of the following:

☐ Outlet Protection/Velocity Dissipation (SS-10)
☐ Slope Drains (SS-11)

Protect the Perimeter of the site or exposed area from sediment discharge using <u>one or more</u> of the following:

☐ Silt Fence (SC-1)
☐ Gravel Bag Berm (SC-6)
☐ Fiber Rolls (SC-5)

Capture sediments in channeled storm water by using <u>one or more</u> of the following:

☐ De-silting Basin3 (SC-2)
☐ Storm Drain Inlet Protection (SC-10)
☐ Sediment Trap (SC-3)
☐ Gravel Bag Barrier (SC-8)

Prevent sediment from being tracked off-site by using <u>one or more</u> of the following:

☐ Stabilized Construction Entrance (TC-1)
☐ Construction Road Stabilization (TC-2)
☐ Entrance/Exit Tire Wash (TC-3)
☐ Street Sweeping (SC-7)

Notes on above BMPs:

1. Stockpiles should be fully covered when materials are not being added or removed.
2. Vegetation stabilization BMPs must be installed, irrigated, and established (uniform vegetative coverage with 70% coverage established) prior to October 1st. In the event stabilizing vegetation has not been established by October 1st, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.
3. De-silting basins must be designed in accordance with industry standards such as Caltrans.

All construction sites must implement the above BMPs in accordance with the City's dry and wet season requirements, which are detailed below.

A. Dry Season Requirements (May 1 through September 30) include but are not limited to:

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
- Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.
- The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).
- Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.
- Properly protected, designated storage areas are required for materials and wastes.
- All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.
- Remnant trash and debris shall be removed and/or properly stored/disposed of daily.
- Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.
- Materials for spill control/containment must be stockpiled onsite.
- Non-storm water discharges must be eliminated or controlled to the MEP.

B. Rainy Season Requirements (October 1 through April 30) include but are not limited to:

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
- Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not

considered to be "exposed" for purposes of this requirement.

- The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).
- Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.
- Properly protected, designated storage areas are required for materials and wastes.
- All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.
- Remnant trash and debris shall be removed and/or properly stored/disposed of daily.
- Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.
- Materials for spill control/containment must be stockpiled onsite.
- Non-storm water discharges must be eliminated or controlled to the MEP.
- Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- Perimeter protection and sediment containment BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- adequate soil stabilization and erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a selected BMP fails, it must be repaired, improved, or replaced with an acceptable alternate as soon as it is safe to do so.
- All vegetation erosion prevention BMPs must be established prior to the rainy season to be considered as a BMP.
- Standby erosion and sediment control BMPs must be able to protect all exposed soil areas. A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for seven or more calendar days. The ability to deploy standby BMP materials is not sufficient for these areas.

Project Site Map

A site map of the project must be attached to this form and contain the following features:

- An outline of the entire property
- Drainage areas on the property and direction of flow
- Areas of soil erosion
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing storm water controls (oil water separators, sumps, etc.)
- Location of impervious areas (paved areas, buildings, covered areas)
- Locations where toxic or hazardous materials spilled in the past
- Location of building and activity areas (e.g. fueling islands, garages, waste container areas, wash racks, hazardous material storage areas, etc.)
- Locations where BMPs proposed in this document will be installed
- Locations where materials will be temporarily stored onsite

City Use Only

Approved □ **Yes** □ **No**

_____ Signature ____/____/____ Date _____ Department

ATTACHMENT 4.1

MUNICIPAL INSPECTION FORM

CITY OF LA MESA
STORM WATER QUALITY INSPECTION FOR MUNICIPAL FACILITIES

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Annual

A. CONTACT INFORMATION

Facility Name_____

Street Address_____ Mailing Address_____

_____ _____

Manager/Operator(s)_____

Telephone (□□□□□□□□□) _____ - □□□□□□□□□□ ext._____

Fax (□□□□□□□□□) _____ - □□□□□□□□□□

B. FACILITY SITE INFORMATION

Principal Activity:_____

SIC Code(s)_____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)?_____ New JURMP Classification?_____

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID _____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____

Approximate distance to water bodies: ☐ □200 ft. ☐ 200 □1000 ft. ☐ 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate □ impervious surface of this area_____□

Exposed areas of intensive outdoor activity: _____

D. SWPPP REVIEW

DOES FACILITY MAINTAIN A SWPPP: ☐ YES ☐ NO ☐ NOT APPLICABLE

SWPPP Component	Provided	Adequate	Comments
Site Map/Description	☐ Yes ☐ No	☐ Yes ☐ No	_____
Materials List	☐ Yes ☐ No	☐ Yes ☐ No	_____
Significant Spills/Leaks	☐ Yes ☐ No	☐ Yes ☐ No	_____
Pollution Prevention	☐ Yes ☐ No	☐ Yes ☐ No	_____
Industrial Activities	☐ Yes ☐ No	☐ Yes ☐ No	_____
Pollutant Sources/Risks	☐ Yes ☐ No	☐ Yes ☐ No	_____
Compliance Activity Schedule	☐ Yes ☐ No	☐ Yes ☐ No	_____
Employee Training	☐ Yes ☐ No	☐ Yes ☐ No	_____
Accessible to staff	☐ Yes ☐ No	☐ Yes ☐ No	_____
Existing BMPs	☐ Yes ☐ No	☐ Yes ☐ No	_____

E. BMP ASSESSMENT

BMPs	N/A	Yes	No	Comments
E.1 General				
Is the site free of litter and debris?				
Are discharge locations free of sediment and debris?				
Are parking lots, sidewalks and streets free of sediment and debris?				
Are roof downspouts directed away from areas of potential pollutants?				
Is pressure washing / hosing down conducted to clean facility? If yes, is wash water captured?				
Are employees trained in storm water management? If so, provide a list of employees who have participated.				
E.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
Is reclaimed water used for irrigation?				
Are stockpiles of soil or landscape waste covered and equipped to prevent runoff transport?				
Are pest management techniques employed?				
Is drought-resistant vegetation incorporated into landscaping?				
Are pesticides, herbicides, and fertilizers managed in accordance with the JURMP BMPs?				
E.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area enclosed and free of litter and debris?				

BMPs	N/A	Yes	No	Comments
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor material storage areas adequate (covered area with secondary containment)?				
Are outdoor storage containers properly labeled?				
Is there an accessible spill response kit?				
Is there a spill response plan? If so, please provide to inspector.				
Are storage tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
E.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				
Are heavy equipment and vehicles stored in garages or under canopies?				
Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
Are equipment and vehicles inspected daily for leaks and repaired as necessary?				
Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				
Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
Are biodegradable soaps used for cleaning activities?				
E.5 Construction				
Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				
E.6 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
E.7 Other				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
Are the appropriate signs posted for the facility?				
Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.				

CITY OF LA MESA
STORM WATER QUALITY INSPECTION SUMMARY

F. SUMMARY OF BMP COMMENTS:

G. RECOMMENDED CORRECTIVE ACTION

Is corrective action needed? ☐ Yes ☐ No If yes, describe below.

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Photocopy ☐ Fax

H. VIOLATIONS

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described above.

☐ Violation of storm water ordinance or other applicable regulations were found.

Type of violation: ☐ Illegal discharge(s) of pollutants into the storm drain or receiving waters

Description

☐ Illegal connection(s) to the storm drain system

Location_____

☐ Littering ☐ Improper implementation of required BMPs

Non-Compliance with General Industrial Permit: ☐ Need NEC ☐ Need NOI ☐ Need NEC/NOI

☐ Other_____

I. RECOMMENDED CITY ACTIONS

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

RW 303(d) Receiving water impairments, as listed in the most recent 303(d) list
WS COC High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
PDP pollutant discharge potential.
Emp. Training employee training activities focused on storm water pollution prevention
Housekeeping standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
Minor Struct. minor structural BMPs that do not require building permits, such as covering with tarps or building berms
Major Struct. major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results exceed the EPA benchmark by an order of magnitude or more

DMax

CITY OF LA MESA

SUPPLEMENTAL WATERSHED ASSESSMENT QUESTIONNAIRE AND INSPECTION

Inspected by D-MAX Engineering, Inc.

Business Name _____ Date:_____/_____/_____

Watershed (circle one): San Diego River Chollas Creek/San Diego Bay

Questions for Facility Contact Person

When water (from rain, sprinklers, etc.) leaves your site where does it go? ☐ Treatment Plant/Sewer ☐ Storm Drain System ☐ A Water Body (any) ☐ Don't Know/Unsure

Runoff leaving your site eventually reaches what water body (more than one can be checked)? ☐ San Diego Bay ☐ Chollas Creek ☐ Pacific Ocean ☐ San Diego River ☐ Mission Bay ☐ Don't Know/Unsure

What is your impression of the water quality/condition of the downstream water body? ☐ Good ☐ Fair ☐ Poor ☐ Don't Know

In general, what do you think are the main areas or activities at local businesses that could contribute to pollution of runoff? ☐ Washing Activities ☐ Washing Activities Done by Mobile Businesses ☐ Material Storage ☐ Material Processing ☐ Landscaping ☐ Repair Services ☐ Illegal Dumping ☐ Trash Area ☐ Don't Know/Unsure ☐ Other

Other than today's inspection, have you received any information or education about what your business should do to prevent pollution from entering the environment? ☐ Yes ☐ No

Observations

Was evidence of any non-storm water discharge (including allowable discharges) observed? ☐ Significant ☐ Minimal ☐ No

If irrigation system is present, which sprinkler head types are present (check all that apply)? ☐ Spray ☐ Rotor ☐ Microspray ☐ Drip ☐ Bubblers ☐ Water by hand ☐ Other ☐ NA

Approximate percentage of site's total pervious area that is landscaped: _____ %

Attitude toward compliance with storm water regulations: ☐ Receptive ☐ Neutral ☐ Resistant

Overall Source Ranking (for Watershed Pollutants of Concern)

☐ Significant ☐ Not Significant

ATTACHMENT 4.2

MUNICIPAL EDUCATION AND OUTREACH

Malik Tamimi

From: Malik Tamimi
Sent: Tuesday, March 25, 2008 2:43 PM
To: ALL LAMESA USERS
Subject: NPDES Storm Water Program Update

Hi Everyone,
As you may be aware the Regional Water Quality Control Board issued the National Pollutant Discharge Elimination System Permit No. R-9-2007-0001 on January 24, 2007. The Municipal Permit requires the City to develop, adopt, and implement various programs and policies aimed at controlling storm water pollution within the City of La Mesa. These programs are now in effect. A brief description of the program updates are presented below. The programs have been adopted and incorporated in our **Municipal Code**.

1. Jurisdictional Urban Runoff Management Program Update:
   This document has been updated and presents the City's jurisdictional program to meet the requirements of the New Municipal Permit. The JURMP Update consists of 16 Chapters. Several of these chapters may require changes to your ongoing activities/programs.

   - ***Non-Storm Water Discharges:*** this chapter presents a list of exempt and prohibited non-storm water discharges that are reflected in Chapter 7.18 of our Municipal Code. **This will affect everyone**.
   - ***Development Planning Component:*** this chapter pertains to new development or redevelopment with land disturbing activities, structural development including construction or installation of a building or structure, the creation of impervious surfaces, public agency projects, and land subdivision. **This will affect Community Development and Engineering departments.**
   - ***Construction Component:*** this chapter addresses building and construction activities. **This will affect Engineering and Building departments.**
   - ***Municipal Component:*** this chapter addresses all municipal facilities and activities. **This will affect all of Public Works Operation Center, Environmental Services, Engineering, and Fire Department.**
   - ***Industrial and Commercial:*** this chapter addresses industrial/commercial business activities. **This will affect Engineering (Storm Water Code Compliance).**
   - ***Residential:*** this chapter addresses residential activities. **This will affect Engineering (Storm Water Code Compliance), Community Services, and Environmental Services.**
   - ***Illicit Discharge Detection and Elimination:*** this chapter addresses illegal discharges/illicit connections to the storm drain system and water quality monitoring/pollutant source identification and enforcement. **This will affect Engineering (Storm Water Code Compliance) and Public Works Operation Center.**
   - ***Education/Public Participation:*** these two chapters focus on education outreach/public participation to address storm water pollution prevention. **This will affect Engineering, Community Development, Community Services, Public Works Operation Center, Environmental Services, and Fire Department.**
   - ***Fiscal Analysis:*** this chapter will require standardized fiscal analysis methods and reporting. **This will affect Engineering/Environmental Services.**

2. Ordinance Update
   - Chapter 7.18 pertains to storm water and non-storm water discharges. It has been updated to reflect the new municipal permit requirements. Copies have not yet been posted online; however, a copy is available for review at the Engineering Department or with our City Clerk.

- Storm Water Best Management Practices Manual-Part II has been updated to reflect new municipal permit requirements (SUSMP/Hydromodification/LID/Advance Treatment) for new development/redevelopment projects. Copies have been emailed to Engineering and Community Development and has been posted to our City website. **This affects Engineering and Community Development.**

3. Watershed Urban Runoff Management Plan (WURMP) San Diego Bay
   - Two watershed water quality activities that demonstrate watershed priority pollutant load reduction in active implementation are required on an annual basis. **This affects Engineering and Public Works Operation Center.**
   - Two watershed water quality education outreach activities are required on an annual basis. **This affects Engineering.**

4. Watershed Urban Runoff Management Plan (WURMP) San Diego River
   - Two watershed water quality activities that demonstrate watershed priority pollutant load reduction in active implementation are required on an annual basis. **This affects Engineering and Public Works Operation Center.**
   - Two watershed water quality education outreach activities are required on an annual basis. **This affects Engineering.**

Should you have any questions as it pertains to your department, feel free to contact me. A copy of the aforementioned documents will be made available at the Engineering Department.

Thank you

Malik Tamimi
Environmental Specialist
NPDES Storm Water Program
City of La Mesa
8130 Allison Avenue
La Mesa, CA 91941
(619) 667-1340

CITY OF LA MESA

MUNICIPAL PROGRAM

STORM WATER

BEST MANAGEMENT PRACTICES

NOTEBOOK

City of La Mesa Municipal Best Management Practices Notebook

This notebook presents best management practices (BMPs) for numerous municipal activities. The BMP fact sheets have been selected from the California Stormwater BMP Handbook, January 2003. The following table is an index of the BMPs that are presented in this notebook.

BMP Number	***BMP Description***
SC-10	Non-Stormwater Discharges
SC-11	Spill Prevention, Control and Cleanup
SC-20	Vehicle and Equipment Fueling
SC-21	Vehicle and Equipment Cleaning
SC-22	Vehicle and Equipment Repair
SC-30	Outdoor Loading/Unloading
SC-31	Outdoor Container Storage
SC-32	Outdoor Equipment Maintenance
SC-33	Outdoor Storage of Raw Materials
SC-34	Waste Handling and Disposal
SC-41	Building and Grounds Maintenance
SC-43	Parking/Storage Area Maintenance
SC-60	Housekeeping Practices
SC-61	Safer Alternative Products
SC-70	Road and Street Maintenance
SC-71	Plaza and Sidewalk Cleaning
SC-72	Fountains and Pool Maintenance
SC-73	Landscape Maintenance
SC-74	Drainage System Maintenance
SC-75	Waste Handling and Disposal
SC-76	Water and Sewer Utility Maintenance

The BMP fact sheets can be found at www.cabmphandbooks.com.

WEEKLY TAILGATE TRAINING
2007/2008

The table below includes the weekly tailgate training sessions provided by the City during the 2007/2008 reporting period. Training sessions relevant to implementing the City's JURMP are highlighted in green.

DATE	SUBJECT	DIVISION	TRAINER	# ATTENDING
7/3/2007	Safety in the Workplace	3107 - Traffic Safety	Tracy Clark	5
7/3/2007	Hot Weather Procedures	5150 - Parks	Randy Goodell	13
7/9/2007	Dump Beds	3102 - Streets	Dave Liesberg	5
7/10/2007	Your Right To Know	3105 - Fleet	Tracy Clark	5
7/10/2007	BMP's - Storage of Materials	5150 - Parks	Randy Goodell	14
7/16/2007	PPE/ Respirator	3102 - Streets	David Liesberg	5
7/17/2007	BMP's - Housekeeping	5150 - Parks	Randy Goodell	16
7/23/2007	Smoke Detectors	3102 - Streets	Dave Liesberg	5
7/24/2007	Trip Hazards	5150 - Parks	Randy Goodell	15
7/24/2007	Chemical Labels/MSDS	3105 - Fleet	Tracy Clark	5
8/14/2007	Keep Your Back Injury Free	3105 - Fleet	Tracy Clark	7
8/14/2007	Trip Hazards - Sidewalks	5150 - Parks	Randy Goodell	13
8/28/2007	BMP's - Over Irrigation/Runoff	5150 - Parks	Randy Goodell	13
8/29/2007	Taming Driver Aggression	4142 - Wastewater	Steve Maurer	8
9/3/2007	Machine Safety	3102 - Streets	Dave Liesberg	4
9/11/2007	Traffic Safety	5150 - Parks	Randy Goodell	13
9/17/2007	Car Safety	3102 - Streets	Dave Liesberg	8
9/19/2007	Dump Truck Beds	4142 - Wastewater	Steve Maurer	7
9/24/2007	Truck Cab Cleaning	3102 - Streets	Ed Manning	5
9/25/2007	Reporting Wrongdoing	5150 - Parks	Randy Goodell	17
10/1/2007	Driver Fatigue	3102 - Streets	Ed Manning	5
10/2/2007	Water Use & Weather Conditions	5150 - Parks	Randy Goodell	18
10/8/2007	Safety in the Work Place	3102 - Streets	David Liesberg	5
10/16/2007	BMP's - Outdoor Storage	5150 - Parks	Randy Goodell	18
10/29/2007	BMP - Outdoor Storage	3102 - Streets	Dave Liesberg	6

WEEKLY TAILGATE TRAINING
2007/2008

DATE	SUBJECT	DIVISION	TRAINER	# ATTENDING
10/30/2007	BMP - Outdoor Storage	5150 - Parks	Randy Goodell	18
11/9/2007	BMP - Outdoor Storage	4142 - Wastewater	Steve Maurer	8
11/19/2007	BMP - Spill Containment	3102 - Streets	Dave Liesberg	4
11/21/2007	BPM - General Storage	5150 - Parks	Randy Goodell	13
12/4/2007	Equipment Safety	5150 - Parks	Randy Goodell	17
12/10/2007	BMP's - Storm Water	3102 - Streets	Ed Manning	5
12/11/2007	Driving in the Rain	5150 - Parks	Randy Goodell	18
12/17/2007	Equipment Maintenance	3102 - Streets	Dave Liesberg	5
12/20/2007	Forklift Operator	3102 - Streets	Matt Jones	11
1/7/2008	BMP's - Outdoor Storage	3102 - Streets	D. Liesberg	6
1/8/2008	Site and Playground Inspections / BioShield	5150 - Parks	R. Goodell	18
1/9/2008	Street sweeper	3102 - Streets	E. Manning	9
1/14/2008	Driver Fatique	3102 - Streets	D. Liesberg	5
1/16/2008	Annual Pesticde Safety Training	5150 - Parks	R. Goodell	16
1/23/2008	Truck Loads	3102 - Streets	D. Liesberg	6
1/28/2008	Caught or Crushed Injuries	3102 - Streets	D. Liesberg	5
1/29/2008	Rain and Drains	5150 - Parks	R. Goodell	18
2/11/2008	Aqgressive drivinq	3102 - Streets	D. Liesberg	7
2/18/2008	Wheel Chocks	3102 - Streets	D. Liesberq	4
2/12/2008	Playground Inspections	5150 - Parks	R. Goodell	18
2/26/2008	General Housekeeping	5150 - Parks	R. Goodell	15
2/29/2008	Safe Drivinq	4142 - Wastwater	S. Maurer	6
3/3/2008	Carbon Monoxide	3102 - Streets	D. Liesberq	8
3/18/2008	BMP'S - Run Off	3102 - Streets	E. Manning	6
3/18/2008	BMP'S - Run Off	5150 - Parks	R. Goodell	16
3/19/2008	USA Markout Procedures	4142 - Wastewater	S. Maurer	6
3/31/2007	Excavation Safety	3102 - Streets	D. Liesberg	7
4/1/2008	BMP'S - Runoff	5150 - Parks	R. Goodell	13
4/7/2008	Digging	3102 - Streets	D. Liesberg	8
4/9/2008	NPDES	4142 - Wastewater	S. Maurer	7

WEEKLY TAILGATE TRAINING
2007/2008

DATE	SUBJECT	DIVISION	TRAINER	# ATTENDING
4/13/2008	Electrical Safety Part 1	3102 - Streets	D. Liesberq	4
4/15/2008	Crime Prevention and Recognition	Police Department	H. Lindquist	40
4/21/2008	Electrical Safety Part 2	3102 - Streets	D. Liesberg	5
5/6/2008	Preventative Maintenance Goals	3105 - Fleet	J. Phillips	4
5/6/2008	Equipment Safety	5150 - Parks	R. Goodell	15
5/12/2008	Eye Safety	3102 - Streets	D. Liesberg	5
5/13/2008	PM - Drive on Inspections	3105 - Fleet	J. Phillips	4
5/13/2008	Eye Protection	3105 - Fleet	J. Phillips	4
5/19/2008	Tool Safety	3102 - Streets	D. Liesberq	4
5/20/2008	Cell Phone Laws and Use	5150 - Parks	R. Goodell	17
5/20/2008	Belt Tensioners and Wiper Blades	3105 - Fleet	J. Phillips	4
5/20/2008	Wheel Chocks and Jackstands	3105 - Fleet	J. Phillips	4
5/21/2008	Inspecting Truck Shocks	3105 - Fleet	J. Phillips	4

Storm Water Bulletin Board

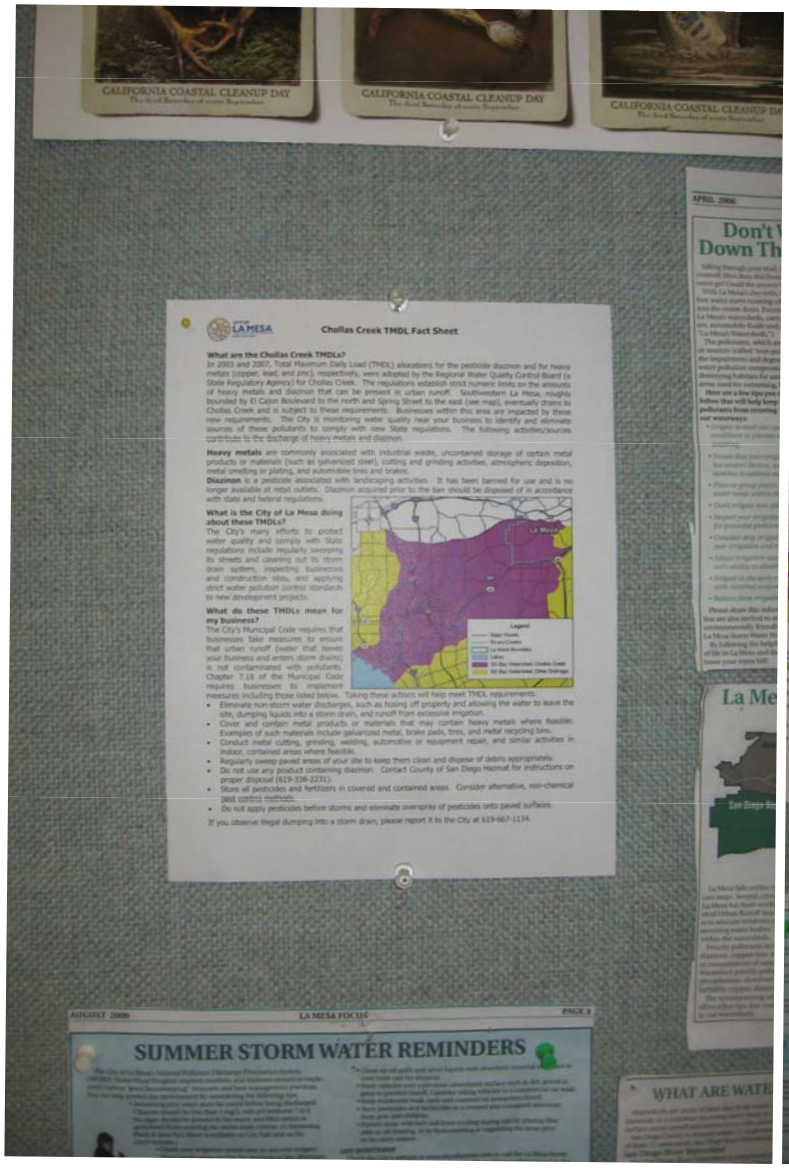
CALIFORNIA COASTAL CLEANUP DAY
Cholias Creek TMDL Fact Sheet
What are the Cholias Creek TMDLs?
What is the City of La Mesa doing about these TMDLs?
What do these TMDLs mean for my business?
Legend
SUMMER STORM WATER REMINDERS
WHAT ARE WATE

Help!
Pollutants were found in your neighborhood storm drain.
¡Ayude!
Aphids
Preventing Urban Runoff Pollution
A Guide for Commercial and Industrial Businesses
Residential Survey Program
Storm Water Best Management Practices (BMPs)
A Guide for Construction Activity
Don't Wash Money Down The Storm Drain!
La Mesa's Watersheds
WHAT ARE WATERSHEDS?
Litter bugs.
DON'T TRASH CALIFORNIA

BECOMING A "GREEN BUSINESS" IS GOOD BUSINESS
APRIL CREEK TO BAY CLEANUP A SUCCESS IN LA MESA
Litter bugs.
DON'T TRASH CALIFORNIA
City of La Mesa
Storm Water Pollution Prevention
Pools & Spas
City of La Mesa
Storm Water Pollution Prevention
Over-Irrigation
The Adopt-A-Highway Program

ATTACHMENT 5.1

INDUSTRIAL AND COMMERCIAL INSPECTION MATERIALS

CITY OF LA MESA

STORM WATER QUALITY INSPECTION FOR INDUSTRIAL/COMMERCIAL FACILITIES

Inspected by D-MAX Engineering, Inc.

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint

Result: ☐ Full Insp. ☐ Could not Contact ☐ Low Commercial ☐ Moved, Vacant ☐ Duplicate ☐ Moved, Replaced by_____ ☐ Refused

A. CONTACT INFORMATION

Original

Business Name_____

_____

Street Address_____

_____

Owner/Official(s)_____

Title_____

Business Telephone (☐☐☐☐) _____ -☐☐☐☐☐☐☐☐ext._____

Business Fax (☐☐☐☐☐) _____ - ☐☐☐☐☐☐☐☐☐☐☐

Changes

Business Name_____

_____

Street Address_____

_____

Owner/Official(s)_____

Title_____

Business Telephone (☐☐☐☐) _____ -☐☐☐☐☐☐☐☐ext._____

Business Fax (☐☐☐☐☐) _____ - ☐☐☐☐☐☐☐☐☐☐☐

Home Based? ☐ Yes ☐ No

Facility personnel present:_____

Property management company:_____ Business Telephone (☐☐☐☐)____ -_____ext.____

Mailing address:_____

☐☐☐☐☐☐☐☐☐☐☐

Approximate area covered by industrial or commercial activities:_____square feet

Approximate ☐ impervious surface of this area_____☐

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP ASSESSMENT

D.1 General

BMPs	N/A	Yes	No	Comments
Is the site free of litter and debris?				
Are discharge locations free of sediment and debris?				
Are parking lots, sidewalks and streets free of sediment and debris?				
Is pressure washing of parking lots or sidewalks conducted at the facility? Is wash water captured?				
Are roof downspouts directly away from areas of potential pollutants?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area enclosed and free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor material storage areas adequate (covered area with secondary containment)?				
Are outdoor storage containers properly labeled?				
Is there an accessible spill response kit?				
Are outdoor storage containers equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				
Are heavy equipment and vehicles stored in garages or under canopies?				
Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
Are vehicle-fueling areas covered and are storm drain inlets in/around the fueling area protected from spills and leaks?				
Is vehicle washing performed in a contained area where runoff does not enter the MS4?				
D.5 Food Establishments				
Does facility have a grease trap or grease interceptor?				
When was the last time the grease trap or interceptor was maintained? _____				
Where is the grease trap or interceptor located? ☐ Under the sink ☐ Outside ☐ Other				

BMPs	N/A	Yes	No	Comments
How many grease fryers are at the facility? _____				
About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually				
How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Do oil-recycling/grease bins have overhead coverage?				
Do oil-recycling/grease bins have secondary containment?				
At what time is cleaning performed? _____				
What is the cleaning method? _____				
Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
Where is used cleaning water discharged? _____				
Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
If not, have the appropriate authorities been notified?				
D.7 Other				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
Were any educational materials distributed?				SD River SD Bay TMDL F1 F2 F2-SP F3 F3-SP Auto Auto-SP

D.8 BMP Summary

E. SWPPP REVIEW

Does facility maintain a SWPPP: ☐ **Yes** ☐ **No** ☐ **Not Applicable**

SWPPP Component	Provided		Comments
Site Map/Description	☐ Yes	☐ No	
Materials List	☐ Yes	☐ No	
Significant Spills/Leaks	☐ Yes	☐ No	
Pollution Prevention	☐ Yes	☐ No	
Industrial Activities	☐ Yes	☐ No	
Pollutant Sources/Risks	☐ Yes	☐ No	
Compliance Activity Schedule	☐ Yes	☐ No	
Employee Training	☐ Yes	☐ No	
Accessible to staff	☐ Yes	☐ No	
Existing BMPs	☐ Yes	☐ No	

Does this facility have a storm water monitoring program? ☐ Yes ☐ No ☐ N/A

Was appropriate monitoring conducted during the most recent wet season? ☐ Yes ☐ No

If not, does the facility have documentation of no qualifying rain events? ☐ Yes ☐ No

If not, is the facility in a GMP and not scheduled for most recent year ? ☐ Yes ☐ No

Do monitoring results show that existing BMPs are effective in removing pollutants? ☐ Yes ☐ No ☐ None Available

Notes:

F. CORRECTIVE ACTIONS REQUIRED BY THE CITY

Is corrective action needed? ☐ Yes ☐ No

If **BMP-related** corrective action is required, describe below. If other corrective action, check the appropriate box in section G.

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax

G. VIOLATIONS

- ☐ No violations have been noted at this time
- ☐ No violations have been noted, but recommend taking corrective action described in Section F.
- ☐ Violation of the City's storm water ordinance (Municipal Code Chapter 7.18):
  - ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
    Description☐☐☐

CITY OF LA MESA

SUPPLEMENTAL WATERSHED ASSESSMENT QUESTIONNAIRE AND INSPECTION

Inspected by D-MAX Engineering, Inc.

Business Name _____ Date:_____/_____/_____

Watershed (circle one): San Diego River Chollas Creek/San Diego Bay

Questions for Facility Contact Person

When water (from rain, sprinklers, etc.) leaves your site where does it go? ☐ Treatment Plant/Sewer ☐ Storm Drain System ☐ A Water Body (any) ☐ Don't Know/Unsure

Runoff leaving your site eventually reaches what water body (more than one can be checked)? ☐ San Diego Bay ☐ Chollas Creek ☐ Pacific Ocean ☐ San Diego River ☐ Mission Bay ☐ Don't Know/Unsure

What is your impression of the water quality/condition of the downstream water body? ☐ Good ☐ Fair ☐ Poor ☐ Don't Know

In general, what do you think are the main areas or activities at local businesses that could contribute to pollution of runoff? ☐ Washing Activities ☐ Washing Activities Done by Mobile Businesses ☐ Material Storage ☐ Material Processing ☐ Landscaping ☐ Repair Services ☐ Illegal Dumping ☐ Trash Area ☐ Don't Know/Unsure ☐ Other

Other than today's inspection, have you received any information or education about what your business should do to prevent pollution from entering the environment? ☐ Yes ☐ No

Observations

Was evidence of any non-storm water discharge (including allowable discharges) observed? ☐ Significant ☐ Minimal ☐ No

If irrigation system is present, which sprinkler head types are present (check all that apply)? ☐ Spray ☐ Rotor ☐ Microspray ☐ Drip ☐ Bubblers ☐ Water by hand ☐ Other ☐ NA

Approximate percentage of site's total pervious area that is landscaped: _____ %

Attitude toward compliance with storm water regulations: ☐ Receptive ☐ Neutral ☐ Resistant

Overall Source Ranking (for Watershed Pollutants of Concern)

☐ Significant ☐ Not Significant

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

☐RW 303(d)☐☐ Receiving water impairments, as listed in the most recent 303(d) list
☐WS COC☐☐ High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
☐PDP☐☐ pollutant discharge potential.
☐Emp. Training☐☐ employee training activities focused on storm water pollution prevention
☐Housekeeping☐☐ standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
☐Minor Struct.☐☐ minor structural BMPs that do not require building permits, such as covering with tarps or building berms
☐Major Struct.☐☐ major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results☐are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results☐are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results☐are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results☐above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results☐exceed the EPA benchmark by an order of magnitude or more

CITY OF LA MESA
SUPPLEMENTAL FOG QUESTIONS
Inspected by D-MAX Engineering, Inc.

Business Name _____ Date:_____/_____/_____

Street Address _____ La Mesa, CA _____

What kind of grease control device does the facility have? ☐ **G**rease trap ☐ Grease interceptor ☐ None

BMPs	N/A	Yes	No	Comments
Does the amount of solids in the grease trap/interceptor appear acceptable?				
Are cleaning logs / maintenance logs maintained on site?				
Are exhaust hood(s) and filter(s) cleaned and maintained?				
Is waste food properly disposed of in trash bins?				
Does restaurant have documented training program for employees for keeping grease out of the storm drain and sewer systems?				

City of La Mesa

DEPARTMENT OF PUBLIC WORKS

May 5, 2008

Re: Storm Water Compliance Inspections

La Mesa Business Owner:

The City of La Mesa (City) will be visiting your business to conduct a storm water compliance inspection. The City is required by the State of California to conduct storm water compliance inspections of industrial and commercial business. The City has contracted with a local environmental and water quality consulting firm, **D-MAX Engineering, Inc.**, to perform the inspections on behalf of the City. D-MAX inspectors are authorized to conduct storm water inspections on behalf of the City.

The inspection program is only one component in a multi-faceted approach to controlling storm water pollution within the City. In addition to business site inspections, the City is also performing frequent construction site inspections, conducting a comprehensive storm drain monitoring program to detect pollutants, developing educational programs for a variety of audiences, imposing urban runoff requirements for new developments, and conducting frequent cleaning of the storm drain system. We sincerely appreciate your concern and cooperation during the implementation of this required program. For additional questions please visit http://www.ci.la-mesa.ca.us/index.asp?NID=234 or call 619.667.1134.

Sincerely,

Malik Tamimi

Malik Tamimi

Environmental Specialist
City of La Mesa

DIRECTOR AND ENGINEERING DIVISION:
8130 ALLISON AVENUE, LA MESA, CALIFORNIA 91941 / PHONE 619.667.1166, FAX 619.667.1380
www.ci.la-mesa.ca.us

Printed on Recycled Paper

San Diego Bay Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego Bay and the San Diego River. Your business or facility is located within the San Diego Bay Watershed.

San Diego Bay Watershed

The San Diego Bay Watershed is comprised of 415 square miles. It extends from the Laguna Mountains to San Diego Bay. The watershed falls within the cities of La Mesa, Chula Vista, Coronado, Imperial Beach, Lemon Grove, National City, San Diego, and unincorporated areas of the County. Approximately 4 square miles in the southern portion of the City of La Mesa is part of this watershed. The major discharge sources to San Diego Bay include Sweetwater River, Otay River, Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek.

Three drainage basins in the City of La Mesa are part of the San Diego Bay Watershed. Runoff from the Spring Valley Basin flows to the Sweetwater River. Runoff from the University Channel and Lemon Grove Basin contribute to Chollas Creek. The aforementioned creek and river flow into San Diego Bay.

Pollutants of concern associated with the watershed include diazinon, copper and zinc, fecal coliform, turbidity, and total suspended solids. The sources of these pollutants are a result of residential, agriculture or commercial pesticide application, automobiles and industrial waste, sewer spills, encampments, wildlife, erosion, suspended sediment, and fertilizers. Pollutants of concern for Chollas Creek in particular include metals such as copper, lead, zinc, cadmium, and coliform bacteria.

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Moreover, store materials properly to ensure it is not exposed to storm water and do not over-irrigate your landscape. If you observe storm water pollution or illegal dumping into a storm drain, you should call the City's Storm Water Pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

San Diego River Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego River and the San Diego Bay. Your business or facility is located within the San Diego River Watershed.

San Diego River Watershed

The San Diego River Watershed is comprised of 443 square miles. It extends from the mountains near Julian to the Pacific Ocean. Portions of the watershed fall within the cities of El Cajon, Poway, San Diego, Santee, several unincorporated areas, and the City of La Mesa. Primary tributaries to the San Diego River include Boulder Creek, Conejos Creek, Los Coches Creek, San Vicente Creek, and Forester Creek. Alvarado Creek in La Mesa is also tributary to the San Diego River. Alvarado Creek flows into the San Diego River and ultimately into the Pacific Ocean between South Mission Beach and Ocean Beach near Dog Beach.

Pollutants of concern listed in the 2002 Clean Water Act Section 303(d) List Of Water Quality for the lower San Diego River Watershed include fecal coliform (sewage/urban runoff), low dissolved oxygen (decay of organic matter), total dissolved solids (industrial waste/chemical spills), and phosphorus (phosphate based detergents). Between 1996 and 1999, coliform bacteria more than doubled due to urban runoff and sewage.

Other pollutants of concern not listed above include pesticides such as Diazinon and Chlorpyrifos (commercial, agricultural, and residential application), Total Suspended Solids/Turbidity (suspended sediment/solids, construction, sewage, eutrophication), Copper and Zinc (industrial waste or automobiles), and pH/Phosphate (industrial waste, automobiles, sewage, fertilizers, eutrophication, hardening/concrete of creeks).

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What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Store materials properly to ensure it is not exposed to storm water. Do not over-irrigate your landscape. If you observe illegal dumping into a storm drain, you should call the City's storm water pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

3.0 INDUSTRIAL AND COMMERCIAL

3.1 BMP REQUIREMENTS FOR ALL DISCHARGERS

3.1.1 NON-STORM WATER DISCHARGES

Non-storm water discharges refer to water flows that are not associated with storm events (i.e. the product of precipitation). The following categories of non-storm water discharges are exempt from discharge prohibitions established by the City's ordinance, but BMPs must maintained to keep prevent these discharges from being a source of or transporting pollutants to the City's storm water conveyance system. Such discharges are listed below:

- Discharges from potable water sources not subject to NPDES Permit No. CAG679001, other than water main breaks;
- Diverted stream flows (provided required permits are obtained);
- Flows from riparian habitats and wetlands;
- Foundation drains (not including active groundwater dewatering systems);
- Rising groundwater;
- Uncontaminated groundwater infiltration to MS4s [as defined at 40 CFR 35.2005(20)];
- Uncontaminated pumped groundwater;
- Water from crawl space pumps;
- Water from footing drains (not including active groundwater dewatering systems).
- Air conditioning condensate
- Flows from emergency fire fighting activities
- Springs
- Water line flushing

3.1.2 BMP REQUIREMENTS APPLICABLE TO ALL DISCHARGERS

Good Housekeeping BMPs

Good housekeeping consists of practices implemented to prevent pollutants from being carried in either non-storm water dischargers or with storm water during a storm event and include the practices below. These practices should be implemented by all dischargers, when applicable:

- Report prohibited non-storm water discharges to the City's storm water hotline (619) 667-1134
    - Prohibited non-storm water discharges include industrial and commercial businesses hosing down their sites or washing vehicles or equipment where water reaches the City's storm water conveyance

system, or anyone dumping solid or liquid waste directly into or where it may reach the City's storm water conveyance system.

- Regularly clean and maintain outdoor areas
  - Eliminate the accumulation of pollutants (dirt, surplus materials, spilled or dropped substances, litter, and debris) that collect in areas that can be carried in runoff to the storm water conveyance system.
  - Keep dumpster, trashcan, and recycling bin lids closed to prevent the wind from carrying trash out of the receptacles and to prevent wind, rain, and scavengers from transporting pollutants to the storm water conveyance system.

- Choose dry cleaning methods
  - Eliminate hosing down the site unless all wash water is contained and disposed of to a pervious area, like a lawn, or the sanitary sewer system. Note that some kinds of wash water (i.e. containing significant amounts of pollutants) may not be allowed to be disposed of to a pervious area. Additionally, sewer permits may be necessary for disposing of significant amounts of wash water to the sewer system.
  - Sweeping of paved areas is a dry cleaning method that helps prevent trash, debris, and particulate matter such as dirt from accumulating on paved surfaces and being carried to the storm water conveyance system during a rain event.

- Reduce the use of toxic materials
  - Substitute non-toxic or less-toxic cleaning materials and solvents, use non-caustic and phosphate-free detergents, water-based degreasers, non-chlorinated solvents, when possible.

- Store materials in a manner where they do not contact storm water
  - Move into a building or provide a cover, berm, or similar structure to prevent storm water from contacting materials stored outdoors.

Erosion Control

- Remove or secure any significant accumulations of eroded soils from slopes, or other exposed areas. Such areas may be secured through the use of vegetation, geotextiles, erosion control blankets, etc.

Illegal Connections and Discharges

- Illegal connections to the storm water conveyance system, including, but not limited to sinks and toilets plumbed to the storm water conveyance system, and other systems that convey prohibited discharges to the storm water conveyance system must be eliminated (even if the connection was established pursuant to a valid permit and was legal at the time it was constructed).
- Illegal discharge practices must be eliminated. If a discharge is not include on the list of allowed discharges discussed in section 2.1.1, and is not water resulting from a storm event, it is most likely an illegal discharge.

3.2 BMP Requirements For Industrial And Commercial Sites

Key BMPs generally applicable to industrial and commercial facilities and activities include the following:

- Reducing the exposure of pollutants to storm water and non-storm water discharges. This is often done through
  - Covering the pollutants and/or
  - Keeping pollutants away from typical flow paths of water
- Good housekeeping: generally keeping work and storage areas clean and well organized
- Prompt, proper cleanup of spills
- Preventing illegal discharges, such as vehicle wash water

3.2.1 Pollution Prevention

The City will require incorporation of such strategies into the standard operating procedures of all industrial and commercial facilities, whether a large or small industrial facility, a corporate chain store, a franchise, or an independent or family-run shop. The following pollution prevention methods shall be considered and implemented to the MEP, where applicable:

- Reduce quantity of toxic materials used or substitute less-toxic materials
- Use minimal cleaning water to decrease wastewater generation
- Display pollution prevention methods prominently to remind or instruct employees and customers
- Implement a spill response plan
- Segregate and recycle wastes
- Provide a schedule of preventive maintenance procedures
- Reduce waste through more efficient production processes
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Treat wastes on site to decrease volume and/or toxicity
- Dispose of wastes properly
- Continually train employees as needed

3.2.2 General and Activity Specific BMPs

In addition to the pollution prevention BMPs described above, the City has also established a set of minimum BMPs based on the CASQ California Stormwater BMP Handbook – Industrial & Commercial (CASQA, 2003) for all industrial and commercial sites. Businesses are required to use an effective combination of general BMPs and activity-specific BMPs. General BMPs and activity-specific BMPs are required where applicable and are briefly listed below. The relevant CASQA BMP fact sheet reference is

given in parentheses after each listing; the BMP fact sheets are available online at www.cabmphandbooks.com. In some cases the City does not agree with some of the specific recommended BMP options listed in the CASQA fact sheets. Those exceptions are listed later in this section.

Note that more stringent BMP requirements may need to be applied where necessary to reduce discharges of pollutants to sensitive water bodies and/or comply with total maximum daily load (TMDL) regulations. The City also reserves the right to require the development of Storm Water Pollution Prevention Plans (SWPPP) and/or storm water monitoring if deemed necessary by City inspectors.

- **General BMPs**
  - Non-Storm Water Discharge Control (SC-10)
  - Spill Prevention, Control/Cleanup (SC-11)
  - Waste Handling and Disposal (SC-34)
  - Sediment/Erosion Control (SC-40)
  - Building/Grounds Maintenance (SC-41)
  - Parking Area Maintenance (SC-43)
  - Drainage System Maintenance (SC-44)
  - Employee Training
    - As appropriate to their positions, staff must be trained to avoid prohibited discharges.
    - Staff must be trained in proper implementation of the BMPs applicable to the activities they regularly conduct.
- **Activity-Specific BMPs**
  Appropriate BMPs depend on the type of activities, pollutants and potential source of pollutants. BMPs requirements for the following activities and areas, which are relatively common at industrial and commercial sites, follow the CASQA BMP noted in parentheses after each activity.
  - Vehicle/Equipment Fueling (SC-20)
  - Vehicle/Equipment Cleaning (SC-21)
  - Vehicle/Equipment Repair (SC-22)
  - Outdoor Loading/Unloading (SC-30)
  - Outdoor Liquid Container Storage (SC-31)
  - Outdoor Equipment Operations (SC-32)
  - Outdoor Storage of Raw Materials (SC-33)

In addition to the minimum BMPs listed above, the City may require additional BMPs based on specific site conditions observed during an inspection. The City also may require the implementation of treatment control BMPs, including but not limited to the following:

- Infiltration Trench (TC-10)
- Infiltration Basin (TC-11)
- Retention/Irrigation (TC-12)

- Wet Pond (TC-20)
- Constructed Wetland (TC-21)
- Extended Detention Basin (TC-22)
- Vegetated Swale (TC-30)
- Vegetated Buffer Strip (TC-31)
- Bioretention (TC-32)
- Media Filter (TC-40)
- Water Quality Inlet (TC-50)
- Multiple Systems (TC-60)
- Wetland (MP-20)
- Media Filter (MP-40)
- Wet Vault (MP-50)
- Vortex Separator (MP-51)
- Drain Inlet (MP-52)

3.2.3 CITY EXCEPTIONS TO CASQA FACT SHEETS

The City has noted some exceptions to some BMPs listed on some of the aforementioned CASQA Industrial and Commercial Fact Sheets, which are discussed below.

Please note that although CASQA fact sheets state that listed BMPs are "suggested protocols," the City requires the implementation of such protocols as minimum BMPs, when applicable to the business.

There are no fact sheets specific to disposal of hazardous waste included in the CASQA Industrial and Commercial Handbook. Industrial and commercial businesses must follow appropriate waste disposal BMPs (SC-34) and applicable laws and regulations when disposing of hazardous waste.

CASQA fact sheet SC-11 states that industrial and commercial businesses should develop and regularly update a spill prevention control and countermeasure (SPCC) Plan. A formal SPCC document is not required, but is encouraged. However, other BMPs listed on SC-11 must be implemented when preventing and responding to spills.

SC-22, Vehicle and Equipment and Repair, states, "Incoming vehicles [should be] checked for leaking oil and fluids. Do not allow leaking vehicles or equipment on site." Due to the nature of vehicle equipment and repair facilities, leaking vehicles or equipment may be allowed on site. BMPs must be implemented to prevent vehicle and equipment fluids from contacting, or potentially contacting, storm water.

SC-43, Parking/Storage Area Maintenance, states, "Follow the procedures below when cleaning oily deposits: use a screen or filter fabric over inlet, then wash surfaces." Non-storm water discharges of this nature, even if filtered, are not allowed to enter the storm water conveyance system. Water must be contained, collected, and disposed of properly.

SC-41 - Building and Grounds Maintenance, states (in regards to pressure washing), "If soaps or detergents are not used, and the surrounding area is paved, waste runoff does not have to be collected but must be screened. Pressure washers must use filter fabrics or some other type of screen on the ground and/or in the catch basin to trap the particles in wash water runoff." As previously mentioned, non-storm water discharges of this nature, even if filtered, are not allowed to enter the storm water conveyance system. Water must be contained, collected, and disposed of properly.

Note that the City does not require the use of treatment control BMPs as minimum BMPs for existing industrial and commercial facilities. Treatment control BMPs may be necessary at industrial and commercial facilities to reduce pollutants to the MEP. Treatment control BMPs are required for all high priority development projects as required by the Municipal Permit and the City's SUSMP ordinance. Any business implementing treatment control BMPs should be aware of regulations that regulate the removal of silt, sediment, and/or vegetation from naturally lined ponds and detention basins.

City of La Mesa
Storm Water Pollution Prevention
Over-Irrigation

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

With La Mesa's clay soils, it doesn't take much to moisten the ground before water starts running off your property to the curb, down the street and into the storm drain. Runoff from over-irrigation may transport pollutants such as sediment, pesticides, fertilizers, pet waste, bacteria, and automobile fluids. These pollutants enter our local creeks and streams and discharge into the ocean.

Over-irrigation is not prohibited; however, the following measures are recommended.

1. Over-irrigation runoff shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Irrigate to meet site-specific conditions to prevent over-watering.
3. Ensure that your irrigation system has control devices, sensors or shut-off switches to address malfunctions.
4. Place or group plants with similar water needs within the same area.
5. Don't irrigate non-planted areas.
6. Inspect your irrigation system regularly for potential problems
7. Consider drip irrigation to save water and prevent over-irrigation and runoff.
8. Adjust irrigation rates according to seasons, weather conditions and the soil's ability to absorb water. Instead of watering for 15-minutes straight, break up the session into 5-minute intervals, allowing water to soak in before the next application.
9. Irrigate in the early morning; it's the most efficient time to water plants with minimal evaporation.
10. Refrain from irrigation during hot, windy periods of the day. Do not let water run out into the street.

Do the right thing, stay in compliance and protect our environment. For more information contact the City's Storm Water Hotline (619) 667-1134.

Pollutants of Concern

As rainfall flows over the ground, it picks up a variety of pollutants and deposits them into our watersheds. The following pollutants are commonly transported in the storm drain system and have been found to degrade water quality.

- Sediments
- Fertilizers
- Metals
- Detergents
- Pesticides
- Organic Compounds (solvents)
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

The following **B**est **M**anagement **P**ractices (**BMPs**) are required to be used at all industrial and commercial businesses, where applicable, to reduce urban runoff pollution in our streams and waterways. To do your part in protecting our water quality, please implement the following BMPs, where applicable or checked by the City inspector.

Maintenance Good Housekeeping

- ❑ Regularly, dry sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- ❑ If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- ❑ Water used for cleaning exterior surfaces must be contained and disposed of into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the storm drain or leave the property.
- ❑ Regularly inspect and maintain storm drain inlets.

Landscaping

- ❑ Only irrigate during early morning or late evening to avoid evaporation.
- ❑ Aim sprinklers to avoid watering other areas.
- ❑ Time sprinklers to avoid over watering and causing runoff.
- ❑ Minimize pesticide, herbicide and fertilizer use, which are harmful to animals downstream.
- ❑ Hand pull weeds instead of using herbicides.
- ❑ Do not use pesticides that eliminate beneficial insects (i.e., Integrated Pest Management).

Outdoor Material Storage

- ❑ Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid material.
- ❑ Have a spill response kit available to clean up potential spills such as kitty litter or other absorbents.
- ❑ Keep material storage areas free from rainwater accumulation.
- ❑ Keep lids closed on all outdoor storage containers and ensure containers are labeled.

Waste Management

- ❑ Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- ❑ Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- ❑ Fix any leaks in garbage cans or dumpsters.
- ❑ Schedule regular waste pick-up.

Vehicle Equipment Maintenance

- ❑ Perform all vehicle maintenance indoors when possible.
- ❑ Use drip-pans to collect fluids from leaky vehicles.
- ❑ Clean up spills immediately using kitty litter or other absorbents. Properly dispose of used absorbents.

Vehicle Equipment Washing

- ❑ Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- ❑ Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- ❑ Minimize the use of soaps and water while washing.
- ❑ Protect storm drains or curb inlets and then collect all wash water by vacuum. Recycle or dispose of wash water via the sanitary sewer system.
- ❑ Drain excess wash water to the sanitary sewer (sink or toilet), not to storm drains.

Loading Areas Operations

- ❑ Load and unload in designated areas.
- ❑ Regularly dry sweep loading and unloading areas.
- ❑ If possible, cover loading areas.
- ❑ Divert storm water away from all loading and unloading areas.
- ❑ Check shipments and trucks for leaks and spills.
- ❑ Cleanup spills/leaks immediately and dispose of properly.
- ❑ If you must use water for cleaning, use a mop and bucket and dispose of wash water into the sanitary sewer.
- ❑ Major cleaning of exterior surfaces must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water should not be allowed to enter the street gutter or storm drains.

What's the difference?

Sanitary Sewer vs. Storm Drain System

The water that drains down a sink or toilet in a home or business flows to the sanitary sewer and is treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers ☐ terminating at the Pacific Ocean!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our watersheds.

Who can you contact?

REPORT ILLEGAL DUMPING
City of La Mesa.
(619) 667-1134

(After Hours Hotline)
County Storm Water Hotline
1-888-846-0800

HOUSEHOLD HAZARDOUS WASTE DISPOSAL
EDCO
8184 Commercial Street
By Appointment
Questions: (619) 466-3355

RECYCLING
EDCO: (619) 466-3355

QUESTIONS AND COMMENTS
City of La Mesa Storm Water Program
(619) 667-1340

LOOK ON THE WEB

USED OIL RECYCLING CENTERS
http://www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
http://www.ipm.ucdavis.edu/

County of San Diego Storm Water Management Program
www. co.san-diego.ca.us/deh/stormwater/stormwater.html

State Water Resources Control Board (SWRCB) Storm Water Program
www.swrcb.ca.gov/stormwtr/construction.html

US Environmental Protection Agency
www.epa.gov/OWOW/NPS/

Clean Water Network
www.cwn.org

Preventing Urban Runoff Pollution

A Guide for Commercial and Industrial Businesses

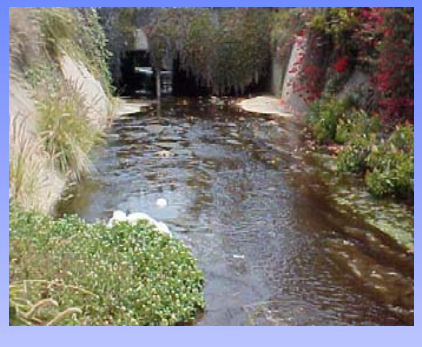

Urban storm water runoff is the **largest contributor** to **watershed pollution** in San Diego County.

Beginning in 2002, your business is **required** to prevent urban runoff pollution by implementing **B**est **M**anagement **P**ractices (**BMPs**).

The City will be conducting inspections to ensure that BMPs are being used and water quality is protected.

CITY OF LA MESA
Jewel of the Hills

NEW
Increased discounts

HVAC
$1,900 per pH CTCC
$ 625 per standard CTCC

Toilets
$ 165 per 1.2 gpf toilet
$ 135 per 1.6 gpf toilet

Urinals
$ 400 per zero-water urinal
$ 200 per .5 gpf urinal

and more
$ 150 per waterbroom

To bring expenses down, start at the top.

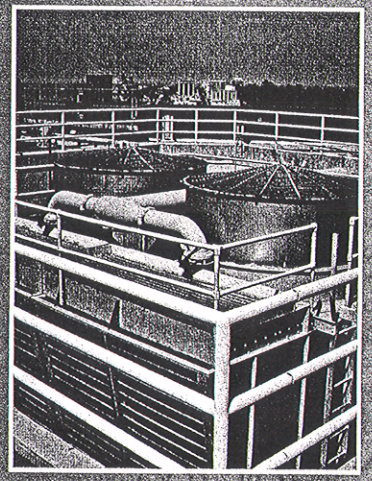

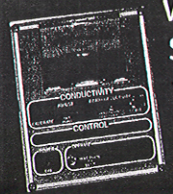

We'll give you up to $1,900 for cooling tower conductivity controllers that work 24/7.

©2006 San Diego County Water Authority REV 08/2006

Voucher Incentive Programs
commercial • Residential

Processing Center
P.O. Box 884
El Segundo, CA 90245-0884

We've increased water-efficiency discounts . . .

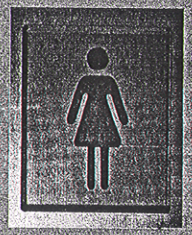

for your restrooms, your HVAC system and more.

MONEY SAVER
Voucher Incentive Programs
1-800-981-1938

Urinals

$200 per high-efficiency urinal

You'll save 66–100 percent each use. Pre-1989 urinals use 3 or more gallons of water compared to the .5 gallon, or less, used by high-efficiency or zero-water urinals.

Guidelines

$400 per zero-water urinal

- Urinals using .5 gallon or less per flush and waterless models are acceptable.
- New urinals must replace existing urinals using 3.0 gallons per flush or more.
- Urinals installed as part of new construction or restroom additions do not qualify.
- Properties built after 1994 do not qualify.
- Vouchers may be applied to the cost of the urinal and sales tax.

Cooling Tower Conductivity Controllers

New discounts for pH controllers lead to even greater water and energy savings and longer equipment life. A properly functioning conductivity controller facilitates automated monitoring and control. Reductions in scaling, bleed-off water and chemical use add up to significant 24/7 savings.

$625 per CTCC

$1,900 per pH CTCC

Guidelines

- Controllers that automatically monitor and maintain pH levels of recirculated water may qualify for the $1,900 voucher discount.

Toilets

You'll save more than 60 percent every time you flush. Pre-1981 toilets use 5–7 gallons of water per flush, compared to the 1.2–1.6 gallons per flush used by these water-efficient toilets.

Guidelines

$165 per high-efficiency toilet

- Toilets must replace fixtures which are specified by their manufacturers to use at least 3.5 gallons per flush.
- Toilets installed as part of new construction or restroom additions do not qualify.
- Properties built after 1994 do not qualify.
- Vouchers may be applied to the cost of the toilet tank, bowl and sales tax.
- High-efficiency toilets must be selected from the current list of Water Authority approved models.

Call toll free 1-800-986-4538

Discount incentive availability varies by water agency.

Waterbrooms

Save time and money when cleaning tennis courts, pool decks, kitchens, outdoor eating areas, sidewalks, and more. Waterbrooms can save 5–15 gallons per minute and clean in about 75% less time.

Guidelines

$150 per waterbroom

- Waterbroom vouchers are available for commercial properties only.
- Not all water agencies are participating.

Sponsoring Agencies: Carlsbad Municipal Water District, City of Del Mar, City of Escondido, Fallbrook Public Utility District, Helix Water District, City of Oceanside, Olivenhain Municipal Water District, Otay Water District, Padre Dam Municipal Water District, City of Poway, Rainbow Municipal Water District, Ramona Municipal Water District, Rincon del Diablo Municipal Water District, City of San Diego, San Dieguito Water District, Santa Fe Irrigation District, Sweetwater Authority, Vallecitos Water District, Valley Center Municipal Water District and Vista Irrigation District.

REV 08/2006

San Diego County Water Authority

MONEY SAVER Voucher Incentive Programs 1-800-986-4538

Before you buy...

Call the Processing Center to request a voucher. The voucher will be treated like a coupon by participating wholesale and retail suppliers and plumbers/contractors throughout San Diego County. Vouchers must be presented at the time fixtures or equipment are purchased.

1. Call 1-800-986-4538 to make sure you are a qualifying customer of a participating agency and vouchers are still available.
2. Vouchers expire 30 days after issuance. If you need additional time to complete your purchase, call 1-800-986-4538 and see if an extension is available.
3. Redeem your voucher when you purchase qualifying fixture(s) or equipment from participating suppliers or contractors.
4. Customers participating in the program agree to respond to a brief water conservation survey and to allow an on-site installation verification.

Commercial, public, multi-family properties

up to $25-per-station discounts for smart controllers

New construction now qualifies!

Discounts are no longer limited to the replacement of existing controllers! Suppliers and contractors may now offer this point-of-purchase discount to all commercial, multi-family and public customers.

Automatically adjust watering schedules as the weather changes.

Improve landscape health and appearance.

Reduce runoff.

smart LANDSCAPE
A San Diego County Water Authority Program

HERE'S HOW

Before purchasing a new controller(s), request a discount voucher. Call 800-986-4538 (option 2, 5) to determine property eligibility and voucher availability or go to www.sdcwa.org/manage/conservation-overview.phtml to download the voucher application.

- Vouchers must be presented at the time of purchase.
- The voucher will be treated like a coupon by participating suppliers and/or contractors.
- Contractors may request vouchers with property owner's/manager's written authorization.
- Participating customers agree to an on-site installation verification.
- Funding is limited and vouchers are distributed on a first-come, first-served basis.

GUIDELINES

- Qualifying properties must have at least 2,000 square feet of irrigated landscape.
- Controllers must be selected from the current list of eligible models.
- Maximum 48 stations per controller.
- Controllers must be installed by qualified C-27 licensed contractors from the list of contractors provided by manufacturers. (This requirement does not apply to properties with in-house landscape maintenance staff.)

NO REBATES!

- There are no rebates available for previously purchased commercial or new construction controllers.
- Voucher discounts apply only at the time of equipment purchase.

FREE WATER MANAGEMENT REPORTS

When you participate in the Smart Landscape Program, your property may receive water budget information. It's a service that helps property owners and managers control water-related expenses by comparing the amount of water used with the optimal amount needed. Offered in select areas only. Please call your water agency for availability.

CALL TOLL-FREE: 800-986-4538 (option 2, 5)

or go to www.sdcwa.org/manage/conservation-overview.phtml.

MWD METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

San Diego County Water Authority

MONEY SAVER Voucher Rebate Program

Participating Agencies: Carlsbad Municipal Water District, City of Del Mar, City of Escondido, Fallbrook Public Utility District, Helix Water District, Lakeside Water District, City of Oceanside, Olivenhain Municipal Water District, Otay Water District, Padre Dam Municipal Water District, City of Poway, Rainbow Municipal Water District, Ramona Municipal Water District, Rincon del Diablo Municipal Water District, City of San Diego, San Dieguito Water District, Santa Fe Irrigation District, Sweetwater Authority, Vallecitos Water District, Valley Center Municipal Water District and Vista Irrigation District.

over for even more

Do you have a list of irrigation repairs or upgrades but no budget?

HERE'S HOW

Applications are available: from irrigation equipment suppliers; at www.sdcwa.org/manage/conservation.phtml; or by calling 800-986-4538 (option 2, 5).

4 Easy Steps

- Submit a grant application. We'll contact you about your application within 10 days of receipt.
- Complete installation within 60 days of approval notification.
- Fax, e-mail or mail receipts.
- Schedule an appointment to confirm installation.

GUIDELINES

- Funding is limited and grants are issued on a first-come, first-served basis.
- Grants may not exceed $2,500 per irrigated acre.
- Grant funds are not available for labor, plant materials, delivery or installation.
- Hardware and/or equipment must be installed by a California licensed contractor with a C-27 landscaping classification. (This requirement does not apply to properties with in-house landscape maintenance staff.)
- FREE Water Management Reports! When you participate in the Smart Landscape Program, your property may receive water budget information. (See other side.)

We offer grants up to **$5,000**

for commercial, public or multi-family properties. Public properties may receive up to $10,000.

Call today
800-986-4538 (option 2, 5)

FREE irrigation evaluations

Water savings potential 20 to 40%

- A water agency representative will visit and review your irrigation system. You will receive a brief report including water-saving recommendations.
- Customers must have at least 1 acre of irrigated landscaping.
- Water agency pre-approval is required.

Call for information or to schedule a survey:

City of San Diego	(619) 570-1999
Helix Water District	(619) 466-0585
Vallecitos Water District	(760) 744-0460
Other agencies	(800) 986-4538 (option 2, 5)

The 20 Gallon challenge
Save Water Now
www.20gallonchallenge.com

We have $ for indoor water-saving devices too!

Need more money for irrigation repairs?

Receive $195 Per Acre Foot of Water Saved

Try the Water Savings Performance Program, which provides $195 per acre foot of water saved.

Contact: Deneice Cotton
(213) 217-6616 or dcotton@mwdh2o.com

This program is offered by the Metropolitan Water District.

Artificial Turf

A 50¢-per-square-foot introductory incentive is available to replace natural grass. When it's gone, a 30¢/SF incentive will be offered.

For an application, visit www.sdcwa.org/manage/conservation-overview.phtml

over for even more $

smart LANDSCAPE
A San Diego County Water Authority Program

P.O. Box 786
El Segundo, CA 90245

It's smart business to irrigate efficiently

Call toll-free: 800-986-4538 (option 2, 5)

We can help

Chollas Creek TMDL Fact Sheet

What are the Chollas Creek TMDLs?

In 2003 and 2007, Total Maximum Daily Load (TMDL) allocations for the pesticide diazinon and for heavy metals (copper, lead, and zinc), respectively, were adopted by the Regional Water Quality Control Board (a State Regulatory Agency) for Chollas Creek. The regulations establish strict numeric limits on the amounts of heavy metals and diazinon that can be present in urban runoff. Southwestern La Mesa, roughly bounded by El Cajon Boulevard to the north and Spring Street to the east (see map), eventually drains to Chollas Creek and is subject to these requirements. Businesses within this area are impacted by these new requirements. The City is monitoring water quality near your business to identify and eliminate sources of these pollutants to comply with new State regulations. The following activities/sources contribute to the discharge of heavy metals and diazinon.

Heavy metals are commonly associated with industrial waste, uncontained storage of certain metal products or materials (such as galvanized steel), cutting and grinding activities, atmospheric deposition, metal smelting or plating, and automobile tires and brakes.

Diazinon is a pesticide associated with landscaping activities. It has been banned for use and is no longer available at retail outlets. Diazinon acquired prior to the ban should be disposed of in accordance with state and federal regulations.

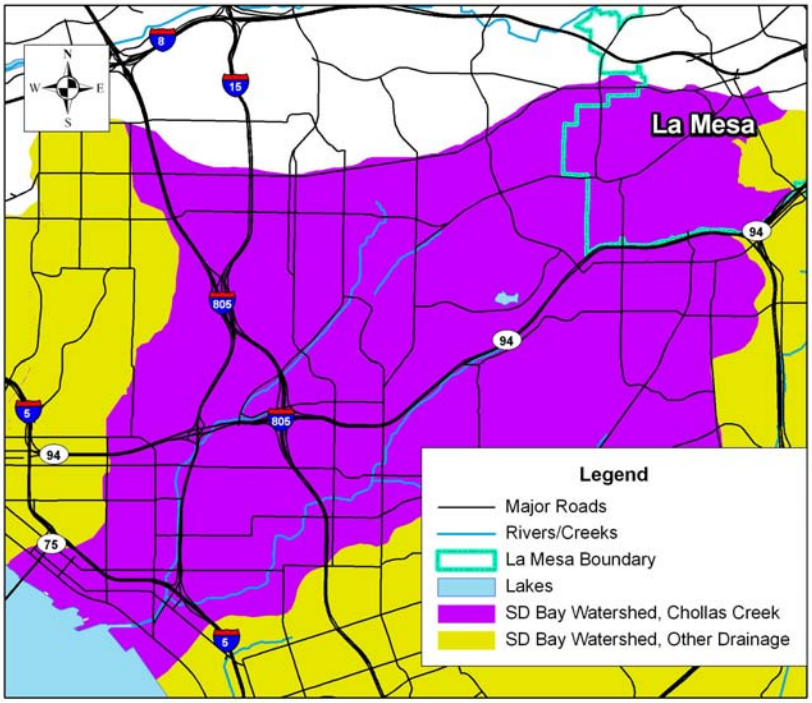

What is the City of La Mesa doing about these TMDLs?

The City's many efforts to protect water quality and comply with State regulations include regularly sweeping its streets and cleaning out its storm drain system, inspecting businesses and construction sites, and applying strict water pollution control standards to new development projects.

What do these TMDLs mean for my business?

The City's Municipal Code requires that businesses take measures to ensure that urban runoff (water that leaves your business and enters storm drains) is not contaminated with pollutants. Chapter 7.18 of the Municipal Code requires businesses to implement measures including those listed below. Taking these actions will help meet TMDL requirements.

- Eliminate non-storm water discharges, such as hosing off property and allowing the water to leave the site, dumping liquids into a storm drain, and runoff from excessive irrigation.
- Cover and contain metal products or materials that may contain heavy metals where feasible. Examples of such materials include galvanized metal, brake pads, tires, and metal recycling bins.
- Conduct metal cutting, grinding, welding, automotive or equipment repair, and similar activities in indoor, contained areas where feasible.
- Regularly sweep paved areas of your site to keep them clean and dispose of debris appropriately.
- Do not use any product containing diazinon. Contact County of San Diego Hazmat for instructions on proper disposal (619-338-2231).
- Store all pesticides and fertilizers in covered and contained areas. Consider alternative, non-chemical pest control methods.
- Do not apply pesticides before storms and eliminate overspray of pesticides onto paved surfaces.

If you observe illegal dumping into a storm drain, please report it to the City at 619-667-1134.

We are serving drinking water only upon request.

This saves water by eliminating waste at the table and by reducing water needed for cleaning glasses.

Thank you for your understanding!

The 20 Gallon challenge

Save Water Now

Tips	Estimated Savings
• Shorten showers.	2.5 gallons/minute
• Wash only full loads of clothes.	15–50 gallons/load
• Don't over-water! Cut irrigation cycles by 1-3 minutes.	15–25 gallons/minute

20gallonchallenge.com

See more tips and make your pledge to save water!

The San Diego County Water Authority and its 24 member retail water agencies thank you for helping our region save water.

San Diego County Water Authority

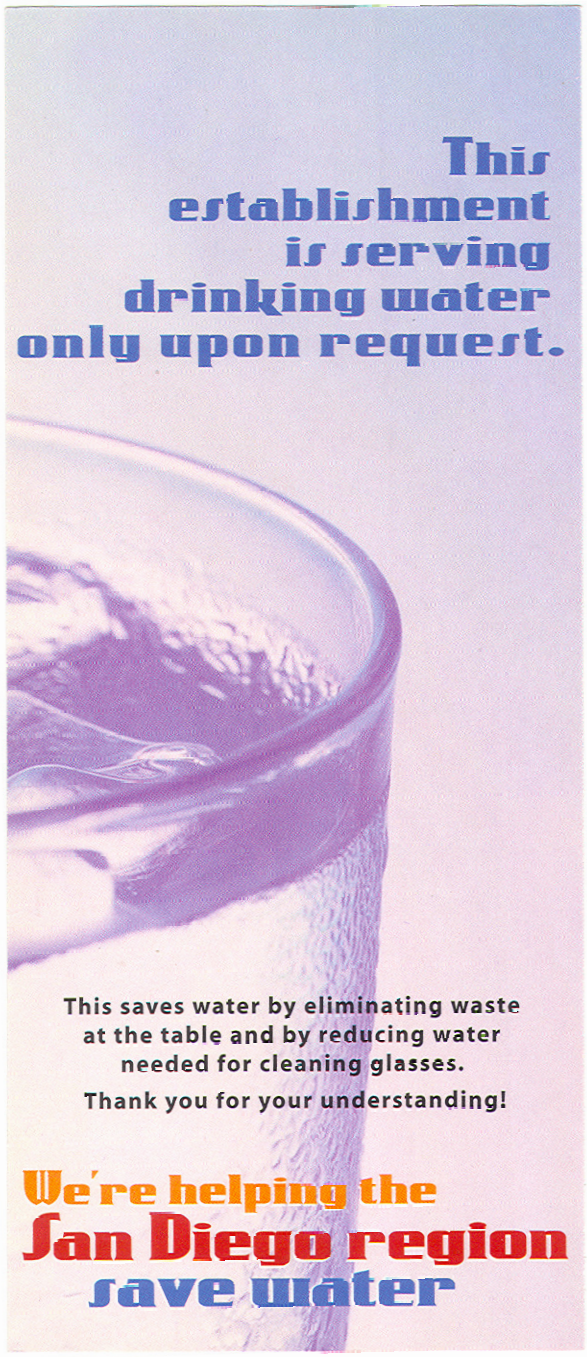
This establishment is serving drinking water only upon request.
This saves water by eliminating waste at the table and by reducing water needed for cleaning glasses.
Thank you for your understanding!
We're helping the San Diego region save water

How To Keep COOKING GREASE Out of the Drain

You Can Help Prevent Sewer Spills

Cooking Grease

is one of the primary causes of residential pipeline and City sewer main clogs resulting in sewer spills throughout the Metropolitan Wastewater Sewerage area. The spilled sewage eventually reaches San Diego's bays, rivers, and beaches, causing unsafe conditions and temporary closures.

All cooking oils disposed of improperly can cause problems in the sewer system. These include:

- ✓ frying oil
- ✓ salad oil
- ✓ meat drippings
- ✓ bacon fat
- ✓ greasy leftovers

Important Facts

- Cooking grease coats pipelines similar to the way that fatty foods clog human arteries. The grease clings to the inside of the pipelines, eventually causing complete blockage.
- Costly home plumbing bills are often the result of grease-clogged pipelines. Residential pipelines clog easily since they are only 2"- 4" in diameter.

- Many people are unaware that pouring hot water and detergent down the drain only breaks up grease temporarily. Grease should NEVER be poured down the drain. If small amounts of grease accidentally get into your drain, flush immediately with COLD water.

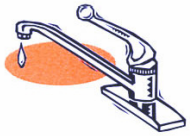

- Flushing grease down the toilet also causes sewer backups.

By following a few simple steps, you can help prevent costly sewer spills in the future.

Step 1

All **cooking oil** should be poured into an old milk carton, frozen juice container, or other non-recyclable package, and disposed of *in the garbage,*

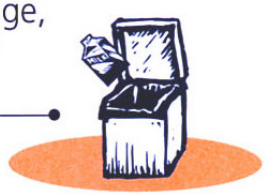

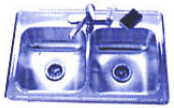

not down the drain.

Step 2

Dishes and pots that are coated with greasy leftovers, should be wiped clean with a disposable towel prior to washing or placement in dishwashers.

Step 3

Instead of placing fat trimmings from meat in the garbage disposal, put them in a trash can. *ALWAYS* put cooking grease containers and greasy towels in a plastic bag before disposing of them in your trash bag. *NEVER* dispose of cooking grease directly into your automated trash container.

Other Causes...

- The continual flow of nutrient-filled water found in pipelines attracts tree roots through pipe joints and manholes. The roots eventually grow, causing separation of the pipeline joints or blockages in the pipe. Always avoid planting trees and shrubs near residential and City sewer pipelines.
- Rocks, debris, power outages, vandalism, rain and construction are also contributing factors to sewer spills.

About MWWD

The Metropolitan Wastewater Department (MWWD) processes approximately 180 million gallons per day generated by 2 million people within 16 cities and districts that comprise the Metropolitan Sewerage System.

Fact sheet information taken from material produced by San Diego MWWD. Information was intended for residents, but much of it is also applicable to businesses.

Cómo mantener la

GRASA de COCINAR

fuera del desagüe

Usted puede ayudar a prevenir derrames en los alcantarillados

La Grasa de la Cocina

Una de la causas principales de las obstrucciones en el sistema municipal de alcantarillado y las tuberías residenciales que ocasionan derrames en los alcantarillados en todo el Sistema de Aguas Residuales del Área Metropolitana. Las aguas negras derramadas llegan eventualmente a las bahías, ríos y playas de San Diego causando condiciones inseguras y cierres temporales.

Todas las grasas que se desechen inadecuadamente pueden causar problemas en el sistema de alcantarillado. Entre estas grasas están las siguientes:

- ✓ el aceite de freír
- ✓ el aderezo para ensaladas
- ✓ la grasa de carnes cocidas
- ✓ la grasa de tocino
- ✓ las sobras de comidas grasosas

Datos Importantes

- La grasa de cocinar cubre las tuberías de una forma similar a la manera como los alimentos grasosos obstruyen las arterias humanas. La grasa se pega a la parte interior de las tuberías, causando eventualmente bloqueos completos.
- Con frecuencia las costosas facturas por trabajos de plomería en el hogar son la consecuencia de tuberías obstruidas por la grasa. Las tuberías residenciales se obstruyen fácilmente puesto que sólo tienen de 2 a 4 pulgadas (5 a 10 cm) de diámetro.

- Muchas personas ignoran que vertiendo agua caliente y detergente al desagüe sólo corta la grasa temporalmente. La grasa NUNCA debe echarse en el desagüe. Si pequeñas cantidades de grasa caen accidentalmente dentro de su desagüe, hágalas bajar inmediatamente con una descarga de agua FRÍA.

- Descargar grasa por la tasa también causa obstrucciones en el alcantarillado.

Siguiendo unos cuantos pasos sencillos,usted puede ayudar a prevenir futuros derrames costosos en el alcantarillado.

Paso 1

Todos los aceites de cocinar deben echarse dentro de un envase viejo de leche, un envase de jugo u otro empaque no reciclable y desecharse *en la basura,*

no por el desagüe.

Paso 2

Los platos y ollas que estén cubiertos con sobras grasosas deben limpiarse con una toalla desechable antes de lavarlos o colocarlos en la máquina lavaplatos.

Paso 3

En lugar de colocar recortes de grasa de la carne en el triturador de basura, colóquelos en el bote de basura. *SIEMPRE* ponga los recipientes de aceites o grasas de la cocina y las servilletas grasosas en una bolsa de plástico antes de desecharlos en su bolsa de basura. *NUNCA* deseche los aceites o grasas de la cocina directamente en su bote de basura.

Otras Causas...

- El flujo continuo de agua llena de elementos nutritivos que se encuentra en las tuberías atrae a las raíces de los arboles a través de las uniones y en los registros de acceso de la tubería. Las raíces eventualmente crecen causando la separacíon de las uniones de la tubería. Los residentes y negocios de San Diego deben evitar plantar árboles y arbustos cerca de las tuberías residenciales y las tuberías del sistema municipal de alcantarillado.
- Las piedras, escombros, interrupciones del suministro eléctrico, actos de vandalismo, lluvias y obras de construcción son otros factores que contribuyen a la obstrucción de las tuberías.

Acerca de MWWD

El Departamento Metropolitano de Aguas Residuales (MWWD-por sus siglas en inglés) procesa aproximadamente 180 millones de galones de aguas residuales, diáriamente que son generados por 2 millones de habitantes detro se las 16 ciudades y distritos que forman el Sistema Metropolitano de Alcantarillado.

Esta hoja de datos de información tomados de material producido por el MWWD de San Diego. La información ha sido destinado para los residentes, pero muchos de ellos también es aplicable a las empresas.

Grease Interceptors and Grease Traps

Grease traps and grease interceptors are the most common types of grease control devices, which reduce discharges of grease to the sanitary sewer system. The grease trap prevents excess grease from getting into the sewer system from existing plumbing lines within facilities. Traps are small and are usually installed inside a facility. Generally, they range in size from 20 gallons per minute (gpm) to 50 gpm.

Many high-volume or new establishments use grease interceptors, which are larger than the traps and are installed underground, outside of a facility. Grease is actually "intercepted" in these concrete tanks before it reaches the City sewer main. Grease interceptors should be accessible by three manhole covers and a sample box.

Interceptors and traps cause the flow of water to slow down, allowing the grease to naturally float to the top of the tank for easy removal.

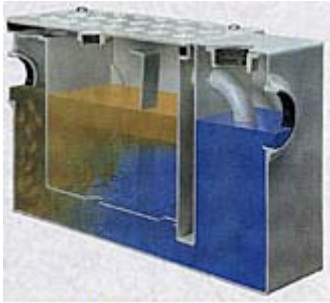

Grease Trap

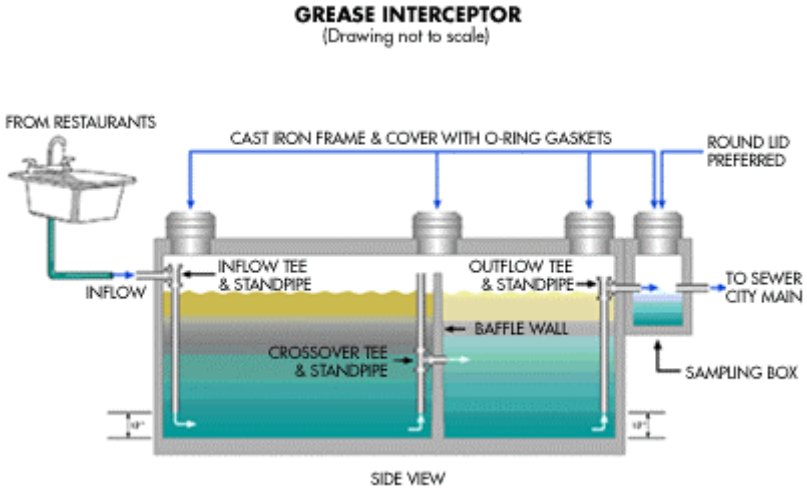

What's Cookin'

Eating and Drinking Establishments: Stormwater Best Management Practices

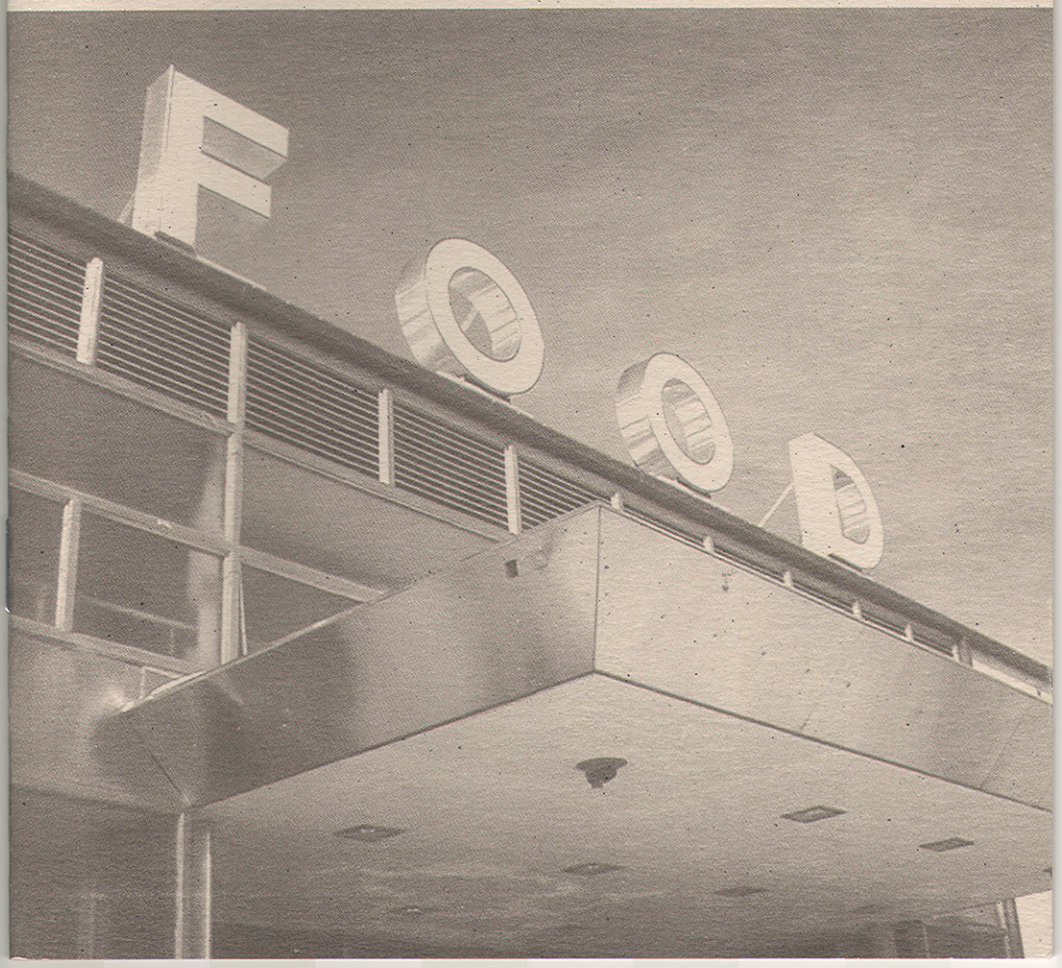

Dear Business Owner:

This training guide is being provided as a tool to assist eating and drinking establishments by outlining stormwater best management practices (BMPs) for owners, managers, and employees. BMPs are actions you can take to prevent or reduce pollutants from leaving your business. By using this training guide, you can proactively help to protect our waterways.

Clean eating and drinking establishments are important to everyone. However, when not properly handled and managed, routine activities that keep businesses clean, or that assist in food production, can contribute to the pollution of our watersheds. Pollution can harm aquatic habitats, human health, and ultimately can result in waterway closures. Being a successful business and an environmentally responsible eating and drinking establishment go hand-in-hand. The Food and Beverage Association, along with the County of San Diego, local city government agencies, and the Port District have developed minimum BMPs for eating and drinking establishments.

Please note that this training guide is not intended to provide requirements for all regulations that pertain to your business. The goal of this guide is to educate businesses on stormwater BMPs.

The Food and Beverage Association of San Diego County and the County of San Diego encourage you to share this information with all of your employees. To help ensure compliance, train all employees on a quarterly basis, review stormwater BMPs, and practice pollution prevention.

Thank you for being environmentally responsible and for keeping the San Diego region a desirable place for people to live and visit! Should you have any questions, please contact your local jurisdiction (see page 13 and 14 of this guide).

FOOD & BEVERAGE ASSOCIATION OF SAN DIEGO

Do you know where water in the street goes?

In Southern California, water running off our streets flows into storm drains. Some people think that this water goes to our local wastewater treatment plant.

They are mistaken!

Anything entering the storm drain flows untreated into our creeks, streams, and rivers and ends up in our lakes and the ocean. Polluted water harms plants and animals and makes us sick. It causes beach closures and makes our fish and shellfish unsafe to eat.

Our ocean and lakes are being polluted!

A storm drain outlet that empties directly into a local stream.

What is causing stormwater pollution?

The sanitary sewer system and the storm drain system are different systems. Storm drain openings are located outside in gutters, alleys, and streets. Materials that are spilled, dumped, or poured onto these surfaces can enter the storm drain system and eventually travel to our creeks, lakes, and the ocean without being treated.

Waste water from sinks and floor drains travel through the sewer system to a waste water plant where it is treated before it flows to the ocean.

To keep our water clean, it is very important that all water used in business activities be directed only to drains that lead to the sanitary sewer.

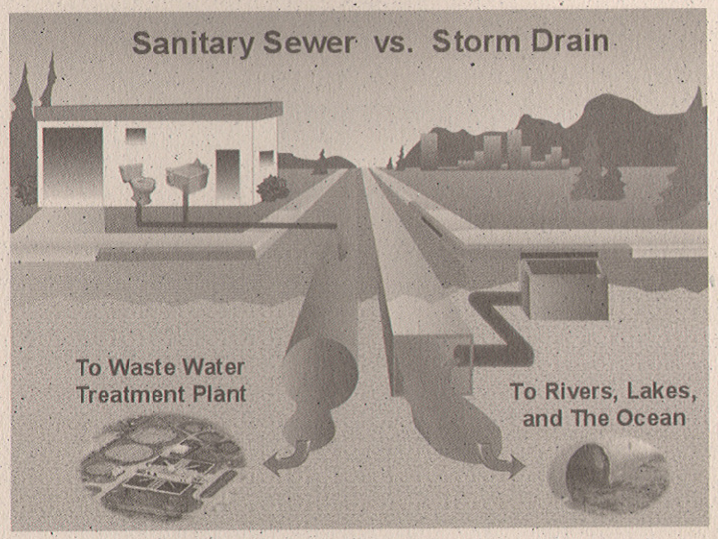

Waste water from toilets, kitchen sinks, mop sinks, dishwashers, kitchen floor sinks and drains goes to a treatment plant.

What can your business do to keep our water clean?

The County of San Diego, Unified Port District, and each of the 18 cities in the county adopted local stormwater ordinances to protect our water resources. These ordinances require your eating and drinking establishments to:

1. **Prohibit pollutants from entering the storm drain system**
2. **Use Best Management Practices (BMPs)**

As a business owner or operator, you are legally responsible to comply with these stormwater ordinances. Failure to comply with these ordinances could result in citations and fines.

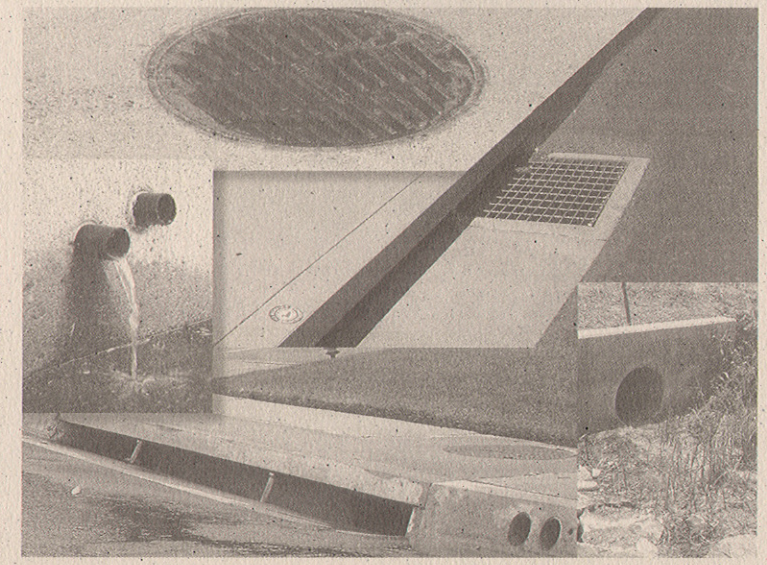

The storm drain system includes parking lots, sidewalks, streets, gutters, and drainage channels.

Best Management Practices and Your Business

Best Management Practices, commonly called BMPs, are actions you can take to prevent or reduce pollutants from leaving your eating and drinking establishment.

A key type of BMP is "pollution prevention". Pollution prevention methods help to limit the amount of pollutants that are produced, thus eliminating the need to manage or remove them. Pollution prevention BMPs can help your business run more efficiently and can save you money.

Inspect Your Business

This is a good way to make sure that your eating and drinking establishment complies with stormwater requirements.

- ✔ Inspect inside and outside areas of your business.
- ✔ Make sure that all pipes inside your business are connected to the sewer system.
- ✔ Locate and mark storm drain openings on a map and post it in a common work area. Show your employees where the openings are located.
- ✔ Review your current practices and look for areas where you can improve.
- ✔ Inspect grease traps or interceptors regularly.
- ✔ Record any changes that you make to help prevent stormwater pollution.
- ✔ Good record keeping is your key to compliance.

Inform Your Employees

Employees are more likely to respond to training when they understand the impact of their daily activities on water quality.

- ✔ Hold staff meetings to discuss the importance of keeping our water clean.
- ✔ Train all employees on stormwater BMPs and pollution prevention.
- ✔ Have your employees read and review this guide and sign and date the training log included on pages 17 and 18.
- ✔ Record other training sessions and include date, instructor, and attendees.
- ✔ Keep training records on site.
- ✔ Provide regular refresher trainings.
- ✔ Post BMPs and pollution prevention tips around your business.
- ✔ Teach employees on the proper use of spill clean-up materials.

Keep good training records and self-inspection checklists (see pages 15 and 16).

Cleaning and Disposal

Cleaning products and food waste can pollute our waterways if they are not handled and disposed of properly.

Spill Prevention and Clean Up

It is always best to prevent spills, but be prepared when they occur.

- ✔ Routinely maintain all equipment and fix all leaks.
- ✔ Keep spill clean-up materials handy such as near dumpsters, grease bins, and unloading areas.
- ✔ Use dry methods for spill clean up such as rags, absorbents, brooms, and vacuums.
- ✔ If a final rinse is needed, collect the rinse water using a mop or a wet vacuum. Pour the rinse water into a mop sink or a floor drain connected to the sewer.
- ✔ Clean up the used absorbent and place in the trash.
- ✔ Report any spill that cannot be cleaned up or contained before entering the storm drain. To report spills and discharges, call the Regional Stormwater Hotline at **(888) 846-0800**.

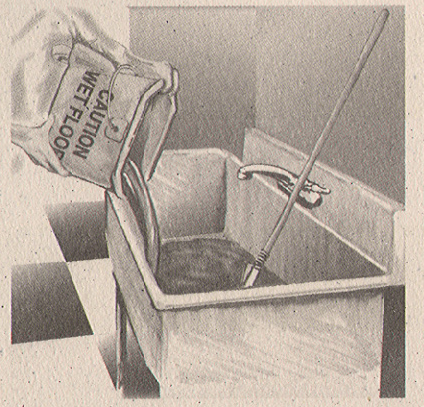

Pour all wash water to the sewer and not to the storm drain system.

Inside Areas

- ✔ Sweep and mop floors daily.
- ✔ Wash floor mats, kitchen mats, filters, and garbage cans in a mop sink, janitors sink, or near the kitchen floor drain.
- ✔ Never clean equipment outside where water may flow to an unprotected storm drain.
- ✔ If floor mats are too big to clean indoors, contract with a mat-cleaning service or clean them in an area that drains to the sewer.
- ✔ Pour rinse water containing soap, bleach, and disinfectants to a mop sink or sewer.

Outside Eating Areas

- ✔ Sweep or vacuum litter and food waste daily.
- ✔ Cover storm drain openings before wet cleaning, such as pressure washing.
- ✔ Contain and collect all wash water and dispose of it properly. Contact your local sewer agency for discharge requirements.

Wash floor mats in an area that drains to a sewer and not to the storm drain system.

Grease Management

Grease can collect in the sewer lines and create sewer blockages that cause sewage spills into the storm drain system.

- ✔ Install a grease trap or interceptor whenever possible or as required by a municipal sewer agency.
- ✔ Regularly clean grease traps and interceptors.
- ✔ Contract with a grease hauler to regularly service and empty your grease waste.
- ✔ Grease storage area should be regularly cleaned and inspected.
- ✔ Make sure grease bins are always tightly closed.
- ✔ Store grease bins on level ground and secure to prevent bins from tipping over.

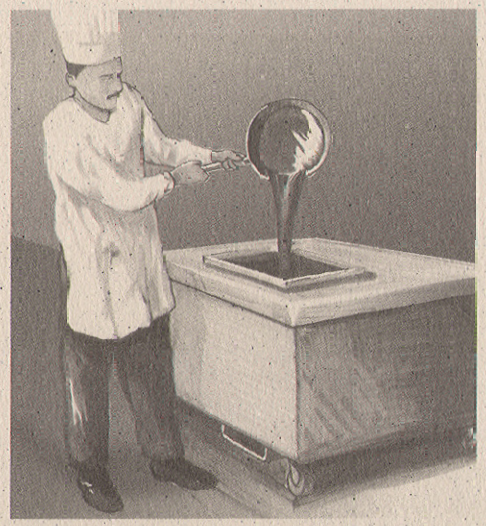

Collect bulk grease in containers and contract with a firm for recycling.

Dumpster and Unloading Areas

Liquid and solid waste from leaking trash containers and unloading areas can flow into storm drains.

- ✔ Sweep up food particles, cigarette butts, and litter around dumpsters and unloading areas regularly.
- ✔ Put trash and debris in tied plastic bags before placing into the dumpsters.
- ✔ Dispose of liquid waste into the sanitary sewer.
- ✔ Keep dumpster lids closed and locked to prevent illegal dumping.
- ✔ Do not hose out dumpsters.
- ✔ Call your solid waste hauler when dumpsters are leaking, need cleaning, or repair.

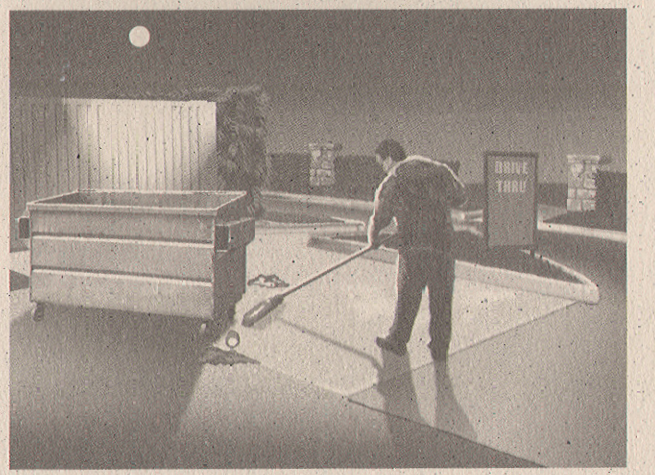

Use dry methods for cleaning up spills and leaks such as rags, absorbents, brooms, and vacuums.

Grounds

Customers are more likely to use a trash can if your property is kept neat and clean.

- ✔ Routinely sweep and clean parking lots and paved areas around your eating and drinking establishment.
- ✔ Provide trash cans with lids in your parking lot to discourage littering.
- ✔ Post "No Dumping or Littering" signs around your property.
- ✔ Sweep up dirt, leaves, and clippings on walkways, street, and gutters.
- ✔ Apply pesticides and fertilizers according to label instructions and do not apply before a rain event. Try using less toxic alternatives.
- ✔ Adjust sprinkler heads properly to avoid over-watering and runoff.
- ✔ Clean the rooftops of your buildings at least once before the rainy season.
- ✔ Cover any materials stored outside and on the roof.

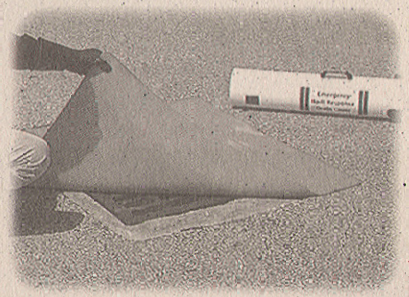

Prevent waste water from entering storm drains by using plastic sheeting or other storm drain type covers.

Recycling and Pollution Prevention

Conserve water. Eating and drinking establishments in San Diego County use millions of gallons of water each day for daily activities.

- ✔ Use proper storage and "first-in, first-out" for food materials.
- ✔ Post water conservation signs around faucets.
- ✔ Purchase recycled products or products with a high-recycled material content.
- ✔ Contact your local solid waste hauler for recycling options and bins.
- ✔ Start a recycling program and make sure recycling bins are easily accessible to employees.

Paper, cardboard, glass, aluminum, tin, and #1 and #2 plastics can easily be recycled.

How to Reach Us

County of San Diego,
Department of Environmental Health,
Food and Housing Division:
For any questions regarding eating and drinking establishments call **(619) 338-2379** or **(800) 253-9933**

Regional Stormwater Hotline

To report spills and discharges to the storm drain system, call **(888) 846-0800**

General Information

For additional information regarding water quality in the San Diego region, please use the resources listed below.

(888) 846-0800 **www.projectcleanwater.org**
(888) THINK-BLue **www.thinkbluesd.com**

Local Stormwater Program Information

Stormwater and BMP requirements may vary by jurisdiction. Please contact your jurisdiction for questions or if you would like additional information. Updated phone numbers are posted on the **www.projectcleanwater.org** website.

Carlsbad	(760) 602-2799
Chula Vista	(619) 397-6111
Coronado	(619) 522-7380
County of San Diego (Unincorporated Communities)	(888) 846-0800
Del Mar	(760) 753-1120
El Cajon	(619) 441-5580
Encinitas	(760) 633-2632
Escondido	(760) 839-4668
Imperial Beach	(619) 628-1369
La Mesa	(619) 667-1134
Lemon Grove	(619) 825-3810
National City	(619) 336-4389
Oceanside	(760) 435-5800
Poway	(858) 679-4228
San Diego	(619) 235-1000
San Diego Unified Port District	(619) 686-6254
San Marcos	(760) 752-7550
Santee	(619) 258-4100
Solana Beach	(858) 720-2400
Vista	(760) 726-1340

Self-inspection Checklist	Done	Date
Employees have reviewed this guide and have been trained on stormwater BMPs.		
Employees have been shown how to properly use spill clean-up materials.		
Spill clean-up materials are readily available around your business in case of a spill.		
Storm drain openings have been located and marked.		
"No littering" signs and pollution prevention tips have been posted.		
Brooms, vacuums, and rags are available and are used instead of wet cleaning methods.		
Storm drain openings are protected and wash water is collected if water is used outside.		
Wash water from filters, garbage cans, kitchen and floor mats drain only to the sewer.		
All wash water and rinse water are drained to the sewer.		
All indoor drains, sinks, dishwashers, and food equipment drain to the sewer.		

Self-inspection Checklist	Done	Date
Grease traps / interceptors are installed as required by sewer agency and serviced regularly.		
Grease bins are kept tightly closed and regularly serviced by a licensed grease hauler.		
Dumpsters and grease bins do not leak and are in good shape.		
Dumpster and other waste containers are kept closed when not in use.		
Dumpster and grease bin areas, parking lots, and drives are cleaned regularly using dry methods.		
Recycling program has been established and recycling bins are accessible.		
Material stockpiled outside and on the roof are properly covered.		
Hired landscapers and contractors are familiar with stormwater regulations.		
Irrigation system is properly adjusted to prevent over-watering and runoff.		
Storm drains are kept free of trash, leaves, and dirt.		

Training Log

Have your employees **sign** and **date** this training log.

Employee Name	Date

Training Log

Employee Name	Date

Thank you to the City and County of Santa Barbara for the original format.

The Green Wrench Guide

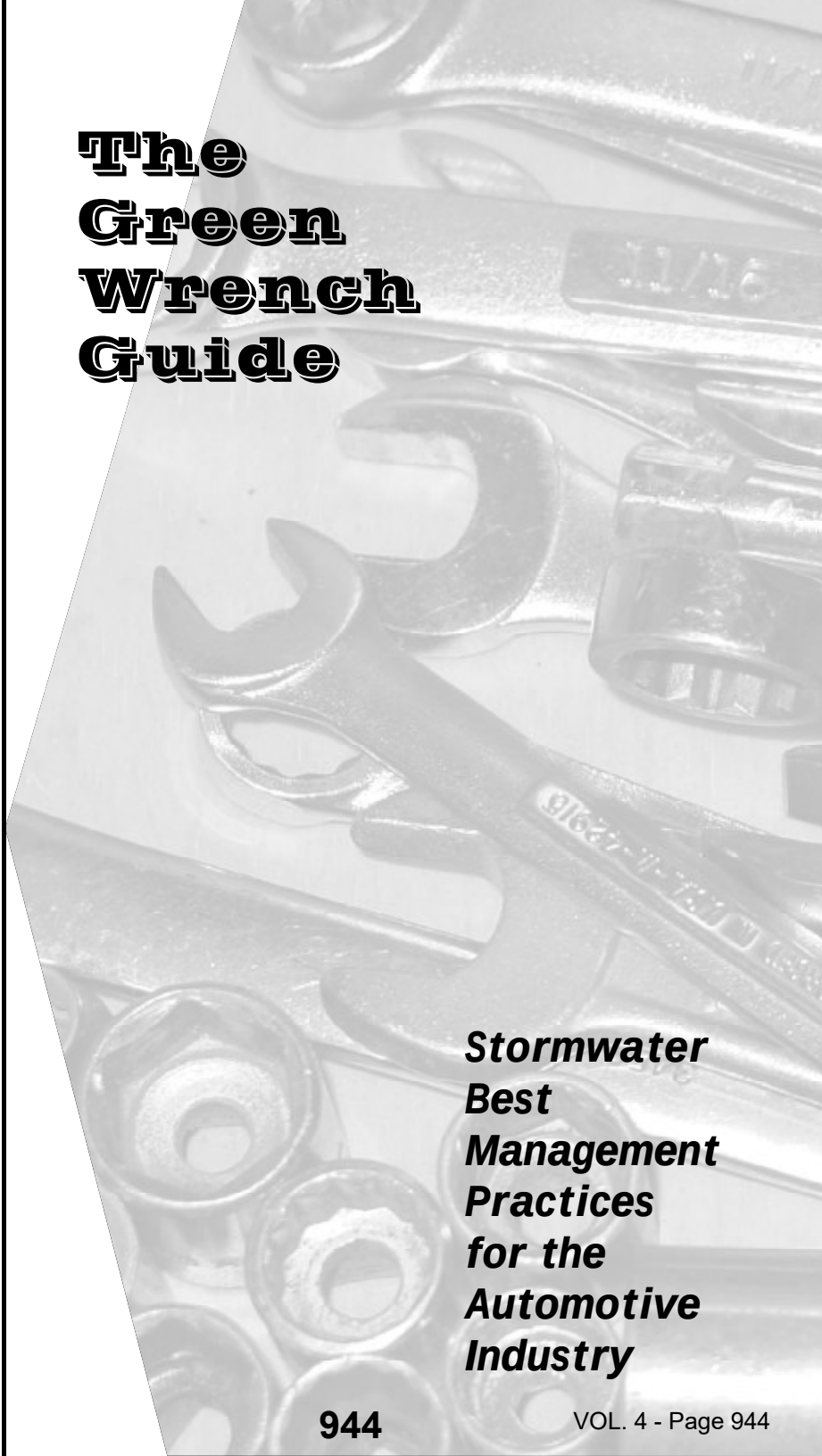

Stormwater Best Management Practices for the Automotive Industry

Definitions

Best Management Practices (BMPs):	Techniques or controls used to prevent or reduce the discharge of pollutants into stormwater, receiving waters, or the stormwater conveyance system.
Dry Cleaning Methods:	Methods of cleaning surfaces that minimizes the use of water. Examples include sweeping, vacuuming, and using hydrophobic mops and rags.
Illegal Connection:	An unauthorized pipe, facility, or other device connected to the storm drain system or receiving waters. Devices that convey pollutants may be illegal even if they were permitted at the time of installation.
Illegal Discharge:	The unauthorized discharge of pollutants or non-stormwater into the stormwater conveyance system or receiving waters.
Pollutants:	Anything that can cause or contribute to water quality degradation.
Pollution Prevention:	Practices that minimize or eliminate the generation of pollutants at the source.
Receiving Waters:	Any water bodies including the Pacific Ocean, lakes, streams, lagoons, rivers, reservoirs, and intermittent waters such as vernal pools and seasonal dry creeks.
Stormwater Conveyance System (storm drain system):	Any public or private drainage system (non-sewage) including streets, curbs, gutters, inlets, ditches, pipes, channels, culverts, streams, etc.

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Thank you to The City of San Francisco for the original Green Wrench Guide concept.

Background

What is Stormwater Pollution

When water flows over work areas, parking lots, streets, and other surfaces, it picks up pollutants and carries them into the storm drain system. This system is designed to prevent flooding by transporting water away from urban areas. Water and all the contaminants that it collects eventually flow without treatment through the storm drain system to our streams, lakes, and the ocean where we swim and fish. This polluted runoff harms inland freshwater wildlife and habitats, and in some cases causes, beach closures and makes our fish and shellfish unsafe to eat.

The Storm Drain System and the Sewer System are NOT Connected

In San Diego County, wastewater and surface runoff are discharged into two separate underground systems. Wastewater that is disposed to a toilet, sink, or a piped sewer drain flows into the sanitary sewer system where it is filtered and treated. Water runoff that leaves your business via driveways, sidewalks, parking lots, streets, gutters, storm drain inlets, drainage ditches, and concrete channels flows into a separate storm drain system. Anything that enters the storm drain system eventually flows untreated and unfiltered into our creeks, bays, lagoons – and ultimately the ocean. The things you do at work are directly connected to the health and safety of our citizens and the environment.

Your Responsibilities

As required by federal and state laws, the County of San Diego, the Unified Port District, and each of the 18 incorporated cities in the County have adopted local stormwater management ordinances to protect our water resources. *These ordinances prohibit the discharge of pollutants into the storm drain system.* Pollutants typically associated with automotive maintenance and repair activities include antifreeze, fuels, waste oils, solvents, and paints. Other pollutants commonly contributing to stormwater pollution include sediment, fertilizers, pesticides, and litter. As a business owner or operator, you are legally responsible for ensuring that these and any other potential stormwater pollutants are properly managed. To do so, you will need to select and use Best Management Practices that are specific to your business activities.

A storm drain outlet which flows unfiltered directly into a local stream.

Best Management Practices (BMPs)

Best Management Practices, commonly called BMPs, are actions you can take to prevent pollutants from leaving your facility. In general, there are two main types of BMPs:

- **Source control BMPs** keep pollutants from entering runoff. Examples include preventive maintenance and routine sweeping.

- **Treatment control BMPs** remove pollutants from runoff before it reaches the storm drain system. Common examples are storm drain filters and oil / water separators.

Source control BMPs are often preferable because they are usually simpler and more cost-effective. One of the main types of source control BMPs is “pollution prevention”. Pollution prevention methods (process changes, materials substitution, waste reduction) help to limit the amount of pollutants that are generated, thus eliminating the need to manage or remove them. Pollution prevention BMPs can help your business to run more efficiently and can save you money.

Using the BMPs described in this booklet will help you to satisfy regulatory requirements and to preserve and protect San Diego’s waterways. Successfully meeting this challenge will require the active participation of all employees at your business. To assist your employees in understanding these requirements, please have them read and review this Green Wrench Guide. Also have your employees sign and date the training log included on pages 19 and 20 of this guide so that you will have a record of their training activities.

BMPs and Your Business

This guide is designed to help you think about ways to manage potential stormwater pollutants associated with your business activities. It provides information on minimum requirements, and includes suggested pollution prevention tips for the automotive industry. It is organized according to the following activity types:

- **Facility Audits**
- **Employee Training**
- **Spill Management and Reporting**
- **Vehicles and Equipment**
- **Good Housekeeping**
- **Hazardous Waste Recycling and Treatment**

This guide is not intended to address all regulatory requirements pertaining to your business. Local jurisdictions may have additional, more specific stormwater BMP requirements. Pages 17 and 18 of this guide list additional contact information where you can obtain more information on stormwater and other regulatory requirements.

Thank you for helping to keep the San Diego region a great place for people to live and visit!

Facility Audits

Conducting your own facility audit is the best way to make sure that you stay in compliance with stormwater requirements. This can also save you money by identifying process and procedural improvements (waste prevention, etc.) to make your business activities more efficient. Be sure to address the following key areas during your audits:

- **Illegal Connections** - Inspect your business for connections that may convey pollutants to the storm drain system or receiving waters. An illegal connection is an unauthorized pipe, facility, or other device connected to the storm drain system, and may be illegal even if it was permitted at the time of installation.

- **Inlet and Discharge Points** - Identify the location of storm drain inlets on or down-gradient of your business or property. Mark these locations on a facility map and keep it posted in a common work area. Ensure that employees are shown these areas during training sessions.

- **Review of Activities** - Identify and use specific BMPs for activities with the potential to cause spills or releases of pollutants (oil, grease, fuel, etc.). Use the BMPs presented here as a guide for compliance, but don't stop there. Continue to seek out other sources of BMP information through the internet, professional associations, industry publications, etc. – you can never know too much.

- **Documentation** - Document any corrective action taken after your audit. Documentation is your key to demonstrating compliance. Be sure to include revised business practices and procedures in your employee training.

Employee Training

An effective stormwater management training program promotes employee ownership of problems and solutions. Employees are more likely to respond to training when they understand the impact of their daily activities on water quality. By involving your employees, their feedback will help implement needed actions to reduce stormwater pollution.

- Train all employees on stormwater BMPs and pollution prevention. Maintain training records on site; record the date of each training session and include a sign-in list of those who attended. Perform refresher trainings on a regular basis.

- Post signs around your shop reminding employees of BMPs and pollution prevention tips. This will also help to create awareness for your customers.

- Train employees about the proper use, handling, and disposal of all hazardous materials. Make sure all employees have current licensing and certification for their specific job duties.

- Teach employees how to control, contain, and clean up spills. Demonstrate how to properly use spill response kits.

You can stay informed about current regulations by joining trade associations and subscribing to trade journals and magazines. At trade association meetings and workshops, you will have the opportunity to learn about new pollution control practices and to network with others in your industry. Being involved will help you share ideas with others and will keep your training program up to date.

Spill Management and Reporting

It is always best to prevent spills, but be ready when they occur. Keep spill kits readily available, preferably near work areas where spills are most likely to occur. Make sure all employees know where these materials are kept and how to properly use them to contain and immediately clean up spills. Whenever possible, use dry methods such as sweeping, vacuuming, mopping or absorbents (if absorbents are used, they may have to be disposed of as a hazardous waste). Spilled hazardous materials (antifreeze, gasoline, solvents, etc.) need to be managed as hazardous wastes. Make sure your employees are aware of any special requirements that apply to hazardous material disposal.

Use the following guidelines within 24 hours of occurrence for reporting spills:

- Report any spill or discharge that cannot be completely contained or cleaned up prior to entering the storm drain system. To report spills and discharges, call the Regional Stormwater Hotline at **(888) 846-0800**.

- If the spill involves hazardous substances, call the Department of Environmental Health (DEH), Hazardous Materials Division at **(619) 338-2284**.

Always call **911** if the spill presents an immediate threat to public health or the environment.

This section describes core BMPs for vehicle fluid management, engine and parts cleaning, vehicle and equipment washing, and body repair and painting. No matter which of these activities you are doing, it is important to always protect storm drain inlets on or down-gradient of work areas. Cover inlets with plastic or other impermeable material to prevent the entry of spilled fluids or wash water. Tape or weigh down the edges to keep the protective material in place.

Vehicle Fluid Management

Antifreeze, waste oil, and used solvents are hazardous wastes and must be stored, managed, and disposed of in accordance with all local, state, and federal laws.

- Whenever possible, drain vehicle fluids indoors or within covered areas, and only over floors that are constructed of a non-porous material such as concrete. Asphalt and dirt floors are not acceptable because they absorb spilled or leaked fluids.
- Use drip pans, containers, or other methods of drip and spill containment.
- Take extra precautions to prevent spills while draining fluids from vehicles. Transfer waste fluids to a labeled waste storage container as soon as possible.

- Provide drip pans under stored vehicles and those with known leaks. Drain fluids from disabled or stored vehicles as soon as possible to prevent leaks and spills.

- Transfer any fluids from drip pans or collection devices to designated waste storage areas regularly.
- Store vehicle fluids in separate, sealed, and leak-proof containers.

Vehicle & Equipment Washing

- Never discharge wash water or rinse water to a storm drain system or receiving water. Wash vehicles and equipment in designated areas. Use wash racks whenever possible.
- Use a spray nozzle or rinse bucket to conserve water and minimize discharge water.
- Whenever possible, use biodegradable soaps.
- Consider the use of a wash water recycling system to minimize wastewater from car washing.
- Use an oil / water separator or similar treatment system to remove oil, grease, and solids when discharging to the sanitary sewer.
- Use a commercial car wash facility if you are not able to meet the minimum standards described in this guide.
- Contact your local sewer agency for discharge information to the sanitary sewer. Use of oil / water separators and wash water recycling systems may have special discharge requirements.

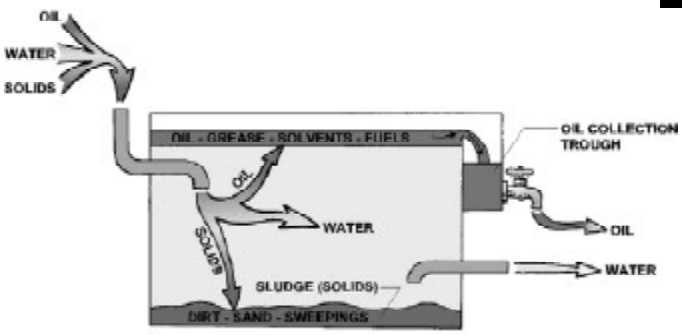

OIL/WATER SEPARATOR

An oil / water separator is designed specifically to remove petroleum products, and can also remove solids. As the mixture enters the separator, the vehicle fluids float to a collection trough and the water flows into the sewer system. Solids settle to the bottom of the separator. Bottom sludges are often contaminated with heavy metals and other pollutants and must be managed as a hazardous waste.

Engine and Parts Cleaning

- Designate specific areas in your service bays for parts cleaning. Do not wash or rinse parts outdoors.
- Use aqueous cleaning solutions instead of solvents whenever possible. Recycle used solutions through a licensed hazardous waste hauler.
- Avoid using hose-off degreasers; never allow runoff to enter the storm drain system. Instead, brush off loose debris and use damp rags to wipe down parts. Manage used rags through a rag service or as hazardous waste.
- Clean parts in self-contained sinks or drum units when working with solvents. Inspect part washing units daily for leaks and make repairs immediately.

- Allow parts to drain over the solvent sink or drum, rather than allowing the solvents to drip or spill onto the floor. Never discharge the rinse solution into the sewer system.

- Recycle wastewater from steam cleaning or pressure washing activities. Discharges of wash water into the storm drain system are prohibited.

Body Repair and Painting

- Conduct work indoors or under cover when possible. If this cannot be done, take other precautions to prevent discharges from work areas.

- Inspect damaged vehicles for fluid leaks and use drip pans where necessary.

- Regularly clean work areas using dry methods. Use a shop vacuum or sweep up dust and debris. Do not vacuum flammable liquids.

- Allow wet sanding debris to dry overnight on the shop floor and sweep or vacuum it the next day. Liquid must not be discharged to the storm drain system. Consider investing in sanders with an attached vacuum system to capture dust at the source.

- Conduct painting only in approved, enclosed areas equipped with vacuum hoods and filters.
- Minimize paint and thinner waste by carefully calculating paint needs based on surface area and by using the proper sprayer cup size.
- Collect water used to control over-spray or dust in the paint booth and recycle or dispose of it properly. Clean spray guns in a self-contained unit and recycle or properly dispose of the cleaning solution.
- Check with your local fire agency and the Air Pollution Control District for additional information and permit requirements for spray booths, coatings, and emissions.

Good Housekeeping

"Good Housekeeping" refers to the routine practices you can use to maintain a clean work environment, and to prevent pollutants from entering our waterways. These practices include the use of dry cleaning methods for floor and paved surfaces, waste management practices, and grounds maintenance.

Floors and Paved Surfaces

- Sweep or vacuum your shop floors frequently. Use mops instead of hosing down work areas.
- Consider using a three mop system as described below:

1. Remove any spilled oil using a hydrophobic (oil absorbing) mop and wring out oil into a bucket labeled "Oil Only". Add the waste oil from this bucket to your waste oil drum or tank where it can be recycled. Keep the oil mop and the "Oil Only" bucket readily available in the work area for any future oil spills.
2. If antifreeze is spilled, use a regular mop and wring out the antifreeze into a bucket labeled "Coolant Only". Recycle the spilled material with other used antifreeze. Use rags sparingly for small spills or to dry a work area. Use a rag service or manage the rags as a hazardous waste.

3. Use a regular mop and bucket with detergent as a final rinse and use water sparingly. Dispose of wash water to an oil / water separator or the sewer.

- Never pour mop water onto paved areas, such as parking lots, sidewalks, street gutters, or storm drains.
- Oil / water separators must be regularly inspected and cleaned.
- Do not hose down fuel-dispensing islands; use only dry clean-up methods. Absorbent used for fuel spills should be promptly swept up and disposed of as hazardous waste.

Material and Waste Management

- Materials and waste such as fuels, solvents, batteries, and oils must be stored off the ground and in areas where they will not be exposed to rain water.
- If possible, provide overhead coverage for all outside hazardous materials or waste storage areas. If overhead coverage is not available, then cover stored materials with an impervious material such as a plastic tarp.
- Store batteries indoors and place used batteries in plastic trays to contain any potential leaks. Recycle used batteries regularly.
- Sweep parking lots and areas around your facility regularly. Do not hose down these areas. Provide trash cans with lids in your parking lot to discourage littering.
- Keep trash storage and disposal areas clean and free of debris. Inspect trash storage areas weekly. Maintain dumpsters and other containers in good condition and keep them securely closed when not in use.

- Contact your local solid waste hauler for recycling options and containers.
- Post “No Dumping or Littering” signs around your property.

Rooftops and Landscaped Areas

- Clean the rooftops of your buildings at least once before the rainy season. Cover any materials that are stored on the roof to protect them from rainwater.
- Maintain landscaped areas so that dirt and sediment do not reach the sidewalk or street.
- Apply pesticides and fertilizers according to label instructions and do not apply prior to rain. Consider using less toxic alternatives to pesticides and fertilizers whenever possible.
- Recycle or dispose of green waste properly.
- Properly berm and cover soil stockpiles.
- Ensure that sprinkler heads are adjusted properly to prevent over-irrigation and water runoff.

Hazardous Waste Recycling and Treatment

Please call the County of San Diego, DEH Hazardous Materials Duty Specialist at **(619) 338-2231** for incompatible waste storage and on-site hazardous waste treatment requirements.

Recycling

- Reuse and recycle solvents, paints, oil filters, antifreeze, motor oil, batteries, water, and lubricants whenever possible.
- Segregate wastes – it saves money! Combining different types of hazardous wastes will limit your recycling options and can be dangerous. A licensed hazardous waste hauler can provide information on hazardous waste storage and disposal costs.
- Label waste barrels and drums in accordance with all local, state, and federal laws and regulations. This will also help to remind employees to separate wastes and to recycle.

On-Site Waste Treatment

- Consider self-contained, zero discharge treatment alternatives that incorporate wastewater recycling.
- Choose treatment systems that are effective, but easy to maintain and repair.
- Properly maintain and service all pre-treatment equipment, including oil / water separators.

How to Reach Us

Regional Stormwater Hotline

To report spills and discharges to the storm drain system, call **(888) 846-0800**.

General Information

For additional information regarding water quality in the San Diego region, please use the resources listed below.

(888) 846-0800	**www.projectcleanwater.org**
(888) THINK-BLue	**www.thinkbluesd.com**

Local Stormwater Program Information

Stormwater and BMP requirements may vary by jurisdiction. Please contact your jurisdiction for questions or if you would like additional information. Updated phone numbers are posted on the www.projectcleanwater.org website.

Carlsbad . . . . . (760) 602-2799
Chula Vista . . . . . (619) 397-6111
Coronado . . . . . (619) 522-7380
County of San Diego
(Unincorporated Communities) . . . . . (888) 846-0800
Del Mar . . . . . (760) 753-1120
El Cajon . . . . . (619) 441-5580
Encinitas . . . . . (760) 633-2632
Escondido . . . . . (760) 839-6315
Imperial Beach . . . . . (619) 628-1369
La Mesa . . . . . (619) 667-1152
Lemon Grove . . . . . (619) 825-3810

National City	(619) 336-4389
Oceanside	(760) 435-5800
Poway	(858) 679-4228
San Diego	(619) 235-1000
San Diego Unified Port District	(619) 686-6254
San Marcos	(760) 752-7550
Santee	(619) 258-4100
Solana Beach	(858) 720-2400
Vista	(760) 726-1340

Other Agency Contacts

County of San Diego, Department of Environmental Health, Hazardous Materials Management Division:

To report hazardous materials and waste spills, call **(619) 338-2284**

To obtain general information on hazardous materials and waste requirements, call **(619) 338-2231**

Air Pollution Control District:

To obtain information on air emission requirements, call **(858) 650-4700**

Training Log

Have your employees sign and date this training log so that you will have a record of their training activities.

Employee Name	Date

Training Log

Employee Name	Date

project clean water

THINK BLUE
You're the solution to storm drain pollution.
Protecting our beaches, bays, and watersheds™

ATTACHMENT 5.2

IPM CARDS

Ants

Ants are one of the most prevalent pests in California. Although ants are annoying when they come indoors, they can be beneficial by feeding on fleas, termites, and other pests in the garden. While spraying chemicals inside the house may seem effective, it won't prevent more ants from entering your home, which is essential for control because most ants nest outside. Focus management efforts on excluding ants from buildings or valuable plants.

Make your house less attractive to ants:

- Caulk cracks and crevices that provide entry inside.
- Store attractive food in closed containers.
- Clean up grease and spills.
- Look for and remove indoor nesting sites, such as inside potted plants.
- Ant-proof kitchen garbage pails with sticky barriers such as petroleum jelly under the lip and pet dishes by placing them in a moat of water.
- Remove sweet food sources next to your house such as aphid-infested bushes and ripened fruit on trees.

When ants invade your house, take these steps:

- Sponge invaders with soapy water as soon as they enter.
- Plug up ant entryways with caulk or petroleum jelly.
- Remove infested potted plants.
- Clean up food sources.
- Rely on baits to control the ant colony.
- Indoor sprays are not usually necessary.

How and why baits work best:

When using bait, place it along ant trails and at nest openings. Worker ants will be attracted to bait and take it back to the nest where the entire colony, including queens, may be killed. The bait must be slow-acting so workers won't be killed before they get back to the nest. It may take several weeks for results to be evident. Just killing workers foraging in your home or garden does little to control the colony, because as few as one percent of a colony's foraging worker ants are able to provide sufficient food to support nestbound queens and larvae. Baits in bait stations or ant stakes are easiest to use and safest for the environment.

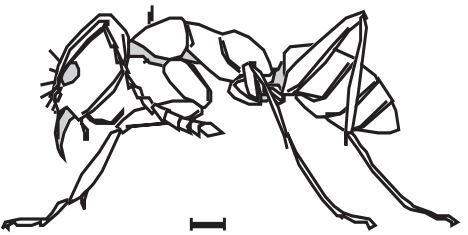

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*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

Learn more about San Diego regional water quality at: www.ThinkBlueSD.org & www.ProjectCleanWater.org. For more pest information visit the University of California IPM website at: www.ipm.ucdavis.edu or the UCCE Master Gardeners at: (858) 694-2860, Mon - Fri, 9 am to 3 pm

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It's the water that connects us!

Aphids

Almost every plant has one or more aphid species that occasionally feeds on it, but low to moderate numbers of aphids are usually not damaging in gardens or on landscape trees. Although aphids can curl leaves and produce sticky honeydew, they rarely kill plants and can often be washed off with water. When aphid numbers get high, natural enemies frequently feed on them, eliminating the need for pesticides. Insecticidal soaps and oils are less toxic pesticides that can be used when treatment is necessary.

Aphids are common in your garden because:

- Aphids like lush new growth. Don't over fertilize. Use organic fertilizers or slow-release products.
- Aphids build up on flowering plums, roses, tulip trees, crape myrtles, apples, and many vegetables. Expect aphids when you grow these plants.
- Ants protect aphids from their natural enemies. Keep ants off plants to get more benefit from these beneficial insects.

To reduce aphids:

- Prune out infested leaves and stems.
- Knock aphid populations off plants by shaking or spraying with a strong stream of water.
- Protect seedlings with covers or aluminum soil mulches.
- Wait for hot weather; most aphids are heat-intolerant and will be gone by mid-June.

Protect aphids' natural enemies:

- Lady beetles, both adults and larvae
- Lacewings
- Syrphid fly larvae
- Soldier beetles
- Parasitic mini-wasps that turn aphids into crusty mummies (See reverse for insect drawings)

Natural enemies of aphids such as lady beetles and lacewings will come into your garden naturally when aphids are abundant. Protect these good bugs by avoiding the use of insecticides that may be toxic to a broad variety of insects.

If insecticides seem necessary, use the safest products:

- Nonchemical pest control methods should be used first to manage aphid populations. However, if you feel insecticides are necessary, choose less toxic products.
- Insecticidal oils and soaps are the safest products. When properly used, these materials solve most pest problems.
- Oils and soaps work by smothering aphids, so application must be thorough. Don't apply to drought-stressed plants or when it is very hot. A few plants are sensitive to these products.
- Insecticidal soaps, soap-pyrethrum mixtures, or neem oils are often applied on vegetables or small bushes like roses.
- Narrow range oils, like parafinic, supreme or superior oils, are appropriate for larger trees.
- Oils and soaps don't kill aphids hidden within curled leaves. Prune these out. Systemic insecticides can kill hidden aphids, but they are much more toxic and not registered for use on garden vegetables or fruit trees.

aphid

lady beetle

parasitic mini-wasp killing aphid

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Cockroaches

HEALTHY GARDEN HEALTHY HOME

Cockroaches thrive in warm environments that provide food, water, and shelter. Roaches hide in cracks, crawl spaces, and other dark places during the day and come out at night to feed. Pesticide sprays alone will not control roaches and are not usually required. Baits provide better control. You must integrate several strategies to make your home a less roach-friendly environment. Thoroughness is essential for effective control.

Identify your cockroach species first:

- Effective management options vary according to species.
- Cockroach traps provide an easy way to catch roaches for identification.
- Control practices for outdoor invaders (American, oriental roaches) and indoor residents (brownbanded and German roaches) differ.
- For help with identification go to www.ipm.ucdavis.edu.

Remove food and water sources:

- Even tiny crumbs or liquids in cracks provide good food sources.
- Store food in sealed containers.
- Keep trash in containers with tight lids.
- Eliminate plumbing leaks.
- Vacuum cracks and crevices and clean floors and counters daily.

Remove roach hiding places:

- Seal cracks and other openings to prevent invaders from the outside.
- Seal cracks in false bottoms of cupboards and other indoor hiding places.
- Seal or clean up other areas where you find roaches or their egg cases hiding.
- Remove old newspapers, boxes, and other clutter in kitchens and bathrooms.
- The oriental cockroach hides outdoors under ivy and other shelter. Check to see if you have this roach and remove outdoor hiding places or bait.

Use traps to identify and track cockroach populations:

- Cockroach traps are available in hardware stores.
- Place traps on the floor around edges of walls, in cupboards and other places where you think roaches are foraging. Place bait stations at locations where you trap roaches.
- Check traps daily.
- Sticky traps with pheromones may provide some control of German cockroaches.

Using chemicals to control cockroaches:

- Avoid use of foggers, bombs, or aerosol sprays — they just disperse populations.
- Boric acid powder blown into cracks, crevices, hollow walls, under refrigerators, or other undisturbed hiding places is very effective (allow 7 days or more for an effect to be seen).
- Bait stations containing boric acid, abamectin, fipronil, or hydramethylnon placed near hiding places can be effective if other food sources are removed (allow 7 days or more for an effect to be seen). Replace stations as needed as long as roaches are being caught.
- Insecticide sprays alone do not give long-term control. They are not necessary if other methods such as baits and boric acid powder are combined along with cleanup and removal of hiding places.
- Contact a professional pest control operator for very serious infestations, but be sure they use an integrated program as described above.

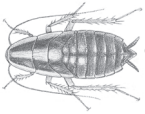

German cockroach nymph

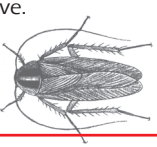

German cockroach adult

*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

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Earwigs

HEALTHY GARDEN HEALTHY HOME

While their prominent tail-end pincers may look ferocious, earwigs are not harmful to people. Earwigs may seriously damage seedling vegetables and chew holes in annual flowers, soft fruit, and corn silks, but earwigs also play a beneficial role by feeding on aphids and other insects. Nocturnal in habit, earwigs feed at night and hide during the day in dark, cool, moist places in the yard or within flowers or vegetables. To manage earwigs, reduce hiding places and moisture, and employ a vigilant trapping program.

Should you be concerned about earwigs in your garden?

- Yes, if you are growing vegetables, herbaceous flowering plants, sweet corn, or plants with soft fruits like strawberries and apricots.
- No, if your garden is primarily lawn, trees, and woody ornamentals or native plants.

Reduce outdoor hiding places:

- Eliminate dense undergrowth of vines, ground cover and weeds around vegetable and flower gardens.
- Prune away fruit tree suckers.
- Remove leaves, boards, boxes, trash, and other debris from planting areas.
- Move flower pots and other garden objects and structures that can harbor earwigs.
- Check plastic or organic mulches and remove them to limit earwig numbers.

Trap earwigs until they are gone!

- Trap earwigs with rolled newspaper, bamboo tubes, or short pieces of hose. Place these traps on the soil near plants just before dark, and shake accumulated earwigs out into a pail of soapy water in the morning. A low-sided can filled with oil and a drop of bacon grease or fish oil also makes a good trap. Daily trapping will reduce earwig populations to tolerable levels.

Other ways to reduce earwig problems:

- Drip irrigate where possible to reduce surface moisture.
- Keep earwigs out of stone fruit trees with a band of sticky substance like Tanglefoot, around the trunk, and harvest fruit as soon as it ripens.
- Insecticides should rarely be needed.

Inside the home:

Earwigs may seek refuge indoors when conditions outside are too dry, hot, or cold. Large accumulations of earwigs can be annoying but present no health hazards. When earwigs invade your home follow these steps:

- Sweep or vacuum up invading earwigs.
- Seal up cracks or other entry points.
- Remove debris from gutters and around entryways.
- Keep water and moisture away from structures.
- Replace white outdoor lights with yellow ones, which are less attractive to earwigs.
- Indoor application of pesticides is not recommended.

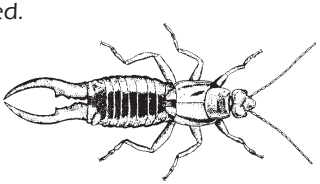

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Fleas

Fleas are particularly annoying to people and pets, especially during spring and early summer when their numbers tend to increase dramatically. The common flea in California is the cat flea. Despite its name, it attacks both dogs and cats and will also bite humans. To keep fleas out of your home, control fleas on your pet and regularly clean pet sleeping areas.

On the pet:

Recently, a number of very effective and safe new products for flea control on the pet have become available. Remember to supplement pet treatments with regular cleaning of your home and periodic combing with a pet flea comb to detect new infestations.

- Spot-on formulations are applied to the animal's coat, providing flea control for 1 to 3 months. Available from veterinarians or over-the-counter.
- Systemic flea control products, available from vets, are given as a pill or food additive. While they do not kill adult fleas, they prevent reproduction.
- Flea collars containing insect growth regulators (IGRs) give protection for up to 6 months on dogs and up to a year on cats. Be sure to choose collars containing methoprene or pyriproxyfen.
- Flea shampoos and soaps, powders and dusts, spray-on liquids, and dips are less effective and more hazardous to pets, people, and the environment than the three types of products above.

In the yard:

Outdoor treatment is rarely needed, but if your pet regularly sleeps outside and flea numbers are high, these areas can be treated with a spray containing pyriproxyfen. If possible, open sleeping areas to sunlight by removing low hanging vegetation. Immature fleas are unlikely to survive in areas with exposure to sunlight.

Inside the home:

Whether or not you are aware of fleas in your home, regularly vacuum and launder areas where your pet rests to avoid flea buildup. If you have a major flea problem, treat your pet with one of the options on the front of this card and follow the steps below.

- Locate heavily infested areas (usually areas where the pet rests) and concentrate treatment there.
- Wash throw rugs and pet bedding.
- Vacuum upholstered furniture, cleaning under cushions and in crevices.
- Vacuum carpets, especially beneath furniture.
- Use a hand sprayer or aerosol to treat all carpets and unwashable upholstered furniture with an insecticide that contains an IGR (methoprene or pyriproxyfen). This treatment kills larvae but not pupae, so fleas may continue to emerge for up to 2 weeks.
- Over the next 2 weeks vacuum regularly to remove adult fleas that emerge from pupae. Do not reapply pesticides.
- Seal vacuum bags and discard them so fleas don't escape.

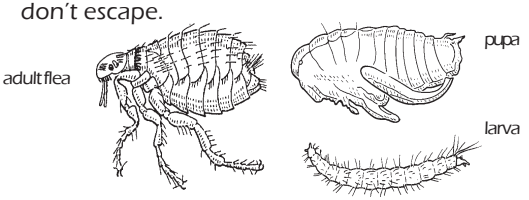

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Gardening with Good Bugs

HEALTHY GARDEN HEALTHY HOME

Most gardens contain far more types of good bugs,or beneficial insects, than pest insects. Beneficial insects and other organisms that kill pest insects are called natural enemies. In any pest management or plant care program, it is important to encourage these natural enemies by avoiding pesticides that kill them. You can also encourage beneficial insects by choosing plants that provide them with pollen, nectar, and shelter and keeping ants out of pest-infested plants. Learn to identify good bugs, both in their adult forms and immature (larval) stages.

Common good bugs found in California gardens include:

- Lady beetles: Both adults and larvae consume aphids.
- Lacewings: Lacewing larvae feed on many insect pests; adults are often seen around lights.
- Syrphid flies: Syrphid fly larvae consume aphids; adults hover around flowers.
- Parasitic mini-wasps: Many species of tiny wasps lay their eggs in pests like aphids or caterpillars; their hatching larvae consume the pest and kill it.
- Spiders: All spiders feed on insects or other arthropods and are beneficial in the garden.

(See reverse for drawings of good bugs mentioned above.)

What is Integrated Pest Management?

Integrated pest management (IPM) uses environmentally sound, yet effective, ways to keep pests from annoying you or damaging plants. IPM programs usually combine several pest control methods for long- term prevention and management of pest problems without harming you, your family, or the environment — IPM also reduces pollution in California waterways. Successful IPM begins with correct identification of the pest. Only then can selection of the appropriate IPM methods and materials be made.

Preferred IPM methods include:

- Planting pest-resistant or well-adapted plant varieties like native plants.
- Discouraging pests by modifying the way you design, irrigate, fertilize, and manage your garden.
- Altering the garden or home environment to deprive pests of the food, water, shelter or other requirements they need to thrive.
- Keeping pests out of the home and garden using barriers, screens, and caulking.
- Squashing, trapping, washing off or pruning out pests.
- Relying on good bugs in your garden to eat pests, thereby eliminating the need for insecticides that may end up in our waterways.

Turning to pesticides:

- Only use pesticides when non-chemical controls are ineffective and pests are reaching intolerable levels.
- Use pesticides in combination with the methods described above.
- Choose pesticides carefully so that the least toxic, most effective material is used to protect human health and the environment.

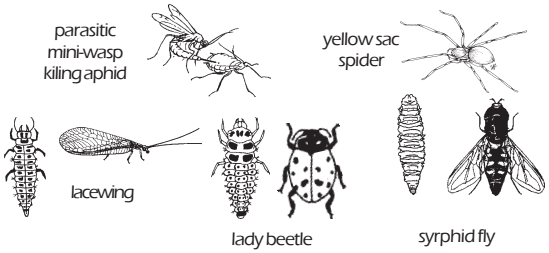

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Head Lice

HEALTHY GARDEN HEALTHY HOME

Head lice can infest anybody, but children are prone to infestations because they play closely and share items that come in contact with the head like hats, headphones, and combs. Head lice are not known to transmit any infectious diseases; they are more of a nuisance than a health risk. Children with head lice, however, are generally not allowed to attend school as long as nits are found in their hair.

Head lice facts:

- Head lice cannot hop, fly, or jump; they crawl. Lice spread only through direct contact with an infested object or person.
- Head lice spend their entire life in head hair and can only survive off a human head for about 1 or 2 days.
- A newly hatched louse must ingest blood within minutes of birth to survive.
- Head lice cannot live on family pets.
- Nits (eggs) that are more than 1 1/4 inch from the scalp probably are dead or have already hatched.

What to look for:

- Intense scratching on the back of the head or neck.
- Tiny white eggs (nits) glued to hair near the scalp.
- Small, rapidly crawling flat insects.

Four steps necessary to manage an infestation of head lice:

1 Use a head louse shampoo if you observe active lice or viable eggs.

- Avoid shampoo products containing lindane, which are available by prescription only. Pyrethrin and permethrin are safer, more effective, and less polluting to wastewater than lindane. Not all eggs will be killed.
- To avoid insecticides entirely, use soap shampoos that contain coconut or olive oils. Most soap shampoos kill all stages of the louse except the egg. Because they are not as effective as products containing pesticides, you must be sure to comb and repeat these shampoos four times at 3-day intervals. Successive shampooing kills newly hatched lice.

2 Remove nits from the head by combing with a specially designed nit comb.

- This step is the key to successful control. Repeat daily as long as you find live lice or nits within 1¦4 inch of the scalp. Use a metal comb specially designed for removing head lice and their eggs. Combs sold with head lice shampoos are not generally effective. Infested hair can also be cut out with small safety scissors.

3 Remove lice and nits from the household.

- Wash clothing and bedding of the infested person in hot water (at least 140°F) and dry in a hot dryer or have them dry cleaned. Place other items (earphones, bike helmets) in plastic and put in a freezer that is 5°F or lower for at least 10 hours. Clean any object that might have come in contact with the infested person's head (stuffed animals, car seats). Vacuum carpets and upholstery. Pesticide sprays are not recommended.

4 Check heads and remove nits daily until infestation is gone. Follow with weekly head checks to detect reinfestation.

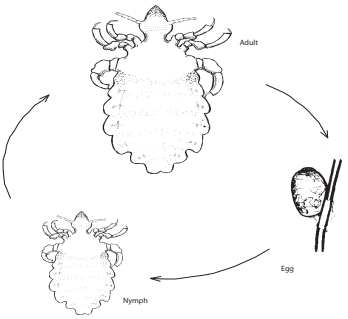

For more information see Pest Notes: Head Lice, available at Cooperative Extension offices and at www.ipm.ucdavis.edu

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Lawn Insects

HEALTHY GARDEN HEALTHY HOME

Contrary to popular belief, insects are not a common cause of residential lawn damage in California. Poor lawn care, especially improper watering and planting inappropriate grass species, are more likely causes of unhealthy or dying lawns. Disease-causing agents, excess orinappropriate use of chemicals such as fertilizer and herbicides, or dog urine also produce lawn damage resembling that of insects. Many insects in the lawn are beneficial. Never apply an insecticide unless a damaging level of a known insect pest is confirmed. Insecticides are only effective if applied at the right time and in the right manner. Some insecticides may kill good bugs too.

How do you know if insects are causing damage?

- Brown spots in lawns can be caused by over- or under-irrigation, plant disease, improper use of chemicals, or dog urine as well as insects.
- Confirm presence of insects before applying an insecticide. For grubs, dig around roots, for other insects perform a drench test. (See reverse.)

Keep your lawn healthy by:

- Planting grass species that do well in your area
- Irrigating deeply and infrequently
- Doing routine maintenance on sprinkler heads
- Applying only 3 to 6 pounds of actual nitrogen per 1000 square feet per year when fertilizing
- Aerating your lawn annually; remove thatch if it exceeds 1/2 inch
- Cutting only one-third to one-half of grass height at each mowing and keeping lawnmower blades sharp

See the UC Guide to Healthy Lawns at www.ipm.ucdavis.edu

If a damaging level of insects is confirmed, do the following:

- Choose an insecticide based on the pest you're targeting.
- Find out which insecticide ingredients target specific lawn insects:
  - *Bacillus thuringiensis* (Bt) kills only caterpillars, including cutworms, lawn moths, and skippers.
  - Insect-attacking nematodes control caterpillars or grubs.
  - Azadirachtin controls cutworms, armyworms, and larvae of lawn moths.
  - Imidacloprid is effective against young lawn grubs.
  - Pyrethroids (e.g., cyfluthrin, bifenthrin) are broadly toxic insecticides that kill chinch bugs, lawn moths, and cutworms, but also kill beneficial insects and should be avoided.
- Get help from UC Cooperative Extension.

HOW TO PERFORM A DRENCH TEST

- Mix 3–4 tablespoons of dishwashing liquid to 2 gallons of water.
- Evenly apply the 2 gallons to 1 square yard of your lawn.
- Monitor the area for 10 minutes and count the number of armyworms, cutworms, or lawn moth larvae that rise to the surface.
- Treat the area only if insect numbers exceed 5 armyworms or cutworms or 15 lawn moths per square yard.

chinch bug

sod webworm larva

cutworm larva

grub larva

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Safe Use & Disposal of Pesticides

HEALTHY GARDEN HEALTHY HOME

Pesticides are designed to be toxic to the pests they target — insects, weeds, and other unwanted home and garden invaders. Always read pesticide product labels carefully and follow all directions on proper use, storage, and disposal of empty pesticide containers. Product labels are your main source of information on how to use a product safely and legally. They include guidelines needed to protect you, your family, and pets. The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For the site nearest you in San Diego County call 1-877-713-2784 .

If you must use pesticides, follow these tips to reduce pesticide effects on your local waterways:

- Identify your pest problem and choose the least toxic pesticide that targets your pest and achieves the results you want. If you need help identifying the least toxic pest control method, contact your University of California Cooperative Extension office.
- Determine the right amount of pesticide to purchase. Purchasing exactly the amount you need for the application eliminates the need for storing unused pesticides.
- Use spot treatments whenever possible.

Outdoors

- Avoid overwatering after applying pesticides. Never let pesticide runoff flow into storm drains.
- Do not apply pesticides outdoors when rain is forecast or when it is windy.
- Avoid applying pesticides on paved areas.

Indoors

- Avoid applying pesticides in or near floor drains or sinks.
- Avoid applying pesticides on areas that will be washed or mopped with water, or where food is prepared or stored.

When using and storing pesticides take these precautions:

- Always wear a long-sleeved shirt, pants, and eye protection, and other equipment suggested on the label.
- Store products tightly capped in a locked cabinet out of reach from children and pets.
- Always keep pesticides in their original container.
- Know where to call for help in an emergency!

Pesticide disposal:

- If you cannot use up your pesticides, fertilizers, and weed killers, give them to a friend who may need them.
- Sewage treatment plants are not designed to treat for certain toxic pesticides like diazinon and chlorpyrifos — dumping pesticides into the stormdrain or down the sink is never an option.
- The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For household pesticide disposal information for San Diego County, call 877-713-2784.

Finding active ingredients on a pesticide label:

Pesticide labels are required by law to show the active ingredient and its percentage. Minimize or avoid the use of products that contain diazinon and chlorpyrifos – these materials are polluting our waterways. Always read the label before you buy!

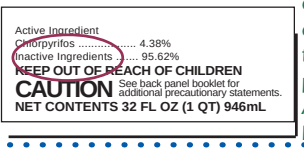
Active Ingredient
Chlorpyrifos 4.38%
Inactive Ingredients 95.62%
KEEP OUT OF REACH OF CHILDREN
CAUTION See back panel booklet for additional precautionary statements.
NET CONTENTS 32 FL OZ (1 QT) 946mL

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Snails & Slugs

Snails and slugs rank among our most despised garden pests. These slimy mollusks emerge from hiding at night and chew holes in leaves and flowers of many succulent garden plants and fruit. Slugs and snails are similar in structure and biology, except slugs lack the snails' external spiral shell. Management requires a vigilant and integrated approach that includes eliminating moisture and hiding spots, trapping, barriers, and handpicking. Baits can be helpful, but by themselves, don't provide adequate control in gardens that contain plenty of shelter, food, and moisture.

How do you know snails and slugs are causing damage?

- You may not observe these pests at first because they feed at night and hide during the day. Go out at night or early morning to view them in action.
- Other pests can cause holes in leaves, flowers, and fruit. Look for the shiny, slimy trails slugs and snails leave behind.

What must be done to reduce snails and slugs?

- Remove daytime hiding places — ivy, weedy areas, debris, or boards.
- Regularly remove snails from shelters you cannot eliminate such as low ledges on fences, undersides of decks, meter boxes.
- Place traps in your garden and dispose of trapped snails and slugs daily.
- Reduce moist surfaces by switching to drip irrigation or sprinkling in the morning rather than later in the day.
- Consider snail-proof plants such as impatiens, geraniums, begonias, lantana, nasturtiums, and many plants with stiff leaves and highly scented foliage like sage, rosemary,and lavender.

How can I manage snails and slugs without using pesticides?

- Make sure the garden is mollusk-free before planting. Then erect a copper barrier around it. Use a 4- to 6-inch-wide band of copper, buried an inch below the soil and bent over at the top or attach it around the edge of a raised bed.
- Place your garden in the sunniest spot possible. Remove garden objects or adjacent plants or ground cover that may serve as shady shelter. Reduce moist surfaces as much as possible.
- Build a trap using a 12"x15" board raised off the ground by 1-inch runners. As the mollusks collect under the board, scrape them off and destroy them daily.

What about baits?

- Baits will not be very effective unless you also remove shelter, food, and moisture.
- Metaldehyde baits are especially poisonous to dogs and birds. Metaldehyde also loses its effectiveness rapidly in sunlight and after rain or irrigation.
- Iron phosphate baits are safe for use around dogs, children, and wildlife.
- Irrigate before applying bait and apply in evening on warm days when mollusks are active.
- Scatter bait around sprinklers and in moist and protected areas where snails and slugs travel.

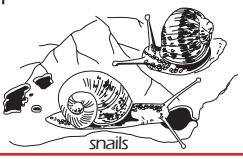

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Spiders

HEALTHY GARDEN HEALTHY HOME

Spiders are mostly beneficial because they feed on pest insects. However, many people think that all spiders are dangerous and aggressive. In California, the main spider capable of causing serious injury is the black widow, which generally remains outdoors and out of sight. Spiders seen out in the open during the day are unlikely to bite people. Focus pest management efforts on removing webs and hiding places. Pesticides are not generally recommended.

What to know about spiders:

- In California, the main spider capable of causing serious injury is the black widow:
  - The poisonous black widow spider is commonly found outdoors, in sheltered, dry, undisturbed areas such as wood piles.
  - Female black widows have shiny black bodies with a red hourglass marking on the underside.
  - Only large female black widows can injure people.

    Anyone bitten by a black widow spider should remain calm and seek medical advice, or call California's Poison Control Center at 1-800-8-POISON (1-800-876-4766).
- The brown recluse spider does not live in California.
- The jaws of most spiders are too small to bite humans.
- Some other spiders bite when trapped in clothing, but the reaction is usually no more severe than itching or a bee sting. See www.ipm.ucdavis.edu for more information about these spiders.

To prevent spiders from entering your house, take these steps:

- Seal home foundation cracks and other access holes.
- Inspect window and door screens for good seals that keep out spiders and the insects they prey on.
- Keep areas around home foundations free of clutter.

Manage spiders using these tips:

- Indoors, regular housecleaning provides adequate spider control.
- Vacuum up the spider and its web.
- Prevent clutter buildup that can provide hiding places.
- Remove spider webs from the exterior of the house with a broom or high pressure hose.
- Indoors, squash spiders or capture them in a jar and release them outdoors.

When removing spiders, don't overlook the fact that spiders eat a large number and variety of nuisance and pest insects. Spiders also have natural enemies — wasps, other spiders, birds, reptiles, and others — that sometimes keep them from becoming too numerous.

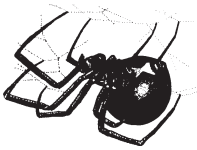

black widow spider

longbodied cellar spider

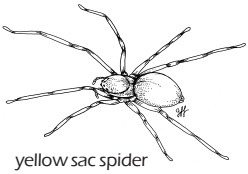

yellow sac spider

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Termites

Because of the serious damage they can cause to wooden structures, termites are among the pests most feared by homeowners. However, swarms of flying termites do not always mean your building is infested. A careful inspection of the structure is required to confirm an infestation. People also frequently mistake swarms of flying ants for termites. If you suspect that your house is infested, call a professional. Do-it-yourself sprays cannot be relied on to reduce a damaging infestation. Common termites in California are the subterranean termites that build nests in soil, dampwood termites that nest in moist wood and soil, and drywood termites that nest above ground in dry wood. Management of each termite species is different.

Distinguish flying ants from termites:

- Check the antennae, wings and waist to confirm that pest insects are termites. (Please refer to ant vs. termite drawing on back.)

Design your building to keep termites out:

- Keep a 12-inch barrier of smooth concrete, sand, or other material between the soil surface and substructure wood beneath a building.
- Choose termite-resistant wood for fences or other structures that must contact soil.
- Remove wood piles, untreated fence posts, and buried scrap wood near structures.
- Provide adequate ventilation to substructures and keep them dry.
- Immediately repair foundation cracks.

If termites are invading your home:

- Destroy shelter tubes that subterranean termites build between soil and wood structures.
- If dampwood termite nests are accessible, remove infested wood and eliminate excess moisture.
- Drywood termites can be controlled with heat, freezing, electricity, microwaves, fumigation, or spot treatments of chemicals.
- For any infestation, contact a professional for help. Pesticides licensed only for use by a pest control operator are usually necessary to control subterranean and dampwood infestations.

Using pesticides for termite control:

- Pesticides may be injected into the soil by professional applicators through drilling or rodding. Special procedures must be followed to prevent contamination of ground or surface water.
- For soil injections, ask your applicator to use a product other than chlorpyrifos. Newer types of products such as fipronil and chloronicotinyls are safer for your health and the environment.
- Baits can be effective in some cases, but may take several months to control the problem and must be followed up with constant monitoring.

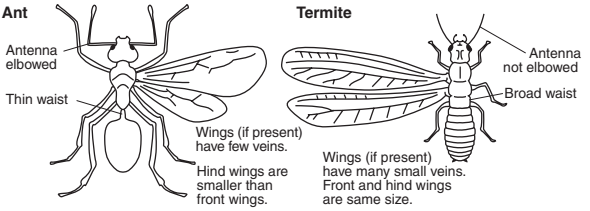

*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

Learn more about San Diego regional water quality at: www.ThinkBlueSD.org & www.ProjectCleanWater.org. For more pest information visit the University of California IPM website at: www.ipm.ucdavis.edu or the UCCE Master Gardeners at: (858) 694-2860, Mon - Fri, 9 am to 3 pm

UC IPM
University of California Cooperative Extension

UNIVERSITY of CALIFORNIA

MASTER GARDENER ASSOCIATION SAN DIEGO COUNTY

It's the water that connects us!

Giant Whitefly

HEALTHY GARDEN HEALTHY HOME

Giant whiteflies can cover a beautiful plant with white fuzzy wax and sticky honeydew, turning it into an unsightly mess. First discovered in San Diego County in October 1992, this whitefly has spread northward into other areas of California. Since its introduction into San Diego, giant whitefly has spread rapidly northward along the coast. Although affected plants may be weakened, they rarely die. To manage giant whitefly, wash plants off with water and encourage natural enemies.

What plants are affected?

- Many ornamentals including hibiscus, giant bird of paradise, begonia, Xylosma.
- Fruit trees including citrus, avocado, mulberry and banana.

Look for these damage symptoms on affected plants:

- Long, white, waxy filaments produced by the whitefly give the leaf surface a bearded appearance. These hairlike strands may be mistaken for a fungal infection.
- Large amounts of sticky honeydew excreted by the whitefly as it feeds on plant sap.
- Black sooty mold growing on the honeydew.

How to recognize the whitefly:

- Adults are small (3/16") and white with light brown markings on wings and usually found in groups on undersides of leaves.
- Nymphs are yellowish, small, oval, have no legs and don't move.

To reduce problems, use an integrated program that includes:

- Removing infested leaves.
- Washing giant whiteflies off leaves with a strong stream of water.
- Planting species less susceptible to giant whitefly.
- Avoiding insecticides that injure natural enemies, such as lacewings, lady beetles, syrphid flies, and parasitic wasps.

What about insecticides?

- **Don't use insecticides if beneficial insects, including parasites and predators, are present in the area.**
- **To confirm the presence of parasitic wasps, use a magnifying glass to look for parasite exit holes on giant whitefly nymphs or darkened nymphs as indicated in drawings below.**
- **If you do choose to use an insecticide, select least toxic products such as insecticidal soaps or oils. Remember to follow label directions and spray the undersides of the leaves where whitefly colonies are found.**

(adult) (actual size) I

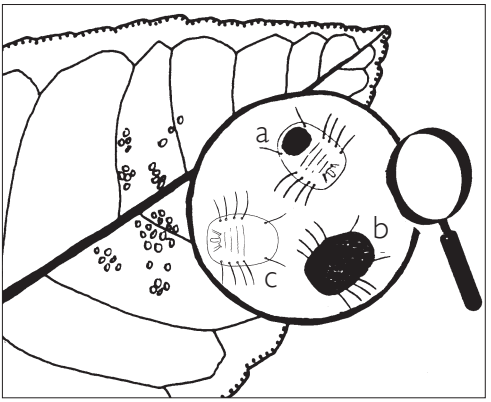

Examine whitefly colonies for grayish-black or yellow nymphs with exit holes (a), or darkened nymphs (b), or healthy nymphs (c).

Use NON-CHEMICAL methods & LEAST TOXIC pesticides. WHY? Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes, and oceans.

Learn more about San Diego regional water quality at www.ThinkBlueSD.org & www.ProjectCleanWater.org.
For more pest information, visit the University of California IPM Web site at **www.ipm.ucdavis.edu**. or contact the UCCE Master Gardeners at (858) 694-2860, Mon-Fri, 9 am to 3 pm.

UC IPM University of California Cooperative Extension

ANR University of California

Master Gardener Association San Diego County

It's the water that connects us!

ATTACHMENT 5.3

LA MESA FOCUS NEWSLETTER ARTICLES

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • August 2007

For more City of La Mesa news, check the City's website at

www.ci.la-mesa.ca.us

GROUNDBREAKING CEREMONY

HELD FOR NEW LIBRARY/POST OFFICE BUILDING

Celebrating the breaking of ground for the new library/post office building on May 23 were (l to r) La Mesa Postmaster Rose Estrada, Councilmember Dave Allan, City Manager Sandra Kerl, Councilmember Mark Arapostathis, Mayor Art Madrid, Vice Mayor Ruth Sterling, County Library Director Jose Aponte, and Councilmember Ernie Ewin.

On May 23, the City broke ground for a new library/post office building on the site of the former La Mesa city hall parking lot. The new building will take up 17,725 square feet, house over 100,000 books and periodicals, and feature a full-service postal retail space. An estimated 1,000 to 1,500 people will visit the building daily.

The library will occupy approximately 10,000 square feet in the front of the building facing Allison Ave. The San Diego County Library will continue to operate the new facility under an agreement with the City. A new U.S. post office retail center will occupy slightly more than 7,000 square feet facing north. Estimated completion of the building is spring 2008.

The groundbreaking marks the successful culmination of three years of negotiations between the City of La Mesa, the County of San Diego, and the U.S. Postal Service. The La Mesa City Council, County Library Director Jose Aponte and Postmaster Rose Estrada from the La Mesa post office were among the dignitaries in attendance at the ceremonial event.

During construction, the existing 40-year-old library building will remain open as will all existing post office operations on Allison Ave. Parking for visitors to city hall is provided in lots on Date Ave., with access from Allison Ave. Parking for library patrons remains in adjacent lots where signs have been posted, with entrance from both University Ave. and Date Ave. Parking for post office customers remains unchanged.

Following in the wake of the grand opening of the new fire station headquarters in summer 2006, the latest construction project is part of a master plan to completely redevelop the La Mesa Civic Center. Once the library/post office building opens, construction will begin on a 36,000-square-foot police station on the site of the current library.

Funding for the two state-of-the-art public safety facilities is provided by the passage of the Proposition D, Police, Fire and Emergency Services bond measure, approved by La Mesa voters in March 2004. The library/post office is being funded by bonds issued in August 2006, which will be repaid from monies owed to the City's general fund from the Redevelopment Agency and a lease with the U.S. Postal Service. No Proposition D funds will be used to pay for any costs related to this new building.

Construction and planning of the new buildings is being done concurrently with planned street improvements that will include street trees, new sidewalks and diagonal street parking. The street improvements are being funded by a "smart growth" grant the City received from SANDAG. The architecture of both the library/post office building and the police station, enhanced by street improvements, will complement the new fire station and will fit into the overall design of the Civic Center Master Plan.

YOUR INPUT IS NEEDED...

Respond to the "Sidewalks" Survey by September 1!

The City is in the process of creating a map to show proposed sidewalk locations, and we are interested in citizen input. We want to make La Mesa as walkable as possible, while realizing that some neighborhoods are not suited for sidewalks.

Please visit our website at www.ci.la-mesa.ca.us/sidewalk.htm to take a brief survey, or contact us by phone, e-mail or regular mail with your answer to this question: Should there be sidewalks in front of my house?

This topic affects us all, so please get involved. We are looking for people with opinions on both sides of this issue.

Contact Dirk Epperson, assistant engineer, at 619-667-1152, e-mail depperson@ci.le-mesa.ca.us, or send a note via regular mail to Dirk at 8130 Allison Ave., La Mesa, CA 91941. Be sure to include your name and mailing address. Phone and e-mail are optional. The deadline to respond is September 1, 2007.

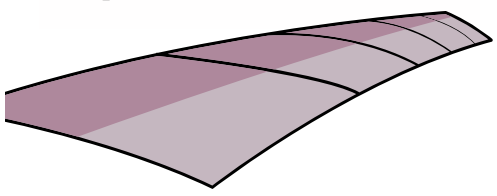

NEW LA MESA LOGO DEVELOPED FROM CITIZEN INPUT

The City of La Mesa unveiled its new, revised logo June 12 when the first two of six new police vehicles were put into service with the new logo imprinted on their doors. The logo, a three-color rectangular design that includes a gold circular element with dark blue text and a teal bar, also will be seen in monochrome formats, such as the all-white version used on the new FOCUS newsletter banner.

According to City Manager Sandra Kerl, the revised city logo will be used to "brand" (i.e., identify) La Mesa and to present a unified and focused image for the City. The new logo is being phased into use on all City publications and stationery as well as on City vehicles and uniforms. Eventually, it will be seen on all directional and street signs. The approach will be to immediately utilize the new logo in applications that will not cost additional money and phase in other areas over time as funding becomes available through grants and other outside funding sources.

For several years, one of the priorities for the City Council has been to focus on economic development to help spur activity that will positively impact the City's finances and thus our ability to provide services. With Council approval, a graphic design firm was hired to work with City staff and participants in two community outreach workshops held in the spring and summer of 2006. Subsequently, further outreach to the community was conducted through a City website survey. As a result, the City Council approved a new design for all types of City signs. The new, revised logo also developed from that process.

CITY OF LA MESA
JEWEL of the HILLS

LA MESA APPRECIATION DAY

Get Involved!

Saturday, November 3, 2007
8 a.m. – 12 noon

Help make La Mesa beautiful. On La Mesa Appreciation Day there are two ways to help your community:

- La Mesa's parks are our city's jewels. Help make them shine! Encourage your civic, church or social group to adopt a park for a clean-up day on November 3. We will help you find a project that all your members can do. Give us a call!
- Individuals and families are invited to come to a La Mesa neighborhood park at 8 a.m. on November 3. Sign up with an Adopt-a-Park volunteer who will be visible in a Park Appreciation Day T-shirt at each park. Bring a rake or grab a trash bag at the park and help your local La Mesa jewel shine! General clean-up includes picking up trash, light raking, trimming and weeding.

Please bring your own gloves and rakes or trowels to La Mesa Appreciation Day. Each participant will receive a free T-shirt. You don't have to be a La Mesa resident – you just need to love La Mesa! All ages are welcome. Signed waivers are required for all participants. Download waivers from the City website and complete them prior to November 3 to expedite the signup process at the park of your choice. Parents must accompany children under the age of 18 at individual parks unless the child is with a supervised group.

Download an application form at www.ci.la-mesa.ca.us. For more information, call 619-667-1300 or e-mail commservices@ci.la-mesa.ca.us.

ARE YOU OKAY?

Family members who worry about homebound seniors or disabled relatives in the La Mesa and greater East County area can arrange for a safety check through the SHARP Grossmont Senior Resource Center. The "Are You Okay?" telephone reassurance program makes a computer-generated daily telephone call, seven days a week, to homebound or disabled residents. If there is no answer after a few attempts, someone is sent to check on the individual. There is no charge for the service. To register call the Senior Resource Center at 619-740-4214.

For additional information on resources to assist the elderly, call the La Mesa Adult Enrichment Center at 619-464-0505.

LA MESA TO PARTICIPATE IN THE CX3 WELLNESS PILOT PROGRAM

The City of La Mesa has been selected by the County of San Diego to participate in a pilot program called CX3, which stands for Communities of Excellence in Nutrition, Physical Activity and Obesity Prevention.

The program involves teams of youth and adult volunteers who will walk a targeted neighborhood mapping community indicators such as walkability to parks, schools and food markets. They will also look at advertising in the area and the number of establishments selling fresh produce. Once these items are mapped, the data will be used to develop local action plans for policy and environmental change.

The program was developed by the California Nutrition Network and was piloted in six counties across the state. San Diego County has decided to use this model and is piloting the program in select areas of La Mesa and Chula Vista.

The La Mesa CX3 asset mapping project will target West La Mesa streets and corridors bordered by Spring St., 70th St., Junior High Dr. and El Cajon Blvd. This area of La Mesa has been designated by the La Mesa City Council as a neighborhood targeted for increased services and infrastructure upgrades. The effort began with a new teen center at Highwood Park and sidewalk improvements in the area. Future improvements include additional upgrades to Highwood Park. This project will further enhance the City's efforts to improve this neighborhood.

The La Mesa CX3 project is a collaboration among the La Mesa Park and Recreation Foundation, City of La Mesa Community Services Department, Helix High School, the County of San Diego Maternal Child and Family Services Department, and the East Region Health and Human Services Agency. The project is expected to take six months to complete.

As part of the CX3 project, Helix Charter High School students and their volunteer mentors receive training in what to look for to make a city walkable.

WATCH YOUR CITY COUNCIL IN ACTION!

Tune in to Cox cable channel 24 and watch the La Mesa City Council in action. Televised meetings make City Council deliberations available to residents who are unable to attend meetings, making government more accessible to the community.

La Mesa residents can view La Mesa City Council meetings each month on the second Tuesday at 4 p.m. and on the fourth Tuesday at 6 p.m.

A NEW CITY OF LA MESA WEBSITE IS COMING TO A COMPUTER NEAR YOU!

The City Council has recommended two significant steps that contribute to the enhancement of services to the community. The first, a new City website, underscores the commitment by the City Council to keep La Mesa residents well informed about all that occurs at City Hall and throughout the community. The second, a newly revised logo, keeps La Mesa's image unified and focused and is an initial step to "brand" our City in the minds of the public. (See the New Logo article on the front page.)

Set to launch in late summer, the new City website will feature a fresh new look. More important, it will contain easy-to-access, up-to-date content and will feature a new e-mail notification system and a request tracker for coordinating citizen requests. The address of the new City of La Mesa website will be www.ci.la-mesa.ca.us. Website visitors may begin using the new web address now to access the current City website.

www.ci.la-mesa.ca.us to launch in Late Summer

Integrating the new website and the new logo into the mainstream of daily activity at the City of La Mesa takes time. Undoubtedly, there will be some "tweaking" needed on these two projects to make them as beneficial as possible for La Mesa residents, business owners and visitors.

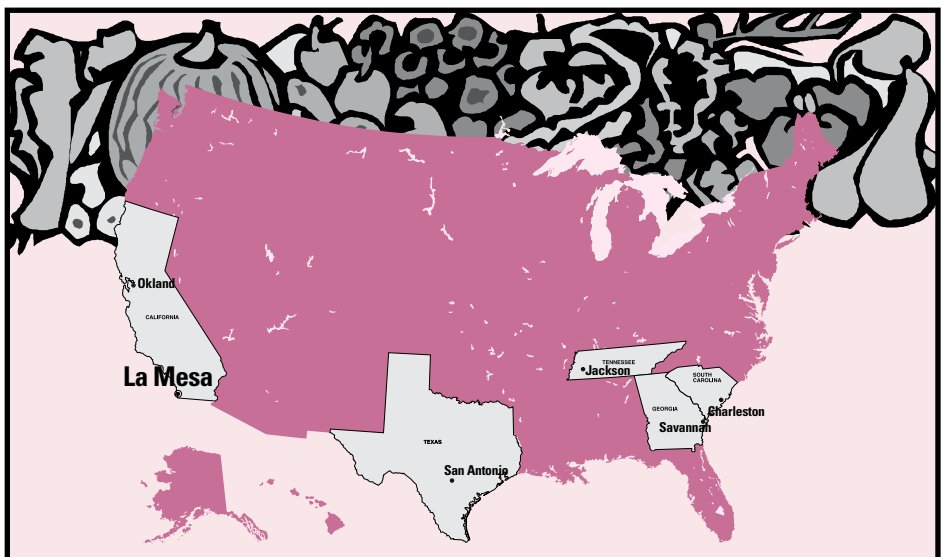

LA MESA SELECTED FOR WELLNESS INITIATIVE

La Mesa has been selected as one of six cities to partner with the National League of Cities' (NLC) Institute for Youth, Education and Families (YEF Institute) in combating childhood obesity and promoting youth and community wellness. La Mesa was selected by NLC's YEF Institute because of its work with the Communities of Excellence in Nutrition, Physical Activity and Obesity Prevention (CX3) program developed by the California Nutrition Network. The CX3 program determines community strengths and weaknesses for wellness and helps the City develop appropriate policies. (See the associated article on page 2.)

As part of the City and School Leaders Collaborating on Local Wellness Policies initiative, the one-year technical assistance initiative will provide municipal and school leaders with peer learning opportunities and consultation with national experts in the areas of local wellness policies, childhood obesity, healthy eating, active living, and school health councils.

The City of La Mesa's Wellness Task Force and the La Mesa-Spring Valley School District Wellness and Physical Education Committee hope to form a Wellness Oversight Committee. The La Mesa Wellness Task Force has already approached the City Council to approve a broad-based wellness program.

The other cities selected for the initiative are: Charleston, SC; Jackson, TN; Oakland, CA; San Antonio, TX; and Savannah, GA. The YEF Institute is working with the American Association of School Administrators on this project, with support provided by The Robert Wood Johnson Foundation.

KEEP UP THE GOOD WORK LA MESA!

The California Integrated Waste Management Board has acknowledged La Mesa's accomplishment in meeting the State's mandated 50 percent diversion rate. This means that 50 percent of everything that we are disposing of is being diverted away from our landfills and being reused, recycled, or in the case of some hazardous materials, disposed of properly and safely. This is the accumulation of years of hard work and a positive partnership between the City and you, the community.

Our work, however, is not finished! California law requires all cities and counties in the State to maintain the 50 percent diversion rate. We must continue to do the right thing and keep waste out of our landfills, which are running low on space.

Here are five tips to continued improvement:

- **Recycle, recycle, recycle!** Are you recycling as much as you can? Look at things before you throw them away and ask yourself: Is it unsoiled paper or cardboard, or CRV # 1 or 2 plastic, glass or aluminum? If the answer is Yes, rinse the items, if needed, and place them in your blue cart or recycling bin.
- **Put toxic waste in its place!** If you have household hazardous waste (HHW), such as batteries, fluorescent lights, paint, chemicals, mercury devices (including thermometers), or electronics, take advantage of the City's free HHW disposal program by calling 619-287-5696 x4270.
- **Paper or Plastic?** That's sooo 20th century! Get yourself some reusable produce and shopping bags. Most grocers now sell them at a reasonable price, and reusable bags work much better than plastic.
- **Collect construction debris!** EDCO's SANCO Resource Recovery facility is now open in Lemon Grove for mixed loads of debris that will save you time and money. Call 619-287-7555 for more information.
- **Try composting!** This is a great way to cut down on food waste going into the trash and gives you a great source of material for your yard. For more information, visit www.ci.la-mesa.ca.us and click on Trash, Recycling & Hazardous Waste – Internet Resources.

WHAT DO YOU KNOW ABOUT TRASH, RECYCLING AND CONSERVATION?

Q1. What is California's waste diversion mandate (amount of waste that must be kept out of landfills)?
a) 25% b) 50% c) 100%
d) It is a guideline only, not a mandate

Q2. Which of the following can be thrown in the trash?
a) Batteries b) Latex paint c) Compact fluorescent bulbs
d) Cellular telephones e) None of the above

Q3. Plastic bags can be recycled at most grocery stores.
True or False?

Q4. EDCO will not accept paper, plastic, and glass mixed together in blue bins.
True or False?

Q5. Shade trees should be planted on which side of your house for the best effect?
a) North b) South c) East d) West

Q6. Compact Fluorescent Lights (CFLs) are extremely hazardous if broken.
True or False?

Q7. Hand washing your dishes uses more water than your dishwasher.
True or False?

Q8. Which of the following is not collected at household hazardous waste events?
a) Used motor oil b) Rechargeable batteries c) Tires
d) Household cleaners e) They are all accepted

Q9. Screensavers should be used to save energy when your computer is inactive.
True or False?

Q10. Disposing of household hazardous waste and electronic waste is inconvenient and expensive.
True of False?

ANSWERS: *Q1-b; Q2-e; Q3-True; Q4-False; Q5-d (That's where the hot afternoon sun hits most directly); Q6-False (There is limited danger due to the trace amounts of mercury, but they should be handled cautiously); Q7-True (But use your appliances after 7 pm); Q8-c (Tires can be recycled at six locations in La Mesa, visit www.ci.la-mesa.ca.us or call 1-800-237-BLUE for more info); Q9-False (Screensavers don't save energy, only "sleep modes" do that); Q10-False (The City of La Mesa provides at least six free collection events yearly in or near the city that require you only to bring the waste and we'll do the rest! Call 287-5696 x4270).*

COOL SPOTS IN & AROUND LA MESA

La Mesa residents who may be at risk from extreme heat can seek relief at several community locations.

The County of San Diego has established a network of Cool Zones at public and community facilities across the County. Most of the sites are open to the public during regular weekday hours. Cool Zone sites, mostly located in the hottest areas of the county, help older adults and others keep cool and save energy costs.

The following sites and facilities in and around La Mesa serve as Cool Zones:

COOL ZONE

SITE/FACILITY	ADDRESS	CITY, ZIP	HOURS
La Mesa Adult Enrichment Center	8450 La Mesa Blvd	La Mesa, 91941	M-F 8-5
La Mesa Branch Library	8055 University Ave	La Mesa, 91941	M-Th 10-8, F & Sat 10-5, Sun 1-5
El Cajon Branch Library	201 E. Douglas	El Cajon, 92020	M-Th 10-8, F & Sat 10-5, Sun 1-5
Fletcher Hills Branch Library	576 Garfield Ave	El Cajon, 92020	T & Th 10-6, W 10-8, F & Sat 10-5
Lemon Grove Branch Library	8073 Broadway	Lemon Grove, 91945	M & Th 10-6, T & W 10-8, F & Sat 10-5
Rancho San Diego Branch Library	11555 Via Rancho San Diego	El Cajon, 92019	M & W 10-6, T & Th 10-8, F & Sat 10-5, Sun 1-5
Spring Valley Branch Library	836 Kempton St	Spring Valley, 91977	M-T 10-8, W-Th 10-6, F-Sat 10-5
Christian Science Reading Room	8370 La Mesa Blvd	La Mesa, 91941	M,W,Th,F 9-5, T 9-7, Sat 10-4
Parkway Plaza Mall	415 Parkway Plaza	El Cajon, 92020	All Day & Evening, during regular mall hours
Herrick Community Health Care Library	9001 Wakarusa St	La Mesa, 91942	T 9-8, W-F 9-5:30, Sat 8-Noon

ONE PHONE CALL CAN HELP STOP STORM WATER POLLUTION

Residents may call the City of La Mesa's Storm Water Pollution Prevention Hotline (619-667-1134) at any time to help stop storm water pollution. City personnel will verify the complaint and address the problem immediately.

Potential pollutants include: sediment (soil/dirt), fertilizers (plant food), metals, detergents (soap), pesticides (chemicals to kill plants or bugs), organic compounds (solvents), trash and debris, oil and grease, and bacteria or viruses.

What should you look for and report?

Commercial/Industrial Areas
- Hosing down a parking lot/water running into the street
- Washing company vehicles without capturing runoff
- Storing equipment outside uncovered
- Overflowing trash cans

Construction Sites
- Tracking soil onto the street
- Storing stockpiles of soil without covering it for extended periods of time
- Discharging water into the street

Residential
- Washing soil off the property and into the street
- Significant over-irrigation
- Fixing a car on the street
- Significant overspray of pesticides or fertilizers
- Not cleaning up pet waste

If you observe any of these violations, call the City's Storm Water Pollution Prevention Hotline at 619-667-1134 and City staff will address the issue. Protecting our environment protects our quality of life!

FIRE SAFETY AND BARBEQUES

For those of us in the community who are backyard barbeque chefs, summer time means grilling time. Here are some simple safety precautions you can take to protect the food and the chef:

- Make sure your grill is in good working order, with no cracks, holes or leaks, especially if you are using propane.
- Use the grill at least 10 feet away from your house or any building. Never use any type of barbeque grill indoors.
- Do not leave the grill unattended, especially when children or pets are nearby.
- Never use gasoline or kerosene to light a charcoal fire.
- Do not attempt to restart a fire by adding additional lighter fluid to an already lit grill. This can cause a flare-up.
- Dispose of charcoal, away from kids and pets, in a metal container. Cool the coals with water first. Coals get hot – up to 1,000 degrees – and can stay hot for several days.
- Use long-handled utensils and oven mitts to help prevent burns.
- Do not wear loose clothing that hangs from your arms or upper body.
- Keep a fire extinguisher near the grill and know how to use it.
- Call 911 if you have a fire or receive a serious burn injury.

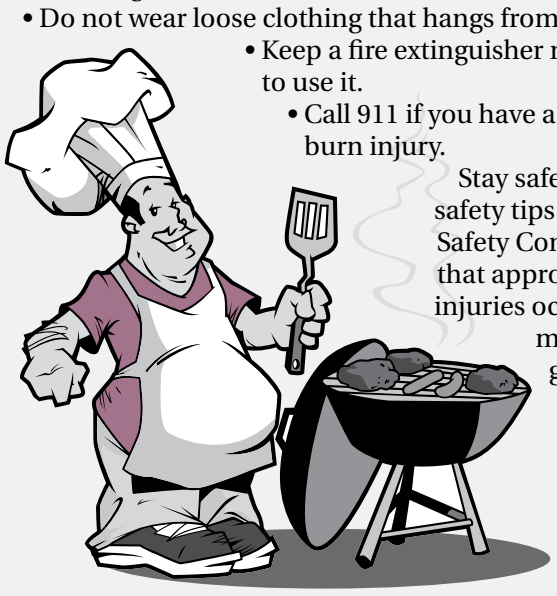

Stay safe by following the basic safety tips above. Consumer Products Safety Commission statistics show that approximately 20 deaths and 400 injuries occur each year due to carbon monoxide poisoning from grilling fires.

The La Mesa Fire Department hopes you have a great summer and many safe grilling experiences.

ATTENTION MIDDLE AND HIGH SCHOOL STUDENTS!

La Mesa is seeking teen residents between the ages of 13 and 20 who are interested in serving their community by becoming a member of La Mesa's Youth Advisory Commission.

The Commission serves as an advisory body to the City Council on matters pertaining to programs, projects, and issues that address the concerns of youth in La Mesa. It is the Commission's responsibility to explore and develop activities that will promote positive youth relations in the City. Current activities include a reading program at La Mesa Dale Elementary School and participating in National Youth Service Day.

Commission meetings are held the second Monday of each month at 4:30 p.m. in the Community Center Conference Room, 4975 Memorial Drive, La Mesa.

Applications are available on the City's website at www.ci.la-mesa.ca.us, at La Mesa City Hall, 8130 Allison Avenue, or by calling the City Clerk's office at 619-667-1120.

Applications must be received in the City Clerk's office no later than 5:30 p.m., Friday, August 31, 2007 to be included in the September interview process.

EVERYONE'S A WINNER!

JOIN THE TEAM FOR THE 2007 INTERGENERATIONAL GAMES

The City of La Mesa is stepping up to the plate again this fall to present the 2nd Annual Intergenerational Games. The event will be held on Friday, October 12, from 9 a.m. until 1 p.m. on the La Mesa Middle School athletic fields.

Intergenerational Games brings together mature, active adults, students and volunteers from La Mesa elementary, middle and high schools for an energetic, fun-filled half-day event. The focus is on non-competitive fun, physical activity, wellness and healthy lifestyle.

Active adults age 55 or older are encouraged to sign up for this enjoyable and rewarding event. Adults will be paired with students from grades 4 through 6, and teams will be made up of one student and one adult. Each team will take part in a circuit of eight games and two knowledge challenges. Activities will include a Frisbee toss, trashcan basketball, hockey net shot, skeeball, soccer kick, bocce roll, horseshoe throw and similar games. There is no charge to participate and the rewards are great.

The event will kick off with a motivational opening address and will conclude with a group picnic-style lunch and awards ceremony. Everyone is a winner in the Intergenerational Games!

For information and registration, call the La Mesa Community Center at 619-667-1300 or the Adult Enrichment Center at 619-464-0505. Intergenerational Games is sponsored by the City of La Mesa, La Mesa Commission on Aging, County of San Diego Aging & Independence Services, La Mesa-Spring Valley School District, La Mesa 55+ Senior Softball League and many other community partners and business sponsors. For sponsorship opportunities, call Judy Stern at 619-667-1490.

TOUR HISTORIC LA MESA HOMES

On Saturday, November 3, from 10 a.m. until 3 p.m., the La Mesa Historical Society (LMHS), along with the City's Historic Preservation Commission, will sponsor the second Historic Home Tour of La Mesa.

The tour will highlight five historic homes dating from 1907 that are in or adjacent to the Date Avenue Historic District. All the properties are carried in the Inventory of Historic Resources. Each will have displays of La Mesa history and the buildings as they were, and each will be decorated in a fall motif and have artists working in the yards.

An art show/art mart, co-sponsored by La Mesa's Foothills Art Association, will display original art by local artists featuring the theme "Historic La Mesa." The artwork will be available for sale.

Free Old Town trolley shuttle buses – which proved so popular in 2006 – will again operate from the tour center at the corner of Palm Ave. and Lemon Ave. in La Mesa's downtown Village. There is limited parking and vehicle access for most of the homes. Abundant parking is available adjacent to the tour center and in City parking lots.

Full-day tickets will be priced at $15 for individuals ten years and older. Advance sale tickets and tickets for LMHS members will be $12 ($5 of the ticket price may be applied to a new membership in LMHS at the time of purchase). The advance sale ticket price is good only through October 19.

Mark your calendar now! Call 619-465-1883 for additional information or to reserve your spot on the tour.

SAN DIEGO SENIOR OLYMPIC GAMES

To Get Underway in September

It's never too late to be an Olympic champion! The San Diego Senior Olympics (SDSO) is the premier multi-sport competition in California for amateur athletes age 50 and older. The games are open to competitive, recreational and novice athletes. The SDSO offers 23 sports including individual and team sports such as softball, tennis, swimming, cycling, golf and bowling.

Each sport is organized by volunteer commissioners. If you are interested in helping to organize one of the events, e-mail info@sdseniorgames.org or call the office at 619-226-1324. You may also call SDSO Board member Jim Campbell in La Mesa at 619-466-6764.

The San Diego Senior Olympics is a local affiliate of the California Senior Games Association and the National Senior Games Association.

"LEGENDS OF BROADWAY AND OTHER TALES"

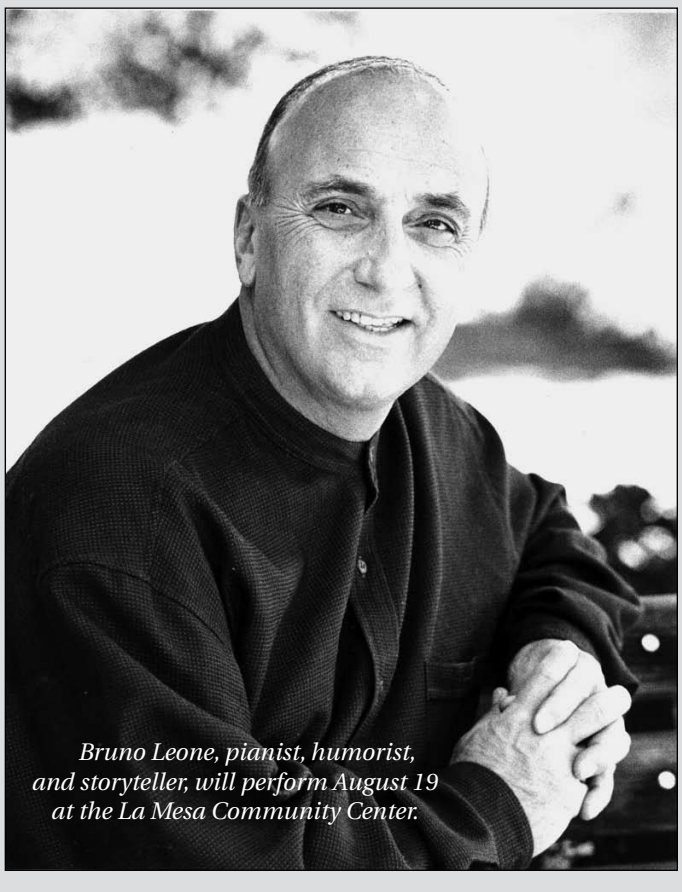

Bruno Leone, pianist, humorist, and storyteller, will perform August 19 at the La Mesa Community Center.

Annual Fundraiser for the La Mesa Arts Alliance

The La Mesa Arts Alliance presents "Legends of Broadway and Other Tales" featuring Bruno Leone. Mr. Leone is a pianist, a humorist and a storyteller. He will perform his piano artistry and tell great stories about the lives and times of America's leading composers and lyricists.

The event will be held on Sunday, August 19, from 4-7 p.m. in the Arbor View Room at the La Mesa Community Center, 4975 Memorial Drive. Tickets are $25 per person and $40 per couple. Admission includes the show, hors d'oeuvres, adult beverages at intermission and membership in the La Mesa Arts Alliance.

Your support of this event will allow the Arts Alliance to continue its programs including the La Mesa Walking Art Trail utility box project, youth art education at Kids Care Fest, Sundays at Six summer concert series, Harp Fest and artist programs. The La Mesa Arts Alliance believes that a diverse community of artists and arts organizations is essential to the cultural, educational, social and economic vitality of our community.

For ticket information, call 619-667-1300, e-mail commservices@ci.la-mesa.ca.us or go to www.ci.la-mesa.ca.us.

PREPARING FOR THE PANDEMIC FLU

– Third in a Series of Articles –

Through this series of articles, we have presented information that has illustrated the differences between a pandemic flu and the seasonal flu. We have also provided information on caring for sick individuals. This issue will address preparedness.

For many years, preparedness organizations have been stressing the need for pre-disaster preparation. Each individual, family and place of business should have a stockpile of provisions sufficient to meet their needs for three days. Three days is the time necessary for disaster support organizations to mobilize their resources.

In the case of the pandemic flu, the event may span several months and return in sequential waves. Large numbers of people will be affected, and the event will have an impact on logistical supply chains including food and fuel. Banking and many other services will be less accessible. Provision of medical care will be severely impacted. Support organizations, which we would normally depend upon, may be unable to respond. Knowing this, it is imperative that we begin to think beyond three days.

Current recommendations for a pandemic event are to be self-sufficient for two weeks. A preparedness guide issued by the County of San Diego Office of Emergency Services encourages the use of "Ready Kits," which are supplied with the following:

- Battery-operated flashlight, radio and TV
- Extra supply of prescription medications and a cooler if refrigeration for the prescriptions is necessary
- A two-week supply of non-perishable foods that meet dietary needs
- Manual can opener
- One gallon of water per person per day
- Cash money and change
- Items for sanitation: toilet tissue, plastic bags, feminine hygiene products, etc.
- Medical equipment and assistive devices: oxygen and portable unit, hearing aids, walkers, glasses, etc.
- Paper towels, masks, industrial respirators, etc. for chemical sensitivities, respiratory ailments, and similar conditions
- Emergency List that includes personal information such as: doctor's information, personal support network contact information, medication names, dosages, and frequencies
- Items for infants: formula, diapers, etc.
- White distress flag, whistle, glow sticks
- Important documents: photo ID, birth certificates, proof of address, medical insurance, etc.
- Heavy gloves
- Supplies for service and companion animals: such as food, ID tags, etc.

In addition to the Ready Kit items, it is recommended that additional supplies should also be stockpiled that are necessary to care for sick individuals and for keeping the household environment clean. These items include:

- Labeled household disinfectants or chlorine bleach mixtures
- Masks for respiratory protection, which meet the N95 standard
- Soap
- Tissues
- Paper towels

For additional preparedness information, the following web sites are recommended:

- www.readysandiego.org
- www.sdarc.org
- www.salvationarmyusa.org

Pandemic flu information is readily available from the County of San Diego at www.sdbirdflu.org and from the Centers for Disease Control at www.cdc.gov.

PLAN – PREPARE - STAY INFORMED

CLEARER SKIES FOR LA MESA

Recently, cables were taken down and utility poles were removed as the last leg of the Jackson Drive Undergrounding Project was completed.

Utility undergrounding is the removal of overhead wires and poles and placement of wires under the street and/or sidewalk. Undergrounding removes unsightly wires and poles in neighborhoods, enhances views, and may add value to neighborhood properties. New streetlights are installed to replace the existing streetlights that were previously on wooden utility poles.

The Jackson Drive Underground Project (District 23) included the portion of Jackson Drive from Interstate 8 to Lemon Avenue. The project converted 14 residential customers and 2 commercial customers and benefited many more. As part of the project, the City installed/replaced five street lights and removed 24 poles. The total project cost was $2.3 million.

Future underground districts have been identified for Spring Street and Parkway Drive. The Undergrounding Program is a combined effort of the City of La Mesa and SDG&E.

LA MESA RECYCLES USED OIL & OIL FILTERS

Used oil is hazardous to the environment. La Mesa has 10 State-certified collection centers that will take your used oil. Visit www.ci.la-mesa.ca.us or call 1-800-237-BLUE for locations and more information. Help keep La Mesa beautiful!

RECYCLE USED OIL

VOLUNTEER DRIVERS NEEDED FOR NEW

Rides4Neighbors PROGRAM

Starting this fall, *Rides4Neighbors* will be a volunteer-based transportation assistance program for La Mesa's older adult residents and adult residents with disabilities. Rides will be provided by screened, trained volunteers, who will use their own vehicles to assist transit-dependent La Mesa neighbors in need of a lift.

As a volunteer, you will be part of a rewarding and meaningful civic program. Community surveys consistently find that what residents like best about La Mesa is the neighborly, small town feel. *Rides4Neighbors* will help build that spirit of community and old-fashioned neighborliness. So join us by opening your heart and car door to a rider in need of a lift.

Volunteer drivers will be reimbursed for mileage and receive secondary liability insurance. As a volunteer, you decide your availability and choose the rides you wish to provide. There is no minimum time commitment or number of rides required to be a volunteer. We can either call you when a ride is needed, or notify you via e-mail.

The City of La Mesa will be receiving a federal New Freedom grant award through SANDAG to cover most of the start-up costs for developing and providing this new service. The Adult Enrichment Center will take ride requests, explain ridership rules and match ride requests with volunteers.

For more information, call the Adult Enrichment Center at 619-464-0505, or go online to www.ci.la-mesa.ca.us to download a volunteer application form.

KNOW THE DANGERS OF AIRSOFT GUNS

In recent months there have been several instances in which the police have responded to reports of guns on school campuses, only to find that the gun is an Airsoft / BB / or realistic toy gun.

Airsoft guns can be easily mistaken for real guns, with potentially deadly consequences. Many of these replica guns have all the markings of real guns including the trademarks of the real gun manufacturers. Just as you would not display a real firearm in public, the same is true with airsoft guns. Airsoft guns are not "cap" guns or "squirt" guns.

Remember this – it is very difficult to visibly distinguish an airsoft gun from a real gun. Here is an example:

AIRSOFT GLOCK HANDGUN **REAL GLOCK HANDGUN**

California Penal Code section 626.10(a) makes it illegal to bring any BB, pellet or airsoft gun that is operated by forced air (CO2) or spring action onto a school campus. This section also covers many other illegal weapons, such as knives, daggers, tasers and stun guns. If someone is caught with any of these weapons on campus, he or she can be arrested. California Penal Code section 12553(a)(1) makes it a misdemeanor to alter a replica gun (removing the orange or red tip) to make the gun look more realistic.

In addition to criminal charges, and the potential for a deadly encounter with police, there is a State zero-tolerance policy. California Education Code section 48915(c) provides that all schools require mandatory suspension and the recommendation for expulsion for any student who possesses any weapon on campus.

The La Mesa Police Department urges parents to discuss this very important issue with their children and make clear to them the dangers and consequences of taking any weapon or simulated weapon to school or any public place.

THE INS AND OUTS OF PORTABLE STORAGE CONTAINERS

You may have seen portable metal storage and shipping containers around town. Most of these containers were originally used to import goods to the United States from overseas. The containers have found a second life as storage containers on residential and commercial property throughout the United States.

Unfortunately, these metal storage containers are not allowed in residential zones in La Mesa. In fact, portable storage containers are only allowed in the City of La Mesa in very limited circumstances. Moreover, the use of these containers can create attractive nuisances and potential safety hazards when used for permanent storage purposes.

La Mesa Municipal Code Section 24.05.020.D.1 states that only "permitted accessory uses and structures" are allowed in residential zones. Portable storage containers – metal or otherwise – are not listed as a permitted accessory use or structure in this code section. Authorized accessory structures in a residential zone include garages and storage sheds.

What about commercial zones? According to La Mesa Municipal Code Section 24.06.040.I.b, "Portable storage containers…are only permitted when authorized as part of a permanent structure subject to the appropriate site plan approval and building permits." In short, portable storage containers are only allowed by permit in a commercial zone.

If you have questions regarding the use of portable storage containers in La Mesa, call Code Compliance Officer Allen Edwards at 619-667-1189.

ARE YOUR CHILDREN HOME ALONE?

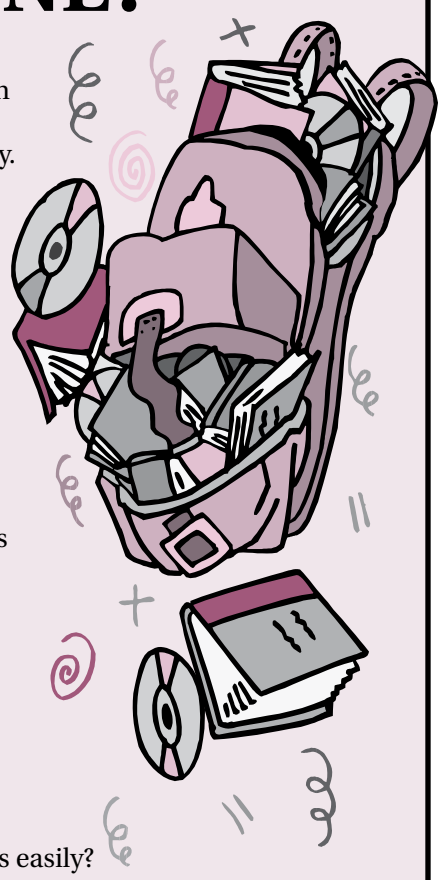

If you are like many American parents who work and have to leave their children on their own after school every day, you might be anxious about your child's safety. By following the safeguards listed below, you can help ease some of the worry and take measures that will protect your children even when you are not around.

What you can do:

- First, make sure your children are old enough and mature enough to care for themselves
- Know local resources such as the La Mesa Teen Center and other after-school programs
- Teach your children basic safety rules
- Know the answers to the three W's:
  - Where are your children?
  - What are they're doing?
  - Whom are they with?

Are your children ready?

Can your children:

- Be trusted to go straight home after school or activities?
- Use the telephone properly?
- Operate locks and kitchen appliances easily?
- Follow rules and instructions well?
- Handle unexpected situations without panicking?
- Stay home without being afraid?

If you answered "Yes" to the above questions, then teach your children:

- To check in with you immediately after arriving home
- How to give directions to your home, in case of an emergency
- To never accept gifts or rides from anyone without your permission
- How to use the door and window locks and alarm system if you have one
- To never open the door and let anyone into your home
- To never let a caller on the phone know that they are home alone
- To carry a house key with them in a safe place
- How to escape in case of an emergency
- To let you know about anything that frightens them or makes them feel uncomfortable
- To keep important phone numbers near the phone
- How and when to call 9-1-1

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 8:00 AM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM
The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM
The above meetings are held at the
Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM
(except July, August, November, December)
The above meeting is held at the
Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS

(Area code 619)

Adult Enrichment Center	464-0505
Animal Control	667-1436
Building Inspection	667-1176
Business Licenses	667-1118
Cable TV	262-1122
City Attorney	667-1128
City Clerk	667-1120
City Council	667-1106
City Hall	463-6611
City Manager	667-1105
Crime Prevention	667-1445
Dog Licenses	667-1117
Engineering	667-1166
Fire (Business)	667-1355
Human Resources	667-1175
Library	469-2151
Mayor	667-1100
Municipal Pool	466-4177
Parking Citations	667-1117
Planning	667-1158
Police (Business)	667-1400
Public Works	667-1450
Recreation	667-1300
Recycling/Trash	287-7555
Sewer Charges	667-1126
Sidewalk Maintenance	667-1450
Storm Water Hotline	667-1134
Streetlight Maintenance	667-1450
Traffic Engineering Hotline	667-1144
Traffic Signal Maintenance	667-1166
Zoning	667-1177

CITY COUNCIL ACTIONS

April 10, 2007
Authorized the acceptance of a grant from the California Department of Alcoholic Beverage Control Grant Assistance Program.

Denied the appeal of the Planning Commission's approval of Tentative Tract Map TTM-05 11 and Site Development Plan DAB-05-27 proposed by Zigman Properties LP for a one-lot subdivision of a 0.52-acre property at 8135 El Paso Street in the CN-D (Neighborhood Commercial/Urban Design Overlay) Zone for the development of 15 new residential condominium units with 4 commercial suites, and ratified Design Review DRB-05-27.

Endorsed the U.S. Mayors Climate Protection Agreement calling for a reduction in greenhouse gas emissions.

April 24, 2007
Declared there are weeds, rubbish and refuse existing upon certain streets, sidewalks and private property in the City of La Mesa, which constitute a public nuisance and declared the intention of the Council to order its abatement.

Approved the installation of three speed humps on Lake Park Way between Baltimore Drive and Lake Murray Boulevard.

Authorized staff to proceed with the Proposition 218 notification and public hearing processes in connection with proposed sewer rates and EDCO trash rates.

Approved the Allocation of Community Development Block Grant (CDBG) and HOME Funds and adopted the Annual Plan for Community Development activities for Fiscal Year 2007-2008.

Adopted the Fee Schedule for Fiscal Year 2007-2008.

May 8, 2007
Approved the ratification of Parcel Map Tract No. 06-09, for a one lot subdivision of property for 76 residential condominium units at the "Villages of La Mesa," a proposed residential care facility by Briercrest Development LP at 9000 Murray Drive.

Authorized the application and acceptance of funding from the California Department of Conservation's Division of Recycling for beverage container recycling and litter cleanup activities.

Authorized the nomination of Porter Hall as a local historic landmark.

Authorized the application and acceptance of grant funding from the California Integrated Waste Management Board for waste reduction and diversion of hazardous materials.

May 22, 2007
Approved a cooperative agreement between the Helix Water District and the City of La Mesa for the joint construction of water and storm drain improvements on Alamo Way.

Awarded a contract to Dudek and Associates, Inc. for the preparation of an Environmental Impact Report for the Mixed Use Urban Overlay Zone.

June 12, 2007
Authorized the acceptance and expenditure of the 2007 Edward Byrne Memorial Justice Assistance Program Grant Funds.

Authorized the acceptance of the California Air Resources Board grant for the purchase of low-emission construction equipment for the Public Works Department to meet new state-mandated Tier III diesel emission requirements for off-road diesel equipment.

June 26, 2007
Ratified the Planning Commission's approval of Tentative Tract Map TTM-07 01, Site Development Plan DAB-07-05 and Special Permit SP-07-04, and ratified the Design Review Board's approval of Design Review DRB-07-05, for a 5-unit, 6-lot planned residential development at 5475 Heidi Street.

Authorized the execution of an Exclusive Negotiation Agreement between the City of La Mesa and Citymark Communities LLC for the development of a mixed-use project on the existing police station site.

Approved the designation of the property located at 4628 Third Street as a historic landmark and a Historic Landmark Property Preservation Agreement (Mills Act) with the property owner.

Authorized rate adjustments for EDCO Disposal Corporation for the collection of refuse and recycling to become effective July 1, 2007.

Authorized rate adjustments for sewer service effective September 1, 2007 and the introduction and first reading of an ordinance amending Chapter 17.12 of the La Mesa Municipal Code adjusting sewer rates for the next two years.

WALK LA MESA

Just for the Fun of It

The La Mesa Wellness Task Force wants you to know
that there are organized walks nearby every day of the week.
Check the City's website at www.ci.la-mesa.ca.us/News for a list of options,
or pick up a flyer at La Mesa City Hall or Community Center.

Call 619-667-1300 for more information.

La Mesa – it's made for walking!

SEE INSIDE

BLUE PULLOUT SECTION
for Community Services Programs & Activities Schedule

La Mesa
COMMUNITY SERVICES
Fall 2007
Registration begins August 1st!

CITY OF LA MESA FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619-463-6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.ci.la-mesa.ca.us

CITY OF LA MESA FOCUS

This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Contact your elected officials at 619-667-1106.

Mayor..... Art Madrid
Vice Mayor ..... Ruth Sterling
Councilmember.....Dave Allan
Councilmember..... Mark Arapostathis
Councilmember..... Ernie Ewin
City Manager..... Sandra Kerl
Focus Editor ..... Carol McLaughlin
Community Services Editor.. Käaren McElroy
Editorial Staff .....Heather Moore Byerley
Suzanne Strassburger

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CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • November 2007

LAST CALL FOR 2 EVENTS ON SATURDAY, NOVEMBER 3RD!

#1 **Don't miss the tour of historic La Mesa homes on November 3 from 10 a.m. until 3 p.m. Cost is $15 for individuals 10 and older. Call 619-465-1883 for information.**

#2 **Last Chance to Sign Up!**

LA MESA PARK APPRECIATION DAY

Saturday, November 3
8 a.m. – Noon

Bring a rake or trowel or grab a trash bag at a neighborhood La Mesa park at 8 a.m. on Saturday, November 3, and help your local La Mesa jewel shine! General cleanup includes picking up trash, light raking, trimming and weeding. Sign up with an Adopt-a-Park volunteer who will be visible in a Park Appreciation Day T-shirt at each park.

Each participant will receive a free T-shirt. You don't have to be a La Mesa resident – you just need to love La Mesa!

All ages are welcome. Parents must accompany children under the age of 18 at individual parks unless the child is with a supervised group. Signed waivers are required for all participants. Call 619-667-1300 for more information.

CITY LAUNCHES NEW WEBSITE OCTOBER 31ST!
See article on page 3.

IT'S CHILD'S PLAY...

PLAY TODAY FOR A HEALTHIER TOMORROW

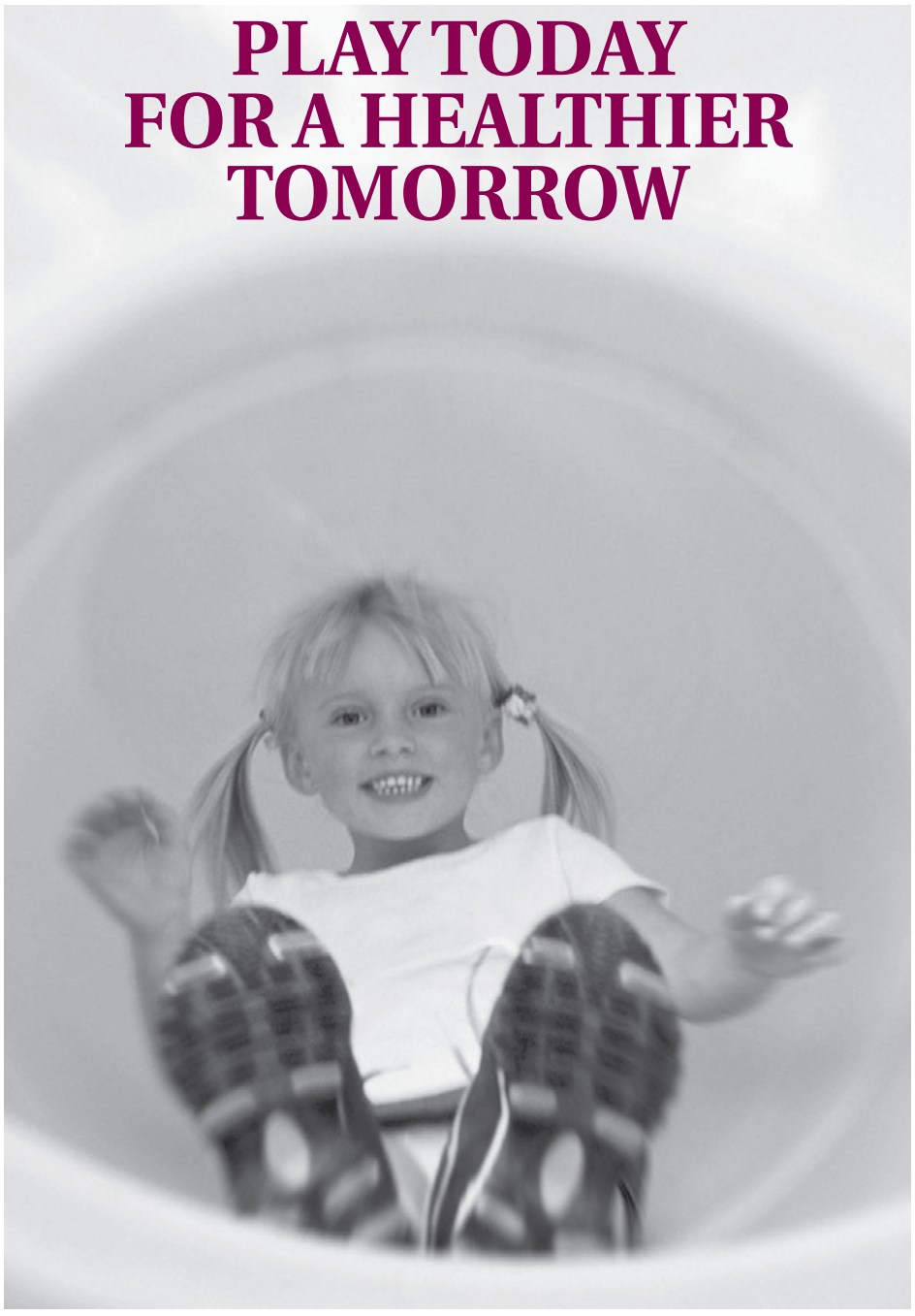

The La Mesa Park & Recreation Foundation launched its latest capital campaign called "It's Child's Play" this past summer. The Foundation proposes to raise $1 million to upgrade community playgrounds in Northmont, Vista La Mesa, Collier, La Mesita and Jackson Parks. The new venture follows a successful campaign to raise $8 million that created a youth sports complex at Parkway Middle School and revamped Briercrest Park.

The new campaign is a result of community input and evaluation of need within the City, including new, age-appropriate, accessible playgrounds for neighborhood parks. In addition, the City of La Mesa has agreed to partner with the Foundation to make other improvements to the five parks by refurbishing restrooms, adding security lighting and refreshing landscaping and irrigation.

Joe Drew, CEO of Drew Ford, and Ed Burr, CEO of EDCO, will chair the volunteer fundraising committee for "It's Child's Play." Initial support for the campaign comes from these two prominent La Mesa businesses as well as Grossmont Shopping Center. Private fundraising opens up greater opportunities for creative play environments when combined with City funding for parks that often is dependent upon the municipality's limited resources. Over the last several years, the trend has been to combine the assets of public and private partnerships to refurbish parks because municipal leaders see upgrading parks as a way to revitalize a neighborhood.

What are the benefits to supporting upgrades in City parks? Statistics indicate that the current generation of children will not have as long a life span as their parents due to complications from obesity. Sedentary lifestyles are causing a multitude of problems in our youth. According to the Centers for Disease Control, the percentage of children and teens who are overweight has tripled in the last 20 years. While the solution for this problem is multi-pronged and complicated, there is no question that having attractive, safe and close parks is a first step in encouraging regular physical activity for families.

If you are interested in getting involved in this project, please call the La Mesa Park & Recreation Foundation at 619-667-1331 or e-mail parkfndn@ci.la-mesa.ca.us. The La Mesa Park & Recreation Foundation is a private, non-profit organization that improves the lives of East County families through recreational, educational and cultural services. The Foundation's mission is to develop quality projects and programs that provide positive activities for youth, strengthen family bonds, and enhance community pride.

CITY RECEIVES 3 AWARDS!

In less than two months, the City of La Mesa has received recognition for these three outstanding projects:

The County of San Diego awarded the City of La Mesa the "Shaping a Healthy Future Award" at the Childhood Obesity Conference on September 20. The award was presented to the City for its work on citywide walkability, the CX3 youth engagement activity (Communities of Excellence in Nutrition, Physical Activity and Obesity Prevention), and the approval and implementation of the La Mesa Community Wellness Program. The County has issued a Call to Action on Childhood Obesity that includes seven domains or focal areas including: county and city government, schools, media and marketing, businesses, preschools/childcare and after school activities, faith/community and youth-based organizations, and healthcare systems and providers.

The California Chapter of the American Planning Association has awarded a major honor to the City of La Mesa for the Grossmont Trolley Station Project, including the Alterra and Pravada residential developments. The award was presented October 2 at a statewide conference. Called the "Outstanding Planning Project Award," the tribute is the fourth such planning prize awarded to the smart-growth, transit-oriented, mixed-use project currently under construction along Fletcher Parkway. Combining 527 dwelling units with 2,700 square feet of retail space oriented toward the trolley platform, the buildings incorporate "green building" features for energy and environmental design.

On September 13, the City received the American Public Works Association (APWA) "Honor Award" for its renovation of Porter Hall. Porter Hall originally was constructed in 1928 and recently was designated a Historical Landmark. Remodeling of Porter Hall was necessary to repair fire and termite damage and to bring the building and site into compliance with the Americans with Disabilities Act (ADA). The renovation also prepared the building for its new tenant, the Foothills Art Gallery. The award recognizes the City's creative design plan that provided the necessary improvements and dealt with the fire damage, while still maintaining the building's historical integrity.

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FEED BIRDS

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9-698-4163 or
eant@yahoo.com.

For additional information, see the accompanying "Frequently Asked Questions" (FAQs) about sewer lateral maintenance, or contact the Engineering Division of the Department of Public Works at 619-667-1166.

PRIVATE SEWER LATERALS

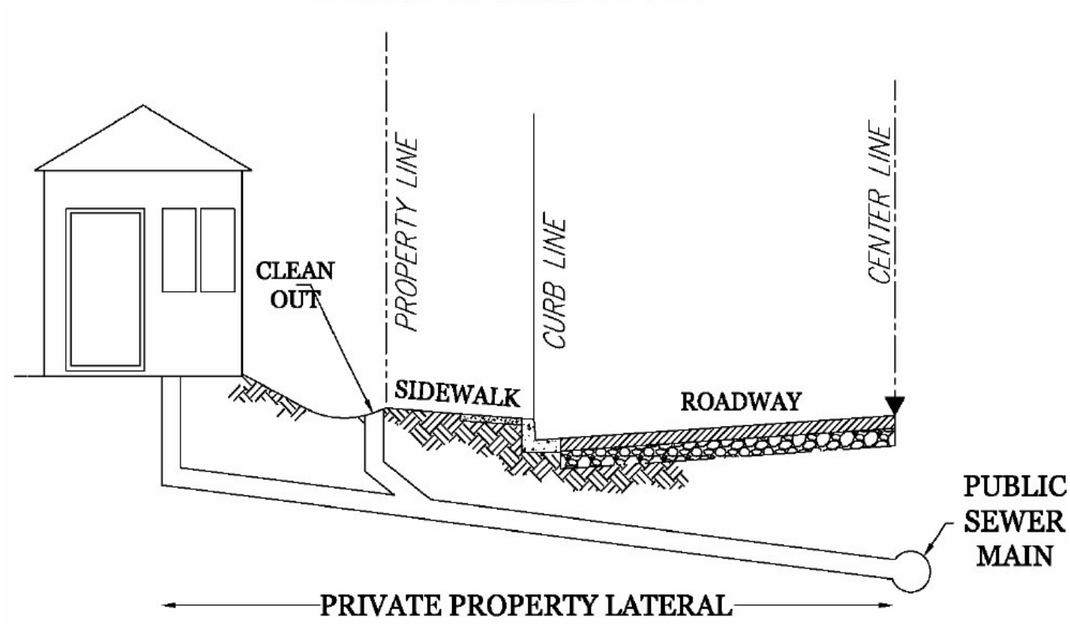

SEWER LATERAL FAQS

Q – How do I know if there is a blockage and what can I do about it?

A – If water does not drain or drains at a slower rate than normal, it may be an indication of a full or partial blockage. If this happens, you should call a licensed plumber and minimize the use of water until the problem is resolved.

You should also call Public Works at 619-667-1450 during working hours (6:00 a.m. to 3:30 p.m., Mondays through Thursdays and alternate Fridays) or 619-667-1400 during non-working hours. Crews will inspect the public sewer main to ensure that there are no problems in the main.

Q – How is a lateral cleaned?

A – A plumber normally sends a rod or a snake into the lateral through a cleanout to remove any blockage.

Q – What is a cleanout, and do I need one if I don't already have one?

A – A cleanout is a "Y" fitting on the sewer lateral that provides access to clean the lateral. It is advisable to install one if you do not have one. For further information, contact the City's Building Division at 619-667-1176.

Q – How can I have my lateral inspected?

A – A licensed plumber may videotape the sewer lateral to assess the lateral's condition.

1005

YOUTH SPORTS LEAGUES WORK TO PROVIDE HEALTHY SNACKS FOR PLAYERS AND SPECTATORS

For the past several months, the La Mesa Wellness Task Force, a coalition of professionals and community members working for a healthier La Mesa, has collaborated with the La Mesa Athletic Council to promote awareness of healthier snacks among the Council's member organizations. In September, the board of directors and members of the Athletic Council unanimously approved a resolution to make an effort to conform to the combined wellness policies of the Grossmont Union High School District, La Mesa-Spring Valley School District and City of La Mesa's Community Wellness Program.

The resolution called upon the Athletic Council's members to implement plans to incrementally offer healthier snack options. The first step encourages members to begin an awareness and educational campaign on the importance of healthy eating for players and spectators. This will be followed by providing healthy food choices for team snacks and at snack bars. The final step will reduce the availability of foods which are promoting poor health and, in some cases, eliminating these foods entirely from sponsored events, snack bars, food services and programs.

According to a study released by the California Center for Public Health Advocacy, using 2004 state Department of Education Physical Fitness Test data for students in grades 5, 7 and 9, the rate of overweight children in the La Mesa-Spring Valley School District was 24.9 percent. With some 4,500 youth participating in youth sports on La Mesa fields, providing educational materials and ultimately healthy snacks is a significant step in local efforts to improve the health and vitality of East County children and to combat childhood obesity.

City of La Mesa Launches New Website!

Starting October 31, log on to **www.ci.la-mesa.ca.us** and check out the **NEW** City of La Mesa website. The redesigned site features a fresh, new look and includes easy-to-access, up-to-date content. Stay informed about upcoming events and public meetings by regularly checking the Calendar or News & Announcements sections, sign up to be notified by e-mail about City happenings that are important to you, or report a problem or concern by clicking on "La Mesa Listens." Our new website is still a work in progress. Over the next few months, more features will be added. For example, an upgrade to "La Mesa Listens" will allow you to track your request, and e-commerce opportunities will be expanded. With news and information about La Mesa at your fingertips, we hope you will visit often.

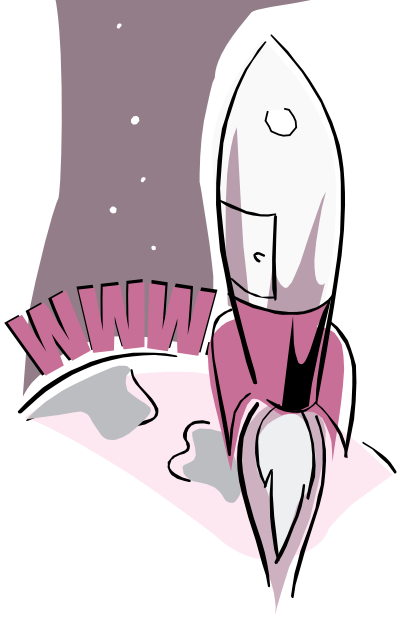

A LA MESA TRADITION NEEDS YOU!

The La Mesa Parade Committee needs you! Volunteers are now being recruited to help with the 2008 parade to be held on Saturday, May 31, 2008. This year's theme is…

"A Salute to Ol' Glory – Celebrate America."

Volunteer meetings are held once a month from January to June. Volunteers are needed to recruit business participation and floats and to coordinate cars for the parade. To volunteer, please contact Yvonne Garrett at 619-667-1300 or commservices@ci.la-mesa.ca.us.

And . . . mark your calendar for May 31 at 10 a.m. so you won't miss the parade! Watch for more details in the next two issues of the FOCUS newsletter.

SENIOR HOUSING EXPO RETURNS

The City of La Mesa will host the 4th annual Senior Housing Expo on Wednesday, February 6, 2008. The event will take place at the La Mesa Community Center, 4975 Memorial Drive, from 10:00 a.m. to 1:30 p.m.

The Senior Housing Expo is a free event open to adults interested in learning more about San Diego area housing alternatives such as assisted living, 55+ residential communities, low-income senior and disabled rental housing, reverse mortgages, granny flat construction, home modifications, shared housing, and housing-related legal concerns. NBC 7/39's Consumer Bob will be the featured keynote presenter. He will share information about good deals, how to save money and how to avoid scams.

The event will feature more than 50 exhibitors, interesting speakers, and valuable resources on housing alternatives. It is open to area seniors as well as adult children of aging parents. Shuttle service will be available from the parking areas.

The Housing Expo is sponsored by Union Bank of California. It is hosted by the City of La Mesa, the La Mesa Park & Recreation Foundation and the La Mesa Commission on Aging, in partnership with Aging and Independence Services, AARP and other community organizations. For general event information, call the La Mesa Adult Enrichment Center at 619-464-0505.

Event sponsorship and exhibitor opportunities are still available. Interested businesses and organizations may direct inquiries to Judy Stern at 619-667-1490.

ENVIRONMENTAL – Preserving Your

DISPOSE OF OLD ELECTRONIC DEVICES, PAINT AND OTHER TOXIC ITEMS . . .

But Do It Safely And Responsibly

Common household items, such as batteries, fluorescent light bulbs or tubes, paint, chemicals, or electronic devices, can't be thrown in the trash. State law requires that these types of items, called "household hazardous waste" or "HHW" not be placed in trash containers because of their destructive effect on the environment. Instead, they can be recycled and reused.

If you reside within the city limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program. And . . . while supplies last . . . event participants may bring a mercury thermometer and exchange it for a FREE non-hazardous thermometer.

The next event will be held on Saturday, November 17.
An appointment is required.
Call EDCO at 619-287-5696 x 4270 to schedule your drop-off time.

EXAMPLES OF HHW ARE:

- General: Batteries, fluorescent lights, latex and oil based paints, solvents, cleaners, pesticides and garden products, pool products, propane, and any items labeled flammable, hazardous, toxic or corrosive.
- Electronic: TVs, computer monitors and hardware, telephones, VCRs and radios.
- Automotive: Used oil and filters, batteries and antifreeze.

For more information on HHW, log on to www.ci.la-mesa.ca.us. Information on recycling, energy conservation and other topics also is available.

2008 HHW DROP-OFF SCHEDULE

January 26	August 16
March 29	September 27
May 17	November 22
July 12	

RECYCLING CONTAINERS MAKING THEIR WAY INTO CITY PARKS

With help from a grant from the California Parks and Recreation Department's Land and Water Conservation Fund, there are now seven recycling containers in Briercrest Park. These high-quality containers have covered lids and clearly visible signs and are located next to the existing unmarked trash cans.

All materials collected are part of the City's commingled recycling program. This means that all recyclable materials go into one container – aluminum, plastic, glass, paper and cardboard. All park visitors are encouraged to help conserve valuable resources and protect the environment by using the recycling containers.

With funding from the California Department of Conservation's Division of Recycling, the City will soon be adding recycling containers to other parks in La Mesa. Look for recycling opportunities soon in a park near you!

FREE OIL FILTERS!

RECYCLE
USED OIL FILTERS

Participate in the City of La Mesa Oil Filter Exchange. Bring your used oil filters to be recycled and receive a FREE oil filter!
Saturday, November 10
10 a.m. – 2 p.m.
Kragen Auto Parts, 5350 Jackson Dr.

This free oil filter offer is valid only at the specific location and on the date and time indicated above.
Funded by a grant from the California Integrated Waste Management Board.

Zero Waste – You Make It Happen!

CONSERVE WATER OUTDOORS AND BE ELIGIBLE FOR A REBATE

Helix Water District has two programs to help single-family homeowners conserve water outdoors. Residents are eligible to apply for an artificial turf rebate worth up to $1,000 or a smart controller rebate worth up to $350. For more information, call 619-466-0585, visit www.hwd.com/conserv or e-mail conserve@helixwater.org.

Recycle your Christmas tree at EDCO Station. Call 619-466-3355.

Donate your healthy, live tree.

See article on page 5.

PROGRAM UPDAT
Quality of Life –

BE AWARE OF WHAT YOU WASH DOWN THE STORM DRAIN

With La Mesa's clay soils, it doesn't take much to moisten the ground before water starts running off your property to the curb, down the street and into the storm drain. Eventually, the runoff will reach the region's waterways, carrying with it pollutants such as pesticides, fertilizers, automobile fluids and pet waste.

The pollutants, which are diluted and transported from different areas or sources (called "non-point source pollution"), contribute significantly to the impairment and degradation of our receiving water bodies. Moreover, water pollution compromises our quality of life by affecting family health; destroying habitats for animals, birds and fish; and impacting recreational areas used for swimming, boating and fishing.

Here are a few tips that you can follow that will help keep pollutants from entering our waterways:

- Irrigate to meet site-specific conditions to prevent over watering.
- Ensure that your irrigation system has control devices, sensors or shut-off switches to address malfunctions.
- Place or group plants with similar water needs within the same area.
- Don't irrigate non-planted areas.
- Inspect your irrigation system regularly for potential problems.
- Consider drip irrigation to save water and prevent over-irrigation and runoff.
- Adjust irrigation rates according to seasons, weather conditions and the soil's ability to absorb water.
- Irrigate in the early morning; it's the most efficient time to water plants with minimal evaporation.
- Refrain from irrigation during hot, windy periods of the day.

Please share this information with your family, friends and neighbors.

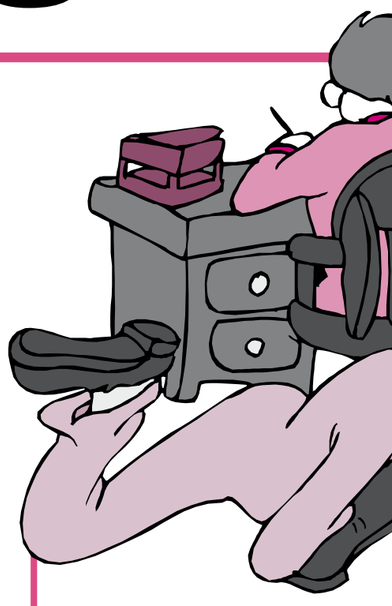

RECYCL

Interested in starting
store, or commercial o
and EDCO can help. Al
a little determination. Y
take what you collect t

For more inf
www.ci.la-mesa.

1008

LA MESA FIRE DEPARTMENT REMINDS RESIDENTS . . .

PRACTICE YOUR ESCAPE PLAN!

The La Mesa Fire Department has joined forces with the nonprofit National Fire Protection Association (NFPA) to remind residents to "Practice Your Escape Plan." Firefighters and safety advocates are spreading the word about the dangers of home fires and teaching residents how to plan and practice escape from a home in case a fire occurs.

Develop a fire escape plan that identifies two ways out of each room and a family meeting place outside. Make sure your plan allows for any specific needs in your household. If everyone knows what to do, everyone can get out quickly. Then practice using the plan at least twice a year.

Install working smoke alarms on every level of your home and inside and outside each sleeping area. Keep in mind that studies have shown that some people may not awaken to the sound of a smoke alarm; they may need help waking up. If the smoke alarm sounds, go to your closest exit; if you run into smoke, turn and use another way out. If you must exit through smoke, get low and go under the smoke to your exit. Don't take time to pick up belongings; just get out and help others get out. Move fast but stay calm.

According to the latest NFPA research, in 2006, 3,245 people died in home fires – that's nearly nine people every day. Being alerted to a fire and knowing what to do to escape from one are extremely important, yet less than one-quarter of households have planned and practiced a home fire escape plan. Sometimes there are only seconds to escape, but there's no question that having a plan in place that has been practiced saves precious time and makes survival more likely.

Are you prepared for a fire? Although it's difficult to prepare for the unexpected, reviewing the information above and taking action based on it to plan for a fire is strongly recommended. And . . . don't forget to practice your escape plan!

Check www.nfpa.org for more information.

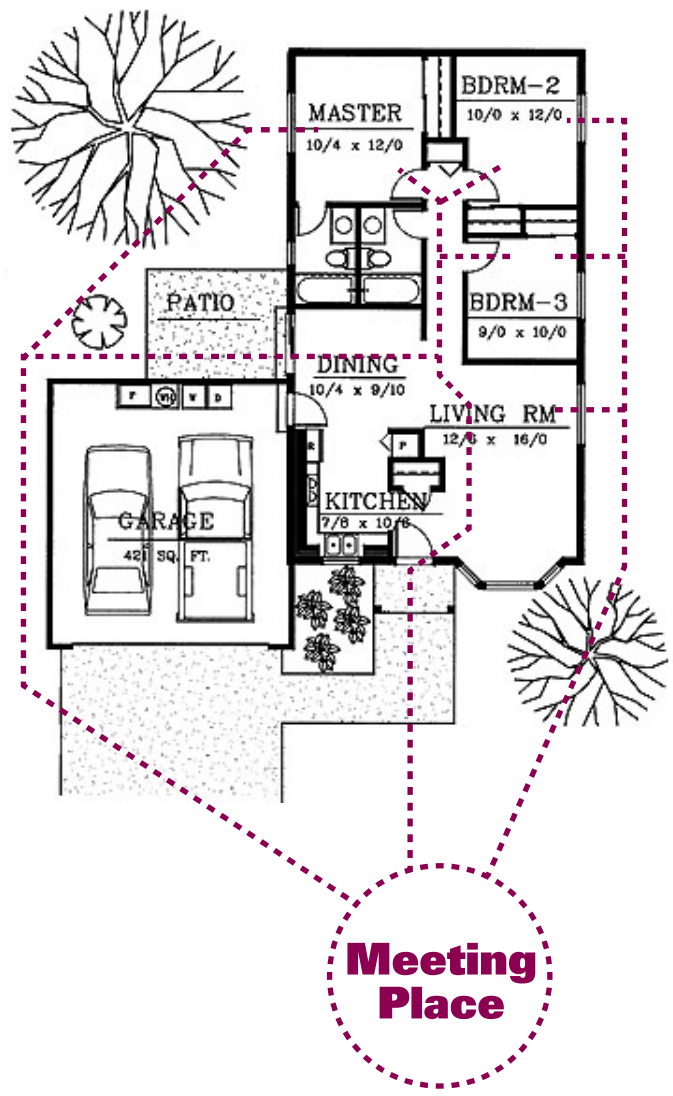

PREPARING FOR THE PANDEMIC FLU

– Fourth in a Series of Articles –

Business and Workplace Preparation

In previous editions of the FOCUS, we offered advice to assist you and your family in preparing for a pandemic flu or similar events. This edition will present a planning tool to assist businesses.

Maintaining the lifestyles enjoyed by those who live and work in La Mesa are dependent on a strong, thriving economic base. The composition of business in our city ranges from merchants and entrepreneurs with a few employees to corporations that employ hundreds. Profits, expenditures and wages all add to the economic base. A single lost job removes tens of thousands of dollars from the amount available to be spent within the community. This loss touches every citizen and every business.

A pandemic flu would certainly affect business operations. Businesses can expect loss of customers, interruption of supplies, diminished access to currency and financial services, and an absent workforce who may be sick or caring for sick family members.

Planning for the eventuality of a pandemic flu or public health event is critical to a business's survival. The United States Department of Health and Human Services provides two checklists to assist businesses in their planning efforts. These can be found at www.pandemicflu.gov/plan/checklists.html; they are titled "Business Pandemic Influenza Planning Checklist" and "Pandemic Preparedness Planning for US Businesses with Overseas Operations."

We recommend that each business within the community make use of these planning tools to help ensure its continued existence through a catastrophic event such as a pandemic. These resources provide points of thought and guidance but do not build a plan; it is up to each business to develop a plan that will meet its own unique circumstances.

Each document assists in an evaluation of how a pandemic flu would affect a business, its employees and customers. Each also provides guidance in establishment of policy, allocation of resources, and working with employees and within the community. The Health and Human Services web page offers numerous links to planning resources for businesses as well as for individuals and communities.

Further resources and guidance can be found at the following web sites:

- www.birdflu.org – County of San Diego Health and Human Services
- www.cdc.gov – Centers for Disease Control
- www.who.int/en – World Health Organization

Pandemic flu information is readily available from the County of San Diego at www.sdbirdflu.org and from the Centers for Disease Control at www.cdc.gov.

PLAN – PREPARE - STAY INFORMED

La Mesa Fire Dept. to Celebrate Centennial in 2008

Join us in commemorating the La Mesa Fire Department's 100-year anniversary! The department was established in February 1908, and we will kick off the festivities with a community open house on February 29, 2008. The celebration will continue throughout the year with a pancake breakfast on March 30 and participation in the City's annual parade on May 31, among other activities.

Watch for more details about these events on the City's website at www.ci.la-mesa.ca.us. Click on the Fire Department's page for all the latest, and sign up to receive e-mail notification of all our upcoming community events.

ARE YOU PREPARED FOR AN EMERGENCY?

How prepared are you to survive a natural or man-made emergency? Most people don't take the time to think about what they would do in the event of an emergency until something happens, and then it is too late.

There is a good possibility that power, water and other services will be disrupted during an earthquake or other disaster. You should be prepared to survive on your own for 72 hours. How comfortable you are during those first 72 hours depends on how well prepared you are. It only takes a few minutes a day to get prepared. Start by putting together a 72-hour survival kit for your home. Your kit should include things like water, food, flashlight, radio and a change of clothes. You should also put together a smaller kit for your car.

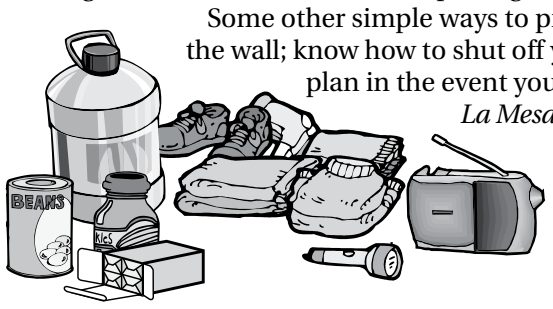

Some other simple ways to prepare are to: secure your water heater and other heavy or tall items to the wall; know how to shut off your water, gas and electricity; and write down a family reunification plan in the event you and your family are separated.

La Mesa Survive is an emergency preparedness program designed to help you prepare to be on your own for the first 72 hours after an emergency. You can download a copy of the *La Mesa Survive* booklet from the City website or call the Fire Department at 619-667-1355 to request a copy.

You never know when an emergency will strike, so take the time now to prepare.

You will be glad you did.

USE 9-1-1 TO REPORT A DRUNK DRIVER

The La Mesa Police Department has established partnerships with citizens and federal, state and local law enforcement agencies to reduce the number of persons who drive while under the influence of alcohol. The Department has received grant funding from the California Office of Traffic Safety through the Business, Transportation & Housing Agency. The funding stretches police staffing with other police agencies for overtime patrols, DUI checkpoints, probation checks, and joint anti-DUI operations in and around La Mesa.

One Call Could Save A Life

Have you ever wondered where a police officer was when you've observed someone driving recklessly? The person was, at a minimum, driving dangerously. Perhaps, more seriously, he or she was alcohol impaired. In 2005, 120 persons were killed and 2,981 persons were injured in alcohol-related crashes in San Diego County.

You can do something to help get drunk drivers off the road. If you see a drunk driver on the road, dial 9-1-1. When you call, provide the following information:

1. State that you wish to report a drunk driver.
2. Give the exact location of the vehicle, including the name of the road or cross streets, and the direction the vehicle is traveling.
3. Give a complete description of the vehicle, including make, model, color and license plate.
4. Describe the manner in which the vehicle is being driven.

What You Should Look For

The following signs can help you detect impaired drivers:

- Turning with a wide radius
- Straddling the center of the road or lane marker
- Appearing to be drunk (i.e., eye fixation, face close to windshield, drinking in the vehicle)
- Almost striking an object or another vehicle
- Weaving or zigzagging across the road
- Driving on surfaces other than a designated roadway
- Swerving or abruptly turning away from a generally straight course
- Turning abruptly or illegally
- Driving slower than 10 mph below the speed limit
- Stopping without cause in a traffic lane
- Stopping inappropriately
- Following others too closely
- Drifting or moving in a straight line
- Erratic braking
- Driving into opposing or crossing traffic
- Signaling that is inconsistent with driving actions
- Slow response to traffic signals, including sudden stops and delayed starts
- Driving with headlights off at night

Citizens who use the 9-1-1 emergency system to notify law enforcement of suspected drunk drivers create a partnership that connects individuals and communities with law enforcement and the goal of improving public safety.

THERE IS NO SAFE WAY TO DRINK AND DRIVE

There is no safe way to drive while under the influence. Always designate a sober driver if you know you will be drinking. Even one drink can make you an unsafe driver. A lot depends on the type of drink; if you are drinking on an empty stomach; your body type, gender and health status; and other factors including medicines and drugs you may have taken. Each drink increases your chances of having an accident from five times higher to 25 times higher, and more. Drinking alcohol affects your Blood Alcohol Concentration (BAC). It is unlawful to drive with a BAC that is:

- **.08% or more,**
- **.04% or more if you drive commercial vehicles, and**
- **.01% or more if you are under 21 years of age.**

An effective deterrent to drunk driving involves personal responsibility, education on the effects of alcohol on driving, and a public intolerance of impaired drivers.

HAVE A SAFE AND SECURE HOLIDAY SEASON

Santa may not be the only one who'll be coming to town for the holidays. Make your holiday season safer by following these simple tips:

- **Pair up with your neighbors.** Become acquainted with your neighbors. When you are away from home shopping or at a holiday party, your neighbors can watch for any unusual activity at your home. You can return the favor.
- **Shop in pairs.** Don't go into holiday crowds alone. A lone shopper is more vulnerable than a couple or group.
- **No cash, No credit cards, No ID in your wallet.** Have a purse or wallet with you if you like; they might be useful as decoys. Keep the real stuff – minimal cash, one credit card and your ID – in a fanny pack placed in front of you or in the inside pocket of your coat, jacket or other overgarment.
- **Use only indoor ATMs.** This is much safer than standing or sitting in your car in a dark, lonely parking lot.
- **Photocopy your vehicle registration, proof of insurance and the contents of your wallet.** If your car is broken into or stolen while you are shopping, or if your wallet is lost or stolen, you will have a record of the contents. Making a copy of the contents, front and back, can possibly speed the recovery of your vehicle.
- **Don't forget your garage door opener.** If you have an electric garage door opener, take it with you if you are driving when you go shopping, visiting or partying.
- **Will you be partying this holiday season? If so, please don't drink and drive.**

For additional safety information, contact the La Mesa Police Department Crime Prevention Unit at 619-667-1445.

Additional information on these topics can be found at the following websites:

California Office of Traffic Safety
www.ots.ca.gov

California Department of Motor Vehicles
www.dmv.ca.gov

National Highway Transportation Safety Administration
www.nhtsa.dot.gov

Mothers Against Drunk Driving
www.madd.org

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 8:00 AM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM
The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM
The above meetings are held at the
Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM
(except July, August, November, December)
The above meeting is held at the
Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS

(Area code 619)

Adult Enrichment Center	464-0505
Animal Control	667-1436
Building Inspection	667-1176
Business Licenses	667-1118
Cable TV	262-1122
City Attorney	667-1128
City Clerk	667-1120
City Council	667-1106
City Hall	463-6611
City Manager	667-1105
Crime Prevention	667-1445
Dog Licenses	667-1117
Engineering	667-1166
Fire (Business)	667-1355
Human Resources	667-1175
Library	469-2151
Mayor	667-1100
Municipal Pool	466-4177
Parking Citations	667-1117
Planning	667-1158
Police (Business)	667-1400
Public Works	667-1450
Recreation	667-1300
Recycling/Trash	287-7555
Sewer Charges	667-1126
Sidewalk Maintenance	667-1450
Storm Water Hotline	667-1134
Streetlight Maintenance	667-1450
Traffic Engineering Hotline	667-1144
Traffic Signal Maintenance	667-1166
Zoning	667-1177

CITY COUNCIL ACTIONS

July 10, 2007
Ratified the Design Review Board's approval of DRB 07 02, a request by Cricket Communications to construct a wireless communications facility in the parking lot serving 8809 La Mesa Boulevard.

Authorized an amendment to the contract for the management and implementation of a Home Investment Partnerships Program with the County of San Diego to fund the La Mesa Down Payment and Closing Cost Assistance (DCCA) Loan Program and accept the Home Allocation of $1,289,901.34.

Adopted an ordinance amending Chapter 17.12 of the La Mesa Municipal Code to adjust the schedule of sewer service charges commencing September 1, 2007 by the minimum amount necessary to operate and maintain the sewer system in a safe, adequate and sanitary manner.

July 24, 2007
Approved the first amendment to the National Pollutant Discharge Elimination System San Diego Regional Stormwater Co-permittees Memorandum of Understanding.

Ordered the vacation of a portion of Quarry Road right-of-way dedicated on American Homes, Map no. 2203, fronting 3915-3917 Quarry Road.

Upheld the Planning Commission's approval of Variance A-03-07 (Pruitt), to reduce the south side setback for a new garage at 8430 La Mesa Boulevard.

August 14, 2007
Amended Section 12.44.130 of the La Mesa Municipal Code for the installation of a disabled persons parking space at 6070 Nancy Drive.

Authorized the application for a technical assistance grant for "Communities for Healthy Kids," a program of the Institute for Local Government.

Approved a revised priority list of streets for future underground utility districts.

Accepted the Annual Report on the Neighborhood Traffic Management Program and approved the 2007 ranked list of streets requesting traffic calming.

August 28, 2007
Ratified the Design Review Board's approval of DRB 07 11, an exterior remodel of a commercial building at 8047-8049 La Mesa Boulevard.

Ratified the Design Review Board's approval of DRB 07 16, a request to add a second dwelling unit to the property at 4505 Spring Street.

Authorized the execution of an agreement to negotiate between the City of La Mesa and Citymark Communities LLC for the development of a mixed-use project on the Allison Avenue parking lot site.

Adopted an urgency ordinance adding Chapter 10.50.47 of the La Mesa Municipal Code for purposes of regulating the presence of animals at outdoor assemblages.

Approved traffic calming on High Street between Waite Drive and Lemon Grove Avenue.

September 11, 2007
Ratified the Design Review Board's approval of DRB 06-16 (City of La Mesa) – a proposed police facility at 8085 University Avenue in the La Mesa Civic Center.

Adopted a Resolution expressing support for San Diego Gas & Electric's Sunrise Powerlink Transmission Project.

September 18, 2007
Adopted a resolution taking legislative action to resolve the labor contract impasse with the Police Officers' Association for fiscal year 2007-2008.

September 25, 2007
Approved the 2007 Christmas in the Village outdoor assemblage permit and authorized the temporary closure of portions of La Mesa city streets for the event sponsored by the La Mesa Village Merchants Association.

Adopted the biennial budget for fiscal year 2007-2008 and fiscal year 2008-2009.

Ratified the Design Review Board's approval of DRB 07 06 (City of La Mesa) – for Downtown Village Design Guidelines.

Ordered the vacation of a portion of the High Street right-of-way at 3812 Costa Bella Drive.

Established Underground Utility District No. 26 from 7434 to 7463 Orien Avenue and 7323 University Avenue (Helix High School).

Approved the designation of Porter Hall, located at 4910 Memorial Drive in MacArthur Park, as a historic landmark.

WALK LA MESA

Just for the Fun of It

The La Mesa Wellness Task Force wants you to know that there are organized walks nearby every day of the week. Check the City's website at www.ci.la-mesa.ca.us/News for a list of options, or pick up a flyer at La Mesa City Hall or Community Center.

Call 619-667-1300 for more information.

La Mesa – it's made for walking!

SEE INSIDE

BLUE PULLOUT SECTION
for Community Services Programs & Activities Schedule

La Mesa
COMMUNITY SERVICES
Spring 2008
Registration begins Nov. 1st!

CITY OF LA MESA FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619-463-6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.ci.la-mesa.ca.us

CITY OF LA MESA FOCUS

This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Contact your elected officials at 619-667-1106.

Mayor..... Art Madrid
Vice Mayor ..... Ernie Ewin
Councilmember..... Ruth Sterling
Councilmember.....Dave Allan
Councilmember..... Mark Arapostathis
City Manager..... Sandra Kerl
Focus Editor ..... Carol McLaughlin
Community Services Editor.. Käaren McElroy
Editorial Staff .....Heather Moore Byerley
Suzanne Strassburger

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CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • February 2008

LA MESA TOWN HALL MEETING

Thursday, Feb. 7, 2008

7:00 – 9:00 pm

Lemon Avenue Elementary School
8787 Lemon Avenue

Come share your ideas for the future of La Mesa!

LA MESA COMMUNITY SERVICES

Early signups for summer camp programs and enrollment for spring swim classes begins February 1.

Additional details are available in the city's website. From the home page, click on the Departments tab, then Community Services to view these and other activities for all ages.

NEW LA MESA LIBRARY AND POST OFFICE

Construction timeline is on target for completion of new library and post office building

The City is making good progress toward completing construction of the new branch library and post office building. The 17,000 sq. ft. structure will include a new 10,000 sq. ft. La Mesa branch of the County Library System and a 7,000 sq. ft. post office. The new library will be over 40% larger than the existing library, one of the most visited branches in the County system. The new post office will provide retail postal services with better access in a more modern facility. The majority of the existing post office building, located just east of City Hall, provides space for mail sorting and local carrier routes. In the future, these carrier services will be moved to another location away from the Civic Center.

Construction progress is being carefully monitored to ensure timely completion. The new La Mesa Police Station is scheduled to begin construction once the library is moved into the new facility and the existing site is transferred to the City from the County. The new Proposition D funded Police Station will be located on the site where the current library and the former Helix Water District office is located as outlined in the Civic Center Master Plan.

continued on page 2

UPCOMING STREET RESURFACING

The City of La Mesa plans to continue with its street resurfacing program in 2008. This past year portions of Glen Street, Washington Avenue, Cypress Street, Grant Avenue, Lemon Avenue, Normal Avenue, Windsor Drive, Canterbury Drive, Date Avenue, Finley Avenue, and Third Street were resurfaced following the replacement of sewer pipes in those streets. Additionally, the commitment to the annual slurry seal program is paying dividends by extending the useful life of much of the street network, so that repaving is not needed as soon. More information on street maintenance is available on the City's website. Go to www.cityoflamesa.com and enter *street* in the search field. This past year approximately 3 million square feet of pavement was slurry sealed.

THE FOLLOWING STREETS ARE SCHEDULED TO BE RESURFACED IN 2008:

- University Avenue from Allison Avenue to Spring Street
- Allison Avenue from University Avenue to Palm Avenue
- Jackson Drive from Fletcher Parkway to the City limits
- Baltimore Drive from University Avenue to the City limits
- These streets will be resurfaced after sewer pipes are replaced:
  Boulder Drive, Boulder Place, Crowder Lane, Hillcrest Avenue, Chevy Chase Drive (from Hillcrest to Sunrise), Grape Street, Normal Avenue (from Windsor to Lemon), Lee Avenue (from University to Grape), Maiden Lane, and Summit Drive (from Eastridge to the end)

There will be some traffic delays associated with these projects and residents will be informed prior to the start of any work. Your patience is requested while the City upgrades this important infrastructure.

Continued from page 1

New La Mesa Library and Post Office

The new La Mesa Library will continue to be operated by the County library services staff who have been working closely with the City on design of the new building and interior improvements. José Aponte, Library Director, states that the new La Mesa library will "build on its reputation as a community asset for kids, families and the greater population. La Mesa is taking the first steps towards building the library necessary to support our kids and our community to compete in the 21st century world marketplace."

The library staff is looking forward to moving into the new library so they can better serve the La Mesa community by this spring. The new library will include a children's area, a young adult section, and computer stations; as well as traditional reference, fiction, and periodical sections. Library staff has worked closely with the City's architect and design team to create an exciting and functional new space. Betty Waznis of the County library staff states "The City of La Mesa provides an outstanding setting for families and businesses to grow and thrive. We welcome the opportunity to continue to support the residents of La Mesa with cutting edge library service in this enhanced new environment."

This cooperative arrangement between the City and the County will provide the community with a fantastic new library, while also taking another giant step toward completing the vision established by the City Council for a new civic center. The first civic center project to be completed was the new Fire Station 11 and Emergency Operations Facility on the corner of Allison Avenue and University Avenue, just west of the library project. The library and post office facility, scheduled for completion in March 2008, is the second project in this master plan. The third major project will be construction of the new two-story police station on the north side of the Civic Center site at University Avenue and Baltimore Drive. This new facility will provide much needed space for current and future public safety needs in La Mesa. The project will include below grade parking for police vehicles to provide more security and better function for police operations, as well as create more space for future uses within the Civic Center block.

New Police Station to be located at University and Baltimore

COLLIER PARK MASTER PLAN

The design team of Architects Bundy & Thompson/Garbini & Garbini have been retained to prepare a master plan for Collier Park. The current goal is to present a final master plan to the City Council in June 2008.

The process to develop the master plan will include a comprehensive and interactive outreach program of interviews, surveys, and workshops conducted by the design team. After an initial phase of information gathering, research, etc. the design team has scheduled the first interactive workshop for March 1, 2008, 8:30am to 4:00pm at the Nan Couts Cottage. This first workshop will focus on developing the community's wants, needs, and desires for the future of Collier Park. A second workshop is schedule for April 26, 2008, 8:30am to 4:00pm at Nan Couts Cottage. At this workshop, attendees will work on master plan ideas for Collier Park.

Representatives from a broad spectrum of the community will be invited to participate in these two workshops and an open invitation will be made to anyone who wants to attend and participate. That word "participate" is important because there will be no place on the sidelines for spectators at these all day workshops.

Questions and comments should be sent to the Design Team, Attention: Dick Bundy, FAIA at abtdick@pacbell.net or mailed to Architects Bundy & Thompson, 715 J Street, Suite207, San Diego CA 92101.

Collier Park is the City's first park

BRIERCREST PARK IS AN ALL AROUND WINNER

The annual Kids Care Fest is a regular event at Briercrest Park

The City of La Mesa received an Orchid Award for Briercrest Park in the San Diego Orchids and Onions Awards ceremony held on Friday, November 30, 2007. The Park was given the Orchid in the Landscape Architecture-Sustainable Design category. The architectural improvements ongoing at Briercrest Park promote healing and wellness values. The park provides access to education, rehabilitation, and interactive recreational activities in a highly visible and creative setting. Briercrest Park also won the Orchid Award because of sustainable design which relies on a streambed concept for the hydrology cycle. The entire park drains into a natural basin so that all on-site storm water is captured and runoff is used to feed nearby shrubs and trees.

With a design from the Schmidt Design Group, Briercrest Park was redeveloped in 2005. The park plan was the result of an extensive community planning effort resulting in the Parks Master Plan. "The vision was to design a place where people of all ages and abilities will find balance, peace, and harmony. Briercrest Park is an asset to the community and is a treasure for all to enjoy," said Mayor Art Madrid.

Adjacent to Briercrest Park a development will soon begin construction for a Senior Assisted Living Project that will take advantage of the location next to the award winning park and near the amenities and services of Grossmont Hospital. The City Council approved an amendment to the ground lease that will allow the Village at Briercrest to include 120 residential units and a 24-bed special care unit to be known as the Vintage Club. The Village at Briercrest will be developed by the Health Care Group. The building will be one to four stories, containing approximately 120,000 square feet, and will be located on a 2½- acre City-owned site. A portion of the annual lease payments to the City for this project go to the ongoing maintenance and improvement of Briercrest park. The concept for integrating a private development that complements the "wellness" theme for Briercrest park was approved as part of the Parks Master Plan.

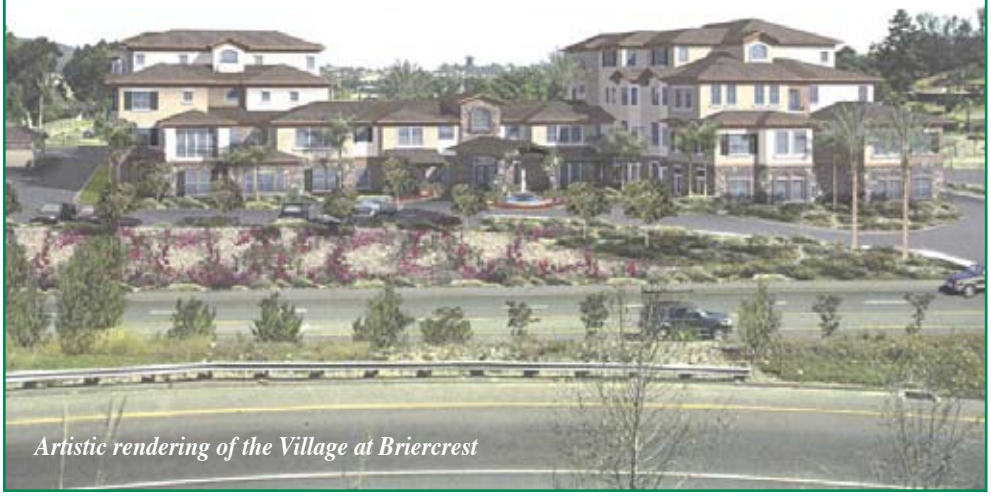

Artistic rendering of the Village at Briercrest

OPEN YOUR HEART & CAR DOOR TO A LA MESA NEIGHBOR WHO NEEDS A LIFT…

Become a part of La Mesa's newest community production, now in full swing!

Inaugural rider Margaret Gaines(r) and her driver, Doris Tuley, were honored at the Rides4Neighbors kickoff event held December 11, 2007 at the La Mesa Community Center.

Rides4Neighbors is our volunteer-based transportation assistance program for La Mesa's older adult residents and adult residents with disabilities. Rides are provided by screened and trained volunteers who use their own vehicles to assist transit dependent La Mesa neighbors in need of a lift.

The City of La Mesa received a federal New Freedom grant award through the San Diego Association of governments (SANDAG) to cover most of the start-up costs and two year's operation for developing and providing this new service. In December 2007 the City was recommended for continued funding for an additional three years and is awaiting the SANDAG Board's final approval. The La Mesa Adult Enrichment Center accepts ride requests, explains ridership rules and the suggested donation system, and matches ride requests with volunteers.

Volunteer drivers are reimbursed for mileage and receive secondary liability insurance. As a volunteer, you decide your availability and choose the rides you wish to provide. There is no minimum time commitment or number of rides required to be a volunteer. We can either call you when a ride is needed, or notify you via e-mail.

As a volunteer, you will be part of a rewarding and meaningful civic program. Community surveys consistently find that what residents like best about La Mesa is the neighborly small town feel. Rides4Neighbors will help build that spirit of community and old-fashioned neighborliness. Join us by opening your heart and car door to a rider in need of a lift!

For more information, call the Adult Enrichment Center at 619-464-0109, or go online to www.cityoflamesa.com/Rides4NeighborsVolunteer to download a volunteer application form.

WHAT IS RIDES4NEIGHBORS?

- Rides4Neighbors a volunteer-based transportation program for adults age 65 and older and persons with a disability who are residents of La Mesa.
- Rides are provided by trained volunteers who use their personal vehicle.
- Rides are scheduled for essential transportation needs, like medical appointments, grocery and other essential shopping, personal care, personal business.
- Ride destinations are not limited to La Mesa, but are contingent upon finding a volunteer willing to transport you to your destination.

The City of La Mesa provides eligibility screening for riders and volunteers, scheduling, ride coordination, volunteer training, mileage reimbursement and secondary insurance.

SCHEDULING A RIDE

- Call 619.464.0109 to schedule a ride.
- First time riders complete an application and service agreement prior to the first ride.
- Request your ride at least one week in advance of your trip date; new callers should allow even more time in order to process your initial application.
- Rides4Neighbors makes every effort to match you with a screened volunteer driver, but ride availability is not guaranteed.
- Eligible riders may receive the equivalent of up to $100 of service per month, based on mileage reimbursement and/or purchased rides fees.
- Riders must be residents of the City of La Mesa, age 65 or older, or have a disability that prevents use of existing public transit services including ADA Paratransit.

PAYING FOR A RIDE

- Rides are donation-based; the minimum suggested donation is $3 per one-way trip; the suggested donation scale is based on the trip distance, or geographical zone.
- Donation statements are mailed to riders monthly and donation checks may be made payable to the "City of La Mesa."
- Volunteer drivers do not accept payment, donations or tips from riders, but a heartfelt Thank You is always welcome!

VOLUNTEERING

- We are seeking adult volunteers with an excellent driving record who are willing to use their personal vehicle to provide a ride to a neighbor in need.
- Volunteers complete an application, provide a copy of a valid Drivers' License and insurance certificate, authorize the City to make a DMV records check, complete a Live Scan background check, and complete an orientation and training.
- Volunteer drivers are reimbursed for mileage and receive secondary liability insurance.
- As a volunteer, you decide your availability and choose the rides you wish to provide. There is no minimum time commitment or number of rides required to be a volunteer.
- Call 619.464.0109 for information on becoming a Rides4Neighbors volunteer!

Rides4Neighbors

PUBLIC ACCESS DEFIBRILLATORS

Public access defibrillators are available in many City facilities and a growing number of private buildings. The use of these devices, in conjunction with cardio pulmonary resuscitation or CPR, increases the chances of survival for victims of a heart attack who are in cardiac arrest.

The use of public access defibrillators is now incorporated into the current CPR training as an additional module. They are easy to use. Simply open the device and follow the pre-recorded instructions and prompts.

Defibrillators are located for public access at the following City of La Mesa sites: Police Department, Municipal Pool, Adult Enrichment Center, City Hall, Community Center, Public Works Operations Center, and the Fire Department Administrative Office.

THE AWARD WINNING PROJECT AT GROSSMONT TROLLEY STATION

The Transit Oriented Development at Grossmont Trolley Station is fully under construction by Fairfield Residential LLC. The Smart Growth development, Alterra and Pravada, consists of two levels of structured parking, topped by three and four levels of apartments and site amenities. The lower level of the parking structure will replace the 600 surface public parking spaces and the second level of parking will serve the new apartments.

Though not fully completed, this development has already been recognized with four awards. It won a San Diego Chapter American Planning Association award for Outstanding Planning and for Outstanding Planning Project, and garnered the California Chapter of American Planning Association for the same named award. The project has also received an award from the Urban Land Institute for distinguished planning and design achievement. The smart growth transit oriented development is sure to garner more local, State, and national award recognition when complete.

The project is located on both sides of the Grossmont Center Drive bridge. The west side, Pravada, is under construction at the present time and will have 297 apartment homes. Alterra, to be constructed on the east side of the bridge, will have 230 apartment homes and will begin construction in 2008. When construction is started on the east side of the bridge, parking will be closed on the east side and trolley patron parking will be allowed in the first level garage at Pravada on the west side. In total, there will be 2,700 square feet of retail space oriented to the transit station platform, and 527 one and two-bedroom apartments on the eight acre site. Of the 527 units, 15% or 80 units will be made available to very low and moderate-income households, funded through a $2.7 million contribution from the La Mesa Community Redevelopment Agency's housing fund. In addition, the San Diego Association of Governments (SANDAG) awarded a $2 million Smart Growth Grant and the Metropolitan Transit System (MTS) included a $1.7 million capital improvement project that implements a community-wide objective to achieve better access to and from the trolley station. These public improvements will include two elevators and a bridge structure, along with other pedestrian amenities and improvements.

Pravada is currently under construction and should be ready for occupancy by late summer

The developer, Fairfield Residential, stated that most apartment units on the west side in Pravada should be ready for occupancy sometime in late summer 2008. Anyone who is interested in the Pravada apartment community can call Fairfield's interest line at 858.824.6464 or contact them via their website at www.pravada-apts.com.

Project site at Fletcher Parkway on both sides of Grossmont Center Drive

LA MESA UNVEILS TWO NEW PLAQUES ON THE WALK OF FAME

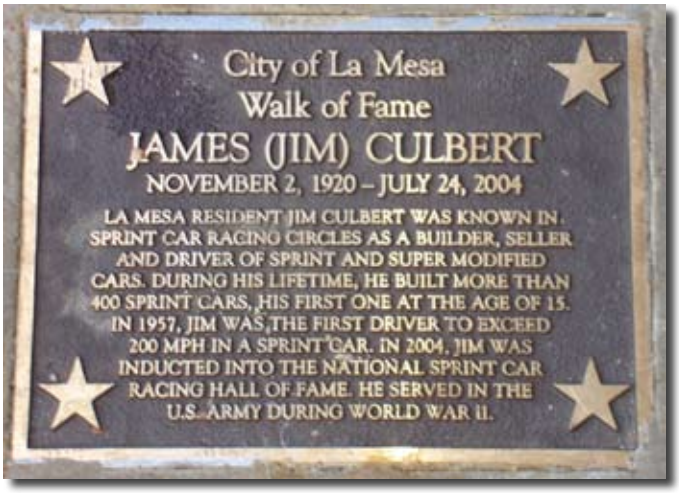

On January 9, 2007 two new plaques were unveiled on La Mesa's Walk of Fame. Along La Mesa Boulevard in the La Mesa Village, bronze plaques in the sidewalk recognize individuals whose achievements and contributions have been important to the livelihood of La Mesa. The new inductees to the Walk of Fame are James "Jim" Culbert and James "J.O." Orsborn.

Jim Culbert was known worldwide in sprint car racing circles as a builder, seller and driver of sprint and super-modified cars. In the late 1940s, he founded Culbert Automotive Engineering (CAE) that evolved into an auto racing superstore. James was also the record holder for speed in sprint and modified roadsters, and in 1957 he was the first driver to exceed 200 mph in a sprint car. Shortly before his death in 2004, Mr. Culbert was inducted into the National Sprint Car Hall of Fame in Knoxville, Iowa.

James Orsborn resided in La Mesa his entire life and was a well-known member of the community. Known to many simply by his initials, J. O. began his career as a volunteer fireman with the La Mesa Fire Department at the age of 15. He was appointed La Mesa's Fire Chief in 1981 and retired in 1990 after 46 years of service. He was also active in scouting, serving in various capacities with the San Diego Boy Scouts, and was awarded the Silver Beaver Medal for his long service.

Prior inductees to the Walk of Fame are: Elmer Drew, founder of Drew Ford; Shuttle Astronaut Dr. Ellen Ochoa; longtime resident Sarah "Nan" Couts; Basketball Hall of Fame and Helix High graduate Bill Walton; and Ed and Sandra Burr, founders of EDCO Disposal Corporation.

JOHN A. DAVIS FAMILY YMCA

Expansion and Remodel

The finishing touches are being made to the expansion and remodel of the John A. Davis Family YMCA in La Mesita Park. This $2.7 million project is scheduled for completion in spring 2008. The facility will double in size, add more than 20 parking spaces, and receive a fresh coat of paint inside and out. The new facility will provide additional programming in individual fitness programs, group fitness classes, Pilates, youth and pee wee sports, youth day camps, and senior activities. For more information on the East County Family YMCA, John A. Davis Facility, please log on to eastcounty.ymca.org or call (619) 464-1323.

Construction nears completion on the YMCA facility in La Mesita Park

CITY ASSISTING FIRST TIME HOMEBUYERS!

La Mesa recently reopened its first-time homebuyers Down Payment and Closing Cost Assistance (DCCA) Program. The DCCA Program can provide qualified low-income households with up to $120,000 for use as a down payment on an eligible single-family or condominium unit in La Mesa. The money comes in the form of a deferred interest loan, a "silent second," that requires no monthly payment of principle or interest. "The program's funding comes from the County of San Diego HOME Consortium and their dollars come from the federal government, so we have to operate the program under some rigid guidelines. Still, this type of program is as important as ever because while housing prices are falling, providing an opportunity for first-time buyers, private financing is becoming harder to obtain without some form of assistance. La Mesa is extremely pleased to be able to offer this type of assistance once again," says program administrator Chris Gonzales (619.667.1192).

Despite the strong initial interest in the DCCA Program, only six households have recently qualified for the program. Each of the six qualified households is currently working with their lender and shopping for property in La Mesa. It is anticipated that each could close purchase transactions before spring. The City's mission now is to continue to promote the program so that remaining available funds can assist qualified households to become first time homebuyers. Interested parties can read more about the DCCA Program on the City website www.cityoflamesa.com and search *DCCA*.

HONORING OUR HISTORY

The La Mesa Register of Historic Landmarks continued to grow in 2007 with the addition of two residences, one civic building, and a commercial storefront. Each site was nominated by the property owners and considered by the Historic Preservation Commission and the City Council. These latest additions bring the total number of designated historic sites to 28.

Porter Hall, located in MacArthur Park and owned by the City, underwent exterior restoration and tenant improvements in 2007 and is the new home of the Foothills Art Association. The oldest, octagonal portion of the structure was constructed c.1928 across the street (to the south) from its current location. It was once a flower shop and housed the local branch of the San Diego County library from 1932 until 1957.

The Old Post Office Building at the southwest corner of La Mesa Boulevard and 4th Street was constructed in 1939. It was designed by local architect Frank L. Hope, Sr. in the Art Moderne style and is the first commercial building to achieve landmark status.

The Staveley House, 4628 3rd Street, is a well-preserved 1924 single-story California bungalow. It is notable for having an upswept gable roof typical of the Oriental variation on the Craftsman style.

The Staples-Orcutt House at 4576 Acacia Avenue was built in 1910. It has a cast cement concrete veneer that mimics the rusticated stone of the numerous retaining walls found in the older residential sections of the City. This house was used as a duplex for many years and has recently been converted back to a single-family residence.

Old Post Office Building

Staples-Orcutt House

Staveley House

Porter Hall

ARE YOU PREPARED?

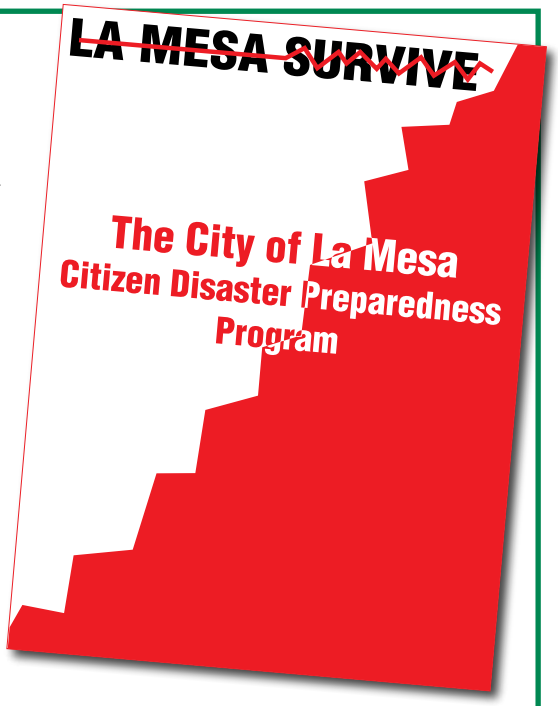

How prepared are you to survive a natural or man made emergency? Most people don't take time to think about what they would do in the event of an emergency until something happens and then it is too late. There is a good possibility that power, water, and other services will be disrupted during an earthquake or other disaster. You should be prepared to survive on your own for 72 hours. How comfortable you are during those first 72 hours depends on how well prepared you are. It only takes a few minutes a day to get prepared. Start with putting together a 72 hour survival kit for your home. Your kit should include things like water, food, flashlight, radio, and a change of clothes. You should also put together a smaller kit for your car.

Some other simple ways to prepare are to: Secure your water heater and other heavy or tall items to the wall; know how to shut off your water, gas, and electricity; and write down a family reunification plan in the event that you and your family are separated.

La Mesa Survive is an emergency preparedness program designed to help you prepare to be on your own for the first 72 hours after an emergency. As part of the year-long celebration of our 100th anniversary, the Fire Department is updating the La Mesa Survive program to provide you with the most current information available. You can download a copy of the current La Mesa Survive booklet from the city website at www.cityoflamesa.com/ LaMesaSurvive. You may also call the Fire Department at 619-667-1355 to request a booklet. Watch for announcements when the updated La Mesa Survive booklet becomes available later this year.

The City of La Mesa is in the process of planning a community disaster response exercise in 2008. During the October 2007 wildfires thousands of volunteers showed up at relief centers and evacuation sites all over the county to offer assistance. Ordinary citizens wanted to help out wherever they could. If you would like to get involved here are just a few places to start. All types of volunteer positions are available through the San Diego/Imperial Counties Chapter of the American Red Cross. Visit their website at www.sdarc.org or call 858.309.1200. Another way to volunteer is to become a Citizen Emergency Response Team (CERT) member. East County CERT will hold three academies in 2008 with the first one starting February 2. For more information on CERT visit the website at www.eastcountycert.org or call 619-667-1472. Watch for future information about the La Mesa disaster response exercise.

You never know when an emergency will strike. Take the time now to prepare yourself. You will be glad that you did.

SPRING FIRE SAFETY

Spring cleaning is a long standing tradition that calls for household cleanup. It's also the perfect time to ensure your home is safe from potential fire hazards. We encourage you to use this tradition to help make your home fire safe, inside and out. Here are some simple tasks that can help make your home a safer place.

While cleaning the inside of your house, check the batteries in smoke detectors to make sure they are operating properly. Smoke detectors should be checked monthly and batteries replaced twice a year. Fire extinguishers should also be checked. Make sure that the gauge is not in the red and that extinguishers are easily accessible in case of emergency. Another important item is to inspect all electrical cords for damage and loose connections.

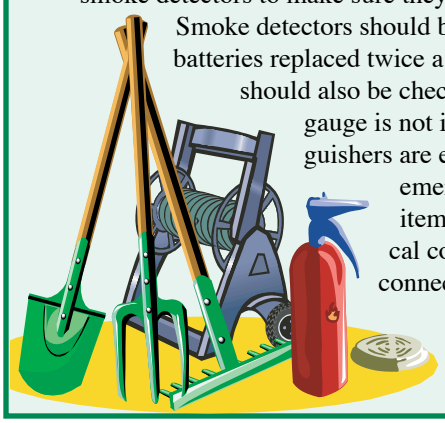

Fire safety extends to the outside of your house as well. While cleaning the outside of your house, check for trees growing into power lines. Be sure to contact SDG&E (www.sdge.com/safety/trees.shtml) prior to pruning around power lines. Prune branches that could be a potential fire hazard, and clear dead grass and brush from around fire hydrants. Next, clean dead leaves and needles from your roof and gutters, and install spark arresters on your chimney outlets and stovepipes. Make sure any firewood is stored safely away from your house. Finally, make sure all household chemicals are locked out of reach of children.

Following these simple fire and life safety tips, along with rehearsing your home escape plan, will help ensure that your home is not only cleaner, but also safer for you and your family. For more safety information contact the La Mesa Fire Department at 619.667.1355 or visit the following websites:

www.firesafety.gov/

www.sandiego.gov/fireandems/safety/tips.shtml

www.usfa.dhs.gov/citizens/index.shtm

NEW LAWS FOR 2008

During 2007 the California Legislature considered more than 2,700 measures introduced by the members of the Senate and Assembly. About 750 of those measures resulted in additions or amendments to State laws, most of which took effect on January 1. Many of the changes are technical in nature but some are more substantive and may have a direct effect on you. Police Department staff have reviewed summaries of the changes for 2008 and have provided information on several new laws that may be of interest to you.

Provisions have been added to the Health & Safety Code and the Vehicle Code, that make it illegal to smoke a pipe, cigar, or cigarette in a vehicle in which a person under the age of 18 is an occupant. The offense is an "infraction," punishable by a fine of no more than $100. Other provisions of the law prohibit an officer from stopping the vehicle to investigate a violation of this law only. The officer may enforce the law if the driver has been stopped or contacted for some other violation or lawful purpose. (Senate Bill 7, "SB7," by Oropeza)

The Vehicle Code has been amended to prohibit the use or sale of spray coating products that impair the reading or recognition of license plates by electronic devices such as license plate readers used by law enforcement agencies or on toll roads. (Assembly Bill 801, "AB801," by Walters)

Many people are aware that new laws were adopted that will restrict the use of cell phones when driving. These laws do not take effect until July 1, 2008. At that time, it will be unlawful to talk or listen on a cell phone while driving unless you are doing so in "hands free" mode. Drivers under the age of 18 cannot talk or listen on a cell phone at all, whether or not they are doing so in "hands free" mode. Certain exemptions are provided including: allowing the use of a cell phone to make emergency calls; and allowing the use of cell phones by emergency services professionals such as police and fire personnel, in the course of their duties, while driving emergency vehicles. Exemptions are also provided for the use of cell phones with "push to talk" features, where the driver does not have to hold the cell phone to his or her ear, but only for drivers of certain vehicles, including tow trucks. (Senate Bill 33, "SB33," by Simitian)

You can find the complete text of these and other new laws at www.leginfo.ca.gov/bilinfo.html.

PROPERLY DISPOSE OF OR RECYCLE YOUR HAZARDOUS ITEMS!

If you're like most of us, you probably have some things at your home like batteries, fluorescent lights, chemicals, or electronics that can't be just thrown in the trash. These items are considered household hazardous waste (HHW) and are not allowed to be placed in the trash because of their destructive effect on the environment and their ability to be recycled and reused.

DISPOSAL IS FREE! If you reside within the incorporated city limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program.

2008 HHW DROP-OFF SCHEDULE:

March 29	*May 17*	*July 12*
August 16	*September 27*	*November 22*

Call EDCO Disposal Corporation at (619) 287-5696 ext. 4270 to make an appointment.

While supplies last, participants may bring a mercury thermometer and exchange it for a FREE non-hazardous thermometer.

EXAMPLES OF HHW ARE:

General: Batteries, fluorescent lights, latex & oil based paints, solvents, cleaners, pesticides and garden products, pool products, propane, and any items labeled flammable, hazardous, toxic, or corrosive.

Electronics: TVs, computer monitors and hardware, telephones, VCRs, and radios.

Automotive: Used oil and filters, batteries, and antifreeze.

Call EDCO at 619.287.5696, ext. 4270 to schedule an appointment or to request additional information.
To discover more information on HHW or other disposal or recycling options, visit www.cityoflamesa.com and search *hhw*.

ANNOUNCING SPRING CLEAN-UP 2008

The City of La Mesa and EDCO Disposal Corporation will be holding the annual Spring Clean-Up on two Saturdays in April. Your opportunity is here to simplify your life! And it's all for free!

The event will be held between 7:00 am and 2:00 pm at EDCO Station, 8184 Commercial Street.

If you live SOUTH of Interstate 8, your clean-up day is April 12

If you live NORTH of Interstate 8, your clean-up day is April 19

DISPOSE OF OR RECYCLE:

- Reusable Items
- Unwanted Furniture
- Large Appliances
- Landscape Material
- Waste Debris from Improvement Projects
- Just Plain Junk

This annual event is for residents who live within the incorporated city limits ONLY. You MUST bring a California Driver's License listing your La Mesa address. DO NOT bring items from a household outside of the City of La Mesa.

There are some restrictions on the items than can be accepted. This is NOT a Household Hazardous Waste (HHW) Collection Event. We will NOT accept batteries, fluorescent lights, televisions, computer monitors, home electronics, tires, or items labeled poison, flammable, corrosive, or explosive. To dispose of HHW for free, please call 619.287.5696 ext. 4270.

We also will not accept waste from businesses, contractors or professional landscapers.

Free mulch will be available on a self-loading, first-come-first-served basis.

City Employee Recognized for "Peer Support" Efforts

Maxine Lynch, the City's Safety Volunteer Coordinator, was honored last November at the annual conference of the International Critical Incident Stress Foundation for her work and achievements in the field of "Peer Support." Maxine received the Foundation's "Jefferson Cup" award during ceremonies at the conference in San Diego.

Maxine first came to work for the City of La Mesa in 1981 as an Animal Control Officer. Her talents and skills led her to other positions within the Police Department, first as a Crime Prevention Specialist, and then to her current position as the Safety Volunteer Coordinator, working primarily with the City's Retired Senior Volunteer Patrol members, or RSVPs.

In 1995 Maxine proposed the creation of a "Peer Support Team" for the La Mesa Police Department. Her proposal was approved and Maxine, working with other Police Department staff, developed the guidelines and training standards for the new "Peer Support Team." She has gone on to become one of the leading figures in the California peer support community and is the current President of the California Peer Support Association.

Among the many achievements that were cited when Maxine was presented with the Jefferson Cup award were: development of the La Mesa Police Department Peer Support Team; subsequent development of the La Mesa Police & Fire Peer Support Team; proposal and implementation work on a Police & Fire Peer Support Trailer for use at critical incidents; and her years of service in providing peer support, and training and supervising peer support personnel.

On January 8 Maxine was honored by the La Mesa City Council with a Commendation for her dedication and accomplishments in the peer support field.

MISS LA MESA PAGEANT

The 2008 Miss La Mesa and Miss La Mesa Teen Pageant is right around the corner. Young women ages 13-26, who are residents of La Mesa, may apply through the end of February to become an ambassador in their community.

For pageant information, contact Ms. Alex Stathoulis at 619.200.1567 or misslamesapageant@yahoo.com.

SENIOR HOUSING EXPO

Visitors get helpful information on housing alternatives for seniors

The City of La Mesa hosts the 4th Annual Senior Housing Expo on Wednesday, February 6, 2008. The event takes place at the La Mesa Community Center, 4975 Memorial Drive, from 10:00 am to 1:30 pm.

The Senior Housing Expo is a FREE event featuring more than 50 exhibitors, interesting speakers, and valuable resources on housing alternatives. The event is open to area seniors as well as adult children of aging parents who are interested in learning more about San Diego area housing alternatives such as: assisted living, 55+ residential communities, low income senior and disabled rental housing, reverse mortgages, granny flat construction, home modifications, shared housing, and home safety. NBC 7/39's Consumer Bob will be the featured keynote presenter, sharing information about good deals, how to save money, and how to avoid scams. Shuttle service is available from the parking areas and attendees may also use nearby street parking.

The event is sponsored by Union Bank of California, AARP California, and MDC, Inc. Event hosts include the City of La Mesa, the La Mesa Park & Recreation Foundation, and the La Mesa Commission on Aging, in partnership with Aging and Independence Services, AARP and other community organizations. For more event information call the La Mesa Adult Enrichment Center at 619.464.0505.

LA MESA LOVES A PARADE!

On Saturday, May 31, 2008 downtown La Mesa will dress up in red, white, and blue for the Annual Flag Day Parade, "A Salute to Old Glory!" The parade marches through downtown La Mesa Village beginning at 10 a.m. Seventy-five units are featured including: area marching bands, floats, military vehicles, active and retired war heroes, equestrian units, and youth groups.

Businesses and civic groups are encouraged to participate in the "Jewel of the Hills" Float contest and get your organization highlighted in the La Mesa FOCUS! Another crowd pleaser is a 20-foot wide flag carried down La Mesa Boulevard by community volunteers. Spectators are encouraged to dress in patriotic attire and cheer on the participants.

2007 Jewel of the Hills Float Award presented to the American Legion

There will be two patriotic pre-parade concerts for your listening pleasure. La Mesa Middle School band will perform at La Mesa Boulevard and Palm Avenue and The Granger Middle School Jazz Band will perform at La Mesa Boulevard and Nebo Drive. Each band will play from 9:00 am – 10:00 am.

The City extends its heartfelt thanks to La Mesa Flag Day sponsors: La Mesa Rotary, Wal-Mart, KSON 97.3 and 92.1 Country Radio, and La Mesa Community Welfare Association.

For more information visit the City's website at www.cityoflamesa.com or call the Parade hotline at 619.667.1172.

PRIVATE SEWER LATERAL MAINTENANCE TIPS

In the November 2007 issue of the Focus there was an article explaining that it was the responsibility of homeowners to maintain their own sewer lateral (www.cityoflamesa.com search for *FOCUS* and select the November 2007 issue from archives). This followup article will provide some tips on how to best maintain your sewer lateral.

The entire length of the sewer lateral from the house to the public main is owned by the private homeowner and is the homeowner's responsibility to maintain. The major maintenance concerns with sewer laterals are:

- There are no cracks or breaks
- There is no grease build up
- There are no roots

The best way to investigate whether or not you have any of these concerns in your sewer lateral is to have a licensed plumber conduct a video inspection of your lateral. The plumber may have to clean the lateral prior to doing the video inspection. After cleaning and taking the video ask the plumber to report any deficiencies and if possible show them to you.

In order for a plumber to be able to video your sewer lateral there needs to be a cleanout. Cleanouts are good to have because they provide an access point for cleaning and videoing. Most plumbers can install a cleanout if you do not already have one.

A crack or break in your lateral could let sewage leak out into the ground or could let groundwater into the lateral. Cracks or breaks can also allow roots to intrude into a sewer lateral. Cracks or breaks should be repaired by a licensed plumber. The plumber may be able to replace a portion of the lateral or in some cases re-line the inside of the lateral. The re-lining of a sewer lateral can be a cost effective method of repairing a sewer lateral because it requires minimal ground disturbance and excavation.

Do not pour any oil or fat down your sink drains. Oils and fats will solidify in to grease, can cause your lateral to become clogged, and can cause the public sewer main in the street to become clogged. The number one maintenance problem in City sewer pipes is the presence of grease.

Property owners are advised to consult the Building Division at 619.667.1176 or the Engineering Division at 619.667.1166 for additional information. A permit from the City is required for any excavation work.

American Cancer Society's Relay For Life Unites La Mesa

Hearts and Feet Are Used To Fight Cancer

Walkers and runners can join in the battle against cancer during the American Cancer Society's Relay For Life in La Mesa. Teams of La Mesa residents, businesses, and City officials will gather at Parkway Middle School on Saturday, April 5, 2008 for a 24-hour relay against cancer. Relay for Life is a family-oriented team event where participants can walk or run relay-style around a course and take part in fun activities off the course. Teams can include co-workers, club members, families and friends who obtain donations prior to the event.

The La Mesa Relay for Life is not a "race" and you do not have to be at any particular fitness level to participate, you just have to be able to move around the track at your own pace.

A Relay For Life is a unique opportunity for the community to come together in the fight against cancer. Many participants are cancer survivors, serving as reminders that our community is not immune to this disease and that we can actually help our friends,

families, and neighbors that have been touched by cancer. Increased wellness plays a part in the battle against cancer as new evidence has shown that physical activity and better nutrition are factors in preventing this awful disease. The City of La Mesa has made a commitment to encouraging community wellness and this event is one way the City can encourage physical activity for its residents. The City will also be sponsoring a team.

For more information about the event call Brad Pagano, American Cancer Society at 619.682.7449.

STORM WATER: DID YOU KNOW?

Did you know that La Mesa has two main channels with flowing water year-round? The Alvarado Channel runs parallel to Fletcher Parkway and flows into the San Diego River while the University Channel runs parallel to University Avenue and flows into Chollas Creek. Segments of these channels are open and support various plants and animals. Moreover, water from these channels help support downstream wetlands and eventually flow into the Ocean.

Did you know that all the inlets you see along the streets are storm drains that convey runoff into these channels? Car washing activities, hosing down the driveway, vehicles leaking oil, and over-irrigating are either a source of or transport mechanism of harmful pollutants to these channels.

Did you know that the San Diego River within the San Diego River Watershed and Chollas Creek within the San Diego Bay Watershed are listed on a State list as being impaired for various pollutants? The Regional Water Quality Control Board in San Diego has issued Total Maximum Daily Loads (TMDLs) for diazinon and dissolved metals for Chollas Creek. Jurisdictions and agencies that drain into Chollas Creek are required to monitor water quality and eliminate these pollutants transported in urban runoff from entering the storm drains and channels. TMDLs for harmful bacteria are also being issued for both Chollas Creek and the San Diego River.

We need your help to stop these harmful pollutants from entering Alvarado and University channels. Over-irrigation generates runoff that transports these harmful pollutants into the storm drains and channels. Check your irrigation system often and adjust it to minimize runoff. Instead of hosing down your driveway, sweep it or allow the water to run into your lawn and not into the street. Use biodegradable soap when you wash your car and direct wastewater onto your lawn, not into the street. Minimize the use of pesticides on landscaping. La Mesa City Hall offers free Integrated Pest Management Tip Cards on how to control pests without using harmful chemicals. For more information visit www.projectcleanwater.org. If your car is leaking, place an oil pan beneath the car until it is fixed. Do your part and help prevent harmful pollutants from entering our creeks!

Visit www.cityoflamesa.com (search *storm water*) for additional information or visit any of the following websites: projectcleanwater.org; portofsandiego.org; swrcb.ca.gov; waterboards.ca.gov; or hwd.com/conserv.

WALK LA MESA

Just for the Fun of It!

The La Mesa Wellness Task Force wants you to know that there are organized walks nearby every day of the week. Check the City's website at www.cityoflamesa.com, search *health & wellness,* and click on Walk La Mesa under Quick Links for a list of options or pick up a flyer at La Mesa City Hall or the La Mesa Community Center.

Call 619-667-1300 for more information

La Mesa – it's made for walking!

ABANDONED SHOPPING CARTS

Have you seen a shopping cart abandoned in your neighborhood? In addition to being an eyesore, misplaced shopping carts mean loss of revenue to the businesses where they rightfully belong. The California Shopping Cart Retrieval Corporation (CSCRC) will pick it up and return it to the appropriate retailer and they can use your help in locating these errant carts.

The phone number to call at CSCRC is: 800-252-4613. Be sure to give a detailed location of the shopping cart. For example:

"One Wal-Mart shopping cart was abandoned at the intersection of Nagel Street and Mellmanor Drive," or, "Two Vons shopping carts are on the sidewalk at 7501 University Avenue."

The City of La Mesa works with grocery stores and other retailers to retrieve shopping carts as quickly as possible. If you know of a particularly pesky shopping cart that hasn't been picked up in your neighborhood, or you just have a question, please call Code Compliance Officer Allen Edwards at 619.667.1189.

CITY OF LA MESA
PARK APPRECIATION DAY

Saturday, March 29, 2008 8:00 AM – 12 noon

On La Mesa Park Appreciation Day you can help make La Mesa beautiful!

- La Mesa's parks are our City's jewels. Help make them shine! Encourage your civic, church, or social group to adopt a park for a clean up day on March 29th. We will help you find a project that all your members can do! Give us a call!
- Individual and families are invited to come to a La Mesa neighborhood park at 8:00 am on Saturday, March 29th. Sign up with an Adopt-a-Park volunteer who will be visible in a Park Appreciation Day t-shirt at each park. Bring a rake or grab a trash bag at the park and help your local La Mesa jewel shine! General cleanup includes picking up trash, light raking, trimming, and weeding.

Please bring your own gloves and rakes or trowels to La Mesa Park Appreciation Day. Free t-shirts for all participants. You don't have to be a La Mesa resident – just love La Mesa's parks! All ages are welcome to participate. Signed waivers are required. Download waivers from www.cityoflamesa.com/ParkAppreciationWaiver and complete them prior to the event to speed the signup process at the park of your choice. Parents must accompany children under the age of 18 years at individual parks unless their participation is with a supervised group previously arranged with the City.

Survey: Smoke Free Zones in La Mesa

The La Mesa City Council has directed the Community Services Commission to gather data and public input on restricting smoking in outdoor patios where food is served and in areas of public access where children are present such as entryways and commercial walkways. (The La Mesa Municipal Code currently prohibits smoking in City parks and playgrounds.) The Commission is distributing a survey to City of La Mesa businesses and residents as a first step in developing a report to the City Council concerning the designation of smoke-free zones. Thank you for your participation – your responses are very important!

To complete the survey online go to www.cityoflamesa.com/Survey

To hear the survey questions and respond via a voice mail message call 619.667.1172 and select the "smoke free zones" option.

If you prefer to submit your response in writing, survey forms are available at City Hall, 8130 Allison Avenue; Adult Enrichment Center, 8540 La Mesa Boulevard; and the La Mesa Community Center, 4975 Memorial Drive.

Public input on this subject will be heard at the La Mesa Community Center, 4975 Memorial Drive as follows:

- For business owners on February 13, 2008 at 6:00 pm
- For residents on March 12, 2008 at 6:00 pm

LA MESA PARTICIPATES IN COMMUNITIES FOR HEALTHY KIDS

The City of La Mesa is proud to be designated as the first Level 1 Community to participate in the Communities for Healthy Kids program, a program of the Institute for Local Government. The project will help La Mesa reach a primary goal of the City's Community Wellness Program, which is to help increase awareness of low and no cost health insurance programs available for eligible uninsured children and help increase the number of eligible La Mesa children enrolled in those programs.

The Level 1 Community designation is significant because it demonstrates La Mesa is far beyond that of other cities in California in its readiness to address promotion of health and wellness issues in our community.

The La Mesa Wellness Task Force, made up of representatives from varied organizations including city officials, schools, non-profits, residents, hospitals and businesses, was conceived to locally address national concerns about obesity-related illnesses and health problems steming from sedentary lifestyles. In July 2006 the La Mesa Council approved the Community Wellness Program developed by the Task Force. With technical assistance from Communities for Healthy Kids, city staff and members of the Task Force will develop materials and procedures for distribution of information and provide enrollment opportunities for children eligible for low and no cost health insurance (generally Medi-Cal and Healthy Families). The materials and procedures to be developed can then be replicated in communities throughout the state. Outreach events will include presence at school functions, events at Grossmont Center, and local special events to name a few.

Watch the City's website at www.cityoflamesa.com for future wellness events in your area.

"Sundays At Six" Summer Concerts

Launches 7th year of free summer music!

Save the dates of June 8, 15, 22, 29, July 13, and 20 for fun summer concerts in the park!

"Sundays At Six" features an hour-long concert from 6 -7 pm, at the Harry Griffen Park Amphitheatre. These FREE summer concerts feature quality musical entertainment. Concert goers can enjoy a picnic dinner under the setting sun in this lovely setting.

The 2008 concert committee is looking for volunteers to assist with the concert series as well as community sponsorships to support the cost of providing these concerts. To volunteer or provide financial support for the concert series please contact La Mesa Community Services at 619.667.1300 or commservices@ci.la-mesa.ca.us.

GET INVOLVED IN YOUR COMMUNITY

The City of La Mesa is seeking citizens who are interested in volunteering their time and talent in service to the community by becoming a member of one of the City's boards, commissions, or committees. The City has a number of citizen boards, commissions, and committees that provide input or make recommendations to the City Council and staff.

Public involvement is crucial to the City's decision-making process. By advising the City Council and staff, bringing new ideas to the table, and representing the community, you will be helping your City government make the best, most informed decisions possible for the benefit of the entire community.

Following is a brief summary of the roles and responsibilities of the advisory bodies for which vacancies will exist in June. (Youth Advisory Commission terms expire in September.) With a few exceptions, most advisory groups meet only once a month for a couple of hours. It is a wonderful way to help your City, as well as to meet and work with people having similar interests and knowledge.

COMMISSION ON AGING serves as an advisory body to the City Council on policy matters pertaining to programs, projects, and issues that address the concerns and needs of older adults in the community. The Commission plans and coordinates community education and information forums on senior topics and issues, provides support to projects and activities for the elderly, and advises on the development of senior programs and initiatives.

Members shall be residents of the City and must be at least 55 years of age at the time of appointment.

COMMUNITY SERVICES COMMISSION serves as an advisory body to the City Council on parkland acquisition and policies relating to recreation and park purposes. It is the responsibility of the Commission to develop and recommend ordinances and/or resolutions establishing administrative rules and regulations for park and recreation facilities; review the proposed department budget; prepare, as needed, a program of park/public facility improvement; and recommend desirable contractual relations between the City and other agencies for use of buildings, playgrounds, and other facilities.

Members must be resident electors of the City of La Mesa.

DESIGN REVIEW BOARD reviews and approves development plans for compliance with the Urban Design Program, and makes recommendations on development proposals and other design related issues as directed by the City Council.

The Board consists of five members, three of which shall be design professionals, defined as registered architect or landscape architect, a building designer, urban designer, or urban planner. One design professional shall be appointed chairperson. The remaining members are the Community Development Director and a designated Planning Department staff member.

HISTORIC PRESERVATION COMMISSION acts as an advisory body to the City Council on matters of historic preservation, including review of development plans and the La Mesa Historic Resources Inventory, nominate structures to the register of designated landmarks, encourage private efforts to protect historic resources, and provide advice and guidance to property owners of historic resources.

Members of the Commission shall have the following qualifications: two are registered voters and are licensed architects, landscape architects, city planners, urban designers, architectural historians, individuals practicing structural or interior design; two are current resident electors of the City of La Mesa; and three are registered voters and are recommended by the La Mesa Historical Society. Members must be registered voters and meet one of the qualifications outlined in this paragraph.

HUMAN RELATIONS ADVISORY COMMISSION serves as an advisory body to the City Council on matters pertaining to programs, projects, and issues that promote goodwill in the community. It is the responsibility of the Commission to explore issues and develop activities that respect diversity and promote positive human relations in La Mesa.

Members must be resident electors of the City of La Mesa, and two members shall represent the disabled citizens of the community.

INDEPENDENT CITIZENS' BOND OVERSIGHT COMMITTEE informs the public concerning the City's expenditure of revenues received from bond proceeds authorized by the voter approval of Proposition D – La Mesa Fire, Police, Emergency Services Measure.

The committee appointments will include representatives from the following groups: one member active in the business community; one member active in senior citizen organizations; one member a resident and active in the community at large; one member of a bona fide taxpayers organization; one member who is a qualified professional in a construction related field such as architecture, construction management or civil engineering; one member who is a qualified professional in a financial or accounting-related field; and one member acceptable to the San Diego Building and Construction Trades Council.

LA MESA COMMUNITY PARKING COMMISSION acts in an advisory capacity to the City Council regarding parking issues within the Parking District. The Commission is committed to ensuring cost-effective public parking that meets the needs of the City's businesses, residents and patrons by involving the community in parking management decisions.

The Commission appointments will include representatives from the following categories: one retail merchant; one commercial business member; one resident; and two members at large shall be appointed as members. No category shall have more than two representatives on the Commission. At least one of the retail/commercial merchants shall be a member of the La Mesa Village Merchants Association. Merchant representation from east and west of Spring Street shall be preferred. The appointed members shall be registered voters and residents or business owners in the City of La Mesa.

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION approves or disapproves all loan and grant applications for the rehabilitation of qualifying homes in the City of La Mesa. It reviews and makes

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Get Involved in Your Community

disposition of all cases involving deferred payment loans and lead-based paint grants.

The appointed members shall be registered voters and residents or business owners in the City of La Mesa with experience in lending, construction, real estate or related fields.

PERSONNEL APPEALS BOARD ensures an impartial and independent review of personnel matters. Employees in the classified service may appeal certain grievances and disciplinary actions to the Personnel Appeals Board.

Two of the five members are chosen from persons recommended by City employees. Members shall be resident electors of the City of La Mesa.

PLANNING COMMISSION serves as an advisory body to the City Council on land use matters, including review of development plans for consistency with General Plan, Zoning Ordinance, Subdivision Ordinance and Sign Ordinance; review of Special Permits, Conditional Use Permits and Variances; review of appeals from staff and Development Advisory Board determinations; and other duties as required by State law.

Members must be resident electors of the City of La Mesa.

TRAFFIC COMMISSION serves as an advisory body to the City Council on matters relating to traffic issues that require City Council approval as provided in the traffic ordinances of the City. In addition, the Commission may approve other traffic issues as directed by the City Council of the City of La Mesa and as set forth within the Organization, Rules, and Procedures of the Commission.

Members must be residents of the City of La Mesa.

YOUTH ADVISORY COMMISSION serves as an advisory body to the City Council on matters pertaining to programs, projects, and issues that address the concerns of youth in the community. It is the responsibility of the Commission to explore and develop activities and issues that will promote positive youth relations in La Mesa.

Members must be at least 13 years and not more than 20 years of age at the time of appointment.

Please give serious consideration to serving on a board, commission or committee. Applications and specific information regarding qualifications, requirements for serving, and meeting days and times are available by accessing the City's website at www.cityoflamesa.com and selecting "Boards and Commissions" under the Government tab, visiting the Clerk's office at City Hall, 8130 Allison Avenue, or calling the City Clerk's office at 619.667.1120. Applications must be submitted to the City Clerk's office no later than 5:30 p.m., Friday, June 6, 2008 to be included in the June interview and selection process.

COUNCIL ACTIONS

October 9, 2007
Ratified the Design Review Board's approval of DRB 07-13 (La Jolla Investment Group, Inc.) – for proposed exterior alterations to a commercial center at 7520 El Cajon Boulevard.

Ratified the Design Review Board's approval of DRB 07-19 (Whitlow) – for a proposed addition of a second story to an existing detached garage at 4433 Acacia Avenue.

Adopted a resolution encouraging and supporting the California Department of Corrections and Rehabilitation's actions to notify 2,741 sex offenders to relocate their residences outside of the 2,000-foot "Predator Free" zones (around schools and parks) for purposes of enforcing Jessica's Law.

October 30, 2007
Adopted a resolution authorizing the acceptance of a grant from the San Diego Police Department to conduct an alcohol enforcement program and approving the addition of the grant funds to the FY 2007-2008 budget.

Received the quarterly status report on the construction of the new public safety facilities and approved the second story build out for the new police station.

Approved the plan and schedule for the preparation of a Water System Management Plan for the City of La Mesa in accordance with the State Water Resources Control Board wastewater discharge requirements Order No. 2006-0003-DWQ.

November 13, 2007
Adopted a resolution awarding a contract for Bid No. 07-11 for the Storm Drain Replacement/Rehabilitation Project to New Century Construction, Inc.

Adopted a resolution awarding Bid 07-12 for the La Mesa Municipal Pool Deck Resurfacing Project to Team C Construction.

November 27, 2007
Approved the designation of the Staples-Orcutt House at 4576 Acacia Avenue as a historic landmark, and a Historic Landmark Property Preservation Agreement (Mills Act) with the property owner.

Adopted an ordinance adopting by reference the 2007 Edition of the California Building Standards Code, known as the California Code of Regulations, Title 24 (CCR, T-24) incorporating: the 2006 International Building Code; the 2006 Uniform Plumbing Code; the 2006 Uniform Mechanical Code; the 2005 National Electrical Code; and amending Title 14 of the La Mesa Municipal Code and all other ordinances in conflict therewith.

Adopted an ordinance adopting by reference the 2007 Edition of the California Fire Code, known as the California Code of Regulations, Title 24, Part 9 (CCR, T-24, P-9), incorporating: the 2006 International Fire Code, with certain amendments, additions and deletions; and amending Title 11 of the La Mesa Municipal Code and all other ordinances in conflict therewith.

December 11, 2007
Adopted a resolution approving the 2007-2008 Home Administration contract for management and implementation of a Home Investment Partnerships Project.a

Adopted a resolution approving the Third Amendment to the American Dream Downpayment Initiative (ADDI) Agreement and the allocation of the ADDI funds for Fiscal Year 2007-2008 to the Down Payment and Closing Cost Assistance (DCCA) Program.

Adopted a resolution declaring its intention to sell General Obligation Bonds of the City in the amount of not to exceed six million ($6,000,000), fixing the time and place for taking bids and directing publication of notice inviting bids.

Adopted a resolution providing for the issuance of General Obligation Bonds, Election of 2004 Series B (Fire, Police and Emergency Services Measure) principal in an amount not to exceed six million dollars ($6,000,000).

Established Underground Utility District No. 27 on Normal Avenue from Lowell Street to 7907 Normal Avenue.

Established Underground Utility District No. 28 on Massachusetts Avenue from University Avenue to the City limits.

Established Underground Utility District No. 29 on Waite Drive from 69th Street to High Street.

Adopted an ordinance amending Chapter 10.21 of the La Mesa Municipal Code establishing Skate Park Regulations and establishing qualified immunity from liability by deeming certain skating activities hazardous recreational activities.

Approved an agreement with the Buxton Company for economic development research for La Mesa.

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
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Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS

This newsletter is produced anddistributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Contact your elected officials at 619-667-1106.

Mayor..... Art Madrid
Vice Mayor .....Ernie Ewin
Councilmember..... Ruth Sterling
Councilmember.....Dave Allan
Councilmember..... Mark Arapostathis
City Manager..... Sandra Kerl
Focus Editor ..... Käären McElroy
Editorial Staff ..... Heather L. Moore

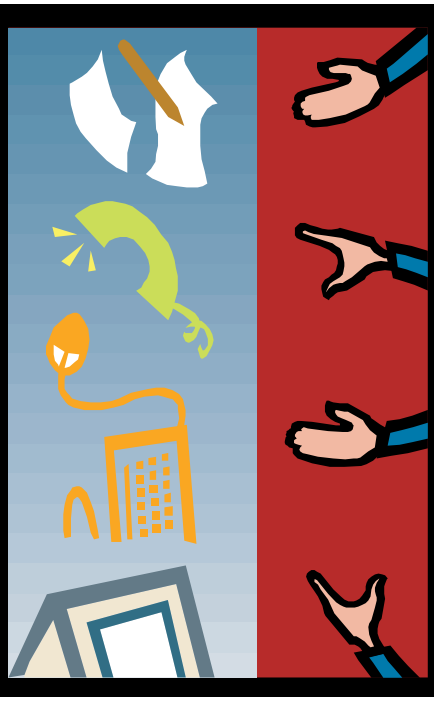

GIVE US YOUR FEEDBACK!

This is our first edition of the La Mesa FOCUS distributed exclusively online and we would like your comments.

To let us know what you like or don't like about this issue, complete our online survey at...

www.cityoflamesa.com/FocusFeedback

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 8:00 AM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM
The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM
The above meetings are held at the Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM (except July, August, November, December)
The above meeting is held at the Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS

(Area code 619)

Adult Enrichment Center..... 464-0505
Animal Control 667-1436
Building Inspection..... 667-1176
Business Licenses..... 667-1118
Cable TV..... 262-1122
City Attorney..... 667-1128
City Clerk..... 667-1120
City Council..... 667-1106
City Hall 463-6611
City Manager 667-1105
Crime Prevention 667-1445
Dog Licenses 667-1117
Engineering..... 667-1166
Fire (Business)..... 667-1355
Human Resources 667-1175
Library 469-2151
Mayor..... 667-1100
Municipal Pool 466-4177
Parking Citations..... 667-1117
Planning..... 667-1158
Police (Business)..... 667-1400
Public Works 667-1450
Recreation 667-1300
Recycling/Trash 287-7555
Sewer Charges 667-1126
Sidewalk Maintenance..... 667-1450
Storm Water Hotline..... 667-1134
Streetlight Maintenance 667-1450
Traffic Engineering Hotline .. 667-1144
Traffic Signal Maintenance .. 667-1166
Zoning 667-1177

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • May 2008

La Mesa Seeks Your Perspective on Service Priorities

WE WANT TO HEAR FROM YOU!

The City of La Mesa has worked to present the most fiscally responsible budget while protecting the health and safety of the community. However, due to declining revenue, increased costs and years of "state money grabs" the City is unable to continue to fund the essential public services at the level necessary to meet current and future needs.

Complicating matters, the State has now declared a projected multi-billion dollar deficit for fiscal year 2008 – and the Governor and State Legislature are expected to make significant funding cuts, which may take more money away from cities like ours. Without a local funding solution, we are facing devastating cuts and potential disruption of essential City services.

As you may know, recently there has been a sharp increase in robberies, auto thefts, burglaries and violent crime in La Mesa. We must attract and retain experienced police officers to keep crime and gangs out of La Mesa.

We also need funding for essential services such as fixing potholes, repairing sidewalks and repaving local streets, which will improve safety and traffic flow throughout La Mesa.

A recent community survey found that residents would support a potential Vital City Services Measure to address these service needs. Before we move forward with any solution, we want to hear from you about your service priorities. If you haven't yet filled out our community survey, go to our website www.ci.la-mesa.ca.us to tell us your priorities. Your feedback is important to us!

CITY COUNCIL 2008 STRATEGIC PLANNING WORKSHOP

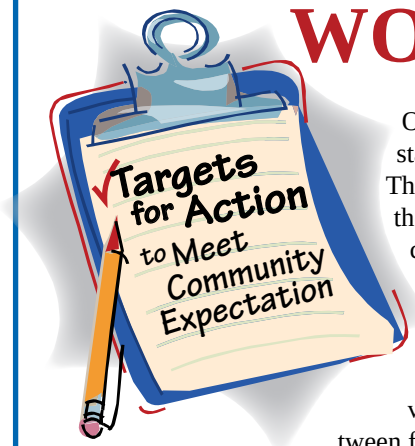

On March 18, 2008 the City Council and management staff met for a day-long strategic planning workshop. This annual process is one of the early steps taken by the Council to review past accomplishments, gather community input from the year, and to project how the financial conditions on the horizon will be affecting the City. This process assists the Council and staff in preparation of adopting and/or updating the City's two-year budget. This year the City is facing some very significant financial challenges to fill the gap between falling revenues and increasing costs to provide services. As a result, the major focus of this workshop was on financial issues. At the end of the workshop, based on policy direction, each City Department prepares

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GOAL OF COMMUNITY WELLNESS PROGRAM:

TO INCREASE AWARENESS OF NO AND LOW COST HEALTH INSURANCE FOR ELIGIBLE CHILDREN

Referrals and Enrollment Opportunities Planned

It comes as no surprise that the cost of everyday living has increased in the past few years. Many families have had to cut back on treats such as movies, eating out, and vacations just to provide the basic necessities. In addition, many employers have had to cut back on employee benefits such as dependent health insurance programs just to stay in business. In a domino effect, the additional high cost of health care can make a visit to the doctor unaffordable for uninsured or underinsured children. What may come as a surprise to many families is the availability of no and low cost health insurance programs for eligible children.

One goal of La Mesa's Community Wellness Program is to increase awareness of health, dental, and vision insurance available for eligible children through the Medi-Cal for Families and the California Healthy Families program. Eligibility is determined by family income, family size, and age of each child. Medi-Cal is provided at no cost for eligible children from birth to age 19 or 21 if in school. Healthy Families covers eligible children from birth to age 19. Actual premiums for children through the Healthy Families program depend on family income, size, and the health plan chosen; for example, a family of four with an income of $53,000 may qualify for this program. No family pays

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DONT MISS THE 11TH ANNUAL LA MESA FLAG DAY PARADE

The charm of downtown La Mesa Village is the ideal backdrop for La Mesa's annual Flag Day parade on Saturday, May 31st. The parade festivities will begin with two free patriotic concerts; one featuring La Mesa Middle School Band at La Mesa Boulevard and Palm Avenue and the 2nd featuring Granger Junior High Jazz Band at La Mesa Boulevard and Date Avenue. The parade kicks off at 10 a.m. beginning at the La Mesa Adult Enrichment Center at the intersection of La Mesa Boulevard and University Avenue and continues through the downtown village, ending at City Hall. This year's invited Grand Marshals are the 2007 AFC West Division Champions San Diego Chargers!

Red, white and blue will be visible everywhere as La Mesa celebrates our country and Salutes Old Glory! Businesses are invited to enter a patriotic themed float into the parade and be entered into the Jewel of the Hills Float Award. A photo of the winning float will be featured in future City of La Mesa publications. Six marching units including the popular Marine Corps Band, will march in the parade as well as floats, local service organizations, equestrian groups, specialized vehicles, performance groups, drill teams, color guards, clowns, dogs, vintage cars, and pageant winners.

We are fortunate again this year to have KSON Country FM 97.3 and 92.1 radio station as one of our sponsors. KSON personalities will be along the parade route announcing the entries. Free flags will be given out along the route while supplies last. The La Mesa Community Welfare Association, La Mesa Rotary, Wal-Mart and City of La Mesa are also sponsoring the event.

Spectators are encouraged to arrive early on parade day for the best viewing. The parade committee suggests that people ride the trolley to the La Mesa Boulevard station since parking in the immediate vicinity will be limited.

You and your family won't want to miss this free, fun-filled family event. For more information call 619.667.1172 or email commservices@ci.la-mesa.ca.us.

The Marine Corps band steps off in the 2007 parade

6TH ANNUAL La Mesa Kiwanis Club Soap Box Derby Race

June 7, 9 a.m.-5 p.m.

Junior High Drive by La Mesa Middle School

Sponsored by Drew Ford in cooperation with City of La Mesa.

Winners will be sent to National All-American Soap Box Derby in Akron, Ohio, in July. Youngsters ages 8 to 17 wishing to enter the race should contact Dennis Wilkes at 619.469.7353.

GREEN STYLE TIP

Printing the La Mesa FOCUS

In the February issue feedback survey, several readers said they preferred the feel of a printed version of FOCUS in their hands but wanted to conserve on the expensive color ink. Here's a tip for printing a black & white version.

With the document displayed in Adobe Reader® select print from the file menu. Select properties in the print dialogue box and look for the option to print in black & white. The location of selection boxes may vary depending on your operating system and type of printer.

ENRICH YOUR SUMMER!

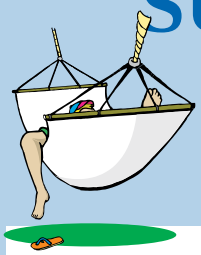

Looking for something to do during those lazy days of summer?

A recreation class may add some sizzle to the season!

Browse our weekly youth class selections or look for summer day camp programs. We have weekly classes for adults too!

Convenient enrollment is available online or you can access a printable version of our enrollment form to mail in.

Classes fill quickly. DON'T DELAY!

COMMUNITY WELLNESS
TAKES TO THE STREETS

Engineering Division Awarded Safe Routes to School Grant

La Mesa Teens Make a Difference with CX3 Project

The Public Works Engineering Division is happy to announce the award of a California Safe Routes to School grant in the amount of $550,800. These funds will be used for street and sidewalk improvements in the West La Mesa area along Lowell Street and Orien Avenue in the area surrounding Helix Charter High School. This is the largest amount the City of La Mesa has received through this grant program to date. The scope of work includes installing new curb, gutter and sidewalk where none currently exists on Lowell Street and Orien Avenue around Helix High School. The success of the grant proposal was due to several years of research, public sensing, planning, and strong collaborative efforts between various City departments and other agencies. Six agencies are collaborating on and contributing resources to the project: Helix Charter High School, Grossmont Union High School District, San Diego Gas & Electric, AT&T, Cox Communications, and the City of La Mesa.

In February 2006 the City published a Walkability Plan outlining fundamental planning concepts that the City now uses to enhance pedestrian access to essential destinations such as schools, work places, transit, shopping, and services as well as encourage walking as a method to improve fitness and expand social interaction within the community. You can review the complete text of the Walkability Plan on the City's website. Later that year, the La Mesa Community Wellness Program, adopted by City Council in July 2006, included as one of its primary goals the promotion of a more walkable city. The complete text of the La Mesa Community Wellness Program can also be reviewed on the City's website.

In June 2007 six La Mesa teens, along with volunteer adult mentors, began a civic engagement program called CX3. CX3, which stands for Communities of Excellence in Nutrition, Physical Activity and Obesity prevention. It is a community wellness strategy that involves identifying benchmarks or community indicators and observing these items to target communities' strengths and gaps. Once the items are mapped, the data is used to develop local action plans for policy, systems and environmental change. The La Mesa teens set about mapping a portion of West La Mesa in June 2007 measuring indicators that included: number of fast food restaurants; availability of fresh produce in local markets; advertisements on billboards, bus benches, and in store windows; and an audit of walkability to schools, markets, and recreation.

Following data collection and mapping, three of the teens involved in the project developed a plan of action to advocate for community change. Their decision to advocate for walkability in the area around Helix Charter High School was based on knowledge of the City's focus with the Walkability Plan and Community Wellness Program and their commitment to the safety and security of fellow students. The area surrounding the school is described as having limited sidewalks, poorly marked crosswalks, poles and other barriers in the middle of existing sidewalks, and lacks landscaping to buffer the pedestrian pathway from the street. The teens developed a PowerPoint presentation, a website, and photo essay boards to advocate their message locally to La Mesa Youth Advisory Commission, Helix High School Charter Board, and La Mesa City Council. The photo essays are currently on display at the Grossmont Healthcare District Herrick Library. The West La Mesa area was specifically selected for the CX3 project to compliment other La Mesa revitalization projects focusing on the area.

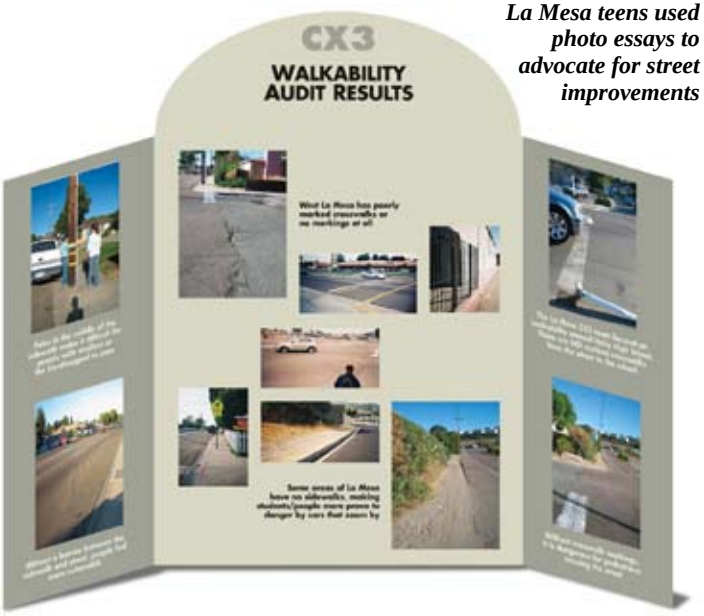

La Mesa teens used photo essays to advocate for street improvements

The earlier walkability study and wellness document published in 2006 were enhanced by the efforts of the CX3 team in 2007. The total scope of work for the project includes: undergrounding conflicting overhead utilities, replacing a storm drain beneath Lowell Street through the intersection of Normal Avenue, constructing new sidewalks, street lights and landscaping on Lowell Street and Orien Avenue, and installing pedestrian ramps and curb bulb-outs at the intersection of Normal Avenue and Lowell Street. In addition to this work, Helix Charter High School plans to renovate its student parking lot this summer. If all goes according to plan all work should be completed in about a year.

CX3 was developed by the California Nutrition Network and piloted in six counties across the state. San Diego County decided to use this program and chose Chula Vista and La Mesa as their first CX3 communities. In addition to support from the County, the La Mesa CX3 project received a grant from the Grossmont Healthcare District.

Teen civic engagement, street improvements, and community wellness may seem like very diverse issues but they serve to illustrate the positive impacts and importance of collaborative efforts in accomplishing La Mesa's community improvement goals.

"MOVIE NIGHT UNDER THE STARLIGHT"

FEATURING: FREE MOVIES FOR THE ENTIRE FAMILY

FRIDAY JULY 18 RATED PG

"HOOK"

STARRING:
Robin Williams and Dustin Hoffman
LOCATION: La Mesa Municipal Pool
5100 Memorial Dr., La Mesa, 91941

FRIDAY AUGUST 15 RATED PG

"SHREK the Third"

STARRING VOICE OF:
Mike Myers, Eddie Murphy,
Cameron Diaz and Antonio Banderas
LOCATION: La Mesita Park
8855 Dallas St., La Mesa, CA 91942

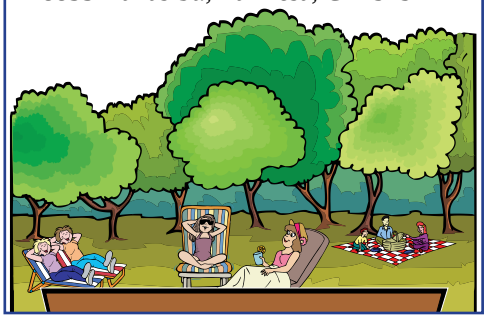

EAST COUNTY SENIOR SERVICE PROVIDERS

9th Annual Senior Health Fair

Friday, May 30, 2008
10:00 a.m. - 1:00 p.m.
Santee Trolley Square Amphitheater
East of Target Garden Center, 9850 Mission Gorge Rd., Santee

- Free Health Screenings
- Health Information
- Senior Community Services
- Home Care Services
- Raffle Prizes
- Educational Programs
- Volunteer Opportunities
- Housing Options
- Nutrition Services
- Much More!

For more information call:

La Mesa Adult Enrichment Center at 619.464.0505
Ask about taking the MTS Trolley or bus line to the Fair!

Sponsored by: East County Senior Service Providers &

SHARP Grossmont Hospital · Grossmont Healthcare District · Santee Trolley Square

SUNDAYS AT SIX

Summer Concert Series

at Harry Griffen Park, 9550 Milden Street, La Mesa
Concerts from 6-7p.m.

JUNE 15 ..... Navy Band Southwest Jazz Band
JUNE 22 ..... Trails and Rails Cowboy & Train Songs
JUNE 29 ..... San Diego Concert Band
JULY 13 ..... The Ron Jermain Big Band
JULY 20 ..... A 5th of Blues
JULY 27 ..... Shamrockers–Traditional Irish to Classic Rock

Peformance lineup subject to change without notice

Enjoy FREE concerts featuring performances from some of San Diego's premiere recording artists, musicians, and singers. Bring a picnic and spend "Sundays at Six" relaxing to concert band, country, jazz, and variety music in the company of friends.

GETTING THERE— I-8 E or W to Severin -North on Severin - Right on Amaya - Right on Water - Left on Milden **OR** SR125 N or S to Fletcher Pkwy/ Amaya - East on Amaya-Right on Water - Left on Milden

For concert information go to www.cityoflamesa.com or call 619.667.1300

Thanks to our Sponsors: La Mesa Arts Alliance – fostering the arts in our community · Wells Fargo · City of La Mesa – Jewel of the Hills

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91941

7:00 AM to dark Mon – Fri
6:30 AM to dark Weekends
Adults $10 for 9 holes $14 for 18 holes
Students $6 for 9 holes $10 for 18 holes
(includes college with valid student ID)
Clinics, lessons, and special programs are available.

For details go to
www.sunvalleygolfclub.com
or call 619.466.6102

LA MESA ARTS ALLIANCE

fostering the arts in our community

presents

East County Youth Symphony

Sunday, May 4, 2008

3:00 – 5:30 p.m.

La Mesa Community Center
4975 Memorial Dr. La Mesa 91941

FREE ADMISSION

(donations accepted at the door)

No host beverages and refreshments will be available during intermission

Please call for reservations to assure sufficient seating.

Information 619.667.1300
commservices@ci.la-mesa.ca.us

THE LA MESA COMMISSION ON AGING

Presents Summer Community Forums:

TUESDAY, MAY 27 1:30 PM

"Identity Theft, Elder Fraud & Protection"

TUESDAY, JUNE 24 1:30 PM

"New Technology: Living Alone Safer, Healthier & Happier"

A special program introducing new developments and innovations such as:

- *Technology for improved hearing*
- *Technology for improved vision*
- *Technology for memory*
- *Audio & Video Communications*
- *Central Alarm Monitoring*
- *Automation for a Safer Home*

TUESDAY AUGUST 19 9:30 AM

"Coffee with George Chamberlin"

TUESDAY, SEPTEMBER 23 1:30 PM

"La Mesa Candidates' Forum"

Moderator: League of Women Voters

LOCATION: La Mesa Adult Enrichment Center, 8450 La Mesa Blvd

RSVP's Required to Assure Adequate Seating 619.464.0505

WHAT IS RIDES4NEIGHBORS?

- Rides4Neighbors a volunteer-based transportation program for adults age 65 and older and persons with a disability who are residents of La Mesa.
- Rides are provided by trained volunteers who use their personal vehicle.
- Rides are scheduled for essential transportation needs, like medical appointments, grocery and essential shopping, personal care, and personal business.
- Ride destinations are not limited to La Mesa, but are contingent upon finding a volunteer willing to transport you to your destination.

The City of La Mesa provides eligibility screening for riders and volunteers, scheduling, ride coordination, volunteer training, mileage reimbursement and secondary insurance.

SCHEDULING A RIDE

- Call 619.464.0109 to schedule a ride.
- First time riders complete an application and service agreement prior to the first ride.
- Request your ride at least one week in advance of your trip date; new callers should allow even more time in order to process your initial application.
- Rides4Neighbors makes every effort to match you with a screened volunteer driver, but ride availability is not guaranteed.
- Eligible riders may receive the equivalent of up to $100 of service per month, based on mileage reimbursement and/or purchased rides fees.
- Riders must be residents of the City of La Mesa, age 65 or older, or have a disability that prevents use of existing public transit services including ADA Paratransit.

PAYING FOR A RIDE

- Rides are donation-based; the minimum suggested donation is $3 per one-way trip; the suggested donation scale is based on the trip distance, or geographical zone.
- Donation statements are mailed to riders monthly and donation checks may be made payable to the "City of La Mesa."
- Volunteer drivers do not accept payment, donations or tips from riders, but a heartfelt "Thank You" is always welcome!

VOLUNTEERING

- We are seeking adult volunteers with an excellent driving record who are willing to use their personal vehicle to provide a ride to a neighbor in need.
- Volunteers complete an application, provide a copy of a valid Drivers' License and insurance certificate, authorize the City to make a DMV records check, complete a Live Scan background check, and complete an orientation and training.
- Volunteer drivers are reimbursed for mileage and receive secondary liability insurance.
- As a volunteer, you decide your availability and choose the rides you wish to provide. There is no minimum time commitment or number of rides required to be a volunteer.
- Call 619.464.0109 for information on becoming a Rides4Neighbors volunteer!

Rides4Neighbors

STATE GRANT

Funds Used to Target Selling or Furnishing Alcohol to Minors

April marks the beginning of the last quarter of a year-long grant program, where $37,720 was awarded to the police department from the California Department of Alcoholic Beverage Control (A.B.C.) to target those who sell or furnish alcohol to minors. The program objectives are to educate the 124 alcohol establishments in La Mesa to conform to all A.B.C. laws and regulations, train police department personnel to investigate A.B.C. violations, purchase undercover investigative equipment, and to conduct several undercover operations targeting underage drinking.

The police department has used these grant funds to conduct 17 operations, including working with other police agencies in task force operations, targeting business employees who sell alcohol to minors, and targeting business customers who are willing to buy alcohol for minors loitering near stores. There have been 19 arrests and the compliance rate for alcoholic establishments to comply with A.B.C. regulations has increased from an initial 27% to over 97%.

Grant undercover operations will continue through June 30, 2008. Police department personnel will continue to monitor A.B.C. licensed establishments and investigate those who sell and furnish alcohol to minors on an ongoing basis beyond the grant period.

FIRE STATION DEDICATION

On February 29, 2008 La Mesa Fire Station 11 was officially dedicated as the "J.O. Orsborn Memorial Fire Station." The small ceremony was well attended by the Orsborn family, City staff, elected officials, and Fire Department retirees. The newly installed dedication sign is clearly visible on the administration side of the building.

James "J.O." Orsborn resided in La Mesa his entire life and was a well-known member of the community. At the age of 15, in 1941, he began his career as a volunteer fireman with the La Mesa Fire Department. He was appointed Fire Chief in 1981. Chief Orsborn retired in 1990 after 46 years of service. He served with the California Fire Chiefs Association, Fire Training Officer's Division, and Pioneer Hook & Ladder Museum in San Diego. J.O. also was active with San Diego Boy Scouts, serving in various capacities and was awarded the Silver Beaver Medal for his long service.

Shortly after his passing on May 11, 2007 the La Mesa City Council voted to rename Station 11 in his honor. J.O. also holds a spot on the City of La Mesa Walk of Fame.

Dedication of Fire Station 11 is part of the year-long Fire Department Centennial celebration

La Mesa Police Department's

Citizens Academy 2008

Ever wonder how the police department operates on a daily basis?

Come see for yourself at our FREE Citizens Academy!

Participants will track a real homicide case and learn about police tactics through interactive demonstrations, hands-on evidence collection and scenarios. The Academy will consist of six classes, one class per week.

The classes will be held every Thursday evening beginning May 29 from 6:00 p.m. to 9:00 p.m. at the La Mesa Police Department. Snacks and soft drinks are included.

Class size is limited to 20 participants, so sign up early. The deadline for applications is May 8, 2008.

*All applicants must pass a background screening in order to be admitted to the Academy.

For more information call the Crime Prevention Unit at 619.667.1445.

Applications can be picked up at the La Mesa Police Department or downloaded from the City website.

FIRE DEPARTMENT CENTENNIAL CELEBRATIONS

On February 29 the La Mesa Fire Department marked 100 years of service to the community. A mention of the fire company appeared in *La Mesa Springs Scout* newspaper on March 16, 1908. Since no official date could be found, the Centennial Planning Committee decided to designate Leap Day as the official start of the celebration.

La Mesa firefighters prepared breakfast for more than 650 people

A community kick off event was held at Station 11 on February 29. The California State Firefighters Association's (CSFA) antique fire steamer was present, complete with Blaze the Dalmatian. There was a historical video and various photo displays and items for people to admire. Starbucks on Fletcher Parkway generously provided refreshments to the dozens of people who attended.

Next was a Pancake Breakfast on March 30, also at Station 11. The event was timed to coincide with the La Mesa Village Merchant's Association's Antique Street Fair. Even though the weather was slightly grey and drizzly, it was still a great time for residents and visitors to come out and spend the day in downtown La Mesa. The event was a fundraiser to help the Department restore its antique Kenmore fire engine. The breakfast was well attended with 678 people paying $5 each for pancakes, eggs, sausage, orange juice, and coffee donated by Starbucks Fletcher Parkway. Between breakfast and merchandise sales it is estimated that about $4,000 was raised.

The next event will be the La Mesa Flag Day Parade: A Salute to Old Glory, on May 31. The Fire department is having an opportunity drawing for three people to ride in the parade on the CSFA antique fire steamer, which will be led by a team of horses. Tickets for the drawing are $2.00 each or three for $5.00. Tickets can be purchased at the Fire Administration Office, 8054 Allison Ave. Tickets are on sale until May 16. The drawing will be held May 17 at 5:00 pm at Fire Station 11.

See antique and current fire apparatus in the Salute to Old Glory parade on May 31.

Until the end of February next year all sworn staff will wear a special badge in commemoration of the centennial. If you see fire department personnel out in the community be sure and check out the great retro design of the badge. Commemorative merchandise is on sale as well. Stop by an event, one of the stations, or the administration office to purchase miniature badge lapel pins, T-shirts, or window decals.

There will be additional events throughout the year, so be sure and check the City's website at www.cityoflamesa.com. From this site you can also sign up to be notified by e-mail of Fire Department or other City events.

NEIGHBORHOOD WATCH

Crime and the fear of crime threaten a community's well-being. People become afraid to walk on the streets and play in the parks. In turn, crime feeds on the isolation it creates and the problem continues to grow. The La Mesa Police Department is committed to preserving the peaceful lifestyle we have all come to enjoy in our city. However, we need your help to serve as the eyes and ears of the community.

Today's busy lifestyles mean that homes and valuables are left unattended for long periods of time. You and your neighbors can help prevent crimes in your neighborhood simply by watching out for one another. Neighborhood Watch is one of the most effective ways to reach out to your neighbors.

Neighborhood Watch is one of the most widespread crime prevention efforts in the United States because it has a long track record of success. Typically, Neighborhood Watch groups organize to respond to an immediate threat such as a series of robberies, a sharp increase in burglaries, or a rising fear of street crime. Often, when the crisis is resolved, membership and commitment to the program start to fade away. After all, why keep an eye out for criminals if they've been arrested or gone elsewhere? This attitude ignores the key benefits of the contemporary Neighborhood Watch. A Neighborhood Watch group empowers people to prevent crime, forges a bond between law enforcement and the community they serve, and builds a foundation for broader community improvement. As you can see, Neighborhood Watch is far more than a quick fix for an existing crime problem.

The success of the Neighborhood Watch program rests with the citizens that take the initiative to help each other and assist law enforcement in their crime fighting efforts. Don't wait until something occurs in your neighborhood, be proactive and help prevent crime before it happens. Visit the Police Department pages on the City of La Mesa website for more Crime Prevention tips, alerts about crime in your area, and press releases from the Police Department. To obtain information about starting and maintaining a Neighborhood Watch in your area, please contact the La Mesa Police Department's Crime Prevention Unit at 619.667.1445.

GOOD OUTDOOR LA MESA FUN

Free Youth Golf Clinic
La Mesa Residents Only

Saturday, June 21
3:00 p.m.

Complete this coupon and return to:

Sun Valley Golf Club
5080 Memorial Dr.
La Mesa CA 91941

Name: _____

Address: _____

_____

_____

Phone: _____

Space is limited. Register now!

LA MESA TRASH CART REGULATIONS

THINGS YOU NEED TO KNOW

Are you storing your trash, recycling and green waste carts properly?

Your EDCO carts cannot be placed in the street until the evening before collection and must be removed on collection day. The rest of the time, your carts must be stored away from the curb, off sidewalks and out of public view. You may never store your carts in the street or use them to reserve parking.

Be a good neighbor. Help keep our streets clear and neighborhoods looking nice!

If you have any questions about trash collection and recycling in La Mesa call 619.667.1338 or visit the City website.

Trash cans may be placed at the curb the evening before collection and must be removed on collection day.

KEEP UP THE GOOD WORK LA MESA!

Great job La Mesa, keep up the good work! The City has met the State mandated 50% waste diversion goal for the second consecutive year. In fact, in the City's most recent report to the California Integrated Waste Management Board for 2006, we actually increased our diversion rate to 54%. This means that La Mesa is keeping an estimated 54% of our waste stream out of landfills. The materials are being reused, recycled, or in the case of some hazardous materials, disposed of properly and safely. This is the accumulation of years of hard work and a positive partnership between the City, EDCO, and you, the community.

Our work, however, is not finished! California law requires all cities and counties in the State to maintain the 50% diversion rate. We must continue to do the right thing and keep waste out of our landfills which are running low on space.

HERE'S WHAT YOU CAN DO TO HELP:

- Recycle, recycle, recycle! Are you recycling as much as you can? Look at things before you throw them away and ask yourself: is it unsoiled paper or cardboard, or CRV # 1 or 2 plastic, glass, or aluminum? If the answer is yes, rinse them if needed and place them in your blue bin or recycling dumpster.
- Put toxic waste in its place! If you have household hazardous waste (HHW), such as batteries, fluorescent lights, paint, chemicals, mercury devices (including thermometers), or electronics, do the right thing and use the City's HHW disposal program by calling 619.287.5696 x4270 to schedule an appointment.
- Paper or Plastic? That's sooo 20th century! Get yourself some reusable produce and shopping bags. Most grocers now sell them cheap and they work much better than plastic!
- Collect construction debris! EDCO's SANCO Resource Recovery is now open in Lemon Grove for mixed loads of debris that will save you time and money. Call 619.287.7555 for more info.
- Try composting! This is a great way to cut down on food waste going into the trash and gives you a great source of material for your yard. For more info, visit our website at www.cityoflamesa.com/composting.

WELLNESS NEWS

PERSONAL MENU PLANNER

Most people have little idea whether they're eating a balanced diet or not. The USDA wants to change that. On March 11, the U.S. Department of Agriculture announced the release of the MyPyramid Menu Planner, a new state-of-the-art nutrition guidance tool to help individuals and homemakers plan healthiermenus based on the recommendations of the MyPyramid food guidance system and the Dietary Guidelines for Americans.

To use the Planner, go to www.mypyramid.gov and click on the MyPyramid Menu Planner link.

The Menu Planner will be useful to not only those interested in healthful and nutritious diets but also high school and middle school classes, and dietitians, health professionals, and nutrition educators for use in counseling and educational programming. Please help get the word out that the Menu Planner is provided free of charge to the public and can help motivate consumers to make healthier food choices.

Information furnished by the San Diego Nutrition Network.

RECYCLING RAMPS UP IN LA MESA

The City adopted a mandatory recycling ordinance in the early 1990s to help meet a State mandated 50% waste stream diversion goal. Under the ordinance, all residents and businesses in La Mesa are required to recycle reusable materials. The City and EDCO Disposal Corporation recently reviewed recycling accounts to ensure that everyone is in compliance. Those multi-family residences and businesses that are not recycling were given 90 days to set up their service. There are no exemptions to the recycling requirement.

Non-compliant multi-family residential properties and non-compliant businesses were notified by the City of La Mesa that recycling service arrangements must be made. Staff from EDCO Disposal Corporation, the City's contracted waste hauler, is in the process of conducting site visits at the affected properties to discuss appropriate service levels, assist with bin location, and resolve issues and concerns.

Approximately 10,500 residences and businesses throughout La Mesa receive waste hauling services from EDCO. However, the account review showed that 5% of these accounts needed help to comply with La Mesa's mandatory recycling ordinance. Single-family residences and most businesses were found to be already in compliance.

Further information about La Mesa's recycling ordinance is available by contacting Scott Munzenmaier in the City of La Mesa at 619.667.1338 or smunzenmaier@ci.la-mesa.ca.us. Recycling service from EDCO is available by calling 619.287.7555.

Recycling dumpsters like these can be found at multi-family residences and businesses in La Mesa

RECYCLING REMINDER!

Here is a reminder of the types of items you can recycle in your blue EDCO recycling bin.

GLASS BOTTLES & JARS

Recycle all food and beverage containers—clear and colored glass. Please rinse. No need to remove labels though.

CARDBOARD

Flatten or cut boxes to a maximum size of 3 ft. x 3 ft.

NEWSPAPERS

Recycle your newspaper and all paper inserts, coupons, etc. that are delivered with it (but not the plastic bags – those can go to your local grocery or large retail store).

CANS

Recycle aluminum cans and steel cans—including clean & dry paint cans, and empty aerosol cans. Also recycle aluminum foil.

PLASTIC CONTAINERS

Recycle plastic bottles & jugs marked ♻ or ♻ , and all beverage containers labeled "CA Redemption Value" or "CA Cash Refund" including:

- Food & Beverage Containers — Milk, soda, water, salad dressings, cooking oil, etc.
- Jars & Canisters — Peanut butter jars, mayonnaise jars, aspirin bottles and 35mm film canisters.
- Cleaning Products & Detergents — Bleach, detergent, soap, shampoo, drain cleaners, etc. (Containers must be empty.)
- Automotive & Yard Care Products — EMPTY motor oil, antifreeze, plant food and herbicide containers.

MIXED PAPER

Recycle virtually all clean and dry paper including: writing paper (all colors), computer paper, copy paper, "no carbon required" (NCR) forms, catalogs, brochures, magazines, junk mail, phone books, Post-It® type notes, and shredded paper. EDCO accepts them all, PLUS if those items have staples, window envelopes, or even those little metal clasps on legal envelopes, they're OK, too! But, please, no large metal items like clasps on envelopes, folders, or three-ring binders.

Place all your recyclable materials in your blue trash container

You can also recycle cereal boxes and other clean food packaging, including cake boxes, flour bags, frozen dinner boxes, paper egg cartons, and soda/beer 12-pack carrying boxes. Also recycle paper grocery bags, gift boxes, shoe boxes, paper gift wrap, calendars, and core tubes from paper towels, etc.

"Before you know it, recycling becomes second-nature..."

DON'T FORGET ABOUT HOUSEHOLD HAZARDOUS WASTE!

Like most people, you probably have some things at your home that can't be just thrown away like batteries, fluorescent lights, chemicals, or electronics. These items are considered household hazardous waste (HHW) and are not allowed to be placed in the trash because of their destructive effect on the environment and their ability to be recycled and reused.

DISPOSAL IS FREE! If you reside within the City limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program.

2008 HHW DROP-OFF SCHEDULE:
May 17, July 12, August 16
September 27, November 22

Call EDCO Disposal Corporation at 619.287.5696 x 4270 to make an appointment.

While supplies last, participants may bring a mercury thermometer and exchange them for a FREE non-hazardous thermometer.

EXAMPLES OF HHW ARE:

General: Batteries, fluorescent lights, latex and oil-based paints, solvents, cleaners, pesticides and garden products, pool products, propane, and any items labeled flammable, hazardous, toxic, or corrosive.

Electronics: TVs, computer monitors and hardware, telephones, VCRs, and radios.

Automotive: Used oil and filters, batteries, and antifreeze.

Call EDCO at 619.287.5696 x4270, to schedule an appointment or to request additional information. For more information on HHW or other disposal or recycling options, log on to www.cityoflamesa.com.

LA MESA VOLUNTEERS MAKE THEIR PARK JEWELS SHINE

More than 200 volunteers celebrated La Mesa Park Appreciation Day on March 29, 2008. Workers picked up trash, pulled weeds, spread mulch, raked leaves, and painted tables in La Mesa parks.

The event, normally held in October, was postponed until March of this year due to last fall's wildfires.

Park Appreciation Day 2008 is scheduled for October 25. Watch for more information in the August edition of the *La Mesa FOCUS*.

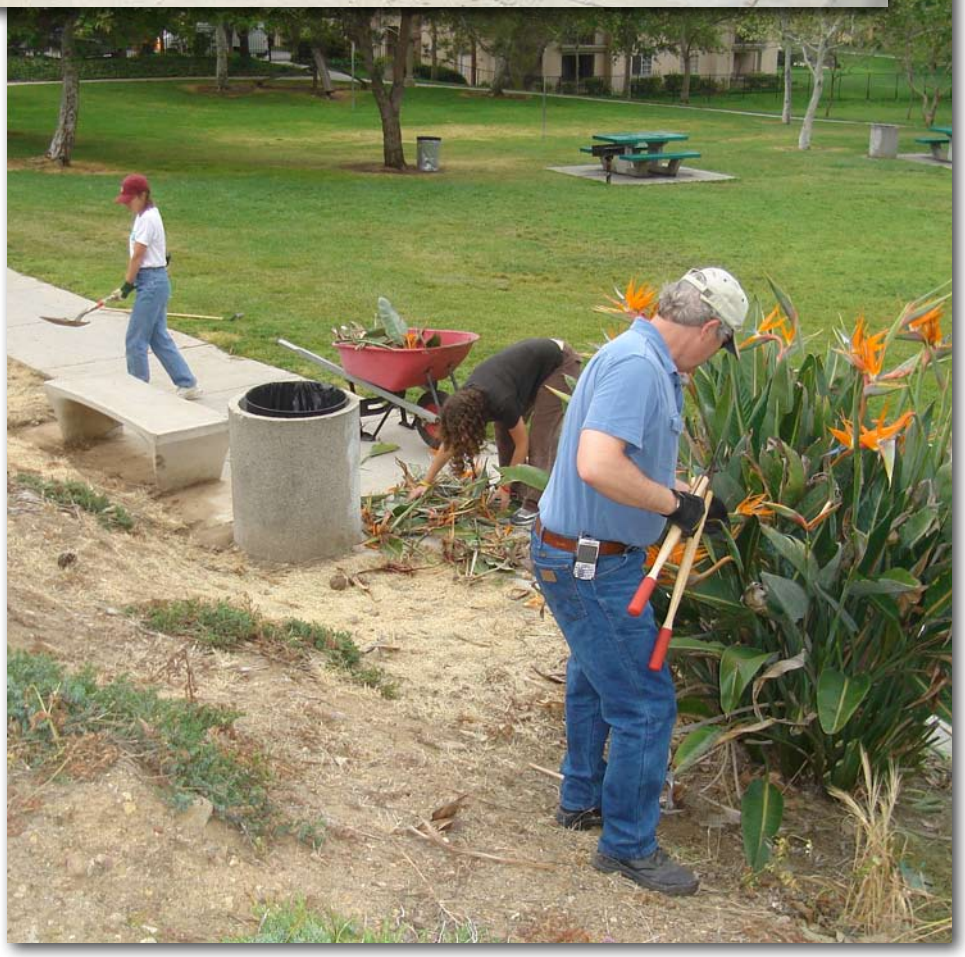

Volunteers spruce up landscaping at Northmont Park

VOLUNTEERS NEEDED!

The City of La Mesa's Community Participation Program currently has volunteer positions and special assignments available in the departments and project areas listed here. Volunteers play an important role in the enhancement and expansion of services to City residents. You not only provide a valuable service for the community, but also enjoy flexible scheduling for most assignments, develop new skills and meet new friends. For more information stop by the Adult Enrichment Center, 8450 La Mesa Blvd., or call 619.464.0505 for an application.

RIDES4NEIGHBORS

We need Volunteer Drivers for Rides4Neighbors, a new transportation program for La Mesa's older residents and residents with disabilities. Volunteer drivers use their own vehicles, are reimbursed for mileage and provided with supplemental liability insurance. You decide availability and choose the rides you wish to provide.

CITY OF LA MESA FINANCE DIVISION

Accounts Payable has need for a volunteer for Alpha filing. Requires basic office skills: filing, copy/fax machine, and mail processing. Computer knowledge a plus. Time commitment: monthly as needed.

ADOPT A BLOCK!

Help preserve and enhance the beauty and cleanliness of La Mesa by volunteering for Adopt A Block. The City provides a vest, bags, and a pick-up tool. All you need to do is commit at least 5 hours a month for one year!

CITY OF LA MESA SEWER BILLING

Volunteer position available monthly or "as needed" to help with filing. Requires basic office skills: filing, copy/fax machine, and mail processing. Computer knowledge a plus.

CITY OF LA MESA FINANCE

Has need for a volunteer to help organize the internal filing system. Requires basic office skills: filing, copy/fax machine, and mail processing. Computer knowledge a plus. Time needs: 1-3 days/wk.

CITY OF LA MESA PARKING CITATIONS

Needs a volunteer to help out with filing. Requires basic office skills: filing, copy/fax machine, and mail processing. Computer knowledge a plus. Time needs: 1 hour per week.

Friday Night Dance-La Mesa Adult Enrichment Center

Needs volunteers to help with front door cashiering and cash out. Times needs: once a month for a 3½ hour shift.

LA MESA PET THERAPY NEEDS YOU & YOUR DOG!

Would you and your dog be willing to be trained and spend 2 hours a month visiting patients in La Mesa convalescent homes? If you have questions about the program, we can put you in touch with a current Pet Therapy volunteer.

ADOPT THE MOFFATT GARDEN AT THE LA MESA ADULT ENRICHMENT CENTER!

Seeking a dedicated garden-lover or group to help us with upkeep for our memorial garden. Weekly weeding, watering, and sprucing up is what is needed.

Down load a volunteer application from www.cityoflamesa.com

COUNCIL APPOINTMENTS

The City of La Mesa is looking for volunteers to serve on various advisory boards, commissions and committees. Serving on a City board or commission offers residents a unique opportunity to become involved in local government and in the community.

The City encourages citizen participation in municipal government and welcomes your interest in serving on a board, commission or committee. These groups provide valuable public input into government and assist in the decision making process.

Recruitment is currently underway for openings. Serving in an advisory capacity, each group has specific roles and responsibilities. You can learn more about the various boards, commissions and committees by the following links:

- ***Building Codes Review Board***
- ***Commission on Aging***
- ***Community Services Commission***
- ***Design Review Board***
- ***Historic Preservation Commission***
- ***Human Relations Advisory Commission***
- ***Independent Citizens' Bond Oversight Committee***
- ***La Mesa Community Parking Commission***
- ***Loan Committee for Real Estate Rehabilitation***
- ***Personnel Appeals Board***
- ***Planning Commission***
- ***Traffic Commission***
- ***Youth Advisory Commission***

Most advisory groups meet once a month for a couple of hours. It is a wonderful way to meet and work with people who have similar interests and knowledge.

Please consider this opportunity to serve on a board, commission, or committee. Find applications and specific information regarding qualifications, requirements for serving, and meeting days and times on the City website, by visiting the City Clerk's office at City Hall, 8130 Allison Avenue, or calling the Clerk's office at 619.667.1120.

Applications for advisory boards must be submitted to the City Clerk's office no later than 5:30 pm, Friday, June 6, 2008, to be included in the June interview and selection process.

2008 LA MESA GARDEN AWARDS

NOMINATION FORM

How Does Your Garden Grow? This year marks the 28th anniversary of La Mesa Beautiful's annual contest involving property owners within the city limits of La Mesa who have done a great job landscaping their property.

Nominate any property. Include blocks or even neighborhoods which have helped make La Mesa the "Jewel of the Hills."

Winners will be recognized at the Annual Garden Awards Luncheon scheduled for October 15, 2008 at the La Mesa Community Center. A team of judges will evaluate all nominations. Their decision is final. Nominations may be filed throughout the year.

Winners will be notified prior to the award luncheon. For consideration this year, nominations should be submitted before July 1st.

1. Single Family Residence (Best Design)

Name _____

Address _____

Telephone No. _____

2. Single Family Residence (Best Use of Color)

Name _____

Address _____

Telephone No. _____

3. Low Water Use (Best Design)

Name _____

Address _____

Telephone No. _____

4. Low Water Use (Attractive Landscape)

Name _____

Address _____

Telephone No. _____

5. Multi-Family Residential

Name _____

Address _____

Telephone No. _____

6. Business, Commercial or Industrial

Name _____

Address _____

Telephone No. _____

7. Public Facility (School, Hospital, Rest Home, Church, Park, Block or Neighborhood, etc.)

Name _____

Address _____

Telephone No. _____

8. Individual who has contributed most to the beautification of La Mesa.

(Please submit a letter stating the reason(s) for the nomination.)

Name _____

Address _____

Telephone No. _____

PLEASE CLIP OUT AND MAIL TO:

LA MESA GARDEN AWARDS
La Mesa Beautiful, P.O. Box 127, La Mesa, CA 91944

La Mesa Beautiful is a Non-profit Corporation.
Its Sole Purpose is to Encourage the Development
of a More Attractive Community.

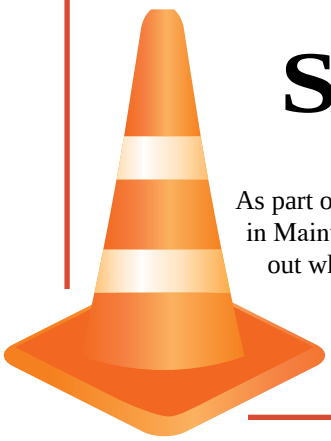

Notice of Upcoming
SLURRY SEAL
in Maintenance Zone 5

As part of the City's Street Maintenance Program, many of the streets in Maintenance Zone 5 will be slurry sealed later this spring. To find out what maintenance zone you live in, go to www.cityoflamesa.com/StreetMaintenance. Before the application of slurry seal, repairs and improvements are made to the concrete sidewalks and pedestrian ramps in the same maintenance zone. Slurry seal helps extend the useful life of the street asphalt pavement.

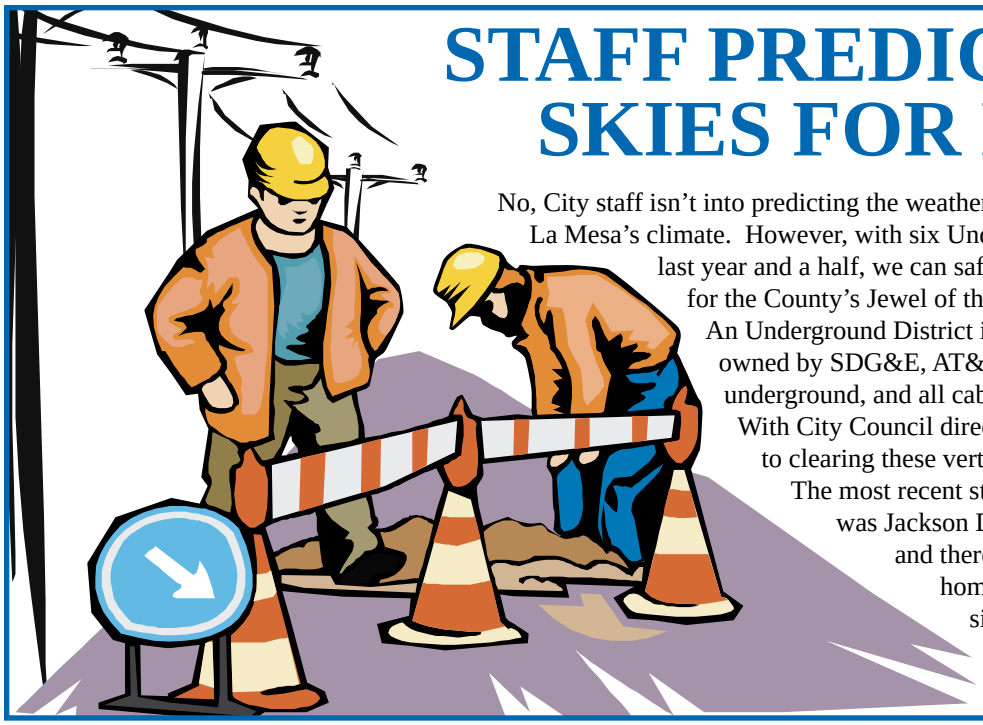

STAFF PREDICTS CLEAR SKIES FOR LA MESA

No, City staff isn't into predicting the weather, or anything else having to do with La Mesa's climate. However, with six Underground Districts established within the last year and a half, we can safely say that there will be clearer skies ahead for the County's Jewel of the Hills. What is an Underground District? An Underground District is an established area where utility cables owned by SDG&E, AT&T, and Cox Communications are placed underground, and all cables and poles within the area are removed. With City Council direction, staff has taken an aggressive approach to clearing these vertical obstacles, making way for clear skies. The most recent street completed as part of this City program was Jackson Drive between the I-8 and Lemon Avenue, and there are six more areas on the way. Is your home in one of these areas? Visit the City web-site at www.cityoflamesa.com/UndergroundUtilities for upcoming districts and additional information.

ADULT SOFTBALL

(18 years and older)

REGISTRATION: July 21, 2008, 5:30 – 6:30 p.m.
- La Mesa Community Center 4975 Memorial Drive
- Sports Information Line 619.667.1319
- Team rosters and game rules will be issued at time of registration.

FEE: $525 for season.
- Umpire fees not included - $15/game each team. The entire fee must be paid at time of registration. No partial payments.
- Payment options:
  a) one check
  b) all cash
  c) one check and the remainder cash
  d) credit card
- A $25 service charge and postage will be required on all returned checks. Payees will have one day to correct the problem to guarantee a position. A waiting list will be taken after reaching the maximum number of teams.

SEASON*: 10 or more weeks beginning the week of August 11, 2008 (weather permitting).

LOCATION: Junior Seau Complex, Field #1, 9009 Park Plaza Drive, entrance to La Mesita Park.

LEAGUES*:
Monday – Coed
Tuesday – Coed
Wednesday – Men
Thursday – Coed
Friday – Men

GAME TIMES: Monday – Thursday: 6:00 – 9:00 p.m.
Friday: 6:00 – 10:00 p.m.

** Subject to change based on the number of teams*
Note: Minimum 4 teams required per night or league night subject to change or cancellation.

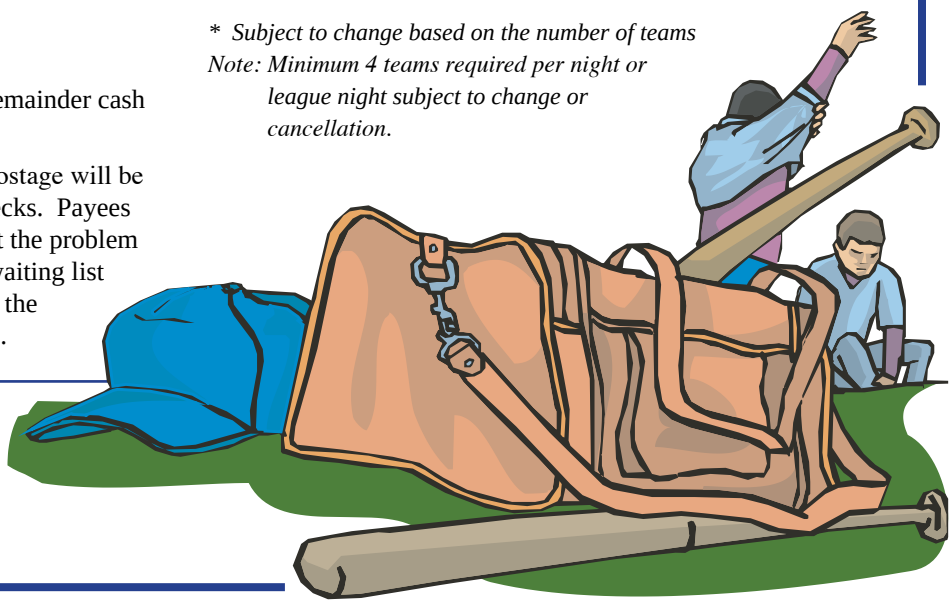

$14.5 MILLION SEWER UPGRADE PROJECT CONTINUES

The City of La Mesa secured a $14.5 million low-interest loan from the State Water Resources Control Board in 2006. The loan is being used to rehabilitate and upgrade the City's aging sewer system in older sections of La Mesa.

The project has been divided into four phases. **PHASE 2** construction is currently underway and is scheduled for completion in May of 2008. **PHASE 3** construction is scheduled to start in early summer of 2008 and Phase 4 will start next year. The combined phases represent the largest infrastructure project ever undertaken by the City.

During construction, residents may be inconvenienced by restricted traffic flows and construction noise in areas close to the construction zones. The City apologizes in advance for any inconvenience. However, this project will enhance health and safety for La Mesa residents for many years.

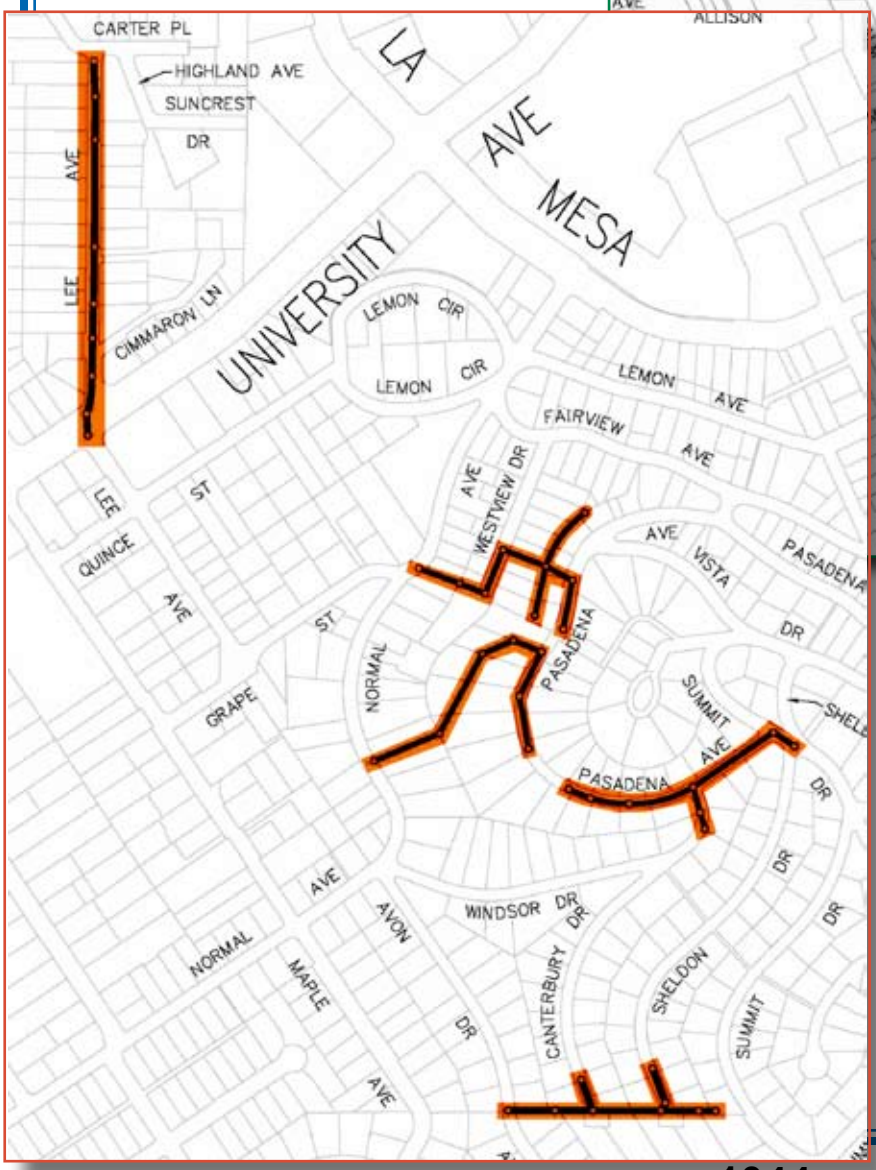

PHASE 3 construction will take place on the following streets: Pasadena Ave., Orchard Ave., Lemon Ave., Finley Ave., 4th St., Sunrise Ave., and Hillcrest Ave., as well as in easements between Avon Dr. and Summit Dr., Normal Ave., and Pasadena Ave., and off of Chevy Chase Dr.

The accompanying diagram shows the locations of the proposed work. Residents in each neighborhood affected by the work will be notified of the start dates 48 hours prior to the start of construction.

Highlighted streets show locations of sewer upgrades

UPDATES TO THE CITY'S STORM WATER PROGRAM

You know you should protect the environment, you want to protect the environment, and now you have to protect the environment. Under provisions of the federal Clean Water Act and the State Porter-Cologne Water Quality Control Act, the City of La Mesa is required to implement various pollution prevention programs geared towards protecting water quality. The Regional Water Quality Control Board issued a permit on January 24, 2007 to the City of La Mesa and other cities within the region that requires the protection of water quality to the maximum extent practicable.

To meet the permit requirements, the City updated its Jurisdictional Urban Runoff Management Program, Watershed Urban Runoff Management Programs, Development Manuals, and Chapter 7.18 Storm Water Ordinance as of March 24, 2008. The aforementioned programs and policy are now in effect. How do these new programs and policies aimed at controlling storm water pollution affect you? Remember, the only water to enter into the storm drain system is rainwater. Listed below are tips to keep you on the right side of the law.

RESIDENTIAL AREAS

The following activities are prohibited:

1. Discharge of wash water from cleaning or hosing of impervious (ie pavement/concrete/asphalt) surfaces such as driveways, sidewalks and patios. Instead of washing, dry sweep and collect the debris or direct the wastewater into a lawn or vegetated area so that it does not flow onto the street and into the storm drain.
2. Discharge of pool or fountain water containing chlorine, biocides, or other chemicals. If you plan to drain a pool, the water pH should be 7 to 8 and there should be no chlorine in the pool or fountain water. Chlorine will naturally evaporate from pool water, use your test kit to check for chlorine every 24 hours until the pool or fountain water is chlorine free.
3. Discharge of sediment, pet waste, vegetation clippings, or other landscape. Make sure you sweep and pickup after your pets and dispose of waste appropriately.
4. Discharge of wastewater from car washes for school or club fundraisers.
5. Discharge associated with vehicle maintenance on City streets.

INDUSTRIAL/COMMERCIAL FACILITIES

Industrial and Commercial facilities are required to ensure the following:

1. Discharge of wash water from the facility or into the storm drain within the facility is prohibited. Dry sweep rather than using water.
2. Storage of material outside shall be covered and contained. If liquid material is stored outside, it should be placed over secondary containment.
3. Discharge resulting from cleaning, repair of any type of equipment is prohibited.
4. Discharge of wash water from mobile operations such as vehicle washing/detailing, steam cleaning, power washing, and carpet cleaning is prohibited.

CONSTRUCTION/DEVELOPMENT SITES

The following are required of construction sites:

1. Cover and contain soil, material, or waste stockpiles throughout the year.
2. Develop hydromodification plans for projects greater than 50 acres.
3. Implement advanced treatment for projects planned on steep hillside slopes to prevent erosion.
4. Grade no more than 17 acres at one time until site is protected.
5. Incorporate low impact development such as porous pavement and grass swales to increase rainwater infiltration.
6. Ensure erosion control, sediment control, material and waste management are implemented at the site.

Should you witness illegal discharges, please contact the City's Storm Water Hotline at 619.667.1134. Thank you for protecting our environment and preserving our quality of life.

Continued from page 1

Strategic Planning Workshop

"Targets for Action" that outline specific steps and target dates to achieve community goals within the core areas defined by Council, including:

- Offer a safe community
- Maintain a financially sound and affordable city government
- Continue to improve high quality municipal services
- Revitalize neighborhoods and corridors
- Enhanced recreation and quality of life opportunities
- Provide effective and efficient traffic circulation and transportation

City Manager Sandra Kerl outlined the full day of topics to develop policy direction from the Council on how to meet both community expectations and the many financial challenges facing the City in the future. The hard work of the day began with a very thorough financial forecast prepared by the City's Administrative Services Director Gary Ameling. The forecast evaluates economic trends that are expected to have an affect on the City, including sales tax, property tax, employment projections, fees for services and permits, and other sources of revenue from State and Federal sources. The Council asked many questions in getting a handle on the City's financial forecast for the next six years.

The second part of the workshop focused on the ongoing efforts throughout the year by the Council to reach out and communicate with the citizens of La Mesa and gather information and opinions about the key issues in the community. This was the second year of success for the Town Hall meetings to gather input from concerned citizens and property owners. A summary of the comments received at the meetings and follow-up actions by staff was presented to the Council. Later in the workshop the Council also reviewed the results of a community phone survey that asked several questions about how well the City is doing in the view of the citizens in terms of providing services and meeting community expectations.

Continuing with the importance of focusing on the economy and the City's budget issues, there were several sections of the workshop dedicated to evaluating various actions the City can take to address new sources of revenue. These discussions included a thorough review of the City's "Cost Recovery Policies" for the various permits, services and facilities provided by the City. Each City department provided a detailed review of the fees and recommended changes to insure that the Council's objectives are being met. The Council provided direction to the City Manager on some changes to the departmental policies and the updated fee schedule which reflects these changes, which will go back to the Council for formal adoption later this spring.

The "community survey" was further discussed during this portion of the Workshop to listen to the preliminary data from citizens of La Mesa about their opinions on the idea of a local sales tax measure to provide an ongoing revenue source to maintain services and facilities in the City. A key issue in this discussion was the ability of the City to find long-term solutions that will avoid the ongoing impacts on La Mesa's budget that are a direct result of continual financial difficulties at the State level.

The other financial program that was presented at the Workshop was information from the Buxton Company. This group has developed information about potential new retail and service businesses that could be attracted to La Mesa as part of the City's economic development strategy. The data indicated that there is a very strong pool of shopping and service demand within a nine minute drive-time area around La Mesa. Demographic information from this data will be used to match the City with various retail and restaurant franchises that can be approached about interest in coming to La Mesa to provide quality services and products as well as providing much needed sales tax revenues to sustain City services and facilities.

In addition, the Council discussed the potential use of a site at the corner of Waite Drive and Murray Hill Road as a future neighborhood park location. The site is owned by the County and because it was formerly a fueling station, it has been undergoing remediation for several years. When the cleanup is completed, the Council has expressed interest to the County in acquiring the property.

In all, it was a long day and a very successful workshop to assess how the City is doing, what looms on the horizon, and provide direction to the City Manager in how the City will be going forward into the budget preparation process. A summary of the various programs and projects for that will be reflected in each City department work program and in the upcoming budget process outlined in the City Council's "Targets for Action." This document is updated annually to define the Council's core values and objectives based on community input and Council policies. By viewing the "Targets for Action" you can see an outline of the many programs and projects that the City will be undertaking in the next year by key areas.

The La Mesa Wellness Task Force wants you to know that there are organized walks nearby every day of the week. Check the City's website at www.cityoflamesa.com, search *health & wellness,* and click on Walk La Mesa under Quick Links for a list of options or pick up a flyer at La Mesa City Hall or the La Mesa Community Center.

Call 619-667-1300 for more information

La Mesa – it's made for walking!

Continued from page 1

Goal of Community Wellness Program

more than $45 per month. Co-payments at the time of services are $5 and some services are offered free of charge.

With help from the Institute for Local Government through the Communities for Healthy Kids Program, the City of La Mesa has planned a multi-pronged campaign to increase awareness and ultimately the number of eligible La Mesa children enrolled in these programs. Outreach efforts and a number of enrollment opportunities are planned this year. Several of these events are conducted in partnership with the La Mesa-Spring Valley School District and other community partners. Watch for specific informational materials coming home from school with your children. Enrollment opportunities will also be available at a number of community events this fall. Watch the City's website www.cityoflamesa.com for specific information when it becomes available.

To find out if you are eligible for Medi-Cal or California Healthy Families and to receive an application call toll-free 1.888.747.1222. For telephone assistance completing the application call toll-free 1.800.880.5305.

Additionally, Certified Applicant Assistants (CAAs) are available to help your family complete the application. For easy referral you can call the La Mesa Community Center office at 619.667.1300 for referral to a Communities for Healthy Kids project partner. Community Center office hours are Monday through Thursday 7:30 a.m. to 5:30 p.m. and alternate Fridays 7:30 a.m. to 4:30 p.m. Please note that City offices are closed alternate Fridays. Via email, send your name, residence address, and best daytime phone number(s) to commservices@ci.la-mesa.ca.us and we will forward your information to one of our area project partners for application assistance.

COUNCIL ACTIONS

January 8, 2008

Adopted a resolution amending Section 12.44.130 of the La Mesa Municipal Code installing a disabled persons parking space at 4231 Lowell Street.

Adopted a resolution adding Subsections 12.28.030 (50.9) and (82.8) to the La Mesa Municipal Code, establishing Amarillo Avenue as a stop street at Mellmanor Drive and Nentra Street as a stop street at Amarillo Avenue.

Adopted a resolution approving the Sidewalk Master Plan and Negative Declaration.

Approved the La Mesa Community Parking Commission's Capital Improvement Program (CIP) recommendations for improvements within the Downtown Parking District.

February 12, 2008

Ratified the Design Review Board's approval of DRB-07-25 (Starbucks Coffee Company), for a proposed carryout restaurant at 4200 Spring Street.

Ratified the Design Review Board's approval of DRB-07-20 (Chili's Restaurant), for proposed exterior improvements to an existing restaurant at 8285 Fletcher Parkway.

Adopted an ordinance repealing Chapter 7.18 of the Municipal Code in its entirety and adopting a new Chapter 7.18 to update regulations pertaining to storm water and non-storm water discharges.

February 26, 2008

Ratified the Design Review Board's approval of DRB-07-15 (KFC/Taco Bell), for a proposed fast-food restaurant at 5454 Jackson Drive.

Appointed members to the Human Relations Advisory Commission and the Youth Advisory Commission.

February 28, 2008

Directed the City Manager to initiate a third party independent investigation, under the authority of the Municipal Code, of the incident on February 20, 2008 involving the Mayor; and, if individual City Councilmembers so desired, they may contact the District Attorney or Grand Jury to invite either or both of these entities to initiate an investigation.

March 11, 2008

Adopted a resolution approving the City of La Mesa to apply for a grant to the CA Endowment for the "Live Well" Community Wellness Initiative.

Adopted a resolution approving the City of La Mesa to apply for three-year grant funding for the San Diego Association of Governments (SANDAG) Transnet Senior Mini-Grant Program.

Adopted a resolution authorizing the Mayor to execute Caltrans Program Supplement Agreements for all phases of the Smart Growth Incentive Grant Program for the Allison Avenue and University Avenue Pedestrian Enhancement Project.

Adopted a resolution designating La Mesa Fire Stations as Safely Surrendered Baby Sites.

March 25, 2008

Adopted a resolution authorizing the application and acceptance of funding from the California Department of Conservation's Division of Recycling for beverage container recycling and litter cleanup activities.

Adopted a resolution authorizing the application and acceptance of grant funding from the California Integrated Waste Management Board for waste reduction and diversion of hazardous materials.

Ratified the Design Review Board's approval of DRB-07-35 (Village Garden), for a proposed remodel to an existing restaurant at 8384 La Mesa Boulevard.

Ratified the Design Review Board's approval of DRB-07-30 (Sprint/Nextel), for a modification to an existing wireless communications facility at 7840 El Cajon Boulevard.

Adopted a resolution amending Section 12.40.010 (1) of the La Mesa Municipal Code designating a no parking zone on the west side of Acacia Avenue from Pasadena Avenue to Beverly Drive.

Adopted a resolution authorizing acceptance of a grant from the California Office of Traffic Safety to conduct a local seat belt compliance traffic safety project and approving the addition of the grant funds to the FY 2007-2008 Budget.

Adopted a resolution approving updated rules for parade entries.

Adopted a resolution of intention to authorize the allocation of a maximum of $300,000 from the Downtown Parking Fund to pay for professional services to prepare the Downtown Streetscape Improvement Program to revitalize public infrastructure in the downtown area.

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Contact your elected officials at 619.667.1106.

Mayor..... Art Madrid
Vice Mayor .....Ernie Ewin
Councilmember..... Ruth Sterling
Councilmember.....Dave Allan
Councilmember..... Mark Arapostathis
City Manager..... Sandra Kerl
Focus Editor ..... Käaren McElroy
Editorial Staff ..... Heather L. Moore
Ofelia Bareno

GIVE US YOUR FEEDBACK!

To let us know what you like or don't like about this issue, complete our online survey at...

www.cityoflamesa.com/FocusFeedback

If you would prefer to continue receiving a printed version or need further information please email at cmoff@ci.la-mesa.ca.us or call 619.667.1105 to be placed on a mailing list.

Want to know when the next issue of FOCUS is published?

Use the NOTIFY ME link to request automatic email notification so you won't miss the most up-to-date publication.

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM
(as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 8:00 AM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM

The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM

The above meetings are held at the Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM
(except July, August, November, December)

The above meeting is held at the Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS

(Area code 619)

Adult Enrichment Center 464-0505
Animal Control 667-1436
Building Inspection 667-1176
Business Licenses 667-1118
Cable TV..... 262-1122
City Attorney 667-1128
City Clerk..... 667-1120
City Council 667-1106
City Hall 463-6611
City Manager 667-1105
Crime Prevention 667-1445
Dog Licenses 667-1117
Engineering..... 667-1166
Fire (Business)..... 667-1355
Human Resources 667-1175
Library 469-2151
Mayor..... 667-1100
Municipal Pool 466-4177
Parking Citations..... 667-1117
Planning..... 667-1158
Police (Business) 667-1400
Public Works 667-1450
Recreation 667-1300
Recycling/Trash 287-7555
Sewer Charges 667-1126
Sidewalk Maintenance..... 667-1450
Storm Water Hotline..... 667-1134
Streetlight Maintenance 667-1450
Traffic Engineering Hotline .. 667-1144
Traffic Signal Maintenance .. 667-1166
Zoning 667-1177

ATTACHMENT 5.4

MOBILE BUSINESS AFFIDAVITS

AFFIDAVIT OF DISPOSAL

I _____ (business name) located at _____

_____ (address) on _____(date)

Certify under penalty of law that all waste generated (hazardous and non-hazardous) from the aforementioned business's activities will be disposed of appropriately in compliance with federal, state. and local regulations. I further understand disposal of any unauthorized waste into the sewer and storm drain systems is prohibited. I am aware that there are significant penalties for non-compliance with the said regulations that may result in penalties including fines and further legal actions for knowing violations.

_____
Authorized Signature

_____
Date

STORM WATER BEST MANAGEMENT PRACTICES IMPLEMENTATION AFFIDAVIT

(*MUNICIPAL CODE 17.18 STORMWATER MANAGEMENT AND DISCHARGE CONTROL*)

I _____(Business Owner Name) owner/authorized officer of _____ (Business Name) located at _____ (Address) have hereby read the attached Pollution Prevention Section 4.1 and Best Management Practices (BMP) Implementation Section 4.3 of the City of La Mesa's Jurisdictional Urban Runoff Management Program (JURMP). Furthermore, I have reviewed and will implement the Best Management Practices as applicable in Table(s)_____ presented in Appendix C of the City's JURMP. Should the aforementioned business be inspected by the City and observed not to be implementing the recommended Best Management Practices, fines/further action will be taken against the business owner per Municipal Code Chapter 7.18.230 "Enforcement of this chapter".

Signature: _____
(By Owner or Authorized Officer Only)

Date: _____

For Official Use Only

Business SIC Code: _____

Business Activity: _____

JURMP Priority: _____

E:\0780 NPDES\2004 NPDES Folder\BMP Agreement.doc

ATTACHMENT 6.1

RESIDENTIAL OUTREACH MATERIALS

City of La Mesa
Department of Public Works

Notice of Excessive Runoff

You are receiving this notice because excess water runoff has been observed coming from your property. Typically, this runoff is due to excessive or malfunctioning irrigation. Urban water runoff is a major contributor to storm water pollution. This runoff picks up litter, yard waste, fertilizer, pesticides, oil residue and sediment. All together, these compounds add up to storm water pollution. Storm water flows into streams and the ocean, not wastewater treatment plants. While this specific runoff carries only a small amount of pollutants, the hundreds of inlets around the City of La Mesa can add up to a much larger problem. Excess runoff can not only lead to storm water pollution but also to increased water bills. By inspecting and properly maintaining your irrigation system, you will insure you're not wasting water.

Please attempt to locate the source of this runoff and eliminate it, if possible. Make any necessary repairs or adjustments to irrigation systems and/or reroute and contain excess drainage.

For more information, you may call 619-667-1450.

City of La Mesa
Department of Public Works

Maintaining your Infrastructure

The Department of Public Works is responsible for the maintenance of $450 million of public infrastructure. By properly maintaining that infrastructure, the Department protects the public's safety and improves the quality of life for the citizens of La Mesa.

This Department is responsible for:

- 150 miles of streets
- 156 miles of sewer pipe
- 53 miles of storm drain pipe
- 14 parks
- 37 buildings
- 200 vehicles and pieces of equipment
- 58 traffic signals
- 1,900 street lights
- 7,200 signs
- 8,150 street and park trees

Pollutants of Concern

As rainfall flows over the ground, it picks up a variety of pollutants and deposits them into our watersheds. The following pollutants are commonly transported in the storm drain system and have been found to degrade water quality.

- Sediments
- Fertilizers
- Metals
- Detergents
- Pesticides
- Organic Compounds (solvents)
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

The following Best Management Practices (BMPs) are required to be used in residential areas to reduce urban runoff pollution in our streams and waterways. To do your part in protecting our water quality, please implement the following BMPs, where applicable or checked by the City inspector.

Maintenance & Good Housekeeping

- ❑ Regularly, dry sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- ❑ If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- ❑ Water used for cleaning exterior surfaces must be contained and disposed of into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the storm drain or leave the property.
- ❑ Regularly inspect and maintain storm drain inlets.

Landscaping

- ❑ Only irrigate during early morning or late evening to avoid evaporation.
- ❑ Aim sprinklers to avoid watering other areas.
- ❑ Time sprinklers to avoid over watering and causing runoff.
- ❑ Minimize pesticide, herbicide and fertilizer use, which are harmful to animals downstream.
- ❑ Hand pull weeds instead of using herbicides.
- ❑ Do not use pesticides that eliminate beneficial insects (i.e., Integrated Pest Management).

Outdoor Material Storage

- ❑ Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid material.
- ❑ Have a spill response kit available to clean up potential spills such as kitty litter or other absorbents.
- ❑ Keep material storage areas free from rainwater accumulation.
- ❑ Keep lids closed on all outdoor storage containers and ensure containers are labeled.

Waste Management

- ❑ Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- ❑ Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- ❑ Fix any leaks in garbage cans or dumpsters.
- ❑ Schedule regular waste pick-up.

Vehicle /Equipment Maintenance

- ❑ Perform all vehicle maintenance indoors when possible.
- ❑ Use drip-pans to collect fluids from leaky vehicles.
- ❑ Clean up spills immediately using kitty litter or other absorbents. Properly dispose of used absorbents.

Vehicle /Equipment Washing

- ❑ Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- ❑ Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- ❑ Minimize the use of soaps and water while washing.
- ❑ Protect storm drains or curb inlets and then collect all wash water by vacuum. Recycle or dispose of wash water via the sanitary sewer system.
- ❑ Drain excess wash water to the sanitary sewer (sink or toilet), not to storm drains.

Loading Areas & Operations

- ❑ Load and unload in designated areas.
- ❑ Regularly dry sweep loading and unloading areas.
- ❑ If possible, cover loading areas.
- ❑ Divert storm water away from all loading and unloading areas.
- ❑ Check shipments and trucks for leaks and spills.
- ❑ Cleanup spills/leaks immediately and dispose of properly.
- ❑ If you must use water for cleaning, use a mop and bucket and dispose of wash water into the sanitary sewer.
- ❑ Major cleaning of exterior surfaces must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water should not be allowed to enter the street gutter or storm drains.

Sanitary Sewer vs. Storm Drain System

The water that drains down a sink or toilet in a home or business flows to the sanitary sewer and is treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – terminating at the Pacific Ocean!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our watersheds.

REPORT ILLEGAL DUMPING
City of La Mesa.
(619) 667-1134

(After Hours Hotline)
County Storm Water Hotline
1-888-846-0800

HOUSEHOLD HAZARDOUS WASTE DISPOSAL
EDCO
8184 Commercial Street
By Appointment
Questions: (619) 466-3355

RECYCLING
EDCO: (619) 466-3355

QUESTIONS AND COMMENTS
City of La Mesa Storm Water Program
(619) 667-1340

LOOK ON THE WEB

USED OIL RECYCLING CENTERS
http://www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
http://www.ipm.ucdavis.edu/

County of San Diego Storm Water Management Program
www. co.san-diego.ca.us/deh/stormwater/stormwater.html

State Water Resources Control Board (SWRCB) Storm Water Program
www.swrcb.ca.gov/stormwtr/construction.html

US Environmental Protection Agency
www.epa.gov/OWOW/NPS/

Clean Water Network
www.cwn.org

Preventing Urban Runoff Pollution

A Guide for Residents

Urban storm water runoff is the **largest contributor** to **watershed pollution** in San Diego County.

The City of La Mesa's Storm Water Ordinance Requires the implementation of **Best Management Practices** (BMPs) to prevent urban runoff pollution.

The City monitors activities within the City's jurisdiction and may take enforcement measures to ensure the prevention of urban runoff pollution.

ATTACHMENT 8.1

TIPS FOR OUTDOOR VENDORS ATTACHMENT 7.1

CITY OF
LA MESA
JEWEL of the HILLS

City of La Mesa
Storm Water Pollution Prevention
Tips for Outdoor Vendors

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying storm water runoff into receiving water bodies, such as creeks, lakes and oceans. Unlike the sewer system, storm water runoff entering the storm drain system is not treated. Harmful pollutants, as listed below, can be transported during non-storm water discharges such as hosing down side walks or equipment. These types of pollutants are harmful to the environment and negatively impact water quality, aquatic animal and plant life as well as our quality of life. Non-storm water discharges are prohibited and in violation of the City Ordinance. A list of common pollutants and pollution prevention tips are provided below.

Pollutants of Concern

1. Sediment
2. Fertilizers
3. Metals
4. Detergents
5. Pesticides
6. Organic Compounds (solvents)
7. Trash and Debris
8. Oil and Grease
9. Bacteria

Good House Keeping

- Dry sweep exterior paved areas. **Do not use a hose or water!** Place debris in dumpster and keep dumpster lid closed.
- If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer system (sink or toilet). Wash water is not allowed to enter the storm drain.

Outdoor Material and Equipment Management

- Store material under covered areas.
- Place liquid material in secondary containment to ensure spills are contained.
- Ensure that frying oil is contained and managed properly without dropping/leaking on to the pavement.
- If using frying oil, ensure that you purchase absorbent material (absorbent pads) to address cleanup of potential oil spills.
- Inspect/fix equipment to ensure no leaks.
- Do not wash equipment at the event!

Waste Management

- Place trash in dumpsters with lids always closed.
- Cleanup leaks/spills immediately and place waste material into the dumpster

Should you require clarification or additional information on storm water pollution prevention, please contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.2

CONSTRUCTION BMP TRIFOLD

6) **Sediment Tracking** – Construct a stabilized construction entrance and conduct frequent street sweeping to keep sediment off of roadways.

7) **Materials Management** – Protect stockpiles of soil and paving materials from wind and water erosion. Have a spill prevention and control plan for hazardous materials such as fuel, paints and solvents.

8) **Waste Management** – properly store and dispose of solid, hazardous, concrete, and sanitary wastes. Cleanup spills immediately.

9) **Non-Storm Water Discharges**

- **Paving/grinding** – Protect inlets from slurry seal operations and vacuum saw cut slurry and grinding residue.
- **De-watering** – Use accumulated water for dust suppression or consult with City staff and the Regional Water Quality Control Board when dewatering operation is proposed.
- **Potable Water/Irrigation** – Shut off water source to broken lines, sprinklers or valves as soon as possible and direct water away from pollutant sources.

For further assistance, detailed BMP information from the above list can be downloaded from the City's Storm Water Pollution Prevention website.

Additional Resources

City of La Mesa Departments

Storm Water Program	(619) 667-1134
Engineering Division	(619) 667-1166
Building Division	(619) 667-1176

Best Management Practices (BMPs)

La Mesa Storm Water Page
www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm

California Storm Water Quality Association (CASQA) www.cabmphandbooks.com

International BMP Database
www.bmpdatabase.org

Regulatory

State Water Resources Control Board
www.swrcb.ca.gov/stormwtr/index.html

California Regional Water Quality Control Board, San Diego Region
www.swrcb.ca.gov/rwqcb9/

US Environmental Protection Agency, NPDES Program
http://cfpub.epa.gov/npdes/index.cfm

Waste Management

EDCO (solid waste)	(619) 287-5696
County Hazardous Materials Division	(619) 338-2222
Sanitary Sewer Overflows	
(Mon-Fri 6am-3:30pm)	(619) 667-1450
(Non-working hours)	(619) 469-6111

Storm Water Best Management Practices (BMPs)

A Guide for Construction Activity

Provided by the City of La Mesa
Department of Public Works
Storm Water Program

8130 Allison Ave
La Mesa, CA
91941

(619) 667-1134
www.cityoflamesa.com

Storm Water Pollution

Construction activities can have a significant impact on water quality due to soil disturbances and the types of materials and equipment used. As storm water flows over a construction site, it can pick up pollutants such as sediment, oil, fuels, paints, adhesives, trash, debris and fertilizers. Polluted storm water runoff can harm or kill fish and other wildlife, and can destroy aquatic habitat.

Best Management Practices (BMPs)

In order to reduce, or eliminate, erosion and pollutant discharges into La Mesa's storm drain system, owners and operators of all construction sites are required to implement Best Management Practices (BMPs). BMPs are techniques or physical controls utilized to prevent pollution.

Permit/Regulatory Requirements

The following permits and ordinances must be considered before construction or grading activity commences:

- **State Construction General Permit** – Projects which disturb one acre or more of soil must obtain coverage by submitting a Notice of Intent to the State Water Resources Control Board and preparing a Storm Water Pollution Prevention Plan (SWPPP).
- **Storm Water Management Ordinance -** Review Chapter 7.18 of the La Mesa Municipal Code (LMC) for local storm water requirements and penalties for noncompliance.
- **Grading Ordinance** – Chapter 14.05 of the LMC requires additional erosion control requirements during grading activities. Consult with the Engineering Division to determine if a grading permit is needed.
- **Building Permits** – Contact the Building Division to determine what building permits may be needed. Storm water BMP notes must be shown on site plans.
- **Encroachment Permits** – A permit is needed when working in the public right-of-way. Please contact the Engineering Division for specific requirements.

Inspection Program

City staff monitors constructions sites for proper erosion and sediment controls all year long, with more frequent inspections occurring during the wet season (October 1 through April 30). Inspectors will evaluate BMP implementation, effectiveness and maintenance.

Sites Covered Under State Construction General Permit (Over 1 Acre):

- These sites are also subject to inspections by the Regional Water Quality Control Board (RWQCB).
- Self-inspections are required before forecasted rain events, during each 24-hour rain event, and following a rain event.

Minimum BMPs

Construction projects within the City will be required to implement at least one of the BMPs from each category below when applicable to the site. Please refer to the following list while planning your project to ensure compliance with City and State requirements and to prevent storm water pollution. Brief examples of BMPs have been mentioned within each category, but do not represent a complete list.

1) **Planning and Scheduling** – Minimize land disturbance during the wet season.

2) **Slope Stabilization** – Preserve existing vegetation and stabilize slopes with hydraulic mulch or erosion control blankets.

3) **Site Drainage** – Install outlet protection devices to reduce velocity and erosion potential of storm water flows.

4) **Sediment Perimeter Protection** – Install silt fencing, straw rolls or a gravel bag barrier to prevent sediment discharges.

5) **Sediment Capture** Protect all storm drain inlets with gravel bags. For sites over an acre, inlet controls should be used in conjunction with a sediment basin/trap.

ATTACHMENT 8.3

CONSTRUCTION SWPPP GUIDE TRIFOLD

SEDIMENT CONTROL	**A.8**
Description/Illustration of BMPs to prevent increase of sediment load in discharge	A.8
Construction phase / BMP sequencing schedule including supplemental pre-rain action plan for sediment control measures	A.8
NON-STORM WATER	**A.9**
Description of non-storm water discharges to receiving waters	A.9
Locations of discharges	A.9
Description of BMPs	A.9
Name and phone number of qualified person responsible for non-storm water management	A.9
POST-CONSTRUCTION	**A.10**
Description and location of BMPs	A.10
Operation/Maintenance of BMPs after project completion (including funding)	A.10
MAINTENANCE, INSPECTIONS, AND REPAIR	**A.11**
Name and phone number of qualified person responsible for inspections	A.11
Inspection checklist: date, weather, inadequate BMPs, visual observations of BMPs, corrective action, inspector's name, title, signature	A.11.a-f
OTHER REQUIREMENTS	**A.12-16**
Documentation of all training	A.12
List of Contractors/Subcontractors	A.13

Section B. Monitoring and Reporting Requirements	
Description of site inspection plans	B.3
Compliance certification (annually 7/1) if project is under active construction	B.4
Noncompliance reporting	B.5
Records of all inspections; compliance certifications; noncompliance reports, etc. should be kept for at least three years	B.6
Monitoring program for sediment contribution from direct discharges to impaired water bodies	B.7
Monitoring program for pollutants not visually detectable in storm water (non-visible pollutants)	B.8
Section C. Standard Provisions Construction Activities	
Signed Certification for SWPPP, reports, amendments, etc. Who is authorized to sign and by what authority has the duly authorized representative been assigned?	C.9,10
Location of General Permit and SWPPP on site during construction activities	C. 17

City of La Mesa
8130 Allison Avenue
La Mesa, CA 91941
(619) 667-1134
www.cityoflamesa.com

CONSTRUCTION SWPPP INFORMATION

State General Construction Permit

Your construction project may be subject to the State of California General Construction Permit. Construction activities subject to this permit include clearing, grading, disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of a at least one acre of total land area. Construction activity that result in soil disturbances of less than one acre is subject to this permit if the construction activity is part of a larger common plan of development that encompasses one or more acres of soil disturbance or if there is significant water quality impairment as a result.

Planning Document Review

If your project is subject to the General Construction Permit, a Notice of Intent (NOI) and filing fee, and preparation of a Storm Water Pollution Prevention Plan (SWPPP) and Monitoring Program are required prior to commencement with project activities. The SWPPP is required to be submitted to the City of La Mesa for review. Prior to submitting a SWPPP to the City for Review, ensure that the following items are addressed

Common Problems

- ☑ Provide a copy of the NOI Application, letter sent to you by the State Water Resources Control Board with Waste Discharge Identification Number (WDID).
- ☑ Ensure the owner and or contractor sign the certification forms.
- ☑ Ensure personnel assigned to various tasks i.e. inspections are presented in the SWPPP and their role is clearly defined.

- ☑ Ensure vicinity map shows the general topography.
- ☑ Provide selected Best Management Practices (BMPs) specifically for the project.
- ☑ Place BMPs on the map.
- ☑ Provide site-specific information for materials list.
- ☑ Ensure text correspond with appendices and is consistent.
- ☑ Provide information on Post-Construction BMPs and funding source.
- ☑ Review the General Construction Permit to ensure all components have been addressed.

Ensure the following items are incorporated into your SWPPP & Monitoring Program:

	Permit Section
Vicinity Map (graphic)	***A.5.a.1***
Major roadways, geographic features or landmarks	A.5.a.1
Site perimeter	A.5.a.1
Geographic features	A.5.a.1
General topography	A.5.a.1
Site Map (graphic) (can modify Parcel Map)	***A.5.a.2***
Site perimeter	A.5.a.2
Existing and proposed buildings, lots, and roadways	A.5.a.2
Storm water collection and discharge points	A.5.a.2
General topography before and after construction	A.5.a.2
Anticipated discharge location(s)	A.5.a.2
Drainage patterns	A.5.a.2
Relevant drainage areas	A.5.a.2
Temporary on-site drainage	A.5.a.2
Drainage (graphic)	***A.5.b.1***
Drainage patterns	A.5.b.1
Slopes after major grading	A.5.b.1
Calculations for storm water run-on	A.5.b.1
BMPs that divert off-site drainage from going through site	A.5.b.1
Storm Water Inlets (graphic)	***A.5.b.2***
Drainage patterns to storm water inlets or receiving water	A.5.b.2
BMPs that protect storm water inlets or receiving water	A.5.b.2
Site History/Past Site Usage (Real Estate Broker Disclosure may be sufficient)	***A.5.b.3***
Description of toxic materials treated, stored, or spilled on site	A.5.b.3
BMPs that minimize contact of contaminants with storm water	A.5.b.3
Location of Areas Designated for: (graphic)	***A.5.b.4***
Soil or waste storage	A.5.b.4
Vehicle storage & service	A.5.b.4
Construction material loading, unloading, and access	A.5.b.4
Equipment storage, cleaning, maintenance	A.5.b.4
BMP Descriptions for: (graphic or narrative)	***A.5.b.5***
Waste handling and disposal areas	A.5.b.5
On-site storage and disposal of construction materials and waste	A.5.b.5
BMPs to minimize exposure of storm water to construction materials, equipment, vehicles, waste	A.5.b.5
Post Construction BMPs	***A.5.b.6 See A. 10***
Additional Information	***A.5. c***
Description of other pollutant sources and BMPs that cannot be shown graphically	A.5.c.1
Pre-construction control practices	A.5.c.1
Inventory of materials and activities that may pollute storm water	A.5.c.2
BMPs to reduce/eliminate potential pollutants listed in the inventory	A.5.c.2
Runoff coefficient (before & after)	A.5.c.3
Percent impervious (before & after)	A.5.c.3
Copy of the NOI and WDID #	A.5.c.4
Construction activity schedule	A.5.c.5
Contact information	A.5.c.6
EROSION CONTROL	**A.6**
SWPPP shall include: (graphic)	***A.6.a-c***
Areas of vegetation on site	A.6.a.1
Areas of soil disturbance that will be stabilized during rainy season	A.6.a.2
Areas of soil disturbance which will be exposed during any part of the rainy season	A.6.a.3
Construction phase / BMP sequencing schedule including supplemental pre-rain action plan for erosion control measures	A.6.a.4
BMPs for erosion control	A.6.b
BMPs to control wind erosion	A.6.c

ATTACHMENT 12.1

ADDITIONAL WATER QUALITY MONITORING DATA

ID	CLIENT	PROJECT	PROJECT NUM	LABNAME	SAMPLE NAME	Site_Old Name	LAB SAMP ID	MATRIX	STORM DATE	SAMP DATE	PREP DATE	ANA DATE	BATCH	METHOD CODE	METHOD NAME	PREP NAME	ANALYTE	CAS NUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	BASIS	DILUTION	SPIKE LEVEL	RECOVERY	UPPER CL	LOWER CL	ANALYST	P SOLIDS	L NOTE	A NOTE	Weather	Sample Type
252	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/28/2007 07:00:00	06/28/2007 07:00:00	7062920	MBAS- Liquid	SM5540 C	General Preparation	Methylene Blue Active	NA	FALSE	FALSE	ND	0.1	0.5	mg/l	NA	1					AML				Dry	Grab
262	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	07/02/2007 13:38:00	07/03/2007 14:50:41	7070217	Solids, TDS-Liquid	SM2540 C	General Preparation	Total Dissolved	NA	FALSE	FALSE	1760	1	20	mg/l	NA	1					AML				Dry	Grab
261	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/28/2007 07:21:00	06/28/2007 14:22:00	7062812	Phosph (Total) - L	SM4500 P B, E	General Preparation	Phosphorus, Total	7723-14-0	FALSE	FALSE	0.31	0.02	0.05	mg/l	NA	1					GH				Dry	Grab
260	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/28/2007 07:24:00	06/29/2007 15:47:32	7062816	O&G(1664)-Liquid	EPA 1664	1664	Oil & Grease	C-007	FALSE	FALSE	ND	5	5	mg/l	NA	1					GH				Dry	Grab
264	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/27/2007 13:53:00	06/27/2007 13:53:00	7062724	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	3.57	0.05	0.05	NTU	NA	1					AML				Dry	Grab
259	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/29/2007 14:02:00	06/29/2007 14:04:21	7062918	Nitrogen, total A	Calculation	General Preparation	Total Nitrogen	NA	FALSE	FALSE	4.1	0.5	0.5	mg/l	NA	1					MG				Dry	Grab
256	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	07/02/2007 11:01:00	07/02/2007 13:18:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	ND	0.010	0.020	mg/l	NA	1					VK				Dry	Grab
258	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/28/2007 08:23:00	06/29/2007 13:48:26	7062829	Nitrogen, TKN - L	SM4500 N C	General Preparation	Total Kjeldahl Nitrogen	NA	FALSE	FALSE	2.5	0.3	0.5	mg/l	NA	1					JEL				Dry	Grab
257	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/28/2007 08:27:00	06/28/2007 11:32:11	7062831	Nitrate-nitrite-L	SM4500 NO3 E	General Preparation	Nitrate/Nitrite as N	NA	FALSE	FALSE	1.58	0.02	0.10	mg/l	NA	2					JEL				Dry	Grab
263	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	07/02/2007 13:36:00	07/03/2007 14:48:42	7070216	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	ND	1	20	mg/l	NA	1					AML				Dry	Grab
253	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	07/02/2007 11:01:00	07/02/2007 13:18:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Cadmium	7440-43-9	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
255	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	07/02/2007 11:01:00	07/02/2007 13:18:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
251	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/27/2007 15:27:00	06/28/2007 12:55:54	7062726	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	714	100	100	mg CaCO3/L	NA	10					ICP				Dry	Grab
250	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/26/2007 16:40:00	06/30/2007 16:00:00	7062807	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	500	20	20	MPN/100 ml	NA	10					CA				Dry	Grab
249	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/26/2007 16:40:00	06/30/2007 15:00:00	7062806	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	7000	200	200	MPN/100 ml	NA	100					CA				Dry	Grab
248	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/26/2007 16:40:00	06/29/2007 16:00:00	7062806	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	800	20	20	MPN/100 ml	NA	10					CA				Dry	Grab
247	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/28/2007 07:06:00	07/06/2007 23:54:00	7062803	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.243	0.05	0.05	ug/l	NA	1	0.250	97	130	60	RAT		GC-05		Dry	Grab
246	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/28/2007 07:06:00	07/06/2007 23:54:00	7062803	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.263	0.05	0.05	ug/l	NA	1	0.250	105	130	60	RAT		GC-05		Dry	Grab
245	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/28/2007 07:06:00	07/06/2007 23:54:00	7062803	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT		GC-05		Dry	Grab
244	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/28/2007 07:06:00	07/06/2007 23:54:00	7062803	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Dry	Grab
243	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	06/28/2007 07:06:00	07/06/2007 23:54:00	7062803	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Dry	Grab
254	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-5	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0706421-01	Water	6/26/2007	6/26/2007 15:00:00	07/02/2007 11:01:00	07/02/2007 13:18:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
391	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/03/2007 11:04:00	12/12/2007 03:14:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
390	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/03/2007 11:04:00	12/12/2007 03:14:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
389	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/03/2007 11:04:00	12/12/2007 03:14:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
352	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711489-05	Water		11/30/2007 09:15:14	11/30/2007 12:15:00	12/04/2007 15:40:00	7120524	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	90000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
350	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711489-05	Water		11/30/2007 09:15:12	11/30/2007 12:15:00	12/03/2007 12:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	80000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
394	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/03/2007 13:02:00	12/03/2007 17:18:00	7120320	Cu Diss EPA-6020	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	0.010	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
351	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711489-05	Water		11/30/2007 09:15:13	11/30/2007 12:15:00	12/04/2007 14:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	130000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
399	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/05/2007 07:27:00	12/06/2007 08:05:17	7120501	Phosph (Total) - L	SM4500 P B, E	General Preparation	Phosphorus, Total	7723-14-0	FALSE	FALSE	0.74	0.02	0.05	mg/l	NA	1					GH				Wet	Composite, Time Weighted
392	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/03/2007 11:04:00	12/12/2007 03:14:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.317	0.05	0.05	ug/l	NA	1	0.250	127	130	60	RAT		GC-05		Wet	Composite, Time Weighted
402	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/01/2007 12:06:00	12/01/2007 12:06:00	7120314	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	135	0.05	0.05	NTU	NA	1					JEL				Wet	Composite, Time Weighted
400	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/07/2007 09:15:00	12/11/2007 09:17:12	7121106	Solids, TDS-Liquid	SM2540 C	General Preparation	Total Dissolved	NA	FALSE	FALSE	234	1	20	mg/l	NA	1					JDP				Wet	Composite, Time Weighted
398	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/06/2007 17:00:00	12/06/2007 17:00:00	7121024	Nitrogen, total A	Calculation	General Preparation	Total Nitrogen	NA	FALSE	FALSE	7.1	0.5	0.5	mg/l	NA	1					MG				Wet	Composite, Time Weighted
397	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/04/2007 10:17:00	12/04/2007 17:43:14	7120407	Nitrogen, TKN - L	SM4500 N C	General Preparation	Total Kjeldahl Nitrogen	NA	FALSE	FALSE	5.2	0.3	0.5	mg/l	NA	1					JEL				Wet	Composite, Time Weighted
396	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/06/2007 16:00:00	12/06/2007 16:00:00	7120606	Nitrate-nitrite-L	SM4500 NO3 E	General Preparation	Nitrate/Nitrite as N	NA	FALSE	FALSE	1.89	0.02	0.10	mg/l	NA	2					JEL				Wet	Composite, Time Weighted
395	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/02/2007 14:56:00	12/05/2007 08:01:41	7120204	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	100	10	10	mg CaCO3/L	NA	1					JLB				Wet	Composite, Time Weighted
393	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/03/2007 11:04:00	12/12/2007 03:14:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.278	0.05	0.05	ug/l	NA	1	0.250	111	130	60	RAT		GC-05		Wet	Composite, Time Weighted
401	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0711531-01	Water		11/30/2007 16:00:00	12/07/2007 09:21:00	12/07/2007 09:21:00	7121029	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	249	1	20	mg/l	NA	1					JDP				Wet	Composite, Time Weighted
489	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712153-01	Water	12/7/2007	12/07/2007 09:45:00	12/07/2007 10:45:00	12/11/2007 11:30:00	7120817	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	500	20	20	MPN/100 ml	NA	10					MG				Wet	Grab
607	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Fluvalinate		FALSE	FALSE	ND	0.5	2	ng/L										Wet	Composite, Time Weighted
602	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Cypermethrin		FALSE	FALSE	84.6	0.5	2	ng/L										Wet	Composite, Time Weighted
603	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Danitol		FALSE	FALSE	ND	0.5	2	ng/L										Wet	Composite, Time Weighted
604	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Deltamethrin		FALSE	FALSE	ND	0.5	2	ng/L										Wet	Composite, Time Weighted
605	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Esfenvalerate		FALSE	FALSE	ND	0.5	2	ng/L										Wet	Composite, Time Weighted

ID	CLIENT	PROJECT	PROJECT NUM	LABNAME	SAMPLE NAME	Site_Old Name	LAB SAMP ID	MATRIX	STORM DATE	SAMP DATE	PREP DATE	ANA DATE	BATCH	METHOD CODE	METHOD NAME	PREP NAME	ANALYTE	CAS NUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	BASIS	DILUTION	SPIKE LEVEL	RECOVERY	UPPER CL	LOWER CL	ANALYST	P SOLIDS	L NOTE	A NOTE	Weather	Sample Type
606	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Fenvalerate		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
608	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		L-Cyhalothrin		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
609	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Permethrin		FALSE	FALSE	71.3	5	25	ng/L											Wet	Composite, Time Weighted
610	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Prallethrin		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
488	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712153-01	Water	12/7/2007	12/07/2007 09:45:00	12/07/2007 10:45:00	12/11/2007 11:40:00	7120816	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	170000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
601	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Cyfluthrin		FALSE	FALSE	46.1	0.5	2	ng/L											Wet	Composite, Time Weighted
599	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Allethrin		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
487	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712153-01	Water	12/7/2007	12/07/2007 09:45:00	12/07/2007 10:45:00	12/10/2007 12:30:00	7120816	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	5000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
566	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 13:28:00	12/11/2007 16:32:00	7121115	Cu Diss EPA-6020	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	0.014	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
600	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	907-ALV-001	Alv. 1 Comp 2	WO 0712177	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Bifenthrin		FALSE	FALSE	39.3	0.5	2	ng/L											Wet	Composite, Time Weighted
562	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 08:01:00	12/19/2007 22:08:00	7121004	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
563	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 08:01:00	12/19/2007 22:08:00	7121004	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
565	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 08:01:00	12/19/2007 22:08:00	7121004	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.315	0.05	0.05	ug/l	NA	1	0.250	126	130	60	RAT		GC-05		Wet	Composite, Time Weighted
561	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 08:01:00	12/19/2007 22:08:00	7121004	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
567	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/12/2007 17:34:00	12/14/2007 09:06:55	7121244	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	52	10	10	mg CaCO3/L	NA	1					JLB				Wet	Composite, Time Weighted
568	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/14/2007 10:18:00	12/14/2007 10:18:00	7121412	Nitrate-nitrite-L	SM4500 NO3 E	General Preparation	Nitrate/Nitrite as N	NA	FALSE	FALSE	0.86	0.009	0.05	mg/l	NA	1					JEL				Wet	Composite, Time Weighted
569	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/18/2007 09:00:00	12/18/2007 16:00:00	7121735	Nitrogen, TKN L	SM4500 N C	General Preparation	Total Kjeldahl Nitrogen	NA	FALSE	FALSE	1.7	0.3	0.5	mg/l	NA	1					JEL				Wet	Composite, Time Weighted
570	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/18/2007 18:00:00	12/19/2007 18:30:00	7121830	Nitrogen, total A	Calculation	General Preparation	Total Nitrogen	NA	FALSE	FALSE	2.6	0.5	0.5	mg/l	NA	1					MG				Wet	Composite, Time Weighted
571	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/14/2007 07:29:00	12/14/2007 14:47:21	7121403	Phosph (Total) - L	SM4500 P B, E	General Preparation	Phosphorus, Total	7723-14-0	FALSE	FALSE	0.40	0.02	0.05	mg/l	NA	1					GH				Wet	Composite, Time Weighted
572	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/13/2007 11:15:00	12/14/2007 15:20:07	7121322	Solids, TDS-Liquid	SM2540 C	General Preparation	Total Dissolved	NA	FALSE	FALSE	153	1	20	mg/l	NA	1					JDP				Wet	Composite, Time Weighted
573	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/13/2007 16:41:00	12/14/2007 14:50:32	7121416	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	72	1	20	mg/l	NA	1					JDP				Wet	Composite, Time Weighted
574	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/07/2007 15:51:00	12/07/2007 15:58:53	7120719	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	62.9	0.05	0.05	NTU	NA	1					GH				Wet	Composite, Time Weighted
564	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-001	Alv. 1	0712177-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 08:01:00	12/19/2007 22:08:00	7121004	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.331	0.05	0.05	ug/l	NA	1	0.250	132	130	60	RAT		GC-05	S-02, S-04	Wet	Composite, Time Weighted
267	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 09:39:00	07/03/2007 22:06:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT				Dry	Grab
286	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/28/2007 17:00:00	06/28/2007 17:00:00	7070215	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	19.5	0.05	0.05	NTU	NA	1					MG				Dry	Grab
271	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/27/2007 14:10:00	07/01/2007 13:00:00	7062817	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	22000	200	200	MPN/100 ml	NA	100					CA				Dry	Grab
272	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/27/2007 14:10:00	07/01/2007 14:00:00	7062819	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	17000	200	200	MPN/100 ml	NA	100					CA				Dry	Grab
265	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 09:39:00	07/03/2007 22:06:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT				Dry	Grab
266	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 09:39:00	07/03/2007 22:06:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT				Dry	Grab
283	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/28/2007 07:21:00	06/28/2007 14:22:00	7062812	Phosph (Total) - L	SM4500 P B, E	General Preparation	Phosphorus, Total	7723-14-0	FALSE	FALSE	0.86	0.02	0.05	mg/l	NA	1					GH				Dry	Grab
285	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 13:36:00	07/03/2007 14:48:42	7070216	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	ND	1	20	mg/l	NA	1					AML				Dry	Grab
270	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/27/2007 14:10:00	06/30/2007 13:00:00	7062817	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	5000	200	200	MPN/100 ml	NA	100					CA				Dry	Grab
284	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 13:38:00	07/03/2007 14:50:41	7070217	Solids, TDS-Liquid	SM2540 C	General Preparation	Total Dissolved	NA	FALSE	FALSE	1040	1	20	mg/l	NA	1					AML				Dry	Grab
268	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 09:39:00	07/03/2007 22:06:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.214	0.05	0.05	ug/l	NA	1	0.250	86	130	60	RAT				Dry	Grab
282	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/28/2007 07:24:00	06/29/2007 15:47:32	7062816	O&G(1664)-Liquid	EPA 1664	1664	Oil & Grease	C-007	FALSE	FALSE	ND	5	5	mg/l	NA	1					GH				Dry	Grab
281	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/29/2007 14:02:00	06/29/2007 14:04:21	7062918	Nitrogen, total A	Calculation	General Preparation	Total Nitrogen	NA	FALSE	FALSE	3.0	0.5	0.5	mg/l	NA	1					MG				Dry	Grab
280	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/28/2007 08:23:00	06/29/2007 13:48:26	7062829	Nitrogen, TKN L	SM4500 N C	General Preparation	Total Kjeldahl Nitrogen	NA	FALSE	FALSE	1.4	0.3	0.5	mg/l	NA	1					JEL				Dry	Grab
279	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/28/2007 08:27:00	06/28/2007 11:32:11	7062831	Nitrate-nitrite-L	SM4500 NO3 E	General Preparation	Nitrate/Nitrite as N	NA	FALSE	FALSE	1.58	0.04	0.25	mg/l	NA	5					JEL				Dry	Grab
278	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 11:01:00	07/02/2007 13:23:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	ND	0.010	0.020	mg/l	NA	1					VK				Dry	Grab
276	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 11:01:00	07/02/2007 13:23:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	0.006	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
275	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 11:01:00	07/02/2007 13:23:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Cadmium	7440-43-9	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
274	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/28/2007 07:00:00	06/28/2007 07:00:00	7062920	MBAS- Liquid	SM5540 C	General Preparation	Methylene Blue Active	NA	FALSE	FALSE	ND	0.1	0.5	mg/l	NA	1					AML				Dry	Grab
273	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	06/28/2007 17:46:00	07/02/2007 12:39:53	7062844	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	666	100	100	mg CaCO3/L	NA	10					JLB				Dry	Grab
277	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 11:01:00	07/02/2007 13:23:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
269	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0706433-01	Water	6/27/2007	06/27/2007 09:00:00	07/02/2007 09:39:00	07/03/2007 22:06:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.215	0.05	0.05	ug/l	NA	1	0.250	86	130	60	RAT				Dry	Grab

ID	CLIENT	PROJECT	PROJECT NUM	LABNAME	SAMPLE NAME	Site_Old Name	LAB SAMP ID	MATRIX	STORM DATE	SAMP DATE	PREP DATE	ANA DATE	BATCH	METHOD CODE	METHOD NAME	PREP NAME	ANALYTE	CAS NUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	BASIS	DILUTION	SPIKE LEVEL	RECOVERY	UPPER CL	LOWER CL	ANALYST	P SOLIDS	L NOTE	A NOTE	Weather	Sample Type
408	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/03/2007 13:02:00	12/03/2007 17:23:00	7120320	Cu Diss EPA-6020	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	0.025	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
415	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/07/2007 09:21:00	12/07/2007 09:21:00	7121029	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	152	1	20	mg/l	NA	1					JDP				Wet	Composite, Time Weighted
414	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/07/2007 09:15:00	12/11/2007 09:17:12	7121106	Solids, TDS-Liquid	SM2540 C	General Preparation	Total Dissolved	NA	FALSE	FALSE	113	1	20	mg/l	NA	1					JDP				Wet	Composite, Time Weighted
413	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/05/2007 07:27:00	12/06/2007 08:05:17	7120501	Phosph (Total) - L	SM4500 P B, E	General Preparation	Phosphorus, Total	7723-14-0	FALSE	FALSE	0.65	0.02	0.05	mg/l	NA	1					GH				Wet	Composite, Time Weighted
416	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/01/2007 12:06:00	12/01/2007 12:06:00	7120314	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	130	0.05	0.05	NTU	NA	1					JEL				Wet	Composite, Time Weighted
405	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/03/2007 11:04:00	12/12/2007 04:08:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
412	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/06/2007 17:00:00	12/06/2007 17:00:00	7121024	Nitrogen, total A	Calculation	General Preparation	Total Nitrogen	NA	FALSE	FALSE	5.4	0.5	0.5	mg/l	NA	1					MG				Wet	Composite, Time Weighted
411	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/04/2007 10:17:00	12/04/2007 17:43:14	7120407	Nitrogen, TKN L	SM4500 N C	General Preparation	Total Kjeldahl Nitrogen	NA	FALSE	FALSE	3.7	0.3	0.5	mg/l	NA	1					JEL				Wet	Composite, Time Weighted
404	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/03/2007 11:04:00	12/12/2007 04:08:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	1.08	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
409	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/02/2007 14:56:00	12/05/2007 08:01:41	7120204	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	60	10	10	mg CaCO3/L	NA	1					JLB				Wet	Composite, Time Weighted
407	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/03/2007 11:04:00	12/12/2007 04:08:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.284	0.05	0.05	ug/l	NA	1	0.250	114	130	60	RAT		GC-05		Wet	Composite, Time Weighted
406	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/03/2007 11:04:00	12/12/2007 04:08:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.360	0.05	0.05	ug/l	NA	1	0.250	144	130	60	RAT		GC-05	S-02, S-04	Wet	Composite, Time Weighted
355	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711489-06	Water		11/30/2007 09:15:17	11/30/2007 12:15:00	12/04/2007 15:40:00	7120524	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	50000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
354	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711489-06	Water		11/30/2007 09:15:16	11/30/2007 12:15:00	12/04/2007 14:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	50000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
353	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711489-06	Water		11/30/2007 09:15:15	11/30/2007 12:15:00	12/03/2007 12:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	30000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
410	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/06/2007 16:00:00	12/06/2007 16:00:00	7120606	Nitrate-nitrite-L	SM4500 NO3 E	General Preparation	Nitrate/Nitrite as N	NA	FALSE	FALSE	1.68	0.02	0.10	mg/l	NA	2					JEL				Wet	Composite, Time Weighted
403	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	907-ALV-002	Alv. 2	0711531-02	Water		11/30/2007 15:30:00	12/03/2007 11:04:00	12/12/2007 04:08:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
170	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Aldrin	309-00-2	FALSE	FALSE	ND	0.07	0.10	ug/l	NA	1					LZ				Dry	Grab
171	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	alpha-BHC	319-84-6	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					LZ				Dry	Grab
172	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	alpha-Chlordane	5103-71-9	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Dry	Grab
173	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	beta-BHC	319-85-7	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Dry	Grab
174	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Chlordane (Total)	57-74-9	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Dry	Grab
175	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	delta-BHC	319-86-8	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Dry	Grab
176	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Dieldrin	60-57-1	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Dry	Grab
187	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Methoxychlor	72-43-5	FALSE	FALSE	ND	0.13	0.50	ug/l	NA	1					LZ				Dry	Grab
178	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endosulfan II	33213-65-9	FALSE	FALSE	ND	0.05	0.10	ug/l	NA	1					LZ				Dry	Grab
167	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	4,4 :-DDD	72-54-8	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Dry	Grab
179	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endosulfan sulfate	1031-07-8	FALSE	FALSE	ND	0.06	0.10	ug/l	NA	1					LZ				Dry	Grab
180	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endrin	72-20-8	FALSE	FALSE	ND	0.05	0.10	ug/l	NA	1					LZ				Dry	Grab
181	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endrin aldehyde	7421-93-4	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Dry	Grab
182	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endrin ketone	53494-70-5	FALSE	FALSE	ND	0.06	0.10	ug/l	NA	1					LZ				Dry	Grab
183	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	gamma-BHC (Lindane)	58-89-9	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Dry	Grab
213	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	07/02/2007 11:21:00	07/03/2007 10:42:00	7070213	Ni Total EPA-6020	EPA 6020	EPA 3020A	Nickel (Total)	7440-02-2	FALSE	FALSE	ND	0.002	0.050	mg/l	NA	1					VK				Dry	Grab
185	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Heptachlor	76-44-8	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					LZ				Dry	Grab
206	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/26/2007 14:25:00	06/29/2007 13:00:00	7062706	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	1700	20	20	MPN/100 ml	NA	10					CA				Dry	Grab
177	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endosulfan I	959-98-8	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					LZ				Dry	Grab
238	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/27/2007 09:12:00	06/27/2007 17:20:00	7062714	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
205	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	07/02/2007 11:21:00	07/03/2007 10:42:00	7070213	Cd Total EPA-6020	EPA 6020	EPA 3020A	Cadmium (Total)	7440-43-9	FALSE	FALSE	ND	0.001	0.010	mg/l	NA	1					VK				Dry	Grab
200	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:06:00	07/06/2007 22:59:00	7062803	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT		GC-05		Dry	Grab
236	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/27/2007 09:12:00	06/27/2007 17:20:00	7062714	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Cadmium	7440-43-9	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
204	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	07/02/2007 11:21:00	07/03/2007 10:42:00	7070213	As Total EPA-6020	EPA 6020	EPA 3020A	Arsenic (Total)	7440-38-2	FALSE	FALSE	0.005	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
203	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	07/02/2007 11:21:00	07/03/2007 10:42:00	7070213	Ag Total EPA-6020	EPA 6020	EPA 3020A	Silver (Total)	7440-22-4	FALSE	FALSE	ND	0.0003	0.01	mg/l	NA	1					VK				Dry	Grab
202	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:06:00	07/06/2007 22:59:00	7062803	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.278	0.05	0.05	ug/l	NA	1	0.250	111	130	60	RAT		GC-05		Dry	Grab
242	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/27/2007 13:53:00	06/27/2007 13:53:00	7062724	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	0.64	0.05	0.05	NTU	NA	1					AML				Dry	Grab
241	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	07/02/2007 13:36:00	07/03/2007 14:48:42	7070216	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	ND	1	20	mg/l	NA	1					AML				Dry	Grab

ID	CLIENT	PROJECT	PROJECT NUM	LABNAME	SAMPLE NAME	Site_Old Name	LAB SAMP ID	MATRIX	STORM DATE	SAMP DATE	PREP DATE	ANA DATE	BATCH	METHOD CODE	METHOD NAME	PREP NAME	ANALYTE	CAS NUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	BASIS	DILUTION	SPIKE LEVEL	RECOVERY	UPPER CL	LOWER CL	ANALYST	P SOLIDS	L NOTE	A NOTE	Weather	Sample Type
169	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	4,4'-DDT	50-29-3	FALSE	FALSE	ND	0.08	0.10	ug/l	NA	1					LZ				Dry	Grab
239	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 09:12:00	06/27/2007 17:20:00	7062714	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	ND	0.010	0.020	mg/l	NA	1					VK				Dry	Grab
168	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	4,4'-DDE	72-55-9	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Dry	Grab
237	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 09:12:00	06/27/2007 17:20:00	7062714	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
208	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	07/02/2007 11:21:00	07/03/2007 10:42:00	7070213	Cr Total EPA-6020	EPA 6020	EPA 3020A	Chromium (Total)	7440-47-3	FALSE	FALSE	ND	0.004	0.050	mg/l	NA	1					VK				Dry	Grab
209	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	07/02/2007 11:21:00	07/03/2007 10:42:00	7070213	Cu Total EPA-6020	EPA 6020	EPA 3020A	Copper (Total)	7440-50-8	FALSE	FALSE	ND	0.002	0.050	mg/l	NA	1					VK				Dry	Grab
210	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/26/2007 14:25:00	06/30/2007 13:10:00	7062707	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	170	20	20	MPN/100 ml	NA	10					CA				Dry	Grab
207	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/26/2007 14:25:00	06/30/2007 13:00:00	7062706	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	23000	2000	2000	MPN/100 ml	NA	1000					CA				Dry	Grab
211	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 17:46:00	07/02/2007 12:39:53	7062844	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	589	100	100	mg CaCO3/L	NA	10					JLB				Dry	Grab
212	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	07/02/2007 11:22:00	07/02/2007 16:49:24	7070214	Hg Total EPA-7470	EPA 7470	EPA 7470A	Mercury (Total)	7439-97-6	FALSE	FALSE	ND	0.00008	0.0001	mg/l	NA	1					TJK				Dry	Grab
186	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Heptachlor epoxide	1024-57-3	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Dry	Grab
240	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	07/02/2007 11:21:00	07/03/2007 10:42:00	7070213	Pb Total EPA-6020	EPA 6020	EPA 3020A	Lead (Total)	7439-92-1	FALSE	FALSE	ND	0.0004	0.010	mg/l	NA	1					VK				Dry	Grab
232	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Pyrene	129-00-0	FALSE	FALSE	ND	1.15	2.00	ug/l	NA	1					FM				Dry	Grab
188	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	TCMX	877-09-8	TRUE	FALSE	0.525			ug/l	NA	1	0.500	105	147	22	LZ				Dry	Grab
221	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (b) fluoranthene	205-99-2	FALSE	FALSE	ND	1.80	2.00	ug/l	NA	1					FM				Dry	Grab
184	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	gamma-Chlordane	5103-74-2	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Dry	Grab
223	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (k) fluoranthene	207-08-9	FALSE	FALSE	ND	1.39	2.00	ug/l	NA	1					FM				Dry	Grab
224	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Chrysene	218-01-9	FALSE	FALSE	ND	0.500	2.00	ug/l	NA	1					FM				Dry	Grab
201	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:06:00	07/06/2007 22:59:00	7062803	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.257	0.05	0.05	ug/l	NA	1	0.250	103	130	60	RAT		GC-05		Dry	Grab
235	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:00:00	06/28/2007 07:00:00	7062920	MBAS- Liquid	SM5540 C	General Preparation	Methylene Blue Active	NA	FALSE	FALSE	ND	0.1	0.5	mg/l	NA	1					AML				Dry	Grab
219	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (a) anthracene	56-55-3	FALSE	FALSE	ND	0.550	2.00	ug/l	NA	1					FM				Dry	Grab
233	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Terphenyl-dl4	NA	TRUE	FALSE	29.7		0.00	ug/l	NA	1	25.0	119	140	30	FM				Dry	Grab
220	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (a) pyrene	50-32-8	FALSE	FALSE	ND	0.650	2.00	ug/l	NA	1					FM				Dry	Grab
231	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Phenanthrene	85-01-8	FALSE	FALSE	ND	0.460	2.00	ug/l	NA	1					FM				Dry	Grab
230	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Nitrobenzene-d5	NA	TRUE	FALSE	28.8		0.00	ug/l	NA	1	25.0	115	121	35	FM				Dry	Grab
229	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Naphthalene	91-20-3	FALSE	FALSE	ND	1.61	2.00	ug/l	NA	1					FM				Dry	Grab
228	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Indeno (1,2,3-cd) pyrene	193-39-5	FALSE	FALSE	ND	0.990	2.00	ug/l	NA	1					FM				Dry	Grab
227	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Fluorene	86-73-7	FALSE	FALSE	ND	0.550	2.00	ug/l	NA	1					FM				Dry	Grab
226	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Fluoranthene	206-44-0	FALSE	FALSE	ND	0.600	2.00	ug/l	NA	1					FM				Dry	Grab
225	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Dibenz (a,h) anthracene	53-70-3	FALSE	FALSE	ND	0.950	2.00	ug/l	NA	1					FM				Dry	Grab
234	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	07/02/2007 11:21:00	07/03/2007 10:42:00	7070213	Zn Total EPA-6020	EPA 6020	EPA 3020A	Zinc (Total)	7440-66-6	FALSE	FALSE	ND	0.010	0.050	mg/l	NA	1					VK				Dry	Grab
216	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Acenaphthene	83-32-9	FALSE	FALSE	ND	0.770	2.00	ug/l	NA	1					FM				Dry	Grab
189	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Toxaphene	8001-35-2	FALSE	FALSE	ND	1.00	1.00	ug/l	NA	1					LZ				Dry	Grab
190	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1016	12674-11-2	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Dry	Grab
191	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1221	11104-28-2	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Dry	Grab
192	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1232	11141-16-5	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Dry	Grab
214	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:24:00	06/29/2007 15:47:32	7062816	O&G(1664)-Liquid	EPA 1664	1664	Oil & Grease	C-007	FALSE	FALSE	ND	5	5	mg/l	NA	1					GH				Dry	Grab
222	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (g,h,i) perylene	191-24-2	FALSE	FALSE	ND	1.09	2.00	ug/l	NA	1					FM				Dry	Grab
215	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	2-Fluorobiphenyl	321-60-8	TRUE	FALSE	27.1		0.00	ug/l	NA	1	25.0	108	130	30	FM				Dry	Grab
218	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Anthracene	120-12-7	FALSE	FALSE	ND	0.630	2.00	ug/l	NA	1					FM				Dry	Grab
217	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/27/2007 07:38:00	06/29/2007 20:11:00	7062710	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Acenaphthylene	208-96-8	FALSE	FALSE	ND	0.870	2.00	ug/l	NA	1					FM				Dry	Grab
196	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1260	11096-82-5	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Dry	Grab
199	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:06:00	07/06/2007 22:59:00	7062803	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Dry	Grab
198	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:06:00	07/06/2007 22:59:00	7062803	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Dry	Grab
197	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	6/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	TCMX	877-09-8	TRUE	FALSE	0.525			ug/l	NA	1	0.500	105	147	22	LZ				Dry	Grab

ID	CLIENT	PROJECT	PROJECT NUM	LABNAME	SAMPLE NAME	Site_Old Name	LAB SAMP ID	MATRIX	STORM DATE	SAMP DATE	PREP DATE	ANA DATE	BATCH	METHOD CODE	METHOD NAME	PREP NAME	ANALYTE	CAS NUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	BASIS	DILUTION	SPIKE LEVEL	RECOVERY	UPPER CL	LOWER CL	ANALYST	P SOLIDS	L NOTE	A NOTE	Weather	Sample Type
193	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1242	53469-21-9	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Dry	Grab
195	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1254	11097-69-1	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Dry	Grab
194	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0706415-02	Water	6/26/2007	06/26/2007 12:30:00	06/28/2007 07:01:00	06/29/2007 22:17:00	7062802	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1248	12672-29-6	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Dry	Grab
580	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Deltamethrin		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
338	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711489-01	Water		11/30/2007 09:15:00	11/30/2007 12:15:00	12/03/2007 12:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	70000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
482	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/05/2007 17:31:00	12/07/2007 11:33:00	7120527	Pb Total EPA-6020	EPA 6020	EPA 3020A	Lead (Total)	7439-92-1	FALSE	FALSE	0.025	0.0004	0.010	mg/l	NA	1					CR				Wet	Composite, Time Weighted
581	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Esfenvalerate		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
582	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Fenvalerate		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
339	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711489-01	Water		11/30/2007 09:15:01	11/30/2007 12:15:00	12/04/2007 14:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	1600000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
340	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711489-01	Water		11/30/2007 09:15:02	11/30/2007 12:15:00	12/04/2007 15:40:00	7120524	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	160000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
583	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Fluvalinate		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
584	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		L-Cyhalothrin		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
453	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/05/2007 17:31:00	12/07/2007 11:33:00	7120527	Ag Total EPA-6020	EPA 6020	EPA 3020A	Silver (Total)	7440-22-4	FALSE	FALSE	ND	0.0003	0.01	mg/l	NA	1					CR				Wet	Composite, Time Weighted
575	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Allethrin		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
461	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/05/2007 17:31:00	12/07/2007 11:33:00	7120527	Ni Total EPA-6020	EPA 6020	EPA 3020A	Nickel (Total)	7440-02-2	FALSE	FALSE	ND	0.002	0.050	mg/l	NA	1					CR				Wet	Composite, Time Weighted
460	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/03/2007 11:01:00	12/03/2007 15:57:55	7120310	Hg Total EPA-7470	EPA 7470	EPA 7470A	Mercury (Total)	7439-97-6	FALSE	FALSE	ND	0.00008	0.0001	mg/l	NA	1					CJR				Wet	Composite, Time Weighted
459	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/02/2007 14:56:00	12/05/2007 08:01:41	7120204	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	58	10	10	mg CaCO3/L	NA	1					JLB				Wet	Composite, Time Weighted
458	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/05/2007 17:31:00	12/07/2007 11:33:00	7120527	Cu Total EPA-6020	EPA 6020	EPA 3020A	Copper (Total)	7440-50-8	FALSE	FALSE	ND	0.002	0.050	mg/l	NA	1					CR				Wet	Composite, Time Weighted
457	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/03/2007 13:02:00	12/03/2007 17:28:00	7120320	Cu Diss EPA-6020	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	0.010	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
456	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/05/2007 17:31:00	12/07/2007 11:33:00	7120527	Cr Total EPA-6020	EPA 6020	EPA 3020A	Chromium (Total)	7440-47-3	FALSE	FALSE	ND	0.004	0.050	mg/l	NA	1					CR				Wet	Composite, Time Weighted
463	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Acenaphthene	83-32-9	FALSE	FALSE	ND	0.770	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
454	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/05/2007 17:31:00	12/07/2007 11:33:00	7120527	As Total EPA-6020	EPA 6020	EPA 3020A	Arsenic (Total)	7440-38-2	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
464	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Acenaphthylene	208-96-8	FALSE	FALSE	ND	0.870	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
452	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/03/2007 11:04:00	12/12/2007 05:03:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.309	0.05	0.05	ug/l	NA	1	0.250	124	130	60	RAT		GC-05		Wet	Composite, Time Weighted
451	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/03/2007 11:04:00	12/12/2007 05:03:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.410	0.05	0.05	ug/l	NA	1	0.250	164	130	60	RAT		GC-05	S-02, S-04	Wet	Composite, Time Weighted
450	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/03/2007 11:04:00	12/12/2007 05:03:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
449	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/03/2007 11:04:00	12/12/2007 05:03:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
448	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/03/2007 11:04:00	12/12/2007 05:03:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
447	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	TCMX	877-09-8	TRUE	FALSE	0.225			ug/l	NA	1	0.500	45	147	22	LZ				Wet	Composite, Time Weighted
446	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1260	11096-82-5	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
455	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/05/2007 17:31:00	12/07/2007 11:33:00	7120527	Cd Total EPA-6020	EPA 6020	EPA 3020A	Cadmium (Total)	7440-43-9	FALSE	FALSE	ND	0.001	0.010	mg/l	NA	1					CR				Wet	Composite, Time Weighted
472	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Dibenz (a,h) anthracene	53-70-3	FALSE	FALSE	ND	0.950	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
481	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/03/2007 13:02:00	12/03/2007 17:28:00	7120320	Pb Diss EPA-6020	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
480	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Terphenyl-dl4	NA	TRUE	FALSE	19.0		0.00	ug/l	NA	1	25.0	76	140	30	DV				Wet	Composite, Time Weighted
479	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Pyrene	129-00-0	FALSE	FALSE	ND	1.15	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
478	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Phenanthrene	85-01-8	FALSE	FALSE	ND	0.460	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
477	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Nitrobenzene-d5	NA	TRUE	FALSE	0.0200		0.00	ug/l	NA	1	25.0	0.08	121	35	DV			S-04	Wet	Composite, Time Weighted
476	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Naphthalene	91-20-3	FALSE	FALSE	ND	1.61	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
475	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Indeno (1,2,3-cd) pyrene	193-39-5	FALSE	FALSE	ND	0.990	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
462	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	2-Fluorobiphenyl	321-60-8	TRUE	FALSE	21.0		0.00	ug/l	NA	1	25.0	84	130	30	DV				Wet	Composite, Time Weighted
473	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Fluoranthene	206-44-0	FALSE	FALSE	ND	0.600	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
443	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1242	53469-21-9	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
471	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Chrysene	218-01-9	FALSE	FALSE	ND	0.500	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
470	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (k) fluoranthene	207-08-9	FALSE	FALSE	ND	1.39	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
469	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (g,h,i) perylene	191-24-2	FALSE	FALSE	ND	1.09	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted

ID	CLIENT	PROJECT	PROJECT NUM	LABNAME	SAMPLE NAME	Site_Old Name	LAB SAMP ID	MATRIX	STORM DATE	SAMP DATE	PREP DATE	ANA DATE	BATCH	METHOD CODE	METHOD NAME	PREP NAME	ANALYTE	CAS NUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	BASIS	DILUTION	SPIKE LEVEL	RECO-VERY	UPPER CL	LOWER CL	ANALYST	P SOLIDS	L NOTE	A NOTE	Weather	Sample Type
468	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (b) fluoranthene	205-99-2	FALSE	FALSE	ND	1.80	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
467	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (a) pyrene	50-32-8	FALSE	FALSE	ND	0.650	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
466	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (a) anthracene	56-55-3	FALSE	FALSE	ND	0.550	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
465	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Anthracene	120-12-7	FALSE	FALSE	ND	0.630	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
474	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 15:18:00	12/10/2007 19:17:00	7120433	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Fluorene	86-73-7	FALSE	FALSE	ND	0.550	2.00	ug/l	NA	1					DV				Wet	Composite, Time Weighted
484	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/01/2007 12:06:00	12/01/2007 12:06:00	7120314	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	88.6	0.05	0.05	NTU	NA	1					JEL				Wet	Composite, Time Weighted
445	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1254	11097-69-1	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
423	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	beta-BHC	319-85-7	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
422	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	alpha-Chlordane	5103-71-9	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
421	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	alpha-BHC	319-84-6	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
420	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Aldrin	309-00-2	FALSE	FALSE	ND	0.07	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
419	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	4,4□DDT	50-29-3	FALSE	FALSE	ND	0.08	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
418	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	4,4□DDE	72-55-9	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
425	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	delta-BHC	319-86-8	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
483	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/04/2007 16:05:28	7120437	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	166	1	20	mg/l	NA	1					JDP				Wet	Composite, Time Weighted
426	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Dieldrin	60-57-1	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
485	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/03/2007 13:02:00	12/03/2007 17:28:00	7120320	Zn Diss EPA-6020	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	0.067	0.010	0.020	mg/l	NA	1					CR				Wet	Composite, Time Weighted
486	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/05/2007 17:31:00	12/07/2007 11:33:00	7120527	Zn Total EPA-6020	EPA 6020	EPA 3020A	Zinc (Total)	7440-66-6	FALSE	FALSE	0.288	0.010	0.050	mg/l	NA	1					CR				Wet	Composite, Time Weighted
579	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Danitol		FALSE	FALSE	ND	0.5	2	ng/L										Wet	Composite, Time Weighted
578	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Cypermethrin		FALSE	FALSE	ND	0.5	2	ng/L										Wet	Composite, Time Weighted
577	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Cyfluthrin		FALSE	FALSE	10.6	0.5	2	ng/L										Wet	Composite, Time Weighted
576	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Bifenthrin		FALSE	FALSE	19.8	0.5	2	ng/L										Wet	Composite, Time Weighted
586	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Prallethrin		FALSE	FALSE	ND	0.5	2	ng/L										Wet	Composite, Time Weighted
417	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	4,4□DDD	72-54-8	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
435	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Heptachlor	76-44-8	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
585	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1	WO 0711532	Water		11/30/2007	12/7/2007	12/28/2007		Pyrethroids by NCI	EPA 625mNCI		Permethrin		FALSE	FALSE	ND	5	25	ng/L										Wet	Composite, Time Weighted
442	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1232	11141-16-5	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
441	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1221	11104-28-2	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
440	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1016	12674-11-2	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
439	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Toxaphene	8001-35-2	FALSE	FALSE	ND	1.00	1.00	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
438	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	TCMX	877-09-8	TRUE	FALSE	0.225			ug/l	NA	1	0.500	45	147	22	LZ				Wet	Composite, Time Weighted
424	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Chlordane (Total)	57-74-9	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
436	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Heptachlor epoxide	1024-57-3	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
444	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1248	12672-29-6	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
434	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	gamma-Chlordane	5103-74-2	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
433	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	gamma-BHC (Lindane)	58-89-9	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
432	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endrin ketone	53494-70-5	FALSE	FALSE	ND	0.06	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
431	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endrin aldehyde	7421-93-4	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
430	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endrin	72-20-8	FALSE	FALSE	ND	0.05	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
429	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endosulfan sulfate	1031-07-8	FALSE	FALSE	ND	0.06	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
428	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endosulfan II	33213-65-9	FALSE	FALSE	ND	0.05	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
427	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endosulfan I	959-98-8	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
437	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0711532-01	Water		11/30/2007 16:04:00	12/04/2007 16:00:00	12/08/2007 15:57:00	7120436	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Methoxychlor	72-43-5	FALSE	FALSE	ND	0.13	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
556	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 13:28:00	12/11/2007 16:28:00	7121115	Pb Diss EPA-6020	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
548	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Fluoranthene	206-44-0	FALSE	FALSE	ND	0.600	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted

ID	CLIENT	PROJECT	PROJECT NUM	LABNAME	SAMPLE NAME	Site_Old Name	LAB SAMP ID	MATRIX	STORM DATE	SAMP DATE	PREP DATE	ANA DATE	BATCH	METHOD CODE	METHOD NAME	PREP NAME	ANALYTE	CAS NUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	BASIS	DILUTION	SPIKE LEVEL	RECOVERY	UPPER CL	LOWER CL	ANALYST	P SOLIDS	L NOTE	A NOTE	Weather	Sample Type
588	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Bifenthrin		FALSE	FALSE	52.4	0.5	2	ng/L											Wet	Composite, Time Weighted
587	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Allethrin		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
560	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 18:39:00	12/11/2007 21:04:00	7121032	Zn Total EPA-6020	EPA 6020	EPA 3020A	Zinc (Total)	7440-66-6	FALSE	FALSE	0.080	0.010	0.050	mg/l	NA	1					CR				Wet	Composite, Time Weighted
559	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 13:28:00	12/11/2007 16:28:00	7121115	Zn Diss EPA-6020	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	0.048	0.010	0.020	mg/l	NA	1					CR				Wet	Composite, Time Weighted
558	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/07/2007 15:51:00	12/07/2007 15:58:53	7120719	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	31.2	0.05	0.05	NTU	NA	1					GH				Wet	Composite, Time Weighted
557	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 18:39:00	12/11/2007 21:04:00	7121032	Pb Total EPA-6020	EPA 6020	EPA 3020A	Lead (Total)	7439-92-1	FALSE	FALSE	ND	0.0004	0.010	mg/l	NA	1					CR				Wet	Composite, Time Weighted
521	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1254	11097-69-1	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
555	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Terphenyl-dl4	NA	TRUE	FALSE	16.5		0.00	ug/l	NA	1	25.0	66	140	30	ZZZ				Wet	Composite, Time Weighted
553	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Phenanthrene	85-01-8	FALSE	FALSE	ND	0.460	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
552	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Nitrobenzene-d5	NA	TRUE	FALSE	27.0		0.00	ug/l	NA	1	25.0	108	121	35	ZZZ				Wet	Composite, Time Weighted
551	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Naphthalene	91-20-3	FALSE	FALSE	ND	1.61	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
554	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Pyrene	129-00-0	FALSE	FALSE	ND	1.15	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
549	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Fluorene	86-73-7	FALSE	FALSE	ND	0.550	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
536	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 18:39:00	12/11/2007 21:04:00	7121032	Ni Total EPA-6020	EPA 6020	EPA 3020A	Nickel (Total)	7440-02-2	FALSE	FALSE	ND	0.002	0.050	mg/l	NA	1					CR				Wet	Composite, Time Weighted
547	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Dibenz (a,h) anthracene	53-70-3	FALSE	FALSE	ND	0.950	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
546	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Chrysene	218-01-9	FALSE	FALSE	ND	0.500	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
545	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (k) fluoranthene	207-08-9	FALSE	FALSE	ND	1.39	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
544	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (g,h,i) perylene	191-24-2	FALSE	FALSE	ND	1.09	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
543	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (b) fluoranthene	205-99-2	FALSE	FALSE	ND	1.80	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
542	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (a) pyrene	50-32-8	FALSE	FALSE	ND	0.650	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
541	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Benzo (a) anthracene	56-55-3	FALSE	FALSE	ND	0.550	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
540	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Anthracene	120-12-7	FALSE	FALSE	ND	0.630	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
539	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Acenaphthylene	208-96-8	FALSE	FALSE	ND	0.870	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
538	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Acenaphthene	83-32-9	FALSE	FALSE	ND	0.770	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
537	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	2-Fluorobiphenyl	321-60-8	TRUE	FALSE	23.7		0.00	ug/l	NA	1	25.0	95	130	30	ZZZ				Wet	Composite, Time Weighted
550	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 07:02:00	12/14/2007 02:30:00	7121102	PAH (8270) - Liquid	EPA 8270C	EPA 3520C	Indeno (1,2,3-cd) pyrene	193-39-5	FALSE	FALSE	ND	0.990	2.00	ug/l	NA	1					ZZZ				Wet	Composite, Time Weighted
516	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1016	12674-11-2	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
526	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 08:01:00	12/19/2007 21:14:00	7121004	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
509	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	gamma-BHC (Lindane)	58-89-9	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
510	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	gamma-Chlordane	5103-74-2	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
511	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Heptachlor	76-44-8	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
512	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Heptachlor epoxide	1024-57-3	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
513	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Methoxychlor	72-43-5	FALSE	FALSE	ND	0.13	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
507	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endrin aldehyde	7421-93-4	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
515	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Toxaphene	8001-35-2	FALSE	FALSE	ND	1.00	1.00	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
506	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endrin	72-20-8	FALSE	FALSE	ND	0.05	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
517	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1221	11104-28-2	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
518	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1232	11141-16-5	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
519	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1242	53469-21-9	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
520	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1248	12672-29-6	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
522	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	Aroclor 1260	11096-82-5	FALSE	FALSE	ND	0.34	0.50	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
524	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 08:01:00	12/19/2007 21:14:00	7121004	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
523	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8082 (PCB) - Liquid	EPA 8082	EPA 3520C	TCMX	877-09-8	TRUE	FALSE	0.447			ug/l	NA	1	0.500	89	147	22	LZ				Wet	Composite, Time Weighted
514	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	TCMX	877-09-8	TRUE	FALSE	0.447			ug/l	NA	1	0.500	89	147	22	LZ				Wet	Composite, Time Weighted
498	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	alpha-Chlordane	5103-71-9	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted

ID	CLIENT	PROJECT	PROJECT NUM	LABNAME	SAMPLE NAME	Site_Old Name	LAB SAMP ID	MATRIX	STORM DATE	SAMP DATE	PREP DATE	ANA DATE	BATCH	METHOD CODE	METHOD NAME	PREP NAME	ANALYTE	CAS NUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	BASIS	DILUTION	SPIKE LEVEL	RECOVERY	UPPER CL	LOWER CL	ANALYST	P SOLIDS	L NOTE	A NOTE	Weather	Sample Type
490	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712153-02	Water	12/7/2007	12/07/2007 09:05:00	12/07/2007 10:45:00	12/10/2007 12:30:00	7120816	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	13000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
491	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712153-02	Water	12/7/2007	12/07/2007 09:05:00	12/07/2007 10:45:00	12/11/2007 11:40:00	7120816	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	90000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
492	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712153-02	Water	12/7/2007	12/07/2007 09:05:00	12/07/2007 10:45:00	12/11/2007 11:30:00	7120817	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	9000	20	20	MPN/100 ml	NA	10					MG				Wet	Grab
493	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	4,4:-DDD	72-54-8	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
494	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	4,4:-DDE	72-55-9	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
495	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	4,4:-DDT	50-29-3	FALSE	FALSE	ND	0.08	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
508	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endrin ketone	53494-70-5	FALSE	FALSE	ND	0.06	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
497	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	alpha-BHC	319-84-6	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
527	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 08:01:00	12/19/2007 21:14:00	7121004	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.387	0.05	0.05	ug/l	NA	1	0.250	155	130	60	RAT		GC-05	S-02, S-04	Wet	Composite, Time Weighted
499	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	beta-BHC	319-85-7	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
500	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Chlordane (Total)	57-74-9	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
501	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	delta-BHC	319-86-8	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
502	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Dieldrin	60-57-1	FALSE	FALSE	ND	0.04	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
503	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endosulfan I	959-98-8	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
504	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endosulfan II	33213-65-9	FALSE	FALSE	ND	0.05	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
505	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Endosulfan sulfate	1031-07-8	FALSE	FALSE	ND	0.06	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
496	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 08:07:00	12/14/2007 08:33:00	7121005	8081(Pest) - Liquid	EPA 8081	EPA 3520C	Aldrin	309-00-2	FALSE	FALSE	ND	0.07	0.10	ug/l	NA	1					LZ				Wet	Composite, Time Weighted
590	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Cypermethrin		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
525	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 08:01:00	12/19/2007 21:14:00	7121004	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
589	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Cyfluthrin		FALSE	FALSE	49.4	0.5	2	ng/L											Wet	Composite, Time Weighted
591	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Danitol		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
592	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Deltamethrin		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
593	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Esfenvalerate		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
594	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Fenvalerate		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
595	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Fluvalinate		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
596	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		L-Cyhalothrin		FALSE	FALSE	6.6	0.5	2	ng/L											Wet	Composite, Time Weighted
597	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Permethrin		FALSE	FALSE	ND	5	25	ng/L											Wet	Composite, Time Weighted
529	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 18:39:00	12/11/2007 21:04:00	7121032	Ag Total EPA-6020	EPA 6020	EPA 3020A	Silver (Total)	7440-22-4	FALSE	FALSE	ND	0.0003	0.01	mg/l	NA	1					CR				Wet	Composite, Time Weighted
598	EnviroMatrix Analytical,	La Mesa Wet Weather Monitoring	200703W-8	CRG Marine Laboratory, Inc.	908-UNI-001	Univ. 1 Comp 2	WO 0712176	Water	12/7/2007	12/7/2007	12/13/2007	1/2/2008		Pyrethroids by NCI	EPA 625mNCI		Prallethrin		FALSE	FALSE	ND	0.5	2	ng/L											Wet	Composite, Time Weighted
528	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 08:01:00	12/19/2007 21:14:00	7121004	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.319	0.05	0.05	ug/l	NA	1	0.250	128	130	60	RAT		GC-05		Wet	Composite, Time Weighted
530	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 18:39:00	12/11/2007 21:04:00	7121032	As Total EPA-6020	EPA 6020	EPA 3020A	Arsenic (Total)	7440-38-2	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
531	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 18:39:00	12/11/2007 21:04:00	7121032	Cd Total EPA-6020	EPA 6020	EPA 3020A	Cadmium (Total)	7440-43-9	FALSE	FALSE	ND	0.001	0.010	mg/l	NA	1					CR				Wet	Composite, Time Weighted
532	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 18:39:00	12/11/2007 21:04:00	7121032	Cr Total EPA-6020	EPA 6020	EPA 3020A	Chromium (Total)	7440-47-3	FALSE	FALSE	ND	0.004	0.050	mg/l	NA	1					CR				Wet	Composite, Time Weighted
533	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/11/2007 13:28:00	12/11/2007 16:28:00	7121115	Cu Diss EPA-6020	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	0.011	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
534	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 18:39:00	12/11/2007 21:04:00	7121032	Cu Total EPA-6020	EPA 6020	EPA 3020A	Copper (Total)	7440-50-8	FALSE	FALSE	ND	0.002	0.050	mg/l	NA	1					CR				Wet	Composite, Time Weighted
535	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-001	Univ. 1	0712176-01	Water	12/7/2007	12/07/2007 00:00:00	12/10/2007 18:33:00	12/13/2007 09:57:36	7121031	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	50	10	10	mg CaCO3/L	NA	1					JLB				Wet	Composite, Time Weighted
334	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	07/02/2007 11:01:00	07/02/2007 13:57:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	0.031	0.010	0.020	mg/l	NA	1					VK				Dry	Grab
328	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	06/27/2007 15:40:00	07/01/2007 15:00:00	7062823	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	500	20	20	MPN/100 ml	NA	10					CA				Dry	Grab
323	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	07/02/2007 09:39:00	07/04/2007 00:51:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT				Dry	Grab
324	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	07/02/2007 09:39:00	07/04/2007 00:51:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.209	0.05	0.05	ug/l	NA	1	0.250	84	130	60	RAT				Dry	Grab
325	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	07/02/2007 09:39:00	07/04/2007 00:51:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.242	0.05	0.05	ug/l	NA	1	0.250	97	130	60	RAT				Dry	Grab
326	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	06/27/2007 15:40:00	06/30/2007 14:00:00	7062822	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	1100	20	20	MPN/100 ml	NA	10					CA				Dry	Grab
327	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	06/27/2007 15:40:00	07/01/2007 15:00:00	7062822	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	23000	2000	2000	MPN/100 ml	NA	1000					CA				Dry	Grab
322	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	07/02/2007 09:39:00	07/04/2007 00:51:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT				Dry	Grab
329	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	06/28/2007 17:46:00	07/02/2007 12:39:53	7062844	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	1740	100	100	mg CaCO3/L	NA	10					JLB				Dry	Grab

ID	CLIENT	PROJECT	PROJECT NUM	LABNAME	SAMPLE NAME	Site_Old Name	LAB SAMP ID	MATRIX	STORM DATE	SAMP DATE	PREP DATE	ANA DATE	BATCH	METHOD CODE	METHOD NAME	PREP NAME	ANALYTE	CAS NUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	BASIS	DILUTION	SPIKE LEVEL	RECOVERY	UPPER CL	LOWER CL	ANALYST	P SOLIDS	L NOTE	A NOTE	Weather	Sample Type
330	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	06/28/2007 07:00:00	06/28/2007 07:00:00	7062920	MBAS- Liquid	SM5540 C	General Preparation	Methylene Blue Active	NA	FALSE	FALSE	ND	0.1	0.5	mg/l	NA	1					AML				Dry	Grab
331	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	07/02/2007 11:01:00	07/02/2007 13:57:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Cadmium	7440-43-9	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
337	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	06/28/2007 17:00:00	06/28/2007 17:00:00	7070215	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	1.26	0.05	0.05	NTU	NA	1					MG				Dry	Grab
333	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	07/02/2007 11:01:00	07/02/2007 13:57:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
335	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	06/28/2007 07:24:00	06/29/2007 15:47:32	7062816	O&G(1664)-Liquid	EPA 1664	1664	Oil & Grease	C-007	FALSE	FALSE	ND	5	5	mg/l	NA	1					GH				Dry	Grab
336	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	07/02/2007 13:36:00	07/03/2007 14:48:42	7070216	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	ND	1	20	mg/l	NA	1					AML				Dry	Grab
321	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	07/02/2007 09:39:00	07/04/2007 00:51:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT				Dry	Grab
332	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0706438-01	Water	6/27/2007	06/27/2007 13:40:00	07/02/2007 11:01:00	07/02/2007 13:57:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
366	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/03/2007 13:02:00	12/03/2007 16:45:00	7120320	Zn Diss EPA-6020	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	0.084	0.010	0.020	mg/l	NA	1					CR				Wet	Composite, Time Weighted
360	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/03/2007 11:04:00	12/12/2007 00:30:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.279	0.05	0.05	ug/l	NA	1	0.250	112	130	60	RAT		GC-05		Wet	Composite, Time Weighted
343	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711489-02	Water		11/30/2007 09:15:05	11/30/2007 12:15:00	12/04/2007 15:40:00	7120524	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	30000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
362	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/02/2007 14:56:00	12/05/2007 08:01:41	7120204	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	50	10	10	mg CaCO3/L	NA	1					JLB				Wet	Composite, Time Weighted
361	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/03/2007 13:02:00	12/03/2007 16:45:00	7120320	Cu Diss EPA-6020	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	0.016	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
363	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/03/2007 13:02:00	12/03/2007 16:45:00	7120320	Pb Diss EPA-6020	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
356	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/03/2007 11:04:00	12/12/2007 00:30:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
365	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/01/2007 12:06:00	12/01/2007 12:06:00	7120314	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	64.6	0.05	0.05	NTU	NA	1					JEL				Wet	Composite, Time Weighted
341	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711489-02	Water		11/30/2007 09:15:03	11/30/2007 12:15:00	12/03/2007 12:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	50000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
342	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711489-02	Water		11/30/2007 09:15:04	11/30/2007 12:15:00	12/04/2007 14:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	220000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
359	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/03/2007 11:04:00	12/12/2007 00:30:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.355	0.05	0.05	ug/l	NA	1	0.250	142	130	60	RAT		GC-05	S-02, S-04	Wet	Composite, Time Weighted
358	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/03/2007 11:04:00	12/12/2007 00:30:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
357	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/03/2007 11:04:00	12/12/2007 00:30:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
364	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-002	Univ. 2	0711530-01	Water		11/30/2007 15:30:00	12/07/2007 09:21:00	12/07/2007 09:21:00	7121029	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	109	1	20	mg/l	NA	1					JDP				Wet	Composite, Time Weighted
319	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	07/02/2007 13:36:00	07/03/2007 14:48:42	7070216	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	ND	1	20	mg/l	NA	1					AML				Dry	Grab
318	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	06/28/2007 07:24:00	06/29/2007 15:47:32	7062816	O&G(1664)-Liquid	EPA 1664	1664	Oil & Grease	C-007	FALSE	FALSE	ND	5	5	mg/l	NA	1					GH				Dry	Grab
317	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	06/27/2007 14:10:00	07/01/2007 14:00:00	7062819	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	170	20	20	MPN/100 ml	NA	10					CA				Dry	Grab
306	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	06/27/2007 14:10:00	06/30/2007 13:00:00	7062817	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	230	20	20	MPN/100 ml	NA	10					CA				Dry	Grab
320	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	06/28/2007 17:00:00	06/28/2007 17:00:00	7070215	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	1.12	0.05	0.05	NTU	NA	1					MG				Dry	Grab
313	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	07/02/2007 11:01:00	07/02/2007 13:33:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	ND	0.010	0.020	mg/l	NA	1					VK				Dry	Grab
312	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	07/02/2007 11:01:00	07/02/2007 13:33:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
311	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	07/02/2007 11:01:00	07/02/2007 13:33:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
310	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	07/02/2007 11:01:00	07/02/2007 13:33:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Cadmium	7440-43-9	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
307	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	06/27/2007 14:10:00	07/01/2007 13:00:00	7062817	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	700	20	20	MPN/100 ml	NA	10					CA				Dry	Grab
305	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	07/02/2007 09:39:00	07/03/2007 23:56:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.195	0.05	0.05	ug/l	NA	1	0.250	78	130	60	RAT				Dry	Grab
304	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	07/02/2007 09:39:00	07/03/2007 23:56:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.202	0.05	0.05	ug/l	NA	1	0.250	81	130	60	RAT				Dry	Grab
303	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	07/02/2007 09:39:00	07/03/2007 23:56:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT				Dry	Grab
302	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	07/02/2007 09:39:00	07/03/2007 23:56:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT				Dry	Grab
301	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	07/02/2007 09:39:00	07/03/2007 23:56:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT				Dry	Grab
309	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	06/28/2007 07:00:00	06/28/2007 07:00:00	7062920	MBAS- Liquid	SM5540 C	General Preparation	Methylene Blue Active	NA	FALSE	FALSE	ND	0.1	0.5	mg/l	NA	1					AML				Dry	Grab
308	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0706433-03	Water	6/27/2007	06/27/2007 11:25:00	06/28/2007 17:46:00	07/02/2007 12:39:53	7062844	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	435	100	100	mg CaCO3/L	NA	10					JLB				Dry	Grab
369	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/03/2007 11:04:00	12/12/2007 01:25:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
377	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/03/2007 13:02:00	12/03/2007 16:49:00	7120320	Zn Diss EPA-6020	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	0.059	0.010	0.020	mg/l	NA	1					CR				Wet	Composite, Time Weighted
376	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/01/2007 12:06:00	12/01/2007 12:06:00	7120314	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	77.5	0.05	0.05	NTU	NA	1					JEL				Wet	Composite, Time Weighted
375	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/07/2007 09:21:00	12/07/2007 09:21:00	7121029	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	99	1	20	mg/l	NA	1					JDP				Wet	Composite, Time Weighted
374	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/03/2007 13:02:00	12/03/2007 16:49:00	7120320	Pb Diss EPA-6020	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
373	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/02/2007 14:56:00	12/05/2007 08:01:41	7120204	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	69	10	10	mg CaCO3/L	NA	1					JLB				Wet	Composite, Time Weighted

ID	CLIENT	PROJECT	PROJECT NUM	LABNAME	SAMPLE NAME	Site_Old Name	LAB SAMP ID	MATRIX	STORM DATE	SAMP DATE	PREP DATE	ANA DATE	BATCH	METHOD CODE	METHOD NAME	PREP NAME	ANALYTE	CAS NUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	BASIS	DILUTION	SPIKE LEVEL	RECOVERY	UPPER CL	LOWER CL	ANALYST	P SOLIDS	L NOTE	A NOTE	Weather	Sample Type
372	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/03/2007 13:02:00	12/03/2007 16:49:00	7120320	Cu Diss EPA-6020	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	0.009	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
370	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/03/2007 11:04:00	12/12/2007 01:25:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.496	0.05	0.05	ug/l	NA	1	0.250	198	130	60	RAT		GC-05	S-02, S-04	Wet	Composite, Time Weighted
368	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/03/2007 11:04:00	12/12/2007 01:25:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
371	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/03/2007 11:04:00	12/12/2007 01:25:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.251	0.05	0.05	ug/l	NA	1	0.250	100	130	60	RAT		GC-05		Wet	Composite, Time Weighted
346	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711489-03	Water		11/30/2007 09:15:08	11/30/2007 12:15:00	12/04/2007 15:40:00	7120524	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	30000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
367	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711530-02	Water		11/30/2007 16:00:00	12/03/2007 11:04:00	12/12/2007 01:25:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
344	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711489-03	Water		11/30/2007 09:15:06	11/30/2007 12:15:00	12/03/2007 12:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	8000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
345	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-003	Univ. 3	0711489-03	Water		11/30/2007 09:15:07	11/30/2007 12:15:00	12/04/2007 14:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	130000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
294	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/27/2007 14:10:00	07/01/2007 14:00:00	7062819	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	2300	200	200	MPN/100 ml	NA	100					CA				Dry	Grab
288	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/27/2007 09:39:00	07/03/2007 23:01:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT				Dry	Grab
289	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/27/2007 09:39:00	07/03/2007 23:01:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT				Dry	Grab
290	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/27/2007 09:39:00	07/03/2007 23:01:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.195	0.05	0.05	ug/l	NA	1	0.250	78	130	60	RAT				Dry	Grab
291	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/27/2007 09:39:00	07/03/2007 23:01:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.213	0.05	0.05	ug/l	NA	1	0.250	85	130	60	RAT				Dry	Grab
293	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/27/2007 14:10:00	07/01/2007 13:00:00	7062817	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	5000	200	200	MPN/100 ml	NA	100					CA				Dry	Grab
295	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/28/2007 17:46:00	07/02/2007 12:39:53	7062844	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	635	100	100	mg CaCO3/L	NA	10					JLB				Dry	Grab
296	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/28/2007 07:00:00	06/28/2007 07:00:00	7062920	MBAS- Liquid	SM5540 C	General Preparation	Methylene Blue Active	NA	FALSE	FALSE	ND	0.1	0.5	mg/l	NA	1					AML				Dry	Grab
297	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	07/02/2007 11:01:00	07/02/2007 13:28:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Cadmium	7440-43-9	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
299	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	07/02/2007 11:01:00	07/02/2007 13:28:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
300	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	07/02/2007 11:01:00	07/02/2007 13:28:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	0.025	0.010	0.020	mg/l	NA	1					VK				Dry	Grab
314	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/28/2007 07:24:00	06/29/2007 15:47:32	7062816	O&G(1664)-Liquid	EPA 1664	1664	Oil & Grease	C-007	FALSE	FALSE	ND	5	5	mg/l	NA	1					GH				Dry	Grab
315	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	07/02/2007 13:36:00	07/03/2007 14:48:42	7070216	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	ND	1	20	mg/l	NA	1					AML				Dry	Grab
316	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/28/2007 17:00:00	06/28/2007 17:00:00	7070215	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	1.72	0.05	0.05	NTU	NA	1					MG				Dry	Grab
287	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	07/02/2007 09:39:00	07/03/2007 23:01:00	7070209	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT				Dry	Grab
298	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	07/02/2007 11:01:00	07/02/2007 13:28:00	7070210	Metals, D-Max-DryWea-diss	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					VK				Dry	Grab
292	D-Max Engineering	La Mesa Dry Weather Monitoring	200703W-3	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0706433-02	Water	6/27/2007	06/27/2007 10:15:00	06/27/2007 14:10:00	06/30/2007 13:00:00	7062817	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	2300	200	200	MPN/100 ml	NA	100					CA				Dry	Grab
378	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/03/2007 11:04:00	12/12/2007 02:19:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Chlorpyrifos	2921-88-2	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
388	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/03/2007 13:02:00	12/03/2007 17:13:00	7120320	Zn Diss EPA-6020	EPA 6020	EPA 6020/No	Zinc	7440-66-6	FALSE	FALSE	0.135	0.010	0.020	mg/l	NA	1					CR				Wet	Composite, Time Weighted
387	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/01/2007 12:06:00	12/01/2007 12:06:00	7120314	Turbidity-Liquid	SM2130 B	General Preparation	Turbidity	NA	FALSE	FALSE	51.6	0.05	0.05	NTU	NA	1					JEL				Wet	Composite, Time Weighted
386	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/07/2007 09:21:00	12/07/2007 09:21:00	7121029	Solids, TSS-Liquid	SM2540 D	General Preparation	Total Suspended	NA	FALSE	FALSE	71	1	20	mg/l	NA	1					JDP				Wet	Composite, Time Weighted
385	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/03/2007 13:02:00	12/03/2007 17:13:00	7120320	Pb Diss EPA-6020	EPA 6020	EPA 6020/No	Lead	7439-92-1	FALSE	FALSE	ND	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
384	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/02/2007 14:56:00	12/05/2007 08:01:41	7120204	Hardness-EPA 200.7	EPA 200.7	EPA 3010A	Hardness (Total)	NA	FALSE	FALSE	35	10	10	mg CaCO3/L	NA	1					JLB				Wet	Composite, Time Weighted
383	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/03/2007 13:02:00	12/03/2007 17:13:00	7120320	Cu Diss EPA-6020	EPA 6020	EPA 6020/No	Copper	7440-50-8	FALSE	FALSE	0.018	0.001	0.005	mg/l	NA	1					CR				Wet	Composite, Time Weighted
382	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/03/2007 11:04:00	12/12/2007 02:19:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Triphenyl phosphate	115-86-6	TRUE	FALSE	0.317	0.05	0.05	ug/l	NA	1	0.250	127	130	60	RAT		GC-05		Wet	Composite, Time Weighted
381	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/03/2007 11:04:00	12/12/2007 02:19:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Tribuytlphosphate	126-73-8	TRUE	FALSE	0.371	0.05	0.05	ug/l	NA	1	0.250	148	130	60	RAT		GC-05	S-02, S-04	Wet	Composite, Time Weighted
379	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/03/2007 11:04:00	12/12/2007 02:19:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Diazinon	333-41-5	FALSE	FALSE	ND	0.04	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted
348	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711489-04	Water		11/30/2007 09:15:10	11/30/2007 12:15:00	12/04/2007 14:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Total Coliforms	NA	FALSE	FALSE	130000	2000	2000	MPN/100 ml	NA	1000					MG				Wet	Grab
349	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711489-04	Water		11/30/2007 09:15:11	11/30/2007 12:15:00	12/04/2007 15:40:00	7120524	Enterococcus-WW	SM 9230 A, B	General Prep	Enterococcus	NA	FALSE	FALSE	14000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
347	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711489-04	Water		11/30/2007 09:15:09	11/30/2007 12:15:00	12/03/2007 12:15:00	7120523	Coliform, T & F- WW	SM 9221 B, E	General Prep	Fecal Coliforms	NA	FALSE	FALSE	24000	200	200	MPN/100 ml	NA	100					MG				Wet	Grab
380	D-Max Engineering	La Mesa Wet Weather Monitoring	200703W-8	EnviroMatrix Analytical, Inc.	908-UNI-004	Univ. 4	0711530-03	Water		11/30/2007 16:10:00	12/03/2007 11:04:00	12/12/2007 02:19:00	7120311	8141A Chlor,Diaz,Mal	EPA 8141A	EPA 3520C	Malathion	121-75-5	FALSE	FALSE	ND	0.05	0.05	ug/l	NA	1					RAT		GC-05		Wet	Composite, Time Weighted

CITY OF LA MESA

2007/2008 JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

IDDE SECTION

DECEMBER 2008

PREPARED BY:

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CITY OF LA MESA
JEWEL of the HILLS

DMAX

CITY OF LA MESA

2007/2008 JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

IDDE SECTION

SEPTEMBER 2008

PREPARED BY:

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CITY OF
LA MESA
JEWEL of the HILLS

SANDRA L. KERL
CITY MANAGER

December 2008

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sandra L. Kerl
City Manager

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INTRODUCTION AND CONTENTS

Introduction

The 2007/2008 reporting period as originally written in Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit) was defined as July 1, 2007 through June 30, 2008. Reporting on the City of La Mesa's implementation of all components of its JURMP was originally required to be submitted to the RWQCB by September 30, 2008. However, on September 10, 2008, the RWQCB adopted Addendum No. 2 to the Municipal Permit, which required that the City of La Mesa (City) discuss its 2008 Dry Weather Monitoring Program activities in Section 7 of its 2007/2008 JURMP Annual Report.

Section 7 of the Annual Report discusses the implementation of the illicit discharge detection and elimination (IDDE) component of the City's storm water program. This program component includes both dry weather monitoring activities and other activities to prevent and respond to illicit connection and illicit discharges, such as operating a storm water hotline. The reporting period for the portions of this section that discuss dry weather monitoring activities was changed to extend through September 30, 2008, but the reporting period for other activities described in the section was not changed and thus extends through June 30, 2008, the same reporting period as applies to the rest of the JURMP Annual Report. Because the field work for the dry weather monitoring program is not required to be completed until September 30, 2008, the same day that the JURMP Annual Report is to be submitted, the RWQCB extended the submittal deadline for all of Section 7 of the 2007/2008 JURMP Annual Report until December 15, 2008.

Contents

This submittal includes a certification statement, the text of Section 7 of the 2007/2008 JURMP Annual Report, and the attachments associated with that section. For clarity, the items included in this submittal are listed below.

- Certification Statement for Section 7 Submittal
- Introduction and Contents
- Section 7 (IDDE Component) of the 2007/2008 JURMP Annual Report
- JURMP Annual Report Requirements Checklist (for Section 7 only)
- Attachment 7.1, City of La Mesa Dry Weather Field Screening and Analytical Monitoring Program 2007
- Attachment 7.2, City of La Mesa Dry Weather Field Screening and Analytical Monitoring Program 2008

Please note that the complaint log, referenced as Appendix B in Section 7, was already provided with the main JURMP Annual Report submittal in September 2008 and is not included again with this December submittal.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

Recognizing that illicit connections and illicit discharges can be significant sources of pollutants to the City's MS4, the City maintains several programs to prevent and to seek out and eliminate IC/IDs. Illicit discharges may result from activities such as vehicle washing or equipment cleaning without the use of proper BMPs. Sewer pipes and drains in car washes connected to the MS4 are examples of illicit connections. City storm water personnel work with residents, businesses, and City staff to make them aware of BMPs to prevent IC/IDs and to encourage reporting of IC/IDs. The following activities are the primary components of the City's program to combat IC/IDs:

- Inspecting local businesses, construction sites, and municipal facilities
- Conducting the Dry Weather Monitoring Program
- Operating a public complaint hotline

These mechanisms enable the City to provide a comprehensive system to better the quality of storm water and urban runoff throughout the City.

7.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the illicit discharge detection and elimination component during the 2007/2008 reporting period are presented in the following bulleted list. Please note that per Addendum No. 2 to the Municipal Permit, the reporting period for the Dry Weather Monitoring Program extended through September 30, 2008. The reporting period for all other components of the City's IDDE program ended on June 30, 2008. The following subsections provide more details on how the City complied with both the 2001 permit and the new 2007 Municipal Permit during the reporting period.

- Six IC/IDs were discovered/reported during the 2007/2008 reporting period. All six were followed up on by City personnel, and enforcement measures were applied as necessary.
- The City recorded and investigated 137 Storm Water Hotline complaints (Appendix B).
- The City performed both of the recommended corrective actions proposed in the 2007 Dry Weather Field Screening and Analytical Monitoring Program Report to prevent possible pollutants from entering the storm drain system.
- The City conducted the 2008 Dry Weather Field Screening and Analytical Monitoring Program.

7.2 Public Reporting of Illicit Discharges and Connections

Reporting and Response

Public and municipal involvement are crucial to preventing and eliminating IC/IDs from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is provided on the City's website, in distributed storm water educational material, in storm water articles in the *La Mesa Focus* newsletter, and on the Storm Water Bulletin Board. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged onto a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges. The Public Works Department also receives complaints regarding storm water, often due to infrastructure concerns. Complaints to the Public Works Department are also tracked and investigated.

Complaints received by the City during the 2007/2008 reporting period and the City's response to each are listed in Appendix B. One hundred thirty-seven complaints were documented this year, an increase from the 89 recorded last year. The increase in documented complaints may indicate that individuals in the City are more aware of the impact of certain activities on the storm drain system as well as the need to report such activities to the Storm Water Hotline and/or the City website.

Enforcement

As previously stated, investigated complaints from the Storm Water Hotline and City website are included in a table in Appendix B. The table also includes relevant Public Works Department complaints and a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, violations, and/or educational material. Table 7-1 summarizes the enforcement actions taken in response to complaints received by the City's Storm Water Hotline.

Table 7-1
Enforcement Actions Resulting from Complaints Received by the Storm Water Hotline

Category	Verbal Warning	Written Notice to Comply	Written Warning	NOV
Commercial	6	1	1	9
Industrial	0	0	1	0
Mobile	0	0	0	6
Municipal	4	0	0	0
Residential	4	2	17	5
Construction	2	0	0	2

7.3 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to various types of spills. The City has established protocols to prevent spills and to properly respond to and report spills if they do occur. The City has a detailed program to prevent sanitary sewer overflows (SSO). Preventative maintenance is regularly conducted on the City's sanitary sewer system, and video inspections and sewer surveys are regularly conducted to monitor the condition of the public sewer lines and to determine the necessity of maintenance. Private lateral lines do not receive preventative maintenance, but the City assists in the containment and cleanup of sewer spills if the spill could potentially reach the City's MS4. Individuals in the City are encouraged to report any SSOs to the City's Storm Water Hotline. More detail about the City's spill prevention, response, and reporting procedures for SSOs and other spills can be found in the City's JURMP.

During the 2007/2008 reporting period, no SSOs were recorded; however, one non-SSO spill occurred. The City responded immediately and sent the RWQCB a detailed email regarding the spill within 24 hours. The RWQCB deemed it unnecessary to produce a formal report on the event. A summary of that spill is provided below.

- On 6/4/2008, the City received a complaint about a homeowner rinsing/discharging wastewater from a 500 gallon tank from their residence at 4950 Pine Street. When the La Mesa Fire Department arrived at the site no active discharge was observed, but red staining was apparent on the curb of the street. The hazmat team advised the homeowner to place kitty litter along the curb and issued an NOV for the illegal discharge. Educational material and instructions for proper disposal of the kitty litter were provided to the resident.

7.4 Urban Runoff Monitoring

The City has continued to conduct a Dry Weather Monitoring Program, as required by the Municipal Permit. This program assists the City in detecting and eliminating IC/IDs to the storm drain system. There are three major components to the Dry Weather Monitoring Program:

- Field observations, which includes site description and qualitative observations
- Field screening monitoring, which includes flow estimation and sample testing using meters and test kits at the site
- Analytical monitoring, which involves submittal of collected samples from selected sites to an analytical laboratory for additional testing

Numeric action levels are used as the primary approach for the interpretation of most constituent concentrations measured in the field and laboratory. The California Toxics Rule (CTR) Criteria Maximum Concentration (CMC) is used as the action level for dissolved trace metals. Temperature and turbidity parameters are evaluated using best

professional judgment to determine the necessity of an upstream investigation. The action levels for all other pollutants were adopted in 2003 and were based on statistical analyses of previous Dry Weather Monitoring Program data and established water quality benchmarks from the Basin Plan and the United States Environmental Protection Agency Multi-Sector General Permit.

The City visits all designated primary monitoring stations to collect Dry Weather Monitoring Program data. When a primary monitoring station is found to be dry, the City visits designated alternate monitoring stations.

7.4.1 2007 Dry Weather Monitoring Program

During the 2007 Dry Weather Monitoring Program, 18 primary monitoring stations and one alternate monitoring station were visited. One of the primary sites was observed to be dry, so an alternate site, Site 60, was chosen as a replacement for field screening. Only one field exceedance and one bacteria exceedance were noted in 2007. The 2007 Dry Weather Field Screening and Analytical Monitoring Program Report is provided as Attachment 7.1. For further information about how the City addressed notable findings of the 2007 Dry Weather Monitoring Program and responded to the resulting recommendations, see Section 7.5.1 of this report.

7.4.2 2008 Dry Weather Monitoring Program

Program Updates

In early 2008, the City's Dry Weather Monitoring Program site locations and procedures were updated in response to new Municipal Permit requirements as part of the City's JURMP update.

To provide better overall coverage of the City's MS4, some new sites were added, and some site locations were changed. Through this process the number of designated primary sites was increased from 18 to 20. The sampling location site names were also changed using a format similar to the site naming format employed by the State's Surface Waters Ambient Monitoring Program. More detail about the changes in site locations and naming procedures is provided in the City's updated JURMP that was submitted to the RWQCB in March 2008. The new site names and locations have been used beginning with the 2008 Dry Weather Monitoring Program and are provided in Table 7-4 in this section. They were also updated on the City's dry weather monitoring locations map. No other updates to the map were made during the reporting period.

In addition to changes in site locations and names, the City also made some modifications to Dry Weather Monitoring Program procedures. A new trash assessment component developed regionally by the Dry Weather Monitoring sub-workgroup with input from the RWQCB was incorporated into the City's program. More detail about the new trash assessment program is provided later in this subsection. The City also began following up on laboratory exceedances within two business days of receiving analytical laboratory results. Note that the City had already been following up on field

exceedances within two business days and testing for methylene blue active substances (MBAS) in the field in the past, so no changes were necessary to comply with those new requirements. The City did, however, remove MBAS from its list of constituents tested in the laboratory since the 2007 Municipal Permit no longer requires it and the City tests for it in the field.

2008 Results

The City's storm water consultant, D-MAX, conducted the 2008 Dry Weather Monitoring Program in July and August of 2008. Twenty primary monitoring stations and one alternate monitoring station were visited. Since primary Site 907-ALV-003 was dry, alternate Site 907-ALV-580 was visited for monitoring.

A summary of action level exceedances for field and laboratory constituents is provided below in Table 7-2. The results of all follow-up investigations are presented in Table 7-3, in Section 7.5.2 of this report. Also in this section, analytical field and laboratory results are included as Table 7-5 and Table 7-6, respectively.

Table 7-2
Summary of Action Level Exceedances

Field Screening (20 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
pH	0	0 %	---
Conductivity	0	0 %	---
Turbidity	1	5%	907-ALV-002
Surfactants	0	0 %	---
Ammonia-Nitrogen	0	0 %	---
Nitrate-Nitrogen	0	0 %	---
Orthophosphate-Phosphorus	0	0 %	---
Laboratory Analyses (6 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
Oil & Grease	0	0 %	---
Cadmium	0	0 %	---
Copper	0	0 %	---
Lead	0	0 %	---
Zinc	0	0 %	---
Diazinon	0	0 %	---
Chlorpyrifos	0	0 %	---

Table 7-2 (Continued)
Summary of Action Level Exceedances

Laboratory Analyses (6 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
Total Coliforms	3	50%	907-ALV-002, 908-UNI-002, 908-UNI-004
Fecal Coliforms	1	17%	907-ALV-002
Enterococci	2	33%	907-ALV-002, 908-UNI-002

Note: Data is from the initial site visits only; data from follow-up investigations is not included.

Follow-up investigations conducted in response to action level exceedances are summarized in Section 7.5.2 of this report.

A formal trash assessment was performed for the first time in 2008 in accordance with the Municipal Permit requirements. The San Diego Copermittee Dry Weather Monitoring Workgroup developed five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although numbers of trash pieces are also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g.,

medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).

- *Threat to Aquatic Health* – Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers fall in this category.

Twenty-one sites were assessed during the 2008 Dry Weather Monitoring Program, and most of the sites were scored as "optimal," having little or no trash. Five sites were scored as "suboptimal," and one site had a "marginal" trash score. Notably, none of the sites visited had "submarginal" or "poor" levels of trash. Additionally, none of the trash observed was determined to pose a threat to human or aquatic health. Actions taken by the City in response to the results of the trash assessment are described in Section 7.5.2 of this report.

The 2008 Dry Weather Monitoring Program Report can be found as Attachment 7.2.

7.5 Follow-up and Enforcement

7.5.1 Actions Taken in Response to the 2007 Dry Weather Monitoring Program Findings

Based on the 2007 Dry Weather Monitoring Program results, two follow-up recommendations were made. In response to these recommendations, trash was removed from Site 57, Site 52, and the conveyance along Sarita Street (upstream of Site 4A). Follow-up visits were also performed later in the reporting period to check whether trash had again accumulated at these sites. No notable trash was observed during those follow-up visits. Also, the City contacted the California Shopping Cart Retrieval Corporation to remove a shopping cart from Site 4A, and the cart was removed from the channel.

7.5.2 2008 Dry Weather Monitoring Follow-Up Investigations

If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. Upstream investigations are performed when exceedances are verified during confirmation visits. See the City's JURMP for a complete discussion of upstream investigation procedures.

Table 7-3 presents conclusions based on the results of confirmation visits and, where necessary, upstream investigations conducted at three sites during the 2008 Dry Weather Monitoring Program.

Table 7-3
Summary of Follow-up Investigations

Site	Follow-Up Investigation Target Constituent(s)		Results / Probable Source
	Field	Laboratory	
907-ALV-002	Turbidity	Total Coliforms, Fecal Coliforms, *Enterococci*	Turbidity, fecal coliforms, and *Enterococci* were below the action level at the confirmation visit. The total coliform exceedances may have resulted from decaying leaves in storm drains upstream, which were observed during the upstream investigation.
908-UNI-002	---	Total Coliforms, *Enterococci*	Based on confirmation visit and upstream investigation, litter and decomposing leaf debris located at and near the site were likely sources of the bacterial exceedances.
908-UNI-004	---	Total Coliforms	The total coliform exceedance was likely due to stagnant water and organic debris.

The City is in the process of responding to the 2008 Dry Weather Monitoring Program findings.

Any other actions taken during the remainder of the Reporting Period will be described in the 2008/2009 JURMP Annual Report.

7.6 Illicit Discharge Detection and Elimination Component Effectiveness Assessment

The assessment of the effectiveness of this program component is provided in Section 11 of this JURMP Annual Report.

7.7 Program Review and Modification

The City's JURMP was recently updated in March 2008. The RWQCB extended the reporting period for the Dry Weather Monitoring Program through passing Addendum No. 2 in September 2008. No changes to the City's illicit discharge detection and elimination component have been made since that time.

Table 7-4
2008 Dry Weather Monitoring Locations

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
907-ALV-001	Alvarado Road, east of the trolley station, on the channel	Concrete Channel	Commercial	Residential	907.11	32.77209	-117.04136
907-ALV-002	Along the south edge of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection	Manhole	Industrial	Commercial	907.11	32.77414	-117.02287
907-ALV-003	Parkway Drive located in the southeast corner of Coleman College property	Manhole	Residential	Commercial	907.11	32.77362	-117.03794
907-ALV-004	7780 Parkway Drive, inside Parkway Manor Condominiums' parking lot, by visitor parking at the top of the driveway	Manhole	Residential	None	907.11	32.77546	-117.02918
907-ALV-005	Alvarado Channel, underneath the intersection of Fletcher Parkway and Baltimore Drive, north side of channel	Outlet	Residential	Commercial	907.11	32.77380	-117.02737
907-ALV-006	Fletcher Parkway and Marengo Avenue intersection, in planter	Manhole	Residential	None	907.11	32.77550	-117.02309
907-ALV-007	Jackson Drive and Parkway Drive, behind Amex Auto Repair	Manhole	Residential	Commercial	907.11	32.77832	-117.01821
907-ALV-008	South of Fletcher Parkway, under SR-125 overpass, west of the outfalls from the north	Concrete Channel	Residential	Commercial	907.11	32.78400	-117.00570
907-ALV-120	Jackson Drive, 100 feet west of Murray Drive, north side of street	Manhole	Commercial	None	907.11	32.77630	-117.01423
907-ALV-12A	Jackson Drive, 100 feet west of Murray Drive, south side of street	Manhole	Commercial	Residential	907.11	32.77605	-117.01434
907-ALV-580	Northeast corner of Amaya Drive and Amaya Court intersection	Manhole	Residential	None	907.11	32.78640	-117.00116
907-ALV-590	Southeast corner of Parkway Drive and Amarillo Avenue intersection	Natural Creek	Residential	None	907.11	32.78180	-117.01328
907-ALV-640	North side of Seton Hall Street, between Swarthmore Street and Wheaton Street	Concrete Channel	Residential	None	907.11	32.77651	-117.03462

Table 7-4 (Continued)
2008 Dry Weather Monitoring Locations

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
908-LEM-520	Near Waite Drive and Harris Street intersection, south end of Harris Street	Outlet	Residential	None	908.22	32.74514	-117.03931
908-UNI-001	69th Street and Boulevard Drive intersection	Natural Creek	Commercial	Residential	908.22	32.75463	-117.04908
908-UNI-002	Harbison Avenue and University Avenue intersection, west sidewalk, east of CB Hair & Nails	Manhole	Residential	Commercial	908.22	32.75498	-117.04639
908-UNI-003	Along Lowell Street, about halfway between University Avenue and Normal Avenue, north side of street	Manhole	Residential	Commercial	908.22	32.75536	-117.03528
908-UNI-004	In front of 7851 University Avenue, along the south side of the street	Manhole	Commercial	None	908.22	32.76308	-117.02855
908-UNI-005	Rolando Park, in locked gated area by left field of baseball field	Manhole	Residential	Parks	908.22	32.75787	-117.05260
909-SPR-001	Spring Street and Spring Gardens Road intersection, inside La Mesa Seventh Day Adventist Church	Concrete Channel	Residential	Parks	909.12	32.75483	-117.01311
909-SPR-002	In front of 4621 Bancroft Drive, just south of Golondrina Drive	Manhole	Residential	None	909.12	32.76324	-117.00118

Note
* Alternate Site 907-ALV-580 was substituted for dry primary monitoring Site 907-ALV-003

Table 7-5
2008 Field Analytical Results

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants MBAS mg/L	Ammonia-Nitrogen NH_3-N mg/L	Nitrate-Nitrogen NO_3-N mg/L	Orthophosphate-Phosphorus PO_4-P mg/L
907-ALV-001	7/31/08	10:40	98	23.4	7.8	3.97	3.17	0.25	0.3	1.27 *	0.36
907-ALV-002	7/31/08	11:50	10	22.5	7.3	**421**	1.89	0.75	0.6	2.44	0.33
907-ALV-002 (Confirmation)	8/1/08	9:30	3	21.5	7.1	14.20	2.59	na	na	na	na
907-ALV-002 (Confirmation)	8/8/08	14:10	3	24.0	7.3	8.05	1.89	na	na	na	na
907-ALV-003	7/31/08	15:30	Dry	ns	ns	ns	ns	ns	ns	ns	ns
907-ALV-004	8/1/08	8:45	<1	22.1	7.7	3.34	1.19	0.38	0.4	1.31 *	0.33
907-ALV-005	7/31/08	14:40	5	26.9	7.0	1.85	3.70	0.25	0.3	2.64	0.13 *
907-ALV-006	7/31/08	16:00	1	26.5	7.1	8.57	2.49	0.38	0.3	1.18 *	0.29
907-ALV-007	7/29/08	13:30	3	25.5	7.9	1.47	2.84	0.50	0.2	1.20 *	0.26
907-ALV-008	7/29/08	15:15	8	22.8	7.7	3.12	2.77	0.38	0.3	2.40	0.13 *
907-ALV-120	8/1/08	11:50	5	24.0	7.1	16.78	2.16	0.25	0.4	2.33	0.36
907-ALV-12A	7/29/08	16:20	8	23.8	7.7	8.70	2.56	0.25	0.4	4.86	0.13 *
907-ALV-580	8/1/08	13:45	3	25.5	7.5	12.91	2.35	0.25	0.5	1.27 *	0.07 *
907-ALV-590	7/29/08	14:25	2	26.8	7.4	1.58	2.45	0.25	0.3	1.31 *	0.16 *
907-ALV-640	7/30/08	9:15	<1	23.0	8.8	3.30	1.17	0.25	0.1	0.45 *	0.26
908-LEM-520	8/1/08	10:45	<1	25.1	8.2	7.56	4.79	0.50	0.3	3.96	0.42
908-UNI-001	7/30/08	10:20	187	23.7	7.8	1.05	2.95	0.50	0.4	3.41	0.10 *
908-UNI-002	7/30/08	11:25	3	24.4	7.9	13.95	5.70	0.75	0.3	6.08	0.33

Table 7-5 (Continued)
2008 Dry Weather Monitoring Locations

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants MBAS mg/L	Ammonia-Nitrogen NH_3-N mg/L	Nitrate-Nitrogen NO_3-N mg/L	Orthophosphate-Phosphorus PO_4-P mg/L
908-UNI-002 (Confirmation)	8/8/08	15:15	3	26.1	7.8	na	na	na	na	na	na
908-UNI-003	7/30/08	12:10	10	24.5	8.1	0.45	2.27	0.25	0.3	4.00	0.13 *
908-UNI-004	7/31/08	9:15	5	24.4	7.4	2.39	2.65	0.50	0.2	1.56 *	0.29
908-UNI-004 (Confirmation)	8/8/08	14:30	2	26.9	7.7	2.61	na	na	na	na	na
908-UNI-005	7/29/08	11:20	<1	24.0	7.2	3.23	4.31	0.50	0.3	5.83	0.62
909-SPR-001	7/30/08	15:30	39	23.9	7.5	2.30	2.41	0.13	0.3	2.67	0.27
909-SPR-002	7/30/08	14:20	1	25.5	8.2	8.56	2.20	0.13	0.3	9.63	0.23 *
Reporting Limit				**0.1**	**0.01**	**0.01**	**0.01**	**0.13**	**0.1**	**2.26**	**0.25**
Action Level				**BPJ**	**< 6.5 > 9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.00**	**2.00**

Note
ns = not sampled (dry site)
na = not analyzed
* = Value reported is below the Practical Detection Limit (PDL) or Reporting Limit.
Red values were at or above the measured constituent's action level
denotes a follow-up visit
denotes a location sampled for laboratory analysis

Table 7-6
2008 Laboratory Analytical Results

Site No.	Surfactants mg/L MBAS	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms MPN/100 mL	Fecal Coliforms MPN/100 mL	Enterococci MPN/100 mL
4A	nd	nd	631	nd	0.005	nd	nd	nd	nd	17,000	8,000	1,300
12A	nd	nd	688	nd	nd	nd	nd	nd	nd	5,000	1,700	500
14A	nd	nd	592	nd	nd	nd	nd	nd	nd	8,000	2,300	1,300
39	nd	nd	564	nd	nd	nd	nd	nd	nd	13,000	3,000	**14,000**
39 (Confirmation)	na	na	na	na	na	na	na	na	na	13,000	13,000	800
57	nd	nd	664	nd	nd	nd	nd	nd	nd	2,200	nd	170
ANALYTICAL REPORTING LIMITS	**0.5**	**5**	**10**	**0.005**	**0.005**	**0.005**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**
ACTION LEVELS	**1.0**	**15**	*****	**CTR**	**CTR**	**CTR**	**CTR**	**0.5**	**0.5**	**50,000**	**20,000**	**10,000**

Notes
Red Bold Type = Values that exceed action levels
nd = Not detected
na = Not analyzed
CTR = California Toxics Rule (based on hardness)
* = Total hardness is not considered a pollutant and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependant on the total hardness value of the water sample. Total hardness measurements are thus required to calculate action levels for dissolved metals.
denotes a confirmation visit

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	7.4, 7.5; Tables 7-2 hrough 7-6; Attachments 7.1 and 7.2
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	Attachments 7.1 and 7.2
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	7.5, Appendix B
v. The number and brief description of illicit discharges and connections identified.	7.5, Appendix B
vi. The number of illicit discharges and connections eliminated.	7.5, Appendix B
vii. Identification and description of all spills to the MS4 and response to the spills.	7.3, Appendix B
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2, Appendix B
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5, Appendix B
xiii. A description of notable activities conducted to manage illicit discharges and connections.	7.1, 7.5

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Attachments 7.1 and 7.2
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	7.4, Attachments 7.1 and 7.2
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	7.4, Attachments 7.1 and 7.2
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	7.4, Table 7-6, Attachments 7.1 and 7.2
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	(n/a)
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	7.4, Table 7-5, Attachments 7.1 and 7.2
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	7.4, Attachments 7.1 and 7.2
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	7.4, Attachments 7.1 and 7.2
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	7.4, Attachment 7.2

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	7.4, Attachments 7.1 and 7.2
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	7.5, Attachments 7.1 and 7.2
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5, Attachments 7.1 and 7.2
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	7.4, 7.5, Attachments 7.1 and 7.2

ATTACHMENT 7.1

CITY OF LA MESA DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING 2007

CITY OF LA MESA
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2007

Submitted to:

CITY OF LA MESA
Engineering Department
8130 Allison Avenue
La Mesa, CA 91941

Prepared by:

D-MAX Engineering, Inc.
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October 3, 2007
Project No. 200703W-5

Mr. Hamed Hashemian, P.E.
Engineering Project Manager
City of La Mesa
8130 Allison Avenue
P.O. Box 937
La Mesa, CA 91944-0937

Re: 2007 Dry Weather Field Screening and Analytical Monitoring Program City of La Mesa, California

Dear Mr. Hashemian:

Enclosed please find the final report for the City of La Mesa 2007 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of La Mesa during the 2007 dry weather season. The contents include field screening data and analytical laboratory test results, analysis of the collected data, and photographs of the sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions. Your reviewed comments have been incorporated in this final report.

It has been a pleasure working with the City of La Mesa on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

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ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
303(d)	Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
CFR	Code of Federal Regulations
CFU/mL	Colony Forming Units per milliliter
CMC	Criterion maximum concentration
COC	Constituent of Concern
Copermittees	The 18 cities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority.
CTR	California Toxics Rule
CV	Coefficient of Variance
D-MAX	D-MAX Engineering, Inc.
EMA	EnviroMatrix Analytical, Inc.
FS	Functional Sensitivity
gpm	Gallons per minute
GPS	Global Positioning System
HSA	Hydrologic Subarea
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illegal Discharge
JURMP	Jurisdictional Urban Runoff Management Program
MLS	Mass Loading Station
MBAS	Methylene blue active substances
mg/L	Milligrams per liter
MPN/100mL	Most probable number (of colony-forming units) per 100 milliliters
mS/cm	Millisiemens per centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order 2001-01
nd	Not detected
ns	Not sampled (dry site)
nt	Not tested
NTU	Nephelometric Turbidity Unit
PDL	Practical Detection Limit
ppb	Parts per billion
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TNTC	Too Numerous To Count
USEPA	United States Environmental Protection Agency
WQO	Water Quality Objective
WURMP	Watershed Urban Runoff Management Program

1 INTRODUCTION

1.1 Regulatory Requirements

San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (the recently adopted Municipal Permit) requires that the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) in 2007 be conducted in accordance with RWQCB Order 2001-01 (the previous Municipal Permit) requirement. Under Order No. 2001-01, each of the Copermittees, including the City of La Mesa, must annually conduct dry weather field screening of discharges into its storm drain system. This procedure consists of recording field observations, estimating observed flow rates, and conducting field testing at selected locations along the storm drain conveyance system during the dry weather season (May 1st through September 30th). The Permit also requires Copermittees to conduct laboratory analysis for at least 25 percent of the visited sites that have flowing or ponded water. At each sampling location that exhibits no flowing or ponded water, an alternate sampling station must be selected and sampled. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required. The results from the current year's Dry Weather Field Screening and Analytical Monitoring Program, including both field screening and analytical monitoring, are presented herein.

1.2 Hydrologic Setting

The City of La Mesa encompasses an area of nine square miles just east of the City of San Diego. The primary land use in La Mesa is residential with 55,000 residents. Other land uses in La Mesa include roads and streets, commercial, mixed use, schools, and industrial. An estimated 52 percent of La Mesa falls within the San Diego River Watershed, Hydrologic Unit (HU) 907, while the remaining 48 percent is located in the San Diego Bay Watershed. In both the San Diego Bay and the San Diego River watersheds, the City of La Mesa makes up about one percent of the overall land area of the watershed respectively. Runoff generated in the City is conveyed through five drainage basins. The boundaries of these drainage basins are illustrated in Figure 1. Table 1-1 lists the drainage basins along with the approximate percentage of drainage area in La Mesa, the corresponding hydrologic unit of the basin, and the receiving water body to which each basin drains.

TABLE 1-1
CITY OF LA MESA DRAINAGE BASINS

Drainage Basin	Percentage of City Area	Hydrologic Unit	Receiving Water Body	Watershed
Alvarado	51	907	San Diego River	San Diego River
University	28	908	Chollas Creek	San Diego Bay
Spring Valley	14	909	Sweetwater River	San Diego Bay
Lemon Grove	6	908	Chollas Creek	San Diego Bay
Lake Murray	1	907	San Diego River	San Diego River

The San Diego Bay Watershed is comprised of three hydrologic units: Pueblo San Diego (HU 908), Sweetwater (HU 909), and Otay (HU 910). Each hydrologic unit is essentially a separate watershed, but these three watersheds all drain to San Diego Bay. For regulatory purposes, they have been combined into one watershed management area, referred to as the San Diego Bay Watershed. The City of La Mesa includes areas within two of those hydrologic units, the

Pueblo San Diego Watershed and the Sweetwater Watershed. Runoff from the Spring Valley Basin eventually enters the Sweetwater River, which terminates in San Diego Bay. Runoff collected in the University and Lemon Grove basins drains to Chollas Creek, which also flows into San Diego Bay.

The San Diego River Watershed is the second largest hydrologic unit in San Diego County. It also has the highest population (~475,000) of the County's watersheds. In addition to runoff from La Mesa, the San Diego River carries water from other large portions of the cities of San Diego, El Cajon, Poway, and Santee and several unincorporated jurisdictions. The mouth of the river eventually discharges into the Pacific Ocean, south of Mission Bay. Runoff collected in the Lake Murray Basin eventually enters the Alvarado Drainage Basin, which drains to the San Diego River.

1.3 Constituents of Concern

Based primarily on wet weather monitoring data from mass loading stations (MLS) located on Chollas Creek, bioassessments, the 2005-2006 San Diego Bay Watershed Urban Runoff Management Program (WURMP) Annual Report, and the Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) List), the constituents that have been established as targeted pollutants in the Pueblo San Diego Watershed are diazinon, copper, zinc, bacterial indicators, trash, and turbidity. Total Maximum Daily Load (TMDL) regulations have continued for diazinon and for dissolved metals. Monitoring in recent years, however, indicates that the recent ban on diazinon use has essentially eliminated diazinon as a pollutant of concern. The Sweetwater Watershed, which is significantly less urbanized than the Pueblo San Diego watershed, does not have any 303(d) Listings. Turbidity and bacteria were identified as constituents of concern in the WURMP Annual Report for the Sweetwater watershed.

In the San Diego River Watershed, constituent data have been collected annually. The 2005-2006 San Diego River WURMP Annual Report lists bacterial indicators, copper and zinc as high priority Constituents of Concern (COC). The WURMP Annual Report also notes that diazinon, turbidity, and trash are non-high priority COCs.

1.4 Program Overview

The Municipal Permit adopted by the San Diego RWQCB requires all Copermittees, including the City of La Mesa, to conduct field screening and analytical monitoring at different sampling locations throughout the City during the dry weather season (May 1st through September 30th). The purpose of the Dry Weather Monitoring Program is to detect and eliminate illicit connections and illicit discharges (IC/ID) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following three components:

- Field screening observations
- Field screening analytical monitoring
- Laboratory analytical monitoring

Information collected from the Dry Weather Monitoring Program is also used to characterize dry weather discharges in the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as necessary to detect and eliminate the sources of these pollutants. This report presents the results of the City of La Mesa 2007 Dry Weather Monitoring Program conducted by D-MAX Engineering, Inc. (D-MAX).

1.5 Previous Work

The City of La Mesa has conducted an annual Dry Weather Monitoring Program since 1993. A summary of the screening results obtained for each year (1993 through 2006) is discussed below and presented in Table 1-2. Before 2002, laboratory analyses were not required. Laboratory testing was added to the program in 2002 as required by the current Municipal Permit. The same laboratory and field tests used in 2007 were also used from 2002 through 2006. Graphical representations of the data for both the San Diego River and San Diego Bay watersheds have also been prepared and are included as Attachments 1 and 2, respectively. The graphs display the results of both field and laboratory analyses for the 2002 through 2007 Dry Weather Monitoring Programs. Where applicable, averages for each constituent have been calculated, and error bars displaying average plus and minus one standard deviation have also been included on the graphs. Trend lines have been prepared for constituents where multiple values above the method reporting limit were recorded. The equations and R^2 values for the lines have been indicated on the graphs. Note that an R^2 value of 0.0 indicates a very poor fit and 1.0 indicates a perfect fit. Since the trend lines have been based on only five years of data, conclusions regarding pollution trends cannot be drawn with a large degree of certainty.

In 1993, all 15 of the visited sites showed concentrations of ammonia at or above 1.0 milligrams per liter (mg/L) NH_3-N. Of these sites, 13 showed concentrations of copper at or above 1.0 mg/L, and six had concentrations of surfactants greater than 1.0 mg/L. Concentrations of chlorine and phenols greater than 1.0 mg/L were recorded at three and five sites, respectively.

In 1994, 11 of the 16 visited sites had ponded or flowing water. Ammonia was detected at 10 of these sites, with seven showing concentrations above 1.0 mg/L. Concentrations of surfactants ranging between 0.3 mg/L and 0.8 mg/L were detected at all 11 sites. Copper was detected at nine sites with concentrations ranging from the detection limit to 3.0 mg/L, and concentrations of phenols ranged between 0.04 mg/L and 4.9 mg/L at eight of the sites. Chlorine was detected at all 11 sites, but no concentrations were above 1.0 mg/L.

In 1995, ammonia was detected at all 11 sites with ponded or flowing water, but only one site showed a concentration above 1.0 mg/L. Surfactants were also detected at all 11 sites, but only two concentrations were at or above 1.0 mg/L. Chlorine was detected at 10 sites but in very low concentrations (0.1 to 0.4 mg/L), and phenols were not detected at any sites.

In 1996, the Dry Weather Monitoring Program consisted of seven previously-screened sites along with eight new sites. Six sites showed concentrations of ammonia above 0.5 mg/L, with only two of those being at or above 1.0 mg/L. Five of these sites were located along Jackson Drive and Grossmont Shopping Center. Surfactant concentrations of 0.5 mg/L and greater were observed at seven sites, with one site showing a surfactant concentration of >3.0 mg/L. In general, the concentrations of phenols, copper, and chlorine were very low or below the reporting limits.

In 1997, the Dry Weather Monitoring Program consisted of six previously-screened sites and six new sites. Surfactants and ammonia were detected throughout the City. All ammonia concentrations were between 0.0 mg/L and 1.0 mg/L except one, which exceeded 10 mg/L, and only one site showed a concentration of surfactants above 1.0 mg/L. Chlorine in low concentrations (< 0.5 mg/L) was also detected at the majority of the sites visited. Copper was detected at a concentration of 0.1 mg/L at three sites, and only one site showed a detectable phenol concentration of 0.3 mg/L. During visual observations, a strong odor was observed at most of the sites located within the Grossmont Shopping Center. This odor, along with the presence of high levels of ammonia and low levels of copper, prompted an investigation within

the Grossmont Center. The investigation found the primary source of the ammonia to be fertilizers used on the lawns and flowerbeds. Copper concentrations could be attributed to the chemicals used to control algae and to the pennies thrown into the fountains, where they remain until periodic cleaning of the pools.

In 1998, the City conducted one round of dry weather field screening at 14 sites. Ammonia was detected at all 11 sites with ponded or flowing water, and concentrations ranged from below the field test detection limit to 9.5 mg/L. Surfactant concentrations ranging from 0.25 to 0.75 mg/L were also detected at 11 sites. Copper was detected at only one site inside Grossmont Shopping Center. Chlorine concentrations at a low range of 0.1 to 0.2 mg/L were detected at five sites. Phenols were not detected at any of the sites visited.

In 1999, the City conducted two rounds of field screening at 14 sites. In round one, the ammonia levels ranged from 0.2 to 7.0 mg/L. Surfactant concentrations were in the 0.25 to 0.75 mg/L range for this round and were detected at all visited sites with ponded or flowing water. Phenols and copper were detected at five and nine sites, respectively, at concentrations of 0.1-0.2 mg/L. Chlorine concentrations were detected at a maximum of 0.3 mg/L and a minimum that was below the detection limit.

In round two of the 1999 sampling, ammonia concentrations generally ranged from 0.2 to 4.0 mg/L, although one site was found to have a concentration of 30 mg/L. An upstream investigation revealed that a sewer overflow was the cause of this elevated value, and later sampling showed that the concentration had dropped to 1.0 mg/L. This site also had the highest recorded surfactant concentration, >3.0 mg/L, which later fell to 0.25 mg/L. Surfactant concentrations between 0.25 and 2.0 mg/L were detected at all other tested sites. Phenols, copper, and chlorine all had minimum values below the detection limit. The maximum value measured for phenols was 0.1 mg/L. The maximum copper concentration value was 0.6 mg/L, and the maximum chlorine concentration was 0.5 mg/L.

In 2000, the City performed two rounds of the field screening program at 15 sites. In round one, ammonia concentrations ranged between 0.2 and 2.0 mg/L, surfactant concentrations ranged from 0.25 to 2.5 mg/L, and chlorine ranged from a value below the detection limit to 0.4 mg/L. Copper and phenol levels were only detected at two sites each; the copper concentration peaked at 0.7 mg/L, and the phenol concentration peaked at 0.2 mg/L.

During round two, ammonia concentrations ranged from 0.1 to 5.0 mg/L, surfactant concentrations ranged from 0.25 to 0.75 mg/L, and chlorine ranged from a value below the detection limit to 0.6 mg/L. As found in round one, copper and phenols concentrations were typically undetectable, but several sites showed traces of these constituents. The copper concentration reached a maximum of 0.4 mg/L, and the phenol concentration reached a maximum of 0.1 mg/L.

In 2001, two rounds of field screening were performed throughout the City, at 15 and 16 sites, respectively. Surfactant concentrations ranged from 0.25 to 0.75 mg/L. Ammonia concentrations ranged from 0.1 to 8.0 mg/L. Only one site showed a detectable concentration of copper (0.2 mg/L), and a chlorine concentration of 0.1 mg/L was also only detected at one site. Phenols were detected only during the second visit to Site 35, where field analysis resulted in a concentration of 0.1 mg/L.

During round two, surfactant concentrations ranged from 0.25 to 1.5 mg/L. Ammonia was detected between 0.1 and 5.0 mg/L. Chlorine concentrations ranged from a value below the detection limit to 0.4 mg/L. Copper was not detected during this round of sampling. Phenols were only detected during the second visit to Site 13C, at a concentration of 1.0 mg/L.

In 2002, the City conducted one round of field screening at a total of 19 sites. As one of the stations was observed dry, an alternate site (Site 14) was selected for monitoring with this site having measurable flow. Ammonia concentrations of 1.0 mg/L or higher were found at five of the sites, with the highest concentration reaching 8.0 mg/L at Site 4A. The ammonia concentration at Site 4A dropped to 0.4 upon a follow-up visit. Nitrate concentrations at all the sites were found below 5.0 mg/L NO_3-N, with two sites having concentrations below the detection limit. Orthophosphate-P concentrations generally were measured below 1.0 mg/L PO_4-P, but Site 40 had an orthophosphate-P concentration reaching 7.83 mg/L. Upon a return visit to Site 40, the orthophosphate-P concentration had dropped to 0.82 mg/L. Surfactant concentrations exceeded 1.0 mg/L at three of the sites. The maximum surfactant concentration was recorded greater than 24 mg/L at Site 40, but dropped to 0.75 mg/L on a return visit. Laboratory analysis for surfactants detected contamination at one site (Site 4A) with a concentration of 4.8 mg/L. Oil and grease were detected at three of the sites, with the maximum concentration reaching 8.0 mg/L. Laboratory results for dissolved metals and pesticides found all concentrations below the method detection limit.

In 2003, the City conducted one round of field screening at a total of 18 sites. Alternate Site 14 was substituted for primary Site 61, which was dry. 16 sites had measurable flowing water; the flow rate ranged from 1.0 gallons per minute (gpm) to 118.5 gpm. Two of the sites had ponded water. An ammonia concentration of 1.0 mg/L or higher was found at three sites. There were no sites with nitrate concentrations at or above the action level of 10 mg/L. An orthophosphate-P concentration exceeding the action level of 2.0 mg/L was found at one site, while the rest of the sites had detectable orthophosphate-P concentrations at low levels. A surfactant concentration of 1.0 mg/L was measured at one of the sites. Laboratory analyses were conducted at five sites and indicated bacterial contamination at three sites. The organophosphate pesticide diazinon was detected at one of the sites but was below the action level of 0.5 micrograms per liter (µg/L). Chlorpyrifos was not detected at any of the sites. Surfactants were detected at one site, but the concentration was below the action level of 1.0 mg/L. None of the laboratory samples had detectable amounts of dissolved metals, oil, or grease.

In 2004, the City conducted one round of field screening at the 18 primary monitoring stations, all of which had ponded or flowing water. Ammonia was detected above the action level at two sites, which were found to have the common upstream source of an illicit sewage connection. No sites were found to have orthophosphate-P or surfactant concentrations above the respective action levels. Laboratory analyses were again conducted for five sites and, as in 2003, three sites were found to have bacterial indicators in excess of established action levels. No other constituents assessed by laboratory analysis were found to be in excess of established action levels.

In 2005, the City again conducted one round of field screening at all 18 primary monitoring stations. All of the visited sites had either flowing or ponded water. Surfactants were detected above the action level at one site during the first visit, but had fallen below the action level by the time of a follow-up visit the next day. Ammonia action level exceedances were detected at two sites. For one site, the ammonia level dropped below the action level by the following day. For the other site, located in Grossmont Shopping Center, the ammonia concentration had dropped significantly by the time of a follow-up visit but remained above the action level. Three of the five sites receiving laboratory analysis had bacterial indicators exceeding action levels; no other constituents tested for in the lab were above set action levels.

In 2006, the City conducted one round of field screening at all 18 primary monitoring stations. All of the visited sites had either flowing or ponded water. Surfactants were detected above the action level at one site during the first visit, but had fallen below the action level by the time

of a follow-up visit the next day. Ammonia action level exceedances were detected at three, although the concentrations at all three sites fell below the action level by the time of the follow-up visits. Two of these sites had had elevated ammonia concentrations in previous years. As in previous years, there were no sites with nitrate concentrations at or above the action level. Furthermore, there were no sites that exceeded the action level for orthophosphate-P concentrations. Four of the five sites receiving laboratory analysis had bacterial indicators exceeding action levels. No other constituents tested in the lab were above set action levels.

1.6 Report Outline

Section 1, Introduction, includes regulatory background, the City of La Mesa hydrologic setting, previous monitoring results, and a report outline.

Section 2, Sampling Locations, describes the field screening sampling locations and the criteria used to select sampling locations.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and results of the field screening analyses.

Section 5, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 6, Data Analysis, provides an analysis and description of each site with evidence of physical, chemical or biological pollution.

Section 7, Upstream Investigations, includes follow-up investigations of sites with recurring evidence of physical, chemical or biological pollution.

Section 8, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Photographs of the investigated sites

Appendix B Laboratory analytical reports

Appendix C Copies of the original field data sheets

Attachment 1 Historical Data Graphs: San Diego River Watershed

Attachment 2 Historical Data Graphs: San Diego Bay Watershed

Site No.	1	2	3	4	4A	5	6	7	7A	8	9	10	10A	11	12	12A	13	13A	13B	13C	14	15	16	17	18	19	20	21	22	23	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1993																																														
Ammonia mg/l	1.4	1.4	4.5	2.2		1.3	1.4	1.1		0.7	0.7	0.5		1.1	2.2		0.8				2.1	1.0																								
Chlorine mg/l	0.6	0.4	1.3	0.7		0.9	1.0	1.1		0.6	0.5	0.9		0.4	0.6		0.6				0.7	0.4																								
Copper mg/l	1.0	1.4	1.6	1.5		1.0	0.6	2.5		2.2	2.5	1.8		1.1	0.7		2.1				2.2	2.8																								
Surfactants mg/l	1.0	1.0	6.0	0.5		0.5	0.3	0.5		0.3	3.0	0.5		1.0	0.5		0.5				0.8	0.5																								
Phenols mg/l	0.6	0.1	0.7	0.4		0.04	2.8	2.3		3.3	3.0	0.5		1.0	0.5		0.5				0.8	0.5																								
1994																																														
Ammonia mg/l			1.7	2.1				1.7	na	3.4	0.3						na				0.9		0.5	2.0	1.8	na	na	nd	na	2.0																
Chlorine mg/l			0.2	0.3				0.5	na	0.2	0.3						na				0.1		0.3	0.7	0.2	na	na	0.0	na	0.2																
Copper mg/l			1.1	0.0				0.3	na	0.5	0.0						na				3.0		1.4	0.2	nd	na	na	nd	na	0.2																
Surfactants mg/l			0.5	0.5				0.8	na	0.5	0.4						na				0.4		0.4	0.6	0.3	na	na	0.3	na	0.3																
Phenols mg/l			0.2	0.1				4.9	na	1.7	0.04						na				0.1		nd	0.5	0.1	na	na	nd	na	nd																
1995																																														
Ammonia mg/l			0.2	na											0.7						0.1				0.3			0.3			0.1	0.4	0.0	7.6	na	0.1	0.2									
Chlorine mg/l			0.2	na											nd						0.4				0.1			0.3			0.3	0.4	0.4	0.3	na	0.1	0.2									
Copper mg/l			nd	na											nd						nd				nd			nd			nd	nd	nd	nd	na	nd	nd									
Surfactants mg/l			1.0	na											0.5						0.5				0.5			0.3			0.8	0.5	0.3	7.5	na	0.5	0.5									
Phenols mg/l			nd	na											nd						nd				nd			nd			nd	nd	nd	nd	na	nd	nd									
1996																																														
Ammonia mg/l			0.7		0.2				na	0.6			0.4		1.5	1.0		0.4	0.1		0.5		na						na					0.1				0.2	0.9							
Chlorine mg/l			0.1		0.4				na	0.2			0.1		nd	nd		0.1	0.3		0.3		na						na					0.1				0.3	0.4							
Copper mg/l			nd		0.1				na	nd			nd		0.1	0.1		0.1	nd		nd		na						na					nd				nd	0.3							
Surfactants mg/l			0.5		0.4				na	0.5			0.5		0.5	>3.0		0.3	0.6		0.8		na						na					0.3				0.4	0.3							
Phenols mg/l			0.1		0.1				na	0.3			0.1		0.1	0.1		0.1	0.1		0.1		na						na					0.1				0.1	0.1							
1997																																														
Ammonia mg/l			0.6												0.6	0.8			0.9	0.6	0.8																		0.5	>10	na	na	na	1.0		
Chlorine mg/l			0.1												nd	0.4			0.9	0.3	0.5																		0.3	0.3	na	na	na	0.9		
Copper mg/l			nd												0.1	0.1			nd	nd	nd																		0.1	nd	na	na	na	nd		
Surfactants mg/l			0.3												1.0	0.3			>3.0	0.4	0.5																		1.0	0.3	na	na	na	0.4		
Phenols mg/l			nd												nd	nd			nd	nd	0.3																		nd	nd	na	na	na	nd		
1998																																														
Ammonia mg/l			0.3		0.3										9.5	0.3			0.2	0.2	0.3													0.1					0.6	0.4	na	na	na	4.0		
Chlorine mg/l			nd		nd										nd	nd			0.2	0.1	nd													0.1					0.1	0.2	na	na	na	nd		
Copper mg/l			nd		nd										nd	nd			nd	nd	nd													nd					nd	0.4	na	na	na	nd		
Surfactants mg/l			0.4		0.3										0.8	0.8			0.3	0.6	0.5													0.3					0.5	0.3	na	na	na	0.5		
Phenols mg/l			nd		nd										nd	nd			nd	nd	nd													nd					nd	nd	na	na	na	nd		

nd = not detected
na = not applicable

Site No.	1	2	3	4	4A	5	6	7	7A	8	9	10	10A	11	12	12A	13	13A	13B	13C	14	15	16	17	18	19	20	21	22	23	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1999, Round One																																														
Ammonia mg/l			0.5		0.2										0.6	0.4			0.4	0.2	0.3													0.2					0.5	na	na	na	na	7.0		
Chlorine mg/l			nd		0.1										nd	0.1			0.1	0.2	0.1													0.3					0.1	na	na	na	na	nd		
Copper mg/l			0.2		0.1										0.2	nd			0.1	0.1	0.1													0.1					0.2	na	na	na	na	0.2		
Surfactants mg/l			0.3		0.3										0.3	0.5			0.3	0.8	0.3													0.3					0.3	na	na	na	na	0.5		
Phenols mg/l			0.2		nd										0.1	nd			nd	0.1	0.1													nd					nd	na	na	na	na	0.1		
1999, Round Two																																														
Ammonia mg/l			0.4		30.0										1.5	0.2			0.5	0.6	0.2													0.5					0.6	0.2	na	na	na	4.0		
Chlorine mg/l			0.1		nd										0.2	0.2			0.1	0.1	<0.1													0.3					0.5	0.1	na	na	na	nd		
Copper mg/l			nd		0.1										0.2	nd			0.1	0.1	0.1													0.1					0.3	0.6	na	na	na	0.1		
Surfactants mg/l			0.8		>3.0										2.0	0.3			0.3	0.3	0.3													2.0					0.5	0.3	na	na	na	1.8		
Phenols mg/l			nd		0.1										nd	nd			0.1	0.1	nd													0.1					nd	nd	na	na	na	0.1		
2000, Round One																																														
Ammonia mg/l					6.0										0.8	0.4			0.2	0.4	0.8													0.2					0.8	0.2	na	na	na	8.0	5.0	na
Chlorine mg/l					nd										nd	nd			nd	nd	nd													nd					nd	nd	na	na	na	0.1	nd	na

TABLE 1-2 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Copper mg/l	nd	nd	nd	nd	nd	nd	nd	nd	0.2	na	na	na	nd	nd	na
Surfactants mg/l	0.8	0.5	0.3	0.3	0.5	0.3	0.3	0.3	0.3	na	na	na	0.5	0.3	na
Phenols mg/l	nd	nd	nd	nd	nd	nd	nd	nd	0.1	na	na	na	nd	nd	na
2000, Round Two															
Ammonia mg/l	0.1	0.6	0.3	0.2	0.3	0.2	0.2	1.0	1.0	Dry	Dry	Dry	4.0	5.0	Dry
Copper mg/l	nd	nd	nd	nd	nd	nd	nd	0.1	0.4	Dry	Dry	Dry	nd	nd	Dry
Chlorine mg/l	nd	nd	nd	nd	0.1	nd	0.1	nd	0.6	Dry	Dry	Dry	nd	nd	Dry
Surfactants mg/l	0.3	0.5	0.5	0.25	0.5	0.5	0.3	0.3	0.3	Dry	Dry	Dry	0.5	0.8	Dry
Phenols mg/l	nd	nd	nd	nd	nd	nd	0.1	nd	nd	Dry	Dry	Dry	nd	nd	Dry
2001															
Ammonia mg/l	6.0	0.8	0.4	0.2	0.4	0.8	0.2	0.8	0.2	na	na	na	8.0	5.0	na
Chlorine mg/l	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na	na	0.1	nd	na
Copper mg/l	nd	nd	nd	nd	nd	nd	nd	nd	0.2	na	na	na	nd	nd	na
Surfactants mg/l	0.75	0.5	0.25	0.25	0.5	0.25	0.25	0.25	0.25	na	na	na	0.5	0.25	na
Phenols mg/l	nd	nd	nd	nd	nd	nd	nd	nd	0.1	na	na	na	nd	nd	na

nd = not detected
na = not applicable

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	61	64
2002																			
Temp. ℃	22	20	19	21	22	20	21	19	20	19	22	22	20	23	23	21	19	Dry	26
pH	7.9	6.9	7.5	7.4	7.6	7.5	7.8	6.9	7.8	7.4	7.3	7.4	6.8	7.9	8.1	7.4	7.5	Dry	8.9
Turbidity,NTU	8.35	36	19.1	5.35	4.48	15.51	2.66	5.23	11.32	23.29	463	6.18	35.08	7.4	11.49	19.87	12.05	Dry	6.7
Conductivity,µmhos/cm	2710	2810	2850	3910	3730	4710	4100	1938	1906	2530	2350	5010	1394	3180	3500	2420	1594	Dry	1403
Surfactants mg/l	4.0	0.25	0.25	0.5	0.37	0.25	0.37	0.25	0.25	0.25	24	0.5	1.5	0.25	0.5	0.25	0.75	Dry	0.5
Ammonia,mg/l	**8.0**	**1.0**	0.4	0.4	0.3	0.5	0.2	0.4	0.2	**1.0**	0.2	0.2	1.0	0.2	0.6	0.6	0.4	Dry	**1**
Nitrate,mg/l	1.5	1.0	5.0	2.5	2.5	3.0	1.0	5.0	4.0	1.0	0.2	5.0	nd	0.3	0.2	0.2	0.8	Dry	nd
Orthophosphate-P, mg/L	0.65	0.65	0.13	0.26	0.20	0.49	0.13	0.26	0.10	0.26	**7.83**	0.65	0.82	nd	0.13	0.33	0.49	Dry	0.16
Surfactants,mg/l	**4.8**	nd		0.6		nd													nd
Oil and Grease, mg/l	8.0	1.0		nd		1.0													nd
Total Hardness,mg/l	608	614		864		1060													331
Cadmium,mg/l	nd	nd		nd		nd													nd
Copper, mg/l	nd	nd		nd		nd													nd
Lead, mg/l	nd	nd		nd		nd													nd
Zinc, mg/l	nd	nd		nd		nd													nd

TABLE 1-2 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Diazinon, µg/L	nd	nd		nd		nd													nd
Chlorpyrifos, µg/L	nd	nd		nd		nd													nd
Total Coliform, MPN/100ml	> 1,600	> 1,600		> 1,600		> 1,600													>1600
Fecal Coliform, MPN/100ml	> 1,600	> 1,600		> 1,600		500													>1600
Enterococcus, MPN/100ml	500	500		> 1,600		240													>1600
2003																			
Temp. ℃	23	23	21.5	25	23	22.5	26	23.5	29	23	27	25	31	24.5	20	23	28	NA	33
pH	8.3	7.9	8.2	7.8	8.4	8.5	8.2	8.1	8.4	8.2	8.5	8.4	7.8	8.2	8.3	8.2	8.2	NA	8.8
Turbidity,NTU	2.57	15.00	11.81	3.73	2.76	1.05	1.23	11.53	1.33	24.46	66.0	0.54	64.0	4.34	10.54	17.17	2.32	NA	29.04
Conductivity,µmhos/cm	2550	2690	2730	2760	3270	4180	3090	2360	1310	2280	2760	7030	1290	620	1690	2680	2290	NA	3040
Surfactants mg/l, field screening	0.25	0.63	0.50	0.25	0.25	0.38	0.25	0.50	nd	0.50	**1.0**	0.38	0.25	0.13	0.13	0.25	0.25	NA	0.5
Ammonia,mg/l	0.3	0.6	0.3	0.1	0.2	0.2	0.2	0.8	0.2	**12.0**	**10.0**	0.3	0.8	0.3	0.3	0.6	0.4	NA	**5**
Nitrate,mg/l	1.0	4.5	6.4	3.0	3.0	2.5	0.6	6.4	2.4	0.3	0.3	4.8	0.1	0.6	0.1	1.0	0.2	NA	nd
Orthophosphate-P, mg/L	0.20	1.30	0.10	0.13	0.13	0.13	0.20	1.63	0.07	**3.26**	1.63	0.33	0.65	0.07	0.49	0.07	0.26	NA	0.49
Surfactants,mg/l	nd		nd				nd			0.5					nd				
Oil and Grease, mg/l	nd		nd				nd			nd					nd				
Total Hardness,mg/l	545		647				616			387					460				
Cadmium,mg/l	nd		nd				nd			nd					nd				
Copper, mg/l	nd		nd				nd			nd					nd				
Lead, mg/l	nd		nd				nd			nd					nd				
Zinc, mg/l	nd		nd				nd			nd					nd				
Diazinon, µg/L	0.05		nd				nd			nd					nd				
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd				
Total Coliform, MPN/100ml	**90,000**	-	**90,000**	-		-	5,000	-		**160,000**					1,700				
Fecal Coliform, MPN/100ml	**50,000**	-	**24,000**	-			2,300			**90,000**					1,300				
Enterococcus, MPN/100ml	800		300	-			80			**13,000**					800				

NTU = Nephelometric Turbidity Units
µmhos/cm = micromhos per centimeter
MPN/100mL = most probable number (of colony forming units) per 100 milliliters
nd = not detected
na = not applicable
Red values were at or above the measured constituent's action level

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	61	64
2004																			
Temp. ℃	25	23	24	27	25		24	26	23	23	26	26	26	27	25	26	29	20	31
pH	8.4	7	7.6	7.8	7.9		7.8	7.8	7.9	7.5	7.3	7.8	8.1	8.2	8.3	7.5	7.4	7.7	8.5
Turbidity,NTU	2.71	12.5	14.01	2.18	3.9		0.82	15.29	3.02	26.98	48.15	2.95	4.85	7.75	4.29	19.67	0.45	20.94	7.52
Conductivity,µmhos/cm	2230	2350	2630	3180	2880		3120	2400	1880	2280	2070	5470	980	2900	1830	2300	2070	1000	1080
Ammonia,mg/l	0.1	0.7	0.3	0.2	0.2		0.1	0.8	0.4	**1.5**	**5**	0.1	0.2	0.2	0.4	0.4	0.8	0.6	0.3
Nitrate,mg/l	3.75	6.25	6.25	6.25	3.75		5	6.25	1.25	3.8	1.25	6.25	1.25	1.25	1.25	2.5	1.25	1.25	nd
Orthophosphate-P, mg/L	0.23	0.26	0.1	0.26	0.2		0.33	0.33	0.33	0.65	0.98	1.3	0.98	0.1	0.98	0.07	0.82	0.1	0.65
Surfactants mg/l, field screening	0.5	0.38	0.5	0.75	0.5		0.25	0.25	0.25	0.63	0.63	0.75	0.75	0.25	0.25	0.25	0.38	0.63	0.5
Surfactants,mg/l	nd		nd				nd			nd					nd				
Oil and Grease, mg/l	2		2				nd			nd					nd				
Total Hardness,mg/l	522		687				676			392					504				
Cadmium,mg/l	nd		nd				nd			nd					nd				
Copper, mg/l	0.005		nd				nd			nd					nd				
Lead, mg/l	nd		nd				nd			nd					nd				
Zinc, mg/l	nd		nd				0.029			nd					nd				

TABLE 1-2 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Diazinon, µg/L	nd		nd			nd			nd					0.052				
Chlorpyrifos, µg/L	nd		nd			nd			nd					nd				
Total Coliform, MPN/100ml	**80000**		**80000**			8000			**1600000**					9000				
Fecal Coliform, MPN/100ml	1400		700			220			**160000**					nd				
Enterococcus, MPN/100ml	1300		3000			1700			**30000**					3000				
2005																		
Temp. ℃	20.3	22.0	20.5	24.2	22.8	21.1	21.1	22.9	21.2	22.1	23.6	25.7	21.2	19.2	21.4	26.1	19.9	25.7
pH	8.1	6.8	7.4	7.5	7.8	7.6	7.5	7.6	7.4	7.2	7.6	7.2	8.0	7.6	7.2	8.4	7.4	8.8
Turbidity,NTU	10.71	22.94	7.86	15.14	17.87	0.52	6.49	15.81	9.02	14.74	1.01	15.43	1.70	1.18	17.57	0.32	4.78	2.35
Conductivity,µmhos/cm	1891	1670	1740	1590	2830	2200	1457	1039	990	977	2110	3050	2690	1736	2010	1980	900	930
Surfactants mg/l, field screening	0.75	0.50	0.50	0.38	0.38	0.50	0.50	0.13	0.50	0.25	0.50	**1.00**	**1.25**	**1.25**	0.25	0.25	0.88	0.50
Ammonia,mg/l	**1.0**	0.7	0.8	0.3	0.2	0.2	0.4	**10.0**	0.3	0.8	0.2	0.7	0.1	0.3	0.6	0.2	0.4	0.4
Nitrate,mg/l	2.50	5.00	7.50	5.00	3.75	3.75	6.25	1.25	1.25	1.25	3.75	1.25	0.25	0.25	1.25	2.50	1.25	1.25
Orthophosphate-P, mg/L	0.33	0.26	0.10	1.63	0.20	0.20	0.26	2.12	0.10	0.13	0.33	0.49	0.13	0.26	0.07	0.20	0.10	0.49
Surfactants,mg/l	nd		nd			nd			nd					nd				
Oil and Grease, mg/l	nd		nd			nd			nd					nd				
Total Hardness,mg/l	791		794			871			461					521				
Cadmium,mg/l	nd		nd			nd			nd					nd				
Copper, mg/l	nd		nd			nd			nd					nd				
Lead, mg/l	nd		nd			nd			nd					nd				
Zinc, mg/l	nd		nd			0.026			0.027					nd				
Diazinon, µg/L	nd		nd			nd			nd					0.11				
Chlorpyrifos, µg/L	nd		nd			nd			nd					nd				
Total Coliform, MPN/100ml	**240,000**		**130,000**			**240,000**			30,000					30,000				
Fecal Coliform, MPN/100ml	**24,000**		230			170			nd					230				
Enterococcus, MPN/100ml	**160,000**		800			80			500					800				

NTU = Nephelometric Turbidity Units
µmhos/cm = micromhos per centimeter
MPN/100mL = most probable number (of colony forming units) per 100 milliliters
nd = not detected
na = not applicable
Red values were at or above the measured constituent's action level

TABLE 1-2 (CONTINUED)
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	61	64
2006																			
Temp. ℃	25.0	23.8	23.4	24.4	24.3		25.5	24.5	25.6	24.4	24.5	25.3	29.7	22.9	27.5	23.7	29.5	24.3	27.0
pH	8.3	6.9	7.7	7.9	7.8		7.8	8.2	6.9	7.7	7.5	7.7	8.4	8.1	7.7	7.4	8.0	7.4	8.9
Turbidity,NTU	1.83	47.13	9.94	2.02	4.43		1.02	10.09	7.77	11.93	22.31	1.64	8.27	4.56	3.51	13.32	2.34	9.37	6.24
Conductivity,µmhos/cm	2.16	1.95	2.31	5.16	2.44		2.51	1.94	2.50	1.55	2.19	5.56	2.40	2.62	1.71	2.33	1.86	2.3	0.90
Surfactants mg/l, field screening	0.25	0.25	0.50	0.25	0.50		0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.25	0.25	0.50	0.25	0.25	**1.5**
Ammonia,mg/l	0.3	0.6	0.2	0.6	0.1		0.1	0.3	**1.50**	0.2	1.0	0.2	0.4	0.2	0.8	0.8	0.4	**2.5**	0.8
Nitrate,mg/l	3.75	3.75	5.00	6.25	3.75		5.00	5.00	2.50	2.50	2.50	7.50	3.75	1.25	2.50	2.50	2.50	3.75	2.50
Orthophosphate-P, mg/L	0.10	0.26	0.10	0.26	0.33		0.07	0.20	0.07	0.07	0.20	0.26	0.33	0.10	0.26	0.10	0.07	1.14	0.49
Surfactants,mg/l	nd		nd				nd			nd					nd				
Oil and Grease, mg/l	nd		nd				nd			nd					nd				
Total Hardness,mg/l	524		686				508			434					438				
Cadmium,mg/l	nd		nd				nd			nd					nd				
Copper, mg/l	0.008		nd				nd			0.005					nd				
Lead, mg/l	nd		nd				nd			nd					nd				
Zinc, mg/l	0.028		nd				nd			0.028					nd				
Diazinon, µg/L	nd		nd				nd			nd					nd				
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd				
Total Coliform, MPN/100ml	**130,000**		**50,000**				**80,000**			23,000					**240,000**				
Fecal Coliform, MPN/100ml	5,000		**30,000**				3,000			220					20				
Enterococcus, MPN/100ml	5000		500				80			40					900				

NTU = Nephelometric Turbidity Units
µmhos/cm = micromhos per centimeter
MPN/100mL = most probable number (of colony forming units) per 100 milliliters
nd = not detected
na = not applicable
Red values were at or above the measured constituent's action level

2 SAMPLING LOCATIONS

The City of La Mesa prepared a Jurisdictional Urban Runoff Management Program (JURMP) in 2002. Table 8-1 in Section 8 of the JURMP identifies 18 primary monitoring stations where data will be collected during the Dry Weather Monitoring Program. Table 8-2 of the JURMP lists nine alternate stations to be monitored if any of the primary stations do not have flowing or ponded water. Sampling sites are located in hydrologic unit (HU) 907, HU 908, and HU 909.

During the 2007 Dry Weather Monitoring Program, all 18 primary sampling locations were visited, and 17 of them had flowing or ponded water. Site 61 at Center Drive, Commercial Street, west of Industrial Lane, in front of City Public Work was dry, and thus Site 60 at Jackson Drive, north of Fletcher Parkway, across from Mesa Ridge Apartments was selected as an alternate location for monitoring.

Table 2-1 provides the site number, location, conveyance configuration, primary and secondary land uses, hydrologic unit, and Global Positioning System (GPS) coordinates of the sampling locations that were visited. Figure 1 displays the sampling locations on a map of the City that also shows storm drain lines, roads, and drainage basin boundaries. Photographs of all the sampling locations are included as Appendix A. Laboratory analytical reports are included in Appendix B, and Appendix C contains the field data sheets for each site visit. A map of the watersheds in and around the City of La Mesa is included as Figure 2.

TABLE 2-1
2007 DRY WEATHER MONITORING STATIONS

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
4A	Alvarado channel, intersection of Fletcher Parkway and Baltimore Drive	Concrete Channel	Commercial	Commercial	907	32.77364	-117.02771
12	Jackson Drive, 100 feet west of Murray Drive, north side of street	Manhole	Commercial	Commercial	907	32.77641	-117.01414
12A	Jackson Drive, 100 feet west of Murray Drive, south side of street	Manhole	Commercial	Residential	907	32.77611	-117.01453
13B	Southwest corner of Lowell Street and University Avenue	Manhole	Commercial	Residential	908	32.75688	-117.03738
13C	Intersection of University Avenue and Parks Avenue	Manhole	Commercial	Residential	908	32.76004	-117.03346
14A	Across from 7105 – 7033 Boulevard Drive between Harbinson Avenue and Massachusetts Avenue	Outlet	Commercial	Residential	908	32.75438	-117.04535
34	Grossmont Shopping Center, in front of Sports Authority	Manhole	Commercial	Commercial	907	32.77694	-117.01077
35	Inside Grossmont Shopping Center, in front of Bath and Body Works	Manhole	Commercial	Commercial	907	32.77841	-117.01070
39	Grossmont Shopping Center parking lot between Staples & Mattress Discounters	Manhole	Commercial	Commercial	907	32.77733	-117.00713
40	N.E. corner of Grossmont Center Drive and Murray Drive, south of Trader Joe's parking lot	Manhole	Commercial	Commercial	907	32.77848	-117.00639
50	Harbinson Avenue and University Avenue intersection, west sidewalk, east of CB Hair and Nails	Manhole	Residential	Commercial	908	32.75516	-117.04584
52	Massachusetts Avenue, Waite Drive, south end of Harris Street	Outlet	Residential	Residential	908	32.74514	-117.03931
55	Bancroft Drive, east of residential address 9132 Madison Avenue	Natural Creek	Residential	Residential	909	32.76970	-117.00019

TABLE 2-1 (CONTINUED)
2007 DRY WEATHER MONITORING STATIONS

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
57	Amaya Drive, east of Severin Drive, across from Howell Drive	Earthen Channel	Residential	Residential	907	32.78532	-116.99744
58	Northeast corner of Amaya Drive. Amaya Court intersection	Manhole	Residential	Residential	907	32.78625	-117.00143
59	Southeast corner of Parkway Drive and Amarillo Avenue intersection	Natural Creek	Residential	Residential	907	32.78180	-117.01328
60*	Jackson Drive, north of Fletcher Parkway, across from Mesa Ridge Apartments	Manhole	Residential	Commercial	907	32.78079	-117.01904
61	Center Drive, Commercial Street, west of Industrial Lane in front of City Public Works	Catch Basin	Commercial	Industrial	907	32.77259	-117.02238
64	North side of Seton Hall Street, between Swarthmore Street and Wheaton Street	Concrete Channel	Residential	Residential	907	32.77651	-117.03462

Note
* Alternate Site 60 was substituted for dry primary monitoring Site 61.

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consisted of qualitative field observations, flow measurement, and field analyses of selected water quality parameters. Information relating to weather conditions, the amount of time since last rainfall, and the type of storm water conveyance was recorded. Specific observations and results of the field water quality analyses were recorded on the field data sheets, which are included as Appendix C. The data sheets also serve as a record of the field visit and were completed for every site visit regardless of whether or not samples were collected.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Qualitative field observations were made during each site visit whether or not ponded or flowing water was observed. These observations are intended to provide a general assessment of the site and include variables like odor, water clarity, the presence of floatables, visible deposits, stains and biological status. Evidence of present or past illicit connections and illegal discharges to the storm drain system may be ascertained by careful field observations. Each field screening location was photographed to provide additional information and documentation of site conditions. Photos are included in Appendix A.

Flow Measurement

Flow measurements can be used to estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative of an illegal release upstream. Various field methods can be used to estimate the discharge rate. These include measuring the velocity, depth, and width of the flowing water, or recording the amount of time required to fill a bottle of known volume with sample water.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Surfactants, measured as methylene blue active substances (MBAS)*
- Nitrate-N
- Ammonia-N
- Orthophosphate Phosphorus (Orthophosphorus- P)

* Surfactants are also referred to as detergents, specifically with respect to discussion of field test kit results. Due to the importance of surfactants, the City conducted analyses for this parameter in both the field and laboratory.

The methods that were used to perform the above field analyses along with the detection limit, range, and accuracy, are listed in Table 3-1.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01 mS/cm	0 – 20 mS/cm	± 2% of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.1°C	0.0°C – 60.0°C	± 0.5°C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703-11 Portable Turbidity Meter***	0.01 NTU	0.01 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.0 mg/L – 3.0 mg/L*	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[3]***	2.26 mg/L**	2.26 mg/L –13.6 mg/L**	± 30%
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate***	0.10 mg/L**	0.10 mg/L – 3.00 mg/L**	Varies with measured concetration[4,5]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[6]***	0.25 mg/L**	0.25 mg/L – 2.61 mg/L**	Varies with measured concetration[4,5]

Notes:

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The detection limit for nitrate is 10.0 mg/L; however, the detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The detection limit for orthophosphate is 0.75 mg/L; however, the detection limit for orthophosphate phosphorus is lowered due to the conversion.

*Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Reporting limit, range, and accuracy information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

3.2 Laboratory Analytical Methods

In accordance with Order 2001-01 requirements, water samples were collected at five sites (greater than 25 percent of the sites) where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc., a California Department of Health Services certified laboratory, for analysis of the following constituents:

- Total hardness
- Surfactants, measured as MBAS
- Oil and grease
- Diazinon
- Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus*

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Detection Limit	Maximum Holding Time**
Surfactants, measured as MBAS	SM 5540 C	0.5 mg/L	48 hours
Oil and Grease	USEPA 1664	5 mg/L	28 days
Total Hardness	USEPA 200.7	10 mg/L	14 days
Cadmium	USEPA 6010, 6020, 200.8	0.005 mg/L	6 months
Copper	USEPA 6010, 6020, 200.8	0.005 mg/L	6 months
Lead	USEPA 6010, 6020, 200.8	0.005 mg/L	6 months
Zinc	USEPA 6010, 6020, 200.8	0.020 mg/L	6 months
Diazinon	USEPA 8141A	0.05 µg/L	7 days
Chlorpyrifos	USEPA 8141A	0.05 µg/L	7 days
Total Coliforms	SM 9221	20* – 1,600,000 MPN/100 mL	6 hours
Fecal Coliforms	SM 9221	20* – 160,000 MPN/100 mL	6 hours
Enterococci	SM 9230	20* – 160,000 MPN/100 mL	6 hours

Notes:

*For D-Max's Dry Weather Monitoring Program, EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100mL). For fecal coliforms and enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.

**Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the QA/QC procedures listed in Section 3.3.2.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project included the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters were calibrated periodically with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube was kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter was calibrated and periodically checked for accuracy using standard solutions. The conductivity meter was checked periodically with standard solutions and calibrated as necessary.

Field sample collection containers were first rinsed with distilled water and then with the sample water before sample collection. Upon completion of sampling at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water.

The accuracy of field analytical techniques was assessed at the beginning of the sampling program by analyzing solutions of known concentrations for ammonia, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration	Field Test Kit Results
6/12/07	Ammonia Nitrogen	1.0 mg/L	1.0 mg/L
6/12/07	Surfactants	1.0 mg/L	1.0 mg/L
6/12/07	Nitrate Nitrogen	10.0 mg/L	10.0 mg/L
6/12/07	Orthophosphate	3.0 mg/L	3.0 mg/L

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis were collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles were obtained from the laboratory and thus did not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples were kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures were followed, and samples were delivered and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain of custody forms are included in Appendix B.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation was necessary, numeric action levels and best professional judgment (described below) were used to interpret the field screening results. If visual and/or analytical evidence of gross contamination was present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation was initiated. For sites that exceeded numeric action levels but were not perceived as an immediate threat to water quality, a re-sampling was conducted within 24 hours. A comprehensive source investigation was conducted thereafter if elevated concentrations persisted.

The results of these investigations are included in Section 7 of this report. Recommendations based on these investigations are included in Section 8.

If elevated levels of pollutants were detected after laboratory analyses, a comprehensive follow-up investigation including re-sampling was conducted. The following three methods were employed to determine whether immediate or comprehensive follow-up investigations were necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels were used as the primary approach for interpreting pH, orthophosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels, which are based on county-wide sampling data and have been used by all Copermittees since the 2003 dry weather season. If pH, orthophosphate-P, nitrate, ammonia, or surfactants were observed above the numeric action level, a follow-up investigation was conducted within 24 hours to investigate the source unless best professional judgment indicated otherwise. If oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, or *Enterococcus* laboratory analytical results exceeded numeric action levels, then source investigations were conducted.

California Toxics Rule

The CTR criterion maximum concentration (CMC) was used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases.

Best Professional Judgment

Best professional judgment was utilized as the primary approach for interpreting turbidity, conductivity, and water temperature. Best professional judgment was also the secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew due to their familiarity with the City of La Mesa Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters. Best professional judgment may indicate that results which either exceed certain action levels or are statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
pH	<6.5 or >9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Turbidity (NTU)[2]	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Temperature (°C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values <0.75 may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Surfactants (mg/L MBAS)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	California Toxics Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)	California Toxics Rule	
Dissolved Lead (µg/L)	California Toxics Rule	
Dissolved Zinc (µg/L)	California Toxics Rule	
Total Coliforms (MPN/100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	20,000	
Enterococci (MPN/100 mL)	10,000	

Notes

[1]The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

[2]Basin Plan = Water Quality Control Plan for the San Diego Basin

WQO = Water Quality Objective

TDS = Total Dissolved Solids

ppb = parts per billion

4 FIELD SCREENING RESULTS

The Dry Weather Monitoring Program commenced on June 12, 2007 and was completed on June 14, 2007. A total of 19 monitoring stations were visited; however, field screening was only conducted at the 18 sites where ponded or flowing water was observed. Since primary sampling Site 61 was observed to be dry, alternate Site 60 was selected as a replacement. In addition, one follow-up visit was performed at a site where one constituent was found to exceed accepted action levels. Completed field data sheets for each site visit are included in Appendix C.

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the Dry Weather Monitoring Program. Weather conditions were recorded at each site, and any evidence of dry weather flows was documented. Visual observations of the sample water, such as odor, color, clarity, floatable materials, vegetation, organisms, and the condition of the sampling location, were also recorded. Observations are summarized below and presented in Table 4-1.

Atmospheric Conditions
Sunny weather was the dominant light condition during field screening.

Odor
None of the visited sites had noticeable odors during field screening.

Color
Water samples collected from most of the sites were colorless, with the exception of five sites that had water with a yellowish hue.

Clarity
The majority of water samples collected from visited sites were clear with negligible suspended particles observed.

Floatable Materials
During routine field screening visits, 10 of the sites that had flowing or ponded water were observed to have small amounts of trash in or around the sampling location. The trash observed included materials such as paper, plastics, Styrofoam, aluminum cans, glass bottles, and shopping carts.

Vegetation
Vegetative growth ranged from no growth to naturally vegetated riparian areas. No growth was observed at 14 sites, which included concrete channels with no soil and manholes or catch basins that received limited sunlight. Five of the 19 visited sites had normal vegetation; that is, vegetation not considered significantly limited by man-made structures (e.g., a manhole which blocks sunlight and access to soil) nor so overgrown that it significantly impaired flow at the site.

Biology
Many of the sites exposed to sunlight had algal growth, which indicates that water flow is consistent at the site. Insects were observed at six sites.

Deposits
Sediment deposition was observed at all the sampling location sites except Site 12A.

TABLE 4-1
SUMMARY OF FIELD OBSERVATIONS

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
4A	6/13/07	9:20	Sunny	None	None	Clear	Trash	Coarse & Fine Particulates	None	Insects, Algae
12	6/14/07	14:30	Sunny	None	None	Clear	None	Fine Particulates	None	None
12A	6/14/07	10:00	Sunny	None	Yellow	Clear	None	None	None	None
13B	6/12/07	11:55	Sunny	None	None	Clear	Trash	Fine Particulates	None	None
13C	6/14/07	9:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
14A	6/14/07	11:00	Sunny	None	None	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae
34	6/14/07	15:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
35	6/13/07	13:45	Sunny	None	None	Clear	None	Fine Particulates	None	Insects
39	6/13/07	11:30	Sunny	None	Yellow	Clear	None	Fine Particulates	None	None
40	6/12/07	14:45	Sunny	None	None	Clear	None	Fine Particulates	None	None
50	6/12/07	11:15	Sunny	None	None	Clear	Trash	Fine Particulates	None	None
52	6/13/07	14:50	Sunny	None	Yellow	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae
55	6/12/07	13:55	Sunny	None	None	Clear	None	Coarse & Fine Particulates	Normal	Algae
57	6/13/07	10:45	Sunny	None	Yellow	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae

TABLE 4-1
SUMMARY OF DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
58	6/13/07	16:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
59	6/12/07	16:15	Sunny	None	None	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae
60	6/14/07	13:30	Sunny	None	None	Clear	Trash	Fine Particulates	None	None
61	6/14/07	13:10	Sunny	ns	ns	ns	Trash	Fine Particulates	None	None
64	6/12/07	10:10	Sunny	None	Yellow	Clear	Trash	Fine Particulates	None	Insects, Algae
64 (follow-up)	6/13/07	8:40	Sunny	None	Yellow	Clear	Trash	Fine Particulates	None	Insects, Algae

Note
ns = not sampled (dry site)

4.2 Field Analytical Results

Field analyses were conducted at all sites with ponded or flowing water. Chemical analyses were conducted using a CHEMetrics field test kits for surfactants and CHEMetrics V-2000 Multi-Analyte LED Photometer and Vacu-vials® for nitrate, ammonia, and ortho-phosphate; pH, specific conductance, and temperature were measured using a Hanna Instruments Portable pH/EC/TDS/Temperature Meter (HI 991301). Turbidity was measured using a Hanna Instruments Turbidity Meter (HI 93203-11). Flow was estimated either visually or, when possible, by measuring the velocity, depth, and width of the flowing water. A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 presents the results of all field analyses conducted at the sampled sites. Graphs of each parameter analyzed and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median
Flow Rate (gpm)	162	<1.0	14.5	4.0
Temperature (° Celsius)	26.4	20.0	23.0	22.8
pH	10.0	7.2	8.2	8.0
Conductivity (mS/cm)	5.3	1.08	2.0	2.19
Turbidity (NTU)	14.63	1.27	5.4	3.74
Ammonia (mg/L NH_3-N)	0.5	0.1	0.2	0.2
Surfactants (mg/L MBAS)	0.75	0.25	0.5	0.5
Nitrate (mg/L NO_3-N)	5.85	0.1	2.1	1.76
Orthophosphate-P (mg/L PO_4-P)	0.52	0.03	0.2	0.23

The **flow rates** at sites with measurable flow ranged from less than 1.0 gpm to 162 gpm, with an average of 14.5 gpm and a median of 4.0 gpm, as shown in Table 4-2. The highest flow rate of 162 gpm was measured at Site 4A.

Water temperature is an important physical parameter and can help interpret the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. Water temperature was measured in the field immediately upon sample collection at each site with ponded or flowing water. During routine visits, temperature readings ranged from 20.0 to 26.4 degrees Celsius (°C), with an average of 23.0°C and a median of 22.8°C. The minimum temperature of 20.0°C was recorded at Site 64 during the second visit to the site. The maximum temperature of 26.4°C was recorded at Site 59. Graph 4-1 presents the results of temperature readings at all sites.

The **pH** is a measure of whether a water body is acidic or basic. This is a critical factor in determining water quality, as the pH of an aquatic system will drive a multitude of chemical reactions, including the availability of nutrients or the solubility of chemical substances. The pH values ranged from 7.2 to 10.0, with an average of 8.2 and median of 8.0. The lowest pH reading of 7.2 was observed at Site 12, while the highest pH of 10.0 was recorded at Site 64. Graph 4-2 presents the results of pH readings at all sites.

Specific Conductance (Conductivity) values indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water or potentially help indicate the presence of dissolved pollutants. Conductivity readings ranged from 1.08 to 5.30 millisiemens per centimeter (mS/cm) during routine field screening, with an average of 2.0 mS/cm and a median of 2.19 mS/cm. The lowest reading of 1.08 mS/cm was recorded at Site 64 during follow-up investigation, while the highest conductivity of 5.30 mS/cm measured during routine field screening at Site 50. Graph 4-3 illustrates the results of conductivity measurements at all sites.

Turbidity indicates the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation (thus reducing photosynthetic capacity), but excessive suspended particles can also absorb heat and elevate water temperatures. Turbidity measurements ranged from 1.27 to 14.63 Nephelometric Turbidity Unit (NTU), with an average of 5.4 NTU and a median of 3.74 NTU. The lowest measurement of 1.27 NTU was documented at Site 14A. The highest turbidity reading of 14.63 NTU was recorded at Site 58. Graph 4-4 presents the results of turbidity measurements at all sites.

Ammonia is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms. Ammonia concentrations measured in the water samples ranged from 0.1 to 0.5 mg/L NH_3-N, with an average of 0.2 mg/L and a median of 0.2 mg/L. The lowest ammonia concentration of 0.1 mg/L was found at sites 55 and 64, while the highest ammonia concentration of 0.5 mg/L was observed at Site 12. Graph 4-5 shows the results of the ammonia analyses at all sampling locations.

Nitrate is a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, which will later cause the suffocation of fish and other aquatic organisms by depleting oxygen from the water during decomposition. During the field analysis, nitrate was measured in mg/L NO_3 and converted into mg/L nitrate-N using a conversion factor of 0.226. This process is explained above in footnote 4 of Table 3-1. Nitrate concentrations measured in the water samples ranged from 0.1 to 5.85 mg/L NO_3-N, with an average of 2.1 mg/L and a median of 1.76 mg/L. Nitrate was measured at the lowest detectable concentration, 0.10 mg/L, at sites 57 and 64. The highest nitrate concentration of 5.85 mg/L was observed at Site 50. Graph 4-6 presents the results of nitrate analyses at all sampling locations.

Orthophosphate Phosphorus (orthophosphate-P) is also a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate, orthophosphate-P pollution can cause nutrient enrichment (eutrophication), stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient in plant growth. During the field analysis, orthophosphate was measured in mg/L PO_4 and

converted into mg/L orthophosphate-P using a conversion factor of 0.326 (See Note 6 to Table 3-1). Orthophosphate-P was found at concentrations ranging from 0.03 to 0.52 mg/L PO_4-P, with an average of 0.2 mg/L and a median of 0.23 mg/L. The lowest orthophosphate-P concentration of 0.03 mg/L was observed at sites 35 and 58. The highest concentration of 0.52 mg/L was found at Site 13B. Graph 4-7 illustrates the results of orthophosphate-P at all sampling locations.

Surfactant concentrations in water samples often indicate illegal discharge from industrial, commercial or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms. During field analysis, surfactant concentrations ranged from 0.25 mg/L to 0.75 mg/L, with an average of 0.5 mg/L and a median of 0.5 mg/L. The lowest concentration of 0.25 mg/L was found at four sites. The highest concentration of 0.75 mg/L was found at Site 13B. Graph 4-8 reflects the results of the surfactants analyses at all sampling locations.

TABLE 4-3
SUMMARY OF FIELD ANALYTICAL RESULTS

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants MBAS mg/L	Ammonia NH_3-N mg/L	Nitrate NO_3-N mg/L	Orthophosphate-P PO_4-P mg/L
4A	6/13/07	9:20	162.0	20.2	8.5	4.05	2.22	0.50	0.2	1.81[1]	0.16[1]
12	6/14/07	14:30	10.0	23.1	7.2	12.51	2.14	0.50	0.5	2.00[1]	0.26
12A	6/14/07	10:00	5.0	20.8	7.7	10.85	2.25	0.50	0.3	3.96	0.13[1]
13B	6/12/07	11:55	10.0	22.2	8.0	2.22	3.94	0.75	0.3	5.49	0.52
13C	6/14/07	9:00	5.0	22.4	8.0	8.07	3.32	0.50	0.2	2.67	0.26
14A	6/14/07	11:00	22.0	23.0	8.3	1.27	2.56	0.38	0.2	3.25	0.13[1]
34	6/14/07	15:00	8.0	22.2	8.0	6.47	2.00	0.38	0.3	3.77	0.36
35	6/13/07	13:45	1.0	25.7	8.7	2.36	1.78	0.25	0.2	1.72[1]	0.03[1]
39	6/13/07	11:30	5.0	22.8	7.9	9.24	1.90	0.62	0.3	0.68[1]	0.20[1]
40	6/12/07	14:45	2.0	25.2	7.6	4.91	1.79	0.38	0.2	0.45[1]	0.33
50	6/12/07	11:15	3.0	22.5	8.0	2.25	5.30	0.50	0.2	5.85	0.34
52	6/13/07	14:50	1.0	24.1	8.3	4.95	3.72	0.50	0.2	2.98	0.49
55	6/12/07	13:55	4.0	22.7	8.2	3.34	2.65	0.25	0.1	0.41[1]	0.11[1]
57	6/13/07	10:45	2.0	21.1	7.7	2.52	2.19	0.38	0.2	0.10[1]	0.33

TABLE 4-3
SUMMARY OF FIELD ANALYTICAL RESULTS (CONTINUED)

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants MBAS mg/L	Ammonia NH_3-N mg/L	Nitrate NO_3-N mg/L	Orthophosphate-P PO_4-P mg/L
58	6/13/07	16:00	3.0	23.1	7.5	14.63	2.14	0.25	0.4	0.23[1]	0.03[1]
59	6/12/07	16:15	3.0	26.4	8.1	1.54	2.00	0.25	0.2	1.63[1]	0.16[1]
60	6/14/07	13:30	<1	23.9	8.0	3.18	2.63	0.63	0.2	0.81[1]	0.29
61	6/14/07	13:10	Dry	ns	ns	ns	ns	ns	ns	ns	ns
64	6/12/07	10:10	<1	26.0	**10.0**	3.43	1.12	0.63	0.1	0.10[1]	0.10[1]
64 (follow-up)	6/13/07	8:40	1.0	20.0	**9.3**	nt	1.08	nt	nt	nt	nt

Note
nd= not detected
ns = not sampled (dry site)
nt = not tested
[1] value reported is below the Practical Detection Limit (PDL)
Red values were at or above the measured constituent's action level

denotes a follow-up visit

denotes a location sampled for laboratory analysis

GRAPH 4-1: Temperature

Action Level is Best Professional Judgment

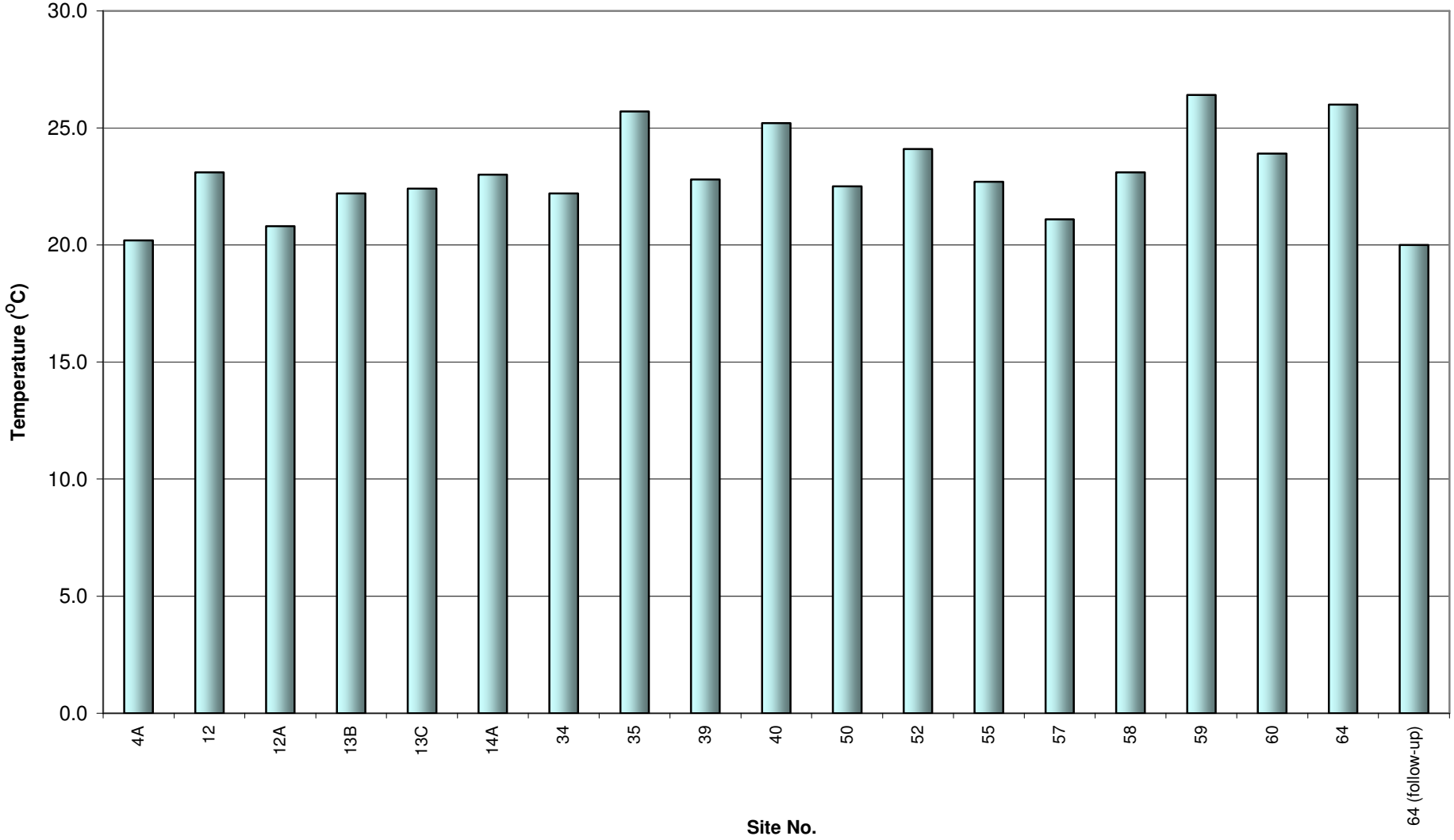

Note: Site 61 is dry in 2007.

GRAPH 4-2: pH

Action Level is > 9.0 or < 6.5

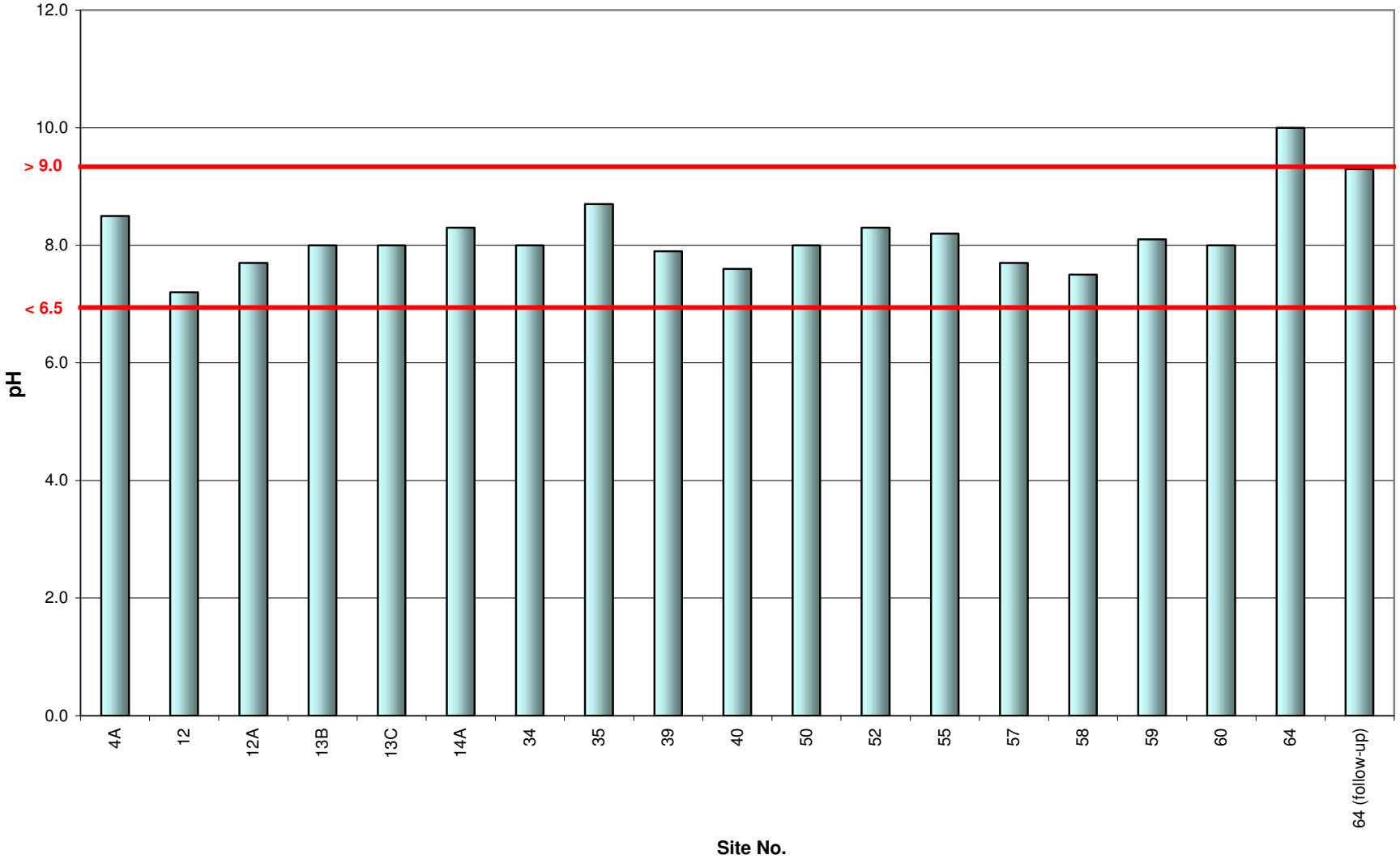

Note: Site 61 is dry in 2007.

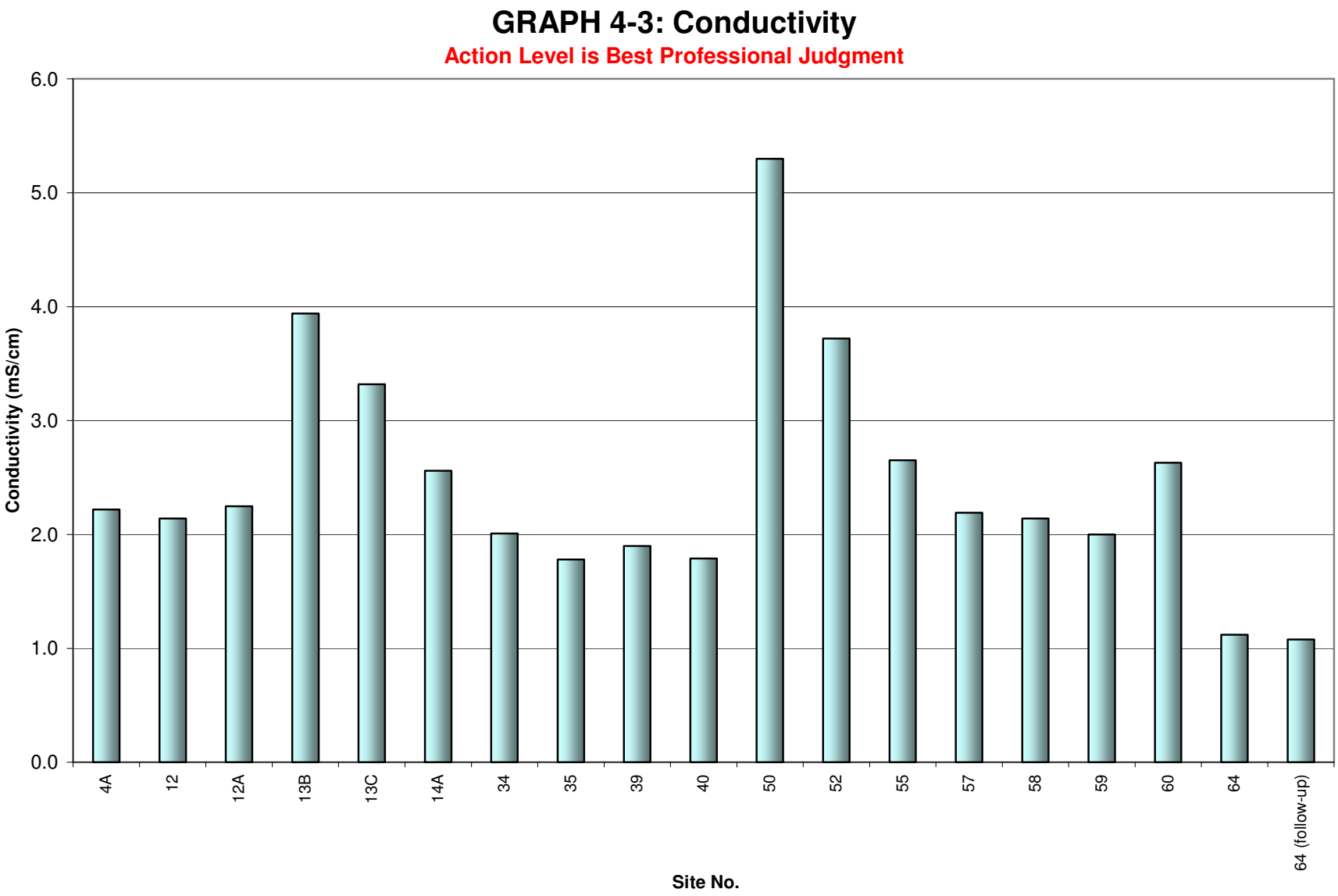

Note: Site 61 is dry in 2007.

GRAPH 4-4: Turbidity

Action Level is Best Professional Judgment

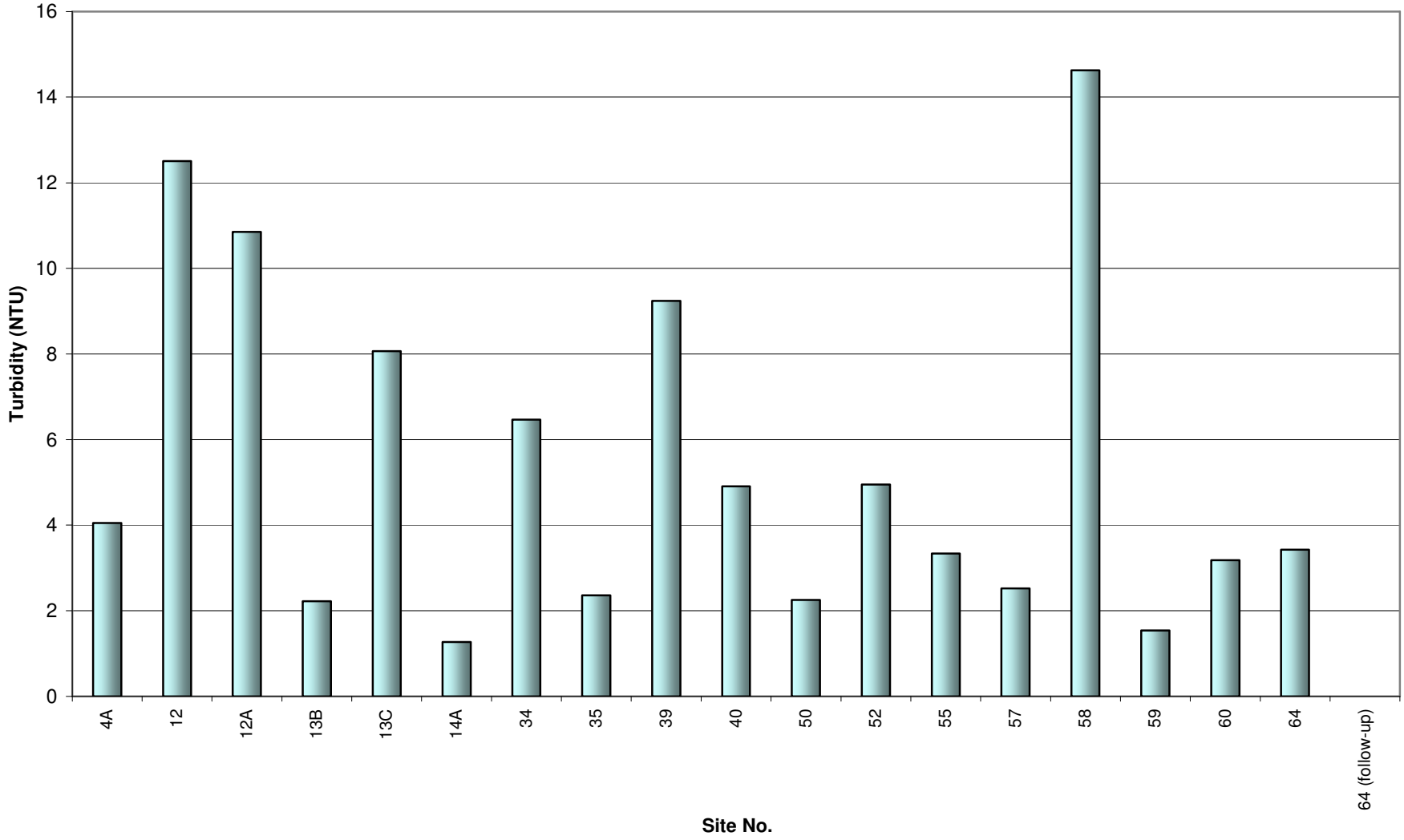

Note: Site 61 is dry in 2007.

GRAPH 4-5: Ammonia (NH_3-N)

Action Level = 1.0 mg/L

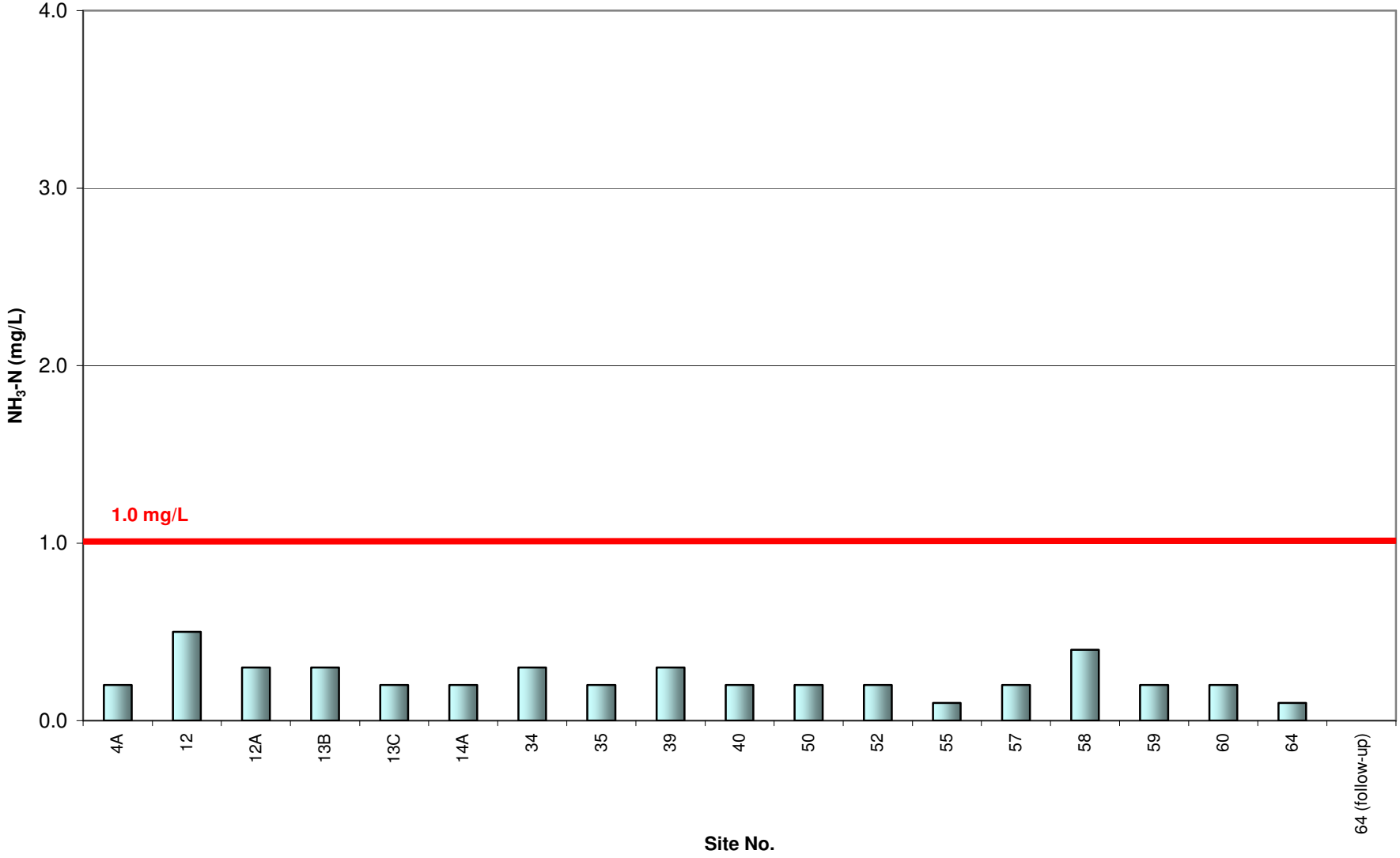

Note: Site 61 is dry in 2007.

GRAPH 4-6: Nitrate (NO_3-N)

Action Level = 10.0 mg/L

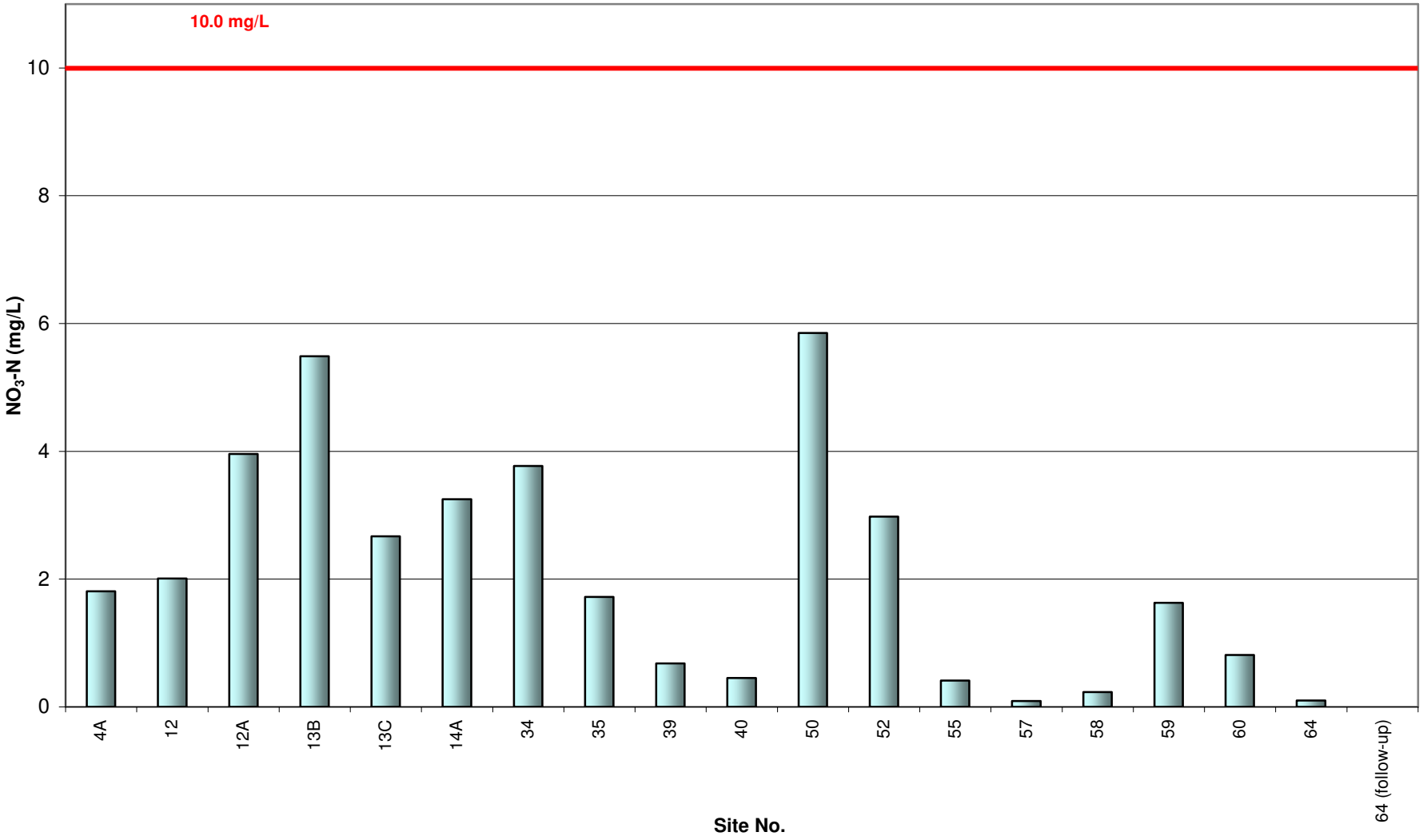

Note: Site 61 is dry in 2007.

GRAPH 4-6: Nitrate (NO_3-N)

Action Level = 10.0 mg/L

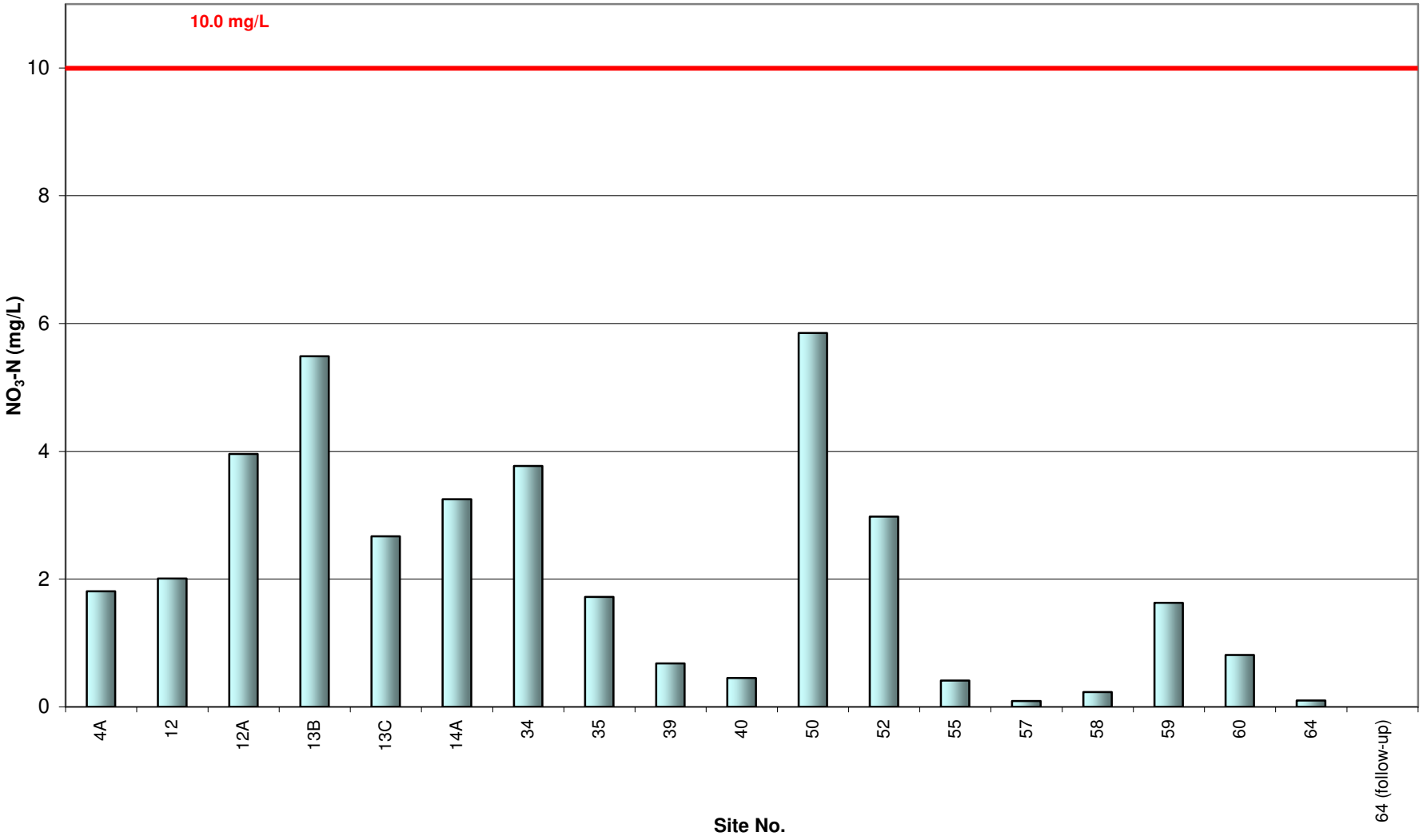

Note: Site 61 is dry in 2007.

GRAPH 4-8: Surfactants (Methylene Blue Active Substances)

Action Level = 1.0 mg/L

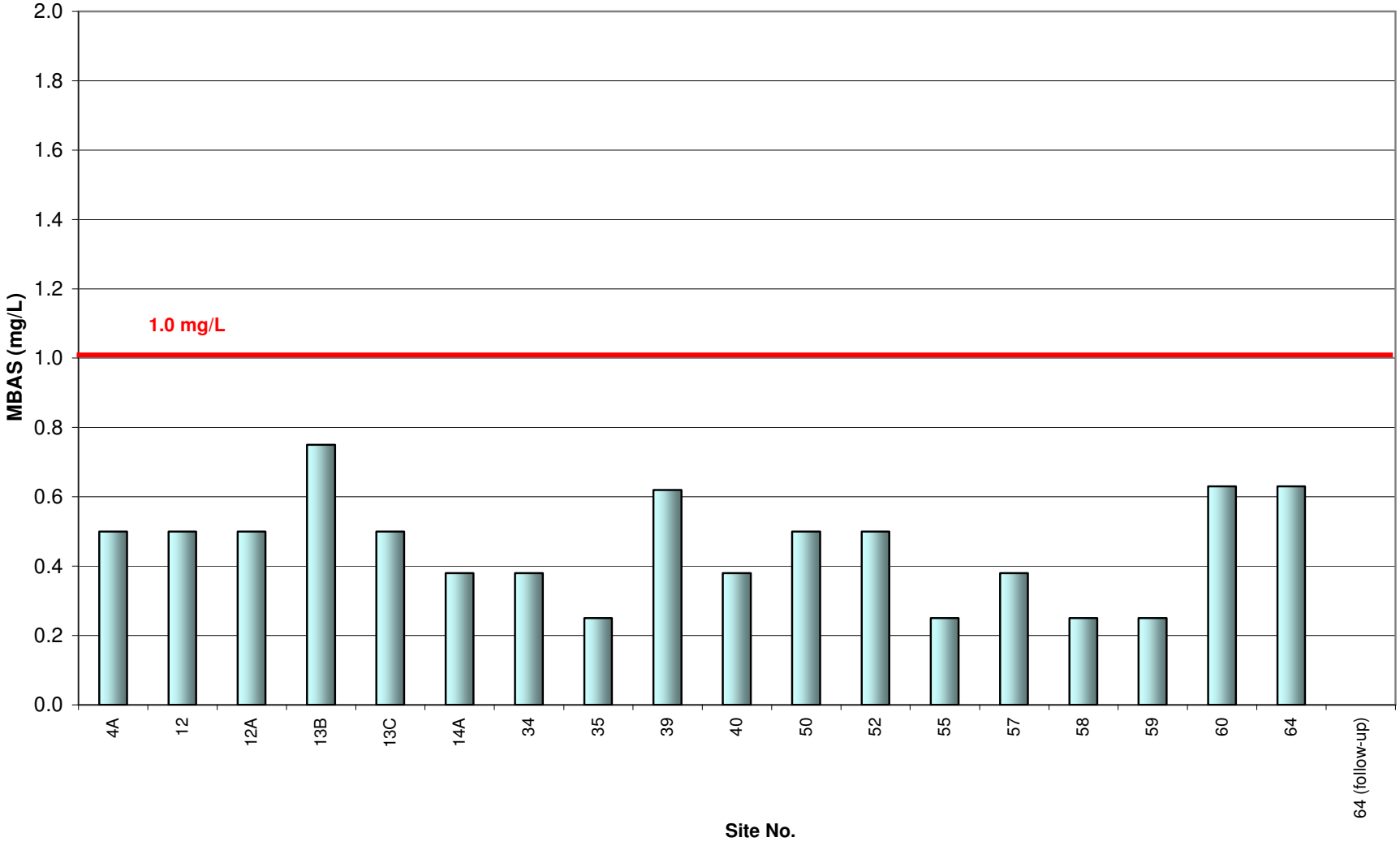

Note: Site 61 is dry in 2007

5 LABORATORY ANALYTICAL RESULTS

5.1 Summary

Laboratory analyses were conducted at five sites, representing over 25 percent of all sites with ponded or flowing water. A summary of the laboratory analytical results is presented in Table 5-1. Table 5-2 presents all of the results from the laboratory analyses. The laboratory reports are included in Appendix B.

TABLE 5-1
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum
Surfactants (mg/L MBAS)	nd	nd
Oil and grease (mg/L)	nd	nd
Total hardness (mg/L $CaCO_3$)	688	564
Cadmium (dissolved, mg/L)	nd	nd
Copper (dissolved, mg/L)	0.005	nd
Lead (dissolved, mg/L)	nd	nd
Zinc (dissolved, mg/L)	nd	nd
Diazinon (µg/L)	nd	nd
Chlorpyrifos (µg/L)	nd	nd
Total Coliforms (MPN/100 mL)	17,000	2,200
Fecal Coliforms (MPN/100 mL)	8,000	nd
Enterococcus (MPN/100 mL)	14,000	170

nd = not detected

Surfactants (MBAS) are analyzed to detect detergent pollution from residential, commercial or industrial washing activities. Surfactants were not detected at any sites during the 2007 Dry Weather Monitoring Program.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources including parking lots, washing activities, illegal discharges, and automobile repair facilities. Oil and grease were not detected at or above the reporting limit at any of the sampled sites.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with results expressed in mg/L of $CaCO_3$. Although it is not itself considered a pollutant, total hardness is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals, as well as other minerals and ions. Total hardness values varied from 564 to 688 mg/L $CaCO_3$. The lowest value of 564 mg/L was observed at Site 39, while the highest total hardness value of 688 mg/L $CaCO_3$ was found at Site 12A.

Diazinon and **chlorpyrifos** are organophosphate pesticides that can be harmful to aquatic organisms if transported in urban runoff. Diazinon and chlorpyrifos are highly toxic to birds, mammals, and insects. They are also highly toxic to freshwater fish and invertebrates following acute exposure. Diazinon and Chlorpyrifos were not detected at any of the sampled sites during the 2007 Dry Weather Monitoring Program.

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Metal concentrations in the environment can originate from a variety of sources including automobile operation, automobile repair facilities, car washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms, including fish and waterfowl. The laboratory samples collected during the 2007 Dry Weather Monitoring Program were analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Cadmium, lead, and zinc were not detected at any site. Dissolved copper was detected at Site 4A with a concentration of 0.005 mg/L. According to the CTR (1-hour) for Dissolved Metals in Fresh Waters,[1] which defines metal toxicity as a function of water hardness, the action level for dissolved copper in water samples with hardness values of 631 mg/L $CaCO_3$ is 0.076 mg/L. Therefore, since measured copper concentration was significantly below the action levels corresponding to the measured hardness values, source investigations were not deemed necessary.

Coliform bacteria are relatively harmless to humans and are present in all mammalian digestive tracts. They are also present in soil and decomposing organic matter, so measurements of total coliforms are not typically considered to be very accurate indicators of fecal contamination. Water samples are analyzed for total coliform bacteria because it is a historically accepted public health practice and because the Municipal Permit requires it. During the 2007 Dry Weather Monitoring Program, total coliform counts ranged from 2,200 to 17,000 MPN/100 mL. The highest level, 17,000 MPN/100 mL was found at Site 4A, which is below the action level of 50,000 MPN/100 mL.

Fecal coliforms, a subset of coliform bacteria, and **enterococci** are found primarily in the gastro-intestinal tracts of humans and animals, so they are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material was human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain. Fecal coliform counts were below the action level of 20,000 MPN/100 mL and ranged from a value below the detection limit to 8,000 MPN/100 mL. *Enterococcus* counts ranged from 170 to 14,000 MPN/100 mL. Site 39, was the only site with an *Enterococcus* count above the action level of 10,000 MPN/100 mL.

[1] For equations and constants used in CTR calculations, see http://www.USEPA.gov/ost/standards/ctr/toxic.pdf

TABLE 5-2
SUMMARY OF LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Surfactants mg/L MBAS	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms MPN/100 mL	Fecal Coliforms MPN/100 mL	Enterococci MPN/100 mL
4A	6/13/07	9:20	nd	nd	631	nd	0.005	nd	nd	nd	nd	17,000	8,000	1,300
12A	6/14/07	10:00	nd	nd	688	nd	nd	nd	nd	nd	nd	5,000	1,700	500
14A	6/14/07	11:00	nd	nd	592	nd	nd	nd	nd	nd	nd	8,000	2,300	1,300
39	6/13/07	11:30	nd	nd	564	nd	nd	nd	nd	nd	nd	13,000	3,000	**14,000**
39(follow-up)	6/27/07	14:30	nt	nt	nt	nt	nt	nt	nt	nt	nt	13,000	13,000	800
57	6/13/07	10:45	nd	nd	664	nd	nd	nd	nd	nd	nd	2,200	nd	170
ANALYTICAL REPORTING LIMITS			**0.5**	**5**	**10**	**0.005**	**0.005**	**0.005**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**
ACTION LEVELS			**1.0**	**15**	*****	**CTR**	**CTR**	**CTR**	**CTR**	**0.5**	**0.5**	**50,000**	**20,000**	**10,000**

Notes

Red Bold Type = Values that exceed action levels
nd = Not detected
nt = Not tested
CTR = California Toxics Rule (based on hardness)
*= Total hardness is not considered a pollutant (see Section 3.4 for details) and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependant on the total hardness value of the water sample. Total hardness measurements are thus required to calculate action levels for dissolved metals.

6 DATA ANALYSIS

When contaminant levels were detected above established action levels during field screening, upstream investigations were conducted to identify the source(s) of the contaminants. Since the laboratory requires several days to analyze samples, sites with contamination detected by laboratory analyses were investigated during a later round of visits. Based on the visual observations and the field and laboratory analytical testing that was conducted, the following sites demonstrated physical and chemical evidence of possible illegal discharges and/or illicit connections:

Site 39

Site 39 is located in a manhole junction box about 25 feet deep located in the Grossmont Shopping Center parking lot between Staples and Mattress Discounters. Approximately halfway down the walls of the manhole, lateral pipes carrying drainage from the immediate commercial area discharge into the manhole. The main pipe at the bottom of the manhole carries flow westward and eventually discharges to the Alvarado Channel. No constituents were above their respective action levels during field screening. Laboratory analysis of the water sample detected an *Enterococcus* count above the established action level of 10,000 MPN/100 mL. An upstream investigation was later conducted at this site to identify potential source(s) of this bacterial indicator (see Section 7).

Site 64

Site 64 is a concrete channel on the north side of Seton Hall Street, between Swarthmore Street and Wheaton Street (see Appendix A). The concrete channel had algal growth throughout its length. A pH level of 10.0 and a water temperature of 26.0° C were observed during the initial visit. The field crew returned the next morning to observe a pH level of 9.3, still above the action level of 9.0. An investigation upstream in the concrete channel found lower pH readings when samples were taken from water located in shaded areas where temperatures were decreased. Approximately 500 yards upstream from the sampling site, a pH reading was taken from an outlet that was the main source of the flow observed. The pH reading was 7.9 with a temperature of 17.0. The field crew believes that the high pH at the sampling site resulted primarily from algal photosynthesis and increased temperature, which removes carbon dioxide from the water. Because carbon dioxide forms carbonic acid when dissolved in water, removal of carbon dioxide from water makes the water more basic and results in higher pH readings. Typically the pH increases during daylight hours as sunlight stimulates algal photosynthesis and carbon dioxide is removed from water. During the night when algae is not photosynthesizing, the carbon dioxide level in the water increases due to biological respiration and physical diffusion of carbon dioxide from air into water, and the pH decreases. Because the solubility of gas in water is inversely proportional to the water temperature, carbon dioxide is less soluble in warmer water. Sunlight heats the shallow, unshaded water in the concrete channel, resulting in lower solubility for carbon dioxide later in the day when the water is warmer. The effects of temperature and algal photosynthesis lead to lower pH values in the morning and higher values in the afternoon. Since the majority of the concrete channel was not shaded, even in the earlier hours of the day, the pH reading continued to be elevated from increased summer temperatures.

7 UPSTREAM INVESTIGATIONS

7.1 Purpose

The purpose of the upstream investigations is to find the sources of the pollutants that exceeded action levels during initial field screening and laboratory testing.

Dry Weather Monitoring in 2007 revealed elevated levels of pollutants at only one site, as described in Section 6. In addition, Site 64 was investigated for pH levels above the action level and received a follow-up visit within 24 hours of the initial visit.

Five sites of the 18 were sampled for laboratory analysis during the initial round of field screening. Only one site had one analyte observed above established action levels. Site 39 showed *Enterococcus* above action levels. Upstream investigations were undertaken at this site to identify potential source(s) of the high bacteria count.

7.2 Investigation Procedures

7.2.1 General Procedures

Upstream investigations were conducted in two rounds. The first upstream investigations were for the sites at which field tests indicated elevated constituent levels. These investigations were conducted immediately after confirming the elevated concentrations via additional field testing. The second round of upstream investigations was carried out for the sites at which laboratory testing had found elevated constituent levels. These investigations were conducted after receiving the test results from the laboratory.

During the investigations, the D-MAX field crew measured flow rates, performed visual observations, and conducted field testing. Visual observations, such as water color, clarity, odor, floatable materials, vegetation and biology, and physical parameters, such as temperature, pH and conductivity, were recorded on field data sheets at each official sampling site. Field data sheets are included in Appendix C.

Field investigators began the source identification investigations by testing the water at the site itself; they then gradually worked upstream until potential pollutant sources could be identified. If follow-up field testing at a site resulted in constituent concentrations below specified action levels, it was concluded that the pollution found during the initial field screening and laboratory analysis was due to a transient flow.

7.2.2 Bacterial Investigation Procedures

In order to determine potential sources for sites with high bacteria, the D-MAX field crew used 3M Petrifilm *Escherichia coli* / Coliform Count plates as a rapid method to trace sources of both total coliform bacteria and *E. coli* bacteria in the storm water conveyance system. Because laboratory microbiological analyses take a significant amount of time, relying primarily on laboratory analyses can significantly delay an upstream investigation for bacteria. Also, due to the cost of these tests, often only a few locations can be examined, giving a less comprehensive picture. The Petrifilm plates allowed the field crew to quickly sample numerous branches or locations upstream of the sites.

Samples were taken in the field and preserved with Butterfield's phosphate buffer to keep the pH close to 7. Sample containers were kept on ice in a cooler and then plated within 6 hours of collection to ensure proper holding times were observed. The plates were then incubated at

35℃ ± 1℃. After 24 hours of incubation, total coliform bacterial concentrations were enumerated and, after an additional 24 hours (48 hours incubation total), *E. coli* levels could be read from the same plates, helping investigators identify potential bacterial sources over a large area in a timely manner.

This method is an improvement over the technique used in the past because it tests for *E. coli* bacteria. *E. coli* bacteria are a subset of fecal coliform bacteria and are better indicators of fecal contamination than total coliforms. Additionally, since total coliforms and *E. coli* are enumerated on the same plate, a rough ratio of *E. coli* (more likely to be from fecal sources) to total coliforms can be ascertained. While not unequivocally conclusive, this information allows for a better determination as to whether observed high bacteria levels likely come from fecal or non-fecal sources. Note that although *E. coli* are a major subset of fecal coliform bacteria, they are not enumerated for upstream analyses as an equivalent replacement for laboratory fecal coliform testing.

It should be noted that although laboratory analyses are done for total coliforms, fecal coliforms, and *enterococcus*, field bacteria analyses using Petrifilm plates are used to test only for total coliform bacteria and *E. coli*. As noted in Section 4, total coliform bacteria are generally harmless to humans but are a commonly-used indicator of harmful, pathogenic organisms, especially those found in fecal matter. Because the total coliform group of bacteria includes many species of bacteria of non-fecal origin, it is not as precise an indicator of fecal contamination as fecal coliforms or enterococci. A high total coliform count does not necessarily indicate fecal contamination of water, as total coliforms can also be found in soil, grain, and water, especially stagnant water. Therefore, a water sample with a high level of total coliform bacteria does not necessarily have a correspondingly high level of pathogens.

Fecal coliforms and enterococci are found mainly (but not solely) in the digestive tracts of humans and warm-blooded animals. With a few notable exceptions, fecal coliforms and enterococci are not hazardous to humans, but their presence is usually a good indication of the presence of animal or human waste. Fecal contamination from animal sources may be less hazardous to humans than fecal contamination from human sources; however, standard tests for fecal coliform and *Enterococcus* cannot reliably distinguish between human and animal sources.

Field bacteria tests using Petrifilm plates use Colony Forming Units per milliliter (CFU/mL) as the measurement unit, rather than the Most Probable Number (of colony forming units) per 100 milliliters (MPN/100 mL) unit used in laboratory analyses. These units are generally comparable, although the laboratory volume, and thus value, is one hundred times greater. D-MAX has created a stringent field protocol to control sample development as consistently as possible. Sterile dilution vials containing pre-measured amounts of sterile buffer solution for dilution are used for sample collection, the diluted samples are kept on ice in a cooler while in the field, and chilled samples are collected from the field crew twice daily to be plated within the proper holding time. Plated samples are then developed in an incubator for a total of 48 hours. While this method is not conducted at a certified laboratory, it is still useful for determining which locations have relatively higher or relatively lower bacteria levels. The action level for total coliform bacteria is 50,000 MPN/100 mL, which roughly corresponds to 500 CFU/mL. However, only about 150 or fewer colony forming units can be accurately enumerated using a Petrifilm plate. This would correspond to 15,000 MPN/100 mL. Therefore, all samples were first diluted 1:10 with sterile buffer solution before Petrifilm analysis, thus adjusting the detection limits for Petrifilm plates from the standard value of 1-150 CFU/mL to 10-1,500 CFU/mL. This adjusted range corresponds to approximately 10,000

to 150,000 MPN/100 mL, a much more useful range when dealing with total coliform bacteria levels around the action level of 50,000 MPN/mL.

7.3 Investigated Sites

7.3.1 Site 39

Site 39 is a manhole junction box about 25 feet deep located in the Grossmont Shopping Center. Laboratory analysis of the water sample at Site 39 detected an *Enterococcus* count of 14,000 MPN/100 mL, above the established action level of 10,000 MPN/100 mL. After receiving the results from the laboratory, the field crew conducted a follow-up investigation of the area and several of the lateral branches that join the main pipe at Site 39 to attempt to locate the source(s) of the exceedance in this area.

The total coliform bacterial count from the follow-up investigations at Site 39 was 10 CFU/mL. To the northeast of Site 39, upstream locations 39-1 and 39-2 were visited next. Both of those sites are located near the Murray Drive and Grossmont Center Drive intersection; see Figure 7-1 and Table 7-1 for more specific information. The total coliform level at 39-1 was higher than Site 39, with a count of 300 CFU/mL. The water sample from the loading dock at Sharp Grossmont Hospital (location 39-2) indicated very high levels of total coliform bacteria, as the bacteria growth on the plate was too numerous to count (TNTC). No *E. coli* was detected at either of those two upstream locations or at Site 39. No flow was observed further upstream from upstream locations 39-1 and 39-2.

A sample was taken from a manhole along the exit ramp of Interstate-8 just northwest of the Ford dealership, Site 39-3, where the storm drain map indicated a line from the south that drains toward Site 39 is located. The flow was observed traveling northwest at about 1 gpm. The total coliform bacteria count for this site was 90 CFU/mL, but *E. coli* was still fairly low.

To investigate whether the bacteria levels at the site extended to areas farther downstream, a sample was taken downstream from Site 39 at a manhole located in front of Sports Authority. A sample was taken from the eastern line at this location, which comes from Site 39. The sample was taken from this line that would consist of only water from Site 39 unless there is an additional, unknown connection. The total coliform count was 20 CFU/mL, which is similar to Site 39.

An additional sample was taken from Site 39 for laboratory analysis on June 27, 2007 to confirm the bacterial concentrations. Results were 13,000 MPN/100 mL for both total and fecal coliforms, both of which are below their respective action levels. *Enterococcus* bacterial counts were 800 MPN/100 mL, which is significantly lower than the initial reading of 14,000 MPN/100 mL and well below the action level. Nonetheless, because the analyses indicated that essentially all the total coliforms were fecal coliforms and an illicit sewer connection had been detected upstream of this site in the past at Sharp Grossmont Hospital, an additional sample was taken at upstream location 39-2. That location also had a high total coliform count during the upstream investigation. That additional sample was submitted for laboratory analysis for total coliforms, fecal coliforms, and enterococci, and ammonia, which is an indicator of sewage releases. The laboratory reported total coliform and *Enterococcus* counts of 40 MPN/100 mL and 300 MPN/100 mL, respectively. Fecal coliforms were not detected. Ammonia was measured at a concentration of 0.47 mg/L, these results do not suggest a sewage leak or other illegal discharge. The overall results of the investigation suggest that bacteria levels are not consistently high at Site 39, and relatively higher levels may be the result of transient flows. The locations and results of follow-up sampling events are summarized in the Table 7-1 and Figure 7-1.

FIGURE 7-1
SAMPLING LOCATIONS FOR SITE 39 UPSTREAM INVESTIGATION

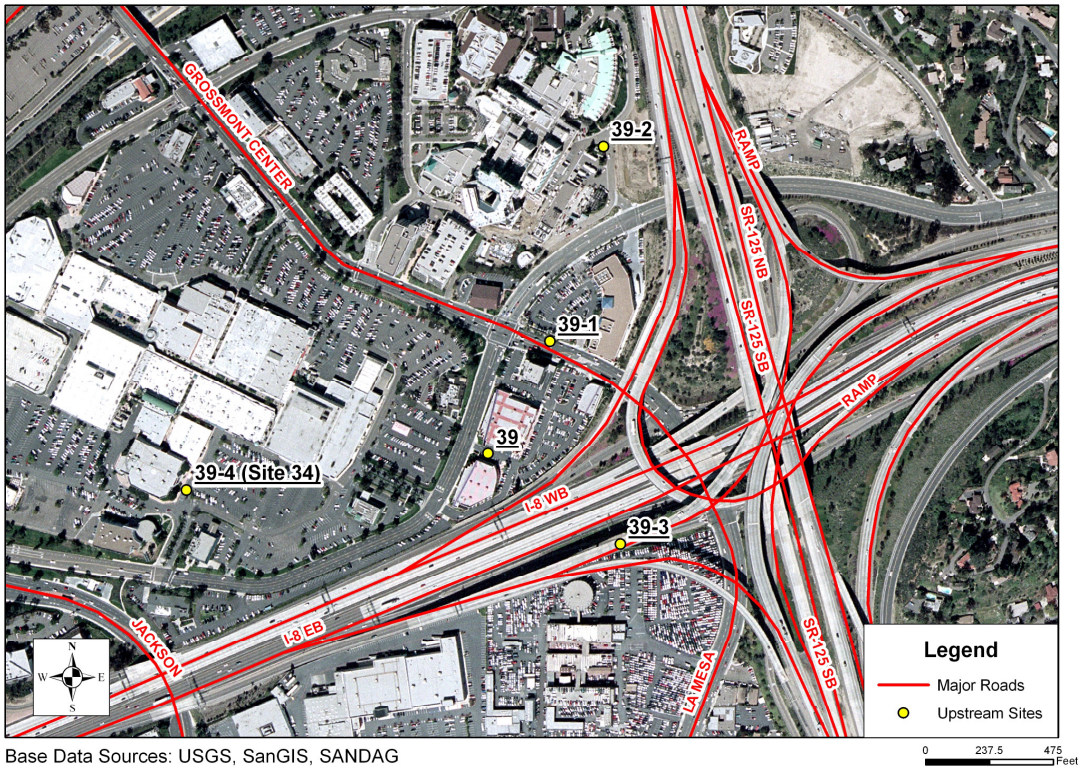

Base Data Sources: USGS, SanGIS, SANDAG

TABLE 7-1
SAMPLING LOCATIONS FOR SITE 39 UPSTREAM INVESTIGATION

ID	Location	Flow (gpm)	Total Coliforms (CFU/mL)	*E. coli* (CFU/mL)
39	Grossmont Shopping Center parking lot between Staples & Mattress Discounters	5	10	< 10
39-1	N.E. corner of Grossmont Center Drive and Murray Drive, south of Trader Joe's parking lot.	2	300	< 10
39-2	Sharp Grossmont Hospital, at loading dock, entrance G	<1	TNTC	< 10
39-3	Exit ramp from I-8 East to Grossmont Center Drive, northwest of the Ford dealership	1	90	20
39-4	Grossmont Shopping Center, in front of Sports Authority, (Site 34) sampling from east pipe connection	5	20	< 10

TNTC = too numerous to count

8 SUMMARY AND RECOMMENDATIONS

8.1 Summary

8.1.1 Summary of Field Screening and Laboratory Analysis Data

During the course of dry weather monitoring, 19 sites were visited, of which 18 had measurable flow and one was dry. The 2007 field screening was resulted in only one follow-up investigation, compared to four in 2006 and three in 2005. Flow rates at the observed sites ranged from a trickle of less than 1 gallon per minute to 162 gpm. As in the past, the highest flow rate was recorded in the Alvarado Channel.

All but one site had measurements of pH that fell between 6.5 and 9.0. Site 64 had a pH of 10.0 during the initial visit and a reading of 9.3 on the following day. Elevated pH levels were likely a result of algal photosynthetic activity (see Section 6). Conductivity readings were not considered an indication of threat to water quality based on the field crew's best professional judgment.

All measurements of ammonia were below concentrations of 0.50 mg/L, below the action level of 1.0 mg/L.

As in the past five years, nitrate concentrations among all sites were below the action level of 10.0 mg/L. The highest nitrate concentration, measured at Site 50, was 5.85 mg/L. The action level for reactive phosphorous concentrations, 2.0 mg/L, was not exceeded at any of the sites.

The highest concentration of surfactants among all sites was 0.75 mg/L, below the action level of 1.0 mg/L, which was detected at Site 13B.

As per the Permit, laboratory analyses were conducted at five sites. Results detected bacteria levels in water sampled from Site 39 that exceeded the established action level for *Enterococcus*, which is 10,000 MPN/100 mL.

Dissolved copper was detected at Site 4A, but it was below the CTR action level. No other dissolved metals were detected at any of the sites. As it was for 2006, no chlorpyrifos, diazinon, oil and grease, and surfactants were detected at any sites.

Trash was observed at 10 of the visited sites, up from eight sites in 2006 and up from four sites in 2005. Sediment was present at all but one of the sites visited, but no other floatables were observed.

Vegetation was present at many of the sites where sunlight was accessible to the site. Those sites located in darker areas, normally had no vegetation.

8.1.2 Summary of Upstream Investigation Data

Follow-up visits were performed on the following business day whenever field tests showed one or more parameters above their respective action levels at the initial field screening visit. During the Dry Weather Monitoring Program in 2007, only one site required a follow-up visit for a pH reading that exceeded action levels. Only one site required upstream investigations after laboratory results were concluded.

Site 39 required upstream investigations to locate potential sources of the elevated bacteria levels indicated by laboratory analyses. To facilitate a prompt, comprehensive survey of potential sources of bacterial contamination, Petrifilm plates were used to conduct field

microbacterial analyses. Note that total coliforms levels alone are considered a poor indicator of fecal material and an even poorer indicator of pathogens. Based on the results of the upstream investigations and follow-up actions conducted at Site 39,the elevated bacterial count observed was transient.

8.2 Recommendations

Based on the results of the 2007 Dry Weather Monitoring Program for the City of La Mesa, the following follow-up actions are recommended for consideration:

Inspection and Maintenance

- Consider checking sites where trash was noted during the 2007 Dry Weather Monitoring Program for trash and debris accumulation as deemed necessary. A notable amount of trash was observed in the following three locations: Site 52, the channel upstream of Site 57, and the conveyance along Sarita Street (upstream of Site 4A).

- Retrieve the shopping cart from the channel at Site 4A and contact California Shopping Cart Retrieval Corporation (1-800-667-4613) to pick up the cart.

9 References

City of San Diego, City of El Cajon, City of La Mesa, et al. 2007. San Diego River Watershed: Watershed Urban Runoff Management Program 2005-06 Annual Report.

USEPA. October 30, 2000. *Multi-Sector General Permit for Storm Water*.

USEPA. May 18, 2000. *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California*. 40 CFR Part 131.

San Diego Regional Water Quality Control Board (RWQCB). 1994. *Water Quality Control Plan for the San Diego Basin*.

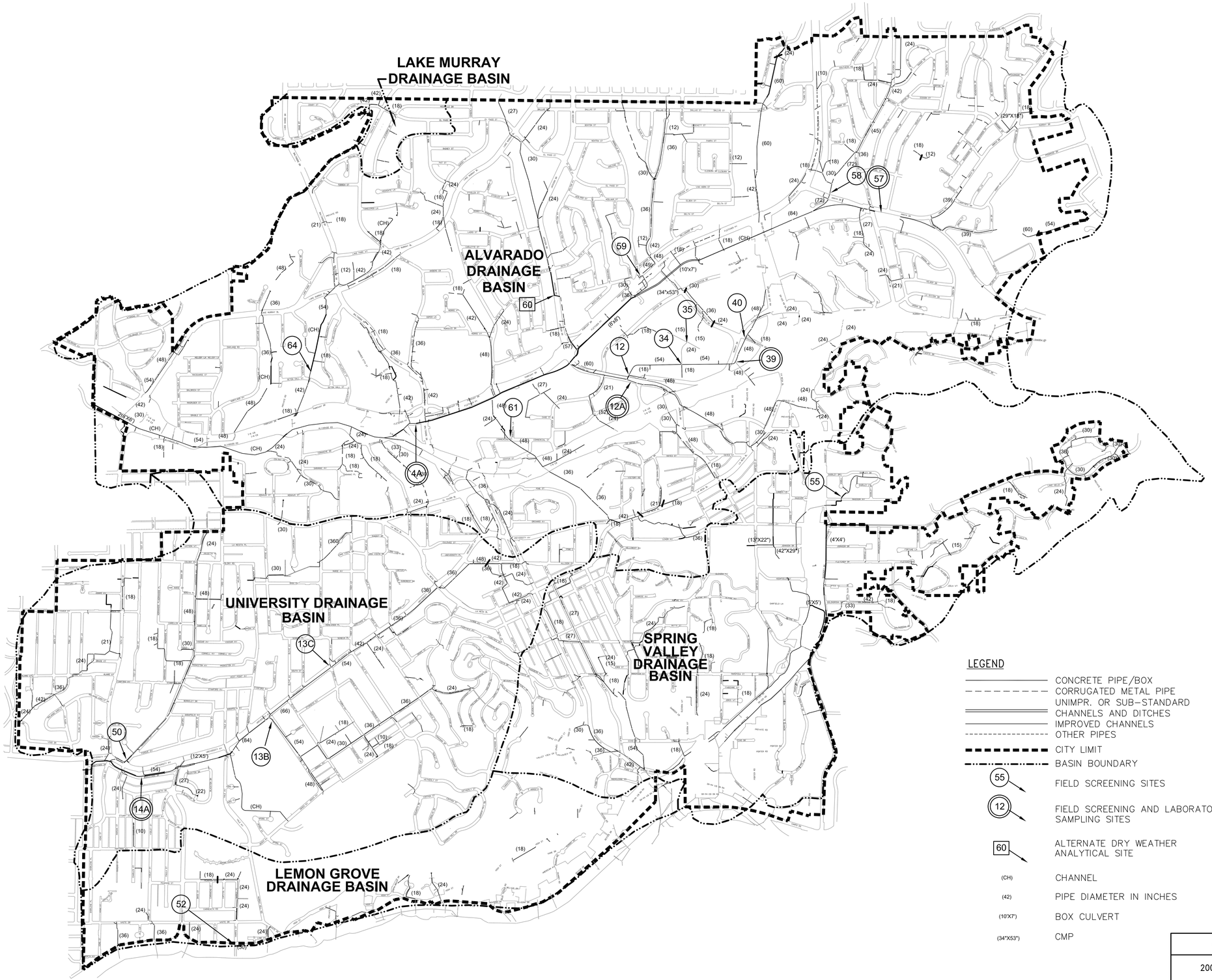

CITY OF LA MESA

2007 DRY WEATHER MONITORING STATIONS

DRAWN BY: CM	CHECKED BY:	FIGURE NO: 1
FN:LAMESA DRY WEATHER 2007	DATE: 06-18-07	

D-Max Engineering, Inc.

FIGURE 2

WATERSHED MAP OF THE LA MESA AREA

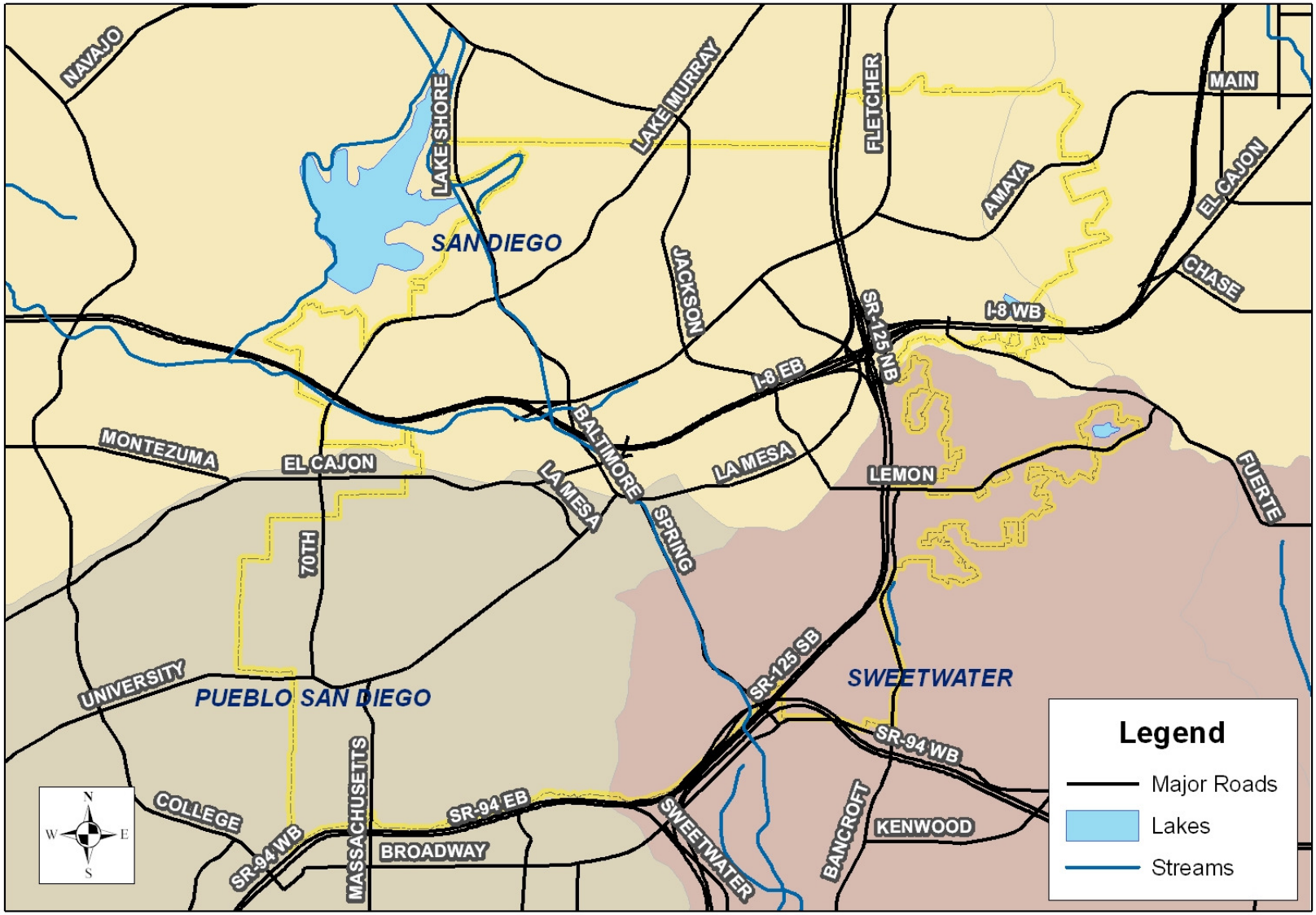

Base Data Sources: USGS, SanGIS, SANDAG

0 2,000 4,000 Feet

Appendix A

Photographs of Sampling Locations

Site No 4A (Photo 10)	
Site No 12 (Photo 27)	

Site No 12A (Photo 22)	
Site No 13B (Photo 4)	

Site No 13C (Photo 21)	
Site No 14A (Photo 23)	

Site No 34 (Photo 28)	
Site No 35 (Photo 15)	

Site No 39 (Photo 14)	
Site No 40 (Photo 7)	

Site No 50 (Photo 3)	
Site No 52 (Photo 17)	

Site No 55 (Photo 6)	
Site No 57 (Photo 13)	

Site No 58 (Photo 19)	
Site No 59 (Photo 9)	

Site No 60 (Photo 26)	
Site No 61 (Photo 25)	

Site No 64 (Photo 1)	

Appendix B

Laboratory Analytical Reports

* Site “University 2” was part of a separate project, but the lab results are shown because they are inseparable from the follow-up analysis results of Site 39.

EnviroMatrix Analytical, Inc.

21 June 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0706207

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200703W-5

Enclosed are the results of analyses for samples received by the laboratory on 06/13/07 12:36. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
4A	0706207-01	Water	06/13/07 09:20	06/13/07 12:36
57	0706207-02	Water	06/13/07 10:45	06/13/07 12:36
39	0706207-03	Water	06/13/07 11:30	06/13/07 12:36

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4A (0706207-01) Water Sampled: 06/13/07 09:20 Received: 06/13/07 12:36									
Cadmium	ND	0.005	mg/l	1	7062008	06/20/07	06/20/07	EPA 6020	
Copper	**0.005**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
57 (0706207-02) Water Sampled: 06/13/07 10:45 Received: 06/13/07 12:36									
Copper	ND	0.005	mg/l	1	7062008	06/20/07	06/20/07	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
39 (0706207-03) Water Sampled: 06/13/07 11:30 Received: 06/13/07 12:36									
Zinc	ND	0.020	mg/l	1	7062008	06/20/07	06/20/07	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4A (0706207-01) Water Sampled: 06/13/07 09:20 Received: 06/13/07 12:36									
Chlorpyrifos	ND	0.05	ug/l	1	7061807	06/18/07	06/20/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*96 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*81 %*	*60-130*		"	"	"	"	
57 (0706207-02) Water Sampled: 06/13/07 10:45 Received: 06/13/07 12:36									
Chlorpyrifos	ND	0.05	ug/l	1	7061807	06/18/07	06/20/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*82 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*		"	"	"	"	
39 (0706207-03) Water Sampled: 06/13/07 11:30 Received: 06/13/07 12:36									
Chlorpyrifos	ND	0.05	ug/l	1	7061807	06/18/07	06/20/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*110 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*119 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4A (0706207-01) Water Sampled: 06/13/07 09:20 Received: 06/13/07 12:36									
Hardness (Total)	**631**	100	mg CaCO3/L	10	7061429	06/14/07	06/19/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7061924	06/15/07	06/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7061805	06/18/07	06/18/07	EPA 1664	
57 (0706207-02) Water Sampled: 06/13/07 10:45 Received: 06/13/07 12:36									
Hardness (Total)	**664**	100	mg CaCO3/L	10	7061429	06/14/07	06/19/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7061924	06/15/07	06/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7061805	06/18/07	06/18/07	EPA 1664	
39 (0706207-03) Water Sampled: 06/13/07 11:30 Received: 06/13/07 12:36									
Hardness (Total)	**564**	100	mg CaCO3/L	10	7061429	06/14/07	06/19/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7061924	06/15/07	06/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7061805	06/18/07	06/18/07	EPA 1664	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4A (0706207-01) Water Sampled: 06/13/07 09:20 Received: 06/13/07 12:36									
Total Coliforms	**17000**	200	MPN/100 ml	100	7061408	06/13/07	06/17/07	SM 9221 B, E	
Fecal Coliforms	**8000**	200	"	"	"	"	06/16/07	"	
Enterococcus	**1300**	20	"	10	7061409	"	06/17/07	SM 9230 A, B	
57 (0706207-02) Water Sampled: 06/13/07 10:45 Received: 06/13/07 12:36									
Total Coliforms	**2200**	20	MPN/100 ml	10	7061408	06/13/07	06/17/07	SM 9221 B, E	
Fecal Coliforms	ND	20	"	"	"	"	06/16/07	"	
Enterococcus	**170**	20	"	"	7061409	"	06/17/07	SM 9230 A, B	
39 (0706207-03) Water Sampled: 06/13/07 11:30 Received: 06/13/07 12:36									
Total Coliforms	**13000**	200	MPN/100 ml	100	7061408	06/13/07	06/17/07	SM 9221 B, E	
Fecal Coliforms	**3000**	200	"	"	"	"	06/16/07	"	
Enterococcus	**14000**	200	"	"	7061409	"	06/17/07	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062008										
Blank (7062008-BLK1)				Prepared & Analyzed: 06/20/07						
Copper	ND	0.005	mg/l							
Lead	ND	0.005	"							
Cadmium	ND	0.005	"							
Zinc	ND	0.020	"							
LCS (7062008-BS1)				Prepared & Analyzed: 06/20/07						
Zinc	0.098	0.020	mg/l	0.100		98	75-125			
Lead	0.114	0.005	"	0.100		114	75-125			
Copper	0.111	0.005	"	0.100		111	75-125			
Cadmium	0.121	0.005	"	0.100		121	75-125			
LCS Dup (7062008-BSD1)				Prepared & Analyzed: 06/20/07						
Cadmium	0.124	0.005	mg/l	0.100		124	75-125	2	20	
Copper	0.113	0.005	"	0.100		113	75-125	2	20	
Lead	0.116	0.005	"	0.100		116	75-125	2	20	
Zinc	0.097	0.020	"	0.100		97	75-125	1	20	
Duplicate (7062008-DUP1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Cadmium	ND	0.005	mg/l		ND				20	
Copper	0.005	0.005	"		0.005			0	20	
Lead	ND	0.005	"		ND				20	
Zinc	0.016	0.020	"		0.014			13	20	
Matrix Spike (7062008-MS1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Lead	0.099	0.005	mg/l	0.100	ND	99	75-125			
Copper	0.092	0.005	"	0.100	0.005	87	75-125			
Cadmium	0.102	0.005	"	0.100	ND	102	75-125			
Zinc	0.112	0.020	"	0.100	0.014	98	75-125			

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062008										
Matrix Spike Dup (7062008-MSD1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Zinc	0.114	0.020	mg/l	0.100	0.014	100	75-125	2	20	
Copper	0.093	0.005	"	0.100	0.005	88	75-125	1	20	
Lead	0.098	0.005	"	0.100	ND	98	75-125	1	20	
Cadmium	0.100	0.005	"	0.100	ND	100	75-125	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061807										
Blank (7061807-BLK1)				Prepared: 06/18/07 Analyzed: 06/20/07						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.205*		*"*	*0.250*		*82*	*60-130*			
Surrogate: Tribuytlphosphate	*0.225*		*"*	*0.250*		*90*	*60-130*			
LCS (7061807-BS1)				Prepared: 06/18/07 Analyzed: 06/21/07						
Bolstar	0.48	0.10	ug/l	0.500		96	60-130			
Diazinon	0.47	0.05	"	0.500		94	60-130			
Ethoprop	0.49	0.05	"	0.500		98	60-130			
Mevinphos	0.51	0.25	"	0.500		102	60-130			
Methyl parathion	0.48	0.10	"	0.500		96	60-130			
Phorate	0.47	0.05	"	0.500		94	60-130			
Ronnel	0.49	0.25	"	0.500		98	60-130			
Trichlorinate	0.46	0.05	"	0.500		92	60-130			
Surrogate: Triphenyl phosphate	*0.233*		*"*	*0.250*		*93*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061429										
Blank (7061429-BLK1)				Prepared: 06/14/07	Analyzed: 06/19/07					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7061429-DUP1)		**Source: 0706220-01**		Prepared: 06/14/07	Analyzed: 06/19/07					
Hardness (Total)	ND	10	mg CaCO3/L		ND				20	
Batch 7061805										
Blank (7061805-BLK1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	ND	5	mg/l							
LCS (7061805-BS1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	86	5	mg/l	103		83	75-125			
LCS Dup (7061805-BSD1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	84	5	mg/l	104		81	75-125	2	20	
Batch 7061924										
Blank (7061924-BLK1)				Prepared: 06/15/07	Analyzed: 06/19/07					
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7061924-BS1)				Prepared: 06/15/07	Analyzed: 06/19/07					
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120			
LCS Dup (7061924-BSD1)				Prepared: 06/15/07	Analyzed: 06/19/07					
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120	0	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706207

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061924										
Duplicate (7061924-DUP1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7061924-MS1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120			
Matrix Spike Dup (7061924-MSD1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120	0	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Address: 7220 Trade St. Suite 119
San Diego, CA 92121

Phone (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather

Project #: 200703W-5 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐ 413.1 ☐ 413.2 ☒ 1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐ Gas ☐ Diesel ☐ Ext ☐ ASTM	624 / 8260 (VOC) ☐ Full ☐ BTXE ☐ MTBE ☐ Oxy	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Dia/C	TBT (Organotin Compounds)	pH ☐ Conductivity (EC) ☐ TSS ☐ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐ Metals ☐ Organics	Cd Cr Cu Pb Ni Ag Zn ☒ Dissolved	Coliform, ☒ Total (MTF) ☒ Fecal (MTF) ☐ Colilert, T-	Enterococcus, ☒ MTF ☐ Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	MBAS
01	4A	6/13/07 9:20	Water	2/4 G/P	X							X						X	X	X		X	X
02	57	~ 10:45	~	~	X							X						X	X	X		X	X
03	39	~ 11:30	~	~	X							X						X	X	X		X	X
04																							
05																							
06																							
07																							
08																							
09																							
10																							

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other_____

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day 5 day ☒ STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other _____

[1]**Sample Disposal:** By Laboratory [2]Return to client: P/U or Delivery Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: Client EMA Autosampler

Project Comments:

T = 2°C

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature: [illegible]
Print: Manouchehr Dadkhah	Print: Tony
Company: D-Max Eng.	Company: EM
Signature: [illegible]	Signature: [illegible]
Print: Tony Pack	Print: W. Lucer
Company: EMA	Company: E
Signature:	Signature:
Print:	Print:
Company:	Company:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Gold

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

21 June 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0706235

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200703W-5

Enclosed are the results of analyses for samples received by the laboratory on 06/14/07 12:10. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
12A	0706235-01	Water	06/14/07 10:00	06/14/07 12:10
14A	0706235-02	Water	06/14/07 11:00	06/14/07 12:10

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
12A (0706235-01) Water Sampled: 06/14/07 10:00 Received: 06/14/07 12:10									
Zinc	ND	0.020	mg/l	1	7062008	06/20/07	06/20/07	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
14A (0706235-02) Water Sampled: 06/14/07 11:00 Received: 06/14/07 12:10									
Zinc	ND	0.020	mg/l	1	7062008	06/20/07	06/20/07	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
12A (0706235-01) Water Sampled: 06/14/07 10:00 Received: 06/14/07 12:10									
Chlorpyrifos	ND	0.05	ug/l	1	7061807	06/18/07	06/20/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*82 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*81 %*	*60-130*		"	"	"	"	
14A (0706235-02) Water Sampled: 06/14/07 11:00 Received: 06/14/07 12:10									
Chlorpyrifos	ND	0.05	ug/l	1	7061807	06/18/07	06/20/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*80 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*82 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
12A (0706235-01) Water Sampled: 06/14/07 10:00 Received: 06/14/07 12:10									
Hardness (Total)	**688**	100	mg CaCO3/L	10	7061824	06/18/07	06/20/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7061924	06/15/07	06/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7061805	06/18/07	06/18/07	EPA 1664	
14A (0706235-02) Water Sampled: 06/14/07 11:00 Received: 06/14/07 12:10									
Hardness (Total)	**592**	100	mg CaCO3/L	10	7061824	06/18/07	06/20/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7061924	06/15/07	06/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7061805	06/18/07	06/18/07	EPA 1664	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
12A (0706235-01) Water Sampled: 06/14/07 10:00 Received: 06/14/07 12:10									
Total Coliforms	**5000**	200	MPN/100 ml	100	7061501	06/14/07	06/18/07	SM 9221 B, E	
Fecal Coliforms	**1700**	20	"	10	"	"	06/17/07	"	
Enterococcus	**500**	20	"	"	7061502	"	06/18/07	SM 9230 A, B	
14A (0706235-02) Water Sampled: 06/14/07 11:00 Received: 06/14/07 12:10									
Total Coliforms	**8000**	200	MPN/100 ml	100	7061501	06/14/07	06/18/07	SM 9221 B, E	
Fecal Coliforms	**2300**	200	"	"	"	"	06/17/07	"	
Enterococcus	**1300**	20	"	10	7061502	"	06/18/07	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062008										
Blank (7062008-BLK1)				Prepared & Analyzed: 06/20/07						
Zinc	ND	0.020	mg/l							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
Cadmium	ND	0.005	"							
LCS (7062008-BS1)				Prepared & Analyzed: 06/20/07						
Zinc	0.098	0.020	mg/l	0.100		98	75-125			
Cadmium	0.121	0.005	"	0.100		121	75-125			
Lead	0.114	0.005	"	0.100		114	75-125			
Copper	0.111	0.005	"	0.100		111	75-125			
LCS Dup (7062008-BSD1)				Prepared & Analyzed: 06/20/07						
Lead	0.116	0.005	mg/l	0.100		116	75-125	2	20	
Zinc	0.097	0.020	"	0.100		97	75-125	1	20	
Copper	0.113	0.005	"	0.100		113	75-125	2	20	
Cadmium	0.124	0.005	"	0.100		124	75-125	2	20	
Duplicate (7062008-DUP1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Copper	0.005	0.005	mg/l		0.005			0	20	
Cadmium	ND	0.005	"		ND				20	
Zinc	0.016	0.020	"		0.014			13	20	
Lead	ND	0.005	"		ND				20	
Matrix Spike (7062008-MS1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Lead	0.099	0.005	mg/l	0.100	ND	99	75-125			
Zinc	0.112	0.020	"	0.100	0.014	98	75-125			
Copper	0.092	0.005	"	0.100	0.005	87	75-125			
Cadmium	0.102	0.005	"	0.100	ND	102	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062008										
Matrix Spike Dup (7062008-MSD1)		**Source: 0706207-01**		Prepared & Analyzed: 06/20/07						
Copper	0.093	0.005	mg/l	0.100	0.005	88	75-125	1	20	
Zinc	0.114	0.020	"	0.100	0.014	100	75-125	2	20	
Cadmium	0.100	0.005	"	0.100	ND	100	75-125	2	20	
Lead	0.098	0.005	"	0.100	ND	98	75-125	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061807										
Blank (7061807-BLK1)				Prepared: 06/18/07 Analyzed: 06/20/07						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.205*		*"*	*0.250*		*82*	*60-130*			
Surrogate: Tribuytlphosphate	*0.225*		*"*	*0.250*		*90*	*60-130*			
LCS (7061807-BS1)				Prepared: 06/18/07 Analyzed: 06/21/07						
Bolstar	0.48	0.10	ug/l	0.500		96	60-130			
Diazinon	0.47	0.05	"	0.500		94	60-130			
Ethoprop	0.49	0.05	"	0.500		98	60-130			
Mevinphos	0.51	0.25	"	0.500		102	60-130			
Methyl parathion	0.48	0.10	"	0.500		96	60-130			
Phorate	0.47	0.05	"	0.500		94	60-130			
Ronnel	0.49	0.25	"	0.500		98	60-130			
Trichlorinate	0.46	0.05	"	0.500		92	60-130			
Surrogate: Triphenyl phosphate	*0.233*		*"*	*0.250*		*93*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061805										
Blank (7061805-BLK1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	ND	5	mg/l							
LCS (7061805-BS1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	86	5	mg/l	103		83	75-125			
LCS Dup (7061805-BSD1)				Prepared & Analyzed: 06/18/07						
Oil & Grease	84	5	mg/l	104		81	75-125	2	20	
Batch 7061824										
Blank (7061824-BLK1)				Prepared: 06/18/07 Analyzed: 06/20/07						
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7061824-DUP1)		**Source: 0706244-01**		Prepared: 06/18/07 Analyzed: 06/20/07						
Hardness (Total)	ND	10	mg CaCO3/L		ND				20	
Batch 7061924										
Blank (7061924-BLK1)				Prepared: 06/15/07 Analyzed: 06/19/07						
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7061924-BS1)				Prepared: 06/15/07 Analyzed: 06/19/07						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120			
LCS Dup (7061924-BSD1)				Prepared: 06/15/07 Analyzed: 06/19/07						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120	0	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706235

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7061924										
Duplicate (7061924-DUP1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7061924-MS1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120			
Matrix Spike Dup (7061924-MSD1)		**Source: 0706207-01**		Prepared: 06/15/07		Analyzed: 06/19/07				
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120	0	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Address: 1220 Trade St. Suite 114
San Diego, CA 92121

Phone: (858)586-6600 Fax: (858)586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather

Project #: 200703W-5 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1	413.2	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel Ext ASTM	624 / 8260 (VOC) Full BTXE MTBE	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Dia/C	TBT (Organotin Compounds)	pH Conductivity (EC) TSS TDS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	Co Cr Cu Pb Ni Ag Zn Dissolved	Coliform, Total (MTF) Fecal (MTF) Colilert	Enterococcus, MTF Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	MBAS
01	12A	6/14/09	10:00	Water	2/4 G/P	X								X							X	X	X		X	X
02	14A	"	11:00	"	" "	X								X							X	X	X		X	X
03																										
04																										
05																										
06																										
07																										
08																										
09																										
10																										

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other_____

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day 5 day X STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other _____

[1]**Sample Disposal:** By Laboratory [2]Return to client: P/U or Delivery Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: Client EMA Autosampler

Project Comments:

T=6°C

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature: [illegible]
Print: Manouchehr Dadkhah	Print: James
Company:	Company: EMA
Signature: [illegible]	Signature: [illegible]
Print: James Peck	Print: JAMES HAC
Company: EMA	Company: EMA
Signature:	Signature:
Print:	Print:
Company:	Company:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Gold

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

06 July 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0706438

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200703W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/27/07 15:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
University 2	0706438-01	Water	06/27/07 13:40	06/27/07 15:00
site 39	0706438-02	Water	06/27/07 14:30	06/27/07 15:00

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
University 2 (0706438-01) Water Sampled: 06/27/07 13:40 Received: 06/27/07 15:00									
Cadmium	ND	0.005	mg/l	1	7070210	07/02/07	07/02/07	EPA 6020	
Zinc	**0.031**	0.020	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
University 2 (0706438-01) Water Sampled: 06/27/07 13:40 Received: 06/27/07 15:00									
Chlorpyrifos	ND	0.05	ug/l	1	7070209	07/02/07	07/04/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*97 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*84 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
University 2 (0706438-01) Water Sampled: 06/27/07 13:40 Received: 06/27/07 15:00									
Hardness (Total)	**1740**	100	mg CaCO3/L	10	7062844	06/28/07	07/02/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7062920	06/28/07	06/28/07	SM5540 C	
Oil & Grease	ND	5	"	"	7062816	06/28/07	06/29/07	EPA 1664	
Total Suspended Solids	ND	20	"	"	7070216	07/02/07	07/03/07	SM2540 D	
Turbidity	**1.26**	0.05	NTU	"	7070215	06/28/07	06/28/07	SM2130 B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
University 2 (0706438-01) Water Sampled: 06/27/07 13:40 Received: 06/27/07 15:00									
Total Coliforms	**23000**	2000	MPN/100 ml	1000	7062822	06/27/07	07/01/07	SM 9221 B, E	
Fecal Coliforms	**1100**	20	"	10	"	"	06/30/07	"	
Enterococcus	**500**	20	"	"	7062823	"	07/01/07	SM 9230 A, B	
site 39 (0706438-02) Water Sampled: 06/27/07 14:30 Received: 06/27/07 15:00									
Total Coliforms	**13000**	200	MPN/100 ml	100	7062822	06/27/07	07/01/07	SM 9221 B, E	
Fecal Coliforms	**13000**	200	"	"	"	"	06/30/07	"	
Enterococcus	**800**	20	"	10	7062823	"	07/01/07	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070210										
Blank (7070210-BLK1)				Prepared & Analyzed: 07/02/07						
Zinc	ND	0.020	mg/l							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
Cadmium	ND	0.005	"							
LCS (7070210-BS1)				Prepared & Analyzed: 07/02/07						
Zinc	0.105	0.020	mg/l	0.100		105	75-125			
Cadmium	0.108	0.005	"	0.100		108	75-125			
Lead	0.107	0.005	"	0.100		107	75-125			
Copper	0.098	0.005	"	0.100		98	75-125			
LCS Dup (7070210-BSD1)				Prepared & Analyzed: 07/02/07						
Zinc	0.113	0.020	mg/l	0.100		113	75-125	7	20	
Lead	0.120	0.005	"	0.100		120	75-125	11	20	
Copper	0.101	0.005	"	0.100		101	75-125	3	20	
Cadmium	0.114	0.005	"	0.100		114	75-125	5	20	
Duplicate (7070210-DUP1)		**Source: 0706421-01**		Prepared & Analyzed: 07/02/07						
Zinc	ND	0.020	mg/l		ND				20	
Cadmium	ND	0.005	"		ND				20	
Copper	0.002	0.005	"		0.002			0	20	
Lead	ND	0.005	"		ND				20	
Matrix Spike (7070210-MS1)		**Source: 0706421-01**		Prepared & Analyzed: 07/02/07						
Cadmium	0.102	0.005	mg/l	0.100	ND	102	75-125			
Copper	0.095	0.005	"	0.100	0.002	93	75-125			
Lead	0.112	0.005	"	0.100	ND	112	75-125			
Zinc	0.101	0.020	"	0.100	ND	101	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070210										
Matrix Spike Dup (7070210-MSD1)		**Source: 0706421-01**		Prepared & Analyzed: 07/02/07						
Copper	0.095	0.005	mg/l	0.100	0.002	93	75-125	0	20	
Lead	0.113	0.005	"	0.100	ND	113	75-125	0.9	20	
Cadmium	0.103	0.005	"	0.100	ND	103	75-125	1	20	
Zinc	0.101	0.020	"	0.100	ND	101	75-125	0	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7070209										
Blank (7070209-BLK1)				Prepared: 07/02/07 Analyzed: 07/03/07						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.193*		*"*	*0.250*		*77*	*60-130*			
Surrogate: Tribuytlphosphate	*0.199*		*"*	*0.250*		*80*	*60-130*			
LCS (7070209-BS1)				Prepared: 07/02/07 Analyzed: 07/03/07						
Bolstar	0.37	0.10	ug/l	0.500		74	60-130			
Diazinon	0.38	0.05	"	0.500		76	60-130			
Ethoprop	0.38	0.05	"	0.500		76	60-130			
Mevinphos	0.40	0.25	"	0.500		80	60-130			
Methyl parathion	0.37	0.10	"	0.500		74	60-130			
Phorate	0.35	0.05	"	0.500		70	60-130			
Ronnel	0.38	0.25	"	0.500		76	60-130			
Trichlorinate	0.37	0.05	"	0.500		74	60-130			
Surrogate: Triphenyl phosphate	*0.195*		*"*	*0.250*		*78*	*60-130*			
Surrogate: Tribuytlphosphate	*0.198*		*"*	*0.250*		*79*	*60-130*			
LCS Dup (7070209-BSD1)				Prepared: 07/02/07 Analyzed: 07/03/07						
Bolstar	0.35	0.10	ug/l	0.500		70	60-130	6	30	
Diazinon	0.37	0.05	"	0.500		74	60-130	3	30	
Ethoprop	0.40	0.05	"	0.500		80	60-130	5	30	
Mevinphos	0.36	0.25	"	0.500		72	60-130	11	30	
Methyl parathion	0.35	0.10	"	0.500		70	60-130	6	30	
Phorate	0.39	0.05	"	0.500		78	60-130	11	30	
Ronnel	0.36	0.25	"	0.500		72	60-130	5	30	
Trichlorinate	0.36	0.05	"	0.500		72	60-130	3	30	
Surrogate: Triphenyl phosphate	*0.193*		*"*	*0.250*		*77*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*		*"*	*0.250*		*80*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062816										
Blank (7062816-BLK1)				Prepared: 06/28/07	Analyzed: 06/29/07					
Oil & Grease	ND	5	mg/l							
LCS (7062816-BS1)				Prepared: 06/28/07	Analyzed: 06/29/07					
Oil & Grease	98	5	mg/l	108		91	75-125			
LCS Dup (7062816-BSD1)				Prepared: 06/28/07	Analyzed: 06/29/07					
Oil & Grease	81	5	mg/l	92.5		88	75-125	19	20	
Batch 7062844										
Blank (7062844-BLK1)				Prepared: 06/28/07	Analyzed: 07/02/07					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7062844-DUP1)		**Source: 0706433-01**		Prepared: 06/28/07	Analyzed: 07/02/07					
Hardness (Total)	569	10	mg CaCO3/L		666			16	20	
Batch 7062920										
Blank (7062920-BLK1)				Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7062920-BS1)				Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120			
LCS Dup (7062920-BSD1)				Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	0.9	0.5	mg/l	1.00		90	80-120	11	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0706438

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7062920										
Duplicate (7062920-DUP1)		**Source: 0706415-01**		Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	ND	0.5	mg/l		ND				20	
Matrix Spike (7062920-MS1)		**Source: 0706415-01**		Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120			
Matrix Spike Dup (7062920-MSD1)		**Source: 0706415-01**		Prepared & Analyzed: 06/28/07						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00	ND	100	80-120	0	20	
Batch 7070215										
Duplicate (7070215-DUP1)		**Source: 0706463-01**		Prepared & Analyzed: 06/28/07						
Turbidity	0.30	0.05	NTU		0.29			3	20	
Reference (7070215-SRM1)				Prepared & Analyzed: 06/28/07						
Turbidity	1.57	0.05	NTU	1.59		99	82.39-117.6			
Batch 7070216										
Duplicate (7070216-DUP1)		**Source: 0706424-02**		Prepared: 07/02/07 Analyzed: 07/03/07						
Total Suspended Solids	214	20	mg/l		232			8	20	
Reference (7070216-SRM1)				Prepared: 07/02/07 Analyzed: 07/03/07						
Total Suspended Solids	84	20	mg/l	94.9		89	84.5-103.47			

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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Address: 9220 Trade St. Suite 119
San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: SAME

Project ID: LA MESA DRY WEATHER F-UP

Project #: 200703W-3 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1	413.2	1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel Ext ASTM	624 / 8260 (VOC) Full BTXE MTBE Ox	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Dia/Ch	TBT (Organotin Compounds)	pH Conductivity (EC) TDS TSS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	Cd Cr Cu Ni Ag Zn Dissolved	Coliform, Total (MTF) Fecal (MTF) Collert,	Enterococcus, MTF Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	Turbidity
01	University 2	6/27/07 13:40	Water	2/5 G/P	X									X		X					X	X	X		X	X
02	Site 39	6/27/07 14:30	water	2 P																		X	X			
03																										
04																										
05																										
06																										
07																										
08																										
09																										
10																										

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other_____

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day 5 day X STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other _____

[1]**Sample Disposal:** ✓ By Laboratory [2]Return to client: P/U or Delivery Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Custody Seals Intact: Yes No N/A

COC/Labels Agree: Yes No N/A

Containers Properly Preserved: Yes No N/A

Temperature @ Receipt: 3°C

Sampled By: ✓ Client EMA Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature:
Print: Manouchehr Dadkhah	Print: W. Lucero
Company: D-Max Eng.	Company: EMA
Signature	Signature
Print	Print
Company	Company
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Gold

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

13 August 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0708020

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200703W-7

Enclosed are the results of analyses for samples received by the laboratory on 08/01/07 13:20. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0708020

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 39, Upstream	0708020-01	Water	08/01/07 09:45	08/01/07 13:20

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0708020

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 39, Upstream (0708020-01) Water	**Sampled: 08/01/07 09:45**		**Received: 08/01/07 13:20**						
Ammonia as N	**0.47**	0.10	mg/l	1	7081102	08/10/07	08/13/07	SM4500 NH3 B,C	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0708020

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 39, Upstream (0708020-01) Water Sampled: 08/01/07 09:45 Received: 08/01/07 13:20									
Total Coliforms	**40**	20	MPN/100 ml	10	7080208	08/01/07	08/05/07	SM 9221 B, E	
Fecal Coliforms	ND	20	"	"	"	"	08/04/07	"	
Enterococcus	**300**	20	"	"	7080209	"	08/05/07	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0708020

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7081102										
Blank (7081102-BLK1)				Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	ND	0.10	mg/l							
LCS (7081102-BS1)				Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	0.75	0.10	mg/l	0.820		91	80-120			
LCS Dup (7081102-BSD1)				Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	0.71	0.10	mg/l	0.820		87	80-120	5	20	
Duplicate (7081102-DUP1)		**Source: 0708040-05**		Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	0.10	0.10	mg/l		0.12			18	20	
Matrix Spike (7081102-MS1)		**Source: 0708040-05**		Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	0.90	0.10	mg/l	0.820	0.12	95	80-120			
Matrix Spike Dup (7081102-MSD1)		**Source: 0708040-05**		Prepared: 08/10/07		Analyzed: 08/13/07				
Ammonia as N	0.85	0.10	mg/l	0.820	0.12	89	80-120	6	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Address: 1220 Trade Street, Suite 114, San Diego, CA 92121

Phone: 858-586-6600 Fax: 858-586-6644

Email:

Billing Address: Same

Project ID: LaMesa DW - F-up

Project #: 200703W-7 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1 413.2 1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel Ext ASTM	624 / 8260 (VOC) Full BTXE MTBE O	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	pH Conductivity (EC) TSS TDS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	Cd Cr Cu Pb Ni Ag Zn Dissolved	Coliform, Total (MTF) Fecal (MTF) Colilert,	Enterococcus, MTF Idexx	Heterotrophic Plate Count (HPC)		
01	site 39, upstream	8/1/07 9:45	water	3 p											X					X	X			
02																								
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other _____

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day 5 day STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other _____

[1]**Sample Disposal:** By Laboratory [2]Return to client: P/U or Delivery Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: 5°C

COC/Labels Agree: Yes No N/A

Sampled By: Client EMA Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature: [illegible]
Print: Manouchehr Dadkhah	Print: Rose Meehan
Company: D-Max	Company: D-Max Engine
Signature: [illegible]	Signature: [illegible]
Print: Rose Meehan	Print: W. Luce
Company: D-Max Engineering Inc	Company: EM
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Golde

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days f disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

Appendix C

Field Data Sheets

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	4A		Latitude	32.77364	Watershed	Hydrologic Unit	907
Location	Alvarado channel, intersection of Fletcher PKWY and Baltimore		Longitude	-117.02771		Hydrologic Area	907.1
			TB Page	1270-H1		Hydrologic Subarea (Optional)	907.11
Date	6/13/07	Time 09:20	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☐ Fine Particulates ☑ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☐ None ☑ Insects ☑ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 10 + 11

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.2	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	8.0	Ortho -PO_4 (mg/L)	0.5
pH (pH units)	8.5	MBAS (mg/L)	0.5	NO_3-N (mg/L)	1.81	Ortho –PO4-P(mg/L)	0.16
COND (mS/cm)	2.22	TURB (NTU)	4.05	Other			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	52	in
Depth	1	in
Velocity	12/12	ft/sec
Flow	162	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash includes food wrappers and plastic bags. Shopping cart in channel as well.

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	12		Latitude	32.77641	Watershed	Hydrologic Unit	907
Location	Jackson Drive, 100ft west of Murray Drive, north side of street		Longitude	-117.01414		Hydrologic Area	907.1
			TB Page	1270-J1		Hydrologic Subarea (Optional)	907.11
Date	6/14/07	Time 14:30	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☑ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 27

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.1	**NH_3-N** (mg/L)	0.5	**NO_3** (mg/L)	3.9	**Ortho -PO_4** (mg/L)	0.8
pH (pH units)	7.2	**MBAS** (mg/L)	0.5	**NO_3-N** (mg/L)	2.01	Ortho –PO4-P(mg/L)	0.26
COND (mS/cm)	2.14	**TURB** (NTU)	12.51	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	0	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	12A		Latitude	32.77611	Watershed	Hydrologic Unit	907
Location	Jackson Drive, 100 feet west of Murray Drive, South side of Street.		Longitude	-117.01453		Hydrologic Area	907.1
			TB Page	1270 - A1		Hydrologic Subarea (Optional)	907.11
Date	6/14/07	Time 10:00	Observer	LD, MC		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☑ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 22

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.8	**NH_3-N** (mg/L)	0.3	**NO_3** (mg/L)	17.5	**Ortho -PO_4** (mg/L)	0.4
pH (pH units)	7.7	**MBAS** (mg/L)	0.5	**NO_3-N** (mg/L)	3.96	Ortho –PO4-P(mg/L)	0.13
COND (mS/cm)	2.25	**TURB** (NTU)	10.85	**Other**			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	13B		Latitude	32.75688	Watershed	Hydrologic Unit	908
Location	Southwest corner of Lowell Street and University Avenue		Longitude	-117.03738		Hydrologic Area	908.2
			TB Page	1270-G4		Hydrologic Subarea (Optional)	908.22
Date	6/12/07	Time 11:55	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☑ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 4

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.2	**NH3-N** (mg/L)	0.3	**NO3** (mg/L)	24.3	**Ortho -PO4** (mg/L)	1.6
pH (pH units)	8.0	**MBAS** (mg/L)	0.75	**NO3-N** (mg/L)	5.49	Ortho –PO4-P(mg/L)	0.52
COND (mS/cm)	3.94	**TURB** (NTU)	2.22	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash includes foodwrappers, Plant debris present as well.

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	13C		Latitude	32.76004	Watershed	Hydrologic Unit	908
Location	Intersection of University Avenue and Parks Avenue		Longitude	-117.03346		Hydrologic Area	908.2
			TB Page	1270-G4		Hydrologic Subarea (Optional)	908.22
Date	6/14/07	Time 09:00	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☑ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☑ Insects	☐ Algae	☐ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 20 + 21

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.4	**NH3-N** (mg/L)	0.2	**NO3** (mg/L)	11.8	**Ortho -PO4** (mg/L)	0.8
pH (pH units)	8.0	**MBAS** (mg/L)	0.5	**NO3-N** (mg/L)	2.67	Ortho –PO4-P(mg/L)	0.26
COND (mS/cm)	3.32	**TURB** (NTU)	8.07	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Cockroaches inside Manhole.

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	14 A		Latitude	32.75438	Watershed	Hydrologic Unit	908
Location	Boulevard Drive between Harbison Ave. and Massachusetts Ave., across from 7105-7033		Longitude	-117.04535		Hydrologic Area	908.2
			TB Page	1270-F4		Hydrologic Subarea (Optional)	908.22
Date	6/14/07	Time 11:00	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☐ Fine Particulates ☑ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other _____

Biology ☐ None ☑ Insects ☑ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☑ Other larvae

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 23 + 24

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	14.4	Ortho -PO_4 (mg/L)	0.4
pH (pH units)	8.3	MBAS (mg/L)	0.38	NO_3-N (mg/L)	3.25	Ortho –PO4-P(mg/L)	0.13
COND (mS/cm)	2.56	TURB (NTU)	1.27	Other			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	14	in
Depth	0.5	in
Velocity	10/10	ft/sec
Flow	22	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash includes food wrappers, styrofoam container, plastic bags & cups.

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	34		Latitude	32.77694	Watershed	Hydrologic Unit	907
Location	Grossmont Shopping Center, in front of Sporto Authority		Longitude	-117.01077		Hydrologic Area	907.1
			TB Page	1271-A1		Hydrologic Subarea (Optional)	907.11
Date	6/14/07	Time 15:00	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☑ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 28

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.2	**NH_3-N** (mg/L)	0.3	**NO_3** (mg/L)	16.7	**Ortho -PO_4** (mg/L)	1.1
pH (pH units)	8.0	**MBAS** (mg/L)	0.38	**NO_3-N** (mg/L)	3.77	Ortho –PO4-P(mg/L)	0.36
COND (mS/cm)	2.01	**TURB** (NTU)	6.47	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	35		Latitude	32.77841	Watershed	Hydrologic Unit	907
Location	Inside Grossmont Shopping Center, in front of Bath and Body Works		Longitude	-117.01070		Hydrologic Area	907.1
			TB Page	1271 - A1		Hydrologic Subarea (Optional)	907.11
Date	6/13/07	Time 13:45	Observer	MD, ML		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☐ None ☑ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 15 + 16

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.7	**NH_3-N** (mg/L)	0.2	**NO_3** (mg/L)	7.6	**Ortho -PO_4** (mg/L)	0.1
pH (pH units)	8.7	**MBAS** (mg/L)	0.25	**NO_3-N** (mg/L)	1.72	Ortho –PO4-P(mg/L)	0.03
COND (mS/cm)	1.78	**TURB** (NTU)	2.36	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	39		Latitude	32.77733	Watershed	Hydrologic Unit	907
Location	Grossmont Shopping Center parking lot between Staples & Mattress Decanters		Longitude	-117.00713		Hydrologic Area	907.1
			TB Page	1271-A1		Hydrologic Subarea (Optional)	907.11
Date	6/13/07	Time 11:30	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☑ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 14

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.8	**NH_3-N** (mg/L)	0.3	**NO_3** (mg/L)	3.0	**Ortho -PO_4** (mg/L)	0.6
pH (pH units)	7.9	**MBAS** (mg/L)	0.62	**NO_3-N** (mg/L)	0.68	Ortho –PO4-P(mg/L)	0.2
COND (mS/cm)	1.90	**TURB** (NTU)	9.24	**Other**			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☑ IC/ID Follow-Up For Enterococcus

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	39		**Latitude**	32.77733	**Watershed**	**Hydrologic Unit**	907
Location	Grossmont Shopping Center Parkinglot, between Staples & Mattress Discounters		**Longitude**	-117.00713		**Hydrologic Area**	907.1
			TB Page	1271-A1		**Hydrologic Subarea** (Optional)	907.11
Date	6/25/07	**Time** 10:30	**Observer**	MD.MC		**Discharge Area** (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☑ > 72 hours ☐ < 72 hours
Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____
Biology ☑ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.8	**NH_3-N** (mg/L)	NT	**NO_3** (mg/L)	NT	**Ortho -PO_4** (mg/L)	NT
pH (pH units)	7.9	**MBAS** (mg/L)	NT	**NO_3-N** (mg/L)	NT	Ortho –PO4-P(mg/L)	NT
COND (mS/cm)	2.05	**TURB** (NTU)	NT	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	40		Latitude	32.77848	Watershed	Hydrologic Unit	907
Location	N.E. corner of Grossmont Center Drive and Murray Drive, South of Trader Joe's parking lot.		Longitude	-117.00639		Hydrologic Area	907.1
			TB Page	1271 - A1		Hydrologic Subarea (Optional)	907.11
Date	6/12/07	Time 14:45	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☑ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 7

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.2	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	2.0	Ortho -PO_4 (mg/L)	1.0
pH (pH units)	7.6	MBAS (mg/L)	0.38	NO_3-N (mg/L)	0.45	Ortho –PO4-P(mg/L)	0.33
COND (mS/cm)	1.79	TURB (NTU)	21.91	Other			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	50		Latitude	32.75516	Watershed	Hydrologic Unit	908
Location	Harbison Ave. and University Ave. intersection, west sidewalk, east of CB Hair and Nails		Longitude	-117.04584		Hydrologic Area	908.2
			TB Page	1270-F4		Hydrologic Subarea (Optional)	908.22
Date	6/12/07	Time 11:15	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☑ > 72 hours ☐ < 72 hours
Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____
Biology ☑ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 3

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.5	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	25.9	Ortho -PO_4 (mg/L)	1.1
pH (pH units)	8.0	MBAS (mg/L)	0.5	NO_3-N (mg/L)	5.85	Ortho –PO4-P(mg/L)	0.34
COND (mS/cm)	5.30	TURB (NTU)	2.25	Other			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash includes plastic bags & food wrappers.

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	52		Latitude	32.74514	Watershed	Hydrologic Unit	908
Location	Massachusetts Ave., White Dr., south end of Harris St.		Longitude	-117.03931		Hydrologic Area	908.2
			TB Page	1270-F5		Hydrologic Subarea (Optional)	908.22
Date	6/13/07	Time 14:50	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☐ Fine Particulates ☑ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other _____

Biology ☐ None ☑ Insects ☑ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☑ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 17+18

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.1	**NH_3-N** (mg/L)	0.2	**NO_3** (mg/L)	13.2	**Ortho -PO_4** (mg/L)	1.5
pH (pH units)	8.3	**MBAS** (mg/L)	0.5	**NO_3-N** (mg/L)	2.98	Ortho –PO4-P(mg/L)	0.49
COND (mS/cm)	3.72	**TURB** (NTU)	4.95	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	55		Latitude	32.76970	Watershed	Hydrologic Unit	909
Location	Bancroft Dr., Madison Ave., east of residential address 9132		Longitude	-117.00019		Hydrologic Area	909.1
			TB Page	1271-B2		Hydrologic Subarea (Optional)	909.12
Date	6/12/07	Time 1355	Observer	MD, ML		Discharge Area (Optional)	

Land Use (Primary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☐ Fine Particulates ☑ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other _____

Biology ☐ None ☐ Insects ☑ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 5 + 6

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.7	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	1.8	Ortho -PO_4 (mg/L)	0.3
pH (pH units)	8.2	MBAS (mg/L)	0.25	NO_3-N (mg/L)	0.41	Ortho –PO4-P(mg/L)	0.11
COND (mS/cm)	2.65	TURB (NTU)	3.34	Other			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	57		Latitude	32.78532	Watershed	Hydrologic Unit	907
Location	Amaya Dr., east of Severin Dr., across from Howell Dr.		Longitude	-116.99744		Hydrologic Area	907.1
			TB Page	1251-B7		Hydrologic Subarea (Optional)	907.11
Date	6/13/07	Time 10:45	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☑ > 72 hours ☐ < 72 hours
Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Coarse Particulate ☐ Fine Particulates ☑ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other _____
Biology ☐ None ☑ Insects ☑ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 12+13

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.1	**NH_3-N** (mg/L)	0.2	**NO_3** (mg/L)	0.4	**Ortho -PO_4** (mg/L)	1.0
pH (pH units)	7.7	**MBAS** (mg/L)	0.38	**NO_3-N** (mg/L)	0.09	Ortho –PO4-P(mg/L)	0.33
COND (mS/cm)	2.19	**TURB** (NTU)	2.52	**Other**			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash includes aluminum can, plastic bags & a food wrapper.

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	58		Latitude	32.78625	Watershed	Hydrologic Unit	907
Location	Northeast corner of Amaya Dr. & Amaya Ct. intersection		Longitude	-117.00143		Hydrologic Area	907.1
			TB Page	1251-B7		Hydrologic Subarea (Optional)	907.11
Date	6/13/07	Time 16:00	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☑ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 19

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.1	**NH_3-N** (mg/L)	0.4	**NO_3** (mg/L)	1.0	**Ortho -PO_4** (mg/L)	0.1
pH (pH units)	7.5	**MBAS** (mg/L)	0.25	**NO_3-N** (mg/L)	0.23	Ortho –PO4-P(mg/L)	0.03
COND (mS/cm)	2.14	**TURB** (NTU)	14.63	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	59		Latitude	32.78180	Watershed	Hydrologic Unit	907
Location	Southeast corner of Parkway Dr. and Amarillo Ave. intersection		Longitude	-117.01328		Hydrologic Area	907.1
			TB Page	1250-J7		Hydrologic Subarea (Optional)	907.11
Date	6/12/07	Time 16:15	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☐ Fine Particulates	☑ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☑ Insects	☑ Algae	☐ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 8+9

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.4	**NH_3-N** (mg/L)	0.2	**NO_3** (mg/L)	7.2	**Ortho -PO_4** (mg/L)	0.5
pH (pH units)	8.1	**MBAS** (mg/L)	0.25	**NO_3-N** (mg/L)	1.63	Ortho –PO4-P(mg/L)	0.16
COND (mS/cm)	2.00	**TURB** (NTU)	1.54	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	60		Latitude	32.78079	Watershed	Hydrologic Unit	907
Location	Jackson Drive, North of Fletcher Pkwy, Across from Mesa Ridge Apartments.		Longitude	-117.01904		Hydrologic Area	907.1
			TB Page	1250-J7		Hydrologic Subarea (Optional)	907.11
Date	6/14/07	Time 13:30	Observer	MD, MC		Discharge Area (Optional)	

Land Use (Primary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☑ > 72 hours ☐ < 72 hours
Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____
Biology ☑ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 26

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.9	**NH_3-N** (mg/L)	0.2	**NO_3** (mg/L)	3.6	**Ortho -PO_4** (mg/L)	0.9
pH (pH units)	8.0	**MBAS** (mg/L)	0.63	**NO_3-N** (mg/L)	0.81	Ortho –PO4-P(mg/L)	0.29
COND (mS/cm)	2.63	**TURB** (NTU)	3.18	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Plastic cup down manhole

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	61			Latitude	32.77259	Watershed: Hydrologic Unit	907
Location	Center Dr., Commercial St., west of Industrial Lane in front of City Public Works			Longitude	-117.02238	Hydrologic Area	907.1
				TB Page	1270-H2	Hydrologic Subarea (Optional)	907.11
Date	6/14/07	Time	13:10	Observer	MD, KL	Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☑ Other NS
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☑ Other NS
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque			☑ Other NS
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☑ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive			☐ Other
Biology	☑ None	☐ Insects	☐ Algae	☐ Snails/Fish	☐ Mussels/Barnacles		☐ Other

Flow Observed ☐ Yes ☑ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 25

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		**NH_3-N** (mg/L)		**NO_3** (mg/L)		**Ortho -PO_4** (mg/L)	
pH (pH units)		**MBAS** (mg/L)		**NO_3-N** (mg/L)		Ortho –PO4-P(mg/L)	
COND (mS/cm)		**TURB** (NTU)		**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	DRY	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	64		Latitude	32.77651	Watershed	Hydrologic Unit	907
Location	North side of Seton Hall St., between Swathmore St. and Wheaton St.		Longitude	-117.03462		Hydrologic Area	907.1
			TB Page	1270-G1		Hydrologic Subarea (Optional)	907.11
Date	6/12/07	Time 10:10	Observer	M.D.MC		Discharge Area (Optional)	

Land Use (Primary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☑ > 72 hours ☐ < 72 hours
Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____
Biology ☐ None ☑ Insects ☑ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 1+2

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.0	**NH_3-N** (mg/L)	0.1	**NO_3** (mg/L)	0.4	**Ortho -PO_4** (mg/L)	0.3
pH (pH units)	10.0	**MBAS** (mg/L)	0.63	**NO_3-N** (mg/L)	0.09	Ortho –PO4-P(mg/L)	0.1
COND (mS/cm)	1.12	**TURB** (NTU)	3.43	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	41	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash includes plastic bags + PVC pipe

City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☑ IC/ID Follow-Up For pH

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	64		**Latitude**	32.77651	**Watershed**	**Hydrologic Unit**	907
Location	North side of Seton Hall St., between Swathmore St. and Wheaton St.		**Longitude**	-117.03462		**Hydrologic Area**	907.1
			TB Page	1270-G1		**Hydrologic Subarea** (Optional)	907.11
Date	6/13/07	**Time** 08:40	**Observer**	MD, MC		**Discharge Area** (Optional)	

Land Use (Primary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☑ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☐ None ☑ Insects ☑ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☑ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.0	**NH_3-N** (mg/L)	NT	**NO_3** (mg/L)	NT	**Ortho -PO_4** (mg/L)	NT
pH (pH units)	9.3	**MBAS** (mg/L)	NT	**NO_3-N** (mg/L)	NT	Ortho –PO4-P(mg/L)	NT
COND (mS/cm)	1.08	**TURB** (NTU)	NT	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Attachment 1

Historical Data Graphs:
San Diego River Watershed

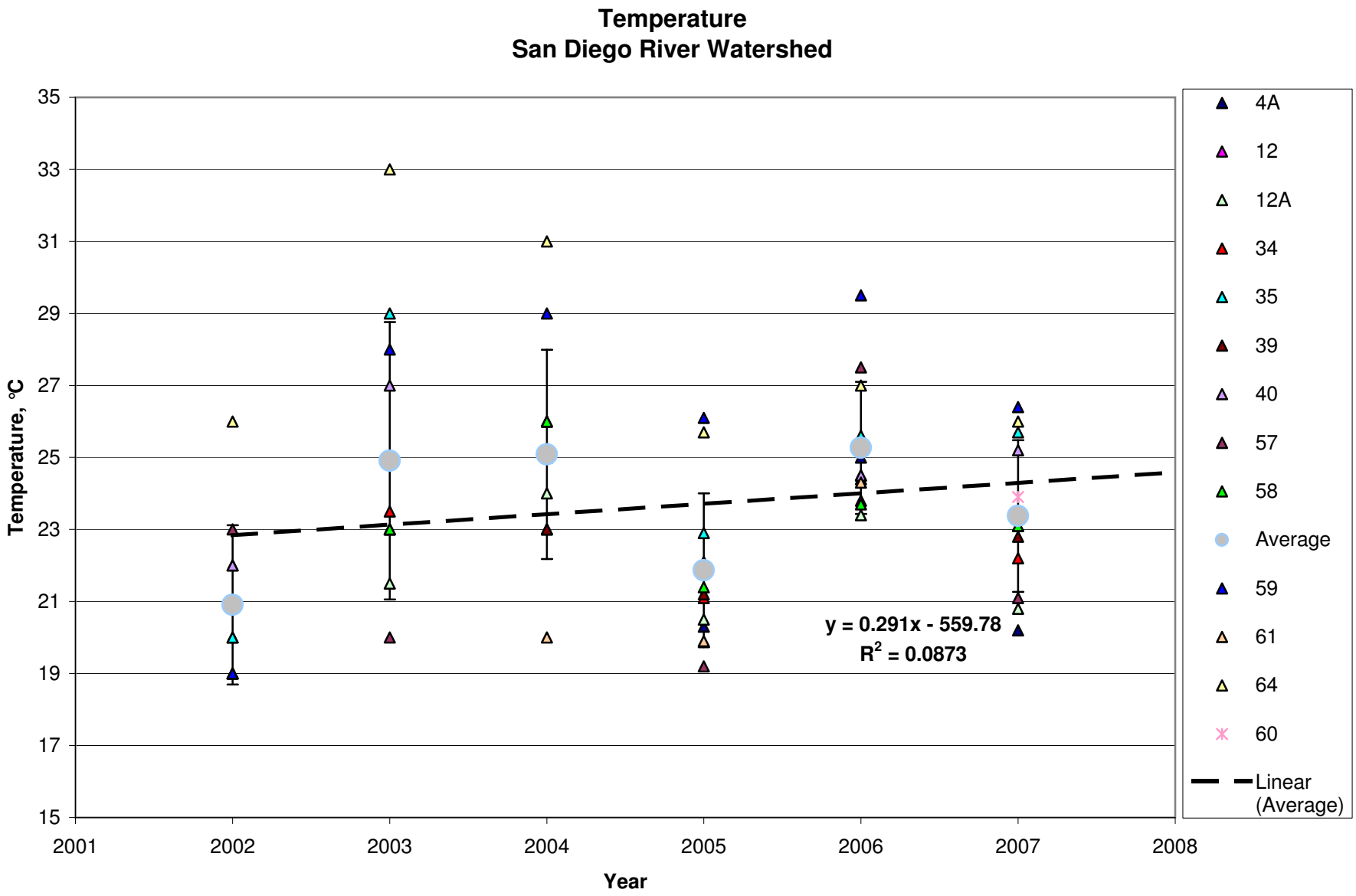
Temperature
San Diego River Watershed
Temperature, °C
35
33
31
29
27
25
23
21
19
17
15
2001
2002
2003
2004
2005
2006
2007
2008
Year
y = 0.291x - 559.78
R2 = 0.0873
4A
12
12A
34
35
39
40
57
58
Average
59
61
64
60
Linear (Average)

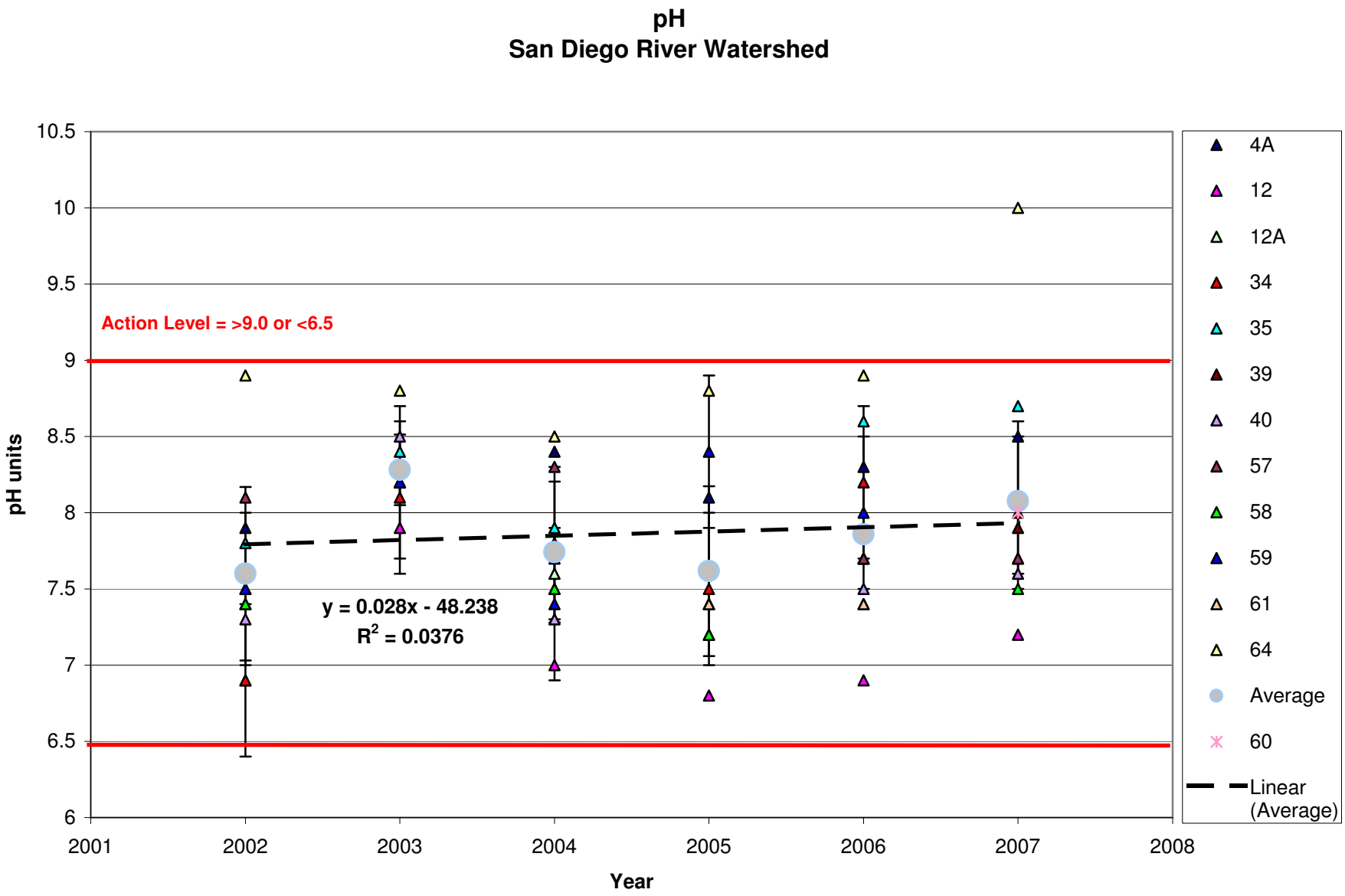
pH
San Diego River Watershed
Action Level = >9.0 or <6.5
y = 0.028x - 48.238
R2 = 0.0376
pH units
Year
10.5
10
9.5
9
8.5
8
7.5
7
6.5
6
2001
2002
2003
2004
2005
2006
2007
2008
4A
12
12A
34
35
39
40
57
58
59
61
64
Average
60
Linear (Average)

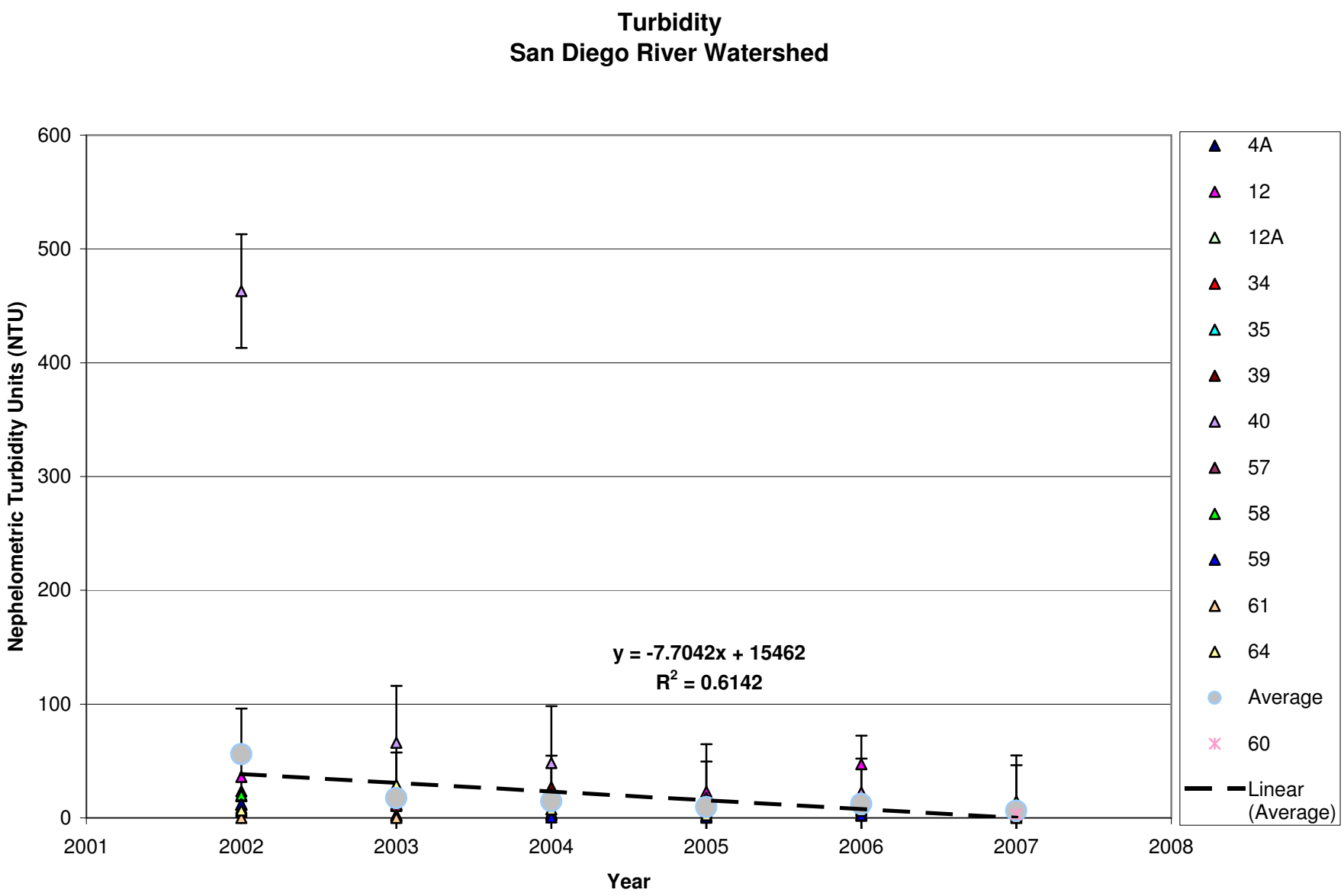
Turbidity
San Diego River Watershed
Nephelometric Turbidity Units (NTU)
600
500
400
300
200
100
0
2001
2002
2003
2004
2005
2006
2007
2008
Year
y = -7.7042x + 15462
R2 = 0.6142
4A
12
12A
34
35
39
40
57
58
59
61
64
Average
60
Linear (Average)

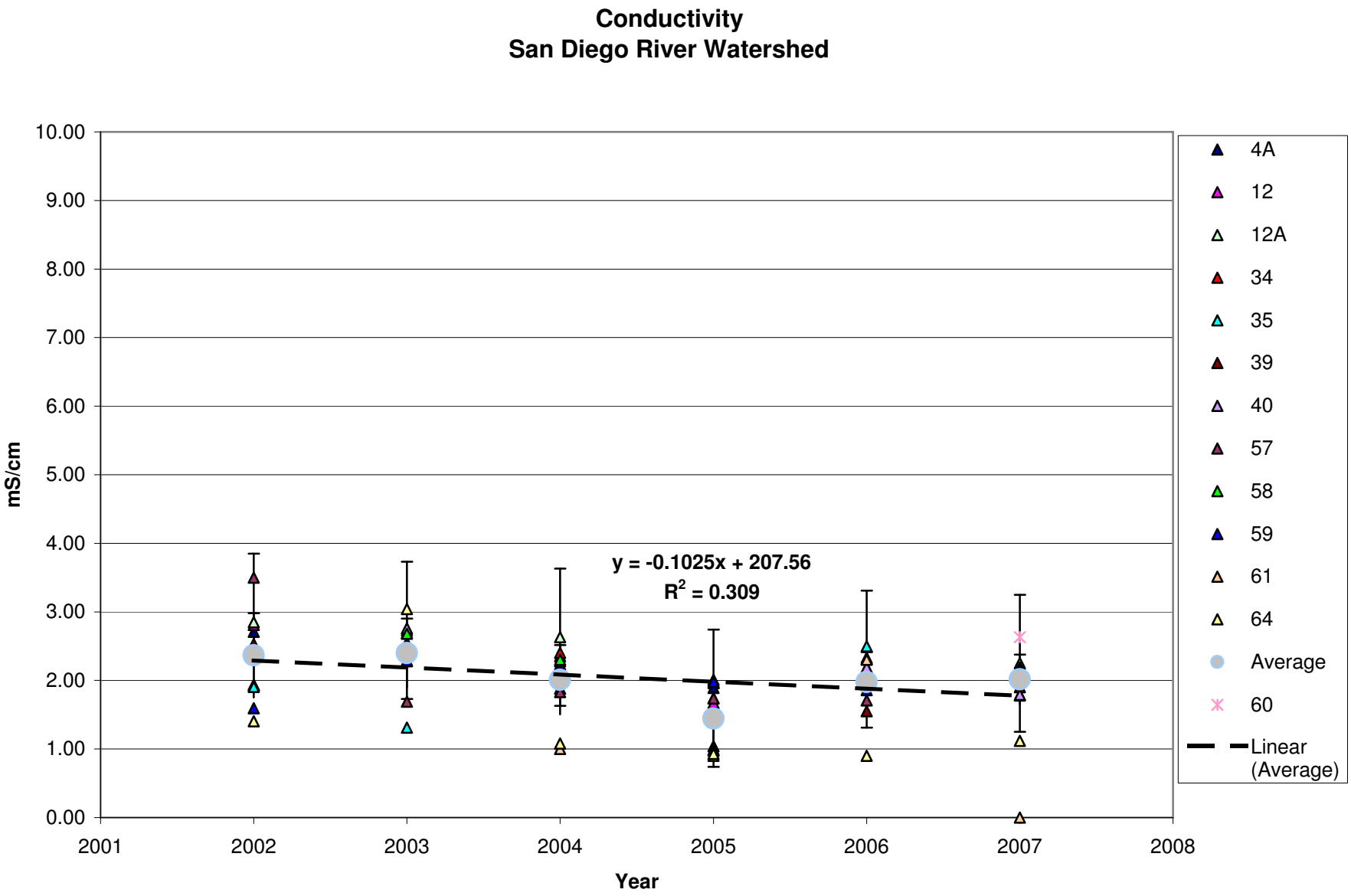
Conductivity
San Diego River Watershed
mS/cm
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
2001
2002
2003
2004
2005
2006
2007
2008
Year
y = -0.1025x + 207.56
R2 = 0.309
4A
12
12A
34
35
39
40
57
58
59
61
64
Average
60
Linear (Average)

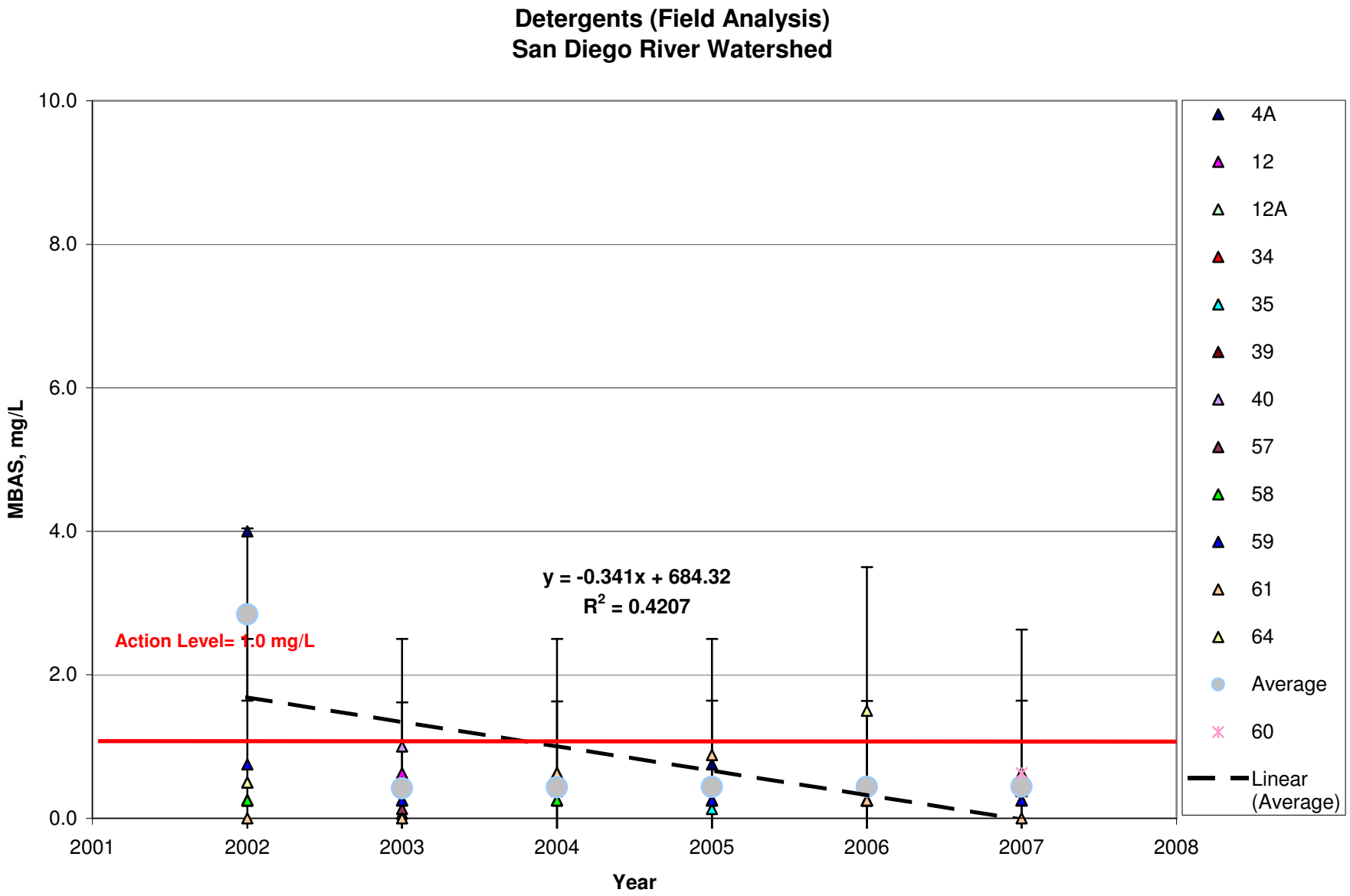
Detergents (Field Analysis)
San Diego River Watershed
MBAS, mg/L
10.0
8.0
6.0
4.0
2.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
Year
y = -0.341x + 684.32
R2 = 0.4207
Action Level= 1.0 mg/L
4A
12
12A
34
35
39
40
57
58
59
61
64
Average
60
Linear (Average)

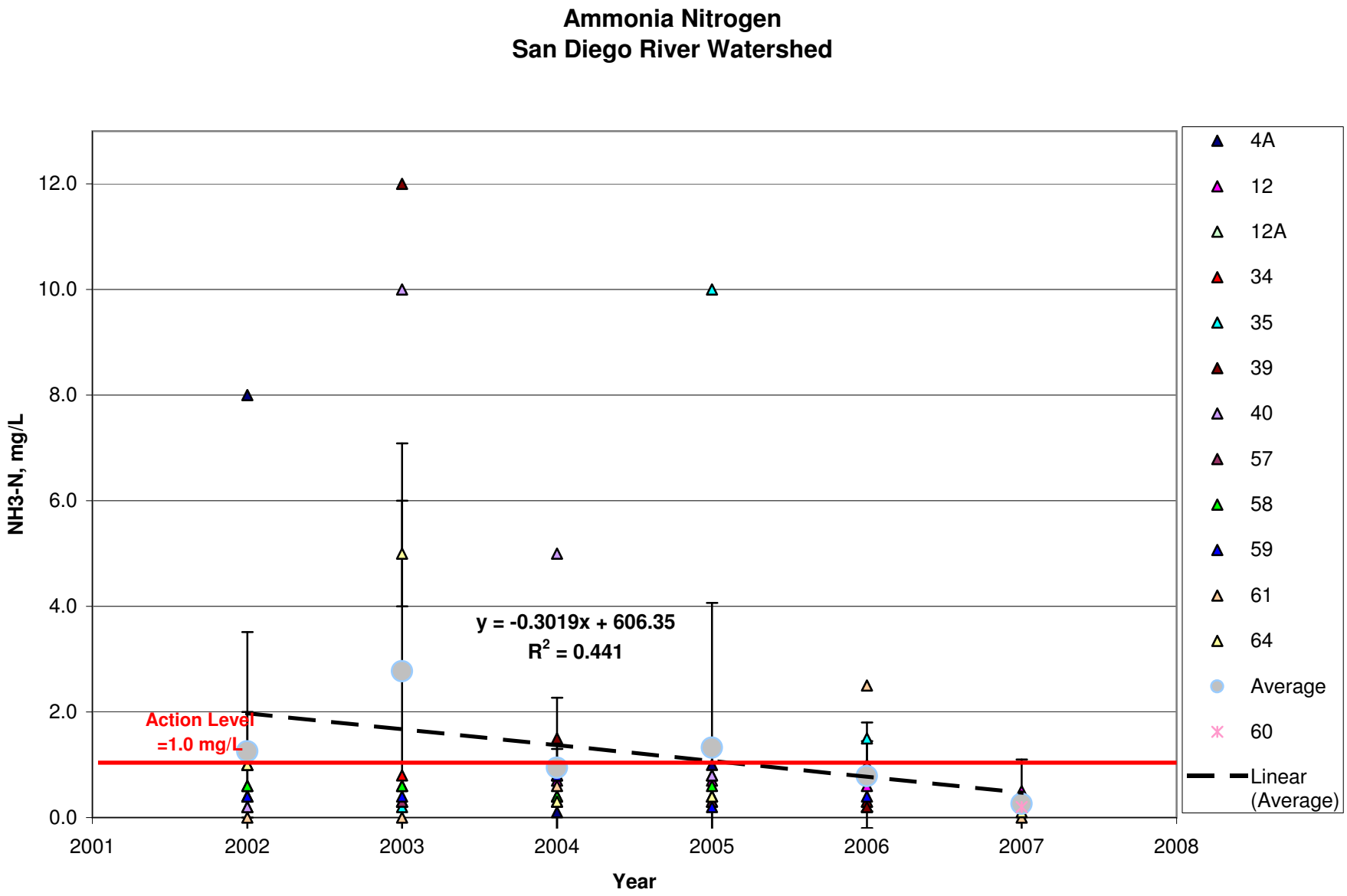
Ammonia Nitrogen
San Diego River Watershed
NH3-N, mg/L
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
Year
y = -0.3019x + 606.35
R2 = 0.441
Action Level
=1.0 mg/L
4A
12
12A
34
35
39
40
57
58
59
61
64
Average
60
Linear
(Average)

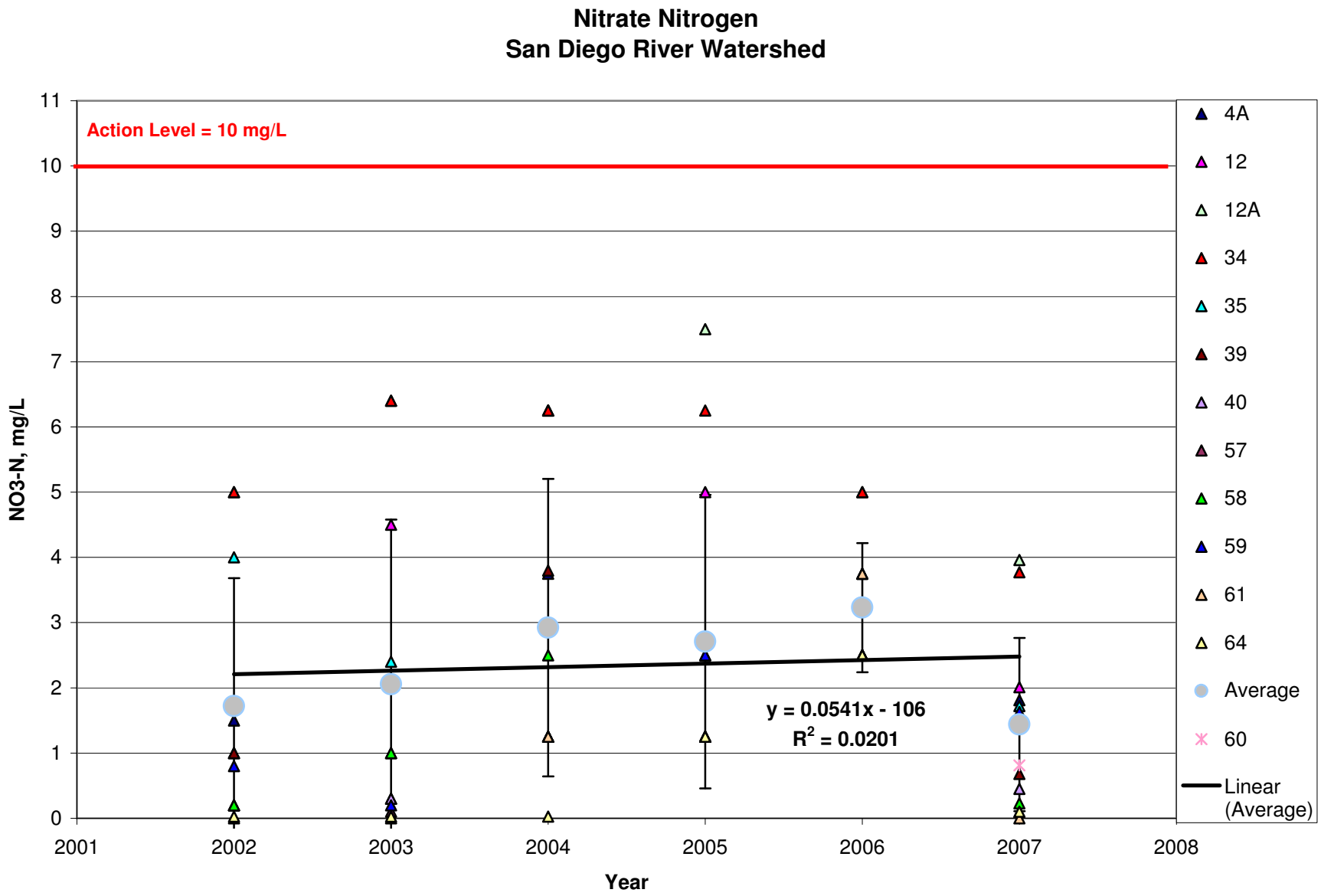
Nitrate Nitrogen
San Diego River Watershed
Action Level = 10 mg/L
NO3-N, mg/L
Year
y = 0.0541x - 106
R2 = 0.0201
4A
12
12A
34
35
39
40
57
58
59
61
64
Average
60
Linear (Average)

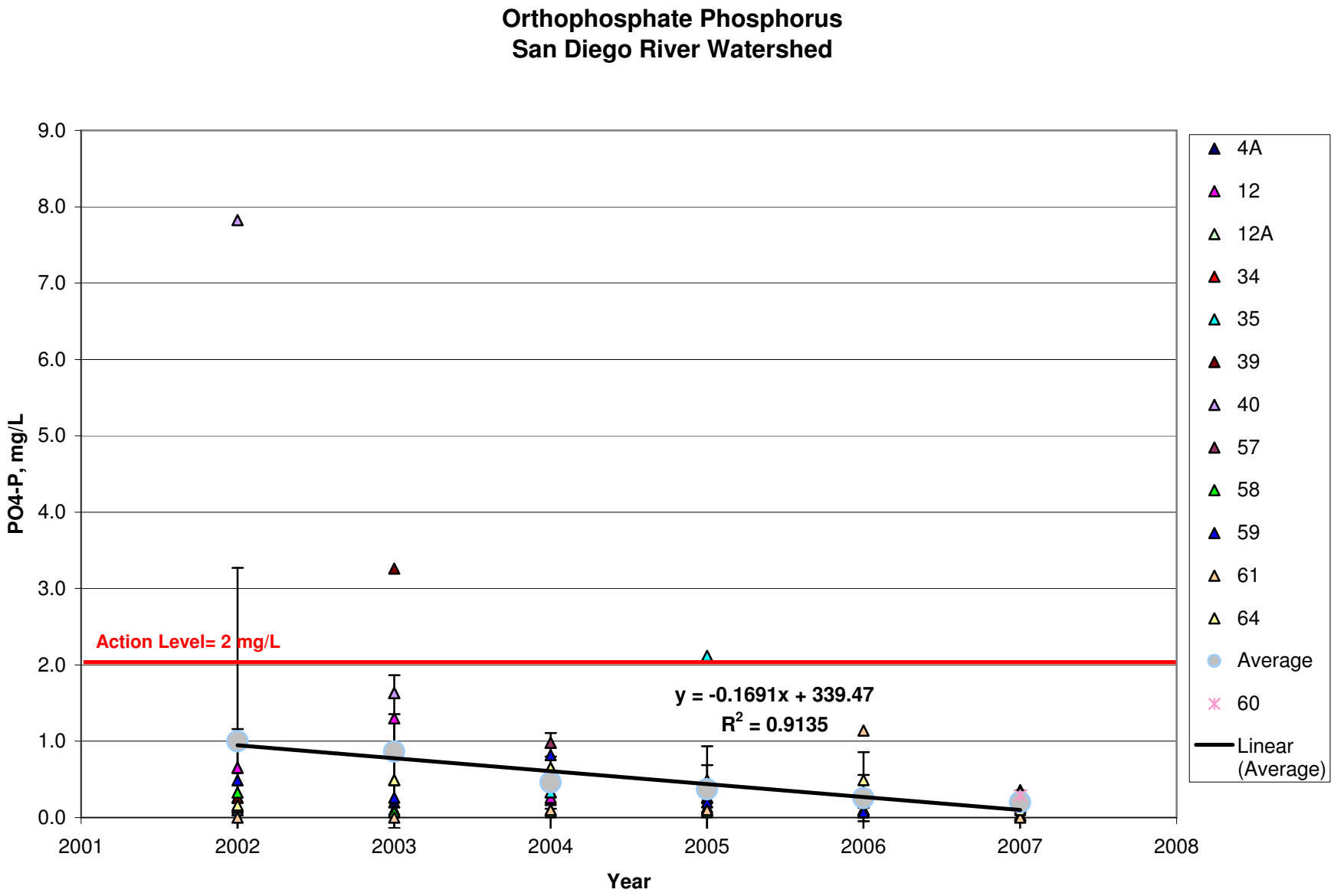
Orthophosphate Phosphorus
San Diego River Watershed
PO4-P, mg/L
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
Action Level= 2 mg/L
y = -0.1691x + 339.47
R2 = 0.9135
2001
2002
2003
2004
2005
2006
2007
2008
Year
4A
12
12A
34
35
39
40
57
58
59
61
64
Average
60
Linear (Average)

Surfactants (Laboratory Analysis)
San Diego River Watershed

Note: All "nd" values have been plotted as 0.25 mg/L, which equals (reporting limit)/2

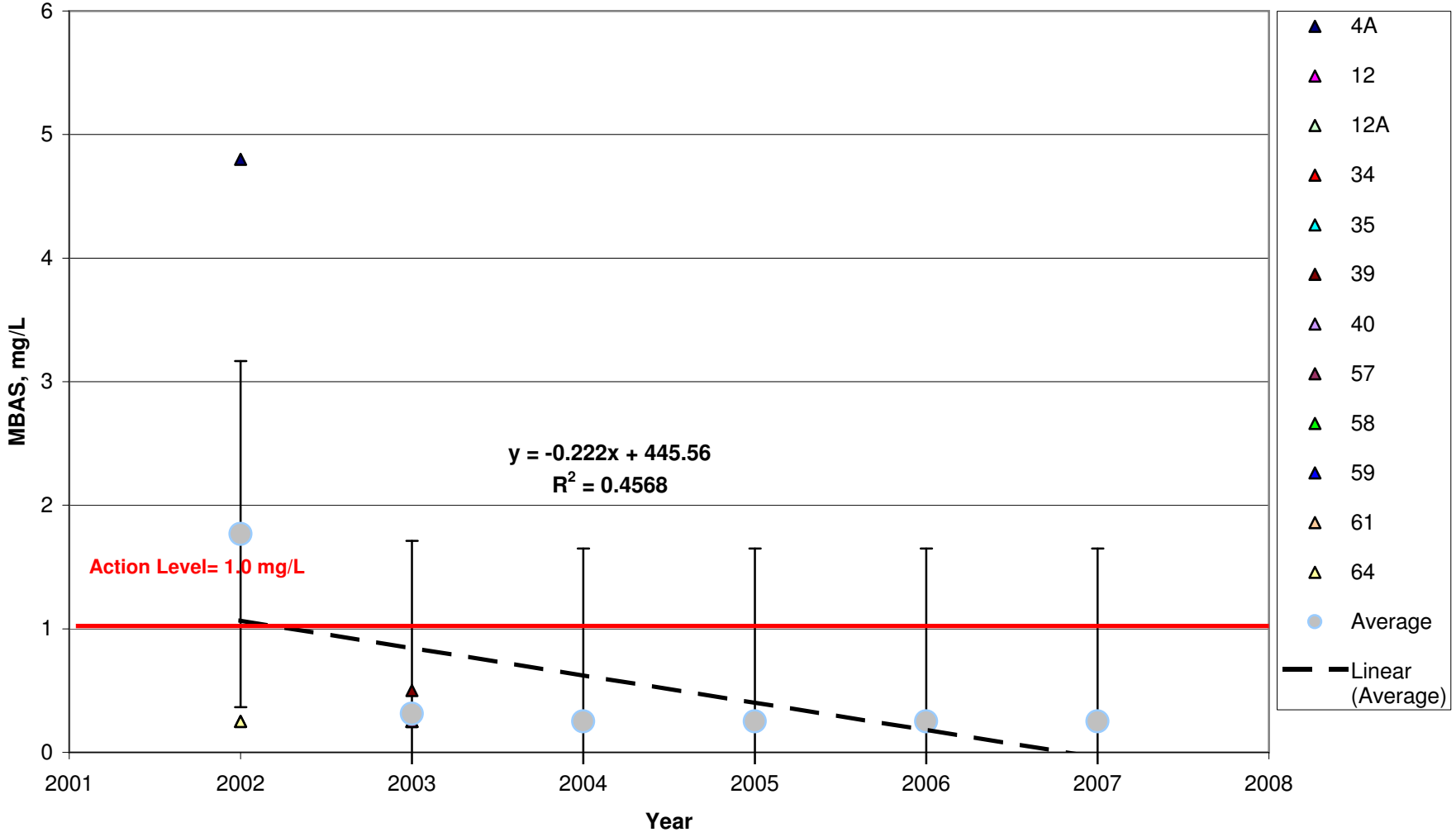

Oil & Grease
San Diego River Watershed

Note: All "nd" values have been plotted with a value of (reporting limit)/2; this is 0.5 mg/L for 2002-2004 and 2.5 mg/L for 2005

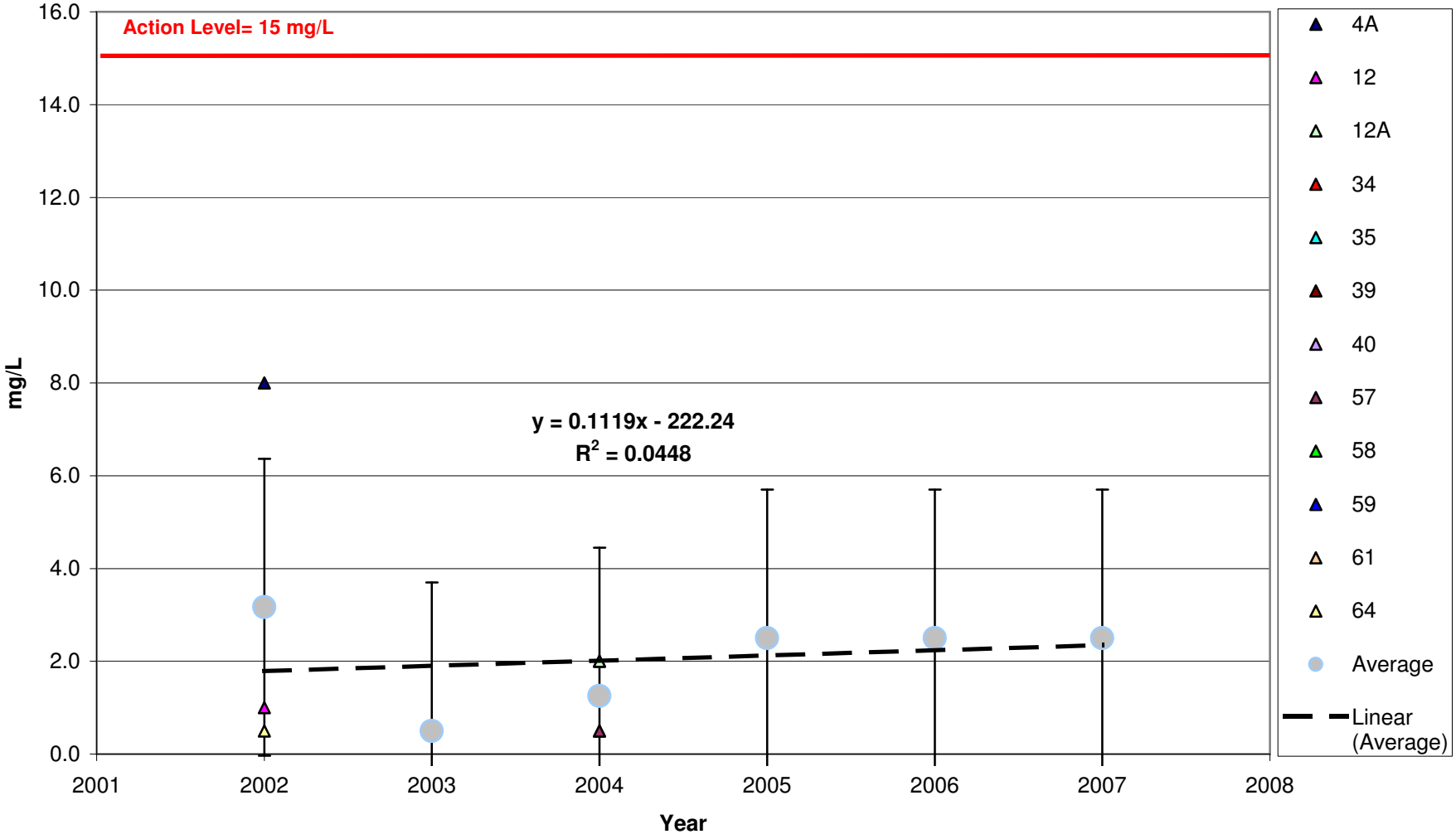

Dissolved Cadmium
San Diego River Watershed

Note: No detectable levels of cadmium have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit)/2

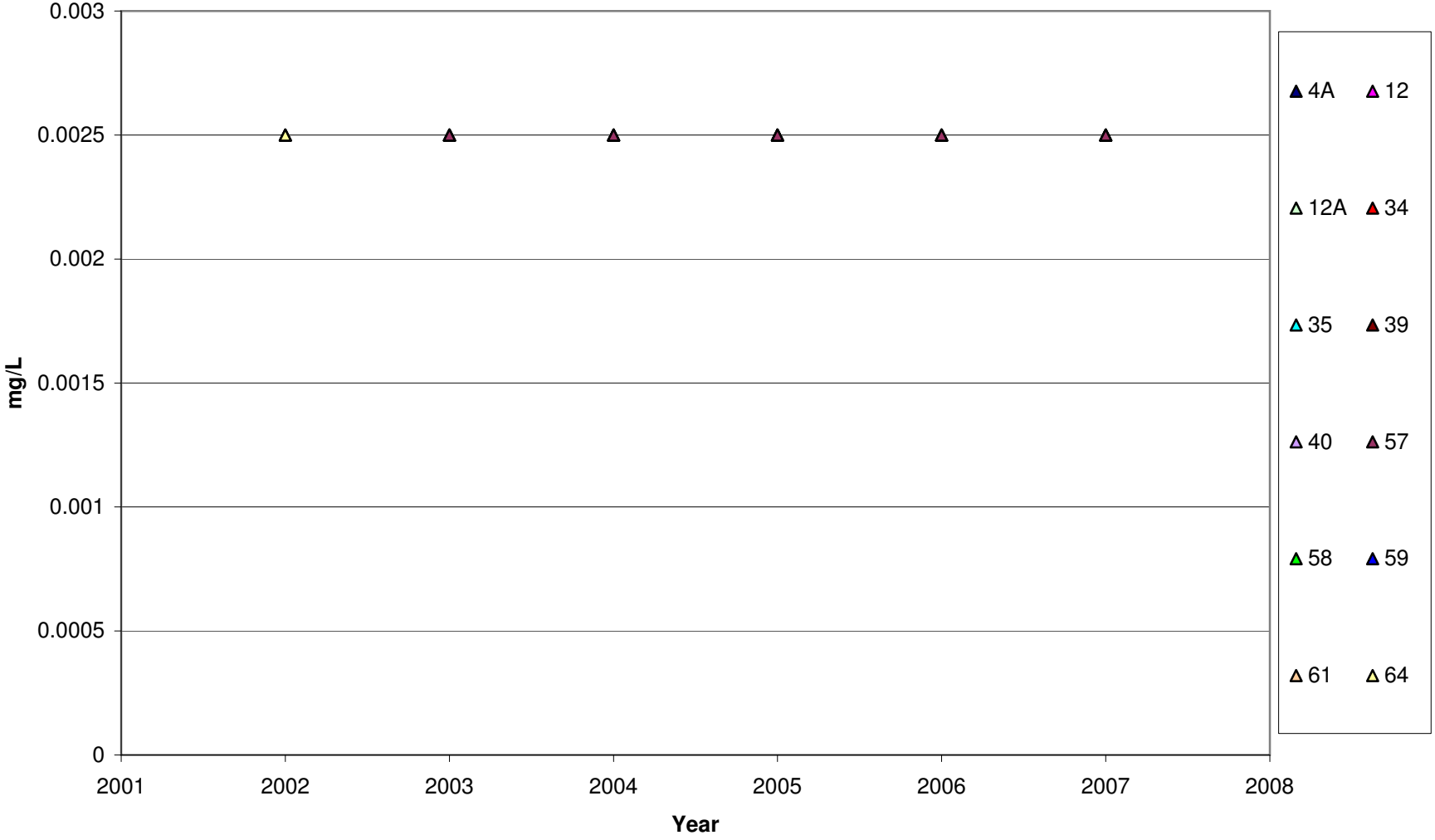

Dissolved Copper
San Diego River Watershed

Note: No detectable levels of copper have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit)/2

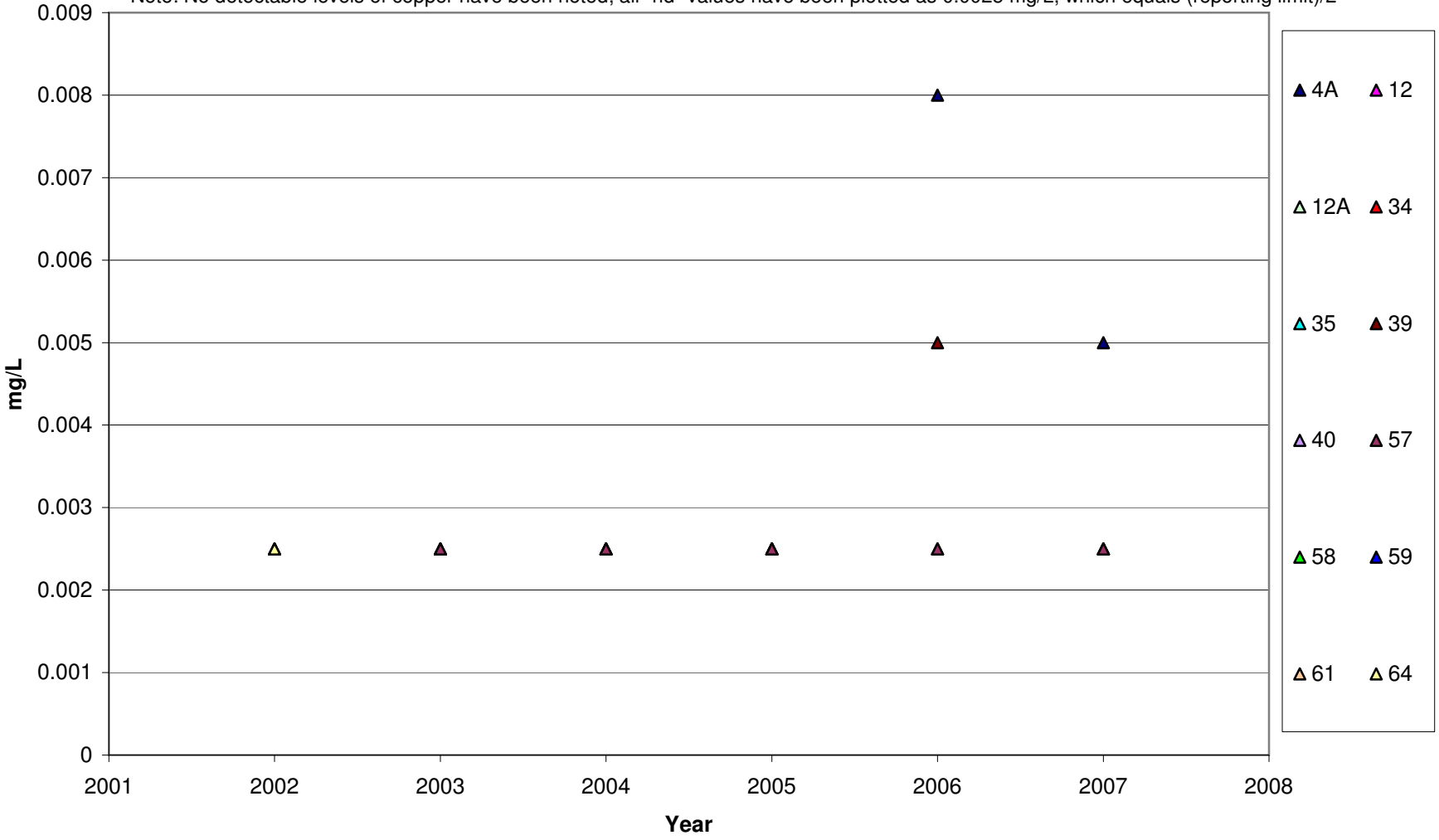

Dissolved Lead
San Diego River Watershed

Note: No detectable levels of lead have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit)/2

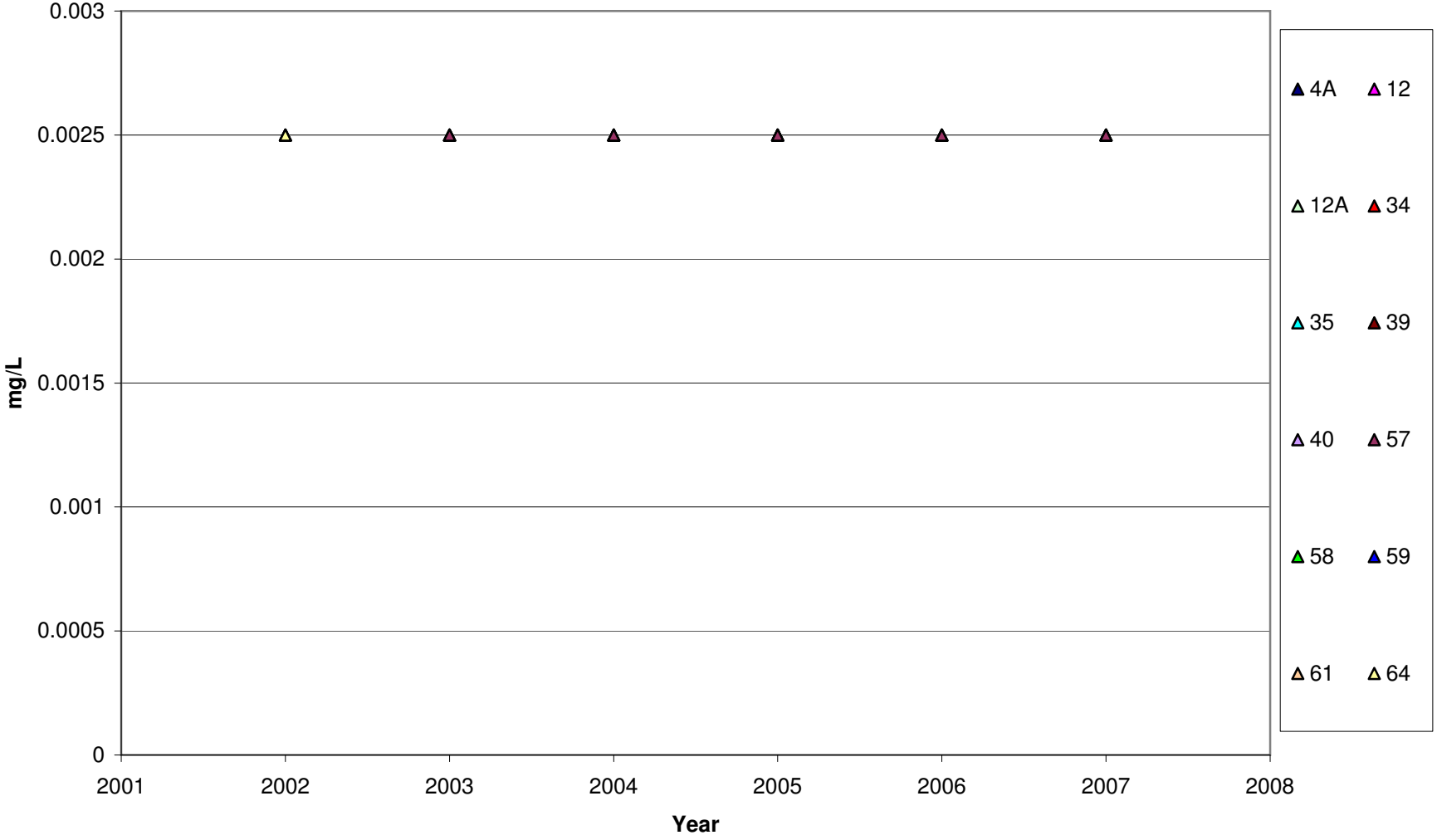

Dissolved Zinc
San Diego River Watershed

Note: All "nd" values have been plotted as 0.01 mg/L, which equals (reporting limit)/2

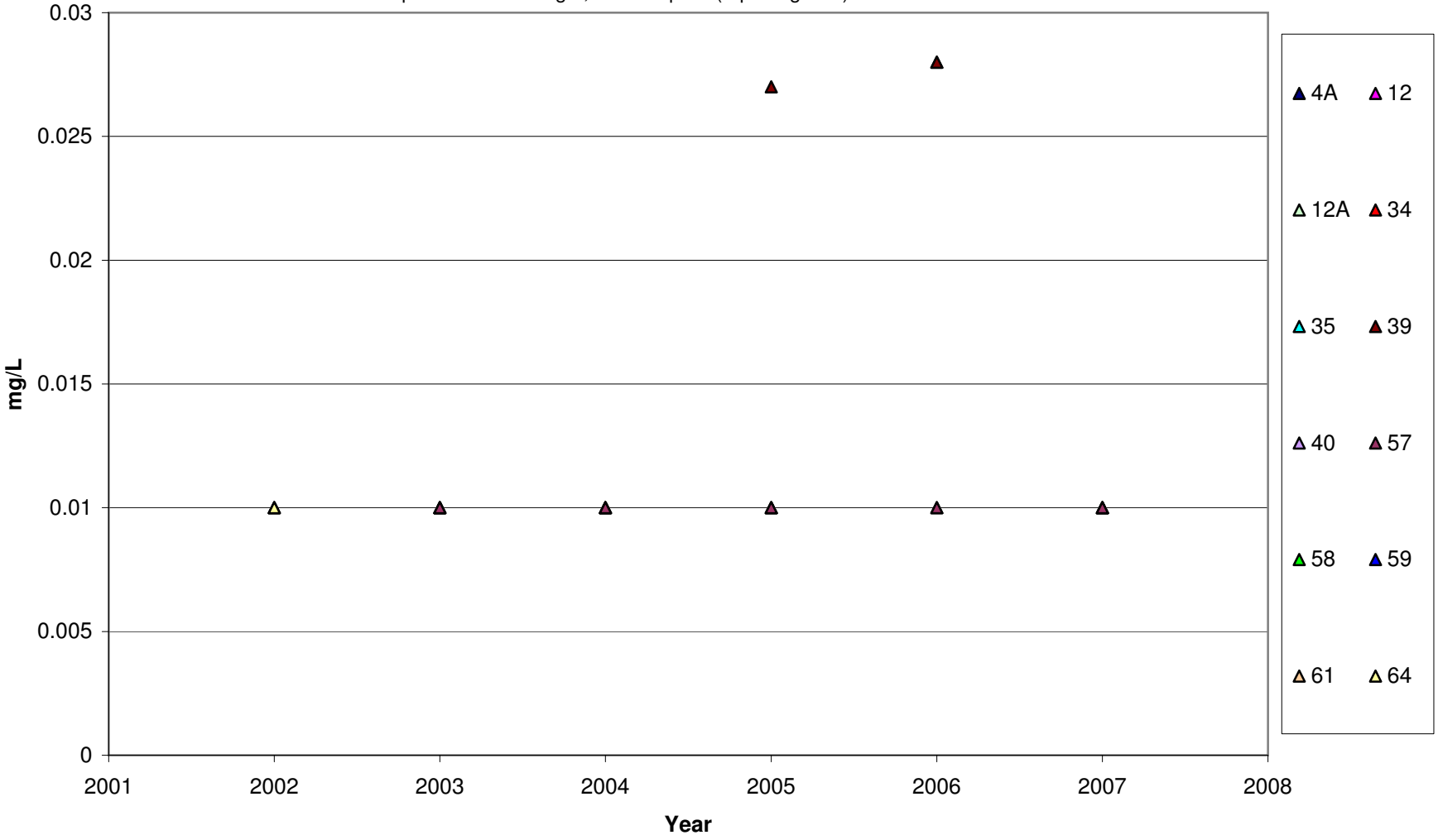

Diazinon
San Diego River Watershed

Note: All "nd" values have been plotted as 0.025 µg/L, which equals (reporting limit)/2

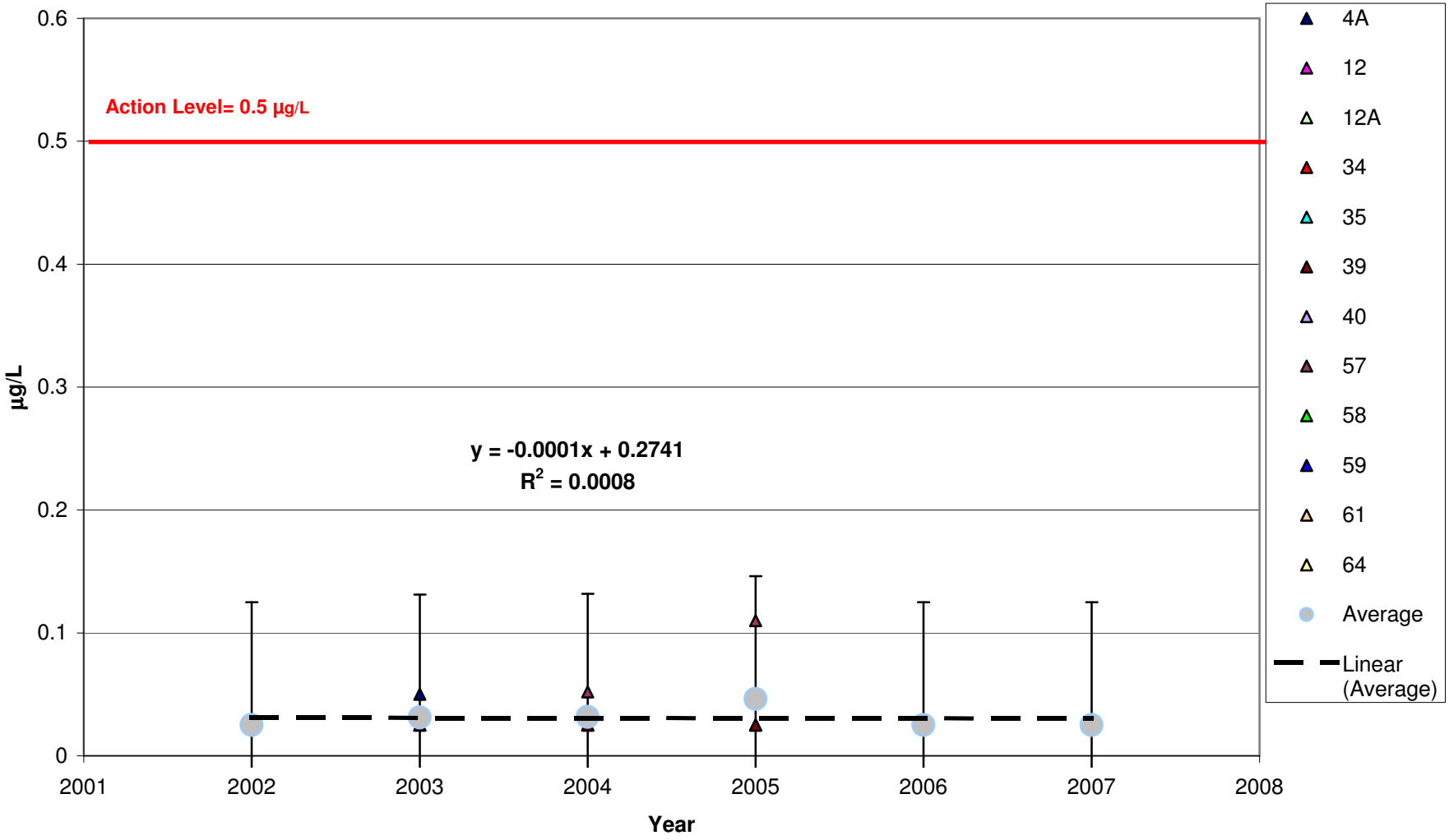

Chlorpyrifos
San Diego River Watershed

Note: No detectable levels of chlorpyrifos have been noted; all "nd" values have been plotted as 0.025 µg/L, which equals (reporting limit)/2

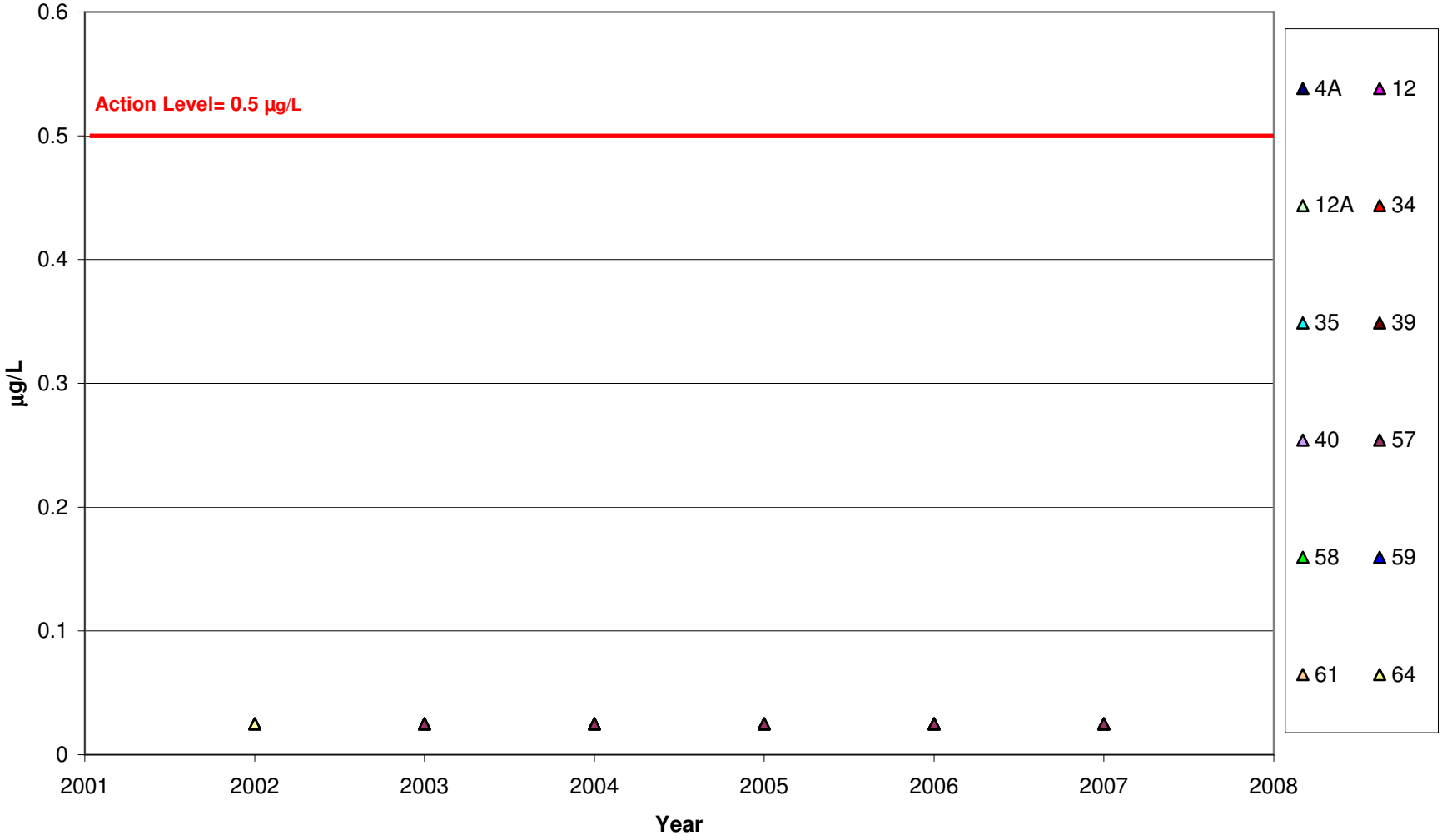

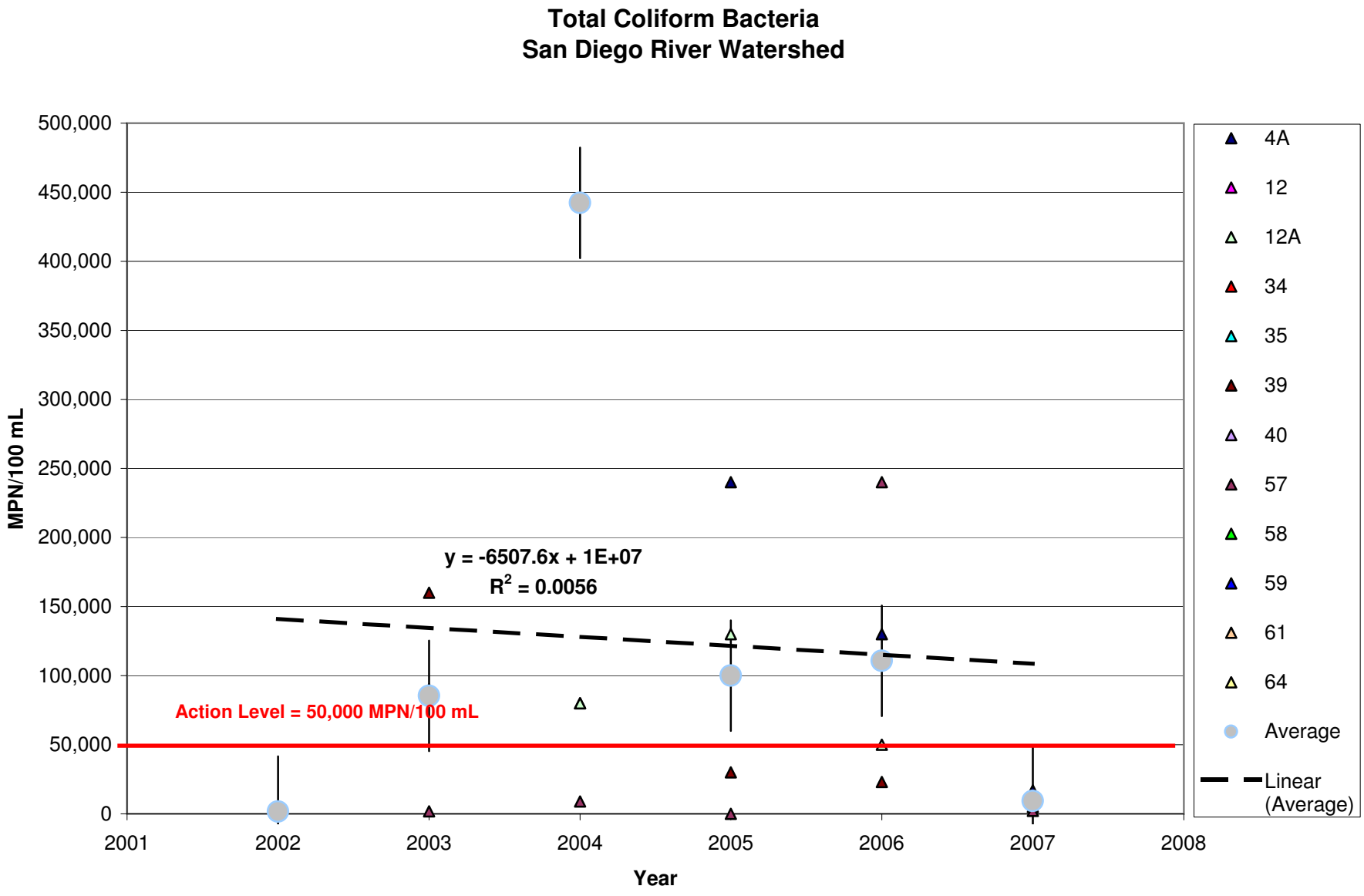
Total Coliform Bacteria
San Diego River Watershed
MPN/100 mL
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
2001
2002
2003
2004
2005
2006
2007
2008
Year
y = -6507.6x + 1E+07
R2 = 0.0056
Action Level = 50,000 MPN/100 mL
4A
12
12A
34
35
39
40
57
58
59
61
64
Average
Linear (Average)

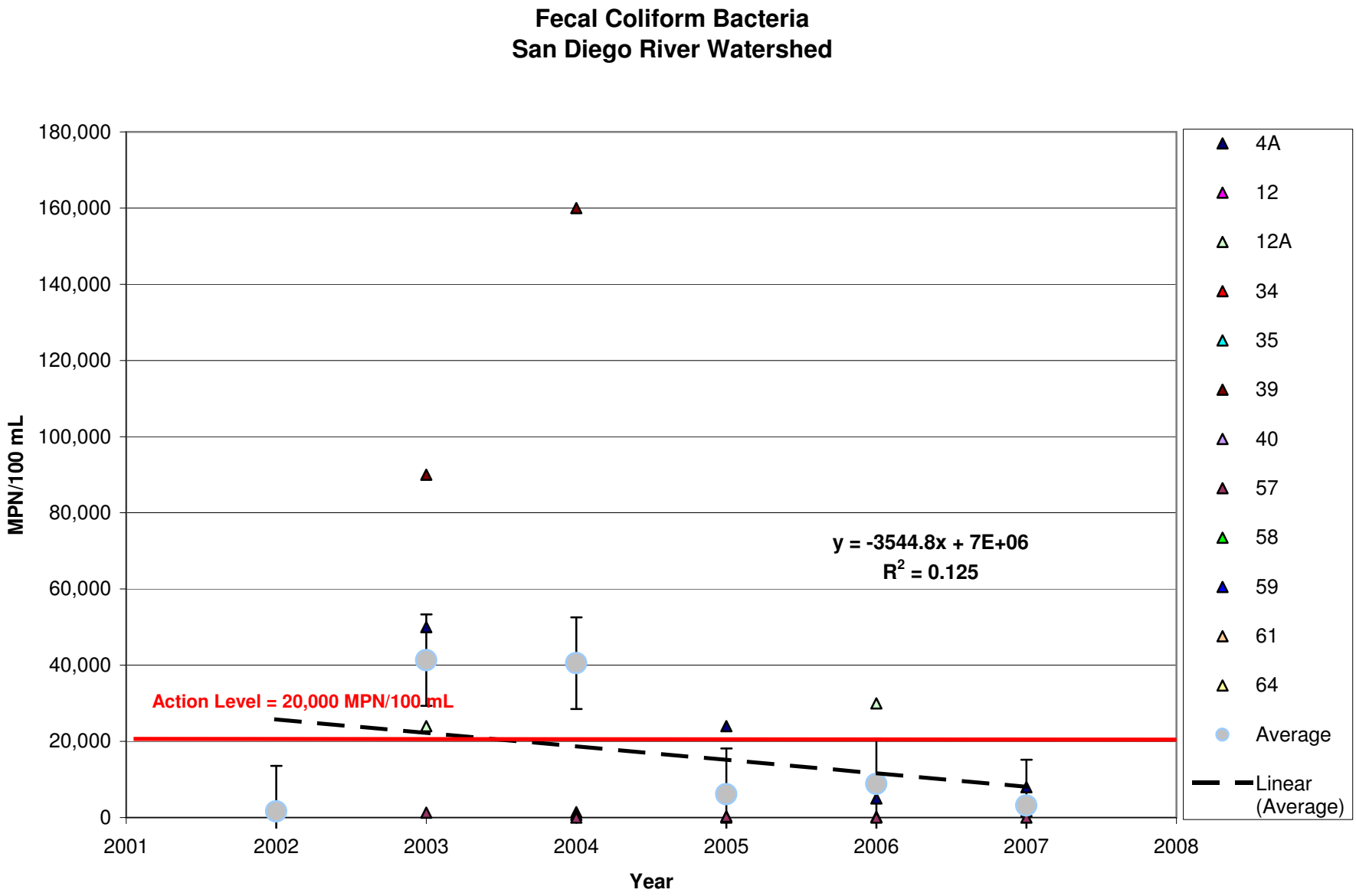
Fecal Coliform Bacteria
San Diego River Watershed
MPN/100 mL
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
2001
2002
2003
2004
2005
2006
2007
2008
Year
y = -3544.8x + 7E+06
R2 = 0.125
Action Level = 20,000 MPN/100 mL
4A
12
12A
34
35
39
40
57
58
59
61
64
Average
Linear (Average)

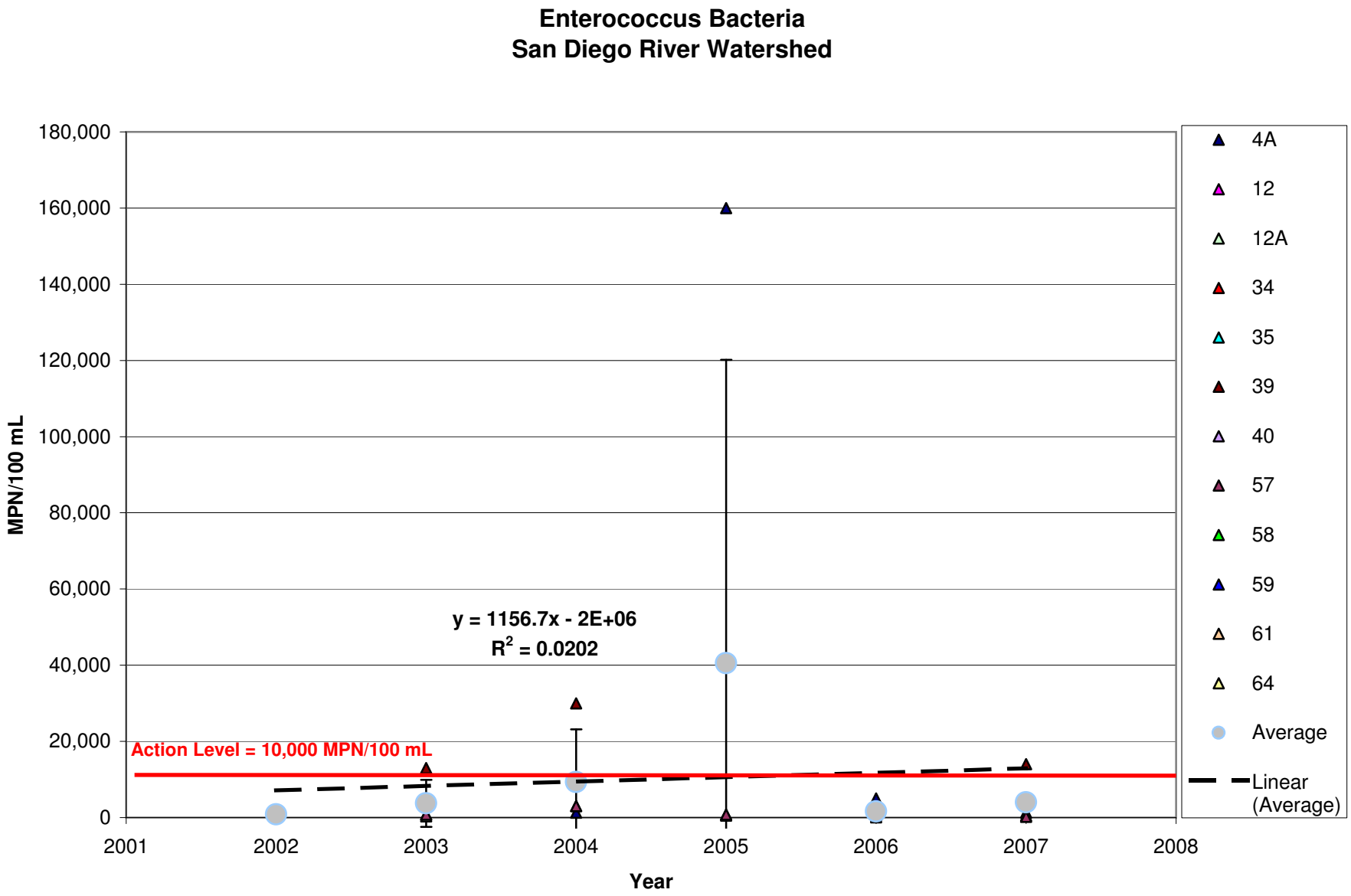
Enterococcus Bacteria
San Diego River Watershed
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
MPN/100 mL
y = 1156.7x - 2E+06
R2 = 0.0202
Action Level = 10,000 MPN/100 mL
2001
2002
2003
2004
2005
2006
2007
2008
Year
4A
12
12A
34
35
39
40
57
58
59
61
64
Average
Linear (Average)

Attachment 2

Historical Data Graphs:
San Diego Bay Watershed

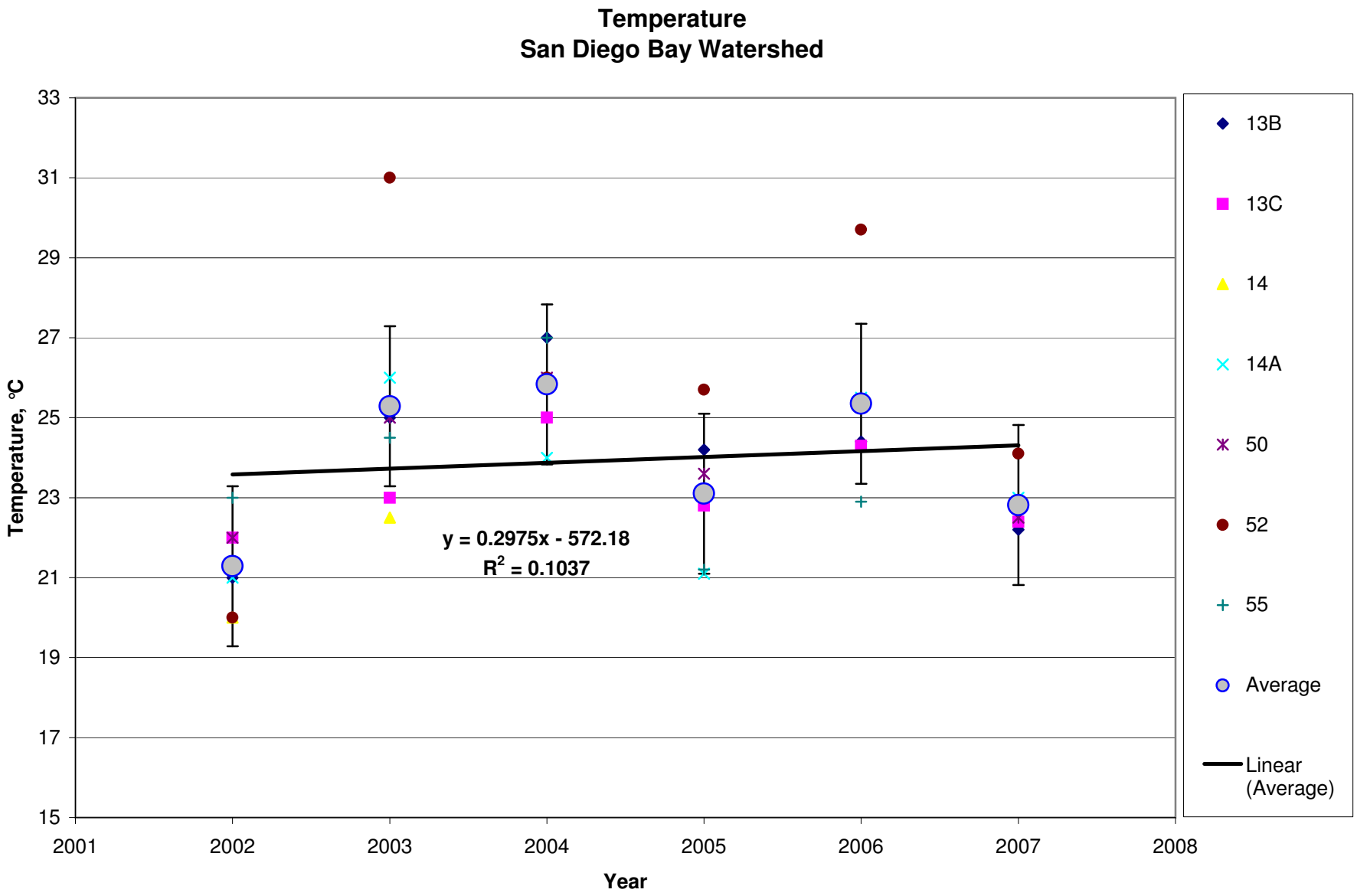
Temperature
San Diego Bay Watershed
Temperature, °C
33
31
29
27
25
23
21
19
17
15
2001
2002
2003
2004
2005
2006
2007
2008
Year
y = 0.2975x - 572.18
R2 = 0.1037
13B
13C
14
14A
50
52
55
Average
Linear (Average)

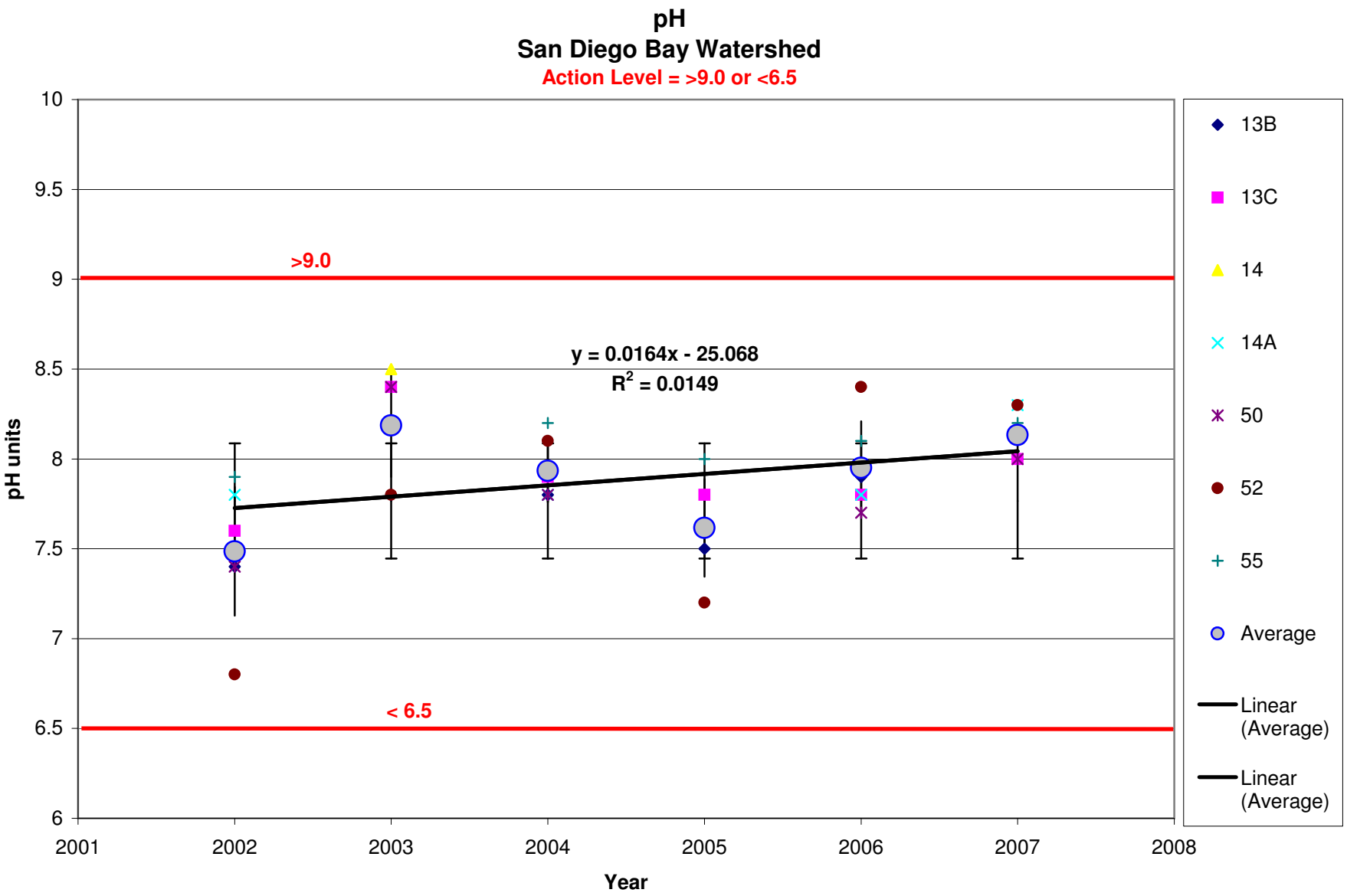
pH
San Diego Bay Watershed
Action Level = >9.0 or <6.5
>9.0
< 6.5
y = 0.0164x - 25.068
R2 = 0.0149
pH units
Year
10
9.5
9
8.5
8
7.5
7
6.5
6
2001
2002
2003
2004
2005
2006
2007
2008
13B
13C
14
14A
50
52
55
Average
Linear (Average)
Linear (Average)

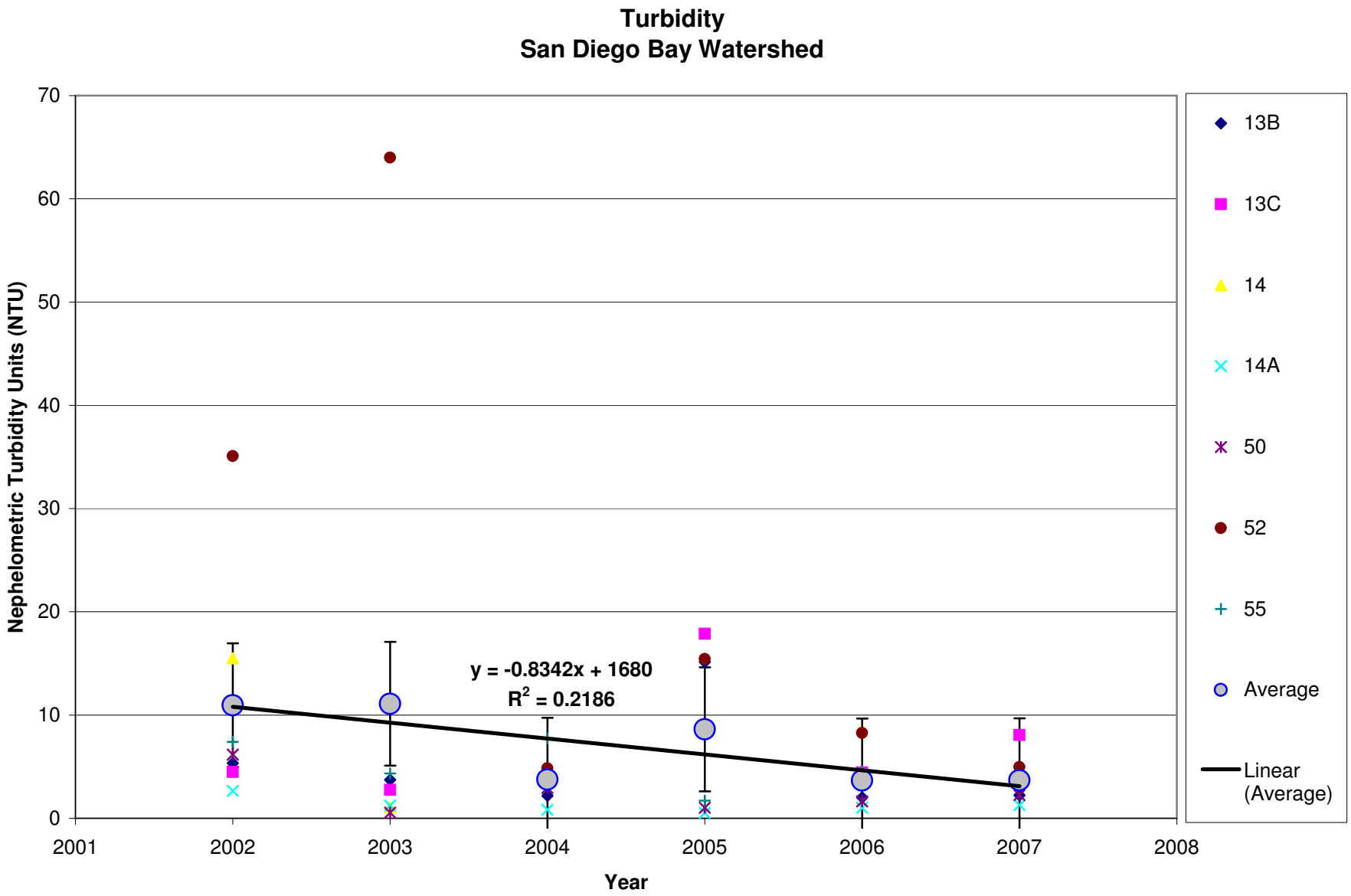
Turbidity
San Diego Bay Watershed
Nephelometric Turbidity Units (NTU)
70
60
50
40
30
20
10
0
2001
2002
2003
2004
2005
2006
2007
2008
Year
y = -0.8342x + 1680
R2 = 0.2186
13B
13C
14
14A
50
52
55
Average
Linear (Average)

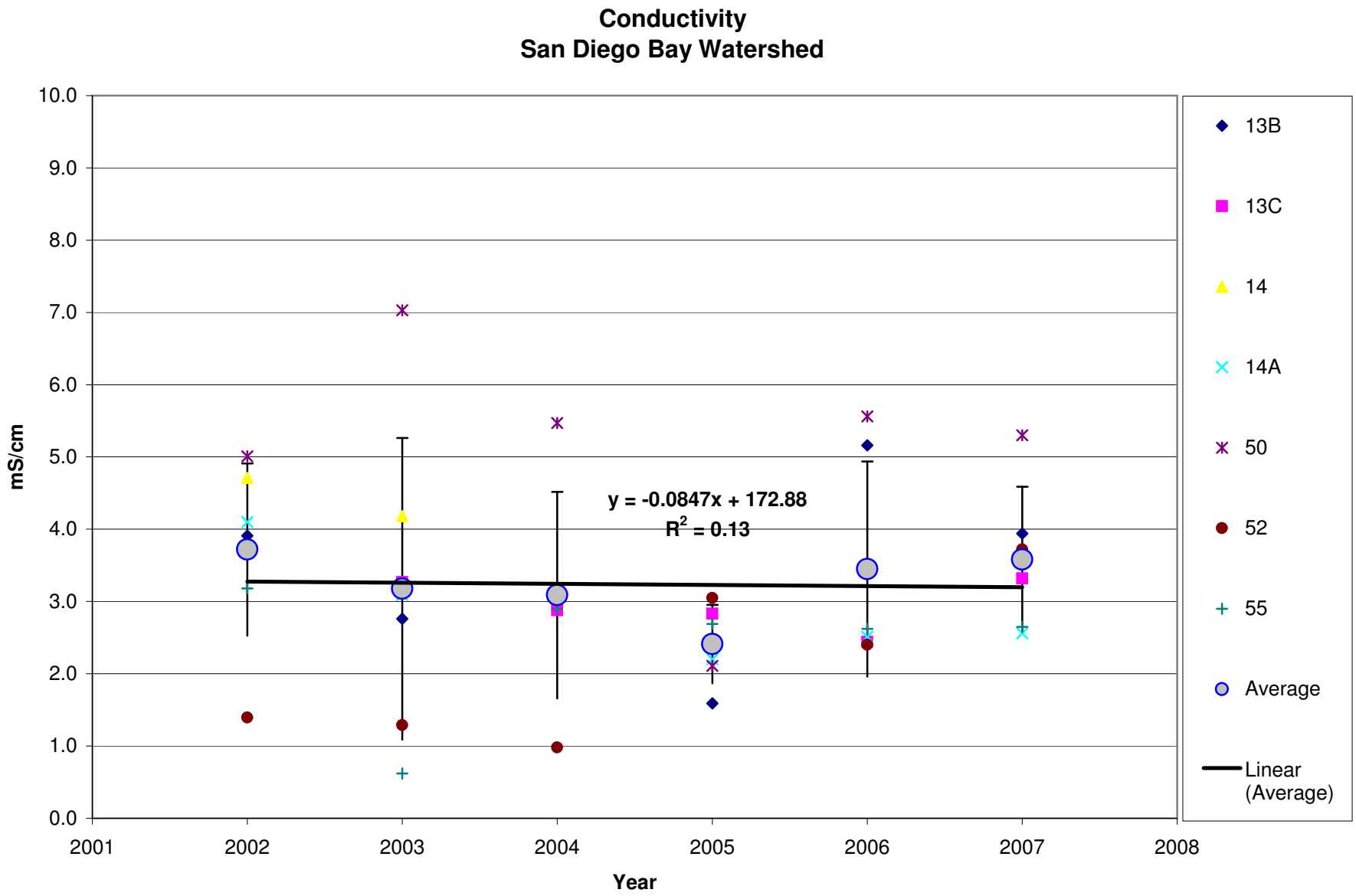
Conductivity
San Diego Bay Watershed
mS/cm
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
Year
y = -0.0847x + 172.88
R2 = 0.13
13B
13C
14
14A
50
52
55
Average
Linear (Average)

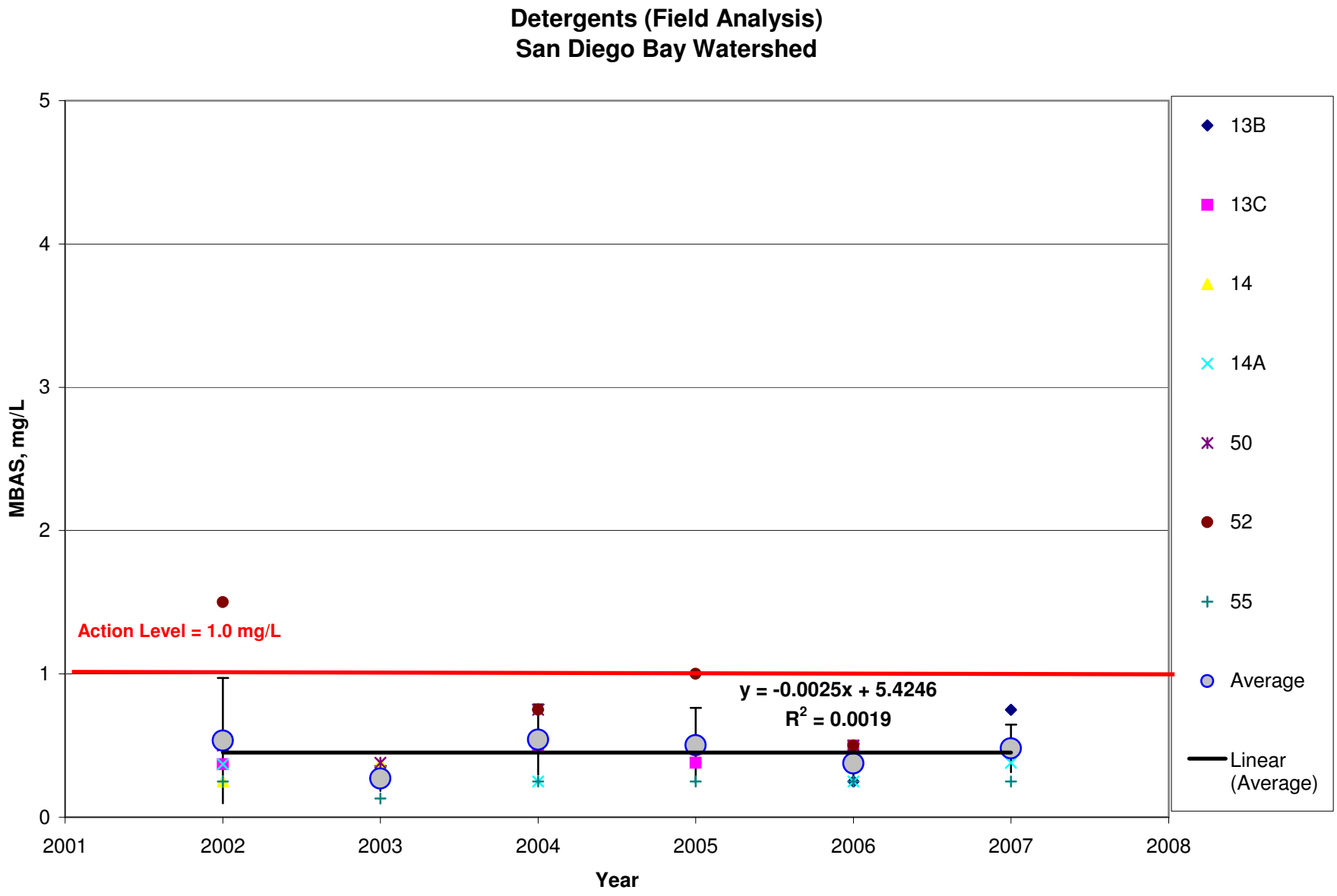
Detergents (Field Analysis)
San Diego Bay Watershed
MBAS, mg/L
Year
Action Level = 1.0 mg/L
y = -0.0025x + 5.4246
R2 = 0.0019
13B
13C
14
14A
50
52
55
Average
Linear (Average)
0
1
2
3
4
5
2001
2002
2003
2004
2005
2006
2007
2008

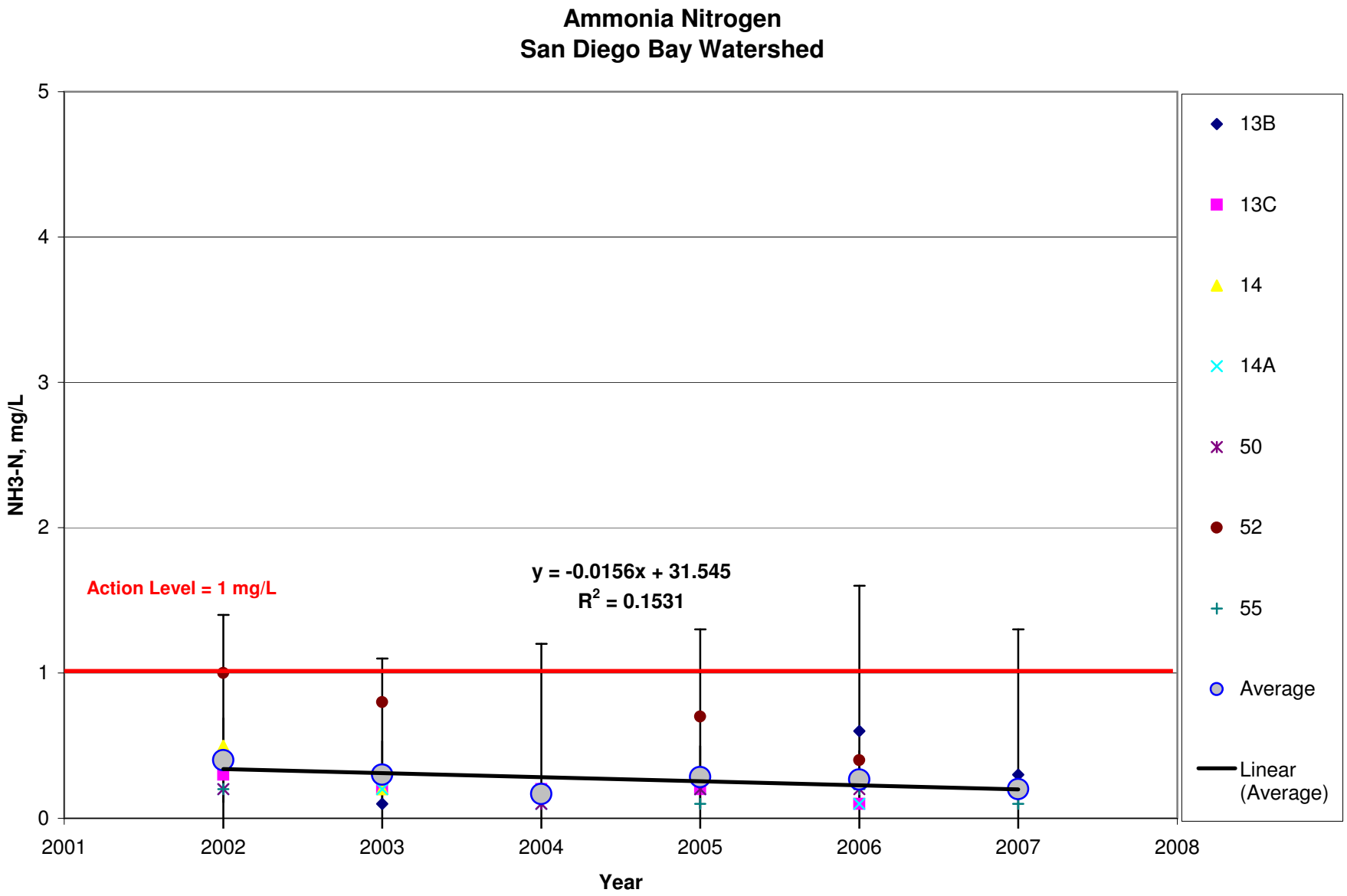
Ammonia Nitrogen
San Diego Bay Watershed
NH3-N, mg/L
5
4
3
2
1
0
Action Level = 1 mg/L
y = -0.0156x + 31.545
R2 = 0.1531
2001
2002
2003
2004
2005
2006
2007
2008
Year
13B
13C
14
14A
50
52
55
Average
Linear (Average)

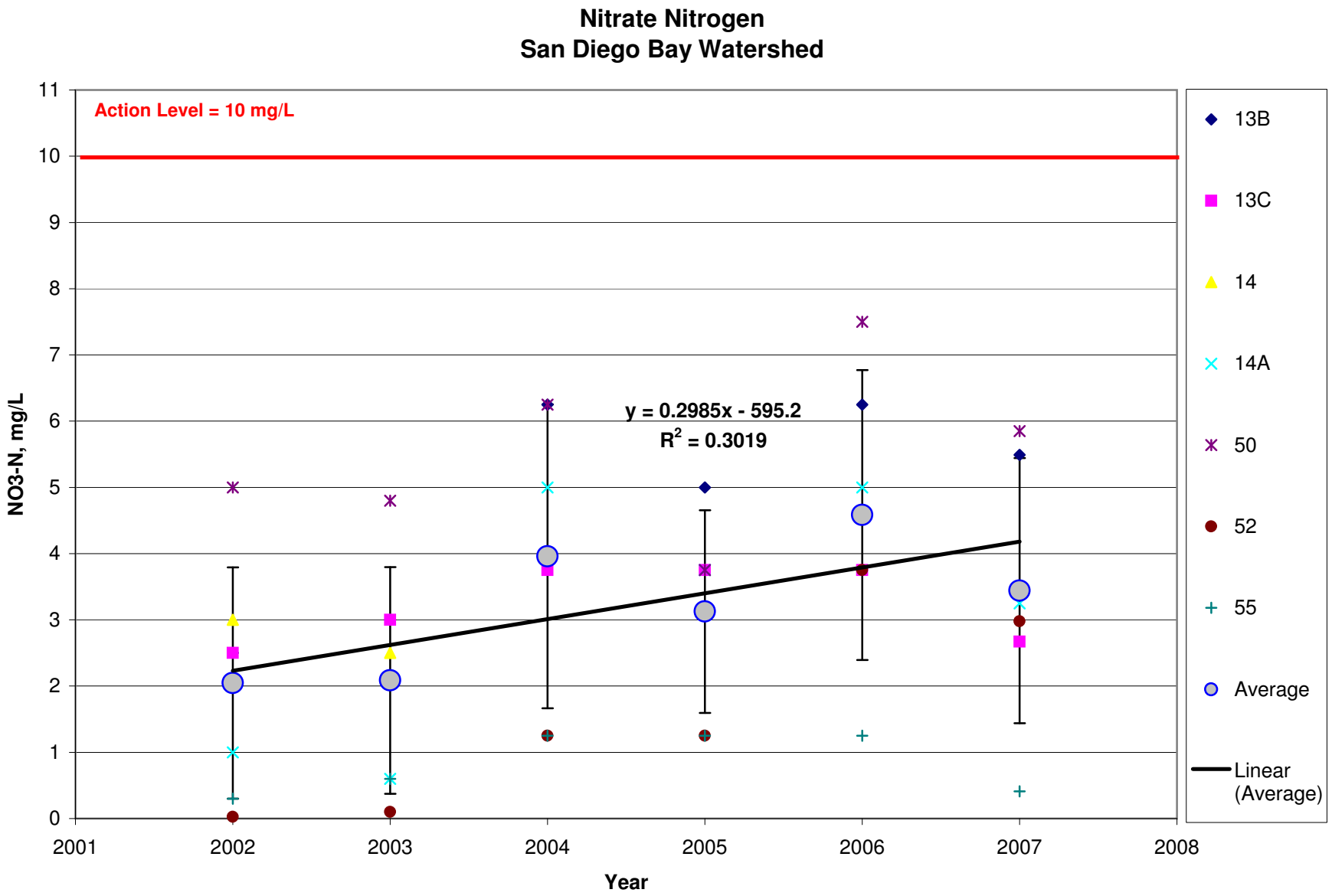
Nitrate Nitrogen
San Diego Bay Watershed
Action Level = 10 mg/L
y = 0.2985x - 595.2
R2 = 0.3019
NO3-N, mg/L
Year
0
1
2
3
4
5
6
7
8
9
10
11
2001
2002
2003
2004
2005
2006
2007
2008
13B
13C
14
14A
50
52
55
Average
Linear (Average)

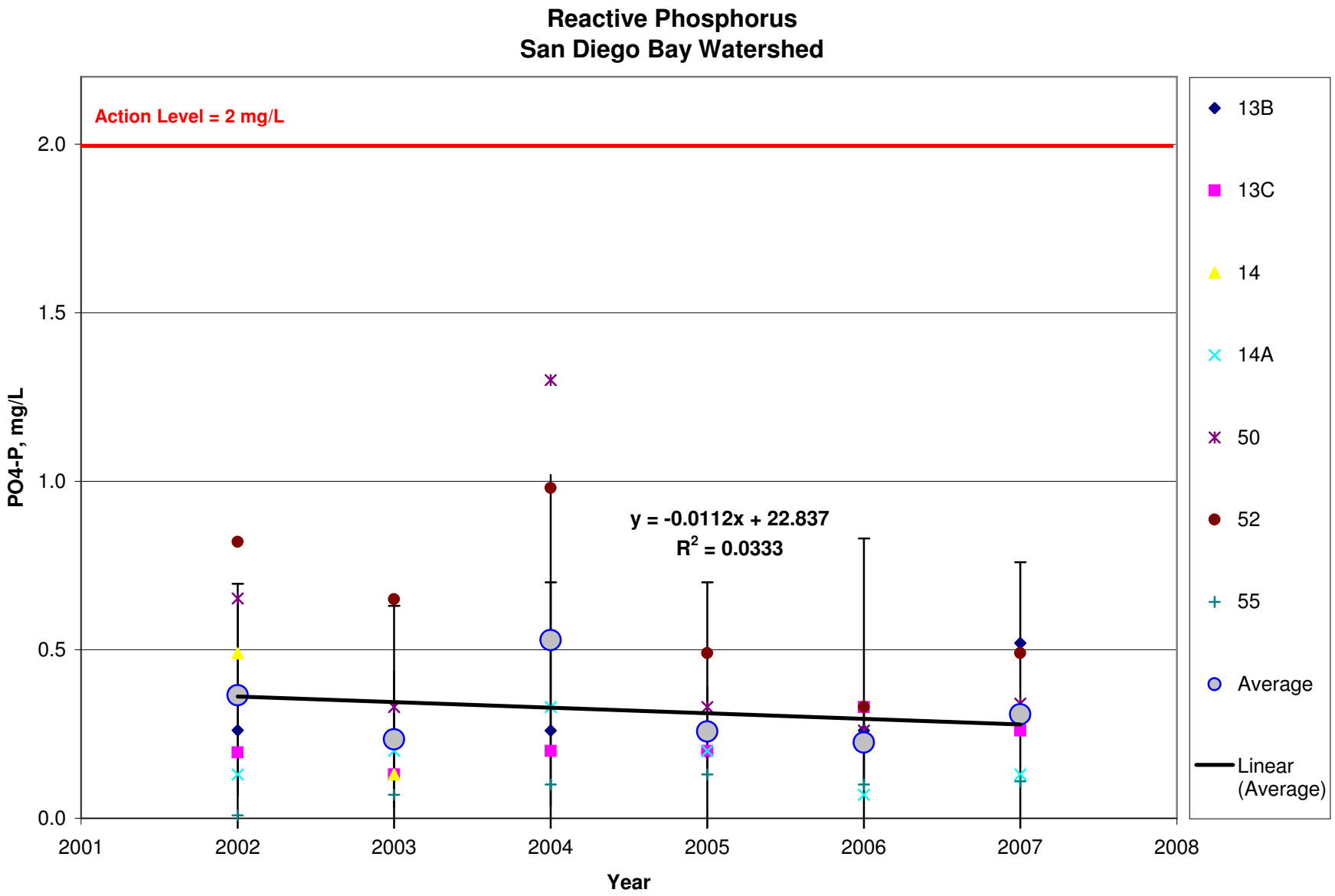
Reactive Phosphorus
San Diego Bay Watershed
Action Level = 2 mg/L
2.0
1.5
1.0
0.5
0.0
PO4-P, mg/L
y = -0.0112x + 22.837
R2 = 0.0333
2001
2002
2003
2004
2005
2006
2007
2008
Year
13B
13C
14
14A
50
52
55
Average
Linear (Average)

Surfactants (Laboratory Analysis)
San Diego Bay Watershed

Note: All "nd" values have been plotted as 0.25 mg/L, which equals (reporting limit)/2

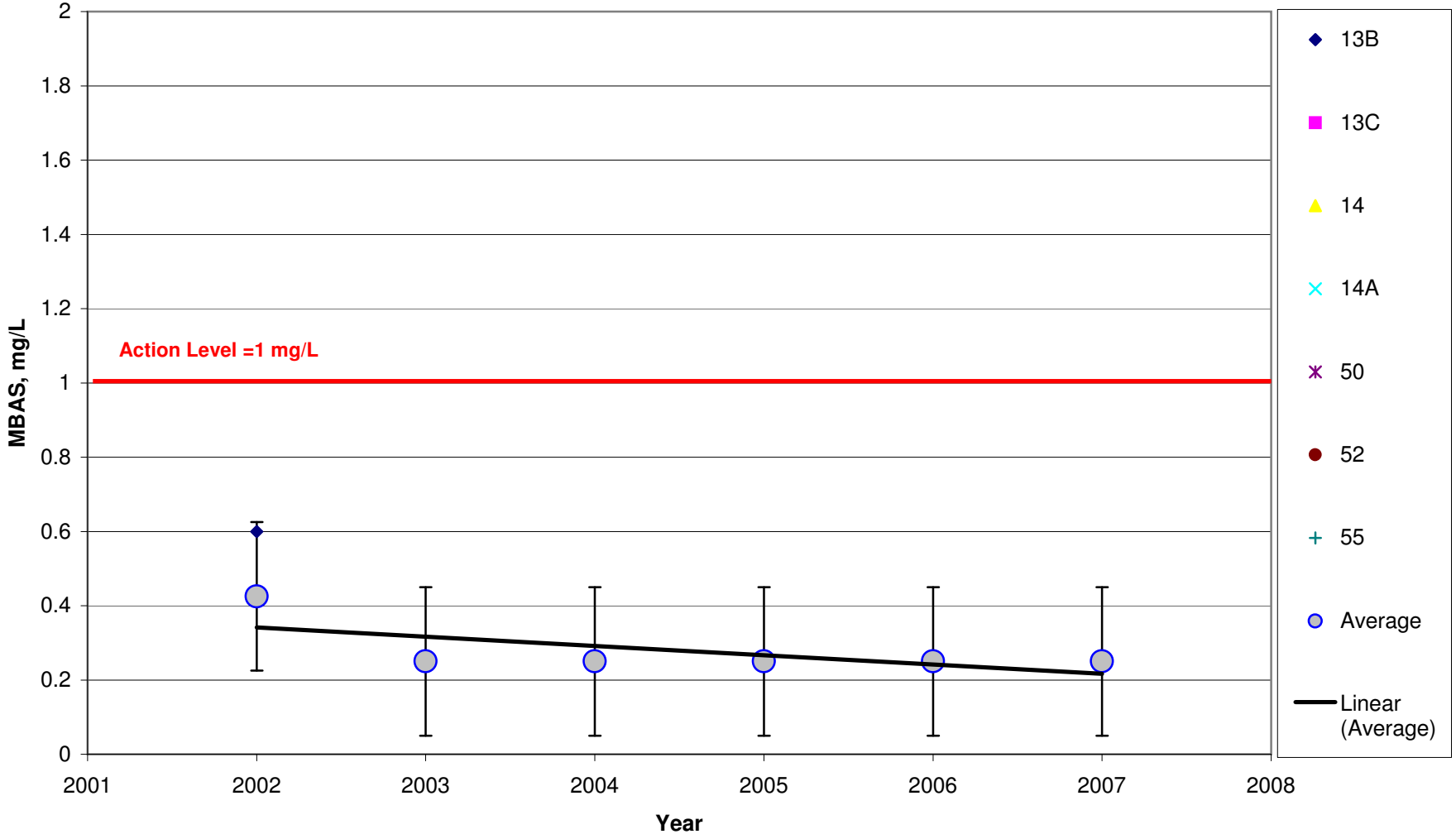

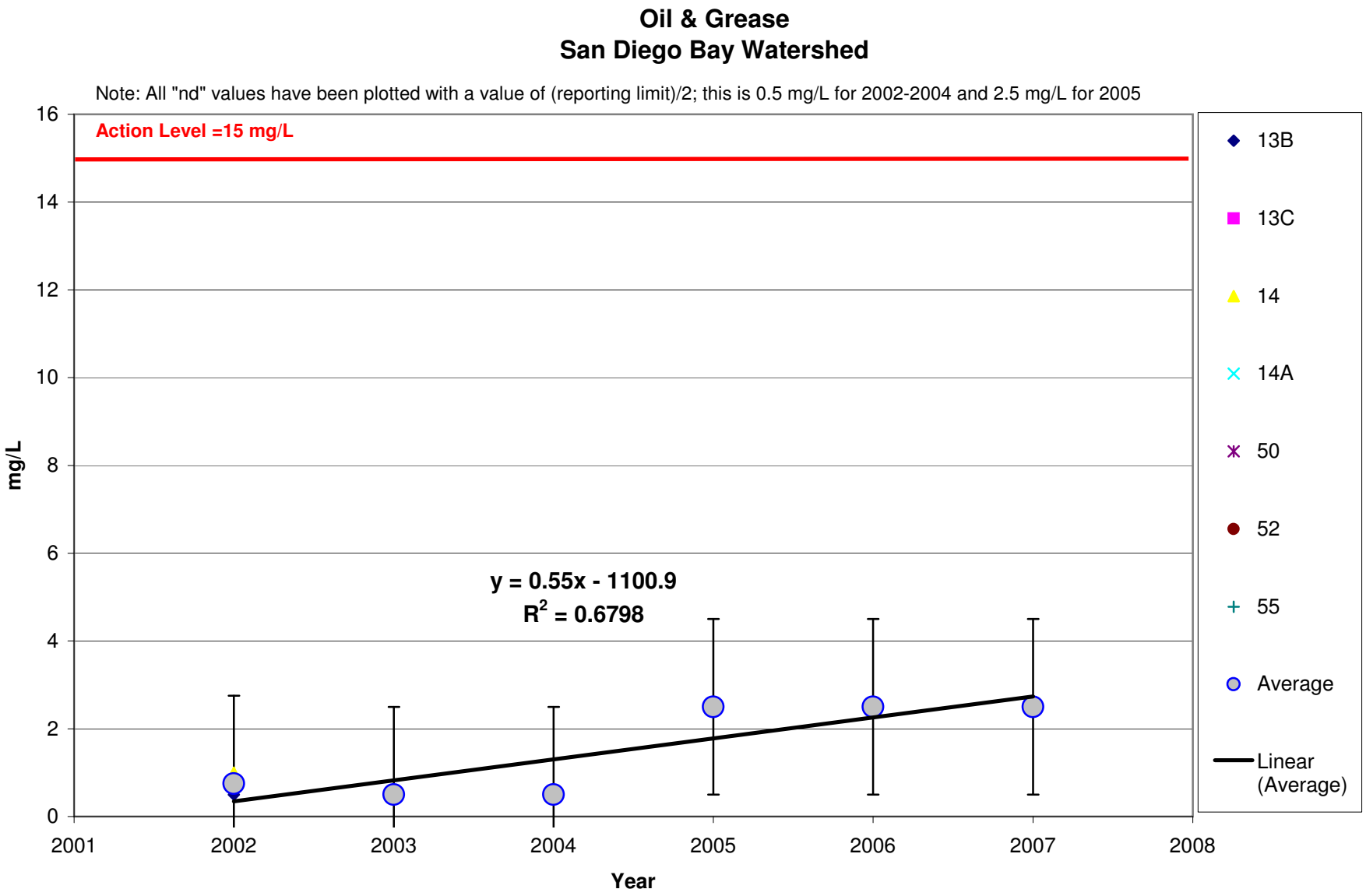
Oil & Grease
San Diego Bay Watershed
Note: All "nd" values have been plotted with a value of (reporting limit)/2; this is 0.5 mg/L for 2002-2004 and 2.5 mg/L for 2005
Action Level =15 mg/L
y = 0.55x - 1100.9
R2 = 0.6798
mg/L
Year
0
2
4
6
8
10
12
14
16
2001
2002
2003
2004
2005
2006
2007
2008
13B
13C
14
14A
50
52
55
Average
Linear (Average)

Dissolved Cadmium
San Diego Bay Watershed

Note: No detectable levels of cadmium have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit)/2

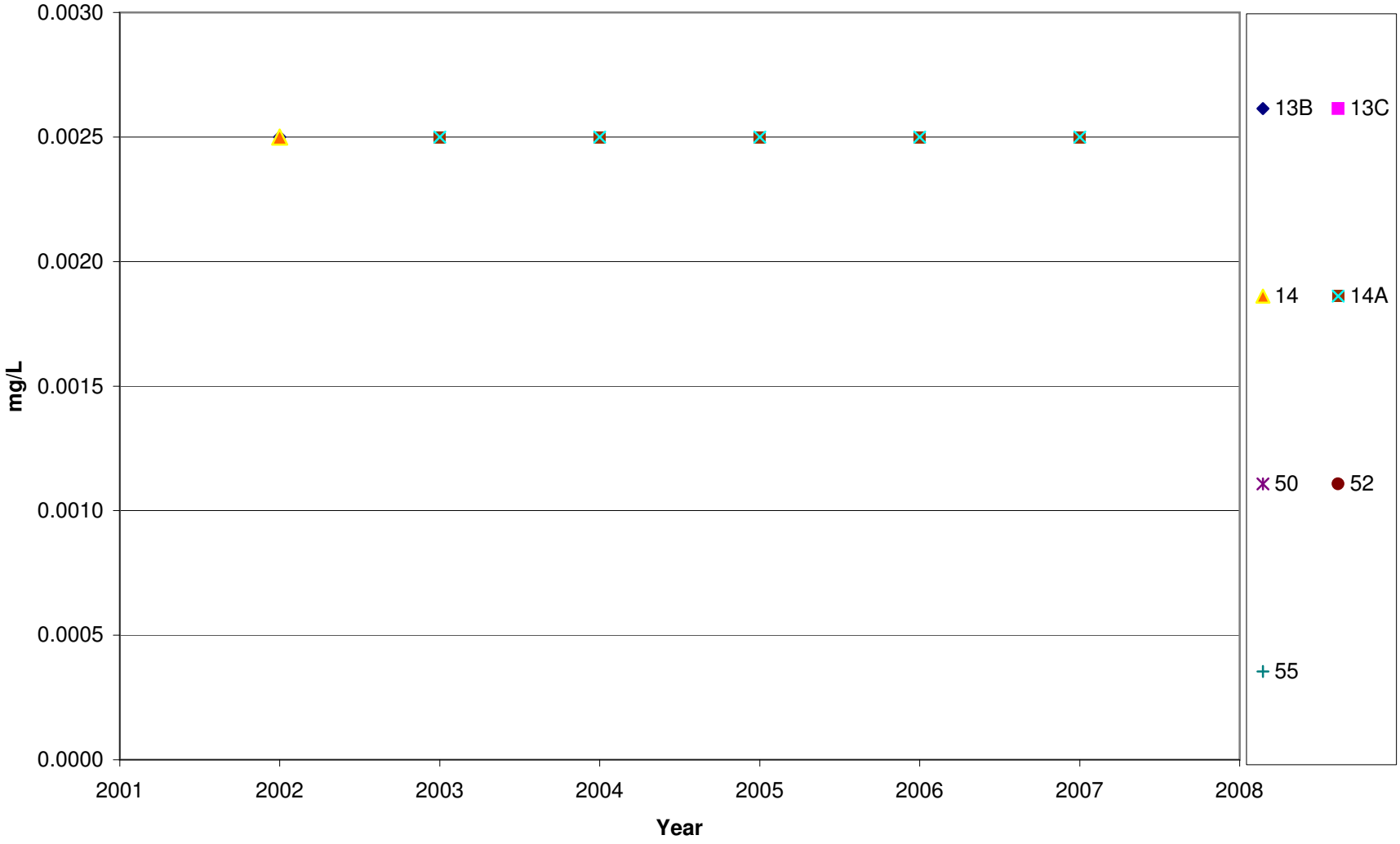

Dissolved Copper
San Diego Bay Watershed

Note: No detectable levels of copper have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit)/2

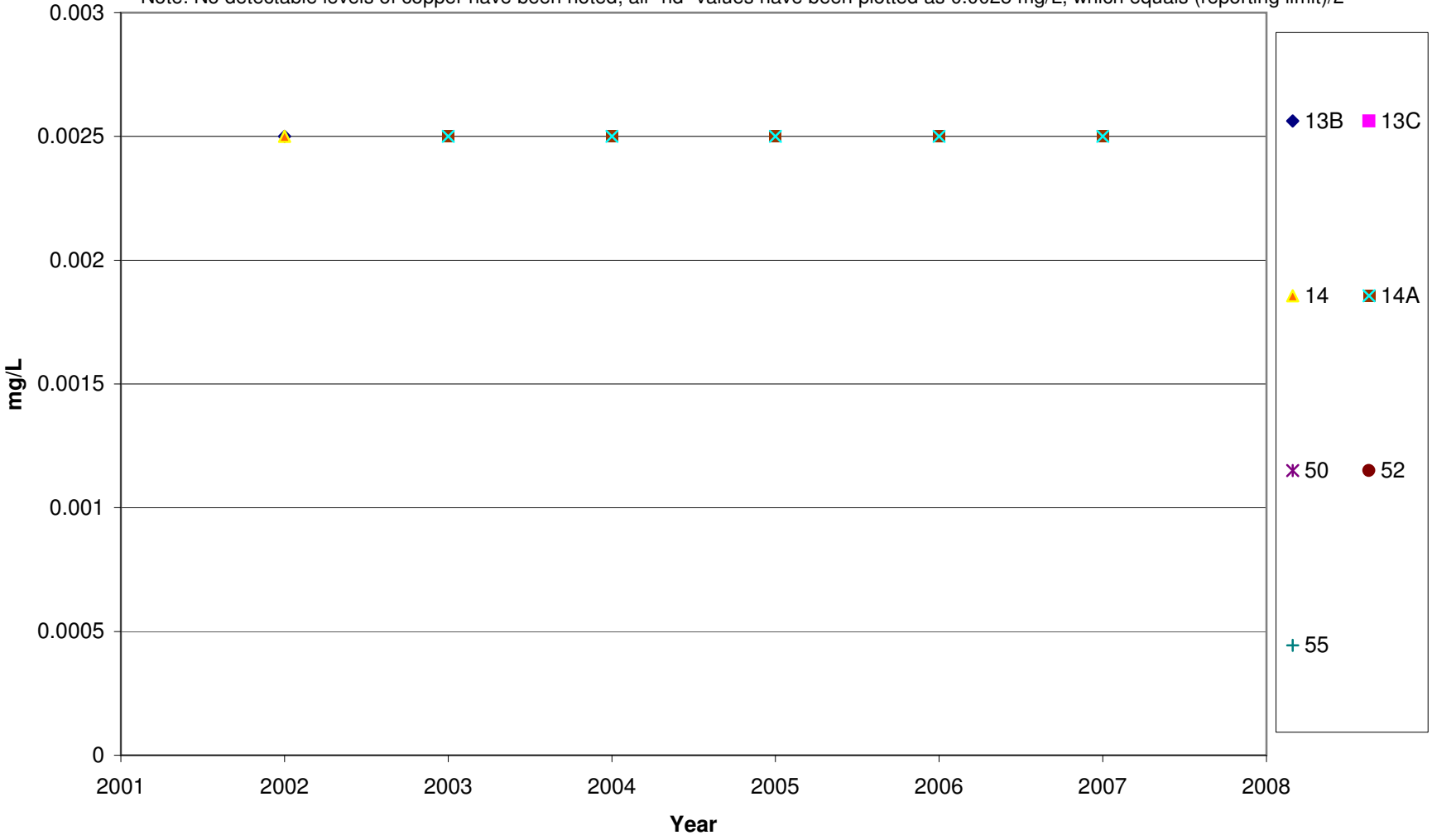

Dissolved Lead
San Diego Bay Watershed

Note: No detectable levels of lead have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit)/2

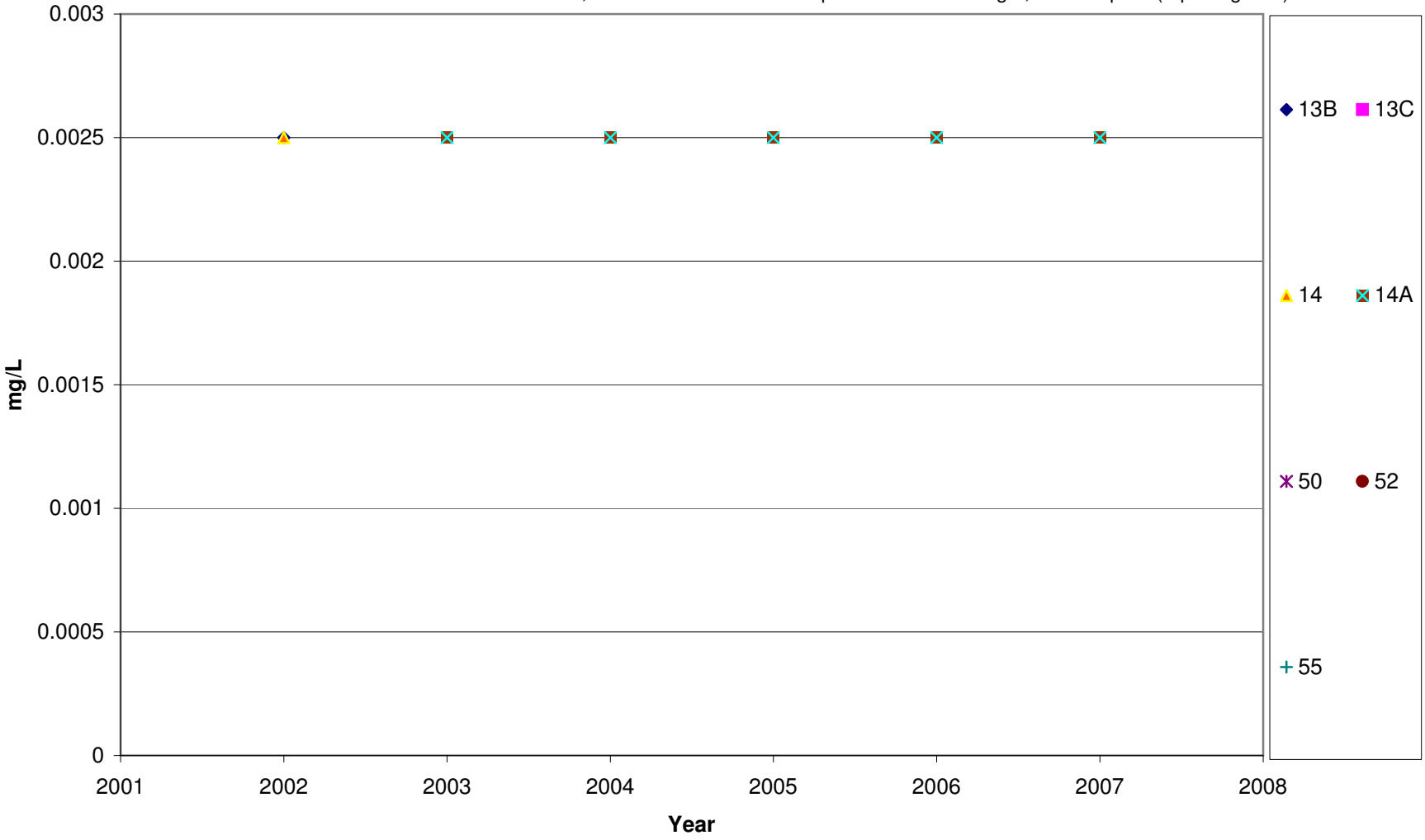

Dissolved Zinc
San Diego Bay Watershed

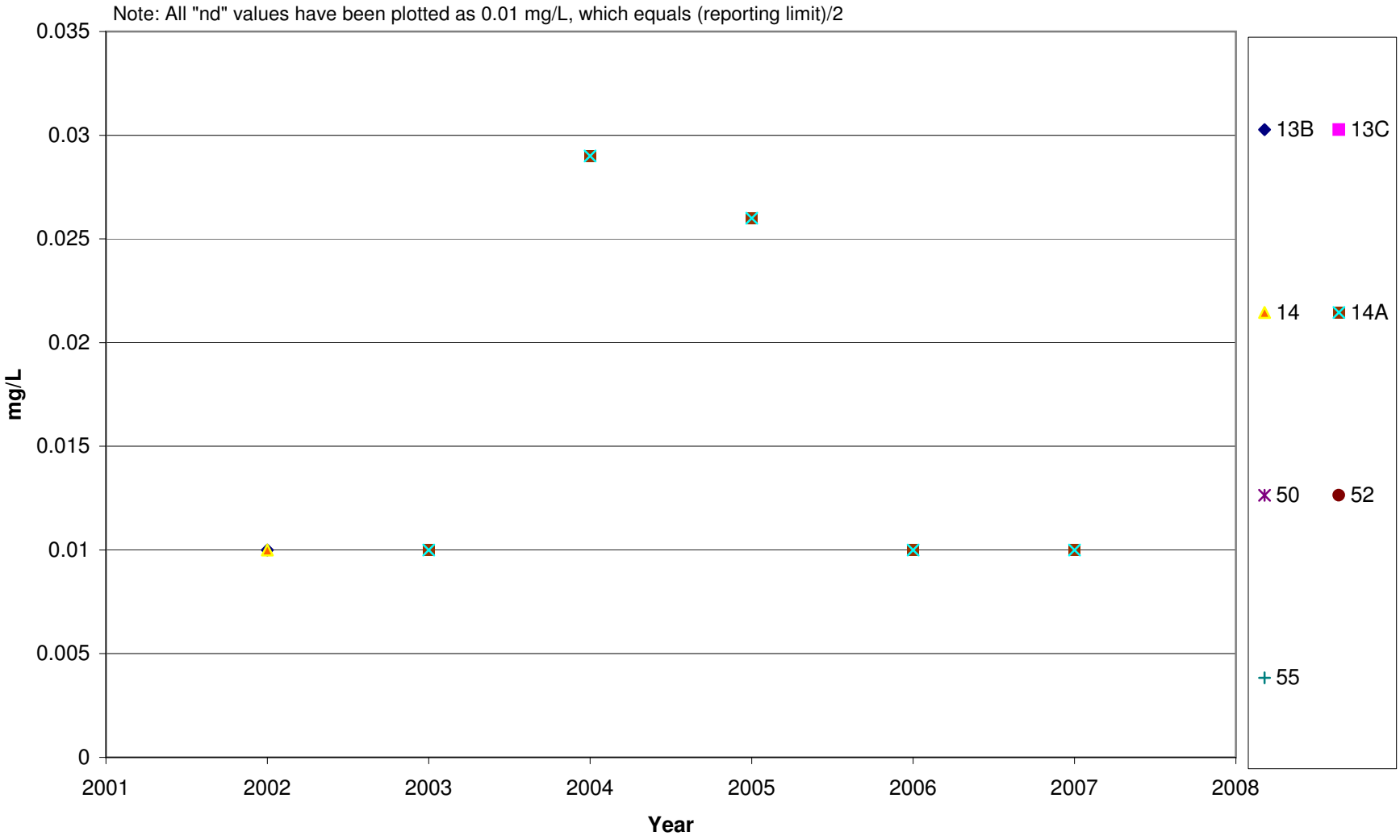

Diazinon
San Diego Bay Watershed

Note: All "nd" values have been plotted as 0.025 µg/L, which equals (reporting limit)/2

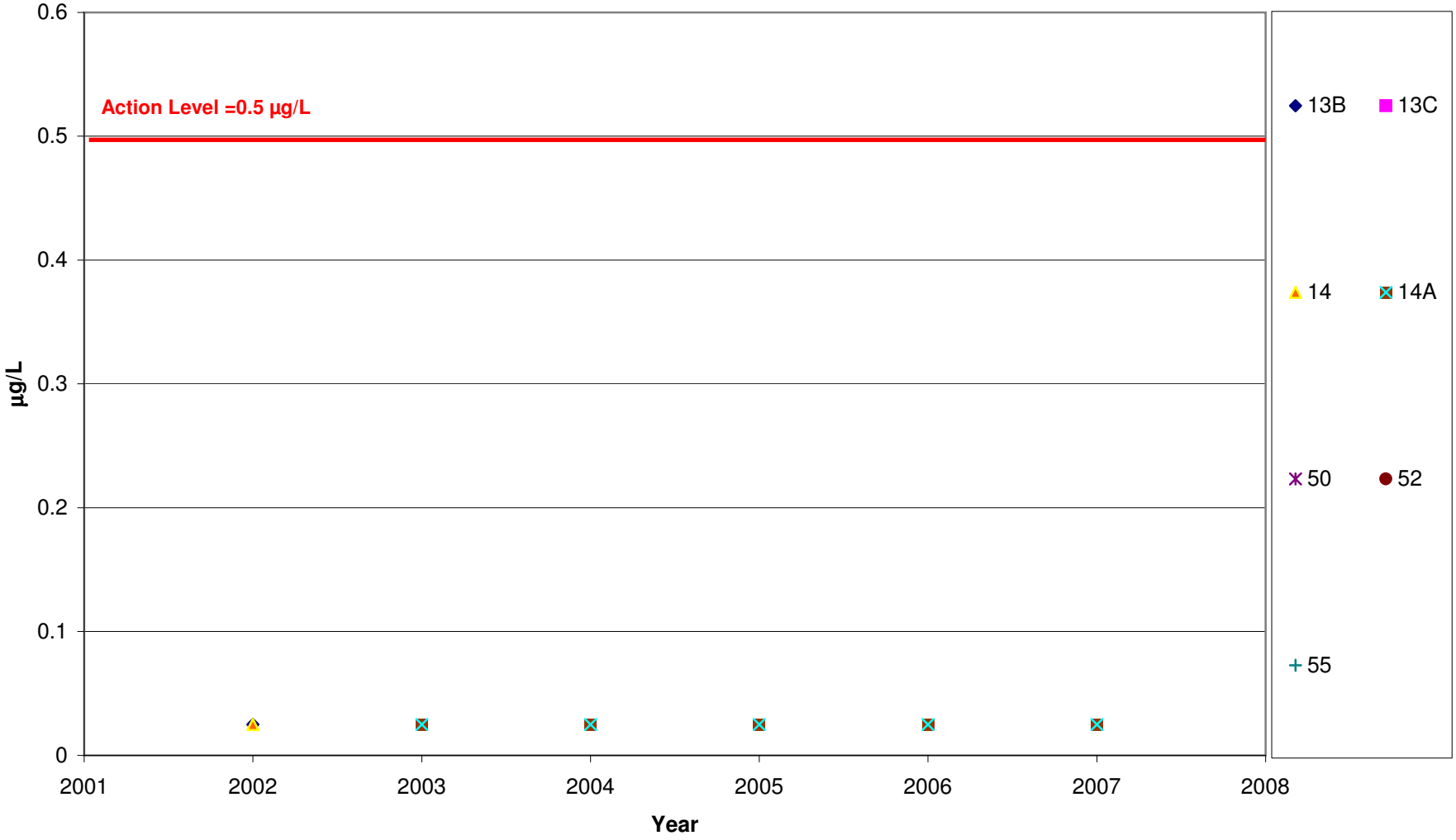

Chlorpyrifos
San Diego Bay Watershed

Note: No detectable levels of chlorpyrifos have been noted; all "nd" values have been plotted as 0.025 µg/L, which equals (reporting limit)/2

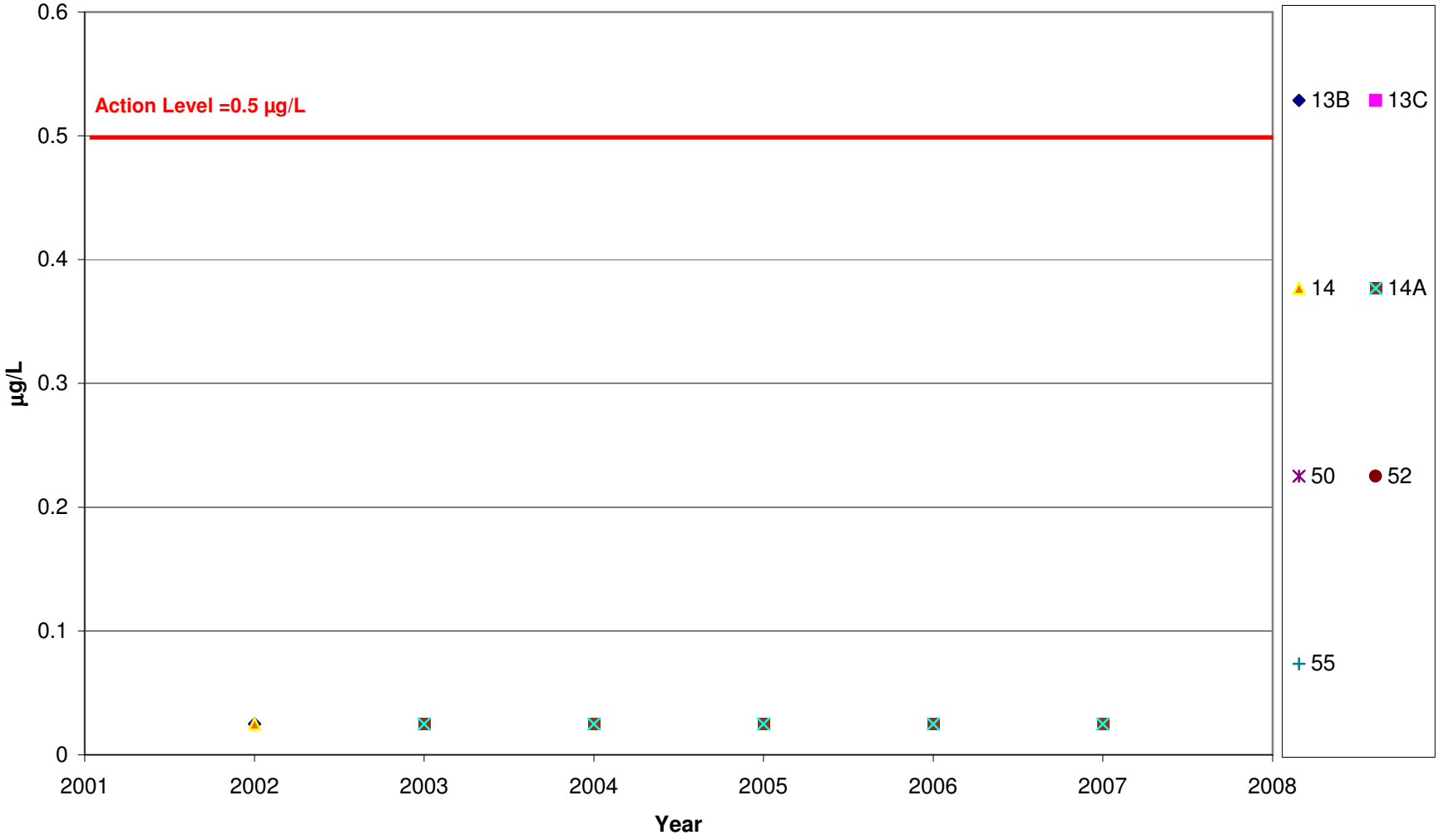

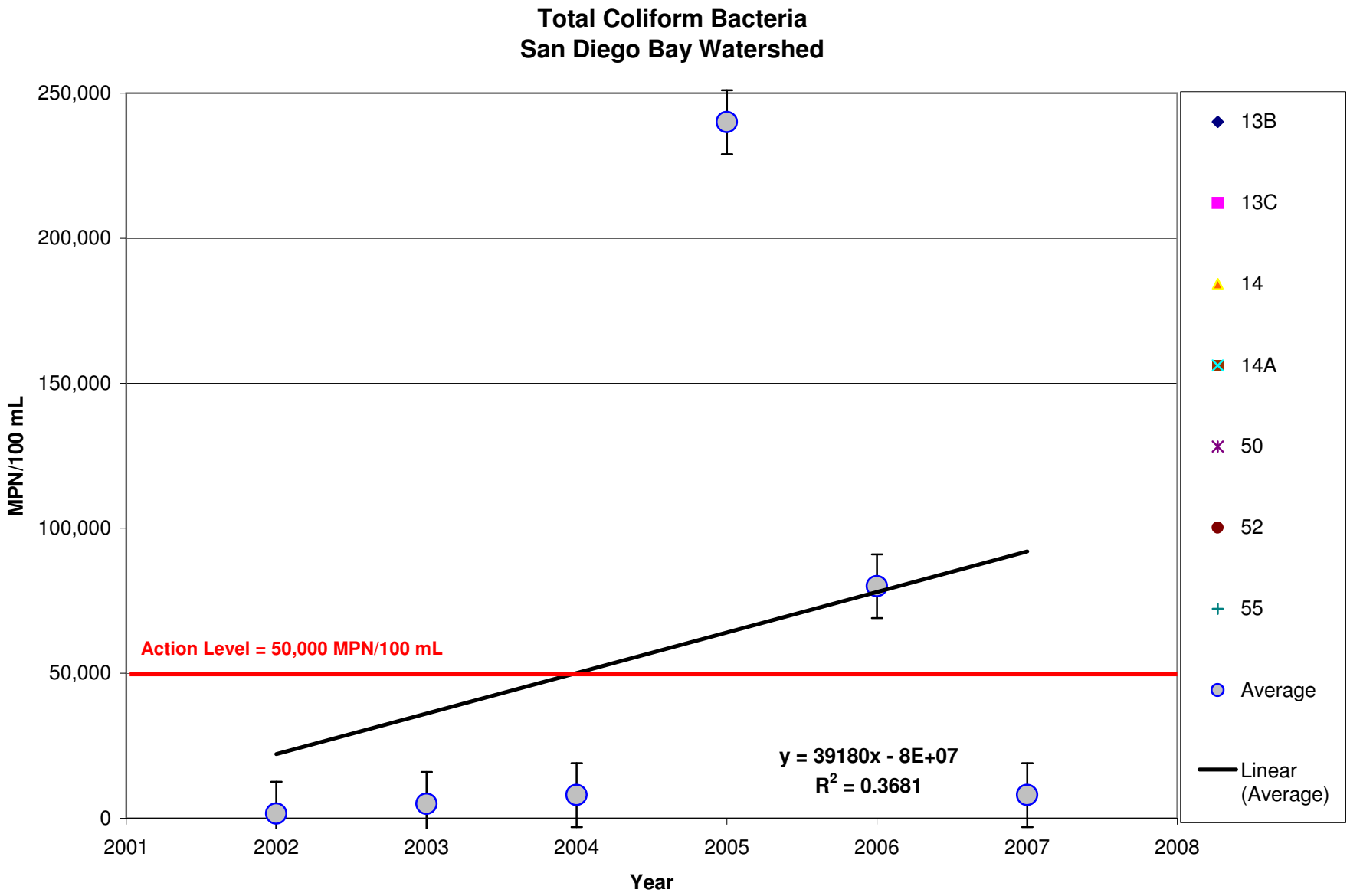
Total Coliform Bacteria
San Diego Bay Watershed
250,000
200,000
150,000
100,000
50,000
0
MPN/100 mL
Action Level = 50,000 MPN/100 mL
y = 39180x - 8E+07
R2 = 0.3681
2001
2002
2003
2004
2005
2006
2007
2008
Year
13B
13C
14
14A
50
52
55
Average
Linear (Average)

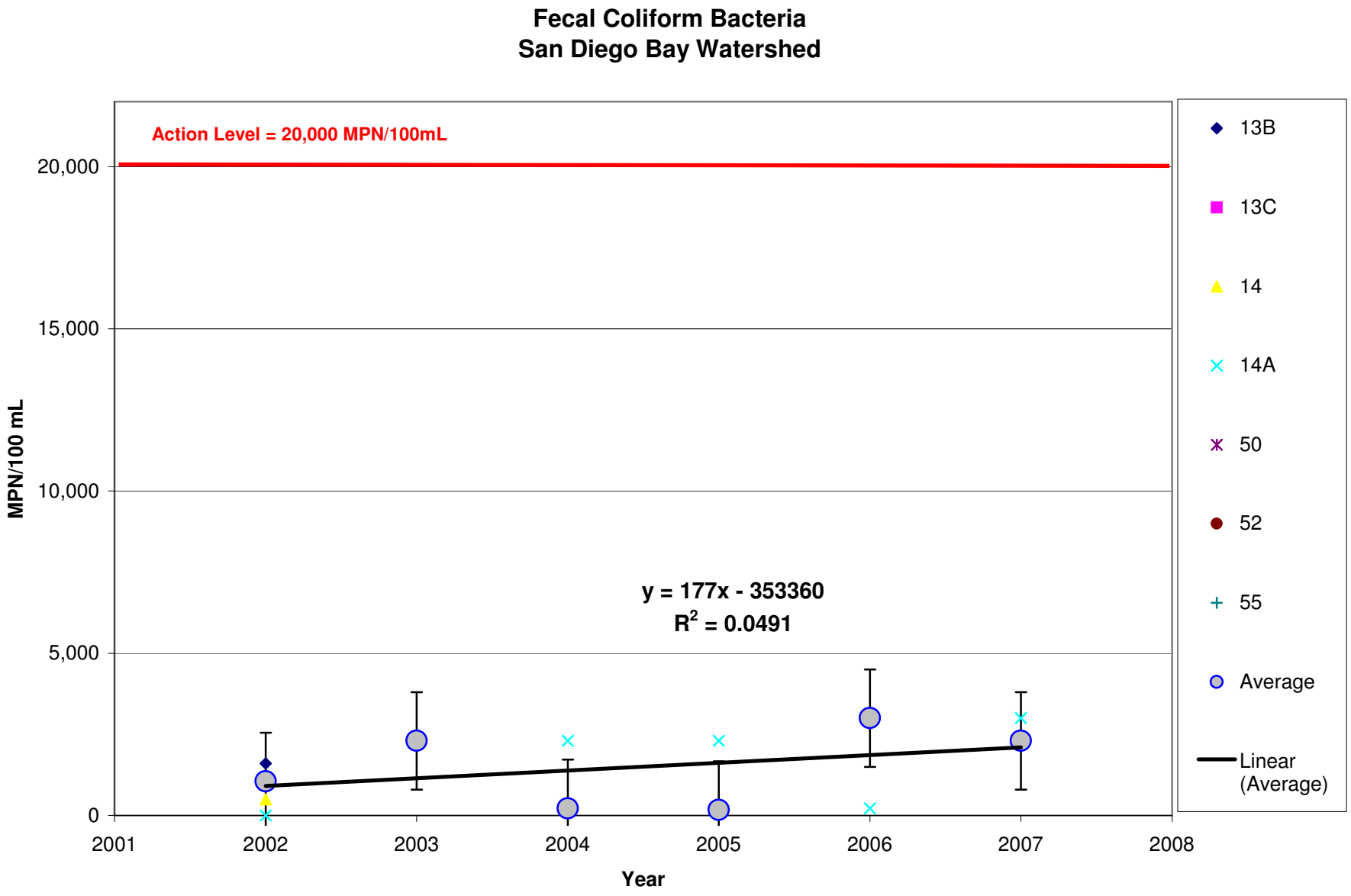
Fecal Coliform Bacteria
San Diego Bay Watershed
Action Level = 20,000 MPN/100mL
y = 177x - 353360
R2 = 0.0491
MPN/100 mL
20,000
15,000
10,000
5,000
0
2001
2002
2003
2004
2005
2006
2007
2008
Year
13B
13C
14
14A
50
52
55
Average
Linear (Average)

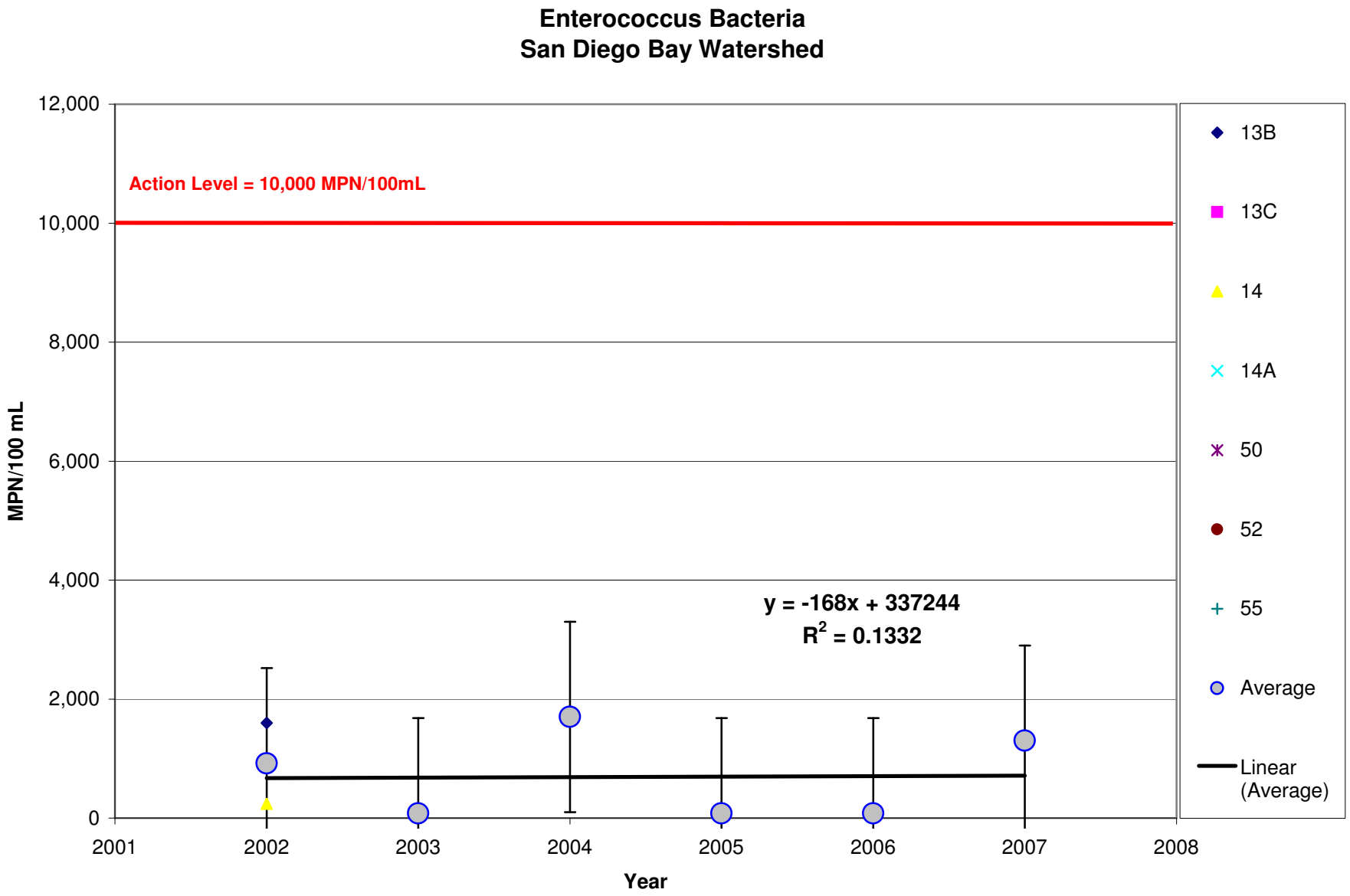
Enterococcus Bacteria
San Diego Bay Watershed
Action Level = 10,000 MPN/100mL
y = -168x + 337244
R2 = 0.1332
MPN/100 mL
12,000
10,000
8,000
6,000
4,000
2,000
0
2001
2002
2003
2004
2005
2006
2007
2008
Year
13B
13C
14
14A
50
52
55
Average
Linear (Average)

ATTACHMENT 7.2

CITY OF LA MESA DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING 2008

CITY OF LA MESA
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2008

Submitted to:

CITY OF LA MESA
Engineering Department
8130 Allison Avenue
La Mesa, CA 91941

Prepared by:

D-MAX Engineering, Inc.
7220 Trade Street, Suite 119
San Diego, CA 92121
Tel: (858) 586-6600
Fax: (858) 586-6644

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

November 20, 2008
Project No. 200827W-1

Mr. Malik Tamimi
Storm Water Program Manager
City of La Mesa
8130 Allison Avenue
P.O. Box 937
La Mesa, CA 91944-0937

Re: 2008 Dry Weather Field Screening and Analytical Monitoring Program City of La Mesa, California

Dear Mr. Tamimi:

Per your request D-MAX Engineering, Inc., conducted the routine phase of the Dry Weather Field Screening and Analytical Monitoring Program for the City of La Mesa during the 2008 dry weather season. Subsequently, follow-up investigations were conducted to identify the sources of pollutants detected during the monitoring program.

This report presents the results of the monitoring program and follow-up investigations. The contents include field screening data and analytical laboratory test results, analyses of collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations and recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. It has been our pleasure working with the City of La Mesa on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

D-MAX Engineering, Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

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ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
µg/L	Micrograms per Liter
303(d)	Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
BPJ	Best Professional Judgment
CFR	Code of Federal Regulations
City	City of La Mesa
CMC	Criterion Maximum Concentration
COC	Constituent of Concern
Copermittees	The 18 cities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CTR	California Toxics Rule
CV	Coefficient of Variance
D-MAX	D-MAX Engineering, Inc.
E. coli	*Escherichia coli*
EC	Electrical Conductivity
EMA	EnviroMatrix Analytical, Inc.
FS	Functional Sensitivity
gpm	Gallons per Minute
GPS	Global Positioning System
HA	Hydrologic Area
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illegal Discharge
JURMP	Jurisdictional Urban Runoff Management Program
LED	Light-Emitting Diode
MLS	Mass Loading Station
MBAS	Methylene Blue Active Substances
mg/L	Milligrams per Liter
MPN/100mL	Most Probable Number (of colony-forming units) per 100 Milliliters
mS/cm	Millisiemens per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
na	Not Analyzed
nd	Not Detected
ns	Not Sampled (dry site)
NTU	Nephelometric Turbidity Unit
PDL	Practical Detection Limit
ppb	Parts per Billion
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board
TDS	Total Dissolved Solids
USEPA	United States Environmental Protection Agency
WQO	Water Quality Objective
WURMP	Watershed Urban Runoff Management Program

1 INTRODUCTION

1.1 Regulatory Requirements

In accordance with San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit), each of the Copermittees, including the City of La Mesa, is required to annually perform dry weather field screening of discharges into its storm drain system. This procedure is comprised of recording field observations, estimating observed flow rates, and conducting field testing at selected locations along the storm drain conveyance system during the dry weather season, May 1 through September 30. The Municipal Permit also necessitates that Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station should be visited. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. The results from the current year's Dry Weather Monitoring Program conducted by D-MAX Engineering, Inc., (D-MAX) are presented herein.

1.2 Program Overview

The purpose of the Dry Weather Monitoring Program is to detect and eliminate illicit connections and illicit discharges (IC/ID) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following three components:

- Field screening observations
- Field screening analytical monitoring
- Laboratory analytical monitoring

The data gathered from dry weather monitoring is used to characterize discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. As needed, follow-up studies and source investigations are conducted to detect and eliminate the sources of these pollutants.

1.3 Hydrologic Setting

The City of La Mesa (City) encompasses an area of nine square miles just east of the City of San Diego. The primary land use in La Mesa is residential with over 56,000 residents. Other land uses include roads and streets, commercial, mixed use, schools, and industrial. Approximately 52 percent of La Mesa is located within the San Diego River Watershed, while the remaining 48 percent is located in the San Diego Bay Watershed. The City of La Mesa makes up about one percent of the overall land area in both the San Diego Bay and the San Diego River watersheds. Runoff generated in La Mesa is conveyed through five drainage basins. The boundaries of these drainage basins are illustrated in Figure A. Table 1-1 lists the drainage basins along with the approximate percentage of drainage area in La Mesa, the corresponding hydrologic unit (HU) of the basin, and the receiving water body to which each basin drains.

TABLE 1-1
CITY OF LA MESA DRAINAGE BASINS

Drainage Basin	Percentage of City Area	Hydrologic Unit	Receiving Water Body	Watershed
Alvarado	51	907	San Diego River	San Diego River
University	28	908	Chollas Creek	San Diego Bay
Spring Valley	14	909	Sweetwater River	San Diego Bay
Lemon Grove	6	908	Chollas Creek	San Diego Bay
Lake Murray	1	907	San Diego River	San Diego River

The San Diego River Watershed is the second largest hydrologic unit in San Diego County. It also has the highest population (~475,000) of the County's watersheds. In addition to runoff from La Mesa, the San Diego River carries water from other large portions of the cities of San Diego, El Cajon, Poway, and Santee and several unincorporated jurisdictions. The mouth of the river eventually discharges into the Pacific Ocean, south of Mission Bay. Runoff collected in the Lake Murray Basin eventually enters the Alvarado Drainage Basin, which drains to the San Diego River.

The San Diego Bay Watershed is comprised of three hydrologic units: Pueblo San Diego (HU 908), Sweetwater (HU 909), and Otay (HU 910). Each hydrologic unit is essentially a separate watershed, but these three watersheds all drain to San Diego Bay. For regulatory purposes, they have been combined into one watershed management area, referred to as the San Diego Bay Watershed. The City of La Mesa includes areas within two of those hydrologic units, the Pueblo San Diego Watershed and the Sweetwater Watershed. Runoff from the Spring Valley Basin eventually enters the Sweetwater River, which terminates in San Diego Bay. Runoff collected in the University and Lemon Grove basins drains to Chollas Creek, which also flows into San Diego Bay.

1.4 Constituents of Concern (COC)

Based primarily on wet weather monitoring data from mass loading stations (MLS) located on Chollas Creek, bioassessments, the 2008 San Diego Bay Watershed Urban Runoff Management Program (WURMP) Annual Report, and the Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) List), several constituents have been established as targeted pollutants in hydrologic areas (HA) located within City of La Mesa's Jurisdiction. In HA 908.2, part of the Pueblo San Diego Watershed, the COCs identified are bacteria, metals, sediment, trash, and pesticides. For HA 909.1 within the Sweetwater Watershed, bacteria has been listed as a COC.

In the San Diego River Watershed, constituent data have been collected annually. The 2008 San Diego River WURMP Annual Report lists bacteria indicators, phosphorus, total dissolved solids, low dissolved oxygen and turbidity as the COCs.

1.5 Previous Work

The City of La Mesa has conducted an annual dry weather monitoring program since 1993. A summary of the screening results obtained for each year is displayed in Table 1-2. Historical dry weather monitoring data is included in Appendix A.

TABLE 1-2
SUMMARY OF HISTORICAL DRY WEATHER SITES

Year	Number of Field Screening Sites [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1993	15	10	4	1	0
1994 [3]	11	11	0	4	0
1995 [4]	11	11	0	2	0
1996	12	12	0	3	0
1997	9	8	1	3	0
1998	11	8	3	3	0
1999-R1	10	10	0	4	0
1999-R2	11	11	0	3	0
2000-R1	11	11	0	4	0
2000-R2	11	11	0	4	0
2001 R1	11	11	0	4	0
2001 R2	12	12	0	4	0
2002	18	18	0	1	5
2003	18	16	2	1	5
2004	18	17	1	0	5
2005	18	16	2	0	5
2006	18	17	1	0	5
2007	18	18	0	1	5

Notes:

- The City of La Mesa conducted two separate rounds of dry weather monitoring in years 1999-2001.
  R1 = Round one
  R2 = Round two

[1] Number of Field Screening Sites = Number Flowing + Number Ponded. Field screening cannot be conducted at sites found to be dry. Dry sites are replaced by either a flowing or ponded site.

[2] Laboratory testing commenced in 2002 as required by San Diego Regional Water Quality Control Board Order 2001-001.

[3] The 1994 *City of La Mesa Dry Weather Non-Point Source Outfall Screening Program* by Cooper Engineering Associates states that 13 sites showed evidence of flow. However, in "Table 3. Summary of Dry Weather Screening Chemical Analysis" of the report, flow rates and chemical test results are provided for 11 sites only. For the purposes of this table, number of sites tested is listed as 11 and the remaining sites have been added to the number of dry sites.

[4] Per the *City of La Mesa Dry Weather Non-Point Source Outfall Screening Program* by Cooper Engineering Associates for 1995, 12 sites had flowing water and one site was ponded. Chemical analysis data is provided for 11 sites only. Thus, number of sites tested is listed as 11 and the remaining two sites are listed as dry.

The San Diego RWQCB did not require laboratory analyses to be performed as part of the dry weather program until 2002. The same laboratory and field tests have been used since 2002 until present. Graphical representations of the data for both the San Diego River and San Diego Bay watersheds are included as Attachments 1 and 2, respectively. The graphs display the results of both field and laboratory analyses for the 2002 through 2008 dry weather monitoring programs. Where applicable, averages for each constituent have been calculated, and error bars displaying average plus and minus one standard deviation have also been included on the graphs. Trend lines have been prepared for constituents where multiple values above the method reporting limit were recorded. The equations and R^2

values for the lines have been indicated on the graphs. Note that an R^2 value of 0.0 indicates a very poor fit and 1.0 indicates a perfect fit. Since the trend lines have been based on only seven years of data, conclusions regarding pollution trends cannot be drawn with a large degree of certainty.

1.6 Report Outline

Section 1, Introduction, includes regulatory background, a program overview, a discussion of the City of La Mesa's hydrologic setting and constituents of concern, a summary of historical field screening data, and the report outline.

Section 2, Sampling Locations, describes the field screening sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and results of the field screening analyses.

Section 5, Trash Assessment, discusses the procedure and results of the trash assessment.

Section 6, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 7, Data Analysis, provides an analysis of field and laboratory data collected in 2008, as well as a comparison of past results.

Section 8, Upstream Investigations, details the results of follow-up investigations undertaken to isolate the sources of water contamination detected during the field screening program.

Section 9, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Historical Dry Weather Monitoring Table

Appendix B Photographs of the Investigated Sites

Appendix C Laboratory Analytical Reports

Appendix D Copies of the original Field Data Sheets

Attachment 1 Historical Data Graphs: San Diego River Watershed

Attachment 2 Historical Data Graphs: San Diego Bay Watershed

2 SAMPLING LOCATIONS

The City of La Mesa updated its Jurisdictional Urban Runoff Management Program (JURMP) in 2008. Table 9-4 in Section 9 of the JURMP identifies 20 primary monitoring stations where data will be collected during the Dry Weather Monitoring Program. Table 9-5 of the JURMP lists nine alternate stations to be monitored if any of the primary stations do not have flowing or ponded water. Sampling sites are located in HU 907, HU 908, and HU 909.

During the 2008 Dry Weather Monitoring Program, all 20 primary sampling locations were visited, 19 of which had flowing or ponded water. Site 907-ALV-003 was dry, and thus Site 907-ALV-580 was selected as an alternate location for monitoring.

Table 2-1 provides the site number, location, conveyance configuration, primary and secondary land uses, hydrologic subareas, and Global Positioning System (GPS) coordinates of the sampling locations that were visited. Photographs of all the sampling locations are included as Appendix B. Figure A displays the sampling locations on a map of the City that also shows storm drain lines, roads, and drainage basin boundaries. A map of the watersheds in and around the City of La Mesa is included as Figure B.

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
907-ALV-001	Alvarado Road, east of the trolley station, on the channel	Concrete Channel	Commercial	Residential	907.11	32.77209	-117.04136
907-ALV-002	Along the south edge of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection	Manhole	Industrial	Commercial	907.11	32.77414	-117.02287
907-ALV-003	Parkway Drive located in the southeast corner of Coleman College property	Manhole	Residential	Commercial	907.11	32.77362	-117.03794
907-ALV-004	7780 Parkway Drive, inside Parkway Manor Condominiums' parking lot, by visitor parking at the top of the driveway	Manhole	Residential	None	907.11	32.77546	-117.02918
907-ALV-005	Alvarado Channel, underneath the intersection of Fletcher Parkway and Baltimore Drive, north side of channel	Outlet	Residential	Commercial	907.11	32.77380	-117.02737
907-ALV-006	Fletcher Parkway and Marengo Avenue intersection, in planter	Manhole	Residential	None	907.11	32.77550	-117.02309
907-ALV-007	Jackson Drive and Parkway Drive, behind Amex Auto Repair	Manhole	Residential	Commercial	907.11	32.77832	-117.01821
907-ALV-008	South of Fletcher Parkway, under SR-125 overpass, west of the outfalls from the north	Concrete Channel	Residential	Commercial	907.11	32.78400	-117.00570
907-ALV-120	Jackson Drive, 100 feet west of Murray Drive, north side of street	Manhole	Commercial	None	907.11	32.77630	-117.01423
907-ALV-12A	Jackson Drive, 100 feet west of Murray Drive, south side of street	Manhole	Commercial	Residential	907.11	32.77605	-117.01434
907-ALV-580	Northeast corner of Amaya Drive and Amaya Court intersection	Manhole	Residential	None	907.11	32.78640	-117.00116
907-ALV-590	Southeast corner of Parkway Drive and Amarillo Avenue intersection	Natural Creek	Residential	None	907.11	32.78180	-117.01328
907-ALV-640	North side of Seton Hall Street, between Swarthmore Street and Wheaton Street	Concrete Channel	Residential	None	907.11	32.77651	-117.03462

TABLE 2-1 (CONTINUED)
2008 DRY WEATHER MONITORING STATIONS

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
908-LEM-520	Near Waite Drive and Harris Street intersection, south end of Harris Street	Outlet	Residential	None	908.22	32.74514	-117.03931
908-UNI-001	69th Street and Boulevard Drive intersection	Natural Creek	Commercial	Residential	908.22	32.75463	-117.04908
908-UNI-002	Harbison Avenue and University Avenue intersection, west sidewalk, east of CB Hair & Nails	Manhole	Residential	Commercial	908.22	32.75498	-117.04639
908-UNI-003	Along Lowell Street, about halfway between University Avenue and Normal Avenue, north side of street	Manhole	Residential	Commercial	908.22	32.75536	-117.03528
908-UNI-004	In front of 7851 University Avenue, along the south side of the street	Manhole	Commercial	None	908.22	32.76308	-117.02855
908-UNI-005	Rolando Park, in locked gated area by left field of baseball field	Manhole	Residential	Parks	908.22	32.75787	-117.05260
909-SPR-001	Spring Street and Spring Gardens Road intersection, inside La Mesa Seventh Day Adventist Church	Concrete Channel	Residential	Parks	909.12	32.75483	-117.01311
909-SPR-002	In front of 4621 Bancroft Drive, just south of Golondrina Drive	Manhole	Residential	None	909.12	32.76324	-117.00118

Note
Alternate Site 907-ALV-580 was substituted for dry primary monitoring Site 907-ALV-003

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of flow measurement, quantitative field analyses of selected water quality parameters, and qualitative field observations. Information relating to weather conditions, the amount of time since last rainfall, and the type of storm water conveyance are recorded. Specific observations and results of the field water quality analyses are documented on field data sheets, which are included in Appendix D. The data sheets also serve as a record of the field visit and are completed for every site visit regardless of whether or not samples were collected.

For 2008, field data sheets were updated to include three categories of visits. Previously the sheets included check boxes for either routine field screening or follow-up visits. This year there are check boxes for routine field screening, confirmation and IC/ID follow-up visits. A confirmation visit is a revisit of the original site within one business day, whereas an IC/ID follow-up is an upstream investigation. For the purposes of this report, confirmation and IC/ID follow-up visits are both referred to as "follow-up" visits.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Irrespective of flow, qualitative field observations are made during each site visit. These observations provide a general site assessment and describe factors like water odor, clarity, the presence of floatables, visible deposits or stains, vegetation and biological organisms. Evidence of present or past illicit connections and illegal discharges to the storm drain system may also be ascertained through careful field observations. Each field screening location is photographed to provide additional information and documentation of site conditions. Photographs are included in Appendix B.

Flow Measurement

Flow measurements can be utilized to estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may indicate an illegal discharge upstream. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Surfactants, measured as methylene blue active substances (MBAS)*
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)

- Orthophosphate-Phosphorus (Orthophosphate-P)

* Surfactants are also referred to as detergents, specifically with respect to discussion of field test kit results.

The methods used to perform the above field analyses, along with the detection limit, range and accuracy of each method, are listed in Table 3-1.

3.2 Laboratory Analytical Methods

In accordance with Order R9-2007-0001, laboratory samples were collected at six sites, representing over 25 percent of the sites where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc, a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Total hardness
- Oil and grease
- Diazinon
- Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project includes the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described in Section 3.3.1 and Section 3.3.2.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01 mS/cm	0 – 20 mS/cm	± 2% of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.1 °C	0.0 °C – 60.0 °C	± 0.5 °C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703 Portable Turbidity Meter***	0.01 NTU	0.01 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.0 mg/L – 3.0 mg/L*	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[3]***	2.26 mg/L**	2.26 mg/L –13.6 mg/L**	± 30%of practical detection limit[4]
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate***	0.10 mg/L**	0.10 mg/L – 3.00 mg/L**	Varies with measured concetration[4,5]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[6]***	0.25 mg/L**	0.25 mg/L – 2.61 mg/L**	Varies with measured concetration[4,5]

Notes:

TDS = total dissolved solids
EC = electrical conductivity
mS/cm = millisiemens per centimeter
°C = degrees Celsius
NTU = nephelometric turbidity unit
mg/L = milligrams per liter
LED = light-emitting diode

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The detection limit for nitrate is 10.0 mg/L; however, the detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The detection limit for orthophosphate is 0.75 mg/L; however, the detection limit for orthophosphate-phosphorus is lowered due to the conversion.

*Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Reporting limit, range, and accuracy information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Detection Limit	Maximum Holding Time [1]
Oil and Grease	USEPA 1664	5 mg/L	28 days
Total Hardness	USEPA 200.7	10 mg/L	14 days
Dissolved Cadmium	USEPA 6020	0.005 mg/L	24 hours
Dissolved Copper	USEPA 6020	0.005 mg/L	24 hours
Dissolved Lead	USEPA 6020	0.005 mg/L	24 hours
Dissolved Zinc	USEPA 6020	0.020 mg/L	24 hours
Diazinon	USEPA 8141A	0.05 µg/L	7 days
Chlorpyrifos	USEPA 8141A	0.05 µg/L	7 days
Total Coliforms	SM 9221	20 – 1,600,000 MPN/100 mL [2]	6 hours
Fecal Coliforms	SM 9221	20 – 160,000 MPN/100 mL [2]	6 hours
Enterococci	SM 9230	20 – 160,000 MPN/100 mL [2]	6 hours
Total Coliforms	SM 9223 (IDEXX Colilert) [3]	10 – 2,400,000 MPN/100 mL	6 hours
Escherichia coli (*E. coli*) [4]	SM 9223 (IDEXX Colilert) [3]	10 – 2,400,000 MPN/100 mL	6 hours
Enterococci	IDEXX Enterolert [3]	10 – 240,000 MPN/100 mL	6 hours

Notes:

µg/L = micrograms per liter

MPN/100 mL = most probable number (of colony-forming units) per 100 milliliters

[1] Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.

[2] For D-MAX's Dry Weather Monitoring Program, EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 MPN/100mL. For fecal coliforms and Enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.

[3] IDEXX Colilert and Enterolert tests are performed by EnviroMatrix Analytical. This test is used during upstream investigations only.

[4] Number of fecal coliforms is derived from number of *Escherichia coli* (*E. coli*) through the following formula: Fecal Coliforms = *E. coli* / 0.85. The converted fecal coliform count, not the number of *E.coli*, is reported in this report's data tables.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters are calibrated periodically with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter is calibrated and periodically checked for accuracy using standard solutions. The conductivity meter is checked periodically with standard solutions and calibrated as necessary.

Field sample collection containers are first rinsed with distilled water and then with the sample water before sample collection. Upon completion of sampling at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water and dried.

The accuracy of field analytical techniques is assessed at the beginning of each sampling week by analyzing solutions of known concentrations for ammonia-nitrogen, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration (mg/L)	Acceptable Range* (mg/L)	Field Test Kit Results (mg/L)
07/29/08	Ammonia-Nitrogen	1.0	0.8 – 1.2	0.9
07/29/08	Surfactants	1.0	0.75 – 1.25	1.0
07/29/08	Nitrate *	44.3	31.0 – 57.6	50.4
07/29/08	Orthophosphate *	1.0	0.75 – 1.25	0.8
08/05/08	Ammonia-Nitrogen	1.0	0.8 – 1.2	1.0
08/05/08	Surfactants	1.0	0.75 – 1.25	1.0
08/05/08	Nitrate *	44.3	31.0 – 57.6	48.0
08/05/08	Orthophosphate *	1.0	0.75 – 1.25	0.8

Notes:
* Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1.

** Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by dividing the results by 4.43 for nitrate and 3.06 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis are collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed, and samples are delivered and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain of custody forms are included in Appendix C.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine

whether an immediate source investigation is necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a re-sampling is conducted within one day. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by the laboratory analyses, a comprehensive follow-up pollutant source investigation is conducted within two days of receiving the analytical reports from the lab. The results of these investigations are included in Section 8 of this report. Recommendations based on these investigations are included in Section 9.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (see Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels, which are based on county-wide sampling data and have been used by all Copermittees since the 2003 dry weather season. If pH, orthophosphate-P, nitrate-N, ammonia-N, or surfactants are observed above the numeric action level, a follow-up investigation is conducted within 24 hours to investigate the source unless best professional judgment indicated otherwise. If oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, or *Enterococcus* laboratory analytical results exceeded numeric action levels, then source investigations are conducted within two business days of receiving the test results from the lab.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew due to their familiarity with the City of La Mesa Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters. Best professional judgment may indicate that results which either exceed certain action levels or statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
pH	<6.5 or >9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Turbidity (NTU)[2]	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Temperature (°C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values <0.75 may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	California Toxics Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)	California Toxics Rule	
Dissolved Lead (µg/L)	California Toxics Rule	
Dissolved Zinc (µg/L)	California Toxics Rule	
Total Coliforms (MPN/100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	20,000	
Enterococci (MPN/100 mL)	10,000	

Notes

[1] The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

[2] Basin Plan = Water Quality Control Plan for the San Diego Basin

WQO = Water Quality Objective

ppb = parts per billion

4 FIELD SCREENING RESULTS

The 2008 Dry Weather Monitoring Program began July 29, 2008, and was completed August 8, 2008. A total of 21 monitoring stations were visited. Field screening was conducted at the 20 sites where ponded or flowing water was observed. Since primary sampling Site 907-ALV-003 was dry, alternate Site 907-ALV-580 was selected as a replacement. Completed field data sheets for each site visit are included in Appendix D.

4.1 Qualitative Observations

Qualitative observations, which are a routine part of the Dry Weather Monitoring Program, are summarized below and presented in Table 4-1:

Light Conditions
Light conditions were primarily sunny, with a few occurrences of overcast and partly cloudy weather.

Odor
Water samples from the majority of sites were odorless. Two sites displayed a musty odor.

Color
Water samples taken from most of the sites were colorless, with the exception of four sites displaying water with a yellow hue.

Clarity
Despite showing negligible suspended particles, all but one site showed clear water samples.

Floatable Materials
During routine field screening visits, small amounts of trash were noted at several sites. Section 5 of this report includes a complete Trash Assessment. No other floatables were noted.

Deposits
Sediment, gravel or fine particulates were observed at all sites. While no sampled sites contained oily deposits or stains, one dry site had small stains likely resulting from mineral deposits.

Vegetation
Taking into account exposure to sunlight and soil, all sites displayed appropriate vegetation. Manholes lacking soil and sunlight showed no vegetation. Concrete channels displayed either limited or normal vegetation, and the natural creeks showed normal vegetative growth. No sites showed excessive vegetation that would significantly impaired flow.

Biology
The presence of biological organisms typically implies healthy water conditions. Also, algal growth indicates that water flow is persistent at the site. No sites visited displayed excessive algal growth, which can indicate nutrient enrichment (eutrophication). Many of the sampling locations were host to other biological organisms including fish, tadpoles, snails and various insects.

TABLE 4-1
FIELD OBSERVATIONS

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
907-ALV-001	7/31/08	10:40	Sunny	None	None	Clear	None	Fine Particulates	Limited	Insects, Algae, Snails, Larvae, Tadpoles
907-ALV-002	7/31/08	11:50	Sunny	Musty	Yellow	Opaque	None	Fine Particulates	None	None
907-ALV-002 (Confirmation)	8/1/08	9:30	Sunny	None	None	Clear	None	Fine Particulates	None	None
907-ALV-002 (Confirmation)	8/8/08	14:10	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	None	Cockroaches
907-ALV-003	7/31/08	15:30	Sunny	None	ns	ns	ns	Stains	None	None
907-ALV-004	8/1/08	8:45	Partly Cloudy	None	None	Clear	None	Fine Particulates	None	None
907-ALV-005	7/31/08	14:40	Sunny	None	None	Clear	None	Fine Particulates	None	None
907-ALV-006	7/31/08	16:00	Sunny	None	Yellow	Clear	Trash	Fine Particulates	None	None
907-ALV-007	7/29/08	13:30	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects
907-ALV-008	7/29/08	15:15	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects/Fish
907-ALV-120	8/1/08	11:50	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Spiders
907-ALV-12A	7/29/08	16:20	Sunny	None	None	Clear	None	Fine Particulates	None	None
907-ALV-580	8/1/08	13:45	Sunny	None	None	Clear	None	Fine Particulates	None	None

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
907-ALV-590	7/29/08	14:25	Sunny	None	None	Clear	None	Fine Particulates	Normal	Insects, Algae, Fish
907-ALV-640	7/30/08	9:15	Overcast	Musty	Yellow	Clear	Trash	Fine Particulates	Limited	Algae, Snails
908-LEM-520	8/1/08	10:45	Sunny	None	None	Clear	None	Fine Particulates	Normal	Insects, Algae, Snails
908-UNI-001	7/30/08	10:20	Sunny	None	None	Clear	None	Fine Particulates	Normal	Insects, Algae, Tadpoles
908-UNI-002	7/30/08	11:25	Sunny	None	None	Clear	Trash	Fine Particulates	None	Larvae
908-UNI-002 (Confirmation)	8/8/08	15:15	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	None
908-UNI-003	7/30/08	12:10	Sunny	None	None	Clear	None	Fine Particulates	None	None
908-UNI-004	7/31/08	9:15	Sunny	None	None	Clear	None	Fine Particulates	None	Spiders
908-UNI-004 (Confirmation)	8/8/08	14:30	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	None	None
908-UNI-005	7/29/08	11:20	Overcast	None	Yellow	Clear	None	Fine Particulates	None	Insects
909-SPR-001	7/30/08	15:30	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Larvae
909-SPR-002	7/30/08	14:20	Sunny	None	None	Clear	None	Fine Particulates	None	None

Notes:

ns = not sampled (dry site)

denotes a confirmation visit

4.2 Field Analytical Results

Field analyses are conducted at all sites with flowing or ponded water. The measured constituents are described below.

Flow rates are the measurements of the volume of fluid passing through a given surface per unit time. Flow rate measurements are needed to calculate the load or particular amount of a pollutant discharged.

Water temperature is needed to assess the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. In the field, water temperature is measured immediately upon sample collection at each site with ponded or flowing water.

The **pH** is an expression of acidity or alkalinity of a water sample. The pH of an aquatic system will drive a variety of chemical reactions, including the availability of nutrients or the solubility of chemical substances, particularly heave metals.

Turbidity describes the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation, thus reducing photosynthetic capacity, but excessive suspended particles can also absorb heat and increase water temperatures.

Specific Conductance (Conductivity) values indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water and potentially help indicate the presence of dissolved pollutants.

Surfactant concentrations in water samples often reflect illegal discharge from industrial, commercial or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms.

Ammonia-Nitrogen (ammonia-N) is an indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-Nitrogen (nitrate-N) is a common sign of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, which can deplete oxygen from the water during decomposition and eventually suffocate other aquatic life. During the field analysis, nitrate is measured in milligrams per liter (mg/L) NO_3 and converted into mg/L nitrate-N using a conversion factor of 0.226. This process is explained in Note 3 of Table 3-1.

Orthophosphate-Phosphorus (orthophosphate-P) is also an indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate-N, orthophosphate-P pollution can cause nutrient enrichment (eutrophication), stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient in plant growth. During the field analysis, orthophosphate is measured in mg/L PO_4 and converted into mg/L orthophosphate-P using a conversion factor of 0.326. This process is explained in Note 6 of Table 3-1.

A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 shows the results of all field analyses conducted at the sampled sites. Graphs of the

various parameters and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceed-ances	Graph Number
Flow Rate (gpm)	187	< 1	19.6	4.0	45.2	---	4-1
Temperature (ºC)	26.9	22.1	24.4	24.2	1.38	0	4-2
pH	8.8	7.0	7.7	7.7	0.45	0	4-3
Turbidity (NTU)	421	0.45	263.3	3.3	93.0	1	4-4
Conductivity (mS/cm)	5.7	1.17	2.8	2.5	1.1	0	4-5
Surfactants (mg/L MBAS)	0.75	0.13	0.37	0.32	0.18	0	4-6
Ammonia-N (mg/L)	0.6	0.1	0.33	0.3	0.11	0	4-7
Nitrate-N (mg/L NO_3-N)	9.63	0.45	2.99	2.42	2.24	0	4-8
Orthophosphate-P (mg/L PO_4-P)	0.62	0.07	0.26	0.27	0.13	0	4-9
Dissolved Oxygen (mg/L) *	9.1	6.52	7.81	*	*	0	*

Notes:
gpm = gallons per minute
Calculations include complete routine visit data only. Confirmation visits, follow-up visits and dry sites not incorporated.
* Dissolved oxygen was measured at only two sites. There is no median, standard deviation, or graph for this constituent.

TABLE 4-3
FIELD ANALYTICAL RESULTS

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants MBAS mg/L	Ammonia-N NH_3-N mg/L	Nitrate-N NO_3-N mg/L	Orthophosphate-P PO_4-P mg/L
907-ALV-001	7/31/08	10:40	98	23.4	7.8	3.97	3.17	0.25	0.3	1.27 *	0.36
907-ALV-002	7/31/08	11:50	10	22.5	7.3	**421**	1.89	0.75	0.6	2.44	0.33
907-ALV-002 (Confirmation)	8/1/08	9:30	3	21.5	7.1	14.20	2.59	na	na	na	na
907-ALV-002 (Confirmation)	8/8/08	14:10	3	24.0	7.3	8.05	1.89	na	na	na	na
907-ALV-003	7/31/08	15:30	Dry	ns	ns	ns	ns	ns	ns	ns	ns
907-ALV-004	8/1/08	8:45	<1	22.1	7.7	3.34	1.19	0.38	0.4	1.31 *	0.33
907-ALV-005	7/31/08	14:40	5	26.9	7.0	1.85	3.70	0.25	0.3	2.64	0.13 *
907-ALV-006	7/31/08	16:00	1	26.5	7.1	8.57	2.49	0.38	0.3	1.18 *	0.29
907-ALV-007	7/29/08	13:30	3	25.5	7.9	1.47	2.84	0.50	0.2	1.20 *	0.26
907-ALV-008	7/29/08	15:15	8	22.8	7.7	3.12	2.77	0.38	0.3	2.40	0.13 *
907-ALV-120	8/1/08	11:50	5	24.0	7.1	16.78	2.16	0.25	0.4	2.33	0.36
907-ALV-12A	7/29/08	16:20	8	23.8	7.7	8.70	2.56	0.25	0.4	4.86	0.13 *
907-ALV-580	8/1/08	13:45	3	25.5	7.5	12.91	2.35	0.25	0.5	1.27 *	0.07 *
907-ALV-590	7/29/08	14:25	2	26.8	7.4	1.58	2.45	0.25	0.3	1.31 *	0.16 *
907-ALV-640	7/30/08	9:15	<1	23.0	8.8	3.30	1.17	0.25	0.1	0.45 *	0.26

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants MBAS mg/L	Ammonia-N NH_3-N mg/L	Nitrate-N NO_3-N mg/L	Orthophosphate-P PO_4-P mg/L
908-LEM-520	8/1/08	10:45	<1	25.1	8.2	7.56	4.79	0.50	0.3	3.96	0.42
908-UNI-001	7/30/08	10:20	187	23.7	7.8	1.05	2.95	0.50	0.4	3.41	0.10 *
908-UNI-002	7/30/08	11:25	3	24.4	7.9	13.95	5.70	0.75	0.3	6.08	0.33
908-UNI-002 (Confirmation)	8/8/08	15:15	3	26.1	7.8	na	na	na	na	na	na
908-UNI-003	7/30/08	12:10	10	24.5	8.1	0.45	2.27	0.25	0.3	4.00	0.13 *
908-UNI-004	7/31/08	9:15	5	24.4	7.4	2.39	2.65	0.50	0.2	1.56 *	0.29
908-UNI-004 (Confirmation)	8/8/08	14:30	2	26.9	7.7	2.61	na	na	na	na	na
908-UNI-005	7/29/08	11:20	<1	24.0	7.2	3.23	4.31	0.50	0.3	5.83	0.62
909-SPR-001	7/30/08	15:30	39	23.9	7.5	2.30	2.41	0.13	0.3	2.67	0.27
909-SPR-002	7/30/08	14:20	1	25.5	8.2	8.56	2.20	0.13	0.3	9.63	0.23 *
REPORTING LIMIT				**0.1**	**0.01**	**0.01**	**0.01**	**0.13**	**0.1**	**2.26**	**0.25**
ACTION LEVEL				**BPJ**	**< 6.5 > 9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.00**	**2.00**

Notes:
na = not analyzed
ns = not sampled (dry site)
BPJ = Best Professional Judgment, see Section 3.4
* value reported is below the Practical Detection Limit
Red Bold Type = value exceeds action level
denotes a confirmation visit
denotes a location sampled for laboratory analysis

GRAPH 4-1: Flow

Action Level is Best Professional Judgment

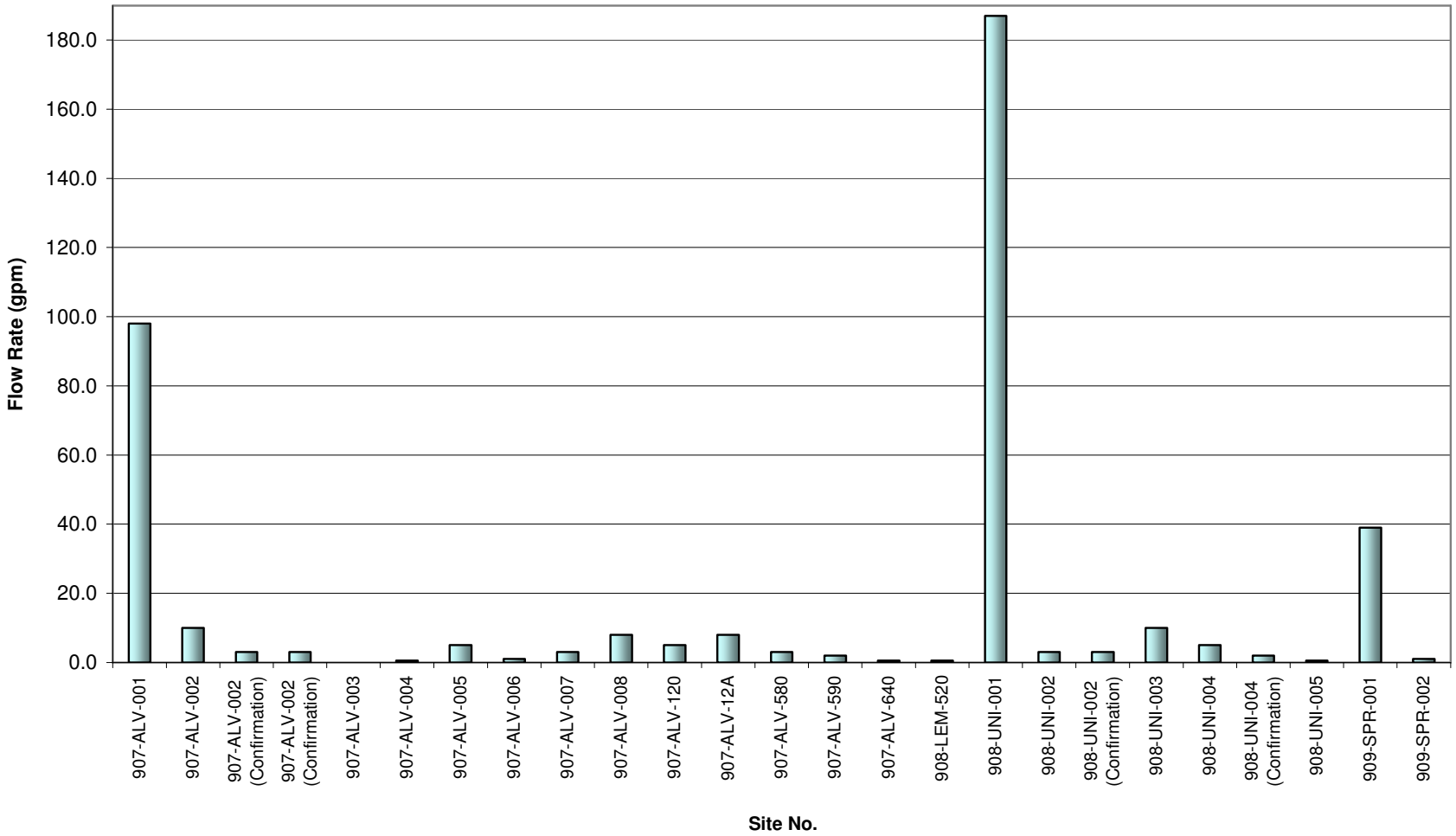

Note: Site 907-ALV-003 was dry.

GRAPH 4-2: Temperature

Action Level is Best Professional Judgment

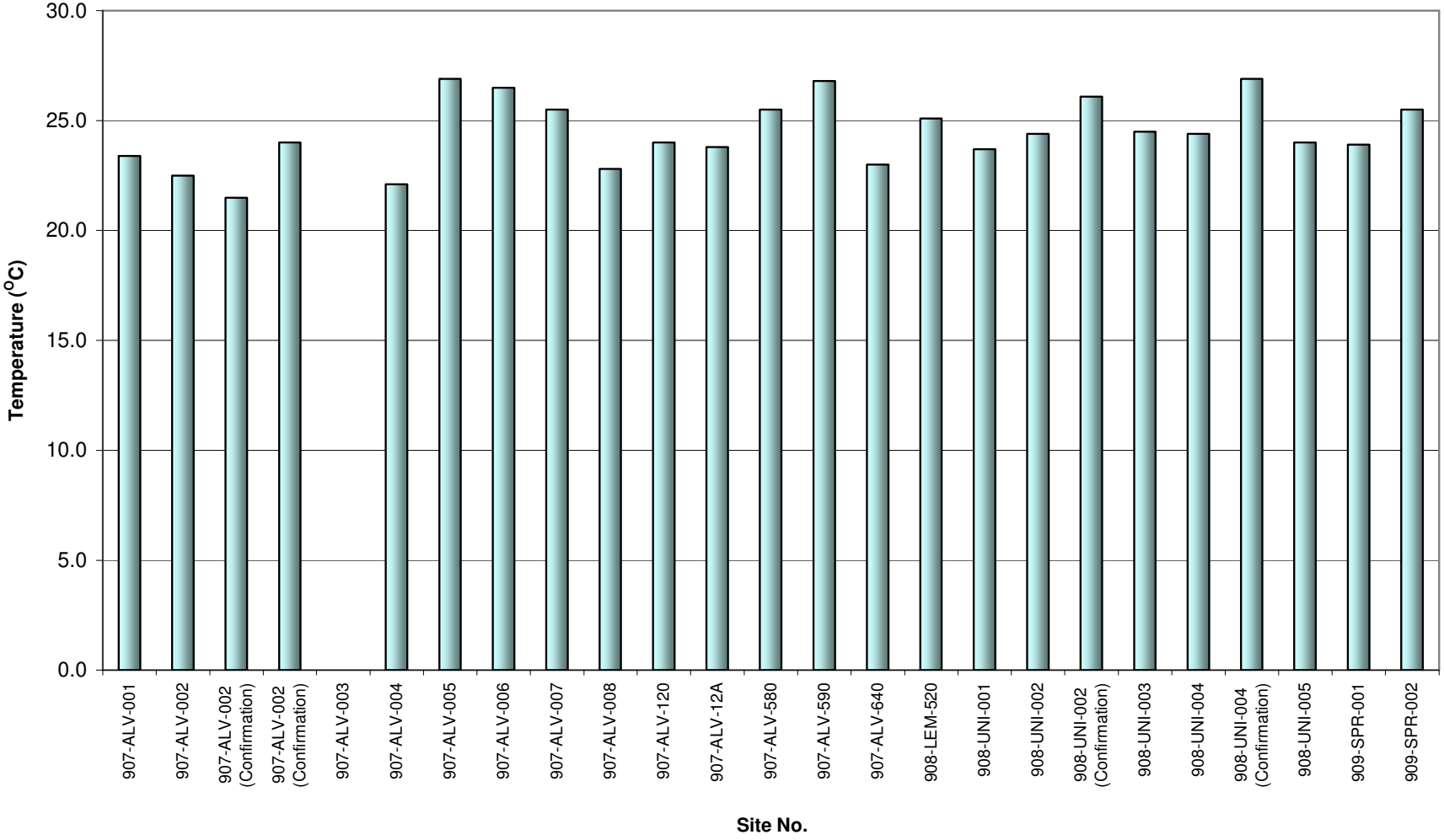

Note: Site 907-ALV-003 was dry.

GRAPH 4-3: pH

Action Level is > 9.0 or < 6.5

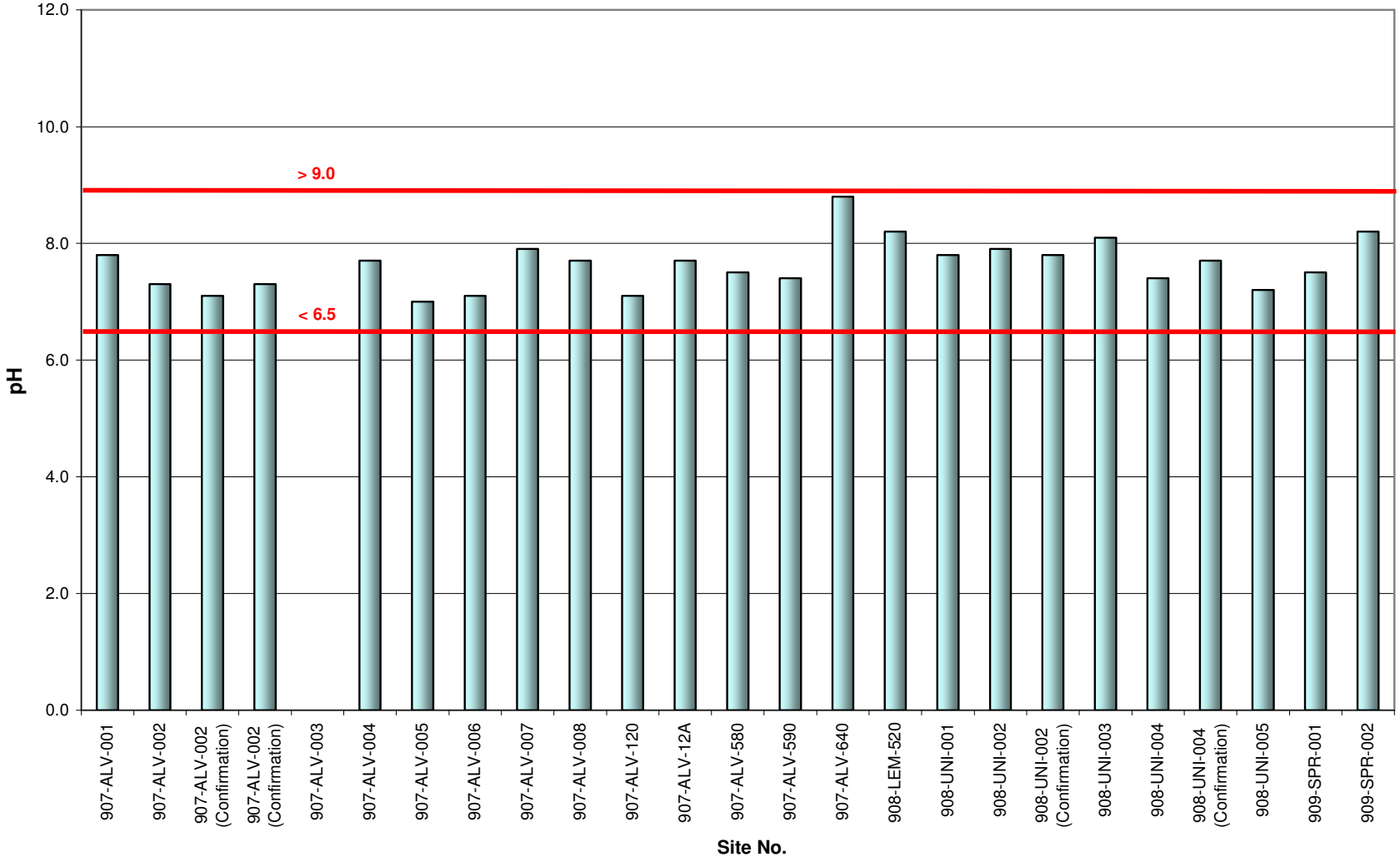

Note: Site 907-ALV-003 was dry.

GRAPH 4-4: Turbidity

Action Level is Best Professional Judgment

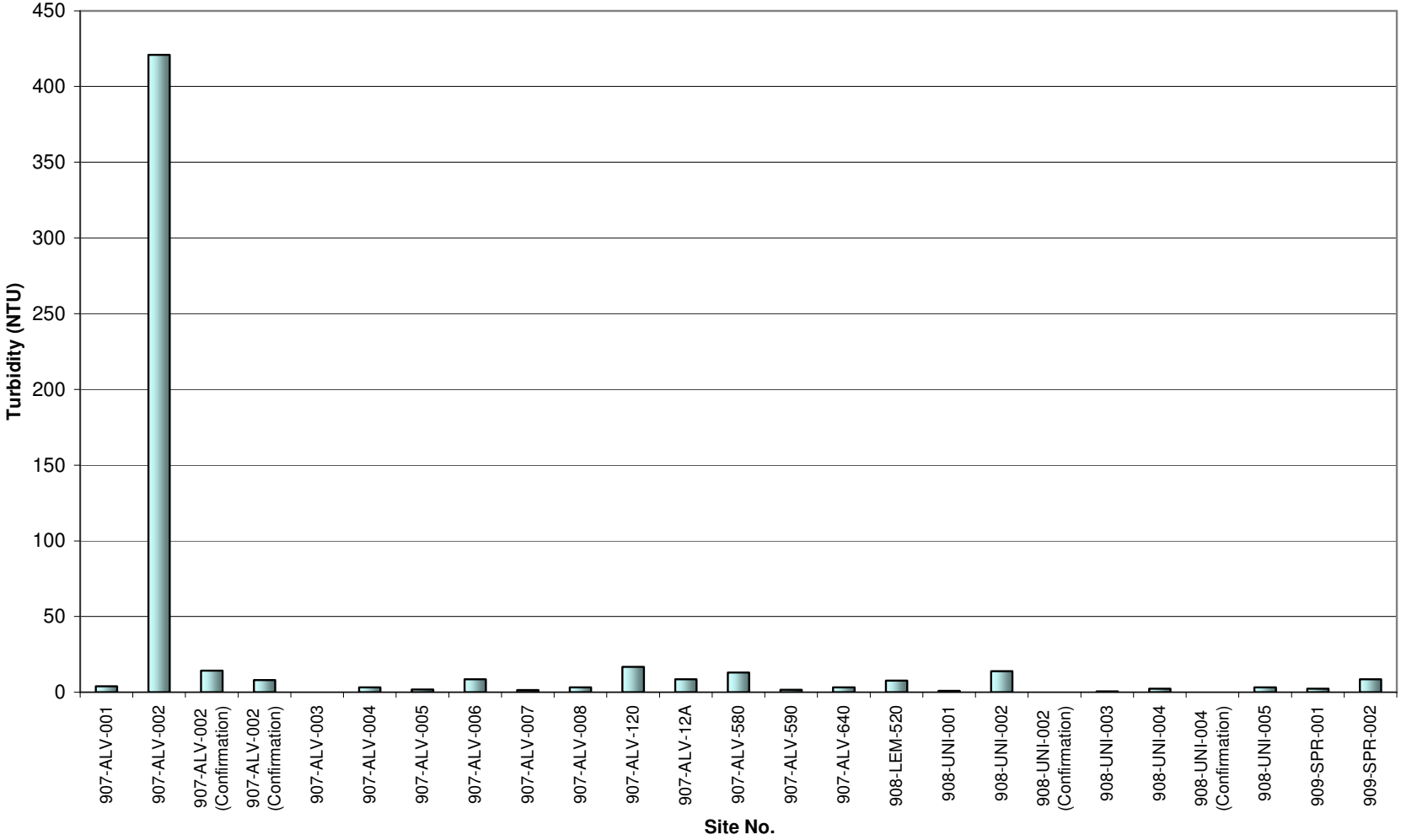

Note: Site 907-ALV-003 was dry.

GRAPH 4-5: Conductivity

Action Level is Best Professional Judgment

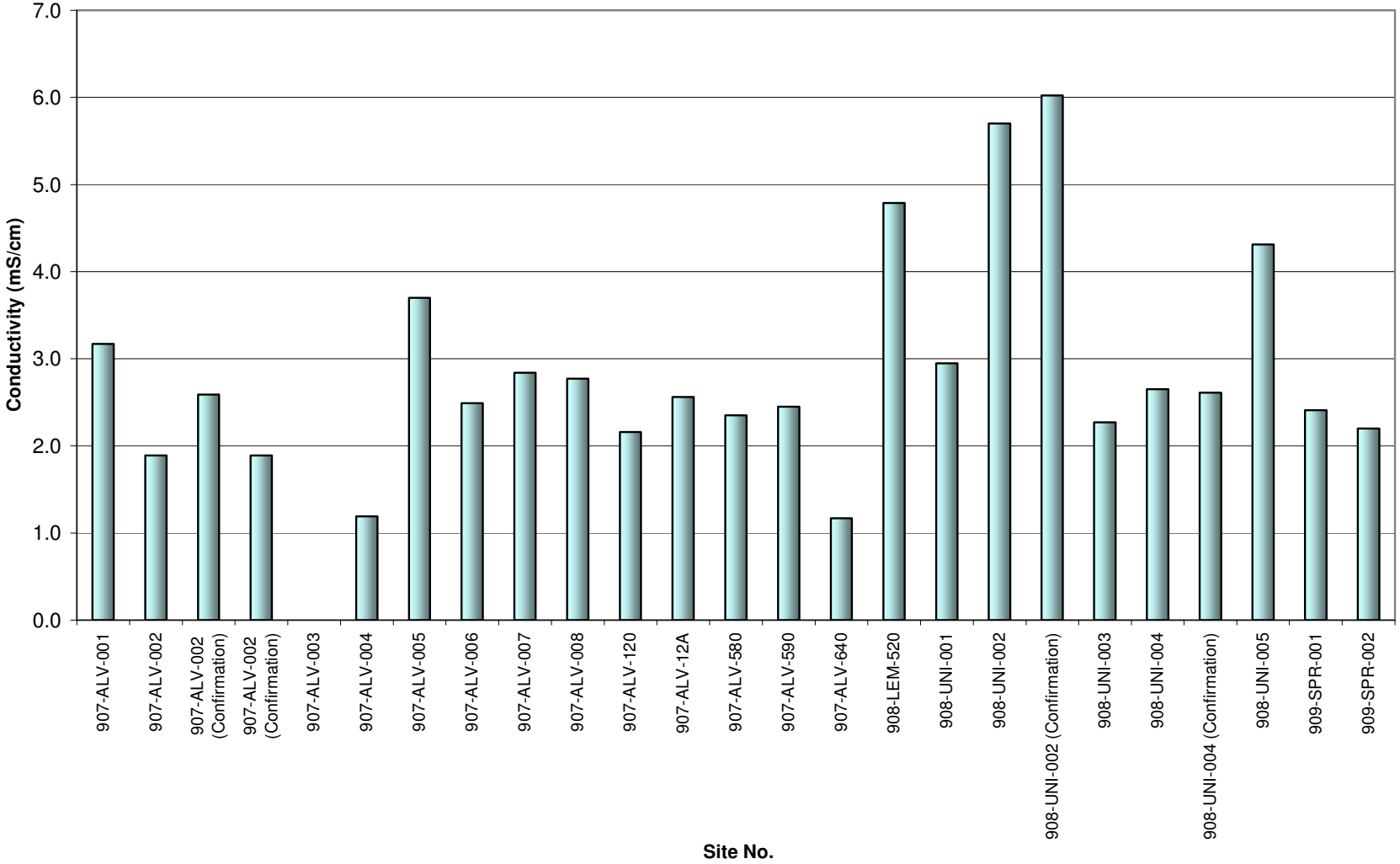

Note: Site 907-ALV-003 was dry.

GRAPH 4-6: Surfactants (Methylene Blue Active Substances)

Action Level = 1.0 mg/L

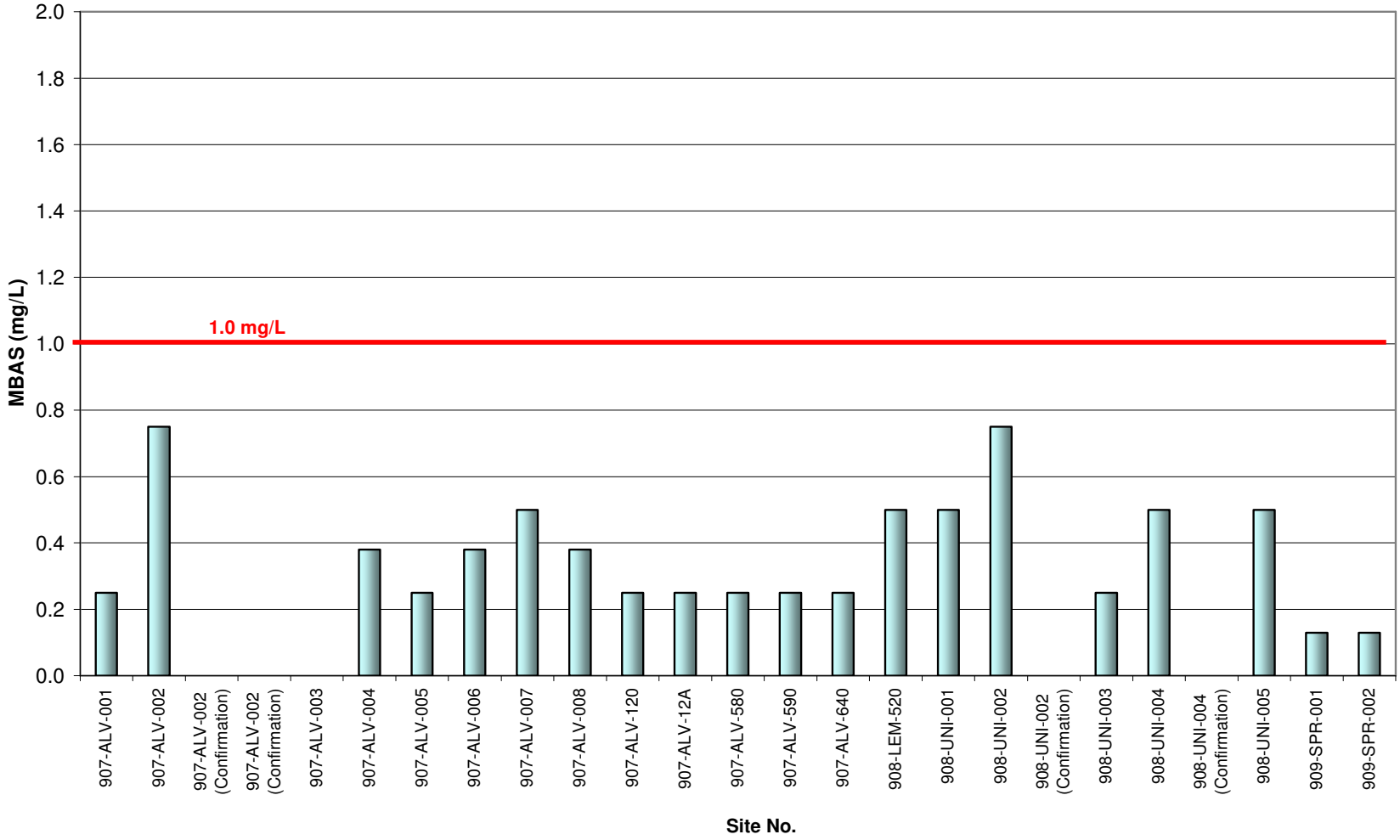

Note: Site 907-ALV-003 was dry.

GRAPH 4-7: Ammonia-N (NH_3-N)

Action Level = 1.0 mg/L

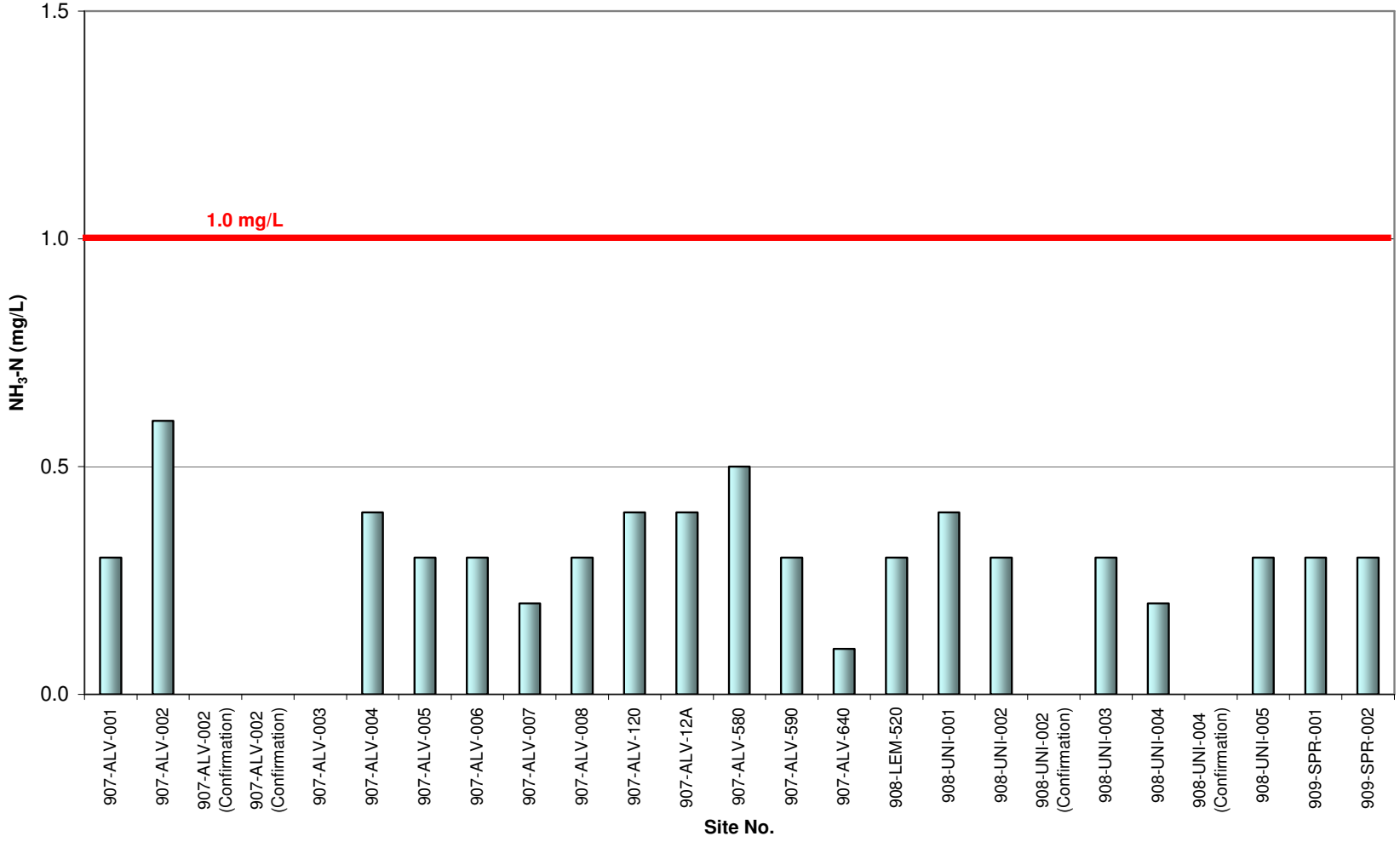

Note: Site 907-ALV-003 was dry.

GRAPH 4-8: Nitrate-N (NO_3-N)

Action Level = 10.0 mg/L

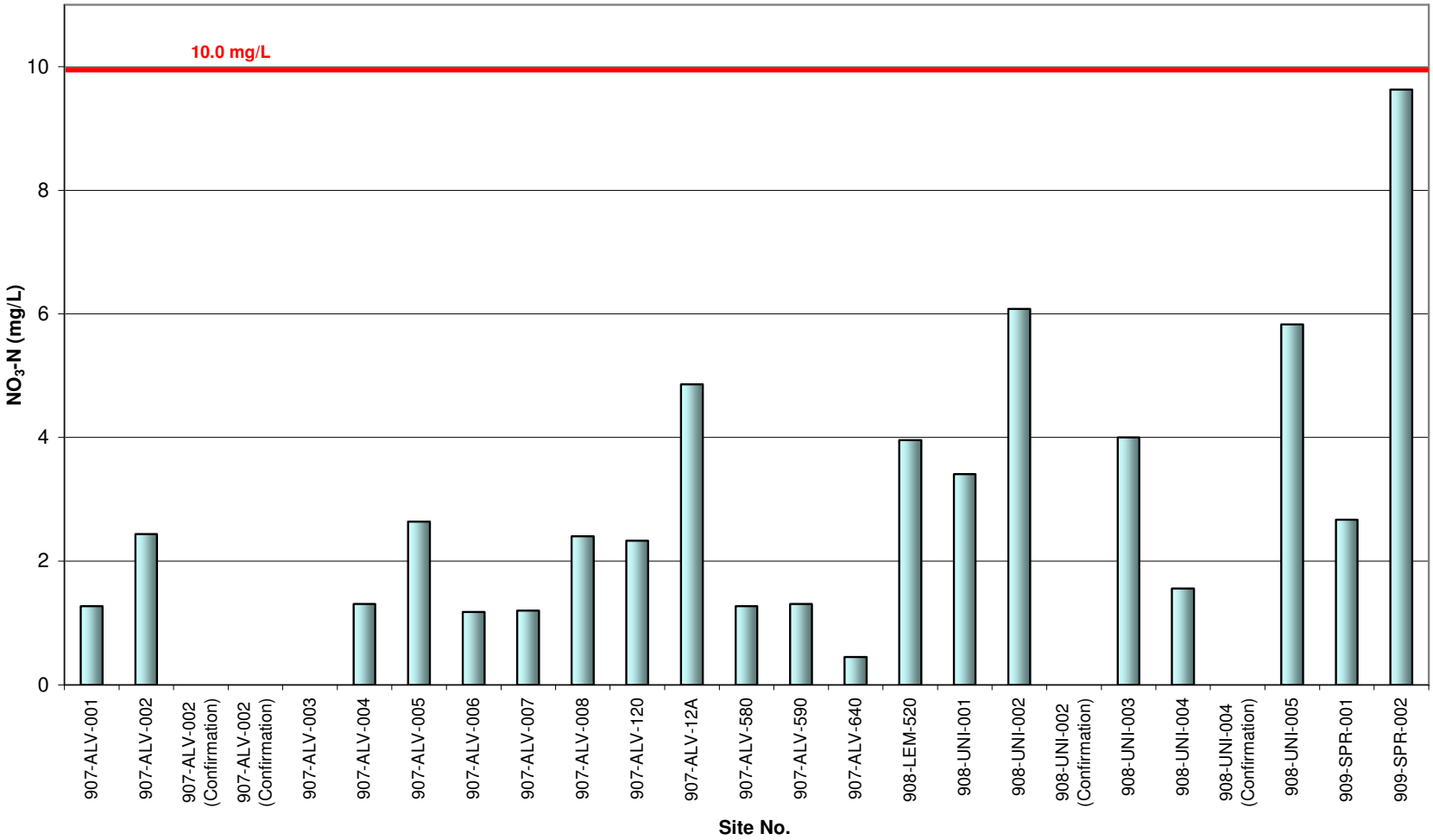

Note: Site 907-ALV-003 was dry.

GRAPH 4-9: Orthophosphate-P (PO_4-P)

Action Level = 2.0 mg/L

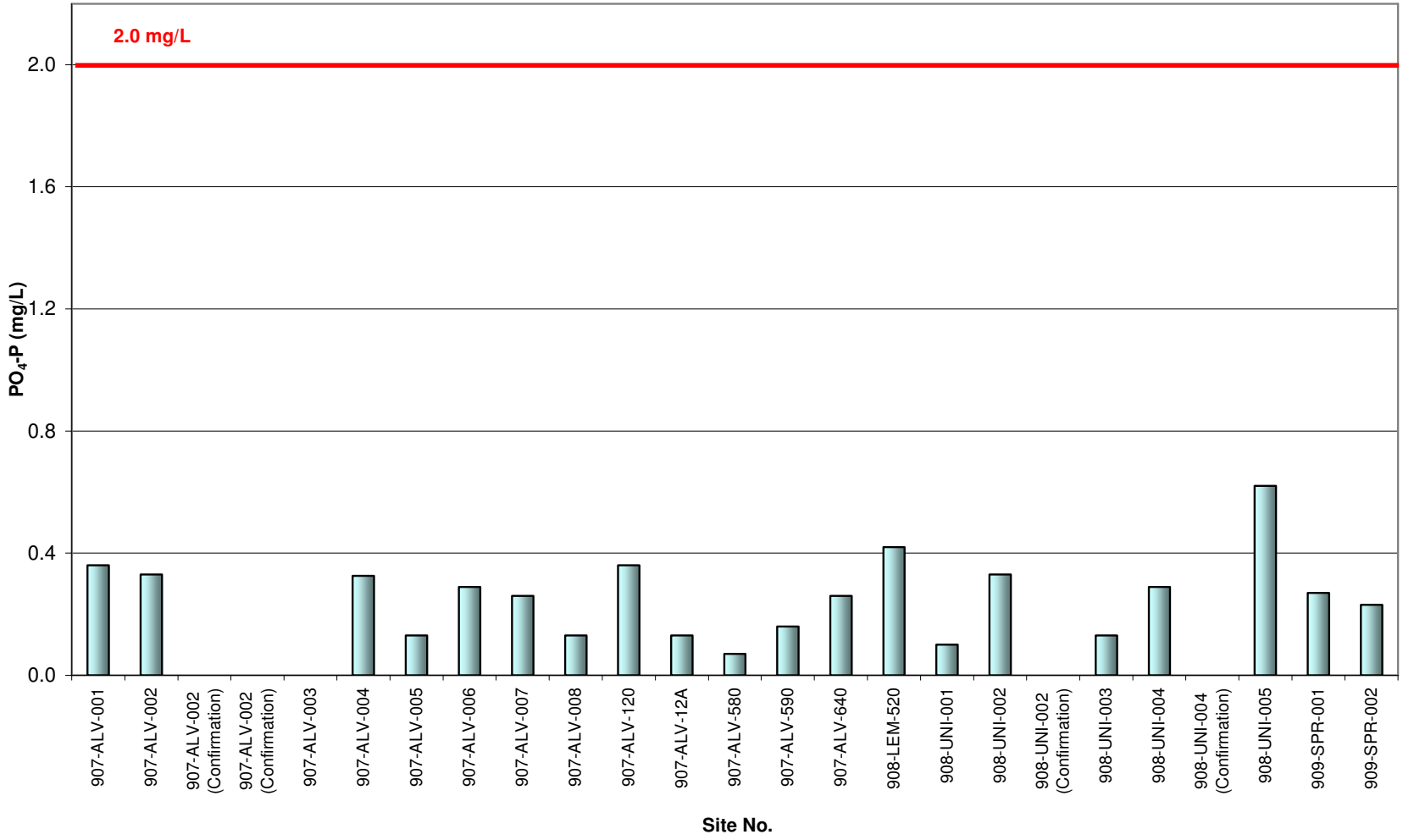

Note: Site 907-ALV-003 was dry.

5 TRASH ASSESSMENT

5.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather field screening site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form to document the amount and extent of trash and the threat to human and aquatic health. The first page is completed at every site. The second page, which includes information about the types, prevalence, potential routes, and sources of trash, is also completed at sites where a larger amount of trash is observed.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although a number of trash pieces is also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g., medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).
- *Threat to Aquatic Health* – Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and

other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Form.

If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

The majority of sites sampled in the City of La Mesa were rated "optimal." No sites were considered to have "submarginal" or "poor" trash levels. Additionally, no sites were determined to pose a threat to human or aquatic health.

Table 5-1 and Graph 5-1 summarize the trash assessment results. Figure 5-1 provides a map of sampling sites and their corresponding trash assessment.

TABLE 5-1
TRASH ASSESSMENT RESULTS

Optimal	Suboptimal	Marginal	Submarginal	Poor
907-ALV-001 907-ALV-002 907-ALV-003 907-ALV-004 907-ALV-005 907-ALV-008 907-ALV-12A 907-ALV-580 907-ALV-590 908-UNI-001 908-UNI-003 908-UNI-004 908-UNI-005 909-SPR-001 909-SPR-002	907-ALV-006 907-ALV-007 907-ALV-120 907-ALV-640 908-LEM-520	908-UNI-002	(None)	(None)

GRAPH 5-1
TRASH ASSESSMENT SUMMARY

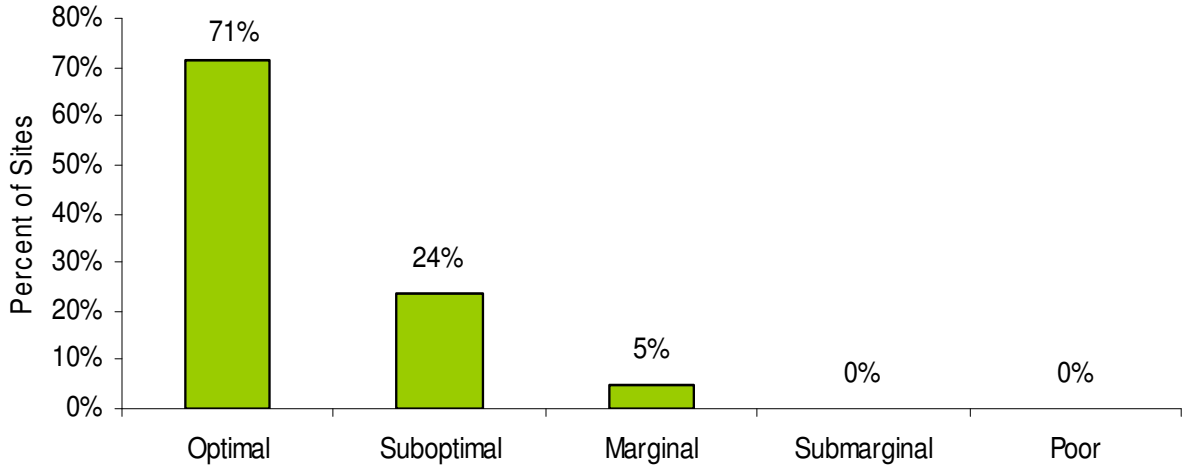

FIGURE 5-1
TRASH ASSESSMENT MAP

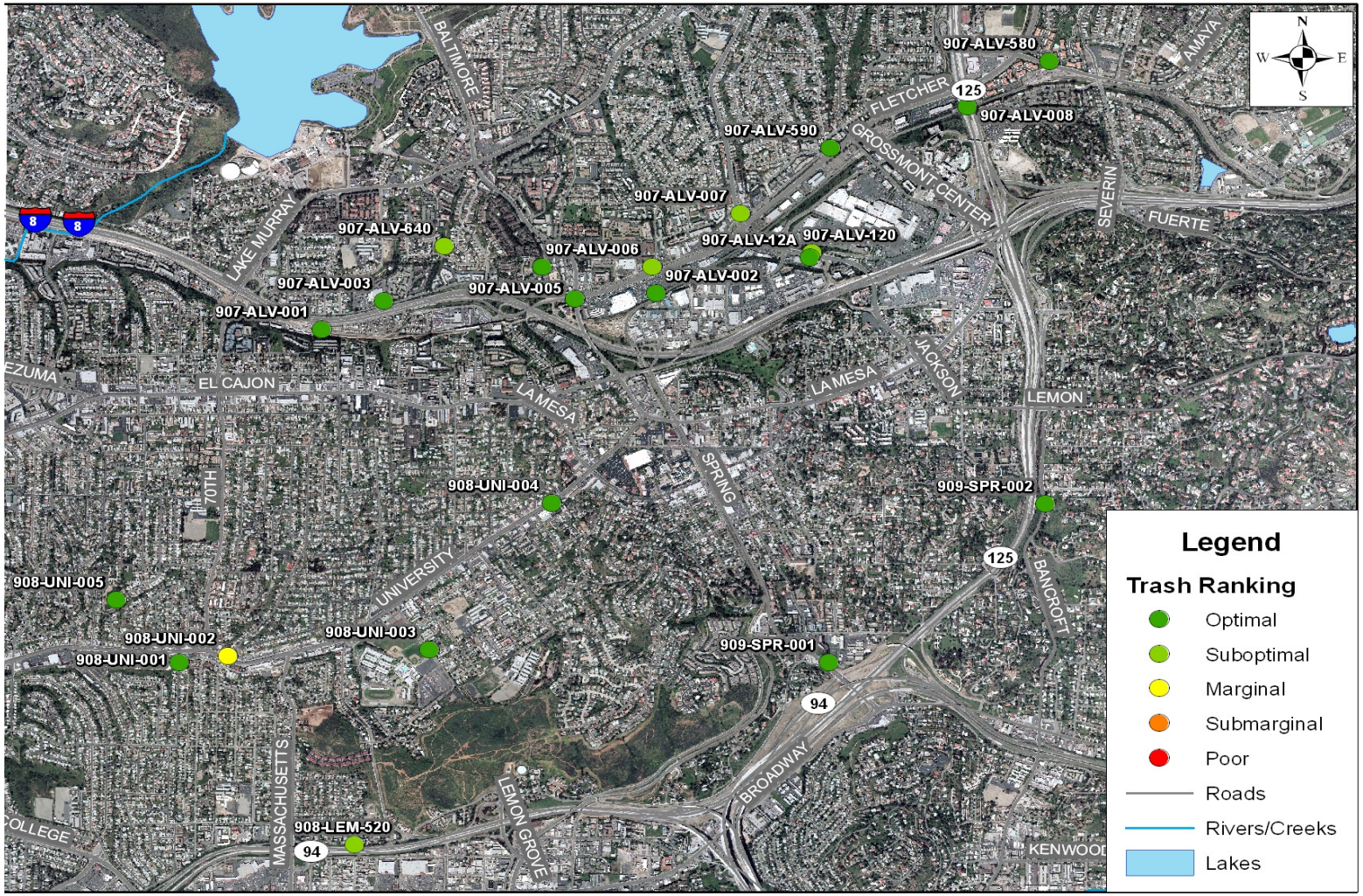

Base Data Sources: USGS, SanGIS, SANDAG

6 LABORATORY ANALYTICAL RESULTS

6.1 Summary

Laboratory analyses were conducted at six sites, representing over 25 percent of all sites with ponded or flowing water. The laboratory constituents measured are defined below.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Hardness itself is not considered a pollutant, but is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Diazinon and **chlorpyrifos** are organophosphate pesticides that can be harmful to aquatic organisms if transported in urban runoff. Diazinon and chlorpyrifos are highly toxic to birds, mammals, and insects. They are also highly toxic to freshwater fish and invertebrates following acute exposure.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness, with toxicity decreasing as hardness increases. Therefore, each dissolved metal has a CMC for a specific total hardness. The laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 6-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

TABLE 6-1
CTR – CMC FOR DISSOLVED METALS

Dissolved Copper			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
ALV 002	536	0.0654	0.014
UNI-002	1570	0.1799	0.01
UNI-004	646	0.078	0.005
Dissolved Zinc			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
ALV 002	536	0.486045	0.075
UNI 002	1570	1.208206	0.038

Notes:
Sites listed are those at which a particular dissolved metal was detected.
For equations and constants used in California Toxics Rule calculations, see http://www.epa.gov/ost/standards/ctr/toxic.pdf

Coliform bacteria are relatively harmless to humans and are present in mammalian digestive tracts and are naturally found in most surface waters and soils. Testing water samples for total coliform bacteria is a standard practice in public health since a high level of total coliform bacteria often may indicate the presence of other more harmful, pathogenic

organisms, sometimes of fecal origin. Total coliform is measured in lieu of these pathogens since the various pathogens are generally present in much smaller quantities and are difficult to detect.

Fecal coliform, a subset of coliform bacteria, and **Enterococci** are found primarily in the gastro-intestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. A host of human diseases, particularly those of the gastro-intestinal tract, are spread through water contaminated with fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material was human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

A summary of the laboratory analytical results is presented in Table 6-2. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included in Appendix C.

TABLE 6-2
LABORATORY ANALYSES STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Number of Exceedances
Total Hardness (mg/L $CaCO_3$)	1570	527	*
Oil and Grease (mg/L)	nd	nd	0
Diazinon (µg/L)	nd	nd	0
Chlorpyrifos (µg/L)	nd	nd	0
Cadmium (dissolved, mg/L)	nd	nd	0
Copper (dissolved, mg/L)	0.014	0.005	0
Lead (dissolved, mg/L)	nd	nd	0
Zinc (dissolved, mg/L)	0.075	0.038	0
Total Coliforms (MPN/100 mL)	300,000	30,000	3
Fecal Coliforms (MPN/100 mL)	50,000	800	1
Enterococci (MPN/100 mL)	90,000	800	2

Notes:
nd = not detected

Calculations include complete routine visit data only. Confirmation visits, follow-up visits and dry sites not incorporated.

* Total hardness is not considered a pollutant and does not have an established action level.

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Oil & Grease mg/L	Total Hardness mg/L $CaCO_3$	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms MPN/100 mL	Fecal Coliforms MPN/100 mL *	Enterococci MPN/100 mL
907-ALV-001	7/31/08	10:40	nd	851	nd	nd	nd	nd	nd	nd	30,000	7,000	800
907-ALV-002	7/31/08	11:50	nd	536	nd	0.014	nd	0.075	nd	nd	**300,000**	**50,000**	**90,000**
907-ALV-002	8/8/08	14:10	na	na	na	na	na	na	na	na	**141,000**	1,318	3,448
908-UNI-001	7/30/08	10:20	nd	753	nd	nd	nd	nd	nd	nd	30,000	800	1,300
908-UNI-002	7/30/08	11:25	nd	1570	nd	0.010	nd	0.038	nd	nd	**50,000**	7,000	**24,000**
908-UNI-002	8/8/08	15:15	na	na	na	na	na	na	na	na	**130,000**	na	2,064
908-UNI-003	7/30/08	12:10	nd	527	nd	nd	nd	nd	nd	nd	30,000	1,700	900
908-UNI-004	7/31/08	9:15	nd	646	nd	0.005	nd	nd	nd	nd	**50,000**	13,000	8,000
908-UNI-004	8/8/08	14:30	na	na	na	na	na	na	na	na	6,130	na	na
ANALYTICAL REPORTING LIMITS			**5**	**10**	**0.005**	**0.005**	**0.005**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**
ACTION LEVELS			**15**	**	**CTR**	**CTR**	**CTR**	**CTR**	**0.5**	**0.5**	**50,000**	**20,000**	**10,000**

Notes:
Red Bold Type = value exceeds action level
denotes a confirmation visit
nd = not detected
na = not analyzed
CTR = California Toxics Rule; CTR action levels for metals are calculated based upon on the total hardness value of the water sample.
* Number of fecal coliforms is derived from *E.coli* count. Number of fecal coliforms = (Number of *E.coli*) / 0.85
** = Total hardness is not considered a pollutant (see section 3.4 for details), and thus has no established action level for the purposes of dry weather monitoring.

7 DATA ANALYSIS

This first part of this section provides an overall evaluation of test results obtained from the 2008 Dry Weather Monitoring Program. The second portion of this section describes historical trends for various constituent exceedances.

7.1 2008 Results

Of the 20 sites sampled, three sites had exceedances in total coliform levels, one site in fecal coliforms and two sites in *Enterococcus* levels. Turbidity was also in exceedance at one site.

TABLE 7-1
2008 EXCEEDANCES SUMMARY

Site No.	Turbidity	Total Coliforms	Fecal Coliforms	Enterococci
907-ALV-002	✓	✓	✓	✓
907-UNI-002		✓		✓
908-UNI-004		✓		

Note: Table reflects exceedances occurring during routine visits only, not confirmation or follow-up visits.

7.2 Previous Results

Historical results of exceedances are presented in Table 7-2, Graph 7-1 and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances for field constituents, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

Since 2002, no exceedances were measured in water temperature, nitrate-nitrogen, oil and grease, cadmium, copper, lead, zinc, diazinon , or chlorpyrifos. Thus, these constituents have not been included in the following table and graphs.

The historical data for the results of field analyses presented in Graph 7-1 indicate a decreasing trend in surfactants, ammonia-nitrogen, and orthophosphate-phosphorus concentrations. There have been no exceedances in surfactants and ammonia-nitrogen since 2006 and no exceedance in orthophosphate-phosphorus levels since 2005. No discernable trend is apparent for pH, turbidity, or conductivity.

Historical data for laboratory analyses presented in Graph 7-2 indicate that total coliforms and fecal coliform exceedance rates have decreased somewhat over the years. Since 2003, *Enterococcus* exceedances have been 20 percent per year with the exception of 2006 and 2008. There were no *Enterococcus* exceedances in 2006. This year, 33 percent of laboratory sampled sites had *Enterococcus* measurements above the action level.

TABLE 7-2
PERCENT OF SITES WITH EXCEEDANCES BY YEAR

	Field Testing							Laboratory Analyses			
Year	**Number of Field Testing Sites**	*pH*	*Turbidity*	*Conductivity*	*Surfactants*	*Ammonia-N*	*Orthophosphate-P*	**Number of Laboratory Sampling Sites**	*Total Coliforms*	*Fecal Coliforms*	Enterococci
2002	18	0	6	6	17	28	6	5	100	80	40
2003	18	0	0	6	6	17	6	5	60	60	20
2004	18	0	0	0	0	11	0	5	60	20	20
2005	18	0	0	0	6	11	6	5	60	20	20
2006	18	0	0	0	6	17	0	5	80	20	0
2007	18	6	0	0	0	0	0	5	0	0	20
2008	20	0	5	0	0	0	0	6	50	17	33

Notes:

Results based on complete routine visits only. Confirmation visits, follow-up visits and dry sites not included.

* By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

GRAPH 7-1
PERCENT OF SITES WITH FIELD CONSTITUENT EXCEEDANCES BY YEAR

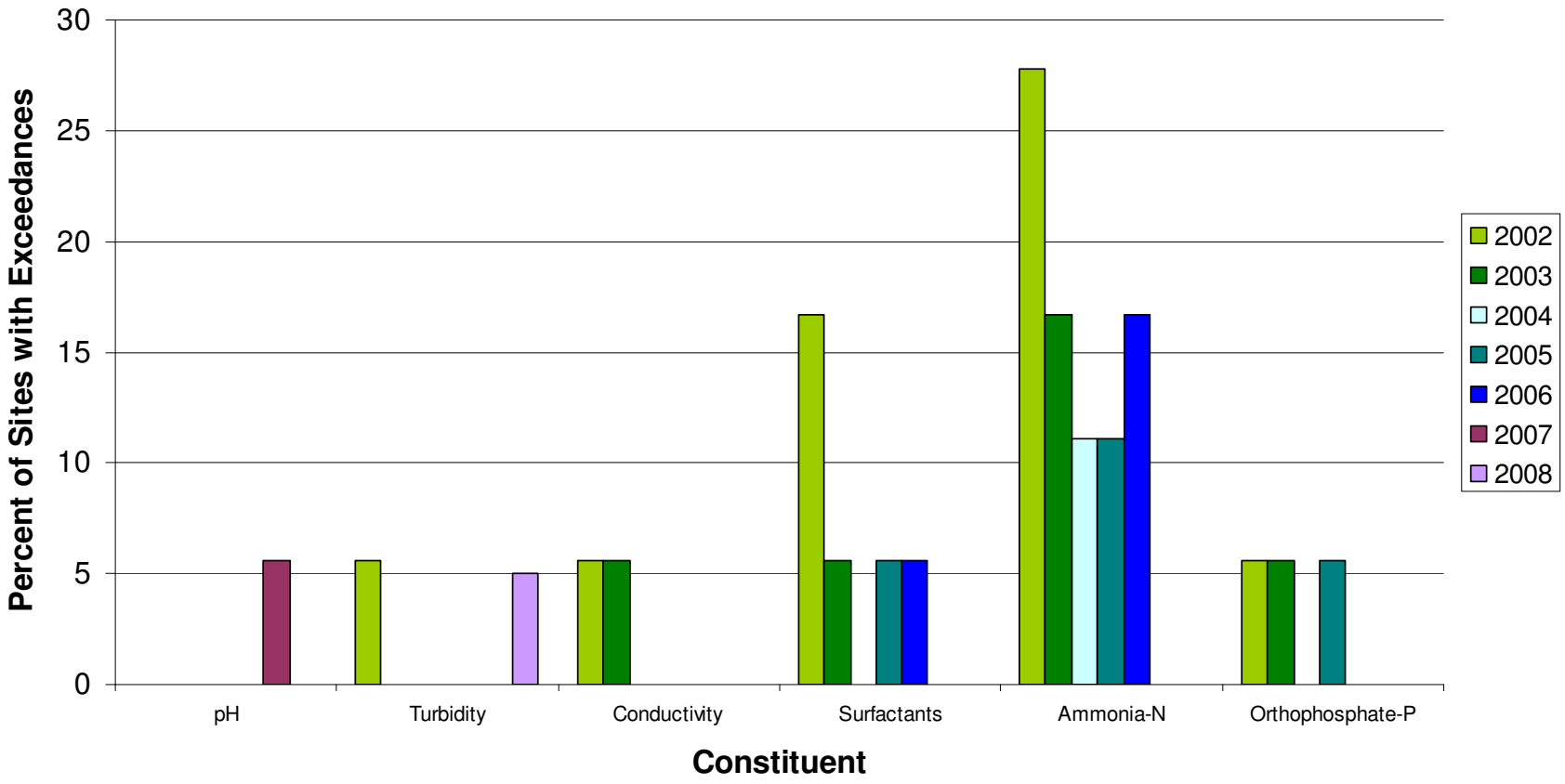

GRAPH 7-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

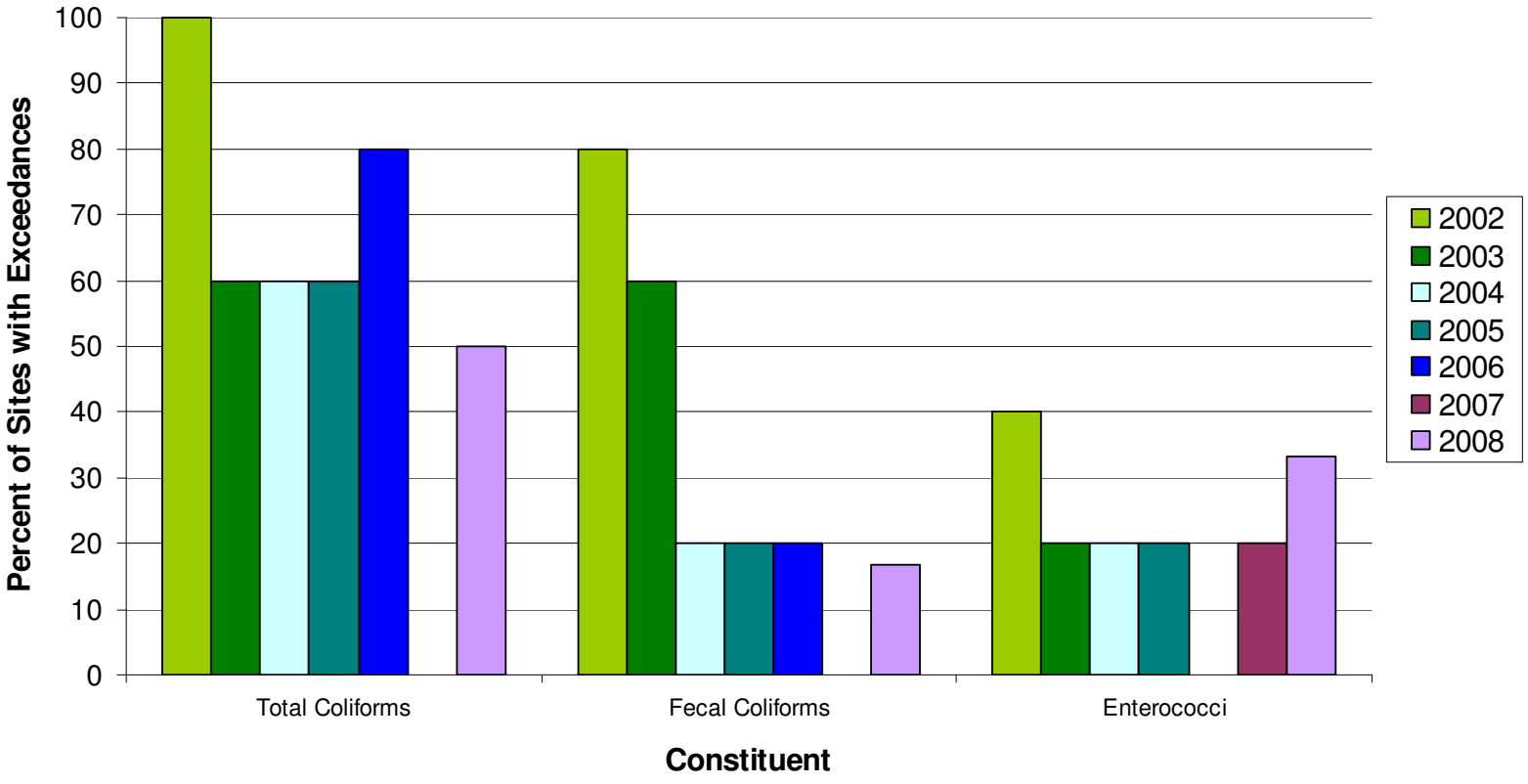

8 FOLLOW-UP INVESTIGATIONS

The purpose of follow-up investigations is to find the sources of pollutants that exceeded action levels during the initial field screening and laboratory testing.

8.1 Investigation Procedures

When a constituent is found to be over the action limit, follow-up investigations are conducted. Follow-up investigations are divided into two categories. The first type is a confirmation visit to retest the constituent that had been measured above its respective action level. For field test exceedances, the confirmation visit occurs within one business day. For exceedances of laboratory constituent action levels, the confirmation visit is conducted within two business days of receiving the results.

If the constituent in question remains above the action limit during the confirmation visit, an upstream investigation will occur. The upstream investigation consists of "IC/ID follow-up" visits, which intend to identify any illicit connections or illegal discharges into the storm water conveyance system. If follow-up field screening or laboratory analysis at a site results in constituent concentrations below the respective action levels, the initial high result may have been due to a transient flow.

The laboratory test for investigating upstream bacteria sources differs from routine field screening bacteria testing through the use of the IDEXX Colilert and IDEXX Enterolert tests. Information about these methods is provided in Table 3-2. Results for the Colilert and Enterolert tests are typically available within 24 hours, as opposed to the five days needed for routine testing.

The quicker turnaround time allows for additional upstream investigations as needed. During all follow-up visits, flow rates are measured and visual observations are performed. For confirmation visits, physical parameters such as temperature, pH and conductivity are recorded as well. Field data sheets are included in Appendix D.

8.2 Investigated Sites

In the 2008 Dry Weather Monitoring Program, three sites were revisited and also required upstream investigations. Water at Site 907-ALV-002 had exceedances in turbidity, total coliforms, fecal coliforms and Enterococci. The samples at Site 908-UNI-002 had high levels of total coliforms and Enterococci. Lastly, water at Site 908-UNI-004 was above the action level in total coliforms.

Site 907-ALV-002

Water from Site 907-ALV-002 was yellow and opaque with an elevated turbidity of 421 NTU. An immediate upstream investigation did not reveal any potential sources of increased turbidity. At the confirmation visit the next day, water was clear and colorless with a turbidity of 14.20 NTU. The turbidity was measured again several days later during the bacteria investigation and was measured at 8.05 NTU. Since the turbidity was no longer in exceedance, it was concluded that the previous sample's exceedance was due to a transient flow.

Laboratory results of water from Site 907-ALV-002 indicated elevated levels of total coliforms, fecal coliforms and Enterococci. Upon the confirmation visit, total coliforms continued to be elevated, but fecal coliforms and *Enterococcus* bacteria were no longer above the action level.

An industrial area immediately upstream was investigated, followed by Sun Valley Golf Course, MacArthur Park and areas surrounding La Mesa Boulevard. Very small amounts of runoff were seen in the industrial area. The golf course and park were well-irrigated and were contributing to the storm drain flow. Bacteria levels from a sample taken at Site 907-ALV-002-1, which drains water from the golf course and MacArthur park, were below the action level.

Farther upstream a sample was taken at Site 907-ALV-002-2, which was previously Site 29, last sampled in 2001. This manhole contained a notable amount of trash and leaf debris. Water from this site had total coliforms above the action level.

Since fecal coliform and *Enterococcus* measurements were only elevated during the first visit to Site 907-ALV-002, these exceedances were most likely due to a transient flow. The elevated levels of total coliforms likely resulted from decaying organic matter, primarily leaves around Site 907-ALV-002. Farther upstream, decaying leaf debris and trash were the most probable causes of elevated total coliforms at Site 907-ALV-002-2.

Table 8-1 and Figure 8-1 summarize the locations and results of this follow-up investigation.

TABLE 8-1
SITE 907-ALV-002 BACTERIA UPSTREAM INVESTIGATION

Site	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	Enterococci (MPN/100 mL)
907-ALV-002 *(Routine Visit)*	Along the south edge of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection	10	**300,000**	**50,000**	**90,000**
907-ALV-002 *(Confirmation Visit)*	*(same as above)*	3	**141,000**	1,318	3,448
907-ALV-002-1	South of I-8, north of golf course, north side of fence, by the freeway	2	24,200	1,098	383
907-ALV-002-2	Next to 8515 La Mesa Boulevard	1	**141,000**	2,282	1,679

Notes:

Red Bold Type = value exceeds action level

Number of fecal coliforms was derived from the *E. coli* count using the following formula:

Number of fecal coliforms = (Number of *E. coli*) / 0.85.

FIGURE 8-1
SITE 907-ALV-002 UPSTREAM INVESTIGATION MAP

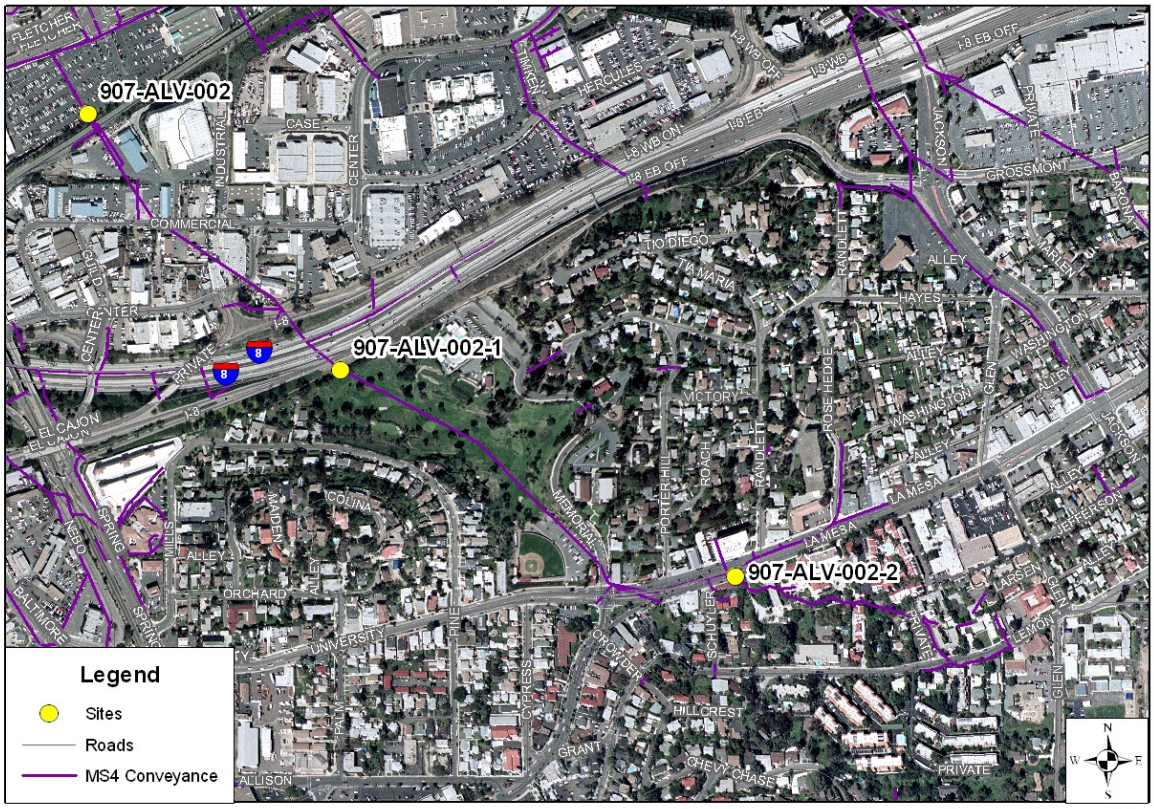

Site 908-UNI-002

Laboratory results for Site 908-UNI-002 yielded elevated total coliform and *Enterococcus* bacteria levels at both the routine and confirmation visits. The site is a manhole receiving water from primarily residential areas and some commercial. The water was clear, colorless, and odorless with no vegetation and some larvae present. A notable amount of food wrappers and trash was observed.

PHOTO 8-1: Trash at Site 908-UNI-002

Upstream streets appeared fairly clean and street sweeping was observed to be currently underway. However, inspected manholes in these neighborhoods had a significant amount of decaying leaves and small amounts of litter. Some irrigation runoff was noted.

Site 908-UNI-002-1 is a manhole on the main storm drain line upstream. A small amount of flow was observed and sampled here. Total coliform and *Enterococcus* levels were below the action level here. Farther upstream, the storm drains were dry but contained decaying leaves and litter.

As bacteria levels were high at the Site 908-UNI-002 and not upstream, the most probable source of the elevated bacteria levels was litter and decaying leaves in the storm drain system near and at the site. A summary of the locations and follow-up sampling events are presented in Table 8-2 and Figure 8-2.

TABLE 8-2
SITE 908-UNI-002 BACTERIA UPSTREAM INVESTIGATION

Site	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Enterococci (MPN/100 mL)
908-UNI-002 *(Routine Visit)*	Harbison Aveune and University Avenue intersection, west sidewalk, east of CB Hair & Nails	3	**50,000**	**24,000**
908-UNI-002 (*Confirmation Visit)*	*(same as above)*	3	**130,000**	2,064
908-UNI-002-1	Between 4678 and 4688 Dauer Avenue, in street immediately prior to start of alley	< 1	8,160	2,247

Note: **Red Bold Type** = value exceeds action level

FIGURE 8-2
SITE 908-UNI-002 UPSTREAM INVESTIGATION MAP

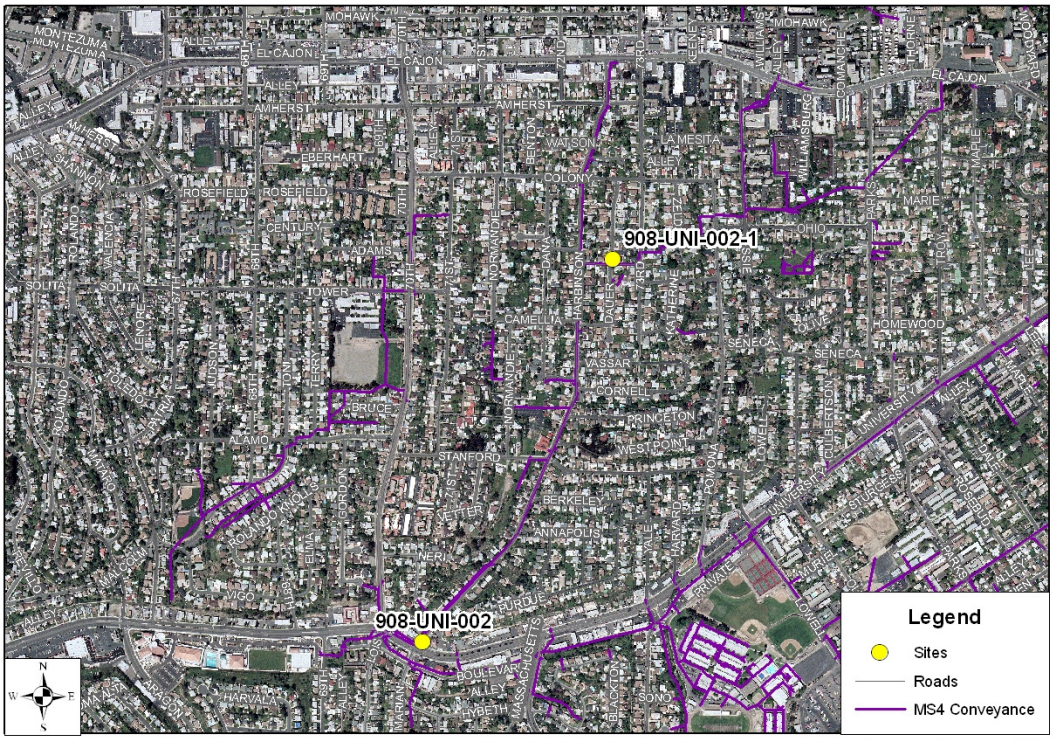

Base Data Sources: USGS, SanGIS, SANDAG

0 700 1,400 Feet

Site 908-UNI-004

Site 908-UNI-004 is a manhole that had clear, colorless and odorless water. Total coliform counts were at the action level initially, but had subsided upon the confirmation visit. At the initial visit, ponded water was observed in a parking lot several feet upstream of the site. There was no observable water at the confirmation visit.

PHOTO 8-2: Ponded water just upstream of Site 908-UNI-004

A shopping center immediately upstream was inspected, but storm drains were only damp and samples could not be taken. It was noted that these storm drains were cluttered with leaves and some litter, including food wrappers and soda bottles. Farther upstream, a manhole was sampled and did not have total coliforms above the action level.

The overall results of the investigation suggest that the high reading of total coliform bacteria at Site 908-UNI-004 was the result of a transient flow. The stagnant water observed during the routine visit may have supported bacterial growth, which had since dried up. The decomposing organic waste such as leaves and food observed in the shopping

center may contribute to bacterial growth, but without a sufficient flow, the bacteria could no longer survive.

The locations and results of sampling for this follow-up investigation are summarized in Table 8-3 and Figure 8-3.

TABLE 8-3
SITE 908-UNI-004 BACTERIA UPSTREAM INVESTIGATION

Site	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)
908-UNI-004 *(Routine Visit)*	In front of 7851 University Avenue along the south side of the street	5	**50,000**
908-UNI-004 *(Confirmation)*	*(same as above)*	2	6,130
908-UNI-004-1	Allison Avenue close to University Avenue	2	9,800

Note: **Red Bold Type** = value exceeds action level

FIGURE 8-3
SITE 908-UNI-004 UPSTREAM INVESTIGATION MAP

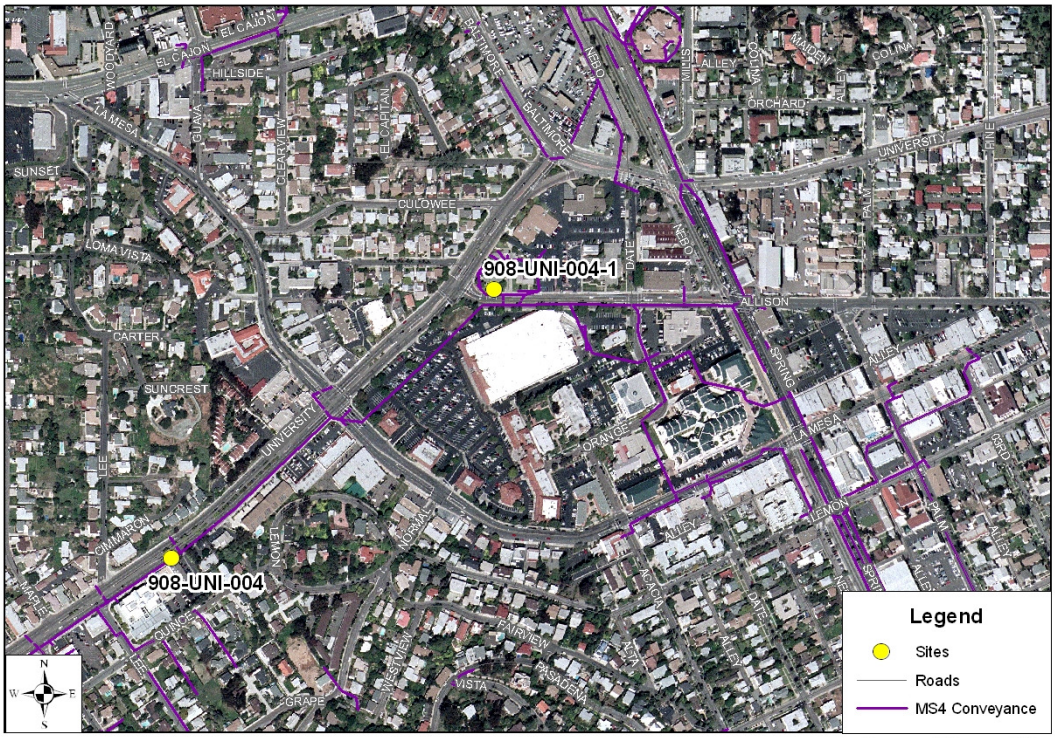

Base Data Sources: USGS, SanGIS, SANDAG

9 SUMMARY AND RECOMMENDATIONS

9.1 Summary

9.1.1 Summary of Field Screening and Laboratory Analysis Data

In the City of La Mesa 2008 Dry Weather Monitoring Program, 21 sampling sites were visited, 20 of which had flowing or ponded water for field screening. Site 907-ALV-580 was sampled in place of Site 907-ALV-003, which was dry. Samples from six of these were sent for laboratory analyses. Confirmation visits and upstream investigations for sites showing constituents at or above respective action levels were performed at three sites. A summary of action level exceedances is provided in Table 9-1. Conclusions based on confirmation visits and upstream investigations are presented in Table 9-2.

TABLE 9-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (20 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
pH	0	0 %	---
Conductivity	0	0 %	---
Turbidity	1	5%	907-ALV-002
Surfactants	0	0 %	---
Ammonia-Nitrogen	0	0 %	---
Nitrate-Nitrogen	0	0 %	---
Orthophosphate-Phosphorus	0	0 %	---
Laboratory Analyses (6 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
Oil & Grease	0	0 %	---
Cadmium	0	0 %	---
Copper	0	0 %	---
Lead	0	0 %	---
Zinc	0	0 %	---
Diazinon	0	0 %	---
Chlorpyrifos	0	0 %	---
Total Coliforms	3	50%	907-ALV-002, 908-UNI-002, 908-UNI-004
Fecal Coliforms	1	17%	907-ALV-002
Enterococci	2	33%	907-ALV-002, 908-UNI-002

Note: Data is from the initial site visits only.

The majority of sites had flowing water, ranging from less than 1 gpm to 187 gpm. Most sites displayed very little amounts of trash. Water at two sites had a musty odor. The remainder of the sites' water samples were odorless. Samples at four sites were yellow in color; the remainder were colorless. One site had opaque water at the initial visit, but was clear upon the confirmation visit. Sediments and fine particulates were present at nearly all sites. A dry site had small stains, likely resulting from mineral deposits. Algae grew at five sites, and several other sites were host to insects, snails, tadpoles and fish.

9.1.2 Summary of Follow-up Data

Table 9-2 presents the conclusions based on the results of the confirmation and upstream investigations conducted at three sites for the 2008 Dry Weather Monitoring Program.

TABLE 9-2
SUMMARY OF FOLLOW-UP INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results / Probable Source
	Field	Laboratory	
907-ALV-002	Turbidity	Total Coliforms, Fecal Coliforms, Enterococci	Turbidity, fecal coliforms and Enterococci were below the action level at the confirmation visit. The total coliform exceedances may have resulted from decaying leaves in storm drains upstream, which were observed during the upstream investigation.
908-UNI-002	---	Total Coliforms, Enterococci	Based on confirmation visit and upstream investigation, litter and decomposing leaf debris located at and near the site were likely sources of the bacterial exceedances.
908-UNI-004	---	Total Coliforms	The total coliform exceedance was likely due to stagnant water and organic debris.

9.2 Recommendations

Based on the results of the year 2008 Dry Weather Field Screening Program for the City of La Mesa, the following actions are recommended for consideration.

- Remove leaves and trash from sites 907-ALV-002 and 907-ALV-002-2.
- Clean up trash from Site 908-UNI-002.
- Contact property management of the Vons shopping center located upstream of Site 908-UNI-004 regarding removal leaf debris and litter from storm drain inlets.

10 References

California Regional Water Quality Control Board, San Diego Region. January 24, 2007. *Order No. R9-2007-0001.*

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City of El Cajon, et al. 2008. *San Diego River Watershed: Watershed Urban Runoff Management Program 2007-08 Annual Report.*

Cooper Engineering Associates. July 29, 1994. *City of La Mesa Dry Weather Non-Point Source Outfall Screening Program*.

Cooper Engineering Associates. March 1996. *City of La Mesa Dry Weather Non-Point Source Outfall Screening Program*.

San Diego Regional Water Quality Control Board. 1994. *Water Quality Control Plan for the San Diego Basin*.

USEPA. October 30, 2000. *Multi-Sector General Permit for Storm Water*.

USEPA. May 18, 2000. *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California*. 40 CFR Part 131.

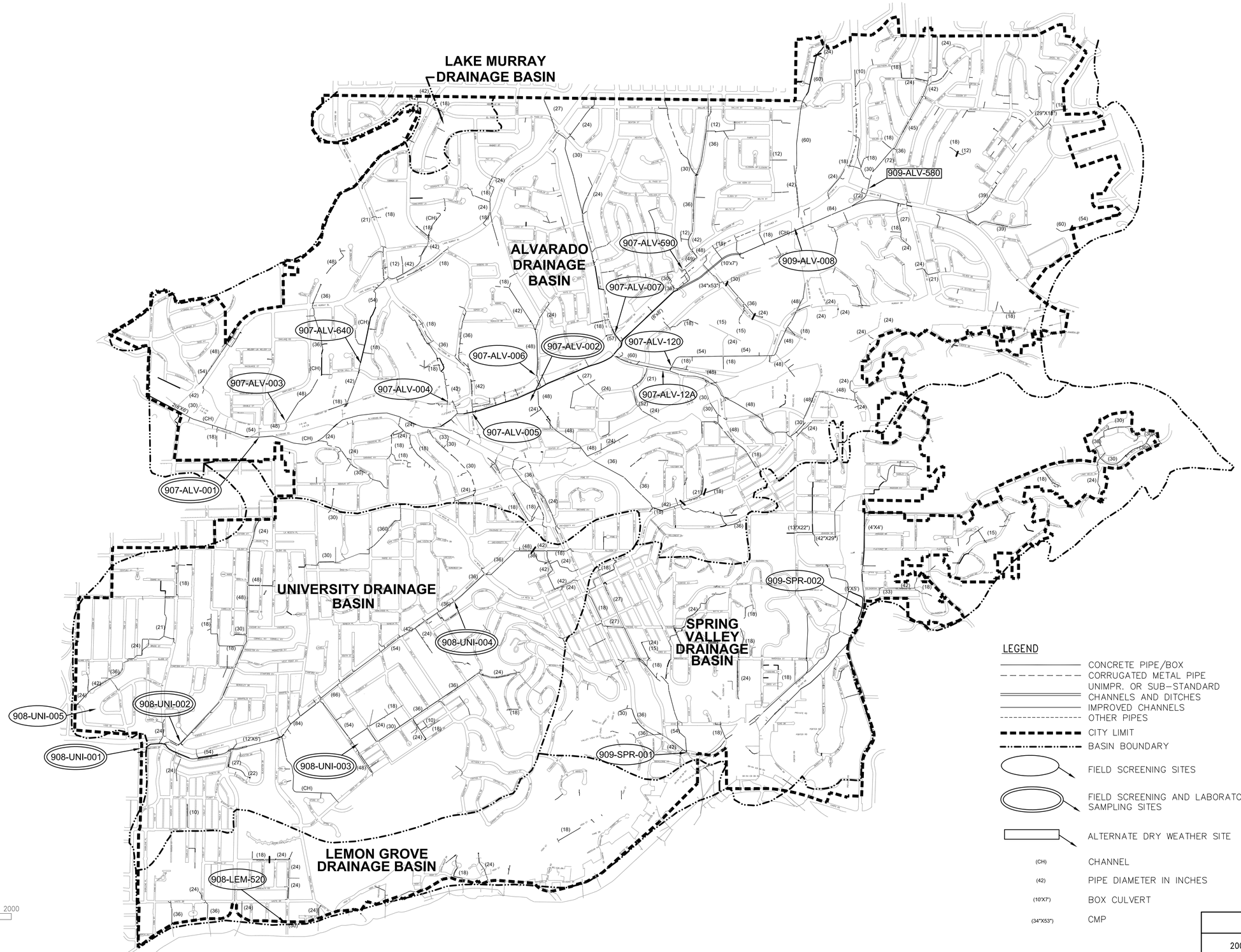

LEGEND

- CONCRETE PIPE/BOX
- CORRUGATED METAL PIPE
- UNIMPR. OR SUB-STANDARD CHANNELS AND DITCHES
- IMPROVED CHANNELS
- OTHER PIPES
- CITY LIMIT
- BASIN BOUNDARY
- FIELD SCREENING SITES
- FIELD SCREENING AND LABORATORY SAMPLING SITES
- ALTERNATE DRY WEATHER SITE
- (CH) CHANNEL
- (42) PIPE DIAMETER IN INCHES
- (10'X7') BOX CULVERT
- (34"X53") CMP

CITY OF LA MESA

2008 DRY WEATHER MONITORING STATIONS

DRAWN BY: CM	CHECKED BY:	FIGURE A
FN:LAMESA DRY WEATHER 2008	DATE:	

D-Max Engineering, Inc.

FIGURE B
CITY OF LA MESA WATERSHED MAP

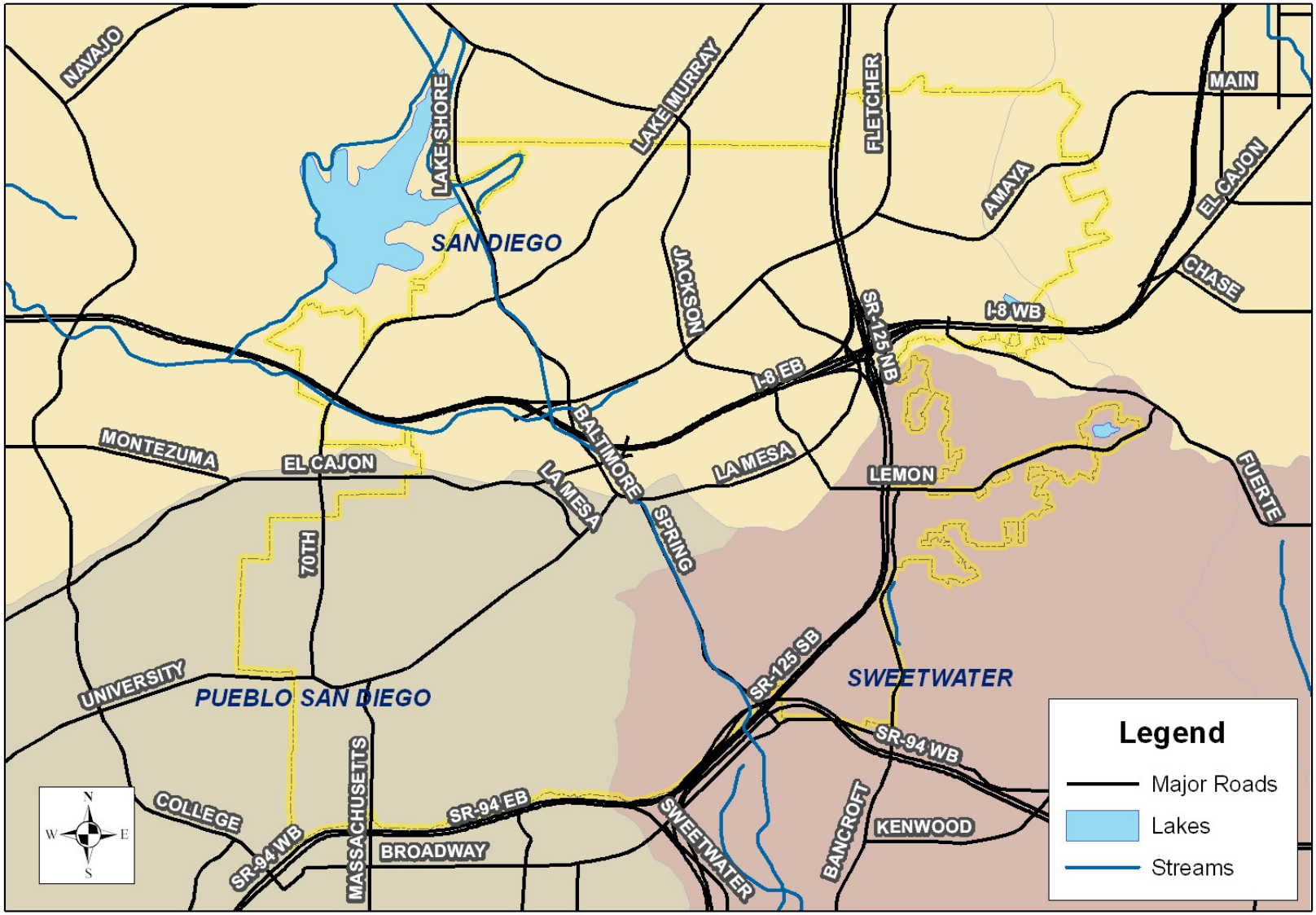

Base Data Sources: USGS, SanGIS, SANDAG

0 2,000 4,000 Feet

Appendix A

Historical Dry Weather Data Table

City of La Mesa Dry Weather Monitoring Historical Data

Site No.	1	2	3	4	4A	5	6	7	7A	8	9	10	10A	11	12	12A	13	13A	13B	13C	14	15	16	17	18	19	20	21	22	23	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1993																																														
Ammonia mg/l	**1.4**	**1.4**	**4.5**	**2.2**		**1.3**	**1.4**	**1.1**		0.7	0.7	0.5		**1.1**	**2.2**		0.8				**2.1**	**1.0**																								
Chlorine mg/l	0.63	0.36	**1.33**	0.73		0.92	0.95	**1.13**		0.63	0.49	0.85		0.44	0.61		0.58				0.66	0.44																								
Copper mg/l	**1.0**	**1.4**	**1.6**	**1.5**		**1.0**	**0.6**	**2.5**		**2.2**	**2.5**	**1.8**		**1.1**	**0.7**		**2.1**				**2.2**	**2.8**																								
Surfactants mg/l	**1.0**	**1.0**	**6.0**	0.50		0.50	0.25	0.50		0.25	**3.0**	0.50		**1.0**	0.50		0.50				0.75	0.50																								
Phenols mg/l	**0.6**	0.1	**0.7**	0.4		0.04	**2.8**	**2.3**		**3.3**	**3.0**	**0.5**		**1.0**	**0.5**		**0.5**				**0.8**	**0.5**																								
1994																																														
Ammonia mg/l			**1.7**	**2.1**				**1.7**		**3.4**	0.3						ns				0.9		0.5	**2.0**	**1.8**	ns	ns	nd	ns	**2.0**																
Chlorine mg/l			0.16	0.28				0.49		0.18	0.28						ns				0.07		0.28	0.73	0.23	ns	ns	0.01	ns	0.23																
Copper mg/l			**1.1**	0.0				0.3		**0.5**	0.0						ns				**3.0**		**1.4**	0.2	nd	ns	ns	nd	ns	0.2																
Surfactants mg/l			0.50	0.50				0.75		0.50	0.35						ns				0.35		0.35	0.60	0.25	ns	ns	0.25	ns	0.25																
Phenols mg/l			0.2	0.1				**4.9**		**1.7**	0.04						ns				0.1		nd	**0.5**	0.1	ns	ns	nd	ns	nd																
1995																																														
Ammonia mg/l			0.2	ns											0.7						0.1				0.3			0.3			0.1	0.4	0.0	**7.6**	ns	0.1	0.2									
Chlorine mg/l			0.20	ns											nd						0.40				0.10			0.30			0.30	0.40	0.40	0.30	ns	0.10	0.20									
Copper mg/l			nd	ns											nd						nd				nd			nd			nd	nd	nd	nd	ns	nd	nd									
Surfactants mg/l			**1.0**	ns											0.50						0.50				0.50			0.25			0.75	0.50	0.25	**7.50**	ns	0.50	0.50									
Phenols mg/l			nd	ns											nd						nd				nd			nd			nd	nd	nd	nd	ns	nd	nd									
1996																																														
Ammonia mg/l			0.7		0.2				ns	0.6			0.4		**1.5**	**1.0**		0.4	0.1		0.5		ns						ns					0.1				0.2	0.9							
Chlorine mg/l			0.05		0.35				ns	0.20			0.10		nd	nd		0.10	0.30		0.25		ns						ns					0.05				0.25	0.35							
Copper mg/l			nd		0.1				ns	nd			nd		0.1	0.1		0.1	nd		nd		ns						ns					nd				nd	0.3							
Surfactants mg/l			0.50		0.35				ns	0.50			0.50		0.50	**>3.0**		0.25	0.60		0.75		ns						ns					0.25				0.35	0.25							
Phenols mg/l			0.1		0.1				ns	0.3			0.1		0.1	0.1		0.1	0.1		0.1		ns						ns					0.1				0.1	0.1							
1997																																														
Ammonia mg/l			0.6												0.6	0.8			0.9	0.6	0.8																		0.5	**>10**	ns	ns	ns	**1.0**		
Chlorine mg/l			0.10												nd	0.40			0.85	0.25	0.50																		0.30	0.25	ns	ns	ns	0.90		
Copper mg/l			nd												0.1	0.1			nd	nd	nd																		0.1	nd	ns	ns	ns	nd		
Surfactants mg/l			0.25												**1.0**	0.25			**>3.0**	0.35	0.50																		**1.0**	0.30	ns	ns	ns	0.35		
Phenols mg/l			nd												nd	nd			nd	nd	0.25																		nd	nd	ns	ns	ns	nd		
1998																																														
Ammonia mg/l			0.3		0.3										**9.5**	0.3			0.2	0.2	0.3													0.1				0.6	0.4	ns	ns	ns	**4.0**		
Chlorine mg/l			nd		nd										nd	nd			0.20	0.10	nd													0.10				0.10	0.20	ns	ns	ns	nd		
Copper mg/l			nd		nd										nd	nd			nd	nd	nd													nd				nd	0.4	ns	ns	ns	nd		
Surfactants mg/l			0.38		0.25										0.75	0.75			0.25	0.63	0.50													0.25				0.50	0.25	ns	ns	ns	0.50		
Phenols mg/l			nd		nd										nd	nd			nd	nd	nd													nd				nd	nd	ns	ns	ns	nd		
1999, Round One																																														
Ammonia mg/l			0.5		0.2										0.6	0.4			0.4	0.2	0.3													0.2				0.5	ns	ns	ns	ns	**7.0**		
Chlorine mg/l			nd		0.10										nd	0.10			0.10	0.20	0.10													0.30				0.10	ns	ns	ns	ns	nd		
Copper mg/l			0.2		0.1										0.2	nd			0.1	0.1	0.1													0.1				0.2	ns	ns	ns	ns	0.2		
Surfactants mg/l			0.25		0.25										0.25	0.50			0.25	0.75	0.25													0.25				0.25	ns	ns	ns	ns	0.50		
Phenols mg/l			0.2		nd										0.1	nd			nd	0.1	0.1													nd				nd	ns	ns	ns	ns	0.1		
1999, Round Two																																														
Ammonia mg/l			0.4		**30.0**										**1.5**	0.2			0.5	0.6	0.2													0.5				0.6	0.2	ns	ns	ns	**4.0**		
Chlorine mg/l			0.10		nd										0.20	0.20			0.10	0.10	<0.1													0.30				0.50	0.10	ns	ns	ns	nd		
Copper mg/l			nd		0.1										0.2	nd			0.1	0.1	0.1													0.1				0.3	**0.6**	ns	ns	ns	0.1		
Surfactants mg/l			0.75		>3.0										**2.0**	0.25			0.25	0.25	0.25													**2.0**				0.50	0.25	ns	ns	ns	**1.75**		
Phenols mg/l			nd		0.1										nd	nd			0.1	0.1	nd													0.1				nd	nd	ns	ns	ns	0.1		
2000, Round One																																														
Ammonia mg/l					**6.0**										0.8	0.4			0.2	0.4	0.8													0.2				0.8	0.2	ns	ns	ns	**8.0**	**5.0**	ns
Chlorine mg/l					nd										nd	nd			nd	nd	nd													nd				nd	nd	ns	ns	ns	0.10	nd	ns
Copper mg/l					nd										nd	nd			nd	nd	nd													nd				nd	0.2	ns	ns	ns	nd	nd	ns
Surfactants mg/l					0.75										0.50	0.25			0.25	0.50	0.25													0.25				0.25	0.25	ns	ns	ns	0.50	0.25	ns
Phenols mg/l					nd										nd	nd			nd	nd	nd													nd				nd	0.1	ns	ns	ns	nd	nd	ns
2000, Round Two																																														
Ammonia mg/l					0.1										0.6	0.3			0.2	0.3	0.2													0.2				**1.0**	**1.0**	ns	ns	ns	**4.0**	**5.0**	ns
Copper mg/l					nd										nd	nd			nd	nd	nd													nd				0.1	0.4	ns	ns	ns	nd	nd	ns
Chlorine mg/l					nd										nd	nd			nd	0.10	nd													0.10				nd	0.60	ns	ns	ns	nd	nd	ns
Surfactants mg/l					0.25										0.50	0.50			0.25	0.50	0.50													0.25				0.25	0.25	ns	ns	ns	0.50	0.75	ns
Phenols mg/l					nd										nd	nd			nd	nd	nd													0.1				nd	nd	ns	ns	ns	nd	nd	ns
2001																																														
Ammonia mg/l					**6.0**										0.8	0.4			0.2	0.4	0.8													0.2				0.8	0.2	ns	ns	ns	**8.0**	**5.0**	ns
Chlorine mg/l					nd										nd	nd			nd	nd	nd													nd				nd	nd	ns	ns	ns	0.10	nd	ns
Copper mg/l					nd										nd	nd			nd	nd	nd													nd				nd	0.2	ns	ns	ns	nd	nd	ns
Surfactants mg/l					0.75										0.50	0.25			0.25	0.50	0.25													0.25				0.25	0.25	ns	ns	ns	0.50	0.25	ns
Phenols mg/l					nd										nd	nd			nd	nd	nd													nd				nd	0.1	ns	ns	ns	nd	nd	ns

City of La Mesa Dry Weather Monitoring Hisotical Data

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	60	61	64
2002																				
Temp.°C	22	20	19	21	22	20	21	19	20	19	22	22	20	23	23	21	19		ns	26
pH	7.9	6.9	7.5	7.4	7.6	7.5	7.8	6.9	7.8	7.4	7.3	7.4	6.8	7.9	8.1	7.4	7.5		ns	8.9
Turbidity,NTU	8.35	36	19.1	5.35	4.48	15.51	2.66	5.23	11.32	23.29	463	6.18	35.08	7.4	11.49	19.87	12.05		ns	6.7
Conductivity,µmhos/cm	2,710	2,810	2,850	3,910	3,730	4,710	4,100	1,938	1,906	2,530	2,350	5,010	1,394	3,180	3,500	2,420	1,594		ns	1,403
Surfactants mg/l	**4.0**	0.25	0.25	0.50	0.37	0.25	0.37	0.25	0.25	0.25	**> 24**	0.5	**1.5**	0.25	0.5	0.25	0.75		ns	0.50
Ammonia,mg/l	**8.0**	**1.0**	0.4	0.4	0.3	0.5	0.2	0.4	0.2	**1.0**	0.2	0.2	**1.0**	0.2	0.6	0.6	0.4		ns	**1.0**
Nitrate,mg/l	1.5	1.0	5.0	2.5	2.5	3.0	1.0	5.0	4.0	1.0	0.2	5.0	nd	0.3	0.2	0.2	0.8		ns	nd
Orthophosphate-P, mg/L	0.65	0.65	0.13	0.26	0.20	0.49	0.13	0.26	0.10	0.26	**7.83**	0.65	0.82	nd	0.13	0.33	0.49		ns	0.16
Surfactants,mg/l	**4.8**	nd		0.6		nd														nd
Oil and Grease, mg/l	8.0	1.0		nd		1.0														nd
Total Hardness,mg/l	608	614		864		1,060														331
Cadmium,mg/l	nd	nd		nd		nd														nd
Copper, mg/l	nd	nd		nd		nd														nd
Lead, mg/l	nd	nd		nd		nd														nd
Zinc, mg/l	nd	nd		nd		nd														nd
Diazinon, µg/L	nd	nd		nd		nd														nd
Chlorpyrifos, µg/L	nd	nd		nd		nd														nd
Total Coliform, MPN/100ml	> 1,600	> 1,600		> 1,600		> 1,600														> 1,600
Fecal Coliform, MPN/100ml	> 1,600	> 1,600		> 1,600		500														> 1,600
Enterococcus, MPN/100ml	500	500		> 1,600		240														> 1,600
2003																				
Temp.°C	23	23	21.5	25	23	22.5	26	23.5	29	23	27	25	31	24.5	20	23	28		na	33
pH	8.3	7.9	8.2	7.8	8.4	8.5	8.2	8.1	8.4	8.2	8.5	8.4	7.8	8.2	8.3	8.2	8.2		na	8.8
Turbidity,NTU	2.57	15.00	11.81	3.73	2.76	1.05	1.23	11.53	1.33	24.46	66.0	0.54	64.0	4.34	10.54	17.17	2.32		na	29.04
Conductivity,µmhos/cm	2,550	2,690	2,730	2,760	3,270	4,180	3,090	2,360	1,310	2,280	2,760	**7,030**	1,290	620	1,690	2,680	2,290		na	3,040
Surfactants mg/l, field screening	0.25	0.63	0.50	0.25	0.25	0.38	0.25	0.50	nd	0.50	**1.0**	0.38	0.25	0.13	0.13	0.25	0.25		na	0.5
Ammonia,mg/l	0.3	0.6	0.3	0.1	0.2	0.2	0.2	0.8	0.2	**12.0**	**10.0**	0.3	0.8	0.3	0.3	0.6	0.4		na	**5.0**
Nitrate,mg/l	1.0	4.5	6.4	3.0	3.0	2.5	0.6	6.4	2.4	0.3	0.3	4.8	0.1	0.6	0.1	1.0	0.2		na	nd
Orthophosphate-P, mg/L	0.20	1.30	0.10	0.13	0.13	0.13	0.20	1.63	0.07	**3.26**	1.63	0.33	0.65	0.07	0.49	0.07	0.26		na	0.49
Surfactants,mg/l	nd		nd				nd			0.5					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	545		647				616			387					460					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	nd		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				nd			nd					nd					
Diazinon, µg/L	0.05		nd				nd			nd					nd					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**90,000**		**90,000**				5,000			**160,000**					1,700					
Fecal Coliform, MPN/100ml	**50,000**		**24,000**				2,300			**90,000**					1,300					
Enterococcus, MPN/100ml	800		300				80			**13,000**					800					
2004																				
Temp.°C	25	23	24	27	25		24	26	23	23	26	26	26	27	25	26	29		20	31
pH	8.4	7.0	7.6	7.8	7.9		7.8	7.8	7.9	7.5	7.3	7.8	8.1	8.2	8.3	7.5	7.4		7.7	8.5
Turbidity,NTU	2.71	12.5	14.01	2.18	3.9		0.82	15.29	3.02	26.98	48.15	2.95	4.85	7.75	4.29	19.67	0.45		20.94	7.52
Conductivity,µmhos/cm	2,230	2,350	2,630	3,180	2,880		3,120	2,400	1,880	2,280	2,070	5,470	980	2,900	1,830	2,300	2,070		1,000	1,080
Ammonia,mg/l	0.1	0.7	0.3	0.2	0.2		0.1	0.8	0.4	**1.5**	**5.0**	0.1	0.2	0.2	0.4	0.4	0.8		0.6	0.3
Nitrate,mg/l	3.75	6.25	6.25	6.25	3.75		5	6.25	1.25	3.8	1.25	6.25	1.25	1.25	1.25	2.5	1.25		1.25	nd
Orthophosphate-P, mg/L	0.23	0.26	0.1	0.26	0.2		0.33	0.33	0.33	0.65	0.98	1.3	0.98	0.1	0.98	0.07	0.82		0.1	0.65
Surfactants mg/l, field screening	0.5	0.38	0.5	0.75	0.5		0.25	0.25	0.25	0.63	0.63	0.75	0.75	0.25	0.25	0.25	0.38		0.63	0.5
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	2		2				nd			nd					nd					
Total Hardness,mg/l	522		687				676			392					504					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	0.005		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				0.029			nd					nd					
Diazinon, µg/L	nd		nd				nd			nd					0.052					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**80,000**		**80,000**				8,000			**1,600,000**					9,000					
Fecal Coliform, MPN/100ml	1,400		700				220			**160,000**					nd					
Enterococcus, MPN/100ml	1,300		3,000				1,700			**30,000**					3,000					

City of La Mesa Dry Weather Monitoring Hisotical Data

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	60	61	64
2005																				
Temp.℃	20.3	22.0	20.5	24.2	22.8		21.1	21.1	22.9	21.2	22.1	23.6	25.7	21.2	19.2	21.4	26.1		19.9	25.7
pH	8.1	6.8	7.4	7.5	7.8		7.6	7.5	7.6	7.4	7.2	7.6	7.2	8.0	7.6	7.2	8.4		7.4	8.8
Turbidity,NTU	10.71	22.94	7.86	15.14	17.87		0.52	6.49	15.81	9.02	14.74	1.01	15.43	1.70	1.18	17.57	0.32		4.78	2.35
Conductivity,µmhos/cm	1891	1670	1740	1590	2830		2200	1457	1039	990	977	2110	3050	2690	1736	2010	1980		900	930
Surfactants mg/l, field screening	0.75	0.50	0.50	0.38	0.38		0.50	0.50	0.13	0.50	0.25	0.50	**1.00**	0.25	0.25	0.25	0.25		0.88	0.50
Ammonia,mg/l	**1.0**	0.7	0.8	0.3	0.2		0.2	0.4	**10.0**	0.3	0.8	0.2	0.7	0.1	0.3	0.6	0.2		0.4	0.4
Nitrate,mg/l	2.50	5.00	7.50	5.00	3.75		3.75	6.25	1.25	1.25	1.25	3.75	1.25	0.25	0.25	1.25	2.50		1.25	1.25
Orthophosphate-P, mg/L	0.33	0.26	0.10	1.63	0.20		0.20	0.26	**2.12**	0.10	0.13	0.33	0.49	0.13	0.26	0.07	0.20		0.10	0.49
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	791		794				871			461					521					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	nd		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				0.026			0.027					nd					
Diazinon, µg/L	nd		nd				nd			nd					0.11					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**240,000**		**130,000**				**240,000**			30,000					30,000					
Fecal Coliform, MPN/100ml	**24,000**		230				170			nd					230					
Enterococcus, MPN/100ml	**160,000**		800				80			500					800					
2006																				
Temp.℃	25.0	23.8	23.4	24.4	24.3		25.5	24.5	25.6	24.4	24.5	25.3	29.7	22.9	27.5	23.7	29.5		24.3	27.0
pH	8.3	6.9	7.7	7.9	7.8		7.8	8.2	6.9	7.7	7.5	7.7	8.4	8.1	7.7	7.4	8.0		7.4	8.9
Turbidity,NTU	1.83	47.13	9.94	2.02	4.43		1.02	10.09	7.77	11.93	22.31	1.64	8.27	4.56	3.51	13.32	2.34		9.37	6.24
Conductivity,µmhos/cm	2.16	1.95	2.31	5.16	2.44		2.51	1.94	2.50	1.55	2.19	5.56	2.40	2.62	1.71	2.33	1.86		2.3	0.90
Surfactants mg/l, field screening	0.25	0.25	0.50	0.25	0.50		0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.25	0.25	0.50	0.25		0.25	**1.5**
Ammonia,mg/l	0.3	0.6	0.2	0.6	0.1		0.1	0.3	**1.5**	0.2	**1.0**	0.2	0.4	0.2	0.8	0.8	0.4		**2.5**	0.8
Nitrate,mg/l	3.75	3.75	5.00	6.25	3.75		5.00	5.00	2.50	2.50	2.50	7.50	3.75	1.25	2.50	2.50	2.50		3.75	2.50
Orthophosphate-P, mg/L	0.10	0.26	0.10	0.26	0.33		0.07	0.20	0.07	0.07	0.20	0.26	0.33	0.10	0.26	0.10	0.07		1.14	0.49
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	524		686				508			434					438					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	0.008		nd				nd			0.005					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	0.028		nd				nd			0.028					nd					
Diazinon, µg/L	nd		nd				nd			nd					nd					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**130,000**		**50,000**				**80,000**			23,000					**240,000**					
Fecal Coliform, MPN/100ml	5,000		**30,000**				3,000			220					20					
Enterococcus, MPN/100ml	5,000		500				80			40					900					
2007																				
Temp.℃	20.2	23.1	20.8	22.2	22.4		23	22.2	25.7	22.8	25.2	22.5	24.1	22.7	21.1	23.1	26.4	23.9	ns	26
pH	8.5	7.2	7.7	8.0	8.0		8.3	8.0	8.7	7.9	7.6	8.0	8.3	8.2	7.7	7.5	8.1	8.0	ns	**10.0**
Turbidity,NTU	4.05	12.51	10.85	2.22	8.07		1.27	6.47	2.36	9.24	4.91	2.25	4.95	3.34	2.52	14.63	1.54	3.18	ns	3.43
Conductivity,mS/cm	2.22	2.14	2.25	3.94	3.32		2.56	2.01	1.78	1.9	1.79	5.3	3.72	2.65	2.19	2.14	2	2.63	ns	1.12
Surfactants mg/l, field screening	0.5	0.5	0.5	0.75	0.5		0.38	0.38	0.25	0.62	0.38	0.5	0.5	0.25	0.38	0.25	0.25	0.63	ns	0.63
Ammonia,mg/l	0.2	0.5	0.3	0.3	0.2		0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.4	0.2	0.2	ns	0.1
Nitrate,mg/l	1.81	2.01	3.96	5.49	2.67		3.25	3.77	1.72	0.68	0.45	5.85	2.98	0.41	0.09	0.23	1.63	0.81	ns	0.1
Orthophosphate-P, mg/L	0.16	0.26	0.13	0.52	0.26		0.13	0.36	0.03	0.2	0.33	0.34	0.49	0.11	0.33	0.03	0.16	0.29	ns	0.1
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	631		688				592			564					664					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	0.005		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				nd			nd					nd					
Diazinon, µg/L	nd		nd				nd			nd					nd					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	17,000		5,000				8,000			13,000					2,200					
Fecal Coliform, MPN/100ml	8,000		1,700				2,300			3,000					nd					
Enterococcus, MPN/100ml	1,300		500				1,300			**14,000**					170					

Appendix B

Photographs of Sampling Locations

Site No 907-ALV-001 (Photo 34)	
Site No 907-ALV-002 (Photo 36)	
Site No 907-ALV-003 (Photo 41)	

Site No 907-ALV-004 (Photo 45)	
Site No 907-ALV-005 (Photo 40)	
Site No 907-ALV-006 (Photo 43)	

Site No 907-ALV-007 (Photo 4)	
Site No 907-ALV-008 (Photo 10)	
Site No 907-ALV-120 (Photo 52)	

Site No 907-ALV-12A (Photo 12)	
Site No 907-ALV-580 (Photo 55)	
Site No 907-ALV-590 (Photo 5)	

Site No 907-ALV-640 (Photo 13)	
Site No 908-LEM-520 (Photo 51)	
Site No 908-UNI-001 (Photo 18)	

ite No
-UNI-003

hoto 23)

ite No
-UNI-004

hoto 30)

1341

Site No 908-UNI-005 (Photo 2)	
Site No 909-SPR-001 (Photo 26)	
Site No 909-SPR-002 (Photo 24)	

Appendix C

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

06 August 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807579

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200827W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/31/08 13:13. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807579

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-001	0807579-01	Water	07/31/08 10:40	07/31/08 13:13
907-ALV-002	0807579-02	Water	07/31/08 11:50	07/31/08 13:13

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807579

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (0807579-01) Water	**Sampled: 07/31/08 10:40**		**Received: 07/31/08 13:13**						
Zinc	ND	0.020	mg/l	1	8073107	07/31/08	07/31/08	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
907-ALV-002 (0807579-02) Water	**Sampled: 07/31/08 11:50**		**Received: 07/31/08 13:13**						
Zinc	**0.075**	0.020	mg/l	1	8073107	07/31/08	07/31/08	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	**0.014**	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807579

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (0807579-01) Water Sampled: 07/31/08 10:40 Received: 07/31/08 13:13									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8080111	08/01/08	08/04/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*106 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*103 %*	*60-130*		"	"	"	"	
907-ALV-002 (0807579-02) Water Sampled: 07/31/08 11:50 Received: 07/31/08 13:13									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8080111	08/01/08	08/04/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*118 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*95 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807579

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (0807579-01) Water Sampled: 07/31/08 10:40 Received: 07/31/08 13:13									
Hardness (Total)	**851**	100	mg CaCO3/L	10	8073140	07/31/08	08/01/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8080112	08/01/08	08/01/08	EPA 1664A	
907-ALV-002 (0807579-02) Water Sampled: 07/31/08 11:50 Received: 07/31/08 13:13									
Hardness (Total)	**536**	100	mg CaCO3/L	10	8073140	07/31/08	08/01/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8080112	08/01/08	08/01/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807579

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (0807579-01) Water Sampled: 07/31/08 10:40 Received: 07/31/08 13:13									
Total Coliforms	**30000**	2000	MPN/100 ml	1000	8080605	07/31/08	08/04/08	SM 9221 B, E	
Fecal Coliforms	**7000**	200	"	100	"	"	08/03/08	"	
Enterococcus	**800**	20	"	10	8080606	"	08/04/08	SM 9230 A, B	
907-ALV-002 (0807579-02) Water Sampled: 07/31/08 11:50 Received: 07/31/08 13:13									
Total Coliforms	**300000**	2000	MPN/100 ml	1000	8080605	07/31/08	08/04/08	SM 9221 B, E	
Fecal Coliforms	**50000**	200	"	100	"	"	08/03/08	"	
Enterococcus	**90000**	200	"	"	8080606	"	08/04/08	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807579

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073107										
Blank (8073107-BLK1)				Prepared & Analyzed: 07/31/08						
Copper	ND	0.005	mg/l							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
Cadmium	ND	0.005	"							
LCS (8073107-BS1)				Prepared & Analyzed: 07/31/08						
Cadmium	0.101	0.005	mg/l	0.100		101	75-125			
Copper	0.100	0.005	"	0.100		100	75-125			
Lead	0.102	0.005	"	0.100		102	75-125			
Zinc	0.098	0.020	"	0.100		98	75-125			
LCS Dup (8073107-BSD1)				Prepared & Analyzed: 07/31/08						
Cadmium	0.099	0.005	mg/l	0.100		99	75-125	2	20	
Copper	0.100	0.005	"	0.100		100	75-125	0.1	20	
Lead	0.100	0.005	"	0.100		100	75-125	3	20	
Zinc	0.098	0.020	"	0.100		98	75-125	0.4	20	
Duplicate (8073107-DUP1)		**Source: 0807538-05**		Prepared & Analyzed: 07/31/08						
Cadmium	ND	0.005	mg/l		ND				20	
Zinc	ND	0.020	"		ND				20	
Copper	0.001	0.005	"		0.002			29	20	QR-04
Lead	ND	0.005	"		ND				20	
Matrix Spike (8073107-MS1)		**Source: 0807538-05**		Prepared & Analyzed: 07/31/08						
Cadmium	0.102	0.005	mg/l	0.100	ND	102	75-125			
Copper	0.100	0.005	"	0.100	0.002	98	75-125			
Lead	0.114	0.005	"	0.100	ND	114	75-125			
Zinc	0.103	0.020	"	0.100	ND	103	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807579

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073107										
Matrix Spike Dup (8073107-MSD1)		**Source: 0807538-05**		Prepared & Analyzed: 07/31/08						
Cadmium	0.104	0.005	mg/l	0.100	ND	104	75-125	1	20	
Copper	0.102	0.005	"	0.100	0.002	100	75-125	2	20	
Lead	0.109	0.005	"	0.100	ND	109	75-125	5	20	
Zinc	0.102	0.020	"	0.100	ND	102	75-125	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807579

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080111										
Blank (8080111-BLK1)				Prepared: 08/01/08 Analyzed: 08/04/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.218*		*"*	*0.250*		*87*	*60-130*			
Surrogate: Tribuytlphosphate	*0.228*		*"*	*0.250*		*91*	*60-130*			
LCS (8080111-BS1)				Prepared: 08/01/08 Analyzed: 08/04/08						
Bolstar	0.42	0.10	ug/l	0.500		84	60-130			
Diazinon	0.41	0.05	"	0.500		81	60-130			
Ethoprop	0.40	0.05	"	0.500		81	60-130			
Mevinphos	0.37	0.25	"	0.500		74	60-130			
Methyl parathion	0.32	0.10	"	0.500		65	60-130			
Phorate	0.35	0.05	"	0.500		71	60-130			
Ronnel	0.38	0.25	"	0.500		77	60-130			
Trichlorinate	0.40	0.05	"	0.500		80	60-130			
Surrogate: Triphenyl phosphate	*0.292*		*"*	*0.250*		*117*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
LCS Dup (8080111-BSD1)				Prepared: 08/01/08 Analyzed: 08/04/08						
Bolstar	0.42	0.10	ug/l	0.500		84	60-130	0.5	30	
Diazinon	0.37	0.05	"	0.500		73	60-130	10	30	
Ethoprop	0.40	0.05	"	0.500		80	60-130	1	30	
Mevinphos	0.38	0.25	"	0.500		75	60-130	2	30	
Methyl parathion	0.36	0.10	"	0.500		71	60-130	10	30	
Phorate	0.41	0.05	"	0.500		82	60-130	15	30	
Ronnel	0.40	0.25	"	0.500		79	60-130	3	30	
Trichlorinate	0.41	0.05	"	0.500		81	60-130	2	30	
Surrogate: Triphenyl phosphate	*0.239*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.227*		*"*	*0.250*		*91*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807579

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073140										
Blank (8073140-BLK1)				Prepared: 07/31/08	Analyzed: 08/01/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8073140-DUP1)		**Source: 0807518-01**		Prepared: 07/31/08	Analyzed: 08/01/08					
Hardness (Total)	455	100	mg CaCO3/L		452			0.6	20	
Batch 8080112										
Blank (8080112-BLK1)				Prepared & Analyzed: 07/31/08						
Oil & Grease	ND	5	mg/l							
LCS (8080112-BS1)				Prepared & Analyzed: 07/31/08						
Oil & Grease	32	5	mg/l	40.0		81	75-125			
LCS Dup (8080112-BSD1)				Prepared & Analyzed: 07/31/08						
Oil & Grease	32	5	mg/l	40.0		80	75-125	0.9	20	
Matrix Spike (8080112-MS1)		**Source: 0807419-02**		Prepared & Analyzed: 07/31/08						
Oil & Grease	195	5	mg/l	40.0	122	183	0-200			

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Notes and Definitions

QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry weather

Project #: 200827W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbo	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐A	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE	625 / 8270 (Semi Volatile Organics) ☐ PAH or	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) Dia/	TBT (Organotin Compounds)	~~pH ☐Conductivity (EC)~~ ☒TSS ☒TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) (Cr) (Cu) (Pb) Ni Ag (Zn) ☒Disso	Coliform, ☒Total (MTF) ☒Fecal (MTF) ☐Coli	Enterococcus, ☒MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	~~Total phosphorus~~	Total Nitrogen
01	907-ALV-001	7/31/20	10:40	water	3G/5P	X							X		X					X	X	X		X	X	X
02	907-ALV-002	"	11:50	water	2G/5P	X							X		X					X	X	X		X	X	X
03																										
04																										
05																										
06																										
07																										
08																										
09																										
10																										

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW)=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☒STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature Manouchehr Dadkhah	Signature [signature]
Print Manouchehr Dadkhah	Print Adam Queen
Company D-Max Eng.	Company EMA Inc
Signature [signature]	Signature [signature]
Print Adam Queen	Print Sean Flores
Company EMA Inc	Company EMA Inc
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenro

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days fro disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 8°C on ice

EnviroMatrix Analytical, Inc.

06 August 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807580

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200827W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/31/08 13:13. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807580

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
908-UNI-004	0807580-01	Water	07/31/08 09:15	07/31/08 13:13

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807580

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-004 (0807580-01) Water Sampled: 07/31/08 09:15 Received: 07/31/08 13:13									
Zinc	ND	0.020	mg/l	1	8073107	07/31/08	07/31/08	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	**0.005**	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807580

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-004 (0807580-01) Water Sampled: 07/31/08 09:15 Received: 07/31/08 13:13									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8080111	08/01/08	08/04/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*96 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807580

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-004 (0807580-01) Water Sampled: 07/31/08 09:15 Received: 07/31/08 13:13									
Hardness (Total)	**646**	100	mg CaCO3/L	10	8073140	07/31/08	08/01/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8080112	08/01/08	08/01/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807580

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-004 (0807580-01) Water Sampled: 07/31/08 09:15 Received: 07/31/08 13:13									
Total Coliforms	**50000**	2000	MPN/100 ml	1000	8080605	07/31/08	08/04/08	SM 9221 B, E	
Fecal Coliforms	**13000**	200	"	100	"	"	08/03/08	"	
Enterococcus	**8000**	200	"	"	8080606	"	08/04/08	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807580

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073107										
Blank (8073107-BLK1)				Prepared & Analyzed: 07/31/08						
Copper	ND	0.005	mg/l							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
Cadmium	ND	0.005	"							
LCS (8073107-BS1)				Prepared & Analyzed: 07/31/08						
Cadmium	0.101	0.005	mg/l	0.100		101	75-125			
Copper	0.100	0.005	"	0.100		100	75-125			
Lead	0.102	0.005	"	0.100		102	75-125			
Zinc	0.098	0.020	"	0.100		98	75-125			
LCS Dup (8073107-BSD1)				Prepared & Analyzed: 07/31/08						
Cadmium	0.099	0.005	mg/l	0.100		99	75-125	2	20	
Copper	0.100	0.005	"	0.100		100	75-125	0.1	20	
Lead	0.100	0.005	"	0.100		100	75-125	3	20	
Zinc	0.098	0.020	"	0.100		98	75-125	0.4	20	
Duplicate (8073107-DUP1)		**Source: 0807538-05**		Prepared & Analyzed: 07/31/08						
Cadmium	ND	0.005	mg/l		ND				20	
Zinc	ND	0.020	"		ND				20	
Copper	0.001	0.005	"		0.002			29	20	QR-04
Lead	ND	0.005	"		ND				20	
Matrix Spike (8073107-MS1)		**Source: 0807538-05**		Prepared & Analyzed: 07/31/08						
Cadmium	0.102	0.005	mg/l	0.100	ND	102	75-125			
Copper	0.100	0.005	"	0.100	0.002	98	75-125			
Lead	0.114	0.005	"	0.100	ND	114	75-125			
Zinc	0.103	0.020	"	0.100	ND	103	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807580

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073107										
Matrix Spike Dup (8073107-MSD1)		**Source: 0807538-05**		Prepared & Analyzed: 07/31/08						
Cadmium	0.104	0.005	mg/l	0.100	ND	104	75-125	1	20	
Copper	0.102	0.005	"	0.100	0.002	100	75-125	2	20	
Lead	0.109	0.005	"	0.100	ND	109	75-125	5	20	
Zinc	0.102	0.020	"	0.100	ND	102	75-125	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807580

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080111										
Blank (8080111-BLK1)				Prepared: 08/01/08 Analyzed: 08/04/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.218*		*"*	*0.250*		*87*	*60-130*			
Surrogate: Tribuytlphosphate	*0.228*		*"*	*0.250*		*91*	*60-130*			
LCS (8080111-BS1)				Prepared: 08/01/08 Analyzed: 08/04/08						
Bolstar	0.42	0.10	ug/l	0.500		84	60-130			
Diazinon	0.41	0.05	"	0.500		81	60-130			
Ethoprop	0.40	0.05	"	0.500		81	60-130			
Mevinphos	0.37	0.25	"	0.500		74	60-130			
Methyl parathion	0.32	0.10	"	0.500		65	60-130			
Phorate	0.35	0.05	"	0.500		71	60-130			
Ronnel	0.38	0.25	"	0.500		77	60-130			
Trichlorinate	0.40	0.05	"	0.500		80	60-130			
Surrogate: Triphenyl phosphate	*0.292*		*"*	*0.250*		*117*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
LCS Dup (8080111-BSD1)				Prepared: 08/01/08 Analyzed: 08/04/08						
Bolstar	0.42	0.10	ug/l	0.500		84	60-130	0.5	30	
Diazinon	0.37	0.05	"	0.500		73	60-130	10	30	
Ethoprop	0.40	0.05	"	0.500		80	60-130	1	30	
Mevinphos	0.38	0.25	"	0.500		75	60-130	2	30	
Methyl parathion	0.36	0.10	"	0.500		71	60-130	10	30	
Phorate	0.41	0.05	"	0.500		82	60-130	15	30	
Ronnel	0.40	0.25	"	0.500		79	60-130	3	30	
Trichlorinate	0.41	0.05	"	0.500		81	60-130	2	30	
Surrogate: Triphenyl phosphate	*0.239*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.227*		*"*	*0.250*		*91*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807580

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073140										
Blank (8073140-BLK1)				Prepared: 07/31/08	Analyzed: 08/01/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8073140-DUP1)		**Source: 0807518-01**		Prepared: 07/31/08	Analyzed: 08/01/08					
Hardness (Total)	455	100	mg CaCO3/L		452			0.6	20	
Batch 8080112										
Blank (8080112-BLK1)				Prepared & Analyzed: 07/31/08						
Oil & Grease	ND	5	mg/l							
LCS (8080112-BS1)				Prepared & Analyzed: 07/31/08						
Oil & Grease	32	5	mg/l	40.0		81	75-125			
LCS Dup (8080112-BSD1)				Prepared & Analyzed: 07/31/08						
Oil & Grease	32	5	mg/l	40.0		80	75-125	0.9	20	
Matrix Spike (8080112-MS1)		**Source: 0807419-02**		Prepared & Analyzed: 07/31/08						
Oil & Grease	195	5	mg/l	40.0	122	183	0-200			

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Notes and Definitions

QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego, CA 92121

Phone (858) 586-6600 Fax (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather

Project #: 200827W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbo	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐A	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE	625 / 8270 (Semi Volatile Organics) ☐ PAH or	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) Dir/C	TBT (Organotin Compounds)	~~pH ☐Conductivity (EC) ☒TSS ☐TDS~~	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) ☒Disso	Coliform, ☒Total (MTF) ☒Fecal (MTF) ☐Coli	Enterococcus, ☒MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	~~Total Diff~~
01	908_UNI-004	7/31/08	9:15	Water	2G/4P	X							X		X					X	X	X		X	X
02																									
03																									
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW)=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☒STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A | Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A | Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A | Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature Manouchehr Dadkhah	Signature [signature]
Print Manouchehr Dadkhah	Print Adam Queen
Company D-Max Eng	Company EMA Inc
Signature [signature]	Signature [signature]
Print Adam Queen	Print Sean Flora
Company EMA Inc	Company EMA Inc
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenro

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T= 8°C on ice

EnviroMatrix Analytical, Inc.

07 August 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807587

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200827W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/30/08 13:20. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807587

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
908-UNI-001	0807587-01	Water	07/30/08 10:20	07/30/08 13:20
908-UNI-002	0807587-02	Water	07/30/08 11:25	07/30/08 13:20
908-UNI-003	0807587-03	Water	07/30/08 12:10	07/30/08 13:20

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807587

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-001 (0807587-01) Water	**Sampled: 07/30/08 10:20**		**Received: 07/30/08 13:20**						
Total Suspended Solids	ND	20	mg/l	1	8080510	08/05/08	08/07/08	SM2540 D	
Turbidity	**2.19**	0.05	NTU	"	8073112	07/30/08	07/30/08	SM2130 B	
908-UNI-002 (0807587-02) Water	**Sampled: 07/30/08 11:25**		**Received: 07/30/08 13:20**						
Total Suspended Solids	ND	20	mg/l	1	8080510	08/05/08	08/07/08	SM2540 D	
Turbidity	**22.0**	0.05	NTU	"	8073112	07/30/08	07/30/08	SM2130 B	
908-UNI-003 (0807587-03) Water	**Sampled: 07/30/08 12:10**		**Received: 07/30/08 13:20**						
Total Suspended Solids	ND	20	mg/l	1	8080510	08/05/08	08/07/08	SM2540 D	
Turbidity	**2.08**	0.05	NTU	"	8073112	07/30/08	07/30/08	SM2130 B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807587

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073112										
Duplicate (8073112-DUP1)		**Source: 0807504-01**		Prepared & Analyzed: 07/29/08						
Turbidity	0.19	0.05	NTU		0.20			5	20	
Reference (8073112-SRM1)				Prepared & Analyzed: 07/29/08						
Turbidity	3.18	0.05	NTU	3.72		85	72.75-137.4			
Batch 8080510										
Blank (8080510-BLK1)				Prepared: 08/04/08 Analyzed: 08/07/08						
Total Suspended Solids	ND	20	mg/l							
Duplicate (8080510-DUP1)		**Source: 0807587-01**		Prepared: 08/05/08 Analyzed: 08/07/08						
Total Suspended Solids	4.0	20	mg/l		ND				20	
Reference (8080510-SRM1)				Prepared: 08/04/08 Analyzed: 08/07/08						
Total Suspended Solids	48.6	20	mg/l	50.3		97	81.91-107			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego, CA 92121

Phone: 858.586.6600 Fax: 858.586.6644

Email: arsalan@dmaxinc.com

Billing Address: (same)

Project ID: La Mesa Dry Weather

Project #: 200827W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease :1413.1 :1413.2 :1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) :1Gas :1Diesel :1Ext :1A	624 / 8260 (VOC) :1Full :1BTXE :1MTBE	625 / 8270 (Semi Volatile Organics) :1PAH on	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TRPH (Organic Compounds)	:1pH :1Conductivity (EC) :1TSS :1TDS	Nitrate :1Nitrite :1TKN :1NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) :1Metals :1Organics	Cd Cr Cu Pb Ni Ag Zn :1Dissol	Coliform, :1Total (MTF) :1Fecal (MTF) :1Coli	Enterococcus, :1MTF :1Index	Heterotrophic Plate Count (HPC)	Turbidity		
01	908-UNI-001	7/30/08 10:20	storm water	1 P										X								X			
02	908-UNI-002	7/30/08 11:25	↓	1 P										X								X			
03	908-UNI-003	7/30/08 12:10	↓	1 P										X								X			
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)

[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client ☐P/U or Delivery ☐Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A | Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A | Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A | Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature:
Print: Manouchehr Dadkhah	Print: Sean Flores
Company: D-Max Engineering	Company: EMA Inc.
Signature:	Signature:
Print:	Print:
Company:	Company:
Signature:	Signature:
Print:	Print:
Company:	Company:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Cli

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the d disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T=17°c on ice

EnviroMatrix Analytical, Inc.

07 August 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807588

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200827W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/31/08 13:13. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807588

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
908-UNI-004	0807588-01	Water	07/31/08 09:15	07/31/08 13:13

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807588

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-004 (0807588-01) Water Sampled: 07/31/08 09:15 Received: 07/31/08 13:13									
Total Suspended Solids	ND	20	mg/l	1	8080510	08/05/08	08/07/08	SM2540 D	
Turbidity	**1.99**	0.05	NTU	"	8080417	08/01/08	08/01/08	SM2130 B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807588

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080417										
Duplicate (8080417-DUP1)		**Source: 0807588-01**		Prepared & Analyzed: 08/01/08						
Turbidity	1.91	0.05	NTU		1.99			4	20	
Reference (8080417-SRM1)				Prepared & Analyzed: 08/01/08						
Turbidity	3.11	0.05	NTU	3.72		84	72.75-137.4			
Batch 8080510										
Blank (8080510-BLK1)				Prepared: 08/04/08 Analyzed: 08/07/08						
Total Suspended Solids	ND	20	mg/l							
Duplicate (8080510-DUP1)		**Source: 0807587-01**		Prepared: 08/05/08 Analyzed: 08/07/08						
Total Suspended Solids	4.0	20	mg/l		ND				20	
Reference (8080510-SRM1)				Prepared: 08/04/08 Analyzed: 08/07/08						
Total Suspended Solids	48.6	20	mg/l	50.3		97	81.91-107			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather

Project #: 200827W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐	624 / 8260 (VOC) ☐Full ☐BTXB ☐MTBE	625 / 8270 (Semi Volatile Organics) ☐ PAH o	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☒TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Diss	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Co	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Turbidity
01	908-UNI-004	7/31/08 9:15	water	2G/4P										X									X
02																							
03																							
04																							
05																							
06																							
07																							
08																							
09																							
10																							

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☒STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A | Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A | Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A | Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

Sample from COC 0807580 to be used sample for this COC

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature:
Print: Manouchehr Dadkhah	Print: Seem Flory
Company: D-Max Eng.	Company: EMA Inc.
Signature	Signature
Print	Print
Company	Company
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenro

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days fro disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T=8°c on ice

EnviroMatrix Analytical, Inc.

08 August 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807554

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200827W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/30/08 13:20. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807554

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
908-UNI-001	0807554-01	Water	07/30/08 10:20	07/30/08 13:20
908-UNI-002	0807554-02	Water	07/30/08 11:25	07/30/08 13:20
908-UNI-003	0807554-03	Water	07/30/08 12:10	07/30/08 13:20

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807554

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-001 (0807554-01) Water Sampled: 07/30/08 10:20 Received: 07/30/08 13:20									
Cadmium	ND	0.005	mg/l	1	8073107	07/31/08	07/31/08	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
908-UNI-002 (0807554-02) Water Sampled: 07/30/08 11:25 Received: 07/30/08 13:20									
Copper	**0.010**	0.005	mg/l	1	8073107	07/31/08	07/31/08	EPA 6020	
Cadmium	ND	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
Zinc	**0.038**	0.020	"	"	"	"	"	"	
908-UNI-003 (0807554-03) Water Sampled: 07/30/08 12:10 Received: 07/30/08 13:20									
Zinc	ND	0.020	mg/l	1	8073107	07/31/08	07/31/08	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807554

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-001 (0807554-01) Water	**Sampled: 07/30/08 10:20**		**Received: 07/30/08 13:20**						**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8073132	07/31/08	08/02/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*118 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*91 %*	*60-130*		"	"	"	"	
908-UNI-002 (0807554-02) Water	**Sampled: 07/30/08 11:25**		**Received: 07/30/08 13:20**						**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8073132	07/31/08	08/02/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*115 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*97 %*	*60-130*		"	"	"	"	
908-UNI-003 (0807554-03) Water	**Sampled: 07/30/08 12:10**		**Received: 07/30/08 13:20**						**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8073132	07/31/08	08/08/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	**11.6**	1.25	"	25	"	"	"	"	
Surrogate: Triphenyl phosphate		*105 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*88 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807554

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-001 (0807554-01) Water	**Sampled: 07/30/08 10:20**		**Received: 07/30/08 13:20**						
Hardness (Total)	**753**	100	mg CaCO3/L	10	8073140	07/31/08	08/01/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8080112	08/01/08	08/01/08	EPA 1664A	
908-UNI-002 (0807554-02) Water	**Sampled: 07/30/08 11:25**		**Received: 07/30/08 13:20**						
Hardness (Total)	**1570**	100	mg CaCO3/L	10	8073140	07/31/08	08/01/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8080112	08/01/08	08/01/08	EPA 1664A	
908-UNI-003 (0807554-03) Water	**Sampled: 07/30/08 12:10**		**Received: 07/30/08 13:20**						
Hardness (Total)	**527**	100	mg CaCO3/L	10	8073140	07/31/08	08/01/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8080112	08/01/08	08/01/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807554

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-001 (0807554-01) Water	**Sampled: 07/30/08 10:20**		**Received: 07/30/08 13:20**						
Total Coliforms	**30000**	2000	MPN/100 ml	1000	8073135	07/30/08	08/03/08	SM 9221 B, E	
Fecal Coliforms	**800**	20	"	10	"	"	08/02/08	"	
Enterococcus	**1300**	20	"	"	8073136	"	08/03/08	SM 9230 A, B	
908-UNI-002 (0807554-02) Water	**Sampled: 07/30/08 11:25**		**Received: 07/30/08 13:20**						
Total Coliforms	**50000**	2000	MPN/100 ml	1000	8073135	07/30/08	08/03/08	SM 9221 B, E	
Fecal Coliforms	**7000**	200	"	100	"	"	08/02/08	"	
Enterococcus	**24000**	200	"	"	8073136	"	08/03/08	SM 9230 A, B	
908-UNI-003 (0807554-03) Water	**Sampled: 07/30/08 12:10**		**Received: 07/30/08 13:20**						
Total Coliforms	**30000**	2000	MPN/100 ml	1000	8073135	07/30/08	08/03/08	SM 9221 B, E	
Fecal Coliforms	**1700**	20	"	10	"	"	08/02/08	"	
Enterococcus	**900**	20	"	"	8073136	"	08/03/08	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807554

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073107										
Blank (8073107-BLK1)				Prepared & Analyzed: 07/31/08						
Copper	ND	0.005	mg/l							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
Cadmium	ND	0.005	"							
LCS (8073107-BS1)				Prepared & Analyzed: 07/31/08						
Cadmium	0.101	0.005	mg/l	0.100		101	75-125			
Copper	0.100	0.005	"	0.100		100	75-125			
Lead	0.102	0.005	"	0.100		102	75-125			
Zinc	0.098	0.020	"	0.100		98	75-125			
LCS Dup (8073107-BSD1)				Prepared & Analyzed: 07/31/08						
Cadmium	0.099	0.005	mg/l	0.100		99	75-125	2	20	
Copper	0.100	0.005	"	0.100		100	75-125	0.1	20	
Lead	0.100	0.005	"	0.100		100	75-125	3	20	
Zinc	0.098	0.020	"	0.100		98	75-125	0.4	20	
Duplicate (8073107-DUP1)		**Source: 0807538-05**		Prepared & Analyzed: 07/31/08						
Cadmium	ND	0.005	mg/l		ND				20	
Zinc	ND	0.020	"		ND				20	
Copper	0.001	0.005	"		0.002			29	20	QR-04
Lead	ND	0.005	"		ND				20	
Matrix Spike (8073107-MS1)		**Source: 0807538-05**		Prepared & Analyzed: 07/31/08						
Cadmium	0.102	0.005	mg/l	0.100	ND	102	75-125			
Copper	0.100	0.005	"	0.100	0.002	98	75-125			
Lead	0.114	0.005	"	0.100	ND	114	75-125			
Zinc	0.103	0.020	"	0.100	ND	103	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807554

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073107										
Matrix Spike Dup (8073107-MSD1)		**Source: 0807538-05**		Prepared & Analyzed: 07/31/08						
Cadmium	0.104	0.005	mg/l	0.100	ND	104	75-125	1	20	
Copper	0.102	0.005	"	0.100	0.002	100	75-125	2	20	
Lead	0.109	0.005	"	0.100	ND	109	75-125	5	20	
Zinc	0.102	0.020	"	0.100	ND	102	75-125	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807554

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073132										
Blank (8073132-BLK1)				Prepared: 07/31/08 Analyzed: 08/01/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.254*		*"*	*0.250*		*102*	*60-130*			
Surrogate: Tribuytlphosphate	*0.221*		*"*	*0.250*		*88*	*60-130*			
LCS (8073132-BS1)				Prepared: 07/31/08 Analyzed: 08/01/08						
Bolstar	0.42	0.10	ug/l	0.500		84	60-130			
Diazinon	0.43	0.05	"	0.500		87	60-130			
Ethoprop	0.41	0.05	"	0.500		82	60-130			
Mevinphos	0.45	0.25	"	0.500		90	60-130			
Methyl parathion	0.34	0.10	"	0.500		68	60-130			
Phorate	0.36	0.05	"	0.500		71	60-130			
Ronnel	0.41	0.25	"	0.500		82	60-130			
Trichlorinate	0.41	0.05	"	0.500		83	60-130			
Surrogate: Triphenyl phosphate	*0.252*		*"*	*0.250*		*101*	*60-130*			
Surrogate: Tribuytlphosphate	*0.242*		*"*	*0.250*		*97*	*60-130*			
LCS Dup (8073132-BSD1)				Prepared: 07/31/08 Analyzed: 08/01/08						
Bolstar	0.44	0.10	ug/l	0.500		87	60-130	4	30	
Diazinon	0.42	0.05	"	0.500		84	60-130	3	30	
Ethoprop	0.42	0.05	"	0.500		83	60-130	0.7	30	
Mevinphos	0.50	0.25	"	0.500		101	60-130	11	30	
Methyl parathion	0.35	0.10	"	0.500		69	60-130	3	30	
Phorate	0.37	0.05	"	0.500		74	60-130	4	30	
Ronnel	0.41	0.25	"	0.500		81	60-130	1	30	
Trichlorinate	0.44	0.05	"	0.500		88	60-130	6	30	
Surrogate: Triphenyl phosphate	*0.251*		*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.214*		*"*	*0.250*		*86*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807554

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8073140										
Blank (8073140-BLK1)				Prepared: 07/31/08	Analyzed: 08/01/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8073140-DUP1)		**Source: 0807518-01**		Prepared: 07/31/08	Analyzed: 08/01/08					
Hardness (Total)	455	100	mg CaCO3/L		452			0.6	20	
Batch 8080112										
Blank (8080112-BLK1)				Prepared & Analyzed: 07/31/08						
Oil & Grease	ND	5	mg/l							
LCS (8080112-BS1)				Prepared & Analyzed: 07/31/08						
Oil & Grease	32	5	mg/l	40.0		81	75-125			
LCS Dup (8080112-BSD1)				Prepared & Analyzed: 07/31/08						
Oil & Grease	32	5	mg/l	40.0		80	75-125	0.9	20	
Matrix Spike (8080112-MS1)		**Source: 0807419-02**		Prepared & Analyzed: 07/31/08						
Oil & Grease	195	5	mg/l	40.0	122	183	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry weather

Project #: 200827W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 X1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐A	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE	625 / 8270 (Semi Volatile Organics) ☐ PAH or	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	(8141) (Organophosphorus Pesticides) Diaz	TBT (Organotin Compounds)	~~pH ☐Conductivity (EC) X 195 ☐TDS~~	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	(Cd) Cr (Cu) (Pb) Ni Ag (Zn) X Dissc	Coliform, X Total (MTF) X Fecal (MTF) ☐Co	Enterococcus, X MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	~~Turbidity~~ SF 7/31	per Area
01	908-UNI-001	7/30/08	10:20	Water	3G/4P	X							X		X					X	X	X		X	X
02	908-UNI-002	"	11:25	"	2G/4P	X							X		X					X	X	X		X	X
03	908-UNI-003	"	12:10	"	2G/4P	X							X		X					X	X	X		X	X
04															X										
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day X STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature Manouchehr Dadkhah	Signature [signature]
Print Manouchehr Dadkhah	Print Adam Queen
Company D-Max Eng.	Company EMA Inc
Signature [signature]	Signature [signature]
Print Adam Queen	Print Sean Flores
Company EMA Inc	Company EMA Inc.
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenro

T= 17°C on ice

EnviroMatrix Analytical, Inc.

08 August 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0807589

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200827W-1

Enclosed are the results of analyses for samples received by the laboratory on 07/31/08 13:13. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807589

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-001	0807589-01	Water	07/31/08 10:40	07/31/08 13:13
907-ALV-002	0807589-02	Water	07/31/08 11:50	07/31/08 13:13

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807589

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (0807589-01) Water Sampled: 07/31/08 10:40 Received: 07/31/08 13:13									
Nitrate/Nitrite as N	**0.66**	0.05	mg/l	1	8080738	08/07/08	08/07/08	SM4500 NO3 E	
Total Kjeldahl Nitrogen	**0.6**	0.5	"	"	8080620	08/06/08	08/06/08	SM4500 N C	
Total Nitrogen	**1.3**	0.5	"	"	8080741	08/07/08	08/07/08	Calculation	
Phosphorus, Total	**0.39**	0.05	"	"	8080629	08/06/08	08/06/08	SM4500 P B, E	
Total Dissolved Solids	**1850**	20	"	"	8080622	08/06/08	08/07/08	SM2540 C	
Total Suspended Solids	ND	20	"	"	8080621	"	08/07/08	SM2540 D	
Turbidity	**2.83**	0.05	NTU	"	8080417	08/01/08	08/01/08	SM2130 B	
907-ALV-002 (0807589-02) Water Sampled: 07/31/08 11:50 Received: 07/31/08 13:13									
Nitrate/Nitrite as N	**1.26**	0.10	mg/l	2	8080738	08/07/08	08/07/08	SM4500 NO3 E	
Total Kjeldahl Nitrogen	**2.2**	0.5	"	1	8080620	08/06/08	08/06/08	SM4500 N C	
Total Nitrogen	**3.5**	0.5	"	"	8080741	08/07/08	08/07/08	Calculation	
Phosphorus, Total	**1.28**	0.05	"	"	8080629	08/06/08	08/06/08	SM4500 P B, E	
Total Dissolved Solids	**1240**	20	"	"	8080622	08/06/08	08/07/08	SM2540 C	
Total Suspended Solids	**394**	20	"	"	8080621	"	08/07/08	SM2540 D	
Turbidity	**409**	0.05	NTU	"	8080417	08/01/08	08/01/08	SM2130 B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807589

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080417										
Duplicate (8080417-DUP1)		**Source: 0807588-01**		Prepared & Analyzed: 08/01/08						
Turbidity	1.91	0.05	NTU		1.99			4	20	
Reference (8080417-SRM1)				Prepared & Analyzed: 08/01/08						
Turbidity	3.11	0.05	NTU	3.72		84	72.75-137.4			
Batch 8080620										
Blank (8080620-BLK1)				Prepared & Analyzed: 08/06/08						
Total Kjeldahl Nitrogen	ND	0.5	mg/l							
LCS (8080620-BS1)				Prepared & Analyzed: 08/06/08						
Total Kjeldahl Nitrogen	4.6	0.5	mg/l	4.10		113	80-120			
LCS Dup (8080620-BSD1)				Prepared & Analyzed: 08/06/08						
Total Kjeldahl Nitrogen	4.4	0.5	mg/l	4.10		106	80-120	7	20	
Duplicate (8080620-DUP1)		**Source: 0807589-01**		Prepared & Analyzed: 08/06/08						
Total Kjeldahl Nitrogen	0.7	0.5	mg/l		0.6			13	20	
Matrix Spike (8080620-MS1)		**Source: 0807589-01**		Prepared & Analyzed: 08/06/08						
Total Kjeldahl Nitrogen	5.2	0.5	mg/l	4.10	0.6	111	80-120			
Matrix Spike Dup (8080620-MSD1)		**Source: 0807589-01**		Prepared & Analyzed: 08/06/08						
Total Kjeldahl Nitrogen	4.7	0.5	mg/l	4.10	0.6	99	80-120	10	20	
Batch 8080621										
Blank (8080621-BLK1)				Prepared: 08/06/08 Analyzed: 08/07/08						
Total Suspended Solids	ND	20	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807589

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080621										
Duplicate (8080621-DUP1)		**Source: 0808078-04**		Prepared: 08/06/08		Analyzed: 08/07/08				
Total Suspended Solids	2.0	20	mg/l		2.0			0	20	
Batch 8080622										
Blank (8080622-BLK1)				Prepared: 08/06/08		Analyzed: 08/07/08				
Total Dissolved Solids	ND	20	mg/l							
Duplicate (8080622-DUP1)		**Source: 0808015-01**		Prepared: 08/06/08		Analyzed: 08/07/08				
Total Dissolved Solids	1240	20	mg/l		1230			0.6	20	
Batch 8080629										
Blank (8080629-BLK1)				Prepared & Analyzed: 08/06/08						
Phosphorus, Total	ND	0.05	mg/l							
LCS (8080629-BS1)				Prepared & Analyzed: 08/06/08						
Phosphorus, Total	0.49	0.05	mg/l	0.500		98	80-120			
LCS Dup (8080629-BSD1)				Prepared & Analyzed: 08/06/08						
Phosphorus, Total	0.48	0.05	mg/l	0.500		97	80-120	1	20	
Duplicate (8080629-DUP1)		**Source: 0807589-01**		Prepared & Analyzed: 08/06/08						
Phosphorus, Total	0.37	0.05	mg/l		0.39			7	20	
Matrix Spike (8080629-MS1)		**Source: 0807589-01**		Prepared & Analyzed: 08/06/08						
Phosphorus, Total	0.85	0.05	mg/l	0.500	0.39	91	80-120			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0807589

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080629										
Matrix Spike Dup (8080629-MSD1)		**Source: 0807589-01**		Prepared & Analyzed: 08/06/08						
Phosphorus, Total	0.84	0.05	mg/l	0.500	0.39	90	80-120	0.6	20	
Batch 8080738										
Blank (8080738-BLK1)				Prepared & Analyzed: 08/07/08						
Nitrate/Nitrite as N	ND	0.05	mg/l							
LCS (8080738-BS1)				Prepared & Analyzed: 08/07/08						
Nitrate/Nitrite as N	0.50	0.05	mg/l	0.500		100	80-120			
LCS Dup (8080738-BSD1)				Prepared & Analyzed: 08/07/08						
Nitrate/Nitrite as N	0.48	0.05	mg/l	0.500		95	80-120	5	20	
Duplicate (8080738-DUP1)		**Source: 0808058-05**		Prepared & Analyzed: 08/07/08						
Nitrate/Nitrite as N	ND	0.05	mg/l		ND				20	
Matrix Spike (8080738-MS1)		**Source: 0808058-05**		Prepared & Analyzed: 08/07/08						
Nitrate/Nitrite as N	0.53	0.05	mg/l	0.500	ND	106	80-120			
Matrix Spike Dup (8080738-MSD1)		**Source: 0808058-05**		Prepared & Analyzed: 08/07/08						
Nitrate/Nitrite as N	0.54	0.05	mg/l	0.500	ND	109	80-120	3	20	
Reference (8080738-SRM1)				Prepared & Analyzed: 08/07/08						
Nitrate/Nitrite as N	0.68	0.05	mg/l	0.688		99	8.81-109.0			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego, CA 92121

Phone: (858)586-6600 Fax: (858)586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather

Project #: 200827W-1 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐1413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐A	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE	625 / 8270 (Semi Volatile Organics) ☐ PAH or	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) TSS TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Dissc	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Col	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Phosphorus	Total Nitrogen	T
01	907_ALV-001	7/31/08	10:40	Water	3G/5P										X								X	X	
02	907_ALV-002	"	11:50	Water	2G/5P										X								X	X	X
03																									
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☐5 day ☒STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

Sample from COC 0807579 to be used Sample for This COC

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature:
Print: Manouchehr Dadkhah	Print: Sean Flores
Company: D-Max Eng.	Company: EMA Inc.
Signature	Signature
Print	Print
Company	Company
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenro

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days fro disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 8°C

EnviroMatrix Analytical, Inc.

15 August 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0808151

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#: 200827W-2

Enclosed are the results of analyses for samples received by the laboratory on 08/08/08 16:29. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0808151

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-002-1	0808151-01	Water	08/08/08 12:00	08/08/08 16:29
907-ALV-002-2	0808151-02	Water	08/08/08 12:45	08/08/08 16:29
907-ALV-002	0808151-03	Water	08/08/08 14:10	08/08/08 16:29
908-UNI-004	0808151-04	Water	08/08/08 14:30	08/08/08 16:29
908-UNI-004-1	0808151-05	Water	08/08/08 14:50	08/08/08 16:29
908-UNI-002	0808151-06	Water	08/08/08 15:15	08/08/08 16:29
908-UNI-002-1	0808151-07	Water	08/08/08 15:35	08/08/08 16:29

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0808151

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
907-ALV-002-1 (0808151-01) Water Sampled: 08/08/08 12:00 Received: 08/08/08 16:29								
Total Coliforms	**24200**	10	MPN/100 ml	10	8081108	08/08/08 17:30 08/09/08 17:30	SM9223	
E. Coli	**933**	10	"	"	"	08/08/08 17:30 08/09/08 17:30	"	
Enterococcus	**383**	10	"	"	8081109	08/08/08 17:30 08/09/08 17:30	Idexx	
907-ALV-002-2 (0808151-02) Water Sampled: 08/08/08 12:45 Received: 08/08/08 16:29								
Total Coliforms	**141000**	100	MPN/100 ml	100	8081108	08/08/08 17:30 08/09/08 17:30	SM9223	
E. Coli	**1940**	10	"	10	"	08/08/08 17:30 08/09/08 17:30	"	
Enterococcus	**1679**	10	"	"	8081109	08/08/08 17:30 08/09/08 17:30	Idexx	
907-ALV-002 (0808151-03) Water Sampled: 08/08/08 14:10 Received: 08/08/08 16:29								
Total Coliforms	**141000**	100	MPN/100 ml	100	8081108	08/08/08 17:30 08/09/08 17:30	SM9223	
E. Coli	**1120**	10	"	10	"	08/08/08 17:30 08/09/08 17:30	"	
Enterococcus	**3448**	10	"	"	8081109	08/08/08 17:30 08/09/08 17:30	Idexx	
908-UNI-004 (0808151-04) Water Sampled: 08/08/08 14:30 Received: 08/08/08 16:29								
Total Coliforms	**6130**	10	MPN/100 ml	10	8081108	08/08/08 17:30 08/09/08 17:30	SM9223	
E. Coli	**122**	10	"	"	"	08/08/08 17:30 08/09/08 17:30	"	
908-UNI-004-1 (0808151-05) Water Sampled: 08/08/08 14:50 Received: 08/08/08 16:29								
Total Coliforms	**9800**	10	MPN/100 ml	10	8081108	08/08/08 17:30 08/09/08 17:30	SM9223	
E. Coli	**10**	10	"	"	"	08/08/08 17:30 08/09/08 17:30	"	
908-UNI-002 (0808151-06) Water Sampled: 08/08/08 15:15 Received: 08/08/08 16:29								
Total Coliforms	**130000**	100	MPN/100 ml	100	8081108	08/08/08 17:30 08/09/08 17:30	SM9223	
E. Coli	**3650**	10	"	10	"	08/08/08 17:30 08/09/08 17:30	"	
Enterococcus	**2064**	10	"	"	8081109	08/08/08 17:30 08/09/08 17:30	Idexx	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0808151

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
908-UNI-002-1 (0808151-07) Water Sampled: 08/08/08 15:35 Received: 08/08/08 16:29								
Total Coliforms	**8160**	10	MPN/100 ml	10	8081108	08/08/08 17:30 08/09/08 17:30	SM9223	
E. Coli	**31**	10	"	"	"	08/08/08 17:30 08/09/08 17:30	"	
Enterococcus	**2247**	10	"	"	8081109	08/08/08 17:30 08/09/08 17:30	Idexx	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address:

Project ID: La Masa Dry Weather

Project #: 200827W-2 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1 413.2 1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel Ext ASTM	624 / 8260 (VOC) Full BTXE MTBE	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	pH Conductivity (EC) TSS TDS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	Cd Cr Cu Pb Ni Ag Zn Dissolved	Coliform, Total (MTF) Fecal (MTF) Coliform	Enterococcus, MTF Idexx	Heterotrophic Plate Count (HPC)			
01	907-ALV-002-1	8/8/08	12:00	water	2 P																X	X			
02	907-ALV-002-2	"	12:45	"	"																X	X			
03	907-ALV-002	"	14:10	"	"																X	X			
04	908-UNI-004	"	14:30	"	1 P																X				
05	908-UNI-004-1	"	14:50	"	1 P																X				
06	908-UNI-002	"	15:15	"	2 P																X	X			
07	908-UNI-002-1	"	15:35	"	2 P																X	X			
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other_____

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day X 5 day STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other _____

[1]**Sample Disposal:** By Laboratory [2]Return to client: P/U or Delivery Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: Client EMA Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature:
Print: Manouchehr Dadkhah	Print: Sean Flore
Company: D-Max Eng.	Company: EMA Inc.
Signature	Signature
Print	Print
Company	Company
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenro

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days fro disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T=5°C on ice

Appendix D

Field Data Sheets

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-001		Latitude	32.77209	Watershed	Hydrologic Unit	907
Location	Alvarado Rd, east of the trolley station, on the channel		Longitude	-117.04136		Hydrologic Area	907.1
			TB Page	1270-F2		Hydrologic Subarea (Optional)	907.11
Date	07/31/08	Time 10:40	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other larvae, tadpoles

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 33-34

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	5.6	Ortho-PO_4 (mg/L)	1.1
pH (pH units)	7.8	TURB (NTU)	3.97	NO_3-N (mg/L)	1.27	Ortho-PO_4-P (mg/L)	0.36
COND (mS/cm)	3.17	MBAS (mg/L)	0.25	Do (mg/L)	~~7~~ 9.1		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	42	in
Depth	0.75	in
Velocity	15/15	ft/sec
Flow	98	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 2 pieces of trash visible - soda can, bag of chips.
insects - flies, larvae; tadpoles, snails

Trash Assessment Form

SITE ID: 907-ALV-001 **DATE:** 7/31/2008

LOCATION: alvarado Rd, east of the trolley station, on the channel **TIME:** 10:40

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

_____

_____

_____

_____

_____

_____

_____

_____

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-002			Latitude	32.77414	Watershed: Hydrologic Unit	907
Location	manhole along the south edge of Costco parking lot, just south of Murengo Ave & Fletcher Pkwy intersection			Longitude	-117.02287	Hydrologic Area	907.1
				TB Page	1270-H1	Hydrologic Subarea (Optional)	907.11
Date	07/31/08	Time	11:50	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☑ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 35-38

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.5	NH_3-N (mg/L)	0.6	NO_3 (mg/L)	10.8	Ortho-PO_4 (mg/L)	1.0
pH (pH units)	7.3	TURB (NTU)	421	NO_3-N (mg/L)	2.44 ~~[illegible]~~	Ortho-PO_4 -P (mg/L)	0.326
COND (mS/cm)	1.89	MBAS (mg/L)	0.75	Do (mg/L)	6.52		

Analytical Lab Samples Collected? ☑ Yes ☐ No

SD 07/31/08

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash. Water is very opaque.

Trash Assessment Form

SITE ID: 907-ALV-002 **DATE:** 7/31/08

LOCATION: manhole along the south edge of costco parking lot, just south of Morengo ~~BLVD~~ AVE & Fletcher ~~PKY~~ intersection **TIME:** 11:50

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

_____

_____

_____

_____

_____

_____

_____

_____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For turbidity ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-002		Latitude	32.77414	Watershed	Hydrologic Unit	907
Location	manhole along the south edge of costco parking lot, just south of the Marengo Ave & Fletcher Pkwy intersec.		Longitude	-117.02287		Hydrologic Area	907.1
			TB Page	1270-H1		Hydrologic Subarea (Optional)	907.11
Date	08/01/08	Time 09:30	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 48

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.5	NH3-N (mg/L)	na	NO3 (mg/L)	na	Ortho-PO4 (mg/L)	na
pH (pH units)	7.1	TURB (NTU)	14.20	NO3-N (mg/L)	na	Ortho-PO4 -P (mg/L)	na
COND (mS/cm)	2.59	MBAS (mg/L)	na	Do (mg/L)			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No longer opaque like yesterday

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Total Coliforms, Fecal Coliforms, Enterococci ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-002		Latitude	32.77414	Watershed	Hydrologic Unit	907
Location	along south edge of the Costco parking lot, just south of the Marengo/Fletcher intersection		Longitude	-117.02287		Hydrologic Area	907.1
			TB Page	1270-H1		Hydrologic Subarea (Optional)	907.11
Date	08/08/08	Time 14:10	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects (cockroaches) ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.3	TURB (NTU)	~~Ae~~ 8.05	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.89	MBAS (mg/L)	na	Do (mg/L)	na		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Bacteria → total → fecal → enter

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-002-1		Latitude	32.77104	Watershed	Hydrologic Unit	907
Location	south of I-8, ~~at~~ north ~~point~~ of golf course, north side of fence (next to I-8)		Longitude	-117.01921		Hydrologic Area	907.1
			TB Page	1270-J2		Hydrologic Subarea (Optional)	907.11
Date	8/08/08	Time 12:00	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other larvae

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Do (mg/L)			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Fecal, Total Coli, Entero

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-002-2		Latitude	32.76857	Watershed	Hydrologic Unit	907
Location	Next to 8515 La Mesa Blvd.		Longitude	-117.01350		Hydrologic Area	907.1
			TB Page	1270-J2		Hydrologic Subarea (Optional)	907.11
Date	8/8/08	Time 12:45	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Do (mg/L)			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	/	gpm				Flow		gpm

COMMENTS: construction going on w/i feet of manhole. significant trash & leaf debris.

✓

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-00~~#~~3			Latitude	32.77362	Watershed: Hydrologic Unit	907
Location	~~#~~ Parkway Dr. located in SE corner of Coleman College property			Longitude	-117.03794	Hydrologic Area	907.1
				TB Page	1270 - G1	Hydrologic Subarea (Optional)	907.11
Date	07/31/08	Time	1530	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial (School) ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor NS	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☑ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 41 - 42

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4 -P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns	Do (mg/L)	ns		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Dry; spider webs - no spiders seen; leaf debris
No trash

Trash Assessment Form

SITE ID: 907-ALV-003 DATE: 07/31/2008

LOCATION: Parkway Dr. located in SE corner of Coleman College property TIME: 1536

OBSERVER: MD SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907 - ALV - 004		Latitude	32.77546	Watershed	Hydrologic Unit	907
Location	7780 Parkway Dr. inside Parkway Manor Condos parking lot - top of driveway		Longitude	-117.02918		Hydrologic Area	907.1
			TB Page	1270-G1		Hydrologic Subarea (Optional)	907.11
Date	08/01/08	Time	0845	Observer	MD SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 45-47

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.1	NH_3-N (mg/L)	0.4	NO_3 (mg/L)	5.8	Ortho-PO_4 (mg/L)	1.0
pH (pH units)	7.7	TURB (NTU)	3.34	NO_3-N (mg/L)	1.31	Ortho-PO_4 -P (mg/L)	0.326
COND (mS/cm)	1.19	MBAS (mg/L)	0.38	Do (mg/L)	—		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: - significant animal waste, not touching water
- no trash

Trash Assessment Form

SITE ID: 907-ALV-004 DATE: 08/01/08

LOCATION: 7780 Parkway Dr, inside Prkwy Manor condos, top of drive way by visitor parking TIME: ~~08:~~ 8:45

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

_____

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_____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-005		Latitude	32.77380	Watershed	Hydrologic Unit	907
Location	outfall to Alvarado channel from north, close to intersection of Fletcher Pkwy & Baltimore Dr		Longitude	-117.02737		Hydrologic Area	907.1
			TB Page	1270-H1		Hydrologic Subarea (Optional)	907.11
Date	7/31/08	Time 14:40	Observer	MD SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☑ Insects ~~☑ Algae~~ ~~☑ Fish~~ ~~☑ Snails~~ SD 07/31/08		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 39-40

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.9	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	11.7	Ortho-PO_4 (mg/L)	0.4
pH (pH units)	7.0	TURB (NTU)	1.85	NO_3-N (mg/L)	2.64	Ortho-PO_4-P (mg/L)	0.13
COND (mS/cm)	3.70	MBAS (mg/L)	0.25	Do (mg/L)			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash downstream in open concrete channel. None @ actual site.

Trash Assessment Form

SITE ID: 907 - ALV-005 **DATE:** 7/31/08

LOCATION: outfall to alvarado channel from (N), intersection of Fletcher & Baltimore **TIME:** 14:40

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

_____

_____

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_____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-006		Latitude	32.77550	Watershed	Hydrologic Unit	907
Location	Fletcher Pkwy & Marengo Ave intersection, in planter		Longitude	-117.02309		Hydrologic Area	907.1
			TB Page	1270-H1		Hydrologic Subarea (Optional)	907.11
Date	07/31/08	Time 16:00	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 43-44

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.5	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	5.2	Ortho-PO_4 (mg/L)	0.9
pH (pH units)	7.1	TURB (NTU)	8.57	NO_3-N (mg/L)	1.18	Ortho-PO_4-P (mg/L)	0.29
COND (mS/cm)	2.49	MBAS (mg/L)	0.38	Do (mg/L)	—		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - food wrappers

Trash Assessment Form

SITE ID: 907-ALV-006 **DATE:** 7/31/08

LOCATION: Fletcher Parkway & Marengo Ave intersection, in planter **TIME:** 1600

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-007		Latitude	32.77832	Watershed	Hydrologic Unit	907
Location	Jackson Dr & Parkway Dr, behind Amex Auto Repair		Longitude	-117.01821		Hydrologic Area	907.1
			TB Page	1270-J1		Hydrologic Subarea (Optional)	907.11
Date	07/29/08	Time 1330	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 3-4

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	5.3	Ortho-PO_4 (mg/L)	0.8
pH (pH units)	7.9	TURB (NTU)	1.47	NO_3-N (mg/L)	1.20	Ortho-PO_4-P (mg/L)	0.26
COND (mS/cm)	2.84	MBAS (mg/L)	0.5	Do (mg/L)	—		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - all food wrappers, plastic bottles
Insects - cockroaches

Trash Assessment Form

SITE ID: 907- ALV-007 DATE: 07/29/08

LOCATION: Jackson Dr & Parkway Dr, behind Amex Auto Repair TIME: 1330

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-008			Latitude	32.78400	Watershed: Hydrologic Unit	907
Location	South of Fletcher Parkway, under SR-125 overpass, west of the outfalls from the north.			Longitude	-117.00570	Hydrologic Area	907.1
				TB Page	1251-A7	Hydrologic Subarea (Optional)	907.11
Date	7/29/08	Time	1515	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☑ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 7-10

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	10.6	Ortho-PO_4 (mg/L)	0.4
pH (pH units)	7.7	TURB (NTU)	3.12	NO_3-N (mg/L)	2.40	Ortho-PO_4 -P (mg/L)	0.13
COND (mS/cm)	2.77	MBAS (mg/L)	0.38	Do (mg/L)	—		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907 - ALV - 120		Latitude	32.77630	Watershed	Hydrologic Unit	907
Location	Jackson Dr, 100 ft west of Murray Dr. north side of street.		Longitude	-117.01423		Hydrologic Area	907.1
			TB Page	1270-J1		Hydrologic Subarea (Optional)	907.11
Date	08/01/08	Time 11:50	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☑ Other spiders

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 52-53

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.4	NO_3 (mg/L)	10.3	Ortho-PO_4 (mg/L)	1.1
pH (pH units)	7.1	TURB (NTU)	16.78	NO_3-N (mg/L)	2.33	Ortho-PO_4 -P (mg/L)	0.36
COND (mS/cm)	2.16	MBAS (mg/L)	0.25	Do (mg/L)	—		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	5	gpm				Flow		gpm

COMMENTS: Trash- food wrapper, plastic bag, plastic cup

Trash Assessment Form

SITE ID: 907-ALV-120 DATE: 08/01/2008

LOCATION: Jackson Dr, 100 ft west of Murray Dr. north side of street TIME: 11:50

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-12A		Latitude	32.77605	Watershed	Hydrologic Unit	907
Location	Jackson Dr, 100 ft west of Murray Dr, south side of street		Longitude	-117.01434		Hydrologic Area	907.1
			TB Page	1270-J1		Hydrologic Subarea (Optional)	907.11
Date	07/29/08	Time 1620	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 11-12

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.8	NH_3-N (mg/L)	0.4	NO_3 (mg/L)	21.5	Ortho-PO_4 (mg/L)	0.4
pH (pH units)	7.7	TURB (NTU)	8.7	NO_3-N (mg/L)	4.86	Ortho-PO_4-P (mg/L)	0.13
COND (mS/cm)	2.26	MBAS (mg/L)	0.25	Do (mg/L)	—		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 907 - ALV - 12A DATE: 7/29/08

LOCATION: Jackson Dr, 100 ft west of Murray Drive, south side of st. TIME: 1620

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-580		Latitude	32.78640	Watershed	Hydrologic Unit	907
Location	Northeast corner of Amaya Dr & Amaya Ct intersection		Longitude	-117.00116		Hydrologic Area	907.1
			TB Page	1251-B7		Hydrologic Subarea (Optional)	907.11
Date	08/01/08	Time 13:45	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 54-55

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.5	NO_3 (mg/L)	5.6	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	7.5	TURB (NTU)	12.91	NO_3-N (mg/L)	1.27	Ortho-PO_4 -P (mg/L)	0.07
COND (mS/cm)	2.35	MBAS (mg/L)	0.25	Do (mg/L)	—		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 907-ALV-580 DATE: 8/01/08

LOCATION: NE corner of Amaya Dr & Amaya Ct intersection TIME: 13:45

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907 - ALV-590		Latitude	32.78180	Watershed	Hydrologic Unit	907
Location	Southeast corner of Parkway Dr & Amarillo Ave intersection		Longitude	-117.01328		Hydrologic Area	907.1
			TB Page	1250 - J7		Hydrologic Subarea (Optional)	907.11
Date	7/29/08	Time 1425	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☑ Algae	☑ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 5-6

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.8	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	5.8	Ortho-PO_4 (mg/L)	0.5
pH (pH units)	7.4	TURB (NTU)	1.58	NO_3-N (mg/L)	1.31	Ortho-PO_4-P (mg/L)	0.16
COND (mS/cm)	2.45	MBAS (mg/L)	0.25	Do (mg/L)	—		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: - ants, flies
- minimal trash - illegal dumping of trash away from site.

Trash Assessment Form

SITE ID: 907-ALV-590 DATE: 7/29/08

LOCATION: SE corner of Prkwy Dr & Amarillo Ave intersection TIME: 14:25

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: 907-ALV-008 **DATE:** 07/29/08

LOCATION: south of Fletcher Pkwy, under SR-125 overpass, west of outfalls from north **TIME:** 15:15

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	907-ALV-640		Latitude	32.77651	Watershed	Hydrologic Unit	907
Location	North side of Seton Hall St, between Swarthmore St & Wheaton St.		Longitude	-117.034462		Hydrologic Area	907.1
			TB Page	1270-G1		Hydrologic Subarea (Optional)	907.11
Date	07/30/08	Time ~~09~~15	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken: ☑ Yes ☐ No **Photo #** 13-15

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	2.0	Ortho-PO_4 (mg/L)	0.8
pH (pH units)	8.8	TURB (NTU)	3.30	NO_3-N (mg/L)	0.45	Ortho-PO_4-P (mg/L)	0.26
COND (mS/cm)	1.17	MBAS (mg/L)	0.25	Do (mg/L)			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash- soccer ball, broken glass, golf ball, tire next to site
lots of leaves

Trash Assessment Form

SITE ID: 907 - ALV - 640 DATE: 07/30/08

LOCATION: North side of Seton Hall St, btwn Swarthmore St & Wheaton St TIME: 09:15

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	908-LEM-520	Latitude	32.74514	Watershed	Hydrologic Unit	908
Location	~~Massachusetts~~ Ave, Waite Dr, south end of Harris St.	Longitude	-117.03931		Hydrologic Area	908.2
		TB Page	1270-F5		Hydrologic Subarea (Optional)	908.22
Date	8/~~30~~1/08	Time	10:45	Observer	MD, SD	Discharge Area (Optional)

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects (Dragonflies, etc)	☑ Algae	☐ Fish	☑ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☑ Yes ☐ No ☑ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 49-51

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.1	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	17.5	Ortho-PO_4 (mg/L)	1.3
pH (pH units)	8.2	TURB (NTU)	7.56	NO_3-N (mg/L)	3.96	Ortho-PO_4-P (mg/L)	0.42
COND (mS/cm)	4.79	MBAS (mg/L)	0.5	Do (mg/L)	—		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	<1	gpm				Flow		gpm

COMMENTS: - Trash - mainly food packaging (cups, wrappers)
- Overland Flow from ~~Massachusetts Ave~~ Harris St, w/ trash & pet waste. However, water was sampled from outlet only, not overland runoff. (<1 gallon).

Trash Assessment Form

SITE ID: 908 · LEM - 520 DATE: 08/01/2008

LOCATION: ~~Massachusetts Ave~~, Waite Dr, South end of Harris St. TIME: 10:45

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	909-SPR-001			Latitude	32.75483	Watershed: Hydrologic Unit	909
Location	Spring St & Spring Gardens Rd intersection, inside La Mesa Seventh-Day adventist church			Longitude	-117.01311	Watershed: Hydrologic Area	909.1
				TB Page	1270 - J4	Watershed: Hydrologic Subarea (Optional)	909.12
Date	7/30/08	Time	1530	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other larvae

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 26-28

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	11.8	Ortho-PO_4 (mg/L)	0.7
pH (pH units)	7.5	TURB (NTU)	2.30	NO_3-N (mg/L)	2.67	Ortho-PO_4-P (mg/L)	0.27
COND (mS/cm)	2.41	MBAS (mg/L)	0.13	Do (mg/L)			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	25	in
Depth	0.5	in
Velocity	10/10	ft/sec
Flow	39	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Dragonflies, flies
Trash- food wrappers, cardboard. > very low quantity

Trash Assessment Form

SITE ID: 909 - SPR - 001 DATE: 7/30/08

LOCATION: Spring St & Spring Gardens Rd intersection, inside La Mesa 7th Day adventist Church TIME: 1530

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	909-SPR-002		Latitude	32.76324	Watershed	Hydrologic Unit	909
Location	Bancroft Dr, just south of Golondria, in front of 4621 Bancroft		Longitude	-117.00118		Hydrologic Area	909.1
			TB Page	1271-B3		Hydrologic Subarea (Optional)	909.12
Date	07/30/08	Time 1420	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 24-25

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	42.6	Ortho-PO_4 (mg/L)	0.7
pH (pH units)	8.2	TURB (NTU)	8.86	NO_3-N (mg/L)	9.63	Ortho-PO_4-P (mg/L)	0.23
COND (mS/cm)	2.20	MBAS (mg/L)	0.13	Do (mg/L)			

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	1	gpm				Flow		gpm

COMMENTS: 1 cigarette - otherwise no trash. Leaf debris present.

Trash Assessment Form

SITE ID: 909-SPR-002 DATE: 7/30/08

LOCATION: Bancroft Dr. just South of Golondrina in front of 4621 Bancroft Dr TIME: 14:20

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	908-UNI-001			Latitude	32.75463	Watershed: Hydrologic Unit	908
Location	69th Street & Boulevard Dr intersection			Longitude	117.04908	Hydrologic Area	908.2
				TB Page	1270-E4	Hydrologic Subarea (Optional)	908.22
Date	7/30/08	Time	10:20	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other tadpoles

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 16-18

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.7	NH_3-N (mg/L)	0.4	NO_3 (mg/L)	15.1	Ortho-PO_4 (mg/L)	0.3
pH (pH units)	7.8	TURB (NTU)	1.05	NO_3-N (mg/L)	3.41	Ortho-PO_4-P (mg/L)	0.10
COND (mS/cm)	2.95	MBAS (mg/L)	0.5	Do (mg/L)			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	96 ~~75~~	in
Depth	0.75	in
Velocity	10/12	ft/sec
Flow	187	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash
Dragonflies, tadpoles

Trash Assessment Form

SITE ID: 908-UNI-001 DATE: 07/30/08

LOCATION: 69th St & Boulvard Dr intersection TIME: 10:20

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	908-UNI-002			Latitude	32.75~~507~~ 498	Watershed	Hydrologic Unit: 908
Location	Harbison Ave & University Ave intersection, west sidewalk, east of CB Hair & Nails			Longitude	-117.04~~655~~ 639		Hydrologic Area: 908.2
				TB Page	1270-E4		Hydrologic Subarea (Optional): 908.22
Date	7/30/08	Time	11:25	Observer	MD, SD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	~~☑ None~~ SD 07/30/08	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other larvae

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 19-21

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.4	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	26.9	Ortho-PO_4 (mg/L)	1.0
pH (pH units)	7.9	TURB (NTU)	13.95	NO_3-N (mg/L)	6.08	Ortho-PO_4 -P (mg/L)	0.33
COND (mS/cm)	5.70	MBAS (mg/L)	0.76	Do (mg/L)	—		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	3	gpm				Flow		gpm

COMMENTS: -Trash- food wrappers, newspaper, aluminum can, receipts, plastic bag
-larvae

Trash Assessment Form

SITE ID: 908-UNI-002 DATE: 7/30/08

LOCATION: Harbison Ave & University Ave intersection, west sidewalk, east of CB Hair & Nail TIME: 11:25

OBSERVER: MD SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 8 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Total Coli + Entero

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	908-UN1-002-1		Latitude	32.76406	Watershed	Hydrologic Unit	908
Location	Between 4678 & 4688 Dover ~~St~~ Avenue, in street, prior to start of alley		Longitude	-117.04115		Hydrologic Area	908.2
			TB Page	1270-F3		Hydrologic Subarea (Optional)	908.22
Date	8/8/08	Time 15:35	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	~~☑ None~~	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other spiders

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4-P (mg/L)	
COND (mS/cm)		MBAS (mg/L)		Do (mg/L)			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For total coliforms & Enterococcus ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	908-UN1-002		Latitude	32.75498	Watershed	Hydrologic Unit	908
Location	Harbison Ave & University Ave intersection, west sidewalk, east of CB Hair & Nails		Longitude	-117.04639		Hydrologic Area	908.2
			TB Page	1270-E4		Hydrologic Subarea (Optional)	908.22
Date	08/08/08	Time 15:15	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.1	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.8	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	6.02	MBAS (mg/L)	na	Do (mg/L)	na		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: some trash

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	908-UNI-003		Latitude	32.75536	Watershed	Hydrologic Unit	908
Location	Along Lowell St, South of University Ave		Longitude	-117.03528		Hydrologic Area	908.2
			TB Page	1270-G4		Hydrologic Subarea (Optional)	908.22
Date	7/30/08	Time 12:10	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 22-23

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.5	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	17.7	Ortho-PO_4 (mg/L)	0.4
pH (pH units)	8.1	TURB (NTU)	0.45	NO_3-N (mg/L)	4.00	Ortho-PO_4-P (mg/L)	0.13
COND (mS/cm)	2.27	MBAS (mg/L)	0.25	Do (mg/L)	—		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	10	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash, leaf debris, spider webs

Trash Assessment Form

SITE ID: 908-UNI-003 DATE: 7/30/08

LOCATION: Along Lowell St. South of University Ave. TIME: 12:10

OBSERVER: MD SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

_____

_____

_____

_____

_____

_____

_____

_____

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	908-UN1-004		Latitude	32.76308	Watershed	Hydrologic Unit	908
Location	manhole approx at 7851 University Ave, along the south side of the street.		Longitude	117.02855		Hydrologic Area	908.2
			TB Page	1270-H3		Hydrologic Subarea (Optional)	908.22
Date	7/31/08	Time 9:15	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other spiders

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 29-30 (photos 31-32 were just upstream)

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.4	NH_3-N (mg/L)	0.2	NO_3 (mg/L)	6.9	Ortho-PO_4 (mg/L)	0.9
pH (pH units)	7.4	TURB (NTU)	2.39	NO_3-N (mg/L)	1.56	Ortho-PO_4-P (mg/L)	0.29
COND (mS/cm)	2.65	MBAS (mg/L)	0.5	Do (mg/L)	—		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: No trash

Trash Assessment Form

SITE ID: 908-UNI-004 **DATE:** 7/30/08

LOCATION: manhole approximately at 7851 University Ave, S. side of St **TIME:** 9:15

OBSERVER: SD, MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Total Coliforms ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	908-UNI-004		Latitude	32.76308	Watershed	Hydrologic Unit	908
Location	In front of 7851 University Ave, along the south side of the street		Longitude	-117.02855		Hydrologic Area	908.2
			TB Page	1270-H3		Hydrologic Subarea (Optional)	908.22
Date	08/08/08	Time 1430	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.9	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.7	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	2.61	MBAS (mg/L)	na	Do (mg/L)	na		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Total Calif.

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	908 UNI-004-1		Latitude	32.76617	Watershed	Hydrologic Unit	908
Location	Allison Ave, close to University Ave,		Longitude	-117.02422		Hydrologic Area	908.2
			TB Page	1270-H2		Hydrologic Subarea (Optional)	90822
Date	8/08/08	Time 1450	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	na	Do (mg/L)			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	2	gpm				Flow		gpm

COMMENTS: no trash

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	908-UNI-005		Latitude	32.75787	Watershed	Hydrologic Unit	908
Location	Rolando Park, in locked gated area by left field of baseball field		Longitude	-117.05260		Hydrologic Area	908.2
			TB Page	1270-E4		Hydrologic Subarea (Optional)	908.22
Date	7/29/08	Time 11:20	Observer	MD, SD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 1 - 2

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.3	NO_3 (mg/L)	25.8	Ortho-PO_4 (mg/L)	1.9
pH (pH units)	7.2	TURB (NTU)	3.23	NO_3-N (mg/L)	5.83	Ortho-PO_4-P (mg/L)	0.62
COND (mS/cm)	4.31	MBAS (mg/L)	0.5	Do (mg/L)	—		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: - Flow from two inlets: north & northwest
- No trash

Trash Assessment Form

SITE ID: 908-UNI-005 DATE: 7/29/08

LOCATION: Rolando Park, in locked gated area by (E) field of baseball field TIME: 1120

OBSERVER: MD, SD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Attachment 1

Historical Data Graphs:
San Diego River Watershed

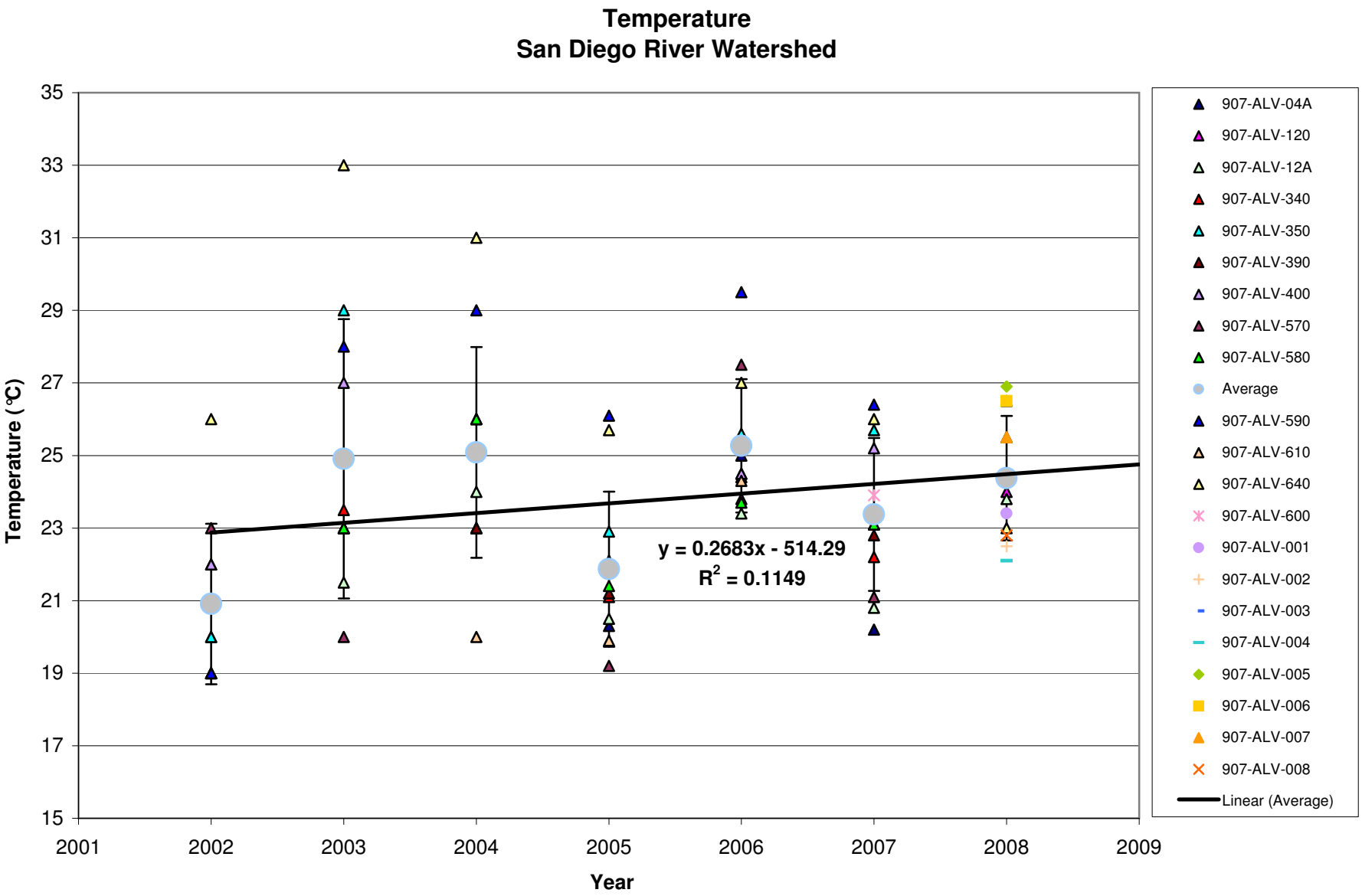
Temperature
San Diego River Watershed
Temperature (°C)
35
33
31
29
27
25
23
21
19
17
15
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 0.2683x - 514.29
R2 = 0.1149
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
Average
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

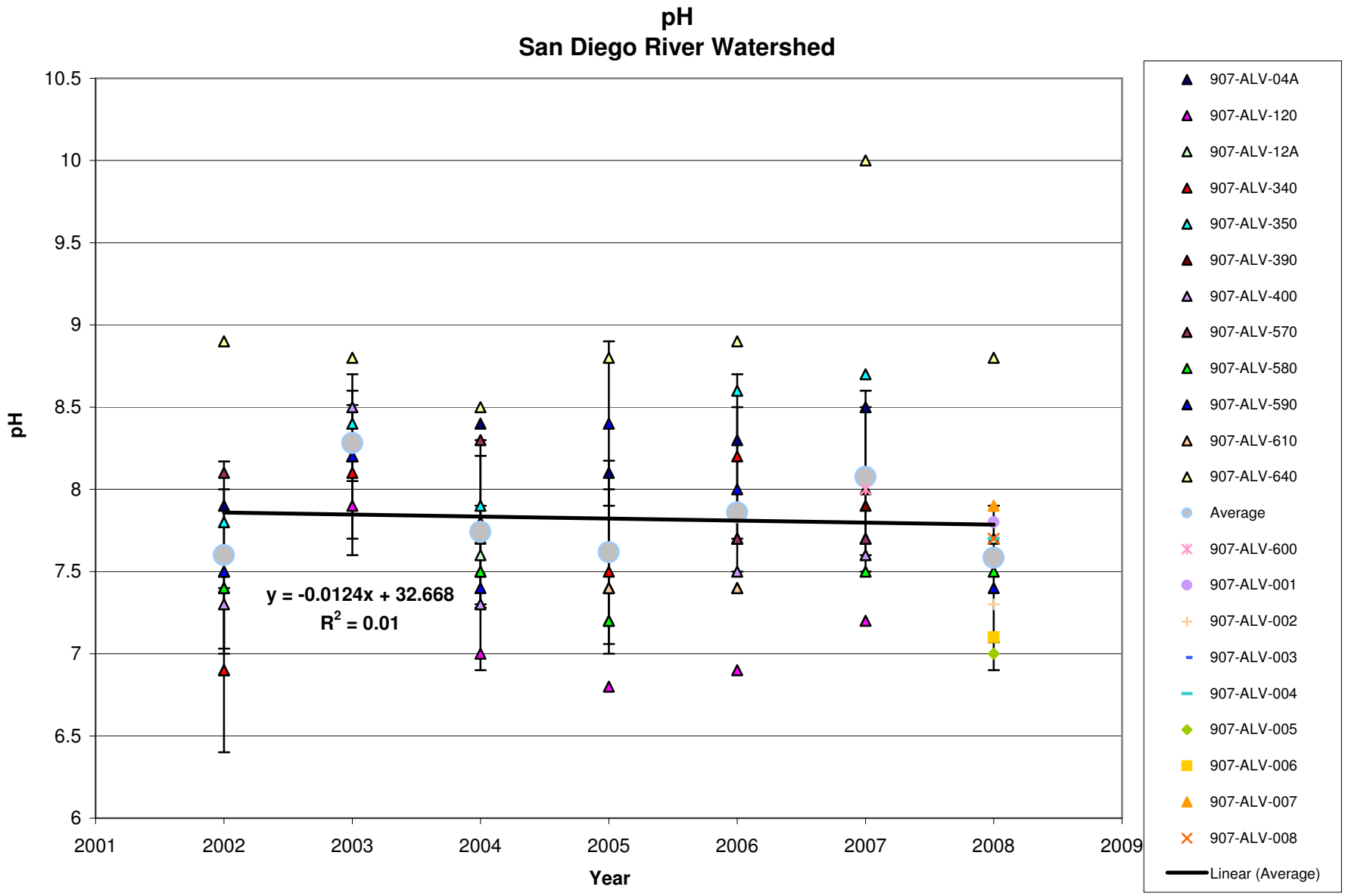
pH
San Diego River Watershed
10.5
10
9.5
9
8.5
8
7.5
7
6.5
6
pH
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = -0.0124x + 32.668
R2 = 0.01
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

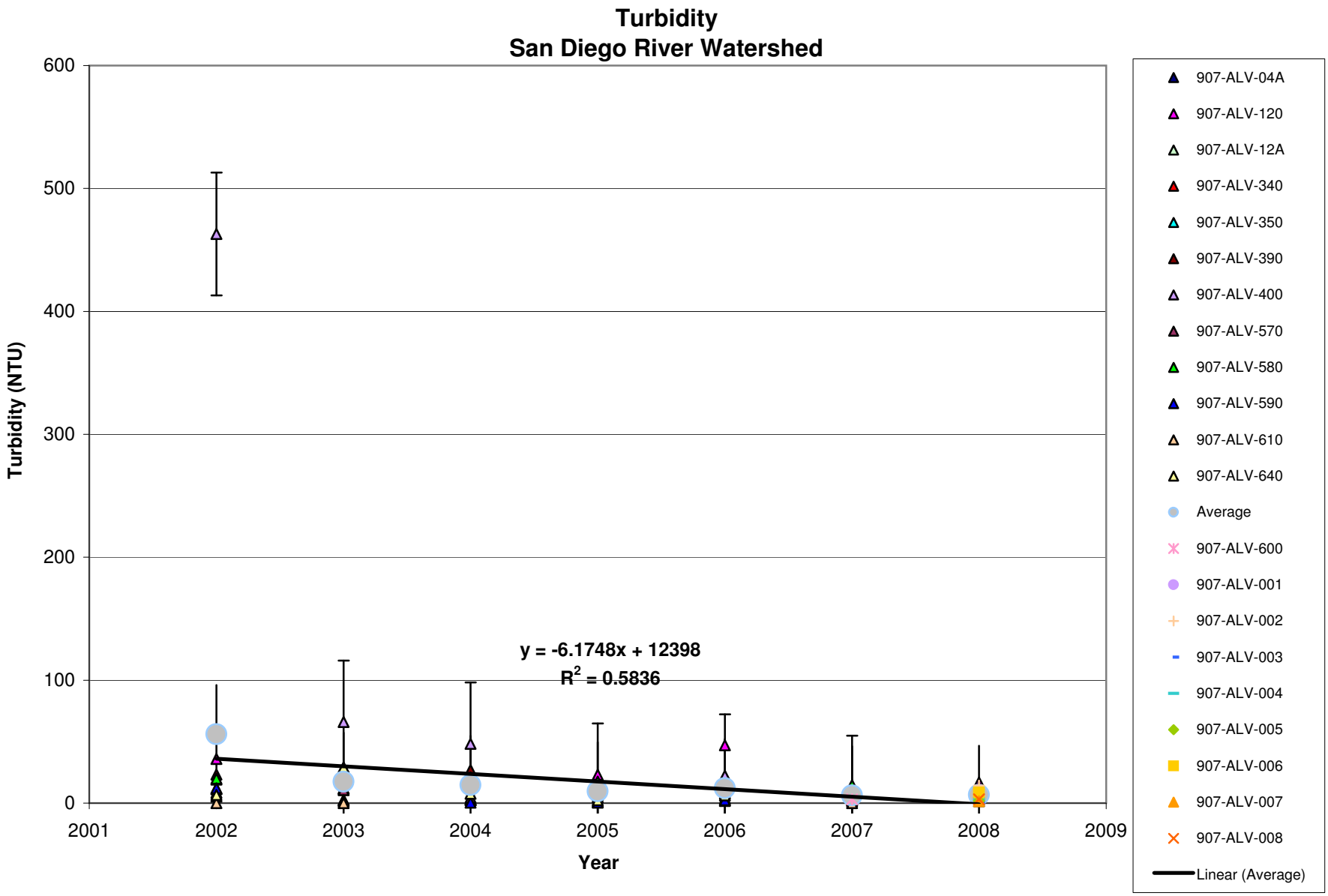
Turbidity
San Diego River Watershed
Turbidity (NTU)
600
500
400
300
200
100
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = -6.1748x + 12398
R2 = 0.5836
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

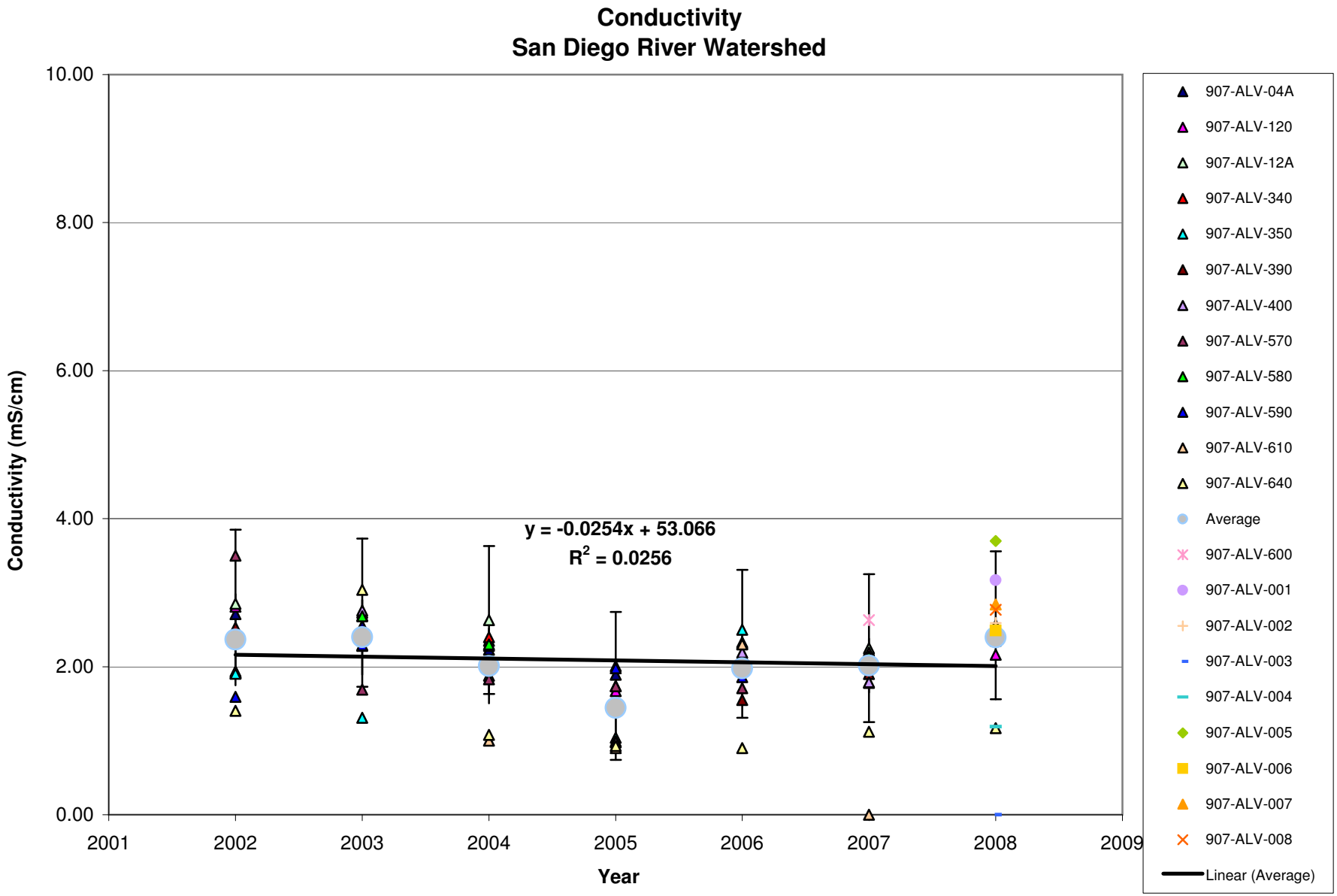
Conductivity
San Diego River Watershed
Conductivity (mS/cm)
10.00
8.00
6.00
4.00
2.00
0.00
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = -0.0254x + 53.066
R2 = 0.0256
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

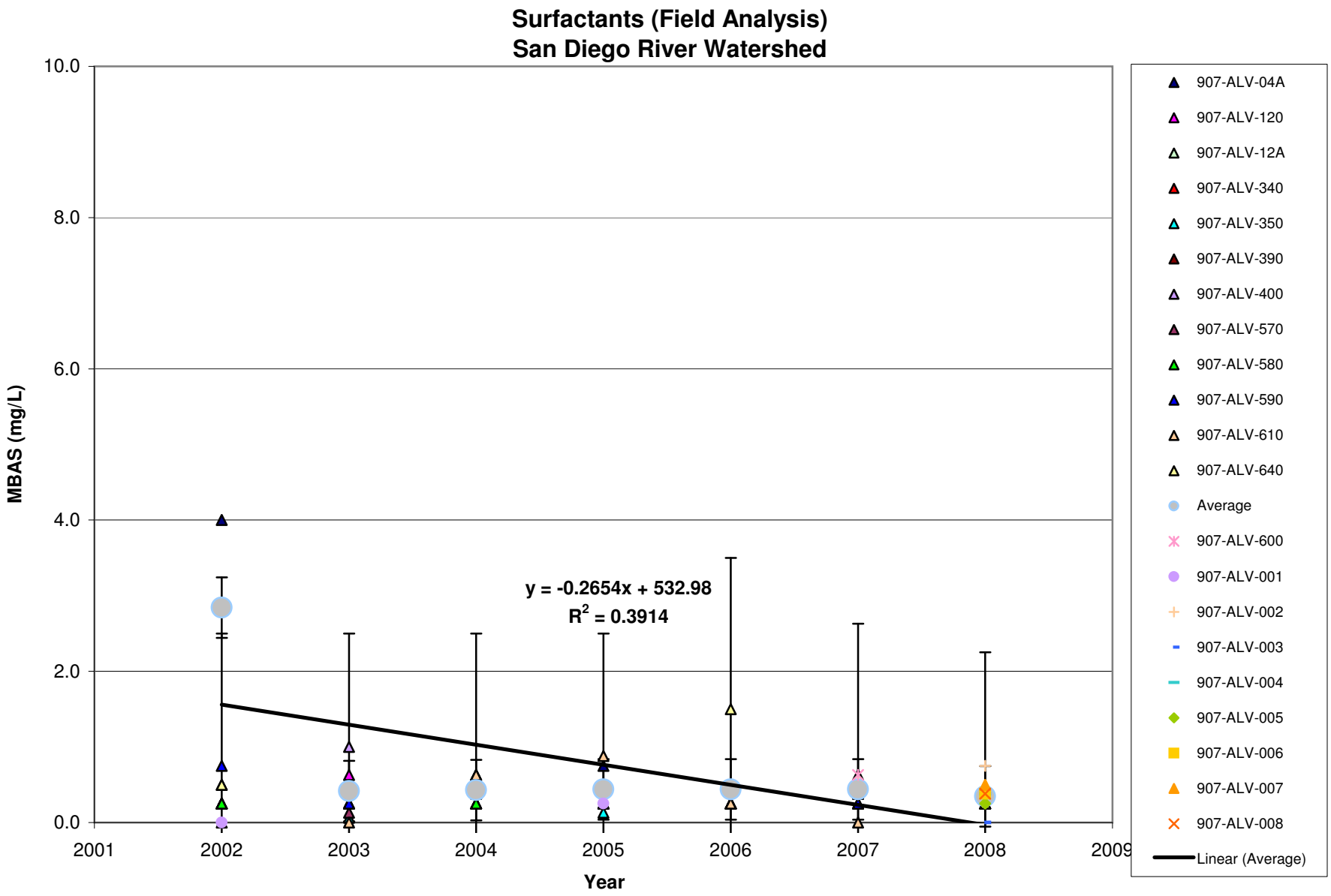
Surfactants (Field Analysis)
San Diego River Watershed
MBAS (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = -0.2654x + 532.98
R2 = 0.3914
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

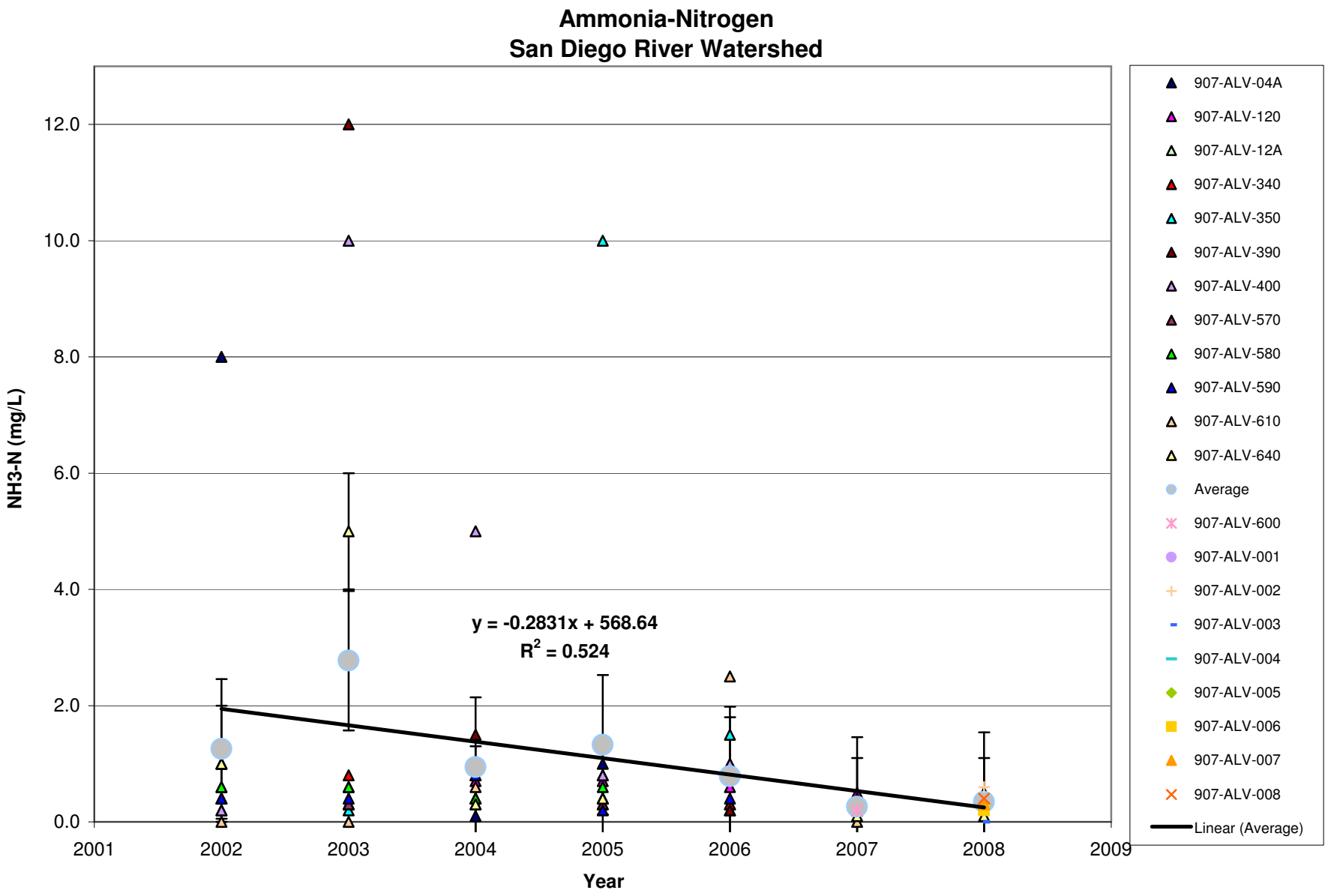
Ammonia-Nitrogen
San Diego River Watershed
NH3-N (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = -0.2831x + 568.64
R2 = 0.524
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

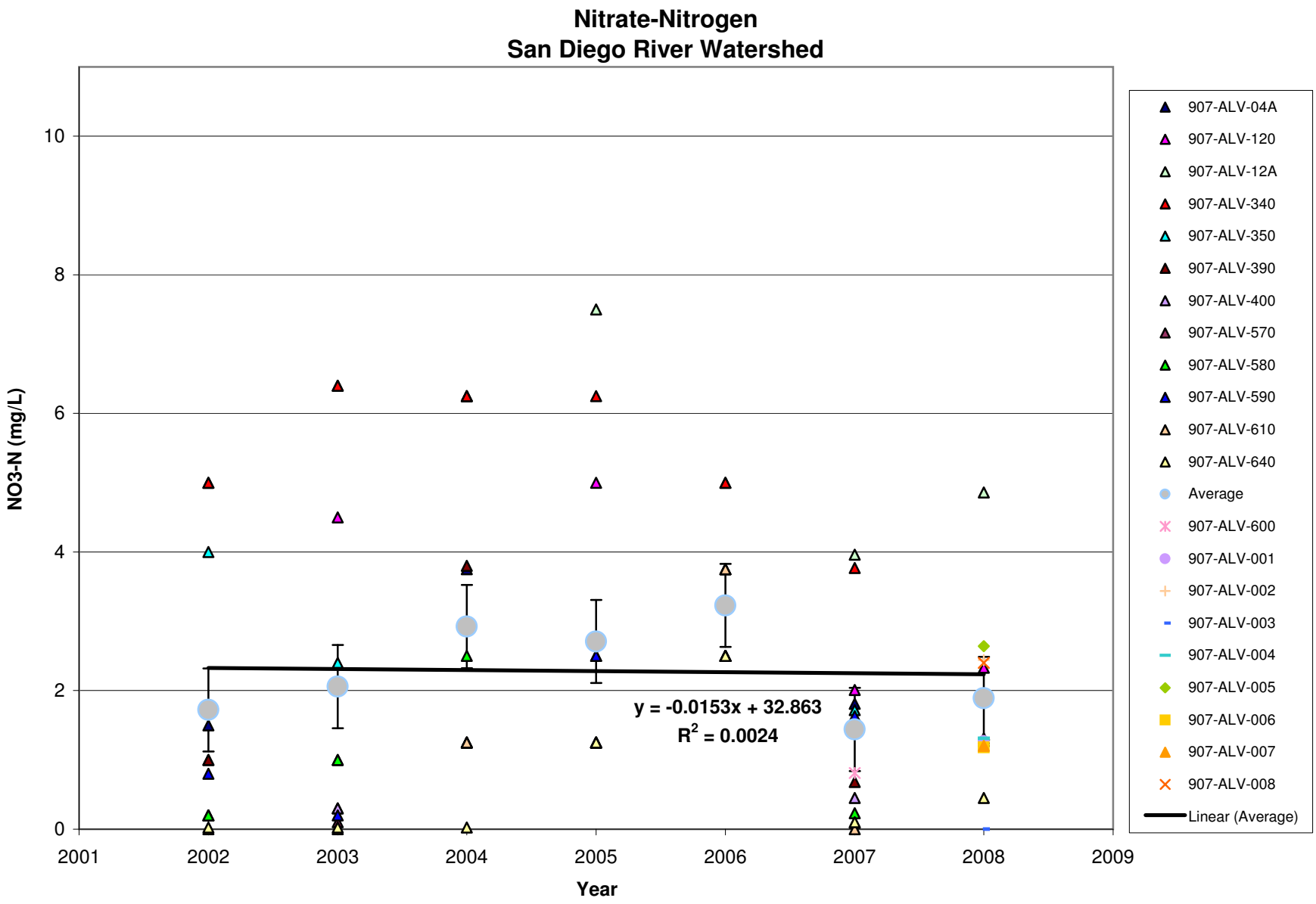
Nitrate-Nitrogen
San Diego River Watershed
NO3-N (mg/L)
Year
0
2
4
6
8
10
2001
2002
2003
2004
2005
2006
2007
2008
2009
y = -0.0153x + 32.863
R2 = 0.0024
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

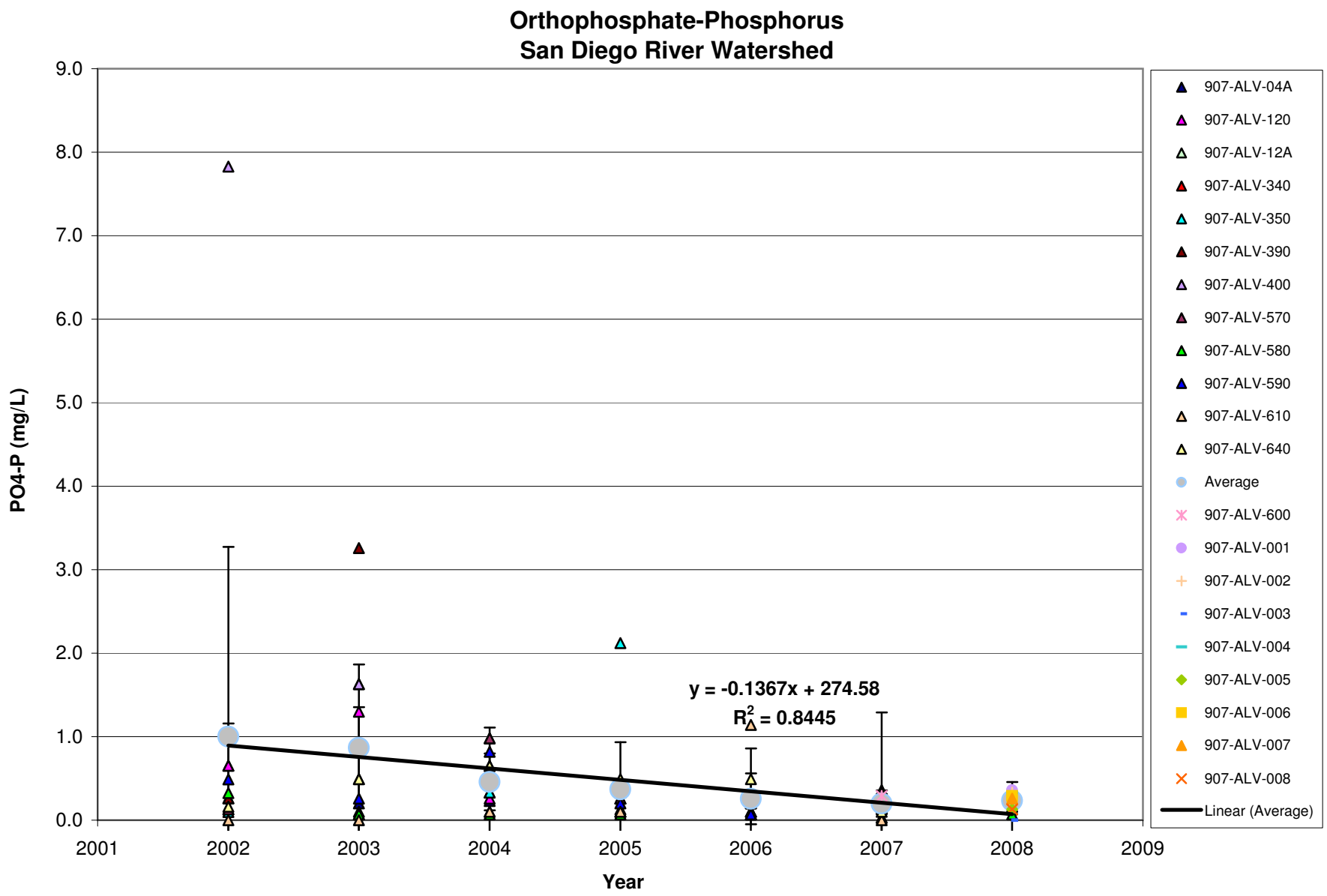
Orthophosphate-Phosphorus
San Diego River Watershed
PO4-P (mg/L)
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = -0.1367x + 274.58
R2 = 0.8445
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

Surfactants (Laboratory Analysis)
San Diego River Watershed

Note: All "nd" values have been plotted as 0.25 mg/L, which equals (reporting limit)/2. The last year of surfactants laboratory analyses was 2007.

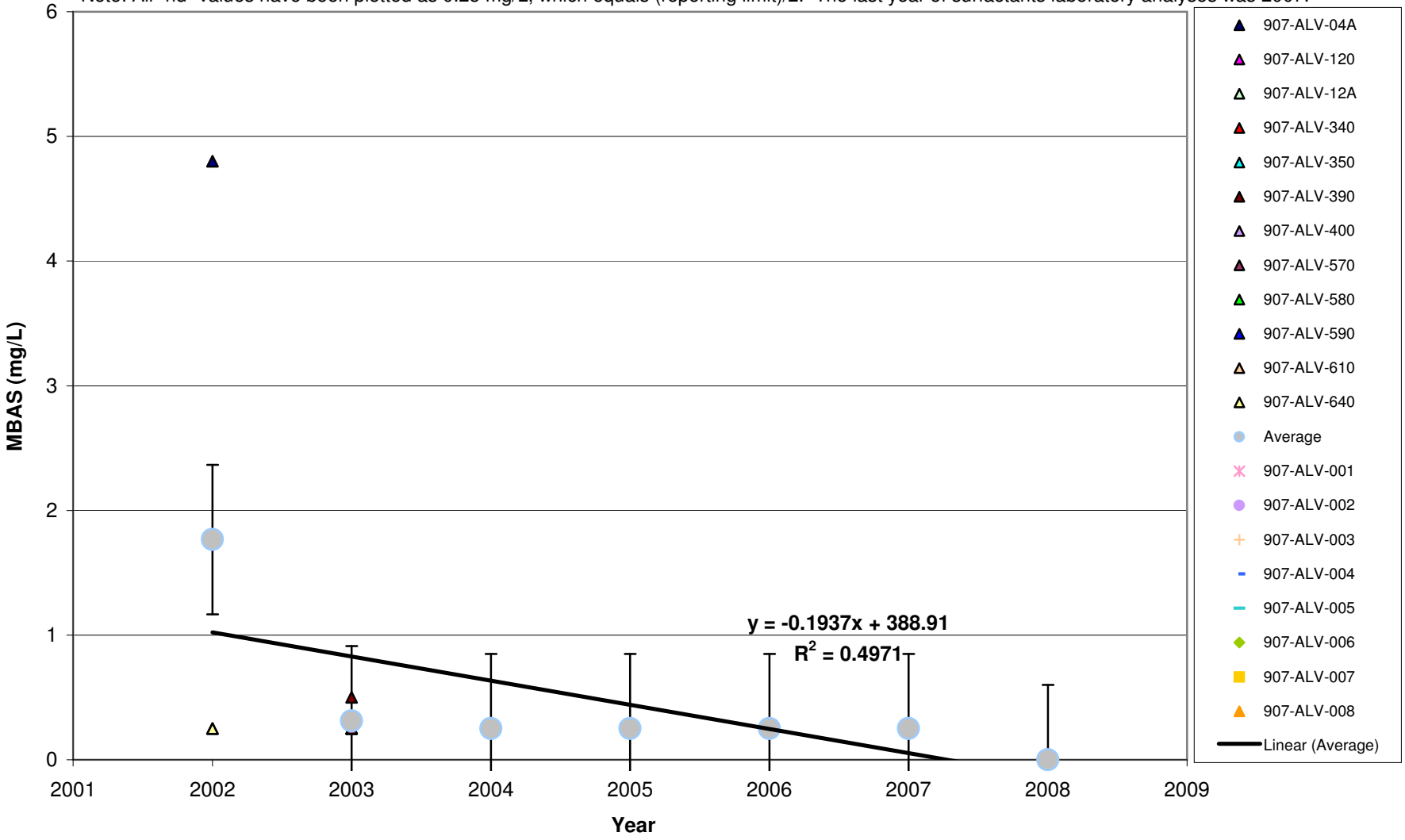

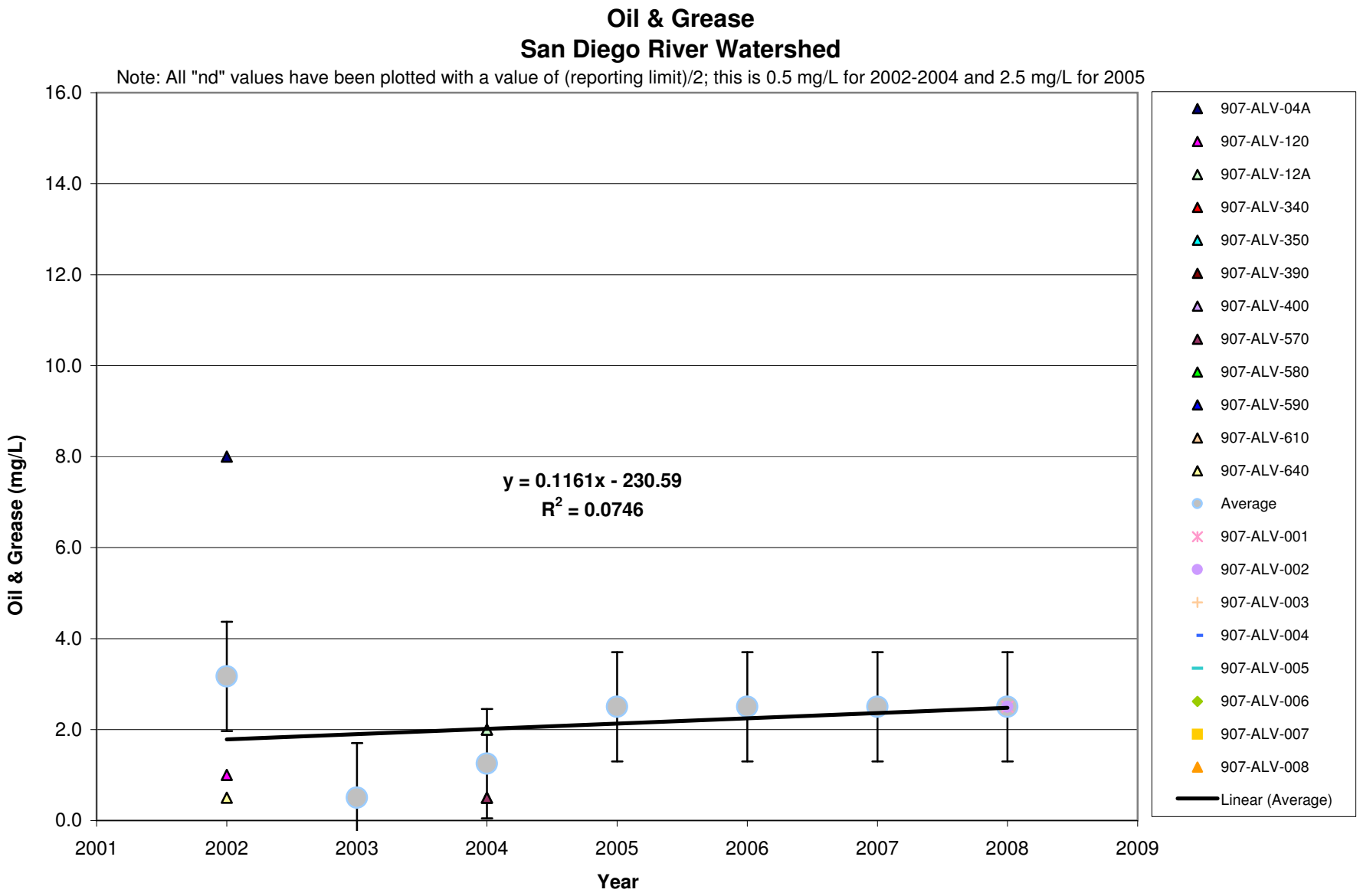
Oil & Grease
San Diego River Watershed
Note: All "nd" values have been plotted with a value of (reporting limit)/2; this is 0.5 mg/L for 2002-2004 and 2.5 mg/L for 2005
Oil & Grease (mg/L)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 0.1161x - 230.59
R2 = 0.0746
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

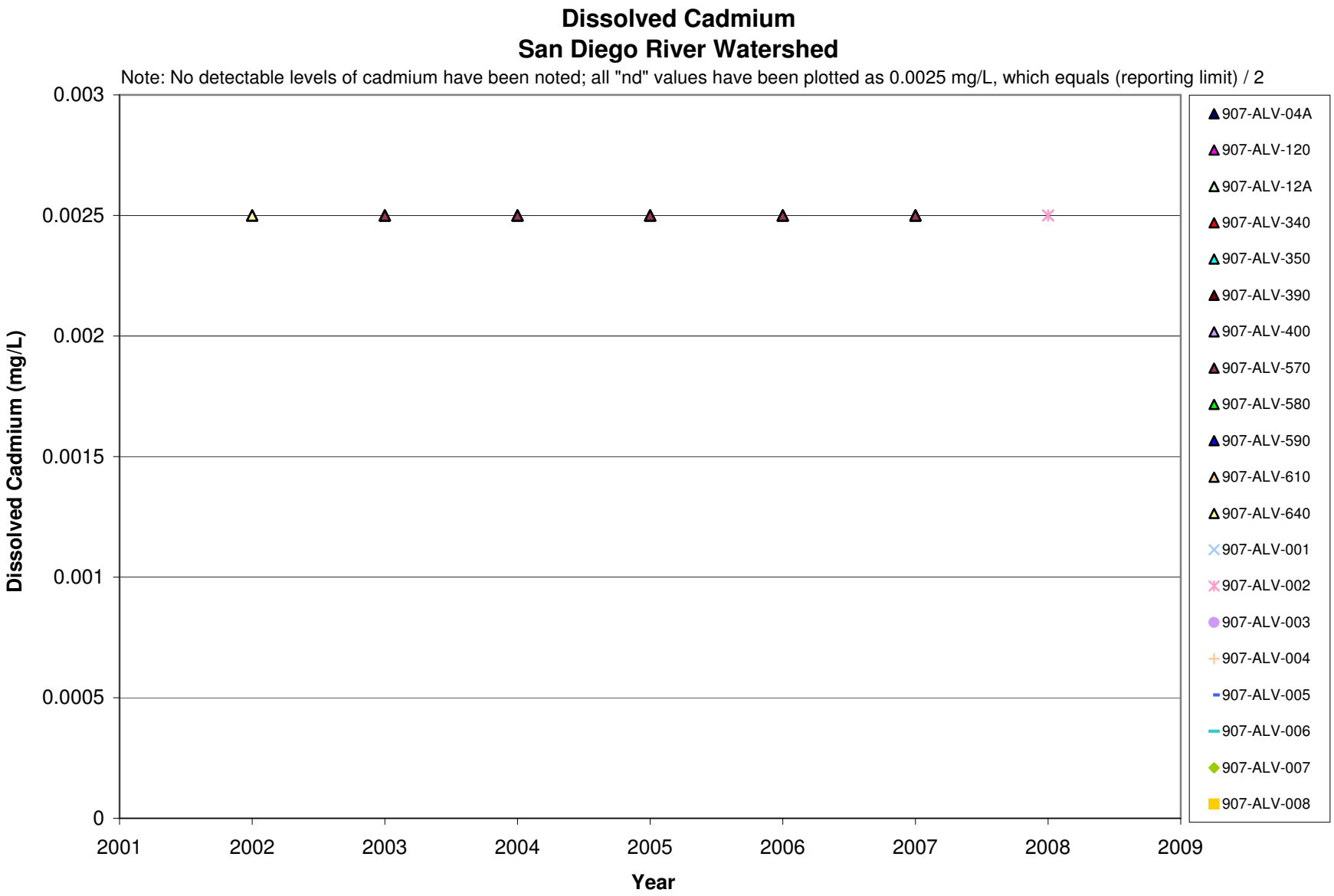
Dissolved Cadmium
San Diego River Watershed
Note: No detectable levels of cadmium have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit) / 2
Dissolved Cadmium (mg/L)
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-001
907-ALV-002
907-ALV-003
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907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008

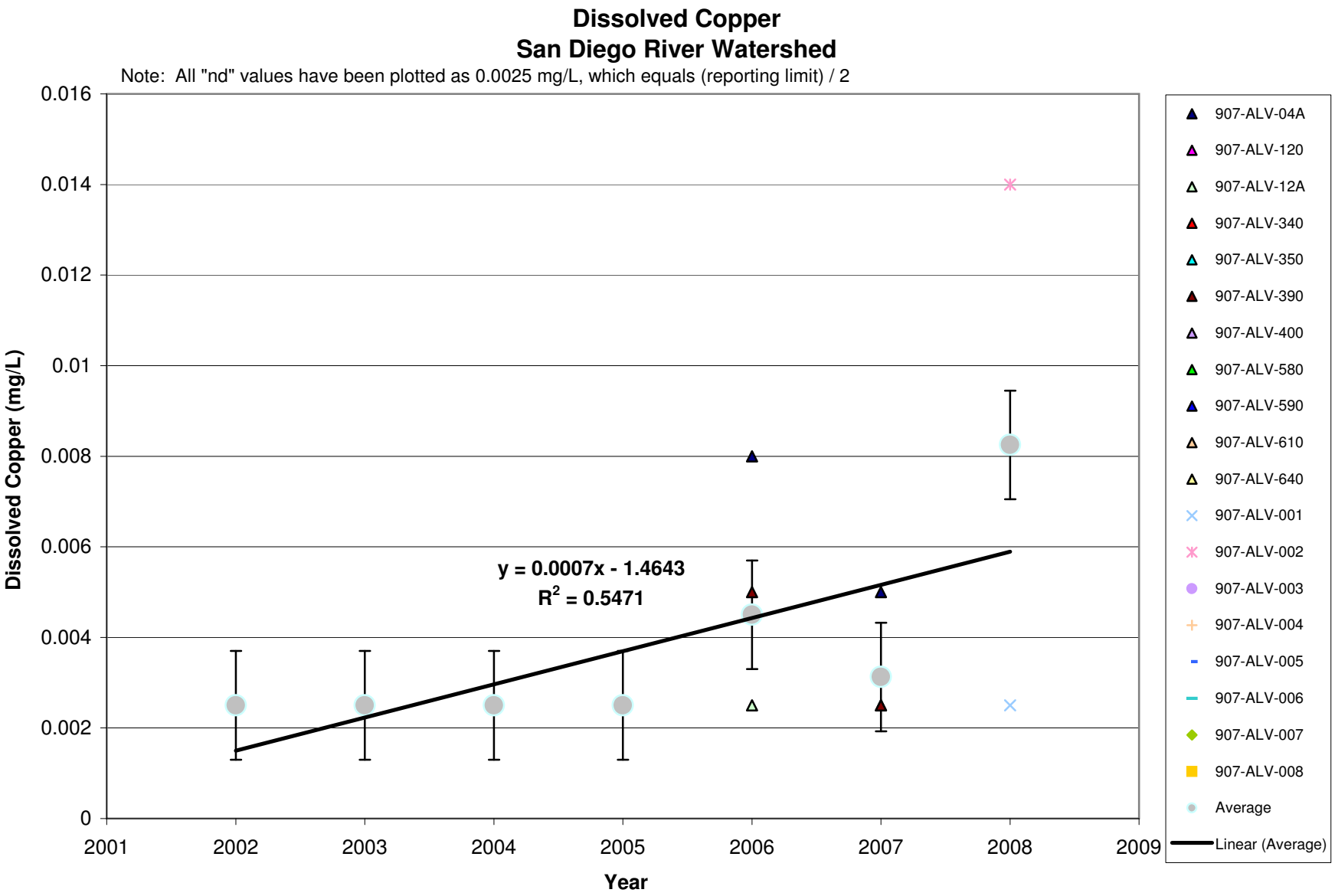
Dissolved Copper
San Diego River Watershed
Note: All "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit) / 2
Dissolved Copper (mg/L)
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 0.0007x - 1.4643
R2 = 0.5471
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Average
Linear (Average)

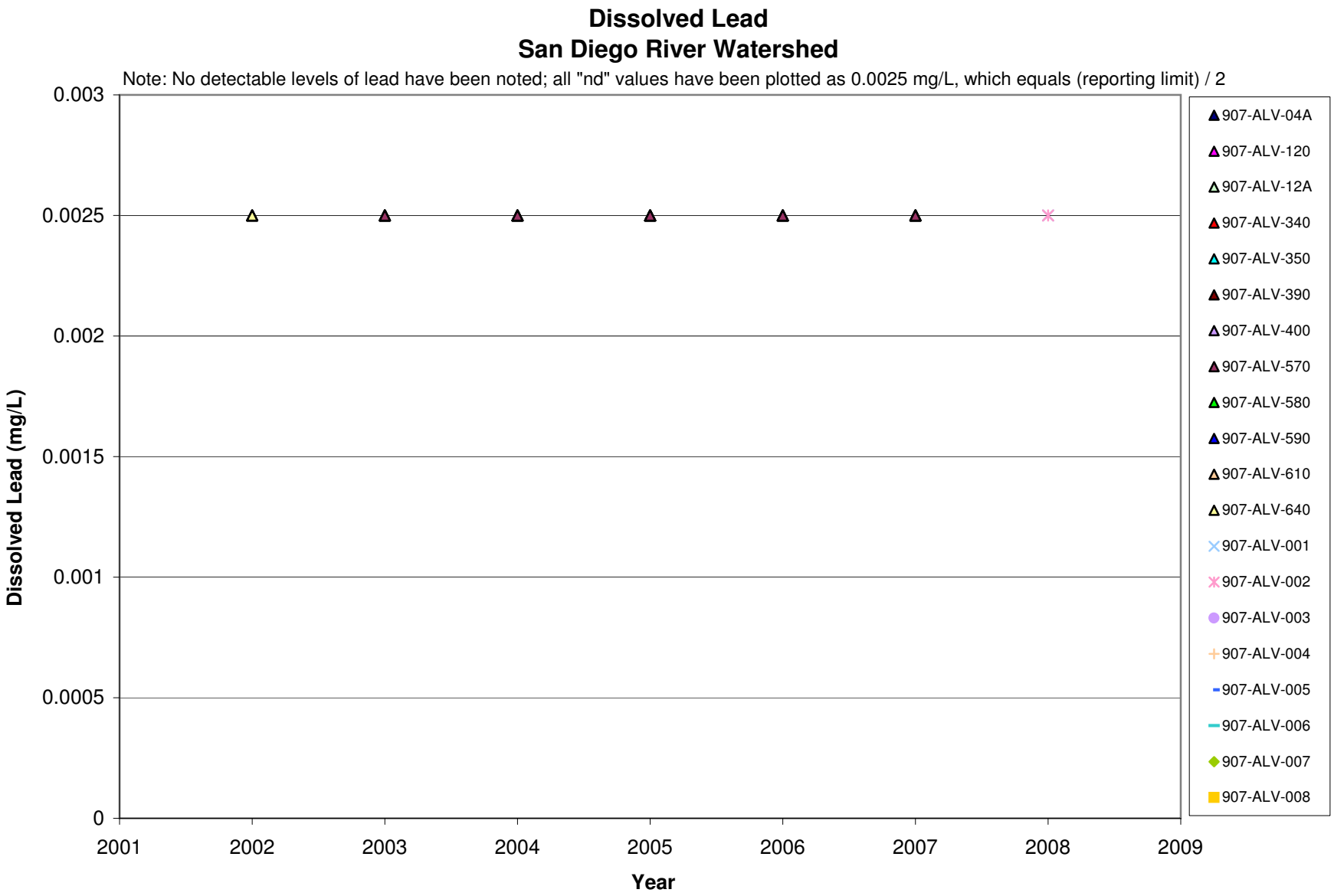
Dissolved Lead
San Diego River Watershed
Note: No detectable levels of lead have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit) / 2
Dissolved Lead (mg/L)
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-001
907-ALV-002
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907-ALV-007
907-ALV-008

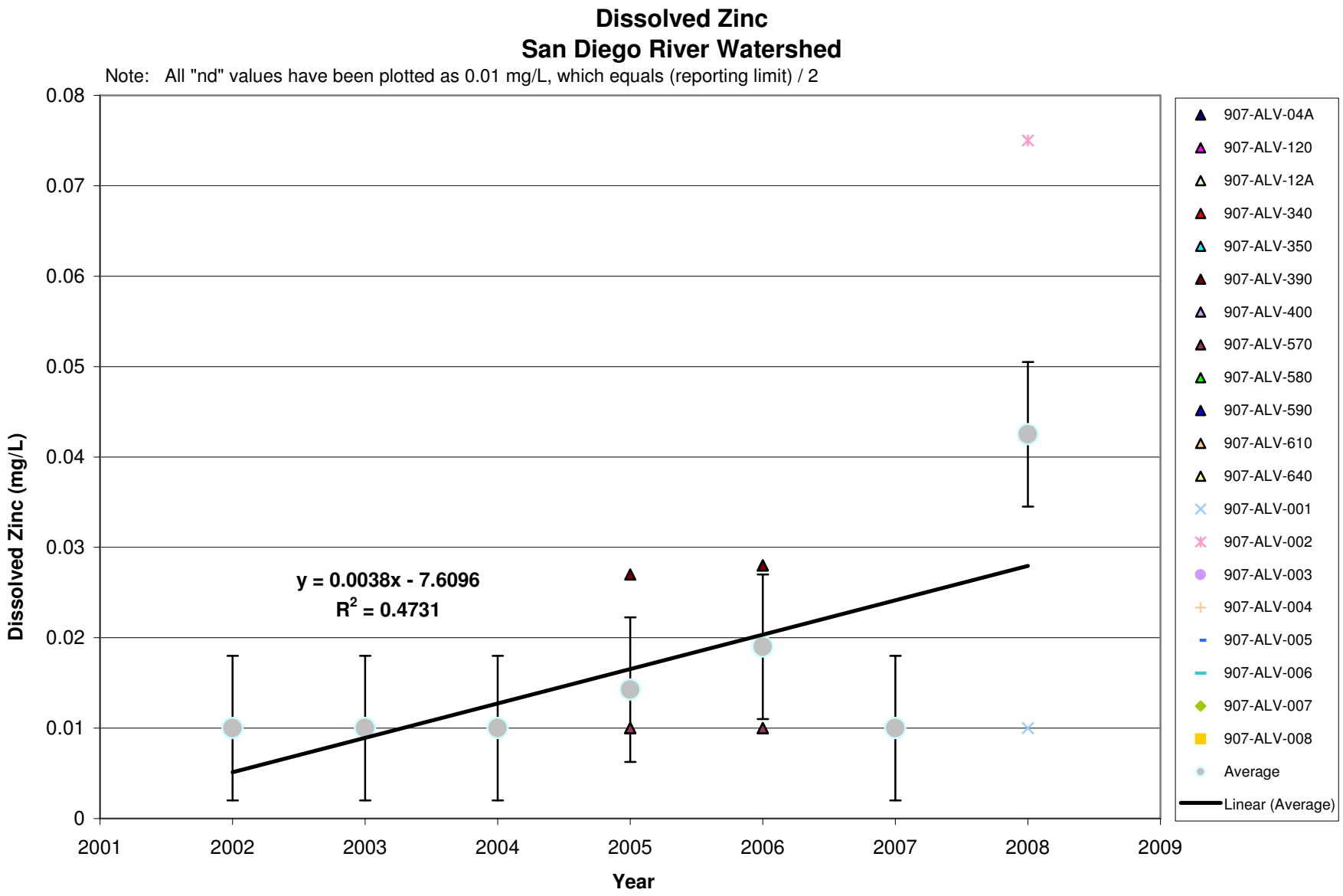
Dissolved Zinc
San Diego River Watershed
Note: All "nd" values have been plotted as 0.01 mg/L, which equals (reporting limit) / 2
Dissolved Zinc (mg/L)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 0.0038x - 7.6096
R2 = 0.4731
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Average
Linear (Average)

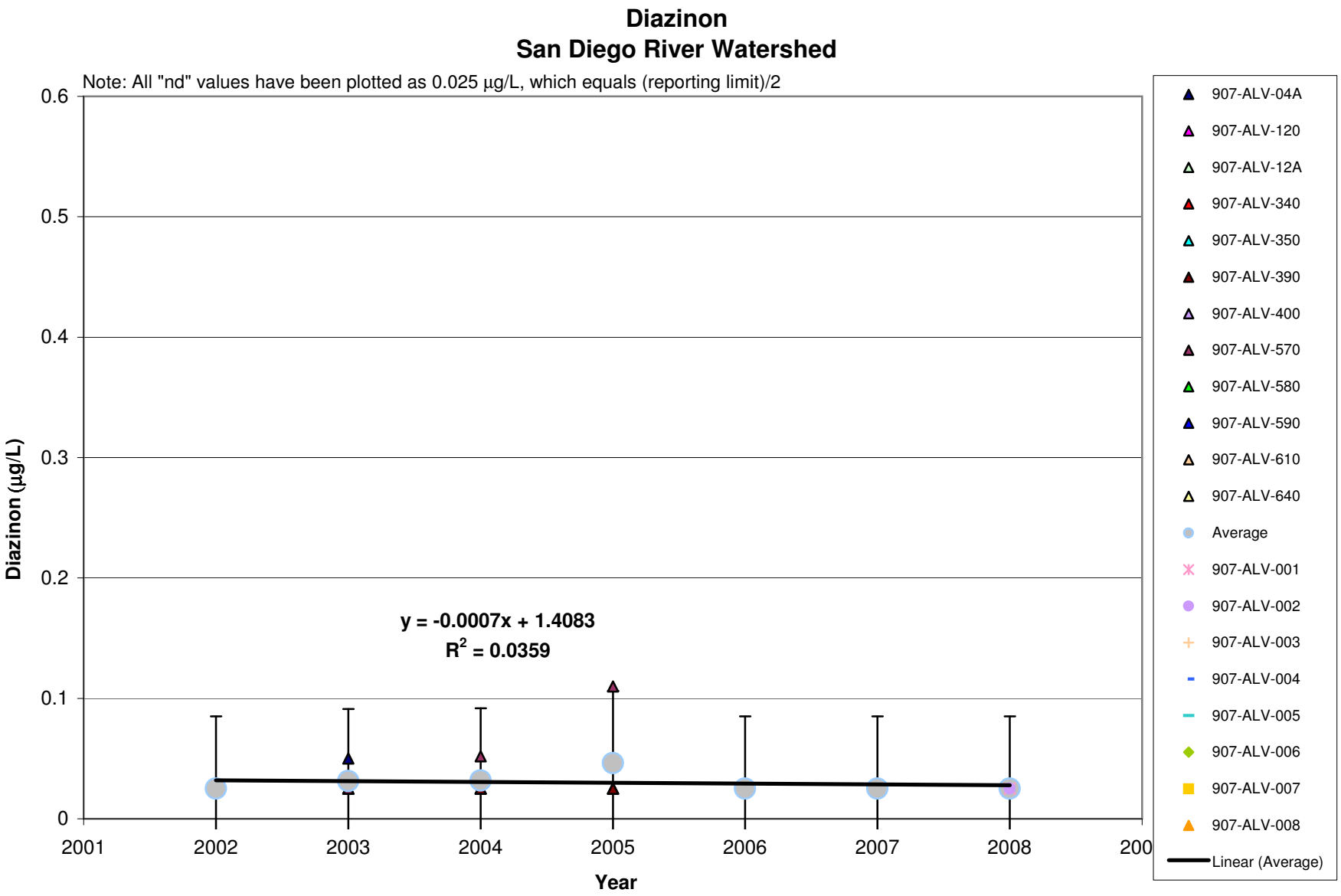
Diazinon
San Diego River Watershed
Note: All "nd" values have been plotted as 0.025 µg/L, which equals (reporting limit)/2
Diazinon (µg/L)
0.6
0.5
0.4
0.3
0.2
0.1
0
2001
2002
2003
2004
2005
2006
2007
2008
200
Year
y = -0.0007x + 1.4083
R2 = 0.0359
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

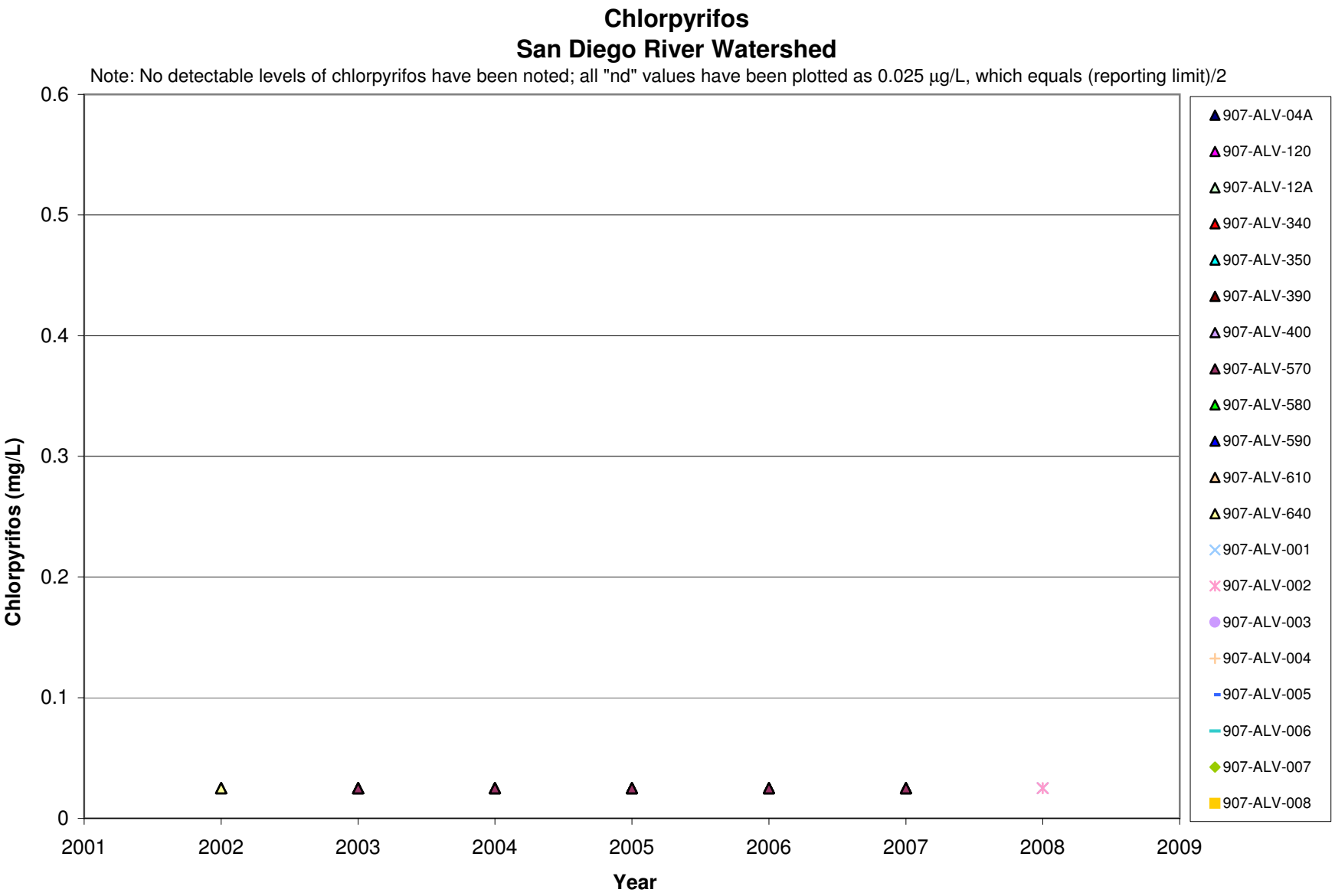
Chlorpyrifos
San Diego River Watershed
Note: No detectable levels of chlorpyrifos have been noted; all "nd" values have been plotted as 0.025 µg/L, which equals (reporting limit)/2
Chlorpyrifos (mg/L)
0.6
0.5
0.4
0.3
0.2
0.1
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008

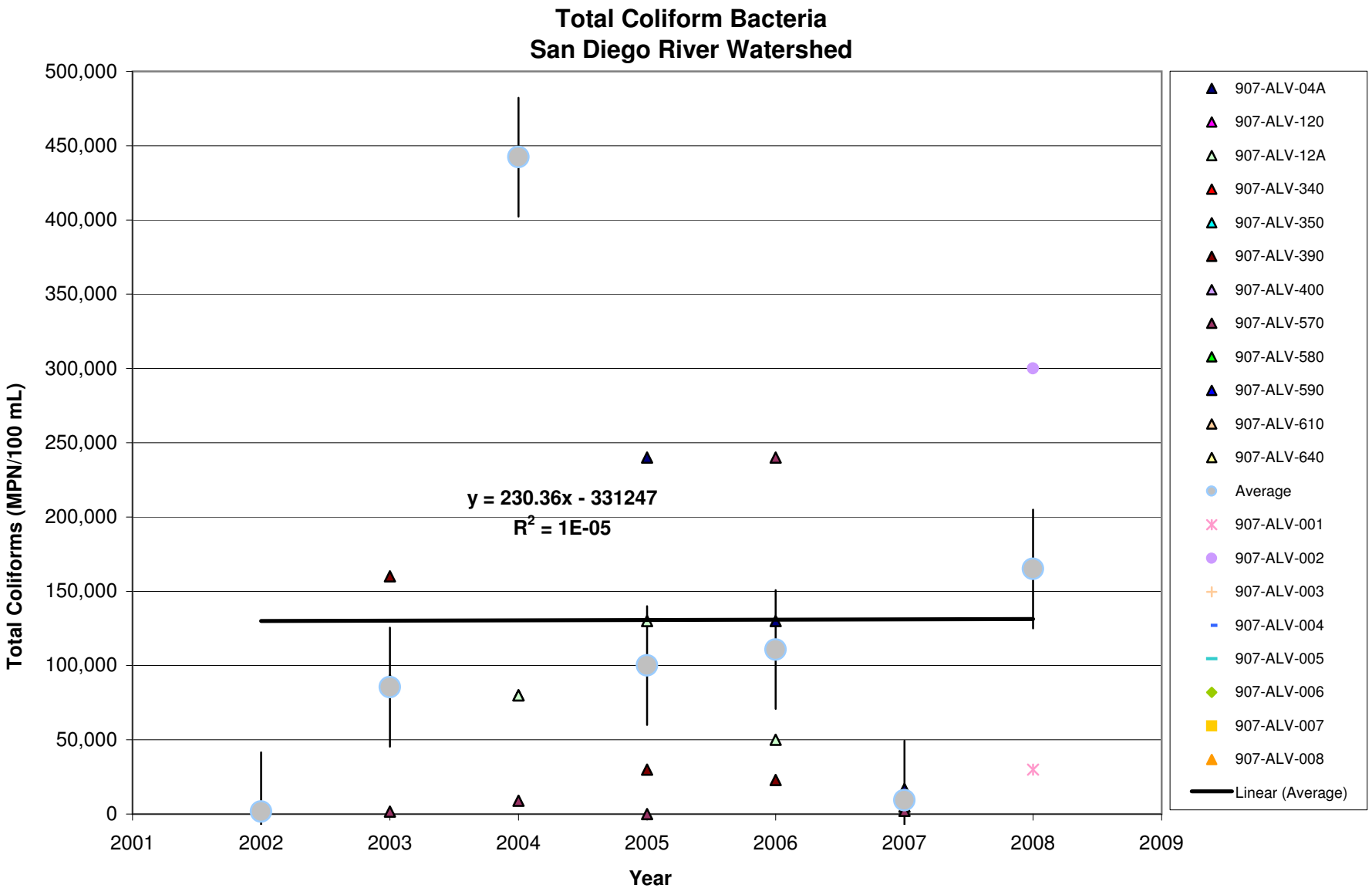
Total Coliform Bacteria
San Diego River Watershed
Total Coliforms (MPN/100 mL)
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 230.36x - 331247
R2 = 1E-05
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

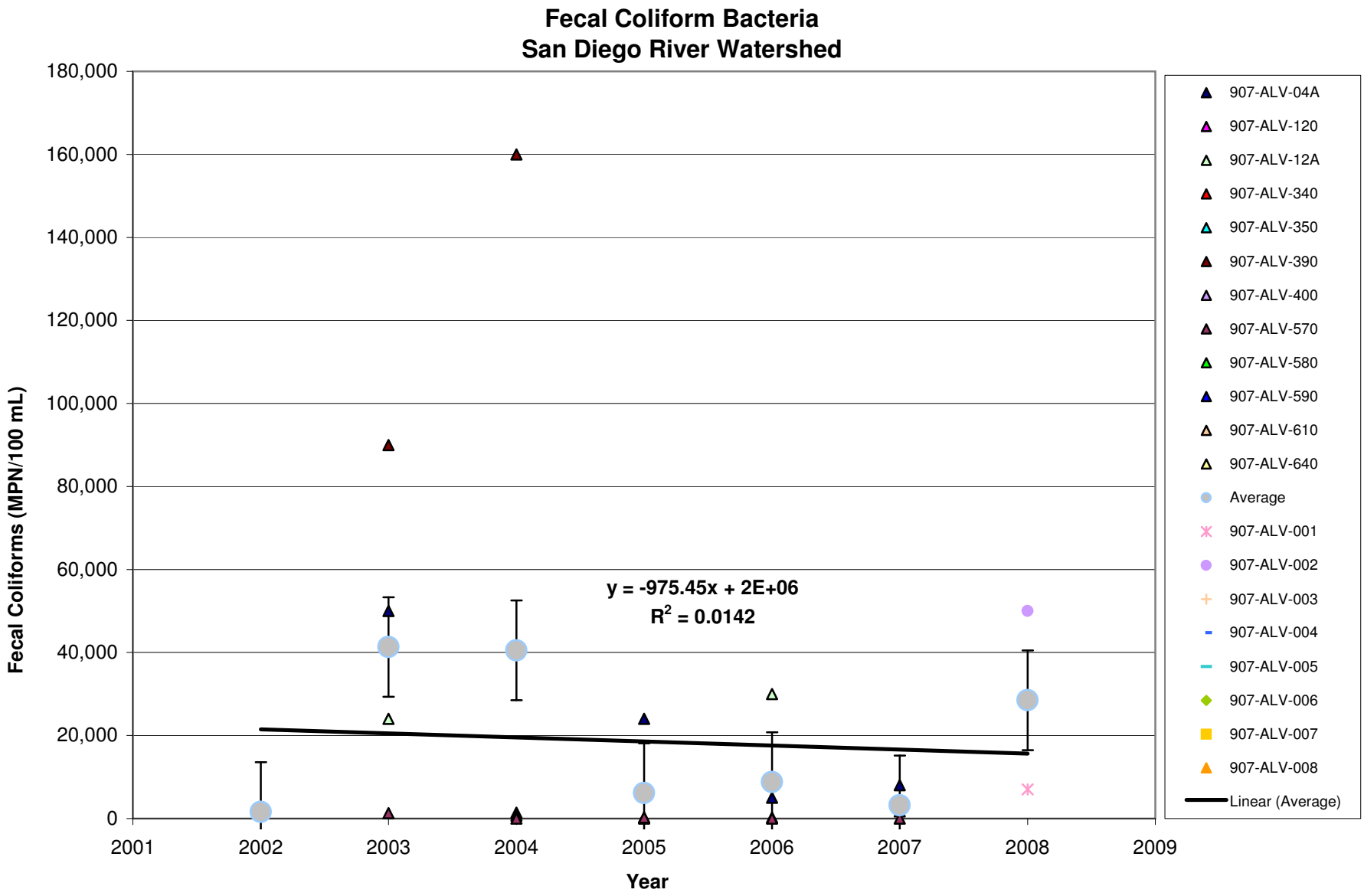
Fecal Coliform Bacteria
San Diego River Watershed
Fecal Coliforms (MPN/100 mL)
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = -975.45x + 2E+06
R2 = 0.0142
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

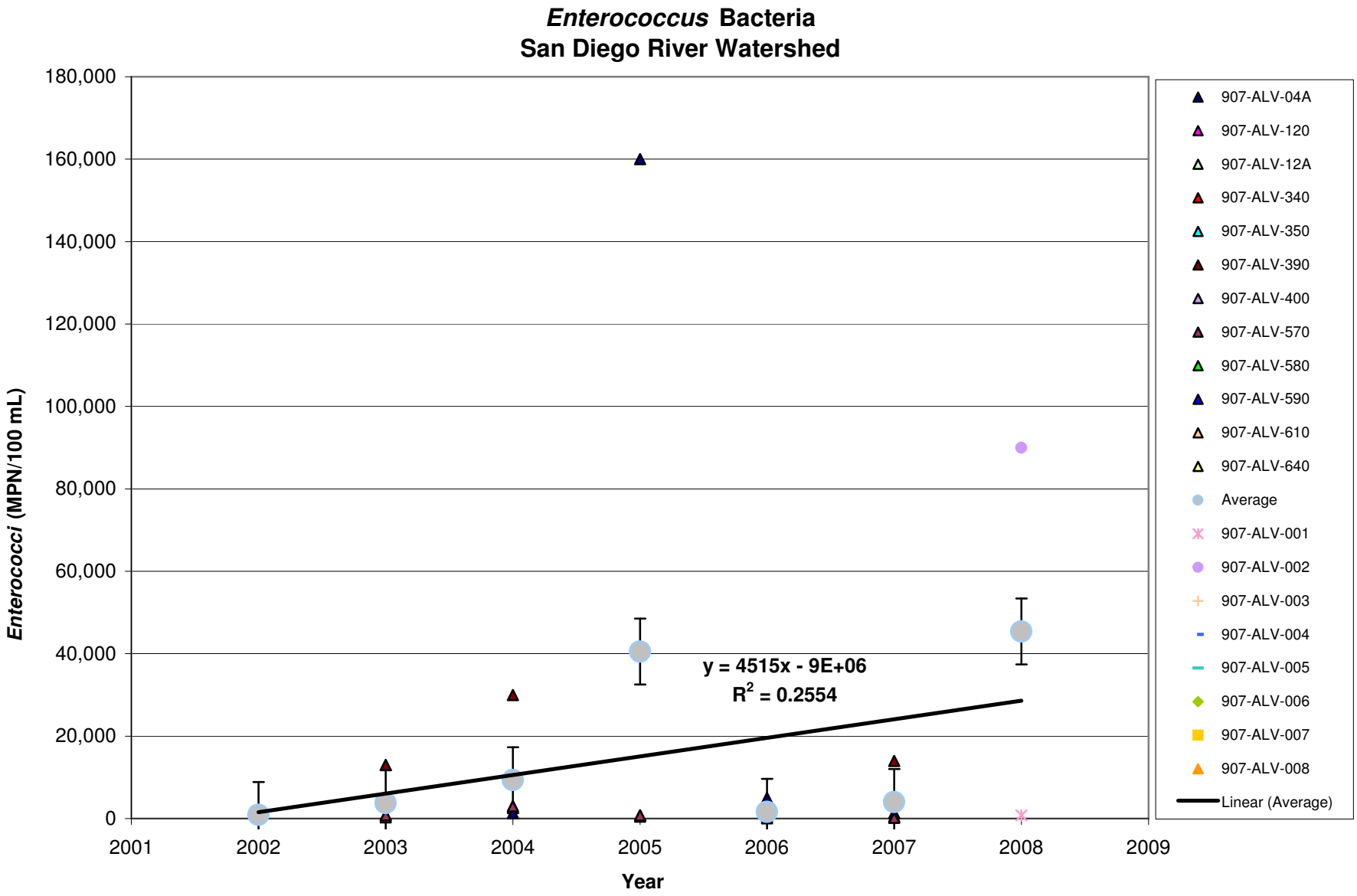
Enterococcus Bacteria
San Diego River Watershed
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Enterococci (MPN/100 mL)
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 4515x - 9E+06
R^2 = 0.2554
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

Attachment 2

Historical Data Graphs:
San Diego Bay Watershed

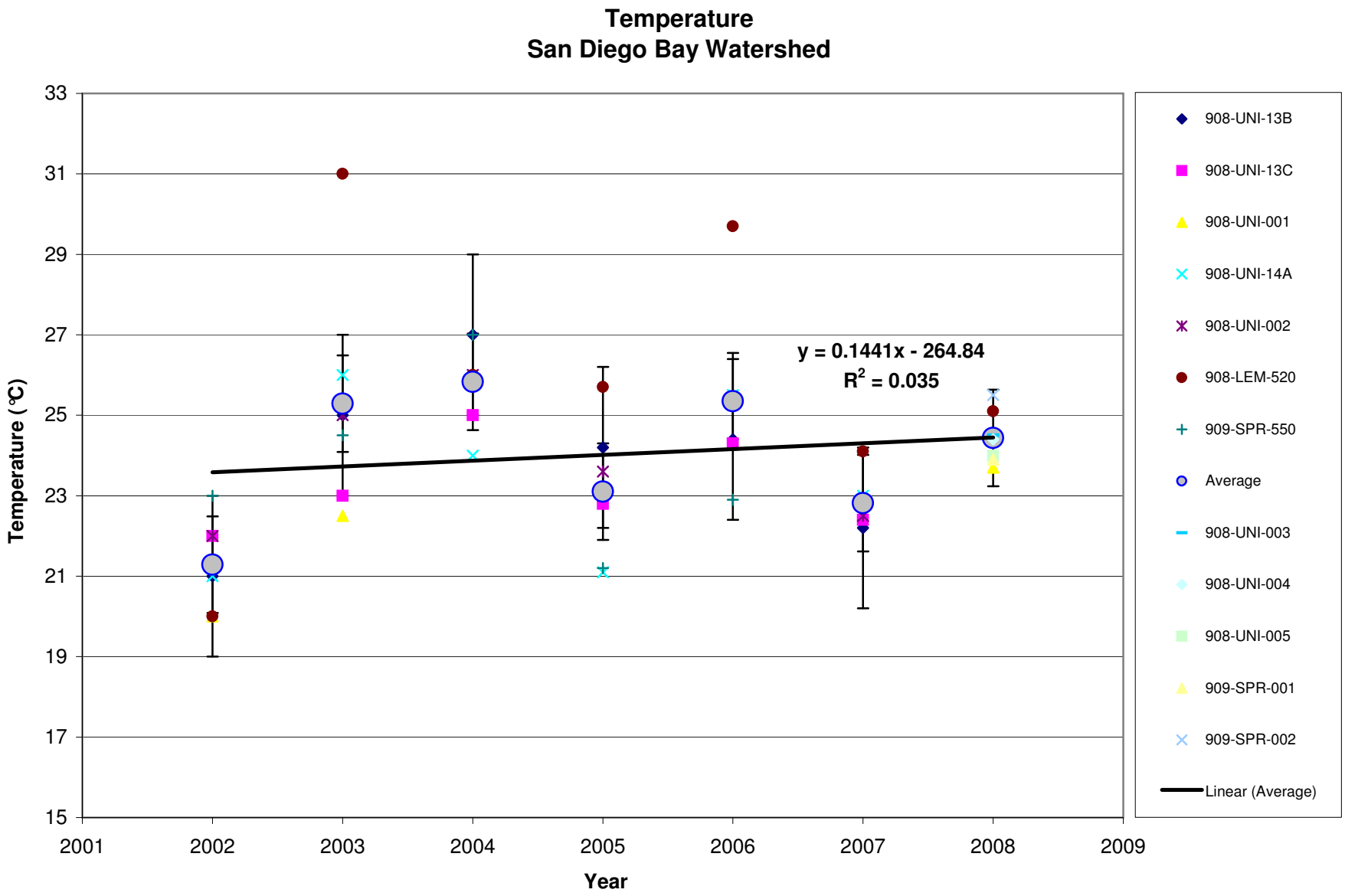
Temperature
San Diego Bay Watershed
Temperature (°C)
33
31
29
27
25
23
21
19
17
15
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 0.1441x - 264.84
R2 = 0.035
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

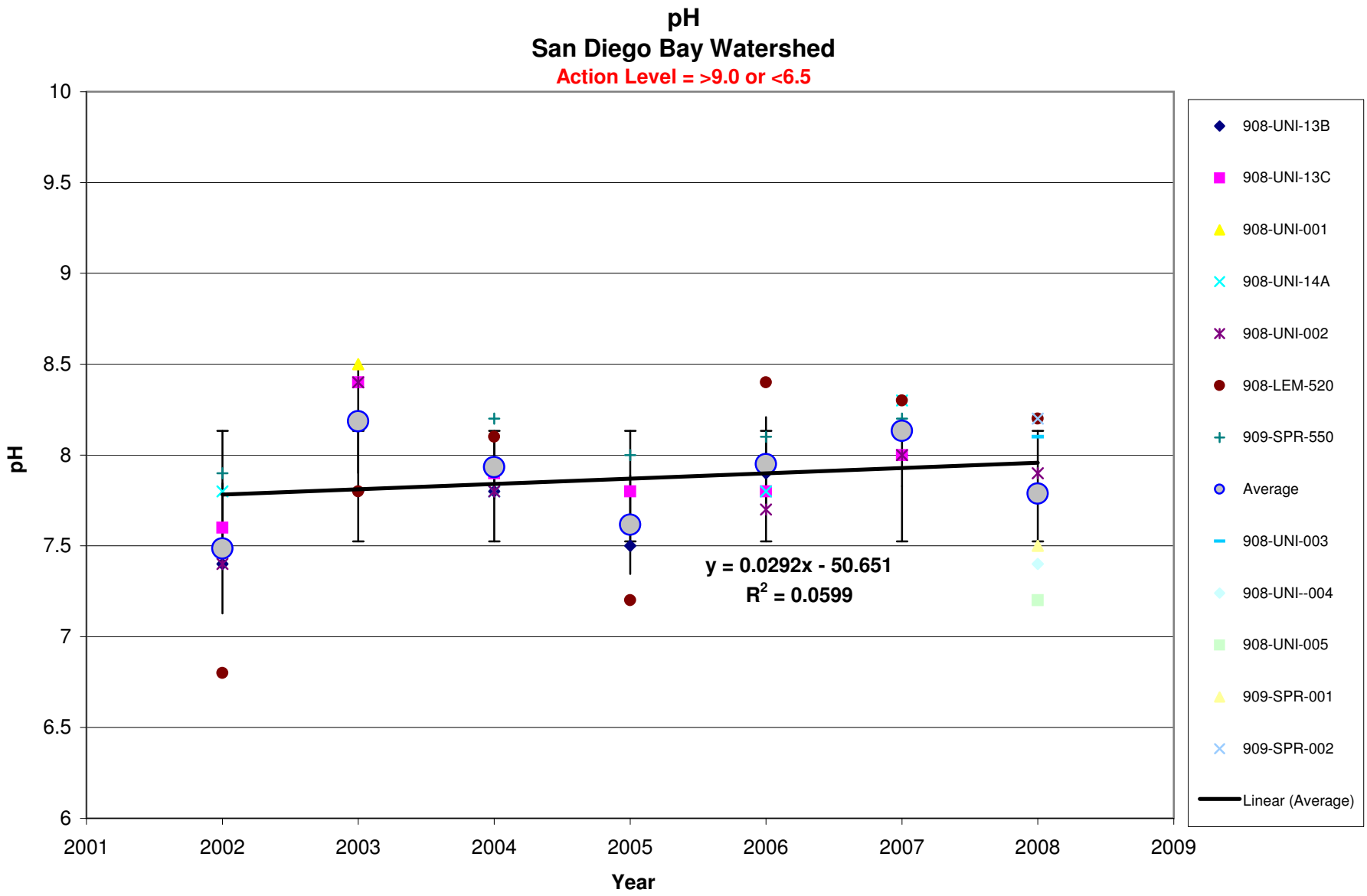
pH
San Diego Bay Watershed
Action Level = >9.0 or <6.5
10
9.5
9
8.5
8
7.5
7
6.5
6
pH
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 0.0292x - 50.651
R2 = 0.0599
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI--004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

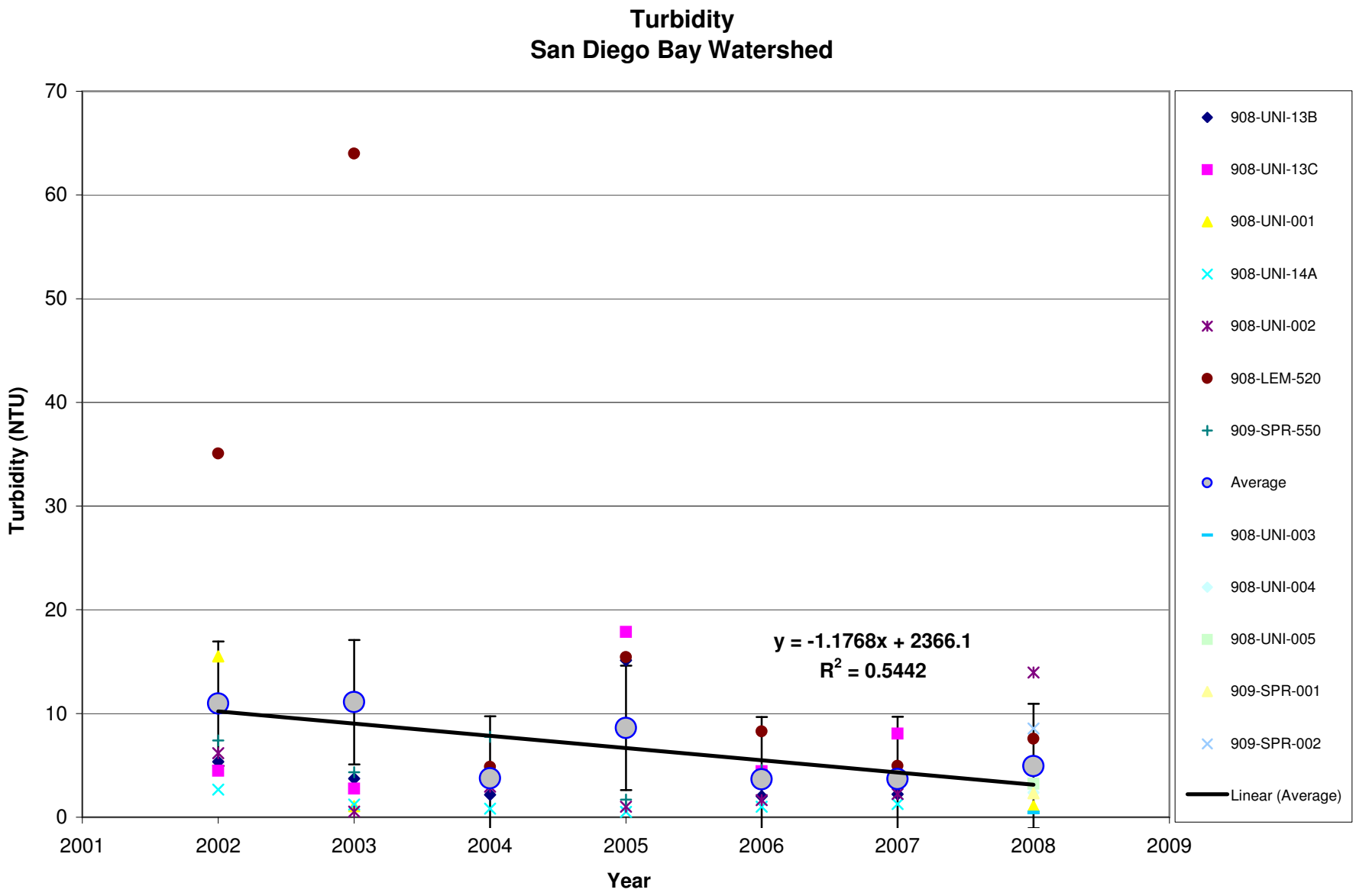
Turbidity
San Diego Bay Watershed
Turbidity (NTU)
Year
70
60
50
40
30
20
10
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
y = -1.1768x + 2366.1
R2 = 0.5442
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

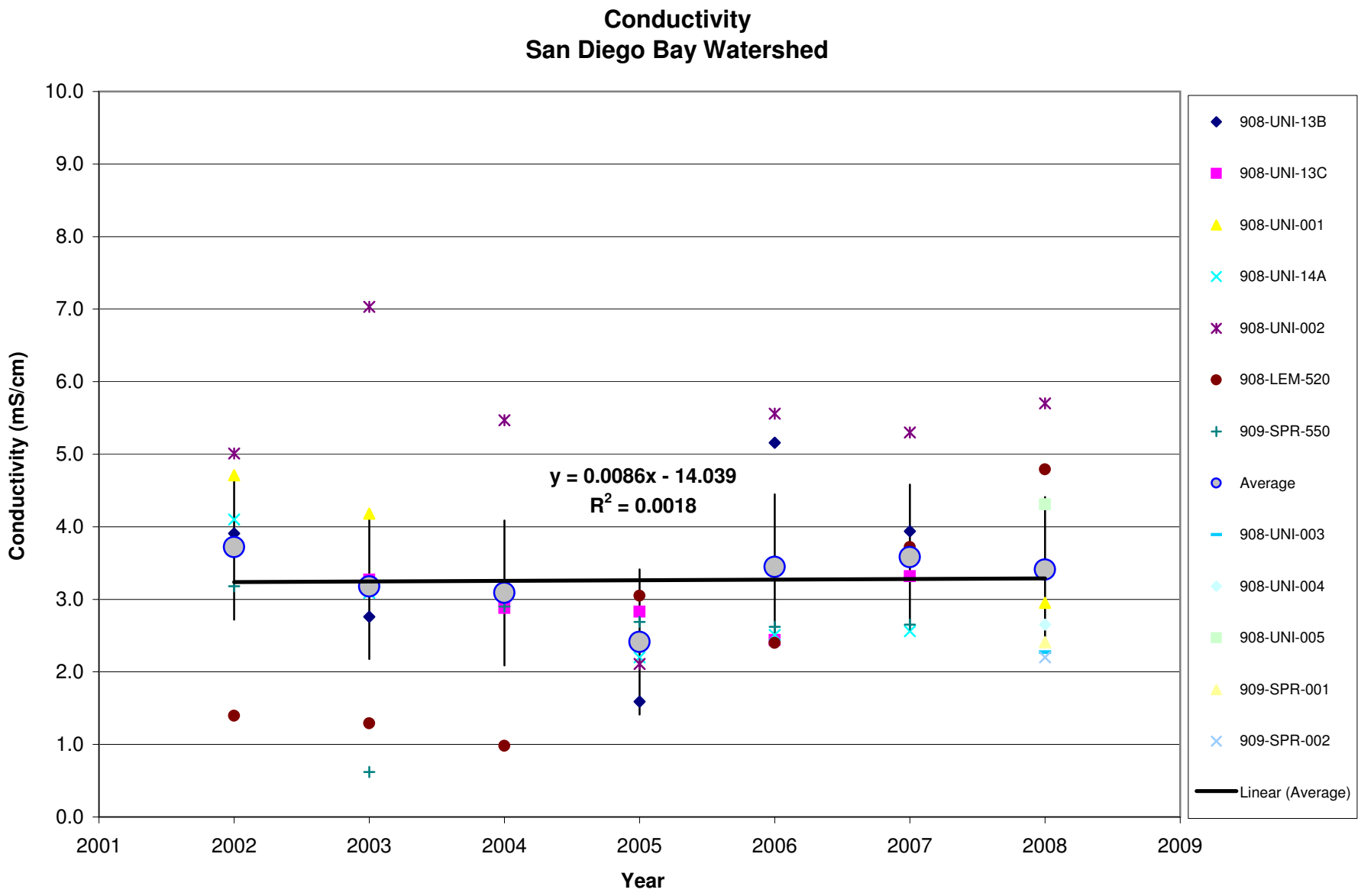
Conductivity
San Diego Bay Watershed
Conductivity (mS/cm)
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 0.0086x - 14.039
R2 = 0.0018
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

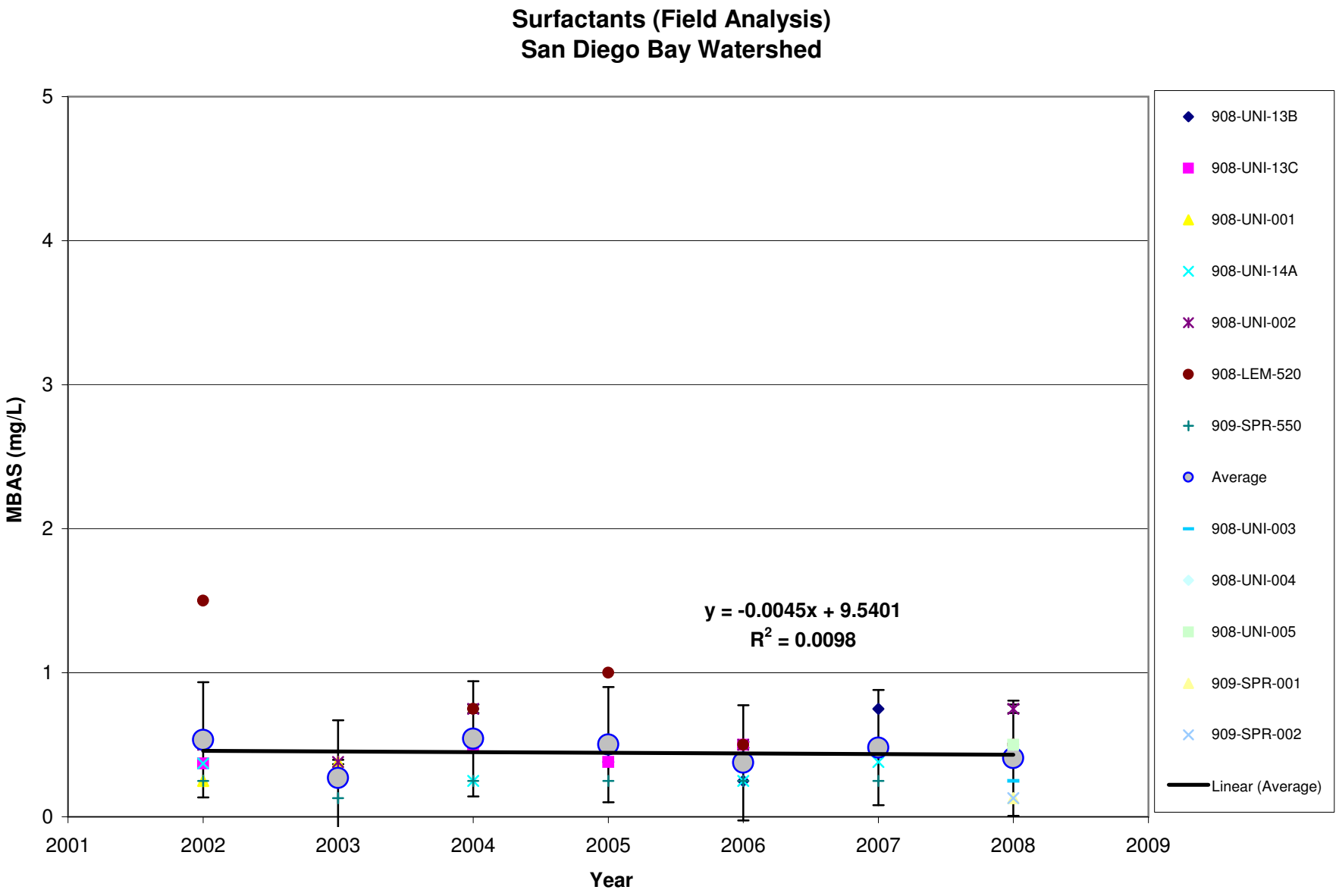
Surfactants (Field Analysis)
San Diego Bay Watershed
MBAS (mg/L)
5
4
3
2
1
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = -0.0045x + 9.5401
R2 = 0.0098
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

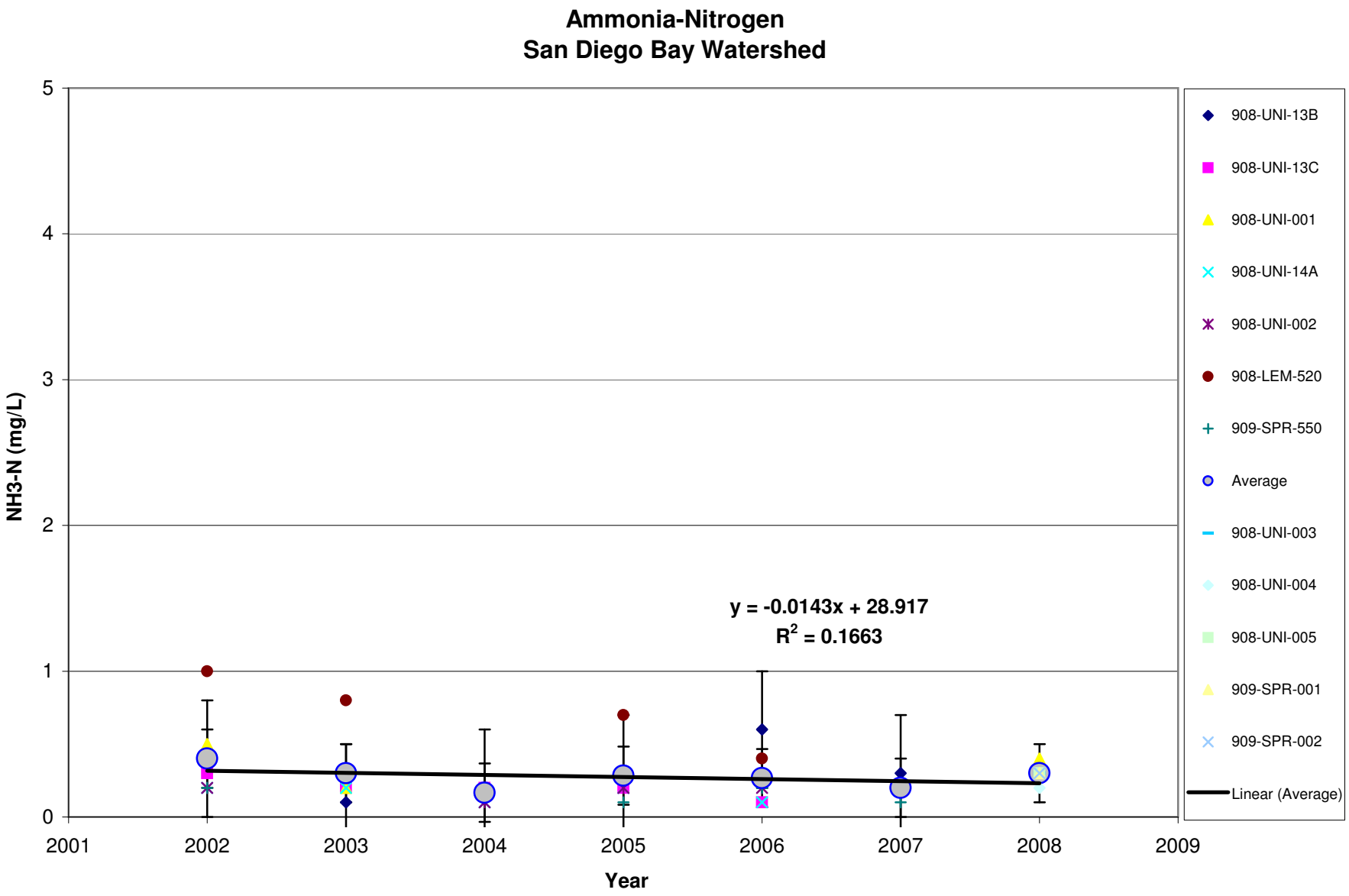
Ammonia-Nitrogen
San Diego Bay Watershed
NH3-N (mg/L)
5
4
3
2
1
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = -0.0143x + 28.917
R2 = 0.1663
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

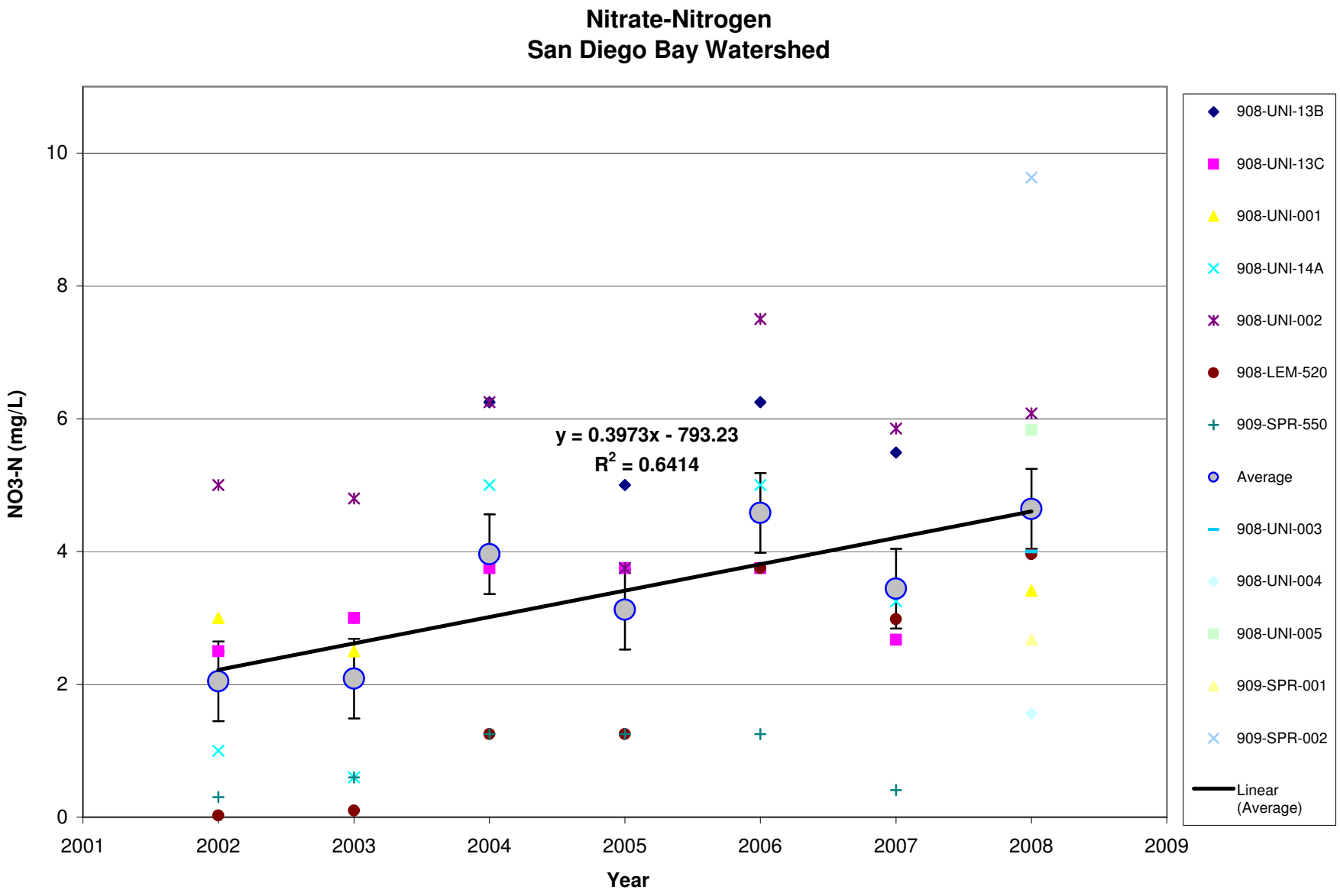
Nitrate-Nitrogen
San Diego Bay Watershed
NO3-N (mg/L)
Year
y = 0.3973x - 793.23
R2 = 0.6414
0
2
4
6
8
10
2001
2002
2003
2004
2005
2006
2007
2008
2009
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

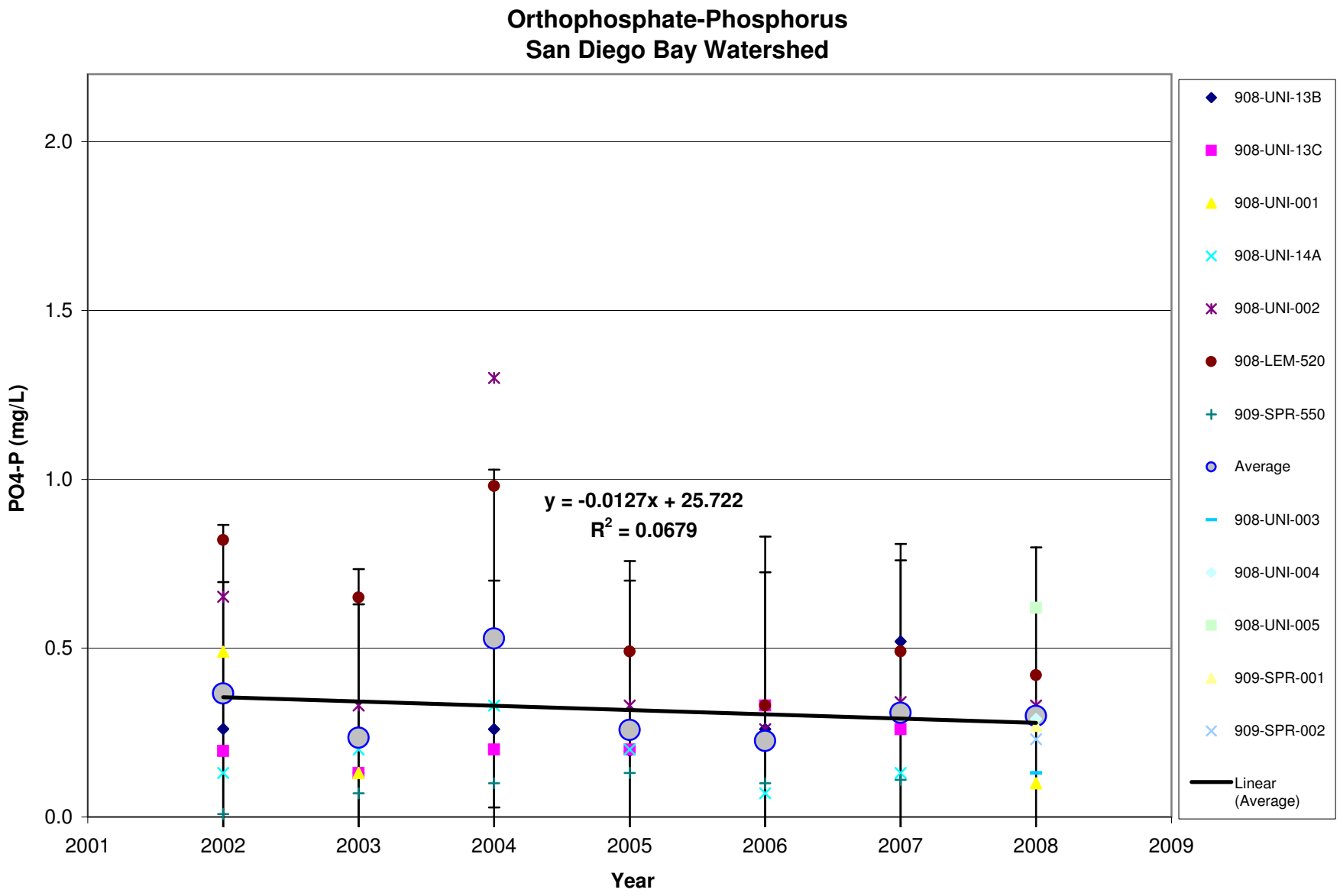
Orthophosphate-Phosphorus
San Diego Bay Watershed
PO4-P (mg/L)
2.0
1.5
1.0
0.5
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = -0.0127x + 25.722
R2 = 0.0679
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

Surfactants (Laboratory Analysis)
San Diego Bay Watershed

Note: All "nd" values have been plotted as 0.25 mg/L, which equals (reporting limit)/2. The last year of surfactants lab analyses was 2007.

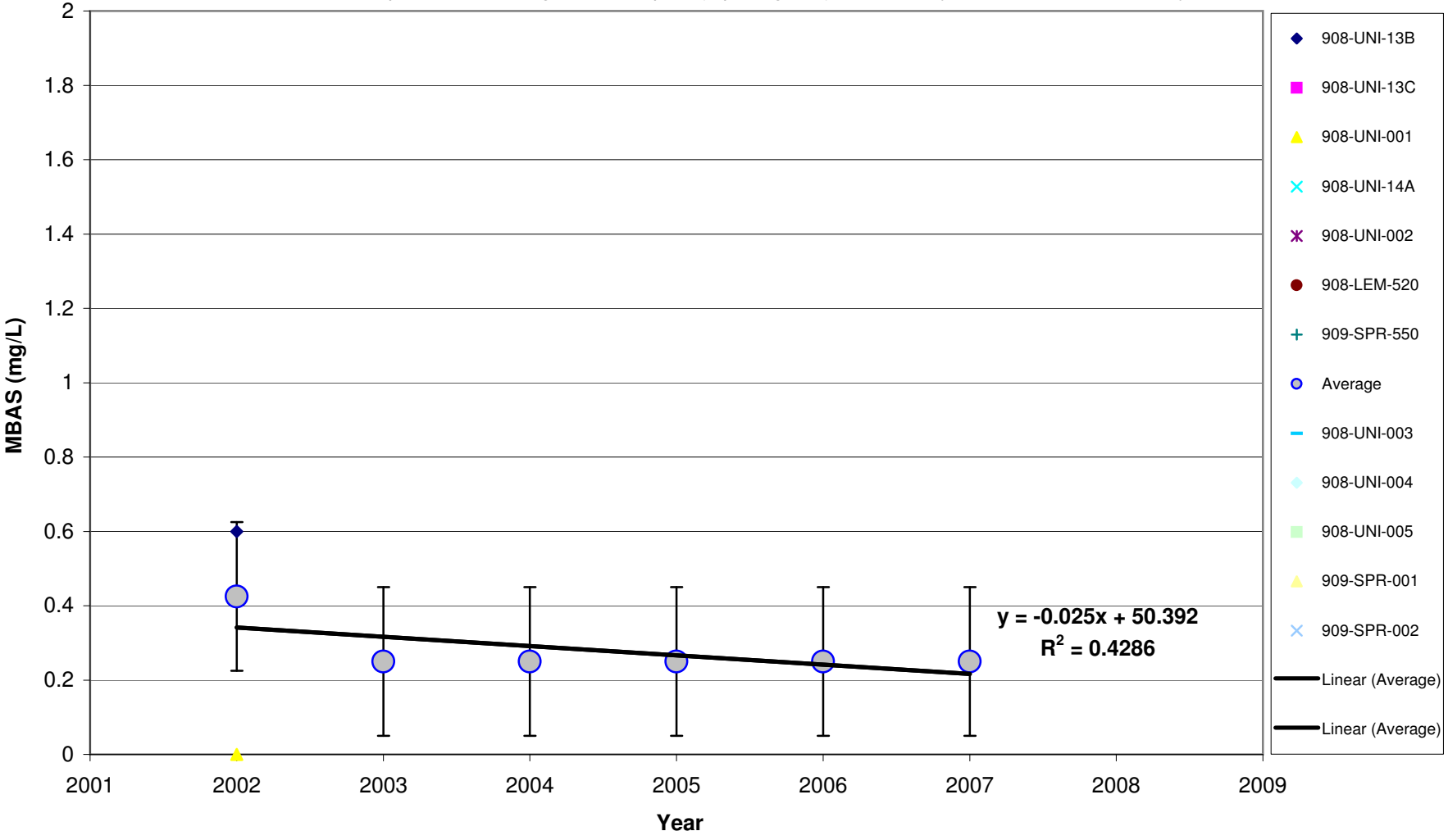

Oil & Grease
San Diego Bay Watershed

Note: All "nd" values have been plotted with a value of (reporting limit)/2; this is 0.5 mg/L for 2002-2004 and 2.5 mg/L for 2005

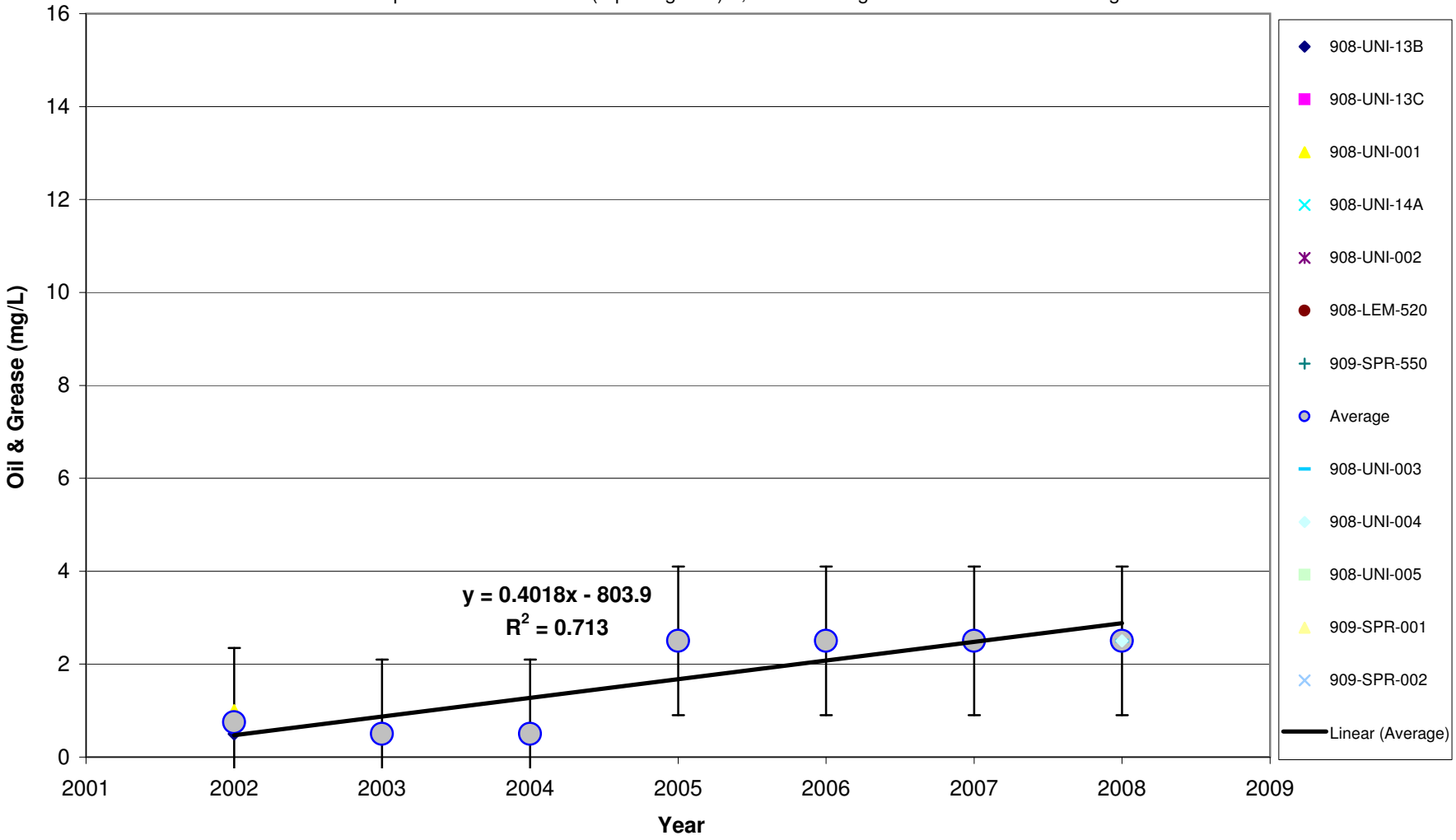

Dissolved Cadmium
San Diego Bay Watershed

Note: No detectable levels of cadmium have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit)/2

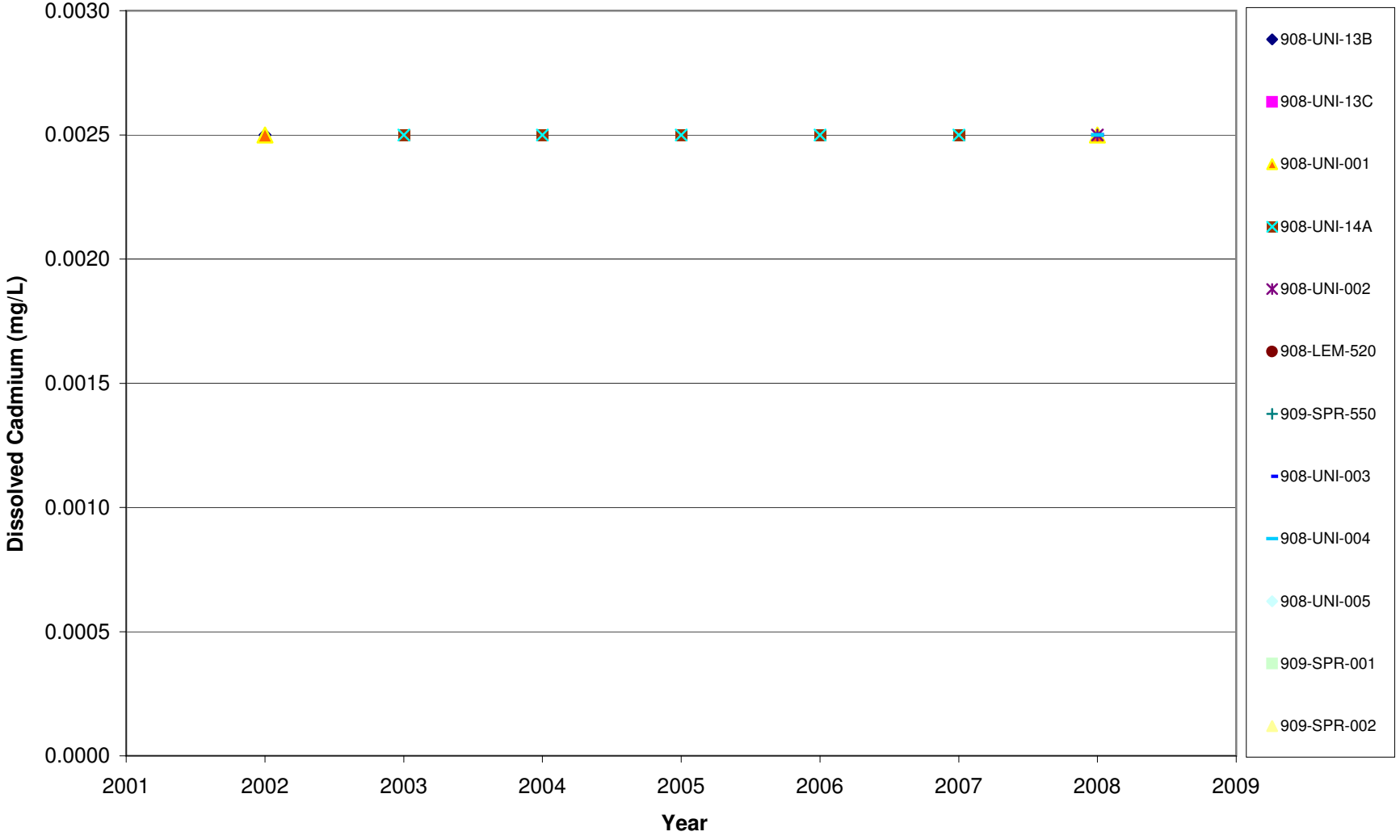

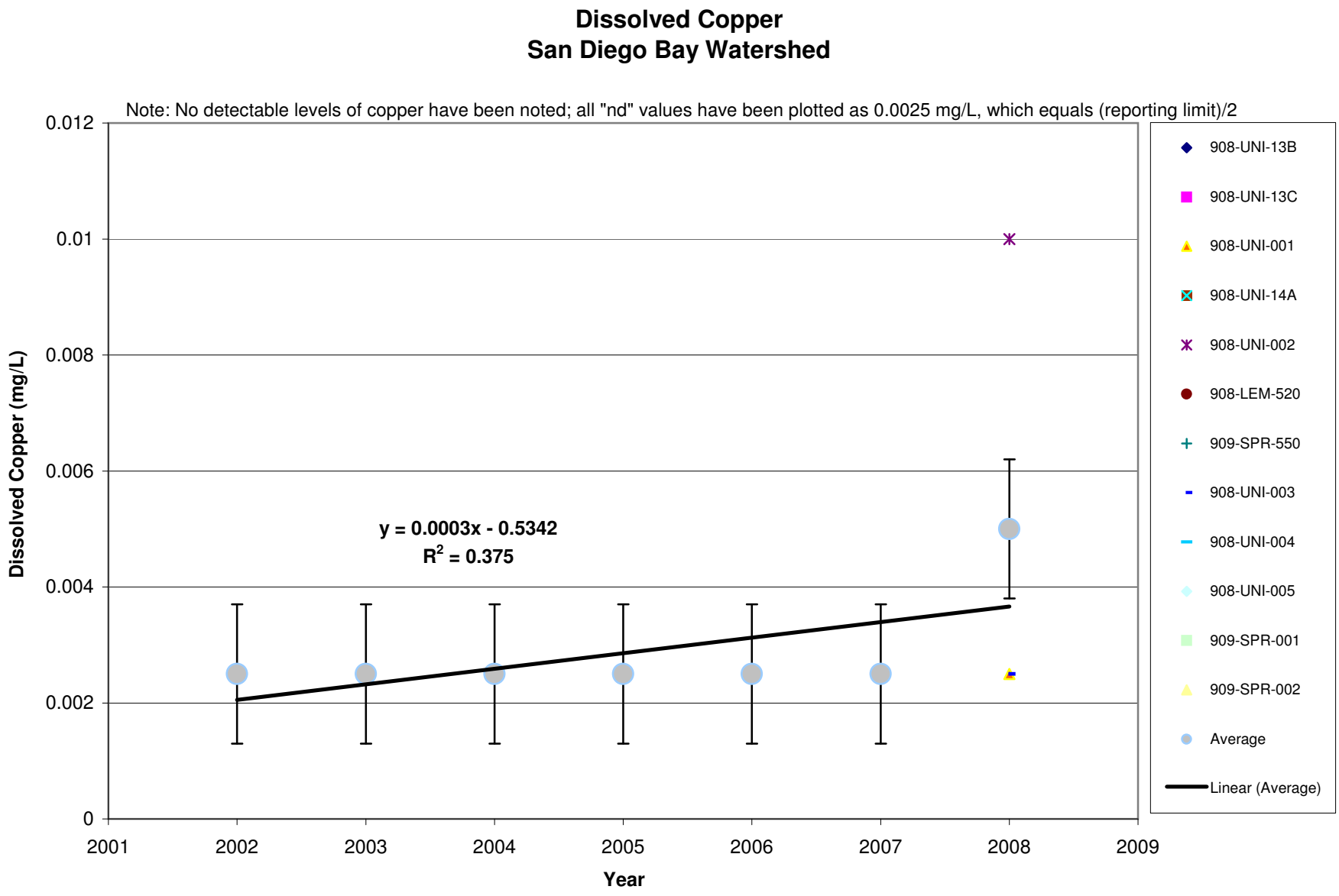
Dissolved Copper
San Diego Bay Watershed
Note: No detectable levels of copper have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit)/2
Dissolved Copper (mg/L)
0.012
0.01
0.008
0.006
0.004
0.002
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 0.0003x - 0.5342
R2 = 0.375
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Average
Linear (Average)

Dissolved Lead
San Diego Bay Watershed

Note: No detectable levels of lead have been noted; all "nd" values have been plotted as 0.0025 mg/L, which equals (reporting limit)/2

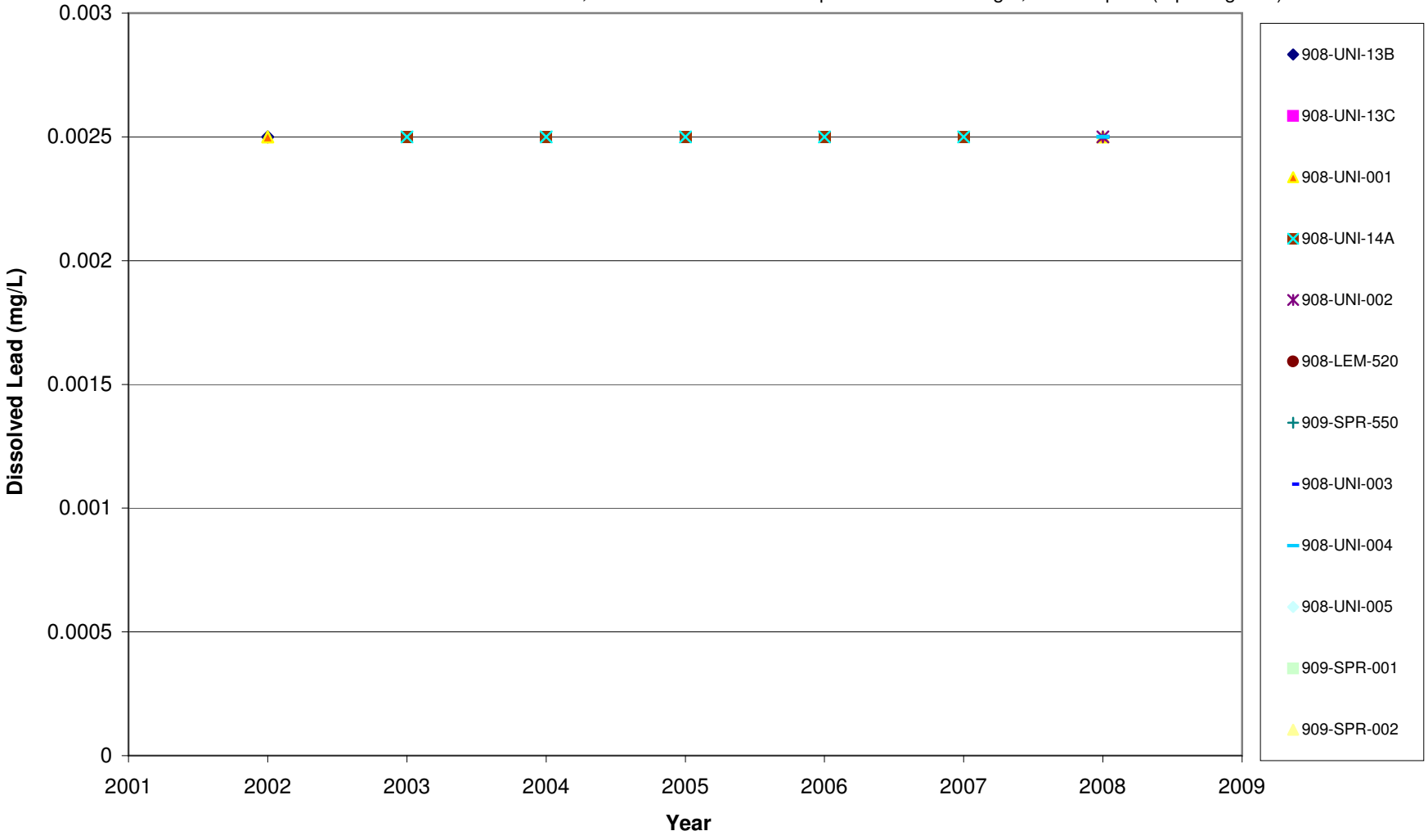

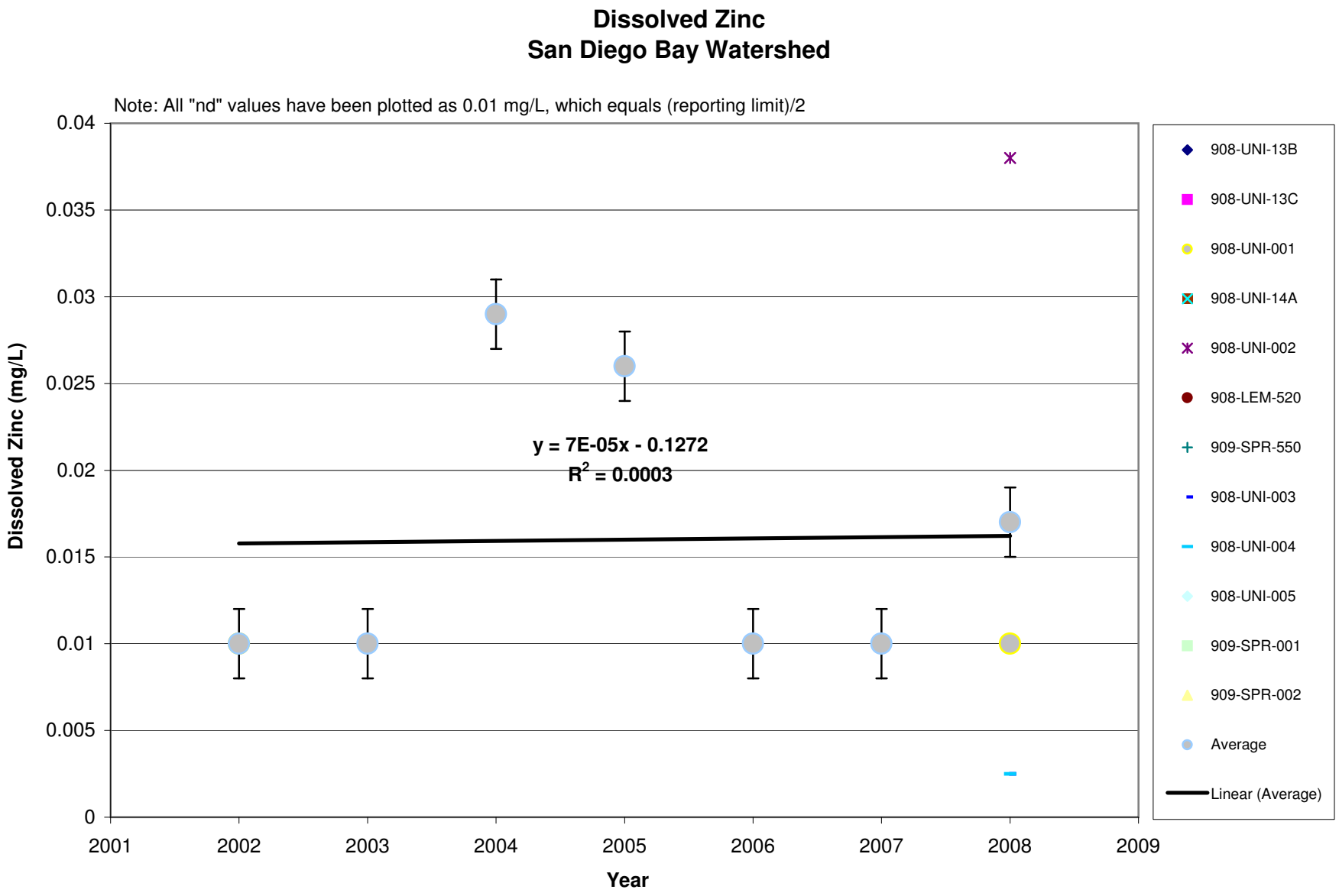
Dissolved Zinc
San Diego Bay Watershed
Note: All "nd" values have been plotted as 0.01 mg/L, which equals (reporting limit)/2
Dissolved Zinc (mg/L)
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 7E-05x - 0.1272
R2 = 0.0003
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Average
Linear (Average)

Diazinon
San Diego Bay Watershed

Note: All "nd" values have been plotted as 0.025 µg/L, which equals (reporting limit)/2

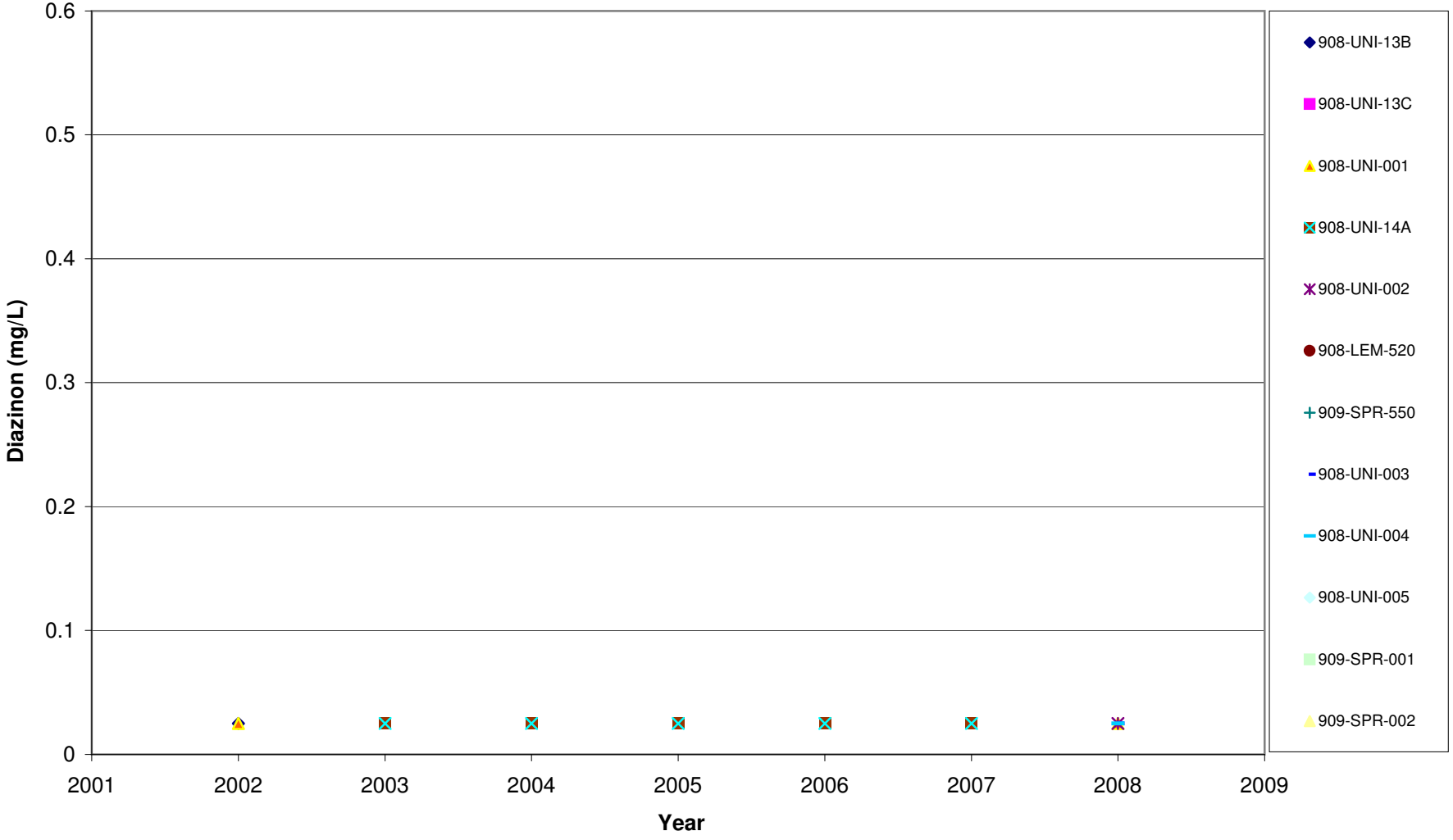

Chlorpyrifos
San Diego Bay Watershed

Note: No detectable levels of chlorpyrifos have been noted; all "nd" values have been plotted as 0.025 µg/L, which equals (reporting limit)/2

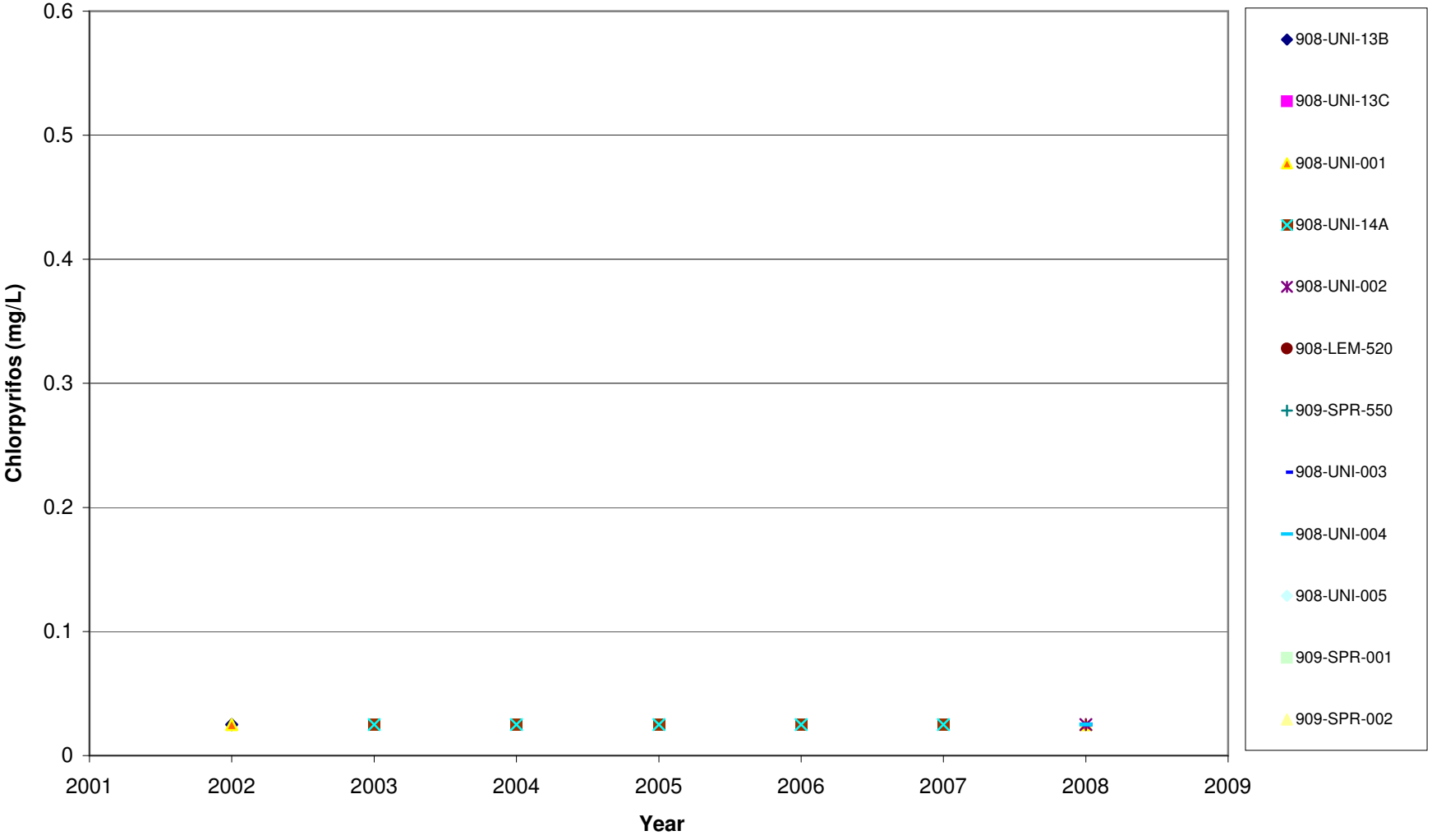

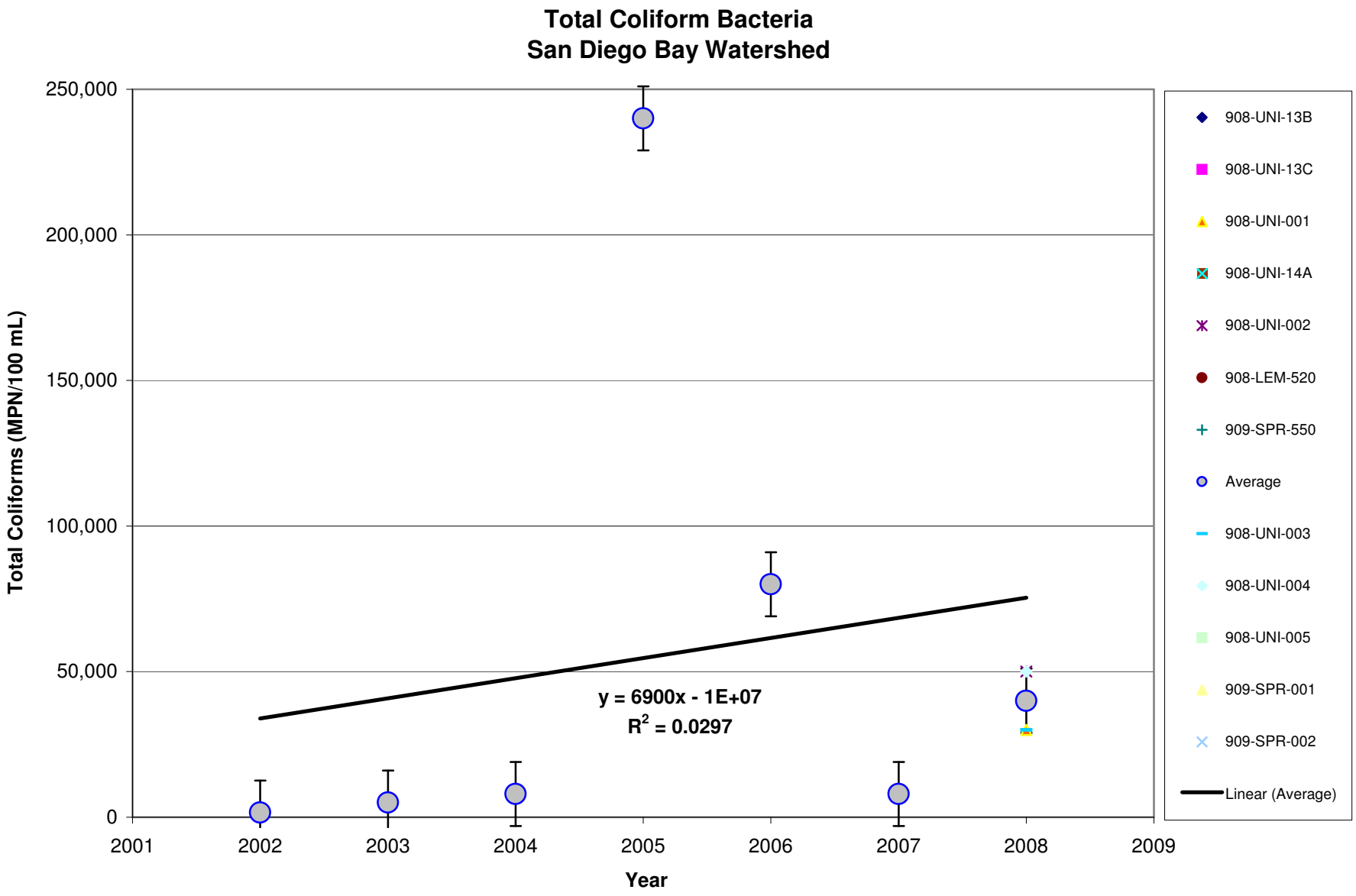
Total Coliform Bacteria
San Diego Bay Watershed
Total Coliforms (MPN/100 mL)
250,000
200,000
150,000
100,000
50,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 6900x - 1E+07
R2 = 0.0297
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

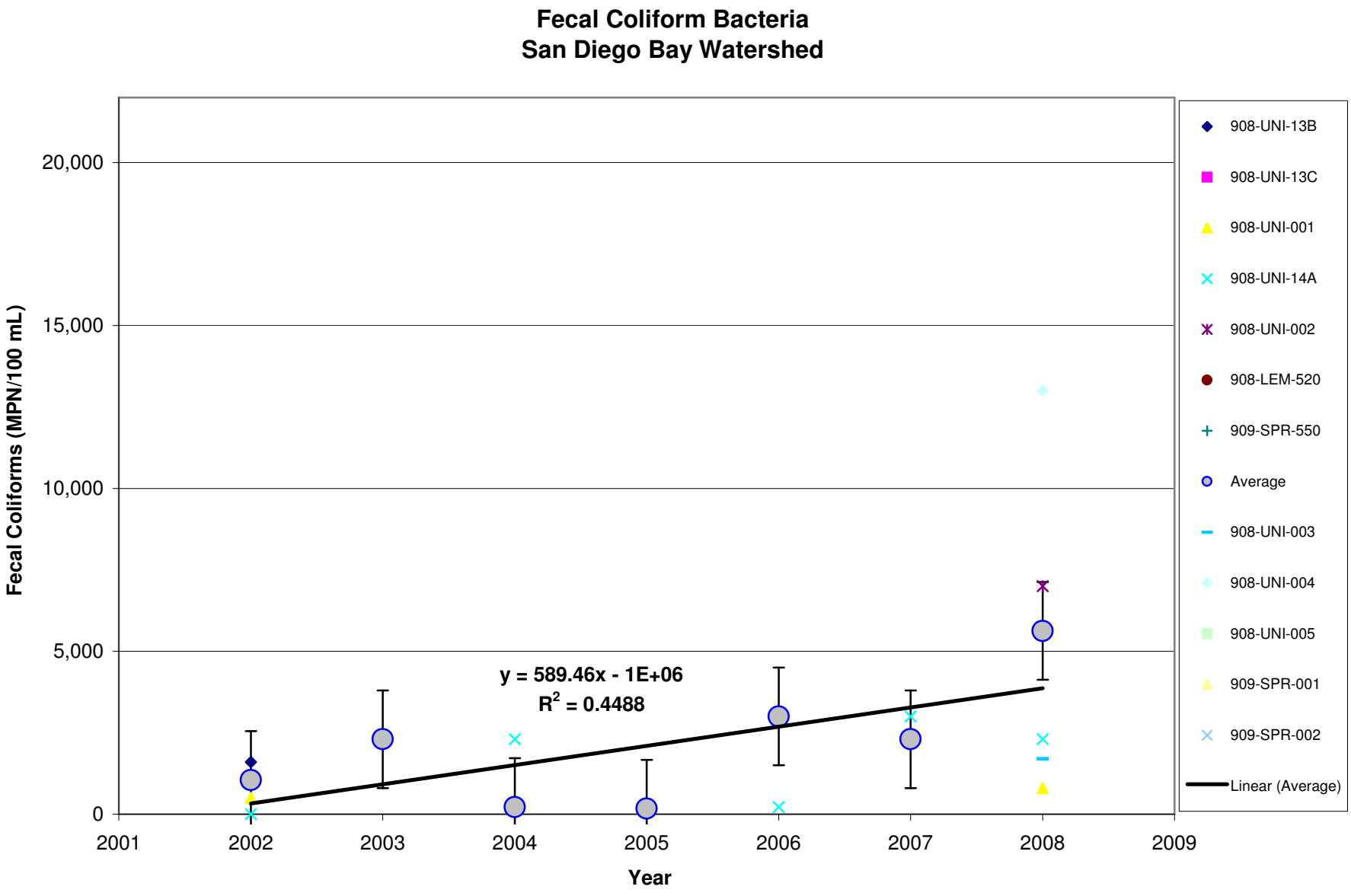
Fecal Coliform Bacteria
San Diego Bay Watershed
Fecal Coliforms (MPN/100 mL)
20,000
15,000
10,000
5,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 589.46x - 1E+06
R2 = 0.4488
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

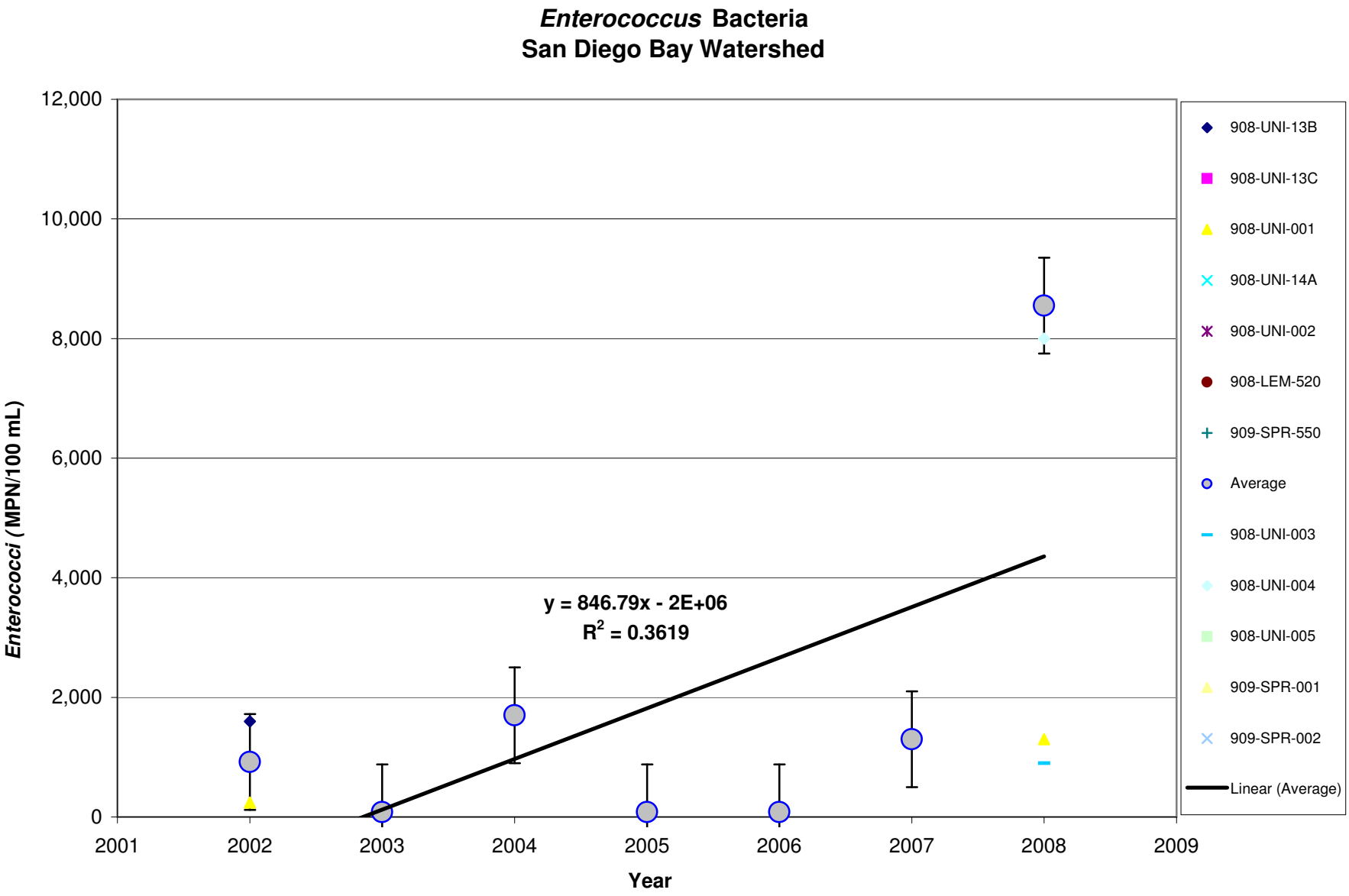
Enterococcus Bacteria
San Diego Bay Watershed
12,000
10,000
8,000
6,000
4,000
2,000
0
Enterococci (MPN/100 mL)
2001
2002
2003
2004
2005
2006
2007
2008
2009
Year
y = 846.79x - 2E+06
R2 = 0.3619
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

CITY OF LA MESA

2008/2009 JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

SEPTEMBER 2009

PREPARED BY:

D-MAX ENGINEERING, INC.
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SAN DIEGO, CALIFORNIA 92121
858.586.6600

CITY OF LA MESA
JEWEL of the HILLS

DMAX

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ACRONYMS AND ABBREVIATIONS

Acronym	Abbreviation
℃	Degrees Celsius
303(d) List	2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments
Appendix A	Appendix A of BMP Manual Part I
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
BMP Manual Part I	The City of La Mesa Storm Water Best Management Practices Manual – Part I
BMP Manual Part II	The City of La Mesa Storm Water Best Management Practices Manual – Part II
Calsense	Calsense Computerized Irrigation Control
CASQA	California Stormwater Quality Association
CEQA	California Environmental Quality Act
CIP	Capital Improvement Project
City	City of La Mesa
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CMC	Criteria Maximum Concentration
CMP	Corrugated Metal Pipe
CSWMP	Construction Storm Water Management Plan
CTR	California Toxics Rule
CWA	Clean Water Act/Federal Water Pollution Control Act
D-MAX	D-MAX Engineering, Inc.
DAB	Development Advisory Board
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FOG	Fats, Oils, and Grease
General Construction Permit	State of California General Construction Permit
gpm	Gallons Per Minute
HA	Hydrologic Area
HDPE	High Density Polyethylene
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HOA	Home Owners' Association
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illicit Discharge
IDDE	Illicit Discharge Detection and Elimination

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
IHC	Interim Hydromodification Criteria
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
LID	Low Impact Development
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable
mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) Per 100 Milliliters
MS4	Municipal Separate Storm Sewer System
mS/cm	MilliSiemens Per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
nt	Not Tested
NTU	Nephelometric Turbidity Unit
PCWQTR	Post Construction Water Quality Technical Report
PDPA	Pollutant Discharge Potential Assessment
Priority Project	Priority Development Project
RCP	Reinforced Concrete Pipe
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Government
SIC	Standard Industrial Classification
Solana Center	Solana Center for Environmental Innovations
SPCBMPP	Standard Post Construction Best Management Practices Plan
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 7.18 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TSS	Total Suspended Solids
TTWQ	Threat to Water Quality
WDID	Waste Discharge Identification Number

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
WQO	Basin Plan Water Quality Objectives
WQTR	Water Quality Technical Report
WURMP	Watershed Urban Runoff Management Program
µg/L	Micrograms Per Liter

CITY OF
LA MESA
JEWEL of the HILLS

SANDRA L. KERL
CITY MANAGER

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sandra L. Kerl
City Manager

Date: September 2009

Telephone Number: (619) 667-1105

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EXECUTIVE SUMMARY

In January 2007, the Regional Water Quality Control Board (RWQCB) issued Order No. R9-2007-0001, a National Pollution Discharge Elimination (NPDES) Permit regulating discharges to the storm drain system within 18 municipalities in San Diego County, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (collectively referred to as "Copermittees"). Order No. R9-2007-0001, generally referred to as the Municipal Permit, required each Copermittee, including the City of La Mesa (City), to update the existing Jurisdictional Urban Runoff Management Program (JURMP) document. The City's JURMP includes Best Management Practices (BMP) standards for businesses, construction and development projects, residents, and the City's own activities. The JURMP also includes programs for water quality monitoring and educational outreach.

This JURMP Annual Report presents the City's activities to implement its JURMP during the 2008/2009 fiscal year, which began on July 1, 2008 and ended on June 30, 2009. Each section of this JURMP Annual Report discusses how the City's efforts during 2008/2009 met the requirements of the Municipal Permit. Key actions taken for the major components of the City's storm water program are summarized below.

Development Planning Component

During 2008/2009, the City continued to oversee development activities occurring in the City in order to mitigate potential threats to water quality. The City implemented its treatment control BMP operation and maintenance verification program, which included maintaining the treatment control BMP database, conducting an inspection program, and implementing an annual self maintenance verification program. Eight sites in the City with approved treatment control BMPs were inspected and all eleven sites were required to complete annual maintenance verification forms. Enforcement actions were taken as needed for sites with BMP maintenance violations and/or which failed to return maintenance verification forms.

Construction Component

During 2008/2009, a total of 56 routine construction inspections were completed at 36 sites. Enforcement actions were taken where necessary and were effective in bringing about compliance. The City's plan check and inspection program required projects to comply with the City's minimum BMP requirements.

Municipal Component

The City inspected all high threat to water quality (TTWQ) municipal fixed facilities and continued its rigorous street sweeping and MS4 maintenance programs. A total of 568 tons of trash and debris was removed during street sweeping activities, and 122.25 cubic yards of debris was removed during standard MS4 maintenance. An additional 10.5 cubic yards of debris was removed during the cleaning of 21 filter inserts installed along University Avenue. The City also replaced or rehabilitated over 11,000 linear feet of sewer line and continued to maintain its sanitary sewer system to decrease the potential

for sanitary sewer overflows (SSO). City personnel were regularly trained regarding storm water pollution prevention concepts and practices.

Industrial and Commercial Component

During 2008/2009, the City met the Municipal Permit requirement to inspect at least 25 percent of the City's industrial and commercial inventory. The City inspected all high threat to water quality (TTWQ) sites on the City's industrial and commercial inventory as well as additional medium TTWQ sites. During the inspections conducted during 2008/2009, the City notified industrial and commercial businesses of the City's BMP requirements through discussions with facility personnel. Inspectors also assessed each facility's compliance with the General Industrial Permit (Industrial Permit). The City also conducted additional data collection programs focused on assessing pollutant discharge potential and other watershed-specific issues.

Residential Component

Residential areas comprise more than half of the City of La Mesa's land use, and the City worked to educate these residents through a variety of means. The City provided its quarterly *La Mesa Focus* newsletter to City residents via email and the City's website. Each newsletter published during 2008/2009 contained storm water articles relating to residential activities. During 2008/2009 the City hosted a variety of waste disposal events and encouraged residents to participate in these events. The City also responded to complaints made to the City storm water hotline regarding residential areas. The complaint investigations were used as opportunities to enforce BMP requirements and to educate residents about storm water pollution prevention.

Illicit Discharge Detection and Elimination Component

On September 10, 2008, the RWQCB adopted Addendum No. 2 to the Municipal Permit. This addendum requires the City to wait to submit the illicit discharge detection and elimination (IDDE) section of its JURMP Annual Report until the report for 2009 Dry Weather Monitoring Program, which took place after July 1, 2009, is finalized. The section must be submitted to the RWQCB no later than December 15, 2009.

While the full section will not be submitted until after September 30, 2009, the City did still implement its IDDE program component during 2008/2009. During this period, the City responded to and resolved 107 complaints made to its storm water hotline and the Public Works maintenance hotline. The City completed its 2008 Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program). The recommendations in the final report for the Dry Weather Monitoring Program were addressed during this reporting period. The City continued maintenance of the sanitary sewer system to prevent SSOs.

Education Component

As a means to raise storm water awareness in various communities, the City continued to conduct various education and outreach activities throughout 2008/2009. The City's efforts resulted in an estimated 30,510 impressions. City staff attended eight training sessions, and the City continued to circulate the quarterly *La Mesa Focus* newsletter to

businesses and residents. Each newsletter sent during 2008/2009 included storm water-related articles aimed at both residents and businesses in the City. Additionally, the City continued to maintain a storm water bulletin board at City Hall, which is strategically located to maximize exposure to both City personnel and project proponents that visit the Engineering Division. To better serve the City's diverse population, some educational materials were distributed in Spanish and English.

Public Participation Component

Public participation activities in 2008/2009 included cleanup events, which have a direct effect on water quality, and outreach activities, through which the City works to increase general knowledge and awareness regarding storm water issues. The City participated in Coastal Cleanup Day and the Creek to Bay Cleanup with two clean–up sites in the City for each event. During these events 857 pounds of trash and recyclables were collected. Other cleanup activities completed during 2008/2009 included Park Appreciation Day, Adopt-a-Park, Adopt-a-Block, and the La Mesa Spring Cleanup. The City partnered with local Eagle Scouts to install a storm water information kiosk at Jackson Park. A variety of waste disposal events, including household hazardous waste (HHW) disposal events, were also held in the City.

Fiscal Analysis Component

The City continued to fund its storm water program though the City's Sanitation Fund. Itemized expenditures for 2008/2009 were $679,674 and $844,912 has been budgeted for 2009/2010.

Effectiveness Assessment Component

The City continued evaluating the effectiveness of its storm water program based on the approach presented in the City's March 2008 JURMP update. The City has seen lower amounts of pollutants in its Dry Weather Monitoring Program in recent years. The City has also implemented additional treatment control BMPs for University Avenue and its Public Works Operation Center, and it conducts additional street sweeping to aid in meeting watershed requirements. An audience in need of additional education and outreach has been determined to be parties responsible for treatment control BMP operation and maintenance. The City's new treatment control BMP operation and maintenance verification program will help assist in providing knowledge regarding the proper upkeep of these BMP features.

Special Investigations

The City continued implementation of an additional water quality monitoring program, which includes sampling at sites in the San Diego River and San Diego Bay watersheds. The City also completed additional data gathering during industrial and commercial inspections to assess knowledge of watershed-specific storm water concepts and to assess the potential for inspected sites to be significant sources of watershed pollutants of concern.

Conclusions and Recommendations

The City will continue to implement the programs in its JURMP during 2009/2010; it is anticipated that some program refinements will be made as implementation progresses. The City will also collaborate with the other Copermittees to improve the efficiency of its program and to develop updated methods of assessing program effectiveness.

1.0 INTRODUCTION

1.1 BACKGROUND

This Jurisdictional Urban Runoff Management Program (JURMP) Annual Report presents a summary of the activities of the City of La Mesa (City) during the 2008/2009 fiscal year. Preparation and submittal of the JURMP Annual Report is required by San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit).

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act (also known as the Clean Water Act, or CWA) established a framework for regulating Municipal Separate Storm Sewer System (MS4) discharges under the National Pollutant Discharge Elimination System (NPDES). The RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region in 1990, followed by a revised permit in 2001. The current Municipal Permit in turn replaced the 2001 permit, RWQCB Order No. 2001-01, in 2007.

Like all the other regulated municipalities in the San Diego region, collectively referred to as Copermittees, the City developed and submitted a JURMP to the RWQCB in 2002. As required by the Municipal Permit, the City submitted an updated JURMP in March 2008. The JURMP includes management measures for a variety of different sectors and activity types such as municipal, industrial, commercial, construction, and significant development and re-development.

Annual reports on the implementation of the JURMP are required to be submitted to the RWQCB September 30 of each year. This JURMP Annual Report presents information from the 2008/2009 fiscal year, which extended from July 1, 2008 to June 30, 2009.

1.1.2 CITY SETTING

The City of La Mesa includes an area of approximately nine square miles and has a population of over 56,000 residents. The primary land use in La Mesa is residential. Grossmont Center and businesses along major roads in the City make up the bulk of the commercial development, and a small light industrial area is located close to the geographic center of the City, just north of Interstate 8.

Approximately 52 percent of La Mesa is located within the San Diego River Watershed, while the remaining 48 percent is located in the San Diego Bay Watershed. The City of La Mesa makes up about one percent of the overall land area in both the San Diego Bay and the San Diego River watersheds. Runoff generated in La Mesa is conveyed through five drainage basins. Figure 1-1 on the following page shows the drainage basins and the land uses in the City. Table 1-1 lists the drainage basins along with the approximate

percentage of drainage area in La Mesa, the corresponding hydrologic unit (HU) of the basin, and the receiving water body to which each basin drains.

Table 1-1
City of La Mesa Drainage Basins

Drainage Basin	Percent of City Area	Hydrologic Unit	Receiving Water Body	Watershed
Alvarado	51	907	San Diego River	San Diego River
University	28	908	Chollas Creek	San Diego Bay
Spring Valley	14	909	Sweetwater River	San Diego Bay
Lemon Grove	6	908	Chollas Creek	San Diego Bay
Lake Murray	1	907	San Diego River	San Diego River

Please note that while runoff from the City drains to these water bodies, the actual water bodies are not themselves located within the City.

Figure 1-1
City of La Mesa Land Use and Drainage Basins

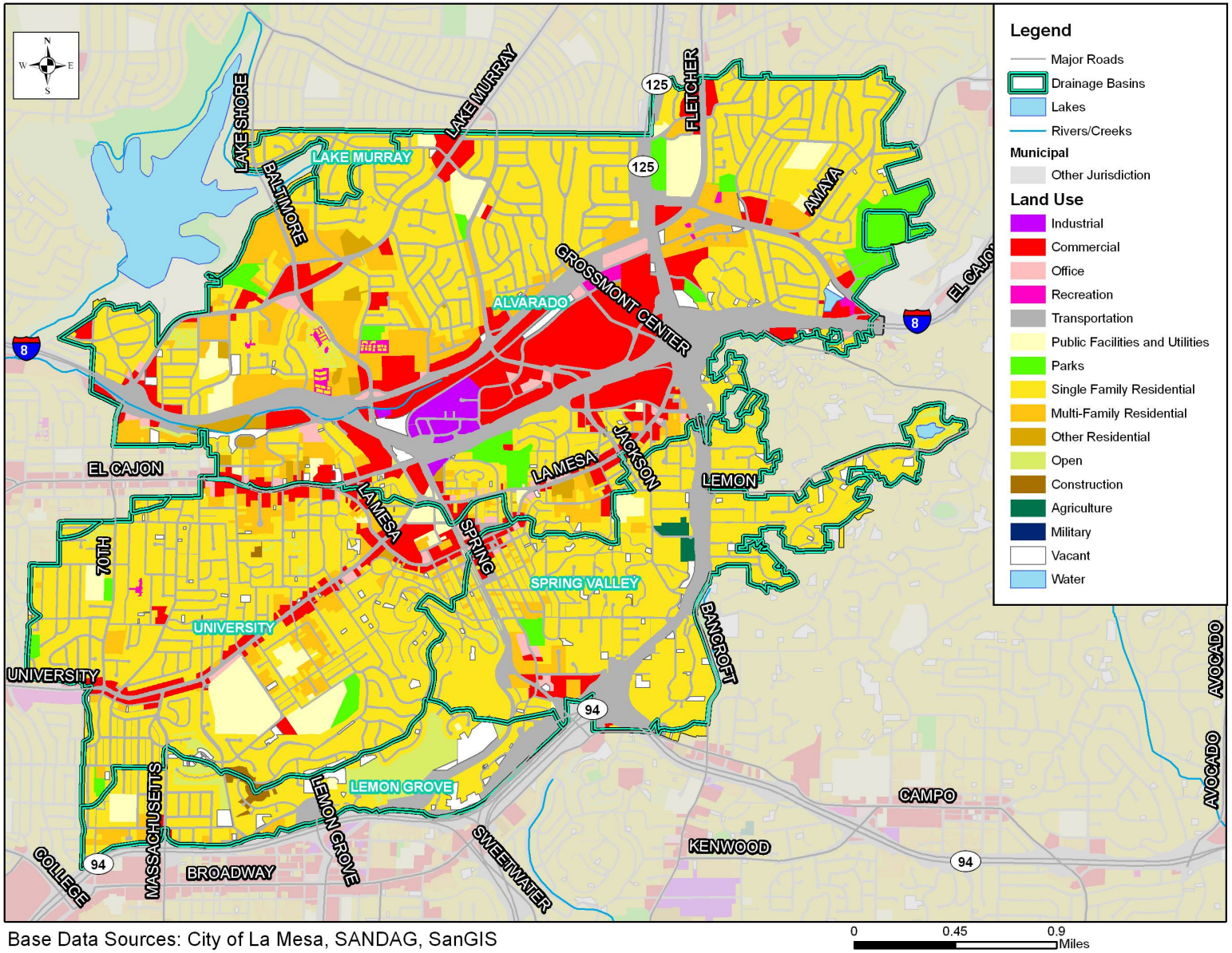

Base Data Sources: City of La Mesa, SANDAG, SanGIS

0 0.45 0.9 Miles

1.2 Purpose and Objectives

The City's JURMP presents a strategy to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The JURMP includes a variety of programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the City's implementation of its JURMP during the 2008/2009 reporting period.

1.3 Report Organization

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning Component**
Section 3	**Construction Component**
Section 4	**Municipal Component**
Section 5	**Industrial and Commercial Component**
Section 6	**Residential Component**
Section 7	**Illicit Discharge Detection and Elimination Component**
Section 8	**Education Component**
Section 9	**Public Participation Component**
Section 10	**Fiscal Analysis Component**
Section 11	**Effectiveness Assessment Component**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all the sections required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a clearer explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Subsection 1.1, Background, has been divided into subsections 1.1.1, Regulatory Background, and 1.1.2, City Setting, for the sake of clarity.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of pollutants from development projects to the MEP and managing increase in runoff from development project that have the potential to negatively affect downstream water bodies. During the 2008/2009 fiscal year, the City accomplished these goals through implementation of its JURMP document.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2008/2009 reporting period are presented in the following bulleted list. The remainder of this section provides more detail about the City's implementation of this component of its storm water program.

- Distributed the City's development requirements checklist (Appendix A of BMP Manual Part II) to projects applying for permits.
- Collaborated with the Copermittee Land Development Workgroup to discuss key Model SUSMP and Hydromodification Management Plan (HMP) development issues.
- Used the City's treatment control BMP database to track completed Priority Development Projects.
- Conducted maintenance inspections of treatment control BMPs at eight completed development projects in the City.
- Provided annual BMP maintenance verification forms to eight private and three public completed development projects prior to the start of the wet season.
- Issued six NOVs to development projects for failure to adequately maintain treatment control BMPs and failure to submit required annual maintenance verification forms in a timely fashion.

2.2 LAND USE PLANNING

2.2.1 BACKGROUND

The City's General Plan was last updated in 2002 and contains water quality and watershed protection principles in its Public Services and Facilities Element. The comprehensive principles established in 2002 provide an ample framework for implementing the requirements of the current Municipal Permit, and no changes to these policies were necessary during the reporting period.

2.2.2 Source Characterization

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts to the surrounding environment. No changes to the development restrictions in the City's General Plan for storm water purposes were implemented during the reporting period.

2.2.3 Best Management Practice Requirements

Please refer to the City's updated JURMP document for a list of the water protection policies included in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 Program Implementation

The City implemented its water protection related land use policies during the reporting period mainly through the City's Municipal Code. The City's Storm Water Ordinance and BMP Manual Part II were updated during the 2007/2008 reporting period to comply with the latest Municipal Permit. No changes to either of these documents were made during the 2008/2009 reporting period.

Details on how the City implemented its established water protection policies through its environmental review process and its development project approval and verification processes during the reporting period are provided in Sections 2.3 and 2.4 of this JURMP Annual Report document.

2.3 Environmental Review Process

The City's current environmental review process is detailed in the City's updated JURMP. The overall structure of the review process, such as the City's departments involved and the document submissions required, remains the same as in previous reporting years. No modifications to the City's environmental review process have been made since the submittal of the updated JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

During the 2008/2009 fiscal year, the City implemented the watershed protection principles in the City's General Plan through various aspects of the City's development project approval and verification process, as detailed below.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's BMP Manual Part II, which contains the City's SUSMP regulations. No changes to the City's BMP Manual Part II were made during the 2008/2009 reporting period. However, the City will be updating this document to incorporate the recently approved Model SUSMP by the March 2010 deadline.

2.4.3 Best Management Practice Requirements

No changes were made to the development BMP requirements presented in the City's current JURMP during the 2008/2009 reporting period.

2.4.4 Program Implementation

During the 2008/2009 fiscal year, the City required implementation of its BMP requirements for all development projects through education, a comprehensive development project approval process, and a treatment control BMP inspection and maintenance verification program.

2.4.4.1 Outreach and Staff Training

The City provides training for staff involved in the planning and review of development projects within the City and works closely with the development community to communicate its development requirements throughout the entire approval process. The City also contracts with an outside consultant to perform reviews of Post Construction Water Quality Technical Reports (PCWQTR) submitted for development projects. Details on trainings conducted and educational materials developed and distributed during the reporting period can be found in Section 8 of this JURMP Annual Report document. Based on initial results from the first year of the program, distribution of treatment BMP maintenance verification letters seems to be increasing the level of knowledge of regulated parties.

2.4.4.2 Urban Runoff Approval Process for Development Projects

All development projects that required City permits were required to undergo the City's urban runoff approval process as detailed in the City's JURMP. Forms completed by project applicants are kept with the project's file at the City for future reference. As discussed in the City's JURMP, the City required all projects applying for construction and building permits to complete an "Appendix 'A' –Storm Water Requirements and Project Data Sheet" that guides project applicants to submit proper documents to the City for review. Features of the Appendix A form are discussed in the City's updated JURMP, and a copy of the form was included as an attachment to the 2007/2008 JURMP Annual Report document.

All development projects determined to be Priority Projects after completing the Appendix A form were required to implement the City's SUSMP requirements and prepare PCWQTRs. The City developed a Post Construction WQTR Report Guidelines sheet to detail all the information required to be included in a project's PCWQTR, which was included as an attachment to the 2007/2008 JURMP Annual Report. Table 2-1 lists the development projects subject to the City's SUSMP requirements during the 2008/2009 reporting period, the number of document reviews for each project, and their current approval statuses as of the end of the 2008/2009 reporting period.

Table 2-1
Development Projects Subject to SUSMP Requirements During 2008/2009

#	Project Name	Location	Project Type	Number of Reviews in 2008/2009	Approved? (Yes/No)
1	Severin Drive	5980 Severin Drive	Priority	1	No
2	La Mesa Hilltop	Westerly extension of Orien Avenue	Priority	3	No

La Mesa Hilltop first submitted a WQTR late in the 2004-2005 reporting period. After some time of inactivity, a new developer took over the project. City staff met with the City's stormwater consultant D-MAX Engineering, Inc. (D-MAX) and REC Consultants to discuss changes to the City's SUSMP Ordinance since the first review, and the project submitted an updated PCWQTR in early 2009. The submittals for the project received in 2008/2009 proposed BMPs such as retention areas and pervious pavement for driveways, but none of the submittals were approved due to BMP sizing issues. The City will continue to work with the project proponent to ensure proposed BMPs are appropriately sized prior to approving the project design.

Severin Drive is a proposed two-story commercial medical building to be built on an existing empty lot. The project submitted an initial package, and conditions were accepted by the design review board and planning commission, and the project was ratified by City Council in May 2009. No detailed grading or building plans have been submitted to the Engineering Department, but the City will continue to work with the project proponents to ensure proper site, source, and treatment control BMPs are proposed for the development prior to approval of any construction plans.

Two development projects that submitted documents to the City for review during the 2007/2008 reporting period, KFC/Taco Bell and Montbello South, did not submit revised documents during this 2008/2009 reporting period. Currently these two projects are on hold and it is unknown when or if they will resume development in the future. If any project is resumed, they will be subject to the City's current SUSMP requirements and the document review process detailed in the updated JURMP.

No Priority Projects were allowed to implement treatment control BMPs with low removal efficiency rankings during the reporting period. The City makes every effort to encourage development projects to select treatment controls with high and medium

pollutant removal efficiencies and does not expect to approve many projects with low removal efficiency BMPs. However, if projects proposing a low removal efficiency treatment control BMP with a defensible infeasibility analysis are approved, details of those projects and their feasibility analyses will be reported as required in future JURMP annual reports.

During the reporting period, no projects received a SUSMP waiver for implementation of treatment control BMPs. The City has never issued a SUSMP waiver in the past either, and at this time the City has no plans to develop a SUSMP waiver mitigation program.

Model SUSMP and Hydromodification Management Plan

The Copermittee Land Development Workgroup met regularly to discuss key Model SUSMP and Hydromodification Management Plan (HMP) development issues and provide updates on the status of consultant work products. The City of La Mesa regularly participated in the Land Development Workgroup during 2008/2009.

During the reporting period, the Copermittees submitted the Model SUSMP and HMP to the Regional Board for approval in January 2009. The Model SUSMP was approved by the Regional Board in March 2009, and the City will update its local SUSMP accordingly by the March 2010 deadline. The Land Development Workgroup did not receive approval or comments from the Regional Board regarding the HMP during the reporting period. The City's current BMP Manual Part II contains detailed Interim Hydromodification Criteria (IHC), which the City will continue to implement until the HMP is finalized. None of the development projects undergoing the City's review process during the reporting period were subject to the IHC since all of these projects are less than 50 acres. Once the Final HMP is approved, the City will also incorporate these requirements into its local SUSMP and update project applicant guidance documents.

BMP Installation Verification

During the course of 2008/2009, after maintenance verification letters had been sent out during the summer of 2008, the City identified recently completed Priority Projects within the City's jurisdiction to be added to the treatment control BMP inventory. When a project is completed, the City checks for BMPs prior to occupancy, records the site information, assigns it a TTWQ priority, and then adds it to the inventory of projects subject to the City's inspection and annual maintenance verification program the following fiscal year. This process helps the City focus its inspection resources on sites more likely to have maintenance deficiencies, as maintenance deficiencies are generally less likely at sites with recently installed BMPs. A table of the projects identified after distribution of verification letters is presented in Table 2-2 at the end of this JURMP Section. These projects will be added to the City's treatment control BMP inventory in 2009/2010.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

2008/2009 Annual Maintenance Verification

The Municipal Permit requires annual verification of operation and maintenance of treatment control BMPs installed within the City's jurisdiction. Annual verification must be provided by the party responsible for treatment control BMP maintenance and must be returned to the City prior to the start of the wet season (October 1st). While most of the implementation materials used for this program were developed during the 2007/2008 reporting period, 2008/2009 was the City's first year implementing the program. Using the property owner names and addresses recorded in the City's BMP database, BMP maintenance verification forms were mailed to all the projects included in the City's BMP database in early 2008/2009. The template letter, BMP maintenance verification form, and FAQ sheet were included as an attachment to the 2007/2008 JURMP Annual Report.

The City required that completed maintenance verification forms be returned by late August 2008, to give the City time to follow-up with non-responders. Out of the 11 projects on the City's inventory, three public projects and one private project returned their verification forms by the deadline. Seven projects did not respond, two of which were found to have new responsible party information. Contact information for these two projects was updated in the City's database, and verification forms were resent to the new responsible parties. NOVs were issued in September 2008 to the remaining five projects. Of the 5 projects that received NOVs in September 2008 for failure to return annual maintenance verification forms, Providence Square was the only site that failed to comply. An additional NOV was issued for the project and the site was again non-responsive. A routine inspection was conducted at the project in June 2009 to assess condition of the BMPs on site. Results of this inspection and further follow up actions for Providence Square are described below.

Operation and Maintenance Inspections

During the 2008/2009 fiscal year, the City contracted D-MAX to conduct inspections of projects with treatment control BMPs in accordance with the inspection frequencies outlined in the City's JURMP. Table 2-3 provides a summary of the number of inspections performed and how these met the requirements of the Municipal Permit. All high TTWQ inspections were performed prior to October 1, 2008.

Table 2-3
2008/2009 Inspection Numbers versus Municipal Permit Requirements

Site Class	Number of Sites	Full BMP Assessments	Percent Inspected	Permit Requirement	Requirement Met
All Inventoried Sites	11	8	73%	20%	**Yes**
Medium TTWQ	9	6	67%	50%	**Yes**

Site Class	Number of Sites	Full BMP Assessments	Percent Inspected	Permit Requirement	Requirement Met
High TTWQ	2	2	100%	100%	**Yes**

During the inspection, each BMP was visually inspected, inspection results were documented, GPS Coordinates were recorded for each BMP, and photos of BMPs with maintenance deficiencies were taken. Table 2-4 lists the development projects inspected, the number of BMPs installed at each site, the number of BMPs inspected, the number of BMPs found in need of maintenance, a brief description of inspection findings, and, if applicable, any follow-up actions taken. Public Priority Projects are indicated with the marker "(CIP)", which is short for capital improvement project. The BMP types installed at these sites and the sites' TTWQ priorities are included in the City's treatment control BMP inventory, which is included in Appendix A.1 of this JURMP Annual Report. Further discussion of some of the inspection results and follow-up actions is provided in the text below.

Kaiser and the Fire Station, the only two high TTWQ sites on the City's 2008/2009 treatment control BMP inventory, were inspected prior to October 1st 2008, at which time no maintenance deficiencies were found. While the Former Car Dealership project is not a high TTWQ site, it was also inspected in September 2008. This site was found to have maintenance deficiencies during last year's inspection program and failed to return the site's annual maintenance verification form by the August 2008 deadline. This BMP is located on a vacant lot due to the previous facility going out of business; however, the lot owner was informed that they were still responsible for the BMP regardless of whether or not the property was in use. The City wanted to assess if the site had improved its BMP maintenance prior to the start of the wet season, so a routine inspection was conducted in September 2008. During the inspection, it was observed that all vegetation in the swale was dead, and the inlet holes to the swale were completely clogged with sediment. The City issued an NOV to the site and worked directly with the party responsible for maintenance to bring the site into compliance. The swale was repaired and a maintenance verification form for the site was returned to the City in early October 2008, before the first rain event of the season.

Follow-up actions were recommended for all development projects with BMPs observed in need of maintenance. Since sites are notified by mail of deficiencies in BMP maintenance, with specific corrective actions listed, official verbal and written warnings are typically not used; however, the City has found that there is often significant turnover at property management companies responsible for BMP maintenance, and the City typically follows-up with non responders by phone to verify that documents have reached the correct individual prior to issuance of an NOV. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP. Since inspections were conducted at the end of the reporting period, aside from the high priority sites and the Former Car Dealership which were inspected prior to the wet season, not all follow-up actions were able to be conducted during 2008/2009. Early in

the 2009/2010 reporting period, the City sent out its annual maintenance verification forms. For sites with noted maintenance deficiencies during 2008/2009, the cover letter included an additional summary report of the previous year's inspection findings and necessary corrective actions. The City will follow-up with any sites that fail to verify that the required corrective actions and regular BMP maintenance were conducted prior to the start of the 2009/2010 rainy season.

As mentioned previously, Providence Square was issued two NOVs prior to its routine inspection during the reporting period. As presented in Table 2-3, while one BMP was observed in need of maintenance, three were observed in adequate condition and it appeared that maintenance of BMPs is being conducted at the site. The site was notified of the observed maintenance deficiency with another request for the annual maintenance verification early in the 2009/2010 reporting period. After the City contacted the responsibly party of the project by phone, they promptly filled out the maintenance verification form and sent it in to the City. No further enforcement action is necessary at this time.

Copies of the forms utilized to administer the above enforcement actions can be found in Appendix D of the City's updated JURMP.

During the reporting period, no sites were observed to present a significant threat to human health or the environment during inspections, so none were reported to the RWQCB.

2.5 Development Planning Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 Program Review and Modification

The inspection frequency for treatment control BMPs has been revised to match the Municipal Permit language more closely. Table 4-2 of the JURMP has been revised to read as follows:

Table 4-2
Treatment Control BMP Inspection Frequencies

Site Type	Inspection Frequency
High Priority	Annual, Completed Prior to Wet Season
Contains Drainage Inserts	50 Percent of All Sites with Drainage Inserts Per Year
All Other Sites	As Needed

Table 2-2
Completed SUSMP Projects to Add to Appendix A.1

No.	Project Name	Project Address	Development Type	BMPs	HSA	TTWQ
1	Grossmont Medical Offices	8860/8870 Center Dr	Commercial	Bioretention, drainage inserts, hydrodynamic separator	907.11	Medium
2	Davis YMCA Expansion** (CIP)	8881 Dallas St	Commercial	Media filter, bioswale	907.11	Medium
3	Commercial Trolley Theaters	8555 Fletcher Pkwy	Commercial	Drainage inserts	907.11	High
4	La Mesita	7360 La Mesita Place	Residential	Drainage inserts	908.22	Medium

Table 2-4
Summary of Treatment Control BMP Inspection Results

#	Project Name	Inspection Date	BMP(s) Installed	BMP(s) Inspected	BMPs Requiring Maintenance	Inspection Notes	Follow Up Notes	Resolution Status
1	Kaiser	9/30/2008	1	1	0	No maintenance deficiencies noted.	Maintenance verification form returned in August 2009.	NA
2	Former Car Dealership	9/30/2008	1	1	1	Dead vegetation in swale and clogged inlet holes observed.	NOV sent to responsible party. Vegetation reestablished and inlet holes confirmed clear prior to start of wet season.	Resolved
3	Fire Station (CIP)	9/30/2008	1	1	0	No maintenance deficiencies noted.	NA	NA
4	Bougainvillea Walk	6/29/2009	3	3	1	One drainage insert observed full of sediment and debris.	Written notice of maintenance required sent to responsible party in early 2009/2010. Follow-up to continue in 2009/2010.	In progress
5	La Mesa Teen Center (CIP)	6/29/2009	4	4	2	Two drainage inserts observed full of sediment and debris.	Written notice of maintenance required sent to responsible party in early 2009/2010. Maintenance verification form returned in September 2009.	Resolved
6	Providence Square (Formerly Talmadge East Apartments)	6/29/2009	4	4	1	One drainage insert observed full of sediment and debris.	Written notice of maintenance required sent to responsible party in early 2009/2010. Maintenance verification form returned in August 2009.	Resolved
7	Lowell Street Condominiums	6/29/2009	4	4	1	One drainage insert observed full of sediment and debris.	Written notice of maintenance required sent to responsible party in early 2009/2010. Maintenance verification form returned in August 2009.	Resolved

#	Project Name	Inspection Date	BMP(s) Installed	BMP(s) Inspected	BMPs Requiring Maintenance	Inspection Notes	Follow Up Notes	Resolution Status
8	Parkview	6/29/2009	16	16	0	No maintenance deficiencies noted.	NA	NA

3.0 CONSTRUCTION

3.1 INTRODUCTION

The City's construction program is designed to control construction and grading activities in the City. These types of projects have the potential to impact nearby water bodies due to the presence of disturbed soils and building materials and the potential for associated pollutants to be transported off site by storm water or non-storm water flows. The City continued to implement its construction program throughout 2008/2009.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2008/2009 reporting period are presented in the following bulleted list. The following subsections provide more detail on how the City complied with the Municipal Permit during the reporting period.

- Distributed appropriate checklists to all projects applying for grading and building permits.
- Conducted plan checks of erosion control plans to ensure construction projects comply with the City's minimum BMP requirements.
- Conducted training for applicable City staff.
- Conducted 56 construction inspections at 36 sites during 2008/2009.
- Issued 13 verbal warnings, two written warnings, and four NOVs to non-compliant construction sites and activities during 2008/2009.
- As part of the updated JURMP, required construction sites less than one acre to complete a Construction Storm Water Management Plan (CSWMP), similar to a Storm Water Pollution Prevention Plan, that details the planned construction phase BMPs for the project.

3.2 SOURCE CHARACTERIZATION

An inventory of active construction projects during the reporting period is presented in Appendix A.2 of this JURMP Annual Report. The City's inventory was maintained throughout the reporting period by the City's Engineering Division. New construction projects were added to the inventory at the start of construction, and projects were removed from the inventory after construction was completed. Since construction projects were continually being added and removed throughout the fiscal year, inventory updates were usually performed more frequently than the minimum once per month.

Since construction activities that involve grading activities are generally more of a threat to water quality than other construction activities such as tenant improvements, the City has chosen to include only projects that have applied for grading permits on the construction inventory. Even though other, smaller, construction projects are not included on the City's construction inventory, the City still requires BMP implementation and maintains oversight of these projects. The City's building inspectors inspect these sites for proper BMP implementation during their routine building construction inspections. Building inspectors issue a BMP stamp of approval on the building permit if all BMPs are being implemented properly. Building inspectors will notify the Engineering Division of the Public Works Department if any major BMP deficiencies are noted or if a facility is required to submit an application for a grading permit and thus be included on the City's construction inventory. Inspections by the Building Department are not tracked as are the City's construction inspections, but these inspections are used as a supplemental tool to implement the City's construction storm water requirements.

3.3 Updates to Ordinances and Approval Processes

The City did not make any changes or updates to City ordinances or approval processes during 2008/2009.

3.4 Best Management Practice Requirements

The City's updated construction and grading project requirements are detailed in the City's updated BMP Manual Part II, which can be found as Appendix C in the City's JURMP. The City did not make any changes to these BMPs during 2008/2009.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below.

3.5.1 Education and Staff Training

During 2008/2009, City staff involved in construction program implementation were trained on dry weather and wet weather requirements, erosion control, material management BMPs, enforcement action and procedures. Please see Section 8 of this JURMP Annual Report document for details on trainings performed and construction-related educational materials distributed.

3.5.2 Construction and Grading Approval Process

The City's grading approval process is described thoroughly in Section 5 of the City's JURMP. During 2008/2009, City personnel verified that all construction projects planned

to implement the City's minimum BMP requirements prior to issuing any building or grading permits. The City continued to distribute the updated version of Appendix A, which helps the City and the project proponent identify whether coverage under the State of California General Construction Permit (Construction Permit) is needed. Additionally, the City continued to require construction projects that are not subject to the General Construction Permit to complete a Construction Storm Water Management Plan (CSWMP), which details BMPs planned for construction sites not required to develop a storm water pollution prevention plan (SWPPP). A copy of the City's CSWMP form is included as Attachment 3.1. Approved forms and documents completed by project proponents are kept with the each project's file at the City for reference.

During 2008/2009, the City continued to enforce a 17 acre maximum disturbed area for grading activities. None of the City's active construction sites were larger than 17 acres, and the maximum disturbed area limitation did not apply. However, all construction sites were still required to limit exposed cleared or graded areas to the amount of area that could be protected prior to a rain event, as prescribed in the City's seasonal BMP requirements.

The City also continued implementing advanced treatment requirements during the reporting period. Criteria for determining when advanced treatment is required are detailed in the City's updated JURMP. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites within the City's jurisdiction, and advanced treatment methods were not required at any construction sites.

3.5.3 Inspection of Construction Sites

Construction projects that were active during 2008/2009, along with their assigned TTWQ, the number of weeks the site was activity within the rainy season, and the number of inspections conducted during both the wet and dry seasons, the number of follow-up inspections, and the total number of inspections for each site is included in Appendix A.2. A total of 55 routine construction inspections were performed for 36 construction sites during 2008/2009.

Construction inspections conducted during the reporting period were performed as described in the City's updated JURMP. Key components of the inspections include checks for coverage under the General Construction Permit during the initial inspection and assessments of compliance with the City's BMP and discharge requirements during all inspections. Responsible parties at the sites are educated as needed during inspections. Copies of the inspection forms are kept on file at the City.

3.5.4 Enforcement Measures

Any violations were noted on the project's inspection form, and the sites were given a list of corrective actions necessary to fix the observed violation. When necessary, a

verbal or written warning was issued for the violation, and the City followed up with the site until compliance was achieved. Table 3-1, below, includes the number of violations and enforcement actions taken during the reporting period in response to violations of the City's minimum construction BMP requirements. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP.

Table 3-1
Construction Enforcement Actions Taken

Enforcement Context	Verbal Warnings	Written Warnings	Follow-Up Inspections	NOVs	Stop Work Orders
Routine Inspections	11	2	1	2	0
Other Construction-Related Enforcement	2	0	0	2	0

Copies of the forms utilized to administer the above enforcement actions can be found in Appendix D of the City's updated JURMP.

None of the violations observed at construction sites during the reporting period were found to endanger human health or the environment. The City was able to bring about compliance at all sites for which enforcement actions were taken, and it was not necessary to report any of these sites to the RWQCB.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 Program Review and Modification

The City's JURMP was recently updated in March 2008. No changes to the City's construction component have been made since that time.

4.0 MUNICIPAL COMPONENT

4.1 INTRODUCTION

Throughout 2008/2009, the City of La Mesa continued to manage municipal areas and activities to reduce municipal discharges of pollutants to the MS4 to the MEP. As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and activities. Public parks and recreation facilities, administrative buildings, fire stations, and public works facilities make up the bulk of the municipal areas in the City. Municipal activities conducted by the City or City contractors include power washing, graffiti abatement, building maintenance, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. Information about the City's prioritized street sweeping program can be found in Table 4-1, and information about the City's MS4 maintenance program can be found in Table 4-2. Information about sanitary sewer overflows (SSO) that occurred during 2008/2009 can be found in Table 4-3. The City continued to respond to complaints made to the City's Storm Water Hotline. All complaints made to the City's Storm Water Hotline are included in Appendix B; enforcement actions taken in response to complaint investigations are included in Table 4-4. The City's municipal inspection results can be found in Table 4-5 and Table 4-6.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the 2008/2009 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the municipal component and of its storm water program during the reporting period are provided in the remainder of Section 4.

- The City inspected all high TTWQ fixed municipal facilities.
- The City hosted eight training events/meetings for approximately 54 municipal personnel.
- The City maintained an informational storm water bulletin board in City Hall.
- The City removed a total of 568 tons of sediment and debris from street sweeping activities.
- The City removed a total of 122.25 cubic yards of sediment and debris from standard MS4 cleaning activities, not including drainage insert maintenance.
- The City removed over 10 cubic yards of sediment and debris from 21 filter inserts in University drainage basin.
- City personnel continued to restock the pet waste bag dispensers in City parks, using 18,000 pet waste bags during 2008/2009.

- A total of 121,089 linear feet of sewer line were televised during 2008/2009, which led to the discovery of some areas of the sanitary sewer in need of repair. The City replaced or rehabilitated 11,195 linear feet of sanitary sewer line.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities. As mentioned in the City's JURMP, municipal fixed facilities have been grouped under one category, fixed facilities. This is because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar.

4.2.2 SOURCE CHARACTERIZATION

All fixed facilities are included on the City's municipal inventory, which was revised during the JURMP update in early 2008. Additional descriptions of the facilities and activities conducted at them can be found in the City's JURMP. The City's inventory is included in this JURMP Annual Report as Appendix A.3.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City continues to implement and assess the effectiveness of BMPs at fixed municipal facilities. As mentioned in the City's JURMP, the City uses the California Stormwater Quality Association (CASQA) Municipal BMP Handbook to establish appropriate BMPs for fixed municipal facilities. Table 6-2 in the City's JURMP describes the CASQA fact sheets that are used for specific facility types.

The City continues to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. The City also continues to use Calsense Computerized Irrigation Control (Calsense) at a number of fixed municipal facilities to reduce water use and decrease the chance of transporting pollutants to the City's MS4 by over-irrigation. BMP implementation for parks and recreational facilities, as described in the City's JURMP, has not changed.

City public works employees, fire station employees, and employees at other fixed facilities in the City continue to implement BMPs appropriate to the facility type as described in the City's JURMP. City fire response personnel continue to be trained in implementing BMPs for non-emergency fire fighting activities as described in Section 3 of the City's JURMP. There have been no changes in BMP requirements for any fixed municipal facilities.

4.2.4 PROGRAM IMPLEMENTATION

As mentioned above, the City's BMP requirements have not changed since the development of the revised JURMP. Some notable examples of implementation of those BMPs are provided below.

Calsense Computerized Central Irrigation Control

The City continues to use Calsense, an advanced automated irrigation system designed to prevent over irrigation at several fixed municipal facilities. Since Calsense is automated, it has a lower chance of malfunction than manual irrigation systems and allows the City to monitor irrigation activity from a central computer. A total of 21 municipal facilities, including both parks and various fixed facilities, are equipped with Calsense technology.

The Calsense system monitors irrigation by including the use of master valves and flow sensing to prevent over-irrigation and also decrease the amount of water that is used. A break in the system is recognized as a high flow, and the system is shut off until it is repaired. The use of this technology allows the City to prevent major leaks by detecting smaller leaks that might otherwise go undetected earlier than with a manual system. The automatic shutoff by Calsense saves thousands of gallons of water and prevents the runoff generated by a leak from carrying pollutants from parks and other fixed municipal facilities to the storm drain system. The irrigation system can be controlled by a central computer, which calculates the best time for irrigation based on moisture readings, weather, and real time flow rates at every valve. Additionally, the system allows staff to manage the system more efficiently and with less chance of over-irrigation. The irrigation schedules can be designed for a long period of time or easily modified for weekly or daily needs if necessary. The system allows for the most efficient usage of water while minimizing the chance of over-irrigation and consequent introduction of pollutants to the City's storm drain system.

Parks and Recreational Facilities

During 2008/2009, City continued to maintain the 34 pet waste bag dispensers installed throughout 14 parks. City personnel restock the dispensers as necessary; 18,000 pet waste bags were used during the reporting period. As mentioned in the City's JURMP, a number of volunteers continue to assist in keeping the designated dog area at Harry Griffin Park free of pet waste as part of the Canine Corners Program. The City also continues to host the Adopt-A-Park program, which engages residents of the City in volunteering to pick up trash throughout local parks. The City continued its partnership with the St. Madeline's Sophie Center, which employs developmentally disabled individuals in park maintenance activities.

In partnership with a local Eagle Scout, the City installed a third informational storm water kiosk during 2008/2009. There are now kiosks in three City parks: La Mesita Park, Vista La Mesa Park, and Jackson Park. These kiosks present storm water pollution prevention information to park patrons and are updated with information regarding upcoming outreach events. The Adopt-A-Park program, the partnership with St.

Madeline's Sophie Center, and the storm water kiosks are also discussed in Section 9 of this Annual Report.

Public Works Facilities, Fire Stations, Other Fixed Facilities
As previously mentioned, City personnel continued to implement appropriate BMPs for municipal fixed facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance (i.e. landscaping, building maintenance, etc.) as necessary. Parking facilities associated with fixed municipal facilities are conducted as part of the regular sweeping activities and were swept weekly during 2008/2009. The large paved area at the City's Public Works Operation Center was swept at least once weekly during 2008/2009, and twice weekly if needed. Public Works employees continued to implement the storm water management plan (SWMP) at the Public Works Operations Center. Public Works employees also continued to maintain the seven filter inserts on the property; these inserts are cleaned twice annually.

Municipal Inspections
During 2008/2009, the City conducted follow-ups inspections of fixed municipal facilities recommended for follow-up based on the results of the 2007/2008 routine municipal inspections. As mentioned in the 2007/2008 JURMP Annual Report, these facilities received routine inspections at the end of 2007/2008, so follow-ups were completed in 2008/2009. The City distributed the corrective actions needed based on inspection findings to the municipal staff responsible for the maintenance of each of these facilities in 2008/2009. Following this notice, follow-up inspections were completed. The status of corrections was also checked during routine inspections conducted later in 2008/2009. Table 4-5, at the end of this section, lists all five facilities where follow-up inspections were conducted and the results of the inspections.

All high TTWQ fixed municipal facilities received a routine annual inspection in 2008/2009. Table 4-6 at the end of this section lists all high TTWQ municipal fixed facilities requiring inspection in 2008/2009, the date the inspection was performed, and the recommended corrective actions from the inspection. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2008/2009. The City's municipal inspection form is included as Attachment 4.1.

4.3 Roads, Streets, Highways, and Parking Facilities

4.3.1 Background

The City conducts regular maintenance of roads, streets, highways, and parking facilities in the City to control pollutants such as sediment, metals, and litter and debris.

4.3.2 Source Characterization

The City maintains roads, streets, and highways; the City also maintains four stand-alone parking facilities. Roads, streets, and highways, are included as one entity on the

City's municipal inventory and each individual stand-alone parking facility is also included on the City's municipal inventory, which is included in Appendix A.3.

4.3.3 BEST MANAGEMENT PRACTICES

The City's primary BMP for roads, streets, highways, and parking facilities is street sweeping. Other BMPs are chosen as needed based on the CASQA Municipal Handbook. The City's sweeping frequency is outlined in the JURMP and described in the following subsection. There were no changes to the BMPs implemented for roads, streets, highways, and parking facilities in 2008/2009.

4.3.4 PROGRAM IMPLEMENTATION

During 2008/2009, the City swept a total of 8,285 curb miles, removing approximately 568 tons of debris. Similar to previous reporting periods, the debris removed by sweeping activities was approximately 80 percent sediment and 20 percent leaves, debris, and trash. Table 4-1, below, describes the areas assigned high, medium, and low sweeping priorities, and the associated sweeping frequency. The City met the sweeping frequency requirements of the high, medium, and low priority streets as described in both the JURMP and in the table below. Parking lots associated with City parks were swept every two weeks; parking lots associated with all other fixed facilities in the City were swept every week during 2008/2009.

As a means to address priority pollutants in the San Diego Bay and the San Diego River Watersheds, the City conducted additional sweepings of some City streets. Designated residential areas that are low priority were swept monthly during 2008/2009 and selected high priority streets were swept weekly.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
High	Downtown areas, designated residential areas, designated commercial areas, stand-alone parking facilities	10.6 miles	At least every two weeks
Medium	Center islands	9 miles	At least once per month
Low	Designated residential areas	140 miles	As needed, at least annually
Fixed Facilities	Parking lots associated with municipal fixed facilities	N/A*	Weekly

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
Fixed Facilities - Parks	Parking lots associated with parks	N/A*	Every two weeks
Fixed Facilities – PW Operations Center	Public Works Operation Center	N/A*	At least weekly, twice weekly if needed
Total Amount of Debris Collected from Street Sweeping Activities: 568 tons			

* Mileage data is not available for the swept area of stand-alone parking facilities, parking facilities associated with municipal facilities, and the PW Operations Center. Mileage accrued while sweeping these facilities is included in the total mileage.

Inspections
Trash, debris, and sediment that have accumulated on City streets is identified and cleaned up via street sweeping, so additional inspections beyond this effort are not necessary.

4.4 MS4

4.4.1 Background

The City's storm water conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during rain events. The City's MS4 consists of approximately 56 miles of pipes of varying materials, natural channels, concrete channels, and culverts and over 400 curb inlets and catch basins.

4.4.2 Source Characterization

The City's MS4 as one complete entity is included on the City's high TTWQ municipal inventory.

4.4.3 Best Management Practices

The City maintains a strict MS4 maintenance and cleaning schedule. Maintenance and cleaning are conducted to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. As described in the City's JURMP, BMPs for MS4 maintenance activities are chosen based on the CASQA Municipal Handbook and have not changed during 2007/2008.

The City has installed and maintains 21 filter inserts in catch basins in the University drainage basin, which are designed to prevent debris from entering the MS4. These filter inserts are maintained as part of the routine MS4 maintenance schedule. Figure 4-1 shows the locations of these drainage inserts.

4.4.4 PROGRAM IMPLEMENTATION

The City implemented a rigorous MS4 inspection and cleaning schedule during 2008/2009. The City inspected and cleaned all MS4 cleanout locations twice in 2008/2009; at least one cleaning was conducted between May 1 and September 30. The City's MS4 inspection and cleaning schedule for 2008/2009 is shown in Table 4-2, below.

Table 4-2
MS4 Maintenance Data

	Percent Inspected and/or Cleaned*	Percent of Open Channels Found with Anthropogenic Litter Cleaned	Amount of Debris Removed from Cleaning Activities
Catch Basins/Self Cleaning MS4 Facilities	**100%**	N/A	**52.25 cubic yards**
Open Channels	**100%**	**100%**	**70 cubic yards**
Drainage Inserts	**100%**	N/A	**10.5 cubic yards**
Total Debris Removed From MS4 Maintenance Activities: 132.75 cubic yards			

* No structures were observed at least 33% of capacity during the reporting period. However, the City cleans out any structures, including self-cleaning structures, in which trash and debris is observed at the time of inspection.

The City's cleanout locations are access points to various sections in the City's MS4, so no additional pipe beyond the cleanout location is typically cleaned. The City may flush the MS4 line and then reclaim the water in the event of a spill. During 2008/2009, there was no need to flush any MS4 line, so there is no data to report for additional MS4 cleanout activities. The City continued to maintain the filter inserts installed in the University drainage basin.

During 2008/2009, the City continued to inspect the open channels in the City and remove trash and debris as necessary. If litter or debris is observed during the routine inspections, it is removed immediately. The total length of the channel segments inspected and cleaned by City staff was approximately 4,930 feet.

As described in Table 4-2, 132.75 cubic yards of debris was removed during MS4 maintenance activities. The weight of the material removed was not recorded, though an overall estimation of the composition of debris removed from MS4 maintenance activities is 80 percent trash and leaves and 20 percent rocks and soil. The volumes were converted to estimated weights using the percent composition estimates from City maintenance staff and conversion factors of 2,300 pounds per cubic yard of rocks and

soil and 400 pounds per cubic yard of trash, leaves, and similar material. The total weight of material removed was estimated at 52.44 tons.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. A spill that introduces untreated sewage to receiving waters can contain high concentrations of bacteria, viruses, and even hazardous chemicals. Routine inspection and maintenance of the sanitary sewer system works to reduce the potential for a spill or SSO and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 SOURCE CHARACTERIZATION

The City maintains a system of public sanitary sewer pipes to convey wastewater from the City to be treated. The sanitary sewer system, as one complete entity, is included on the City's high TTWQ municipal inventory.

4.5.3 BEST MANAGEMENT PRACTICES

The City implements BMPs from the CASQA Municipal Handbook, as described in the City's JURMP, during sanitary sewer maintenance. There have been no changes to these BMPs during 2008/2009. The City inspects and maintains the sanitary sewer system as part of regular wastewater activities. The City clears blockages and repairs leaks as needed.

4.5.4 PROGRAM IMPLEMENTATION

The City continued to maintain 33 posted signs at various canyon locations providing emergency contact information to report possible SSOs. These signs help the City in responding to illegal discharges and SSOs that may otherwise go unnoticed for a longer period of time.

As part of the City's regular maintenance schedule, the City maintains areas known to be "hot spots" for grease buildup on a monthly basis. The City has also worked to develop a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs. During 2008/2009, the City began to implement a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs. Additionally, the City introduced a FOG Ordinance, No. 2009-2794 and 2009-2795 which provides legal authority and outlines specific details of the program.

In addition to the monthly maintenance at known grease "hot spots," the City seeks to eliminate seepage from the sanitary sewer system to the MS4 by routine preventative maintenance of both systems. Routine maintenance of both systems allows the City to find areas that are likely to become problems in the future and make the necessary repairs/replacements before any larger issues arise. The City also continued to conduct flow metering in its sanitary sewer system to monitor for evidence of potential problems. During 2008/2009, the City replaced or rehabilitated 11,195 linear feet of sewer line. A total of 121,089 linear feet of sewer line was televised during 2008/2009, which led to the discovery of some areas of the sanitary sewer in need of repair. This prevented these areas from becoming future seepage points.

In case of an SSO, the City maintains a spill response plan that establishes procedures for responding to an SSO. Detailed information about the City's SSO spill response plan is included in the City's JURMP. During 2008/2009, there were eight SSOs. All spills were reported to the State Water Resources Control Board (SWQCB) within 24 hours through the California Integrated Water Quality System (CIWQS), as required by the Municipal Permit. Table 4-3, below, provides a description of each SSO event that occurred during 2008/2009. In each instance the City responded by recovering as much of the spill as possible and cleaning up and mitigating the effects of the spill.

Table 4-3
SSO Information

Spill Location	Spill Date	Estimated Spill Volume	Approximate Percentage of Volume Recaptured
6180 Sarita St.	9/1/2008	825 gallons	36%
4401 Palm Ave.	9/18/2008	360 gallons	69%
4401 Palm Ave.	1/11/2009	250 gallons	100%
7777 Alvarado Rd.	1/14/2009	300 gallons	83%
4426 Bellflower Dr.	3/8/2009	400 gallons	100%
3669 Harris St.	3/9/2009	600 gallons	100%
5016 Pine St.	3/29/2009	105 gallons	100%
7700 University Ave.	4/14/2009	400 gallons	100%

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City conducts a variety of different mobile municipal activities, typically involving infrastructure maintenance, landscape maintenance, graffiti removal, and power washing. Power washing is not considered a part of any normal maintenance activities, but it is used when other methods of cleaning or graffiti removal are not effective.

4.6.2 Source Characterization

Both power washing and graffiti removal are listed on the City's high TTWQ municipal inventory. Infrastructure maintenance and landscape maintenance are listed on the City's medium TTWQ municipal inventory.

4.6.3 Best Management Practices

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel are trained to implement BMPs for the specific activity in which they are involved. For example, City personnel performing power washing are trained to collect all waste water and City personnel conducting graffiti removal are trained to store and handle any chemicals properly.

4.6.4 Program Implementation

Power washing and graffiti removal, both high TTWQ activities, are conducted on an as needed basis and are therefore not on a set schedule. Neither power washing nor graffiti removal was scheduled to be conducted during the timeframe that routine municipal inspections were conducted. Facility personnel responsible for graffiti removal and power washing were contacted, however, to discuss BMP implementation and verify that BMPs are implemented during these activities to prevent discharge of any pollutants to the storm drain system. Facility personnel reported that water is either directed to landscaping or storm drains are blocked and water is vacuumed up once the project is complete.

Municipal personnel that conduct other mobile activities such as infrastructure maintenance and landscape maintenance are trained regularly regarding BMPs for material use and disposal. Emergency vehicle maintenance personnel are trained on the proper handling and use of pesticides, herbicides, and fertilizers as described in the City's JURMP.

4.7 Special Events

4.7.1 Background

There is one annual special event in La Mesa: Oktoberfest, which is an annual three-day celebration occurring in early October each year. There are no other regular major special events, although smaller events may occur from time to time.

4.7.2 Source Characterization

As required by the Municipal Permit, special events are included on the city's high TTWQ municipal inventory.

4.7.3 BEST MANAGEMENT PRACTICES

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter/debris from the event, and raise storm water awareness among the vendors and patrons of the event, as applicable. During smaller events, City staff ensure that any trash and debris left over from the events is cleaned up.

Individuals or groups wishing to host events in the City meeting certain criteria are required to obtain a permit from the City. Both Community Assembly Permits and Block Party Permits are available from Public Works and Park Use Permits are available from the Community Services Department. Permits require individuals responsible for the event to control trash and clean up after the event. If vendors are anticipated at the event, Vendor Fact Sheets (Attachment 8.1) are provided to the permit applicant.

4.7.4 PROGRAM IMPLEMENTATION

During 2008/2009, the City provided vendors of the Oktoberfest event a handout entitled "Tips for Outdoor Vendors." This fact sheet informed the vendors of the difference between the storm drain system and the sanitary sewer system and the effects of polluted urban runoff. The sheet also included event-specific BMPs, such as using dry cleaning methods, having spill response materials if using cooking grease, and managing trash and other wastes properly. The City distributed 330 copies of the aforementioned fact sheet.

The City also conducted an inspection of Oktoberfest during one of the days of the event. Minor amounts of litter and debris were observed on the ground and portable toilet facilities lacked secondary containment. The portable toilets were clean and free of any leaks, and the City plans on ensuring secondary containment trays are ordered with the portable toilets for the Oktoberfest occurring in 2009/2010. Trash and debris observed during the event was cleaned up as part of the routine special event BMPs that occurred at the close of the event.

4.8 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

Reporting and Response

Public and municipal involvement are crucial to preventing and eliminating illicit connections and illegal discharges (IC/ID) from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is provided on the City's website, in distributed storm water educational material, in storm water articles in the *La Mesa Focus* newsletter, and on the Storm Water Bulletin Board. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and

website are logged onto a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges. The Public Works Department also receives complaints regarding storm water, often due to infrastructure concerns. Complaints to the Public Works Department are also tracked and investigated.

Complaints received by the City during the 2008/2009 reporting period and the City's response to each are listed in Appendix B. A total of 107 complaints were documented this year.

Enforcement

As previously stated, complaints received via the Storm Water Hotline, City website, and Public Works hotline are included in a table in Appendix B. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, violations, and/or educational material. Table 4-4, below, summarizes the enforcement actions taken in response to complaints received.

Table 4-4
Enforcement Actions Resulting from Complaints Received by the Storm Water Hotline

	Verbal Warning	Written Notice to Comply	Written Warning	NOV
Commercial	5	4	0	5
Industrial	0	0	0	0
Mobile	2	0	0	0
Municipal	0	0	0	0
Residential	1	5	5	2
Construction	2	0	0	0

4.9 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to sanitary sewer overflows. Preventative maintenance is regularly conducted on the City's sanitary sewer system, and video inspections and sewer surveys are regularly conducted to monitor the condition of the public sewer lines and to determine the necessity of maintenance. City crews do not maintain private laterals, but the City assists in the containment and cleanup of spills from private laterals if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report any SSOs to the City's Storm Water Hotline. As previously mentioned, there were eight SSOs during 2008/2009; there were no other spills during the reporting period.

4.10 Education and Outreach

During 2008/2009, the City continued to educate municipal personnel regarding proper BMP implementation and other storm water and watershed concepts. The City held a variety of training sessions for City personnel. The City also continued to maintain a storm water bulletin board in City Hall, which provided storm water information and brochures. A photo of the bulletin board is included as Attachment 4.2. Detailed information regarding the education and outreach conducted for City personnel is described in detail in Section 8 of this Annual Report.

4.11 Municipal Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.12 Program Modification and Review

The following modifications were made to the municipal component of the City's JURMP during 2008/2009:

Fixed Facilities (Section 6.2 in the City's JURMP)
In the municipal inventory presented in the City's JURMP, there are four listings for public works facilities located at 8152 Commercial Street: PW Yard, PW Fleet, PW Storage and Maintenance, and PW Storage. During 2008/2009, the City chose to consolidate these four facilities into one listing on the City's municipal inventory. Since the facilities are located at the same address and operate in a shared space, the listings were consolidated to be more straightforward for inspection purposes. The consolidated listing included on the municipal inventory is now titled "Public Works Operation Center" and is high TTWQ.

Table 4-5
Follow-Up Compliance Table

#	Facility Name	Address	Reason for Violation (2007/2008 Routine Inspection)	Follow-Up	Resolution Status
1	Community Pool	5100 Memorial Drive	Chemical storage area lacks containment and chlorine residue is hosed off to nearby storm drains and channel. Pool deck is pressure washed, water discharges to pool deck drains, which are connected to the storm drain system.	See Table 4-6 on the following for progress made during 2008/2009	In Progress
2	Harry Griffin Park	9550 Milden Street	Portable toilets lack secondary containment.	Not resolved at time of follow-up inspection, but confirmed corrected during 2008/2009 routine inspection	Resolved
3	Northmont Park	Severin Drive and Amaya Drive	Significant debris in and around inlet. Herbicide reside observed on sidewalk.	Not resolved at time of follow-up inspection, but confirmed corrected during 2008/2009 routine inspection	Resolved
4	Public Works (PW) Yard (including PW Storage Yard, PW Fleet, PW Storage and Maintenance)	8152 Commercial Street	Significant amounts of sediment in the stockpile area, storage area and near an inlet on site.	Follow-up inspection found the corrections had been made. Confirmed continued implementation of corrections during 2008/2009 routine inspection.	Resolved
5	Rolando Park	Alamo Way & Vigo Street	Significant sediment and uncontained hillsides and stockpiles. Significant debris in storm drains. Construction BMPs failing or not implemented.	Follow-up inspection found the corrections had been made. Confirmed continued implementation of corrections during 2008/2009 routine inspection.	Resolved

Table 4-6
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
1	Allison Avenue Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	5/28/2009	• Provide secondary containment for portable toilet and sink Remove food, debris and trash stains from dumpster areas	• City staff are currently investigating whether the portable toilet at this location is meant to be wheelchair accessible. If so, equipping the portable toilet with secondary containment will make the facility inaccessible to wheelchairs. • Portable toilet is clean, there is no evidence of spills or leaks	In Progress
2	Aztec Park	High	Parks and Recreation Facilities	5/6/2009	• No significant corrective actions	N/A	N/A
3	Briercrest Park	High	Parks and Recreation Facilities	5/26/2009	• No significant corrective actions	N/A	N/A
4	Collier Park and Pump House	High	Parks and Recreation Facilities	5/26/2009	• Provide stabilization for hillsides on site to prevent sediment transport to channel. • Remove leaf and sediment debris around culvert and throughout site; consider increasing frequency of sweeping • Ensure catch basin is kept free of trash and debris.	• City installed wall at base of hillsides to help stabilize hillsides in June 2009. • Parks Staff cleaned out culvert and catch basins in the park in June 2009.	Resolved

Table 4-6 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
5	Community Pool	High	Parks and Recreation Facilities	5/29/2009	• Remove sediment build up around concrete channel. • Stabilize loose sediment in the landscaping to prevent erosion and sediment transport. • Use dry methods or collect all water used to cleanup pool chemicals and dispose of appropriately to a sewer drain. • Provide some documentation of this change of practice. • Minimize discharge of water to deck drains that are not directed to the sewer	• Stormwater Program Manager met with pool staff in June to discuss necessary changes to current practices. Hosing will be minimized to ensure water, which drains to landscaping, is fully contained by the landscaping • Spill kit was obtained • City is investigating potential options for providing secondary containment to chemical storage areas	In Progress
6	Harry Griffin Park	High	Parks and Recreation Facilities	5/26/2009	• No significant corrective actions	N/A	N/A
7	Highwood Park	High	Parks and Recreation Facilities	5/27/2009	• No significant corrective actions	N/A	N/A
8	Jackson Park	High	Parks and Recreation Facilities	5/27/2009	• No significant corrective actions	N/A	N/A
9	Junior Sean Sports Complex	High	Parks and Recreation Facilities	5/28/2009	• No significant corrective actions	N/A	N/A
10	La Mesa Blvd (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	5/28/2009	• No significant corrective actions	N/A	N/A
11	La Mesita Park and Gardener's Shack	High	Parks and Recreation Facilities	5/27/2009	• No significant corrective actions	N/A	N/A

Table 4-6 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
12	Lemon Ave Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	5/29/2009	• No significant corrective actions	N/A	N/A
13	MacArthur Park	High	Parks and Recreation Facilities	5/27/2009	• No significant corrective actions	N/A	N/A
14	Northmont Park	High	Parks and Recreation Facilities	5/26/2009	• No significant corrective actions	N/A	N/A
15	Palm Avenue Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	5/26/2009	• No significant corrective actions	N/A	N/A
16	Porter Hall	High	Parks and Recreation Facilities	5/28/2009	• No significant corrective actions	N/A	N/A
17	Porter Park	High	Parks and Recreation Facilities	5/28/2009	• No significant corrective actions	N/A	N/A
18	Public Works Facility	High	Public Works Facilities	6/1/2009	• No significant corrective actions	N/A	N/A
19	Rolando Park	High	Parks and Recreation Facilities	5/27/2009	• No significant corrective actions	N/A	N/A
20	Sunset Park, Gardener's Shack and Recreational Building	High	Parks and Recreation Facilities	5/27/2009	• No significant corrective actions	N/A	N/A
21	Sunshine Park	High	Parks and Recreation Facilities	5/27/2009	• No significant corrective actions	N/A	N/A
22	Vista La Mesa Park	High	Parks and Recreation Facilities	5/28/2009	• No significant corrective actions	N/A	N/A

Note: Roads, streets, highways, and parking lots; the MS4; and the sanitary sewer system were inspected via the maintenance effort described earlier in this section.

Figure 4-1
City Maintained Drainage Inserts Installed in the University Drainage Basin

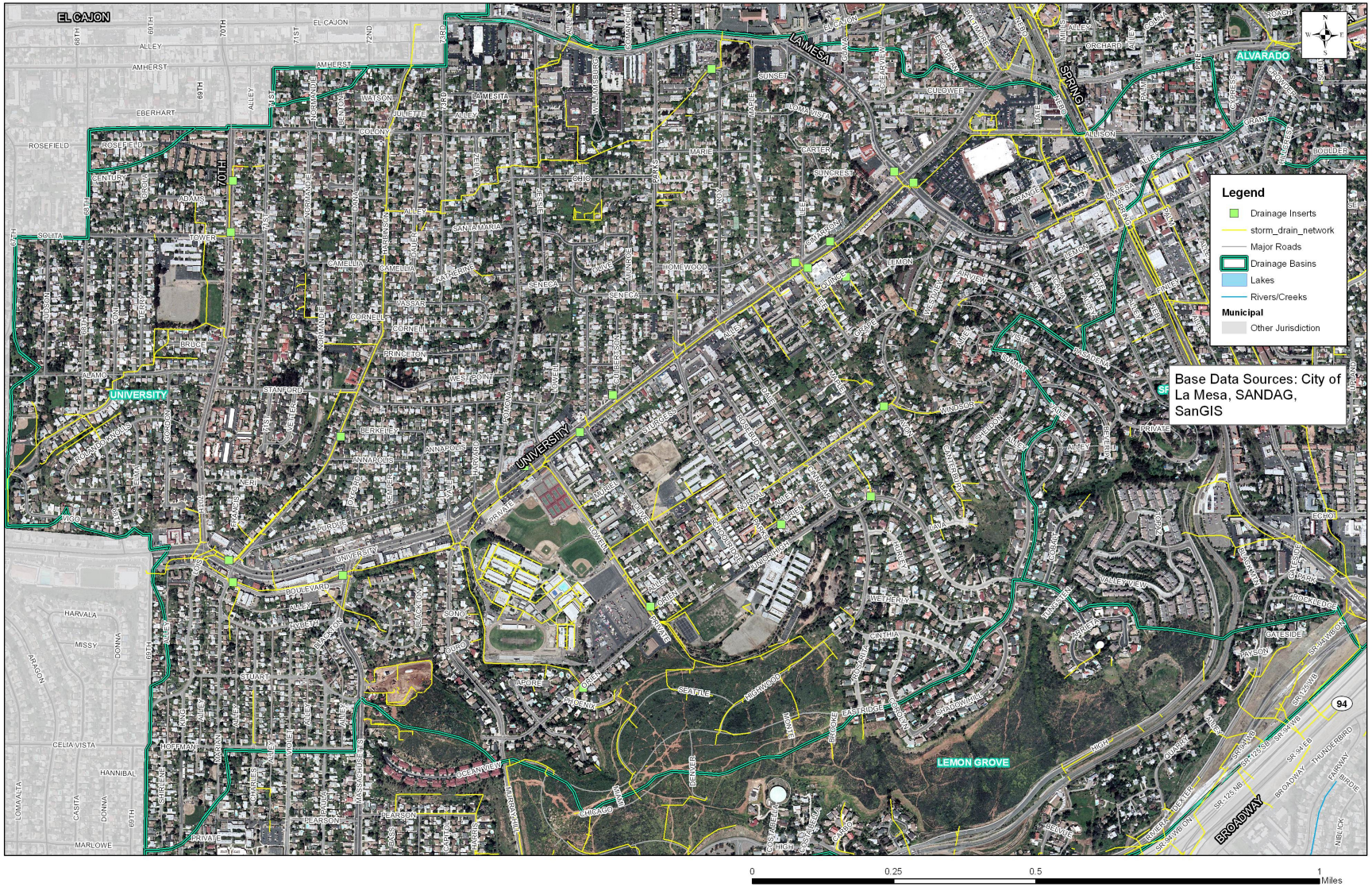

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During 2008/2009, the City continued to implement a storm water program to reduce urban runoff pollution from the areas and activities of industrial and commercial businesses. The City aims to reduce the amount of pollutants discharged from industrial and commercial facilities by implementing various aspects of its industrial and commercial program.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Notable achievements for the industrial and commercial component during the 2008/2009 reporting period are outlined below. Additional details about the City's implementation of the industrial and commercial component and of its storm water program during the reporting period are provided in the remainder of Section 5.

- The City met the Municipal Permit requirement of inspecting at least 25 percent of its stationary industrial and commercial inventory.
- The City inspected all high TTWQ stationary industrial and commercial facilities.
- The City completed pollutant discharge potential assessment (PDPA) forms and additional watershed-specific questionnaires at inspections to aid watershed management and source identification efforts.
- Based on inspection findings and complaints made to the hotline, the City issued 46 NOVs, four notices to comply, and seven verbal warnings to industrial and commercial businesses.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 BACKGROUND

The City's updated industrial and commercial inventories can be found in appendices A.4 and A.5, respectively, and include all stationary facilities known to be operating in the City that are required to be included on the City's inventories. Stationary facilities in the City include, but are not limited to, manufacturing facilities, wholesalers, auto dealerships, auto repair shops, and restaurants. The City requires industrial and commercial businesses to implement pollution prevention measures and minimum, activity-specific BMPs to mitigate the impacts of business activities on water quality.

5.2.2 SOURCE CHARACTERIZATION

The City's industrial and commercial inventories include both stationary and mobile businesses, as required by the Municipal Permit, and were updated during 2008/2009.

Information on how the City prioritizes the industrial and commercial inventories based on TTWQ is discussed in detail in the City's JURMP. The City considers factors including those listed below when prioritizing the inventories:

- Industrial Permit subjectivity
- Consideration of downstream waterbody and whether the business is likely to discharge pollutants for which the waterbody is impaired
- Results from previous inspections and institutional knowledge
- Proximity to the receiving waterbody

The City's updated inventory includes 468 stationary industrial and commercial facilities.

5.2.3 Best Management Practice Requirements

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other designated BMPs to reduce or potentially eliminate the generation of pollutants from business areas/activities. The City has established a set of minimum BMPs based on the CASQA Industrial and Commercial Handbook. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. The City's BMP requirements are described in more detail in the City's BMP Manual Part I, which is an attachment to the City's JURMP. BMP requirements for stationary industrial and commercial businesses did not change during 2008/2009.

5.2.4 Program Implementation

As previously mentioned, the City updated its industrial and commercial inventory during 2008/2009. The updated industrial and commercial inventories are included as Appendix A.4 and Appendix A.5, respectively, to this JURMP Annual Report.

Industrial and Commercial Inspections
During 2008/2009, the City conducted storm water compliance inspections at selected stationary industrial and commercial facilities. All high TTWQ sites were selected for routine inspection. Additional sites selected for routine inspection were medium TTWQ and were typically restaurants and auto-related facilities. The City chose to select mainly restaurants and auto-related facilities for the additional industrial and commercial inspections due to those industry categories' potential to discharge bacteria and heavy metals, respectively.

Table 5-1, on the following page, provides a summary of the industrial and commercial site visits. In the table, full inspections have been counted as one full inspection. Because facilities move/go out of business, are duplicates of other businesses listed on the City's inventory, or are conducting activities for which inclusion on the City's inventory is not necessary, full inspections are not conducted at all visited facilities. Since time and effort is spent to visit these facilities, visits where a full inspection is not conducted are considered equivalent to one half of a full inspection. The only time a site visit would not count as half of a full inspection is if the facility moved and was replaced

by a facility where a full inspection was conducted or the facility was a duplicate of another facility selected for inspection.

Table 5-1
Summary of Routine Site Visits

Facility Category	Inventoried Stationary Sites	Equivalent Full Inspections	Percentage of Total Inventory
High TTWQ Sites	42	42	9%
Additional Sites	426	109	23%
Totals	**468**	**151**	**32%**

Facility inspections were conducted in accordance with the protocol set in the City's JURMP. Inspections involved a thorough examination of the facility and all outdoor activities. BMP deficiencies and corrective actions were recorded on the City's industrial and commercial inspection form and discussed with facility personnel present during the inspection. During 2008/2009 the City revised the Microsoft Access Industrial and Commercial Database, which stores industrial and commercial inspection information, to allow for inspectors to enter data directly into the database in the field rather than using a paper form. Information collected during the inspection was the same whether the inspector was using the paper form or inputting information directly into the database using a tablet computer. Inputting inspection results directly into the database during the inspection streamlines the inspection process as it eliminates the need for data entry. Additionally, the inspector has all previous inspection records on hand during the inspection if any questions about previous inspections arise.

During the inspection process, the City also checked Industrial Permit compliance status when applicable. The City also reviews storm water pollution prevention plans (SWPPP) and monitoring results when applicable. Businesses observed to be in violation of the Industrial Permit are included in Table 5-2, at the end of this section. The City also completed PDPA forms and supplemental watershed questionnaire forms during the inspections in an effort to collect more data from inspected facilities. These forms are included with the City's inspection form, which is included in Attachment 5.1. More information about the results of the watershed questionnaire analysis is presented in Section 12.

During 2008/2009, the City conducted several types of inspections:

- Follow-up inspections at sites not in compliance in 2007/2008
- Routine inspections for 2008/2009
- Follow-up inspections at sites not in compliance in 2008/2009

The results of these inspections are presented in Table 5-3.

In some cases, a facility recommended for follow-up during 2007/2008 was observed to be in compliance during the follow-up inspection conducted during 2008/2009. These sites received routine inspection subsequent to the follow-up to confirm continued compliance with City requirements. In some cases, businesses were out of compliance in the 2008/2009 routine inspections. The City will conduct further follow-up and enforcement activities at these sites to bring them back into compliance in 2009/2010.

The City did not rely on third party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third party inspection program.

General Industrial Permit

Subjectivity to the Industrial Permit was evaluated during the industrial and commercial inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector gathered information about the business activities that occur on site and assigned or reassigned the business' standard industrial classification (SIC) code(s). Based on the assigned SIC code, the inspector evaluated the Industrial Permit subjectivity of the business. Any violations of the Industrial Permit requirements were recorded on the standard industrial and commercial inspection form and are presented in Table 5-2, at the end of this section. The table includes businesses directed to file a Notice of Intent (NOI) and develop a SWPPP and monitoring program, as well as businesses that had filed an NOI but had failed to develop a SWPPP and monitoring program. The table also includes facilities that could potentially gain exemption from Industrial Permit requirements by completing notice of non-applicability/no exposure certification (NONA/NEC) paperwork. Each business was notified of any Industrial Permit-related non-compliance by the inspector.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to provide site-specific one-on-one education regarding storm water concepts and BMPs. Inspectors discussed a variety of topics such as watershed concepts, the Industrial Permit and minimum, activity-specific BMP requirements. Prior to performing industrial and commercial inspections, the City sent a letter to all businesses informing them of the upcoming inspection. This notification letter also authorized the City's consultant, D-MAX Engineering, Inc., to perform the facility inspections on behalf of the City.

In previous years, a copy of the hand written inspection form was sent to businesses as record of the inspection and to provide corrective actions to facility personnel. It was determined that some businesses had a difficult time understanding what actions were needed or viewed the actions more as recommendations than requirements. A database generated report, which clearly states the required corrective actions, was developed and distributed to businesses during the routine inspections conducted in late 2008/2009.

Ideally, this method of inspection result notification will more effectively convey inspection results and required corrective actions to facility personnel.

During 2008/2009, updates were also made to the instructional sheets that are provided with NOI and NONA/NEC paperwork. It was common for facility personnel to call the inspector or Storm Water Program Manager to ask about completing paperwork for Industrial Permit status. NONA/NEC paperwork is relatively long and tends to be confusing for business personnel, so most Industrial Permit-related questions were about NONA/NEC paperwork. The instruction sheets for both the NOI and NONA/NEC paperwork were revised to provide more guidance in filling out the paperwork properly. The revisions in the City's guidance materials should simplify the process of completing NOI and NONA/NEC paperwork. NOI and NONA/NEC cover sheets are included as Attachment 5.2.

The City continued to partner with Target and Dixieline Lumber in the City to provide English and Spanish Integrated Pest Management (IPM) cards (Attachment 5.3) available to the public at each business's garden center. This continued collaboration between the businesses and the City's Stormwater Program Manager in distributing educational material is a valuable asset to the City's storm water program. During 2008/2009, a total of 62 packets of English IPM cards and 60 packets of Spanish IPM cards were distributed through Target and Dixieline Lumber.

The City continued to publish storm water-related articles in the widely distributed *La Mesa Focus* newsletter. The 2008 issues were distributed electronically to residents and businesses in the City. Summaries of the articles in the newsletter can be found in Section 6; the newsletters are included as Attachment 5.4 to this JURMP Annual Report.

Enforcement

Several industrial and commercial facilities were observed to be out of compliance with the City's municipal storm water ordinance and/or the Industrial Permit during inspections conducted in 2008/2009. As previously mentioned, some inspections were conducted near the end of the 2008/2009 reporting period, so actions to bring the sites into compliance will continue into the 2009/2010 reporting period. The City did, however, send NOVs to all businesses in violation of the City's municipal storm water ordinance and/or the Industrial Permit during routine inspections conducted in 2008/2009. A total of 41 NOVs were mailed in response to the 2008/2009 inspections for businesses failing to properly implement BMPs. No industrial and commercial IC/IDs were discovered during routine inspections.

During the course of the 2008/2009 reporting period, the City received 20 complaints through the City's storm water hotline regarding stationary industrial and commercial businesses. Details of the industrial and commercial complaint investigations are included in the City's complaint log, which is included as Appendix B. The City took the following enforcement actions during investigations conducted in response to complaints to the storm water hotline:

- Issued four notices to comply

- Issued seven verbal warnings
- Issued five NOVs

There were no instances of noncompliance that posed significant threat to human health or the environment observed during 2008/2009. Other than the non-filers discussed earlier in this section, no other businesses were reported to the RWQCB.

5.3 Mobile Sources

5.3.1 Background

Due to the nature of activities of most mobile businesses, a major area of concern tends to be illegal discharges. In general, mobile businesses can difficult to identify, as many may not have City business licenses. Additionally, many mobile businesses may be home based and activities do not occur in one fixed location, inspections of such facilities are impractical.

5.3.2 Source Characterization

Known mobile industrial and commercial businesses, as described in the City's JURMP, are included on the City's inventory and are marked as mobile. Toward the end of the fiscal year, the Regional Industrial and Commercial Workgroup also developed a web-based mobile business database for use by all Copermittees. The goal of developing this database is to allow Copermittees to share information about mobile businesses, which may be active in more than one jurisdiction. The City contributed its mobile business inventory for upload to the regional database.

5.3.3 Best Management Practice Requirements

BMPs for stationary industrial and commercial facilities are required to be implemented for all outdoor activities, as applicable. BMPs for mobile businesses, including key principles, such as proper collection and disposal of any discharge, are discussed in the City's JURMP. The City has also established a program that requires mobile businesses operating in the City to sign an affidavit making businesses aware of the City's BMP requirements and commits them to implementing the required BMPs.

During 2008/2009, the Regional Industrial and Commercial Workgroup, in which the City participated, developed regional mobile business BMP standards. These standards were devised to create a uniform set of minimum BMPs for mobile businesses operating within the region. The regional mobile business BMP standards were adopted at the end of June 2009.

5.3.4 PROGRAM IMPLEMENTATION

During the 2008/2009 inspection program, the City responded to three calls to the City's storm water hotline regarding mobile businesses. A notable occurrence of mobile non-compliance as well as the City's response is discussed below:

- An anonymous caller reported to the storm water hotline that mobile pressure washing activities were being conducted at La Mesa Middle School without the use of effective BMPs. Overflow from washing activities was observed in street. The City's Stormwater Program Manager contacted Gary Olsen of Steam Glow Inc., the business performing pressure washing, who vacuumed the excess water and altered pressure washing procedures to ensure compliance with minimum BMP requirements.

More detail about the complaints made to the City's storm water hotline regarding mobile businesses is included in the City's complaint log in Appendix B.

In addition to the regional effort to standardize mobile business BMPs, the Regional Industrial and Commercial Workgroup worked to develop a regional mobile business database. The database is designed to store information regarding mobile businesses operating within the region and facilitate communication regarding mobile business activities and enforcement actions between Copermittees.

Mobile Affidavits
The City requires mobile businesses to sign an affidavit when applying for a business license to acknowledge the City's BMP requirements. Additionally, the affidavit states that the business owner agrees to implement BMPs as required by the City's JURMP and acknowledges that failure to do so will result in enforcement action and possible legal action. During 2008/2009, there were no applications for a business license by a mobile business; therefore no affidavits were signed during this reporting period.

Education and Outreach and Enforcement
As previously mentioned, three complaints were made to the City's Storm Water Hotline regarding mobile businesses. In each instance, City personnel discussed the BMP requirements of mobile businesses with business personnel.

There were no instances of noncompliance of mobile businesses that were believed to present potential threats to human health or the environment observed during 2008/2009, so none were reported to the RWQCB.

5.4 INDUSTRIAL AND COMMERCIAL COMPONENT EFFECTIVENESS ASSESSMENT

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was recently updated in March 2008. No changes to the City's industrial and commercial component have been made since that time.

Table 5-2
Violations of the Industrial Permit

#	Business Name	Street Address	Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation				
						File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC	Other
1	A-1 Self Storage, Center Dr	8328 Center Drive	Conditional	4225	No outdoor exposure				✔	
2	American Tanks	8111 Commercial Street	Conditional	3444	No outdoor exposure				✔	
3	L & R Neon	8200 Commercial Street #101	Conditional	3993	Outdoor exposure of aluminum	✔	✔	✔		
4	Moran Canvas Products	8135 Center Drive	Conditional	3444	Outdoor exposure	✔	✔	✔		
5	Rainbow Steel Inc.	8332 Case Street	Conditional	3499	WDID 9 37I0 18321 filed in August 2003					Provide a complete SWPPP
6	Thomas J. Taylor Construction	8189 Center Street	Conditional	2434, 0782	Outdoor exposure	✔	✔	✔		

Table 5-3
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
1	7-Eleven Store #16119-2111	5255 Baltimore			6/24/2009			
2	7-Eleven Store 13647 G-2121	8300 Parkway Drive			6/25/2009			
3	A A A Auto Repair & Transmission	7025 University Ave	1/13/2009	Completed	6/4/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
4	A-1 Hire, Ltd.	7190 University Ave.	1/13/2009	Completed	6/4/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
5	A-1 Self Storage, Center Dr	8328 Center Dr			8/5/2008			
6	Ace Coating Co.	8333 Case St. Suite 584			6/12/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
7	Affordable Paint And Body	8181 Center Street			8/6/2008	✔	1/15/2009	Resolved
8	Albertsons #6710	8920 Fletcher Parkway			6/23/2009			
9	Aliberto's Mexican Food	7819 El Cajon Blvd.	1/22/2009	Completed	6/8/2009			
10	All American Carpets	8186 Center Street Suite E			8/11/2008			

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
11	American Tanks	8111 Commercial St			6/25/2009			
12	Amira Auto Sales & Broker	6942 University Ave. Suite C			6/18/2009			
13	Anthony's Fish Grotto La Mesa	9530 Murray Dr			6/25/2009			
14	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr	1/14/2009	Completed	6/11/2009			
15	Arby's 5822	5341 Jackson Dr	1/15/2009	Completed	6/9/2009			
16	Are Con, Inc.	8171 Center Street			8/6/2008	✔	1/15/2009	Resolved
17	Arigato Japanese Restaurant	5575 Baltimore Dr # 110			6/11/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
18	Audio Associates	8200 Center Drive			8/4/2008			
19	Auto Repair Specialists	8120 Center St			8/5/2008			
20	Aztec Fire & Safety	8107 Commercial St.			8/7/2008	✔	1/15/2009	Resolved
21	Baldwin Auto Sales	8174 Center St.			8/7/2008			
22	Bob Bowen's Auto Service	7191 Alvarado Rd			6/11/2009			
23	Bob Stall Chevrolet	7601 Alvarado Road	1/14/2009	Completed	6/15/2009			

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
24	Brady Co. / San Diego, Inc.	8100 Commercial Street			8/6/2008			
25	Broding's Battery Warehouse	8188 Commercial St.			6/15/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
26	C & D Towing Specialists	8332 Case St.			8/6/2008			
27	Caliber Collision Centers	8310 Center Drive			8/4/2008			
28	California Countertop, Inc	7811 Alvarado Rd			6/11/2009			
29	Carl Burger Dodge World	8355 Hercules Street	1/15/2009	In Progress	6/9/2009			
30	Carl Burgers Jeep Eagle World	8333 Hercules St.			6/9/2009			
31	Casa De Pico Restaurant	5500 Grossmont Center Drive 404			6/25/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
32	Centex Glazing	8260 Commercial St.	1/22/2009	Completed	6/18/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
33	Centre City Shell #2	3810 Massachusetts Ave			6/5/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
34	Chili's Bar & Grill #454	8285 Fletcher Pkwy	1/14/2009	In Progress	6/8/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
35	Chipotle Mexican Grill	8005 Fletcher Parkway	1/14/2009	Completed	5/28/2009			
36	Chopsticks Inn Restaurant	8687 La Mesa Blvd			6/12/2009			
37	Coast Restaurant Supply	8120 Commercial St.			8/11/2008			
38	Coco's #132	5550 Lake Murray Blvd			6/10/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
39	College/La Mesa Smog Test Only	7643 University Avenue Suite G			6/25/2009			
40	Collins Plumbing, Inc.	8130 Commercial St.			8/11/2008			
41	Commercial Electric & Gas Appliance Service	8110 Commercial St.			8/11/2008			

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
42	Dan's Automotive	7501 University Ave.	1/13/2009	In Progress	6/5/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
43	Davis Framing, Inc.	8103 Commercial Street			8/11/2008			
44	Discount Smog Centers	7633 El Cajon Blvd Suite 200			6/25/2009			
45	Diversified Materials Company, Inc*	8250 Commercial Street	1/15/2009		See Table Footnote			
46	Dixieline Lumber & Home Centers	8372 Center Dr			6/9/2009			
47	Dragon House	6062 Lake Murray Blvd #201			6/10/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
48	Drew Ford / Drew Hyundai	8970 La Mesa Blvd.			6/30/2009			
49	EDCO Transfer Station	8182 Commercial St			6/12/2009			
50	El Azteca Taco Shop Mexican Food	8306 Parkway Drive			6/25/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
51	El Sarape Mexican Food	5525 Jackson Dr, Suite B			6/25/2009			

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
52	El Torito	5024 Baltimore Dr	1/22/2009	Completed	6/8/2009			
53	Enterprise Rent-A-Car #3241	8363 Center Drive, Ste 6 H			8/5/2008	✔	1/15/2009	Resolved
54	Equality Plating Co.	8172 Center St			8/7/2008			
55	Five Star Collision Center Inc	7643 University Avenue Suite H	1/15/2009	Completed	6/10/2009			
56	Fuddrucker's	5500 Grossmont Center Drive			6/1/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
57	Golden State Auto of La Mesa, Inc.	7224 University Avenue	1/13/2009	Completed	6/4/2009			
58	Greater San Diego Air Conditioning	8141 Center St.			8/6/2008			
59	Gus's Subs & Pizza #2	5620 Baltimore Drive			6/24/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
60	Hearth House	5505 Jackson Dr	1/15/2009	Completed	6/9/2009			
61	Himalayan Indian and Italian Cuisine	7918 El Cajon Blvd			6/25/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
62	Jack In The Box, Jackson	5141 Jackson Dr			6/9/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
63	Jack In The Box, University	6987 University Ave	1/13/2009	In Progress	6/4/2009			
64	Kentucky Fried Chicken	5358 Jackson Dr	1/14/2009	Completed	6/9/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
65	Knott's Pest Control, Inc.	5141 Guild St.			6/10/2009			
66	L & R Neon	8200 Commercial St. #101			8/12/2008			
67	La Mesa Auto Company	7840 La Mesa Blvd.			6/22/2009			
68	La Mesa Car Wash	5322 Jackson Dr			6/25/2009			
69	La Mesa Motor Clinic, Inc.	5120 Guild St			8/13/2008			
70	La Mesa Transfer & Storage, Inc.	8336 Case St			8/4/2008			
71	La Salsa Restaurants	4990 Baltimore Dr			6/8/2009			

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
72	Los Pinos Taco Shop	5660 Lake Murray Blvd			6/10/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
73	Marie Callender's #74	6950 Alvarado Rd	1/22/2009	Completed	6/8/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
74	Marieta's	8949 La Mesa Blvd			6/11/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
75	McDonald's	8045 Fletcher Pkwy	1/14/2009	In Progress	6/8/2009			
76	MD Auto Group*	7840 La Mesa Blvd, Suite B3	1/14/2009		See Table Footnote			
77	Moran Canvas Products	8135 Center Dr.			8/12/2008			
78	Nacho's Taco Shop	7589 University Ave	1/13/2009	Completed	6/8/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
79	Nfarooqi Enterprises L L C (Jack in the Box)	6140 Lake Murray Blvd			6/24/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
80	Olive Garden G M R I, Inc. #1301	5500 Grossmont Center Dr J-2			6/1/2009			
81	Outback Steakhouse	5628 Lake Murray Blvd			6/30/2009			
82	P A W Service Center	8230 Commercial Street			8/12/2008			
83	P.G. King	5575 Baltimore Dr #105-A			6/12/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
84	Palm Springs Deli	8363 Center Drive			8/12/2008			
85	Palmer Painting Company	8104 Center St.			8/5/2008			
86	Panda Express #226	8011 University Ave	1/13/2009	Completed	6/5/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
87	Panda Express #606	5500 Grossmont Center Drive E-1			6/1/2009			
88	Pho Superbowl	8342 Parkway Dr.			6/23/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
89	Pick Up Stix La Mesa	8025 Fletcher Pkwy	1/14/2009	Completed	6/8/2009			
90	Preston's Tire & Wheel	8300 Center Drive			8/5/2008			

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
91	Primary Mechanical, Inc.	5345 Timken St., Suite I			8/13/2008			
92	Rainbow Steel Inc.	8332 Case St.	1/22/2009	In Progress	6/22/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
93	Raindance Roof Company, Inc.	8176 Commercial St.			6/15/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
94	Ralph's Grocery Company 104	8800 Grossmont Blvd			6/23/2009			
95	Red Lobster G M R I, Inc. #504	8703 Murray Dr #504			6/1/2009			
96	Riha Construction Company	8173 Commercial Street			8/13/2008			
97	Rob's Automotive	7589 El Cajon Blvd Unit E	1/14/2009	Completed	6/25/2009			
98	Round Table Pizza	8032 La Mesa Blvd	1/14/2009	Completed	6/8/2009			
99	Rowe's La Mesa Pet Hotel	8126 Center Street			8/7/2008			
100	Rubio's Restaurants. Inc.	5500 Grossmont Center Dr, # D 22			6/1/2009			
101	Schaefer Ambulance Service, Inc.	7285 University Ave			6/4/2009			

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business	Address	Follow-Up Date (Based on 2007/2008 Inspection)	Correction Status	Routine Inspection Date	Follow-Up Required?	Follow-Up Date	Correction Status
102	Shirley's Kitchen, University	7118 University Ave	1/13/2009	Completed	6/22/2009			
103	Shizuoka Japanese Restaurant	9118 Fletcher Pky			6/12/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
104	Sid's Auto Body, Inc.	7473 El Cajon Blvd.	1/14/2009	Completed	6/22/2009			
105	Silvia's Windows	8176 Center Street Suite D			8/7/2008			
106	Sun Tacos	5100 Jackson Dr			6/25/2009	✔	NOV sent in early 2009/2010. Follow-Up inspection to be completed in 2009/2010.	In Progress
107	Talon Auto Adjusters	8163 Commercial Street			6/18/2009			
108	The Truck and SUV Center	5301 Lake Murray Boulevard	1/15/2009	Completed	6/10/2009			
109	Thomas J. Taylor Construction	8189 Center St.			8/11/2008			
110	Vons Grocery Co #2137	5630 Lake Murray Blvd			6/24/2009			
111	Wheel & Deal, Inc.	7675 University Avenue			6/25/2009			
112	Yum Yum Donut Franchise #5228	7550 El Cajon Blvd			6/23/2009			

* These businesses were found to have moved/gone out of business during routine inspection visits in late 2008/2009

6.0 RESIDENTIAL

6.1 INTRODUCTION

Over half the land use in the City of La Mesa is designated as residential. Due to the large residential area, activities that take place within these areas have the potential to impact the quality of the receiving water bodies. Residential activities such as vehicle washing, over-irrigation, pesticide and fertilizer application, and home maintenance can potentially contribute pollutants to the City's MS4 if BMPs are not properly implemented. Additionally, improper disposal of household hazardous waste (HHW) can also contribute pollutants to the MS4. Pollutants of concern include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has worked to implement a range of programs to address these residential activities with the goal of reducing pollutant loads associated with such activities.

Figure 6-1 depicts the residential land use in the City. Yellow areas signify single-family homes, orange areas are multi-family homes such as duplexes and apartment buildings, brown areas are mobile home parks, and purple areas are other residential areas such as nursing homes.

Figure 6-1
Residential Land Use in the City

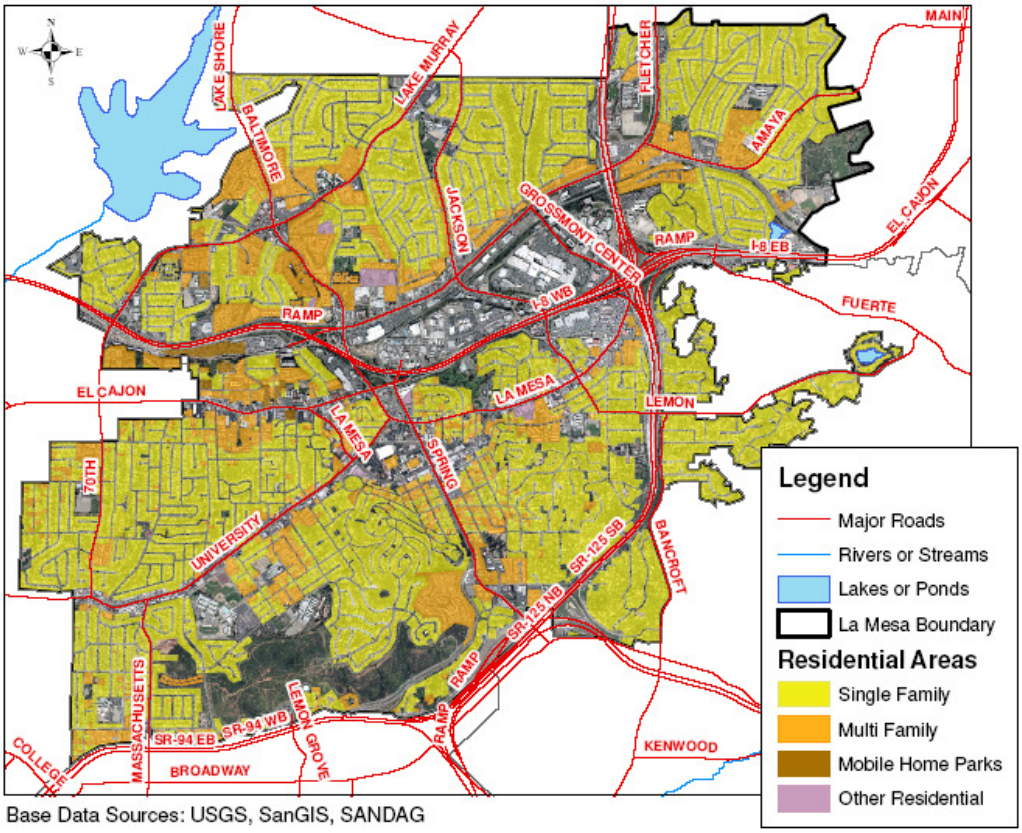

Base Data Sources: USGS, SanGIS, SANDAG

6.1.1 Summary of Notable Accomplishments

Some notable achievements for the residential component during the 2008/2009 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the residential component and of its storm water program during the reporting period are provided in the remainder of Section 6.

- The City worked with local Eagle Scouts to construct and install an informational storm water kiosk in Jackson Park.
- The City hosted eight HHW events; 804 participants dropped off 999 loads of HHW.
- The City hosted the La Mesa Spring Clean Up on two consecutive Saturdays during 2008/2009. The event was held at the City's EDCO station and allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste free of charge.
- The City continued to distribute the *La Mesa Focus* newsletter to residents in the City.
- The City continued to respond to complaints made to the City's Storm Water Hotline regarding residential areas and activities.

6.2 Source Characterization

The City has identified several high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities, which are discussed in the following subsections.

6.2.1 High TTWQ Activities

During 2008/2009, the City continued to identify the following activities as high TTWQ:

- Automobile repair and maintenance
- Automobile washing
- Automobile parking
- Home and garden care activities and product use
- Disposal of pet waste

6.2.2 High Threat to Water Quality Areas

In addition high TTWQ activities, the City has identified several residential areas that pose a high TTWQ. High TTWQ residential areas are designated by considering complaint investigations, institutional knowledge, data from the City's Dry Weather Monitoring, and criteria as defined in the Municipal Permit. The following residential areas have been designated high TTWQ.

East of Helix High School
This area drains to University Channel and includes the residential area east of Helix High School around Lowell Street, Normal Avenue, and Olive Avenue. University Channel serves as a part of the storm water conveyance system for the City and is part of the Chollas Creek Watershed. During the 2009 Dry Weather Monitoring Program, a transient dissolved copper exceedance was detected in this area.

Baltimore Drive, North of Interstate 8
The area surrounding Baltimore Drive is largely composed of high-density housing. Runoff from this area drains to Alvarado Channel via two internal storm drain networks. Storm Water Hotline calls related to high TTWQ activities in this area have been recorded in past years. Some past Dry Weather Monitoring results have indicated that this area could be a source of bacteria, although that has not been found in monitoring programs during recent sampling years. The area is still classified as a high TTWQ to be conservative, although the City may reevaluate the prioritization in future years if recent dry weather monitoring trends continue. Potential runoff sources include residences located on Parkway Drive, Aztec Drive, and Baltimore Drive.

Nagel Street and Sarita Street
The residential area around the intersection of Nagel Street and Sarita Street drains to Alvarado Channel. Past Dry Weather Monitoring Program upstream investigations have indicated that this area has been a source of bacteria.

6.3 Best Management Practice Requirements

The City has continued to provide information regarding the implementation of pollution prevention measures, such as good housekeeping practices, for residential areas and activities. The City's BMP Manual Part I includes lists of general residential BMP requirements and BMP requirements for specific residential activities. The manual is included in Appendix C of the JURMP. General residential BMPs include erosion control; non-storm water discharge management, including elimination of IC/IDs; and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Specific BMPs for the high priority activities outlined above are also included in the City's BMP Manual Part I. There have been no changes to the City's residential BMP requirements as discussed in Appendix C of the City's JURMP.

6.4 Program Implementation

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted. This ensures that pollutants associated with residential activities and areas are minimized. The residential program has an education component so that residents are made aware of appropriate BMPs and high TTWQ activities.

6.4.1 TRAINING, EDUCATION, AND OUTREACH

The City has continued to conduct training, education, and outreach activities for residents, which are described below.

***La Mesa Focus* Newsletter Articles**

The City publishes storm water related articles in the quarterly *La Mesa Focus* newsletter. Four newsletters were printed during the reporting period. Each edition was mailed to approximately 17 residential addresses. These issues were also archived on the City's website; 795 individuals are signed up to receive e-mail notification when a new newsletter has been posted on the website. Approximately 12 copies were provided to individuals upon request and three copies were left out at the Community Center for visitors to the center to read. The articles published in 2008/2009 are summarized below and included as Attachment 5.4.

The August 2008 newsletter contained the following storm water-related articles and announcements:

- "LA MESA ENVIRONMENTAL AWARENESS FESTIVAL" informed residents of the upcoming event. The event was advertised to provide information and resources on water conservation, urban runoff, and other environmental issues.
- "7th ANNUAL KIDS CARE FEST" provided information for an event this event. I Love a Clean San Diego (ILACSD) provided information about watersheds and storm water during this event.
- "24th ANNUAL COSTAL CLEANUP DAY" encouraged residents to participate in and informed residents of the upcoming coastal cleanup event.
- "PARK APPRICIATION DAY" encouraged residents to participate in and informed residents of the upcoming park cleanup event.
- "MEDICAL SHARPS BANNED FROM LANDFILL" provided information regarding proper disposal methods of sharps and HHW.
- "DO THE RIGHT THING!" identified different types of HHW and notified residents of drop-off dates and locations for recycling HHW free of charge.
- "RECYCLING NOW AVAILABLE AT CITY PARKS" informed residents of the additions of recycling containers to City parks and encouraged use of the containers.

The November 2008 newsletter contained the following storm water-related articles and announcements:

- "RECYCLE USED OIL FILTERS" notified residents of drop-off dates and locations to recycle used oil filters free of charge.
- "CITY OF LA MESA PARK APPRICIATION DAY" announced the amount of debris removed from City parks during the event and informed residents of the next cleanup event.

- "CALL US TO HELP STOP STORM WATER POLLUTION!" informed residents of the City's Storm Water Hotline, potential storm water pollutants to be aware of, and what to look for and report based on the facility or area type.
- "GOT ELECTRONICS?" highlighted how and where to properly dispose of electronic waste and HHW.
- "CALIFORNIA COSTAL CLEAN UP DAY IN LA MESA" announced the participants' efforts during the cleanup event and the total debris removed during the cleanup.
- "DO THE RIGHT THING!" identified different types of HHW and notified residents of drop-off dates and locations for recycling HHW free of charge.
- "SUSTAINABLILTY CELEBRATED AT THE ENVIRONMENTAL AWARENESS FESTIVAL" reported on the celebrated Environmental Awareness Festival and provided a web site for information about next year's festival.

The February 2009 edition included a two page informational section of storm water-related articles, which included:

- "DO THE RIGHT THING!" which highlighted examples of HHW, as well as drop-off dates and locations.
- "MEDICAL SHARPS DISPOSAL IS NOW EASIER" listed types of sharps, HHW, and information regarding proper disposal methods.
- "LA MESA RECIEVES GRANT TO ENHANCE MULTIFAMILY RECYCLING OPPORTUNITIES" informed residents of the City's recycling grant that would provide eligible apartments and condominiums with better recycling opportunities.
- "ANNOUNCING SPRING CLEANUP 2009!" notified residents of the City's free event for unwanted items and waste disposal event.

The May 2009 newsletter contained the following storm water-related articles and announcements:

- "FORCAST FOR LA MESA RESTAURANTS - FOG CLEARING" informed the public of the new state law for fats, oils, and grease (FOG) control program and inspections. Information for a free workshop on program requirements was also provided.
- "MANDATORY RECYCLING AND YOU" outlined types of recyclable materials and how recycling helps to improve the environment.
- "DOING OUR PART TO SAVE H_2O" informed residents of the importance of conserving water and La Mesa's efforts to reduce water usage.
- "DO THE RIGHT THING!" identified different types of HHW and notified residents of drop-off dates and locations for recycling HHW free of charge.

- "FREE OIL FILTERS" notified residents of the time, date, and location of the free used oil filter exchange event for La Mesa.
- "IRRIGATION WATER POLLUTION PREVENTION IN YOUR WATERSHED" informed residents of storm water, constituents of concern, and tips on how to eliminate pollutant discharges.

Other Educational Outreach Materials and Activities
The City has continued to provide storm water information and contacts on their website (www.cityoflamesa.com). The City's Storm Water Hotline also provides a medium for City residents to obtain storm water information and file storm water related complaints. Other educational outreach materials and activities that targeted residents are discussed in detail in Sections 8 of this report.

During 2008/2009, the City continued to participate in the Regional Residential Education Program.

6.4.1.1 HHW Events

The City hosted eight HHW collection events throughout the 2008/2009 reporting period at the City's EDCO station on Commercial Street. Door-to-door pick-up was also offered for disabled and senior residents. A total of 804 people participated in the events, and 999 loads of HHW were collected. HHW flyers or the Regional Guide for Household Hazardous Waste Reduction & Disposal in San Diego County were on hand if residents requested educational materials. About five pieces of educational material were distributed per event.

Other Collection Events
In addition to the HHW disposal events, the City hosted the La Mesa Spring Clean Up on two consecutive Saturdays during 2008/2009. The event was held at the City's EDCO station and allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste without charge. Details about this event can be found in Section 9 of this report.

6.4.2 Compliance and Enforcement

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the Storm Water Hotline, and observations made by the City's municipal personnel. To help focus efforts on high priority areas, the City generated a map of the high TTWQ areas in the City and distributed it to Public Works staff. Staff were instructed to be especially vigilant for potential threats to storm water quality in these areas of the City and were told to report any observed threats to the Storm Water Hotline. A copy of the map is included as Attachment 6.1. If a potential to impact water quality is present the City provides a verbal warning, written warning, Notice to Comply (NTC), and NOVs as applicable. The City received 22 residential-related complaints during this reporting period. Complaints were submitted through

the Storm Water Hotline and internally through the Public Works Department; the City's complaint log is included as Appendix B to this report.

Five written warnings, two NOVs, one verbal warning, and five NTCs were issued to residents and/or landlords during this reporting period. Many of the complaints verified involved residents who were unaware of residential BMPs. These issues were resolved with a verbal warning and distribution of educational materials. The City issued NOVs to more serious violations such as vehicle maintenance without BMPs or washing debris into the street. City personnel also cleaned areas in the public right of way as necessary to resolve complaints. All residential complaints were resolved and no further actions, such as fines or reports to the RWQCB aside from this JURMP Annual Report, were deemed necessary.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's residential component have been made since that time.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008 RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the 2008/2009 illicit discharge detection and elimination section and attachments to the RWQCB no later than December 15, 2008.

8.0 EDUCATION COMPONENT

8.1 INTRODUCTION

During 2008/2009, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, residents, and underserved audiences. The City aims to reduce storm water pollution by increasing awareness about the storm water conveyance system and promoting the implementation of BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the 2008/2009 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the education component and of its storm water program during the reporting period are provided in the remainder of Section 8.

- The City has hosted eight training events/meetings for approximately 54 municipal personnel.
- The City hosted a training session for 20 local industrial and commercial business representatives.
- During 2008/2009, the City's quarterly newsletter, the *La Mesa Focus*, featured several articles highlighting storm water topics aimed at businesses and residents of the City.
- Educational materials were made available to project proponents and City personnel at City Hall through the informational Storm Water Bulletin Board.
- The City worked closely with the local Eagle Scouts to construct and install an informational storm water kiosk at Jackson Park.
- The City partnered with ILCASD to education residents at special events and through school presentations during 2008/2009.
- The City provided financial support and educational materials for a booth hosted by the Solana Center for Environmental Innovations (Solana Center) at Earth Fair in Balboa Park on 4/19/2009.
- Approximately 330 vendors at the City's Oktoberfest event were provided with a handout entitled "Tips for Outdoor Vendors".

8.2 STAFF TRAINING ELEMENT

The City has provided extensive training and educational outreach to its municipal personnel. Many municipal personnel are out in the field on a daily basis, so it is important that they understand the importance of implementing BMPs. Additionally, municipal personnel are encouraged to report any IC/IDs observed to the appropriate City staff and to educate other municipal personnel and the general public about storm water pollution prevention.

The informational storm water bulletin board at City Hall is continually updated with information on storm water topics such as BMPs. The bulletin board is visible to City personnel, project proponents, and other City Hall visitors. A photo of the bulletin board is included in Attachment 4.2. Additionally, the City's sent e-mails to City staff encouraging participation in California Coastal Clean-Up Day and the City's Park Appreciation Day. Each e-mail was sent to over 200 City staff.

Table 8-1, below, includes all training sessions that were provided for various municipal departments during 2008/2009.

Table 8-1
Municipal Training Sessions

#	Date	Event	Topic(s)	Participants
1	8/20/2008	Process Improvement Team (PIT) Meeting	Presentation of storm water issues by the Storm Water Program Manager	10 Development and Engineering Staff
2	9/24/2008	Construction Projects Meeting presented by the Storm Water Program Manager	Discussion of dry weather and wet weather requirements, erosion control, material management BMPs, and enforcement action and procedures	7 Public Works and Engineering Staff
3	9/25/2008	Construction Projects Meeting presented by the Storm Water Program Manager	Discussion of dry weather and wet weather requirements, erosion control, material management BMPs, enforcement action and procedures	7 Public Works and Engineering Staff
4	9/25/2008	Escondido PAPA Seminar	Seminar on worker safety, laws and regulations, alternatives to synthetic herbicides, and cultural practices on athletic fields	3 Parks Division Employees

Table 8-1
Municipal Training Sessions

#	Date	Event	Topic(s)	Participants
5	12/5/2008	Low-impact Development (LID) Treatment Control (TC) BMPs	Discussion of porous pavement as an LID TC BMP lead by the Storm Water Program Manager	7 Development, Engineering, Public Works and Environmental Services Staff
6	5/13/2009	Sustainable Landscape Practices Training	Training on sustainable horticultural practices, fertilizer application, water quality, and sustainable turf grass management	3 Parks Division Employees
7	5/19/2009	Integrated Pest Management (IPM) Training for Landscape Professionals	Training on IPM, water conservation methods, organics and sustainable practices, and herbicide calibration techniques	3 Parks Division Employees
8	6/23/2009	Park Tailgate Meeting	NPDES Training	14 Parks Division Employees

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, residential areas, and underserved audiences. These efforts promote storm water awareness and BMP implementation.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Violations of the City's BMP requirements are corrected through enforcement actions as necessary. For each inspection, facility personnel received verbal education on the importance of implementing proper BMPs. Additionally, a letter describing the City's inspection program and BMP requirements was sent to all industrial and commercial businesses selected for routine inspection during 2008/2009.

As previously mentioned, the City's quarterly *La Mesa Focus* newsletter 2008/2009 featured several articles highlighting storm water topics that were aimed at businesses and residents of the City. Examples of such articles included "Do the Right Thing," "Call Us to Help Stop Storm Water Pollution," "Forecast for La Mesa Restaurants - Fog

Clearing," and "Irrigation Pollution Prevention in Your Watershed." Newsletters published during 2008/2009 are included as Attachment 5.4.

During 2008/2009 reporting period, the City distributed a handout with tips for outdoor commercial vendors (Attachment 8.1). These handouts were distributed to vendors that had booths at the Oktoberfest event, which is the City's largest special event. A total of 330 of these handouts were distributed. The handout detailed specific BMPs that could be implemented by the vendors at the event and detailed the difference between the storm drain system and the sanitary sewer system.

A Code Update Workshop was also provided to local business representatives during 2008/2009, which included a discussion of pollution prevention BMPs and inspection frequency. Good housekeeping practices, eliminating outdoor exposure, and preventing illegal discharges, were among the BMPs topics discussed in the workshop. A total of 20 representatives from industrial and commercial business throughout La Mesa attended this workshop.

8.3.2 Construction Site Owners and Developers

Due to the nature of activities, construction sites have the potential to discharge many types of pollutants to receiving waters if not managed properly. Many construction site owners, contractors, and developers visit the City's Engineering Division to apply for necessary permits. The Storm Water Bulletin Board (Attachment 4.2), located across from the front counter where permits are issued, includes material about construction BMPs to provide education for these parties. Several construction related brochures, specifically the construction site management tri fold and a construction SWPPP tri fold (Attachments 8.2 and 8.3) are available for project proponents to take from the bulletin board.

8.3.3 Residential Areas

Since residential areas make up more than half the City, the City understands the importance of reaching this particular audience through educational outreach programs. During May of 2009, ILACSD visited several schools of various aged students with prepared storm water presentations. The City also continued to publish the *La Mesa Focus* newsletter (Attachment 5.4), which reaches residents in the City. As previously mentioned, several storm water articles were included in the newsletters distributed in 2008/2009.

Despite its location near the City's Engineering counter, the City's Storm Water Bulletin Board provided information to residents that may have been visiting City Hall. Various posters provide storm water information and information about clean-up events. Additionally, there are several brochures and fact sheets available for the public to take, which included IPM cards (Attachment 5.3), Over-irrigation Fact Sheet (Attachment 8.4), Chollas Creek TDML Fact Sheet (Attachment 8.5), residential Preventing Urban Runoff

Pollution brochure (Attachment 8.6), and the Pools and Spas Fact Sheet (Attachment 8.7).

The City also continued to partner with Target and Dixieline Lumber in La Mesa to provide English and Spanish versions of the IPM cards at the checkouts of each business's garden center (Attachment 5.3). Educational material was also distributed at various events in the City, such as the Environmental Awareness Fair, Intergenerational Games, and Kidscarefest. Materials distributed included the residential Preventing Urban Runoff brochure (Attachment 8.6), San Diego River and San Diego Bay factsheets (Attachment 8.8), and magnets encouraging residents to recycle used oil and used oil filters. Other media like pencils, temporary tattoos, and stickers with storm water messages on them were also provided during special events. Details of the events are included in Section 9. Table 8-2, below, describes the materials provided to residents and the approximate number distributed.

Table 8-2
Educational Materials Distributed to Residents

Educational Material	Number Distributed
English IPM Cards	62 English
Spanish IPM Cards	60 Spanish
Residential Preventing Urban Runoff Pollution Tri fold	9
Recycle Your Used Motor Oil and Filter Magnet	14
San Diego Bay Fact Sheet	4
San Diego River Fact Sheet	3
Storm Water Pencils	45
Storm Water Key Chains	50
Recycling Flyers	58
Temporary Storm Water Tattoos	80
Alternative Pesticide Stickers	33

In addition to the educational materials that were provided at various locations and during various events, the City continued to display storm water-related educational material at storm water kiosks at select City parks. In July 2008, the City partnered with local Eagle Scouts to construct a kiosk for Jackson Park. The City now maintains three kiosks in three City parks. Education material such as the San Diego River Watershed Fact Sheet (Attachment 8.8), Over-irrigation Fact Sheet (Attachment 8.4), Pool and Spas Fact Sheet (Attachment 8.7), the residential Preventing Urban Runoff Pollution brochure (Attachment 8.6), and a Helix Water District tri fold were displayed for patrons of the park.

Figure 8-1. Storm Water Kiosk at Jackson Park

The City website, www.cityoflamesa.com, is another way in which City residents can become familiar with the design and intended utilization of the storm drain system, proper HHW disposal, alternatives to hazardous household products, find information regarding volunteer opportunities, applicable City contact information, and IPM cards. As previously mentioned, the City provided electronic copies of each *La Mesa Focus* newsletter on the website during 2008/2009.

8.3.4 Underserved Communities

As discussed in the City's JURMP, the City has identified the several residential areas along University Avenue as "underserved" communities. Two residential areas have been identified as Low/Moderate Income Block Groups. A third area has been identified as a Hispanic Household Concentration area. In an effort to promote outreach and education in these underserved communities, the City has developed Spanish versions of several educational materials distributed to residents. Another effort implemented by the City is the utilization of the Spanish language option on the City's Storm Water Hotline. The City plans to continue outreach to these underserved communities by providing more educational programs in future reporting years.

8.3.5 Complaint Investigations

To further aid the process of identifying illegal discharges, the City encourages the public and City staff to report IC/IDs. In addition to the City's Storm Water Hotline, Public Works also has a maintenance hotline for complaints regarding issues with the MS4 and sewer lines. These complaints are followed up by Public Works personnel. If a representative for the targeted business, residential area, or construction site is present, the inspector will provide site-specific information regarding storm water issues

including applicable educational materials. Included in Table 8-3 are the names and the quantity of each educational material distributed during complaint investigations in 2008/2009.

Table 8-3
Educational Materials Distributed During Complaint Investigations

Educational Material	Number Distributed
Chollas Creek TMDL Fact Sheet	1
Informational Door Hanger	1
Over-Irrigation Fact Sheet	8
Pool and Spa Fact Sheet	2
San Diego Bay Watershed Fact Sheet	3
San Diego River Watershed Fact Sheet	8
Residential Preventing Urban Runoff Pollution Tri fold	6

8.4 OUTREACH COMPONENT EFFECTIVENESS ASSESSMENT

The estimated number of impressions made by the City's education and outreach efforts during 2008/2009 is presented and described below. Please refer to Section 11 of this JURMP Annual Report for the remainder the effectiveness assessment for this program component.

Impressions Made

The City has continued to provide residents and businesses storm water-related education through inspections, distribution and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees because it is likely that the attendees will discuss the content with others after the training session. Printed educational materials distributed are assumed to generate three impressions each.

Table 8-4 details the number of impressions made by the City during this reporting year. The number of impressions decreased during 2008/2009 as compared to other reporting

periods. The City discontinued the distribution of hard copies of the *La Mesa Focus* newsletters to conserve paper, which accounts for this decrease.

Table 8-5
Impressions Made by the City

Impression Type	Count	Unit	Estimated Impressions
Municipal Inspections	28	Inspections	140
Industrial/Commercial Inspections	147	Inspections	441
Construction Inspections	56	Inspections	168
Letter from the City – "Re: Storm Water Compliance Inspections"	144	Letters	432
San Diego River Watershed Fact Sheet	11	Brochures	33
San Diego Bay Watershed Fact Sheets	7	Brochures	21
Residential Preventing Urban Runoff Pollution	15	Brochures	45
IPM Cards (English/Spanish)	122	Informational Cards	366
Tips for Outdoor Vendors	330	Brochures	990
Chollas Creek TMDL Fact Sheet	13	Brochures	39
Recycle Your Used Motor Oil and Filter Magnet	14	Magnet	42
English/Spanish Door Hanger	1	Door Hangers	3
Over-Irrigation Fact Sheet	8	Brochures	24
Pool and Spa Fact Sheet	2	Brochures	6
Storm Water Pencils	45	Pencils	135
Storm Water Key Chains	50	Key Chains	150
Recycling Flyers	58	Brochures	174
Temporary Storm Water Tattoos	80	Tattoos	240
Alternative Pesticide Stickers	33	Stickers	99
Construction Site Management Tri fold	4	Brochures	12
NOI Paperwork	3	Handout	9
NONA/NEC Paperwork	3	Handout	9
La Mesa Focus Newsletter	92	Newsletters	276
La Mesa Focus Newsletter Email Notification	3,180	Email	9,540
Storm Water Bulletin Board	80	Visits	240
Training Session/Activities and Events	3,812	Attendees	15,248
Coastal Cleanup Day E-mail	200	E-Mails	600
Park Appreciation Day E-mail	200	E-Mails	600
Complaint Investigation	107	Investigations	428
Total City Impressions			***30,510***

8.5 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's education component have been made since that time.

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to foster storm water awareness and improve water quality. Public participation includes, but is not limited to, cleanup events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Collaboration between the City and the community should help encourage a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed in this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the 2008/2009 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the public participation component and of its storm water program during the reporting period are provided in the remainder of Section 9.

- During 2008/2009, the City hosted clean-up events at Alvarado and University channels as part of California Coastal Cleanup and Creek to Bay Cleanup. Approximately 113 volunteers removed over 857 pounds of trash and debris during these events.
- The City hosted 8 HHW collection events. A total of 804 individuals disposed of 115,842 pounds of HHW in these events.
- The Solana Center hosted two used oil filter exchange events at Kragen Auto Parts in La Mesa. A total of 85 individuals traded a used oil filter for a new one.
- Similar to previous years, the City hosted the La Mesa Spring Cleanup event on two separate weekends during 2008/2009. A total of 1,261 participants and disposed of 894,840 pounds of large items, green waste, and other trash.
- Volunteers for the City's Adopt-a-Block, Adopt-a-Park, and Canine Corner programs, which involve residents in keeping local streets and parks free of litter and pet waste, logged over 3,900 hours.
- Similar to previous years, the City held Park Appreciation Day, a clean up event occurring throughout 12 City parks. A total of 369 volunteers participated in this event.
- The City contracted ILACSD to present the Enviroscape watershed model at the Intergenerational Games and Kidscarefest.

9.2 Public Participation Activities

Cleanup Events and Programs

During 2008/2009, the City hosted various cleanup events and activities at various locations in the City. Cleanup events provide a direct benefit to water quality and provide an opportunity for the City to distribute educational materials and information to the event's volunteers.

California Coastal Cleanup Day

The City hosted the California Coastal Cleanup Day in specific areas of Alvarado and University channels on 9/20/2008. A total of 46 volunteers removed over 370 pounds of trash and recyclables at the Alvarado site, and 12 volunteers removed 82 pounds of trash and recyclables in the channel and surrounding walkways at the University site.

At University Channel, volunteers were given a pre and post event knowledge assessment tests. The pre-test was given to participants before City personnel presented an overview of storm water pollution prevention and watershed concepts. A post test was given immediately after City personnel finished the brief presentation. The results of the survey showed that the event left participants with a better understanding of what watershed they were in, what defines a watershed, and that the Chollas Creek has a TMDL for pesticides and metals. On the pre-test, only 45 percent of participants knew which watershed they were in. After the presentation, all volunteers were aware that they were in the San Diego Bay Watershed.

Park Appreciation Day

Park Appreciation Day was a cleanup event held throughout 12 parks in the City on 10/24/2008. A short presentation was given by the site captain regarding watershed concepts, local watersheds' constituents of concern, the benefits of cleanups, and the different kinds of information available on the City's website. Chollas Creek was mentioned at the parks that fell within the San Diego Bay Watershed. A total of 369 volunteers worked to collect over 65 cubic yards of green waste and 10 cubic yards of trash between all 12 locations.

Creek to Bay Cleanup

The City hosted the Creek to Bay Cleanup in specific areas of Alvarado and University channels on 4/18/2009. Forty-four volunteers participated in removing 296 pounds of trash from Alvarado Channel; 11 volunteers removed 83 pounds of trash and 26 pounds of recyclables from the site at University Channel (Figure 9-1). City personnel briefly explained watershed concepts, pollutants of concern, and required BMPs to all event volunteers. At the University Channel site, event volunteers were also presented with information on the TMDL for Chollas Creek. These cleanup events and results were advertised on the City website and were posted on the City's Storm Water Bulletin Board.

Similar to the California Coastal Cleanup Day event, volunteers received a pre and post knowledge assessment tests at the University Channel site. The pre-test was given to participants before City personnel presented an overview of storm water pollution prevention and watershed concepts. A post test was given immediately after City personnel finished the brief presentation. The results of the survey showed that the event left participants with a better understanding of what watershed they were in, what defines a watershed, and that the Chollas Creek has a TMDL for pesticides and metals. Overall the level of storm water understanding increased in post-test results.

Figure 9-1 – Creek to Bay Cleanup at University Channel

Adopt-a-Park and Adopt-a-Block

The City's Adopt-a-Park Program has continued to involve local businesses, schools, service organizations, families, and other individuals in keeping the City's parks free of trash. Currently, half of the public parks in La Mesa have been adopted. Volunteers involved in this program are encouraged to remove trash on a regular basis from City parks and open spaces.

Similarly, the City's Adopt-a-Block Program promotes cleanliness in the City by encouraging City residents to keep neighborhoods free of trash and debris. Volunteers pick up trash during normal daily activities, such as daily walks in their neighborhood. There are approximately 60 volunteers who are active participants of this program. Individuals utilize City-provided trash bags or may choose to collect trash prior to trash collection day so that litter and debris can be deposited into any available trash can along the street.

Canine Corners

Canine Corners volunteers pick up pet waste in designated areas of Harry Griffin Park. Volunteers also advocate patrons of the park to pick up after their pets. This prevents pet waste and associated bacteria and viruses from being discharged to the

City's MS4. In combination with the City's Adopt-a-Park and Adopt-a-Block programs, volunteers have logged over 3,919 hours of removing trash and pet waste from various parks and streets throughout the City.

Saint Madeline's Sophie Center
The City maintains a contract with Saint Madeline's Sophie Center, which employs developmentally disabled individuals to aid in picking up trash and debris at various parks throughout the City. The scope of services includes trash and debris cleanup, emptying trash receptacles and replacement of plastic liners, sweeping/cleaning picnic area tables, as well as some janitorial responsibilities at the park restrooms. Crews consist of three individuals and one job coach. Parks included in this program are Aztec Park, Collier Park, Highwood Park, Jackson Park, La Mesita Park, Northmont Park, Rolando Park, Sunset Park, Sunshine Park, and Vista La Mesa Park. A similar program is conducted at the Jr. Seau Sports Complex, also with a crew consisting of three individuals and one job coach.

Hazardous Waste Collection and Used Oil Recycling Program
The City's Community Hazardous Waste Collection and Used Oil Recycling Programs encourage City residents and business owners to properly dispose of HHW. The City hosted eight HHW collection events at EDCO's disposal transfer station facility, which is located near the center of the City. As previously mentioned, events were advertised in the City's *La Mesa Focus* newsletter (Attachment 5.4), which was circulated to thousands of residents and businesses in the City. A total of 804 people participated in the events; a total of 115,842 pounds of HHW was collected. Door-to-door pickup service was also provided for the senior and disabled communities.

By means of the California Integrated Waste Management Board grant and the Solana Center, La Mesa also organized two used motor oil filter exchange events on 12/6/08 and 6/13/09 at Kragen Auto Parts. A total of 85 people came with one used oil filter each to exchange it for a new oil filter. In addition to the filter exchange, participants were provided with various educational materials. The events were advertised in the *La Mesa Focus* newsletter. Throughout the City of La Mesa, there are also nine certified collection centers for used oil. An estimated total of 11,189 gallons of used oil and 1,200 used oil filters were collected by these facilities during the 2008/2009 reporting year. These figures do not include used oil that was disposed of during HHW disposal events.

Other Waste Disposal
The City hosted the La Mesa Spring Clean Up event on two consecutive Saturdays in 2008/2009 (4/11/2009 and 4/18/2009). Residents were allowed to bring large items, unwanted household materials (not including HHW), and green waste to the EDCO location in the City for free disposal. There were a total of 1,261 participants and 894,840 pounds of waste were collected. Participants were provided with a flyer for re-entry that included information regarding HHW and C&D (EDCO's Sanitation Company Facility).

Public Reporting
As discussed in Section 4, complaints are received through the City's Storm Water Hotline and online website reporting system. The number for the hotline is advertised in articles published in the *La Mesa Focus* newsletter and on various educational materials given out at public outreach events. The residential, industrial and commercial, construction, and municipal communities are encouraged to utilize the hotline to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable.

9.3 Outreach Events

The City has continued to provide educational outreach programs for a variety of different communities in the City. Since it is an effective way of reaching large numbers of individuals, educational outreach is typically associated with an event. Other outreach events in the City include the participation of commercial businesses in distributing educational materials and the City's participation in regional meetings and events.

Kidscarefest
Kidscarefest is a free event designed to promote healthy living and mindsets for children and their families. The festival was held at Briercrest Park on 9/20/2008. ILACSD hosted a booth and used the Enviroscape watershed model (Figure 9-2) to demonstrate storm water pollution concepts and emphasize the importance of keeping waterways free of pollutants. Approximately 130 people visited the ILACSD storm water booth during Kidscarefest. During this event, 33 recycling flyers, 80 storm water tattoos, and 33 sets of alternative pesticide stickers were distributed to the public.

Figure 9-2 – Demonstration of Enviroscape Watershed Model at Kidscarefest

Intergenerational Games
ILACSD also hosted a booth at the Intergenerational Games at the La Mesa Middle School on 10/10/2008. During this event, ILACSD used the Enviroscape watershed to demonstrate watershed and storm water pollution prevention concepts to over 250 people. A total of 25 recycling flyers, 45 storm water pencils, and 50 storm water key chains were distributed to booth visitors.

Oktoberfest
Oktoberfest is the largest festival in the City and was held from 10/3/2008 through 10/5/2008. As previously mentioned in Section 8.3.1, 330 vendors at the event were provided a handout entitled Tips for Outdoor Vendors (Attachment 8.1). This handout listed constituents of concern and BMPs during events designed to eliminate pollutant discharges.

Environmental Awareness Festival
On 9/13/2008, the first Environmental Awareness Festival for the City was held at Harry Griffin Park that was attended by about 500 people. There were booths and activities emphasizing water conservation, storm water pollution, energy efficiency, sustainable gardening techniques, and recycling. ILACSD had a booth with a Coastal Cleanup Day sign-up sheet and educational materials, such as San Diego Bay and River fact sheets and residential Preventing Urban Runoff Pollution tri folds. A HHW model house was also on display for visitors to learn about proper disposal methods and types of HHW.

ILACSD School Presentations
During 2008/2009, ILACSD was contracted to conduct storm water pollution prevention presentations for several La Mesa schools. Two presentations were given at La Mesa Dale Elementary and were attended by 28 students each day. Thirty students attended the La Mesa Middle School presentation and 80 students from Helix High School attended the storm water presentation on their campus.

Storm Water Information Kiosks
As mentioned in Section 8, the City has continued to work with local Eagle Scouts to construct storm water kiosks. An additional kiosk was installed during 2008/2009. The park kiosks present storm water pollution prevention information to park patrons.

Business Participation
As previously discussed in this report, the City's Stormwater Program Manager has continued to work with two businesses in La Mesa, Target and Dixieline Lumber, to distribute IPM cards (Attachment 5.3). The IPM cards were developed as part of a regional effort to combat pesticide pollution and increase the utilization of IPM techniques. Target keeps the educational materials in its garden center due to the likelihood of individuals visiting that portion of the store purchasing pesticides. Dixieline Lumber keeps the cards at the registers for those checking out to take. Providing educational materials that customers may take home and review before using the purchased products may mitigate the negative impacts they have on receiving water bodies.

Chollas Creek TMDL Stakeholder Meetings
The jurisdictions named as dischargers for Chollas Creek TMDLs regularly meet to share information, develop reports, and discuss strategies. The City actively partook in several of these meetings during the reporting period.

Storm Water Copermittee Meetings and Other City Participation
The meetings of various storm water Copermittee workgroups provide a forum for representatives from various jurisdictions within San Diego County and other interested parties, including the general public, to exchange information and ideas regarding the management of storm water programs. The City continued to attend several of these meetings during the reporting period and will continue to do so during the 2009/2010 reporting period.

During 2008/2009, the City provided funding and educational materials for the Solana Center for a regional collection event at the Earth Day Festival on 4/19/2009. Thousands of people from all over San Diego County attended the event.

9.4 Public Participation Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

9.5 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's public participation component have been made since that time.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

The City's Sanitation Fund provides funding for the Storm Water Program. There have not been any changes to this funding mechanism during this reporting period. The total expenditures in 2008/2009 were $679,764. The proposed budget for the 2009/2010 Fiscal Year is $844,912. The itemized costs within six different categories are presented in Table 10-1, below. Note that 2008/2009 contractor costs in the table below are based on funds encumbered during the reporting period. The budget for fiscal year 2009/2010 includes a new line item for "TMDL Chollas Creek Implementation" shown in "Permit Fees and Regional Shared Costs" in the table below.

Table 10-1
Itemized Expenditures and Budget For Fiscal Years 2008/2009 and 2009/2010

Storm Water Program Fiscal Analysis	Expenditures FY08/09	Budget FY 09/10
Engineering Division	$ 200,067	$ 200,860
Program Mgmt.	$ 97,970	$ 100,510
Land Use	$ 16,975	$ 15,300
Construction	$ 18,497	$ 17,230
Existing Development	$ 33,490	$ 31,830
Education	$ 10,675	$ 12,720
IC/ID	$ 21,320	$ 22,240
Admin	$ 1,140	$ 1,030
Public Works Operations	$ 116,254	$ 117,072
SSO/MS4 Cleaning	$ 109,440	$ 110,210
Streets Division	$ 4,260	$ 4,290
Parks Division	$ 2,554	$ 2,572
Equipment and Supplies	$ 46,332	$ 54,800
Storm drain pipe and supplies	$ 15,756	$ 22,990
Vactor	$ 30,576	$ 31,810
BMPs	$ 116,408	$ 205,180
Street Sweeping	$ 108,408	$ 175,180
WURMP - San Diego River	$ 4,000	$ 15,000
WURMP - San Diego Bay	$ 4,000	$ 15,000
Consultant Services	$ 146,318	$ 165,000
Jurisdictional Dry Weather Monitoring	$ 33,858	$ 40,000
Jurisdictional Wet Weather Monitoring	$ 23,494	$ 60,000
Inspections	$ 29,273	$ 10,000

Storm Water Program Fiscal Analysis	Expenditures FY08/09	Budget FY 09/10
JURMP Annual Report and Update	$ 25,667	$ 30,000
WURMP - San Diego River	$ 15,371	$ 5,000
WURMP - San Diego Bay	$ 15,371	$ 5,000
Public Education/Outreach Program	$ 3,284	$ 10,000
Training & Development	$ -	$ 5,000
Miscellaneous As-Needed Services	$ -	$ -
Permit fees and Regional Shared Costs	$ 54,385	$ 102,000
Annual Permit Fee to RWQCB	$ 13,499	$ 20,000
NPDES Regional Shared Costs	$ 40,886	$ 55,000
MOU San Diego River WURMP	$ -	$ 13,500
MOU San Diego Bay WURMP	$ -	$ 13,500
TMDL Chollas Creek Implementation	$ -	$ 50,000
TOTAL	**$ 679,764**	**$ 844,912**

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City continued to use the standardized program effectiveness assessment soon after it was developed by the Copermittees during the last permit cycle. Since the submittal of the JURMP in March 2008, no additional progress has been made on regional standardized approaches to program effectiveness assessment. It is likely that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will revisit the issue of standardized assessment metrics and procedures in the near future. The City anticipates participating in the process of developing such regional standards and incorporating work products produced into its own local program effectiveness assessment system.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

The City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions

Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 Effectiveness Assessment Results

The Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome Level Assessments

Level 1
Level 1 outcomes essentially are measures of permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix C of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement.

Levels 2 and 3
See the tables 11-1 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Please note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

Level 4
The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed. Note that the City has installed Calsense in various City parks and medians, as described in Section 4. Calsense is designed to decrease water usage, which is likely to have reduced the load of pollutants potentially transported by irrigation runoff.

Level 5
The Dry Weather Monitoring Program is the City's primary mechanism of measuring the quality of discharges. The City also performs an additional monitoring program at six sites; five of these sites are located in the City's MS4, and one is located in an improved channel that has also been identified as a receiving water body. Beginning in 2009, the City is collecting MS4 outfall water quality data to characterize pollutant

discharges and to assess whether these discharges contribute to the receiving water quality.

Figures 11-4 through 11-7 are graphs demonstrating historical Dry Weather Monitoring results and trends. Ammonia –nitrogen and detergents, the two constituents with the longest historical data record, both show decreasing trends over time. No discernable trend is apparent for other field screening constituents.

It had been noted in the 2007/2008 annual report that sediment and metals values in runoff from the area upstream of Site 907-ALV-002 was higher than those recorded at the other sites. The City performed additional inspections in this area in the 2008/2009 year. During the 2009 Dry Weather Monitoring Program, no metal exceedances or signs of excess sedimentation were detected.

Level 6

No Regional Monitoring Program stations are located within or close to the City of La Mesa. The western portion of Alvarado Channel is the only receiving water body within City limits. The City has placed two special study monitoring sites, one in Alvarado Channel at the point where the channel exits the City and one in University Channel at the most downstream point in the City. Two wet weather samples and three dry weather samples have been collected at these sites over the past three years. See Section 12 for a discussion of findings. The City will also continue to work with the San Diego River and San Diego Bay WURMP workgroups to improve the quality of water bodies downstream of the City of La Mesa.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency BMPs. Based on interaction with responsible parties during the reporting period, and the results of the treatment control inspections, there is a greater level of awareness of the need for regular treatment control BMP maintenance within the City. The City will continue to work with the parties responsible for maintenance of treatment control BMPs during 2009/2010.

Construction

The available data indicate that on the whole the City's construction program effectively requires BMP implementation. Any BMP deficiencies noted are typically remedied promptly. The City has received some hotline calls about poor BMP implementation at a few small projects, so the City will continue its efforts to notify small projects and homeowners of the City's BMP requirements.

Municipal

The City's municipal activities effectively implement BMPs and reduce pollutant loading. The City's municipal staff are regularly trained on storm water issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit frequency requirements. In particular, the City sweeps its streets more often than the permit requirements to aid in WURMP efforts. The City has also installed drainage inserts along University Avenue and at the Public Works Operation Center to reduce the discharge of pollutants. The City has implemented a sophisticated system, Calsense, to control irrigation runoff from parks and medians. The City also distributes pet waste bags through dispensers in its parks.

Industrial and Commercial

The City has a comprehensive inspection program that utilizes experienced consultant inspectors. Results are tracked through a database. During 2008/2009 the City continued to follow-up with non-compliant sites and the City will continue to do so into 2009/2010.

As discussed in Section 5, the City began mailing out database generated reports of inspection results rather than copies of the inspection form during 2008/2009. The City identified that facility personnel may have a difficult time understanding the required corrective actions from the copy of the inspection report itself. Ideally, this method of inspection result notification will more effectively convey inspection results and required corrective actions to facility personnel. Additionally, updated NOI and NONA/NEC instructional coversheets (Attachment 5.2) were developed to assist industrial facilities in successfully completing appropriate paperwork to be in compliance with Industrial Permit requirements.

The City has also begun invoicing businesses in order to recover costs of inspections, and it appears that this practice has stimulated more interest in and a higher desire for

awareness about the program. Businesses also have an increased incentive to comply with the regulations, as compliant businesses will be inspected less frequently.

Residential
The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. The City is also conducting additional wet weather monitoring studies to help identify and mitigate residential sources of pollution more effectively.

Illicit Discharge Detection and Elimination
The City's IDDE program has effectively responded to complaints. No IC/IDs were identified during the 2009 Dry Weather Monitoring Program. There were eight SSOs during the reporting period; City staff worked to mitigate the effects of each of the spills by containing and cleaning the spill as necessary. City staff were able to fully capture the volume of the spill in most of the spills, indicating the City's response and SSMP are effective. The City will continue to respond appropriately to SSOs and take action to prevent and eliminate IC/IDs.

Education
During 2008/2009, the City continued to educate various communities in the City. During 2008/2009 the City worked with local Eagle Scouts to install a third informational storm water kiosk in a City park and continued to work with local garden supply retailers to distribute IPM cards.

Public Participation
The City continued to encourage participation in public events, such as clean-ups and reporting potential storm water violations via the City's Storm Water Hotline. Though the number of hotline calls decreased between 2007/2008 and 2008/2009, the number of storm water hotline calls has increased over the years, which may indicate an increased level of awareness of the Storm Water Hotline rather than an increase in the number of storm water issues occurring in the City.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-1
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review and approve project plans	External A small number of projects submitted reports during 2008/2009. Based on meetings with applicants and BMPs proposed, it appears that the level of knowledge is increasing. Internal The City's storm water consultant and the City's Stormwater Program Manager worked with engineers in the City to improve their level of understanding of the SUSMP program. The City's consultant reviews WQTRs submitted to the City.	Overall WQTR approval rate during reporting period	0%	N/A, addressed through other significant activities for this component
		Number of projects requiring three or more reviews prior to WQTR approval	N/A, no projects approved	
		Percent of projects proposing BMPs besides filter inserts		
		Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern		
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	See Section 2	
Verify BMPs are properly maintained	External Verification letters were sent to all 11 projects on the City's inventory. Internal N/A, verification letters were prepared by the City's consultant.	Percent of sites properly maintaining BMPs	33%	Additional load reduction could be achieved through improved BMP maintenance.
		Resolution status of enforcement actions	See Section 2	
		Percent of sites submitting proper verification forms	91%	
		Percent of sites certifying proper maintenance	91%	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-2
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by permit conditions, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs by end of reporting period	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Resolution status of enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff are regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	86%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4	Number of pet waste bags distributed	18,000
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.		Amount of sediment and debris removed (weight or volume)	568 tons
				Amount of sediment and debris removed per length of street swept (weight or volume per curb mile)	0.10 tons/ curb mile
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume)	122.25 cubic yards
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons)	685 gallons
Maintain municipal treatment control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment BMPs	10.5 cubic yards
				BMP effectiveness studies	N/A
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal The City contracts with a qualified consultant to perform industrial and commercial inspections.	Percent of inspected sites in compliance with BMP requirements (not including additional study or follow-ups)	69%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	0	Number of IC/IDs eliminated (inspections and complaint investigations)	23
		Consistent with the intentional selection of sites with the highest TTWQ potential, many sites had a low BMP score of 1, though fewer sites than 2007/2008. Aside from those problem sites, the most common score was three. See Figure 11-2 on the following page for a score distribution.			
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores

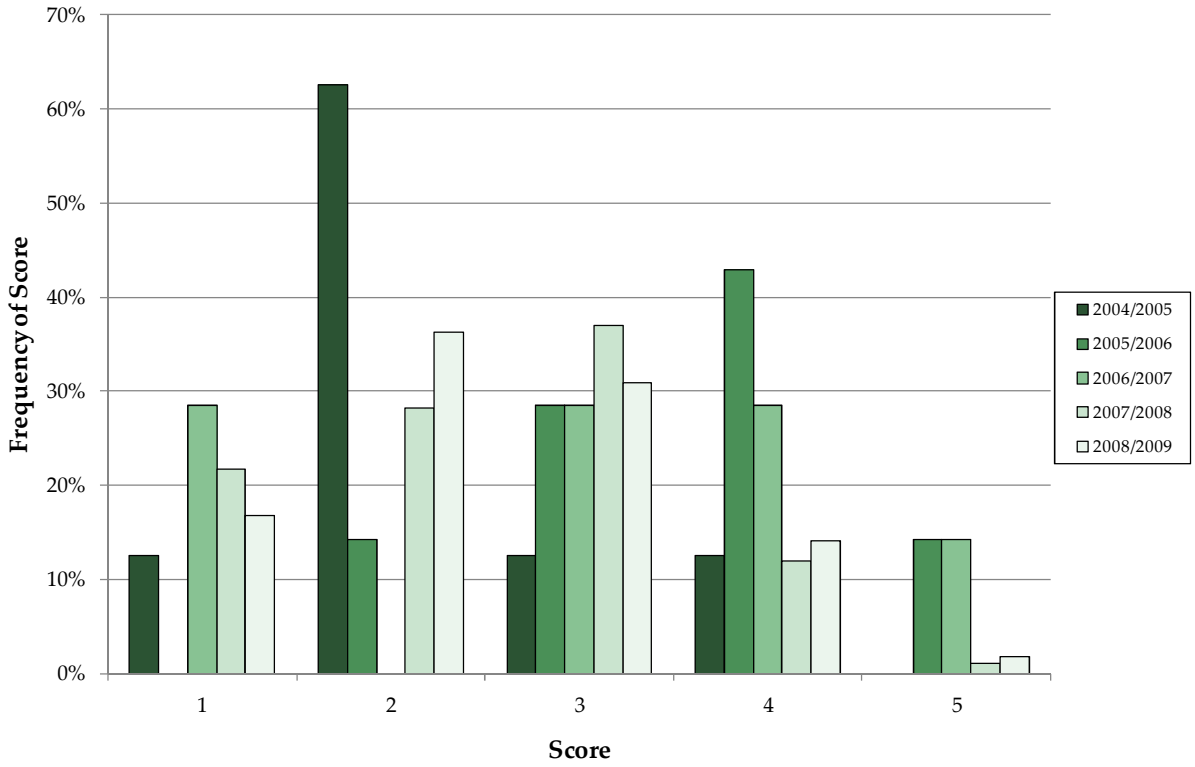

Figure 11-2
BMP Assessment Scores

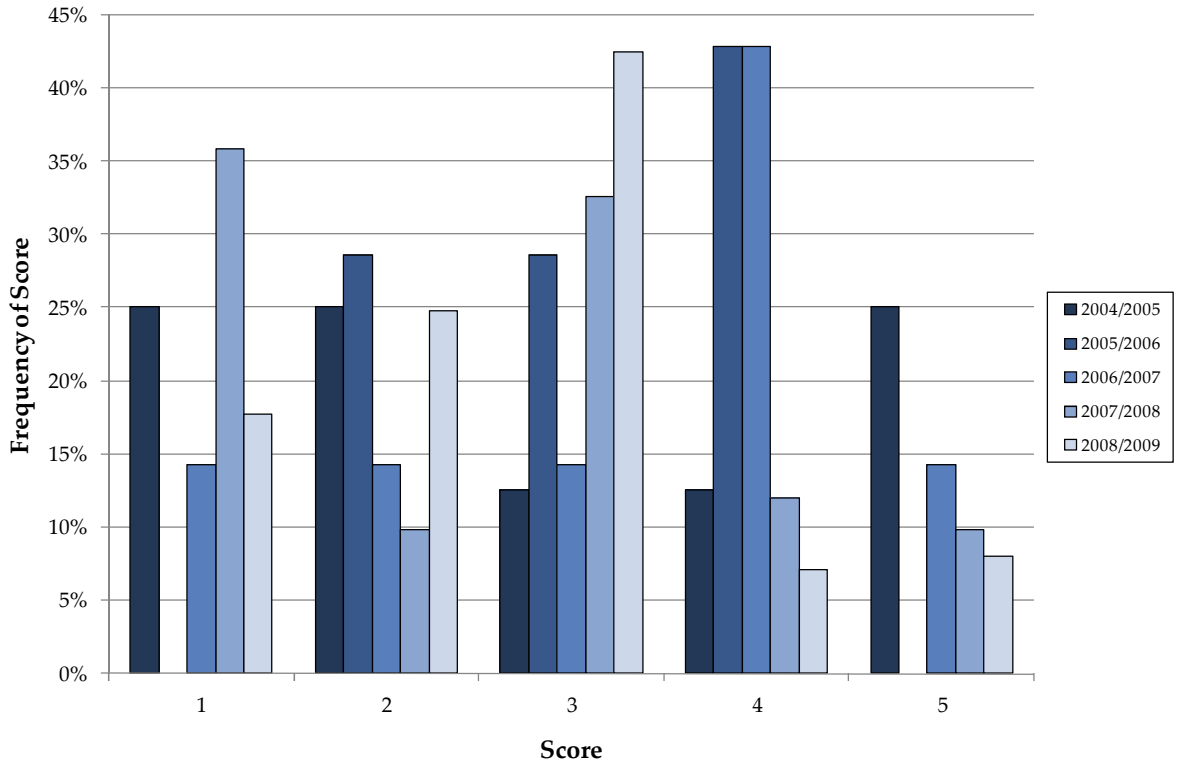

Table 11-5: Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External Residents were educated in variety of ways in 2008/2009; see sections 6 and 8 for details. Internal The City's Stormwater Program Manager is heavily involved in the implementation of the residential component. Other City staff involved in the program also have a good understanding of the goals of the storm water program.	Number of residential incidents reported to storm water hotline	22	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution of enforcement actions	See Section 6	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6: Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were eliminated, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to storm water hotline	The City's Stormwater Program Manager trains City staff as needed. See sections 4 and 8. City staff were responsible for many of the reports made to the hotline, as shown in Section 7.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 7 are likely to have resulted a pollutant loading reduction.
Respond to and clean up SSOs	City staff are thoroughly trained on how to respond to SSOs.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems. See Section 4 for details.	There were eight SSOs during the reporting period; overflow was fully captured in the majority of the overflows.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-7: Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for 2008/2009.
	Estimated number of impressions made	30,510		

Notes
Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8: Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details. See Figure 11-3 for a summary of hotline reports in recent years.	Number of attendees at events	3,812	Amount of trash and debris collected at cleanup events	475 lbs.
		Number of calls received to the storm water hotline	107	Amount of HHW collected	115,842 pounds of HHW, 1,200 oil filters, and 11,189 gallons of used oil

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-3
Storm Water Complaints Logged

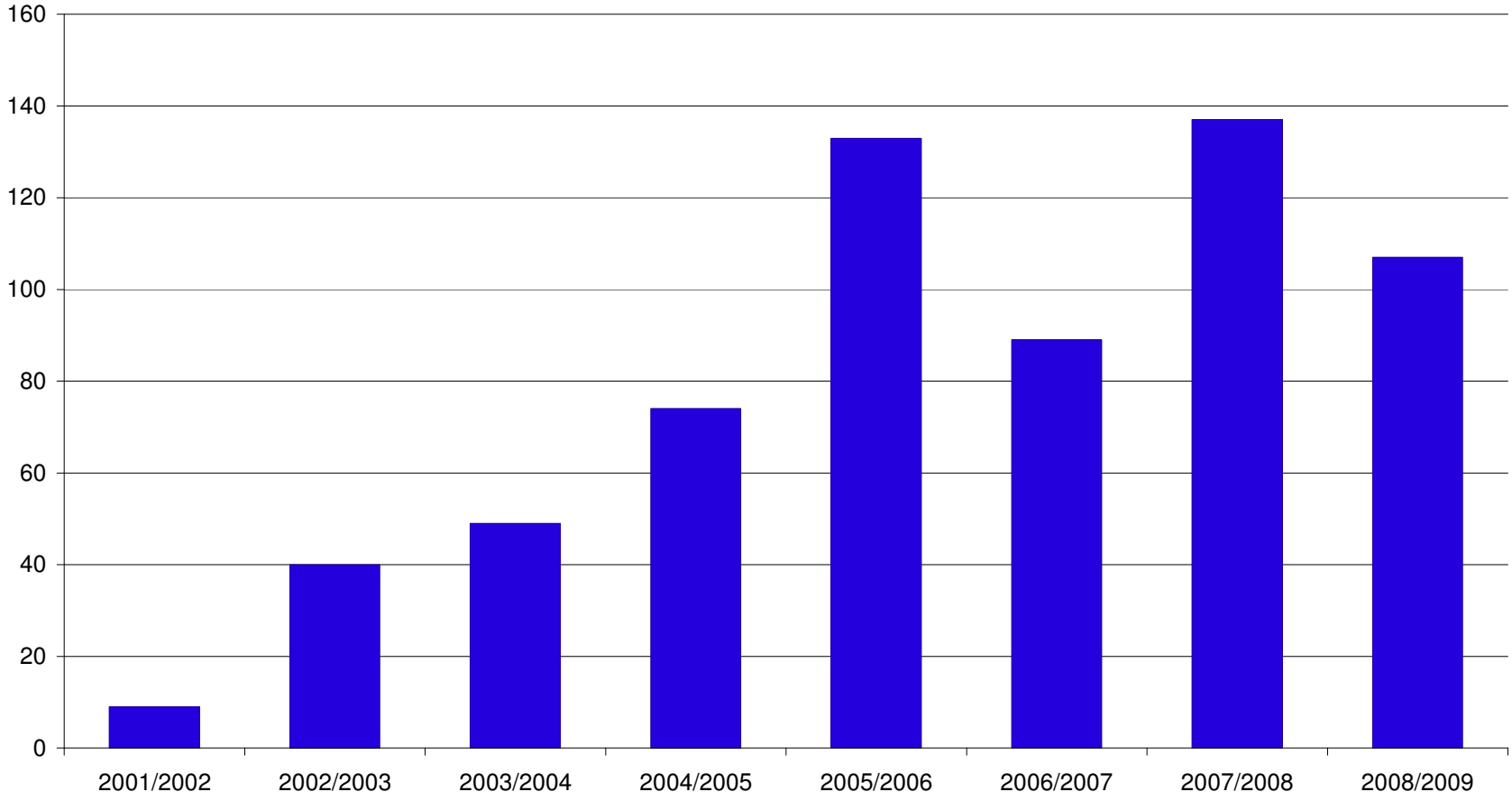

Figure 11-4
Dry Weather Monitoring, Averages of Tested Constituents, 1993-2009

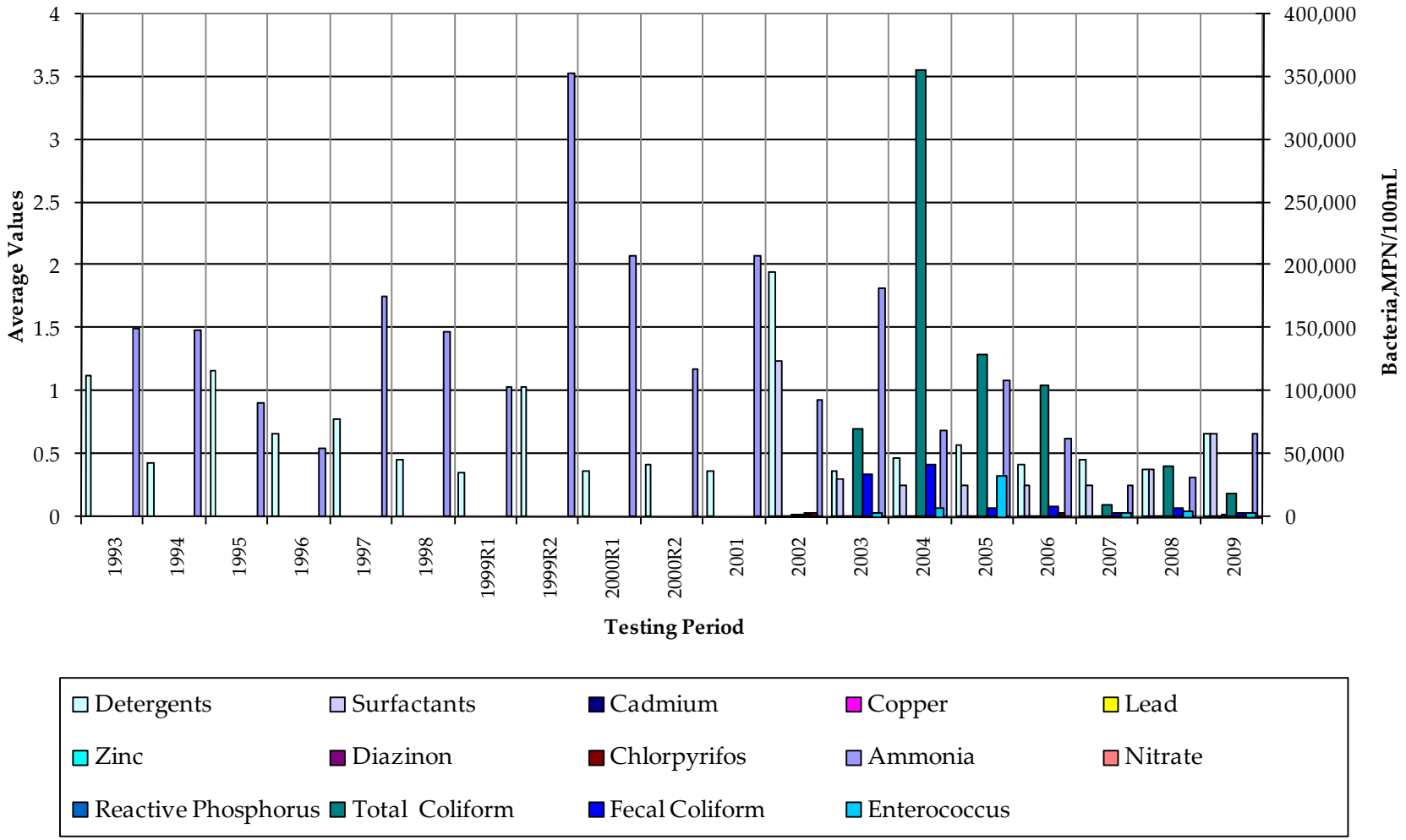

Figure 11-5
Dry Weather Monitoring, Ammonia-Nitrogen 1993-2009

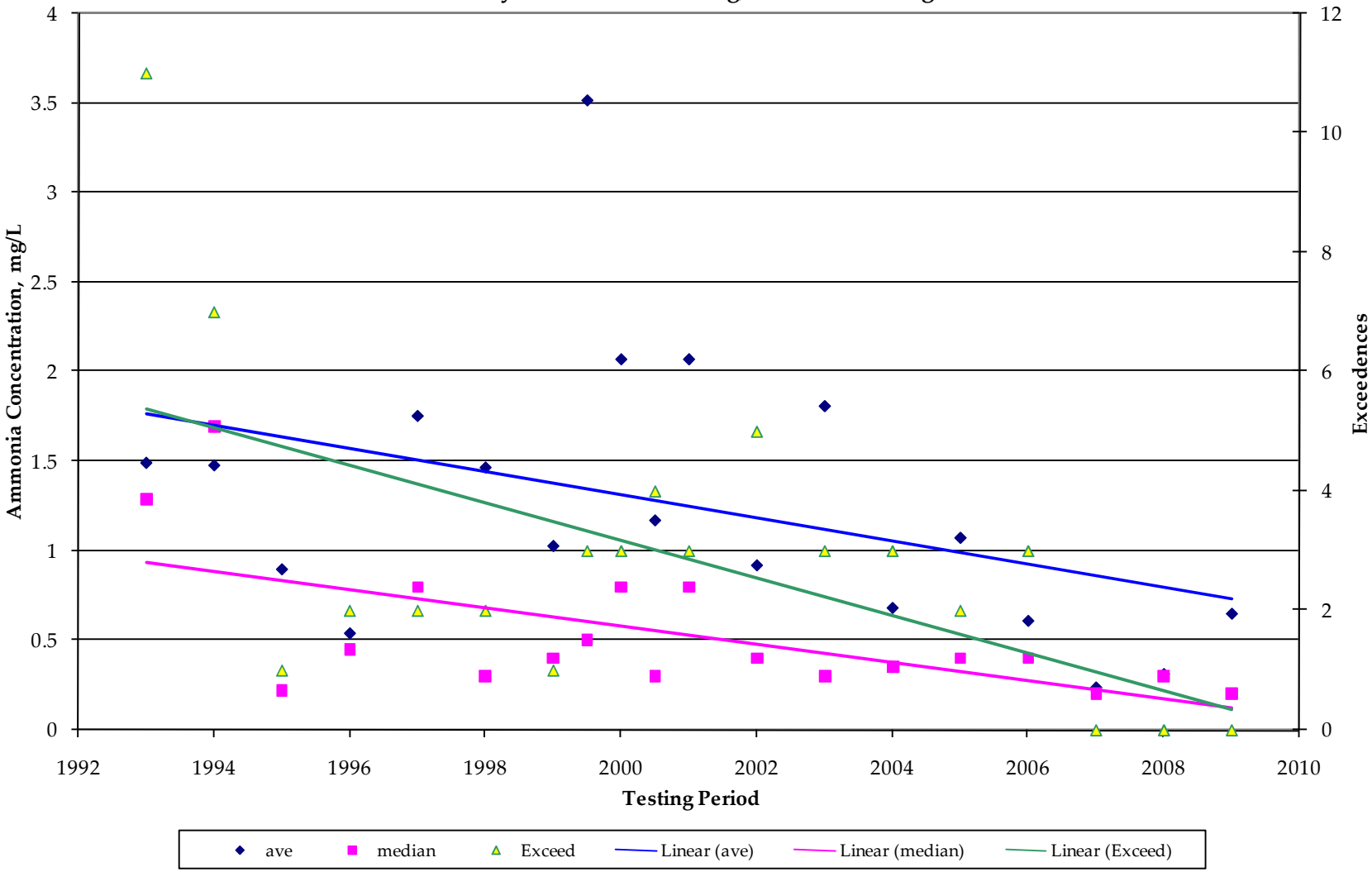

Figure 11-6
Dry Weather Monitoring, Detergents, 1993-2009

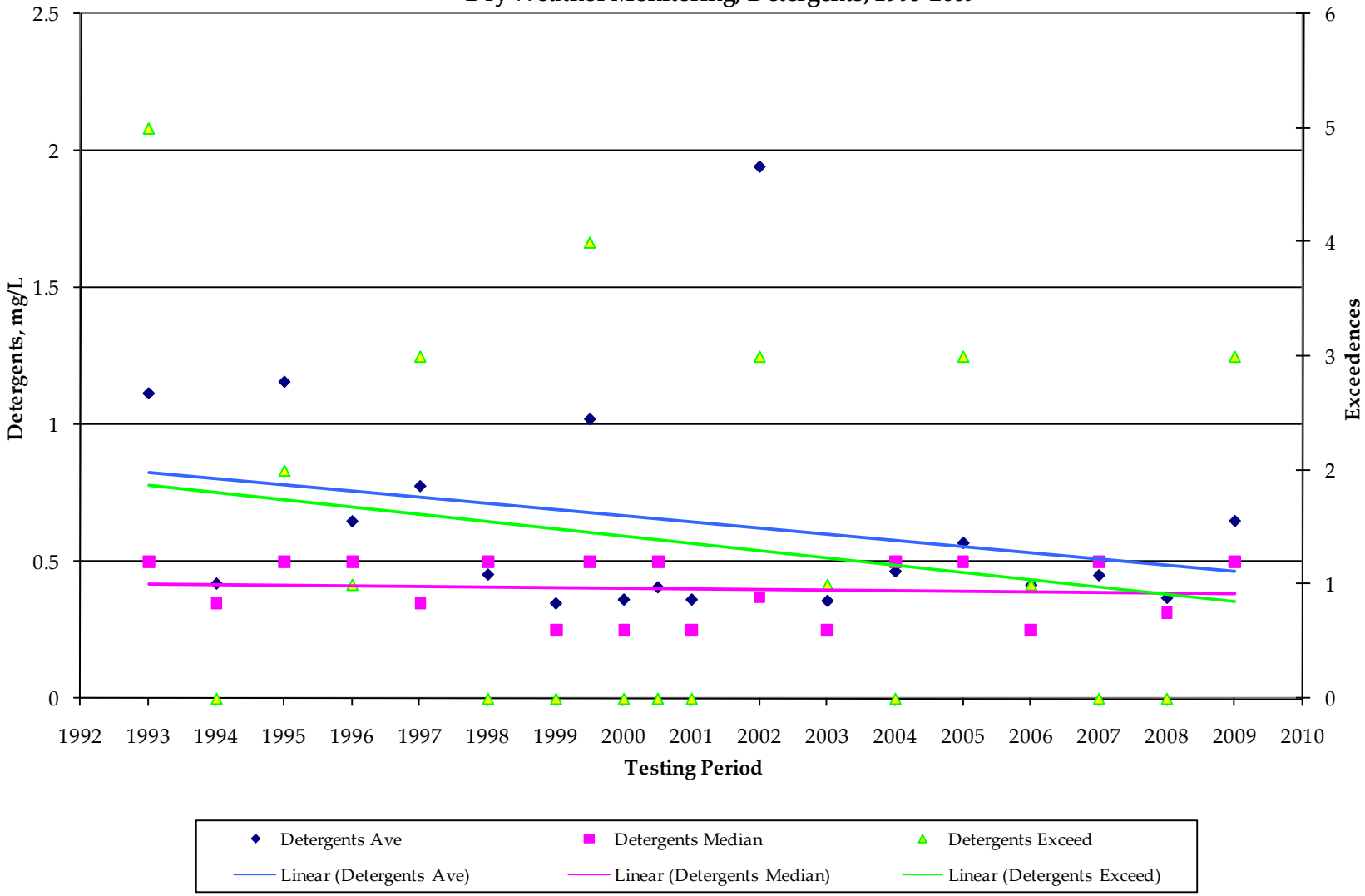

Figure 11-7
Dry Weather Results, Fecal Coliform and *Enterococcus* Bacteria 2002-2009

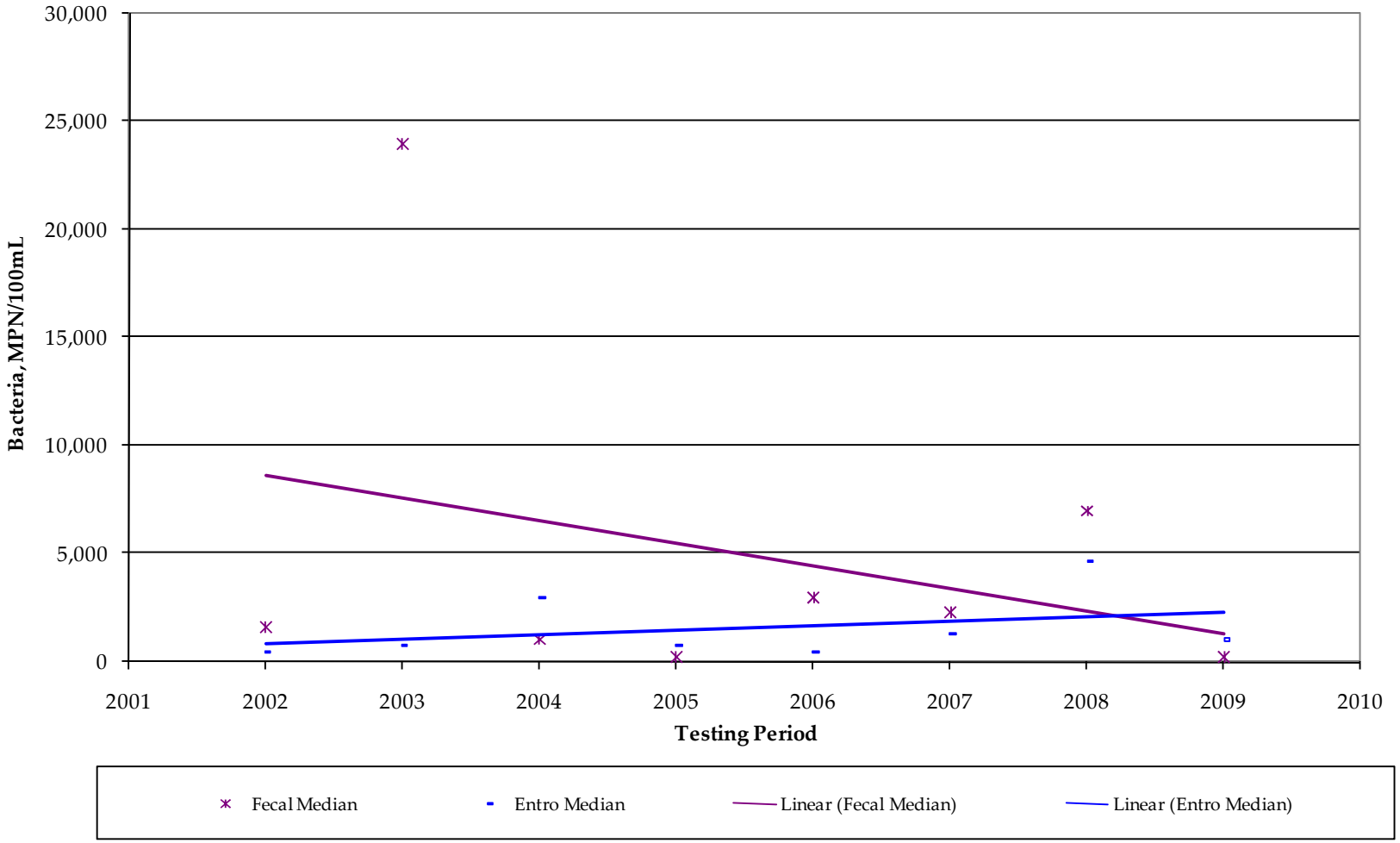

12.0 SPECIAL INVESTIGATIONS

During the reporting period the City conducted two special investigations: wet weather water quality monitoring and additional data collection during industrial and commercial inspections. Details of these investigations are presented below.

12.1 ADDITIONAL WATER QUALITY MONITORING

During the reporting period, the City continued the additional wet and dry weather water quality monitoring program it initiated during the 2006/2007 fiscal year. The goal of this additional study is to use sampling results during both dry and wet weather monitoring to identify potential sources of pollutants. Data from the monitoring is included as Attachment 12.1 to this Annual Report.

12.2 ADDITIONAL DATA COLLECTED DURING INDUSTRIAL AND COMMERCIAL INSPECTIONS

During routine industrial and commercial inspections conducted in 2008/2009 the City collected additional inspection information. Several of the questions were asked to gauge the level of knowledge of the facility contact person, and other questions were based on inspector observations.

The last question on the Supplemental Watershed Assessment Questionnaire and Inspection Form prompts the inspector to assign either significant or not significant to the overall source ranking for watershed pollutants of concern. This box was checked "Significant" when two or more of the watershed pollutants of concern were assigned a pollutant discharge potential (PDP) of three (3) or higher, or one watershed pollutant of concern was assigned a PDP of a four (4) or higher. If the site did not meet the aforementioned criteria, the box was checked "Not Significant."

If the site was ranked as a "Significant" source for watershed pollutants of concern, the site was marked as being in violation of the City's Municipal Storm Water Ordinance. Some sites were observed to be in violation of the City's Municipal Storm Water Ordinance but were ranked as "Not Significant" sources for watershed pollutants of concern. In these cases, any high PDP scores for the businesses were assigned to pollutant categories that are not considered watershed pollutants of concern and therefore did not meet the criteria of "Significant." More information on enforcement actions for industrial and commercial businesses is present in Section 5 of this JURMP Annual Report.

Information gathered from the questionnaire during 2008/2009 routine industrial and commercial inspections is discussed below, and split up between the San Diego River and San Diego Bay Watersheds. The City collected the same additional data during routine inspections conducted in 2007/2008; a comparison between the 2007/2008 and 2008/2009 data is included in Section 12.2.3, below.

12.2.1 SAN DIEGO RIVER WATERSHED RESULTS

Most facility personnel (approximately 65%) did not have any knowledge of receiving any information or education about what businesses should be doing to prevent pollution from entering the environment. Other information gathered from the questions asked to facility personnel are presented in the following tables.

Table 12-1
Question: When water (from rain, sprinklers, etc.) leaves your site where does it go?

Answer	Frequency of Answer
A Water Body (Any)	30%
Don't Know/Unsure	20%
Storm Drain System	40%
Storm Drain System, A Water Body (any)	0%
Treatment Plant/Sewer	10%

Table 12-2
Question: Runoff leaving your site eventually reaches what water body?

Answer	Frequency of Answer
Don't Know/Unsure	65%
Mission Bay	0%
Pacific Ocean	35%
Pacific Ocean, San Diego River	0%
Pacific Ocean, San Diego River, Mission Bay	0%
San Diego Bay	0%
San Diego River	0%

Table 12-3
Question: What is your impression of the water quality/condition of the downstream water body?

Answer	Frequency of Answer
Don't Know	20%
Fair	20%
Good	50%
Poor	10%

Table 12-4
Question: In General, what do you think are the main areas or activities at local businesses that could contribute to pollution of runoff (more than one answer is checked in some instances)?

Answer	Frequency of Answer
Washing Activities	20%
Washing Activities Done by Mobile Businesses	0%
Material Storage	0%
Material Processing	0%
Landscaping	0%
Repair Services	10%
Illegal Dumping	15%
Trash Area	10%
Don't Know	55%
Other	20%

About half of facility personnel (approximately 45%) were receptive in their attitude toward compliance with storm water regulations. Other information regarding observations recorded during the inspection is included in the tables below:

Table 12-5
Observation: Was evidence of any non-storm water discharges (including allowable discharges) observed?

Observation	Frequency of Answer
Minimal	10%
No	85%
Significant	5%

Table 12-6
Observation: If irrigation system is present, which sprinkler head types are present (more than one answer is checked in some instances)?

Observation	Frequency of Answer
Spray	30%
Rotor	5%
Microspray	0%
Drip	0%
Bubblers	0%
Water by Hand	15%
Other	0%
N/A	50%

Table 12-7
Sites observed to be a significant source for watershed pollutants of concern in the San Diego River Watershed

#	Business Name	Business Address
1	Dan's Automotive	7501 University Avenue
2	Panda Express #226	8011 University Avenue
3	Centre City Shell #2	3810 Massachusetts Avenue

12.2.2 SAN DIEGO BAY WATERSHED

Similar to the San Diego River Watershed, most facility personnel (approximately 62%) did not have any knowledge of receiving any information or education about what businesses should be doing to prevent pollution from entering the environment. Other information gathered from the questions asked to facility personnel are presented in the following tables.

Table 12-8
Question: When water (from rain, sprinklers, etc.) leaves your site where does it go?

Answer	Frequency of Answer
A Water Body (Any)	8%
Don't Know/Unsure	14%
Storm Drain System	73%
Storm Drain System, A Water Body (any)	1%
Treatment Plant/Sewer	4%

Table 12-9
Question: Runoff leaving your site eventually reaches what water body?

Answer	Frequency of Answer
Don't Know/Unsure	35%
Mission Bay	2%
Pacific Ocean	4%
Pacific Ocean, San Diego River	4%
Pacific Ocean, San Diego River, Mission Bay	1%
San Diego Bay	4%
San Diego River	8%

Table 12-10
Question: What is your impression of the water quality/condition of the downstream water body?

Answer	Frequency of Answer
Don't Know	18%
Fair	21%
Good	49%
Poor	12%

Table 12-11
Question: In General, what do you think are the main areas or activities at local businesses that could contribute to pollution of runoff (more than one answer is checked in some instances)?

Answer	Frequency of Answer
Washing Activities	16%
Washing Activities Done by Mobile Businesses	5%
Material Storage	15%
Material Processing	7%
Landscaping	9%
Repair Services	15%
Illegal Dumping	17%
Trash Area	12%
Don't Know	33%
Other	8%

Most facility personnel (approximately 84%) were receptive in their attitude toward compliance with storm water regulations. Other information regarding observations recorded during the inspection is included in the tables below:

Table 12-12
Observation: Was evidence of any non-storm water discharges (including allowable discharges) observed?

Observation	Frequency of Answer
Minimal	15%
No	74%
Significant	11%

Table 12-13
Observation: If irrigation system is present, which sprinkler head types are present?

Observation	Frequency of Answer
Spray	58%
Rotor	3%
Microspray	0%
Drip	3%
Bubblers	0%
Water by Hand	5%
Other	0%
N/A	34%

Table 12-14
Sites observed to be a significant source for watershed pollutants of concern in the Chollas Creek subwatershed of the San Diego Bay Watershed

#	Business Name	Business Address
1	Affordable Paint And Body	8181 Center Street
2	Are Con, Inc.	8171 Center Street
3	Arigato Japanese Restaurant	5575 Baltimore Drive #110
4	Casa De Pico Restaurant	5500 Grossmont Center Drive 404
5	Chili's Bar & Grill #454	8285 Fletcher Parkway
6	Coco's #132	5550 Lake Murray Boulevard
7	Dragon House	6062 Lake Murray Boulevard
8	El Azteca Taco Shop Mexican Food	8306 Parkway Drive
9	Enterprise Rent-A-Car #3241	8363 Center drive Suite 6H
10	Gus's Subs & Pizza #2	5620 Baltimore Drive
11	Jack In The Box, Jackson	5141 Jackson Drive
12	Los Pinos Taco Shop	5660 Lake Murray Boulevard
13	Nfarooqi Enterprises L L C (Jack in the Box)	6140 Lake Murray Boulevard
14	P.G. King	5575 Baltimore Drive #105-A
15	Pho Superbowl	8342 Parkway Drive
16	Sun Tacos	5100 Jackson Drive
17	Vons Grocery Co #2137	5630 Lake Murray Boulevard

12.2.3 Comparison of the 2007/2008 and 2008/2009 Data

Industrial and commercial facilities inspected during 2008/2009 made up the second group of routine inspections from which data was collected using the Supplemental Watershed Assessment Questionnaire. Although many of the sites inspected in 2007/2008 are different from those inspected in 2008/2009, data from the two different years were compared to identify possible overall trends or issues on which the City

needs to focus its outreach/education efforts. Below are the comparisons between the 2007/2008 and 2008/2009 information for inspections conducted in the San Diego River and San Diego Bay watersheds, respectively.

San Diego River

During the 2008/2009, inspectors noted that the percentages of facility owners/operators who were unaware of any storm water educational materials received at their site was about the same for inspections conducted in 2008/2009 and those conducted 2007/2008. Results from the questionnaire conducted in 2007/2008 and 2008/2009 were largely the same. Personnel appeared to be less receptive to the regulation requirements in 2008/2009, however. Due to the poor economy, it is possible that individuals were less receptive to the inspections because they were concerned that corrective actions will be costly for them to implement.

San Diego Bay

Similar to the San Diego River Watershed, results from the questionnaires were largely the same between 2007/2008 and 2008/2009. In contrast to the questionnaires completed in the San Diego River Watershed, most (84 percent) of facility personnel were receptive to the inspection, which is an increase from 2007/2008 where only 64 percent of facility personnel were identified as being receptive to the inspection.

12.3 Pollutant Discharge Potential Assessment

During 2008/2009, the City conducted pollutant discharge potential assessments (PDPA) at industrial and commercial facilities that received full inspection; the purpose of the assessment is to assist in source identification. The assessment is intended to be a semi-quantitative tool to identify which sites are major sources of the principal pollutants of concern for storm water. For each of several main categories of pollutants, a numeric pollutant discharge potential (PDP) on a scale from 0 (not present) to 5 (severe) is assigned. A copy of the PDPA form is included with the standard inspection form in Attachment 5.1.

Sediment, trash, and oil and grease were observed to be the largest issues during the industrial and commercial inspections conducted during 2008/2009. The City uses this information to help target businesses for inspection. Figure 12-2, on the following page, shows the distribution of PDP scores for each pollutant on the PDPA table.

Figure 12-2
PDPA Score Distribution for Facilities That Received Routine Inspection in 2008/2009

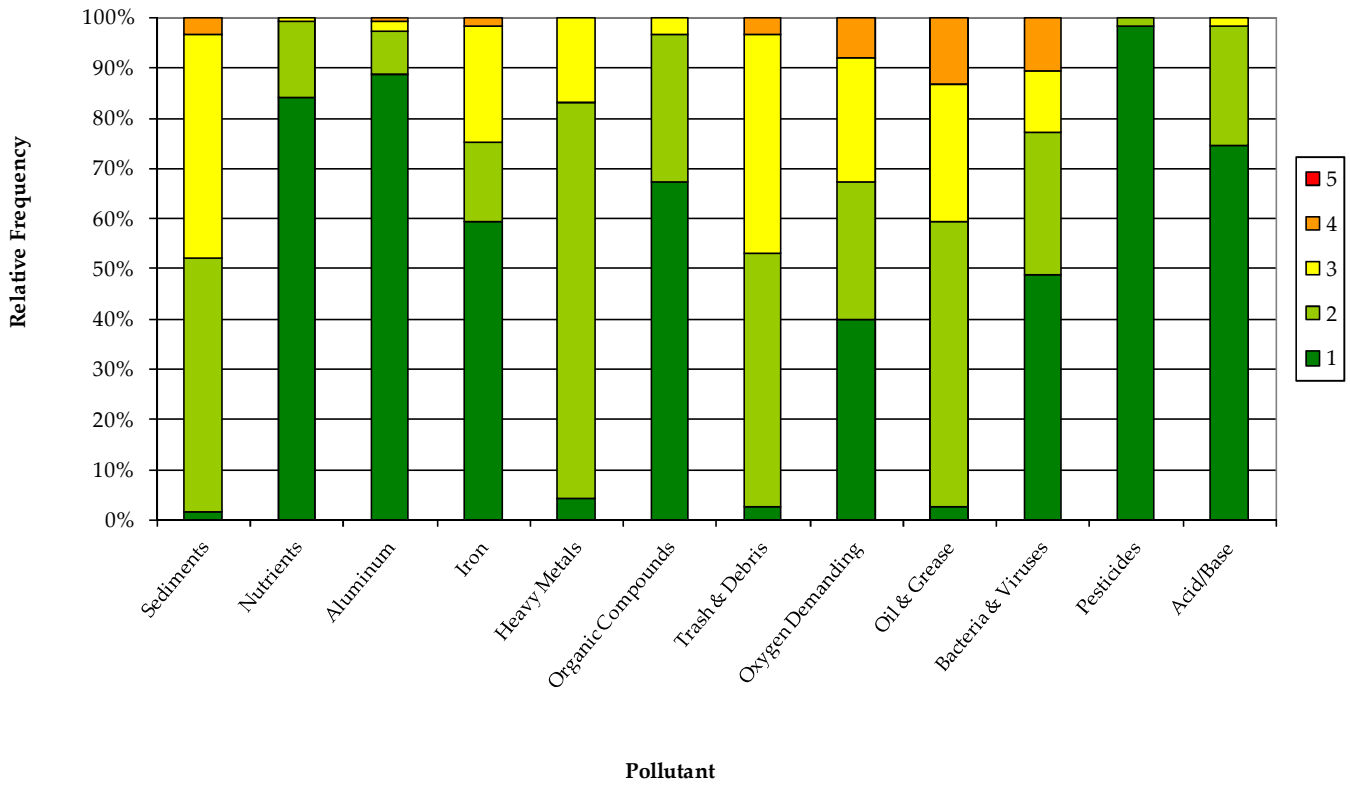

13.0 NON-EMERGENCY FIRE FIGHTING

Please reference Section 4.2.3 of this JURMP Annual Report for information about BMPs and procedures associated with non-emergency fire fighting activities.

14.0 JURMP REVISIONS

Changes to the JURMP made since the overall JURMP update in the spring of 2008 are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 Conclusions and Recommendations

During 2008/2009, the City of La Mesa continued to implement its storm water program based on the revised 2008 JURMP. Additionally, the City continued to work collaboratively with the other Copermittees to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City will continue to refine and improve its storm water program based on information made available by these collaborative efforts.

16.0 REFERENCES

California Regional Water Quality Control Board, 2007. Order No. R9-2007-0001. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

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Caltrans Storm Water Quality Handbooks, 2003. *Construction Site Best Management Practices Manual.*

City of La Mesa, 2008. *Jurisdictional Urban Runoff Management Program.*

County of San Diego, 2007. *Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Report.*

City of La Mesa

Jurisdictional Urban Runoff Management Program

2008/2009 Annual Report

Appendices and Attachments

APPENDIX A.1

Appendix A.1
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Year Finaled	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Filtration	Hydrodynamic Separators	Other	
1	Aragon	7701 El Cajon Blvd	University	2006	N								X		Medium
2	Bougainvillea Walk	Milden Street	Alvarado	2007	N						X				Medium
3	Briercrest Park (CIP)	9051 Wakarusa Street	Alvarado	2005	Y					X					Medium
4	Former Car Dealership	7604 El Cajon Blvd	Alvarado	2003	Y		X								Medium
5	Eastridge Serramar	3957 Murray Hill Road	University and Spring Valley	2007	N			X					X		Medium
6	La Mesa Teen Center (CIP)	7775 Junior High Drive	University	2007	Y		X								Medium
7	Lowell Street Condominiums	4241 Lowell Street	University	2006	N		X				X				Medium
8	Parkview	4111 Massachusetts Ave	University	2004	N			X			X			Porous concrete	Medium

Appendix A.1 (Continued)
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Year Finaled	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Filtration	Hydrodynamic Separators	Other	
9	Providence Square (Formerly Talmadge East Apartments)	5090 Guava Street	Alvarado	2007	N						X				Medium
10	Fire Station (CIP)	8054 Allison Avenue	University	2006	Y									Storm screens	High
11	Kaiser	8010 Parkway Drive	Alvarado	2007	Y								X		High

Notes

- Alvarado and Lake Murray drainage basins are in HSA 907.11 (San Diego River Watershed)
- University and Lemon Grove drainage basins are in HSA 908.22 (San Diego Bay Watershed)
- Spring Valley drainage basin is in HSA 909.12 (San Diego Bay Watershed)

APPENDIX A.2

Appendix A.2
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Total Insp.
Public Projects								
1	I&I Mitigation Project Phase II	City-Wide	SD Bay SD River	Low	31	0	0	0
2	New Police Station	8085 University Avenue	SD Bay	High	31	15	0	15
Private Projects								
3	50 Multi Units (Briercrest)	9000 Murray Dr	SD River	Medium	31	7	0	7
4	Alvarado Channel[1]*	Fletcher Parkway	SD River	Medium	25	6	0	6
5	Commercial Med/Parking Structure (Grossmont Hospital)	8860/8870 Center Dr	SD Bay	Medium	8	2	0	2
6	Condos (30 Condo Units, Hilltop View)	7378 Orien Avenue	SD Bay	Medium	31	7	0	7
7	Multi-Apartment (500)	8725 Fletcher Pkwy	SD River	Medium	31	7	0	7
8	SFH*	7531, 7533, 7535, 7537 Ohio Place	SD River	Medium	0	0	0	0
9	YMCA Expansion*	8881 Dallas	SD River	Medium	0	0	0	0
10	Addition to Existing Home/Retaining Wall	4292 Merritt Blvd	SD Bay	Low	31	1	0	1
11	Christ Lutheran Church*	7915 La Mesa Blvd	SD Bay	Low	0	0	0	0
12	CoAmerica (Wendy's)[2]	5450 Jackson Dr	SD River	Low	0[2]	1	0	1
13	Commercial	8085 Commercial	SD Bay	Low	4	0	0	0
14	Condos (Aragon)	7701 El Cajon Blvd	SD Bay	Low	8	2	0	2
15	Grading for New Garage	4580 Pomona	SD Bay	Low	31	1	0	1
16	Grading RV Parking	4661 Maple Ave	SD Bay	Low	31	1	0	1

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Total Insp.
17	Helix Water District Pipeline Replacement*	Commanche Drive & El Cajon Blvd	SD River	Low	0	0	0	0
18	Helix Water District Pipeline Replacement*	68th and Alamo Way	SD Bay	Low	0	0	0	0
19	Improvement*	4979 Garfield	SD Bay	Low	0	0	0	0
20	Improvement*	6980 Wisconsin	SD River	Low	0	0	0	0
21	Multi-Condos (3)*	5816 Pawnee Dr	SD River	Low	0	0	0	0
22	Other Old Shell Station	4200 Spring St.	SD River	Low	11	1	0	1
23	Retaining Wall	5137 Guava Ave	SD River	Low	9	0	0	0
24	SFH	9222 Briercrest Dr	SD River	Low	31	1	0	1
25	SFH (3)*	3714 Carona St	SD Bay	Low	0	0	0	0
26	SFH*	4415 Dale Ave	SD Bay	Low	0	0	0	0
27	SFH	9130 Johnson	SD River	Low	22	0	0	0
28	SFH	4667 Judson	SD Bay	Low	31	1	0	1
29	SFH	9035 Lemon Ave	SD Bay	Low	31	1	0	1
30	SFH*	9223 Lovell	SD Bay	Low	0	0	0	0
31	SFH*	9227 Madison Ave	SD Bay	Low	0	0	0	0
32	SFH*	9320 Madison Avenue	SD Bay	Low	0	0	0	0
33	SFH[3]	9038 Mollywoods Ave	SD River	Low	0[3]	1	0	1
34	SFH	6300 Orien	SD Bay	Low	31	0	0	0
35	SFH*	6147 Primrose Dr	SD River	Low	0	0	0	0
36	SFH	6151 Primrose Dr	SD River	Low	31	1	0	1

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

Notes and Definition

* These facilities were completed prior to the start of the 2008/2009 wet season

[1] Inspections of Alvarado Channel were conducted by SANDAG, which provided funding for this project

[2] Construction is currently on hold; however, the City conducted one inspection at this site during the wet season to ensure erosion control BMPs were fully implemented.

APPENDIX A.3

Appendix A.3
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source
1	Allison Avenue Lot (Parking Facility)	Palm & Allison Avenues	High	San Diego River	Roads, Streets, Highways, and Parking Facilities	
2	Aztec Park	Corner of Aztec Drive and Morocco Dr.	High	San Diego River	Parks and Recreation Facilities	X
3	Briercrest Park	9000 Block Wakarusa Street	High	San Diego River	Parks and Recreation Facilities	X
4	Collier Park and Pump House	4401 Palm Avenue	High	San Diego Bay	Parks and Recreation Facilities	X
5	Community Pool	5100 Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities	X
6	Graffiti Removal	Throughout City	High	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	
7	Harry Griffin Park	9550 Milden Street	High	San Diego River	Parks and Recreation Facilities	X
8	Highwood Park	4200 Parks Avenue	High	San Diego Bay	Parks and Recreation Facilities	X
9	Jackson Park	Jackson Drive and Laird Street	High	San Diego River	Parks and Recreation Facilities	X
10	Junior Seau Sports Complex	9001 Park Plaza Drive	High	San Diego River	Parks and Recreation Facilities	X
11	La Mesa Blvd (Parking Facility)	La Mesa Blvd & Acacia Avenue	High	San Diego Bay	Roads, Streets, Highways, and Parking Facilities	X
12	La Mesita Park and Gardener's Shack	8855 Dallas Street	High	San Diego River	Parks and Recreation Facilities	X
13	Lemon Ave Lot (Parking Facility)	Lemon Avenue & 3rd Street	High	San Diego Bay	Roads, Streets, Highways, and Parking Facilities	X
14	MacArthur Park	University Avenue and Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities	X

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source
15	Municipal Separate Storm Sewer	53 miles of pipes, storm drains, storm drain boxes, and open channel sections throughout the City	High	San Diego Bay/ San Diego River	MS4	
16	Northmont Park	Severin Drive and Amaya Drive	High	San Diego River	Parks and Recreation Facilities	X
17	Palm Avenue Lot (Parking Facility)	Palm & Lemon Avenues	High	San Diego River	Roads, Streets, Highways, and Parking Facilities	
18	Porter Hall	4910 Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities	X
19	Porter Park	8425 University Avenue	High	San Diego Bay	Parks and Recreation Facilities	X
20	Power Washing	Throughout City	High	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	
21	Public Works Operation Center	8152 Commercial Street	High	San Diego River	Public Works Facilities	
22	Roads, Streets, and Highways	149 miles of roadways throughout the City	High	San Diego Bay/ San Diego River	Roads, Streets, Highways, and Parking Facilities	X
23	Rolando Park	Alamo Way and Vigo Street	High	San Diego Bay	Parks and Recreation Facilities	X
24	Sanitary Sewer Maintenance	Throughout City	High	San Diego Bay/ San Diego River	Sanitary Sewer Maintenance	
25	Special Events	Throughout City	High	San Diego Bay/ San Diego River	Special Events	
26	Sunset Park, Gardener's Shack, and Recreational Building	5540 Lake Park Way	High	San Diego River	Parks and Recreation Facilities	X
27	Sunshine Park	70th and Tower Street	High	San Diego Bay	Parks and Recreation Facilities	X
28	Vista La Mesa Park	King Street and Hoffman Avenue	High	San Diego Bay	Parks and Recreation Facilities	X

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source
29	Fire Station No. 11	8034 Allison Avenue	Medium	San Diego Bay	Fire Stations	
30	Fire Station No. 12	8834 Dallas Street	Medium	San Diego River	Fire Stations	
31	Fire Station No. 13	9110 Grossmont Boulevard	Medium	San Diego River/ San Diego Bay	Fire Stations	
32	Infrastructure Maintenance	Throughout City	Medium	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	
33	Landscape Maintenance	Throughout City	Medium	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	
34	Police Station	8181 Allison Avenue	Medium	San Diego River	Other Fixed Facilities	
35	PW Maintenance Building	8152 Commercial Street, Building 100	Medium	San Diego River	Public Works Facilities	
36	PW Traffic Operation Trailer	8152 Commercial Street, Building 600	Medium	San Diego River	Public Works Facilities	
37	Adult Enrichment Center	8450 La Mesa Boulevard	Low	San Diego Bay	Other Fixed Facilities	
38	Adult Enrichment Center Clubhouse	8425 La Mesa Boulevard	Low	San Diego Bay	Other Fixed Facilities	
39	City Hall and Modular Buildings	8130 Allison Avenue	Low	San Diego Bay	Other Fixed Facilities	
40	City Hall Annex	8130 Allison Avenue	Low	San Diego Bay	Other Fixed Facilities	
41	Community Center	4975 Memorial Drive	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	
42	Helix Water District	7911 University Avenue	Low	San Diego Bay	Other Fixed Facilities	
43	Historical Society	8369 University Avenue	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	
44	Library/Fine Arts	8055 University Avenue	Low	San Diego Bay	Other Fixed Facilities	

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source
45	Nan Couts Cottage (Recreational Bldg)	4875 Memorial Dr.	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	
46	Postal Facility	4800 Nebo Drive	Low	San Diego Bay	Other Fixed Facilities	
47	PW Administration	8152 Commercial Street, Building 300	Low	San Diego River	Other Fixed Facilities	
48	PW Document Storage	8152 Commercial Street, Building 500	Low	San Diego River	Other Fixed Facilities	
49	Recreation Center	4975 Memorial Drive	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	

Notes

TTWQ – Threat to Water Quality

SIC –Standard Industrial Classification Code

Basin – City of La Mesa drainage basin. HSAs are as follows: Alvarado and Lake Murray (907.12; San Diego River Watershed), University and Lemon Grove (908.22, San Diego Bay Watershed), Spring Valley (909.12, San Diego Bay Watershed)

WDID – Waste Discharge Identification Number

Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX A.4

Appendix A.4
Industrial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	WDID#:	Likely Source
1	American Tanks	8111 Commercial St	3444	High	Manufacturing, Fabricated Metal	Alvarado		
2	California Countertop, Inc	7811 Alvarado Rd	3089	High	Manufacturing, Plastic/Rubber	Alvarado	9 37I019697	
3	Centex Glazing	8260 Commercial St.	1791	High	Other Contractor	Alvarado		
4	Dixieline Lumber & Home Centers	8372 Center Dr	2432	High	Manufacturing, Wood/Furniture	Alvarado	9 37I015244	
5	EDCO Transfer Station	8182 Commercial St	4953	High	Waste Management	Alvarado	9 37I012705	
6	Rainbow Steel Inc.	8332 Case St.	3499	High	Manufacturing, Fabricated Metal	Alvarado	9 37I018321	
7	Schaefer Ambulance Service, Inc.	7285 University Ave	4119	High	Ground Transportation	University	9 37I019735	X
8	Walter H. Barber & Sons, Inc.	8179 Center St.	1629	High	Other Contractor	Alvarado		
9	A-1 Self Storage, Center Dr	8328 Center Dr	4225	Medium	Wholesale/Storage/Warehousing	Alvarado		
10	Albert J. Becker, Inc. dba Wood Design West	8333 Case Street Suite C	2434, 2511	Medium	Manufacturing, Misc	Alvarado		
11	Broke Hardware	8111 Commercial Street	3949	Medium	Manufacturing, Plastic/Rubber	Alvarado		
12	Classic Screen Print	8176 Center St, Ste. C	2759	Medium	Printing	Alvarado		
13	Community Mobile	7825 La Mesa Blvd	4119	Medium	Ground Transportation	University		X
14	E T A Pacific L L C	4440 Olive Avenue	4215	Medium	Ground Transportation	University		X
15	Exotic Wedding Cake	8400 Center Drive	2064	Medium	Manufacturing, Food/Drink	Alvarado		X
16	La Mesa Transfer & Storage, Inc.	8336 Case St	4214	Medium	Wholesale/Storage/Warehousing	Alvarado		
17	M & M Patisserie	7668 El Cajon Blvd	2051	Medium	Manufacturing, Food/Drink	Alvarado		X
18	Moran Canvas Products	8135 Center Dr.	3444	Medium	Manufacturing, Fabricated Metal	Alvarado		
19	A A Printing, Inc.	7323 El Cajon Blvd	2759	Low	Printing	University		
20	A-1 Self Storage	4981 Spring St.	4225	Low	Wholesale/Storage/Warehousing	Alvarado		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	WDID#:	Likely Source
21	Barnes Printers, Inc.	8237 La Mesa Blvd	2759	Low	Printing	University		
22	Continuous Wave Tech, Inc. (Charter Delivery Servi	4350 Palm Avenue Suite 27	4215	Low	Ground Transportation	Spring Valley		
23	Dasina Building Group	8204 Parkway Dr., #5	2434	Low	Manufacturing, Wood/Furniture	Alvarado		
24	Embroidery Express	7640 University Ave #B	2395	Low	Manufacturing, Fabric/Clothes	University		
25	Equality Plating Co.	8172 Center St	3471	Low	Manufacturing, Fabricated Metal	Alvarado		
26	Joe's Signs	7889 University Avenue	3993	Low	Printing	University		
27	L & R Neon	8200 Commercial St. #101	3993	Low	Printing	Alvarado		
28	La Mesa Printing Center	7468 University Ave	2759	Low	Printing	University		
29	Lyons & O'Haver, Inc. Taxidermy	8180 Parkway Drive	3999	Low	Manufacturing, Misc	Alvarado		
30	Printing By Gwen	7640 University Ave C	2732	Low	Printing	University		
31	Susan G. Holtz Photo Research	8204 Center Dr #20	2741	Low	Printing	Alvarado		
32	The Little Warehouse	5175 Baltimore Dr	4225	Low	Wholesale/Storage/Warehousing	Alvarado		
33	Village Awards & Engraving	7769 University Ave	2796	Low	Printing	University		

Notes

TTWQ – Threat to Water Quality

SIC –Standard Industrial Classification Code

Basin – City of La Mesa drainage basin. HSAs are as follows: Alvarado and Lake Murray (907.12; San Diego River Watershed), University and Lemon Grove (908.22, San Diego Bay Watershed), Spring Valley (909.12, San Diego Bay Watershed)

WDID – Waste Discharge Identification Number

Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX A.5

Appendix A.5
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1	A A A Auto Repair & Transmission	7025 University Ave	7537	High	Auto Repair	University		X
2	A-1 Hire, Ltd.	7190 University Ave.	7353, 7694	High	Vehicle/Equipment Rental	University		X
3	Affordable Paint And Body	8181 Center Street	7532	High	Auto Paint/Body	Alvarado		
4	Aliberto's Mexican Food	7819 El Cajon Blvd.	5812	High	Eating/Drinking Establishments	University		X
5	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr	7542, 7549	High	Vehicle Washing	Alvarado		
6	Arby's 5822	5341 Jackson Dr	5812	High	Eating/Drinking Establishments	Alvarado		X
7	Are Con, Inc.	8171 Center Street	1771	High	Cement Mixing/Cutting	Alvarado		
8	Aztec Fire & Safety	8107 Commercial St.	1799	High	Other Contractor	Alvarado		
9	Bob Stall Chevrolet	7601 Alvarado Road	5511, 7538	High	Vehicle Dealers	Alvarado		
10	Carl Burger Dodge World	8355 Hercules Street	5511, 7538, 7532	High	Vehicle Dealers	Alvarado		
11	Carl Burgers Jeep Eagle World	8333 Hercules St.	5511, 7538	High	Vehicle Dealers	Alvarado		
12	Chili's Bar & Grill #454	8285 Fletcher Pkwy	5812, 5813	High	Eating/Drinking Establishments	Alvarado		X
13	Chipotle Mexican Grill	8005 Fletcher Parkway	5812	High	Eating/Drinking Establishments	Alvarado		X
14	Dan's Automotive	7501 University Ave.	7538	High	Auto Repair	University		X
15	El Torito	5024 Baltimore Dr	5812	High	Eating/Drinking Establishments	Alvarado		X
16	Enterprise Rent-A-Car #3241	8363 Center Drive, Ste 6 H	7514	High	Vehicle/Equipment Rental	Alvarado		
17	Five Star Collision Center Inc	7643 University Avenue Suite H	7532	High	Auto Paint/Body	University		X
18	Golden State Auto of La Mesa, Inc.	7224 University Avenue	5521	High	Vehicle Dealers	University		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
19	Hearth House	5505 Jackson Dr	5812, 5813	High	Eating/Drinking Establishments	Alvarado		X
20	Jack In The Box, University	6987 University Ave	5812	High	Eating/Drinking Establishments	University		X
21	Kentucky Fried Chicken	5358 Jackson Dr	5812	High	Eating/Drinking Establishments	Alvarado		X
22	Marie Callender's #74	6950 Alvarado Rd	5812, 5813	High	Eating/Drinking Establishments	Alvarado		X
23	Marieta's	8949 La Mesa Blvd	5812	High	Eating/Drinking Establishments	Alvarado		X
24	McDonald's	8045 Fletcher Pkwy	5812	High	Eating/Drinking Establishments	Alvarado		X
25	Nacho's Taco Shop	7589 University Ave	5812	High	Eating/Drinking Establishments	University		X
26	Panda Express #226	8011 University Ave	5812	High	Eating/Drinking Establishments	University		X
27	Pick Up Stix La Mesa	8025 Fletcher Pkwy	5812	High	Eating/Drinking Establishments	Alvarado		X
28	Rob's Automotive	7589 El Cajon Blvd Unit E	7538	High	Auto Repair	University		X
29	Round Table Pizza	8032 La Mesa Blvd	5812	High	Eating/Drinking Establishments	University		X
30	Shirley's Kitchen, University	7118 University Ave	5812	High	Eating/Drinking Establishments	University		X
31	Sid's Auto Body, Inc.	7473 El Cajon Blvd.	7532	High	Auto Paint/Body	University		X
32	The Truck and SUV Center	5301 Lake Murray Boulevard	5521	High	Vehicle Dealers	Alvarado		
33	5 Star Market & Liquor	7495 University Avenue	5411	Medium	Eating/Drinking Establishments	University		X
34	7 Eleven Food Store 13649 E-2121	5746 Amaya Drive	5411	Medium	Eating/Drinking Establishments	Alvarado		X
35	7 Eleven Food Store 17945	7602 University Avenue	5411	Medium	Eating/Drinking Establishments	University		X
36	7-Eleven Store #16119-2111	5255 Baltimore	5411	Medium	Eating/Drinking Establishments	Alvarado		X
37	7-Eleven Store 13647 G-2121	8300 Parkway Drive	5411	Medium	Eating/Drinking Establishments	Alvarado		X
38	7-Eleven Store 21453	5650 Baltimore Drive	5411	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
39	A & A Garden Equip Parts Service	7243 University Avenue	5261	Medium	Nurseries/Greenhouses	University		X
40	A & B Auto Electric	7801 El Cajon Blvd, Ste 2	7539	Medium	Auto Repair	University		X
41	A & W Restaurants	5500 Grossmont Center Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
42	A And D Hawaiian B.B.Q.	7918 El Cajon Blvd Suite D	5812	Medium	Eating/Drinking Establishments	Alvarado		X
43	A To Z Auto Repair	7159 University Avenue	7538	Medium	Auto Repair	University		X
44	Ace Coating Co.	8333 Case St. Suite 584	1799	Medium	Other Contractor	Alvarado		
45	Albertsons #6710	8920 Fletcher Parkway	5411	Medium	Eating/Drinking Establishments	Alvarado		X
46	All American Carpets	8186 Center Street Suite E	1742	Medium	Painting/Coating	Alvarado		
47	All Italiana	8356 Allison Ave	5812	Medium	Eating/Drinking Establishments	University		X
48	Amira Auto Sales & Broker	6942 University Ave. Suite C	5521	Medium	Other	University		
49	Anthony's Fish Grotto La Mesa	9530 Murray Dr	5812, 5813	Medium	Eating/Drinking Establishments	Alvarado		X
50	Antica Trattora Inc.	5654 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
51	Aquahouse	7705 El Cajon Blvd. Suite 14	2086	Medium	Manufacturing, Food/Drink	University		X
52	Arco Sunshine Food Store #9543	7594 University Ave	5541	Medium	Fueling	University		X
53	Arco Sunshine Food Store #9596	7974 University Ave	5541	Medium	Fueling	University		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
54	Arigato Japanese Restaurant	5575 Baltimore Dr # 110	5812	Medium	Eating/Drinking Establishments	Alvarado		X
55	Audio Associates	8200 Center Drive	1799	Medium	Painting/Coating	Alvarado		
56	Auto Repair Specialists	8120 Center St	7539	Medium	Auto Repair	Alvarado		
57	B J's Pizza & Grill	5500 Grossmont Ctr Dr #M1	5812	Medium	Eating/Drinking Establishments	Alvarado		X
58	B M H Italian L L C	7670 El Cajon Blvd	5499	Medium	Eating/Drinking Establishments	Alvarado		X
59	Baldwin Auto Sales	8174 Center St.	5521	Medium	Vehicle Dealers	Alvarado		
60	Baskin-Robbins 31 Flavors	8807 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
61	Big O Tires	7589 El Cajon Blvd Suite A	7534, 7538	Medium	Auto Repair	University		X
62	Bluecrystalherbs.Com	4409 68th Street	5499	Medium	Eating/Drinking Establishments	University		X
63	Bob Bowen's Auto Service	7191 Alvarado Rd	7538	Medium	Auto Repair	Alvarado		
64	Brady Co. / San Diego, Inc.	8100 Commercial Street	1742	Medium	Painting/Coating	Alvarado		
65	Brewbanks Coffeehouse	8697 La Mesa Blvd Suite A	5812	Medium	Eating/Drinking Establishments	Alvarado		X
66	Brigantine Restaurant	9350 Fuerte Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
67	Broding's Battery Warehouse	8188 Commercial St.	5013	Medium	Auto Supplies	Alvarado		
68	C & D Auto Care	7163 University Avenue	7538	Medium	Auto Repair	University		X
69	C & D Towing Specialists	8332 Case St.	7549	Medium	Auto Repair	Alvarado		
70	Caffe Bar E Restoranti	5263 Baltimore Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
71	Caliber Collision Centers	8310 Center Drive	7532	Medium	Auto Paint/Body	Alvarado		
72	Callari's Italian Deli & Bakery	7670 El Cajon Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
73	Candy Island	5500 Grossmont Center Drive	5441	Medium	Eating/Drinking Establishments	Alvarado		X
74	Cappuccino House	7334 University Avenue	5812	Medium	Eating/Drinking Establishments	University		X
75	Carini Electric, Inc.	8104 Center St.	1731	Medium	Other Contractor	Alvarado		
76	Carl's Jr. #284	8110 Parkway Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
77	Carruso's Coffee Corner	8201 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
78	Casa De Pico Restaurant	5500 Grossmont Center Drive 404	5812 5813	Medium	Eating/Drinking Establishments	Alvarado		X
79	Casual Cafe	8881 Fletcher Parkway	5812	Medium	Eating/Drinking Establishments	Alvarado		X
80	Centifontis	8209 La Mesa Blvd	5441	Medium	Eating/Drinking Establishments	University		X
81	Centre City Shell #2	3810 Massachusetts Ave	5541	Medium	Fueling	Lemon Grove		
82	Chang's Express	5500 Grossmont Center Drive # Fc4	5812	Medium	Eating/Drinking Establishments	Alvarado		X
83	Charcoal House	9566 Murray Dr.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
84	Chef Taka Restaurant	7520 El Cajon Blvd Suite 300	5812	Medium	Eating/Drinking Establishments	Alvarado		X
85	Chefaxel Inc. Bistro	7097 University Avenue	5812, 5963	Medium	Eating/Drinking Establishments	University		X
86	Chopsticks Inn Restaurant	8687 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
87	Chuck E. Cheese's	5500 Grossmont Center Dr J 34	5812	Medium	Eating/Drinking Establishments	Alvarado		X
88	Ciao Bella	5263-65 Baltimore Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
89	Citlalli Mexican Food	7327 University Avenue	5812	Medium	Eating/Drinking Establishments	University		X
90	Claim Jumper Restaurant La Mesa	5500 Grossmont Ctr. Drive #406	5812	Medium	Eating/Drinking Establishments	Alvarado		X
91	Coast Restaurant Supply	8120 Commercial St.	5046	Medium	Wholesale/Storage/Warehousing	Alvarado		
92	Coco's #132	5550 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
93	Coffee Indulgences	8900 Grossmont Blvd #7	5812	Medium	Eating/Drinking Establishments	Alvarado		X
94	Cold Stone Creamery	5500 Grossmont Center Dr. #F1	5812	Medium	Eating/Drinking Establishments	Alvarado		X
95	College/La Mesa Smog Test Only	7643 University Avenue Suite G	7549	Medium	Auto Repair	University		X
96	Collins Plumbing, Inc.	8130 Commercial St.	1711	Medium	Other Contractor	Alvarado		
97	Commercial Electric & Gas Appliance Service	8110 Commercial St.	7699	Medium	Equipment Repair	Alvarado		
98	Continental Catering	8232 Parkway Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
99	Cosmos Coffee Cafe'	8278 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
100	Costco Wholesale #469	8125 Fletcher Pkwy	5411, 5812	Medium	Eating/Drinking Establishments	Alvarado		X
101	D'amato's Pizza	8807 La Mesa Blvd.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
102	Dante's Pizza	5500 Grossmont Center Dr # 135	5812	Medium	Eating/Drinking Establishments	Alvarado		X
103	Denny's, Inc. #1743	6970 Alvarado Rd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
104	Deters Inc.	8180 Commercial Street	7359	Medium	Vehicle/Equipment Rental	Alvarado		
105	Discount Smog Centers	7633 El Cajon Blvd Suite 200	7549	Medium	Auto Repair	University		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
106	Domino's Pizza	7960 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
107	Dragon House	6062 Lake Murray Blvd #201	5812	Medium	Eating/Drinking Establishments	Alvarado		X
108	Dream Dinners	5208 Jackson Drive Suite 116	5499	Medium	Eating/Drinking Establishments	Alvarado		X
109	Drew Ford / Drew Hyundai	8970 La Mesa Blvd.	5511, 7538	Medium	Vehicle Dealers	Alvarado		
110	Eastridge Veterinary Clinic	7750 University Avenue, Suite A	742	Medium	Animal Facilities	University		X
111	El Azteca Taco Shop Mexican Food	8306 Parkway Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
112	El Cerrito Veterinary Hospital	6911 University Avenue	742	Medium	Animal Facilities	University		X
113	Elite Auto Collision Repair Center	4949 Baltimore Drive	7532	Medium	Auto Paint/Body	Alvarado		
114	Elite Auto Group	7658 University Avenue	5511	Medium	Vehicle Dealers	University		
115	Elite Auto Group	7643 University Avenue	5521	Medium	Vehicle Dealers	University		
116	Eloquent Auto	7147 University Avenue	7549	Medium	Auto Repair	University		X
117	European Bistro	6062 Lake Murray Blvd Suite 102-105	5812	Medium	Eating/Drinking Establishments	Alvarado		X
118	European Delicatessen	6062 Lake Murray Blvd Suite 101	5461	Medium	Eating/Drinking Establishments	Alvarado		X
119	Express Auto Service	7633 El Cajon Blvd. suite 300	7538	Medium	Auto Repair	University		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
120	Falcon's Lure	7745 University Avenue	5813	Medium	Eating/Drinking Establishments	University		X
121	Family Chef Restaurant	6155 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
122	Fast Seafood And Mexican Food	5525 Jackson Drive Suite B	5812	Medium	Eating/Drinking Establishments	Alvarado		X
123	Fish Tacos And More	5525 Jackson Drive Suite B	5812	Medium	Eating/Drinking Establishments	Alvarado		X
124	Fix Me A Plate Cafe	9168-9172 Fletcher Parkway	5812	Medium	Eating/Drinking Establishments	Alvarado		X
125	Fletcher Hills Pet Clinic	9160 Fletcher Hills Parkway	742	Medium	Animal Facilities	Alvarado		X
126	Fuddrucker's	5500 Grossmont Center Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
127	Gold Coast Bagel	5658 Lake Murray Blvd	5461	Medium	Eating/Drinking Establishments	Alvarado		X
128	Golden Spoon Yogurt	5640 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
129	Greater San Diego Air Conditioning	8141 Center St.	1711	Medium	Other Contractor	Alvarado		
130	Groceryworks.Com Operating Company	8011 University Avenue	5411	Medium	Eating/Drinking Establishments	University		X
131	Growers Direct	7055 University Avenue	5431	Medium	Eating/Drinking Establishments	University		X
132	Gus's Subs & Pizza #2	5620 Baltimore Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
133	Hayes Furniture	8270 La Mesa Blvd	7359	Medium	Vehicle/Equipment Rental	University		X
134	Hickory Farms, Inc. #13292	5500 Grossmont Center Drive 197	5499	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
135	J Ks Greek Cafe	7749 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
136	J.A. MacDonald, Inc.	8338 Center Drive	1522	Medium	Other Contractor	Alvarado		
137	Jack In The Box, Jackson	5141 Jackson Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
138	Jack Orr Auto Body, Inc.	7253 University Ave	7539	Medium	Auto Repair	University		X
139	Jamba Juice #143	5500 Grossmont Ctr Dr.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
140	James L. Yancy	8336 Case Street	4789	Medium	Ground Transportation	Alvarado		
141	Java Mama Cafe	8250 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
142	Jitters Coffee Shop	8201 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
143	Jolt 'N Joes	8076 La Mesa Boulevard	5812	Medium	Eating/Drinking Establishments	University		X
144	La Casa Blanca Mexican Restaurant	9570 Murray Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
145	La Fogata Mexican Restaurant	7303 El Cajon Blvd	5812	Medium	Eating/Drinking Establishments	University		X
146	La Mesa Motor Clinic, Inc.	5120 Guild St	7538	Medium	Auto Repair	Alvarado		
147	La Mesa Nine Diamonds L L C	3775 Massachusetts Avenue	5411	Medium	Eating/Drinking Establishments	Lemon Grove		
148	La Mesa Ocean Grille	5465 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
149	La Mesa Smog Check	7801 El Cajon Blvd, Ste 1	7549	Medium	Auto Repair	University		X
150	La Mesa Submarina	5454 Grossmont Center Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
151	La Mesita Mexican Food	7012 University Avenue	5812	Medium	Eating/Drinking Establishments	University		X
152	La Salsa Restaurants	4990 Baltimore Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
153	Lake Murray Cafe	5465 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
154	Lake Murray Village Veterinarian	5644 Lake Murray Blvd.	742	Medium	Animal Facilities	Alvarado		X
155	Lisa Osthues	6060 Lubbock Avenue	5499	Medium	Eating/Drinking Establishments	Alvarado		X
156	Little Roma Italian Cuisine	5575 Baltimore Drive Suite 104	5812	Medium	Eating/Drinking Establishments	Alvarado		X
157	Logistics International, Inc.	4670 Nebo Drive Suite 100	4789	Medium	Ground Transportation	University		X
158	Los Pinos Taco Shop	5660 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
159	Lotus Pond Restaurant	8260 Parkway Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
160	Manhattan Pizza	6195-D Lake Murray Blvd.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
161	Manhattan Pizza	6195 Lake Murray Blvd Suite D	5812	Medium	Eating/Drinking Establishments	Alvarado		X
162	Mario's De La Mesa	8425 La Mesa Blvd.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
163	McDonalds	5500 Grossmont Center Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
164	McDonald's	5500 Grossmont Center Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
165	Mesa Plaza	7520 El Cajon Blvd Suite 301	5411	Medium	Eating/Drinking Establishments	Alvarado		X
166	Mi Casita Taco Shop	8038 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
167	Midas Mufflers	7207 University Ave	7539	Medium	Auto Repair	University		X
168	Mr G'S Tavern	7081 University Avenue	5813	Medium	Eating/Drinking Establishments	University		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
169	Mr. D'S Mini Mart	8292 La Mesa Blvd	5411	Medium	Eating/Drinking Establishments	University		X
170	Mrs. Field's	5500 Grossmont Center Drive	5441	Medium	Eating/Drinking Establishments	Alvarado		X
171	Mystic Grill & Bakery	6990 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
172	New York Giant Pizza	9083 Dallas St	5812	Medium	Eating/Drinking Establishments	Alvarado		X
173	Nfarooqi Enterprises L L C (Jack in the Box)	6140 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
174	Nonnos Pizza	5314 Baltimore Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
175	Norma Jeans	5286 Baltimore Dr	5813	Medium	Eating/Drinking Establishments	Alvarado		X
176	Norm's Cocktails	7403 El Cajon Blvd	5813	Medium	Eating/Drinking Establishments	University		X
177	Olive Garden G M R I, Inc. #1301	5500 Grossmont Center Dr J-2	5812	Medium	Eating/Drinking Establishments	Alvarado		X
178	Outback Steakhouse	5628 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
179	Oz's Pub	8758 La Mesa Blvd	5813	Medium	Eating/Drinking Establishments	Alvarado		X
180	P.G. King	5575 Baltimore Dr #105-A	5812	Medium	Eating/Drinking Establishments	Alvarado		X
181	Pacific Southwest Structures	8140 Commercial Street	1771	Medium	Cement Mixing/Cutting	Alvarado		
182	Pacific Tire & Brake	7633 El Cajon Blvd, Suite 100	7564, 7538	Medium	Auto Repair	University		X
183	Palm Springs Deli	8363 Center Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
184	Palmer Painting Company	8104 Center St.	1721	Medium	Painting/Coating	Alvarado		
185	Panda Express #606	5500 Grossmont Center Drive E-1	5812	Medium	Eating/Drinking Establishments	Alvarado		X
186	Panda Land	9200 Fletcher Pky	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
187	Panera Bread	5500 Grossmont Center Drive Suite 145	5812	Medium	Eating/Drinking Establishments	Alvarado		X
188	Parkway Bar	9188 Fletcher Parkway	5813	Medium	Eating/Drinking Establishments	Alvarado		X
189	Parkway Market	9085 Dallas Street	5411	Medium	Eating/Drinking Establishments	Alvarado		X
190	Parkway Pet Hospital	8200 Parkway Drive	742	Medium	Animal Facilities	Alvarado		X
191	Parky's	6149 Lake Murray Blvd	5813	Medium	Eating/Drinking Establishments	Alvarado		X
192	Paula Jean's Coffee Bean	5565 Grossmont Center Drive	5499	Medium	Eating/Drinking Establishments	Alvarado		X
193	Pet Emergency Clinic East County	5232 Jackson Dr., Suite 105	742	Medium	Animal Facilities	Alvarado		X
194	Pho Superbowl	8342 Parkway Dr.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
195	Pietros Cucina Italiana	8378 Parkway Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
196	Pizza Hut	8011 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
197	Plaza Deli	7777 Alvarado Rd 400 A	5812	Medium	Eating/Drinking Establishments	Alvarado		X
198	Preston's Tire & Wheel	8300 Center Drive	7538	Medium	Auto Repair	Alvarado		
199	Pretzel Maker	5500 Grossmont Center Drive	5461	Medium	Eating/Drinking Establishments	Alvarado		X
200	Primary Mechanical, Inc.	5345 Timken St., Suite I	1711	Medium	Other Contractor	Alvarado		
201	Public Auto Wholesale	8220 Commercial Street	5521	Medium	Vehicle Dealers	Alvarado		
202	Quiznos Sub 10552	8555 Fletcher Parkway Suite 103	5812	Medium	Eating/Drinking Establishments	Alvarado		X
203	Raindance Roof Company, Inc.	8176 Commercial St.	1761	Medium	Other Contractor	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
204	Ralph's Grocery Company 104	8800 Grossmont Blvd	5411	Medium	Eating/Drinking Establishments	Alvarado		X
205	Red Lobster G M R I, Inc. #504	8703 Murray Dr #504	5812	Medium	Eating/Drinking Establishments	Alvarado		X
206	Rita's Fine Food	8900 Grossmont Blvd Suite 5	5411	Medium	Eating/Drinking Establishments	Alvarado		X
207	Rosaritos Mexican Food	6062 Lake Murray Blvd Suite 204	5812	Medium	Eating/Drinking Establishments	Alvarado		X
208	Rosarito's Mexican Food #3	7941 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
209	Round Table Pizza Restaurant	5999 Severin Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
210	Rowe's La Mesa Pet Hotel	8126 Center Street	752	Medium	Animal Facilities	Alvarado		X
211	Rubio's Restaurants. Inc.	5500 Grossmont Center Dr, # D 22	5812	Medium	Eating/Drinking Establishments	Alvarado		X
212	Sam's Market	7587 University Avenue	5411	Medium	Eating/Drinking Establishments	University		X
213	Sanfilippo's Pizza	8141 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
214	Schlotzsky's	5500 Grossmont Center Dr 219	5812	Medium	Eating/Drinking Establishments	Alvarado		X
215	Sergio's Café	7380 Parkway Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
216	Shakey's Pizza La Mesa	5500 Grossmont Center Drive Suite 267	5812	Medium	Eating/Drinking Establishments	Alvarado		X
217	Shenanigan's Irish Pub	7030 University Avenue	5813	Medium	Eating/Drinking Establishments	University		X
218	Shizuoka Japanese Restaurant	9118 Fletcher Pky	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
219	Silvia's Windows	8176 Center Street Suite D	5039	Medium	Building Materials	Alvarado		
220	Simply Unforgettable	7668 El Cajon Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
221	Souplantation/Garden Fresh	9158 Fletcher Pky #3	5812	Medium	Eating/Drinking Establishments	Alvarado		X
222	Starbucks Coffee #5222	5500 Grossmont Center Drive	5499	Medium	Eating/Drinking Establishments	Alvarado		X
223	Starbucks Coffee #5953	8497 Fletcher Parkway	5499	Medium	Eating/Drinking Establishments	Alvarado		X
224	Starbucks Coffee #6876	5416 Lake Murray Blvd	5499	Medium	Eating/Drinking Establishments	Alvarado		X
225	Starbucks Coffee #8905	5020 Baltimore Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
226	Steak Daddy Corp.	7777 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
227	Street Smart Vehicle Protection/Premium	7633 El Cajon Blvd.	7549	Medium	Auto Repair	University		X
228	Submarina - La Mesa	5454 Grossmont Ctr. Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
229	Subway	8396 Parkway Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
230	Subway #32859	7900 El Cajon Blvd Suite L	5812	Medium	Eating/Drinking Establishments	Alvarado		X
231	Subway #32859	7900 El Cajon Blvd Suite L/M	5812	Medium	Eating/Drinking Establishments	Alvarado		X
232	Subway (Jaspal Enterprises)	7404 University Avenue	5812	Medium	Eating/Drinking Establishments	University		X
233	Subway Sandwiches	8142 La Mesa Blvd.	5812	Medium	Eating/Drinking Establishments	University		X
234	Subway Sandwiches, Lake Murray	5307 Lake Murray Blvd A	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
235	Summit Transmissions	7633 El Cajon Blvd. #208	7537	Medium	Auto Repair	University		X
236	Sun Valley Golf Course	5080 Memorial Drive	7992	Medium	Golf Courses/Parks	Alvarado		X
237	Talon Auto Adjusters	8163 Commercial Street	7389	Medium	Vehicle Dealers	Alvarado		
238	Tamarind Thai Restaurant	7970 University Avenue	5812	Medium	Eating/Drinking Establishments	University		X
239	Tasty Garden Buffet	7984 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
240	Thai Dragon House	6062 Lake Murray Blvd Suite 201	5812	Medium	Eating/Drinking Establishments	Alvarado		X
241	The Charcoal House	9566 Murray Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
242	The Chickenest 95, Inc.	7200 Parkway Dr #111	5812	Medium	Eating/Drinking Establishments	Alvarado		X
243	The Chico Club	7366 El Cajon Blvd	5813	Medium	Eating/Drinking Establishments	Alvarado		X
244	The Coffee Merchant	5500 Grossmont Center Drive Ste 321	5499	Medium	Eating/Drinking Establishments	Alvarado		X
245	The Greek Gyros II	5500 Grossmont Ctr. Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
246	The Hot Pot	5525 Grossmont Center Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
247	The Pet Hospital of La Mesa	5336 Jackson Dr.	742	Medium	Animal Facilities	Alvarado		X
248	The Yogurt Mill	8158 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
249	Thomas J. Taylor Construction	8189 Center St.	2434, 0782	Medium	Other Contractor	Alvarado		
250	Trader Joe's #24	5475 Grossmont Center Drive Suite A	5411	Medium	Eating/Drinking Establishments	Alvarado		X
251	Trattoria Tiramisu	8273 La Mesa Blvd.	5812	Medium	Eating/Drinking Establishments	University		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
252	Trolley Stop Deli	8150 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
253	University Animal Clinic	7134 University Ave.	742	Medium	Animal Facilities	University		X
254	VCA Grossmont Animal Hospital	8274 Parkway Drive	742	Medium	Animal Facilities	Alvarado		X
255	Villa's Mexican Food	5500 Grossmont Center Drive F C-9	5812	Medium	Eating/Drinking Establishments	Alvarado		X
256	Vine Ripe Market	8191 Fletcher Parkway	5411	Medium	Eating/Drinking Establishments	Alvarado		X
257	Vons Companies Inc #2093	8011 University Avenue	5411	Medium	Eating/Drinking Establishments	University		X
258	Vons Grocery Co #2137	5630 Lake Murray Blvd	5411	Medium	Eating/Drinking Establishments	Alvarado		X
259	West Coast Barbecue & Catering	6126 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
260	Wheel & Deal, Inc.	7675 University Avenue	5521	Medium	Vehicle Dealers	University		
261	Wienerschnitzel #58	6949 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
262	Wongs Golden Palace, Inc.	7126 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
263	Yogurt Express	6195 Lake Murray Blvd C	5812	Medium	Eating/Drinking Establishments	Alvarado		X
264	Yum Yum Donut Franchise #5228	7550 El Cajon Blvd	5461, 5812	Medium	Eating/Drinking Establishments	Alvarado		X
265	Zodiak Café	9158 Fletcher Parkway #3	5812	Medium	Eating/Drinking Establishments	Alvarado		X
266	10,000 R V	5500 Grossmont Center Drive	5561	Low	Vehicle Dealers	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
267	7 Eleven Food Store 20884 D 2121	4253 Palm Avenue	5411	Low	Eating/Drinking Establishments	Spring Valley		
268	70th Street Service Station	5151 70th St	5541	Low	Fueling	Alvarado		
269	A M E X Petroleum	8303 Parkway Drive	5541	Low	Fueling	Alvarado		
270	A-Aairco Air Conditioning	7227 University Avenue	1711	Low	Other Contractor	University		
271	Above & Beyond Carpet Care	7878 La Mesa Blvd	7217	Low	Carpet/Furniture Cleaning	University		
272	Ace Parking Management	5500 Grossmont Center Drive	7521	Low	Vehicle Parking/Storage	Alvarado		
273	Action R V, Inc.	8090 University Avenue	5561	Low	Vehicle Dealers	Alvarado		
274	Advance Medical Supply	7710 University Avenue	5047	Low	Wholesale/Storage/Warehousing	University		
275	Affordable Duplication Services	7840 El Cajon Blvd Suite 205	5065	Low	Wholesale/Storage/Warehousing	Alvarado		
276	Air Best Inc.	8760 La Mesa Blvd.	1711	Low	Other Contractor	Alvarado		
277	Al & EDS Autosound	5208 Jackson Dr. 117	7549	Low	Auto Repair	Alvarado		
278	All Lines Dealer Alds Inc.	7373 Mohawk St.	7549	Low	Auto Repair	Alvarado		
279	April's Mosaics	8341 Lemon Avenue Suite C	1743	Low	Masonry	Spring Valley		
280	Arco # 09578	9600 Murray Drive	5541	Low	Fueling	Alvarado		
281	Art Of Nature	8816 La Mesa Blvd	5193	Low	Wholesale/Storage/Warehousing	Alvarado		
282	Auto Center	8203 University Ave	7539	Low	Auto Repair	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
283	Automobile Freight Forwarding	7590 El Cajon Blvd Suite H	4731	Low	Ground Transportation	Alvarado		
284	Autozone 2809	7791 El Cajon Boulevard	5531	Low	Auto Supplies	University		
285	Azure Construction, Inc.	7423 El Cajon Blvd	1799	Low	Other Contractor	University		
286	B F S Retail & Commercial	5577 Lake Murray Blvd	5531	Low	Auto Supplies	Alvarado		
287	Babies "R" Us	8150 Fletcher Parkway	5137	Low	Wholesale/Storage/Warehousing	Alvarado		
288	Bancroft Motors	8760 Campo Rd.	5521	Low	Vehicle Dealers	Spring Valley		
289	Beck's Repair Shop	8838 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
290	Benintende And Son's Painting	8341 Lemon Avenue Suite C	1721	Low	Painting/Coating	Spring Valley		
291	Best Produce	6957 University Avenue	5141	Low	Wholesale Food	University		
292	Billiards Direct	8223 La Mesa Blvd	5091	Low	Wholesale/Storage/Warehousing	University		
293	Bill's Lock and Key	7368 El Cajon Boulevard	7699	Low	Equipment Repair	Alvarado		
294	Bob Stall Chevrolet	7631-7651 Alvarado Road	5599	Low	Vehicle Dealers	Alvarado		
295	Bond's Automotive	8418 La Mesa Blvd	7539	Low	Auto Repair	Spring Valley		
296	C & C Glass	8772 La Mesa Blvd	1793	Low	Other Contractor	Alvarado		
297	C & C Glass, Inc.	8712 La Mesa Boulevard	1793	Low	Other Contractor	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
298	California Cars & Credit	8760 Campo Road	5521	Low	Vehicle Dealers	Spring Valley		
299	California Park R V Sales	7407 Alvarado Road	5561	Low	Vehicle Dealers	Alvarado		
300	Center Glass Co. #3	7853 El Cajon Blvd.	1793	Low	Other Contractor	Alvarado		
301	Centifonti	8365 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
302	Circle K Stores, Inc. # 8675	8899 La Mesa Blvd	5541	Low	Fueling	Alvarado		
303	Condoconversions.Com, Inc.	4817 Palm Avenue Suite I	1522	Low	Other Contractor	University		
304	Countywide Machine Tool Repair	8030 La Mesa Blvd Suite 314	1731	Low	Other Contractor	University		
305	Dave Wallace Roofing	8900 Grossmont Blvd Suite 3	1761	Low	Other Contractor	Alvarado		
306	Davis Framing, Inc.	8103 Commercial Street	1521	Low	Other Contractor	Alvarado		
307	De Albas Spring St.	4867 Spring St.	7539	Low	Auto Repair	Alvarado		
308	Dennis Sherman Foreign Car Service	8620 La Mesa Boulevard	7538	Low	Auto Repair	Alvarado		
309	Denny's Restaurant #6488	4235 Spring St	5812	Low	Eating/Drinking Establishments	Spring Valley		
310	Dieter Fischer's Star Car Service	8699 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
311	Don Keating Service	8381 La Mesa Boulevard	7538	Low	Auto Repair	Spring Valley		
312	Don Keating Used Cars	8381 La Mesa Boulevard	5521	Low	Vehicle Dealers	Spring Valley		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
313	Ducastel L L C	4350 Palm Avenue # 13	5065	Low	Wholesale/Storage/Warehousing	Spring Valley		
314	Earl W. Fite & Sons, Inc.	8878 La Mesa Blvd	1711	Low	Other Contractor	Alvarado		
315	El Guapo's	8350 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
316	Elite Trade Enterprise	8030 La Mesa Blvd #156	1799	Low	Other Contractor	University		
317	Emerald Oil Co.	5600 Baltimore Drive	5541	Low	Fueling	Alvarado		
318	Essential Flooring	8216 Parkway Drive	1752	Low	Other Contractor	Alvarado		
319	Euclid Motors	4969 Baltimore Dr.	5521	Low	Vehicle Dealers	Alvarado		
320	European Car Service	8855 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
321	Family Carpets & Drapes, Inc.	7111 University Avenue	1542	Low	Other Contractor	University		
322	Firestone Tire & Service Centers	8784 Grossmont Blvd	7534	Low	Auto Repair	Alvarado		
323	Forever Memories	8801 La Mesa Blvd	7359	Low	Vehicle/Equipment Rental	Alvarado		
324	Fox Auto Sales	7480 El Cajon Blvd	5521	Low	Vehicle Dealers	Alvarado		
325	German Auto Repair	4654 Nebo Dr	7539	Low	Auto Repair	Spring Valley		
326	Gomez Handyman Services	7584 Ohio Place	1521	Low	Other Contractor	University		
327	Grossmont Drain Cleaning	8949 Alpine Avenue	1711	Low	Other Contractor	Spring Valley		
328	H & J Contracting, Inc.	8820 La Mesa Blvd	1799	Low	Other Contractor	Alvarado		
329	Hanger 94, Inc	5270 Jackson Drive	5137	Low	Wholesale/Storage/Warehousing	Alvarado		
330	Harloff Automotive	7445 University Avenue	5531, 7538	Low	Auto Supplies	University		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
331	Harold's Automotive	8202 Parkway Dr	7538	Low	Auto Repair	Alvarado		
332	Hearx	8066-68 La Mesa Blvd	3845	Low	Manufacturing, Electronics	University		
333	Helix Pet Hospital	4223 Palm Ave.	742	Low	Animal Facilities	Spring Valley		
334	Henry's Marketplace	4630 Palm Avenue	5499	Low	Eating/Drinking Establishments	Spring Valley		
335	Holt Industrial Services	5638 Lake Murray Blvd #182	7699	Low	Equipment Repair	Alvarado		
336	Hunters Construction Co.	7374 El Cajon Blvd.	1522	Low	Other Contractor	Alvarado		
337	I Deal Door & Window Company	7859 El Cajon Blvd.	1751	Low	Other Contractor	Alvarado		
338	Ideal Door & Window Co.	7859 El Cajon Blvd	1793	Low	Other Contractor	Alvarado		
339	Innova Energy Baltimore Shell	5261 Baltimore Drive	5541	Low	Fueling	Alvarado		
340	Intelligent Solutions	8374 Allison Avenue	5045	Low	Wholesale/Storage/Warehousing	University		
341	J. W. Smart Construction	8130 La Mesa Blvd 174	1522	Low	Other Contractor	University		
342	J.B. Auto & Truck Sales	4999 Baltimore Drive	5521	Low	Vehicle Dealers	Alvarado		
343	Jackson and Blane Heating and A/C	7576 University Avenue	1711	Low	Other Contractor	University		
344	Jackson Pendo Development Company	8530 La Mesa Blvd Suite 306	1521	Low	Other Contractor	Alvarado		
345	Jiffy Lube #831	5540 Lake Murray Blvd	7549	Low	Auto Repair	Alvarado		
346	Joe N Andy's Hole In The Wall	8344 La Mesa Blvd	5813	Low	Eating/Drinking Establishments	Spring Valley		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
347	Johnny B'S Bar & Grill	8393 La Mesa Blvd	5813	Low	Eating/Drinking Establishments	Spring Valley		
348	K 1 Tire	7159 University Avenue	5531	Low	Auto Supplies	University		
349	Ken Gwin Landscape, Inc	4350 Palm Avenue Suite 6	782	Low	Landscaping	Spring Valley		
350	Kennedy Electric	5884 Samuel Street	1742	Low	Painting/Coating	Alvarado		
351	Kevin Flynn	6226 Primrose Drive	5084	Low	Wholesale/Storage/Warehousing	Alvarado		
352	Kragen CSK Auto, Inc. #789	5350 Jackson Dr.	5531	Low	Auto Supplies	Alvarado		
353	La Mesa Auto Care	8692 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
354	La Mesa Back Comfort	8760 La Mesa Blvd, Ste A	2514	Low	Manufacturing, Wood/Furniture	Alvarado		
355	La Mesa Car Wash	5322 Jackson Dr	5541, 7542	Low	Fueling	Alvarado		
356	La Mesa Lumber	8255 University Ave	5211	Low	Building Materials	Alvarado		
357	La Mesa Paint & Body	8170 Parkway Dr	7539	Low	Auto Repair	Alvarado		
358	La Mesa Texaco/Chula Vista Entertainment	4925 Spring St	5541	Low	Fueling	Alvarado		
359	La Torta Mexican Café/Deli	8350 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
360	Lake Murray Blvd #1 Exxon	6085 Lake Murray Blvd	5541	Low	Fueling	Alvarado		
361	Lakeside Motors	8090 University Avenue	5521	Low	Vehicle Dealers	Alvarado		
362	Lars Construction Co	4703 Spring Street	1799	Low	Other Contractor	University		
363	M J Medical, Incorporated	5310 Baltimore Drive	5047	Low	Wholesale/Storage/Warehousing	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
364	McNeill Development Corp	8419 La Mesa Blvd Suite C	1542	Low	Other Contractor	Spring Valley		
365	Medical Arts Pharmacy Inc.	8851 Center Drive Suite 110	2834	Low	Manufacturing, Biotech/Pharmaceutical	Alvarado		
366	Mercedesparts.Com Inc	6035 Lake Murray Blvd	5531	Low	Auto Supplies	Alvarado		
367	Microfiber Solutions	7484 University Avenue Suite 230	5169	Low	Wholesale/Storage/Warehousing	University		
368	Nicks Autos Group	4949 Baltimore Drive	5521	Low	Vehicle Dealers	Alvarado		
369	P A W Service Center	8230 Commercial Street	7538	Low	Auto Repair	Alvarado		
370	P L M & Associates, Inc.	8115 Commercial Street	1799	Low	Other Contractor	Alvarado		
371	Pacific Homeworks	7200 Parkway Drive, 105	1751	Low	Other Contractor	Alvarado		
372	Palm Springs Market	4301 Palm Avenue	5411	Low	Eating/Drinking Establishments	Spring Valley		
373	Para Quality Construction Inc	7853 El Cajon Blvd	1742	Low	Painting/Coating	Alvarado		
374	Paradise Auto Sales, L L C	7640 El Cajon Blvd	5521	Low	Vehicle Dealers	Alvarado		
375	Peanuts Auto Repair	5387 Lake Murray Blvd	7539	Low	Auto Repair	Alvarado		
376	Performance Choppers	4999 Baltimore Dr., Suite 1	5571	Low	Vehicle Dealers	Alvarado		
377	Performance Motoring	8620 La Mesa Blvd.	5521	Low	Vehicle Dealers	Alvarado		
378	Pete's Place	8330 La Mesa Blvd	5813	Low	Eating/Drinking Establishments	Spring Valley		
379	Pham Thu Trang	7140 University Avenue Suite D	5087	Low	Wholesale/Storage/Warehousing	University		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
380	Phil J. Maynard	8653 Washington Avenue	1521	Low	Other Contractor	Alvarado		
381	Pinos Mexican Food	4233 Spring Street	5812	Low	Eating/Drinking Establishments	Spring Valley		
382	Por Favor Restaurant	8302 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
383	Postal Annex	8030 La Mesa Blvd	7389	Low	Pool/Fountain Cleaning	University		
384	R D E Company, Inc.	4730 Palm Avenue	1742	Low	Painting/Coating	Spring Valley		
385	R L T Sims Enterprises Inc	5335 Jackson Drive	5521	Low	Vehicle Dealers	Alvarado		
386	Rancho Mobil #2	5450 Jackson Dr	5541	Low	Fueling	Alvarado		
387	Residential Heating & AC	7574 University Avenue	1711	Low	Other Contractor	University		
388	Richard Communications	8262 University Avenue Suite A	3651	Low	Manufacturing, Electronics	Alvarado		
389	Riha Construction Company	8173 Commercial Street	1542	Low	Other Contractor	Alvarado		
390	Road Pros Tire & Lube	7151 University Ave.	5531, 7534	Low	Auto Supplies	University		
391	Ron's Automotive	4951 Clearview Way	7538	Low	Auto Repair	Alvarado		
392	Roy Johnson Contractor	7830 La Mesa Blvd	1521	Low	Other Contractor	University		
393	San Diego Adaptive Sports Fund	8255 University Avenue	7521	Low	Vehicle Parking/Storage	Alvarado		
394	San Diego R V	7407 Alvarado Road	5561	Low	Vehicle Dealers	Alvarado		
395	San Diego Shirt Works	7729 University Avenue	2396	Low	Manufacturing, Fabric/Clothes	University		
396	Shell Gas Station	9090 Dallas St	5541	Low	Fueling	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
397	Shower Walls of San Diego	6063 Lake Murray Blvd	1521	Low	Other Contractor	Alvarado		
398	Smogs R Us / California Inspection Station	9089 Dallas St.	7549	Low	Auto Repair	Alvarado		
399	Software Systems Associates	7484 University Avenue Suite 320	5045	Low	Wholesale/Storage/Warehousing	University		
400	Sonus- U S A, Inc.	5565 Grossmont Center Drive 3-153	5047	Low	Wholesale/Storage/Warehousing	Alvarado		
401	Southern California Discount Tire	8867 Grossmont Blvd.	7534	Low	Auto Repair	Alvarado		
402	Sparky's Transmissions	8861 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
403	Spectrum Audio	8841 La Mesa Blvd Suite A	7359	Low	Vehicle/Equipment Rental	Alvarado		
404	Speedy Smog Of California	7482 El Cajon Blvd	7538	Low	Auto Repair	Alvarado		
405	Spring Chevron	8200 University Avenue	5541	Low	Fueling	Alvarado		
406	Steves Bancroft Motors	8760 Campo Road Suite A	5521	Low	Vehicle Dealers	Spring Valley		
407	Steve's Delivery Service	9320 Earl Street Unit 8	4215	Low	Ground Transportation	Alvarado		
408	Street Smart Auto Sound	7482 El Cajon Blvd	7549	Low	Auto Repair	Alvarado		
409	Sunny Donuts	4199 Spring St	5812	Low	Eating/Drinking Establishments	Spring Valley		
410	Sunset Glazing, Inc.	8834 La Mesa Blvd.	1793	Low	Other Contractor	Alvarado		
411	Sunshine Carpet And Upholstery	9145 Dillon Drive	7217	Low	Carpet/Furniture Cleaning	Spring Valley		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
412	T J'S Auto Repair	8090 University Ave Suite B	7532	Low	Auto Paint/Body	Alvarado		
413	The Car Shop	4999 Baltimore Dr	7532	Low	Auto Paint/Body	Alvarado		
414	The Dashboard Store/Expert Window Tinting	7147 University Avenue	5531	Low	Auto Supplies	University		
415	The Rush Group	7633 El Cajon Blvd, Suite 210 B	5531	Low	Auto Supplies	University		
416	The Village Garden Restaurant &	8384 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
417	The Vine At The Village Garden	8384 La Mesa Blvd.	5812	Low	Eating/Drinking Establishments	Spring Valley		
418	Timberwolf Construction, Inc.	7323 El Cajon Blvd	1521	Low	Other Contractor	University		
419	Translatin Productions	5706 Baltimore Drive Suite 345	3911	Low	Manufacturing, Fabricated Metal	Alvarado		
420	Trotter Door & Trim	8186 Commercial St.	1521	Low	Other Contractor	Alvarado		
421	Tune Craft, Inc.	8802 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
422	University Air Conditioning &	8203 University Avenue	1711	Low	Other Contractor	Alvarado		
423	V S P I	5500 Grossmont Center Drive	5521	Low	Vehicle Dealers	Alvarado		
424	Valvoline Instant Oil Change	7981 El Cajon Blvd	7539	Low	Auto Repair	Alvarado		
425	Village Garden Restaurant & Bakery	8384 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
426	W E Bedding Corp	5200 Jackson Drive	5021	Low	Wholesale/Storage/Warehousing	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
427	West Coast D B I, Inc	4240 Francis Way	1522	Low	Other Contractor	University		
428	Worldwide Auto Parts Inc.	9089 Dallas St.	5531	Low	Auto Supplies	Alvarado		
429	Z-Coil Pain Relief Footwear	8803 La Mesa Blvd	5139	Low	Wholesale/Storage/Warehousing	Alvarado		
430	Abundant Life Landscape	5484 Wellesley Street E	782	Medium	Landscaping	Alvarado	X	X
431	All Star Powerwash	3123 Reservoir Drive	7349	Medium	Power Washing		X	
432	Al's T L C Landscape	9255 Magnolia Avenue Space 240	782	Medium	Landscaping		X	X
433	Aqua Pool Plastering	1137 Naranca	7389	Medium	Pool/Fountain Cleaning		X	
434	Aristocrat Landscape	PO Box 15601	782	Medium	Landscaping		X	X
435	Asplundh Tree Expert	708 Blair Mill Road	783	Medium	Landscaping		X	X
436	Belle Saveur	7040 Neri Drive	5812	Medium	Eating/Drinking Establishments	University	X	X
437	Blue Dolphin	4213 Kansas St. #1	7542	Medium	Vehicle Washing		X	
438	Bonded Carpet & Drapery Service	7831 Ostrow Street	7217	Medium	Carpet/Furniture Cleaning		X	
439	Bostrom Landscaping	Not Listed	782	Medium	Landscaping		X	X
440	Bright Side Detail	10325 Baron Drive	7542	Medium	Vehicle Washing		X	
441	Budget Lawn Maintenance	9204 Sombria Road	782	Medium	Landscaping		X	X
442	California Scenic Landscape	Not Listed	782	Medium	Landscaping		X	X
443	Cecilio Ramirez Landscaping	328 S 30th Street	782	Medium	Landscaping		X	X
444	Charlies Carpet Cleaning	10707 Jamacha Blvd #182	7217	Medium	Carpet/Furniture Cleaning		X	
445	Classic Image Mobile Detailing	Not Listed	7542	Medium	Vehicle Washing		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
446	Coastal Chem Dry	4901 Morena Blvd Suite 316	7217	Medium	Carpet/Furniture Cleaning		X	
447	Coles Carpets	1170 W Morena Blvd	7217	Medium	Carpet/Furniture Cleaning		X	
448	Complete Car Care Pros	2703 Rhoades Road	7542	Medium	Vehicle Washing		X	
449	Considerate Tree Care, Inc	PO Box 2595	783	Medium	Landscaping		X	X
450	Contreras Landscape	856 Morrison Street	782	Medium	Landscaping		X	X
451	Cortez Tree Service	2527 Guajowe Lake Road	783	Medium	Landscaping		X	X
452	Crossman Landscape & Maintenance	8617 Cuyamaca Street	781	Medium	Landscaping		X	X
453	Crown Point Clippers, Inc.	PO Box 177108	783	Medium	Landscaping		X	X
454	Crystal Pool Service	1109 N 2nd Street	7389	Medium	Pool/Fountain Cleaning		X	
455	Custom Landscaping And Irrigation	9461 Grossmont Summit Drive Suite A	782	Medium	Landscaping	Alvarado	X	X
456	Dan's Maintenance	8901 Zencaro Avenue	782	Medium	Landscaping		X	X
457	Deep Cleaning And Restoration	Not Listed	7217	Medium	Carpet/Furniture Cleaning		X	
458	Detailing Concepts by Laura	6152 Horton Drive	7542	Medium	Vehicle Washing	Alvarado	X	
459	Detailing Concepts By Laura	Not Listed	7549	Medium	Auto Repair		X	X
460	Diego Puga Vargas	3828 Cherokee Street #5	782	Medium	Landscaping		X	X
461	Doan's Landscape	9550 Mavin Drive	782	Medium	Landscaping		X	X
462	Eagle Landscape Maintenance	2924 Poinsettia Drive	782	Medium	Landscaping		X	X
463	Emilio	Not Listed	782	Medium	Landscaping		X	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
464	Environmental Landscape Engineers	9210 Grossmont Blvd	781	Medium	Landscaping		X	X
465	Estrada Land Planning, Inc.	755 Broadway Circle Suite 300	781	Medium	Landscaping		X	X
466	Exquisite Mobile Detailing	Not Listed	7542	Medium	Vehicle Washing		X	
467	Finn Pool & Spa	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
468	Fitzgerald Carpet & Upholstery	5500 Grossmont Center Drive 111	7217	Medium	Carpet/Furniture Cleaning	Alvarado	X	
469	Focus Landscape	Not Listed	782	Medium	Landscaping		X	X
470	Foothills Pool Service	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
471	G.G. Landscaping, Inc.	9737 Jeremy Street	782	Medium	Landscaping		X	X
472	Garden Design	Not Listed	782	Medium	Landscaping		X	X
473	Garden Environmentals	9415 Los Coches Road	781	Medium	Landscaping		X	X
474	Gary F. Hoyt Landscape	13625 Adrian Street	781	Medium	Landscaping		X	X
475	Goins Landscaping	Not Listed	782	Medium	Landscaping		X	X
476	Grass Doctor Landscape Inc	9600 Campo Road Suite C	781	Medium	Landscaping		X	X
477	Halsey Design Group, Inc.	9340 Fuerte Dr., Suite 303	781	Medium	Landscaping	Alvarado	X	X
478	Happy Landscaping	Not Listed	782	Medium	Landscaping		X	X
479	Irriscape Construction, Inc.	20182 Carancho Road	781	Medium	Landscaping		X	X
480	J C Landscaping & Maintenance	Not Listed	782	Medium	Landscaping		X	X
481	JC Brooks Construction	8383 Center Drive Suite A	7349	Medium	Power Washing	Alvarado	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
482	Jerry Frazee	Not Listed	7542	Medium	Vehicle Washing		X	
483	John Guevera Clear Water Pool	3533 Harris Street	7389	Medium	Pool/Fountain Cleaning	Lemon Grove	X	
484	Justo Huezo Landscaping	1824 Teton Pass Street	782	Medium	Landscaping		X	X
485	Kar Tek	2034 Hidden Crest Drive	7542	Medium	Vehicle Washing		X	
486	Ken Bojok Tree Service Inc.	12443 Gay Rio Drive	782	Medium	Landscaping		X	X
487	Ken Myers Pool Service & Repair	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
488	Knott's Pest Control, Inc.	5141 Guild St.	7342	Medium	Pest Control	Alvarado	X	
489	Kostos Tree Service, Inc.	12810 Wildcat Canyon Road	783	Medium	Landscaping		X	X
490	La Bahn's Landscaping	5000 Thorne Drive Suite B	782	Medium	Landscaping	University	X	X
491	Lee Landscaping	4511 Cannington Drive	782	Medium	Landscaping		X	X
492	Linda Clark Roseworks	10656 Fuerte Drive	782	Medium	Landscaping		X	X
493	McClain, Inc.	1272 Tuttle Lane	783	Medium	Landscaping		X	X
494	Mikes Mobile Auto Detailing	Not Listed	7542	Medium	Vehicle Washing		X	
495	Mike's Mobile Detailing	Not Listed	7542	Medium	Vehicle Washing		X	
496	Mo Mo's Trees	Not Listed	783	Medium	Landscaping		X	X
497	Mobile Airbag Installation	Not Listed	7549	Medium	Auto Repair		X	X
498	Mow Blow N Go	Not Listed	782	Medium	Landscaping		X	X
499	Mr. Crabgrass Santos Landscape	10426 Park Avenue	782	Medium	Landscaping		X	X
500	My Carpet Guy	9074 Prospect Avenue	7217	Medium	Carpet/Furniture Cleaning		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
501	Nissho Of California, Inc.	1902 S Santa Fe Avenue	781	Medium	Landscaping		X	X
502	Ocean Blue Pool Service	13983 Chicarita Creek Road	7389	Medium	Pool/Fountain Cleaning		X	
503	Olympic Carpet Cleaning	538 Front Street	7217	Medium	Carpet/Furniture Cleaning		X	
504	Orozco's Tree Trimming	138 Richfield Avenue	781	Medium	Landscaping		X	X
505	Oscar & Sons Co.	1512 Altadena Avenue	781	Medium	Landscaping		X	X
506	Pacific Edge Landscape Maintenance	Not Listed	782	Medium	Landscaping		X	X
507	Pacific Green Landscape, Inc.	8834 Winter Gardens Blvd	782	Medium	Landscaping		X	X
508	Pacific Sun Pool N Spa Center	8550 Production Avenue Suite B	7389	Medium	Pool/Fountain Cleaning		X	
509	Paradise Power Washing	Not Listed	7349	Medium	Power Washing		X	
510	Patons Pond Service	5308 Camino Playa Malaga	7389	Medium	Pool/Fountain Cleaning		X	
511	Plant House Landscaping	1633 Fuerte Knolls Lane	781	Medium	Landscaping		X	X
512	Pool Rite Service	1129 Whitsett Drive	7389	Medium	Pool/Fountain Cleaning		X	
513	R J C Window Cleaning Company	1642 Folkestone Street	7349	Medium	Power Washing		X	
514	Rafael Gardening Landscape Svc	8843 Cottonwood Avenue	782	Medium	Landscaping		X	X
515	Rightway Landscaping	898 Galopago Street	782	Medium	Landscaping		X	X
516	Rods & Customs Unlimited	Not Listed	7549	Medium	Auto Repair		X	X
517	Rogelio Valdez Gardening	2655 1/2 Broadway, Ste A	782	Medium	Landscaping		X	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
518	Rojas Garden Services	2858 Beatrice Street	781	Medium	Landscaping		X	X
519	Rosendo's Pool Service	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
520	Ruiz Tree Service	2016 E Avenue	782	Medium	Landscaping		X	X
521	San Diego Erosion Control	6920 Miramar Road Suite 303	781	Medium	Landscaping		X	X
522	Shawn Hillman	Not Listed	7549	Medium	Auto Repair		X	X
523	Spurlock Poirier Landscape	2122 Hancock Street	781	Medium	Landscaping		X	X
524	Stanley Steemer Carpet Cleaners	9655 Via Excelencia	7217	Medium	Carpet/Furniture Cleaning		X	
525	Steve Wolff And Associates, Inc.	9602 Santiago Blvd	782	Medium	Landscaping		X	X
526	Superior Carpet Care	Not Listed	7217	Medium	Carpet/Furniture Cleaning		X	
527	Swains Mobile Auto Detailing	11988 Via Granero	7542	Medium	Vehicle Washing		X	
528	Tates Mobile Detailing	5500 Grossmont Center Suite 213	7542	Medium	Vehicle Washing	Alvarado	X	
529	The Davey Tree Expert Company	6914 Mission Gorge Road	783	Medium	Landscaping		X	X
530	The Water's Edge Pool & Spa	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
531	Tony Lawrence Care (T L C)	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
532	Torresdey Landscaping	Not Listed	782	Medium	Landscaping		X	X
533	Triton Power Clean	1930 Quidort Ct	7349	Medium	Power Washing		X	
534	Trujillo Auto Detail	208 Tremont Street	7542	Medium	Vehicle Washing		X	
535	Truong Gardener	2960 Murray Ridge Road	782	Medium	Landscaping		X	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
536	Villa Pool & Spa	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
537	Vision Apartment Landscape &	Not Listed	782	Medium	Landscaping		X	X
538	Warrens Carpet Cleaning Service	7343 Ronson Road Suite S	7217	Medium	Carpet/Furniture Cleaning		X	
539	Water Tech Pool Service	1533 Greenfield Drive	7389	Medium	Pool/Fountain Cleaning		X	
540	West Coast Arborists, Inc	2200 E Via Burton Street	781	Medium	Landscaping		X	X
541	Western Tree Service	815 Telegraph Canyon Road 815	783	Medium	Landscaping		X	X
542	Weststar Landscape Services	3553 Harris Street	782	Medium	Landscaping		X	X
543	Wins Pools	13227 Idyl Drive	7389	Medium	Pool/Fountain Cleaning		X	
544	Wittmayer Landscape Maintenance	1400 Country Crest Drive	782	Medium	Landscaping		X	X
545	Yard Man	Not Listed	782	Medium	Landscaping		X	X
546	1 800 Anytyme	1410 S Santa Fe	1731	Low	Other Contractor		X	
547	1st Choice Signs	610 Rock Springs Road	1731	Low	Other Contractor		X	
548	A & P Plumbing	6940 Schilling Avenue	1711	Low	Other Contractor		X	
549	A & S Construction	4130 Bancroft Drive	1521	Low	Other Contractor	Spring Valley	X	
550	A C S Construction, L P	1235 W Collins Avenue	1521	Low	Other Contractor		X	
551	A D S Environmental Services	4820 Mercury Street Suite C	1799	Low	Other Contractor		X	
552	A Hardwood Floor Co.	12025 Lemon Crest Drive	1752	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
553	A M G Demolition & Environmental	1102 Fleetridge Drive	1795	Low	Other Contractor		X	
554	A M S Paving, Inc.	10400 Banana Avenue	1611	Low	Cement Mixing/Cutting		X	
555	A Michael Mallow Const	8629 Via Del Luz Drive	1521	Low	Other Contractor		X	
556	A O Reed & Company	4777 Ruffner St	1799	Low	Other Contractor		X	
557	A P Southwest, L L C	5002 S Ash Avenue	1521	Low	Other Contractor		X	
558	A R B, Inc.	26000 Commercentre Drive	1799	Low	Other Contractor		X	
559	A R C Roofing	451 Marshall Avenue	1761	Low	Other Contractor		X	
560	A S C Builders	5190 Rebel Road	1521	Low	Other Contractor		X	
561	A S I Hastings, Inc.	1250 Greenfield Drive	1711	Low	Other Contractor		X	
562	A To Z Plumbing, Inc.	7811 Mission Gorge Road Suite L	1711	Low	Other Contractor		X	
563	A&D Steel, Inc.	10520 Kenney Street	1791	Low	Other Contractor		X	
564	A-1 Budget Roofing, Inc.	1980 Summit Drive	1761	Low	Other Contractor		X	
565	A-1 Lawns	4536 Nebo Drive	782	Low	Landscaping	Spring Valley	X	
566	Aardvark Ant & Pest Control Inc	2514 Jamacha Road #502-40	7342	Low	Pest Control		X	
567	Absolutely Electric	3146 L Street	1731	Low	Other Contractor		X	
568	Access Professional Systems, Inc.	8250 Vickers Street Suite E	1522	Low	Other Contractor		X	
569	Accu Air Inc.	1318 Bermuda View	1799	Low	Other Contractor		X	
570	Action Air Conditioning & Heating	2750 Santa Fe Avenue	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
571	Adolfson And Peterson	5002 S Ash Avenue	1521	Low	Other Contractor		X	
572	Adrian's Custom Woodworks	5925 Warren Place	1751	Low	Other Contractor	Alvarado	X	
573	Advanced Electronic Solutions	1830 John Towers Avenue	1731	Low	Other Contractor		X	
574	Advanced Engery Insulation, Inc.	14368 Olde Highway 80 Suite A	1521	Low	Other Contractor		X	
575	Affordable Raingutters	1402 N Magnolia Avenue	1761	Low	Other Contractor		X	
576	Affordable Water Heaters And	24707 San Fernando Road	1711	Low	Other Contractor		X	
577	Air Doc Inc	1444 Pioneer Way, Ste 8	1711	Low	Other Contractor		X	
578	Air Plus Mechanical, Inc	9191 Chesapeake Drive	1799	Low	Other Contractor		X	
579	Air Systems Mechanical, Inc	6101 Jackson Drive	1711	Low	Other Contractor	Alvarado	X	
580	Air Tek	9424 Chesapeake Drive Suite 1302	1711	Low	Other Contractor		X	
581	Akenson Electric	8843 Prospect Avenue	1731	Low	Other Contractor		X	
582	Al T. Sejut Electrical	4060 Vista Calaveras	1731	Low	Other Contractor		X	
583	Alarms Unlimited, Inc.	4584 Park Blvd	1799	Low	Other Contractor		X	
584	Alcal Arcade Contracting, Inc.	31164 Huntwood Avenue	1761	Low	Other Contractor		X	
585	Alcoa Signage	9535 Arjons Dr E	1799	Low	Other Contractor		X	
586	Alessio Heating & Air, Inc	740 Metcalf Street 14	1711	Low	Other Contractor		X	
587	All American Mechanical	431 Park Industrial Drive	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
588	All American Sewer & Drain	PO Box 1482	7699	Low	Equipment Repair		X	X
589	All Drains Plumbing	7541 Girard Avenue #533	1623	Low	Other Contractor		X	
590	All Pro Air	1265 Avocado Blvd Suite 104-148	1711	Low	Other Contractor		X	
591	All Star Water Heaters	30300 Puerto Vallarta	1711	Low	Other Contractor		X	
592	Aloha City Pest Control, Inc.	8100 Broadway Suite C	7342	Low	Pest Control		X	
593	American Asphalt & Concrete Inc	9011 Memory Lane	1611	Low	Cement Mixing/Cutting		X	
594	American Asphalt South, Inc	14436 Santa Ana Avenue	1611	Low	Cement Mixing/Cutting		X	
595	American Automatic Fire	9510 Pathway Street B	1799	Low	Other Contractor		X	
596	American Fence Co, Inc.	9944 Prospect Ave	1799	Low	Other Contractor		X	
597	American Fireplaces, Inc.	9938 Mesa Rim Road	1799	Low	Other Contractor		X	
598	American Leak Detection	656 Metcalf Street	1799	Low	Other Contractor		X	
599	American Mechanical Services Of Ca	2664 Vista Pacific Drive	1799	Low	Other Contractor		X	
600	American Pest Control	8100 Broadway Suite E	7342	Low	Pest Control		X	
601	American Residential Services Of	6162 Nancy Ridge Drive Suite 100	1799	Low	Other Contractor		X	
602	American Residential Services,L L	9895 Olson Drive	1711	Low	Other Contractor		X	
603	American Technologies	8444 Miralani Drive	1522	Low	Other Contractor		X	
604	Ampam Parks Mechanical	1060 N Wilmington Blvd.	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
605	Ampolos Construction	4979 Paguera Street	1522	Low	Other Contractor		X	
606	Amtech Lighting Service	13350 Gregg Street	1611	Low	Cement Mixing/Cutting		X	
607	Anderson Drilling	10303 Channel Road	1781	Low	Other Contractor		X	
608	Anderson Piping Contractors, Inc.	339 Cypress Lane	1711	Low	Other Contractor		X	
609	Andrade & Company	2123 Vuelta Court	1721	Low	Painting/Coating		X	
610	Angus Asphalt Inc	9959 Prospect Avenue	1611	Low	Cement Mixing/Cutting		X	
611	Anthony & Son Painting	4175 Avocado Blvd	1721	Low	Painting/Coating		X	
612	Antimite	4017 42nd Street	1521	Low	Other Contractor		X	
613	Any Hour Septic Service	10119 Prince Charming Lane	7699	Low	Equipment Repair		X	X
614	Apex Lighting & Electric	1939 Friendship Drive, Ste A	1731	Low	Other Contractor		X	
615	Applied Waterproofing Technology	3562 Grove Street	1799	Low	Other Contractor		X	
616	Armando Jara Almanza	1461 Remembrance Drive	1542	Low	Other Contractor		X	
617	Arrow Swimming Pool Construction	15525 Old Hwy 80	1799	Low	Other Contractor		X	
618	Asaro Construction Co.	6924 Hyde Park Drive 214	1542	Low	Other Contractor		X	
619	Aspen Cooling & Heating, Inc.	3720 Oceanic Way Suite 207	1711	Low	Other Contractor		X	
620	Astra Flooring Company	3402 Kurtz St	1752	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
621	Astro Mechanical Contractors, Inc.	603 S Marshall Avenue	1521	Low	Other Contractor		X	
622	Atlantis Pools And Spas	1106 Leonard Avenue	1799	Low	Other Contractor		X	
623	Atlas Fence Company	1211 32nd Street Suite S	1799	Low	Other Contractor		X	
624	Atlas Footing Repair Inc	1136 Greenfield Drive	1799	Low	Other Contractor		X	
625	Atlas Termite Co	25 2nd Avenue	7342	Low	Pest Control		X	
626	Avalanche Mechanical	5575 Magnatron Blvd Suite C	1711	Low	Other Contractor		X	
627	Award Roofing Services	8731 Winter Gardens Blvd	1761	Low	Other Contractor		X	
628	Axium Electric	6042 Carol Street	1731	Low	Other Contractor		X	
629	Ayala Boring, Inc.	10150 Poplar Avenue	1799	Low	Other Contractor		X	
630	Aztec Landscaping, Inc.	7980 Lemon Grove Way	1521	Low	Other Contractor		X	
631	B & J Jackson-Stone Enterprises,	345 Vernon Way	1741	Low	Masonry		X	
632	B & W Precast Construction, Inc.	2511 Harmony Grove Road	1623	Low	Other Contractor		X	
633	B A E Co Builder	Not Listed	1521	Low	Other Contractor		X	
634	B B C Construction	Not Listed	1521	Low	Other Contractor		X	
635	B D R Communications, Inc.	1944 Kellogg Avenue	1731	Low	Other Contractor		X	
636	B E Kaylor Restoration Inc.	4820 Mercury Street Suite D	1522	Low	Other Contractor		X	
637	B E T Construction	Not Listed	1742	Low	Painting/Coating		X	
638	B T Construction	5711 Lancaster Drive	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
639	B&B Acoustics, Inc.	12115 Lakeside Avenue	1742	Low	Painting/Coating		X	
640	B. O' Brien Electric Service	13655 Highway 8 Business 52	1799	Low	Other Contractor		X	
641	Banker Insulation Of Ca, Inc.	2357 Vineyard Avenue	1742	Low	Painting/Coating		X	
642	Banner Builders Inc	1530 Jamacha Road Suite P	1521	Low	Other Contractor		X	
643	Barner Electric	9435 Wheatlands Court Suite K	1731	Low	Other Contractor		X	
644	Barratt American Inc.	5950 Priestly Drive	1521	Low	Other Contractor		X	
645	Basile Construction Inc	7840 Dunbrook Road	1623	Low	Other Contractor		X	
646	Bath Co. Shower Door	613 W Main Street	1799	Low	Other Contractor		X	
647	Bauer Cabling Solutions, Inc.	1027 S Claremont Street	1623	Low	Other Contractor		X	
648	Bay City Electric Works Inc.	12208 Industry Road	1799	Low	Other Contractor		X	
649	Bay Sheet Metal, Inc	1263 Greenfield Drive	1761	Low	Other Contractor		X	
650	Beach Cities Landscape, Inc.	8911 Olive Drive	1799	Low	Other Contractor		X	
651	Beck Electric	3707 5th Avenue Suite 556	1731	Low	Other Contractor		X	
652	Belfor Property Restoration	11545 Sorrento Valley Road Suite 308	1799	Low	Other Contractor		X	
653	Ben Martindill	Not Listed	1751	Low	Other Contractor		X	
654	Benchmark Landscape, Inc.	12575 Stowe Drive	1799	Low	Other Contractor		X	
655	Bernard's Plumbing, Inc.	1884 Powell Drive	1711	Low	Other Contractor		X	
656	Besek Electric	525 F Street	1731	Low	Other Contractor		X	
657	Best Interiors, Inc.	2100 E Via Burton	1521	Low	Other Contractor		X	
658	Best Rain Gutters	550 Ramon Avenue	1761	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
659	Best Value Glass, Inc.	1517 N Cuyamaca Street	1793	Low	Other Contractor		X	
660	Betz Concrete, Inc.	2301 Vineyard Avenue	1771	Low	Cement Mixing/Cutting		X	
661	Bill Hutson Installations & Repair	622 Margarita Avenue	1522	Low	Other Contractor		X	
662	Bill's Construction Assistance	2222 Escondido Avenue	1521	Low	Other Contractor		X	
663	Bill's Home Repair	5401 Pennsylvania Lane	1521	Low	Other Contractor		X	
664	Blaine Tech Services	20735 Belshaw Avenue	1781	Low	Other Contractor		X	
665	Blasingame Custom Building	81 Matscher Street	1521	Low	Other Contractor		X	
666	Bledsoe Masonry, Inc.	4680 Felspar Street	1741	Low	Masonry		X	
667	Blue Diamond Plumbing And	16382 Pauhaska Road	1711	Low	Other Contractor		X	
668	Blue Fountain Pools	6136 Mission Gorge Road #117	1799	Low	Other Contractor		X	
669	Blue Haven Pools	655 Venture Street Suite 101	1799	Low	Other Contractor		X	
670	Bluewater Environmental Services,	2075 Williams Street	1521	Low	Other Contractor		X	
671	Bob Jenson A/C & Heating	1347 Broadway	1711	Low	Other Contractor		X	
672	Bob Piva Roofing	1192 Industrial Avenue	1761	Low	Other Contractor		X	
673	Bornholdt Construction, Inc.	1027 Greenfield Drive #2	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
674	Bowie Handyman Service	Not Listed	1522	Low	Other Contractor		X	
675	Boyce Construction Co., Inc.	10463 Austin Drive Suite D	1799	Low	Other Contractor		X	
676	Brabazon's Alpine Paving &	5738 Willows Road A	1799	Low	Other Contractor		X	
677	Brad L. Stoner Painting, Inc.	9245 Dowdy Drive #112	1721	Low	Painting/Coating		X	
678	Bray Construction	Not Listed	1522	Low	Other Contractor		X	
679	Brett Lanz Construction	10705 Prince Lane	1700	Low	Other Contractor		X	
680	Brookstone Telecom, Inc.	43300 Business Park Drive Suite B-106	1522	Low	Other Contractor		X	
681	Brookwood Plastering, Inc.	13675 Choisser Lane	1742	Low	Painting/Coating		X	
682	Brundage Bone Concrete Pumping	1630 W Pellessier Road	1771	Low	Cement Mixing/Cutting		X	
683	Buckskin Welding	2480 Bass Rd	7692	Low	Equipment Repair		X	X
684	Budge- It Home Remodeling, Inc	9150 Sesi Lane	1521	Low	Other Contractor		X	
685	Buildercraft Construction	1820 Avenida Del Mundo Suite 406	1521	Low	Other Contractor		X	
686	Builders Termite & Pest Control,	1139 S Placentia Avenue	7342	Low	Pest Control		X	
687	Building Restorations, Inc.	6975 North Avenue Suite A	1799	Low	Other Contractor		X	
688	Burgio Plastering	1937 Friendship Drive Suite C	1742	Low	Painting/Coating	City Limit	X	
689	Bycor General Contractor	6867 Nancy Ridge Drive	1522	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
690	C & J Builders, Inc.	Not Listed	1521	Low	Other Contractor		X	
691	C & R Systems, Inc.	1835 Capital Street	1731	Low	Other Contractor		X	
692	C A Skyhook, Inc	8733 Magnolia Avenue Suite 134	1751	Low	Other Contractor		X	
693	C C M Enterprises	10848 Wheatlands Avenue	1799	Low	Other Contractor		X	
694	C E Wilson Corporation	662 Grand Avenue	1522	Low	Other Contractor		X	
695	C G P Maintenance And Construction	7270 Engineer Road Suite D	1700	Low	Other Contractor		X	
696	C M I Plumbing And Piping Inc.	1029 Vernon Way	1711	Low	Other Contractor		X	
697	C P C Mechanical, Inc.	13664 Willow Road	1623	Low	Other Contractor		X	
698	C W A Development, Inc.	3494 Harris Street	1521	Low	Other Contractor		X	
699	C. L. Anderson Company	Not Listed	1731	Low	Other Contractor		X	
700	C. Leafdale Plumbing	2775 Kurtz Street	1711	Low	Other Contractor		X	
701	C. Lilley Construction Inc	592 Westwind Dr N	1500	Low	Other Contractor		X	
702	California Comfort Systems U S A,	9750 Distribution Avenue	1711	Low	Other Contractor		X	
703	California Concrete Cutting &	388 Citrus Avenue	1771	Low	Cement Mixing/Cutting		X	
704	California Construction Clean-Up	3336 Adams Avenue	1799	Low	Other Contractor		X	
705	California Delta Mechanical	1235 Grand Avenue	1711	Low	Other Contractor		X	
706	Calsoft Water Service Inc.	4635 Ruffner Street	1799	Low	Other Contractor		X	
707	Campbell Construction	6550 Van Buren Blvd	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
708	Can-Do Electric	1100 N Magnolia Avenue Suite J	1731	Low	Other Contractor		X	
709	Capacity Construction Inc.	9323 Chesapeake Drive Suite A-1	1799	Low	Other Contractor		X	
710	Carol E. Patterson	Not Listed	1742	Low	Painting/Coating		X	
711	Carolyn E. Scheidel, Contractor	PO Box 1796	1742	Low	Painting/Coating		X	
712	Carpet Club	518 W Washington Avenue	1752	Low	Other Contractor		X	
713	Carpet Trend	Not Listed	1752	Low	Other Contractor		X	
714	Carrion Construction, Inc.	312 W Laurel Street	1521	Low	Other Contractor		X	
715	Carter Installation Services, Inc.	594 Front Street Suite A	1751	Low	Other Contractor		X	
716	Cartwright Termite & Pest Control	1376 Broadway	7342	Low	Pest Control		X	
717	Casady Electric Inc	275 Camino Del Cerro Grande	1799	Low	Other Contractor		X	
718	Casper's Concrete Cutting	3825 Bancroft Drive 105	1799	Low	Other Contractor		X	
719	Cass Plumbing & Heating	4569 30th Street Suite C	1711	Low	Other Contractor		X	
720	Cay-Lor Construction	Not Listed	1522	Low	Other Contractor		X	
721	Cement Cutting, Inc.	3610 Hancock Street	1771	Low	Cement Mixing/Cutting		X	
722	Central Plumbing Heating Cooling	6152 Mission Gorge Road Suite H	1711	Low	Other Contractor		X	
723	Century Shower Door Co.	20100 S Normandie Avenue	1751	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
724	Certified Electric Incorporated	14781 Pomerado Road 101	1731	Low	Other Contractor		X	
725	Charco Construction Company	7065 El Cajon Blvd	1521	Low	Other Contractor		X	
726	Charlie Hughes Tile	Not Listed	1743	Low	Masonry		X	
727	Charrua Painting	1163 Marline Avenue	1721	Low	Painting/Coating		X	
728	Christie Construction	10006 Country View Road	1521	Low	Other Contractor		X	
729	Chula Vista Electric Co	127 Press Lane	1731	Low	Other Contractor		X	
730	Ciani Communications Construction	Not Listed	1731	Low	Other Contractor		X	
731	City-Wide Electronic Systems, Inc.	1540 N Pioneer Way	1731	Low	Other Contractor		X	
732	Clardy Construction	15225 Sleepy Creek Road	1799	Low	Other Contractor		X	
733	Clark Home Improvement And	Not Listed	1521	Low	Other Contractor		X	
734	Clean Edge Painting	9906 Mission Vega Road #1	1721	Low	Painting/Coating		X	
735	Clean Power Systems, Inc.	13230 Evening Creek Drive Suite 203	1711	Low	Other Contractor		X	
736	Clear Sign & Design, Inc.	170 Navajo Street	1799	Low	Other Contractor		X	
737	Clearview Windows & Doors	28106 Ave Crocker	1793	Low	Other Contractor		X	
738	C-Me Plumbing & Drain Service	10828 Charing Cross Road	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
739	Coast Sign	1500 W Embassy Street	1799	Low	Other Contractor		X	
740	Coastal Property Care & Const,	Not Listed	1542	Low	Other Contractor		X	
741	Coating Creations	Not Listed	1721	Low	Painting/Coating		X	
742	Code 3 Electrical	10934 Greencastle Street	1731	Low	Other Contractor		X	
743	College Works Painting	1682 Langley Avenue	1721	Low	Painting/Coating		X	
744	Columbia Pest Control Co. Of San	127 W 9th Street	7342	Low	Pest Control		X	
745	Comanche Contractors, Inc.	15467 Chemical Ln	1521	Low	Other Contractor		X	
746	Command Communication	Not Listed	1731	Low	Other Contractor		X	
747	Commercial & Industrial Roofing	9239 Olive Drive	1761	Low	Other Contractor		X	
748	Communications Plus	1675 Morena Blvd	1731	Low	Other Contractor		X	
749	Concrete Concepts, Inc.	2317 Vineyard Avenue	1771	Low	Cement Mixing/Cutting		X	
750	Concrete Cutting Company	PO Box 910503	1799	Low	Other Contractor		X	
751	Connie Jo's Services Unlimited	21000 Plummer Street	1521	Low	Other Contractor		X	
752	Continental Western Transportation	9235 Harris Plant Road	1771	Low	Cement Mixing/Cutting		X	
753	Copper Electric, Inc.	10054 Prospect Avenue	1731	Low	Other Contractor		X	
754	Corky's Pest Control, Inc.	909 Rancheros Drive	7342	Low	Pest Control		X	
755	Corlett Electrical Construction	8315 Tommy Drive	1731	Low	Other Contractor		X	
756	Coronado Heating & A C	1512 Palm Avenue	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
757	Cosco Fire Protection, Inc.	10695 Treena Street Suite 105	1799	Low	Other Contractor		X	
758	Countywide Mechanical	1997 Friendship Drive Unit G	1711	Low	Other Contractor		X	
759	Cox Roofing	5429 Alpine Blvd	1799	Low	Other Contractor		X	
760	Creative Touch Interiors, Inc.	7720 Kenamar Court C	1752	Low	Other Contractor		X	
761	Crew Builders	5752 Oberilin Drive Suite 105	1521	Low	Other Contractor		X	
762	Crisler Electric	539 Telegraph Canyon Road #636	1731	Low	Other Contractor		X	
763	Cromwell Contracting, Inc.	9540 Palomino Ridge	1521	Low	Other Contractor		X	
764	Curto Const Co.	Not Listed	1522	Low	Other Contractor		X	
765	Custom Antenna & Garage Door	5833 El Cajon Blvd	1731	Low	Other Contractor		X	
766	Custom Electrical	10739 Oak Creek Drive	1731	Low	Other Contractor		X	
767	Custom Media Mfg Sign Co.	136 Neptune Place	1799	Low	Other Contractor		X	
768	Cut N Core, Inc.	9194 Chesapeake Drive	1799	Low	Other Contractor		X	
769	D & M Welding	7952 North Avenue	1799	Low	Other Contractor		X	
770	D & S Termite Control	3638 Bancroft Drive	7342	Low	Pest Control		X	
771	D C Construction	14789 Bonita Vista Way	1794	Low	Other Contractor		X	
772	D F S Flooring	15651 Saticoy Street	1752	Low	Other Contractor		X	
773	D G A M, Inc	1961 Main Street	1799	Low	Other Contractor		X	
774	D G Behrens Pool Construction	13031 Poway Road	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
775	D G Plumbing	206 Greenfield Drive Suite G	1711	Low	Other Contractor		X	
776	D P R Construction	6333 Greenwich Drive Suite 170	1521	Low	Other Contractor		X	
777	D S H Solar Electric	2785 Kurtz Street Suite 5	1731	Low	Other Contractor		X	
778	D.G. Handyman	Not Listed	1522	Low	Other Contractor		X	
779	Daniel Heisinger Plumbing	Not Listed	1711	Low	Other Contractor		X	
780	Darby Painting Plus+, Inc	1626 Onyx Court	1721	Low	Painting/Coating		X	
781	Daryl Griffis Acoustics, Inc.	4958 Naples Street	1742	Low	Painting/Coating		X	
782	Dave Wallace, General	8039 Golden Avenue	1521	Low	Other Contractor		X	
783	Dave's Home Repair	Not Listed	1522	Low	Other Contractor		X	
784	David Spinks	2146 Lemon Avenue	1741	Low	Masonry		X	
785	Davies Electric Co., Inc.	9085 Kenamar Drive	1731	Low	Other Contractor		X	
786	Davis & Adams Construction, Inc.	7986 Dagget Street	1799	Low	Other Contractor		X	
787	Davis Roofing	10027 Beck Drive	1799	Low	Other Contractor		X	
788	De Marco Plumbing & Drain, Inc.	4401 Twain Avenue Suite 11	1711	Low	Other Contractor		X	
789	Dean Toneys Heating & Air	401 Washingtonia Drive	1711	Low	Other Contractor		X	
790	Democo, Inc.	2386 N Batavia Street	1795	Low	Other Contractor		X	
791	Dennis Cook Roofing	8824 Lakeview Road	1761	Low	Other Contractor		X	
792	Dennis Design	Not Listed	1721	Low	Painting/Coating		X	
793	Dennis R. Williams	13392 Johnson Road	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
794	Dewey Pest Control	9386 Bond Avenue	7342	Low	Pest Control		X	
795	Diamond Pools	10520 Kenney Street	1799	Low	Other Contractor		X	
796	Diamond Termite & Pest Control	12038 Woodside Avenue Suite D	7342	Low	Pest Control		X	
797	Dietrich Corporation	1243 Greenfield Druve Suite H	1799	Low	Other Contractor		X	
798	Digital Voice & Data	3621-96 Avocado Village Court	1731	Low	Other Contractor		X	
799	Dillard Builders, Inc.	262 Garden Grove Lane	1521	Low	Other Contractor		X	
800	Diroma, Inc.	13838 Poway Road	1521	Low	Other Contractor		X	
801	Diversified Window Coverings, Inc.	8410 Juniper Creek Lane	1799	Low	Other Contractor		X	
802	Dock Pros, Inc.	2870 Ragle Way	1796	Low	Other Contractor		X	
803	Don Wallingsford, Inc.	4741 E Hunter C	7623	Low	Equipment Repair		X	X
804	Double B Concrete Cutting, Inc.	1532 Plover Street	1771	Low	Cement Mixing/Cutting		X	
805	Doug Lister Construction	1655 Laslo Drive	1521	Low	Other Contractor		X	
806	Downstream Services, Inc	2855 Progress Place	1623	Low	Other Contractor		X	
807	Drain Medic, Inc.	7868 Lester Drive	1742	Low	Painting/Coating		X	
808	Drain Patrol	7764 Arjons Drive	1799	Low	Other Contractor		X	
809	Drum Plumbing	2550 Fortune Way	1711	Low	Other Contractor		X	
810	Drywall Specialties	6512 El Cajon Blvd. Suite C	1742	Low	Painting/Coating		X	
811	Dynalectric Co.	9505 Chesapeake Drive S	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
812	E B C O Steel Inc.	1355 Presioca Street	1791	Low	Other Contractor		X	
813	Earl K. Powers Construction	678 Enterprise Street	1741	Low	Masonry		X	
814	East County Grading & Paving, Inc.	PO Box 712020	1794	Low	Other Contractor		X	
815	East County Handyman	1232 Portola Avenue	1521	Low	Other Contractor		X	
816	East County Heating & Air	721 S Lincoln Avenue	1711	Low	Other Contractor		X	
817	East County Tile And Marble, Inc.	9855 Prospect Avenue	1743	Low	Masonry		X	
818	Easy-Turf, Inc.	750 N Citracado Parkway Suite 17	1799	Low	Other Contractor		X	
819	Eberhard Benton Roof Company	3691 Hancock Street	1761	Low	Other Contractor		X	
820	Ecosse Electric	Not Listed	1731	Low	Other Contractor		X	
821	Edick & Watt, Inc.	270 Millar Avenue	1521	Low	Other Contractor		X	
822	Ehinger Electric	Not Listed	1731	Low	Other Contractor		X	
823	El Cajon Electric Co	985 Greenfield Drive	1731	Low	Other Contractor		X	
824	El Cajon Roofing Inc	1354 Broadway Avenue	1761	Low	Other Contractor		X	
825	Electric Required	6118 Hersholt Ave	1731	Low	Other Contractor		X	
826	Ellis Mc Kinney, Inc.	1410 Monument Hill Road	1751	Low	Other Contractor		X	
827	Emergency Plumbing & Drain	Not Listed	1711	Low	Other Contractor		X	
828	Emig Construction Company	9915 Tangor Way	1522	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
829	Equitable Construction & Remodel	4724 Divine Way	1522	Low	Other Contractor	City Limit	X	
830	Erickson - Hall Construction	500 Corporate Drive	1522	Low	Other Contractor		X	
831	European Natural Stone Co., Inc.	10051 Prospect Avenue	1741	Low	Masonry		X	
832	Exceptional Restorations	Not Listed	7699	Low	Equipment Repair		X	X
833	Exit Light Co	3525 Del Mar Heights Road #304	1731	Low	Other Contractor		X	
834	Express/ Champion Harwood Floors	Not Listed	1752	Low	Other Contractor		X	
835	F T Emory Plumbing Co., Inc.	4340 Viewridge Avenue Suite C	1711	Low	Other Contractor		X	
836	F. J. Willert Contracting Co.,	1869 Nirvana Avenue	1500	Low	Other Contractor		X	
837	F. R. Ghianni Drywall	1937 Friendship Drive, Ste A	1742	Low	Painting/Coating		X	
838	Farwest Insulation Contracting	1375 S Acacia Avenue Suite A	1742	Low	Painting/Coating		X	
839	Fast Water Heaters, Inc.	275 N Marshall Avenue	1711	Low	Other Contractor		X	
840	Finest City Heating & Air	1069 Vernon Way	1711	Low	Other Contractor		X	
841	Fire & Ice Heating & Air	9911 Maine Avenue	1799	Low	Other Contractor		X	
842	First Line Security Inc.	370 W Center Street	1731	Low	Other Contractor		X	
843	First Page	3280 Olive Street #18	1521	Low	Other Contractor		X	
844	First Quality Painting, Inc.	13933 Sycamore Way	1721	Low	Painting/Coating		X	
845	Fischbeck Plumbing Co.	277 Blanchard Road	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
846	Fix Plumbing And Drains	180 Mace Street Suite C15	1711	Low	Other Contractor		X	
847	Flores Air	2931 Adrian Street	1711	Low	Other Contractor		X	
848	Floyd & Howerton Plumbing Inc	1269 Greenfield Drive	1711	Low	Other Contractor		X	
849	Force Electric	8201 Winter Gardens Blvd	1731	Low	Other Contractor		X	
850	Foshay Electric Company, Inc.	7676 Engineer Road	1731	Low	Other Contractor		X	
851	Fox & Turner Construction Co., Inc.	Not Listed	1742	Low	Painting/Coating	Alvarado	X	
852	Frontier Concrete Inc.	717 Mercantile Street	1771	Low	Cement Mixing/Cutting		X	
853	Fudge's Carpets & Blinds, Inc.	314 S Johnson Avenue	1752	Low	Other Contractor		X	
854	Fueling & Service Technologies,	7050 Village Drive Suite D	1799	Low	Other Contractor		X	
855	G And H Electric	345 First Avenue	1521	Low	Other Contractor		X	
856	G D T Construction	701 B Street Suite 340	1521	Low	Other Contractor		X	
857	G E Brown Service, Inc.	497 11th Street Suite 7	1799	Low	Other Contractor		X	
858	G M G Stone, Inc.	165 Denny Way	1741	Low	Masonry		X	
859	G M W Drywall, Inc.	272 Gemini Avenue	1742	Low	Painting/Coating		X	
860	G. Agundez Concrete	3211 Peg Leg Mine Road	1771	Low	Cement Mixing/Cutting		X	
861	G. Scott Asphalt, Inc	358 Trousdale Drive	1611	Low	Cement Mixing/Cutting		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
862	Garcia's Precision Acoustics	3162 Carlsbad Blvd Suite B	1742	Low	Painting/Coating		X	
863	Gardner Pool Plastering, Inc.	801 Gable Way	1799	Low	Other Contractor		X	
864	Generation Contracting & Emergency	13750 Danielson Street Suite 100	1799	Low	Other Contractor		X	
865	Genesis Power Management	2455 La Ramada Lane	1731	Low	Other Contractor		X	
866	Geoff Waugh Construction	13149 Lakeview Granda Drive	1751	Low	Other Contractor		X	
867	Geogrid Retaining Wall Systems Inc	1295 Distribution Way	1799	Low	Other Contractor		X	
868	Gerry Roy, Inc.	2030 Dale Street	1731	Low	Other Contractor		X	
869	Gifford's Home Repair	8730 Our Way	1521	Low	Other Contractor		X	
870	Gilbert Construction	9699 Carta Lane	1799	Low	Other Contractor		X	
871	Global Power Group, Inc.	202 Greenfield Drive Suite C	1731	Low	Other Contractor		X	
872	Golden State Garage Doors, Inc.	10540 Kenney Street	1799	Low	Other Contractor		X	
873	Good And Roberts	1330 Park Center Drive	1521	Low	Other Contractor		X	
874	Good Guys Painting Company	Not Listed	1721	Low	Painting/Coating		X	
875	Gossmeyer Construction	3021 Ridgecliff Lane	1522	Low	Other Contractor		X	
876	Gould Electric Inc.	12130 Dearborn Place	1731	Low	Other Contractor		X	
877	Greenbrier Lawn & Tree Expert	3616 Bancroft Drive	1799	Low	Other Contractor		X	
878	Greene & St. John Inc.	Not Listed	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
879	Gregg Drilling & Testing, Inc.	2726 Walnut Avenue	1781	Low	Other Contractor		X	
880	Groundwater And Environmental	6160 Fairmount Avenue Suite A	1799	Low	Other Contractor		X	
881	Grove Plumbing, Inc.	7637 Lemon Avenue	1711	Low	Other Contractor		X	
882	Gudino Electric	824 Santa Isabel Drive	1799	Low	Other Contractor		X	
883	Gula Roofing Co.	1352 Hillcrest Drive	1761	Low	Other Contractor		X	
884	Gulf Engineering & Construction	675 S 2nd Street	1521	Low	Other Contractor		X	
885	H & A Construction	191 Glover Avenue	1521	Low	Other Contractor		X	
886	H & H Steel Enterprises, Inc.	16891 Sunrise Vista	1799	Low	Other Contractor		X	
887	H & W Custom Builders, Inc.	14511 Olde Highway 80	1521	Low	Other Contractor		X	
888	H B Shaffer	968 Waterloo Avenue	1521	Low	Other Contractor		X	
889	H H S Construction, Inc.	14455 Ramona Avenue Unit D	1731	Low	Other Contractor		X	
890	H L Masonary Builders Inc.	20891 Viento Valle	1741	Low	Masonry		X	
891	H M Construction	1530 Jamacha Road Suite Z	1522	Low	Other Contractor		X	
892	H M S Construction, Inc.	1225 Linda Vista Drive	1522	Low	Other Contractor		X	
893	H P Communications	13341 Temescal Canyon Road	1731	Low	Other Contractor		X	
894	H S B Real Estate And Investments,	4481 Palo Verde Terrace	1521	Low	Other Contractor		X	
895	Hackouts Glass Co.	747 W Main Street	1793	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
896	Haenggi Heating And Air	1179 N Cuyamaca Avenue Suite C	1711	Low	Other Contractor		X	
897	Hamel's Refrigeration, A/C & Heat	1909 Sonett Street	1711	Low	Other Contractor		X	
898	Hammer Construction Company	1294 Cardinal Place	1771	Low	Cement Mixing/Cutting		X	
899	Hammond & Masing General	9770 Carroll Centre Road Suite E	1521	Low	Other Contractor		X	
900	Handyman Matters	2820 Via Orange Way Suite A	1521	Low	Other Contractor		X	
901	Hannibal Painting	9325 Goyette Place	1721	Low	Painting/Coating		X	
902	Hans Construction Mechanical, Inc.	Not Listed	1711	Low	Other Contractor		X	
903	Harbor Pest Control Inc	6160 Fairmount Avenue Suite K	7342	Low	Pest Control		X	
904	Har-Bro Construction	7192 Clairemont Mesa Blvd	1521	Low	Other Contractor		X	
905	Hawkins Construction, Inc.	Not Listed	1522	Low	Other Contractor		X	
906	Hawkins Door & Trim, Inc.	1320 Grand Avenue Suite 5	1799	Low	Other Contractor		X	
907	Hazard Construction Company	6465 Marindustry Drive	1771	Low	Cement Mixing/Cutting		X	
908	Hec's Construction	1708 Horseshoe Court	1799	Low	Other Contractor		X	
909	Heiman Construction Co.	742 Genevieve Street Suite M	1521	Low	Other Contractor		X	
910	Heintschel Plastering, Inc.	475 Corporate Drive	1742	Low	Painting/Coating		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
911	Helix Mechanical, Inc.	1100 N Magnolia Avenue Suite G	1711	Low	Other Contractor		X	
912	Hersum Construction Inc	6365 Marindustry Drive Suite A	1522	Low	Other Contractor		X	
913	Hess Roofing, Inc.	1681 Magnolia Avenue N	1761	Low	Other Contractor		X	
914	Hillcrest Contracting, Inc.	1467 Circle City Drive	1611	Low	Cement Mixing/Cutting		X	
915	Hitt Contracting, Inc.	2704 Dorr Avenue	1522	Low	Other Contractor		X	
916	Hodge General Contractors	3815 Linda Vista Drive	1521	Low	Other Contractor		X	
917	Hofstee Drywall	1491 Curtis Lane	1799	Low	Other Contractor		X	
918	Holland's Custom Kitchens, Inc.	14511 Olde Highway 80	1799	Low	Other Contractor		X	
919	Home Energy Systems	6996 Convoy Court	1711	Low	Other Contractor		X	
920	Homestead Sheet Metal	9031 Memory Lane	1761	Low	Other Contractor		X	
921	Hometeam Pest Defense	10070 Carrol Canyon Road Suite 105	7342	Low	Pest Control		X	
922	Hondo Electric, Inc.	420 K Street Suite 261	1731	Low	Other Contractor		X	
923	Honeywell International, Inc.	6 Centerpointe Drive Suite 300	1731	Low	Other Contractor		X	
924	Horizon Solar Systems, Inc	120 N Pacific Street Suite G7	1799	Low	Other Contractor		X	
925	Howards Rug Co Of San Diego Inc	6110 Nancy Ridge Drive	1799	Low	Other Contractor		X	
926	Hughes Heating & Air Conditioning	PO Box 2965	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
927	Hydrex Pest Control	PO Box 261127	7342	Low	Pest Control		X	
928	I-Con Electric	4109 Morning Star Court	1731	Low	Other Contractor		X	
929	Ideal Mechanical	8524 Ablette Road	1711	Low	Other Contractor		X	
930	Ideal Plumbing & Heating	5161 Waring Road	1711	Low	Other Contractor		X	
931	Imperial Custom Cabinets	8093 Lemon Grove Way	1751	Low	Other Contractor		X	
932	Ink Electric, Inc.	7845 North Avenue	1731	Low	Other Contractor		X	
933	Inland Plaster, Inc.	38372 Innovation Court Suite C-301	1742	Low	Painting/Coating		X	
934	Integrated Sign Associates	1160 M Pioneer Way	1799	Low	Other Contractor		X	
935	Integrity Concrete	540 Opper Street	1771	Low	Cement Mixing/Cutting		X	
936	Integrity Home Improvements	5725 Kearny Villa Road Suite A	1521	Low	Other Contractor		X	
937	Integrity Restoration Inc	4901 Morena Blvd Suite 502	1522	Low	Other Contractor		X	
938	Interior Specialists, Inc.	1630 Faraday Avenue	1752	Low	Other Contractor		X	
939	International Iron Products	10883 Thornmint Road	1791	Low	Other Contractor		X	
940	Interstate Striping Of Calif.,	8511-B Ablette Road	1771	Low	Cement Mixing/Cutting		X	
941	Interwest Electric	8135 Engineer Road	1799	Low	Other Contractor		X	
942	Irish Setters Inc.	674 Rancheros Drive	1743	Low	Masonry		X	
943	Issac Sanders Company	4752 68th Street #A	1743	Low	Masonry		X	
944	J & L Insulation, Inc.	10035 Maine Avenue	1742	Low	Painting/Coating		X	
945	J & M Keystone Inc	2709 Via Orange Way Suite A	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
946	J & S Maintenance	Not Listed	1521	Low	Other Contractor		X	
947	J & S Sealing & Striping	6121 Fairmount Ave	1799	Low	Other Contractor		X	
948	J C Electric	24857 Abalar Way	1731	Low	Other Contractor		X	
949	J N Horn Construction Co., Inc.	1301 Pepper Drive	1521	Low	Other Contractor		X	
950	J P Plumbing	9051 La Mar Street	1711	Low	Other Contractor		X	
951	J P Witherow Roofing Company	1001 Morena Blvd	1761	Low	Other Contractor		X	
952	J R Electric	1717 Wind River Road	1731	Low	Other Contractor		X	
953	J R Masonry, Inc.	1447 Peach Avenue	1741	Low	Masonry		X	
954	J. D. Paving, Inc.	1412 Barham Road	1611	Low	Cement Mixing/Cutting		X	
955	J. Munoz Concrete	6160 Seascape Drive	1771	Low	Cement Mixing/Cutting		X	
956	J. W. Warren Construction, Inc	3113 Calle Allejandro	1799	Low	Other Contractor		X	
957	J.H. O'Brien Landscaping &	3435 Ocean Park Blvd Suite 103	1799	Low	Other Contractor		X	
958	Jackpot Painting Contractors, Inc.	391 Olive Avenue	1721	Low	Painting/Coating		X	
959	Jackson & Blanc	7929 Arjons Drive	1711	Low	Other Contractor		X	
960	Jackson Design & Remodeling	4797 Mercury Street Suite B	1521	Low	Other Contractor		X	
961	Jacobs Construction	4244 Spring Court	1521	Low	Other Contractor		X	
962	Jamar Electric, Inc.	9830 Prospect Avenue Suite D	1731	Low	Other Contractor		X	
963	James Dennis Mc Alexander	Not Listed	1522	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
964	James Grey Construction	9960 Estrella Drive	1521	Low	Other Contractor		X	
965	Jason Will Do It	1390 Ryan Ridge Road	1721	Low	Painting/Coating		X	
966	Jensen Electric	9101 Heatherdale Street	1731	Low	Other Contractor		X	
967	Jerry's Heating & Air	9717 Airport Vista Road	1711	Low	Other Contractor		X	
968	Jessee Fence	24061 N Viejas Grade	1799	Low	Other Contractor		X	
969	Jie Da Handyman	Not Listed	1522	Low	Other Contractor		X	
970	Jim Simmons Electric	13439 Samantha Avenue	1731	Low	Other Contractor		X	
971	Joe Sherlock Construction, Inc.	16290 Summer Sage Road	1521	Low	Other Contractor		X	
972	Joe Silva Plumbing	16951 Old Coach Road	1711	Low	Other Contractor		X	
973	Joe Vaughn Drywall	Not Listed	1742	Low	Painting/Coating		X	
974	John H. Pearce Construction	Not Listed	1521	Low	Other Contractor		X	
975	John Tessitore Concrete, Inc	5574 Pray Street	1771	Low	Cement Mixing/Cutting		X	
976	John Weber Construction &	334 Mulberry Drive	1629	Low	Other Contractor		X	
977	Johnson Controls, Inc.	12393 Slauson Avenue	1799	Low	Other Contractor		X	
978	Johnson Electric, Inc.	1650 Maple Drive	1731	Low	Other Contractor		X	
979	Juice Electric	4005 Citradora Drive	1731	Low	Other Contractor		X	
980	Just Water Heaters, Inc.	3400 Investment Blvd	1711	Low	Other Contractor		X	
981	Just-Star Construction, Inc.	9292 Chesapeake Drive Suite 100	1741	Low	Masonry		X	
982	K & J Construction	8864 Ellsworth Circle	1522	Low	Other Contractor		X	
983	K T M Construction	10020 Prospect Avenue	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
984	K.P. Electric	1423 E Washington Avenue #36	1731	Low	Other Contractor		X	
985	Kalabat Building Company	980 E Chase Avenue Suite 2	1521	Low	Other Contractor		X	
986	K-Designers	7472 Orangewood Avenue	1799	Low	Other Contractor		X	
987	Keith Monroe & Co.	3186 Adams Avenue Suite 200	1721	Low	Painting/Coating		X	
988	Keith Okonski Construction Inc.	Not Listed	1521	Low	Other Contractor		X	
989	Kenard Construction, Inc.	1830 Gillespie Way Suite 105	1542	Low	Other Contractor		X	
990	Kennedy Masonry, Inc	7313 Melodia Terrace	1741	Low	Masonry		X	
991	Kimball Construction	1804 Garnet Avenue Suite 508	1521	Low	Other Contractor		X	
992	Kincade Excavation	774 Muirwood Drive	1794	Low	Other Contractor		X	
993	King Of The Painters Co	4155 Camino Alegre	1711	Low	Other Contractor		X	
994	Kiowa Construction Services	1601 Plantation Way	1799	Low	Other Contractor		X	
995	Kirk Paving Incorporated	8722 Winter Gardens Blvd	1611	Low	Cement Mixing/Cutting		X	
996	Krushensky's Construction Co.,	1988 Alpine Creek Lane	1542	Low	Other Contractor		X	
997	Kunkel Heating Service	7445 Roosevelt Avenue	1799	Low	Other Contractor		X	
998	Kyler Construction, Inc.	38725 Calle De Companero	1742	Low	Painting/Coating		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
999	L 2 Specialties, Inc.	3613 W Macarthur Blvd. Suite 611	1521	Low	Other Contractor		X	
1000	L A County Masonry	27811 Avenue Hopkins Unit 2	1741	Low	Masonry		X	
1001	L D I Mechanical Inc.	1740 Delilah Street	1711	Low	Other Contractor		X	
1002	L T Handyman Company	Not Listed	1522	Low	Other Contractor		X	
1003	L. B. Powers & Sons, Inc.	1705 W Lewis Street	1799	Low	Other Contractor		X	
1004	L. W. Carson Construction	11855 Sorrento Valley Road	1521	Low	Other Contractor		X	
1005	La Jolla Electric, Inc.	9153 Chesapeake Drive	1731	Low	Other Contractor		X	
1006	La Mesa Glass, Inc.	6691 Federal Blvd	1793	Low	Other Contractor		X	
1007	La Mesa Management And Maintenance	Not Listed	1522	Low	Other Contractor		X	
1008	La Mesa Stucco, Inc.	976 Leland Street	1799	Low	Other Contractor		X	
1009	La Tourrette Painting	8675 Hayes St.	1721	Low	Painting/Coating	Alvarado	X	
1010	Lampert Murray M Company Inc	3545 Camino Del Rio South Suite C	1541	Low	Other Contractor		X	
1011	Landsmith Landscape Construction	Not Listed	1799	Low	Other Contractor		X	
1012	Landsystems	8720 Miramar Place	1799	Low	Other Contractor		X	
1013	Lang Electric	47900 Oasis Court	1731	Low	Other Contractor		X	
1014	Lanier Construction, Inc.	10888 Buggywhip Drive	1521	Low	Other Contractor		X	
1015	Larry's Electrical Service, Inc.	1043 Worthington Street	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1016	Lasco Bathware, Inc.	3255 E Miraloma Avenue	1711	Low	Other Contractor		X	
1017	Le Perv Landscape, Inc.	5002 Santa Fe Street Suite A	1799	Low	Other Contractor		X	
1018	Ledcor Petty Construction, L.P.	9466 Black Mountain Road Suite 200	1542	Low	Other Contractor		X	
1019	Lehnert General Contracting	17125 Skyline Truck Trail	1521	Low	Other Contractor		X	
1020	Lekos Electric, Inc.	1370 Pioneer Way	1731	Low	Other Contractor		X	
1021	Lemon Grove Stucco Inc	1057 Elkelton Blvd	1771	Low	Cement Mixing/Cutting		X	
1022	Lester's Plumbing	9733 Saint George Street	1711	Low	Other Contractor		X	
1023	License-To-Kill Inc.	4618 Avocado Blvd	7342	Low	Pest Control		X	
1024	Life Deck	770 Gateway Center Drive	1771	Low	Cement Mixing/Cutting		X	
1025	Lightning Electric	1707 Coronado Avenue	1731	Low	Other Contractor		X	
1026	Lightworks Architectural Lighting	9883 Pacific Heights Blvd Suite E	1731	Low	Other Contractor		X	
1027	Linear Electric Inc	7676 Engineer Road Unit L	1731	Low	Other Contractor		X	
1028	Lloyd Pest Control Company, Inc.	935 Sherman Street	7342	Low	Pest Control		X	
1029	Lockard Electric, Inc.	Not Listed	1731	Low	Other Contractor		X	
1030	Los Angeles Signal Construction,	15100 E Nelson Avenue	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1031	Lot Management, Inc.	7200 Ponto Drive Suite B	1521	Low	Other Contractor		X	
1032	Lucas & Mercier Construction	29712 Avenida De Las Banderas	1751	Low	Other Contractor		X	
1033	Lucas And Mercier Development	630 Alta Vista Suite 203	1521	Low	Other Contractor		X	
1034	Lundco Cleaning Systems	Not Listed	1799	Low	Other Contractor		X	
1035	Luzaich Striping Inc.	14219 Olde Highway 80	1611	Low	Cement Mixing/Cutting		X	
1036	M C Communications, Inc.	199 E 27th Street	1799	Low	Other Contractor		X	
1037	M D Painting	Not Listed	1721	Low	Painting/Coating		X	
1038	M D Plumbing	3793 35th Street	1711	Low	Other Contractor		X	
1039	M J B Heating & Air Conditioning,	1348 La Mirada Drive Suite A	1711	Low	Other Contractor		X	
1040	M J Kennedy Electric	2032 Diamond Street	1731	Low	Other Contractor		X	
1041	M J M Handyman	Not Listed	1522	Low	Other Contractor		X	
1042	M W Reynolds Construction Co.,	1908 Friendship Drive Suite A	1521	Low	Other Contractor		X	
1043	M. C. Brown Construction&	10777 Eureka Road	1521	Low	Other Contractor		X	
1044	M. Gehring Construction	Not Listed	1799	Low	Other Contractor		X	
1045	M.C. McMurray Painting &	Not Listed	1721	Low	Painting/Coating		X	
1046	Macord Construction Corp	101-H Copperwood Way	1742	Low	Painting/Coating		X	
1047	Magna Window Corporation	1879 Lincoln Avenue	1793	Low	Other Contractor		X	
1048	Magnum Electric Inc.	1174 Pierre Way	1731	Low	Other Contractor		X	
1049	Mallucci Builders	Not Listed	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1050	Marathon General Inc	130 S Hale Avenue	1799	Low	Other Contractor		X	
1051	Mark Snyder Electric	12900 Brookprinter Place Suite 200	1731	Low	Other Contractor		X	
1052	Marrokal Construction Company	9842 River Street	1522	Low	Other Contractor		X	
1053	Marshall Roofing Company	11729 Calle Albara	1761	Low	Other Contractor		X	
1054	Martin Electric II	1841 Westward Ho Circle	1731	Low	Other Contractor		X	
1055	Martin Roofing Co Inc	6608 Federal Blvd	1761	Low	Other Contractor		X	
1056	Marzola Construction Co., Inc.	17025 Industry Place	1771	Low	Cement Mixing/Cutting		X	
1057	Master Electric Company, Inc.	8055 El Capitan Dr.	1731	Low	Other Contractor	Alvarado	X	
1058	Master Plumbing And Leak Detection	8726 Production Avenue Suite B	1711	Low	Other Contractor		X	
1059	Masterpiece Leaded Windows	13831 Danielson Street	1751	Low	Other Contractor		X	
1060	Mastersev Inc.	560 Library Street	1623	Low	Other Contractor		X	
1061	Mattia Concrete Cleaning	Not Listed	1799	Low	Other Contractor		X	
1062	Maxim Floor Systems	1189 N Grove Street Bldg. C	1752	Low	Other Contractor		X	
1063	Mayer Roofing, Inc.	490 Corporate Drive	1761	Low	Other Contractor		X	
1064	Mc Bride Electric	9919 Hibert Street Suite F	1731	Low	Other Contractor		X	
1065	Mc Guire Electric	8605 Fiona Way	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1066	Mc Kay Roofing Company, Inc.	10622 Keeney Street	1761	Low	Other Contractor		X	
1067	Mc Millan Water Treatment	8450 Tamarind Avenue Suite D	1522	Low	Other Contractor		X	
1068	Mc Minn Contruction Inc.	13350 Birch Tree Lane	1521	Low	Other Contractor		X	
1069	Mc Neil Construction	5009 Gasconade Avenue	1799	Low	Other Contractor		X	
1070	Mechanical Industries, Inc.	314 Yampa Street	1791	Low	Other Contractor		X	
1071	Michael M. Carson Const. Co.	946 S Lincoln Avenue	1521	Low	Other Contractor		X	
1072	Mickey's Electric	1513 Winsome Drive	1799	Low	Other Contractor		X	
1073	Mike Jackson Electrical	11464 Crazy Horse Drive	1731	Low	Other Contractor		X	
1074	Mike Oliver Plumbing, Inc.	Not Listed	1711	Low	Other Contractor		X	
1075	Mike Simpson Plumbing	Not Listed	1711	Low	Other Contractor		X	
1076	Mike's Home Repair & Maintenance	Not Listed	1522	Low	Other Contractor		X	
1077	Milgard Manufacturing Inc	26879 Diaz Road	1799	Low	Other Contractor		X	
1078	Milholland Electric, Inc.	9169 Chespeake Drive	1799	Low	Other Contractor		X	
1079	Miller Brooks Environmental, Inc	2124 Main Street Suite 200	1522	Low	Other Contractor		X	
1080	Miller Construction	Not Listed	1521	Low	Other Contractor		X	
1081	Miller Paving Corp	9236 Olive Drive	1611	Low	Cement Mixing/Cutting		X	
1082	Milton Electric	5167 Hilda Road	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1083	Minute Man Pest Management, Inc.	1625 Cuyamaca Avenue	7342	Low	Pest Control		X	
1084	Mirstone Plastering Inc.	1374 Presioca Street	1742	Low	Painting/Coating		X	
1085	Mission Pools Of Escondido	755 W Grand Avenue	1799	Low	Other Contractor		X	
1086	Mission Valley Roofing, Inc.	9908 Prospect	1761	Low	Other Contractor		X	
1087	MLS Construction Co.	Not Listed	1522	Low	Other Contractor	University	X	
1088	Mocon Pipebursting	82204 Hihgway 111 C201	1542	Low	Other Contractor		X	
1089	Monterey Park Roofing Co.	10 Scrub Oak	1761	Low	Other Contractor		X	
1090	My Electrician Online	Not Listed	1731	Low	Other Contractor		X	
1091	My Plumber S.D., L L P	9975 Pennsylvania Avenue	1711	Low	Other Contractor		X	
1092	N E C Unified Solutions, Inc.	6535 N State Hwy 161	1731	Low	Other Contractor		X	
1093	N P L Mechanical	731 Terra Lane	1761	Low	Other Contractor		X	
1094	National Air, Inc.	2053 Kurtz Street	1711	Low	Other Contractor		X	
1095	National Electric Works, Inc.	4440 Rainier Avenue	1731	Low	Other Contractor		X	
1096	Natural Environmental, Inc	1162 N Marshall Avenue	1799	Low	Other Contractor		X	
1097	Neal Electric Inc	13250 Kirkham Way	1731	Low	Other Contractor		X	
1098	Network Pavers	Not Listed	1611	Low	Cement Mixing/Cutting		X	
1099	Newman Replacement Windows, Inc.	6110 Yarrow Drive	1751	Low	Other Contractor		X	
1100	Nicholas Grant Corporation Dba	5370 Eastgate Mall	1611	Low	Cement Mixing/Cutting		X	
1101	Nielsen Development	1224 Greenfield Street	1522	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1102	Normac Kitchens, Inc.	607 N Central Avenue	1799	Low	Other Contractor		X	
1103	North County Acoustics	8315 Miralani Drive	1742	Low	Painting/Coating		X	
1104	North County Gunite Company	12562 Highway 67	1611	Low	Cement Mixing/Cutting		X	
1105	Northbrook Inc	3101 G Orange Grove Avenue	1799	Low	Other Contractor		X	
1106	O J Insulation, Inc.	600 S Vincent Avenue	1742	Low	Painting/Coating		X	
1107	On Time Construction & Landscape	Not Listed	1521	Low	Other Contractor		X	
1108	One Way Audio Video &	Not Listed	1796	Low	Other Contractor		X	
1109	Orestano Painting And Decorating	Not Listed	1721	Low	Painting/Coating		X	
1110	Orion Construction Corp.	1232 Keystone Way	1799	Low	Other Contractor		X	
1111	Orkin Exterminating Company	2420 Grand Avenue Suite J	7342	Low	Pest Control		X	
1112	Ozzy's Plumbing & Drain Services	2695 Calle Quebrada	1711	Low	Other Contractor		X	
1113	P.w. Marsh & Sons, Inc	1068 Broadway 220	1521	Low	Other Contractor		X	
1114	Pacific Building Group	5754 Pacific Center Blvd Suite 203	1522	Low	Other Contractor		X	
1115	Pacific Electric Co	9328 Lakeview Road	1799	Low	Other Contractor		X	
1116	Pacific Lath And Plaster	360 S Spruce Street	1742	Low	Painting/Coating		X	
1117	Pacific Production Plumbing	1584 Pioneer Way	1711	Low	Other Contractor		X	
1118	Pacific Refrigeration, Inc.	1440 Broadway	7623	Low	Equipment Repair		X	X
1119	Pacific Rim Mechanical, Inc.	7655 Convoy Court	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1120	Pacific Sewer Maintenance Corp.	8244 W Hillsdale Court Unit #3	1623	Low	Other Contractor		X	
1121	Pacific Structures Construction,	101 State Place Suite E	1771	Low	Cement Mixing/Cutting		X	
1122	Pacific Sundance Construction Inc.	2911 W Warner Avenue	1521	Low	Other Contractor		X	
1123	Pacifica Glass Co., Inc.	1997 Friendship Drive Suite G	1793	Low	Other Contractor		X	
1124	Pac-West Sheet Metal	528 Amigas Drive Suite C	1761	Low	Other Contractor		X	
1125	Padre Pools	9679 Marilla Drive	1799	Low	Other Contractor		X	
1126	Paint Plus, Inc.	1647 Dewitt Estates Road	1721	Low	Painting/Coating		X	
1127	Palm Engineering Construction	3770 Hancock Street Suite H	1521	Low	Other Contractor		X	
1128	Par Electrical Contractors, Inc.	2410 Vineyard Avenue	1731	Low	Other Contractor		X	
1129	Paradise Custom Pools	Po Box 900454	1799	Low	Other Contractor		X	
1130	Paramount R & R, Inc.	9340 Hazard Way	1771	Low	Cement Mixing/Cutting		X	
1131	Paramount Scaffold, Inc.	16631 S Avalon Blvd	1799	Low	Other Contractor		X	
1132	Passage Supply Inc.	1505 S Dupont Avenue #F	1751	Low	Other Contractor		X	
1133	Patriot Plumbing, Inc.	870 N Second Street	1711	Low	Other Contractor		X	
1134	Patterson Brothers Lighting, Inc	12047 Riverside Drive	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1135	Paul Hansen Equipment	603 S Marshall Avenue	1521	Low	Other Contractor		X	
1136	Pavement Recycling Systems	121 N Main Street	1611	Low	Cement Mixing/Cutting		X	
1137	Payco Specialties Inc	120 N 2nd Avenue	1799	Low	Other Contractor		X	
1138	Pebble Paving Co.	7954 Convoy Court	1611	Low	Cement Mixing/Cutting		X	
1139	Perry Plumbing	2810 Sandover Court	1799	Low	Other Contractor		X	
1140	Pete Paniagua Termite & Pest	3736 Grove Street	7342	Low	Pest Control		X	
1141	Peterbuilt Corporation	6235 Lusk Blvd	1521	Low	Other Contractor		X	
1142	Peterson Roofing, Inc.	549 W Central Park Avenue	1522	Low	Other Contractor		X	
1143	Phazer Electric Inc	Not Listed	1731	Low	Other Contractor		X	
1144	Phillips Welding	Not Listed	1799	Low	Other Contractor		X	
1145	Plumbing Solutions, Inc.	17701 W Danielson Street Apartment 102	1711	Low	Other Contractor		X	
1146	Porterfield Home Enhancements	7827 Segovia Way	1521	Low	Other Contractor		X	
1147	Portillo Concrete, Inc.	3528 Harris Street	1771	Low	Cement Mixing/Cutting		X	
1148	Pota Landscape	6344 Arms Lake Avenue	1799	Low	Other Contractor		X	
1149	Power Communication Systems	4643 Mission Gorge Place Suite A	1542	Low	Other Contractor		X	
1150	Power Drain Service	5622 Meade Avenue	1711	Low	Other Contractor		X	
1151	Power Fabricating Inc.	625 S Fee Ana Street	1731	Low	Other Contractor		X	
1152	Power Plus - S. R. Bray Corp	1005 N Edward Court	1799	Low	Other Contractor		X	
1153	Precision Concrete Cutting	32428 Campo Drive	1771	Low	Cement Mixing/Cutting		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1154	Precision Electric Co	8137 Winter Gardens Blvd	1731	Low	Other Contractor		X	
1155	Premier Roofing	9054 Olive Drive	1761	Low	Other Contractor		X	
1156	Pro Coat Systems, Inc.	1131 N Citrus Street	1799	Low	Other Contractor		X	
1157	Pro Drain & Plumbing Service Inc.	7440 Central Avenue	1799	Low	Other Contractor		X	
1158	Pro Line Construction	13240 Morning Glory Drive	1522	Low	Other Contractor		X	
1159	Pro Tech Insulation, Inc.	2041 Skyview Glen	1799	Low	Other Contractor		X	
1160	Pro Wall Lath & Plaster, Inc.	360 S Spruce Street	1771	Low	Cement Mixing/Cutting		X	
1161	Progressive Investments, Inc.	1168 Greenfield Drive	1741	Low	Masonry		X	
1162	Promark Roofing	302 Hunter Court	1761	Low	Other Contractor		X	
1163	Pro-Vlad	Not Listed	1522	Low	Other Contractor		X	
1164	Pullman Comm Inc	2530 Lynn Way	1731	Low	Other Contractor		X	
1165	Purser Construction, Inc.	9474 Kearny Villa Road Suite 101	1799	Low	Other Contractor		X	
1166	Quality Interiors, Inc.	803 E Parkridge Avenue	1742	Low	Painting/Coating		X	
1167	Quality Patio & Sunrooms	8388 Mary Dean Lane	1521	Low	Other Contractor		X	
1168	Quality Rooter And Plumbing, Inc.	1798 Pepper Villa Drive	1711	Low	Other Contractor		X	
1169	Quick Plumbing	1692 N Mollison Avenue	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1170	Quintessa Construction, Inc.	2210 Encinitas Blvd Suite S	1521	Low	Other Contractor		X	
1171	R & C Structures, Inc.	1615 La Mirada Drive	1799	Low	Other Contractor		X	
1172	R & M Electrical Contractor, Inc.	4912 E Florence Circle	1731	Low	Other Contractor		X	
1173	R A D Construction, Inc.	3479 Citrus Street Suite A	1799	Low	Other Contractor		X	
1174	R B E	1177 Greefield Drive Suite B	1721	Low	Painting/Coating		X	
1175	R B Electrical	1248 Andover Road	1731	Low	Other Contractor		X	
1176	R C Grading, Inc.	1650 W Pellisier Road	1611	Low	Cement Mixing/Cutting		X	
1177	R C Morse General Contractor	Not Listed	1521	Low	Other Contractor		X	
1178	R D Hammond Builders	10041 Medina Drive	1521	Low	Other Contractor		X	
1179	R L I	1967 Brockhurst Drive	1731	Low	Other Contractor		X	
1180	R. E. Paxton Contracting	Not Listed	1542	Low	Other Contractor		X	
1181	R. J. Dutch Devos	Not Listed	7699	Low	Equipment Repair		X	X
1182	R.C. Young Roofing Co., Inc.	875 34th Street	1761	Low	Other Contractor		X	
1183	Race Way Electric, Inc.	PO Box 710885	1731	Low	Other Contractor		X	
1184	Radford Doors U S A, Inc.	2130 Newton Avenue	1751	Low	Other Contractor		X	
1185	Rain For Rent	3404 State Road	1799	Low	Other Contractor		X	
1186	Ram Electric	12365 Lakeshore Dr	1731	Low	Other Contractor		X	
1187	Ramona Paving & Construction	1303 Olive Street	1611	Low	Cement Mixing/Cutting		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1188	Ranbar Plumbing Contractors, Inc.	10149 Channel Road Suite A	1521	Low	Other Contractor		X	
1189	Ranbar Plumbing Contractors, Inc.	10149 Channel Road Suite A	1711	Low	Other Contractor		X	
1190	Rapid Plumbing	5595 Magnatron Blvd Suite Q	1711	Low	Other Contractor		X	
1191	Raver Contruction, Inc.	14978 Skyline Truck Trail	1521	Low	Other Contractor		X	
1192	Rawson Enterprises, Inc.	10233 Jefferson Street	1521	Low	Other Contractor		X	
1193	Raymar Construction	43931 Via Montalban	1700	Low	Other Contractor		X	
1194	Ray's Cement Work	2477 1/2 Hardy Drive	1741	Low	Masonry		X	
1195	Ray's Plumbing	10346 Bosque Drive	1711	Low	Other Contractor		X	
1196	Real Time Plumbing	180 Mace Street Suite B7	1711	Low	Other Contractor		X	
1197	Reasonable Drain And Plumbing	1765 Garnet Avenue Suite 104	1711	Low	Other Contractor		X	
1198	Renewable Energy Concepts, Inc.	684 Clarion Court	1731	Low	Other Contractor		X	
1199	Republic I T S	371 Bel Marin Keys Blvd #200	1731	Low	Other Contractor		X	
1200	Rescom Overhead Doors, Inc.	1738 Brackett Street	1751	Low	Other Contractor		X	
1201	Reuben's Plumbing	1759 Linwood Street	1711	Low	Other Contractor		X	
1202	Richard Murray Painting	Not Listed	1721	Low	Painting/Coating		X	
1203	Rick Skinner Construction	6965 Endens Avenue	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1204	Ricks Sign & Lighting Service	Po Box 219	1799	Low	Other Contractor		X	
1205	Ritch Builder Co	4629 Calle De Vida	1521	Low	Other Contractor		X	
1206	Rivera's Iron Works, Inc.	2534 S Santa Fe Avenue	1799	Low	Other Contractor		X	
1207	Robeck Electrical Maintenance	1070 Commerce Street Suite C	1799	Low	Other Contractor		X	
1208	Robert Brown Electric	455 Pepper Drive	1521	Low	Other Contractor		X	
1209	Robert Rubidoux Roofing	1261 La Paloma Glen	1761	Low	Other Contractor		X	
1210	Robinson Electric	8871 Troy Street	1731	Low	Other Contractor		X	
1211	Robinson Roofing & Consulting	PO Box 902	1761	Low	Other Contractor		X	
1212	Roejack Roofing, Inc.	1107 Petree Street	1761	Low	Other Contractor		X	
1213	Roel Construction Co Inc	3366 Kurtz Street	1799	Low	Other Contractor		X	
1214	Roger H. Proulx & Co.	6833 E Rosecrans Avenue Suite C	1799	Low	Other Contractor		X	
1215	Roger L. Ballantyne	Not Listed	1742	Low	Painting/Coating		X	
1216	Romero's Roofing Service, Inc.	1827 Cleveland Avenue	1799	Low	Other Contractor		X	
1217	Ronald Jay Cappello	Not Listed	1711	Low	Other Contractor		X	
1218	Ronces-McKinney Painting, Inc	4418 Avocado Blvd	1721	Low	Painting/Coating		X	
1219	Ron's Plumbing	9962 Prospect Avenue	1711	Low	Other Contractor		X	
1220	Roofcorp Of C A, Inc.	2130 S Dupont Drive	1761	Low	Other Contractor		X	
1221	Roofing Services Of San Diego	8285 Buckhorn Street	1742	Low	Painting/Coating		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1222	Rossi Painting Co, Inc.	4025 E 6th Street	1721	Low	Painting/Coating		X	
1223	Roth Construction Corporation	4850 Talmadge Park Row	1522	Low	Other Contractor		X	
1224	Roto Rooter Sewer Service	180 Denny Way	7699	Low	Equipment Repair		X	X
1225	Royster Group Construction, Inc.	696 State Street	1521	Low	Other Contractor		X	
1226	Russell Plumbing & Supplies Inc	9030 Wintergardens Blvd	1711	Low	Other Contractor		X	
1227	Rye Built Construction Corp	6319 Badger Lake Avenue	1521	Low	Other Contractor		X	
1228	S E Pipeline Construction Company	11832 S Bloomfield Avenue	1623	Low	Other Contractor		X	
1229	S G Plastering	14475 Olde Highway 80 Suite A	1742	Low	Painting/Coating		X	
1230	S O S Rooter	3485 Pickwick Street	1711	Low	Other Contractor		X	
1231	Sadler Roofing	125 Grand Canal	1799	Low	Other Contractor		X	
1232	Safway Steel Products	1107 Petree Street Suite 103	1799	Low	Other Contractor		X	
1233	Salvador Flores, Jr.	Not Listed	1721	Low	Painting/Coating		X	
1234	San Diego Electric Co.	7906 Linen Drive	1731	Low	Other Contractor		X	
1235	San Diego Fence Co., Inc.	7920 Engineer Road	1799	Low	Other Contractor		X	
1236	San Diego Mirror & Window	2515 Industry Street	1793	Low	Other Contractor		X	
1237	San Diego Pool Plastering	10750 Valle Vista Road	1799	Low	Other Contractor		X	
1238	San Diego Preferred Plumbing Inc	8898 Clairemont Mesa Blvd Suite J	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1239	San Diego Roofing, Inc.	7364 El Cajon Blvd	1761	Low	Other Contractor		X	
1240	San Diego Stucco Company Inc	625 North Avenue	1771	Low	Cement Mixing/Cutting		X	
1241	San Diego Trane Company	9555 Chesapeake Drive Suite 201	1799	Low	Other Contractor		X	
1242	San Marcos Roofing	1580 Grapevine Lane	1799	Low	Other Contractor		X	
1243	Santa Fe Plaster	620 Alpine Way	1742	Low	Painting/Coating		X	
1244	Santee Electric Company	8461 Melrose Lane	1731	Low	Other Contractor		X	
1245	Saw Core Inc.	12111 Lakeside Avenue	1795	Low	Other Contractor		X	
1246	Schearing Construction Company	4339 Mount Putman Avenue	1799	Low	Other Contractor		X	
1247	Schilling Corporation	697 Greenfield Drive	1799	Low	Other Contractor		X	
1248	Schillreff Mechanical Inc.	Not Listed	1711	Low	Other Contractor		X	
1249	Schindler Elevator Corporation	16450 Foothill Blvd Suite 200	1796	Low	Other Contractor		X	
1250	Schmid Building Products	13000 Kirkham Way Suite 101	1742	Low	Painting/Coating		X	
1251	Schmidt Fire Protection Co, Inc.	4760 Murphy Canyon Road	1731	Low	Other Contractor		X	
1252	Seal Electric Inc.	9216 Abraham Way Suite C	1731	Low	Other Contractor		X	
1253	Sears Home Improvement Product	10415 Slusher Drive	1799	Low	Other Contractor		X	
1254	Secure Roof, Inc.	976 B Andreasen Drive	1761	Low	Other Contractor		X	
1255	Sedco Plumbing	1265 Hayden Lane	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1256	Select Electric, Inc	1425 Presioca Street	1731	Low	Other Contractor		X	
1257	Service Master All Phase	1466 Pioneer Way Suite 6	1521	Low	Other Contractor		X	
1258	Sherwood Mechanical, Inc.	13630 Danielson	1799	Low	Other Contractor		X	
1259	Sid's Carpet Barn, Inc.	132 W 8th Street	1752	Low	Other Contractor		X	
1260	Sierra Painting	11389 Reidy Canyon Place	1721	Low	Painting/Coating		X	
1261	Sierra Window Concepts, Ltd.	5252 Balboa Avenue Suite 304	1751	Low	Other Contractor		X	
1262	Sign Ad Corporation	9540 Waples Street Suite C	1799	Low	Other Contractor		X	
1263	Signtech Electrical Advertising	4444 Federal Blvd	1731	Low	Other Contractor		X	
1264	Silva And Silva Asphalt	9642 Prospect Avenue	1611	Low	Cement Mixing/Cutting		X	
1265	Silverthorn Construction, Inc.	1674 Alpine Terrace Road	1799	Low	Other Contractor		X	
1266	Sim J. Harris, Inc.	4375 Jutland Drive Suite 260	1611	Low	Cement Mixing/Cutting		X	
1267	Simmons Sheet Metal Fab. Inc.	2950 San Luis Rey Road	1761	Low	Other Contractor		X	
1268	Simonsen Solutions	Not Listed	1522	Low	Other Contractor		X	
1269	Simplexgrinnell L P	9855 Carroll Canyon Road	1731	Low	Other Contractor		X	
1270	Smart Systems Technologies, Inc.	9 Goodyear	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1271	Smith Roofing Co, Inc	4211 Whittier Street	1761	Low	Other Contractor		X	
1272	So Cal Custom Roofing	625 North Avenue	1761	Low	Other Contractor		X	
1273	Soclaris Contracting	Not Listed	1521	Low	Other Contractor		X	
1274	Solomon Electrical Services	3812 Superior Street	1731	Low	Other Contractor		X	
1275	Source Refrigeration & H V A C,	800 E Orangethorpe Avenue	1711	Low	Other Contractor		X	
1276	South Bay Fence Inc	3084 Main St	1799	Low	Other Contractor		X	
1277	South Coast Erosion Control, Inc.	1014 E Washington Avenue	1799	Low	Other Contractor		X	
1278	South Coast Patio	8927 Lakeview Road	1799	Low	Other Contractor		X	
1279	Southern Contracting Company	559 Twin Oaks Valley Road N	1799	Low	Other Contractor		X	
1280	Southern Lighting & Graphics Inc.	10370 Regis Court	1521	Low	Other Contractor		X	
1281	Southwest Window Co., Inc.	8666 Production Avenue	1793	Low	Other Contractor		X	
1282	Spectra Contract Flooring	8320 Caminto Santa Fe 1	1799	Low	Other Contractor		X	
1283	Sperry Construction & Electric,	9938 Blossom Valley Road	1731	Low	Other Contractor		X	
1284	Spooner's Woodworks, Inc.	12305 Crosthwaite Circle	1751	Low	Other Contractor		X	
1285	Sprekelmeyer & Muessigmann	522 Trailridge Drive	1731	Low	Other Contractor		X	
1286	Spring Valley Insulation	3151 Bancroft Drive	1742	Low	Painting/Coating		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1287	Stabler Building Company Inc.	11496 Cypress Terrace Place	1521	Low	Other Contractor		X	
1288	Stanley Access Technologies	244 Miller Avenue	1799	Low	Other Contractor		X	
1289	Steele Plumbing Inc.	1304 Pepper Drive	1711	Low	Other Contractor		X	
1290	Steve Fox Plumbing, Inc.	4172 Cartagena	1711	Low	Other Contractor		X	
1291	Stillson General Contracting	Not Listed	1521	Low	Other Contractor		X	
1292	Stokely Construction, Inc	Not Listed	1521	Low	Other Contractor		X	
1293	Strauwald Co. And Supply	9449 Calle Del Lago	1521	Low	Other Contractor		X	
1294	Streamline Plumbing, Inc	Not Listed	1799	Low	Other Contractor		X	
1295	Strickland Brothers Carpet	728 Hawthorne	1752	Low	Other Contractor		X	
1296	Summit Steel Fabrications, Inc.	4468 Parkhurst Street	1791	Low	Other Contractor		X	
1297	Sunlite Landscape	567 Anderson Road	1799	Low	Other Contractor		X	
1298	Sunrise Concrete	12012 Riverside Drive	1771	Low	Cement Mixing/Cutting		X	
1299	Sunshine Communications, Inc	10981 San Diego Mission Road Suite 100	1731	Low	Other Contractor		X	
1300	Sunwest Plumbing	9899 Hibert Unit E	1711	Low	Other Contractor		X	
1301	Superior Door Systems Inc	8059 Wing Avenue	1799	Low	Other Contractor		X	
1302	Superior Gunite	12306 Van Nuys Blvd	1771	Low	Cement Mixing/Cutting		X	
1303	Sweetwater Plumbing & Hardware	8300 Paradise Valley Road Suite 120	1799	Low	Other Contractor		X	
1304	Sylvania Lighting Services Corp.	2851 Pomona Blvd	1731	Low	Other Contractor		X	
1305	T & M Framing, Inc.	1224 Greenfield Drive	1751	Low	Other Contractor		X	
1306	T C Construction	10540 Prospect Avenue	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1307	T C P Company	7080 Mt Vernon	1521	Low	Other Contractor		X	
1308	T D Construction	319 River Trail Place	1521	Low	Other Contractor		X	
1309	T F Kaiser Construction, Inc.	4525 Mount Frissell Drive	1521	Low	Other Contractor		X	
1310	T G C Builders	Not Listed	1521	Low	Other Contractor		X	
1311	T L C Plumbing, Inc.	4569 Mission Gorge Place Suite E	1711	Low	Other Contractor		X	
1312	T- Mar Construction Inc	2340 Meyers Avenue	1742	Low	Painting/Coating		X	
1313	T P Acoustics Inc	9225 Mira Este Court Suite A	1799	Low	Other Contractor		X	
1314	T R C	9471 Ridgehaven Court Suite E	1521	Low	Other Contractor		X	
1315	T R Construction Co	13100 Kirkham Way Suite 204	1761	Low	Other Contractor		X	
1316	Tanknology, Inc.	8501 N Mopac Expressway Suite 400	1799	Low	Other Contractor		X	
1317	Taylor Signs And Graphics	14537 Kittery Street	1731	Low	Other Contractor		X	
1318	Taylor Trim & Supply, Inc.	2057 Aldergrove Avenue	1751	Low	Other Contractor		X	
1319	Team C Construction	1208 N 2nd Street	1771	Low	Cement Mixing/Cutting		X	
1320	Tejeda & Tejeda Asphalt &	9714 Sutton Crt	1771	Low	Cement Mixing/Cutting		X	
1321	Temecon Gen. Bldg. Contractor,	9715 Carroll Centre Road Suite 108	1522	Low	Other Contractor		X	
1322	Temecula Valley Drywall, Inc.	41228 Raintree Court	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1323	Temperature Design Energy Systems	9141 Hillman Way	1799	Low	Other Contractor		X	
1324	Temperatures Unlimited, Inc.	26841 Ruether Avenue Suite G	1711	Low	Other Contractor		X	
1325	Terminix International Company	1736 N Magnolia Avenue	7342	Low	Pest Control		X	
1326	Terra West Grading	37035 Yuma Ln	1611	Low	Cement Mixing/Cutting		X	
1327	Terry Lindquist Roofing	877 Hale Court	1799	Low	Other Contractor		X	
1328	Testamerica Drilling Corp.	1016 E Katella Avenue	1781	Low	Other Contractor		X	
1329	The Brickman Group, Ltd	6218 Fairmount Avenue	1521	Low	Other Contractor		X	
1330	The Ghianni-Larussa Group, Inc.	13880 Stowe Drive Suite A	1742	Low	Painting/Coating		X	
1331	The Whole Nine Yards	Not Listed	1522	Low	Other Contractor		X	
1332	The Wright Painting Co.	12642 Casa Vista Road	1721	Low	Painting/Coating		X	
1333	Thomas' Handyman Services	2570 Granada Circle	1521	Low	Other Contractor		X	
1334	Thomas Lukasiewicz Construction	8874 Gowdy Avenue	1542	Low	Other Contractor		X	
1335	Thompson Heating & Air	888 Rancheros Drive Suite E	1799	Low	Other Contractor		X	
1336	Thornton Steel & Iron Works, Inc.	1323 State College Parkway	1799	Low	Other Contractor		X	
1337	Tidwell Masonry	Not Listed	1741	Low	Masonry		X	
1338	Tierra Verde Resources, Inc.	1545 Lake Drive	1799	Low	Other Contractor		X	
1339	Tile King, Inc.	595 N Smith #A	1743	Low	Masonry		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1340	Tim Walford Roofing	10699 San Diego Mission Road Apt 313	1761	Low	Other Contractor		X	
1341	Timberline Building Services	418 Edmard Street	1521	Low	Other Contractor		X	
1342	Timberwood Landscape, Inc.	2731 Via Orange Way Suite 111	1799	Low	Other Contractor		X	
1343	Todd Enterprises, Inc.	3040 Clairemont Drive Suite C	1522	Low	Other Contractor		X	
1344	Todd F. Metcalf	630 W Foothill Blvd Suite C	1742	Low	Painting/Coating		X	
1345	Tom Reed General Contractor	1721 Yale Street	1521	Low	Other Contractor		X	
1346	Tom's Handyman Service	Not Listed	1522	Low	Other Contractor		X	
1347	Tony Gallo Painting	20 Surfbird Lane	1721	Low	Painting/Coating		X	
1348	Tool Time Construction, Inc	7546 Trade Street	1522	Low	Other Contractor		X	
1349	Top Notch Termite Company, Inc	6041 Fairmount Avenue	7342	Low	Pest Control		X	
1350	Torres General, Inc.	10783 Jamacha Blvd. Suite 8	1751	Low	Other Contractor		X	
1351	Torres Tile, Inc.	1255 Linda Vista Drive	1752	Low	Other Contractor		X	
1352	Town & Country Construction	Not Listed	1522	Low	Other Contractor		X	
1353	Town & Country Custom Pools	9920 Prospect Avenue Suite 106	1799	Low	Other Contractor		X	
1354	Traffic Control Service, Inc	584 N Marshall Avenue	1799	Low	Other Contractor		X	
1355	Transcal Construction	3622 Eagle Street	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1356	Travcon Builders, Inc.	Not Listed	1542	Low	Other Contractor		X	
1357	Treebeard Landscape	9917 Campo Road	1799	Low	Other Contractor		X	
1358	Tri City Glass Of S D, Inc.	2555-B Sweerwater Springs Blvd.	1793	Low	Other Contractor		X	
1359	Tri Com Telecommunications Inc.	2845 Bancroft Drive	1521	Low	Other Contractor		X	
1360	Tri County Drilling	9631 Candida Street	1799	Low	Other Contractor		X	
1361	Tribal Painting, Inc.	1263 Bermuda Place	1721	Low	Painting/Coating		X	
1362	Triple D Concrete Pumping	Not Listed	1771	Low	Cement Mixing/Cutting		X	
1363	True Lawn Care, Inc.	9820 Maine Avenue	1799	Low	Other Contractor		X	
1364	Truly Nolen Of America	7170 University Avenue	1742	Low	Painting/Coating		X	
1365	Tubbs Enterprises, Inc.	2620 Aurora Glen	1742	Low	Painting/Coating		X	
1366	Tupper's Custom Works	Not Listed	1542	Low	Other Contractor		X	
1367	Ulm Plumbing & Heating	7525 Mission Gorge Road Suite B	1711	Low	Other Contractor		X	
1368	Ultrasigns Inc.	5458 Complex Street Suite 401	1799	Low	Other Contractor		X	
1369	V I C O	Not Listed	1521	Low	Other Contractor		X	
1370	V W C	425 W La Cadena Suite 12	1521	Low	Other Contractor		X	
1371	Valley Crest Landscape Maint., Inc	8500 Miramar Road	1799	Low	Other Contractor		X	
1372	Valleycrest Tree Company	12087-40 N Lopez Canyon Road	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1373	Van Con Builders Inc.	1301 Pepper Drive Suite D	1521	Low	Other Contractor		X	
1374	Van Deutch Refrigeration	Not Listed	7623	Low	Equipment Repair		X	X
1375	Vanberg Constuction	2521 B Street Suite 102	1799	Low	Other Contractor		X	
1376	Vanguard Fire Protection, Inc.	1604 La Mirada Del Suite 105	1799	Low	Other Contractor		X	
1377	Ventura's Plumbing & Drain	8425 Pueblo Road	1711	Low	Other Contractor		X	
1378	Viacom Outdoor, Inc.	1731 Workman Street	1799	Low	Other Contractor		X	
1379	Vic's Plumbing	687 Alveda Avenue	1711	Low	Other Contractor		X	
1380	Vigil Handyman Service	Not Listed	1522	Low	Other Contractor		X	
1381	Viking Electric	1549 Fair Valley Rd	1731	Low	Other Contractor		X	
1382	Viking Insulation Co., Inc.	3014 Floyd Street	1742	Low	Painting/Coating		X	
1383	Vinyard Doors, Inc.	3605 Pacific Highway	1799	Low	Other Contractor		X	
1384	Volks Electric	6646 Julie Street	1731	Low	Other Contractor		X	
1385	W & S Electric	1050 Pioneer Way Suite K	1731	Low	Other Contractor		X	
1386	Walker Wood Products	43195 Business Park Drive	1751	Low	Other Contractor		X	
1387	Walldesign Inc.	2350 SE Bristol Street	1521	Low	Other Contractor		X	
1388	Walter Anderson Plumbing Inc	1150 N Marshall Avenue	1711	Low	Other Contractor		X	
1389	Water Heaters Only, Inc.	970 E Main Street Suite 200	1711	Low	Other Contractor		X	
1390	Wavecrest Construction, Inc.	5333 Mission Center Road	1522	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1391	Wayne Perry Construction Inc	8281 Commonwealth	1522	Low	Other Contractor		X	
1392	Weather Machines	9858 Hawley Road	1799	Low	Other Contractor		X	
1393	Wedcon Systems, Inc.	1660 Chicago Avenue Suite N9	1799	Low	Other Contractor		X	
1394	West Co Construction	1212 S Pacific Street #1	1521	Low	Other Contractor		X	
1395	West Coast Appliance Service	10744 Prospect Avenue Suite B	1731	Low	Other Contractor		X	
1396	Western Cable Construction	3420 University Avenue	1799	Low	Other Contractor		X	
1397	Western Exterminator Co	1320 Hill Street	7342	Low	Pest Control		X	
1398	Western Foundations & Shoring	10875 Highway 67	1799	Low	Other Contractor		X	
1399	Western Pump, Inc.	3235 F Street	1521	Low	Other Contractor		X	
1400	Westmac Enterprises, Inc.	9830 Vine Street Suite 100	1799	Low	Other Contractor		X	
1401	Whillock Contracting Inc	PO Box 2322	1542	Low	Other Contractor		X	
1402	Whitson C M	10603 Rancho Bernardo Road	1521	Low	Other Contractor		X	
1403	Wilfrido Concrete Construction	303 H Street Suite 407	1771	Low	Cement Mixing/Cutting		X	
1404	Winfield Floor Window Covering	7031 Carroll Road	1752	Low	Other Contractor		X	
1405	Wire Pros Electric, Inc.	1753 Kyrsten Terrace Court	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1406	Woodruff Trenching, Inc.	9735 Prospect Avenue	1629	Low	Other Contractor		X	
1407	Xunda Handyman	Not Listed	1522	Low	Other Contractor		X	
1408	Ye Olde Handyman Service	Not Listed	1522	Low	Other Contractor		X	
1409	Your Way Fumigation	41880 Kalmia Street Suite 170	7342	Low	Pest Control		X	
1410	Zeller Drain Cleaning	Not Listed	7699	Low	Equipment Repair		X	X

Notes
TTWQ – Threat to Water Quality
SIC –Standard Industrial Classification Code
Basin – City of La Mesa drainage basin. HSAs are as follows: Alvarado and Lake Murray (907.12; San Diego River Watershed), University and Lemon Grove (908.22, San Diego Bay Watershed), Spring Valley (909.12, San Diego Bay Watershed)
Mobile – Mobile business
Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX B

Appendix B
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
1	7/02/08	Hotline Caller	Saleh Zahran 7991 Morocco Dr	Residential	Over-irrigation, running into Aztec Park	7/9/08 MT sends out written notice to comply.	Written Notice to Comply Over-irrigation Fact Sheet San Diego River Watershed
2	7/7/08	Hotline Caller	Buenos Dias Restaurant 5100 Jackson Drive	Commercial-Restaurant	Hosing down outdoor eating area	7/9/08 MT sends out written notice to comply.	Written Notice to Comply What's Cookin'-English What's Cookin'-Spanish Urban Runoff Trifold San Diego River Watershed
3	7/16/08	Hotline Caller	7153 Pearson	Residential	Over-irrigation	7/16/08 MT contact complainant. 7/18/08 MT conducts site visit during morning and verifies complaint. MT sends out written notice to comply.	Written Notice to Comply Over-irrigation Fact Sheet San Diego Bay Watershed
4	7/16/08	Hotline Caller	5475 Ohio Ave	Residential	Over-irrigation	7/18/08 MT verifies complaint. MT sends written notice to comply.	Written Notice to Comply Over-irrigation Fact Sheet San Diego River Watershed
5	7/16/08	Hotline Caller	IHOP	Restaurant	Grease Container	7/16/08 MT recommends contacting the County to address issue in their jurisdiction. MT provides County Storm Water Hotline number.	N/A
6	7/16/08	Hotline Caller	World Auto Car 4999 Baltimore Drive	Commercial	Wash Cars	7/22/08 MT sends written notice to comply.	Written Notice to Comply Urban Runoff Trifold
7	7/17/08	Hotline Caller	Shell Service Station Spring Street	Commercial	Over-irrigation	7/17/08 SF talks to store manager to stop over-irrigation.	Verbal Warning

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#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
8	7/18/08	City Personnel	Elite Auto Group 7658 University Avenue	Commercial	Washing Vehicles	7/28/08 MT sends written notice to comply	Written Notice to Comply Urban Runoff Trifold Chollas Creek TMDL Sheet SD Bay Watershed
9	7/21/08	Hotline Caller	Roy Schumacher 9105 Sinjon Circle	Residential	Washing down driveway	7/22/08 MT sends written notice to comply.	Written Notice to Comply Urban Runoff Trifold SD River Watershed
10	7/22/08	Hotline Caller	Homeless Man Date/University (Storm Drain)	Other	Homeless man dumping trash into storm drain	7/22/08 MT talks to homeless man to stop dumping trash into storm drain/use public trash receptacles instead. MT puts in service request with public works to cleanout storm drain. 7/22/08 Public Works removes three bags of trash from storm drain and properly disposes of trash.	Verbal Warning
11	7/23/08	Public Works	University Ave.	Municipal	There is trash in the storm drain on University, to the left of where date intersects University.	Public Works Resolved: WO# 22164	N/A
12	7/23/08	Pubic Works	5711 Water St.	Municipal	They need storm drains cleaned out at 5711 Water St.	Public Works Resolved: WO# 22168	N/A

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13	8/1/08	Hotline Caller	SD RV Resort 7407 Alvarado Rd	RV-Park	Dumping Wastewater	8/1/08 MT issues written notice to comply. 8/4/08 MT talks with manager about educating residents and facility maintenance on good housekeeping.	Written Notice to Comply Urban Runoff Trifold SD River Watershed
14	8/4/08	Hotline Caller	4343 Canteberry Drive La Mesa	Residential	Dumping Paint in storm drain	8/4/08 MT request public works to enter storm drain to verify/cleanout storm drain.	N/A
15	8/5/08	Hotline Caller	Abernathy 7700 Homewood Place	Residential	Pool Discharge	8/7/08 MT sends written notice to comply. 8/18/08 MT contacts Mr. Abernathy to further discuss. It was a broken sprinkler and the sediment was swept from curb the next day. No further action.	Written Notice Pool Spa Fact Sheet SD Bay Fact Sheet Urban Runoff Trifold
16	8/7/08	Hotline Caller	Auto Repair Specialist 8120 Center Street	Commercial-Auto Repair	Washing Vehicles	8/7/08 MT issues NOV and contacts business to cease and desist from washing activities.	Written NOV Green Wrench Guide SD River Watershed Urban Runoff Trifold

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17	8/8/08	Hotline Caller	SDGE Jackson Drive/Center	Utility	Dumping Cement Wastewater	8/11/08 MT contacts Yuen and Dennis Gerschoffer with SDGE to follow-up on the discharge. MT issues written notice requesting SDGE BMP Manual, Training Log, and Commitment Statement. 8/18/08 MT left message for Becca to send over training logs. 9/12/08 MT meets with SDGE. Training log and BMP education material provided. Commitment letter to be sent. No further action	Written Notice to Comply
18	8/12/08	Hotline Caller	La Mesa Middle School Steam Glow Inc. Gary Olsen	Mobile-Pressure Washing	BMP implementation not effective	8/12/08 MT contacts La Mesa Middle School and Gary Olsen. Some overflow of water occurred onto street. Gary fixes breach in BMPs and vacuums excess wastewater.	Verbal Warning
19	8/14/08	Public Works	4343 Canterbury Drive	Municipal	The storm drain at 4343 Canterbury needs checked for paint/residue. Clean if necessary, call Malik with results.	Public Works Resolved: WO # 22313	N/A
20	8/14/08	Public Works	7777 Jr. High Drive	Municipal	Clean up open drainage channel in the back of Highwood Park.	Public Works Resolved: WO # 22318	N/A

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21	8/14/08	Public Works	Alvarado Road	Municipal	Remove the shopping cart in the culvert off Alvarado, under the 125 behind the medical building. It is at the entrance to the box culvert before it dumps into the channel. It is covered in Mud- will take 2 people.	Public Works Resolved: WO# 22320	N/A
22	8/18/08	Hotline Caller	4050 Charles Street	Residential	Irrigation water discharge to alley	8/18/08 MT contacts Greg for additional details. 8/19/08 MT makes site visit in morning at alley way and no irrigation or erosion issues observed.	N/A
23	08/21/2008	Public Works	7857Orien Avenue	Municipal	There is a bad sewer smell at 7857 Orien Ave. There is a dead end storm drain with bad smell.	Public Works Resolved: WO# 22367	N/A
24	9/2/08	Hotline Caller	4437 Rosebud Lane	Residential	Over-irrigation	9/8/08 MT sends written warning.	Written Warning Over-irrigation Fact Sheet SD Bay Watershed Chollas TMDL Fact Sheet

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#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
25	9/4/08	Hotline Caller	8640 Larsen Way *Source found at 8665 La Mesa Blvd	Residential	Wastewater Discharge from Pipe	9/4/08 MT verifies complaint. Evidence of stagnant water with odor. MT knocked on door, no response. MT sends letter to address to cease/desist and contact City immediately. 9/11/08 MT contacted by resident to further investigate. MT determines source of discharge from Convalescent Hospital. MT issues NOV/Cease and Desist.	Written Warning Urban Runoff Trifold **Follow-up** Written NOV Urban Runoff Trifold SD River Watershed
26	9/8/08	Hotline Caller	6090 Severin	Residential	Over-irrigation	9/9/08 MT sends out written warning and over-irrigation fact sheet.	Written Warning Over-irrigation Fact Sheet SD River Fact Sheet
27	9/16/08	Hotline Caller	5800 Kappa Street	Residential	Over-irrigation	9/16/08 MT verifies complaint. MT notes some over-irrigation staining. MT sends over-irrigation fact sheet.	Over-irrigation Fact Sheet
28	9/17/08	City Personnel	New Police Station Site/City Hall	Construction	BMPs	9/17/08 MT notes not all BMPs being implemented on site. MT walks with superintendent describing BMPs to be added. BMPs implemented.	Verbal Warning
29	9/17/08	Hotline Caller	Primrose/Amaya	Residential	Over-irrigation	9/18/08 MT verifies but not signs of over-irrigation stains observed.	N/A
30	9/18/08	Hotline Caller	6269 Falmouth (Lawrence McGrael)	Residential	Pumping Groundwater	9/18/08 MT verifies complaint. No groundwater pumping observed.	N/A

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31	9/18/08	Hotline Caller	Enterprise 8363 Center Drive, Suite 6H	Commercial	Car Washing Activities	9/18/08 MT meets with Shannon Blust (manager) and discussed BMPs for car washing activities. No discharge was noted.	Verbal Warning Urban Runoff Trifold SD River Fact Sheet
32	9/22/08	Hotline Caller	73rd Street 4590	Residential	Blowing grass clippings	9/23/08 MT verifies complaint. Minimal landscaping debris noted along curb/typical of residential areas. Could not verify source.	N/A
33	9/23/08	Hotline Caller	El Paso/Lake Murray	Commercial	Cutting asphalt within parking lot	9/24/08 MT verifies complaint but contractor not at site. No runoff noted. 9/30/08 MT meets with A&F Asphalt to ensure stockpiles are covered and parking lot is swept.	Verbal Warning
34	9/30/08	City Personnel	Helix Water District Jackson Drive and Fletcher	Construction	Working Along Curb with No BMPs	9/30/08 MT request storm drain be protected and BMPs be implemented. BMPs implemented immediately	Verbal Warning
35	9/30/08	City Personnel	McClelland Auto 7060 El Cajon Blvd	Commercial	Oil Container in parking lot/partially leaking	9/30/08 MT contacts Matt Lin to cleanup site. Site cleaned-up immediately. No further action.	Verbal Warning
36	10/2/08	Hotline Caller	Marc Carpenter & Assoc 5019 Randlett Drive	Residential	Draining pond or pool with algae	10/7/08 MT sends NOV/Educational Material.	NOV Urban Runoff Trifold Pool & Spa Fact Sheet
37	10/7/08	Hotline Caller	Parks Ave/Normal Street	Mobile	Dropped cement on road	10/07/08 SM tries to identify source. SM Public Works is contacted to cleanup. No responsible party found. No further action.	N/A

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38	10/13/08	Hotline Caller	5855 Kelton Avenue	Residential	Neighbor washing down driveway	10/15/08 MT verifies complaint.	Urban Runoff Trifold SD River Fact Sheet
39	10/14/08	Hotline Caller	Elite Auto 7958 University Avenue	Commercial	Working on vehicles outside, no BMPs	10/15/08 MT contacts business and gives verbal warning.	Verbal Warning
40	10/14/08	Hotline Caller	70th Street Trolley Station	Residential	Hydrant was hit and water flowed over cliff to trolley parking area with sediment	10/14/08 MT visits site. Helix Water District vacuuming sediment from parking lots. Storm drain inlet protected. MT contacts MTS to ensure that once sediment dries that it be vacuumed. MT follows up to verify cleanup on 10/22/08 and sediment residue remains in parking lot. MT contacts Vance Williams at MTS and was informed that sweepers will be out to cleanup site this weekend. 10/29/08 MT follows-up and parking lot swept/no further action.	N/A
41	10/24/08	City Personnel	BJs Restaurant Grossmont Center	Commercial	Washing loading area at night.	10/24/08 MT meets with manager and gives verbal warning.	N/A
42	10/24/08	Hotline Caller	Behind Mc Crea's Music Store Allison Avenue Municipal Parking Lot	Commercial	Dumping of Oil	10/24/08 MT verifies complaint and does not observe oil stains in the parking lot. No further action.	N/A
43	10/27/08	Hotline Caller	7800 University Avenue	Commercial	Over-irrigation	10/27/08 MT verifies over-irrigation. Written notice sent.	Written Notice Over-irrigation Fact Sheet Chollas TMDL Fact Sheet SD Bay Watershed

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44	10/28/08	Hotline Caller	Saleh Zahran 7991 Morocco Drive	Residential	Over-irrigation	10/29/08 MT issues written warning.	Written Warning Over-irrigation Fact Sheet SD River Watershed
45	10/28/08	Hotline Caller	Wilma Petix 6221 Veemac Ave	Residential	Over-irrigation	10/29/08 MT issues written warning	Written Warning Over-irrigation Fact Sheet SD River Watershed
46	11/3/08	City Personnel	Brett Miller Paving Project Site 8000 University Avenue/Cypress Plaza	Construction	No BMPs	11/03/08 MT gives verbal warning to implement BMPs. BMPs deployed at end of day on 11/03/08. No further action.	Verbal Warning
47	11/4/08	Hotline Caller	Anders Circle and Aztec Drive	Residential	Over-irrigation	11/4/08 MT to verify complaint once rain stops. MT request door hangers at residence along Anders Circle	Door Hangers
48	11/20/08	City Personnel	Affordable Paint & Body 8181 Center Street	Commercial	Illegal Discharge	11/20/08 MT notes trail of water from business along Center Street. MT issues written NOV.	Written NOV Urban Runoff Trifold SD River Watershed
49	11/21/08	City Personnel	TJ Auto Repair 8090 University Avenue	Commercial	Hosing off property	11/21/08 MT issues NOV/Stop Discharge.	Written NOV Green Wrench Guide English Green Wrench Guide Spanish Urban Runoff Trifold SD River Watershed
50	11/24/08	Hotline caller	Drew Volkswagen 5580 Grossmont Blvd	Commercial	Car Washing	11/24/08 MT issues NOV. 12/4/08 MT receives letter response on BMPs to be implemented by Drew Volkswagen.	Written NOV Urban Runoff Trifold SD River Watershed

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51	11/25/08	City Personnel	Chevron Station 5322 Jackson Drive	Commercial	Car Washing	11/25/08 MT issues NOV.	Written NOV Urban Runoff Trifold SD River Watershed
52	2/24/09	City Personnel	Steve Carpenter San Diego County Water Authority University & Spring	Other	Discharging vault water without BMPs at storm drain inlet.	2/24/09 MT stops discharge and issues NOV. 2/25/09 MT meets with Steve Carpenter to discuss appropriate BMP implementation to complete project.	Written NOV
53	3/18/09	City Personnel	Houston 8126 Center Drive	Mobile	Discharging water to storm drain from fire hydrant	3/18/09 MT verified discharge of potable water. Discharge stopped. No further action.	Verbal Warning
54	09/04/2008	Public Works	Center Drive	Municipal	Clean out the culvert between Dixieline and Rainbow Steel.	Public Works Resolved: WO# 22469	N/A
55	09/04/2008	Public Works	3654 Harris Street	Municipal	Per Request Tracker ID#276: Along the W side of Harris St. where it dead ends at the freeway, there is always standing water. Need storm drain inlet cleared out. Flying bugs starting to form	Public Works Resolved: WO# 22470	N/A

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56	9/11/2008	Public Works	4279 Spring Street	Municipal	There is a manhole in parking lot at 4279 Spring St. that floods parking lot when it rains.	Public Works Resolved: WO# 22519	N/A
57	9/22/2008	Public Works	8843 Mariposa Street	Municipal	Adam from Fire prevention has some questions regarding the easement at 8843 Mariposa.	Public Works Resolved: WO# 22596	N/A
58	9/22/2008	Public Works	4015 King Street	Municipal	Between 4015 King St. and house to the N, there is a bad sewer odor coming out of the storm drain.	Public Works Resolved: WO# 22604	N/A
59	9/24/2008	Public Works	Amaya Drive	Municipal	The drainage ditch needs cleared and cleaned on Amaya Dr	Public Works Resolved: WO# 22619	N/A
60	9/26/2008	Public Works	7626 Seneca Place	Municipal	The storm drain in front of her house is growing tall weeds out of it.	Public Works Resolved: WO# 22650	N/A
61	10/10/2008	Public Works	6226 Primrose Drive	Municipal	The storm drain at 6226 Primrose has a bad odor to it.	Public Works Resolved: WO# 22735	N/A

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62	10/10/2008	Public Works	Date Avenue	Municipal	Per Email: Locate the drain line from the area drain along the W curb line of Date Ave., across from the patio entrance to City Hall.	Public Works Resolved: WO# 22739	N/A
63	11/12/2008	Public Works	4702 Jessie Avenue	Municipal	Malik received a VM about the storm drain being plugged at 4702 Jessie. Steve paged.	Public Works Resolved: WO# 22951	N/A
64	12/1/2008	Public Works	4649 Judson Way	Municipal	The storm drain easement backed up with mud and flooded yard.	Public Works Resolved: WO# 23051	N/A
65	12/1/2008	Public Works	4604 Judson Way	Municipal	There is a blocked drain at 4604 Judson Way. D. Schoolcraft responded.	Public Works Resolved: WO# 23053	N/A

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66	12/1/2008	Public Works	4604 Judson Way	Municipal	The storm drain in front of driveway at 4604 1/2 Judson Way overflowed last night with the big rain. It is not currently overflowing, but will happen if it rains again. John Hill paged.	WO# 23054	N/A
67	12/1/2008	Public Works	Orien Avenue	Municipal	The storm drain at dead end of Orien (7510 Orien), needs cleaned out.	WO# 23055	N/A
68	12/5/2008	Public Works	7510 Judson Way	Municipal	Her backyard flooded over walls where the storm drain was flooded from rain	WO# 23098	N/A
69	12/15/2008	Public Works	8506 Fresno Avenue	Municipal	The storm drain at 8506 Fresno/4th is full of water and not flowing. There are sand bags and a straw berm blocking it.	WO# 23140	N/A

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70	12/16/2008	Public Works	Mohawk Street	Municipal	The storm drain is flooding just W of the intersection at Mohawk & Williams. Steve paged.	WO# 23157	N/A
71	12/16/2008	Public Works	4975 Memorial Drive	Municipal	The storm drain (by the dumpster) is plugged and starting to flood the Kitchen in the Rec Center. Steve paged.	WO# 23158	N/A
72	12/16/2008	Public Works	4401 Palm Avenue	Municipal	The drain by the apts./businesses is plugged and overflowing at Collier Park. Steve paged.	WO# 23160	N/A
73	12/16/2008	Public Works	8336 Dallas Street	Municipal	There are two storm drains in front of and across the street from 8336 Dallas that are flooding and running toward neighbor's garages.	WO# 23163	N/A

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74	12/22/2008	Public Works	8054 Allison Avenue	Municipal	The storm drain in the drive next to Fire Admin, across from Library entrance, is clogged and draining slowly. Steve paged.	WO# 23194	N/A
75	12/22/2008	Public Works	4236 Highwood Avenue	Municipal	There are cabinet doors stuck in the storm drain at 4236 Highwood. Steve paged.	WO# 23195	N/A
76	12/22/2008	Public Works	7980 Lemon Circle	Municipal	There is a plugged and overflowing storm drain at 7980 Lemon Cir. Steve was paged.	WO# 23196	N/A
77	12/22/2008	Public Works	Orien Avenue	Municipal	There is water coming out of the concrete at Orien & Phoenix. If you are looking at Phoenix Dr., it is on the L side. Steve paged.	WO# 23199	N/A

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78	12/29/2008	Public Works	4948 Randlett Drive	Municipal	Per Request Tracker ID#516: Rain water is running down their driveway and into their garage. They had to use sandbags.	WO# 23220	N/A
79	12/29/2008	Public Works	7248 Juliette Place	Municipal	The storm drain at the bottom of Juliette Pl. is plugged with debris and not draining well. Caller lives at 7248 Juliette Pl.	WO# 23221	N/A
80	12/29/2008	Public Works	Fletcher Parkway	Municipal	There is a sofa in the Fletcher Pkwy/Amarillo drain.	WO# 23222	N/A
81	12/29/2008	Public Works	6267 De Camp Drive	Municipal	The drainage ditch behind 6267 De Camp is full of debris and water. Water is now draining into her yard. The ditch runs between De Camp and Falmouth.	WO# 23224	N/A

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82	1/12/2009	Public Works	7740 Parkway Drive	Municipal	Per Request Tracker ID#539: The storm drain is completely blocked with debris at 7740 Parkway Dr., at Baltimore.	WO# 23302	N/A
83	1/12/2009	Public Works	5800 Dugan Avenue	Municipal	The drainage ditch, behind 5800 Dugan Ave., is backed up with debris and causing his yard to fill with water when it rains.	WO# 23305	N/A
84	1/13/2009	Public Works	Center Drive	Municipal	The storm drain grate fell in at the corner of Center & Grossmont Blvd. J. Phillips and K. Harmon responded.	WO# 23316	N/A
85	2/9/2009	Public Works	Mohawk Street	Municipal	The storm drain is plugged at Mohawk & Williams. R. Goodell & K. Alexander responded.	WO# 23449	N/A

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86	2/13/2009	Public Works	70th Street	Municipal	There is mud and debris blocking the storm drain at 70th & Blvd. Steve paged.	WO# 23488	N/A
87	2/13/2009	Public Works	5964 Amaya Drive	Municipal	There is a 100ft. straw berm left at 5964 Amaya, and since the rain it is now going inside the storm drain.	WO# 23491	N/A
88	2/24/2009	Public Works	Orien Avenue	Municipal	She is concerned with the drain along 7857 Orien Ave. She said it is exposed.	WO# 23539	N/A
89	2/24/2009	Public Works	Toni Lane	Municipal	There is a 12ft. deep/4 ft. wide sink hole in his back yard. He thinks it is from the City maintained drain in his back yard. Steve paged.	WO# 23542	N/A
90	2/24/2009	Public Works	La Mesa Blvd	Municipal	The drains in front of and next to the restaurant have a bad sewer odor.	WO# 23545	N/A

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91	3/2/2009	Public Works	Severin Drive	Municipal	The storm drain is full of leaves in Northmont Park.	WO# 23585	N/A
92	3/2/2009	Public Works	Orien Avenue	Municipal	The storm drain grate (cover) fell in the box on Orien, near the cul-de-sac to Lowell. Steve paged.	WO# 23590	N/A
93	3/2/2009	Public Works	University Avenue	Municipal	There is a sewer spill on the N side of University Ave., in the 7600 block, near Elite Auto. It is going toward the 7/11 and down the storm drain. Steve paged.	WO# 23592	N/A
94	3/5/2009	Public Works	Baltimore Drive	Municipal	TV all the corrugated metal pipe along Baltimore Dr.	WO# 23621	N/A
95	3/17/2009	Public Works	5380 Swarthmore Street	Municipal	The storm drain channel needs cleared out of Bamboo and weeds behind 5380 Swarthmore St.	WO# 23658	N/A

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96	3/25/2009	Public Works	4th Street	Municipal	The E alley on 4th at Lemon Ave. has dirt going into the storm drain.	WO# 23703	N/A
97	4/1/2009	Public Works	Normal Avenue	Municipal	There is a piece of exposed rebar on the N side of Normal Ave, at Parks.	WO# 23765	N/A
98	4/7/2009	Public Works	Spring Street	Municipal	The concrete over the drain inlet has been hit and cracked	WO# 23794	N/A
99	4/13/2009	Public Works	4335 Merritt Blvd	Municipal	TV the 12" CMP SD crossing at 4355 Merritt Blvd. Resident claims the City's portion has collapsed.	WO# 23816	N/A
100	4/20/2009	Public Works	Fortune Lane	Municipal	TV the storm drain from Fortune Ln. to Fletcher Dr. between 9365/9375 Fortune down to about 9350/9360 Fletcher Drive.	WO# 23850	N/A

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101	4/22/2009	Public Works	4691 Zelda Avenue	Municipal	The storm drain grate is not on properly. He is a contractor working for the city.	WO# 23864	N/A
102	4/27/2009	Public Works	Highfield Avenue	Municipal	Per Request Tracker ID#761: Clear the ditch and drain under Highfield Ave.	WO# 23878	N/A
103	4/27/2009	Public Works	4689 Harbinson Avenue	Municipal	Per Request Tracker ID#761: Clear the ditch and drain under Highfield Ave.	WO# 23881	N/A
104	5/6/2009	Public Works	4180 Hybeth Drive	Municipal	The storm drain is backing up at 4180 Hybeth. Thinks someone may be dumping in it.	WO# 23940	N/A
105	5/11/2009	Public Works	4200 Woodland Drive	Municipal	The storm drain at 4200 Woodland needs to be fixed like the one on Merritt was done. Neighbors are afraid a kid is going to get stuck down there.	WO# 23962	N/A

Appendix B
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
106	6/1/2009	Public Works	Lake Murray Blvd.	Municipal	Replace the storm drain box at the NW corner of Lake Murray Blvd. & Cowles Mtn. Coordinate with Dirk.	WO# 24060	N/A
107	6/9/2009	Public Works	Highfield Avenue	Municipal	There is heavy debris blocking the culvert at the bottom of Highfield.	WO# 24124	N/A

APPENDIX C

Appendix C
JURMP Annual Report Requirements Checklist

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location in Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.3
iii. A listing of the development projects to which SUSMP requirements were applied.	Table 2-1
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	Appendix A (inventory)
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-3 and 2-4
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2, Table 2-2
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.2

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.2
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3, Table 2-4
xviii. A description of notable activities conducted to manage urban runoff from development projects.	Throughout Section 2

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A (inventory)
viii. A description of the general results of the inspections.	3.5
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5 Table 3-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix A (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	2.4.3.2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.4, Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4, Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4, Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	**(N/A for 08-09)**
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-2
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3.4, Table 4-1
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4, Table 4-1
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.3.4, Table 4-3
xviii. A description of the general results of the inspections.	Table 4-3
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	Throughout Section

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.2 (mobile), Appendix A (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	5.2.4
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4, Table 5-2
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	Throughout Section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	7.4, Table 7-2, 7-3, and 7-4
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	7.4, Attachment 7.1
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	7.5
v. The number and brief description of illicit discharges and connections identified.	7.5, Appendix B
vi. The number of illicit discharges and connections eliminated.	7.5, Appendix B
vii. Identification and description of all spills to the MS4 and response to the spills.	7.3, Appendix B
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2, Appendix B
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5, Table 7-1, Appendix B

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
xiii. A description of notable activities conducted to manage illicit discharges and connections.	7.5, Table 7-1

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	7.4
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	7.4
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	7.4
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	7.4
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	7.4
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	7.4
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	7.4

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	7.4
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	7.4
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	7.4
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	7.4
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.4
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	7.4

* Section 7, the Illicit Discharge Detection and Elimination component, of the 2008/2009 Annual Report, will be submitted to the RWQCB no later than December 15, 2008.

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3

Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.2 and 9.3

Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11

Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order. (For 2007-2008, the requirements that apply are essentially the same as those found in Order No. 2001-01)	10

Same as old Permit for 2007-2008

Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12

Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	4.2.3, 13

JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14 and each program component section

ATTACHMENTS

ATTACHMENT 3.1

CONSTRUCTION STORM WATER MANAGEMENT PLAN

CITY OF LA MESA
JEWEL of the HILLS

CONSTRUCTION STORM WATER MGMT. PLAN

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

Project Name: _____ Project Address: _____
Person completing form: _____ Telephone number: (_____)_____-_____
Signature: _____ Date: ____/____/_____

Construction projects less than one acre but answer "Yes" to questions 2, 3, or 4 in Section 2 Part C of the City's Appendix A document are required to prepare a Construction Storm Water Management Plan (CSWMP). Completion of this form along with submittal of a site map with the features described at the end of this form can adequately meet this requirement.

Planning and Organization

Person responsible for implementing items in this CSWMP:_____

Is this project subject to other construction regulations? ~ Yes ~ No
If yes, please list: _____

Significant Materials

List all significant materials that will be stored and handled at the site in the table below.
Include a brief description of the location where the materials will be stored and expected quantities.

Material	Storage Location	Expected Quantity

Potential Pollutant Sources

Provide a brief narrative description of the site's activities and list the potential pollutants that could be transported from the site by storm water in the following table.

Activity	Potential Pollutants Sources and Pollutants Generated by Activity

Best Management Practices

Every construction site within the City's jurisdiction is required to select, install, and maintain construction BMPs to reduce, retain, and manage pollutant discharges to the maximum extent practicable. The BMPs listed below are required by the City where applicable. The corresponding Caltrans fact sheet for the listed BMPs is indicated in parenthesis. These fact sheets are obtainable from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual (2003) and provide additional details on how to implement the BMP.

Please check all BMPs below that are applicable and feasible for the construction that will be implemented and maintained for the length of construction.

- ☐ Preserve natural hydrologic features where feasible
- ☐ Preserve riparian buffers and corridors where feasible
- ☐ Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction
- ☐ Minimize exposure time of disturbed soil areas
- ☐ Minimize grading during the wet season and correlate grading with seasonal dry weather periods to the extent feasible
- ☐ Temporarily stabilize and reseed disturbed soil areas as rapidly as feasible
- ☐ Preserve existing vegetation where feasible (SS-2)
- ☐ Establish permanent re-vegetation or landscaping as early as feasible

Prevent the contamination of storm water from vehicles and equipment through proper management of the following types of activities:

- ☐ Cleaning (NS-8)
- ☐ Fueling (NS-9)

☐ Maintenance (NS-10)

Prevent the contamination of storm water from construction materials through proper management of the following types of activities:

☐ Material Delivery and Storage (WM-1)
☐ Material Use (WM-2)
☐ Stockpile Management1 (WM-3)
☐ Spill Prevention and Control (WM-4)

Prevent the contamination of storm water by wastes through proper management of the following types of wastes:

☐ Solid Waste (WM-5)
☐ Hazardous Waste (WM-6)
☐ Contaminated Soil (WM-7)
☐ Concrete (WM-8)
☐ Sanitary Waste (WM-9)
☐ Liquid (WM-10)

Prevent the contamination of storm water through proper management of the follow activities:

☐ Water Conservation Practices (NS-1)
☐ Dewatering Operations (NS-2)
☐ Paving and Grinding (NS-3)
☐ Potable Water/Irrigation and Flushing (NS-7)

Prevent erosion and sediment runoff from exposed graded areas through physical stabilization and/or vegetation stabilization[2] by implementing <u>one or more</u> of the following BMPs:

☐ Hydraulic Mulch (SS-3)
☐ Hydroseeding (SS-4)
☐ Soil Binders (SS-5)
☐ Straw Mulch (SS-6)
☐Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats (SS-7)
☐ Wood Mulch (SS-8)
☐ Earth Dikes/Drainage Swales (SS-9)

Reduce the velocity of storm water by using <u>one or more</u> of the following:

☐ Outlet Protection/Velocity Dissipation (SS-10)
☐ Slope Drains (SS-11)

Protect the Perimeter of the site or exposed area from sediment discharge using <u>one or more</u> of the following:

☐ Silt Fence (SC-1)
☐ Gravel Bag Berm (SC-6)
☐ Fiber Rolls (SC-5)

Capture sediments in channeled storm water by using <u>one or more</u> of the following:

☐ De-silting Basin3 (SC-2)
☐ Storm Drain Inlet Protection (SC-10)
☐ Sediment Trap (SC-3)
☐ Gravel Bag Barrier (SC-8)

Prevent sediment from being tracked off-site by using <u>one or more</u> of the following:

☐ Stabilized Construction Entrance (TC-1)
☐ Construction Road Stabilization (TC-2)
☐ Entrance/Exit Tire Wash (TC-3)
☐ Street Sweeping (SC-7)

Notes on above BMPs:

1. Stockpiles should be fully covered when materials are not being added or removed.
2. Vegetation stabilization BMPs must be installed, irrigated, and established (uniform vegetative coverage with 70% coverage established) prior to October 1st. In the event stabilizing vegetation has not been established by October 1st, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.
3. De-silting basins must be designed in accordance with industry standards such as Caltrans.

All construction sites must implement the above BMPs in accordance with the City's dry and wet season requirements, which are detailed below.

A. Dry Season Requirements (May 1 through September 30) include but are not limited to:

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
- Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.
- The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).
- Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.
- Properly protected, designated storage areas are required for materials and wastes.
- All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.
- Remnant trash and debris shall be removed and/or properly stored/disposed of daily.
- Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.
- Materials for spill control/containment must be stockpiled onsite.
- Non-storm water discharges must be eliminated or controlled to the MEP.

B. Rainy Season Requirements (October 1 through April 30) include but are not limited to:

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
- Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not

considered to be "exposed" for purposes of this requirement.

- The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).
- Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.
- Properly protected, designated storage areas are required for materials and wastes.
- All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.
- Remnant trash and debris shall be removed and/or properly stored/disposed of daily.
- Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.
- Materials for spill control/containment must be stockpiled onsite.
- Non-storm water discharges must be eliminated or controlled to the MEP.
- Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- Perimeter protection and sediment containment BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- adequate soil stabilization and erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a selected BMP fails, it must be repaired, improved, or replaced with an acceptable alternate as soon as it is safe to do so.
- All vegetation erosion prevention BMPs must be established prior to the rainy season to be considered as a BMP.
- Standby erosion and sediment control BMPs must be able to protect all exposed soil areas. A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for seven or more calendar days. The ability to deploy standby BMP materials is not sufficient for these areas.

Project Site Map

A site map of the project must be attached to this form and contain the following features:

- An outline of the entire property
- Drainage areas on the property and direction of flow
- Areas of soil erosion
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing storm water controls (oil water separators, sumps, etc.)
- Location of impervious areas (paved areas, buildings, covered areas)
- Locations where toxic or hazardous materials spilled in the past
- Location of building and activity areas (e.g. fueling islands, garages, waste container areas, wash racks, hazardous material storage areas, etc.)
- Locations where BMPs proposed in this document will be installed
- Locations where materials will be temporarily stored onsite

City Use Only

Approved □ **Yes** □ **No**

_____ Signature ____/____/____ Date _____ Department

ATTACHMENT 4.1

MUNICIPAL INSPECTION FORM

City of La Mesa

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Facility Name_____

Street Address_____ Mailing Address_____

_____ _____

Manager/Operator(s)_____

Telephone # (_____) _____ - _____ ext._____ Fax # (_____) _____ - _____

Manager/Operator(s) Email:_____

Facility Personnel Present_____

B. FACILITY/SITE INFORMATION

Principal activity:_____

JURMP Classification_____

New JURMP Classification?_____

Does facility maintain SWPPP/BMP Plan? ☐ Yes ☐ No

If yes, what is the date of last SWPPP/BMP Plan revision?_____

If yes, does the SWPPP/BMP Plan include applicable minimum BMPs from the JURMP? (if no, describe in Section E) ☐ Yes ☐ No

If yes, does the SWPPP/BMP Plan include a current list of individuals Responsible for implementing BMPs at the site? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Drainage basin: ☐ Alvarado ☐ University ☐ Spring Valley ☐ Lemon Grove ☐ Lake Murray

Nearest conveyances or water bodies: _____ Hydrologic Area: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities: _____ square feet

Approximate % impervious surface of this area_____%

Exposed areas of intensive outdoor activity: _____

City of La Mesa

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

D. BMP ASSESSMENT

BMPs	N/A	Yes	No	Comments
D.1 General				
Is the site free of excessive litter and debris?				
Are discharge locations free of excessive sediment and debris?				
Are parking lots, sidewalks and streets free of excessive sediment and debris?				
Are roof downspouts directed away from areas of potential pollutants?				
Is wash water from pressure washing / hosing managed appropriately?				
Are employees trained in storm water management?				
Does the facility have a current log of employees who have participated in training?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
If reclaimed water is used for irrigation, is the site free of evidence of irrigation water entering the storm drain?				
Are stockpiles of soil or landscape waste covered when feasible and equipped to prevent runoff transport?				
Are pesticides, herbicides, and fertilizers managed in accordance with the JURMP BMPs?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area adequately covered (closed lids or permanent overhead cover)?				
Is the trash/recycling area free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor materials that pose a threat to water quality stored appropriately (covered or in sealed containers)?				
Are outdoor storage containers properly labeled?				
Is there an accessible, appropriate spill response kit?				
Is there a written spill response plan? If so, please provide to inspector. (NA if no significant materials to spill)				
Are liquid storage containers/tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
Is water from pools and/or fountains disposed of properly?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				

City of La Mesa

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

BMPs	N/A	Yes	No	Comments
Are vehicle maintenance activities conducted within contained areas when feasible (garage, canopy, work shop)?				
Are equipment and vehicles inspected daily for leaks and repaired as necessary?				
Are storm drain inlets near vehicle-fueling areas protected from spills and leaks?				
Is vehicle washing preformed in a designated area where runoff does not enter the MS4?				
Are biodegradable soaps used when appropriate?				
D.5 Building Repair/Construction				
Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				
Are impervious areas free of debris and spills from painting, scraping, and/or sandblasting activities?				
D.6 Structural BMPs				
Are structural BMPs adequately maintained? (NA if no structural BMPs at facility)				
D.7 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.8 Other				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
E. ADDITIONAL COMMENTS (describe any additional deficiencies not represented above and/or notable BMP improvements)				

City of La Mesa

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

BMPs	N/A	Yes	No	Comments

F. CORRECTIVE ACTION

Is corrective action needed? ☐ Yes ☐ No (If **BMP-related** corrective action is required, describe below.)

Operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax ☐ E-Mail

G. VIOLATIONS

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described in Section F.

☐ Violation of City Ordinance(s):

- ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
  Description_____
- ☐ Illegal connection(s) to the storm drain system
  Location_____
- ☐ Littering
- ☐ Failure to properly implement required BMPs

☐ Other Violation_____

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

☐ Implement the recommended corrective actions listed in Section F.

Additional actions required:

H. ADDITIONAL RECOMMENDED CITY ACTIONS*

*Recommended City Actions listed at the time of inspection are subject to change based on later review by office staff

Does this facility require a follow-up inspection? ☐ Priority 1 ☐ Priority 2 ☐ Priority **3** ☐ None

ASSESSMENT

Level of knowledge regarding storm water issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

ATTACHMENT 4.2

PHOTO OF THE STORM WATER BULLETIN BOARD

STORM WATER
BULLETIN BOARD
La Mesa
General Plan
Land Use Element
NO DUMPING
IN OUR BAY
NO TIRAR
DESPERDICIOS
EN NUESTRA BAHÍA
STORM WATER PROTECTION
IS IN GOOD HANDS...YOURS!
SUMMER STORM WATER REMINDERS
BECOMING A
"GREEN BUSINESS"
IS GOOD BUSINESS
APRIL CREEK TO BIG CLEANUP
A SUCCESS IN LA MESA

Soap is a pollutant
Don't Wash Money Down The Storm Drain!
Áfidos o pulgones
Áfidos o pulgones
APPLICATION ENCLOSED
Help!
Pollutants were found in your neighborhood storm drain.
¡Ayude!
Contaminantes fueron encontrados en las alcantarillas de su vecindario.
CONSTRUCTION SWPPP INFORMATION
State General Construction Permit
La Mesa's Watersheds
San Diego Bay
La Mesa Watersheds

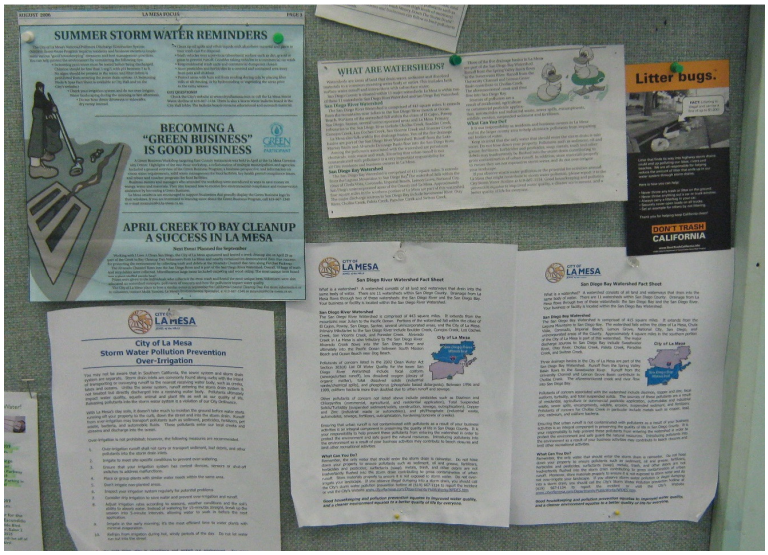
SUMMER STORM WATER REMINDERS
BECOMING A "GREEN BUSINESS" IS GOOD BUSINESS
APRIL CREEK TO BAY CLEANUP A SUCCESS IN LA MESA
WHAT ARE WATERSHEDS?
Litter bugs.
DON'T TRASH CALIFORNIA
CITY OF LA MESA
City of La Mesa
Storm Water Pollution Prevention Over-Irrigation
San Diego River Watershed Fact Sheet
San Diego Bay Watershed Fact Sheet

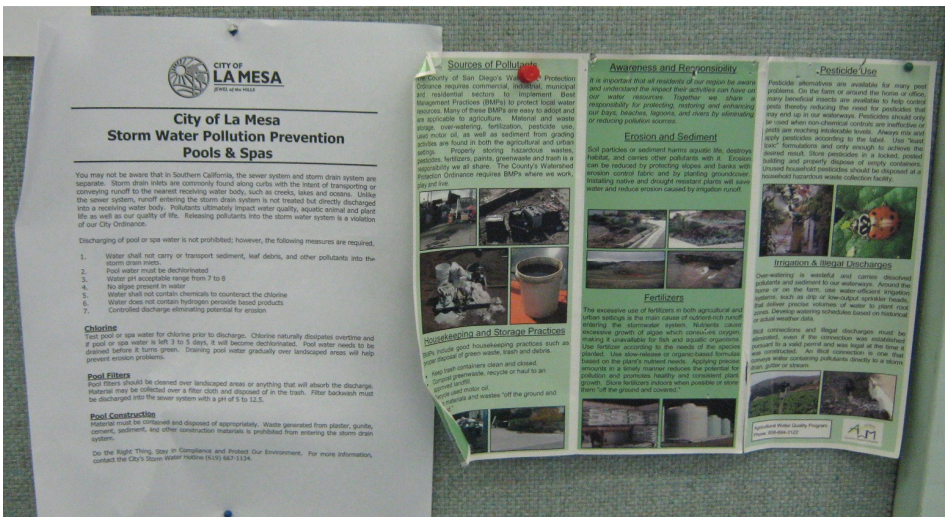
CITY OF LA MESA
City of La Mesa
Storm Water Pollution Prevention
Pools & Spas
Chlorine
Pool Filters
Pool Construction
Sources of Pollutants
Awareness and Responsibility
Pesticide Use
Erosion and Sediment
Fertilizers
Irrigation & Illegal Discharges
Housekeeping and Storage Practices

ATTACHMENT 5.1

INDUSTRIAL/COMMERCIAL INSPECTION FORM

CITY OF LA MESA

STORM WATER COMPLIANCE INSPECTION FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Inspected by D-MAX Engineering, Inc.

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint

Result: ☐ Full Insp. ☐ Could not Contact ☐ Not Inventoried ☐ Moved, Vacant ☐ Moved, Replaced by_____ ☐ Refused ☐ Mobile ☐ Duplicate of_____

A. CONTACT INFORMATION

Original	Changes
Business Name_____	Business Name_____
_____	_____
Street Address _____	Street Address_____
_____	☐ change _____
Responsible Person(s)_____	Responsible Person(s)_____
Title:_____	Title:_____
Business Telephone # (____) _____ -_____ext._____	Business Telephone # (____) _____ -_____ext._____
Business Fax # (_____) _____ - _____	Business Fax # (_____) _____ - _____

Home Based? ☐ Yes ☐ No Mobile Business? ☐ Yes ☐ No **APN**:_____

Is this facility located in a multi-suite complex? ☐ Yes ☐ No

Facility personnel present:_____

B. FACILITY/SITE INFORMATION

Principal activity:_____

Assigned SIC code(s) _____ _____ _____ _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

Recommended change of SIC Code(s)?_____ _____ _____ _____

Existing SIC code(s) _____ _____ _____ _____

Status Update (if no longer active in City or does not need an inspection): ☐ Moved/Out of Business ☐ Duplicate ☐ Not Inventoried ☐ Out of Jurisdiction

Does facility have a current business certificate? ☐ Yes ☐ No #_____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐ Mandatory ☐ Conditional ☐ No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐ Yes ☐ No WDID: 9 37I0_____

Has facility filed a Notice Of Termination (NOT) for the WDID# listed above? ☐ Yes ☐ No Approval date:_____ month/yr

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a storm water monitoring program? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Discharge points: _____

_____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate % impervious surface of this area_____%

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP ASSESSMENT

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.1 General					
Keep site free of litter, debris, and sediment using dry methods					
Keep storm drains on site free of litter and debris					
Keep outdoor areas free of spills and leaks					
Collect water from pressure washing or hosing and dispose of appropriately					☐ Unknown Performed by:
Direct roof downspouts away from areas of potential pollutants					
D.2 Landscaping					
Properly manage pesticides/fertilizer; use IPM when feasible					☐ Unknown Landscaping Co:
Employ adequate erosion prevention measures (vegetation or physical stabilization)					
Eliminate over watering/over-irrigation					
Properly store stockpiles to prevent material transport					
Properly store and dispose of green waste					☐ Unknown
D.3 Materials and Wastes					
Protect trash area from contact with storm water					
Keep trash area free of litter and debris, liquids, powders, sediment					
Adequately cover materials stored outside					
Prevent run-on from contacting materials stored outdoors					
Properly label outdoor storage containers					
Provide an accessible, functional spill response kit					
Equip liquid storage containers with spill containment					
Keep spill containment free of spills and rainwater					
Properly store and dispose of hazardous materials					
Keep loading and unloading areas, including drains, free of debris					
Dispose of water generated by processing activities appropriately					
Dispose of pool, spa, fountain, and filter backwash water properly					☐ Unknown Performed by:
Clean floor mats in locations that do not drain to street or storm drain system					

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.4 Equipment, Vehicles, and Outdoor Activities					
Conduct outdoor activities within contained areas (garage, under canopy, work shop)					
Use drip pans to collect leaks/spills					
Provide materials (berm, mat, etc.) to protect storm drain inlets from spills and leaks					
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4					
D.5 Other					
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff					
Identify and eliminate illicit connections and illegal discharges					

D.6 Additional Required Actions

D.7 Additional Questions	**Comments/Results**
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐ Painting ☐ Sandblasting ☐ Fuel Distribution ☐ Dust dispersion or mineral processing ☐ Metal smelting ☐ Metal plating or anodizing ☐ Chemical production or mixing ☐ Large fuel burning device ☐ Incinerator
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A
What is the approximate percentage of the site that drains to the treatment control BMPs?	☐ N/A
Do major potential pollutant sources drain to treatment BMP(s)?	☐ All ☐ Some ☐ None ☐ N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	NOI NONA/NEC

E. STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE*

☐ Non-compliance with the State Industrial Storm Water General Permit noted.

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE*:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit—see Attachment 3 of the Industrial Permit (www.waterboards.ca.gov/stormwtr/industrial.html).

- ☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP)—see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required:

_____

_____

_____

F. CORRECTIVE ACTION SUMMARY

☐ **Corrective Actions Required.** Please refer to sections D.1-D.6, E, and F of this form and, if applicable, the Food Establishment Storm Water BMP Assessment form (if applicable, it is attached).

☐ No Corrective Actions Required at this time.

G. RECOMMENDED CITY ACTIONS**

_____

_____

_____

Follow Up Inspection Priority: ☐ **Priority 1** ☐ **Priority 2** ☐ **Priority 3**

ASSESSMENT

Level of knowledge regarding stormwater issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

*Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

**Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

"RW 303(d)" = Receiving water impairments, as listed in the most recent 303(d) list
"WS COC" = High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
"PDP" = pollutant discharge potential.
"Emp. Training" = employee training activities focused on storm water pollution prevention
"Housekeeping" = standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
"Minor Struct." = minor structural BMPs that do not require building permits, such as covering with tarps or building berms
"Major Struct." = major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results* are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results* are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results* are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results* above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results* exceed the EPA benchmark by an order of magnitude or more

DMAX

CITY OF LA MESA
FOOD ESTABLISHMENT STORM WATER BMP ASSESSMENT
Inspected by D-MAX Engineering, Inc.

Business Name _____

How long has the manager worked at the business? ☐ < 3 months ☐ 3-6 months ☐ 7-12 months ☐ > 1 year ☐ Unknown

Is the facility manager also the owner? ☐ Yes ☐ No ☐ Unknown

Property management company:_____ Business Telephone # **(____)**____ -_____ext.____

Mailing address:_____

_____

BMPs	No Corrections Required		**Corrections Required**		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
Keep grease bin and area surrounding grease bin free of grease stains/spills					
Keep storm drain inlets free of grease and other food debris					

Additional Questions	**Comments**
Does facility have a grease trap or grease interceptor?	☐ No ☐ Grease Trap ☐ Grease Interceptor ☐ Unknown
What is the reported maintenance frequency for the grease trap or interceptor?	☐ Annual ☐ Every 6 mn ☐ Quarterly ☐ Monthly ☐ Every 2 wks ☐ Weekly ☐ > Weekly ☐ Unknown
How many grease fryers are at the facility? _____	
About how often is fryer oil replaced? ☐ Monthly ☐ Every 2 weeks ☐ Weekly ☐ Twice/week ☐ Daily ☐ Don't change	
How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Dumpster	
Grease Hauler: _____	
Do oil-recycling/grease bins have overhead coverage?	☐ Yes ☐ No
Do oil-recycling/grease bins have secondary containment?	☐ External containment ☐ Double-walled ☐ No
How are outdoor areas (patio, loading dock, parking lot, dumpster area, etc.) cleaned? (check all that apply)	
☐ Hose (If yes, see relevant question in Section D.1 of main form)	
☐ Sweep	
☐ Power wash (If yes, see relevant question in Section D.1 of main form)	
☐ Pick up trash	
☐ Outside company/property management	
☐ Do not clean	

CITY OF LA MESA

SWPPP/BMP PLAN AND/OR STORM WATER MONITORING PLAN ATTACHMENT

Inspected by D-MAX Engineering, Inc.

SWPPP REVIEW* **Does facility maintain a SWPPP/BMP Plan:** ☐ **Yes** ☐ **No** ☐ **Unknown** ☐ **Not Available**

SWPPP Component	Provided		Adequate		Comments
Site Map/Description……	☐ Yes	☐ No	☐ Yes	☐ No	_____
Materials List……..	☐ Yes	☐ No	☐ Yes	☐ No	_____
Significant Spills/Leaks…….	☐ Yes	☐ No	☐ Yes	☐ No	_____
Pollution Prevention Team….. (Identification of current team members.)	☐ Yes	☐ No	☐ Yes	☐ No	_____
Industrial Activities……	☐ Yes	☐ No	☐ Yes	☐ No	_____
Pollutant Sources/Risks……..	☐ Yes	☐ No	☐ Yes	☐ No	_____
Compliance Activity Schedule. (Procedures to conduct annual site compliance evaluation.)	☐ Yes	☐ No	☐ Yes	☐ No	_____
Employee Training……	☐ Yes	☐ No	☐ Yes	☐ No	_____
Accessible to staff…..……..	☐ Yes	☐ No	☐ Yes	☐ No	_____
Storm Water BMPs…..……	☐ Yes	☐ No	☐ Yes	☐ No	_____

*The SWPPP review portion of the inspection focuses mainly on proposed BMPs and monitoring practices. It is not intended to be a comprehensive assessment of compliance with all SWPPP-related requirements of the General Industrial Permit.

STORM WATER MONITORING PROGRAM

Does this facility have a storm water monitoring program? ☐ Yes ☐ No ☐ N/A

Was appropriate monitoring conducted during the most recent wet season? ☐ Yes ☐ No

If not, does the facility have documentation of no qualifying rain events? ☐ Yes ☐ No

If not, is the facility in a GMP and not scheduled for most recent year? ☐ Yes ☐ No

Do monitoring results show that existing BMPs are effective in removing pollutants? ☐ Yes ☐ No ☐ None Available

If not, were potential sources of the identified pollutants observed during the inspection? ☐ Yes ☐ No

If yes, list the potential sources and their associated pollutants: _____

_____

_____

Exceedances Noted (list dates, locations, constituent(s) and numeric value(s)):

_____

_____

_____

_____

_____

_____

ATTACHMENT 5.2

UPDATED NOI AND NONA/NEC INSTRUCTIONAL COVER SHEETS

Compliance with the Industrial Storm Water General Permit, NONA/NEC

Your business is conditionally subject to the Industrial Storm Water General Permit ("General Industrial Permit"). The General Industrial Permit, which applies to facilities throughout California, regulates businesses according to their Standard Industrial Classification (SIC) codes.

Since your business is conditionally subject to the General Industrial Permit, you may fill out the attached paperwork to gain potential exemption from General Industrial Permit requirements if you can certify that the following minimum conditions at your facility are met:

1. All prohibited non-storm water discharges have been eliminated or otherwise permitted.
2. All areas of past exposure have been inspected and cleaned, as appropriate.
3. All materials related to industrial activity (including waste materials) are not exposed to storm water or authorized non-storm water discharges.
4. All industrial activities and industrial equipment are not exposed to storm water or authorized non-storm water discharges.
5. There is no exposure of materials associated with industrial activity through other direct or indirect pathways such as particulates from stacks and exhaust systems.

If the above conditions are not met or the above conditions are not certified with the attached paperwork, your business will be required to submit a Notice of Intent (NOI) to file for coverage under the General Industrial Permit. Requirements associated with this include an annual fee of $1,008, development of a Storm Water Pollution Prevention Plan, and collecting and analyzing at least two samples of storm water during each year's wet season (October 1 through April 30).

Satisfactorily completing the attached Notice of Non-Applicability (NONA) and its accompanying No Exposure Certification (NEC) will serve as certifying the above conditions. This paperwork is to be completed as soon as possible and retained on site in an accessible location. In addition, the City requests that a copy be sent to both the City and the Regional Water Quality Control Board (RWQCB). Please note there is periodic re-evaluation of the facility to ensure these conditions are continuously met.

City of La Mesa
Attn: Hamed Hashemian
Storm Water Pollution Prevention Program
City of La Mesa
P.O. Box 937
La Mesa, CA 91944-0937

Regional Water Quality Control Board
Attn: Region 9 Storm Water Permitting Unit
Regional Water Quality Control Board
9174 Sky Park Court
Suite 100
San Diego, CA 92123

Tips for completing the paperwork

- Even if your site has no exposure, you need to complete and submit the NONA/NEC paperwork to be in compliance with the General Industrial Permit
- On the Notice of Non-Applicability, complete the
  - Facility Information
  - Regulatory Status (in most cases the answer to the first question will be no)
  - Basis of Non-Applicability
    - Your business's basis of non-applicability is **reason 2**, you do not have to fill out anything relating to other reasons for basis of non-applicability. Your SIC code can be found on your inspection report; since you are being provided your SIC code, Table 3 is not necessary for completing this section.
  - Certification
- Answer the series of yes/no questions on the No Exposure Certification and sign and date
- Attach some photos of the outdoor areas of your facility

Additional Resources

- For further questions regarding completing the NONA/NEC paperwork, contact
  - Your inspector (name is listed on your copy of the inspection report) from D-MAX Engineering, Inc., the firm contracted by the City to conduct your inspection, at (858) 586-6600.
  - City of La Mesa: Hamed Hashemian at (619) 667-1153
  - Regional Water Quality Control Board: (858) 467-2952, ask for General Industrial Permit Compliance
- **For more information about the General Industrial Permit, visit:**

http://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml

Compliance with the Industrial Storm Water General Permit, NOI

Your facility is currently not in compliance with the requirements of the Industrial Storm Water General Permit ("General Industrial Permit"). The General Industrial Permit applies to industrial facilities throughout California and is overseen by the State Water Resources Control Board (SWRCB). In the San Diego region, it is administered and enforced by the San Diego Regional Water Quality Control Board (SDRWQCB). The following sources can provide more information regarding the process of coming into compliance, which includes filing a Notice of Intent (NOI), preparing a Storm Water Pollution Prevention Plan (SWPPP), and implementing a storm water quality monitoring program.

A copy of the General Industrial Permit can be found on the State Water Resources Control Board (SWRCB) Industrial Storm Water Program website:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml

The website also offers additional information about the General Industrial Permit compliance, as well as forms and other documents. A checklist for submitting an NOI and NOI paperwork are attached; NOI instructions, as referred to on the checklist, are included in the General Industrial Permit.

Additional Resources:

- Industrial and Commercial Best Management Practices (BMP) Handbook can be found on the California Stormwater Quality Association (CASQA) website:

  http://www.cabmphandbooks.com/Industrial.asp

- Guidelines regarding SWPPP development and storm water quality monitoring can be found at:

  http://www.cabmphandbooks.com/Documents/Industrial/Section_2.pdf

- A sample SWPPP can be found at:

  http://www.cabmphandbooks.com/Documents/Industrial/Appendix_C.pdf

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ATTACHMENT 5.3

INTEGRATED PEST MANAGEMENT CARDS

Ants

Ants are one of the most prevalent pests in California. Although ants are annoying when they come indoors, they can be beneficial by feeding on fleas, termites, and other pests in the garden. While spraying chemicals inside the house may seem effective, it won't prevent more ants from entering your home, which is essential for control because most ants nest outside. Focus management efforts on excluding ants from buildings or valuable plants.

Make your house less attractive to ants:

- Caulk cracks and crevices that provide entry inside.
- Store attractive food in closed containers.
- Clean up grease and spills.
- Look for and remove indoor nesting sites, such as inside potted plants.
- Ant-proof kitchen garbage pails with sticky barriers such as petroleum jelly under the lip and pet dishes by placing them in a moat of water.
- Remove sweet food sources next to your house such as aphid-infested bushes and ripened fruit on trees.

When ants invade your house, take these steps:

- Sponge invaders with soapy water as soon as they enter.
- Plug up ant entryways with caulk or petroleum jelly.
- Remove infested potted plants.
- Clean up food sources.
- Rely on baits to control the ant colony.
- Indoor sprays are not usually necessary.

How and why baits work best:

When using bait, place it along ant trails and at nest openings. Worker ants will be attracted to bait and take it back to the nest where the entire colony, including queens, may be killed. The bait must be slow-acting so workers won't be killed before they get back to the nest. It may take several weeks for results to be evident. Just killing workers foraging in your home or garden does little to control the colony, because as few as one percent of a colony's foraging worker ants are able to provide sufficient food to support nestbound queens and larvae. Baits in bait stations or ant stakes are easiest to use and safest for the environment.

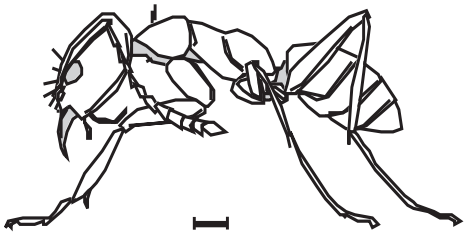

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*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

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Aphids

Almost every plant has one or more aphid species that occasionally feeds on it, but low to moderate numbers of aphids are usually not damaging in gardens or on landscape trees. Although aphids can curl leaves and produce sticky honeydew, they rarely kill plants and can often be washed off with water. When aphid numbers get high, natural enemies frequently feed on them, eliminating the need for pesticides. Insecticidal soaps and oils are less toxic pesticides that can be used when treatment is necessary.

Aphids are common in your garden because:

- Aphids like lush new growth. Don't over fertilize. Use organic fertilizers or slow-release products.
- Aphids build up on flowering plums, roses, tulip trees, crape myrtles, apples, and many vegetables. Expect aphids when you grow these plants.
- Ants protect aphids from their natural enemies. Keep ants off plants to get more benefit from these beneficial insects.

To reduce aphids:

- Prune out infested leaves and stems.
- Knock aphid populations off plants by shaking or spraying with a strong stream of water.
- Protect seedlings with covers or aluminum soil mulches.
- Wait for hot weather; most aphids are heat-intolerant and will be gone by mid-June.

Protect aphids' natural enemies:

- Lady beetles, both adults and larvae
- Lacewings
- Syrphid fly larvae
- Soldier beetles
- Parasitic mini-wasps that turn aphids into crusty mummies (See reverse for insect drawings.)

Natural enemies of aphids such as lady beetles and lacewings will come into your garden naturally when aphids are abundant. Protect these good bugs by avoiding the use of insecticides that may be toxic to a broad variety of insects.

If insecticides seem necessary, use the safest products:

- Nonchemical pest control methods should be used first to manage aphid populations. However, if you feel insecticides are necessary, choose less toxic products.
- Insecticidal oils and soaps are the safest products. When properly used, these materials solve most pest problems.
- Oils and soaps work by smothering aphids, so application must be thorough. Don't apply to drought-stressed plants or when it is very hot. A few plants are sensitive to these products.
- Insecticidal soaps, soap-pyrethrum mixtures, or neem oils are often applied on vegetables or small bushes like roses.
- Narrow range oils, like parafinic, supreme or superior oils, are appropriate for larger trees.
- Oils and soaps don't kill aphids hidden within curled leaves. Prune these out. Systemic insecticides can kill hidden aphids, but they are much more toxic and not registered for use on garden vegetables or fruit trees.

aphid

lady beetle

parasitic mini-wasp killing aphid

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Cockroaches

HEALTHY GARDEN HEALTHY HOME

Cockroaches thrive in warm environments that provide food, water, and shelter. Roaches hide in cracks, crawl spaces, and other dark places during the day and come out at night to feed. Pesticide sprays alone will not control roaches and are not usually required. Baits provide better control. You must integrate several strategies to make your home a less roach-friendly environment. Thoroughness is essential for effective control.

Identify your cockroach species first:

- Effective management options vary according to species.
- Cockroach traps provide an easy way to catch roaches for identification.
- Control practices for outdoor invaders (American, oriental roaches) and indoor residents (brownbanded and German roaches) differ.
- For help with identification go to www.ipm.ucdavis.edu.

Remove food and water sources:

- Even tiny crumbs or liquids in cracks provide good food sources.
- Store food in sealed containers.
- Keep trash in containers with tight lids.
- Eliminate plumbing leaks.
- Vacuum cracks and crevices and clean floors and counters daily.

Remove roach hiding places:

- Seal cracks and other openings to prevent invaders from the outside.
- Seal cracks in false bottoms of cupboards and other indoor hiding places.
- Seal or clean up other areas where you find roaches or their egg cases hiding.
- Remove old newspapers, boxes, and other clutter in kitchens and bathrooms.
- The oriental cockroach hides outdoors under ivy and other shelter. Check to see if you have this roach and remove outdoor hiding places or bait.

Use traps to identify and track cockroach populations:

- Cockroach traps are available in hardware stores.
- Place traps on the floor around edges of walls, in cupboards and other places where you think roaches are foraging. Place bait stations at locations where you trap roaches.
- Check traps daily.
- Sticky traps with pheromones may provide some control of German cockroaches.

Using chemicals to control cockroaches:

- Avoid use of foggers, bombs, or aerosol sprays — they just disperse populations.
- Boric acid powder blown into cracks, crevices, hollow walls, under refrigerators, or other undisturbed hiding places is very effective (allow 7 days or more for an effect to be seen).
- Bait stations containing boric acid, abamectin, fipronil, or hydramethylnon placed near hiding places can be effective if other food sources are removed (allow 7 days or more for an effect to be seen). Replace stations as needed as long as roaches are being caught.
- Insecticide sprays alone do not give long-term control. They are not necessary if other methods such as baits and boric acid powder are combined along with cleanup and removal of hiding places.
- Contact a professional pest control operator for very serious infestations, but be sure they use an integrated program as described above.

German cockroach nymph

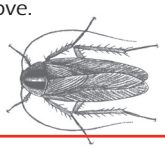

German cockroach adult

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Earwigs

HEALTHY GARDEN HEALTHY HOME

While their prominent tail-end pincers may look ferocious, earwigs are not harmful to people. Earwigs may seriously damage seedling vegetables and chew holes in annual flowers, soft fruit, and corn silks, but earwigs also play a beneficial role by feeding on aphids and other insects. Nocturnal in habit, earwigs feed at night and hide during the day in dark, cool, moist places in the yard or within flowers or vegetables. To manage earwigs, reduce hiding places and moisture, and employ a vigilant trapping program.

Should you be concerned about earwigs in your garden?

- Yes, if you are growing vegetables, herbaceous flowering plants, sweet corn, or plants with soft fruits like strawberries and apricots.
- No, if your garden is primarily lawn, trees, and woody ornamentals or native plants.

Reduce outdoor hiding places:

- Eliminate dense undergrowth of vines, ground cover and weeds around vegetable and flower gardens.
- Prune away fruit tree suckers.
- Remove leaves, boards, boxes, trash, and other debris from planting areas.
- Move flower pots and other garden objects and structures that can harbor earwigs.
- Check plastic or organic mulches and remove them to limit earwig numbers.

Trap earwigs until they are gone!

- Trap earwigs with rolled newspaper, bamboo tubes, or short pieces of hose. Place these traps on the soil near plants just before dark, and shake accumulated earwigs out into a pail of soapy water in the morning. A low-sided can filled with oil and a drop of bacon grease or fish oil also makes a good trap. Daily trapping will reduce earwig populations to tolerable levels.

Other ways to reduce earwig problems:

- Drip irrigate where possible to reduce surface moisture.
- Keep earwigs out of stone fruit trees with a band of sticky substance like Tanglefoot, around the trunk, and harvest fruit as soon as it ripens.
- Insecticides should rarely be needed.

Inside the home:

Earwigs may seek refuge indoors when conditions outside are too dry, hot, or cold. Large accumulations of earwigs can be annoying but present no health hazards. When earwigs invade your home follow these steps:

- Sweep or vacuum up invading earwigs.
- Seal up cracks or other entry points.
- Remove debris from gutters and around entryways.
- Keep water and moisture away from structures.
- Replace white outdoor lights with yellow ones, which are less attractive to earwigs.
- Indoor application of pesticides is not recommended.

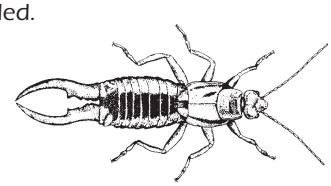

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Fleas

Fleas are particularly annoying to people and pets, especially during spring and early summer when their numbers tend to increase dramatically. The common flea in California is the cat flea. Despite its name, it attacks both dogs and cats and will also bite humans. To keep fleas out of your home, control fleas on your pet and regularly clean pet sleeping areas.

On the pet:

Recently, a number of very effective and safe new products for flea control on the pet have become available. Remember to supplement pet treatments with regular cleaning of your home and periodic combing with a pet flea comb to detect new infestations.

- Spot-on formulations are applied to the animal's coat, providing flea control for 1 to 3 months. Available from veterinarians or over-the-counter.
- Systemic flea control products, available from vets, are given as a pill or food additive. While they do not kill adult fleas, they prevent reproduction.
- Flea collars containing insect growth regulators (IGRs) give protection for up to 6 months on dogs and up to a year on cats. Be sure to choose collars containing methoprene or pyriproxyfen.
- Flea shampoos and soaps, powders and dusts, spray-on liquids, and dips are less effective and more hazardous to pets, people, and the environment than the three types of products above.

In the yard:

Outdoor treatment is rarely needed, but if your pet regularly sleeps outside and flea numbers are high, these areas can be treated with a spray containing pyriproxyfen. If possible, open sleeping areas to sunlight by removing low hanging vegetation. Immature fleas are unlikely to survive in areas with exposure to sunlight.

Inside the home:

Whether or not you are aware of fleas in your home, regularly vacuum and launder areas where your pet rests to avoid flea buildup. If you have a major flea problem, treat your pet with one of the options on the front of this card and follow the steps below.

- Locate heavily infested areas (usually areas where the pet rests) and concentrate treatment there.
- Wash throw rugs and pet bedding.
- Vacuum upholstered furniture, cleaning under cushions and in crevices.
- Vacuum carpets, especially beneath furniture.
- Use a hand sprayer or aerosol to treat all carpets and unwashable upholstered furniture with an insecticide that contains an IGR (methoprene or pyriproxyfen). This treatment kills larvae but not pupae, so fleas may continue to emerge for up to 2 weeks.
- Over the next 2 weeks vacuum regularly to remove adult fleas that emerge from pupae. Do not reapply pesticides.
- Seal vacuum bags and discard them so fleas don't escape.

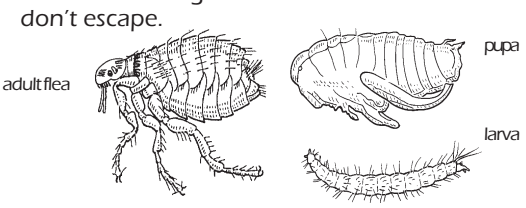

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Gardening with Good Bugs

HEALTHY GARDEN HEALTHY HOME

Most gardens contain far more types of good bugs,or beneficial insects, than pest insects. Beneficial insects and other organisms that kill pest insects are called natural enemies. In any pest management or plant care program, it is important to encourage these natural enemies by avoiding pesticides that kill them. You can also encourage beneficial insects by choosing plants that provide them with pollen, nectar, and shelter and keeping ants out of pest-infested plants. Learn to identify good bugs, both in their adult forms and immature (larval) stages.

Common good bugs found in California gardens include:

- Lady beetles: Both adults and larvae consume aphids.
- Lacewings: Lacewing larvae feed on many insect pests; adults are often seen around lights.
- Syrphid flies: Syrphid fly larvae consume aphids; adults hover around flowers.
- Parasitic mini-wasps: Many species of tiny wasps lay their eggs in pests like aphids or caterpillars; their hatching larvae consume the pest and kill it.
- Spiders: All spiders feed on insects or other arthropods and are beneficial in the garden.

(See reverse for drawings of good bugs mentioned above.)

What is Integrated Pest Management?

Integrated pest management (IPM) uses environmentally sound, yet effective, ways to keep pests from annoying you or damaging plants. IPM programs usually combine several pest control methods for long- term prevention and management of pest problems without harming you, your family, or the environment — IPM also reduces pollution in California waterways. Successful IPM begins with correct identification of the pest. Only then can selection of the appropriate IPM methods and materials be made.

Preferred IPM methods include:

- Planting pest-resistant or well-adapted plant varieties like native plants.
- Discouraging pests by modifying the way you design, irrigate, fertilize, and manage your garden.
- Altering the garden or home environment to deprive pests of the food, water, shelter or other requirements they need to thrive.
- Keeping pests out of the home and garden using barriers, screens, and caulking.
- Squashing, trapping, washing off or pruning out pests.
- Relying on good bugs in your garden to eat pests, thereby eliminating the need for insecticides that may end up in our waterways.

Turning to pesticides:

- Only use pesticides when non-chemical controls are ineffective and pests are reaching intolerable levels.
- Use pesticides in combination with the methods described above.
- Choose pesticides carefully so that the least toxic, most effective material is used to protect human health and the environment.

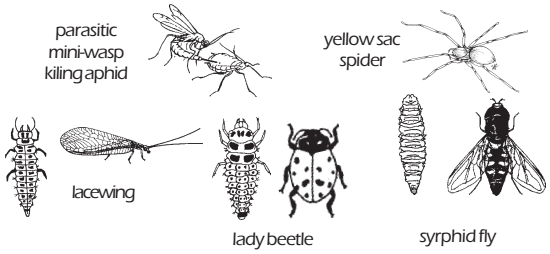

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Head Lice

HEALTHY GARDEN HEALTHY HOME

Head lice can infest anybody, but children are prone to infestations because they play closely and share items that come in contact with the head like hats, headphones, and combs. Head lice are not known to transmit any infectious diseases; they are more of a nuisance than a health risk. Children with head lice, however, are generally not allowed to attend school as long as nits are found in their hair.

Head lice facts:

- Head lice cannot hop, fly, or jump; they crawl. Lice spread only through direct contact with an infested object or person.
- Head lice spend their entire life in head hair and can only survive off a human head for about 1 or 2 days.
- A newly hatched louse must ingest blood within minutes of birth to survive.
- Head lice cannot live on family pets.
- Nits (eggs) that are more than 1 1/4 inch from the scalp probably are dead or have already hatched.

What to look for:

- Intense scratching on the back of the head or neck.
- Tiny white eggs (nits) glued to hair near the scalp.
- Small, rapidly crawling flat insects.

Four steps necessary to manage an infestation of head lice:

1 Use a head louse shampoo if you observe active lice or viable eggs.

- Avoid shampoo products containing lindane, which are available by prescription only. Pyrethrin and permethrin are safer, more effective, and less polluting to wastewater than lindane. Not all eggs will be killed.
- To avoid insecticides entirely, use soap shampoos that contain coconut or olive oils. Most soap shampoos kill all stages of the louse except the egg. Because they are not as effective as products containing pesticides, you must be sure to comb and repeat these shampoos four times at 3-day intervals. Successive shampooing kills newly hatched lice.

2 Remove nits from the head by combing with a specially designed nit comb.

- This step is the key to successful control. Repeat daily as long as you find live lice or nits within 1¦4 inch of the scalp. Use a metal comb specially designed for removing head lice and their eggs. Combs sold with head lice shampoos are not generally effective. Infested hair can also be cut out with small safety scissors.

3 Remove lice and nits from the household.

- Wash clothing and bedding of the infested person in hot water (at least 140°F) and dry in a hot dryer or have them dry cleaned. Place other items (earphones, bike helmets) in plastic and put in a freezer that is 5°F or lower for at least 10 hours. Clean any object that might have come in contact with the infested person's head (stuffed animals, car seats). Vacuum carpets and upholstery. Pesticide sprays are not recommended.

4 Check heads and remove nits daily until infestation is gone. Follow with weekly head checks to detect reinfestation.

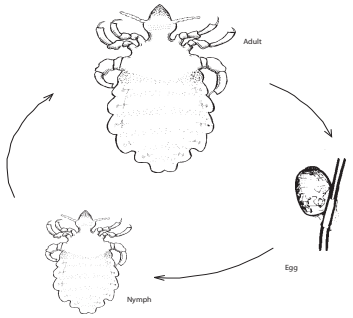

For more information see Pest Notes: Head Lice, available at Cooperative Extension offices and at www.ipm.ucdavis.edu

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Lawn Insects

HEALTHY GARDEN HEALTHY HOME

Contrary to popular belief, insects are not a common cause of residential lawn damage in California. Poor lawn care, especially improper watering and planting inappropriate grass species, are more likely causes of unhealthy or dying lawns. Disease-causing agents, excess orinappropriate use of chemicals such as fertilizer and herbicides, or dog urine also produce lawn damage resembling that of insects. Many insects in the lawn are beneficial. Never apply an insecticide unless a damaging level of a known insect pest is confirmed. Insecticides are only effective if applied at the right time and in the right manner. Some insecticides may kill good bugs too.

How do you know if insects are causing damage?

- Brown spots in lawns can be caused by over- or under-irrigation, plant disease, improper use of chemicals, or dog urine as well as insects.
- Confirm presence of insects before applying an insecticide. For grubs, dig around roots, for other insects perform a drench test. (See reverse.)

Keep your lawn healthy by:

- Planting grass species that do well in your area
- Irrigating deeply and infrequently
- Doing routine maintenance on sprinkler heads
- Applying only 3 to 6 pounds of actual nitrogen per 1000 square feet per year when fertilizing
- Aerating your lawn annually; remove thatch if it exceeds 1/2 inch
- Cutting only one-third to one-half of grass height at each mowing and keeping lawnmower blades sharp

See the UC Guide to Healthy Lawns at www.ipm.ucdavis.edu

If a damaging level of insects is confirmed, do the following:

- Choose an insecticide based on the pest you're targeting.
- Find out which insecticide ingredients target specific lawn insects:
  - *Bacillus thuringiensis* (Bt) kills only caterpillars, including cutworms, lawn moths, and skippers.
  - Insect-attacking nematodes control caterpillars or grubs.
  - Azadirachtin controls cutworms, armyworms, and larvae of lawn moths.
  - Imidacloprid is effective against young lawn grubs.
  - Pyrethroids (e.g., cyfluthrin, bifenthrin) are broadly toxic insecticides that kill chinch bugs, lawn moths, and cutworms, but also kill beneficial insects and should be avoided.
- Get help from UC Cooperative Extension.

HOW TO PERFORM A DRENCH TEST

- Mix 3–4 tablespoons of dishwashing liquid to 2 gallons of water.
- Evenly apply the 2 gallons to 1 square yard of your lawn.
- Monitor the area for 10 minutes and count the number of armyworms, cutworms, or lawn moth larvae that rise to the surface.
- Treat the area only if insect numbers exceed 5 armyworms or cutworms or 15 lawn moths per square yard.

chinch bug

sod webworm larva

cutworm larva

grub larva

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Safe Use & Disposal of Pesticides

HEALTHY GARDEN HEALTHY HOME

Pesticides are designed to be toxic to the pests they target — insects, weeds, and other unwanted home and garden invaders. Always read pesticide product labels carefully and follow all directions on proper use, storage, and disposal of empty pesticide containers. Product labels are your main source of information on how to use a product safely and legally. They include guidelines needed to protect you, your family, and pets. The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For the site nearest you in San Diego County call 1-877-713-2784 .

If you must use pesticides, follow these tips to reduce pesticide effects on your local waterways:

- Identify your pest problem and choose the least toxic pesticide that targets your pest and achieves the results you want. If you need help identifying the least toxic pest control method, contact your University of California Cooperative Extension office.
- Determine the right amount of pesticide to purchase. Purchasing exactly the amount you need for the application eliminates the need for storing unused pesticides.
- Use spot treatments whenever possible.

Outdoors

- Avoid overwatering after applying pesticides. Never let pesticide runoff flow into storm drains.
- Do not apply pesticides outdoors when rain is forecast or when it is windy.
- Avoid applying pesticides on paved areas.

Indoors

- Avoid applying pesticides in or near floor drains or sinks.
- Avoid applying pesticides on areas that will be washed or mopped with water, or where food is prepared or stored.

When using and storing pesticides take these precautions:

- Always wear a long-sleeved shirt, pants, and eye protection, and other equipment suggested on the label.
- Store products tightly capped in a locked cabinet out of reach from children and pets.
- Always keep pesticides in their original container.
- Know where to call for help in an emergency!

Pesticide disposal:

- If you cannot use up your pesticides, fertilizers, and weed killers, give them to a friend who may need them.
- Sewage treatment plants are not designed to treat for certain toxic pesticides like diazinon and chlorpyrifos — dumping pesticides into the stormdrain or down the sink is never an option.
- The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For household pesticide disposal information for San Diego County, call 877-713-2784.

Finding active ingredients on a pesticide label:

Pesticide labels are required by law to show the active ingredient and its percentage. Minimize or avoid the use of products that contain diazinon and chlorpyrifos – these materials are polluting our waterways. Always read the label before you buy!

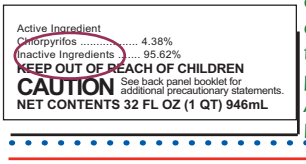

*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

Learn more about San Diego regional water quality at: www.ThinkBlueSD.org & www.ProjectCleanWater.org. For more pest information visit the University of California IPM website at: www.ipm.ucdavis.edu or the UCCE Master Gardeners at: (858) 694-2860, Mon - Fri, 9 am to 3 pm

UC IPM
University of California Cooperative Extension

ANR University of California

Master Gardener Association San Diego County

It's the water that connects us!

Snails & Slugs

HEALTHY GARDEN HEALTHY HOME

Snails and slugs rank among our most despised garden pests. These slimy mollusks emerge from hiding at night and chew holes in leaves and flowers of many succulent garden plants and fruit. Slugs and snails are similar in structure and biology, except slugs lack the snails' external spiral shell. Management requires a vigilant and integrated approach that includes eliminating moisture and hiding spots, trapping, barriers, and handpicking. Baits can be helpful, but by themselves, don't provide adequate control in gardens that contain plenty of shelter, food, and moisture.

How do you know snails and slugs are causing damage?

- You may not observe these pests at first because they feed at night and hide during the day. Go out at night or early morning to view them in action.
- Other pests can cause holes in leaves, flowers, and fruit. Look for the shiny, slimy trails slugs and snails leave behind.

What must be done to reduce snails and slugs?

- Remove daytime hiding places — ivy, weedy areas, debris, or boards.
- Regularly remove snails from shelters you cannot eliminate such as low ledges on fences, undersides of decks, meter boxes.
- Place traps in your garden and dispose of trapped snails and slugs daily.
- Reduce moist surfaces by switching to drip irrigation or sprinkling in the morning rather than later in the day.
- Consider snail-proof plants such as impatiens, geraniums, begonias, lantana, nasturtiums, and many plants with stiff leaves and highly scented foliage like sage, rosemary,and lavender.

How can I manage snails and slugs without using pesticides?

- Make sure the garden is mollusk-free before planting. Then erect a copper barrier around it. Use a 4- to 6-inch-wide band of copper, buried an inch below the soil and bent over at the top or attach it around the edge of a raised bed.
- Place your garden in the sunniest spot possible. Remove garden objects or adjacent plants or ground cover that may serve as shady shelter. Reduce moist surfaces as much as possible.
- Build a trap using a 12"x15" board raised off the ground by 1-inch runners. As the mollusks collect under the board, scrape them off and destroy them daily.

What about baits?

- Baits will not be very effective unless you also remove shelter, food, and moisture.
- Metaldehyde baits are especially poisonous to dogs and birds. Metaldehyde also loses its effectiveness rapidly in sunlight and after rain or irrigation.
- Iron phosphate baits are safe for use around dogs, children, and wildlife.
- Irrigate before applying bait and apply in evening on warm days when mollusks are active.
- Scatter bait around sprinklers and in moist and protected areas where snails and slugs travel.

*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

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It's the water that connects us!

Spiders

HEALTHY GARDEN HEALTHY HOME

Spiders are mostly beneficial because they feed on pest insects. However, many people think that all spiders are dangerous and aggressive. In California, the main spider capable of causing serious injury is the black widow, which generally remains outdoors and out of sight. Spiders seen out in the open during the day are unlikely to bite people. Focus pest management efforts on removing webs and hiding places. Pesticides are not generally recommended.

What to know about spiders:

- In California, the main spider capable of causing serious injury is the black widow:
  - The poisonous black widow spider is commonly found outdoors, in sheltered, dry, undisturbed areas such as wood piles.
  - Female black widows have shiny black bodies with a red hourglass marking on the underside.
  - Only large female black widows can injure people.

  Anyone bitten by a black widow spider should remain calm and seek medical advice, or call California's Poison Control Center at 1-800-8-POISON (1-800-876-4766).
- The brown recluse spider does not live in California.
- The jaws of most spiders are too small to bite humans.
- Some other spiders bite when trapped in clothing, but the reaction is usually no more severe than itching or a bee sting. See www.ipm.ucdavis.edu for more information about these spiders.

To prevent spiders from entering your house, take these steps:

- Seal home foundation cracks and other access holes.
- Inspect window and door screens for good seals that keep out spiders and the insects they prey on.
- Keep areas around home foundations free of clutter.

Manage spiders using these tips:

- Indoors, regular housecleaning provides adequate spider control.
- Vacuum up the spider and its web.
- Prevent clutter buildup that can provide hiding places.
- Remove spider webs from the exterior of the house with a broom or high pressure hose.
- Indoors, squash spiders or capture them in a jar and release them outdoors.

When removing spiders, don't overlook the fact that spiders eat a large number and variety of nuisance and pest insects. Spiders also have natural enemies — wasps, other spiders, birds, reptiles, and others — that sometimes keep them from becoming too numerous.

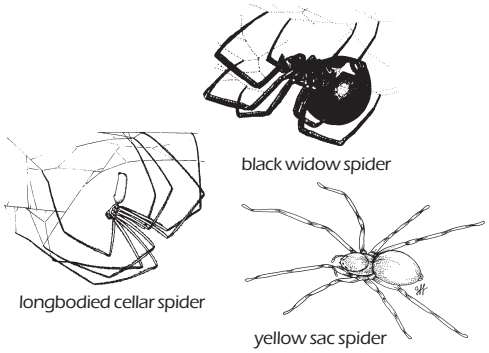

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University of California Cooperative Extension

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Termites

Because of the serious damage they can cause to wooden structures, termites are among the pests most feared by homeowners. However, swarms of flying termites do not always mean your building is infested. A careful inspection of the structure is required to confirm an infestation. People also frequently mistake swarms of flying ants for termites. If you suspect that your house is infested, call a professional. Do-it-yourself sprays cannot be relied on to reduce a damaging infestation. Common termites in California are the subterranean termites that build nests in soil, dampwood termites that nest in moist wood and soil, and drywood termites that nest above ground in dry wood. Management of each termite species is different.

Distinguish flying ants from termites:

- Check the antennae, wings and waist to confirm that pest insects are termites. (Please refer to ant vs. termite drawing on back.)

Design your building to keep termites out:

- Keep a 12-inch barrier of smooth concrete, sand, or other material between the soil surface and substructure wood beneath a building.
- Choose termite-resistant wood for fences or other structures that must contact soil.
- Remove wood piles, untreated fence posts, and buried scrap wood near structures.
- Provide adequate ventilation to substructures and keep them dry.
- Immediately repair foundation cracks.

If termites are invading your home:

- Destroy shelter tubes that subterranean termites build between soil and wood structures.
- If dampwood termite nests are accessible, remove infested wood and eliminate excess moisture.
- Drywood termites can be controlled with heat, freezing, electricity, microwaves, fumigation, or spot treatments of chemicals.
- For any infestation, contact a professional for help. Pesticides licensed only for use by a pest control operator are usually necessary to control subterranean and dampwood infestations.

Using pesticides for termite control:

- Pesticides may be injected into the soil by professional applicators through drilling or rodding. Special procedures must be followed to prevent contamination of ground or surface water.
- For soil injections, ask your applicator to use a product other than chlorpyrifos. Newer types of products such as fipronil and chloronicotinyls are safer for your health and the environment.
- Baits can be effective in some cases, but may take several months to control the problem and must be followed up with constant monitoring.

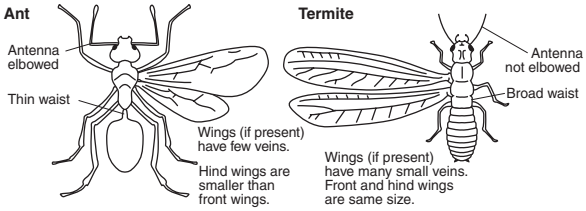

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Giant Whitefly

HEALTHY GARDEN HEALTHY HOME

Giant whiteflies can cover a beautiful plant with white fuzzy wax and sticky honeydew, turning it into an unsightly mess. First discovered in San Diego County in October 1992, this whitefly has spread northward into other areas of California. Since its introduction into San Diego, giant whitefly has spread rapidly northward along the coast. Although affected plants may be weakened, they rarely die. To manage giant whitefly, wash plants off with water and encourage natural enemies.

What plants are affected?

- Many ornamentals including hibiscus, giant bird of paradise, begonia, Xylosma.
- Fruit trees including citrus, avocado, mulberry and banana.

Look for these damage symptoms on affected plants:

- Long, white, waxy filaments produced by the whitefly give the leaf surface a bearded appearance. These hairlike strands may be mistaken for a fungal infection.
- Large amounts of sticky honeydew excreted by the whitefly as it feeds on plant sap.
- Black sooty mold growing on the honeydew.

How to recognize the whitefly:

- Adults are small (3/16") and white with light brown markings on wings and usually found in groups on undersides of leaves.
- Nymphs are yellowish, small, oval, have no legs and don't move.

To reduce problems, use an integrated program that includes:

- Removing infested leaves.
- Washing giant whiteflies off leaves with a strong stream of water.
- Planting species less susceptible to giant whitefly.
- Avoiding insecticides that injure natural enemies, such as lacewings, lady beetles, syrphid flies, and parasitic wasps.

What about insecticides?

- **Don't use insecticides if beneficial insects, including parasites and predators, are present in the area.**
- **To confirm the presence of parasitic wasps, use a magnifying glass to look for parasite exit holes on giant whitefly nymphs or darkened nymphs as indicated in drawings below.**
- **If you do choose to use an insecticide, select least toxic products such as insecticidal soaps or oils. Remember to follow label directions and spray the undersides of the leaves where whitefly colonies are found.**

(adult) 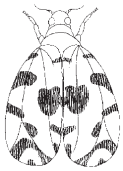 (actual size) I

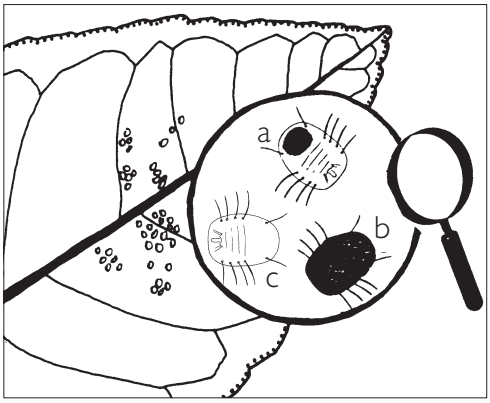

Examine whitefly colonies for grayish-black or yellow nymphs with exit holes (a), or darkened nymphs (b), or healthy nymphs (c).

Use NON-CHEMICAL methods & LEAST TOXIC pesticides. WHY? Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes, and oceans.

Learn more about San Diego regional water quality at www.ThinkBlueSD.org & www.ProjectCleanWater.org.
For more pest information, visit the University of California IPM Web site at **www.ipm.ucdavis.edu**. or contact the UCCE Master Gardeners at (858) 694-2860, Mon-Fri, 9 am to 3 pm.

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ATTACHMENT 5.4

LA MESA FOCUS NEWSLETTERS

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • August 2008

MOVIE NIGHT UNDER THE STARLIGHT

FREE MOVIE
FOR THE ENTIRE FAMILY

FRIDAY AUGUST 15 RATED PG

"SHREK the Third"

STARRING VOICES OF:
Mike Myers, Eddie Murphy,
Cameron Diaz and Antonio Banderas

LOCATION:
La Mesita Park
8855 Dallas St., La Mesa

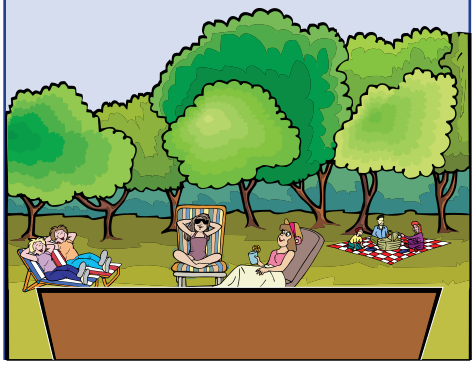

NEW LA MESA LIBRARY OPENS IN JUNE

Officials cut the ribbon for the new La Mesa Library on July 18.

The new La Mesa Branch of the San Diego County Library, located at 8074 Allison Avenue, opened for business on Monday, June 16. Already the new facility appears to be very popular with the community. The Library was built in order to make room for the new Proposition D locally funded Police Station that will start construction in early fall on the old Library and former Helix Water District sites. The new Library is much larger than the former facility and provides many improvements. A grand opening and open house was held to recognize all the individual efforts by the City and the County to complete this new facility and to invite everyone in the community to visit their new Library. Councilmembers acknowledged the success of this project at a ribbon-cutting ceremony on July 18. A community open house was held to celebrate the opening on Saturday, July 19.

Jose Aponte, Library Director for the County of San Diego, commented on visiting the new facility that "It is open, airy, and inviting. The new La Mesa Library will delight library and book lovers alike. Working together with the City of La Mesa, the County Library is proud to deliver seven days a week of quality services in our new Library home." Numbers from the first few weeks since the opening seem to support this. Staff at the new branch reported that the daily circulation of materials averaged 1,370 items per day, up 43% from last year's average. Total attendance at the new Library was nearly 13,000 visitors for the month of June, which represents an almost 30% increase over the annual average daily attendance.

Continued on page 13

COOL SPOTS

IN & AROUND LA MESA

La Mesa residents who may be at risk from extreme heat can seek relief during the hot summer months at several community locations. You can find a list of Cool Zones in and around La Mesa on the City's website.

The County of San Diego establishes this network of Cool Zones at public and community facilities across the County. Most of these sites are open to the public during regular weekday hours. Cool Zone sites, mostly located in the hottest areas of the County, help older adults and others keep cool and save energy costs. For a list of Cool Zones throughout the County and tips to stay cool visit the San Diego Aging and Independence Services website at www.ais-sd.org or call 1.800.510.2020.

MULTICULTURAL FESTIVAL to be held in January 2009

The Annual Multicultural Festival will be held once again in January. Sponsored by the Human Relations Advisory Commission, the Festival will feature music and entertainment in celebration of the rich cultural heritage of our great nation. The event will take place at the La Mesa Community Center, 4975 Memorial Drive. There is no admission charge and refreshments will be served following the program. Specific information about the date and time will be posted on the City's website in December.

LA MESA ENVIRONMENTAL AWARENESS FESTIVAL

September 13

10:00 am – 2:00 pm — Harry Griffen Park
9550 Milden Street, La Mesa

- Activities and games for all ages!
- Information and resources on water conservation, energy efficiency, recycling, composting, solar cooking, storm drain runoff, master gardeners, and more.
- Recycling drop off: metal, paper, electronics, glass, all plastics (1-7), plastic bags, and clean formed Styrofoam.
- Free shade tree program.
- Energy saving light bulb rebate program.

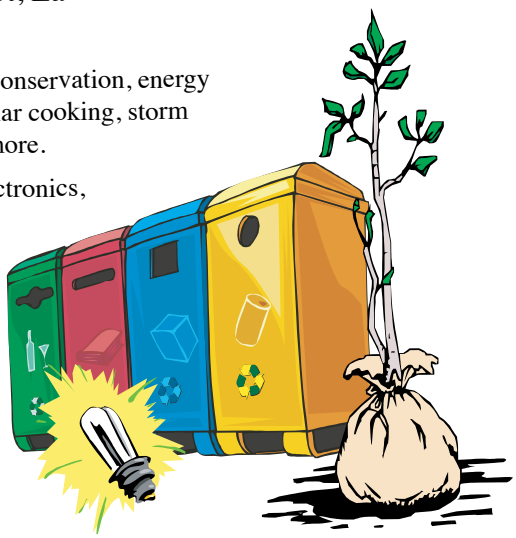

For more details visit the City's website at www.cityoflamesa.com or contact Greg Humora at 619.667.1146.

La Mesa COMMUNITY SERVICES

Fall Recreation and Enrichment Programs

Falling into fitness is as easy as family members enrolling in classes offered through La Mesa Community Services.

ENROLLMENT FOR FALL CLASSES BEGINS AUGUST 1.

Browse our weekly youth class selections or our class offerings for adults.

Convenient enrollment is available online or you can access a printable version of our enrollment form to mail in.

Classes fill quickly. DON'T DELAY!

Kids Care Fest

7TH ANNUAL Kids Care Fest

Saturday, September 20
9:00 am – 2:00 pm

Briercrest Park and Grossmont Healthcare District
9001 Wakarusa Street, La Mesa

A FREE event for kids and parents

- health information
- health screenings
- fun zone
- art activities
- children's fingerprinting
- meet fire & police

Event is presented in partnership with the City of La Mesa, Grossmont Healthcare District, and La Mesa Park & Recreation Foundation

For additional details go to
www.cityoflamesa.com
www.grossmonthealthcare.org
or call 619.825.5050

communities for healthy kids

A Program of the Institute for Local Government

ENROLLMENT OPPORTUNITY

Health plan representatives will be available at Kids Care Fest to answer your questions and assist with the application process for children eligible for California Healthy Families and Medi-Cal for Families. To determine if you are eligible call 1.800.880.5305.

Avoid long waits at the event and make an appointment through the Community Services office 619.667.1300.

If you wish to enroll at the event you will need to bring the following items:

- Proof of income (check, pay stub, or tax return) dated within the last 45 days for each person in the home with income
- Proof of California residency (utility bill, rent receipt, CA driver's license or ID card)
- Birth certificate or proof of immigration status for each child
- Social Security Number for each child
- Documentation of child support or alimony (paid or received), Social Security income, or disability payments if you have any

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91941

7:00 am to dark Mon – Fri
6:30 am to dark Weekends
Adults $10 for 9 holes $14 for 18 holes
Students $6 for 9 holes $10 for 18 holes
(includes college with valid student ID)

Clinics, lessons, and special programs are available.

For details go to
www.sunvalleygolfclub.com
or call 619.466.6102

Do you have questions about your medications?
BRING THEM TO US!

Meet the Pharmacist & Senior Health Fair

Thursday, Sept. 18, 2008
9:00 am – 12:00 pm

John A. Davis
Family YMCA
8881 Dallas St.
La Mesa 91942

Local pharmacists will be available to review your prescriptions, over-the-counter medications, vitamins, and supplements. Also enjoy a continental breakfast, health presentations, exhibitor fair, opportunity drawings, health screenings, and preview exercise classes.

For reservations call after August 25th
1.877.926.8330

24TH ANNUAL CALIFORNIA COASTAL CLEANUP DAY

Mark your calendars for Saturday, September 20 to participate in the 24th Annual California Coastal Cleanup Day here in La Mesa. The City will be hosting two cleanup sites; Alvarado Channel off Fletcher Parkway and University Channel off University Avenue. Refreshments, snacks, trash bags, and prizes will be provided at the cleanup site. The cleanup event is tentatively scheduled to start at 9:00 am and end at 12:00 pm.

The California Coastal Cleanup Day, which is coordinated by I Love A Clean San Diego and San Diego Coastkeeper, is the largest volunteer event in San Diego County and one of the largest single environmental volunteer events in the state. Last year, in San Diego alone, 6,212 volunteers covered 165 miles of coastline and open space, removing close to 100,000 pounds of debris. Throughout the state, an estimated 61,000 volunteers removed nearly 1 million pounds of debris.

Please come join us to help keep our environment trash free. Should you have any questions on how to get involved, feel free to contact Malik Tamimi at the City of La Mesa 619.667.1340 and or signup for the event at www.cleansd.org .

CITY OF LA MESA HOSTS A CASTING CALL FOR VOLUNTEER DRIVERS!

Become a part of La Mesa's community production, now in its first year's run…

"Rides4Neighbors"

Katrina Lee, Rides4Neighbors Transportation Specialist, is seen here with Volunteer Drivers Larry Shaw and Virginia Kellogg at a recent luncheon honoring City of La Mesa Volunteers.

Rides4Neighbors is a volunteer-based transportation assistance program for La Mesa's older adult residents and adult residents with disabilities who are unable to use regular public transit. Rides are provided by screened, trained volunteers, who use their own vehicles to assist transit dependent La Mesa neighbors in need of a lift.

A rider testimonial provides only a glimpse of how much this volunteer based transportation program has touched those we serve: "Thank you so very much for all your services – and patience – for the enrichment this valuable program has provided to my well being."
– A grateful rider

The City of La Mesa receives funding from a federal New Freedom grant award through the San Diego Association of Governments (SANDAG) to cover most costs for developing and providing this new service. The La Mesa Adult Enrichment Center takes ride requests, explains ridership rules and the suggested donation system and matches ride requests with volunteers.

Volunteer drivers are reimbursed for mileage and receive secondary liability insurance. We currently have 16 volunteer drivers and are continuing to recruit for more. As a volunteer, you decide your availability and choose the rides you wish to provide. There is no minimum time commitment or number of rides required to be a volunteer. We can either call you when a ride is needed, or notify you via an e-mail blast.

As a volunteer, you will be part of a rewarding and meaningful civic program. Community surveys consistently find that what residents like best about La Mesa is the neighborly, small town feel. Rides4Neighbors helps build that spirit of community and old-fashioned neighborliness. So join us by opening your heart and car door to a rider in need of a lift!

Questions? For more information, call Katrina Lee, Transportation Specialist at 619-464-0109, or go online to www.cityoflamesa.com to download a volunteer application form.

THE LA MESA COMMISSION ON AGING

Presents: **SUMMER COMMUNITY FORUMS**

Thursday, August 14 9:00 AM

"Coffee with George Chamberlin"

Tuesday, September 23 1:30 PM

"La Mesa Candidates' Forum"

Moderator: League of Women Voters

Location: La Mesa Adult Enrichment Center, 8450 La Mesa Blvd

RSVPs required to ensure adequate seating 464-0505

VOLUNTEERS NEEDED

The City of La Mesa's Citywide Volunteer Program has volunteer positions and special assignments available throughout the year in various departments and for special projects. Volunteers play an important role in the enhancement and expansion of services to City residents. They not only provide a valuable service for the community, but also enjoy flexible scheduling for most assignments, develop new skills, meet new friends, and are officially recognized by the City of La Mesa at the Annual Volunteer Appreciation Luncheon.

- The Purchasing Division of the Finance Department currently has an opening for a Volunteer Clerical Aide for the summer. This position assists with data entry and administrative assignments. The position requires a volunteer who is proficient in Microsoft Word and Excel. Preference is for someone who can volunteer on a regular basis through the summer, at least 4 hours per week. The schedule is flexible—Monday through Friday. Call 619.464.0505 for additional information and an application.

- Senior adult volunteers are needed for the KAST (Kids and Seniors Together) Program. Volunteers work with elementary school children from 2:30 to 4:30 pm during the school year. The program is designed to provide an opportunity for senior adults to share their talents, skills or special interests with students who will benefit from individualized one on one mentoring. The La Mesa Dale School serves as the program site. Call 619.667.1333 for additional program information.

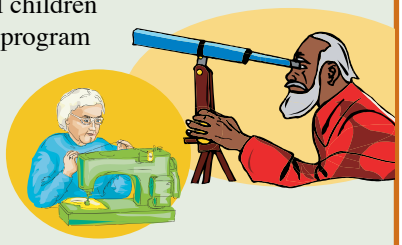

AND THAT'S NOT ALL! If you have a special skill to share or an area of interest where you would like to help the City government, please let us know. Download a volunteer application from www.cityoflamesa.com or call the Adult Enrichment Center at 619.464.0505.

REMINDER ON UPCOMING DIGITAL TV TRANSITION

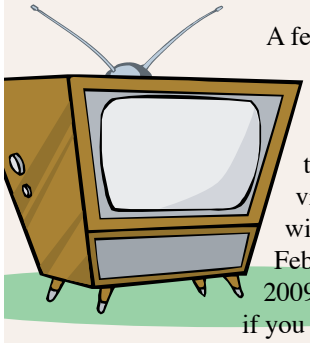

A federally mandated transition from analog to digital television (DTV) will occur on February 17, 2009. This means if you currently use a traditional antenna, either on the roof or inside (often referred to as rabbit ears), you will not continue to receive free television after the conversion date without taking one of the three following actions:

DTV CONVERTER BOXES. Owners of traditional analog TVs without cable service will need to purchase a DTV converter box. The cost is estimated to be $50-$70. The National Telecommunications and Information Administration (NTIA) issues coupons valued at $40 for converter boxes (limit 2 per household). For more information on this coupon program visit www.ntia.doc.gov/dtvcoupon or call 1.888.388.2009.

DIGITAL TV SETS. TVs with a built-in digital tuner will be able to receive the broadcast digital signals and you can still get free programming without paying a monthly fee.

PAID SERVICE. Current subscribers to a cable, satellite, or telephone company service provider will continue to be able to use their existing TV to receive the stations carried by the service provider with no additional changes necessary to their TVs.

You can find more information about the transition to digital television from the National Association of Broadcasters at www.dtvanswers.com.

TEAMING UP TO BRING YOU *Intergenerational Games!*

The City of La Mesa announces the 3rd Annual Intergenerational Games in La Mesa! The event takes place Friday, October 10th from 9 AM – 12:30 PM at the La Mesa Middle School athletic fields. Intergenerational Games teams active adults age 55+ with local students in grades four through six for a fun-filled half-day event completing a circuit of 8 game and 2 knowledge challenges. The focus is on non-competitive fun, physical activity, wellness and healthy lifestyle. Everyone's a winner!

Active adults age 55+ and La Mesa students in grades 4 through 6 are encouraged to sign up for this fun FREE event! For information and registration call the La Mesa Community Center at 667-1300 or the Adult Enrichment Center at 464-0505.

Partners include: City Of La Mesa, La Mesa Commission on Aging, County of San Diego Aging & Independence Services, La Mesa-Spring Valley School District, La Mesa 55+ Senior Softball League, and many other community partners and business sponsors. For sponsorship opportunities call Judy Stern at 619.667.1490.

SKATE PARK TO REOPEN

The La Mesa Skate Park in La Mesita Park, 8855 Dallas Street, La Mesa, has undergone some recent modifications and is scheduled to open late August as an unsupervised skate park. In January 2008 the La Mesa City Council adopted Municipal Code Chapter 10.21, Sections 10.21.011 through 10.21.019 that establishes the following rules of conduct for skate parks:

RULES OF CONDUCT

- Skateboarding and in-line skating are hazardous activities
- Skate at your own risk. Skateboards and in-line skates only
- Skate park hours are dawn to dusk
- No skateboarding or in-line skating on wet surfaces
- Helmets, kneepads, and elbow pads required in the designated skate park area
- Failure to wear helmets, kneepads, and elbow pads in the designated skate park area will subject persons to citation per Section 10.21.010(e) of the La Mesa Municipal Code
- Skating on park curbs, parking lot, and entrance sidewalk is prohibited
- No graffiti or tagging
- No glass bottles
- Dispose of trash in trash receptacles
- No smoking, alcohol, or drug use
- No intimidation, hazing, or fighting
- No spectators are permitted in the designated skate park area
- No unauthorized pieces of equipment, obstacles, or apparatus may be brought into the designated skate park area
- No food or drink allowed in the designated skate park area
- No special events or contests are allowed in the designated skate park area unless authorized by the City of La Mesa
- The City of La Mesa reserves the right to eject anyone from the skate park at any time for any reason

PARK APPRECIATION DAY

Saturday, Oct 25 • 8:00 am to 12 noon

Individuals and families are invited to pick a La Mesa park on Saturday morning, Oct 25, sign up with an Adopt-a-Park volunteer (visible in a Park Appreciation Day t-shirt) and help spruce up your favorite neighborhood park. General clean up includes picking up trash, light raking, trimming, and weeding.

If you have a large group, we can help you find a project that all your members can do! Give us a call at 619.667.1300.

Bring your own gloves, rakes, or trowels. Free t-shirts for all participants. Signed waivers are required – download from www.cityoflamesa.com and bring with you to the park. Parents must accompany children under age 18 unless with a supervised group.

La Mesa's parks are our City's jewels. Help make them shine!

MISSION ESTONIA

THE SWIM ACROSS THE GULF OF FINLAND

On August 8 La Mesa Community Services Recreation Supervisor Becky Jackman plans to accomplish a swim that by all accounts has never been accomplished before. She will be swimming 35 – 40 miles across the Gulf of Finland from Tallinn, Estonia to Helsinki, Finland, in an estimated time of over 20 hours in the water.

Becky is a 23-year employee of the City. She began her employment as a part-time lifeguard/swim instructor and advanced to her current position as Recreation Supervisor of Aquatics and Sports. An avid swimmer since early childhood, she started swimming competitively at age 10 and continued swimming in high school where she competed on the varsity swim team at Helix High School for four years. In 1990 Becky began competing with an adult "Masters" swim team and began long distance open water swimming in 1995. Her previous distance swims include the Maui Channel in 2000, Catalina Channel in 2001, around Manhattan Island in 2002, and across the English Channel in 2003.

Becky has dedicated her 2008 swim to raise funds for the Burn Institute of San Diego. T-shirts commemorating Becky's swim are for sale. For more information, to buy a shirt, or to donate to the Burn Institute in Becky's name, please call Jeff Beeler at 619.206.6414.

GOOD OUTDOOR LA MESA FUN

Free Youth Golf Clinic
La Mesa Residents Only
Sat., Sept. 20 – 3:00 p.m.

Complete this coupon and return to:
Sun Valley Golf Club
5080 Memorial Dr., La Mesa CA 91941

Name: _____

Address: _____

Phone: _____

Space is limited. Register now!

ADULT SOFTBALL

(Ages 18 and up)

New leagues forming later this year. Watch for more details in the November issue of the La Mesa FOCUS or leave your contact information on the Sports Information Line 619.667.1319.

WATER POLO

Fall Youth Program

If you like swimming and team sports come learn water polo! Classes will run during the months of September and October.

Look for detailed information on the City's website or call the Municipal Pool information line at 619.667.1494.

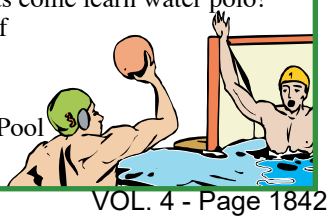

LA MESA FIRE DEPARTMENT URGES RESIDENTS TO *"Prevent Home Fires"*

A pot holder too close to a lit burner or a space heater left on overnight could be all it takes to start a home fire. In fact, cooking and heating are among the leading causes of home fires in the United States, according to the nonprofit National Fire Protection Association (NFPA).

The La Mesa Fire Department is teaming up with NFPA from October 5-11 to urge La Mesa residents to "Prevent Home Fires" during Fire Prevention Week. This year's campaign focuses on preventing all the leading causes of home fires – cooking, heating and electrical equipment, and smoking materials. Additionally, fire safety educators will be teaching local residents how to plan and practice escape from a home in case a fire occurs.

According to the latest research from NFPA, more than 2,500 people died in home fires in the United States in 2006, and 12,500 were injured. Fire departments responded to 396,000 home fires, which accounted for 80% of civilian deaths and 76% of injuries that year.

"While the number of home fires is daunting, the good news is that many are easily preventable when residents take simple steps to increase their safety from fire," said La Mesa Fire Marshal Greg McAlpine. "Whether it's smoking outside the home, keeping space heaters at least three feet away from anything that can burn, or staying in the kitchen when you are using the stovetop, there are easy things you can do to keep your home and family safe from fire."

Do you know how to keep your home safe from fire hazards? Reviewing the following information and taking action can help you "Prevent Home Fires" during Fire Prevention Week and year-round.

- **Cooking:** Stay in the kitchen when you are frying, grilling, or broiling food. If you leave the kitchen for even a short period of time, turn off the stove.
- **Heating:** Keep all things that can burn, such as paper, bedding or furniture, at least 3 feet away from heating equipment.
- **Electrical:** Replace cracked and damaged electrical cords; use extension cords for temporary wiring only. Consider having additional circuits or receptacles added by a qualified electrician.
- **Smoking:** If you smoke, smoke outside; wherever you smoke, use deep, sturdy ashtrays.

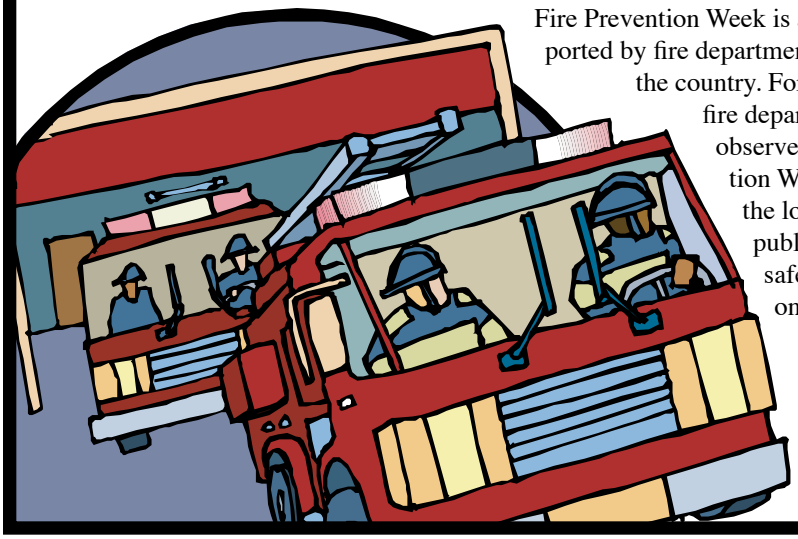

Fire Prevention Week is actively supported by fire departments across the country. For 85 years fire departments have observed Fire Prevention Week, making it the longest running public health and safety observance on record.

Crime Prevention Update from the La Mesa Police Department

The La Mesa Police Department has been hard at work on its crime prevention efforts. Since the beginning of 2008, several projects have been completed. Some of the highlights include:

- **Crime Prevention DVD** for residents- The La Mesa Police Department has created an informative video to instruct residents on common sense tactics to keep yourself and your property safe. The video can be viewed by topic segments on the City's website or you can pick up a copy of the complete DVD at the La Mesa Police Station, 8181 Allison Avenue.
- **Citizens Academy-** The La Mesa Police Department's Citizens Academy was a huge success! The Academy was held every Thursday evening from May 29th to July 3rd. The participants learned about the Traffic Unit, the Communications Center, police car features, gangs, the Investigations Unit, evidence collection, the Special Response Team (SWAT), defensive tactics, and the Peer Support Team. At the end of the Academy, the citizens participated in a mock trial. Another Citizens Academy will be held in 2009. Keep your eyes open for more information on this exciting program!
- **Neighborhood Watch-** Our Neighborhood Watch program has grown tremendously over the last few months. The City of La Mesa now has over 75 active Neighborhood Watch groups. A meeting of the Neighborhood Watch captains was held in May to brainstorm new and exciting ideas for the program. National Night Out will be held August 5th. Neighborhoods are encouraged to conduct outdoor activities that evening in order to send the message to criminals that the residents of La Mesa are watching and will not tolerate illegal activity. Simultaneously, an event will be held at Grossmont Center to promote the Neighborhood Watch Program. Target will be providing giveaways and activities for the whole family!

For information on these and other upcoming projects, please call the Crime Prevention Unit at .619.667.1445.

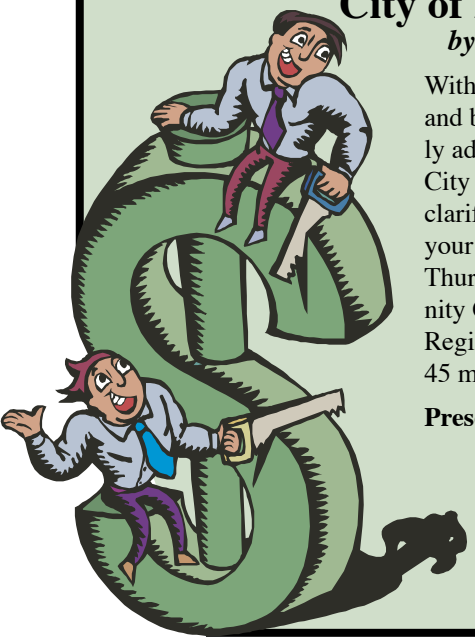

City of La Mesa Offers $25 Rebate Voucher for an Inspection Fee

by Attending Free Code Update Workshop for Local Industrial & Commercial Businesses

Within the past year, new environmental, fire and building codes have changed due to recently adopted state and federal regulations. The City of La Mesa is providing an opportunity to clarify how these new requirements will affect your business. This workshop will be held on Thursday, August 28 at the La Mesa Community Center (4975 Memorial Drive, La Mesa). Registration is at 8:00 am and followed by three 45 minute presentations.

Presentation Topics

1. City of La Mesa Storm Water Program Update
2. Fire & Building Department Update
3. Fats Oil & Grease (FOG) Program (Restaurants)

To help your business meet these new requirements, the City will provide information on what your business can expect during annual storm water, building, fire, and Fats Oil & Grease (FOG) program inspections. Information on new inspection fees for the storm water and FOG programs will also be presented. The City will offer a $25 rebate voucher off your next storm water, fire, and FOG inspection fee for attending this workshop.

This workshop is being endorsed by the East County Chamber of Commerce, La Mesa Chamber of Commerce, and the La Mesa Village Merchants Association. Should you have any questions on the workshop, please feel free to contact Malik Tamimi at .619.667.1340.

LA MESA POLICE OFFICERS RECEIVE COMMENDATIONS

Two La Mesa Police Detectives, Detectives Shawn Wray and Scott Hildebrand, were recently honored for their heroic efforts to save a man's life during the Firestorm of 2007. The San Diego County Burn Institute recognized their efforts, as well as the police department and the F.B.I. Law Enforcement Bulletin, an international magazine published by the Federal Bureau of Investigation.

Both detectives had volunteered to participate in the mutual aid response to a rural part of the county during the firestorm. The detectives entered an area burning out of control in an attempt to locate and rescue an injured man. They disregarded their own safety, risking their lives to save another. The injured man was found and removed from the burn area as the fire was closing in on them. It was later learned that two persons had died in their homes in the same area. A supervisor recognized the detectives for saving the injured man's life.

BEWARE OF GAS SIPHONING

With the rising price of gas, an inevitable side effect is the theft of gasoline from cars, trucks, and recreational vehicles. It is imperative to protect your valuable investment in your vehicle. Be aware of the location you park your car. Always park in a well-lit area where other people can observe your vehicle. When at home, park in your garage if it is available or park as close to your home as possible. Also, consider a secure gas cap. Your original gas cap can be replaced with a locking gas cap found at any auto supply store.

POLICE DEPARTMENT OBTAINS NEW SPEED TRAILER

The La Mesa Police Department recently obtained a brand new speed trailer thanks to Officer Jeff Raybould of the Traffic Division. Officer Raybould submitted a grant request to the Office of Traffic Safety in 2007 for the purchase of new equipment. As a result of this request, the La Mesa Police Department was awarded a grant in the amount of $115,605.00.

One of the items purchased with the grant money is a Kustom Signal Smart Model 1 speed trailer with a solar panel. Other grant-funded purchases are pending. The speed trailer will be used to educate the public, help slow traffic on roadways, and monitor speed complaints from citizens. The speed trailer is capable of tracking vehicles and logging their speed as they approach the trailer and as they pass by the trailer. The on board computer allows police to recall this information so they can utilize resources in the most efficient manner.

The La Mesa Police Department's Traffic Division can be reached at 619.667.1444 or online at www.cityoflamesa.com.

GRANT UPGRADES AGING SEWER SYSTEM

The City of La Mesa secured a $14.5 million low-interest loan from the State Water Resources Control Board in 2006. The loan is being used to rehabilitate and upgrade the City's aging sewer system in older and hillside sections of La Mesa.

The project has been divided into four phases. Phase 2 construction is substantially complete. Phase 3 is scheduled to begin in the summer of 2008 with Phase 4 following in 2009. The combined phases represent the largest infrastructure project ever undertaken by the City.

During construction, residents may be inconvenienced by restricted traffic flows and construction noise in areas close to the construction zones. The City apologizes in advance for any inconvenience. However, this project will enhance the health and safety of La Mesa residents for many years.

Phase 3 construction will take place on portions of the following streets: Pasadena Ave., Orchard Ave., Lemon Ave., Finley Ave., 4th Street, Sunrise Ave., and Hillcrest Ave, as well as in easements between Avon Dr. and Summit Dr., Normal Ave. and Pasadena Ave, and off of Chevy Chase Drive.

The accompanying diagram shows the locations of the proposed work. Residents in each neighborhood affected by the work will be notified of the start dates 48 hours prior to the start of construction.

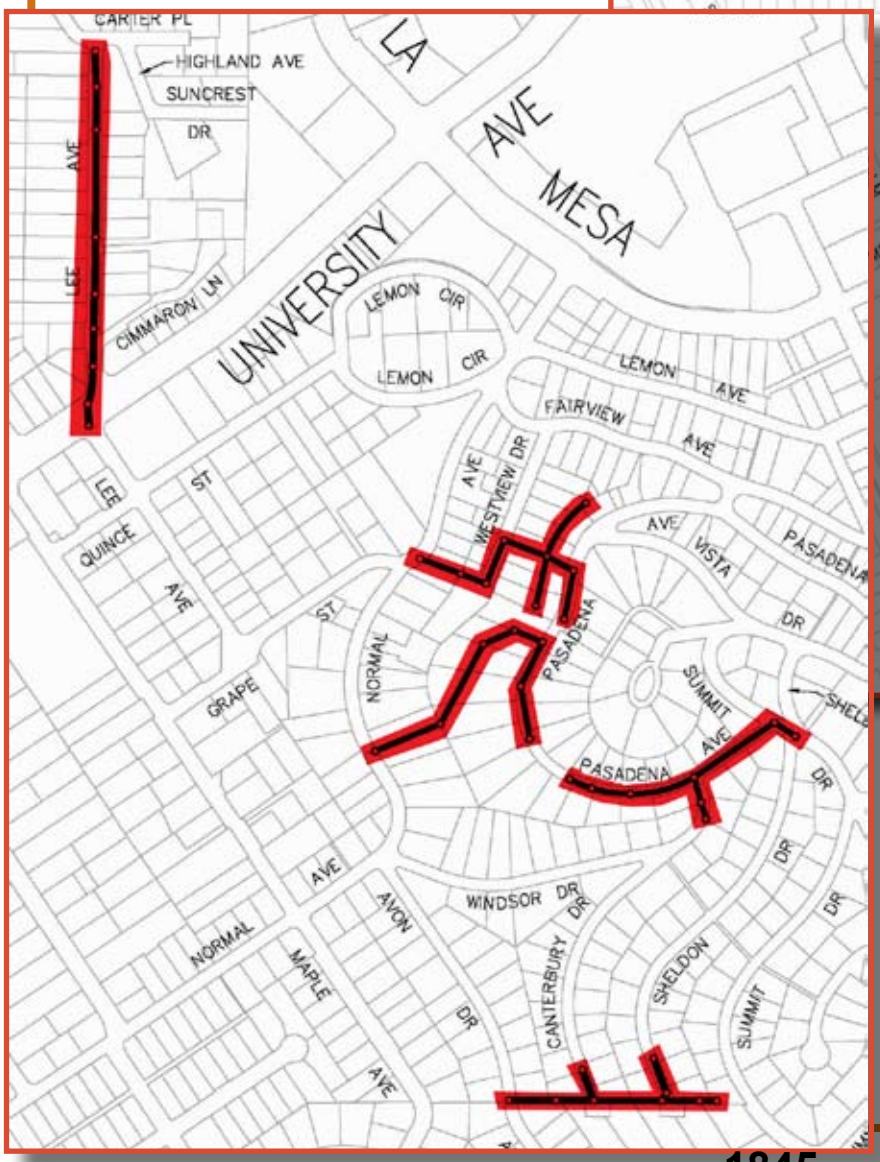

Highlighted streets show locations of sewer upgrades

a's west end, the City has scheduled
o be replaced in and around Normal

dents may be inconvenienced by
d construction noise in areas close
. The City apologizes in advance
However, this project will enhance
Mesa residents for many years.

Normal Avenue Sewer Group Improvements will take place on the streets as shown in the diagram. Residents in each neighborhood affected by the work will be notified of the start dates 48 hours prior to the start of construction.

Following the replacement of the sewer pipes, the utilities will be undergrounded on Normal Avenue from Lowell Street to Windsor Drive. After the utility undergrounding the street will be resurfaced.

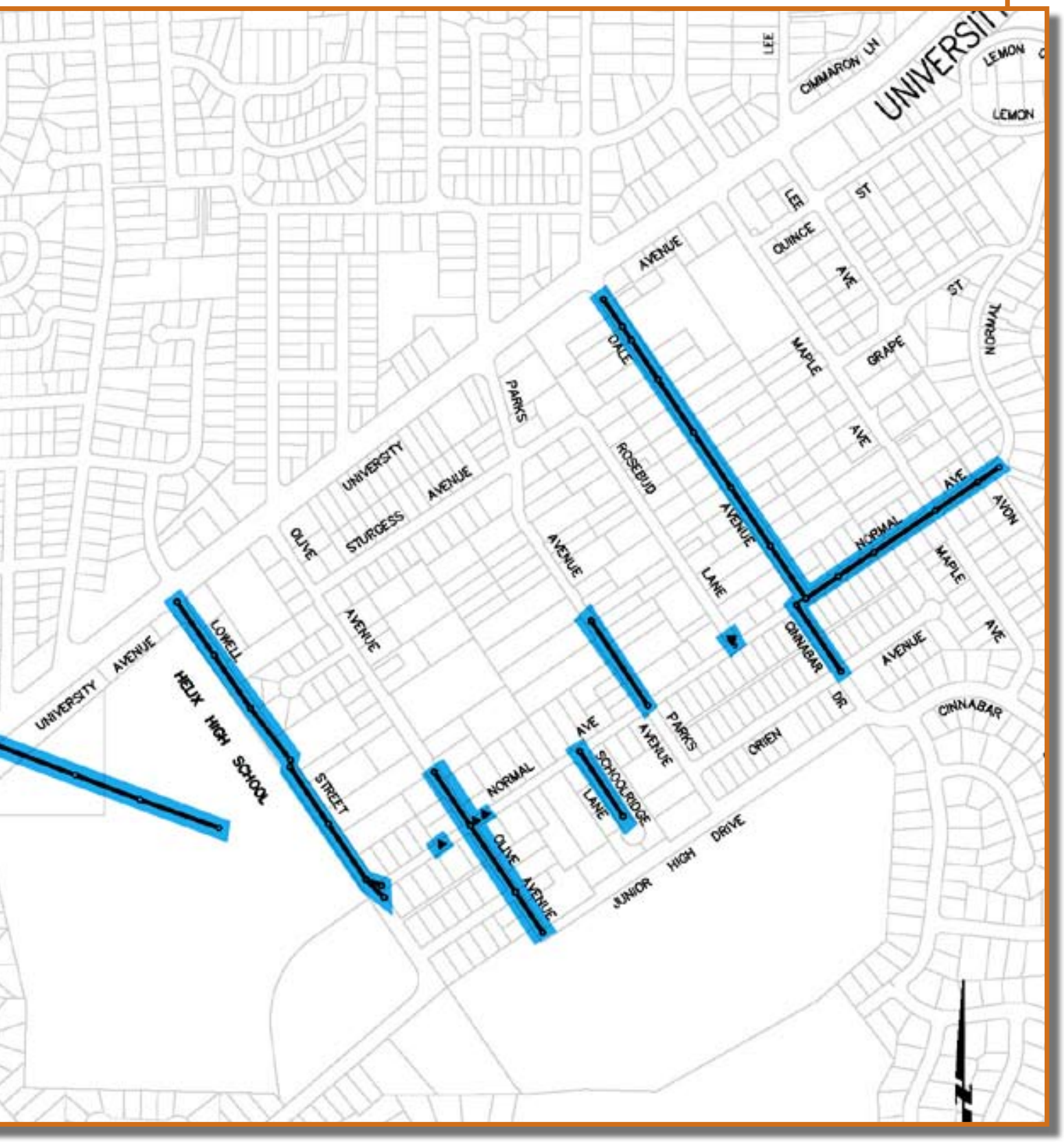

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MEDICAL SHARPS BANNED FROM LANDFILLS

On September 1, 2008 a statewide ban will take effect under California Health and Safety Code Section 118286, prohibiting the disposal of sharps in California landfills. Sharps are defined as, any device having acute rigid corners, edges, or protuberances capable of cutting or piercing, including, but not limited to, all of the following:

- Hypodermic needles, hypodermic needles with syringes, blades, needles with attached tubing, syringes contaminated with biohazardous waste, acupuncture needles, and root canal files.
- Broken glass items, such as Pasteur pipettes and blood vials contaminated with biohazardous waste.
- Any item capable of cutting or piercing that is contaminated with trauma scene waste.

What to do? There are several possible options for legally and safely disposing of sharps:

Pharmacies and Hospitals – Contact the pharmacy or hospital where you obtained your sharps to see if they have a take-back program to assist you with safe disposal.

Mail-Back Services – These services are available which can provide you with postal-approved packaging allowing you to return sharps to the point of manufacture for disposal. You can find these services through the California Integrated Waste Management Board website at www.ciwmb.ca.gov/HHW/sharps.

La Mesa's Household Hazardous Waste Program – City of La Mesa residents may now dispose of sharps, along with other banned items and household hazardous waste (HHW), such as batteries, fluorescent bulbs, household chemicals, and electronics through the City's HHW drop-off program. Call EDCO Disposal Corporation at 619.287.5696 x4270 to schedule an appointment for the next event. See the HHW article posted in this issue of FOCUS for more info.

DO THE RIGHT THING!

Do you have batteries, fluorescent lights, chemicals, electronics, or anything else that you know you can't just throw away, but don't know what to do with them? These items are considered household hazardous waste (HHW) and are not allowed to be placed in the trash because of their destructive effect on the environment.

DISPOSAL IS FREE! If you reside within the City limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program.

2008 HHW DROP-OFF SCHEDULE:

August 16 • September 27
November 22

Call EDCO Disposal Corporation at 619.287.5696 x4270 to make an appointment or more information.

While supplies last, participants may bring a mercury thermometer and exchange it for a FREE non-hazardous thermometer. Please ask for your new thermometer upon arriving.

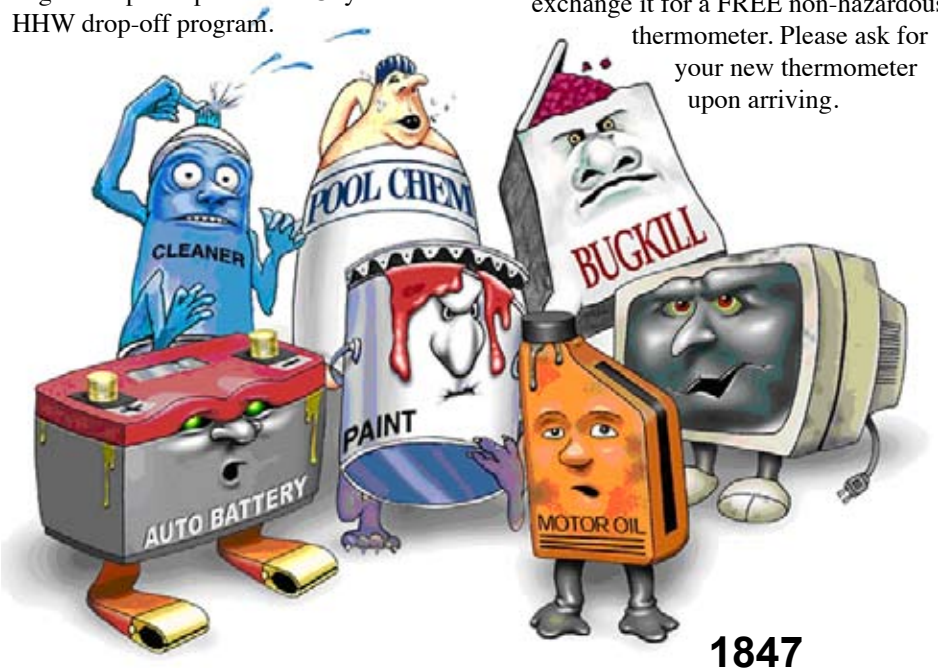

EXAMPLES OF HHW ARE:

GENERAL: Batteries, fluorescent lights, latex & oil based paints, solvents, cleaners, pesticides & garden products, pool products, propane, medical needles (sharps), and any items labeled flammable, hazardous, toxic, or corrosive.

ELECTRONICS: TVs, computer monitors and hardware, telephones, VCRs, and radios.

AUTOMOTIVE: Used oil & filters, batteries, and antifreeze.

For more information on HHW or other disposal or recycling options, log on to www.cityoflamesa.com

Continued from page 1 – ## *New Library Open*

The Library was constructed along with the new La Mesa Post Office branch as part of the City's Civic Center Master Plan. Although these projects represent a significant investment, they were initiated as a means to maximize the City's property assets. The library construction was completed to make way for the new Proposition D funded Police Station without having to purchase additional land or absorb significant relocation costs for Police operations if the new facility had been constructed on the station's existing site. Additionally, the U. S. Postal Service is an existing tenant of the City and has agreed, as part of a long-term lease agreement, to move into the new facility in the Civic Center area. Rent from the Post Office will offset expenditures for its share of the new building. The Post Office is working on final plans for its space and is expected to relocate to the new building in the very near future.

RECYCLING NOW AVAILABLE AT CITY PARKS

Recycling in La Mesa just keeps getting easier! In addition to the recycling containers that now serve both sides of La Mesa Boulevard in the village, you can now find recycling in all City parks. Thanks to funding from the California Department of Conservation's Division of Recycling we've added over 40 recycling containers throughout the City.

These sturdy blue containers have covered lids and clearly visible signs and are located near existing unmarked trash cans. All materials collected are part of the City's commingled recycling program. This means that all recyclable materials go into one container- aluminum, plastic, glass, paper, and cardboard. We encourage all users of the parks to take advantage of this opportunity to take care of the environment!

If you are interested in starting a recycling program at your school, office, store, or commercial or residential property, the City and EDCO Disposal Corporation can help! All it takes is a few materials and a little determination. It's a little effort for a great reward by helping the environment and it can pay for itself if you take what you collect to a recycling buyback center. Visit our website at www.cityoflamesa.com or call EDCO at 619.287.7555 for more info.

When you visit our parks use the blue recycling cans to dispose of beverage containers. Help keep La Mesa green!

LA MESA HISTORIC HOMES TOUR

On Saturday, November 8 the La Mesa Historical Society (LMHS) will present the 3rd Annual Historic Home Tour. The event is co-sponsored by the Historic Preservation Commission of the City of La Mesa. The tour will feature homes that helped make La Mesa what it was and is today.

The tour, which highlights five La Mesa historic homes dating from 1908, will run 10:00 am to 3:00 pm. All five properties are carried in the City's Inventory of Historic Resources. Each will be decorated in a fall motif and have displays of La Mesa history and of the buildings as they were in La Mesa's early days. Visitors can watch local artists at work in the yards.

Free shuttle buses will operate from the Tour Center at the corner of Palm and Lemon Avenues in the downtown Village of La Mesa since there is limited parking and vehicle access for most of the homes. Abundant parking is available adjacent to the Tour Center and in City lots.

An art show/art mart, co-sponsored by La Mesa's Foothills Art Association, will display original art by local artists with works available for sale. The Tour Center will also feature historical displays, antique automobiles and sources of information for other special events in East County.

Tickets purchased the day of the event will be $15 for LMHS members and $18 for non-members. Pre-sale tickets at $12 for LMHS members and $15 non-members are available by telephoning 619.465.1883.

Lyster-Garfield House

Charles Samson House

Washburne House

Frew House

Winslow House

100TH BIRTHDAY CELEBRATION

The Reverend Henry A. Mc Kinney's House has been the official location of the La Mesa Historical Society since 1975. This year the house is turning 100 years old. To celebrate this passage of time, 1908-2008, the Historical Society is throwing a Birthday Party. The celebration is being combined with an old fashioned Quilt Show. The house and backyard will be decorated with many special quilts from the past.

Join the La Mesa Historical Society for an afternoon of fun, refreshments, opportunity drawing, and a Quilt Show. If you have yet to visit the house, this event is the perfect opportunity.

Saturday, Sept. 27, 2008
1:00 – 4:00 pm
The McKinney House, 8369 University Ave.

ADMISSION IS FREE

WALKING COUNTS!
Make your goal 10,000 steps a day

You've heard it before but it bears repeating. Walking is one of the most beneficial forms of exercise we can do. It is easy to adapt for any age and fitness level. All you really need to get started is a good pair of walking shoes and, of course, a little motivation!

A good goal to work toward is an average of 10,000 steps per day. In terms of distance that's about five miles each day. That may seem like a lot but you'd be surprised at how you can fit in some extra steps per day each week until you reach that goal. Find helpful information on how to get started at www.thewalkingsite.com.

Here are some ideas to increase the number of steps you take each day:

- Walk to a park to eat your lunch.
- Skip the elevator and take the stairs.
- Walk the kids to school.
- Walk the dog – you'll both benefit!
- Park at the far end of the parking lot.
- Get off the bus one stop early.
- Make a walk part of your lunch hour.
- Invite a friend along.

The La Mesa Wellness Task Force supports the City's goal to make La Mesa a more walkable community. Steps have already been taken (please pardon the pun) to create ways to make walking La Mesa more fun. Aside from all the organized walking groups in town, La Mesa's Walking Art Trail is a great way to start adding those extra steps and view some public art along the way. The not too distant future will bring grant-funded street and sidewalk improvements to the area surrounding Helix Charter High School. City staff members are also working on a project to map out walking routes throughout the community that will vary by distance and difficulty to add variety to your walking regimen. Watch the City's website for more information as it becomes available.

WALK LA MESA
Just for the Fun of It!

The La Mesa Wellness Task Force wants you to know that there are organized walks nearby every day of the week. Check the City's website at www.cityoflamesa.com, search *health & wellness,* and click on Walk La Mesa under Quick Links for a list of options or pick up a flyer at La Mesa City Hall or the La Mesa Community Center.

Call 619.667.1300 for more information

La Mesa – it's made for walking!

COUNCIL ACTIONS

April 8, 2008
Adopted a resolution making required findings and certifying the final Environmental Impact Report, including a Mitigation Monitoring and Reporting Program, (City of La Mesa, Case File ZOA-07-01) for a proposed Mixed Use Overlay Zone to be applied to properties designated as "Mixed Use Urban" on the City of La Mesa General Plan Map.

Adopted a resolution approving the Design Guidelines for properties located in the Mixed Use Overlay Zone.

Adopted a resolution appropriating funds for the purchase and installation of a fabric shade structure at the Rolando Park playground.

Adopted an ordinance adding Chapter 24.18 to the La Mesa Municipal Code establishing a Mixed Use Overlay Zone governing mixed use development and assigning the Mixed Use Overlay Zone to certain property per ZOA-07-01.

Adopted an ordinance amending Chapters 7 and 24 of the La Mesa Municipal Code by adding, repealing and amending various code sections relating to adult businesses per ZOA-07-02.

April 22, 2008
Adopted a resolution declaring there were weeds, rubbish and refuse existing upon certain streets, sidewalks and private property in the City of La Mesa, which constitute a public nuisance and declaring the intention of the Council to order its abatement.

Adopted a resolution amending Section 12.28.030 (5.1) and adding Sections 12.28.030 (59.81) and 12.28.030 (71.01) of the La Mesa Municipal Code designating Eastridge Drive as a stop street at Highwood Avenue and Highwood Avenue as a stop street at Eastridge Drive.

Approved the allocation of Community Development Block Grant (CDBG) and HOME funds and adopted the Annual Plan for Community Development activities for Fiscal Year 2008-2009.

Adopted a Fee Schedule for Fiscal Year 2008-2009.

April 24, 2008
Accepted the findings and conclusions of the third party independent investigation report regarding the Police Department's response to an incident involving the Mayor on February 20, 2008.

May 13, 2008
Ratified the Design Review Board's approval of DRB-08-01 (CCRT Properties) for a proposed exterior remodel to an existing commercial building at 8401 Fletcher Parkway.

Adopted a resolution accepting bid of Portillo Concrete Inc. and awarding a contract for Bid 07-15, construction of intersection improvements at University Avenue and Yale Avenue.

May 27, 2008
Adopted a resolution amending Section 12.64.010 of the La Mesa Municipal Code adopting a 45 mph speed limit for Riviera Drive.

Adopted an ordinance adding Chapter 10.17 to the Municipal Code prohibiting the sale and distribution of novelty lighters.

Adopted a resolution approving Site Development Plan DAB-07-32 and ratified the Design Review Board's approval of Design Review DRB-07-32 (Crosspointe Life Church) for alterations to an existing church at 8809 La Mesa Boulevard.

June 10, 2008
Adopted a resolution approving Program Supplement No. 0E40 Rev. 000 for construction of sidewalks on Orien Avenue and Lowell Street.

Adopted a resolution waiving formal bidding and authorizing the purchase of an aerial ladder truck.

Adopted a resolution of the City Council declaring its official intent to reimburse itself with the proceeds of a future tax-exempt borrowing for certain capital expenditures undertaken by the City of La Mesa.

Authorized the appropriation of funds for the design and construction of the La Mesa Skate Park Repair and Upgrade Project, and adopted a resolution rejecting the apparent low bidder as non-responsive and non-responsible and awarding the contract to the responsive and responsible second low bidder, Team C Construction, Inc., Bid No. 07-27.

June 24, 2008
Ratified the Planning Commission's approval of Tentative Tract Map TTM-08-02 and Site Development Plan DAB-08-07 (PDM-La Mesa, LLC/Bradley Land Group) a proposal to subdivide a 0.76-acre site for the purpose of creating 19 residential condominium units with 1 commercial suite fronting on El Cajon Boulevard, and ratified the Design Review Board's approval of Design Review DRB-08-07 at 7561 El Cajon Boulevard.

Ratified the Planning Commission's approval of Tentative Tract Map TTM-08-01 and Site Development Plan DAB-08-06 (PDM-La Mesa, LLC/Bradley Land Group) a proposal to subdivide a 1.5 acre site for the purpose of creating 45 residential condominium units with 2 commercial suites fronting on El Cajon Boulevard, and ratified the Design Review Board's approval of Design Review DRB-08-06 at 7353 El Cajon Boulevard and 4888 Jessie Avenue.

Adopted resolutions calling and giving notice of the holding of a General Municipal Election to be held in the City on Tuesday, November 4, 2008; requesting the County Board of Supervisors to conduct the election and to consolidate it with the Statewide General Election; and adopting regulations for candidates for elective office pertaining to candidates' statements.

Adopted resolutions approving the fourth amendment to the American Dream Down Payment Initiative (ADDI) Agreement and the allocation of the ADDI funds for Fiscal Year 2008-2009 to the Down Payment and Closing Cost Assistance (DCCA) Program; and approving the execution of the second amendment to the Agreement for management and implementation of a Home Investment Partnerships Program Project with the County of San Diego to fund the La Mesa Down Payment and Closing Cost Assistance (DCCA) Loan Program and accept the Home allocation of $1,550,269.95.

Adopted resolutions approving the 2008-2009 amended final budget; and adopting the Appropriations Limit for Fiscal Year ending June 30, 2009 and the annual adjustment factors used to calculate the limit.

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.
Contact your elected officials at 619.667.1106.

Mayor..... Art Madrid
Vice Mayor .....Ernie Ewin
Councilmember..... Ruth Sterling
Councilmember.....Dave Allan
Councilmember..... Mark Arapostathis
City Manager..... Sandra Kerl
Focus Editor ..... Käaren McElroy
Editorial Staff ..... Heather L. Moore
Ofelia Bareno

If you would prefer to continue receiving a printed version or need futher information please email at cmoff@ci.la-mesa.ca.us or call 619.667.1105 to be placed on a mailing list.

Want to know when the next issue of FOCUS is published?

Use the NOTIFY ME link to request automatic email notification so you won't miss the most up-to-date publication.

GREEN STYLE TIP

Printing the La Mesa FOCUS

In the February issue feedback survey, several readers said they preferred the feel of a printed version of FOCUS in their hands but wanted to conserve on the expensive color ink. Here's a tip for printing a black & white version.

With the document displayed in Adobe Reader® select print from the file menu. Select properties in the print dialogue box and look for the option to print in black & white. The location of selection boxes may vary depending on your operating system and type of printer.

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 8:00 AM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM
The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM
The above meetings are held at the Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM (except July, August, November, December)
The above meeting is held at the Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS
(Area code 619)

Adult Enrichment Center..... 464-0505
Animal Control 667-1436
Building Inspection..... 667-1176
Business Licenses..... 667-1118
Cable TV..... 262-1122
City Attorney..... 667-1128
City Clerk..... 667-1120
City Council..... 667-1106
City Hall 463-6611
City Manager 667-1105
Crime Prevention 667-1445
Dog Licenses 667-1117
Engineering..... 667-1166
Fire (Business)..... 667-1355
Human Resources 667-1175
Library 469-2151
Mayor..... 667-1100
Municipal Pool 466-4177
Park Permits..... 667-1300
Parking Citations..... 667-1117
Planning..... 667-1177
Police (Business)..... 667-1400
Public Works 667-1450
Recreation 667-1300
Recycling/Trash 287-7555
Sewer Charges 667-1126
Sidewalk Maintenance..... 667-1450
Storm Water Hotline..... 667-1134
Streetlight Maintenance 667-1450
Traffic Engineering Hotline .. 667-1144
Traffic Signal Maintenance .. 667-1166
Zoning 667-1177

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • November 2008

WHERE IS THE NEW LA MESA POLICE STATION LOCATED?

City officials breaking ground for new police station

Police Department personnel have had many comments over the last few months from excited La Mesa residents regarding the new police station. They exclaim, "You guys must be so excited, the new station is beautiful!" Police staff wonder, "Where have we been? What new police station?" Many people believe that the new building between Fire Station 11 and City Hall is the new police station. The new building that completed construction in April 2008 is the new La Mesa Branch Library and US Post Office building.

So where will the new police station be located? The new police station address

Continued on page 14

LA MESA VILLAGE FARMERS MARKET TURNS 15

Time flies when you're having fun. It's a common saying but if the La Mesa Village Farmers Market is any indicator, it's absolutely true. Since August 1993, the City of La Mesa has sponsored the weekly market every Friday, rain or shine, from 3:00 pm to 6:00 pm in the Allison Ave. municipal parking lot. This past August the Farmers Market achieved its 15th season in downtown La Mesa. It's been a fun ride for La Mesa citizens and the staff, managers, and volunteers working behind the scenes to make the market happen each week.

Many readers may recall that warm August day in 1993 when the market first started operations. That day 19 local farmers — five of whom still sell at the market — and a throng of curious shoppers converged on the Allison Ave. municipal parking lot to inaugurate the market and launch what was to become a long-standing La Mesa Village tradition. The first tent stands were set up and the first table legs landed on the pavement bearing the weight of the fruits, vegetables, and flowers heaped upon them, fresh and ready for sale to an eager public.

Continued on page 15

KIDS CARE FEST

September 20 was a day for kids of all ages at Briercrest Park. The 7th Annual Kids Care Fest treated more than 1200 children and their families to interactive games, educational activities, public safety displays, and attractions. In the street fair atmosphere, children had opportunities to try their hand at watercolor painting, take a turn on the bungee jumper, ride the ponies, be fingerprinted, step into a fire truck or police car, and interact with strolling clowns. Local healthcare providers and advocates were on hand to provide a variety of health screenings and information on staying healthy and active. For the first time this year, health insurers were on hand to provide information on low and no cost health insurance for children and to assist eligible families with the enrollment process as part of the City's participation in Communities for Healthy Kids.

We extend many thanks to our partners, sponsors, exhibitors, and volunteers for another successful regional event. A tentative date of September 19, 2009 has been set for the 8th Annual Kids Care Fest. Watch the City of La Mesa and Grossmont Healthcare District websites for more information. You won't want to miss it!

Students from San Diego State University Department of Exercise and Nutritional Sciences talk to young visitors about the benefits of healthy eating and physical activity

La Mesa COMMUNITY SERVICES

Spring Recreation and Enrichment Programs

Springing into fitness is as easy as family members enrolling in classes offered through La Mesa Community Services.

ENROLLMENT FOR SPRING CLASSES BEGINS DECEMBER 1.

Browse our weekly youth class selections or our class offerings for adults.

Convenient enrollment is available online or you can access a printable version of our enrollment form to mail in.

Classes fill quickly.
DON'T DELAY!

Space is available in some Fall Classes beginning in November. ENROLL NOW!

RIDES4NEIGHBORS – 619.464.0109

Introducing Group Shopping and Medical Shuttle

WEDNESDAYS

Pick-up at your home between 10:00 - 11:00 am and return home at 1:00 pm

(Donation-based: you will receive a statement with a suggested donation monthly.)

Reservations required at least 1 week in advance by calling 619.464.0109

The shuttle will make stops at the Grossmont Center Mall (Target, Wal-Mart, Ralph's) and SHARP Grossmont Hospital and the surrounding medical offices.

ELIGIBILITY:

- **This new service is available for persons age 65+ and those with disabilities in the 91941, 91942 and 92119 zip code areas.**
- **You must be enrolled in the Rides4Neighbors program.**
- **Please call 619.464.0109 for an enrollment form.**

A Partnership with La Mesa First United Methodist Church!

with support from Grossmont Healthcare District, SANDAG-New Freedom funds, City of La Mesa

La Mesa First United Methodist Church

Grossmont Healthcare District

SANDAG

CITY OF LA MESA JEWEL of the HILLS

FREE OIL FILTERS

La Mesa Oil Filter Exchange Event

Saturday, December 6
10:00 am – 2:00 pm
Kragen Auto Parts
5350 Jackson Drive, La Mesa

Bring your used oil filters to be recycled and receive a FREE oil filter!

This offer is only valid at the specific date, time, and location above. Used oil filters will be accepted during regular business hours. Thank you!

Funded by a grant from the California Integrated Waste Management Board.

ZERO WASTE –
YOU MAKE IT HAPPEN!

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91941

7:00 am to dark Mon – Fri
6:30 am to dark Weekends
Adults $10 for 9 holes $14 for 18 holes
Students $6 for 9 holes $10 for 18 holes
(includes college with valid student ID)
Clinics, lessons, and special programs are available.

For details go to
www.sunvalleygolfclub.com
or call 619.466.6102

CITY OF LA MESA
PARK APPRECIATION DAY 2008

Was Held on Saturday, October 25th

Our thanks to all the volunteers who helped out at La Mesa parks

BEAUTIFUL JOB EVERYONE!

Thank you

October 25 was the 2008 La Mesa Park Appreciation Day. If you participated at your favorite park, City staff would like to take this opportunity to thank you for all the hard work and to share what you accomplished. A total of 75 cubic yards of debris were removed, tables painted, landscaping trimmed, and leaves raked. City park sites are cleaner, spruced up, and ready for the change of season.

If you missed this year's event, you missed a wonderful opportunity to take a hands-on approach to improve your park facilities. This is a great event for groups and special projects can be assigned depending on the size of your group. Park Appreciation Day is an annual event, so plan ahead for next year on October 24, 2009.

Individuals or groups who are interested in helping to keep City parks green and in tip top condition can join our Adopt-a-Park program. Adopt-a-Park assigns one person or group to a specific park and that person or group spruces up the park each weekend by picking up litter, emptying trash cans into the dumpster, and stocking the restrooms. Park adopters get their name on a sign posted at the park. For more information about the Adopt-a-Park program, or if you are interested in adopting a park, contact the City's Volunteer Coordinator Judy Stern at 619.667.1490 or the Department of Public Works at 619.667.1450.

SAVE THE DATE

Saturday October 24, 2009
for the next
La Mesa Park Appreciation Day

Holiday Open House

Wednesday, December 17th

10:00 am – Noon
La Mesa Community Center
4975 Memorial Drive

RSVP 619.464.0505

Shuttle Service available from the ball field parking lot and street parking

PROGRAM:
Dean Paul Ratzman 40's Swing on Tour

Holiday Sing-A-Long with the Thursday Night Singers

Refreshments Served

EVENT SPONSORS:
Community Convalescent Hospital of La Mesa

SecureHorizons

New Year's Eve Party

Wednesday December 31

8:00 pm until Midnight

Live dance band – Melody Kings

Catered sandwiches, salads, snacks, non-alcoholic beverages, and dessert

Party favors and noisemakers

FUN! FUN! FUN!

La Mesa Adult Enrichment Center
8450 La Mesa Blvd.

$20 per ticket

Call 619.464.0505 for ticket info

Tickets on sale now. Space is limited. First come—first served.

Pay at the Adult Enrichment Center office or at the Friday Night Dance.

Call Us To Help Stop Storm Water Pollution!

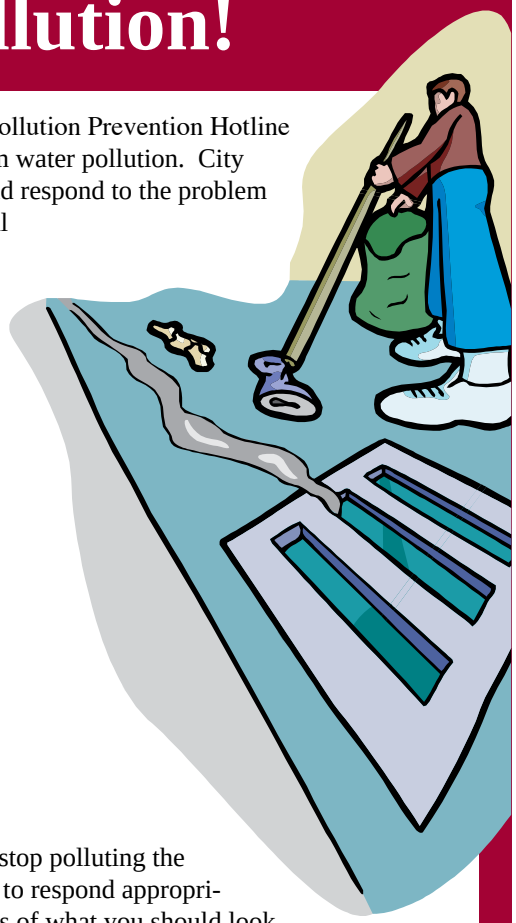

You can call the City's Storm Water Pollution Prevention Hotline at 619.667.1134 any time to stop storm water pollution. City personnel will verify the complaint and respond to the problem immediately. Below is a list of several storm water pollutants you should be aware of.

Storm Water Pollutants

- Sediment (soil/dirt)
- Fertilizers (plant food)
- Metals
- Detergents (soap)
- Pesticides (chemicals to kill plants or bugs)
- Organic Compounds (solvents)
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

What should you report?

You may either ask the person to stop polluting the environment or count on the City to respond appropriately. The following are examples of what you should look out for and report to the City.

Commercial/Industrial Areas

- Hosing down the parking lot/water running off onto the street
- Washing company vehicles without capturing the runoff
- Storing equipment outside without covering it
- Overflowing trash cans or dumpsters

Construction Sites

- Tracking soil onto the street
- Storing stockpiles of soil without covering it for extended periods of time
- Discharging water into the street

Residential

- Washing soil off property and into the street
- Significant over-irrigation
- Fixing car on the street
- Significant overspray of pesticides or fertilizers
- Not picking up after pets

If you see any of these activities, talk to the responsible party or contact the City immediately. Protecting our environment protects our quality of life!

Gather your gear it's time
FOR THE...
SPRING 2009 ADULT SOFTBALL SEASON

(18 years and older)

Registration: La Mesa Fire Station #12, 8844 Dallas St.
January 26, 2009 —5:30 to 6:30 pm

Sports Information Line 667-1172, #6
Team rosters and game rules will be issued at time of registration.

Fee: $525 for the season.
Umpire fees [not included in fee]
$15/game each team.

The entire fee must be paid at time of registration. No partial payments.

Payment options:
a) one check
b) all cash
c) one check and the remainder cash
d) credit card

A $25 service charge and postage will be required on all returned checks. Payees will have one day to correct the problem to guarantee a position.

A waiting list will be taken after reaching the maximum number of teams.

***Season:** 12 weeks beginning the week of February 23 (weather permitting)

Location: Junior Seau Sports Complex, Field #1, enter from La Mesita Park.

****Leagues:**
Tuesday – Coed
Wednesday – Men
Thursday – Coed
Friday – Men

Game Times:
Tuesday – Thursday 6:00 – 9:00 pm
Friday 6:00 – 10:00 pm

** Subject to change based on the number of teams*

***Minimum 4 teams required per night or league night subject to change or cancellation.*

PLAY BALL!

Don't Leave Valuables in Your Car

Vehicle burglaries continue to be a huge problem for law enforcement and citizens alike. During the summer months May through August the La Mesa Police Department received 239 reports of vehicle burglaries. Many of the cases seen at the La Mesa Police Department on a daily basis are due to an attractive item being left in the vehicle. GPS devices, iPods, cameras, laptops, cell phones, and cash have all been reported stolen out of vehicles. It is important to note that the thieves were able to defeat the door locks or break windows in many of these cases! Do not assume that simply locking your car doors is enough to scare a burglar away. In recent months, many of the burglaries occurred during the day when the victim was running errands or going to work. Shopping centers, medical facilities, and gyms are popular targets for car burglars due to the high volume of cars in one area. The thief simply looks into all the cars and breaks into the ones where valuables are visible. Several victims left their car for only a few minutes and returned to find their valuables stolen.

In recent months we have also seen many residential neighborhoods become a target for overnight car burglars. In most all of these cases, it was clear the burglar was looking in car windows to see if there was anything valuable in plain sight. Lock all car doors and close all windows, even in your garage or driveway. Set the alarm if you have one installed and watch out for your neighbor's vehicles. The most important thing you can do to prevent your vehicle from being burglarized is to make it a habit to take everything out of your car whenever you exit. Do not, under any circumstances, leave valuables in your car. Many innocent victims thought that they could "hide" their valuable electronic devices and wallets under the seat or in the trunk. If you see anything suspicious, do not hesitate to call the La Mesa Police Department. In an emergency or if you witness a crime in progress dial 9-1-1. For non-emergency calls dial 619.667.1400.

If you have specific questions regarding vehicle security you can contact the Crime Prevention Unit at 619.667.1445 or visit the City website at www.cityoflamesa.com for additional safety information and crime prevention tips.

Street Resurfacing on Jackson Drive, Baltimore Drive, and Other Streets

In early October the City started work on resurfacing Jackson Drive from Fletcher Parkway to the north City limit just past Dallas Street. The project will replace pavement and make improvements to the intersection of Jackson Drive and El Paso Drive, near Murray Manor Elementary school, to increase safety for cars, bicycles and pedestrians. The work is scheduled to be completed the beginning of December.

Following the work on Jackson Drive, the City plans to resurface Baltimore Drive from University Avenue to the north City limit just past El Paso Street. Portions of several other streets will also be resurfaced following sewer pipe replacement including: Lee Avenue, Grape Street, Normal Avenue, Mills Street, Colina Drive, Maiden Lane, Hillcrest Avenue, Crowder Lane, Chevy Chase Drive, Boulder Place, and Boulder Drive. These streets are being resurfaced following the replacement of old, under-capacity sewer pipes.

Jackson Drive and Baltimore Drive are major collector streets vital to the City's road network. Please pardon our dust as we conduct these infrastructure improvement projects to better serve the community and provide you with many years of continued service from these roads.

Resurfacing is underway on Jackson Drive

Popular Historic Homes Tour Coming Soon

Don't miss the 3rd Annual La Mesa Historic Home Tour on Saturday, November 8 10:00 am to 3:00 pm. Tickets are $15 for Historical Society members, $18 for non-members. Shuttle trolleys to the five homes are available at the tour center located at Lemon and Palm Avenues in the Village of La Mesa. Call 619.465.1883 for more information.

HOLIDAY DRINKING AND DRIVING

During this holiday season your safety is the La Mesa Police Department's number one priority, which is why we encourage you to "THINK BEFORE YOU DRINK." With the volume of holiday parties and family gatherings this time of year the La Mesa Police Department recommends that if you plan to drink an alcoholic beverage, prior to going out for the night you need to designate a driver who will not be drinking.

The La Mesa Police Department recently received a $90,000 grant from the California Office of Traffic Safety for Driving Under the Influence (DUI) Awareness and Enforcement programs. This grant will run from October 1, 2008 to September 30, 2009. The grant allows the La Mesa Police Department to conduct several DUI and Driver's License checkpoints as well as DUI saturation patrols during the next year.

A typical DUI arrest could end up costing in excess of $10,000 with attorney's fees, court costs, and increases in your insurance. Please remember that "buzzed driving" is still "drunk driving" with the same serious consequences. This is why the La Mesa Police Department encourages you to designate a driver, or take the trolley, bus, or a cab home if you do decide to drink. A $50 cab ride is much less expensive than a $10,000 expense for a DUI arrest.

VOLUNTEERS NEEDED!

Are you interested in becoming a volunteer with the City of La Mesa? Check out our volunteer opportunities below or download a Volunteer Application from www.cityoflamesa.com.

The City of La Mesa's Community Participation Program has volunteer positions and special assignments available in the departments and project areas listed below. Volunteers play an important role in the enhancement and expansion of services to City residents. You not only provide a valuable service for the community, but also enjoy flexible scheduling for most assignments, develop new skills, meet new friends, and are officially recognized by the City of La Mesa at our Annual Volunteer Appreciation Luncheon.

Rides4Neighbors

We need Volunteer Drivers for Rides4Neighbors, a new transportation program for La Mesa's older residents and residents with disabilities. Rides are provided by trained volunteers, who use their own vehicles. We reimburse for mileage and provide supplemental liability insurance. Read more about the program on the City's website or call the Adult Enrichment Center at 619.464.0109.

City of La Mesa Greeter/Host for City Council Meetings

The City Clerk's office has a need for a volunteer(s) to host City Council meetings. This position involves greeting attendees, distributing speaker sign-up sheets, and providing the agenda upon request. City Council meetings are held on the 2nd and 4th Tuesday of each month. For information on this position, please call the City Clerk's office at 619.667.1120.

Adult Enrichment Center Coffee Klatch

We are seeking volunteers for Coffee Klatch, a volunteer-run coffee "shop" for Adult Center participants. Coffee Klatch is scheduled on Mondays, Wednesdays, and Fridays from 9:00 to 11:00 am in the Drop-In Center. Volunteers prepare and serve coffee and pastries donated by Starbucks. Flexible day scheduling is available. For information or a volunteer application call 619.464.0505.

Adopt A Block!

You can help preserve and enhance the beauty and cleanliness of La Mesa by volunteering for Adopt A Block. If you are a regular walker in your neighborhood, whether alone, with a pet or a neighbor, you can join this dedicated team of volunteers. The City provides a program vest, bags and a pick-up tool. All you need to do is commit to spending at least 5 hours a month for one year! You make your own hours, plus you are recognized at the City's annual luncheon celebration! Sign up TODAY by calling 619.464.0505.

Friday Night Dance at La Mesa Adult Enrichment Center

We need volunteers to help with front door cashiering and cash out. Time needs: once a month for a 3½ hour shift. Please pick up a volunteer application at the Adult Enrichment Center or call 619.464.0505 to have one mailed to you.

La Mesa Pet Therapy Needs You and Your Dog!

Would you and your dog be willing to spend 2 hours a month visiting patients in La Mesa convalescent homes? Call the Adult Enrichment Center to pick up an application or call 619.464.0505. If you have more questions about the program, we will put you in touch with a current Pet Therapy volunteer.

Adopt the Moffatt Garden at the La Mesa Adult Enrichment Center!

We are seeking a dedicated garden lover, or group of garden lovers, to help us with tender loving care and upkeep for our beautiful memorial garden. A weekly weeding, helping meet the needs of thirsty plants, and sprucing up would be just the right stuff needed to keep this special place a treasure for all to enjoy. Please stop in the office to pick up a volunteer application, or call 619.464.0505.

GOOD OUTDOOR LA MESA FUN

Free Youth Golf Clinic
La Mesa Residents Only
Sat., March 21 – 3:00 pm

Complete this coupon and return to:
Sun Valley Golf Club
5080 Memorial Dr., La Mesa CA 91941

Name: _____

Address: _____

Phone: _____

Space is limited. Register now!

COMMUNITY EMERGENCY NOTIFICATION SYSTEM

La Mesa has a new tool to help residents in the event of a disaster or large scale emergency. The Community Emergency Notification System (CENS) is a mass notification telephone system that allows City officials to call any or all residents in the City of La Mesa to alert them to emergency situations. It is like 911 operators calling you. The system called "Alert-SanDiego" is used to warn the public about imminent threats to life or property, disaster notifications, evacuation notices, public health emergencies, and any other notification to provide emergency information. City officials now have the ability to record a message or instructions to help you during an emergency. The system will only be used in emergency situations and will not be used for routine messages.

The system utilizes the region's 911 database to contact land line telephones. You do not have to register your home phone unless it is a VoIP internet service. You can register your mobile phone, VoIP, and email address. The system is also TTY/TDD capable. By registering your mobile or VolP phone, you are allowing emergency response personnel to provide you with information you need to be aware of or action you need to take during an emergency or disaster such as alerts and evacuations. To register, please visit www.readysandiego.org. Select "AlertSanDiego" and follow the instructions. You may register more than one mobile phone associated with your home address. If you have already registered and you have moved or changed your mobile number, you will need to re-register your new information

This is another way to help get critical information in the event of a disaster. You never know when an emergency will strike so take the time now to prepare yourself. Download a copy of the La Mesa Survive booklet from the City's website. You may also stop by or call the Fire Department at 619.667.1355 to request a print version of the booklet.

GOT ELECTRONICS?

Do you have electronic waste that you need to get rid of? Disposal of e-waste just got easier! Bring your old TV or computer monitor to the new and convenient free* recycling drop-off location at EDCO Station, 8184 Commercial Street, La Mesa for www.edcodisposal.com or call 619.466.3355. This service is open to all residents and businesses and no appointment is necessary. All electronics can be recycled. **A small fee may apply to some items.*

Electronic waste is a growing segment of our waste stream. Because numerous electronic devices are made with components that contain lead, mercury, nickel, cadmium, and other toxic elements that can harm the environment, they are prohibited from disposal in landfills under Title 22 of the California Code of Regulations, the Universal Waste Rule.

Do you have other household hazardous wastes for disposal? La Mesa residents can also use the City's regular appointment-only collection events to drop off items like paint and solvents, fluorescent bulbs, batteries, chemicals, medical sharps, and pool and garden products, as well as electronics. See the Household Hazardous Waste info on page 9 of this issue of the FOCUS for upcoming dates and more information or call 619.287.5696 x4270 to make an appointment.

California Coastal Cleanup Day in La Mesa

California Coastal Cleanup Day was held on Saturday, September 20. The state-wide cleanup event included over 750 cleanup sites with more than 60,000 volunteers throughout the state removing 900,000 pounds of debris from the shorelines, coast, and inland areas.

This year will mark the third year the City of La Mesa has hosted two cleanup sites; Alvarado Channel and University Channel. Fifty-eight volunteers participated in the cleanup event and removed over 400 pounds of trash and debris. It was a successful community event to help protect our environment and preserve our quality of life.

Removing trash from University Channel as part of California Coastal Cleanup Day in La Mesa

DO THE RIGHT THING!

Do you have batteries, fluorescent lights, chemicals, electronics, or anything else that you know you can't just throw away, but don't know what to do? These items are considered household hazardous waste (HHW) and are not allowed to be placed in the trash because of their destructive effect on the environment.

DISPOSAL IS FREE! If you reside within the city limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program.

The next event is on November 22, 2008. An appointment is required. Call 619.287.5696 x4270.

Announcing the 2009 Event Schedule!

January 31	June 6	October 10
March 14	July 18	November 21
May 2	August 29	

The above events are by appointment only. Call EDCO Disposal Corporation at 619.287.5696 x4270 for an appointment.

While supplies last, participants may bring a mercury thermometer and exchange it for a FREE non-hazardous thermometer. Please ask for your new thermometer upon arriving.

EXAMPLES OF HHW ARE:

GENERAL: Batteries, fluorescent lights, latex & oil based paints, solvents, cleaners, pesticides & garden products, pool products, propane, and any items labeled flammable, hazardous, toxic, or corrosive.

ELECTRONICS: TVs, computer monitors and hardware, telephones, VCRs, and radios.

AUTOMOTIVE: Used oil & filters, batteries, and antifreeze.

MEDICAL SHARPS (needles) can also be disposed of through this program. They must be properly secured in a sharps container.

E-WASTE can now be recycled at the EDCO Station buy back center during business hours without an appointment. See the announcement in this issue of FOCUS.

Call EDCO at 619.287.5696 x4270 to schedule an appointment or to request additional information. For more information on HHW or other disposal or recycling options, log on to www.cityoflamesa.com/HHW.

Sustainability Celebrated at the Environmental Awareness Festival

The first La Mesa Environmental Awareness Festival was a big success with hundreds of people in attendance from around the county. The event took place at Harry Griffen Park on Saturday, September 13 and was organized by La Mesa's Environmental/Sustainable Committee.

Twenty-one organizations offered everything from giveaway items such as mercury-free thermometers and reusable shopping bags, a compact fluorescent for incandescent light bulb exchange program, and workshops on solar cooking and shade tree planting. A drive-thru recycling zone was provided for e-waste, all plastics, glass, metal, cardboard, and paper. The electricity for the event was generated by solar power. The event catered to all ages and included information and discussion on topics including water conservation, energy efficiency, recycling, composting, solar power, storm water pollution prevention, gardening and more.

The City plans to make this an annual event. Look for announcements regarding the 2009 Environmental Awareness Festival next summer.

CHALLENGE CENTER

Did you know that the San Diego Chargers used to have practice facilities here in La Mesa? In spring 1964 the Chargers were looking for a practice location during the football season. The La Mesa City Council made available the field that is now the David Madrid Memorial Field (where La Mesa Little League and Senior Softball League play) at Sunset Park. The Chargers also needed locker and classroom facilities so local businessmen came to the rescue and personally underwrote the cost of a building in Sunset Park. After several years the Chargers moved away and the City took over the building turning it into Sunset Gym. In 1999 the Challenge Center moved into Sunset Gym where it remains to this day.

Challenge Center is a facility that provides physical therapy, assisted, and independent fitness memberships with no enrollment fees and no contracts to sign. You simply pay as you go ($20 / month for independent membership). Challenge Center is well equipped with machine and free weights, an aquatics program (at the Joan Kroc Center), and personal training. Challenge Center also is the only facility in San Diego County that has CFES (computerized functional electrical stimulation) bicycles. CFES bikes use computer-controlled electrical current to stimulate muscular contractions in paralyzed extremities of individuals with spinal cord injury allowing them to pedal on their own.

Recently, Challenge Center started a low-impact exercise class on Wednesday mornings that incorporates strength, aerobic, and flexibility training in a fun and friendly setting. For a limited time, Challenge Center would like to invite you to try the group exercise class for free. Challenge Center is located at 5540 Lake Park Way off of Lake Murray Boulevard. If you need directions or would like to learn more about Challenge Center visit the website at www.challengecenter.org or call 619.667.8644.

SHARP Grossmont Hospital

Senior Resource Center

in cooperation with the
City of La Mesa

Will hold a
FLU SHOT CLINIC

Monday, November 3, 2008
9:00 am - 11:00 am
La Mesa Community Center
4975 Memorial Drive 91941

For adults 62+ years of age
and those with a chronic illness

No appointments necessary

$2 Donation

For other flu shot sites call toll free
1.877.358.0202

FLU SEASON IS HERE!

Here are some easy tips to stay flu free. Wash your hands!! Stay away from sick people, and avoid hospitals and doctors offices. Stay home when you are sick. Avoid touching your mouth, nose, and eyes. Get plenty of sleep. Be physically active. Manage your stress. Drink plenty of fluids and eat nutritious food.

If you want some added protection you might want to get a flu shot. A flu shot is an inactivated vaccine (containing killed virus) that is given with a needle, usually in the arm. The flu shot is approved for use in people older than six months, including healthy people and people with chronic medical conditions. About two weeks after vaccination, antibodies that provide protection against influenza virus infection develop in the body.

Flu shot are recommended for:

- Children 6 months to 19 years old
- Pregnant women
- People 50+ years of age
- People with chronic medical conditions
- People who live in nursing homes or other long-term care facilities

People who need to see their doctor before getting a flu shot are:

- Those with a severe allergy to eggs
- Those who have had a reaction to the influenza vaccination before
- Those who get Guillain-Barré syndrome (GBS) within 6 weeks of a flu shot
- Those less than 6 months old
- Those who are sick at the time of vaccination

Source: The Centers for Disease Control and Prevention

Rides4Neighbors Partners Offer a Community Shopping Shuttle Service!

Older adults and area residents with disabilities now have another new option for meeting essential transportation needs! In mid-October the City of La Mesa's Rides4Neighbors program teamed with the La Mesa First United Methodist Church to offer a new weekly shuttle service to the Grossmont Center area.

Each Wednesday, the church's 9-passenger van will be put into operation to help seniors and disabled individuals who are dependent on public transportation with their shopping and medical trips. The van will pick up scheduled riders at their homes between 10:00 am and 11:00 am and return home about 1½ to 2 hours later. The shuttle will make stops at Grossmont Center destinations such as Target, Longs, and Wal-Mart; the nearby Ralph's; and SHARP Grossmont Hospital facilities and surrounding medical offices.

The service is available to residents of the 91941, 91942 and 92119 zip code areas. All riders must be pre-enrolled in the Rides4Neighbors program before a reservation can be made. Once approved for the service, riders must make their reservations at least one week in advance.

Shuttle service is donation-based, and riders may mail in the suggested donation at the end of each month to the Rides-4Neighbors office. Friends and relatives may purchase gift coupon booklets that seniors and other eligible riders may use to make a donation. Coupons booklets will be available at both the La Mesa Adult Enrichment Center, 8450 La Mesa Blvd., and the La Mesa First United Methodist Church, 4690 Palm Ave. Program donations will be used to expand and sustain specialized community transit services.

The group shopping and medical shuttle is made possible through grant funding from the Grossmont Healthcare District and San Diego Association of Government's federal New Freedom program.

For more information on program enrollment and shuttle scheduling, call the Rides4Neighbors Program at 619.464.0109 or go to www.cityoflamesa.com to download an enrollment form.

The La Mesa Fire Department Reminds Citizens to Practice Fireplace Safety This Winter

If you plan to use your wood burning fireplace this winter you will want to take these important precautions to make sure the fire stays in the fireplace where it belongs. Creosote buildup, a sooty residue in your chimney, can pose a real fire hazard. Chimneys need to be cleaned out frequently and should be inspected for obstructions and cracks to prevent deadly chimney and roof fires. Check to make sure the damper is open before starting any fire. Never burn trash, paper, or green wood in your fireplace. These materials cause heavy creosote buildup and are difficult to control. Use a screen heavy enough to stop rolling logs and big enough to cover the entire opening of the fireplace to catch flying sparks. Don't wear loose-fitting clothes near any open flame. Make sure the fire is completely out before leaving the house or going to bed. Store cooled ashes in a tightly sealed metal container outside the home.

Don't forget - having a working smoke alarm dramatically increases your chances of surviving a fire, and remember to practice a home escape plan frequently with your family.

Visit the City's website at www.cityoflamesa.com for more fire prevention tips or call the La Mesa Fire Department at 619.667.1355 for additional fire prevention information.

HAVE A SAFE HOLIDAY SEASON

While most people are spending their holidays enjoying friends and family, thieves are on the prowl for unsuspecting victims. The holidays are the prime season for robberies, home burglaries, and vehicle burglaries. Be careful not to get complacent with your daily activities during the holidays. By following a few simple rules, you can reduce your chances of becoming a victim.

When you are out shopping, be aware of those around you. Con artists often take advantage of people's generosity in order to scam them out of their hard-earned cash. Keep an eye on anyone hovering around you or following too closely. Be extra careful not to get distracted. Any distraction can give a thief an open opportunity to steal your belongings.

Avoid carrying large amounts of cash and don't wear expensive jewelry. Take one credit card with you and leave the rest at home. If possible don't carry a purse or backpack. Put your credit card, cell phone, and identification in your front pocket to reduce the likelihood that someone will pickpocket you in the large holiday crowds. Should you find that your credit card has been lost or stolen, cancel the credit card immediately.

If you must shop alone, try to go during daylight hours. Never leave packages in your car. If you must carry packages with you, lock them in your trunk, where they are out of sight. Park in a well-lit parking lot and ask a security guard to accompany you to your car if it is dark outside or the lot is deserted.

If children accompany you on your shopping trips, make sure they know your cell phone number by heart. Make sure your children know to go to a security guard or store employee if they get separated from you.

Check that all doors and windows are locked when you leave your home. Set the alarm if you have one and leave lights on if you plan to be out past dark. Make sure gifts and cash are not visible from any windows. If you will be gone for an extended period of time, have your neighbors watch your home for you. If they bring in your mail and newspapers everyday, it will not appear as if the house is empty. Put timers on both indoor and outdoor lights to make the house appear occupied.

You will find more valuable information on the City website at www.cityoflamesa.com, including a video that explains home security, vehicle security, and personal safety. For more information about preventing crime during the holidays and year round, call the La Mesa Police Department Crime Prevention Unit at 619.667.1445.

CITY OF LA MESA HOSTS CASTING CALL FOR VOLUNTEER DRIVERS

Become a part of La Mesa's community production, now in its first year's run…"Rides4Neighbors"

Rides4Neighbors

Rides4Neighbors is a volunteer-based transportation assistance program for La Mesa's older adult residents and adult residents with disabilities who are unable to use regular public transit. Rides are provided by screened, trained volunteers, who use their own vehicles to assist transit dependent La Mesa neighbors in need of a lift.

Volunteer drivers are reimbursed for mileage and receive secondary liability insurance. As a volunteer, you decide your availability and choose the rides you wish to provide. There is no minimum time commitment or number of rides required to be a volunteer. We can either call you when a ride is needed, or notify you via an e-mail blast.

As a volunteer, you will be part of a rewarding and meaningful civic program. Community surveys consistently find that what residents like best about La Mesa is the neighborly, small town feel. Rides-4Neighbors will help build that spirit of community and old-fashioned neighborliness. So join us by opening your heart and car door to a rider in need of a lift!

For more information, call the Adult Enrichment Center at 619.464.0109, or go to www.cityoflamesa.com to download a volunteer driver application form.

Police Station... *Continued from page 1*

will be 8085 University Avenue. It will be located on the property where the old La Mesa Branch Library and the old Helix Water District building were located. Please excuse our dust!

Demolition of the old structures is underway and construction on the new facility will begin soon.

In 2004, La Mesa residents overwhelmingly passed Proposition D, a public safety bond measure in the amount of $25 million to build Fire Station 11, remodel Fire Station 13, and build a new police station.

The current police facility, located at 8181 Allison Avenue, was built in 1966 and is approximately 15,000 square feet. At the time the building was constructed the Police Department had about 40 employees. The La Mesa Police Department currently has 68 sworn officers and 29 non sworn employees. Needless to say the department has outgrown the old facility.

The old Helix Water District building is readied for demolition to make room for a new police station

While waiting for the new library and post office building to be completed, the Police Department and other City staff have been working with Leach Mounce Architects over the past two years to develop plans for the new station. In August 2008 Edge Development from Temecula, California was awarded the bid for construction on the project in the amount of $14,727,000. This bid was within the budget of the Proposition D funds allocated for the police station.

The new police station is a two-story building with secured underground parking. The underground parking will hold the entire fleet of City-owned police vehicles and provides space for employee parking as well. The building will be approximately 40,000 square feet in size and the underground parking structure approximately 45,000 square feet.

The City held an official ground breaking ceremony on Tuesday, October 14, 2008 at 2:00 pm. The new state-of-the-art police station is scheduled to be completed in spring 2010. The Police Department will provide quarterly update reports on the new police facility at City Council Meetings.

POOL CLOSED FOR MAINTENANCE

The La Mesa Municipal Pool will be closed for winter maintenance from November 24, through February 2, 2009. Watch the City's website next year for information on spring aquatic classes and programs.

Farmers Market... Continued from page 1

Back then few people involved in the market's creation could have imagined it would endure so long, especially Mark and Suzanne Bendixen. The Bendixens were the on-site market managers that first day and remain so today. They've done an outstanding job for 15 years and they deserve much of the credit for the market's longevity and bright future. Thanks to the Bendixens, not only has the market endured, it has thrived, emerging as one of the longest-running farmers markets operating in San Diego County and the only such market operating in East County.

On-site manager Mark Bendixen reviews a stand before the market opens.

Today the market operates much the same as it did on that first day. Boundaries are blocked off by volunteers or Public Works staff in the early morning. Around mid-day, farmers and food vendors arrive to start setting up their tents and stands and the marketplace begins to take shape. Fresh flowers are put out on display, colorful fruits and vegetables are carefully arranged and stacked, herbs, breads, unique specialty foods, and imports are set out. Kettle corn is popped and succulent plants sunbathe.

Early-bird customers survey the grounds previewing the wares before the market opens. Vendors chat across the aisle and answer questions from patrons, cutting samples for tasting. Young student musicians from a local music store nervously tune their guitars before entertaining the patrons. The motion is constant. The crowd builds and the sense of anticipation mingles with the fragrance of freshness. At 3:00 pm sharp, Mark Bendixen strikes a metal triangle like a trail boss calling the hands in for supper, officially signaling the start of the market. The pent up anticipation is released in a flurry of buying and selling. The fun begins and time takes flight.

These happy customers think the Farmers Market is just "peachy."

So, what has been the key to the La Mesa Village Farmers Market's success, you ask? "The City has always focused on maintaining the character, scale, and charm that people have come to appreciate from this market and that has kept the market strong," says Chris Gonzales the Community Development Program Coordinator who recently took over from long-time City employee Elke Ertle. Ertle was involved in setting up the market originally and had managed the business affairs of the market for the City until her retirement in 2006. "Shoppers tell us that the items they buy here are fresher, sweeter, and taste better than what they can buy in a store and they have more fun shopping here. They appreciate the quality, variety, and availability we provide week-in and week-out, rain or shine."

John Brothers of Baba Foods Hummus makes another sale.

If you're a regular visitor to the La Mesa Village Farmers Market, the City thanks you for your support. Next time bring a friend or neighbor and make a day of it by visiting the many shops and dining establishments in the La Mesa Village. If you've never been to the market you can find directions and a list of products in season on the City's website at www.cityoflamesa.com. Come on out and join the fun!

WALK LA MESA

Just for the Fun of It!

The La Mesa Wellness Task Force wants you to know that there are organized walks nearby every day of the week. Check the City's website at www.cityoflamesa.com, search *health & wellness,* and click on Walk La Mesa under Quick Links for a list of options or pick up a flyer at La Mesa City Hall or the La Mesa Community Center.

Call 619.667.1300 for more information

La Mesa – it's made for walking!

COUNCIL ACTIONS

July 8, 2008
Adopted a resolution approving the City to apply for a federal Safe Routes to School Grant in support of the Community Wellness Initiative.

Adopted a resolution authorizing the City to negotiate and execute a Financial Assistance Agreement with the State Water Resources Control Board.

Approved a Joint Use and Operation Agreement for District and City facilities between the City of La Mesa and the La Mesa-Spring Valley School District.

Appointed members to fill vacancies on various City boards, commissions and committees.

July 22, 2008
Adopted a resolution approving a purchase order for household hazardous waste services provided by Clean Harbors Environmental Services

Closed the 2008 Weed Abatement Program.

July 29, 2008
Adopted a resolution ordering the submission to the qualified electors of the City a measure relating to the establishment of a local transactions and use tax (sales tax) at the General election to be held on Tuesday, November 4, 2008 as called by resolution.

August 12, 2008
Ratified DRB-08-09 (Land & Design, Inc.) – a proposal for a remodel to an existing commercial building at 4330 Palm Avenue.

Adopted a resolution accepting Bid 08-06 and awarding the contract for the Jackson Drive Rehabilitation Project to Marathon General, Inc.

Adopted a resolution awarding a contract for Bid 07-14, Lowell Street Storm Drain Replacement Project to Rentex Construction Incorporated.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a local DUI Enforcement and Awareness Program and approved the addition of the grant funds to the FY 2008-2009 Budget.

September 9, 2008
Ratified the Design Review Board's approval of DRB-07-33 (Comerica Bank) – a proposed 3,300 square foot bank at 5450 Jackson Drive.

Adopted a resolution awarding a professional services contract for construction management services for the La Mesa Police facility to Vanir Construction Management, Inc.

Adopted a resolution authorizing the acceptance and expenditure of the 2007 Law Enforcement Terrorism Prevention Program grant funds.

Adopted a resolution authorizing acceptance of a grant from the McCormick Foundation for wildland firefighting equipment.

Adopted a resolution approving a Memorandum of Agreement between the County of San Diego and the City of La Mesa for the use of the Community Emergency Notification System.

Adopted a resolution authorizing the execution of an agreement for Mass Casualty/ Mass Decontamination Cache Program between the City of La Mesa and San Diego County Emergency Services Organization for temporary transfer of mass casualty apparatus.

Adopted an ordinance, subject to voter approval, adding Chapter 5.28 to the Municipal Code establishing a transactions and use tax to be administered by the State Board of Equalization.

Approved the plans and conditions for the 2008 Oktoberfest and authorized the temporary closure of portions of City streets for the event.

Approved transportation shuttle assistance for elderly and disabled attendees at City-organized events.

Adopted a resolution acknowledging elder abuse as a community concern and the adoption of prevention strategies

September 23, 2008
Adopted a resolution executing fourth option to renew Bid 04-05 and award contract for structural firefighting clothing to L. N. Curtis & Sons.

Adopted a resolution authorizing the Chief of Police to enter into an agreement for the "East County Regional Gang Task Force/ Safe Streets Task Force" Memorandum of Understanding.

Adopted a resolution approving reversion to acreage of Parcel Map No 20274, a one lot subdivision of property for 76 residential units at the "Villages of La Mesa," a proposed residential care facility by Briercrest Development LP at 9000 Murray Drive.

NOTIFY ME

Notify Me is the City of La Mesa email notification system that instantly alerts citizens of important City news, events and services. Notify Me allows community members to subscribe to a number of email lists including the La Mesa City Council Agenda, Recreation Classes Schedule and La Mesa Police Department Press Releases. It provides residents with another means of communicating with and obtaining information from City Hall. It is a powerful tool that easily keeps you informed, reduces the need to call or visit City Hall, and provides easy access to new information on the City's website.

To sign up for this service, please visit **Notify Me.** Enter your complete email address, select the email type you would like to receive (html or text), and select each email list you would like to subscribe to. Finally, click the Subscribe/ Manage button.

You will receive a confirmation email for each category you select. You can make changes to your email notification subscription by entering your email address and clicking the Subscribe/Manage button. If at any time you decide you no longer wish to receive notifications, each email contains instructions to remove your email address from our notification service.

YOU CAN SIGN UP TO RECEIVE INFORMATION ABOUT THE FOLLOWING CATEGORIES:

- Adult Enrichment Center Classes, News & Events
- City Calendar, News & Announcements
- Community Services Recreation Classes & Aquatics
- Fire Prevention, Emergency Preparedness & Upcoming Events
- FOCUS Quarterly Newsletter
- City Council Meeting Agendast
- Planning Commission Meeting Agendas
- Police Department Press Releases
- Job Announcements

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.
Contact your elected officials at 619.667.1106.

Mayor..... Art Madrid
Vice Mayor ..... Mark Arapostathis
Councilmember..... Ruth Sterling
Councilmember..... Ernie Ewin
Councilmember..... Dave Allan
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If you would prefer to continue receiving a printed version or need futher information please email at cmoff@ci.la-mesa.ca.us or call 619.667.1105 to be placed on a mailing list.

Want to know when the next issue of FOCUS is published?

Use the NOTIFY ME link to request automatic email notification so you won't miss the most up-to-date publication.

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 5:30 PM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM

The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM

The above meetings are held at the
Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM (except July, August, December)

The above meeting is held at the
Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS
(Area code 619)

Adult Enrichment Center	*464-0505*
Animal Control	*667-1436*
Building Inspection	*667-1176*
Business Licenses	*667-1118*
Cable TV	*262-1122*
City Attorney	*667-1128*
City Clerk	*667-1120*
City Council	*667-1106*
City Hall	*463-6611*
City Manager	*667-1105*
Crime Prevention	*667-1445*
Dog Licenses	*667-1117*
Engineering	*667-1166*
Fire (Business)	*667-1355*
Human Resources	*667-1175*
Library	*469-2151*
Mayor	*667-1100*
Municipal Pool	*466-4177*
Park Permits	*667-1300*
Parking Citations	*667-1117*
Planning	*667-1177*
Police (Business)	*667-1400*
Public Works	*667-1450*
Recreation	*667-1300*
Recycling/Trash	*287-7555*
Sewer Charges	*667-1126*
Sidewalk Maintenance	*667-1450*
Storm Water Hotline	*667-1134*
Streetlight Maintenance	*667-1450*
Traffic Engineering Hotline	*667-1144*
Traffic Signal Maintenance	*667-1166*
Zoning	*667-1177*

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • February 2009

2009 TOWN HALL MEETINGS

As part of La Mesa's commitment to staying in touch with the community, the City Council has scheduled two Town Hall Meetings for 2009. These open forum meetings provide an opportunity for citizens to provide input on issues in their neighborhood and throughout the City. The two meetings are held in different parts of the City to give all residents a chance to participate. The City Council encourages all who are interested in the present and future of La Mesa to attend and provide their ideas, comments, and opinions. Information gathered from these meetings will be used by staff and the Council to recommend and set priorities for the City's next budget.

The next Town Hall Meetings are:

Tuesday - February 3, 2009 from 6:30 to 8:30 pm
Northmont Elementary School
9405 Gregory Street

Thursday - February 5, 2009 from 6:30 to 8:30 pm
Rolando Elementary School
6925 Tower Street

City Council Budget Workshops

In keeping with the Council's commitment to keep an open and transparent budget process, the Council will be holding their annual Strategic Planning Workshop this spring in preparation for adoption of a new Budget. This process includes community input through Town Hall Meetings to be held in February and a special budget workshop held January 20, 2009 to address short-term budget actions due to the significant fiscal impacts from regional and national economic downward trends.

The Council welcomes community input throughout this process. This is important to meet community expectations and to allow an open view of how the City's expected revenues can be most effectively allocated among all the competing interests. Key challenges in the process this year will be trying to accurately model expected fiscal conditions for the next two year budget. The Council will use this Workshop to set policies and provide staff direction for projects and programs needed to maintain vital City services as effectively and efficiently as possible. From this Workshop, the Council's budget policies and "Targets for Action" will be developed that become the basis for preparation of the next City Budget for fiscal years 2009 to 2011.

The Strategic Planning Workshop will be held:

Tuesday, March 17, 2009 from 8:00 am to 4:00 pm
Fire Administration Building
8054 Allison Avenue

CATCHING THE VILLAGE WAVE

Public projects spur a wave of private investment in La Mesa's Downtown Village

La Mesa's charming, historic Downtown Village is experiencing a wave of public and private investment that is revitalizing the area and diversifying the mix of tenants. Once dominated by antique shops and second-hand retailers, the Village of La Mesa is now home to a wider range of eateries, professional firms, and personal services. A number of wonderful antique shops remain in the Village, but in recent years they have been joined by new restaurants, professional firms in finance, insurance, real estate, legal, engineering, medical/dental offices, and health and beauty salons.

It is difficult to say with certainty what triggered this new investment in the heart of La Mesa, but some business owners point to the City's projects at Civic Center as being one catalyst. In 2007 and 2008, respectively, the City completed work on the construction of a new fire station and a state-of-the-art County library. Both civic projects have made a positive contribution to the image of the City and the Downtown Village. The City is currently constructing a new Police Department headquarters on the Civic Center site, with completion expected in 2010. These projects and the continued attractive value of the Village seem to have caught the attention of a diverse mix of users. Examples of Village businesses that have recently invested in their facilities include Johnny B's Burgers and Brew, Centifonti's Bar & Restaurant, State Farm Insurance, LPL Financial, Stowe Biotherapy, McRea & Associates/Assist2Sell, Hoffer's Cigar Bar, Tres Fabu Design Studios, and Advanced Painting Specialists. Pete's Place bar and lounge, a long-time tenant in the Village, recently also completed a complete interior remodel, which is profiled later in this article.

Continued on page 4

ECONOMIC DEVELOPMENT SUCCESS
The Fletcher Parkway Corridor

Redevelopment projects have transformed the Fletcher Parkway corridor during the last two decades. One of the first major projects was The Villages at Amaya, a housing development near Fletcher Parkway and Amaya Drive that was completed in early1988. That development also incorporated the Amaya Trolley Station. Fletcher Parkway itself was expanded and beautifully landscaped in the early 1990s in coordination with other Redevelopment projects along this significant commercial corridor.

Following these projects were two major retail redevelopment projects. First was transformation of older industrial buildings from the AAA building west to Jackson Drive, including the Grossmont Trolley Center project with nationally recognized retail businesses and a multi-screen theater complex.

Next was the Gateway Center retail project completed in late 1998. This project runs from Jackson Drive west to Baltimore Drive and includes major retailers BabiesRUs, Ethan Allen, and Costco, as well as four new restaurant facilities.

Sometimes Redevelopment projects must also reinvent themselves to keep up with rapidly changing commercial trends. The theater complex fronting Trolley Court, originally redeveloped in the early 1990s, became a new redevelopment project during 2008 due to the closure of the movie theaters that lacked the now popular "stadium seating." The east end of the Grossmont Trolley Center, in the former theater building, now has new eateries including: Sammy's Woodfired Pizza, Quiznos, and Banbu; other new commercial venues, and a new parking area. At the west end of the Gateway Center, near Jackson Drive, a Best Buy opened last fall in a space that was vacant for over a year.

The latest Redevelopment project in the Fletcher Parkway Corridor is at the Grossmont MTS Trolley Station. Fairfield Residential in partnership with the City and the San Diego Metropolitan Transit System (MTS) is constructing the Pravada and Alterra apartments along with a small amount of commercial space. This "smart growth" project will be recognized by Leadership in Energy and Environmental Design (LEED) certification with its many sustainable environmental features that include photovoltaic solar panels. There will be 527 new housing units, with 80 designated to be more affordable units for qualifying incomes. The project also replaced existing public transit parking on the ground level of the parking structure, and provides secure parking for the project residences on the second level. Public improvements to the transit platform will be completed by the San Diego Association of Governments (SANDAG) as part of the project. These long overdue public improvements will include upgrading the Alvarado Creek channel behind the AAA building to alleviate problem flooding of the trolley tracks. More important, the public improvements being constructed by SANDAG will include two elevators and a bridge structure that will greatly improve transit passenger access to facilities at the Grossmont Hospital campus and Grossmont Center.

These important economic development efforts along the Fletcher Parkway corridor have greatly added to the employment, service, business, and residential mix in La Mesa through very successful long-term public/private partnerships that help to maintain vital services in the community. The goal of the Redevelopment areas has been to remove blight and eliminate flooding problems along Alvarado Channel through actively developing under-utilized properties and creating financially sound public and private partnerships. This has been achieved as promised to the community. La Mesa has benefited from these improvements to the Fletcher Parkway corridor both physically and fiscally. Economic development through redevelopment has made an impressive difference in this area over the last 20 years and will continue to make a positive impact to the community in the future.

WHAT IS SENIOR TAXI SCRIP?

- SENIOR TAXI SCRIP helps provide affordable and reliable transportation to older adults and persons with disabilities who are residents of East County communities within the Grossmont Healthcare District.
- Through the SENIOR TAXI SCRIP program, eligible older adults and persons with disabilities purchase discounted Yellow Cab scrip booklets for $10 each (actual value is $20) at the La Mesa Adult Enrichment Center.
- The City of La Mesa provides eligibility screening for SENIOR TAXI SCRIP riders and reserves the right to limit scrip sales based on availability.
- Scrip coupons are used like cash to pay for Yellow Cab fares and tips for travel needs such as medical appointments, grocery and other essential travel.
- Ride destinations are not limited to East County communities, but are contingent on scheduling in advance with Yellow Cab and service availability.

What are the rules of the SENIOR TAXI SCRIP program?

- You must be a resident of a community within the Grossmont Healthcare District.
- You must be age 65 or older, or have a disability that prevents you from driving or using existing public-transit services to meet your health-related transportation needs.

- Scrip is non-transferable, non-negotiable and non-replaceable.
- Scrip can only be used to pay for your taxicab rides. If you need assistance, a caregiver, relative or other support person may accompany you.
- Scrip can only be used with the Yellow Cab Company. Inform the dispatcher you will be paying with scrip purchased through the City of La Mesa when scheduling your ride. Although scrip can be used at any time or day, scrip riders are encouraged to use "off hours" Mon – Thu 10:00 am to 2:00 pm whenever possible.
- Scrip participants must meet eligibility requirements and complete an application and service agreement prior to purchasing scrip booklets. Physician's certificate may be required.
- Once approved, you can purchase SENIOR TAXI SCRIP for $10 a 50% discount. Up to five booklets of scrip can be purchased each month.

Applications for ***SENIOR TAXI SCRIP*** should be downloaded from the city website. Applications can also be obtained at the La Mesa Adult Enrichment Center, 8450 La Mesa Blvd., La Mesa, CA 91941, or call 619.464.0505.

"Love Letters" A. R. Gurney's

The La Mesa ARTS Alliance (LMAA) presents its first theatrical production, featuring La Mesa residents in A.R. Gurney's popular "Love Letters", Thursday, February 12 at the La Mesa Community Center. The evening begins with no host refreshments at 6:00 pm. A "meet the actors" reception follows the play. Tickets are available on an open seating basis and can be purchased at the La Mesa Community Center for $10 each. Call 619.667.1300 for more information.

The LMAA is a volunteer association whose goal is to foster arts in our community by: expanding the arts into youth education; increasing public/individual involvement; supporting cultural activities that enhance understanding of and respect for art; integrating art into daily life through public art; and creating support for artists and non-profit art groups.

The LMAA continues to follow this ideal through collaborative activities, support of the City of La Mesa and the La Mesa Park and Recreation Foundation, and a calendar of events throughout the year. The LMAA also hosts *Sundays At Six* summer concerts at Harry Griffen Park, created the La Mesa Walking Art Trail utility box project, and jointly participates in *Kids Care Fest* and *Spring HarpFest*.

CATCHING THE VILLAGE WAVE...*continued from page 1*

Adding to this trend of economic development in La Mesa's Village is the arrival of several major new businesses that have located downtown, making substantial physical and financial investments in their properties. Below are profiles of four projects that opened in the Village in 2008, representing at least $8 million of private investment in the Village.

Millicent & Company Salon

Millicent Hultenius, owner of Millicent & Company Salon, is proud of her new salon in the Village. As a salon owner and operator for over 20 years, she understands the business of looking good and taking pride in appearance and her new shop exemplifies the principle. In the fall of 2008, Millicent & Company Salon, a full-service beauty salon, opened for business at the southeast corner of Lemon Avenue and Palm Avenue, occupying an underutilized former bank building that she purchased, gutted, and completely remodeled, inside and out.

Just a year earlier, she couldn't have imagined having a brand new shop in the Village. At the time, she was operating two thriving salons elsewhere, one in El Cajon and another on Baltimore Drive in La Mesa. Then, in early 2008, the El Cajon shop was destroyed by fire. Unable to finance a re-build of the burned-out shop, all the employees and customers from the El Cajon salon crowded into the remaining La Mesa location at a time when Hultenius and the property owner were at an impasse in negotiations on the terms of a shop expansion. In the midst of this business turmoil, Hultenius' mother, also named Millicent, passed away, leaving behind an inheritance and an inspiration to persevere. Hultenius forged ahead and found the resources to start over and consolidate both salons into a single new location in La Mesa Village. Hultenius estimates the total cost of acquisition and renovation at approximately $2 million. Serving roughly 1,000 customers per month and employing 50 stylists and technicians, the salon brings customers and employees into the Village. "It's been an incredibly difficult year, but we're overjoyed to be here in the Village in this great new space. Our customers like being able to meet for lunch or shop before or after their appointments and we want to be a positive neighbor in the Village and help other businesses do well," says Hultenius.

Millicent & Company Salon's new location (on cover) and the interior is a thing of beauty.

GIO's Wine Bar & Restaurant

GIO's quality has raised the bar in the Village, along with an elegant outdoor dining area.

Entrepreneur and new restaurateur Gabe Giordano grew up in La Mesa. As a child and young adult, he once played in the Village and dined in the Village Garden restaurant that used to operate in the space that is now GIO Wine Bar & Restaurant. "I always wanted to own a restaurant and, more specifically, I always wanted own one in this particular location," says Giordano. After achieving financial success in a series of endeavors, Giordano had not only the financial resources to make his dream come true, but also the confidence that the Village was changing and could support a new restaurant concept. He sensed a pent-up demand for high-quality, sit-down dining in La Mesa and believed such a restaurant would appeal to a broad cross-section of patrons. Giordano was so confident that an upscale restaurant and wine bar could succeed in the Village that he invested nearly $2 million in design and interior and exterior improvements.

Giordano's vision produced a stylish, yet elegant, dining venue with diverse and affordably-priced cuisine that was an instant hit with patrons. So far, Giordano's vision and confidence have been well-rewarded. According to Bill Bender, Giordano's restaurant operations consultant, since opening GIO in August 2008, the response has been overwhelmingly positive and the restaurant's gross sales are well in excess of projected levels. That type of sales activity translates into greater foot traffic in the Village, greater exposure for existing businesses, and spin-off sales from both customers and the 56 employees working at GIO.

Randall Lamb Engineering

Formerly located in downtown San Diego in the One America Plaza high-rise office building, Randall Lamb Engineering, a well-established electrical engineering firm with 45 employees, relocated to the Village in 2008. Randall Lamb's lease in One America Plaza was up and the firm was facing a hefty increase to remain in its offices. Though the firm enjoyed the prestige of its downtown address and the vitality of downtown San Diego, the firm's leadership realized that La Mesa offered excellent transportation infrastructure and good regional centrality. "Locating in the Village allowed us to be closer to some major clients yet still very accessible to other clients and prospects. We were worried that some employees would not move with us to La Mesa, but the close trolley access and carpooling helped resolve any initial transportation concerns," recalls Olga Fisher, Associate Principal with Randall Lamb.

Most important, the Village provided Randall Lamb an opportunity to become a property owner instead of a lessee. Kurt Kohler of Randall Lamb, a long-time La Mesa resident, spotted the vacant La Mesa Appliance and Grossmont Escrow storefronts on Palm Avenue while driving through the Village in early 2007 and immediately envisioned their potential as a headquarters for Randall Lamb. By September 2007, the firm had closed escrow on both buildings and started an ambitious project to join the two structures into a single building while preserving the historically significant features of each. The adaptive re-use project culminated in a state-of-the-art office space, incorporating the latest in "green" technology and utilization of recycled materials. The total cost of the project is estimated above $4 million.

Randall Lamb's dazzling new interior, and above right is Randall Lamb's new Village facility.

Pete's Place

In with the new – Pete's is ready for another 40 years in the Village.

Pete's Place has been in the Village since the mid 1940s. Originally located at the corner of Spring Street & Allison Avenue on what is now the AT&T building site, Pete's has been owned by the Favero family for over 40 years. During that time, the family-owned bar & cocktail lounge developed a loyal customer base and become a Village landmark. John & Michelle Huey, co-owners of the bar along with Michelle's brother, Scott Favero, felt that after 41 years the building, which they rent, was due for some upgrades. They also acknowledged that the Village was improving, citing the introduction of a broader range of tenants, the Civic Center projects, and the arrival of GIO Wine Bar & Restaurant as examples. They wanted to be a positive part of the change and saw an opportunity to give their customers a new experience and also appeal to a new customer base starting to discover the Village.

Initially, the project started as an effort to bring the building up to standards called for under the Americans with Disabilities Act (ADA) and to repair some plumbing and electrical issues. However, they soon realized that in order to correct those problems they'd have to practically gut the facility. They decided to change direction and proceed with a full renovation of the interior of the building, replacing floors, installing ADA compliant restrooms, restoring the original brick walls, installing a new bar, new lighting, and new electrical and plumbing systems. The transformation is startling, converting a dark, cramped lounge into an airy, rustic tavern with modern amenities. Michelle Huey estimates the cost of the project at approximately $200,000 and feels the investment was well worth it based on the expected return and on the overwhelmingly positive reaction from customers, both old and new.

In addition to the four examples profiled above, three new storefronts have opened on La Mesa Boulevard, west of Spring Street. These include Unleashed Fitness, a boxing and fitness gym, Edible Arrangements, makers of fruit baskets and edible gift bouquets, and Readers, Inc., a children and youth bookstore. Each of these new investments in the Downtown Village highlight the viability of the Downtown Village as a commercial district and hint at its continued future success. The City of La Mesa is also planning to invest additional resources into the Downtown Village in the coming years. The City is currently retaining a team of consultants to prepare design and engineering plans for the renovation and upgrade of public infrastructure and streetscape improvements in the Downtown area (e.g., sidewalks, lighting, landscaping, street furniture, and other amenities). The design work is funded with revenues from the Downtown Parking Fund and is the critical first step toward a long-overdue renovation of the public realm in the Village. Construction of the streetscape improvements is planned to be phased over several years with capital projects funded from a variety of sources. The first phase, which is already designed, is expected to start construction in 2009 with the improvement on Allison Avenue. It is hoped that this public investment will help to provide the impetus for even more private investments and prosperity in the Downtown Village. The La Mesa City Council is committed to the public and private partnership that is key to achieving long-term vitality and success in the Village.

CATCHING THE VILLAGE WAVE…continued from page 4

La Mesa Residents Vote to Maintain Vital City Services

La Mesa voters came to the polls on November 4 and approved Proposition L – The La Mesa Vital City Services Measure. The Measure authorized a ¾ cent transactions and use tax (commonly referred to as a sales tax) that will go into effect on April 1, 2009. The proceeds from this new tax will allow the City to continue providing the level of service that La Mesans enjoy today. The tax will be effective on April 1 and the first payment to the City will come from the State Board of Equalization (SBOE) in June. Once the tax is enacted, the sales tax rate in La Mesa will go from 7.75% to 8.50%, or an additional ¾ cent on each dollar.

There are several differences in how these local sales taxes are applied. The major difference is for vehicle sales (cars, boats, RVs, etc.). The new tax will only be collected on vehicles sold to La Mesa residents (even if the transaction takes place outside of the City) as opposed to the base sales tax which is applied to all vehicle sales that take place in La Mesa (even if the vehicle is purchased by a non-resident). For example, if you are buying a new vehicle in La Mesa and indicate that you will register the vehicle within the city limits, the dealership will apply the additional tax to the transaction.

If you are buying the new vehicle in San Diego or any other city outside of La Mesa, the additional tax will still apply if your vehicle will be registered in incorporated La Mesa. However, someone from another city who will register the vehicle purchase to an address outside of incorporated La Mesa, even if they have a La Mesa zip code, will not pay the higher tax. This State law protects dealerships from lost sales. For most other transactions, the tax is applied just like the regular sales tax (for example, the Proposition L tax does not apply to prescription drugs or food sold for home preparation). The difference is that the full amount collected from the new ¾ cent tax will stay here in La Mesa providing the funding necessary for the services that make La Mesa a great place to live, work, and visit.

The City is posting information about Proposition L on the website. View a copy of the enabling legislation, including the guiding principles approved by the City Council in placing this measure before the community for consideration.

AVOID THE BITE

In early November, a reporter at the White House got more than an interview from then "First Dog" Barney—he got a bite. With statistics showing that about 4.7 million people in the U.S. are bitten by dogs every year, and 80 percent of those bites from familiar dogs, it's a safe assumption that any dog can bite, even if that dog belongs to the President.

Children are three times more likely to sustain a serious dog bite than an adult. They are often excited to see a dog and may run towards the animal talking loudly and using quick movements. They may even try to hug the animal. Any of these actions can easily result in a bite.

The good news is most dog bites to both adults and children are preventable. By following some basic guidelines and educating your children, you can approach dogs the right way. Remember, even the friendliest dog can be uncomfortable meeting new people.

Simple Rules for Approaching a Dog: Before petting someone else's dog always ask the owner for permission. After getting permission, approach slowly and calmly. Let the dog sniff the back of your hand first. Slowly pet the dog from the side, not from above the dog. Pet the dog's sides or back gently, and avoid the dog's face and mouth.

When to NOT Approach a Dog: Never sneak up on or pet a dog that is eating or sleeping. Animals may bite when they are startled or frightened. Avoid petting a dog that is playing with a toy. Some dogs are protective of toys and may think you or your child are trying to take it away. Never pet a dog in a car or one that is behind a fence. Most dogs naturally protect their property and space.

Although most people, children in particular, will often interact with their family's and neighbors' dogs, they need to know what to do should they encounter an unknown dog, especially if that dog is off-leash and without a caregiver. If you see a dog running loose in La Mesa it is best to contact La Mesa Animal Control who can get the dog to safety and search for the owner through licensing or a microchip scan. If a strange dog approaches you, stand still like a tree with your hands at your sides. Never try to run away from a dog, their natural instinct is to chase you. It is best to back away slowly from a dog until you are in a safe spot.

For more animal information or if you find a stray dog contact La Mesa Animal Control at 619.667.1436.

POLICE DEPARTMENT ANNOUNCES PROMOTIONS

Chief Alan Lanning announced the promotions of Sergeant Matt Nicholass to Lieutenant and Officer Angela DeSarro to Sergeant, both effective December 19, 2008.

Lieutenant Nicholass joined the Police Department in 1998. He previously worked for the Oceanside Police Department as a reserve officer. Following his initial assignment as a patrol officer, he was selected for a special assignment as a traffic accident investigator in the Police Department's Traffic Unit in 2000. Later that year he was selected for assignment as a motor officer and worked as one of the Police Department's three motorcycle officers. In 2004 he was appointed as a master officer, responsible for the training of new police officers and supervising patrol officers from time to time. He was promoted to sergeant in 2007 and assigned to the Patrol Division where he supervised a squad of patrol officers.

In addition to his regular duties, over the years Lieutenant Nicholass has served as one of the Police Department's driving instructors and is a member of the Special Response Team. He is a past recipient of the California Highway Patrol "10851 Pin" for excellence in the identification and recovery of stolen vehicles. He has twice been selected as the Police Department's Employee of the Quarter. He has consistently been recognized by his supervisors as a dedicated professional with excellent skills and knowledge, and for his work in training and mentoring personnel.

Sgt. DeSarro joined the Police Department in 2001 and worked as a patrol officer until 2005, when she was selected for a special assignment as a detective, assigned to the Investigations Unit. In 2008 she was chosen for another special assignment, as a member of the Police Department's Special Enforcement Detail.

Sergeant DeSarro has excelled throughout her career and has been honored a number of times for her outstanding work. In 2003 she was recognized by the La Mesa Sunrise Rotary as its Officer of the Year. She was similarly honored by the Scottish Rite of Mission Valley in 2005 and also received the San Diego Crime Stoppers "Enough Is Enough" award that year. She is a past recipient of the Police Department's Employee of the Quarter award and currently serves as a member of the Peer Support Team.

La Mesa
COMMUNITY SERVICES

SPRING AQUATICS
Enroll now for spring youth learn-to-swim classes.

SPRING ENRICHMENT CLASSES
Space is still available in some spring classes

Check availability online

SUMMER DAY AND SPECIALTY CAMP PROGRAMS
Available now

Convenient enrollment is available online or print the enrollment form to mail in.

SUN VALLEY GOLF COURSE
5080 Memorial Dr., La Mesa, CA 91941
7:00 am to dark Mon – Fri • 6:30 am to dark Weekends
Adults $10 for 9 holes $14 for 18 holes • Students $6 for 9 holes $10 for 18 holes
(includes college with valid student ID)
Clinics, lessons, and special programs are available.
For details go to **www.sunvalleygolfclub.com** or call 619.466.6102

GOOD OUTDOOR LA MESA FUN
Free Youth Golf ClinicLa Mesa Residents Only
Sat., March 21 – 3:00 pm
Complete this coupon and return to:
Sun Valley Golf Club • 5080 Memorial Dr., La Mesa CA 91941

Name: _____
Address: _____
Phone: _____

SPACE IS LIMITED. REGISTER NOW!

DO THE RIGHT THING!

Did you know that household hazardous waste (HHW) disposal is *FREE FOR LA MESA RESIDENTS* for the following items?

Batteries | **Fluorescent lights** | **Latex & oil based paints**

Solvents & cleaners | **Pesticides & garden products** | **Pool products**

Propane | **Any items labeled flammable, hazardous, toxic, or corrosive.**

Electronics **TVs** | **Computer monitors & hardware** | **Cell phones & telephones**

MP3 players | **VCRs** | **Radios**

Automotive batteries | **Used oil & filters** | **Antifreeze**

These items are considered hazardous and are not allowed to be placed in the trash because of their destructive effect on the environment. If you reside within the City limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program.

Collection events are available by appointment only by calling EDCO at 619.287.5696 x4270. Upcoming dates are:

March 14 May 2 June 6 July 18 August 29 October 10 November 21

Make your own non-toxic cleaning supplies cheap and easy! For a limited time, request free green cleaning recipe decals when you arrive at the event and we'll throw in a free spray bottle.

Medical sharps (needles) can also be disposed of through this program. They must be properly secured in a sharps container. See our announcement for easier disposal. Call 619.667.1338 or visit www.cityoflamesa.com/hhw for more info.

E-waste can now be recycled at the EDCO Station buyback center during business hours without an appointment. The center is open Monday through Saturday from 8:00 am to 4:00 pm. A small fee may apply to some items.

Call EDCO at 619.287.5696 x4270 or email at lmhhw@edcodisposal.com, to schedule an appointment for HHW drop-off. To request additional information about the program, please contact the Department of Public Works Environmental Services Division at 619.667.1338 or by email at envirosvcs@ci.la-mesa.ca.us. For general HHW information or other disposal and recycling options, visit www.cityoflamesa.com/hhw.

MEDICAL SHARPS DISPOSAL IS NOW EASIER

The City of La Mesa is now offering free sharps disposal through our household hazardous waste (HHW) program without an appointment. Sharps are defined as, "any device having acute rigid corners, edges, or protuberances capable of cutting or piercing, including, but not limited to, all of the following:

- Hypodermic needles, hypodermic needles with syringes, blades, needles with attached tubing, syringes contaminated with biohazardous waste, acupuncture needles, and root canal files.
- Broken glass items, such as Pasteur pipettes and blood vials contaminated with biohazardous waste.
- Any item capable of cutting or piercing that is contaminated with trauma scene waste."

Sharps must be properly secured in a sharps container. See our HHW announcement for upcoming drop-off event dates. For more info, call the Department of Public Works Environmental Services Division at 619.667.1338 or email us at envirosvcs@ci.la-mesa.ca.us.

Here are other possible options for legally and safely disposing of sharps:

Pharmacies and Hospitals – Contact the pharmacy or hospital where you obtained your sharps to see if they have a "take-back" program or can assist you with safe disposal.

Mail-Back Services – Sharps can be sent to businesses that provide proper disposal using safe, postal-approved packaging. You can find these services through the California Integrated Waste Management Board website at www.ciwmb.ca.gov/HHW/sharps.

An appointment is required for disposal of other types of HHW such as batteries, fluorescent bulbs, household chemicals, and electronics. Call EDCO at 619.287.5696 x4270 or email at lmhhw@edcodisposal.com to schedule an appointment for the next event.

LA MESA RECEIVES GRANT TO ENHANCE MULTIFAMILY RECYCLING OPPORTUNITIES

The City of La Mesa was recently awarded a grant for $113,000 from the California Department of Conservation, Division of Recycling to improve recycling opportunities for apartment and condominium complexes. Under the grant, eligible properties may receive indoor/outdoor recycling receptacles for use in common areas, can crushers, and smaller below-the-counter containers for indoor use. The goal of the grant is to increase recycling opportunities for items with a California Redemption Value (CRV) such as beverage containers. Notices of the program inviting participation will be mailed directly to property owners and managers.

Look for your eligibility notice and the program flyer in the mail in the coming months. For more information about the program or to be placed on the multifamily participation list, please contact the Department of Public Works Environmental Services Division at 619.667.1338 or by email at envirosvcs@ci.la-mesa.ca.us.

The California Department of Conservation, Division of Recycling also provides recycling information and assistance for residents, businesses and organizations. They can be reached at 1.800.RECYCLE or online at www.conservation.ca.gov.

ANNOUNCING SPRING CLEANUP 2009!

Your opportunity is here to simplify your life! The City of La Mesa and EDCO Disposal Corporation will be holding the annual Spring Clean-Up event on two Saturdays in April. And it's all free for La Mesa residents!

The event will be held between 7:00 am and 2:00 pm at EDCO Station, 8184 Commercial Street.

If you live SOUTH of Interstate 8, your clean-up day is April 11

If you live NORTH of Interstate 8, your clean-up day is April 18

WHAT YOU CAN BRING:

- *Reusable Items*
- *Unwanted Furniture*
- *Large Appliances*
- *Landscape Material*
- *Waste Debris from Improvement Projects*
- *Trash and Yard Waste*
- *Just plain junk*

This annual event is for residents who live within the incorporated City limits ONLY. You MUST bring a California Identification Card or Driver's License listing your La Mesa address. DO NOT bring items from a household outside of the City of La Mesa.

There are some restrictions on the items than can be accepted. This is NOT a Household Hazardous Waste (HHW) Collection Event. We will NOT accept batteries, fluorescent lights, televisions, computer monitors, home electronics, tires, or items labeled poison, flammable, corrosive, or explosive. To dispose of HHW, please call 619.287.5696 x4270. To get more info see the HHW flyer in this issue of the FOCUS or visit www.cityoflamesa.com/hhw.

We also will not accept waste from businesses, contractors or professional landscapers.

Free mulch will be available on a self-loading, first-come, first-serve basis.

PHASE IV OF $14.5 MILLION SEWER
Upgrade Project Continues

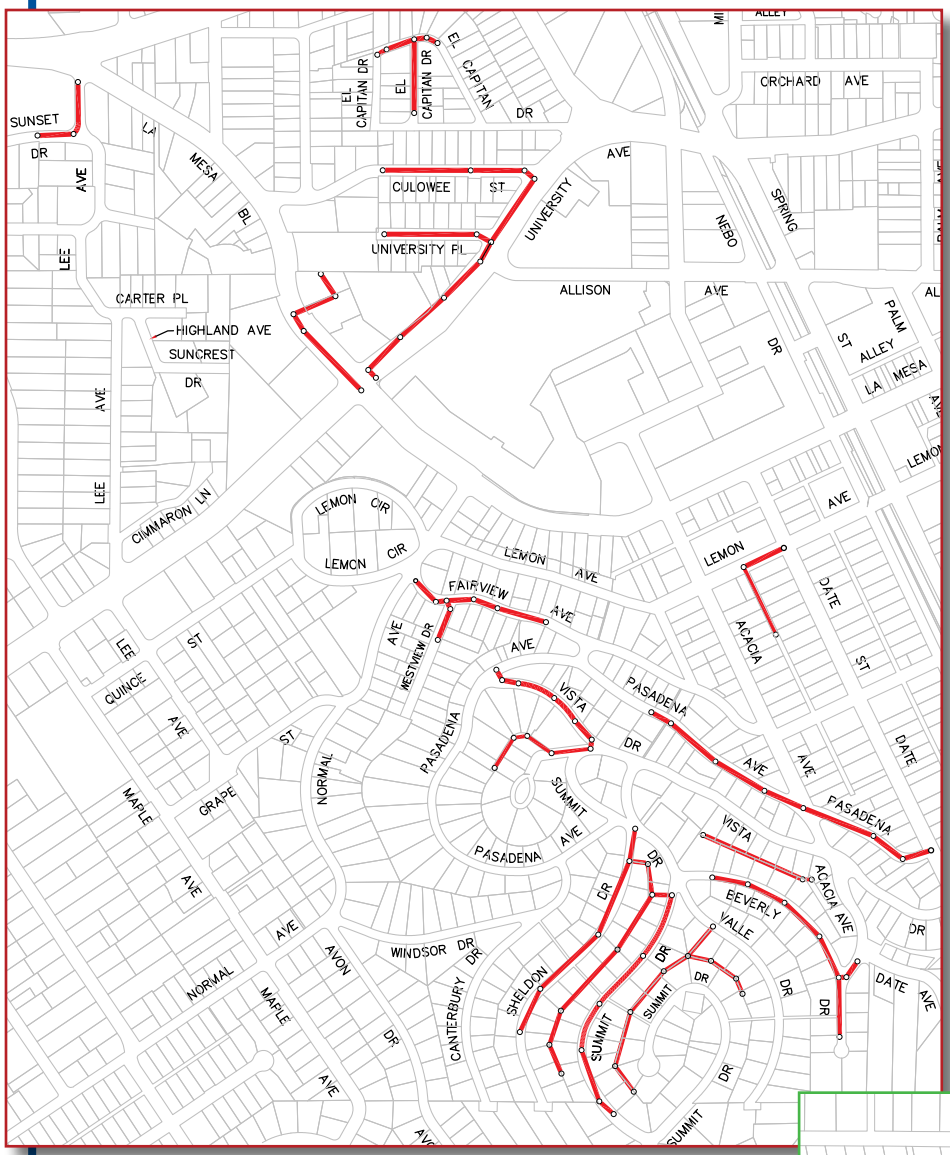

The following streets and easements will be affected as part of Phase 4:

El Capitan Dr.

Culowee St.

Sheldon Dr.

Beverly Dr.

Westview Dr.

University Pl.

Summit Dr.

Madison Ave.

Larsen Wy.

Pasadena Ave. between Date Ave. and Vista Dr.

Fairview Ave. between Normal Ave. and Pasadena Ave.

Lemon Ave. between Date Ave. and Acacia Ave.

Garfield St. between Madison Ave. and Jefferson Ave.

Alley between Madison Ave. and Jefferson Ave.

Easement between Summit Dr. and Valle Dr.

Easement between Valle Dr. and Vista Dr.

Easement between Summit Dr. and Sheldon Dr.

The accompanying diagram shows the locations of the proposed work. Residents in each neighborhood affected by the work will be notified of the start dates 48 hours prior to the start of construction.

In 2006 the City of La Mesa secured a $14.5 million low-interest loan from the State Water Resources Control Board. These funds are being used to rehabilitate and upgrade the City's aging sewer system in older and hillside sections of La Mesa.

The project was divided into four phases. Phase 3 construction is currently underway and is scheduled for completion in March 2009 (see the August 2008 issue of FOCUS for sites of Phase 3 construction). Phase 4 construction is scheduled to start this year in early spring. The combined phases represent the largest infrastructure project ever undertaken by the City.

During construction, residents may be inconvenienced by restricted traffic flows and construction noise in areas close to the construction zones. This infrastructure improvement project will enhance health and safety for La Mesa residents for many years. The City apologizes in advance for any inconvenience.

NEW LEFT TURN SIGNAL AT LAKE MURRAY AND EL PASO

Federal grant money will provide funding for upgrading the traffic signal at the intersection of Lake Murray Boulevard and El Paso Street. The project will install a protected left turn arrow for the Lake Murray Boulevard approaches to the intersection. This means that vehicles turning left from Lake Murray onto El Paso will have a separate signal to help protect them from oncoming traffic.

The signal will be upgraded to include state-of-the-art pedestrian countdown features that show how many seconds remain to safely cross the street. An audible voice will tell pedestrians when it is safe to cross, and a vibrotactile feature will cause the push button to vibrate indicating that the button has been pushed. Since the intersection is near Murray Manor Elementary School, new high visibility crosswalks will be installed at the intersection.

These improvements provide greater safety by helping to reduce vehicle crashes and increasing the visibility of school children and other pedestrians using the crosswalks. Additional work at the intersection includes updating the curb ramps to comply with the Americans with Disabilities Act (ADA).

San Diego Gas & Electric has begun work placing the overhead utility wires below ground on Parkway Drive between Marengo Avenue and Amarillo Avenue. This project is part of the City's utility undergrounding program and is expected to take six months to complete. For more information visit http://www.cityoflamesa.com/undergroundutilities.

Parkway Drive Utility Undergrounding Begins

Waite Drive Sound Wall
Construction Begins

Caltrans began construction of a sound wall just north of State Route 94 in December. This project has been in the planning stages for several years, and it is the only sound wall funded for construction in San Diego County. The wall will be on the north side of the freeway between Murray Hill Road and Massachusetts Avenue. The cost of the project is around $1 million. Work is expected to be completed in 10 months.

WHO'S THERE?

Respond Safely When Door-to-Door Marketers Knock

On December 10, 2008 the media reported a disturbing situation in which an elderly female was kidnapped from her home. Although this incident did not occur within the City of La Mesa, but rather the unincorporated (County) area of La Mesa, the La Mesa Police Department would like to remind our citizens of the dangers associated with letting strangers into your home. In this kidnapping case, the victim had previously purchased a vacuum from the suspect. The suspect returned on a different day asking to borrow the victim's phone to make a call. It was during this second visit that the kidnapping took place. Citizens are encouraged to be extremely careful when answering the door to solicitors. The City of La Mesa has strict guidelines solicitors must follow when conducting door-to-door sales or marketing.

All individuals going door-to-door selling products or conducting marketing activities in the City of La Mesa are required to obtain a Solicitor Business License. Each individual representative of an organization must have their own Solicitor Business License. Solicitors must provide the following to the City before their Business License is approved and they are allowed to go door-to-door:

1. **Proof of $1,000 surety bond naming the City of La Mesa**
2. **Three 2x2 passport-style photographs**
3. **Set of fingerprints**

Non-profit organizations are not exempt from this requirement. To obtain the license, each solicitor must undergo a background check by the Police Department. The license includes a color picture, as well as their business name, address, and phone number. Solicitors must have the license in their possession and make it available for your review upon request.

Solicitors are not allowed to do business on sidewalks, streets, or other public property and may only operate between the hours of 9:00 am and 8:00 pm. They do not need to carry their product or provide their service at that time to be considered a solicitor.

The following La Mesa Municipal Code sections are associated with solicitation:

6.04.050 License to Conduct Business Required--Compliance. 6.04.340 Displaying in Vehicle. 6.28.020 License Required. 6.28.080 Possession and Exhibition of License. 6.28.120 Prohibitory Signs

View the text of these Municipal Code sections here or enter "Municipal Code" in the search field on the City website and select "Title 6 BUSINESS LICENSES AND REGULATIONS."

If a solicitor calls on you at home, ask to see their City of La Mesa business license before beginning any business with them.

- *The license is approximately 8½" x 3½" in size, cream in color, and will say "City of La Mesa" at the top.*
- *If the solicitor cannot provide a business license they are most likely operating illegally in the City of La Mesa.*
- *Call the Police Department at 619.667.1400 to report any unlicensed individual conducting solicitation activity. Be ready to provide your location, a description of the individual, and their direction of travel.*
- *The City of La Mesa would like to stop unlicensed solicitation. Please also contact the City's Business License Officer at 619.667.1118 whenever you have an unlicensed solicitor in your neighborhood.*

Having good home security and safety practices will also aid in preventing crimes related to solicitors or people posing as solicitors.

- *DO NOT, under any circumstances, allow solicitors into your home.*
- *Only make purchases from organizations in which you initiated the contact, or have checked through the Better Business Bureau or local Chamber of Commerce.*
- *Visit the Police Department Crime Prevention section to find an informative video with tips on home security and personal safety. If you are unable to view the video online, copies of the DVD are available free of charge at the Police Station located at 8181 Allison Avenue.*
- *Please contact the Crime Prevention Unit at 619.667.1445 or the Business Licensing Unit at 619.667.1118 if you have additional questions.*

PORTION DISTORTION

Serving Savvy

What's the difference between a portion and a serving? A definition to remember is a portion is the amount of an individual food item you choose to eat and a serving is a unit of measure for the amount of food recommended from each food group by the United States Department of Agriculture (USDA). The National Institutes of Health (NIH) recommends the average person consume 6-11 servings of whole grains each day. A serving of whole grains is typically defined as 1 ounce, or the equivalent of 1 slice of bread or ½ cup of rice or pasta. If you aren't careful it can be easy to confuse this recommendation to mean 6-11 portions of grain with no consideration of the actual number of servings in the portions you are eating, thus falling into the portion distortion trap. A plate of spaghetti at your favorite Italian restaurant will most likely be more than a single ½ cup serving.

The prospect of having to measure or weigh everything you eat may seem impractical or at best inconvenient. To help put things in perspective, the USDA has developed some comparative examples of serving sizes in the basic food groups against some everyday items that are easy to remember.

- **1 cup of cereal flakes = a fist**
- **1 pancake = compact disc**
- **½ cup cooked rice or pasta = ½ baseball**
- **1 cup salad greens = 1 baseball**
- **¼ cup of raisins = 1 large egg**
- **3 oz. meat, fish, or poultry = 1 deck of playing cards**
- **2 tablespoons of peanut butter = 1 ping pong ball**

A good source of information on healthy eating is the USDA's website www.mypyramid.com. The site offers a variety of nutrition information as well as tips for losing weight and menu planners and nutrition trackers designed just for you. Portions of the website are designed especially for kids so the whole family can take part. Best of all it's free! There is even a serving size example card to print out and laminate. If you don't have access to Internet at home, you can access this important information from computers located at the new La Mesa Branch of the San Diego County Library on Allison Avenue between City Hall and the Fire Administration buildings. Remember, the best way to fight portion distortion is to become serving savvy!

KNOW WHAT'S IN THE FOOD YOU BUY

- Watch out for words you don't know or can't pronounce. They most often mean chemicals or artificial ingredients have been added during processing.
- Ingredients on the nutrition label are listed according to amount from most to least. If an item has sugar as the first ingredient it means the product contains more sugar than any other single ingredient.
- Be aware that "sugar" goes by many different names: dextrose, fructose, glucose, and high-fructose corn syrup.
- Choose foods that have the word "whole" in front of grains. Such as whole wheat or whole grain products. They typically have more dietary fiber, antioxidants and protein than processed grains.
- To be "low fat" foods should have less than three grams of fat per serving. Try to eat more low fat foods. They are healthier for your body.

Information compiled by: Intern Sara Kloack

WANT TO MAKE A DIFFERENCE?

VOLUNTEER FOR A CITY BOARD, COMMISSION OR COMMITTEE

The City of La Mesa is now recruiting for City boards, commissions, and committees. Members of boards and commissions provide an invaluable service to our city. They advise the City Council and City staff on a wide variety of subjects by making recommendations on important policy matters.

Serving on a board or commission can be a rewarding experience for community service-minded residents. It is an excellent way to participate in the functioning of local government and to make a personal contribution to the improvement of our community. Citizen participation helps ensure our local government is addressing the needs of the La Mesa community through the services, planning, and decision making provided by each board.

You can learn more about the roles and responsibilities of the various boards, commissions, and committees by visiting the Boards & Commissions overview page of the City website. Most advisory groups meet once a month for a couple of hours.

Please consider this opportunity to serve on a board, commission, or committee. Find an application and specific information regarding qualifications, requirements for serving, and meeting days and times on the City's website, by visiting the City Clerk's office at City Hall, 8130 Allison Avenue, or calling the Clerk's office at 619.667.1120.

Applications for advisory boards must be submitted to the City Clerk's office no later than 5:30 pm, Thursday, June 11, 2009, to be included in the June interview and selection process. The interview and selection process for the Youth Advisory Commission occurs in September.

Applications are now being accepted for appointment on the following boards, commissions, and committees:

Building Codes Review Board

Commission on Aging

Community Services Commission

Design Review Board

Human Relations Advisory Commission

La Mesa Community Parking Commission

Loan Committee for Real Estate Rehab

Personnel Appeals Board

Planning Commission

Traffic Commission

Youth Advisory Commission

WALK LA MESA

Just for the Fun of It!

The La Mesa Wellness Task Force wants you to know that there are organized walks nearby every day of the week. Check the City's website at www.cityoflamesa.com, search *live well,* and click on Walk La Mesa under Quick Links for a list of options or pick up a flyer at La Mesa City Hall or the La Mesa Community Center. Call 619-667-1300 for more information.

EVERY KID'S LIFE LIST

In July 2006 the La Mesa City Council adopted a Community Wellness Program that encourages everyone in our community to make nutritious food choices and increase their physical activity as part of a healthy lifestyle plan. The La Mesa Community Services Department offers a variety of classes and seasonal activities designed to introduce participants to activities that provide physically, mentally, and emotionally healthful benefits. Our intent is to promote lifelong health and wellness and we are especially interested in helping children develop positive lifestyle choices at an early age. Responses to the City's latest Community Survey indicated that La Mesan's love their parks, ranking them one of the most important assets in La Mesa. Community Services staff understands the importance of outdoor recreational opportunities, especially to children's cognitive, emotional, and social development.

Throughout the country other public and private organizations are working in a variety of ways to address the growing epidemic of childhood obesity in an effort to reverse the startling prediction that today's children will not live as long as their parents. One such group is the California Roundtable on Recreation, Parks and Tourism, a consortium of State, federal, local, academic, private, and non-profit organizations whose mission is to encourage California's children to participate in outdoor recreational activities and discover their heritage. The Roundtable has developed a list of experiences every child should have by the time they enter high school. This list represents a giant step towards encouraging children to get up, get out, get active, and develop a lasting appreciation for the outdoor environment around them. Governor Arnold Schwarzenegger issued a proclamation on July 6, 2007 recognizing the Children's Outdoor Bill of Rights. Many of these experiences are available without leaving La Mesa city limits. All of these experiences are available within San Diego County.

We are happy to share this list and encourage every one of you to seize every opportunity to introduce the children in your family to these life-building experiences.

EVERY CHILD SHOULD HAVE THE OPPORTUNITY TO:

Discover California's Past • Splash in the Water • Play in a Safe Place
Camp Under the Stars • Explore Nature • Learn to Swim • Follow a Trail
Play on a Team • Catch a Fish • Celebrate their Heritage

NOTIFY ME

Notify Me is the City of La Mesa email notification system that instantly alerts citizens of important City news, events and services. Notify Me allows community members to subscribe to a number of email lists including the La Mesa City Council Agenda, Recreation Classes Schedule and La Mesa Police Department Press Releases. It provides residents with another means of communicating with and obtaining information from City Hall. It is a powerful tool that easily keeps them informed, reduces the need to call or visit City Hall, and provides easy access to new information on the City's website.

To sign up for this service, please visit Notify Me. Enter your complete email address, select the email type you would like to receive (html or text), and select each email list you would like to subscribe to. Finally, click the Subscribe/ Manage button.

You will receive a confirmation email for each category you select. You can make changes to your email notification subscription by entering your email address and clicking the Subscribe/Manage button. If at any time you decide you no longer wish to receive notifications, each email contains instructions to remove your email address from our notification service.

YOU CAN SIGN UP TO RECEIVE INFORMATION ABOUT THE FOLLOWING CATEGORIES:

- Adult Enrichment Center Classes, News & Events
- City Calendar, News & Announcements
- Community Services Recreation Classes & Aquatics
- Fire Prevention, Emergency Preparedness & Upcoming Events
- FOCUS Quarterly Newsletter
- City Council Meeting Agendas
- Planning Commission Meeting Agendas
- Police Department Press Releases
- Job Announcements

COUNCIL ACTIONS

October 14, 2008
Adopted a resolution authorizing Change Order No. 1 for Phase 4 of the State Revolving Fund Sewer Design Project to PBS&J.

Adopted a resolution awarding a contract to Quality Assurance Inspections to provide material testing and special inspection services for the City of La Mesa Police Station Project.

Appointed members to Youth Advisory Commission.

October 28, 2008
Ratified the Design Review Board's approval of DRB-07-14 (CA Independent Grocers & Convenience Stores) for an exterior remodel to an existing two-story office building located at 8923 La Mesa Boulevard.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a local seat belt compliance traffic safety project and approving the addition of the grant funds to the FY 2008-2009 and 2009-2010 budgets.

Adopted a resolution adding Section 12.28.030 (74.13) to the La Mesa Municipal Code designating Kelton Avenue as a stop street at El Paso Street.

November 12, 2008
Adopted a resolution accepting Bid 08-13 and awarding a construction contract to Peterson-Chase General Engineering Construction, Inc. for the Grossmont Center Drive bridge railing repair project.

Adopted a resolution accepting Bid 08-07 and awarding a contract to Casper Company for the removal of hazardous materials from Fire Station 13.

Adopted a resolution authorizing a Memorandum of Understanding between the San Diego County District Attorney's Office and the La Mesa Police Department for the reimbursement of joint operations expenses from Project SAFE Neighborhood, Regional Anti-Gun Violence Federal Grant.

November 25, 2008
Ratified the Design Review Board's approval of DRB-08-04 (T Mobile) for a wireless communications facility at 3881 Shirlene Place in the adjacent King Street Right-of-Way, and approved the Negative Declaration in accordance with the California Environmental Quality Act.

Adopted a resolution awarding Bid No. 08-02 for fence installation at Sunset Park and ramp railing installation at Rolando Park to Atlas Fence Company.

Adopted a resolution authorizing the acceptance of an agreement with the San Diego County Sheriff's Department to participate in the California Office of Traffic Safety "Avoid DUI Campaign" Grant, to conduct a regional three year alcohol enforcement program.

Designated the property located at 8545 Chevy Chase Drive as a historic landmark and entered into a Historic Landmark Property Preservation Agreement with the property owners.

Designated the property located at 5628 Nokomis Street as a historic landmark and entered into a Historic Landmark Property Preservation Agreement with the property owners.

Upheld the Planning Commission's approval of Special Permit SP-08-08 (Telliard) for a retaining wall retaining more than three feet of fill within the front setback and an accessory structure that exceeds the height limitations at 9335 Golondrina Drive and denied the appeal.

Adopted a resolution approving Tentative Parcel Map TPM-08-02 (City of La Mesa) for a proposed 3-lot subdivision of property consisting of approximately 3.5 acres located at the northeast corner of El Cajon Boulevard and Baltimore Drive.

Adopted a resolution approving the Purchase and Sale Agreement between the City of La Mesa and Fifties Challenge, LLC for Parcel 1 of TPM-08-02 located at the northeast corner of El Cajon Boulevard and Baltimore Dr.

Approved the Negative Declaration for both TPM-08-02 and the Sale and Purchase Agreement in accordance with the California Environmental Quality Act.

Adopted a resolution approving the Purchase and Sale Agreement between the City Council and the La Mesa Community Redevelopment Agency for the sale of the existing Police Station site at 8181 Allison Avenue and adopted the proposed Negative Declaration for the project.

December 9, 2008
Adopted a resolution reciting the facts of the General Municipal Election held on November 4, 2008 and declaring the results of the Election.

Ratified the Design Review Board's approval of DRB-08-10 (T Mobile), a proposed wireless communications facility at 5777 Lake Murray Boulevard and approved the Negative Declaration in accordance with the California Environmental Quality Act.

Adopted a resolution awarding a construction contract for the University Avenue Street Improvements, Bid 07-02, to Tri-Group Construction and Development, Inc.

Adopted a resolution authorizing the continued use of Supplemental Law Enforcement's Citizens Option for Public Safety (COPS) funds for the San Diego County 800 MHz Regional Communications System (RCS).

Adopted a resolution approving the ratification of Parcel Map Tract No. 08 02 for a three lot subdivision of property at the northeast corner of El Cajon Boulevard and Baltimore Drive.

The Miss La Mesa and Miss La Mesa Teen Pageants

are seeking young women who are La Mesa residents ages 13-26 to participate. Also, there will be a Miss La Mesa Princess Program for girls ages 6-12.

If you are interested please contact Pageant Director Alexandra Kuty at 619.698.4163 or email misslamesapageant@yahoo.com.

Hurry! The entry deadline in Sunday, February 8.

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.
Contact your elected officials at 619.667.1106.

Mayor..... Art Madrid
Vice Mayor ..... Mark Arapostathis
Councilmember..... Ruth Sterling
Councilmember..... Ernie Ewin
Councilmember..... Dave Allan
City Manager..... Sandra Kerl
Focus Editor ..... Käaren McElroy
Editorial Staff ..... Heather L. Moore
Ofelia Bareno

If you would prefer to continue receiving a printed version or need futher information please email at cmoff@ci.la-mesa.ca.us or call 619.667.1105 to be placed on a mailing list.

Want to know when the next issue of FOCUS is published?

Use the NOTIFY ME link to request automatic email notification so you won't miss the most up-to-date publication.

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 5:30 PM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM

The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM

The above meetings are held at the
Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM (except July, August, December)

The above meeting is held at the
Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS
(Area code 619)

Adult Enrichment Center	464-0505	*Dog Licenses*	667-1117	*Public Works*	667-1450
Animal Control	667-1436	*Engineering*	667-1166	*Recreation*	667-1300
Building Inspection	667-1176	*Fire (Business)*	667-1355	*Recycling/Trash*	287-7555
Business Licenses	667-1118	*Human Resources*	667-1175	*Sewer Charges*	667-1126
Cable TV	262-1122	*Library*	469-2151	*Sidewalk Maintenance*	667-1450
City Attorney	667-1128	*Mayor*	667-1100	*Storm Water Hotline*	667-1134
City Clerk	667-1120	*Municipal Pool*	466-4177	*Streetlight Maintenance*	667-1450
City Council	667-1106	*Park Permits*	667-1300	*Traffic Engineering Hotline*	667-1144
City Hall	463-6611	*Parking Citations*	667-1117	*Traffic Signal Maintenance*	667-1166
City Manager	667-1105	*Planning*	667-1177	*Zoning*	667-1177
Crime Prevention	667-1445	*Police (Business)*	667-1400		

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • May 2009

COMING SOON

New Signs in the Downtown Village

The City of La Mesa will be replacing the signs in and around the Downtown Village this summer. New sign designs were created as part of La Mesa's effort to enhance the community image and will provide a fresh look for the Downtown Village. The new signs are being funded by a combination of state grants and revenue from the Downtown Parking Fund.

Interested in City Government?

Consider serving on a Board or Commission.

See Page 7

FIRE STATION 13

CONSTRUCTION UPDATE

Fire Station 13, located at 9110 Grossmont Boulevard, is currently closed while undergoing a renovation to abate asbestos within the building as well as bring the building up to current "Essential Services Building" standards. Some of the improvements include: upgraded HVAC system, a new roof, a fresh coat of paint, new sleeping quarters, and a dedicated fitness room. The abatement process has been completed and construction for the upgrades began in April.

Originally built in 1961, Fire Station 13 has been home to many La Mesa firefighters. Fire Station 13 is the third and final La Mesa Fire Station in the City to be upgraded. Funding for this project comes from Proposition D approved by voters in 2004.

Everyone in the Fire Department is excited about the project and we eagerly await reopening of the station anticipated in the fall.

Community Emergency Notification System

La Mesa has a new tool to help residents in the event of a disaster or large scale emergency. The Community Emergency Notification System (CENS) is a mass notification telephone system that allows City officials to call any or all residents in the City of La Mesa to alert them to emergency situations. It is like 911 operators calling you. The system is called "AlertSanDiego" and is used to warn the public about imminent threats to life or property, disaster notifications, evacuation notices, public health emergencies, and any other notification to provide emergency information. City officials now have the ability to record a message or instructions to help you during an emergency. The system will only be used in emergency situations and will not be used for routine messages.

Continued on page 6

La Mesa Flag Day Parade

Saturday, May 30–Starts at 10:00 am
in the Downtown Village

Firemen's Association Post-Parade Barbecue

at Nebo Drive

Two Pre-Parade Concerts at 9:00 – 10:00 am

La Mesa Blvd. at Nebo Drive and Palm Ave.

"A Salute to Old Glory"

SUMMER'S ALMOST HERE!

Community Services has some COOL activities to help beat the heat (and the boredom)!

Browse our weekly youth class selections or check out our exciting day camp programs.

There are weekly classes for adults too!

Convenient enrollment is available 24/7 online or access a printable version of our enrollment form to mail in.

Classes and camps fill quickly.
DON'T DELAY – ENROLL TODAY!

La Mesa COMMUNITY SERVICES

7TH ANNUAL La Mesa Kiwanis Club Soap Box Derby Race

May 16, 6 am-6 pm

Junior High Drive by La Mesa Middle School

Sponsored by Drew Ford in cooperation with City of La Mesa.

Winners will be sent to National All-American Soap Box Derby in Akron, Ohio, in July. Youngsters ages 8 to 17 wishing to enter the race should contact Dennis Wilkes at 619.469.7353.

ALL-AMERICAN SOAP BOX DERBY

DIVE-IN MOVIE

SAVE THE DATE
Mark your calendar for July 17

FREE family movie (to be announced)

Take the Hollywood plunge, bring your favorite flotation device and cool off with us for a dive-in movie at the La Mesa Municipal Pool. Watch the City website for details as they become available.

If you or your organization would like to be a sponsor for this event, contact Aquatics Supervisor Becky Jackman at 619.667.1495.

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91941

7:00 am to dark Mon – Fri
6:30 am to dark Weekends

Adults $10 for 9 holes
$14 for 18 holes

Students*
$6 for 9 holes
$10 for 18 holes
*(*includes college with valid student ID)*

Clinics, lessons, and special programs are available.
For details go to
www.sunvalleygolfclub.com
or call 619.466.6102

GOLFERS WANTED

Cinco de Mayo Pro-Am Golf Classic

Tuesday, May 5, 2009

7:30 am Breakfast and Registration
9:00 am Shotgun Start
Play will be in a Shamble Format

Steele Canyon Golf Course
3199 Stonefield Drive, Jamul

Individual player $275 donation
Foursome $1,000 donation

Complete the player participation form and fax back to 619.464.3761

Funds raised during this tournament will benefit "It's Child's Play" La Mesa Park & Recreation Foundation's drive to raise $1 million to provide accessible, age-appropriate, and fun playgrounds in La Mesa parks.

CITY ANNOUNCES 2009

MISS LA MESA & MISS LA MESA TEEN

On March 6, 2009 the City of La Mesa held one of its most grand traditions, the Miss La Mesa and Miss La Mesa Teen Pageants. These pageants have been a La Mesa tradition since the late 1960s and have been an outstanding mentoring program for young women. Contestants were judged on a personal interview, essay, speech, poise and personality, sportswear, evening gown, and response to an on-stage question. Winners of the pageant will advance to the Miss Greater San Diego Pageant, the official preliminary to Miss California USA and Miss USA.

Congratulations to La Mesa's 2009 City Ambassadors.

Miss La Mesa 2009
Stephanie Packard

1st Runner Up – *Allison Williams*
Miss Congeniality – *Keilani Fite*
Miss Photogenic – *Stephanie Packard*
Speech Award – *Hope Rosemary*
Interview Award – *Allison Williams*
Essay Award – *Hope Rosemary*

Miss La Mesa Teen 2009
Katarina Schweitzer

1st Runner Up – *Rosa Chaves-Frank*
2nd Runner Up – *Abby Lehto*
Miss Congeniality – *Danamarie Carter*
Miss Photogenic – *Katarina Schweitzer*
Speech Award – *Rosa Chaves-Frank*
Interview Award – *Rosa Chaves-Frank*
Essay Award – *Katarina Schweitzer*

La Mesa Commission on Aging Presents

"Preserving Your Capital in Today's Economy"

Tuesday May 26 1:30 pm

Presenters: Michael O'Riordan & Stan Miller, O'Riordan & Associates

Location: La Mesa Adult Enrichment Center, 8450 La Mesa Boulevard

RSVP's Required to Assure Adequate Seating 619.464.0505

East County Senior Providers

10th Annual SENIOR HEALTH FAIR

Friday, May 15, 2009

10:00 am - 1:00 pm

Santee Trolley Square

Near Amphitheater & Food Court
9850 Mission Gorge Rd., Santee

FREE HEALTH SCREENINGS

Blood Pressure, Diabetes, Stroke,
Video Otoscopy and more!

Educational Programs • Health Information • Volunteer Opportunities
Financial Information • Senior Community Services
Housing Options • Home Care Services • Nutrition Services
Safety • Much more!

PARTICIPANTS & ATTENDEES

Ask about taking the MTS Trolley or bus line to the Fair!
For more information call: La Mesa Adult Enrichment Center at 619.464.0505

PROSPECTIVE VENDORS

For more information call: Laura Printy, Alzheimer's Association at 858.966.3291

Sponsored by: East County Senior Service Providers &

SHARP Grossmont Hospital

Grossmont Healthcare District

Santee Trolley Square

GOOD OUTDOOR LA MESA FUN

Free Youth Golf ClinicLa Mesa Residents Only
Saturday, June 20 – 3:00 pm
Complete this coupon and return to:
Sun Valley Golf Club • 5080 Memorial Dr., La Mesa CA 91941

Name: _____

Address: _____

Phone: _____

SPACE IS LIMITED. REGISTER NOW!

2009 MOVIE NIGHT UNDER THE STARLIGHT

A FREE movie for the entire family is planned for
Friday, July 31

Movie: "E.T.: The Extra-Terrestrial"

Location: La Mesita Park
8855 Dallas Street

Time: Pre-show entertainment at 8:20
Movie begins at 8:30 pm

We are seeking sponsors to help us make this a fun family event. If you or your organization would like to be a sponsor for this event, contact Recreation Supervisor Michele Greenberg-McClung at 619.667.1333.

Designing for Pedestrian and Bicycle Safety

FREE TRAINING WORKSHOP

Friday, May 15
8:45 am – 4:00 pm

Spring Valley Community Church
730 Concepcion Avenue
Spring Valley, CA 91977

Interactive workshop sponsored by the Healthy Transportation Network and County of San Diego Health and Human Services Agency (HHSA) East Region aimed at providing the latest bicycle and pedestrian design tools to community advocates and practicing transportation, planning, and design professionals. Morning coffee/snacks and lunch provided.

Workshop is free but space is limited RSVP to Rails-to-Trails Conservancy 415.814.1100 or western@railstotrails.org

Questions? Contact Katie Judd, HHSA East Region 619.668-3758 or Katherine.Judd@sdcounty.ca.gov

OUTDOOR WEDDINGS

Amphitheatre at Harry Griffen Park

West Terrace Patio at the La Mesa Community Center

Warm weather and the sight of blooming spring flowers bring thoughts of an outdoor wedding to the bride and groom-to-be. Outdoor weddings capture nature and the beauty of the ceremony. The City of La Mesa offers two unique outdoor wedding sites to assist in planning your dream wedding.

The amphitheatre at Harry Griffen Park has been the site of many memorable weddings. The gazebo is the ideal location for the bride and her attendants to begin their procession along the walkway to the staging area. Lush mature trees and other landscaping enhance the area.

A second outdoor venue is located at the La Mesa Community Center. The West Terrace Patio is a semi-circular patio that is complimented by vine covered brick columns. City staff sets up chairs, aisle runner, and decorated trellis in the rental package. For those weather questionable spring days the ceremony can be moved indoors. For Information call: 619.667.1305.

SUNDAYS AT SIX

Summer Concert Series

at Harry Griffen Park, 9550 Milden Street, La Mesa
Concerts from 6:00 – 7:00 pm

Enjoy FREE concerts featuring performances from some of San Diego's premiere recording artists, musicians, and singers. Bring a picnic and spend "Sundays at Six" relaxing to concert band, country, jazz, and variety music in the company of friends.

June 14	**Navy Jazz Band Southwest**
June 21	**San Diego Concert Band**
June 28	**Paradise (Latin soul that rocks)**
July 12	**Mark Jackson Country Band**
July 19	**Breez'n Variety Band**
July 26	**Strange Woods Celtic Band**

Note: Performance lineup is subject to change without notice

Up-to-date concert information is available on the City website or call 619.667.1300

Thanks to our sponsors:

LA MESA ARTS ALLIANCE – fostering the arts in our community

CITY OF LA MESA – JEWEL of the HILLS

WELLS FARGO

La Mesa ARTS Alliance presents:

2nd ANNUAL Spring Classical Concert

with the East County Youth Symphony

Sunday, May 3 — 3:00 pm

La Mesa Community Center, 4975 Memorial Drive

Conductor Olga Teztsova will direct the amazing talents of 80 of East County's most promising young musicians in a presentation of classical selections from some of the world's great composers.

The concert is FREE to the public. No-host refreshments will be available and a silent auction will be held during intermission. Donations will be gratefully accepted. Proceeds will be divided equally between the La Mesa ARTS Alliance and the East County Youth Symphony. Please RSVP as seating is limited 619.667.1300.

Community Emergency Notification System

Continued from page 1

The system utilizes the region's 911 database to contact land-line telephones. You do not need to register your home phone unless it is a VoIP internet service. You can register your mobile phone, VoIP, and email address. It is also TTY/TDD capable. By registering, you are allowing emergency response personnel to notify you with information and/or actions to take, such as an evacuation that you need to be aware of during an emergency or disaster. To register, please visit www.readysandiego.org and select "AlertSanDiego," then follow the instructions. You may register more than one mobile phone associated with your home address. If you have already registered and you have moved or changed your mobile number, you will need to re-register your new information

This is just another way to help get you information in the event of a disaster. You never know when an emergency will strike so take the time now to prepare yourself. Download a copy of the La Mesa Survive booklet from the City website or call the Fire Department at 619.667.1355 to have one mailed to you.

WALK LA MESA

Just for the fun of it!

Did you know there are organized walks nearby every day of the week? For a list of options visit Walk La Mesa under Quick Links – Live Well. You may also pick up a flyer at La Mesa City Hall or the La Mesa Community Center. Call 619.667.1300 for more information.

La Mesa... it's made for walking.

NEW LEFT TURN SIGNAL AT LAKE MURRAY AND EL PASO

Federal grant money will provide funding for upgrading the traffic signal at the intersection of Lake Murray Boulevard and El Paso Street. The project will install a protected left turn arrow for the Lake Murray Boulevard approaches to the intersection. This means that vehicles turning left from Lake Murray onto El Paso will have a separate signal to help protect them from on-coming traffic.

The signal will be upgraded to include state-of-the-art pedestrian countdown features that show how many seconds remain to safely cross the street. An audible voice will tell pedestrians when it is safe to cross, and a vibrotactile feature will cause the push button to vibrate indicating that the button has been pushed. Since the intersection is near Murray Manor Elementary School, new high visibility crosswalks will be installed at the intersection.

These improvements provide greater safety by helping to reduce vehicle crashes and increasing the visibility of school children and other pedestriaans using the crosswalks. Additional work at the intersection includes updating the curb ramps to comply with the Americans with Disabilities Act (ADA).

WANT TO MAKE A DIFFERENCE?

Volunteer for a City Board, Commission, or Committee!

The City of La Mesa is now recruiting for City boards, commissions, and committees. Members of boards and commissions provide an invaluable service to our city. They advise the City Council and City staff on a wide variety of subjects by making recommendations on important policy matters.

Serving on a board or commission can be a rewarding experience for community service-minded residents. It is an excellent way to participate in the functioning of local government and to make a personal contribution to the improvement of our community. Citizen participation helps ensure our local government is addressing the needs of the La Mesa community through the services, planning, and decision making provided by each board.

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Loan Committee for Real Estate Rehab

Personnel Appeals Board

Planning Commission

Traffic Commission

Youth Advisory Commission

You can learn more about the roles and responsibilities of the various boards, commissions, and committees by visiting the Boards & Commissions overview page. Most advisory groups meet once a month for a couple of hours.

Please consider this opportunity to serve on a board, commission, or committee. Find an application and specific information regarding qualifications, requirements for serving, and meeting days and times on the City's website by visiting the City Clerk's office at City Hall, 8130 Allison Avenue, or calling the Clerk's office at 619.667.1120.

Applications for advisory boards must be submitted to the City Clerk's office no later than 5:30 pm, Thursday, June 11, 2009, to be included in the June interview and selection process. The interview and selection process for the Youth Advisory Commission occurs in September.

More Head Room for La Mesa

The City and SDG&E continue recent progress to give La Mesa residents more head room.

In early spring construction to put overhead cabling underground began on two of the six districts currently approved by City Council. If you've encountered roadwork along the westbound lanes of Fletcher Parkway, you've seen San Diego Gas & Electric's (SDG&E's) contractor working to underground the overhead lines along Parkway Drive. Over half of the conduit is already installed for the district which extends from Marengo Avenue to Lambda Lane.

In the area of Helix Charter High School, the school is not the only one making changes. SDGE's contractor recently completed installation of all conduit for the Orien Avenue underground district in anticipation of upcoming street and sidewalk improvements by the City.

Finally, Massachusetts Avenue, a major corridor in La Mesa, is in the final stages of acquiring easements to allow for undergrounding of the overhead utilities. The overhead utilities on Waite Drive will also be undergrounded beginning this summer.

What's all the hoopla? If you've lived in La Mesa long enough to see the impact of removing poles and cabling from our skies, you know that these projects are more than technological upgrades; they are a great way to remove eyesores and make our Jewel of the Hills shine.

Stay tuned, there's more work to come!

Baltimore Drive Street Resurfacing

On March 10, 2009 the City Council awarded a contract to Hazard Construction to resurface various streets in the City. The largest street will be Baltimore Drive from University Avenue to the north City limit.

Resurfacing follows replacement of the sewer pipes in portions of these streets as part of La Mesa's effort to coordinate infrastructure improvements. Other streets to be resurfaced are: portions of Lee Avenue, Grape Street, Normal Avenue, Mills Street, Colina Drive, Orchard Avenue, Hillcrest Avenue, Crowder Lane, Chevy Chase Drive, Boulder Place, Boulder Drive, and 4th Street. This project also includes installation and upgrade of pedestrian ramps.

Keep up-to-date on the schedule and find additional information at cityoflamesa.com/resurfacing.

For your safety, drivers are encouraged to stay alert and follow all no parking and traffic control signs in construction zones. Please contact Dirk Epperson at depperson@ci.la-mesa.ca.us with questions or concerns.

City Responds to Concerns About Homeless

From time to time City residents or visitors to La Mesa report people who appear to be homeless on our City streets and in parks or other areas. The presence of homeless people in our community is not new and is an issue that impacts the entire San Diego region. In July 2004 the Regional Task Force on the Homeless estimated there were nearly 10,000 homeless people in the San Diego region.

The immediate concern of many of our residents and visitors are the potential risks posed by the homeless or that the homeless themselves may face. Based on contacts our police officers have had with the homeless, we know that many have criminal histories, issues with substance abuse, and may commit various crimes to help support their day-to-day existence.

As we can all imagine, being homeless presents a whole set of dangers to the homeless themselves, including poor health, lack of health care, and a greater danger of being victimized by crime. Make-shift shelters set up by the homeless in secluded areas pose certain dangers to both the homeless and public, primarily due to uncontrolled trash and waste and small fires or stoves used for cooking and warmth.

Due to these concerns, a number of the City's departments are working together in an effort to address homeless issues in La Mesa. Members of the Police, Fire, and Community Development Departments have recently identified and closed a number of homeless encampments throughout the City. Police officers make periodic checks of areas where encampments are typically found and respond to citizen reports of new encampments. The officers' first goal is to address any public safety issues they find, and officers also provide information to the homeless they contact about where they can obtain services. Government agencies and private sector service providers in the San Diego region offer a variety of programs to provide assistance to the homeless. These include providing food, short-term lodging, and counseling and education services.

In closing, we feel it is important to keep the following information in mind when you see or encounter the homeless.

- As an individual, you should not give food or money to the homeless, but encourage them to seek assistance through government or private agency providers.
- Generally, it is not illegal to ask for food or money, or offer to work for food or money, but it is unlawful to do so in an aggressive or harassing manner.
- It is illegal to offer to work for food or money in close proximity to a freeway on-ramp or off-ramp.
- Stopping your car on a street or at an intersection to give money to a homeless person creates a hazard for other vehicles and for the homeless who step into the street to accept your gift of money.

More information on the homeless issue in the San Diego region can be found at the website for the Regional Task Force on the Homeless www.rtfhsd.org.

PHASE IV OF $14.5 MILLION SEWER
Upgrade Project Continues

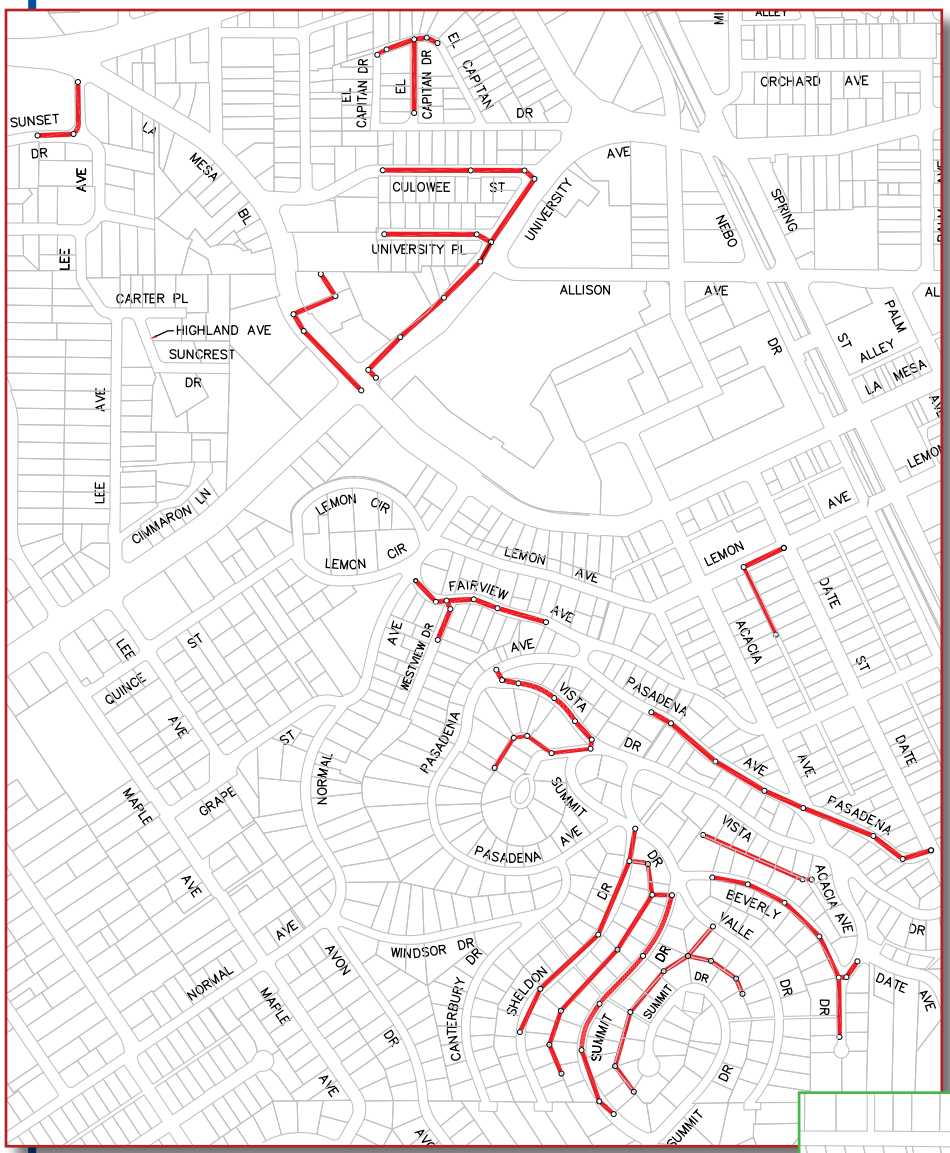

The following streets and easements will be affected as part of Phase 4:

El Capitan Dr.

Culowee St.

University Pl.

Sheldon Dr.

Summit Dr.

Beverly Dr.

Madison Ave.

Westview Dr.

Larsen Way

Pasadena Ave. between Date Ave. and Vista Dr.

Fairview Ave. between Normal Ave. and Pasadena Ave.

Lemon Ave. between Date Ave. and Acacia Ave.

Garfield St. between Madison Ave. and Jefferson Ave.

Alley between Madison Ave. and Jefferson Ave.

Easement between Summit Dr. and Valle Dr.

Easement between Valle Dr. and Vista Dr.

Easement between Summit Dr. and Sheldon Dr.

The accompanying diagram shows the locations of the proposed work. Residents in construction areas will be notified prior to the start of construction.

In 2006 the City of La Mesa secured a $14.5 million low-interest loan from the State Water Resources Control Board. These funds are being used to rehabilitate and upgrade the City's aging sewer system in older and hillside sections of La Mesa.

The project was divided into four phases. Phase 3 construction is scheduled to be completed in May. Phase 4 construction is scheduled to start this summer. The combined phases represent the largest infrastructure project ever undertaken by the City.

During construction, residents may be inconvenienced by restricted traffic flow and higher than normal noise levels in areas close to the construction zones. This project will enhance health and safety for La Mesa residents for many years. The City apologizes in advance for any inconvenience.

SPRING FIRE SAFETY

Spring cleaning is the perfect time to ensure your home is safe from potential fire and life safety hazards. La Mesa Fire Department encourages you to use this tradition to help make your home fire safe, inside and out. We've provided you with some simple tasks that can help make your home a safer place.

While cleaning the inside of your house, check the batteries in smoke detectors to make sure they are operating properly. Smoke detectors should be checked monthly, and the batteries should be replaced semiannually. Fire extinguishers should be checked to make sure that the gauge is not in the red and that they are easily accessible in case of an emergency. Another important item to check is electrical cords. You should inspect all cords for damage and loose connections.

Fire safety extends to the outside of your house as well. While cleaning the outside of your house, you should check for trees growing into power lines. Be sure to contact SDG&E prior to pruning around power lines. Clean dead leaves and needles from your roof and gutters, and install a spark arrester on your chimney outlets and stovepipes. Prune branches that could be a potential fire hazard, and clear dead grass and brush from around fire hydrants. Make sure any firewood is stored safely away from your house. Finally, make sure all household chemicals are locked out of reach of children.

Following these simple fire and life safety tips, along with rehearsing your home escape plan, will help ensure that your home is not only cleaner, but also safer for you and your family. For more information, please contact La Mesa Fire Department at 619.667.1355 or visit the following websites:

http://www.firesafety.gov/

http://www.sandiego.gov/fireandems/safety/tips.shtml

http://www.usfa.dhs.gov/citizens/index.shtm

http://www.burninstitute.org/

http://www.cityoflamesa.com/FirePrevention

http://www.sdge.com/

University Ave. Improvements

Allison Ave. to Spring St.

The City of La Mesa has secured TransNet funding through the Smart Growth Incentive Grant Program to make streetscape improvements to University Avenue around the Civic Center. The University Avenue Improvements are consistent with the concept plans developed during the University Avenue Revitalization public input process. The project is being built in phases as the Civic Center buildings are completed. The first phase included sidewalk improvements in front of the new library.

The next phase will include installation of new sidewalk, street trees, street lights, upgraded traffic signal, high visibility crosswalks, median landscaping and street resurfacing, around the new police station. As part of this project, access to Nebo Drive and Date Avenue will be closed permanently at University Avenue. The old Helix Water District driveway accessing the Civic Center will be relocated adjacent to the Police Station building after construction is completed.

Residents looking to access the Civic Center are advised to park on Allison Avenue or City Hall's back parking lot accessible from Date Avenue off of Allison Avenue. We apologize for any inconvenience during the construction.

WIPES CLOG PIPES

Did you know that not all "flushable" wipes are really flushable? Despite that claim, many are not suitable for flushing and can snag in pipes and cause clogs in the sewer system.

While many personal care, diaper, and home cleaning wipes advertise that they are "flushable", testing shows this doesn't mean that they disappear. Two different "flushable" wipes were compared to regular toilet paper in a water test and only the toilet paper disintegrated quickly. After an hour of soaking, one wipe began to dissolve, but not completely until torn apart and the other did not degrade at all. When these wipes are flushed they can clog the sewer pipes, blocking the flow of waste water. Please exercise caution when disposing anything in the toilet!

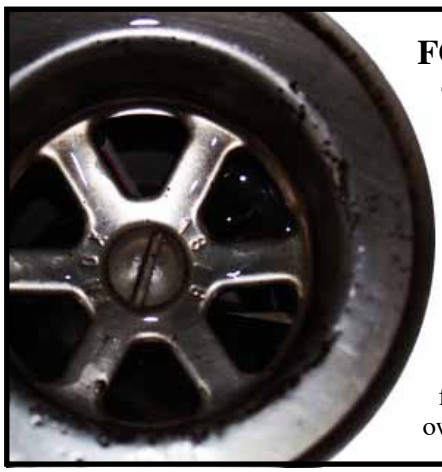

FORECAST FOR LA MESA RESTAURANTS - FOG CLEARING

The State of California has issued a new law requiring cities to implement fats, oils and grease (FOG) control programs. The number one maintenance problem in the La Mesa sewer system is the presence of fats, oils, and grease.

The new law becomes effective July 1, 2009. The FOG control program requires restaurants to install and maintain equipment that limits the amount of fats, oils and grease that enters the sewer collection system.

Under the FOG control program, restaurants are required to obtain a permit and undergo inspection. There will be a small fee required for the permit and inspections.

The City will be holding a free workshop presentation of the program requirements on June 1 from 8:30 am to 10:00 am at the La Mesa Community Center, 4975 Memorial Drive. All restaurant owners and/or managers are encouraged to attend.

2009 LA MESA GARDEN AWARDS

NOMINATION FORM

How Does Your Garden Grow? This year marks the 29th Anniversary of La Mesa Beautiful's annual contest involving property owners within the city limits of La Mesa who have done a great job landscaping their property.

Nominate any property. Include blocks or even neighborhoods which have helped make La Mesa the "Jewel of the Hills."

Winners will be recognized at the Annual Garden Awards Luncheon scheduled for October 14, 2009 at the La Mesa Community Center. A team of judges will evaluate all nominations. Their decision is final. Nominations may be filed throughout the year.

Winners will be notified prior to the award luncheon. For consideration this year, nominations should be submitted before July 1st.

1. Single Family Residence (Best Design)

Name _____

Address _____

Telephone No. _____

2. Single Family Residence (Best Use of Color)

Name _____

Address _____

Telephone No. _____

3. Low Water Use (Best Design)

Name _____

Address _____

Telephone No. _____

4. Low Water Use (Attractive Landscape)

Name _____

Address _____

Telephone No. _____

5. Multi-Family Residential

Name _____

Address _____

Telephone No. _____

6. Business, Commercial or Industrial

Name _____

Address _____

Telephone No. _____

7. Public Facility (School, Hospital, Rest Home, Church, Park, Block or Neighborhood, etc.)

Name _____

Address _____

Telephone No. _____

8. Individual who has contributed most to the beautification of La Mesa.

(Please submit a letter stating the reason(s) for the nomination.)

Name _____

Address _____

Telephone No. _____

PLEASE CLIP OUT AND MAIL TO:

LA MESA GARDEN AWARDS
La Mesa Beautiful, P.O. Box 410, La Mesa, CA 91944

La Mesa Beautiful is a Non-profit Corporation.
Its Sole Purpose is to Encourage the Development
of a More Attractive Community.

JUVENILES AND SOCIAL NETWORKING ON THE INTERNET

Let's face it, social networking websites are here to stay… so is text messaging…so is gaming with web connectivity. Five years ago the police would have advised that no juvenile should ever connect to a social networking site. We realize now that it is impractical to restrict young adults from all technology-related activities. Now is the time to educate yourself on the proper use of these social networking websites.

What is a social networking site?

A social networking site is a combination of a yearbook and a diary. The users can post photos of themselves, listen to music, chat live with their friends, search for others and list their interests. Many of the sites also allow the user to list their location. Users can also make comments and postings on other people's pages; like a blog. Most juveniles use the sites to display information and photos for their friends to look at and comment on. The juveniles talk to one another using the real time chat option or they send messages to be viewed at a later time, similar to an e-mail. Users connect with one another by requesting access to their friend's profiles. The profiles can be set to private, so anyone searching the site would only see the username and a photo (if the user posts one). Users request access to others profiles and if accepted, they can view the entire page.

Popular social networking sites include MySpace, Facebook and Bebo. The benefit to these sites is that they allow the user to search for people they may have lost touch with or send messages to multiple users. The sites are widely used to discover new music or connect with others with similar interests. However, if not used responsibly, social networking sites can become a huge problem for juveniles.

It seems innocent, so how does trouble occur?

Oftentimes juveniles do not think about what they are posting online. Posting personal information can lead to extreme danger. These websites can be viewed by anyone in the world. Social networking sites have been linked to kidnappings, murders, child pornography, gang and drug activity, bullying, blackmail, and sexual assault. A recent news report indicated that MySpace had identified and removed 90,000 registered sex offenders from the website!

The following is a list of tips for users to follow when utilizing a social networking website:

- Do not post provocative photos, even if you are over 18 years of age.
- Give your real age when signing up. Most sites have age requirements. If you do not meet them, then you should not be on the site.
- Do not post personal information such as sports teams you belong to, bands you like and hobbies. Of course, you should never post your address or phone number. Even the most inexperienced predator can use personal information to find you or gain your trust.
- Set your page to private. Never let anyone onto your page that you don't know.
- Set a display name (screen name) that is not your actual name. Instead, make up a generic name such as "123girl." Do not use any information in your display name that indicates personal interests or location such as "SoccerLover123" or "SanDiegoGal."
- Never use the site for dating purposes.
- Never say anything online that you wouldn't say to someone's face. Also, never post anything that you would be embarrassed for your parents to see. Remember that anyone can look at the sites, including colleges and employers.
- Do not post your school name or mascot. This shows predators where you are in the world.
- If someone threatens you or makes you uncomfortable while on the site, tell an adult and report the abuse to the website. Most sites have a section where you can report misuse.
- If you are being bullied by someone, it is important to tell a parent or guardian. Make sure to print the messages.

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The following is a list of precautions parents must take to protect their children online:

- Talk to them about their online activities.
- Ask to see their online profiles.
- Keep the computer in an open living room or kitchen, so your children are not behind closed doors while using the Internet. Position the monitor so that it is facing the room and is not hidden from view.
- Many times children make more than one profile page. Ensure that you have access to all of them.
- Do not allow your children to lie about their age online.
- Their online profile should not be treated like a diary. It's your house and your computer, you have every right to view their online activities.
- Check your browser's history and look at the websites you children have visited.
- Create your own profile so you can become familiar with the site your child is using. Request to be allowed on your child's page as a "friend." If your child is embarrassed that their friends will see that their parent is on their page, use a picture of an inanimate object or a celebrity for your profile.
- Encourage your child to tell you about any online contacts that make them uncomfortable. Report any online abuse to authorities.
- Know more than your child about the computer. Take classes, read articles, and explore the features on the computer.

Important information parents should know:

There are several websites that tell teens how to set up profiles on social networking sites without their parent's knowledge. By being armed with this information, you can better protect your children. Some of the tips given to children by these sites are:

- Make sure you close the door while you are using the computer. If your parents require that you leave the door open, close it halfway and put something loud (like a bell or beads) on the door so you are alerted when someone is entering the room.
- Develop quick reflexes in order to close out of the page quickly, if needed.
- Don't let your computer save your passwords.
- Don't tell your siblings that you have an online profile.
- Make sure your friends don't tell their parents that you have an online profile.
- Use a free e-mail service to make a secret e-mail account that your parents don't know about.
- Delete the history in the browser every time you use the computer. However, don't delete everything because it will look suspicious.
- Keep the volume low on your speakers.
- Have other applications open so that you can easily hide the page on the computer desktop.
- Don't talk about the website in front of your parents or use a code word for it.

As of January 2009 some new laws went into effect as part of California's Penal Code. You can review text from these new laws on the City website. It is imperative that you stay one step ahead of your child on the Internet. Teach them the proper use of the Internet, rather than them teaching you.

Following are some additional resources for safe use of the Internet:

www.cyberbully411.com

www.netsmartz.org

www.cybertipline.com

http://tcs.cybertipline.com

www.ncpc.org

www.wiredsafety.org

www.ice.gov

www.sdpolicefoundation.org

Do you have additional questions about safety and cyber crime? Please call Crime Prevention Specialist Heather Lindquist at the La Mesa Police Department's Crime Prevention Unit, 619.667.1445.

MANDATORY RECYCLING AND YOU

In the early 1990s the City of La Mesa passed a mandatory recycling ordinance to comply with State Assembly Bill (AB) 939 that required eventual 50% diversion of materials from landfills. The City ordinance requires that all recyclable materials be separated from trash and recycled. EDCO's collection program handles most materials covered under the ordinance such as paper, plastic, glass and aluminum. Some materials such as home appliances and construction and demolition debris (concrete, asphalt, drywall etc.) can be recycled through EDCO but are not part of the normal collection system. A few additional materials

What is mandatory recycling?

are required to be recycled under State law, such as electronics, batteries, and fluorescent lights. More information is available at www.cityoflamesa.com/hhw.

What does this mean to you? Everyone in the City (residents, workers and visitors) must have access to recycling. The City has installed recycling containers in all public areas with trash service such as the Downtown Village, all parks, and most City facilities with funding from the California Department of Conservation's Division of Recycling. If you live or work in La Mesa, you should have access to convenient recycling as well. If you don't, ask for it or let the City know by calling 619.667.1338 or email envirosvcs@ci.la-mesa.ca.us. Last year over 500 La Mesa businesses and multi-family properties were contacted and informed of the need to have recycling available and over 90% became compliant within a year. Field checks by City staff for compliance are ongoing and La Mesa is aiming for 100% participation.

RECYCLING RULES!

We mean that in two ways:

1. **Recycling is essential to preserving our environment and**
2. **Don't forget the rules of recycling!**

Thanks to your recycling efforts, the City of La Mesa has met the State's 50% diversion requirement for the third straight year by keeping more than 50% of what we discard out of the landfills. In the most recent reporting year, 2007, we had an estimated diversion rate of 62%, eight points higher than the year before.

Here is a reminder of the types of items you can combine in your blue EDCO recycling bin:

GLASS BOTTLES & JARS

Recycle all food and beverage containers—clear and colored glass. Please rinse. No need to remove labels though.

CARDBOARD

Flatten or cut boxes to a maximum size of 3 ft. x 3 ft.

NEWSPAPERS

Recycle your newspaper and all paper inserts, coupons, etc. that are delivered with it (but not the plastic bags – those can go to your local grocery or large retail store).

CANS

Recycle aluminum cans and steel cans—including clean & dry paint cans, and empty aerosol cans. Also recycle aluminum foil.

PLASTIC CONTAINERS

Recycle plastic bottles & jugs marked ♻ or ♻ , and all beverage containers labeled "CA Redemption Value" or "CA Cash Refund" including:

- Food & Beverage Containers — Milk, soda, water, salad dressings, cooking oil, etc.
- Jars & Canisters — Peanut butter jars, mayonnaise jars, aspirin bottles, and 35mm film canisters.
- Cleaning Products & Detergents — Bleach, detergent, soap, shampoo, drain cleaners, etc. (Containers must be empty.)
- Automotive & Yard Care Products — EMPTY motor oil, antifreeze, plant food, and herbicide containers.

MIXED PAPER

Recycle virtually all clean and dry paper including: writing paper (all colors), computer paper, Xerox paper, "no carbon required" (NCR) forms, catalogs, brochures, magazines, junk mail, phone books, post-it type notes, and shredded paper. EDCO accepts them all, PLUS if those items have staples, window envelopes, or even those little metal clasps on legal envelopes, they're OK, too! But please, no large metal items like clasps and paper fasteners from notebooks or 3-ring binders.

You can also recycle cereal boxes and other clean food packaging, including cake boxes, flour bags, frozen dinner boxes, paper egg cartons, and soda/beer 12-pack carrying boxes. Also recycle paper grocery bags, gift boxes, shoe boxes, paper gift wrap, calendars, and core tubes from paper towels, etc.

STEERING CLEAR OF CAR CLONING

CAR CLONING: ***stealing the identity of a legitimately-owned vehicle and slapping it onto a stolen car.***

How does car cloning work? It begins with a stolen vehicle—usually a luxury car or fully-loaded SUV. Then, the vehicle is "cloned"—its manufacturer-installed Vehicle Identification Number (VIN) plate is pried off and replaced with another one.

This second VIN plate actually holds a legitimate number that came from a vehicle of a similar make and model in a different state. Other phony ownership documents complete the cloning. At that point it can be easily registered with a motor vehicle agency in another state. Once the stolen vehicle is registered anew, it can be sold.

In Tampa, more than 1,000 cloned cars were sold to witting and unwitting buyers in 20 states and several countries.

So how big is the possible impact of cloning on consumers? If you buy a cloned vehicle and its true pedigree is discovered, the car will be confiscated, and you'll still be responsible for any outstanding loans. If your vehicle is the victim of car cloning, you could be accused of a variety of offenses—from parking tickets or cutting somebody off in traffic...to serious criminal activity like organized crime. And you could spend a great deal of time and money trying to prove that it wasn't you or your car after all.

The National Motor Vehicle Title Information System is a U. S. Department of Justice database that links state motor vehicle departments together…and once fully operational should go a long way towards shutting down car cloning activities. If a car is titled in one state, a criminal should not be able to steal its VIN and use it on another vehicle in another state. So far, 37 states participate or are in the process of participating in the system. The program should be in all 50 states by next year.

Tips on how to steer clear of car cloning:

1. If you think your car was cloned (for example: if you receive notice of unpaid parking tickets that aren't yours), contact your local police.
2. When car shopping, beware of a car being sold for substantially less than comparable makes and models.
3. Get a copy of the car's vehicle history report.
4. Check out the VIN plate on the dashboard for any evidence of tampering such as scratches or pry marks.
5. Look for incorrect spellings on paperwork, like vehicle titles.
6. Trust your intuition—if it sounds too good to be true, it probably is!

More details about car cloning are available at www.fbi.gov/page2/march09/cloning_032409.html.

New Trend to Vehicle Burglaries

Imagine this scenario:

You get your credit card bill in the mail. You open it and notice several thousand dollars worth of charges that you didn't make. You think back and cannot remember a time when your credit card may have been compromised. In fact, the charges are on a credit card that you rarely use! You check your wallet and the credit card is missing, but nothing else has been disturbed. You have likely been the victim of an emerging trend in vehicle burglary.

It is no secret that vehicle burglaries continue to be a problem for La Mesa residents and the entire county alike. The La Mesa Police Department has learned through interviews with actual vehicle burglars that on some types of vehicles, thieves can break into cars that leave virtually no signs that a burglary has occurred.

The new trend is that when a suspect locates a purse or wallet in the vehicle, he takes only one credit card from the wallet. The suspect then returns the wallet back where it was found and relocks the vehicle. The only way the victim finds out about the burglary is when fraudulent charges begin to appear on the credit account. Many times, thousands of dollars of the victim's money has already been spent by the time they notice the credit card is missing.

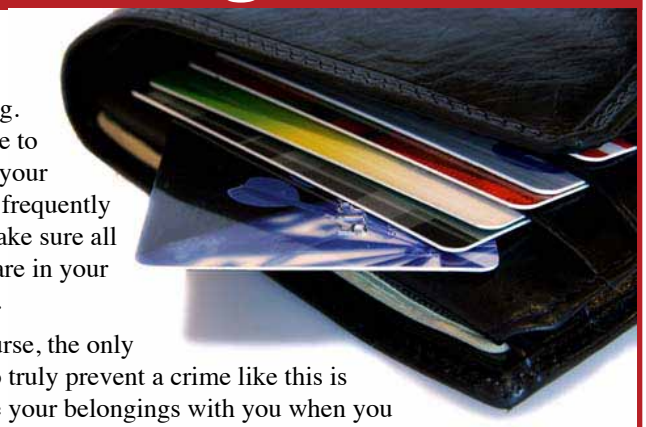

Be sure to check your wallet frequently and make sure all cards are in your wallet.

Of course, the only way to truly prevent a crime like this is to take your belongings with you when you leave your car. If your wallet and valuables are with you at all times, instead of being left in plain sight, the likelihood is significantly decreased that your vehicle will be burglarized. Make sure everything is taken out of your car, even if you will only be gone for a few minutes. This includes iPods, cell phones, chargers and removable GPS systems.

If you have questions about vehicle burglary, please visit the La Mesa Police Department's Crime Prevention page at www.cityoflamesa.com.

Drought tolerant landscaping, such as that seen here in front of the Fire Administration Offices, has helped the City reduce water usage by 25% since 1990.

DOING OUR PART TO SAVE H_2O

Water is becoming an increasingly valuable commodity as water agencies struggle to keep up with demand. The City of La Mesa continually strives to reduce water consumption and save tax dollars at the same time. The following are some of La Mesa's significant water savings efforts:

- All parks and building renovations have been retrofit with Calsense® irrigation controllers. The controllers have a master valve sensor with a shutoff that shuts down the system in the event of a break eliminating water waste. The last phase of the Calsense project currently underway will allow the irrigation cycles to be modified automatically based on weather changes. Purchase of some of the controllers was made possible through grants from the Helix Water District for conversion from older irrigation controllers.
- Drought tolerant vegetation is being used for all new or replacement landscaping.
- Artificial turf is being utilized at the Junior Seau Sports Complex
- Irrigation upgrades were completed in 2008 to the medians of Baltimore Drive and Lake Murray Boulevard reducing water consumption.
- Using these combined methods, outdoor water usage has been reduced by 25% since 1990, even while the amount of acreage maintained has been increased.
- Utilizing the Empower Partnership program with the City of Chula Vista, kitchen sink spray valves were exchanged for low-flow pre-rinse spray valves at local restaurants.
- The City plans to install waterless urinals in one park and one fire station to assess their feasibility.
- Courtesy notices are provided to homes where over irrigation is observed.
- In 2007 the Environmental/Sustainable Committee was formed to address issues including water conservation.
- The first ever Environmental Awareness Festival was held in September 2008 at Harry Griffen Park. The event included information and demonstrations concerning water conservation and information and displays provided by representatives from Helix Water District.

Links to water conservation web sites are posted on the Environmental Awareness page of this website.

CENSUS BUREAU NEWS

Address Canvassers Take to the Streets April 2009

The 2010 Census launched its next operation, Address Canvassing. A preliminary wave began on March 29th, and the mass effort launched on April 6, 2009. The entire phase concludes by June 19, 2009.

During Address Canvassing, the Census Bureau will put to work approximately 140,000 people to canvass all known streets and roads throughout the country. The canvassers identify every living quarter where people live or could potentially live, and verify more than 145 million addresses.

For the first time in Decennial Census history, census workers will confirm, add, and delete addresses using a GPS-equipped handheld computer. Each computer is so secure that it will work only when activated by the fingerprint of its assigned operator.

Each building or structure receives Global Positioning System (GPS) coordinates to make sure it is also recorded in the right location.

Census workers also will update maps by adding new roads. This work ensures that the census address list is complete so that everyone can be counted in the 2010 census.

DO THE RIGHT THING!

Did you know that household hazardous waste (HHW) disposal is *FREE FOR LA MESA RESIDENTS* for the following items?

Batteries	**Fluorescent lights**	**Latex & oil based paints**
Solvents & cleaners	**Pesticides & garden products**	**Pool products**
Propane	**Any items labeled flammable, hazardous, toxic, or corrosive.**	

Electronics TVs	**Computer monitors & hardware**	**Cell phones & telephones**
MP3 players	**VCRs**	**Radios**
Automotive batteries	**Used oil & filters**	**Antifreeze**

These items are considered hazardous and are not allowed to be placed in the trash because of their destructive effect on the environment. If you reside within the City limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program.

Collection events are available by appointment only by calling EDCO at 619.287.5696 x4270. Upcoming dates are:

May 2 **June 6** **July 18** **August 29** **October 10** **November 21**

Make your own non-toxic cleaning supplies cheap and easy! For a limited time, request free green cleaning recipe decals when you arrive at the event and we'll throw in a free spray bottle.

Medical sharps (needles) can also be disposed of through this program. They must be properly secured in a sharps container. See our announcement for easier disposal. Call 619.667.1338 or visit www.cityoflamesa.com/hhw for more info.

E-waste can now be recycled at the EDCO Station buyback center during business hours without an appointment. The center is open Monday through Saturday from 8:00 am to 4:00 pm. A small fee may apply to some items.

Call EDCO at 619.287.5696 x4270 or email at lmhhw@edcodisposal.com, to schedule an appointment for HHW drop-off. To request additional information about the program, please contact the Department of Public Works Environmental Services Division at 619.667.1338 or by email at envirosvcs@ci.la-mesa.ca.us. For general HHW information or other disposal and recycling options, visit www.cityoflamesa.com/hhw.

FREE OIL FILTERS

La Mesa Oil Filter Exchange Event

Saturday, June 13
10:00 am – 2:00 pm

Kragen Auto Parts, 5350 Jackson Drive

Bring your used oil filters to be recycled and receive a FREE oil filter!

This offer valid only on the specific date, time, and location above. Used filters accepted during business hours only. Thank you!

This program is funded by a grant from the California Integrated Waste Management Board.

Irrigation Pollution Prevention in Your Watershed!

Non-point source pollution (pollutants that are diluted and transported from different areas or sources) contributes significantly to the impairment of our receiving water bodies. The City of La Mesa falls within two watersheds; San Diego River and San Diego Bay. The San Diego River Watershed encompasses the area north of El Cajon Boulevard and I-8, while the San Diego Bay Watershed includes the area south of the I-8 and El Cajon Boulevard. The San Diego River Watershed is drained primarily by Alvarado Channel (just parallel to the I-8), while University Channel (just parallel to University Avenue) drains the San Diego Bay Watershed within our jurisdiction.

Creeks within these watersheds have been listed under the Clean Water Act as being impaired by various pollutants. The various jurisdictions that fall within the watersheds have been working together to educate and eliminate pollutants from entering our receiving water bodies under a Watershed Urban Runoff Management Program (WURMP). The WURMP identifies several pollutants that are considered priority pollutants within the watershed. For example, priority pollutants in the San Diego Bay Watershed include: bacteria, diazinon, copper/zinc, as well as lower priority pollutants including turbidity (measurement of suspended particulates in water column i.e., cloudy water) and trash. Priority pollutants within the San Diego River Watershed includes bacteria, total dissolved solids, total phosphorous, dissolved oxygen, pH as well as lower priority pollutants such as turbidity, copper, diazinon, and eutrophication.

The aforementioned pollutants are associated with a wide range of sources and are easily transported to our receiving water bodies through runoff. Over-irrigation is a significant factor in transporting these pollutants to the nearby storm water conveyance system or directly discharging them into a creek. Pesticides, fertilizers, pet waste, and bacteria may be transported from your landscaped areas by over-irrigation runoff to our storm drain system and creeks. Preventing these pollutants from making their way into the storm water conveyance system ultimately improves our quality of life.

The following are tips that you can follow to help eliminate pollutants from entering our creeks.

- Design your irrigation to meet site-specific conditions to prevent over watering.
- Application rate should not exceed soil's ability to absorb water
- Irrigation system should be designed with control devices or sensors or shut-off switches to address malfunctions.
- Place or group plants with similar water needs within the same area.
- Do not irrigate non-planted areas.
- Regularly inspect your irrigation system for potential problems.
- Consider drip irrigation to save water and prevent over-irrigation and runoff
- Adjust irrigation rates according to seasons and weather conditions.
- Irrigate in the early morning because it is the most efficient time to water plants with minimal evaporation.
- Refrain from irrigation during hot windy periods of the day.

Please share the above information with your family, friends, and neighbors.
For more information you may contact the City's Storm Water Hotline 619.667.1134.

STAY UP-TO-DATE ON IMPORTANT CITY NEWS, EVENTS, AND SERVICES.

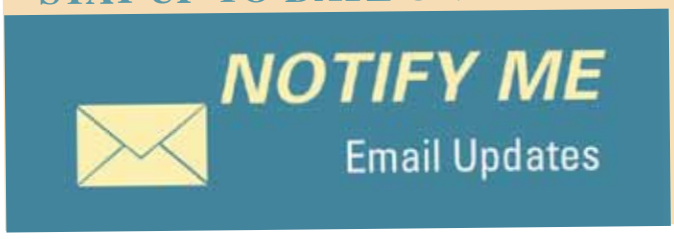

Through the City's Notify Me website service you can subscribe to one or more categories of information and have email alerts sent to you whenever special announcements are made in your categories. Use the button at the left to sign up for this service. Enter your email address, select the type of email you would like to receive (html or text) and select each email list you wish to subscribe to. Finally, click the Subscribe/Manage button. You will receive a confirmation email for each category you select.

COUNCIL ACTIONS

January 13, 2009
Adopted a Resolution authorizing a Memorandum of Understanding with the California Bureau of Investigation, State Department of Justice, for the reimbursement of training funds from the San Diego Sexual Assault Felony Enforcement (SAFE) Grant.

Adopted a resolution authorizing the acceptance of the Fireman's Fund Grant for fire equipment and fire prevention materials.

Adopted a resolution approving the City of La Mesa, in partnership with the La Mesa branch of the San Diego County Library, to apply to the ICMA Public Library Innovation Grant Program for the "Ready…Set… Live Well" Community Wellness Initiative.

January 20, 2009
Approved short-term cost cutting measures for the General Fund.

January 27, 2009
Adopted a resolution authorizing the application and acceptance of funding from the California Department of Conservation's Division of Recycling for beverage container recycling and litter cleanup activities.

Adopted a resolution authorizing the filing of an application for Smart Growth Incentive Program funds through the San Diego Association of Governments for the La Mesa Downtown Streetscape Project.

Adopted a resolution authorizing the filing of an application for Smart Growth Incentive Program funds through the San Diego Association of Governments for Grossmont Trolley Station improvements.

Adopted a resolution authorizing the filing of an application for Smart Growth Incentive Program funds through the San Diego Association of Governments for the La Mesa Boulevard / El Cajon Boulevard intersection improvements.

Adopted a resolution authorizing the filing of an application for Smart Growth Incentive Program funds through the San Diego Association of Governments for the Spring Street Trolley Station Smart Growth Implementation Plan.

Adopted a resolution in support of a grant proposal by the San Diego Childhood Obesity Initiative to the Robert Wood Johnson Foundation to enhance the Live Well initiative.

Approved the expansion of administrative citations to include non-compliant foreclosured and abandoned properties.

February 10, 2009
Adopted a resolution accepting the M.O.U. between the Chula Vista Police Department and the La Mesa Police Department regarding the California Office of Traffic Safety "Operation Crack Down on Illegal Street Racing" grant and approving the addition of personnel costs to the FY 2008-2009, 2009-2010 budgets.

February 24, 2009
Adopted a resolution to amend the fiscal year 2008-09 Capital Improvement Program to include replacement of trash receptacles within the parking district and allocate up to $23,000 from the Downtown Parking Fund to pay for the new receptacles as recommended by the La Mesa Community Parking Commission.

Adopted a resolution amending Section 12.28.030 (24) and adding Section 12.28.030 (91.25) to the La Mesa Municipal Code designating Pomona Avenue as a stop street at Stanford Avenue.

March 10, 2009
Adopted a resolution approving amendments to Heartland Communications Facility Authority (HCFA) Joint Powers Agreement (JPA) deleting the East County Fire Protection District as a member agency and revising the formula for allocation of expenses.

Adopted a resolution authorizing execution of an agreement with the American Red Cross for use of La Mesa Community Services facilities in times of disaster.

Adopted a resolution accepting Bid No. 07-25 awarding a contract for Fire Station 13 renovation to Randall Construction, Inc. and appropriating available investment interest earnings to the project.

Adopted a policy related to placing items on the agenda by the public.

March 24, 2009
Ratified the Design Review Board's approval of DRB-09-01 (Henry's Farmers Market) - a proposed exterior remodel to an existing supermarket at 4630 Palm Avenue.

Ratified the Design Review Board's approval of DRB-09-03 (At&T) - a proposal for murals and roof screening at the At&T building located at 4711 Spring Street.

Adopted a resolution authorizing the acceptance of the FY08 State Homeland Security Grant Program (SHSGP) Grant for terrorism preparedness.

Adopted a resolution accepting an increase in the Hazard Elimination Safety Grant amount, accepting Bid. No 07-06, and awarding the construction contract for traffic signal modifications at Lake Murray Boulevard and El Paso Street to T & M Electric, Inc. DBA Perry Electric.

Adopted a resolution approving installation of three speed cushions on Dale Avenue between University Avenue and Normal Avenue.

Adopted a resolution authorizing a Memorandum of Understanding between the San Diego County Sheriff's Department and the La Mesa Police Department for mutual aid responses to emergency situations.

ADULT SOFTBALL
(18 YEARS AND OLDER)

REGISTRATION: Wed., July 22, 2009, 5:30 – 6:30 pm
- La Mesa Fire Station #12
  8844 Dallas Street
- Voice Mail 619.667.1172 #6
- Team rosters and game rules will be issued at time of registration.

SEASON*: 10 or more weeks beginning the week of August 17, 2009 (weather permitting).

FEE: $525 for season.
- Umpire fees not included - $15/game each team. The entire fee must be paid at time of registration. No partial payments.
- Payment options:
  a) one check b) all cash
  c) one check and the remainder cash
  d) credit card
- A $25 service charge and postage will be required on all returned checks. Payees will have one day to correct the problem to guarantee a position.
- A waiting list will be taken after reaching the maximum number of teams.

LOCATION: Junior Seau Complex, Field #1, 9009 Park Plaza Drive, entrance to La Mesita Park.

LEAGUES:** Wed/Fri. – Men
Mon/Tues/Thurs – Coed

GAME TIMES: Wed/Fri: 6:00 – 10:00 pm
Mon/Tues/Thurs: 6:00 – 9:00 pm

**Season length subject to change based on the number of teams*

***Minimum 4 teams required per night or league night is subject to change or cancellation.*

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.
Contact your elected officials at 619.667.1106.

Mayor ..... Art Madrid
Vice Mayor ..... Mark Arapostathis
Councilmember ..... Ruth Sterling
Councilmember ..... Ernie Ewin
Councilmember ..... Dave Allan
City Manager ..... Sandra Kerl
Focus Editor ..... Käaren McElroy
Editorial Staff ..... Heather L. Moore
Ofelia Bareno

If you prefer to receive a printed version, please email name and address to cmoff@ci.la-mesa.ca.us or call 619.667.1105.

Want to know when the next issue of FOCUS is published?

Use the NOTIFY ME link to request automatic email notification so you won't miss the most up-to-date publication.

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 5:30 PM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM

The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM

The above meetings are held at the
Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM (except July, August, December)

The above meeting is held at the
Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS (Area code 619)

Adult Enrichment Center	*464.0505*
Animal Control	*667.1436*
Building Inspection	*667.1176*
Business Licenses	*667.1118*
Cable TV	*262.1122*
City Attorney	*667.1128*
City Clerk	*667.1120*
City Council	*667.1106*
City Hall	*463.6611*
City Manager	*667.1105*
Crime Prevention	*667.1445*
Dog Licenses	*667.1117*
Engineering	*667.1166*
Fire (Business)	*667.1355*
Human Resources	*667.1175*
Library	*469.2151*
Mayor	*667.1100*
Municipal Pool	*466.4177*
Park Permits	*667.1300*
Parking Citations	*667.1117*
Planning	*667.1177*
Police (Business)	*667.1400*
Public Works	*667.1450*
Recreation	*667.1300*
Recycling/Trash	*287.7555*
Rides4Neighbors	*464.0109*
Senior Taxi Scrip	*667.1321*
Sewer Charges	*667.1126*
Sidewalk Maint.	*667.1450*
Storm Water Hotline	*667.1134*
Streetlight Maint.	*667.1450*
Traffic Eng. Hotline	*667.1144*
Traffic Signal Maint.	*667.1166*
Zoning	*667.1177*

ATTACHMENT 6.1

MAP OF HIGH TTWQ RESIDENTIAL AREAS

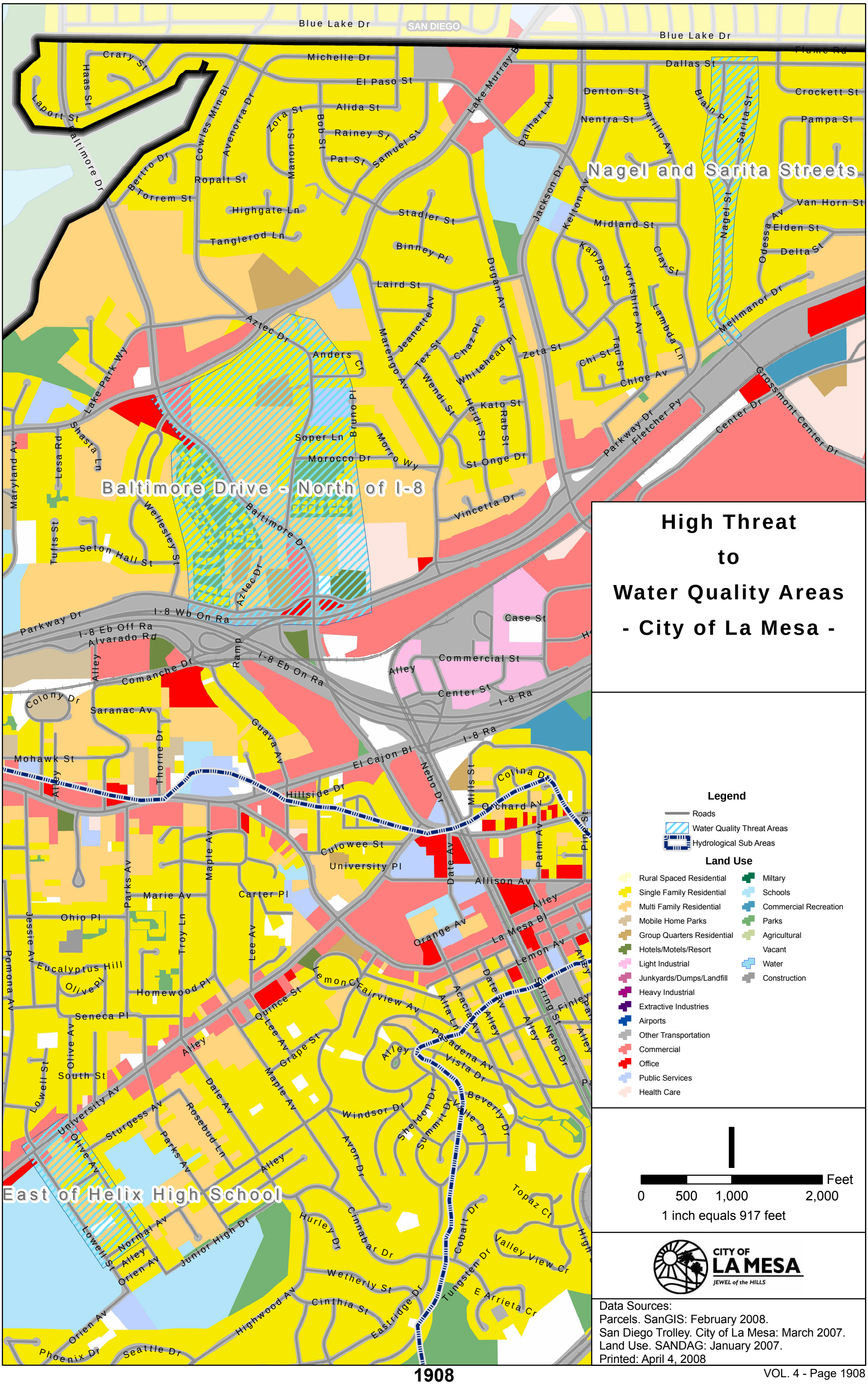
Nagel and Sarita Streets
Baltimore Drive - North of I-8
East of Helix High School
High Threat
to
Water Quality Areas
- City of La Mesa -
Legend
Roads
Water Quality Threat Areas
Hydrological Sub Areas
Land Use
Rural Spaced Residential
Single Family Residential
Multi Family Residential
Mobile Home Parks
Group Quarters Residential
Hotels/Motels/Resort
Light Industrial
Junkyards/Dumps/Landfill
Heavy Industrial
Extractive Industries
Airports
Other Transportation
Commercial
Office
Public Services
Health Care
Miltary
Schools
Commercial Recreation
Parks
Agricultural
Vacant
Water
Construction
Feet
0 500 1,000 2,000
1 inch equals 917 feet
CITY OF LA MESA
JEWEL of the HILLS
Data Sources:
Parcels. SanGIS: February 2008.
San Diego Trolley. City of La Mesa: March 2007.
Land Use. SANDAG: January 2007.
Printed: April 4, 2008

ATTACHMENT 8.1

TIPS FOR OUTDOOR VENDORS

CITY OF LA MESA
JEWEL of the HILLS

VENDOR FACT SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

City of La Mesa
Storm Water Pollution Prevention
Tips for Outdoor Vendors

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying storm water runoff into receiving water bodies, such as creeks, lakes and oceans. Unlike the sewer system, storm water runoff entering the storm drain system is not treated. Harmful pollutants, as listed below, can be transported during non-storm water discharges such as hosing down side walks or equipment. These types of pollutants are harmful to the environment and negatively impact water quality, aquatic animal and plant life as well as our quality of life. Non-storm water discharges are prohibited and in violation of the City Ordinance. A list of common pollutants and pollution prevention tips are provided below.

Pollutants of Concern

1. Sediment
2. Fertilizers
3. Metals
4. Detergents
5. Pesticides
6. Organic Compounds (solvents)
7. Trash and Debris
8. Oil and Grease
9. Bacteria

Good House Keeping

- Dry sweep exterior paved areas. **Do not use a hose or water!** Place debris in dumpster and keep dumpster lid closed.
- If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer system (sink or toilet). Wash water is not allowed to enter the storm drain.

Outdoor Material and Equipment Management

- Store material under covered areas.
- Place liquid material in secondary containment to ensure spills are contained.
- Ensure that frying oil is contained and managed properly without dropping/leaking on to the pavement.
- If using frying oil, ensure that you purchase absorbent material (absorbent pads) to address cleanup of potential oil spills.
- Inspect/fix equipment to ensure no leaks.
- Do not wash equipment at the event!

Waste Management

- Place trash in dumpsters with lids always closed.
- Cleanup leaks/spills immediately and place waste material into the dumpster

Should you require clarification or additional information on storm water pollution prevention, please contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.2

CONSTRUCTION SITE MANAGEMENT TRI FOLD

6) **Sediment Tracking** – Construct a stabilized construction entrance and conduct frequent street sweeping to keep sediment off of roadways.

7) **Materials Management** – Protect stockpiles of soil and paving materials from wind and water erosion. Have a spill prevention and control plan for hazardous materials such as fuel, paints and solvents.

8) **Waste Management** – properly store and dispose of solid, hazardous, concrete, and sanitary wastes. Cleanup spills immediately.

9) **Non-Storm Water Discharges**

- **Paving/grinding** – Protect inlets from slurry seal operations and vacuum saw cut slurry and grinding residue.
- **De-watering** – Use accumulated water for dust suppression or consult with City staff and the Regional Water Quality Control Board when dewatering operation is proposed.
- **Potable Water/Irrigation** – Shut off water source to broken lines, sprinklers or valves as soon as possible and direct water away from pollutant sources.

For further assistance, detailed BMP information from the above list can be downloaded from the City's Storm Water Pollution Prevention website.

Additional Resources

City of La Mesa Departments

Storm Water Program	(619) 667-1134
Engineering Division	(619) 667-1166
Building Division	(619) 667-1176

Best Management Practices (BMPs)

La Mesa Storm Water Page
www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm

California Storm Water Quality Association (CASQA) www.cabmphandbooks.com

International BMP Database
www.bmpdatabase.org

Regulatory

State Water Resources Control Board
www.swrcb.ca.gov/stormwtr/index.html

California Regional Water Quality Control Board, San Diego Region
www.swrcb.ca.gov/rwqcb9/

US Environmental Protection Agency, NPDES Program
http://cfpub.epa.gov/npdes/index.cfm

Waste Management

EDCO (solid waste)	(619) 287-5696
County Hazardous Materials Division	(619) 338-2222
Sanitary Sewer Overflows	
(Mon-Fri 6am-3:30pm)	(619) 667-1450
(Non-working hours)	(619) 469-6111

Storm Water Best Management Practices (BMPs)

A Guide for Construction Activity

Provided by the City of La Mesa
Department of Public Works
Storm Water Program

8130 Allison Ave
La Mesa, CA
91941

(619) 667-1134
www.cityoflamesa.com

Storm Water Pollution

Construction activities can have a significant impact on water quality due to soil disturbances and the types of materials and equipment used. As storm water flows over a construction site, it can pick up pollutants such as sediment, oil, fuels, paints, adhesives, trash, debris and fertilizers. Polluted storm water runoff can harm or kill fish and other wildlife, and can destroy aquatic habitat.

Best Management Practices (BMPs)

In order to reduce, or eliminate, erosion and pollutant discharges into La Mesa's storm drain system, owners and operators of all construction sites are required to implement Best Management Practices (BMPs). BMPs are techniques or physical controls utilized to prevent pollution.

Permit/Regulatory Requirements

The following permits and ordinances must be considered before construction or grading activity commences:

- **State Construction General Permit** – Projects which disturb one acre or more of soil must obtain coverage by submitting a Notice of Intent to the State Water Resources Control Board and preparing a Storm Water Pollution Prevention Plan (SWPPP).
- **Storm Water Management Ordinance -** Review Chapter 7.18 of the La Mesa Municipal Code (LMC) for local storm water requirements and penalties for noncompliance.
- **Grading Ordinance** – Chapter 14.05 of the LMC requires additional erosion control requirements during grading activities. Consult with the Engineering Division to determine if a grading permit is needed.
- **Building Permits** – Contact the Building Division to determine what building permits may be needed. Storm water BMP notes must be shown on site plans.
- **Encroachment Permits** – A permit is needed when working in the public right-of-way. Please contact the Engineering Division for specific requirements.

Inspection Program

City staff monitors constructions sites for proper erosion and sediment controls all year long, with more frequent inspections occurring during the wet season (October 1 through April 30). Inspectors will evaluate BMP implementation, effectiveness and maintenance.

Sites Covered Under State Construction General Permit (Over 1 Acre):

- These sites are also subject to inspections by the Regional Water Quality Control Board (RWQCB).
- Self-inspections are required before forecasted rain events, during each 24-hour rain event, and following a rain event.

Minimum BMPs

Construction projects within the City will be required to implement at least one of the BMPs from each category below when applicable to the site. Please refer to the following list while planning your project to ensure compliance with City and State requirements and to prevent storm water pollution. Brief examples of BMPs have been mentioned within each category, but do not represent a complete list.

1) **Planning and Scheduling** – Minimize land disturbance during the wet season.

2) **Slope Stabilization** – Preserve existing vegetation and stabilize slopes with hydraulic mulch or erosion control blankets.

3) **Site Drainage** – Install outlet protection devices to reduce velocity and erosion potential of storm water flows.

4) **Sediment Perimeter Protection** – Install silt fencing, straw rolls or a gravel bag barrier to prevent sediment discharges.

5) **Sediment Capture** Protect all storm drain inlets with gravel bags. For sites over an acre, inlet controls should be used in conjunction with a sediment basin/trap.

ATTACHMENT 8.3

CONSTRUCTION SWPPP TRI FOLD

SEDIMENT CONTROL	**A.8**
Description/Illustration of BMPs to prevent increase of sediment load in discharge	A.8
Construction phase / BMP sequencing schedule including supplemental pre-rain action plan for sediment control measures	A.8
NON-STORM WATER	**A.9**
Description of non-storm water discharges to receiving waters	A.9
Locations of discharges	A.9
Description of BMPs	A.9
Name and phone number of qualified person responsible for non-storm water management	A.9
POST-CONSTRUCTION	**A.10**
Description and location of BMPs	A.10
Operation/Maintenance of BMPs after project completion (including funding)	A.10
MAINTENANCE, INSPECTIONS, AND REPAIR	**A.11**
Name and phone number of qualified person responsible for inspections	A.11
Inspection checklist: date, weather, inadequate BMPs, visual observations of BMPs, corrective action, inspector's name, title, signature	A.11.a-f
OTHER REQUIREMENTS	**A.12-16**
Documentation of all training	A.12
List of Contractors/Subcontractors	A.13

Section B. Monitoring and Reporting Requirements	
Description of site inspection plans	B.3
Compliance certification (annually 7/1) if project is under active construction	B.4
Noncompliance reporting	B.5
Records of all inspections; compliance certifications; noncompliance reports, etc. should be kept for at least three years	B.6
Monitoring program for sediment contribution from direct discharges to impaired water bodies	B.7
Monitoring program for pollutants not visually detectable in storm water (non-visible pollutants)	B.8
Section C. Standard Provisions Construction Activities	
Signed Certification for SWPPP, reports, amendments, etc. Who is authorized to sign and by what authority has the duly authorized representative been assigned?	C.9,10
Location of General Permit and SWPPP on site during construction activities	C. 17

City of La Mesa
8130 Allison Avenue
La Mesa, CA 91941
(619) 667-1134
www.cityoflamesa.com

CONSTRUCTION SWPPP INFORMATION

State General Construction Permit

Your construction project may be subject to the State of California General Construction Permit. Construction activities subject to this permit include clearing, grading, disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of a at least one acre of total land area. Construction activity that result in soil disturbances of less than one acre is subject to this permit if the construction activity is part of a larger common plan of development that encompasses one or more acres of soil disturbance or if there is significant water quality impairment as a result.

Planning Document Review

If your project is subject to the General Construction Permit, a Notice of Intent (NOI) and filing fee, and preparation of a Storm Water Pollution Prevention Plan (SWPPP) and Monitoring Program are required prior to commencement with project activities. The SWPPP is required to be submitted to the City of La Mesa for review. Prior to submitting a SWPPP to the City for Review, ensure that the following items are addressed

Common Problems

- ☑ Provide a copy of the NOI Application, letter sent to you by the State Water Resources Control Board with Waste Discharge Identification Number (WDID).
- ☑ Ensure the owner and or contractor sign the certification forms.
- ☑ Ensure personnel assigned to various tasks i.e. inspections are presented in the SWPPP and their role is clearly defined.

- ☑ Ensure vicinity map shows the general topography.
- ☑ Provide selected Best Management Practices (BMPs) specifically for the project.
- ☑ Place BMPs on the map.
- ☑ Provide site-specific information for materials list.
- ☑ Ensure text correspond with appendices and is consistent.
- ☑ Provide information on Post-Construction BMPs and funding source.
- ☑ Review the General Construction Permit to ensure all components have been addressed.

Ensure the following items are incorporated into your SWPPP & Monitoring Program:

	Permit Section
Vicinity Map (graphic)	***A.5.a.1***
Major roadways, geographic features or landmarks	A.5.a.1
Site perimeter	A.5.a.1
Geographic features	A.5.a.1
General topography	A.5.a.1
Site Map (graphic) (can modify Parcel Map)	***A.5.a.2***
Site perimeter	A.5.a.2
Existing and proposed buildings, lots, and roadways	A.5.a.2
Storm water collection and discharge points	A.5.a.2
General topography before and after construction	A.5.a.2
Anticipated discharge location(s)	A.5.a.2
Drainage patterns	A.5.a.2
Relevant drainage areas	A.5.a.2
Temporary on-site drainage	A.5.a.2
Drainage (graphic)	***A.5.b.1***
Drainage patterns	A.5.b.1
Slopes after major grading	A.5.b.1
Calculations for storm water run-on	A.5.b.1
BMPs that divert off-site drainage from going through site	A.5.b.1
Storm Water Inlets (graphic)	***A.5.b.2***
Drainage patterns to storm water inlets or receiving water	A.5.b.2
BMPs that protect storm water inlets or receiving water	A.5.b.2
Site History/Past Site Usage (Real Estate Broker Disclosure may be sufficient)	***A.5.b.3***
Description of toxic materials treated, stored, or spilled on site	A.5.b.3
BMPs that minimize contact of contaminants with storm water	A.5.b.3
Location of Areas Designated for: (graphic)	***A.5.b.4***
Soil or waste storage	A.5.b.4
Vehicle storage & service	A.5.b.4
Construction material loading, unloading, and access	A.5.b.4
Equipment storage, cleaning, maintenance	A.5.b.4
BMP Descriptions for: (graphic or narrative)	***A.5.b.5***
Waste handling and disposal areas	A.5.b.5
On-site storage and disposal of construction materials and waste	A.5.b.5
BMPs to minimize exposure of storm water to construction materials, equipment, vehicles, waste	A.5.b.5
Post Construction BMPs	***A.5.b.6 See A. 10***
Additional Information	***A.5. c***
Description of other pollutant sources and BMPs that cannot be shown graphically	A.5.c.1
Pre-construction control practices	A.5.c.1
Inventory of materials and activities that may pollute storm water	A.5.c.2
BMPs to reduce/eliminate potential pollutants listed in the inventory	A.5.c.2
Runoff coefficient (before & after)	A.5.c.3
Percent impervious (before & after)	A.5.c.3
Copy of the NOI and WDID #	A.5.c.4
Construction activity schedule	A.5.c.5
Contact information	A.5.c.6
EROSION CONTROL	**A.6**
SWPPP shall include: (graphic)	***A.6.a-c***
Areas of vegetation on site	A.6.a.1
Areas of soil disturbance that will be stabilized during rainy season	A.6.a.2
Areas of soil disturbance which will be exposed during any part of the rainy season	A.6.a.3
Construction phase / BMP sequencing schedule including supplemental pre-rain action plan for erosion control measures	A.6.a.4
BMPs for erosion control	A.6.b
BMPs to control wind erosion	A.6.c

ATTACHMENT 8.4

OVER IRRIGATION FACT SHEET

City of La Mesa
Storm Water Pollution Prevention
Over-Irrigation

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

With La Mesa's clay soils, it doesn't take much to moisten the ground before water starts running off your property to the curb, down the street and into the storm drain. Runoff from over-irrigation may transport pollutants such as sediment, pesticides, fertilizers, pet waste, bacteria, and automobile fluids. These pollutants enter our local creeks and streams and discharge into the ocean.

Over-irrigation is not prohibited; however, the following measures are recommended.

1. Over-irrigation runoff shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Irrigate to meet site-specific conditions to prevent over-watering.
3. Ensure that your irrigation system has control devices, sensors or shut-off switches to address malfunctions.
4. Place or group plants with similar water needs within the same area.
5. Don't irrigate non-planted areas.
6. Inspect your irrigation system regularly for potential problems
7. Consider drip irrigation to save water and prevent over-irrigation and runoff.
8. Adjust irrigation rates according to seasons, weather conditions and the soil's ability to absorb water. Instead of watering for 15-minutes straight, break up the session into 5-minute intervals, allowing water to soak in before the next application.
9. Irrigate in the early morning; it's the most efficient time to water plants with minimal evaporation.
10. Refrain from irrigation during hot, windy periods of the day. Do not let water run out into the street.

Do the right thing, stay in compliance and protect our environment. For more information contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.5

CHOLLAS CREEK TMDL FACT SHEET

Chollas Creek TMDL Fact Sheet

What are the Chollas Creek TMDLs?
In 2003 and 2007, Total Maximum Daily Load (TMDL) allocations for the pesticide diazinon and for heavy metals (copper, lead, and zinc), respectively, were adopted by the Regional Water Quality Control Board (a State Regulatory Agency) for Chollas Creek. The regulations establish strict numeric limits on the amounts of heavy metals and diazinon that can be present in urban runoff. Southwestern La Mesa, roughly bounded by El Cajon Boulevard to the north and Spring Street to the east (see map), eventually drains to Chollas Creek and is subject to these requirements. Businesses within this area are impacted by these new requirements. The City is monitoring water quality near your business to identify and eliminate sources of these pollutants to comply with new State regulations. The following activities/sources contribute to the discharge of heavy metals and diazinon.

Heavy metals are commonly associated with industrial waste, uncontained storage of certain metal products or materials (such as galvanized steel), cutting and grinding activities, atmospheric deposition, metal smelting or plating, and automobile tires and brakes.
Diazinon is a pesticide associated with landscaping activities. It has been banned for use and is no longer available at retail outlets. Diazinon acquired prior to the ban should be disposed of in accordance with state and federal regulations.

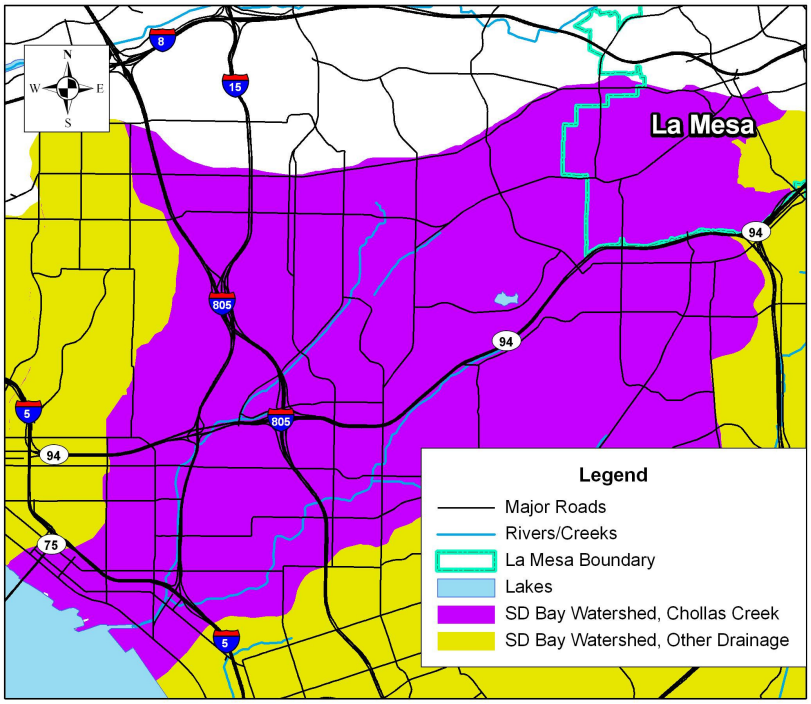

What is the City of La Mesa doing about these TMDLs?
The City's many efforts to protect water quality and comply with State regulations include regularly sweeping its streets and cleaning out its storm drain system, inspecting businesses and construction sites, and applying strict water pollution control standards to new development projects.

What do these TMDLs mean for my business?
The City's Municipal Code requires that businesses take measures to ensure that urban runoff (water that leaves your business and enters storm drains) is not contaminated with pollutants. Chapter 7.18 of the Municipal Code requires businesses to implement measures including those listed below. Taking these actions will help meet TMDL requirements.

- Eliminate non-storm water discharges, such as hosing off property and allowing the water to leave the site, dumping liquids into a storm drain, and runoff from excessive irrigation.
- Cover and contain metal products or materials that may contain heavy metals where feasible. Examples of such materials include galvanized metal, brake pads, tires, and metal recycling bins.
- Conduct metal cutting, grinding, welding, automotive or equipment repair, and similar activities in indoor, contained areas where feasible.
- Regularly sweep paved areas of your site to keep them clean and dispose of debris appropriately.
- Do not use any product containing diazinon. Contact County of San Diego Hazmat for instructions on proper disposal (619-338-2231).
- Store all pesticides and fertilizers in covered and contained areas. Consider alternative, non-chemical pest control methods.
- Do not apply pesticides before storms and eliminate overspray of pesticides onto paved surfaces.

If you observe illegal dumping into a storm drain, please report it to the City at 619-667-1134.

ATTACHMENT 8.6

RESIDENTIAL PREVENTING URBAN RUNOFF POLLUTION BROCHURE

Pollutants of Concern

As rainfall flows over the ground, it picks up a variety of pollutants and deposits them into our watersheds. The following pollutants are commonly transported in the storm drain system and have been found to degrade water quality.

- Sediments
- Fertilizers
- Metals
- Detergents
- Pesticides
- Organic Compounds (solvents)
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

The following Best Management Practices (BMPs) are required to be used in residential areas to reduce urban runoff pollution in our streams and waterways. To do your part in protecting our water quality, please implement the following BMPs, where applicable or checked by the City inspector.

Maintenance & Good Housekeeping

- ❑ Regularly, dry sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- ❑ If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- ❑ Water used for cleaning exterior surfaces must be contained and disposed of into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the storm drain or leave the property.
- ❑ Regularly inspect and maintain storm drain inlets.

Landscaping

- ❑ Only irrigate during early morning or late evening to avoid evaporation.
- ❑ Aim sprinklers to avoid watering other areas.
- ❑ Time sprinklers to avoid over watering and causing runoff.
- ❑ Minimize pesticide, herbicide and fertilizer use, which are harmful to animals downstream.
- ❑ Hand pull weeds instead of using herbicides.
- ❑ Do not use pesticides that eliminate beneficial insects (i.e., Integrated Pest Management).

Outdoor Material Storage

- ❑ Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid material.
- ❑ Have a spill response kit available to clean up potential spills such as kitty litter or other absorbents.
- ❑ Keep material storage areas free from rainwater accumulation.
- ❑ Keep lids closed on all outdoor storage containers and ensure containers are labeled.

Waste Management

- ❑ Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- ❑ Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- ❑ Fix any leaks in garbage cans or dumpsters.
- ❑ Schedule regular waste pick-up.

Vehicle /Equipment Maintenance

- ❑ Perform all vehicle maintenance indoors when possible.
- ❑ Use drip-pans to collect fluids from leaky vehicles.
- ❑ Clean up spills immediately using kitty litter or other absorbents. Properly dispose of used absorbents.

Vehicle /Equipment Washing

- ❑ Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- ❑ Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- ❑ Minimize the use of soaps and water while washing.
- ❑ Protect storm drains or curb inlets and then collect all wash water by vacuum. Recycle or dispose of wash water via the sanitary sewer system.
- ❑ Drain excess wash water to the sanitary sewer (sink or toilet), not to storm drains.

Loading Areas & Operations

- ❑ Load and unload in designated areas.
- ❑ Regularly dry sweep loading and unloading areas.
- ❑ If possible, cover loading areas.
- ❑ Divert storm water away from all loading and unloading areas.
- ❑ Check shipments and trucks for leaks and spills.
- ❑ Cleanup spills/leaks immediately and dispose of properly.
- ❑ If you must use water for cleaning, use a mop and bucket and dispose of wash water into the sanitary sewer.
- ❑ Major cleaning of exterior surfaces must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water should not be allowed to enter the street gutter or storm drains.

treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – terminating at the Pacific Ocean!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our watersheds.

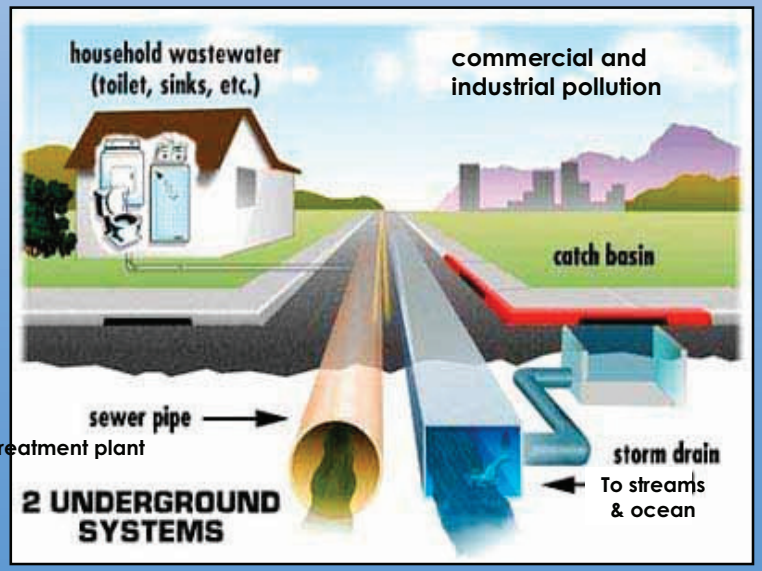

1-888-846-0800

HOUSEHOLD HAZARDOUS WASTE DISPOSAL

EDCO
8184 Commercial Street
By Appointment
Questions: (619) 466-3355

RECYCLING

EDCO: (619) 466-3355

QUESTIONS AND COMMENTS

City of La Mesa Storm Water Program
(619) 667-1340

LOOK ON THE WEB

USED OIL RECYCLING CENTERS
http://www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
http://www.ipm.ucdavis.edu/

County of San Diego Storm Water Management Program
www. co.san-diego.ca.us/deh/stormwater/stormwater.html

State Water Resources Control Board (SWRCB) Storm Water Program
www.swrcb.ca.gov/stormwtr/construction.html

US Environmental Protection Agency
www.epa.gov/OWOW/NPS/

Clean Water Network
www.cwn.org

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ATTACHMENT 8.7

POOL AND SPA FACT SHEET

CITY OF LA MESA
JEWEL of the HILLS

POOL & SPA FACT SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91942
Phone: 619.667.1166 • Fax: 619.667.1380

City of La Mesa
Storm Water Pollution Prevention
Pools & Spas

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

Discharging of pool or spa water is not prohibited; however, the following measures are required.

1. Water shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Pool water must be dechlorinated
3. Water pH acceptable range from 7 to 8
4. No algae present in water
5. Water shall not contain chemicals to counteract the chlorine
6. Water does not contain hydrogen peroxide based products
7. Controlled discharge eliminating potential for erosion

Chlorine

Test pool or spa water for chlorine prior to discharge. Chlorine naturally dissipates overtime and if pool or spa water is left 3 to 5 days, it will become dechlorinated. Pool water needs to be drained before it turns green. Draining pool water gradually over landscaped areas will help prevent erosion problems.

Pool Filters

Pool filters should be cleaned over landscaped areas or anything that will absorb the discharge. Material may be collected over a filter cloth and disposed of in the trash. Filter backwash must be discharged into the sewer system with a pH of 5 to 12.5.

Pool Construction

Material must be contained and disposed of appropriately. Waste generated from plaster, gunite, cement, sediment, and other construction materials is prohibited from entering the storm drain system.

Do the Right Thing, Stay in Compliance and Protect Our Environment. For more information, contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.8

SAN DIEGO RIVER AND SAN DIEGO BAY FACT SHEETS

San Diego River Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego River and the San Diego Bay. Your business or facility is located within the San Diego River Watershed.

San Diego River Watershed

The San Diego River Watershed is comprised of 443 square miles. It extends from the mountains near Julian to the Pacific Ocean. Portions of the watershed fall within the cities of El Cajon, Poway, San Diego, Santee, several unincorporated areas, and the City of La Mesa. Primary tributaries to the San Diego River include Boulder Creek, Conejos Creek, Los Coches Creek, San Vicente Creek, and Forester Creek. Alvarado Creek in La Mesa is also tributary to the San Diego River. Alvarado Creek flows into the San Diego River and ultimately into the Pacific Ocean between South Mission Beach and Ocean Beach near Dog Beach.

Pollutants of concern listed in the 2002 Clean Water Act Section 303(d) List Of Water Quality for the lower San Diego River Watershed include fecal coliform (sewage/urban runoff), low dissolved oxygen (decay of organic matter), total dissolved solids (industrial waste/chemical spills), and phosphorus (phosphate based detergents). Between 1996 and 1999, coliform bacteria more than doubled due to urban runoff and sewage.

Other pollutants of concern not listed above include pesticides such as Diazinon and Chlorpyrifos (commercial, agricultural, and residential application), Total Suspended Solids/Turbidity (suspended sediment/solids, construction, sewage, eutrophication), Copper and Zinc (industrial waste or automobiles), and pH/Phosphate (industrial waste, automobiles, sewage, fertilizers, eutrophication, hardening/concrete of creeks).

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Store materials properly to ensure it is not exposed to storm water. Do not over-irrigate your landscape. If you observe illegal dumping into a storm drain, you should call the City's storm water pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

San Diego Bay Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego Bay and the San Diego River. Your business or facility is located within the San Diego Bay Watershed.

San Diego Bay Watershed

The San Diego Bay Watershed is comprised of 415 square miles. It extends from the Laguna Mountains to San Diego Bay. The watershed falls within the cities of La Mesa, Chula Vista, Coronado, Imperial Beach, Lemon Grove, National City, San Diego, and unincorporated areas of the County. Approximately 4 square miles in the southern portion of the City of La Mesa is part of this watershed. The major discharge sources to San Diego Bay include Sweetwater River, Otay River, Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek.

Three drainage basins in the City of La Mesa are part of the San Diego Bay Watershed. Runoff from the Spring Valley Basin flows to the Sweetwater River. Runoff from the University Channel and Lemon Grove Basin contribute to Chollas Creek. The aforementioned creek and river flow into San Diego Bay.

Pollutants of concern associated with the watershed include diazinon, copper and zinc, fecal coliform, turbidity, and total suspended solids. The sources of these pollutants are a result of residential, agriculture or commercial pesticide application, automobiles and industrial waste, sewer spills, encampments, wildlife, erosion, suspended sediment, and fertilizers. Pollutants of concern for Chollas Creek in particular include metals such as copper, lead, zinc, cadmium, and coliform bacteria.

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Moreover, store materials properly to ensure it is not exposed to storm water and do not over-irrigate your landscape. If you observe storm water pollution or illegal dumping into a storm drain, you should call the City's Storm Water Pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

ATTACHMENT 8.6

RESIDENTIAL PREVENTING URBAN RUNOFF POLLUTION BROCHURE

DRY WEATHER SAMPLING DATA FOR ALVARADO DRAINAGE BASIN

Sampling Date	6/26/2007	6/27/2007	7/31/2008
Sampled By:	D-Max	D-Max	D-Max
907-ALV-001			
Cadmium (mg/l)	ND	-	ND
Chlorpyrifos (ug/l)	ND	-	ND
Copper (mg/l)	ND	-	ND
Diazinon (ug/l)	ND	-	ND
Enterococcus (MPN/100 ml)	500	-	800
Fecal Coliforms (MPN/100 ml)	800	-	7000
Hardness (Total) (mg CaCO3/L)	714	-	851
Lead (mg/l)	ND	-	ND
Malathion (ug/l)	ND	-	ND
Methylene Blue Active Substances (mg/l)	ND	-	-
Nitrate/Nitrite as N (mg/l)	1.58	-	0.66
Oil & Grease (mg/l)	ND	-	ND
Phosphorus, Total (mg/l)	0.31	-	0.39
Total Coliforms (MPN/100 ml)	7000	-	30000
Total Dissolved Solids (mg/l)	1760	-	1850
Total Kjeldahl Nitrogen (mg/l)	2.5	-	0.6
Total Nitrogen (mg/l)	4.1	-	1.3
Total Suspended Solids (mg/l)	ND	-	ND
Tribuytlphosphate (ug/l)	0.263	-	0.257
Triphenyl phosphate (ug/l)	0.243	-	0.265
Turbidity (NTU)	3.57	-	2.83
Zinc (mg/l)	ND	-	ND
Dissolved Oxygen (mg/l)	9.85	-	9.1
907-ALV-002	-	-	-
Cadmium (mg/l)	-	ND	ND

DRY WEATHER SAMPLING DATA FOR ALVARADO DRAINAGE BASIN (CONTINUED)

Sampling Date	6/26/2007	6/27/2007	7/31/2008
Sampled By:	D-Max	D-Max	D-Max
Chlorpyrifos (ug/l)	-	ND	ND
Copper (mg/l)	-	0.006	0.014
Diazinon (ug/l)	-	ND	ND
Enterococcus (MPN/100 ml)	-	17000	90000
Fecal Coliforms (MPN/100 ml)	-	5000	50000
Hardness (Total) (mg CaCO3/L)	-	666	536
Lead (mg/l)	-	ND	ND
Malathion (ug/l)	-	ND	ND
Methylene Blue Active Substances (mg/l)	-	ND	-
Nitrate/Nitrite as N (mg/l)	-	1.58	1.26
Oil & Grease (mg/l)	-	ND	ND
Phosphorus, Total (mg/l)	-	0.86	1.28
Total Coliforms (MPN/100 ml)	-	22000	300000
Total Dissolved Solids (mg/l)	-	1040	1240
Total Kjeldahl Nitrogen (mg/l)	-	1.4	2.2
Total Nitrogen (mg/l)	-	3	3.5
Total Suspended Solids (mg/l)	-	ND	394
Tribuytlphosphate (ug/l)	-	0.214	0.237
Triphenyl phosphate (ug/l)	-	0.215	0.295
Turbidity (NTU)	-	19.5	409
Zinc (mg/l)	-	ND	0.075
Dissolved Oxygen (mg/l)	-	6.32	6.52

DRY WEATHER SAMPLING DATA FOR UNIVERSITY DRAINAGE BASIN

Sampling Date	6/26/2007	3/5/2008	6/30/2008	7/30/2008
Sampled By:	D-Max	Weston	Weston	D-Max
908-UNI-001				
2-Fluorobiphenyl (ug/l)	27.1	-	-	-
4,4´-DDD (ug/l)	ND	-	-	-
4,4´-DDE (ug/l)	ND	-	-	-
4,4´-DDT (ug/l)	ND	-	-	-
Acenaphthene (ug/l)	ND	-	-	-
Acenaphthylene (ug/l)	ND	-	-	-
Aldrin (ug/l)	ND	-	-	-
alpha-BHC (ug/l)	ND	-	-	-
alpha-Chlordane (ug/l)	ND	-	-	-
Anthracene (ug/l)	ND	-	-	-
Aroclor 1016 (ug/l)	ND	-	-	-
Aroclor 1221 (ug/l)	ND	-	-	-
Aroclor 1232 (ug/l)	ND	-	-	-
Aroclor 1242 (ug/l)	ND	-	-	-
Aroclor 1248 (ug/l)	ND	-	-	-
Aroclor 1254 (ug/l)	ND	-	-	-
Aroclor 1260 (ug/l)	ND	-	-	-
Arsenic (Total) (mg/l)	0.005	-	-	-
Benzo (a) anthracene (ug/l)	ND	-	-	-
Benzo (a) pyrene (ug/l)	ND	-	-	-
Benzo (b) fluoranthene (ug/l)	ND	-	-	-
Benzo (g,h,i) perylene (ug/l)	ND	-	-	-
Benzo (k) fluoranthene (ug/l)	ND	-	-	-
beta-BHC (ug/l)	ND	-	-	-
Cadmium (mg/l)	ND	ND	ND	ND

DRY WEATHER SAMPLING DATA FOR UNIVERSITY DRAINAGE BASIN

Sampling Date	6/26/2007	3/5/2008	6/30/2008	7/30/2008
Sampled By:	D-Max	Weston	Weston	D-Max
Cadmium (Total) (mg/l)	ND	ND	ND	-
Chlordane (Total) (ug/l)	ND	-	-	-
Chlorpyrifos (ug/l)	ND	ND	ND	ND
Chromium (Total) (mg/l)	ND	-	-	-
Chrysene (ug/l)	ND	-	-	-
Copper (mg/l)	ND	0.0035	0.0026	ND
Copper (Total) (mg/l)	ND	0.004	0.0032	-
delta-BHC (ug/l)	ND	-	-	-
Diazinon (ug/l)	ND	ND	ND	ND
Dibenz (a,h) anthracene (ug/l)	ND	-	-	-
Dieldrin (ug/l)	ND	-	-	-
Endosulfan I (ug/l)	ND	-	-	-
Endosulfan II (ug/l)	ND	-	-	-
Endosulfan sulfate (ug/l)	ND	-	-	-
Endrin (ug/l)	ND	-	-	-
Endrin aldehyde (ug/l)	ND	-	-	-
Endrin ketone (ug/l)	ND	-	-	-
Enterococcus (MPN/100 ml)	170	-	-	1300
Fecal Coliforms (MPN/100 ml)	1700	-	-	800
Fluoranthene (ug/l)	ND	-	-	-
Fluorene (ug/l)	ND	-	-	-
gamma-BHC (Lindane) (ug/l)	ND	-	-	-
gamma-Chlordane (ug/l)	ND	-	-	-
Hardness (Total) (mg CaCO3/L)	589	416.5	369.8	753
Heptachlor (ug/l)	ND	-	-	-
Heptachlor epoxide (ug/l)	ND	-	-	-

DRY WEATHER SAMPLING DATA FOR UNIVERSITY DRAINAGE BASIN

Sampling Date	6/26/2007	3/5/2008	6/30/2008	7/30/2008
Sampled By:	D-Max	Weston	Weston	D-Max
Indeno (1,2,3-cd) pyrene (ug/l)	ND	-	-	-
Lead (mg/l)	ND	ND	0.00005	ND
Lead (Total) (mg/l)	ND	0.00024	0.00017	-
Malathion (ug/l)	ND	ND	ND	ND
Mercury (Total) (mg/l)	ND	-	-	-
Methoxychlor (ug/l)	ND	-	-	-
Methylene Blue Active Substances (mg/l)	ND	-	-	-
Naphthalene (ug/l)	ND	-	-	-
Nickel (Total) (mg/l)	ND	-	-	-
Nitrobenzene-d5 (ug/l)	28.8	-	-	-
Oil & Grease (mg/l)	ND	-	ND	ND
Phenanthrene (ug/l)	ND	-	-	-
Pyrene (ug/l)	ND	-	-	-
Silver (Total) (mg/l)	ND	-	-	-
TCMX (ug/l)	0.525	-	-	-
TCMX (ug/l)	0.525	-	-	-
Terphenyl-dl4 (ug/l)	29.7	-	-	-
Total Coliforms (MPN/100 ml)	23000	-	-	30000
Total Kjeldahl Nitrogen (mg/l)	-	0.98	1.1	-
Total Suspended Solids (mg/l)	ND	2.7	ND	ND
Toxaphene (ug/l)	ND	-	-	-
Tribuytlphosphate (ug/l)	0.257	-	-	0.228
Triphenyl phosphate (ug/l)	0.278	-	-	0.295
Turbidity (NTU)	0.64	-	-	2.19
Zinc (mg/l)	ND	0.0167	0.0092	ND
Zinc (Total) (mg/l)	ND	0.0202	0.0116	-

DRY WEATHER SAMPLING DATA FOR UNIVERSITY DRAINAGE BASIN

Sampling Date	6/26/2007	3/5/2008	6/30/2008	7/30/2008
Sampled By:	D-Max	Weston	Weston	D-Max
Ammonia-N (mg/l)	-	0.03	0.13	-
Biochemical Oxygen Demand (mg/l)	-	-	ND	-
Bolstar (Sulprofos) (ug/l)	-	ND	ND	-
Allethrin (ug/l)	-	ND	ND	-
Bifenthrin (ug/l)	-	ND	ND	-
Cyfluthrin (ug/l)	-	ND	ND	-
Cypermethrin (ug/l)	-	ND	ND	-
Danitol (ug/l)	-	ND	ND	-
Deltamethrin (ug/l)	-	ND	ND	-
Esfenvalerate (ug/l)	-	ND	ND	-
Fenvalerate (ug/l)	-	ND	ND	-
Fluvalinate (ug/l)	-	ND	ND	-
L-Cyhalothrin (ug/l)	-	ND	ND	-
Permethrin (ug/l)	-	ND	ND	-
Piperonyl Butoxide (ug/l)	-	ND	ND	-
Prallethrin (ug/l)	-	ND	ND	-
Resmethrin (ug/l)	-	ND	ND	-
Demeton (ug/l)	-	ND	ND	-
Dichlorvos (ug/l)	-	ND	ND	-
Dimethoate (ug/l)	-	ND	ND	-
Dissolved Organic Carbon (mg/l)	-	8.2	7.9	-
Disulfoton (ug/l)	-	ND	ND	-
Ethoprop (Ethoprofos) (ug/l)	-	ND	ND	-
Fenchlorphos (Ronnel) (ug/l)	-	ND	ND	-
Fensulfothion (ug/l)	-	ND	ND	-
Fenthion (ug/l)	-	ND	ND	-

DRY WEATHER SAMPLING DATA FOR UNIVERSITY DRAINAGE BASIN

Sampling Date	6/26/2007	3/5/2008	6/30/2008	7/30/2008
Sampled By:	D-Max	Weston	Weston	D-Max
Merphos (ug/l)	-	ND	ND	-
Methyl Parathion (ug/l)	-	ND	ND	-
Mevinphos (Phosdrin) (ug/l)	-	ND	ND	-
Nitrate-N by IC (mg/l)	-	5	3.34	-
Nitrite-N by IC (mg/l)	-	ND	ND	-
Phorate (ug/l)	-	ND	ND	-
Tetrachlorvinphos (Stirofos) (ug/l)	-	ND	ND	-
Tokuthion (ug/l)	-	ND	ND	-
Total Organic Carbon (mg/l)	-	9.4	8.6	-
Trichloronate (ug/l)	-	ND	ND	-
908-UNI-002				
Cadmium (mg/l)	ND	-	-	ND
Chlorpyrifos (ug/l)	ND	-	-	ND
Copper (mg/l)	ND	-	-	0.01
Diazinon (ug/l)	ND	-	-	ND
Enterococcus (MPN/100 ml)	500	-	-	24000
Fecal Coliforms (MPN/100 ml)	1100	-	-	**7000**
Hardness (Total) (mg CaCO3/L)	1740	-	-	1570
Lead (mg/l)	ND	-	-	ND
Malathion (ug/l)	ND	-	-	ND
Methylene Blue Active Substances (mg/l)	ND	-	-	-
Oil & Grease (mg/l)	ND	-	-	ND
Total Coliforms (MPN/100 ml)	23000	-	-	50000
Total Suspended Solids (mg/l)	ND	-	-	ND
Tribuytlphosphate (ug/l)	0.209	-	-	0.242
Triphenyl phosphate (ug/l)	0.242	-	-	0.287

DRY WEATHER SAMPLING DATA FOR UNIVERSITY DRAINAGE BASIN

Sampling Date	6/26/2007	3/5/2008	6/30/2008	7/30/2008
Sampled By:	D-Max	Weston	Weston	D-Max
Turbidity (NTU)	1.26	-	-	**22**
Zinc (mg/l)	0.031	-	-	0.038
908-UNI-003				
Cadmium (mg/l)	ND	-	-	ND
Chlorpyrifos (ug/l)	ND	-	-	ND
Copper (mg/l)	ND	-	-	ND
Diazinon (ug/l)	ND	-	-	ND
Enterococcus (MPN/100 ml)	170	-	-	900
Fecal Coliforms (MPN/100 ml)	230	-	-	1700
Hardness (Total) (mg CaCO3/L)	435	-	-	527
Lead (mg/l)	ND	-	-	ND
Malathion (ug/l)	ND	-	-	**11.6**
Methylene Blue Active Substances (mg/l)	ND	-	-	-
Oil & Grease (mg/l)	ND	-	-	ND
Total Coliforms (MPN/100 ml)	700	-	-	30000
Total Suspended Solids (mg/l)	ND	-	-	ND
Tribuytlphosphate (ug/l)	0.202	-	-	0.22
Triphenyl phosphate (ug/l)	0.195	-	-	0.262
Turbidity (NTU)	1.12	-	-	2.08
Zinc (mg/l)	ND	-	-	ND
908-UNI-004				
Cadmium (mg/l)	ND	-	-	ND
Chlorpyrifos (ug/l)	ND	-	-	ND
Copper (mg/l)	ND	-	-	0.005
Diazinon (ug/l)	ND	-	-	ND
Enterococcus (MPN/100 ml)	2300	-	-	8000

DRY WEATHER SAMPLING DATA FOR UNIVERSITY DRAINAGE BASIN

Sampling Date	6/26/2007	3/5/2008	6/30/2008	7/30/2008
Sampled By:	D-Max	Weston	Weston	D-Max
Fecal Coliforms (MPN/100 ml)	2300	-	-	**13000**
Hardness (Total) (mg CaCO3/L)	635	-	-	646
Lead (mg/l)	ND	-	-	ND
Malathion (ug/l)	ND	-	-	ND
Methylene Blue Active Substances (mg/l)	ND	-	-	-
Oil & Grease (mg/l)	ND	-	-	ND
Total Coliforms (MPN/100 ml)	5000	-	-	50000
Total Suspended Solids (mg/l)	ND	-	-	ND
Tribuytlphosphate (ug/l)	0.195	-	-	0.239
Triphenyl phosphate (ug/l)	0.213	-	-	0.299
Turbidity (NTU)	1.72	-	-	1.99
Zinc (mg/l)	0.025			ND

Wet Weather Sampling Data for Alvarado Drainage Basin

Sampling Date	4/20/2007	11/30/2007	12/7/2007	11/4/2008	2/5/2009
Sampled By:	**D-Max**	**D-Max**	**D-Max**	**Weston**	**Weston**
Site ALV-001					
Fecal Coliforms (MPN/100 mL)	170	80,000	5,000	50,000	30,000
Total Coliforms (MPN/100 mL)	23,000	130,000	170,000	170,000	130,000
Enterococci (MPN/100 mL)	300	90,000	500	70,000	170,000
Hardness (Total) (mg CaCO3/L)	236	100	52	269	200
Copper (mg/L)	0.011	0.01	0.014	-	-
Total Nitrogen (mg/L)	8.2	7.1	2.6	-	-
Nitrate/Nitrite as N (mg/L)	2.34	1.89	0.86	-	-
Total Kjeldahl Nitrogen (mg/L)	5.9	5.2	1.7	-	-
Turbidity (NTU)	70.7	135	62.9	54.6	46.6
Total Dissolved Solids (mg/L)	540	234	153	238	97
Total Suspended Solids (mg/L)	149	249	72	777	2060
Phosphorus, Total (mg/L)	0.79	0.74	0.4	1.34	0.61
Chlorpyrifos (ug/L)	ND	ND	ND	-	-
Diazinon (ug/L)	ND	ND	ND	-	-
Malathion (ug/L)	ND	ND	ND	-	-
Allethrin (ug/L)	-	-	ND	-	-
Bifenthrin (ug/L)	-	-	0.0393	-	-
Cyfluthrin (ug/L)	-	-	0.0461	-	-
L-Cyhalothrin (ug/L)	-	-	ND	-	-
Cypermethrin (ug/L)	-	-	0.0846	-	-
Danitol (ug/L)	-	-	ND	-	-
Deltamethrin (ug/L)	-	-	ND	-	-
Esfenvalerate (ug/L)	-	-	ND	-	-
Fenvalerate (ug/L)	-	-	ND	-	-
Fluvalinate (ug/L)	-	-	ND	-	-
Permethrin (ug/L)	-	-	0.0713	-	-

Wet Weather Sampling Data for Alvarado Drainage Basin (Continued)

Sampling Date	4/20/2007	11/30/2007	12/7/2007	11/4/2008	2/5/2009
Sampled By:	**D-Max**	**D-Max**	**D-Max**	**Weston**	**Weston**
Prallethrin (ug/L)	-	-	ND	-	-
Dissolved Oxygen (mg/L)	10.0	7.0	8.0	-	-
ALV-002					
Fecal Coliforms (MPN/100 mL)	17000	30000	-	-	-
Total Coliforms (MPN/100 mL)	240000	50000	-	-	-
Enterococci (MPN/100 mL)	24000	50000	-	-	-
Hardness (Total) (mg CaCO3/L)	117	60	-	-	-
Copper (mg/L)	0.024	0.025	-	-	-
Total Nitrogen (mg/L)	8.4	5.4	-	-	-
Nitrate/Nitrite as N (mg/L)	2.02	1.68	-	-	-
Total Kjeldahl Nitrogen (mg/L)	6.4	3.7	-	-	-
Turbidity (NTU)	127	130	-	-	-
Total Dissolved Solids (mg/L)	224	113	-	-	-
Total Suspended Solids (mg/L)	242	152	-	-	-
Phosphorus, Total (mg/L)	1	0.65	-	-	-
Chlorpyrifos (ug/L)	ND	ND	-	-	-
Diazinon (ug/L)	ND	1.08	-	-	-
Malathion (ug/L)	0.3	ND	-	-	-
Dissolved Oxygen (mg/L)		8.4	-	-	-

Wet Weather Sampling Data for University Drainage Basin

Sampling Date	10/14/2006	4/20/2007	11/30/2007	11/30/2007	12/7/2007	12/7/2007	2/3/2008	10/4/2008	11/4/2008	11/4/2008	2/5/2009
Sampled By:	**Weston**	**D-Max**	**D-Max**	**Weston**	**D-Max**	**Weston**	**Weston**	**Weston**	**D-Max**	**Weston**	**Weston**
UNI-001											
Fecal Coliforms (MPN/100 mL)	-	230	70000	80000	13000	50000	2300	30000	-	170000	30000
Total Coliforms (MPN/100 mL)	-	23000	1600000	230000	90000	220000	28000	70000	-	280000	130000
Enterococcus (MPN/100 mL)	-	800	160000	170000	9000	23000	70000	130000	-	500000	110000
Hardness (Total) (mg/L)	132	230	58	44.3	50	19.9	60.3	-	-	97	200
Copper (mg/L)	0.0183	0.011	0.0100	0.0085	0.0110	0.0136	0.0072	-	-	0.0240	0.013
Copper (Total) (mg/L)	0.0986	ND	ND	0.0676	ND	0.0165	0.0229	-	-	0.063	0.028
Lead (mg/L)	0.0021	ND	ND	0.00129	ND	0.00087	0.0002	-	-	ND	ND
Lead (Total) (mg/L)	0.0547	0.015	0.025	0.039	ND	0.01126	0.01426	-	-	0.026	0.006
Zinc (mg/L)	0.2587	0.054	0.067	0.0906	0.048	0.0555	0.0523	-	-	0.185	0.075
Zinc (Total) (mg/L)	0.7091	0.178	0.288	0.497	0.08	0.1259	0.1652	-	-	0.547	0.125
Cadmium (mg/L)	0.0006	-	-	ND	-	ND	ND	-	-	-	-
Cadmium (Total) (mg/L)	0.0028	ND	ND	0.0008	ND	ND	0.0003	-	-	-	-
Chromium (Total) (mg/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Turbidity (NTU)	-	57.2	88.6	-	31.2	-	-	-	-	43.1	72.8
Total Suspended Solids (mg/L)	248	118	166	220	-	64	90	-	-	168	97
Ammonia-N (mg/L)	0.48	-	-	1.26	-	0.52	0.2	-	-	-	-
Nitrite-N (mg/L)	ND	-	-	0.19	-	0.05	0.36	-	-	-	-
Nitrate-N (mg/L)	4	-	-	1.9	-	0.84	1.29	-	-	-	-
Total Kjeldahl Nitrogen (mg/L)	10	-	-	6.4	-	1.5	1.7	-	-	-	-
Total Organic Carbon (mg/L)	90	-	-	25	-	9	9.7	-	-	-	-
Oil & Grease (mg/L)	5.1	-	-	8	-	3.3	ND	-	-	-	-
Chlorpyrifos (ug/L)	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND
Diazinon (ug/L)	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND
Malathion (ug/L)	ND	ND	ND	0.1601	ND	ND	ND	-	0.4767	-	ND
Dissolved Organic Carbon (mg/L)	-	-	-	18.6	-	7.3	8.4	-	-	-	-
Arsenic (Total) (mg/L)	-	ND	ND	-	ND	-	-	-	-	-	-
TCMX (ug/L)	-	0.496	0.225	-	0.447	-	-	-	-	-	-
Toxaphene (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Aroclor 1016 (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Aroclor 1221 (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Aroclor 1232 (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Heptachlor epoxide (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Aroclor 1242 (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Aroclor 1248 (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Aroclor 1254 (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Aroclor 1260 (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Silver (Total) (mg/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Dieldrin (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-

Wet Weather Sampling Data for University Drainage Basin (Continued)

Sampling Date	10/14/2006	4/20/2007	11/30/2007	11/30/2007	12/7/2007	12/7/2007	2/3/2008	10/4/2008	11/4/2008	11/4/2008	2/5/2009
Sampled By:	**Weston**	**D-Max**	**D-Max**	**Weston**	**D-Max**	**Weston**	**Weston**	**Weston**	**D-Max**	**Weston**	**Weston**
Methoxychlor (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
4,4´-DDD (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
4,4´-DDE (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
4,4´-DDT (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Aldrin (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
alpha-BHC (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
alpha-Chlordane (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0015	-
beta-BHC (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
delta-BHC (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Heptachlor (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Endosulfan I (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Endosulfan II (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0796	-
Endosulfan sulfate (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.1425	-
Endrin (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0043	-
Endrin aldehyde (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0183	-
Endrin ketone (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0652	-
gamma-BHC (Lindane) (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
gamma-Chlordane (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Chlordane (Total) (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Terphenyl-dl4 (ug/L)	-	23.5	19	-	16.5	-	-	-	-	0.0612	-
Dibenz (a,h) anthracene (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Fluoranthene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.1558	-
Fluorene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0095	-
Indeno (1,2,3-cd) pyrene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.1247	-
Naphthalene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0227	-
Chrysene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.1992	-
Phenanthrene (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Pyrene (ug/L)	-	ND	ND	-	ND	-	-	-	-	-	-
Nitrobenzene-d5 (ug/L)	-	23.1	0.02	-	27	-	-	-	-	-	-
Acenaphthylene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0041	-
Mercury (Total) (mg/L)	-	ND	ND	-	-	-	-	-	-	-	-
Nickel (Total) (mg/L)	-	ND	ND	-	ND	-	-	-	-	-	-
2-Fluorobiphenyl (ug/L)	-	24.4	21	-	23.7	-	-	-	-	-	-
Acenaphthene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0162	-
Anthracene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0171	-
Benzo (a) anthracene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0667	-
Benzo (a) pyrene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0823	-
Benzo (k) fluoranthene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.0435	-
Benzo (g,h,i) perylene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.1373	-

Wet Weather Sampling Data for University Drainage Basin (Continued)

Sampling Date	10/14/2006	4/20/2007	11/30/2007	11/30/2007	12/7/2007	12/7/2007	2/3/2008	10/4/2008	11/4/2008	11/4/2008	2/5/2009
Sampled By:	**Weston**	**D-Max**	**D-Max**	**Weston**	**D-Max**	**Weston**	**Weston**	**Weston**	**D-Max**	**Weston**	**Weston**
Benzo (b) fluoranthene (ug/L)	-	ND	ND	-	ND	-	-	-	-	0.1032	-
Disulfoton (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Piperonyl Butoxide (ug/L)	ND	-	-	ND	-	ND	ND	-	-	-	-
Merphos (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Fensulfothion (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Bolstar (Sulprofos) (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Tokuthion (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Tetrachlorvinphos (Stirofos) (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Ethoprop (Ethoprofos) (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Fenthion (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Phorate (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Methyl Parathion (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Dimethoate (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Demeton (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Dichlorvos (ug/L)	ND	-	-	ND	-	ND	ND	-	0.1016	-	-
Danitol (ug/L)	ND	-	ND	ND	ND	ND	ND	-	ND	-	-
Trichloronate (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Fenchlorphos (Ronnel) (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Mevinphos (Phosdrin) (ug/L)	ND	-	-	ND	-	ND	ND	-	ND	-	-
Deltamethrin (ug/L)	ND	-	ND	ND	ND	ND	ND	-	ND	-	-
Allethrin (ug/L)	ND	-	ND	ND	ND	ND	ND	-	ND	-	-
Esfenvalerate (ug/L)	0.0062	-	ND	ND	ND	ND	ND	-	ND	-	-
Fenvalerate (ug/L)	ND	-	ND	ND	ND	ND	ND	-	ND	-	-
Cypermethrin (ug/L)	0.047400002	-	ND	0.027	ND	0.0684	ND	-	0.0268	-	-
Permethrin (ug/L)	ND	-	ND	0.4493	ND	0.1677	ND	-	0.1076	-	-
Prallethrin (ug/L)	ND	-	ND	ND	ND	ND	ND	-	ND	-	-
Cyfluthrin (ug/L)	0.281	-	0.0106	0.0958	0.0494	0.0685	0.0402	-	0.0797	-	-
Bifenthrin (ug/L)	0.140800003	-	0.0198	0.2221	0.0524	0.0779	0.0389	-	0.2302	-	-
Fluvalinate (ug/L)	-	-	ND	ND	ND	ND	ND	-	ND	-	-
L-Cyhalothrin (ug/L)	-	-	ND	0.0067	0.0066	0.0027	0.009	-	0.0049	-	-
Resmethrin (ug/L)	-	-	-	-	-	-	ND	-	ND	-	-
Benzo (e) pyrene (ug/L)	-	-	-	-	-	-	-	-	-	0.1031	-
Biphenyl (ug/L)	-	-	-	-	-	-	-	-	-	0.0207	-
1-Methylnaphthalene (ug/L)	-	-	-	-	-	-	-	-	-	0.016	-
2-Methylnaphthalene (ug/L)	-	-	-	-	-	-	-	-	-	0.0288	-
2,3,5-Trimethylnaphthalene (ug/L)	-	-	-	-	-	-	-	-	-	0.0059	-
2,6-Dimethylnaphthalene (ug/L)	-	-	-	-	-	-	-	-	-	0.0163	-
Perylene (ug/L)	-	-	-	-	-	-	-	-	-	0.0472	-
UNI-002											

Wet Weather Sampling Data for University Drainage Basin (Continued)

Sampling Date	10/14/2006	4/20/2007	11/30/2007	11/30/2007	12/7/2007	12/7/2007	2/3/2008	10/4/2008	11/4/2008	11/4/2008	2/5/2009
Sampled By:	**Weston**	**D-Max**	**D-Max**	**Weston**	**D-Max**	**Weston**	**Weston**	**Weston**	**D-Max**	**Weston**	**Weston**
Fecal Coliforms (MPN/100 mL)	-	17000	50000	-	-	-	-	-	160000	-	-
Total Coliforms (MPN/100 mL)	-	80000	220000	-	-	-	-	-	500000	-	-
Enterococcus (MPN/100 mL)	-	2300	30000	-	-	-	-	-	24000	-	-
Hardness (Total) (mg CaCO3/L)	-	131	50	-	-	-	-	-	100	-	-
Copper (mg/L)	-	0.013	0.016	-	-	-	-	-	0.030	-	-
Copper (Total) (mg/L)	-	-	-	-	-	-	-	-	0.062	-	-
Lead (mg/L)	-	ND	ND	-	-	-	-	-	ND	-	-
Lead (Total) (mg/L)	-	-	-	-	-	-	-	-	0.018	-	-
Zinc (mg/L)	-	0.051	0.084	-	-	-	-	-	0.247	-	-
Zinc (Total) (mg/L)	-	-	-	-	-	-	-	-	0.478	-	-
Turbidity (NTU)	-	89.4	64.6	-	-	-	-	-	-	-	-
Total Suspended Solids (mg/L)	-	150	109	-	-	-	-	-	105	-	-
Chlorpyrifos (ug/L)	-	ND	ND	-	-	-	-	-	ND	-	-
Diazinon (ug/L)	-	ND	ND	-	-	-	-	-	ND	-	-
Malathion (ug/L)	-	ND	ND	-	-	-	-	-	ND	-	-
Fluvalinate (ug/L)	-	-	-	-	-	-	-	-	ND	-	-
Danitol (ug/L)	-	-	-	-	-	-	-	-	ND	-	-
Allethrin (ug/L)	-	-	-	-	-	-	-	-	ND	-	-
Bifenthrin (ug/L)	-	-	-	-	-	-	-	-	0.3252	-	-
Cyfluthrin (ug/L)	-	-	-	-	-	-	-	-	0.0934	-	-
Cypermethrin (ug/L)	-	-	-	-	-	-	-	-	0.0194	-	-
Resmenthrin (ug/L)	-	-	-	-	-	-	-	-	ND	-	-
Fenvalerate (ug/L)	-	-	-	-	-	-	-	-	ND	-	-
L-Cyhalothrin (ug/L)	-	-	-	-	-	-	-	-	0.0251	-	-
Permethrin (ug/L)	-	-	-	-	-	-	-	-	0.2211	-	-
Prallenthrin (ug/L)	-	-	-	-	-	-	-	-	ND	-	-
Deltamethrin (ug/L)	-	-	-	-	-	-	-	-	ND	-	-
Esfenvalerate (ug/L)	-	-	-	-	-	-	-	-	ND	-	-
Ammonia as N (mg/L)	-	-	-	-	-	-	-	-	2.53	-	-
Total Kjeldahl Nitrogen (mg/L)	-	-	-	-	-	-	-	-	7.1	-	-
Total Nitrogen (mg/L)	-	-	-	-	-	-	-	-	8.2	-	-
Nitrate/Nitrite as N (mg/L)	-	-	-	-	-	-	-	-	1.1	-	-
Methylene Blue Active Substances (mg/L)	-	-	-	-	-	-	-	-	0.6	-	-
Orthophosphate as P (mg/L)	-	-	-	-	-	-	-	-	0.66	-	-
Phosphorus, Total (mg/L)	-	-	-	-	-	-	-	-	1.27	-	-
UNI-003											
Fecal Coliforms (MPN/100 mL)	-	8000	8000	-	-	-	-	-	-	-	-
Total Coliforms (MPN/100 mL)	-	30000	130000	-	-	-	-	-	-	-	-
Enterococcus (MPN/100 mL)	-	2300	30000	-	-	-	-	-	-	-	-

Wet Weather Sampling Data for University Drainage Basin (Continued)

Sampling Date	10/14/2006	4/20/2007	11/30/2007	11/30/2007	12/7/2007	12/7/2007	2/3/2008	10/4/2008	11/4/2008	11/4/2008	2/5/2009
Sampled By:	**Weston**	**D-Max**	**D-Max**	**Weston**	**D-Max**	**Weston**	**Weston**	**Weston**	**D-Max**	**Weston**	**Weston**
Hardness (Total) (mg CaCO3/L)	-	155	69	-	-	-	-	-	-	-	-
Copper (mg/L)	-	0.022	0.009	-	-	-	-	-	-	-	-
Lead (mg/L)	-	ND	ND	-	-	-	-	-	-	-	-
Zinc (mg/L)	-	0.089	0.059	-	-	-	-	-	-	-	-
Turbidity (NTU)	-	72.3	77.5	-	-	-	-	-	-	-	-
Total Suspended Solids (mg/L)	-	147	99	-	-	-	-	-	-	-	-
Chlorpyrifos (ug/L)	-	ND	ND	-	-	-	-	-	-	-	-
Diazinon (ug/L)	-	ND	ND	-	-	-	-	-	-	-	-
Malathion (ug/L)	-	0.27	ND	-	-	-	-	-	-	-	-
UNI-004											
Fecal Coliforms (MPN/100 mL)	-	5000	24000	-	-	-	-	-	-	-	-
Total Coliforms (MPN/100 mL)	-	23000	130000	-	-	-	-	-	-	-	-
Enterococcus (MPN/100 mL)	-	2300	14000	-	-	-	-	-	-	-	-
Hardness (Total) (mg CaCO3/L)	-	87	35	-	-	-	-	-	92	-	-
Copper (mg/L)	-	0.021	0.018	-	-	-	-	-	0.040	-	-
Copper (Total) (mg/L)	-	-	-	-	-	-	-	-	0.074	-	-
Lead (mg/L)	-	ND	ND	-	-	-	-	-	ND	-	-
Lead (Total) (mg/L)	-	-	-	-	-	-	-	-	0.016	-	-
Zinc (mg/L)	-	0.148	0.135	-	-	-	-	-	0.459	-	-
Zinc (Total) (mg/L)	-	-	-	-	-	-	-	-	0.752	-	-
Turbidity (NTU)	-	58.3	51.6	-	-	-	-	-	-	-	-
Total Suspended Solids (mg/L)	-	100	71	-	-	-	-	-	92	-	-
Chlorpyrifos (ug/L)	-	ND	ND	-	-	-	-	-	-	-	-
Diazinon (ug/L)	-	ND	ND	-	-	-	-	-	-	-	-
Malathion (ug/L)	-	0.08	ND	-	-	-	-	-	-	-	-
UNI-006											
Hardness (Total) (mg CaCO3/L)	-	-	-	-	-	-	-	-	76	-	-
Copper (mg/L)	-	-	-	-	-	-	-	-	0.065	-	-
Copper (Total) (mg/L)	-	-	-	-	-	-	-	-	0.081	-	-
Lead (mg/L)	-	-	-	-	-	-	-	-	ND	-	-
Lead (Total) (mg/L)	-	-	-	-	-	-	-	-	ND	-	-
Zinc (mg/L)	-	-	-	-	-	-	-	-	0.664	-	-
Zinc (Total) (mg/L)	-	-	-	-	-	-	-	-	0.816	-	-
Total Suspended Solids (mg/L)	-	-	-	-	-	-	-	-	49	-	-
UNI-007											
Hardness (Total) (mg CaCO3/L)	-	-	-	-	-	-	-	-	76	-	-
Copper (mg/L)	-	-	-	-	-	-	-	-	0.041	-	-
Copper (Total) (mg/L)	-	-	-	-	-	-	-	-	0.067	-	-
Lead (mg/L)	-	-	-	-	-	-	-	-	ND	-	-

Wet Weather Sampling Data for University Drainage Basin (Continued)

Sampling Date	10/14/2006	4/20/2007	11/30/2007	11/30/2007	12/7/2007	12/7/2007	2/3/2008	10/4/2008	11/4/2008	11/4/2008	2/5/2009
Sampled By:	**Weston**	**D-Max**	**D-Max**	**Weston**	**D-Max**	**Weston**	**Weston**	**Weston**	**D-Max**	**Weston**	**Weston**
Lead (Total) (mg/L)	-	-	-	-	-	-	-	-	0.012	-	-
Zinc (mg/L)	-	-	-	-	-	-	-	-	0.498	-	-
Zinc (Total) (mg/L)	-	-	-	-	-	-	-	-	0.834	-	-
Total Suspended Solids (mg/L)	-	-	-	-	-	-	-	-	43	-	-

CITY OF LA MESA

2008/2009 JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

IDDE SECTION

DECEMBER 2009

PREPARED BY:

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INTERIM CITY MANAGER

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David E. Witt
Interim City Manager

Date: December 2009

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INTRODUCTION AND CONTENTS

Introduction

Section 7 of the Annual Report discusses the implementation of the illicit discharge detection and elimination (IDDE) component of the City's storm water program. This program consists of dry weather monitoring activities and other activities intended to prevent and respond to illicit connection and illicit discharges, such as operating a storm water hotline. The reporting period for the portions of this section that discuss dry weather monitoring activities have been extended through September 30, 2009, but the reporting period for other activities described in the section was not changed and thus extends through June 30, 2009, consistent with rest of the JURMP Annual Report. Because the field work for the dry weather monitoring program is not required to be completed until September 30, 2009, the same day that the JURMP Annual Report is to be submitted, the RWQCB extended the submittal deadline for all of Section 7 of the 2008/2009 JURMP Annual Report until December 15, 2009.

Contents

This submittal includes a certification statement, the text of Section 7 of the 2008/2009 JURMP Annual Report, and the attachments associated with that section. For clarity, the items included in this submittal are listed below.

- Certification Statement for Section 7 Submittal
- Introduction and Contents
- Section 7 (IDDE Component) of the 2008/2009 JURMP Annual Report
- JURMP Annual Report Requirements Checklist (for Section 7 only)
- Attachment 7.1, City of La Mesa Dry Weather Field Screening and Analytical Monitoring Program 2009

Please note that the complaint log, referenced as Appendix B in Section 7, was already provided with the main JURMP Annual Report submittal in September 2009 and is not included again with this December submittal.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

The City maintains several programs to prevent and to seek out and eliminate illicit connections and illicit discharges (IC/IDs), which can be significant sources of pollutants to the City's MS4. Illicit discharges may result from activities such as vehicle washing or equipment cleaning without the use of proper BMPs. Illicit connections include improper links to the MS4, typically of conveyances that should be plumbed to the sanitary sewer system, such as car wash facility drains. City storm water personnel work with residents, businesses, and City staff to make them aware of BMPs to prevent IC/IDs and to encourage reporting of IC/IDs. The following activities are the primary components of the City's program to combat IC/IDs:

- Inspecting local businesses, construction sites, and municipal facilities
- Conducting the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program)
- Operating a public complaint hotline

These activities enable the City to provide a comprehensive system to improve the quality of storm water and urban runoff throughout the City through detection and elimination of IC/IDs.

7.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the illicit discharge detection and elimination component during the 2008/2009 reporting period are presented in the following bulleted list. Please note that per Addendum No. 2 to the Municipal Permit, the reporting period for the Dry Weather Monitoring Program was extended through September 30, 2009. The reporting period for all other components of the City's illicit discharge detection and elimination (IDDE) program ended on June 30, 2009.

- Twenty IC/IDs were discovered and reported during the 2008/2009 reporting period. All were followed up on by City personnel, and enforcement measures were applied as necessary.
- The City recorded and investigated 107 Storm Water Hotline complaints (Appendix B, which was included with the September 2009 JURMP Annual Report submittal).
- The City performed the recommended corrective actions proposed in the 2008 Dry Weather Monitoring Program Report to remove trash and leaves from the storm drain system.
- The City conducted the 2009 Dry Weather Monitoring Program.

7.2 Public Reporting of Illicit Discharges and Connections

See also Section 4.8 of this JURMP Annual Report.

Reporting and Response

Public and municipal involvement are crucial to preventing and eliminating IC/IDs from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is provided on the City's website, in distributed storm water educational material, in storm water articles in the *La Mesa Focus* newsletter, and on the Storm Water Bulletin Board. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged onto a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges. See Figure 7-1 for a map of complaints within the City and their corresponding responsible party type. The Public Works Department also receives complaints regarding storm water, often due to infrastructure concerns. Complaints to the Public Works Department are also tracked and investigated. See Figure 7-2 for a map of all complaints reported to Public Works and to the Storm Water Hotline.

Complaints received by the City during the 2008/2009 reporting period and the City's response to each are listed in Appendix B, which was included with the September 2009 JURMP Annual Report submittal. A total of 107 complaints were documented this year.

Enforcement

As previously stated, complaints received via the Storm Water Hotline, City website, and Public Works hotline are included in a table in Appendix B. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, violations, and/or educational material. See Figure 7-3, at the end of this section, for a map of these enforcement actions within the City.

7.3 Spill Reporting, Response, and Prevention

See Section 4.9 of this JURMP Annual Report.

7.4 Urban Runoff Monitoring

The City has continued to conduct a Dry Weather Monitoring Program, as required by the Municipal Permit. This program assists the City in detecting and eliminating IC/IDs to the storm drain system. There are three major components to the Dry Weather Monitoring Program:

- Field observations, which include site descriptions and qualitative observations

- Field screening, which includes flow estimation and sample testing using meters and test kits at the site
- Analytical monitoring, which involves submittal of collected samples from selected sites, constituting 25 percent of all flowing or ponded sites, to an analytical laboratory for additional testing

The City visits all designated primary monitoring stations each year between May 1 and September 30 to collect dry weather monitoring data. When a primary monitoring station is found to be dry, the City visits designated alternate monitoring stations.

Numeric action levels are used as the primary approach for the interpretation of most constituent concentrations measured in the field and laboratory. Action levels for dissolved metals follow the California Toxics Rule (CTR) Criteria Maximum Concentration (CMC). Temperature, turbidity, and conductivity parameters are evaluated using best professional judgment to determine if further investigation is needed. The action levels for pH, surfactants, ammonia-nitrogen, nitrate-nitrogen, orthophosphate-phosphorus, oil and grease, diazinon, and chlorpyrifos were adopted in 2003 and were based on statistical analyses of previous Dry Weather Monitoring Program data, established water quality benchmarks from the Basin Plan, and the United States Environmental Protection Agency Multi-Sector General Permit.

The Regional Monitoring Workgroup in November 2008 requested the Dry Weather Monitoring Sub-workgroup to evaluate dry weather action levels that were submitted in April 2003 by the County of San Diego on behalf of the Copermittees. The Dry Weather Monitoring Sub-workgroup determined that the bacterial indicators action levels required additional analysis. All other action levels were deemed appropriate and will not change. The Dry Weather Monitoring Sub-workgroup contracted the services of D-MAX Engineering (D-MAX) through the City of La Mesa to conduct the evaluation of historical bacterial data collected from dry weather monitoring from 2002 through 2007. Details of their evaluation are posted on the Project Clean Water Website at http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf. The Regional Monitoring Workgroup on May 19, 2009 evaluated the recommendations of the Dry Weather Monitoring Sub-workgroup and selected the 80th percentile values to be proposed as the dry weather action levels for bacterial indicators beginning on May 1, 2010. The current levels and the levels proposed for use beginning May 1, 2010 are presented in Table 7-1.

TABLE 7-1
Bacterial Indicators Action Levels for Dry Weather Monitoring Program

	Total Coliform (MPN/100 mL)	**Fecal Coliform (MPN/100 mL)**	***Enterococcus* (MPN/100 mL)**
2003-2009 Action Levels	50,000	20,000	10,000
Proposed 2010 -2012 Action Levels	130,000	13,000	7,000

7.4.1 2008 DRY WEATHER MONITORING PROGRAM

During the 2008 Dry Weather Monitoring Program, 20 primary monitoring stations and one alternate monitoring station were visited. One of the primary sites was observed to be dry, so alternate Site 907-ALV-580 was chosen as a replacement for field screening. Only three sites had constituents measured above action levels in 2008, primarily for indicator bacteria. For further information about how the City addressed notable findings of the 2008 Dry Weather Monitoring Program and responded to the resulting recommendations, see Section 7.5.1 of this report.

7.4.2 2009 DRY WEATHER MONITORING PROGRAM

2009 Results

The City's storm water consultant, D-MAX, conducted the 2009 Dry Weather Monitoring Program in June 2009. Twenty primary monitoring stations and one alternate monitoring station were visited. Since primary Site 907-ALV-003 was dry, alternate Site 907-ALV-580 was visited.

A summary of action level exceedances for field and laboratory constituents is provided in Table 7-2. The results of all follow-up investigations are presented in Table 7-3, in Section 7.5.2 of this report. A list of all the monitoring stations visited is displayed in Table 7-4. Also in this section, the complete field analytical and laboratory analytical results are included as Table 7-5 and Table 7-6, respectively.

Table 7-2
Summary of Action Level Exceedances

Field Screening (20 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
pH	1	5	907-ALV-640
Conductivity	0	0	---
Turbidity	0	0	---
Surfactants	3	15	907-ALV-006 908-LEM-520 908-UNI-002
Ammonia-Nitrogen	0	0	---
Nitrate-Nitrogen	1	5	908-UNI-005
Orthophosphate-Phosphorus	0	0	---

Laboratory Analyses (6 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
Oil & Grease	0	0	---
Cadmium	0	0	---
Copper	1	5	908-UNI-003
Lead	0	0	---
Zinc	0	0	---
Diazinon	0	0	---
Chlorpyrifos	0	0	---
Total Coliforms	1	5	907-ALV-002
Fecal Coliforms	0	0	---
Enterococci	1	5	907-ALV-002

Note: Data is from the initial site visits only; data from follow-up investigations is not included.

Follow-up investigations conducted in response to action level exceedances are summarized in Section 7.5.2 of this report.

A formal trash assessment was performed in 2009 in accordance with the Municipal Permit requirements. A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form's five categories are primarily qualitative descriptions of the amount and extent of trash although a number of trash pieces is also included in each category as a rough guideline. The five categories are defined as follows.

- Optimal: On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
- Suboptimal: On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
- Marginal: Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
- Submarginal: Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (~100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
- Poor: Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is also assessed at each site. Prior to the beginning of the 2009 dry weather season, the Dry Weather Monitoring Sub-workgroup added additional detail to the definitions of these categories to help achieve a greater level or inter-jurisdictional consistency. The definitions are as follows:

- *Threat to Human Health* – Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment.
- *Threat to Aquatic Health* – Large amount (50 pieces or more) of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amounts of settleable, degradable, and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment.

Twenty-one sites were assessed during the 2009 Dry Weather Monitoring Program, and most of the sites were rated optimal, having little or no trash. Five sites were rated as suboptimal, and two sites had a marginal trash score. Notably, none of the sites visited had conditions warranting a submarginal or poor trash rating. Additionally, none of the trash observed was determined to pose a threat to human or aquatic health. Actions taken by the City in response to the results of the trash assessment are described in Section 7.5.2 of this report.

The 2009 Dry Weather Monitoring Program Report can be found as Attachment 7.1.

7.5 Follow-up and Enforcement

7.5.1 Actions Taken in Response to the 2008 Dry Weather Monitoring Program Findings

Based on the 2008 Dry Weather Monitoring Program results, three follow-up recommendations were made. In response to these recommendations, leaves and trash were removed from the storm water conveyance at Site 908-ALV-002, and upstream location 908-ALV-002-2. Trash was also removed from Site 908-UNI-002. The City has worked with the Vons Shopping Center property management upstream of Site 908-UNI-004 regarding removal of leaf debris and litter from storm drains onsite. In the past, the City had discussed general storm water pollution prevention issues and had requested a Storm Water Monitoring Plan and Best Management Practices Plan from the property owner. Since the 2008 Dry Weather Monitoring Program, the City has

followed up with property management regarding catch basin cleaning, dumpster maintenance, and other required pollution prevention issues.

7.5.2 2009 Dry Weather Monitoring Follow-Up Investigations

If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. Upstream investigations are performed when exceedances are verified during confirmation visits. See the City's JURMP for a complete discussion of upstream investigation procedures.

Table 7-4 presents conclusions based on the results of confirmation visits and, where necessary, upstream investigations conducted at three sites during the 2009 Dry Weather Monitoring Program.

Table 7-3
Summary of Follow-up Investigations

Site	Upstream Investigation Target Constituent(s)		Results / Probable Source
	Field	Laboratory	
907-ALV-002	---	Total Coliforms, Enterococci	Decomposing organic material and trash upstream of the site
907-ALV-006	Surfactants	---	Likely due to a transient flow from vehicle washing by resident in neighborhood upstream
907-ALV-640	pH	---	Sunlight and higher temperatures encouraging the removal of carbon dioxide through decreased solubility and increased photosynthesis
908-LEM-520	Surfactants	---	Transient flow
908-UNI-002	Surfactants	---	Transient flow from residential and commercial area
908-UNI-003	---	Copper	Transient flow
908-UNI-005	Nitrate-nitrogen	---	Transient flow, potentially due to fertilizer usage in surrounding residential and park areas

The City is in the process of responding to the 2009 Dry Weather Monitoring Program findings. These actions and any other actions taken with respect to the City's Dry Weather Monitoring Program during the remainder of 2009/2010 will be described in the 2009/2010 JURMP Annual Report.

7.5.3 IC/IDs Identified

The IC/IDs identified in 2008/2009 are discussed in Section 4 of the September 2009 JURMP Annual Report submittal.

7.6 Illicit Discharge Detection and Elimination Component Effectiveness Assessment

The effectiveness assessment of this program component is provided in Section 11 of this JURMP Annual Report, which was submitted in September 2009.

7.7 Program Review and Modification

Changes to the definitions of threat to human health and threat to aquatic health used during the trash assessment component of the Dry Weather Monitoring Program and proposed bacteria action levels to be used in the 2010 dry weather season are discussed earlier in this section. No other changes to the City's illicit discharge detection and elimination component were made during the reporting period.

Table 7-4
2009 Dry Weather Monitoring Locations

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
907-ALV-001	Alvarado Road, east of the trolley station	Concrete Channel	Commercial	Residential	907.11	32.77209	-117.04136
907-ALV-002	Along the southern edge of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection	Manhole	Industrial	Commercial	907.11	32.77414	-117.02287
907-ALV-003*	Parkway Drive located in the southeast corner of Coleman College property	Manhole	Residential	Commercial (School)	907.11	32.77362	-117.03794
907-ALV-004	7780 Parkway Drive, inside Parkway Manor Condominiums parking lot, by visitor parking at the top of the driveway	Manhole	Residential	None	907.11	32.77546	-117.02918
907-ALV-005	Alvarado Channel, underneath the intersection of Fletcher Parkway and Baltimore Drive, north side of channel	Outlet	Residential	Commercial	907.11	32.77380	-117.02737
907-ALV-006	Fletcher Parkway and Marengo Avenue intersection, in planter	Manhole	Residential	None	907.11	32.77550	-117.02309
907-ALV-007	Jackson Drive and Parkway Drive, behind Amex Auto Repair	Manhole	Residential	Commercial	907.11	32.77832	-117.01821
907-ALV-008	South of Fletcher Parkway, under SR-125 overpass, west of the outfalls from the north	Concrete Channel	Residential	Commercial	907.11	32.78400	-117.00570
907-ALV-120	Jackson Drive, 100 feet west of Murray Drive, north side of street	Manhole	Commercial	None	907.11	32.77630	-117.01423
907-ALV-12A	Jackson Drive, 100 feet west of Murray Drive, south side of street, in front of 5304 Jackson Drive	Manhole	Commercial	Residential	907.11	32.77605	-117.01434
907-ALV-580*	Northeast corner of Amaya Drive and Amaya Court intersection	Manhole	Residential	None	907.11	32.78640	-117.00116

Table 7-4 (Continued)
2009 Dry Weather Monitoring Locations

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
907-ALV-590	Southeast corner of Parkway Drive and Amarillo Avenue intersection	Natural Creek	Residential	None	907.11	32.78180	-117.01328
907-ALV-640	North side of Seton Hall Street, between Swarthmore Street and Wheaton Street	Concrete Channel	Residential	None	907.11	32.77651	-117.03462
908-LEM-520	Near Waite Drive and Harris Street intersection, south end of Harris Street	Outlet	Residential	None	908.22	32.74514	-117.03931
908-UNI-001	69th Street and Boulevard Drive intersection	Natural Creek	Commercial	Residential	908.22	32.75463	-117.04908
908-UNI-002	Harbison Avenue and University Avenue intersection, west sidewalk, east of CB Hair & Nails	Manhole	Residential	Commercial	908.22	32.75498	-117.04639
908-UNI-003	Along Lowell Street, about halfway between University Avenue and Normal Avenue, north side of street, 4291 Lowell Street driveway	Manhole	Residential	Commercial	908.22	32.75536	-117.03528
908-UNI-004	In front of 7851 University Avenue along the south side of the street	Manhole	Commercial	None	908.22	32.76308	-117.02855
908-UNI-005	Rolando Park, in gated area by left field of baseball field	Manhole	Residential	Parks	908.22	32.75787	-117.05260
909-SPR-001	Spring Street and Spring Gardens Road intersection, inside La Mesa Seventh Day Adventist Church	Concrete Channel	Residential	Parks	909.12	32.75483	-117.01311
909-SPR-002	In front of 4621 Bancroft Drive, just south of Golondrina Drive	Manhole	Residential	None	909.12	32.76324	-117.00118

Note:
* Alternate Site 907-ALV-580 was substituted for dry primary monitoring Site 907-ALV-003

Table 7-5
2009 Field Analytical Results

Site No	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants MBAS (mg/L)	Ammonia NH_3-N (mg/L)	Nitrate NO_3-N (mg/L)	Orthophosphate-P PO_4-P (mg/L)
907-ALV-001	6/12/09	10:15	75	19.1	7.6	3.37	3.24	0.50	0.110	0.86*	0.220*
907-ALV-002	6/2/09	11:30	5	21.5	7.2	16.36	2.03	0.25	0.399	0.95*	0.226*
907-ALV-002 *(Confirmation)*	6/18/09	13:30	3	23.3	7.0	na	2.29	na	na	na	na
907-ALV-003	6/15/09	10:40	dry	ns	ns	ns	ns	ns	ns	ns	ns
907-ALV-004	6/15/09	11:25	<1	21.7	8.1	11.51	1.15	0.25	0.134	0.31*	0.193*
907-ALV-005	6/15/09	15:00	5	23.6	7.4	1.23	3.35	0.25	0.161	3.50	0.070*
907-ALV-006	6/16/09	15:10	1	24.0	7.1	7.92	2.34	**2.00**	0.212	0.58*	0.322
907-ALV-006 *(Confirmation)*	6/17/09	9:40	<1	21.6	6.9	na	2.99	0.63	na	na	na
907-ALV-007	6/12/09	15:40	2	21.3	7.8	1.52	3.63	0.5	0.163	2.41	0.161*
907-ALV-008	6/16/09	14:20	1	22.0	8.0	4.82	2.42	0.50	0.088*	0.86*	0.074*
907-ALV-120	6/16/09	11:30	2	22.2	7.0	20.39	2.00	0.75	0.336	3.49	0.338
907-ALV-12A	6/16/09	10:50	5	22.0	7.5	8.47	2.55	0.63	0.309	4.36	0.112*
907-ALV-580	6/12/09	14:40	2	21.5	7.6	20.42	2.00	0.25	0.281	0.57*	0.067*
907-ALV-590	6/2/09	12:40	2	24.2	8.0	0.01	2.43	0.38	0.213	0.92*	0.036*
907-ALV-640	6/15/09	9:50	<1	24.8	**10.1**	4.76	1.27	0.75	0.064*	0.08*	0.108*
907-ALV-640 *(Confirmation)*	6/16/09	9:25	1	20.4	8.1	na	1.25	na	na	na	na
908-LEM-520	6/16/09	10:10	1	22.3	7.5	6.41	4.26	**1.50**	0.214	1.49*	0.365
908-LEM-520 *(Confirmation)*	6/16/09	16:00	1	26.7	7.8	na	4.60	0.75	na	na	na

Table 7-5 (Continued)
2009 Field Analytical Results

Site No	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants MBAS (mg/L)	Ammonia NH_3-N (mg/L)	Nitrate NO_3-N (mg/L)	Orthophosphate-P PO_4-P (mg/L)
908-UNI-001	6/2/09	15:25	78	22.8	8.1	0.01	2.90	0.50	0.292	2.89	0.103*
908-UNI-002	6/2/09	14:30	2	24.3	7.8	1.45	5.63	**2.00**	0.159	7.15	0.291
908-UNI-002 *(Confirmation)*	6/3/09	9:20	2	22.0	7.7	na	4.34	0.63	na	na	na
908-UNI-003	6/12/09	11:25	5	21.8	8.1	0.52	2.55	0.25	0.118	4.49	0.030*
908-UNI-004	6/12/09	12:20	3	22.6	7.5	4.04	2.71	0.50	0.194	2.08*	0.183*
908-UNI-005	6/16/09	12:20	<1	21.6	8.5	1.68	2.67	0.75	0.476	**17.25**	1.03
908-UNI-005 *(Confirmation)*	6/17/09	10:20	<1	21.4	8.4	na	2.20	na	na	1.81*	na
909-SPR-001	6/15/09	13:15	12	22.2	7.5	1.00	2.47	0.38	0.189	2.39	0.185*
909-SPR-002	6/15/09	14:00	2	22.8	8.2	3.13	2.17	0.13	0.220	5.64	0.127*
Reporting Limits				**0.1**	**0.01**	**0.01**	**0.01**	**0.13**	**0.1**	**2.26**	**0.25**
Action Level				**BPJ**	**<6.5 >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.0**	**2.0**

Notes:
ns = not sampled (dry site)
na = not analyzed
* = Value reported is below the Practical Detection Limit (PDL) or Reporting Limit.
Red values were at or above the measured constituent's action level
denotes a follow-up visit
denotes a location sampled for laboratory analysis

Table 7-6
2009 Laboratory Analytical Results

Site No.	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L $CaCO_3$)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	Enterococci (MPN/100 mL)
907-ALV-001	6/12/09	10:15	nd	801	nd	0.003	nd	nd	nd	nd	23,000	270	800
907-ALV-002	6/2/09	11:30	nd	596	nd	0.002	nd	nd	nd	nd	**50,000**	17,000	**17,000**
907-ALV-002	6/18/09	13:30	na	na	na	na	na	na	na	na	15,500	554*	780
907-ALV-590	6/2/09	12:40	na	na	na	na	na	na	na	na	5,000	nd	80
908-UNI-001	6/5/09	10:15	nd	796	nd	0.003	nd	nd	nd	nd	7,000	300	1,300
908-UNI-002	6/2/09	14:30	nd	1740	nd	0.005	nd	0.048	nd	nd	22,000	220	1,300
908-UNI-003	6/12/09	11:25	nd	529	nd	**0.076**	nd	nd	nd	nd	800	80	130
908-UNI-003	6/22/09	14:30	na	na	na	0.005	na	na	na	na	na	na	na
908-UNI-004	6/12/09	12:20	nd	628	nd	0.006	nd	nd	nd	nd	5,000	220	90
ANALYTICAL REPORTING LIMITS			**5**	**10**	**0.001**	**0.001**	**0.001**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**
ACTION LEVELS			**15**	**	**CTR**	**CTR**	**CTR**	**CTR**	**0.5**	**0.5**	**50,000**	**20,000**	**10,000**

Notes:
Red Bold Type = value exceeds action level
[yellow box] denotes a confirmation visit
nd = not detected
na = not analyzed
CTR = California Toxics Rule; CTR action levels for metals are calculated based upon on the total hardness value of the water sample.
* Number of fecal coliforms is derived from *E. coli* count. Number of fecal coliforms = (Number of *E. coli*) / 0.85
** Total hardness is not considered a pollutant, and thus has no established action level for the purposes of dry weather monitoring.

Figure 7-1
Public Complaints by Responsible Party

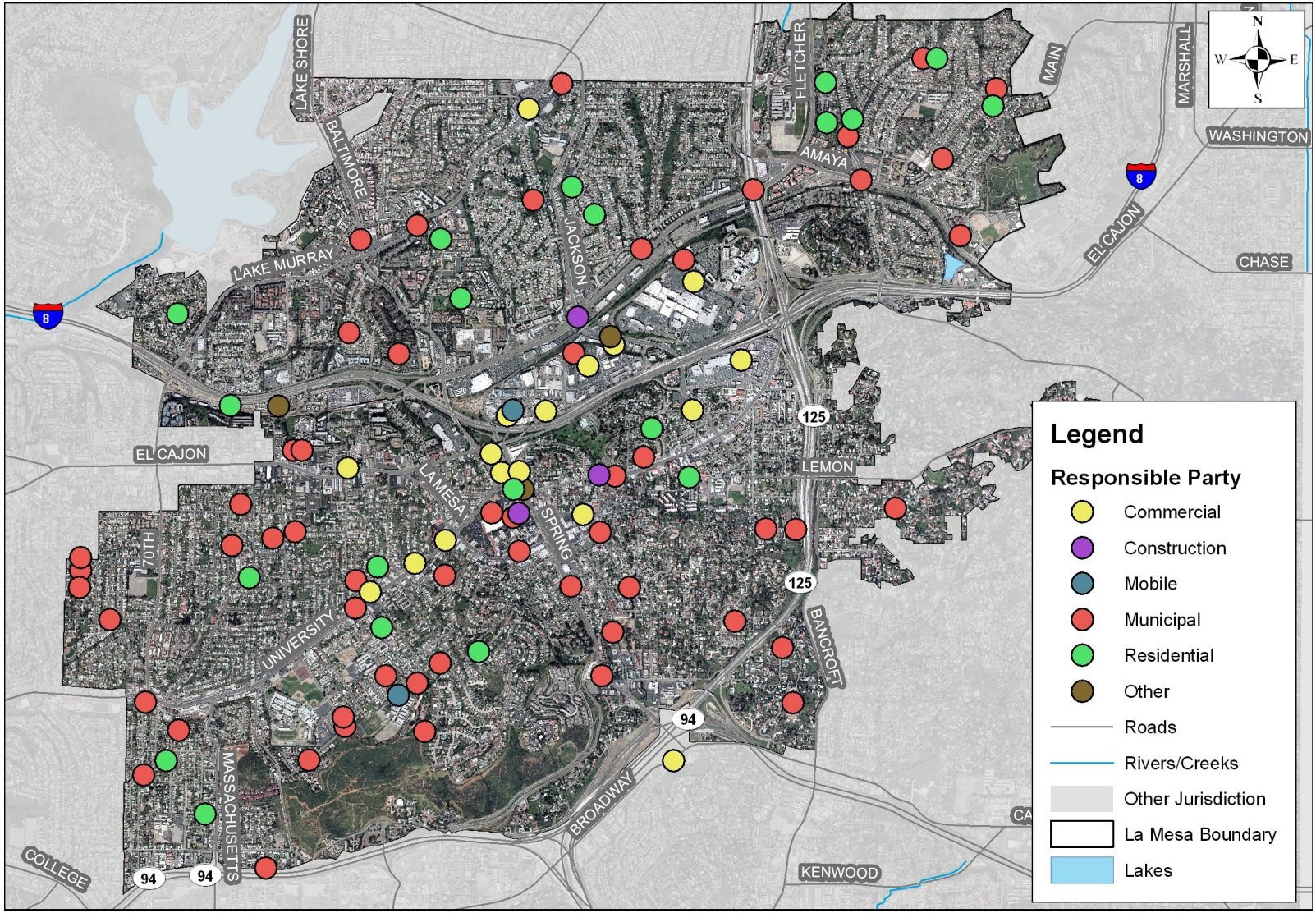

Base Data Sources: USGS, SanGIS, SANDAG

0 0.5 1 Miles

Figure 7-2
Public Complaints by Reporting Method

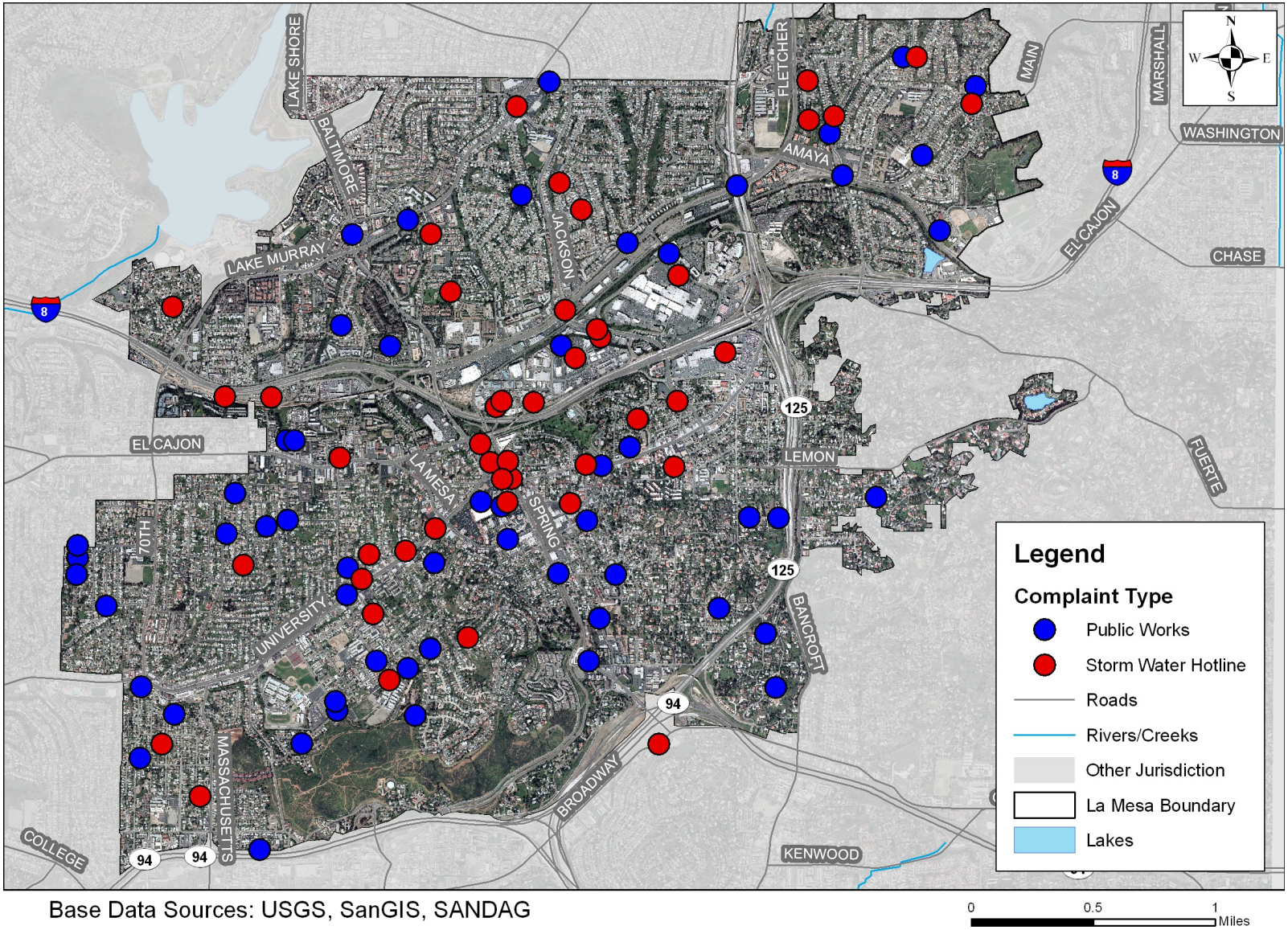

Base Data Sources: USGS, SanGIS, SANDAG

0 0.5 1 Miles

Figure 7-3
Public Complaints by Enforcement Action

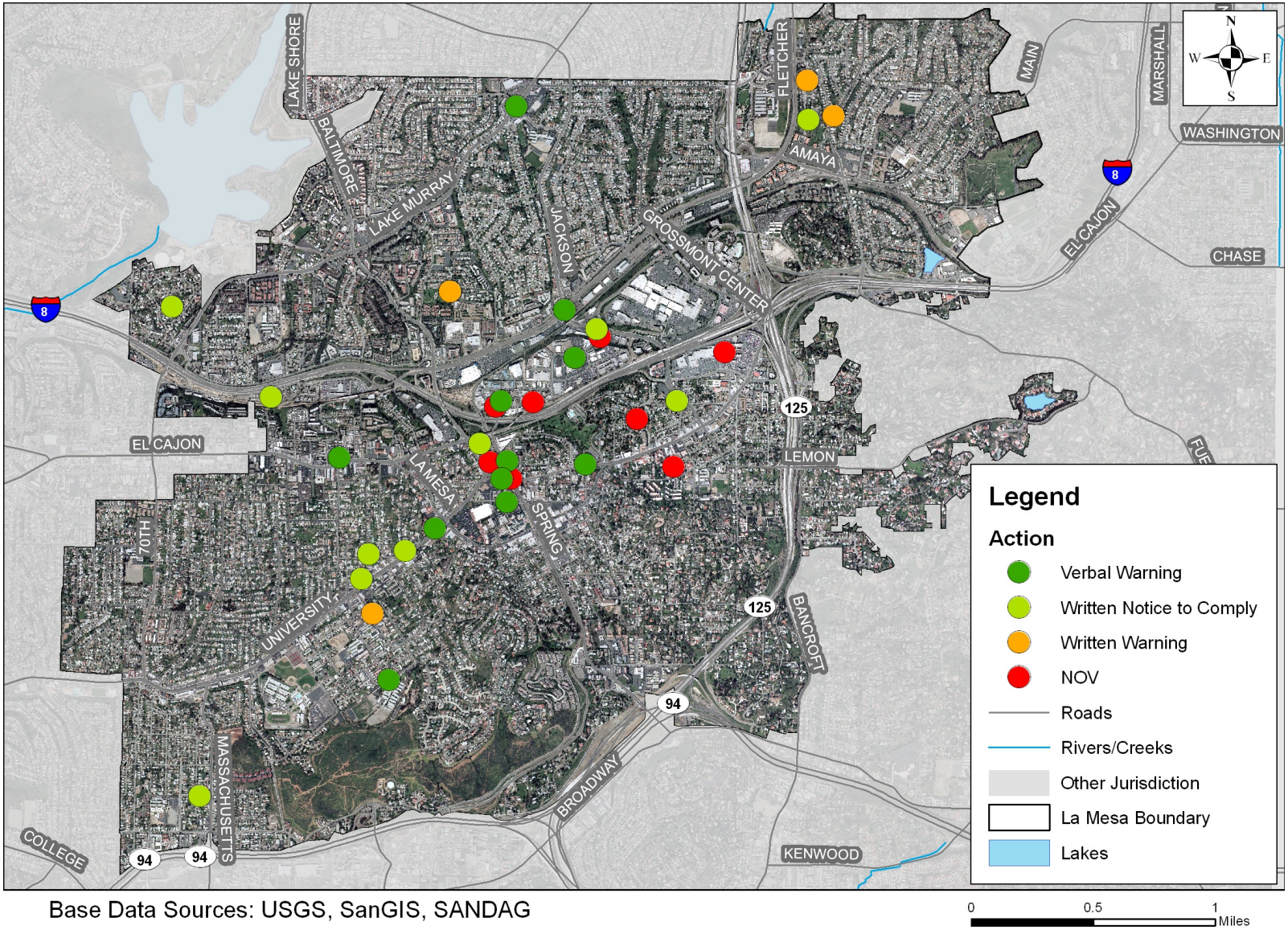

Base Data Sources: USGS, SanGIS, SANDAG

0 0.5 1 Miles

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	7.4, 7.5; Tables 7-2 through 7-6; Attachment 7.1
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	Attachment 7.1
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	7.5; Appendix B
v. The number and brief description of illicit discharges and connections identified.	7.5; Appendix B
vi. The number of illicit discharges and connections eliminated.	7.5; Appendix B
vii. Identification and description of all spills to the MS4 and response to the spills.	4.9, 7.3; Appendix B
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	4.9, 7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	4.9, 7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2, Appendix B
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5, Table 7-1, Appendix B
xiii. A description of notable activities conducted to manage illicit discharges and connections.	7.1, 7.5

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Attachment 7.1
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	7.4; Attachment 7.1
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	7.4; Attachment 7.1
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	7.4; Table 7-6; Attachment 7.1
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	(n/a)
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	7.4; Table 7-5, Attachment 7.1
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	7.4; Attachment 7.1
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	7.4; Attachment 7.1
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	7.4; Attachment 7.1

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	7.4; Attachment 7.1
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	7.5; Attachment 7.1
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5; Attachment 7.1
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	7.4, 7.5; Attachment 7.1

ATTACHMENT 7.1

CITY OF LA MESA DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM 2009

CITY OF LA MESA
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2009

Submitted to:

CITY OF LA MESA
Engineering Department
8130 Allison Avenue
La Mesa, CA 91942

Prepared by:

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D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

November 9, 2009
Project No. 200912W

Mr. Joe Kuhn
City of La Mesa
8130 Allison Avenue
P.O. Box 937
La Mesa, CA 91942

Re: 2009 Dry Weather Field Screening and Analytical Monitoring Program City of La Mesa, California

Dear Mr. Kuhn:

Enclosed please find our final report for the City of La Mesa 2009 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of La Mesa during the 2009 dry weather season. The contents include field screening results, trash assessment data, analytical laboratory test results, analyses of the collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. It has been our pleasure working with the City of La Mesa on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

D-MAX Engineering, Inc.

Arsalan Dadkhah

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

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ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
µg/L	Micrograms per Liter
303(d)	Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
BPJ	Best Professional Judgment
CFR	Code of Federal Regulations
City	City of La Mesa
CMC	Criterion Maximum Concentration
COC	Constituent of Concern
Copermittees	The 18 cities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CTR	California Toxics Rule
CV	Coefficient of Variance
D-MAX	D-MAX Engineering, Inc.
E. coli	*Escherichia coli*
EC	Electrical Conductivity
EMA	EnviroMatrix Analytical, Inc.
FS	Functional Sensitivity
gpm	Gallons per Minute
GPS	Global Positioning System
HA	Hydrologic Area
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illegal Discharge
JURMP	Jurisdictional Urban Runoff Management Program
LED	Light-Emitting Diode
MLS	Mass Loading Station
MBAS	Methylene Blue Active Substances
mg/L	Milligrams per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) per 100 Milliliters
mS/cm	Millisiemens per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
na	Not Analyzed
nd	Not Detected
ns	Not Sampled (dry site)
NTU	Nephelometric Turbidity Unit
PDL	Practical Detection Limit
ppb	Parts per Billion
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board
TDS	Total Dissolved Solids
USEPA	United States Environmental Protection Agency
WQO	Water Quality Objective
WURMP	Watershed Urban Runoff Management Program

1 INTRODUCTION

1.1 Program Overview

The purpose of the Dry Weather Field Screening and Analytical Monitoring Program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the storm water conveyance system, minimizing the negative impact of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following components:

- Field screening observations
- Field screening analytical monitoring
- Trash assessments
- Laboratory analytical monitoring

The data gathered from dry weather monitoring is used to characterize discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as needed to detect and eliminate the sources of these pollutants.

1.2 Hydrologic Setting

The City of La Mesa (City) encompasses an area of nine square miles just east of the City of San Diego. The primary land use in La Mesa is residential with over 56,000 residents. Other types of land use include roads and streets, commercial, mixed use, schools, and industrial. Approximately 52 percent of La Mesa is located within the San Diego River Watershed, while the remaining 48 percent is located in the San Diego Bay Watershed. The City of La Mesa makes up about one percent of the overall land area in both the San Diego Bay and the San Diego River watersheds. Runoff generated in La Mesa is conveyed through five drainage basins. The boundaries of these drainage basins are illustrated in Figure A. Table 1-1 lists the drainage basins along with the approximate percentage of drainage area in La Mesa, the corresponding hydrologic unit (HU) of the basin, and the receiving water body to which each basin drains.

TABLE 1-1
CITY OF LA MESA DRAINAGE BASINS

Drainage Basin	Percentage of City Area	Hydrologic Unit	Receiving Water Body	Watershed
Alvarado	51	907	San Diego River	San Diego River
University	28	908	Chollas Creek	San Diego Bay
Spring Valley	14	909	Sweetwater River	San Diego Bay
Lemon Grove	6	908	Chollas Creek	San Diego Bay
Lake Murray	1	907	San Diego River	San Diego River

The San Diego River Watershed is the second largest hydrologic unit in San Diego County. It also has the highest population (approximately 475,000) of the County's watersheds. The San Diego River carries runoff from other large portions of the cities of San Diego, El Cajon, Poway, and Santee and several unincorporated jurisdictions in addition to that of La Mesa.

The mouth of the river eventually discharges into the Pacific Ocean, south of Mission Bay. Runoff collected in the Lake Murray Basin eventually enters the Alvarado Drainage Basin, which drains to the San Diego River.

The San Diego Bay Watershed is comprised of three hydrologic units: Pueblo San Diego (HU 908), Sweetwater (HU 909), and Otay (HU 910). These three watersheds all drain into San Diego Bay, even though each hydrologic unit is essentially a separate watershed. For regulatory purposes, they have been combined into one watershed management area, referred to as the San Diego Bay Watershed. The City of La Mesa includes areas within two of those hydrologic units, the Pueblo San Diego Watershed and the Sweetwater Watershed. Runoff from the Spring Valley Basin eventually enters the Sweetwater River, which terminates in San Diego Bay. Runoff collected in the University and Lemon Grove basins drains to Chollas Creek, which also flows into San Diego Bay.

1.3 Regulatory Requirements

In accordance with San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit), each of the Copermittees, including the City of La Mesa, is required to annually perform dry weather field screening of discharges into its storm drain conveyance system. During the dry weather season, May 1 through September 30, selected locations along the storm drain conveyance system are evaluated. This procedure includes recording field observations, estimating observed flow rates, and conducting field testing. The Municipal Permit also necessitates that Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station is selected. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days.

1.4 Constituents of Concern (COC)

Based primarily on wet weather monitoring data from mass loading stations (MLS) located on Chollas Creek, bioassessments, the 2009 San Diego Bay Watershed Urban Runoff Management Program (WURMP) Annual Report, and the Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) List), several constituents have been established as targeted pollutants in hydrologic areas (HA) located within City of La Mesa's Jurisdiction. In HA 908.2, part of the Pueblo San Diego Watershed, the COCs identified are bacteria, metals, sediment, trash, and pesticides. For HA 909.1 within the Sweetwater Watershed, bacteria has been listed as a COC.

Constituent data have been collected annually in the San Diego River Watershed. The 2008 San Diego River WURMP Annual Report lists bacteria indicators, phosphorus, total dissolved solids, low dissolved oxygen and turbidity as the COCs.

1.5 Previous Work

The City of La Mesa has conducted annual dry weather monitoring programs since 1993. A summary of the screening results obtained for each year is displayed in Table 1-2. Historical dry weather monitoring data is included in Appendix A.

TABLE 1-2
SUMMARY OF HISTORICAL DRY WEATHER SITES

Year	Number of Field Screening Sites [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1993	15	10	4	1	0
1994 [3]	11	11	0	4	0
1995 [4]	11	11	0	2	0
1996	12	12	0	3	0
1997	9	8	1	3	0
1998	11	8	3	3	0
1999-R1	10	10	0	4	0
1999-R2	11	11	0	3	0
2000-R1	11	11	0	4	0
2000-R2	11	11	0	4	0
2001 R1	11	11	0	4	0
2001 R2	12	12	0	4	0
2002	18	18	0	1	5
2003	18	16	2	1	5
2004	18	17	1	0	5
2005	18	16	2	0	5
2006	18	17	1	0	5
2007	18	18	0	1	5
2008	20	19	0	1	6

Notes:
The City of La Mesa conducted two separate rounds of dry weather monitoring in years 1999-2001.
R1 Round one
R2 Round two

[1] Number of Field Screening Sites Number Flowing Number Ponded. Field screening cannot be conducted at sites found to be dry. Dry sites are replaced by either a flowing or ponded site.

[2] Laboratory testing commenced in 2002 as required by San Diego Regional Water Quality Control Board Order 2001-001.

[3] The 1994 *City of La Mesa Dry Weather Non-Point Source Outfall Screening Program* by Cooper Engineering Associates states that 13 sites showed evidence of flow. However, in Table 3. Summary of Dry Weather Screening Chemical Analysis of the report, flow rates and chemical test results are provided for 11 sites only. For the purposes of this table, number of sites tested is listed as 11 and the remaining sites have been added to the number of dry sites.

[4] Per the *City of La Mesa Dry Weather Non-Point Source Outfall Screening Program* by Cooper Engineering Associates for 1995, 12 sites had flowing water and one site was ponded. Chemical analysis data is provided for 11 sites only. Thus, number of sites tested is listed as 11 and the remaining two sites are listed as dry.

The San Diego RWQCB did not require laboratory analyses to be performed as part of the dry weather program until 2002. The same laboratory and field tests have been used since 2002 until present. Graphical representations of the data for both the San Diego River and San Diego Bay watersheds are included as Attachments 1 and 2, respectively. The graphs display the results of both field and laboratory analyses for the 2002 through 2009 dry weather monitoring programs. Where applicable, averages for each constituent have been calculated, and error bars displaying average plus and minus one standard deviation have also been included on the graphs. Trend lines have been prepared for constituents where

multiple values above the method reporting limit were recorded. The equations and R^2 values for the lines have been indicated on the graphs. Note that an R^2 value of 0.0 indicates a very poor fit and 1.0 indicates a perfect fit. Since the trend lines have been based on only eight years of data, conclusions regarding pollution trends cannot be drawn with a large degree of certainty.

1.6 Report Outline

Section 1, Introduction, includes an overview of the program, a discussion of the City of La Mesa's hydrologic setting, regulatory background, a description of constituents of concern, a summary of historical field screening data, and the report outline.

Section 2, Sampling Locations, describes the field screening sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and results of the field screening analyses.

Section 5, Trash Assessment, discusses the procedure and results of the trash assessment.

Section 6, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 7, Data Analysis, provides an analysis of field and laboratory data collected in 2009, as well as a comparison of past results.

Section 8, Follow-up Investigations, details the results of follow-up investigations undertaken to isolate the sources of water contamination detected during the field screening program.

Section 9, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Historical Dry Weather Monitoring Table

Appendix B Photographs of the Sampling Locations

Appendix C Laboratory Analytical Reports

Appendix D Field Data and Trash Assessment Sheets

Attachment 1 Historical Data Graphs: San Diego River Watershed

Attachment 2 Historical Data Graphs: San Diego Bay Watershed

2 SAMPLING LOCATIONS

The City of La Mesa's 2008 JURMP identifies 20 primary dry weather monitoring stations. During the 2009 Dry Weather Monitoring Program, all 20 primary sampling locations were visited, 19 of which had flowing or ponded water. Since Site 907-ALV-003 was dry, alternate Site 907-ALV-580 was selected as a replacement.

Table 2-1 lists site information including site name, location, conveyance configuration, primary and secondary land uses, hydrologic subareas, and Global Positioning System (GPS) coordinates. Photographs of all sites visited in 2009 are included in Appendix B. Figure A shows site locations on a map of the City in relation to storm drain lines, roads, and drainage basin boundaries. A map of the watersheds in and around the City of La Mesa is included as Figure B.

TABLE 2-1
2009 DRY WEATHER MONITORING STATIONS

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
907-ALV-001	Alvarado Road, east of the trolley station	Concrete Channel	Commercial	Residential	907.11	32.77209	-117.04136
907-ALV-002	Along the southern edge of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection	Manhole	Industrial	Commercial	907.11	32.77414	-117.02287
907-ALV-003	Parkway Drive located in the southeast corner of Coleman College property	Manhole	Residential	Commercial (School)	907.11	32.77362	-117.03794
907-ALV-004	7780 Parkway Drive, inside Parkway Manor Condominiums parking lot, by visitor parking at the top of the driveway	Manhole	Residential	None	907.11	32.77546	-117.02918
907-ALV-005	Alvarado Channel, underneath the intersection of Fletcher Parkway and Baltimore Drive, north side of channel	Outlet	Residential	Commercial	907.11	32.77380	-117.02737
907-ALV-006	Fletcher Parkway and Marengo Avenue intersection, in planter	Manhole	Residential	None	907.11	32.77550	-117.02309
907-ALV-007	Jackson Drive and Parkway Drive, behind Amex Auto Repair	Manhole	Residential	Commercial	907.11	32.77832	-117.01821
907-ALV-008	South of Fletcher Parkway, under SR-125 overpass, west of the outfalls from the north	Concrete Channel	Residential	Commercial	907.11	32.78400	-117.00570
907-ALV-120	Jackson Drive, 100 feet west of Murray Drive, north side of street	Manhole	Commercial	None	907.11	32.77630	-117.01423
907-ALV-12A	Jackson Drive, 100 feet west of Murray Drive, south side of street, in front of 5304 Jackson Drive	Manhole	Commercial	Residential	907.11	32.77605	-117.01434

TABLE 2-1 (CONTINUED)
2009 DRY WEATHER MONITORING STATIONS

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
907-ALV-580	Northeast corner of Amaya Drive and Amaya Court intersection	Manhole	Residential	None	907.11	32.78640	-117.00116
907-ALV-590	Southeast corner of Parkway Drive and Amarillo Avenue intersection	Natural Creek	Residential	None	907.11	32.78180	-117.01328
907-ALV-640	North side of Seton Hall Street, between Swarthmore Street and Wheaton Street	Concrete Channel	Residential	None	907.11	32.77651	-117.03462
908-LEM-520	Near Waite Drive and Harris Street intersection, south end of Harris Street	Outlet	Residential	None	908.22	32.74514	-117.03931
908-UNI-001	69th Street and Boulevard Drive intersection	Natural Creek	Commercial	Residential	908.22	32.75463	-117.04908
908-UNI-002	Harbison Avenue and University Avenue intersection, west sidewalk, east of CB Hair & Nails	Manhole	Residential	Commercial	908.22	32.75498	-117.04639
908-UNI-003	Along Lowell Street, about halfway between University Avenue and Normal Avenue, north side of street, 4291 Lowell Street driveway	Manhole	Residential	Commercial	908.22	32.75536	-117.03528
908-UNI-004	In front of 7851 University Avenue along the south side of the street	Manhole	Commercial	None	908.22	32.76308	-117.02855
908-UNI-005	Rolando Park, in gated area by left field of baseball field	Manhole	Residential	Parks	908.22	32.75787	-117.05260
909-SPR-001	Spring Street and Spring Gardens Road intersection, inside La Mesa Seventh Day Adventist Church	Concrete Channel	Residential	Parks	909.12	32.75483	-117.01311
909-SPR-002	In front of 4621 Bancroft Drive, just south of Golondrina Drive	Manhole	Residential	None	909.12	32.76324	-117.00118

Note: Alternate Site 907-ALV-580 was substituted for dry primary monitoring Site 907-ALV-003

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of qualitative field observations, flow measurements, and quantitative field analyses of selected water quality parameters. Weather conditions, time since last rainfall, and the type of storm water conveyance are recorded as well. Specific observations and results of the field water quality analyses are documented on field datasheets, which also serve as a record of the field visit. Datasheets are completed for every site visit regardless of whether or not samples were collected. Check boxes on the datasheets indicate if the visit is for routine field screening, confirmation of an exceedance, or an IC/ID follow-up visit. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation. Datasheets from the 2009 Dry Weather Monitoring Program are included as Appendix D.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Qualitative field observations are made during each site visit. These observations include a general site assessment and record water odor, clarity, the presence of floatables, visible deposits or stains, vegetation, and biological organisms. Evidence of present or past illicit connections and illegal discharges to the storm drain system can also be discovered through careful field observations. Each field screening location is photographed to document site conditions. Photographs are included in Appendix B.

Flow Measurement

Flow measurements can help estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative of an illegal discharge. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth, and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Surfactants, measured as methylene blue active substances (MBAS)
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)
- Orthophosphate-Phosphorus (Orthophosphate-P)

Surfactants are also referred to as detergents.

The methods used to perform the above field analyses, along with the reporting limit, range, and accuracy of each method, are listed in Table 3-1.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.01 mS/cm	0 □20 mS/cm	± 2□ of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.1□C	0.0□C □60.0□C	± 0.5□C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.01	0.00 □14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703 Portable Turbidity Meter□□□	0.01 NTU	0.01 □50.00 NTU and 50 □1000 NTU	± 0.5 NTU or 5□ of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.0 mg/L □3.0 mg/L□	± 0.13 & ± 0.5 mg/L [2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer □Nitrate 3 Vacu-vials□ (K-6933) Cadmium reduction[3]□□□	1.13 mg/L□□	1.13 mg/L □ 113 mg/L□□	± 30□ of practical detection limit[4]
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer □Ammonia 3 Vacu-vials□ (K-1403) Salicylate□□□	0.10 mg/L□□	0.10 mg/L □3.00 mg/L□□	Varies with measured concentration[4,5]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer □Phosphate 2 Vacu-vials□ (K-8513) Stannous chloride chemistry[6]□□□	0.098 mg/L□□	0.098 mg/L □2.608 mg/L□□	Varies with measured concentration[4,5]

Notes:

TDS □total dissolved solids
EC □electrical conductivity
mS/cm □millisiemens per centimeter
□C □degrees Celsius
NTU □nephelometric turbidity unit
mg/L □milligrams per liter
LED □light-emitting diode

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20□. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The practical detection limit for nitrate is 5.0 mg/L; however, the practical detection limit for nitrate-nitrogen is lower due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30□ at PDL, ±20□ for 25□ of full range, ±10□ for 75□ of full range, ±10□ for 120□ of full range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4□ of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The practical detection limit for orthophosphate is 0.3 mg/L; however, the practical detection limit for orthophosphate-phosphorus is lower due to the conversion.

□Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

□□Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

□□□Test method information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

3.2 Laboratory Analytical Methods

In accordance with Order R9-2007-0001, laboratory samples were collected at six sites, representing over 25 percent of the sites where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc, a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Total hardness
- Oil and grease
- Diazinon
- Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project includes the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described in Section 3.3.1 and Section 3.3.2.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters, turbidity meter and conductivity meter are tested daily before field screening begins. The pH meters are calibrated as needed with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter and conductivity meter are calibrated as needed using standard solutions.

Field sample collection containers are rinsed first with distilled water and then with the sample water prior to sample collection. Upon completion of sampling and testing at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water and dried.

The accuracy of field analytical techniques and equipment is assessed at the beginning of each sampling week by analyzing solutions of known concentrations for ammonia-nitrogen, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Maximum Holding Time [1]
Oil and Grease	USEPA 1664	5 mg/L	28 days
Total Hardness	USEPA 200.7	10 mg/L	14 days
Dissolved Cadmium	USEPA 200.8	0.001 mg/L	24 hours
Dissolved Copper	USEPA 200.8	0.001 mg/L	24 hours
Dissolved Lead	USEPA 200.8	0.001 mg/L	24 hours
Dissolved Zinc	USEPA 200.8	0.020 mg/L	24 hours
Diazinon	USEPA 8141A	0.05 g/L	7 days
Chlorpyrifos	USEPA 8141A	0.05 g/L	7 days
Total Coliforms [2]	SM 9221	20 1,600,000 MPN/100 mL	6 hours
Fecal Coliforms [2]	SM 9221	20 160,000 MPN/100 mL	6 hours
Enterococci [2]	SM 9230	20 160,000 MPN/100 mL	6 hours
Total Coliforms	SM 9223 (IDEXX Colilert) [3]	10 2,419,600 MPN/100 mL	6 hours
Escherichia coli (*E. coli*) [4]	SM 9223 (IDEXX Colilert) [3]	10 2,419,600 MPN/100 mL	6 hours
Enterococci	IDEXX Enterolert [3]	10 241,960 MPN/100 mL	6 hours

Notes:

g/L micrograms per liter

MPN/100 mL most probable number (of colony-forming units) per 100 milliliters

[1] Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.

[2] For D-MAX's Dry Weather Monitoring Program, EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 MPN/100mL. For fecal coliforms and Enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.

[3] IDEXX Colilert and Enterolert tests are performed by EnviroMatrix Analytical. This test is used during upstream investigations only.

[4] Number of fecal coliforms is derived from number of *Escherichia coli* (*E. coli*) through the following formula: Fecal Coliforms *E. coli* / 0.85. The converted fecal coliform count, not the number of *E. coli*, is reported in this report's data tables.

TABLE 3-3
FIELD ANALYSIS QA□QC RESULTS

Date	Analyte	Known Concentration (mg□L)	Acceptable Range* (mg□L)	Field Test Kit Results (mg□L)
06/02/09	Ammonia-Nitrogen	0.82	0.66 □0.98	0.694
06/02/09	Surfactants	1.0	0.75 □1.25	1.0
06/02/09	Nitrate □	44.3	31.0 □57.6	46.43
06/02/09	Orthophosphate □	3.07	2.45 □3.68	2.693
06/08/09	Ammonia-Nitrogen	0.82	0.66 □0.98	0.863
06/08/09	Surfactants	1.0	0.75 □1.25	1.0
06/08/09	Nitrate □	44.3	31.0 □57.6	46.42
06/08/09	Orthophosphate □	3.07	2.45 □3.68	3.014
06/15/09	Ammonia-Nitrogen	0.82	0.66 □0.98	0.884
06/15/09	Surfactants	1.0	0.75 □1.25	1.0
06/15/09	Nitrate □	44.3	31.0 □57.6	48.28
06/15/09	Orthophosphate □	3.07	2.45 □3.68	3.050

Notes:
□Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1.
□□Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by dividing the results by 4.43 for nitrate and 3.06 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA□QC

Samples for laboratory analysis are collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed, and samples are delivered and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain of custody forms are included in Appendix C.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation is necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a re-sampling is conducted within one day. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by

the laboratory analyses, a comprehensive follow-up pollutant source investigation is conducted within two days of receiving the analytical reports from the lab. The results of these investigations are included in Section 8 of this report. Recommendations based on these investigations are included in Section 9.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (see Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels, which are based on county-wide sampling data and have been used by all Copermittees since the 2003 dry weather season. If pH, orthophosphate-P, nitrate-N, ammonia-N, or surfactants are observed above the numeric action level, a follow-up investigation is conducted within 24 hours to investigate the source unless best professional judgment indicated otherwise. If oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, or *Enterococcus* laboratory analytical results exceeded numeric action levels, then source investigations are conducted within two business days of receiving the test results from the lab.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew due to their familiarity with the City of La Mesa Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters. Best professional judgment may indicate that results which either exceed certain action levels or statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source□Notes
pH	□6.5 or 9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Temperature (□C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values □0.75 may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source□Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (□g/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 □g/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (□g/L)	0.5	
Dissolved Cadmium (□g/L)	California Toxics Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd □14 ppb; Cu □38 ppb; Pb □209 ppb; and Zn □297 ppb.
Dissolved Copper (□g/L)	California Toxics Rule	
Dissolved Lead (□g/L)	California Toxics Rule	
Dissolved Zinc (□g/L)	California Toxics Rule	
Total Coliforms (MPN/100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	20,000	
Enterococci (MPN/100 mL)	10,000	

Notes

[1] The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

[2] Basin Plan □ Water Quality Control Plan for the San Diego Basin

WQO □Water Quality Objective

ppb □parts per billion

4 FIELD SCREENING RESULTS

The 2009 Dry Weather Monitoring Program was conducted in June 2009. A total of 21 monitoring stations were visited including one site that was dry. Field screening was conducted at the 20 sites where ponded or flowing water was observed. Completed field data sheets for each site visit are included in Appendix D.

4.1 Qualitative Observations

Qualitative observations, which are a routine part of the Dry Weather Monitoring Program, are summarized below and presented in Table 4-1:

Light Conditions
Light conditions were primarily partly cloudy during field screenings, with occasionally overcast or sunny weather.

Odor
Water samples from the majority of sites were odorless, with one site having a chemical odor and one smelling musty.

Color
Water samples taken from most of the sites were colorless, with the exception of six sites having water that appeared yellow.

Clarity
Two sites had slightly cloudy water. The remaining sites had clear water samples.

Floatable Materials
During routine field screening visits, six sites had trash floating on the water's surface, and the water at one site had a visible sheen. Section 5 of this report includes a complete Trash Assessment.

Deposits
Sediment, gravel, or fine particulates were observed at most sites. No other types of deposits were noted.

Vegetation
All sites had either normal or no vegetation present, appropriate to sunlight and soil conditions at that location. Manholes and concrete conveyances did not support vegetative growth. Vegetation did not impair the flow of water at any locations.

Biology
The presence of organisms in and around sampling sites typically implies healthy water conditions. Algae and insects were the organisms most commonly seen, with occasional snails and spiders noted. Spiders were typically found within manholes. Snails were typically present in areas having algae and yellow-colored water. Insects were also most commonly found where algae was growing.

TABLE 4-1
FIELD OBSERVATIONS

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
907-ALV-001	6/12/09	10:15	Overcast	None	None	Clear	None	Fine Particulates	Normal	Insect/Algae
907-ALV-002	6/2/09	11:30	Partly Cloudy	None	None	Clear	None	None	None	None
907-ALV-002	6/5/09	11:50	Partly Cloudy	None	None	Clear	None	None	None	None
907-ALV-002 *(Confirmation)*	6/18/09	13:30	Sunny	None	None	Clear	None	Sediment, Fine Particulates	None	None
907-ALV-003	6/15/09	10:40	Partly Cloudy	ns	ns	ns	ns	Sediment/Gravel	None	None
907-ALV-004	6/15/09	11:25	Partly Cloudy	None	None	Clear	None	None	None	None
907-ALV-005	6/15/09	15:00	Partly Cloudy	None	None	Clear	None	Fine Particulates	None	None
907-ALV-006	6/16/09	15:10	Partly Cloudy	None	None	Clear	Sheen	Sediment/Gravel	None	None
907-ALV-006 *(Confirmation)*	6/17/09	9:40	Overcast	None	None	Clear	None	Sediment	None	None
907-ALV-007	6/12/09	15:40	Overcast	None	None	Clear	None	Fine Particulates	None	None
907-ALV-008	6/16/09	14:20	Partly Cloudy	None	None	Clear	None	Sediment/Gravel	None	Algae
907-ALV-120	6/16/09	11:30	Partly Cloudy	None	None	Slightly Cloudy	None	Sediment/Gravel, Fine Particulates	None	Insects
907-ALV-12A	6/16/09	10:50	Partly Cloudy	None	None	Clear	None	None	None	Insects
907-ALV-580	6/12/09	14:40	Overcast	None	None	Slightly Cloudy	None	None	None	None
907-ALV-590	6/2/09	12:40	Partly Cloudy	None	None	Clear	None	Sediment/Gravel	Normal	Insect/Algae
907-ALV-590	6/5/09	12:55	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel	Normal	Algae
907-ALV-640	6/15/09	9:50	Partly Cloudy	None	Yellow	Clear	None	Fine Particulates	None	Snails, Insect/Algae

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
907-ALV-640 *(Confirmation)*	6/16/09	9:25	Overcast	None	Yellow	Clear	None	Fine Particulates	None	Snails, Insect/Algae
908-LEM-520	6/16/09	10:10	Overcast	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Snails, Insect/Algae
908-LEM-520 *(Confirmation)*	6/16/09	16:00	Partly Cloudy	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Snails, Insect/Algae
908-UNI-001	6/2/09	15:25	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel	Normal	Insect/Algae
908-UNI-001	6/5/09	10:15	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel	Normal	Insect/Algae
908-UNI-002	6/2/09	14:30	Partly Cloudy	Chemical	None	Clear	None	Fine Particulates	None	None
908-UNI-002	6/5/09	10:35	Partly Cloudy	Musty	None	Clear	Trash	Fine Particulates	None	None
908-UNI-002 *(Confirmation)*	6/3/09	9:20	Partly Cloudy	None	Yellow	Clear	None	Fine Particulates	None	None
908-UNI-003	6/12/09	11:25	Overcast	None	None	Clear	None	Sediment/Gravel	None	None
908-UNI-004	6/12/09	12:20	Overcast	None	None	Clear	None	None	None	None
908-UNI-005	6/16/09	12:20	Partly Cloudy	None	Yellow	Clear	None	None	None	Spiders
908-UNI-005 *(Confirmation)*	6/17/09	10:20	Partly Cloudy	None	None	Clear	None	None	None	Spiders
909-SPR-001	6/15/09	13:15	Partly Cloudy	None	None	Clear	None	Sediment, Fine Particulates	Normal	Insects
909-SPR-002	6/15/09	14:00	Partly Cloudy	None	None	Clear	None	Fine Particulates	None	None

Notes:

ns not sampled (dry site)

denotes a confirmation visit

Two routine visits were made to this site to test for different constituents. Field observations for both visits are presented in this table.

4.2 Field Analytical Results

Field analyses are conducted at all sites with flowing or ponded water. The measured constituents are described below.

Flow rate quantifies the volume of fluid passing across a given surface per unit time. Flow rate measurements are needed to calculate the load or particular amount of a pollutant discharged.

Water temperature is needed to assess the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. In the field, water temperature is measured immediately upon sample collection at each site with ponded or flowing water.

The **pH** is an expression of acidity or alkalinity of a water sample. The pH of an aquatic system can affect a variety of chemical reactions, including the availability of nutrients and the solubility of chemical substances, particularly heavy metals.

Turbidity describes the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation, thus reducing photosynthetic capacity, but excessive suspended particles can also absorb heat and increase water temperatures.

Specific Conductance (Conductivity) measurements indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water and potentially help indicate the presence of dissolved pollutants.

Surfactant concentrations in water samples often reflect illegal discharges from industrial, commercial or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms.

Ammonia-Nitrogen (ammonia-N) is an indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-Nitrogen (nitrate-N) is a common sign of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, resulting in oxygen depletion as algae decomposes and may eventually suffocate other aquatic life. During the field analysis, nitrate is measured in milligrams per liter (mg/L) NO_3 and converted into mg/L nitrate-N using a conversion factor of 0.226. This process is explained in Note 3 of Table 3-1.

Orthophosphate-Phosphorus (orthophosphate-P) is also an indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate-N, orthophosphate-P pollution can cause nutrient enrichment (eutrophication), stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient in plant growth. During the field analysis, orthophosphate is measured in mg/L PO_4 and converted into mg/L orthophosphate-P using a conversion factor of 0.326. This process is explained in Note 6 of Table 3-1.

A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 shows the results of all field analyses conducted at the sampled sites. Graphs of the various parameters and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceed-ances	Graph Number
Flow Rate (gpm)	78	□1	10.2	2	22.8	---	4-1
Temperature (ºC)	24.8	19.1	22.4	22.2	1.3	0	4-2
pH	10.1	7.0	7.8	7.7	0.7	1	4-3
Turbidity (NTU)	20.42	0.01	5.95	3.71	6.46	0	4-4
Conductivity (mS/cm)	5.63	1.15	2.69	2.51	1.00	0	4-5
Surfactants (mg/L MBAS)	2.00	0.13	0.65	0.50	0.55	3	4-6
Ammonia-N (mg/L)	0.476	0.064	0.217	0.203	0.106	0	4-7
Nitrate-N (mg/L NO_3-N)	17.25	0.08	3.11	2.23	3.84	1	4-8
Orthophosphate-P (mg/L PO_4-P)	1.030	0.030	0.212	0.172	0.217	0	4-9

Notes:
gpm □gallons per minute
Calculations include complete routine visit data only. Confirmation visits, follow-up visits, and dry sites not incorporated.

TABLE 4-3
FIELD ANALYTICAL RESULTS

Site No	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants MBAS (mg/L)	Ammonia NH_3-N (mg/L)	Nitrate NO_3-N (mg/L)	Orthophosphate-P PO_4-P (mg/L)
907-ALV-001	6/12/09	10:15	75	19.1	7.6	3.37	3.24	0.50	0.110	0.86	0.220
907-ALV-002	6/2/09	11:30	5	21.5	7.2	16.36	2.03	0.25	0.399	0.95	0.226
907-ALV-002 *(Confirmation)*	6/18/09	13:30	3	23.3	7.0	na	2.29	na	na	na	na
907-ALV-003	6/15/09	10:40	dry	ns	ns	ns	ns	ns	ns	ns	ns
907-ALV-004	6/15/09	11:25	<1	21.7	8.1	11.51	1.15	0.25	0.134	0.31	0.193
907-ALV-005	6/15/09	15:00	5	23.6	7.4	1.23	3.35	0.25	0.161	3.50	0.070
907-ALV-006	6/16/09	15:10	1	24.0	7.1	7.92	2.34	**2.00**	0.212	0.58	0.322
907-ALV-006 *(Confirmation)*	6/17/09	9:40	<1	21.6	6.9	na	2.99	0.63	na	na	na
907-ALV-007	6/12/09	15:40	2	21.3	7.8	1.52	3.63	0.5	0.163	2.41	0.161
907-ALV-008	6/16/09	14:20	1	22.0	8.0	4.82	2.42	0.50	0.088	0.86	0.074
907-ALV-120	6/16/09	11:30	2	22.2	7.0	20.39	2.00	0.75	0.336	3.49	0.338
907-ALV-12A	6/16/09	10:50	5	22.0	7.5	8.47	2.55	0.63	0.309	4.36	0.112
907-ALV-580	6/12/09	14:40	2	21.5	7.6	20.42	2.00	0.25	0.281	0.57	0.067
907-ALV-590	6/2/09	12:40	2	24.2	8.0	0.01	2.43	0.38	0.213	0.92	0.036
907-ALV-640	6/15/09	9:50	<1	24.8	**10.1**	4.76	1.27	0.75	0.064	0.08	0.108
907-ALV-640 *(Confirmation)*	6/16/09	9:25	1	20.4	8.1	na	1.25	na	na	na	na
908-LEM-520	6/16/09	10:10	1	22.3	7.5	6.41	4.26	**1.50**	0.214	1.49	0.365

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site No	Date	Time	Flow (gpm)	Temp. (□C)	pH	Turbidity (NTU)	Conductivity (mS□cm)	Surfactants MBAS (mg□L)	Ammonia NH_3-N (mg□L)	Nitrate NO_3-N (mg□L)	Orthophosphate-P PO_4-P (mg□L)
908-LEM-520 *(Confirmation)*	6/16/09	16:00	1	26.7	7.8	na	4.60	0.75	na	na	na
908-UNI-001	6/2/09	15:25	78	22.8	8.1	0.01	2.90	0.50	0.292	2.89	0.103□
908-UNI-002	6/2/09	14:30	2	24.3	7.8	1.45	5.63	**2.00**	0.159	7.15	0.291
908-UNI-002 *(Confirmation)*	6/3/09	9:20	2	22.0	7.7	na	4.34	0.63	na	na	na
908-UNI-003	6/12/09	11:25	5	21.8	8.1	0.52	2.55	0.25	0.118	4.49	0.030□
908-UNI-004	6/12/09	12:20	3	22.6	7.5	4.04	2.71	0.50	0.194	2.08□	0.183□
908-UNI-005	6/16/09	12:20	□1	21.6	8.5	1.68	2.67	0.75	0.476	**17.25**	1.03
908-UNI-005 *(Confirmation)*	6/17/09	10:20	□1	21.4	8.4	na	2.20	na	na	1.81□	na
909-SPR-001	6/15/09	13:15	12	22.2	7.5	1.00	2.47	0.38	0.189	2.39	0.185□
909-SPR-002	6/15/09	14:00	2	22.8	8.2	3.13	2.17	0.13	0.220	5.64	0.127□
Reporting Limits				**0.1**	**0.01**	**0.01**	**0.01**	**0.13**	**0.1**	**2.26**	**0.25**
Action Level				**BPJ**	**□6.5 9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.0**	**2.0**

Notes:
na □ not analyzed
ns □ not sampled (dry site)
BPJ □ Best Professional Judgment (see Section 3.4)
□value reported is below the Practical Detection Limit; measurements have an increased percent error
Red Bold Type □ value exceeds action level
[yellow box] denotes a confirmation visit
[blue box] denotes a location sampled for laboratory analysis

GRAPH 4-1: Flow

Action Level is Best Professional Judgment

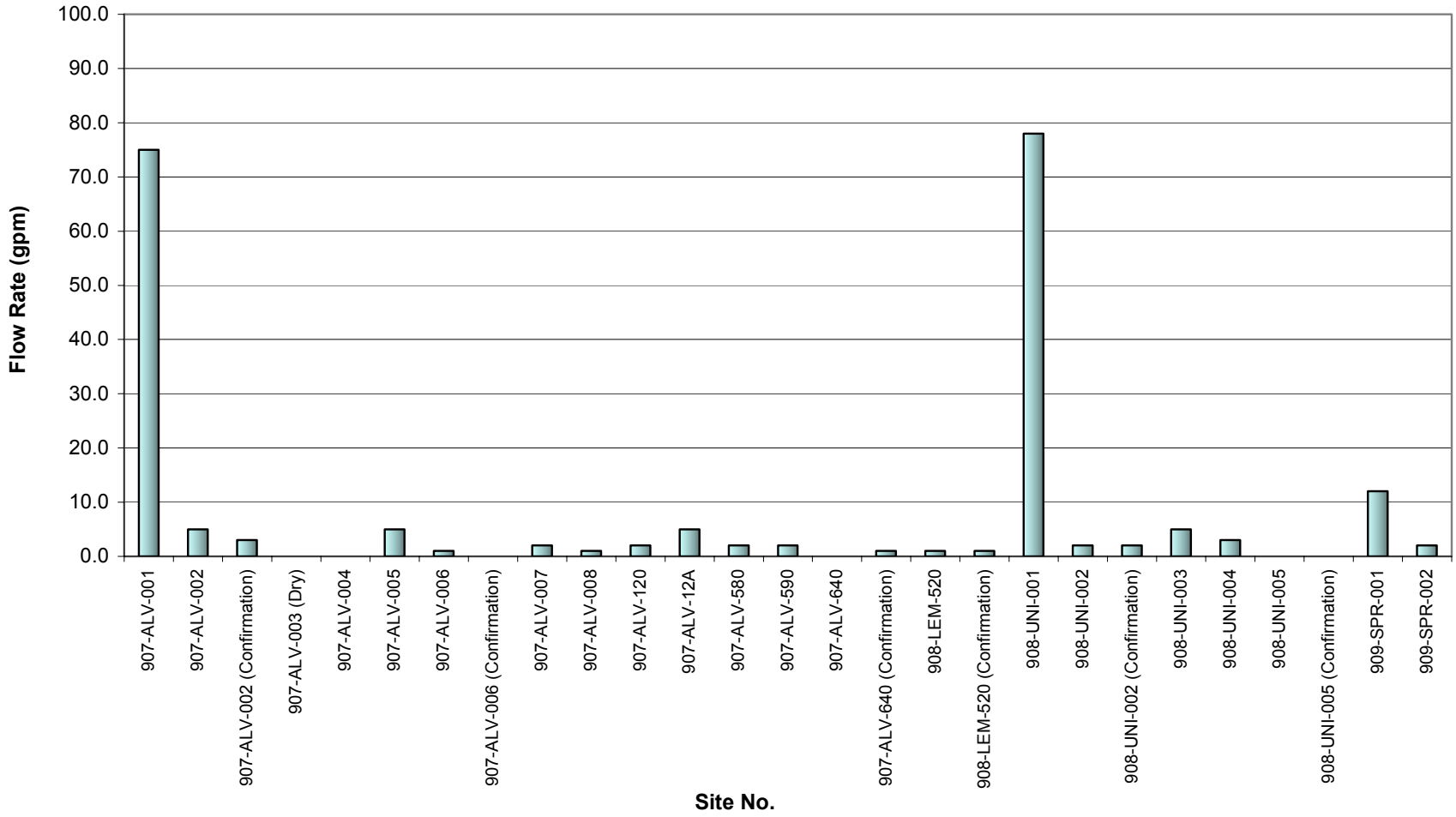

Note: Site 907-ALV-003 was dry.

GRAPH 4-2: Temperature

Action Level is Best Professional Judgment

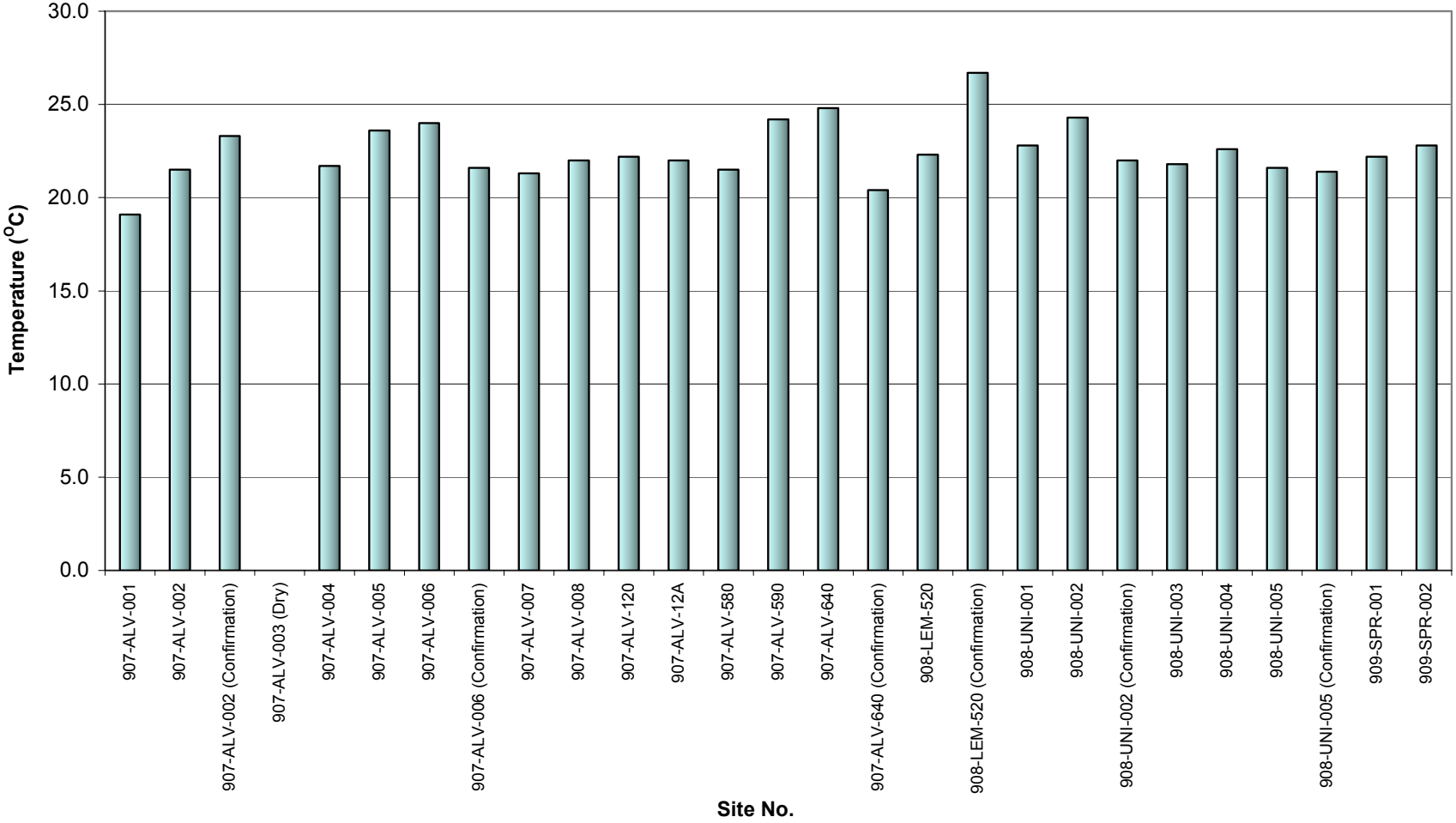

Note: Site 907-ALV-003 was dry.

GRAPH 4-3: pH

Action Level is 9.0 or □6.5

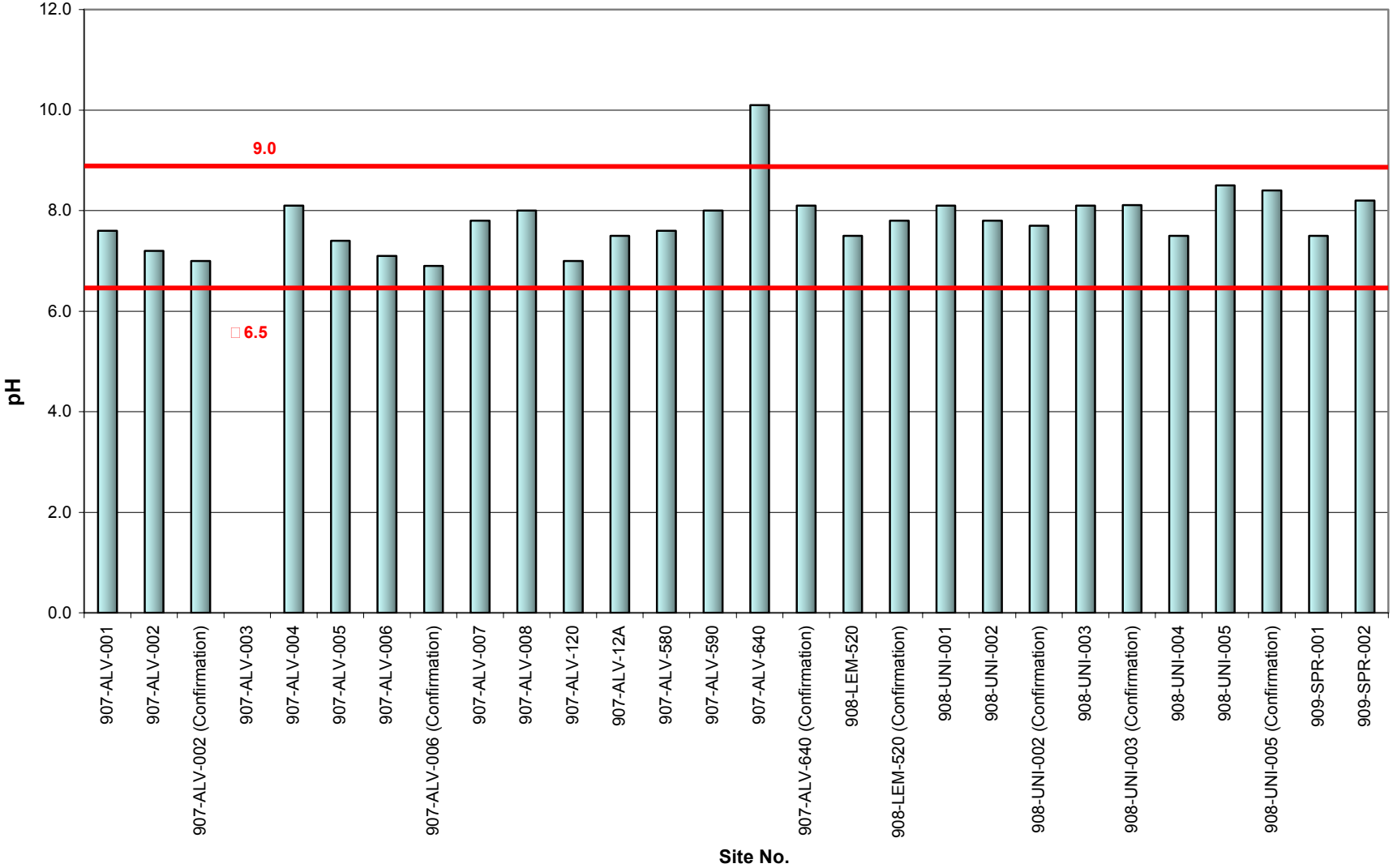

Note: Site 907-ALV-003 was dry.

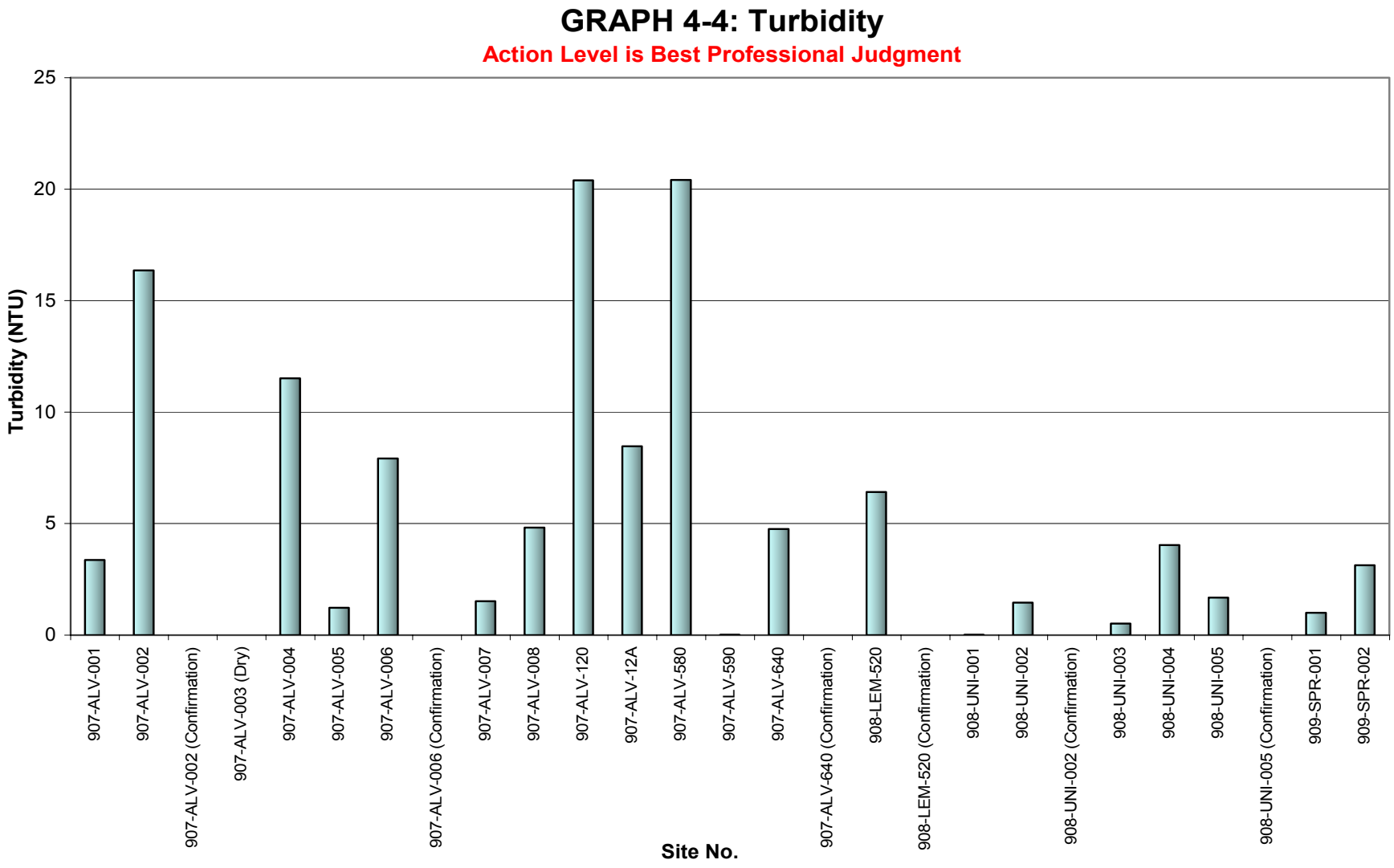

Note: Site 907-ALV-003 was dry.

GRAPH 4-5: Conductivity

Action Level is Best Professional Judgment

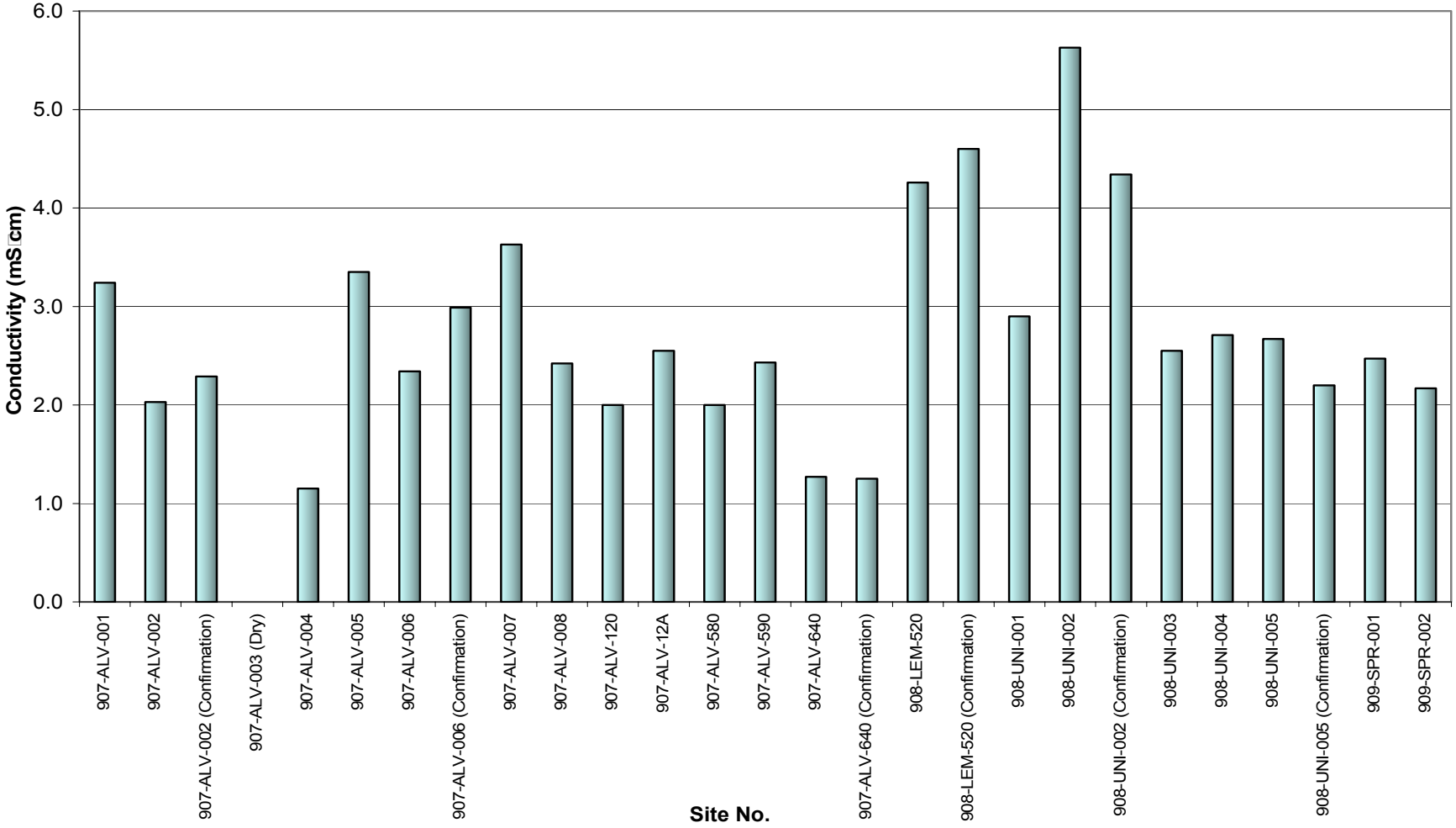

Note: Site 907-ALV-003 was dry.

GRAPH 4-6: Surfactants (Methylene Blue Active Substances)

Action Level 1.0 mg/L

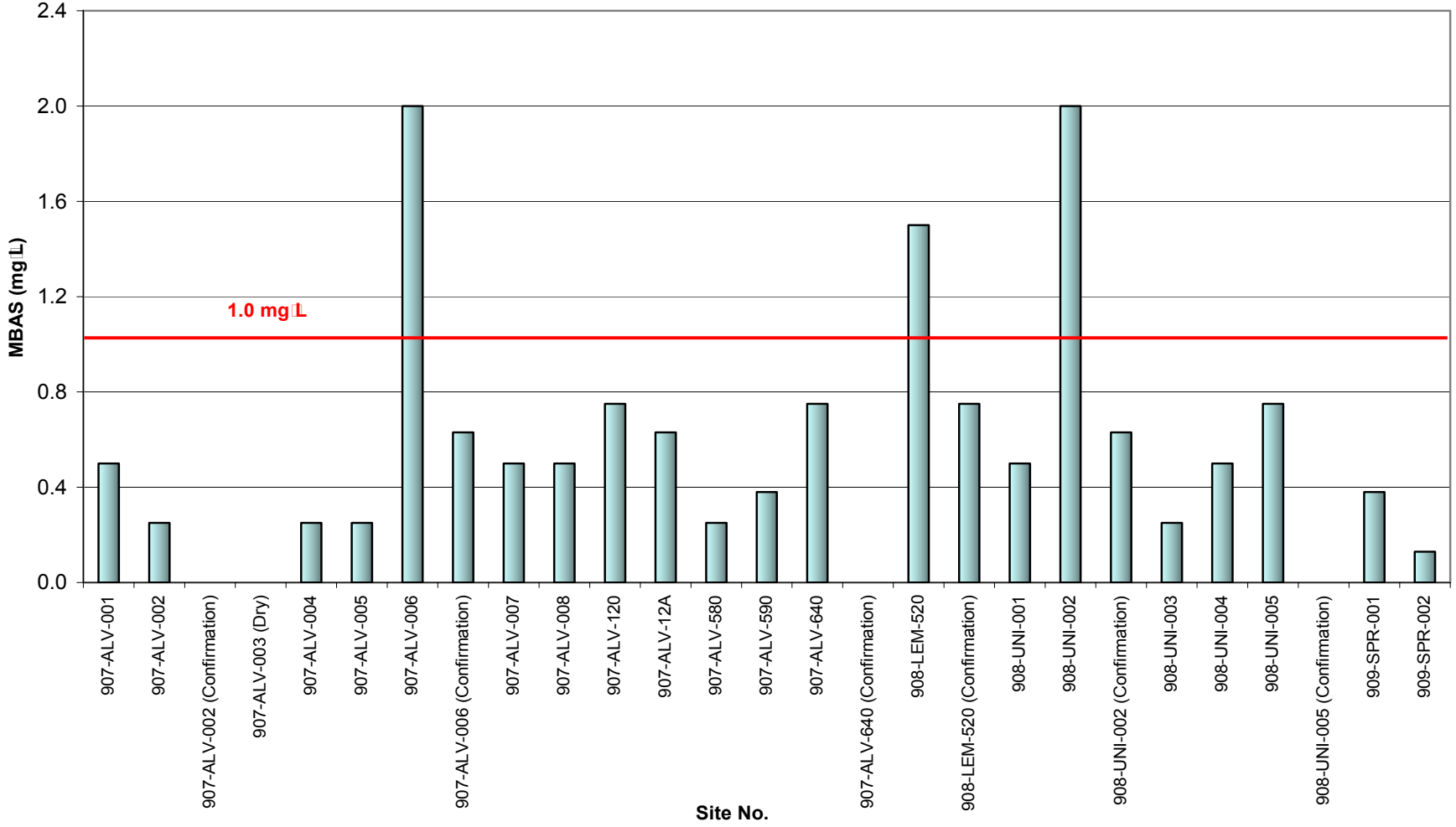

Note: Site 907-ALV-003 was dry.

GRAPH 4-7: Ammonia-N (NH_3-N)

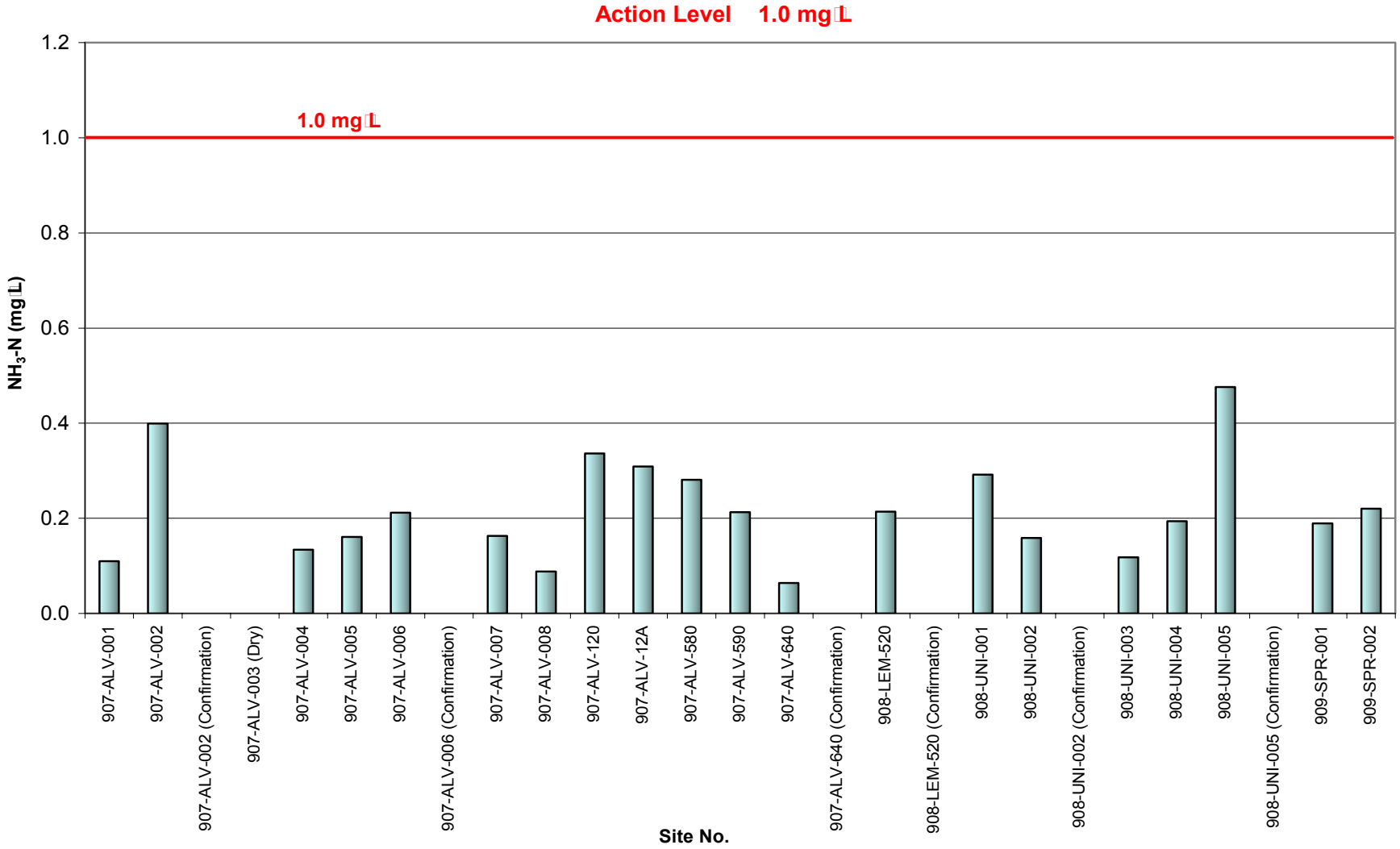

Note: Site 907-ALV-003 was dry.

GRAPH 4-8: Nitrate-N (NO_3-N)

Action Level 10.0 mg/L

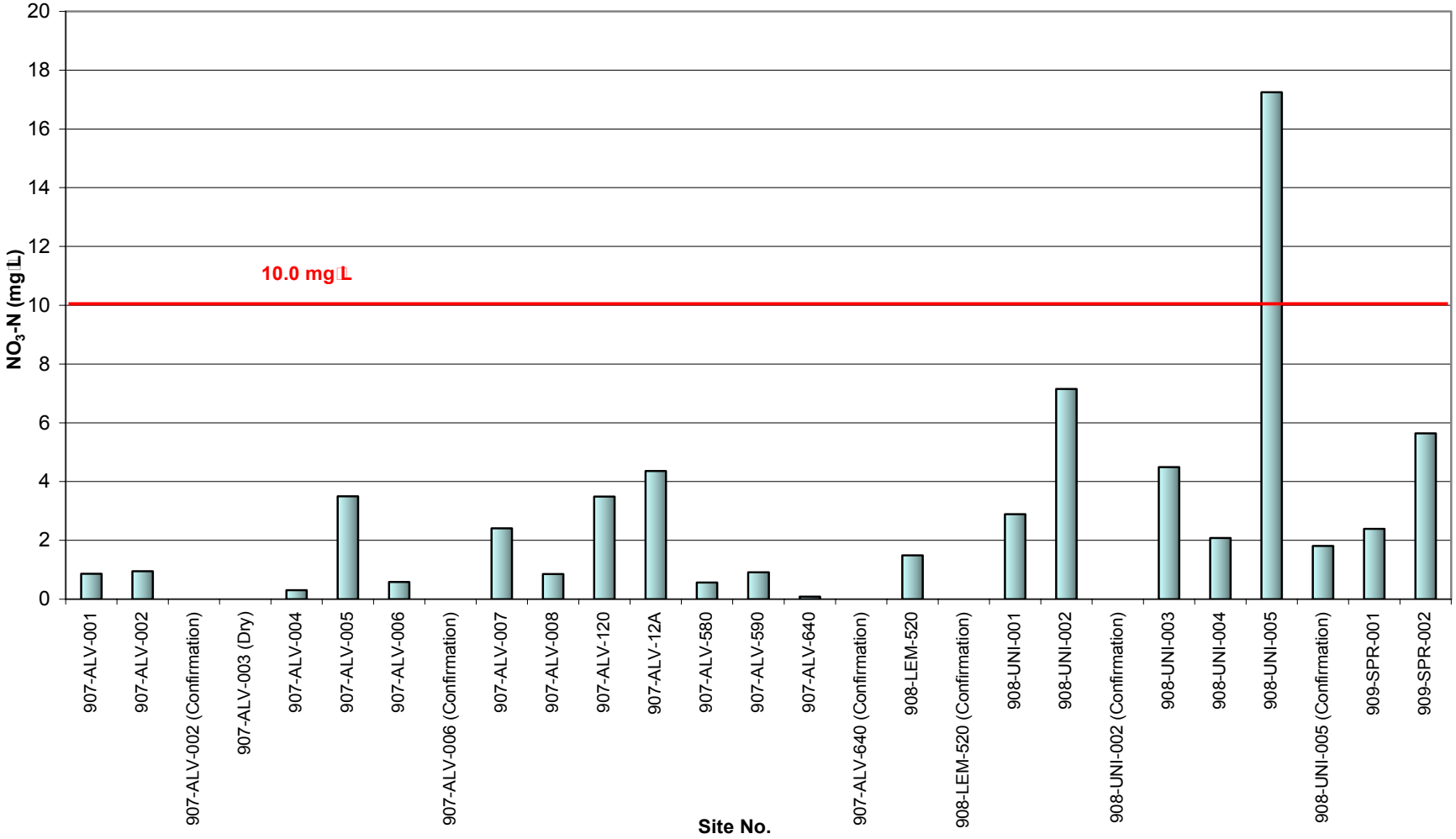

Note: Site 907-ALV-003 was dry.

GRAPH 4-9: Orthophosphate-P (PO_4-P)

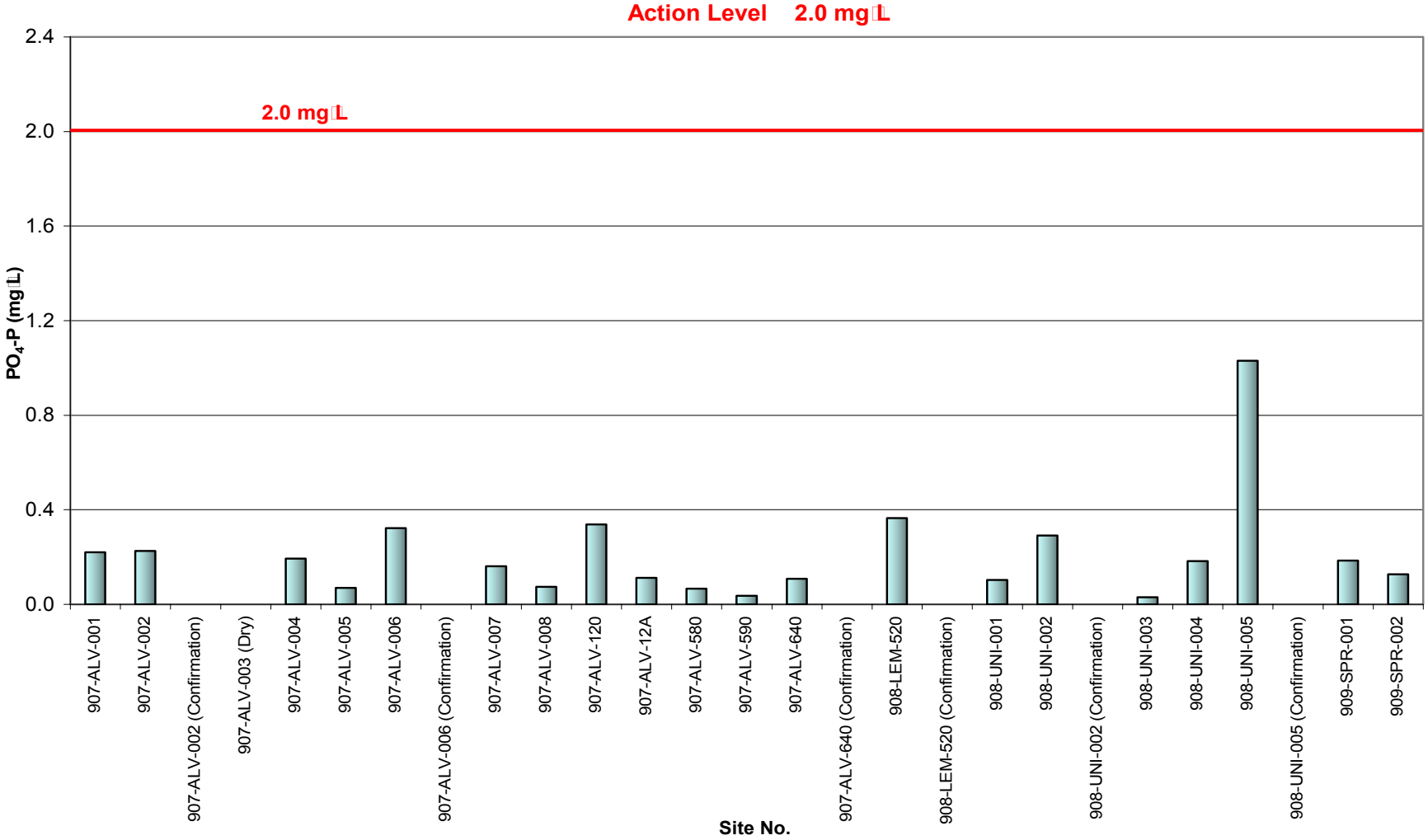

Note: Site 907-ALV-003 was dry.

5 TRASH ASSESSMENT

5.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather monitoring site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a Trash Assessment Form to document the amount and extent of trash at each evaluated site. The form categorizes the site into one of five trash categories: optimal, suboptimal, marginal, submarginal, or poor. The form also addresses any potential threats that the trash may pose to human or aquatic health. For sites rating submarginal or poor, the form includes a section to record types, prevalence, potential routes, and sources of trash.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form's five categories are primarily qualitative descriptions of the amount and extent of trash although a number of trash pieces is also included in each category as a rough guideline. The five categories are defined as follows.

- Optimal: On first glance, no trash visible. Little or no trash (□10 pieces) evident when evaluated area is closely examined for litter and debris.
- Suboptimal: On first glance, little or no trash visible. After close inspection small levels of trash (□10-50 pieces) evident in evaluated area.
- Marginal: Trash is evident in low to medium levels (□51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
- Submarginal: Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (□100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
- Poor: Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* □ Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment.

- *Threat to Aquatic Health* Large amount of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amounts of settleable, degradable, and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Large amount is defined as 50 pieces or more.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the Comments section of the Trash Assessment Form.

If a site is labeled as submarginal or poor, it is assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on their prevalence and the potential threat to water quality they pose. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

The majority of sites evaluated during the 2009 Dry Weather Monitoring Program were rated optimal. Of the remaining seven sites, five were rated suboptimal, two sites were rated marginal, and one was considered to be submarginal. No sites were considered to be in the poor category. Additionally, one site (Site 907-ALV-004) was observed to pose a threat to human health due to accumulation of animal feces. The feces were not considered an immediate threat to human health since they were not in contact with flow at the site; however in the event of rainfall or significant runoff, water could contact or transport the feces.

Table 5-1 and Graph 5-1 summarize the trash assessment results. Figure 5-1 provides a map of sampling sites and their corresponding trash assessment.

TABLE 5-1
2009 TRASH ASSESSMENT RESULTS

Optimal	Suboptimal	Marginal	Submarginal	Poor
907-ALV-001 907-ALV-002 907-ALV-003 907-ALV-004 907-ALV-005 907-ALV-008 907-ALV-12A 907-ALV-580 908-UNI-003 908-UNI-004 908-UNI-005 909-SPR-001 909-SPR-002	907-ALV-006 907-ALV-007 907-ALV-120 907-ALV-640 908-LEM-520	908-UNI-002 908-UNI-001	907-ALV-590	(None)

GRAPH 5-1
2009 TRASH ASSESSMENT RESULTS

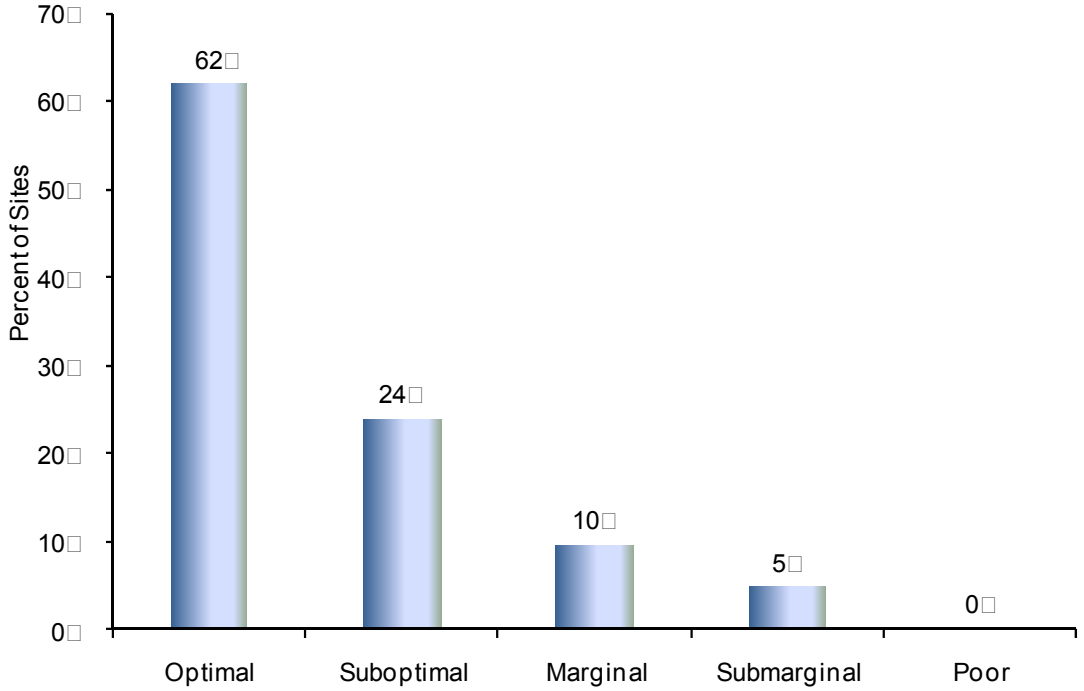

5.3.1 Submarginal Site

Site 907-ALV-590 is located at a natural creek near the southeast corner of the Parkway Drive and Amarillo Avenue intersection. A couch, shopping carts, clothing, and food packaging were observed at the site. The types of trash present appeared to have arrived at the site via illegal dumping and littering. The area also appeared to be used by transients. Table 5-2 presents a breakdown of the types, potential routes, and potential sources of trash to Site 907-ALV-590.

TABLE 5-2
BREAKDOWN OF SUBMARGINAL SITE TRASH

Site	Types of Trash	Ranking	Potential Route 1	Potential Route 2	Potential Source 1	Potential Source 2
907-ALV-590	Household	1	Dumping	Littering	Household	Transient
	Shopping Carts	2	Dumping	Littering	Transient	Household
	Fabric/Clothing	3	Dumping	Littering	Transient	Household
	Food Packaging	4	Littering	--	Transient	Household

FIGURE 5-1
TRASH ASSESSMENT MAP

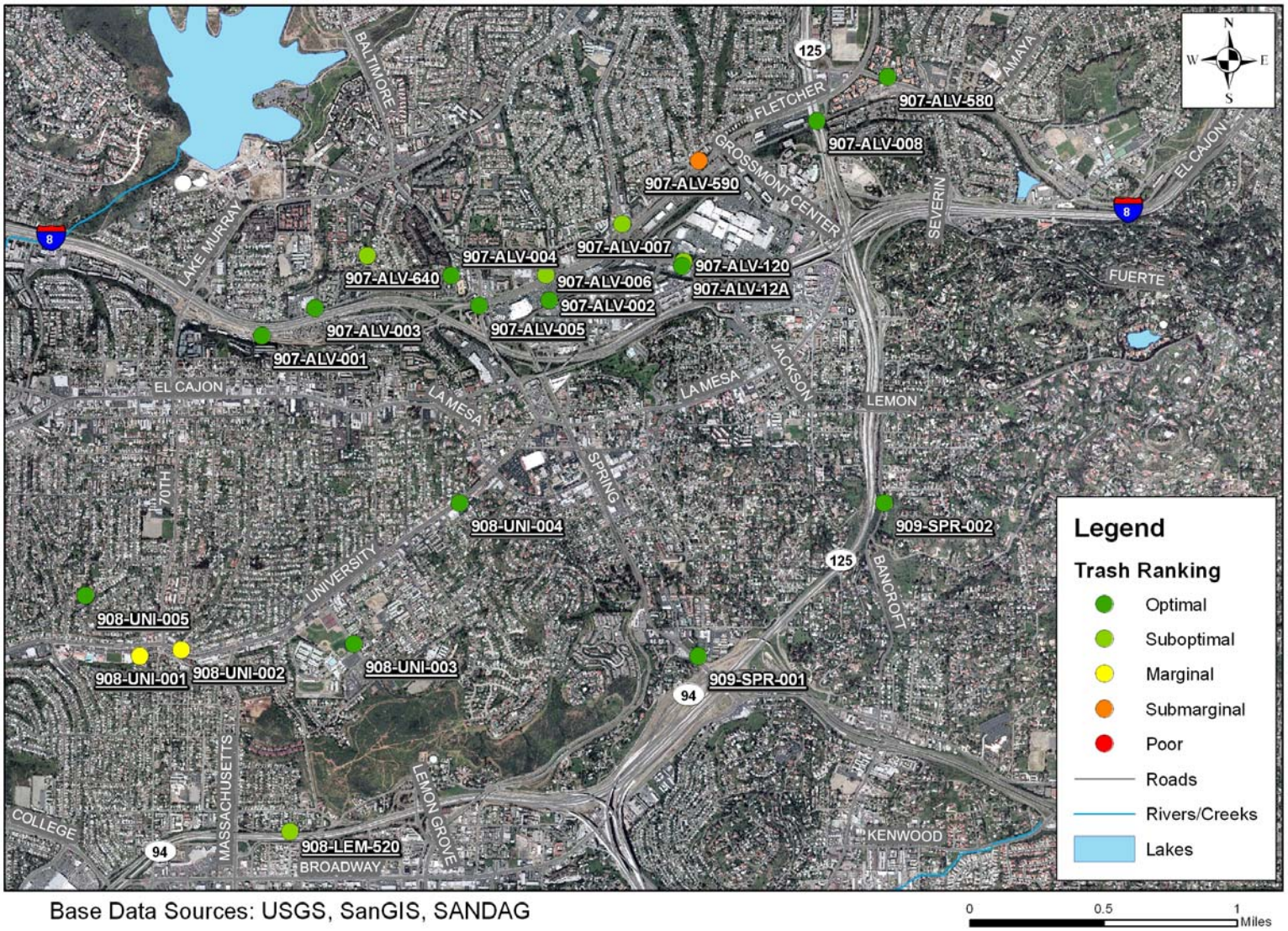

Base Data Sources: USGS, SanGIS, SANDAG

6 LABORATORY ANALYTICAL RESULTS

6.1 Summary

Laboratory analyses were conducted at six sites, representing over 25 percent of all sites with ponded or flowing water. The laboratory constituents measured are defined below.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Hardness itself is not considered a pollutant, but is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Diazinon and **chlorpyrifos** are organophosphate pesticides that can be harmful to aquatic organisms if transported in urban runoff. Diazinon and chlorpyrifos are highly toxic to birds, mammals, and insects. They are also highly toxic to freshwater fish and invertebrates following acute exposure.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness, with toxicity decreasing as hardness increases. For a specific hardness, each dissolved metal has a Criterion Maximum Concentration (CMC), a short term concentration limit in which aquatic life can be sustained. The laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 6-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

Coliform bacteria are present in mammalian digestive tracts and are relatively harmless to humans. Coliform bacteria is naturally found in most surface waters and soils. Water samples are tested for total coliform in the interest of public health, serving as an indicator of the presence of other more harmful pathogenic organisms of potentially fecal origin. Water is tested for total coliform in lieu of these pathogens as they occur in much smaller quantities that may be difficult to detect.

Fecal coliform, a subset of coliform bacteria, and **Enterococci** are found primarily in the gastrointestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material present in water is human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

A summary of the laboratory analytical results is presented in Table 6-2. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included in Appendix C.

TABLE 6-1
CTR □CMC FOR DISSOLVED METALS

Dissolved Copper			
Site	Total Hardness (mg/L)	Concentration (mg/L)	CMC (mg/L)
907-ALV-001	801	0.003	0.050
907-ALV-002	596	0.002	0.050
908-UNI-001	796	0.003	0.050
908-UNI-002	1740	0.005	0.050
908-UNI-003	529	**0.076**	0.050
908-UNI-003 *(Confirmation)*	634	0.005	0.050
908-UNI-004	628	0.006	0.050
Dissolved Zinc			
Site	Total Hardness (mg/L)	Concentration (mg/L)	CMC (mg/L)
908-UNI-002	1740	0.048	0.379

Notes:
Sites listed are those at which a particular dissolved metal was detected.
For equations and constants used in California Toxics Rule calculations, see
http://www.epa.gov/ost/standards/ctr/toxic.pdf
CMC □ Criterion Maximum Concentration;
Red Bold Type □ value exceeds action level
□ denotes a confirmation visit

TABLE 6-2
LABORATORY ANALYSES STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	of Exceedances
Oil and Grease (mg/L)	nd	nd	0
Total Hardness (mg/L CaCo3)	1740	529	□
Cadmium (dissolved, mg/L)	nd	nd	0
Copper (dissolved, mg/L)	0.076	0.002	1
Lead (dissolved, mg/L)	nd	nd	0
Zinc (dissolved, mg/L)	0.048	nd	0
Diazinon (□g/L}	nd	nd	0
Chlorpyrifos (□g/L)	nd	nd	0
Total Coliform (MPN/100ml)	54,800	800	1
Fecal Coliform (MPN/100ml)	17,000	80	0
Enterococcus (MPN/100ml)	17,000	80	1

Notes:
nd □ not detected

Calculations include complete routine visit data only. Confirmation visits, follow-up visits and dry sites not incorporated.

□Total hardness is not considered a pollutant and does not have an established action level.

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Oil Grease (mg/L)	Total Hardness (mg/L $CaCO_3$)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	Enterococci (MPN/100 mL)
907-ALV-001	6/12/09	10:15	nd	801	nd	0.003	nd	nd	nd	nd	23,000	270	800
907-ALV-002	6/2/09	11:30	nd	596	nd	0.002	nd	nd	nd	nd	**50,000**	17,000	**17,000**
907-ALV-002	6/18/09	13:30	na	na	na	na	na	na	na	na	15,500	554	780
907-ALV-590	6/2/09	12:40	na	na	na	na	na	na	na	na	5,000	nd	80
908-UNI-001	6/5/09	10:15	nd	796	nd	0.003	nd	nd	nd	nd	7,000	300	1,300
908-UNI-002	6/2/09	14:30	nd	1740	nd	0.005	nd	0.048	nd	nd	22,000	220	1,300
908-UNI-003	6/12/09	11:25	nd	529	nd	**0.076**	nd	nd	nd	nd	800	80	130
908-UNI-003	6/22/09	14:30	na	na	na	0.005	na	na	na	na	na	na	na
908-UNI-004	6/12/09	12:20	nd	628	nd	0.006	nd	nd	nd	nd	5,000	220	90
ANALYTICAL REPORTING LIMITS			**5**	**10**	**0.001**	**0.001**	**0.001**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**
ACTION LEVELS			**15**		**CTR**	**CTR**	**CTR**	**CTR**	**0.5**	**0.5**	**50,000**	**20,000**	**10,000**

Notes:
Red Bold Type value exceeds action level
denotes a confirmation visit
nd not detected
na not analyzed
CTR California Toxics Rule; CTR action levels for metals are calculated based upon on the total hardness value of the water sample.
Number of fecal coliforms is derived from *E. coli* count. Number of fecal coliforms (Number of *E. coli*) / 0.85
Total hardness is not considered a pollutant (see section 3.4 for details), and thus has no established action level for the purposes of dry weather monitoring.

7 DATA ANALYSIS

This first part of this section provides an overall evaluation of test results obtained from the 2009 Dry Weather Monitoring Program. The second portion of this section describes historical trends for various constituent exceedances.

7.1 2009 Results

Of the 20 sites sampled, the most frequent exceedance was in surfactants concentrations with water from three sites testing over the action level. One site had exceedances in both total coliform and *Enterococcus* counts, but no other bacteria exceedances were measured. There was one occurrence each of pH, nitrate-nitrogen, and copper exceedances, occurring at different sites. Table 7-1 presents a summary of the exceedances found during the 2009 Dry Weather Monitoring Program.

TABLE 7-1
2009 EXCEEDANCES SUMMARY

Site	pH	Surfactants	Nitrate-N	Copper	Total Coliforms	Enterococci
907-ALV-002					✓	✓
907-ALV-006		✓				
907-ALV-640	✓					
908-LEM-520		✓				
907-UNI-002		✓				
908-UNI-003				✓		
908-UNI-005			✓			

Note: Table reflects exceedances occurring during routine visits only, not confirmation or follow-up visits.

7.2 Previous Results

Historical results of exceedances are presented in Table 7-2, Graph 7-1 and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances for field constituents, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

Since 2002, no exceedances were measured in water temperature, oil and grease, cadmium, lead, zinc, diazinon, or chlorpyrifos, so these constituents have not been incorporated into the following table and graphs.

The historical data for the results of field analyses presented in Graph 7-1 indicate a decreasing trend in ammonia-nitrogen and orthophosphate-phosphorus concentrations. There have been no exceedances in ammonia-nitrogen since 2006 and no exceedance in orthophosphate-phosphorus levels since 2005. No discernable trend is apparent for pH, turbidity, conductivity or surfactants. Since these trends have been based on only eight years of data, conclusions regarding pollution trends cannot be drawn with a large degree of certainty.

Historical data for laboratory analyses presented in Graph 7-2 indicate that total coliform, fecal coliform, and *Enterococcus* exceedance rates have decreased somewhat over the years. This year, only one analytical monitoring site had total coliform and *Enterococcus* measurements above the action level, and no sites has fecal coliform exceedances.

TABLE 7-2
PERCENT OF SITES WITH EXCEEDANCES BY YEAR

	Field Testing								Laboratory Analyses				
Year	**Number of Field Testing Sites**	***pH***	***Turbidity***	***Conductivity***	***Surfactants***	***Ammonia-N***	***Nitrate-N***	***Orthophosphate-P***	***Number of Laboratory Sampling Sites***	***Total Coliforms***	***Fecal Coliforms***	***Enterococci***	***Copper***
2002	18	0	6	6	17	28	0	6	5	100	80	40	0
2003	18	0	0	6	6	17	0	6	5	60	60	20	0
2004	18	0	0	0	0	11	0	0	5	60	20	20	0
2005	18	0	0	0	6	11	0	6	5	60	20	20	0
2006	18	0	0	0	6	17	0	0	5	80	20	0	0
2007	18	6	0	0	0	0	0	0	5	0	0	20	0
2008	20	0	5	0	0	0	0	0	6	50	17	33	0
2009	20	5	0	0	15	0	5	0	6	17	0	17	17

Notes:

Results based on complete routine visits only. Confirmation visits, follow-up visits and dry sites not included.

By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

GRAPH 7-1
PERCENT OF SITES WITH FIELD CONSTITUENT EXCEEDANCES BY YEAR

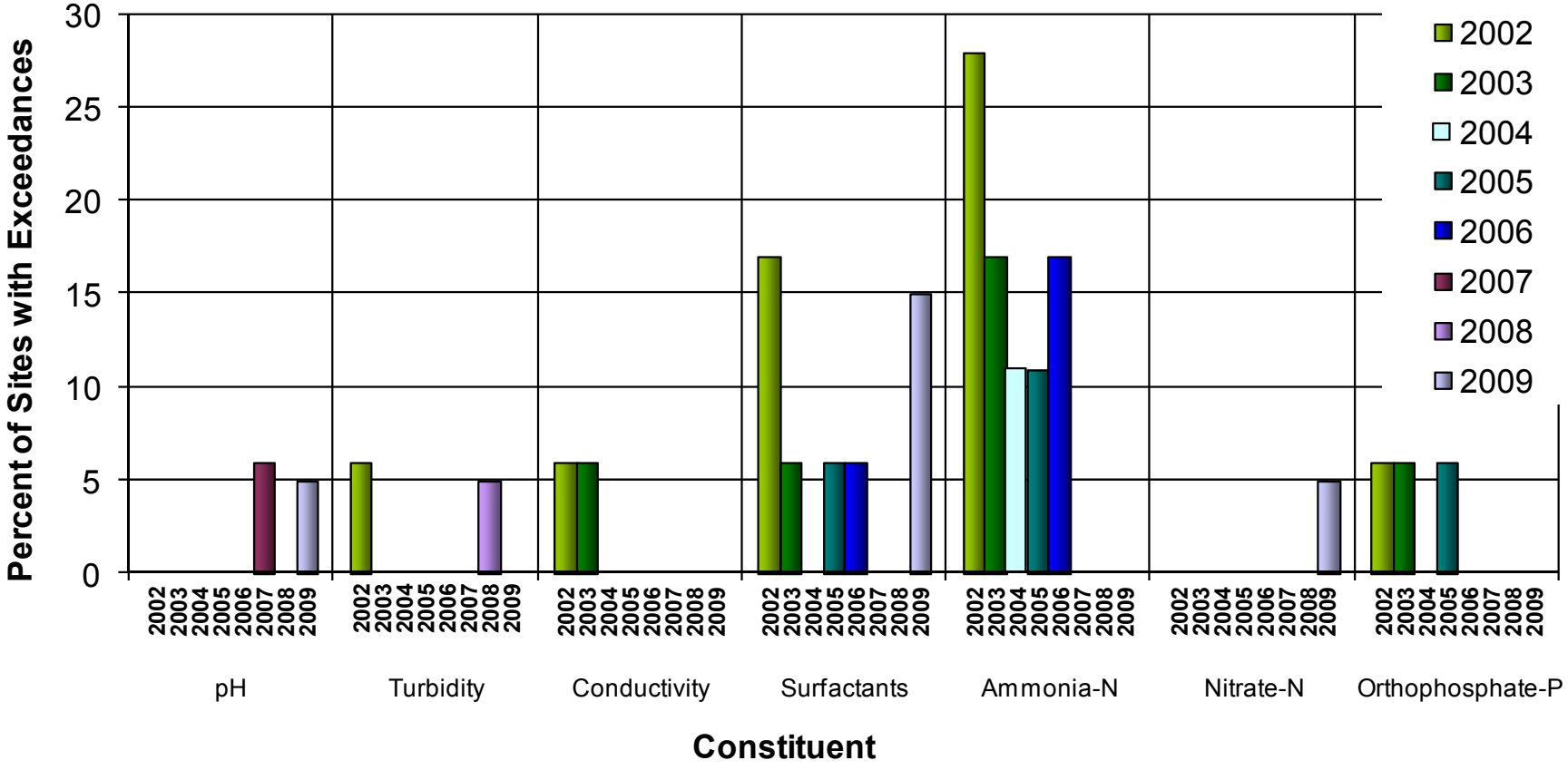

GRAPH 7-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

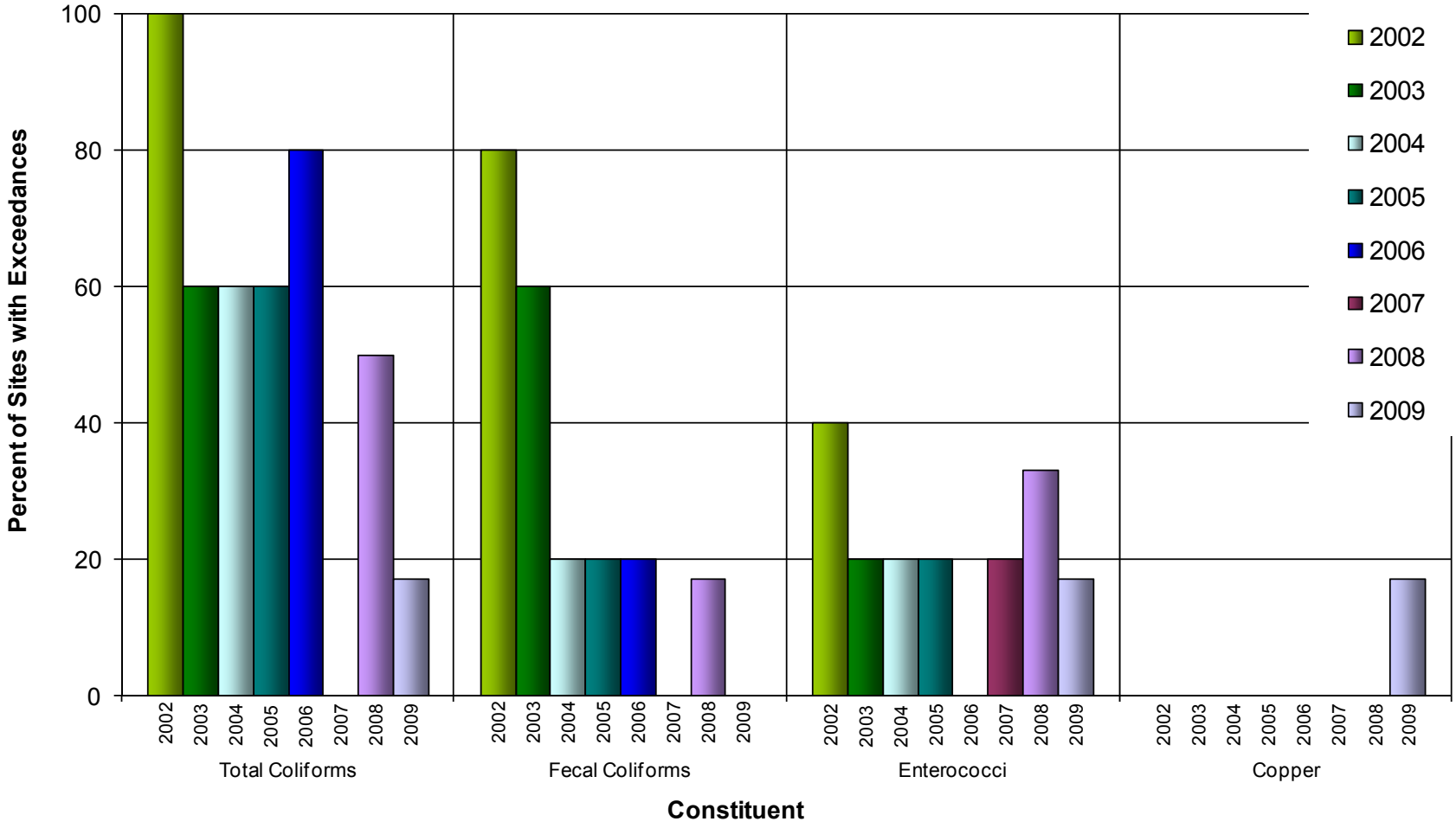

8 FOLLOW-UP INVESTIGATIONS

The purpose of follow-up investigations is to find the sources of pollutants that exceeded action levels during the initial field screening and laboratory testing.

8.1 Investigation Procedures

When a constituent is found to be over the action limit, follow-up investigations are conducted. Follow-up investigations are divided into two categories. The first type is a confirmation visit to retest the constituent that had been measured above its respective action level. For field test exceedances, the confirmation visit occurs within one business day. For exceedances of laboratory constituent action levels, the confirmation visit is conducted within two business days of receiving the results.

If the constituent in question remains above the action limit during the confirmation visit, an upstream investigation will occur. The upstream investigation consists of IC/ID follow-up visits, which intend to identify any illicit connections or illegal discharges into the storm water conveyance system. If follow-up field screening or laboratory analysis at a site results in constituent concentrations below the respective action levels, the initial high result may have been due to a transient flow.

The laboratory test for investigating upstream bacteria sources differs from routine field screening bacteria testing through the use of the IDEXX Colilert and IDEXX Enterolert tests. Information about these methods is provided in Table 3-2. Results for the Colilert and Enterolert tests are typically available within 24 hours, as opposed to the five days needed for routine testing. The quicker turnaround time allows for additional upstream investigations as needed.

During all follow-up visits, flow rates are measured and visual observations are performed. For confirmation visits, physical parameters such as temperature, pH, and conductivity are recorded as well. Field data sheets are included in Appendix D.

8.2 Investigated Sites

In the 2009 Dry Weather Monitoring Program, seven sites had constituents testing above the action levels. Three sites were investigated for excess surfactants, one for elevated pH, one for nitrate-nitrogen levels, one for high *Enterococcus,* and one for a high copper concentration. All field screening exceedances were below the action level during the confirmation visit. Upstream investigations were conducted for the two sites with laboratory constituent exceedances. Discussion of the follow-up investigations and results are presented below for each investigated site.

Site 907-ALV-002

Site 907-ALV-002 is located within a manhole on the south side of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection. Laboratory results indicated an *Enterococcus* exceedance at 17,000 MPN/100 mL and total coliform levels at the action level of 50,000 MPN/100 mL. Flow was measured at 5 gpm. At the confirmation visit bacteria levels were below action levels at the site, where the water was flowing at a rate of 3 gpm. Upstream location 907-ALV-002-1, a manhole located on the south side of Interstate 8 on the north end of a golf course, was sampled and also did not have any exceedances in bacteria levels. Farther upstream, two locations within the same manhole were tested to determine if the large amounts of decomposing leaves and trash in the

Photo 8-1: Decomposing leaves and trash within the concrete box at upstream locations 907-ALV-002-2 (top center) and 907-ALV-002-3 (bottom left).

concrete box were contributing bacteria to storm water flows (see Photo 8-1). Location 907-ALV-002-2 is situated in the pipe entering the concrete box, and location 907-ALV-002-3 is in the outgoing pipe. The flow through the concrete box was 1 gpm. Both samples measured over the action level for total coliform with values of 51,700 and 54,800 MPN/100 mL, respectively. The high level of bacteria in the water before it entered the concrete box indicated that other sources of bacteria were present upstream of the manhole, with the conditions within the concrete box having an additive effect. Upstream along Memorial Street, significant leaf litter was observed, which may have been a source of decomposing leaves and bacteria to the storm water conveyance at locations 907-ALV-002-2 and 907-ALV-002-3.

It is possible that bacteria at Site 907-ALV-002 was a result of decomposing leaves and trash at upstream locations. Since the flow at 907-ALV-002-2 and 907-ALV-002-3 measured only 1 gpm on the same day that the flow at Site 907-ALV-002 measured 3 gpm, it seems likely that the bacteria levels were diluted by the input of water further downstream. This is supported by the fact that there was no total coliform exceedance at 907-ALV-002-1, where the flow had increased to 2 gpm downstream of Sites 907-ALV-002-2 and 907-ALV-002-3. No leaf litter or trash accumulation was noted along Commercial Street, surrounding Site 907-ALV-002, indicating that leaf litter and trash decomposition upstream of the site, when combined with higher flow through the area, is the most likely cause of the transient elevated bacteria levels. Table 8-1 and Figure 8-1 present the locations and results of this follow-up investigation.

TABLE 8-1
SITE 907-ALV-002 BACTERIA UPSTREAM INVESTIGATION

Site	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	Enterococci (MPN/100 mL)
907-ALV-002 *(Routine Visit)*	Along the south edge of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection	5	**50,000**	17,000	**17,000**
907-ALV-002 *(Confirmation)*	*(same as above)*	3	15,500	554	780
907-ALV-002-1	South of I-8, north of golf course, north side of fence, by the freeway	2	26,100	418	657
907-ALV-002-2	Next to 8515 La Mesa Boulevard, before entering concrete box	1	**51,700**	1,200	1,918
907-ALV-002-3	Next to 8515 La Mesa Boulevard, after leaving concrete box	1	**54,800**	1,035	2,755

Notes:
Red Bold Type □ value exceeds action level
Number of fecal coliforms was derived from the *E. coli* count using the following formula:
Number of fecal coliforms □ (Number of *E. coli*) / 0.85.

FIGURE 8-1
SITE 907-ALV-002 UPSTREAM INVESTIGATION MAP

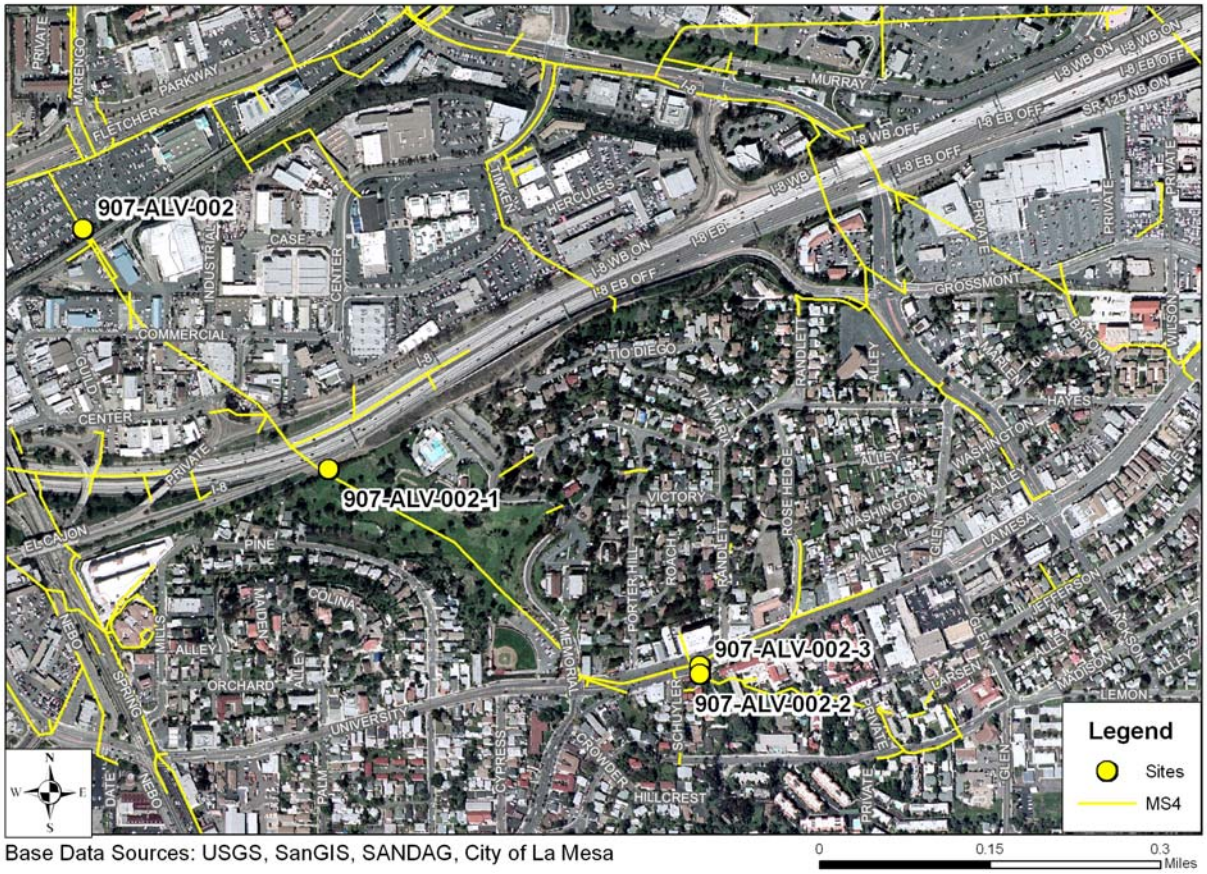

Site 907-ALV-006

Site 907-ALV-006 is located in a manhole near the intersection of Fletcher Parkway and Marengo Avenue, in a landscaped planter. During the initial visit, the level of surfactants was 2.0 mg/L, which is above the 1.0 mg/L action level. The water was flowing at about 1 gpm and had a white film visible on the surface.

The primary land use upstream of the site is residential. Just after the exceedance was noted, evidence of car washing was observed in the driveway of a home on Kato Street. The driveway was wet and runoff reached the storm drain inlet nearby. As this inlet is directly upstream of Site 907-ALV-006 and the only other sources of flow noted were that of irrigation runoff, it is likely that this vehicle washing was the source of elevated surfactants levels.

Upon revisiting the site the following day, general conditions at the site appeared to be the same and the flow was less than 1 gpm. At this confirmation visit, surfactants measured 0.63 mg/L. It was concluded that the initial elevated level of surfactants was transient and most likely due to upstream vehicle washing.

Site 907-ALV-640

Site 907-ALV-640 is located in a concrete channel in a residential neighborhood on the north side of Seton Hall Road, between Swarthmore Street and Wheaton Street. During the initial field screening, the water was flowing slowly at a rate of less than 1 gpm, with a temperature of 24.8 °C. A sample that was taken from a sunny portion of the channel had a pH of 10.1, which is over the action level of 9.0.

Photo 8-2: Water entering a shaded portion of Site 907-ALV-640

At that time, pH measurements were taken at various other locations just upstream and downstream of the site. One upstream location was a small landscaping drain contributing flow to Site 907-ALV-640. The pH of water at this location was 8.6. Further upstream, the pH in a shaded area of the channel was 8.3. Downstream of Site 907-ALV-640, the flow was sampled just prior to entering a pipe in a shaded area. The pH at this location was 8.8. At the confirmation visit to Site 907-ALV-640 the following day, the pH was 8.1 and the temperature was 20.4 °C. No sources of runoff with high pH levels were found entering the channel.

Given that the water's pH decreased from the sunny portion to the shaded portion of the channel, and the pH level was lower in the same location when the water was cooler the following day, it was concluded that the high pH level was a result of sunlight and increased temperature, which remove carbon dioxide from the water. Because carbon dioxide forms carbonic acid when dissolved in water, removal of carbon dioxide from water makes the water more basic and results in higher pH readings. Typically the pH increases during daylight hours as sunlight stimulates algal photosynthesis and carbon dioxide is removed from water. During the night when algae is not photosynthesizing, the carbon dioxide level in the water increases due to biological respiration and physical diffusion of carbon dioxide from 0air into water, and the pH decreases. Because the solubility of gas in water is inversely proportional to the water temperature, carbon dioxide is less soluble in warmer water. Sunlight heats the shallow, unshaded water in a concrete channel, resulting in lower solubility for carbon dioxide.

Site 908-LEM-520

Site 908-LEM-520 is located at an outlet by the south end of Harris Street near Waite Drive. This site receives flow from the surrounding residential neighborhoods. At the time of the initial visit, the water was yellow in color, with trash floating on the surface and a flow rate of 1 gpm. The surfactants concentration of the initial sample exceeded the 1.0 mg/L action level, measuring 1.5 mg/L. Overland flow was observed traveling down Harris Street and entering the inlet contributing to Site 908-LEM-520 (see Photo 8-3). The flow appeared to

Photo 8-3: Sump-pump discharge water entering Harris Street upstream of Site 908-LEM-520

originate from drains in the curb in front of numerous houses. A resident informed the field crew that the neighborhood is situated in a shallow groundwater area and that most of the houses in the area use sump-pumps to prevent water from accumulating beneath their homes. The resident reported that flow is always present in the streets for this reason, which is consistent with the presence of algae along the curbs. Since Site 908-LEM-520 collects water from the drains of numerous properties and no washing activities were observed, the exact source of surfactants at the time of the first visit could not be identified. At the confirmation visit the next day, surfactants were measured below the action level at 0.75 mg/L. The source of the surfactant exceedance was therefore determined to be transient.

Site 908-UNI-002

Site 908-UNI-002 is located in a manhole near the intersection of Harbison Avenue and University Avenue intersection. During the initial visit, surfactants were measured at 2.0 mg/L, and the water had a chemical odor. An immediate upstream investigation on Harbison Avenue and the surrounding residential areas was performed, but a potential source of surfactants could not be identified. Manholes opened upstream of the site were found to have approximately the same amount of flow as Site 908-UNI-002, appearing to originate from irrigation runoff. At the confirmation visit the following day, the surfactants level was below the action level at 0.63 mg/L. The flow was again approximately 2 gpm and but no longer had a detectable odor. It was concluded that the initial high level of surfactants was likely due to a transient flow.

Site 908-UNI-003

Site 908-UNI-003 is located where two pipes converge in a manhole on the north side of Lowell Street, between University Avenue and Normal Avenue. Laboratory results indicated a copper concentration of 0.076 mg/L, exceeding the CMC for water at this site. During the follow-up investigation, a sample was collected from Site 908-UNI-003 and also from each of the contributing pipes, referred to as sampling locations 908-UNI-003-1 and 903-UNI-003-2. The laboratory results and respective CMC values for each location are presented in Table 8-2. Copper concentrations from all three follow-up samples were below CMC values. Areas surrounding the site and upstream drainage area were examined during the upstream investigation, but no clear source of the copper exceedance could be identified. It was concluded that the exceedance was most likely the result of a transient flow.

TABLE 8-2
SITE 907-UNI-003 COPPER UPSTREAM INVESTIGATION

Site	Location	Hardness (mg/L $CaCO_3$)	Copper (mg/L)	CMC (mg/L)
908-UNI-003	Along Lowell Street, about halfway between University Avenue and Normal Avenue, north side of street, 4291 Lowell Street driveway	529	**0.076**	0.0496
908-UNI-003 *(Confirmation)*	*(Same as above)*	634	0.005	0.0496
908-UNI-003-1 *(Follow-Up)*	Along Lowell Street about halfway between University Avenue and Normal Avenue south side 4291 Lowell Street driveway	417	0.001	0.0496

Site	Location	Hardness (mg/L $CaCO_3$)	Copper (mg/L)	CMC (mg/L)
908-UNI-003-2 *(Follow-Up)*	Along Lowell Street about halfway between University Avenue and Normal Avenue. Coming from east side; Lowell Street driveway	458	0.002	0.0496

Notes:
CMC Criterion Maximum Concentration, short term concentration limit in which aquatic life can be sustained
Red Bold Type value exceeds action level

Site 908-UNI-005

Site 908-UNI-005 is located in a manhole in Rolando Park, within a gated dirt area on the left side of the baseball field. At the time of the first visit, a flow of less than 1 gpm was observed and a nitrate-nitrogen level of 17.25 mg/L, above the action level of 10 mg/L, was measured. At the confirmation visit the following day, nitrate-nitrogen was measured 1.81 mg/L.

Photo 8-4: Site 908-UNI-005

The initial exceedance was likely due to a transient flow. The drainage area to Site 908-UNI-005 is made up of parks and residential areas. It is possible that fertilizer use in Sunshine Park, upstream of Rolando Park, and surrounding community may have been a source of nitrate-nitrogen. At the time of the routine and confirmation visit, no clear source could be identified.

9 SUMMARY AND RECOMMENDATIONS

9.1 Summary of Field Screening and Laboratory Analysis Data

In the City of La Mesa 2009 Dry Weather Monitoring Program, 21 sites were visited, 20 of which had flowing or ponded water. Site 907-ALV-580 was sampled in place of Site 907-ALV-003, which was dry. Samples from six sites were submitted for laboratory analyses. Confirmation visits and upstream investigations were performed for seven sites having constituents at or above respective action levels. A summary of action level exceedances is provided in Table 9-1. Conclusions based on confirmation visits and upstream investigations are presented in Table 9-2.

TABLE 9-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (20 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
pH	1	5	907-ALV-640
Conductivity	0	0	-
Turbidity	0	0	-
Surfactants	3	15	907-ALV-006 908-LEM-520 908-UNI-002
Ammonia-Nitrogen	0	0	-
Nitrate-Nitrogen	1	5	908-UNI-005
Orthophosphate-Phosphorus	0	0	-
Laboratory Analyses (6 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
Oil & Grease	0	0	-
Cadmium	0	0	-
Copper	1	5	908-UNI-003
Lead	0	0	-
Zinc	0	0	-
Diazinon	0	0	-
Chlorpyrifos	0	0	-
Total Coliforms	1	5	907-ALV-002
Fecal Coliforms	0	0	-
Enterococci	1	5	907-ALV-002

Note: Data is from the initial site visits only. Confirmation visits, follow-up visits and dry sites not included.

All but one site had flowing water. The majority of sites had odorless water, with one sample having a chemical odor. Samples at six sites were yellow in color; the remainder were colorless. Two sites had slightly cloudy water, and the rest of the water samples were clear. Sediments and fine particulates were present at most sites. Algae grew at ten sites, insects were present at eleven sites, and several other sites were host to snails and spiders. Trash levels were optimal at most sites, five sites were ranked suboptimal, two marginal, and one submarginal site.

9.2 Summary of Follow-up Data

Table 9-2 presents the conclusions based on the results of the confirmation and upstream investigations conducted at seven sites for the 2009 Dry Weather Monitoring Program.

TABLE 9-2
SUMMARY OF FOLLOW-UP INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results □Probable Source
	Field	Laboratory	
907-ALV-002	---	Total Coliforms, Enterococci	Decomposing organic material and trash upstream of the site
907-ALV-006	Surfactants	---	Likely due to a transient flow from vehicle washing by resident in neighborhood upstream
907-ALV-640	pH	---	Sunlight and higher temperatures encouraging the removal of carbon dioxide through decreased solubility and increased photosynthesis
908-LEM-520	Surfactants	---	Transient flow
908-UNI-002	Surfactants	---	Transient flow from residential and commercial area
908-UNI-003	---	Copper	Transient flow
908-UNI-005	Nitrate-nitrogen	---	Transient flow, potentially due to fertilizer usage in surrounding residential and park areas

9.3 Recommendations

9.3.1 2008 Recommendation Implementation

In response to the recommendation presented in the 2008 Dry Weather Field Screening Program, the City took the following actions:

- Leaves and trash were removed from sites 907-ALV-002 and 907-ALV-002-2 prior to the beginning of the 2008/2009 and the 2009/2010 rainy seasons.
- Trash was removed from Site 908-UNI-002 prior to the beginning of the 2008/2009 and the 2009/2010 rainy seasons.
- The City has worked with the Vons Shopping Center property management upstream of Site 908-UNI-004 regarding removal of leaf debris and litter from storm drains onsite. The City discussed general storm water pollution prevention issues and requested a Storm Water Monitoring Plan and Best Management Practices Plan from the property owner. Since the 2008 Dry Weather Monitoring Program, the City has followed up with property management regarding catch basin cleaning, dumpster maintenance, and other required pollution prevention issues.

9.3.2 2009 Recommendations

Based on the results of the 2009 Dry Weather Field Screening Program, the following actions are recommended. It is also noted below where recommended actions have already been implemented.

- Remove leaf debris from Memorial Avenue, located along the conveyance upstream of Site 907-ALV-002. The City has removed decomposing leaves and trash from location 907-ALV-002-2, an upstream concrete box, as well as from Site 907-ALV-002.
- Remove the household debris and trash from the area surrounding Site 907-ALV-590, which received a submarginal trash rating. Clean up trash from sites 908-UNI-001 and 908-UNI-002, which received marginal trash ratings.
- Consider substituting primary Site 907-ALV-003, which has been dry for several years, with alternate Site 907-ALV-580, which has been sampled for the past two years.

10 REFERENCES

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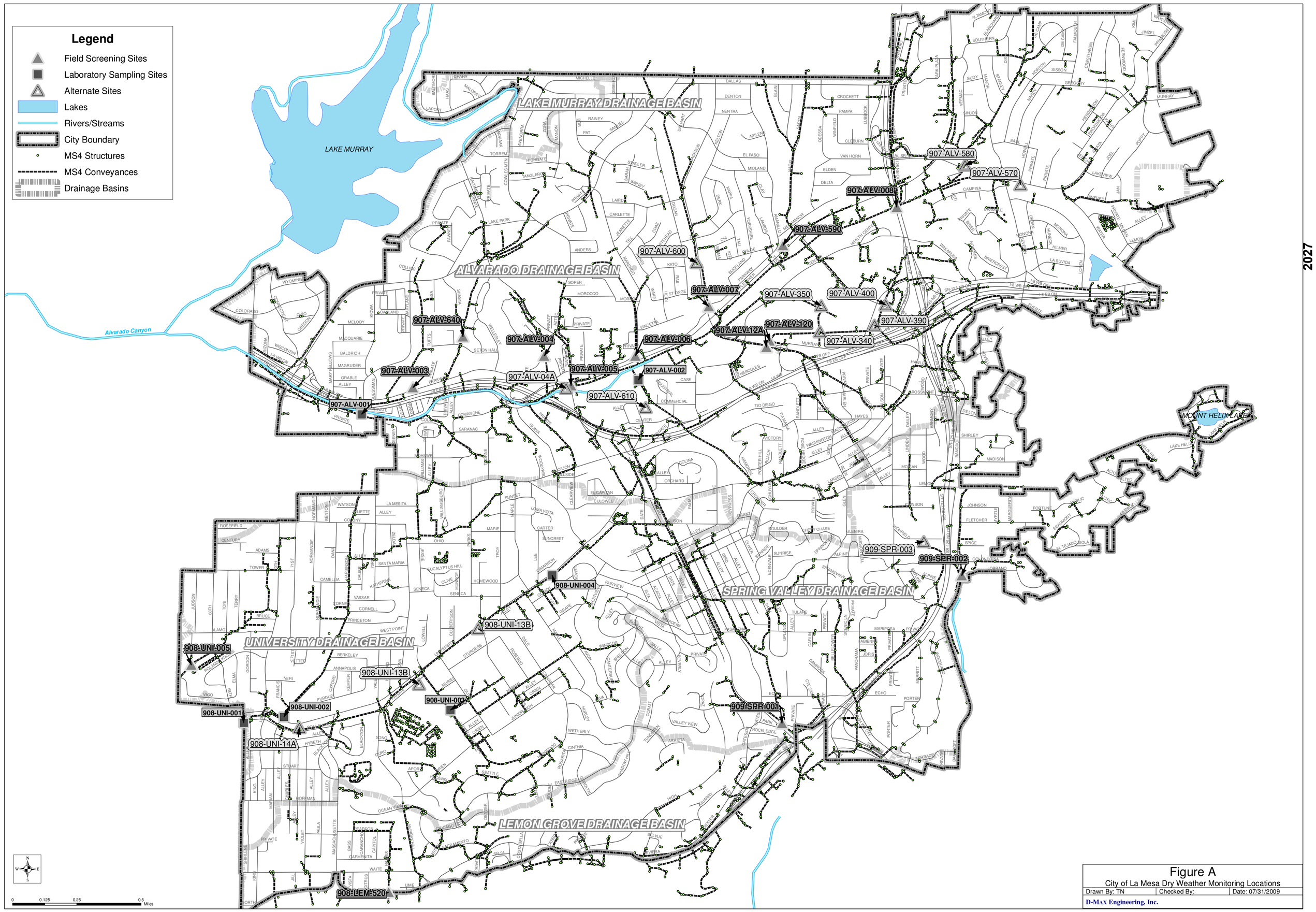

Figure A
City of La Mesa Dry Weather Monitoring Locations

Drawn By: TN	Checked By:	Date: 07/31/2009

D-MAX Engineering, Inc.

2027

Base Data Sources: USGS, SanGIS, SANDAG, City of La Mesa

FIGURE B
CITY OF LA MESA WATERSHED MAP

Base Data Sources: USGS, SanGIS, SANDAG

Appendix A

Historical Dry Weather Data Tables

City of La Mesa Historical Data

Site No.	1	2	3	4	4A	5	6	7	7A	8	9	10	10A	11	12	12A	13	13A	13B	13C	14	15	16	17	18	19	20	21	22	23	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1993																																														
Ammonia mg/l	1.4	1.4	4.5	2.2		1.3	1.4	1.1		0.7	0.7	0.5		1.1	2.2		0.8				2.1	1.0																								
Chlorine mg/l	0.6	0.4	1.3	0.7		0.9	1.0	1.1		0.6	0.5	0.9		0.4	0.6		0.6				0.7	0.4																								
Copper mg/l	1.0	1.4	1.6	1.5		1.0	0.6	2.5		2.2	2.5	1.8		1.1	0.7		2.1				2.2	2.8																								
Surfactants mg/l	1.0	1.0	6.0	0.5		0.5	0.3	0.5		0.3	3.0	0.5		1.0	0.5		0.5				0.8	0.5																								
Phenols mg/l	0.6	0.1	0.7	0.4		0.04	2.8	2.3		3.3	3.0	0.5		1.0	0.5		0.5				0.8	0.5																								
1994																																														
Ammonia mg/l			1.7	2.1				1.7	na	3.4	0.3						na				0.9		0.5	2.0	1.8	na	na	nd	na	2.0																
Chlorine mg/l			0.2	0.3				0.5	na	0.2	0.3						na				0.1		0.3	0.7	0.2	na	na	0.0	na	0.2																
Copper mg/l			1.1	0.0				0.3	na	0.5	0.0						na				3.0		1.4	0.2	nd	na	na	nd	na	0.2																
Surfactants mg/l			0.5	0.5				0.8	na	0.5	0.4						na				0.4		0.4	0.6	0.3	na	na	0.3	na	0.3																
Phenols mg/l			0.2	0.1				4.9	na	1.7	0.04						na				0.1		nd	0.5	0.1	na	na	nd	na	nd																
1995																																														
Ammonia mg/l			0.2	na											0.7						0.1				0.3			0.3			0.1	0.4	0.0	7.6	na	0.1	0.2									
Chlorine mg/l			0.2	na											nd						0.4				0.1			0.3			0.3	0.4	0.4	0.3	na	0.1	0.2									
Copper mg/l			nd	na											nd						nd				nd			nd			nd	nd	nd	nd	na	nd	nd									
Surfactants mg/l			1.0	na											0.5						0.5				0.5			0.3			0.8	0.5	0.3	7.5	na	0.5	0.5									
Phenols mg/l			nd	na											nd						nd				nd			nd			nd	nd	nd	nd	na	nd	nd									
1996																																														
Ammonia mg/l			0.7		0.2				na	0.6			0.4		1.5	1.0		0.4	0.1		0.5		na						na					0.1				0.2	0.9							
Chlorine mg/l			0.1		0.4				na	0.2			0.1		nd	nd		0.1	0.3		0.3		na						na					0.1				0.3	0.4							
Copper mg/l			nd		0.1				na	nd			nd		0.1	0.1		0.1	nd		nd		na						na					nd				nd	0.3							
Surfactants mg/l			0.5		0.4				na	0.5			0.5		0.5	>3.0		0.3	0.6		0.8		na						na					0.3				0.4	0.3							
Phenols mg/l			0.1		0.1				na	0.3			0.1		0.1	0.1		0.1	0.1		0.1		na						na					0.1				0.1	0.1							
1997																																														
Ammonia mg/l			0.6												0.6	0.8			0.9	0.6	0.8																		0.5	>10	na	na	na	1.0		
Chlorine mg/l			0.1												nd	0.4			0.9	0.3	0.5																		0.3	0.3	na	na	na	0.9		
Copper mg/l			nd												0.1	0.1			nd	nd	nd																		0.1	nd	na	na	na	nd		
Surfactants mg/l			0.3												1.0	0.3			>3.0	0.4	0.5																		1.0	0.3	na	na	na	0.4		
Phenols mg/l			nd												nd	nd			nd	nd	0.3																		nd	nd	na	na	na	nd		
1998																																														
Ammonia mg/l			0.3		0.3										9.5	0.3			0.2	0.2	0.3										0.1								0.6	0.4	na	na	na	4.0		
Chlorine mg/l			nd		nd										nd	nd			0.2	0.1	nd										0.1								0.1	0.2	na	na	na	nd		
Copper mg/l			nd		nd										nd	nd			nd	nd	nd										nd								nd	0.4	na	na	na	nd		
Surfactants mg/l			0.4		0.3										0.8	0.8			0.3	0.6	0.5										0.3								0.5	0.3	na	na	na	0.5		
Phenols mg/l			nd		nd										nd	nd			nd	nd	nd										nd								nd	nd	na	na	na	nd		
1999, Round One																																														
Ammonia mg/l			0.5		0.2										0.6	0.4			0.4	0.2	0.3										0.2								0.5	na	na	na	na	7.0		
Chlorine mg/l			nd		0.1										nd	0.1			0.1	0.2	0.1										0.3								0.1	na	na	na	na	nd		
Copper mg/l			0.2		0.1										0.2	nd			0.1	0.1	0.1										0.1								0.2	na	na	na	na	0.2		
Surfactants mg/l			0.3		0.3										0.3	0.5			0.3	0.8	0.3										0.3								0.3	na	na	na	na	0.5		
Phenols mg/l			0.2		nd										0.1	nd			nd	0.1	0.1										nd								nd	na	na	na	na	0.1		
1999, Round Two																																														
Ammonia mg/l			0.4		30.0										1.5	0.2			0.5	0.6	0.2										0.5								0.6	0.2	na	na	na	4.0		
Chlorine mg/l			0.1		nd										0.2	0.2			0.1	0.1	<0.1										0.3								0.5	0.1	na	na	na	nd		
Copper mg/l			nd		0.1										0.2	nd			0.1	0.1	0.1										0.1								0.3	0.6	na	na	na	0.1		
Surfactants mg/l			0.8		>3.0										2.0	0.3			0.3	0.3	0.3										2.0								0.5	0.3	na	na	na	1.8		
Phenols mg/l			nd		0.1										nd	nd			0.1	0.1	nd										0.1								nd	nd	na	na	na	0.1		
2000, Round One																																														
Ammonia mg/l					6.0										0.8	0.4			0.2	0.4	0.8										0.2								0.8	0.2	na	na	na	8.0	5.0	na
Chlorine mg/l					nd										nd	nd			nd	nd	nd										nd								nd	nd	na	na	na	0.1	nd	na
Copper mg/l					nd										nd	nd			nd	nd	nd										nd								nd	0.2	na	na	na	nd	nd	na
Surfactants mg/l					0.8										0.5	0.3			0.3	0.5	0.3										0.3								0.3	0.3	na	na	na	0.5	0.3	na
Phenols mg/l					nd										nd	nd			nd	nd	nd										nd								nd	0.1	na	na	na	nd	nd	na
2000, Round Two																																														
Ammonia mg/l					0.1										0.6	0.3			0.2	0.3	0.2										0.2								1.0	1.0	Dry	Dry	Dry	4.0	5.0	Dry
Copper mg/l					nd										nd	nd			nd	nd	nd										nd								0.1	0.4	Dry	Dry	Dry	nd	nd	Dry
Chlorine mg/l					nd										nd	nd			nd	0.1	nd										0.1								nd	0.6	Dry	Dry	Dry	nd	nd	Dry
Surfactants mg/l					0.3										0.5	0.5			0.25	0.5	0.5										0.3								0.3	0.3	Dry	Dry	Dry	0.5	0.8	Dry
Phenols mg/l					nd										nd	nd			nd	nd	nd										0.1								nd	nd	Dry	Dry	Dry	nd	nd	Dry
2001																																														
Ammonia mg/l					6.0										0.8	0.4			0.2	0.4	0.8										0.2								0.8	0.2	na	na	na	8.0	5.0	na
Chlorine mg/l					nd										nd	nd			nd	nd	nd										nd								nd	nd	na	na	na	0.1	nd	na
Copper mg/l					nd										nd	nd			nd	nd	nd										nd								nd	0.2	na	na	na	nd	nd	na
Surfactants mg/l					0.75										0.5	0.25			0.25	0.5	0.25										0.25								0.25	0.25	na	na	na	0.5	0.25	na
Phenols mg/l					nd										nd	nd			nd	nd	nd										nd								nd	0.1	na	na	na	nd	nd	na

City of La Mesa Historical Data

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	60	61	64
2002																				
Temp.℃	22	20	19	21	22	20	21	19	20	19	22	22	20	23	23	21	19		Dry	26
pH	7.9	6.9	7.5	7.4	7.6	7.5	7.8	6.9	7.8	7.4	7.3	7.4	6.8	7.9	8.1	7.4	7.5		Dry	8.9
Turbidity,NTU	8.35	36	19.1	5.35	4.48	15.51	2.66	5.23	11.32	23.29	463	6.18	35.08	7.4	11.49	19.87	12.05		Dry	6.7
Conductivity,µmhos/cm	2710	2810	2850	3910	3730	4710	4100	1938	1906	2530	2350	5010	1394	3180	3500	2420	1594		Dry	1403
Surfactants mg/l	4.0	0.25	0.25	0.5	0.37	0.25	0.37	0.25	0.25	0.25	24	0.5	1.5	0.25	0.5	0.25	0.75		Dry	0.5
Ammonia,mg/l	**8.0**	**1.0**	0.4	0.4	0.3	0.5	0.2	0.4	0.2	**1.0**	0.2	0.2	1.0	0.2	0.6	0.6	0.4		Dry	**1**
Nitrate,mg/l	1.5	1.0	5.0	2.5	2.5	3.0	1.0	5.0	4.0	1.0	0.2	5.0	nd	0.3	0.2	0.2	0.8		Dry	nd
Orthophosphate-P, mg/L	0.65	0.65	0.13	0.26	0.20	0.49	0.13	0.26	0.10	0.26	**7.83**	0.65	0.82	nd	0.13	0.33	0.49		Dry	0.16
Surfactants,mg/l	**4.8**	nd		0.6		nd														nd
Oil and Grease, mg/l	8.0	1.0		nd		1.0														nd
Total Hardness,mg/l	608	614		864		1060														331
Cadmium,mg/l	nd	nd		nd		nd														nd
Copper, mg/l	nd	nd		nd		nd														nd
Lead, mg/l	nd	nd		nd		nd														nd
Zinc, mg/l	nd	nd		nd		nd														nd
Diazinon, µg/L	nd	nd		nd		nd														nd
Chlorpyrifos, µg/L	nd	nd		nd		nd														nd
Total Coliform, MPN/100ml	> 1,600	> 1,600		> 1,600		> 1,600														>1600
Fecal Coliform, MPN/100ml	> 1,600	> 1,600		> 1,600		500														>1600
Enterococcus, MPN/100ml	500	500		> 1,600		240														>1600
2003																				
Temp.℃	23	23	21.5	25	23	22.5	26	23.5	29	23	27	25	31	24.5	20	23	28		na	33
pH	8.3	7.9	8.2	7.8	8.4	8.5	8.2	8.1	8.4	8.2	8.5	8.4	7.8	8.2	8.3	8.2	8.2		na	8.8
Turbidity,NTU	2.57	15.00	11.81	3.73	2.76	1.05	1.23	11.53	1.33	24.46	66.0	0.54	64.0	4.34	10.54	17.17	2.32		na	29.04
Conductivity,µmhos/cm	2550	2690	2730	2760	3270	4180	3090	2360	1310	2280	2760	7030	1290	620	1690	2680	2290		na	3040
Surfactants mg/l, field screening	0.25	0.63	0.50	0.25	0.25	0.38	0.25	0.50	nd	0.50	**1.0**	0.38	0.25	0.13	0.13	0.25	0.25		na	0.5
Ammonia,mg/l	0.3	0.6	0.3	0.1	0.2	0.2	0.2	0.8	0.2	**12.0**	**10.0**	0.3	0.8	0.3	0.3	0.6	0.4		na	**5**
Nitrate,mg/l	1.0	4.5	6.4	3.0	3.0	2.5	0.6	6.4	2.4	0.3	0.3	4.8	0.1	0.6	0.1	1.0	0.2		na	nd
Orthophosphate-P, mg/L	0.20	1.30	0.10	0.13	0.13	0.13	0.20	1.63	0.07	**3.26**	1.63	0.33	0.65	0.07	0.49	0.07	0.26		na	0.49
Surfactants,mg/l	nd		nd				nd			0.5					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	545		647				616			387					460					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	nd		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				nd			nd					nd					
Diazinon, µg/L	0.05		nd				nd			nd					nd					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**90,000**		**90,000**				5,000			**160,000**					1,700					
Fecal Coliform, MPN/100ml	**50,000**		**24,000**				2,300			**90,000**					1,300					
Enterococcus, MPN/100ml	800		300				80			**13,000**					800					
2004																				
Temp.℃	25	23	24	27	25		24	26	23	23	26	26	26	27	25	26	29		20	31
pH	8.4	7	7.6	7.8	7.9		7.8	7.8	7.9	7.5	7.3	7.8	8.1	8.2	8.3	7.5	7.4		7.7	8.5
Turbidity,NTU	2.71	12.5	14.01	2.18	3.9		0.82	15.29	3.02	26.98	48.15	2.95	4.85	7.75	4.29	19.67	0.45		20.94	7.52
Conductivity,µmhos/cm	2230	2350	2630	3180	2880		3120	2400	1880	2280	2070	5470	980	2900	1830	2300	2070		1000	1080
Ammonia,mg/l	0.1	0.7	0.3	0.2	0.2		0.1	0.8	0.4	**1.5**	**5**	0.1	0.2	0.2	0.4	0.4	0.8		0.6	0.3
Nitrate,mg/l	3.75	6.25	6.25	6.25	3.75		5	6.25	1.25	3.8	1.25	6.25	1.25	1.25	1.25	2.5	1.25		1.25	nd
Orthophosphate-P, mg/L	0.23	0.26	0.1	0.26	0.2		0.33	0.33	0.33	0.65	0.98	1.3	0.98	0.1	0.98	0.07	0.82		0.1	0.65
Surfactants mg/l, field screening	0.5	0.38	0.5	0.75	0.5		0.25	0.25	0.25	0.63	0.63	0.75	0.75	0.25	0.25	0.25	0.38		0.63	0.5
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	2		2				nd			nd					nd					
Total Hardness,mg/l	522		687				676			392					504					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	0.005		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				0.029			nd					nd					
Diazinon, µg/L	nd		nd				nd			nd					0.052					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**80000**		**80000**				8000			**1600000**					9000					
Fecal Coliform, MPN/100ml	1400		700				220			**160000**					nd					
Enterococcus, MPN/100ml	1300		3000				1700			**30000**					3000					

City of La Mesa Historical Data

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	60	61	64
2005																				
Temp.℃	20.3	22.0	20.5	24.2	22.8		21.1	21.1	22.9	21.2	22.1	23.6	25.7	21.2	19.2	21.4	26.1		19.9	25.7
pH	8.1	6.8	7.4	7.5	7.8		7.6	7.5	7.6	7.4	7.2	7.6	7.2	8.0	7.6	7.2	8.4		7.4	8.8
Turbidity,NTU	10.71	22.94	7.86	15.14	17.87		0.52	6.49	15.81	9.02	14.74	1.01	15.43	1.70	1.18	17.57	0.32		4.78	2.35
Conductivity,µmhos/cm	1891	1670	1740	1590	2830		2200	1457	1039	990	977	2110	3050	2690	1736	2010	1980		900	930
Surfactants mg/l, field screening	0.75	0.50	0.50	0.38	0.38		0.50	0.50	0.13	0.50	0.25	0.50	**1.00**	**1.25**	**1.25**	0.25	0.25		0.88	0.50
Ammonia,mg/l	**1.0**	0.7	0.8	0.3	0.2		0.2	0.4	**10.0**	0.3	0.8	0.2	0.7	0.1	0.3	0.6	0.2		0.4	0.4
Nitrate,mg/l	2.50	5.00	7.50	5.00	3.75		3.75	6.25	1.25	1.25	1.25	3.75	1.25	0.25	0.25	1.25	2.50		1.25	1.25
Orthophosphate-P, mg/L	0.33	0.26	0.10	1.63	0.20		0.20	0.26	2.12	0.10	0.13	0.33	0.49	0.13	0.26	0.07	0.20		0.10	0.49
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	791		794				871			461					521					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	nd		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				0.026			0.027					nd					
Diazinon, µg/L	nd		nd				nd			nd					0.11					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**240,000**		**130,000**				**240,000**			30,000					30,000					
Fecal Coliform, MPN/100ml	**24,000**		230				170			nd					230					
Enterococcus, MPN/100ml	**160,000**		800				80			500					800					
2006																				
Temp.℃	25.0	23.8	23.4	24.4	24.3		25.5	24.5	25.6	24.4	24.5	25.3	29.7	22.9	27.5	23.7	29.5		24.3	27.0
pH	8.3	6.9	7.7	7.9	7.8		7.8	8.2	6.9	7.7	7.5	7.7	8.4	8.1	7.7	7.4	8.0		7.4	8.9
Turbidity,NTU	1.83	47.13	9.94	2.02	4.43		1.02	10.09	7.77	11.93	22.31	1.64	8.27	4.56	3.51	13.32	2.34		9.37	6.24
Conductivity,µmhos/cm	2.16	1.95	2.31	5.16	2.44		2.51	1.94	2.50	1.55	2.19	5.56	2.40	2.62	1.71	2.33	1.86		2.3	0.90
Surfactants mg/l, field screening	0.25	0.25	0.50	0.25	0.50		0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.25	0.25	0.50	0.25		0.25	**1.5**
Ammonia,mg/l	0.3	0.6	0.2	0.6	0.1		0.1	0.3	**1.50**	0.2	1.0	0.2	0.4	0.2	0.8	0.8	0.4		**2.5**	0.8
Nitrate,mg/l	3.75	3.75	5.00	6.25	3.75		5.00	5.00	2.50	2.50	2.50	7.50	3.75	1.25	2.50	2.50	2.50		3.75	2.50
Orthophosphate-P, mg/L	0.10	0.26	0.10	0.26	0.33		0.07	0.20	0.07	0.07	0.20	0.26	0.33	0.10	0.26	0.10	0.07		1.14	0.49
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	524		686				508			434					438					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	0.008		nd				nd			0.005					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	0.028		nd				nd			0.028					nd					
Diazinon, µg/L	nd		nd				nd			nd					nd					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**130,000**		**50,000**				**80,000**			23,000					**240,000**					
Fecal Coliform, MPN/100ml	5,000		**30,000**				3,000			220					20					
Enterococcus, MPN/100ml	5000		500				80			40					900					
2007																				
Temp.℃	20.2	23.1	20.8	22.2	22.4		23	22.2	25.7	22.8	25.2	22.5	24.1	22.7	21.1	23.1	26.4	23.9	ns	26
pH	8.5	7.2	7.7	8	8		8.3	8	8.7	7.9	7.6	8	8.3	8.2	7.7	7.5	8.1	8	ns	**10**
Turbidity,NTU	4.05	12.51	10.85	2.22	8.07		1.27	6.47	2.36	9.24	4.91	2.25	4.95	3.34	2.52	14.63	1.54	3.18	ns	3.43
Conductivity,mS/cm	2.22	2.14	2.25	3.94	3.32		2.56	2.01	1.78	1.9	1.79	5.3	3.72	2.65	2.19	2.14	2	2.63	ns	1.12
Surfactants mg/l, field screening	0.5	0.5	0.5	0.75	0.5		0.38	0.38	0.25	0.62	0.38	0.5	0.5	0.25	0.38	0.25	0.25	0.63	ns	0.63
Ammonia,mg/l	0.2	0.5	0.3	0.3	0.2		0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.4	0.2	0.2	ns	0.1
Nitrate,mg/l	1.81	2.01	3.96	5.49	2.67		3.25	3.77	1.72	0.68	0.45	5.85	2.98	0.41	0.09	0.23	1.63	0.81	ns	0.1
Orthophosphate-P, mg/L	0.16	0.26	0.13	0.52	0.26		0.13	0.36	0.03	0.2	0.33	0.34	0.49	0.11	0.33	0.03	0.16	0.29	ns	0.1
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	631		688				592			564					664					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	0.005		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				nd			nd					nd					
Diazinon, µg/L	nd		nd				nd			nd					nd					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	17,000		5,000				8,000			13,000					2,200					
Fecal Coliform, MPN/100ml	8,000		1,700				2,300			3,000					nd					
Enterococcus, MPN/100ml	1,300		500				1,300			**14,000**					170					

City of La Mesa Historical Data

Site No.	907-ALV-001	907-ALV-002	907-ALV-003	907-ALV-004	907-ALV-005	907-ALV-006	907-ALV-007	907-ALV-008	907-ALV-120	907-ALV-12A	907-ALV-580	907-ALV-590	907-ALV-640	908-LEM-520	908-UNI-001	908-UNI-002	908-UNI-003	908-UNI-004	908-UNI-005	909-SPR-001	909-SPR-002
2008																					
Temp.℃	23.4	22.5	ns	22.1	26.9	26.5	25.5	22.8	24.0	23.8	25.5	26.8	23.0	25.1	23.7	24.4	24.5	24.4	24.0	23.9	25.5
pH	7.8	7.3	ns	7.7	7.0	7.1	7.9	7.7	7.1	7.7	7.5	7.4	8.8	8.2	7.8	7.9	8.1	7.4	7.2	7.5	8.2
Turbidity,NTU	3.97	421	ns	3.34	1.85	8.57	1.47	3.12	16.78	8.70	12.91	1.58	3.30	7.56	1.05	13.95	0.45	2.39	3.23	2.30	8.56
Conductivity,mS/cm	3.17	1.89	ns	1.19	3.7	2.49	2.84	2.77	2.16	2.56	2.35	2.45	1.17	4.79	2.95	5.7	2.27	2.65	4.31	2.41	2.2
Surfactants mg/l, field test	0.25	0.75	ns	0.38	0.25	0.38	0.50	0.38	0.25	0.25	0.25	0.25	0.25	0.50	0.50	0.75	0.25	0.50	0.50	0.13	0.13
Ammonia,mg/l	0.3	0.6	ns	0.4	0.3	0.3	0.2	0.3	0.4	0.4	0.5	0.3	0.1	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.3
Nitrate,mg/l	1.27	2.44	ns	1.31	2.64	1.18	1.20	2.40	2.33	4.86	1.27	1.31	0.45	3.96	3.41	6.08	4.00	1.56	5.83	2.67	9.63
Orthophosphate-P, mg/L	0.36	0.33	ns	0.33	0.13	0.29	0.26	0.13	0.36	0.13	0.07	0.16	0.26	0.42	0.10	0.33	0.13	0.29	0.62	0.27	0.23
Oil and Grease, mg/l	nd	nd													nd	nd	nd	nd			
Total Hardness,mg/l	851	536													753	1,570	527	646			
Cadmium,mg/l	nd	nd													nd	nd	nd	nd			
Copper, mg/l	nd	0.014													nd	0.01	nd	0.005			
Lead, mg/l	nd	nd													nd	nd	nd	nd			
Zinc, mg/l	nd	0.075													nd	0.038	nd	nd			
Diazinon, µg/L	nd	nd													nd	nd	nd	nd			
Chlorpyrifos, µg/L	nd	nd													nd	nd	nd	nd			
Total Coliform, MPN/100ml	30,000	**300,000**													30,000	**50,000**	30,000	**50,000**			
Fecal Coliform, MPN/100ml	7,000	**50,000**													800	7,000	1,700	13,000			
Enterococcus, MPN/100ml	800	**90,000**													1,300	**24,000**	900	8,000			

Appendix B

Photographs of Sampling Locations

Site 907-ALV-001	
Site 907-ALV-002	
Site 907-ALV-003	

Site 907-ALV-004	
Site 907-ALV-005	
Site 907-ALV-006	

Site 907-ALV-007	
Site 907-ALV-008	
Site 907-ALV-120	

Site 907-ALV-12A	
Site 907-ALV-580	
Site 907-ALV-590	

Site 907-ALV-640	
Site 908-LEM-520	
Site 908-UNI-001	

Site 908-UNI-002	
Site 908-UNI-003	
Site 908-UNI-004	

Site 908-UNI-005	
Site 909-SPR-001	
Site No 909-SPR-002	

Appendix C

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

10 June 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906093

Project Name: La Mesa MSH Sampling 200912W-23

Enclosed are the results of analyses for samples received by the laboratory on 06/02/09 16:52. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa MSH Sampling 200912W-23

EMA Log #: 0906093

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-002	0906093-01	Water	06/02/09 11:30	06/02/09 16:52
907-ALV-590	0906093-02	Water	06/02/09 12:40	06/02/09 16:52
908-UNI-002	0906093-03	Water	06/02/09 14:30	06/02/09 16:52
908-UNI-001	0906093-04	Water	06/02/09 15:25	06/02/09 16:52

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MSH Sampling 200912W-23

EMA Log #: 0906093

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-002 (0906093-01) Water Sampled: 06/02/09 11:30 Received: 06/02/09 16:52									
Total Dissolved Solids	**1370**	20.0	mg/l	1	9060817	06/08/09	06/09/09	SM2540 C	
Total Suspended Solids	ND	20.0	"	"	9060537	06/05/09	06/08/09	SM2540 D	
907-ALV-590 (0906093-02) Water Sampled: 06/02/09 12:40 Received: 06/02/09 16:52									
Total Dissolved Solids	**1550**	20.0	mg/l	1	9060817	06/08/09	06/09/09	SM2540 C	
Total Suspended Solids	ND	20.0	"	"	9060537	06/05/09	06/08/09	SM2540 D	
908-UNI-002 (0906093-03) Water Sampled: 06/02/09 14:30 Received: 06/02/09 16:52									
Total Suspended Solids	ND	20.0	mg/l	1	9060537	06/05/09	06/08/09	SM2540 D	
908-UNI-001 (0906093-04) Water Sampled: 06/02/09 15:25 Received: 06/02/09 16:52									
Total Suspended Solids	ND	20.0	mg/l	1	9060537	06/05/09	06/08/09	SM2540 D	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MSH Sampling 200912W-23

EMA Log #: 0906093

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-590 (0906093-02) Water Sampled: 06/02/09 12:40 Received: 06/02/09 16:52									
Total Coliforms	**5000**	200	MPN/100 ml	100	9060503	06/02/09	06/06/09	SM 9221 B, E	
Fecal Coliforms	ND	2	"	1	"	"	06/05/09	"	
Enterococcus	**80**	20	"	10	9060504	"	06/06/09	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MSH Sampling 200912W-23

EMA Log #: 0906093

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060537										
Blank (9060537-BLK1)				Prepared: 06/05/09	Analyzed: 06/08/09					
Total Suspended Solids	ND	20.0	mg/l							
Duplicate (9060537-DUP1)		**Source: 0906093-01**		Prepared: 06/05/09	Analyzed: 06/08/09					
Total Suspended Solids	ND	20.0	mg/l		ND				20	QR-04
Reference (9060537-SRM1)				Prepared: 06/05/09	Analyzed: 06/08/09					
Total Suspended Solids	52.0	20.0	mg/l	52.7		99	30.26-105.5			
Batch 9060817										
Blank (9060817-BLK1)				Prepared: 06/08/09	Analyzed: 06/09/09					
Total Dissolved Solids	ND	20.0	mg/l							
Duplicate (9060817-DUP1)		**Source: 0906172-01**		Prepared: 06/08/09	Analyzed: 06/09/09					
Total Dissolved Solids	601	20.0	mg/l		676			12	20	
Reference (9060817-SRM1)				Prepared: 06/08/09	Analyzed: 06/09/09					
Total Dissolved Solids	192	20.0	mg/l	178		108	7.08-112.9			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa MS4 sampling

Project #: 2009 12W83 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □	8015B (TPH) □ Gas □ Diesel □ E	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestic	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	□ pH □ EC X TSS X TDS	□ Nitrate □ Nitrite □ TKN □ NH	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Orga	Cd Cr Cu Pb Ni Ag Zn	Coliform, X Total (MTF) X Fecal
1	907-AIV-002	6/2/09	11:30	Water	3/6 P									X					
2	907-AIV-590	"	12:40	"	1/4 G/P									X					X
3	908-UNI-002	"	14:30	"	1/4 "									X					
4	908-UNI-001	"	18:25	"	1/4 "									X					
5																			
6																			
7																			
8																			
9																			
10																			

NO TDS LWL

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME
Signature: Manouchehr Dadkhah	6-2-09 16:52
Print: Manouchehr Dadkhah	
Company: D. Max Eng Inc.	
Signature	
Print	
Company:	
Signature	
Print	
Company:	

Project/Sample Comments: 5°C on Ice

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White- EMA Canary - Accounting Pink - Client (

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 d of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

17 June 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906092

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200912 W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/02/09 16:51. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906092

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-Alv-002	0906092-01	Water	06/02/09 11:30	06/02/09 16:51
908-UNI-002	0906092-02	Water	06/02/09 14:30	06/02/09 16:51
908-UNI-001	0906092-03	Water	06/02/09 15:25	06/02/09 16:51

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906092

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-Alv-002 (0906092-01) Water Sampled: 06/02/09 11:30 Received: 06/02/09 16:51									
Lead	ND	0.001	mg/l	1	9060712	06/07/09	06/17/09	EPA 200.8	
Copper	**0.002**	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
Cadmium	ND	0.001	"	"	"	"	"	"	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906092

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-Alv-002 (0906092-01) Water Sampled: 06/02/09 11:30 Received: 06/02/09 16:51									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9060248	06/02/09	06/06/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*104 %*	*60-130*		"	"	"	"	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906092

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-Alv-002 (0906092-01) Water Sampled: 06/02/09 11:30 Received: 06/02/09 16:51									
Hardness (Total)	**596**	100	mg CaCO3/L	10	9060340	06/03/09	06/05/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9060821	06/08/09	06/08/09	EPA 1664A	
908-UNI-002 (0906092-02) Water Sampled: 06/02/09 14:30 Received: 06/02/09 16:51									
Oil & Grease	ND	5	mg/l	1	9060821	06/08/09	06/08/09	EPA 1664A	
908-UNI-001 (0906092-03) Water Sampled: 06/02/09 15:25 Received: 06/02/09 16:51									
Oil & Grease	ND	5	mg/l	1	9060821	06/09/09	06/09/09	EPA 1664A	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906092

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-Alv-002 (0906092-01) Water Sampled: 06/02/09 11:30 Received: 06/02/09 16:51									
Total Coliforms	**50000**	2000	MPN/100 ml	1000	9060503	06/02/09	06/06/09	SM 9221 B, E	
Fecal Coliforms	**17000**	200	"	100	"	"	06/05/09	"	
Enterococcus	**17000**	200	"	"	9060504	"	06/06/09	SM 9230 A, B	
908-UNI-002 (0906092-02) Water Sampled: 06/02/09 14:30 Received: 06/02/09 16:51									
Total Coliforms	**22000**	200	MPN/100 ml	100	9060503	06/02/09	06/06/09	SM 9221 B, E	
Fecal Coliforms	**220**	20	"	10	"	"	06/05/09	"	
Enterococcus	**1300**	20	"	"	9060504	"	06/06/09	SM 9230 A, B	
908-UNI-001 (0906092-03) Water Sampled: 06/02/09 15:25 Received: 06/02/09 16:51									
Total Coliforms	**7000**	200	MPN/100 ml	100	9060503	06/02/09	06/06/09	SM 9221 B, E	
Fecal Coliforms	**300**	20	"	10	"	"	06/05/09	"	
Enterococcus	**1300**	20	"	"	9060504	"	06/06/09	SM 9230 A, B	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906092

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060712										
Blank (9060712-BLK1)				Prepared: 06/07/09		Analyzed: 06/17/09				
Cadmium	ND	0.001	mg/l							
Copper	ND	0.001	"							
Lead	ND	0.001	"							
Zinc	ND	0.020	"							
LCS (9060712-BS1)				Prepared: 06/07/09		Analyzed: 06/17/09				
Copper	0.052	0.001	mg/l	0.0500		104	75-125			
Cadmium	0.052	0.001	"	0.0500		104	75-125			
Lead	0.051	0.001	"	0.0500		102	75-125			
Zinc	0.050	0.020	"	0.0500		99	75-125			
LCS Dup (9060712-BSD1)				Prepared: 06/07/09		Analyzed: 06/17/09				
Lead	0.050	0.001	mg/l	0.0500		101	75-125	1	20	
Copper	0.051	0.001	"	0.0500		102	75-125	2	20	
Cadmium	0.050	0.001	"	0.0500		101	75-125	3	20	
Zinc	0.048	0.020	"	0.0500		96	75-125	3	20	
Duplicate (9060712-DUP1)		**Source: 0906164-05**		Prepared: 06/07/09		Analyzed: 06/17/09				
Cadmium	ND	0.001	mg/l		ND				20	
Copper	0.002	0.001	"		0.002			6	20	
Lead	ND	0.001	"		ND				20	
Zinc	ND	0.020	"		ND				20	
Matrix Spike (9060712-MS1)		**Source: 0906164-05**		Prepared: 06/07/09		Analyzed: 06/17/09				
Cadmium	0.045	0.001	mg/l	0.0500	ND	90	75-125			
Copper	0.044	0.001	"	0.0500	0.002	84	75-125			
Lead	0.050	0.001	"	0.0500	ND	101	75-125			
Zinc	0.047	0.020	"	0.0500	ND	94	75-125			

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906092

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060712										
Matrix Spike Dup (9060712-MSD1)		**Source: 0906164-05**		Prepared: 06/07/09	Analyzed: 06/17/09					
Zinc	0.044	0.020	mg/l	0.0500	ND	88	75-125	6	20	
Cadmium	0.042	0.001	"	0.0500	ND	84	75-125	7	20	
Lead	0.050	0.001	"	0.0500	ND	100	75-125	0.5	20	
Copper	0.042	0.001	"	0.0500	0.002	79	75-125	6	20	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906092

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060248										
Blank (9060248-BLK1)				Prepared: 06/02/09 Analyzed: 06/06/09						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.230*		*"*	*0.250*		*92*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
LCS (9060248-BS1)				Prepared: 06/02/09 Analyzed: 06/06/09						
Bolstar	0.37	0.10	ug/l	0.500		74	60-130			
Diazinon	0.46	0.05	"	0.500		92	60-130			
Ethoprop	0.42	0.05	"	0.500		84	60-130			
Mevinphos	0.42	0.25	"	0.500		84	60-130			
Methyl parathion	0.39	0.10	"	0.500		78	60-130			
Phorate	0.39	0.05	"	0.500		78	60-130			
Ronnel	0.43	0.25	"	0.500		86	60-130			
Trichlorinate	0.44	0.05	"	0.500		88	60-130			
Surrogate: Triphenyl phosphate	*0.250*		*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.260*		*"*	*0.250*		*104*	*60-130*			
LCS Dup (9060248-BSD1)				Prepared: 06/02/09 Analyzed: 06/06/09						
Bolstar	0.36	0.10	ug/l	0.500		72	60-130	3	30	
Diazinon	0.45	0.05	"	0.500		90	60-130	2	30	
Ethoprop	0.39	0.05	"	0.500		78	60-130	7	30	
Mevinphos	0.39	0.25	"	0.500		78	60-130	7	30	
Methyl parathion	0.39	0.10	"	0.500		78	60-130	0	30	
Phorate	0.41	0.05	"	0.500		82	60-130	5	30	
Ronnel	0.44	0.25	"	0.500		88	60-130	2	30	
Trichlorinate	0.44	0.05	"	0.500		88	60-130	0	30	
Surrogate: Triphenyl phosphate	*0.260*		*"*	*0.250*		*104*	*60-130*			
Surrogate: Tribuytlphosphate	*0.260*		*"*	*0.250*		*104*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906092

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060340										
Blank (9060340-BLK1)				Prepared: 06/03/09	Analyzed: 06/04/09					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9060340-DUP1)		**Source: 0905200-02**		Prepared: 06/03/09	Analyzed: 06/04/09					
Hardness (Total)	561	100	mg CaCO3/L		542			3	20	
Batch 9060821										
Blank (9060821-BLK1)				Prepared & Analyzed: 06/08/09						
Oil & Grease	ND	5	mg/l							
LCS (9060821-BS1)				Prepared & Analyzed: 06/08/09						
Oil & Grease	33	5	mg/l	40.0		82	78-114			
LCS Dup (9060821-BSD1)				Prepared & Analyzed: 06/08/09						
Oil & Grease	35	5	mg/l	40.0		86	78-114	6	20	
Matrix Spike (9060821-MS1)		**Source: 0905768-01**		Prepared & Analyzed: 06/08/09						
Oil & Grease	32	5	mg/l	40.0	ND	79	78-114			

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Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry weather

Project #: 200912-W-1 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2	8015B (TPH) □ Gas □ Diesel □ E	624/8260 (VOC) Full BTXE MTI	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestic	608 / 8082 (Polychlorinated Biph	8141) (Organophosphorus Pesticid	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Orga	Cd Cr Cu Pb Ni Ag Zn	Coliform, Total (MTF) Fecal	
1	907-Alv-002	6/2/09	11:30	water	3/ G/p	X						X						X	X	
2	908-UNI-002	"	14:30	"	1/6 G/p	X						X						X	X	
3	908-UNI-001	"	15:25	"	1/4 G/p	X						X						X	X	
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

RELINQUISHED BY	DATE/TIME
Signature: Manouchehr Dadkhah	6-2-09 16:51
Print: Manouchehr Dadkhah	
Company: D-Max Eng.	
Signature	
Print	
Company:	
Signature	
Print	
Company:	

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments: 5°C on ice

[1]Additional costs may apply, consult a project manager for details. White- EMA Canary - Accounting Pink - Client (

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 d of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

19 June 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906185

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:MS4 Sampling 200912W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/05/09 13:44. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906185

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
908-UNI-001	0906185-01	Stormwater	06/05/09 10:15	06/05/09 13:44
908-UNI-002	0906185-02	Stormwater	06/05/09 10:35	06/05/09 13:44
907-ALV-002	0906185-03	Stormwater	06/05/09 11:50	06/05/09 13:44
907-ALV-590	0906185-04	Stormwater	06/05/09 12:55	06/05/09 13:44

NOTE: The TKN analysis was performed by a sub-contract laboratory, results to follow in a separate report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906185

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-001 (0906185-01) Stormwater	**Sampled: 06/05/09 10:15**		**Received: 06/05/09 13:44**						
Cadmium	ND	0.001	mg/l	1	9061707	06/17/09	06/18/09	EPA 200.8	
Copper	**0.003**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
908-UNI-002 (0906185-02) Stormwater	**Sampled: 06/05/09 10:35**		**Received: 06/05/09 13:44**						
Zinc	**0.048**	0.020	mg/l	1	9061707	06/17/09	06/18/09	EPA 200.8	
Lead	ND	0.001	"	"	"	"	"	"	
Copper	**0.005**	0.001	"	"	"	"	"	"	
Cadmium	ND	0.001	"	"	"	"	"	"	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906185

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-001 (0906185-01) Stormwater	**Sampled: 06/05/09 10:15**		**Received: 06/05/09 13:44**						**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9061007	06/10/09	06/12/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*96 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*		"	"	"	"	
908-UNI-002 (0906185-02) Stormwater	**Sampled: 06/05/09 10:35**		**Received: 06/05/09 13:44**						**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9061007	06/10/09	06/12/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*132 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*112 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906185

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-001 (0906185-01) Stormwater Sampled: 06/05/09 10:15 Received: 06/05/09 13:44									
Hardness (Total)	**796**	100	mg CaCO3/L	10	9060714	06/07/09	06/08/09	EPA 200.7	
908-UNI-002 (0906185-02) Stormwater Sampled: 06/05/09 10:35 Received: 06/05/09 13:44									
Hardness (Total)	**1740**	100	mg CaCO3/L	10	9060714	06/07/09	06/08/09	EPA 200.7	
907-ALV-002 (0906185-03) Stormwater Sampled: 06/05/09 11:50 Received: 06/05/09 13:44									
Nitrate/Nitrite as N	**2.01**	0.25	mg/l	5	9060902	06/09/09	06/09/09	SM4500 NO3 E	
Total Nitrogen	**4.0**	0.5	"	1	9061906	06/17/09	06/17/09	Calculation	
Phosphorus, Total	**0.41**	0.05	"	"	9061010	06/10/09	06/10/09	SM4500 P B, E	
907-ALV-590 (0906185-04) Stormwater Sampled: 06/05/09 12:55 Received: 06/05/09 13:44									
Nitrate/Nitrite as N	**1.48**	0.25	mg/l	5	9060902	06/09/09	06/09/09	SM4500 NO3 E	
Total Nitrogen	**4.6**	0.5	"	1	9061906	06/17/09	06/17/09	Calculation	
Phosphorus, Total	**0.26**	0.05	"	"	9061010	06/10/09	06/10/09	SM4500 P B, E	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906185

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061707										
Blank (9061707-BLK1)				Prepared: 06/17/09		Analyzed: 06/18/09				
Copper	ND	0.001	mg/l							
Cadmium	ND	0.001	"							
Lead	ND	0.001	"							
Zinc	ND	0.020	"							
LCS (9061707-BS1)				Prepared: 06/17/09		Analyzed: 06/18/09				
Cadmium	0.051	0.001	mg/l	0.0500		103	75-125			
Zinc	0.052	0.020	"	0.0500		105	75-125			
Lead	0.053	0.001	"	0.0500		106	75-125			
Copper	0.052	0.001	"	0.0500		104	75-125			
LCS Dup (9061707-BSD1)				Prepared: 06/17/09		Analyzed: 06/18/09				
Lead	0.052	0.001	mg/l	0.0500		105	75-125	0.8	20	
Copper	0.052	0.001	"	0.0500		104	75-125	0.2	20	
Zinc	0.054	0.020	"	0.0500		108	75-125	3	20	
Cadmium	0.052	0.001	"	0.0500		103	75-125	0.2	20	
Duplicate (9061707-DUP1)		**Source: 0906342-03**		Prepared: 06/17/09		Analyzed: 06/18/09				
Zinc	ND	0.020	mg/l		ND				20	
Cadmium	ND	0.001	"		ND				20	
Lead	ND	0.001	"		ND				20	
Copper	ND	0.001	"		ND				20	
Matrix Spike (9061707-MS1)		**Source: 0906342-03**		Prepared: 06/17/09		Analyzed: 06/18/09				
Cadmium	0.050	0.001	mg/l	0.0500	ND	100	75-125			
Zinc	0.051	0.020	"	0.0500	ND	103	75-125			
Lead	0.051	0.001	"	0.0500	ND	103	75-125			
Copper	0.052	0.001	"	0.0500	ND	104	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906185

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061707										
Matrix Spike Dup (9061707-MSD1)		**Source: 0906342-03**		Prepared: 06/17/09	Analyzed: 06/18/09					
Copper	0.052	0.001	mg/l	0.0500	ND	104	75-125	0.06	20	
Zinc	0.051	0.020	"	0.0500	ND	103	75-125	0.08	20	
Cadmium	0.050	0.001	"	0.0500	ND	100	75-125	0.2	20	
Lead	0.053	0.001	"	0.0500	ND	106	75-125	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906185

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061007										
Blank (9061007-BLK1)				Prepared: 06/10/09 Analyzed: 06/12/09						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.270*		*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
LCS (9061007-BS1)				Prepared: 06/10/09 Analyzed: 06/12/09						
Bolstar	0.39	0.10	ug/l	0.500		78	60-130			
Diazinon	0.46	0.05	"	0.500		92	60-130			
Ethoprop	0.50	0.05	"	0.500		100	60-130			
Mevinphos	0.39	0.25	"	0.500		78	60-130			
Methyl parathion	0.41	0.10	"	0.500		82	60-130			
Phorate	0.41	0.05	"	0.500		82	60-130			
Ronnel	0.47	0.25	"	0.500		94	60-130			
Trichlorinate	0.47	0.05	"	0.500		94	60-130			
Surrogate: Triphenyl phosphate	*0.290*		*"*	*0.250*		*116*	*60-130*			
Surrogate: Tribuytlphosphate	*0.290*		*"*	*0.250*		*116*	*60-130*			
LCS Dup (9061007-BSD1)				Prepared: 06/10/09 Analyzed: 06/12/09						
Bolstar	0.40	0.10	ug/l	0.500		80	60-130	3	30	
Diazinon	0.45	0.05	"	0.500		90	60-130	2	30	
Ethoprop	0.50	0.05	"	0.500		100	60-130	0	30	
Mevinphos	0.43	0.25	"	0.500		86	60-130	10	30	
Methyl parathion	0.40	0.10	"	0.500		80	60-130	2	30	
Phorate	0.43	0.05	"	0.500		86	60-130	5	30	
Ronnel	0.46	0.25	"	0.500		92	60-130	2	30	
Trichlorinate	0.46	0.05	"	0.500		92	60-130	2	30	
Surrogate: Triphenyl phosphate	*0.290*		*"*	*0.250*		*116*	*60-130*			
Surrogate: Tribuytlphosphate	*0.290*		*"*	*0.250*		*116*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906185

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9060714										
Blank (9060714-BLK1)				Prepared: 06/07/09	Analyzed: 06/08/09					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9060714-DUP1)		**Source: 0906116-01**		Prepared: 06/07/09	Analyzed: 06/08/09					
Hardness (Total)	442	100	mg CaCO3/L		446			1	20	
Batch 9060902										
Blank (9060902-BLK1)				Prepared & Analyzed: 06/09/09						
Nitrate/Nitrite as N	ND	0.05	mg/l							
LCS (9060902-BS1)				Prepared & Analyzed: 06/09/09						
Nitrate/Nitrite as N	0.49	0.05	mg/l	0.500		98	80-120			
LCS Dup (9060902-BSD1)				Prepared & Analyzed: 06/09/09						
Nitrate/Nitrite as N	0.50	0.05	mg/l	0.500		101	80-120	3	20	
Duplicate (9060902-DUP1)		**Source: 0906245-03**		Prepared & Analyzed: 06/09/09						
Nitrate/Nitrite as N	0.01	0.05	mg/l		0.01			26	20	QR-04
Matrix Spike (9060902-MS1)		**Source: 0906245-03**		Prepared & Analyzed: 06/09/09						
Nitrate/Nitrite as N	0.48	0.05	mg/l	0.500	0.01	93	80-120			
Matrix Spike Dup (9060902-MSD1)		**Source: 0906245-03**		Prepared & Analyzed: 06/09/09						
Nitrate/Nitrite as N	0.44	0.05	mg/l	0.500	0.01	86	80-120	8	20	
Batch 9061010										
Blank (9061010-BLK1)				Prepared & Analyzed: 06/10/09						
Phosphorus, Total	ND	0.05	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906185

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061010										
LCS (9061010-BS1)				Prepared & Analyzed: 06/10/09						
Phosphorus, Total	0.48	0.05	mg/l	0.500		96	80-120			
LCS Dup (9061010-BSD1)				Prepared & Analyzed: 06/10/09						
Phosphorus, Total	0.47	0.05	mg/l	0.500		94	80-120	2	20	
Duplicate (9061010-DUP1)		**Source: 0906172-01**		Prepared & Analyzed: 06/10/09						
Phosphorus, Total	0.04	0.05	mg/l		0.04			13	20	
Matrix Spike (9061010-MS1)		**Source: 0906172-01**		Prepared & Analyzed: 06/10/09						
Phosphorus, Total	0.56	0.05	mg/l	0.500	0.04	105	80-120			
Matrix Spike Dup (9061010-MSD1)		**Source: 0906172-01**		Prepared & Analyzed: 06/10/09						
Phosphorus, Total	0.48	0.05	mg/l	0.500	0.04	89	80-120	16	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
QR-04	The RPD between the sample and sample duplicate is not valid since both results are below the reporting limit for this analyte.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: 858 586 6600 Fax: 858 586 6644

Email:

Billing Address:

Project ID: La Mesa Dry Weather & MS4 Sampling

Project #: 200912W-1 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □	8015B (TPH) □ Gas □ Diesel □ E	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestic	608 / 8082 (Polychlorinated Biphe	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Orga	Cd Cr Cu Pb Ni Ag Zn	Coliform, □ Total (MTF) □ Fecal
1	908-UNI-001	6/5/09	10:15	SW	2P, 1G							X						X	
2	908-UNI-002	↓	10:35	SW	2P, 1G							X						X	
3	907-ALV-002	↓	11:50	SW	1P														
4	907-ALV-590	↓	12:55	SW	1P														
5																			
6																			
7																			
8																			
9																			
10																			

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temp @ Receipt: _____

COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME
Signature	6/5/09 13:44
Print: Joe Leonard	
Company: D-Max Eng	
Signature	
Print	
Company:	
Signature	
Print	
Company:	

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White- EMA Canary - Accounting Pink - Client

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 d of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 6°C on Ice

19 June 2009

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0906185

Project Name: La Mesa Dry Weather Monitoring
Project Number: MS4 Sampling 2009 12W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- Nitrogen, TKN - Liquid

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

4340 Viewridge Avenue, Suite A • San Diego, California 92123 • (858) 560-7717 • Fax (858) 560-7763
Analytical Chemistry Laboratory

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

LABORATORY REPORT

Prepared For: EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jamey A. Cote

Project: 0906185

Sampled: 06/05/09
Received: 06/10/09
Issued: 06/19/09 16:16

NELAP #01108CA California ELAP#2706 CSDLAC #10256 AZ #AZ0671 NV #CA01531

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.
This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

LABORATORY ID	CLIENT ID	MATRIX
ISF1192-01	0906185-03	Water
ISF1192-02	0906185-04	Water

Reviewed By:

TestAmerica Irvine

D.J. Watson
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jamey A. Cote

Project ID: 0906185
Report Number: ISF1192

Sampled: 06/05/09
Received: 06/10/09

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISF1192-01 (0906185-03 - Water)								
Reporting Units: mg/l								
Total Kjeldahl Nitrogen	SM4500-Norg C	9F17124	0.50	**2.0**	1	6/17/2009	6/17/2009	
Sample ID: ISF1192-02 (0906185-04 - Water)								
Reporting Units: mg/l								
Total Kjeldahl Nitrogen	SM4500-Norg C	9F17124	0.50	**3.1**	1	6/17/2009	6/17/2009	

TestAmerica Irvine

D.J. Watson
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123
Attention: Jamey A. Cote

Project ID: 0906185
Report Number: ISF1192

Sampled: 06/05/09
Received: 06/10/09

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 9F17124 Extracted: 06/17/09										
Blank Analyzed: 06/17/2009 (9F17124-BLK1)										
Total Kjeldahl Nitrogen	ND	0.50	mg/l							
LCS Analyzed: 06/17/2009 (9F17124-BS1)										
Total Kjeldahl Nitrogen	19.9	0.50	mg/l	20.0		99	85-120			
Matrix Spike Analyzed: 06/17/2009 (9F17124-MS1)					**Source: ISF1760-04**					
Total Kjeldahl Nitrogen	10.9	0.50	mg/l	10.0	1.68	92	85-120			
Matrix Spike Dup Analyzed: 06/17/2009 (9F17124-MSD1)					**Source: ISF1760-04**					
Total Kjeldahl Nitrogen	10.9	0.50	mg/l	10.0	1.68	92	85-120	0	15	

TestAmerica Irvine

D.J. Watson
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.	Project ID: 0906185	
4340 Viewridge Avenue, Suite A		Sampled: 06/05/09
San Diego, CA 92123	Report Number: ISF1192	Received: 06/10/09
Attention: Jamey A. Cote		

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference

TestAmerica Irvine

D.J. Watson
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
17461 Derian Avenue, Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

EnviroMatrix Analytical, Inc.	Project ID: 0906185	
4340 Viewridge Avenue, Suite A		Sampled: 06/05/09
San Diego, CA 92123	Report Number: ISF1192	Received: 06/10/09
Attention: Jamey A. Cote		

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
SM4500-Norg C	Water		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Irvine

D.J. Watson
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0906185

ISF1192

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Test America-Irvine [S]
17461 Derian Avenue, Suite 100
Irvine, California 92614-5817
Phone :949-261-1022
Fax: 949-261-1228

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0906185-03	**Water**	**Sampled:06/05/09 11:50**		
Nitrogen, TKN - L	~~06/12/09 16:00~~	07/03/09 11:50		
Containers Supplied:				
250 mL Poly H2SO4 (B)				
Sample ID: 0906185-04	**Water**	**Sampled:06/05/09 11:50**		
Nitrogen, TKN - L	~~06/12/09 16:00~~	07/03/09 11:50		
Containers Supplied:				
250 mL Poly H2SO4 (B)				

Send report to jbeyer@enviromatrixinc.com, lluick@enviromatrixinc.com, and reports@enviromatrixinc.com

0.0
6/11/09
5:15

Released By	Date	Received By	Date
[signature]	6-10-09 1438	Efrain Figueroa TA	6-10-09 14:38
Efrain Figueroa TA	6-10-09 17:55	[signature]	6/10/09 17:55
#06			1.6 C°

Phone: 858 586 6600 Fax: 858 586 6644

Email:

Billing Address:

Project ID: La Mesa Dry Weather & MS4 Sampling

Project #: 200912W-1 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 16	8015B (TPH) □ Gas □ Diesel □ Ex	624/8260 (VOC) Full BTXE MTB	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestici	608 / 8082 (Polychlorinated Biphen	8141 (Organophosphorus Pesticide	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TT	TCLP (RCRA) □ Metals □ Organ	Cd Cr Cu Pb Ni Ag Zn	Coliform □ Total (MTF) □ Fecal (
1	908-UNI-001	6/5/09	10:15	SW	2P, 1G							X						X X	
2	908-UNI-002	↓	10:35	SW	2P, 1G							X						X X	
3	907-ALV-002		11:50	SW	1P														
4	907-ALV-590		12:55	SW	1P														
5																			
6																			
7																			
8																			
9																			
10																			

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A

Custody Seals Intact: Yes No N/A

COC/Labels Agree: Yes No N/A

Containers Properly Preseved: Yes No N/A

Temp @ Receipt: _____

Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME
Signature	6/5/09
Print: Joe Leonard	13:44
Company: D-Max Eng	
Signature	
Print	
Company:	
Signature	
Print	
Company:	

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

White- EMA Canary - Accounting Pink - Cl

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T = 6°C on Ice

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0906185

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Test America-Irvine [S]
17461 Derian Avenue, Suite 100
Irvine, California 92614-5817
Phone :949-261-1022
Fax: 949-261-1228

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0906185-03	**Water**	**Sampled:06/05/09 11:50**		
Nitrogen, TKN - L	~~06/12/09 16:00~~	07/03/09 11:50		
Containers Supplied:				
250 mL Poly H2SO4 (B)				
Sample ID: 0906185-04	**Water**	**Sampled:06/05/09 11:50**		
Nitrogen, TKN - L	~~06/12/09 16:00~~	07/03/09 11:50		
Containers Supplied:				
250 mL Poly H2SO4 (B)				

Send report to jbeyer@enviromatrixinc.com, llwick@enviromatrixinc.com, and reports@enviromatrixinc.com

Released By	Date	Received By	Date
[signature]	6-10-09 1430	Efrain Figueroa TA	6-10-09 14:30

EnviroMatrix Analytical, Inc.

19 June 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906413

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200912W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/12/09 13:46. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906413

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-001	0906413-01	Water	06/12/09 10:15	06/12/09 13:46
908-UNI-003	0906413-02	Water	06/12/09 11:25	06/12/09 13:46
908-UNI-004	0906413-03	Water	06/12/09 12:20	06/12/09 13:46

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906413

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (0906413-01) Water Sampled: 06/12/09 10:15 Received: 06/12/09 13:46									
Cadmium	ND	0.001	mg/l	1	9061708	06/17/09	06/18/09	EPA 200.8	
Copper	**0.003**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
908-UNI-003 (0906413-02) Water Sampled: 06/12/09 11:25 Received: 06/12/09 13:46									
Cadmium	ND	0.001	mg/l	1	9061708	06/17/09	06/18/09	EPA 200.8	
Copper	**0.076**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
908-UNI-004 (0906413-03) Water Sampled: 06/12/09 12:20 Received: 06/12/09 13:46									
Cadmium	ND	0.001	mg/l	1	9061708	06/17/09	06/18/09	EPA 200.8	
Copper	**0.006**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906413

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (0906413-01) Water Sampled: 06/12/09 10:15 Received: 06/12/09 13:46									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9061519	06/15/09	06/17/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*84 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*92 %*	*60-130*		"	"	"	"	
908-UNI-003 (0906413-02) Water Sampled: 06/12/09 11:25 Received: 06/12/09 13:46									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9061519	06/15/09	06/17/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*120 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*108 %*	*60-130*		"	"	"	"	
908-UNI-004 (0906413-03) Water Sampled: 06/12/09 12:20 Received: 06/12/09 13:46									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9061519	06/15/09	06/17/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*104 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906413

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (0906413-01) Water Sampled: 06/12/09 10:15 Received: 06/12/09 13:46									
Hardness (Total)	**801**	100	mg CaCO3/L	10	9061649	06/16/09	06/17/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9061719	06/17/09	06/17/09	EPA 1664A	
908-UNI-003 (0906413-02) Water Sampled: 06/12/09 11:25 Received: 06/12/09 13:46									
Hardness (Total)	**529**	100	mg CaCO3/L	10	9061649	06/16/09	06/17/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9061719	06/17/09	06/17/09	EPA 1664A	
908-UNI-004 (0906413-03) Water Sampled: 06/12/09 12:20 Received: 06/12/09 13:46									
Hardness (Total)	**628**	100	mg CaCO3/L	10	9061649	06/16/09	06/17/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9061719	06/17/09	06/17/09	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906413

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (0906413-01) Water Sampled: 06/12/09 10:15 Received: 06/12/09 13:46									
Total Coliforms	**23000**	2000	MPN/100 ml	1000	9061607	06/12/09	06/16/09	SM 9221 B, E	
Fecal Coliforms	**270**	20	"	10	"	"	06/15/09	"	
Enterococcus	**800**	20	"	"	9061608	"	06/16/09	SM 9230 A, B	
908-UNI-003 (0906413-02) Water Sampled: 06/12/09 11:25 Received: 06/12/09 13:46									
Total Coliforms	**800**	20	MPN/100 ml	10	9061607	06/12/09	06/16/09	SM 9221 B, E	
Fecal Coliforms	**80**	20	"	"	"	"	06/15/09	"	
Enterococcus	**130**	20	"	"	9061608	"	06/16/09	SM 9230 A, B	
908-UNI-004 (0906413-03) Water Sampled: 06/12/09 12:20 Received: 06/12/09 13:46									
Total Coliforms	**5000**	20	MPN/100 ml	10	9061607	06/12/09	06/16/09	SM 9221 B, E	
Fecal Coliforms	**220**	20	"	"	"	"	06/15/09	"	
Enterococcus	**90**	20	"	"	9061608	"	06/16/09	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906413

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061708										
Blank (9061708-BLK1)				Prepared: 06/17/09		Analyzed: 06/18/09				
Cadmium	ND	0.001	mg/l							
Copper	ND	0.001	"							
Lead	ND	0.001	"							
Zinc	ND	0.020	"							
LCS (9061708-BS1)				Prepared: 06/17/09		Analyzed: 06/18/09				
Cadmium	0.049	0.001	mg/l	0.0500		99	85-115			
Copper	0.051	0.001	"	0.0500		102	85-115			
Lead	0.051	0.001	"	0.0500		101	75-125			
Zinc	0.051	0.020	"	0.0500		102	85-115			
LCS Dup (9061708-BSD1)				Prepared: 06/17/09		Analyzed: 06/18/09				
Cadmium	0.049	0.001	mg/l	0.0500		99	85-115	0.1	20	
Zinc	0.051	0.020	"	0.0500		103	85-115	1	20	
Copper	0.051	0.001	"	0.0500		103	85-115	1	20	
Lead	0.051	0.001	"	0.0500		103	75-125	1	20	
Duplicate (9061708-DUP1)		**Source: 0906387-06**		Prepared: 06/17/09		Analyzed: 06/18/09				
Cadmium	ND	0.001	mg/l		ND				20	
Copper	0.001	0.001	"		0.001			2	20	
Lead	ND	0.001	"		ND				20	
Zinc	0.002	0.020	"		0.002			2	20	
Matrix Spike (9061708-MS1)		**Source: 0906387-06**		Prepared: 06/17/09		Analyzed: 06/18/09				
Copper	0.047	0.001	mg/l	0.0500	0.001	92	70-130			
Lead	0.051	0.001	"	0.0500	ND	103	75-125			
Cadmium	0.046	0.001	"	0.0500	ND	92	70-130			
Zinc	0.048	0.020	"	0.0500	0.002	92	70-130			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906413

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061708										
Matrix Spike Dup (9061708-MSD1)		**Source: 0906387-06**		Prepared: 06/17/09	Analyzed: 06/18/09					
Zinc	0.048	0.020	mg/l	0.0500	0.002	92	70-130	0.8	20	
Copper	0.047	0.001	"	0.0500	0.001	92	70-130	0.4	20	
Cadmium	0.046	0.001	"	0.0500	ND	92	70-130	0.1	20	
Lead	0.051	0.001	"	0.0500	ND	103	75-125	0.02	20	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906413

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061519										
Blank (9061519-BLK1)				Prepared: 06/15/09 Analyzed: 06/17/09						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.290*		*"*	*0.250*		*116*	*60-130*			
Surrogate: Tribuytlphosphate	*0.210*		*"*	*0.250*		*84*	*60-130*			
LCS (9061519-BS1)				Prepared: 06/15/09 Analyzed: 06/17/09						
Bolstar	0.39	0.10	ug/l	0.500		78	60-130			
Diazinon	0.41	0.05	"	0.500		82	60-130			
Ethoprop	0.41	0.05	"	0.500		82	60-130			
Mevinphos	0.37	0.25	"	0.500		74	60-130			
Methyl parathion	0.48	0.10	"	0.500		96	60-130			
Phorate	0.38	0.05	"	0.500		76	60-130			
Ronnel	0.42	0.25	"	0.500		84	60-130			
Trichlorinate	0.41	0.05	"	0.500		82	60-130			
Surrogate: Triphenyl phosphate	*0.190*		*"*	*0.250*		*76*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
LCS Dup (9061519-BSD1)				Prepared: 06/15/09 Analyzed: 06/17/09						
Bolstar	0.39	0.10	ug/l	0.500		78	60-130	0	30	
Diazinon	0.40	0.05	"	0.500		80	60-130	2	30	
Ethoprop	0.40	0.05	"	0.500		80	60-130	2	30	
Mevinphos	0.32	0.25	"	0.500		64	60-130	14	30	
Methyl parathion	0.50	0.10	"	0.500		100	60-130	4	30	
Phorate	0.38	0.05	"	0.500		76	60-130	0	30	
Ronnel	0.39	0.25	"	0.500		78	60-130	7	30	
Trichlorinate	0.37	0.05	"	0.500		74	60-130	10	30	
Surrogate: Triphenyl phosphate	*0.270*		*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906413

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061649										
Blank (9061649-BLK1)				Prepared: 06/16/09	Analyzed: 06/17/09					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9061649-DUP1)		**Source: 0906346-01**		Prepared: 06/16/09	Analyzed: 06/17/09					
Hardness (Total)	324	100	mg CaCO3/L		324			0.1	20	
Batch 9061719										
Blank (9061719-BLK1)				Prepared & Analyzed: 06/17/09						
Oil & Grease	ND	5	mg/l							
LCS (9061719-BS1)				Prepared & Analyzed: 06/17/09						
Oil & Grease	32	5	mg/l	40.0		81	78-114			
LCS Dup (9061719-BSD1)				Prepared & Analyzed: 06/17/09						
Oil & Grease	34	5	mg/l	40.0		84	78-114	3	20	
Matrix Spike (9061719-MS1)		**Source: 0906354-02**		Prepared & Analyzed: 06/17/09						
Oil & Grease	39	5	mg/l	40.0	ND	98	78-114			

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Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Additional studies

Project #: 200912W-1 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒ 1664	8015B (TPH) □ Gas □ Diesel □ Ex	624/8260 (VOC) Full BTXE MTB	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticide	608 / 8082 (Polychlorinated Biphe	8141 (Organophosphorus Pesticide	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TT	TCLP (RCRA) □ Metals □ Organ	Cd Cr Cu Pb Ni Ag Zn	Coliform, ☒ Total (MTF) ☒ Fecal (
1	907-ALV-001	6/12/09	10:15	Water	2/6 G/P	X						X						X	X
2	908-WNI-003	~	11:25	~	2/5 G/P	X						X						X	X
3	908-WNI-004	~	12:20	~	~ ~	X						X						X	X
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt: _____
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME
Signature: Manouchehr Dadkhah	6/12/09 13:30
Print: Manouchehr Dadkhah	
Company: D-Max Engr.	
Signature: Kelly Leyden	6/12/09 13:46
Print: Kelly Leyden	
Company: EMA	
Signature	
Print	
Company:	

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details. White- EMA Canary - Accounting Pink - Clien

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T = 6" on ice

EnviroMatrix Analytical, Inc.

23 June 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906414

Project Name: La Mesa Additional Study
Project Desc./#:200912W-4

Enclosed are the results of analyses for samples received by the laboratory on 06/12/09 13:46. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 0906414

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-001	0906414-01	Water	06/12/09 10:15	06/12/09 13:46
908-UNI-003	0906414-02	Water	06/12/09 11:25	06/12/09 13:46
908-UNI-004	0906414-03	Water	06/12/09 11:25	06/12/09 13:46

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Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 0906414

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (0906414-01) Water Sampled: 06/12/09 10:15 Received: 06/12/09 13:46									
Nitrate/Nitrite as N	**1.30**	0.25	mg/l	5	9061531	06/15/09	06/15/09	SM4500 NO3 E	
Total Kjeldahl Nitrogen	**2.4**	0.5	"	1	9061843	06/18/09	06/18/09	SM4500 N C	
Total Nitrogen	**3.7**	0.5	"	"	9062232	06/22/09	06/22/09	Calculation	
Phosphorus, Total	**0.44**	0.05	"	"	9061536	06/15/09	06/15/09	SM4500 P B, E	
Total Dissolved Solids	**1740**	20.0	"	"	9061721	06/18/09	06/18/09	SM2540 C	
Total Suspended Solids	ND	20.0	"	"	9061905	06/19/09	06/19/09	SM2540 D	
908-UNI-003 (0906414-02) Water Sampled: 06/12/09 11:25 Received: 06/12/09 13:46									
Total Suspended Solids	ND	20.0	mg/l	1	9061905	06/19/09	06/19/09	SM2540 D	
908-UNI-004 (0906414-03) Water Sampled: 06/12/09 11:25 Received: 06/12/09 13:46									
Total Suspended Solids	ND	20.0	mg/l	1	9061905	06/19/09	06/19/09	SM2540 D	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 0906414

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061531										
Blank (9061531-BLK1)				Prepared & Analyzed: 06/15/09						
Nitrate/Nitrite as N	ND	0.05	mg/l							
LCS (9061531-BS1)				Prepared & Analyzed: 06/15/09						
Nitrate/Nitrite as N	0.51	0.05	mg/l	0.500		101	80-120			
LCS Dup (9061531-BSD1)				Prepared & Analyzed: 06/15/09						
Nitrate/Nitrite as N	0.52	0.05	mg/l	0.500		104	80-120	2	20	
Duplicate (9061531-DUP1)		**Source: 0905443-04**		Prepared & Analyzed: 06/15/09						
Nitrate/Nitrite as N	3.30	0.25	mg/l		3.25			1	20	
Matrix Spike (9061531-MS1)		**Source: 0906414-01**		Prepared & Analyzed: 06/15/09						
Nitrate/Nitrite as N	3.70	0.25	mg/l	2.50	1.30	96	80-120			
Matrix Spike Dup (9061531-MSD1)		**Source: 0906414-01**		Prepared & Analyzed: 06/15/09						
Nitrate/Nitrite as N	3.91	0.25	mg/l	2.50	1.30	104	80-120	6	20	
Reference (9061531-SRM1)				Prepared & Analyzed: 06/15/09						
Nitrate/Nitrite as N	0.69	0.05	mg/l	0.688		101	8.81-109.0			
Batch 9061536										
Blank (9061536-BLK1)				Prepared & Analyzed: 06/15/09						
Phosphorus, Total	ND	0.05	mg/l							
LCS (9061536-BS1)				Prepared & Analyzed: 06/15/09						
Phosphorus, Total	0.54	0.05	mg/l	0.500		109	80-120			

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Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 0906414

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061536										
LCS Dup (9061536-BSD1)				Prepared & Analyzed: 06/15/09						
Phosphorus, Total	0.54	0.05	mg/l	0.500		109	80-120	0.2	20	
Duplicate (9061536-DUP1)		**Source: 0906266-01**		Prepared & Analyzed: 06/15/09						
Phosphorus, Total	3.38	0.10	mg/l		2.85			17	20	
Matrix Spike (9061536-MS1)		**Source: 0906266-01**		Prepared & Analyzed: 06/15/09						
Phosphorus, Total	3.89	0.10	mg/l	1.00	2.85	104	80-120			
Matrix Spike Dup (9061536-MSD1)		**Source: 0906266-01**		Prepared & Analyzed: 06/15/09						
Phosphorus, Total	4.00	0.10	mg/l	1.00	2.85	115	80-120	3	20	
Batch 9061721										
Blank (9061721-BLK1)				Prepared: 06/17/09 Analyzed: 06/18/09						
Total Dissolved Solids	ND	20.0	mg/l							
Duplicate (9061721-DUP1)		**Source: 0906514-01**		Prepared: 06/17/09 Analyzed: 06/18/09						
Total Dissolved Solids	575	20.0	mg/l		572			0.5	20	
Reference (9061721-SRM1)				Prepared: 06/17/09 Analyzed: 06/18/09						
Total Dissolved Solids	194	20.0	mg/l	178		109	7.08-112.9			
Batch 9061843										
Blank (9061843-BLK1)				Prepared & Analyzed: 06/18/09						
Total Kjeldahl Nitrogen	ND	0.5	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 0906414

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061843										
LCS (9061843-BS1)				Prepared & Analyzed: 06/18/09						
Total Kjeldahl Nitrogen	3.8	0.5	mg/l	4.10		94	80-120			
LCS Dup (9061843-BSD1)				Prepared & Analyzed: 06/18/09						
Total Kjeldahl Nitrogen	3.6	0.5	mg/l	4.10		87	80-120	8	20	
Duplicate (9061843-DUP1)		**Source: 0906263-01**		Prepared & Analyzed: 06/18/09						
Total Kjeldahl Nitrogen	1.9	0.5	mg/l		1.9			2	20	
Matrix Spike (9061843-MS1)		**Source: 0906263-01**		Prepared & Analyzed: 06/18/09						
Total Kjeldahl Nitrogen	4.0	0.5	mg/l	4.10	1.9	50	80-120			QM-05
Matrix Spike Dup (9061843-MSD1)		**Source: 0906263-01**		Prepared & Analyzed: 06/18/09						
Total Kjeldahl Nitrogen	4.4	0.5	mg/l	4.10	1.9	62	80-120	11	20	QM-05
Batch 9061905										
Blank (9061905-BLK1)				Prepared & Analyzed: 06/19/09						
Total Suspended Solids	ND	20.0	mg/l							
Duplicate (9061905-DUP1)		**Source: 0906401-02**		Prepared & Analyzed: 06/19/09						
Total Suspended Solids	94.2	20.0	mg/l		96.0			2	20	
Duplicate (9061905-DUP2)		**Source: 0906460-01**		Prepared: 06/19/09 Analyzed: 06/22/09						
Total Suspended Solids	3.2	20.0	mg/l		3.2			0	20	
Duplicate (9061905-DUP3)		**Source: 0906461-01**		Prepared: 06/19/09 Analyzed: 06/22/09						
Total Suspended Solids	ND	20.0	mg/l		ND				20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 0906414

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061905										
Duplicate (9061905-DUP4)		**Source: 0906462-01**		Prepared: 06/19/09 Analyzed: 06/22/09						
Total Suspended Solids	198	20.0	mg/l		180			9	20	
Reference (9061905-SRM1)				Prepared & Analyzed: 06/19/09						
Total Suspended Solids	44.6	20.0	mg/l	41.9		106	4.94-113.1			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering	**EMA Log #: 0906414**
Project Name: La Mesa Additional Study	

Notes and Definitions

QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Additional Study

Project #: 2009112W-4 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 16	8015B (TPH) □ Gas □ Diesel □ Ex	624/8260 (VOC) Full BTXE MTB	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestici	608 / 8082 (Polychlorinated Biphen	8141 (Organophosphorus Pesticide	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TT	TCLP (RCRA) □ Metals □ Organ	Cd Cr Cu Pb Ni Ag Zn	Coliform, □ Total (MTF) □ Fecal (
1	907-ALV-001	6/12/09	10:15	Water	2/6 9/p									X					
2	908-UNI-003	"	11:25	Water	2/5 9/p														
3	908-UNI-004	"	12:20	Water	2/5 9/p														
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME
Signature: Manouchehr Dadkhah	6/12/09 13:30
Print: Manouchehr Dadkhah	
Company: D-Max Eng.	
Signature: Kelly Cayet	6/12/09 13:46
Print: Kelly Cayet	
Company: EMA	
Signature	
Print	
Company:	

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

White- EMA Canary - Accounting Pink - Client

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

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EnviroMatrix Analytical, Inc.

23 June 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906569

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#: 200912W-2

Enclosed are the results of analyses for samples received by the laboratory on 06/18/09 16:26. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906569

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-002	0906569-01	Water	06/18/09 13:30	06/18/09 16:26
907-ALV-002-1	0906569-02	Water	06/18/09 14:45	06/18/09 16:26
907-ALV-002-2	0906569-03	Water	06/18/09 15:20	06/18/09 16:26
907-ALV-002-3	0906569-04	Water	06/18/09 15:35	06/18/09 16:26

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906569

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
907-ALV-002 (0906569-01) Water Sampled: 06/18/09 13:30 Received: 06/18/09 16:26								
Total Coliforms	**15500**	10	MPN/100 ml	10	9062002	06/18/09 17:20 06/19/09 17:31	SM9223	
E. Coli	**471**	10	"	"	"	06/18/09 17:20 06/19/09 17:31	"	
Enterococcus	**780**	10	"	"	9062003	06/18/09 17:20 06/19/09 17:25	Idexx	
907-ALV-002-1 (0906569-02) Water Sampled: 06/18/09 14:45 Received: 06/18/09 16:26								
Total Coliforms	**26100**	100	MPN/100 ml	100	9062002	06/18/09 17:20 06/19/09 17:31	SM9223	
E. Coli	**355**	10	"	10	"	06/18/09 17:20 06/19/09 17:31	"	
Enterococcus	**657**	10	"	"	9062003	06/18/09 17:20 06/19/09 17:25	Idexx	
907-ALV-002-2 (0906569-03) Water Sampled: 06/18/09 15:20 Received: 06/18/09 16:26								
Total Coliforms	**51700**	100	MPN/100 ml	100	9062002	06/18/09 17:20 06/19/09 17:31	SM9223	
E. Coli	**1020**	10	"	10	"	06/18/09 17:20 06/19/09 17:31	"	
Enterococcus	**1918**	10	"	"	9062003	06/18/09 17:20 06/19/09 17:25	Idexx	
907-ALV-002-3 (0906569-04) Water Sampled: 06/18/09 15:35 Received: 06/18/09 16:26								
Total Coliforms	**54800**	100	MPN/100 ml	100	9062002	06/18/09 17:20 06/19/09 17:31	SM9223	
E. Coli	**880**	10	"	10	"	06/18/09 17:20 06/19/09 17:31	"	
Enterococcus	**2755**	10	"	"	9062003	06/18/09 17:20 06/19/09 17:25	Idexx	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906569

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather, F-up

Project #: 200912W-2 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 16	8015B (TPH) □ Gas □ Diesel □ Ex	624/8260 (VOC) Full BTXE MTB	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestici	608 / 8082 (Polychlorinated Biphen	8141 (Organophosphorus Pesticide	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TT	TCLP (RCRA) □ Metals □ Organ	Cd Cr Cu Pb Ni Ag Zn	Coliform, □ Total (MTF) □ Fecal (
1	907-ALV-002	6/18/09	13:30	water	2 P														
2	907-ALV-002-1	"	14:45	"	" "														
3	907-ALV-002-2	"	15:20	"	" "														
4	907-ALV-002-3	"	15:35	"	" "														
5	907-ALV-10 MIX																		
6																			
7																			
8																			
9																			
10																			

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME
Signature: Manoucheh Dadkhah	6/18/09
Print: Manoucheh Dadkhah	16:24
Company: D-Max Engr	
Signature	
Print	
Company:	
Signature	
Print	
Company:	

Project/Sample Comments:

T=4° on ice

[1]Additional costs may apply, consult a project manager for details.

White- EMA Canary - Accounting Pink - Clier

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

29 June 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0906651

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#:200912W-2

Enclosed are the results of analyses for samples received by the laboratory on 06/22/09 16:23. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906651

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
908-UNI-003	0906651-01	Water	06/22/09 14:30	06/22/09 16:23
908-UNI-003-1	0906651-02	Water	06/22/09 14:45	06/22/09 16:23
908-UNI-003-2	0906651-03	Water	06/22/09 15:00	06/22/09 16:23

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906651

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-003 (0906651-01) Water Sampled: 06/22/09 14:30 Received: 06/22/09 16:23									
Copper	**0.005**	0.001	mg/l	1	9062701	06/27/09	06/27/09	EPA 200.8	
908-UNI-003-1 (0906651-02) Water Sampled: 06/22/09 14:45 Received: 06/22/09 16:23									
Copper	**0.001**	0.001	mg/l	1	9062701	06/27/09	06/27/09	EPA 200.8	
908-UNI-003-2 (0906651-03) Water Sampled: 06/22/09 15:00 Received: 06/22/09 16:23									
Copper	**0.002**	0.001	mg/l	1	9062701	06/27/09	06/27/09	EPA 200.8	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906651

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-003 (0906651-01) Water Sampled: 06/22/09 14:30 Received: 06/22/09 16:23									
Hardness (Total)	**634**	100	mg CaCO3/L	10	9062235	06/22/09	06/24/09	EPA 200.7	
908-UNI-003-1 (0906651-02) Water Sampled: 06/22/09 14:45 Received: 06/22/09 16:23									
Hardness (Total)	**417**	10	mg CaCO3/L	1	9062235	06/22/09	06/24/09	EPA 200.7	
908-UNI-003-2 (0906651-03) Water Sampled: 06/22/09 15:00 Received: 06/22/09 16:23									
Hardness (Total)	**458**	10	mg CaCO3/L	1	9062235	06/22/09	06/24/09	EPA 200.7	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906651

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062701										
Blank (9062701-BLK1)				Prepared & Analyzed: 06/27/09						
Copper	ND	0.001	mg/l							
LCS (9062701-BS1)				Prepared & Analyzed: 06/27/09						
Copper	0.051	0.001	mg/l	0.0500		103	85-115			
LCS Dup (9062701-BSD1)				Prepared & Analyzed: 06/27/09						
Copper	0.052	0.001	mg/l	0.0500		104	85-115	0.9	20	
Duplicate (9062701-DUP1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Copper	ND	0.001	mg/l		ND				20	
Matrix Spike (9062701-MS1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Copper	0.048	0.001	mg/l	0.0500	ND	96	70-130			
Matrix Spike Dup (9062701-MSD1)		**Source: 0906730-04**		Prepared & Analyzed: 06/27/09						
Copper	0.048	0.001	mg/l	0.0500	ND	97	70-130	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 0906651

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9062235										
Blank (9062235-BLK1)				Prepared: 06/22/09	Analyzed: 06/24/09					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9062235-DUP1)		**Source: 0906651-01**		Prepared: 06/22/09	Analyzed: 06/24/09					
Hardness (Total)	639	100	mg CaCO3/L		634			0.8	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering	**EMA Log #: 0906651**
Project Name: La Mesa Dry Weather Monitoring	

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 | Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather F.UP

Project #: 200912W-2 | PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE	625 / 8270 (Semi Volatile Organics) ☐PAH	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr (Cu) Pb Ni Ag Zn X Dis	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐C	Enterococcus, ☐MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness
01	908-UNI-003	6/22/09 1430	water	2P														X				X
02	908-UNI-003-1	~ 1415	~	~														X				X
03	908-UNI-003-2	~ 1500	~	~														X				X
04																						
05																						
06																						
07																						
08																						
09																						
10																						

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A | Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A | Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A | Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature: [illegible]
Print: Manouchehr Dadkhah	Print: Sean Flem
Company: D-Max Eng.	Company: EMA Inc
Signature	Signature
Print	Print
Company	Company
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Gold

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

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Appendix D

Field Data & Trash Assessment Sheets

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-001			Latitude	33.71209	Watershed: Hydrologic Unit	907
Location	Alvarado rd., east of the trolley station, on the channel			Longitude	-117.04136	Hydrologic Area	907.1
				TB Page	1270, F2	Hydrologic Subarea (Optional)	907.11
Date	06/12/09	Time	10:15	Observer	MD/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1, 2

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	19.1	NH_3-N (mg/L)	0.18	NO_3 (mg/L)	3.807	Ortho-PO_4 (mg/L)	0.674
pH (pH units)	7.6	TURB (NTU)	3.37	NO_3-N (mg/L)	0.860	Ortho-PO_4 -P (mg/L)	0.220
COND (mS/cm)	3.24	MBAS (mg/L)	0.5	Do (mg/L)	6.71		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width	48	in	Volume		mL	Diameter		ft
Depth	0.5	in	Time to Fill		sec	Depth		ft
Velocity	10.0	ft/sec	Flow		gpm	Velocity		ft/sec
Flow	75	gpm				Flow		gpm

COMMENTS: Bucket, fast food bags, food wrapp

29
69

RM

2009 Trash Assessment Form

SITE ID: 907-ALV-001 **DATE:** 04/12/09

LOCATION: Alvarado rd., east of the Trolley Station, on the channel **TIME:** 10:15

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50 x 15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

af

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-002		**Latitude**	32.77414	**Watershed**	**Hydrologic Unit**	907
Location	Along the south edge of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection		**Longitude**	-117.02287		**Hydrologic Area**	907.1
			TB Page	1270, H1		**Hydrologic Subarea** (Optional)	907.11
Date	06/02/2009	**Time** 1130	**Observer**	MD/AK		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 24, 25

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.5	NH_3-N (mg/L)	0.399	NO_3 (mg/L)	4.211	Ortho-PO_4 (mg/L)	0.693
pH (pH units)	7.2	TURB (NTU)	16.36	NO_3-N (mg/L)	0.952	Ortho-PO_4 -P (mg/L)	0.226
COND (mS/cm)	2.03	MBAS (mg/L)	0.25	Do (mg/L)	6.36		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

aj

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	907-ALV-002		**Latitude**	32.77414	**Watershed**	**Hydrologic Unit**	907
Location	South edge of Costco parking lot; east of Baltimore Dr/ Fletcher Pkwy intersection		**Longitude**	-117.02287		**Hydrologic Area**	907.1
			TB Page	1270, H1		**Hydrologic Subarea** (Optional)	907.11
Date	6/5/09	**Time** 11:50	**Observer**	JL		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 2142, 2143, 2144

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.3	NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.62	TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4-P (mg/L)	
COND (mS/cm)		MBAS (mg/L)		Do (mg/L)	7.22		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume	1000	mL
Time to Fill	13	sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 907-ALV-002 **DATE:** 06/02/2009

LOCATION: Along the south edge of Costco parking lot, just south of the Mandango Avenue and Fletcher Parkway intersection **TIME:** 11:30

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For ~~Total Coliforms~~ Enterococcus ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-002		**Latitude**	32.77414	**Watershed**	**Hydrologic Unit**	907
Location	Along the south edge of the costco parking lot, just south of the Marengo Ave and Fletcher Parkway intersection		**Longitude**	-117.02287		**Hydrologic Area**	907.1
			TB Page	1270, H11		**Hydrologic Subarea** (Optional)	907.11
Date	06/18/09	**Time** 1330	**Observer**	MD/AK		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/~~Gravel~~	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.0	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	2.29	MBAS (mg/L)	NA	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

PM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Enterococcus

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-002-1		Latitude	32.77109	Watershed	Hydrologic Unit	907
Location	South of I-8, north of golf course, north side of fence (next to I-8)		Longitude	-117.01913		Hydrologic Area	907.1
			TB Page	1270, J2		Hydrologic Subarea (Optional)	907.11
Date	04/18/04	Time 1445	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☒ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	NA	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Leaves in pipe - lg. amt.

DM

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City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Enterococcus

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-002-2		**Latitude**	32.76861	**Watershed**	**Hydrologic Unit**	907
Location	In front of 8515 La Mesa Blvd. Sampled from pipe before entering ~~catch basin~~ concrete box		**Longitude**	-117.01350		**Hydrologic Area**	907.1
			TB Page	1270, J2		**Hydrologic Subarea** (Optional)	907.11
Date	06/18/09	**Time** 15:20	**Observer**	MD/AK		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 58-60

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4-P (mg/L)	
COND (mS/cm)		MBAS (mg/L)		Do (mg/L)			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow		gpm				Flow		gpm

COMMENTS: leaves & trash in catch basin

DM

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City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Enterococcus

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	907-ALV-0023		Latitude	32.76861	Watershed	Hydrologic Unit	907
Location	In front of 8515 La Mesa Blvd. Sampled from pipe after leaving ~~catch basin~~ concrete box		Longitude	-117.01350		Hydrologic Area	907.1
			TB Page	1270, J2		Hydrologic Subarea (Optional)	907.11
Date	06/18/09	Time 1535	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 58-60

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)		Do (mg/L)			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Leaves & Trash in catch basin

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907- ALV-003		Latitude	32.77362	Watershed	Hydrologic Unit	907
Location	Parkway Drive located in the southeast corner of Coleman College Property		Longitude	-117.03794		Hydrologic Area	907.1
			TB Page	1270, G1		Hydrologic Subarea (Optional)	907.11
Date	06/15/09	Time	10:40 ~~06/15/09~~	Observer	MD/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other N/A
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other N/A
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☒ Other N/A
Floatables	☒ ~~None~~	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☒ Other N/A
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 13, 14

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4 -P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

DM

2009 Trash Assessment Form

SITE ID: 907-ALV-003 **DATE:** 06/15/09

LOCATION: Parkway Drive located in the southeast corner of Coleman College property **TIME:** 10:40

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 3 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907 - ALV- 004		Latitude	32.77546	Watershed	Hydrologic Unit	907
Location	7780 Parkway Drive; inside Parkway Manor Condominiums' parking lot, by visitor parking at the top of the driveway		Longitude	-117.02918		Hydrologic Area	907.1
			TB Page	1270, G1		Hydrologic Subarea (Optional)	907.11
Date	06/15/09	Time 11:29	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☒ Yes ☐ No **Photo #** 4 15-18

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.7	NH_3-N (mg/L)	0.134	NO_3 (mg/L)	1.357	Ortho-PO_4 (mg/L)	0.591
pH (pH units)	8.1	TURB (NTU)	11.51	NO_3-N (mg/L)	0.307	Ortho-PO_4-P (mg/L)	0.193
COND (mS/cm)	1.15	MBAS (mg/L)	0.25	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	<1	gpm				Flow		gpm

COMMENTS: Large amount animal feces on ledge above water level.

2009 Trash Assessment Form

SITE ID: 907-ALV-004 **DATE:** 06/15/09

LOCATION: 7780 Parkway Dr. inside Parkway Manor Condominiums' Parking lot, by visitor parking at the top of the driveway **TIME:** 11:25

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☒ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Animal feces on ledge above water level

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

DM

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-005		Latitude	32.77380	Watershed	Hydrologic Unit	907
Location	Alvarado channel, underneath the intersection of Fletcher Parkway and Baltimore Drive, north side of channel		Longitude	-117.02737		Hydrologic Area	907.1
			TB Page	1270, H11		Hydrologic Subarea (Optional)	907.11
Date	06/15/09	Time 15:00	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 23, 23-1

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.6	NH_3-N (mg/L)	0.161	NO_3 (mg/L)	15.50	Ortho-PO_4 (mg/L)	0.215
pH (pH units)	7.4	TURB (NTU)	1.23	NO_3-N (mg/L)	3.503	Ortho-PO_4-P (mg/L)	0.070
COND (mS/cm)	3.35	MBAS (mg/L)	0.25	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 907-ALV-005 DATE: 06/15/09

LOCATION: Alvarado channel, underneath the intersection of Fletcher Parkway and Baltimore Drive, north side of channel TIME: 1500

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-006			Latitude	32.77550	Watershed: Hydrologic Unit	907
Location	Fletcher Parkway and Marengo Ave intersection, in planter			Longitude	-117.02309	Hydrologic Area	907.1
				TB Page	1270, H1	Hydrologic Subarea (Optional)	907.11
Date	06/16/09	Time	1510	Observer	MD/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☒ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment ~~Gravel~~	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 54-55

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.212	NO_3 (mg/L)	2.577	Ortho-PO_4 (mg/L)	0.989
pH (pH units)	7.1	TURB (NTU)	7.92	NO_3-N (mg/L)	0.582	Ortho-PO_4-P (mg/L)	0.322
COND (mS/cm)	2.34	MBAS (mg/L)	2.0	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

AM

2009 Trash Assessment Form

SITE ID: 907-ALV-006 **DATE:** 04/16/09

LOCATION: Fletcher Parkway and Marengo Ave, intersection, in planter **TIME:** 1510

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-006		Latitude	32.77580	Watershed	Hydrologic Unit	907
Location	Fletcher Parkway and Marengo Avenue intersection, in planter		Longitude	-117.02309		Hydrologic Area	907.1
			TB Page	1270, H1		Hydrologic Subarea (Optional)	907.11
Date	06/17/09	Time 9:40	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray			☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☒ Sediment/~~Gravel~~	☐ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive				☐ Other
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.6	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	6.9	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.99	MBAS (mg/L)	0.63	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-007			Latitude	32.77832	Watershed: Hydrologic Unit	907
Location	Jackson Drive and Parkway Drive, Behind Amex Auto Repair			Longitude	-117.01821	Hydrologic Area	907.1
				TB Page	1270, J1	Hydrologic Subarea (Optional)	907.11
Date	06/12/09	Time	1540	Observer	MD/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/Barnacles ☐ Insect/Algae ☐ Insect/Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No Photo # 9, 10

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.3	NH_3-N (mg/L)	0.165	NO_3 (mg/L)	10.67	Ortho-PO_4 (mg/L)	0.493
pH (pH units)	7.8	TURB (NTU)	1.52	NO_3-N (mg/L)	2.41	Ortho-PO_4-P (mg/L)	0.161
COND (mS/cm)	3.63	MBAS (mg/L)	0.5	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

DM

2009 Trash Assessment Form

SITE ID: 907-ALV-007 **DATE:** 06/12/09

LOCATION: Jackson Drive and Parkway Drive, behind Amex Auto Repair **TIME:** 1540

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6x6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-008		Latitude	32.78400	Watershed	Hydrologic Unit	907
Location	South of Fletcher Parkway, under SR-125 overpass, west of the outfalls from the north		Longitude	-117.00570		Hydrologic Area	907.1
			TB Page	1251, A7		Hydrologic Subarea (Optional)	907.11
Date	06/16/09	Time 14:20	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ~~☒ Outlet~~ ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ~~☒ Insect/ Algae~~ ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 51-53

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)	0.088	NO_3 (mg/L)	3.792	Ortho-PO_4 (mg/L)	0.228
pH (pH units)	8.0	TURB (NTU)	4.82	NO_3-N (mg/L)	0.857	Ortho-PO_4-P (mg/L)	0.074
COND (mS/cm)	2.42	MBAS (mg/L)	0.5	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	1	gpm				Flow		gpm

COMMENTS: _____

DM

2009 Trash Assessment Form

SITE ID: 907-ALV-008 **DATE:** 06/16/09

LOCATION: South of Fletcher Parkway under SR-125 overpass, west of the Out Rt-113 from the south **TIME:** 14:20

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-12A		Latitude	32.77605	Watershed	Hydrologic Unit	907
Location	Jackson Drive, 100 feet west of Murray Drive, south side of the street, in front of 5304 Jackson Dr.		Longitude	-117.01434		Hydrologic Area	907.1
			TB Page	1270, J1		Hydrologic Subarea (Optional)	907.11
Date	06/16/09	Time 10:50	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☒ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** ~~37-40~~ 45-46

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)	0.309	NO_3 (mg/L)	19.27	Ortho-PO_4 (mg/L)	0.344
pH (pH units)	7.5	TURB (NTU)	8.47	NO_3-N (mg/L)	4.36	Ortho-PO_4-P (mg/L)	0.112
COND (mS/cm)	2.55	MBAS (mg/L)	0.63	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	5	gpm				Flow		gpm

COMMENTS: Insects: ants, cockroaches, spiders

DM

2009 Trash Assessment Form

SITE ID: 907-ALV-12A **DATE:** 06/16/09

LOCATION: Jackson Drive, 100 feet west of Murray Drive, South side of the street, in front of 5304 Jackson Drive **TIME:** 10:50

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-120		Latitude	32.77630	Watershed	Hydrologic Unit	907
Location	Jackson Drive, 100 feet west of Murray Drive, north side of street		Longitude	-117.01423		Hydrologic Area	907.1
			TB Page	1270, J1		Hydrologic Subarea (Optional)	907.11
Date	06/16/09	Time 11:30	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 2 47-48

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.3366	NO_3 (mg/L)	15.43	Ortho-PO_4 (mg/L)	1.038
pH (pH units)	7.0	TURB (NTU)	20.39	NO_3-N (mg/L)	3.49	Ortho-PO_4-P (mg/L)	0.338
COND (mS/cm)	2.00	MBAS (mg/L)	0.75	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ants, spiders

DM

2009 Trash Assessment Form

SITE ID: 907-ALV-120 **DATE:** 06/16/09

LOCATION: Jackson Drive, 100 feet west of Murray Drive, north side of street **TIME:** 11:30

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 3

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DY
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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-580		Latitude	32.78640	Watershed	Hydrologic Unit	907
Location	Northeast corner of Amaya Drive and Amaya Court intersection		Longitude	-117.00116		Hydrologic Area	907.1
			TB Page	1251, B7		Hydrologic Subarea (Optional)	907.11
Date	06/12/09	Time 14:40	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☒ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☒ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 7,8

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.5	NH_3-N (mg/L)	0.281	NO_3 (mg/L)	2.509	Ortho-PO_4 (mg/L)	0.205
pH (pH units)	7.6	TURB (NTU)	20.42	NO_3-N (mg/L)	0.567	Ortho-PO_4 -P (mg/L)	0.067
COND (mS/cm)	2.00	MBAS (mg/L)	0.25	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	2	gpm				Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 907-ALV-580 DATE: 06/12/09

LOCATION: Northeast corner of Amaya Drive and Amaya Court intersection TIME: 1440

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

a5

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-590		**Latitude**	32.78180	**Watershed**	**Hydrologic Unit**	907
Location	Southeast corner of Parkway Drive and Amarillo Avenue intersection		**Longitude**	-117.01328		**Hydrologic Area**	907.1
			TB Page	1250, J7		**Hydrologic Subarea** (Optional)	907.11
Date	06/02/2009	**Time** 1240	**Observer**	MD/AK		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 26-32

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.2	NH_3-N (mg/L)	0.213	NO_3 (mg/L)	4.061	Ortho-PO_4 (mg/L)	0.109
pH (pH units)	8.0	TURB (NTU)	0.01	NO_3-N (mg/L)	0.918	Ortho-PO_4 -P (mg/L)	0.036
COND (mS/cm)	2.43	MBAS (mg/L)	0.38	Do (mg/L)	8.52		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

4/9/09

2009 Trash Assessment Form

SITE ID: 907-ALV-590 DATE: 06/02/2009

LOCATION: Southeast corner of Parkway Dr. and Amarillo Ave. intersection TIME: 12:40

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☒ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing	3	X	X			X					X	
Food Packaging	4		X			X					X	
Food Waste												
Household	1	X	X			X					X	
Shopping Carts	2	X	X			X					X	
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

a8

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	907-ALV-590		**Latitude**	32.78180	**Watershed**	**Hydrologic Unit**	907
Location	Southeast corner of parkway Drive and Amarillo Avenue intersection		**Longitude**	-117.01328		**Hydrologic Area**	907.1
			TB Page	1250, J7		**Hydrologic Subarea** (Optional)	907.11
Date	6/5/09	**Time** 12:55	**Observer**	JL		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 2145-2149

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.5	NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	8.09	TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)		Do (mg/L)	8.88		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.5	in
Velocity	1.5	ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

DM

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-640		Latitude	32.77651	Watershed	Hydrologic Unit	907
Location	North side of Seton Hall St. between Swarthmore Street and Wheaton St.		Longitude	-117.03462		Hydrologic Area	907.1
			TB Page	1270, G1		Hydrologic Subarea (Optional)	907.11
Date	06/15/09	Time 9:50	Observer	MD / AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 2 11,12

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.8	NH_3-N (mg/L)	0.064	NO_3 (mg/L)	0.366	Ortho-PO_4 (mg/L)	0.331
pH (pH units)	10.1	TURB (NTU)	4.76	NO_3-N (mg/L)	0.083	Ortho-PO_4-P (mg/L)	0.108
COND (mS/cm)	1.27	MBAS (mg/L)	0.75	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	<1	gpm				Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 907-ALV-640 **DATE:** 06/15/09

LOCATION: North side of Seton Hall Street between Swarthmore st. and Wheaton st. **TIME:** 9:50

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For pH ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-640			Latitude	32.77651	Watershed: Hydrologic Unit	907
Location	North side of Seton Hall st. between Swarthmore st. and Wheaton st.			Longitude	-117.03462	Hydrologic Area	907.1
				TB Page	1270, G1	Hydrologic Subarea (Optional)	907.11
Date	06/16/09	Time	9:25	Observer	MD/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	~~☐ None~~	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.4	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.1	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.25	MBAS (mg/L)	NA	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-LEM-520		Latitude	32.74514	Watershed	Hydrologic Unit	908
Location	Near Waite Drive and Harris street intersection, south end of Harris street		Longitude	-117.03931		Hydrologic Area	908.2
			TB Page	1270, F5		Hydrologic Subarea (Optional)	908.22
Date	06/16/09	Time 10:10	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☒ Yes ☐ No ☐ Irrigation Runoff ☒ Other: Seepage water in street

Photo Taken ☒ Yes ☐ No **Photo #** 37-40

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)	0.214	NO_3 (mg/L)	6.572	Ortho-PO_4 (mg/L)	1.120
pH (pH units)	7.5	TURB (NTU)	6.41	NO_3-N (mg/L)	1.485	Ortho-PO_4-P (mg/L)	0.365
COND (mS/cm)	4.26	MBAS (mg/L)	~~10~~ 1.5	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	1	gpm				Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 908-LEM-520 DATE: 06/16/09

LOCATION: Near Waite Drive and Harris street intersection, South end of Harris street TIME: 10:10

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): ~~30~~ x 20 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-LEM-520		**Latitude**	32.74514	**Watershed**	**Hydrologic Unit**	908
Location	Near Waite Drive and Harris Street intersection, south end of Harris Street.		**Longitude**	-117.03931		**Hydrologic Area**	908.2
			TB Page	1270, F5		**Hydrologic Subarea** (Optional)	908.22
Date	06/16/09	**Time** 1600	**Observer**	MD/AK		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☒ Yes ☐ No ☐ Irrigation Runoff ☒ Other: Seepage water in Street

Photo Taken ☒ Yes ~~☐ No~~ **Photo #** 41-44

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.7	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.8	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	4.60	MBAS (mg/L)	0.75	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

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☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	908-UNI-001	**Latitude**	32.75463	Watershed	**Hydrologic Unit**	908
Location	69th Street and Boulevard Dr intersection	**Longitude**	-117.04908		**Hydrologic Area**	908.2
		TB Page	1270, E4		**Hydrologic Subarea** (Optional)	908.22
Date	6/5/09 **Time** 10:15	**Observer**	JL		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 2130, 2131, 2132, 2133, 2134

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)		Do (mg/L)			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	3	in
Velocity	0.68	ft/sec
Flow	63	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-001		**Latitude**	32.75463	**Watershed**	**Hydrologic Unit**	908
Location	69th Street and Boulevard Drive intersection		**Longitude**	-117.04908		**Hydrologic Area**	908.2
			TB Page	1270, E4		**Hydrologic Subarea** (Optional)	908.22
Date	06/02/2009	**Time** 1525	**Observer**	MD/AK		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 35,36

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	0.292	NO_3 (mg/L)	12.80	Ortho-PO_4 (mg/L)	0.317
pH (pH units)	8.1	TURB (NTU)	0.01	NO_3-N (mg/L)	~~56.64~~ 2.89	Ortho-PO_4 -P (mg/L)	0.103
COND (mS/cm)	2.9	MBAS (mg/L)	0.5	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	50	in
Depth	0.5	in
Velocity	10/10	ft/sec
Flow	78	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 908-UNI-001 DATE: 06/02/2009

LOCATION: 69th Street and Boulevard Drive intersection TIME: 1525

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 40 x 12

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-002			Latitude	32.75498	Watershed: Hydrologic Unit	908
Location	Harbinson Avenue and University Avenue intersection, west sidewalk of Harbinson, east of CB Hair+Nails			Longitude	-117.04639	Hydrologic Area	908.2
				TB Page	1270, E4	Hydrologic Subarea (Optional)	908.22
Date	6/5/09	Time	10:35	Observer	JL	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☒ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 2135-2140

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)		Do (mg/L)			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	9 ~~12~~	in
Depth	0.1 ~~0.25~~	in
Velocity	1	ft/sec
Flow	~~928~~	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-002		**Latitude**	32.75498	**Watershed**	**Hydrologic Unit**	908
Location	Harbison Avenue and University avenue intersection, west sidewalk east of CB Hair & Nails		**Longitude**	-117.04639		**Hydrologic Area**	908.2
			TB Page	1270, E4		**Hydrologic Subarea** (Optional)	908.22
Date	04/02/2009	**Time** 1430	**Observer**	MD/AK		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☒ Chemical (cleaner)	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 33, 34

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.3	NH_3-N (mg/L)	0.159	NO_3 (mg/L)	31.63	Ortho-PO_4 (mg/L)	0.892
pH (pH units)	7.8	TURB (NTU)	1.45	NO_3-N (mg/L)	7.15	Ortho-PO_4 -P (mg/L)	0.291
COND (mS/cm)	5.63	MBAS (mg/L)	2.0	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 908-UNI-002 DATE: 04/02/2009

LOCATION: Harbison Ave. and University Ave. intersection, west sidewalk, east of CB hair & nails TIME: 1430

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 8x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

a7

☐ Field Screening ☒ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-002		**Latitude**	32.75498	**Watershed**	**Hydrologic Unit**	908
Location	Harbison Avenue and University Avenue intersection, West sidewalk east of CB hair & nails		**Longitude**	-117.04639		**Hydrologic Area**	908.2
			TB Page	1270, E4		**Hydrologic Subarea** (Optional)	908.22
Date	06/03/2009	**Time** 9:20	**Observer**	MD/AK		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	
pH (pH units)	7.7	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	
COND (mS/cm)	4.34	MBAS (mg/L)	0.63	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-4NI-003		Latitude	32.75536	Watershed	Hydrologic Unit	908
Location	Along Lowell St. about halfway between University Avenue and Normal Avenue, north side of street, 4291 Lowell St. driveway		Longitude	-117.03528		Hydrologic Area	908.2
			TB Page	1270 G4		Hydrologic Subarea (Optional)	908.22
Date	06/12/2009	Time 11:25	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 2 3,4

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.8	NH_3-N (mg/L)	0.118	NO_3 (mg/L)	19.86	Ortho-PO_4 (mg/L)	0.092
pH (pH units)	8.1	TURB (NTU)	0.52	NO_3-N (mg/L)	4.49	Ortho-PO_4 -P (mg/L)	0.030
COND (mS/cm)	2.55	MBAS (mg/L)	0.25	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

SR 29

DM

2009 Trash Assessment Form

SITE ID: 908-UNI-003 **DATE:** 06/12/2009

LOCATION: Along Lowell Street, about halfway between University Ave. and Normal Ave. North side of street in 4291 Lowell St. driveway **TIME:** 11:25

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Copper ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-003		**Latitude**	32.75536	**Watershed**	**Hydrologic Unit**	908
Location	Along Lowell St. about halfway between University Ave and Normal Ave. North side of street. 4291 Lowell St. driveway		**Longitude**	-117.03528		**Hydrologic Area**	908.2
			TB Page	1270, G4		**Hydrologic Subarea** (Optional)	908.22
Date	6/22/09	**Time**	14:30 ~~2:3~~	**Observer**	DK / MD	**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	~~7.4~~ 8.11	TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)	2.22	MBAS (mg/L)		Do (mg/L)			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For ~~Cop~~ ☒ IC/ID Follow-Up For Copper

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	908-UNI-003-1		Latitude	32.75536	Watershed	Hydrologic Unit	908
Location	Along Lowell St. About halfway between University Ave and Normal Ave. South side. 4291 Lowell St. driveway		Longitude	-117.03528		Hydrologic Area	908.2
			TB Page	1270, 64		Hydrologic Subarea (Optional)	908.22
Date	4/22/09	Time 14:45	Observer	DK, MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4-P (mg/L)	
COND (mS/cm)	4.00	MBAS (mg/L)		Do (mg/L)			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Copper

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	908 - UNI - 003 - 2			Latitude	32.75536	Watershed: Hydrologic Unit	908
Location	Along Lowell St. about halfway between University Ave and Normal Ave. Coming from east side. 4291 Lowell St. driveway			Longitude	-117.03528	Hydrologic Area	908.2
				TB Page	1270, G4	Hydrologic Subarea (Optional)	908.22
Date	06/22/09	Time	15:00	Observer	DK, MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4-P (mg/L)	
COND (mS/cm)		MBAS (mg/L)		Do (mg/L)			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-004		**Latitude**	32.76308	**Watershed**	**Hydrologic Unit**	908
Location	In front of 7861 University Avenue, along the south side of the street		**Longitude**	-117.02855		**Hydrologic Area**	908.2
			TB Page	1270, H3		**Hydrologic Subarea** (Optional)	908.22
Date	06/12/09	**Time** 12:20	**Observer**	MD/AK		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 5,6

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.6	NH_3-N (mg/L)	0.194	NO_3 (mg/L)	9.186	Ortho-PO_4 (mg/L)	0.562
pH (pH units)	7.5	TURB (NTU)	4.04	NO_3-N (mg/L)	2.076	Ortho-PO_4 -P (mg/L)	0.183
COND (mS/cm)	2.71	MBAS (mg/L)	0.5	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

DM

2009 Trash Assessment Form

SITE ID: 908-UNI-004 **DATE:** 06/12/09

LOCATION: In front of 7551 University Avenue along the South side of the street **TIME:** 12:20

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-005		Latitude	32.75787	Watershed	Hydrologic Unit	908
Location	Rolando Park, in locked gated area by left field of baseball field		Longitude	-117.05260		Hydrologic Area	908.2
			TB Page	1270, E4		Hydrologic Subarea (Optional)	908.22
Date	06/16/09	Time 12:20	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☒ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other Spiders

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 49-50

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.6	NH_3-N (mg/L)	0.476	NO_3 (mg/L)	76.31	Ortho-PO_4 (mg/L)	3.160
pH (pH units)	8.5	TURB (NTU)	1.68	NO_3-N (mg/L)	17.25	Ortho-PO_4-P (mg/L)	1.030
COND (mS/cm)	2.67	MBAS (mg/L)	0.75	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Black widow spiders

2009 Trash Assessment Form

SITE ID: 908-UNI-005 DATE: 06/16/09

LOCATION: Rolando Park, in locked gated area behind left field of baseball field TIME: 12:20

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-005		Latitude	32.75787	Watershed	Hydrologic Unit	908
Location	Rolando Park, in locked gated area by left field of baseball field		Longitude	-117.05260		Hydrologic Area	908.2
			TB Page	1270, E4		Hydrologic Subarea (Optional)	908.22
Date	06/17/09	Time 10:20	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other spiders

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ~~☐ No~~ **Photo #** 56, 57

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.4	NH_3-N (mg/L)	NA	NO_3 (mg/L)	8.00	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.4	TURB (NTU)	NA	NO_3-N (mg/L)	1.808	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.20	MBAS (mg/L)	NA	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	909-SPR-001		Latitude	32.75483	Watershed	Hydrologic Unit	909
Location	Spring street and Spring Gardens rd intersection, inside La Mesa Seventh Day Adventist ~~Baptist~~ Church		Longitude	-117.01311		Hydrologic Area	909.1
			TB Page	1270, J4		Hydrologic Subarea (Optional)	909.12
Date	06/15/09	Time 1315	Observer	MD/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray			☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive				☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 19, 20

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.189	NO_3 (mg/L)	10.59	Ortho-PO_4 (mg/L)	0.569
pH (pH units)	7.5	TURB (NTU)	1.00	NO_3-N (mg/L)	2.39	Ortho-PO_4-P (mg/L)	0.185
COND (mS/cm)	2.47	MBAS (mg/L)	0.38	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width	15	in	Volume		mL	Diameter		ft
Depth	0.25	in	Time to Fill		sec	Depth		ft
Velocity	10.10	ft/sec	Flow		gpm	Velocity		ft/sec
Flow	12	gpm				Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 909-SPR-001 DATE: 06/15/09

LOCATION: Spring Street and Spring Gardens road intersection, inside LaMesa Seventh Day Adventist Church TIME: 1315

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

DM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	909-SPR-002			Latitude	32.76324	Watershed: Hydrologic Unit	909
Location	In front of 4621 Bancroft Drive just south of Golondrina Drive			Longitude	-117.00118	Hydrologic Area	909.1
				TB Page	1271, B3	Hydrologic Subarea (Optional)	909.12
Date	06/15/09	Time	1400	Observer	MD/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 21, 22

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)	0.220	NO_3 (mg/L)	24.97	Ortho-PO_4 (mg/L)	0.388
pH (pH units)	8.2	TURB (NTU)	3.13	NO_3-N (mg/L)	5.648	Ortho-PO_4 -P (mg/L)	0.127
COND (mS/cm)	2.17	MBAS (mg/L)	0.13	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	2	gpm				Flow		gpm

COMMENTS: _____

DM

2009 Trash Assessment Form

SITE ID: 909-SPR-002 DATE: 06/15/09

LOCATION: In front of 4621 Bancroft Drive just south of Colondina Drive TIME: 1400

OBSERVER: MD/AK

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Attachment 1

Historical Data Graphs:
San Diego River Watershed

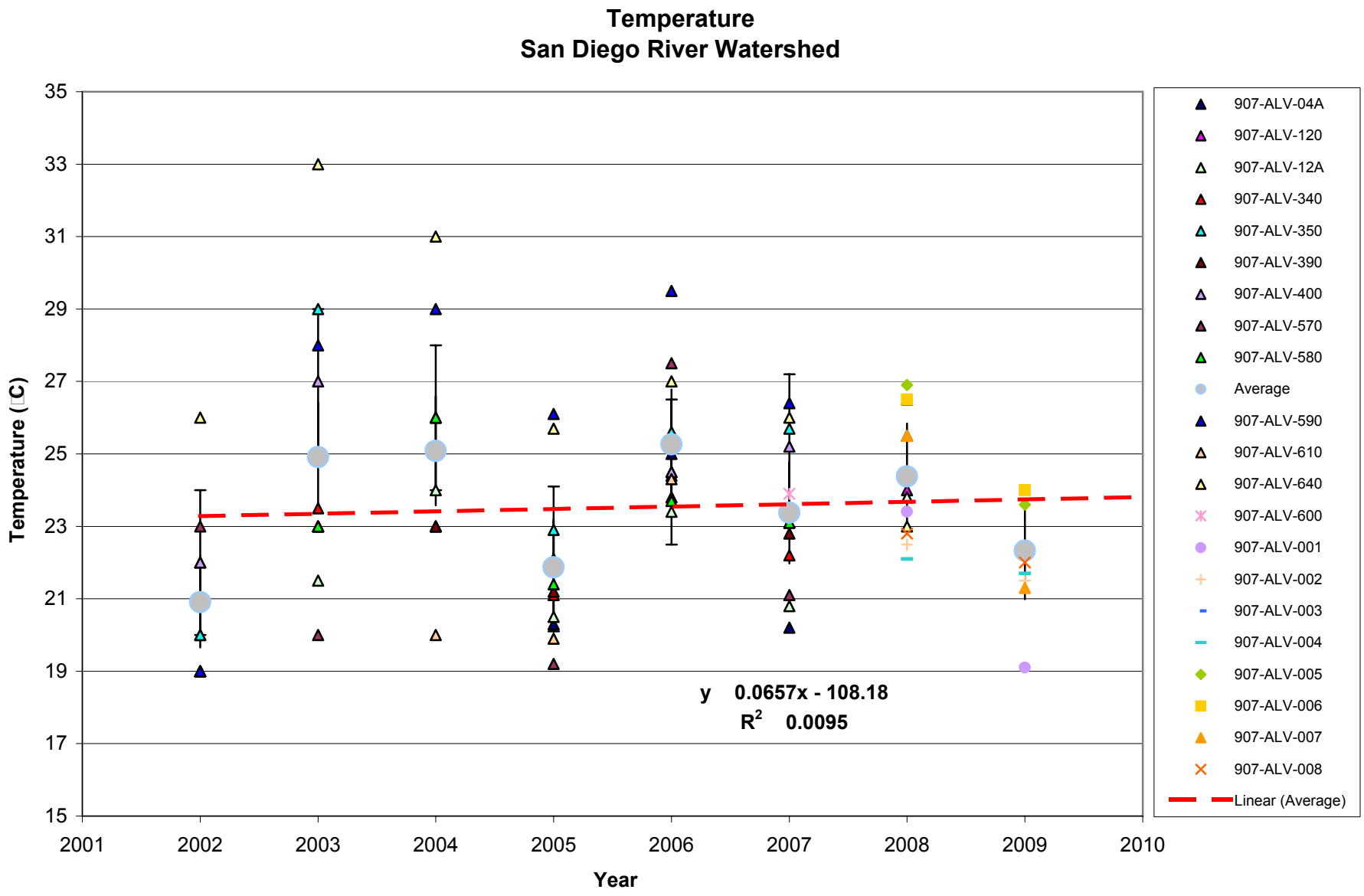
Temperature
San Diego River Watershed
Temperature (□C)
35
33
31
29
27
25
23
21
19
17
15
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y 0.0657x - 108.18
R2 0.0095
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
Average
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

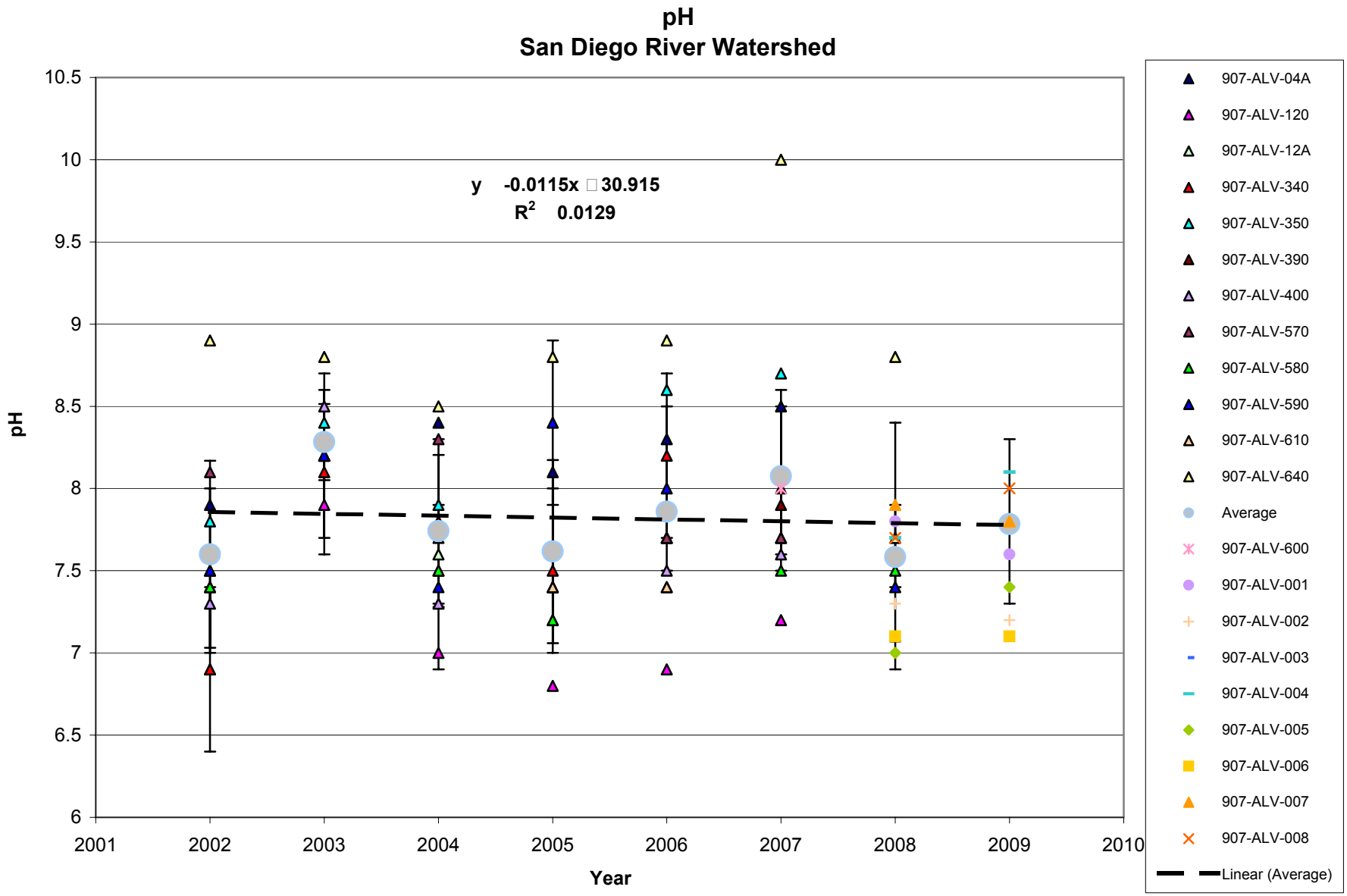
pH
San Diego River Watershed
y -0.0115x 30.915
R2 0.0129
pH
Year
10.5
10
9.5
9
8.5
8
7.5
7
6.5
6
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

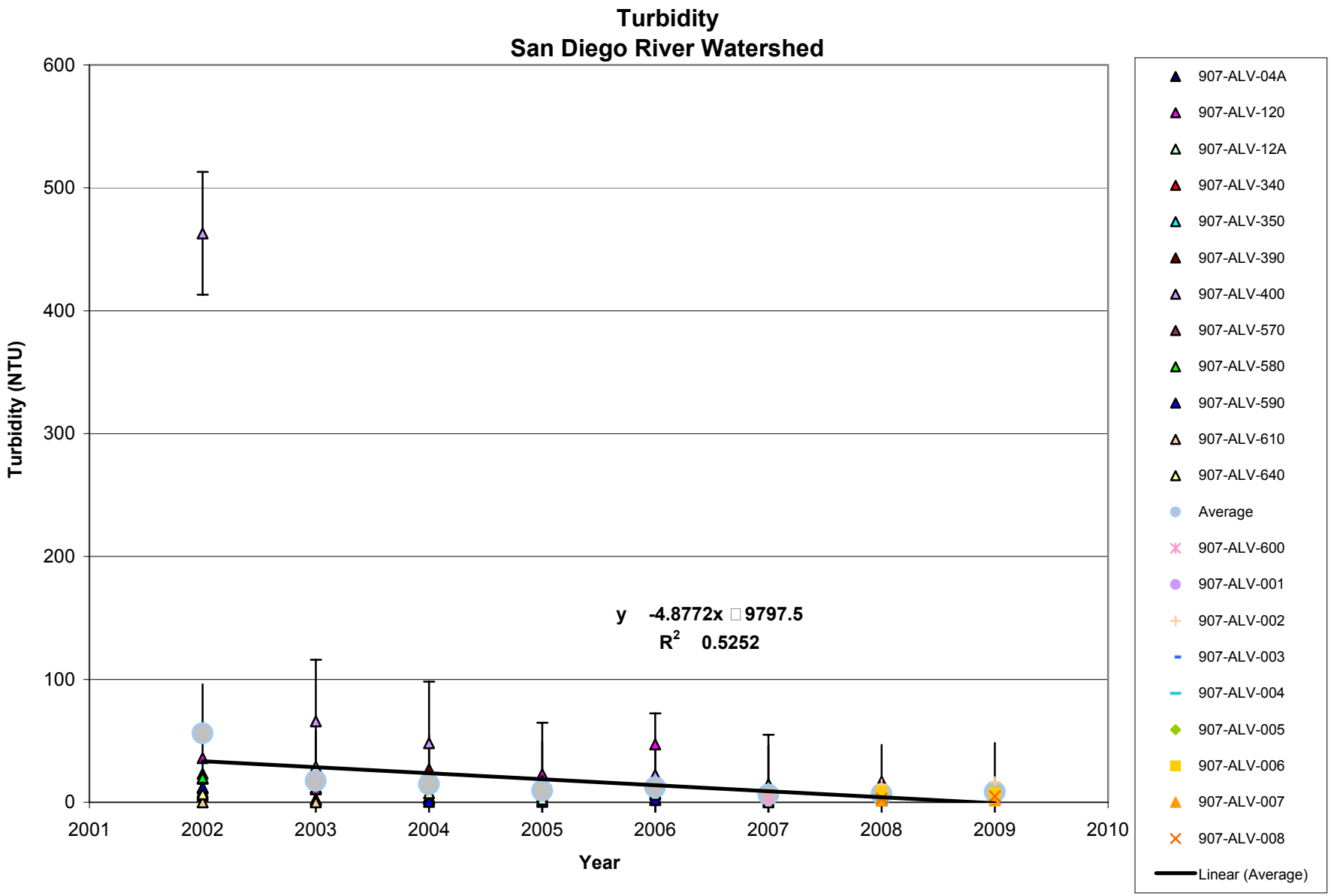
Turbidity
San Diego River Watershed
Turbidity (NTU)
600
500
400
300
200
100
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y -4.8772x 9797.5
R2 0.5252
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

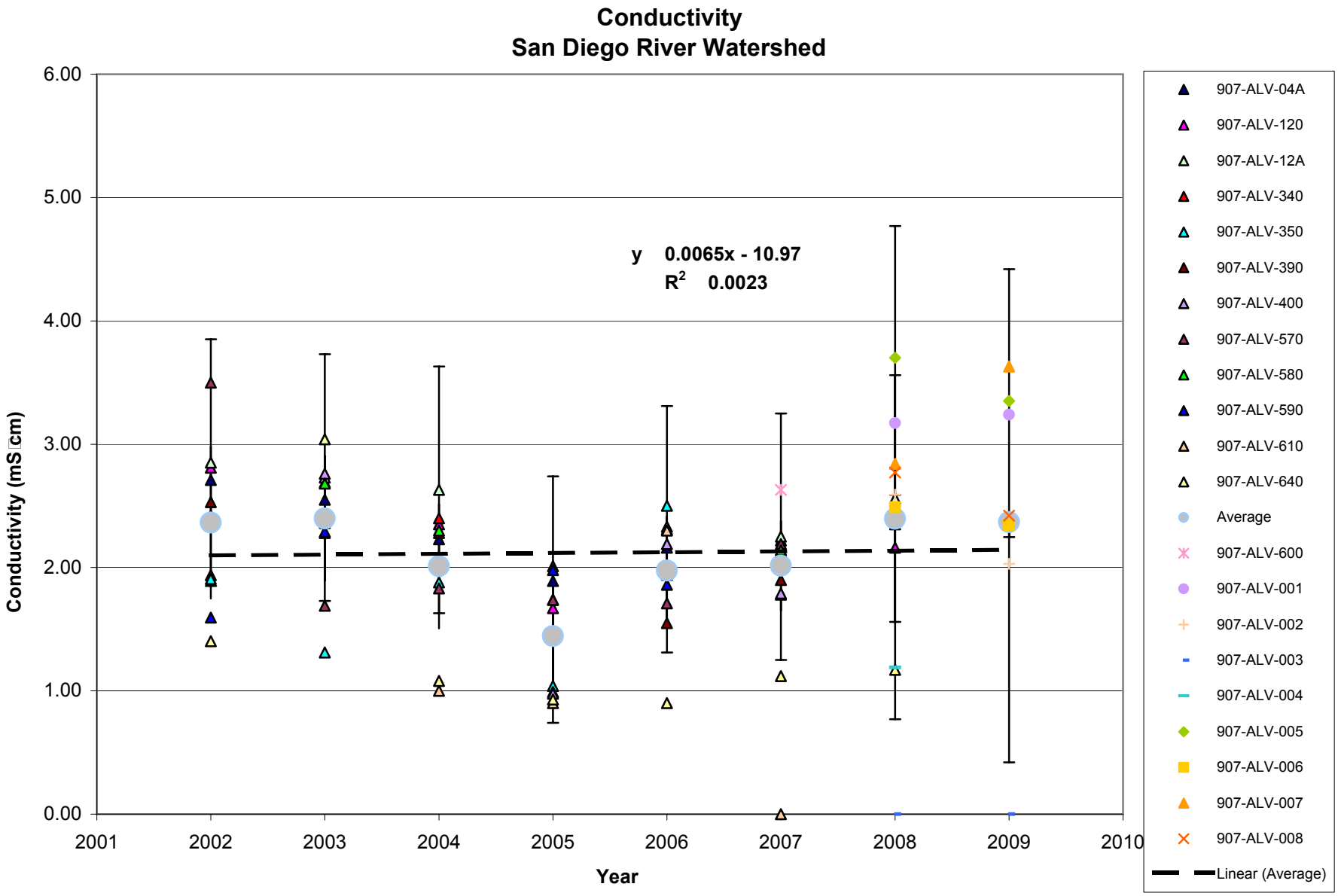
Conductivity
San Diego River Watershed
y 0.0065x - 10.97
R2 0.0023
Conductivity (mS/cm)
6.00
5.00
4.00
3.00
2.00
1.00
0.00
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

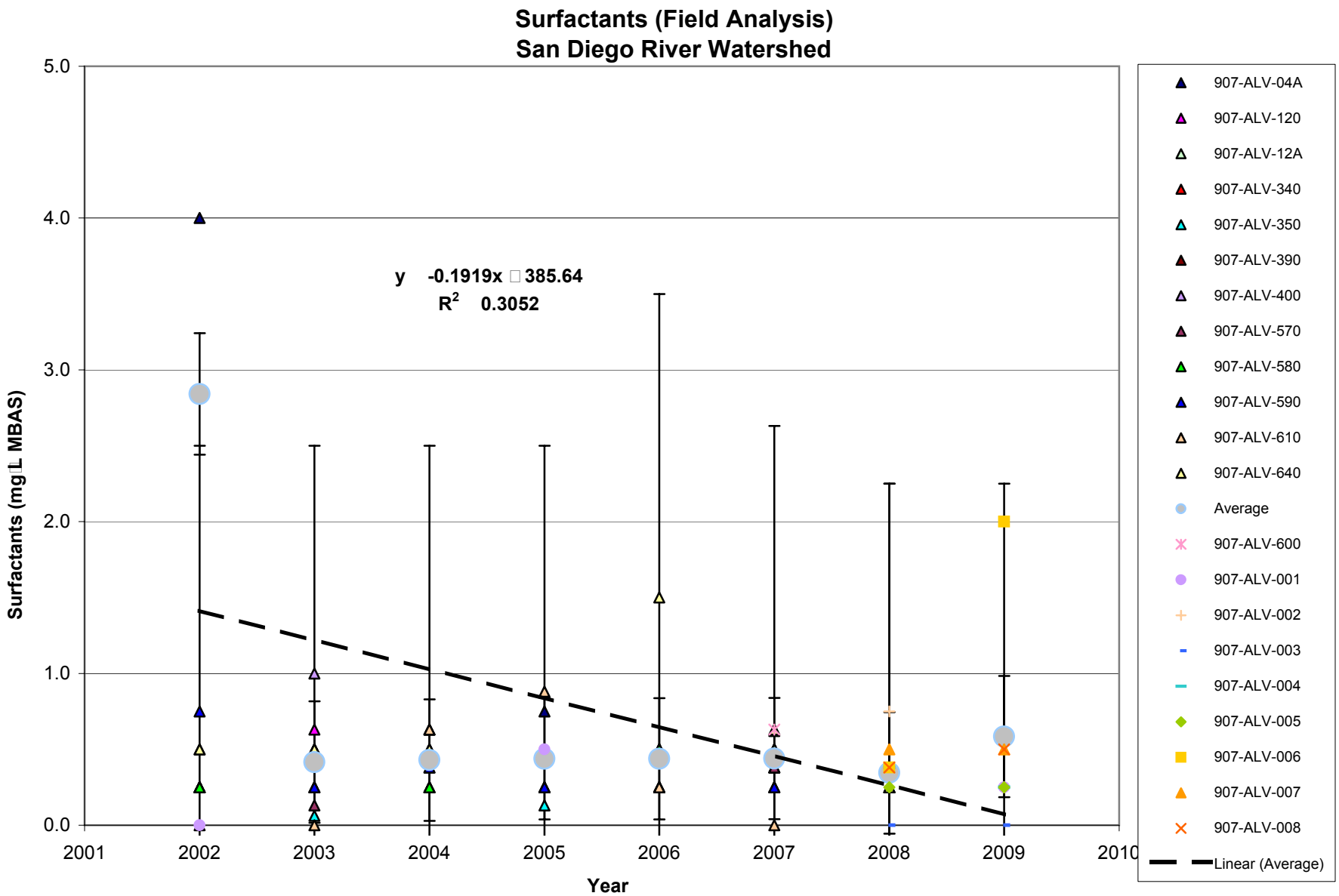
Surfactants (Field Analysis)
San Diego River Watershed
y -0.1919x 385.64
R2 0.3052
Surfactants (mgL MBAS)
5.0
4.0
3.0
2.0
1.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

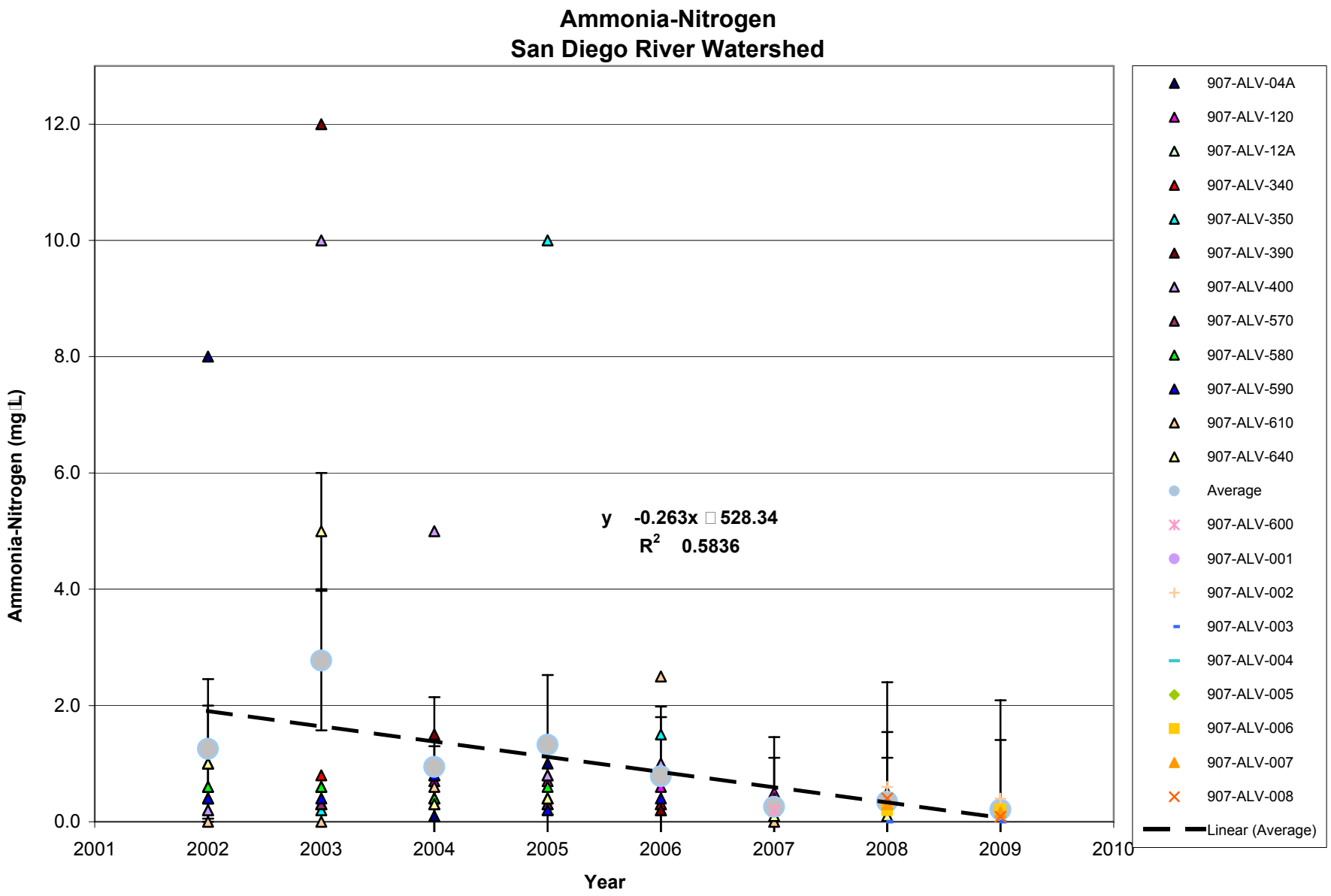
Ammonia-Nitrogen
San Diego River Watershed
Ammonia-Nitrogen (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y -0.263x 528.34
R2 0.5836
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

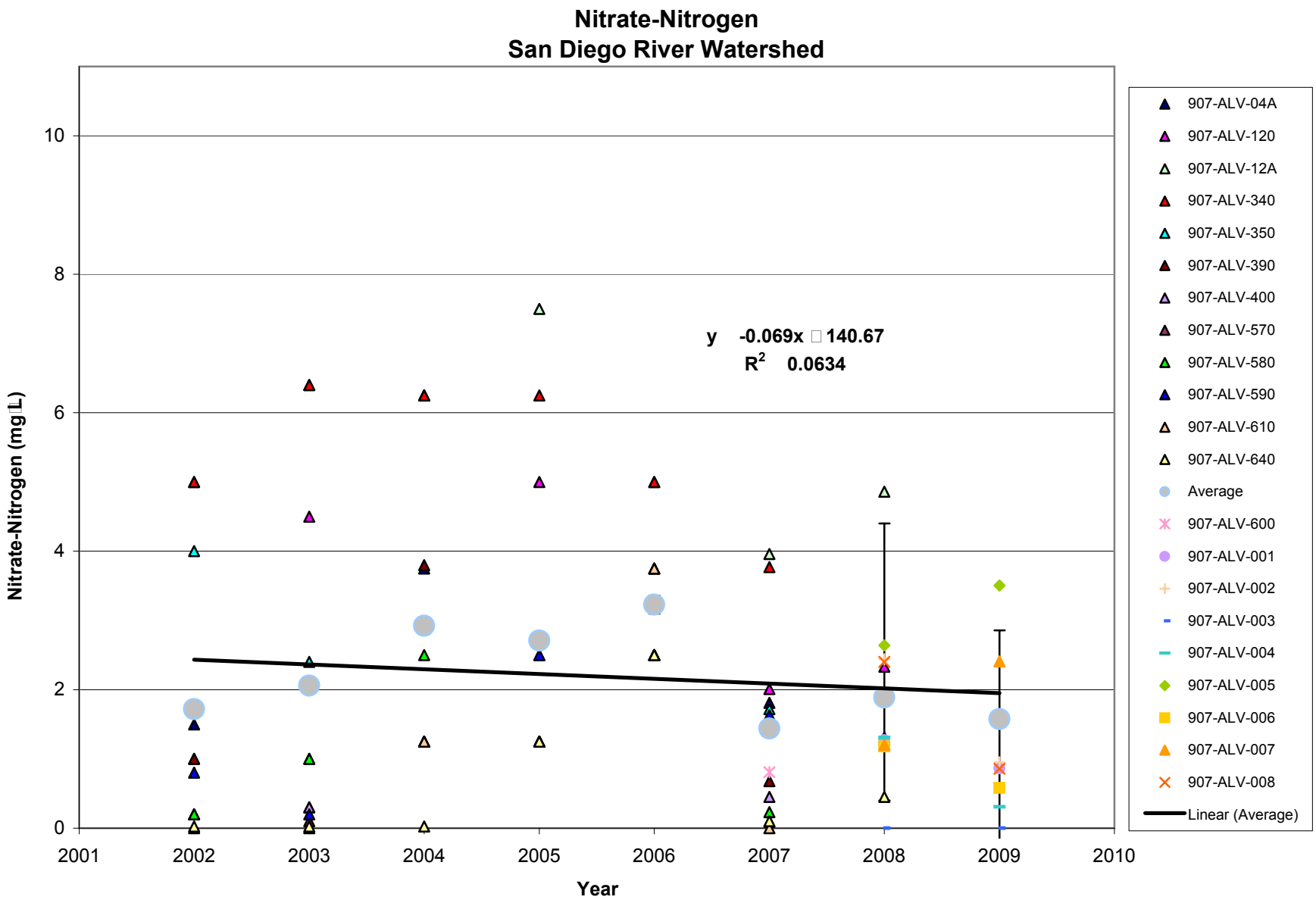
Nitrate-Nitrogen
San Diego River Watershed
Nitrate-Nitrogen (mg/L)
Year
0
2
4
6
8
10
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
y -0.069x 140.67
R2 0.0634
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

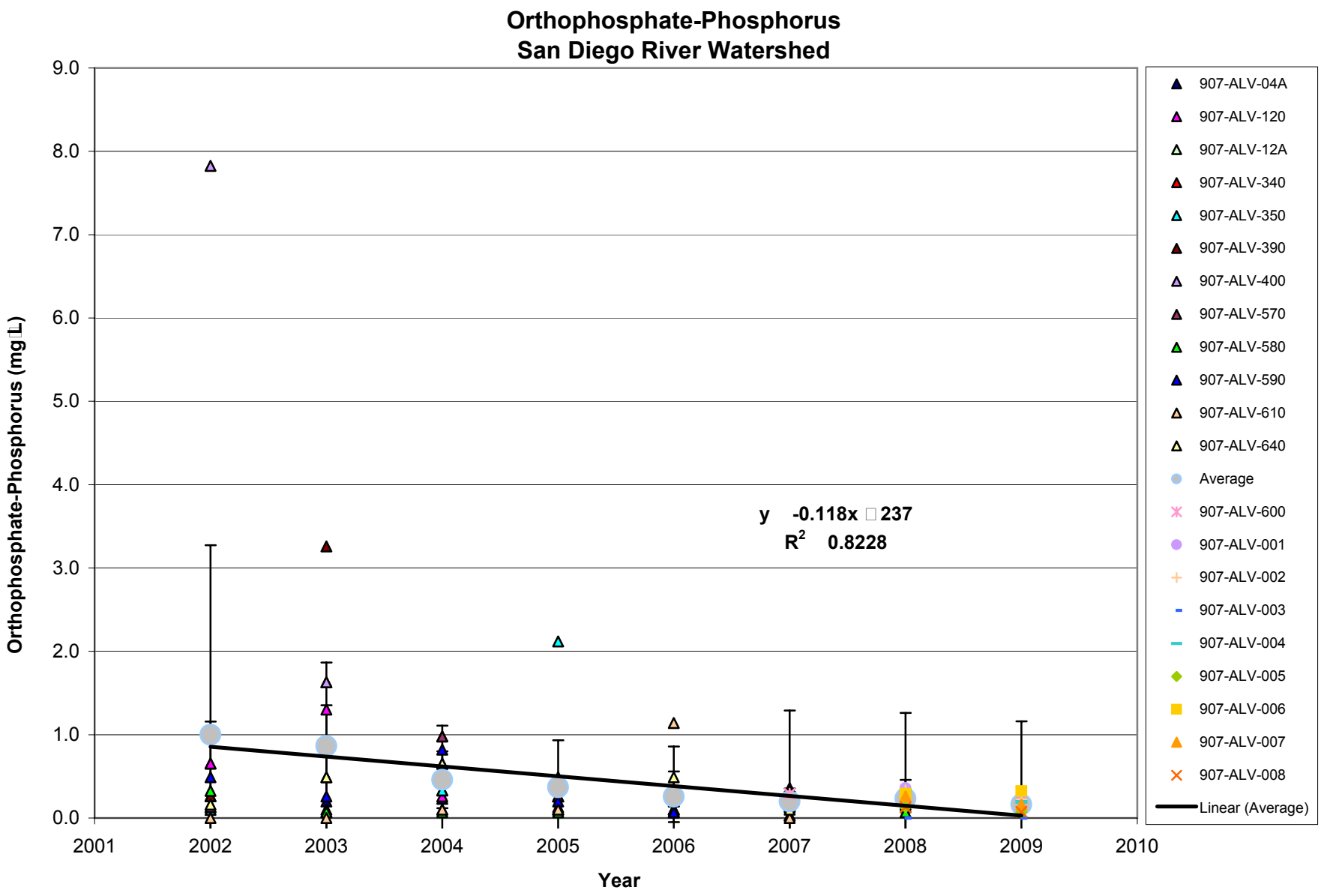
Orthophosphate-Phosphorus
San Diego River Watershed
Orthophosphate-Phosphorus (mg/L)
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y -0.118x 237
R2 0.8228
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

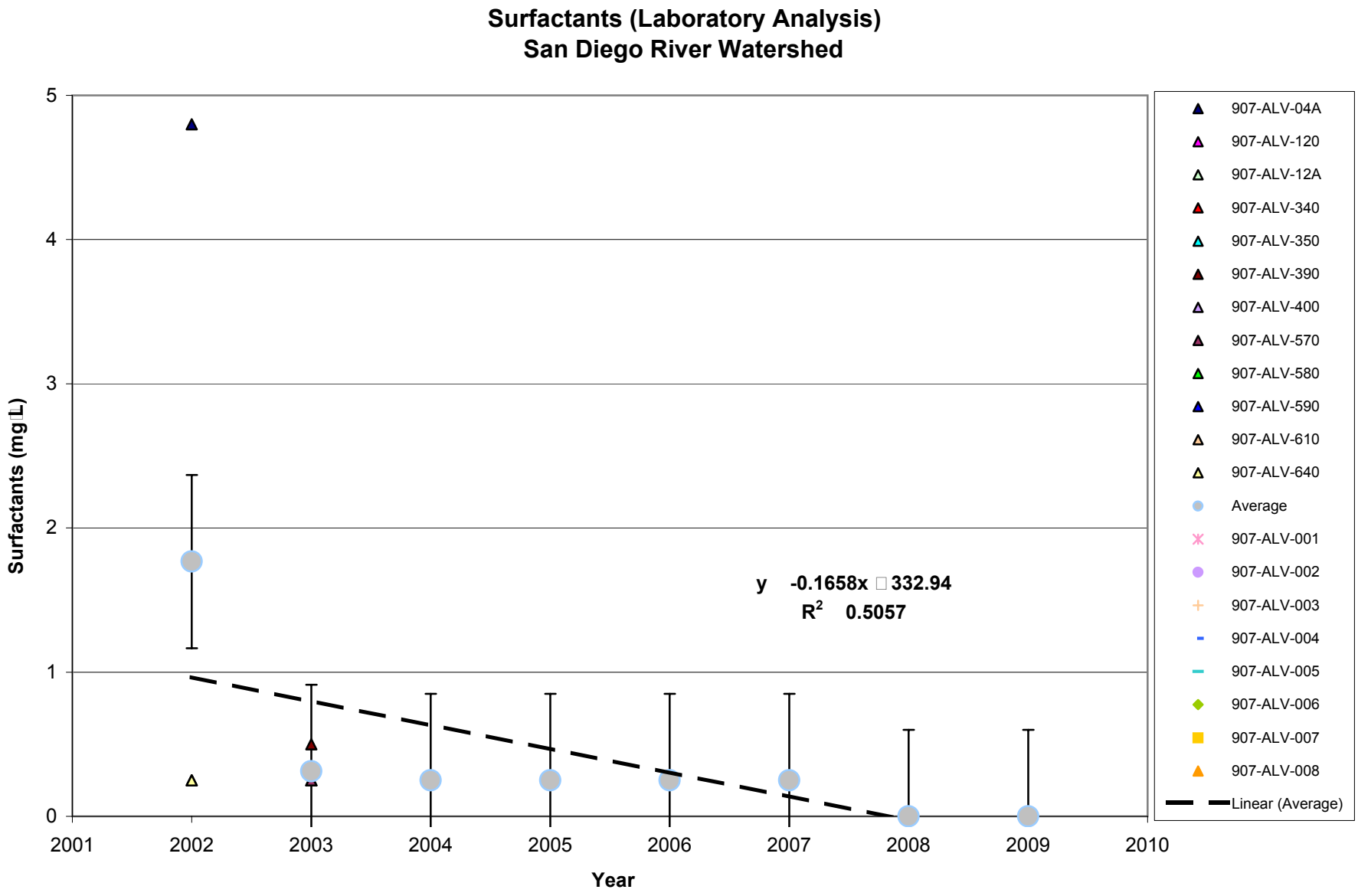
Surfactants (Laboratory Analysis)
San Diego River Watershed
Surfactants (mg/L)
Year
0
1
2
3
4
5
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
y -0.1658x 332.94
R2 0.5057
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

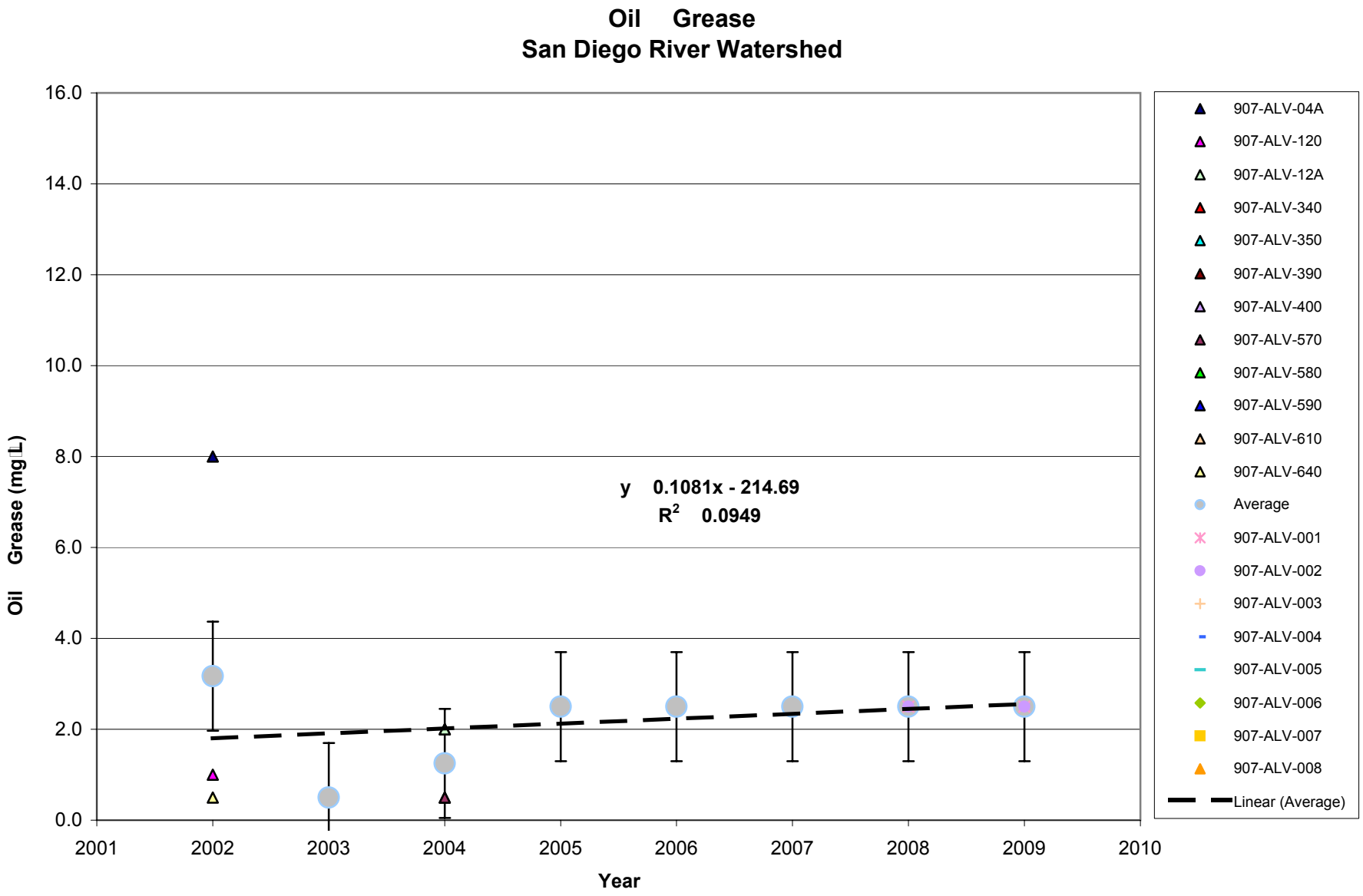
Oil Grease
San Diego River Watershed
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
Oil Grease (mg L)
y 0.1081x - 214.69
R2 0.0949
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

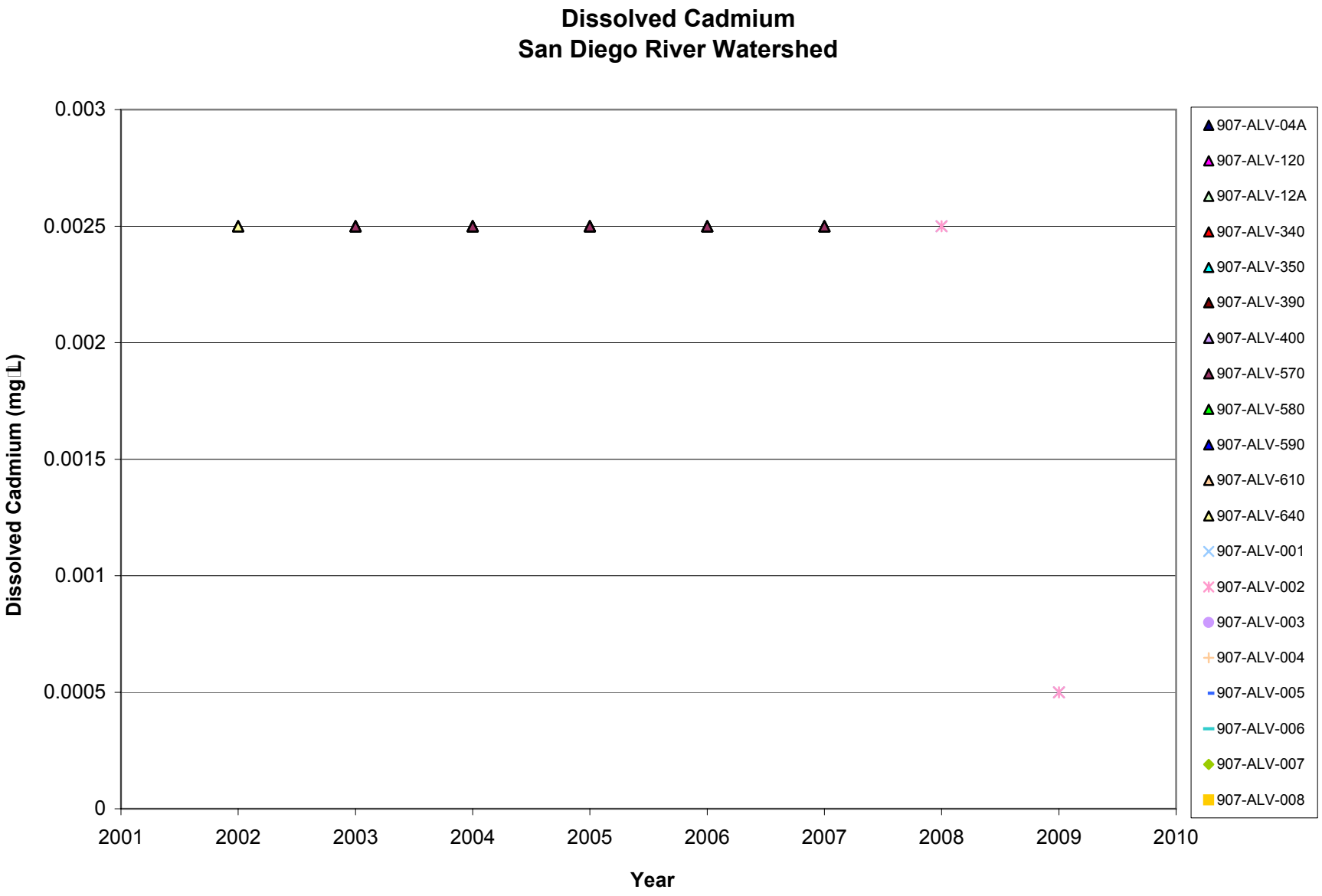
Dissolved Cadmium
San Diego River Watershed
Dissolved Cadmium (mg/L)
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008

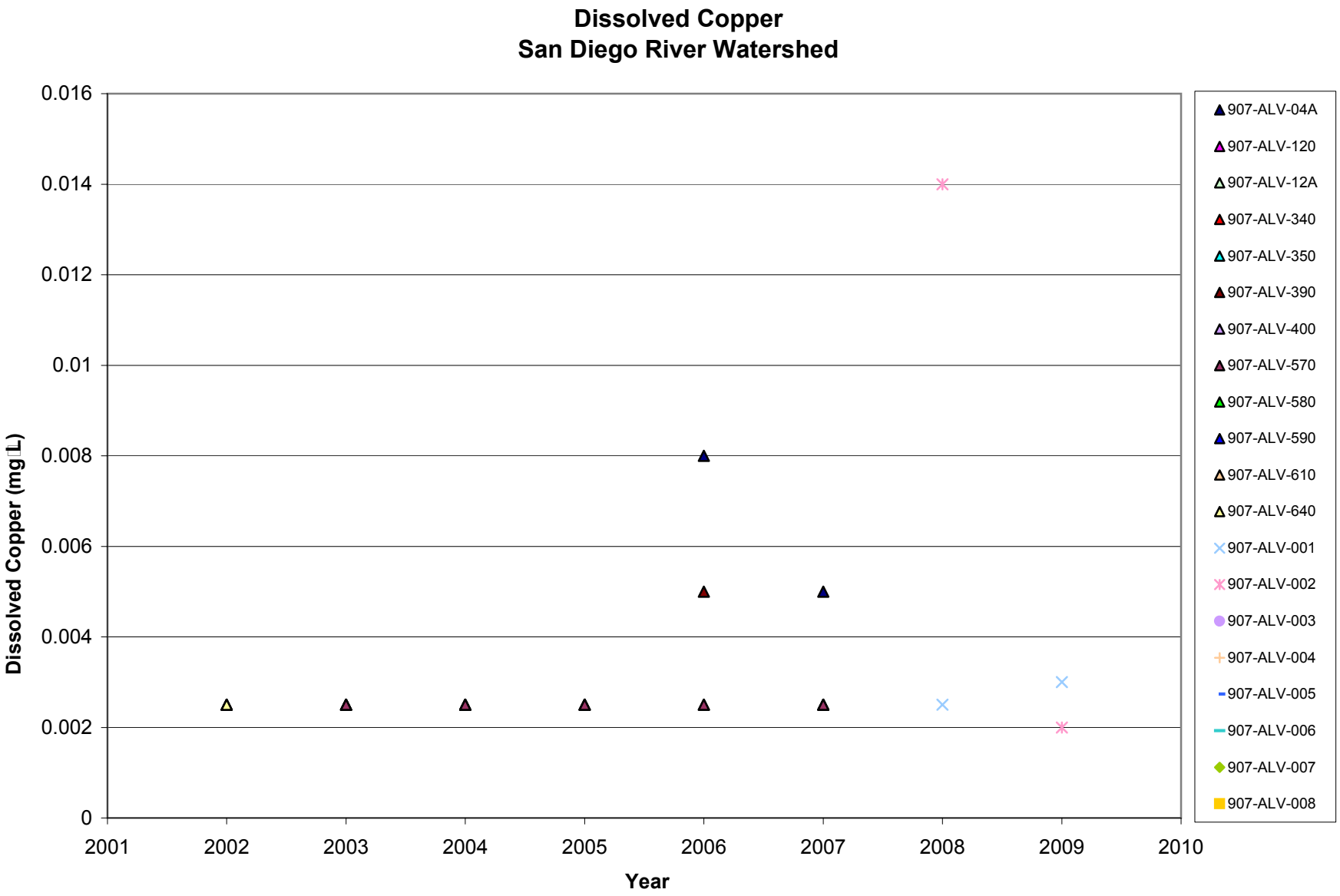
Dissolved Copper
San Diego River Watershed
Dissolved Copper (mg/L)
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008

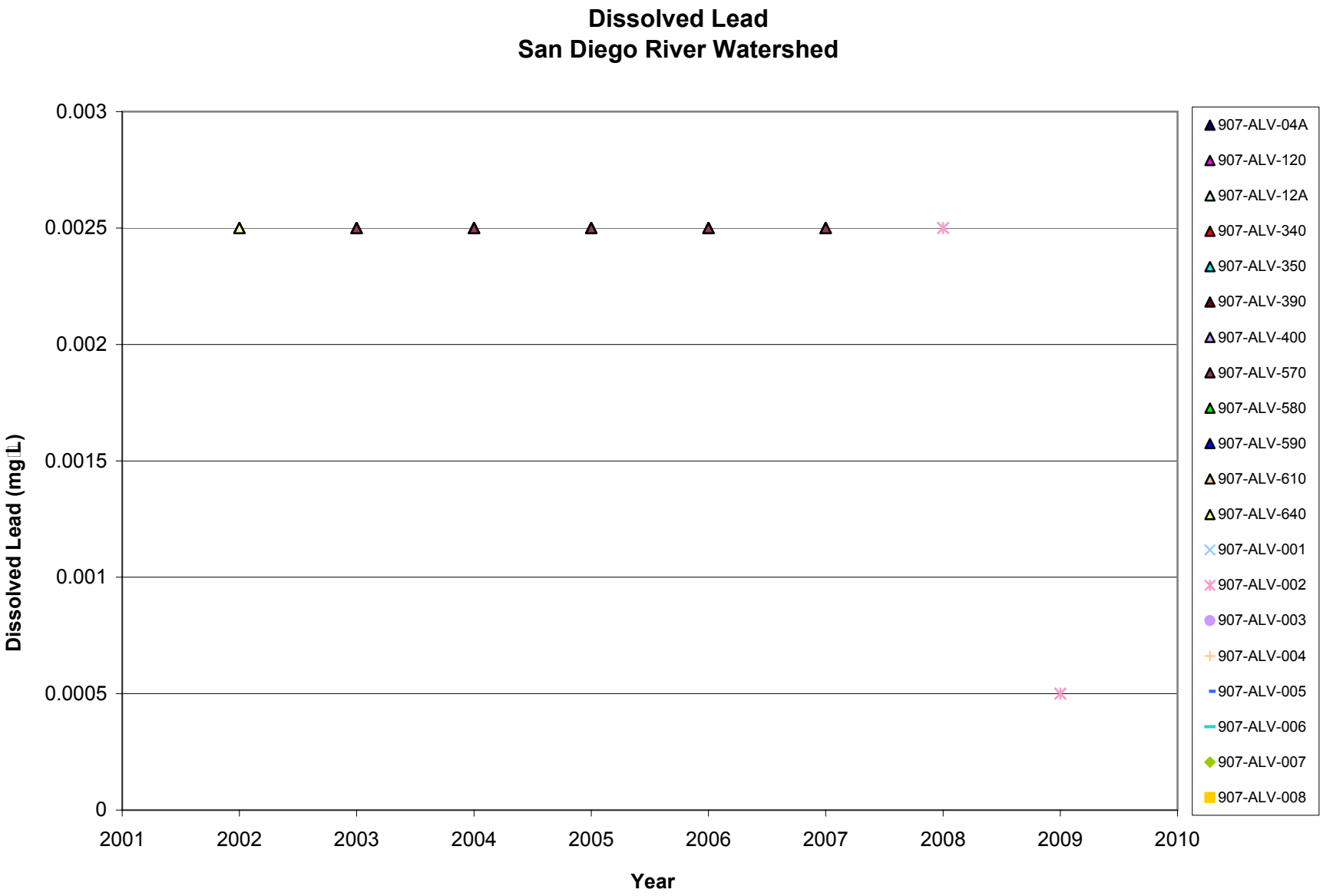
Dissolved Lead
San Diego River Watershed
Dissolved Lead (mg/L)
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008

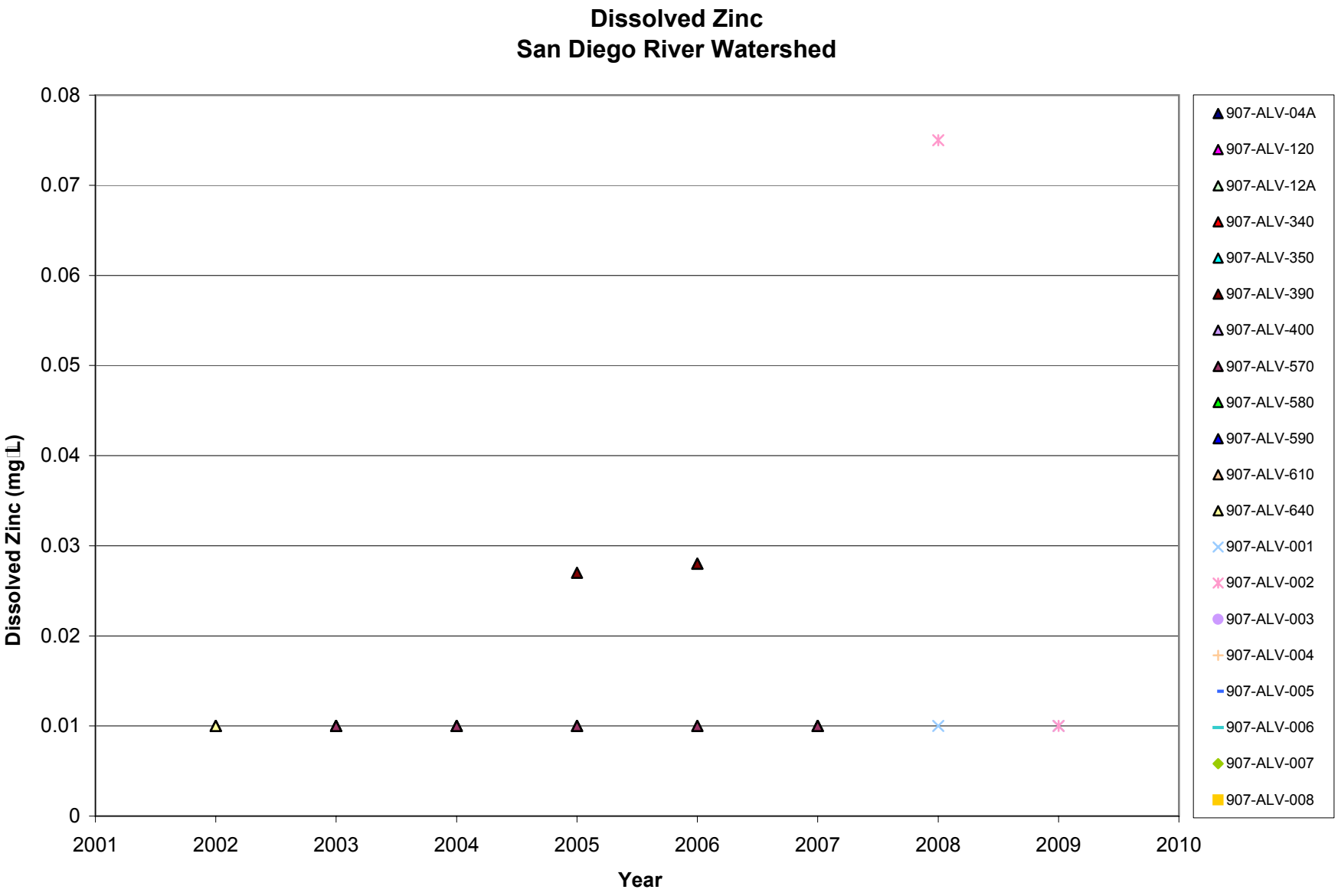
Dissolved Zinc
San Diego River Watershed
Dissolved Zinc (mg/L)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008

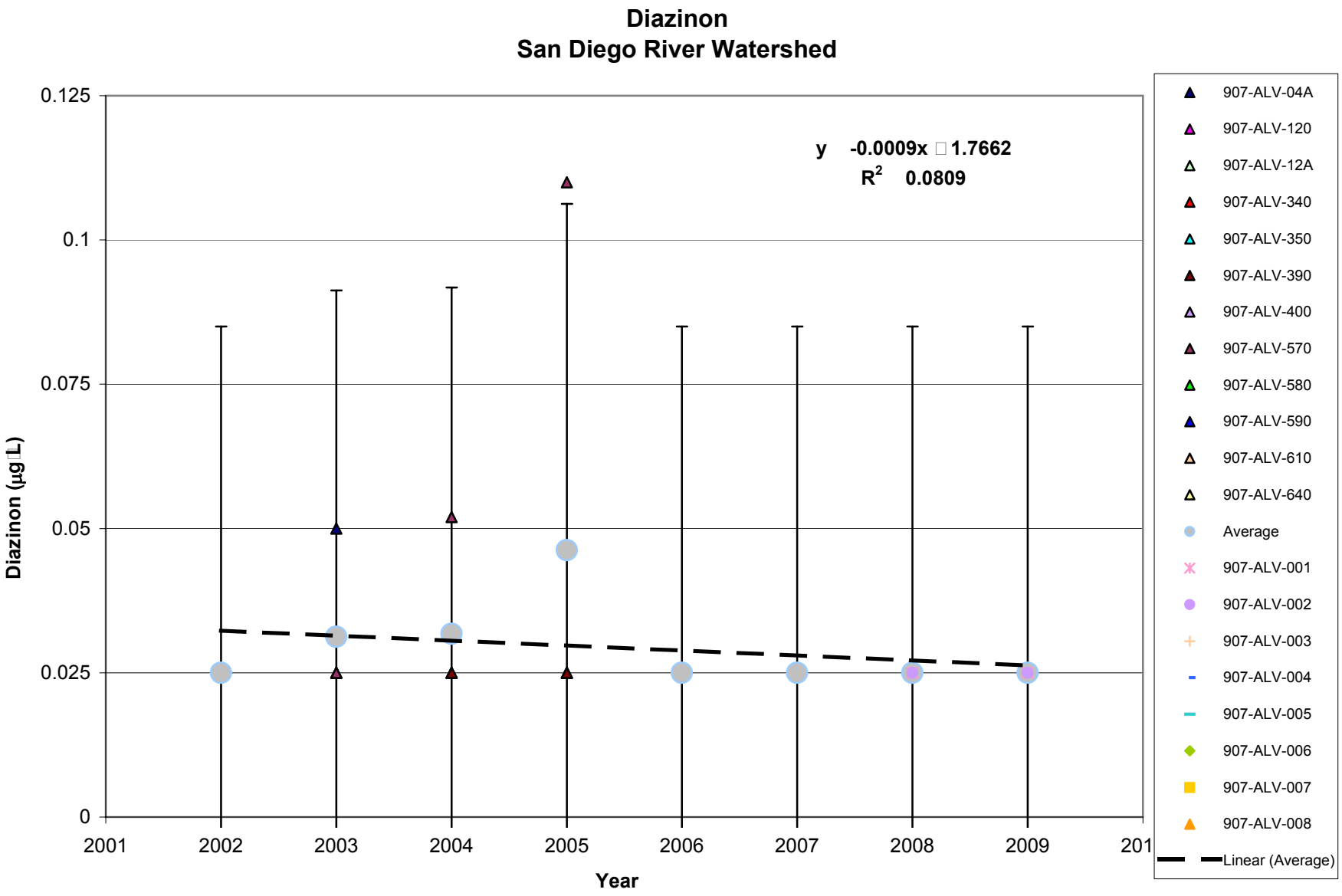
Diazinon
San Diego River Watershed
y -0.0009x 1.7662
R2 0.0809
0.125
0.1
0.075
0.05
0.025
0
Diazinon (µg L)
2001
2002
2003
2004
2005
2006
2007
2008
2009
201
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

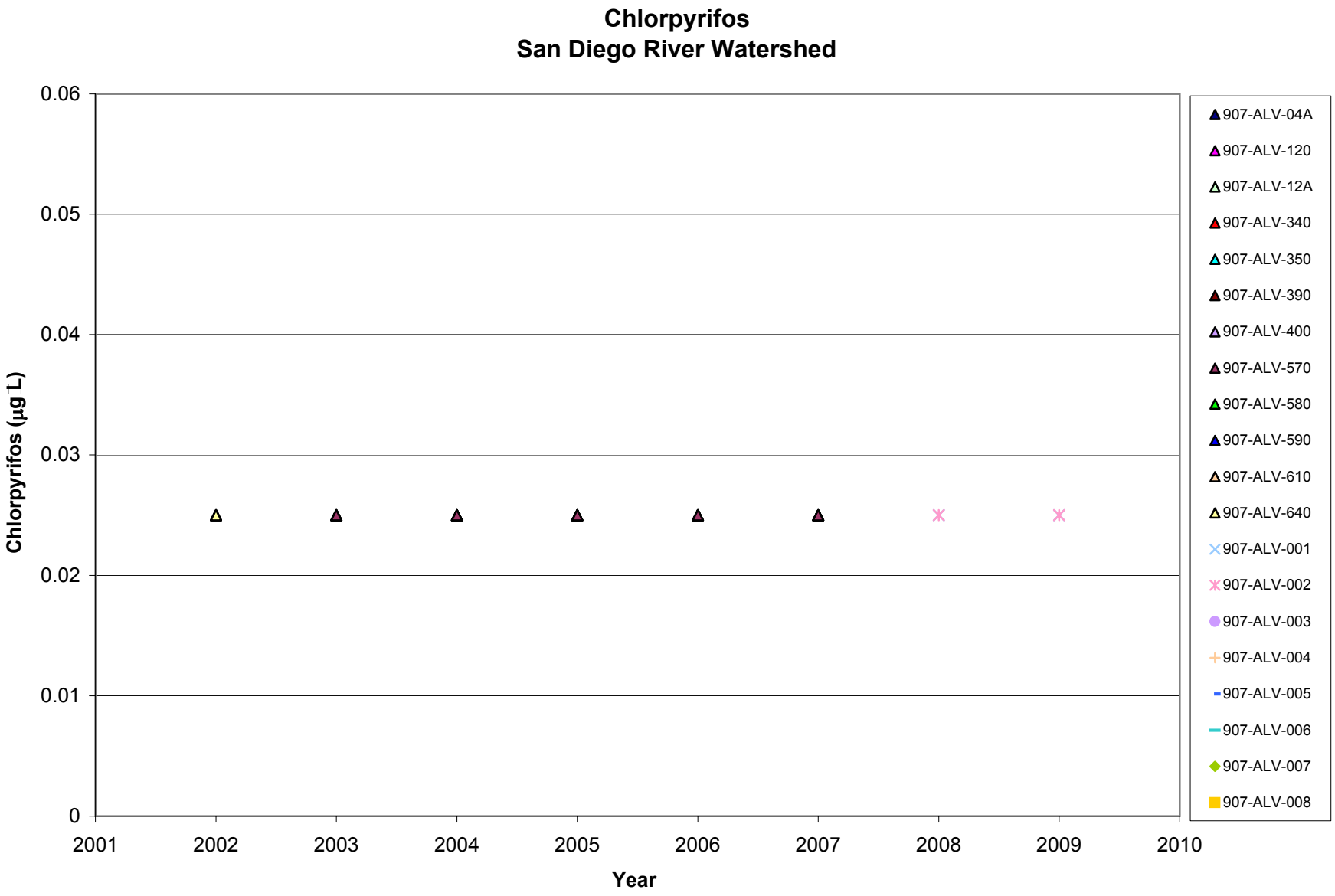
Chlorpyrifos
San Diego River Watershed
Chlorpyrifos (µg/L)
0.06
0.05
0.04
0.03
0.02
0.01
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008

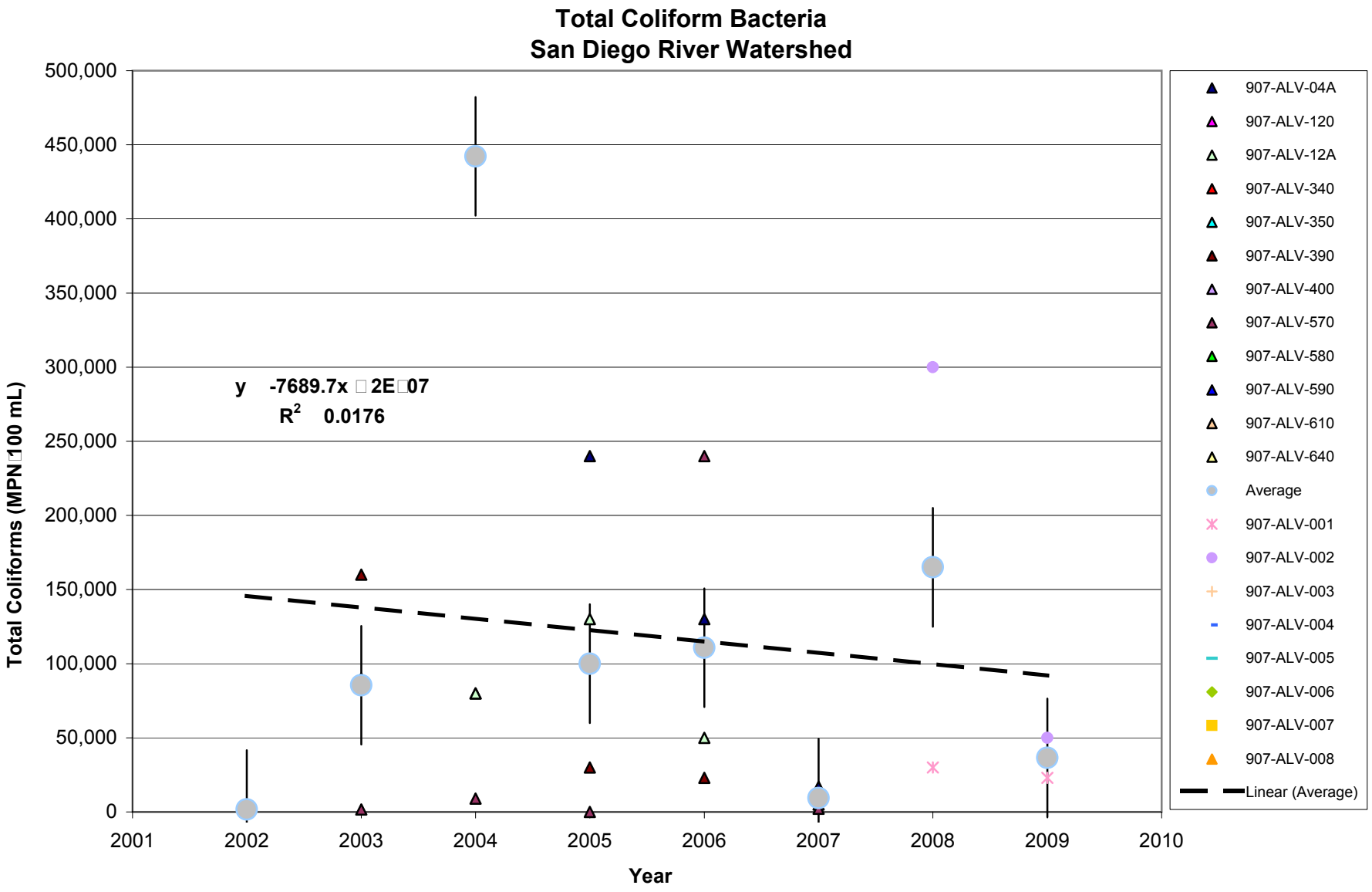
Total Coliform Bacteria
San Diego River Watershed
Total Coliforms (MPN 100 mL)
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y -7689.7x 2E 07
R2 0.0176
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

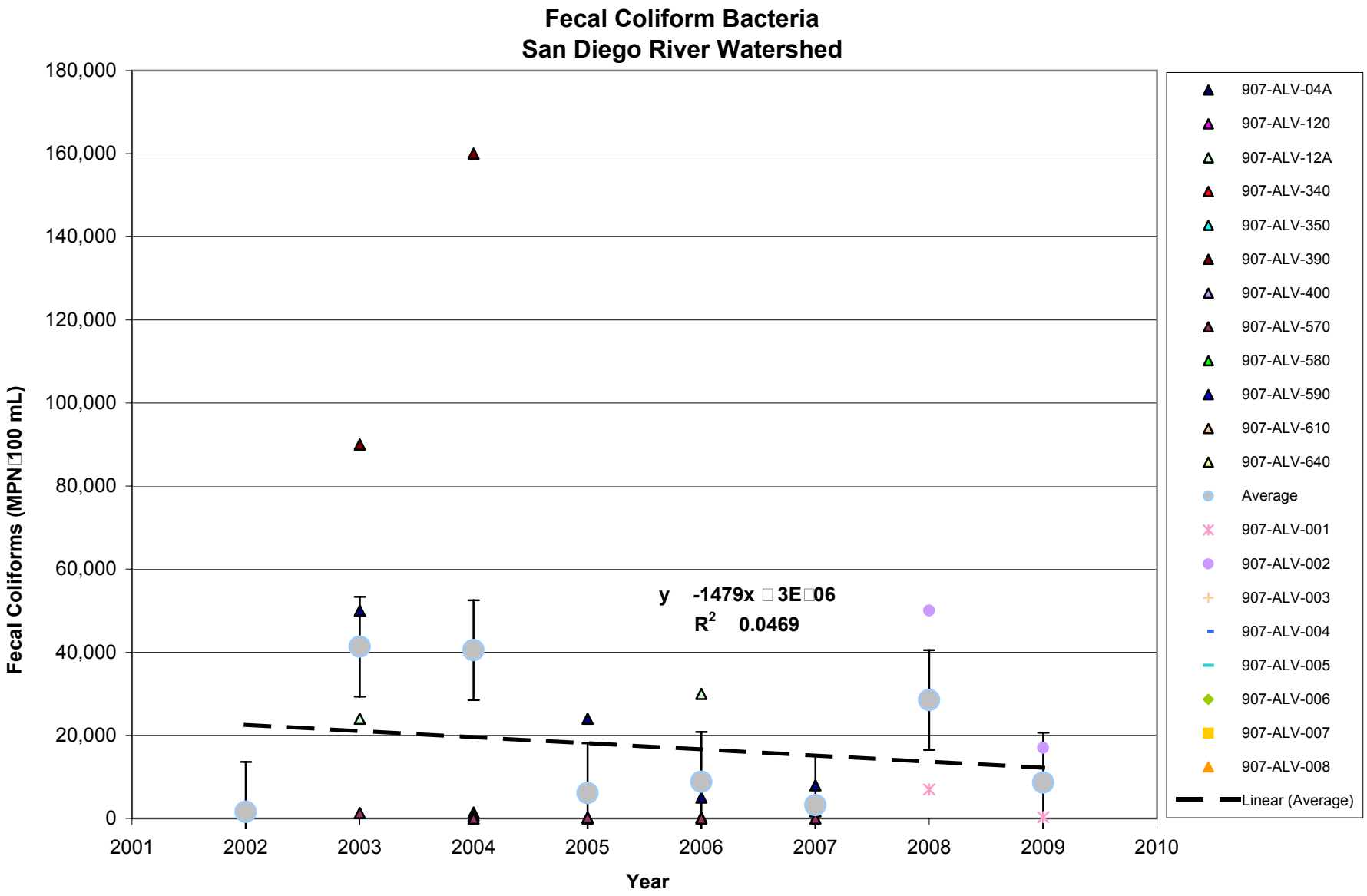
Fecal Coliform Bacteria
San Diego River Watershed
Fecal Coliforms (MPN 100 mL)
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y -1479x 3E 06
R2 0.0469
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

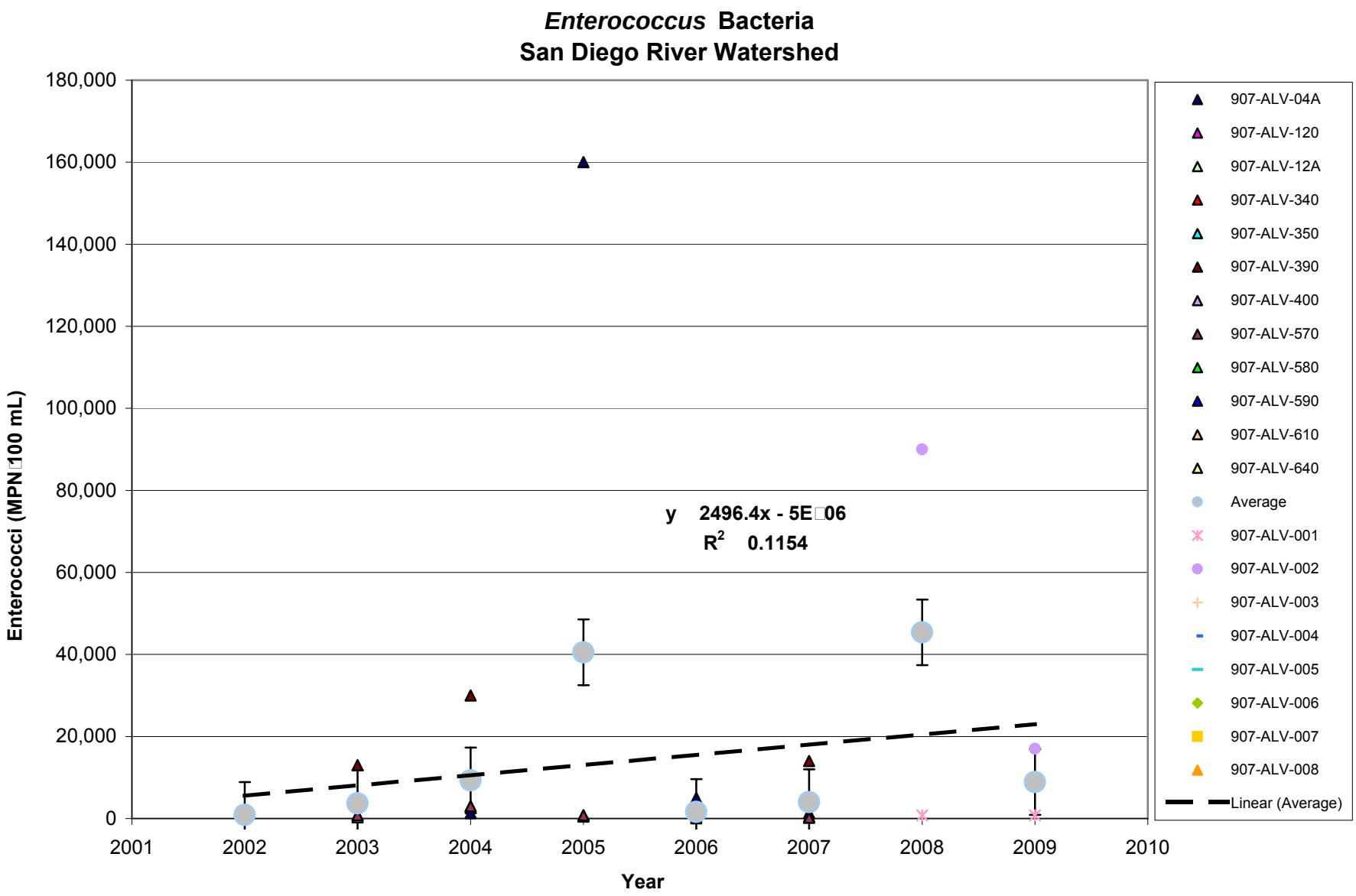
Enterococcus Bacteria
San Diego River Watershed
Enterococci (MPN/100 mL)
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y 2496.4x - 5E-06
R² 0.1154
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-001
907-ALV-002
907-ALV-003
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

Attachment 2

Historical Data Graphs:
San Diego Bay Watershed

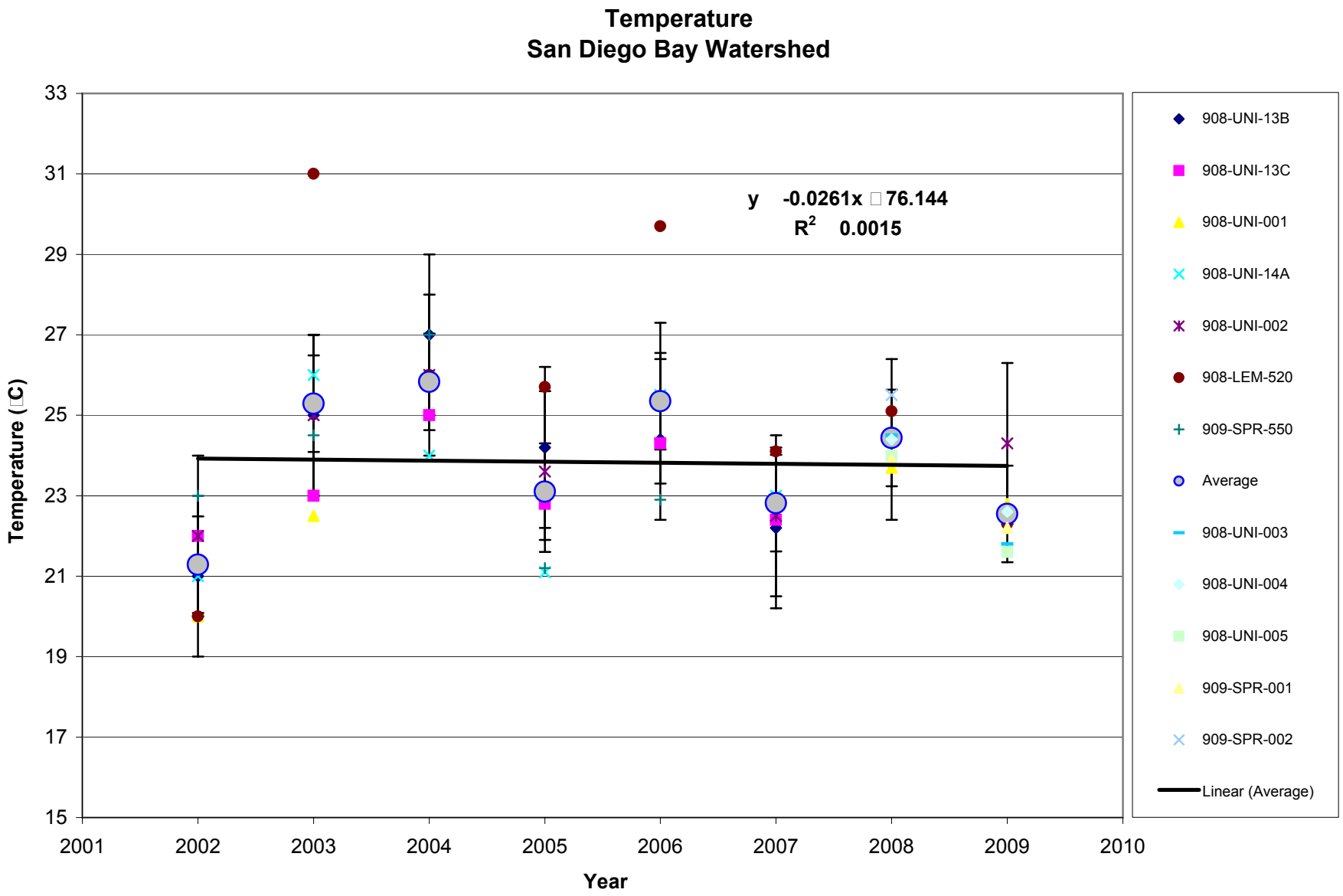
Temperature
San Diego Bay Watershed
y -0.0261x 76.144
R2 0.0015
Temperature (C)
Year
33
31
29
27
25
23
21
19
17
15
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

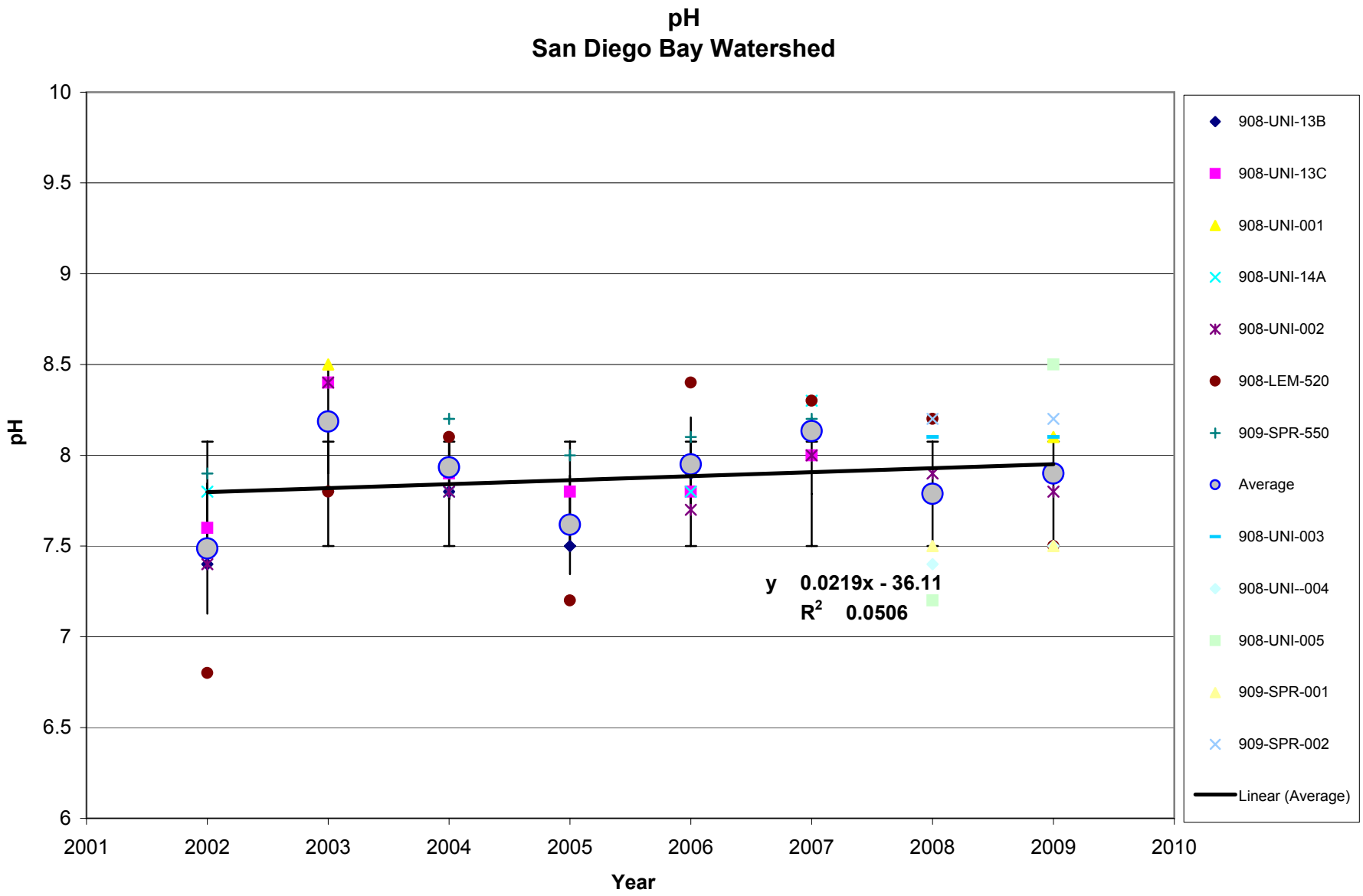
pH
San Diego Bay Watershed
10
9.5
9
8.5
8
7.5
7
6.5
6
pH
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y 0.0219x - 36.11
R2 0.0506
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI--004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

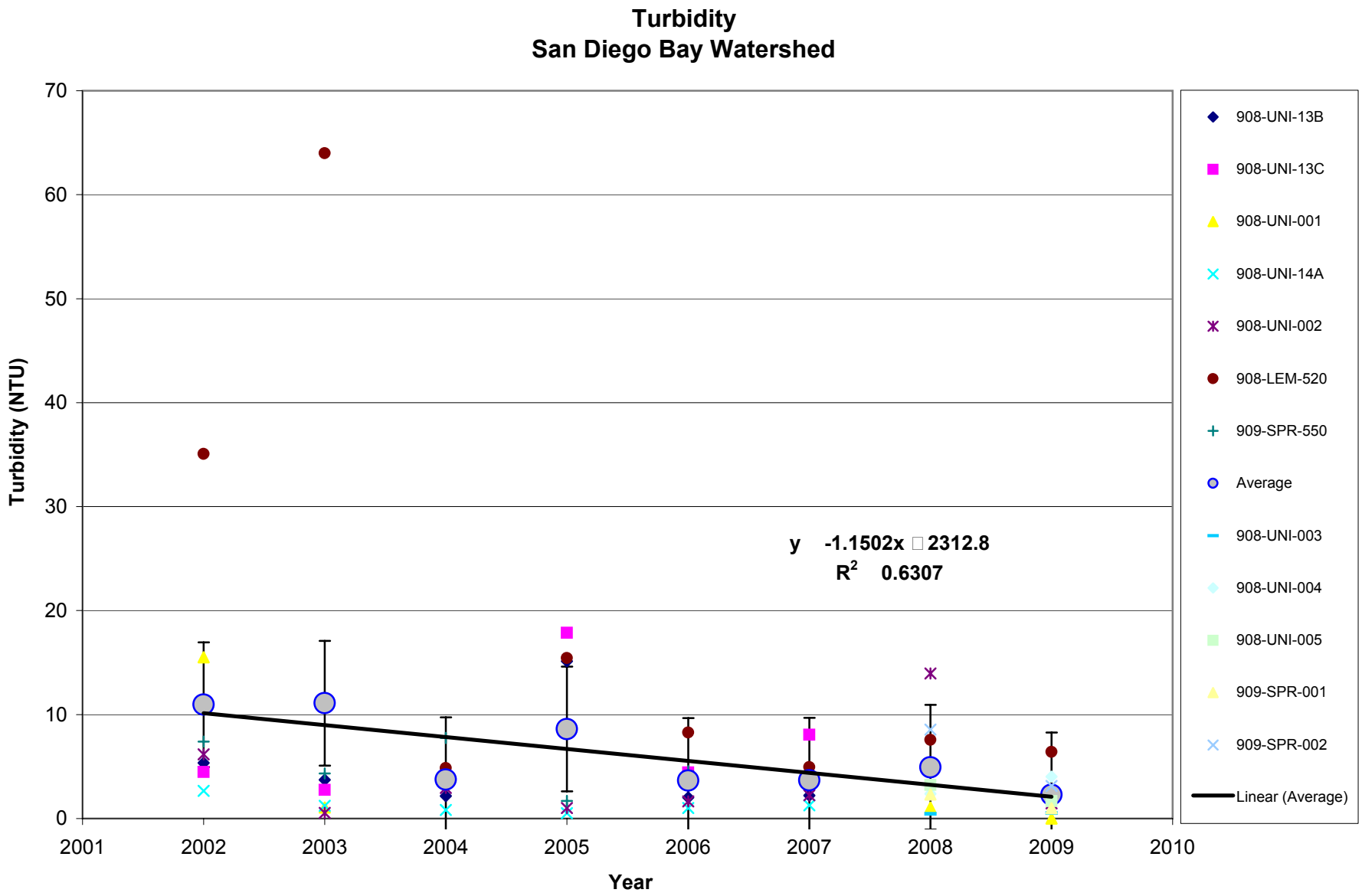
Turbidity
San Diego Bay Watershed
Turbidity (NTU)
Year
70
60
50
40
30
20
10
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
y -1.1502x 2312.8
R2 0.6307
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

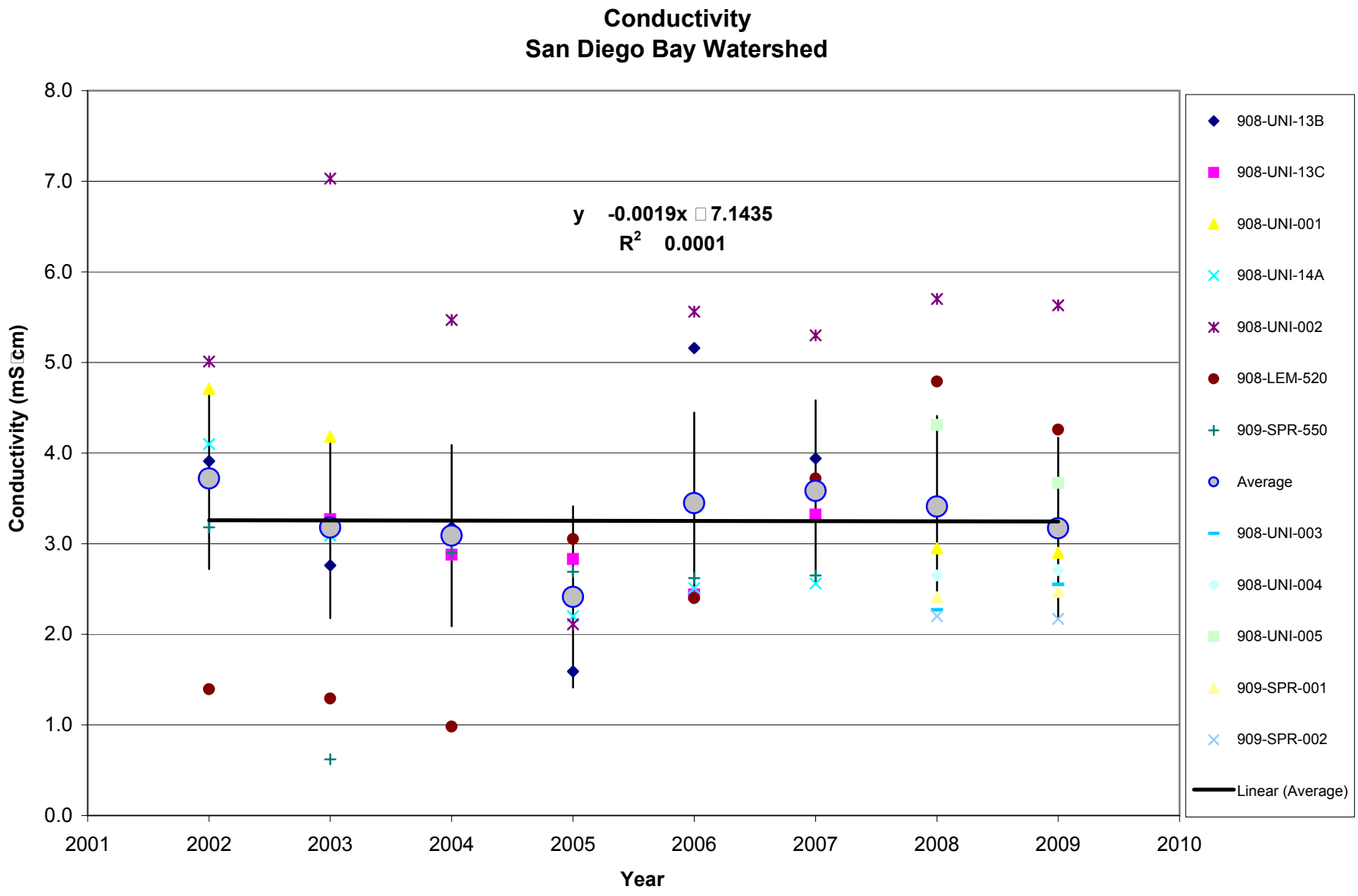
Conductivity
San Diego Bay Watershed
y -0.0019x 7.1435
R2 0.0001
Conductivity (mS cm)
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

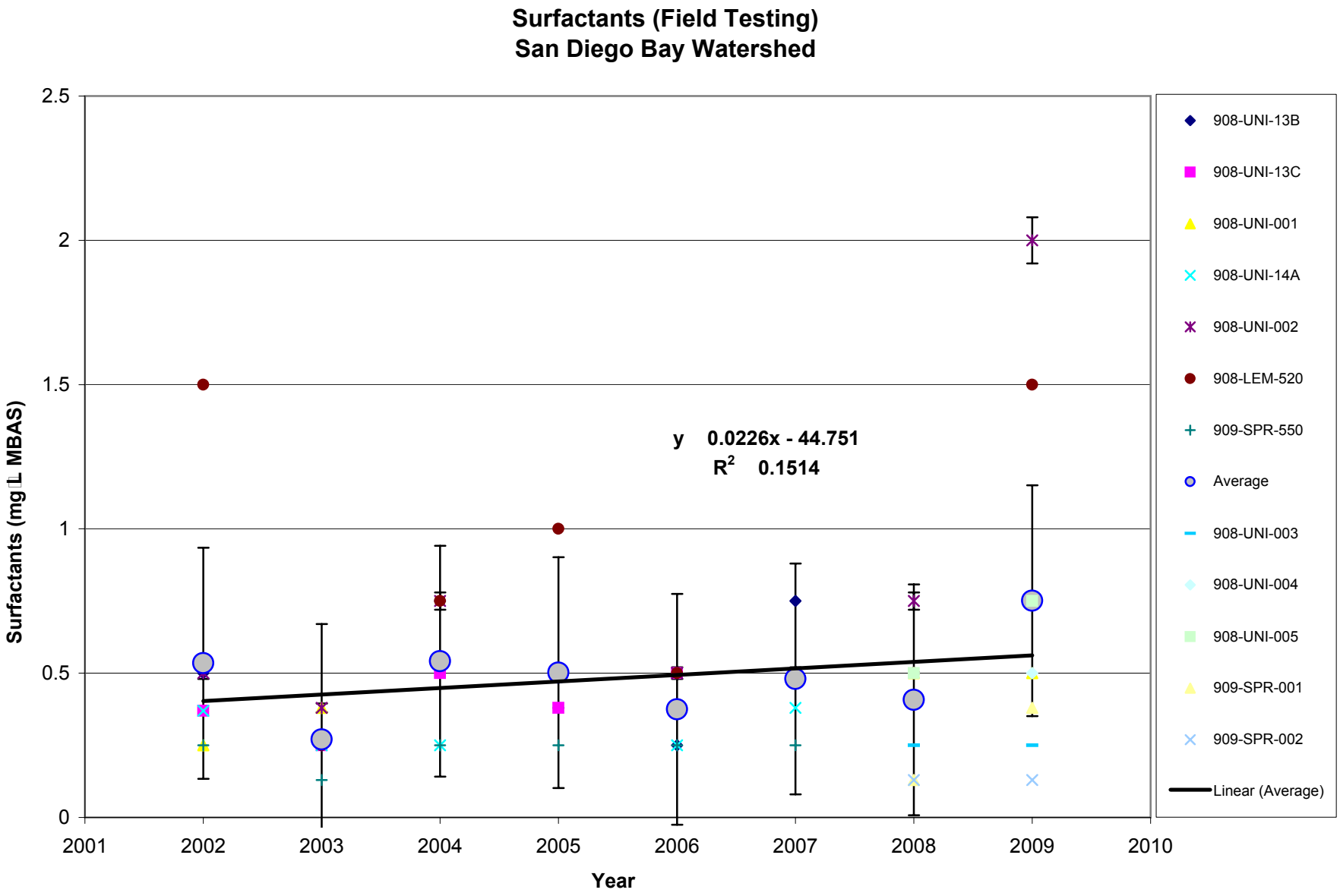
Surfactants (Field Testing)
San Diego Bay Watershed
Surfactants (mg L MBAS)
Year
y 0.0226x - 44.751
R2 0.1514
2.5
2
1.5
1
0.5
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

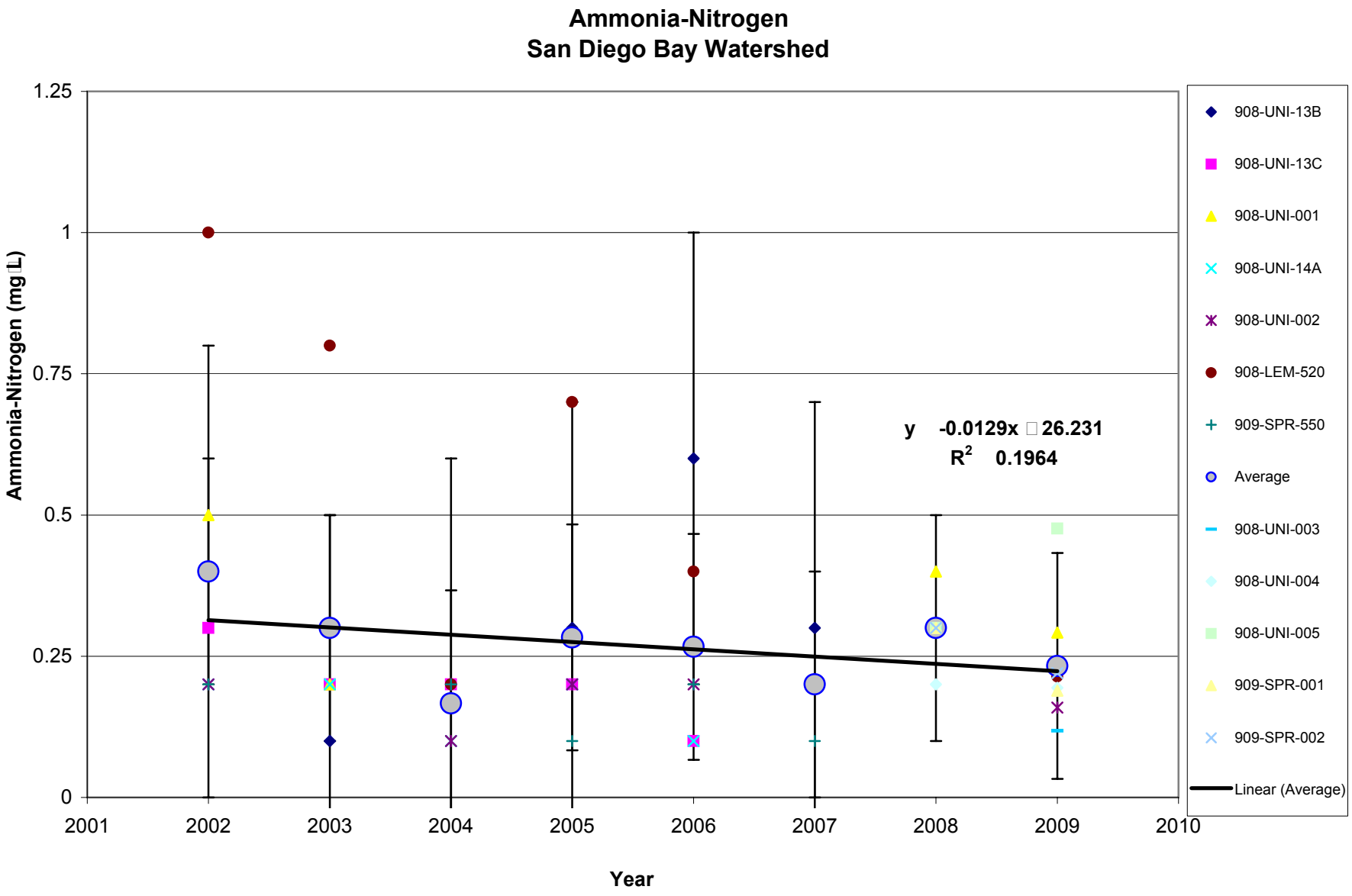
Ammonia-Nitrogen
San Diego Bay Watershed
Ammonia-Nitrogen (mg/L)
1.25
1
0.75
0.5
0.25
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y -0.0129x 26.231
R2 0.1964
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

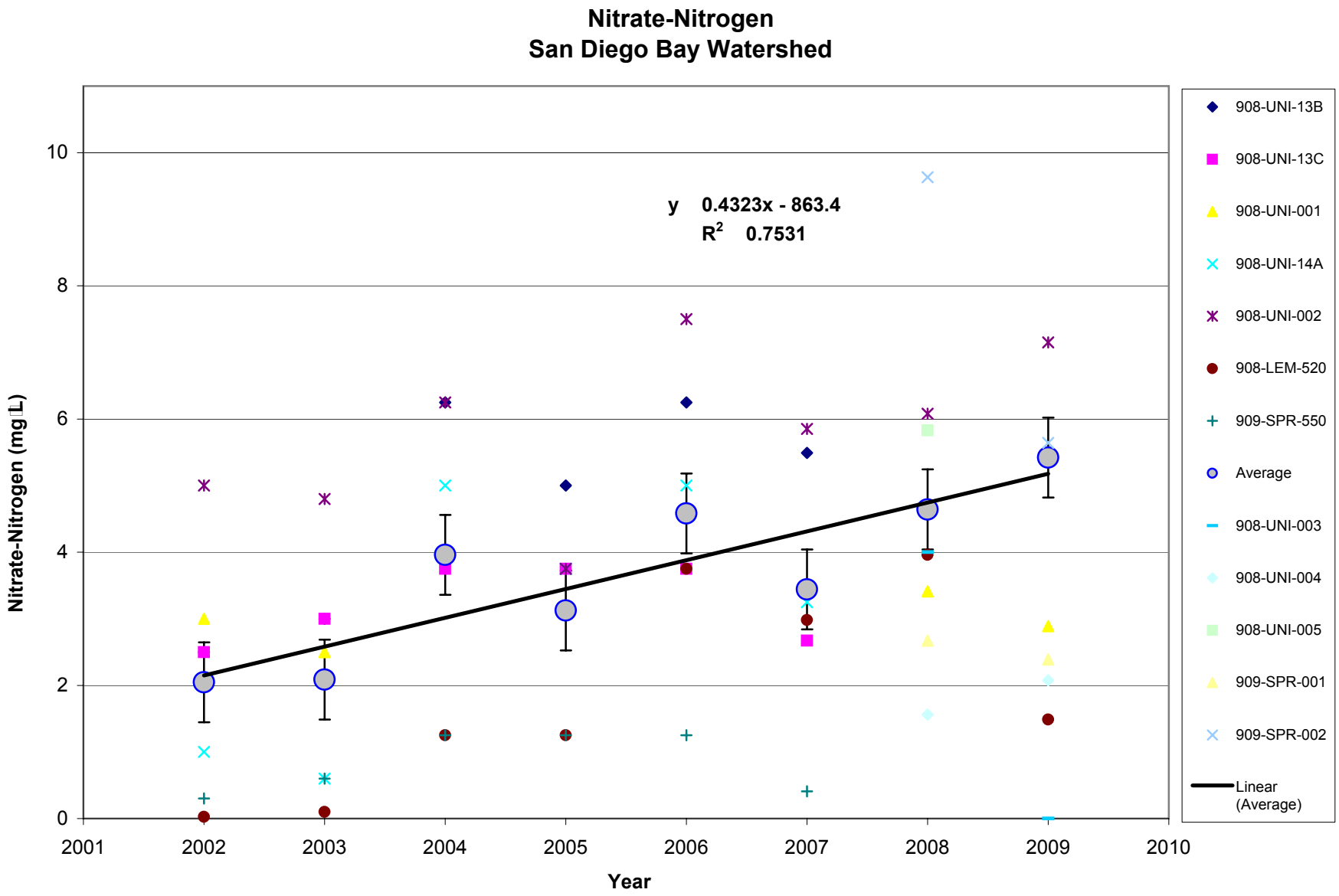
Nitrate-Nitrogen
San Diego Bay Watershed
y 0.4323x - 863.4
R2 0.7531
Nitrate-Nitrogen (mg/L)
Year
0
2
4
6
8
10
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

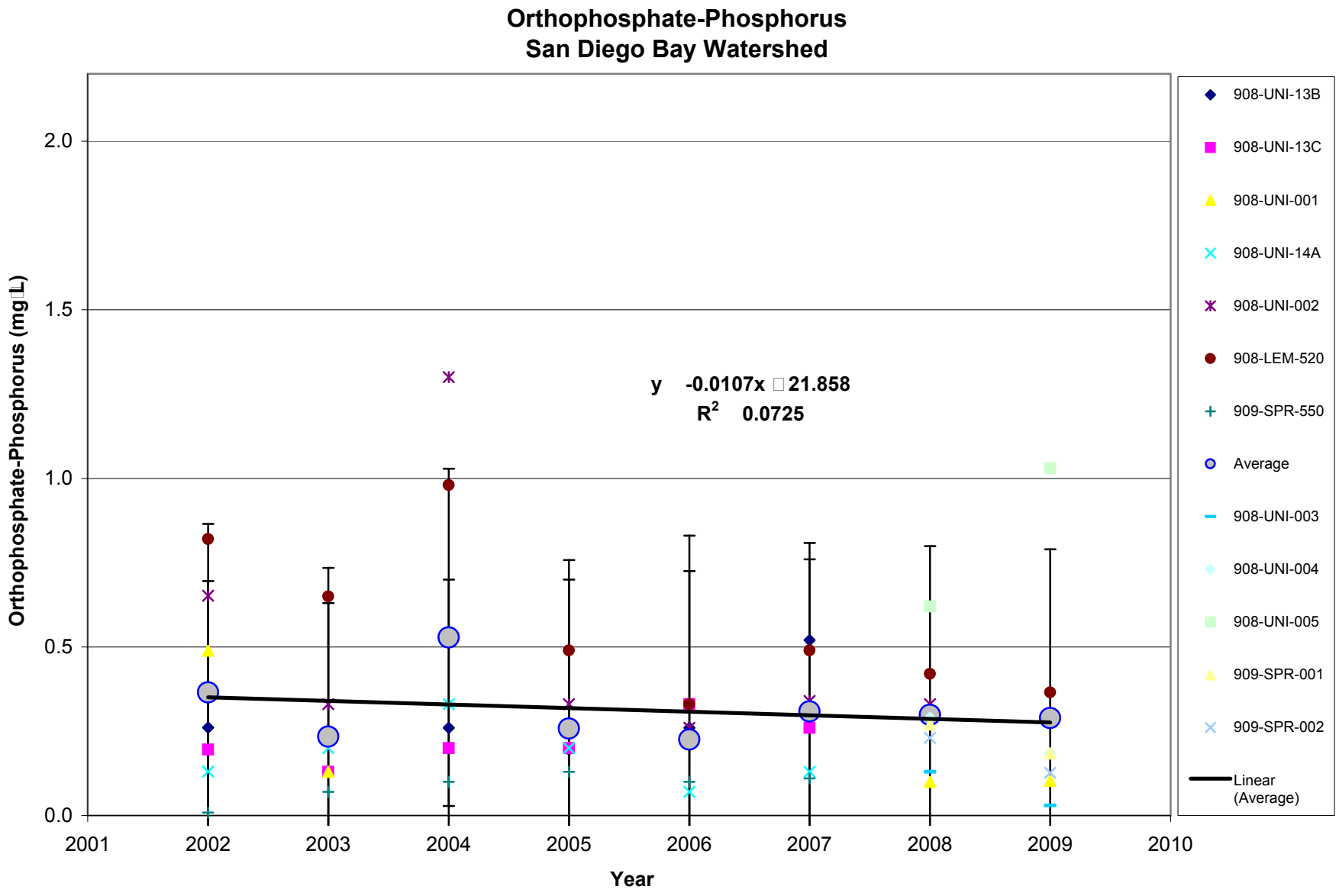
Orthophosphate-Phosphorus
San Diego Bay Watershed
Orthophosphate-Phosphorus (mg/L)
2.0
1.5
1.0
0.5
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y -0.0107x 21.858
R2 0.0725
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

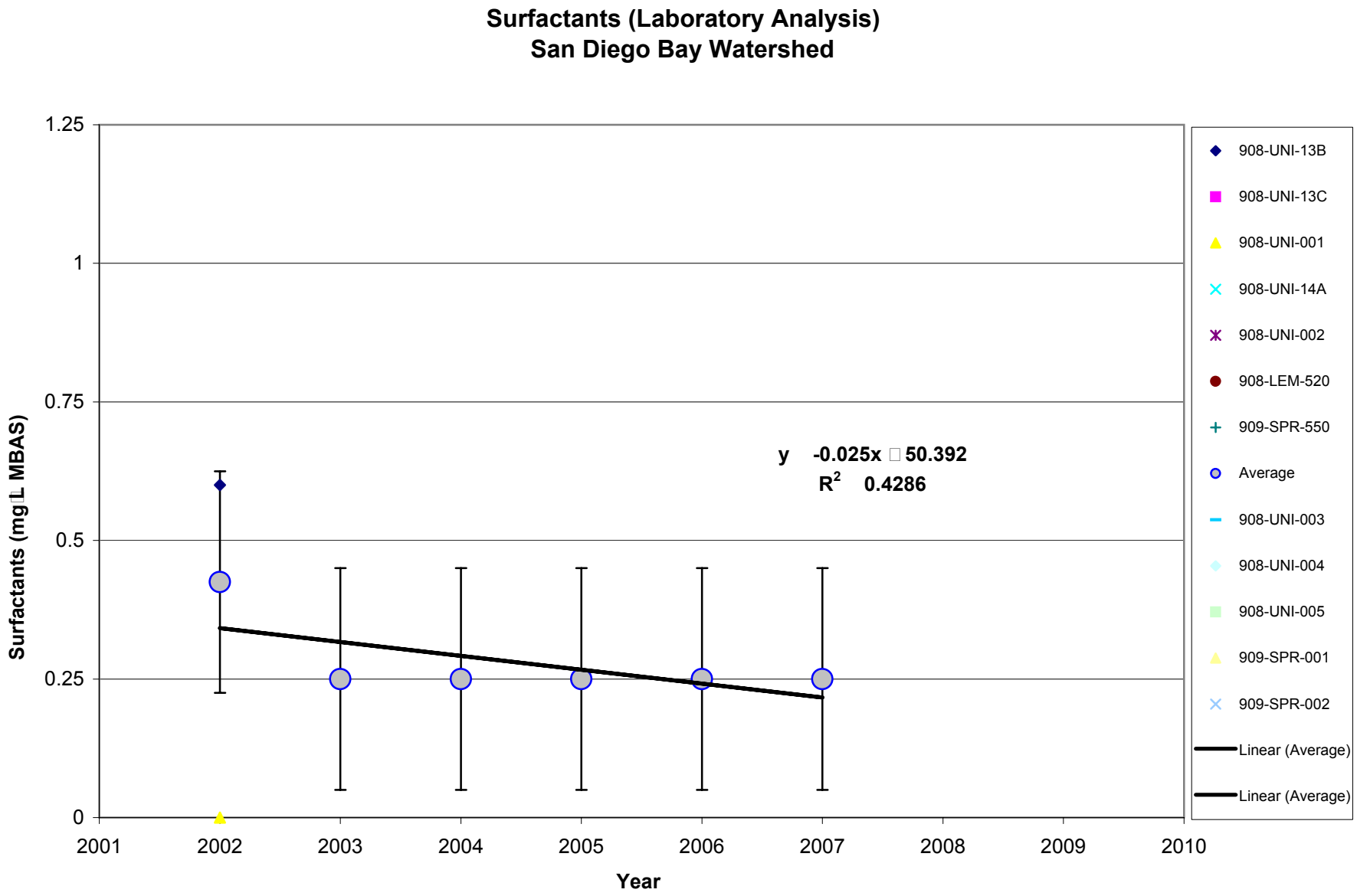
Surfactants (Laboratory Analysis)
San Diego Bay Watershed
1.25
1
0.75
0.5
0.25
0
Surfactants (mg/L MBAS)
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y -0.025x 50.392
R2 0.4286
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)
Linear (Average)

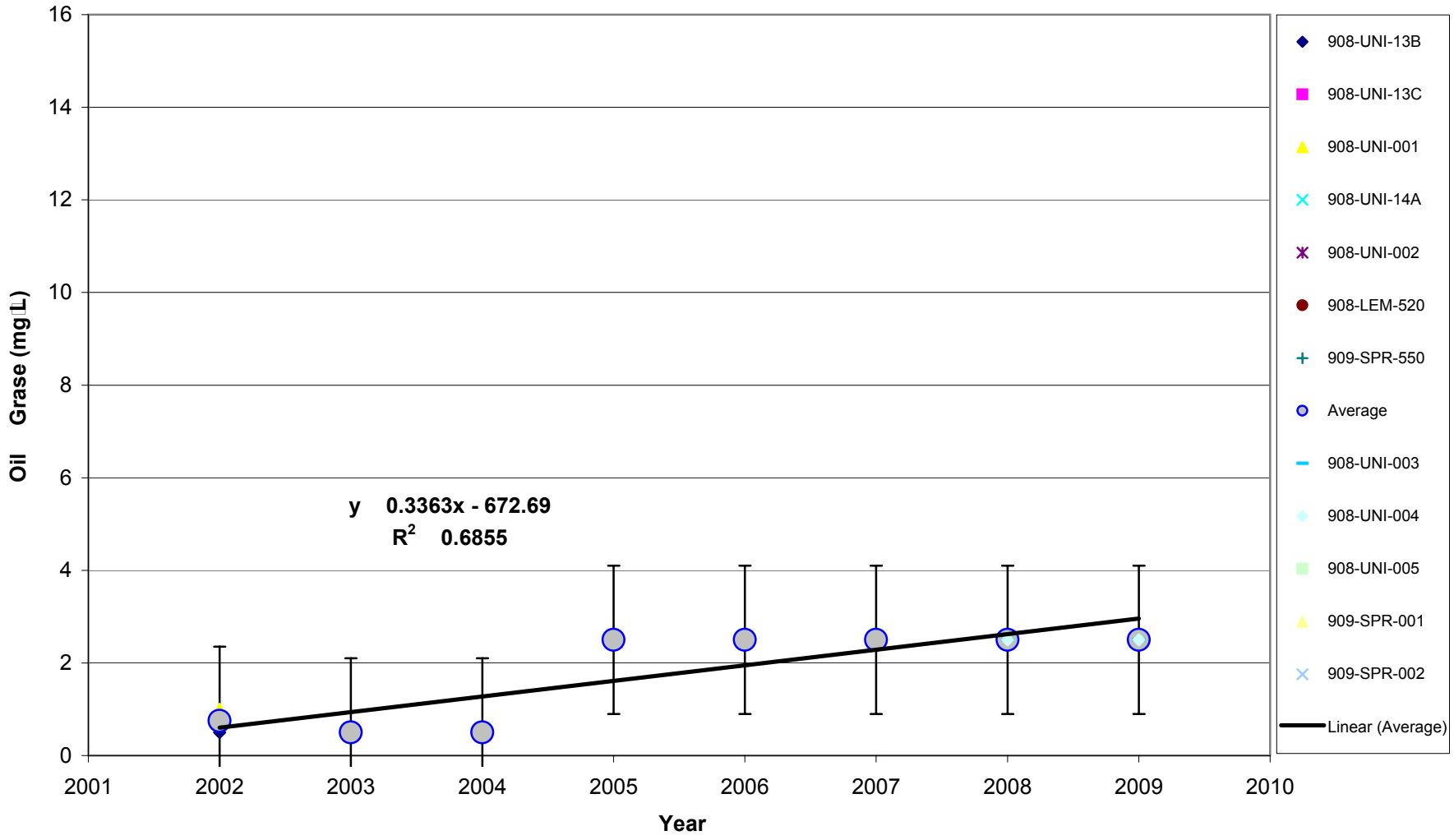
16
14
12
10
8
6
4
2
0
Oil Grase (mg L)
y 0.3363x - 672.69
R2 0.6855
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

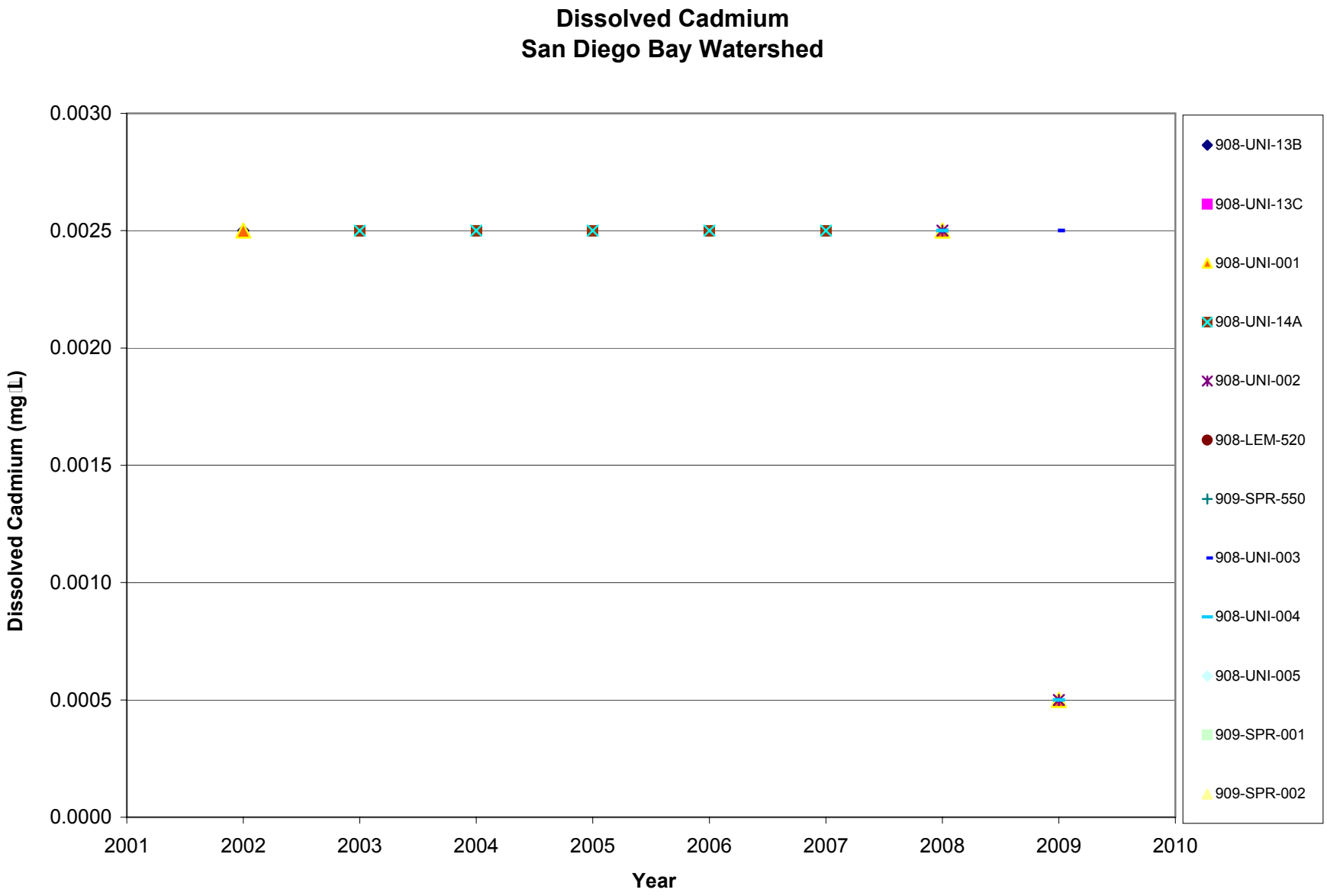
Dissolved Cadmium
San Diego Bay Watershed
Dissolved Cadmium (mg/L)
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002

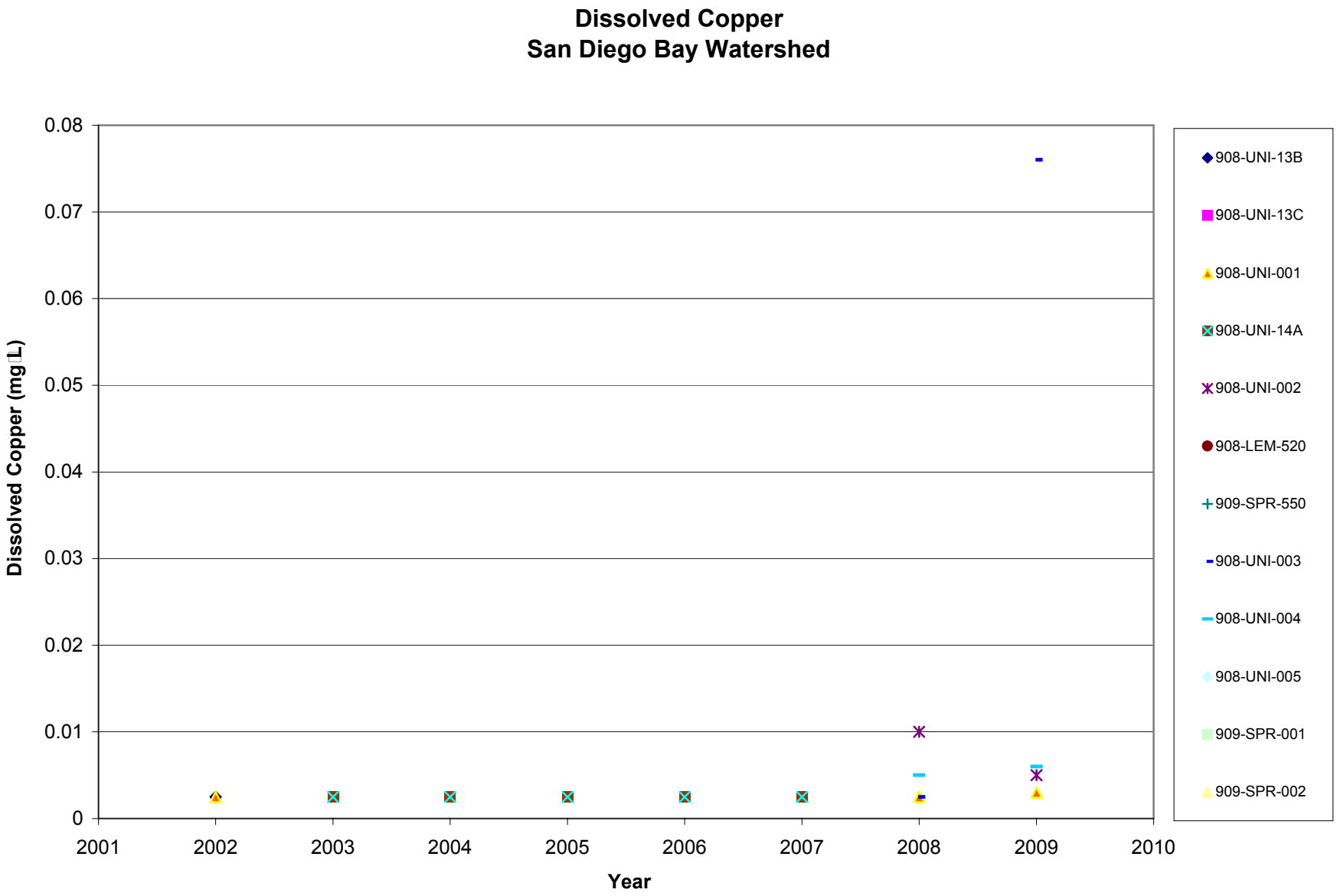
Dissolved Copper
San Diego Bay Watershed
Dissolved Copper (mg/L)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002

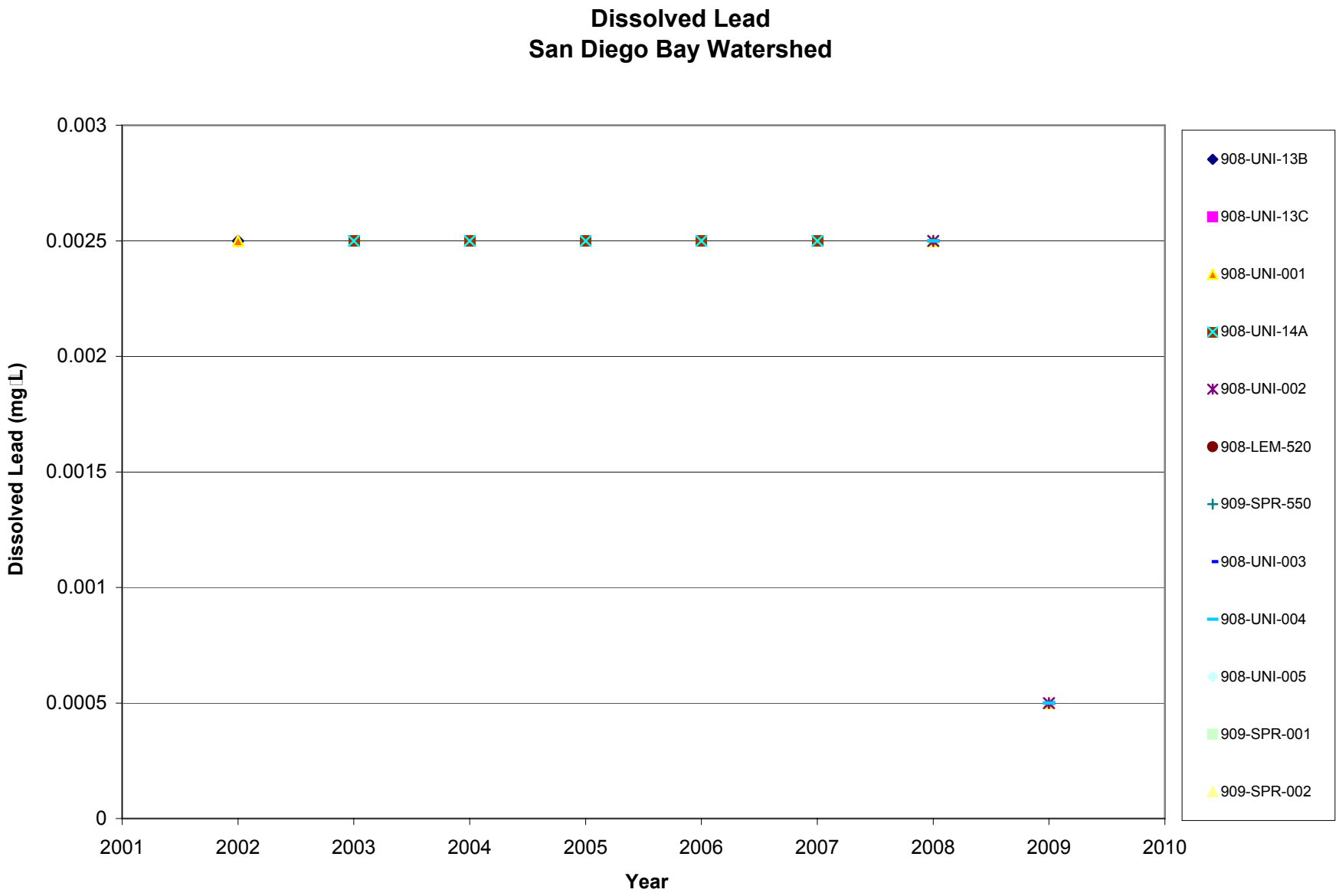
Dissolved Lead
San Diego Bay Watershed
Dissolved Lead (mg/L)
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002

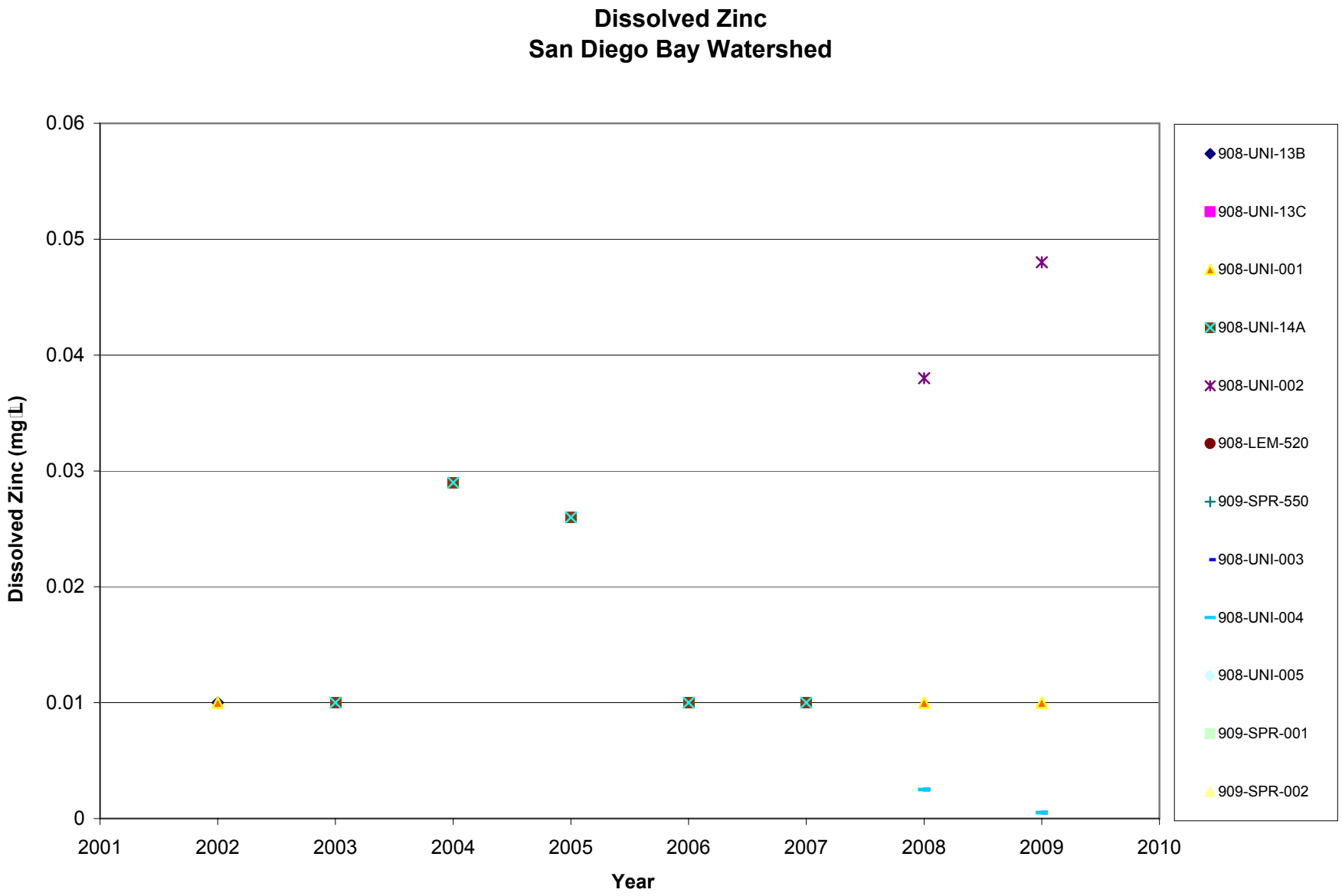
Dissolved Zinc
San Diego Bay Watershed
Dissolved Zinc (mg/L)
0.06
0.05
0.04
0.03
0.02
0.01
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002

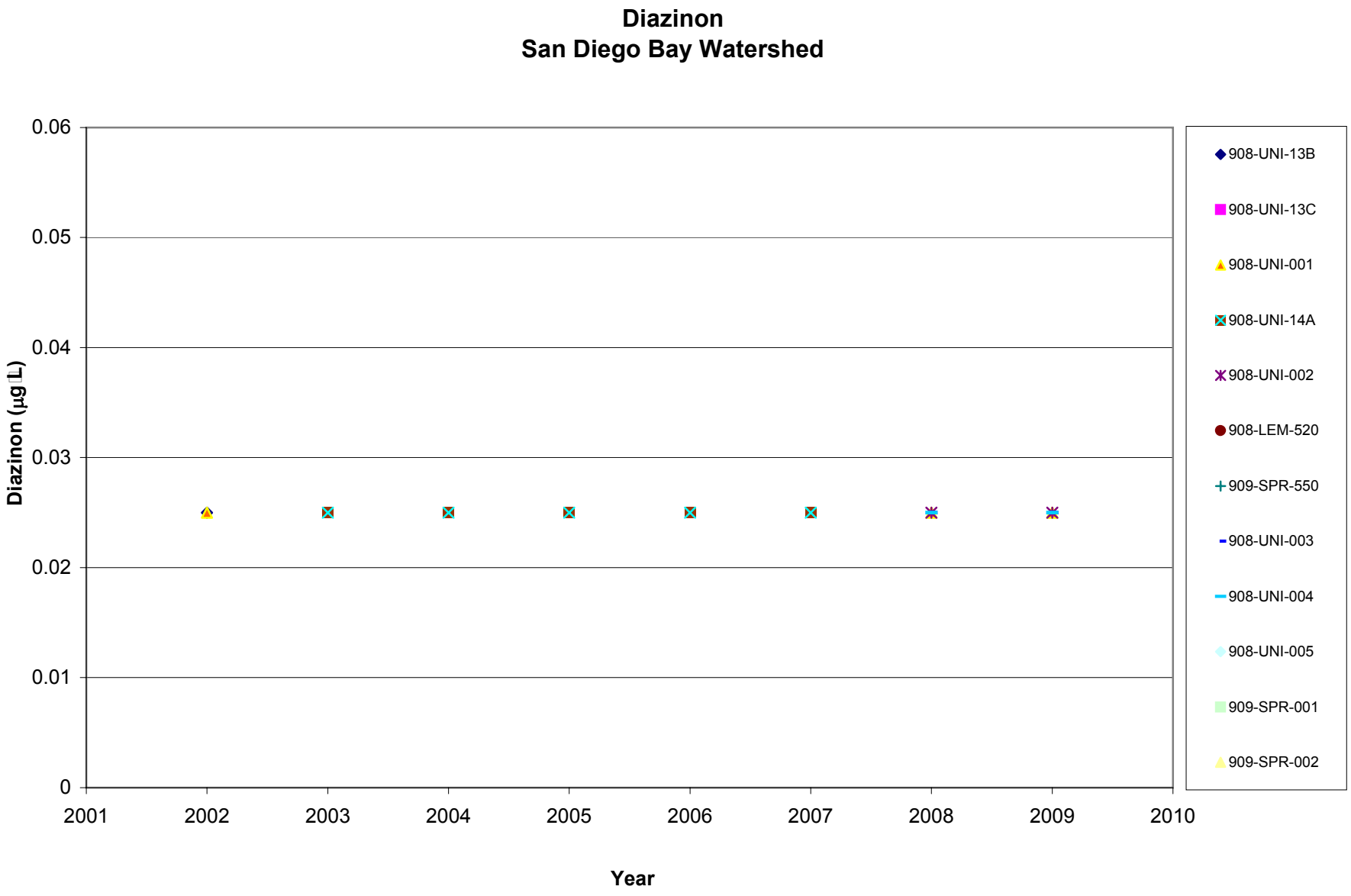
Diazinon
San Diego Bay Watershed
0.06
0.05
0.04
0.03
0.02
0.01
0
Diazinon (µg/L)
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002

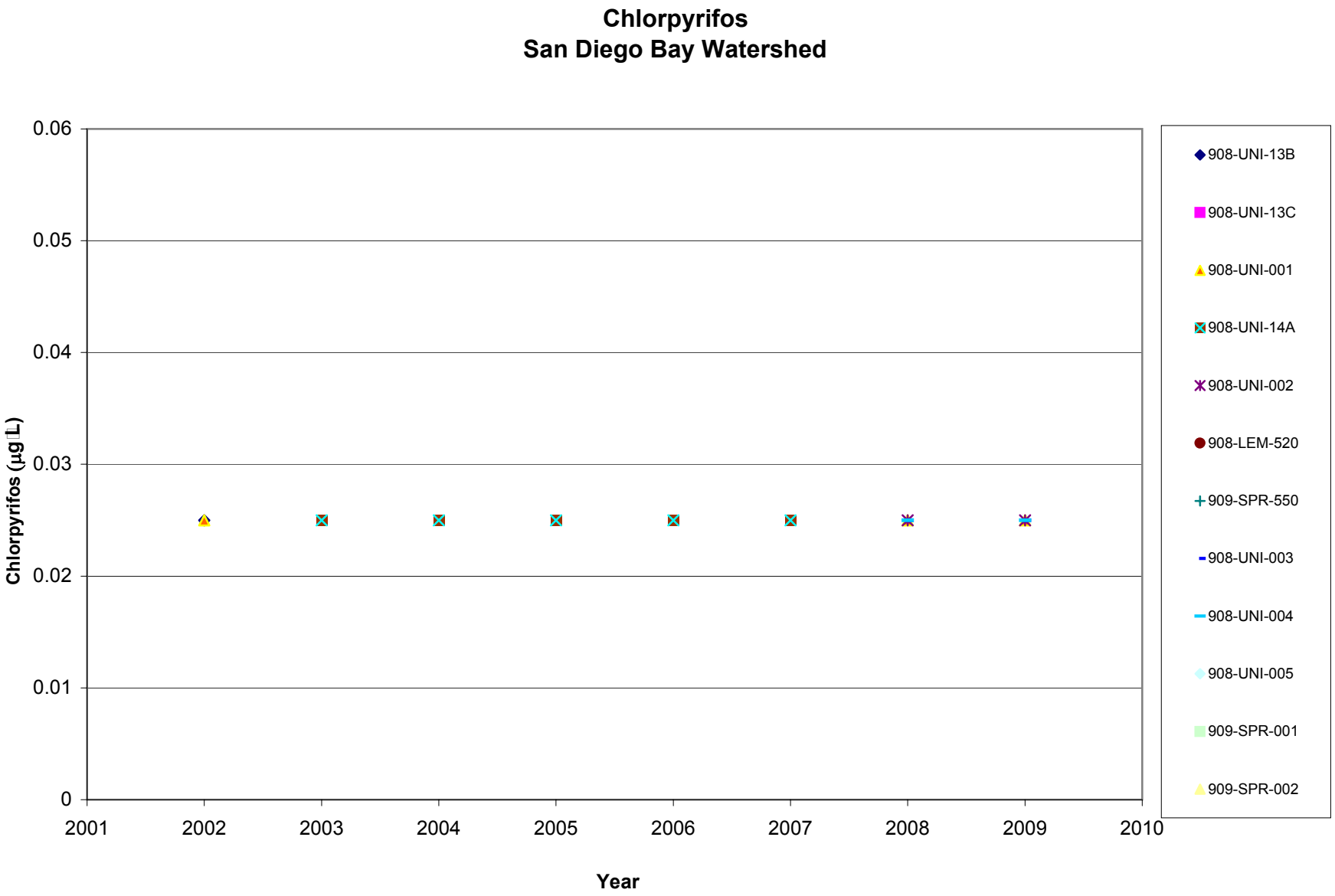
Chlorpyrifos
San Diego Bay Watershed
0.06
0.05
0.04
0.03
0.02
0.01
0
Chlorpyrifos (µg/L)
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002

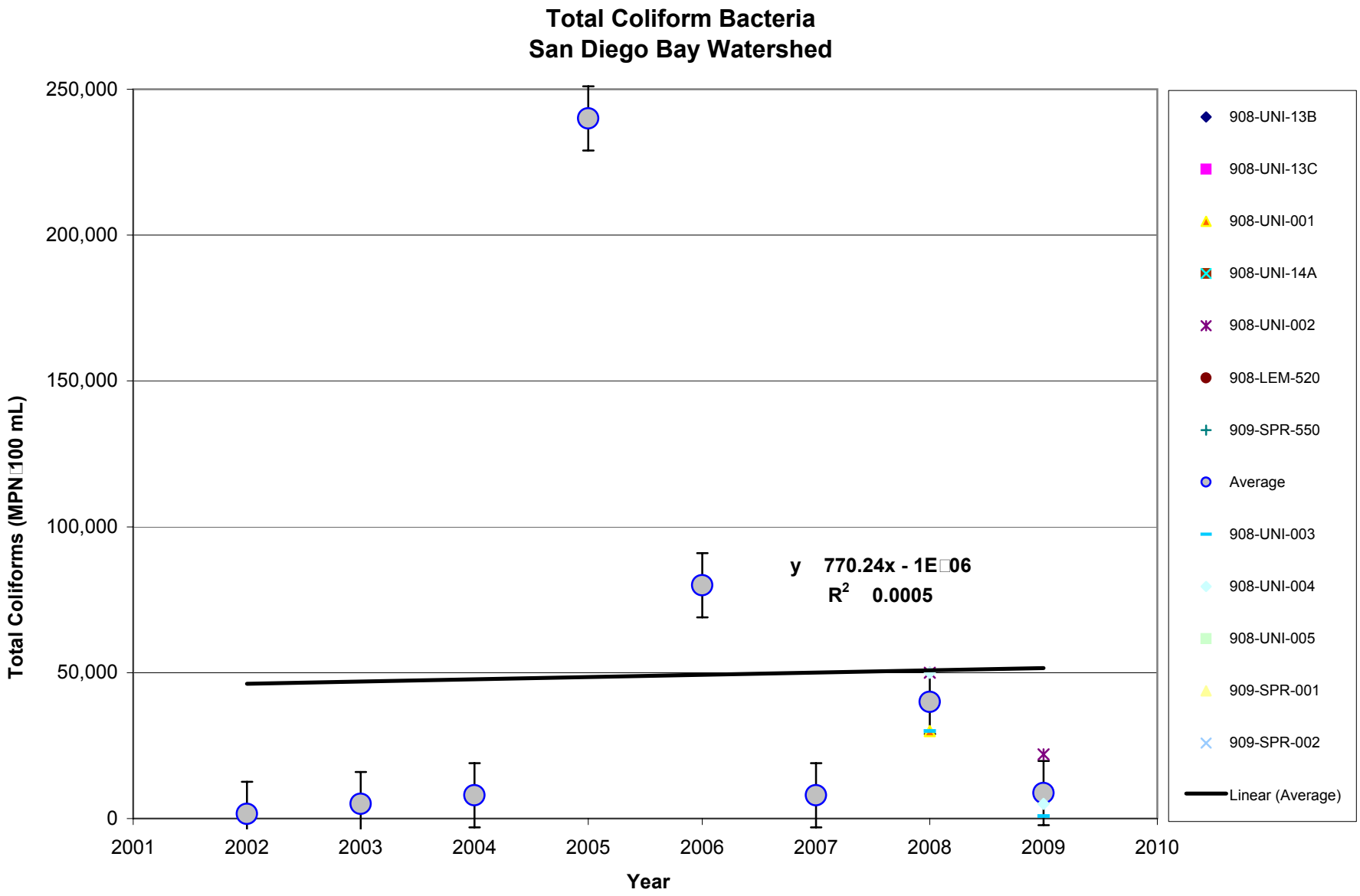
Total Coliform Bacteria
San Diego Bay Watershed
Total Coliforms (MPN 100 mL)
250,000
200,000
150,000
100,000
50,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y 770.24x - 1E 06
R2 0.0005
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

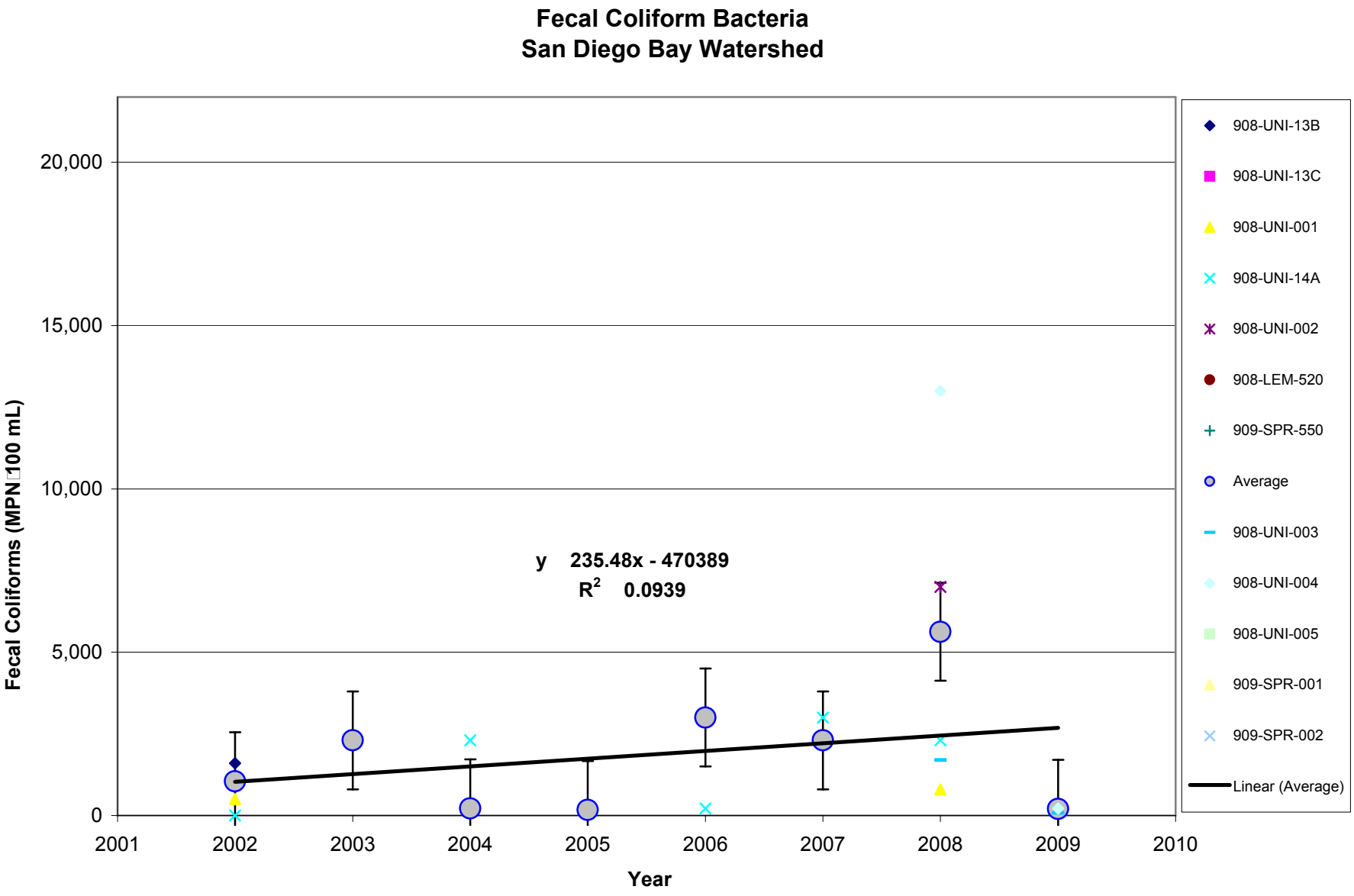
Fecal Coliform Bacteria
San Diego Bay Watershed
Fecal Coliforms (MPN 100 mL)
20,000
15,000
10,000
5,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y 235.48x - 470389
R2 0.0939
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

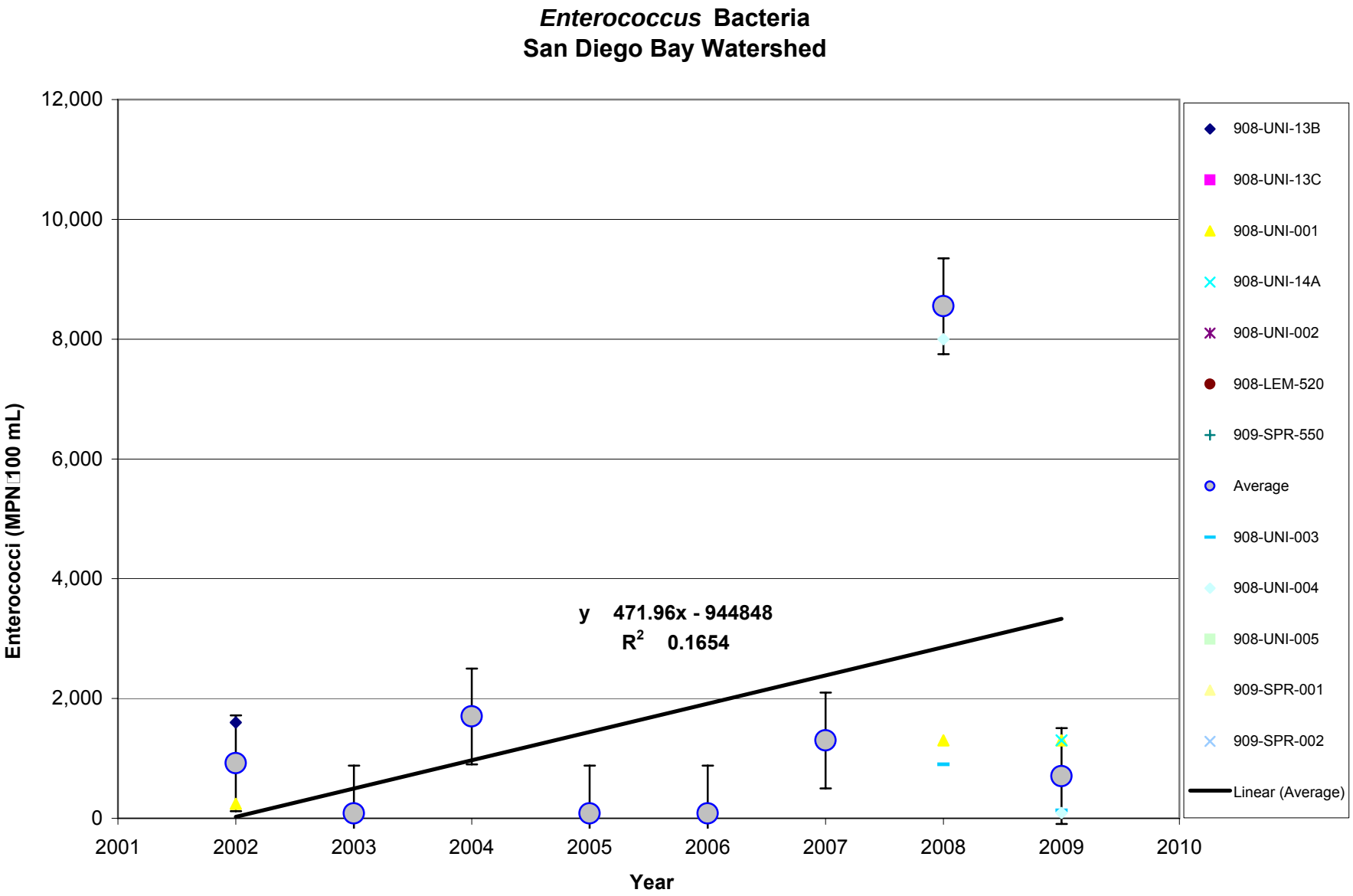
Enterococcus Bacteria
San Diego Bay Watershed
Enterococci (MPN 100 mL)
12,000
10,000
8,000
6,000
4,000
2,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year
y 471.96x - 944848
R2 0.1654
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

CITY OF LA MESA

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT 2009/2010

SEPTEMBER 2010

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

CITY OF LA MESA

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SAN DIEGO, CALIFORNIA 92121
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ACRONYMS AND ABBREVIATIONS

Acronym	Abbreviation
℃	Degrees Celsius
303(d) List	2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments
Appendix A	Appendix A of BMP Manual Part I
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
BMP Manual Part I	The City of La Mesa Storm Water Best Management Practices Manual – Part I
BMP Manual Part II	The City of La Mesa Storm Water Best Management Practices Manual – Part II
Calsense	Calsense Computerized Irrigation Control
CASQA	California Stormwater Quality Association
CEQA	California Environmental Quality Act
CIP	Capital Improvement Project
City	City of La Mesa
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CMC	Criteria Maximum Concentration
CMP	Corrugated Metal Pipe
CSWMP	Construction Storm Water Management Plan
CTR	California Toxics Rule
CWA	Clean Water Act/Federal Water Pollution Control Act
D-MAX	D-MAX Engineering, Inc.
DAB	Development Advisory Board
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FOG	Fats, Oils, and Grease
General Construction Permit	State of California General Construction Permit
gpm	Gallons Per Minute
HA	Hydrologic Area
HDPE	High Density Polyethylene
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HOA	Home Owners' Association
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illicit Discharge
IDDE	Illicit Discharge Detection and Elimination

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
IHC	Interim Hydromodification Criteria
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
LID	Low Impact Development
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable
mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) Per 100 Milliliters
MS4	Municipal Separate Storm Sewer System
mS/cm	MilliSiemens Per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
nt	Not Tested
NTU	Nephelometric Turbidity Unit
PDPA	Pollutant Discharge Potential Assessment
Priority Project	Priority Development Project
RCP	Reinforced Concrete Pipe
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Government
SIC	Standard Industrial Classification
Solana Center	Solana Center for Environmental Innovations
SPCBMPP	Standard Post Construction Best Management Practices Plan
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 7.18 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TSS	Total Suspended Solids
TTWQ	Threat to Water Quality
WDID	Waste Discharge Identification Number
WQO	Basin Plan Water Quality Objectives

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
WQTR	Water Quality Technical Report
WURMP	Watershed Urban Runoff Management Program
µg/L	Micrograms Per Liter

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David E. Witt
City Manager

Date: September 2010

Telephone Number: (619) 667-1105

EXECUTIVE SUMMARY

San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit), a National Pollution Discharge Elimination (NPDES) Permit, regulates discharges to the storm drain systems of 21 municipal agencies in San Diego County, including the City of La Mesa (City). The Municipal Permit requires the City to develop and implement a Jurisdictional Urban Runoff Management Program (JURMP), with the overall goal of reducing discharges of pollutants to the City's storm drain system to the maximum extent practicable. The City's JURMP includes required "Best Management Practices" (BMP) to control pollution. Specific lists of BMPs apply to businesses, construction and development projects, residents, and the City's own activities. The JURMP also includes programs for water quality monitoring and educational outreach.

At the end of each fiscal year, the City is required to report a summary of its JURMP implementation activities to the RWQCB. This JURMP Annual Report presents the City's activities during the 2009/2010 fiscal year, which began on July 1, 2009 and ended on June 30, 2010. Each section of this JURMP Annual Report discusses how the City's efforts during 2009/2010 met the requirements of the Municipal Permit. Key actions taken for the major components of the City's storm water program are summarized below.

Development Planning Component

The City continued to oversee development activities occurring in the City to mitigate potential threats to water quality at the design stage. The City maintained and updated its inventory of installed treatment control BMPs and implemented its maintenance verification program through which parties responsible for maintaining BMPs at each of the City's 15 inventoried sites certify in writing that their treatment devices have been maintained and are in working order. Six sites in the City with approved treatment control BMPs were also inspected by City staff. Enforcement actions successfully achieved the return of all maintenance verification forms and the correction of all deficiencies noted during inspections.

Construction Component

During 2009/2010, a total of 69 routine construction inspections were completed at 27 sites. The City's plan check and inspection program required projects to comply with the City's minimum BMP requirements. Enforcement actions were taken where necessary and were effective in bringing about compliance. Notably, since the City had in the past received some hotline calls about poor BMP implementation at a few small projects, the City inspected all low priority construction sites and notified small projects and homeowners of the City's BMP requirements.

Municipal Component

The City inspected all high threat to water quality (TTWQ) municipal fixed facilities, as required by the Municipal Permit. Over 576 tons of trash and debris were removed during street sweeping activities, and 249 cubic yards of debris and sediment were removed during standard MS4 maintenance. An additional 14 cubic yards of debris were removed during

the cleaning of the filter inserts installed in the University drainage basin. The City also replaced or rehabilitated 15,063 linear feet of sewer line and continued to maintain its sanitary sewer system to decrease the potential for sanitary sewer overflows (SSO). In keeping with its regular practice, the City trained its staff regarding the most current storm water pollution prevention concepts and practices.

Industrial and Commercial Component

During 2009/2010, the City hired a full-time inspector to build a cooperative working relationship with local businesses, to keep businesses accountable to the storm water education they have received, and to track compliance from routine inspection through enforcement resolution. The City met the Municipal Permit requirement to inspect at least 25 percent of the City's industrial and commercial inventory. The City inspected all high TTWQ sites on its industrial and commercial inventory as well as additional medium TTWQ sites. An inspection fee has been instituted to recover costs for site visits. Since fees are assessed for each visit, including follow-up visits, businesses have generally become more willing to comply with BMP requirements in a smaller number of inspection visits. During 2009/2010, no inspected businesses were observed to be out of compliance with the General Industrial Permit (Industrial Permit).

Residential Component

Residential areas comprise more than half of the City of La Mesa's land use, and the City worked to educate these residents through a variety of means. The City provided its quarterly *La Mesa Focus* newsletter to City residents via email and the City's website. Each newsletter published during 2009/2010 contained storm water articles relating to residential activities. The City encouraged its residents to participate in a variety of waste disposal events and volunteer-based cleanup events, and 938 participants dropped off 134,782 pounds of household hazardous waste (HHW) during the City's eight HHW events. The City's residents are considered important allies in reporting complaints to the City storm water hotline. Complaint investigations in residential areas were used as opportunities both to enforce BMP requirements and to educate residents about storm water pollution prevention.

Illicit Discharge Detection and Elimination Component

On September 10, 2008, the RWQCB adopted Addendum No. 2 to the Municipal Permit. This addendum requires the City to wait to submit the illicit discharge detection and elimination (IDDE) section of its JURMP Annual Report until the report for 2010 Dry Weather Monitoring Program, which took place after July 1, 2010, is finalized. The section must be submitted to the RWQCB no later than December 15, 2010.

While the full section will not be submitted until after September 30, 2010, the City did implement its IDDE program component during 2009/2010. During this period, the City responded to and resolved 84 complaints made to its storm water hotline and the Public Works maintenance hotline. The City completed its 2009 Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program). The recommendations in the final report for the 2009 Dry Weather Monitoring Program were addressed during

this reporting period. The City also continued maintenance of the sanitary sewer system to prevent SSOs.

Education Component

As a means to raise storm water awareness in various communities, the City continued to conduct various education and outreach activities throughout 2009/2010. The City's efforts resulted in an estimated 34,642 impressions. I Love A Clean San Diego (ILACSD) partnered with the City to educate residents of all ages at special events and school presentations. The City continued to circulate the quarterly *La Mesa Focus* newsletter to businesses and residents, and each newsletter sent during the reporting included storm water-related articles. Additionally, the City continued to maintain a storm water bulletin board at City Hall, which is strategically located to maximize exposure to both City personnel and project proponents that visit the Engineering Division. To better serve the City's diverse population, some educational materials were distributed in Spanish and English. Additionally, City staff were provided various training sessions.

Public Participation Component

Public participation activities in 2009/2010 included multiple volunteer-based cleanup events, which have a direct effect on water quality, and public outreach activities intended to increase general knowledge and awareness regarding storm water issues. The City participated in Coastal Cleanup Day and the Creek to Bay Cleanup, with two cleanup sites located in the City for each event. During these events over 1,326 pounds of trash and 53 pounds of recyclables were collected. Other cleanup activities completed during 2009/2010 included Park Appreciation Day, Adopt-a-Park, Adopt-a-Block, and the La Mesa Spring Cleanup. A variety of waste disposal events, including HHW disposal events, were also held in the City.

Fiscal Analysis Component

The City continued to fund its storm water program though the City's Sanitation Fund and the collection of a storm water inspection fee. As required by the Municipal Permit, the Copermittees collectively developed new fiscal analysis reporting standards, which were implemented for the first time in 2009/2010.

Effectiveness Assessment Component

The City continued evaluating the effectiveness of its storm water program based on the approach presented in the City's JURMP. The City has seen a consistent trend of decreasing median concentrations and exceedance numbers for various polluting constituents in its Dry Weather Monitoring Program. In both the treatment control BMP program and the industrial and commercial inspection program, enforcement has been very effective in reaching compliance. The City has implemented additional City-maintained treatment control BMPs for the University drainage area and its Public Works Operation Center, and the City also conducts additional street sweeping to aid in meeting watershed requirements.

Special Investigations

Aside from upstream investigations conducted as part of the Dry Weather Monitoring Program, no special investigations were needed or conducted during this reporting period.

Conclusions and Recommendations

The City will continue to implement the programs in its JURMP during 2010/2011; it is anticipated that some program refinements will be made as implementation progresses. The City will also continue to collaborate with other Copermittees as applicable within its watersheds and regionally.

1.0 INTRODUCTION

1.1 BACKGROUND

This Jurisdictional Urban Runoff Management Program (JURMP) Annual Report presents an activity summary for the City of La Mesa (City) during the 2009/2010 fiscal year. The JURMP Annual Report preparation and submission are required by San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit).

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), established a framework for regulating Municipal Separate Storm Sewer System (MS4) discharges under the National Pollutant Discharge Elimination System (NPDES). In 1990, the RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region, followed by a revised permit in 2001. RWQCB Order No. 2001-01 was replaced by the current Municipal Permit in 2007.

In 2002, the City, like all regulated municipalities in the San Diego region (collectively referred to as Copermittees), developed and submitted a JURMP to the RWQCB. The City then submitted an updated JURMP, as required by the Municipal Permit, in March 2008. The JURMP explains management measures for different sectors, including municipal, industrial, commercial, construction, and significant development and re-development activities.

Annual reports documenting the implementation of the JURMP are required to be submitted to the RWQCB by September 30. This JURMP Annual Report presents data from the 2009/2010 fiscal year, which extended from July 1, 2009, to June 30, 2010.

1.1.2 CITY SETTING

The City of La Mesa, located in central San Diego County, covers an area of approximately nine square miles and has a population size of over 56,000 residents. Although the primary land use in La Mesa is residential, there are areas of industrial and commercial development, parks and open space, and other types of development.

Approximately 52 percent of La Mesa is located within the San Diego River Watershed, while the remaining 48 percent is located in the San Diego Bay Watershed. In total, the City constitutes about one percent of the land area in each watershed. Runoff generated in La Mesa is conveyed through five drainage basins: Alvarado, University, Spring Valley, Lemon Grove, and Lake Murray. Table 1-1 lists the approximate percentage of each drainage area in La Mesa, the corresponding hydrologic unit (HU) of the basin, and the receiving water body to which each basin drains. Figure 1-1 presents the drainage basins as they relate to land use activities in the City.

Table 1-1
City of La Mesa Drainage Basins

Drainage Basin	Percent of City Area	Hydrologic Sub Area	Receiving Water Body	Watershed
Alvarado	51	907.11 Mission San Diego	San Diego River	San Diego River
University	28	908.22 Chollas	Chollas Creek	San Diego Bay
Spring Valley	14	909.12 La Nacion	Sweetwater River	San Diego Bay
Lemon Grove	6	908.22 Chollas	Chollas Creek	San Diego Bay
Lake Murray	1	907.11 Mission San Diego	San Diego River	San Diego River

Please note that while runoff from the City drains to these water bodies, the actual receiving water bodies are not themselves located within the City.

Figure 1-1
City of La Mesa Land Use and Drainage Basins

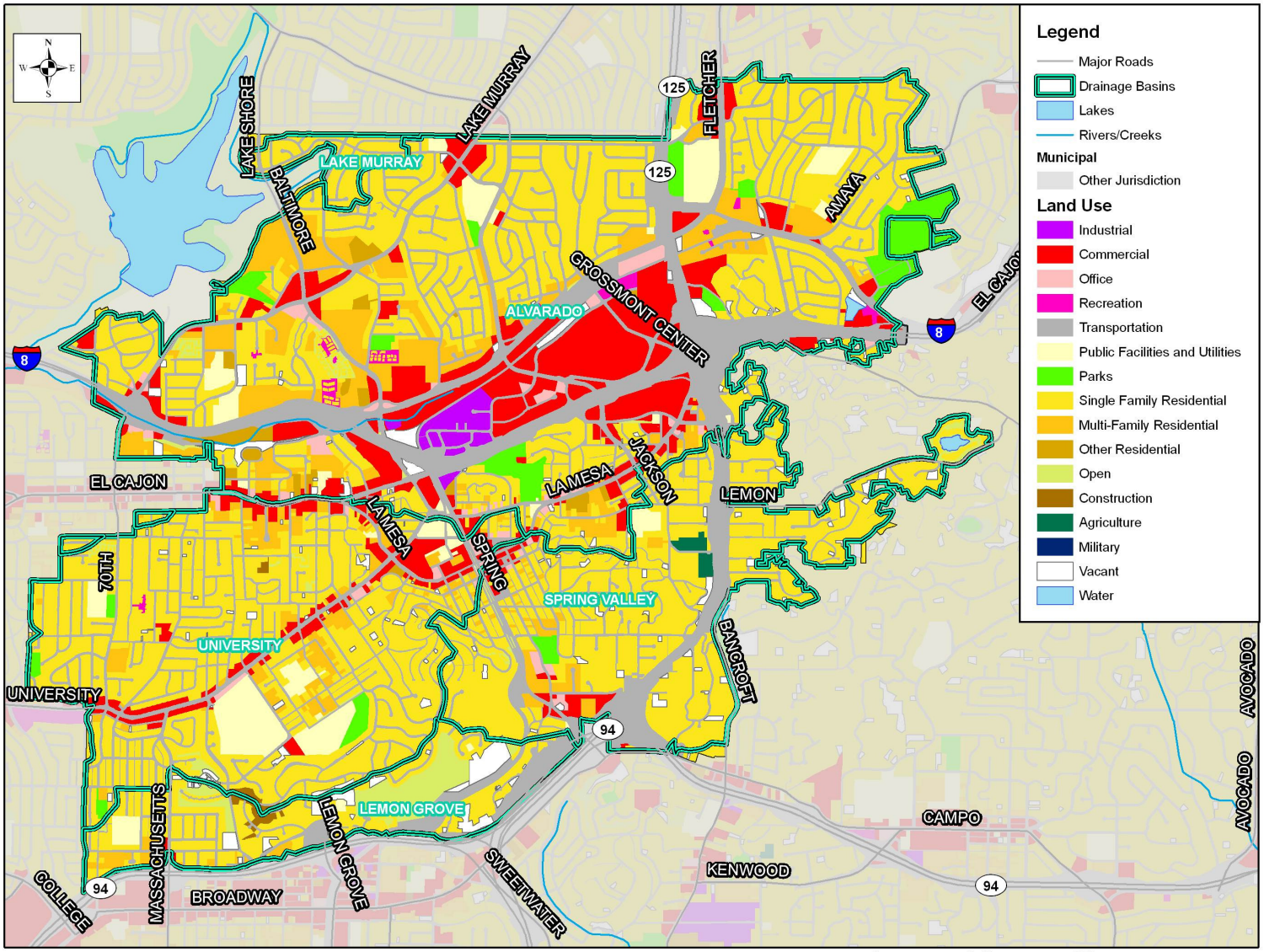

Base Data Sources: City of La Mesa, SANDAG, SanGIS

0 0.45 0.9 Miles

1.2 Purpose and Objectives

The City's JURMP presents strategies to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The JURMP describes various programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the implementation of the City of La Mesa's JURMP during the 2009/2010 reporting period.

1.3 Report Organization

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning Component**
Section 3	**Construction Component**
Section 4	**Municipal Component**
Section 5	**Industrial and Commercial Component**
Section 6	**Residential Component**
Section 7	**Illicit Discharge Detection and Elimination Component**
Section 8	**Education Component**
Section 9	**Public Participation Component**
Section 10	**Fiscal Analysis Component**
Section 11	**Effectiveness Assessment Component**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all components required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a more detailed explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Background, subsection 1.1, has been divided into Regulatory Background, subsection 1.1.1, and City Setting, subsection 1.1.2, for clarity.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of pollutants from development projects to the MEP and by managing the increase in runoff from development project that have the potential to negatively affect downstream water bodies. During the 2009/2010 fiscal year, the City accomplished these goals through implementation of its JURMP document.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2009/2010 reporting period are presented in the following bulleted list. The remainder of this section provides more detail about the City's implementation of this component of its storm water program.

- Distributed the City's development requirements checklist ("Appendix A" of BMP Manual Part II) to projects applying for permits.
- Updated the SUSMP requirements in February 2010, in advance of the March 24, 2010 deadline.
- Worked with other Copermittees to develop a final Hydromodification Management Plan, which was approved by the RWQCB just after the end of the 2009/2010 reporting period.
- Used the City's treatment control BMP database to track completed Priority Development Projects.
- Conducted maintenance inspections of treatment control BMPs at six completed development projects in the City. See Table 2-1 in this section for a comparison of inspection numbers and Municipal Permit requirements.
- Obtained verification of BMP maintenance from all inventoried projects.

2.2 LAND USE PLANNING

2.2.1 BACKGROUND

The City's General Plan was last updated in 2002 and contains water quality and watershed protection principles in its Public Services and Facilities Element. The comprehensive principles established in 2002 provide an ample framework for implementing the requirements of the current Municipal Permit, and no changes to these policies were necessary during the reporting period.

2.2.2 Source Characterization

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts to the surrounding environment. No changes to the development restrictions in the City's General Plan for storm water purposes were implemented during the reporting period. The City Council has authorized a comprehensive update to the General Plan to be completed by the City's centennial celebration in 2012.

2.2.3 Best Management Practice Requirements

Please refer to the City's updated JURMP document for a list of the water protection policies included in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 Program Implementation

The City implemented its water protection related land use policies during the reporting period mainly through the City's Municipal Code. The City updated the SUSMP requirements in Chapter 7.18 of its Municipal Code by passing a revised Storm Water Ordinance on February 23, 2010. The updates made at this time were consistent with the Model SUSMP prepared by the Copermittees and adopted by the RWQCB on March 25, 2009. The revised Storm Water Ordinance is included as Attachment 2.1 of this JURMP Annual Report. The City of La Mesa's BMP Manual II, a formatted guidance manual based on the regional Model SUSMP document, was also updated in February 2010 and is incorporated into the municipal code as an uncodified appendix to Chapter 7.18. The updated City of La Mesa's BMP Manual II is included as Attachment 2.2.

Details on how the City implemented its established water protection policies through its environmental review process and its development project approval and verification processes during the reporting period are provided in Sections 2.3 and 2.4 of this JURMP Annual Report document.

2.3 Environmental Review Process

The City's current environmental review process is detailed in the City's updated JURMP. The overall structure of the review process, such as the City's departments involved and the document submissions required, remains the same as in previous reporting years. No modifications to the City's environmental review process have been made since the submittal of the updated JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

During the 2009/2010 fiscal year, the City implemented the watershed protection principles in the City's General Plan through various aspects of the City's development project approval and verification process, as detailed below.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's BMP Manual Part II, which contains the City's SUSMP regulations. The City's SUSMP regulations are included in Municipal Code Chapter 7.18. Projects subject to SUSMP regulations are identified by completion of applicability checklists. More detail about this process is provided in Section 2.4.4.2.

2.4.3 Best Management Practice Requirements

The City updated its SUSMP requirements for development projects in February 2010, as described in Section 2.2.4 above.

2.4.4 Program Implementation

During the 2009/2010 fiscal year, the City required implementation of its BMP requirements for all development projects through education, a comprehensive development project approval process, and a treatment control BMP inspection and maintenance verification program.

2.4.4.1 Outreach and Staff Training

The City provides training for staff involved in the planning and review of development projects within the City and works closely with the development community to communicate its development requirements throughout the entire approval process. City staff performs reviews of WQTR's submitted for development purposes. Outside consultants may also be used for review assistance. Details on trainings conducted and educational materials developed and distributed during the reporting period can be found in Section 8 of this JURMP Annual Report document. Based on initial results from the first year of the program, distribution of treatment BMP maintenance verification letters appears to be increasing the level of knowledge of regulated parties.

2.4.4.2 Urban Runoff Approval Process for Development Projects

All development projects that required City permits were required to undergo the City's urban runoff approval process as detailed in the City's JURMP. Forms completed by project

applicants are kept with the project's file at the City for future reference. As discussed in the City's JURMP, the City required all projects applying for construction and building permits with any potential to impact storm water to complete an "Appendix 'A' –Storm Water Requirements and Project Data Sheet" that guides project applicants to submit proper documents to the City for review. An updated "Appendix A" form is available as Attachment 2.3. All development projects determined to be Priority Projects after completing the "Appendix A" form were required to implement the City's SUSMP requirements and prepare Post Construction WQTRs in accordance with the City's BMP Manual II. All priority projects are tracked using the City's database.

During the reporting year, three development projects submitted WQTRs, which were subjected to the City's SUSMP requirements, as applicable. The projects and the results of the reviews are listed below.

- Grossmont Trolley Apartments. This was a resubmittal of the WQTR during construction, which was reviewed twice and eventually approved under the conditions described below in this sub-section.
- Park Station – Kitzman. The WQTR for this Priority Project was reviewed and not approved during 2009/2010.
- SFH 9323 Charmichael Dr. This project was determined not to be a Priority Project.

Several projects subjected to SUSMP requirements in previous reporting periods have not submitted revised plans nor have the existing plans been approved. If these projects are resumed, they will be subjected to the City's current SUSMP requirements and the document review process detailed in the updated JURMP. Some other proposed development projects have been abandoned. No new Priority Projects were allowed to implement treatment control BMPs with low removal efficiency rankings during the reporting period.

One development project that was noteworthy during 2009-2010 was the Grossmont Trolley Apartments project. During 2009/2010, several years after the final approval, the project submitted a revised WQTR during construction. Due to unforeseen onsite constraints the developer wished to change a treatment BMP in a particular location from a Baysaver media filtration unit to downspout filters. The City required a full feasibility analysis per SUSMP requirements, in order to make any changes to the plan. The developer submitted the analysis and revised WQTR to the City in early 2010. The City initially denied the request and required full and complete documentation prior to any approval. Following a meeting with City staff and a clarification of the rules, the developer submitted a complete feasibility study and revised WQTR in April 2010. The feasibility study included project alternatives as well as documentation of the reasons for the change, which was an unavoidable conflict with an existing 10" SDGE gas main. Documentation of the cost and difficulty of moving the gas main was provided by SDGE within the analysis.

While the proposed BMP type was changed, all BMPs were sized appropriately, and no waiver from numeric sizing criteria was issued. This BMP change affected a very small

percentage of the total project area with Baysaver media filtration units and vegetated swales installed at other locations onsite. The project was completed at the very end of the 2009/2010 reporting period.

During the reporting period, no projects received a SUSMP waiver for implementation of treatment control BMPs. The City has never issued a SUSMP waiver, and at this time the City has no plans to develop a SUSMP waiver mitigation program.

Hydromodification Management Plan

During the reporting period the Copermittee Land Development Workgroup met regularly to discuss key Hydromodification Management Plan (HMP) development issues and provide updates on the status of consultant work products. City staff regularly participated in the workgroup meetings. The final regional HMP was adopted by the RWQCB just after the end of the 2009/2010 reporting period on July 14, 2010. The City will be incorporating the HMP requirements into its local development requirements prior to the January 14, 2011 deadline.

The City's current Municipal Code contains detailed Interim Hydromodification Criteria (IHC) which the City implemented in 2009/2010 and will continue to implement until the recently adopted regional HMP requirements are incorporated into local requirements. No projects were subject to IHC requirements during 2009/2010 since none were larger than 50 acres.

BMP Installation Verification

During the course of 2009/2010, after maintenance verification letters had been sent out during the summer of 2009, the City tracked Priority Projects within the City's jurisdiction completed during the remainder of the reporting period to be added to the treatment control BMP inventory. When a project is completed, the City checks for BMPs prior to occupancy, records the site information, assigns it a TTWQ priority, and then adds it to the inventory of projects subject to the City's inspection and annual maintenance verification program the following fiscal year. This process helps the City focus its inspection resources on sites more likely to have maintenance deficiencies, as maintenance deficiencies are generally less likely at sites with recently installed BMPs. A list of the projects identified after distribution of verification letters is presented in Table 2-2 at the end of this section. These projects will be added to the City's treatment control BMP inventory in 2010/2011.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

2009/2010 Annual Maintenance Verification

The Municipal Permit requires annual verification of operation and maintenance of treatment control BMPs installed within the City's jurisdiction. Annual verification must be provided by the party responsible for treatment control BMP maintenance and must be returned to the City prior to the start of the wet season (October 1st). Using the property owner names and addresses recorded in the City's BMP database, BMP maintenance

verification forms were mailed to all the projects included in the City's BMP database in early 2009/2010.

The City required that completed maintenance verification forms be returned no later than October 1, 2009. The City was able to obtain appropriate responses from every site on the inventory in 2009/2010. Out of the 15 projects on the City's inventory, seven projects did not return their verification forms by the deadline and were issued NOVs in October 2009. After receiving NOVs, nearly all promptly submitted the annual maintenance verification form. Only one site failed to comply in a timely manner, so the City issued an administrative citation to the Prescott Companies, the management company for the HOA for the Aragon development, in May 2010. The completed maintenance verification form was submitted shortly after the citation was issued.

Operation and Maintenance Inspections

During the 2009/2010 fiscal year, the City contracted D-MAX to conduct inspections of projects with treatment control BMPs in accordance with the inspection frequencies outlined in the City's JURMP. Table 2-1 provides a summary of the number of inspections performed and how these met the requirements of the Municipal Permit. All high TTWQ inspections were performed prior to October 1, 2009.

Table 2-1
Assessment of Compliance with Required Inspection Frequencies

Site Class	Number of Sites	Full BMP Assessments	Percent Inspected	Permit Requirement	Requirement Met
All Inventoried Sites	15	6	40%	20%	Yes
Sites with Drainage Inserts	7	4	57%	50%	Yes
High TTWQ	3	3	100%	100%	Yes

During full inspections, each BMP was visually assessed, GPS coordinates were recorded, and deficiencies were documented in writing and in photographs. Table 2-3 lists the development projects inspected, the number of BMPs installed at each site, the number of BMPs inspected, the number of BMPs found in need of maintenance, a brief description of inspection findings, and, if applicable, any follow-up actions taken. Public Priority Projects are indicated with the marker "(CIP)", which is short for capital improvement project. The BMP types installed at these sites and the TTWQ priority for each site is included in the City's treatment control BMP inventory, which is included in Appendix A.1 of this JURMP Annual Report. Further discussion of some of the inspection results and follow-up actions is provided in the text below.

Enforcement

Follow-up actions were recommended for all development projects with BMPs observed in need of maintenance. Since sites are notified by mail of deficiencies in BMP maintenance, with specific corrective actions listed, official verbal and written warnings are typically not

used. The City has found that there is often significant turnover at property management companies responsible for BMP maintenance, and the City typically follows-up with non responders by phone to verify that documents have reached the correct individual prior to issuance of an NOV. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP. The City follows up with any sites that fail to verify that the required corrective actions and regular BMP maintenance were conducted. The City issued eight NOVs and one administrative citation to projects failing to respond with appropriate maintenance verification documents and/or projects with deficiencies discovered during routine inspection. All deficiencies noted in the 2009/2010 reporting period have been resolved. Some examples of follow-up action and resolution are described below.

The inspection of Grossmont Trolley Theater Commercial, found that two catch basins on the property did not have drainage inserts installed as had been approved. The City issued an NOV on October 12, 2009. In response, the property owner installed two drainage inserts on November 23, 2009, which was verified by City personnel on November 30, 2009.

Additionally, during the inspection at the Grossmont Medical Offices Building and Parking Structure at 8860/8870 Center Drive, multiple deficiencies were noted. One catch basin did not contain a drainage insert as proposed, the CDS Unit was inaccessible for maintenance due to a fence, and the vegetated swale was not well maintained. At that time, the maintenance verification form had also not been returned. The City issued an NOV detailing all of these deficiencies on October 12, 2009. On November 17, 2009, City staff confirmed that the fence had been removed, the swale had been planted, and the site had retained a contractor to install the missing BMP. The maintenance verification letter was also returned to the City.

It is the City's policy to verify the installation of treatment control BMPs prior to granting occupancy at completed projects. Past installation deficiencies were rectified by inspection and enforcement during 2009/2010 as described above. Recent improvements to installation verification at project completion, more stringent SUSMP requirements for the clarity of site maps, and additional visits to completed sites by storm water staff have ensured that projects completed in 2009/2010 would not have installation deficiencies similar to projects completed in previous years.

Copies of the forms utilized to administer the above enforcement actions can be found in Appendix D of the City's updated JURMP.

During the reporting period, no sites were observed to present a significant threat to human health or the environment during inspections, so none were reported to the RWQCB.

2.5 Development Planning Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 Program Review and Modification

The City's SUSMP requirements have been updated as described above in Section 2.2.4.

Table 2-2
SUSMP Projects Completed After Establishment of 2009/2010 Inventory

No.	Project Name	Project Address	Development Type	BMPs	Drainage Basin	TTWQ
1	Grossmont Trolley Apartments	8725 Fletcher Parkway	Commercial	2 vegetated swales, 1 media filter, 6 downspout filters, 11 catch basin inserts	Alvarado	High

Note: The Grossmont Trolley Apartments project was completed in June of 2010, at the end of the reporting period.

Table 2-3
Summary of Treatment Control BMP Inspection Results

#	Project Name	Inspection Date	TTWQ	BMP(s) Installed	BMP(s) Inspected	BMPs Requiring Maintenance	Inspection Notes	Follow Up Notes	Resolution Status
1	Kaiser	9/29/2009	High	1	1	0	No maintenance deficiencies noted.	N/A	N/A
2	Fire Station (CIP)	9/29/2009	High	1	1	0	No maintenance deficiencies noted.	N/A	N/A
3	Bougainvillea Walk	9/30/2009	Medium	3	3	0	No maintenance deficiencies noted.	N/A	N/A
4	Grossmont Trolley Theater Commercial	9/30/2009	High	0	0	2	Required BMPs indicated on development plan were not installed. Both catch basins on property observed without drainage inserts.	NOV issued on 10/12/09; two drainage inserts were installed on 11/23/09 and verified on 11/30/09.	Resolved
5	Grossmont Medical Offices and Parking Structure	9/29/2009	Medium	2	2	2	Drain insert indicated on development plans was not installed; vortex separator could not be accessed at time of inspection; standing water in vegetated swale & inadequate vegetative cover in swale observed.	NOV issued on 10/12/09; met with responsible party on 11/17/09 to discuss treatment control; vegetated swale planted with drought tolerant plants as of 11/17/09; will install Flo Gard catch basin insert.	Resolved

Table 2-3 (Continued)
Summary of Treatment Control BMP Inspection Results

#	Project Name	Inspection Date	TTWQ	BMP(s) Installed	BMP(s) Inspected	BMPs Requiring Maintenance	Inspection Notes	Follow Up Notes	Resolution Status
6	La Mesita	9/30/2009	Medium	0	0	2	One catch basin and one curb inlet observed without drain inserts.	NOV issued on 10/12/09; on 10/15/09 received call from Downstream Services indicating purchase of units.	Resolved

3.0 CONSTRUCTION

3.1 INTRODUCTION

The City's construction program is designed to control construction and grading activities in the City. These types of projects have the potential to impact nearby water bodies due to the presence of disturbed soils and building materials and the potential for associated pollutants to be transported off site by storm water or non-storm water flows. The City continued to implement its construction program throughout 2009/2010.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2009/2010 reporting period are presented in the following bulleted list. The following subsections provide more detail on how the City complied with the Municipal Permit during the reporting period.

- Distributed appropriate checklists to all projects applying for grading and building permits.
- Conducted plan checks of erosion control plans to ensure construction projects comply with the City's minimum BMP requirements.
- Conducted training for applicable City staff.
- Conducted 69 construction inspections at 27 sites during 2009/2010.
- Issued one verbal warning, seven written warnings, and eight NOVs to non-compliant construction sites and activities during 2009/2010.
- Required construction sites less than one acre to complete a Construction Storm Water Management Plan (CSWMP), similar to a Storm Water Pollution Prevention Plan, which details the planned construction phase BMPs for the project.

3.2 SOURCE CHARACTERIZATION

An inventory of active construction projects during the reporting period is presented in Appendix A.2 of this JURMP Annual Report. The City's inventory was maintained throughout the reporting period by the City's Engineering Division. New construction projects were added to the inventory at the start of construction, and projects were removed from the inventory after construction was completed. Since construction projects were continually being added and removed throughout the fiscal year, inventory updates were usually performed more frequently than the minimum once per month.

Since construction activities that involve grading activities are generally more of a threat to water quality than other construction activities such as tenant improvements, the City has chosen to include only projects that have applied for grading permits on the construction inventory. Although other, smaller, construction projects are not included on the City's construction inventory; the City requires BMP implementation and maintains oversight of these projects. The City's building inspectors inspect these sites for proper BMP implementation during their routine building construction inspections. Building inspectors will notify the Engineering Division of the Public Works Department if any major BMP deficiencies are noted or if a facility is required to submit an application for a grading permit, and thus be included on the City's construction inventory. Inspections by the Building Department are not tracked like the City's construction inspections, but these inspections are used as a supplemental tool to implement the City's construction storm water requirements.

3.3 Updates to Ordinances and Approval Processes

In February 2010, the City updated its BMP Manual II to include information on the newly adopted model SUSMP. The BMP Manual II is referenced as an uncodified appendix to City Code Chapter 7.18. There were no changes to the City's project approval process during 2009/2010.

3.4 Best Management Practice Requirements

The City's updated construction and grading project requirements are detailed in the City's updated BMP Manual Part II, which can be found as Appendix C in the City's JURMP. The City did not make any changes to these BMPs during 2009/2010.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below.

3.5.1 Education and Staff Training

During 2009/2010, City staff involved in construction program implementation was trained on dry weather and wet weather requirements, erosion control, material management BMPs, enforcement action and procedures. Please see Section 8 of this JURMP Annual Report document for details on trainings performed and construction-related educational materials distributed.

3.5.2 Construction and Grading Approval Process

The City's grading approval process is described thoroughly in Section 5 of the City's JURMP. During 2009/2010, City personnel verified that all construction projects planned to implement the City's minimum BMP requirements prior to issuing any building or grading

permits. The City continued to distribute Appendix A, which helps the City and the project proponent identify whether coverage under the State of California General Construction Permit (Construction Permit) is needed. Additionally, the City continued to require construction projects that are not subject to the General Construction Permit to complete a Construction Storm Water Management Plan (CSWMP), which details BMPs planned for construction sites not required to develop a storm water pollution prevention plan (SWPPP). A copy of the City's CSWMP form is included as Attachment 3.1. Approved forms and documents completed by project proponents are kept with the each project's file at the City for reference.

During 2009/2010, the City continued to enforce a 17 acre maximum disturbed area for grading activities. None of the City's active construction sites were larger than 17 acres, and the maximum disturbed area limitation did not apply. However, all construction sites were still required to limit exposed cleared or graded areas to the amount of area that could be protected prior to a rain event, as prescribed in the City's seasonal BMP requirements.

The City also continued implementing advanced treatment requirements during the reporting period. Criteria for determining when advanced treatment is required are detailed in the City's updated JURMP. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites within the City's jurisdiction, and advanced treatment methods were not required at any construction sites.

3.5.3 Inspection of Construction Sites

Construction projects that were active during 2009/2010, along with their assigned TTWQ, the number of weeks the site was active during the rainy season, the number of inspections conducted during wet and dry seasons, and the total number of inspections for each site are included in Appendix A.2. A total of 69 routine construction inspections were performed at 27 construction sites during 2009/2010.

Construction inspections conducted during the reporting period were performed as described in the City's JURMP. Key components of the inspections include checks for coverage under the Construction Permit during the initial inspection and assessment of compliance with the City's BMP and discharge requirements. Responsible parties at the sites are educated as needed during inspections. Copies of the inspection forms are kept on file at the City.

3.5.4 Enforcement Measures

Any violations were noted on the project's inspection form, and the sites were given a list of corrective actions necessary to fix the observed violations. When necessary, a verbal or written warning was issued for the violation, and the City followed up with the site until compliance was achieved. Table 3-1, on the following page, includes the number of violations and enforcement actions taken during the reporting period in response to violations of the City's minimum construction BMP requirements. Enforcement actions are

administered in an escalating manner as described in the City's updated JURMP. Copies of the forms utilized to administer enforcement actions can be found in Appendix D of the City's updated JURMP.

Table 3-1
Construction Enforcement Actions Taken

Enforcement Context	Verbal Warnings	Written Warnings	NOVs	Stop Work Orders
Routine Inspections	1	5	6	0
Other Construction-Related Enforcement	0	2	2	0

In January 2010, the RWQCB contacted the City regarding the Fairfield Grossmont Trolley Apartments construction site located at 8725 Fletcher Parkway. City staff accompanied a RWQCB staff member on a joint inspection of the site. The site had ineffective sediment control BMPs in place; however no violations were issued by the RWQCB or the City at the time of the inspection. Upon investigation, it was found that sediment had remained on site and not entered the City's MS4 because the drainage features at the site were not yet connected to the MS4. City staff followed up with the site to ensure corrective actions provided during the inspection were implemented.

None of the violations observed at construction sites during the reporting period were found to endanger human health or the environment. The City was able to bring about compliance at all sites for which enforcement actions were taken, and it was not necessary to report any of these sites to the RWQCB.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 Program Review and Modification

The City's JURMP was recently updated in March 2008. No changes to the City's construction component have been made since that time.

4.0 MUNICIPAL COMPONENT

4.1 INTRODUCTION

Throughout the 2009/2010 reporting period, the City continued to manage municipal areas and activities to reduce municipal discharges of pollutants to the MS4 to the MEP. As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and conducts various municipal activities. Public parks and recreation facilities, administrative buildings, fire stations, and public works facilities make up the bulk of the municipal facilities in the City. Municipal activities conducted by the City or City contractors include power washing, graffiti abatement, building maintenance, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. Information about the City's prioritized street sweeping program can be found in Table 4-1, and information about the City's MS4 maintenance program can be found in Table 4-2. Information about sanitary sewer overflows (SSO) that occurred during 2009/2010 can be found in Table 4-3. The City continued to respond to complaints made to the City's Storm Water Hotline. All complaints made to the City's Storm Water Hotline are included in Appendix B; enforcement actions taken in response to complaint investigations are included in Table 4-4. The City's municipal inspection results can be found in Table 4-5.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the 2009/2010 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the municipal component and of its storm water program during the reporting period are provided in the remainder of Section 4.

- The City inspected all high TTWQ fixed municipal facilities.
- The City hosted six training events/meetings for approximately 32 municipal personnel.
- The City maintained an informational storm water bulletin board in City Hall.
- The City removed a total of 576.88 tons of sediment and debris from street sweeping activities.
- The City removed over 249 cubic yards of sediment and debris from standard MS4 cleaning activities, not including drainage insert maintenance.
- The City removed over 14 cubic yards of sediment and debris from 21 filter inserts in University drainage basin.
- City personnel continued to restock the pet waste bag dispensers in City parks, using 22,500 pet waste bags during 2009/2010.

- A total of 34,723 linear feet of sewer line were televised during 2009/2010, which led to the discovery of some areas of the sanitary sewer in need of repair. The City replaced or rehabilitated 15,063 linear feet of sanitary sewer line.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities. As mentioned in the City's JURMP, municipal fixed facilities have been grouped under one category, fixed facilities. This is because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar.

4.2.2 SOURCE CHARACTERIZATION

All fixed facilities are included on the City's municipal inventory; descriptions of the facilities and activities can be found in the City's JURMP. The City's inventory is included in this JURMP Annual Report as Appendix A.3.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City continues to implement and assess the effectiveness of BMPs at fixed municipal facilities. As mentioned in the City's JURMP, the City uses the California Stormwater Quality Association (CASQA) Municipal BMP Handbook to establish appropriate BMPs for fixed municipal facilities. Table 6-2 in the City's JURMP describes the CASQA fact sheets that are used for specific facility types.

The City continues to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. The City also continues to use Calsense Computerized Irrigation Control (Calsense) at a number of fixed municipal facilities to reduce water use and decrease the chance of transporting pollutants to the City's MS4 by over-irrigation. BMP implementation for parks and recreational facilities, as described in the City's JURMP, has not changed.

City public works employees, fire station employees, and employees at other fixed facilities in the City continue to implement BMPs appropriate to the facility type as described in the City's JURMP. City fire response personnel continue to be trained in implementing BMPs for non-emergency fire fighting activities as described in Section 3 of the City's JURMP. There have been no changes in BMP requirements for any fixed municipal facilities.

4.2.4 PROGRAM IMPLEMENTATION

As mentioned above, the City's BMP requirements have not changed since the development of the revised JURMP. Some notable examples of implementation of those BMPs are provided below.

Calsense Computerized Central Irrigation Control

The City continues to use Calsense, an advanced automated irrigation system designed to prevent over irrigation at several fixed municipal facilities. Since Calsense is automated, it has a lower chance of malfunction than manual irrigation systems and allows the City to monitor irrigation activity from a central computer. A total of 21 municipal facilities, including both parks and various fixed facilities, are equipped with Calsense technology.

The Calsense system monitors irrigation by including the use of master valves and flow sensing to prevent over-irrigation and also decrease the amount of water that is used. A break in the system is recognized as a high flow, and the system is shut off until it is repaired. The use of this technology allows the City to prevent major leaks by detecting smaller leaks that might otherwise go undetected earlier than with a manual system. The automatic shutoff by Calsense saves thousands of gallons of water and prevents the runoff generated by a leak from carrying pollutants from parks and other fixed municipal facilities to the storm drain system. The irrigation system can be controlled by a central computer, which calculates the best time for irrigation based on moisture readings, weather, and real time flow rates at every valve. Additionally, the system allows staff to manage the system more efficiently and with less chance of over-irrigation. The irrigation schedules can be designed for a long period of time or easily modified for weekly or daily needs if necessary. The system allows for the most efficient usage of water while minimizing the chance of over-irrigation and consequent introduction of pollutants to the City's storm drain system.

Parks and Recreational Facilities

During 2009/2010, City continued to maintain the 34 pet waste bag dispensers installed throughout 14 parks. City personnel restock the dispensers as necessary; 22,500 pet waste bags were used during the reporting period. As mentioned in the City's JURMP, a number of volunteers continue to assist in keeping the designated dog area at Harry Griffen Park free of pet waste as part of the Canine Corners Program. The City also continues to host the Adopt-A-Park program, which engages residents of the City in volunteering to pick up trash throughout local parks. The City continued its partnership with the St. Madeline Sophie's Center, which employs developmentally disabled individuals in park maintenance activities.

During 2009/2010, the City maintained the informational kiosks in three City parks: La Mesita Park, Vista La Mesa Park, and Jackson Park. These kiosks present storm water pollution prevention information to park patrons and are updated with information regarding upcoming outreach events. The Adopt-A-Park program, the partnership with St. Madeline Sophie's Center, and the storm water kiosks are also discussed in Section 9 of this Annual Report.

As previously mentioned, the City continued to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. In 2009/2010, the City used 7.6 tons of fertilizer, 86 pounds of herbicide, and 0.4 pounds of pesticides.

Public Works Facilities, Fire Stations, Other Fixed Facilities
As previously mentioned, City personnel continued to implement appropriate BMPs for municipal fixed facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance (i.e. landscaping, building maintenance, etc.) as necessary. Parking facilities associated with fixed municipal facilities are conducted as part of the regular sweeping activities and were swept weekly during 2009/2010. The large paved area at the City's Public Works Operation Center was swept at least once weekly during 2009/2010, and twice weekly if needed. Public Works employees continued to implement the storm water management plan (SWMP) at the Public Works Operations Center. Public Works employees also continued to maintain the seven filter inserts on the property; these inserts are cleaned twice annually.

Municipal Inspections
All high TTWQ fixed municipal facilities received a routine annual inspection in 2009/2010. Table 4-5 at the end of this section lists all high TTWQ municipal fixed facilities requiring inspection in 2009/2010, the date the inspection was performed, and the recommended corrective actions from the inspection. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2009/2010. The City's municipal inspection form is included as Attachment 4.1.

Two municipal facilities were recommended for follow-up during 2008/2009, Community Pool and Allison Avenue Parking Lot. During the routine inspections completed in 2009/2010 the issues observed at these facilities had been resolved.

- The chemical storage area at Community Pool was outfitted with secondary containment and it was determined that the pool deck drains are directed toward a landscape area, so no changes needed to be made to the deck hosing practices.
- The portable toilet at Allison Avenue Parking lot is wheelchair-accessible and equipping the toilet with secondary containment would make it inaccessible to wheelchairs. The portable toilet was clean and free of any evidence of spills or leaks.

4.3 Roads, Streets, Highways, and Parking Facilities

4.3.1 Background

The City conducts regular maintenance of roads, streets, highways, and parking facilities in the City to control pollutants such as sediment, metals, and litter and debris.

4.3.2 Source Characterization

The City maintains roads, streets, and highways; the City also maintains four stand-alone parking facilities. Roads, streets, and highways, are included as one entity on the City's municipal inventory and each individual stand-alone parking facility is also included on the City's municipal inventory, which is included in Appendix A.3.

4.3.3 BEST MANAGEMENT PRACTICES

The City's primary BMP for roads, streets, highways, and parking facilities is street sweeping. Other BMPs are chosen as needed based on the CASQA Municipal Handbook. The City's sweeping frequency is outlined in the JURMP and described in the following subsection. There were no changes to the BMPs implemented for roads, streets, highways, and parking facilities in 2009/2010.

4.3.4 PROGRAM IMPLEMENTATION

During 2009/2010, the City swept a total of 8,285 curb miles, removing approximately 576.88 tons of debris. Similar to previous reporting periods, the debris removed by sweeping activities was approximately 80 percent sediment and 20 percent leaves, debris, and trash. Table 4-1, below, describes the areas assigned high, medium, and low sweeping priorities, and the associated sweeping frequency. The City met the sweeping frequency requirements of the high, medium, and low priority streets as described in both the JURMP and in the table below. Parking lots associated with City parks were swept every two weeks; parking lots associated with all other fixed facilities in the City were swept every week during 2009/2010.

As a means to address priority pollutants in the San Diego Bay and the San Diego River Watersheds, the City conducted additional sweepings of some City streets. Designated residential areas that are low priority were swept monthly during 2009/2010 and selected high priority streets were swept weekly.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
High	Downtown areas, designated residential areas, designated commercial areas, stand-alone parking facilities	10.6 miles	At least every two weeks
Medium	Center islands	9 miles	At least once per month
Low	Designated residential areas	140 miles	As needed, at least annually
Fixed Facilities	Parking lots associated with municipal fixed facilities	N/A*	Weekly
Fixed Facilities - Parks	Parking lots associated with parks	N/A*	Every two weeks

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
Fixed Facilities – PW Operations Center	Public Works Operation Center	N/A*	At least weekly, twice weekly if needed
Total Amount of Debris Collected from Street Sweeping Activities: 576.88 tons			

* Mileage data is not available for the swept area of stand-alone parking facilities, parking facilities associated with municipal facilities, and the PW Operations Center. Mileage accrued while sweeping these facilities is included in the total mileage.

Inspections
Trash, debris, and sediment that have accumulated on City streets are identified and cleaned up via street sweeping, so additional inspections beyond this effort are not necessary.

4.4 MS4

4.4.1 Background

The City's storm water conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during rain events. The City's MS4 consists of approximately 56 miles of pipes of varying materials, natural channels, concrete channels, and culverts and over 400 curb inlets and catch basins.

4.4.2 Source Characterization

The City's MS4, as one complete entity, is included on the City's high TTWQ municipal inventory.

4.4.3 Best Management Practices

The City maintains a strict MS4 maintenance and cleaning schedule in order to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. As described in the City's JURMP, BMPs for MS4 maintenance activities are chosen based on the CASQA Municipal Handbook and have not changed during 2009/2010.

The City has installed and maintains 21 filter inserts in catch basins in the University drainage basin, which are designed to prevent debris from entering the MS4. These filter inserts are maintained as part of the routine MS4 maintenance schedule. Figure 4-1 shows the locations of these drainage inserts.

During 2009/2010, two Filterra Bioretention System units were installed at Orien Avenue at Lowell Street. During the first year after installation, the Filterra Bioretention System units will be maintained by the manufacturer, and after the first year, the City's Public Works employees will maintain the units twice per year, once prior to the rainy season. These Filterra Bioretention System units are located in the University drainage basin and the location can be found in Figure 4-1.

4.4.4 PROGRAM IMPLEMENTATION

The City implemented a rigorous MS4 inspection and cleaning schedule during 2009/2010. The City inspected and cleaned all MS4 cleanout locations twice in 2009/2010; at least one cleaning was conducted between May 1 and September 30. The City's MS4 inspection and cleaning schedule for 2009/2010 is shown in Table 4-2.

Table 4-2
MS4 Maintenance Data

	Percent Inspected and/or Cleaned*	Percent of Open Channels Found with Anthropogenic Litter Cleaned	Amount of Debris Removed from Cleaning Activities
Catch Basins/Self Cleaning MS4 Facilities	**100%**	N/A	**175.25 cubic yards**
Open Channels	**100%**	**100%**	**74 cubic yards**
Drainage Inserts	**100%**	N/A	**14.25 cubic yards**
Total Debris Removed From MS4 Maintenance Activities: 263.5 cubic yards			

* No structures were observed at least 33% of capacity during the reporting period. However, the City cleans out any structures, including self-cleaning structures, in which trash and debris is observed at the time of inspection.

The City's cleanout locations are access points to various sections in the City's MS4, so no additional pipe beyond the cleanout location is typically cleaned. The City may flush the MS4 line and then reclaim the water in the event of a spill. During 2009/2010, there was no need to flush any MS4 line, so there is no data to report for additional MS4 cleanout activities. As previously mentioned, the City continued to maintain the filter inserts installed in the University drainage basin.

During 2009/2010, the City continued to inspect the open channels in the City and remove trash and debris as necessary. If litter or debris is observed during the routine inspections, it is removed immediately. The total length of the channel segments inspected and cleaned by City staff was approximately 4,930 feet.

As described in Table 4-2, 263.5 cubic yards of debris was removed during MS4 maintenance activities. The weight of the material removed was not recorded, though an overall estimation of the composition of debris removed from MS4 maintenance activities is

80 percent trash and leaves and 20 percent rocks and soil. The volumes were converted to estimated weights using the percent composition estimates from City maintenance staff and conversion factors of 2,300 pounds per cubic yard of rocks and soil and 400 pounds per cubic yard of trash, leaves, and similar material. The total weight of material removed was estimated at 102.8 tons.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. A spill that introduces untreated sewage to receiving waters can contain high concentrations of bacteria, viruses, and even hazardous chemicals. Routine inspection and maintenance of the sanitary sewer system works to reduce the potential for a spill or SSO and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 SOURCE CHARACTERIZATION

The City maintains a system of public sanitary sewer pipes to convey wastewater from the City to be treated. The sanitary sewer system, as one complete entity, is included on the City's high TTWQ municipal inventory.

4.5.3 BEST MANAGEMENT PRACTICES

The City implements BMPs from the CASQA Municipal Handbook, as described in the City's JURMP, during sanitary sewer maintenance. There have been no changes to these BMPs during 2009/2010. The City inspects and maintains the sanitary sewer system as part of regular wastewater activities. The City clears blockages and repairs leaks as needed.

4.5.4 PROGRAM IMPLEMENTATION

As part of the City's regular maintenance schedule, the City maintains areas known to be "hot spots" for grease buildup on a monthly basis. During 2009/2010, the City continued to implement a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs. Additionally, the City's FOG Ordinance, No. 2009-2794 and 2009-2795, went into effect on July 1, 2009. The FOG Ordinance provides legal authority for the City to regulate grease producing facilities and outlines specific details of the program. During 2009/2010, the City conducted 166 FOG inspections at FOG facilities. The City will continue to conduct FOG inspections during 2010/2011. The City also will enforce any storm water violations noted during FOG inspections.

Throughout FOG inspections conducted in 2009/2010, many FOG-producing facilities were observed without a grease control device (GCD). These facilities will be required to install

grease traps or will need to pay a mitigation fee. Public Works employees are working to assess the amount of grease found in the "hot spot" areas to establish a baseline for use in determining long term effectiveness. During FOG inspections in 2009/2010, City personnel identified facilities that will be required to increase the pumping frequency of their grease traps and identified some facilities where facility personnel never pumped their GCD and were unaware of its location within their facilities. Follow up FOG inspections of these facilities will occur during 2010/2011 to ensure facilities come into compliance with the City's FOG requirements. In fall 2010, NOVs will be issued to approximately 14 FOG facilities that have not enrolled in the FOG Program or that have refused inspection. The City is currently working to refine procedures, establish program measurements, and increase effectiveness for the FOG program.

In addition to the monthly maintenance at known grease "hot spots," the City seeks to eliminate seepage from the sanitary sewer system to the MS4 by routine preventative maintenance of both systems. Routine maintenance of both systems allows the City to find areas that are likely to become problems in the future and make the necessary repairs/replacements before any larger issues arise. The City also continued to conduct flow metering in its sanitary sewer system to monitor for evidence of potential problems. During 2009/2010, the City replaced or rehabilitated 15,063 linear feet of sewer line. The majority of this sewer replacement is through a multi-phase program whereby the City has been replacing older sewer in sections of the City. The City received a low interest loan from the State Water Resources Board in 2007 to upgrade the system and protect against infiltration and inflow, as well as SSOs. Additional phases of the sewer replacement project are set for 2010/2011.

A total of 34,723 linear feet of sewer line was televised during 2009/2010, which led to the discovery of some areas of the sanitary sewer in need of repair. This prevented these areas from becoming future seepage points.

In case of an SSO, the City maintains a spill response plan that establishes procedures for responding to an SSO. Detailed information about the City's SSO spill response plan is included in the City's JURMP. During 2009/2010, there was one SSO. The spill was reported to the State Water Resources Control Board (SWQCB) within 24 hours through the California Integrated Water Quality System (CIWQS), as required by the Municipal Permit. Table 4-3, below, provides a description of the SSO event that occurred during 2009/2010. The City responded by recovering as much of the spill as possible and cleaning up and mitigating the effects of the spill.

Table 4-3
SSO Information

Spill Location	Spill Date	Estimated Spill Volume	Approximate Percentage of Volume Recaptured
University Avenue and La Mesa Boulevard	11/4/2009	3 gallons	100%

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City conducts a variety of different mobile municipal activities, typically involving infrastructure maintenance, landscape maintenance, graffiti removal, and power washing. Power washing is not considered a part of any normal maintenance activities, but it is used when other methods of cleaning or graffiti removal are not effective.

4.6.2 Source Characterization

Both power washing and graffiti removal are listed on the City's high TTWQ municipal inventory. Infrastructure maintenance and landscape maintenance are listed on the City's medium TTWQ municipal inventory.

4.6.3 Best Management Practices

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel are trained to implement BMPs for the specific activity in which they are involved. For example, City personnel performing power washing are trained to collect all waste water and City personnel conducting graffiti removal are trained to store and handle any chemicals properly.

4.6.4 Program Implementation

Power washing and graffiti removal, both high TTWQ activities, are conducted on an as needed basis and are therefore not on a set schedule. Neither power washing nor graffiti removal was scheduled to be conducted during the timeframe that routine municipal inspections were conducted. Facility personnel responsible for graffiti removal and power washing have been trained and are aware of the BMPs necessary for each activity to prevent discharge to the MS4. Water produced by these activities is either directed to landscaping or storm drains are blocked and water is vacuumed up once the project is complete.

Municipal personnel that conduct other mobile activities such as infrastructure maintenance and landscape maintenance are trained regularly regarding BMPs for material use and disposal. Emergency vehicle maintenance personnel are trained on the proper handling and use of pesticides, herbicides, and fertilizers as described in the City's JURMP.

4.7 Special Events

4.7.1 Background

The La Mesa Oktoberfest is the only priority designated annual special event that occurs in the City. Oktoberfest is a three-day celebration occurring in early October. There are no other regular major special events, although smaller events may occur on occasion.

4.7.2 Source Characterization

As required by the Municipal Permit, special events are included on the city's high TTWQ municipal inventory.

4.7.3 Best Management Practices

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter/debris from the event, and raise storm water awareness among the vendors and patrons of the event, as applicable. During smaller events, City staff ensure that any trash and debris left over from the events is cleaned up.

Individuals or groups wishing to host events in the City meeting certain criteria are required to obtain a permit from the City. Both Community Assembly Permits and Block Party Permits are available from Public Works and Park Use Permits are available from the Community Services Department. Permits require individuals responsible for the event to control trash and clean up after the event. If vendors are anticipated at the event, Vendor Fact Sheets (Attachment 8.1) are provided to the permit applicant.

4.7.4 Program Implementation

During 2009/2010, the City provided vendors of the Oktoberfest event a handout entitled "Tips for Outdoor Vendors" (Attachment 8.1). This fact sheet informed the vendors of the difference between the storm drain system and the sanitary sewer system and the effects of polluted urban runoff. The sheet also included event-specific BMPs, such as using dry cleaning methods, having spill response materials if using cooking grease, and managing trash and other wastes properly. The City distributed 50 copies of the aforementioned fact sheet.

On the Monday following the three-day event, the City conducted a post inspection of the area where the event took place. The inspection was a joint inspection conducted by the City and the City's storm water consultant, D-Max Engineering, Inc. The City issued two NOVs for illegal discharges that were observed as business owners attempted to clean the area after the event. All observed IC/IDs were eliminated during the inspection. Minor amounts of litter and debris were observed on the ground, which was cleaned up as part of the routine special event BMPs.

4.8 Public Reporting of Illicit Discharges and Connections

Reporting and Response

Public and municipal involvement is crucial to preventing and eliminating IC/IDs from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is provided on the City's website, in distributed storm water educational material, in storm water articles in the

La Mesa Focus newsletter, and on the Storm Water Bulletin Board. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged onto a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges. The Public Works Department also receives complaints regarding storm water, often due to infrastructure concerns. Complaints to the Public Works Department are also tracked and investigated.

Complaints received by the City during the 2009/2010 reporting period and the City's response to each are listed in Appendix B. A total of 84 complaints were documented this year.

Enforcement

As previously stated, complaints received via the Storm Water Hotline, City website, and Public Works Hotline are included in a table in Appendix B. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, violations, and/or educational material. Table 4-4, below, summarizes the enforcement actions taken in response to complaints received.

Table 4-4
Enforcement Actions Resulting from Complaints Received by the Storm Water Hotline

	Verbal Warning	Enforcement Letter	Written Warning	NOV
Commercial	0	3	2	2
Industrial	0	0	0	0
Mobile	0	0	0	0
Municipal	0	0	0	0
Residential	2	7	4	4
Construction	0	0	1	3

4.9 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to sanitary sewer overflows. Preventative maintenance is regularly conducted on the City's sanitary sewer system, and video inspections and sewer surveys are regularly conducted to monitor the condition of the public sewer lines and to determine the necessity of maintenance. City crews do not maintain private laterals, but the City assists in the containment and cleanup of spills from private laterals if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report any SSOs to the City's Storm Water Hotline. As previously mentioned, there was one SSO during 2009/2010; there were no other spills during the reporting period.

4.10 Education and Outreach

During 2009/2010, the City continued to educate municipal personnel regarding proper BMP implementation and other storm water and watershed concepts. The City held a variety of training sessions for City personnel. The City also continued to maintain a storm water bulletin board in City Hall, which provided storm water information and brochures. Detailed information regarding the education and outreach conducted for City personnel is described in detail in Section 8 of this Annual Report.

4.11 Municipal Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.12 Program Modification and Review

The City's JURMP was updated in March 2008. No changes to the City's municipal component have been made since that time.

Table 4-5
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
1	Allison Avenue Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	6/1/2010	• Provide secondary containment for portable toilet and sink	• Equipping the portable toilet with secondary containment will make the facility inaccessible to wheelchairs. • Portable toilet is clean, there is no evidence of spills or leaks	Resolved
2	Aztec Park	High	Parks and Recreation Facilities	4/21/2010	• No significant corrective actions	N/A	N/A
3	Briercrest Park	High	Parks and Recreation Facilities	4/21/2010	• No significant corrective actions	N/A	N/A
4	Collier Park and Pump House	High	Parks and Recreation Facilities	6/1/2010	• No significant corrective actions	N/A	N/A
5	Community Pool	High	Parks and Recreation Facilities	6/23/2010	• No significant corrective actions	N/A	N/A
6	Harry Griffen Park	High	Parks and Recreation Facilities	6/1/2010	• Clean out sediment, litter, and debris from all catch basins, channels, and parking lots • Keep dumpster lids closed and the enclosures free of trash and debris • Provide secondary containment for the portable toilet at the north parking lot • Repair downed portions of the silt fence that runs along the channel on the east side of the parking lot	• No follow-up inspection required. Facility personnel will be notified of corrective actions. City will follow-up verbally with appropriate personnel to ensure corrective actions taken.	N/A

Table 4-5 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
7	Highwood Park	High	Parks and Recreation Facilities	4/20/2010	• Collect sediment and plant debris that has accumulated in the parking lot, trench drain, catch basin, and sidewalk • Removed trash observed throughout parking lot and dumpster area	• No follow-up inspection required. Facility personnel will be notified of corrective actions. City will follow-up verbally with appropriate personnel to ensure corrective actions taken.	N/A
8	Jackson Park	High	Parks and Recreation Facilities	4/20/2010	• No significant corrective actions	N/A	N/A
9	Junior Sean Sports Complex	High	Parks and Recreation Facilities	6/2/2010	• Sediment needs to be removed from all catch basins around the perimeter of the fields	• No follow-up inspection required. Facility personnel will be notified of corrective actions. City will follow-up verbally with appropriate personnel to ensure corrective actions taken.	N/A
10	La Mesa Blvd (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	6/1/2010	• No significant corrective actions	N/A	N/A
11	La Mesita Park and Gardener's Shack	High	Parks and Recreation Facilities	5/18/2010	• Remove trash and cigarette butts in the skate park area	• No follow-up inspection required. Facility personnel will be notified of corrective actions. City will follow-up verbally with appropriate personnel to ensure corrective actions taken.	N/A
12	Lemon Ave Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	5/18/2010	• No significant corrective actions	N/A	N/A

Table 4-5 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
13	MacArthur Park	High	Parks and Recreation Facilities	6/2/2010	• Stockpile of mulch needs to be covered and contained • Portable toilet needs secondary containment • All dumpsters need to remain closed	• No follow-up inspection required. Facility personnel will be notified of corrective actions. City will follow-up verbally with appropriate personnel to ensure corrective actions taken.	N/A
14	Northmont Park	High	Parks and Recreation Facilities	4/20/2010	• Clean out leaves and plant debris from all storm drain inlets • Keep site free of litter	• No follow-up inspection required. Facility personnel will be notified of corrective actions. City will follow-up verbally with appropriate personnel to ensure corrective actions taken.	N/A
15	Palm Avenue Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	5/18/2010	• No significant corrective actions	N/A	N/A
16	Porter Hall	High	Parks and Recreation Facilities	6/2/2010	• No significant corrective actions	N/A	N/A
17	Porter Park	High	Parks and Recreation Facilities	6/2/2010	• No significant corrective actions	N/A	N/A

Table 4-5 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
18	Public Works Facility	High	Public Works Facilities	6/18/2010	• Ensure storm drain filters are replaced at gas pumps, stockpile/drying area, and northern storm drain outfall • Restore fiber roll BMPs in stockpile/drying area and at covered area where patch truck, paver, and oil truck are located • Stockpile area needs sweep up and trash/debris removed from area near fleet maintenance • Ensure rusty metals are covered with tarps during rainy season, particularly in the storage area north of fleet maintenance	• Facility personnel were notified of inspection results and required corrective actions. Follow-up will be completed in 2010/2011.	In Progress
19	Rolando Park	High	Parks and Recreation Facilities	5/24/2010	• Clean up sediment and plant debris in the parking lot and on all paved walkways	• No follow-up inspection required. Facility personnel will be notified of corrective actions. City will follow-up verbally with appropriate personnel to ensure corrective actions taken.	N/A
20	Sunset Park, Gardener's Shack and Recreational Building	High	Parks and Recreation Facilities	6/1/2010	• Provide some form of soil stabilization for the slope west of the park to prevent erosion to the parking lot	• No follow-up inspection required. Facility personnel will be notified of corrective actions. City will follow-up verbally with appropriate personnel to ensure corrective actions taken.	N/A

Table 4-5 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
21	Sunshine Park	High	Parks and Recreation Facilities	6/2/2010	• Remove vegetative debris from catch basin	• No follow-up inspection required. Facility personnel will be notified of corrective actions. City will follow-up verbally with appropriate personnel to ensure corrective actions taken.	N/A
22	Vista La Mesa Park	High	Parks and Recreation Facilities	5/11/2010	• Remove trash from under picnic tables • Remove plant debris and sediment from concrete swale at the north end of the park	• No follow-up inspection required. Facility personnel will be notified of corrective actions. City will follow-up verbally with appropriate personnel to ensure corrective actions taken.	N/A

Note: Roads, streets, highways, and parking lots; the MS4; and the sanitary sewer system were inspected via the maintenance effort described earlier in this section.

Figure 4-1
City Maintained Treatment Control BMPs Installed in the University Drainage Basin

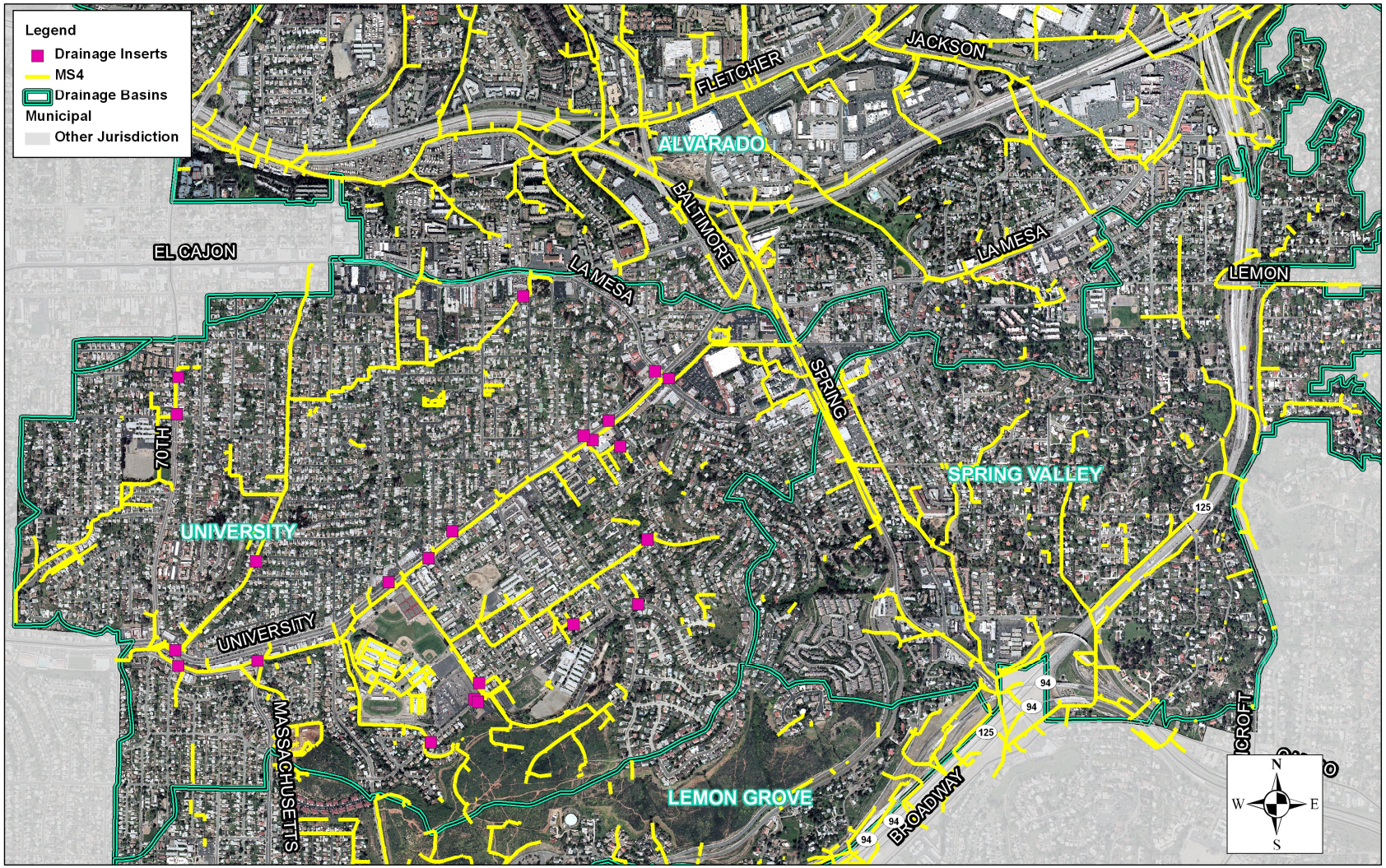

Base Data Sources: City of La Mesa, SANDAG, SanGIS

0 0.2 0.4 0.8 Miles

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During 2009/2010, the City continued to implement a storm water program to reduce urban runoff pollution from the areas and activities of industrial and commercial businesses. The City aims to reduce the amount of pollutants discharged from industrial and commercial facilities by implementing various aspects of its industrial and commercial program.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Notable achievements for the industrial and commercial component during the 2009/2010 reporting period are outlined below. Additional details about the City's implementation of the industrial and commercial component and of its storm water program during the reporting period are provided in the remainder of Section 5.

- The City met the Municipal Permit requirement of inspecting at least 25 percent of its stationary industrial and commercial inventory.
- The City inspected all high TTWQ stationary industrial and commercial facilities.
- The City completed pollutant discharge potential assessment (PDPA) forms and additional watershed-specific questionnaires at inspections to aid watershed management and source identification efforts.
- Based on inspection findings and complaints made to the hotline, the City took enforcement actions against industrial and commercial businesses, as necessary.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 BACKGROUND

The City's updated industrial and commercial inventories can be found in appendices A.4 and A.5, respectively, and include all stationary facilities known to be operating in the City that are required to be included on the City's inventories. Stationary facilities in the City include, but are not limited to, manufacturing facilities, wholesalers, auto dealerships, auto repair shops, and restaurants. The City requires industrial and commercial businesses to implement pollution prevention measures and minimum, activity-specific BMPs to mitigate the impacts of business activities on water quality.

5.2.2 SOURCE CHARACTERIZATION

The City's industrial and commercial inventories include both stationary and mobile businesses, as required by the Municipal Permit, and were updated during 2009/2010.

Information on how the City prioritizes the industrial and commercial inventories based on TTWQ is discussed in detail in the City's JURMP. The City considers the following factors when prioritizing the inventories:

- Industrial Permit subjectivity
- Consideration of downstream waterbody and whether the business is likely to discharge pollutants for which the waterbody is impaired
- Results from previous inspections and institutional knowledge
- Proximity to the receiving waterbody

The City's updated inventory includes 462 stationary industrial and commercial facilities.

5.2.3 Best Management Practice Requirements

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other designated BMPs to reduce or potentially eliminate the generation of pollutants from business areas/activities. The City has established a set of minimum BMPs based on the CASQA Industrial and Commercial Handbook. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. The City's BMP requirements are described in more detail in the City's BMP Manual Part I, which is an attachment to the City's JURMP. BMP requirements for stationary industrial and commercial businesses did not change during 2009/2010.

5.2.4 Program Implementation

As previously mentioned, the City updated its industrial and commercial inventory during 2009/2010. The updated industrial and commercial inventories are included as Appendix A.4 and Appendix A.5, respectively, to this JURMP Annual Report.

Industrial and Commercial Inspections
During 2009/2010, the City conducted storm water compliance inspections at selected stationary industrial and commercial facilities. This year the City hired a new employee, Engineering Technician I, to perform industrial and commercial inspections. All high TTWQ sites were selected for routine inspection. Additional sites selected for routine inspection were selected randomly.

Table 5-1, on the following page, provides a summary of the industrial and commercial site visits. In the table, full inspections have been counted as one full inspection. Because facilities move/go out of business, are duplicates of other businesses listed on the City's inventory, or are conducting activities for which inclusion on the City's inventory is not necessary, full inspections are not conducted at all visited facilities. Since time and effort are required to visit these facilities, visits where a full inspection is not conducted are considered equivalent to one half of a full inspection. The only time a site visit would not count as half of a full inspection is if the facility moved and was replaced by a facility where a full inspection was conducted or if the facility was a duplicate of another facility selected for inspection.

Table 5-1
Summary of Routine Site Visits

Facility Category	Inventoried Stationary Sites	Equivalent Full Inspections*	Percentage of Total Inventory
High TTWQ Sites	26	26	5.6%
Additional Sites	438	94.5	20.4%
Totals	**462**	**120.5**	**26%**

* "Equivalent Full Inspections" includes full inspections and also counts at 50 percent value the site visits where a full inspection could not be conducted but where effort was taken to document the visit and update the inventory. It does not include any businesses that were duplicate listings of other inspected facilities or facilities replaced by other businesses inspected during the reporting period.

Facility inspections were conducted in accordance with the protocol set in the City's JURMP. Inspections involved a thorough examination of the facility and all outdoor activities. BMP deficiencies and corrective actions were recorded on the City's industrial and commercial inspection form and discussed with facility personnel present during the inspection. Businesses were given a copy of corrective actions at the time of inspection.

During the inspection process, the City also checked Industrial Permit compliance status when applicable. The City also reviews storm water pollution prevention plans (SWPPP) and monitoring results when applicable. Furthermore, the City completed PDPA forms and supplemental watershed questionnaire forms during the inspections in an effort to collect more data from inspected facilities. These forms are included with the City's inspection form, which is included in Attachment 5.1. More information about the results of the watershed questionnaire analysis is presented in Section 12.

During 2009/2010, the City conducted the following inspections:

- Follow-up inspections at sites not in compliance in 2008/2009
- Routine inspections for 2009/2010

The results of full follow-up inspections are included in Table 5-2; compliance issues at these sites were resolved during 2009/2010. Results of the sites that received full routine inspections are included in Table 5-3.

In some cases, a facility recommended for follow-up during 2008/2009 was observed to be in compliance during the follow-up inspection conducted during 2009/2010. These sites received routine inspection subsequent to the follow-up to confirm continued compliance with City requirements. In some cases, businesses were out of compliance in the 2009/2010 routine inspections. The City will conduct further follow-up and enforcement activities at these sites to bring them back into compliance in 2010/2011. Additionally the City completed approximately 170 Fats, Oil, and Grease (FOG) inspections during 2009/2010.

These inspections also include a quick check for storm water compliance in addition to the FOG requirements for restaurants.

The City did not rely on third party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third party inspection program.

General Industrial Permit

Subjectivity to the Industrial Permit was evaluated during the industrial and commercial inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector gathered information about the business activities that occur on site and assigned or reassigned the business' standard industrial classification (SIC) code(s). Based on the assigned SIC code, the inspector evaluated the Industrial Permit subjectivity of the business. Notably, none of the inspected businesses in the City were observed to be in violation regarding obtaining coverage under the Industrial Permit in 2009/2010.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to give site-specific one-on-one education regarding storm water concepts and BMPs. The City Inspector discusses a variety of topics including watershed concepts, the Industrial Permit, and minimum, activity-specific BMP requirements. Prior to performing industrial and commercial inspections, the City sent a letter to all businesses informing them of the upcoming inspection. In the case of the follow-up inspections conducted in September 2009, this notification letter also authorized the City's consultant, D-MAX Engineering, Inc., to perform the facility inspections on behalf of the City. The City Inspector works directly with businesses that have had repeat violations, such as A-1 Equipment and Rainbow Steel, to ensure long term compliance. The City's inspector has visited businesses more frequently than for official annual inspections in order to build a relationship with the personnel and to clarify storm water regulations. Also, the City has started providing a customized list of corrective actions during the inspection to facilitate prompt compliance.

The City continued to partner with the local Target and Dixieline Lumber to provide English and Spanish Integrated Pest Management (IPM) cards (Attachment 5.2) to the public at each business's garden center. This continued collaboration between the businesses and the City's Storm Water Program Manager in distributing educational material is a valuable asset to the City's storm water program. During 2009/2010, a total of 75 packets of IPM cards were distributed by both Target and Dixieline Lumber.

The City continued to publish storm water-related articles in the *La Mesa Focus* newsletter. The 2009/2010 issues were distributed electronically to residents and businesses in the City. Summaries of the articles in the newsletter can be found in Section 6; the newsletters are included as Attachment 5.3 to this JURMP Annual Report.

Enforcement
Several industrial and commercial facilities were observed to be out of compliance with the City's municipal storm water ordinance during inspections conducted in 2009/2010. As previously mentioned, some inspections were conducted near the end of the 2009/2010 reporting period, so actions to bring the sites into compliance will continue into the 2010/2011 reporting period. The City did, however, send NOVs to all businesses in violation of the City's municipal storm water ordinance during routine inspections conducted in 2009/2010. A total of 19 NOVs were mailed in response to the 2009/2010 inspections for businesses failing to properly implement BMPs. Notably, a smaller percentage of business inspections resulted in the need for a follow-up visit than in previous years. The likely explanation for this increase in compliance is the storm water inspection fee program. While the initial purpose of the inspection fee was to fund the storm water program, charging businesses for each routine inspection and follow-up visit provides the additional benefit of encouraging businesses to come into compliance with the City requirements to avoid the fees associated with additional follow-up inspections. Businesses are required to pay for all necessary re-inspections until they are in compliance, which has made it fiscally possible for the City to have one inspector as point person who personally coordinates compliance assistance and enforcement. No industrial and commercial IC/IDs were discovered during routine inspections.

During the course of the 2009/2010 reporting period, the City received 11 complaints regarding stationary industrial and commercial businesses. These came directly from residents as calls into the storm water hotline, complaints entered through La Mesa's Request Tracker and the Civic Plus websites, or complaints from City staff. Details of the industrial and commercial complaint investigations are included in the City's complaint log, which is included as Appendix B. The City took appropriate enforcement actions during investigations conducted in response to these complaints including verbal discussions, distribution of educational materials, written warnings, and NOVs, as necessary.

There were no instances of noncompliance that posed significant threat to human health or the environment observed during 2009/2010. No non-filers were noted, as discussed earlier in this section, and no other businesses were reported to the RWQCB.

5.3 Mobile Sources

5.3.1 Background

Due to the nature of activities of most mobile businesses, a major area of concern is illegal discharges. In general, mobile businesses can be difficult to identify, as many do not have City business licenses. Additionally, many mobile businesses may be home-based and/or conduct activities that do not occur in one fixed location, so inspections of such facilities are impractical.

5.3.2 Source Characterization

Known mobile industrial and commercial businesses, as described in the City's JURMP, are included on the City's inventory and are marked as mobile. A total of 981 businesses are

included on the City's 2009/2010 mobile inventory. In 2008/2009, the Regional Industrial and Commercial Workgroup also developed a web-based mobile business database for use by all Copermittees. The goal of developing this database is to allow Copermittees to share information about mobile businesses, which may be active in more than one jurisdiction. The City contributed its mobile business inventory for upload to the regional database.

5.3.3 Best Management Practice Requirements

BMPs for stationary industrial and commercial facilities are required to be implemented for all outdoor activities, as applicable. BMPs for mobile businesses, including key principles, such as proper collection and disposal of any discharge, are discussed in the City's JURMP. The City has also established a program that requires mobile businesses operating in the City to sign an affidavit making businesses aware of the City's BMP requirements and commits them to implementing the required BMPs.

During 2008/2009, the Regional Industrial and Commercial Workgroup, in which the City participated, developed regional mobile business BMP standards. These standards were devised to create a uniform set of minimum BMPs for mobile businesses operating within the region. The regional mobile business BMP standards were adopted at the end of June 2009.

5.3.4 Program Implementation

During the 2009/2010 inspection program, the City responded to one call to the City's storm water hotline regarding mobile businesses. More detail about the complaint made to the City's storm water hotline regarding the U.S. Carpet Care discharge is included in the City's complaint log in Appendix B.

In addition to the regional effort to standardize mobile business BMPs, the Regional Industrial and Commercial Workgroup worked to develop a regional mobile business database. The database is designed to store information regarding mobile businesses operating within the region and to facilitate communication regarding mobile business activities and enforcement actions between Copermittees.

Mobile Affidavits
The City requires mobile businesses to sign an affidavit when applying for a business license to acknowledge the City's BMP requirements. Additionally, the affidavit states that the business owner agrees to implement BMPs as required by the City's JURMP and acknowledges that failure to do so will result in enforcement action and possible legal action. During 2009/2010, there was one application for a business license by a mobile auto detailing business; therefore one affidavit was signed during this reporting period.

Education and Outreach and Enforcement
The BMP template, based on regional mobile business BMP standards, was mailed out to 561 businesses during 2009/2010. As previously mentioned, one complaint was made to the City's Storm Water Hotline regarding a mobile business. City personnel discussed the BMP requirements of mobile businesses with business personnel.

There were no instances of noncompliance of mobile businesses that were believed to present potential threats to human health or the environment observed during 2009/2010, so none were reported to the RWQCB.

5.4 Industrial and Commercial Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 Program Review and Modification

The City's JURMP was recently updated in March 2008. No changes to the City's industrial and commercial component have been made since that time.

Table 5-2
Follow-Up Inspection Results

#	Business	Street Address	Inspection Date
1	A A A Auto Repair & Transmission	7025 University Ave	9/29/2009
2	A-1 Hire, Ltd.	7190 University Ave.	10/1/2009
3	Ace Coating Co.	8333 Case St. Suite 584	10/6/2009
4	Affordable Paint And Body	8181 Center Street	9/30/2009
5	Broding's Battery Warehouse	8188 Commercial St.	9/14/2009
6	Centex Glazing	8260 Commercial St.	9/29/2009
7	Centre City Shell #2	3810 Massachusetts Ave	9/29/2009
8	Chili's Bar & Grill #454	8285 Fletcher Pkwy	9/30/2009
9	Coco's #132	5550 Lake Murray Blvd	9/29/2009
10	Dan's Automotive	7501 University Ave.	9/29/2009
11	El Azteca Taco Shop Mexican Food	8306 Parkway Drive	10/1/2009
12	Fuddrucker's	5500 Grossmont Center Drive	9/30/2009
13	Gus's Subs & Pizza #2	5620 Baltimore Drive	9/30/2009
14	Himalayan Indian and Italian Cuisine	7918 El Cajon Blvd	9/30/2009
15	Jack In The Box, Jackson	5141 Jackson Dr	9/30/2009
16	Kentucky Fried Chicken	5358 Jackson Dr	9/30/2009
17	Marie Callender's #74	6950 Alvarado Rd	9/29/2009
18	Marieta's	8949 La Mesa Blvd	9/30/2009
19	Nacho's Taco Shop	7589 University Ave	9/29/2009
20	Nfarooqi Enterprises L L C (Jack in the Box)	6140 Lake Murray Blvd	9/29/2009
21	Panda Express #226	8011 University Ave	9/30/2009
22	Pho Superbowl	8342 Parkway Dr.	10/6/2009
23	Rainbow Steel Inc.	8332 Case St.	10/6/2009
24	Raindance Roof Company, Inc.	8176 Commercial St.	10/6/2009
25	Shizuoka Japanese Restaurant	9118 Fletcher Pky	9/30/2009
26	Sun Tacos	5100 Jackson Dr	10/6/2009

Table 5-3
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code	Basin	Inspection Date	Follow-Up Required?	Correction Status
1	A A A Auto Repair & Transmission	7025 University Ave.	High	7537	University	5/3/2010		
2	A-1 Hire, Ltd.	7190 University Ave.	High	7353	University	5/3/2010	✔	In Progress
3	Ace Coating Co.	8333 Case St.	Medium	1799	Alvarado	4/28/2010		
4	Affordable Paint And Body	8181 Center St.	High	7532	Alvarado	5/3/2010		
5	American Tanks	8111 Commercial St.	High	3444	Alvarado	5/7/2010		
6	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr.	High	7542	Alvarado	5/3/2010		
7	Auto Fix	7227 University Ave.	High	7537	University	5/3/2010		
8	Big Daddy's Oil Inc. #14	9600 Murray Dr.	High	5541	Alvarado	5/10/2010		
9	Bob Stall Chevrolet	7601 Alvarado Rd.	High	5511	Alvarado	6/30/2010		
10	Broding's Battery Warehouse	8188 Commercial St.	Medium	5013	Alvarado	5/10/2010		
11	California Countertop, Inc	7811 Alvarado Rd.	High	3089	Alvarado	4/28/2010		
12	Carl Burger Dodge World	8355 Hercules St.	High	5511	Alvarado	5/10/2010		
13	Carl Burgers Jeep Eagle World	8355 Hercules St.	High	5511	Alvarado	5/10/2010		
14	Centex Glazing	8260 Commercial St.	High	1791	Alvarado	4/28/2010		
15	Centre City Shell #2	3810 Massachusetts Ave.	Medium	5541	University	5/6/2010		
16	Chili's Bar & Grill #454	8285 Fletcher Pkwy.	High	5812	Alvarado	4/26/2010	✔	In Progress
17	Chipotle Mexican Grill	8005 Fletcher Pkwy.	High	5812	Alvarado	5/4/2010		
18	Coco's #132	5550 Lake Murray Blvd.	Medium	5812	Alvarado	5/20/2010		
19	Dan's Automotive	7501 University Ave.	High	7538	University	5/10/2010		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code	Basin	Inspection Date	Follow-Up Required?	Correction Status
20	Dixieline Lumber & Home Centers	8372 Center Dr.	High	2432	Alvarado	6/9/2010		
21	EDCO Transfer Station	8184 Commercial St.	High	4953	Alvarado	5/13/2010		
22	El Azteca Taco Shop Mexican Food	8306 Parkway Dr.	Medium	5812	Alvarado	5/21/2010		
23	Five Star Collision Center Inc	7643 University Ave.	High	7532	University	5/19/2010	✔	In Progress
24	Fuddrucker's	5500 Grossmont Center Dr.	Medium	5812	Alvarado	5/5/2010	✔	In Progress
25	Gio	8384 La Mesa Blvd.	High	5812	Alvarado	5/27/2010		
26	Gus's Subs & Pizza #2	5620 Baltimore Dr.	Medium	5812	Alvarado	6/24/2010		
27	Himalayan Cuisine	7819 El Cajon Blvd.	High	5812	Alvarado	6/28/2010		
28	Jack In The Box	5141 Jackson Dr.	Medium	5812	Alvarado	5/12/2010	✔	In Progress
29	Marie Callender's #74	6950 Alvarado Rd.	High	5812	Alvarado	4/22/2010		
30	Marieta's	8949 La Mesa Blvd.	High	5812	Alvarado	4/22/2010		
31	McDonald's	8045 Fletcher Pkwy.	High	5812	Alvarado	5/12/2010		
32	Nacho's Taco Shop	7589 University Ave.	High	5812	University	4/27/2010		
33	Nfarooqi Enterprises L L C (Jack in the Box)	6140 Lake Murray Blvd.	Medium	5812	Alvarado	5/7/2010		
34	Panda Express #226	8011 University Ave.	High	5812	University	5/4/2010		
35	Pho Superbowl	8342 Parkway Dr.	Medium	5812	University	5/25/2010		
36	Pick Up Stix La Mesa	8025 Fletcher Pkwy.	High	5812	Alvarado	5/12/2010		
37	Rainbow Steel Inc.	8332 Case St.	High	3499	Alvarado	6/15/2010	✔	In Progress
38	Shizuoka Japanese Restaurant	9118 Fletcher Pkwy.	Medium	5812	Alvarado	6/16/2010		
39	Sun Tacos	5100 Jackson Dr.	High	5812	Alvarado	6/10/2010		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code	Basin	Inspection Date	Follow-Up Required?	Correction Status
40	TrailersPlus	7651 Alvarado Rd.	High	7519	Alvarado	5/19/2010		
41	Walter H. Barber & Sons, Inc.	8179 Center St.	High	1629	Alvarado	4/28/2010	✔	In Progress
42	7 Eleven Food Store 13649 E-2121	5746 Amaya Dr.	Medium	5411	Alvarado	5/7/2010		
43	99 Cents Only	7809 El Cajon Blvd.	Medium	5411	Alvarado	5/27/2010		
44	A To Z Auto Repair	7159 University Ave.	Medium	7538	University	6/7/2010		
45	Albert J. Becker, Inc. dba Wood Design West	8333 Case St.	Medium	2434	Alvarado	5/19/2010		
46	Arco Sunshine Food Store #9543	7974 University Ave.	Medium	5541	University	6/9/2010		
47	Auto Repair Specialists	8120 Center St.	Medium	7539	Alvarado	6/30/2010		
48	B J's Pizza & Grill	5500 Grossmont Center Dr.	Medium	5812	Alvarado	4/29/2010		
49	Baldwin Auto Sales	8174 Center St.	Medium	5521	Alvarado	6/16/2010		
50	Brigantine Restaurant	9350 Fuerte Dr.	Medium	5812	Alvarado	4/29/2010		
51	C & D Towing Specialists	8332 Case St.	Medium	7549	Alvarado	6/30/2010		
52	Caliber Collision Centers	8310 Center Dr.	Medium	7532	Alvarado	6/9/2010		
53	Carl's Jr. #284	8110 Parkway Dr.	Medium	5812	Alvarado	4/29/2010		
54	Century Motors	7474 University Ave.	Medium	5521	University	6/17/2010		
55	China Super Buffet	7984 La Mesa Blvd.	Medium	7221	University	4/27/2010	✔	In Progress
56	Chuck E Cheese	5500 Grossmont Center Dr.	Medium	7221	Alvarado	6/22/2010		
57	Claim Jumper Restaurant La Mesa	5500 Grossmont Center Dr.	Medium	5812	Alvarado	5/5/2010		
58	Commercial Electric & Gas Appliance Service	8110 Commercial St.	Medium	7699	Alvarado	6/29/2010		
59	Costco Wholesale #469	8125 Fletcher Pkwy.	Medium	5411	Alvarado	5/5/2010		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code	Basin	Inspection Date	Follow-Up Required?	Correction Status
60	De Albas Spring St. Collision and Paint	4867 Spring St.	Low	7539	Alvarado	6/21/2010		
61	Denny's Restaurant #6488	4235 Spring St.	Low	5812	Spring Valley	5/13/2010		
62	Elite Auto Collision Repair Center	4949 Baltimore Dr.	Medium	7532	Alvarado	6/23/2010		
63	Extreme Auto Recovery San Diego	8180 Commercial St.	Medium	7389	Alvarado	6/14/2010		
64	German Auto Repair	4654 Nebo Dr.	Low	7539	Spring Valley	6/29/2010		
65	Growers Direct	7055 University Ave.	Medium	5411	University	5/25/2010		
66	Harloff Automotive	7445 University Ave.	Low	5531	University	6/8/2010		
67	Jack Orr Auto Body, Inc.	7253 University Ave.	Medium	7539	University	6/24/2010		
68	La Mesa Lumber	8255 University Ave.	Low	5211	Alvarado	6/21/2010		
69	La Mesa Paint & Body	8170 Parkway Dr.	Low	7539	Alvarado	6/16/2010		
70	La Mesa Transfer & Storage, Inc.	8336 Case St.	Medium	4214	Alvarado	5/28/2010	✔	In Progress
71	La Mesita Mexican Food	7012 University Ave.	Medium	5812	University	6/10/2010		
72	Lake Murray Cafe	5465 Lake Murray Blvd.	Medium	5812	Alvarado	5/10/2010		
73	Lotus Pond Restaurant	8260 Parkway Dr.	Medium	5812	Alvarado	5/10/2010		
74	Midas Mufflers	7207 University Ave.	Medium	7539	University	6/7/2010		
75	Millenium Motors	8090 University Ave.	Medium	4411	Alvarado	6/23/2010		
76	Moran Canvas Products	8135 Center St.	Medium	3444	Alvarado	6/18/2010		
77	New York Giant Pizza	9083 Dallas St.	Medium	5812	Alvarado	6/22/2010		
78	Pacific Southwest Structures	8140 Commercial St.	Medium	1771	Alvarado	6/29/2010		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code	Basin	Inspection Date	Follow-Up Required?	Correction Status
79	Por Favor Restaurant	8302 La Mesa Blvd.	Low	5812	University	5/11/2010		
80	Rosarito's Mexican Food	Lake Murray Blvd.	Medium	5812	University	4/26/2010		
81	Smogs R Us	9089 Dallas St.	Low	7549	Alvarado	5/26/2010		
82	Souplantation/Garden Fresh	9158 Fletcher Pkwy.	Medium	5812	Alvarado	5/6/2010		
83	South Coast Petroleum	5261 Baltimore Dr.	Medium	5541	Alvarado	6/8/2010		
84	Spring Chevron	8200 University Ave.	Low	5541	Alvarado	6/21/2010		
85	Spring Street Gas And Mini Market	4925 Spring St.	Medium	5541	Alvarado	6/21/2010		
86	Stemar Restoration	8161 Commercial St.	Medium	1521	Alvarado	5/6/2010		
87	Su Robertos Mexican Food	5307 Lake Murray Blvd.	Medium	5812	Alvarado	6/14/2010		
88	Sunset Glazing, Inc.	8834 La Mesa Blvd.	Low	1793	Alvarado	6/4/2010		
89	Tamarind Thai Restaurant	7970 University Ave.	Medium	5812	University	5/20/2010		
90	The Chickenest 95, Inc.	7200 Parkway Dr.	Medium	5812	Alvarado	5/19/2010		
91	The Omelette Factory La Mesa	5270 Baltimore Dr.	Medium	5812	Alvarado	6/30/2010		
92	Trader Joe's #24	5495 Grossmont Center Dr.	Medium	5411	Alvarado	6/22/2010		
93	V-House Pho & Grills	9200 Fletcher Pkwy.	Medium	7221	Alvarado	5/18/2010		
94	Vine Ripe Market	8191 Fletcher Pkwy.	Medium	5411	Alvarado	6/22/2010	✔	In Progress
95	Vons	8011 University Ave.	Medium	5411	University	6/18/2010		
96	Weevil Burger Restaurant	9104 Fletcher Pkwy.	Medium	7221	Alvarado	5/18/2010		
97	70th Street Shell Service Station	5151 70th St.	Low	5541	Alvarado	4/22/2010		
98	Autozone 2809	7791 El Cajon Blvd.	Low	5531	University	6/10/2010		
99	Center Glass Co. #3	7853 El Cajon Blvd.	Low	1793	Alvarado	6/3/2010		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code	Basin	Inspection Date	Follow-Up Required?	Correction Status
100	Davis Framing, Inc.	8103 Commercial St.	Low	1521	Alvarado	6/29/2010		
101	Dieter Fischer's Star Car Service	8699 La Mesa Blvd.	Low	7539	Alvarado	6/16/2010		
102	Harold's Automotive	7860 El Cajon Blvd.	Low	7538	Alvarado	6/15/2010		
103	Henry's Marketplace	4630 Palm Ave.	Low	5499	Spring Valley	5/6/2010		
104	Jiffy Lube #831	5540 Lake Murray Blvd.	Low	7549	Alvarado	5/20/2010		
105	K 1 Tire	7159 University Ave.	Low	5531	University	6/9/2010		
106	Nicks Autos Group	4949 Baltimore Dr.	Low	5521	Alvarado	6/23/2010		
107	Paradise Auto Sales, L L C	7640 El Cajon Blvd.	Low	5521	Alvarado	6/15/2010		
108	San Diego R V	7407 Alvarado Rd.	Low	5561	Alvarado	6/17/2010		
109	Steves Bancroft Motors	8760 Campo Rd.	Low	5521	Spring Valley	6/18/2010		
110	T J'S Auto Repair	8090 University Av.	Low	7532	Alvarado	6/28/2010		
111	Truly Nolen Of America	7170 University Ave.	Low	1742	University	6/17/2010		
112	Tune Craft, Inc.	8802 La Mesa Blvd.	Low	7539	Alvarado	6/23/2010		
113	Valvoline Instant Oil Change	7981 El Cajon Blvd.	Low	7539	Alvarado	6/18/2010		
114	Worldwide Auto Parts Inc. (Now Carquest Auto Parts)	9089 Dallas St.	Low	5531	Alvarado	5/26/2010		

Table 5-4
Industrial and Commercial Partial Inspections

#	Business	Street Address	TTWQ*	SIC Code	Inspection Result
1	Equality Plating Co.	8172 Center St.	Low	3471	Refused in 09/10, Inspected in 10/11
2	Greater San Diego Air Conditioning	8141 Center St.	Medium	1711	Moved, Vacant
3	La Mesa Auto Repair	7801-2 El Cajon Blvd.	Medium	7549	Moved, Replaced by La Mesa Smog Check
4	M D Painting	6076 Amarillo Ave.	Low	1721	Home Occupation
5	Mattia Concrete Cleaning	7860 El Paso St.	Low	1799	Home Occupation
6	R H Plastering	8160 Center St.	Medium	1742	Could Not Contact. Will follow up for formal inspection in early 10/11
7	Raindance Roof Company, Inc.	8176 Commercial St.	High	1761	Could Not Contact. Will follow up in 10/11.
8	RKC- Rich's Kustoms And Collision	7589 El Cajon Blvd Suite D	Medium	7532	Could Not Contact. Based on visual inspection looks to be low TTWQ.
9	Ron's Automotive	4951 Clearview Way	Low	7538	Home Occupation
10	Triple D Concrete Pumping	5476 Kiowa Dr.	Low	1771	Home Occupation
11	University Air Conditioning & Heating Inc.	7227 University Ave.	Low	1711	Moved, Replaced by Auto Fix
12	West Coast D B I, Inc.	4240 Francis Way	Low	1522	Home Occupation
13	Wheel & Deal, Inc.	7675 University Ave.	Medium	5521	Moved, Vacant

6.0 RESIDENTIAL

6.1 INTRODUCTION

Over half of the land use in the City of La Mesa is designated as residential. Due to the large residential area, activities that take place within these areas have the potential to impact the quality of the receiving water bodies. Residential activities such as vehicle washing, over-irrigation, pesticide and fertilizer application, and home maintenance can potentially contribute pollutants to the City's MS4 if BMPs are not properly implemented. Additionally, improper disposal of household hazardous waste (HHW) can also contribute pollutants to the MS4. Pollutants of concern include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has worked to implement a range of programs to address these residential activities with the goal of reducing pollutant loads associated with such activities.

Figure 6-1 depicts the residential land use in the City. Yellow areas signify single-family homes, orange areas are multi-family homes such as duplexes and apartment buildings, brown areas are mobile home parks, and purple areas are other residential areas such as nursing homes.

Figure 6-1
Residential Land Use in the City

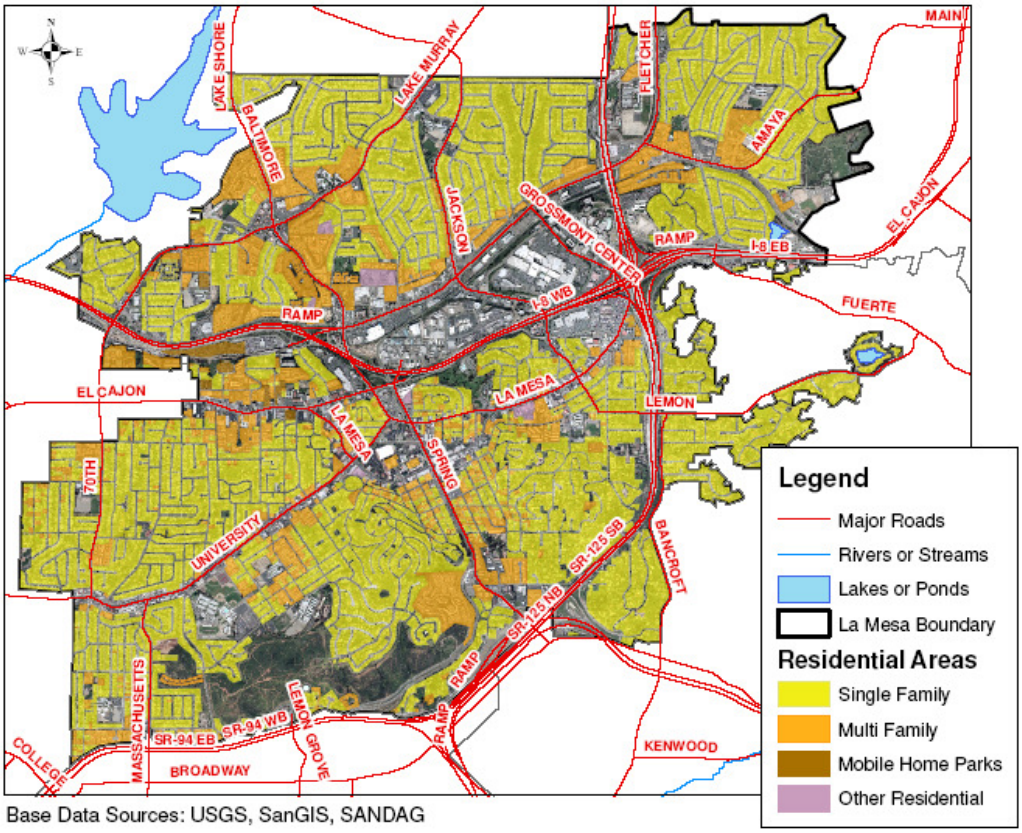

Base Data Sources: USGS, SanGIS, SANDAG

6.1.1 Summary of Notable Accomplishments

Some notable achievements for the residential component during the 2009/2010 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the residential component and of its storm water program during the reporting period are provided in the remainder of Section 6.

- The City continued to work with local Eagle Scouts to construct and install informational storm water kiosks. The City received approval to construct a new storm water kiosk in Harry Griffin Regional Park in 2010/2011.
- The City hosted eight HHW events; 938 participants dropped off 134,782 pounds of HHW.
- The City hosted the La Mesa Spring Clean Up on two consecutive Saturdays during 2009/2010. The event was held at the City's EDCO station and allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste free of charge.
- The City continued to distribute the *La Mesa Focus* newsletter to residents in the City.
- The City continued to respond to complaints made to the City's Storm Water Hotline and submitted online regarding residential areas and activities.

6.2 Source Characterization

The City has identified several high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities, which are discussed in the following subsections.

6.2.1 High TTWQ Activities

During 2009/2010, the City continued to identify the following activities as high TTWQ:

- Automobile repair and maintenance
- Automobile washing
- Automobile parking
- Home and garden care activities and product use
- Disposal of pet waste

6.2.2 High Threat to Water Quality Areas

In addition high TTWQ activities, the City has identified several residential areas that pose a high TTWQ. High TTWQ residential areas are designated by considering complaint investigations, institutional knowledge, data from the City's Dry Weather Monitoring, and criteria as defined in the Municipal Permit. The following residential areas have been designated high TTWQ.

East of Helix High School
This area drains to University Channel and includes the residential area east of Helix High School around Lowell Street, Normal Avenue, and Olive Avenue. University Channel serves as a part of the storm water conveyance system for the City and is part of the Chollas Creek Watershed. During the 2009 Dry Weather Monitoring Program, a transient dissolved copper exceedance was detected in this area.

Baltimore Drive, North of Interstate 8
The area surrounding Baltimore Drive is largely composed of high-density housing. Runoff from this area drains to Alvarado Channel via two internal storm drain networks. Storm Water Hotline calls related to high TTWQ activities in this area have been recorded in past years. Some past Dry Weather Monitoring results have indicated that this area could be a source of bacteria, although that has not been found in monitoring programs during recent sampling years. The area is still classified as a high TTWQ to be conservative, although the City may reevaluate the prioritization in future years if recent dry weather monitoring trends continue. Potential runoff sources include residences located on Parkway Drive, Aztec Drive, and Baltimore Drive.

Nagel Street and Sarita Street
The residential area around the intersection of Nagel Street and Sarita Street drains to Alvarado Channel. Past Dry Weather Monitoring Program upstream investigations have indicated that this area has been a source of bacteria.

Residential areas within the City designated as high TTWQ receive additional attention and periodic visual inspection from storm water staff to check for evidence of IC/IDs and high TTWQ activities.

6.3 Best Management Practice Requirements

The City has continued to provide information regarding the implementation of pollution prevention measures, such as good housekeeping practices, for residential areas and activities. The City's BMP Manual Part I includes lists of general residential BMP requirements and BMP requirements for specific residential activities. The manual is included in Appendix C of the JURMP. General residential BMPs include erosion control; non-storm water discharge management, including elimination of IC/IDs; and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Specific BMPs for the high priority activities outlined above are also included in the City's BMP Manual Part I. There have been no changes to the City's residential BMP requirements as discussed in Appendix C of the City's JURMP.

6.4 Program Implementation

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted. This ensures that pollutants associated with residential activities and areas are minimized. The residential program has an education component so that residents are made aware of appropriate BMPs and high TTWQ activities.

6.4.1 TRAINING, EDUCATION, AND OUTREACH

The City has continued to conduct training, education, and outreach activities for residents, which are described below.

***La Mesa Focus* Newsletter Articles**

The City publishes storm water related articles in the quarterly *La Mesa Focus* newsletter. Four newsletters were printed during the reporting period. Each edition was mailed to approximately 21 residential addresses. These issues were also archived on the City's website; 908 individuals are signed up to receive e-mail notification when a new newsletter has been posted on the website. Additionally, copies were left out at the La Mesa Library for patrons to read. The articles published in 2009/2010 are summarized below and included as Attachment 5.3.

The August 2009 newsletter contained the following storm water-related articles and announcements:

- "DOING OUR PART TO SAVE H_2O" informed residents of water saving efforts conducted by the City and provided a link to water conservation web sites.
- "2ND ANNUAL ENVIRONMENTAL AWARENESS FESTIVAL" educated residents on the free upcoming event. The event provided information about resources pertaining to water conservation, storm drain runoff, and other environmental issues.
- "8th ANNUAL KIDS CARE FEST" was advertised. I Love A Clean San Diego (ILACSD) provided information about watersheds and storm water during this event.
- "PARK APPRECIATION DAY" encouraged residents to participate in the event and informed residents of the upcoming park cleanup event.
- "AVOID THE CLOG BY ELIMINATING FOG" informed residents of the harmful effects of improper disposal of fats, oils, and grease into the wastewater system and provided tips on how to properly dispose of FOG. The article also provided information on the City's FOG program with a link to a FOG Discharge Permit application and a phone number for more information.
- "GREEN AUTOMOTIVE TIPS FOR THE HOME MECHANIC" provided tips to residents on how to properly dispose of or recycle automotive materials and fluids.
- "DO THE RIGHT THING!" identified different types of HHW and notified residents of drop-off dates and locations for recycling HHW free of charge.
- "RECYCLING NOW AVAILABLE AT CITY PARKS" informed residents of the additions of recycling containers to City parks and encouraged use of the containers.

The November 2009 newsletter contained the following storm water-related articles and announcements:

- "UPDATE: CITY OF LA MESA FOG PROGRAM" reminded residents of the harmful effects of improper disposal of fats, oils and grease into the wastewater system and provided information about the City's FOG program with a phone number for more information on FOG discharge permits and inspection requirements.
- "CITY OF LA MESA PARK APPRECIATION DAY 2009" informed residents of the past and future Park Appreciation Days and discussed the City's Adopt-a-Park program and provided a phone number for interested persons.
- "THE ENVIRONMENTAL AWARENESS FESTIVAL SAYS YES TO SUSTAINABILITY!" reported on the celebrated 2nd Annual La Mesa Environmental Awareness Festival and provided a link to La Mesa's Environmental Sustainability Commission.
- "CALIFORNIA COSTAL CLEAN UP DAY IN LA MESA" announced the participants' efforts during the cleanup event and the total amount of debris removed during the cleanup.
- "SAVE MONEY BY PREVENTING OVER-IRRIGATION" educated residents on the potential threats of over irrigating and tips on how to eliminate pollutants from entering creeks. The article also provided information on programs to help conserve water and a phone number for the City's Storm Water Hotline.
- "DO THE RIGHT THING!" identified different types of HHW and notified residents of drop-off dates and locations for recycling HHW free of charge.
- "ENVIRONMENTAL RESOURCES" provided residents with a list of resources with phone numbers available to help reduce their environmental impact.

The February 2010 newsletter contained the following storm water-related articles and announcements:

- "ST. MADELINE SOPHIE CENTER ASSISTS IN OUR PARKS" introduced the public to the St. Madeline Sophie Center which keeps park grounds free of trash and graffiti in La Mesa parks.
- "GOT JUNK?" notified residents of the City's free event for unwanted items and waste disposal event at EDCO Station.
- "FREE OIL FILTERS" advertised the La Mesa oil filter exchange event which encouraged residents to bring used oil filters to be recycled and to receive a free one in exchange.
- "CUT OUT FOG!" informed residents on how to help maintain the City's wastewater system and provided information on FOG and a phone number for more information.

- "FREQUENTLY ASKED QUESTIONS" provided answers to questions regarding proper disposal of bulky items, water heaters, and household toxic products.
- "FREE HOUSEHOLD HAZARDOUS WASTE AND ELECTRONIC WASTE DISPOSAL" identified different types of HHW and notified residents of drop-off dates and locations for recycling HHW free of charge.
- "8TH ANNUAL CREEK TO BAY CLEANUP" informed residents of the event and provided a link to the City's website with a phone number for more information.
- "EXCITING VOLUNTEER OPPORTUNITIES!' listed volunteer programs such as the Adopt-a-Block program which encourages residents to pick up trash around their neighborhoods.
- "GOOD HOUSEKEEPING: IMPORTANT STORM WATER REQUIREMENTS" informed residents of the City's requirements to implement good housekeeping measures and best management practices and provided tips on how to meet the requirements.
- "STORM DRAIN POLLUTION?" provided the City's Storm Water Pollution Hotline and a list of storm water pollutants.
- "TEST YOUR ENVIRONMENTAL KNOWLEDGE" provided a quiz for residents to test their knowledge on proper recycling and disposal practices, storm water runoff and watersheds in La Mesa.

The May 2010 newsletter contained the following storm water-related articles and announcements:

- "LA MESA CELEBRATES NATIONAL PUBLIC WORKS WEEK, MAY 16-22" informed residents of the La Mesa Public Works Department and its crucial role in the City's maintenance of wastewater and storm water collection systems.
- "FREE HOUSEHOLD HAZARDOUS WASTE AND ELECTRONIC WASTE DISPOSAL" identified different types of HHW and notified residents of drop-off dates and locations for recycling HHW free of charge.
- "FREE OIL FILTERS" advertised the La Mesa oil filter exchange event which encouraged residents to bring used oil filters to be recycled and to receive a free one in exchange.
- "EXCITING VOLUNTEER OPPORTUNITIES!' listed volunteer programs such as the Adopt-a-Park program which encouraged residents to help with the upkeep of the City of La Mesa parks and provided a phone number for more information.
- "SHARPS DISPOSAL HAS NEVER BEEN EASIER!" listed types of sharps, HHW, and information regarding proper disposal methods with a phone number and website for more information.

- "OVER IRRIGATION IS MONEY DOWN THE DRAIN" informed residents on the potential threats of over irrigating and provided information on programs to help conserve water and a phone number for the City's Storm Water Hotline.
- "STORM WATER POLLUTION PREVENTION REQUIREMENTS" informed residents of the City's strict requirements set by the State of California regarding storm water pollution and educated the public on potential everyday pollutants. It also listed ways that residents can help decrease or maintain low pollutant concentrations.

Other Educational Outreach Materials and Activities
The City has continued to provide storm water information and contacts on their website (www.cityoflamesa.com). The City's Storm Water Hotline also provides a medium for City residents to obtain storm water information and file storm water related complaints. Other educational outreach materials and activities that targeted residents are discussed in detail in Sections 8 of this report.

During 2009/2010, the City continued to participate in the Regional Residential Education Program.

6.4.1.1 HHW Events

The City hosted eight HHW collection events throughout the 2009/2010 reporting period at the City's EDCO station on Commercial Street. Door-to-door pick-up was also offered for disabled and senior residents. A total of 938 people participated in the events, and 134,782 pounds of HHW were collected. HHW flyers or the Regional Guide for Household Hazardous Waste Reduction & Disposal in San Diego County were on hand if residents requested educational materials. About five pieces of educational material were distributed per event.

Other Collection Events
In addition to the HHW disposal events, the City hosted the La Mesa Spring Clean Up on two consecutive Saturdays during 2009/2010. The event was held at the City's EDCO station and allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste without charge. Details about this event can be found in Section 9 of this report.

6.4.2 Compliance and Enforcement

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the Storm Water Hotline, and observations made by the City's municipal personnel. To help focus efforts on high priority areas, the City generated a map of the high TTWQ areas in the City and distributed it to Public Works staff. Staff was instructed to be especially vigilant for potential threats to storm water quality in these areas of the City and was told to report any observed threats to the Storm Water Hotline. A copy of the map is included as Attachment 6.1. If a potential to impact water quality is present

the City provides a verbal warning, written warning, Notice to Comply (NTC), and NOVs as applicable. The City received 54 residential-related complaints during this reporting period. Complaints were submitted through the Storm Water Hotline and through La Mesa's Request Tracker and the Civic Plus website as well as internally through the Public Works Department; the City's complaint log is included as Appendix B to this annual report.

Two written warnings, four NOVs, one verbal warning, and two enforcement letters were issued to residents and/or landlords during this reporting period. Many of the complaints verified involved residents who were unaware of residential BMPs. These issues were resolved with a verbal warning and distribution of educational materials. The City issued NOVs to more serious violations including, washing paint directly into the street, presence of loose dirt and debris onsite, onsite junk storage, and a hydraulic fluid spill. City personnel also cleaned areas in the public right of way as necessary to resolve complaints. All residential complaints were resolved and no further actions, such as fines or reports to the RWQCB aside from this JURMP Annual Report, were deemed necessary.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's residential component have been made since that time.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008 RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the 2009/2010 Illicit Discharge Detection and Elimination section and attachments to the RWQCB no later than December 15, 2010.

8.0 EDUCATION COMPONENT

8.1 INTRODUCTION

During 2009/2010, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, residents, and underserved audiences. The City aims to reduce storm water pollution by increasing awareness about the storm water conveyance system and promoting the implementation of BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the 2009/2010 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the education component and of its storm water program during the reporting period are provided in the remainder of Section 8.

- The City has hosted six training events/meetings for approximately 32 municipal personnel.
- During 2009/2010, the City's quarterly newsletter, the *La Mesa Focus*, featured several articles highlighting storm water topics aimed at businesses and residents of the City.
- Educational materials were made available to project proponents and City personnel at City Hall through the informational Storm Water Bulletin Board.
- The City partnered with ILACSD to educate residents at special events and through school presentations during 2009/2010.
- The City provided financial support and educational materials for a booth hosted by the Solana Center for Environmental Innovations (Solana Center) at Earth Fair in Balboa Park on April 18, 2010.
- Approximately 50 vendors at the City's Oktoberfest event were provided with a handout entitled "Tips for Outdoor Vendors".

8.2 STAFF TRAINING ELEMENT

The City has provided extensive training and educational outreach to its municipal personnel. Many municipal personnel are out in the field on a daily basis, so it is important that they understand the importance of implementing BMPs. Additionally, municipal personnel are encouraged to report any IC/IDs observed to the appropriate City staff and to educate other municipal personnel and the general public about storm water pollution prevention.

The informational storm water bulletin board at City Hall is continually updated with information on storm water topics such as BMPs. The bulletin board is visible to City personnel, project proponents, and other City Hall visitors. In addition, there are educational materials for the public to take located at the bulletin board such as storm water hotline magnets, IPM cards, and residential storm water pollution prevention trifolds. Additionally, the City has sent e-mails to its staff encouraging the participation in the California Coastal Clean-Up Day and the City's Park Appreciation Day. Each e-mail was sent to over 200 City staff members.

Table 8-1, below, includes all training sessions that were provided for various municipal departments during 2009/2010.

Table 8-1
Municipal Training Sessions

#	Date	Event	Topic(s)	Participants
1	10/7/2009	Municipal Training	City's seasonal construction requirements for dry and wet weather; erosion and sediment control; material management practices; construction inventory; enforcement actions and procedures; new general construction permit	9 Public Works/ Engineering Employees
2	2/25/2010	FOG Seminar	General FOG info, grease traps and interceptors, case studies, SSO reduction (FOG and SSOs), inspection and evaluation	3 Public Works/ Engineering Employees
3	3/17/2010	Municipal Training	City's updated SUSMP, Low-Impact Development (LID) requirements, engineering submittals, forms, and website information	7 Public Works/ Engineering, 1 Building Division, 1 Community Development Employees
4	3/23/2010	One Day Environmental Enforcement Training	Conducting effective interviews; access, entry, and warrants; evidence to prove a violation; enforcement options and case development	Storm Water Program Manager and Engineering Technician I
5	3/31/2010	Industrial/ Commercial Training	Industrial/Commercial BMP enforcement, implementation, and monitoring data review	1 Public Works/ Engineering Employee

Table 8-1
Municipal Training Sessions

#	Date	Event	Topic(s)	Participants
6	5/26/2010	Process Improvement Team (PIT) Meeting	Storm water standards	7 Community Development, 1 Building Division, and 2 Public Works/ Engineering Employees

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, residential areas, and underserved audiences. These efforts promote storm water awareness and BMP implementation.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Violations of the City's BMP requirements are corrected through enforcement actions as necessary. For each inspection, facility personnel received verbal education on the importance of implementing proper BMPs. Additionally, a letter describing the City's inspection program and BMP requirements was sent to all industrial and commercial businesses selected for routine inspection during 2009/2010.

As previously mentioned, the City's quarterly *La Mesa Focus* newsletter 2009/2010 featured several articles highlighting storm water topics that were aimed at businesses and residents of the City. Examples of such articles included "Avoid the Clog by Eliminating FOG," "Save Money by Preventing Over-Irrigation," and "Storm Water Pollution Prevention Requirements." Newsletters published during 2009/2010 are included as Attachment 5.3.

During 2009/2010 reporting period, the City distributed a handout with tips for outdoor commercial vendors (Attachment 8.1). These handouts were distributed to vendors that had booths at the Oktoberfest event, which is the City's largest special event. A total of 50 of these handouts were distributed. The handout detailed specific BMPs that could be implemented by the vendors at the event and detailed the difference between the storm drain system and the sanitary sewer system.

8.3.2 CONSTRUCTION SITE OWNERS AND DEVELOPERS

Due to the nature of activities, construction sites have the potential to discharge many types of pollutants to receiving waters if not managed properly. Many construction site owners, contractors, and developers visit the City's Engineering Division to apply for necessary

permits. The Storm Water Bulletin Board located across from the front counter where permits are issued, includes material about construction BMPs to provide education for these parties. Several construction related brochures, specifically the construction site management tri fold and a construction SWPPP tri fold are available for project proponents to take from the bulletin board.

8.3.3 Residential Areas

Since residential areas make up more than half the City, the City understands the importance of reaching this particular audience through educational outreach programs. During October 2009 and February 2010, ILACSD visited local schools of various aged students with prepared storm water presentations. The City also continued to publish the *La Mesa Focus* newsletter (Attachment 5.3), which reaches residents in the City. As previously mentioned, several storm water articles were included in the newsletters distributed in 2009/2010.

The City's Storm Water Bulletin Board provided information to residents that may have been visiting City Hall. Various posters provide storm water information and information about clean-up events. Additionally, there are several brochures and fact sheets available for the public to take, which included IPM cards (Attachment 5.2), Over-irrigation Fact Sheet (Attachment 8.2), Chollas Creek TDML Fact Sheet (Attachment 8.3), residential Preventing Urban Runoff Pollution trifold (Attachment 8.4), and the Pools and Spas Fact Sheet (Attachment 8.5).

The City also continued to partner with Target and Dixieline Lumber in La Mesa to provide English and Spanish versions of the IPM cards at the checkouts of each business' garden center (Attachment 5.2). Educational material was also distributed at various events in the City, such as the "Sustain La Mesa" Environmental Festival, Intergenerational Games, and Kids Care Fest. Materials distributed included the residential Preventing Urban Runoff trifold (Attachment 8.4), San Diego River and San Diego Bay fact sheets (Attachment 8.6), and magnets encouraging residents to recycle used oil and used oil filters. Other media like pencils, temporary tattoos, and stickers with storm water messages on them were also provided during special events. Details of the events are included in Section 9.

In addition to the educational materials that were provided at various locations and during various events, the City continued to display storm water-related educational material at storm water kiosks at select City parks. The City now maintains three kiosks in three City parks. Additionally, in May 2010, the City received approval from the Harry Griffen Park Joint Powers Authority to construct a new storm water kiosk in Harry Griffen Regional Park which is slated for 2010/2011. Educational material such as the San Diego River Watershed Fact Sheet (Attachment 8.6), Over-irrigation Fact Sheet (Attachment 8.2), Pool and Spas Fact Sheet (Attachment 8.5), a residential Preventing Urban Runoff Pollution trifold (Attachment 8.4), and a Helix Water District trifold were displayed at the kiosks for patrons of the park.

Figure 8-1. Storm Water Kiosk

The City website, www.cityoflamesa.com, is another resource for City residents to become familiar with the design and intended utilization of the storm drain system, proper HHW disposal, alternatives to hazardous household products, find information regarding volunteer opportunities, applicable City contact information, and IPM cards. As previously mentioned, the City provided electronic copies of each *La Mesa Focus* newsletter on the website during 2009/2010.

8.3.4 Underserved Communities

As discussed in the City's JURMP, the City has identified the several residential areas along University Avenue as "underserved" communities. Two residential areas have been identified as Low/Moderate Income Block Groups. A third area has been identified as a Hispanic Household Concentration area. In an effort to promote outreach and education in these underserved communities, the City has developed Spanish versions of several educational materials distributed to residents. Another effort implemented by the City is the utilization of the Spanish language option on the City's Storm Water Hotline. The City plans to continue outreach to these underserved communities by providing more educational programs in future reporting years.

8.3.5 Complaint Investigations

To further aid the process of identifying illegal discharges, the City encourages the public and City staff to report IC/IDs. In addition to the City's Storm Water Hotline, Public Works also has a maintenance hotline for complaints regarding issues with the MS4 and sewer lines. These complaints are followed up by Public Works personnel. If a representative for the targeted business, residential area, or construction site is present, the inspector will provide site-specific information regarding storm water issues including applicable educational materials.

8.4 OUTREACH COMPONENT EFFECTIVENESS ASSESSMENT

The estimated number of impressions made by the City's education and outreach efforts during 2009/2010 is presented and described below. Please refer to Section 11 of this JURMP Annual Report for the remainder the effectiveness assessment for this program component.

Impressions Made

The City has continued to provide residents and businesses storm water-related education through inspections, distribution, and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees because it is likely that the attendees will discuss the content with others after the training session. Printed educational materials and other items such as pencils and stickers are assumed to generate three impressions each.

Table 8-2 details the number of impressions made by the City during this reporting year. The number of impressions decreased during 2009/2010 as compared to other reporting periods. The City discontinued the distribution of hard copies of the *La Mesa Focus* newsletters to conserve paper, which accounts for this decrease.

Table 8-2
Impressions Made by the City

Impression Type	Count	Unit	Estimated Impressions
Municipal Inspections	22	Inspections	110
Industrial/Commercial Inspections	114	Inspections	342
Construction Inspections	69	Inspections	207
Training Session/Activities and Events	4,136	Attendees	16,544
Complaint Investigation	84	Investigations	252
Reusable Grocery Bags	3,130	Bags	9,390
FOG Binder	166	Binders	498
Storm Water Activity Book	57	Booklet	171
Automotive Recycling Guide	2	Brochures	6
Chollas Creek TMDL Fact Sheet	39	Brochures	117
IPM Cards (English/Spanish)	150	Brochures	450
Over-Irrigation Fact Sheet	33	Brochures	99
Pool and Spa Fact Sheet	3	Brochures	9
Residential Preventing Urban Runoff Pollution	155	Brochures	465
San Diego Bay Watershed Fact Sheets	64	Brochures	192
San Diego River Watershed Fact Sheet	42	Brochures	126
Tips for Outdoor Vendors	50	Brochures	150
2010 Regional Storm Water Calendar	500	Calendars	1,500
La Mesa Focus Newsletter	929	Newsletters	2,787
Recycling Pencil	140	Pencils	420
Oil Rags	100	Rags	300
Recycling Sticker	29	Stickers	87
Temporary Recycling Tattoos	140	Tattoos	420
		Total	***34,642***

8.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was updated in March 2008. No changes to the City's education component have been made since that time.

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to foster storm water awareness and improve water quality. Public participation includes, but is not limited to, cleanup events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Collaboration between the City and the community should help encourage a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed in this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the 2009/2010 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the public participation component and of its storm water program during the reporting period are provided in the remainder of Section 9.

- During 2009/2010, the City hosted clean-up events at Alvarado and University channels as part of California Coastal Cleanup and Creek to Bay Cleanup. Approximately 64 volunteers removed over 1,316 pounds of trash and debris and 53 pounds of recyclables during these events.
- The City hosted 8 HHW collection events. A total of 938 individuals disposed of 134,782 pounds of HHW in these events.
- The Solana Center hosted two used oil filter exchange events at Kragen Auto Parts in La Mesa. A total of 37 individuals traded a used oil filter for a new one.
- Similar to previous years, the City hosted the La Mesa Spring Cleanup event on two separate weekends during 2009/2010. A total of 1,556 participants disposed of 544 tons of large items, green waste, and other trash and 150 tons of recyclables.
- Volunteers for the City's Adopt-a-Block, Adopt-a-Park, and Canine Corner programs, continued to involve residents in keeping local streets and parks free of litter and pet waste.
- Similar to previous years, the City held Park Appreciation Day, a cleanup event occurring throughout 12 City parks. A total of 291 volunteers collected 95 cubic yards of green waste and 16 cubic yards of trash.
- The City contracted ILACSD to present "Operation Cleanup," an interactive watershed game, at the Intergenerational Games and Kidscarefest.

9.2 Public Participation Activities

Cleanup Events and Programs

During 2009/2010, the City hosted various cleanup events and activities at various locations in the City. Cleanup events provide a direct benefit to water quality and an opportunity for the City to distribute educational materials and information to the event's volunteers.

California Coastal Cleanup Day

The City hosted the California Coastal Cleanup Day in specific areas of Alvarado and University channels on 9/19/2009. A total of 9 volunteers removed over 17 pounds of trash and 3 pounds of recyclables at the Alvarado site, and 18 volunteers removed 550 pounds of trash and 125 pounds of recyclables in the channel and surrounding walkways at the University site.

At Alvarado Channel, volunteers were given a pre- and post-event knowledge assessment tests. The pre-test was given to participants before City personnel presented an overview of storm water pollution prevention and watershed concepts. A post-test was given immediately after City personnel finished the brief presentation. The results of the survey showed that the event left participants with a better understanding of which watershed they were in at the event, what defines a watershed, and how their indirect and direct actions can impact the environment. After the presentation, all volunteers were aware that they were in the San Diego River Watershed and how their actions can affect environmental quality.

Park Appreciation Day

Park Appreciation Day was a cleanup event held throughout 12 parks in the City on 10/24/2009. A short presentation was given by the site captain regarding watershed concepts, local watersheds' constituents of concern, the benefits of cleanups, and the TMDL for the San Diego Bay. Chollas Creek was mentioned at the parks that fell within the San Diego Bay Watershed. A total of 291 volunteers worked to collect over 95 cubic yards of green waste and 16 cubic yards of trash between all 12 locations.

Creek to Bay Cleanup

The City hosted the Creek to Bay Cleanup in specific areas of Alvarado and University channels on 4/24/2010 and 4/25/2010. At Alvarado Channel, 23 volunteers participated in removing 450 pounds of trash and 25 pounds of recyclables. At University Channel, 16 volunteers removed 350 pounds of trash and 10 pounds of recyclables (Figure 9-1). City personnel briefly explained watershed concepts, pollutants of concern, and required BMPs to all event volunteers. At the University Channel site, event volunteers were also presented with information on the TMDL for Chollas Creek. These cleanup events and results were advertised on the City website and were posted on the City's Storm Water Bulletin Board.

Similar to the California Coastal Cleanup Day event, volunteers received a pre- and post-knowledge assessment tests at the University Channel and Alvarado Channel sites. The pre-test was given to participants before City personnel presented an overview of

storm water pollution prevention and watershed concepts. A post-test was given immediately after City personnel finished the brief presentation. The results of the survey showed that the event left participants with a better understanding of which watershed they were in, what defines a watershed, and that the Chollas Creek has a TMDL for pesticides and metals. The increased level of storm water understanding was illustrated by the post-test results.

Figure 9-1 – Creek to Bay Cleanup at University Channel

Adopt-a-Park and Adopt-a-Block

The City's Adopt-a-Park Program has continued to involve local businesses, schools, service organizations, families, and other individuals in keeping the City's parks free of trash. Currently, many of the public parks in La Mesa have been adopted. Volunteers involved in this program are encouraged to remove trash on a regular basis from City parks and open spaces.

Similarly, the City's Adopt-a-Block Program promotes cleanliness in the City by encouraging City residents to keep neighborhoods free of trash and debris. Volunteers pick up trash during normal daily activities, such as daily walks in their neighborhood. Individuals utilize City-provided trash bags or may choose to collect trash prior to trash collection day so that litter and debris can be deposited into any available trash can along the street.

Canine Corners

Canine Corners volunteers pick up pet waste in designated areas of Harry Griffen Regional Park. Volunteers also advocate patrons of the park to pick up after their pets. This prevents pet waste and associated bacteria and viruses from being discharged to

the City's MS4. In combination with the City's Adopt-a-Park and Adopt-a-Block programs, volunteers have continued to remove trash and pet waste from various parks and streets throughout the City.

Saint Madeline Sophie's Center
The City maintains a contract with Saint Madeline Sophie's Center, which employs developmentally disabled individuals to aid in picking up trash and debris at various parks throughout the City. The scope of services includes trash and debris cleanup, emptying trash receptacles and replacement of plastic liners, sweeping/cleaning picnic area tables, as well as some janitorial responsibilities at the park restrooms. Crews consist of three to five individuals and a job coach. Parks included in this program are Aztec Park, Collier Park, Highwood Park, Jackson Park, La Mesita Park, Northmont Park, Rolando Park, Sunset Park, Sunshine Park, and Vista La Mesa Park.

Hazardous Waste Collection and Used Oil Recycling Program
The City's Community Hazardous Waste Collection and Used Oil Recycling Programs encourage City residents and business owners to properly dispose of HHW. The City hosted eight HHW collection events at EDCO's disposal transfer station facility, which is located near the center of the City. As previously mentioned, events were advertised in the City's *La Mesa Focus* newsletter (Attachment 5.3), which was circulated electronically to hundreds of residents and businesses in the City. A total of 776 people from La Mesa and an additional 162 residents from Lemon Grove and other jurisdictions participated in the events; a total of 134,782 pounds of HHW was collected. In January 2010, the City began a grant funded Pennysaver campaign that may explain the increase in hazardous waste disposal from previous years. Door-to-door pickup service was also provided for the senior and disabled communities.

By means of the California Integrated Waste Management Board grant and the Solana Center, La Mesa organized two used motor oil filter exchange events on February 27, 2010, and on June 12, 2010 at Kragen Auto Parts. A total of 37 people participated and exchanged 48 used oil filters for a total of 36 new filters. In addition to the filter exchange, participants disposed of approximately 10 gallons of used oil and were provided with a storm water magnet and the County's storm water automotive guide. The events were advertised in the *La Mesa Focus* newsletter. Throughout the City of La Mesa, there are also 11 certified collection centers for used oil (according to calrecycle.ca.gov).

Other Waste Disposal
The City hosted the La Mesa Spring Clean Up event on two consecutive Saturdays in 2009/2010 (4/10/2010 and 4/17/2010). Residents were allowed to bring large items, unwanted household materials (not including HHW), and green waste to the EDCO location in the City for free disposal. A total of 1,556 vehicles disposed of approximately 544 tons of waste and 150 tons for recycling. Participants were provided with a flyer for re-entry that included information regarding proper HHW disposal at City events and mixed construction and demolition debris (C&D) disposal at EDCO's SANCO Resource Recovery Facility.

Public Reporting
As discussed in Section 4, complaints are received through the City's Storm Water Hotline and online website reporting system. The number for the hotline is advertised in articles published in the *La Mesa Focus* newsletter and on various educational materials given out at public outreach events. The residential, industrial, commercial, construction and municipal communities are encouraged to utilize the hotline to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable.

9.3 Outreach Events

The City has continued to provide educational outreach programs for a variety of different communities in the City. Since it is an effective way of reaching large numbers of individuals, educational outreach is typically associated with an event. Other outreach events in the City include the participation of commercial businesses in distributing educational materials and the City's participation in regional meetings and events.

Kids Care Fest
Kids Care Fest is a free event designed to promote healthy living and mindsets for children and their families. The festival was held at Briercrest Park on September 26, 2009. I Love A Clean San Diego (ILACSD) hosted a booth and used the interactive watershed model to demonstrate storm water pollution concepts and emphasize the importance of keeping waterways free of pollutants. Approximately 500 people visited the ILACSD storm water booth during the festival. During the event, 100 temporary recycling tattoos, 80 recycling pencils, 57 storm water activity books, 29 recycling stickers, and 19 residential trifolds were distributed to the public.

Intergenerational Games
ILACSD also hosted a booth at the Intergenerational Games at the La Mesa Middle School on October 9, 2009. During this event, ILACSD displayed the "Operation Cleanup", an interactive watershed game for children, where pollutants are located and removed from the model (Figure 9-2). This allowed for explanation of storm water pollution concepts, emphasizing the importance of a healthy environment. Approximately 100 students visited the booth and a total of 40 recycling temporary tattoos, 30 recycling pencils, five San Diego Bay fact sheets, San Diego River fact sheets, and five Chollas TMDL fact sheets were distributed.

Figure 9-2 – ILACSD booth at the Intergenerational Games

La Mesa Antique Village Street Faire

The La Mesa Antique Village Street Faire is an annual street fair which features 100 vendors, displaying genuine antiques & collectibles only, music, food, and free parking and admission. On March 28, 2010, the City's Public Works Department hosted a booth at the event and distributed 100 oil rags, 100 reusable bags, 20 San Diego Bay fact sheets, 20 residential trifolds, and 2 Automotive recycling guides.

Oktoberfest

Oktoberfest is the largest festival in the City and was held from October 2, 2009 through October 4, 2009. As previously mentioned in Section 8.3.1, approximately 50 vendors at the event were provided a handout entitled "Tips for Outdoor Vendors" (Attachment 8.1). This handout listed constituents of concern and BMPs during events designed to eliminate pollutant discharges.

"Sustain La Mesa" Environmental Festival

On September 12, 2009, the "Sustain La Mesa" Environmental Festival was held at Harry Griffen Regional Park that was attended by more than 500 people. There were booths and activities emphasizing water conservation, storm water pollution prevention, energy efficiency, sustainable gardening techniques, and recycling. ILACSD had a booth with a Coastal Cleanup Day sign-up sheet and educational materials, such as San Diego Bay and River fact sheets and residential Preventing Urban Runoff Pollution trifolds. During this event there was an electronic waste and recyclables collection. Electronic waste, metal, plastic numbers 1-7, plastic bags, blister pack, six pack rings, bubble wrap, and Styrofoam packaging were collected. Throughout the festival, speakers from the Solana Center, National Wildlife Foundation, and the California Center for Sustainable Energy spoke to the public. The City's Public Works Department also hosted a booth at the event and

distributed 30 residential trifolds, 30 over-irrigation fact sheets, and 30 storm water flyers with "Ten Ways to Prevent Storm Water Pollution".

ILACSD School Presentations

During 2009/2010, ILACSD was contracted to conduct storm water pollution prevention presentations for La Mesa Middle School and Helix High School. One presentation was made to the 90 6th graders at La Mesa Middle in October 2009. One hundred twenty students in 9th through 12th grade from Helix High School attended the storm water presentation on their campus in February 2010.

Storm Water Information Kiosks

As mentioned in Section 8, the City has continued to work with local Eagle Scouts to construct storm water kiosks. The park kiosks present storm water pollution prevention information to park patrons. During 2009/2010, outreach material was updated and educational events were publicized throughout the year at the kiosks. In May 2010, the City received approval from the Harry Griffen Park Joint Powers Authority to construct a new storm water kiosk in Harry Griffen Regional Park which is slated for 2010/2011.

Business Participation

As previously discussed in this report, the City's Storm Water Program Manager has continued to work with two businesses in La Mesa, Target and Dixieline Lumber, to distribute IPM cards (Attachment 5.2). Each business was provided with approximately 75 Integrate Pest Management (IPM) cards each. The IPM cards were developed as part of a regional effort to combat pesticide pollution and increase the utilization of IPM techniques. Target keeps the educational materials in its garden center due to the likelihood of individuals visiting that portion of the store purchasing pesticides. Dixieline Lumber keeps the cards at the registers for customers to take while checking out. Providing educational materials that customers may take home and review before using the purchased products may mitigate the negative impacts they have on receiving water bodies.

Chollas Creek TMDL Stakeholder Meetings

The jurisdictions named as dischargers for Chollas Creek TMDLs regularly meet to share information, develop reports, and discuss strategies. The City actively engaged in the annual public stakeholder meeting on June 21, 2010 located at the Martin Luther King Recreation Center at 6401 Skyline Drive in San Diego, CA.

Storm Water Copermittee Meetings and Other City Participation

The meetings of various storm water Copermittee workgroups provide a forum for representatives from various jurisdictions within San Diego County and other interested parties, including the general public, to exchange information and ideas regarding the management of storm water programs. The City continued to attend several of these meetings during the reporting period and will continue to do so during the 2009/2010 reporting period.

9.4 Public Participation Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

9.5 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's public participation component have been made since that time.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

The City's Sanitation Fund provides funding for the Storm Water Program. There have not been any changes to this funding mechanism during this reporting period. During 2009/2010, a fiscal analysis reporting template was developed collectively by the Copermittees. The City has used this template to report the 2009/2010 expenditures and funding sources in this JURMP Annual Report.

San Diego County Copermittees Fiscal Analysis Report for Urban Runoff Management Programs

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	
Administration	$98,830.08
Development Planning	$19,665.06
Construction	$10,336.16
Municipal	$2,315.21
Industrial and Commercial	$21,411.21
Residential	$1,000.73
IDDE	$35,032.93
Education	$4,692.21
Public Participation	$4,378.46
Special Investigations	$24,850.00
Non-Emergency Firefighting	0
Jurisdictional Total	$222,512.05

WATERSHED	
Watershed 1 – San Diego River	$6,945.65
Watershed 2 – San Diego Bay	$15,010.94
Watershed Total	$21,956.59

REGIONAL	
Annual Permit Fee to Regional Board	$13,499.00
Copermittee Cost Share of Regional Budget	$36,877.00
Regional Total	$50,376.00

TOTAL COSTS	$294,844.64

FUND SUMMARY

FUNDING BY SOURCE	
General Fund	$11,206.42
Storm Water Fee	0
Permit Fees	0
Developer Deposits and Fees	$5,488.70
Registration and Inspection Fees	$17,466.00
Flood Control Fees	0
Franchise Fees	0
Gas Tax	0
Utility Tax	0
Road Fund	0
Enterprise Funds	0
Trust Funds	0
Special Assessment Districts	0
State Appropriated Funds	0
Grant Funds	0
Other – Sanitation Fund	$278,149.52
Total	$312,310.64

ONE-TIME FUNDING	
Grants	0
Donations	0
Total	$0.00

TOTAL FUNDING	$312,310.64

Watershed Urban Runoff Management Program (WURMP)

	Watershed 1 – San Diego River	Watershed 2 – San Diego Bay
Administration (1)	$2,501.82	$7,505.47
Cost Share	$1,942.00	0
Watershed Activities	$2,501.82	$7,505.47
Other	0	0
TOTAL	$6,945.65	$15,010.94

(1) Administration – includes Watershed strategic planning, management, mapping, assessment, and reporting.

Regional Urban Runoff Management Program (RURMP)

Regional Programs	Jurisdictional Cost Share Amount
Administration (1)	0
Cost Share Contribution	$50.00
Other (2)	0
TOTAL	$50.00

(1) Administration – includes assessment, reporting, management, etc.
(2) Other – examples include regional and special studies.

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City regularly evaluates its storm water program to make it as effective as possible at reducing discharges of urban runoff related pollution to the MEP. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next, the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

Based on participation in regional efforts and its experience implementing its JURMP, the City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP, and the City has refined those metrics in the reporting periods since then.

The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual

program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome Level Assessments

Level 1

Level 1 outcomes are basic measures of permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix C of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement.

Levels 2 and 3

See tables 11-1 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Figure 11-1 compares storm water complaint data from this fiscal year to past years. Please note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

Level 4

Tables 11-1 through 11-8 at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is possible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. Reliable load estimation methods have not yet been developed for most other programs. Note that the City has installed Calsense in various City parks and medians, as described in Section 4. Calsense is designed to decrease water usage, which is likely to have reduced the load of pollutants potentially transported by irrigation runoff.

Level 5

The Dry Weather Monitoring Program is the City's primary mechanism of measuring the quality of discharges. The City also performs an additional monitoring program at six sites; five of these sites are located in the City's MS4, and one is located in an improved channel that has also been identified as a receiving water body. In 2009, the City began collecting MS4 outfall water quality data to help characterize pollutant discharges from its MS4, although not enough data to make definitive conclusions has been collected at this point.

Figures 11-2 through 11-5 are graphs that present historical Dry Weather Monitoring results and trends. Ammonia–nitrogen and detergents, the two constituents with the longest historical data record, both show decreasing trends over time. No discernable trend is apparent for other field screening constituents.

Level 6

No Regional Monitoring Program stations are located within or close to the City of La Mesa. The western portion of Alvarado Channel is the only receiving water body within City limits. The City has monitored sites at the downstream point of the Alvarado and

University drainage basins in the past and continues to monitor the University site as a collaborative activity associated with the Chollas Creek TMDL. No long terms trends have been identified in data from these sites. The City will continue to work with the San Diego River and San Diego Bay WURMP workgroups to improve the quality of water bodies downstream of the City of La Mesa.

11.2.2 Overall Component Assessments

Development Planning

The City's review process for development projects effectively requires higher removal efficiency BMPs. City interaction with responsible parties during the reporting period has resulted in BMP installation and a greater level of awareness of the need for regular treatment control BMP maintenance within the City, particularly with newly completed projects. The City will continue to work with the parties responsible for maintenance of treatment control BMPs during 2010/2011.

Construction

Available data indicate that on the whole the City's construction program effectively requires BMP implementation. Any BMP deficiencies noted are typically remedied promptly. Since the City had in the past received some hotline calls about poor BMP implementation at a few small projects, the City inspected all low priority construction sites in 2009/2010 and notified small projects and homeowners of the City's BMP requirements.

Municipal

The City's municipal activities effectively implement BMPs and reduce pollutant loading. The City's municipal staff are regularly trained on storm water issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit frequency requirements. In particular, the City sweeps its streets more often than the permit requirements to aid in WURMP efforts. The City has also installed drainage inserts along University Avenue and at the Public Works Operation Center to reduce the discharge of pollutants. Additional treatment controls, two Filterra bioretention system units, were installed in the University drainage basin during 2009/2010. The City has implemented a sophisticated system, Calsense, to control irrigation runoff from parks and medians. The City also distributes pet waste bags through dispensers in its parks.

Industrial and Commercial

The City hired a new storm water employee during 2009/2010 to fill a dedicated storm water inspector position. The inspector works with businesses during and following inspections to ensure compliance. 2009/2010 the City followed-up with non-compliant sites and will continue to do so into 2010/2011.

The City continued invoicing businesses in order to recover costs of inspections and it appears that this practice has stimulated more interest in the program and more of a desire to comply with regulations. The practice of charging businesses for each routine inspection and follow-up visit provides the additional benefit of encouraging businesses to comply in a timely manner.

Residential
The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. Residential areas within the City designated as high TTWQ receive additional attention from storm water staff to check for evidence of IC/IDs and high TTWQ activities.

Illicit Discharge Detection and Elimination
The City's IDDE program has effectively responded to complaints. No IC/IDs were observed during the 2009 Dry Weather Monitoring Program. There was one SSO during the reporting period, the effects of which were mitigated by containing and cleaning the spill. City staff were able to fully capture the volume of the spill, indicating the City's response and SSMP are effective. The City will continue to respond appropriately to SSOs and take action to prevent and eliminate IC/IDs.

Education
During 2009/2010, the City continued to educate various communities in the City. The City continued to work with local garden supply retailers to distribute IPM cards. The City also continued to distribute the quarterly *La Mesa Focus* newsletter, each issue of which included articles about storm water pollution prevention, to residents and businesses in the City.

Public Participation
The City continued to encourage participation in public events, such as cleanup events, and reporting potential storm water violations via the City's Storm Water Hotline. Hotline calls decreased between 2008/2009 and 2009/2010, which may indicate decreased number of storm water issues occurring in the City.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-1
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review and approve project plans	External No new projects subject to SUSMP requirements submitted reports during 2009/2010. However, it appears that the level of knowledge is increasing among projects installing and maintaining BMPs. Internal The City's Storm Water Program Manager worked with engineers in the City to improve their level of understanding of the new SUSMP requirements in March 2010. The City's consultant is available to review WQTRs submitted to the City.	Overall WQTR approval rate during reporting period	0%, only one new priority project was reviewed	N/A, addressed through other significant activities for this component
		Number of projects requiring three or more reviews prior to WQTR approval	N/A, no new projects approved	
		Percent of projects proposing BMPs besides filter inserts		
		Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern		
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects implementing proposed BMPs	100%, due to City follow-up	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	See Section 2	
Verify BMPs are properly maintained	External Verification letters were sent to all 15 projects on the City's inventory. Internal N/A, verification letters were prepared by the City's consultant.	Percent of sites properly maintaining BMPs	100%, due to City follow-up	Load reduction can be achieved through regular BMP maintenance.
		Resolution status of enforcement actions	See Section 2	
		Percent of sites submitting proper verification forms	100%, due to City follow-up	
		Percent of sites certifying proper maintenance	100%, due to City follow-up	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-2
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by permit conditions, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs by end of reporting period	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Resolution status of enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff are regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	95%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4	Number of pet waste bags distributed	22,500
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.		Amount of sediment and debris removed (weight or volume)	568 tons
				Amount of sediment and debris removed per length of street swept (weight or volume per curb mile)	0.10 tons/ curb mile
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume) not including debris removed from treatment BMPs	249.25 cubic yards
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons)	0 gallons
Maintain municipal treatment control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment BMPs	14.25 cubic yards
				BMP effectiveness studies	N/A
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External The City's inspector regularly interacts with business owners and provides site-specific BMP corrective actions at each full inspection visit. See Section 8 for more detail on educational materials and other outreach efforts. Internal The City regularly hosts and attends training events. See Section 8 for more detail on specific training sessions.	Percent of inspected sites in compliance with BMP requirements (not including follow-ups)	91%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	0	Number of IC/IDs eliminated (inspections and complaint investigations)	1
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5: Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External Residents were educated in variety of ways in 2009/2010; see sections 6 and 8 for details. Internal The City's Stormwater Program Manager is heavily involved in the implementation of the residential component. Other City staff involved in the program also have a good understanding of the goals of the storm water program.	Number of residential incidents reported to storm water hotline	54	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution of enforcement actions	See Section 6	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6: Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were eliminated, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to storm water hotline	The City's Stormwater Program Manager trains City staff as needed. See sections 4 and 8. City staff were responsible for many of the reports made to the hotline, as shown in Section 7.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 7 are likely to have resulted a pollutant loading reduction.
Respond to and clean up SSOs	City staff are thoroughly trained on how to respond to SSOs.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems. See Section 4 for details.	There was one SSO during the reporting period; overflow was fully captured in the majority of the overflows.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-7: Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for 2009/2010.
	Estimated number of impressions made	34,642		

Notes

Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8: Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details. See Figure 11-1 for a summary of hotline reports in recent years.	Number of attendees at events	4,136	Amount of trash and debris collected at cleanup events	1,530 lbs.
		Number of calls received to the storm water hotline	84	Amount of HHW collected	134,782 pounds of HHW, 48 oil filters, and 10 gallons of used oil

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Storm Water Complaints Logged

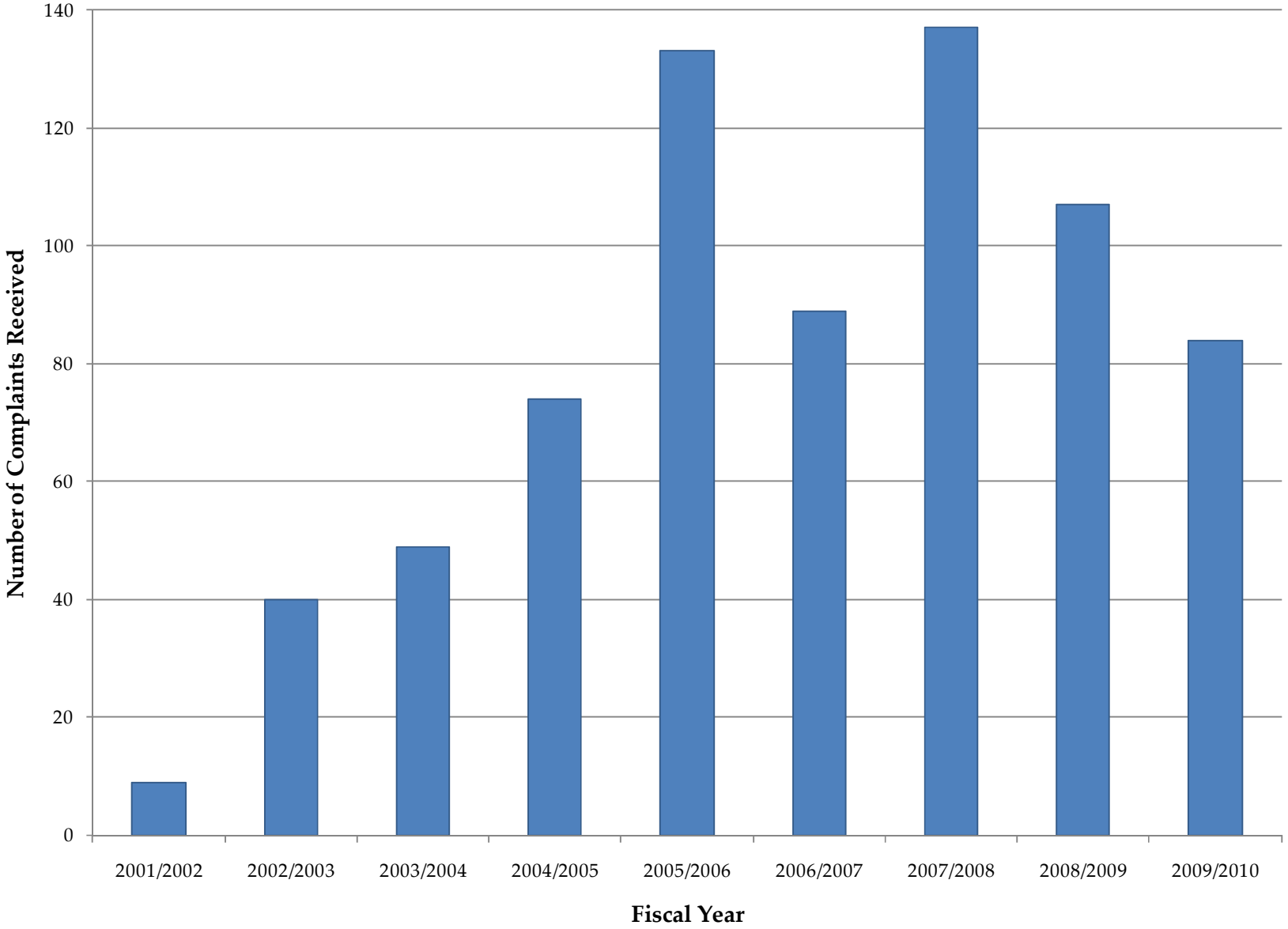

Figure 11-2
Dry Weather Monitoring, Averages of Tested Constituents

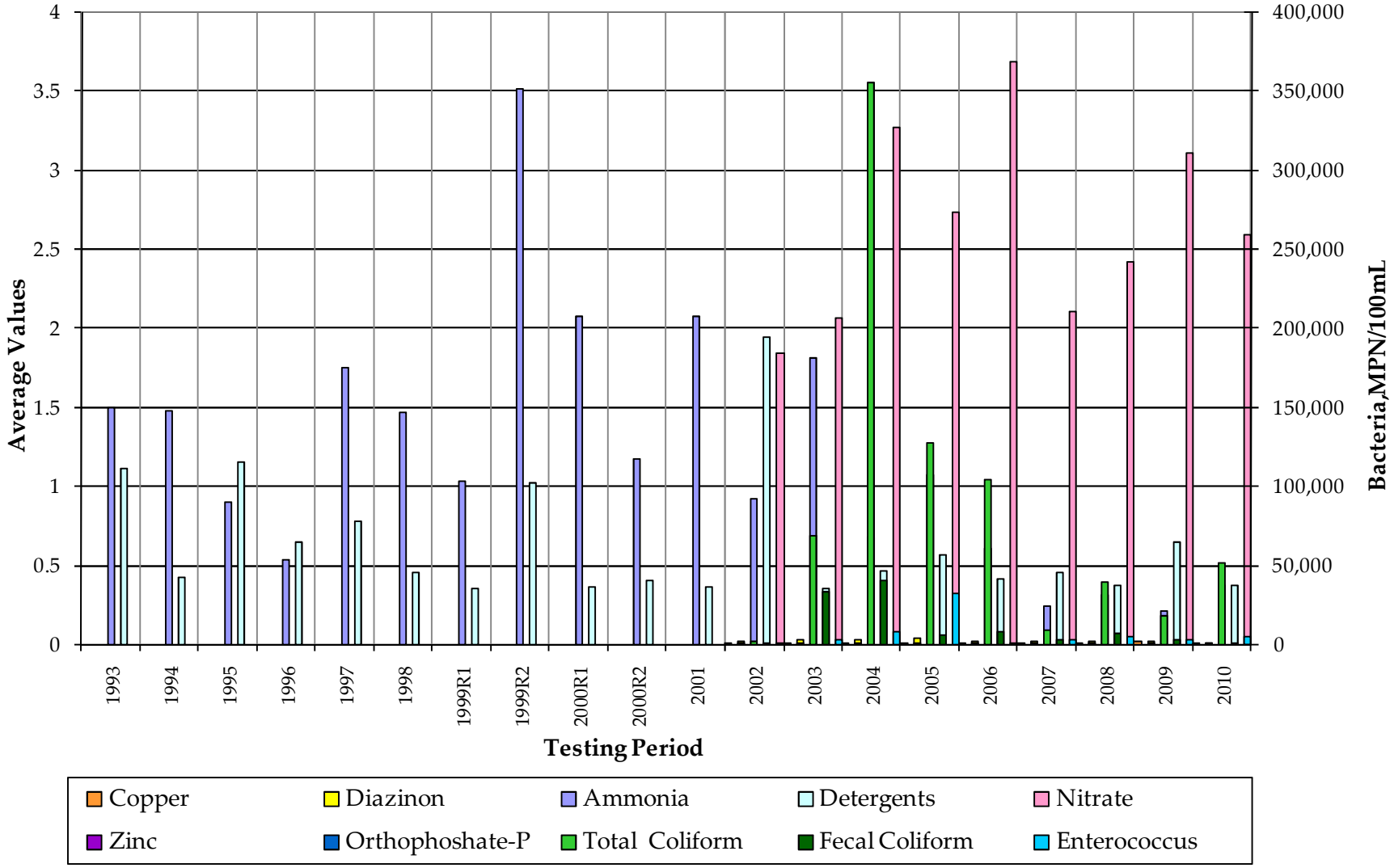

Figure 11-3
Dry Weather Monitoring, Ammonia-Nitrogen 1993-2010

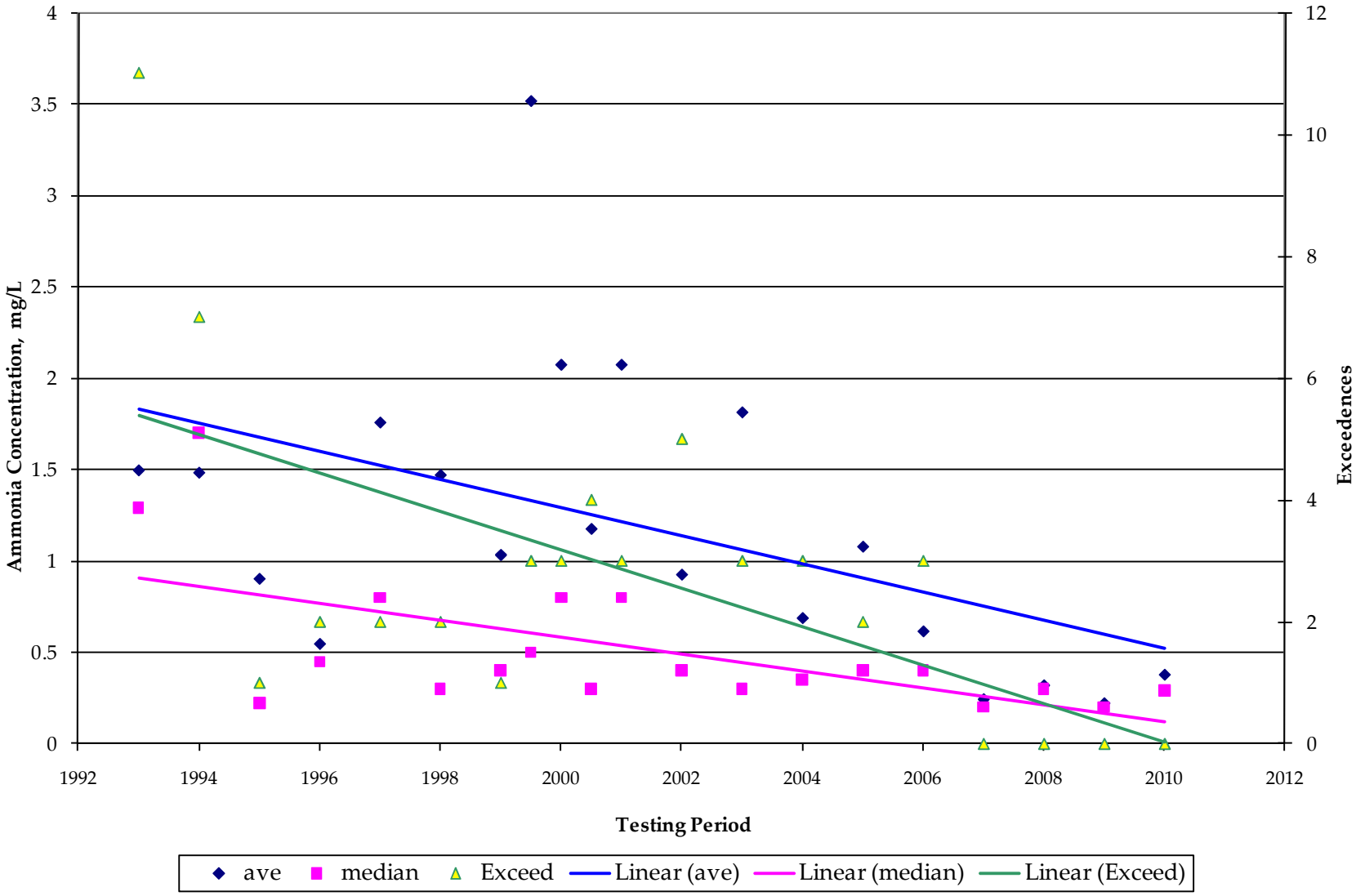

Figure 11-4
Dry Weather Monitoring, Detergents, 1993-2010

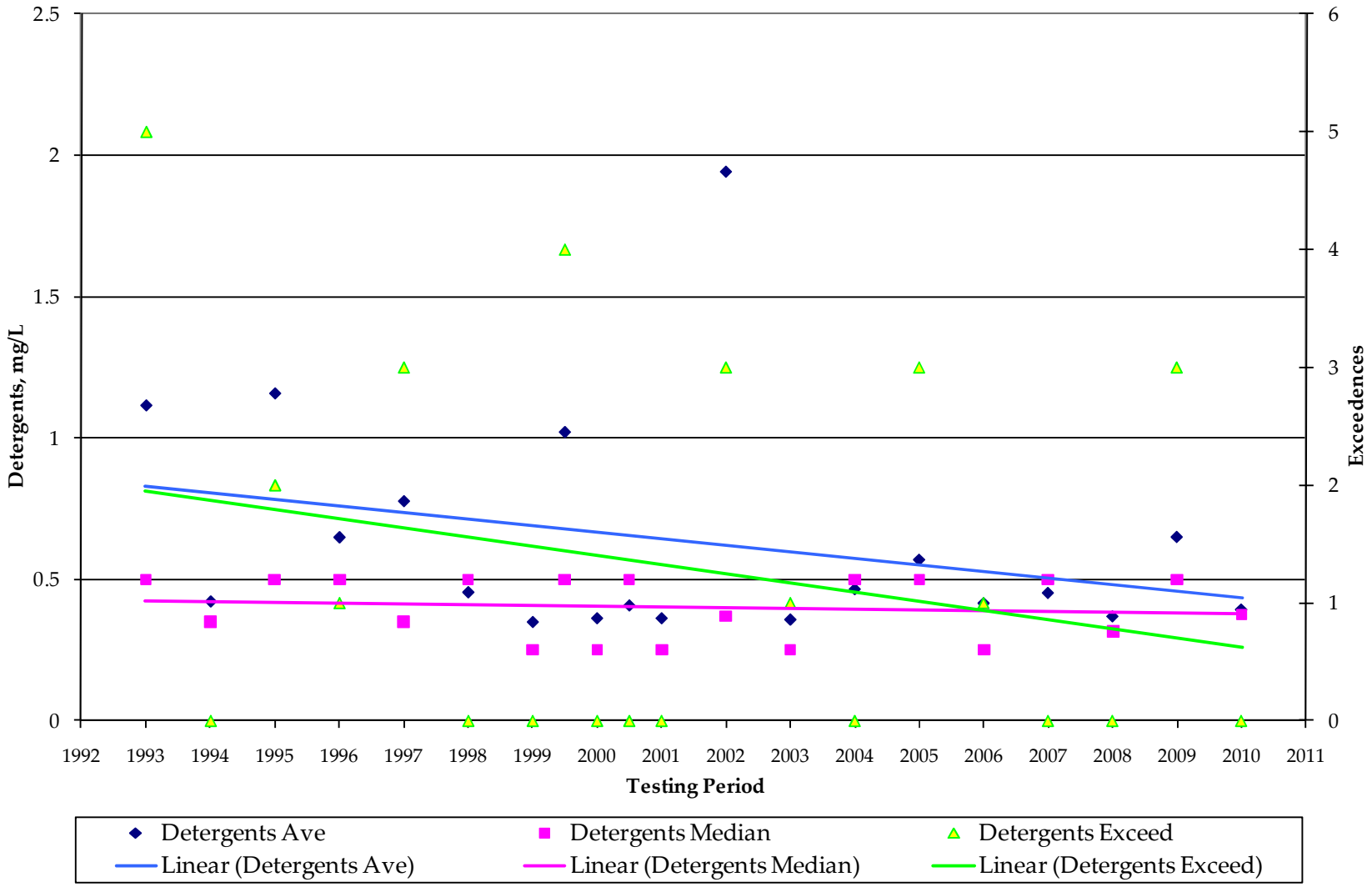

Figure 11-5
Dry Weather Results, Fecal Coliform and Enterococcus Bacteria 2002-2010

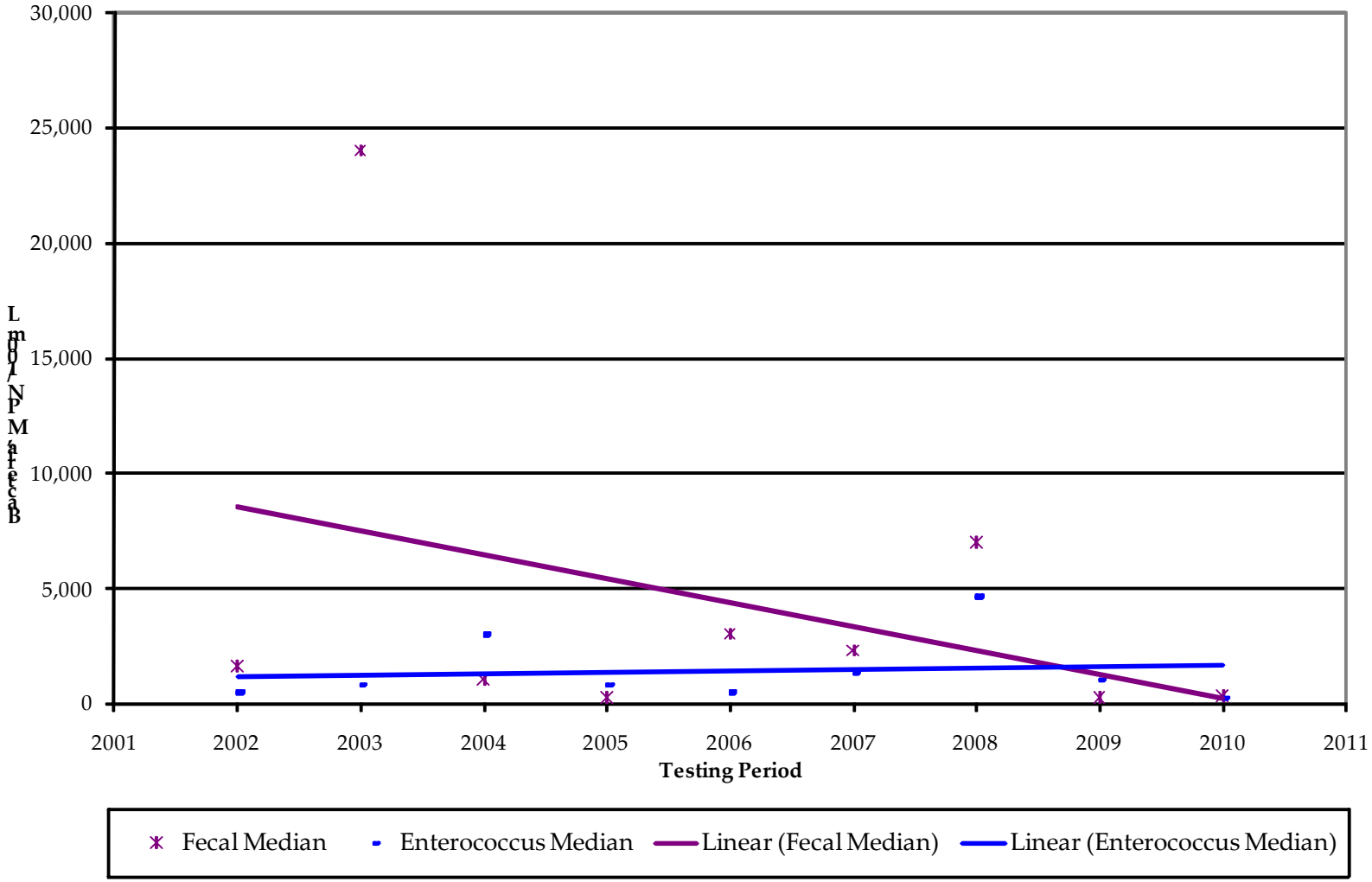

12.0 Special Investigations

The City takes a proactive approach to storm water management in an attempt not only to protect receiving water quality, but also to improve the quality of water that is discharged from the City's MS4. Data collected through the City's various monitoring and inspection programs are used to identify locations within the City that may be contributing to storm water contamination. Source identification investigations are then initiated to pinpoint the exact cause of detected pollution. Aside from upstream investigations conducted as part of the dry weather monitoring and sampling program (to be reported as part of the Illicit Discharge Detection and Elimination component in December), no special investigations were needed or conducted during this reporting period.

13.0 NON-EMERGENCY FIRE FIGHTING

Please reference Section 4.2.3 of this JURMP Annual Report for information about BMPs and procedures associated with non-emergency fire fighting activities.

14.0 JURMP REVISIONS

Changes to the JURMP made since the overall JURMP update in the spring of 2008 are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 Conclusions and Recommendations

During 2009/2010, the City of La Mesa continued to implement its storm water program based on the 2008 JURMP. Additionally, the City continued to work collaboratively with the other Copermittees to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City will continue to refine and improve its storm water program based on information made available by these collaborative efforts.

16.0 REFERENCES

California Regional Water Quality Control Board, 2007. Order No. R9-2007-0001. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Construction.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Industrial & Commercial.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Municipal.*

California Storm Water Quality Association, 2007. *Municipal Stormwater Program Effectiveness Assessment Guidance.*

Caltrans Storm Water Quality Handbooks, 2003. *Construction Site Best Management Practices Manual.*

City of La Mesa, 2008. *Jurisdictional Urban Runoff Management Program.*

County of San Diego, 2007. *Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Report.*

County of San Diego, 2010. *Countywide Model SUSMP: Standard Urban Stormwater Mitigation Plan Requirements for Development Applications*.

State Water Resources Control Board, 1997. Order No. 97-03-DWQ. *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.*

State Water Resources Control Board, 1999. Order No. 99-08-DWQ. *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity.*

APPENDIX A.1

Appendix A.1
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Year Finaled	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Other	
1	Former Car Dealership	7604 El Cajon Blvd.	Alvarado	2003	Y		X								Medium
2	Parkview	4111 Massachusetts Ave.	University	2004	N			X			X			Porous concrete	Medium
3	Briercrest Park (CIP)	9051 Wakarusa St.	Alvarado	2005	Y					X					Medium
4	Aragon	7701 El Cajon Blvd	University	2006	N								X		Medium
5	Fire Station (CIP)	8054 Allison Avenue	University	2006	Y									Storm screens	High
6	Lowell Street Condominiums	4241 Lowell Street	University	2006	N		X				X				Medium
7	Bougainvillea Walk	Milden Street	Alvarado	2007	N						X				Medium
8	Eastridge Serramar	3957 Murray Hill Rd	University and Spring Valley	2007	N			X					X		Medium
9	Kaiser	8010 Parkway Drive	Alvarado	2007	Y								X		High
10	La Mesa Teen Center (CIP)	7775 Junior High Dr.	University	2007	Y		X								Medium

Appendix A.1 (Continued)
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Year Finaled	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Other	
11	Providence Square (Formerly Talmadge East Apartments)	5090 Guava Street	Alvarado	2007	N						X				Medium
12	Grossmont Medical Offices	8860/8870 Grossmont Center Dr	Alvarado	2008	Y	X					X		X		Medium
13	Grossmont Trolley Theater Commercial	8555 Fletcher Pkwy	Alvarado	2008	Y						X				High
14	Davis YMCA Expansion (CIP)	8881 Dallas St	Alvarado	2009	N		X					X			Medium
15	La Mesita	7360 La Mesita Place	University	2009	Y						X				Medium

Notes

- Alvarado and Lake Murray drainage basins are in HSA 907.11 (San Diego River Watershed)
- University and Lemon Grove drainage basins are in HSA 908.22 (San Diego Bay Watershed)
- Spring Valley drainage basin is in HSA 909.12 (San Diego Bay Watershed)

APPENDIX A.2

Appendix A.2
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Total Insp.
Public Projects								
1	New Police Station	8085 University Ave.	SD Bay	High	30	15	0	15
2	Fire Station #13 Rehabilitation	9110 Grossmont Blvd.	SD River	Medium	9	2	0	2
3	I&I Mitigation Project	City-Wide	SD Bay & SD River	Medium	30	9	0	9
4	Sewer Replacement CIP 09-19	Parks, University, Normal, and Orien Area	SD Bay	Medium	5	1	0	1
5	Johnson Drive Storm Drain	Johnson Dr.	SD Bay	Low	18	1	0	1
Private Projects								
6	50 Multi Units (Briercrest)	9000 Murray Dr.	SD River	Medium	30	7	0	7
7	Fairfield Grossmont Trolley Multi-Apartment (500)	8725 Fletcher Parkway	SD River	Medium	30	7	1	8
8	Hilltop Condos (37 Condo Units)	7378 Orien Avenue	SD Bay	Medium	30	7	0	7
9	8348 Center Drive	8348 Center Dr.	SD River	Low	9	1	0	1
10	Addition to Existing Home/ Retaining Wall	4292 Merritt Blvd.	SD Bay	Low	30	1	0	1
11	CoAmerica (Wendy's)	5450 Jackson Dr.	SD River	Low	30	1	0	1
12	Condos (Aragon)	7701 El Cajon Blvd.	SD Bay	Low	30	1	0	1
13	Grading RV Parking	4661 Maple Ave.	SD Bay	Low	30	1	0	1
14	Grossmont Center Bridge	8725 Fletcher Parkway	SD River	Low	5	1	0	1

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Total Insp.
15	Henry's Market Place	4630 Palm Ave.	SD Bay	Low	5	1	0	1
16	Other Old Shell Station	4200 Spring St.	SD River	Low	30	1	0	1
17	SFH	4560 3rd St.	SD Bay	Low	23	1	0	1
18	SFH	4589 Alto Dr.	SD Bay	Low	5	1	0	1
19	SFH	9222 Briercrest Dr.	SD River	Low	30	1	0	1
20	SFH	9120 Johnson	SD River	Low	30	1	0	1
21	SFH	4667 Judson	SD Bay	Low	31	1	0	1
22	SFH	9035 Lemon Ave.	SD Bay	Low	30	1	0	1
23	SFH	4325 Merritt Blvd.	SD Bay	Low	5	1	0	1
24	SFH	9038 Mollywoods Ave.	SD River	Low	30	1	0	1
25	SFH	4480 Panorama	SD Bay	Low	27	1	0	1
26	SFH	4958 Pine St.	SD River	Low	18	1	0	1
27	SFH	9105 Southern Rd.	SD River	Low	23	1	0	1

Notes and Definition

* These facilities were completed prior to the start of the 2009/2010 wet season.

APPENDIX A.3

Appendix A.3
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source*
1	Allison Avenue Lot (Parking Facility)	Palm & Allison Avenues	High	San Diego River	Roads, Streets, Highways, and Parking Facilities	
2	Aztec Park	Corner of Aztec Drive and Morocco Dr.	High	San Diego River	Parks and Recreation Facilities	X
3	Briercrest Park	9000 Block Wakarusa Street	High	San Diego River	Parks and Recreation Facilities	X
4	Collier Park and Pump House	4401 Palm Avenue	High	San Diego Bay	Parks and Recreation Facilities	X
5	Community Pool	5100 Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities	X
6	Graffiti Removal	Throughout City	High	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	
7	Harry Griffen Park	9550 Milden Street	High	San Diego River	Parks and Recreation Facilities	X
8	Highwood Park	4200 Parks Avenue	High	San Diego Bay	Parks and Recreation Facilities	X
9	Jackson Park	Jackson Drive and Laird Street	High	San Diego River	Parks and Recreation Facilities	X
10	Junior Seau Sports Complex	9001 Park Plaza Drive	High	San Diego River	Parks and Recreation Facilities	X
11	La Mesa Blvd (Parking Facility)	La Mesa Blvd & Acacia Avenue	High	San Diego Bay	Roads, Streets, Highways, and Parking Facilities	X
12	La Mesita Park and Gardener's Shack	8855 Dallas Street	High	San Diego River	Parks and Recreation Facilities	X
13	Lemon Ave Lot (Parking Facility)	Lemon Avenue & 3rd Street	High	San Diego Bay	Roads, Streets, Highways, and Parking Facilities	X
14	MacArthur Park	University Avenue and Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities	X

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source*
15	Municipal Separate Storm Sewer	53 miles of pipes, storm drains, storm drain boxes, and open channel sections throughout the City	High	San Diego Bay/ San Diego River	MS4	
16	Northmont Park	Severin Drive and Amaya Drive	High	San Diego River	Parks and Recreation Facilities	X
17	Palm Avenue Lot (Parking Facility)	Palm & Lemon Avenues	High	San Diego River	Roads, Streets, Highways, and Parking Facilities	
18	Porter Hall	4910 Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities	X
19	Porter Park	8425 University Avenue	High	San Diego Bay	Parks and Recreation Facilities	X
20	Power Washing	Throughout City	High	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	
21	Public Works Operation Center	8152 Commercial Street	High	San Diego River	Public Works Facilities	
22	Roads, Streets, and Highways	149 miles of roadways throughout the City	High	San Diego Bay/ San Diego River	Roads, Streets, Highways, and Parking Facilities	X
23	Rolando Park	Alamo Way and Vigo Street	High	San Diego Bay	Parks and Recreation Facilities	X
24	Sanitary Sewer Maintenance	Throughout City	High	San Diego Bay/ San Diego River	Sanitary Sewer Maintenance	
25	Special Events	Throughout City	High	San Diego Bay/ San Diego River	Special Events	
26	Sunset Park, Gardener's Shack, and Recreational Building	5540 Lake Park Way	High	San Diego River	Parks and Recreation Facilities	X
27	Sunshine Park	70th and Tower Street	High	San Diego Bay	Parks and Recreation Facilities	X
28	Vista La Mesa Park	King Street and Hoffman Avenue	High	San Diego Bay	Parks and Recreation Facilities	X

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source*
29	Fire Station No. 11	8034 Allison Avenue	Medium	San Diego Bay	Fire Stations	
30	Fire Station No. 12	8834 Dallas Street	Medium	San Diego River	Fire Stations	
31	Fire Station No. 13	9110 Grossmont Boulevard	Medium	San Diego River/ San Diego Bay	Fire Stations	
32	Infrastructure Maintenance	Throughout City	Medium	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	
33	Landscape Maintenance	Throughout City	Medium	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	
34	Police Station	8181 Allison Avenue	Medium	San Diego River	Other Fixed Facilities	
35	PW Maintenance Building	8152 Commercial Street, Building 100	Medium	San Diego River	Public Works Facilities	
36	PW Traffic Operation Trailer	8152 Commercial Street, Building 600	Medium	San Diego River	Public Works Facilities	
37	Adult Enrichment Center	8450 La Mesa Boulevard	Low	San Diego Bay	Other Fixed Facilities	
38	Adult Enrichment Center Clubhouse	8425 La Mesa Boulevard	Low	San Diego Bay	Other Fixed Facilities	
39	City Hall and Modular Buildings	8130 Allison Avenue	Low	San Diego Bay	Other Fixed Facilities	
40	City Hall Annex	8130 Allison Avenue	Low	San Diego Bay	Other Fixed Facilities	
41	Community Center	4975 Memorial Drive	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	
42	Helix Water District	7911 University Avenue	Low	San Diego Bay	Other Fixed Facilities	
43	Historical Society	8369 University Avenue	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	
44	Library/Fine Arts	8055 University Avenue	Low	San Diego Bay	Other Fixed Facilities	

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source*
45	Nan Couts Cottage (Recreational Bldg)	4875 Memorial Dr.	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	
46	Postal Facility	4800 Nebo Drive	Low	San Diego Bay	Other Fixed Facilities	
47	PW Administration	8152 Commercial Street, Building 300	Low	San Diego River	Other Fixed Facilities	
48	PW Document Storage	8152 Commercial Street, Building 500	Low	San Diego River	Other Fixed Facilities	
49	Recreation Center	4975 Memorial Drive	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	

* Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX A.4

Appendix A.4
Industrial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	WDID#:	Likely Source
1	American Tanks	8111 Commercial St	3444	High	Manufacturing, Fabricated Metal	Alvarado		
2	California Countertop, Inc	7811 Alvarado Rd	3089	High	Manufacturing, Plastic/Rubber	Alvarado	9 37I019697	
3	Centex Glazing	8260 Commercial St.	1791	High	Other Contractor	Alvarado		
4	Dixieline Lumber & Home Centers	8372 Center Dr	2432	High	Manufacturing, Wood/Furniture	Alvarado	9 37I015244	
5	EDCO Transfer Station	8182 Commercial St	4953	High	Waste Management	Alvarado	9 37I012705	
6	Rainbow Steel Inc.	8332 Case St.	3499	High	Manufacturing, Fabricated Metal	Alvarado	9 37I018321	
7	Walter H. Barber & Sons, Inc.	8179 Center St.	1629	High	Other Contractor	Alvarado		
8	A-1 Self Storage, Center Dr	8328 Center Dr	4225	Medium	Wholesale/Storage/Warehousing	Alvarado		
9	Albert J. Becker, Inc. dba Wood Design West	8333 Case Street Suite C	2434, 2511	Medium	Manufacturing, Misc	Alvarado		
10	Broke Hardware	8111 Commercial Street	3949	Medium	Manufacturing, Plastic/Rubber	Alvarado		
11	Classic Screen Print	8176 Center St, Ste. C	2759	Medium	Printing	Alvarado		
12	Community Mobile	7825 La Mesa Blvd	4119	Medium	Ground Transportation	University		X
13	E T A Pacific L L C	4440 Olive Avenue	4215	Medium	Ground Transportation	University		X
14	Exotic Wedding Cake	8400 Center Drive	2064	Medium	Manufacturing, Food/Drink	Alvarado		X
15	La Mesa Transfer & Storage, Inc.	8336 Case St	4214	Medium	Wholesale/Storage/Warehousing	Alvarado		
16	M & M Patisserie	7668 El Cajon Blvd	2051	Medium	Manufacturing, Food/Drink	Alvarado		X
17	Moran Canvas Products	8135 Center Dr.	3444	Medium	Manufacturing, Fabricated Metal	Alvarado		
18	Schaefer Ambulance Service, Inc.	7285 University Ave	4119	Medium	Ground Transportation	University	9 37I019735	X
19	A A Printing, Inc.	7323 El Cajon Blvd	2759	Low	Printing	University		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	WDID#:	Likely Source
20	A-1 Self Storage	4981 Spring St.	4225	Low	Wholesale/Storage/Warehousing	Alvarado		
21	Barnes Printers, Inc.	8237 La Mesa Blvd	2759	Low	Printing	University		
22	Continuous Wave Tech, Inc. (Charter Delivery Servi	4350 Palm Avenue Suite 27	4215	Low	Ground Transportation	Spring Valley		
23	Dasina Building Group	8204 Parkway Dr., #5	2434	Low	Manufacturing, Wood/Furniture	Alvarado		
24	Embroidery Express	7640 University Ave #B	2395	Low	Manufacturing, Fabric/Clothes	University		
25	Equality Plating Co.	8172 Center St	3471	Low	Manufacturing, Fabricated Metal	Alvarado		
26	Joe's Signs	7889 University Avenue	3993	Low	Printing	University		
27	L & R Neon	8200 Commercial St. #101	3993	Low	Printing	Alvarado		
28	La Mesa Printing Center	7468 University Ave	2759	Low	Printing	University		
29	Lyons & O'Haver, Inc. Taxidermy	8180 Parkway Drive	3999	Low	Manufacturing, Misc	Alvarado		
30	Printing By Gwen	7640 University Ave C	2732	Low	Printing	University		
31	Susan G. Holtz Photo Research	8204 Center Dr #20	2741	Low	Printing	Alvarado		
32	The Little Warehouse	5175 Baltimore Dr	4225	Low	Wholesale/Storage/Warehousing	Alvarado		
33	Village Awards & Engraving	7769 University Ave	2796	Low	Printing	University		

Notes

TTWQ – Threat to Water Quality

SIC –Standard Industrial Classification Code

Basin – City of La Mesa drainage basin. HSAs are as follows: Alvarado and Lake Murray (907.12; San Diego River Watershed), University and Lemon Grove (908.22, San Diego Bay Watershed), Spring Valley (909.12, San Diego Bay Watershed)

WDID – Waste Discharge Identification Number

Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX A.5

Appendix A.5
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1	A A A Auto Repair & Transmission	7025 University Ave	7537	High	Auto Repair	University		X
2	A-1 Hire, Ltd.	7190 University Ave.	7353, 7694	High	Vehicle/Equipment Rental	University		X
3	Affordable Paint And Body	8181 Center Street	7532	High	Auto Paint/Body	Alvarado		
4	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr	7542, 7549	High	Vehicle Washing	Alvarado		
5	Bob Stall Chevrolet	7601 Alvarado Road	5511, 7538	High	Vehicle Dealers	Alvarado		
6	Carl Burger Dodge World	8355 Hercules Street	5511, 7538, 7532	High	Vehicle Dealers	Alvarado		
7	Carl Burgers Jeep Eagle World	8333 Hercules St.	5511, 7538	High	Vehicle Dealers	Alvarado		
8	Chili's Bar & Grill #454	8285 Fletcher Pkwy	5812, 5813	High	Eating/Drinking Establishments	Alvarado		X
9	Chipotle Mexican Grill	8005 Fletcher Parkway	5812	High	Eating/Drinking Establishments	Alvarado		X
10	Dan's Automotive	7501 University Ave.	7538	High	Auto Repair	University		X
11	Five Star Collision Center Inc	7643 University Avenue Suite H	7532	High	Auto Paint/Body	University		X
12	Himalayan Cuisine	7819 El Cajon Blvd.	5812	High	Eating/Drinking Establishments	Alvarado		
13	Marie Callender's #74	6950 Alvarado Rd	5812, 5813	High	Eating/Drinking Establishments	Alvarado		X
14	Marieta's	8949 La Mesa Blvd	5812	High	Eating/Drinking Establishments	Alvarado		X
15	McDonald's	8045 Fletcher Pkwy	5812	High	Eating/Drinking Establishments	Alvarado		X
16	Nacho's Taco Shop	7589 University Ave	5812	High	Eating/Drinking Establishments	University		X
17	Panda Express #226	8011 University Ave	5812	High	Eating/Drinking Establishments	University		X
18	Pick Up Stix La Mesa	8025 Fletcher Pkwy	5812	High	Eating/Drinking Establishments	Alvarado		X
19	Sun Tacos	5100 Jackson Drive	5812	High	Eating/Drinking Establishments	Alvarado		
	5 Star Market & Liquor	7495 University Avenue	5411	Medium	Eating/Drinking Establishments	University		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
20	7 Eleven Food Store 13649 E-2121	5746 Amaya Drive	5411	Medium	Eating/Drinking Establishments	Alvarado		X
21	7 Eleven Food Store 17945	7602 University Avenue	5411	Medium	Eating/Drinking Establishments	University		X
22	7-Eleven Store #16119-2111	5255 Baltimore	5411	Medium	Eating/Drinking Establishments	Alvarado		X
23	7-Eleven Store 13647 G-2121	8300 Parkway Drive	5411	Medium	Eating/Drinking Establishments	Alvarado		X
24	7-Eleven Store 21453	5650 Baltimore Drive	5411	Medium	Eating/Drinking Establishments	Alvarado		X
25	A & A Garden Equip Parts Service	7243 University Avenue	5261	Medium	Nurseries/Greenhouses	University		X
26	A & B Auto Electric	7801 El Cajon Blvd, Ste 2	7539	Medium	Auto Repair	University		X
27	A & W Restaurants	5500 Grossmont Center Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
28	A And D Hawaiian B.B.Q.	7918 El Cajon Blvd Suite D	5812	Medium	Eating/Drinking Establishments	Alvarado		X
29	A To Z Auto Repair	7159 University Avenue	7538	Medium	Auto Repair	University		X
30	Ace Coating Co.	8333 Case St. Suite 584	1799	Medium	Other Contractor	Alvarado		
31	Albertsons #6710	8920 Fletcher Parkway	5411	Medium	Eating/Drinking Establishments	Alvarado		X
	Aliberto's Mexican Food	7819 El Cajon Blvd.	5812	Medium	Eating/Drinking Establishments	University		X
32	All American Carpets	8186 Center Street Suite E	1742	Medium	Painting/Coating	Alvarado		
33	All Italiana	8356 Allison Ave	5812	Medium	Eating/Drinking Establishments	University		X
34	Amira Auto Sales & Broker	6942 University Ave. Suite C	5521	Medium	Other	University		
35	Anthony's Fish Grotto La Mesa	9530 Murray Dr	5812, 5813	Medium	Eating/Drinking Establishments	Alvarado		X
36	Antica Trattora Inc.	5654 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
37	Aquahouse	7705 El Cajon Blvd. Suite 14	2086	Medium	Manufacturing, Food/Drink	University		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
38	Arby's 5822	5341 Jackson Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
39	Arco Sunshine Food Store #9543	7594 University Ave	5541	Medium	Fueling	University		X
40	Arco Sunshine Food Store #9596	7974 University Ave	5541	Medium	Fueling	University		X
41	Are Con, Inc.	8171 Center Street	1771	Medium	Cement Mixing/Cutting	Alvarado		
42	Arigato Japanese Restaurant	5575 Baltimore Dr # 110	5812	Medium	Eating/Drinking Establishments	Alvarado		X
43	Audio Associates	8200 Center Drive	1799	Medium	Painting/Coating	Alvarado		
44	Auto Repair Specialists	8120 Center St	7539	Medium	Auto Repair	Alvarado		
45	Aztec Fire & Safety	8107 Commercial St.	1799	Medium	Other Contractor	Alvarado		
46	B J's Pizza & Grill	5500 Grossmont Ctr Dr #M1	5812	Medium	Eating/Drinking Establishments	Alvarado		X
47	B M H Italian L L C	7670 El Cajon Blvd	5499	Medium	Eating/Drinking Establishments	Alvarado		X
48	Baldwin Auto Sales	8174 Center St.	5521	Medium	Vehicle Dealers	Alvarado		
49	Baskin-Robbins 31 Flavors	8807 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
50	Big O Tires	7589 El Cajon Blvd Suite A	7534, 7538	Medium	Auto Repair	University		X
51	Bluecrystalherbs.Com	4409 68th Street	5499	Medium	Eating/Drinking Establishments	University		X
52	Bob Bowen's Auto Service	7191 Alvarado Rd	7538	Medium	Auto Repair	Alvarado		
53	Brady Co. / San Diego, Inc.	8100 Commercial Street	1742	Medium	Painting/Coating	Alvarado		
54	Brewbanks Coffeehouse	8697 La Mesa Blvd Suite A	5812	Medium	Eating/Drinking Establishments	Alvarado		X
55	Brigantine Restaurant	9350 Fuerte Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
56	Broding's Battery Warehouse	8188 Commercial St.	5013	Medium	Auto Supplies	Alvarado		
57	C & D Auto Care	7163 University Avenue	7538	Medium	Auto Repair	University		X
58	C & D Towing Specialists	8332 Case St.	7549	Medium	Auto Repair	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
59	Caffe Bar E Restoranti	5263 Baltimore Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
60	Caliber Collision Centers	8310 Center Drive	7532	Medium	Auto Paint/Body	Alvarado		
61	Callari's Italian Deli & Bakery	7670 El Cajon Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
62	Candy Island	5500 Grossmont Center Drive	5441	Medium	Eating/Drinking Establishments	Alvarado		X
63	Cappuccino House	7334 University Avenue	5812	Medium	Eating/Drinking Establishments	University		X
64	Carini Electric, Inc.	8104 Center St.	1731	Medium	Other Contractor	Alvarado		
65	Carl's Jr. #284	8110 Parkway Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
66	Carruso's Coffee Corner	8201 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
67	Casa De Pico Restaurant	5500 Grossmont Center Drive 404	5812 5813	Medium	Eating/Drinking Establishments	Alvarado		X
68	Casual Cafe	8881 Fletcher Parkway	5812	Medium	Eating/Drinking Establishments	Alvarado		X
69	Centifontis	8209 La Mesa Blvd	5441	Medium	Eating/Drinking Establishments	University		X
70	Centre City Shell #2	3810 Massachusetts Ave	5541	Medium	Fueling	Lemon Grove		
71	Chang's Express	5500 Grossmont Center Drive # Fc4	5812	Medium	Eating/Drinking Establishments	Alvarado		X
72	Charcoal House	9566 Murray Dr.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
73	Chef Taka Restaurant	7520 El Cajon Blvd Suite 300	5812	Medium	Eating/Drinking Establishments	Alvarado		X
74	Chefaxel Inc. Bistro	7097 University Avenue	5812, 5963	Medium	Eating/Drinking Establishments	University		X
75	Chopsticks Inn Restaurant	8687 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
76	Chuck E. Cheese's	5500 Grossmont Center Dr J 34	5812	Medium	Eating/Drinking Establishments	Alvarado		X
77	Ciao Bella	5263-65 Baltimore Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
78	Citlalli Mexican Food	7327 University Avenue	5812	Medium	Eating/Drinking Establishments	University		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
79	Claim Jumper Restaurant La Mesa	5500 Grossmont Ctr. Drive #406	5812	Medium	Eating/Drinking Establishments	Alvarado		X
80	Coast Restaurant Supply	8120 Commercial St.	5046	Medium	Wholesale/Storage/Warehousing	Alvarado		
81	Coco's #132	5550 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
82	Coffee Indulgences	8900 Grossmont Blvd #7	5812	Medium	Eating/Drinking Establishments	Alvarado		X
83	Cold Stone Creamery	5500 Grossmont Center Dr. #F1	5812	Medium	Eating/Drinking Establishments	Alvarado		X
84	College/La Mesa Smog Test Only	7643 University Avenue Suite G	7549	Medium	Auto Repair	University		X
85	Collins Plumbing, Inc.	8130 Commercial St.	1711	Medium	Other Contractor	Alvarado		
86	Commercial Electric & Gas Appliance Service	8110 Commercial St.	7699	Medium	Equipment Repair	Alvarado		
87	Continental Catering	8232 Parkway Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
88	Cosmos Coffee Cafe'	8278 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
89	Costco Wholesale #469	8125 Fletcher Pkwy	5411, 5812	Medium	Eating/Drinking Establishments	Alvarado		X
90	D'amato's Pizza	8807 La Mesa Blvd.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
91	Dante's Pizza	5500 Grossmont Center Dr # 135	5812	Medium	Eating/Drinking Establishments	Alvarado		X
92	Denny's, Inc. #1743	6970 Alvarado Rd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
93	Deters Inc.	8180 Commercial Street	7359	Medium	Vehicle/Equipment Rental	Alvarado		
94	Discount Smog Centers	7633 El Cajon Blvd Suite 200	7549	Medium	Auto Repair	University		X
95	Domino's Pizza	7960 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
96	Dragon House	6062 Lake Murray Blvd #201	5812	Medium	Eating/Drinking Establishments	Alvarado		X
97	Dream Dinners	5208 Jackson Drive Suite 116	5499	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
98	Drew Ford / Drew Hyundai	8970 La Mesa Blvd.	5511, 7538	Medium	Vehicle Dealers	Alvarado		
99	Eastridge Veterinary Clinic	7750 University Avenue, Suite A	742	Medium	Animal Facilities	University		X
100	El Azteca Taco Shop Mexican Food	8306 Parkway Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
101	El Cerrito Veterinary Hospital	6911 University Avenue	742	Medium	Animal Facilities	University		X
102	El Torito	5024 Baltimore Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
103	Elite Auto Collision Repair Center	4949 Baltimore Drive	7532	Medium	Auto Paint/Body	Alvarado		
104	Elite Auto Group	7658 University Avenue	5511	Medium	Vehicle Dealers	University		
105	Elite Auto Group	7643 University Avenue	5521	Medium	Vehicle Dealers	University		
106	Eloquent Auto	7147 University Avenue	7549	Medium	Auto Repair	University		X
107	Enterprise Rent-A-Car #3241	8363 Center Drive, Ste 6 H	7514	Medium	Vehicle/Equipment Rental	Alvarado		
108	European Bistro	6062 Lake Murray Blvd Suite 102-105	5812	Medium	Eating/Drinking Establishments	Alvarado		X
109	European Delicatessen	6062 Lake Murray Blvd Suite 101	5461	Medium	Eating/Drinking Establishments	Alvarado		X
110	Express Auto Service	7633 El Cajon Blvd. suite 300	7538	Medium	Auto Repair	University		X
111	Falcon's Lure	7745 University Avenue	5813	Medium	Eating/Drinking Establishments	University		X
112	Family Chef Restaurant	6155 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
113	Fast Seafood And Mexican Food	5525 Jackson Drive Suite B	5812	Medium	Eating/Drinking Establishments	Alvarado		X
114	Fish Tacos And More	5525 Jackson Drive Suite B	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
115	Fix Me A Plate Cafe	9168-9172 Fletcher Parkway	5812	Medium	Eating/Drinking Establishments	Alvarado		X
116	Fletcher Hills Pet Clinic	9160 Fletcher Hills Parkway	742	Medium	Animal Facilities	Alvarado		X
117	Fuddrucker's	5500 Grossmont Center Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
118	Gold Coast Bagel	5658 Lake Murray Blvd	5461	Medium	Eating/Drinking Establishments	Alvarado		X
119	Golden Spoon Yogurt	5640 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
120	Golden State Auto of La Mesa, Inc.	7224 University Avenue	5521	Medium	Vehicle Dealers	University		
121	Greater San Diego Air Conditioning	8141 Center St.	1711	Medium	Other Contractor	Alvarado		
122	Groceryworks.Com Operating Company	8011 University Avenue	5411	Medium	Eating/Drinking Establishments	University		X
123	Growers Direct	7055 University Avenue	5431	Medium	Eating/Drinking Establishments	University		X
124	Gus's Subs & Pizza #2	5620 Baltimore Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
125	Hayes Furniture	8270 La Mesa Blvd	7359	Medium	Vehicle/Equipment Rental	University		X
126	Hearth House	5505 Jackson Dr	5812, 5813	Medium	Eating/Drinking Establishments	Alvarado		X
127	Hickory Farms, Inc. #13292	5500 Grossmont Center Drive 197	5499	Medium	Eating/Drinking Establishments	Alvarado		X
128	J Ks Greek Cafe	7749 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
129	J.A. MacDonald, Inc.	8338 Center Drive	1522	Medium	Other Contractor	Alvarado		
130	Jack In The Box, Jackson	5141 Jackson Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
131	Jack In The Box, University	6987 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
132	Jack Orr Auto Body, Inc.	7253 University Ave	7539	Medium	Auto Repair	University		X
133	Jamba Juice #143	5500 Grossmont Ctr Dr.	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
134	James L. Yancy	8336 Case Street	4789	Medium	Ground Transportation	Alvarado		
135	Java Mama Cafe	8250 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
136	Jitters Coffee Shop	8201 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
137	Jolt 'N Joes	8076 La Mesa Boulevard	5812	Medium	Eating/Drinking Establishments	University		X
138	Kentucky Fried Chicken	5358 Jackson Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
139	La Casa Blanca Mexican Restaurant	9570 Murray Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
140	La Fogata Mexican Restaurant	7303 El Cajon Blvd	5812	Medium	Eating/Drinking Establishments	University		X
141	La Mesa Motor Clinic, Inc.	5120 Guild St	7538	Medium	Auto Repair	Alvarado		
142	La Mesa Nine Diamonds L L C	3775 Massachusetts Avenue	5411	Medium	Eating/Drinking Establishments	Lemon Grove		
143	La Mesa Ocean Grille	5465 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
144	La Mesa Smog Check	7801 El Cajon Blvd, Ste 1	7549	Medium	Auto Repair	University		X
145	La Mesa Submarina	5454 Grossmont Center Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
146	La Mesita Mexican Food	7012 University Avenue	5812	Medium	Eating/Drinking Establishments	University		X
147	La Salsa Restaurants	4990 Baltimore Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
148	Lake Murray Cafe	5465 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
149	Lake Murray Village Veterinarian	5644 Lake Murray Blvd.	742	Medium	Animal Facilities	Alvarado		X
150	Lisa Osthues	6060 Lubbock Avenue	5499	Medium	Eating/Drinking Establishments	Alvarado		X
151	Little Roma Italian Cuisine	5575 Baltimore Drive Suite 104	5812	Medium	Eating/Drinking Establishments	Alvarado		X
152	Logistics International, Inc.	4670 Nebo Drive Suite 100	4789	Medium	Ground Transportation	University		X
153	Los Pinos Taco Shop	5660 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
154	Lotus Pond Restaurant	8260 Parkway Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
155	Manhattan Pizza	6195-D Lake Murray Blvd.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
156	Manhattan Pizza	6195 Lake Murray Blvd Suite D	5812	Medium	Eating/Drinking Establishments	Alvarado		X
157	Mario's De La Mesa	8425 La Mesa Blvd.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
158	McDonalds	5500 Grossmont Center Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
159	McDonald's	5500 Grossmont Center Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
160	Mesa Plaza	7520 El Cajon Blvd Suite 301	5411	Medium	Eating/Drinking Establishments	Alvarado		X
161	Mi Casita Taco Shop	8038 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
162	Midas Mufflers	7207 University Ave	7539	Medium	Auto Repair	University		X
163	Mr G'S Tavern	7081 University Avenue	5813	Medium	Eating/Drinking Establishments	University		X
164	Mr. D'S Mini Mart	8292 La Mesa Blvd	5411	Medium	Eating/Drinking Establishments	University		X
165	Mrs. Field's	5500 Grossmont Center Drive	5441	Medium	Eating/Drinking Establishments	Alvarado		X
166	Mystic Grill & Bakery	6990 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
167	New York Giant Pizza	9083 Dallas St	5812	Medium	Eating/Drinking Establishments	Alvarado		X
168	Nfarooqi Enterprises L L C (Jack in the Box)	6140 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
169	Nonnos Pizza	5314 Baltimore Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
170	Norma Jeans	5286 Baltimore Dr	5813	Medium	Eating/Drinking Establishments	Alvarado		X
171	Norm's Cocktails	7403 El Cajon Blvd	5813	Medium	Eating/Drinking Establishments	University		X
172	Olive Garden G M R I, Inc. #1301	5500 Grossmont Center Dr J-2	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
173	Outback Steakhouse	5628 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
174	Oz's Pub	8758 La Mesa Blvd	5813	Medium	Eating/Drinking Establishments	Alvarado		X
175	P.G. King	5575 Baltimore Dr #105-A	5812	Medium	Eating/Drinking Establishments	Alvarado		X
176	Pacific Southwest Structures	8140 Commercial Street	1771	Medium	Cement Mixing/Cutting	Alvarado		
177	Pacific Tire & Brake	7633 El Cajon Blvd, Suite 100	7564, 7538	Medium	Auto Repair	University		X
178	Palm Springs Deli	8363 Center Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
179	Palmer Painting Company	8104 Center St.	1721	Medium	Painting/Coating	Alvarado		
180	Panda Express #606	5500 Grossmont Center Drive E-1	5812	Medium	Eating/Drinking Establishments	Alvarado		X
181	Panda Land	9200 Fletcher Pky	5812	Medium	Eating/Drinking Establishments	Alvarado		X
182	Panera Bread	5500 Grossmont Center Drive Suite 145	5812	Medium	Eating/Drinking Establishments	Alvarado		X
183	Parkway Bar	9188 Fletcher Parkway	5813	Medium	Eating/Drinking Establishments	Alvarado		X
184	Parkway Market	9085 Dallas Street	5411	Medium	Eating/Drinking Establishments	Alvarado		X
185	Parkway Pet Hospital	8200 Parkway Drive	742	Medium	Animal Facilities	Alvarado		X
186	Parky's	6149 Lake Murray Blvd	5813	Medium	Eating/Drinking Establishments	Alvarado		X
187	Paula Jean's Coffee Bean	5565 Grossmont Center Drive	5499	Medium	Eating/Drinking Establishments	Alvarado		X
188	Pet Emergency Clinic East County	5232 Jackson Dr., Suite 105	742	Medium	Animal Facilities	Alvarado		X
189	Pho Superbowl	8342 Parkway Dr.	5812	Medium	Eating/Drinking Establishments	Alvarado		X
190	Pietros Cucina Italiana	8378 Parkway Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
191	Pizza Hut	8011 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
192	Plaza Deli	7777 Alvarado Rd 400 A	5812	Medium	Eating/Drinking Establishments	Alvarado		X
193	Preston's Tire & Wheel	8300 Center Drive	7538	Medium	Auto Repair	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
194	Pretzel Maker	5500 Grossmont Center Drive	5461	Medium	Eating/Drinking Establishments	Alvarado		X
195	Primary Mechanical, Inc.	5345 Timken St., Suite I	1711	Medium	Other Contractor	Alvarado		
196	Public Auto Wholesale	8220 Commercial Street	5521	Medium	Vehicle Dealers	Alvarado		
197	Quiznos Sub 10552	8555 Fletcher Parkway Suite 103	5812	Medium	Eating/Drinking Establishments	Alvarado		X
198	Raindance Roof Company, Inc.	8176 Commercial St.	1761	Medium	Other Contractor	Alvarado		
199	Ralph's Grocery Company 104	8800 Grossmont Blvd	5411	Medium	Eating/Drinking Establishments	Alvarado		X
200	Red Lobster G M R I, Inc. #504	8703 Murray Dr #504	5812	Medium	Eating/Drinking Establishments	Alvarado		X
201	Rita's Fine Food	8900 Grossmont Blvd Suite 5	5411	Medium	Eating/Drinking Establishments	Alvarado		X
202	Rob's Automotive	7589 El Cajon Blvd Unit E	7538	Medium	Auto Repair	University		X
203	Rosaritos Mexican Food	6062 Lake Murray Blvd Suite 204	5812	Medium	Eating/Drinking Establishments	Alvarado		X
204	Rosarito's Mexican Food #3	7941 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
205	Round Table Pizza	8032 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
206	Round Table Pizza Restaurant	5999 Severin Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
207	Rowe's La Mesa Pet Hotel	8126 Center Street	752	Medium	Animal Facilities	Alvarado		X
208	Rubio's Restaurants. Inc.	5500 Grossmont Center Dr, # D 22	5812	Medium	Eating/Drinking Establishments	Alvarado		X
209	Sam's Market	7587 University Avenue	5411	Medium	Eating/Drinking Establishments	University		X
210	Sanfilippo's Pizza	8141 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
211	Schlotzsky's	5500 Grossmont Center Dr 219	5812	Medium	Eating/Drinking Establishments	Alvarado		X
212	Sergio's Café	7380 Parkway Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
213	Shakey's Pizza La Mesa	5500 Grossmont Center Drive Suite 267	5812	Medium	Eating/Drinking Establishments	Alvarado		X
214	Shenanigan's Irish Pub	7030 University Avenue	5813	Medium	Eating/Drinking Establishments	University		X
215	Shirley's Kitchen, University	7118 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
216	Shizuoka Japanese Restaurant	9118 Fletcher Pky	5812	Medium	Eating/Drinking Establishments	Alvarado		X
217	Sid's Auto Body, Inc.	7473 El Cajon Blvd.	7532	Medium	Auto Paint/Body	University		X
218	Silvia's Windows	8176 Center Street Suite D	5039	Medium	Building Materials	Alvarado		
219	Simply Unforgettable	7668 El Cajon Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
220	Souplantation/Garden Fresh	9158 Fletcher Pky #3	5812	Medium	Eating/Drinking Establishments	Alvarado		X
221	Starbucks Coffee #5222	5500 Grossmont Center Drive	5499	Medium	Eating/Drinking Establishments	Alvarado		X
222	Starbucks Coffee #5953	8497 Fletcher Parkway	5499	Medium	Eating/Drinking Establishments	Alvarado		X
223	Starbucks Coffee #6876	5416 Lake Murray Blvd	5499	Medium	Eating/Drinking Establishments	Alvarado		X
224	Starbucks Coffee #8905	5020 Baltimore Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
225	Steak Daddy Corp.	7777 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
226	Street Smart Vehicle Protection/Premium	7633 El Cajon Blvd.	7549	Medium	Auto Repair	University		X
227	Submarina - La Mesa	5454 Grossmont Ctr. Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
228	Subway	8396 Parkway Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
229	Subway #32859	7900 El Cajon Blvd Suite L	5812	Medium	Eating/Drinking Establishments	Alvarado		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
230	Subway #32859	7900 El Cajon Blvd Suite L/M	5812	Medium	Eating/Drinking Establishments	Alvarado		X
231	Subway (Jaspal Enterprises)	7404 University Avenue	5812	Medium	Eating/Drinking Establishments	University		X
232	Subway Sandwiches	8142 La Mesa Blvd.	5812	Medium	Eating/Drinking Establishments	University		X
233	Subway Sandwiches, Lake Murray	5307 Lake Murray Blvd A	5812	Medium	Eating/Drinking Establishments	Alvarado		X
234	Summit Transmissions	7633 El Cajon Blvd. #208	7537	Medium	Auto Repair	University		X
235	Sun Valley Golf Course	5080 Memorial Drive	7992	Medium	Golf Courses/Parks	Alvarado		X
236	Talon Auto Adjusters	8163 Commercial Street	7389	Medium	Vehicle Dealers	Alvarado		
237	Tamarind Thai Restaurant	7970 University Avenue	5812	Medium	Eating/Drinking Establishments	University		X
238	Tasty Garden Buffet	7984 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
239	Thai Dragon House	6062 Lake Murray Blvd Suite 201	5812	Medium	Eating/Drinking Establishments	Alvarado		X
240	The Charcoal House	9566 Murray Dr	5812	Medium	Eating/Drinking Establishments	Alvarado		X
241	The Chickenest 95, Inc.	7200 Parkway Dr #111	5812	Medium	Eating/Drinking Establishments	Alvarado		X
242	The Chico Club	7366 El Cajon Blvd	5813	Medium	Eating/Drinking Establishments	Alvarado		X
243	The Coffee Merchant	5500 Grossmont Center Drive Ste 321	5499	Medium	Eating/Drinking Establishments	Alvarado		X
244	The Greek Gyros II	5500 Grossmont Ctr. Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
245	The Hot Pot	5525 Grossmont Center Drive	5812	Medium	Eating/Drinking Establishments	Alvarado		X
246	The Pet Hospital of La Mesa	5336 Jackson Dr.	742	Medium	Animal Facilities	Alvarado		X
247	The Truck and SUV Center	5301 Lake Murray Boulevard	5521	Medium	Vehicle Dealers	Alvarado		
248	The Yogurt Mill	8158 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
249	Thomas J. Taylor Construction	8189 Center St.	2434, 0782	Medium	Other Contractor	Alvarado		
250	Trader Joe's #24	5475 Grossmont Center Drive Suite A	5411	Medium	Eating/Drinking Establishments	Alvarado		X
251	Trattoria Tiramisu	8273 La Mesa Blvd.	5812	Medium	Eating/Drinking Establishments	University		X
252	Trolley Stop Deli	8150 La Mesa Blvd	5812	Medium	Eating/Drinking Establishments	University		X
253	University Animal Clinic	7134 University Ave.	742	Medium	Animal Facilities	University		X
254	VCA Grossmont Animal Hospital	8274 Parkway Drive	742	Medium	Animal Facilities	Alvarado		X
255	Villa's Mexican Food	5500 Grossmont Center Drive F C-9	5812	Medium	Eating/Drinking Establishments	Alvarado		X
256	Vine Ripe Market	8191 Fletcher Parkway	5411	Medium	Eating/Drinking Establishments	Alvarado		X
257	Vons Companies Inc #2093	8011 University Avenue	5411	Medium	Eating/Drinking Establishments	University		X
258	Vons Grocery Co #2137	5630 Lake Murray Blvd	5411	Medium	Eating/Drinking Establishments	Alvarado		X
259	West Coast Barbecue & Catering	6126 Lake Murray Blvd	5812	Medium	Eating/Drinking Establishments	Alvarado		X
260	Wheel & Deal, Inc.	7675 University Avenue	5521	Medium	Vehicle Dealers	University		
261	Wienerschnitzel #58	6949 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
262	Wongs Golden Palace, Inc.	7126 University Ave	5812	Medium	Eating/Drinking Establishments	University		X
263	Yogurt Express	6195 Lake Murray Blvd C	5812	Medium	Eating/Drinking Establishments	Alvarado		X
264	Yum Yum Donut Franchise #5228	7550 El Cajon Blvd	5461, 5812	Medium	Eating/Drinking Establishments	Alvarado		X
265	Zodiak Café	9158 Fletcher Parkway #3	5812	Medium	Eating/Drinking Establishments	Alvarado		X
266	10,000 R V	5500 Grossmont Center Drive	5561	Low	Vehicle Dealers	Alvarado		
267	7 Eleven Food Store 20884 D 2121	4253 Palm Avenue	5411	Low	Eating/Drinking Establishments	Spring Valley		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
268	70th Street Service Station	5151 70th St	5541	Low	Fueling	Alvarado		
269	A M E X Petroleum	8303 Parkway Drive	5541	Low	Fueling	Alvarado		
270	A-Aairco Air Conditioning	7227 University Avenue	1711	Low	Other Contractor	University		
271	Above & Beyond Carpet Care	7878 La Mesa Blvd	7217	Low	Carpet/Furniture Cleaning	University		
272	Ace Parking Management	5500 Grossmont Center Drive	7521	Low	Vehicle Parking/Storage	Alvarado		
273	Action R V, Inc.	8090 University Avenue	5561	Low	Vehicle Dealers	Alvarado		
274	Advance Medical Supply	7710 University Avenue	5047	Low	Wholesale/Storage/Warehousing	University		
275	Affordable Duplication Services	7840 El Cajon Blvd Suite 205	5065	Low	Wholesale/Storage/Warehousing	Alvarado		
276	Air Best Inc.	8760 La Mesa Blvd.	1711	Low	Other Contractor	Alvarado		
277	Al & EDS Autosound	5208 Jackson Dr. 117	7549	Low	Auto Repair	Alvarado		
278	All Lines Dealer Alds Inc.	7373 Mohawk St.	7549	Low	Auto Repair	Alvarado		
279	April's Mosaics	8341 Lemon Avenue Suite C	1743	Low	Masonry	Spring Valley		
280	Arco # 09578	9600 Murray Drive	5541	Low	Fueling	Alvarado		
281	Art Of Nature	8816 La Mesa Blvd	5193	Low	Wholesale/Storage/Warehousing	Alvarado		
282	Auto Center	8203 University Ave	7539	Low	Auto Repair	Alvarado		
283	Automobile Freight Forwarding	7590 El Cajon Blvd Suite H	4731	Low	Ground Transportation	Alvarado		
284	Autozone 2809	7791 El Cajon Boulevard	5531	Low	Auto Supplies	University		
285	Azure Construction, Inc.	7423 El Cajon Blvd	1799	Low	Other Contractor	University		
286	B F S Retail & Commercial	5577 Lake Murray Blvd	5531	Low	Auto Supplies	Alvarado		
287	Babies "R" Us	8150 Fletcher Parkway	5137	Low	Wholesale/Storage/Warehousing	Alvarado		
288	Bancroft Motors	8760 Campo Rd.	5521	Low	Vehicle Dealers	Spring Valley		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
289	Beck's Repair Shop	8838 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
290	Benintende And Son's Painting	8341 Lemon Avenue Suite C	1721	Low	Painting/Coating	Spring Valley		
291	Best Produce	6957 University Avenue	5141	Low	Wholesale Food	University		
292	Billiards Direct	8223 La Mesa Blvd	5091	Low	Wholesale/Storage/Warehousing	University		
293	Bill's Lock and Key	7368 El Cajon Boulevard	7699	Low	Equipment Repair	Alvarado		
294	Bob Stall Chevrolet	7631-7651 Alvarado Road	5599	Low	Vehicle Dealers	Alvarado		
295	Bond's Automotive	8418 La Mesa Blvd	7539	Low	Auto Repair	Spring Valley		
296	C & C Glass	8772 La Mesa Blvd	1793	Low	Other Contractor	Alvarado		
297	C & C Glass, Inc.	8712 La Mesa Boulevard	1793	Low	Other Contractor	Alvarado		
298	California Cars & Credit	8760 Campo Road	5521	Low	Vehicle Dealers	Spring Valley		
299	California Park R V Sales	7407 Alvarado Road	5561	Low	Vehicle Dealers	Alvarado		
300	Center Glass Co. #3	7853 El Cajon Blvd.	1793	Low	Other Contractor	Alvarado		
301	Centifonti	8365 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
302	Circle K Stores, Inc. # 8675	8899 La Mesa Blvd	5541	Low	Fueling	Alvarado		
303	Condoconversions.Com, Inc.	4817 Palm Avenue Suite I	1522	Low	Other Contractor	University		
304	Countywide Machine Tool Repair	8030 La Mesa Blvd Suite 314	1731	Low	Other Contractor	University		
305	Dave Wallace Roofing	8900 Grossmont Blvd Suite 3	1761	Low	Other Contractor	Alvarado		
306	Davis Framing, Inc.	8103 Commercial Street	1521	Low	Other Contractor	Alvarado		
307	De Albas Spring St.	4867 Spring St.	7539	Low	Auto Repair	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
308	Dennis Sherman Foreign Car Service	8620 La Mesa Boulevard	7538	Low	Auto Repair	Alvarado		
309	Denny's Restaurant #6488	4235 Spring St	5812	Low	Eating/Drinking Establishments	Spring Valley		
310	Dieter Fischer's Star Car Service	8699 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
311	Don Keating Service	8381 La Mesa Boulevard	7538	Low	Auto Repair	Spring Valley		
312	Don Keating Used Cars	8381 La Mesa Boulevard	5521	Low	Vehicle Dealers	Spring Valley		
313	Ducastel L L C	4350 Palm Avenue # 13	5065	Low	Wholesale/Storage/Warehousing	Spring Valley		
314	Earl W. Fite & Sons, Inc.	8878 La Mesa Blvd	1711	Low	Other Contractor	Alvarado		
315	El Guapo's	8350 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
316	Elite Trade Enterprise	8030 La Mesa Blvd #156	1799	Low	Other Contractor	University		
317	Emerald Oil Co.	5600 Baltimore Drive	5541	Low	Fueling	Alvarado		
318	Essential Flooring	8216 Parkway Drive	1752	Low	Other Contractor	Alvarado		
319	Euclid Motors	4969 Baltimore Dr.	5521	Low	Vehicle Dealers	Alvarado		
320	European Car Service	8855 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
321	Family Carpets & Drapes, Inc.	7111 University Avenue	1542	Low	Other Contractor	University		
322	Firestone Tire & Service Centers	8784 Grossmont Blvd	7534	Low	Auto Repair	Alvarado		
323	Forever Memories	8801 La Mesa Blvd	7359	Low	Vehicle/Equipment Rental	Alvarado		
324	Fox Auto Sales	7480 El Cajon Blvd	5521	Low	Vehicle Dealers	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
325	German Auto Repair	4654 Nebo Dr	7539	Low	Auto Repair	Spring Valley		
326	Gomez Handyman Services	7584 Ohio Place	1521	Low	Other Contractor	University		
327	Grossmont Drain Cleaning	8949 Alpine Avenue	1711	Low	Other Contractor	Spring Valley		
328	H & J Contracting, Inc.	8820 La Mesa Blvd	1799	Low	Other Contractor	Alvarado		
329	Hanger 94, Inc	5270 Jackson Drive	5137	Low	Wholesale/Storage/Warehousing	Alvarado		
330	Harloff Automotive	7445 University Avenue	5531, 7538	Low	Auto Supplies	University		
331	Harold's Automotive	8202 Parkway Dr	7538	Low	Auto Repair	Alvarado		
332	Hearx	8066-68 La Mesa Blvd	3845	Low	Manufacturing, Electronics	University		
333	Helix Pet Hospital	4223 Palm Ave.	742	Low	Animal Facilities	Spring Valley		
334	Henry's Marketplace	4630 Palm Avenue	5499	Low	Eating/Drinking Establishments	Spring Valley		
335	Holt Industrial Services	5638 Lake Murray Blvd #182	7699	Low	Equipment Repair	Alvarado		
336	Hunters Construction Co.	7374 El Cajon Blvd.	1522	Low	Other Contractor	Alvarado		
337	I Deal Door & Window Company	7859 El Cajon Blvd.	1751	Low	Other Contractor	Alvarado		
338	Ideal Door & Window Co.	7859 El Cajon Blvd	1793	Low	Other Contractor	Alvarado		
339	Innova Energy Baltimore Shell	5261 Baltimore Drive	5541	Low	Fueling	Alvarado		
340	Intelligent Solutions	8374 Allison Avenue	5045	Low	Wholesale/Storage/Warehousing	University		
341	J. W. Smart Construction	8130 La Mesa Blvd 174	1522	Low	Other Contractor	University		
342	J.B. Auto & Truck Sales	4999 Baltimore Drive	5521	Low	Vehicle Dealers	Alvarado		
343	Jackson and Blane Heating and A/C	7576 University Avenue	1711	Low	Other Contractor	University		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
344	Jackson Pendo Development Company	8530 La Mesa Blvd Suite 306	1521	Low	Other Contractor	Alvarado		
345	Jiffy Lube #831	5540 Lake Murray Blvd	7549	Low	Auto Repair	Alvarado		
346	Joe N Andy's Hole In The Wall	8344 La Mesa Blvd	5813	Low	Eating/Drinking Establishments	Spring Valley		
347	Johnny B'S Bar & Grill	8393 La Mesa Blvd	5813	Low	Eating/Drinking Establishments	Spring Valley		
348	K 1 Tire	7159 University Avenue	5531	Low	Auto Supplies	University		
349	Ken Gwin Landscape, Inc	4350 Palm Avenue Suite 6	782	Low	Landscaping	Spring Valley		
350	Kennedy Electric	5884 Samuel Street	1742	Low	Painting/Coating	Alvarado		
351	Kevin Flynn	6226 Primrose Drive	5084	Low	Wholesale/Storage/Warehousing	Alvarado		
352	Kragen CSK Auto, Inc. #789	5350 Jackson Dr.	5531	Low	Auto Supplies	Alvarado		
353	La Mesa Auto Care	8692 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
354	La Mesa Back Comfort	8760 La Mesa Blvd, Ste A	2514	Low	Manufacturing, Wood/Furniture	Alvarado		
355	La Mesa Car Wash	5322 Jackson Dr	5541, 7542	Low	Fueling	Alvarado		
356	La Mesa Lumber	8255 University Ave	5211	Low	Building Materials	Alvarado		
357	La Mesa Paint & Body	8170 Parkway Dr	7539	Low	Auto Repair	Alvarado		
358	La Mesa Texaco/Chula Vista Entertainment	4925 Spring St	5541	Low	Fueling	Alvarado		
359	La Torta Mexican Café/Deli	8350 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
360	Lake Murray Blvd #1 Exxon	6085 Lake Murray Blvd	5541	Low	Fueling	Alvarado		
361	Lakeside Motors	8090 University Avenue	5521	Low	Vehicle Dealers	Alvarado		
362	Lars Construction Co	4703 Spring Street	1799	Low	Other Contractor	University		
363	M J Medical, Incorporated	5310 Baltimore Drive	5047	Low	Wholesale/Storage/Warehousing	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
364	McNeill Development Corp	8419 La Mesa Blvd Suite C	1542	Low	Other Contractor	Spring Valley		
365	Medical Arts Pharmacy Inc.	8851 Center Drive Suite 110	2834	Low	Manufacturing, Biotech/Pharmaceutical	Alvarado		
366	Mercedesparts.Com Inc	6035 Lake Murray Blvd	5531	Low	Auto Supplies	Alvarado		
367	Microfiber Solutions	7484 University Avenue Suite 230	5169	Low	Wholesale/Storage/Warehousing	University		
368	Nicks Autos Group	4949 Baltimore Drive	5521	Low	Vehicle Dealers	Alvarado		
369	P A W Service Center	8230 Commercial Street	7538	Low	Auto Repair	Alvarado		
370	P L M & Associates, Inc.	8115 Commercial Street	1799	Low	Other Contractor	Alvarado		
371	Pacific Homeworks	7200 Parkway Drive, 105	1751	Low	Other Contractor	Alvarado		
372	Palm Springs Market	4301 Palm Avenue	5411	Low	Eating/Drinking Establishments	Spring Valley		
373	Para Quality Construction Inc	7853 El Cajon Blvd	1742	Low	Painting/Coating	Alvarado		
374	Paradise Auto Sales, L L C	7640 El Cajon Blvd	5521	Low	Vehicle Dealers	Alvarado		
375	Peanuts Auto Repair	5387 Lake Murray Blvd	7539	Low	Auto Repair	Alvarado		
376	Performance Choppers	4999 Baltimore Dr., Suite 1	5571	Low	Vehicle Dealers	Alvarado		
377	Performance Motoring	8620 La Mesa Blvd.	5521	Low	Vehicle Dealers	Alvarado		
378	Pete's Place	8330 La Mesa Blvd	5813	Low	Eating/Drinking Establishments	Spring Valley		
379	Pham Thu Trang	7140 University Avenue Suite D	5087	Low	Wholesale/Storage/Warehousing	University		
380	Phil J. Maynard	8653 Washington Avenue	1521	Low	Other Contractor	Alvarado		
381	Pinos Mexican Food	4233 Spring Street	5812	Low	Eating/Drinking Establishments	Spring Valley		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
382	Por Favor Restaurant	8302 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
383	Postal Annex	8030 La Mesa Blvd	7389	Low	Pool/Fountain Cleaning	University		
384	R D E Company, Inc.	4730 Palm Avenue	1742	Low	Painting/Coating	Spring Valley		
385	R L T Sims Enterprises Inc	5335 Jackson Drive	5521	Low	Vehicle Dealers	Alvarado		
386	Rancho Mobil #2	5450 Jackson Dr	5541	Low	Fueling	Alvarado		
387	Residential Heating & AC	7574 University Avenue	1711	Low	Other Contractor	University		
388	Richard Communications	8262 University Avenue Suite A	3651	Low	Manufacturing, Electronics	Alvarado		
389	Riha Construction Company	8173 Commercial Street	1542	Low	Other Contractor	Alvarado		
390	Road Pros Tire & Lube	7151 University Ave.	5531, 7534	Low	Auto Supplies	University		
391	Ron's Automotive	4951 Clearview Way	7538	Low	Auto Repair	Alvarado		
392	Roy Johnson Contractor	7830 La Mesa Blvd	1521	Low	Other Contractor	University		
393	San Diego Adaptive Sports Fund	8255 University Avenue	7521	Low	Vehicle Parking/Storage	Alvarado		
394	San Diego R V	7407 Alvarado Road	5561	Low	Vehicle Dealers	Alvarado		
395	San Diego Shirt Works	7729 University Avenue	2396	Low	Manufacturing, Fabric/Clothes	University		
396	Shell Gas Station	9090 Dallas St	5541	Low	Fueling	Alvarado		
397	Shower Walls of San Diego	6063 Lake Murray Blvd	1521	Low	Other Contractor	Alvarado		
398	Smogs R Us / California Inspection Station	9089 Dallas St.	7549	Low	Auto Repair	Alvarado		
399	Software Systems Associates	7484 University Avenue Suite 320	5045	Low	Wholesale/Storage/Warehousing	University		
400	Sonus- U S A, Inc.	5565 Grossmont Center Drive 3-153	5047	Low	Wholesale/Storage/Warehousing	Alvarado		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
401	Southern California Discount Tire	8867 Grossmont Blvd.	7534	Low	Auto Repair	Alvarado		
402	Sparky's Transmissions	8861 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
403	Spectrum Audio	8841 La Mesa Blvd Suite A	7359	Low	Vehicle/Equipment Rental	Alvarado		
404	Speedy Smog Of California	7482 El Cajon Blvd	7538	Low	Auto Repair	Alvarado		
405	Spring Chevron	8200 University Avenue	5541	Low	Fueling	Alvarado		
406	Steves Bancroft Motors	8760 Campo Road Suite A	5521	Low	Vehicle Dealers	Spring Valley		
407	Steve's Delivery Service	9320 Earl Street Unit 8	4215	Low	Ground Transportation	Alvarado		
408	Street Smart Auto Sound	7482 El Cajon Blvd	7549	Low	Auto Repair	Alvarado		
409	Sunny Donuts	4199 Spring St	5812	Low	Eating/Drinking Establishments	Spring Valley		
410	Sunset Glazing, Inc.	8834 La Mesa Blvd.	1793	Low	Other Contractor	Alvarado		
411	Sunshine Carpet And Upholstery	9145 Dillon Drive	7217	Low	Carpet/Furniture Cleaning	Spring Valley		
412	T J'S Auto Repair	8090 University Ave Suite B	7532	Low	Auto Paint/Body	Alvarado		
413	The Car Shop	4999 Baltimore Dr	7532	Low	Auto Paint/Body	Alvarado		
414	The Dashboard Store/Expert Window Tinting	7147 University Avenue	5531	Low	Auto Supplies	University		
415	The Rush Group	7633 El Cajon Blvd, Suite 210 B	5531	Low	Auto Supplies	University		
416	The Village Garden Restaurant &	8384 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
417	The Vine At The Village Garden	8384 La Mesa Blvd.	5812	Low	Eating/Drinking Establishments	Spring Valley		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
418	Timberwolf Construction, Inc.	7323 El Cajon Blvd	1521	Low	Other Contractor	University		
419	Translatin Productions	5706 Baltimore Drive Suite 345	3911	Low	Manufacturing, Fabricated Metal	Alvarado		
420	Trotter Door & Trim	8186 Commercial St.	1521	Low	Other Contractor	Alvarado		
421	Tune Craft, Inc.	8802 La Mesa Blvd	7539	Low	Auto Repair	Alvarado		
422	University Air Conditioning &	8203 University Avenue	1711	Low	Other Contractor	Alvarado		
423	V S P I	5500 Grossmont Center Drive	5521	Low	Vehicle Dealers	Alvarado		
424	Valvoline Instant Oil Change	7981 El Cajon Blvd	7539	Low	Auto Repair	Alvarado		
425	Village Garden Restaurant & Bakery	8384 La Mesa Blvd	5812	Low	Eating/Drinking Establishments	Spring Valley		
426	W E Bedding Corp	5200 Jackson Drive	5021	Low	Wholesale/Storage/Warehousing	Alvarado		
427	West Coast D B I, Inc	4240 Francis Way	1522	Low	Other Contractor	University		
428	Worldwide Auto Parts Inc.	9089 Dallas St.	5531	Low	Auto Supplies	Alvarado		
429	Z-Coil Pain Relief Footwear	8803 La Mesa Blvd	5139	Low	Wholesale/Storage/Warehousing	Alvarado		
430	Abundant Life Landscape	5484 Wellesley Street E	782	Medium	Landscaping	Alvarado	X	X
431	All Star Powerwash	3123 Reservoir Drive	7349	Medium	Power Washing		X	
432	Al's T L C Landscape	9255 Magnolia Avenue Space 240	782	Medium	Landscaping		X	X
433	Aqua Pool Plastering	1137 Naranca	7389	Medium	Pool/Fountain Cleaning		X	
434	Aristocrat Landscape	PO Box 15601	782	Medium	Landscaping		X	X
435	Asplundh Tree Expert	708 Blair Mill Road	783	Medium	Landscaping		X	X
436	Belle Saveur	7040 Neri Drive	5812	Medium	Eating/Drinking Establishments	University	X	X
437	Blue Dolphin	4213 Kansas St. #1	7542	Medium	Vehicle Washing		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
438	Bonded Carpet & Drapery Service	7831 Ostrow Street	7217	Medium	Carpet/Furniture Cleaning		X	
439	Bostrom Landscaping	Not Listed	782	Medium	Landscaping		X	X
440	Bright Side Detail	10325 Baron Drive	7542	Medium	Vehicle Washing		X	
441	Budget Lawn Maintenance	9204 Sombria Road	782	Medium	Landscaping		X	X
442	California Scenic Landscape	Not Listed	782	Medium	Landscaping		X	X
443	Cecilio Ramirez Landscaping	328 S 30th Street	782	Medium	Landscaping		X	X
444	Charlies Carpet Cleaning	10707 Jamacha Blvd #182	7217	Medium	Carpet/Furniture Cleaning		X	
445	Classic Image Mobile Detailing	Not Listed	7542	Medium	Vehicle Washing		X	
446	Coastal Chem Dry	4901 Morena Blvd Suite 316	7217	Medium	Carpet/Furniture Cleaning		X	
447	Coles Carpets	1170 W Morena Blvd	7217	Medium	Carpet/Furniture Cleaning		X	
448	Complete Car Care Pros	2703 Rhoades Road	7542	Medium	Vehicle Washing		X	
449	Considerate Tree Care, Inc	PO Box 2595	783	Medium	Landscaping		X	X
450	Contreras Landscape	856 Morrison Street	782	Medium	Landscaping		X	X
451	Cortez Tree Service	2527 Guajowe Lake Road	783	Medium	Landscaping		X	X
452	Crossman Landscape & Maintenance	8617 Cuyamaca Street	781	Medium	Landscaping		X	X
453	Crown Point Clippers, Inc.	PO Box 177108	783	Medium	Landscaping		X	X
454	Crystal Pool Service	1109 N 2nd Street	7389	Medium	Pool/Fountain Cleaning		X	
455	Custom Landscaping And Irrigation	9461 Grossmont Summit Drive Suite A	782	Medium	Landscaping	Alvarado	X	X
456	Dan's Maintenance	8901 Zencaro Avenue	782	Medium	Landscaping		X	X
457	Deep Cleaning And Restoration	Not Listed	7217	Medium	Carpet/Furniture Cleaning		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
458	Detailing Concepts by Laura	6152 Horton Drive	7542	Medium	Vehicle Washing	Alvarado	X	
459	Detailing Concepts By Laura	Not Listed	7549	Medium	Auto Repair		X	X
460	Diego Puga Vargas	3828 Cherokee Street #5	782	Medium	Landscaping		X	X
461	Doan's Landscape	9550 Mavin Drive	782	Medium	Landscaping		X	X
462	Eagle Landscape Maintenance	2924 Poinsettia Drive	782	Medium	Landscaping		X	X
463	Emilio	Not Listed	782	Medium	Landscaping		X	X
464	Environmental Landscape Engineers	9210 Grossmont Blvd	781	Medium	Landscaping		X	X
465	Estrada Land Planning, Inc.	755 Broadway Circle Suite 300	781	Medium	Landscaping		X	X
466	Exquisite Mobile Detailing	Not Listed	7542	Medium	Vehicle Washing		X	
467	Finn Pool & Spa	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
468	Fitzgerald Carpet & Upholstery	5500 Grossmont Center Drive 111	7217	Medium	Carpet/Furniture Cleaning	Alvarado	X	
469	Focus Landscape	Not Listed	782	Medium	Landscaping		X	X
470	Foothills Pool Service	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
471	G.G. Landscaping, Inc.	9737 Jeremy Street	782	Medium	Landscaping		X	X
472	Garden Design	Not Listed	782	Medium	Landscaping		X	X
473	Garden Environmentals	9415 Los Coches Road	781	Medium	Landscaping		X	X
474	Gary F. Hoyt Landscape	13625 Adrian Street	781	Medium	Landscaping		X	X
475	Goins Landscaping	Not Listed	782	Medium	Landscaping		X	X
476	Grass Doctor Landscape Inc	9600 Campo Road Suite C	781	Medium	Landscaping		X	X
477	Halsey Design Group, Inc.	9340 Fuerte Dr., Suite 303	781	Medium	Landscaping	Alvarado	X	X
478	Happy Landscaping	Not Listed	782	Medium	Landscaping		X	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
479	Irriscape Construction, Inc.	20182 Carancho Road	781	Medium	Landscaping		X	X
480	J C Landscaping & Maintenance	Not Listed	782	Medium	Landscaping		X	X
481	JC Brooks Construction	8383 Center Drive Suite A	7349	Medium	Power Washing	Alvarado	X	
482	Jerry Frazee	Not Listed	7542	Medium	Vehicle Washing		X	
483	John Guevera Clear Water Pool	3533 Harris Street	7389	Medium	Pool/Fountain Cleaning	Lemon Grove	X	
484	Justo Huezo Landscaping	1824 Teton Pass Street	782	Medium	Landscaping		X	X
485	Kar Tek	2034 Hidden Crest Drive	7542	Medium	Vehicle Washing		X	
486	Ken Bojok Tree Service Inc.	12443 Gay Rio Drive	782	Medium	Landscaping		X	X
487	Ken Myers Pool Service & Repair	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
488	Knott's Pest Control, Inc.	5141 Guild St.	7342	Medium	Pest Control	Alvarado	X	
489	Kostos Tree Service, Inc.	12810 Wildcat Canyon Road	783	Medium	Landscaping		X	X
490	La Bahn's Landscaping	5000 Thorne Drive Suite B	782	Medium	Landscaping	University	X	X
491	Lee Landscaping	4511 Cannington Drive	782	Medium	Landscaping		X	X
492	Linda Clark Roseworks	10656 Fuerte Drive	782	Medium	Landscaping		X	X
493	McClain, Inc.	1272 Tuttle Lane	783	Medium	Landscaping		X	X
494	Mikes Mobile Auto Detailing	Not Listed	7542	Medium	Vehicle Washing		X	
495	Mike's Mobile Detailing	Not Listed	7542	Medium	Vehicle Washing		X	
496	Mo Mo's Trees	Not Listed	783	Medium	Landscaping		X	X
497	Mobile Airbag Installation	Not Listed	7549	Medium	Auto Repair		X	X
498	Mow Blow N Go	Not Listed	782	Medium	Landscaping		X	X
499	Mr. Crabgrass Santos Landscape	10426 Park Avenue	782	Medium	Landscaping		X	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
500	My Carpet Guy	9074 Prospect Avenue	7217	Medium	Carpet/Furniture Cleaning		X	
501	Nissho Of California, Inc.	1902 S Santa Fe Avenue	781	Medium	Landscaping		X	X
502	Ocean Blue Pool Service	13983 Chicarita Creek Road	7389	Medium	Pool/Fountain Cleaning		X	
503	Olympic Carpet Cleaning	538 Front Street	7217	Medium	Carpet/Furniture Cleaning		X	
504	Orozco's Tree Trimming	138 Richfield Avenue	781	Medium	Landscaping		X	X
505	Oscar & Sons Co.	1512 Altadena Avenue	781	Medium	Landscaping		X	X
506	Pacific Edge Landscape Maintenance	Not Listed	782	Medium	Landscaping		X	X
507	Pacific Green Landscape, Inc.	8834 Winter Gardens Blvd	782	Medium	Landscaping		X	X
508	Pacific Sun Pool N Spa Center	8550 Production Avenue Suite B	7389	Medium	Pool/Fountain Cleaning		X	
509	Paradise Power Washing	Not Listed	7349	Medium	Power Washing		X	
510	Patons Pond Service	5308 Camino Playa Malaga	7389	Medium	Pool/Fountain Cleaning		X	
511	Plant House Landscaping	1633 Fuerte Knolls Lane	781	Medium	Landscaping		X	X
512	Pool Rite Service	1129 Whitsett Drive	7389	Medium	Pool/Fountain Cleaning		X	
513	R J C Window Cleaning Company	1642 Folkestone Street	7349	Medium	Power Washing		X	
514	Rafael Gardening Landscape Svc	8843 Cottonwood Avenue	782	Medium	Landscaping		X	X
515	Rightway Landscaping	898 Galopago Street	782	Medium	Landscaping		X	X
516	Rods & Customs Unlimited	Not Listed	7549	Medium	Auto Repair		X	X
517	Rogelio Valdez Gardening	2655 1/2 Broadway, Ste A	782	Medium	Landscaping		X	X
518	Rojas Garden Services	2858 Beatrice Street	781	Medium	Landscaping		X	X
519	Rosendo's Pool Service	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
520	Ruiz Tree Service	2016 E Avenue	782	Medium	Landscaping		X	X
521	San Diego Erosion Control	6920 Miramar Road Suite 303	781	Medium	Landscaping		X	X
522	Shawn Hillman	Not Listed	7549	Medium	Auto Repair		X	X
523	Spurlock Poirier Landscape	2122 Hancock Street	781	Medium	Landscaping		X	X
524	Stanley Steemer Carpet Cleaners	9655 Via Excelencia	7217	Medium	Carpet/Furniture Cleaning		X	
525	Steve Wolff And Associates, Inc.	9602 Santiago Blvd	782	Medium	Landscaping		X	X
526	Superior Carpet Care	Not Listed	7217	Medium	Carpet/Furniture Cleaning		X	
527	Swains Mobile Auto Detailing	11988 Via Granero	7542	Medium	Vehicle Washing		X	
528	Tates Mobile Detailing	5500 Grossmont Center Suite 213	7542	Medium	Vehicle Washing	Alvarado	X	
529	The Davey Tree Expert Company	6914 Mission Gorge Road	783	Medium	Landscaping		X	X
530	The Water's Edge Pool & Spa	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
531	Tony Lawrence Care (T L C)	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
532	Torresdey Landscaping	Not Listed	782	Medium	Landscaping		X	X
533	Triton Power Clean	1930 Quidort Ct	7349	Medium	Power Washing		X	
534	Trujillo Auto Detail	208 Tremont Street	7542	Medium	Vehicle Washing		X	
535	Truong Gardener	2960 Murray Ridge Road	782	Medium	Landscaping		X	X
536	Villa Pool & Spa	Not Listed	7389	Medium	Pool/Fountain Cleaning		X	
537	Vision Apartment Landscape &	Not Listed	782	Medium	Landscaping		X	X
538	Warrens Carpet Cleaning Service	7343 Ronson Road Suite S	7217	Medium	Carpet/Furniture Cleaning		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
539	Water Tech Pool Service	1533 Greenfield Drive	7389	Medium	Pool/Fountain Cleaning		X	
540	West Coast Arborists, Inc	2200 E Via Burton Street	781	Medium	Landscaping		X	X
541	Western Tree Service	815 Telegraph Canyon Road 815	783	Medium	Landscaping		X	X
542	Weststar Landscape Services	3553 Harris Street	782	Medium	Landscaping		X	X
543	Wins Pools	13227 Idyl Drive	7389	Medium	Pool/Fountain Cleaning		X	
544	Wittmayer Landscape Maintenance	1400 Country Crest Drive	782	Medium	Landscaping		X	X
545	Yard Man	Not Listed	782	Medium	Landscaping		X	X
546	1 800 Anytyme	1410 S Santa Fe	1731	Low	Other Contractor		X	
547	1st Choice Signs	610 Rock Springs Road	1731	Low	Other Contractor		X	
548	A & P Plumbing	6940 Schilling Avenue	1711	Low	Other Contractor		X	
549	A & S Construction	4130 Bancroft Drive	1521	Low	Other Contractor	Spring Valley	X	
550	A C S Construction, L P	1235 W Collins Avenue	1521	Low	Other Contractor		X	
551	A D S Environmental Services	4820 Mercury Street Suite C	1799	Low	Other Contractor		X	
552	A Hardwood Floor Co.	12025 Lemon Crest Drive	1752	Low	Other Contractor		X	
553	A M G Demolition & Environmental	1102 Fleetridge Drive	1795	Low	Other Contractor		X	
554	A M S Paving, Inc.	10400 Banana Avenue	1611	Low	Cement Mixing/Cutting		X	
555	A Michael Mallow Const	8629 Via Del Luz Drive	1521	Low	Other Contractor		X	
556	A O Reed & Company	4777 Ruffner St	1799	Low	Other Contractor		X	
557	A P Southwest, L L C	5002 S Ash Avenue	1521	Low	Other Contractor		X	
558	A R B, Inc.	26000 Commercentre Drive	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
559	A R C Roofing	451 Marshall Avenue	1761	Low	Other Contractor		X	
560	A S C Builders	5190 Rebel Road	1521	Low	Other Contractor		X	
561	A S I Hastings, Inc.	1250 Greenfield Drive	1711	Low	Other Contractor		X	
562	A To Z Plumbing, Inc.	7811 Mission Gorge Road Suite L	1711	Low	Other Contractor		X	
563	A&D Steel, Inc.	10520 Kenney Street	1791	Low	Other Contractor		X	
564	A-1 Budget Roofing, Inc.	1980 Summit Drive	1761	Low	Other Contractor		X	
565	A-1 Lawns	4536 Nebo Drive	782	Low	Landscaping	Spring Valley	X	
566	Aardvark Ant & Pest Control Inc	2514 Jamacha Road #502-40	7342	Low	Pest Control		X	
567	Absolutely Electric	3146 L Street	1731	Low	Other Contractor		X	
568	Access Professional Systems, Inc.	8250 Vickers Street Suite E	1522	Low	Other Contractor		X	
569	Accu Air Inc.	1318 Bermuda View	1799	Low	Other Contractor		X	
570	Action Air Conditioning & Heating	2750 Santa Fe Avenue	1799	Low	Other Contractor		X	
571	Adolfson And Peterson	5002 S Ash Avenue	1521	Low	Other Contractor		X	
572	Adrian's Custom Woodworks	5925 Warren Place	1751	Low	Other Contractor	Alvarado	X	
573	Advanced Electronic Solutions	1830 John Towers Avenue	1731	Low	Other Contractor		X	
574	Advanced Engery Insulation, Inc.	14368 Olde Highway 80 Suite A	1521	Low	Other Contractor		X	
575	Affordable Raingutters	1402 N Magnolia Avenue	1761	Low	Other Contractor		X	
576	Affordable Water Heaters And	24707 San Fernando Road	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
577	Air Doc Inc	1444 Pioneer Way, Ste 8	1711	Low	Other Contractor		X	
578	Air Plus Mechanical, Inc	9191 Chesapeake Drive	1799	Low	Other Contractor		X	
579	Air Systems Mechanical, Inc	6101 Jackson Drive	1711	Low	Other Contractor	Alvarado	X	
580	Air Tek	9424 Chesapeake Drive Suite 1302	1711	Low	Other Contractor		X	
581	Akenson Electric	8843 Prospect Avenue	1731	Low	Other Contractor		X	
582	Al T. Sejut Electrical	4060 Vista Calaveras	1731	Low	Other Contractor		X	
583	Alarms Unlimited, Inc.	4584 Park Blvd	1799	Low	Other Contractor		X	
584	Alcal Arcade Contracting, Inc.	31164 Huntwood Avenue	1761	Low	Other Contractor		X	
585	Alcoa Signage	9535 Arjons Dr E	1799	Low	Other Contractor		X	
586	Alessio Heating & Air, Inc	740 Metcalf Street 14	1711	Low	Other Contractor		X	
587	All American Mechanical	431 Park Industrial Drive	1711	Low	Other Contractor		X	
588	All American Sewer & Drain	PO Box 1482	7699	Low	Equipment Repair		X	X
589	All Drains Plumbing	7541 Girard Avenue #533	1623	Low	Other Contractor		X	
590	All Pro Air	1265 Avocado Blvd Suite 104-148	1711	Low	Other Contractor		X	
591	All Star Water Heaters	30300 Puerto Vallarta	1711	Low	Other Contractor		X	
592	Aloha City Pest Control, Inc.	8100 Broadway Suite C	7342	Low	Pest Control		X	
593	American Asphalt & Concrete Inc	9011 Memory Lane	1611	Low	Cement Mixing/Cutting		X	
594	American Asphalt South, Inc	14436 Santa Ana Avenue	1611	Low	Cement Mixing/Cutting		X	
595	American Automatic Fire	9510 Pathway Street B	1799	Low	Other Contractor		X	
596	American Fence Co, Inc.	9944 Prospect Ave	1799	Low	Other Contractor		X	
597	American Fireplaces, Inc.	9938 Mesa Rim Road	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
598	American Leak Detection	656 Metcalf Street	1799	Low	Other Contractor		X	
599	American Mechanical Services Of Ca	2664 Vista Pacific Drive	1799	Low	Other Contractor		X	
600	American Pest Control	8100 Broadway Suite E	7342	Low	Pest Control		X	
601	American Residential Services Of	6162 Nancy Ridge Drive Suite 100	1799	Low	Other Contractor		X	
602	American Residential Services,L L	9895 Olson Drive	1711	Low	Other Contractor		X	
603	American Technologies	8444 Miralani Drive	1522	Low	Other Contractor		X	
604	Ampam Parks Mechanical	1060 N Wilmington Blvd.	1711	Low	Other Contractor		X	
605	Ampolos Construction	4979 Paguera Street	1522	Low	Other Contractor		X	
606	Amtech Lighting Service	13350 Gregg Street	1611	Low	Cement Mixing/Cutting		X	
607	Anderson Drilling	10303 Channel Road	1781	Low	Other Contractor		X	
608	Anderson Piping Contractors, Inc.	339 Cypress Lane	1711	Low	Other Contractor		X	
609	Andrade & Company	2123 Vuelta Court	1721	Low	Painting/Coating		X	
610	Angus Asphalt Inc	9959 Prospect Avenue	1611	Low	Cement Mixing/Cutting		X	
611	Anthony & Son Painting	4175 Avocado Blvd	1721	Low	Painting/Coating		X	
612	Antimite	4017 42nd Street	1521	Low	Other Contractor		X	
613	Any Hour Septic Service	10119 Prince Charming Lane	7699	Low	Equipment Repair		X	X
614	Apex Lighting & Electric	1939 Friendship Drive, Ste A	1731	Low	Other Contractor		X	
615	Applied Waterproofing Technology	3562 Grove Street	1799	Low	Other Contractor		X	
616	Armando Jara Almanza	1461 Remembrance Drive	1542	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
617	Arrow Swimming Pool Construction	15525 Old Hwy 80	1799	Low	Other Contractor		X	
618	Asaro Construction Co.	6924 Hyde Park Drive 214	1542	Low	Other Contractor		X	
619	Aspen Cooling & Heating, Inc.	3720 Oceanic Way Suite 207	1711	Low	Other Contractor		X	
620	Astra Flooring Company	3402 Kurtz St	1752	Low	Other Contractor		X	
621	Astro Mechanical Contractors, Inc.	603 S Marshall Avenue	1521	Low	Other Contractor		X	
622	Atlantis Pools And Spas	1106 Leonard Avenue	1799	Low	Other Contractor		X	
623	Atlas Fence Company	1211 32nd Street Suite S	1799	Low	Other Contractor		X	
624	Atlas Footing Repair Inc	1136 Greenfield Drive	1799	Low	Other Contractor		X	
625	Atlas Termite Co	25 2nd Avenue	7342	Low	Pest Control		X	
626	Avalanche Mechanical	5575 Magnatron Blvd Suite C	1711	Low	Other Contractor		X	
627	Award Roofing Services	8731 Winter Gardens Blvd	1761	Low	Other Contractor		X	
628	Axium Electric	6042 Carol Street	1731	Low	Other Contractor		X	
629	Ayala Boring, Inc.	10150 Poplar Avenue	1799	Low	Other Contractor		X	
630	Aztec Landscaping, Inc.	7980 Lemon Grove Way	1521	Low	Other Contractor		X	
631	B & J Jackson-Stone Enterprises,	345 Vernon Way	1741	Low	Masonry		X	
632	B & W Precast Construction, Inc.	2511 Harmony Grove Road	1623	Low	Other Contractor		X	
633	B A E Co Builder	Not Listed	1521	Low	Other Contractor		X	
634	B B C Construction	Not Listed	1521	Low	Other Contractor		X	
635	B D R Communications, Inc.	1944 Kellogg Avenue	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
636	B E Kaylor Restoration Inc.	4820 Mercury Street Suite D	1522	Low	Other Contractor		X	
637	B E T Construction	Not Listed	1742	Low	Painting/Coating		X	
638	B T Construction	5711 Lancaster Drive	1521	Low	Other Contractor		X	
639	B&B Acoustics, Inc.	12115 Lakeside Avenue	1742	Low	Painting/Coating		X	
640	B. O' Brien Electric Service	13655 Highway 8 Business 52	1799	Low	Other Contractor		X	
641	Banker Insulation Of Ca, Inc.	2357 Vineyard Avenue	1742	Low	Painting/Coating		X	
642	Banner Builders Inc	1530 Jamacha Road Suite P	1521	Low	Other Contractor		X	
643	Barner Electric	9435 Wheatlands Court Suite K	1731	Low	Other Contractor		X	
644	Barratt American Inc.	5950 Priestly Drive	1521	Low	Other Contractor		X	
645	Basile Construction Inc	7840 Dunbrook Road	1623	Low	Other Contractor		X	
646	Bath Co. Shower Door	613 W Main Street	1799	Low	Other Contractor		X	
647	Bauer Cabling Solutions, Inc.	1027 S Claremont Street	1623	Low	Other Contractor		X	
648	Bay City Electric Works Inc.	12208 Industry Road	1799	Low	Other Contractor		X	
649	Bay Sheet Metal, Inc	1263 Greenfield Drive	1761	Low	Other Contractor		X	
650	Beach Cities Landscape, Inc.	8911 Olive Drive	1799	Low	Other Contractor		X	
651	Beck Electric	3707 5th Avenue Suite 556	1731	Low	Other Contractor		X	
652	Belfor Property Restoration	11545 Sorrento Valley Road Suite 308	1799	Low	Other Contractor		X	
653	Ben Martindill	Not Listed	1751	Low	Other Contractor		X	
654	Benchmark Landscape, Inc.	12575 Stowe Drive	1799	Low	Other Contractor		X	
655	Bernard's Plumbing, Inc.	1884 Powell Drive	1711	Low	Other Contractor		X	
656	Besek Electric	525 F Street	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
657	Best Interiors, Inc.	2100 E Via Burton	1521	Low	Other Contractor		X	
658	Best Rain Gutters	550 Ramon Avenue	1761	Low	Other Contractor		X	
659	Best Value Glass, Inc.	1517 N Cuyamaca Street	1793	Low	Other Contractor		X	
660	Betz Concrete, Inc.	2301 Vineyard Avenue	1771	Low	Cement Mixing/Cutting		X	
661	Bill Hutson Installations & Repair	622 Margarita Avenue	1522	Low	Other Contractor		X	
662	Bill's Construction Assistance	2222 Escondido Avenue	1521	Low	Other Contractor		X	
663	Bill's Home Repair	5401 Pennsylvania Lane	1521	Low	Other Contractor		X	
664	Blaine Tech Services	20735 Belshaw Avenue	1781	Low	Other Contractor		X	
665	Blasingame Custom Building	81 Matscher Street	1521	Low	Other Contractor		X	
666	Bledsoe Masonry, Inc.	4680 Felspar Street	1741	Low	Masonry		X	
667	Blue Diamond Plumbing And	16382 Pauhaska Road	1711	Low	Other Contractor		X	
668	Blue Fountain Pools	6136 Mission Gorge Road #117	1799	Low	Other Contractor		X	
669	Blue Haven Pools	655 Venture Street Suite 101	1799	Low	Other Contractor		X	
670	Bluewater Environmental Services,	2075 Williams Street	1521	Low	Other Contractor		X	
671	Bob Jenson A/C & Heating	1347 Broadway	1711	Low	Other Contractor		X	
672	Bob Piva Roofing	1192 Industrial Avenue	1761	Low	Other Contractor		X	
673	Bornholdt Construction, Inc.	1027 Greenfield Drive #2	1521	Low	Other Contractor		X	
674	Bowie Handyman Service	Not Listed	1522	Low	Other Contractor		X	
675	Boyce Construction Co., Inc.	10463 Austin Drive Suite D	1799	Low	Other Contractor		X	
676	Brabazon's Alpine Paving &	5738 Willows Road A	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
677	Brad L. Stoner Painting, Inc.	9245 Dowdy Drive #112	1721	Low	Painting/Coating		X	
678	Bray Construction	Not Listed	1522	Low	Other Contractor		X	
679	Brett Lanz Construction	10705 Prince Lane	1700	Low	Other Contractor		X	
680	Brookstone Telecom, Inc.	43300 Business Park Drive Suite B-106	1522	Low	Other Contractor		X	
681	Brookwood Plastering, Inc.	13675 Choisser Lane	1742	Low	Painting/Coating		X	
682	Brundage Bone Concrete Pumping	1630 W Pellessier Road	1771	Low	Cement Mixing/Cutting		X	
683	Buckskin Welding	2480 Bass Rd	7692	Low	Equipment Repair		X	X
684	Budge- It Home Remodeling, Inc	9150 Sesi Lane	1521	Low	Other Contractor		X	
685	Buildercraft Construction	1820 Avenida Del Mundo Suite 406	1521	Low	Other Contractor		X	
686	Builders Termite & Pest Control,	1139 S Placentia Avenue	7342	Low	Pest Control		X	
687	Building Restorations, Inc.	6975 North Avenue Suite A	1799	Low	Other Contractor		X	
688	Burgio Plastering	1937 Friendship Drive Suite C	1742	Low	Painting/Coating	City Limit	X	
689	Bycor General Contractor	6867 Nancy Ridge Drive	1522	Low	Other Contractor		X	
690	C & J Builders, Inc.	Not Listed	1521	Low	Other Contractor		X	
691	C & R Systems, Inc.	1835 Capital Street	1731	Low	Other Contractor		X	
692	C A Skyhook, Inc	8733 Magnolia Avenue Suite 134	1751	Low	Other Contractor		X	
693	C C M Enterprises	10848 Wheatlands Avenue	1799	Low	Other Contractor		X	
694	C E Wilson Corporation	662 Grand Avenue	1522	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
695	C G P Maintenance And Construction	7270 Engineer Road Suite D	1700	Low	Other Contractor		X	
696	C M I Plumbing And Piping Inc.	1029 Vernon Way	1711	Low	Other Contractor		X	
697	C P C Mechanical, Inc.	13664 Willow Road	1623	Low	Other Contractor		X	
698	C W A Development, Inc.	3494 Harris Street	1521	Low	Other Contractor		X	
699	C. L. Anderson Company	Not Listed	1731	Low	Other Contractor		X	
700	C. Leafdale Plumbing	2775 Kurtz Street	1711	Low	Other Contractor		X	
701	C. Lilley Construction Inc	592 Westwind Dr N	1500	Low	Other Contractor		X	
702	California Comfort Systems U S A,	9750 Distribution Avenue	1711	Low	Other Contractor		X	
703	California Concrete Cutting &	388 Citrus Avenue	1771	Low	Cement Mixing/Cutting		X	
704	California Construction Clean-Up	3336 Adams Avenue	1799	Low	Other Contractor		X	
705	California Delta Mechanical	1235 Grand Avenue	1711	Low	Other Contractor		X	
706	Calsoft Water Service Inc.	4635 Ruffner Street	1799	Low	Other Contractor		X	
707	Campbell Construction	6550 Van Buren Blvd	1521	Low	Other Contractor		X	
708	Can-Do Electric	1100 N Magnolia Avenue Suite J	1731	Low	Other Contractor		X	
709	Capacity Construction Inc.	9323 Chesapeake Drive Suite A-1	1799	Low	Other Contractor		X	
710	Carol E. Patterson	Not Listed	1742	Low	Painting/Coating		X	
711	Carolyn E. Scheidel, Contractor	PO Box 1796	1742	Low	Painting/Coating		X	
712	Carpet Club	518 W Washington Avenue	1752	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
713	Carpet Trend	Not Listed	1752	Low	Other Contractor		X	
714	Carrion Construction, Inc.	312 W Laurel Street	1521	Low	Other Contractor		X	
715	Carter Installation Services, Inc.	594 Front Street Suite A	1751	Low	Other Contractor		X	
716	Cartwright Termite & Pest Control	1376 Broadway	7342	Low	Pest Control		X	
717	Casady Electric Inc	275 Camino Del Cerro Grande	1799	Low	Other Contractor		X	
718	Casper's Concrete Cutting	3825 Bancroft Drive 105	1799	Low	Other Contractor		X	
719	Cass Plumbing & Heating	4569 30th Street Suite C	1711	Low	Other Contractor		X	
720	Cay-Lor Construction	Not Listed	1522	Low	Other Contractor		X	
721	Cement Cutting, Inc.	3610 Hancock Street	1771	Low	Cement Mixing/Cutting		X	
722	Central Plumbing Heating Cooling	6152 Mission Gorge Road Suite H	1711	Low	Other Contractor		X	
723	Century Shower Door Co.	20100 S Normandie Avenue	1751	Low	Other Contractor		X	
724	Certified Electric Incorporated	14781 Pomerado Road 101	1731	Low	Other Contractor		X	
725	Charco Construction Company	7065 El Cajon Blvd	1521	Low	Other Contractor		X	
726	Charlie Hughes Tile	Not Listed	1743	Low	Masonry		X	
727	Charrua Painting	1163 Marline Avenue	1721	Low	Painting/Coating		X	
728	Christie Construction	10006 Country View Road	1521	Low	Other Contractor		X	
729	Chula Vista Electric Co	127 Press Lane	1731	Low	Other Contractor		X	
730	Ciani Communications Construction	Not Listed	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
731	City-Wide Electronic Systems, Inc.	1540 N Pioneer Way	1731	Low	Other Contractor		X	
732	Clardy Construction	15225 Sleepy Creek Road	1799	Low	Other Contractor		X	
733	Clark Home Improvement And	Not Listed	1521	Low	Other Contractor		X	
734	Clean Edge Painting	9906 Mission Vega Road #1	1721	Low	Painting/Coating		X	
735	Clean Power Systems, Inc.	13230 Evening Creek Drive Suite 203	1711	Low	Other Contractor		X	
736	Clear Sign & Design, Inc.	170 Navajo Street	1799	Low	Other Contractor		X	
737	Clearview Windows & Doors	28106 Ave Crocker	1793	Low	Other Contractor		X	
738	C-Me Plumbing & Drain Service	10828 Charing Cross Road	1711	Low	Other Contractor		X	
739	Coast Sign	1500 W Embassy Street	1799	Low	Other Contractor		X	
740	Coastal Property Care & Const,	Not Listed	1542	Low	Other Contractor		X	
741	Coating Creations	Not Listed	1721	Low	Painting/Coating		X	
742	Code 3 Electrical	10934 Greencastle Street	1731	Low	Other Contractor		X	
743	College Works Painting	1682 Langley Avenue	1721	Low	Painting/Coating		X	
744	Columbia Pest Control Co. Of San	127 W 9th Street	7342	Low	Pest Control		X	
745	Comanche Contractors, Inc.	15467 Chemical Ln	1521	Low	Other Contractor		X	
746	Command Communication	Not Listed	1731	Low	Other Contractor		X	
747	Commercial & Industrial Roofing	9239 Olive Drive	1761	Low	Other Contractor		X	
748	Communications Plus	1675 Morena Blvd	1731	Low	Other Contractor		X	
749	Concrete Concepts, Inc.	2317 Vineyard Avenue	1771	Low	Cement Mixing/Cutting		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
750	Concrete Cutting Company	PO Box 910503	1799	Low	Other Contractor		X	
751	Connie Jo's Services Unlimited	21000 Plummer Street	1521	Low	Other Contractor		X	
752	Continental Western Transportation	9235 Harris Plant Road	1771	Low	Cement Mixing/Cutting		X	
753	Copper Electric, Inc.	10054 Prospect Avenue	1731	Low	Other Contractor		X	
754	Corky's Pest Control, Inc.	909 Rancheros Drive	7342	Low	Pest Control		X	
755	Corlett Electrical Construction	8315 Tommy Drive	1731	Low	Other Contractor		X	
756	Coronado Heating & A C	1512 Palm Avenue	1521	Low	Other Contractor		X	
757	Cosco Fire Protection, Inc.	10695 Treena Street Suite 105	1799	Low	Other Contractor		X	
758	Countywide Mechanical	1997 Friendship Drive Unit G	1711	Low	Other Contractor		X	
759	Cox Roofing	5429 Alpine Blvd	1799	Low	Other Contractor		X	
760	Creative Touch Interiors, Inc.	7720 Kenamar Court C	1752	Low	Other Contractor		X	
761	Crew Builders	5752 Oberilin Drive Suite 105	1521	Low	Other Contractor		X	
762	Crisler Electric	539 Telegraph Canyon Road #636	1731	Low	Other Contractor		X	
763	Cromwell Contracting, Inc.	9540 Palomino Ridge	1521	Low	Other Contractor		X	
764	Curto Const Co.	Not Listed	1522	Low	Other Contractor		X	
765	Custom Antenna & Garage Door	5833 El Cajon Blvd	1731	Low	Other Contractor		X	
766	Custom Electrical	10739 Oak Creek Drive	1731	Low	Other Contractor		X	
767	Custom Media Mfg Sign Co.	136 Neptune Place	1799	Low	Other Contractor		X	
768	Cut N Core, Inc.	9194 Chesapeake Drive	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
769	D & M Welding	7952 North Avenue	1799	Low	Other Contractor		X	
770	D & S Termite Control	3638 Bancroft Drive	7342	Low	Pest Control		X	
771	D C Construction	14789 Bonita Vista Way	1794	Low	Other Contractor		X	
772	D F S Flooring	15651 Saticoy Street	1752	Low	Other Contractor		X	
773	D G A M, Inc	1961 Main Street	1799	Low	Other Contractor		X	
774	D G Behrens Pool Construction	13031 Poway Road	1799	Low	Other Contractor		X	
775	D G Plumbing	206 Greenfield Drive Suite G	1711	Low	Other Contractor		X	
776	D P R Construction	6333 Greenwich Drive Suite 170	1521	Low	Other Contractor		X	
777	D S H Solar Electric	2785 Kurtz Street Suite 5	1731	Low	Other Contractor		X	
778	D.G. Handyman	Not Listed	1522	Low	Other Contractor		X	
779	Daniel Heisinger Plumbing	Not Listed	1711	Low	Other Contractor		X	
780	Darby Painting Plus+, Inc	1626 Onyx Court	1721	Low	Painting/Coating		X	
781	Daryl Griffis Acoustics, Inc.	4958 Naples Street	1742	Low	Painting/Coating		X	
782	Dave Wallace, General	8039 Golden Avenue	1521	Low	Other Contractor		X	
783	Dave's Home Repair	Not Listed	1522	Low	Other Contractor		X	
784	David Spinks	2146 Lemon Avenue	1741	Low	Masonry		X	
785	Davies Electric Co., Inc.	9085 Kenamar Drive	1731	Low	Other Contractor		X	
786	Davis & Adams Construction, Inc.	7986 Dagget Street	1799	Low	Other Contractor		X	
787	Davis Roofing	10027 Beck Drive	1799	Low	Other Contractor		X	
788	De Marco Plumbing & Drain, Inc.	4401 Twain Avenue Suite 11	1711	Low	Other Contractor		X	
789	Dean Toneys Heating & Air	401 Washingtonia Drive	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
790	Democo, Inc.	2386 N Batavia Street	1795	Low	Other Contractor		X	
791	Dennis Cook Roofing	8824 Lakeview Road	1761	Low	Other Contractor		X	
792	Dennis Design	Not Listed	1721	Low	Painting/Coating		X	
793	Dennis R. Williams	13392 Johnson Road	1799	Low	Other Contractor		X	
794	Dewey Pest Control	9386 Bond Avenue	7342	Low	Pest Control		X	
795	Diamond Pools	10520 Kenney Street	1799	Low	Other Contractor		X	
796	Diamond Termite & Pest Control	12038 Woodside Avenue Suite D	7342	Low	Pest Control		X	
797	Dietrich Corporation	1243 Greenfield Druve Suite H	1799	Low	Other Contractor		X	
798	Digital Voice & Data	3621-96 Avocado Village Court	1731	Low	Other Contractor		X	
799	Dillard Builders, Inc.	262 Garden Grove Lane	1521	Low	Other Contractor		X	
800	Diroma, Inc.	13838 Poway Road	1521	Low	Other Contractor		X	
801	Diversified Window Coverings, Inc.	8410 Juniper Creek Lane	1799	Low	Other Contractor		X	
802	Dock Pros, Inc.	2870 Ragle Way	1796	Low	Other Contractor		X	
803	Don Wallingsford, Inc.	4741 E Hunter C	7623	Low	Equipment Repair		X	X
804	Double B Concrete Cutting, Inc.	1532 Plover Street	1771	Low	Cement Mixing/Cutting		X	
805	Doug Lister Construction	1655 Laslo Drive	1521	Low	Other Contractor		X	
806	Downstream Services, Inc	2855 Progress Place	1623	Low	Other Contractor		X	
807	Drain Medic, Inc.	7868 Lester Drive	1742	Low	Painting/Coating		X	
808	Drain Patrol	7764 Arjons Drive	1799	Low	Other Contractor		X	
809	Drum Plumbing	2550 Fortune Way	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
810	Drywall Specialties	6512 El Cajon Blvd. Suite C	1742	Low	Painting/Coating		X	
811	Dynalectric Co.	9505 Chesapeake Drive S	1799	Low	Other Contractor		X	
812	E B C O Steel Inc.	1355 Presioca Street	1791	Low	Other Contractor		X	
813	Earl K. Powers Construction	678 Enterprise Street	1741	Low	Masonry		X	
814	East County Grading & Paving, Inc.	PO Box 712020	1794	Low	Other Contractor		X	
815	East County Handyman	1232 Portola Avenue	1521	Low	Other Contractor		X	
816	East County Heating & Air	721 S Lincoln Avenue	1711	Low	Other Contractor		X	
817	East County Tile And Marble, Inc.	9855 Prospect Avenue	1743	Low	Masonry		X	
818	Easy-Turf, Inc.	750 N Citracado Parkway Suite 17	1799	Low	Other Contractor		X	
819	Eberhard Benton Roof Company	3691 Hancock Street	1761	Low	Other Contractor		X	
820	Ecosse Electric	Not Listed	1731	Low	Other Contractor		X	
821	Edick & Watt, Inc.	270 Millar Avenue	1521	Low	Other Contractor		X	
822	Ehinger Electric	Not Listed	1731	Low	Other Contractor		X	
823	El Cajon Electric Co	985 Greenfield Drive	1731	Low	Other Contractor		X	
824	El Cajon Roofing Inc	1354 Broadway Avenue	1761	Low	Other Contractor		X	
825	Electric Required	6118 Hersholt Ave	1731	Low	Other Contractor		X	
826	Ellis Mc Kinney, Inc.	1410 Monument Hill Road	1751	Low	Other Contractor		X	
827	Emergency Plumbing & Drain	Not Listed	1711	Low	Other Contractor		X	
828	Emig Construction Company	9915 Tangor Way	1522	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
829	Equitable Construction & Remodel	4724 Divine Way	1522	Low	Other Contractor	City Limit	X	
830	Erickson - Hall Construction	500 Corporate Drive	1522	Low	Other Contractor		X	
831	European Natural Stone Co., Inc.	10051 Prospect Avenue	1741	Low	Masonry		X	
832	Exceptional Restorations	Not Listed	7699	Low	Equipment Repair		X	X
833	Exit Light Co	3525 Del Mar Heights Road #304	1731	Low	Other Contractor		X	
834	Express/ Champion Harwood Floors	Not Listed	1752	Low	Other Contractor		X	
835	F T Emory Plumbing Co., Inc.	4340 Viewridge Avenue Suite C	1711	Low	Other Contractor		X	
836	F. J. Willert Contracting Co.,	1869 Nirvana Avenue	1500	Low	Other Contractor		X	
837	F. R. Ghianni Drywall	1937 Friendship Drive, Ste A	1742	Low	Painting/Coating		X	
838	Farwest Insulation Contracting	1375 S Acacia Avenue Suite A	1742	Low	Painting/Coating		X	
839	Fast Water Heaters, Inc.	275 N Marshall Avenue	1711	Low	Other Contractor		X	
840	Finest City Heating & Air	1069 Vernon Way	1711	Low	Other Contractor		X	
841	Fire & Ice Heating & Air	9911 Maine Avenue	1799	Low	Other Contractor		X	
842	First Line Security Inc.	370 W Center Street	1731	Low	Other Contractor		X	
843	First Page	3280 Olive Street #18	1521	Low	Other Contractor		X	
844	First Quality Painting, Inc.	13933 Sycamore Way	1721	Low	Painting/Coating		X	
845	Fischbeck Plumbing Co.	277 Blanchard Road	1711	Low	Other Contractor		X	
846	Fix Plumbing And Drains	180 Mace Street Suite C15	1711	Low	Other Contractor		X	
847	Flores Air	2931 Adrian Street	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
848	Floyd & Howerton Plumbing Inc	1269 Greenfield Drive	1711	Low	Other Contractor		X	
849	Force Electric	8201 Winter Gardens Blvd	1731	Low	Other Contractor		X	
850	Foshay Electric Company, Inc.	7676 Engineer Road	1731	Low	Other Contractor		X	
851	Fox & Turner Construction Co., Inc.	Not Listed	1742	Low	Painting/Coating	Alvarado	X	
852	Frontier Concrete Inc.	717 Mercantile Street	1771	Low	Cement Mixing/Cutting		X	
853	Fudge's Carpets & Blinds, Inc.	314 S Johnson Avenue	1752	Low	Other Contractor		X	
854	Fueling & Service Technologies,	7050 Village Drive Suite D	1799	Low	Other Contractor		X	
855	G And H Electric	345 First Avenue	1521	Low	Other Contractor		X	
856	G D T Construction	701 B Street Suite 340	1521	Low	Other Contractor		X	
857	G E Brown Service, Inc.	497 11th Street Suite 7	1799	Low	Other Contractor		X	
858	G M G Stone, Inc.	165 Denny Way	1741	Low	Masonry		X	
859	G M W Drywall, Inc.	272 Gemini Avenue	1742	Low	Painting/Coating		X	
860	G. Agundez Concrete	3211 Peg Leg Mine Road	1771	Low	Cement Mixing/Cutting		X	
861	G. Scott Asphalt, Inc	358 Trousdale Drive	1611	Low	Cement Mixing/Cutting		X	
862	Garcia's Precision Acoustics	3162 Carlsbad Blvd Suite B	1742	Low	Painting/Coating		X	
863	Gardner Pool Plastering, Inc.	801 Gable Way	1799	Low	Other Contractor		X	
864	Generation Contracting & Emergency	13750 Danielson Street Suite 100	1799	Low	Other Contractor		X	
865	Genesis Power Management	2455 La Ramada Lane	1731	Low	Other Contractor		X	
866	Geoff Waugh Construction	13149 Lakeview Granda Drive	1751	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
867	Geogrid Retaining Wall Systems Inc	1295 Distribution Way	1799	Low	Other Contractor		X	
868	Gerry Roy, Inc.	2030 Dale Street	1731	Low	Other Contractor		X	
869	Gifford's Home Repair	8730 Our Way	1521	Low	Other Contractor		X	
870	Gilbert Construction	9699 Carta Lane	1799	Low	Other Contractor		X	
871	Global Power Group, Inc.	202 Greenfield Drive Suite C	1731	Low	Other Contractor		X	
872	Golden State Garage Doors, Inc.	10540 Kenney Street	1799	Low	Other Contractor		X	
873	Good And Roberts	1330 Park Center Drive	1521	Low	Other Contractor		X	
874	Good Guys Painting Company	Not Listed	1721	Low	Painting/Coating		X	
875	Gossmeyer Construction	3021 Ridgecliff Lane	1522	Low	Other Contractor		X	
876	Gould Electric Inc.	12130 Dearborn Place	1731	Low	Other Contractor		X	
877	Greenbrier Lawn & Tree Expert	3616 Bancroft Drive	1799	Low	Other Contractor		X	
878	Greene & St. John Inc.	Not Listed	1521	Low	Other Contractor		X	
879	Gregg Drilling & Testing, Inc.	2726 Walnut Avenue	1781	Low	Other Contractor		X	
880	Groundwater And Environmental	6160 Fairmount Avenue Suite A	1799	Low	Other Contractor		X	
881	Grove Plumbing, Inc.	7637 Lemon Avenue	1711	Low	Other Contractor		X	
882	Gudino Electric	824 Santa Isabel Drive	1799	Low	Other Contractor		X	
883	Gula Roofing Co.	1352 Hillcrest Drive	1761	Low	Other Contractor		X	
884	Gulf Engineering & Construction	675 S 2nd Street	1521	Low	Other Contractor		X	
885	H & A Construction	191 Glover Avenue	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
886	H & H Steel Enterprises, Inc.	16891 Sunrise Vista	1799	Low	Other Contractor		X	
887	H & W Custom Builders, Inc.	14511 Olde Highway 80	1521	Low	Other Contractor		X	
888	H B Shaffer	968 Waterloo Avenue	1521	Low	Other Contractor		X	
889	H H S Construction, Inc.	14455 Ramona Avenue Unit D	1731	Low	Other Contractor		X	
890	H L Masonary Builders Inc.	20891 Viento Valle	1741	Low	Masonry		X	
891	H M Construction	1530 Jamacha Road Suite Z	1522	Low	Other Contractor		X	
892	H M S Construction, Inc.	1225 Linda Vista Drive	1522	Low	Other Contractor		X	
893	H P Communications	13341 Temescal Canyon Road	1731	Low	Other Contractor		X	
894	H S B Real Estate And Investments,	4481 Palo Verde Terrace	1521	Low	Other Contractor		X	
895	Hackouts Glass Co.	747 W Main Street	1793	Low	Other Contractor		X	
896	Haenggi Heating And Air	1179 N Cuyamaca Avenue Suite C	1711	Low	Other Contractor		X	
897	Hamel's Refrigeration, A/C & Heat	1909 Sonett Street	1711	Low	Other Contractor		X	
898	Hammer Construction Company	1294 Cardinal Place	1771	Low	Cement Mixing/Cutting		X	
899	Hammond & Masing General	9770 Carroll Centre Road Suite E	1521	Low	Other Contractor		X	
900	Handyman Matters	2820 Via Orange Way Suite A	1521	Low	Other Contractor		X	
901	Hannibal Painting	9325 Goyette Place	1721	Low	Painting/Coating		X	
902	Hans Construction Mechanical, Inc.	Not Listed	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
903	Harbor Pest Control Inc	6160 Fairmount Avenue Suite K	7342	Low	Pest Control		X	
904	Har-Bro Construction	7192 Clairemont Mesa Blvd	1521	Low	Other Contractor		X	
905	Hawkins Construction, Inc.	Not Listed	1522	Low	Other Contractor		X	
906	Hawkins Door & Trim, Inc.	1320 Grand Avenue Suite 5	1799	Low	Other Contractor		X	
907	Hazard Construction Company	6465 Marindustry Drive	1771	Low	Cement Mixing/Cutting		X	
908	Hec's Construction	1708 Horseshoe Court	1799	Low	Other Contractor		X	
909	Heiman Construction Co.	742 Genevieve Street Suite M	1521	Low	Other Contractor		X	
910	Heintschel Plastering, Inc.	475 Corporate Drive	1742	Low	Painting/Coating		X	
911	Helix Mechanical, Inc.	1100 N Magnolia Avenue Suite G	1711	Low	Other Contractor		X	
912	Hersum Construction Inc	6365 Marindustry Drive Suite A	1522	Low	Other Contractor		X	
913	Hess Roofing, Inc.	1681 Magnolia Avenue N	1761	Low	Other Contractor		X	
914	Hillcrest Contracting, Inc.	1467 Circle City Drive	1611	Low	Cement Mixing/Cutting		X	
915	Hitt Contracting, Inc.	2704 Dorr Avenue	1522	Low	Other Contractor		X	
916	Hodge General Contractors	3815 Linda Vista Drive	1521	Low	Other Contractor		X	
917	Hofstee Drywall	1491 Curtis Lane	1799	Low	Other Contractor		X	
918	Holland's Custom Kitchens, Inc.	14511 Olde Highway 80	1799	Low	Other Contractor		X	
919	Home Energy Systems	6996 Convoy Court	1711	Low	Other Contractor		X	
920	Homestead Sheet Metal	9031 Memory Lane	1761	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
921	Hometeam Pest Defense	10070 Carrol Canyon Road Suite 105	7342	Low	Pest Control		X	
922	Hondo Electric, Inc.	420 K Street Suite 261	1731	Low	Other Contractor		X	
923	Honeywell International, Inc.	6 Centerpointe Drive Suite 300	1731	Low	Other Contractor		X	
924	Horizon Solar Systems, Inc	120 N Pacific Street Suite G7	1799	Low	Other Contractor		X	
925	Howards Rug Co Of San Diego Inc	6110 Nancy Ridge Drive	1799	Low	Other Contractor		X	
926	Hughes Heating & Air Conditioning	PO Box 2965	1711	Low	Other Contractor		X	
927	Hydrex Pest Control	PO Box 261127	7342	Low	Pest Control		X	
928	I-Con Electric	4109 Morning Star Court	1731	Low	Other Contractor		X	
929	Ideal Mechanical	8524 Ablette Road	1711	Low	Other Contractor		X	
930	Ideal Plumbing & Heating	5161 Waring Road	1711	Low	Other Contractor		X	
931	Imperial Custom Cabinets	8093 Lemon Grove Way	1751	Low	Other Contractor		X	
932	Ink Electric, Inc.	7845 North Avenue	1731	Low	Other Contractor		X	
933	Inland Plaster, Inc.	38372 Innovation Court Suite C-301	1742	Low	Painting/Coating		X	
934	Integrated Sign Associates	1160 M Pioneer Way	1799	Low	Other Contractor		X	
935	Integrity Concrete	540 Opper Street	1771	Low	Cement Mixing/Cutting		X	
936	Integrity Home Improvements	5725 Kearny Villa Road Suite A	1521	Low	Other Contractor		X	
937	Integrity Restoration Inc	4901 Morena Blvd Suite 502	1522	Low	Other Contractor		X	
938	Interior Specialists, Inc.	1630 Faraday Avenue	1752	Low	Other Contractor		X	
939	International Iron Products	10883 Thornmint Road	1791	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
940	Interstate Striping Of Calif.,	8511-B Ablette Road	1771	Low	Cement Mixing/Cutting		X	
941	Interwest Electric	8135 Engineer Road	1799	Low	Other Contractor		X	
942	Irish Setters Inc.	674 Rancheros Drive	1743	Low	Masonry		X	
943	Issac Sanders Company	4752 68th Street #A	1743	Low	Masonry		X	
944	J & L Insulation, Inc.	10035 Maine Avenue	1742	Low	Painting/Coating		X	
945	J & M Keystone Inc	2709 Via Orange Way Suite A	1799	Low	Other Contractor		X	
946	J & S Maintenance	Not Listed	1521	Low	Other Contractor		X	
947	J & S Sealing & Striping	6121 Fairmount Ave	1799	Low	Other Contractor		X	
948	J C Electric	24857 Abalar Way	1731	Low	Other Contractor		X	
949	J N Horn Construction Co., Inc.	1301 Pepper Drive	1521	Low	Other Contractor		X	
950	J P Plumbing	9051 La Mar Street	1711	Low	Other Contractor		X	
951	J P Witherow Roofing Company	1001 Morena Blvd	1761	Low	Other Contractor		X	
952	J R Electric	1717 Wind River Road	1731	Low	Other Contractor		X	
953	J R Masonry, Inc.	1447 Peach Avenue	1741	Low	Masonry		X	
954	J. D. Paving, Inc.	1412 Barham Road	1611	Low	Cement Mixing/Cutting		X	
955	J. Munoz Concrete	6160 Seascape Drive	1771	Low	Cement Mixing/Cutting		X	
956	J. W. Warren Construction, Inc	3113 Calle Allejandro	1799	Low	Other Contractor		X	
957	J.H. O'Brien Landscaping &	3435 Ocean Park Blvd Suite 103	1799	Low	Other Contractor		X	
958	Jackpot Painting Contractors, Inc.	391 Olive Avenue	1721	Low	Painting/Coating		X	
959	Jackson & Blanc	7929 Arjons Drive	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
960	Jackson Design & Remodeling	4797 Mercury Street Suite B	1521	Low	Other Contractor		X	
961	Jacobs Construction	4244 Spring Court	1521	Low	Other Contractor		X	
962	Jamar Electric, Inc.	9830 Prospect Avenue Suite D	1731	Low	Other Contractor		X	
963	James Dennis Mc Alexander	Not Listed	1522	Low	Other Contractor		X	
964	James Grey Construction	9960 Estrella Drive	1521	Low	Other Contractor		X	
965	Jason Will Do It	1390 Ryan Ridge Road	1721	Low	Painting/Coating		X	
966	Jensen Electric	9101 Heatherdale Street	1731	Low	Other Contractor		X	
967	Jerry's Heating & Air	9717 Airport Vista Road	1711	Low	Other Contractor		X	
968	Jessee Fence	24061 N Viejas Grade	1799	Low	Other Contractor		X	
969	Jie Da Handyman	Not Listed	1522	Low	Other Contractor		X	
970	Jim Simmons Electric	13439 Samantha Avenue	1731	Low	Other Contractor		X	
971	Joe Sherlock Construction, Inc.	16290 Summer Sage Road	1521	Low	Other Contractor		X	
972	Joe Silva Plumbing	16951 Old Coach Road	1711	Low	Other Contractor		X	
973	Joe Vaughn Drywall	Not Listed	1742	Low	Painting/Coating		X	
974	John H. Pearce Construction	Not Listed	1521	Low	Other Contractor		X	
975	John Tessitore Concrete, Inc	5574 Pray Street	1771	Low	Cement Mixing/Cutting		X	
976	John Weber Construction &	334 Mulberry Drive	1629	Low	Other Contractor		X	
977	Johnson Controls, Inc.	12393 Slauson Avenue	1799	Low	Other Contractor		X	
978	Johnson Electric, Inc.	1650 Maple Drive	1731	Low	Other Contractor		X	
979	Juice Electric	4005 Citradora Drive	1731	Low	Other Contractor		X	
980	Just Water Heaters, Inc.	3400 Investment Blvd	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
981	Just-Star Construction, Inc.	9292 Chesapeake Drive Suite 100	1741	Low	Masonry		X	
982	K & J Construction	8864 Ellsworth Circle	1522	Low	Other Contractor		X	
983	K T M Construction	10020 Prospect Avenue	1521	Low	Other Contractor		X	
984	K.P. Electric	1423 E Washington Avenue #36	1731	Low	Other Contractor		X	
985	Kalabat Building Company	980 E Chase Avenue Suite 2	1521	Low	Other Contractor		X	
986	K-Designers	7472 Orangewood Avenue	1799	Low	Other Contractor		X	
987	Keith Monroe & Co.	3186 Adams Avenue Suite 200	1721	Low	Painting/Coating		X	
988	Keith Okonski Construction Inc.	Not Listed	1521	Low	Other Contractor		X	
989	Kenard Construction, Inc.	1830 Gillespie Way Suite 105	1542	Low	Other Contractor		X	
990	Kennedy Masonry, Inc	7313 Melodia Terrace	1741	Low	Masonry		X	
991	Kimball Construction	1804 Garnet Avenue Suite 508	1521	Low	Other Contractor		X	
992	Kincade Excavation	774 Muirwood Drive	1794	Low	Other Contractor		X	
993	King Of The Painters Co	4155 Camino Alegre	1711	Low	Other Contractor		X	
994	Kiowa Construction Services	1601 Plantation Way	1799	Low	Other Contractor		X	
995	Kirk Paving Incorporated	8722 Winter Gardens Blvd	1611	Low	Cement Mixing/Cutting		X	
996	Krushensky's Construction Co.,	1988 Alpine Creek Lane	1542	Low	Other Contractor		X	
997	Kunkel Heating Service	7445 Roosevelt Avenue	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
998	Kyler Construction, Inc.	38725 Calle De Companero	1742	Low	Painting/Coating		X	
999	L 2 Specialties, Inc.	3613 W Macarthur Blvd. Suite 611	1521	Low	Other Contractor		X	
1000	L A County Masonry	27811 Avenue Hopkins Unit 2	1741	Low	Masonry		X	
1001	L D I Mechanical Inc.	1740 Delilah Street	1711	Low	Other Contractor		X	
1002	L T Handyman Company	Not Listed	1522	Low	Other Contractor		X	
1003	L. B. Powers & Sons, Inc.	1705 W Lewis Street	1799	Low	Other Contractor		X	
1004	L. W. Carson Construction	11855 Sorrento Valley Road	1521	Low	Other Contractor		X	
1005	La Jolla Electric, Inc.	9153 Chesapeake Drive	1731	Low	Other Contractor		X	
1006	La Mesa Glass, Inc.	6691 Federal Blvd	1793	Low	Other Contractor		X	
1007	La Mesa Management And Maintenance	Not Listed	1522	Low	Other Contractor		X	
1008	La Mesa Stucco, Inc.	976 Leland Street	1799	Low	Other Contractor		X	
1009	La Tourrette Painting	8675 Hayes St.	1721	Low	Painting/Coating	Alvarado	X	
1010	Lampert Murray M Company Inc	3545 Camino Del Rio South Suite C	1541	Low	Other Contractor		X	
1011	Landsmith Landscape Construction	Not Listed	1799	Low	Other Contractor		X	
1012	Landsystems	8720 Miramar Place	1799	Low	Other Contractor		X	
1013	Lang Electric	47900 Oasis Court	1731	Low	Other Contractor		X	
1014	Lanier Construction, Inc.	10888 Buggywhip Drive	1521	Low	Other Contractor		X	
1015	Larry's Electrical Service, Inc.	1043 Worthington Street	1731	Low	Other Contractor		X	
1016	Lasco Bathware, Inc.	3255 E Miraloma Avenue	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1017	Le Perv Landscape, Inc.	5002 Santa Fe Street Suite A	1799	Low	Other Contractor		X	
1018	Ledcor Petty Construction, L.P.	9466 Black Mountain Road Suite 200	1542	Low	Other Contractor		X	
1019	Lehnert General Contracting	17125 Skyline Truck Trail	1521	Low	Other Contractor		X	
1020	Lekos Electric, Inc.	1370 Pioneer Way	1731	Low	Other Contractor		X	
1021	Lemon Grove Stucco Inc	1057 Elkelton Blvd	1771	Low	Cement Mixing/Cutting		X	
1022	Lester's Plumbing	9733 Saint George Street	1711	Low	Other Contractor		X	
1023	License-To-Kill Inc.	4618 Avocado Blvd	7342	Low	Pest Control		X	
1024	Life Deck	770 Gateway Center Drive	1771	Low	Cement Mixing/Cutting		X	
1025	Lightning Electric	1707 Coronado Avenue	1731	Low	Other Contractor		X	
1026	Lightworks Architectural Lighting	9883 Pacific Heights Blvd Suite E	1731	Low	Other Contractor		X	
1027	Linear Electric Inc	7676 Engineer Road Unit L	1731	Low	Other Contractor		X	
1028	Lloyd Pest Control Company, Inc.	935 Sherman Street	7342	Low	Pest Control		X	
1029	Lockard Electric, Inc.	Not Listed	1731	Low	Other Contractor		X	
1030	Los Angeles Signal Construction,	15100 E Nelson Avenue	1731	Low	Other Contractor		X	
1031	Lot Management, Inc.	7200 Ponto Drive Suite B	1521	Low	Other Contractor		X	
1032	Lucas & Mercier Construction	29712 Avenida De Las Banderas	1751	Low	Other Contractor		X	
1033	Lucas And Mercier Development	630 Alta Vista Suite 203	1521	Low	Other Contractor		X	
1034	Lundco Cleaning Systems	Not Listed	1799	Low	Other Contractor		X	
1035	Luzaich Striping Inc.	14219 Olde Highway 80	1611	Low	Cement Mixing/Cutting		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1036	M C Communications, Inc.	199 E 27th Street	1799	Low	Other Contractor		X	
1037	M D Painting	Not Listed	1721	Low	Painting/Coating		X	
1038	M D Plumbing	3793 35th Street	1711	Low	Other Contractor		X	
1039	M J B Heating & Air Conditioning,	1348 La Mirada Drive Suite A	1711	Low	Other Contractor		X	
1040	M J Kennedy Electric	2032 Diamond Street	1731	Low	Other Contractor		X	
1041	M J M Handyman	Not Listed	1522	Low	Other Contractor		X	
1042	M W Reynolds Construction Co.,	1908 Friendship Drive Suite A	1521	Low	Other Contractor		X	
1043	M. C. Brown Construction&	10777 Eureka Road	1521	Low	Other Contractor		X	
1044	M. Gehring Construction	Not Listed	1799	Low	Other Contractor		X	
1045	M.C. McMurray Painting &	Not Listed	1721	Low	Painting/Coating		X	
1046	Macord Construction Corp	101-H Copperwood Way	1742	Low	Painting/Coating		X	
1047	Magna Window Corporation	1879 Lincoln Avenue	1793	Low	Other Contractor		X	
1048	Magnum Electric Inc.	1174 Pierre Way	1731	Low	Other Contractor		X	
1049	Mallucci Builders	Not Listed	1521	Low	Other Contractor		X	
1050	Marathon General Inc	130 S Hale Avenue	1799	Low	Other Contractor		X	
1051	Mark Snyder Electric	12900 Brookprinter Place Suite 200	1731	Low	Other Contractor		X	
1052	Marrokal Construction Company	9842 River Street	1522	Low	Other Contractor		X	
1053	Marshall Roofing Company	11729 Calle Albara	1761	Low	Other Contractor		X	
1054	Martin Electric II	1841 Westward Ho Circle	1731	Low	Other Contractor		X	
1055	Martin Roofing Co Inc	6608 Federal Blvd	1761	Low	Other Contractor		X	
1056	Marzola Construction Co., Inc.	17025 Industry Place	1771	Low	Cement Mixing/Cutting		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1057	Master Electric Company, Inc.	8055 El Capitan Dr.	1731	Low	Other Contractor	Alvarado	X	
1058	Master Plumbing And Leak Detection	8726 Production Avenue Suite B	1711	Low	Other Contractor		X	
1059	Masterpiece Leaded Windows	13831 Danielson Street	1751	Low	Other Contractor		X	
1060	Mastersev Inc.	560 Library Street	1623	Low	Other Contractor		X	
1061	Mattia Concrete Cleaning	Not Listed	1799	Low	Other Contractor		X	
1062	Maxim Floor Systems	1189 N Grove Street Bldg. C	1752	Low	Other Contractor		X	
1063	Mayer Roofing, Inc.	490 Corporate Drive	1761	Low	Other Contractor		X	
1064	Mc Bride Electric	9919 Hibert Street Suite F	1731	Low	Other Contractor		X	
1065	Mc Guire Electric	8605 Fiona Way	1731	Low	Other Contractor		X	
1066	Mc Kay Roofing Company, Inc.	10622 Keeney Street	1761	Low	Other Contractor		X	
1067	Mc Millan Water Treatment	8450 Tamarind Avenue Suite D	1522	Low	Other Contractor		X	
1068	Mc Minn Contruction Inc.	13350 Birch Tree Lane	1521	Low	Other Contractor		X	
1069	Mc Neil Construction	5009 Gasconade Avenue	1799	Low	Other Contractor		X	
1070	Mechanical Industries, Inc.	314 Yampa Street	1791	Low	Other Contractor		X	
1071	Michael M. Carson Const. Co.	946 S Lincoln Avenue	1521	Low	Other Contractor		X	
1072	Mickey's Electric	1513 Winsome Drive	1799	Low	Other Contractor		X	
1073	Mike Jackson Electrical	11464 Crazy Horse Drive	1731	Low	Other Contractor		X	
1074	Mike Oliver Plumbing, Inc.	Not Listed	1711	Low	Other Contractor		X	
1075	Mike Simpson Plumbing	Not Listed	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1076	Mike's Home Repair & Maintenance	Not Listed	1522	Low	Other Contractor		X	
1077	Milgard Manufacturing Inc	26879 Diaz Road	1799	Low	Other Contractor		X	
1078	Milholland Electric, Inc.	9169 Chespeake Drive	1799	Low	Other Contractor		X	
1079	Miller Brooks Environmental, Inc	2124 Main Street Suite 200	1522	Low	Other Contractor		X	
1080	Miller Construction	Not Listed	1521	Low	Other Contractor		X	
1081	Miller Paving Corp	9236 Olive Drive	1611	Low	Cement Mixing/Cutting		X	
1082	Milton Electric	5167 Hilda Road	1731	Low	Other Contractor		X	
1083	Minute Man Pest Management, Inc.	1625 Cuyamaca Avenue	7342	Low	Pest Control		X	
1084	Mirstone Plastering Inc.	1374 Presioca Street	1742	Low	Painting/Coating		X	
1085	Mission Pools Of Escondido	755 W Grand Avenue	1799	Low	Other Contractor		X	
1086	Mission Valley Roofing, Inc.	9908 Prospect	1761	Low	Other Contractor		X	
1087	MLS Construction Co.	Not Listed	1522	Low	Other Contractor	University	X	
1088	Mocon Pipebursting	82204 Hihgway 111 C201	1542	Low	Other Contractor		X	
1089	Monterey Park Roofing Co.	10 Scrub Oak	1761	Low	Other Contractor		X	
1090	My Electrician Online	Not Listed	1731	Low	Other Contractor		X	
1091	My Plumber S.D., L L P	9975 Pennsylvania Avenue	1711	Low	Other Contractor		X	
1092	N E C Unified Solutions, Inc.	6535 N State Hwy 161	1731	Low	Other Contractor		X	
1093	N P L Mechanical	731 Terra Lane	1761	Low	Other Contractor		X	
1094	National Air, Inc.	2053 Kurtz Street	1711	Low	Other Contractor		X	
1095	National Electric Works, Inc.	4440 Rainier Avenue	1731	Low	Other Contractor		X	
1096	Natural Environmental, Inc	1162 N Marshall Avenue	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1097	Neal Electric Inc	13250 Kirkham Way	1731	Low	Other Contractor		X	
1098	Network Pavers	Not Listed	1611	Low	Cement Mixing/Cutting		X	
1099	Newman Replacement Windows, Inc.	6110 Yarrow Drive	1751	Low	Other Contractor		X	
1100	Nicholas Grant Corporation Dba	5370 Eastgate Mall	1611	Low	Cement Mixing/Cutting		X	
1101	Nielsen Development	1224 Greenfield Street	1522	Low	Other Contractor		X	
1102	Normac Kitchens, Inc.	607 N Central Avenue	1799	Low	Other Contractor		X	
1103	North County Acoustics	8315 Miralani Drive	1742	Low	Painting/Coating		X	
1104	North County Gunite Company	12562 Highway 67	1611	Low	Cement Mixing/Cutting		X	
1105	Northbrook Inc	3101 G Orange Grove Avenue	1799	Low	Other Contractor		X	
1106	O J Insulation, Inc.	600 S Vincent Avenue	1742	Low	Painting/Coating		X	
1107	On Time Construction & Landscape	Not Listed	1521	Low	Other Contractor		X	
1108	One Way Audio Video &	Not Listed	1796	Low	Other Contractor		X	
1109	Orestano Painting And Decorating	Not Listed	1721	Low	Painting/Coating		X	
1110	Orion Construction Corp.	1232 Keystone Way	1799	Low	Other Contractor		X	
1111	Orkin Exterminating Company	2420 Grand Avenue Suite J	7342	Low	Pest Control		X	
1112	Ozzy's Plumbing & Drain Services	2695 Calle Quebrada	1711	Low	Other Contractor		X	
1113	P.w. Marsh & Sons, Inc	1068 Broadway 220	1521	Low	Other Contractor		X	
1114	Pacific Building Group	5754 Pacific Center Blvd Suite 203	1522	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1115	Pacific Electric Co	9328 Lakeview Road	1799	Low	Other Contractor		X	
1116	Pacific Lath And Plaster	360 S Spruce Street	1742	Low	Painting/Coating		X	
1117	Pacific Production Plumbing	1584 Pioneer Way	1711	Low	Other Contractor		X	
1118	Pacific Refrigeration, Inc.	1440 Broadway	7623	Low	Equipment Repair		X	X
1119	Pacific Rim Mechanical, Inc.	7655 Convoy Court	1799	Low	Other Contractor		X	
1120	Pacific Sewer Maintenance Corp.	8244 W Hillsdale Court Unit #3	1623	Low	Other Contractor		X	
1121	Pacific Structures Construction,	101 State Place Suite E	1771	Low	Cement Mixing/Cutting		X	
1122	Pacific Sundance Construction Inc.	2911 W Warner Avenue	1521	Low	Other Contractor		X	
1123	Pacifica Glass Co., Inc.	1997 Friendship Drive Suite G	1793	Low	Other Contractor		X	
1124	Pac-West Sheet Metal	528 Amigas Drive Suite C	1761	Low	Other Contractor		X	
1125	Padre Pools	9679 Marilla Drive	1799	Low	Other Contractor		X	
1126	Paint Plus, Inc.	1647 Dewitt Estates Road	1721	Low	Painting/Coating		X	
1127	Palm Engineering Construction	3770 Hancock Street Suite H	1521	Low	Other Contractor		X	
1128	Par Electrical Contractors, Inc.	2410 Vineyard Avenue	1731	Low	Other Contractor		X	
1129	Paradise Custom Pools	Po Box 900454	1799	Low	Other Contractor		X	
1130	Paramount R & R, Inc.	9340 Hazard Way	1771	Low	Cement Mixing/Cutting		X	
1131	Paramount Scaffold, Inc.	16631 S Avalon Blvd	1799	Low	Other Contractor		X	
1132	Passage Supply Inc.	1505 S Dupont Avenue #F	1751	Low	Other Contractor		X	
1133	Patriot Plumbing, Inc.	870 N Second Street	1711	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1134	Patterson Brothers Lighting, Inc	12047 Riverside Drive	1731	Low	Other Contractor		X	
1135	Paul Hansen Equipment	603 S Marshall Avenue	1521	Low	Other Contractor		X	
1136	Pavement Recycling Systems	121 N Main Street	1611	Low	Cement Mixing/Cutting		X	
1137	Payco Specialties Inc	120 N 2nd Avenue	1799	Low	Other Contractor		X	
1138	Pebble Paving Co.	7954 Convoy Court	1611	Low	Cement Mixing/Cutting		X	
1139	Perry Plumbing	2810 Sandover Court	1799	Low	Other Contractor		X	
1140	Pete Paniagua Termite & Pest	3736 Grove Street	7342	Low	Pest Control		X	
1141	Peterbuilt Corporation	6235 Lusk Blvd	1521	Low	Other Contractor		X	
1142	Peterson Roofing, Inc.	549 W Central Park Avenue	1522	Low	Other Contractor		X	
1143	Phazer Electric Inc	Not Listed	1731	Low	Other Contractor		X	
1144	Phillips Welding	Not Listed	1799	Low	Other Contractor		X	
1145	Plumbing Solutions, Inc.	17701 W Danielson Street Apartment 102	1711	Low	Other Contractor		X	
1146	Porterfield Home Enhancements	7827 Segovia Way	1521	Low	Other Contractor		X	
1147	Portillo Concrete, Inc.	3528 Harris Street	1771	Low	Cement Mixing/Cutting		X	
1148	Pota Landscape	6344 Arms Lake Avenue	1799	Low	Other Contractor		X	
1149	Power Communication Systems	4643 Mission Gorge Place Suite A	1542	Low	Other Contractor		X	
1150	Power Drain Service	5622 Meade Avenue	1711	Low	Other Contractor		X	
1151	Power Fabricating Inc.	625 S Fee Ana Street	1731	Low	Other Contractor		X	
1152	Power Plus - S. R. Bray Corp	1005 N Edward Court	1799	Low	Other Contractor		X	
1153	Precision Concrete Cutting	32428 Campo Drive	1771	Low	Cement Mixing/Cutting		X	
1154	Precision Electric Co	8137 Winter Gardens Blvd	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1155	Premier Roofing	9054 Olive Drive	1761	Low	Other Contractor		X	
1156	Pro Coat Systems, Inc.	1131 N Citrus Street	1799	Low	Other Contractor		X	
1157	Pro Drain & Plumbing Service Inc.	7440 Central Avenue	1799	Low	Other Contractor		X	
1158	Pro Line Construction	13240 Morning Glory Drive	1522	Low	Other Contractor		X	
1159	Pro Tech Insulation, Inc.	2041 Skyview Glen	1799	Low	Other Contractor		X	
1160	Pro Wall Lath & Plaster, Inc.	360 S Spruce Street	1771	Low	Cement Mixing/Cutting		X	
1161	Progressive Investments, Inc.	1168 Greenfield Drive	1741	Low	Masonry		X	
1162	Promark Roofing	302 Hunter Court	1761	Low	Other Contractor		X	
1163	Pro-Vlad	Not Listed	1522	Low	Other Contractor		X	
1164	Pullman Comm Inc	2530 Lynn Way	1731	Low	Other Contractor		X	
1165	Purser Construction, Inc.	9474 Kearny Villa Road Suite 101	1799	Low	Other Contractor		X	
1166	Quality Interiors, Inc.	803 E Parkridge Avenue	1742	Low	Painting/Coating		X	
1167	Quality Patio & Sunrooms	8388 Mary Dean Lane	1521	Low	Other Contractor		X	
1168	Quality Rooter And Plumbing, Inc.	1798 Pepper Villa Drive	1711	Low	Other Contractor		X	
1169	Quick Plumbing	1692 N Mollison Avenue	1711	Low	Other Contractor		X	
1170	Quintessa Construction, Inc.	2210 Encinitas Blvd Suite S	1521	Low	Other Contractor		X	
1171	R & C Structures, Inc.	1615 La Mirada Drive	1799	Low	Other Contractor		X	
1172	R & M Electrical Contractor, Inc.	4912 E Florence Circle	1731	Low	Other Contractor		X	
1173	R A D Construction, Inc.	3479 Citrus Street Suite A	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1174	R B E	1177 Greefield Drive Suite B	1721	Low	Painting/Coating		X	
1175	R B Electrical	1248 Andover Road	1731	Low	Other Contractor		X	
1176	R C Grading, Inc.	1650 W Pellisier Road	1611	Low	Cement Mixing/Cutting		X	
1177	R C Morse General Contractor	Not Listed	1521	Low	Other Contractor		X	
1178	R D Hammond Builders	10041 Medina Drive	1521	Low	Other Contractor		X	
1179	R L I	1967 Brockhurst Drive	1731	Low	Other Contractor		X	
1180	R. E. Paxton Contracting	Not Listed	1542	Low	Other Contractor		X	
1181	R. J. Dutch Devos	Not Listed	7699	Low	Equipment Repair		X	X
1182	R.C. Young Roofing Co., Inc.	875 34th Street	1761	Low	Other Contractor		X	
1183	Race Way Electric, Inc.	PO Box 710885	1731	Low	Other Contractor		X	
1184	Radford Doors U S A, Inc.	2130 Newton Avenue	1751	Low	Other Contractor		X	
1185	Rain For Rent	3404 State Road	1799	Low	Other Contractor		X	
1186	Ram Electric	12365 Lakeshore Dr	1731	Low	Other Contractor		X	
1187	Ramona Paving & Construction	1303 Olive Street	1611	Low	Cement Mixing/Cutting		X	
1188	Ranbar Plumbing Contractors, Inc.	10149 Channel Road Suite A	1521	Low	Other Contractor		X	
1189	Ranbar Plumbing Contractors, Inc.	10149 Channel Road Suite A	1711	Low	Other Contractor		X	
1190	Rapid Plumbing	5595 Magnatron Blvd Suite Q	1711	Low	Other Contractor		X	
1191	Raver Contruction, Inc.	14978 Skyline Truck Trail	1521	Low	Other Contractor		X	
1192	Rawson Enterprises, Inc.	10233 Jefferson Street	1521	Low	Other Contractor		X	
1193	Raymar Construction	43931 Via Montalban	1700	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1194	Ray's Cement Work	2477 1/2 Hardy Drive	1741	Low	Masonry		X	
1195	Ray's Plumbing	10346 Bosque Drive	1711	Low	Other Contractor		X	
1196	Real Time Plumbing	180 Mace Street Suite B7	1711	Low	Other Contractor		X	
1197	Reasonable Drain And Plumbing	1765 Garnet Avenue Suite 104	1711	Low	Other Contractor		X	
1198	Renewable Energy Concepts, Inc.	684 Clarion Court	1731	Low	Other Contractor		X	
1199	Republic I T S	371 Bel Marin Keys Blvd #200	1731	Low	Other Contractor		X	
1200	Rescom Overhead Doors, Inc.	1738 Brackett Street	1751	Low	Other Contractor		X	
1201	Reuben's Plumbing	1759 Linwood Street	1711	Low	Other Contractor		X	
1202	Richard Murray Painting	Not Listed	1721	Low	Painting/Coating		X	
1203	Rick Skinner Construction	6965 Endens Avenue	1521	Low	Other Contractor		X	
1204	Ricks Sign & Lighting Service	Po Box 219	1799	Low	Other Contractor		X	
1205	Ritch Builder Co	4629 Calle De Vida	1521	Low	Other Contractor		X	
1206	Rivera's Iron Works, Inc.	2534 S Santa Fe Avenue	1799	Low	Other Contractor		X	
1207	Robeck Electrical Maintenance	1070 Commerce Street Suite C	1799	Low	Other Contractor		X	
1208	Robert Brown Electric	455 Pepper Drive	1521	Low	Other Contractor		X	
1209	Robert Rubidoux Roofing	1261 La Paloma Glen	1761	Low	Other Contractor		X	
1210	Robinson Electric	8871 Troy Street	1731	Low	Other Contractor		X	
1211	Robinson Roofing & Consulting	PO Box 902	1761	Low	Other Contractor		X	
1212	Roejack Roofing, Inc.	1107 Petree Street	1761	Low	Other Contractor		X	
1213	Roel Construction Co Inc	3366 Kurtz Street	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1214	Roger H. Proulx & Co.	6833 E Rosecrans Avenue Suite C	1799	Low	Other Contractor		X	
1215	Roger L. Ballantyne	Not Listed	1742	Low	Painting/Coating		X	
1216	Romero's Roofing Service, Inc.	1827 Cleveland Avenue	1799	Low	Other Contractor		X	
1217	Ronald Jay Cappello	Not Listed	1711	Low	Other Contractor		X	
1218	Ronces-McKinney Painting, Inc	4418 Avocado Blvd	1721	Low	Painting/Coating		X	
1219	Ron's Plumbing	9962 Prospect Avenue	1711	Low	Other Contractor		X	
1220	Roofcorp Of C A, Inc.	2130 S Dupont Drive	1761	Low	Other Contractor		X	
1221	Roofing Services Of San Diego	8285 Buckhorn Street	1742	Low	Painting/Coating		X	
1222	Rossi Painting Co, Inc.	4025 E 6th Street	1721	Low	Painting/Coating		X	
1223	Roth Construction Corporation	4850 Talmadge Park Row	1522	Low	Other Contractor		X	
1224	Roto Rooter Sewer Service	180 Denny Way	7699	Low	Equipment Repair		X	X
1225	Royster Group Construction, Inc.	696 State Street	1521	Low	Other Contractor		X	
1226	Russell Plumbing & Supplies Inc	9030 Wintergardens Blvd	1711	Low	Other Contractor		X	
1227	Rye Built Construction Corp	6319 Badger Lake Avenue	1521	Low	Other Contractor		X	
1228	S E Pipeline Construction Company	11832 S Bloomfield Avenue	1623	Low	Other Contractor		X	
1229	S G Plastering	14475 Olde Highway 80 Suite A	1742	Low	Painting/Coating		X	
1230	S O S Rooter	3485 Pickwick Street	1711	Low	Other Contractor		X	
1231	Sadler Roofing	125 Grand Canal	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1232	Safway Steel Products	1107 Petree Street Suite 103	1799	Low	Other Contractor		X	
1233	Salvador Flores, Jr.	Not Listed	1721	Low	Painting/Coating		X	
1234	San Diego Electric Co.	7906 Linen Drive	1731	Low	Other Contractor		X	
1235	San Diego Fence Co., Inc.	7920 Engineer Road	1799	Low	Other Contractor		X	
1236	San Diego Mirror & Window	2515 Industry Street	1793	Low	Other Contractor		X	
1237	San Diego Pool Plastering	10750 Valle Vista Road	1799	Low	Other Contractor		X	
1238	San Diego Preferred Plumbing Inc	8898 Clairemont Mesa Blvd Suite J	1711	Low	Other Contractor		X	
1239	San Diego Roofing, Inc.	7364 El Cajon Blvd	1761	Low	Other Contractor		X	
1240	San Diego Stucco Company Inc	625 North Avenue	1771	Low	Cement Mixing/Cutting		X	
1241	San Diego Trane Company	9555 Chesapeake Drive Suite 201	1799	Low	Other Contractor		X	
1242	San Marcos Roofing	1580 Grapevine Lane	1799	Low	Other Contractor		X	
1243	Santa Fe Plaster	620 Alpine Way	1742	Low	Painting/Coating		X	
1244	Santee Electric Company	8461 Melrose Lane	1731	Low	Other Contractor		X	
1245	Saw Core Inc.	12111 Lakeside Avenue	1795	Low	Other Contractor		X	
1246	Schearing Construction Company	4339 Mount Putman Avenue	1799	Low	Other Contractor		X	
1247	Schilling Corporation	697 Greenfield Drive	1799	Low	Other Contractor		X	
1248	Schillreff Mechanical Inc.	Not Listed	1711	Low	Other Contractor		X	
1249	Schindler Elevator Corporation	16450 Foothill Blvd Suite 200	1796	Low	Other Contractor		X	
1250	Schmid Building Products	13000 Kirkham Way Suite 101	1742	Low	Painting/Coating		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1251	Schmidt Fire Protection Co, Inc.	4760 Murphy Canyon Road	1731	Low	Other Contractor		X	
1252	Seal Electric Inc.	9216 Abraham Way Suite C	1731	Low	Other Contractor		X	
1253	Sears Home Improvement Product	10415 Slusher Drive	1799	Low	Other Contractor		X	
1254	Secure Roof, Inc.	976 B Andreasen Drive	1761	Low	Other Contractor		X	
1255	Sedco Plumbing	1265 Hayden Lane	1711	Low	Other Contractor		X	
1256	Select Electric, Inc	1425 Presioca Street	1731	Low	Other Contractor		X	
1257	Service Master All Phase	1466 Pioneer Way Suite 6	1521	Low	Other Contractor		X	
1258	Sherwood Mechanical, Inc.	13630 Danielson	1799	Low	Other Contractor		X	
1259	Sid's Carpet Barn, Inc.	132 W 8th Street	1752	Low	Other Contractor		X	
1260	Sierra Painting	11389 Reidy Canyon Place	1721	Low	Painting/Coating		X	
1261	Sierra Window Concepts, Ltd.	5252 Balboa Avenue Suite 304	1751	Low	Other Contractor		X	
1262	Sign Ad Corporation	9540 Waples Street Suite C	1799	Low	Other Contractor		X	
1263	Signtech Electrical Advertising	4444 Federal Blvd	1731	Low	Other Contractor		X	
1264	Silva And Silva Asphalt	9642 Prospect Avenue	1611	Low	Cement Mixing/Cutting		X	
1265	Silverthorn Construction, Inc.	1674 Alpine Terrace Road	1799	Low	Other Contractor		X	
1266	Sim J. Harris, Inc.	4375 Jutland Drive Suite 260	1611	Low	Cement Mixing/Cutting		X	
1267	Simmons Sheet Metal Fab. Inc.	2950 San Luis Rey Road	1761	Low	Other Contractor		X	
1268	Simonsen Solutions	Not Listed	1522	Low	Other Contractor		X	
1269	Simplexgrinnell L P	9855 Carroll Canyon Road	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1270	Smart Systems Technologies, Inc.	9 Goodyear	1731	Low	Other Contractor		X	
1271	Smith Roofing Co, Inc	4211 Whittier Street	1761	Low	Other Contractor		X	
1272	So Cal Custom Roofing	625 North Avenue	1761	Low	Other Contractor		X	
1273	Soclaris Contracting	Not Listed	1521	Low	Other Contractor		X	
1274	Solomon Electrical Services	3812 Superior Street	1731	Low	Other Contractor		X	
1275	Source Refrigeration & H V A C,	800 E Orangethorpe Avenue	1711	Low	Other Contractor		X	
1276	South Bay Fence Inc	3084 Main St	1799	Low	Other Contractor		X	
1277	South Coast Erosion Control, Inc.	1014 E Washington Avenue	1799	Low	Other Contractor		X	
1278	South Coast Patio	8927 Lakeview Road	1799	Low	Other Contractor		X	
1279	Southern Contracting Company	559 Twin Oaks Valley Road N	1799	Low	Other Contractor		X	
1280	Southern Lighting & Graphics Inc.	10370 Regis Court	1521	Low	Other Contractor		X	
1281	Southwest Window Co., Inc.	8666 Production Avenue	1793	Low	Other Contractor		X	
1282	Spectra Contract Flooring	8320 Caminto Santa Fe 1	1799	Low	Other Contractor		X	
1283	Sperry Construction & Electric,	9938 Blossom Valley Road	1731	Low	Other Contractor		X	
1284	Spooner's Woodworks, Inc.	12305 Crosthwaite Circle	1751	Low	Other Contractor		X	
1285	Sprekelmeyer & Muessigmann	522 Trailridge Drive	1731	Low	Other Contractor		X	
1286	Spring Valley Insulation	3151 Bancroft Drive	1742	Low	Painting/Coating		X	
1287	Stabler Building Company Inc.	11496 Cypress Terrace Place	1521	Low	Other Contractor		X	
1288	Stanley Access Technologies	244 Miller Avenue	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1289	Steele Plumbing Inc.	1304 Pepper Drive	1711	Low	Other Contractor		X	
1290	Steve Fox Plumbing, Inc.	4172 Cartagena	1711	Low	Other Contractor		X	
1291	Stillson General Contracting	Not Listed	1521	Low	Other Contractor		X	
1292	Stokely Construction, Inc	Not Listed	1521	Low	Other Contractor		X	
1293	Strauwald Co. And Supply	9449 Calle Del Lago	1521	Low	Other Contractor		X	
1294	Streamline Plumbing, Inc	Not Listed	1799	Low	Other Contractor		X	
1295	Strickland Brothers Carpet	728 Hawthorne	1752	Low	Other Contractor		X	
1296	Summit Steel Fabrications, Inc.	4468 Parkhurst Street	1791	Low	Other Contractor		X	
1297	Sunlite Landscape	567 Anderson Road	1799	Low	Other Contractor		X	
1298	Sunrise Concrete	12012 Riverside Drive	1771	Low	Cement Mixing/Cutting		X	
1299	Sunshine Communications, Inc	10981 San Diego Mission Road Suite 100	1731	Low	Other Contractor		X	
1300	Sunwest Plumbing	9899 Hibert Unit E	1711	Low	Other Contractor		X	
1301	Superior Door Systems Inc	8059 Wing Avenue	1799	Low	Other Contractor		X	
1302	Superior Gunite	12306 Van Nuys Blvd	1771	Low	Cement Mixing/Cutting		X	
1303	Sweetwater Plumbing & Hardware	8300 Paradise Valley Road Suite 120	1799	Low	Other Contractor		X	
1304	Sylvania Lighting Services Corp.	2851 Pomona Blvd	1731	Low	Other Contractor		X	
1305	T & M Framing, Inc.	1224 Greenfield Drive	1751	Low	Other Contractor		X	
1306	T C Construction	10540 Prospect Avenue	1799	Low	Other Contractor		X	
1307	T C P Company	7080 Mt Vernon	1521	Low	Other Contractor		X	
1308	T D Construction	319 River Trail Place	1521	Low	Other Contractor		X	
1309	T F Kaiser Construction, Inc.	4525 Mount Frissell Drive	1521	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1310	T G C Builders	Not Listed	1521	Low	Other Contractor		X	
1311	T L C Plumbing, Inc.	4569 Mission Gorge Place Suite E	1711	Low	Other Contractor		X	
1312	T- Mar Construction Inc	2340 Meyers Avenue	1742	Low	Painting/Coating		X	
1313	T P Acoustics Inc	9225 Mira Este Court Suite A	1799	Low	Other Contractor		X	
1314	T R C	9471 Ridgehaven Court Suite E	1521	Low	Other Contractor		X	
1315	T R Construction Co	13100 Kirkham Way Suite 204	1761	Low	Other Contractor		X	
1316	Tanknology, Inc.	8501 N Mopac Expressway Suite 400	1799	Low	Other Contractor		X	
1317	Taylor Signs And Graphics	14537 Kittery Street	1731	Low	Other Contractor		X	
1318	Taylor Trim & Supply, Inc.	2057 Aldergrove Avenue	1751	Low	Other Contractor		X	
1319	Team C Construction	1208 N 2nd Street	1771	Low	Cement Mixing/Cutting		X	
1320	Tejeda & Tejeda Asphalt &	9714 Sutton Crt	1771	Low	Cement Mixing/Cutting		X	
1321	Temecon Gen. Bldg. Contractor,	9715 Carroll Centre Road Suite 108	1522	Low	Other Contractor		X	
1322	Temecula Valley Drywall, Inc.	41228 Raintree Court	1799	Low	Other Contractor		X	
1323	Temperature Design Energy Systems	9141 Hillman Way	1799	Low	Other Contractor		X	
1324	Temperatures Unlimited, Inc.	26841 Ruether Avenue Suite G	1711	Low	Other Contractor		X	
1325	Terminix International Company	1736 N Magnolia Avenue	7342	Low	Pest Control		X	
1326	Terra West Grading	37035 Yuma Ln	1611	Low	Cement Mixing/Cutting		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1327	Terry Lindquist Roofing	877 Hale Court	1799	Low	Other Contractor		X	
1328	Testamerica Drilling Corp.	1016 E Katella Avenue	1781	Low	Other Contractor		X	
1329	The Brickman Group, Ltd	6218 Fairmount Avenue	1521	Low	Other Contractor		X	
1330	The Ghianni-Larussa Group, Inc.	13880 Stowe Drive Suite A	1742	Low	Painting/Coating		X	
1331	The Whole Nine Yards	Not Listed	1522	Low	Other Contractor		X	
1332	The Wright Painting Co.	12642 Casa Vista Road	1721	Low	Painting/Coating		X	
1333	Thomas' Handyman Services	2570 Granada Circle	1521	Low	Other Contractor		X	
1334	Thomas Lukasiewicz Construction	8874 Gowdy Avenue	1542	Low	Other Contractor		X	
1335	Thompson Heating & Air	888 Rancheros Drive Suite E	1799	Low	Other Contractor		X	
1336	Thornton Steel & Iron Works, Inc.	1323 State College Parkway	1799	Low	Other Contractor		X	
1337	Tidwell Masonry	Not Listed	1741	Low	Masonry		X	
1338	Tierra Verde Resources, Inc.	1545 Lake Drive	1799	Low	Other Contractor		X	
1339	Tile King, Inc.	595 N Smith #A	1743	Low	Masonry		X	
1340	Tim Walford Roofing	10699 San Diego Mission Road Apt 313	1761	Low	Other Contractor		X	
1341	Timberline Building Services	418 Edmard Street	1521	Low	Other Contractor		X	
1342	Timberwood Landscape, Inc.	2731 Via Orange Way Suite 111	1799	Low	Other Contractor		X	
1343	Todd Enterprises, Inc.	3040 Clairemont Drive Suite C	1522	Low	Other Contractor		X	
1344	Todd F. Metcalf	630 W Foothill Blvd Suite C	1742	Low	Painting/Coating		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1345	Tom Reed General Contractor	1721 Yale Street	1521	Low	Other Contractor		X	
1346	Tom's Handyman Service	Not Listed	1522	Low	Other Contractor		X	
1347	Tony Gallo Painting	20 Surfbird Lane	1721	Low	Painting/Coating		X	
1348	Tool Time Construction, Inc	7546 Trade Street	1522	Low	Other Contractor		X	
1349	Top Notch Termite Company, Inc	6041 Fairmount Avenue	7342	Low	Pest Control		X	
1350	Torres General, Inc.	10783 Jamacha Blvd. Suite 8	1751	Low	Other Contractor		X	
1351	Torres Tile, Inc.	1255 Linda Vista Drive	1752	Low	Other Contractor		X	
1352	Town & Country Construction	Not Listed	1522	Low	Other Contractor		X	
1353	Town & Country Custom Pools	9920 Prospect Avenue Suite 106	1799	Low	Other Contractor		X	
1354	Traffic Control Service, Inc	584 N Marshall Avenue	1799	Low	Other Contractor		X	
1355	Transcal Construction	3622 Eagle Street	1521	Low	Other Contractor		X	
1356	Travcon Builders, Inc.	Not Listed	1542	Low	Other Contractor		X	
1357	Treebeard Landscape	9917 Campo Road	1799	Low	Other Contractor		X	
1358	Tri City Glass Of S D, Inc.	2555-B Sweerwater Springs Blvd.	1793	Low	Other Contractor		X	
1359	Tri Com Telecommunications Inc.	2845 Bancroft Drive	1521	Low	Other Contractor		X	
1360	Tri County Drilling	9631 Candida Street	1799	Low	Other Contractor		X	
1361	Tribal Painting, Inc.	1263 Bermuda Place	1721	Low	Painting/Coating		X	
1362	Triple D Concrete Pumping	Not Listed	1771	Low	Cement Mixing/Cutting		X	
1363	True Lawn Care, Inc.	9820 Maine Avenue	1799	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1364	Truly Nolen Of America	7170 University Avenue	1742	Low	Painting/Coating		X	
1365	Tubbs Enterprises, Inc.	2620 Aurora Glen	1742	Low	Painting/Coating		X	
1366	Tupper's Custom Works	Not Listed	1542	Low	Other Contractor		X	
1367	Ulm Plumbing & Heating	7525 Mission Gorge Road Suite B	1711	Low	Other Contractor		X	
1368	Ultrasigns Inc.	5458 Complex Street Suite 401	1799	Low	Other Contractor		X	
1369	V I C O	Not Listed	1521	Low	Other Contractor		X	
1370	V W C	425 W La Cadena Suite 12	1521	Low	Other Contractor		X	
1371	Valley Crest Landscape Maint., Inc	8500 Miramar Road	1799	Low	Other Contractor		X	
1372	Valleycrest Tree Company	12087-40 N Lopez Canyon Road	1799	Low	Other Contractor		X	
1373	Van Con Builders Inc.	1301 Pepper Drive Suite D	1521	Low	Other Contractor		X	
1374	Van Deutch Refrigeration	Not Listed	7623	Low	Equipment Repair		X	X
1375	Vanberg Constuction	2521 B Street Suite 102	1799	Low	Other Contractor		X	
1376	Vanguard Fire Protection, Inc.	1604 La Mirada Del Suite 105	1799	Low	Other Contractor		X	
1377	Ventura's Plumbing & Drain	8425 Pueblo Road	1711	Low	Other Contractor		X	
1378	Viacom Outdoor, Inc.	1731 Workman Street	1799	Low	Other Contractor		X	
1379	Vic's Plumbing	687 Alveda Avenue	1711	Low	Other Contractor		X	
1380	Vigil Handyman Service	Not Listed	1522	Low	Other Contractor		X	
1381	Viking Electric	1549 Fair Valley Rd	1731	Low	Other Contractor		X	
1382	Viking Insulation Co., Inc.	3014 Floyd Street	1742	Low	Painting/Coating		X	
1383	Vinyard Doors, Inc.	3605 Pacific Highway	1799	Low	Other Contractor		X	
1384	Volks Electric	6646 Julie Street	1731	Low	Other Contractor		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1385	W & S Electric	1050 Pioneer Way Suite K	1731	Low	Other Contractor		X	
1386	Walker Wood Products	43195 Business Park Drive	1751	Low	Other Contractor		X	
1387	Walldesign Inc.	2350 SE Bristol Street	1521	Low	Other Contractor		X	
1388	Walter Anderson Plumbing Inc	1150 N Marshall Avenue	1711	Low	Other Contractor		X	
1389	Water Heaters Only, Inc.	970 E Main Street Suite 200	1711	Low	Other Contractor		X	
1390	Wavecrest Construction, Inc.	5333 Mission Center Road	1522	Low	Other Contractor		X	
1391	Wayne Perry Construction Inc	8281 Commonwealth	1522	Low	Other Contractor		X	
1392	Weather Machines	9858 Hawley Road	1799	Low	Other Contractor		X	
1393	Wedcon Systems, Inc.	1660 Chicago Avenue Suite N9	1799	Low	Other Contractor		X	
1394	West Co Construction	1212 S Pacific Street #1	1521	Low	Other Contractor		X	
1395	West Coast Appliance Service	10744 Prospect Avenue Suite B	1731	Low	Other Contractor		X	
1396	Western Cable Construction	3420 University Avenue	1799	Low	Other Contractor		X	
1397	Western Exterminator Co	1320 Hill Street	7342	Low	Pest Control		X	
1398	Western Foundations & Shoring	10875 Highway 67	1799	Low	Other Contractor		X	
1399	Western Pump, Inc.	3235 F Street	1521	Low	Other Contractor		X	
1400	Westmac Enterprises, Inc.	9830 Vine Street Suite 100	1799	Low	Other Contractor		X	
1401	Whillock Contracting Inc	PO Box 2322	1542	Low	Other Contractor		X	
1402	Whitson C M	10603 Rancho Bernardo Road	1521	Low	Other Contractor		X	
1403	Wilfrido Concrete Construction	303 H Street Suite 407	1771	Low	Cement Mixing/Cutting		X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	SIC Code(s)	TTWQ	Category	Basin	Mobile?	Likely Source
1404	Winfield Floor Window Covering	7031 Carroll Road	1752	Low	Other Contractor		X	
1405	Wire Pros Electric, Inc.	1753 Kyrsten Terrace Court	1731	Low	Other Contractor		X	
1406	Woodruff Trenching, Inc.	9735 Prospect Avenue	1629	Low	Other Contractor		X	
1407	Xunda Handyman	Not Listed	1522	Low	Other Contractor		X	
1408	Ye Olde Handyman Service	Not Listed	1522	Low	Other Contractor		X	
1409	Your Way Fumigation	41880 Kalmia Street Suite 170	7342	Low	Pest Control		X	
1410	Zeller Drain Cleaning	Not Listed	7699	Low	Equipment Repair		X	X

Notes

TTWQ – Threat to Water Quality

SIC –Standard Industrial Classification Code

Basin – City of La Mesa drainage basin. HSAs are as follows: Alvarado and Lake Murray (907.12; San Diego River Watershed), University and Lemon Grove (908.22, San Diego Bay Watershed), Spring Valley (909.12, San Diego Bay Watershed)

Mobile – Mobile business

Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX B

Appendix B
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
1	7/9/09	Storm Water Hotline	Windsor Hills Baptist Church Orien Drive behind Helix High School	Residential	Small amount of water is flowing down the curb from above the church. Water is not coming from the storm drain but a crack in the curb/pavement.	Talked with caretaker regarding overwatering in rear. He assured that he wasn't watering much. Appears to be a ground water (curb line is below a steep hill).	None
2	7/13/09	Storm Water Hotline	Baltimore Shell Gas Station	Ind/Com	Small amounts of flow are coming out of the 3" curb outlet. Appears to be wastewater coming from the car wash.	Spoke to manager who indicated that he had pumped the water to the sewer yesterday. He reported he would investigate if there is some sort of cross connection. Followed Up October 6th, problem fixed. Leaky irrigation line to buried landscaping drain.	Preventing Urban Runoff Tri-Fold
3	7/13/09	Storm Water Hotline	4759 Harbinson Road	Utility	SDGE has placed dirt and debris on the curb line within their overhead easement. Sandbags and tarp has blown over.	SDGE was contacted and has agreed to fix.	None
4	7/22/09	Code Compliance	3840 Riviera Drive	Residential	Loose dirt and debris/erosion onsite.	Letter to owner of property. Area hydroseeded.	Notice of Violation
5	7/29/09	Code Compliance	6965 Alamo Way	Residential	Green swimming pool water being discharged to curb/gutter.	Site visited, and no pumping was observed.	Pool/Spa Fact Sheet

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
6	7/30/09	Storm Water Hotline	US Carpet Care 5925 Samuel Street	Ind/Com	Report that a US Carpet Care Van was discharging material into the storm drain system via a manhole on Samuel Street.	Spoke with manager about the possible violations and fines, and she ensured that she would investigate the crew and deal with the issue internally. She stated that crews are aware of protocol and that dumping down the storm drain is never allowed.	None
7	7/30/09	Code Compliance	4630 Palm Avenue	Ind/Com	Henry's Marketplace was flushing their fire sprinkler system into adjacent concrete ditch leading to storm drain system.	Talked to the manager about doing this and precautions that must be taken.	None
8	8/4/09	Code Compliance	9038 Molly Woods Avenue	Residential	SFH empty lot received grading permits from City and began work, but owner allegedly committed suicide and project halted. Needs BMP maintenance and erosion control measures.	Will send enforcement letters to next of kin owners or other we can find on permit. BMP issues relatively minor; this issue remains ongoing.	None
9	8/4/09	Public Works	4220 Bancroft Drive	Residential	Tree branches and debris dumped into drainage area.	PW removed debris.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
10	8/5/09	Storm Water Hotline	5315 Kiowa Drive	Residential	Residents (renters) at 5315 Kiowa were reported to be dumping motor oil onto curb. There were oil stains in the street and gutter. It appears that someone changed the oil in the street and it leaked.	Informed residents of the code violation and fine for dumping. Residents said they would not work on cars onsite and would not dump anything. They were receptive and understood the problem.	SD County Automotive Oil Recycling Guide
11	8/11/09	Storm Water Hotline	NW Corner of La Mesa Boulevard and Palm Avenue	Ind/Com	Significant amount of grease on the sidewalk in front of Por Favor Restaurant.	Site visited and observed a greasy area on Palm Avenue that had been recently cleaned up. No illicit dumping was observed or any runoff issue. Sidewalk is dirty from an accumulation of grease and grime. Complainant was informed of the anticipated cleaning schedule.	None
12	8/14/09	Storm Water Hotline	House at corner of Manor Drive and W Manor Drive	Residential	Overwatering: irrigation running down the street.	Talked to elderly resident, who had forgotten to turn off the water.	Over Irrigation Fact Sheet
13	8/14/09	Civic Plus	9345 Monona Drive	Residential	Pool has a leak and water runs down the street when the filter pump runs.	No flows observed upon site visit. No one was home so educational material left on door.	Pool/Spa Fact Sheet

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
14	8/15/09	Storm Water Hotline	SDGE Massachusetts Avenue and Waite Drive	Utility	Motorist hit and dislodged power pole and transformer. Approximately 5 gallons of non-PCB mineral oil was conveyed to gutter.	100% of Material was recovered by absorbent material.	None
15	8/18/09	Storm Water Hotline	3015 Paula Street	Residential	SFH is doing driveway resurfacing. Dirt and material in the sidewalk.	Spoke with contractor who ensured they would clean it up ASAP. Clean up verified.	Construction Tri-fold
16	8/23/09	Request Tracker	6900 69th Street	Ind/Com	Area behind church and vet hospital is overgrown and full of trash	PW resolved issue.	None
17	8/24/09	Civic Plus	4463 4th Street	Residential	Runoff from neighbors' yard is causing a constant, slimy pooling of water at the curb/street edge where mosquitoes are breeding.	Site visited and small turtle pond is cleaned into a grate leading to the curb. Found an alternate area where resident could do this without discharge to storm drain.	Over Irrigation and Pool Fact Sheets
18	8/28/09	Storm Water Hotline	Blaine Place at Nagles Street (Dallas/Jackson Area)	Residential	Over-irrigation occurs early in the morning.	Site investigated and no issues observed. Returned Sept. 9 and found the house to be 6135 Blaine Place. Educational materials and an NPDES Written Warning was left at the door.	NPDES Written Warning Over Irrigation Fact Sheet

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
19	9/1/09	Resident	NE Corner of Jesse Avenue and Ohio Place (Side of house)	Ind/Com	Work truck dumped something down the storm drain during night. Resident did not get license plate or business name.	Site visited and observed a standard grate with no signs of pollution or dumping.	None
20	9/2/09	RWQCB Staff via Civic Plus	Ralphs Grocery Store Grossmont Drive and Jackson Drive	Ind/Com	Regional Board staff noticed carts being washed down with wash water heading toward the storm drain system.	Store manager was informed and issued a written warning. Manager investigated the issue and contacted the washing contractor.	NPDES Written Warning
21	9/9/09	Civic Plus	6235 Henderson	Residential	Discharging something oily into the gutter on a regular basis.	Site visited and no issue observed. Followed up with complainant but no response.	None
22	9/9/09	Resident	6090 Severin Drive	Residential	Over-irrigation complaint. Tenant says the water is on for 3 hours at a time and creates a torrent in the street from 7pm - 10pm on watering days.	Property manager claims this isn't true. Pictures were forwarded to the property owner who claimed to have fixed the problem.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
23	9/16/09	EPA National Tips Database and RWQCB	4870 Palm Avenue Mailing address: 591 Camino de la Reina Suite 918	Residential	Owner is storing junk in his backyard. Much of it has the potential to impact storm water quality, including rusty metals and broken equipment.	Site investigated and NOV issued since this has been an ongoing issue. Letter sent giving 21 days to clean up and to request a meeting. Owner responded on Sept. 29 and agreed. Owner to obtain a dumpster on Oct. 21. Nov. 20 - Cleaned up 90% of material. Dec. 7 – inspection verified total clean up.	Notice of Violation, Letter to Owner, Residential Sources Tri-fold
24	9/21/09	Public Works	7257 University Avenue	Ind/Com	Trash and debris from storm drain behind location.	PW cleaned up.	None
25	9/29/09	Resident	Complete Auto Repair 7801 El Cajon Blvd	Ind/Com	Observed work being done outside and radiator flushing into street 2 weeks ago.	Spoke with owner who was aware of regulations. Said a car with a leaky radiator was driven onto the lot and fixed immediately. Claims to never dump anything into the street.	Commercial BMP Tri-fold

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
26	9/30/09	Resident	4102 Blackton Drive	Residential	Overwatering and detailing business is washing cars into the storm drain.	Investigated complaint and found that washing machine is not plumbed to sewer and drains to the corner of the property. This was source of water. Individual was washing a car in the street at the time and was told to stop. Owner called a plumber and will plumb the machine to sewer on Oct. 1. Oct. 5 - Washer was plumbed to sewer.	None
27	10/6/09	Resident	Alamo Drive and Patria Drive	Utility	San Diego Resident called and indicated large amount of water flowing down the street. Said the source was in La Mesa.	Investigated and found the source to be in San Diego. Alerted San Diego Water Dept. to a broken water main.	None
28	10/21/09	Code Compliance	Rodeway Inn 4210 Spring Street	Ind/Com	Hotel manager was power washing awning and frontage.	Amount of water used was minimal with most water conveyed to landscaping or evaporating. No discharges noted. Informed manager of City regulations regarding power washing and storm drain discharges.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
29	10/23/09	Public Works	Greater San Diego Air Conditioning 8141 Center Street Sonora Plastering 2420 Palm Avenue Suite 77	Ind/Com	Greater San Diego Air Conditioning hired a contractor to do some stucco/plaster work on their facility at 8141 Center Street. Contractor washed the stucco/plaster down the gutter about 200 yards toward the curb inlet.	About ½ was cleaned up on the afternoon of Oct. 23. Remainder was cleaned up on morning of Oct. 26.	Notice of Violation (2) Commercial BMP Trifold (2)
30	11/5/09	Code Compliance	3840 Riviera Drive	Residential	Homeowner cleared and grubbed a large sloped area which drains toward a brow ditch.	Letter was issued to stabilize the slope with erosion control methods. Nov. 20 - Majority of work completed with hydroseed/tackifier stabilization.	Enforcement Letter

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
31	11/12/09	Storm Water Hotline	4350 Yale Avenue	Residential	Diesel fuel spill in the street.	Investigated and there appears to have been a spill at this location. Fuel is mostly just staining on pavement and gutter. Not a substantial amount of recoverable fuel. A verbal warning and door hanger was left at the residence instructing to call the City and to clean up the material. Nov. 18 - Resident stated that he was not the source but cleaned some of it up. Public Works request was made to investigate spill cleanup.	Pollutant door hanger Verbal warning
32	11/16/09	Storm Water Hotline	7439 Orien Avenue	Construction	Contractor had a hose that was sticking into the storm drain system. (SFH Yard)	Investigated and observed a pump that was conveying spring water from the surface adjacent to a hillside. Contractor was instructed to put a fiber roll in front of the inlet or to preferably put the water into landscaping.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
33	11/20/09	Resident	4314 Corte Sano	Construction	Concrete being washed down storm drain.	Investigated and found an individual washing concrete down the gutter in an attempt to clean up a spill. Instructed owner to clean up all concrete in the gutter. Informed owner and worker that the discharge was illegal and fines could follow as well as storm water rules regarding this kind of work.	Notice of Violation
34	11/23/09	Resident	6217 Primrose Drive	Residential	Broken storm drain pipe at location.	Repaired.	None
35	12/2/09	Civic Plus	4529 Normandie Place	Residential	RV and truck with oil stains in driveway/street.	Instructed homeowner to clean up all fresh oil stains and to place drip pans under all vehicles. Proceeded to clean up material in the street which appeared to be residue from City slurry work on Normandie.	Residential BMP Tri-fold
36	12/2/09	Resident	4555 Date Avenue	Residential	Storm drain has broken up swale in front of it.	PW repaired.	None
37	12/9/09	Public Works	8960 Lemon Avenue	Residential	Straw swale stuck in drainage outlet.	PW repaired.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
38	12/15/09	Resident	MTS Property Riviera Drive @ High Street	Residential	Homeless person dumped debris down by a culvert on MTS property.	Dec. 21 - MTS cleaned up the area.	None
39	12/16/09	Resident	8250 Commercial Street	Ind/Com	Drain blockage led to storm water ponding in the rear parking area of a building at 8250 Commercial Street. Building is vacant and empty.	Water had only been there for 2-3 days and was being pumped to a drainage ditch on Commercial Street. Storm water did not appear to be oily, dirty, or a pollution hazard in the local area. Advised the owner to pump as much to the landscaping as possible over a period of days. Dec. 16 – Completed pumping and majority put to landscaping.	None
40	12/23/09	Community Development	5454 Jackson Drive	Construction	Site is doing electrical work and trenching around the structure. No BMPs onsite and some ground water from trenching was conveyed to the street. Poor materials management. Slopes eroding from storm on Dec. 14.	Dec. 24 - Met with contractor and resolved issues.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
41	12/24/09	Resident	9240 Bramble Road	Residential	Clogged storm drain flows into pool after rain.	PW cleaned out drain.	None
42	1/13/10	Storm Water Hotline	6160 Horton Drive	Residential	Large amount of cigarette butts being routinely discarded into the street and gutter in front of 6160 Horton Drive	Letter sent to resident.	Enforcement Letter
43	1/18/10	Request Tracker	8960 Moisan Way	Residential	Clogged drain is spilling trash into street.	PW cleaned out drain.	None
44	1/19/10	Resident	4298 Panorama	Residential	Water on driveway. Poor street drainage has led to flooding.	Informed resident that this would be looked into, but these are long term improvement projects.	None
45	1/19/10	Resident	8940 Johnson Drive	Construction	Construction on Johnson Drive resulted in a storm drain blowout/upheaval of dirt onto the street.	Contacted contractor who cleaned it up.	None
46	1/19/10	Resident	5550 Lake Parkway	Ind/Com	Clogged Storm Drain	Forwarded to Public Works. Resolved.	None
47	1/19/10	Resident	7510 Orien Avenue at Olive/Normal	Residential	Clogged Storm Drain	Forwarded to Public Works. Resolved.	None
48	1/19/10	Engineering Dept.	4958 Pine Street	Construction	Sediment coming down the street from construction in rear.	NOV issues to improve BMPs. Fiber rolls moved.	Notice of Violation

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
49	1/19/10	Resident	8740 Echo Drive	Residential	Caltrans property adjacent to 8740 Echo will not drain.	Informed resident of Caltrans contract info and instructed him to document issue with pictures. Feb. 2 – no further response from resident.	None
50	1/22/10	Public Works	69th and Boulevard Drive	Ind/Com	Collapsed storm drain.	PW fixed drain.	None
51	1/26/10	Resident	8080 Pasadena Avenue	Residential	Problem with erosion into street off the back of their property.	No BMP issues observed.	None
52	2/8/10	Resident	Sierra Vista Avenue at County View	Residential	Septic leak in the County of San Diego. Advised to call County Hotline.	Directed to County of San Diego and problem resolved.	None
53	2/19/10	Resident	4404 Upland Road	Residential	Intermittent issue with white powder coming off of property. Problem started after a pool was installed. Owner of 4404 Upland took a sample last time the discharge occurred and said she would bring it in.	Site visited and no issue observed.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
54	3/4/10	Resident	Sunset Park-Upper Dirt Lot adjacent to Regional Park/Lake Park Condos	Municipal	Dumping prevalent. Teenagers and transients use the area frequently. Resident wants the tree trimmed in order to limit coverage.	Apr. 1 - Parks Dept. trimmed the tree	None
55	3/11/10	Resident	Comanche Hills Apts 5040 Comanche Drive	Residential	Residents are letting animal waste, litter and cigarettes build up. Maintenance crew isn't raking up leaves. Everything is getting routed to the storm drain system.	Contacted complex owner who stated that his site has pet waste bags and does a great job cleaning up. Acknowledged he would inform staff not to litter.	San Diego River Sheet
56	3/22/10	Resident	8530 Tio Diego Place	Construction	Contractor was doing work and plaster/stucco was washed into the curb/gutter in front of house and down street. Did not appear to reach storm drain. Told contractor to clean up.	Mar. 25 - Verified clean up	Written Warning
57	3/23/10	Resident	5430 Kiowa Drive	Residential	Neighbor discharging pool to the street.	Visited site and no active discharge.	None
58	4/1/10	Public Works	69th Street and Boulevard Drive	Ind/Com	Dirt around inlet.	PW cleaned inlet.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
59	4/8/10	Resident	Unknown	Residential	Over-irrigation at neighbor property.	Caller indicated he would work to resolve the issue. No further action taken.	None
60	4/12/10	Storm Water Hotline	6051 Horton Drive	Residential	Resident at 6051 Horton washed a significant amount of paint into the gutter and street.	Public Works cleaned it up with assistance from property owner.	Notice of Violation
61	4/12/10	Request Tracker	4652 Date Avenue	Residential	Resident was applying rat poison which was exposed to storm water.	Resident contacted and issue resolved.	Residential Tri-fold
62	4/12/10	Request Tracker	4572 Nebo Drive	Residential	Over-irrigation at property.	City looked into this issue months ago and did not find a source.	None
63	4/13/2010	Resident	4150 Violet Street	Residential	Owner was emptying swimming pool through unpaved alley, causing erosion.	Owner had already stopped the discharge by the time of site visit. He had started to drain to his landscaping.	None
64	4/16/10	Resident	6051 Horton Drive	Residential	Paint washed into the street on Horton Drive.	Property owner and Public Works already cleaned up the problem.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
65	4/17/10	Resident	8011 University Avenue	Ind/Com	Irrigation water from the property running for over 2 days into the storm drain system. Property owner contacted store manager at Vons who was able to shut it off.	Contacted property manager who indicated that he was aware of the problem and his crew was addressing it. Also indicated that they have a constant problem with vandalism of sprinkler heads which requires security onsite.	None
66	4/20/10	Public Works	Dallas Street at SR-125 Bridge	Utility	SDG&E was pumping ground water from a utility vault into the street to a SD inlet.	Water could not be conveyed to landscaping. Water was relatively clear and sediment free.	None
67	4/20/10	Resident	Dallas Street	Residential	Someone is pumping foul-smelling dirty water from a hole off of Dallas to the storm drain.	Complaint was not verified. No further action taken.	None
68	4/26/10	Fire Dept.	5015 Comanche Drive Unit I	Residential	Residence has a washer discharging to the street.	Apr. 26 – Site visited and warning letter sent to resident and rental office. Apr. 28 – Manager indicated washer has never been hooked up and will be removed.	Written Warning
69	5/4/10	Code Compliance	3738 King Street	Residential	Dirt from front of property is reaching the street.	May 5 – Letter sent to resident.	Residential Tri-fold

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
70	5/11/2010	Engineering Dept.	Lowell Street and University Avenue	Ind/Com	Landscaping company was seen blowing debris into the street gutter about 20 ft. from a curb inlet.	Company was in the process of cleaning it up completely when site was visited that day. Explained why he needed to keep debris away from the storm drain. Gave him a few ideas of where he could collect the debris before sweeping.	None
71	5/18/10	Police Storefront	Across street From 6040 Howell Street	Residential	Car (Chevelle) leaks oil into street. Some minor oil stains.	Site visited and observed no significant stains which could be remedied. Left door hanger.	Door Hanger
72	5/18/10	Public Works	8065 Porter Hill Terrace	Residential	Concrete debris in street from work at residence.	May 20 – Site has been cleaned up but source unknown.	None
73	5/20/10	Resident	Eastridge Drive and Sacramento Drive	Residential	Cans and trash in the storm drain.	PW cleaned.	None
74	5/21/10	Resident	Near 4501 Culbertson Avenue	Residential	Resident complained of a chemical (burning plastic) smell coming from the SE.	Investigated but source unknown. Nothing found at nearby businesses.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
75	5/25/10	Public Works	Motor Home at 4759 70th Street	Residential	Sewage spill at the property from motor home.	Public Works talked to the owners and they indicated they would clean it up. Site then visited and evidence no spill observed.	None
76	6/8/2010	Resident	Spice Street	Residential	Neighbor is draining pool through storm drain.	Pool water is compliant with discharge requirements.	None
77	6/15/10	Resident	9560 Gregory Street	Residential	Drainage ditch behind property is full of debris and weeds.	PW cleaned.	None
78	6/15/10	Resident	6922 Colorado Street and Bedrock Bounders and Landscape	Residential	While dirt was being delivered to SHF front yard, the truck flipped over and hydraulic fluid spilled into street. Tow company allowed fluid to spill around neighborhood.	Home owner and City assisted in clean up with kitty litter and street sweeper. Jun 16 – Verified cleanup but some residue stains on street.	Notice of Violation
79	6/17/10	Resident	4647 Garfield Place	Construction	SHF Construction crew washed concrete/plaster in street toward SD inlet.	Instructed to clean up the area. Jun 18 – verified cleanup by contractor.	Notice of Violation
80	6/17/10	Resident	Carlin Place	Residential	Water and algae in cross gutter. Resident wants City to clean it up.	Cross gutter is functioning properly and there is nothing else the City can do.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
81	6/19/10	Resident	9736 Murray Drive at Primrose	Residential	Plaster and waste dumped in gutter.	Referred to Public Works. Jun 24 – Streets supervisor indicated they had been swept and material removed to maximum extent possible.	None
82	6/23/10	Resident	4667 Judson Way	Residential	Residents are buying and selling cars and washing them at the location.	Letter sent to residence. Ongoing issue, referred to Code Compliance.	Residential Tri-fold
83	6/23/10	Resident	Colorado Street	Residential	Reported oil was spilled in the vicinity of Colorado Street	Issue was already resolved to the extent possible by Public Works.	None
84	6/28/10	Resident	8348 Center Drive	Ind/Com	Canal behind business is full of green algae.	Ongoing issue, canal functioning, not much PW can do.	None

APPENDIX C

Appendix C
JURMP Annual Report Requirements Checklist

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location in Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.2
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	Appendix A.1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-1 and 2-3
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2, Table 2-2
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.2

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.2
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3, Table 2-3
xviii. A description of notable activities conducted to manage urban runoff from development projects.	Throughout Section 2

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A.2
viii. A description of the general results of the inspections.	3.5
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5 Table 3-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix A.3
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	2.4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4 Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4 Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4 Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	**N/A for 09-10**
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3 Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3 Table 4-1
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3 Table 4-1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3 Table 4-1
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3 Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3 Table 4-1
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.3.4, Table 4-5
xviii. A description of the general results of the inspections.	Table 4-5
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	Throughout Section

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.2 (mobile), Appendix A (inventories)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	5.2.4
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	Throughout Section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2009/2010 Annual Report, will be submitted to the RWQCB no later than December 15, 2010.	

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2009/2010 Annual Report, will be submitted to the RWQCB no later than December 15, 2010.	

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3

Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.2 and 9.3

Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11

Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order. (For 2007-2008, the requirements that apply are essentially the same as those found in Order No. 2001-01)	10

Same as old Permit for 2007-2008

Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12

Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	4.2.3, 13

JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14 and each program component section

ATTACHMENTS

ATTACHMENT 2.1

UPDATED STORM WATER ORDINANCE

ORDINANCE NO. 2010-2806

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LA MESA, CALIFORNIA, REPEALING CHAPTER 7.18 OF THE MUNICIPAL CODE IN ITS ENTIRETY AND ADOPTING A NEW CHAPTER 7.18 TO UPDATE REGULATIONS PERTAINING TO STORM WATER AND NON-STORM WATER DISCHARGES

WHEREAS, the San Diego Regional Water Quality Control Board issued National Pollutant Discharge Elimination System Permit No. R9-2007-0001, the "Permit," on January 24, 2007;

WHEREAS, the Permit requires the City to develop, adopt, and implement various programs and policies aimed at controlling storm water pollution in and out of La Mesa's storm water conveyance system;

WHEREAS, it is necessary to update Municipal Code Chapter 7.18 (Storm Water Management and Discharge Control) by repealing and adopting the aforementioned Chapter to ensure compliance with the Permit; and

WHEREAS, the City Council desires to adopt this Ordinance for the purpose of complying with the Permit.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LA MESA, CALIFORNIA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1: Chapter 7.18 of the La Mesa Municipal Code shall be repealed in its entirety and readopted to read as follows:

"Chapter 7.18

STORM WATER MANAGEMENT AND DISCHARGE CONTROL

7.18.010 Title.

This Chapter shall be known as the 'City of La Mesa Watercourse Protection, Storm Water Management and Discharge Control Ordinance.'

7.18.020 Purpose and Intent.

The purpose of this Chapter is to protect the health, safety and welfare of the public by regulating all discharges into the storm water conveyance system and the waters of the State in order to preserve and enhance water quality for beneficial uses by:

(A) Prohibiting non-storm water discharges to the storm water conveyance system;

(B) Eliminating pollutants in storm water to the maximum extent practicable, including pollutants from both point and non-point sources;

(C) Prohibiting activities which cause, or contribute to, exceeding state and federal receiving water quality objectives.

(D) Protecting watercourses from disturbance and pollution.

The intent of this Chapter is to use the police power of the City to regulate water quality in a manner, which complies with all applicable laws, related to water quality, including the federal Clean Water Act, the state Porter-Cologne Water Quality Control Act, and the conditions of any NPDES

permit issued to the City.

7.18.030 Definitions.

For purposes of this Chapter only, the terms below have the following meaning:

"Beneficial Uses" means uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals.

"Beneficial Uses" of the Waters of the State that may be protected against include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. Beneficial Uses are equivalent to Designated Uses under federal law. [California Water Code Section 13050(f)].

"Best Management Practices" or "BMPs" means schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, operation and maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters, or the storm water conveyance system. BMPs may be structural or non-structural. Best Management Practices include, but are not limited to, site design, source control, treatment control, natural design methods, low flow diversions to the sewer, and structures such as infiltration basins, clarifiers, oil and grease separators and filters. BMPs may include any type of pollution prevention and pollution control measure the can help to achieve compliance with this Chapter.

"Clean Water Act Section 303(d) Impaired Water Body" or "impaired water body" means an impaired water body in which water quality does not meet applicable water quality standards and/or is not expected to meet water quality standards, even after the application of technology based pollution controls required by the Clean Water Act. The discharge of urban runoff to these water bodies is significant because these discharges can cause or contribute to violations of applicable water quality standards.

"Development Project" means new development or redevelopment with land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces, public agency projects, and land subdivision.

"Discharge" when used as a verb, means to allow pollutants to directly or indirectly enter storm water, or to allow storm water or non-storm water to directly or indirectly enter the storm water conveyance system or receiving waters, from an activity or operations. When used as a noun, "discharge" means the pollutants, storm water, and/or non-storm water that is discharged.

"Discharger" means any person engaged in activities or operations, or owning facilities, which may result in pollutants entering storm water, the storm water conveyance system or receiving waters. "Dischargers" include, but are not limited to, real and personal property owners, occupants, tenants, lessees, contractors, developers, managers and employees.

“Environmentally Sensitive Areas” include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other similar environmentally sensitive areas which have been identified by the City Engineer. “Directly adjacent” means situated within 200 feet of the Environmentally Sensitive Area. “Discharging directly to,” means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

“Illegal Connection” means a physical connection to the storm water conveyance system or receiving waters, which has not been reviewed and authorized by the city; or a permitted connection, which conveys illegal discharges.

“Illegal Discharge” is any discharge to the storm water conveyance system that is not composed entirely of storm water or is not discharged in compliance with this Chapter.

“Impervious Surface” means constructed or modified surfaces that cannot effectively infiltrate rainfall such as building rooftops, pavement, sidewalks, driveways, etc.

“Impervious Surface Area” means the ground area covered or sheltered by an impervious surface, measured in plan view, i.e., as if from directly above. For example, the “impervious surface area” for a pitched roof is equal to the ground area it shelters, rather than the surface area of the roof itself.

“Maximum Extent Practicable” or “MEP” refers to the standard established by Congress in Clean Water Act section 402(p)(3)(B)(iii) that municipal dischargers of storm water must meet; MEP is an acceptability standard for Best Management Practices based on a level of pollutant reduction that can be achieved by the most effective set of BMPs that can be implemented and still remain practicable; MEP generally emphasizes pollution prevention and source control BMPs as the first line of defense in combination with treatment methods as a backup.

“Non Point Source” refers to diffuse, widespread sources of pollution. These sources may be large or small, but are generally numerous throughout a watershed. Non point sources include, but are not limited to, urban, agricultural, or industrial areas, roads, highways, construction sites, communities served by septic systems, recreational boating activities, timber harvesting, mining, livestock grazing, as well as physical changes to stream channels, and habitat degradation. non point source pollution can occur year round any time rainfall, snow melt, irrigation, or any other source of water runs over land or through the ground, picks up pollutants from these numerous, diffuse sources and deposits them into rivers, lakes, and coastal waters or introduces them into ground water.

“Non-Storm Water” consists of all discharges to and from a storm water conveyance system that do not originate from precipitation events, i.e., all discharges other than storm water. Non-storm water includes illegal discharges, non-prohibited discharges, and NPDES permitted discharges.

“NPDES permit” means a National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency, the State Water Resources Control Board (“SWRCB”), or the California Regional Water Quality Control Board for the San Diego Region (“RWQCB”).

“Person” means an individual, corporation, partnership, limited liability company, joint venture, non-profit organization, trust, association, or governmental agency.

“Pollutant” is broadly defined as any agent that may cause or contribute to the degradation of water quality such that a condition of pollution or contamination is created or aggravated, including but not limited to, dredged spoil, rock, sand, or silt (excluding sediment, silt, or substances in quantities which would enter storm water from a natural undeveloped watershed); solid waste, animal waste, sewage, garbage, or medical waste; wrecked or discarded equipment; radioactive materials; industrial waste; any organic or inorganic contaminant; fecal coliform, fecal streptococcus, and enterococcus bacteria and other pathogens that pose a threat to human health; volatile organic carbon, surfactants, oil and grease, petroleum hydrocarbons, total organic carbon, lead, copper, chromium, cadmium, silver, nickel, zinc, cyanides, phenols, and biocides; any contaminant which can significantly degrade the quality of receiving waters by altering pH, total suspended or settle able solids, biochemical oxygen demand, chemical oxygen demand, nutrients, or temperature.

“Pollution” is the alteration of the quality of the receiving waters to a degree that unreasonably affects the beneficial use of the receiving waters or the facilities that serve the beneficial uses. “Pollution” also includes contamination, which creates a hazard to the public health through poisoning or the spread of disease.

“Point Source” means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged.

“RWQCB” means the California Regional Water Quality Control Board for the San Diego Region.

“Receiving Waters,” means all waters that are “Waters of the State” within the scope of the State Water Code, including but not limited to, natural streams, creeks, rivers, reservoirs, lakes, ponds, water in vernal pools, lagoons, estuaries, bays, the Pacific Ocean, and ground water.

“Significant Redevelopment” means the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces.

“State General Construction Storm Water Permit” means NPDES Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities, and any amendments thereto.

“State General Industrial Storm Water Permit” means NPDES Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities, and any amendments thereto.

“Storm Water” means runoff that originates from precipitation events. “Storm Water” is that portion of precipitation that flows across a surface to the storm drain system or receiving waters. Examples of this phenomenon include: the water that flows off a building’s roof when it rains (runoff from an impervious surface); the water that flows into streams when snow on the ground begins to melt (runoff from a semi-pervious surface); and the water that flows from a vegetated surface when rainfall is in excess of the rate at which it can infiltrate into the underlying soil (runoff from a pervious

surface). During precipitation events in urban areas, rainwater picks up and transports pollutants through storm water conveyance systems, and ultimately to receiving waters.

"Storm Water Conveyance System" means private and public drainage facilities within the City of La Mesa by which storm water may be conveyed to waters of the state, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains. Historic and current development makes use of natural drainage patterns and features as conveyances for urban runoff. Urban streams used in this manner are part of the storm water conveyance system regardless of whether they are natural, man-made, or partially modified features. in these cases, the urban stream is both a storm water conveyance system and receiving water.
"Structural BMP" means a BMP that relies on either a physical condition (other than an entirely natural and undisturbed condition), or on a constructed or installed device to reduce or prevent pollutants in storm water discharges and exempt non-storm water discharges. Constructed or enhanced BMPs that depend on natural materials and processes (e.g., constructed drainage swales or buffers, or constructed wetlands), that require periodic maintenance to function as designed, are Structural BMPs.

"SWRCB" means the State Water Resources Control Board.

"Watercourse" means any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, arroyo or wash, in which surface waters flow in a definite direction or source, either continuously or intermittently, and which has a definite channel and a bed or banks. A channel is not limited to land covered by minimal or ordinary flow, but also includes land covered during times of high water.

"Waters of the State" means any water, surface or underground, including saline waters within the boundaries of California. The definition of the "Waters of the State" is broader than that for the "Waters of the United States" in that all water in the State is considered to be a "Waters of the State" regardless, of circumstances or condition. Under this definition, a municipal storm sewer system (MS4) is always considered to be a "Waters of the State". [California Water Code Section 13050 (e)].

"Waters of the United States" means water subject to the regulatory jurisdiction of the United States under the Federal Clean Water Act and applicable case law. In general, this includes "navigable" waters, waters tributary to "navigable" waters, and adjacent wetlands. [40 Code of Federal Regulations section 122.2.]

"Wet season" means October 1 thru April 30.

<u>7.18.040 Illegal Discharges.</u>

A. Compliance with this Chapter. Any discharge that is not in compliance with this Chapter is an Illegal Discharge. The City maintains legal authority to control the contributions of pollutants in discharges of runoff into the City's MS4 associated with industrial, commercial, construction, and residential activities.

B. Discharge of Non-storm Water Prohibited. No person shall discharge non-storm water directly or indirectly into the storm water conveyance system or receiving waters. Prohibited are illegal discharges or illegal connections that include but not limited to;
   1. Sewage;
   2. Discharge of wash water resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive service facilities;

3. Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility including motor vehicles, cement-related equipment, and port-a-potty servicing, etc.;
4. Discharges of wash water from mobile operations such as mobile automobile washing, steam cleaning, power washing, and carpet cleaning, etc.;
5. Discharge of wash water from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, and residential areas including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.;
6. Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;
7. Discharge of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water;
8. Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction related wastes;
9. Discharges of food related wastes (e.g. grease, fish processing, and restaurant kitchen mat and trash bin wash water, etc.).

C. Exemptions.

1. Separately Permitted Discharges. Storm water discharges regulated under a valid facility-specific NPDES permit or facility specific RWQCB Waste Discharge Requirements permit are exempt from discharge prohibitions established by this Chapter, provided compliance with all relevant permit conditions is maintained to the satisfaction of the RWQCB and the City Engineer. Facilities and activities whose storm water discharges are regulated under a general permit, including the State General Industrial Storm Water Permit, State General Construction Storm Water Permit and the State General De-Watering Permit, are not exempted from this Chapter.

2. Categorically Exempt Discharges. The following categories of non-storm water discharges are exempt from discharge prohibitions established by this Chapter, if all required BMPs are installed, implemented and maintained:

   a. Air conditioning condensation;
   b. Discharges from potable water sources not subject to NPDES Permit No. CAG679001, other than water main breaks;
   c. Diverted stream flows (provided required permits are obtained);
   d. Flows from emergency fire fighting activities (flows necessary for the protection of life or property);
   e. Flows from riparian habitats and wetlands;
   f. Foundation drains (not including active groundwater dewatering systems);
   g. Individual residential washing of vehicles (as long as car washing activities are conducted on private property and that wastewater does not leave private property or enter City's MS4. Note that car washes for school or club fundraisers are not considered an exempt discharge);
   h. Irrigation water;
   i. Landscape irrigation (as long as significant volume of water is not flowing into the MS4 and there is no transport of sediment, grass clippings and other pollutants into the storm drain system);
   j. Lawn watering-(as long as significant volume of water is not flowing into the MS4 and there is no transport of sediment, grass clippings and other pollutants into the storm drain system);

k. Rising ground water;
l. Springs;
m. Swimming pool discharges (if dechlorinated, pH is between 7 and 8, and no erosion or pollutant transport occurs during draining);
n. Uncontaminated ground water infiltration [as defined in 40CFR 35.2005 (20)] to MS4;
o. Uncontaminated pumped ground water;
p. Water from crawl space pumps;
q. Water from footing drains (not including active groundwater dewatering systems);
r. Water line flushing.

3. Public Health and Safety Exemptions. Discharges determined by the City Engineer to be necessary to protect public health and safety are exempt from discharge prohibitions established by this Chapter, provided any conditions on such discharges imposed by the City Engineer are satisfied and the City Engineer makes written findings supporting the exemption.

4. On-Site Wastewater Systems. Discharges to the subsurface from properly functioning permitted site waste water systems are not prohibited by this Chapter.

5. Prohibit Categorically Exempt Discharges listed above that have been identified by the dry weather field screening and analytical monitoring, the receiving waters monitoring and reporting program, or other City monitoring programs as contributing to identified water quality problems.

6. Exemptions Not Absolute. Any exempt discharge described above which the City Engineer determines is a significant source of pollutants to receiving waters or the City's storm water conveyance system, shall be prohibited unless the discharger complies with additional BMPs imposed by the City Engineer to reduce pollutants in the discharge to the maximum extent practicable and the BMPs are effective. Such prohibitions shall take effect after written notice to the discharger by the City Engineer containing a schedule for compliance based on the necessity to protect public health and safety or the environment.

7.18.050 Notification and Mitigation of Illegal Discharges.

A Discharger shall immediately notify the City Engineer of an illegal discharge and take immediate action to control and contain the illegal discharge at the discharger's expense. The discharger shall also mitigate any damage caused by the illegal discharge. Should the City respond to the illegal discharge, the discharger shall be responsible for all costs associated with the City's response and cleanup efforts. The City Engineer may order the discharger to prepare and implement an approved mitigation plan with a time schedule for completion. A mitigation plan may include, but is not limited to, requiring a discharger to prepare a local SWPPP where applicable.

7.18.060 Illegal Connections.

No person shall establish, use, or maintain an illegal connection to the storm water conveyance system or the receiving waters.

7.18.070 Littering and Sweeping.

No person shall throw, deposit, leave, maintain, keep or permit to be thrown, deposited, placed, left or maintained, any refuse, pet waste, rubbish, garbage, or other discarded or abandoned objects, in or upon any street, alley, parking lot, sidewalk, curb, gutter, storm drain, catch basin,

conduit, or other drainage structure or lot except in receptacles maintained for the regular disposal of garbage.

Impervious surfaces, which drain directly or indirectly into the storm water conveyance system, shall be kept free of dirt and debris by regular sweeping. The sweepings shall be placed in garbage receptacles and shall not be allowed to enter the storm water conveyance system.

7.18.080 Compliance with Best Management Practices.

No discharger shall fail to implement, install, use, or maintain BMPs established by the City Engineer pursuant to this Chapter and in compliance with the City's BMP Manual.

7.18.090 Conclusive Determination of Maximum Extent Practicable.

The Best Management Practices established by the City Engineer shall reduce pollutants from the use or activity to the maximum extent practicable. For purposes of enforcement of this Chapter, the City Engineer's determination of the maximum extent practicable shall be conclusive.

7.18.100 Establishment and Prioritization of Best Management Practices for Construction Activities, New Development, Significant Redevelopment and Existing Development.

A. The City Engineer shall establish written BMPs for the following uses:

1. Construction Activities;
2. New Development and Significant Redevelopment;
3. Existing Industrial Development;
4. Existing Commercial Development;
5. Mobile Businesses;
6. Existing Residential Areas and Development;
7. Existing Municipal Areas and Activities;
8. Any other use if it is necessary to reduce pollutants entering receiving waters to the maximum extent practicable.

The document containing the Best Management Practices established by the City Engineer and required for the uses listed above shall be entitled the "The City of La Mesa Storm Water Best Management Practices Manual" (BMP Manual) and shall be incorporated by this reference as an appendix to this Chapter. The BMP Manual includes the City's local Standard Urban Storm Water Mitigation Plan.

B. The City Engineer shall establish priorities for implementation and enforcement of BMPs based on the threat to water quality for each use described in the subsection above.

1. Each site of construction activities shall be categorized as a high, medium, or low threat to water quality by considering the following:
   a. Soil erosion potential;
   b. Site slope;
   c. Project size and type;
   d. Sensitivity of receiving water bodies;
   e. Proximity to receiving water bodies;
   f. Non-storm water discharges;
   g. Past record of non-compliance by the operators of the construction site; and
   h. Any other relevant factors.

2. Each construction site that is determined by the City Engineer to present an exceptional threat to water quality shall be required to implement advanced treatment

for sediment per the requirements of the BMP Manual.

3. Development projects will be required to meet the hydromodification management requirements as described in the BMP Manual.

4. Development and redevelopment projects will be required to meet the applicable post-construction storm water management requirements as described in the BMP Manual. Projects included in the following list shall be categorized as priority development projects.

   a. Housing subdivisions resulting in the disturbance of one acre or more of land or comprised of 10 or more dwelling units. This category includes single-family homes, multi-family homes, condominiums, and apartments.
   b. Commercial developments resulting in the disturbance of one acre or more of land. This category is defined as any development on private land that is not for heavy industrial or residential uses where the land area for development is greater than one acre. The category includes, but is not limited to, hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; commercial airfields; and other light industrial facilities.
   c. Development of heavy industry resulting in the disturbance of one acre or more of land. This category includes, but is not limited to, manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, trucks, etc.).
   d. Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.
   e. Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all Standard Urban Storm Water Mitigation Plan (SUSMP) requirements except for structural treatment BMP and numeric sizing criteria requirement and hydromodification requirement.
   f. All hillside development greater than 5,000 square feet. This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
   g. Environmentally Sensitive Areas: All development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (where discharges from the development or redevelopment will enter receiving waters within the environmentally sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring condition. “Directly adjacent” means situated within 200 feet of the Environmentally Sensitive Area (ESA). “Discharging directly to “means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.
   h. Parking lots 5,000 square feet or more or with 15 or more parking spaces and

potentially exposed to urban runoff. Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

i. Street, roads, highways, and freeways. This category includes any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. Natural BMPs such as constructed wetlands, grassed swales, biofilters, wet ponds, and vegetated filter strips, shall be utilized whenever practicable for all new development and significant redevelopment.

j. Retail Gasoline Outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more, or (b) a projected average daily traffic (ADT) of 100 or more vehicles per day.

k. All other pollutant generating Development Projects that result in the disturbance of one acre or more of land. Generally all projects which include impervious surfaces and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces.

5. Each site of existing industrial development that meets at least one of the following criteria will be included in the industrial inventory:

a. Industrial facilities as defined at 40 CFR§ 122.26(b) (14)
b. Industrial facilities that are subject to section 313 of Title III of the Superfund amendments and Reauthorization Act of 1986 (SARA);
c. Industrial facilities tributary to a Clean Water Act Section 303(d) Impaired Water Body, where a facility generates pollutants for which the water body is impaired;
d. Industrial facilities within or directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas;
e. Facilities subject to the statewide General Industrial Permit or other individual NPDES permits;
f. Operating and closed landfills;
g. Hazardous waste treatment, disposal, storage and recovery facilities;
h. All other industrial facilities that the City Engineer determines are contributing significant pollutant loading to its storm water conveyance system, regardless of whether such facilities are covered under the statewide General Industrial Permit or other NPDES permit.

6. Each site of existing commercial development that conducts activities consistent with any of the categories in the following list shall be included in the commercial inventory

a. Automobile mechanical repair, maintenance, fueling, or cleaning;
b. Airplane mechanical repair, maintenance, fueling, or cleaning;
c. Boat mechanical repair, maintenance, fueling, or cleaning;
d. Equipment repair, maintenance, fueling, or cleaning;
e. Automobile and other vehicle body repair or painting;
f. Automobile (or other vehicle) parking lots and storage facilities;
g. Retail or wholesale fueling;
h. Pest control services;
i. Eating or drinking establishments including food markets;
j. Cement mixing or cutting;
k. Masonry;
l. Painting and coating;
m. Botanical or zoological gardens and exhibits;
n. Landscaping;
o. Nurseries and greenhouses;
p. Golf courses, parks and other recreational areas/facilities;
q. Cemeteries;
r. Marinas;
s. Building material retailers and storage;
t. Animal facilities;
u. Portable sanitary services;
v. Mobile business (including but not limited to mobile automobile or other vehicle washing, mobile carpet/drape/furniture cleaning, painting and coating, pool and fountain cleaning, and power washing services);
w. Other commercial sites or sources that the City Engineer determines may contribute a significant pollutant load to the storm water conveyance system;
x. Any commercial site or source tributary to a Clean Water Act Section 303(d) impaired water body, where, the site or source generates pollutants for which the water body is impaired;
y. Any commercial site or source within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an environmentally sensitive area.

7. Each inventoried site of existing industrial development and existing commercial development shall be assigned a threat to water quality prioritization based on the following factors:

a. Type of industrial activity (SIC Code);
b. Materials used at the facility;
c. Wastes generated;
d. Pollutant discharge potential;
e. Non-storm water discharges;
f. Size of facility;
g. Facility design;
h. Proximity to receiving water bodies;
i. Sensitivity of receiving water bodies;
j. Whether the industrial site is subject to the Statewide General Industrial Permit or an individual NPDES permit;
k. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
l. Total area of the site, area of site where industrial activities occur, and area of the site exposed to rainfall and runoff;
m. Facility's compliance history;

n. Any other relevant factors.

8. The City Engineer shall identify residential areas and activities that are a high priority threat to water quality. At a minimum, these shall include:

   a. Automobile repair and maintenance;
   b. Automobile washing;
   c. Automobile parking;
   d. Home and garden care activities, product use, and disposal (pesticides, herbicides, and fertilizers);
   e. Disposal of household hazardous waste (e.g., paints, cleaning products);
   f. Disposal of trash and pet waste;
   g. Disposal of green waste;
   h. Any other residential source that the City Engineer determines may contribute a significant pollutant load to the storm water conveyance system;
   i. Any residence tributary to a Clean Water Act Section 303(d) Impaired Water Body, where the residence generates pollutants for which the water body is impaired;
   j. Any residence within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area.

9. Each existing municipal area or activity shall be categorized as a high, medium, or low threat to water quality by considering factors including but not limited to the following:

   a. Type of municipal area or activity;
   b. Materials used;
   c. Wastes generated;
   d. Pollutant discharge potential;
   e. Non-storm water discharges;
   f. Size of facility or area;
   g. Proximity to receiving water bodies;
   h. Sensitivity of receiving water bodies;
   i. Any other relevant factors.

At a minimum, the high priority municipal areas and activities shall include the following:

(1) Roads, streets, highways, and parking facilities;
(2) Flood management projects and flood control devices;
(3) Areas and activities tributary to a Clean Water Act Section 303(d) Impaired Water Body, where an area or activity generates pollutants for which the water body is impaired;
(4) Areas and activities within or adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas;
(5) Municipal waste facilities such as active or closed municipal landfills; publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems; municipal separate storm sewer systems; incinerators; solid waste transfer facilities; land application sites; uncontrolled sanitary landfills; corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles; sites for disposing and treating sewage sludge; and hazardous waste treatment, disposal, and recovery facilities;
(6) Municipal airfields;
(7) Parks and recreation facilities;

(8) Special event venues following special events (festivals, sporting events, etc.);
(9) Power washing;
(10) Other municipal areas and activities that the City Engineer determines may contribute a significant pollutant load to the storm water conveyance system.

7.18.110 Site Specific Best Management Practices.

The City Engineer may establish written Best Management Practices for a specific site or activity if necessary to reduce pollutants to the maximum extent practicable or to comply with Total Maximum Daily Load orders or other orders issued to the City that require additional control of sources or potential sources of pollutants to the City's storm water conveyance system.

7.18.120 Alternative Best Management Practices.

The City Engineer may establish written alternative Best Management Practices. The allowable use of alternative BMPs at a specific site shall be determined at the sole discretion of the City Engineer.

7.18.130 Additional Best Management Practices.

The City Engineer may establish additional written Best Management Practices for a specific site if the City Engineer determines that the Best Management Practices implemented at the site have not reduced the pollutants to the maximum extent practicable.

7.18.140 Minimum Best Management Practices.

All dischargers shall implement all applicable Best Management Practices required by the BMP Manual. All dischargers shall also install, implement and maintain at least the following minimum Best Management Practices:

A. Eroded soils. Prior to the rainy season, dischargers must remove or secure any significant accumulations of eroded soils from slopes previously disturbed by clearing or grading, if those eroded soils could otherwise enter the storm water conveyance system or receiving waters during the rainy season. Slopes more than five feet in height, more than 250 square feet in total area, and steeper than 3:1 (run-to-rise) that have been disturbed at any time by clearing, grading, or landscaping, shall be continuously protected from erosion. Additionally, cleared or graded areas left exposed at any given time are limited to the amount of acreage that the project proponent can adequately protect prior to predicted storm event or 17 acres unless disturbance of a larger area is approved in writing by the City Engineer.

B. Parking Lots. Dischargers with parking lots or impervious surfaces used for similar purposes shall clean the surfaces frequently and thoroughly in a manner that does not cause non-storm water discharge to the storm water conveyance system. In most cases, this will require dry cleaning methods such as sweeping and removal of dirt and debris. The dirt and debris shall be disposed of in a manner that prevents it from entering the storm water conveyance system or the receiving waters. At least one cleaning shall be completed in September of each year.

C. Storage of Materials and Wastes. All materials and wastes with the potential to pollute urban runoff shall be stored in a manner that either prevents contact with rainfall and storm water, or contains contaminated runoff for treatment and disposal. Stockpiles of soil or other materials shall be covered and contained throughout the year. All liquid material shall be covered, contained, and placed over secondary containment at all times.

D. Use of Materials. All materials with the potential to pollute urban runoff, including but not limited to, cleaning and maintenance products used outdoors, fertilizers, pesticides and herbicides, shall be used in accordance with label directions. If a label cautions against use of a product where it may enter water or waterways, or cautions that the product may be toxic or have

toxic effects, the product may not be disposed of or rinsed into receiving waters or the storm water conveyance system.

E. Self Inspection for Illegal Discharges. All dischargers, except residential single-family home dischargers, shall inspect their facilities, activities, operations, and procedures at least annually to detect illegal connections and illegal discharges. The self-inspection shall be documented in records kept on the premises for at least five years.

F. Inspection, Maintenance, Repair and Upgrading of BMPs. Structural BMPs must be inspected by the discharger before predicted rain events and following actual rain events. These BMPs must be maintained so that they continue to function as designed. Structural BMPs that fail must be repaired as soon as it is safe to do so. Annual verification of maintenance of structural BMPs must be submitted to the City as required by the City Engineer. If the failure of a structural or nonstructural BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances. All sediment and debris in catch basins must be removed prior to the wet season and disposed of in a manner that prevents it from entering the storm water conveyance system or the receiving waters.

7.18.150 Discharger Sampling, Testing, Monitoring, and Reporting.

The City Engineer may require dischargers to perform sampling, testing, monitoring and reporting of results as a Best Management Practice. In addition, the City Engineer may order a discharger to conduct testing or monitoring and to report the results to the City if (1) the City Engineer determines that testing or monitoring is needed to determine whether BMPs are effectively preventing or reducing pollutants in storm water to the maximum extent practicable, or to determine whether the facility is a significant source of contaminants to waters of the state; or (2) the City Engineer determines that testing or monitoring is needed to assess the impacts of an Illegal discharge on health, safety or the environment; or (3) an illegal discharge has not been eliminated after written notice by the City Engineer; or (4) the discharger is in violation of any provision of this Chapter; or the Regional Water Quality Control Board requires the City to provide information on the discharger's activities.

Testing and monitoring ordered pursuant to this section may include the following:

(1) Visual monitoring of dry weather flows, wet weather erosion, or BMPs;
(2) Visual monitoring of premises for spills or discharges;
(3) Laboratory analyses of storm water or non-storm water discharges for pollutants;
(4) Background or baseline monitoring or analysis; and
(5) Monitoring of receiving waters or sediments that may be affected by pollutant discharges by the discharger.

The City Engineer may direct the time and manner in which the results of required testing and monitoring are reported, and shall determine when required sampling, testing or monitoring may be discontinued. The sampling, testing, monitoring and reporting shall be at the expense of the discharger.

7.18.160 City Authority to Sample, Inspect, and Monitor.

A. Regulatory Inspections. The City Engineer or his designee may inspect the premises of any discharger at reasonable times and in a reasonable manner to carry out the purposes of this Chapter. If a discharger refuses to allow entry for an inspection, an inspection warrant shall be obtained prior to inspection.

B. Scope of Inspections. Inspections may include all actions necessary to determine whether any illegal discharges or illegal connections exist, whether the BMPs installed and implemented are adequate to comply with this Chapter, whether those BMPs are being properly maintained, and whether the discharger complies with other requirements of this Chapter. This may include sampling, metering, monitoring, visual inspections, and records review. Where samples are collected the discharger may request and receive split samples. Records, reports, analyses, or other required information may be inspected and copied, and photographs taken for purposes of enforcement of this Chapter.

C. Installation of Sampling Devices. As part of the inspection, the City Engineer may authorize the installation of sampling or metering devices.

7.18.170 Establishment of a Fee.

The City Council may establish a fee by resolution to recover the cost of inspection, sampling, metering or monitoring by the City Engineer.

7.18.180 Local Storm Water Pollution Prevention Plan.

The City Engineer may require a discharger to prepare and submit a Local Storm Water Pollution Prevention Plan (Local SWPPP) for approval as a Best Management Practice (BMP). In addition, the City Engineer may require a discharger to prepare and submit a Local SWPPP for approval if (1) the discharger is not in compliance with this Chapter; or (2) the facility or activity is a significant source of pollutants to the receiving waters despite compliance with this Chapter. Any discharger required to submit and to obtain approval of a Local SWPPP shall install, implement, and maintain the BMPs specified in the approved Local SWPPP.

The Local SWPPP shall identify the BMPs that will be used by the discharger to prevent or control pollutants in storm water to the maximum extent practicable. If the facility is an industrial facility, the Local SWPPP submitted to the City shall at a minimum meet the requirements of the State NPDES General Industrial Storm Water Permit. If the activity at issue is a construction or land disturbance activity, the Local SWPPP submitted to the City shall at a minimum meet the requirements of the State NPDES General Construction Storm Water Permit. Additional minimum Local SWPPP requirements are:

(1) An inventory of all materials on site that may adversely affect storm water quality;
(2) A description of measures that will be taken to reduce the possibility of accidental spillage resulting from equipment failure or employee error;
(3) A description of onsite spill control procedures and equipment to prevent pollutants from entering the storm water conveyance system;
(4) A site map showing all building structures, materials and waste storage areas, outdoor equipment; storage areas, vehicle service areas, paved areas, areas of existing and potential erosion, storm drain inlets, points of discharge to the storm water conveyance system, and an estimate of the size of the facility and the size of the impervious surface area;
(5) A description of the storm water monitoring program conducted on the site, if any.
(6) A documented employee training program which includes, but is not limited to, the following topics:
    a. Laws, regulations and local ordinances relating to storm water pollution prevention, and an overview of the potential impacts of pollutants in storm water on the receiving waters;
    b. Proper handling of all materials and wastes to prevent spillage;
    c. Proper mitigation of spills, including spill response, containment and cleanup procedures;

d. Visual monitoring of all effluent streams to ensure that no Illegal discharges enter the storm water conveyance system;
e. Discussion of the differences between the storm water conveyance system and the sanitary sewer system;
f. Identification of all onsite connections to the storm water conveyance system.
g. Preventative maintenance and good housekeeping procedures;
h. Material management practices employed by the facility to reduce or eliminate pollutant contact with storm water.

Training materials shall be kept onsite and records of attendance shall be retained for at least five years.

7.18.190 Violation of a State NPDES Permit. A violation of a State NPDES General Construction Storm Water Permit , a State NPDES General Industrial Storm Water Permit, a State General De Watering Permit, or other applicable NPDES permit shall also be considered a violation of this Chapter and may be enforced as such.

7.18.200 Watercourse Protection.

A. Every person owning or occupying real property through which a watercourse passes shall keep and maintain the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles which would pollute, contaminate or retard the flow of water through the watercourse; shall maintain the private structures on the property in a manner which will prevent the structures from interfering with the use, maintenance and physical integrity of the watercourse; shall not remove vegetation in a manner which will increase erosion or remove more healthy vegetation than is necessary for maintenance of the flow.

B. No person shall commit, or cause to be committed, the following acts, unless a written permit has been obtained from the City Engineer and the appropriate state and federal agencies:

(1) Discharge pollutants into or connect any pipe or channel to a watercourse;
(2) Modify the natural flow of water in a watercourse;
(3) Carry out development within thirty feet of the centerline of any creek, or twenty feet of the top of a bank, whichever is the greater distance from the top of the bank;
(4) Deposit in, plant in, remove any material from a watercourse, including its banks, except as required for ordinary and necessary maintenance;
(5) Construct, alter, enlarge, connect to, change, or remove any structure in a watercourse; or
(6) Place any loose or unconsolidated material (including animal manure) along side of or within a watercourse so as to cause a diversion of the flow, or to allow the material to be carried away by storm water.

7.18.210 Permits and Approvals.

Compliance with this Chapter shall be a condition of every permit or approval granted or issued by the City. Failure to comply with this Chapter shall be grounds for revocation of any such permit or approval.

7.18.220 Violation is a Nuisance.

The City Council hereby declares that any violation of this Chapter is a public nuisance.

7.18.230 Enforcement of this Chapter.

A. Misdemeanor Violation. Notwithstanding any other provision of this Code, a violation of this Chapter is a misdemeanor punishable by a fine of not more than one thousand dollars

($1,000) or imprisonment in the County Jail for a period of not more than six months or both fine and imprisonment. Any such violation may be charged as an infraction at the discretion of the City Attorney. Any person convicted of an infraction under the provisions of this Chapter shall be punishable by a fine not to exceed two hundred fifty dollars ($250) for a first or second offense in one year, and not to exceed five hundred dollars ($500) for a third violation in one year.

B. Orders of the City Engineer. The City Engineer is authorized to issue Cease and Desist Orders or Stop Work Orders to any person who is in violation of this Chapter. Failure to comply with a written order of the City Engineer shall be a violation of this Chapter and shall be grounds for the imposition of the civil penalties described in this section.

C. Civil Penalties. Any person who violates a provision of this Chapter may be assessed a civil penalty based on the City of La Mesa Administrative Fine Schedule. Civil penalties may also be assessed by the court in a civil action filed by the City to enforce the provisions of this Chapter.

D. Abatement. Any violation of this Chapter may be abated as a public nuisance and costs of abatement may be recovered by the City as allowed by law.

E. Judicial Action. This Chapter is enforceable by any judicial action allowed by law, including, but not limited to, injunctive relief.

F. Liens. Costs of enforcement of this Chapter, including but not limited to, costs of investigation, sampling and monitoring costs, and unpaid administrative fines and civil penalties, shall constitute a lien against the real property on which the violation occurs and on the real property of any person who violates this Chapter until such lien is satisfied. The lien may be recorded and executed in the same manner as a judgment lien. Prior to the recordation of the lien, the property owner shall be given written notice of the lien and an opportunity to contest the validity of the lien and the amount at a hearing held by the City Manager or designee.

G. Remedies Not Exclusive. Remedies under this Chapter shall be in addition to each other, and in addition to any other legally available remedy, and do not limit or supersede any other enforcement action, civil, criminal or administrative."

SECTION 2: The document containing the Best Management Practices established by the City Engineer pursuant to Section 7.18.100, entitled the "The City of La Mesa Storm Water Best Management Practices Manuals Part I & II," and on file in the City Clerk's office, is hereby adopted as an uncodified appendix to Chapter 7.18.

SECTION 3: This ordinance shall be effective 30 days after its adoption and the City Clerk shall certify to the adoption of this Ordinance and cause the same to be published at least once in the *East County Californian/La Mesa Forum* within 15 days of its adoption.

INTRODUCED AND FIRST READ at a Regular meeting of the City Council of the City of La Mesa, California, held the 9th day of February 2010, and thereafter PASSED AND ADOPTED at a Regular meeting of said City Council held the 23rdday of February 2010, by the following vote, to wit:

AYES: Councilmembers Allan, Arapostathis, Ewin, Sterling and Mayor Madrid

NOES: None

ABSENT: None

APPROVED:

/s/Arthur E. Madrid
ARTHUR E. MADRID, Mayor

ATTEST:

/s/Mary J. Kennedy
MARY J. KENNEDY, CMC, City Clerk

CERTIFICATE OF CITY CLERK

I, MARY J. KENNEDY, City Clerk of the City of La Mesa, California, do hereby certify the foregoing to be a true and correct copy of Ordinance No. 2010-2806, duly passed and adopted by the City Council of said City on the date and by the vote therein recited and that the same has been duly published according to law.

/s/Mary J. Kennedy
MARY J. KENNEDY, CMC, City Clerk

(SEAL OF CITY)

ATTACHMENT 2.2

UPDATED BMP MANUAL II

City of La Mesa
Department of Public Works
Engineering Division

The City of La Mesa Storm Water Best Management Practices Manual – Part II

LA MESA LOCAL STANDARD URBAN STORM WATER MITIGATION PLAN (LOCAL SUSMP)
Adopted 2002
Updated February 2010

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Glossary

Advanced Treatment

Using mechanical or chemical means to flocculate and remove suspended **sediment** from runoff from construction sites prior to discharge.

Attached Residential Development

Any development that provides residential units that share an interior/exterior wall. This category includes, but is not limited to: dormitories, condominiums, and apartments.

Automotive Repair Shop

A facility that is categorized in any one of the following **Standard Industrial Classification (SIC)** codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

Best Management Practice (BMP)

Any procedure or device designed to minimize the quantity of pollutants that enter the storm drain system. BMPs also include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. This manual groups storm water BMPs into the following categories: (1) Construction Storm Water BMPs, which are practices, procedures, devices or materials used to prevent the transport and introduction of pollutants both on and from a project during construction; and (2) Permanent Storm Water BMPs, which are the **Low Impact Development** design features, **source control** features, and **treatment control BMP**s that become a permanent part of a project site.

California Association of Stormwater Quality Agencies (CASQA)

Publisher of the California Stormwater Best Management Practices Handbooks, available at www.cabmphandbooks.com. Successor to the Storm Water Quality Task Force (SWQTF).

California BMP Method

A method for determining the required volume of storm water treatment facilities. Described in Section 5.5.1 of the California Stormwater Best Management Practice Manual (New Development) (CASQA, 2003).

Commercial Development

Commercial development is defined as any development on private land that is not for heavy industrial or residential uses. The category includes, but is not limited to, hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; commercial airfields; and other light industrial facilities. Any development on private land that is not exclusively industrial or residential uses. The **Priority Development Project** category is defined as commercial developments resulting in the disturbance of one acre or more of land.

Conditions of Approval (COAs)

Requirements a municipality may adopt for a project in connection with a discretionary action (e.g., adoption of an EIR or negative declaration or issuance of a use permit). COAs may include features to be incorporated into the final plans for the project and may also specify uses, activities, and operational measures that must be observed over the life of the project.

Construction Storm Water Management Plan (CSWMP)	A CSWMP is the document prepared and submitted to meet the City of La Mesa's construction BMP requirements for a project that causes land disturbance of less than one acre.
Continuous Simulation Modeling	A method of hydrological analysis in which a set of rainfall data (typically hourly for 30 years or more) is used as input, and runoff rates are calculated on the same time step. The output is then analyzed statistically for the purposes of comparing runoff patterns under different conditions (for example, pre- and post-development-project).
Copermittees	See **Dischargers**.
Detached Residential Development	Any development that provides freestanding residential units. This category includes, but is not limited to: detached homes, such as single-family homes and detached condominiums.
Detention	The practice of holding storm water runoff in ponds, vaults, within berms, or in depressed areas and letting it discharge slowly to the storm drain system. See definitions of **infiltration** and **retention**.
Directly Connected Impervious Area	Any **impervious surface** which drains into a catch basin, area drain, or other conveyance structure without first allowing flow across pervious areas (e.g. lawns).
Direct Infiltration	Infiltration via methods or devices, such as dry wells or infiltration trenches, designed to bypass unsaturated surface soils and transmit runoff directly to groundwater.
Dischargers	The agencies named in the **storm water NPDES permit** (see definition): the County of San Diego; the Cities of Carlsbad, El Cajon, La Mesa, Poway, Solana Beach, Chula Vista, Encinitas, Lemon Grove, San Diego, Vista, Coronado, Escondido, National City, San Marcos, Del Mar, Imperial Beach, Oceanside, and Santee; the San Diego Unified Port District, and the San Diego County Regional Airport Authority.
Drainage Management Areas	Areas delineated on a map of the development site showing how drainage is detained, dispersed, or directed to **Integrated Management Practices**. There are four types of Drainage Management Areas, and specific criteria apply to each type of area. See Chapter 4.
Drawdown time	The time required for a storm water detention or infiltration facility to drain and return to the dry-weather condition. For detention facilities, drawdown time is a function of basin volume and outlet orifice size. For infiltration facilities, drawdown time is a function of basin volume and infiltration rate.

Areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other equivalent environmentally sensitive areas which have been identified by the City of La Mesa.

Environmentally Sensitive Areas

This **Priority Development Project** category includes all development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (where discharges from the development or redevelopment will enter receiving waters within the environmentally sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the Environmentally Sensitive Area (ESA). "Discharging directly to "means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

Flow Control

Control of runoff rates and durations as required by the Hydromodification Management Plan.

Head

In hydraulics, energy represented as a difference in elevation. In slow-flowing open systems, the difference in water surface elevation, e.g., between an inlet and outlet.

Higher-Rate Biofilter

A biofilter with a design surface loading rate higher than the 5 inches per hour rate specified in this document for bioretention facilities and planter boxes.

Hillside

Lands that have a natural gradient of 25 percent (4 feet of horizontal distance for every 1 foot of vertical distance) or greater and a minimum elevation differential of 50 feet, or a natural gradient of 200 percent (1 foot of horizontal distance for every 2 feet of vertical distance) or greater and a minimum elevation differential of 10 feet.

Hillside Development Greater Than 5,000 Square Feet

This **Priority Development Project** category includes any development which creates 5,000 square feet of **impervious surface** which is located in an area with known erosive soil conditions, where the development will grade any natural slope that is 25 percent or greater.

Hydrograph

Runoff flow rate plotted as a function of time.

Hydromodification

The change in the natural hydrologic processes and runoff characteristics (i.e. interception, infiltration, overland flow, interflow, and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and changes in sediment transport. In addition, alteration of stream and river channels, installation of dams and water impoundments, and excessive stream bank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

Hydromodification Management Plan (HMP)	A Plan implemented by the **dischargers** so that post-project runoff shall not exceed estimated pre-project rates and/or durations, where increased runoff would result in increased potential for erosion or other adverse impacts to beneficial uses. Also see definition for **flow control.**
Hydrologic Soil Group	Classification of soils by the Natural Resources Conservation Service (NRCS) into A, B, C, and D groups according to infiltration capacity.
Industrial Development	Industrial facilities include those defined at 40 CFR 122.26(b)(14), including those subject to the General Industrial Permit or other individual NPDES permit, operating and closed landfills, facilities subject to SARA Title III, and hazardous waste treatment, disposal, storage and recovery facilities. Examples of industrial facilities includes manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.). The **Priority Development Project** category includes development of heavy industry resulting in the disturbance of one acre or more of land.
Impervious surface	Any material that prevents or substantially reduces infiltration of water into the soil. See discussion of imperviousness in Chapter Two.
Infeasible	As applied to best management practices, impossible to implement because of technical constraints specific to the site.
Infiltration	Seepage of runoff into soils underlying the site. See definition of **retention.**
Infiltration Device	Any structure, such as a dry well, that is designed to infiltrate storm water into the subsurface and, as designed, bypasses the natural groundwater protection afforded by surface or near-surface soil. See definition for **direct infiltration**.
Integrated Management Practice (IMP)	A facility **(BMP)** that provides small-scale treatment, retention, and/or detention and is integrated into site layout, landscaping, and drainage design. See **Low Impact Development.**
Integrated Pest Management (IPM)	An approach to pest management that relies on information about the life cycles of pests and their interaction with the environment. Pest control methods are applied with the most economical means and with the least possible hazard to people, property, and the environment.
Interim Hydromodification Criteria	Pursuant to NPDES permit Provision D.1.d.g.(6), the City of La Mesa prepared Interim Hydromodification Management criteria, which apply to projects disturbing 50 acres or more. The criteria are described in Chapter 2 and in memoranda on the Project Clean Water website.
Jurisdictional Urban Runoff Management Plan (JURMP)	A written description of the specific jurisdictional urban runoff management measures and programs that the City of La Mesa implements to comply with the **storm water NPDES permit** and ensure pollutant discharges are reduced to the MEP and do not cause or contribute to a violation of water quality standards. See **Storm Water Pollution Prevention Program.**

Lead Agency	The public agency that has the principal responsibility for carrying out or approving a project. (CEQA Guidelines §15367).
Low Impact Development	An integrated site design methodology that uses small-scale detention and retention (Integrated Management Practices, or **IMPs**) to mimic pre-existing site hydrological conditions.
Maximum Extent Practicable (MEP)	Standard, established by the 1987 amendments to the Clean Water Act, for the implementation of municipal **storm water pollution prevention programs** (see definition). According to the Act, municipal storm water NPDES permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."
National Pollutant Discharge Elimination System (NPDES)	As part of the 1972 Clean Water Act, Congress established the NPDES permitting system to regulate the discharge of pollutants from municipal sanitary sewers and industries. The NPDES was expanded in 1987 to incorporate permits for storm water discharges as well.
Natural Drainage	A natural swale or topographic depression which gathers and/or conveys runoff to a permanent or intermittent watercourse or waterbody.
New Development	Land disturbing activities; surface grading for structural development, including construction or installation of a building or structure, the creation of **impervious surfaces**; and land subdivision.
Numeric Criteria	Sizing requirements for storm water treatment facilities established in Provision D.1.d.(6)(c) of the San Diego RWQCB's storm water NPDES permit.
Operation and Maintenance (O&M)	Refers to requirements in the **Storm Water NPDES Permit** to inspect treatment BMPs and implement preventative and corrective maintenance in perpetuity. See Chapter Five.
Parking Lot	A land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. This **Priority Development Project** category includes parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.
Permeable Pavements	Pavements for roadways, sidewalks, or plazas that are designed to infiltrate a portion of rainfall, including pervious concrete, pervious asphalt, unit-pavers-on-sand, and crushed gravel.
Pollutant Generating Development Project	Generally all projects which include **impervious surfaces** and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces.

Post Construction Water Quality Technical Report (PCWQTR)	A PCWQTR is the **Project Submittal** of a **Priority Development Project** to demonstrate compliance.
Priority Development Project	A project subject to SUSMP requirements. Defined in **Storm water NPDES Permit** Provision D.1.d.(1). See Appendix A.
Project Area	The entire project area comprises all areas to be altered or developed by the project, plus any additional areas that drain on to areas to be altered or developed.
Projects Discharging to Receiving Waters within Environmentally Sensitive Areas	All development and significant redevelopment that would create 2,500 square feet of **impervious surfaces** or increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition, and either (1) discharge urban runoff to a receiving water within or directly adjacent (where any portion of the project footprint is located within 200 feet of the **environmentally sensitive area**) to an environmentally sensitive area or (2) discharge to a receiving water within an environmentally sensitive area without mixing with flows from adjacent lands (where the **project footprint** is located more than 200 feet from the environmentally sensitive area).
Project Footprint	The limits of all grading and ground disturbance, including landscaping, associated with a project.
Project Submittal	Documents submitted to the City of La Mesa in connection with an application for development approval and demonstrating compliance with Storm Water NPDES Permit requirements for the project. Priority Development Projects submit a **Post Construction Water Quality Technical Report** and all other projects submit a **Standard Post Construction BMP Plan**.
Proprietary	A proprietary device is one marketed under legal right of the manufacturer.
Receiving Waters	Surface bodies of water, which directly or indirectly receive discharges from urban runoff conveyance systems, including naturally occurring wetlands, streams (perennial, intermittent, and ephemeral [exhibiting bed, bank, and ordinary high water mark]), creeks, rivers, reservoirs, lakes, lagoons, estuaries, harbors, bays and the Pacific Ocean. La Mesa will determine the definition for wetlands and the limits thereof for the purposes of this definition as protective as the United States Environmental Protection Agency. Constructed wetlands are not considered wetlands under this definition, unless the wetlands were constructed as mitigation for habitat loss. Other constructed **BMP**s are not considered receiving waters under this definition, unless the BMP was originally constructed in receiving waters. Construction of treatment control BMPs in "Receiving Waters" is prohibited and therefore may not be used to satisfy **SUSMP** requirements.

The creation, addition, and or replacement of **impervious surface** on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces.

Redevelopment Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair.

Rational Method A method of calculating runoff flows based on rainfall intensity, tributary area, and a factor representing the proportion of rainfall that runs off.

Regional (or Watershed) Storm water Treatment Facility A facility that treats runoff from more than one project or parcel.

Regional Water Quality Control Board (Regional Water Board or RWQCB) California RWQCBs are responsible for implementing pollution control provisions of the Clean Water Act and California Water Code within their jurisdiction. There are nine California RWQCBs.

Residential Development Any development on private land that provides living accommodations for one or more persons, including but not limited to: single-family homes, multi-family homes, condominiums, and apartments. This **Priority Development Category** is defined as housing subdivisions resulting in the disturbance of one acre or more of land or comprised of 10 or more dwelling units.

Residential Development of 10 Units or More Any development that provides 10 or more residential units. Residential units can be attached or detached.

Restaurant "Restaurant" means a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (**SIC** code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all **SUSMP** requirements except for structural treatment BMP, numeric sizing criteria requirement, and hydromodification requirement.

Retail Gasoline Outlets (RGOs) This **Priority Development Project** category includes RGOs that meet the following criteria: (a) 5,000 square feet or more, or (b) a projected average daily traffic (ADT) of 100 or more vehicles per day.

Retention The practice of holding storm water in ponds or basins, or within berms or depressed areas, and allowing it to slowly infiltrate into underlying soils. Some portion will evaporate. See definitions for **infiltration** and **detention**.

Sediment	Soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organism survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.
Self-retaining area	An area designed to retain runoff. Self-retaining areas may include graded depressions with landscaping or pervious pavements and may also include tributary impervious areas up to a 2:1 impervious-to-pervious ratio.
Self-treating area	A natural, landscaped, or turf area drains directly off site or to the public storm drain system.
Significant Redevelopment	**Redevelopment** that would create or add or replace at least 5,000 square feet of **impervious surfaces** on an already developed site that falls under one or more priority development project categories. When redevelopment results in an increase of, or replacement of, 50% or more of the previously existing impervious surface, and the existing development was not subject to SUSMP requirements, then the entire project must be included in the treatment measure design. If less than 50% of the previously impervious surface is to be affected, only that portion must be included in the treatment measure design.
Source Control	Land use or site planning practices, or structural or nonstructural measures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff.
Standard Industrial Classification (SIC)	A Federal government system for classifying industries by 4-digit code. It is being supplanted by the North American Industrial Classification System but SIC codes are still referenced by the Regional Water Board in identifying development sites subject to regulation under the NPDES permit. Information and an SIC search function are available at http://www.bls.gov/bls/NAICS.htm
Standard Post Construction BMP Plan (SPCBMPP)	A SPCBMPP is the **Project Submittal** to demonstrate compliance for a project subject to only standard permanent BMP requirements.
Storm Water Conveyance System	Private and public drainage facilities by which storm water may be conveyed to Receiving Waters, such as: natural drainages, roads, streets, constructed channels, aqueducts, storm drains, pipes, street gutters, or catch basins.
Storm Water NPDES Permit	A permit issued by a **Regional Water Quality Control Board** (see definition) to local government agencies (**Dischargers**) placing provisions on allowable discharges of municipal storm water to waters of the state.
Storm Water Pollution Prevention Plan (SWPPP)	A plan providing for temporary measures to control sediment and other pollutants during construction as required by the statewide storm water NPDES permit for construction activities. A SWPPP is required for projects causing land disturbance of one acre or more.

Storm Water Pollution Prevention Program	A comprehensive program of activities designed to minimize the quantity of pollutants entering storm drains. See **Jurisdictional Urban Runoff Management Plan.**
Standard Urban Storm Water Mitigation Plan (SUSMP)	Refers to various documents prepared in connection with implementation of the storm water **NPDES permit** mandate to control pollutants from new development and redevelopment. Each **discharger** will adapt the **model countywide SUSMP** to create a local SUSMP for their respective jurisdiction. Applicants for development project approvals will use the local SUSMP to prepare a submittal for each **Priority Development Project** they propose.
Streets, Roads, Highways, and Freeways	This **Priority Development Project** category includes any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. For the purposes of SUSMP requirements, Streets, Roads, Highways and Freeways do not include trenching and resurfacing associated with utility work; applying asphalt overlay to existing pavement; new sidewalk, pedestrian ramps, or bike lane construction on existing roads; and replacement of damaged pavement.
Treatment	Removal of pollutants from runoff, typically by filtration or settling.
Treatment Control (Structural) BMP	Any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption, or any other physical, biological, or chemical process.
Water Board	See **Regional Water Quality Control Board.**
Water Quality Volume (WQV)	For storm water treatment facilities that depend on detention to work, the volume of water that must be detained to achieve maximum extent practicable pollutant removal. This volume of water must be detained for a specified **drawdown time**.

How to Use the Storm Water Best Management Practices Manual

Review Chapters 1 and 2 to get a general understanding of the requirements. Then follow step-by-step instructions in Chapter 3 to prepare your Project Submittal.

THIS Storm Water Best Management Practices Manual (BMP Manual) will help you ensure your project complies with both the Local Standard Urban Storm Water Mitigation Plan (SUSMP) requirements and the Construction BMP requirements of the City of La Mesa (City). Most applicants will require the assistance of a qualified civil engineer, architect, and/or landscape architect. Because every project is different, you should begin by checking specific requirements with municipal staff.

To use the BMP Manual, note that Construction BMPs are temporary measures to control sediment and other pollutants during construction, while SUSMP requirements apply to the development process during all stages of design, construction, completion, use, and maintenance in perpetuity. Start by completing Appendix A to find out how storm water quality requirements apply to your project.

To meet post-construction SUSMP requirements, see chapters one through five of the BMP Manual. To comply with construction BMP requirements, skip ahead to Chapter Six.

Chapter One provides an overview of the process of planning, design, construction, operation, and maintenance leading to compliance with post-construction SUSMP requirements.

If there are terms and issues you find confusing, try finding answers in the glossary or in **Chapter Two**. Chapter Two provides background on key storm water concepts and water quality regulations, including design criteria.

Then proceed to **Chapter Three** and follow the step-by-step guidance to prepare a Project Submittal for your site.

Chapter Four, the Low Impact Development Design Guide, includes design procedures, calculation procedures, and instructions for presenting your design and calculations in your Project Submittal.

In **Chapter Five** you'll find a detailed description of the process for ensuring operation and maintenance of your storm water facilities over the life of the project. The chapter includes step-by-step instructions for preparing a Storm Water Facilities Operation and Maintenance Plan.

The City of La Mesa's specific construction BMP requirements and performance standards are included in **Chapter Six**.

Throughout each Chapter, you'll find references and resources to help you understand the regulations, complete your Project Submittal, and design storm water control measures for your project.

Construction-Phase Controls

Your Project Submittal for SUSMP compliance is a separate document from the Storm Water Pollution Prevention Plan (SWPPP). A SWPPP provides for temporary measures to control sediment and other pollutants during construction at sites that disturb one acre or more. See Chapter 6 of this BMP manual for more information on SWPPPs.

The most recent, updated version of the BMP Manual is on the City website. The on-line BMP Manual is in Adobe Acrobat format. If you are reading the Acrobat version on a computer with an internet connection, you can use hyperlinks to navigate the document and to access various references. The hyperlinks are throughout the text, as well as in "References and Resources" sections within chapters and in "Bibliography and Suggested Resources" in Appendix F. Some of these links (URLs) may be outdated. In that case, try entering portions of the title or other keywords into a web search engine.

► PLAN AHEAD TO AVOID THE THREE MOST COMMON MISTAKES

The most common (and costly) errors made by applicants for development approvals with respect to storm water quality compliance are:

1. Not planning for compliance early enough. You should think about your strategy for storm water quality compliance before completing a conceptual site design or sketching a layout of subdivision lots (Chapter 3).

2. Assuming proprietary storm water treatment facilities will be adequate for compliance. Most aren't (Chapter 2).

3. Not planning for periodic inspections and maintenance of treatment and flow-control facilities. Consider who will own and who will maintain the facilities in perpetuity and how they will obtain access, and identify which arrangements are acceptable to the City of La Mesa (Chapter 5).

Chapter 1

Policies and Procedures

Determine if your development project must comply with storm water quality requirements, and review the steps to compliance.

Background

Urban runoff discharged from municipal storm water conveyance systems has been identified by local, regional, and national research programs as one of the principal causes of water quality problems in most urban areas. The City of La Mesa's storm water conveyance system, which collects runoff from our streets, rooftops, driveways, parking lots, and other impervious areas, flows directly to our rivers, beaches, and bays without receiving treatment (our storm water conveyance system is separate from our sanitary sewer system). Urban runoff potentially contains a host of pollutants like trash and debris, bacteria and viruses, oil and grease, sediments, nutrients, metals, and toxic chemicals. These contaminants can adversely affect receiving and coastal waters, associated wildlife, and public health. Urban runoff pollution is not only a problem during rainy seasons, but also year-round due to many types of urban water use that discharge runoff (dry weather flow) to the storm water conveyance system.

Land development and construction activities significantly alter drainage patterns and contribute pollutants to urban runoff primarily through erosion and removal or change of existing natural vegetation during construction, and the creation of new impervious surfaces, such as parking lots, which often permanently contribute pollutants throughout the "use" of the project site. When homes, work places, recreational areas, roads, parking lots, and structures are built, new impervious areas are built- creating the potential for an impact to water quality. The natural landscape's ability to infiltrate and cleanse storm water and urban runoff is "capped" by the impervious surfaces. As impervious surfaces increase, water that normally would have percolated into the soil now flows over the land surface directly to downstream wetlands, creeks, and eventually the Pacific Ocean. Accordingly, increases in impervious cover can increase the frequency and intensity of storm water flows. Second, new impervious surfaces often become a source of pollutants associated with development, such as automotive fluids, cleaning solvents, toxic or hazardous chemicals, detergents, sediment, metals, pesticides, oil and grease, and food wastes. These pollutants, which are often temporarily captured on impervious surfaces, are

transported to the storm water conveyance system by storm water and urban runoff. The pollutants flow untreated through the storm water conveyance system and ultimately into our creeks, rivers, beaches, and bays. With the growing concerns of urban runoff and storm water pollution, local, state, and federal agencies devised regulations requiring development planning and construction controls to treat storm water-related pollution from new development projects before it reaches any receiving waters.

On January 24th, 2007, the Regional Board issued Order No. R9-2007-0001, hereinafter referred to as "Municipal Permit." This Municipal Permit replaces the previous municipal permit, RWQCB Order No. 2001-01. The City has updated parts I and II of its BMP Manual to reflect the updated requirements of the current Municipal Permit. The primary objectives of the updated BMP Manual are to (1) Effectively prohibit non-storm water discharges; and (2) Reduce the discharge of pollutants from storm water conveyance systems to the MEP both during construction and throughout the use of a developed site. To maximize the use of LID practices as a means of reducing storm water runoff, Order No. R9-2007-0001 further required that the City define minimum LID and other BMP requirements in a document called the Model Standard Urban Storm Water Mitigation Plan (Model SUSMP), which was approved by the Regional Board on March 25, 2009. The permanent BMP requirements within the Model SUSMP were updated to comply with the current Municipal Permit, and these changes are included in this BMP Manual.

Legal Framework

The requirement to implement storm water BMP requirements for development projects is based on Section 402 (p) of the Clean Water Act. The Federal Clean Water Act amendments of 1987 established a framework for regulating storm water discharges from municipal, industrial, and construction activities under the NPDES program. Under the Federal Clean Water Act, municipalities throughout the nation are issued a Municipal NPDES Permit. The primary goal of the Municipal Permit is to stop polluted discharges from entering the storm water conveyance system and local receiving and coastal waters.

In California, the State Water Resources Control Board (SWRCB), through the nine Regional Boards, administers the NPDES storm water municipal permitting program. Based on the San Diego Municipal Permit issued by the San Diego Regional Board, the City is required to develop and implement construction and permanent storm water BMPs addressing pollution from new development projects.

In order to comply with the conditions of Order No. 2001-01, the City of La Mesa adopted the City of La Mesa Watercourse Protection, Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance") codified in Chapter 7.18 of the La Mesa Municipal Code. These ordinances have been updated as necessary to comply with the current Municipal Permit. This manual is an uncodified ordinance adopted by reference as Part II of the City of La Mesa Storm Water Best Practices Manual. The current Municipal Permit requires the City to categorize and prioritize land uses in order to establish effective BMPs. The City's current Storm Water Ordinance authorizes the City Engineer to establish Best Management Practices

(BMPs), including permanent improvements, for all types of land uses. This manual provides instructions on the City's construction phase and permanent BMP requirements, based on the most recent Model SUSMP, for development projects in the City of La Mesa.

The City Engineer may establish alternative BMPs. The allowable use of alternative BMPs at a specific site shall be determined at the sole discretion of the City Engineer. The City Engineer may establish BMPs for a specific site or activity if necessary to reduce Pollutants to the MEP or to comply with an order of the San Diego Regional Water Board. The City Engineer may also establish additional BMPs for a specific site if the City Engineer determines that the BMPs implemented at the site have not reduced the pollutants to the MEP.

A Low Impact Development Design Procedure

The San Diego Regional Water Board reissued a municipal storm water NPDES permit to the municipal **Copermittees** in January 2007. The permit updates and expands storm water requirements for new developments and redevelopments. Storm water treatment requirements have been made more stringent, minimum standards for **Low Impact Development** (LID) have been added, and the Copermittees are required to develop and implement criteria for the control of runoff peaks and durations from development sites.

To assist the land development community, streamline project reviews, and maximize cost-effective environmental benefits, the Copermittees have developed a unified LID design procedure, which has been adapted for use by the City of La Mesa. This design procedure integrates site planning and design measures with engineered, small-scale **Integrated Management Practices** (IMPs) such as bioretention. By following the procedure, applicants can develop a single integrated design which complies with the complex and overlapping NPDES permit LID requirements, storm water treatment requirements, and flow-control (**hydromodification management**) requirements.

The design approach is detailed in Chapter 4. General instructions for preparing a complete Project Submittal are in Chapter 3, and project-specific submittal requirements are available from municipal staff.

Applicants may choose not to use this design procedure, in which case they will need to demonstrate, in their submittal, compliance with applicable LID criteria, storm water treatment criteria, and flow-control criteria. These criteria are described in Chapter 2 and in the NPDES permit.

Requirements for All Development Projects

All development projects must include control measures to reduce the discharge of storm water pollutants to the maximum extent practicable.

Standard permanent storm water requirements, even for projects that are not "Priority Development Projects," include:

- Implementation of source control BMPs as listed in Appendix C.
- Inclusion of feasible LID features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, direct runoff to landscaping, and retain and slow runoff.
- Submittal of proof of a mechanism under which on-going long-term maintenance of all structural post-construction BMPs will be conducted.
- Compliance with requirements for construction-phase controls on sediment and other pollutants as described in Chapter 6.

Projects (requiring either discretionary actions or construction permits), subject to only standard permanent BMP requirements need to prepare a Standard Post Construction BMP Plan (SPCBMPP). See Appendix G for specific SPCBMPP requirements. Analysis of the project's anticipated pollutants of concern must also be included with the project submittal. Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. Municipal staff may also require additional controls appropriate to the project, which may include storm water treatment controls. LID treatment controls such as infiltration or bioretention are preferred. See "Selection of Treatment Facilities" on page 22.

Priority Development Projects

The NPDES permit requires more specific criteria be applied to Priority Development Projects. Projects (requiring either discretionary actions or construction permits), subject to the priority development project permanent BMP requirements must complete all of the analyses and incorporate all of the applicable BMP requirements in chapters 2 through 5 of this BMP Manual. This includes the LID and source control BMPs, and treatment control BMP requirements.

Projects subject to priority development project requirements must prepare and submit a Post Construction Water Quality Technical Report (PCWQTR) in accordance with Chapter 3 of this BMP Manual. Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type.

► NEW DEVELOPMENT

Projects on previously undeveloped land are Priority Development Projects if they are in one or more of the categories listed in Appendix A.

► PREVIOUSLY DEVELOPED SITES

Projects on previously developed sites ("**redevelopment** projects") are Priority Development Projects if they create, add, or replace 5,000 square feet or more of impervious surface and also are in one of the categories listed in Appendix A.

Municipal staff may choose to designate projects not within the categories in Appendix A as Priority Development Projects, based on potential impacts to storm water quality.

► THE "50% RULE" FOR PREVIOUSLY DEVELOPED PROJECTS

Projects on previously developed sites may also need to retrofit drainage of **all** impervious areas of the **entire** site. For sites creating or replacing more than 5,000 square feet of impervious area:

- If the new project results in an increase of, or replacement of, 50% or more of the previously existing impervious surface, and the existing development was not subject to SUSMP requirements, then the entire project must be included in the treatment measure design.
- If less than 50% of the previously impervious surface is to be affected, only that portion must be included in the treatment measure design.

If a new Development Project feature such as a parking lot falls into a Priority Development Project category, then the entire project footprint is subject to SUSMP requirements.

Projects limited to interior remodels, routine maintenance or repair, roof or exterior surface replacement, resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, or bike lanes on existing roads and routine replacement of damaged pavement such as pothole repair are not subject to treatment requirements. However, other requirements, including incorporation of appropriate source controls, still apply.

Project Review and Permitting Process

The City of La Mesa's Watercourse Protection, Storm Water Management and Discharge Control Ordinance requires that all new development and redevelopment activities comply with the storm water pollution prevention requirements in Chapter 7.18 of the La Mesa Municipal Code, and Parts I and II of the City Of La Mesa Best Management Practices Manual. Applicants must also comply with the grading regulations in Chapter 14.05 of the Municipal Code. These storm water pollution prevention requirements, which are described in detail in this BMP Manual are site specific and vary based on the project's potential impact on receiving water quality.

The flow chart in Figure 1-1, "Review Process for Discretionary Actions" demonstrates how storm water requirements are incorporated into projects requiring subdivision approvals, development permits or other discretionary actions. For information on the construction permit and review process, see Chapter 6 of this BMP Manual. The steps below in "Compliance Process at a Glance" describe the elements of the plan review and permitting processes for storm water best management practice (BMP) requirements.

FIGURE 1-1. Review Process for Discretionary Actions.

The following figure provides an overview of the project review process for projects that require a discretionary action by the City of La Mesa. Discretionary actions include land use plan amendments, re-zonings, subdivisions, planned development permits, conditional use permits, site development permits, variances, neighborhood development permits, and neighborhood use permits.

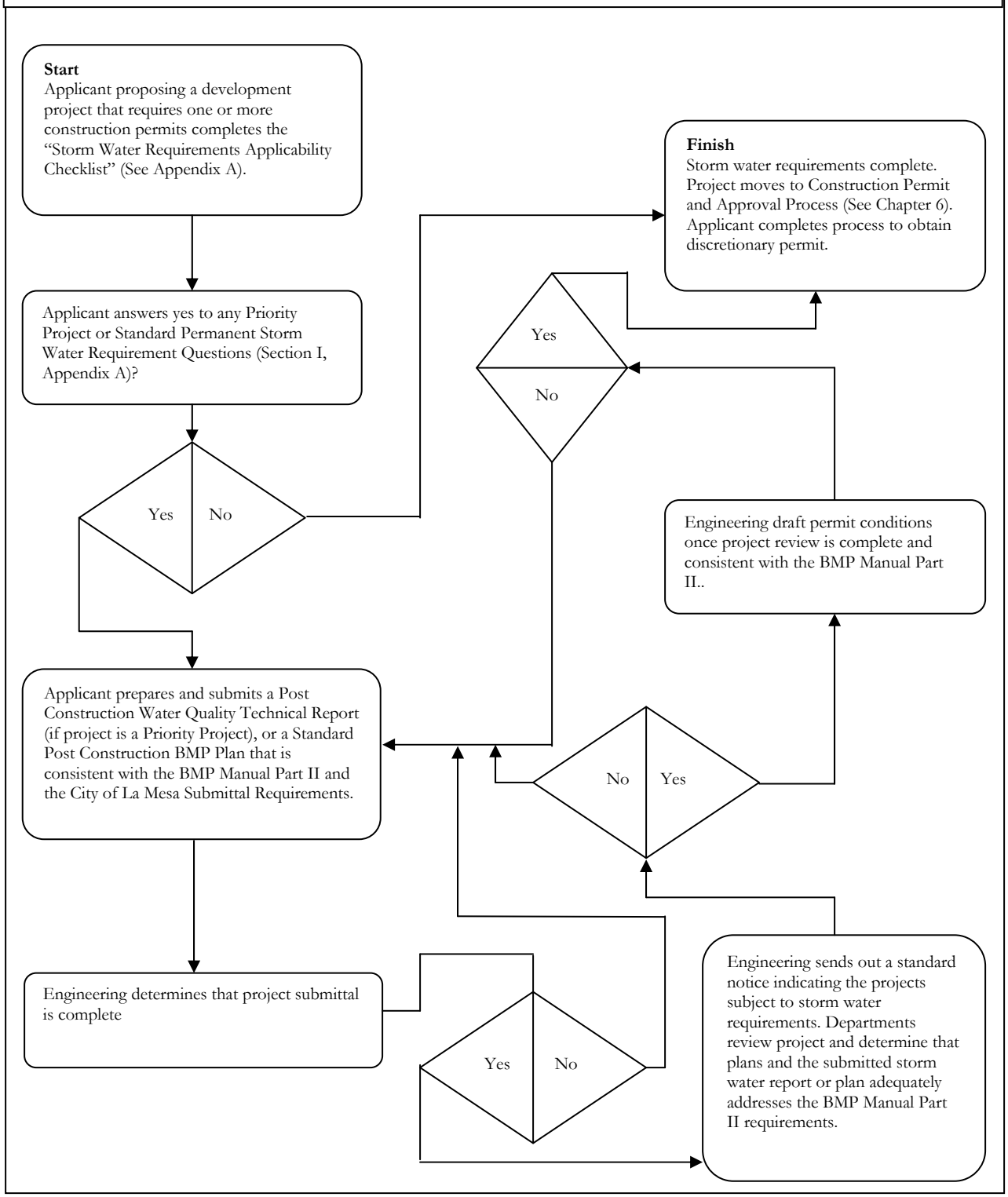

Compliance Process at a Glance

For the applicant for development project approval, storm water compliance follows these general steps:

1. Discuss requirements during a pre-application meeting with municipal staff.
2. Determine applicable storm water BMP requirements by completing the "Storm Water Requirements Applicability Checklist" in Appendix A prior to submittal.
3. Review the instructions in this BMP manual before you prepare your tentative map, preliminary site plan, drainage plan, and landscaping plan.
4. Prepare your Project Submittal, which is typically made with your application for development approvals (entitlements).
5. Prepare a draft Storm Water Facility Operation and Maintenance Plan and include it with your Project Submittal.
6. Under the authority of the City Engineer, Engineering staff will review the Project Submittal with Storm Water Facility Operation and Maintenance Plan for compliance with the applicable storm water requirements contained in this manual.
7. Create your detailed project design, incorporating the features described in your Project Submittal.
8. In a table on your construction plans, list each storm water compliance feature and facility and the plan sheet where it appears.
9. Maintain storm water facilities during construction and following construction.
10. The owner must periodically verify storm water facilities are properly maintained.

Preparation of a complete and detailed Project Submittal is the key to cost-effective storm water compliance and expeditious review of your project. Additional notes about these steps are provided below. Instructions for preparing your Project Submittal are in Chapter 3.

► ADDITIONAL NOTES ON COMPLIANCE

Storm Water Requirements Applicability Checklist. Prior to submittal, applicants must complete the "Storm Water Requirements Applicability Checklist" in Appendix A, to determine if their project is subject to construction and/or permanent storm water best management practice (BMP) requirements. (Note: this form must be completed for all permit applications, even if previous approvals exist. Projects requesting additional construction permits or discretionary approvals, even though previous permits and/or approvals have been obtained, will be required to comply with the storm water requirements in this document). This checklist must be

completed, signed by the responsible party for the project, and submitted with your permit application. Applicants may also verify the project's storm water BMP requirements through a single discipline preliminary review of the project. The project design must include all required permanent BMPs (as determined from the Storm Water Requirements Applicability Checklist in Appendix A), prior to deeming the application package complete.

Determining Adequacy of Proposed Plans. The City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs.

Phased Projects

When determining whether SUSMP requirements apply, a "project" should be defined consistent with California Environmental Quality Act (CEQA) definitions of "project." That is, the "project" is the whole of an action which has the potential for adding or replacing or resulting in the addition or replacement of roofs, pavement, or other impervious surfaces and thereby resulting in increased flows and storm water pollutants. "Whole of an action" means the project may not be segmented or piecemealed into small parts if the effect is to reduce the quantity of impervious area for any part to below the SUSMP thresholds.

Municipal staff may require, as part of an application for approval of a phased development project, a conceptual or master Project Submittal which describes and illustrates, in broad outline, how the drainage for the project will comply with the SUSMP requirements. The level of detail in the conceptual or master Project Submittal should be consistent with the scope and level of detail of the development approval being considered. The conceptual or master Project Submittal should specify that a more detailed Project Submittal for each later phase or portion of the project will be submitted with subsequent applications for discretionary approvals.

Note these minimum standards for SUSMP applicability are for the purpose of ensuring a consistent minimum level or "floor" for implementation consistent with the requirements of the NPDES permit. The City Engineer reserves the right to choose a more expansive interpretation of the NPDES permit's applicability and may also choose to apply source control, treatment, and flow-control requirements to projects that would be exempt under these minimum standards.

New Subdivisions

If a tentative map approval would potentially entitle future owners to construct new or replaced impervious area which, in aggregate, could exceed one of the SUSMP thresholds (Appendix A), then the applicant must take steps to ensure SUSMP requirements can and will be implemented as the subdivision is built out.

If the tentative map application does not include plans for site improvements, the applicant should nevertheless identify the type, size, location, and final ownership of storm water treatment and flow-control facilities adequate to serve common private roadways and any other common areas, and to also manage runoff from an expected reasonable estimate of the square footage of future roofs, driveways, and other impervious surfaces on each individual lot. The City Engineer may condition approval of the map on implementation of storm water treatment and other SUSMP measures when construction occurs on the individual lots. At the City Engineer's discretion, this condition may be enforced by a grant deed of development rights or by a development agreement.

If the City Engineer deems it necessary, the future impervious area of one or more lots may be limited by a deed restriction. This might be necessary when a project is exempted from one or all SUSMP provisions because the total impervious area is below a threshold, or to ensure runoff from impervious areas added after the project is approved does not overload a storm water treatment and flow-control facility.

The City Engineer may require subdivision maps to dedicate an "open space easement, as defined by Government Code Section 51075," to suitably restrict the future building of structures at each storm water facility location if necessary.

In general, in new subdivisions **storm water treatment, infiltration, or flow-control facilities should not be located on individual single-family residential lots**, particularly when those facilities manage runoff from other lots, from streets, or from common areas. A better alternative is to locate storm water facilities on one or more separate, jointly owned parcels.

After consulting with local planning staff, applicants for subdivision approvals will propose one of the following four options, depending on project characteristics and local policies:

1. Show the number of parcels and the total impervious area to be created on all parcels could not, in the future, exceed any of the thresholds in Appendix A.

2. Show that, for each and every lot, the intended use can be achieved with a design which disperses runoff from roofs, driveways, streets, and other impervious areas to self-retaining pervious areas, using the criteria in Chapter 4.

3. Prepare improvement plans showing drainage to treatment and/or flow-control facilities designed in accordance with this BMP manual, and commit to constructing the facilities prior to transferring the lots.

4. Prepare improvement plans showing drainage to treatment and/or flow-control facilities designed in accordance with this BMP manual, and provide appropriate legal instruments to ensure the proposed facilities will be constructed and maintained by subsequent owners.

For the option selected, municipal staff will determine the appropriate conditions of approval, easements, deed restrictions, or other legal instruments necessary to assure future compliance.

Compliance with Flow-Control Requirements

Priority Development Projects (Appendix A) must be designed so that runoff rates and durations are controlled to maintain or reduce downstream erosion conditions and protect stream habitat.

For projects disturbing areas smaller than 50 acres, this can be accomplished by implementing **Low Impact Development** (LID) design using the design criteria and procedures in Chapter 4. The criteria will be updated following RWQCB approval of the **Hydromodification Management Plan** (see Option 2 below).

Priority Development Projects disturbing 50 acres or more must meet the following **interim hydromodification standard**:

> "…post-project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations … where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to increased flow rates and durations."

The City of La Mesa is developing a Hydromodification Management Plan (HMP) in compliance with Provision D.1.g of the NPDES Permit. As required, the City has adopted interim hydromodification criteria (IHC) which will be superseded after the HMP is accepted by the Regional Water Board.

Compliance with the interim hydromodification criteria can be achieved by one of the following options:

1. Use a continuous simulation hydrologic computer model such as USEPA's Hydrograph Simulation Program—Fortran (HSPF) to simulate pre-project and post-project runoff, including the effect of proposed IMPs, detention basins, or other storm water management facilities, and demonstrate the standard is achieved.

2. Use Low Impact Development Integrated Management Practices to manage hydrograph modification impacts, using design procedures, criteria, and sizing factors (ratios of LID IMP volume or area to tributary area) specified by the City of La Mesa.

3. Identify an exemption applicable to the site.

► OPTION 1: CONTINUOUS SIMULATION

Prepare an analysis of pre-project and post-project runoff following the instructions in the memoranda "Using Continuous Simulation to Size Stormwater Control Facilities" (May 9, 2008)

and "Development of Interim Hydromodification Criteria" (October 30, 2007). Both memoranda are available on the Project Clean Water website.

Before preparing the analysis, discuss with municipal staff the required documentation for your Project Submittal, which will include assumptions and modeling parameters used in the analysis and a graphical presentation demonstrating compliance with the following:

1. For flow rates from 20% of the pre-project 5-year runoff event (0.2Q5) to the pre-project 10-year runoff event (Q10), the post-project discharge rates and durations shall not deviate above the pre-project rates and durations by more than 10% over and more than 10% of the length of the flow duration curve.

2. For flow rates from 0.2Q5 to Q5, the post-project peak flows shall not exceed pre-project peak flows. For flow rates from Q5 to Q10, post-project peak flows may exceed pre-project flows by up to 10% for a 1-year frequency interval. For example, post-project flows could exceed pre-project flows by up to 10% for the interval from Q9 to Q10 or from Q5.5 to Q6.5, but not from Q8 to Q10. (Note that the 0.2Q5 end of the range may be modified).

► OPTION 2: LID INTEGRATED MANAGEMENT PRACTICES

Low Impact Development Integrated Management Practices, such as bioretention facilities, planter boxes, and dry wells, can achieve the hydromodification standard. However, the City of La Mesa has not yet prepared design criteria and sizing factors for these facilities applicable to projects 50 acres or more. Project proponents for projects 50 acres or more may use Option 1 to demonstrate their IMPs meet the interim criteria.

► OPTION 3: EXEMPTION FROM HYDROMODIFICATION MANAGEMENT

Exemption from the IHC is allowed for development projects when any of the following conditions are met. (However, plans to restore a channel reach may re-introduce the applicability of hydromodification management.)

1. The project would discharge into channels that are concrete-lined or significantly hardened (e.g., with rip-rap, sackcrete, etc.) downstream to their outfall in bays or the ocean;

2. The project would discharge into underground storm drains discharging directly to bays or the ocean;

3. The project would discharge to a channel where the sub-watershed areas below the project's discharge points are highly impervious (e.g. >70%) and the potential for single-project and/or cumulative impacts is minimal; or

4. The applicant conducts an assessment incorporating sediment transport modeling across the range of geomorphically-significant flows that demonstrates project flows and sediment reductions will not detrimentally affect the receiving water. A May 15,

2008 memorandum, "Geomorphic Analysis for Interim Hydrograph Modification Plan" is available on the Project Clean Water website.

Grandfathering. Projects with prior lawful approval (such as a development agreement, vested tentative map, or a building or grading permit) that have started construction before March 25, 2008, may not have to meet the interim hydromodification management requirements. Verify with municipal staff.

Note these are interim requirements and will be superseded following approval of the HMP by the Regional Water Board in early 2010. Updated hydromodification criteria for all Priority Development Projects will be incorporated into local SUSMP requirements sometime in mid-2010 or later.

Waivers from Numeric Sizing Criteria

The NPDES permit allows for a project to be waived from numeric sizing criteria for storm water treatment only if all available treatment facilities have been considered and found **infeasible**. Municipal staff must inform the Water Board within 5 days of granting a waiver. Other SUSMP requirements—including site designs to minimize imperviousness and source control BMPs—will still apply.

Experience has shown implementation of LID facilities, as described in Chapter 4, is feasible on nearly all development sites. However, the use of LID to retrofit existing drainage systems, to manage runoff from sites smaller than one acre in pedestrian-oriented developments, or to manage runoff from widened portions of roadways, sometimes presents special challenges. In these special situations, applicants should see the discussion of "Selection of Storm Water Treatment Facilities" in Chapter 2 and evaluate the options described on page 24 in order (depending on the specific characteristics of the project and as determined by the City Engineer). All the options listed meet the numeric sizing criteria in the NPDES permit.

If infeasibility of all these options can be established, the City Engineer may determine eligibility of the project for a waiver.

References and Resources:

- RWQCB Order R9-2007-0001 (Storm Water NPDES Permit)
- Project Clean Water web page

Chapter 2

Concepts and Criteria

Technical background and explanations of policies and design requirements

The Regional Water Board reissued a municipal storm water NPDES permit to San Diego County, its 18 cities, the San Diego Unified Port District, and the San Diego Regional Airport Authority in January 2007. The permit mandates a comprehensive program to prevent storm water pollution. That program now includes street sweeping, maintenance of storm drains, business inspections, public outreach, construction site inspections, monitoring, and studies of stream and ocean health, and control of runoff pollutants from new developments and redevelopments.

Permit Provision D.1.d. requires the City of La Mesa to regulate projects in specific categories (Table 1-1) to:

1. Reduce discharges of pollutants to the maximum extent practicable.
2. Prevent runoff discharges from causing or contributing to a violation of water quality standards.

The City of La Mesa has created a Low Impact Development (LID) design procedure (Chapter 4) that ensures consistent and thorough implementation of the Regional Water Board's requirements. This chapter explains the technical background of the LID approach and how it was derived.

The previous permit, issued in 2001, included a requirement to control the post-development peak storm water runoff rates and velocities to maintain or reduce pre-development downstream erosion and protect stream habitat. The 2007 permit includes, in addition to this ongoing requirement, a new requirement to develop a hydromodification management plan (HMP) to identify and define a methodology and performance criteria to ensure flow rates and durations do not exceed pre-project runoff where increased runoff could cause erosion or other significant adverse impacts to beneficial uses.

As required by the NPDES permit, the City of La Mesa has adopted interim hydromodification criteria. See Chapter One.

Water-Quality Regulations

Provision D.1 requires the City of La Mesa to condition development approvals on incorporation of specified storm water controls.

Provision D.1 requires applicable new developments and redevelopments:

- Design the site to conserve natural areas, existing trees and vegetation and soils, to maintain natural drainage patterns, to minimize imperviousness, to detain runoff, and to infiltrate runoff where feasible
- Cover or control sources of storm water pollutants
- Treat runoff prior to discharge. Provision E.10 states: "Urban runoff treatment and/or mitigation must occur prior to the discharge of urban runoff into a receiving water. Federal regulations at 40 CFR 131.10(a) state that in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S."
- Ensure runoff does not exceed pre-project peaks and durations where increases could affect downstream habitat or other beneficial uses
- Maintain treatment and flow-control facilities

The City of La Mesa maintains a database to track approved installations of treatment facilities and to verify facilities are maintained. The City's annual report to the Regional Water Board includes a list of development projects subject to SUSMP conditions and descriptions of those projects that:

- Received a waiver from SUSMP criteria;
- Used hydrologic controls used to meet HMP requirements, including a description of the controls;
- Have an area of 50 acres or greater, thus subject to **Interim Hydromodification Criteria**; and

The City of La Mesa must also report the number of violations and enforcement actions taken upon development projects. The City of La Mesa's programs are subject to audit by the Regional Water Board.

The City of La Mesa—not the Regional Water Board or its staff—is charged with ensuring development projects comply with the D.1 requirements. Regional Water Board staff sometimes review storm water controls and hydromodification impacts in connection with applications for Clean Water Act Section 401 water-quality certification, which is required for projects that involve work, such as dredging or placement of fill, within streams, creeks, or other waters of the US.

► MAXIMUM EXTENT PRACTICABLE

Clean Water Act Section 402(p)(3)(iii) sets the standard for storm water controls as "maximum extent practicable," but doesn't define that term. As implemented, "maximum extent practicable" is ever-changing and varies with conditions.

Many storm water controls, including LID facilities, have proven to be practicable in most site development projects. To achieve fair and effective implementation, criteria, and guidance, requirements for controls must be detailed and specific—while also offering the right amount of flexibility or exceptions for special cases. The NPDES permit includes various standards, including hydrologic criteria, which have been found to comprise "maximum extent practicable." This BMP Manual is to be continuously improved and refined based on the experience of municipal planners and engineers, with input from land developers and development professionals. By following the BMP Manual, applicants can ensure their project design meets "maximum extent practicable."

► BEST MANAGEMENT PRACTICES

Clean Water Act Section 402(p) and USEPA regulations (40 CFR 122.26) specify a municipal program of "management practices" to control storm water pollutants. **Best Management Practice (BMP)** refers to any kind of procedure, activity, or device designed to minimize the quantity of pollutants that enter the storm drain system. BMPs are typically used in place of assigning numeric effluent limits. The criteria for source control BMPs and treatment and flow-control facilities are crafted to fulfill "maximum extent practicable."

To minimize confusion, this guidebook refers to "facilities," "features," or "controls" to be incorporated into development projects. All of these are BMPs.

Pollutants of Concern

NPDES Permit Provision D.1.d.(3) requires the City of La Mesa to develop and implement a procedure for pollutants of concern to be identified for each Priority Development Project.

Documentation of the approach to identifying pollutants of concern and selecting BMPs and facilities follows.

► GROUPING OF POTENTIAL POLLUTANTS OF CONCERN

Urban runoff from a developed site has the potential to contribute pollutants, including oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system and receiving waters. For the purposes of identifying pollutants of concern and associated storm water BMPs, pollutants are grouped in nine general categories as follows:

- **Sediments** are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms

survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

- **Nutrients** are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

- **Metals** are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary sources of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

- **Organic compounds** are carbon-based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.

- **Trash** (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.

- **Oxygen-Demanding Substances** includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-

demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

- Primary sources of **oil and grease** are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

- **Bacteria and Viruses** are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

- **Pesticides** (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

► IDENTIFYING POLLUTANTS OF CONCERN BASED ON LAND USES

Table 2-1 associates pollutants with the categories of Priority Development Projects. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

► WATERSHEDS WITH SPECIAL POLLUTANT CONCERNS

Receiving water conditions may require specialized attention. The three conditions to consider include:

- Ocean waters designated as an "Area of Special Biological Significance" (ASBS)
- 303(d) listed waters; and
- Waters with established TMDLs.

TABLE 2-1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Land Use Type	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft^2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

The State Water Resources Control Board's California Ocean Plan identifies thirty-four locations along the California coast as **Areas of Special Biological Significance (ASBS)**. Currently, there are no ASBS of downstream of the City of La Mesa, See Table 2-2 for a list of applicable downstream water bodies. Please note that while runoff from the City drains to these water bodies, the actual water bodies are not located within the City itself.

TABLE 2-2. City of La Mesa Drainage Basins.

Drainage Basin	Percent of City of La Mesa Area	Receiving Waterbody	Hydrologic Subarea	Watershed
Alvarado	51	San Diego River	907.11	San Diego River
Lake Murray	1	Lake Murray		
University	28	Chollas Creek	908.22	San Diego Bay
Lemon Grove	6			
Spring Valley	14	Sweetwater River	909.12	

The NPDES Permit identifies several receiving waters as impaired for constituents or water quality effects pursuant to **Section 303(d)** of the Clean Water Act. Placement of a water onto the list requires the Regional Board to make further analysis of the impairment and development of total maximum daily loads (TMDLs) for addressing the impairment. The 303(d) listing in itself does not demand that a project proponent select BMPs on the basis of the impairment; however, the project proponent should be cognizant of the impairment and the future implications a TMDL might have upon the proposed land use. The San Diego River, Chollas Creek, and Lake Murray, all of which are on the 2006 CWA Section 303(d) list, are located downstream of the City of La Mesa. The San Diego River is impaired for fecal coliform, low dissolved oxygen, phosphorus, and total dissolved solids (TDS). Chollas Creek is impaired for bacterial indicators, copper, diazinon, lead, and zinc. Lake Murray, which drains a very small portion of the City, is 303(d) listed for pH.

Forthcoming 2008 303(d) list additions will apply upon adoption by the RWQCB and EPA. Check the website below for the most current listing.
(http://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/index.shtml

Once a TMDL is established it may impose conditions on development either through an implementation plan and schedule for the listed water, or through special conditions required of the City of La Mesa affected by the numeric criteria of the TMDL. At this time, several 303(d) listings in San Diego County are at various stages of TMDL development with only four TMDLs having been adopted by the Regional Board. However, there are approximately 190 pending TMDLs in the county.

Applicable current and pending **TMDLs** in the La Mesa area include:

- Adopted TMDL for diazinon for Chollas Creek;

- Adopted TMDL for copper, lead, and zinc for Chollas Creek,
- Pending TMDL for sediment toxicity for the mouth of Chollas Creek,
- Pending TMDL for indicator bacteria for beaches and creeks in the San Diego Region.

The applicant should meet with municipal staff to determine if any project characteristics or watershed characteristics affect selection and design of BMPs. Except in rare circumstances, the use of the LID Design Guide (Chapter 4) and the Storm Water Pollutant Sources/Source Control Checklist (Appendix C) will ensure your project complies with all storm water requirements.

Selection of Permanent Source Control BMPs

Based on identification of potential pollutants of concern associated with various types of facilities, the City of La Mesa has developed a Storm Water Pollutant Sources/Source Control Checklist (Appendix C) of "maximum extent practicable" source controls associated with each facility type. This approach ensures appropriate BMPs are applied to potential sources of each pollutant of concern.

Selection of Storm Water Treatment Facilities

Table 2-3, below, categorizes pollutants of concern related to fate and pathways.

Table 2-4, below, includes a general comparison of how various types of treatment facilities perform for each group of pollutants.

TABLE 2-3. Grouping of Potential Pollutants of Concern by Fate During Storm Water Treatment

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

TABLE 2-4. Groups of Pollutants and Relative Effectiveness of Treatment Facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro -dynamic Devices	Vegetated Swales
Coarse Sediment and Trash	High	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low	Medium
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low	Low

*See page 24 for a discussion of selection of treatment facilities in special situations.

Based on this analysis, the City of La Mesa has determined that the following types of facilities are appropriate for treatment of runoff potentially containing most pollutants of concern. These types of facilities can be used for storm water treatment for all land uses in all watersheds, except where site-specific constraints make them infeasible.

- Infiltration facilities or practices, including dry wells, infiltration trenches, infiltration basins, and other facilities that infiltrate runoff to native soils (sized to detain and infiltrate a volume equivalent to the 85th percentile 24-hour event).
- Bioretention facilities and media filters that detain storm water and filter it slowly through soil or sand (sized with a surface area at least 0.04 times the effectively impervious tributary area).
- Extended detention basins, wet ponds, and wetlands or other facilities using settling (sized to detain a volume equivalent to runoff from the tributary area generated by the 85th percentile 24-hour event).

The recommended design procedure in Chapter 4 integrates LID practices—optimizing the site design, using pervious surfaces, and dispersing of runoff to adjacent pervious areas—with the use of infiltration facilities and practices and bioretention facilities to meet NPDES permit LID requirements, treatment requirements, and flow-control requirements in a cost-effective, unified design.

Oil/water separators ("water quality inlets"), storm drain inlet filters, and hydrodynamic separators, including vortex separators and continuous deflection separators ("CDS units"), are less effective means of storm water treatment, although they may be used in series with more effective facilities.

Underground vaults typically lack the detention time required for settling of fine particles associated with storm water pollutants. They also require frequent maintenance and may retain stagnant water, potentially providing harborage for mosquitoes. Because vaults may be "out of sight, out of mind," experience shows that the required maintenance may not occur.

Lack of space, in itself, is not a suitable justification for using a less-effective treatment on a development site, because the uses of the site and the site design can be altered as needed to accommodate bioretention facilities or planter boxes. In most cases, these effective facilities can be fit into required landscaping setbacks, easements, or other unbuildable areas.

Where possible, drainage to inlets, and drainage away from overflows and underdrains, should be by gravity. Where site topography makes it infeasible to accommodate gravity-fed facilities in the project design, the design flow may be captured in a vault or sump and pumped via force main to an effective facility.

The following situations sometimes present special challenges:

- Portions of sites which are not being developed or redeveloped, but which must be retrofit to meet treatment requirements in accordance with Provision D.1.d.(1)(a) which states in part: "Where redevelopment results in an increase of, or replacement of, more than fifty percent of the impervious surface of a previously existing development, the numeric sizing criteria applies to the entire development."

- Sites smaller than one acre approved for development or redevelopment as part of a municipality's stated objective to preserve or enhance a pedestrian-oriented "smart-growth" type of urban design.

- Roadway widening projects.

In these special situations, the following types of facilities should each be evaluated in priority order (depending on the specific characteristics of the site and as determined by the municipal storm water coordinator) until a feasible design is found.

1. Bioretention areas or planter boxes fed by gravity.

2. Capture of the design flow in a vault or sump and pumping to bioretention areas or planter boxes.

3. A subsurface sand or media filter with a maximum design surface loading rate of 5 inches per hour and a minimum media depth of 18 inches. The sand surface must be made accessible for periodic inspection and maintenance (for example, via a removable grating).

4. A higher-rate surface biofilter, such as a tree-pit-style unit. The grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units.

5. A higher-rate vault-based filtration unit (for example, vaults with replaceable cartridge filters filled with inorganic media).

Proprietary Devices
Many currently available proprietary devices do not meet City of La Mesa requirements when used alone for storm water treatment. Consult with municipal staff before proposing these devices.

Many proprietary storm water treatment devices are currently marketed, and new brands will be introduced. Applicants and applicants' engineers and design professionals should review with municipal staff any proposals for using proprietary devices for storm water treatment before they commence work on preliminary site layout, drainage plans, grading plans, or landscape plans.

Hydrology for NPDES Compliance

► IMPERVIOUSNESS

Schueler (1995) proposed **imperviousness** as a "unifying theme" for the efforts of planners, engineers, landscape architects, scientists, and local officials concerned with urban watershed protection. Schueler argued (1) that imperviousness is a useful indicator linking urban land development to the degradation of aquatic ecosystems, and (2) imperviousness can be quantified, managed, and controlled during land development.

Imperviousness has long been understood as the key variable in urban hydrology. Peak runoff flow and total runoff volume from small urban catchments is usually calculated as a function of the ratio of impervious area to total area **(rational method)**. The ratio correlates to the runoff factor, usually designated "C". Increased flows resulting from urban development tend to increase the frequency of small-scale flooding downstream.

Imperviousness links urban land development to degradation of aquatic ecosystems in two ways.

First, the combination of paved surfaces and piped runoff efficiently collects urban pollutants and transports them, in suspended or dissolved form, to surface waters. These pollutants may originate as airborne dust, be washed from the atmosphere during rains, or may be generated by automobiles and outdoor work activities.

Second, increased peak flows and runoff durations typically cause erosion of stream banks and beds, transport of fine sediments, and disruption of aquatic habitat. Measures taken to control stream erosion, such as hardening banks with riprap or concrete, may permanently eliminate habitat. By reducing infiltration to groundwater, imperviousness may also reduce dry-weather stream flows.

Imperviousness has two major components: rooftops and transportation (including streets, highways, and parking areas). The transportation component is usually larger and is more likely to be **directly connected** to the storm drain system.

The effects of imperviousness can be mitigated by disconnecting impervious areas from the drainage system and by encouraging detention and retention of runoff near the point where it is

generated. Detention and retention reduce peak flows and volumes and allow pollutants to settle out or adhere to soils before they can be transported downstream.

► LOW IMPACT DEVELOPMENT REQUIREMENTS

The NPDES permit requires LID be used on all projects to minimize directly connected impervious area and promote infiltration. For Priority Development Projects, the minimum standards are:

- Drain a portion of impervious areas into pervious areas, if any.
- Design and construct pervious areas, if any, to effectively receive and infiltrate runoff from impervious areas, taking into account soil conditions, slope, and other pertinent factors.
- Construct a portion of paved areas with low traffic and appropriate soil conditions with permeable surfaces.

The LID design procedure in Chapter 4 incorporates these requirements into an integrated design which also meets sizing requirements for storm water treatment facilities and flow-control (hydromodification management) requirements.

► SIZING REQUIREMENTS FOR STORM WATER TREATMENT FACILITIES

The guidance in Chapter 4 was crafted to ensure LID facilities comply with the NPDES permit's hydraulic sizing requirements for storm water treatment facilities and flow-control facilities. The technical background follows.

Most runoff is produced by frequent storms of small or moderate intensity and duration. Treatment facilities are designed to treat smaller storms and the first flush of larger storms—approximately 80% of average annual runoff.

The NPDES permit identifies two types of treatment facilities—volume-based and flow-based.

Volume-based facilities must be designed to infiltrate, filter, or treat the volume of runoff produced from a 24-hour 85th percentile storm event as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map. As shown on the map, rainfall depths vary from about 0.55" to 1.55".

For **flow-based** facilities, the NPDES permit specifies the rational method be used to determine flow. The rational method uses the equation

$Q = CiA$, where

Q = flow

C = weighted runoff factor between 0 and 1

i = rainfall intensity

A = area

The permit identifies two alternatives for calculating rainfall intensity:

1. the 85th percentile rainfall intensity times two, or
2. 0.2 inches per hour.

It is typically found that both methods yield similar results. The 0.2 inches per hour rainfall intensity should be used for sizing flow-based treatment facilities.

The 0.2 inches per hour criterion is the basis for a **consistent countywide sizing factor** for bioretention facilities when used for storm water treatment only (i.e., not for flow control). The factor is based on maintaining a minimum percolation rate of 5 inches per hour through the engineered soil mix. The sizing factor is the ratio of the design intensity of rainfall on tributary impervious surfaces (0.2 inches/hour) to the design percolation rate in the facility (5 inches/hour), or **0.04** (dimensionless).

► FLOW-CONTROL (HYDROMODIFICATION MANAGEMENT)

The NPDES permit specifies for applicable projects:

> … post-project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

Under current Interim Hydromodification Criteria, the requirement applies to projects disturbing 50 acres or more, and applicants may select among **three options** for compliance: Use a continuous simulation model to compare pre-project and post-project runoff, use LID facilities with sizing factors and design criteria developed by the City of La Mesa, or identify a specified exemption. See Chapter One.

The technical background for the Interim Hydromodification Criteria is in the memorandum "Development of Interim Hydromodification Criteria" (October 30, 2007) and other technical documents available on the Project Clean Water website.

Criteria for Infiltration Devices

The NPDES permit restricts the design and location of "infiltration devices" that, as designed, may bypass filtration through surface soils before reaching groundwater. These devices include:

- Infiltration basins.
- Infiltration trenches (includes French drains).

- Unlined retention basins (i.e., basins with no outlets).
- Unlined or open-bottomed vaults or boxes installed below grade (dry wells).

Infiltration devices may not be used in:

- Areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway);
- Automotive repair shops;
- Car washes;
- Fleet storage areas (bus, truck, etc.);
- Nurseries;
- Other areas with pollutant sources that could pose a threat to groundwater, as designated by the City of La Mesa.

The vertical distance from the base of any infiltration device to the seasonal high groundwater mark shall be at least 10 feet. Infiltration devices shall be located a minimum of 100 feet horizontally from any known water supply wells.

In addition, infiltration devices are not recommended where:

- The infiltration device would receive drainage from areas where chemicals are used or stored, where vehicles or equipment are washed, or where refuse or wastes are handled.
- Surface soils or groundwater are polluted.
- The facility could receive sediment-laden runoff from disturbed areas or unstable slopes.
- Increased soil moisture could affect the stability of slopes of foundations.
- Soils are insufficiently permeable to allow the device to drain within 72 hours.

► MOST LID FEATURES AND FACILITIES ARE NOT INFILTRATION DEVICES

Self-treating and self-retaining areas, pervious pavements, bioretention facilities, and planter boxes are not considered to be infiltration devices.

Bioretention facilities work by percolating runoff through 18 inches or more of engineered soil. This removes most pollutants before the runoff is allowed to seep into native soils below. Further pollutant removal typically occurs in the unsaturated (vadose) zone before moisture reaches groundwater.

Where there is concern about the effects of increased soil moisture on slopes or foundations, an impermeable barrier may be added so the facility is "flow through" and all treated runoff is underdrained away from the facility. See the design sheets for Bioretention Facilities and Flow-Through Planters in Appendix B.

References and Resources:

- RWQCB Order R9-2007-0001 (Storm Water NPDES Permit)
- *County of San Diego Low Impact Development Handbook*
- Clean Water Act Section 402(p)
- 40 CFR 122.26
- San Diego Regional Water Quality Control Board—TMDLs
- State Water Resources Control Board—Ocean Standards
- *Site Planning for Urban Stream Protection* (Scheuler, 1995).
- "Application of Water-Quality Engineering Fundamentals to the Assessment of Stormwater Treatment Devices" (Salvia, 2000).

Chapter 3

Preparing Your Project Submittal

Step-by-step assistance to demonstrate compliance.

Your Project Submittal will demonstrate your project complies with all applicable requirements in the storm water NPDES permit—to minimize imperviousness, retain or detain storm water, slow runoff rates, incorporate required source controls, treat storm water prior to discharge, control runoff rates and durations, and provide for operation and maintenance of treatment and flow-control facilities.

Submittal requirements vary from jurisdiction to jurisdiction. See below for the specific requirements of the City of La Mesa.

Typically, your Project Submittal must be coordinated with your application for discretionary approvals and must have sufficient detail to ensure the storm water design, site plan, and landscaping plan are congruent.

A complete and thorough Project Submittal will facilitate quicker review and fewer cycles of review. The City of La Mesa requires a submittal for every applicable project. The step by step procedure in this chapter is highly recommended by the City of La Mesa; any other approaches to meeting the requirements of this BMP Manual must be shown by the project proponent to be defensibly equivalent or better.

In order to meet SUSMP requirements, your submittal will be a Standard Post Construction BMP Plan (SPCBMPP) or a Post Construction Water Quality Technical Report (PCWQTR), depending on the outcome of the "Storm Water Requirements Applicability Checklist" in Appendix A. If you need to prepare a SPCBMPP, see Appendix G for appropriate guidance. If your project is a Priority Development Project, you will need to prepare a PCWQTR as directed in this chapter. **Municipal staff may use a review checklist** such as the following example to evaluate your Project Submittal:

EXAMPLE PROJECT SUBMITTAL CHECKLIST

SUBMITTAL COMPONENT REQUIREMENTS FOR PRIORITY DEVELOPMENT PROJECTS

- ❒ Completed "Storm Water Requirements Applicability Checklist" (Appendix A)
- ❒ Vicinity Map
- ❒ Site Map (See below for contents of Exhibit.)
- ❒ PCWQTR (See below for contents of Report.)
- ❒ Drainage Study (with Hydromodification, if applicable)

CONTENTS OF EXHIBIT (SITE MAP)

Show all of the following on drawings:

- ❒ Show entire property on one map. Use key map if multiple sheets are necessary. (Step 1 in the following step-by-step instructions)
- ❒ Existing natural hydrologic features (depressions, watercourses, floodplains, relatively undisturbed areas) and significant natural resources. (Step 1)
- ❒ Areas of potential soil erosion on the property and downstream of the project. (Step 1)
- ❒ Soil types and depth to groundwater. (Step 1)
- ❒ Existing and proposed site drainage network and connections to drainage off-site, including surface conveyances, private storm drain systems, and municipal storm drain inlets. (Step 3)
- ❒ Proposed design features and surface treatments used to minimize imperviousness. (Step 3)
- ❒ Entire site divided into separate drainage areas, with each area identified as self-treating, self-retaining (zero-discharge), draining to a self-retaining area, or draining to an IMP. (Step 3)
- ❒ For each drainage area, types of impervious area proposed (roof, plaza/sidewalk, and streets/parking) and area of each. (Step 3)
- ❒ Proposed locations and sizes of treatment or flow-control facilities. (Step 3)
- ❒ Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix C and corresponding required source controls. (Step 4)

CONTENTS OF REPORT

Include all of the following in your PCWQTR:

- ❒ Table of Contents
- ❒ Identification of the watershed(s), downstream waterbodies, waterbody impairments, and pollutants of concern (Step 1)
- ❒ Narrative analysis or description of site features and conditions that constrain, or provide opportunities for, storm water control. (Step 2)
- ❒ Narrative description of site design characteristics that protect natural resources. (Step 3)

- ❒ Narrative description and/or tabulation of site design characteristics, building features, and pavement selections that reduce imperviousness of the site. (Step 3)
- ❒ Basis for selection of each proposed engineered LID IMP or alternative treatment facility. (Step 3)
- ❒ Tabulation of proposed pervious and impervious area, showing self-treating areas, self-retaining areas, and areas tributary to each treatment or flow-control facility. (Step 3)
- ❒ Preliminary designs, including calculations, for each infiltration, treatment, or flow-control facility. Elevations should show sufficient hydraulic head for each. (Step 3)
- ❒ A table of identified pollutant sources and for each source, the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix C. (Step 4)
- ❒ General maintenance requirements for infiltration, treatment, and flow-control facilities (Step 5)
- ❒ Means by which facility maintenance will be financed and implemented in perpetuity. (Step 5)
- ❒ Statement accepting responsibility for operation & maintenance of facilities (Step 5).
- ❒ Identification of any conflicts with codes or requirements or other anticipated obstacles to implementing the proposed facilities in the submittal (Step 6).
- ❒ Construction Plan SUSMP Checklist (Step 6).
- ❒ Certification by a registered civil engineer (Step 6).

Step by Step

Suggested coordination with site and landscape design

Plan and design your storm water controls integrally with the site planning and landscaping for your project. It's best to start with general project requirements and preliminary site design concepts, then prepare the detailed site design, landscape design, and storm water control design simultaneously. **This will help ensure that your site plan, landscape plan, and Project Submittal are congruent.**

Begin with general project requirements and program.

The following step-by-step procedure should optimize your design by identifying the best opportunities for storm water controls **early in the design process.**

The recommended steps are:

Sketch conceptual site layout, building locations, and circulation.

1. Assemble needed information.
2. Identify site opportunities and constraints.
3. Follow the LID design guidance in Chapter 4 to analyze your project for LID and to develop and document your drainage design.

Revise site layout, building locations, and circulation to accommodate LID design. Develop land-scaping plan.

4. Specify source controls using the sources/source control checklist in Appendix C.
5. Plan for ongoing maintenance of treatment and flow-control facilities.
6. Complete the Project Submittal.

Submit Site Plan, Landscape Plan, and SUSMP Submittal

Municipal staff may recommend you prepare and submit a preliminary site design prior to formally applying for planning and zoning approvals. Your preliminary site design should incorporate a conceptual plan for site drainage, including self-treating and self-retaining areas and the location and approximate sizes of any treatment facilities. This additional up-front design effort will save time and avoid potential delays later in the review process.

Step 1: Assemble Needed Information

To select types and locations of treatment facilities, the designer needs to know the following site characteristics:

- **Existing natural hydrologic features** and natural resources, including any contiguous natural areas, wetlands, watercourses, seeps, or springs.

- **Existing site topography**, including contours of any slopes of 4% or steeper, general direction of surface drainage, local high or low points or depressions, any outcrops or other significant geologic features.
- **Zoning**, including requirements for **setbacks** and **open space**.
- **Public Works Standards** or other local codes governing minimum street widths, sidewalk construction, allowable pavement types, and drainage. These codes may conflict with Low Impact Development objectives to minimize imperviousness and to maintain or restore natural site hydrology.
- Soil types (including **hydrologic soil groups**) and depth to groundwater, which may determine whether infiltration is a feasible option for managing site runoff. Depending on site location and characteristics, and on the selection of treatment and flow-control facilities, site-specific information (e.g. from boring logs or geotechnical studies) may be required.
- **Existing site drainage.** For undeveloped sites, this should be obtained by inspecting the site and examining topographic maps and survey data. For previously developed sites, site drainage and connection to the municipal storm drain system can be located from site inspection, municipal storm drain maps, and plans for previous development.
- Existing **vegetative cover** and **impervious areas**, if any.
- **Watershed(s)** in which the project area is located.
- **Pollutants of Concern** in receiving waters. For each of the proposed project discharge points, identify the receiving water(s), including hydrologic unit basin number(s), as identified in the most recent version of the Water Quality Control Plan for the San Diego Basin[1], prepared by the San Diego Regional Water Quality Control Board. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies[2]. List any and all pollutants for which the receiving waters are impaired. Use Table 2-1 of this BMP Manual to list anticipated pollutants based on land use.

References and Resources

- *Site Planning for Urban Stream Protection* (Scheuler 1995).
- *Start at the Source* (BASMAA 1999), p. 36

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[1]. Go to: http://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/index.shtml

[2]. Under Section 303(d) of the 1972 Clean Water Act, states, territories and authorized tribes are required to develop a list of water quality limited segments. These waters on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. Go to: http://www.swrcb.ca.gov/rwqcb9/water_issues/programs/303d_list/index.shtml. San Diego is in Region 9.

Step 2: Identify Constraints & Opportunities

Review the information collected in Step 1. Identify the principal constraints on site design and selection of treatment and flow-control facilities as well as opportunities to reduce imperviousness and incorporate facilities into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, restricted right-of-way, or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention facilities), and differences in elevation (which can provide hydraulic head). Note storm water treatment facilities should not be located within protected riparian areas.

Prepare a brief **narrative** describing site opportunities and constraints. This narrative will help you as you proceed with LID design and explain your design decisions to others.

Step 3: Prepare and Document Your LID Design

Use the Low Impact Development Design Guide (Chapter 4) to analyze your project for LID, design and document drainage, and specify preliminary design details for integrated management practices. **Follow the detailed instructions in Chapter 4 to ensure your project complies with NPDES permit LID requirements (Provision D.1.d.(4)) as well as storm water treatment requirements in Provision D.1.d.(6)).** In future editions of this BMP Manual, the LID Design Guide will be updated so that additional hydromodification management requirements are also met via this unified design procedure. Chapter 4 includes calculation procedures and formats for presenting your calculations.

As shown in the example checklist (page 31), your Project Submittal may need to include a drawing showing:

- The entire site divided into separate drainage management areas (DMAs), with each area identified as one of the following: self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. Each area should be clearly marked with a unique identifier.
- For each drainage area, the types of impervious area proposed, and the area of each.
- Proposed locations and sizes of treatment facilities. Each facility should be clearly marked with a unique identifier.

Compliance
The design criteria for DMAs in Chapter 4 ensure the required volume of flow from all developed portions of the project, including landscaped areas, is infiltrated, filtered, or treated (Provision D.1.d.(6)(a).

Your Project Submittal may need to include:

- Tabulation of proposed self-treating areas, self-retaining areas, areas draining to self-retaining areas, and areas draining to IMPs, and the corresponding IMPs identified on the Exhibit.
- Calculations, in the format shown in Chapter 4, showing the minimum square footage required and proposed square footage for each IMP.
- Preliminary designs for each IMP. The design sheets and accompanying drawings in Appendix B may be used or adapted for this purpose.

The following may also be required, or may be advisable to assist the reviewer to understand your design:

- A narrative overview of your design and how your design decisions optimize the site layout, use pervious surfaces, disperse runoff from impervious surfaces, and drain impervious surfaces to engineered IMPs. See Chapter 4.
- A narrative briefly describing each **drainage management area** (DMA), its drainage, and where drainage will be directed.
- A narrative briefly describing each IMP. Include any special characteristics or features distinct from the design sheets in Appendix B.

References and Resources

- Chapter 4
- *County of San Diego Low Impact Development Handbook*
- *The City of La Mesa General Plan*
- *The City of La Mesa Zoning Ordinance* (Title 24 of the La Mesa Municipal Code)
- City of La Mesa Development Codes (La Mesa Municipal Code)
- *Low Impact Development Manual* (Prince George's County, Maryland, 1999).
- *Bioretention Manual* (Prince George's County, Maryland, rev. 2002)
- *Site Planning for Urban Stream Protection* (Schueler, 1995b).
  Low Impact Development Technical Guidance Manual for Puget Sound (Puget Sound Action Team, 2005)
- *LID for Big Box Retailers* (Low Impact Development Center, 2006)

Step 4. Specify Source Control BMPs

Some everyday activities – such as trash recycling/disposal and washing vehicles and equipment – generate pollutants that tend to find their way into storm drains. These pollutants can be minimized by applying **source control BMPs**.

Source control BMPs include **permanent**, structural features that must be incorporated into your project plans and **operational** BMPs, such as regular sweeping and "housekeeping," that must be implemented by the site's occupant or user. The maximum extent practicable standard typically requires both types of BMPs. In general, operational BMPs cannot be substituted for a feasible and effective permanent BMP.

Use the following procedure to specify source control BMPs for your site:

► IDENTIFY POLLUTANT SOURCES

Review the first column in the **Pollutant Sources/Source Control Checklist** (Appendix C). Check off the potential sources of pollutants that apply to your site.

► NOTE LOCATIONS ON SUBMITTAL DRAWING

Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist (Appendix C). Show the location of each pollutant source and each permanent source control BMP in your submittal drawing.

► PREPARE A TABLE AND NARRATIVE

Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist (Appendix C). Now, create a table using the format in Table 3-1. In the left column, list each potential source on your site (from Appendix C, Column 1). In the middle column, list the corresponding **permanent, structural BMPs** (from Columns 2 and 3, Appendix C) used to prevent pollutants from entering runoff. Accompany this table with a narrative that explains any special features, materials, or methods of construction that will be used to implement these permanent, structural BMPs.

► IDENTIFY OPERATIONAL SOURCE CONTROL BMPS

TABLE 3-1. Format for table of permanent and operational source control measures.

Potential source of runoff pollutants	*Permanent source control BMPs*	*Operational source control BMPs*

To complete your table, refer once again to the Pollutant Sources/Source Control Checklist (Appendix C, Column 4). List in the right column of your table the operational BMPs that should be implemented as long as the anticipated activities continue at the site. The same BMPs may also be required as a condition of a use permit or other revocable discretionary approval for use of the site.

References and Resources

- Appendix C: Storm Water Pollutant Sources/Source Control Checklist
- RWQCB Order R9-2007-0001, Provision D.1.d.(5)
- *Start at the Source*, Section 6.7: Details, Outdoor Work Areas
- *California Stormwater Industrial/Commercial Best Management Practice Handbook*
- *Urban Runoff Quality Management* (WEF/ASCE, 1998) Chapter 4: Source Controls

Step 5: Storm Water Facility Maintenance

As required by NPDES Permit Provision D.1.c.(5), projects that include permanent BMPs shall be conditioned to require submittal of proof of a mechanism under which ongoing long-term maintenance of storm water treatment and flow-control facilities will be conducted, satisfactory to the City Engineer. The City of La Mesa requires the following items be included in your Project Submittal:

1. A means to finance and implement facility maintenance in perpetuity.
2. Acceptance of responsibility for maintenance from the time the facilities are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the treatment and flow-control facilities you have selected.

The City Engineer may also require that you prepare and submit a detailed plan that sets forth a maintenance schedule for each of the treatment and flow-control facilities built on your site.

Details of these requirements, and instructions for preparing a detailed operation and maintenance plan, are in Chapter 5.

References and Resources

- *Chapter 5*
- Operation, Maintenance, and Management of Stormwater Management Systems (Watershed Management Institute, 1997)

Step 6: Complete Your Project Submittal

City staff may provide specific instructions for the content and format of your Project Submittal. Your Project Submittal should document the information gathered and decisions made in Steps 1-5. A clear, complete, well-organized Project Submittal will make it possible to confirm your design meets the minimum requirements of the NPDES permit, the City of La Mesa Storm Water Ordinance, and this BMP manual.

► COORDINATION WITH SITE, ARCHITECTURAL, AND LANDSCAPING PLANS

Before completing your Project Submittal, ensure your storm water control design is fully coordinated with the site plan, grading plan, and landscaping plan being proposed for the site.

Information submitted and presentations to design review committees, planning commissions, and other decision-making bodies must incorporate relevant aspects of the storm water design. In particular, ensure:

- Curb elevations, elevations, grade breaks, and other features of the drainage design are consistent with the delineation of DMAs.

- The top edge (overflow) of each bioretention facility is level all around its perimeter—this is particularly important in parking lot medians.
- The resulting grading and drainage design is consistent with the design for parking and circulation.
- Bioretention facilities and other IMPs do not create conflicts with pedestrian access between parking and building entrances.
- Vaults and utility boxes can be accommodated outside bioretention facilities and will not be placed within bioretention facilities.
- The visual impact of storm water facilities, including planter boxes at building foundations and any terracing or retaining walls required for the storm water control design, is shown in renderings and other architectural drawings.
- Landscaping plans, including planting plans, show locations of bioretention facilities, and the plant requirements are consistent with the engineered soils and conditions in the bioretention facilities.
- Renderings and representation of street views incorporate any storm water facilities located in street-side buffers and setbacks

► CONSTRUCTION PLAN SUSMP CHECKLIST

When you submit construction plans for City review and approval, the reviewer will compare that submittal with your earlier Project Submittal. By creating a Construction Plan SUSMP Checklist for your project, you can facilitate the reviewer's comparison and speed review of your project.

TABLE 3-2. Format for Construction Plan SUSMP Checklist.

SUSMP Page #	*BMP Description*	*See Plan Sheet #s*

Here's how:

1. Create a table similar to Table 3-2. Number and list each measure or BMP you have specified in your Project Submittal in Columns 1 and 2 of the table. Leave Column 3 blank. Incorporate the table into your Project Submittal.

2. When you submit construction plans, **duplicate the table** (by photocopy or electronically). Now fill in Column 3, identifying the plan sheets where the BMPs are shown. List all plan sheets on which the BMP appears. Submit the updated table with your construction plans.

Note that the updated table—or Construction Plan SUSMP Checklist—is **only a reference tool** to facilitate comparison of the construction plans to your Project Submittal. City Engineering staff can advise you regarding the process required to propose changes to your approved Project Submittal.

► CERTIFICATION

Your Project Submittal shall be certified by a registered civil engineer.

The certification should state: "The selection, sizing, and preliminary design of storm water treatment and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments."

► EXAMPLE PROJECT SUBMITTAL OUTLINE AND CONTENTS

Check with City Engineering staff for requirements specific to your project.

I. Project Setting

- A. Project Name, Location, Description of project activities
- B. Vicinity Map
- C. Existing site features and conditions
- D. Opportunities and constraints for storm water control
- E. Watershed(s), receiving water bodies, and water body impairments
- F. Pollutants of concern based on land use and downstream water body impairments
- G. Impacts to hydrologic regime

II. Low Impact Development Design Strategies

- A. Optimization of site layout
  - (1) Limitation of development envelope
  - (2) Preservation of natural drainage features
  - (3) Setbacks from creeks, wetlands, and riparian habitats
  - (4) Minimization of imperviousness
  - (5) Using drainage as a design element
- B. Use of permeable pavements
- C. Dispersal of runoff to pervious areas
- D. Use of Integrated Management Practices

III. Documentation of Drainage Design

- A. Drainage Management Areas
  - (1) Tabulation
  - (2) Descriptions
- B. Integrated Management Practices
  - (1) Tabulation and Sizing Calculations

(2) Descriptions

IV. Source Control Measures

A. Description of site activities and potential sources of pollutants

B. Table showing sources, permanent source controls, and operational source controls

V. Facility Maintenance Requirements

A. Ownership and responsibility for maintenance in perpetuity.

(1) Commitment to execute any necessary agreements.

(2) Statement accepting responsibility for operation and maintenance of facilities until that responsibility is formally transferred.

B. Summary of maintenance requirements for each storm water facility.

VI. Construction Plan SUSMP Checklist

VII. Certifications

VIII. Attachment: SUSMP Exhibit (Site Map) clearly showing:

A. Entire property

B. Nearby water bodies and municipal storm drain inlets

C. Private storm drain systems

D. Drainage Management Areas

E. Integrated Management Practices

F. Source control measures and potential sources of pollutants

G. Any other proposed BMPs

► SPECIFIC PROJECT CONSIDERATIONS

Your submittal will reflect the unique character of your own project and should meet the requirements identified in this BMP manual. City Engineering staff can assist you to determine how specific requirements apply to your project.

Chapter 4

Low Impact Development Design Guide

Guidance for designing and documenting your LID site drainage, storm water treatment facilities, and flow-control facilities

Follow the Low Impact Development (LID) design in this BMP manual to achieve compliance with the storm water treatment requirements as well as the LID requirements in the storm water NPDES permit. The City of La Mesa encourages the use of the design and documentation strategies outlined in this chapter. While other approaches may be used, they must be defensibly shown by the project proponent to meet or exceed the low impact development standards in this BMP Manual.

This will require careful documentation of:

- Pervious and impervious areas in the planned project.
- Drainage from each of these areas.
- Locations, sizes, and types of proposed treatment facilities.

Your Project Submittal must include calculations showing the site drainage and proposed LID treatment facilities meet the criteria in this BMP Manual.

This Low Impact Development Design Guide will help you:

- **Analyze your project** and identify and select options for implementing LID techniques to meet runoff treatment requirements—and flow-control requirements, if they apply.
- **Design and document drainage** for the whole site and document how that design meets this BMP Manual's storm water treatment criteria.
- **Specify preliminary design details** and integrate your LID drainage design with your paving and landscaping design.

Alternatives to LID design are discussed in the final section of this chapter.

Analyze Your Project for LID

Conceptually, there are four LID strategies for managing runoff from buildings and paving:

1. **Optimize the site layout** by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.

2. **Use pervious surfaces** such as turf, gravel, or pervious pavement—or use surfaces that retain rainfall, such as vegetated roofs. All drainage from these surfaces is considered to be "self-retained" (a detailed definition corresponding to this concept is on page 50). No further management of runoff is necessary. An emergency overflow should be provided for extreme events.

3. **Disperse runoff** from impervious surfaces on to adjacent pervious surfaces (e.g., direct a roof downspout to disperse runoff onto a lawn).

4. Drain impervious surfaces to engineered **Integrated Management Practices** (IMPs), such as bioretention facilities, planter boxes, cisterns, or dry wells. IMPs infiltrate runoff to groundwater and/or percolate runoff through engineered soil and allow it to drain away slowly. Depending on site conditions and local regulations, it may be possible to harvest and reuse rainwater in conjunction with IMPs.

A combination of two or more strategies may work best for your project. With forethought in design, the four strategies can provide multiple, complementary benefits to your development. Pervious surfaces reduce heat island effects and temperature extremes. Landscaping improves air quality, creates a better place to live or work, and upgrades value for rental or sale. Retaining natural hydrology helps preserve and enhance the natural character of the area. LID drainage design can also conserve water and reduce the need for drainage infrastructure.

Table 4-1 includes ideas for applying LID strategies to site conditions and types of development.

TABLE 4-1. Ideas for Runoff Management

Site Features and Design Objectives	*Vegetated Roof*	*Self-retaining Areas*	*Pervious Pavement*	*Bioretention Facility*	*Flow-through Planter*	*Dry Well*	*Cistern with bioretention*
Clayey native soils	✓			✓	✓		✓
Permeable native soils	✓		✓	✓	✓	✓	
Very steep slopes	✓				✓		
Shallow groundwater	✓				✓		
Avoid saturating subsurface soils	✓		✓		✓		
Connect to roof downspouts		✓		✓	✓	✓	✓
Parking lots/islands and medians			✓	✓		✓	
Sites with extensive landscaping		✓	✓	✓			
Densely developed sites with limited space/landscape	✓		✓		✓	✓	✓
Fit IMPs into landscape and setback areas				✓			✓
Make drainage a design feature		✓		✓			✓
Convey as well as treat storm water				✓			

► OPTIMIZE THE SITE LAYOUT

To minimize storm water-related impacts, apply the following design principles to the layout of newly developed and redeveloped sites.

Conserve natural areas, soils, and vegetation. Define the development envelope and protected areas, identifying areas that are most suitable for development and areas that should be left undisturbed. Use the following guideline to determine the least sensitive areas of the site, in order of increasing sensitivity:

1. Areas devoid of vegetation, including previously graded areas and agricultural fields.
2. Areas of non-native vegetation, disturbed habitats, and eucalyptus woodlands where receiving waters are not present.
3. Areas of chamise or mixed chaparral, and non-native grasslands.
4. Areas containing coastal scrub communities.
5. All other upland communities.
6. Occupied habitat of sensitive species and all wetlands.

Within each of the previous categories, hillside areas should be considered more sensitive than flatter areas.

Coordination
Chapter One includes a presentation of how review of your project's site design and landscape design is coordinated with review for compliance with storm water NPDES requirements.

Where possible, conform the site layout along natural landforms, avoid excessive grading and disturbance of vegetation and soils, and replicate the site's natural drainage patterns. Set back development from creeks, wetlands, and riparian habitats. Preserve significant trees, especially native trees and shrubs, and identify locations for planting additional native or drought tolerant trees and large shrubs. Concentrate development on portions of the site with less permeable soils, and preserve areas that can promote infiltration.

For all types of development, **limit overall coverage** of paving and roofs. Where allowed by La Mesa zoning and design standards—and provided public safety and a walkable environment are not compromised—this can be accomplished by designing compact, taller structures, narrower and shorter streets and sidewalks, smaller parking lots (fewer stalls, smaller stalls, and more efficient lanes), and indoor or underground parking. Examine site layout and circulation patterns and identify areas where landscaping can be substituted for pavement.

Detain and retain runoff throughout the site. On flatter sites, it typically works best to intersperse landscaped areas and IMPs among the buildings and paving. On hillside sites, drainage from upper areas may be collected in conventional catch basins and piped to landscaped areas and IMPs in lower areas.

Use drainage as a design element. Use depressed landscape areas, vegetated buffers, and bioretention areas as amenities and focal points within the site and landscape design. Bioretention areas can be almost any shape and should be located at low points. Bioretention areas shaped as swales can detain and treat low runoff flows and also convey higher flows.

► USE PERVIOUS SURFACES

Consider a vegetated roof. Although not yet widely used in California, vegetated or "green" roofs are growing in popularity. Potential benefits include longer roof life, lower heating and cooling costs, and better sound insulation, in addition to air quality and water quality benefits. For SUSMP compliance purposes, vegetated roofs are considered not to produce increased runoff or runoff pollutants (i.e., any runoff from a vegetated roof requires no further treatment or detention). For more information on vegetated roofs, see www.greenroofs.org.

Consider permeable pavements and surface treatments. Inventory paved areas on your preliminary site plan. Identify where permeable pavements, such as crushed aggregate, turf block, unit pavers, pervious concrete, or pervious asphalt could be substituted for impervious concrete or asphalt paving.

► DISPERSE RUNOFF TO ADJACENT PERVIOUS AREAS

Look for opportunities to direct runoff from impervious areas to adjacent landscaping. The design, including slopes and soils, must reflect a reasonable expectation that an inch of rainfall will soak into the soil and produce no runoff. For example, a lawn or garden depressed 3-4" below surrounding walkways or driveways provides a simple but functional landscape design element.

For sites subject to storm water treatment requirements only, a 2:1 maximum ratio of impervious to pervious area is acceptable. Be sure soils will drain adequately.

Under some circumstances, it may be allowable to direct runoff from impervious areas to pervious pavement (for example, from roof downspouts to a parking lot paved with crushed aggregate or turf block). The pore volume of pavement and base course must be sufficient to retain an inch of rainfall, including runoff from the tributary area. The slopes and soils must be compatible with infiltrating that volume without producing runoff.

► DIRECT RUNOFF TO INTEGRATED MANAGEMENT PRACTICES

Design criteria have been developed for the following IMPs:

- **Bioretention facilities**, which can be configured as swales, free-form areas, or planters to integrate with your landscape design.
- **Flow-through planters**, which can be used near building foundations and other locations where infiltration to native soils is not desired.
- **Dry wells** and other infiltration facilities, which can be used only where soils are permeable.
- **Cisterns**, in combination with a bioretention facility.

See the design sheets in Appendix B.

It may be possible to create a site-specific design that uses cisterns to achieve storm water flow control, storm water treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Such a design could expand the multiple benefits of LID to include water conservation. Keep in mind:

- Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8 below. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse.

- Storage of water for longer than 48 hours creates the potential for mosquito harborage. Cisterns must be designed to prevent entry by mosquitoes.

- Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Some references and resources for water harvesting appear at the end of this chapter.

Finding the right location for treatment facilities on your site involves a careful and creative integration of several factors:

- To make the most efficient use of the site and to maximize aesthetic value, **integrate IMPs with site landscaping**. Zoning codes may require landscape setbacks or buffers, or may specify that a minimum portion of the site be landscaped. It may be possible to locate some or all of your site's treatment and flow-control facilities within this same area, or within utility easements or other non-buildable areas.

- Planter boxes and bioretention areas must be **level or nearly level** all the way around. Bioretention areas configured as swales may be gently sloped in the linear direction, but opposite sides must be at the same elevation.

- For effective, low-maintenance operation, **locate facilities so drainage into and out of the device is by gravity flow.** Pumped systems are feasible, but are expensive, require more maintenance, are prone to untimely failure, and can cause mosquito control problems.

- If the property is being subdivided now or in the future, the facility should be in a **common, accessible area.** In particular, avoid locating facilities on private residential lots. Even if the facility will serve only one site owner or operator, make sure the facility is located for ready access by inspectors from the City of La Mesa and local vector control agency.

- The facility must be accessible to equipment needed for its maintenance. **Access requirements for maintenance** will vary with the type of facility selected. Planter boxes and bioretention areas will typically need access for the same types of equipment used for landscape maintenance.

To complete your analysis, include in your Project Submittal a brief **narrative** documenting the site layout and site design decisions you made. This will provide background and context for how your design meets the quantitative LID design criteria.

Develop and Document Your Drainage Design

The **design documentation procedure** begins with careful delineation of pervious areas and impervious areas (including roofs) throughout the site. The procedure accounts for how runoff from each delineated area is managed. For areas draining to IMPs, the procedure ensures each IMP is appropriately sized.

The procedure results in a space-efficient, cost-efficient LID design for meeting SUSMP requirements on most residential and commercial/industrial developments. The procedure arranges documentation of drainage design and IMP sizing in a consistent format for presentation and review.

This procedure is intended to facilitate, not substitute for, creative interplay among site design, landscape design, and drainage design. **Several iterations may be needed** to optimize your drainage design as well as aesthetics, circulation, and use of available area for your site.

You should be able to complete the needed calculations using only the project's site development plan.

► STEP 1: DELINEATE DRAINAGE MANAGEMENT AREAS

This is the key first step. You must divide the **entire project area** into individual, discrete Drainage Management Areas (DMAs). Typically, lines delineating DMAs follow grade breaks and roof ridge lines. The Exhibit, tables, text, and calculations in your Project Submittal will illustrate, describe, and account for runoff from each of these areas.

Use separate DMAs for each surface type (e.g., landscaping, pervious paving, or roofs). Each DMA must be assigned a single hydrologic soil group. Assign each DMA an identification number and determine its size in square feet.

► STEP 2: CLASSIFY DMAS AND DETERMINE RUNOFF FACTORS

Next, determine how drainage from each DMA will be handled. Each DMA will be one of the following four types:

1. Self-treating areas.
2. Self-retaining areas (also called "zero-discharge" areas).
3. Areas that drain to self-retaining areas.
4. Areas that drain to IMPs.

Self-treating areas are landscaped or turf areas that do not drain to IMPs, but rather drain directly off site or to the storm drain system. Examples include upslope undeveloped areas which are ditched and drained around a development and grassed slopes which drain off-site to a street or storm drain. In general, self-treating areas include no impervious areas, unless the impervious area is very small (5% or less) in relationship to the receiving pervious area and slopes are gentle enough to ensure runoff will be absorbed into the vegetation and soil. Criteria for self-treating areas are in the design sheet "Self Treating and Self-Retaining Areas" in Appendix B.

Rationale

Pollutants in rainfall and windblown dust will tend to become entrained in the vegetation and soils of landscaped areas, so no additional treatment is needed. It is assumed the self-treating landscaped areas will produce runoff less than or equal to the pre-project site condition.

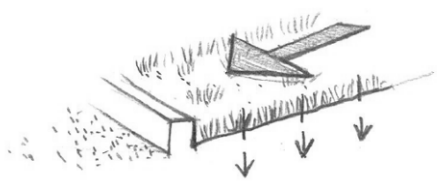

FIGURE 4-1. Self-treating areas are entirely pervious and drain directly off-site or to the storm drain system.

Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that a one-inch rainfall event would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Specify slopes, if any, toward the center of the pervious area. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

Criteria for self-retaining areas are in the design sheet "Self Treating and Self-Retaining Areas" in Appendix B.

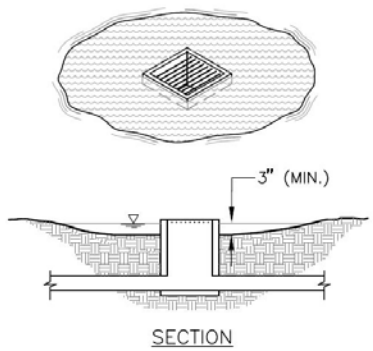

FIGURE 4-2. Self-retaining areas. Berm or depress the grade to retain at least an inch of rainfall and set inlets of any area drains at least 3 inches above low point to allow ponding.

Areas draining to self-retaining areas. Runoff from impervious or partially pervious areas can be managed by routing it to self-retaining pervious areas. For example, roof downspouts can be directed to lawns, and driveways can be sloped toward landscaped areas. The maximum ratio is 2 parts impervious area for every 1 part pervious area.

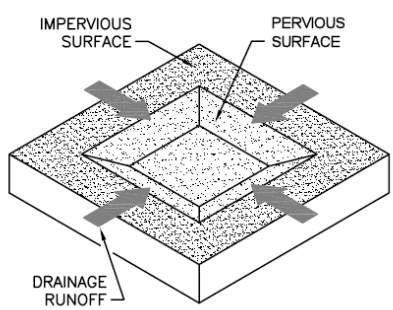

FIGURE 4-3. Relationship of impervious to pervious area for self-retaining areas.
Ratio: ***pervious ≥ ½ impervious***

The drainage from the impervious area must be directed to and dispersed within the pervious area, and the entire area must be designed to retain an inch of rainfall without flowing off-site. For example, if the maximum ratio of 2 parts impervious area into 1 part pervious area is used, then the pervious area must absorb 3 inches of water over its surface before over-flowing to an off-site drain.

A partially pervious area may be drained to a self-retaining area. For example, a driveway composed of unit pavers may drain to an adjacent lawn. In this case, the maximum ratios are:

(Runoff factor) x (tributary area) ≤ 2 x (self-retaining area) *Equation 4-1*

Use the runoff factors in Table 4-2.

Prolonged ponding is a potential problem at higher impervious/pervious ratios. In your design, ensure that the pervious area soils can handle the additional run-on and are sufficiently well-drained.

Under some circumstances, pervious pavement (e.g., crushed stone, pervious asphalt or pervious concrete) can be self-retaining. Adjacent roofs or impervious pavement may drain on to the pervious pavement in the same maximum ratios as described above.

To design a pervious pavement to be a self-treating area, ensure:

- The gravel base course is a minimum of four or more inches deep.
- The base course is not to be underdrained.
- A qualified engineer has been consulted regarding infiltration rates, pavement stability, and suitability for the intended traffic.

Runoff from self-treating and self-retaining areas does not require any further treatment or flow control.

TABLE 4-2. Example Runoff factors for surfaces draining to IMPs.

Surface	Factor
Roofs	1.0
Concrete	1.0
Pervious Concrete	0.1
Porous Asphalt	0.1
Grouted Unit Pavers	1.0
Solid Unit Pavers on granular base, min. 3/16 inch joint space	0.2
Crushed Aggregate	0.1
Turfblock	0.1
Amended, mulched soil	0.1
Landscape	0.1

Areas draining to IMPs are multiplied by a sizing factor to calculate the required size of the IMP. On most densely developed sites—such as commercial and mixed-use developments and small-lot residential subdivisions—most DMAs will drain to IMPs.

More than one drainage area can drain to the same IMP. However, because the minimum IMP sizes are determined by ratio to drainage area size, a drainage area may not drain to more than one IMP. See Figures 4-4 and 4-5.

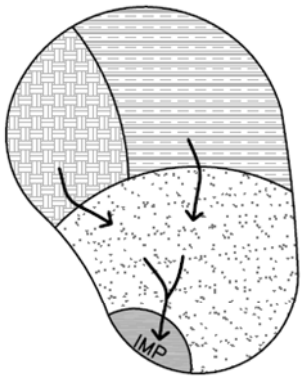

FIGURE 4-4. More than one Drainage Management Area can drain to a single IMP.

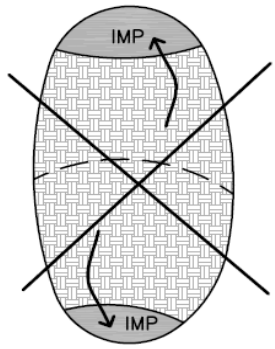

FIGURE 4-5. One Drainage Management Area cannot drain to more than one IMP. Use a grade break to divide the DMA.

Where possible, design site drainage so **only impervious roofs and pavement** drain to IMPs. This yields a simpler, more efficient design and also helps protect IMPs from becoming clogged by sediment.

If it is necessary to include turf, landscaping, or pervious pavements within the area draining to an IMP, list each surface as a separate DMA. A runoff factor (similar to a "C" factor used in the rational method) is applied to account for the reduction in the quantity of runoff. For example, when a turf or landscaped drainage management area drains to an IMP, the resulting increment in IMP size is:

$$\Delta \text{ (Area)} = \text{(pervious area)} \times \text{(runoff factor)} \times \text{(sizing factor)}.$$

Use the runoff factors in Table 4-2.

► STEP 3: TABULATE DRAINAGE MANAGEMENT AREAS

- Tabulate self-treating areas in the format shown in Table 4-3.
- Tabulate self-retaining areas in the format shown in Table 4-4.
- Tabulate areas draining to self-retaining areas in the format shown in Table 4-5. Check to be sure the total product of (square feet of tributary area × runoff factor) for all DMAs draining to a receiving self-retaining area is no greater than a 2:1 ratio to the square footage of the receiving self-retaining area itself.

- Compile a list of DMAs draining to IMPs. Proceed to Step 4 to check the sizing of the IMPs.

TABLE 4-3. Format for Tabulating Self-Treating Areas

DMA Name	*Area (square feet)*

TABLE 4-4. Format for Tabulating Self-Retaining Areas

DMA Name	*Area (square feet)*

TABLE 4-5. Format for Tabulating Areas Draining to Self-Retaining Areas

DMA Name	*Area (square feet)*	*Post-project surface type*	*Runoff factor*	*Receiving self-retaining DMA*	*Receiving self-retaining DMA Area (square feet)*

► STEP 4: SELECT AND LAY OUT IMPS ON SITE PLAN

Select from the list of IMPs in Table 4-6. Illustrations, designs, and design criteria for the IMPs are in the "IMP Design Details and Criteria" at the end of this chapter.

Once you have laid out the IMPs, calculate the square footage you have set aside on your site plan for each IMP.

► STEP 5: REVIEW SIZING FOR EACH IMP

For each of the IMPs, use the appropriate sizing from Table 4-6.

TABLE 4-6. IMP Sizing

Bioretention Facilities	Sizing Factor for Area = 0.04
Flow-through Planters	Sizing Factor for Area = 0.04
Dry Well or Infiltration Basin	See Step 6 to Calculate Min. Volume
Cistern with Bioretention	See Step 6 to Calculate Min. Volume of Cistern; then use 0.04 to calculate minimum size of bioretention area

► STEP 6: CALCULATE MINIMUM AREA AND VOLUME OF EACH IMP

The minimum area of bioretention facilities and flow-through planters is found by summing up the contributions of each tributary DMA and multiplying by the adjusted sizing factor for the IMP.

Equation 4-7

$$Min.\,IMP\,Area = \sum \begin{pmatrix} DMA & DMA \\ Square & \times Runoff \\ Footage & Factor \end{pmatrix} \times \begin{pmatrix} IMP \\ Sizing \\ Factor \end{pmatrix}$$

Use the format of Table 4-7 to present the calculations of the required minimum area and volumes for **bioretention areas** and **planter boxes**:

TABLE 4-7. Format for presenting calculations of minimum IMP Areas for bioretention areas and planter boxes.

DMA Name	*DMA Area (square feet)*	*Post-project surface type*	*DMA Runoff factor*	*DMA Area × runoff factor*	*Soil Type:*	*IMP Name*			
					IMP Sizing factor		*Minimum Area*	*Proposed Area*	
			Total		***0.04***				***IMP Area***

To size **dry wells**, **infiltration basins**, or **infiltration trenches**, use the following procedure:

1. Use the County of San Diego's 85th Percentile Isopluvial Map to determine the minimum unit volume.
2. Determine the weighted runoff factor ("C" factor) for the area tributary to the facility. The factors in Table 4-2 may be used.
3. Multiply the weighted runoff factor times the tributary area times the minimum unit volume.

Equation 4-8

$$Volume = [Tributary\ Area] \times [weighted\ runoff\ \ factor] \times [unit\ volume]$$

4. Select a facility depth.
5. Determine the required facility area. Dry wells may be designed as an open vault or with rock fill. If rock fill is used, assume a porosity of 40%.
6. Ensure the facility can infiltrate the entire volume within 72 hours.

To size a **cistern in series with a bioretention facility**:

1. Use Equation 4-8 to calculate the required cistern volume.
2. Design a discharge orifice for a drawdown time of 24 hours.
3. Determine the maximum discharge from the orifice.
4. The minimum area of the bioretention facility must treat this flow based on a percolation rate of 5" per hour through the engineered soil.

► STEP 7: DETERMINE IF AVAILABLE SPACE FOR IMP IS ADEQUATE

Sizing and configuring IMPs may be an iterative process. After computing the minimum IMP area using Steps 1 – 6, review the site plan to determine if the reserved IMP area is sufficient. If so, the planned IMPs will meet the SUSMP sizing requirements. If not, revise the plan accordingly. Revisions may include:

- Reducing the overall imperviousness of the project site.
- Changing the grading and drainage to redirect some runoff toward other IMPs which may have excess capacity.
- Making tributary landscaped DMAs self-treating or self-retaining.
- Expanding IMP surface area.

► STEP 8: COMPLETE YOUR SUMMARY REPORT

Present your IMP sizing calculations in tabular form. Adapt the following format as appropriate to your project. Coordinate your presentation of DMAs and calculation of minimum IMP sizes with the Project Submittal drawing (labeled to show delineation of DMAs and locations of IMPs). It is also helpful to incorporate a brief description of each DMA and each IMP.

Sum the total area of all DMAs and IMPs listed and show it is equal to the total project area. This step may include adjusting the square footage of some DMAs to account for area used for IMPs.

Format:

Project Name:

Project Location:

APN or Subdivision Number:

Total Project Area (square feet):

Mean Annual Precipitation at Project Site:

I. Self-treating areas:

DMA Name	*Area (square feet)*

II. Self-retaining areas:

DMA Name	*Area (square feet)*

III. Areas draining to self-retaining areas:

DMA Name	*Post-project surface type*	*Runoff factor*	*Area (square feet)*	*Receiving self-retaining DMA*	*Receiving self-retaining DMA Area (square feet)*

IV. Areas draining to IMPs (repeat for each IMP):

DMA Name	*DMA Area (square feet)*	*Post-project surface type*	*DMA Runoff factor*	*DMA Area × runoff factor*	*Soil Type:*	*IMP Name*			
					IMP Sizing factor		*Minimum Area or Volume*	*Proposed Area or Volume*	
			Total						***IMP Area***

Specify Preliminary Design Details

In your Project Submittal, describe your IMPs in sufficient detail to demonstrate the area, volume, and other criteria of each can be met within the constraints of the site.

Ensure these details are consistent with preliminary site plans, landscaping plans, and architectural plans submitted with your application for planning and zoning approvals.

Appendix B includes design sheets for:

- Self-treating and self-retaining areas
- Pervious pavements
- Bioretention facilities
- Flow-through planter
- Dry wells and infiltration basins
- Cistern with bioretention facility

These design sheets include recommended configurations and details, and example applications, for these IMPs. **The information in these design sheets must be adapted and applied to the conditions specific to the development project such as unstable slopes or the lack of available head. Designated municipal staff have final review and approval authority over the project design.**

Keep in mind that proper and functional design of the IMP is the responsibility of the applicant. Effective operation of the IMP throughout the project's lifetime will be the responsibility of the property owner.

Alternatives to Integrated LID Design

If you believe design of features and facilities as described above is infeasible for your development site, consult with Engineering staff before preparing an alternative design for storm water treatment, flow control, and LID compliance.

For all alternative designs, the applicant must prepare a complete Project Submittal, including a drawing showing the entire site divided into discrete Drainage Management Areas, text and tables showing how drainage is routed from each DMA to a treatment facility, and calculations demonstrating the design achieves the applicable design criteria for each storm water treatment facility. Alternative treatment facilities are limited to the circumstances and selection criteria identified beginning on page 22. The Project Submittal must also show how the project meets the minimum LID criteria (page 26) and ensures runoff rates, durations, and velocities are controlled to maintain or reduce downstream erosion conditions and protect stream habitat (NPDES Permit Provision D.1.d.(10)).

► DESIGN OF ALTERNATIVE TREATMENT FACILITIES

Here are criteria and design considerations for some alternative treatment facilities, also known as treatment control BMPs:

Sand Filters. To ensure effectiveness is not compromised by compacting or clogging of the filter surface, sand filters must be maintained frequently.

The following criteria apply to sand filters:

- Calculate the design flow using the rational method with an intensity of 0.2"/hour and the "C" factors for "treatment only" from Table 4-2.
- To determine the required filter surface area, divide the design flow by an allowable design surface loading rate of 5"/hour.
- The minimum depth of filter media is 18". The media should be washed sand, with gradation similar to that specified for fine aggregate in ASTM C-33.
- The entire filter area must be accessible for easy maintenance without the need to enter a confined space.

A typical filter design includes a gravel drain layer and a perforated pipe underdrain. Filter fabric may be used to prevent the filter media from entering the gravel layer.

The design should not include any permanent pool or other standing water. Instead of including a pretreatment basin, consider the following features in the area tributary to the filter to reduce the potential for filter clogging:

- Limit the size of the Drainage Management Area.

- Include only impervious areas in the DMA.
- Stabilize slopes and eliminate sources of sediment in the DMA.
- Provide screens for trash and leaves at storm drain inlets (if allowed by the City of La Mesa).

For additional design considerations and details, see *Design of Stormwater Filtering Systems* by Richard A. Claytor and Thomas R. Schueler, The Center for Watershed Protection, 1996, and *California Stormwater BMP Handbooks* Fact Sheet TC-40, Media Filter.

Extended ("Dry") Detention Basins. The required detention volume is based on the 85th percentile 24-hour storm depth. The steps to calculate the required detention volume are:

1. Use the County of San Diego's 85th Percentile Isopluvial Map to determine the unit basin volume.
2. Determine the weighted runoff factor ("C" factor) for the area tributary to the basin. The factors in Table 4-2 may be used.
3. Multiply the weighted runoff factor times the tributary area times the unit basin volume.

For maximum effectiveness the basin should not be sized substantially larger than this volume.

For design considerations and details, see the *California Stormwater Best Management Practice Handbooks*, Fact Sheet TC-22, "Extended Detention Basins." The basin outlet should be designed for a 24-hour drawdown time.

As noted in Fact Sheet TC-22, "dry" detention basins may not be practicable for drainage areas less than 5 acres. The potential for mosquito harborage is a concern. In the design, do not create any areas that will hold standing water for 72 hours or more.

"Wet" Detention Ponds and Constructed Wetlands. The required detention volume is determined as with a "dry" detention basin. Before proceeding with design, contact the local mosquito control agency to coordinate the design and plan ongoing inspection and maintenance of the facility for mosquito control. For design considerations and details, see the *California Stormwater Best Management Practices Handbooks*, Fact Sheet TC-20, "Wet Ponds," and Fact Sheet TC-21, "Constructed Wetlands."

Vegetated Swales. Design recommendations for conventional vegetated swales are in the *California Stormwater Best Management Practices Handbooks*. The conventional swale design uses available on-site soils and does not include an underdrain system. Where soils are clayey, there is little infiltration. Treatment occurs as runoff flows through grass or other vegetation before exiting at the downstream end. Recommended detention times are on the order of 10 minutes.

Conventional vegetated swales may be used to meet NPDES permit treatment requirements and LID requirements (see page 22). The following should be incorporated in the design:

- Determine the weighted runoff factor ("C" factor) for the area tributary to the swale. The factors in Table 4-2 may be used.
- Calculate the design flow by multiplying the weighted runoff factor times the tributary area times either (1) 0.2 inches of rainfall per hour, or (2) twice the 85th percentile hourly rainfall intensity.
- When sizing the swale, use a value of 0.25 for Manning's "n".
- Ensure that all flow enters the swale near its highest point and that no flow short-circuits treatment by entering the swale along its length.
- The swale should be a minimum 100 feet in length.
- Longitudinal slopes should not exceed 2.5%; on flatter slopes, incorporate measures to avoid prolonged surface ponding.

Consider using linear-shaped bioretention areas in place of conventional vegetated swales because:

- Conventional swale design has resulted in standing water and associated nuisances.
- Conventional swales often don't obtain even the design residence time because of the length required and because proper design requires runoff enter the swale at the upstream end rather than at various locations along its length, and
- Bioretention areas provide a more flexible drainage design, more effective practicable treatment, and more effective flow control within the same footprint.

► TREATMENT FACILITIES FOR SPECIAL CIRCUMSTANCES

Higher-rate surface filters and vault-based proprietary filters can only be used in the circumstances described beginning on page 22 and when sand filters, extended "dry" detention basins, and "wet" detention ponds or constructed wetlands have been found infeasible.

For surface filters, the grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units. Proprietary facilities should be installed consistent with the manufacturer's instructions.

References and Resources:

- RWQCB Order R9-2007-0001 (Storm Water NPDES Permit)
- Low Impact Development Center
- *County of San Diego Low Impact Development Handbook*
- *California Best Management Practices Handbooks*
- *Design of Stormwater Filtering Systems* (Claytor and Scheuler, 1996)
- American Rainwater Catchment Systems Association
- Water Conservation Alliance of Southern Arizona
- *Rainwater Harvesting for Drylands and Beyond*
- *The Texas Manual on Rainwater Harvesting*
- *Managing Wet Weather With Green Infrastructure: Municipal Handbook, Rainwater Harvesting Policies* (Low Impact Development Center, 2008)

Chapter 5

Operation & Maintenance of Storm Water Facilities

How to prepare a customized Storm Water Maintenance Plan for the treatment BMPs on your site.

The storm water NPDES Permit requires the City of La Mesa to verify all treatment and flow-control facilities are adequately maintained. Note that treatment facilities include both LID IMPs and treatment control BMPs. Facilities you install as part of your project will be verified for effectiveness and proper performance. The City of La Mesa may also verify the ongoing function of storm water management features that are not treatment or flow control facilities, such as permeable pavements and limitations on impervious area.

Operation and maintenance of storm water facilities is a six-stage process:

1. Determine **who will own** the facility and be responsible for the maintenance of treatment facilities. Identify the means by which ongoing maintenance will be assured (for example, a maintenance agreement that runs with the land).

2. Identify typical maintenance requirements, and allow for these requirements in your project planning and preliminary design.

3. Prepare a **maintenance plan** for the site incorporating detailed requirements for **each treatment and flow-control facility**.

4. **Maintain** the facilities from the time they are constructed until ownership and maintenance responsibility is formally transferred.

5. **Formally transfer** operation and maintenance **responsibility** to the site owner or occupant. A warranty, secured by a bond, or other financial instrument, may be required to secure against lack of performance due to flaws in design or construction.

6. Maintain the facilities in perpetuity and comply with self-inspection, reporting, and verification requirements.

See the schedule for these stages in Table 5-1.

Stage 1: Ownership and Responsibility

You must specify a means to **ensure maintenance** of treatment and flow-control facilities **in perpetuity.**

Depending on the intended use of your site, this will require one or more of the following:

- Project proponent agreement to maintain storm water BMPs: The City may enter into a contract with the project proponent obliging the project proponent to maintain, repair, and replace the storm water BMP as necessary into perpetuity. Security may be required.

- Assessment districts: The City may approve an Assessment District or other funding mechanism proposed by the project proponent to provide funds for storm water BMP maintenance, repair, and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.

- Lease provisions: In those cases where the City holds title to the land in question, and the land is being leased to another party for private or public use, the City may assure storm water BMP maintenance, repair, and replacement through conditions in the lease.

- Public entity maintenance: The City may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the permanent treatment BMP. Unless acceptable to the City, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed, (e.g., through a trust fund, assessment district fees, bond, letter of credit or similar means). In addition, the City may seek protection from liability by appropriate releases and indemnities. The City shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The City shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions; and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the facilities. The City must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

The City may accept alternative maintenance mechanisms if such mechanisms are as protective as those listed above.

Ownership and maintenance responsibility for treatment and flow-control facilities should be discussed at the **beginning of project planning**, typically at the pre-application meeting for

planning and zoning review. Experience has shown provisions to finance and implement maintenance of treatment and flow-control facilities can be a major stumbling block to project approval, particularly for **small residential subdivisions**. (See "New Subdivisions" in Chapter 1.)

► PRIVATE OWNERSHIP AND MAINTENANCE

The City of La Mesa requires—as a condition of project approval—that a maintenance agreement be executed.

TABLE 5-1. Schedule for planning operation and maintenance of storm water treatment BMPs

Stage	*Description*	*Schedule*
1	Determine facility ownership and maintenance responsibility	Discuss with planning staff at pre-application meeting
2	Identify typical maintenance requirements	In initial submittal, coordinate with planning & zoning application
3	Develop detailed operation and maintenance plan	Provided with Project Submittal, and updated as necessary if any information changes prior to Stage 5.
4	Interim operation and maintenance of facilities	During and following construction including warranty period
5	Formal transfer of operation & maintenance responsibility	On sale and transfer of property or permanent occupancy
6	Ongoing maintenance and compliance with inspection & reporting requirements	In perpetuity

These agreements could provide that the City of La Mesa may collect a management and/or inspection fee established by a standard fee schedule, as applicable. In addition, the agreement may provide that, if the property owner fails to maintain the storm water facility, the City may enter the property, restore the storm water facility to good working order, and obtain reimbursement, including administrative costs, from the property owner.

► TRANSFER TO PUBLIC OWNERSHIP

The City of La Mesa may sometimes choose to have a treatment and flow-control facility deeded to the public, in fee or as an easement, and maintain the facility as part of the municipal storm drain system. The City may recoup the costs of maintenance through a special tax, assessment district, or similar mechanism.

Locating an IMP in a public right-of-way or easement creates an additional design constraint—along with hydraulic grade, aesthetics, landscaping, and circulation. However, because sites typically drain to the street, it may be possible to locate a bioretention swale parallel with the edge of the parcel. The facility may complement, or substitute for, an underground storm drain system.

Even if the facility is to be transferred to the City of La Mesa after construction is complete, it is still the responsibility of the builder to identify general operation and maintenance requirements, prepare a detailed operation and maintenance plan, and to maintain the facility until that responsibility is formally transferred.

Stage 2: General Maintenance Requirements

Include in your Project Submittal a general description of anticipated facility maintenance requirements. This will help ensure that:

- Ongoing costs of maintenance have been considered in your facility selection and design.
- Site and landscaping plans provide for access for inspections and by maintenance equipment.
- Landscaping plans incorporate irrigation requirements for facility plantings.
- Initial maintenance and replacement of facility plantings is incorporated into landscaping contracts and guarantees.

Fact sheets available on the Project Clean Water web page describe general maintenance requirements for the types of storm water facilities featured in the LID Design Guide (Chapter 4). You can use this information to specify general maintenance requirements in your Project Submittal.

Maintenance fact sheets for conventional storm water facilities are available in the California Stormwater BMP Handbooks.

Stage 3: Detailed Maintenance Plan

Prepare a detailed maintenance plan and submit it as required by the City of La Mesa. A detailed maintenance plan must be included with the initial Project Submittal; however the maintenance plan may later be updated to incorporate solutions to any problems or changes that occurred during project construction.

Your detailed maintenance plan should be kept on-site for use by maintenance personnel and during site inspections. It is also recommended that a copy of your initial Project Submittal be kept onsite as a reference.

► YOUR DETAILED MAINTENANCE PLAN: STEP BY STEP

The following step-by-step guidance will help you prepare your detailed maintenance plan.

Preparation of the plan will require familiarity with your storm water facilities as they have been or will be constructed and a fair amount of "thinking through" plans for their operation and maintenance.

► STEP 1: DESIGNATE RESPONSIBLE INDIVIDUALS

To begin creating your detailed maintenance plan, designate and identify:

- The individual who will have direct responsibility for the maintenance of storm water controls. This individual should be the designated contact with City inspectors and should sign self-inspection reports and any correspondence with the City of La Mesa regarding verification inspections.
- Employees or contractors who will report to the designated contact and are responsible for carrying out BMP operation and maintenance.
- The corporate officer authorized to negotiate and execute any contracts that might be necessary for future changes to operation and maintenance or to implement remedial measures if problems occur.
- Your designated respondent to problems, such as clogged drains or broken irrigation mains, that would require immediate response should they occur during off-hours.

Updated contact information must be provided to the City of La Mesa immediately whenever a property is sold and whenever designated individuals or contractors change.

Draw or sketch an **organization chart** to show the relationships of authority and responsibility between the individuals responsible for maintenance. This need not be elaborate, particularly for smaller organizations.

Describe how **funding for BMP operation and maintenance** will be assured, including sources of funds, budget category for expenditures, process for establishing the annual maintenance budget, and process for obtaining authority should unexpected expenditures for major corrective maintenance be required.

Describe how your organization will accommodate initial **training** of staff or contractors regarding the purpose, mode of operation, and maintenance requirements for the storm water facilities on your site. Also, describe how your organization will ensure ongoing training as needed and in response to staff changes.

► STEP 2: SUMMARIZE DRAINAGE AND BMPS

Incorporate the following information from your Project Submittal into your maintenance plan:

- Figures delineating and designating pervious and impervious areas.
- Figures showing locations of storm water facilities on the site.
- Tables of pervious and impervious areas served by each facility.

Review the Project Submittal narrative, if any, that describes each facility and its tributary drainage area and update the text to incorporate any changes that may have occurred during planning and zoning review, building permit review, or construction. Incorporate the updated text into your maintenance plan.

► STEP 3: DOCUMENT FACILITIES "AS BUILT"

Include the following information from final construction drawings:

- Plans, elevations, and details of all facilities. Annotate if necessary with designations used in the initial Project Submittal.
- Design information or calculations submitted in the detailed design phase (i.e., not included in the initial Project Submittal.)
- Specifications of construction for facilities, including sand or soil, compaction, pipe materials and bedding.

In the maintenance plan, note field changes to design drawings, including changes to any of the following:

- Location and layouts of inflow piping, flow splitter boxes, and piping to off-site discharge
- Depths and layering of soil, sand, or gravel
- Placement of filter fabric or geotextiles
- Changes or substitutions in soil or other materials.
- Natural soils encountered (e.g., sand or clay lenses)

► STEP 4: PREPARE MAINTENANCE PLANS FOR EACH FACILITY

Prepare a maintenance plan, schedule, and inspection checklists (routine, annual, and after major storms) for each facility. Plans and schedules for two or more similar facilities on the same site may be combined.

Use the following resources to prepare your customized maintenance plan, schedule, and checklists.

- Specific information noted in Steps 2 and 3, above.
- Other input from the facility designer, municipal staff, or other sources.
- Operation and Maintenance Fact Sheets (available on the Project Clean Water website).

Note any particular characteristics or circumstances that could require attention in the future, and include any troubleshooting advice.

Also include manufacturer's data, operating manuals, and maintenance requirements for any:

- Pumps or other mechanical equipment.
- Proprietary devices used as BMPs.

Manufacturers' publications should be referenced in the text (including models and serial numbers where available). Copies of the manufacturers' publications should be included as an attachment in the back of your maintenance plan or as a separate document.

► STEP 5: COMPILE MAINTENANCE PLAN

The following general outline is provided as an example.

I. Inspection and Maintenance Log

II. Updates, Revisions and Errata

III. Introduction

A. Narrative overview describing the site; drainage areas, routing, and discharge points; and treatment facilities.

IV. Responsibility for Maintenance

A. General

(1) Name and contact information for responsible individual(s).

(2) Organization chart or charts showing organization of the maintenance function and location within the overall organization.

(3) Reference to Operation and Maintenance Agreement (if any). A copy of the agreement should be attached.

(4) Maintenance Funding

(1) Sources of funds for maintenance

(2) Budget category or line item

(3) Description of procedure and process for ensuring adequate funding for maintenance

B. Staff Training Program

C. Records

D. Safety

V. Summary of Drainage Areas and Storm Water Facilities

A. Drainage Areas

(1) Drawings showing pervious and impervious areas (copied or adapted from initial Project Submittal).

(2) Designation and description of each drainage area and how flow is routed to the corresponding facility.

B. Treatment and Flow-Control Facilities

(1) Drawings showing location and type of each facility

(2) General description of each facility (Consider a table if more than two facilities)

(1) Area drained and routing of discharge.

(2) Facility type and size

VI. Facility Documentation

A. "As-built" drawings of each facility (design drawings in the draft Plan)

B. Manufacturer's data, manuals, and maintenance requirements for pumps, mechanical or electrical equipment, and proprietary facilities (include a "placeholder" in the draft plan for information not yet available).

C. Specific operation and maintenance concerns and troubleshooting

VII. Maintenance Schedule or Matrix

A. Maintenance Schedule for each facility with specific requirements for:

(1) Routine inspection and maintenance

(2) Annual inspection and maintenance

(3) Inspection and maintenance after major storms

B. Service Agreement Information

Assemble and make copies of your maintenance plan. One copy must be submitted to the City of La Mesa, and at least one copy kept on-site. Here are some suggestions for formatting the maintenance plan:

- Format plans to 8½" x 11" to facilitate duplication, filing, and handling.
- Include the revision date in the footer on each page.
- Scan graphics and incorporate with text into a single electronic file. Keep the electronic file backed-up so that copies of the maintenance plan can be made if the hard copy is lost or damaged.

► STEP 6: UPDATES

Your maintenance plan will be **a living document**.

Operation and maintenance personnel may change; mechanical equipment may be replaced, and additional maintenance procedures may be needed. Throughout these changes, the maintenance plan must be kept up-to-date.

Updates may be transmitted to the City of La Mesa at any time. However, at a minimum, updates to the maintenance plan must be reported with the annual submittal of the "BMP Inspection & Maintenance Verification Form," or equivalent, to the City.

Stage 4: Interim Maintenance

Applicants will typically be required to warranty storm water facilities against lack of performance due to flaws in design or construction. The warranty may need to be secured by a bond or other financial instrument.

Stage 5: Transfer Responsibility

As part of the detailed maintenance plan, note the expected date when responsibility for operation and maintenance will be transferred. Notify the City of La Mesa when this transfer of responsibility takes place.

Stage 6: Operation & Maintenance Verification

The City of La Mesa implements an operation and maintenance verification program, including periodic site inspections.

Contact municipal staff to determine the frequency of inspections, whether self-inspections are allowed, and applicable fees, if any.

References and Resources

- *Urban Runoff Quality Management* (WEF/ASCE, 1998). pp 186-189.
- *Stormwater Management Manual* (Portland, 2004). Chapter 3.
- *California Storm Water Best Management Practice Handbooks* (CASQA, 2003).
- *Best Management Practices Guide* (Public Telecommunications Center for Hampton Roads, 2002).
- Operation, Maintenance, and Management of Stormwater Management Systems (Watershed Management Institute, 1997)

Chapter 6

Construction BMP Requirements and Performance Standards

Guideline to meeting construction BMP requirements in the SWPPP or CSWMP for your site.

The storm water NPDES Permit requires the City of La Mesa to regulate construction activities within the City in order to reduce construction site discharges of pollutants from the MS4 to the maximum extent practicable and to prevent construction site discharges from the MS4 from causing or contributing to a violation of water quality standards.

Compliance with the City of La Mesa's construction BMP requirements is a four-step process:

1. Determine the applicable storm water requirements for your site.
2. Prepare and submit the appropriate plans.
3. Determine the adequacy of the plans proposed.
4. Assure implementation and maintenance of the requirements.

These steps are described below in greater detail.

Construction Storm Water BMP Requirements

The flow chart in Figure 6-1, "Construction Permit Review & Approval Process" describes how storm water requirements are incorporated into projects during the construction permit review process. The steps below describe the elements of the plan review and permitting processes for storm water best management practice (BMP) requirements.

FIGURE 6-1. Construction Permit Review and Approval Process.

The following figure provides an overview of the project review process for projects that require a construction permit from the City of La Mesa. Construction permits include building permits, grading permits, demolition permits, and encroachment permits.

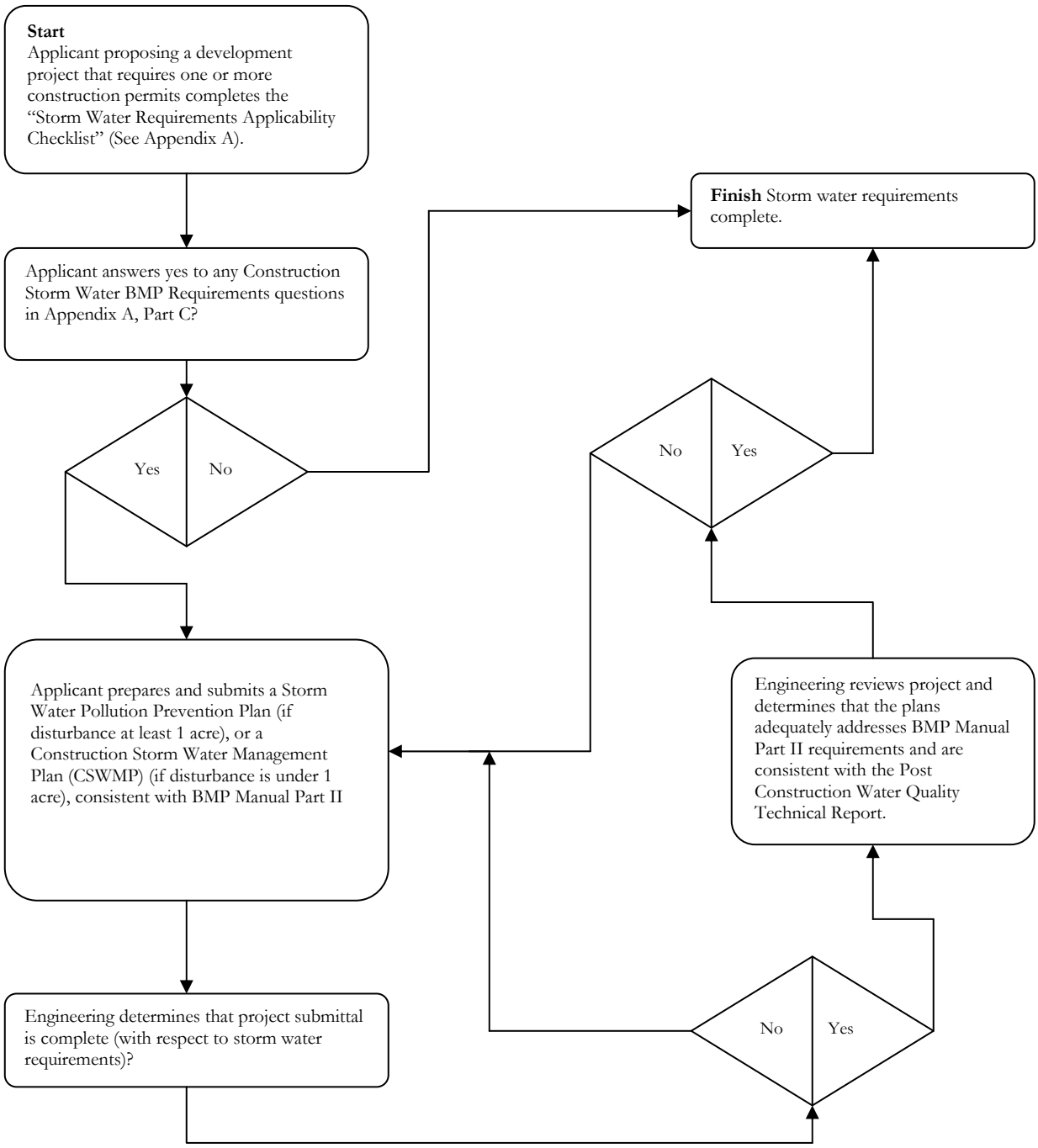

► STEP 1: DETERMINE APPLICABLE STORM WATER BMP REQUIREMENTS

Prior to submittal, applicants must complete the "Storm Water Requirements Applicability Checklist" in Appendix A, to determine if their project is subject to construction and/or permanent storm water best management practice (BMP) requirements. Projects subject to the construction storm water best management practices requirements must comply with the standards included in this BMP Manual, as appropriate depending on the site conditions, season, and project design, and construction methods. Each project must be given a priority ranking (high, medium, or low) for the construction phase (see Appendix A). The prioritization will determine the inspection frequency by the City but will not change the construction BMP requirements. Refer to Step 2: "Prepare & Submit Appropriate Plans," for guidance in navigating through this BMP Manual to ensure construction BMP performance standards are met.

► STEP 2: PREPARE & SUBMIT APPROPRIATE PLANS

This BMP Manual describes the construction site management requirements that contractors must comply with. In addition, the next section of this chapter ("Construction Storm Water BMP Performance Standards") lists the performance standards that construction sites must meet, and provides a list of required erosion control, sediment control, and materials management BMPs for reference. Additionally, each project must determine if they are subject to s requirements and be given a priority of high, medium or low (see Appendix A).

Construction Projects Over 1 Acre. Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in the next section of this chapter, "Construction Storm Water BMP Performance Standards." If a project disturbs 1 acre or more, the applicant must provide a Storm Water Pollution Prevention Plan (SWPPP), which identifies all construction BMP requirements required by this chapter, in accordance with the current State General Permit for Storm Water Discharges Associated with Construction Activity (State General Construction Permit). Consistent with the State General Construction Permit, the City will require that <u>both</u> erosion and sediment control BMPs be installed and maintained for all applicable projects in addition to good housekeeping and site and materials management. Additionally, the State General Construction Permit has a requirement for a sampling and monitoring program to be implemented. Additionally, each project determined to be subject to the City's advanced treatment requirements (see Appendix A) will need to include details on how the site plans to meet these requirements in the SWPPP and/or erosion control plan. Appendix D provides general guidelines for preparation of a SWPPP as well as a more detailed checklist to meet the requirements.

Construction Projects Under 1 Acre. Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in the next section of this chapter, "Construction Storm Water BMP Performance Standards." For projects that disturb less than 1-acre and are determined to have a potential to impact water quality during construction, the applicant must provide a Construction Storm Water Management Plan (CSWMP), which identifies all

construction BMP requirements required in this chapter, with the project submittal. The CSWMP shall depict the BMPs to be implemented during construction to reduce/eliminate discharges of pollutants to the storm drain conveyance system. The CSWMP shall include but not be limited to erosion and sediment control BMPs, good housekeeping measures and site and materials management.

After preparing plans and supporting documents according to the requirements in this BMP Manual, submit plans to the Department of Public Works/Engineering for review (See Step 3).

► STEP 3: DETERMINE ADEQUACY OF PROPOSED PLANS

Under the authority of the City Engineer, Engineering staff will review submitted plans for compliance with the applicable storm water requirements contained in this BMP Manual. The City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs. After all storm water requirements have been approved by the City Engineer, proceed to Step 4 to assure implementation and maintenance of the approved BMPs through permit conditions, plan notes, and if necessary, maintenance agreements.

► STEP 4: ASSURE IMPLEMENTATION & MAINTENANCE OF REQUIREMENTS

Applicants must provide assurances that permanent storm water BMPs will be constructed and permanently maintained throughout the use of a developed site, and that construction BMPs will be implemented and maintained until construction is complete. The summaries below describe how construction and permanent BMP requirements must be assured during both discretionary actions and construction permit review processes. After the City Engineer has approved all construction and/or permanent BMPs, refer to the final section of this chapter, "Implementation and Maintenance of Requirements," to determine how construction and permanent BMP implementation and maintenance will be assured.

Discretionary Action. For any discretionary action, permanent storm water requirements shall be incorporated into the project design and be shown on the plans. In addition, project shall be conditioned to execute a maintenance agreement for ongoing permanent BMP maintenance, satisfactory to the City Engineer, prior to the issuance of any construction permits. This requirement shall be noted on the plans for the discretionary action. If the project will be required to provide construction BMPs, the permit/approval shall include the "Standard Construction BMP Implementation and Maintenance Condition" listed in "Implementation and Maintenance of Requirements" at the end of this chapter.

Construction Permits. For projects requiring construction permits, construction and permanent BMP requirements shall be incorporated into the project design and shown on the plans prior to the issuance of any permits. The project applicant shall execute a permanent BMP maintenance agreement, satisfactory to the City Engineer, prior to issuance of any construction permits. Construction maintenance requirements and the specific permanent BMP maintenance procedures shall be noted on the plans. Any construction BMP requirements that cannot be shown graphically must be noted on the plans.

Construction Storm Water BMP Performance Standards

Those projects that have been determined to require construction BMPs in Steps 1 and 2 of this chapter must identify the construction BMPs to be implemented in accordance with the performance standards in this section. The construction BMPs must be identified in a Storm Water Pollution Prevention Plan or Construction Storm Water Management Plan (CSWMP) for projects disturbing more than or less than 1 acre, respectively. Because all projects require BMPs during construction, those projects that disturb less than 1 acre are required to have a Construction Storm Water Management Plan (CSWMP) which identifies the pollution prevention measures that will be taken. These plans must be prepared in accordance with the guidelines in Appendix D.

► 1. MINIMUM CONSTRUCTION BMP REQUIREMENTS

The City has developed a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to select, install, and maintain general site management, soil stabilization and erosion prevention, and sediment containment BMPs to reduce, retain, and manage pollutant discharges to the MEP. Table 6-1 outlines the minimum construction BMPs required by the City along with the corresponding current fact sheets obtained from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual (2003), where applicable. Additional information on the BMPs included in Table 6-1 can be found in the City of La Mesa Jurisdictional Urban Runoff Management Plan (JURMP), the Model Construction Program for San Diego Copermittees, the City of Los Angeles "Reference Guide for Stormwater Best Management Practices," and the California Stormwater Quality Association (CASQA) BMP Handbook for Construction.

It is the responsibility of the property owner or his/her designee to select, install and maintain appropriate BMPs that meet the City's minimum BMP requirements outlined in Table 6-1 below. BMPs must be installed in accordance with an industry recommended standard or in accordance with the requirements of the State General Construction Permit.

TABLE 6-1. Minimum Required BMPs for Construction

BMP Type	Minimum Required BMP(s)	Corresponding Caltrans Fact sheet
General Site Management		
Project Planning	Preserve natural hydrologic features where feasible	-
	Preserve riparian buffers and corridors where feasible	-
	Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction	-
	Minimize exposure time of disturbed soil areas	SS-1
	Minimize grading during the wet season and correlate grading with seasonal dry weather periods to the extent feasible	SS-1
	Temporarily stabilize and reseed disturbed soil areas as rapidly as feasible	SS-1

BMP Type	Minimum Required BMP(s)	Corresponding Caltrans Fact sheet
	Educate construction site employees and subcontractors on minimum BMP requirements	-
Pollution Prevention	Prevent the contamination of storm water from vehicles and equipment through proper management of the following types of activities: - Cleaning - Fueling - Maintenance	 NS-8 NS-9 NS-10
	Prevent the contamination of storm water from construction materials through proper management of the following types of activities: - Material Delivery and Storage - Material Use - Stockpile Management[1] - Spill Prevention and Control	 WM-1 WM-2 WM-3 WM-4
	Prevent the contamination of storm water by wastes through proper management of the following types of wastes: - Solid Waste - Hazardous Waste - Contaminated Soil - Concrete - Sanitary Waste - Liquid	 WM-5 WM-6 WM-7 WM-8 WM-9 WM-10
	Prevent the contamination of storm water through proper management of the follow activities: - Water Conservation Practices - Dewatering Operations - Paving and Grinding - Potable Water/Irrigation and Flushing	 NS-1 NS-2 NS-3 NS-7
Erosion Prevention and Sediment Containment		
Soil Stabilization and Erosion Prevention	Preserve existing vegetation where feasible	SS-2
	Prevent erosion and sediment runoff from exposed graded areas through physical stabilization and/or vegetation stabilization[2] by implementing one or more of the following BMPs: - Hydraulic Mulch - Hydroseeding - Soil Binders - Straw Mulch - Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats - Wood Mulch - Earth Dikes/Drainage Swales	 SS-3 SS-4 SS-5 SS-6 SS-7 SS-8 SS-9
	Reduce the velocity of storm water by using one or more of the following: - Outlet Protection/Velocity Dissipation - Slope Drains	 SS-10 SS-11
	Establish permanent re-vegetation or landscaping as early as feasible	SS-1

BMP Type	Minimum Required BMP(s)	Corresponding Caltrans Fact sheet
Sediment Containment	Protect the Perimeter of the site or exposed area from sediment discharge using one or more of the following: - Silt Fence - Gravel Bag Berm - Fiber Rolls	 SC-1 SC-6 SC-5
	Capture sediments in channeled storm water by using one or more of the following: - De-silting Basin[3] - Storm Drain Inlet Protection - Sediment Trap - Gravel Bag Barrier	 SC-2 SC-10 SC-3 SC-8
	Prevent sediment from being tracked off-site by using one or more of the following: - Stabilized Construction Entrance - Construction Road Stabilization - Entrance/Exit Tire Wash - Street Sweeping	 TC-1 TC-2 TC-3 SC-7

1. Stockpiles should be fully covered when materials are not being added or removed.
2. Vegetation stabilization BMPs must be installed, irrigated, and established (uniform vegetative coverage with 70% coverage established) prior to October 1st. In the event stabilizing vegetation has not been established by October 1st, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.
3. De-silting basins must be designed in accordance with industry standards such as Caltrans. If the project is one acre or greater the de-silting basin must be designed in accordance with the current State General Construction Permit.

► 2. SITE MANAGEMENT REQUIREMENTS

Construction is a dynamic operation where changes are expected. Storm water BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain their effectiveness and may require relocation, revision, and re-installation, particularly as project grading progresses. Therefore, owner/contractor self- inspections are required. They shall be performed by the owner's/contractor's Qualified Contact Person specifically trained in storm water pollution prevention site management and storm water BMPs, including the installation and maintenance of sediment and erosion control measures. Additional qualified persons may assist with the inspection activities under the direction of the Qualified Contact Person. A Qualified Contact Person is required for all sites during both wet and dry weather conditions.

There are four primary purposes of the self-inspections conducted by owners and contractors:

- To ensure that the owners/contractors take full responsibility for managing storm water pollution caused by their activities.
- To ensure that storm water BMPs are properly documented and implemented and are functioning effectively.
- To identify maintenance (e.g., sediment removal) and repair needs.

- To ensure that the project proponents implement their storm water management plans.

A self-inspection checklist, noting date, time, conditions and inspection date, must be kept on-site and made available for inspection, if requested (note: the State General Construction Permit has additional inspection requirements that must be met to comply with the permit). Self-inspections must be performed by a Qualified Contact Person according to the following schedule:

- Daily forecasting at all times
- At 24-hour intervals during extended rainfall events
- Daily evaluations as earth moving/grading is being conducted during the wet season
- Weekly (every 7 days) in the dry season as earth moving/grading is progressing

Storm water pollution prevention site management requirements include:

A. A qualified person who is trained and competent in the use of BMPs shall be on site daily, although not necessarily full time, to evaluate the conditions of the site with respect to storm water pollution prevention. This qualified contact person shall represent the contractor/ owner on storm water issues.

B. The qualified person shall implement the conditions of the Storm Water Pollution Prevention Plan, contract documents, and/or local ordinances with respect to erosion and sediment control and other waste management regulations.

C. The qualified person is responsible for monitoring the weather and implementation of any emergency plans as needed. The weather shall be monitored on a 5-day forecast plan and a full BMP protection plan shall be activated when there is a 40% chance of rain.

D. The qualified person is responsible for overseeing any site grading and operations and evaluating the effectiveness of the BMPs. This person shall modify the BMPs as necessary to keep the dynamics of the site in compliance. This person or other qualified persons are responsible for checking the BMPs routinely for maintenance and documenting the BMPs being implemented.

► 3. PERFORMANCE STANDARDS

Construction The City Engineer will evaluate the adequacy of the owner's/contractor's site management for storm water pollution prevention, inclusive of BMP implementation, on construction sites based on performance standards for storm water BMPs. Poor BMP practices shall be challenged. Performance standards shall include:

A. No measurable increase of pollution (including sediment) in runoff from the site.

B. No slope erosion.

C. Water velocity moving offsite must not be greater than pre-construction levels.

A site will be considered inactive if construction activities have ceased for a period of 7 or more consecutive calendar days. At any time of year, an inactive site must be fully protected from erosion and discharges of sediment. It is also the owner's/contractor's responsibility at both active and inactive sites to implement a plan to address all potential non-storm water discharges.

Regardless of any inspections conducted by the City, property owners or contractors are required to prevent any construction-related materials, wastes, spills, or residues from entering a storm water conveyance system and to apply for coverage under the State General Construction Permit as applicable for the site.

► 4. SEASONAL REQUIREMENTS

BMP requirements differ between the wet season (Oct. 1 – Apr. 30) and the dry season (May 1 – Sept. 30), the type of the project and topography of the site, as described below.

A. Dry Season Requirements (May 1 through September 30) include but are not limited to:

A. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)

B. Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).

C. Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).

D. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

E. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.

F. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).

G. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

H. The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.

I. A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.

J. Properly protected, designated storage areas are required for materials and wastes.

K. All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.

L. Remnant trash and debris shall be removed and/or properly stored/disposed of daily.

M. Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.

N. Materials for spill control/containment must be stockpiled onsite.

O. Non-storm water discharges must be eliminated or controlled to the MEP.

B. Rainy Season Requirements (October 1 through April 30) include but are not limited to:

A. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)

B. Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).

C. Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).

D. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

E. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.

F. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).

G. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

H. The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.

I. A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.

J. Properly protected, designated storage areas are required for materials and wastes.

K. All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.

L. Remnant trash and debris shall be removed and/or properly stored/disposed of daily.

M. Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.

N. Materials for spill control/containment must be stockpiled onsite.

O. Non-storm water discharges must be eliminated or controlled to the MEP.

P. Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.

Q. Perimeter protection and sediment containment BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.

R. Adequate soil stabilization and erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a selected BMP fails, it must be repaired, improved, or replaced with an acceptable alternate as soon as it is safe to do so.

S. All vegetation erosion prevention BMPs must be established prior to the rainy season to be considered as a BMP.

T. Standby erosion and sediment control BMPs must be able to protect all exposed soil areas. A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for seven or more calendar days. The ability to deploy standby BMP materials is not sufficient for these areas.

► 5. ADVANCED TREATMENT REQUIREMENTS

The City requires advanced treatment methods to be employed at construction sites determined to be an exceptional threat to water quality (see Appendix A). Advanced treatment involves using mechanical or chemical means to flocculate and remove suspended sediment from construction site runoff. Projects required to implement advanced treatment must comply with the following:

1. Treatment effluent water quality shall meet or exceed the water quality objectives for sediment, turbidity, and any other parameter deemed necessary by the City Engineer as listed in the Water Quality Control Plan for the San Diego Basin (9) for inland surface waters and lagoons and estuaries for the appropriate hydrologic unit.

2. Applicant shall provide design, operations and maintenance schedule, monitoring plan, certification of training of staff to the satisfaction of the City Engineer.

► 6. ADDITIONAL CONTROLS FOR CONSTRUCTION SITES

The Municipal Permit requires implementation of additional controls for construction sites tributary to 303(d) listed water body segments impaired for sediment or within, adjacent to, or discharging directly to coastal lagoons or other receiving waters within ESAs. Additional requirements for theses site will be determined on a site-by-site basis at the discretion of the City Engineer.

Implementation and Maintenance of Requirements

Discretionary Actions. Projects seeking discretionary approvals are not required to graphically demonstrate any construction BMP requirements on the project plans. Instead, the discretionary action shall include the following standard condition, which shall also be noted on the plans:

> "The Permittee or designee shall incorporate any construction best management practices (BMPs) necessary to comply with the grading regulations in Chapter 14.05 of the La Mesa Municipal Code, into the construction plans and/or specifications, satisfactory to the City Engineer, prior to the issuance of any construction permits."

Construction Permits for Projects Under 1 Acre. Projects proposing to disturb less than 1 acre during construction shall include construction BMP requirements, where possible, on the plans. Any remaining construction BMPs that cannot be shown graphically on the plans shall be either noted on, or stapled to, the plans and made a condition of the permit. The project's construction priority ranking (see Appendix A) must also be noted on the construction plans. Applicants proposing projects that include permanent BMPs must prepare (if not already prepared as part of a previous permit or approval), and execute a maintenance agreement, prepared satisfactory to the City, following the program described in Chapter 5 of this BMP Manual prior to the issuance of any construction permits. The permanent BMPs shall be

graphically shown on the plans, where possible, and made a condition of the project's permit/approval. The permanent BMP's operation and maintenance requirements (O & M plan discussed in Chapter 5 of this BMP Manual) shall also be noted on the plans and made a condition of the project's permit/approval.

Construction Permits for Projects Over 1 Acre. Projects proposing to disturb more than 1 acre during construction shall include all construction BMPs in a Storm Water Pollution Prevention Plan, prepared in accordance with Appendix D. The construction BMPs shall also be shown on the plans, where possible. Any remaining construction BMPs that cannot be shown graphically on the plans shall be either noted or stapled to the plans and made a condition of the permit. The project's construction priority ranking (see Appendix A) must also be noted on the construction plans. Applicants proposing projects that include permanent BMPs must prepare (if not already prepared as part of a previous permit or approval), and execute a maintenance agreement, prepared satisfactory to the City, following the program described in Chapter 5 of this BMP Manual prior to the issuance of any construction permits. The permanent BMPs shall be graphically shown on the plans, where possible, and made a condition of the project's permit/approval. The permanent BMP's operation and maintenance requirements (O & M plan discussed in Chapter 5 of this BMP Manual) shall also be noted on the plans and made a condition of the project's permit/approval.

APPENDICES

STORM WATER PROJECT DATA SHEET

PROJECT DATA:

Owner's Name & Phone No: _____

Address: _____ Permit No: _____

Project: _____ Date Applied: _____

PROJECT SITE DATA:

1. Area of the lot/parcel _____ sf
2. Existing impervious area (roof/building foot print) _____ sf
3. Existing impervious area (driveway, parking, walkway, hardscape etc.) _____ sf
4. Impervious area after development (roof/building foot print) _____ sf
5. Impervious area after development (driveway, parking, walkway, hardscape, etc.) _____ sf
6. Total area to be disturbed _____ sf
7. Storm water runoff based on Hydrology Study:

Existing runoff _____ cfs, Post construction runoff _____ cfs

8. Identify if the runoff from the site discharges to the public street or storm drain or open channel, detention or retention basin: _____
9. Watershed (Check One): San Diego River _____ San Diego Bay _____

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a. Total disturbed area includes impervious area, construction material storage, staging area, graded slopes, new slopes and landscape areas.

b. The information shall be shown on the site/grading plans.

c. Complete the Storm Water Requirements Applicability Checklist

Notes:

- Items 1 through 9 shall be shown on the site development plan/grading plan.
- The applicant may be required to submit SWPPP or CSWMP, and PCWQTR or SPCBMPP depending on the Priority as stated below.
- A Hydrology report may be required.

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the checklist to determine which permanent best management practices (BMPs) and which construction BMPs are required for your project for storm water. *This form must be completed and submitted with your permit application.*

SECTION 1. PERMANENT STORM WATER BMP REQUIREMENTS:

	YES	NO
1. Is the project a new development?	☐	☐
2. Is the project a significant redevelopment that adds/replaces/creates at least 5,000 ft^2 of impervious surface?	☐	☐
Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for an expanded definition of significant redevelopment.		

If both of the above answers are "No", go to Part B. If either of the above answers is "Yes," Complete Part A Below.

PART A: DETERMINE PRIORITY DEVELOPMENT PROJECT PERMANENT STORM WATER BMP REQUIREMENTS.

DOES THE PROJECT MEET THE DEFINITION OF ONE OR MORE OF THE PRIORITY DEVELOPMENT PROJECT CATEGORIES AS DEFINED IN LA MESA'S BMP MANUAL PART II? (SEE GLOSSARY)	YES	NO
1. Residential development resulting in the disturbance of one acre or more of land or comprised of 10 or more attached or detached dwelling units?	☐	☐
2. Commercial development resulting in the disturbance of one acre or more of land?	☐	☐
3. Industrial development resulting in the disturbance of one acre or more of land?	☐	☐
4. Automotive repair shop?	☐	☐
5. Restaurant greater than 5,000 square feet?	☐	☐
6. Steep (slope of 25% or more) hillside development that will create greater than 5,000 square feet of impervious surface?	☐	☐
7. Project located within or directly adjacent to (within 200 feet) or directly discharging to an Environmentally Sensitive Area (ESA) and creates at least 2,500 square feet of impervious area or increases impervious area to 10% or more of its naturally occurring condition?	☐	☐
8. "Parking lot" greater than or equal to 5,000 square feet or with at least 15 parking spaces, and potentially exposed to urban runoff?	☐	☐
9. "Streets, roads, highways, and freeways" that would create a new paved surface that is 5,000 square feet or greater?	☐	☐
10. "Retail Gasoline Outlets" either 5,000 square feet or greater or with a projected "Average Daily Traffic" of 100 or more vehicles per day	☐	☐
11. All other pollutant generating Development Projects that result in the disturbance of one acre or more of land. Generally all projects which include impervious surfaces and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels.	☐	☐
***** *Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for expanded definitions of the priority development project categories.*		

Limited Exclusion: Trenching and resurfacing work associated with utility projects, such as resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, bike lanes on existing roads, and routine replacement of damaged pavement, such as pothole repair, are not considered priority development projects. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces. Parking lots, buildings and other structures associated with utility projects are priority development projects if one or more of the criteria in Part A are met.

If all answers to Part A are "No", continue to Part B.

PART B: DETERMINE STANDARD PERMANENT STORM WATER REQUIREMENTS.

DOES THE PROJECT PROPOSE:	YES	NO
1. New impervious areas such as rooftops, roads, parking lots, driveways, paths and sidewalks?	☐	☐
2. New pervious landscape areas and irrigation systems?	☐	☐
3. Permanent structures within 100 feet of any natural water body?	☐	☐
4. Trash storage areas?	☐	☐
5. Liquid or solid material loading and unloading areas?	☐	☐
6. Vehicle or equipment fueling, washing, or maintenance areas?	☐	☐
7. Require a General NPDES Permit for storm water discharges associated with industrial activities "(except construction)?	☐	☐
8. Commercial/ industrial waste handling or storage, excluding typical office or household waste?	☐	☐
9. Any grading or ground disturbance during construction?	☐	☐
10. Any new storm drains, or alteration to existing storm drains?	☐	☐
**To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/stormwtr/industrial.html.*		

If any of the answers provided in Section 1, Part A are "Yes," the project is subject to the "Priority Development Project Permanent Storm Water BMP Requirements". A Post Construction Water Quality Technical Report (PCWQTR) shall be submitted; the requirements of the City's Storm Water BMP Manual Part II must be satisfied. In particular, see Chapters 1 through 5 of the BMP Manual. If a Priority Development Project is over 50 acres, the project is also subject to the City's Interim Hydromodification Criteria (IHC) as discussed in Chapter 1 of the Storm Water BMP Manual Part II.

If all answers provided in Section 1, Part A are "No," and <u>any</u> answers to Part B are "Yes," the project is only subject to the Standard Permanent Storm Water BMP Requirements and shall submit a Standard Post-Construction BMP Plan (SPCBMPP). In particular, see Appendix G of the City's Storm Water BMP Manual Part II.

If every question in Part A and B is answered "No," the project is exempt from permanent storm water requirements.

Required submittals, Section 1:	**PCWQTR**	☐	**SPCBMPP**	☐	**Hydromodification**	☐

SECTION 2. CONSTRUCTION STORM WATER BMP REQUIREMENTS:

PART C: DETERMINE CONSTRUCTION PHASE STORM WATER REQUIREMENTS.

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	YES	NO
1. Does the project propose grading or soil disturbance over one acre?	☐	☐
2. Does the project propose any grading or soil disturbance?	☐	☐
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	☐	☐
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete and stucco)?	☐	☐

If the answer to question 1 of Part C is answered "Yes," your project is subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities (General Construction Permit) and the City's Construction Storm Water BMP Performance Standards. A Storm Water Pollution Prevention Plan (SWPPP) and a Notice of Intent (NOI) to enroll in the General Construction Permit must be prepared. Parts D and E of this form must also be completed.

If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Construction Storm Water BMP Performance Standards. A Construction Storm Water Management Plan (CSWMP) must be prepared, and Part E of this form must be completed.

If every question in Part C is answered "No," you do not need to complete Parts D and E of this form, and neither a SWPPP nor CSWMP is required.

PART D: DETERMINE ADVANCED TREATMENT SUBJECTIVITY

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	YES	NO
1. Is the project located within, adjacent to, or is a portion of the site within 200 feet of waters listed on the CWA Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation or turbidity?	☐	☐
2. Will the project disturb more than five acres, including all phases of the development?	☐	☐
If the answers to 1 and 2 are both "yes", please answer questions 3 and 4 below.		
3. Will the project disturbed slopes steeper than 4:1 (horizontal: vertical) and higher than 10 feet that drain toward the 303(d) listed receiving water?	☐	☐
4. Does the project contain a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4?	☐	☐

If <u>all</u> answers to part D are "yes", the project is subject to the City's advanced treatment requirements for construction. Advanced treatment requirements are detailed in Chapter 6 of the Storm Water BMP Manual Part II. Note that even if the above criteria do not apply, advanced treatment may be required at the discretion of the City Engineer.

<u>Required submittals, Section 2:</u>	**SWPPP, NOI** ☐	**CSWMP** ☐	**Advanced Treatment** ☐

PART E: DETERMINE CONSTRUCTION SITE PRIORITY

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans and included in the SWPPP or CSWMP. See the attached flow chart for guidance on determining the construction prioritization. The City Engineer may adjust the priority of the projects both before and during construction.

According to the attached flow chart, this project has the following threat to water quality priority:

☐ **High** ☐ **Medium** ☐ **Low**

[Note: The construction priority DOES NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority DOES affect the frequency of inspections that will be conducted by the City.]

Completed By: _____

Name, Address & Phone

Water Quality Threat Prioritization Flow Chart for Construction Projects

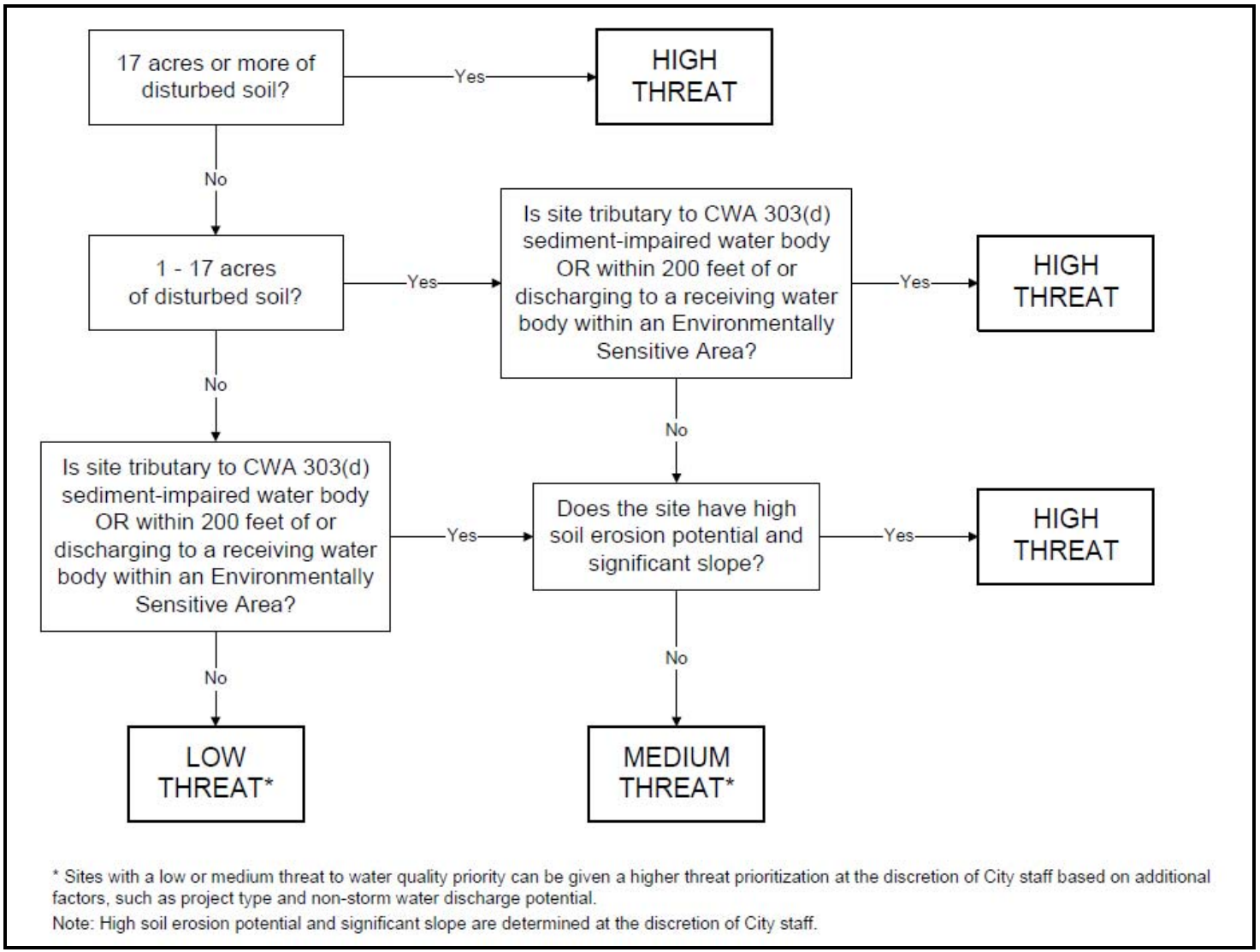

* Sites with a low or medium threat to water quality priority can be given a higher threat prioritization at the discretion of City staff based on additional factors, such as project type and non-storm water discharge potential.

Note: High soil erosion potential and significant slope are determined at the discretion of City staff.

LID Integrated Management Practice Design Sheets

This appendix provides design sheets for the following IMPs:

- Self-treating and self-retaining areas
- Pervious pavements
- Bioretention facilities
- Flow-through planter
- Dry wells and infiltration basins
- Cistern with bioretention facility

These design sheets include recommended configurations and details, and example applications, for these IMPs. **The information in these design sheets must be adapted and applied to the conditions specific to the development project such as unstable slopes or the lack of available head. Designated municipal staff have final review and approval authority over the project design.**

Chapter 3 of this BMP Manual provides information regarding the documentation necessary in your Project Submittal. Keep in mind that proper and functional design of the IMP is the responsibility of the applicant. Effective operation of the IMP throughout the project's lifetime will be the responsibility of the property owner.

Self-Treating and Self-Retaining Areas

Best Uses

- Heavily landscaped sites

Advantages

- No maintenance verification requirement
- Complements site landscaping

Limitations

- Requires substantial square footage
- Grading requirements must be coordinated with landscape design

► **CRITERIA**

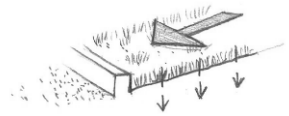

Rainfall on self-treating areas infiltrates or—during intense storms— drains directly off-site or to the storm drain system.

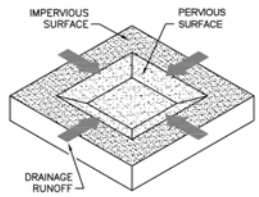

Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. During intense storms, runoff may drain off-site, to the storm drain system, or to IMPs.

LID design seeks to manage runoff from roofs and paving so effects on water quality and hydrology are minimized. Runoff from landscaping, however, does not need to be managed the same way.

Runoff from landscaping can be managed by creating self-treating and self-retaining areas.

Self-treating areas are natural, landscaped, or turf areas that drain directly off site or to the storm drain system. Examples include upslope undeveloped areas that are ditched and drained around a development and grassed slopes that drain offsite to a street or storm drain. Self-treating areas may not drain on to adjacent paved areas.

Where a landscaped area is upslope from or surrounded by paved areas, a **self-retaining area** (also called a zero-discharge area) may be created. Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that the first inch of rainfall would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

Areas draining to self retaining areas. Drainage from roofs and paving can be directed to self-retaining areas and allowed to infiltrate into the soil. The maximum allowable ratio is 2 parts impervious: 1 part pervious.

The self-retaining area must be bermed or depressed to retain an inch of rainfall including the flow from the tributary impervious area.

► **DETAILS**

Drainage from self-treating areas must flow to off-site streets or storm drains without flowing on to paved areas.

Pavement within a self-treating area cannot exceed 5% of the total area.

In self-retaining areas, overflows and area drain inlets should be set high enough to ensure ponding over the entire surface of the self-retaining area.

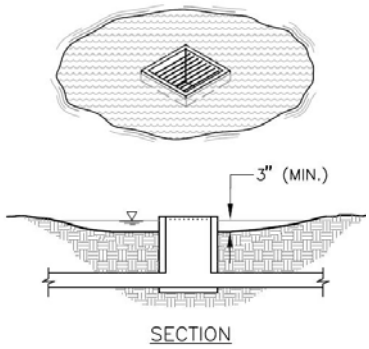

Self–retaining areas should be designed to promote even distribution of ponded runoff over the area.

Leave enough reveal (from pavement down to landscaped surface) to accommodate buildup of turf or mulch.

► **APPLICATIONS**

Lawn or landscaped areas adjacent to streets can be considered self-treating areas.

Self-retaining areas can be created by depressing lawn and landscape below surrounding sidewalks and plazas.

Runoff from walkways or driveways in parks and park-like areas can sheet-flow to self-retaining areas.

Roof leaders can be connected to self-retaining areas by piping beneath plazas and walkways. If necessary, a "bubble-up" can be used.

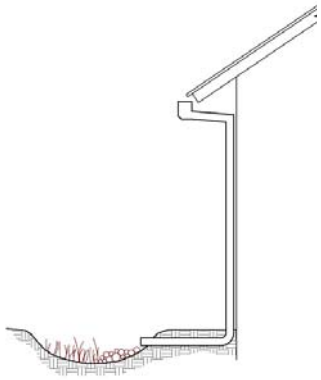

Connecting a roof leader to a self-retaining area. The head from the eave height makes it possible to route roof drainage some distance away from the building.

Self-retaining areas can be created by terracing mild slopes. The elevation difference promotes subsurface drainage.

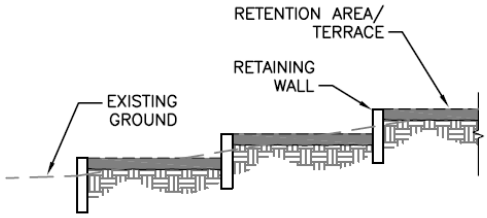

Mild slopes can be terraced to create self-retaining areas.

► DESIGN CHECKLIST FOR SELF-TREATING AREAS

- ❒ The self-treating area is at least 95% lawn or landscaping (not more than 5% impervious).
- ❒ Re-graded or re-landscaped areas have amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- ❒ Runoff from the self-treating area does not enter an IMP or another drainage management area, but goes directly to the storm drain system.

► DESIGN CHECKLIST FOR SELF-RETAINING AREAS

- ❒ Area is bermed all the way around or graded concave.

- ❒ Slopes do not exceed 4%.
- ❒ Entire area is lawn, landscaping, or pervious pavement (see criteria in Chapter 4).
- ❒ Area has amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- ❒ Any area drain inlets are at least 3 inches above surrounding grade.

► DESIGN CHECKLIST FOR AREAS DRAINING TO SELF-RETAINING AREAS

- ❒ Ratio of tributary impervious area to self-retaining area is not greater than 2:1.
- ❒ Roof leaders collect runoff and route it to the self-retaining area.
- ❒ Paved areas are sloped so drainage is routed to the self-retaining area.
- ❒ Inlets are designed to protect against erosion and distribute runoff across the area.

Pervious Pavements

► CRITERIA

Impervious roadways, driveways, and parking lots account for much of the hydrologic impact of land development. In contrast, pervious pavements allow rainfall to collect in a gravel or sand base course and infiltrate into native soil.

Pervious pavements are designed to transmit rainfall through the surface to storage in a base course. For example, a 4-inch-deep base course provides approximately 1.6 inches of storage. Runoff stored in the base course infiltrates to native soils over time. Except in the case of solid pavers, the surface course provides additional storage.

Areas with the following pervious pavements may be regarded as "self-treating" and require no additional treatment or flow control if they drain off-site (not to an IMP).

- Pervious concrete
- Porous asphalt
- Crushed aggregate (gravel)
- Open pavers with grass or plantings
- Open pavers with gravel
- Artificial turf

Areas with these pervious pavements can also be **self-retaining areas** and may receive runoff from impervious areas if they are bermed or depressed to retain the first one inch of rainfall, including runoff from the tributary impervious area.

Solid unit pavers—such as bricks, stone blocks, or precast concrete shapes—are considered to reduce runoff compared to impervious pavement, when the unit pavers are set in sand or gravel with d" gaps between the pavers. Joints must be filled with an open-graded aggregate free of fines.

Best Uses

- Areas with permeable native soils
- Low-traffic areas
- Where aesthetic quality can justify higher cost

Advantages

- No maintenance verification requirement
- Variety of surface treatments can complement landscape design

Limitations

- Initial cost
- Placement requires specially trained crews
- Geotechnical concerns, especially in clay soils
- Concerns about pavement strength and surface integrity
- Some municipalities do not allow in public right of way

When draining pervious pavements to an IMP, use the runoff factors in Table 4-2.

► DETAILS

Permeable pavements can be used in clay soils; however, special design considerations, including an increased depth of base course, typically apply and will increase the cost of this option. Geotechnical fabric between the base course and underlying clay soil is recommended.

Pavement strength and durability typically determines the required depth of base course. If underdrains are used, the outlet elevation must be a minimum of 3 inches above the bottom elevation of the base course.

Pervious concrete and porous asphalt must be installed by crews with special training and tools. Industry associations maintain lists of qualified contractors.

Parking lots with crushed aggregate or unit pavers may require signs or bollards to organize parking.

► DESIGN CHECKLIST FOR PERVIOUS PAVEMENTS

- ❒ No erodible areas drain on to pavement.
- ❒ Subgrade is uniform. Compaction is minimal.
- ❒ Reservoir base course is of open-graded crushed stone. Base depth is adequate to retain rainfall and support design loads.
- ❒ If a subdrain is provided, outlet elevation is a minimum of 3 inches above bottom of base course.
- ❒ Subgrade is uniform and slopes are not so steep that subgrade is prone to erosion.
- ❒ Rigid edge is provided to retain granular pavements and unit pavers.
- ❒ Solid unit pavers are installed with open gaps filled with open-graded aggregate free of fines.
- ❒ Permeable pavements are installed by industry-certified professionals according to vendor's recommendations.
- ❒ Selection and location of pavements incorporates Americans with Disabilities Act requirements, site aesthetics, and uses.

Resources

- Southern California Concrete Producers www.concreteresources.net.
- California Asphalt Pavement Association http://www.californiapavements.org/stormwater.html
- Interlocking Concrete Pavement Institute http://www.icpi.org/
- *Start at the Source Design Manual for Water Quality Protection,* pp. 47-53. www.basmaa.org
- *Porous Pavements,* by Bruce K. Ferguson. 2005. ISBN 0-8493-2670

Bioretention Facilities

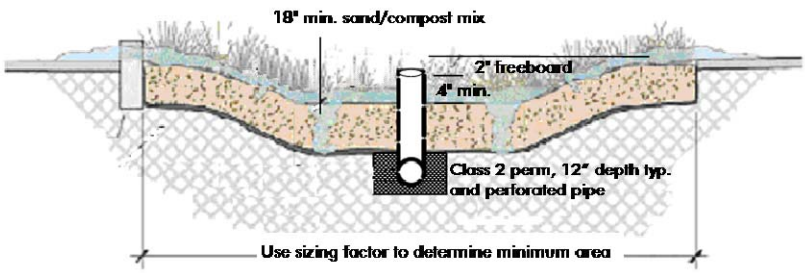

Bioretention facility configured for treatment-only requirements. Bioretention facilities can rectangular, linear, or nearly any shape.

Bioretention detains runoff in a surface reservoir, filters it through plant roots and a biologically active soil mix, and then infiltrates it into the ground. Where native soils are less permeable, an underdrain conveys treated runoff to storm drain or surface drainage.

Bioretention facilities can be configured in nearly any shape. When configured as linear **swales**, they can convey high flows while percolating and treating lower flows.

Bioretention facilities can be configured as in-ground or above-ground planter boxes, with the bottom open to allow infiltration to native soils underneath. If infiltration cannot be allowed, use the sizing factors and criteria for the Flow-Through Planter.

► CRITERIA

For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)
Soil mix surface area	0.04 times tributary impervious area (or equivalent)

Best Uses

- Commercial areas
- Residential subdivisions
- Industrial developments
- Roadways
- Parking lots
- Fit in setbacks, medians, and other landscaped areas

Advantages

- Can be any shape
- Low maintenance
- Can be landscaped

Limitations

- Require 4% of tributary impervious square footage
- Typically requires 3-4 feet of head
- Irrigation typically required

Parameter	Criterion
Surface reservoir depth	6 inches minimum; may be sloped to 4 inches where adjoining walkways.
Underdrain	Required in Group "C" and "D" soils. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► **DETAILS**

Plan. On the surface, a bioretention facility should be one level, shallow basin—or a series of basins. As runoff enters each basin, it should flood and fill throughout before runoff overflows to the outlet or to the next downstream basin. This will help prevent movement of surface mulch and soil mix.

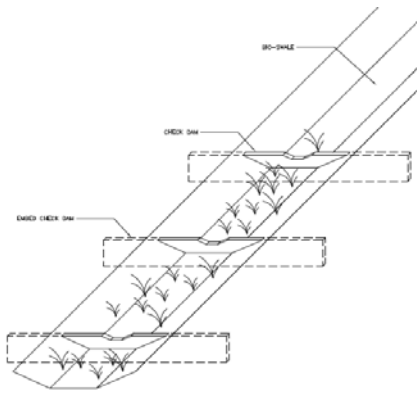

Use check dams for linear bioretention facilities (swales) on a slope.

In a linear swale, check dams should be placed so that the lip of each dam is at least as high as the toe of the next upstream dam. A similar principle applies to bioretention facilities built as terraced roadway shoulders.

Inlets. Paved areas draining to the facility should be graded, and inlets should be placed, so that runoff remains as sheet flow or as dispersed as possible. Curb cuts should be wide (12" is recommended) to avoid clogging with leaves or debris. Allow for a minimum reveal of 4"-6" between the inlet and soil mix elevations to ensure turf or mulch buildup does not block the inlet. In addition, place an apron of stone or concrete, a foot square or larger, inside each inlet to prevent vegetation from growing up and blocking the inlet.

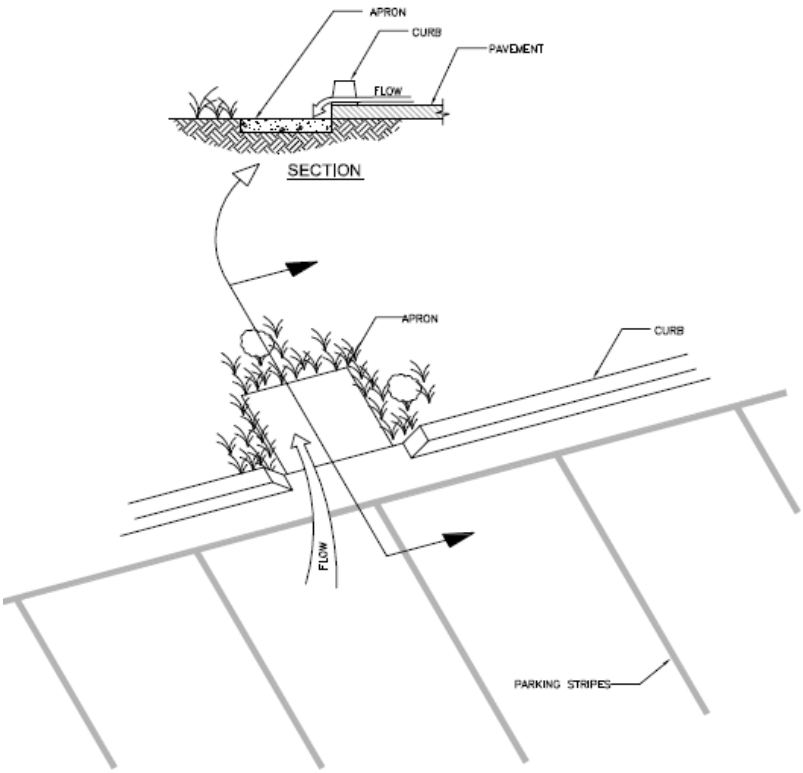

Recommended design details for bioretention facility inlets (see text).

Where runoff is collected in pipes or gutters and conveyed to the facility, protect the landscaping from high-velocity flows with energy-dissipating rocks. In larger installations, provide cobble-lined channels to better distribute flows throughout the facility.

Upturned pipe outlets can be used to dissipate energy when runoff is piped from roofs and upgradient paved areas.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" washed pea gravel be substituted at the top of the crushed rock gravel layers. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer or the gravel drainage layer from the native soil.

Underdrains. No underdrain is required where native soils beneath the facility are Hydrologic Soil Group A or B. For treatment-only facilities where native soils are Group C or D, a

perforated pipe must be bedded in the gravel layer and must terminate at a storm drain or other approved discharge point.

Outlets. In treatment-only facilities, outlets must be set high enough to ensure the surface reservoir fills and the entire surface area of soil mix is flooded before the outlet elevation is reached. In swales, this can be achieved with appropriately placed check dams.

The outlet should be designed to exclude floating mulch and debris.

Vaults, utility boxes, and light standards. It is best to locate utilities outside the bioretention facility—in adjacent walkways or in a separate area set aside for this purpose. If utility structures are to be placed within the facility, the locations should be anticipated and adjustments made to ensure the minimum bioretention surface area and volumes are achieved. Leaving the final locations to each individual utility can produce a haphazard, unaesthetic appearance and make the bioretention facility more difficult to maintain.

Emergency overflow. The site grading plan should anticipate extreme events and potential clogging of the overflow and route emergency overflows safely.

Trees. Bioretention areas can accommodate small or large trees. There is no need to subtract the area taken up by roots from the effective area of the facility. Extensive tree roots maintain soil permeability and help retain runoff. Normal maintenance of a bioretention facility should not affect tree lifespan.

The bioretention facility can be integrated with a tree pit of the required depth and filled with structural soil. If a root barrier is used, it can be located to allow tree roots to spread throughout the bioretention facility while protecting adjacent pavement. Locations and planting elevations should be selected to avoid blocking the facility's inlets and outlets.

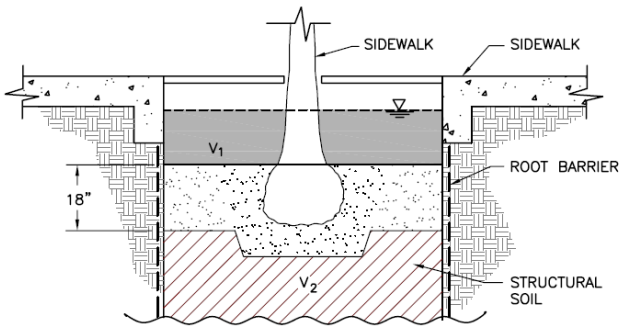

Bioretention facility configured as a tree well.
The root barrier is optional.

► APPLICATIONS

Multi-purpose landscaped areas. Bioretention facilities are easily adapted to serve multiple purposes. The loamy sand soil mix will support turf or a plant palette suitable to the location and a well-drained soil.

Example landscape treatments:

- Lawn with sloped transition to adjacent landscaping.
- Swale in setback area
- Swale in parking median
- Lawn with hardscaped edge treatment
- Decorative garden with formal or informal plantings
- Traffic island with low-maintenance landscaping
- Raised planter with seating
- Bioretention on a terraced slope

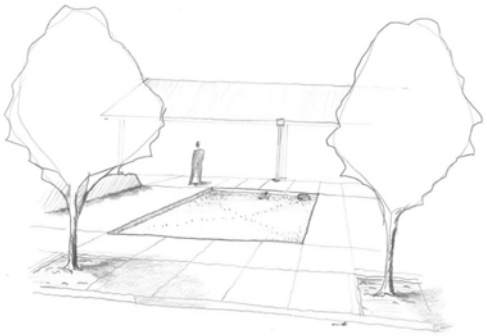

Bioretention facility configured as a recessed decorative lawn with hardscaped edge.

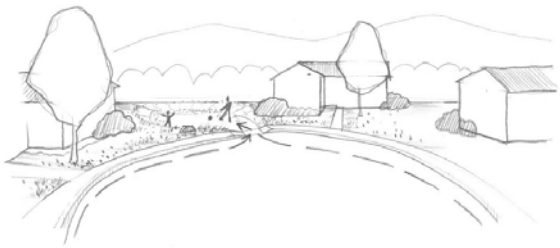

Bioretention facility configured and planted as a lawn/ play area.

Residential subdivisions. Some subdivisions are designed to drain roofs and driveways to the streets (in the conventional manner) and then drain the streets to bioretention areas, with one bioretention area for each 1 to 6 lots, depending on subdivision layout and topography.

If allowed by the local jurisdiction, bioretention areas can be placed on a separate, dedicated parcel with joint ownership.

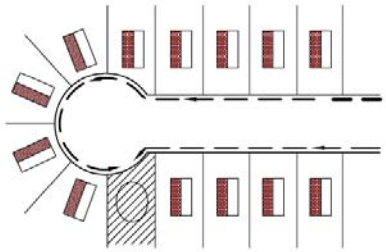

Bioretention facility receiving drainage
from individual lots and the street in
a residential subdivision.

Sloped sites. Bioretention facilities must be constructed as a basin, or series of basins, with the circumference of each basin set level. It may be necessary to add curbs or low retaining walls.

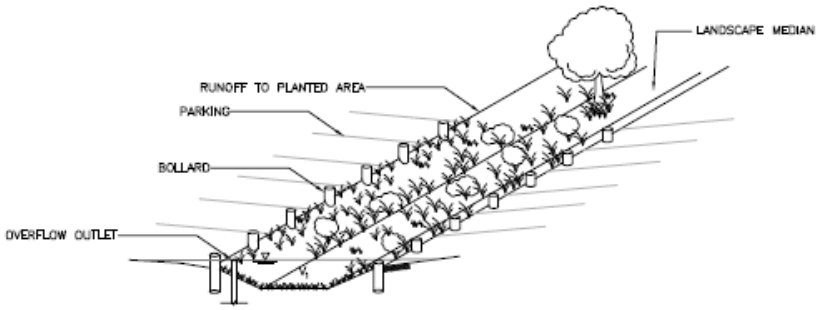

Bioretention facility configured as a parking median.
Note use of bollards in place of curbs, eliminating the need for curb cuts.

Design Checklist for Bioretention

- ❒ Volume or depth of surface reservoir meets or exceeds minimum.
- ❒ 18" depth "loamy sand" soil mix with minimum long-term percolation rate of 5"/hour.
- ❒ Area of soil mix meets or exceeds minimum.
- ❒ Perforated pipe underdrain bedded in "Class 2 perm" with connection and sufficient head to storm drain or discharge point (except in "A" or "B" soils).
- ❒ No filter fabric.
- ❒ Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, with a minimum diameter of 6 inches and a watertight cap.
- ❒ Location and footprint of facility are shown on site plan and landscaping plan.
- ❒ Bioretention area is designed as a basin (level edges) or a series of basins, and grading plan is consistent with these elevations. If facility is designed as a swale, check dams are set so the lip of each dam is at least as high as the toe of the next upstream dam.
- ❒ Inlets are 12" wide, have 4"-6" reveal and an apron or other provision to prevent blockage when vegetation grows in, and energy dissipation as needed.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Plantings are suitable to the climate and a well-drained soil.
- ❒ Irrigation system with connection to water supply.
- ❒ Vaults, utility boxes, and light standards are located outside the minimum soil mix surface area.
- ❒ When excavating, avoid smearing of the soils on bottom and side slopes. Minimize compaction of native soils and "rip" soils if clayey and/or compacted. Protect the area from construction site runoff.

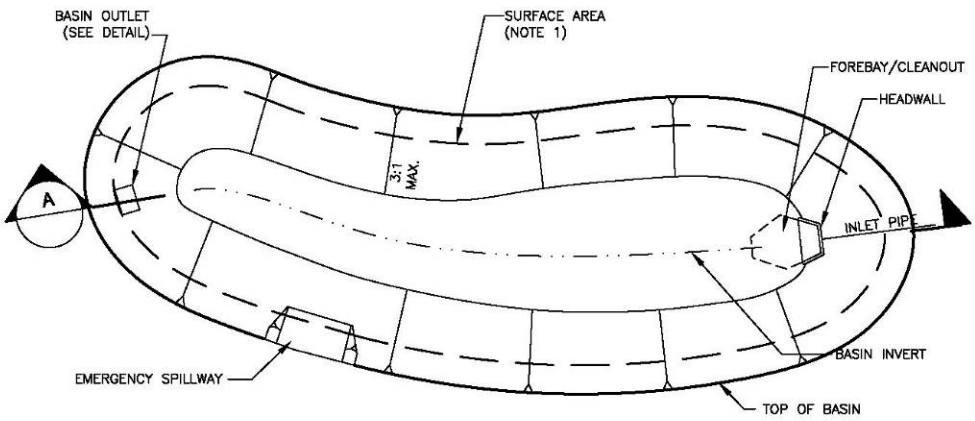

PLAN VIEW
NOT TO SCALE

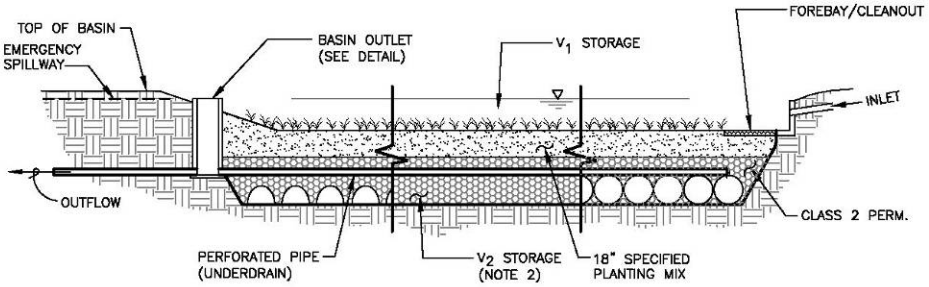

A SECTION
NOT TO SCALE

NOTE

1. SURFACE AREA LIMIT DETERMINED BY EXTENT OF SPECIFIED PLANTING MIX, WHICH IS GOVERNED BY THE OUTLET SPILL ELEVATION. FOR REQUIRED SURFACE AREA REFER TO THE FACTORS AND EQUATIONS IN THE STORMWATER C.3 GUIDEBOOK.
2. V_2 STORAGE ACCOMPLISHED WITH INFILTRATION ARCHES, PERFORATED PIPES, CLASS 2 PERM OR OTHER AT THE DESIGNERS DISCRETION.

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Bioretention Facility

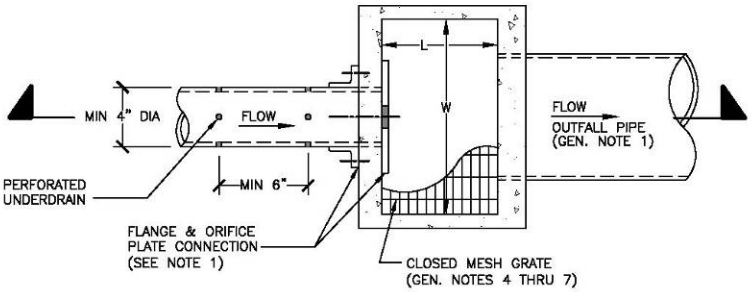

PLAN
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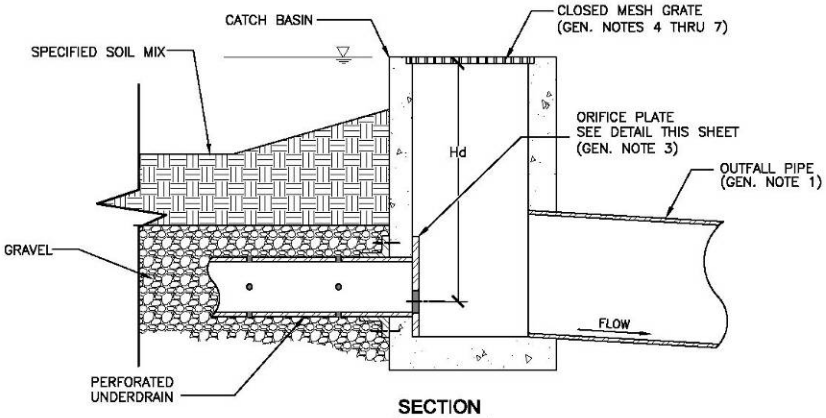

SECTION
N.T.S.

ORIFICE PLATE: MIN SQUARE DIMENSIONS 1.0 FT GREATER THAN PIPE DIA. HOT-DIP GALVANIZED PLATE AFTER HOLES HAVE BEEN DRILLED

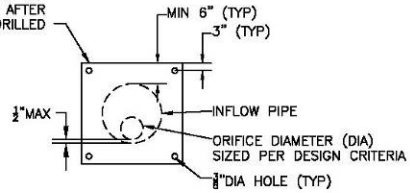

FLOW CONTROL ORIFICE PLATE

NOTE

1. ORIFICE PLATE & FLANGE CONNECTION TO CONCRETE SHALL BE FITTED WITH 30 DUROMETER NEOPRENE RING.

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Bioretention Facility Outlet Detail - A

Flow-through Planter

Portland 2004 Stormwater Manual

Best Uses

- Management of roof runoff
- Next to buildings
- Dense urban areas
- Where infiltration is not desired

Advantages

- Can be used next to structures
- Versatile
- Can be any shape
- Low maintenance

Limitations

- Can be used for flow-control only on sites with "C" and "D" soils
- Requires underdrain
- Requires 3-4 feet of head

Flow-through planters treat and detain runoff without allowing seepage into the underlying soil. They can be used next to buildings and on slopes where stability might be affected by adding soil moisture.

Flow-through planters typically receive runoff via downspouts leading from the roofs of adjacent buildings. However, they can also be set in-ground and receive sheet flow from adjacent paved areas.

Pollutants are removed as runoff passes through the soil layer and is collected in an underlying layer of gravel or drain rock. A perforated-pipe underdrain is typically connected to a storm drain or other discharge point. An overflow inlet conveys flows which exceed the capacity of the planter.

► CRITERIA

Treatment only. For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)

Parameter	Criterion
Soil mix surface area	0.04 times tributary impervious area (or equivalent)
Surface reservoir depth	6" minimum; may be sloped to 4" where adjoining walkways.
Underdrain	Typically used. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► DETAILS

Configuration. The planter must be level. To avoid standing water in the subsurface layer, set the perforated pipe underdrain and orifice as nearly flush with the planter bottom as possible.

Inlets. Protect plantings from high-velocity flows by adding rocks or other energy-dissipating structures at downspouts and other inlets.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Gravel storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" of washed pea gravel be substituted at the top of the crushed rock layer. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer.

Emergency overflow. The planter design and installation should anticipate extreme events and potential clogging of the overflow and route emergency overflows safely.

► APPLICATIONS

Adjacent to buildings. Flow-through planters may be located adjacent to buildings, where the planter vegetation can soften the visual effect of the building wall. A setback with a raised planter box may be appropriate even in some neo-traditional pedestrian-oriented urban streetscapes.

At plaza level. Flow-through planters have been successfully incorporated into podium-style developments, with the planters placed on the plaza level and receiving runoff from the tower roofs above. Runoff from the plaza level is typically managed separately by additional flow-through planters or bioretention facilities located at street level.

Steep slopes. Flow-through planters provide a means to detain and treat runoff on slopes that cannot accept infiltration from a bioretention facility. The planter can be built into the slope similar to a retaining wall. The design should consider the need to access the planter for

periodic maintenance. Flows from the planter underdrain and overflow must be directed in accordance with local requirements. It is sometimes possible to disperse these flows to the downgradient hillside.

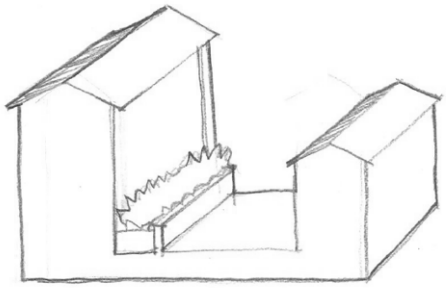

Flow-through planter on the plaza level of a podium-style development.

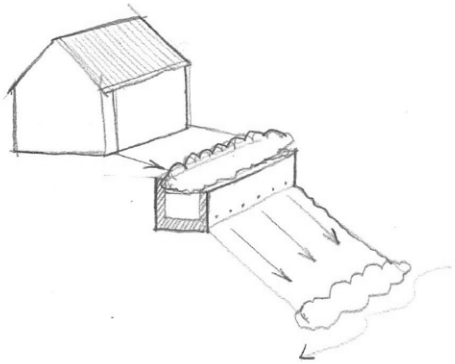

Flow-through planter built into a hillside. Flows from the underdrain and overflow must be directed in accordance with local requirements.

Design Checklist for Flow-through Planter

- ❒ Reservoir depth is 4-6" minimum.
- ❒ 18" depth "loamy sand" soil mix with minimum long-term infiltration rate of 5"/hour.
- ❒ Area of soil mix meets or exceeds minimum.
- ❒ "Class 2 perm" drainage layer.
- ❒ No filter fabric.
- ❒ Perforated pipe underdrain with outlet located flush or nearly flush with planter bottom. Connection with sufficient head to storm drain or discharge point.
- ❒ Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, with a minimum diameter of 6 inches and a watertight cap.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Location and footprint of facility are shown on site plan and landscaping plan.
- ❒ Planter is set level.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Plantings are suitable to the climate and a well-drained soil.
- ❒ Irrigation system with connection to water supply.

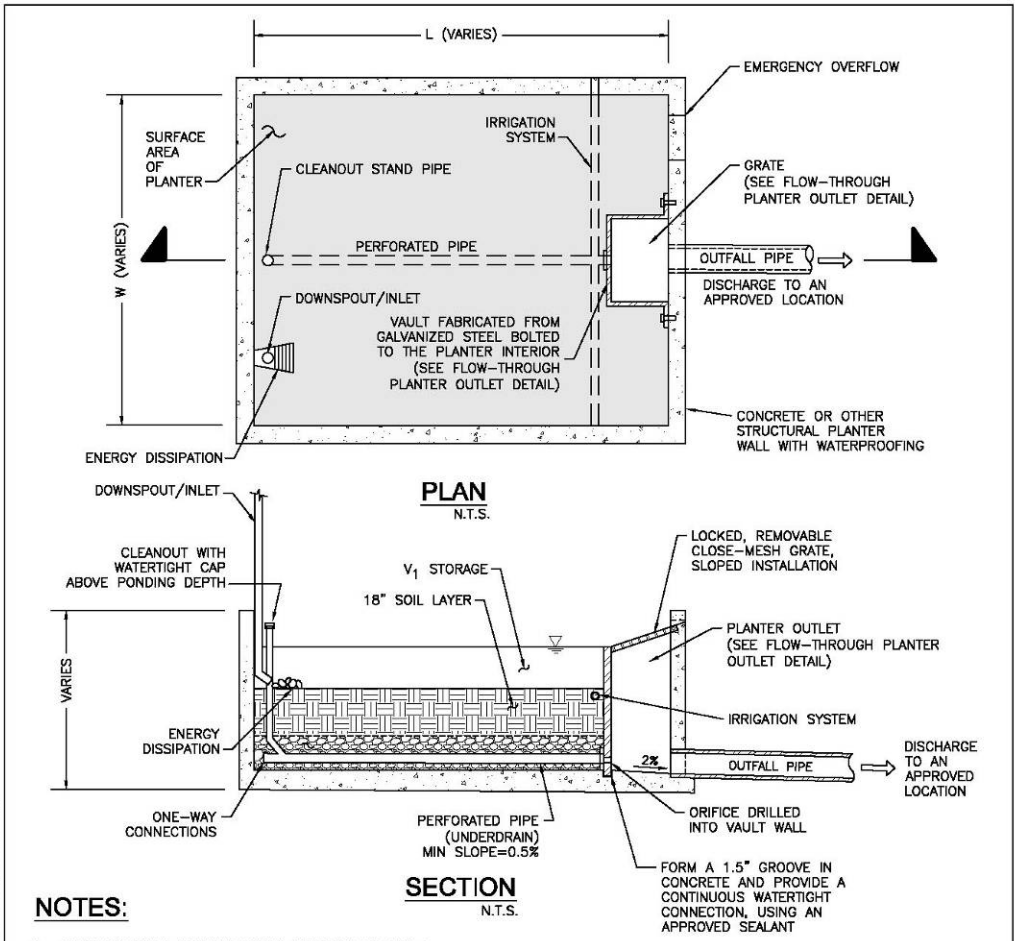

NOTES:

1. FLOW-THROUGH PLANTER SHALL BE SIZED TO MEET CCCWP CRITERIA FOR TREATMENT AND/OR FLOW CONTROL.
2. MINIMUM SURFACE AREA OF PLANTER IS 4% OF TRIBUTARY IMPERVIOUS AREA FOR TREATMENT ONLY DESIGN. FOR FLOW CONTROL AND TREATMENT, REFER TO CCCWP SIZING TOOL CRITERIA.
3. SHAPE OF PLANTER CAN VARY TO MEET PROJECT DESIGN REQUIREMENTS AND LOCATION.
4. CLASS 2 PERMEABLE MATERIAL
5. DOWNSPOUTS/INLET PIPES REQUIRE ENERGY DISSIPATION.
6. USE COUNTY APPROVED ADDITIVE MIXTURE FOR WATERPROOFING CONCRETE.
7. PLANTINGS: SEE CCCWP RECOMMENDED PLANT LIST AND GUIDELINES.
8. PLANTER DESIGN MAY REQUIRE STRUCTURAL ENGINEERING DESIGN.
9. AREA = W x L (ABOVE). EXCLUDES AREA OF VAULT

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Flow-Through Planter Detail

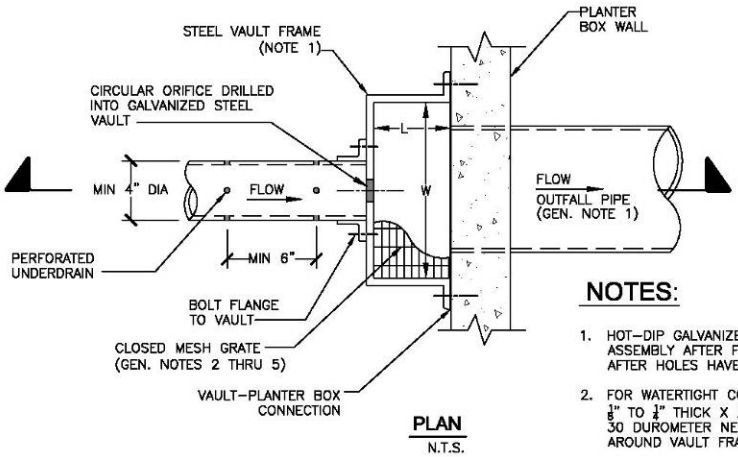

PLAN
N.T.S.

NOTES:

1. HOT–DIP GALVANIZE ENTIRE FRAME ASSEMBLY AFTER FABRICATION AND AFTER HOLES HAVE BEEN DRILLED.
2. FOR WATERTIGHT CONNECTION, INSTALL $\frac{1}{8}$" TO $\frac{1}{4}$" THICK X 2" WIDE CONTINUOUS 30 DUROMETER NEOPRENE GASKET, ALL AROUND VAULT FRAME.

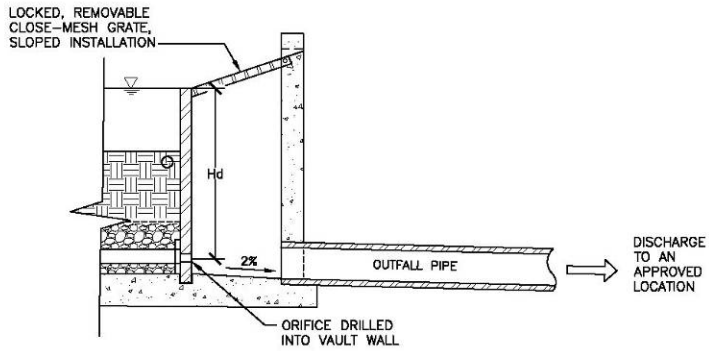

SECTION
N.T.S.

GENERAL OUTLET DETAIL NOTES:

1. OUTFALL PIPE SHALL BE SIZED TO CONVEY DESIGN STORM PER CCCWP DESIGN CRITERIA.
2. GRATE SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
3. GRATE SHALL BE STAINLESS STEEL, ALUMINUM OR STEEL. STEEL GRATES SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER PAINTED AFTER GALVANIZING.
4. GRATE SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
5. STRUCTURAL DESIGN OF GRATE SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF GRATE.

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Flow-Through Planter Outlet Detail

Dry Wells and Infiltration Basins

The typical dry well is a prefabricated structure, such as an open-bottomed vault or box, placed in an excavation or boring. The vault may be empty, which provides maximum space efficiency, or may be filled in rock.

An infiltration basin has the same functional components—a volume to store runoff and sufficient area to infiltrate that volume into the native soil—but is open rather than covered.

Best Uses

- Alternative to bioretention in areas with permeable soils

Advantages

- Compact footprint
- Can be installed in paved areas

Limitations

- Can be used only on sites with "A" and "B" soils
- Requires minimum of 10' from bottom of facility to seasonal high groundwater
- Not suitable for drainage from some industrial areas or arterial roads
- Must be maintained to prevent clogging.

► CRITERIA

Dry wells and infiltration basins must be designed with the minimum volume calculated by Equation 4-8 using a unit volume based on the County of San Diego's 85th Percentile Isopluvial Map.

Consult with the local jurisdiction engineer regarding the need to verify soil permeability and other site conditions are suitable for dry wells and infiltration basins. Some proposed criteria are on Page 5-12 of Caltrans' 2004 *BMP Retrofit Pilot Study Final Report* (CTSW-RT-01-050).

The infiltration rate and infiltrative area must be sufficient to drain a full facility within 72 hours.

► DETAILS

Dry wells should be sited to allow for the potential future need for removal and replacement.

In locations where native soils are coarser than a medium sand, the area directly beneath the facility should be over-excavated by two feet and backfilled with sand as a groundwater protection measure.

Design Checklist for Dry Well

- ❒ Volume and infiltrative area meet or exceed minimum.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Depth from bottom of the facility to seasonally high groundwater elevation is ≥10'.
- ❒ Areas tributary to the facility do not include automotive repair shops; car washes; fleet storage areas (Bus, truck, etc.); nurseries, or other uses that may present an exceptional threat to groundwater quality.
- ❒ Underlying soils are in Hydrologic Soil Group A or B. Infiltration rate is sufficient to ensure a full basin will drain completely within 72 hours. Soil infiltration rate has been confirmed.
- ❒ Set back from structures 10' or as recommended by structural or geotechnical engineer.

Cistern with Bioretention Facility

A cistern in series with a bioretention facility can meet treatment requirements where space is limited. In this configuration, the cistern is equipped with a flow-control orifice and the bioretention facility is sized to treat a trickle outflow from the cistern.

Best Uses

- In series with a bioretention facility to meet treatment requirement in limited space.
- Management of roof runoff
- Dense urban areas

Advantages

- Storage volume can be in any configuration

Limitations

- Somewhat complex to design, build, and operate
- Requires head for both cistern and bioretention facility

► CRITERIA

Cistern. The cistern must detain the volume calculated by Equation 4-8 and must include an orifice or other device designed for a 24-hour drawdown time.

Bioretention facility. See the design sheet for bioretention facilities. The area of the bioretention facility must be sized to treat the maximum discharge flow, assuming a percolation rate of 5" per hour through the engineered soil.

Use with sand filter. A cistern in series with a sand filter can meet treatment requirements. See the discussion of treatment facility selection in Chapter 2 and the design guidance for sand filters in Chapter 4.

► DETAILS

Flow-control orifice. The cistern must be equipped with an orifice plate or other device to limit flow to the bioretention area.

Preventing mosquito harborage. Cisterns should be designed to drain completely, leaving no standing water. Drains should be located flush with the bottom of the cistern. Alternatively—or in addition—all entry and exit points, should be provided with traps or sealed or screened to prevent mosquito entry. Note mosquitoes can enter through openings 1/16" or larger and will fly for many feet through pipes as small as ¼".

Exclude debris. Provide leaf guards and/or screens to prevent debris from accumulating in the cistern.

Ensure access for maintenance. Design the cistern to allow for cleanout. Avoid creating the need for maintenance workers to enter a confined space. Ensure the outlet orifice can be easily accessed for cleaning and maintenance.

► APPLICATIONS

Shallow ponding on a flat roof. The "cistern" storage volume can be designed in any configuration, including simply storing rainfall on the roof where it falls and draining it away slowly. See the County of San Diego's 85th percentile isopluvial diagrams for required average depths.

Cistern attached to a building and draining to a planter. This arrangement allows a planter box to be constructed with a smaller area.

Vault with pumped discharge to bioretention facility. In this arrangement, runoff from a parking lot and/or building roofs can be captured and detained underground and then pumped to a bioretention facility on the surface. Alternatively, treatment can be accomplished with a sand filter. See the discussion of selection of storm water treatment facilities in Chapter 2.

Water harvesting or gray water reuse. It may be possible to create a site-specific design that uses cisterns to achieve storm water flow control, storm water treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse. Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Design Checklist for Cistern

- ❒ Volume meets or exceeds minimum.
- ❒ Outlet with orifice or other flow-control device restricts flow and is designed to provide a 24-hour drawdown time.
- ❒ Outlet is piped to a bioretention facility designed to treat the maximum discharge from the cistern orifice.
- ❒ Cistern is designed to drain completely and/or sealed to prevent mosquito harborage.
- ❒ Design provides for exclusion of debris and accessibility for maintenance.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.

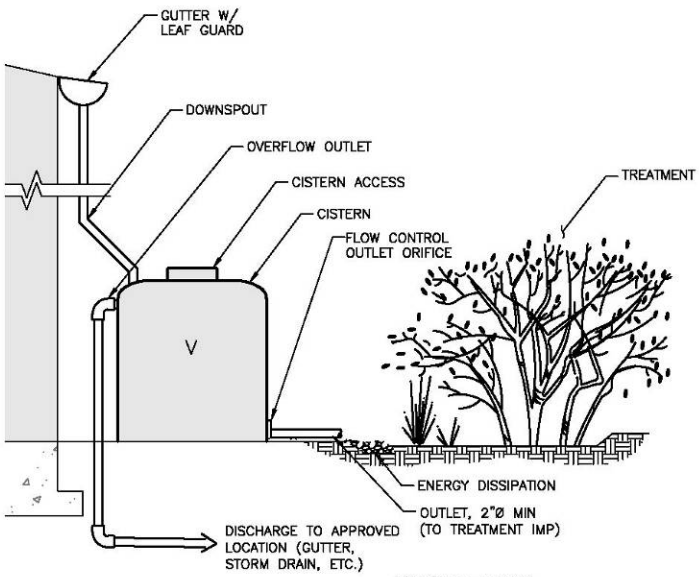

NOTES:
1. DESIGNER SHALL ACCOUNT FOR AND ACCOMODATE FOR POSSIBLE OVERFLOW.
2. OVERFLOW OUTLET CAPACITY SHALL EQUAL OR EXCEED POTENTIAL RUNOFF VOLUME AND RATE.
3. CISTERN PROVIDES FLOW CONTROL ONLY. USE IN COMBINATION WITH TREATMENT IMP.
4. PROVIDE ACCESS FOR CLEAN OUT OF OUTLET ORIFICE. SEE FLOW-THROUGH PLANTER OUTLET DETAIL.
5. PREVENT MOSQUITO BREEDING BY SEALING OR SCREENING ALL OPENINGS TO THE WATER SURFACE AND/OR ENSURE COMPLETE DRAINAGE.

CISTERN

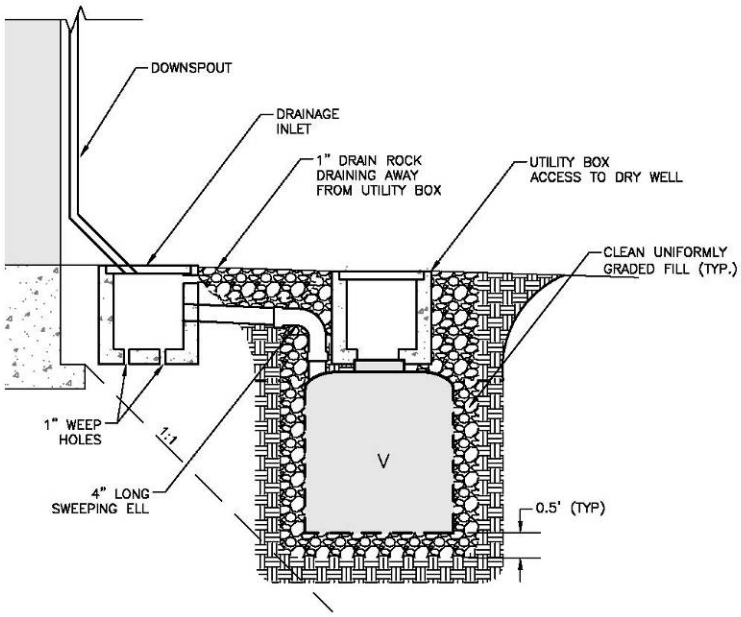

DRY WELL

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How to use this worksheet (also see instructions in Step 4 of Chapter 3 of this BMP Manual):

1. Review Column 1 and identify which of these potential sources of storm water pollutants apply to your site. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your Project-Specific SUSMP drawings.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in a table in your Project-Specific SUSMP. Use the format shown in Table 3-1 in Step 4 of Chapter 3 of this BMP Manual. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternatives.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **A.** On-site storm drain inlets	❑ Locations of inlets.	❑ Mark all inlets with the words "No Dumping! Flows to Bay" or similar.	❑ Maintain and periodically repaint or replace inlet markings. ❑ Provide storm water pollution prevention information to new site owners, lessees, or operators. ❑ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ❑ Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
❑ **B.** Interior floor drains and elevator shaft sump pumps		❑ State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.
❑ **C.** Interior parking garages		❑ State that parking garage floor drains will be plumbed to the sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.
❑ **D1.** Need for future indoor & structural pest control		❑ Note building design features that discourage entry of pests.	❑ Provide Integrated Pest Management information to owners, lessees, and operators.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **D2.** Landscape/ Outdoor Pesticide Use	❑ Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. ❑ Show self-retaining landscape areas, if any. ❑ Show storm water treatment facilities.	State that final landscape plans will accomplish all of the following. ❑ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ❑ Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to storm water pollution. ❑ Where landscaped areas are used to retain or detain storm water, specify plants that are tolerant of saturated soil conditions. ❑ Consider using pest-resistant plants, especially adjacent to hardscape. ❑ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	❑ Maintain landscaping using minimum or no pesticides. ❑ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ❑ Provide IPM information to new owners, lessees, and operators.
❑ **E.** Pools, spas, ponds, decorative fountains, and other water features.	❑ Show location of water feature, nearest landscaped areas, and nearest storm drains.	❑ Describe how water removed from the water feature would drain to nearby landscaping or be dechlorinated before discharge in accordance with City requirements.	❑ See applicable operational BMPs in Fact Sheet SC-72, "Fountain and Pool Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

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1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **F.** Food service	❑ For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. ❑ On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	❑ Describe the location and features of the designated cleaning area. ❑ Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	❑
❑ **G.** Refuse areas	❑ Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. ❑ If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. ❑ Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	❑ State how site refuse will be handled and provide supporting detail to what is shown on plans. ❑ State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	❑ State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
❑ **H.** Industrial processes.	❑ Show process area.	❑ If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."	❑ See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
❑ **I.** Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	❑ Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. ❑ Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. ❑ Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	❑ Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains. Where appropriate, reference documentation of compliance with the requirements of local Hazardous Materials Programs for: ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank	❑ See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials " in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **J.** Vehicle and Equipment Cleaning	❑ Show on drawings as appropriate: (1) Commercial/industrial facilities having vehicle /equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses. (2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use). (3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer. (4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.	❑ If a car wash area is not provided, describe measures taken to discourage on-site car washing and explain how these will be enforced.	Describe operational measures to implement the following (if applicable): ❑ Wash water from vehicle and equipment washing operations shall not be discharged to the storm drain system. ❑ See Fact Sheet SC-21, "Vehicle and Equipment Cleaning," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **K.** Vehicle/Equipment Repair and Maintenance	❑ Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of storm water. ❑ Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. ❑ Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.	❑ State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. ❑ State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. ❑ State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	In the SUSMP report, note that all of the following restrictions apply to use the site: ❑ No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinse water from parts cleaning into storm drains. ❑ No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. ❑ No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **L.** Fuel Dispensing Areas	❑ Fueling areas[3] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of storm water to the maximum extent practicable. ❑ Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.		❑ The property owner shall dry sweep the fueling area routinely. ❑ See the Business Guide Sheet, "Automotive Service—Service Stations" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

[3] The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **M.** Loading Docks	❑ Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct storm water away from the loading area. Water from loading dock areas should be drained to the sanitary sewer where feasible. Direct connections to storm drains from depressed loading docks are prohibited. ❑ Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. ❑ Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer. ❑		❑ Move loaded and unloaded items indoors as soon as possible. ❑ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **N.** Fire Sprinkler Test Water		❑ Provide a means to drain fire sprinkler test water to the sanitary sewer.	❑ See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
O. Miscellaneous Drain or Wash Water ❑ Boiler drain lines ❑ Condensate drain lines ❑ Rooftop equipment ❑ Drainage sumps ❑ Roofing, gutters, and trim.		❑ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. ❑ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. ❑ Rooftop mounted equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ❑ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. ❑ Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.	

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **P.** Plazas, sidewalks, and parking lots.			❑ Plazas, sidewalks, and parking lots shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing shall be collected to prevent entry into the storm drain system. Wash water containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain.

STORM WATER POLLUTION PREVENTION PLAN CONSTRUCTION STORM WATER MANAGEMENT PLAN GUIDELINES

At a minimum, the Storm Water Pollution Prevention Plan (SWPPP) or Construction Storm Water Management Plan (CSWMP) whichever is required, must cover the areas listed below.

If a project disturbs 1-acre or more, the applicant must provide a Storm Water Pollution Prevention Plan (SWPPP), which identifies all construction BMP requirements required by Chapter Six, in accordance with the State General Permit for Storm Water Discharges Associated with Construction Activity (State General Construction Permit). The SWPPP must be kept on site and made available upon request of a representative of the City. Additionally, the State General Construction Permit has a requirement for a sampling and monitoring program to be implemented. Projects that are also required to obtain a general construction National Pollutant Discharge Elimination System (NPDES) Permit are encouraged to visit the State Water Resource Control Board's website for permit application instructions, NOI and NOT forms and guidance in preparing a Storm Water Pollution Prevention Plan (go to: http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml). A template to assist with the preparation of a SWPPP is also provided at the following website: http://www.cabmphandbooks.com/Construction.asp.

For projects that disturb less than 1-acre and are determined to have a potential to impact water quality during construction, the applicant must provide a Construction Storm Water Management Plan (CSWMP), which identifies all construction BMP requirements required by Chapter Six, with the project submittal. The CSWMP shall depict the BMPs to be implemented during construction to reduce/eliminate discharges of pollutants to the storm drain conveyance system. The CSWMP shall include but not be limited to erosion and sediment control BMPs, good housekeeping measures and site and materials management.

Planning and Organization

- Identify the pollution prevention team members who will maintain and implement the SWPPP/CSWMP.
- If applicable, incorporate or reference the appropriate elements of other regulatory requirements.

Site Map

Features displayed on the map must include:

- An outline of the entire property
- Drainage areas on the property and direction of flow
- Areas of soil erosion
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing storm water controls (oil/ water separators, sumps, etc.)
- Location of "impervious" areas- paved areas, buildings, covered areas
- Locations where materials are directly exposed to storm water
- Locations where toxic or hazardous materials have spilled in the past
- Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)

List of Significant Materials

List materials stored and handled at the site. Include the location and typical quantities.

Description of Potential Pollutant Sources

- Provide a narrative description of the site's activities and list the potential pollutant sources and the potential pollutants that could be discharged in storm water discharges from each activity.
- List non-storm water discharges including the source, quantity, frequency, and characteristics of the discharges and drainage area.

Assessment of Potential Sources

Describe which activities are likely to be sources of pollution in storm water and which pollutants are likely to be present in storm water discharges.

Best Management Practices

Describe the BMPs that will be implemented at the site for each potential pollutant and its source.

APPENDIX E — EXAMPLE CONSTRUCTION BEST MANAGEMENT PRACTICES

A. Erosion Control

Physical stabilization BMPs, vegetation stabilization BMPs, or both, will be required to prevent erosion and sediment runoff from exposed graded areas. BMPs for physical and vegetation stabilization include:

1) Physical Stabilization

a) Geotextiles
b) Mats
c) Fiber blankets
d) Hydraulic mulch, Bonded Fiber Matrix
e) Sprayed on binders
f) Mulch on flat areas
g) Other material approved by the City Engineer for use in specific circumstances

If physical stabilization is selected, materials must be appropriate to the circumstances in which they are deployed, and sufficient material must be deployed.

2) Vegetation Stabilization

h) Preservation of existing vegetation
i) Established interim vegetation (via Hydroseed, seeded mats, etc.)
j) Established permanent landscaping

If vegetation stabilization is selected, the stabilizing vegetation must be installed, irrigated and established (uniform vegetative coverage with 70% coverage established) prior to October 1. In the event stabilizing vegetation has not been established by October 1, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.

B. Sediment Control

1) Perimeter protection. Protect the perimeter of the site or exposed area from sediment ingress/discharge in sheet flows using:

k) Silt fencing
l) Gravel bag barriers
m) Fiber rolls

2) Resource protection. Protect Environmentally Sensitive Areas and watercourses from sediment in sheet flows by using**:**

a) Silt fencing
b) Gravel bag barriers
c) Fiber rolls

3) Sediment Capture. Capture sediments in channeled storm water by using:

a) Storm-drain inlet protection measures
b) De-silting basins (Designed in accordance with an industry standard such as Caltrans, California Storm water BMP manual etc. If the project is 5 acres or greater the desilting basin(s) must be designed in accordance with the State General Construction Permit, Order DWQ 99-08.)

4) Velocity Reduction. Reduce the velocity of storm water by using:

a) Outlet protection (energy dissipater)
b) Equalization basins
c) Check dams

5) Off-site Sediment Tracking. Prevent sediment from being tracked off-site by using:

a) Stabilized construction entrances/exits
b) Construction road stabilization
c) Tracking control (i.e., corrugated steel panels, wheel washes)
d) Dust control

C. Materials Management

6) Prevent the contamination of storm water by wastes through proper management of the following types of wastes:

a) Solid
b) Sanitary
c) Concrete
d) Hazardous
e) Equipment – related wastes
f) Stock piles (protection from wind and rain)

7) Prevent the contamination of storm water by construction materials by:

a) Covering and/or providing secondary containment of storage areas
b) Taking adequate precautions when handling materials.

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CITY OF LA MESA
JEWEL of the HILLS

Standard Post-Construction BMP Plan

Standard Permanent Storm Water BMPs

Project Name: _____ Project Address: _____
Person completing form: _____Telephone number: (____)____-_____
Signature: _____ Date: ____/_____/_____

The following planning, design, and post-construction BMPs are required for all land development and redevelopment projects in the City of La Mesa. All BMPs listed below shall be selected and implemented where applicable and feasible.

List pollutants of concern: _____

Each selected BMP must be shown on the applicable plan(s) for the project.

Required BMPs	Check if Selected	If the BMP is not selected, explain why below (attach additional pages if necessary).
1. BMPs for permanent control of erosion from slopes.		
a. Convey runoff safely from the tops of slopes		
b. Vegetate slopes with native or drought tolerant vegetation		
c. Other (describe):		
2. BMPs to control flows, velocity and erosion. Flow control and downstream erosion protection measures shall prevent any significant increase in downstream erosion as a result of the new development, but shall not prevent flows needed to sustain downstream riparian habitats or wetlands.		
a. Minimize disturbances to Natural Drainages		
b. Stabilize permanent channel crossings		
c. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels		
d. Provide buffer zones for natural water bodies		
e. Other (describe):		
3. Low Impact Development (LID) and site design BMPs.		
a. Conserve natural areas, soils, and vegetation where feasible		
b. Construct walkways, trails, patios. overflow parking lots, alleys, and other low-traffic areas with permeable surfaces		
c. Construct impervious surfaces to minimum widths necessary		
d. Use natural drainage systems		
e. Minimize soil compaction in areas that will remain pervious after development		

Required BMPs	Check if Selected	If the BMP is not selected, explain why below (attach additional pages if necessary).
f. Drain runoff from impervious roofs into adjacent landscaping		
g. Drain runoff from impervious sidewalks and/or walkways into adjacent landscaping		
h. Drain runoff from impervious parking lots into adjacent landscaping		
i. Drain runoff from other impervious areas into adjacent landscaping		
j. Other (describe):		
4. Storm drain stenciling and signage		
5. BMPs for outdoor materials storage and exposed work areas, to reduce pollution introduction.		
a. Provide overhead coverage for outdoor storage or work areas		
b. Divert storm water run-on away from outdoor storage or work areas		
6. BMPs for trash storage areas, to reduce pollution introduction. Store trash containers on an impervious surface in a screened or walled area designed to prevent run-on from flowing through the trash area, and provide a roof or awning to prevent direct contact with rain.		
7. BMPs for irrigation systems and landscape design, to minimize the runoff of excess irrigation water into the storm water conveyance system. (Limited exclusion: detached residential developments)		
a. Use rain shutoff devices		
b. Design irrigation system to each landscape area's water requirements		
c. Use flow reducers		
d. Other (describe):		
8. Structural BMPs[1] to treat and/or to infiltrate storm water where a development project would otherwise cause or contribute to a violation of water quality standards in receiving waters.		

[1] Off-site structural BMPs may be used for treatment and infiltration necessary to meet water quality standards only if the conveyance of run-off to those facilities prior to treatment will not cause or contribute to an exceedance of water quality standards or deprive wetlands or riparian habitats of needed flows. Offsite facilities shall not substitute for the use of any on-site source control BMPs required by the manual. When an infiltration BMP is used, related BMPs set out in the manual (including but not limited to siting constraints), to protect present uses of ground water and future uses of that ground water as currently designated in the applicable RWQCB Basin Plan. (Discharges to infiltration BMPs may also require an RWQCB permit and additional state requirements may also be applicable to these discharges.)

City Use Only

If Structural BMPs are proposed, a maintenance agreement is required. Has a maintenance agreement for this project been submitted? □ Yes □ No □ NA

Approved □ Yes □ No

_____ _____/_____/_____ _____

Signature Date Department

ATTACHMENT 2.3

UPDATED APPENDIX 'A' STORM WATER REQUIREMENTS CHECKLIST

APPENDIX 'A' – STORM WATER REQUIREMENTS AND PROJECT DATA SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91942
Phone: 619.667.1166 • Fax: 619.667.1380

PROJECT DATA:

Owner's Name & Phone No: _____

Address: _____ **Permit No:** _____

Project: _____ **Date Applied:** _____

PROJECT SITE DATA:

1. Area of the lot/parcel = _____ sf
2. Existing impervious area (roof/building foot print) = _____ sf
3. Existing impervious area (driveway, parking, walkway, hardscape etc.) = _____ sf
4. Impervious area after development (roof/building foot print) = _____ sf
5. Impervious area after development (driveway, parking, walkway, hardscape etc.) = _____ sf
6. Total area to be disturbed = _____ sf
7. Storm water runoff based on Hydrology Study:

   Existing runoff = _____ cfs, Post construction runoff = _____ cfs
8. Identify if the runoff from the site discharged to the public street or storm drain or open channel, detention or retention basin: _____
9. Water Shed (Check One): San Diego River _____ San Diego Bay _____

---

a. Total disturbed area includes impervious area, construction material storage, staging area, graded slopes, new slopes and landscape areas.

b. The information shall be shown on the site/grading plans.

c. Complete Storm Water Requirements Applicability Checklist.

Notes:

- Items I through 9 shall be shown on the site development plan/grading plan.
- The applicant may be required to submit SWPPP or CSWMP, and PCWQTR or SPCBMPP depending on the "Priority" as stated below.
- A Hydrology report may be required.

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the checklist to determine which permanent best management practices (BMPs) and which construction BMPs are required for your project for storm water. *This form must be completed and submitted with your permit application.*

SECTION 1. PERMANENT STORM WATER BMP REQUIREMENTS:

	Yes	No
1. Is the project a new development?		
2. Is the project a significant redevelopment that adds/replaces/creates at least 5,000 ft^2 of impervious surface?*		
* *Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for an expanded definition of "significant redevelopment"*.		

If both of the above answers are "No", go to Part B. If either of the above answers is "Yes", completer Part A below.

PART A: DETERMINE PRIORITY DEVELOPMENT PROJECT PERMANENT STORM WATER BMP REQUIREMENTS.

DOES THE PROJECT MEET THE DEFINITION OF ONE OR MORE OF THE PRIORITY PROJECT CATEGORIES AS DEFINED IN LA MESA'S BMP MANUAL, PART II? (SEE GLOSSARY)*	Yes	No
1. Residential development resulting in the disturbance of one acre or more of land or comprised of 10 or more attached or detached dwelling units?		
2. Commercial development resulting in the disturbance of one acre or more of land?		
3. Industrial development resulting in the disturbance of one acre or more of land?		
4. Automotive repair shop?		
5. Restaurant greater than 5,000 square feet?		
6. Steep (slope of 25% or more) hillside development that will create greater than 5,000 square feet of impervious surface?		
7. Project located within or directly adjacent to (within 200 feet) or directly discharging to an Environmentally Sensitive Area (ESA) and creates at least 2,500 square feet of impervious area or increases impervious area to 10% or more of its naturally occurring condition?		
8. "Parking lot" greater than or equal to 5,000 square feet or with at least 15 parking spaces, and potentially exposed to urban runoff?		
9. "Streets, roads, highways, and freeways" that would create a new paved surface that is 5,000 square feet or greater?		
10. "Retail Gasoline Outlets" either 5,000 square feet or greater or with a projected "Average Daily Traffic" of 100 or more vehicles per day		
11. All other pollutant generating Development Projects that result in the disturbance of one acre or more of land. Generally all projects which include impervious surfaces and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels.		
***** *Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for expanded definitions of the priority development project categories.*		

Limited Exclusion: Trenching and resurfacing work associated with utility projects, such as resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, bike lanes on existing roads, and routine replacement of damaged pavement, such as pothole repair, are not considered priority development projects. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces. Parking lots, buildings and other structures associated with utility projects are priority development projects if one or more of the criteria in Part A are met.

If all answers to Part A are "No", continue to Part B.

PART B: DETERMINE STANDARD PERMANENT STORM WATER REQUIREMENTS.

DOES THE PROJECT PROPOSE:	**Yes**	**No**
1. New impervious areas such as rooftops, roads, parking lots, driveways, paths and sidewalks?		
2. New pervious landscape areas and irrigation systems?		
3. Permanent structures within 100 feet of any natural water body?		
4. Trash storage areas?		
5. Liquid or solid material loading and unloading areas?		
6. Vehicle or equipment fueling, washing, or maintenance areas?		
7. Require a General NPDES Permit for storm water discharges associated with industrial activities* (Except construction)?		
8. Commercial/ industrial waste handling or storage, excluding typical office or household waste?		
9. Any grading or ground disturbance during construction?		
10. Any new storm drains, or alteration to existing storm drains?		
**To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/stormwtr/industrial.html.*		

If any of the answers provided in Section 1, Part A are "Yes," the project is subject to the "Priority Development Project Permanent Storm Water BMP Requirements". A Post Construction Water Quality Technical Report (PCWQTR) shall be submitted; the requirements of the City's Storm Water BMP Manual Part II must be satisfied. In particular, see Chapters 1 through 5 of the *Storm Water BMP Manual*. If a Priority Development Project is over 50 acres, the project is also subject to the City's Interim Hydromodification Criteria (IHC) as discussed in Chapter 1 of the *Storm Water BMP Manual, Part II*.

If all answers provided in Section 1, Part A are "No," and any answers to Part B are "Yes," the project is only subject to the Standard Permanent Storm Water BMP Requirements and shall submit a Standard Post-Construction BMP Plan (SPCBMPP). In particular, see Appendix G of the City's *Storm Water BMP Manual*, Part II.

If every question in Part A and B is answered "No," the project is exempt from permanent storm water requirements.

Required submittals, Section 1:	PCWQTR	SPCBMPP	Hydromodification

SECTION 2. CONSTRUCTION STORM WATER BMP REQUIREMENTS:

PART C: DETERMINE CONSTRUCTION PHASE STORM WATER REQUIREMENTS.

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	**Yes**	**No**
1. Does the project proposed grading or soil disturbance over one acre?		
2. Does the project propose any grading or soil disturbance?		
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?		
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete and stucco)?		

If the answer to question 1 of Part C is answered "Yes," your project is subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities and the City's Construction Storm Water BMP Performance Standards. A Storm Water Pollution Prevention Plan (SWPPP) and Notice of Intent to enroll in the General Constructin Permit must be prepared. Parts D and E of this form must also be completed.

If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Construction Storm Water BMP Performance Standards and a Construction Storm Water Management Plan (CSWMP) must be prepared and Part E of this form must be completed.

If every question in Part C is answered "No," you do not need to completed Parts D and E of this form and neither a SWPPP nor CSWMP is required.

PART D: DETERMINE ADVANCE TREATMENT SUBJECTIVITY

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	**Yes**	**No**
1. Is the project located within, adjacent to, or a portion of the site within 200 feet of waters listed on the CWA Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation or turbidity?		
2. Will the project disturb more than five acres, including all phases of the development?		
If the answers to 1 and 2 are both "yes", please answer questions 3 and 4 below.		
3. Will the project disturbed slopes steeper than 4:1 (horizontal: vertical) and higher than 10 feet that drain toward the 303(d) listed receiving water?		
4. Does the project contain a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4?		

If <u>all</u> answers to part D are "yes", the project is subject to the City's advanced treatment requirements for construction. Advanced treatment requirements are detailed in Chapter 6 of the *Storm Water BMP Manual,* Part II. Note that even if the above criteria do not apply, advanced treatment may be required at the discretion of the City Engineer based.

<u>Required submittals, Section 2</u>:	SWPPP, NOI	CSWMP	Advanced Treatment

PART E: DETERMINE CONSTRUCTION SITE PRIORITY

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans and included in the SWPPP or CSWMP. See the attached flow chart for guidance on determining the construction prioritization. The City Engineer may adjust the priority of the projects both before and during construction.

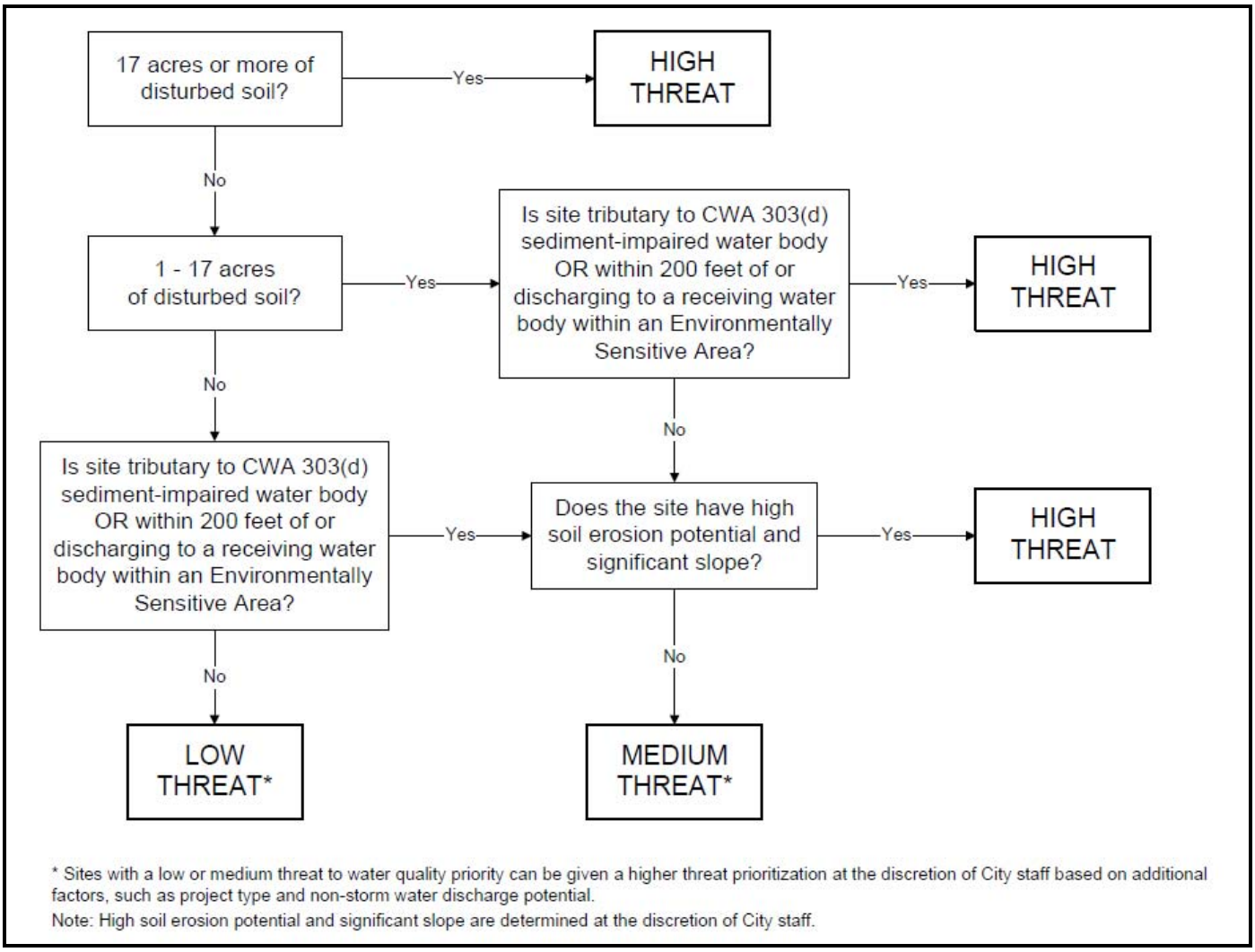

According to the attached flow chart this project has the following threat to water quality priority:

☐ A) High Priority ☐ B) Medium Priority ☐ C) Low Priority

[Note: The construction priority DOES NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority DOES affect the frequency of inspections that will be conducted by the City.]

Completed By: _____

Name, Address & Phone Number

ATTACHMENT 3.1

CONSTRUCTION STORM WATER MANAGEMENT PLAN

CONSTRUCTION STORM WATER MGMT. PLAN

CITY OF LA MESA
JEWEL of the HILLS

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

Project Name: _____ Project Address: _____
Person completing form: _____ Telephone number: (_____)_____-_____
Signature: _____ Date: ____/____/_____

Construction projects less than one acre but answer "Yes" to questions 2, 3, or 4 in Section 2 Part C of the City's Appendix A document are required to prepare a Construction Storm Water Management Plan (CSWMP). Completion of this form along with submittal of a site map with the features described at the end of this form can adequately meet this requirement.

Planning and Organization

Person responsible for implementing items in this CSWMP:_____

Is this project subject to other construction regulations? ~ Yes ~ No
If yes, please list: _____

Significant Materials

List all significant materials that will be stored and handled at the site in the table below.
Include a brief description of the location where the materials will be stored and expected quantities.

Material	Storage Location	Expected Quantity

Potential Pollutant Sources

Provide a brief narrative description of the site's activities and list the potential pollutants that could be transported from the site by storm water in the following table.

Activity	Potential Pollutants Sources and Pollutants Generated by Activity

Best Management Practices

Every construction site within the City's jurisdiction is required to select, install, and maintain construction BMPs to reduce, retain, and manage pollutant discharges to the maximum extent practicable. The BMPs listed below are required by the City where applicable. The corresponding Caltrans fact sheet for the listed BMPs is indicated in parenthesis. These fact sheets are obtainable from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual (2003) and provide additional details on how to implement the BMP.

Please check all BMPs below that are applicable and feasible for the construction that will be implemented and maintained for the length of construction.

- ☐ Preserve natural hydrologic features where feasible
- ☐ Preserve riparian buffers and corridors where feasible
- ☐ Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction
- ☐ Minimize exposure time of disturbed soil areas
- ☐ Minimize grading during the wet season and correlate grading with seasonal dry weather periods to the extent feasible
- ☐ Temporarily stabilize and reseed disturbed soil areas as rapidly as feasible
- ☐ Preserve existing vegetation where feasible (SS-2)
- ☐ Establish permanent re-vegetation or landscaping as early as feasible

Prevent the contamination of storm water from vehicles and equipment through proper management of the following types of activities:

- ☐ Cleaning (NS-8)
- ☐ Fueling (NS-9)

☐ Maintenance (NS-10)

Prevent the contamination of storm water from construction materials through proper management of the following types of activities:

☐ Material Delivery and Storage (WM-1)
☐ Material Use (WM-2)
☐ Stockpile Management1 (WM-3)
☐ Spill Prevention and Control (WM-4)

Prevent the contamination of storm water by wastes through proper management of the following types of wastes:

☐ Solid Waste (WM-5)
☐ Hazardous Waste (WM-6)
☐ Contaminated Soil (WM-7)
☐ Concrete (WM-8)
☐ Sanitary Waste (WM-9)
☐ Liquid (WM-10)

Prevent the contamination of storm water through proper management of the follow activities:

☐ Water Conservation Practices (NS-1)
☐ Dewatering Operations (NS-2)
☐ Paving and Grinding (NS-3)
☐ Potable Water/Irrigation and Flushing (NS-7)

Prevent erosion and sediment runoff from exposed graded areas through physical stabilization and/or vegetation stabilization[2] by implementing <u>one or more</u> of the following BMPs:

☐ Hydraulic Mulch (SS-3)
☐ Hydroseeding (SS-4)
☐ Soil Binders (SS-5)
☐ Straw Mulch (SS-6)
☐Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats (SS-7)
☐ Wood Mulch (SS-8)
☐ Earth Dikes/Drainage Swales (SS-9)

Reduce the velocity of storm water by using <u>one or more</u> of the following:

☐ Outlet Protection/Velocity Dissipation (SS-10)
☐ Slope Drains (SS-11)

Protect the Perimeter of the site or exposed area from sediment discharge using <u>one or more</u> of the following:

☐ Silt Fence (SC-1)
☐ Gravel Bag Berm (SC-6)
☐ Fiber Rolls (SC-5)

Capture sediments in channeled storm water by using <u>one or more</u> of the following:

☐ De-silting Basin3 (SC-2)
☐ Storm Drain Inlet Protection (SC-10)
☐ Sediment Trap (SC-3)
☐ Gravel Bag Barrier (SC-8)

Prevent sediment from being tracked off-site by using <u>one or more</u> of the following:

☐ Stabilized Construction Entrance (TC-1)
☐ Construction Road Stabilization (TC-2)
☐ Entrance/Exit Tire Wash (TC-3)
☐ Street Sweeping (SC-7)

Notes on above BMPs:

1. Stockpiles should be fully covered when materials are not being added or removed.
2. Vegetation stabilization BMPs must be installed, irrigated, and established (uniform vegetative coverage with 70% coverage established) prior to October 1st. In the event stabilizing vegetation has not been established by October 1st, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.
3. De-silting basins must be designed in accordance with industry standards such as Caltrans.

All construction sites must implement the above BMPs in accordance with the City's dry and wet season requirements, which are detailed below.

A. Dry Season Requirements (May 1 through September 30) include but are not limited to:

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
- Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.
- The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).
- Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.
- Properly protected, designated storage areas are required for materials and wastes.
- All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.
- Remnant trash and debris shall be removed and/or properly stored/disposed of daily.
- Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.
- Materials for spill control/containment must be stockpiled onsite.
- Non-storm water discharges must be eliminated or controlled to the MEP.

B. Rainy Season Requirements (October 1 through April 30) include but are not limited to:

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
- Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not

considered to be "exposed" for purposes of this requirement.

- The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).
- Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.
- Properly protected, designated storage areas are required for materials and wastes.
- All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.
- Remnant trash and debris shall be removed and/or properly stored/disposed of daily.
- Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.
- Materials for spill control/containment must be stockpiled onsite.
- Non-storm water discharges must be eliminated or controlled to the MEP.
- Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- Perimeter protection and sediment containment BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- adequate soil stabilization and erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a selected BMP fails, it must be repaired, improved, or replaced with an acceptable alternate as soon as it is safe to do so.
- All vegetation erosion prevention BMPs must be established prior to the rainy season to be considered as a BMP.
- Standby erosion and sediment control BMPs must be able to protect all exposed soil areas. A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for seven or more calendar days. The ability to deploy standby BMP materials is not sufficient for these areas.

Project Site Map

A site map of the project must be attached to this form and contain the following features:

- An outline of the entire property
- Drainage areas on the property and direction of flow
- Areas of soil erosion
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing storm water controls (oil water separators, sumps, etc.)
- Location of impervious areas (paved areas, buildings, covered areas)
- Locations where toxic or hazardous materials spilled in the past
- Location of building and activity areas (e.g. fueling islands, garages, waste container areas, wash racks, hazardous material storage areas, etc.)
- Locations where BMPs proposed in this document will be installed
- Locations where materials will be temporarily stored onsite

City Use Only

Approved □ **Yes** □ **No**

_____ Signature ____/____/____ Date _____ Department

ATTACHMENT 4.1

MUNICIPAL INSPECTION FORM

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. Contact Information

Facility Name_____

Street Address_____ Mailing Address_____

_____ _____

Manager/Operator(s)_____

Telephone (□□□□□□) _____ - □□□□□□□□□□ ext._____ Fax (□□□□□□□) _____ - □□□□□□□□□□

Manager/Operator(s) Email:_____

Facility Personnel Present_____

B. Facility Site Information

Principal activity:_____

JURMP Classification_____

New JURMP Classification?_____

Does facility maintain SWPPP/BMP Plan? ☐ Yes ☐ No

If yes, what is the date of last SWPPP/BMP Plan revision?_____

If yes, does the SWPPP/BMP Plan include applicable minimum BMPs from the JURMP? (if no, describe in Section E) ☐ Yes ☐ No

If yes, does the SWPPP/BMP Plan include a current list of individuals Responsible for implementing BMPs at the site? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

C. Initial Observations

Drainage basin: ☐ Alvarado ☐ University ☐ Spring Valley ☐ Lemon Grove ☐ Lake Murray

Nearest conveyances or water bodies: _____ Hydrologic Area: _____

Approximate distance to water bodies: ☐ □ 200 ft. ☐ 200 □ 1000 ft. ☐ 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities: _____ square feet

Approximate □ impervious surface of this area_____□

Exposed areas of intensive outdoor activity: _____

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

D. BMP Assessment

BMPs	N/A	Yes	No	Comments
D.1 General				
Is the site free of excessive litter and debris?				
Are discharge locations free of excessive sediment and debris?				
Are parking lots, sidewalks and streets free of excessive sediment and debris?				
Are roof downspouts directed away from areas of potential pollutants?				
Is wash water from pressure washing / hosing managed appropriately?				
Are employees trained in storm water management?				
Does the facility have a current log of employees who have participated in training?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
If reclaimed water is used for irrigation, is the site free of evidence of irrigation water entering the storm drain?				
Are stockpiles of soil or landscape waste covered when feasible and equipped to prevent runoff transport?				
Are pesticides, herbicides, and fertilizers managed in accordance with the JURMP BMPs?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area adequately covered (closed lids or permanent overhead cover)?				
Is the trash/recycling area free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor materials that pose a threat to water quality stored appropriately (covered or in sealed containers)?				
Are outdoor storage containers properly labeled?				
Is there an accessible, appropriate spill response kit?				
Is there a written spill response plan? If so, please provide to inspector. (NA if no significant materials to spill)				
Are liquid storage containers/tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
Is water from pools and/or fountains disposed of properly?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				
Are vehicle maintenance activities conducted within contained areas when feasible (garage, canopy, work shop)?				

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

BMPs	N/A	Yes	No	Comments
Are equipment and vehicles inspected daily for leaks and repaired as necessary?				
Are storm drain inlets near vehicle-fueling areas protected from spills and leaks?				
Is vehicle washing preformed in a designated area where runoff does not enter the MS4?				
Are biodegradable soaps used when appropriate?				
D.5 Building Repair/Construction				
Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				
Are impervious areas free of debris and spills from painting, scraping, and/or sandblasting activities?				
D.6 Structural BMPs				
Are structural BMPs adequately maintained? (NA if no structural BMPs at facility)				
D.7 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.8 Other				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
E. ADDITIONAL COMMENTS (describe any additional deficiencies not represented above and/or notable BMP improvements)				

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

F. Corrective Action

Is corrective action needed? ☐ Yes ☐ No (If **BMP-related** corrective action is required, describe below.)

Operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax ☐ E-Mail

G. Violations

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described in Section F.

☐ Violation of City Ordinance(s):

- ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
  Description
- ☐ Illegal connection(s) to the storm drain system
  Location_____
- ☐ Littering
- ☐ Failure to properly implement required BMPs

☐ Other Violation_____

Specific action(s) required to correct the violation described above:

☐ Implement the recommended corrective actions listed in Section F.

Additional actions required:

H. Additional Recommended City Actions

Recommended City Actions listed at the time of inspection are subject to change based on later review by office staff

Does this facility require a follow-up inspection? ☐ Yes ☐ No

Assessment

Level of knowledge regarding storm water issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

ATTACHMENT 5.1

INDUSTRIAL/COMMERCIAL INSPECTION FORM

CITY OF LA MESA
Storm Water Compliance Inspection for Industrial and Commercial Facilities (FY 09-10)

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint

Result: ☐ Full Insp. ☐ Could not Contact ☐ Not Inventoried ☐ Moved, Vacant ☐ Moved, Replaced by_____ ☐ Refused ☐ Mobile ☐ Duplicate of_____

A. CONTACT INFORMATION

Original	Changes
Business Name_____	Business Name_____
_____	_____
Street Address _____	Street Address_____
_____	☐ change _____
Responsible Person(s)_____	Responsible Person(s)_____
Title:_____	Title:_____
Business Telephone (□□□□) _____-□□□□□□□□ext._____	Business Telephone (□□□□) _____-□□□□□□□□ext._____
Business Fax (□□□□□□□□□) _____ - □□□□□□□□□□□	Business Fax (□□□□□□□□□) _____ - □□□□□□□□□□□

Home Based? ☐ Yes ☐ No Mobile Business? ☐ Yes ☐ No **APN**:_____

Is this facility located in a multi-suite complex? ☐ Yes ☐ No

Facility personnel present:_____

B. FACILITY SITE INFORMATION

Principal activity:_____

Assigned SIC code(s) _____ _____ _____ _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

Recommended change of SIC Code(s)?_____ _____ _____ _____

Existing SIC code(s) _____ _____ _____ _____

Status Update (if no longer active in City or does not need an inspection): ☐ Moved/Out of Business ☐ Duplicate ☐ Not Inventoried ☐ Out of Jurisdiction

Does facility have a current business certificate? ☐ Yes ☐ No _____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐ Mandatory ☐ Conditional ☐ No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐ Yes ☐ No WDID: 9 37I0_____

Has facility filed a Notice Of Termination (NOT) for the WDID listed above? ☐ Yes ☐ No Approval date:_____ month/yr

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a storm water monitoring program? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Discharge points: _____

_____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate □ impervious surface of this area_____□

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP ASSESSMENT

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.1 General					
Keep site free of litter, debris, and sediment using dry methods					
Keep storm drains on site free of litter and debris					
Keep outdoor areas free of spills and leaks					
Collect water from pressure washing or hosing and dispose of appropriately					☐ Unknown Performed by:
Direct roof downspouts away from areas of potential pollutants					
D.2 Landscaping					
Properly manage pesticides/fertilizer; use IPM when feasible					☐ Unknown Landscaping Co:
Employ adequate erosion prevention measures (vegetation or physical stabilization)					
Eliminate over watering/over-irrigation					
Properly store stockpiles to prevent material transport					
D.3 Materials and Wastes					
Protect trash area from contact with storm water					
Keep trash area free of litter and debris, liquids, powders, sediment					
Keep grease bin and area surrounding grease bin free of grease stains/spills					
Do oil-recycling/grease bins have overhead coverage?					
Adequately cover materials stored outside					
Prevent run-on from contacting materials stored outdoors					
Provide an accessible, functional spill response kit					
Equip liquid storage containers with spill containment					
Keep spill containment free of spills and rainwater					
Properly store and dispose of hazardous materials					
Keep loading and unloading areas, including drains, free of debris					
Dispose of water generated by processing activities appropriately					
Dispose of pool, spa, fountain, and filter backwash water properly					☐ Unknown Performed by:
Clean floor mats in locations that do not drain to street or storm drain system					

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.4 Equipment, Vehicles, and Outdoor Activities					
Conduct outdoor activities within contained areas (garage, under canopy, work shop)					
Use drip pans to collect leaks/spills					
Provide materials (berm, mat, etc.) to protect storm drain inlets from spills and leaks					
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4					
D.5 Other					
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff					
Identify and eliminate illicit connections and illegal discharges					
D.6 Additional Required Actions					

D.7 Additional Questions	Comments Results
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐ Painting ☐ Sandblasting ☐ Fuel Distribution ☐ Dust dispersion or mineral processing ☐ Metal smelting ☐ Metal plating or anodizing ☐ Chemical production or mixing ☐ Large fuel burning device ☐ Incinerator
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A
What is the approximate percentage of the site that drains to the treatment control BMPs?	☐ N/A
Do major potential pollutant sources drain to treatment BMP(s)?	☐ All ☐ Some ☐ None ☐ N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	NOI ☐ NONA/NEC ☐

E. STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE

☐ Non-compliance with the State Industrial Storm Water General Permit noted.

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit; see Attachment 3 of the Industrial Permit (www.waterboards.ca.gov/stormwtr/industrial.html).

- ☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP); see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required:

F. CORRECTIVE ACTION SUMMARY

☐ **Corrective Actions and Re-inspection Required.** Please refer to sections D.1-D.6, E, and F of this form.

☐ No Corrective Actions Required at this time.

G. RECOMMENDED CITY ACTIONS

ASSESSMENT

Level of knowledge regarding stormwater issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

☐RW 303(d)☐☐ Receiving water impairments, as listed in the most recent 303(d) list
☐WS COC☐☐ High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
☐PDP☐☐ pollutant discharge potential.
☐Emp. Training☐☐ employee training activities focused on storm water pollution prevention
☐Housekeeping☐☐ standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
☐Minor Struct.☐☐ minor structural BMPs that do not require building permits, such as covering with tarps or building berms
☐Major Struct.☐☐ major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results☐are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results☐are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results☐are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results☐above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results☐exceed the EPA benchmark by an order of magnitude or more

CITY OF LA MESA

SUPPLEMENTAL WATERSHED ASSESSMENT QUESTIONNAIRE AND INSPECTION

Business Name _____ Date:_____/_____/_____

Watershed (circle one): San Diego River Chollas Creek/San Diego Bay

Questions for Facility Contact Person

When water (from rain, sprinklers, etc.) leaves your site where does it go? ☐ Treatment Plant/Sewer ☐ Storm Drain System ☐ A Water Body (any) ☐ Don't Know/Unsure

Runoff leaving your site eventually reaches what water body (more than one can be checked)? ☐ San Diego Bay ☐ Chollas Creek ☐ Pacific Ocean ☐ San Diego River ☐ Mission Bay ☐ Don't Know/Unsure

What is your impression of the water quality/condition of the downstream water body? ☐ Good ☐ Fair ☐ Poor ☐ Don't Know

In general, what do you think are the main areas or activities at local businesses that could contribute to pollution of runoff? ☐ Washing Activities ☐ Washing Activities Done by Mobile Businesses ☐ Material Storage ☐ Material Processing ☐ Landscaping ☐ Repair Services ☐ Illegal Dumping ☐ Trash Area ☐ Don't Know/Unsure ☐ Other

Other than today's inspection, have you received any information or education about what your business should do to prevent pollution from entering the environment? ☐ Yes ☐ No

Observations

Was evidence of any non-storm water discharge (including allowable discharges) observed? ☐ Significant ☐ Minimal ☐ No

If irrigation system is present, which sprinkler head types are present (check all that apply)? ☐ Spray ☐ Rotor ☐ Microspray ☐ Drip ☐ Bubblers ☐ Water by hand ☐ Other ☐ NA

Approximate percentage of site's total pervious area that is landscaped: _____ %

Attitude toward compliance with storm water regulations: ☐ Receptive ☐ Neutral ☐ Resistant

Overall Source Ranking (for Watershed Pollutants of Concern)

☐ Significant ☐ Not Significant

Industrial Commercial Storm Water Compliance Inspection Corrective Actions (City Copy)

Inspection Date: _____

Business Name: _____

Address: _____

Responsible Person: _____

Inspector Name/Phone: _____

Re-inspection Required? **Yes** ☐ **No** ☐

Corrective Actions:

1._____

_____

2._____

_____

3._____

_____

4._____

_____

5._____

_____

6._____

_____

Industrial Commercial Storm Water Compliance Inspection Corrective Actions (Business Copy)

Inspection Date: _____

Business Name: _____

Address: _____

Responsible Person: _____

Inspector Name/Phone: _____

Re-inspection Required? **Yes** ☐ **No** ☐

Corrective Actions:

1._____

_____

2._____

_____

3._____

_____

4._____

_____

5._____

_____

6._____

_____

ATTACHMENT 5.2

INTEGRATED PEST MANAGEMENT CARDS

Ants

Ants are one of the most prevalent pests in California. Although ants are annoying when they come indoors, they can be beneficial by feeding on fleas, termites, and other pests in the garden. While spraying chemicals inside the house may seem effective, it won't prevent more ants from entering your home, which is essential for control because most ants nest outside. Focus management efforts on excluding ants from buildings or valuable plants.

Make your house less attractive to ants:

- Caulk cracks and crevices that provide entry inside.
- Store attractive food in closed containers.
- Clean up grease and spills.
- Look for and remove indoor nesting sites, such as inside potted plants.
- Ant-proof kitchen garbage pails with sticky barriers such as petroleum jelly under the lip and pet dishes by placing them in a moat of water.
- Remove sweet food sources next to your house such as aphid-infested bushes and ripened fruit on trees.

When ants invade your house, take these steps:

- Sponge invaders with soapy water as soon as they enter.
- Plug up ant entryways with caulk or petroleum jelly.
- Remove infested potted plants.
- Clean up food sources.
- Rely on baits to control the ant colony.
- Indoor sprays are not usually necessary.

How and why baits work best:

When using bait, place it along ant trails and at nest openings. Worker ants will be attracted to bait and take it back to the nest where the entire colony, including queens, may be killed. The bait must be slow-acting so workers won't be killed before they get back to the nest. It may take several weeks for results to be evident. Just killing workers foraging in your home or garden does little to control the colony, because as few as one percent of a colony's foraging worker ants are able to provide sufficient food to support nestbound queens and larvae. Baits in bait stations or ant stakes are easiest to use and safest for the environment.

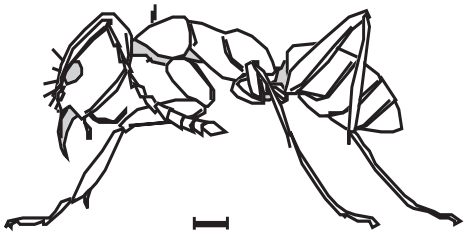

(actual size)

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Aphids

HEALTHY GARDEN HEALTHY HOME

Almost every plant has one or more aphid species that occasionally feeds on it, but low to moderate numbers of aphids are usually not damaging in gardens or on landscape trees. Although aphids can curl leaves and produce sticky honeydew, they rarely kill plants and can often be washed off with water. When aphid numbers get high, natural enemies frequently feed on them, eliminating the need for pesticides. Insecticidal soaps and oils are less toxic pesticides that can be used when treatment is necessary.

Aphids are common in your garden because:

- Aphids like lush new growth. Don't over fertilize. Use organic fertilizers or slow-release products.
- Aphids build up on flowering plums, roses, tulip trees, crape myrtles, apples, and many vegetables. Expect aphids when you grow these plants.
- Ants protect aphids from their natural enemies. Keep ants off plants to get more benefit from these beneficial insects.

To reduce aphids:

- Prune out infested leaves and stems.
- Knock aphid populations off plants by shaking or spraying with a strong stream of water.
- Protect seedlings with covers or aluminum soil mulches.
- Wait for hot weather; most aphids are heat-intolerant and will be gone by mid-June.

Protect aphids' natural enemies:

- Lady beetles, both adults and larvae
- Lacewings
- Syrphid fly larvae
- Soldier beetles
- Parasitic mini-wasps that turn aphids into crusty mummies (See reverse for insect drawings.)

Natural enemies of aphids such as lady beetles and lacewings will come into your garden naturally when aphids are abundant. Protect these good bugs by avoiding the use of insecticides that may be toxic to a broad variety of insects.

If insecticides seem necessary, use the safest products:

- Nonchemical pest control methods should be used first to manage aphid populations. However, if you feel insecticides are necessary, choose less toxic products.
- Insecticidal oils and soaps are the safest products. When properly used, these materials solve most pest problems.
- Oils and soaps work by smothering aphids, so application must be thorough. Don't apply to drought-stressed plants or when it is very hot. A few plants are sensitive to these products.
- Insecticidal soaps, soap-pyrethrum mixtures, or neem oils are often applied on vegetables or small bushes like roses.
- Narrow range oils, like parafinic, supreme or superior oils, are appropriate for larger trees.
- Oils and soaps don't kill aphids hidden within curled leaves. Prune these out. Systemic insecticides can kill hidden aphids, but they are much more toxic and not registered for use on garden vegetables or fruit trees.

aphid

lady beetle

parasitic mini-wasp killing aphid

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Cockroaches

HEALTHY GARDEN HEALTHY HOME

Cockroaches thrive in warm environments that provide food, water, and shelter. Roaches hide in cracks, crawl spaces, and other dark places during the day and come out at night to feed. Pesticide sprays alone will not control roaches and are not usually required. Baits provide better control. You must integrate several strategies to make your home a less roach-friendly environment. Thoroughness is essential for effective control.

Identify your cockroach species first:

- Effective management options vary according to species.
- Cockroach traps provide an easy way to catch roaches for identification.
- Control practices for outdoor invaders (American, oriental roaches) and indoor residents (brownbanded and German roaches) differ.
- For help with identification go to www.ipm.ucdavis.edu.

Remove food and water sources:

- Even tiny crumbs or liquids in cracks provide good food sources.
- Store food in sealed containers.
- Keep trash in containers with tight lids.
- Eliminate plumbing leaks.
- Vacuum cracks and crevices and clean floors and counters daily.

Remove roach hiding places:

- Seal cracks and other openings to prevent invaders from the outside.
- Seal cracks in false bottoms of cupboards and other indoor hiding places.
- Seal or clean up other areas where you find roaches or their egg cases hiding.
- Remove old newspapers, boxes, and other clutter in kitchens and bathrooms.
- The oriental cockroach hides outdoors under ivy and other shelter. Check to see if you have this roach and remove outdoor hiding places or bait.

Use traps to identify and track cockroach populations:

- Cockroach traps are available in hardware stores.
- Place traps on the floor around edges of walls, in cupboards and other places where you think roaches are foraging. Place bait stations at locations where you trap roaches.
- Check traps daily.
- Sticky traps with pheromones may provide some control of German cockroaches.

Using chemicals to control cockroaches:

- Avoid use of foggers, bombs, or aerosol sprays — they just disperse populations.
- Boric acid powder blown into cracks, crevices, hollow walls, under refrigerators, or other undisturbed hiding places is very effective (allow 7 days or more for an effect to be seen).
- Bait stations containing boric acid, abamectin, fipronil, or hydramethylnon placed near hiding places can be effective if other food sources are removed (allow 7 days or more for an effect to be seen). Replace stations as needed as long as roaches are being caught.
- Insecticide sprays alone do not give long-term control. They are not necessary if other methods such as baits and boric acid powder are combined along with cleanup and removal of hiding places.
- Contact a professional pest control operator for very serious infestations, but be sure they use an integrated program as described above.

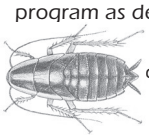

German cockroach nymph

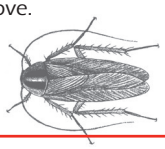

German cockroach adult

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Earwigs

HEALTHY GARDEN HEALTHY HOME

While their prominent tail-end pincers may look ferocious, earwigs are not harmful to people. Earwigs may seriously damage seedling vegetables and chew holes in annual flowers, soft fruit, and corn silks, but earwigs also play a beneficial role by feeding on aphids and other insects. Nocturnal in habit, earwigs feed at night and hide during the day in dark, cool, moist places in the yard or within flowers or vegetables. To manage earwigs, reduce hiding places and moisture, and employ a vigilant trapping program.

Should you be concerned about earwigs in your garden?

- Yes, if you are growing vegetables, herbaceous flowering plants, sweet corn, or plants with soft fruits like strawberries and apricots.
- No, if your garden is primarily lawn, trees, and woody ornamentals or native plants.

Reduce outdoor hiding places:

- Eliminate dense undergrowth of vines, ground cover and weeds around vegetable and flower gardens.
- Prune away fruit tree suckers.
- Remove leaves, boards, boxes, trash, and other debris from planting areas.
- Move flower pots and other garden objects and structures that can harbor earwigs.
- Check plastic or organic mulches and remove them to limit earwig numbers.

Trap earwigs until they are gone!

- Trap earwigs with rolled newspaper, bamboo tubes, or short pieces of hose. Place these traps on the soil near plants just before dark, and shake accumulated earwigs out into a pail of soapy water in the morning. A low-sided can filled with oil and a drop of bacon grease or fish oil also makes a good trap. Daily trapping will reduce earwig populations to tolerable levels.

Other ways to reduce earwig problems:

- Drip irrigate where possible to reduce surface moisture.
- Keep earwigs out of stone fruit trees with a band of sticky substance like Tanglefoot, around the trunk, and harvest fruit as soon as it ripens.
- Insecticides should rarely be needed.

Inside the home:

Earwigs may seek refuge indoors when conditions outside are too dry, hot, or cold. Large accumulations of earwigs can be annoying but present no health hazards. When earwigs invade your home follow these steps:

- Sweep or vacuum up invading earwigs.
- Seal up cracks or other entry points.
- Remove debris from gutters and around entryways.
- Keep water and moisture away from structures.
- Replace white outdoor lights with yellow ones, which are less attractive to earwigs.
- Indoor application of pesticides is not recommended.

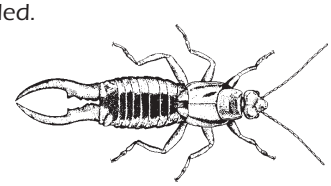

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Fleas

HEALTHY GARDEN HEALTHY HOME

Fleas are particularly annoying to people and pets, especially during spring and early summer when their numbers tend to increase dramatically. The common flea in California is the cat flea. Despite its name, it attacks both dogs and cats and will also bite humans. To keep fleas out of your home, control fleas on your pet and regularly clean pet sleeping areas.

On the pet:

Recently, a number of very effective and safe new products for flea control on the pet have become available. Remember to supplement pet treatments with regular cleaning of your home and periodic combing with a pet flea comb to detect new infestations.

- Spot-on formulations are applied to the animal's coat, providing flea control for 1 to 3 months. Available from veterinarians or over-the-counter.
- Systemic flea control products, available from vets, are given as a pill or food additive. While they do not kill adult fleas, they prevent reproduction.
- Flea collars containing insect growth regulators (IGRs) give protection for up to 6 months on dogs and up to a year on cats. Be sure to choose collars containing methoprene or pyriproxyfen.
- Flea shampoos and soaps, powders and dusts, spray-on liquids, and dips are less effective and more hazardous to pets, people, and the environment than the three types of products above.

In the yard:

Outdoor treatment is rarely needed, but if your pet regularly sleeps outside and flea numbers are high, these areas can be treated with a spray containing pyriproxyfen. If possible, open sleeping areas to sunlight by removing low hanging vegetation. Immature fleas are unlikely to survive in areas with exposure to sunlight.

Inside the home:

Whether or not you are aware of fleas in your home, regularly vacuum and launder areas where your pet rests to avoid flea buildup. If you have a major flea problem, treat your pet with one of the options on the front of this card and follow the steps below.

- Locate heavily infested areas (usually areas where the pet rests) and concentrate treatment there.
- Wash throw rugs and pet bedding.
- Vacuum upholstered furniture, cleaning under cushions and in crevices.
- Vacuum carpets, especially beneath furniture.
- Use a hand sprayer or aerosol to treat all carpets and unwashable upholstered furniture with an insecticide that contains an IGR (methoprene or pyriproxyfen). This treatment kills larvae but not pupae, so fleas may continue to emerge for up to 2 weeks.
- Over the next 2 weeks vacuum regularly to remove adult fleas that emerge from pupae. Do not reapply pesticides.
- Seal vacuum bags and discard them so fleas don't escape.

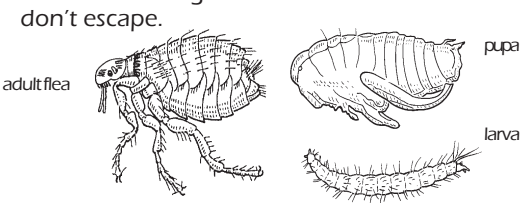

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Gardening with Good Bugs

HEALTHY GARDEN HEALTHY HOME

Most gardens contain far more types of good bugs,or beneficial insects, than pest insects. Beneficial insects and other organisms that kill pest insects are called natural enemies. In any pest management or plant care program, it is important to encourage these natural enemies by avoiding pesticides that kill them. You can also encourage beneficial insects by choosing plants that provide them with pollen, nectar, and shelter and keeping ants out of pest-infested plants. Learn to identify good bugs, both in their adult forms and immature (larval) stages.

Common good bugs found in California gardens include:

- Lady beetles: Both adults and larvae consume aphids.
- Lacewings: Lacewing larvae feed on many insect pests; adults are often seen around lights.
- Syrphid flies: Syrphid fly larvae consume aphids; adults hover around flowers.
- Parasitic mini-wasps: Many species of tiny wasps lay their eggs in pests like aphids or caterpillars; their hatching larvae consume the pest and kill it.
- Spiders: All spiders feed on insects or other arthropods and are beneficial in the garden.

(See reverse for drawings of good bugs mentioned above.)

What is Integrated Pest Management?

Integrated pest management (IPM) uses environmentally sound, yet effective, ways to keep pests from annoying you or damaging plants. IPM programs usually combine several pest control methods for long- term prevention and management of pest problems without harming you, your family, or the environment — IPM also reduces pollution in California waterways. Successful IPM begins with correct identification of the pest. Only then can selection of the appropriate IPM methods and materials be made.

Preferred IPM methods include:

- Planting pest-resistant or well-adapted plant varieties like native plants.
- Discouraging pests by modifying the way you design, irrigate, fertilize, and manage your garden.
- Altering the garden or home environment to deprive pests of the food, water, shelter or other requirements they need to thrive.
- Keeping pests out of the home and garden using barriers, screens, and caulking.
- Squashing, trapping, washing off or pruning out pests.
- Relying on good bugs in your garden to eat pests, thereby eliminating the need for insecticides that may end up in our waterways.

Turning to pesticides:

- Only use pesticides when non-chemical controls are ineffective and pests are reaching intolerable levels.
- Use pesticides in combination with the methods described above.
- Choose pesticides carefully so that the least toxic, most effective material is used to protect human health and the environment.

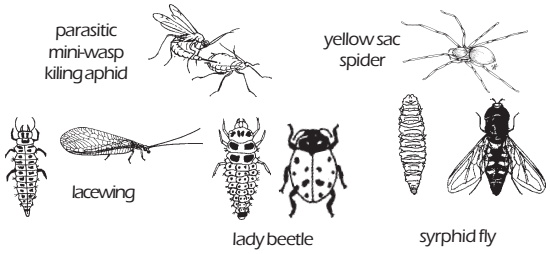

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Head Lice

HEALTHY GARDEN HEALTHY HOME

Head lice can infest anybody, but children are prone to infestations because they play closely and share items that come in contact with the head like hats, headphones, and combs. Head lice are not known to transmit any infectious diseases; they are more of a nuisance than a health risk. Children with head lice, however, are generally not allowed to attend school as long as nits are found in their hair.

Head lice facts:

- Head lice cannot hop, fly, or jump; they crawl. Lice spread only through direct contact with an infested object or person.
- Head lice spend their entire life in head hair and can only survive off a human head for about 1 or 2 days.
- A newly hatched louse must ingest blood within minutes of birth to survive.
- Head lice cannot live on family pets.
- Nits (eggs) that are more than 1 1/4 inch from the scalp probably are dead or have already hatched.

What to look for:

- Intense scratching on the back of the head or neck.
- Tiny white eggs (nits) glued to hair near the scalp.
- Small, rapidly crawling flat insects.

Four steps necessary to manage an infestation of head lice:

1 Use a head louse shampoo if you observe active lice or viable eggs.

- Avoid shampoo products containing lindane, which are available by prescription only. Pyrethrin and permethrin are safer, more effective, and less polluting to wastewater than lindane. Not all eggs will be killed.
- To avoid insecticides entirely, use soap shampoos that contain coconut or olive oils. Most soap shampoos kill all stages of the louse except the egg. Because they are not as effective as products containing pesticides, you must be sure to comb and repeat these shampoos four times at 3-day intervals. Successive shampooing kills newly hatched lice.

2 Remove nits from the head by combing with a specially designed nit comb.

- This step is the key to successful control. Repeat daily as long as you find live lice or nits within 1¦4 inch of the scalp. Use a metal comb specially designed for removing head lice and their eggs. Combs sold with head lice shampoos are not generally effective. Infested hair can also be cut out with small safety scissors.

3 Remove lice and nits from the household.

- Wash clothing and bedding of the infested person in hot water (at least 140°F) and dry in a hot dryer or have them dry cleaned. Place other items (earphones, bike helmets) in plastic and put in a freezer that is 5°F or lower for at least 10 hours. Clean any object that might have come in contact with the infested person's head (stuffed animals, car seats). Vacuum carpets and upholstery. Pesticide sprays are not recommended.

4 Check heads and remove nits daily until infestation is gone. Follow with weekly head checks to detect reinfestation.

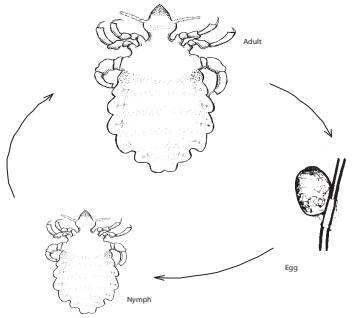

For more information see Pest Notes: Head Lice, available at Cooperative Extension offices and at www.ipm.ucdavis.edu

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Lawn Insects

HEALTHY GARDEN HEALTHY HOME

Contrary to popular belief, insects are not a common cause of residential lawn damage in California. Poor lawn care, especially improper watering and planting inappropriate grass species, are more likely causes of unhealthy or dying lawns. Disease-causing agents, excess orinappropriate use of chemicals such as fertilizer and herbicides, or dog urine also produce lawn damage resembling that of insects. Many insects in the lawn are beneficial. Never apply an insecticide unless a damaging level of a known insect pest is confirmed. Insecticides are only effective if applied at the right time and in the right manner. Some insecticides may kill good bugs too.

How do you know if insects are causing damage?

- Brown spots in lawns can be caused by over- or under-irrigation, plant disease, improper use of chemicals, or dog urine as well as insects.
- Confirm presence of insects before applying an insecticide. For grubs, dig around roots, for other insects perform a drench test. (See reverse.)

Keep your lawn healthy by:

- Planting grass species that do well in your area
- Irrigating deeply and infrequently
- Doing routine maintenance on sprinkler heads
- Applying only 3 to 6 pounds of actual nitrogen per 1000 square feet per year when fertilizing
- Aerating your lawn annually; remove thatch if it exceeds ½ inch
- Cutting only one-third to one-half of grass height at each mowing and keeping lawnmower blades sharp

See the UC Guide to Healthy Lawns at www.ipm.ucdavis.edu

If a damaging level of insects is confirmed, do the following:

- Choose an insecticide based on the pest you're targeting.
- Find out which insecticide ingredients target specific lawn insects:
  - *Bacillus thuringiensis* (Bt) kills only caterpillars, including cutworms, lawn moths, and skippers.
  - Insect-attacking nematodes control caterpillars or grubs.
  - Azadirachtin controls cutworms, armyworms, and larvae of lawn moths.
  - Imidacloprid is effective against young lawn grubs.
  - Pyrethroids (e.g., cyfluthrin, bifenthrin) are broadly toxic insecticides that kill chinch bugs, lawn moths, and cutworms, but also kill beneficial insects and should be avoided.
- Get help from UC Cooperative Extension.

HOW TO PERFORM A DRENCH TEST

- Mix 3–4 tablespoons of dishwashing liquid to 2 gallons of water.
- Evenly apply the 2 gallons to 1 square yard of your lawn.
- Monitor the area for 10 minutes and count the number of armyworms, cutworms, or lawn moth larvae that rise to the surface.
- Treat the area only if insect numbers exceed 5 armyworms or cutworms or 15 lawn moths per square yard.

chinch bug

sod webworm larva

cutworm larva

grub larva

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Learn more about San Diego regional water quality at: www.ThinkBlueSD.org & www.ProjectCleanWater.org. For more pest information visit the University of California IPM website at: www.ipm.ucdavis.edu or the UCCE Master Gardeners at: (858) 694-2860, Mon - Fri, 9 am to 3 pm

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Safe Use & Disposal of Pesticides

HEALTHY GARDEN HEALTHY HOME

Pesticides are designed to be toxic to the pests they target — insects, weeds, and other unwanted home and garden invaders. Always read pesticide product labels carefully and follow all directions on proper use, storage, and disposal of empty pesticide containers. Product labels are your main source of information on how to use a product safely and legally. They include guidelines needed to protect you, your family, and pets. The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For the site nearest you in San Diego County call 1-877-713-2784 .

If you must use pesticides, follow these tips to reduce pesticide effects on your local waterways:

- Identify your pest problem and choose the least toxic pesticide that targets your pest and achieves the results you want. If you need help identifying the least toxic pest control method, contact your University of California Cooperative Extension office.
- Determine the right amount of pesticide to purchase. Purchasing exactly the amount you need for the application eliminates the need for storing unused pesticides.
- Use spot treatments whenever possible.

Outdoors

- Avoid overwatering after applying pesticides. Never let pesticide runoff flow into storm drains.
- Do not apply pesticides outdoors when rain is forecast or when it is windy.
- Avoid applying pesticides on paved areas.

Indoors

- Avoid applying pesticides in or near floor drains or sinks.
- Avoid applying pesticides on areas that will be washed or mopped with water, or where food is prepared or stored.

When using and storing pesticides take these precautions:

- Always wear a long-sleeved shirt, pants, and eye protection, and other equipment suggested on the label.
- Store products tightly capped in a locked cabinet out of reach from children and pets.
- Always keep pesticides in their original container.
- Know where to call for help in an emergency!

Pesticide disposal:

- If you cannot use up your pesticides, fertilizers, and weed killers, give them to a friend who may need them.
- Sewage treatment plants are not designed to treat for certain toxic pesticides like diazinon and chlorpyrifos — dumping pesticides into the stormdrain or down the sink is never an option.
- The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For household pesticide disposal information for San Diego County, call 877-713-2784.

Finding active ingredients on a pesticide label:

Pesticide labels are required by law to show the active ingredient and its percentage. Minimize or avoid the use of products that contain diazinon and chlorpyrifos – these materials are polluting our waterways. Always read the label before you buy!

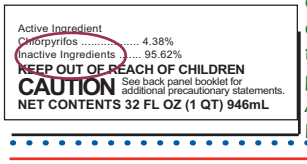
Active Ingredient
Chlorpyrifos 4.38%
Inactive Ingredients 95.62%
KEEP OUT OF REACH OF CHILDREN
CAUTION See back panel booklet for additional precautionary statements.
NET CONTENTS 32 FL OZ (1 QT) 946mL

*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

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UNIVERSITY of CALIFORNIA

MASTER GARDENER ASSOCIATION SAN DIEGO COUNTY

It's the water that connects us!

Snails & Slugs

HEALTHY GARDEN HEALTHY HOME

Snails and slugs rank among our most despised garden pests. These slimy mollusks emerge from hiding at night and chew holes in leaves and flowers of many succulent garden plants and fruit. Slugs and snails are similar in structure and biology, except slugs lack the snails' external spiral shell. Management requires a vigilant and integrated approach that includes eliminating moisture and hiding spots, trapping, barriers, and handpicking. Baits can be helpful, but by themselves, don't provide adequate control in gardens that contain plenty of shelter, food, and moisture.

How do you know snails and slugs are causing damage?

- You may not observe these pests at first because they feed at night and hide during the day. Go out at night or early morning to view them in action.
- Other pests can cause holes in leaves, flowers, and fruit. Look for the shiny, slimy trails slugs and snails leave behind.

What must be done to reduce snails and slugs?

- Remove daytime hiding places — ivy, weedy areas, debris, or boards.
- Regularly remove snails from shelters you cannot eliminate such as low ledges on fences, undersides of decks, meter boxes.
- Place traps in your garden and dispose of trapped snails and slugs daily.
- Reduce moist surfaces by switching to drip irrigation or sprinkling in the morning rather than later in the day.
- Consider snail-proof plants such as impatiens, geraniums, begonias, lantana, nasturtiums, and many plants with stiff leaves and highly scented foliage like sage, rosemary,and lavender.

How can I manage snails and slugs without using pesticides?

- Make sure the garden is mollusk-free before planting. Then erect a copper barrier around it. Use a 4- to 6-inch-wide band of copper, buried an inch below the soil and bent over at the top or attach it around the edge of a raised bed.
- Place your garden in the sunniest spot possible. Remove garden objects or adjacent plants or ground cover that may serve as shady shelter. Reduce moist surfaces as much as possible.
- Build a trap using a 12"x15" board raised off the ground by 1-inch runners. As the mollusks collect under the board, scrape them off and destroy them daily.

What about baits?

- Baits will not be very effective unless you also remove shelter, food, and moisture.
- Metaldehyde baits are especially poisonous to dogs and birds. Metaldehyde also loses its effectiveness rapidly in sunlight and after rain or irrigation.
- Iron phosphate baits are safe for use around dogs, children, and wildlife.
- Irrigate before applying bait and apply in evening on warm days when mollusks are active.
- Scatter bait around sprinklers and in moist and protected areas where snails and slugs travel.

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Spiders

HEALTHY GARDEN HEALTHY HOME

Spiders are mostly beneficial because they feed on pest insects. However, many people think that all spiders are dangerous and aggressive. In California, the main spider capable of causing serious injury is the black widow, which generally remains outdoors and out of sight. Spiders seen out in the open during the day are unlikely to bite people. Focus pest management efforts on removing webs and hiding places. Pesticides are not generally recommended.

What to know about spiders:

- In California, the main spider capable of causing serious injury is the black widow:
  - The poisonous black widow spider is commonly found outdoors, in sheltered, dry, undisturbed areas such as wood piles.
  - Female black widows have shiny black bodies with a red hourglass marking on the underside.
  - Only large female black widows can injure people.

  Anyone bitten by a black widow spider should remain calm and seek medical advice, or call California's Poison Control Center at 1-800-8-POISON (1-800-876-4766).
- The brown recluse spider does not live in California.
- The jaws of most spiders are too small to bite humans.
- Some other spiders bite when trapped in clothing, but the reaction is usually no more severe than itching or a bee sting. See www.ipm.ucdavis.edu for more information about these spiders.

To prevent spiders from entering your house, take these steps:

- Seal home foundation cracks and other access holes.
- Inspect window and door screens for good seals that keep out spiders and the insects they prey on.
- Keep areas around home foundations free of clutter.

Manage spiders using these tips:

- Indoors, regular housecleaning provides adequate spider control.
- Vacuum up the spider and its web.
- Prevent clutter buildup that can provide hiding places.
- Remove spider webs from the exterior of the house with a broom or high pressure hose.
- Indoors, squash spiders or capture them in a jar and release them outdoors.

When removing spiders, don't overlook the fact that spiders eat a large number and variety of nuisance and pest insects. Spiders also have natural enemies — wasps, other spiders, birds, reptiles, and others — that sometimes keep them from becoming too numerous.

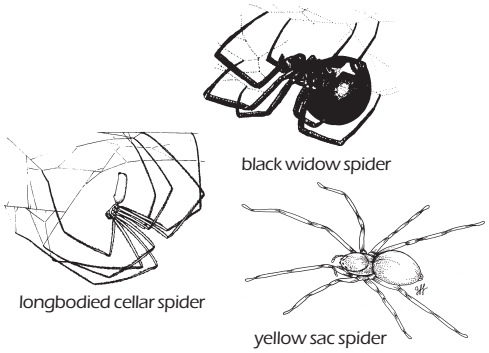

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Termites

Because of the serious damage they can cause to wooden structures, termites are among the pests most feared by homeowners. However, swarms of flying termites do not always mean your building is infested. A careful inspection of the structure is required to confirm an infestation. People also frequently mistake swarms of flying ants for termites. If you suspect that your house is infested, call a professional. Do-it-yourself sprays cannot be relied on to reduce a damaging infestation. Common termites in California are the subterranean termites that build nests in soil, dampwood termites that nest in moist wood and soil, and drywood termites that nest above ground in dry wood. Management of each termite species is different.

Distinguish flying ants from termites:

- Check the antennae, wings and waist to confirm that pest insects are termites. (Please refer to ant vs. termite drawing on back.)

Design your building to keep termites out:

- Keep a 12-inch barrier of smooth concrete, sand, or other material between the soil surface and substructure wood beneath a building.
- Choose termite-resistant wood for fences or other structures that must contact soil.
- Remove wood piles, untreated fence posts, and buried scrap wood near structures.
- Provide adequate ventilation to substructures and keep them dry.
- Immediately repair foundation cracks.

If termites are invading your home:

- Destroy shelter tubes that subterranean termites build between soil and wood structures.
- If dampwood termite nests are accessible, remove infested wood and eliminate excess moisture.
- Drywood termites can be controlled with heat, freezing, electricity, microwaves, fumigation, or spot treatments of chemicals.
- For any infestation, contact a professional for help. Pesticides licensed only for use by a pest control operator are usually necessary to control subterranean and dampwood infestations.

Using pesticides for termite control:

- Pesticides may be injected into the soil by professional applicators through drilling or rodding. Special procedures must be followed to prevent contamination of ground or surface water.
- For soil injections, ask your applicator to use a product other than chlorpyrifos. Newer types of products such as fipronil and chloronicotinyls are safer for your health and the environment.
- Baits can be effective in some cases, but may take several months to control the problem and must be followed up with constant monitoring.

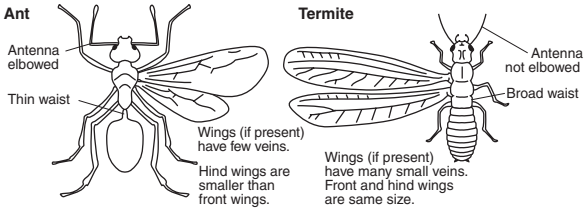

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Giant Whitefly

HEALTHY GARDEN HEALTHY HOME

Giant whiteflies can cover a beautiful plant with white fuzzy wax and sticky honeydew, turning it into an unsightly mess. First discovered in San Diego County in October 1992, this whitefly has spread northward into other areas of California. Since its introduction into San Diego, giant whitefly has spread rapidly northward along the coast. Although affected plants may be weakened, they rarely die. To manage giant whitefly, wash plants off with water and encourage natural enemies.

What plants are affected?

- Many ornamentals including hibiscus, giant bird of paradise, begonia, Xylosma.
- Fruit trees including citrus, avocado, mulberry and banana.

Look for these damage symptoms on affected plants:

- Long, white, waxy filaments produced by the whitefly give the leaf surface a bearded appearance. These hairlike strands may be mistaken for a fungal infection.
- Large amounts of sticky honeydew excreted by the whitefly as it feeds on plant sap.
- Black sooty mold growing on the honeydew.

How to recognize the whitefly:

- Adults are small (3/16") and white with light brown markings on wings and usually found in groups on undersides of leaves.
- Nymphs are yellowish, small, oval, have no legs and don't move.

To reduce problems, use an integrated program that includes:

- Removing infested leaves.
- Washing giant whiteflies off leaves with a strong stream of water.
- Planting species less susceptible to giant whitefly.
- Avoiding insecticides that injure natural enemies, such as lacewings, lady beetles, syrphid flies, and parasitic wasps.

What about insecticides?

- **Don't use insecticides if beneficial insects, including parasites and predators, are present in the area.**
- **To confirm the presence of parasitic wasps, use a magnifying glass to look for parasite exit holes on giant whitefly nymphs or darkened nymphs as indicated in drawings below.**
- **If you do choose to use an insecticide, select least toxic products such as insecticidal soaps or oils. Remember to follow label directions and spray the undersides of the leaves where whitefly colonies are found.**

(adult) 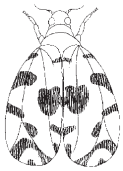 (actual size) I

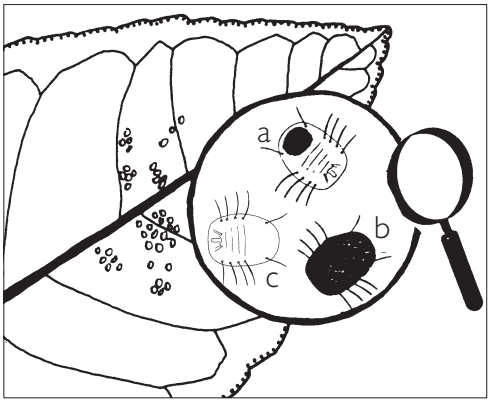

Examine whitefly colonies for grayish-black or yellow nymphs with exit holes (a), or darkened nymphs (b), or healthy nymphs (c).

Use NON-CHEMICAL methods & LEAST TOXIC pesticides. WHY? Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes, and oceans.

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ATTACHMENT 5.3

LA MESA FOCUS NEWSLETTERS

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • August 2009

COUNTY TELEVISION NETWORK (CTN) – CHANNEL 24

La Mesa Programming Schedule

COUNCIL MEETING

2nd Tuesday of each month . . . . . .4:00 pm
4th Tuesday of each month . . . . . .6:00 pm

RESIDENTIAL CRIME PREVENTION VIDEO

Monday . . . . . 7:00 – 7:15 pm
Wednesday . . . . . 7:00 – 7:15 pm
Sunday . . . . . 3:00 – 3:15 pm

MERCHANTS CRIME PREVENTION VIDEO

Monday . . . . . 7:15 – 7:30 pm
Wednesday . . . . . 7:15 – 7:30 pm
Sunday . . . . . 3:15 – 3:30 pm

BULLETIN BOARD

Monday . . . . . 7:00 – 7:30 am
7:30 – 8:00 pm
1st & 3rd Tuesday of each month . . . . . 7:00 – 8:00 pm
Wednesday . . . . . 7:00 – 7:30 am
7:30 – 8:00 pm
Thursday . . . . . 11:30 am – 12:00 pm
8:00 – 8:30 pm
Friday . . . . . 7:00 – 7:30 am
7:30 – 8:00 pm
Saturday . . . . . 12:00 – 1:00 pm
Sunday . . . . . 3:30 – 4:00 pm

DOING OUR PART TO SAVE H2O

Water is becoming an increasingly valuable commodity. The City of La Mesa continually strives to reduce water consumption and save tax dollars at the same time. The following are some of our significant water saving efforts:

- All parks and building renovations have been retrofit with Calsense® irrigation controllers. The controllers have a master valve sensor with a shut-off that eliminates water waste by shutting down the system in the event of a break. The last phase of the Calsense® project, currently underway, will allow the irrigation cycles to be modified automatically based on weather changes. Grants from the Helix Water District supplemented purchase of new irrigation controllers for conversion from older irrigation systems.
- Drought tolerant vegetation is being used for all new or replacement landscaping.
- Artificial turf was installed at the Junior Seau Sports Complex in 2003.
- Irrigation upgrades were completed in 2008 in medians on Baltimore Drive and Lake Murray Boulevard reducing water consumption.
- Utilizing the Empower Partnership with the City of Chula Vista, kitchen sink spray valves were exchanged for low-flow pre-rinse spray valves at local restaurants.
- The Environmental Sustainability Commission was formed to address a variety of issues including water conservation.
- The second annual Environmental Awareness Festival is being held on September 12th at Harry Griffen Park. The event will feature water conservation information and demonstrations. Representatives from the Helix Water District will be available with information and to answer questions.

Links to water conservation web sites are posted on the Environmental Awareness pages of the City website.

GOOD OUTDOOR LA MESA FUN

Free Youth Golf Clinic La Mesa Residents Only
Saturday, September 19 – 3:00 pm
Complete this coupon and return to:
Sun Valley Golf Club • 5080 Memorial Dr., La Mesa CA 91941

Name: _____

Address: _____

Phone: _____

SPACE IS LIMITED. REGISTER NOW!

2ND ANNUAL ENVIRONMENTAL AWARENESS FESTIVAL

September 12

10:00 am – 2:00 pm — Harry Griffen Park

9550 Milden Street, La Mesa

Find information and resources on water conservation, energy efficiency, recycling, composting, solar cooking, storm drain runoff, pest control, xeriscape gardening and more. Activities for all ages include: the County Office of Education's Splash Mobile, a series of speakers, and FREE give-aways throughout the day.

Questions? Contact Gregory Humora, Director of Public Works at 667.1146.

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91941

7:00 am to dark Mon – Fri • 6:30 am to dark Weekends

Adults $10 for 9 holes, $14 for 18 holes
Students* $6 for 9 holes, $10 for 18 holes
*(*includes college with valid student ID)*

Clinics, lessons, and special programs are available.
For details go to
www.sunvalleygolfclub.com
or call 466.6102

La Mesa Library Celebrates 1st Anniversary

On June 20 the La Mesa Library celebrated the first anniversary in its new facility adjacent to City Hall. During this first year the facility had more than 335,000 visits. That's 100,000 more than last year in the old building and represents about five visits for every La Mesa resident. Also during this first year more than 526,000 items were checked out of the La Mesa Library. This is the second highest circulation in the entire County library system with the highest being from a branch with three times the square footage of La Mesa's facility.

The library building, which also houses a Post Office retail facility, was constructed and is maintained by the City Of La Mesa. The library is a branch of the County's library system. In a presentation to the City Council on June 23 Joe Glidden, President of the Friends of La Mesa Library reported on the growing success of the La Mesa Library and cited a formula developed by the Friends of the San Francisco Library. "Using San Francisco's formula," Mr. Glidden reported, "the La Mesa Library returned $7 million in services to the City last fiscal year." These services included books, CDs, DVDs, video games, newspapers, magazines, computers with internet access, and programs for children, teens, and adults.

As you can see here, the new Police Station is beginning to take shape. Construction continues to progress according to schedule with an anticipated completion in fall 2010.

Downtown Village Streetscape Improvement Project

On June 29, 2009 the City held a second community workshop on the Downtown Village Streetscape Improvement Plan, a comprehensive design effort underway to upgrade and modernize public amenities in the Downtown Village and enhance the area's image and identity. The workshop, held at the La Mesa Community Center, was attended by over 60 people, including business owners, property owners, and residents.

The plan is being prepared by a team of consultants led by RBF Consulting, a planning and civil engineering firm. At the meeting, RBF presented a summary of the feedback received at the first workshop, held in April 2009 and provided attendees with a first look at the draft concept designs for the Village. Key elements of the concept plan include establishing multiple gateways to the Village through the use of lighting treatments, improving walkability with enhanced pedestrian crosswalks and wider sidewalks, new lighting and landscaping, and wiring for electricity and sound during special events. Participants engaged City staff and the consultant team in a lengthy and productive question and answer session.

Visit the City website for more information and updates on the Downtown Village Streetscape Improvement Project.

New Signs in the Downtown Village

The City of La Mesa will be replacing the signs in and around the Downtown Village this summer. New sign designs were created as part of La Mesa's effort to enhance the community image and will provide a fresh look for the Downtown Village. The new signs are being funded by a combination of state grants and revenue from the Downtown Parking Fund.

SIDEWALK CONSTRUCTION

A contract has been awarded to construct sidewalks along the southeast corner of Helix Charter High School where none currently exist. Thanks to a state funded Safe Routes to School grant, construction of curb, gutter, sidewalk, new paving, storm drain improvements, landscaping, and irrigation will be completed this summer.

This project compliments other work recently completed near the school. Other work includes: undergrounding of overhead utilities, replacing a storm drain on Lowell Street, and improving the student parking lot. Six different agencies are collaborating on and contributing resources to this project: Helix Charter High School, Grossmont Union High School District, San Diego Gas & Electric, AT&T, Cox Comunications, and the City of La Mesa.

Helix Charter High School completed improvements to the student parking lot along the southeast corner of the school property. The parking lot project included new accessible driveways and improved pedestrian safety in the area. The City's sidewalk project will provide an improved pedestrian linkage from the boundary of the school on Orien Avenue to the intersection of Lowell Street and Normal Avenue where new curb ramps will be installed.

Rides4Neighbors

DRIVERS WANTED

We need Volunteer Drivers for Rides-4Neighbors, a growing transportation program for La Mesa's older residents and residents with disabilities. Rides are provided by trained volunteers who use their own vehicles. Funding from a transportation grant allows the City to reimburse for mileage and provide supplemental liability insurance. Volunteers decide availability and choose the rides they wish to provide. There is no minimum time commitment or number of rides required to be a volunteer. As a volunteer you will be part of a rewarding and meaningful civic program.

For information visit Rides4Neighbors on the City website or call the Adult Enrichment Center at 464.0109.

NEW LEFT TURN SIGNAL AT LAKE MURRAY AND EL PASO

Federal grant money will provide funding for upgrading the traffic signal at the intersection of Lake Murray Boulevard and El Paso Street. The project will install a protected left turn arrow for the Lake Murray Boulevard approaches to the intersection. This means that vehicles turning left from Lake Murray onto El Paso will have a separate signal to help protect them from on-coming traffic.

The signal will be upgraded to include state-of-the-art pedestrian countdown features that show how many seconds remain to safely cross the street. An audible voice will tell pedestrians when it is safe to cross, and a vibrotactile feature will cause the push button to vibrate indicating that the button has been pushed. Since the intersection is near Murray Manor Elementary School, new high visibility crosswalks will be installed at the intersection.

These improvements provide greater safety by helping to reduce vehicle crashes and increasing the visibility of school children and other pedestriaans using the crosswalks. Additional work at the intersection includes updating the curb ramps to comply with the Americans with Disabilities Act (ADA).

COOL SPOTS IN & AROUND LA MESA

La Mesa residents who may be at risk from extreme heat can seek relief during the hot summer months at these La Mesa locations:

Christian Science Reading Room, 8370 La Mesa Blvd., 463.8470, M,W,Th,F 9-5; Tu 9-7; Sat 10-4

La Mesa Adult Enrichment Center, 8450 La Mesa Blvd., 464.0505, M-F 8-5

La Mesa library, 8074 Allison Ave., 469.2151, M-Th 9:30-8, F&S 9:30-5, Su 1-5

The County of San Diego establishes a network of Cool Zones at public and community facilities across the County. Most of these sites are open to the public during regular weekday hours. Cool Zone sites, mostly located in the hottest areas of the county, help older adults and others keep cool and save energy costs. For a complete list of San Diego County Cool Zones and other tips to stay cool go to www.CoolZones.org or contact the County's Aging & Independence Services Call Center at 800.510.2020 and press 6.

FREE Fitness Walks

ALL AGES AND LEVELS!

Get up, Get Out, and Get Moving!

- **FREE guided fitness walks led by certified fitness professionals**
- **Receive coaching and tips for maximizing your workout**
- **Each walk includes a coached warm-up and cool-down**
- **Courses are marked every quarter mile**
- **Summer walks run through September 30**

Join our program host, Fit-X, for the following walks:

The Stroll (novice) – 1 mile, flat - meets corner of La Mesa Blvd & Nebo Drive
Tuesdays begin @ 6:45 pm & Saturdays begin @ 8:00 am

The Stride (intermediate) – 5 miles, slight hills – meets at Jackson Park
Saturdays begin @ 8:00 am

The Challenge (advanced) – 3.5 miles, hills & steps – meets at Highwood Park
Wednesdays begin @ 6:45 pm & Saturdays begin @ 8:00 am

For more information call La Mesa Community Services at 667.1300 or Fit-X San Diego at 858.715.8611

www.fitxsandiego.com/servicesitelinks.asp and click on "City of La Mesa" logo

NOTE: *Hosted fitness walks will continue through December. Watch the website for schedule changes to begin in October.*

CELEBRATE

Foothills Art Association's 60th Anniversary

in conjunction with

The 20th Annual Wildlife in Art Show

November 3 – December 2
Juror: Joe Garcia

Reception
Saturday, November 7
4:30 to 6:30 pm
Awards at 5:30 pm

Foothills Fine Art Gallery
Porter Hall
4910 Memorial Drive
La Mesa, CA
Open Tuesday through Saturday
11:00 am to 4:00 pm

LA MESA UNVEILS NEW URBAN WALKING TRAILS

As we've all heard, walking is one of the best means of exercise for overall health. As part of the "ready, set, Live Well" community wellness initiative, La Mesa has unveiled three urban walking trails in the City providing you the opportunity to increase your physical activity and improve overall fitness.

The Stroll [blue] is a 1 mile beginner walk beginning near the Downtown Village.

The Stride [green] is a 5 mile intermediate walk in the northwest portion of the City.

The Challenge [red] is a 3.5 mile advance walk in the south portion of the City that includes hills and steps.

The Urban Walking Trails guide shows each route clearly marked with its own color. Sidewalk markers in corresponding colors every quarter mile along each trail help to keep you on the right course. Funding for purchase of the markers was provided by the La Mesa Collaborative and the markers were installed by Eagle Scout Candidate Cole Budvarson.

Look for the Urban Walking Trails guide at City Hall, the Library, the Community Center, the Adult Enrichment Center, and other locations throughout the City, or download a copy from the website. Production and printing of the guide was made possible by a grant from the Grossmont Healthcare District with design assistance from Helix High School Marketing Class.

The City is offering free hosted walks along these routes to help get you started on your fitness walking program.

See the detailed program information on page 5. The hosted walking program presented by Fit-X San Diego will continue through December and is made possible through a grant award to the City from the President's Council on Physical Fitness.

LA MESA WALKING TRAIL
CITY OF LA MESA
walk · run · live well
www.cityoflamesa.com/trails

How to Calculate YOUR Body Mass Index

Want to see if your weight is right for your height? Calculate your Body Mass Index (BMI) with these simple steps.

$$BMI = \left(\frac{\text{Weight in Pounds}}{(\text{Height in inches}) \times (\text{Height in inches})} \right) \times 703$$

or

$$BMI = \frac{\text{Weight in Kilograms}}{(\text{Height in Meters}) \times (\text{Height in Meters})}$$

Judge your personal BMI result against the following scale:

- A BMI of less than 18 means you are underweight.
- A BMI of less than 18.5 indicates you are thin for your height.
- A BMI between 18.6 and 24.9 indicates you are at a healthy weight.
- A BMI between 25 and 29.9 suggests you are overweight for your height.
- A BMI of 30 or greater indicates obesity. If you are obese, please consult your doctor about losing weight.

REMEMBER: This is just a scale. Muscle weighs more than fat, so an athletic person may be considered overweight or obese according to this index. It is also important to remember that weight is only one factor related to risk for disease. If you have questions or concerns about the appropriateness of your weight, you should discuss them with your healthcare provider. Source: The Centers for Disease Control and Prevention.

Are your calculations higher than you would like them to be? Do you want to find an exercise option close to home? Check out La Mesa's new Urban Walking Trails.

PERSONAL DISASTER PLAN

There are three common elements of disasters. They are usually unexpected, the emergency services network may be overwhelmed, and the lives and health of people may be in danger. It is important for everyone to make a plan around all of these commonalities.

Transportation, food and water supplies, utilities, and communication systems are some services that may be disrupted during an emergency situation. Consider each of these resources and think about the effect it would have on our lives if these services were compromised. As you do that, gather information to structure your own personal emergency plan and compile a list of supplies to assemble into an emergency supply kit for you and your family.

So how do you prepare for an emergency situation? Have a plan! Obviously you cannot prepare for every potential type of disaster but, depending upon your location, you will know which types of natural disasters will be the most likely. In the San Diego region wildfires are a concern every summer and fall. Assess issues that are pertinent to your family and develop a plan for action.

When putting together your emergency plan, ask the following questions:

1. **How will you get out of your home?**
2. **Who will be responsible for children, elderly relatives, and pets?**
3. **Where will you meet your family?**
4. **How will you communicate with each other if you are separated?**

Make sure you open discussion about emergency preparation with your family. Determine and communicate the plan. Conduct family drills. Determine a contact that lives out of the immediate area, and ask that person to be your lifeline in an emergency situation. Educate appropriate members of your family on how to shut off electricity, water, and gas. It is helpful if all members of your family know basic safety practices.

Personal emergency preparedness allows a measure of independence and confidence in the event of a disaster. Taking the time to develop a plan of action and to compile a few emergency items can mean the difference between panic or control until emergency service teams can reach you during a disaster. Having a plan could make the difference for your family.

The following websites offer more information or you can call the La Mesa Fire Department at 667.1355, or visit www.ready.gov or www.bt.cdc.gov

Coming this fall...

The La Mesa Commission on Aging will present a Community Forum

Emergency Planning, Preparedness, & Neighbor-to-Neighbor Support

Make a note to watch the City website for details as they become available.

TAKE PRECAUTIONS TO PREVENT BURNS

When we think of things in our homes that might cause burns, there are some obvious culprits: curling irons, stoves, radiators and tap water?

As surprising as it sounds, it's true. Each year thousands of emergency room visits are attributed to scalds – injuries caused by hot liquid or steam. Adults often experience mild scalds, perhaps when washing dishes, and quickly adjust the temperature without a second thought. But skin of older adults and children is much more sensitive and can sustain a burn in a matter of seconds.

In an effort to prevent scalds and other painful burns the La Mesa Fire Department and the National Fire Protection Association (NFPA) have teamed up for Fire Prevention Week to help our community "Stay Fire Smart! Don't Get Burned." The public safety campaign, which takes place October 4-10, focuses on burn prevention and treatment, as well as ways to keep your home and family safe from the leading causes of fire.

Simple acts such as setting your water heater's thermostat to no higher than 120 degrees Fahrenheit, and installing "anti-scald" devices on tub faucets and shower heads, can help protect you and your family from scalds. But these measures alone are not enough. Test your water at the faucet using a cooking thermometer to make sure it is no higher than 100 degrees Fahrenheit. Even if your water heater is set no higher than 120 degrees Fahrenheit, use your wrist, elbow, or the back of your hand as your main guide.

Vigilance is key in burn prevention. Always test the water before placing a child or yourself into the tub. The water should feel warm, not hot. Before you put your child in the tub, test the temperature with your wrist, elbow, or the back of your hand. If you're using a thermometer with a read-out, remember that bath water should be no more than 100 degrees.

Of course, tap water isn't the only liquid that can cause burn injuries. Other precautions you can take to keep your family safe from burns include:

- Keep hot foods and liquids away from tables and counter edges so they cannot be pulled or knocked over.
- Never hold a child in your arms while preparing hot food or drinking a hot beverage.
- Teach children that hot things hurt.
- Wear short or close-fitting sleeves when cooking.

All the vigilance in the world may not be sufficient to prevent every single scald or burn. That is why it is also important to know how to treat a burn. Run the burned area under cool water right away for 3-5 minutes and then cover with a clean, dry cloth. If the burn is bigger than your fist or if you have questions, get medical help.

In addition to these important burn prevention strategies, the La Mesa Fire Department is encouraging residents and their families to put their safety first by performing a home hazards inspection during Fire Prevention Week, October 4 - 10. You can download a checklist from www.firepreventionweek.org.

While Fire Prevention Week is an opportune time to practice fire safety in your home, we hope that you will keep these lessons with you year-round and "Stay Fire Smart!"

Please join La Mesa Fire Department as we celebrate Fire Prevention Week on October 10. The celebration will take place between 10:00 am and 2:00 pm at La Mesa Fire Station 11, 8034 Allison Avenue. For more information visit Fire Department pages on the City website or www.firepreventionweek.org.

FALL RECREATION & ENRICHMENT PROGRAMS

Falling into fitness is as easy as enrolling in classes offered through La Mesa Community Services.

Enrollment for fall classes begins August 1.

Browse our weekly youth class selections or our class offerings for adults.

Convenient enrollment is available online or you can access a printable version of our enrollment form to mail in.

Or drop off completed enrollment forms with payment at either the La Mesa Community Center, La Mesa Adult Enrichment Center, or La Mesa Municipal Pool.

Classes fill quickly. DON'T DELAY!

LA MESA MUNICIPAL POOL ANNUAL WINTER MAINTENANCE

The pool and spa will be closed Monday November 23, 2009 through Sunday, January 3, 2010

The La Mesa Environmental Sustainability Committee is pleased to announce the first…

"Our Planet, Our Home"

Environmental Literacy Contest

Students are invited to submit a poem or work of art in which they reflect upon the environment.

The contest is open to youth living or attending schools located within the boundaries of the La Mesa-Spring Valley or Grossmont Union High School Districts. Entrants need not submit work through their school; individual submissions are also accepted.

Sixteen of our entries will be honored for special recognition; two in poetry and two in art for each of four age categories:

Category I — Kindergarten-Grade 2

Category II — Grades 3-5

Category III — Grades 6-8

Category IV — Grades 9-12

Each of these sixteen honored entries will be recognized for achievement by the Mayor at the Sustain La Mesa Environmental Fair September 12, 2009 and displayed in a public exhibit or publication.

Submissions must be received by September 4.

Visit the City website for contest rules and entry form or contact Gregory Humora, Director of Public Works at 667.1146.

ADULT SOFTBALL

(Ages 18 and up)

Leagues forming later this year. Watch for more details in the November issue of the La Mesa FOCUS or leave your contact Information on the Sports Information Line 667.1172 option #6.

FALL WATER POLO

Do you like swimming and team sports? Come learn water polo! Classes Run September through mid-November. Fees are $33 per month for residents and $40 per months for non-residents.

Register at the pool office during office hours Monday through Friday 11:30 am - 6:00 pm.

Questions? Call the Municipal Pool information line at 667.1494.

BACK TO SCHOOL TRAFFIC CONCERNS

Attention: To all school faculty members, parents, and students, there are traffic safety laws that must be followed each and every morning and afternoon when numerous children are being dropped off or picked-up in front of schools. As a reminder, it is illegal for drivers to hold-up the flow of traffic by allowing passengers to enter or exit their vehicle while that vehicle is still in a traffic lane designated for the continued movement of traffic. Not only is this activity unsafe for each and every child involved, it is a violation of California Vehicle Code Section 22400(A). This California Vehicle Code section states that:

"No person shall drive slowly or stop upon a highway so as to impede or block the normal movement of traffic unless the stop is necessary for safe vehicle operation."

In order that we may continue to provide a safe environment for our children when approaching or exiting our schools, the La Mesa Police Department requests voluntary compliance from all parties walking or driving in school areas. Students should exit vehicles on the sidewalk side and not on the traffic side of the vehicle, and students should use crosswalks whenever possible.

To assist with securing and maintaining a safe environment for our schools, the La Mesa Police Department will place uniformed officers at school sites from time to time. Follow the law. Think "Safety First" and "Convenience" a distant second to keep kids safe every day.

BEWARE OF UNLICENSED CONTRACTORS

If you are thinking about remodeling your home or business, beware of unscrupulous contractors. In California, anyone who contracts to perform work that is valued at $500 or more in materials and labor must hold a valid license from the Contractors State License Board.

In order to protect yourself against significant financial and legal consequences in the event of injury or property damage, and to avoid substandard work, be sure you ask to see the contractor's pocket license and some form of identification before you hire. For additional information regarding hiring of a contractor, visit the Contractors State Licensed Board website at www.cslb.ca.gov/Consumers/HireAContractor

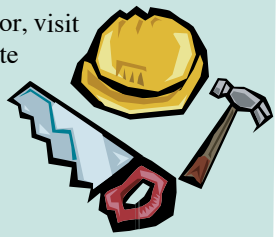

THE IMPORTANCE OF KEEPING YOUR DOG LEASHED

Summer is upon us, a time to enjoy our spacious parks for barbeques, kite flying, and a plethora of other summer activities. Summer is fun for our canine companions too. The nice weather allows more opportunities for them to enjoy the City of La Mesa with their human counterparts. Keep in mind; however, that the City of La Mesa does enforce a leash law throughout the City. Our canine friends must be on leash whenever they leave their property. It is illegal to have your dog off leash in any City park unless specifically designated. This law is important to keep you and your dog safe, as well as other people and dogs around you. A leash can protect your dog from running into traffic if spooked or chasing a squirrel, prevent a dog fight, or keep your dog away from something that is not good for them to eat. Per La Mesa Municipal Code 8.04.130 it is illegal for your dog to be running at large, so keeping your dog on leash also prevents you, the dog owner, from receiving a costly citation to appear in court. The fenced off-leash dog area at Harry Griffen Park does provide a space where your dog can run off leash and socialize with other dogs. While enjoying the summer weather make sure when you pack the Frisbees and barbeque supplies; don't forget your dog leash!

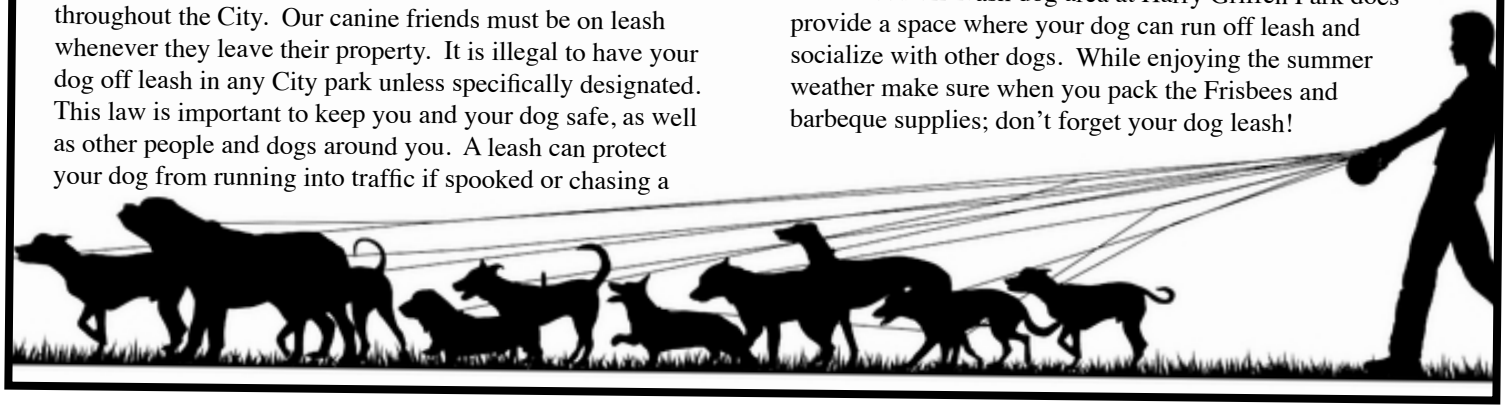

8TH ANNUAL

Kids Care Fest

Saturday, September 26 • 9:00 am – 2:00 pm

Briercrest Park and Grossmont Healthcare District
9001 Wakarusa Street, La Mesa

A FREE event for kids and parents!

- health information
- fun zone
- children's fingerprinting
- health screenings
- art activities
- meet fire & police

Event is presented in partnership with the City of La Mesa, Grossmont Healthcare District, and La Mesa Park & Recreation Foundation

For additional details go to
www.cityoflamesa.com, OR www.grossmonthealthcare.org
or call 825.5050

La Mesa is a...

2009 PLAYFUL CITY USA

On July 13 KaBOOM! named the City of La Mesa a 2009 Playful City USA. La Mesa is one of 93 communities in 33 states to receive this honor and one of only 32 to receive this designation for the second year in a row.

Designation as a Playful City USA community recognizes La Mesa's demonstrated creative commitment to bringing play into children's lives, most specifically in the areas of quantity, quality, and access. Quality relates to the number of usable, open playspaces. Quality involves subjective factors that encourage repeated use and make playspaces engaging, exciting, interesting, and fun. Access entails the ability to get to a playspace (roads, trails) and a lack of barriers to the playspace (cost, safety, traffic, locked gates, equity).

The City's partnership with the La Mesa Park and Recreation Foundation (LMP &RF) is just one of the creative ways our City is enhancing play. This past year the LMP&RF launched the It's Child's Play campaign to raise $1 million dollars to refurbish five La Mesa playgrounds over the next five years. Information about this project is available on the City's website. Join the City, LMP&RF, and Grossmont Healthcare District as we celebrate KaBoom!'s National Play Days Initiative on September 26 at Kids Care Fest.

CURB PAINTING IN LA MESA

It has come to the attention of City staff that a few unlicensed businesses are soliciting curb painting services in various La Mesa neighborhoods. The notice from the companies indicates they will paint your street number on the curb for a small fee or donation.

Curb Painters are regulated by the City of La Mesa and must abide by the requirements detailed in the Municipal Code. Individuals and businesses are required to have a business license issued by the City of La Mesa in order to sell services door-to-door within the City. Non-profit organizations are not exempt from this requirement.

The City regulates the number, size, and paint specifications. These curb painters must present their business and paint specifications to be approved by the City Council. There have been no approved plans submitted at this time.

For more information, or to inquire about a curb painter, please call the Finance Division at 667.1118 between the hours of 7:30 am and 5:30 pm. When leaving a message after hours, please include the company's name, time and location of the occurrence, and the product or service being offered. Alternately, you may submit the information electronically through our website under the Report a Problem link at www.cityoflamesa.com. If you are harassed or are concerned about a solicitor, please call the La Mesa Police Department at 667.1400.

THANK YOU FOR YOUR HELP IN LOCATING UNLICENSED BUSINESSES!

Teaming Up to Bring You Intergenerational Games!

INTERGENERATIONAL GAMES
EVERYONE'S A WINNER!

The City of La Mesa, in partnership with the East County Action Network and AARP, announce the Annual East County Intergenerational Games event in La Mesa! The games take place Friday, October 9 from 9:30 am – 12:30 pm at the La Mesa Middle School athletic fields. Intergenerational Games teams up active adults age 55+ with local students for a fun-filled half-day event. Participants complete a circuit of physical activity games and knowledge challenges. The focus is on non-competitive fun, activity, wellness, and healthy lifestyles.

Active adults age 55+ and La Mesa/Spring Valley students in grades 4 through 6 are encouraged to sign up for this fun FREE event! It's a great way to get the kids active during the fall school break. For information and registration call the La Mesa Community Center at 667.1300 or the Adult Enrichment Center at 464.0505.

Partners include: City Of La Mesa, East County Action Network (ECAN), AARP, La Mesa Commission on Aging, County of San Diego Aging & Independence Services, La Mesa-Spring Valley School District, La Mesa 55+ Senior Softball League, and many other community partners and business sponsors. For sponsorship opportunities call Judy Stern, Human Services Manager, at 667.1490.

PARK APPRECIATION DAY

Saturday, Oct 24
8:00 am to 12:00 noon

Individuals and families are invited to pick a La Mesa park on Saturday morning, October 24, sign up with an Adopt-a-Park volunteer (visible in a Park Appreciation Day t-shirt) and help spruce up your favorite neighborhood park. General clean up includes picking up trash, light raking, trimming, and weeding.

If you have a large group, we can help you find a project that all your members can do! Give us a call at 667.1300.

Bring your own gloves, rakes, or trowels. Free t-shirts for all participants. Signed waivers are required – download from www.cityoflamesa.com and bring with you to the park. Parents must accompany children under age 18 unless with a supervised group.

La Mesa's Parks are Our City's Jewels, Help Make Them Shine!

HALLOWEEN SAFETY

Fall is quickly approaching which means it is time for back to school and time to start thinking about those Halloween plans! In addition to the scary costumes, decorations, and treats, citizens need to take proper measures to ensure Halloween is safe for everyone in the neighborhood. Following is a list of precautions that should be utilized when making your Halloween plans:

First: Prepare your home for trick-or-treaters.

- Your home should be well-lit and appear that visitors are welcome.
- Make sure that all hazards are cleared from your yard and porch. This includes tools, debris, overgrown brush, and vehicles. If you choose to decorate your yard, make sure that a path to the front door is clearly defined and free of tripping hazards.
- Don't leave windows or doors open when you are not in the room. Busy streets and excitement are also an opportunity for a criminal to move around undetected. Secure your home as if you were leaving for the evening. Only open the front door for trick-or-treaters.
- Employ Neighborhood Watch volunteers to "haunt" the neighborhood. Extra sets of eyes and ears will help ensure this Halloween is a safe one for you and the trick-or-treaters roaming the neighborhood.

Next: Prepare children by dressing them appropriately and reviewing safety rules.

- Try makeup instead of masks; it's more comfortable and doesn't obstruct vision the way masks can.
- Check to ensure that costumes are flame-retardant so that trick-or-treaters are safe around jack-o-lanterns, candles, and other flames.
- Look for brightly colored costumes, attach reflector strips to costumes and bags, and remind trick-or-treaters to carry glow sticks and flashlights.
- If a costume involves any sort of fake weapon, make sure that it is made of a flexible material such as cardboard or foam. Or, avoid the whole problem of weapons by challenging your child to design a costume without one.
- Never allow your child to carry an air-soft gun or other toy weapon that appears real.
- Remind everyone to stay on sidewalks and obey traffic signals.
- Encourage children to stay in familiar neighborhoods and only approach homes that are well lit.
- Someone in the group should carry a cell phone to call home or 911 in case of emergency.
- Young children of any age should be accompanied by an adult.
- Parents should know where their children are going before they leave the house.
- Older kids should trick-or-treat in groups; kids walking around alone are never as safe as those in groups, especially at night. Younger kids should be accompanied by a parent or other trusted adult.
- Have a plan if children get separated from their friends or from you.
- Remind your children not to enter strange houses or cars.
- Make a rule that no candy is to be consumed until trick-or-treaters get home.

Once the festivities come to an end remember that the treats still need scrutiny before anyone eats them. It is unlikely the candy will have been tampered with, but it is always better to be safe than sorry. Be especially wary of anything that is not factory wrapped or treats that are no longer sealed.

If you or your children witness anything dangerous or suspicious, call the La Mesa Police Department non-emergency number at 667.1400. Please use 9-1-1 for emergencies only.

For more information on La Mesa Crime Prevention programs visit the Police Department pages on the City website or call 667.1445.

More information available regarding Halloween Safety can be found at the following websites:

www.childrensafetyzone.com

www.ncpc.org

AVOID THE CLOG BY ELIMINATING FOG

Did you know that improper disposal of fats, oils and grease (otherwise known as FOG) into the wastewater system is the leading cause of sewer backups? When put down the drain, FOG can accumulate in collection pipes causing backups into homes and businesses negatively impacting the environment. To comply with state and federal mandates the City of La Mesa has implemented a Fats, Oils, and Grease Control Program to prevent FOG from entering the City's sewer system.

FOG enters the sewer system from homes, as well as from poorly maintained grease traps and interceptors in restaurants and other businesses. Help protect the environment by doing your part to keep FOG out of the sewer system.

Here are a few tips:

- Never pour grease, cooking oil or fat down the sink. Instead pour into an empty jar or coffee can with a secure lid and allow liquid to solidify before throwing away.
- Wipe out greasy pots and pans with a paper towel before doing the dishes.
- Scrape grease and food scraps from cooking surfaces, plates, pots and pans and utensils into a can or the trash for disposal.

GET THE FAQS ABOUT THE CITY'S FOG PROGRAM

What is FOG?

FOG is short for fats, oils, and grease. FOG is created during food preparation and typically ends up in City sewer pipes.

Who has to comply with the City's new FOG requirements?

Restaurants and businesses that prepare food must obtain a FOG discharge permit and be inspected annually.

What do I have to do to comply with the City's FOG Program requirements?

- Complete the FOG Discharge Permit application form (available on-line) and submit to the City of La Mesa along with the appropriate permit and inspection fee.
- The City will schedule an annual inspection of your business to discuss program implementation requirements and enforcement.
- Implement appropriate kitchen best management practices (BMPs) to ensure compliance.
- Install and maintain an appropriate FOG control device and meet all record keeping and reporting requirements of the program.

Who should I call if I have questions or would like more information about the program?

Please contact the City of La Mesa at 667.1166 for information about FOG discharge permit and inspection requirements and for general questions about the City's FOG program.

Information for People Living in San Diego County from the Centers for Disease Control and Prevention – Swine Flu

WHAT IS SWINE FLU?

H1N1 influenza, also known as swine flu, is a new strain of flu that has not previously been seen in the United States. Swine flu has been seen in the United States before, but not this strain, which is caused by type A influenza viruses. Outbreaks of swine flu happen regularly in pigs. People do not normally get swine flu but human infections can and do happen.

Are humans infected with H1N1 flu in San Diego County?

In late March and early April 2009, cases of human infection with H1N1 flu were first reported in Southern California and near San Antonio, Texas. At this time, human cases of H1N1 flu infection have been reported in San Diego County. CDC and local and state health agencies are working together to investigate this situation.

Are there going to be more cases?

More cases are anticipated because health care providers have been put on alert and heightened surveillance to help identify patients with flu-like symptoms.

Is this flu virus contagious?

CDC has determined that this virus is contagious and is spreading from human to human.

We have an entire flu season every year; why is there so much concern about this flu?

Yes, we do have flu in our communities throughout the year with a definite increase in flu during the, "flu season." As a matter of fact, approximately 35,000 people die nationally in any given year from the seasonal flu. What is different is this flu strain is new; therefore, the current seasonal flu vaccine does not protect against it and people have not built up any immunity to it yet. Also, because it is new, our medical community really doesn't know how our bodies will physically respond to it.

What if I got my seasonal flu shot?

This H1N1 influenza virus currently circulating has never been seen before and the vaccine you received for your seasonal flu shot will not protect you. Also, any vaccinations received for swine flu previously (there was an outbreak in 1976) would not provide immunity as this virus is a different strain. There is no vaccine currently available to protect against swine flu.

What are the signs and symptoms of H1N1 flu in people?

The symptoms of H1N1 flu in people are similar to the symptoms of regular human flu and include fever, cough, sore throat, body aches, headache, chills, and fatigue. Some people have reported diarrhea and vomiting associated with swine flu. In the past, severe illness (pneumonia and respiratory failure) and deaths have been reported with swine flu infection in people. Like seasonal flu, H1N1 flu may cause a worsening of underlying chronic medical conditions.

How serious is H1N1 flu infection?

Like seasonal flu, H1N1 flu in humans can vary in severity from mild to severe. Between 2005 until January 2009, 12 human cases of swine flu were detected in the U.S. with no deaths occurring. However, swine flu infection can be serious. In September 1988, a previously healthy 32-year-old pregnant woman in Wisconsin was hospitalized for pneumonia after being infected with swine flu and died eight days later. A swine flu outbreak in Fort Dix, New Jersey occurred in 1976 that caused more than 200 cases with serious illness in several people and one death.

But I have heard that in the recent cases, people in the United States just get flu-like symptoms?

Yes, so far in the United States most people have had regular seasonal flu-like symptoms and recover. However, in Mexico numerous people were hospitalized and there have been deaths, so we are watching and preparing for that possibility here in the United States.

How do you catch swine flu?

Spread of swine flu can occur in two ways:

- Through contact with infected pigs or environments contaminated with swine flu viruses.
- Through contact with a person with swine flu. Human-to-human spread of swine flu has been documented and is thought to occur in the same way as seasonal flu. Influenza is thought to spread mainly person-to-person through coughing or sneezing of infected people.

Are there medicines to treat swine flu?

Yes. CDC recommends the use of oseltamivir or zanamivir for the treatment and/or prevention of infection with these swine influenza viruses. Antiviral drugs are prescription medicines (pills, liquid or an inhaler) that fight against the flu by keeping flu viruses from reproducing in your body. If you get sick, antiviral drugs can make your illness milder and make you feel better faster. They may also prevent serious flu complications. For treatment, antiviral drugs work best if started soon after getting sick (within two days of symptoms).

How long can an infected person spread H1N1 flu to others?

People with H1N1 influenza virus infection should be considered potentially contagious as long as they are symptomatic and possibly for up to seven days following illness onset. Children, especially younger children, might potentially be contagious for longer periods.

What can I do to protect myself from getting sick?

There is no vaccine available right now to protect against H1N1 flu. There are everyday actions that can help prevent the spread of germs that cause respiratory illnesses like influenza. Take these everyday steps to protect your health:

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners are also effective.
- Try to avoid close contact with sick people.
- If you get sick with influenza, CDC recommends that you stay home from work or school and limit contact with others to keep from infecting them. Avoid touching your eyes, nose or mouth. Germs spread this way.

Continued on 16

Continued from page 15

What is Swine Flu?

What should I do if I get sick?

If you live in San Diego County and become ill with influenza-like symptoms, including fever, body aches, runny nose, sore throat, nausea, or vomiting or diarrhea, you may want to contact your health care provider, particularly if you are worried about your symptoms. Your health care provider will determine whether influenza testing or treatment is needed.

If you are sick, you should stay home and avoid contact with other people as much as possible to keep from spreading your illness to others.

If you become ill and experience any of the following warning signs, seek emergency medical care.

In children emergency warning signs that need urgent medical attention include:

- Fast breathing or trouble breathing
- Bluish skin color
- Not drinking enough fluids
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Flu-like symptoms improve but then return with fever and worse cough
- Fever with a rash

In adults, emergency warning signs that need urgent medical attention include:

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting

Can I get swine influenza from eating or preparing pork?

No. Swine influenza viruses are not spread by food. You cannot get swine influenza from eating pork or pork products. Eating properly handled and cooked pork products is safe.

Is travel to Mexico restricted?

At this time, the CDC recommends that U.S. travelers avoid all nonessential travel to Mexico.

Is anything being done at the border?

There is increased surveillance at the border. Customs and Border Patrol agents are instructed to send travelers who appear ill with flu-like symptoms to a secondary screening. Any decision to restrict travel at the border lies with the federal government.

CDC H1N1 Flu Information
800.CDC.INFO.

This information was reprinted with permission from the County of San Diego Office of Media and Public Affairs. Visit the San Diego County website for local updates on the H1N1 flu virus.

More Headroom for La Mesa

PROGRESS UPDATE

Work continues on several of the City's six approved underground districts.

In early spring construction to put overhead cabling underground began along Parkway Drive and Orien Avenue.

At this time, all underground conduit and street improvements for the Parkway Drive district (Marengo Avenue to Lambda Lane) have been installed. The work to pull all cabling connecting residents and businesses being served within the district and removing existing poles and overhead cabling are all that remain. A timeline of one year is anticipated for closeout of the project.

For the Orien Avenue district, Lowell Street to Phoenix Drive, installation of new underground cabling is partially complete and work to pull remaining cables and remove old overhead poles and cables is anticipated completed by the end of Summer.

Finally, the Massachusetts Avenue and Waite Drive districts are one step closer to reality. All necessary easements have been acquired to allow for finalizing the project design. Work in this district is anticipated to begin in the fall.

Stay tuned, there's more work to come!

Thank you for your patience.
The end result will be well worth the wait.

COMMINGLED RECYCLING DO'S AND DON'TS

RECYCLING DO	RECYCLING DON'T
Scrap paper, junk mail and envelopes	*Disposable plates and cups*
Gift paper	*Paper napkins, towels, facial tissues*
Cardboard product packaging	*Soiled cardboard (pizza box bottoms)*
Magazines and newspapers	*Paper milk & juice cartons*
Telephone books	*Wax paper*
File folders	*Drinking glasses & mirrors*
Post-it notes	*Ceramics*
Shredded paper (in a paper bag)	*Plastics other than no. 1 & 2*
Cans and bottles	*Food wrappers*
Glass jars	*Plastic Bags**
Steel cans	*Styrofoam*
All no. 1 & 2 plastics	*Electronics***

It's important to keep our recycling stream clean and free of non-recyclable materials. Please remember the recycling basics and visit www.cityoflamesa.com for more recycling information and options.

** Clean plastic bags can be recycled at grocery stores and large retailers*
*** Electronics can be recycled at the EDCO Station buyback center*

For more recycling information see "Do the Right Thing" in this issue of the FOCUS.

WIPES CLOG PIPES

Did you know that not all, "flushable" wipes are really flushable? Despite that claim, many are not suitable for flushing and can snag in pipes and cause clogs in the sewer system.

While many personal care, diaper, and home cleaning wipes advertise that they are "flushable," testing shows this doesn't mean that they disappear. Two different "flushable" wipes were compared to regular toilet paper in a water test and only the toilet paper disintegrated quickly. After an hour of soaking, one wipe began to dissolve, but not completely until torn apart and the other did not degrade at all. When these wipes are flushed they can clog the sewer pipes, blocking the flow of waste water. Please exercise caution when disposing of anything in the toilet!

GREEN AUTOMOTIVE TIPS FOR THE HOME MECHANIC

The home mechanic can be a green mechanic. There are lots of ways to properly dispose of or recycle automotive materials and fluids. **Here's how:**

USED OIL

There are nine certified collection centers in La Mesa that take oil for recycling and will pay you 16¢ a gallon for your used oil.

OIL FILTERS

Five of the certified collection centers also accept oil filters for steel recycling.

TIRES

Tires can be recycled at four tire centers in La Mesa. Find them now at www.cityoflamesa.com.

ANTIFREEZE

Antifreeze can be disposed of through several businesses in the area as well as La Mesa's household hazardous waste program. Visit our website for more information or use the search feature at www.wastefreesd.org to find the nearest location.

MISCELLANEOUS PARTS

Automotive parts and bodies can be taken to various businesses near La Mesa for scrap or rebuilding and reuse. Find them at www.wastefreesd.org.

STAY UP-TO-DATE

ON IMPORTANT CITY NEWS, EVENTS, AND SERVICES.

Through the City's Notify Me website service you can subscribe to one or more categories of information and have email alerts sent to you whenever special announcements are made in your categories. Use the button at the left to sign up for this service. Enter your email address, select the type of email you would like to receive (html or text) and select each email list you wish to subscribe to. Finally, click the Subscribe/Manage button. You will receive a confirmation email for each category you select.

RECYCLING'S HERE TO STAY

The amount of debris being trucked to our landfills is steadily declining and our recycling numbers are growing. La Mesa has met and exceeded California's 50% diversion mandate by diverting at least half of what we've been discarding away from the landfills since 2005. These materials are diverted by recycling, reuse, and proper disposal of hazardous waste. Here are some diversion program highlights:

Commingled Recycling – All single-family, multi-family and commercial recycling is collected together in containers and sorted later by EDCO Disposal, the City's waste and recycling hauler. There is no need to separate recyclables from each other before collection.

Recycling in Public – All City facilities and parks, as well as the Downtown Village, have recycling containers for public use.

Mandatory Recycling – The majority of commercial properties, businesses, and multifamily complexes are now in compliance and are recycling.

Electronics Recycling – EDCO Station at 8184 Commercial Street has been certified as an electronics recycling facility. All electronics are accepted there at the recycling buyback center during operating hours (Monday-Saturday, 8:00 am to 4:00 pm). Fees may apply to certain devices. Call 619.466.3355 for more information.

Household Hazardous Waste – Materials that should not be taken to landfills such as paint, chemicals, mercury, fluorescent bulbs, medical sharps, and propane can be disposed of through the City's HHW facility. See "Do the Right Thing" in this issue of the FOCUS or visit our website at www.cityoflamesa.com/hhw for more information.

Construction and Demolition Debris – Since 2007 construction projects have been required to recycle 75% of leftover materials. This is the largest growing segment of the recycling stream.

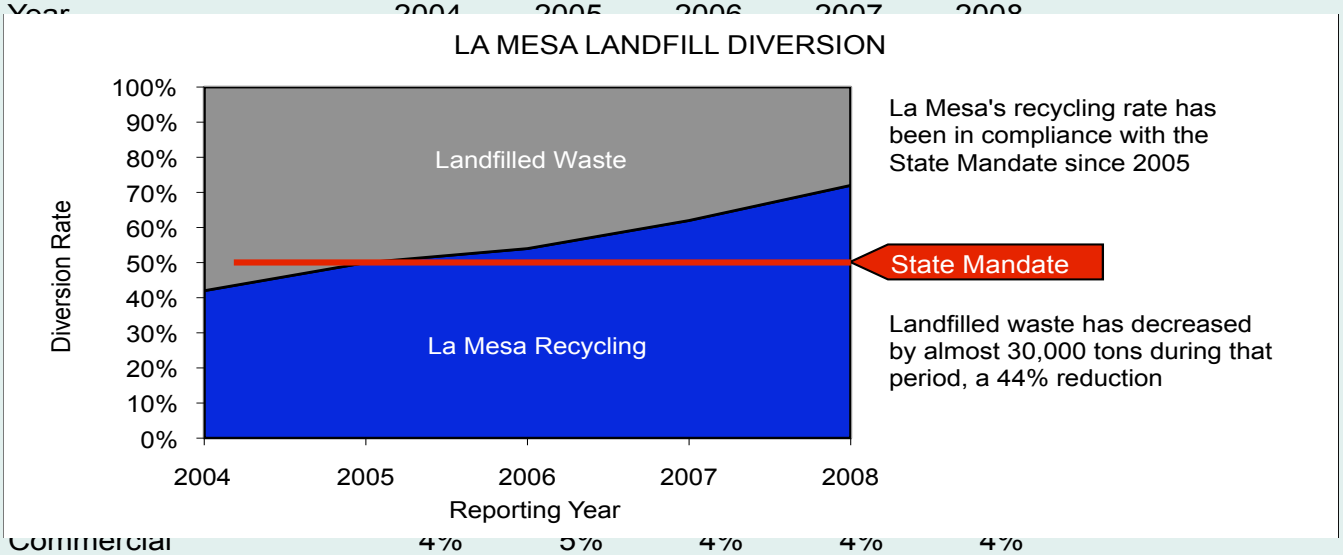

KEEP UP THE GOOD WORK LA MESA!

All of these efforts are making a difference as we aim to continue to improve and minimize our landfill needs.

What Can You Do For a Bee Problem?

In recent weeks, the La Mesa Police Department and the La Mesa Fire Department have received numerous calls of bees and bee hive sightings. The City recommends that residents call a local bee keeper or exterminator to take care of a bee problem on private property.

If there is a bee problem on City property, please call the Public Works Department at 667.1450. The La Mesa Police Department and La Mesa Fire Department will only respond to medical emergencies.

There is additional information about bees available from the County of San Diego.
Call the Bee Info Hotline at 800.200.2337 or visit the County's website at the following link:
http://www.co.san-diego.ca.us/cnty/cntydepts/landu.

DO THE RIGHT THING

Did you know that household hazardous waste (HHW) disposal is FREE for La Mesa residents for the following items?

Batteries
Fluorescent lights
Latex & oil based paints
Solvents & cleaners
Pesticides & garden products
Pool products
Propane
Any items labeled flammable, hazardous, toxic, or corrosive.

Electronics
TVs
Computer monitors & hardware
Cell phones & telephones
MP3 players
VCRs
Radios
Automotive batteries
Used oil & filters
Antifreeze

These items are considered hazardous and are not allowed to be placed in the trash because of their destructive effect on the environment. If you reside within the City limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program.

Collection events are available by appointment only by calling EDCO at 287.5696 x.4270 or emailing to lmhhw@edcodisposal.com.

Medical sharps (needles) can also be disposed of through this program. They must be properly secured in a sharps container. Call 667.1338 or visit our website at www.cityoflamesa.com/hhw for more information.

E-waste can be recycled at the EDCO Station buy back center during business hours without an appointment. The center is open Monday through Saturday from 8:00 am to 4:00 pm. A small fee may apply to some items.

To request additional information about the program, please contact the Department of Public Works Environmental Services Division at 667.1338 or by email at envirosvcs@ci.la-mesa.ca.us. For general HHW information or other disposal and recycling options, visit www.cityoflamesa.com/hhw.

UPCOMING DATES ARE:

August 29 October 10 November 21

Recycle at La Mesa's City Parks

Recycling in La Mesa is easier than ever! Thanks to funding from the California Department of Conservation's Division of Recycling we have over 50 recycling containers located at every City park.

Containers have covered lids, clearly visible signs, and they are located near existing unmarked trash cans. Materials collected are part of the City's commingled recycling program. This means that all recyclable materials go into one container- aluminum, plastic, glass, paper, and cardboard. We encourage all users of the parks to take advantage of this opportunity to take care of the environment!

2009 HISTORIC HOMES TOUR

Save the date and join in the fun!

La Mesa will hold its fourth annual Historic Home Tour on Saturday, November 7 from 10:00 am to 3:00 pm. Presented by the La Mesa Historical Society and co-sponsored by the Historic Preservation Commission of the City of La Mesa, the tour will feature homes that helped make La Mesa what it was and is today. The tour highlights five La Mesa historic homes and one historic church. All tour properties are carried in the City's Inventory of Historic Resources and three are designated landmarks.

Due to limited parking and vehicle access for most of the tour homes, free shuttle buses will operate from the Tour Center at the corner of Palm and Lemon Avenues in the downtown Village of La Mesa. Shuttle parking is available adjacent to the Tour Center and in City lots.

An art show co-sponsored by La Mesa's Foothills Art Association will display original art by local artists with works available for sale. Each site will feature artists displaying their works throughout the grounds. The Tour Center will also feature historical displays, antique automobiles, and sources of information for other special events in East County.

Tickets purchased the day of the event will be $15 for La Mesa Historical Society members and $18 for non-members. Pre-sale tickets at $12 for La Mesa Historical Society members and $15 for non-members are available by telephoning 465.1883 until November 2. Pre-sale tickets may be picked up at the event.

FASHION ROCKS THE EAST

Raising Funds for Pageant Scholarship

The Miss La Mesa and Miss Santee pageants will hold their inaugural fashion show fundraiser "Fashion Rocks the East" benefiting the Miss La Mesa and Miss Santee Scholarship Fund. The fashion show will be held Sunday, August 9 at the La Mesa Community Center beginning at 2:00 pm. The event features live music from Ramshackle and wardrobe provided by Prevue, Act II, Sara's Selections, and Sentimental Fashions just to name a few.

Tickets are $20 each and include a dessert reception and silent auction in addition to the show. The event is open to the public. Pre-ordering tickets is recommended. Tickets at the door are first come first served. To order tickets, donate, become a sponsor, or for information please contact Alexandra Kuty, Pageant Director, at 698.4163 or via email misslamesapageant@yahoo.com.

COUNCIL ACTIONS

April 14, 2009
Adopted a resolution amending Section 12.64.010 of the La Mesa Municipal Code establishing a 25 mph speed limit for La Mesa Boulevard from El Cajon Boulevard to University Avenue (E) and retaining the existing 35 mph speed limit from University Avenue (E) to Interstate 8.

Adopted ordinances adding a new Chapter 17.24 to the La Mesa Municipal Code for purposes of establishing regulations related to a fats, oils, and grease control program and amending Chapters 17.08 and 17.20 to establish regulations necessary for compliance with the State Water Resources Control Board requirements.

Approved the acceptance of the San Diego Police Foundation Canine Unit Expansion Grant for a narcotics detection canine, required equipment, and training.

Adopted a resolution authorizing the City to use American Recovery and Reinvestment Act Funds of 2009 in the amount of $991,000 for construction of the Downtown Village Streetscape Improvement Project.

April 28, 2009
Adopted resolutions authorizing applications for Transportation Development Act – Transnet program funds for the City's Bicycle Master Plan ($75,000); Spring Street freeway crossing pedestrian and bicycle facilities ($500,000); Spring Street and High Street intersection improvements ($138,000); and La Mesa Boulevard - El Cajon Boulevard intersection improvements ($465,000).

Approved General Plan Amendment GPA-08-01 and Zone Reclassification Z-08-01 for an amendment to the La Mesa General Plan to change the land use designation of property located north of El Cajon Boulevard on the east side of Thorne Drive from "Mixed Density Residential" (7-23 dwelling units per acre) to "Mixed Use Urban" (24-40 dwelling units per acre) land use. Also approved a corresponding zone reclassification from the R3 (multiple unit residential) zone to the R3-MU (multiple unit residential/mixed use overlay) zone.

Adopted the Fee Schedule for fiscal year 2009-2010.

May 12, 2009
Ratified the Design Review Board's approval of DRB-09-02 (Addy Investments) for a proposal to demolish a single family residence and construct two new detached dwellings with garages at 4851 Palm Avenue.

Ratified the Design Review Board's approval of DRB-09-06 (Toys R Us) for proposed exterior alterations to an existing retail store at 8790 Grossmont Boulevard.

Ratified the Design Review Board's approval of DRB-08-03 (Mansour) for a proposed two-story commercial/retail building on a vacant site addressed as 5980 Severin Drive.

May 26, 2009
Adopted a resolution authorizing reapplication for a Playful City USA designation in 2009 as part of the City's continuing Wellness Initiative.

Adopted a resolution authorizing an agreement with Walk San Diego for implementation of the La Mesa Kids Walk & Roll to School Safe Routes to School Grant Program.

Adopted a resolution approving the La Mesa Park and Recreation Foundation's recommendation to revamp Jackson Park Playground and name it "Drew Ford Family Playground."

Adopted a resolution accepting a Safe Routes to School grant and waiving formal bid procedures to award a contract for design of the Glen Street Sidewalk Project to PBS&J.

Adopted a resolution approving a proposed residential care facility for the elderly and a skilled nursing facility located at the northeast corner of State Route 125 and Murray Drive, adjacent to Briercrest Park; ratified the Design Review Board's approval of DRB-09-05; and adopted a resolution approving an agreement to ground lease property between the City and Briercrest Development, L.P.

Adopted a resolution awarding Bid No. 08-29 to Ideal Electric for the Aztec Park Lighting Project.

Approved the replacement of paper copies of City Council agenda packets with electronic packets.

June 9, 2009
Adopted a resolution accepting bid of Anton's Service, Inc. and awarding a contract for Bid 08-37, construction of Orien Avenue and Lowell Street sidewalk improvements.

Adopted a resolution authorizing Program Supplement Agreement No. 009-N for traffic signal improvements at the intersection of Lake Murray Boulevard and Baltimore Drive.

Adopted a resolution authorizing Program Supplement Agreement No. 010-N for the La Mesa Kids Walk and Roll to School Safe Routes to School non-infrastructure grant project.

Adopted an ordinance adding Chapter 2.85 to the La Mesa Municipal Code establishing the La Mesa Environmental Sustainability Commission.

June 23, 2009
Adopted the preliminary Biennium Budget for 2009-2011.

Adopted a resolution authorizing the filing of a grant application from the Energy Efficiency and Conservation Block Grant Program to convert city street lights to broad spectrum lighting technology.

Adopted a resolution authorizing an agreement with Island Fitness Express, DBA Fit-X San Diego, for the implementation of a fitness walking program utilizing the urban walking trails in La Mesa.

Adopted a resolution authorizing the City Attorney to cooperate with the League of California Cities, other cities, and counties in litigation challenging the constitutionality of any seizure by the State Government of the City's street maintenance funds.

Adopted a joint resolution of the City Council and the La Mesa Community Redevelopment Agency authorizing the City Attorney/Redevelopment Agency General Counsel to cooperate with the California Redevelopment Association, other cities and counties in litigation challenging the constitutionality of any seizure by the State Government of redevelopment funds.

Adopted a resolution approving rate adjustments for EDCO Disposal Corporation for the collection of refuse and recyclables for the two-year period beginning July 1, 2009.

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91941
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Mayor ..... Art Madrid
Vice Mayor ..... Mark Arapostathis
Councilmember ..... Ruth Sterling
Councilmember ..... Ernie Ewin
Councilmember ..... Dave Allan
City Manager ..... Sandra Kerl
Focus Editor ..... Käaren McElroy
Editorial Staff ..... Heather L. Moore
Ofelia Bareno

If you prefer to receive a printed version, please email name and address to cmoff@ci.la-mesa.ca.us or call 619.667.1105.

Want to know when the next issue of FOCUS is published?

Use the NOTIFY ME link to request automatic email notification so you won't miss the most up-to-date publication.

Watch for the next issue of the
La Mesa FOCUS
AVAILABLE NOVEMBER 1

City of La Mesa

MONTHLY MEETING SCHEDULE

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Third Monday - 5:30 PM

PARKING COMMISSION
First Thursday - 5:30 PM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM

The above meetings are held at City Hall
8130 Allison Avenue - La Mesa

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second Monday - 4:30 PM

The above meetings are held at the
Community Center Conference Room
4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM
(except July, August, December)

The above meeting is held at the
Adult Enrichment Center
8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS (Area code 619)

Adult Enrichment Center	464.0505
Animal Control	667.1436
Building Inspection	667.1176
Business Licenses	667.1118
Cable TV	262.1122
City Attorney	667.1128
City Clerk	667.1120
City Council	667.1106
City Hall	463.6611
City Manager	667.1105
Crime Prevention	667.1445
Dog Licenses	667.1117
Engineering	667.1166
Fire (Business)	667.1355
Human Resources	667.1175
Library	469.2151
Mayor	667.1100
Municipal Pool	466.4177
Park Permits	667.1300
Parking Citations	667.1117
Planning	667.1177
Police (Business)	667.1400
Public Works	667.1450
Recreation	667.1300
Recycling/Trash	287.7555
Rides4Neighbors	464.0109
Senior Taxi Scrip	667.1321
Sewer Charges	667.1126
Sidewalk Maint.	667.1450
Storm Water Hotline	667.1134
Streetlight Maint.	667.1450
Traffic Eng. Hotline	667.1144
Traffic Signal Maint.	667.1166
Zoning	667.1177

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • November 2009

COUNTY TELEVISION NETWORK (CTN) – CHANNEL 24

La Mesa Programming Schedule

COUNCIL MEETING

2nd Tuesday of each month . . . . . .4:00 pm
4th Tuesday of each month . . . . . .6:00 pm

RESIDENTIAL CRIME PREVENTION VIDEO

Monday . . . . . 7:00 – 7:15 pm
Wednesday . . . . . 7:00 – 7:15 pm
Sunday . . . . . 3:00 – 3:15 pm

MERCHANTS CRIME PREVENTION VIDEO

Monday . . . . . 7:15 – 7:30 pm
Wednesday . . . . . 7:15 – 7:30 pm
Sunday . . . . . 3:15 – 3:30 pm

BULLETIN BOARD

Monday . . . . . 7:00 – 7:30 am
7:30 – 8:00 pm
1st & 3rd Tuesday of each month . . . . . 7:00 – 8:00 pm
Wednesday . . . . . 7:00 – 7:30 am
7:30 – 8:00 pm
Thursday . . . . . 11:30 am – 12:00 pm
8:00 – 8:30 pm
Friday . . . . . 7:00 – 7:30 am
7:30 – 8:00 pm
Saturday . . . . . 12:00 – 1:00 pm
Sunday . . . . . 3:30 – 4:00 pm

La Mesa Joins El Cajon and Lemon Grove to Provide Cooperative Fire Services

In an historic endeavor, the cities of La Mesa, El Cajon and Lemon Grove will provide cooperative fire services through a Joint Exercise of Powers Agreement (JPA) which was approved by all three city councils and signed on October 15, 2009. The JPA will provide for the oversight of fire operations in all three agencies under one shared management structure. This will result in more efficient use of resources, better delivery of service to the public, and cost savings of over $500,000 annually.

(l to r) Fire Chiefs Dave Burk of La Mesa, Mike Scott of El Cajon, and Tim Laff of Lemon Grove

Continued on page 19

CITY RECEIVES PRESTIGIOUS HELEN PUTNAM AWARD

La Mesa earned a prestigious 2009 Helen Putnam Award for Excellence in the category of Health and Wellness Programs for its "ready, set... Live Well" community wellness initiative.

On September 17 at the annual League of California Cities Conference in San Jose; the City of La Mesa was presented the 2009 Helen Putnam Award for Excellence in the category of Health and Wellness Programs for "ready, set…..Live Well" a community wellness initiative.

Established in 1982, this program recognizes 10 outstanding cities that deliver the highest quality and level of service in the most effective manner possible. Helen Putnam was a dedicated parent, teacher, principal, mayor, and county supervisor who viewed meeting one's potential as the greatest measure of success. To her, excellence was defined as people doing their best. The League of California Cities recognized that Ms. Putnam epitomized the best definition of excellence in her years of public service and named this Award of Excellence in her honor.

Continued on page 15

Holiday Open House

Come join the La Mesa Adult Enrichment Center

"FAMILY OF FRIENDS"

Tuesday, December 15th

10:00 am – Noon
La Mesa Community Center
4975 Memorial Drive

RSVP 619.464.0505

This is a free event!

Entertainment

Holiday Sing-a-long with the Thursday Night Singers

Refreshments

Many thanks to our event sponsor:
Community Convalescent Hospital of La Mesa

New Year's Eve Party

Thursday, December 31, 2009

8:00 pm until Midnight

Live Dance Band

Catered sandwiches, salads, snacks, non-alcoholic beverages, and dessert

Party favors and noisemakers

FUN! FUN! FUN!

La Mesa Adult Enrichment Center
8450 La Mesa Blvd.

$22 per ticket

Call 619.464.0505 for ticket info

Tickets on sale late October. Space is limited. First come—first served.

Pay at the Adult Enrichment Center office or at the Friday Night Dance.

WINTER CALENDAR

City Hall is closed alternate Fridays and holidays as follows:

Wed, Nov 11	Veteran's day
Fri, Nov 13	
Thu, Nov 26 and Fri, Nov 27	Thanksgiving
Fri, Dec 11	
Thu, Dec 24 at noon	Christmas Eve
Fri, Dec 25	Christmas Day
Fri, Jan 1	New Year's Day
Fri, Jan 8	
Mon, Jan 18	Martin Luther King Jr. Day
Fri, Jan 22	

La Mesa Municipal Pool ANNUAL WINTER MAINTENANCE

The pool and spa will be closed for winter maintenance
Monday, November 23, 2009
through
Sunday, January 3, 2010

Join us when the pool reopens Monday, January 4, 2010!

LIFEGUARD TRAINING & WATER SAFETY INSTRUCTOR COURSES

Life guarding and WSI courses are being planned for the new year. Call 619.667.1494 to be placed on an interest list. Individuals on the interest list will be contacted with enrollment details when the courses are scheduled.

GOOD OUTDOOR LA MESA FUN

Free Youth Golf Clinic La Mesa Residents Only
Saturday, March 20 – 3:00 pm
Complete this coupon and return to:
Sun Valley Golf Club • 5080 Memorial Dr., La Mesa CA 91941

Name: _____

Address: _____

Phone: _____

SPACE IS LIMITED. REGISTER NOW!

ORIEN AVENUE WALKABILITY IMPROVEMENTS

New sidewalks have been constructed along the southeast corner of Helix Charter High School. Thanks to a state funded Safe Routes to School grant, construction of curb, gutter, sidewalk, new paving, storm drain improvements, landscaping, irrigation, and street lights have been added to improve walkability in this area.

This project provides an improved pedestrian linkage from the west boundary of the school on Orien Avenue to the intersection of Lowell Street and Normal Avenue. Filling this sidewalk gap enhances the safety aspect for children walking to La Mesa Dale Elementary School, La Mesa Middle School, Highwood Park, and the Teen Center by physically separating and increasing the distance between pedestrians and vehicular traffic.

The improvements on Orien Avenue compliment other work recently completed in the area. The other work includes: undergrounding of overhead utilities, replacing a storm drain on Lowell Street, and improving the high school's student parking lot. Grant funding for this project was awarded based on results of a study known as CX3 – Communities of Excellence in Nutrition, Physical Activity and Obesity Prevention that began in 2007. You can read more about CX3 in the May 2008 issue of the La Mesa FOCUS. Six different agencies collaborated on and contributed resources to this project: Helix Charter High School, Grossmont Union High School District, San Diego Gas & Electric, AT&T, Cox Comunications, and the City of La Mesa.

SPRING RECREATION AND ENRICHMENT PROGRAMS

Springing into fitness is as easy as enrolling in classes offered through La Mesa Community Services.

Enrollment for spring classes begins December 1.

Browse our weekly youth class selections or our class offerings for adults.

Convenient enrollment is available online or you can access a printable version of our enrollment form to mail in.

Or drop off completed enrollment forms with payment at either the La Mesa Community Center, La Mesa Adult Enrichment Center, or La Mesa Municipal Pool.

Classes fill quickly. DON'T DELAY!

It's not too late to enroll for Fall classes starting in November. Details are available on the City's website.

2009 HISTORIC HOMES TOUR

The La Mesa Historical Society and the Historic Preservation Commission of the City of La Mesa will present the fourth annual Historic Home Tour on Saturday, November 7 from 10:00 am to 3:00 pm. The tour features five homes and one church that helped make La Mesa what it was and is today. Three of the tour properties are designated landmarks and all are carried in the City's Inventory of Historic Resources.

Free shuttle buses will operate from the Tour Center at the corner of Palm and Lemon Avenues in the downtown Village of La Mesa. Shuttle parking is available adjacent to the Tour Center and in City lots.

Tickets purchased the day of the event will be $15 for La Mesa Historical Society members and $18 for non-members. Pre-sale tickets at $12 for La Mesa Historical Society members and $15 for non-members are available by telephoning 619.465.1883 until November 2. Pre-sale tickets may be picked up at the event.

SAVE THE DATE!
2010 PLAYER PARTICIPATION FORM

Quatro de Mayo Golf Classic

Steele Canyon Golf Course, 3199 Stonefield Drive, Jamul

7:30 am breakfast and registration
9:00 am shotgun start

Tuesday - May 4, 2010

Funds raised during this tournament will benefit

"It's Child's Play"

La Mesa Park & Recreation Foundation's drive to raise $1 million to provide accessible, age-appropriate, and fun playgrounds in La Mesa parks

Sign up by December 31, 2009 and receive an "early bird" discount!

- **GOLF FOURSOME - $1,000 DONATION:** $800 if you sign up by December 31, 2009. Includes: Breakfast ~ Lunch ~ Tournament Shirt ~ Sleeve of Golf Balls~ Goody Bag ~ Cocktail Reception & Award Ceremony ~ Play with a Pro!
- **HOLE SPONSOR- $1,500 DONATION:** $1250 if you sign up by December 31, 2009. Includes: 1 Foursome~ Sponsor representative at hole ~ Sponsor logo on hole sign ~ Corporate material or sample included in goody bags ~ Play with a Pro!

Information 619.667.1300 or parkfndn@ci.la-mesa.ca.us

CITY OF LA MESA

THE CITY OF LA MESA
HUMAN RELATIONS
ADVISORY COMMISSION PRESENTS

The 14th Annual MULTICULTURAL FESTIVAL

Sunday, January 17, 2010 • 3:30 pm
La Mesa Community Center
4975 Memorial Drive

Come join us for an afternoon of entertainment celebrating the rich cultural heritage of our great nation as we honor Dr. Martin Luther King, Jr.'s vision of a world where people are judged by the content of their character, not the color of their skin.

FREE ADMISSION!

PLEASE JOIN US FOR REFRESHMENTS AFTER THE PROGRAM
FOR MORE INFORMATION CALL 619.667.1120

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91941

7:00 am to Sunset
7 Days a Week

Adults $10 for 9 holes, $14 for 18 holes
Students* $7 for 9 holes, $10 for 18 holes
*(*includes college with valid student ID)*

Clinics, lessons, and special programs are available.
For details go to
www.sunvalleygolfclub.com
or call 466.6102

"ARJIS" CRIME MAPPING

The Automated Regional Justice Information System, or "ARJIS" is a great crime information resource for all San Diego County residents. One of the features you may want to check out is the crime mapping program, which you can access from the ARJIS website home page at www.arjis.org. It can also be reached through a link on the City of La Mesa's website.

The crime mapping feature can provide you with a picture of the crime activity in your neighborhood, the area where you work, where your children go to school, etc., and includes data for all of San Diego County. Once you have selected the crime mapping feature from the ARJIS home page you will go through a series of steps to define the area you want to check, how you want to search (such as by address, Zip code, etc.), what type of crime or crimes you want to see displayed, and the time frame that you would like to check. Once the map is displayed you can use other features of the program to get more detailed information on particular incidents.

The ARJIS crime mapping program is an easy way to check crime activity in the areas you are interested in and can be a valuable tool for you, your family, your Neighborhood Watch Group, or co-workers. We encourage you to try it out.

Holiday DUI checkpoints are made possible through a grant from the California Office of Traffic Safety.

HOLIDAY DUI ENFORCEMENT

During the upcoming holiday season the La Mesa Police Department will again focus enforcement efforts to detect and arrest suspected intoxicated drivers. Each year 30% to 40% of all traffic fatalities are alcohol related, totaling about 1,500 deaths in California each year.

As part of the enforcement efforts officers will conduct driving under the influence or DUI checkpoints at various locations throughout the City. The checkpoints are not only an enforcement tool but also serve as an educational opportunity for the community to inform drivers of the dangers of driving while under the influence of alcohol or drugs.

One important aspect of the checkpoints is to inform the public that a person does not have to be "drunk" to be guilty of driving under the influence of alcohol. A relatively small amount of alcohol will impair a person's driving abilities, even though they may feel unaffected. A person is legally in violation of the law with a blood/alcohol concentration level of .08%, potentially only two or three drinks an hour depending on body weight and other factors.

The La Mesa Police Department arrests more than 200 people each year for driving under the influence. There are significant costs associated with being arrested and convicted for driving under the influence of alcohol. In addition to attorney fees, fines average from $1,400 to $1,800, and driver's license suspension for at least six months; there is a mandatory two-day jail sentence, and car insurance rates will likely double or triple for up to five years.

The Police Department was recently awarded a grant from the California Office of Traffic Safety for $115,000 to specifically target suspected intoxicated drivers. A similar grant awarded last year provided funds for the Police Department to purchase a DUI trailer. This trailer allows for the storage of equipment, provides workspace for officers at the checkpoints, and provides a secure location to arrest, question, and process prisoners, thereby eliminating the need to relocate to the police station for processing prior to transporting them to jail.

In addition to the checkpoints, officers will be assigned to work special details where they specifically target suspected intoxicated drivers. All of the Police Department's DUI enforcement efforts this holiday season and throughout the coming year will work to educate the public and help make the streets safer in our community by apprehending impaired drivers before they can injure or kill someone.

HAPPY SAFE HOLIDAYS

While most people are spending their time during the holidays enjoying friends and family, thieves are on the prowl for unsuspecting victims. The holidays are the prime season for robberies, home burglaries, and vehicle burglaries. Be careful not to get complacent with your daily activities during the holidays. By following a few simple rules, you will be armed to reduce your chances of becoming a victim.

When you are out shopping, be aware of those around you. Con artists often take advantage of people's generosity in order to scam them out of their hard-earned cash. Keep an eye on anyone hovering around you or following too closely. Be extra careful not to get distracted. Any distraction can give a thief an open opportunity to steal your belongings.

Avoid carrying large amounts of cash and don't wear expensive jewelry. Take one credit card with you and leave the rest at home. If possible don't carry a purse or backpack. Put your credit card, cell phone, and identification in your front pocket to reduce the likelihood that someone will pickpocket you in the large holiday crowds. Should you find that your credit card has been lost or stolen, cancel the credit card immediately.

Be on the lookout for identity theft. With the excitement and stress of the holidays, it is easy to overlook fraudulent charges on your accounts. Check your accounts regularly. If there are charges you don't recognize follow up with your bank immediately. By keeping accurate records of all your holiday purchases and returns, it will be obvious if there is a new charge. Check your credit report after the holidays to ensure no new accounts have been opened in your name.

If you must shop alone, try to go during daylight hours. Never leave packages in your car. If you must carry packages with you, lock them in your trunk, where they are out of sight. Park in a well-lit parking lot and ask a security guard to accompany you to your car if it is dark outside or the lot is deserted. Don't talk on your cell phone or listen to your i-Pod® while walking to and from your car. Once you are in your car, leave the parking lot immediately. Try not to sit in your car and balance your checkbook or shuffle through receipts. Being distracted can make you a prime target for an opportunist.

If children accompany you on your shopping trips, make sure they know your cell phone number by heart. Also, make sure your children know to go to a security guard or store employee if they get separated from you.

Check that all doors and windows are locked when you leave your home. Set the alarm if you have one and leave lights on if you plan to be out past dark. Make sure gifts and cash are not visible from any window. If you will be gone for an extended period of time, have your neighbors watch your home for you. If they bring in your mail and newspapers everyday, it will not appear as if the house is empty. Put timers on both indoor and outdoor lights to make the house appear occupied.

For more information about preventing crime during the holidays, call the La Mesa Police Department Crime Prevention Unit at 619.667.1445. For additional valuable information; including a video that explains home security, vehicle security, and personal safety, visit www.cityoflamesa.com/CrimePreventionVideo.

ACTIVATE YOUR CHILD'S BRAIN POWER

The National Association of State Boards of Education has reported a significant relationship between physical activity and educational success.

Increasing your child's motivation, academic focus, and spirit can be a rewarding experience for the entire family. With cooler weather approaching, fall is the perfect time to set new goals. You already know the benefits of exercise for the adult body—it's not magic, but requires discipline, now how do you make it fun?

- Challenge your child to map out a new walking route each week.
- Set a time and day for the walk, and promise a prized activity treat for completing the walk.
- Make it an adventure! Discover a new neighborhood, and involve the whole family.
- Create exclusive time with each of your children by sharing a walk with each, one at a time. Limit the conversation to positive statements, compliment your child on a good grade, caring gesture, or accomplished task.

Help your child achieve a habit that will give him or her a jump start on healthy adulthood. Who knows, this may become a new family tradition.

COMMUNITY GROUPS TO RAISE FUNDS FOR FIELD REPAIRS

A recent third-party inspection of the artificial turf football field at the Junior Seau Sports Complex has revealed that the turf will need to be replaced in two years or less. Due to the high cost of field replacement and the current financial environment, we expect fundraising could take two years. To avoid closure of the field at the end of this season, $100,000 is needed to repair the field to a condition that will provide the additional two years of play while replacement funding is raised.

The current turf is an early version of artificial field surfacing that has reached the end of its anticipated lifespan. Other than two high school football fields with little availability for public use outside of high school sports, this is the only field designed specifically for youth football in our community and demand for field time is high. The field is an important component to the City's Community Services programs as well as to the physical education programs at Parkway Middle School. In addition to reducing the cost of maintenance and irrigation, artificial turf extends the available playing hours on the field. Since installation in 2003, the field has been scheduled seven days a week throughout the year by eight youth and adult sports leagues and five days a week during the school year by roughly 1,100 students at Parkway Middle School – over 20,600 hours of play. Constant use, coupled with the devastating effect of sun exposure, lack of rain, and decomposed granite tracked onto the field from surrounding walkways, has caused the field to degrade faster than the 10-year lifespan that was originally anticipated when the turf was installed.

Led by the La Mesa Athletic Council, whose membership includes the leagues that utilize the field, several groups are working together to raise funds by the end of this year. If successful, repairs can be accomplished in early 2010 to make the field ready for spring sports. Repairs will provide two years additional playing time while the significant capital necessary for replacement is raised. The newer generation of artificial field surfacing has improved protections against sun exposure and weathering, thus creating a longer field life.

Your support of these community based efforts will help keep this tremendous asset available to our community. Planned fundraising activities include a youth baseball/softball clinic November 23 - 25, and a soccer tournament for youth and adults to be scheduled in January. Individual leagues will also be hosting their own events to help the cause.

Tax deductible donations can be made payable to JSSC Field c/o La Mesa Park and Recreation Foundation, 4975 Memorial Drive, La Mesa, 91942, Tax ID #33-0856480.

SPRING 2010 ADULT SOFTBALL SEASON

(18 years and older)

New Team Registration: La Mesa Fire Station #12, 8844 Dallas St.
January 26, 2010 —5:30 to 6:30 pm

Adult Softball Voicemail 667-1172, #6
Team rosters and game rules will be issued at time of registration.

Fee: $525 for the season.
Umpire fees [not included in fee]
$15/game each team.

The entire fee must be paid at time of registration. No partial payments.

Payment options:
a) one check
b) all cash
c) one check and the remainder cash
d) credit card

A $25 service charge and postage will be required on all returned checks. Payees will have one day to correct the problem to guarantee a position.

A waiting list will be taken after reaching the maximum number of teams.

***Season:** 12 weeks beginning the week of February 15, 2010 (weather permitting)

Location: Junior Seau Sports Complex, Field #1, 9009 Park Plaza Drive, entrance to La Mesita Park.

****Leagues:** Tuesday – Coed
Thursday – Coed
Friday – Men

Game Times: Tuesday & Thursday 6:00 – 9:00 pm
Friday 6:00 – 10:00 pm

** Subject to change based on the number of teams*

***Minimum 4 teams required per night or league night subject to change or cancellation.*

PLAY BALL!

City of La Mesa Hosts a Casting Call for VOLUNTEER DRIVERS!

Become a part of La Mesa's award-winning community production~"Rides4Neighbors"

Rides4Neighbors is a volunteer-based transportation assistance program for older adults and adults with disabilities. Funding for the program comes from federal, state, and Grossmont Healthcare District grants. Rides are provided by volunteers, who use their own vehicles to help eligible riders in La Mesa and neighboring communities in need of a lift. Volunteers help riders get to their doctor, do their grocery shopping, meet other essential needs and, overall, live independently in the community!

"You're an answer to our prayers" was the comment received from a senior couple, both aged 84, who can no longer drive themselves to their medical appointments. Another 85 year-old La Mesa resident stated, "I can't brag about this service enough! Thank you so much for all your help."

Since the program began in December 2007, there have been 342 eligible riders enrolled in the program. Rides4Neighbors made 2,008 trips in its first year of operation. In the first six months of 2009 there have been 1,510 rides given by volunteer drivers, an average of 250 per month and a 50% increase from the previous year.

There are presently 20 screened, trained volunteer drivers who are capable of serving only 45-55 unduplicated riders each month. The more volunteer drivers we have, the better able we are to meet the growing need in our community.

There is no minimum time commitment or number of rides required to be a volunteer. As a volunteer, you decide your availability and choose the rides you wish to provide. Ride requests are posted on the program's scheduling website; drivers simply log on and select the rides that work with their schedule. Rides are scheduled Monday through Friday during regular business hours. Volunteer drivers are reimbursed for mileage at the current federal rate and are covered under a secondary liability and accident insurance.

As a volunteer, you can be a vital part of a rewarding and meaningful civic program. Community surveys consistently find that what residents like best about La Mesa is the neighborly, small town feel. Rides4Neighbors helps build that spirit of community and old-fashioned neighborliness. So please join us by opening your heart and car door to a rider in need of a lift!

For more information, call the Adult Enrichment Center at 619.464.0109, or visit www.cityoflamesa.com to download a volunteer application form.

La Mesa Kids Walk & Roll to School PROGRESS REPORT

In conjunction with WALKSanDiego, the City of La Mesa has received a four-year federal grant administered through Caltrans intended to increase the number of children who walk or bicycle to school and remove the barriers that currently prevent them from doing so. Those barriers include lack of infrastructure, unsafe infrastructure, and a lack of programs that promote walking and bicycling through education/encouragement programs aimed at children, parents, and the community. Eight schools in the La-Mesa Spring Valley School District will participate in the program in two waves with four schools beginning this fall. The remaining four schools will be incorporated into the project beginning in the 2010-2011 school year.

After meeting with La Mesa-Spring Valley School Board and Principals from the eight targeted schools, the Steering Committee decided Wave 1 schools will be: Lemon Avenue, Rolando, and Maryland Elementary Schools, and La Mesa Middle School. Parent and student surveys will be administered in these four schools after fall break.

The Steering Committee for the Project is comprised of parents, teachers, school administrators, city council members, City of La Mesa employees, and WALKSanDiego representatives. They are: Jenna Kirschenman & Thomas Herman, Live Well; Carol Lockwood, La Mesa resident; Craig Wood, La Mesa-Spring Valley School District; Greg Humora & Kathy Feilen, Public Works Department; Heather Lindquist & Ken Hinton, City of La Mesa Police Department; Jo Gilman, Lemon Avenue parent; Juan Antonio Ramirez, Ken Grimes, & Kristin Mueller, WalkSanDiego; Kathy Keehan, San Diego County Bicycle Coalition; Katie Judd, San Diego County Health & Human Services Agency; Mark Arapostathis, Vice-Mayor/Rolando Elementary School; Yvonne Garrett & Kim Shannon, City of La Mesa Community Services Department.

FALL INTO FITNESS

As the fall season approaches, and daylight hours decrease, our motivation to exercise may diminish. It often seems more appealing and relaxing to end the work day with the remote control and to ignore your determination to maintain fitness or meet that goal of losing extra pounds. Don't waste another day. Try walking to improve your mood, and alter the negative spiral that can result from inactivity.

- **Challenge yourself.** Enjoy the personal satisfaction of setting goals and motivating yourself to achieve.
- **Mark your calendar.** Take note of every workout session. Seeing it on the calendar helps with motivation.
- **Listen to music.** Great beats make it easier to keep your body moving. Take your music along or crank up the volume at home and dance around the house.
- **Reward yourself.** Place a dollar in a jar every time you work out. It's also a great way to save money for a special treat!
- **Make it a group thing.** Take a class, go to the gym, or join a walking club. Having someone else around provides great motivation and support.

If you enjoy the company of others and are energized by the sights and sounds of your community, the City of La Mesa offers:

- **"Walk and Talk,"** offered every Tuesday from 9:00-10:30. The first Tuesday of each month, walkers meet at Porter Hall (corner of Memorial Drive & University Ave.) Each week's walking sites are given at that time. You may call 619.667.1300 for further information.
- **La Mesa's Urban Walking Trails** are free walks designed for all ages and fitness levels. The trails showcase various parks and regions of La Mesa. Access the route map at www.cityoflamesa.com or call La Mesa Community Services 619.667.1300 for more information.
- **The La Mesa Walking Art Trail** features utility boxes painted by local artists along an easy walking route in the La Mesa Village. A brochure can be found at many businesses in the La Mesa Village or visit www.cityoflamesa.com.
- Pick up a **"Walk La Mesa"** brochure at any City office and you will find there are community walking groups that meet every day of the week. The brochure is also available for download at www.cityoflamesa.com.

Join others to revive your spirit and commitment to your goals, stay healthy and safe, and experience all that La Mesa has to offer.

LA MESA FLAG DAY PARADE 2010

"A Salute to Old Glory"

You can help create a wonderful, patriotic family event by supporting the La Mesa Flag Day Parade 2010 –"A Salute to Old Glory." Thousands of spectators will wave flags as the entries perform along the parade route through the La Mesa Village beginning at 10:00 am on Saturday, June 5. You may see youth groups, horse units, dance troupes, clown brigades, active and retired military, floats, bands, local heroes, and elected officials - this is Americana at its very best. The Flag Day Parade is organized by volunteers and supported financially by community individuals, organizations, and businesses.

Hosting the 2010 parade will cost $15,000. Thanks to the generosity of donor support for the 2009 parade, and prudent parade management, we have $2,100 as a balance forward, leaving a target amount of $12,900 to raise for 2010. We need to have $12,000 in the bank by January 2010 to justify beginning parade planning and production.

Your donation supports transportation costs for school marching bands, public address equipment for pre-parade school concerts and announcing parade participants, set up and tear down, safety, public restrooms, and printing. A sponsor form outlining the benefits of your participation is available for download on the City website. We are looking for corporate and business pledges, donations from La Mesa's many civic and service organizations, and contributions from individuals.

Other municipalities have had to scale back or cancel their parades, but with your support we can continue this La Mesa tradition. This parade is one of the things that make our City a special place. Please help us by joining our family of sponsoring partners and donors.

Questions? Contact the parade hotline at 619.667.1172 option 4 or download a donor form from the City website.

UPDATE: City of La Mesa's FOG Program

The City of La Mesa has recently begun implementation of a Fats, Oils, and Grease (otherwise known as FOG) Control Program. The goal of this program is to decrease the amount of FOG accumulation within the City's sewer system and is a positive step regarding the prevention of FOG related sewer issues.

Why is reducing FOG Important?
FOG accumulation in the sewer system can lead to blockages and backups which have potential to negatively impact the environment. In addition, FOG reduction results in decreased sewer maintenance costs and increased capacity both within private sewer laterals and City sewer mains.

How are the City's new FOG requirements being implemented?
Restaurants and businesses that prepare food are currently being enrolled and will receive a FOG discharge permit issued by the City. Businesses will then be annually inspected by the City and will also receive FOG Program education and enforcement.

Do your part to prevent FOG discharges

- Never pour grease, cooking oil or fat down the sink. Instead pour into an empty jar or coffee can with a secure lid and allow liquid to solidify before throwing away.
- Wipe out greasy pots and pans with a paper towel before doing the dishes.
- Scrape grease and food scraps from cooking surfaces, plates, pots and pans and utensils into a can or the trash for disposal.

FOG enters the sewer system from homes, as well as from poorly maintained grease traps and interceptors in restaurants and other businesses. Help protect the environment by doing your part to keep FOG out of the sewer system.

Who should I call if I have questions or would like more information about the program?
Please contact the City of La Mesa at 619.667.1340 for more information about FOG discharge permits and inspection requirements and for general questions about the City's FOG program.

ABANDONED SHOPPING CARTS AN UNSIGHTLY NUISANCE

Shopping carts come in handy for shoppers at local grocery stores and at the mall. We all use shopping carts, thus we all share responsibility in keeping shopping carts in their proper place. However, one glaring negative to the convenient shopping cart is they are frequently rolled off the property to which they belong. You may see abandoned shopping carts at a bus stop, an apartment complex parking lot, or at the end of a cul-de-sac. Customers should not remove carts from the business premises. In fact, in the city of La Mesa, it is illegal to remove a cart from the premises of a business.

Businesses should keep track of and retrieve abandoned carts. If you see a cart that has been abandoned please note the cart owner and the location. (Example: a Vons cart at the intersection of Maple and University Avenue). You should then call the store manager and notify them of the cart location. Following are the phone numbers of some local stores that provide shopping carts to customers:

Vons (Baltimore Drive & Lake Murray Blvd.)	**619.464.1099**
Vons (University Avenue & La Mesa Blvd.)	**619.464.1011**
Walmart (Grossmont Shopping Center)	**619.337.3655**
Target (Grossmont Shopping Ceanter)	**619.461.1960**
Costco (8125 Fletcher Parkway)	**619.697.9933**
Albertson's (8920 Fletcher Parkway)	**619.667.4343**
Ralphs (Jackson Drive & Grossmont Blvd.)	**619.469.2161**
99 Cents Only (Baltimore Dr. & El Cajon Blvd.)	**619.697.7599**
Henry's (Palm Avenue & Finley Avenue)	**619.460.7722**
CVS-Pharmacy (Grossmont Shopping Center)	**619.465.1011**
Petco (8501 Fletcher Parkway)	**619.337.0701**
Burlington Coat Factory (7938 El Cajon Blvd.)	**619.460.7624**

If shopping carts are not picked up in a reasonable period of time you can also call the California Shopping Cart Retrieval Corporation (CSCRC) at 800.252.4613. The City of La Mesa contracts with CSCRC to retrieve abandoned shopping carts. The CSCRC will typically pick up the cart(s) within 2-3 days. If you have any questions please call the City of La Mesa at 619.667.1177.

Abandoned carts can be an unsightly eyesore and hazardous along sidewalks and roadways.

PARK APPRECIATION DAY 2009

was held on Saturday, October 24th

Our thanks to all the volunteers who helped out at La Mesa parks

BEAUTIFUL JOB EVERYONE — Thank You!!

October 24 was the 2009 La Mesa Park Appreciation Day. If you participated at your favorite park, City staff would like to take this opportunity to thank you for all the hard work and to share what you accomplished. In addition to painting tables, trimming, and raking, 291 volunteers removed 95 yards of green material and 16 yards of trash from 12 City parks. City park sites are cleaner, spruced up, and ready for the change of season.

If you missed this year's event, you missed a wonderful opportunity to take a hands-on approach to improve your park facilities. This is a great event for groups and special projects can be assigned depending on the size of your group. Park Appreciation Day is an annual event, so plan ahead for next year on October 23, 2010.

Individuals or groups who are interested in helping to keep City parks green and in tip top condition can join our Adopt-a-Park program. Adopt-a-Park assigns one person or a group to a specific park and that person or group spruces up the park each weekend by picking up litter, emptying trash cans into the dumpster, and stocking the restrooms. Park adopters get their name on a sign posted at the park. For more information about the Adopt-a-Park program, or if you are interested in adopting a park, contact the City's Volunteer Coordinator Judy Stern at 619.667.1490 or the Department of Public Works at 619.667.1450.

SAVE-THE-DATE
Saturday October 23, 2010
The Next La Mesa Park Appreciation Day

Displays and presentations located throughout Harry Griffen Park demonstrated various ways to sustain our environment.

The Environmental Awareness Festival Says YES TO SUSTAINABILITY!

The 2nd Annual La Mesa Environmental Awareness Festival topped last year's successful event with hundreds of people in attendance from around the county. The event was presented by La Mesa's Environmental Sustainability Commission at Harry Griffen Park on Saturday, September 12.

Thirty-four organizations were present offering everything from giveaway items such as recycling stickers and reusable shopping bags to face painting and workshops on solar cooking and native trees. A drive-thru recycling zone was provided for e-waste, all plastics, glass, metal, cardboard and paper. A portion of the electricity for the event was generated by solar power. The event catered to all ages and included information and discussion on topics including water conservation, energy efficiency, recycling, composting, solar power, storm water pollution prevention, gardening and more.

Watch for announcements regarding the 2010 festival next summer.

CONTEST PARTICIPANTS GET SPECIAL RECOGNITION

Twenty-one outstanding entries of the first-ever "Our Planet Our Home" Environmental Literacy and Art Contest were recognized by the La Mesa City Council and Betty Waznis, San Diego County Library Assistant Director, at La Mesa's 2nd Annual Environmental Awareness Festival on September 12th. The festival took place at Harry Griffen Park in La Mesa and the recognized work was displayed on the stage where the winners were presented with certificates. The contest received 278 entries and was organized by the City's Environmental Sustainability Commission.

The contest was open to all youth from kindergarten to 12th grade residing within the boundaries of the La Mesa-Spring Valley and Grossmont High School Union School Districts. Recognition was given for art and poetry in four different grade categories. Award winning entries were displayed for a month in the La Mesa Community Library.

Fire Prevention Week Open House Draws Crowd

The new platform ladder truck replaces a 22 year-old truck

On Saturday, October 10 the La Mesa Fire Department hosted a Fire Prevention Week open house at Fire Station 11 from 10:00 am to 2:00 pm.

Approximately 400 people came to visit and department staff handed out approximately 100 plastic fire helmets. Kids also received pencils, sticker badges, coloring books, and fire safety materials.

Visitors were able to see the La Mesa Fire Department's newest addition – a Pierce 100 platform ladder truck. This truck replaces the 22 year-old truck and provides critical access to La Mesa's tallest buildings.

Additional highlights of the open house included: San Miguel fire safety trailer, rescue demonstrations, station tours, getting in and on apparatus.

Participating agencies included: Burn Institute and SDG&E

CALIFORNIA COASTAL CLEANUP DAY IN LA MESA

The California Coastal Cleanup Day was held on Saturday, September 19. The state-wide cleanup event included over 800 cleanup sites with more than 70,000 volunteers throughout the state removing over 1,000,000 pounds of debris from the shorelines, coast and inland areas. This year marks the fourth year the City of La Mesa has hosted two cleanup sites (1) Alvarado Channel and (2) University Channel. The 27 volunteers who participated in the cleanup event at these sites removed over 550 pounds of trash and debris from our local waterways. This was another successful community event helping to protect our environment and preserve our quality of life.

Volunteers cleaned debris from local waterways before it could reach the ocean during the 2009 California Coastal Cleanup Day.

LA MESA LIBRARY
a great community resource!

Check out the new books, movies, video games, and books on tape free with a library card! Access Internet computers with a library card or bring your own notebook computer for Wi Fi. There are story times for children as well as programs for teens and adults.

Thanks to our many Friends of the La Mesa Library, the Library Bookstore has been a great success during its first year in the new building. Is it our new location just off the lobby entrance? Or our new hours from 1:00 – 4:00 pm daily? Or could it be our supply of quality used books that keeps our customers coming back for more? Bookstore sales are reinvested into activities and collections at the La Mesa Branch Library and have helped to expand the Readers, Viewers, Listeners, and Gamers Express programs for La Mesa Library users. You can volunteer to become a Friend of the La Mesa Library. Volunteers with a background in literature, sales, marketing, accounting, or public relations are especially needed. Stop by the bookstore or call Joe Glidden at 619.460.6668 for information.

You can check for upcoming events, and browse library holdings, at the San Diego County Library website, www.sdcl.org. The La Mesa Branch Library is open seven days a week. Hope to see you soon in the new library, next to City Hall, at 8074 Allison Avenue. For additional information call the library at 619.469.2151.

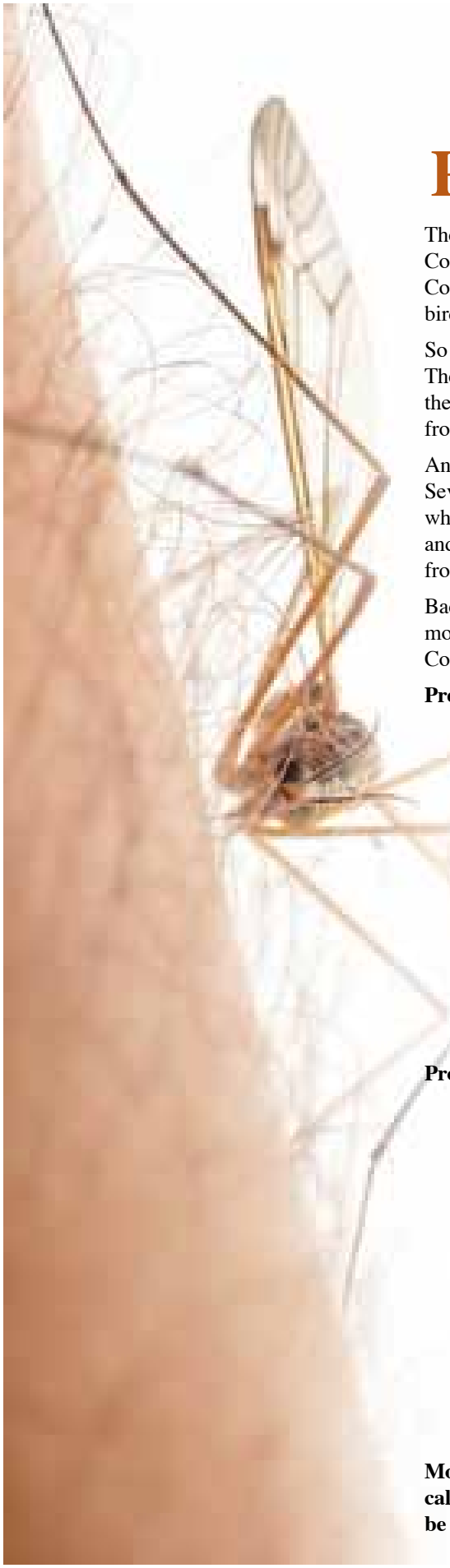

STOP THE SPREAD OF WEST NILE VIRUS:

Prevent, Protect and Report

There has been a lot of buzz about West Nile Virus (WNV) in the last few years. The County of San Diego Vector Control Program reports the virus has been present in the County since 2003. Last year, there were 35 reported human cases and 563 positive dead birds; thankfully, there were no human fatalities.

So far this year Vector Control has detected 32 dead birds that tested positive for the virus. There have also been two human cases; however, they were not locally acquired. Although there are fewer cases this year, Vector Control encourages the public to protect themselves from the virus.

Anyone can get WNV. Infected female mosquitoes transmit the virus when they bite. Severe West Nile disease, such as meningitis or encephalitis, affects less than 1% of people who become infected. West Nile fever (fever, headache, body aches, occasional skin rash, and swollen lymph glands) develops in about 20% of cases. WNV is NOT transmitted from person to person.

Backyard mosquito breeding is a major source of the mosquito problem. To help reduce the mosquito population, remove standing water from your property every week. The Vector Control Program asks you to "Prevent, Protect, and Report" to help fight WNV.

Prevent: Mosquitoes thrive in warm weather. Females lay their eggs in as little as a ½ inch of water. Eggs hatch into flying, biting adults in about one week. Even the smallest items can hold water. Remove, drain, clean, or drill holes into anything that can hold water for more than three days, such as buckets, clogged rain gutters, old tires, plant saucers, pots, coffee cans, pet bowls, and children's toys. Make sure that window and door screens are in good repair to keep mosquitoes outside.

Mosquito-eating fish can be used to control mosquitoes in ornamental ponds or neglected swimming pools. These fish eat mosquito larvae before they turn into biting adults. They are available free of charge from the San Diego County Vector Control Program. Call or visit the County website at http://www.sdcounty.ca.gov/deh/pests/mosquitofishlocations.html for information on how to request the fish.

Protect: Avoid going outdoors at dawn and dusk when mosquitoes are most active. When you do go outdoors, wear long pants and long-sleeved, light-colored shirts. The light color will help you see mosquitoes when they land on you, and the clothing makes it harder for them to bite you.

It is also very important to use insect repellent when going outdoors. Make sure that the repellent contains one of the following EPA registered, CDC recommended ingredients: DEET, Picaridin, Oil of Lemon Eucalyptus, or IR 3535. Read the product label before applying and follow instructions carefully. Unapproved repellents may not be effective.

Report: Over watering, leaky irrigation systems, clogged storm drains, and neglected swimming pools all provide mosquitoes a place to breed. If you find mosquito breeding sources or neglected swimming pools in your community please report them to the Vector Control Program.

More information about West Nile virus or other vector-borne diseases is available by calling 888.551.INFO (4636), or visit www.SDFightTheBite.com. Standing water can be reported at 858.694.2888 or 888.551.4636

Save Money by Preventing Over Irrigation

Could you be that neighbor that is over-watering their yard? With our clay soils, it doesn't take much moisture on the ground before water starts running off your property. Over irrigation can mobilize pollutants such as pesticides, fertilizers, and pet waste prior to reaching the storm drain system and eventually the creeks and channels within our City. Preventing these pollutants from making their way into the storm drain system ultimately improves our quality of life. Following are tips to help you eliminate pollutants from entering our creeks:

- Design your irrigation to meet site-specific conditions and prevent over-watering.
- Application rate should not exceed the soil's ability to absorb water.
- Irrigation system should be designed with control devices, sensors, or shut-off switches to address malfunctions.
- Place or group plants with similar water needs within the same area.
- Do not irrigate non-planted areas.
- Regularly inspect your irrigation system for potential problems.
- Consider drip irrigation to save water and prevent over-irrigation and runoff.
- Adjust irrigation rates according to seasons and weather conditions.
- Irrigate in the early morning because it is the most efficient time to water plants with minimal evaporation.
- Refrain from irrigation during hot windy periods of the day.

You may not be aware that Helix Water District has several programs to help single-family homeowners conserve water outdoors. Residents are eligible to apply for a high efficiency clothes washer rebate worth up to $100 or a smart controller rebate worth up to $200. For more information, call 619.466.0585 or visit www.hwd.com/conserv or e-mail conserve@helixwater.org.

Please share the above information with your family, friends, and neighbors. For more information you may contact the City's Storm Water Hotline 619.667.1134.

HELEN PUTNAM AWARD

continued from page 1

Students at La Mesa Dale Elementary learn how to prepare healthy snacks.

The award winning "ready, set…..Live Well" initiative is a partnership endeavor that has evolved from the La Mesa Community Wellness Program. This model program, adopted by the La Mesa City Council in July 2006, is now a growing network of community partners whose shared vision is to create opportunities that promote physical activity and good nutrition, and provide encouragement and incentive for community members to embrace habits that lead to lifelong health and wellness.

The work accomplished by the City's partnership efforts with the La Mesa-Spring Valley School District (LMSVSD) positioned the City to receive a grant from The California Endowment to pursue establishment of joint policies and programs to promote health and wellness in the community and "ready, set…..Live Well" was born. The Live Well policy team met during the first quarter of 2009 to establish policy guidelines for future programs and projects. Following the work of the policy team, tactical teams were established to draft a strategic plan to encompass a variety of subject areas devoted to community health and wellness. The City Council approved the draft strategic plan on September 22. The plan now heads to the LMSVSD board for its endorsement. Specific elements within the plan that have begun are funded through grants already received. Additional grant and private funding sources are being sought for other programs outlined in the strategic plan.

La Mesa is one of only two cities in San Diego County to receive a 2009 Helen Putnam Award for Excellence. The City of Chula Vista also received the award in the category of Internal Administration. The City of La Mesa is honored to be the recipient of this prestigious award for the second time. In 2006 La Mesa received the award under the category of City-Business Relationships for The PARKS Project, a partnership endeavor between the City, local businesses, non-profits, and the LMSVSD that resulted in construction of the Junior Seau Sports Complex at Parkway Middle School and renovation of Briercrest Park adjacent to the Grossmont Healthcare District building.

WALK LA MESA

Just for the fun of it!

Did you know there are organized walks nearby every day of the week? For a list of options visit Walk La Mesa under Quick Links – Live Well. You may also pick up a flyer at La Mesa City Hall or the La Mesa Community Center. Call 619.667.1300 for more information.

La Mesa...it's made for walking.

City of La Mesa Answers Your Most Frequently Asked Questions

Lists of frequently asked questions can be found on individual Department pages throughout the City website. Below you will find some of the most common inquiries received in the Community Development Department.

Do I need a building permit?
Permits are required for, but not necessarily limited to, residential and business additions, alterations, patio covers, decks, garden and retaining walls, swimming pools, spas, air conditioners, all electrical and plumbing installations including sprinklers, water heaters and gas lines. If you are considering an alteration to an existing building, or a new construction project, please contact the Building Division at 619.667.1176. For additional information please see the Building Division page.

How do I file a zoning code complaint?
To report a zoning code violation in your neighborhood please submit the Zoning Complaint Form [PDF] to the address below or complete the online form at Request Tracker. Zoning Complaints may be submitted in person to:

Code Compliance Officer
Planning Department
8130 Allison Avenue
La Mesa, CA 91941

Does the city have any affordable housing projects or programs?
Please see the City of La Mesa Housing Programs page for more information.

Also see the County of San Diego website here and here for more information.

HELP WANTED

HELP WANTED: Very nice 95-year old lady who can no longer use her car needs a driver for trips to the grocery store, medical appointments, the bank, and the beauty salon. I may need a ride once or twice a week, and my appointments might take an hour or so. ***If you can help me, please call!***

Attention Drivers!

The City of La Mesa Rides4Neighbors Program needs your help for riders like the lady who "placed" the ad above. We have many other riders who need drivers!

- We are seeking adult volunteer drivers with excellent driving records who are willing to use their personal vehicles to provide a ride to a neighbor in need.
- Volunteers complete an application, provide a copy of a valid Drivers' License and insurance certificate, authorize the City to make a DMV records check, complete a Livescan background check, and complete orientation and training.
- Volunteer drivers are reimbursed for mileage and receive secondary liability insurance.
- As a volunteer, you decide your availability and choose the rides you wish to provide. There is no minimum time commitment or number of rides required to be a volunteer.

Please call 619-464-0109 for information on becoming a Rides4Neighbors volunteer!

We need you!

EXCITING VOLUNTEER OPPORTUNITIES!

Are you interested in becoming a volunteer with the City of La Mesa? Check out our volunteer opportunities below or download a Volunteer Application from www.cityoflamesa.com.

Volunteers play an important role in the enhancement and expansion of services to City residents. You will not only provide a valuable service for the community, but also enjoy flexible scheduling for most assignments, develop new skills, and meet new friends.

Rides4Neighbors We need Volunteer Drivers for Rides4Neighbors, a transportation program for La Mesa's older residents and residents with disabilities. Rides are provided by trained volunteers, who use their own vehicles. We reimburse for mileage and provide supplemental liability insurance through this grant-funded program. Volunteers decide availability and choose the rides you wish to provide. There is no minimum time commitment or number of rides required to be a volunteer. As a volunteer, you will be part of a rewarding and meaningful civic program. For information call the Adult Enrichment Center at 619.464.0109.

Adopt-A-Block! You can help preserve and enhance the beauty and cleanliness of La Mesa by volunteering for Adopt-A-Block. If you are a regular walker in your neighborhood, whether alone, with a pet, or with a neighbor, you can join this dedicated team of volunteers. The City provides a program vest, bags, and a pick-up tool. All you need to do is commit to spending at least five hours a month for one year. You make your own hours! Sign up TODAY by calling 619.464.0505.

Friday Night Dance at La Mesa Adult Enrichment Center We need volunteers to help with front door cashiering and cash out. Minimum time commitment: once a month for a 3½ hour shift. Please pick up a Volunteer Application at the Adult Enrichment Center or call 619.464.0505 to have one mailed to you.

La Mesa Pet Therapy Needs You & Your Dog! Would you and your dog be willing to spend two hours each month visiting patients in La Mesa convalescent homes? Pick up an application at the Adult Enrichment Center or call 619.464.0505. If you have more questions about the program we can put you in touch with a current Pet Therapy volunteer.

Adopt the Moffatt Garden at the La Mesa Adult Enrichment Center! We are seeking a dedicated garden lover, or group of garden lovers, to help us with tender loving care and upkeep for our beautiful memorial garden. A weekly weeding, helping meet the needs of thirsty plants, and sprucing up would be just the right stuff needed to keep this special place a treasure for all to enjoy. Please stop in the Adult Enrichment Center office to pick up a Volunteer Application or call 619.464.0505.

DO THE RIGHT THING

Did you know that household hazardous waste (HHW) disposal is available free for La Mesa residents? The following items are considered hazardous and are not allowed to be placed in the trash because of their destructive effect on the environment. If you reside within the City limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program to dispose of these items:

Batteries
Fluorescent lights
Latex & oil based paints
Solvents & cleaners
Pesticides & garden products
Pool products
Propane

Any items labeled flammable, hazardous, toxic, or corrosive.
Electronics
TVs
Computer monitors & hardware
Cell phones & telephones

MP3 players
VCRs
Radios
Automotive batteries
Used oil & filters
Antifreeze
Medical Sharps

Collection events are available by appointment only. Call EDCO at 619.287.5696x4270 or email lmhhw@edcodisposal.com to schedule an appointment. The next event will be November 21.

ANNOUNCING THE 2010 EVENT SCHEDULE!

January 30	May 1	July 24	October 9
March 13	June 5	August 28	November 20

Medical sharps (needles) can also be disposed of through this program. They must be properly secured in a sharps container. Call 619.667.1338 or visit our website at www.cityoflamesa.com/hhw for more info.

E-waste can be recycled at the EDCO Station buy back center during business hours without an appointment. The center is open Monday through Saturday from 8:00 am to 4:00 pm. A small fee may apply to some items.

To request additional information about the program, please contact the Department of Public Works Environmental Services Division at 619.667.1338 or by email at envirosvcs@ci.la-mesa.ca.us. For general HHW information or other disposal and recycling options, visit www.cityoflamesa.com/hhw.

ENVIRONMENTAL RESOURCES

Not sure who to call or where to go for different environmental or disposal/recycling questions? *We've got you covered!*

The following is a list of the resources available to help you reduce your environmental impact and sustain La Mesa.

Appliances	EDCO	www.edcodisposal.com	619.287.7555*
Batteries	EDCO/La Mesa Library	www.wastefreesd.org	800.237.BLUE
Bulky item pickup	EDCO	www.edcodisposal.com	619.287.7555
Chemicals	La Mesa HHW Program**	www.cityoflamesa.com/hhw	619.287.5696x4270
Composting	La Mesa Enviro Svcs*	www.cityoflamesa.com/composting	800.237.BLUE
Construction & demo	SANCO Recourse Rec.*	www.edcodisposal.com	619.287.7555*
Electronics	EDCO*	www.edcodisposal.com	619.287.7555*
Energy Conservation	SDG&E	www.sdge.com	800.411.7343
Fluorescent bulbs	La Mesa HHW Program* **	www.cityoflamesa.com/hhw	619.287.5696x4270
Food recovery	I Love A Clean San Diego	www.wastefreesd.org	800.237.BLUE
Medical sharps	La Mesa HHW Program**	www.cityoflamesa.com/hhw	619.287.5696x4270
Motor Oil	Various Collection Centers	www.cityoflamesa.com/hhw	800.237.BLUE
Paint	La Mesa HHW Program**	www.cityoflamesa.com/hhw	619.287.5696x4270
Pharmaceuticals	La Mesa HHW Program**	www.cityoflamesa.com/hhw	619.287.5696x4270
Plastic bags	Retail/grocery stores	www.zerowaste.ca.gov/plasticbags	800.237.BLUE
Recycling	EDCO*	www.edcodisposal.com	619.287.7555*
Stormwater pollution	La Mesa pollution prevention	www.cityoflamesa.com	619.667.1134
Street cleanup	La Mesa Public Works	www.cityoflamesa.com	619.667.1450
Tires	Various Collection Centers	www.cityoflamesa.com/hhw	800.237.BLUE
Trash disposal	EDCO	www.edcodisposal.com	619.287.7555
Water Conservation	Helix Water District	www.hwd.com	619.466.0585

** Other resources are available. Find them now at www.wastefreesd.org or 800.237.BLUE.*
*** For La Mesa residents only. Businesses may contact Clean Harbors Environmental Resources at www.cleanharbors.com or 800.444.4244. Other resources are available at www.wastefreesd.org or 800.237.BLUE.*

Didn't find what you were looking for? Try our regional database at www.wastefreesd.org or by calling 800.237.BLUE.

La Mesa's Environmental Services Division can be reached at envirosvcs@ci.la-mesa.ca.us or 619.667.1338.

STAY UP-TO-DATE ON IMPORTANT CITY NEWS, EVENTS, AND SERVICES.

Through the City's Notify Me website service you can subscribe to one or more categories of information and have email alerts sent to you whenever special announcements are made in your categories. Use the button at the left to sign up for this service. Enter your email address, select the type of email you would like to receive (html or text) and select each email list you wish to subscribe to. Finally, click the Subscribe/Manage button. You will receive a confirmation email for each category you select.

Provide Cooperative Fire Services

continued from page 1

HOW DID WE GET TO THIS HISTORIC ACTION

On December 9, 2008 City Council designated a representative from that body to work with the City Manager and East County cities to explore creation of a joint powers agency for fire services. City managers and fire chiefs from El Cajon, La Mesa, Lemon Grove, and Santee met over the next several months to discuss the idea. Santee dropped out of the process in early 2009. The cities of La Mesa, El Cajon, and Lemon Grove continued discussing a cooperative effort to provide fire and emergency medical services.

Staff presented preliminary findings regarding the research conducted to the City Council at its March 17, 2009 meeting. At this meeting, the City Council authorized staff to work with the other cities to prepare a Cooperative Fire Services Study. The stated objective in preparing the study was to "provide a comprehensive analysis of cooperative fire services opportunities," expanding on the current level of cooperation between the three cities.

To complete the comprehensive analysis in a short period of time, work groups were established, relying on staff experts from all three cities. The work groups focused on nine functional areas and were given deadlines to answer four general questions:

1) How are we operating today?
2) What are the options/opportunities available through a cooperative effort?
3) What are the challenges and obstacles of a cooperative effort?
4) What are the options for implementation?

As the work groups addressed these questions, they were asked to focus on four guiding principles throughout the analysis process:

1) Maximize resources
2) Contain costs
3) Ensure a high level of fire and emergency medical services delivery
4) Maintain local control

The deliverables from each work group would constitute the Cooperative Fire Services Study. The major sections of the study included the following:

1) Governance
2) Administration
3) Labor
4) Fire Operations
5) EMS Operations
6) Fire Prevention
7) Emergency Preparedness
8) Fleet/Facilities/Equipment
9) Finance

The Governance work group tackled the assignments of recommending the type of relationship that would best serve the three

Continued on page 20

Officials from the Cities of La Mesa, Lemon Grove, and El Cajon sign a joint powers agreement for cooperative fire and emergency medical services

Provide Cooperative Fire Services

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cities, developing a cooperative agreement, and developing an implementation schedule.

A JPA, which provides the best opportunity for the three cities to pool resources, was recommended for several reasons. First, the agreement is simple and quick to implement. Second, the agreement provides a high degree of local control. Third, the agreement allows the cities to share senior management positions, resulting in efficiencies and allowances for specialization of senior staff. Fourth, the joint powers agreement establishes a foundation for the cities to evolve the cooperative relationship into that of a joint agency at some point.

JOINT POWERS AGREEMENT

The committee developed a draft JPA that was presented at the October 13 City Council meeting. The agreement creates a joint executive city manager committee (each with one equal vote), establishes the cost allocation formula for shared positions, specifies that shared staff will remain as employees of their respective cities, creates a personnel exchange and resources pool, defines the distribution of assets, includes provisions for adding new members (although the agreement includes a two year moratorium on adding members), and includes a process to withdraw from the agreement. The joint powers agreement also ensures that budget authority rests with each respective City Council and does not impose changes to existing labor agreements. At the October 13 City Council meeting, additional analysis regarding the joint powers agreement was provided.

The committee explored several formulas that could be used to calculate how the three agencies would share expenses. The committee decided to keep the formula simple. A city's costs are determined by two factors—its population and the number of incidents that occur in the jurisdiction. Each factor makes up 50 percent of the total contribution rate. El Cajon's share is 55%, La Mesa's share is 31%, and Lemon Grove's share is 14%.

The Administration work group began detailing the actual operation of the three separate fire departments under one shared management team. In addition to the opportunities and challenges identified by the work group, this section includes a proposed organizational chart and an implementation plan.

Under the proposed organization, the three fire departments would share a management team led by a single Fire Chief. Each city would appoint a Deputy Fire Chief. The three Deputies would act as the liaisons for their respective cities. As the liaison, the Deputy would attend staff meetings, City Council meetings, provide direct management for their respective departments, and be assigned a shared management duty such as the Deputy Chief over Operations, Training, or Administration.

The shared management structure would also include duty coverage personnel through Battalion Chiefs and Division Chiefs. A shared duty chief agreement was approved by City Council on June 23 and went into effect July 15. At this time, it is proposed that each city will retain its own fire prevention program; however, there will be opportunities for coordination and development of expertise.

The Labor work group, in addition to identifying opportunities, challenges, and a proposed implementation schedule, compared the compensation packages offered by each city.

Surprising to the work group, the city managers, and the fire chiefs was how close each city's compensation package compared to the others.

The task for the Fire Operations work group was critical to the feasibility of cooperative efforts between the three cities. If the level of service offered to residents and businesses in the cities declines because of the joint powers agreement, the rationale for a cooperative arrangement no longer exists. The Fire Operations work group focused on the opportunities and challenges that a shared management of fire services would present.

At the street level, the combined agency would have a daily staffing level of 41 personnel and would operate nine engine companies, two truck companies, one rescue, and three advanced life support ambulances, supervised by a 24-hour shift battalion chief. Even with automatic aid agreements, this potential level of service surpasses what is currently offered.

Each city currently provides paramedic engine companies. El Cajon also manages its own transport paramedic ambulance system. Patient paramedic transport services are provided to La Mesa and Lemon Grove by a private ambulance company, American Medical Response, under contract with the Grossmont Hospital District. Training and continuing education are provided to La Mesa and Lemon Grove through the Regional Cooperative Care Program. El Cajon provides this function in-house.

The Fire Prevention work group had one of the more complicated assignments. Each city operates with unique service Fire Prevention delivery systems. For example; the El Cajon system includes the Fire Marshal position assigned to the building division, while La Mesa and Lemon Grove have the Fire Marshal assigned as part of the Fire Department. El Cajon, La Mesa, and Lemon Grove all participate in the most advanced emergency preparedness programs that meet Federal, State, and County mandates. Each city manages their respective programs with either a combination of chief officers or with a sole chief officer.

The Fleet, Facilities, and Equipment work group identified several areas that will result in more efficient shops and better maintained vehicle fleets. The work group also predicted significant savings by purchasing standardized apparatus/equipment and through placing larger orders.

The last work group, the Finance group, played a vital role in the study, ensuring that compensation calculations were accurate, providing feedback regarding the Cost Allocation Plan, and helping the Governance and Administration work groups with recommendations on the implementation of cost sharing and methodologies for payments between the cities.

A copy of the entire Cooperative Fire Services Study is available on the City's website at www.cityoflamesa.com.

This is a momentous endeavor and is being watched closely by our communities and other surrounding agencies. La Mesa residents should be proud of their Council and staff on leading the way with its partners on the regionalization of fire and EMS services.

COUNCIL ACTIONS

July 14, 2009
Ratified the Design Review Board's approval of DRB-09-07 (Rogers) – for a detached workshop at 8407 Lemon Avenue.

Ratified the Design Review Board's approval of DRB-09-08 (Peterson) – for proposed exterior alterations to the Baltimore Plaza retail center located at 5575 Baltimore Drive and 5611 Lake Murray Boulevard.

Adopted a resolution of Intention to execute the Third Amendment to the Agreement for management and implementation of a Home Investment Partnerships Program Project with the County of San Diego to fund the La Mesa Down Payment and Closing Cost Assistance (DCCA) Loan Program and accept the Home allocation of $1,768,882.95.

Adopted a resolution approving the 2009-2010 Home administration contract for management and implementation of a Home Investment Partnerships Project.

Adopted resolutions pertaining to pension cost sharing changes for unrepresented employees.

Appointed members to fill vacancies on various City boards, commissions and committees.

July 28, 2009
Adopted a resolution approving the Sewer System Management Plan.

Adopted a resolution authorizing the execution of Program Supplement Agreement No. 011-N for project SRTSL-5207(030) for design and construction of sidewalk improvements on Glen Street; and a resolution approving delegation of authority for executing documents with the State of California Department of Transportation (CALTRANS).

Adopted a resolution approving a Paramedic Resource Pool Memorandum of Understanding.

Adopted a resolution approving the 2009-2010 Memorandum of Understanding between the City of La Mesa and the La Mesa Firemen's Association; a resolution rescinding Resolution 2009-104 implementing Government Code Section 20636(c)(4) for employer paid member contributions to the Public Employees' Retirement System (PERS); and a resolution authorizing implementation of Government Code Section 20636(c)(4) for employer paid member contributions to the Public Employees' Retirement System (PERS).

Adopted an ordinance implementing state law (SB 731) regarding the regulation of massage technicians.

Adopted an ordinance amending La Mesa Municipal Code Chapter 10.50 pertaining to the regulation of outdoor assemblages.

Adopted an ordinance amending La Mesa Municipal Code Chapter 7.20 to prohibit scavenging of garbage and refuse containers.

August 11, 2009
Adopted a resolution authorizing execution of an amendment to the Lease Agreement between the City of La Mesa and the United States Postal Service for the buildings located at 4800 Nebo Drive and 4860 Allison Avenue.

Adopted a resolution amending Section 12.64.010 of the La Mesa Municipal Code to reflect approved speed limits on six City streets.

Adopted a resolution awarding Bid No. 09-02 for the Orien Avenue Storm Drain Replacement Project to Rentex Construction Incorporated.

Adopted a resolution accepting the Bid of SC Valley Engineering, Inc. and awarding the contract for Bid No. 09-04 for the Johnson Drive Storm Drain and Sewer Improvements to SC Valley Engineering, Inc.

Adopted a resolution adopting the Biennial Budget for fiscal year 2009-2010 and fiscal year 2010-2011.

September 8, 2009
Ratified the Design Review Board's approval of DRB-09-11 (Chase Bank) – for proposed signage at 4791 Spring Street.

Adopted a resolution amending the Down Payment and Closing Cost Assistance (DCCA) Program to reduce the maximum level of assistance to $70,000 and the loan interest rate to 3.0 percent.

Adopted a resolution approving the 2009-2010 Memorandum of Understanding between the City of La Mesa and the La Mesa General Employees Unit affiliated with the Service Employees International Union Local 221; and a resolution rescinding resolution 2009-105 implementing Government Code Section 20636 (c) (4) for employer paid member contributions to the Public Employees' Retirement System (PERS).

Adopted a resolution authorizing the Chief of Police to enter into an Agreement with the San Diego Regional Computer Forensics Laboratory for evidence examination and analysis services.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a local DUI Enforcement and Awareness Program by approving the addition of the grant funds to the fiscal year 2009-2010 budget.

September 22, 2009
Adopted a resolution taking legislative action to resolve the labor contract impasse with the Police Officers' Association for fiscal year 2009-2010.

Adopted a resolution adopting by reference the San Diego Area Regional Standard Drawings, 2009 Edition, for the City of La Mesa.

Adopted a resolution adding Section 12.40.040 (38.5) to the La Mesa Municipal Code establishing a no parking zone on the southeasterly side of Fletcher Parkway.

Adopted a resolution authorizing the Chief of Police to enter into a Memorandum of Understanding with the San Diego Regional Command and Control Communication (3C's) Program.

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91942
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Mayor ..... Art Madrid
Vice Mayor ..... Mark Arapostathis
Councilmember ..... Ruth Sterling
Councilmember ..... Ernie Ewin
Councilmember ..... Dave Allan
City Manager ..... Sandra Kerl
Focus Editor ..... Käaren McElroy
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Ofelia Bareno

If you prefer to receive a printed version, please email name and address to cmoff@ci.la-mesa.ca.us or call 619.667.1105.

Want to know when the next issue of FOCUS is published?

Use the NOTIFY ME link to request automatic email notification so you won't miss the most up-to-date publication.

Watch for the next issue of the
La Mesa FOCUS
AVAILABLE FEBRUARY 1

City of La Mesa Monthy Meeting Schedule

Meetings are held at City Hall
8130 Allison Avenue - La Mesa
(unless indicated otherwise)

CITY COUNCIL
Second Tuesday - 4:00 PM
Fourth Tuesday - 6:00 PM

PLANNING COMMISSION
First and Third Wednesday - 7:00 PM

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 AM

DESIGN REVIEW BOARD
Every other Monday - 12:30 PM

ENVIRONMENTAL SUSTAINABILITY COMMISSION
Third Monday - 6:00 PM

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 PM

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 AM
(as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 PM

HUMAN RELATIONS ADVISORY COMMISSION
Second Monday - 5:30 PM

LA MESA COMMUNITY PARKING COMMISSION
First Thursday - 5:30 PM

TRAFFIC COMMISSION
First Wednesday - 9:00 AM

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 PM

YOUTH ADVISORY COMMISSION
Second & Fourth Monday - 4:15 PM
The above meetings are held at the Community Center Conference Room 4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 PM
(except July, Aug., Nov., & Dec.)
The above meeting is held at the Adult Enrichment Center 8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS (Area code 619)

Adult Enrichment Center	464.0505
Animal Control	667.1436
Building Inspection	667.1176
Business Licenses	667.1118
Cable TV	262.1122
City Attorney	667.1128
City Clerk	667.1120
City Council	667.1106
City Hall	463.6611
City Manager	667.1105
Crime Prevention	667.1445
Dog Licenses	667.1117
Engineering	667.1166
Fire (Business)	667.1355
Human Resources	667.1175
Library	469.2151
Mayor	667.1100
Municipal Pool	466.4177
Park Permits	667.1300
Parking Citations	667.1117
Planning	667.1177
Police (Business)	667.1400
Public Works	667.1450
Recreation	667.1300
Recycling/Trash	287.7555
Rides4Neighbors	464.0109
Senior Taxi Scrip	667.1321
Sewer Charges	667.1126
Sidewalk Maint.	667.1450
Storm Water Hotline	667.1134
Streetlight Maint.	667.1450
Traffic Eng. Hotline	667.1144
Traffic Signal Maint.	667.1166
Zoning	667.1177

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • February 2010

NEW CITY MANAGER

On January 12, 2010 City Council appointed David E. Witt to the position of City Manager. Dave has served as Interim City Manager since November 2009. Dave first joined the City in 1985 as Assistant Director of Planning. He became Director of Planning (now Community Development) in 1989 and was promoted to Assistant City Manager/Community Development Director in 2003. Join us as we congratulate Dave on his appointment as City Manager.

2010 LA MESA TOWN HALL MEETINGS

If you missed the January meeting you still have an opportunity to participate in a 2010 Town Hall Meeting on

Thursday, February 4
6:30 – 8:30 pm

Murray Manor Elementary School
8305 El Paso Street

The City Council encourages all who are interested in the present and future of La Mesa to attend and provide their ideas, comments, and opinions. Information gathered at Town Hall Meetings is used by staff and the City Council to recommend and set priorities for the City's next budget.

AN INTRODUCTION TO THE 2010 CENSUS

Counting Everyone Once and Only Once and In the Right Place

The foundation of our American democracy is dependent on fair and equitable representation in Congress. In order to achieve an accurate assessment of the number and location of the people living within the nation's borders, the U.S. Constitution mandates a census of the population every 10 years.

The census population totals determine which states gain or lose representation in Congress. It also determines the amount of state and federal funding communities receive over the course of the decade. 2010 Census data will directly affect how more than $4 trillion is allocated to local, state, and tribal governments over the next 10 years. In order for this funding allocation to be accomplished fairly and accurately, the goal of the decennial census is to count everybody, count them only once, and count them in the right place. The facts gathered in the census also help shape decisions for the rest of the decade about

Continued on page 17

VILLAGE MAKEOVER

City and business community create vision for Downtown La Mesa renovation

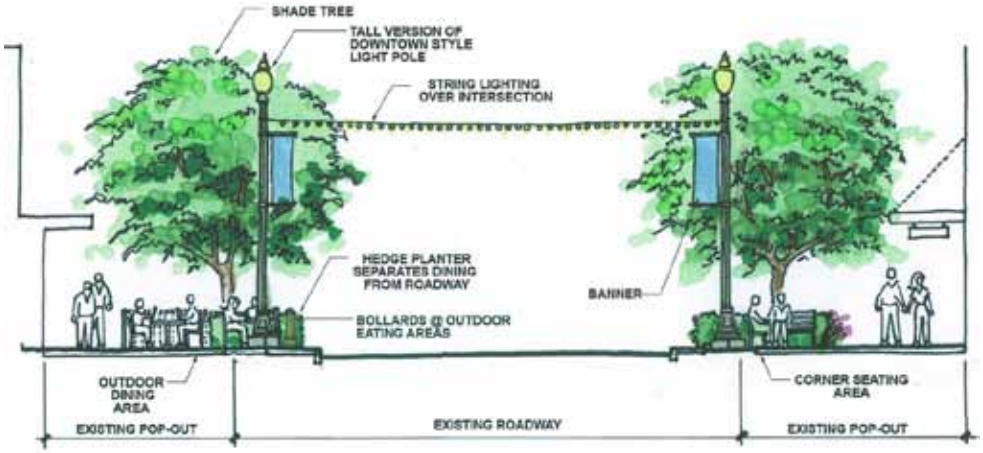

Downtown La Mesa Village is the focus of a major planning effort by the City to design, finance, and construct a complete renovation of the public streetscape throughout the Village. The City's plan is to phase the renovation over time, replacing old sidewalks, lighting, landscaping, street furnishings, and crosswalks with new equipment and new treatments. The project will introduce new amenities, such as: a sound system, safety bollards, power supplies for special events, and Village

Continued on page 17

COUNTY TELEVISION NETWORK (CTN) – CHANNEL 24

La Mesa Programming Schedule

COUNCIL MEETING

2nd Tuesday of each month . . .4:00 pm

4th Tuesday of each month. . . .6:00 pm

RESIDENTIAL CRIME PREVENTION VIDEO

Monday. . . . . 7:00 – 7:15 pm
Wednesday . . . . . 7:00 – 7:15 pm
Saturday . . . . . 3:00 – 3:15 pm
Sunday . . . . . 3:00 – 3:15 pm

MERCHANTS CRIME PREVENTION VIDEO

Monday. . . . . 7:15 – 7:30 pm
Wednesday . . . . . 7:15 – 7:30 pm
Saturday . . . . . 3:15 – 3:30 pm
Sunday . . . . . 3:15 – 3:30 pm

CLICK IT OR TICKET!

Monday. . . . . 7:30 – 7:35 pm
Wednesday . . . . . 7:30 – 7:35 pm
Saturday . . . . . 3:30 – 3:35 pm
Sunday . . . . . 3:30 – 3:35 pm

BULLETIN BOARD

Monday. . . . . 7:00 – 7:30 am
7:35 – 8:30 pm
1st & 3rd Tuesday
of each month . . . 11:30 am – 12:00 pm
7:30 – 8:00 pm
Wednesday . . . . . 7:00 – 7:30 am
7:35 – 8:30 pm
Thursday . . . . . 11:30 am – 12:00 pm
7:30 – 8:00 pm
Friday . . . . . 7:00 – 8:00 am
7:00 – 8:00 pm
Saturday . . . . . 3:35 – 4:30 pm
Sunday . . . . . 3:35 – 4:30 pm

ST. MADELINE SOPHIE CENTER ASSISTS IN OUR PARKS

Since December 2006 the City of La Mesa has contracted with St. Madeline Sophie Center to perform basic restroom and grounds cleaning in many of our heavily used parks. St. Madeline Sophie Center is an organization that helps improve the lives of adults with developmental disabilities through a variety of programs. One of these programs is the Supported Employment Program which provides ongoing vocational training opportunities for its students.

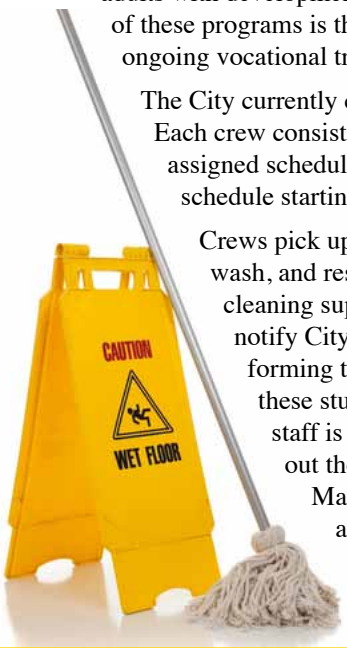

The City currently contracts for four crews to assist with 10 sites. Each crew consists of a coach and from three to five students that have assigned schedules and sites. Crews arrive at the sites on a varied schedule starting at 10:00 am Monday through Friday.

Crews pick up litter throughout the parks, empty trash cans, sweep, wash, and restock restrooms The City provides all necessary cleaning supplies. The St. Madeline Sophie Center crews also notify City staff of any graffiti or vandalism that is found. Performing these daily tasks provides an excellent opportunity for these students to learn valuable work skills and, in turn, city staff is able to focus on other maintenance issues throughout the City. Working with the staff and students from St. Madeline Sophie Center has proven to be a productive and positive experience for all involved. You can find our more information about St. Madeline Sophie Center by visiting their website at www.stmsc.org.

GOOD OUTDOOR LA MESA FUN

Free Youth Golf Clinic — La Mesa Residents Only
Saturday, March 20 – 3:00 pm
Complete this coupon and return to:
Sun Valley Golf Club • 5080 Memorial Dr., La Mesa CA 91941

Name: _____

Address: _____

Phone: _____

SPACE IS LIMITED. REGISTER NOW!

La Mesa ARTS Alliance presents

Radio Daze

A theatrical production remembering the glory days of radio!

Thursday, February 11
6:00 pm reception
7:00 pm curtain
La Mesa Community Center
4975 Memorial Drive
La Mesa CA 91942

Donation $15 per person – includes lite snack fare and no host beverages

Please RSVP with payment by February 4 to LMAA at address to left.

Tickets will be held at the door.

LA MESA ARTS ALLIANCE
fostering the arts in our community

NEED A RIDE?

Are you having trouble getting to your doctor, the pharmacy, the bank or shopping?

THE DISCOUNT TAXI PROGRAM COULD BE FOR YOU!!

- The DISCOUNT TAXI PROGRAM helps make taxicabs affordable to older adults and persons with disabilities who live within the Grossmont Healthcare District.
- The DISCOUNT TAXI PROGRAM is funded by the Grossmont Healthcare District and managed by the City of La Mesa.
- Taxi coupons are used like cash to pay for taxicab fares (and tips) with Yellow Cab for essential travel needs, such as medical appointments, grocery shopping, pharmacy, personal care, and personal business.
- Discount Taxi coupon booklets for Yellow Cab rides are available for $10 each – the actual value of the booklet is $20! That's twenty dollars worth of taxi rides for a 50% discount!
- You must be age 65 years of age or older, or under 65 with a disability, and unable to drive or use public transit.
- Eligibility includes temporary inability to drive due to medical procedures.

CITY OF LA MESA JEWEL of the HILLS

Grossmont Healthcare District

For more information or to receive an application for the DISCOUNT TAXI PROGRAM, please call the La Mesa Adult Enrichment Center at 667.1321. The application is also available online at www.cityoflamesa.com.

Outdoor Wedding Venues

Springtime wedding plans naturally turn thoughts to an outdoor wedding that is beautiful and romantic. Lush grass, trees, and plants are natural decorations as the bride and groom exchange vows in a park setting that they have chosen for their special day.

The City of La Mesa offers two scenic locations for an outdoor wedding. The Amphitheatre at Harry Griffen Park sets the stage with a gazebo where the bride may wait until she makes her entrance walking down the paved path to join her groom. Seating for up to 350 guests face the staging area where the wedding party awaits.

The West Terrace Patio at the La Mesa Community Center offers another choice for an outdoor wedding. Vine-covered red brick columns edge a semi-circular patio that overlooks a golf course. White fan-back chairs provide seating for up to 150 guests, and a decorated trellis is available to provide a frame for the bride and groom as they exchange vows.

An outdoor wedding can be the dream wedding for many couples. If you would like additional information and pricing for La Mesa's outdoor wedding sites, please call the Facilities Specialist at 667.1307.

SENIOR TRANSPORTATION & MOBILITY EXPO

Thursday, June 17—10:00 am – 2:00 pm

La Mesa Community Center 4975 Memorial Drive

A FREE Event for Older Adults, Persons with Disabilities, and Adult Children of Aging Parents interested in Transportation Alternatives, ADA Paratransit, Vehicle Modifications, Public Transit Discount Fares and Special Services, Older Driver Safety and More…

MANY GREAT EXHIBITORS!
INTERESTING SPEAKERS!

Valuable Information to Help YOU and your Family Members Plan for Transportation & Mobility in the Later Years!

For Information Call 464.0505

Funded through grants from SANDAG under the Federal New Freedom and Transnet Senior Mini-Grant Programs and from the Grossmont Healthcare District

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91942

7:00 am to Sunset
7 Days a Week

Adults $10 for 9 holes, $14 for 18 holes
Students* $7 for 9 holes, $10 for 18 holes
*(*includes college with valid student ID)*

Clinics, lessons, and special programs are available.
For details go to
www.sunvalleygolfclub.com
or call 466.6102

SPRING CLEANING INVENTORY

Now that the stress of the holidays is over it is time to think about spring cleaning. As part of your spring cleaning, the La Mesa Police Department would like to recommend an organizational project. Almost every household has one or more items of value. It is important to protect your valuables by keeping accurate records.

Go through your home and identify items that are most likely to be stolen. Items such as electronics, computers, jewelry, musical instruments, and bicycles are all items that are frequently stolen. Take a photograph of each item and note any serial numbers or unusual markings with the photograph. Be as detailed as possible. Refrain from storing the information on your computer as computers may get stolen during a burglary. List everything valuable you own and refer to the list if your home gets burglarized to determine any items that may be missing. When you receive or purchase a new item, immediately note the serial number and save the receipt and warranty paperwork.

It is easy to forget what items you have during a high-stress incident such as a burglary. If your belongings are found in a pawn shop or a suspect's home, it is very difficult for police officers and detectives to return the items to their rightful owner without proper records and serial numbers. Insurance companies may also require documentation of your stolen items.

Another precaution you can take is to install a tracking system on your valuable computer. There are several products on the market, such as software and GPS systems, that can aid the police in finding your computer.

For more information on protecting your valuables, contact Crime Prevention Specialist Heather Lindquist at the La Mesa Police Department at 667.1445.

GOT JUNK?

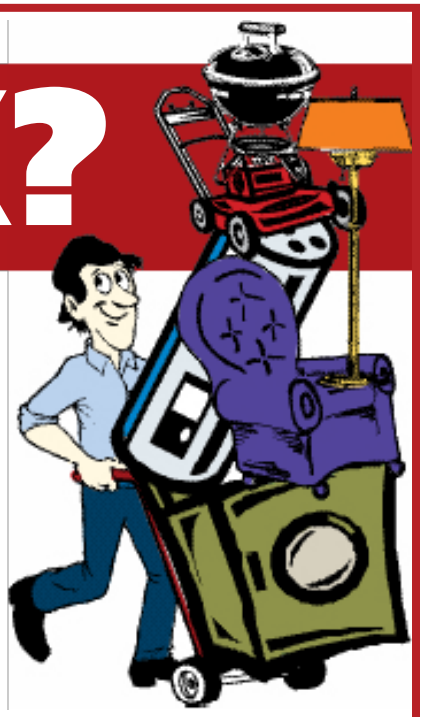

Want to clean out the garage or spruce up the yard but don't know what to do with all that stuff?

Bring it to the annual Spring Clean Up event being held on two Saturdays in April at EDCO Station – It's free to City of La Mesa residents!

The event will be held from 7:00 a.m. to 2:00 p.m. at EDCO Station, located at 8184 Commercial Street.

If you live SOUTH of Interstate 8, your clean-up day is April 10

If you live NORTH of Interstate 8, your clean-up day is April 17

This is your opportunity to dispose of:

Old appliances — *Broken or unwanted furniture*

Landscape material — *Waste debris from improvement projects*

Reusable items — *Electronics*

Trash and yard waste — *Just plain junk*

Free mulch will be available on a self-loading, first-come-first-serve basis.

This annual event is for residents who live within the incorporated city limits of La Mesa ONLY. Proof of residency is required, so bring a California Driver's License showing your La Mesa address. DO NOT bring items from a household outside of the City of La Mesa.

There are some restrictions on the items than can be accepted. This is NOT a Household Hazardous Waste (HHW) Collection Event. We CANNOT accept batteries, fluorescent lights, tires, or items labeled poison, flammable, corrosive, or explosive. To dispose of HHW, please call 287.5696 ext. 4270 or email LMHHW@edcodisposal.com. To get more info see the HHW flyer in this issue of the FOCUS or visit our website at www.cityoflamesa.com/hhw.

We will NOT accept waste from businesses, contractors or professional landscapers.

For event questions please call 667.1338 or email envirosvcs@ci.la-mesa.ca.us.

FREE OIL FILTERS

La Mesa Oil Filter Exchange Event

Saturday February 27—10:00 am - 2:00 pm

Kragen Auto Parts, 5350 Jackson Drive

Bring in your used oil filters to be recycled and receive a FREE OIL FILTER!

This offer is only valid at the specific date, time, and location above.
Only drop off used filters during business hours. Thank you!

Funded by a grant from the California Integrated Waste Management Board

SPRING CALENDAR

City Hall is closed alternate Fridays and holidays as follows:

Fri, Feb 5	**Fri, Mar 5**	**Fri, Apr 2**	**Fri, Apr 30**
Fri, Feb 19	**Fri, Mar 19**	**Fri, Apr 16**	

CUT OUT FOG!

Help Maintain the City Wastewater System

What is FOG?

FOG refers to Fats, Oil, and Grease, which when dumped down the drain can lead to clogs and reduced pipe capacity. Greasy plates, pots, pans, and frying oil are a few of the sources of FOG.

Do your part to prevent FOG discharges!

FOG accumulation in the sewer system can lead to blockages and backups which have the potential to negatively impact the environment. Sewage spills due to FOG blockages are an avoidable source of pollution. This problem can be minimized if we all do our part in disposing of FOG in the proper manner.

Do not pour oil or fat down your sink drains. Oils and fats will solidify into grease, can cause your lateral to become clogged, and can cause the public sewer main in the street to become clogged. The number one maintenance problem in City sewer pipes is the presence of grease.

In addition...

FOG reduction results in decreased sewer maintenance costs and increased capacity both within private sewer laterals and City sewer mains. Sewer pipes that are clear of FOG will run much more smoothly than those which are heavily impacted with fats, oil, and grease.

Who should you call if I have questions or would like more information about FOG?

Call 667.1340 for more information about FOG control methods and for general questions about the City's Food Service Establishment FOG program.

Frequently Asked Questions

List of frequently asked questions can be found on individual Department pages throughout the City website. Below you will find some of the most common inquiries received in the Environmental Services Division of the Public Works Department.

1. How can I dispose of a water heater, broken sofa, or other bulky items?

Each spring the City and EDCO Disposal Corp hold a Clean-up Day for La Mesa residents. The only items not accepted are hazardous waste, wet garbage, tires, explosives, and business waste. Call the City at 667.1338 for further information or clarification. For landfill information call 562.0530. Bulky item pick-up is also available from EDCO for a small fee. Call 287.7555.

2. What can I do about my neighbor's bad trash habits?

If they leave their trash carts on the street past collection day, set them out too early, or let trash accumulate for weeks, call the City at 667.1338 or report it online.

3. Who should I call to start trash/recycle service?

La Mesa has automated residential trash and yard waste collection as well as mandatory recycling. EDCO Disposal Corp is the City's franchised contractor for the collection of trash, yard waste, and recyclables. Call EDCO at 287.7555 to sign up for service and obtain your automated carts and recycling containers.

4. Where can I dispose of household toxic products like old paint and pesticides?

The City holds regular collection events for City of La Mesa residents. Hazardous materials can be dropped off by appointment only. If you live within the City limits, you can call EDCO at 287.5696 ext. 4270 to make an appointment.

Free

HOUSEHOLD HAZARDOUS WASTE AND ELECTRONIC WASTE DISPOSAL

This is your chance to safely and properly dispose of the following materials and items:

Batteries **Fluorescent lights** **Medical sharps** **Latex & oil based paints**
Solvents & cleaners **Pesticides & garden products** **Pool products** **Propane**
Any items labeled flammable, hazardous, toxic, or corrosive.

Electronics **TVs** **Computer monitors & hardware**
Cell phones & telephones **MP3 players** **VCRs** **Radios**
Automotive batteries **Used oil & filters** **Antifreeze**

Collection events are available by appointment only by calling EDCO at 287.5696 ext. 4270 or emailing to lmhhw@edcodisposal.com.

These items are considered hazardous and are not allowed to be placed in the trash because of their destructive effect on the environment. If you reside within the City limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program.

E-waste can be recycled at the EDCO Station buy back center during business hours without an appointment. The center is open Monday through Saturday from 8:00 am to 4:00 pm. A small fee may apply to some items.

To request additional information about the program, please contact the Department of Public Works Environmental Services Division at 667.1338 or by email at envirosvcs@ci.la-mesa.ca.us. For general HHW information or other disposal and recycling options, visit www.cityoflamesa.com/hhw

UPCOMING COLLECTION DATES:
March 13 **May 1** **June 5** **July 24**
August 28 **October 9** **November 20**

8th Annual Creek to Bay Cleanup April 24

Mark Your Calendars!

Working with "I Love A Clean San Diego," the City of La Mesa will sponsor and host two creek cleanup sites on April 24 from 9:00 am – 12:00 pm as part of the 8th Annual Creek to Bay Cleanup Day.

Clean up sites will consist of one location along the Alvarado Channel, and one along the University Channel. Last year during this event, 296 pounds of trash was removed from the Alvarado Channel site, and 83 pounds of trash and 26 pounds of recyclables were removed from the University Channel. Volunteers from the local community demonstrated their true concern to protect the environment and also had fun in the process. This year, we hope to increase our collection totals and will award prizes for the most amount of trash collected as well as the most unique trash item found.

For more information visit the City website or contact Joe Kuhn, Storm Water Program Manager at 667.1340.

SMALL STEPS TO BIG CHANGE!

You do not have to be rich or famous to make healthy choices. There are small steps that anyone can take to live more sustainably.

WHAT IS SUSTAINABILITY?

"Sustainable societies are those whose infrastructure, institutions, and practices (social, economic and environmental) meet the needs of the present generation without compromising the ability of future generations to meet their own needs."

- Brundtland Commission, U.N. Commission on Sustainably Development

TRAVEL THOUGHTFULLY

It's not only what you drive; it's how you drive! Ease up on the gas and brakes and you can get up to 35% better gas mileage; properly inflated tires can increase mileage another 3%. Avoid rush hour when possible, and remove excess cargo; the heavier the load, the more fuel needed to move it. Finally, "piggy back" errands, use transit, carpool, bike, or walk more to reduce the miles you drive. These simple changes can save you thousands of pounds of CO2 every year, and reduces stops at the gas pump too.

Did you know? A quarter of the trips Americans drive are within walking distance. Every mile you don't drive saves one pound of carbon dioxide.

THE FOUR R'S - *Reduce, Reuse, Recycle, and Repair*

Creative thinking is one of the best tools we have to create less waste. Choose products that are returnable, reusable, or refillable. Save your wallet and the environment: take coffee in a travel mug, buy bulk for the best product to package ratio, bring your own bags, and buy secondhand. Packaging accounts for a third of trash generated. Recycling one glass jar saves the energy needed to light a 100-watt bulb for four hours, and recycling just one tenth of American newspapers would save 25 million trees a year.

Did you know? In the past 35 years trash generated per person has almost doubled from 2.7 to 4.4 pounds a day. If you cut your garbage by 10% you can save 1,200 pounds of carbon dioxide.

STOP UNSOLICITED JUNK MAIL.

The average American receives 41 pounds of junk mail each year. Remove your name from national mailing lists at dma-choice.org. Opt out of credit card offers at 1.888.5optout. Any time you give your contact information to a company, you may be placed on a mailing list (i.e.: store discount programs, contests, catalog/internet purchases, warranty cards, etc.); writing "Please do not rent or sell my name" or "no mailing lists" next to your name will help protect you.

Did you know? The annual production of junk mail in the U.S. uses more than 100 million trees; its production and disposal uses more energy than 3 million cars.

EXCITING VOLUNTEER OPPORTUNITIES!

Are you interested in becoming a volunteer with the City of La Mesa? Check out our volunteer opportunities below or download a Volunteer Application from the City website.

Volunteers play an important role in the enhancement and expansion of services to City residents. You will not only provide a valuable service for the community, but also enjoy flexible scheduling for most assignments, develop new skills, and meet new friends.

Adopt A Block! You can help preserve and enhance the beauty and cleanliness of La Mesa by volunteering for Adopt A Block. If you are a regular walker in your neighborhood, whether alone, with a pet, or with a neighbor, you can join this dedicated team of volunteers. The City provides a program vest, bags, and a pick-up tool. All you need to do is commit to spending at least five hours a month for one year! You make your own hours. Sign up TODAY by calling 464.0505.

Rides4Neighbors We need Volunteer Drivers for Rides4Neighbors, a transportation program for La Mesa's older residents and residents with disabilities. Rides are provided by trained volunteers, who use their own vehicles. We reimburse for mileage and provide supplemental liability insurance. Volunteers decide availability and choose the rides you wish to provide. There is no minimum time commitment or number of rides required to be a volunteer. As a volunteer, you will be part of a rewarding and meaningful civic program. For information, call the Adult Enrichment Center at 464.0109.

La Mesa Pet Therapy Needs You & Your Dog! Would you and your dog be willing to spend two hours a month visiting patients in La Mesa convalescent homes? Call the Adult Enrichment Center to pick up an application or call 464.0505. If you have more questions about the program, we will put you in touch with a current Pet Therapy volunteer.

City Hall and Fire Department Tour Guide Would you be interested in coordinating City Hall and Fire Department tours for school classes? This volunteer job involves coordinating school visit requests with the Mayor's office and the Fire Department. The schedule corresponds to the school year and tours are requested periodically. Call the Adult Enrichment Center to pick up an application or call 464.0505.

Adopt the Moffatt Garden at the La Mesa Adult Enrichment Center!

We are seeking a dedicated garden-lover, or group of garden lovers, to help us with tender loving care and upkeep for our beautiful memorial garden. A weekly weeding, helping meet the needs of thirsty plants and sprucing up would be just the right stuff needed to keep this special place a treasure for all to enjoy. Please stop in the Adult Enrichment Center office to pick up a Volunteer Application, or call 464.0505!

GOOD HOUSEKEEPING

Important Storm Water Requirements

The City of La Mesa's National Pollutant Discharge Elimination System (NPDES) Storm Water Program requires residents and business owners to implement various types of good housekeeping measures and best management practices to comply with all regulations. Consider the following tips to help you protect our environment:

1) Swimming pool water must be tested before discharge. Chlorine should be less than 1 mg/L and pH between 7 to 8. No algae should be present in the water and filter debris is prohibited from entering the storm drain system. Detailed fact sheets available at City Hall.

2) Check your irrigation system and do not over-irrigate. Water landscaping during the morning or late afternoon.

3) Do not hose down driveways or sidewalks, dry sweep in place.

4) Clean up oil spills and other liquid material with absorbent material and place in a trash can for disposal.

5) Wash vehicles over a pervious (absorbent) surface such as dirt, gravel, or grass to prevent runoff. Consider taking vehicles to a commercial car wash.

6) Keep your trash dumpsters closed, and keep all pesticides and herbicides in a covered contained area away from pets and children.

7) Protect areas with bare soil from eroding during rainy weather. Establish ground cover using hydroseed/hydromulch and use fiber rolls and silt fencing for sediment control.

A Storm Water Bulletin Board with education and outreach material is available for public view in the City Hall lobby. Find answers to your questions on the City's Storm Water Hotline at 667.1134, or visit the City's website for more information.

STORM DRAIN POLLUTION?

Call The La Mesa Pollution Hotline!

You can call the City's Storm Water Pollution Prevention Hotline 667.1134 at any time to stop storm water pollution. City personnel will verify the complaint and respond to the problem immediately. Below is a list of several storm water pollutants you should be aware of.

Storm Water Pollutants

- Sediment (soil/dirt)
- Fertilizers (plant food)
- Metals
- Detergents (soap)
- Pesticides (chemicals to kill plants or bugs)
- Organic Compounds (solvents)
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

What should you report?

You may either ask the person to stop polluting the environment or count on the City to address the issue. The following are examples of what you should lookout for and report to the City:

Commercial/Industrial Areas

- Hosing down the parking lot/water running off onto the street
- Washing company vehicles without capturing the runoff
- Storing equipment outside without coverings
- Overflowing trash cans

Construction Sites

- Tracking soil onto the street
- Storing stockpiles of soil without covering it for extended periods of time
- Discharging water into the street

Residential

- Washing soil off the property and into the street
- Significant over-irrigation
- Fixing cars on the street
- Significant overspray of pesticides or fertilizers
- Not picking up after pets

If you notice any of these examples, ask the responsible party to comply with environmental regulations, or contact the City for a quick response to these issues. Protecting our environment protects our quality of life!

PROPER USE OF 9-1-1

9-1-1 is an emergency phone number only.

All 9-1-1 calls within the City of La Mesa are routed to the La Mesa Police Department. A dispatcher will evaluate the caller's needs. If the call involves a fire or medical emergency, the call is immediately transferred to the Heartland Fire Dispatch Center.

Following are some types of questions you should be prepared to answer when calling 9-1-1 are:

- Is this a police, fire, or medical emergency?
- Where is the emergency?
- What is occurring?
- When did this occur?
- Do you have any suspect and/or vehicle descriptions?
- Are there now, or were there weapons involved? (gun, knife, etc.)

You will be asked to give your name, address, and telephone number (anonymous calls are accepted). If you are safely able to do so, please remain on the telephone to provide additional information as requested.

It is appropriate to call 9-1-1 for circumstances such as the following:

- A serious crime in progress such as a robbery, burglary, shooting, assault, domestic violence, or vehicle theft.
- A fire, medical, or mental health emergency; or a traffic accident that has just occurred.

Please do not call 9-1-1 for non-emergency calls such as:

- a loud party or music
- parking violations
- barking dogs
- road information
- minor injuries
- time-delayed crime reports
- general questions

Note: *Calls to 9-1-1 for non-emergencies require the dispatcher to divert attention from real emergencies and may create a delay in officers' response to the scene of a serious crime.*

Whether you dial 9-1-1 on purpose or by accident, the dispatcher receives your caller information even if you hang up before the line is answered. The dispatcher will immediately call you back and inquire if an emergency exists. If the line is busy or not answered when the dispatcher attempts to call, an officer will be dispatched to the address from which the call originated to "check the welfare" of the residence or business. If you dial 9-1-1 in error, please remain on the line and advise the dispatcher that you have made a mistake.

Wireless 9-1-1: How To Use Your Cell Phone To Call 9-1-1

Wireless 9-1-1 is the term used to refer to emergency calls made to 9-1-1 from a cellular phone or other wireless device. A cell phone works as a radio transmitter and a receiver that uses radio frequencies instead of a traditional telephone wire to connect callers. Because cell phones are portable, they are not associated with a fixed location or address. The cell tower used to transmit a cellular 9-1-1 call provides only a general location of the cellular caller. This location information is not specific enough for public safety personnel to respond in a timely manner.

To expedite processing of cellular 9-1-1 calls by public safety dispatchers, you should remember the following:

- Immediately advise the dispatcher of the location of the emergency, including the city if known. If you are not sure of the location, look for helpful markers such as street signs, local landmarks, or freeway exits that will help the dispatcher pinpoint your location.
- Provide the dispatcher with your cell phone number so that if the call is disconnected the dispatcher can call you back. If you do not know your cell phone number, memorize it.

If you do not currently have a contract for service with a wireless service provider and your call is disconnected, you must call back because the dispatcher will not have your phone number to call you back.

Become familiar with the features of your cell phone, especially the keypad lock, which prevents accidental dialing. Many 9-1-1 calls made to the La Mesa Police Department are the result of accidental dialing from phones carried in pockets, purses, strollers, or gym bags without the keypad lock feature activated. The processing of accidental calls may delay help for callers with true emergencies.To prevent accidental dialing, do not program your phone to automatically dial 9-1-1. Consult your cell phone user's manual for further information on this and other features.

Using your cell phone while driving is against the law and the practice can be very dangerous. If you must use your cell phone while driving, pull over park where it is safe to do so before you make or answer a call.

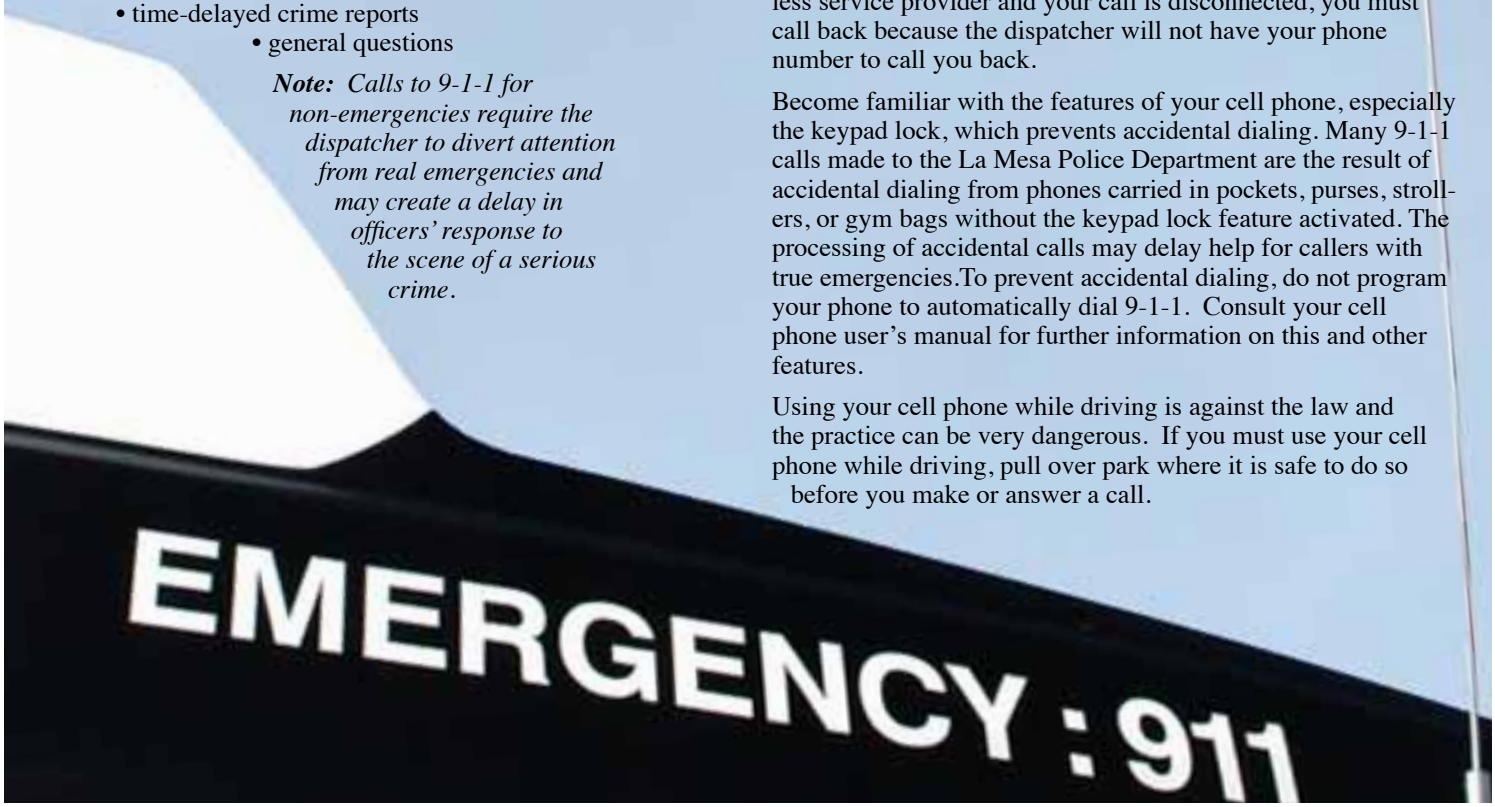

Test Your ENVIRONMENTAL KNOWLEDGE!

Q1. How many times can an aluminum can be recycled before the aluminum becomes unusable?
a) 5
b) 10
c) 1,000
d) 1,000,000
e) It will never degrade

Q2. Which of these cannot be recycled in your blue bin or recycling dumpster?
a) Window envelopes
b) Glass jars (no CRV)
c) Plastic bags
d) Telephone books
e) They can all be recycled this way

Q3. How can you recycle old or broken televisions?
a) Place them in your blue bin or recycling dumpster
b) Place them at the curb on trash collection day
c) Take them to EDCO Station's recycling buyback center
d) You can't recycle them
e) a & c only

Q4. Which of the following is not accepted through our household hazardous waste collection?
a) Chlorine
b) Automobile batteries
c) Propane
d) Medical sharps (needles)
e) They are all accepted

Q5. Anything plugged into an outlet uses electricity even when turned off.
True or False?

Q6. Tap water is better than bottled water because:
a) bottled water is often just tap water from somewhere else
b) tap water is regulated for safety and bottled water is not
c) bottling and shipping water has a much greater negative environmental impact than using water from the tap
d) tap water is much, much cheaper
e) all of the above

Q7. Carpooling is easy to do only when set up by an employer.
True or False?

Q8. Within the City of La Mesa, storm water runoff from driveways, sidewalks and streets ends up:
a) soaking into the ground
b) in a wastewater treatment plant
c) in our local creeks and waterways
d) evaporating into the air

Q9. The City of La Mesa is generally divided into 2 watersheds, the _____ in the north, and the _____ in the south.
a) Pacific Ocean, Lake Murray
b) San Diego River, San Diego Bay
c) Otay River, San Diego Bay
d) Mission Bay, Sweetwater River

Q10. Watering your yard everyday and/or for long periods:
a) is a waste of water
b) causes your plants to be less drought-tolerant
c) results in excess water running from your property
d) is a storm drain pollution issue
e) all of the above

ANSWERS:

Q1. e – Aluminum never loses its strength and can be recycled indefinitely.

Q2. c – You should never place plastic bags in your recycling bin. They may be recycled at large grocery and retail stores.

Q3. c – Televisions and computer monitors can be recycled for free - other electronics are subject to a fee. Contact EDCO at 466.3355 or visit www.edcodisposal.com for more info.

Q4. e – See our flyer in this issue of FOCUS for more info.

Q5. True – These are known as vampire electronics and draw small amounts of power as long as they are plugged into an outlet.

Q6. e – Use reusable bottles with your tap water for convenience.

Q7. False – You can search for carpool opportunities using very specific criteria at www.icommuteSD.com.

Q8. c – Storm water flows directly to local creeks and waterways. Storm water does not pass through a treatment plant before reaching the ocean.

Q9. b – Both carry rain water into the ocean.

Q10. e – To report an issue, please call 667.1134 or visit www.cityofLamesa.com and select "Report a Problem."

CONSTRUCTION UPDATE

As you can see by these recent photos, construction is progressing quickly on the new police station. Construction should be complete by late May at which time interior furnishings will be installed. Police staff anticipate moving into the new facility in late summer.

LA MESA COMMISSION ON
Aging Community Awareness & Education Forums

Tuesday, January 26, 1:30 pm ..... "La Mesa Police Dept. & Emergency Operations" Adult Enrichment Center, 8450 La Mesa Blvd., 91942

Tuesday, February 23, 1:30 pm ..... "La Mesa Fire Dept Emergency Preparedness" Adult Enrichment Center, 8450 La Mesa Blvd., 91942

Tuesday, March 23, 1:30 pm ..... "County of San Diego Office of Emergency Services" Adult Enrichment Center, 8450 La Mesa Blvd., 91942

Tuesday, April 27, 1:30 pm ..... "What is 211 San Diego & How 211 Helps in a Community Emergency?" Adult Enrichment Center, 8450 La Mesa Blvd., 91942

Tuesday, May 25, 1:30 pm ..... "Assisting in Community Emergencies-Churches, Service Clubs & Community Agencies" Adult Enrichment Center, 8450 La Mesa Blvd., 91942

Tuesday, June 22, 1:30 pm ..... "Neighborhood Watch-Organizing for Crime Prevention & Emergency Preparedness" Adult Enrichment Center, 8450 La Mesa Blvd., 91942

Tuesday, September 28, 1:30 pm ..... "La Mesa Candidates' Forum" Adult Enrichment Center, 8450 La Mesa Blvd. 91942

RSVP for each presentation you wish to attend to 464.0505.

WALK LA MESA

Just for the fun of it!

Did you know there are organized walks nearby every day of the week? For a list of options visit the City website, and under Quick Links, choose *City Walks & Urban Hikes.* You may also pick up a Walk La Mesa flyer at City Hall or the La MesaCommunity Center. Call 667.1300 for more info.

La Mesa... it's made for walking

Put a Spring in Your Step!

La Mesa's Urban Walking Trails are FREE walking trails that offer beginner, intermediate, or advanced walkers of all ages and fitness levels different routes to choose from. Walking is a wonderful family activity to enjoy the outdoors and at the same time exercise and explore La Mesa. Look under Quick Links at www.cityoflamesa.com for City Walks & Urban Hikes to download your FREE walking trails map. Maps are also available at the kiosks at Jackson and La Mesita Parks. Routes are identified with sidewalk markers along the way so you won't get lost!

Fun and unstructured volunteer groups get together each week for walks along the intermediate and advanced trails. This is a great way to meet new people and enjoy walking. The "Stride" - an intermediate level five mile route with slight hills - meets at Jackson Park on Saturdays at 8:00 a.m. The "Challenge" - an advanced level three and a half mile route with hills and steps - meets at Highwood Park on Mondays and Wednesdays at 6:15 p.m.

Remember to wear proper walking shoes, bring a water bottle, and check with your doctor first before starting any type of exercise program. For evening walks, bring a flashlight.

It's a new year.... Get Up, Get Out and Get Moving! Visit the City website or call La Mesa Community Services at 667.1300 for more information on La Mesa's Urban Walking Trails and other walking programs throughout the City.

La Mesa COMMUNITY SERVICES

SPRING AQUATICS

Enroll now for spring youth learn-to-swim classes
www.cityoflamesa.com/swim

SPRING ENRICHMENT CLASSES

Space is still available in some spring classes
www.cityoflamesa.com/classes

SUMMER DAY AND SPECIALTY CAMP PROGRAMS

Available now.
Convenient enrollment is available online or print the enrollment for to mail in.

SUNDAYS AT SIX

Summer Concert Series

at Harry Griffen Park

9550 Milden Street, La Mesa

Concerts from 6:00 – 7:00 pm

SAVE THE FOLLOWING DATES:

JUNE 13 JUNE 20 JUNE 27 JULY 11 JULY 18 JULY 25

Enjoy FREE concerts featuring performances from some of San Diego's premiere recording artists, musicians, and singers. Bring a picnic and spend "Sundays at Six" relaxing to concert band, country, jazz, and variety music in the company of friends.

Watch the City website for updated concert information and performance lineup as it becomes available.

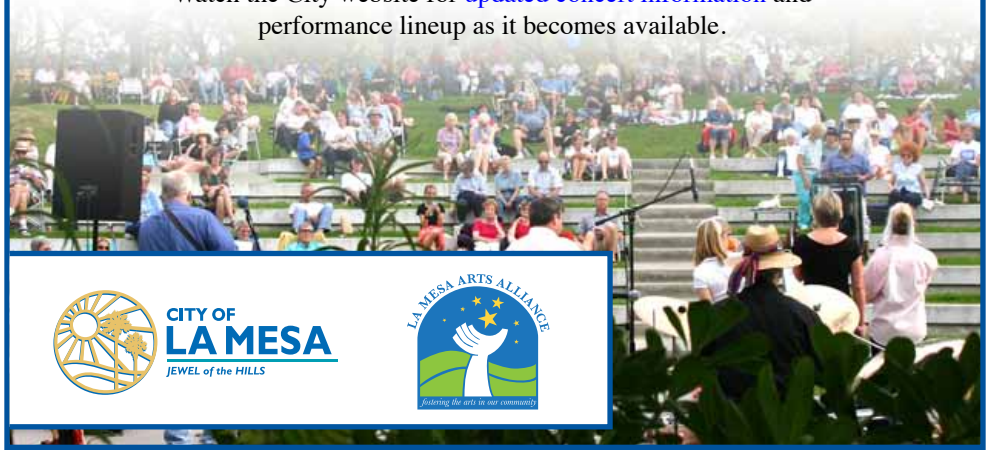

CITY OF LA MESA JEWEL of the HILLS

LA MESA ARTS ALLIANCE fostering the arts in our community

We are searching for Miss La Mesa and Miss Teen La Mesa 2010!

The Miss La Mesa pageant has been a tradition in the City of La Mesa for over 35 years and is an outstanding mentoring and leadership opportunity for young women. The 2010 pageants are set for Friday, March 5. The show is open to the public and two young women will earn the opportunity of a lifetime to be an official hostess for their city. This year a $750.00 scholarship will be awarded to Miss La Mesa 2010 and a $350.00 scholarship to Miss La Mesa Teen 2010!

Contestants will be scored in the following categories: Interview (35% of total score), Poise and Personality (25% of total score), Sportswear (15% of total score), Evening Gown (15% of total score), On Stage Impromptu Question (10% of total score). If you are interested in becoming a contestant please email misslamesapageant@yahoo.com or download the application at www.LaMesaChamber.net. Young women ages 13-26 are eligible to participate. For girls ages 6-12, please contact us about the Miss La Mesa Princess Program.

2009 La Mesa Queens

You could be the next Miss La Mesa or Miss La Mesa Teen!

LA MESA KIDS WALK & ROLL TO SCHOOL

PROGRESS REPORT

In conjunction with WalkSanDiego, the City of La Mesa is moving right along with the La Mesa Kids Walk & Roll to School program. Parent Surveys have been completed at all four Wave 1 schools (Rolando Elementary, Maryland Avenue Elementary, Lemon Avenue Elementary, and La Mesa Middle School) to determine the current number of students walking and/or biking to school. A post-evaluation will be given at the end of the school year to measure program effectiveness.

Each school is currently in the process of establishing a SRTS (Safe Routes to School) Coalition to assist with the facilitation of education activities at their individual schools. Spring activities include student, staff and parent educational presentations, safety patrol training, and SRTS Workshops.

During SRTS Workshops, participants will receive education on relevant health and safety messages, techniques for conducting walkability audits, a range of tools and approaches to assess and enhance pedestrian safety, how to choose suitable routes to school, how to review pedestrian/bicycle collision statistic maps of the school neighborhood, and encouragement of safe behavior applicable to students and parents of each school. Participants will also take part in a walk/bike audit and mapping session of the school neighborhood.

WalkSanDiego will then compile and analyze data from parent surveys, walk audits, and mapping sessions to develop a Safe Routes to School map for each school neighborhood with suggested walk and bike routes. These maps are intended to be used as guides for children walking or biking to school. WalkSanDiego will also use this data to develop a proposed SRTS Work Plan outlining specific infrastructure improvements such as sidewalks and crosswalks geared toward reducing and/or eliminating pedestrian barriers.

VISIT THE LA MESA TEEN WEBSITE

This site offers helpful information regarding resources, programs, and services available to La Mesa teens.

Want to see additional information on the site?

Contact lmteens@ci.la-mesa.ca.us

La Mesa Offers Beginning Bridge Classes

The La Mesa Adult Enrichment Center is offering new Beginning Bridge classes in February and March. Classes begin Friday, February 12 and run through April 9th. The 9-week introductory course will teach you how to play and enjoy the greatest card game of all. Each class meets for 2 hours from 10:00 am until Noon.

The cost for the series is $54 for La Mesa residents and $61 for non-residents.

Beginning Bridge will cover various components of play and bidding such as:

- *Bridge Basics*
- *Suits*
- *No Trump*
- *Taking Tricks*
- *Bidding Ladder*
- *Language of Bidding*
- *Scoring*
- *How to Play Bridge Hands*
- *How to Defend Bridge Hands*

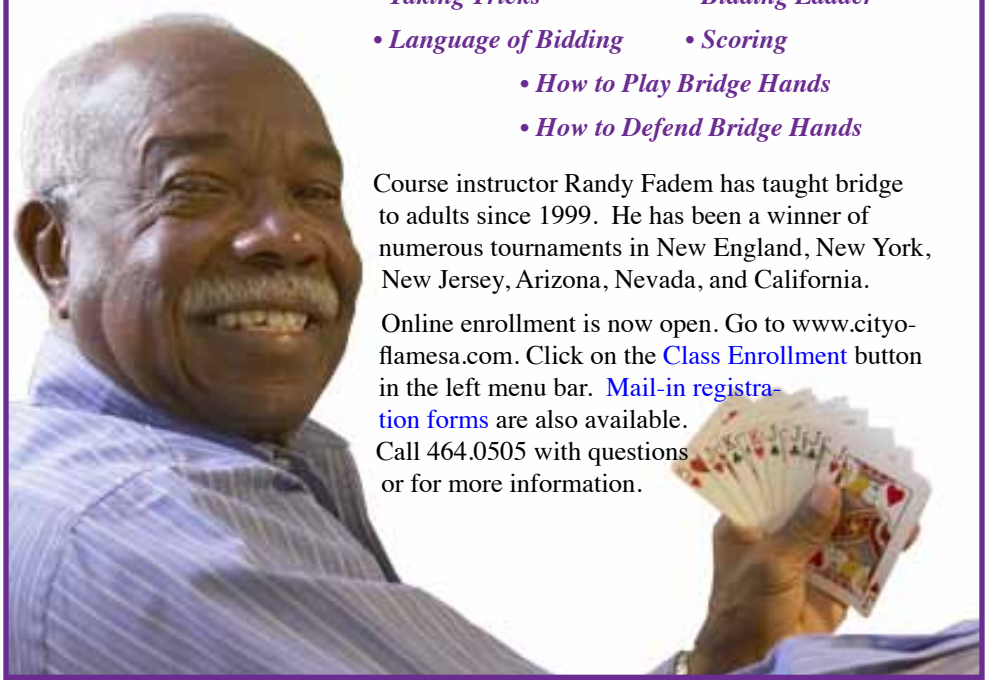

Course instructor Randy Fadem has taught bridge to adults since 1999. He has been a winner of numerous tournaments in New England, New York, New Jersey, Arizona, Nevada, and California.

Online enrollment is now open. Go to www.cityoflamesa.com. Click on the Class Enrollment button in the left menu bar. Mail-in registration forms are also available. Call 464.0505 with questions or for more information.

JUMP-START YOUR DAY WITH HEALTHY FARE

Parents, is this scene among your childhood memories: as Mom serves Dad his first cup of coffee of the day, Junior and his sisters join in a request for scrambled eggs and toast, please. The lunch sacks are assembled and ready to grab on the way out the door. Although this vision may be an exaggerated memory reflected by the sitcoms of the 1960s and '70s, the importance of the breakfast ritual is not fiction. Fast forward to today, and the data suggests that our kids' first meal of the day may not be eaten until many hours after they have used up their nutritional reserves.

Childrens' and teens' bodies, a work in progress, deserve better. According to Kidsdata.org, a website charged with compiling statistics relative to the health of California's children, breakfast consumption decreases steadily with age. The most recent statistics available reveal only 41% of 11th grade males and 39.9% of females reported eating breakfast. To generate and sustain the energy needed to study, learn, and problem-solve, bodily engines thrive on nutrients. An ideal morning meal would consist of an array of protein, fat, and carbohydrate. However, many breakfast foods are manufactured for convenience and only masquerade as nutritious fuel for a busy day.

Fiber cereals, yogurt, English muffins with cheese or peanut butter, fruit, and low in sugar protein/cereal bars are most compatible with the stress-driven, time-constrained mornings we all face today. Successful strategies are difficult to recommend, and you know the approach that is best for your children. However, it is clear that there is wisdom in preparing for the day. And, breakfast is a winning strategy.

FREE...

HANDS ON SCIENCE
March 20, 9:00 am - 12 noon
Highwood Park and Boys & Girls Club Teen Center
Fun Experiments include:

Bottle Rockets
Oobleck
Alka Seltzer Poppers
Bubbles
Glue Balls
It's a Gas
Barges
Periodic Table Bingo
Roller Coasters

ARTS IN THE PARKS
April 24

Activity: paint transfer on t-shirts

10:00 am – Vista La Mesa Park
King Street and
Hoffman St.

1:00 pm – La Mesita Park
8855 Dallas Street

This program is FREE for the whole family. Pre-registration required - call 667.1300

SAVE THE DATE!
2010 PLAYER PARTICIPATION FORM

Quatro de Mayo Golf Classic
Steele Canyon Golf Course 3199 Stonefield Drive, Jamul

7:30 am breakfast and registration
9:00 am shotgun start
Tuesday - May 4, 2010

Funds raised during this tournament will benefit

"It's Child's Play"

La Mesa Park & Recreation Foundation's drive to raise $1 million to provide accessible, age-appropriate, and fun playgrounds in La Mesa parks

Sign up by February 28th and receive an "early bird" discount!

- **GOLF FOURSOME - $1,000 DONATION:** $800 if you sign up by February 28th. Includes: Breakfast ~ Lunch ~ Tournament Shirt ~ Sleeve of Golf Balls~ Goody Bag ~ Cocktail Reception & Award Ceremony ~ Play with a Pro!
- **HOLE SPONSOR- $1,500 DONATION:** $1250 if you sign up by February 28th. Includes: 1 Foursome~ Sponsor representative at hole ~ Sponsor logo on hole sign ~ Corporate material or sample included in goody bags ~ Play with a Pro!

Information 619.667.1300 or parkfndn@ci.la-mesa.ca.us

2010 Census

Continued from page 1

public health, neighborhood improvements, transportation, education, senior services and much more.

Reaching an Increasingly Diverse Population

The goal of the 2010 Census is to count all residents living in the United States on April 1, 2010. The U.S. Census Bureau does not ask about the legal status of respondents in any of its surveys and census programs. To help ensure the nation's increasingly diverse population can answer the questionnaire accurately and completely, about 13 million bilingual Spanish/English forms will be mailed to housing units in neighborhoods identified as requiring high levels of Spanish assistance. Additionally, questionnaires in Spanish, Chinese (Simplified), Korean, Vietnamese and Russian—as well as language guides in 59 languages—will be available on request.

Recruiting Census Workers

By 2010, there will be an estimated 310 million people residing in the United States. Counting each person is one of the largest operations the federal government undertakes. For example, the Census Bureau will recruit nearly 3.8 million applicants for 2010 Census field operations. Of these applicants, the Census Bureau will hire about 1.4 million temporary employees. Some of these employees will be using GPS-equipped hand-held computers to update maps and ensure there is an accurate address list for the mailing of the census questionnaires.

10 Questions, 10 Minutes to Complete

With one of the shortest questionnaires in history, the 2010 Census asks for name, gender, age, race, ethnicity, relationship, and whether you own or rent your home. It takes only about 10 minutes for the average household to complete. Questions about how we live as a nation—our diversity, education, housing, jobs and more—are now covered in the American Community Survey, which is conducted every year throughout the decade and replaces the Census 2000 long-form questionnaire. Responses to the 2010 Census questionnaire are required by law. All responses are used for statistical purposes only, and all are strictly confidential.

For more information, visit the 2010 Census Web site at www.census.gov/2010.

STAY UP-TO-DATE ON IMPORTANT CITY NEWS, EVENTS, AND SERVICES.

Through the City's Notify Me website service you can subscribe to one or more categories of information and have email alerts sent to you whenever special announcements are made in your categories. Use the button at the left to sign up for this service. Enter your email address, select the type of email you would like to receive (html or text) and select each email list you wish to subscribe to. Finally, click the Subscribe/Manage button. You will receive a confirmation email for each category you select.

Village Makeover

Continued from page 1

gateways to let visitors know that they have arrived at their destination. The project will enhance the sense of place in the Village and further establish it as a competitive commercial district offering patrons an array of dining options, products, and services in a visually appealing and safe environment.

The City financed the planning and engineering effort by reinvesting parking revenues from the Downtown Parking Fund to hire a consultant to prepare design concepts and construction documents. The City and the consultant conducted two community workshops in 2009 to gather feedback from the business community. This public involvement was viewed by the City Council as a critical component in the process of developing concept plans and facilitating construction of the improvements. The business community provided valuable guidance and recommendations which have been integrated into final concept plans that illustrate the joint vision of the City and the business community. The project timeline and concept plans can be viewed on the City's website.

The completion of the concept plan, while a major milestone for the overall project, does not mean that jackhammers will be pounding on the Village any time soon. There is much work to be done before construction can begin. The consulting team must prepare engineering plans for a first-phase of construction. The City, with assistance from the consultant, will also devise a work program to ensure that individual businesses can serve their customers effectively during construction.

In this endeavor, the City looks to the local business community to develop a financing mechanism to provide for ongoing and long-term maintenance of the proposed improvements. With assistance from a consultant, the La Mesa Village business community has begun exploring various special financing options for development of a business district that could fund ongoing maintenance and other promotional and management activities to benefit businesses in the Village. The process of establishing a business improvement district is complex and is expected to take at least a year to complete.

Once a satisfactory business improvement district solution is in place, the actual construction of improvements could begin as early as January 2011.

COUNCIL ACTIONS

October 13, 2009
Adopted a resolution waiving formal bidding and authorizing the purchase and installation of a fire station alerting system for Fire Station 13.

Adopted a resolution of intention to authorize the Mayor to execute the fourth amendment to the Agreement for Management and Implementation of a Home Investment Partnerships Program project with the County of San Diego to fund the La Mesa Down Payment and Closing Cost Assistance (DCCA) Loan Program and accept the HOME allocation of $1,768,882.95.

Adopted a resolution authorizing the acceptance of the San Diego Service Authority for a freeway emergencies grant for rescue airbags and auto extrication training.

Approved a Joint Exercise of Powers Agreement (JPA) between the cities of El Cajon, La Mesa and Lemon Grove to provide cooperative fire protection and emergency medical services.

Appointed members to the Youth Advisory Commission.

October 27, 2009
Adopted a resolution approving a professional services agreement with Edward Henning & Associates, and authorized the allocation of additional funds from the Downtown Parking Fund for development of a plan to finance downtown improvements, maintenance and promotion.

Appointed a member to the Youth Advisory Commission.

Adopted a resolution ordering the vacation of portions of the Grossmont Center Drive and Murray Drive right of way dedicated for public road purposes.

Approved the designation of the properties located at 7910 El Capitan Drive, 4646 Third Street, and 9339 Lemon Avenue as historic landmarks, and established Property Preservation (Mills Act) Agreements for the sites.

Adopted an ordinance adopting standard specifications for public works construction in the City of La Mesa regulating materials of construction and their use in the erection, installation, alteration, repair, removal, conversion, demolition, and construction of public works improvements; providing for the administration of contracts as well as permits issued in connection with such improvements; providing penalties for the violation thereof; and repealing all ordinances and parts of ordinances in conflict therewith; and adopting by reference the 2009 edition of the "Standard Specifications for Public Works Construction" commonly known as "Greenbook," 2007 Supplement to "Greenbook" and 2008 Cumulative Supplement to "Greenbook" of the Southern California Chapter, American Public Works Association and Southern California District Associated General Contractors of California Joint Cooperative Committee.

November 10, 2009
Adopted a resolution authorizing staff to submit an application for inclusion in San Diego Association of Governments (SANDAG) proposed project funding recommendations for fiscal year 2011 federal appropriations for the Downtown Village Streetscape Improvement Project

Adopted a resolution authorizing the continuing use of Supplemental Law Enforcement's Citizens Option for Public Safety (COPS) Funds for the San Diego County 800 MHz Regional Communications System (RCS).

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a local Seat Belt Compliance Traffic Safety Project and approving the addition of the grant funds to the fiscal year 2009-2010 and 2010-2011 budgets.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a local DUI Enforcement and Awareness Program by approving the addition of the grant funds to the fiscal year 2009-2010 budget.

Adopted an ordinance amending Chapter 10.36 of the Municipal Code to prohibit the consumption of alcoholic beverages in public places; and adopted a resolution establishing a fee related to regulating and permitting the possession of open alcoholic beverage containers and the consumption and/or sale of alcoholic beverages in public places pursuant to La Mesa Municipal Code Chapter 10.36

November 24, 2009
Accepted the annual audit reports of the La Mesa Community Redevelopment Agency, City of La Mesa, and single audit of federally assisted grant programs for year ending June 30, 2009.

Adopted a resolution authorizing the renewal of the Police Department Storefront lease for a six month-term.

Adopted a resolution approving the 2010-2014 Redevelopment Area Implementation Plan for the Central, Fletcher Parkway and Alvarado Creek Redevelopment Project Areas.

December 8, 2009
Adopted a resolution authorizing a budget adjustment for the award of grant funding from Kaiser Foundation Hospital Southern California Region.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a Sobriety Checkpoint Mini-Grant Project and approving the addition of the grant funds to the fiscal year 2009-2010 and 2010-2011 budgets.

Adopted a resolution authorizing an amendment for a seventh year renewal of RFP No. 02-3, for an annual contract for janitorial/custodial/set up/tear down services – Community Services, Public Works, and Fire Department facilities to American Building Maintenance (ABM) Janitorial Services.

Adopted a resolution finding the apparent low bidder non-responsive and awarding the contract for Bid No. 07-29, Construction of Traffic Signal Modifications at the Intersection of Lake Murray Boulevard and Baltimore Drive, to HMS Construction, Inc., the lowest responsive bidder.

Adopted an ordinance adding Chapter 14.29 to the Municipal Code to establish water efficient landscape regulations.

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91942
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Mayor ..... Art Madrid
Vice Mayor ..... Dave Allan
Councilmember ..... Ruth Sterling
Councilmember ..... Ernie Ewin
Councilmember ..... Mark Arapostathis
City Manager ..... David E. Witt
Focus Editor ..... Käaren McElroy
Editorial Staff ..... Heather Moore Sheppard
Ofelia Bareno

If you prefer to receive a printed version, please email name and address to cmoff@ci.la-mesa.ca.us or call 667.1105.

Want to know when the next issue of FOCUS is published?

Use the NOTIFY ME link to request automatic email notification so you won't miss the most up-to-date publication.

Watch for the next issue of the
La Mesa FOCUS
AVAILABLE MAY 1

City of La Mesa Monthy Meeting Schedule

Meetings are held at City Hall
8130 Allison Avenue - La Mesa
(unless indicated otherwise)

CITY COUNCIL
Second Tuesday - 4:00 pm
Fourth Tuesday - 6:00 pm

PLANNING COMMISSION
First and Third Wednesday - 7:00 pm

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 am

DESIGN REVIEW BOARD
Every other Monday - 12:30 pm

ENVIRONMENTAL SUSTAINABILITY COMMISSION
Third Monday - 6:00 pm

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 pm

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 am
(as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 pm

HUMAN RELATIONS ADVISORY COMMISSION
Second Monday - 5:30 pm

LA MESA COMMUNITY PARKING COMMISSION
First Thursday - 5:30 pm

TRAFFIC COMMISSION
First Wednesday - 9:00 am

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 pm

YOUTH ADVISORY COMMISSION
Second & Fourth Monday - 4:15 pm
The above meetings are held at the Community Center Conference Room 4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 pm
(except July, Aug., Nov., & Dec.)
The above meeting is held at the Adult Enrichment Center 8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS (Area code 619)

Adult Enrichment Center	464.0505
Animal Control	667.1436
Building Inspection	667.1176
Business Licenses	667.1118
Cable TV	262.1122
City Attorney	667.1128
City Clerk	667.1120
City Council	667.1106
City Hall	463.6611
City Manager	667.1105
Crime Prevention	667.1445
Dog Licenses	667.1117
Engineering	667.1166
Fire (Business)	667.1355
Human Resources	667.1175
Library	469.2151
Mayor	667.1100
Municipal Pool	466.4177
Park Permits	667.1300
Parking Citations	667.1117
Planning	667.1177
Police (Business)	667.1400
Public Works	667.1450
Recreation	667.1300
Recycling/Trash	287.7555
Rides4Neighbors	464.0109
Senior Taxi Scrip	667.1321
Sewer Charges	667.1126
Sidewalk Maint.	667.1450
Storm Water Hotline	667.1134
Streetlight Maint.	667.1450
Traffic Eng. Hotline	667.1144
Traffic Signal Maint.	667.1166
Zoning	667.1177

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • May 2010

La Mesa
COMMUNITY SERVICES

ENROLL NOW FOR Summer Activities

AQUATICS
CAMPS
CLASSES

Convenient enrollment is available online OR print the enrollment form to mail in.

Streetscape Improvement Project – Allison Avenue

Allison Avenue is the main access road to the newly revitalized civic center that includes the library, post office, city hall, Fire Station 11/Administration, and police station. Allison Avenue also provides a connection to the downtown village. With a number of busses passing through Allison Avenue and the adjacent trolley station on Spring Street, Allison Avenue also serves as a major transit and pedestrian corridor.

The Allison Streetscape Improvement Project will continue the streetscape improvements that were recently completed on University Avenue around the north side of the civic center which were designed to improve walkability. Improvements will include: landscaped and sheltered bus stops, mid-block crosswalks in front of the new library and bus stop, street lighting, sidewalks, enhanced crosswalks, street trees and landscaping, and an asphalt overlay. The work will take place in between Palm Avenue and University Avenue.

Work is expected to begin this summer and will take approximately nine months to complete. During the construction, there may be delays and parking restrictions. Additional parking will be available on the civic center property north of city hall. We apologize for any inconvenience and will strive to keep disruptions to a minimum.

This project has been funded by a grant from the San Diego Association of Governments. For additional information, please call the city's project manager, Hamed Hashemian at 667.1153.

Planned Sidewalk to Provide Safer Route to School

The City of La Mesa has been awarded a federally funded Safe Routes to School grant in the amount of $522,300 to construct a sidewalk along the east side of Glen Street from Lemon Avenue Elementary School to Springview Lane.

The project includes design and construction of new curb, gutter, sidewalk and any required retaining walls within existing City right of way and driveway transitions behind the new sidewalk on

Continued on page 2

The City of La Mesa recently completed the Downtown Gateway Signage Improvement Project. The City installed approximately 50 new directional signs and new street name signs in and around the Downtown Village, including this new monument sign at Fletcher Parkway & Baltimore Drive. The signage project was paid for with a mix of state grant funds and reinvested parking revenues.

Planned sidewalk...

Continued from page 1

private property, as well as a pedestrian refuge island at the intersection of Glen Street and Alpine Avenue. This project fills a sidewalk gap along the suggested route to school for Lemon Avenue Elementary School on the east side of Glen Street, providing a continuous sidewalk route from the south to the school boundary.

The school has an enrollment of approximately 560 children, of which about 30 or 5% walk on a daily basis. In addition to encouraging students to walk to school, this project would further ongoing efforts to enhance walkability throughout the City. Construction will begin following utility relocations.

DEADLINE
FOR VOTER REGISTRATION

MONDAY, MAY 24

FOR THE CALIFORNIA PRIMARY ELECTION ON JUNE 8

YOUR VOTE COUNTS!

You will need to register to vote if you:

- Have moved recently
- Changed your name
- Wish to change your political affiliation
- Will be at least 18 years of age on or before the next election

Postcard registration forms are available at a variety of public offices including:

- Registrar of Voters Main Office
- All City Clerk Offices
- Department of Motor Vehicles
- U.S. Postal Services
- Public Libraries

Call the Registrar of Voters main office at 858.565.5800 or visit www.sdvote.com for more voter registration information.

WANT TO MAKE A DIFFERENCE IN YOUR COMMUNITY?

VOLUNTEER FOR A CITY BOARD, COMMISSION, OR COMMITTEE

The City of La Mesa is currently seeking La Mesa residents who are interested in serving their community by becoming a member of a City board, commission or committee.

Serving on a board or commission can be a rewarding experience. Citizen participation helps to ensure that our local government is addressing the needs of the La Mesa community through the services, planning, and decision making provided by each board.

Applications are now being accepted for appointment on the following boards, commissions, and committees:

Commission on Aging

Community Services Commission

Design Review Board

Historic Preservation Commission

Human Relations Advisory Commission

La Mesa Community Parking Commission

Loan Committee for Real Estate Rehabilitation

Personnel Appeals Board

Planning Commission

Traffic Commission

Youth Advisory Commission

Please consider this opportunity to serve on a board, commission, or committee. You will find an application and specific information regarding qualifications, requirements for serving, and meeting days and times on the City's website, or call or visit the City Clerk's office in City Hall, 8130 Allison Avenue, 667.1120.

Applications for advisory boards must be submitted to the City Clerk's office no later than 5:30 pm, Thursday, June 10, to be included in the June interview process tentatively scheduled for 6:30 pm on Tuesday, June 22. The interview and selection process for the Youth Advisory Commission occurs in September.

COOL SPOTS IN & AROUND LA MESA

Summer is fast approaching and La Mesa residents who may be at risk from extreme heat can seek relief during the hottest days of the year at several community locations. You can find a list of Cool Zones in and around La Mesa on the City's website.

For a list of Cool Zones throughout the County and tips to stay cool see www.CoolZones.org or contact the AIS Call Center at 800.510.2020 and press 6.

COUNCIL REVIEWS ACCOMPLISHMENTS FOR 2009

As you know, cities throughout California and the nation continue to struggle with the challenges of balancing falling revenues with the ever increasing costs to provide vital services. On March 18, 2010 City Council met with management staff for the annual strategic planning workshop, the first step in the budget review and update process each year. At the workshop Council reviewed accomplishments from the past year, considered community input gathered from Town Hall meetings, and heard reports on fiscal issues that could impact the City.

Visit the City website to learn about accomplishments for the past year in your City.

CITY RECEIVES AWARDS

KAST-Kids and Seniors Together, La Mesa's Urban Walking Trails, and the sidewalks around Helix High School received recognition in spring 2010.

KAST-Kids and Seniors Together received a $700 grant from CECO, San Diego County Employees' Charitable Organization to purchase sports equipment and craft supplies. KAST is a free after-school program for second through fourth grade youth at La Mesa Dale Elementary School. Teachers recommend the children they feel will benefit most from the supportive interaction with older adults working with daily. There is no charge for the children to attend KAST. The program is funded through La Mesa Park & Recreation Foundation with the generous support of donations and grants. For more information please call 667.1300.

La Mesa's Urban Walking Trials received a 2010 Kaiser Permanente Golden Footprint Award for Local Jurisdiction on April 22 from WalkSanDiego. The City's Public Works Department also received the award for sidewalk design and construction on Orien and Lowell around Helix High School. La Mesa's Urban Walking Trails program is part of our "ready… set… Live Well" Community Wellness Program. The trails offer a one mile beginner level route, a five mile intermediate route and a three half mile advanced route. Go to www.cityoflamesa.com under Quick Links go to City Walks & Urban Hikes to print out your user friendly walking map.

In addition to awards, the City's "ready, set, Live Well" initiative was featured in the April 2010 issue of Western Cities magazine. "Ready, set, Live Well" is working to create the most livable city in the San Diego region.

La Mesa Welcomes New Superintendent of Public Works

The City of La Mesa has hired a new superintendent of public works, Mike Emberton, to oversee the Operations and Maintenance Division of the Public Works Department. Mike began in February and replaced long-time employee Eric Johnson who retired in December. Mike is responsible for managing maintenance crews and administrative office staff housed at the Public Works Operations Center at 8152 Commercial Street.

Director of Public Works, Greg Humora is excited to have Mike on board. "Mike comes to the City with the experience and expertise to lead public works operations. He is extremely customer service oriented and I believe his contribution to the department will be significant."

Mike looks forward to serving the citizens of La Mesa for years to come. "La Mesa is a great community. I look forward to many years of service to the citizens and hope to make La Mesa an even better place to live, work and play."

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91942

7:00 am to Sunset
7 Days a Week

Adults $10 for 9 holes, $14 for 18 holes
Students* $7 for 9 holes, $10 for 18 holes
*(*includes college with valid student ID)*

Clinics, lessons, and special programs are available.
For details go to
www.sunvalleygolfclub.com
or call 466.6102

LA MESA CELEBRATES

National Public Works Week, May 16-22

National Public Works Week is a celebration of the tens of thousands of men and women nationwide who provide and maintain the infrastructure and essential services, above, below and all around us, that affect our quality of life. Instituted by the American Public Works Association (APWA) in 1960, National Public Works Week is observed each year during the third full week in May to call attention to the importance of public works in community life.

Often the unseen heroes, the employees of the La Mesa Public Works Department are the key to the City's ability to consistently deliver the high quality services and quality of life for which La Mesa is known. The department is responsible for the engineering, construction, operation and maintenance of the City's infrastructure, including streets and sidewalks, public buildings, wastewater and storm water collection systems, traffic control devices and park facilities. Capital construction projects, land development, right-of-way permits, solid waste and recycling and environmental programs are also managed by Public Works Department staff.

The services provided by the dedicated staff of the Public Works Department impact the community at large and are an integral component of residents' everyday lives. These services and systems are operated, maintained and improved in the most efficient and effective manner ensuring the health, safety and comfort of the general public.

La Mesa Commission on Aging Community Awareness & Education Forums

Tuesday, May 25, 1:30 pm

"Neighborhood Watch—Organizing for Crime Prevention & Emergency Preparedness"

Adult Enrichment Center
8450 La Mesa Blvd.

Tuesday, June 22, 1:30 pm

"Other Community Support in Emergencies—Churches, Clubs & Community Agencies"

Adult Enrichment Center
8450 La Mesa Blvd.

Tuesday, September 28, 1:30 pm

"La Mesa Candidates' Forum"

Adult Enrichment Center
8450 La Mesa Blvd.

RSVP for each presentation you wish to attend at 464.0505

Free Household Hazardous Waste and Electronic Waste Disposal

UPCOMING COLLECTION DATES: June 5 & July 24

Collection events are available by appointment only by calling EDCO at 287.5696 x4270 or emailing to lmhhw@edcodisposal.com.

E-waste can be recycled at the EDCO Station buy back center during business hours without an appointment. The center is open Monday through Saturday from 8:00 am to 4:00 pm. A small fee may apply to some items.

A list of household hazardous waste and electronic waste items included in these programs can be found on the City website. To request additional information about the program, please contact the Department of Public Works Environmental Services Division at 667.1338 or by email at enviros-vcs@ci.la-mesa.ca.us. For general HHW information or other disposal and recycling options, visit www.cityoflamesa.com/hhw.

Free Oil Filters!

La Mesa Oil Filter Exchange Event

Sat., June 12 • 10 am – 2 pm

Kragen O'Reilly Auto Parts
5350 Jackson Drive

Bring in your used oil filters to be recycled and receive a FREE OIL FILTER!

Limit one free filter per customer. This offer is only valid at the specific date, time, and location above. Only drop off used filters during business hours. Thank you!

Program is funded by a grant from the California Department of Resources Recycling and Recovery.

EXCITING VOLUNTEER OPPORTUNITIES!

Are you interested in becoming a volunteer with the City of La Mesa? Volunteers play an important role in the enhancement and expansion of services to City residents. You will not only provide a valuable service for the community, but also enjoy flexible scheduling for most assignments, develop new skills and meet new friends. Check out our volunteer opportunities below or download a Volunteer Application from www.cityoflamesa.com.

Rides4Neighbors

We need Volunteer Drivers for Rides4Neighbors, a transportation program for La Mesa's older residents and residents with disabilities. Rides are provided by trained volunteers in their own vehicles. We reimburse for mileage and provide supplemental liability insurance. Volunteers decide availability and choose the rides they wish to provide. There is no minimum time commitment or number of rides required to be a volunteer. As a volunteer, you will be part of a rewarding and meaningful civic program. For information, call the Adult Enrichment Center at 464.0109.

Adopt A Block!

You can help preserve and enhance the beauty and cleanliness of La Mesa by volunteering for Adopt A Block. If you are a regular walker in your neighborhood, whether alone, with a pet or a neighbor, you can join this dedicated team of volunteers. The City provides a program vest, bags and a pick-up tool. All you need to do is commit to spending at least five hours a month for one year! You make your own hours. Sign up TODAY by calling 464.0505.

City Hall and Fire Department Tour Guide

Would you be interested in coordinating City Hall and Fire Department tours for school classes? This volunteer job involves coordinating school visit requests with the Mayor and the Fire Department administration. The schedule corresponds to the school year and City Hall tours are requested periodically. Download the standard Volunteer Application or call 464.0505.

Adopt A Park!

We are seeking dedicated garden-lovers, park aficionados and environmentally conscious residents to help us with weekly or bi-monthly care and upkeep of one of the City of La Mesa parks. Periodic litter patrol, weeding, rubbish removal, planting and sprucing up would be just the right stuff to help keep these special places a treasure for all to enjoy. Please download a Volunteer Application, or call 464.0505 for more information!

La Mesa Flag Day Parade

"A Salute to Old Glory"

Sat., June 5

10:00 am

Best viewing along La Mesa Blvd. in the Downtown Village

ATTENTION ELEMENTARY STUDENTS & ADULTS AGE 50+

SAVE THE DATE!

East County Intergenerational Games in La Mesa!

Thursday, October 14

"Join the Generations" for a fun-filled morning of bocce ball, hockey shoot, basketball shoot, Frisbee toss, horseshoes, and lots more fun activities with students from 4th thru 6th grade. Each active adult is paired with a student; the activity circuit is completed as a TEAM. T-shirts, snacks, lunch and giveaways included! Events will take place at La Mesa Middle School.

MAKE A DIFFERENCE!

To register for La Mesa Intergenerational Games, please call

464.0505

POLICE DEPARTMENT INTRODUCES NARCOTICS DETECTION CANINE TEAM

In October 2008 the La Mesa Police Department sought funding to implement a narcotics detection canine program. The department obtained a grant award of $68,890 from the San Diego Police Foundation, funded by the Gary and Mary West Foundation. Over the past several months, the department has developed a program and will soon have a team in operation.

A Narcotics Detection Canine Team consists of an officer/handler and a narcotics detection dog. This type of team will assist the La Mesa Police Department in reducing the availability of narcotics on the street, and in apprehending those involved in the use and sale of illegal drugs in our community.

Officer Derek Cox has been selected as the Police Department's first Narcotics Detection Canine Handler. Officer Cox is a very proactive officer who has focused his patrol efforts on arresting those involved in the use, sale, and transportation of illegal drugs and narcotics. Officer Cox has made over 150 narcotics related arrests during the last three years and he is an expert in this field. Officer Cox is also a decorated officer who has received the California Highway Patrol's "10851 Pin" Award three times, for excellence in the identification and recovery of stolen vehicles, along with numerous department commendations and citations.

Officer Cox will introduce his "K9" partner, along with representatives of the Gary and Mary West Foundation and the San Diego Police Foundation, to the community and City Council Members at an upcoming City Council Meeting. Through the generous support of these foundations and the excellent work of Officer Cox, the La Mesa Police Department has a new resource to help meet our commitment of keeping La Mesa a safe community.

SHARPS DISPOSAL HAS NEVER BEEN EASIER!

Trying to figure out how to safely dispose of your medical sharps? It's now easier than it has ever been before and won't cost you a thing! Home-generated sharps waste is defined as hypodermic needles, pen needles, intravenous needles, lancets, and other devices that are used to penetrate the skin for the delivery of medications derived from a household, including a multifamily residence or household.

In September 2008, State law (Section 118286 of the California Health and Safety Code) made it illegal to dispose of sharps waste in the trash or recycling containers, and required that all sharps waste be transported to a collection center in an approved sharps container.

You can now conveniently dispose of sharps free Monday-Saturday during business hours at EDCO Station's Recycling Buyback Center, located at 8184 Commercial Street. For more information please call EDCO at 287.7555 or visit their website at www.edcodisposal.com/toxic.html.

OVER IRRIGATION IS MONEY DOWN THE DRAIN

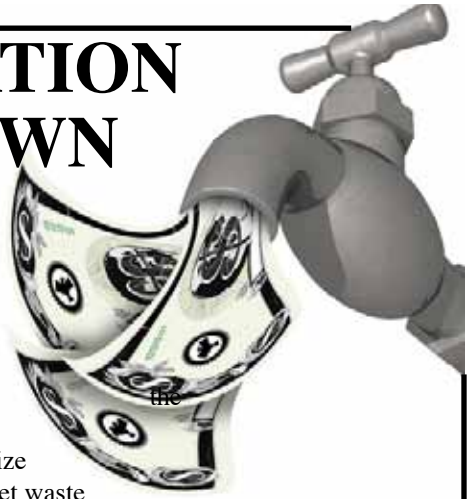

Are you that neighbor that is over-watering their yard? Not only is our precious resource being wasted, but hard earned money as well!

It doesn't take much to moisten the ground before water starts running off your property. Also, over irrigation can mobilize pollutants such as pesticides, fertilizers, and pet waste prior to reaching the storm drain system, and eventually the creeks and channels within our City. Visit the City website for tips that you can follow to help eliminate pollutants from entering our creeks.

You may not be aware that Helix Water District has several programs to help single-family homeowners conserve water. Residents are eligible to apply for high efficiency toilet, clothes washer, and irrigation controller rebates worth up to $200. For more information, call 466.0585 or visit www.hwd.com/conserv or e-mail conserve@helixwater.org.

Please share the above information with your family, friends, and neighbors. For more information you may contact the City's Storm Water Hotline 667.1134.

ADULT SOFTBALL

REGISTRATION

La Mesa Fire Station 12, 8844 Dallas St.
Wednesday, July 21
5:30 – 6:30 pm
Voicemail 667.1172 #6

Team rosters will be issued at time of registration

Fee: $525 for season payable in full at time of registration. Umpire fees not included - $15/game each team

Visit the City website for additional information regarding registration and season schedule.

(18 years and older)

PERSONAL SAFETY

Recent events in the county have caused concern within the community; especially among women. Questions range from, "Where can I safely exercise?" to "Should I buy a weapon?"

Purchasing a weapon and carrying it is a personal choice. The La Mesa Police Department's recommendation is that if you purchase a weapon make sure you are properly trained in the use of that weapon. And know the legal requirements for carrying that particular weapon.

Being physically and psychologically prepared to defend yourself is important. There are numerous excellent self defense courses available within your community. It's a good idea to go online and research which course will work best for you. If you can, attend with a group of friends you can practice with after the training course.

Learning to trust yourself and your instincts is one of the keys to prevent or fight off an attack. Know all your options. Physically and mentally rehearse them. If an attack occurs, you may only have a split second to decide your response. Have a plan in mind…know what you are going to do and then do it quickly.

Below are some tips to help you stay safe:

- Avoid walking or jogging alone especially in the early morning or late at night.
- Wear comfortable clothing that would be easy to run or fight in.
- Avoid wearing headphones, talking on the phone, or texting while you are walking or running alone.
- Carry identification and an emergency phone number.
- Tell someone you trust where you are going and when you will return. Notify them when you get back.
- Always have your keys ready when walking to and from your home, car, or place of business. Avoid getting distracted by digging in your purse or fumbling with shopping bags.
- Always walk with your head held high and look around. A confident presence can make you less of a target.
- Make good eye contact with anyone you encounter; male or female.
- Always be aware of your surroundings and who is near you.
- Change your routine. If you take a certain route at the same time everyday, it will be easy for someone to guess when you will be arriving and leaving.
- If you frequent a particular area, know what businesses are open and what houses are safe. If you need help, you will know exactly where to go instead of trying to guess during a stressful moment.
- Be suspicious! It's not a bad thing.
- Trust your intuition; it's there for a reason. If something doesn't feel right or causes that funny feeling in your gut, move away from the area as quickly as possible. Don't ignore your feelings about a person or a place.
- Sometimes you don't have to be nice! It's OK to be direct or even rude if you don't feel safe. Examples would be the "Talk to the hand gesture" or telling a person, "Sorry, I am not interested."
- If you ever feel that someone is following you, whether they are in a car or on foot, get away! Cross the street, walk into a business or turn and head in the other direction. If the person continues to follow you after you change your course, scream, run into a business, call the police, or signal to other people on the street.
- Know the location of your local police department. If you are being followed while driving, pull into the police station parking lot. Hospitals and fire departments are also good choices.

If you are being attacked:

- Run! Get away any way you can.
- Scream and yell while you are running. Even if the area seems deserted, there may be someone who can hear you.
- If your attacker has control over you and you can't run, do whatever you can not be taken to another location.
- Your hands, feet, knees, elbows and teeth are all weapons. Use them!
- If you are fighting off an attack, the best places to target are face, eyes, throat, and groin.

SMALL STEPS TO BIG CHANGE!

You do not have to be rich or famous to make healthy choices. There are small steps that anyone can take to live more sustainably.

WHAT IS SUSTAINABILITY?

Sustainable societies are those whose infrastructure, institutions, and practices (social, economic and environmental) meet the needs of the present generation without compromising the ability of future generations to meet their own needs.

- Brundtland Commission, U.N. Commission on Sustainably Development

GREEN LAUNDRY.

Do full loads and clean your dryer's lint trap for greater energy efficiency. Set your rinse cycle on cold; you'll use less energy and clothes get just as clean. Hang partially dried clothes, or line dry altogether. Choose high-efficiency models when replacing machines.

Did you know? Heating the water accounts for 90% of the energy used by a washing machine.

EAT LOCALLY.

Buying and growing local food reduces energy consumption. Visit our weekly farmer's market on Alison Ave, Fridays 3:00-6:00 pm. Join a local organic co-op, or grow your own fruits and vegetables.

Did you know? The journey from pasture to plate averages 1,200 to 2,500 miles.

KICK THE BOTTLED WATER HABIT.

America's bottled water habit uses more than 1.5 million barrels of oil each year. Invest in a reusable, nontoxic bottle.

Did you know? 40 percent of bottled waters sold are just tap water.

UNPLUG IT.

Computers and electronic devices with standby-remote control ability are "energy vampires" which suck energy even when turned off. Most recharging adaptors for phones, cameras etc. draw energy whenever they are plugged into an outlet, despite being fully charged or even connected. By plugging into a surge protector strip that can be turned off when not in use, you will save thousands of pounds of carbon dioxide a year.

Did you know? Such phantom energy loss uses an estimated 65 billion kilowatt-hours annually in America, creating more than 87 billion pounds of carbon dioxide.

Part 2 of 3

SUNDAYS AT SIX

Summer Concert Series • Concerts from 6:00 – 7:00 pm

at Harry Griffen Park • 9550 Milden Street, La Mesa

SAVE THE FOLLOWING DATES:

JUNE 13 JUNE 20 JUNE 27 JULY 11 JULY 18 JULY 25

Enjoy FREE concerts featuring performances from some of San Diego's premiere recording artists, musicians, and singers. Bring a picnic and spend "Sundays at Six" relaxing to concert band, country, jazz, and variety music in the company of friends.

Watch the City website for updated concert information and performance lineup as it becomes available.

Thanks to sponsors: Wells Fargo and Country Hills Healthcare Center

CITY OF LA MESA JEWEL of the HILLS

LA MESA ARTS ALLIANCE fostering the arts in our community

STORM WATER POLLUTION PREVENTION REQUIREMENTS

Did you know that the City of La Mesa is under strict requirements set by the State of California regarding storm water pollution? Similar to the requirements of neighbor cities, La Mesa is required to develop and implement strategies to reduce the amount of pollutants entering our streams and waterways.

In order to investigate the level of storm water pollution, the City began conducting storm water quality testing in 1993. Since then, the City has expanded the testing program to analyze additional pollutants, including metals, nutrients, pesticides, oil and grease, and bacteria. There are a total of 18 locations within the City that are tested annually. Monitoring and testing allows the City to pinpoint the pollutants of concern, as well as provide an approximate location of the source. Further investigation can then be conducted to attempt to pinpoint and eliminate the exact cause.

Sources of everyday pollution can include household cleaners, fertilizers, sewage, pesticides, trash, and pet waste. Allowing just a small amount of these materials to run into the street or storm drain may impact the storm water testing which the City conducts.

Here are ways that you can help decrease or maintain low pollutant concentrations.

- Pick up after your pet and place waste in trash cans.
- Dry sweep exterior paved areas. Do not use water or a hose to clean areas such as sidewalks or driveways.
- If water must be used for cleaning, use a mop and bucket. Dispose of wash water in a mop sink.
- Avoid over-irrigation and adjust timers accordingly. The added benefits are a lower water bill and a more efficient use of water.
- Minimize use of pesticides, herbicides, and fertilizers and if used, ensure instructions are followed and over-spray is minimized. Store material properly, cover and contain.
- Keep trash receptacle lids closed and schedule regular pick-ups.
- Perform vehicle maintenance indoors and use drip pans.
- Wash vehicles at a commercial car wash when possible or over an area that prevents wastewater from entering into the storm drain system. Also minimize using soap while washing vehicle.

Storm drains are different than the sewer system. Water entering the storm drain system does not get treated. It flows directly to creeks and rivers – terminating at the Pacific Ocean. Please do your part to help protect the environment. Visit the City website for information and storm water educational materials or call the City of La Mesa's Storm Water Hotline if you have any questions or concerns at 667.1134.

TRANSPORTATION & MOBILITY EXPO

Thursday, June 17 10:00 am – 2:00 pm

La Mesa Community Center, 4975 Memorial Drive

The City of La Mesa will host a Transportation & Mobility Expo on Thursday, June 17.

The Expo is a free event open to East County seniors, adults with disabilities, adult children of aging parents, and other caregivers who want to learn more about San Diego area transportation and community accessibility options. Exhibitors and guest presenters will be on hand to inform and educate attendees about specialized transportation resources, discount taxi services, public transit services and special programs, ADA paratransit, adaptive devices for home and community accessibility, scooters and electric mobility options and more! Channel 10 News Anchor Hal Clement will be the featured speaker.

Funded by the San Diego Association of Government's Transnet Minigrant Program and the Grossmont Healthcare District.

Event sponsorship and exhibitor opportunities are now available. Call Judy Stern at 667.1490.

COUNCIL ACTIONS

January 12, 2010

Ratified the Design Review Board's approval of DRB-09-14 (Windmill Summit LLC), for a proposed 33,000 square-foot, 3 story office building addressed as 9400 Grossmont Summit Drive.

Ratified of the Design Review Board's approval of DRB-09-18 (Clearwire), for proposed modifications to an existing wireless communications facility at 8265 Commercial Street.

Adopted a resolution authorizing the extension of the Regional Communications System Participating Agency Agreement between the County of San Diego and the City of La Mesa until March 31, 2013.

Adopted a resolution authorizing the acceptance and expenditures of the 2008 Homeland Security Grant Program funds to purchase and install the San Diego Regional Command and Control Communication (3C's) equipment into the police department's mobile command vehicle and approving the addition of the grant funds to the FY 2009/2010 budget.

Adopted a resolution approving the use of Heartland Fire and Rescue as the representative name for the joint management team under the Joint Exercise of Powers Agreement for fire protection and emergency medical services for the cities of El Cajon, La Mesa and Lemon Grove.

January 26, 2010

Ratified the Design Review Board's approval of DRB-09-20 (Clearwire), for proposed modifications to an existing wireless communications facility at 9019 Park Plaza Drive.

Adopted a resolution awarding a contract to KTU&A for professional services related to the General Plan circulation update incorporating bicycle facilities and infrastructure and complete street planning.

Adopted a resolution awarding Bid No. 09-18 for the Junior Seau synthetic turf repair to Asphalt, Fabric & Engineering, Inc. dba California Ultimate Turf and accepting a donation from the La Mesa Park and Recreation Foundation and appropriating funds from the City Liability Risk Financing fund to the project.

Adopted a resolution awarding a contract for Bid No. 09-11, Parkway Drive Street Light Project, to Patterson Brothers Lighting Incorporated.

Adopted a resolution waiving formal bid procedures and authorizing execution of agreements between the City of La Mesa and Gary F. Hoyt Landscape Architecture, Inc., for specialized professional services for Collier Park – Phase 1 Landscape Construction Documents; and between the City of La Mesa and Snipes-Dye Associates, Inc., for specialized professional services for Collier Park – Phase 1 Sewer Improvement Drawings.

Adopted a resolution authorizing a grant application for Prop 84 – Statewide Park Development and Community Revitalization Program of 2008 for Collier Park construction.

February 9, 2010

Ratified the Design Review Board's approval of DRB-09-19 (Clearwire), for a proposed wireless communications facility at 5575 Lake Park Way.

Ratified the Design Review Board's approval of DRB-09-22 (Clearwire), for proposed modifications to a wireless communications facility at 8861 La Mesa Boulevard.

Adopted a resolution accepting bid and awarding contract for Sewer Improvements Project at various locations to SC Valley Engineering, Inc., Bid No. 09-19

Adopted a resolution entering into an agreement to perform construction inspection services for sewer improvements at various locations with Infrastructure Engineering Corporation.

Adopted a resolution of the City of La Mesa authorizing the acceptance of the FY09 State Homeland Security Grant Program (SHSGP) grant of $67,821 for terrorism preparedness.

Adopted a resolution in support of the Local Taxpayer, Public Safety and Transportation Protection Act of 2010.

February 23, 2009

Adopted a resolution accepting Bid No. 09-07 and awarding a contract for the Allison Avenue Improvements Project to Hazard Construction Company.

Adopted a resolution entering into an agreement to perform construction inspection services for sewer improvements at various locations with Infrastructure Engineering Corporation.

Adopted a resolution authorizing a grant application for the County of San Diego Community Enhancement Program in collaboration with the "Ready…Set…Live Well" Initiative, the San Diego County Childhood Obesity Initiative, the San Diego County YMCA and the La Mesa Environmental Sustainability Commission.

Adopted an ordinance repealing Chapter 7.18 of the Municipal Code in its entirety and adoption a new Chapter 7.18 to update regulations pertaining to storm water and non-storm water discharges.

Adopted a resolution authorizing the City to join the CaliforniaFIRST Property Assessed Clean Energy Program; authorized the California Statewide Communities Development Authority to accept applications from property owners, conduct contractual assessment proceedings and levy contractual assessments, and authorizing related actions; and adopted a resolution authorizing the lead collaborative entity to apply for funds on behalf of the City.

March 9, 2010

Adopted a resolution approving the establishment of veterans preference credit in the hiring process.

March 23, 2010

Accepted the 2009 Annual Report – Implementation of the General Plan and authorized staff to transmit the Report to the State Office of Planning and Research.

Adopted a resolution authorizing execution of a Memorandum of Understanding for the San Diego Urban Area Regional Computer-Aided Dispatch Interoperability Project (RCIP)

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91942
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Mayor ..... Art Madrid
Vice Mayor ..... Dave Allan
Councilmember ..... Ruth Sterling
Councilmember ..... Ernie Ewin
Councilmember ..... Mark Arapostathis
City Manager ..... David E. Witt
Focus Editor ..... Käaren McElroy
Editorial Staff ..... Heather Moore Sheppard
Ofelia Bareno

Watch for the next issue of the
La Mesa FOCUS
AVAILABLE AUGUST 1

Want email notification when the next issue of FOCUS goes online?

Use the NOTIFY ME link to request automatic email notification so you won't miss the most up-to-date publication.

New sign is part of Allison Ave. Streetscape Improvement Project.

City of La Mesa Monthy Meeting Schedule

Meetings are held at City Hall
8130 Allison Avenue - La Mesa
(unless indicated otherwise)

CITY COUNCIL
Second Tuesday - 4:00 pm
Fourth Tuesday - 6:00 pm

PLANNING COMMISSION
First and Third Wednesday - 7:00 pm

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 am

DESIGN REVIEW BOARD
Every other Monday - 12:30 pm

ENVIRONMENTAL SUSTAINABILITY COMMISSION
Third Monday - 6:00 pm

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 pm

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 am (as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 pm

HUMAN RELATIONS ADVISORY COMMISSION
Second Monday - 5:30 pm

LA MESA COMMUNITY PARKING COMMISSION
First Thursday - 5:30 pm

TRAFFIC COMMISSION
First Wednesday - 9:00 am

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 pm

YOUTH ADVISORY COMMISSION
Second & Fourth Monday - 4:15 pm
The above meetings are held at the Community Center Conference Room 4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 pm (except July, Aug., Nov., & Dec.)
The above meeting is held at the Adult Enrichment Center 8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS (Area code 619)

Adult Enrichment Center	464.0505
Animal Control	667.1436
Building Inspection	667.1176
Business Licenses	667.1118
Cable TV	262.1122
City Attorney	667.1128
City Clerk	667.1120
City Council	667.1106
City Hall	463.6611
City Manager	667.1105
Crime Prevention	667.1445
Dog Licenses	667.1117
Engineering	667.1166
Fire (Business)	667.1355
Human Resources	667.1175
Library	469.2151
Mayor	667.1100
Municipal Pool	466.4177
Park Permits	667.1300
Parking Citations	667.1117
Planning	667.1177
Police (Business)	667.1400
Public Works	667.1450
Recreation	667.1300
Recycling/Trash	287.7555
Rides4Neighbors	464.0109
Senior Taxi Scrip	667.1321
Sewer Charges	667.1126
Sidewalk Maint.	667.1450
Storm Water Hotline	667.1134
Streetlight Maint.	667.1450
Traffic Eng. Hotline	667.1144
Traffic Signal Maint.	667.1166
Zoning	667.1177

ATTACHMENT 6.1

MAP OF HIGH TTWQ RESIDENTIAL AREAS

High Threat to Water Quality Areas - City of La Mesa -

Nagel and Sarita Streets

Baltimore Drive - North of I-8

East of Helix High School

Legend

- Roads
- Water Quality Threat Areas
- Hydrological Sub Areas

Land Use

- Rural Spaced Residential
- Single Family Residential
- Multi Family Residential
- Mobile Home Parks
- Group Quarters Residential
- Hotels/Motels/Resort
- Light Industrial
- Junkyards/Dumps/Landfill
- Heavy Industrial
- Extractive Industries
- Airports
- Other Transportation
- Commercial
- Office
- Public Services
- Health Care
- Miltary
- Schools
- Commercial Recreation
- Parks
- Agricultural
- Vacant
- Water
- Construction

Feet

0 500 1,000 2,000

1 inch equals 917 feet

CITY OF LA MESA
JEWEL of the HILLS

Data Sources:
Parcels. SanGIS: February 2008.
San Diego Trolley. City of La Mesa: March 2007.
Land Use. SANDAG: January 2007.
Printed: April 4, 2008

ATTACHMENT 8.1

TIPS FOR OUTDOOR VENDORS

CITY OF LA MESA
JEWEL of the HILLS

VENDOR FACT SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

City of La Mesa
Storm Water Pollution Prevention
Tips for Outdoor Vendors

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying storm water runoff into receiving water bodies, such as creeks, lakes and oceans. Unlike the sewer system, storm water runoff entering the storm drain system is not treated. Harmful pollutants, as listed below, can be transported during non-storm water discharges such as hosing down side walks or equipment. These types of pollutants are harmful to the environment and negatively impact water quality, aquatic animal and plant life as well as our quality of life. Non-storm water discharges are prohibited and in violation of the City Ordinance. A list of common pollutants and pollution prevention tips are provided below.

Pollutants of Concern

1. Sediment
2. Fertilizers
3. Metals
4. Detergents
5. Pesticides
6. Organic Compounds (solvents)
7. Trash and Debris
8. Oil and Grease
9. Bacteria

Good House Keeping

- Dry sweep exterior paved areas. **Do not use a hose or water!** Place debris in dumpster and keep dumpster lid closed.
- If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer system (sink or toilet). Wash water is not allowed to enter the storm drain.

Outdoor Material and Equipment Management

- Store material under covered areas.
- Place liquid material in secondary containment to ensure spills are contained.
- Ensure that frying oil is contained and managed properly without dropping/leaking on to the pavement.
- If using frying oil, ensure that you purchase absorbent material (absorbent pads) to address cleanup of potential oil spills.
- Inspect/fix equipment to ensure no leaks.
- Do not wash equipment at the event!

Waste Management

- Place trash in dumpsters with lids always closed.
- Cleanup leaks/spills immediately and place waste material into the dumpster

Should you require clarification or additional information on storm water pollution prevention, please contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.2

OVER IRRIGATION FACT SHEET

City of La Mesa
Storm Water Pollution Prevention
Over-Irrigation

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

With La Mesa's clay soils, it doesn't take much to moisten the ground before water starts running off your property to the curb, down the street and into the storm drain. Runoff from over-irrigation may transport pollutants such as sediment, pesticides, fertilizers, pet waste, bacteria, and automobile fluids. These pollutants enter our local creeks and streams and discharge into the ocean.

Over-irrigation is not prohibited; however, the following measures are recommended.

1. Over-irrigation runoff shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Irrigate to meet site-specific conditions to prevent over-watering.
3. Ensure that your irrigation system has control devices, sensors or shut-off switches to address malfunctions.
4. Place or group plants with similar water needs within the same area.
5. Don't irrigate non-planted areas.
6. Inspect your irrigation system regularly for potential problems
7. Consider drip irrigation to save water and prevent over-irrigation and runoff.
8. Adjust irrigation rates according to seasons, weather conditions and the soil's ability to absorb water. Instead of watering for 15-minutes straight, break up the session into 5-minute intervals, allowing water to soak in before the next application.
9. Irrigate in the early morning; it's the most efficient time to water plants with minimal evaporation.
10. Refrain from irrigation during hot, windy periods of the day. Do not let water run out into the street.

Do the right thing, stay in compliance and protect our environment. For more information contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.3

CHOLLAS CREEK TMDL FACT SHEET

Chollas Creek TMDL Fact Sheet

What are the Chollas Creek TMDLs?
In 2003 and 2007, Total Maximum Daily Load (TMDL) allocations for the pesticide diazinon and for heavy metals (copper, lead, and zinc), respectively, were adopted by the Regional Water Quality Control Board (a State Regulatory Agency) for Chollas Creek. The regulations establish strict numeric limits on the amounts of heavy metals and diazinon that can be present in urban runoff. Southwestern La Mesa, roughly bounded by El Cajon Boulevard to the north and Spring Street to the east (see map), eventually drains to Chollas Creek and is subject to these requirements. Businesses within this area are impacted by these new requirements. The City is monitoring water quality near your business to identify and eliminate sources of these pollutants to comply with new State regulations. The following activities/sources contribute to the discharge of heavy metals and diazinon.

Heavy metals are commonly associated with industrial waste, uncontained storage of certain metal products or materials (such as galvanized steel), cutting and grinding activities, atmospheric deposition, metal smelting or plating, and automobile tires and brakes.
Diazinon is a pesticide associated with landscaping activities. It has been banned for use and is no longer available at retail outlets. Diazinon acquired prior to the ban should be disposed of in accordance with state and federal regulations.

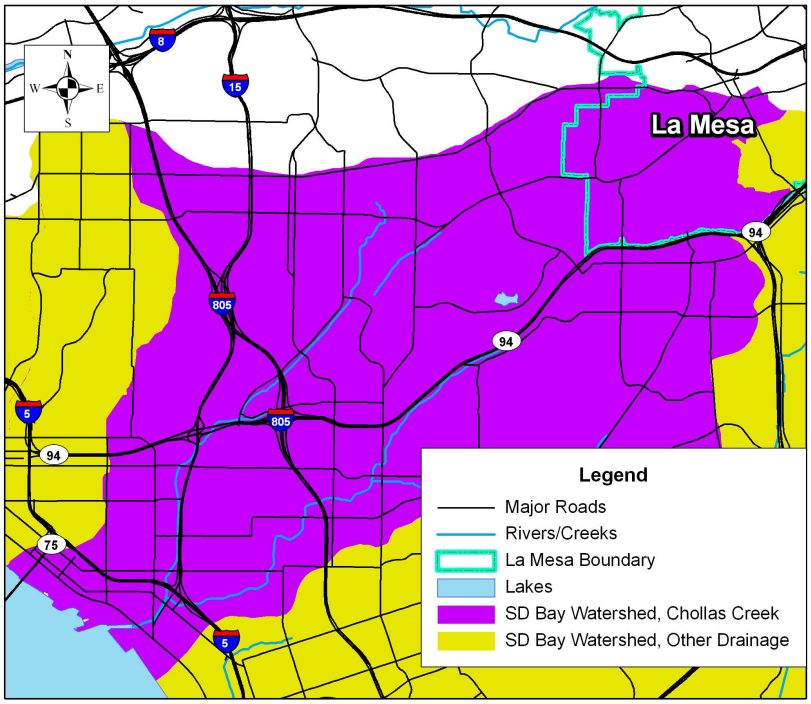

What is the City of La Mesa doing about these TMDLs?
The City's many efforts to protect water quality and comply with State regulations include regularly sweeping its streets and cleaning out its storm drain system, inspecting businesses and construction sites, and applying strict water pollution control standards to new development projects.

What do these TMDLs mean for my business?
The City's Municipal Code requires that businesses take measures to ensure that urban runoff (water that leaves your business and enters storm drains) is not contaminated with pollutants. Chapter 7.18 of the Municipal Code requires businesses to implement measures including those listed below. Taking these actions will help meet TMDL requirements.

- Eliminate non-storm water discharges, such as hosing off property and allowing the water to leave the site, dumping liquids into a storm drain, and runoff from excessive irrigation.
- Cover and contain metal products or materials that may contain heavy metals where feasible. Examples of such materials include galvanized metal, brake pads, tires, and metal recycling bins.
- Conduct metal cutting, grinding, welding, automotive or equipment repair, and similar activities in indoor, contained areas where feasible.
- Regularly sweep paved areas of your site to keep them clean and dispose of debris appropriately.
- Do not use any product containing diazinon. Contact County of San Diego Hazmat for instructions on proper disposal (619-338-2231).
- Store all pesticides and fertilizers in covered and contained areas. Consider alternative, non-chemical pest control methods.
- Do not apply pesticides before storms and eliminate overspray of pesticides onto paved surfaces.

If you observe illegal dumping into a storm drain, please report it to the City at 619-667-1134.

ATTACHMENT 8.4

RESIDENTIAL PREVENTING URBAN RUNOFF POLLUTION BROCHURE

Pollutants of Concern

As rainfall flows over the ground, it picks up a variety of pollutants and deposits them into our watersheds. The following pollutants are commonly transported in the storm drain system and have been found to degrade water quality.

- Sediments
- Fertilizers
- Metals
- Detergents
- Pesticides
- Organic Compounds (solvents)
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

The following Best Management Practices (BMPs) are required to be used in residential areas to reduce urban runoff pollution in our streams and waterways. To do your part in protecting our water quality, please implement the following BMPs, where applicable or checked by the City inspector.

Maintenance & Good Housekeeping

- ❑ Regularly, dry sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- ❑ If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- ❑ Water used for cleaning exterior surfaces must be contained and disposed of into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the storm drain or leave the property.
- ❑ Regularly inspect and maintain storm drain inlets.

Landscaping

- ❑ Only irrigate during early morning or late evening to avoid evaporation.
- ❑ Aim sprinklers to avoid watering other areas.
- ❑ Time sprinklers to avoid over watering and causing runoff.
- ❑ Minimize pesticide, herbicide and fertilizer use, which are harmful to animals downstream.
- ❑ Hand pull weeds instead of using herbicides.
- ❑ Do not use pesticides that eliminate beneficial insects (i.e., Integrated Pest Management).

Outdoor Material Storage

- ❑ Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid material.
- ❑ Have a spill response kit available to clean up potential spills such as kitty litter or other absorbents.
- ❑ Keep material storage areas free from rainwater accumulation.
- ❑ Keep lids closed on all outdoor storage containers and ensure containers are labeled.

Waste Management

- ❑ Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- ❑ Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- ❑ Fix any leaks in garbage cans or dumpsters.
- ❑ Schedule regular waste pick-up.

Vehicle /Equipment Maintenance

- ❑ Perform all vehicle maintenance indoors when possible.
- ❑ Use drip-pans to collect fluids from leaky vehicles.
- ❑ Clean up spills immediately using kitty litter or other absorbents. Properly dispose of used absorbents.

Vehicle /Equipment Washing

- ❑ Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- ❑ Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- ❑ Minimize the use of soaps and water while washing.
- ❑ Protect storm drains or curb inlets and then collect all wash water by vacuum. Recycle or dispose of wash water via the sanitary sewer system.
- ❑ Drain excess wash water to the sanitary sewer (sink or toilet), not to storm drains.

Loading Areas & Operations

- ❑ Load and unload in designated areas.
- ❑ Regularly dry sweep loading and unloading areas.
- ❑ If possible, cover loading areas.
- ❑ Divert storm water away from all loading and unloading areas.
- ❑ Check shipments and trucks for leaks and spills.
- ❑ Cleanup spills/leaks immediately and dispose of properly.
- ❑ If you must use water for cleaning, use a mop and bucket and dispose of wash water into the sanitary sewer.
- ❑ Major cleaning of exterior surfaces must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water should not be allowed to enter the street gutter or storm drains.

a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – terminating at the Pacific Ocean!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our watersheds.

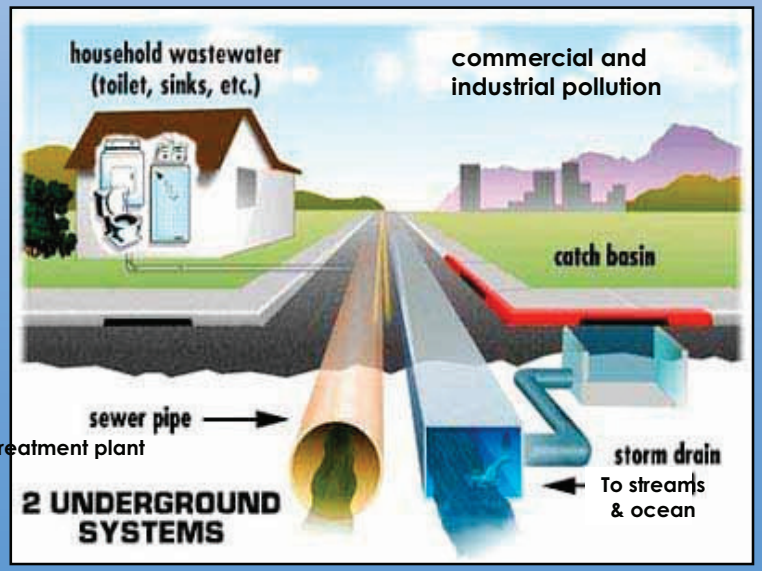

1-888-846-0800

HOUSEHOLD HAZARDOUS WASTE DISPOSAL

EDCO
8184 Commercial Street
By Appointment
Questions: (619) 466-3355

RECYCLING

EDCO: (619) 466-3355

QUESTIONS AND COMMENTS

City of La Mesa Storm Water Program
(619) 667-1340

LOOK ON THE WEB

USED OIL RECYCLING CENTERS
http://www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
http://www.ipm.ucdavis.edu/

County of San Diego Storm Water Management Program
www. co.san-diego.ca.us/deh/stormwater/stormwater.html

State Water Resources Control Board (SWRCB) Storm Water Program
www.swrcb.ca.gov/stormwtr/construction.html

US Environmental Protection Agency
www.epa.gov/OWOW/NPS/

Clean Water Network
www.cwn.org

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ATTACHMENT 8.5

POOL AND SPA FACT SHEET

CITY OF LA MESA
JEWEL of the HILLS

POOL & SPA FACT SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91942
Phone: 619.667.1166 • Fax: 619.667.1380

City of La Mesa
Storm Water Pollution Prevention
Pools & Spas

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

Discharging of pool or spa water is not prohibited; however, the following measures are required.

1. Water shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Pool water must be dechlorinated
3. Water pH acceptable range from 7 to 8
4. No algae present in water
5. Water shall not contain chemicals to counteract the chlorine
6. Water does not contain hydrogen peroxide based products
7. Controlled discharge eliminating potential for erosion

Chlorine

Test pool or spa water for chlorine prior to discharge. Chlorine naturally dissipates overtime and if pool or spa water is left 3 to 5 days, it will become dechlorinated. Pool water needs to be drained before it turns green. Draining pool water gradually over landscaped areas will help prevent erosion problems.

Pool Filters

Pool filters should be cleaned over landscaped areas or anything that will absorb the discharge. Material may be collected over a filter cloth and disposed of in the trash. Filter backwash must be discharged into the sewer system with a pH of 5 to 12.5.

Pool Construction

Material must be contained and disposed of appropriately. Waste generated from plaster, gunite, cement, sediment, and other construction materials is prohibited from entering the storm drain system.

Do the Right Thing, Stay in Compliance and Protect Our Environment. For more information, contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.6

SAN DIEGO RIVER AND SAN DIEGO BAY FACT SHEETS

San Diego River Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego River and the San Diego Bay. Your business or facility is located within the San Diego River Watershed.

San Diego River Watershed

The San Diego River Watershed is comprised of 443 square miles. It extends from the mountains near Julian to the Pacific Ocean. Portions of the watershed fall within the cities of El Cajon, Poway, San Diego, Santee, several unincorporated areas, and the City of La Mesa. Primary tributaries to the San Diego River include Boulder Creek, Conejos Creek, Los Coches Creek, San Vicente Creek, and Forester Creek. Alvarado Creek in La Mesa is also tributary to the San Diego River. Alvarado Creek flows into the San Diego River and ultimately into the Pacific Ocean between South Mission Beach and Ocean Beach near Dog Beach.

Pollutants of concern listed in the 2002 Clean Water Act Section 303(d) List Of Water Quality for the lower San Diego River Watershed include fecal coliform (sewage/urban runoff), low dissolved oxygen (decay of organic matter), total dissolved solids (industrial waste/chemical spills), and phosphorus (phosphate based detergents). Between 1996 and 1999, coliform bacteria more than doubled due to urban runoff and sewage.

Other pollutants of concern not listed above include pesticides such as Diazinon and Chlorpyrifos (commercial, agricultural, and residential application), Total Suspended Solids/Turbidity (suspended sediment/solids, construction, sewage, eutrophication), Copper and Zinc (industrial waste or automobiles), and pH/Phosphate (industrial waste, automobiles, sewage, fertilizers, eutrophication, hardening/concrete of creeks).

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Store materials properly to ensure it is not exposed to storm water. Do not over-irrigate your landscape. If you observe illegal dumping into a storm drain, you should call the City's storm water pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

San Diego Bay Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego Bay and the San Diego River. Your business or facility is located within the San Diego Bay Watershed.

San Diego Bay Watershed

The San Diego Bay Watershed is comprised of 415 square miles. It extends from the Laguna Mountains to San Diego Bay. The watershed falls within the cities of La Mesa, Chula Vista, Coronado, Imperial Beach, Lemon Grove, National City, San Diego, and unincorporated areas of the County. Approximately 4 square miles in the southern portion of the City of La Mesa is part of this watershed. The major discharge sources to San Diego Bay include Sweetwater River, Otay River, Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek.

Three drainage basins in the City of La Mesa are part of the San Diego Bay Watershed. Runoff from the Spring Valley Basin flows to the Sweetwater River. Runoff from the University Channel and Lemon Grove Basin contribute to Chollas Creek. The aforementioned creek and river flow into San Diego Bay.

Pollutants of concern associated with the watershed include diazinon, copper and zinc, fecal coliform, turbidity, and total suspended solids. The sources of these pollutants are a result of residential, agriculture or commercial pesticide application, automobiles and industrial waste, sewer spills, encampments, wildlife, erosion, suspended sediment, and fertilizers. Pollutants of concern for Chollas Creek in particular include metals such as copper, lead, zinc, cadmium, and coliform bacteria.

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Moreover, store materials properly to ensure it is not exposed to storm water and do not over-irrigate your landscape. If you observe storm water pollution or illegal dumping into a storm drain, you should call the City's Storm Water Pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

CITY OF LA MESA

2009/2010
JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT
IDDE SECTION

DECEMBER 2010

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

CITY OF LA MESA

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT 2009/2010

IDDE SECTION

DECEMBER 2010

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David E. Witt
City Manager

Date: December 2010

Telephone Number: (619) 667-1105

INTRODUCTION AND CONTENTS

Introduction

Section 7 of the Annual Report discusses the implementation of the illicit discharge detection and elimination (IDDE) component of the City's storm water program. This program consists of dry weather monitoring activities and other activities intended to prevent and respond to illicit connections and illegal discharges, such as operating a storm water hotline. The reporting period for the portions of this section that discuss dry weather monitoring activities extends through September 30, 2010, but the reporting period for other activities described in the section extends through June 30, 2010, consistent with the rest of the JURMP Annual Report. Because the field work for the dry weather monitoring program is not required to be completed until September 30, 2010, the same day that the JURMP Annual Report is to be submitted, the RWQCB extended the submittal deadline for all of Section 7 of the 2009/2010 JURMP Annual Report until December 15, 2010.

Contents

This submittal includes a certification statement, the text of Section 7 of the 2009/2010 JURMP Annual Report, and the attachments associated with that section. For clarity, the items included in this submittal are listed below.

- Certification Statement for Section 7 Submittal
- Introduction and Contents
- Section 7 (IDDE Component) of the 2009/2010 JURMP Annual Report
- JURMP Annual Report Requirements Checklist (for Section 7 only)
- Attachment 7.1, City of La Mesa Dry Weather Field Screening and Analytical Monitoring Program 2010

Please note that the complaint log, referenced as Appendix B in Section 7, was already provided with the main 2009/2010 JURMP Annual Report submittal in September 2010 and is not included again with this December submittal.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

The City maintains several programs to prevent and to seek out and eliminate illicit connections and illegal discharges (IC/IDs), which can be significant sources of pollutants to the City's MS4. Illicit connections include improper links to the MS4 such as sewer pipes or car wash facility drains. Illegal discharges may result from activities such as vehicle washing or equipment cleaning without the use of proper BMPs. City storm water personnel work with residents, businesses, and City staff to make them aware of BMPs to prevent IC/IDs and to encourage reporting of IC/IDs. The following activities are the primary components of the City's program to combat IC/IDs:

- Inspecting local businesses, construction sites, and municipal facilities
- Conducting the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program)
- Operating a public complaint hotline

These activities enable the City to provide a comprehensive system to improve the quality of storm water and urban runoff throughout the City.

7.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Notable achievements for the illicit discharge detection and elimination component during the 2009/2010 reporting period are presented in the following bulleted list. Please note that per Addendum No. 2 to the Municipal Permit, the reporting period for the Dry Weather Monitoring Program extends through September 30, 2010. The reporting period for all other components of the City's IDDE program ended on June 30, 2010.

- The City recorded and investigated 84 Storm Water Hotline complaints (Appendix B, within the City of La Mesa 2009/2010 JURMP Annual Report).
- Eleven IC/IDs were discovered and reported during the 2009/2010 reporting period. These were followed up on by City personnel, and enforcement measures were applied as required.
- The City performed the recommended corrective actions proposed in the 2009 Dry Weather Monitoring Program Report to prevent possible pollutants from entering the storm drain system.
- The City conducted the 2010 Dry Weather Monitoring Program.

7.2 Public Reporting of Illicit Discharges and Connections

See also Section 4.8 of this JURMP Annual Report.

Reporting and Response

Public and municipal involvement are crucial to preventing and eliminating IC/IDs from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is provided on the City's website, in distributed storm water educational and outreach material, in storm water articles in the *La Mesa Focus* newsletter, and on the Storm Water Bulletin Board. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged onto a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges.

Complaints received by the City during the 2009/2010 reporting period and the City's response to each are listed in Appendix B. A total of 84 complaints were documented this year, a decrease from the 107 complaints documented last year. This may indicate that La Mesa residents are becoming more aware of the City's Storm Water Pollution Prevention Program and, therefore, fewer violations are occurring.

Enforcement

As previously stated, complaints received via the Storm Water Hotline, City website, and Public Works hotline are included in a table in Appendix B. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, violations, and/or educational material.

7.3 Spill Reporting, Response, and Prevention

See Section 4.9 of this JURMP Annual Report.

7.4 Urban Runoff Monitoring

The City has continued to conduct a Dry Weather Monitoring Program, as required by the Municipal Permit. This program assists the City in detecting and eliminating IC/IDs to the storm drain system. There are three major components to the Dry Weather Monitoring Program:

- Field observations, which include site descriptions and qualitative observations
- Field screening, which includes flow estimation and sample testing using meters and test kits at the site

- Analytical monitoring, which involves submittal of collected samples from selected sites, constituting 25 percent of all flowing or ponded sites, to an analytical laboratory for additional testing

Numeric action levels are used as the primary approach for the interpretation of most constituent concentrations measured in the field and laboratory. Action levels for dissolved metals follow the California Toxics Rule (CTR) Criteria Maximum Concentration (CMC). Temperature, turbidity, and conductivity parameters are evaluated using best professional judgment to determine if further investigation is needed. The action levels for pH, surfactants, ammonia-nitrogen, nitrate-nitrogen, orthophosphate-phosphorus, oil and grease, diazinon, and chlorpyrifos were adopted in 2003 and were based on statistical analyses of previous Dry Weather Monitoring Program data, established water quality benchmarks from the Basin Plan, and the United States Environmental Protection Agency Multi-Sector General Permit.

The Regional Monitoring Workgroup in November 2008 requested the Dry Weather Monitoring Sub-workgroup to evaluate dry weather action levels that were submitted in April 2003 by the County of San Diego on behalf of the Copermittees. The Dry Weather Monitoring Sub-workgroup determined that the bacterial indicators action levels required additional analysis. The Dry Weather Monitoring Sub-workgroup contracted D-MAX Engineering through the City of La Mesa to evaluate historical bacterial data collected from dry weather monitoring from 2002 through 2007. Details of their evaluation are posted on the Project Clean Water Website at http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf. The Regional Monitoring Workgroup on May 19, 2009 evaluated the recommendations of the Dry Weather Monitoring Sub-workgroup and selected the 80th percentile values to be the dry weather action levels for bacterial indicators beginning on May 1, 2010. The previous and current action levels (effective as of May 1, 2010) are presented in Table 7-1.

Table 7-1
Bacterial Indicators Action Levels for Dry Weather Monitoring Program

	Total Coliform (MPN/100 mL)	**Fecal Coliform (MPN/100 mL)**	***Enterococcus* (MPN/100 mL)**
2003-2009 Action Levels	50,000	20,000	10,000
2010 -2012 Action Levels	130,000	13,000	7,000

The City visits all designated primary monitoring stations each year between May 1 and September 30 to collect dry weather monitoring data. When a primary monitoring station is found to be dry, the City visits designated alternate monitoring stations.

7.4.1 2009 Dry Weather Monitoring Program

During the 2009 Dry Weather Monitoring Program, 20 primary monitoring stations and one alternate monitoring station were visited. Since primary Site 907-ALV-003 was dry, alternate Site 907-ALV-580 was visited. Seven sites had constituents measured above action levels in 2009. For further information about how the City addressed notable findings of the 2009 Dry Weather Monitoring Program and responded to the resulting recommendations, see Section 7.5.1 of this report.

7.4.2 2010 Dry Weather Monitoring Program

2010 Results

The City's storm water consultant, D-MAX, conducted the 2010 Dry Weather Monitoring Program in June 2010. Twenty primary monitoring stations and two alternate monitoring stations were visited.

A summary of action level exceedances for field and laboratory constituents is provided in Table 7-2. The results of all follow-up investigations are presented in Table 7-3, in Section 7.5.2 of this report. A list of all the monitoring stations visited is displayed in Table 7-4. Also in this section, the complete field analytical and laboratory analytical results are included as Table 7-5 and Table 7-6, respectively.

Table 7-2
Summary of Action Level Exceedances

Field Screening (20 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
pH	0	0	-
Conductivity	0	0	-
Turbidity	0	0	-
Surfactants	0	0	-
Ammonia-Nitrogen*	0	0	-
Nitrate-Nitrogen	0	0	-
Orthophosphate-Phosphorus	0	0	-
Laboratory Analyses (6 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
Oil & Grease	0	0	-
Cadmium	0	0	-
Copper	0	0	-
Lead	0	0	-
Zinc	0	0	-
Diazinon	0	0	-
Chlorpyrifos	0	0	-
Total Coliforms	2**	33**	908-UNI-002, 908-UNI-003
Fecal Coliforms	0	0	-
Enterococci	1	17	908-UNI-002

Notes: Data is from the initial site visits only; data from follow-up investigations is not included.
*Ammonia-N was not measured above the action level at any site, but one upstream investigation was conducted for a borderline measurement.
** Measured result was equal to action level.

Follow-up investigations conducted in response to action level exceedances are summarized in Section 7.5.2 of this report.

A formal trash assessment was performed in 2010 in accordance with the Municipal Permit requirements. A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form's five categories are primarily qualitative descriptions of the amount and extent of trash although a number

of trash pieces is also included in each category as a rough guideline. The five categories are defined as follows.

- Optimal: On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
- Suboptimal: On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
- Marginal: Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
- Submarginal: Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (~100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
- Poor: Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* – Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment.
- *Threat to Aquatic Health* – Large amount (50 pieces or more) of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amounts of settleable, degradable, and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment.

Twenty-two sites were assessed during the 2010 Dry Weather Monitoring Program, and most of the sites were rated optimal, having little or no trash. Only five sites were rated as suboptimal, and no sites had conditions warranting a marginal, submarginal, or poor trash rating. Additionally, none of the trash observed was determined to pose a threat to human or aquatic health. Actions taken by the City in response to the results of the trash assessment are described in Section 7.5.2 of this report.

The 2010 Dry Weather Monitoring Program Report can be found as Attachment 7.1.

7.5 FOLLOW-UP AND ENFORCEMENT

7.5.1 ACTIONS TAKEN IN RESPONSE TO THE 2009 DRY WEATHER MONITORING PROGRAM FINDINGS

Based on the 2009 Dry Weather Monitoring Program results, three follow-up recommendations were made. In response to these recommendations, leaf debris was removed from Memorial Avenue, along the conveyance upstream of Site 907-ALV-002. The City removed decomposing leaves and trash from location 907-ALV-002-2, an upstream concrete box, as well as from Site 907-ALV-002. Household debris and trash were removed from Site 907-ALV-590, which received a submarginal trash rating. Sites 908-UNI-001 and 908-UNI-002, which received marginal trash ratings, were also cleaned. Finally, primary Site 907-ALV-003, which has been dry for several years was replaced by alternate Site 907-ALV-580, which has been sampled for the past few years.

7.5.2 2010 DRY WEATHER MONITORING FOLLOW-UP INVESTIGATIONS

If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. Upstream investigations are performed when exceedances are verified during confirmation visits. See the City's JURMP for a complete discussion of upstream investigation procedures.

Table 7-3 presents conclusions based on the results of confirmation visits and, where necessary, upstream investigations conducted at two sites during the 2010 Dry Weather Monitoring Program.

Table 7-3
Summary of Follow-up Investigations

Site	Upstream Investigation Target Constituent(s)		Results / Probable Source
	Field	Laboratory	
908-UNI-002	---	Total Coliforms, Enterococci	Exceedances not confirmed
908-UNI-003	---	Total Coliforms	Exceedance not confirmed

The City is in the process of responding to the 2010 Dry Weather Monitoring Program findings.

Any other actions taken during the remainder of the Reporting Period will be described in the 2010/2011 JURMP Annual Report.

7.5.3 IC/IDs Identified

Eleven IC/IDs were identified and eliminated during the reporting period. The IC/IDs identified in 2009/2010 are described in Appendix B of the 2009/2010 City of La Mesa JURMP Annual Report.

7.6 Illicit Discharge Detection and Elimination Component Effectiveness Assessment

The effectiveness assessment of this program component is provided in Section 11 of the 2009/2010 City of La Mesa JURMP Annual Report.

7.7 Program Review and Modification

No changes to the City's illicit discharge detection and elimination component were made during the reporting period.

Table 7-4
2010 Dry Weather Monitoring Locations

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
907-ALV-001	Alvarado Road, east of the trolley station	Concrete Channel	Commercial	Residential	907.11	32.77209	-117.04136
907-ALV-002	Along the southern edge of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection	Manhole	Industrial	Commercial	907.11	32.77414	-117.02287
907-ALV-004	7780 Parkway Drive, inside Parkway Manor Condominiums parking lot, by visitor parking at the top of the driveway	Manhole	Residential	None	907.11	32.77546	-117.02918
907-ALV-005*	Alvarado Channel, underneath the intersection of Fletcher Parkway and Baltimore Drive, north side of channel	Outlet	Residential	Commercial	907.11	32.77380	-117.02737
907-ALV-006	Fletcher Parkway and Marengo Avenue intersection, in planter	Manhole	Residential	None	907.11	32.77550	-117.02309
907-ALV-007	Jackson Drive and Parkway Drive, behind Amex Auto Repair	Manhole	Residential	Commercial	907.11	32.77832	-117.01821
907-ALV-008	South of Fletcher Parkway, under SR-125 overpass, west of the outfalls from the north	Concrete Channel	Residential	Commercial	907.11	32.78400	-117.00570
907-ALV-120	Jackson Drive, 100 feet west of Murray Drive, north side of street	Manhole	Commercial	None	907.11	32.77630	-117.01423
907-ALV-12A	Jackson Drive, 100 feet west of Murray Drive, south side of street, in front of 5304 Jackson Drive	Manhole	Commercial	Residential	907.11	32.77605	-117.01434

Table 7-4 (Continued)
2010 Dry Weather Monitoring Locations

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
907-ALV-570*	Amaya Drive, east of Severin Drive, across from Howell Drive	Earthen Channel	Residential	None	907.11	32.78532	-116.99744
907-ALV-580	Northeast corner of Amaya Drive and Amaya Court intersection	Manhole	Residential	None	907.11	32.78640	-117.00116
907-ALV-590	Southeast corner of Parkway Drive and Amarillo Avenue intersection	Natural Creek	Residential	None	907.11	32.78180	-117.01328
907-ALV-640*	North side of Seton Hall Street, between Swarthmore Street and Wheaton Street	Concrete Channel	Residential	None	907.11	32.77651	-117.03462
908-LEM-520	Near Waite Drive and Harris Street intersection, south end of Harris Street	Catch Basin	Residential	None	908.22	32.74516	-117.03931
908-UNI-001	69th Street and Boulevard Drive intersection	Natural Creek	Commercial	Residential	908.22	32.75463	-117.04908
908-UNI-002	Harbison Avenue and University Avenue intersection, west sidewalk, east of CB Hair & Nails	Manhole	Residential	Commercial	908.22	32.75498	-117.04639
908-UNI-003	4291 Lowell Street, about halfway between University Avenue and Normal Avenue, north side of street driveway	Manhole	Residential	Commercial	908.22	32.75536	-117.03528
908-UNI-004	In front of 7851 University Avenue, along the south side of the street	Manhole	Commercial	None	908.22	32.76308	-117.02855
908-UNI-005*	Rolando Park, in gated area by left field of baseball field	Manhole	Residential	Parks	908.22	32.75787	-117.05260

Table 7-4 (Continued)
2010 Dry Weather Monitoring Locations

Site ID	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
908-UNI-14A*	Boulevard Drive between Harbinson Avenue and Massachusetts Avenue across from 7105-7033	Outlet	Commercial	Residential	908.22	32.75438	-117.04535
909-SPR-001	Spring Street and Spring Gardens Road intersection, inside La Mesa Seventh Day Adventist Church	Concrete Channel	Residential	Parks	909.12	32.75483	-117.00118
909-SPR-002	In front of 4621 Bancroft Drive, just south of Golondrina Drive	Manhole	Residential	None	909.12	32.76324	-117.00118

Note:

*Alternate sites 907-ALV-570 and 908-UNI-14A were substituted for dry primary monitoring sites 907-ALV-640 and 908-UNI-005.

Table 7-5
2010 Field Analytical Results

Site No	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants MBAS (mg/L)	Ammonia NH_3-N (mg/L)	Nitrate NO_3-N (mg/L)	Orthophosphate-P PO_4-P (mg/L)
907-ALV-001	6/23/10	13:30	164	21.1	7.5	0.35	3.14	0.25	0.22	0.25 J	0.21
907-ALV-002	6/24/10	15:00	2	21.3	7.3	8.35	3.66	0.25	0.44	4.84	0.12
907-ALV-004	6/28/10	9:30	<1	18.7	7.8	17.65	1.23	0.25	0.14 J	0.66 J	0.23
907-ALV-005	6/24/10	11:00	3	23.0	7.2	1.21	3.50	0.75	0.27	5.63	0.20
907-ALV-006	6/23/10	14:10	<1	25.7	7.7	5.00	2.84	0.75	0.37	0.89 J	0.38
907-ALV-007	6/23/10	16:00	4	25.1	7.8	30.84	2.46	0.50	0.45	1.53	0.48
907-ALV-008	6/25/10	11:35	40	18.1	7.8	3.69	2.66	0.50	0.58	2.81	0.12
907-ALV-120	6/25/10	13:35	2	22.3	7.2	23.32	1.98	0.50	0.48	1.11 J	0.61
907-ALV-12A	6/23/10	9:45	22	19.6	7.5	19.53	2.54	0.25	0.30	5.15	0.12
907-ALV-570	6/25/10	10:50	2	25.5	7.8	0.89	2.98	0.25	0.59	0.15 J	0.07 J
907-ALV-580	6/25/10	14:15	6	21.6	7.6	17.78	2.39	0.50	0.44	1.18	0.12
907-ALV-590	6/25/10	10:00	4	19.3	7.3	1.12	2.60	0.25	0.17 J	1.33	0.05 J
907-ALV-640	6/24/10	9:15	Dry	ns	ns	ns	ns	ns	ns	ns	ns
908-LEM-520	6/28/10	11:25	6	22.0	7.8	4.27	4.56	0.50	0.87	1.34	0.32
908-UNI-001	6/24/10	13:50	28	21.4	8.2	0.51	3.05	0.50	0.20	2.52	0.11
908-UNI-002	6/24/10	11:45	1	24.7	7.9	7.72	6.41	0.50	0.95	6.57	0.30
908-UNI-002	6/25/10	9:15	1	22.1	7.9	6.91	3.98	na	0.47	na	na
908-UNI-002	7/6/10	14:30	2	24.0	7.9	na	6.04	na	na	na	na
908-UNI-003	6/23/10	11:50	17	22.3	8.1	0.60	1.85	0.13	0.15 J	2.89	0.06 J

Table 7-5 (Continued)
2010 Field Analytical Results

Site No	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants MBAS (mg/L)	Ammonia NH_3-N (mg/L)	Nitrate NO_3-N (mg/L)	Orthophosphate-P PO_4-P (mg/L)
908-UNI-003	7/6/10	15:45	9	21.7	8.4	na	2.11	na	na	na	na
908-UNI-004	6/23/10	14:40	9	23.1	7.6	1.41	2.48	0.25	0.17 J	1.65	0.17
908-UNI-005	6/23/10	10:35	Dry	ns	ns	ns	ns	ns	ns	ns	ns
908-UNI-14A	6/28/10	12:05	28	20.1	7.9	0.22	3.16	0.50	0.21	3.15	0.07 J
909-SPR-001	6/28/10	10:35	21	19.2	7.8	0.58	2.36	0.25	0.17 J	2.31	0.20
909-SPR-002	6/25/10	15:00	6	23.4	8.1	3.48	2.20	0.25	0.29	5.98	0.15
Reporting Limits				**0.1**	**0.01**	**0.00**	**0.01**	**0.13**	**0.20**	**1.13**	**0.10**
Action Level				**BPJ**	**<6.5 >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.0**	**2.0**

Notes:
na = not analyzed
ns = not sampled (dry site)
J = Detected below the reporting limit; therefore, result is an estimated concentration.
denotes a follow-up visit
denotes a location sampled for laboratory analysis

Table 7-6
2010 Laboratory Analytical Results

Site No.	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L $CaCO_3$)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms* (MPN/100 mL)	Enterococci (MPN/100 mL)
907-ALV-001	6/23/10	13:30	nd	646	nd	1	nd	3 J	nd	nd	3,000	300	110
907-ALV-002	6/24/10	15:00	nd	903	0.8 J	2 J	nd	2 J	nd	nd	8,000	120	230
908-UNI-001	6/24/10	13:50	nd	748	nd	5 J	nd	8 J	nd	nd	11,000	80	90
908-UNI-002	6/24/10	11:45	nd	1,720	0.5 J	4 J	nd	38	nd	nd	**130,000**	500	**28,000**
908-UNI-002	7/6/10	14:30	na	na	na	na	na	na	na	na	17,300	115	480
908-UNI-003	6/23/10	11:50	nd	340	nd	11	nd	5 J	nd	nd	**130,000**	1,300	5,000
908-UNI-003	7/6/10	15:45	na	na	na	na	na	na	na	na	4,110	36	na
908-UNI-004	6/23/10	14:40	nd	541	nd	3 J	nd	11 J	nd	nd	80,000	1,700	300
Analytical Reporting Limit			**5**	**10**	**1**	**10**	**5**	**20**	**0.05**	**0.05**	**20****	**20****	**20****
Action Levels			**15**	*******	**CTR**	**CTR**	**CTR**	**CTR**	**0.5**	**0.5**	**130,000**	**13,000**	**7,000**

Notes:

Red values were at or above the measured constituent's action level at the site visit.

na = not analyzed; nd= not detected

J = Detected below the reporting limit; therefore, result is an estimated concentration.

CTR = California Toxics Rule

** Bacteria confirmation samples are analyzed using Colilert and Enterolert methods, which have a reporting limit of 10 MPN/100 mL.

*** Total hardness is not considered a pollutant, and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependent on the total hardness value of the water sample.

denotes a confirmation visit

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	Attachment 7.1
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	7.4, 7.5; Tables 7-2 through 7-6; Attachment 7.1
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	Attachment 7.1
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	7.5; Appendix B
v. The number and brief description of illicit discharges and connections identified.	7.5; Appendix B
vi. The number of illicit discharges and connections eliminated.	7.5; Appendix B
vii. Identification and description of all spills to the MS4 and response to the spills.	4.9, 7.3; Appendix B
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	4.9, 7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	4.9, 7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2, Appendix B
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5, Table 7-1, Appendix B
xiii. A description of notable activities conducted to manage illicit discharges and connections.	7.1, 7.5

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Attachment 7.1
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	7.4; Attachment 7.1
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	7.4; Attachment 7.1
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	7.4; Table 7-6; Attachment 7.1
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	(See following)
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	7.4; Table 7-5, Attachment 7.1
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	7.4; Attachment 7.1
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	7.4; Attachment 7.1
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	7.4; Attachment 7.1

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	7.4; Attachment 7.1
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	7.5; Attachment 7.1
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5; Attachment 7.1
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	7.4, 7.5; Attachment 7.1

ATTACHMENT 7.1

CITY OF LA MESA DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM 2010

CITY OF LA MESA
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2010

Submitted to:

CITY OF LA MESA
Engineering Department
8130 Allison Avenue
La Mesa, CA 91942

Prepared by:

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D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

October 18, 2010
Project No. 201025W

Mr. Joe Kuhn
City of La Mesa
8130 Allison Avenue
P.O. Box 937
La Mesa, CA 91942

Re: 2010 Dry Weather Field Screening and Analytical Monitoring Program
City of La Mesa, California

Dear Mr. Kuhn:

Enclosed please find the final report for the City of La Mesa 2010 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of La Mesa during the 2010 dry weather season. The contents include field screening results, trash assessment data, analytical laboratory test results, analyses of the collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. If you have any questions regarding this report, please call me at (858) 586-6600.

D-MAX Engineering, Inc.

Arsalan Dadkhah

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

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1 Historical Data Graphs: San Diego River Watershed
2 Historical Data Graphs: San Diego Bay Watershed

ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
µg/L	Micrograms per Liter
303(d)	Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
BPJ	Best Professional Judgment
CFR	Code of Federal Regulations
City	City of La Mesa
CMC	Criterion Maximum Concentration
COC	Constituent of Concern
Copermittees	The 18 cities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CTR	California Toxics Rule
CV	Coefficient of Variance
D-MAX	D-MAX Engineering, Inc.
E. coli	*Escherichia coli*
EC	Electrical Conductivity
EMA	EnviroMatrix Analytical, Inc.
FS	Functional Sensitivity
gpm	Gallons per Minute
GPS	Global Positioning System
HA	Hydrologic Area
HSA	Hydrologic Subarea
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illegal Discharge
JURMP	Jurisdictional Urban Runoff Management Program
LED	Light-Emitting Diode
MLS	Mass Loading Station
MBAS	Methylene Blue Active Substances
mg/L	Milligrams per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) per 100 Milliliters
mS/cm	Millisiemens per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
na	Not Analyzed
nd	Not Detected
ns	Not Sampled (dry site)
NTU	Nephelometric Turbidity Unit
PDL	Practical Detection Limit
ppb	Parts per Billion
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board
TDS	Total Dissolved Solids
USEPA	United States Environmental Protection Agency
WQO	Water Quality Objective
WURMP	Watershed Urban Runoff Management Program

1 INTRODUCTION

1.1 Program Overview

The purpose of the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the storm water conveyance system, minimizing the negative impact of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following components:

- Field screening observations
- Field screening analytical monitoring
- Trash assessments
- Laboratory analytical monitoring

The data gathered from dry weather monitoring is used to characterize discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as needed to detect and eliminate the sources of these pollutants.

1.2 Hydrologic Setting

The City of La Mesa (City) encompasses an area of nine square miles just east of the City of San Diego. The primary land use in La Mesa is residential with over 55,500 residents. Other types of land use include roads and streets, commercial, mixed use, schools, and industrial. Approximately 52 percent of La Mesa is located within the San Diego River Watershed, while the remaining 48 percent is located in the San Diego Bay Watershed. The City of La Mesa makes up about one percent of the overall land area in both the San Diego Bay and the San Diego River watersheds. Runoff generated in La Mesa is conveyed through five drainage basins. Table 1-1 lists the drainage basins along with the approximate percentage of drainage area in La Mesa, the corresponding hydrologic subarea (HSA) of the basin, and the receiving water body to which each basin drains. The boundaries of these drainage basins are illustrated in Figure A at the end of this report.

TABLE 1-1
CITY OF LA MESA DRAINAGE BASINS

Drainage Basin	Percentage of City Area	Hydrologic Subarea	Receiving Water Body	Watershed
Alvarado	51	907.11	San Diego River	San Diego River
University	28	908.22	Chollas Creek	San Diego Bay
Spring Valley	14	909.12	Sweetwater River	San Diego Bay
Lemon Grove	6	908.22	Chollas Creek	San Diego Bay
Lake Murray	1	907.11	San Diego River	San Diego River

The San Diego River Watershed is the second largest hydrologic unit (HU) in San Diego County. The San Diego River carries runoff from other large portions of the cities of San Diego, El Cajon, Poway, and Santee and several unincorporated jurisdictions in addition to that of La Mesa. Runoff collected in the Lake Murray Basin eventually enters the Alvarado Drainage Basin, which drains to the San Diego River. The mouth of the river discharges into the Pacific Ocean, south of Mission Bay.

The San Diego Bay Watershed is comprised of three HUs: Pueblo San Diego (HU 908), Sweetwater (HU 909), and Otay (HU 910). These three watersheds all drain into San Diego Bay, even though each HU is essentially a separate watershed. For regulatory purposes, they have been combined into one watershed management area, referred to as the San Diego Bay Watershed. The City of La Mesa includes areas within two of those HUs, the Pueblo San Diego Watershed and the Sweetwater Watershed. Runoff from the Spring Valley Basin eventually enters the Sweetwater River, which terminates in San Diego Bay. Runoff collected in the University and Lemon Grove basins drains to Chollas Creek, which also flows into San Diego Bay.

1.3 Regulatory Requirements

In accordance with San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit), each of the Copermittees, including the City of La Mesa, is required to annually perform dry weather field screening of discharges into its storm drain conveyance system. During the dry weather season, May 1 through September 30, selected locations along the storm drain conveyance system are evaluated. This procedure includes recording field observations, estimating observed flow rates, and conducting field testing. The Municipal Permit also necessitates that Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station is selected. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days.

1.4 Constituents of Concern

Based primarily on wet weather monitoring data from mass loading stations (MLS) located on Chollas Creek, bioassessments, the 2008/2009 San Diego Bay Watershed Urban Runoff Management Program (WURMP) Annual Report, and the Clean Water Act Section 303(d) List of Water Quality Limited Segments (303(d) List), several constituents have been established as targeted pollutants in hydrologic areas (HA) located within City of La Mesa's Jurisdiction. In HA 908.2, part of the Pueblo San Diego Watershed, the constituents of concern (COCs) identified are bacteria indicators, metals, sediment, trash, and pesticides. For HA 909.1 within the Sweetwater Watershed, bacteria indicators have been listed as a COC.

Constituent data have been collected annually in the San Diego River Watershed. The 2008/2009 San Diego River WURMP Annual Report lists bacteria indicators, phosphorus, total dissolved solids, low dissolved oxygen and turbidity as the COCs.

1.5 Previous Work

The City of La Mesa has conducted annual dry weather monitoring programs since 1993. A summary of the screening results obtained for each year is displayed in Table 1-2. Historical dry weather monitoring data is included in Appendix A.

TABLE 1-2
SUMMARY OF HISTORICAL DRY WEATHER SITES

Year	Number of Field Screening Sites [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1993	15	10	4	1	0
1994 [3]	11	11	0	4	0
1995 [4]	11	11	0	2	0
1996	12	12	0	3	0
1997	9	8	1	3	0
1998	11	8	3	3	0
1999-R1	10	10	0	4	0
1999-R2	11	11	0	3	0
2000-R1	11	11	0	4	0
2000-R2	11	11	0	4	0
2001 R1	11	11	0	4	0
2001 R2	12	12	0	4	0
2002	18	18	0	1	5
2003	18	16	2	1	5
2004	18	17	1	0	5
2005	18	16	2	0	5
2006	18	17	1	0	5
2007	18	18	0	1	5
2008	20	20	0	1	6
2009	20	20	0	1	6

Notes:
The City of La Mesa conducted two separate rounds of dry weather monitoring in years 1999-2001.
R1 = Round one; R2 = Round two
[1] Number of Field Screening Sites = Number Flowing + Number Ponded. Field screening cannot be conducted at dry sites. Dry sites are replaced by either a flowing or ponded site.
[2] Laboratory testing commenced in 2002 as required by San Diego RWQCB Order 2001-001.
[3] The 1994 *City of La Mesa Dry Weather Non-Point Source Outfall Screening Program* by Cooper Engineering Associates states that 13 sites showed evidence of flow. However, in "Table 3. Summary of Dry Weather Screening Chemical Analysis" of the report, flow rates and chemical test results are provided for 11 sites only. For the purposes of this table, number of sites tested is listed as 11 and the remaining sites have been added to the number of dry sites.
[4] Per the *City of La Mesa Dry Weather Non-Point Source Outfall Screening Program* by Cooper Engineering Associates for 1995, 12 sites had flowing water and one site was ponded. Chemical analysis data is provided for 11 sites only. Thus, number of sites tested is listed as 11 and the remaining two sites are listed as dry.

The San Diego RWQCB did not require laboratory analyses to be performed as part of the dry weather program until 2002. The same laboratory and field tests have been used since 2002 until present. Graphical representations of the data for both the San Diego River and San Diego Bay watersheds are included as Attachments 1 and 2, respectively. The graphs display the results of both field and laboratory analyses for the 2002 through 2009 dry weather monitoring programs. Where applicable, averages for each constituent have been calculated, and error bars displaying average plus and minus one standard deviation have also been included on the graphs. Trend lines have been prepared for constituents where multiple values above the method reporting limit were recorded. The equations and R^2 values for the lines have been indicated on the graphs. Note that an R^2 value of 0.0 indicates a very poor fit and 1.0 indicates a perfect fit.

1.6 Report Outline

Section 1, Introduction, includes an overview of the program, a discussion of the City of La Mesa's hydrologic setting, regulatory background, a description of constituents of concern, a summary of historical dry weather monitoring, and the report outline.

Section 2, Sampling Locations, describes the field sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and results of the field screening analyses.

Section 5, Trash Assessment, discusses the procedure and results of the trash assessment.

Section 6, Laboratory Analytical Results, presents results of laboratory analyses.

Section 7, Data Analysis, provides an analysis of field and laboratory data collected in 2009, as well as a comparison of past results.

Section 8, Follow-up Investigations, details the results of follow-up investigations undertaken to isolate the sources of water pollutants detected during the program.

Section 9, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Historical Dry Weather Monitoring Table

Appendix B Photographs of the Sampling Locations

Appendix C Laboratory Analytical Reports

Appendix D Field Data and Trash Assessment Sheets

Attachment 1 Historical Data Graphs: San Diego River Watershed

Attachment 2 Historical Data Graphs: San Diego Bay Watershed

2 SAMPLING LOCATIONS

The City of La Mesa's 2008 Jurisdictional Urban Runoff Management Plan (JURMP) identifies 20 primary dry weather monitoring stations. During the 2010 Dry Weather Monitoring Program, 22 primary sampling locations were visited. Twenty sites had flowing water and two sites were dry. Since sites 907-ALV-640 and 908-UNI-005 were dry, alternate sites, 907-ALV-570 and 908-UNI-14A, were selected as replacements.

Table 2-1 lists site information including site name, location, conveyance configuration, primary and secondary land uses, hydrologic subareas, and Global Positioning System (GPS) coordinates. Photographs of all sites visited in 2010 are included in Appendix B. Figure A shows site locations on a map of the City in relation to storm drain lines, roads, and drainage basin boundaries. A map of the watersheds in and around the City of La Mesa is included as Figure B.

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
907-ALV-001	Alvarado Road, east of the trolley station	Concrete Channel	Commercial	Residential	907.11	32.77209	-117.04136
907-ALV-002	Along the southern edge of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection	Manhole	Industrial	Commercial	907.11	32.77414	-117.02287
907-ALV-004	7780 Parkway Drive, inside Parkway Manor Condominiums parking lot, by visitor parking at the top of the driveway	Manhole	Residential	None	907.11	32.77546	-117.02918
907-ALV-005	Alvarado Channel, underneath the intersection of Fletcher Parkway and Baltimore Drive, north side of channel	Outlet	Residential	Commercial	907.11	32.77380	-117.02737
907-ALV-006	Fletcher Parkway and Marengo Avenue intersection, in planter	Manhole	Residential	None	907.11	32.77550	-117.02309
907-ALV-007	Jackson Drive and Parkway Drive, behind Amex Auto Repair	Manhole	Residential	Commercial	907.11	32.77832	-117.01821
907-ALV-008	South of Fletcher Parkway, under SR-125 overpass, west of the outfalls from the north	Concrete Channel	Residential	Commercial	907.11	32.78400	-117.00570
907-ALV-120	Jackson Drive, 100 feet west of Murray Drive, north side of street	Manhole	Commercial	None	907.11	32.77630	-117.01423
907-ALV-12A	Jackson Drive, 100 feet west of Murray Drive, south side of street, in front of 5304 Jackson Drive	Manhole	Commercial	Residential	907.11	32.77605	-117.01434

TABLE 2-1 (CONTINUED)
2010 DRY WEATHER MONITORING STATIONS

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
907-ALV-570*	Amaya Drive, east of Severin Drive, across from Howell Drive	Earthen Channel	Residential	None	907.11	32.78532	-116.99744
907-ALV-580	Northeast corner of Amaya Drive and Amaya Court intersection	Manhole	Residential	None	907.11	32.78640	-117.00116
907-ALV-590	Southeast corner of Parkway Drive and Amarillo Avenue intersection	Natural Creek	Residential	None	907.11	32.78180	-117.01328
907-ALV-640*	North side of Seton Hall Street, between Swarthmore Street and Wheaton Street	Concrete Channel	Residential	None	907.11	32.77651	-117.03462
908-LEM-520	Near Waite Drive and Harris Street intersection, south end of Harris Street	Catch Basin	Residential	None	908.22	32.74516	-117.03931
908-UNI-001	69th Street and Boulevard Drive intersection	Natural Creek	Commercial	Residential	908.22	32.75463	-117.04908
908-UNI-002	Harbison Avenue and University Avenue intersection, west sidewalk, east of CB Hair & Nails	Manhole	Residential	Commercial	908.22	32.75498	-117.04639
908-UNI-003	4291 Lowell Street, about halfway between University Avenue and Normal Avenue, north side of street driveway	Manhole	Residential	Commercial	908.22	32.75536	-117.03528
908-UNI-004	In front of 7851 University Avenue, along the south side of the street	Manhole	Commercial	None	908.22	32.76308	-117.02855
908-UNI-005*	Rolando Park, in gated area by left field of baseball field	Manhole	Residential	Parks	908.22	32.75787	-117.05260

TABLE 2-1 (CONTINUED)
2010 DRY WEATHER MONITORING STATIONS

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
908-UNI-14A*	Boulevard Drive between Harbinson Avenue and Massachusetts Avenue across from 7105-7033	Outlet	Commercial	Residential	908.22	32.75438	-117.04535
909-SPR-001	Spring Street and Spring Gardens Road intersection, inside La Mesa Seventh Day Adventist Church	Concrete Channel	Residential	Parks	909.12	32.75483	-117.00118
909-SPR-002	In front of 4621 Bancroft Drive, just south of Golondrina Drive	Manhole	Residential	None	909.12	32.76324	-117.00118

Note: * Alternate sites 907-ALV-570 and 908-UNI-14A were substituted for dry primary monitoring sites 907-ALV-640 and 908-UNI-005.
Denotes a site sampled for laboratory analysis.

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of flow measurements, qualitative field observations, and quantitative field analyses of selected water quality parameters. Weather conditions, time since last rainfall, and the type of storm water conveyance are recorded as well. Specific observations and results of the field water quality analyses are documented on field datasheets, which also serve as a record of the field visit. Datasheets are completed for every site visit regardless of whether or not samples were collected. Check boxes on the datasheets indicate if the visit is for routine field screening, confirmation of an exceedance, or an IC/ID follow-up visit. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation. Datasheets from the 2010 Dry Weather Monitoring Program are included as Appendix D.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Qualitative field observations are made during each site visit. These observations include a general site assessment and description of water odor, clarity, the presence of floatable materials, visible deposits or stains, and organisms. Evidence of present or past illicit connections and illegal discharges to the storm drain system can also be discovered through careful field observations. Each field screening location is photographed to document site conditions. Photographs of each site visited are included in Appendix B.

Flow Measurement

Flow measurements can help estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative of an illegal discharge. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth, and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)
- Orthophosphate-Phosphorus (Orthophosphate-P)
- Surfactants, measured as methylene blue active substances (MBAS)

The methods used to perform the above field analyses, along with the reporting limit, range, and accuracy of each method, are listed in Table 3-1.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Method Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.01 mS/cm	0 – 20 mS/cm	± 2% of FS[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.1°C	0.0°C – 60.0°C	± 0.5°C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.01	0.00 – 14.00	± 0.01
Turbidity	Hanna Instruments HI 93703 Portable Turbidity Meter*	0.00 NTU	0.00 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate*	0.20 mg/L**	0.20 mg/L – 3.00 mg/L**	Varies with measured concentration[2,3]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[4]*	1.13 mg/L**	1.13 mg/L – 113 mg/L**	± 30%of PDL[2]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[4]*	0.10 mg/L**	0.10 mg/L – 2.61 mg/L**	Varies with measured concentration[2,3]
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.00 mg/L – 3.00 mg/L***	± 0.13 & ± 0.5 mg/L[5]

Notes:

EC = electrical conductivity
TDS = Total Dissolved Solids
mS/cm = millisiemens per centimeter
°C = Degrees Celsius
NTU = nephelometric turbidity unit
mg/L = milligrams per liter
LED = light-emitting diode

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] Practical Detection Limit (PDL), also known as the reporting limit, is defined as the lower limit of the stated test range.

Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-N, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). PDL for nitrate is 5.0 mg/L; however, the PDL for nitrate-N is lower due to the conversion.

[4] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The practical detection limit for orthophosphate is 0.3 mg/L; however, the practical detection limit for orthophosphate-phosphorus is lower due to the conversion.

[5] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

*Test method information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

3.2 Laboratory Analytical Methods

In accordance with the Municipal Permit, laboratory samples were collected at 6 sites, representing 25 percent of the sites where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc. (EMA), a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Oil and grease
- Total hardness
- Dissolved Cadmium
- Dissolved Copper
- Dissolved Lead
- Dissolved Zinc
- Diazinon
- Chlorpyrifos
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

3.3 Quality Assurance and Quality Control

The Quality Assurance and Quality Control (QA/QC) Plan utilized for this project includes the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters, turbidity meter, and conductivity meter are tested daily before field screening begins. The pH meters are calibrated as needed with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter and conductivity meter are calibrated as needed using standard solutions.

Field sample collection containers are rinsed first with distilled water and then with the sample water prior to sample collection. Upon completion of sampling and testing at each site, sample collection containers, test vials, and ion-sensitive electrodes are rinsed twice with distilled water and dried.

Field test kit accuracy is assessed prior to commencing sampling. Each lot, or batch, of CHEMetrics ampoules is analyzed against standard solutions of known concentrations of ammonia-N, nitrate, orthophosphate, and surfactants. The results of these tests are shown in Table 3-3.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Method Detection Limit	Maximum Holding Time [1]
Oil and Grease	USEPA 1664	5 mg/L	5 mg/L	28 days
Total Hardness	USEPA 200.7	10 mg/L	10 mg/L	14 days
Dissolved Cadmium	USEPA 200.8	1 µg/L	0.2 µg/L	24 hours
Dissolved Copper	USEPA 200.8	10 µg/L	1 µg/L	24 hours
Dissolved Lead	USEPA 200.8	5 µg/L	1 µg/L	24 hours
Dissolved Zinc	USEPA 200.8	20 µg/L	0.3 µg/L	24 hours
Diazinon	USEPA 8141A	0.05 µg/L	0.04 µg/L	7 days
Chlorpyrifos	USEPA 8141A	0.05 µg/L	0.04 µg/L	7 days
Total Coliforms[2]	SM 9221	20 – 1,600,000 MPN/100 mL	20 MPN/100 mL	6 hours
Fecal Coliforms[2]	SM 9221	20 – 160,000 MPN/100 mL	20 MPN/100 mL	6 hours
Enterococci[2]	SM 9230	20 – 160,000 MPN/100 mL	20 MPN/100 mL	6 hours
Total Coliforms	SM 9223 (IDEXX Colilert)[3]	10 – 2,419,600 MPN/100 mL	10 MPN/100 mL	6 hours
Escherichia coli (E. coli) [4]	SM 9223 (IDEXX Colilert)[3]	10 – 2,419,600 MPN/100 mL	10 MPN/100 mL	6 hours
Enterococci	IDEXX Enterolert[3]	10 – 241,960 MPN/100 mL	10 MPN/100 mL	6 hours

Notes:
µg/L = micrograms per liter
MPN/100 mL = most probable number (of colony-forming units) per 100 milliliters
[1] Maximum Holding Time values listed apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.
[2] For D-MAX's Dry Weather Monitoring Program, EMA performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100 mL). For fecal coliforms and Enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.
[3] IDEXX Colilert and Enterolert tests are performed by EMA. This test is used during upstream investigations only.
[4] Number of fecal coliforms is derived from number of *E. coli* through the following formula:
Fecal Coliforms = *E. coli* / 0.85. The converted fecal coliform count, not the number of *E. coli*, is reported in this report's data tables.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Analyte	Known Concentration (mg/L)	Acceptable Range* (mg/L)	Lot Number	Date	Field Test Kit Results (mg/L)
Ammonia-N	0.85	0.68 - 1.02	74559/8	5/27/2010	0.821
			73707/2	5/17/2010	0.811
			75425/13	6/30/2010	0.811
Nitrate*	44.3	31.0 - 57.6	75362/2	5/17/2010	42.77
			73960/4	5/17/2010	41.02
			75655/6	6/30/2010	38.56
			75655/8	6/30/2010	36.49
Orthophosphate*	6.13	4.29 - 7.97	75263/4	5/17/2010	6.023
			73677/4	5/17/2010	5.265
			75756/4	6/30/2010	5.015
Surfactants	1.0	0.75 - 1.25	75440/75293/12	5/17/2010	1.0
			74268/74253/2	5/17/2010	1.0
			75638/75460/12	6/30/2010	1.0
			75638/75631/2	6/30/2010	1.0

Notes:
* Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1.
** Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by multiplying the results by 0.226 for nitrate and 0.326 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis are collected concurrently with field samples and utilize the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed, and samples are delivered and analyzed within the appropriate holding times listed in Table 3-2. Completed chain of custody forms are included in Appendix C.

3. 4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation is necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a confirmation visit is conducted within two business days. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by the laboratory analyses, a comprehensive follow-up pollutant source investigation is initiated within two business days of receiving the laboratory results. A discussion of follow-up investigations is included in Section 8.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment (BPJ). The three approaches are described below and presented with associated constituents in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results. Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels based on county-wide sampling data. These action levels have been used by all San Diego County Copermittees since the 2003 dry weather season. For implementation in 2010, D-MAX performed statistical analysis on county-wide data to update action levels for bacterial indicators.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is a short term concentration limit in which aquatic life can be sustained. The CMC is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under BPJ, the need for a follow-up investigation is left to the discretion of the D-MAX field crew. BPJ may indicate that results which either exceed certain action levels or are statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/Notes
Conductivity (mS/cm)	BPJ	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values <0.75 may indicate excessive potable water discharge or flushing.
Temperature (°C)	BPJ	Base judgment on season, air temperature, channel type, shading, etc.
pH	<6.5 or >9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Turbidity (NTU)	BPJ	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Laboratory Analytes	**Action Levels**	**Source/Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	CTR	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)		
Dissolved Lead (µg/L)		
Dissolved Zinc (µg/L)		
Total Coliforms (MPN/100 mL)	130,000	Bacteria action levels were updated for implementation in 2010 by the Dry Weather Monitoring Sub-workgroup. Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	13,000	
Enterococci (MPN/100 mL)	7,000	

Notes:
[1] The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information, including within-site and between-site sample variability.
[2] Basin Plan = Water Quality Control Plan for the San Diego Basin
BPJ = Best Professional Judgment
WQO = Water Quality Objective
ppb = parts per billion

4 FIELD SCREENING RESULTS

The 2010 Dry Weather Monitoring Program was conducted in June and July 2010. A total of 22 monitoring stations were visited including two sites that were dry. Completed field datasheets for each site visit are included in Appendix D.

4.1 Qualitative Observations

Qualitative observations, which are a routine part of the Dry Weather Monitoring Program, are summarized below and presented in Table 4-1:

Light Conditions
During the majority of the field screenings, light conditions were sunny, with occasional overcast weather.

Odor
Water samples from all sites were odorless.

Color
All sites had colorless water, with the exception of two sites having yellow water.

Clarity
Water samples from all sites were clear.

Floatable Materials
During routine field screening visits, the majority of sites had no material floating on the water's surface. Water at one site had a slight oil sheen, and another had trash in the water.

Deposits
Sediment, gravel, or fine particulates were observed at most sites. No other types of deposits were noted.

Vegetation
Most sites had no vegetation present. Three sites had limited vegetation and two sites had normal vegetation. Manholes did not support vegetative growth.

Biology
Most sites did not have organisms present in the water. Algae and insects were the organisms most commonly seen, with snails observed at some of the sites.

TABLE 4-1
FIELD OBSERVATIONS

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
907-ALV-001	6/23/2010	13:30	Sunny	None	None	Clear	None	Fine Particulates	Limited	Insects, Algae, Snails
907-ALV-002	6/24/2010	15:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
907-ALV-004	6/28/2010	9:30	Overcast	None	None	Clear	None	Fine Particulates	None	None
907-ALV-005	6/24/2010	11:00	Sunny	None	None	Clear	None	Fine Particulates	None	None
907-ALV-006	6/23/2010	14:10	Sunny	None	None	Clear	None	Fine Particulates	None	None
907-ALV-007	6/23/2010	16:00	Sunny	None	Yellow	Clear	None	Fine Particulates	None	None
907-ALV-008	6/25/2010	11:35	Sunny	None	None	Clear	Trash	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae
907-ALV-120	6/25/2010	13:35	Sunny	None	None	Clear	None	Fine Particulates	None	None
907-ALV-12A	6/23/2010	9:45	Sunny	None	None	Clear	None	None	None	None
907-ALV-570	6/25/2010	10:50	Sunny	None	Yellow	Clear	None	Sediment, Gravel, Fine Particulates	None	Insects, Algae, Snails
907-ALV-580	6/25/2010	14:15	Sunny	None	None	Clear	None	None	None	None
907-ALV-590	6/25/2010	10:00	Sunny	None	None	Clear	Sheen	Sediment, Gravel, Fine Particulates	Limited	Insects, Algae, Snails
907-ALV-640	6/24/2010	9:15	Sunny	ns	ns	ns	ns	Sediment, Gravel	None	None
908-LEM-520	6/28/2010	11:25	Overcast	None	None	Clear	None	Sediment	None	Insects, Algae
908-UNI-001	6/24/2010	13:50	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	Normal	Insects, Algae, Snails
908-UNI-002	6/24/2010	11:45	Sunny	None	None	Clear	None	None	None	None

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
908-UNI-002	6/25/2010	9:15	Sunny	None	None	Clear	None	Fine Particulates	None	Snails
908-UNI-002	7/6/2010	14:30	Sunny	None	None	Clear	None	Fine Particulates	None	None
908-UNI-003	6/23/2010	11:50	Sunny	None	None	Clear	None	Sediment, Gravel, Fine Particulates	None	None
908-UNI-003	7/6/2010	15:45	Sunny	None	None	Clear	None	Gravel, Fine Particulates	None	None
908-UNI-004	6/23/2010	14:40	Sunny	None	None	Clear	None	None	None	None
908-UNI-005	6/23/2010	10:35	Sunny	ns	ns	ns	ns	None	None	None
908-UNI-14A	6/28/2010	12:05	Overcast	None	None	Clear	None	Gravel	Limited	Insects, Algae, Snails
909-SPR-001	6/28/2010	10:35	Overcast	None	None	Clear	None	Fine Particulates	None	None
909-SPR-002	6/25/2010	15:00	Sunny	None	None	Clear	None	Sediment	None	None

Notes:

ns = not sampled (dry site)

Denotes a confirmation visit.

Denotes a site sampled for laboratory analysis.

4.2 Field Analytical Results

Field analyses were conducted at all sites with ponded or flowing water. Definitions of constituents measured are as follows.

Flow rates are the measurements of the volume of fluid passing through a given surface per unit time. Flow rate measurements are particularly important when calculating the load or particular amount of a pollutant discharged.

The **pH** is an expression of the acidity or alkalinity of a water sample. The pH of an aquatic system will affect a multitude of chemical reactions, including the availability of nutrients and the solubility of chemical substances, especially heavy metals.

Water temperature is needed to assess the significance of other parameters such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life.

Conductivity values indicate the total concentration of ions in an aquatic system and the ability of water to conduct electricity. This parameter can be used to assess the mineral content of water or to help determine the presence of dissolved pollutants. Salinity also increases conductivity. Therefore, sites that receive water from the San Diego Bay during high tide often have conductivity greater than the maximum detection limit of 20 mS/cm.

Turbidity indicates the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation (thus reducing photosynthetic capacity), but excessive suspended particles can also absorb heat and elevate water temperatures.

Ammonia-nitrogen is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment, however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-nitrogen is a common indicator of nutrient pollution from agricultural or household fertilizer use and irrigation runoff. Nitrate pollution can cause excessive algal growth, which can later cause the suffocation of fish and other aquatic organisms by depleting oxygen from the water during decomposition. During field analysis, nitrate is measured in mg/L NO_3 and converted into mg/L nitrate-nitrogen using a conversion factor of 0.226. This process is explained in Note 3 of Table 3-1.

Orthophosphate-phosphorus, known as reactive phosphorus, is also a common indicator of nutrient pollution from agricultural or household fertilizer use and irrigation runoff. Similar to nitrate, phosphate pollution can cause eutrophication, which stimulates algal growth and eventually lowers aquatic dissolved oxygen to levels that are dangerous for aquatic life. Because it is commonly a limiting nutrient required for plant growth, relatively low levels of phosphate can cause significant algal growth. During the field analysis, orthophosphate was measured in mg/L PO_4 and converted into mg/L orthophosphate-P using a conversion factor of 0.326. This process is explained in Note 4 of Table 3-1.

Surfactants in water samples often indicate illegal discharges from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish and other aquatic organisms.

A statistical summary of the field analytical results is presented in Table 4-2. The data used in statistical calculations in this table are from routine visits only; data for confirmation visits and upstream investigations have not been incorporated. Table 4-3 presents the results of routine field analyses conducted at the routine sampling sites. Graphs of the parameters analyzed at flowing or ponded sites are included at the end of this section.

TABLE 4-2
FIELD ANALYSES STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceed-ances	Graph Number
Flow (gpm)	164	0.5	18.3	6.0	36.1	0	4-1
Temperature (°C)	25.7	18.1	21.9	21.8	2.3	0	4-2
pH	8.20	7.20	7.70	7.80	0.29	0	4-3
Conductivity (mS/cm)	6.41	1.23	2.90	2.63	1.09	0	4-4
Turbidity (NTU)	30.84	0.22	7.43	3.59	9.19	0	4-5
Ammonia-N (mg/L)	0.95	0.14 J	0.37	0.29	0.23	0	4-6
Nitrate-N (mg/L)	6.57	0.15 J	2.60	1.98	2.00	0	4-7
Orthophosphate-P (mg/L)	0.61	0.11 J	0.20	0.16	0.15	0	4-8
Surfactants (mg/L)	0.75	0.13	0.39	0.38	0.18	0	4-9

Notes: Statistics are calculated from the results of the routine site visits only; confirmation and follow-up visits are not included.

J = Detected below the reporting limit; result is an estimated concentration.

TABLE 4-3
FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow (gpm)	Temp. (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophosphate-P (mg/L)
907-ALV-001	6/23/10	13:30	164	21.1	7.5	0.35	3.14	0.25	0.22	0.25 J	0.21
907-ALV-002	6/24/10	15:00	2	21.3	7.3	8.35	3.66	0.25	0.44	4.84	0.12
907-ALV-004	6/28/10	9:30	<1	18.7	7.8	17.65	1.23	0.25	0.14 J	0.66 J	0.23
907-ALV-005	6/24/10	11:00	3	23.0	7.2	1.21	3.50	0.75	0.27	5.63	0.20
907-ALV-006	6/23/10	14:10	<1	25.7	7.7	5.00	2.84	0.75	0.37	0.89 J	0.38
907-ALV-007	6/23/10	16:00	4	25.1	7.8	30.84	2.46	0.50	0.45	1.53	0.48
907-ALV-008	6/25/10	11:35	40	18.1	7.8	3.69	2.66	0.50	0.58	2.81	0.12
907-ALV-120	6/25/10	13:35	2	22.3	7.2	23.32	1.98	0.50	0.48	1.11 J	0.61
907-ALV-12A	6/23/10	9:45	22	19.6	7.5	19.53	2.54	0.25	0.30	5.15	0.12
907-ALV-570	6/25/10	10:50	2	25.5	7.8	0.89	2.98	0.25	0.59	0.15 J	0.07 J
907-ALV-580	6/25/10	14:15	6	21.6	7.6	17.78	2.39	0.50	0.44	1.18	0.12
907-ALV-590	6/25/10	10:00	4	19.3	7.3	1.12	2.60	0.25	0.17 J	1.33	0.05 J
907-ALV-640	6/24/10	9:15	Dry	ns	ns	ns	ns	ns	ns	ns	ns
908-LEM-520	6/28/10	11:25	6	22.0	7.8	4.27	4.56	0.50	0.87	1.34	0.32
908-UNI-001	6/24/10	13:50	28	21.4	8.2	0.51	3.05	0.50	0.20	2.52	0.11
908-UNI-002	6/24/10	11:45	1	24.7	7.9	7.72	6.41	0.50	0.95	6.57	0.30
908-UNI-002	6/25/10	9:15	1	22.1	7.9	6.91	3.98	na	0.47	na	na
908-UNI-002	7/6/10	14:30	2	24.0	7.9	na	6.04	na	na	na	na

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp. (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Orthophosphate-P (mg/L)
908-UNI-003	6/23/10	11:50	17	22.3	8.1	0.60	1.85	0.13	0.15 J	2.89	0.06 J
908-UNI-003	7/6/10	15:45	9	21.7	8.4	na	2.11	na	na	na	na
908-UNI-004	6/23/10	14:40	9	23.1	7.6	1.41	2.48	0.25	0.17 J	1.65	0.17
908-UNI-005	6/23/10	10:35	Dry	ns	ns	ns	ns	ns	ns	ns	ns
908-UNI-14A	6/28/10	12:05	28	20.1	7.9	0.22	3.16	0.50	0.21	3.15	0.07 J
909-SPR-001	6/28/10	10:35	21	19.2	7.8	0.58	2.36	0.25	0.17 J	2.31	0.20
909-SPR-002	6/25/10	15:00	6	23.4	8.1	3.48	2.20	0.25	0.29	5.98	0.15
Reporting Limits				**0.1**	**0.01**	**0.00**	**0.01**	**0.13**	**0.20**	**1.13**	**0.10**
Action Level				**BPJ**	**<6.5 >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.0**	**2.0**

Notes:
J = Value reported is below the reporting limit; measurements have an increased percent error.
ns = not sampled (dry site)
na = not analyzed
BPJ = Best Professional Judgment (see Section 3.4)
Denotes a confirmation visit.
Denotes a site sampled for laboratory analysis.

GRAPH 4-1: FLOW

Action Level is Best Professional Judgment

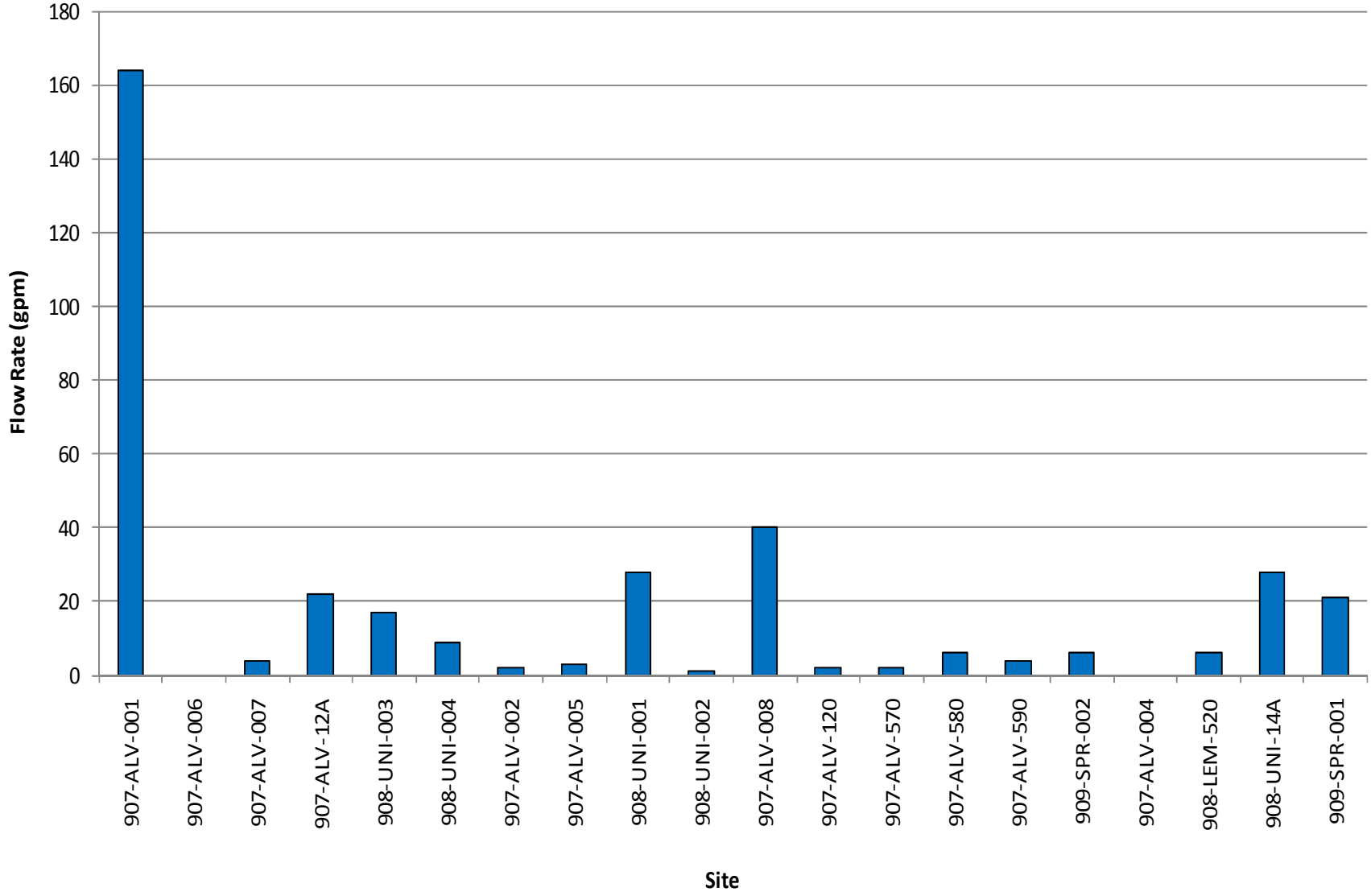

GRAPH 4-2: TEMPERATURE

Action Level is Best Professional Judgment

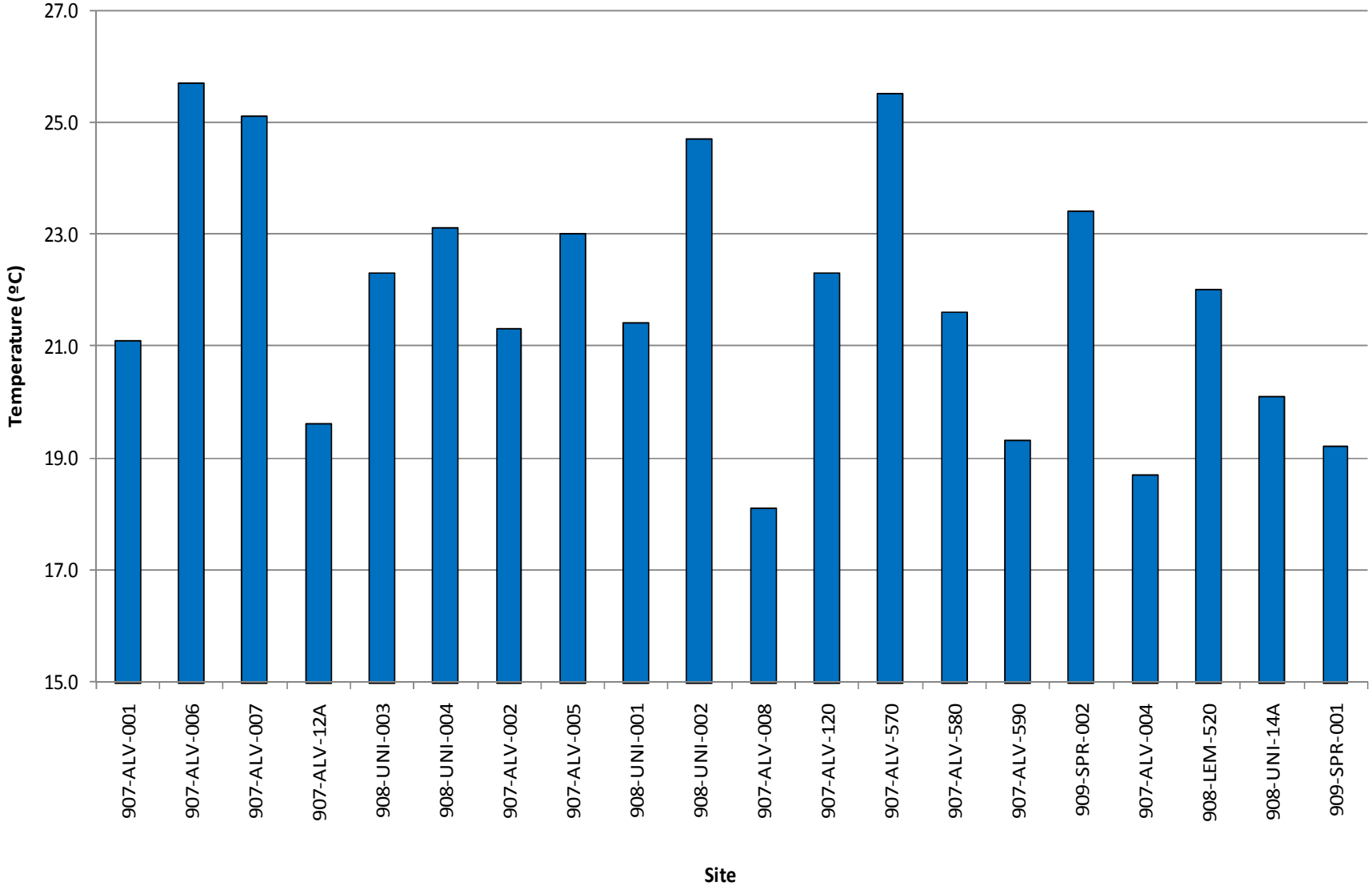

GRAPH 4-3: pH

Action Level is < 6.5 or > 9.0

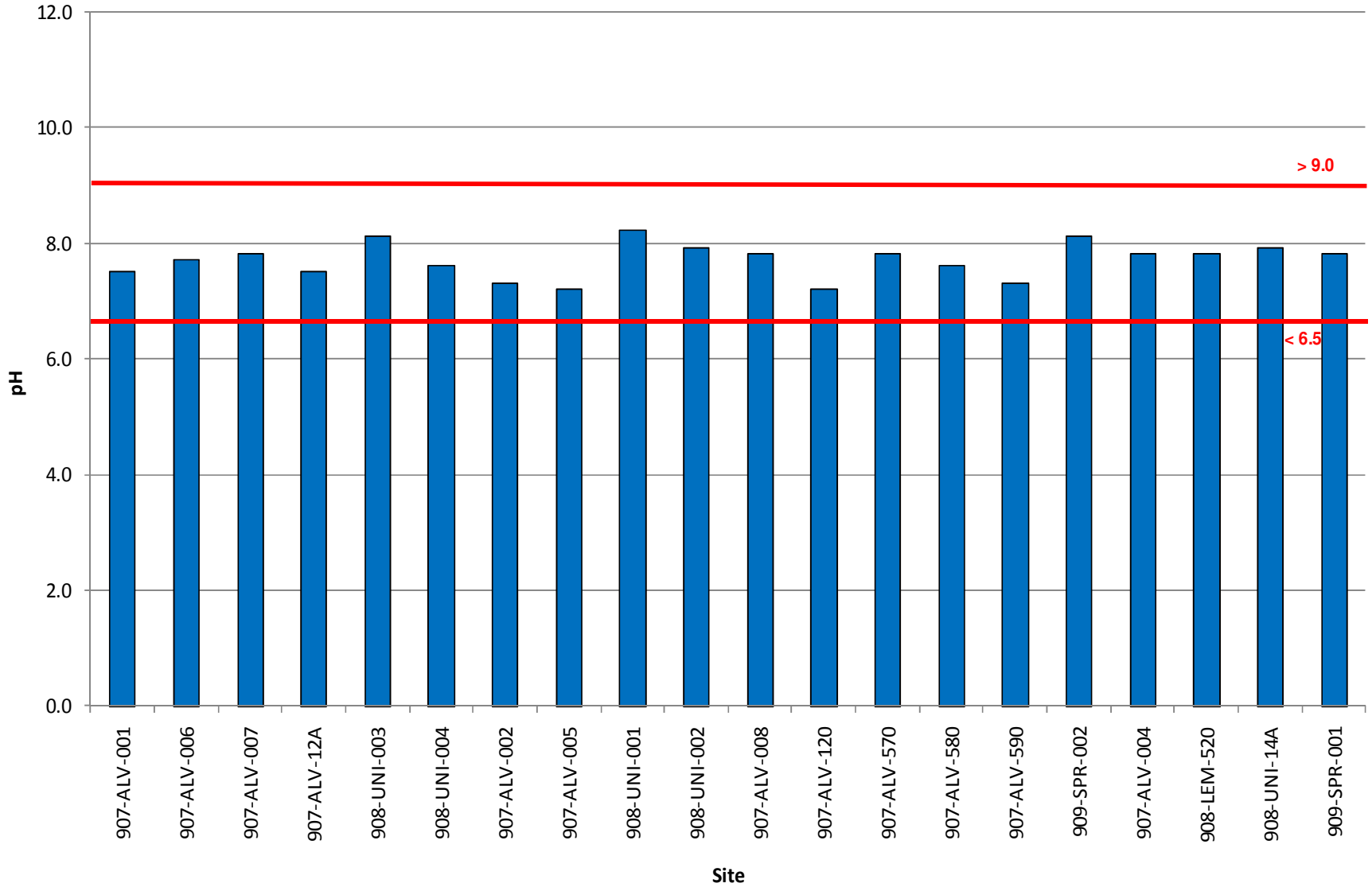

GRAPH 4-4: CONDUCTIVITY

Action Level is Best Professional Judgment

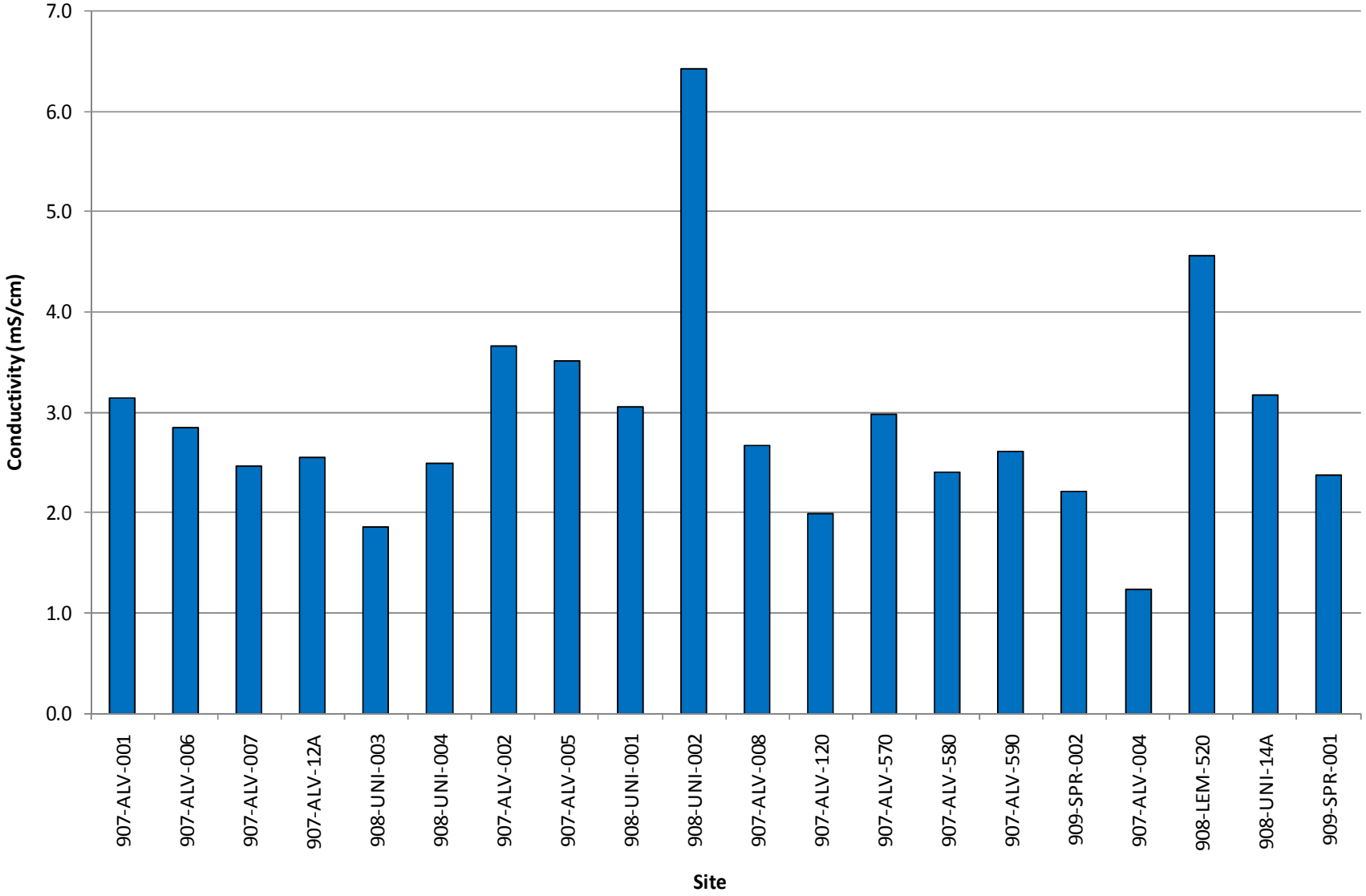

GRAPH 4-5: TURBIDITY

Action Level is Best Professional Judgment

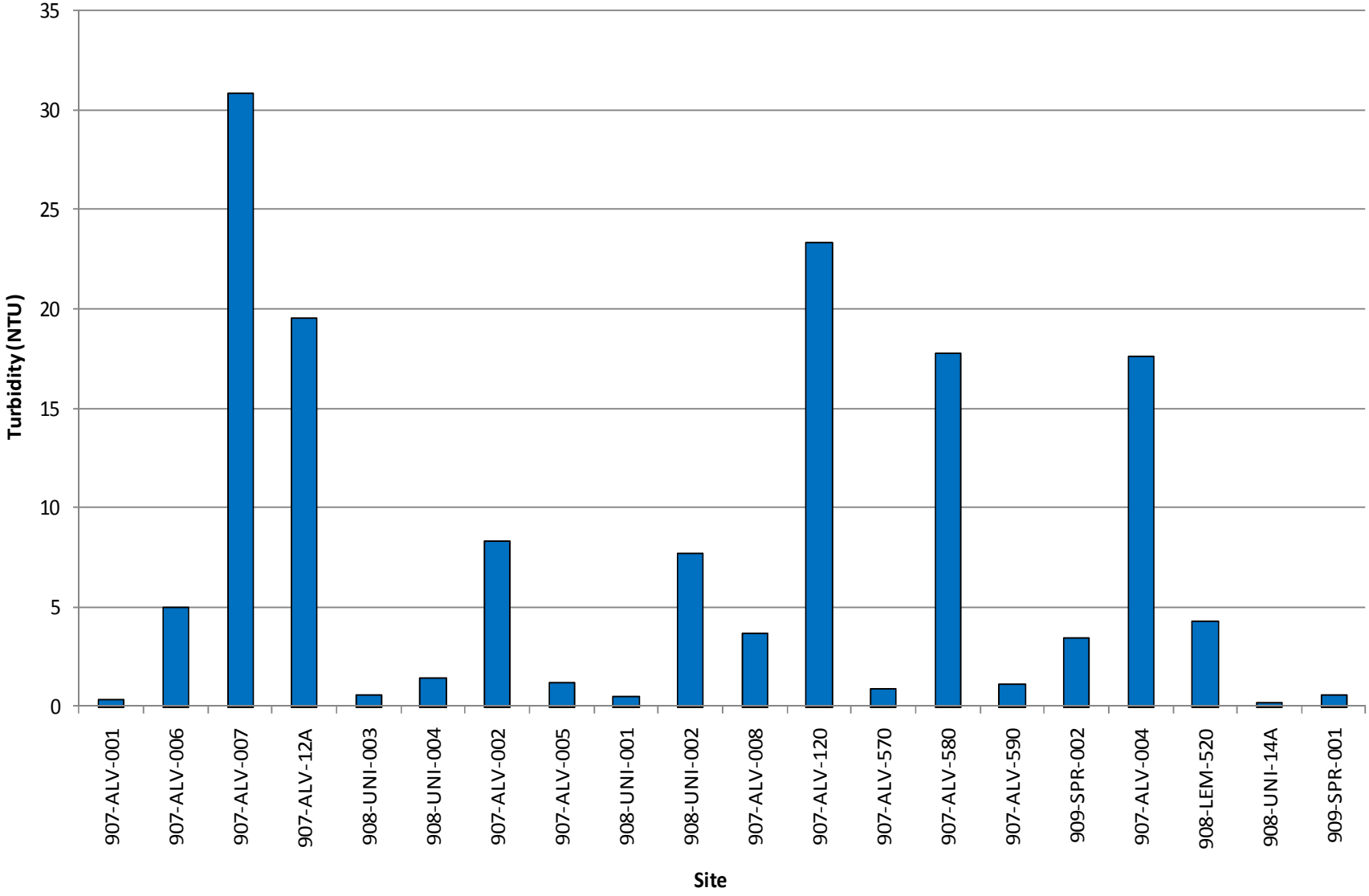

GRAPH 4-6: AMMONIA-N

Action Level = 1.0 mg/L

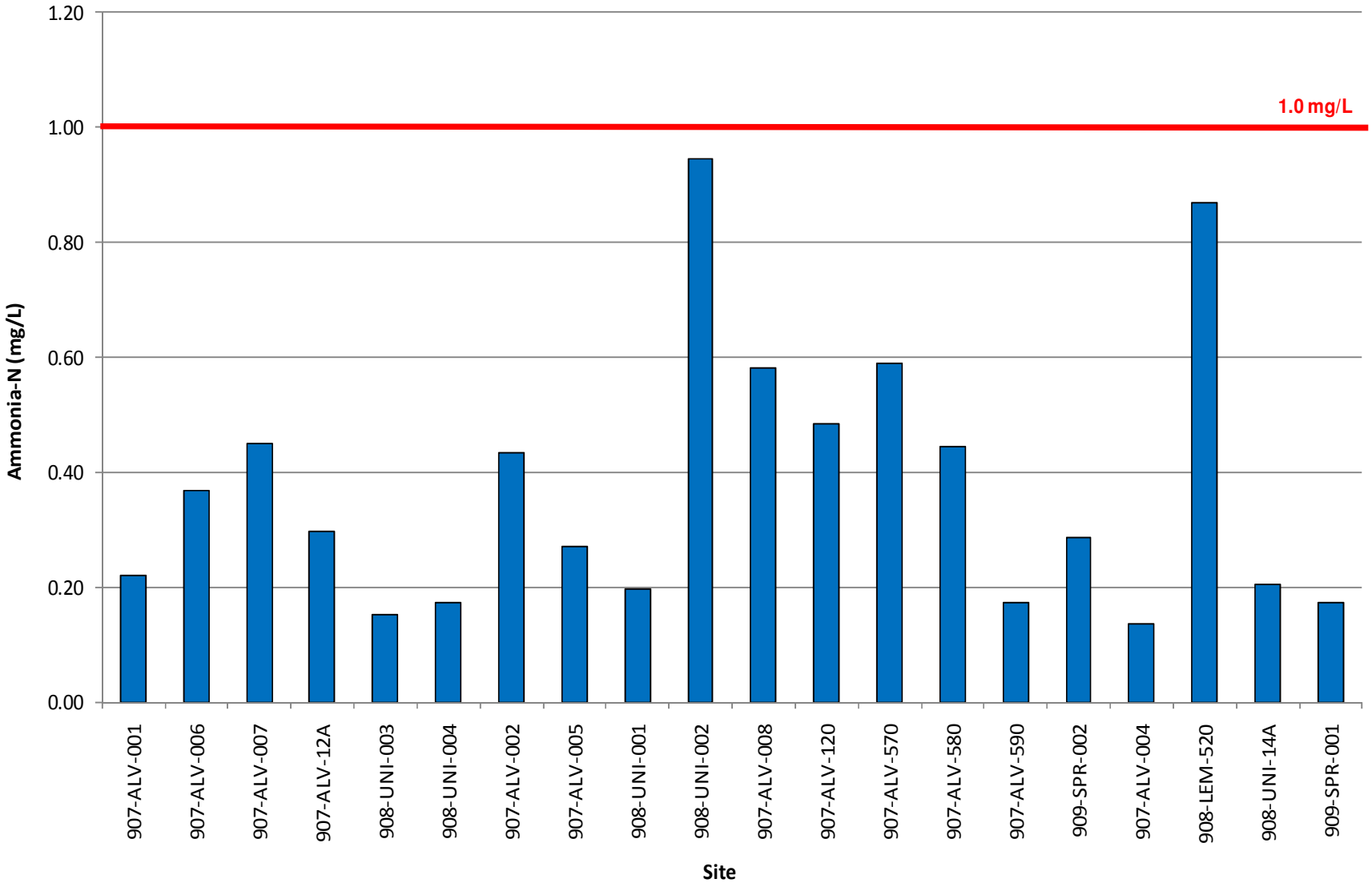

GRAPH 4-7: NITRATE-N

Action Level = 10.0 mg/L

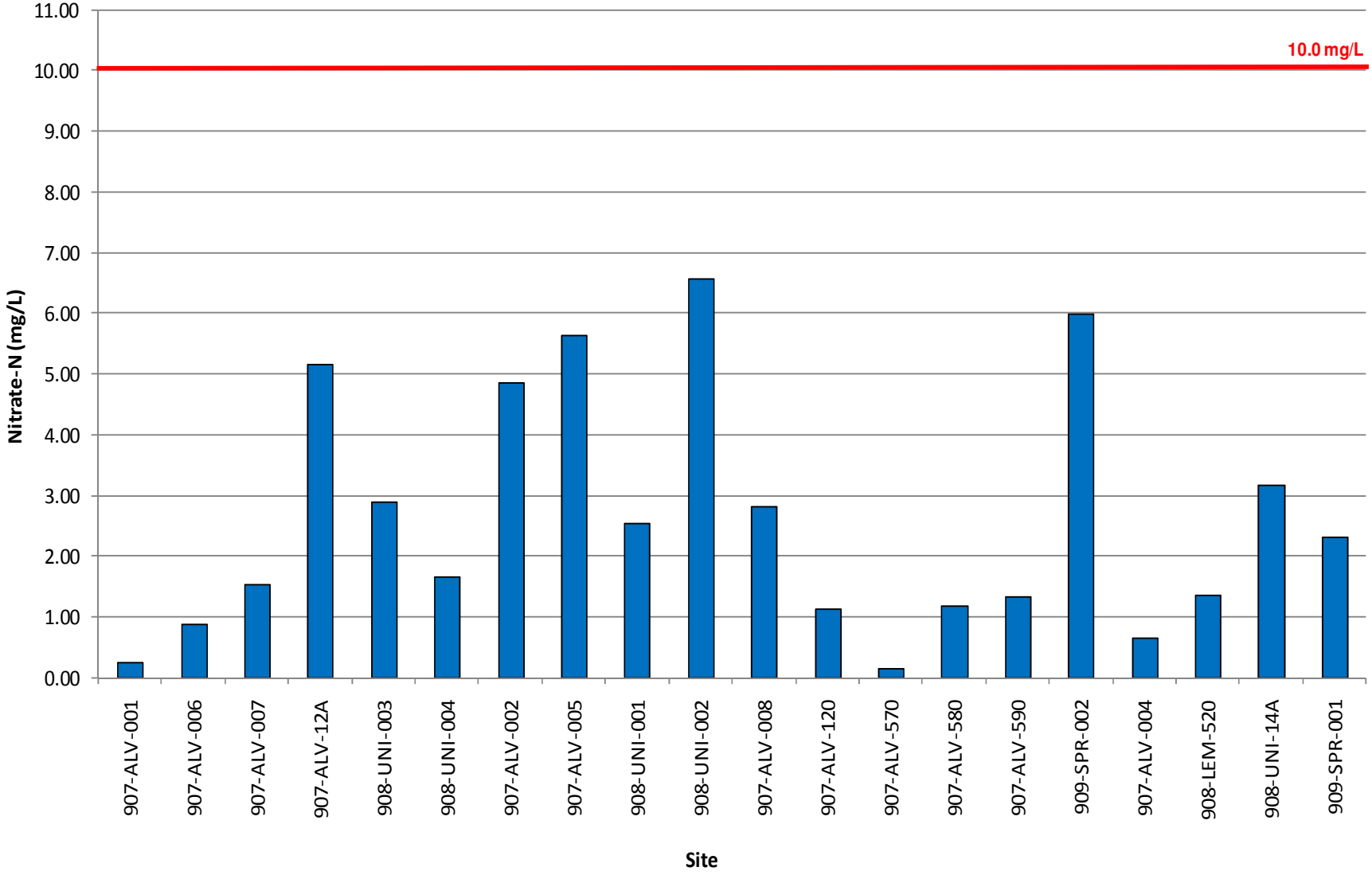

GRAPH 4-8: ORTHOPHOSPHATE-P

Action Level = 2.0 mg/L

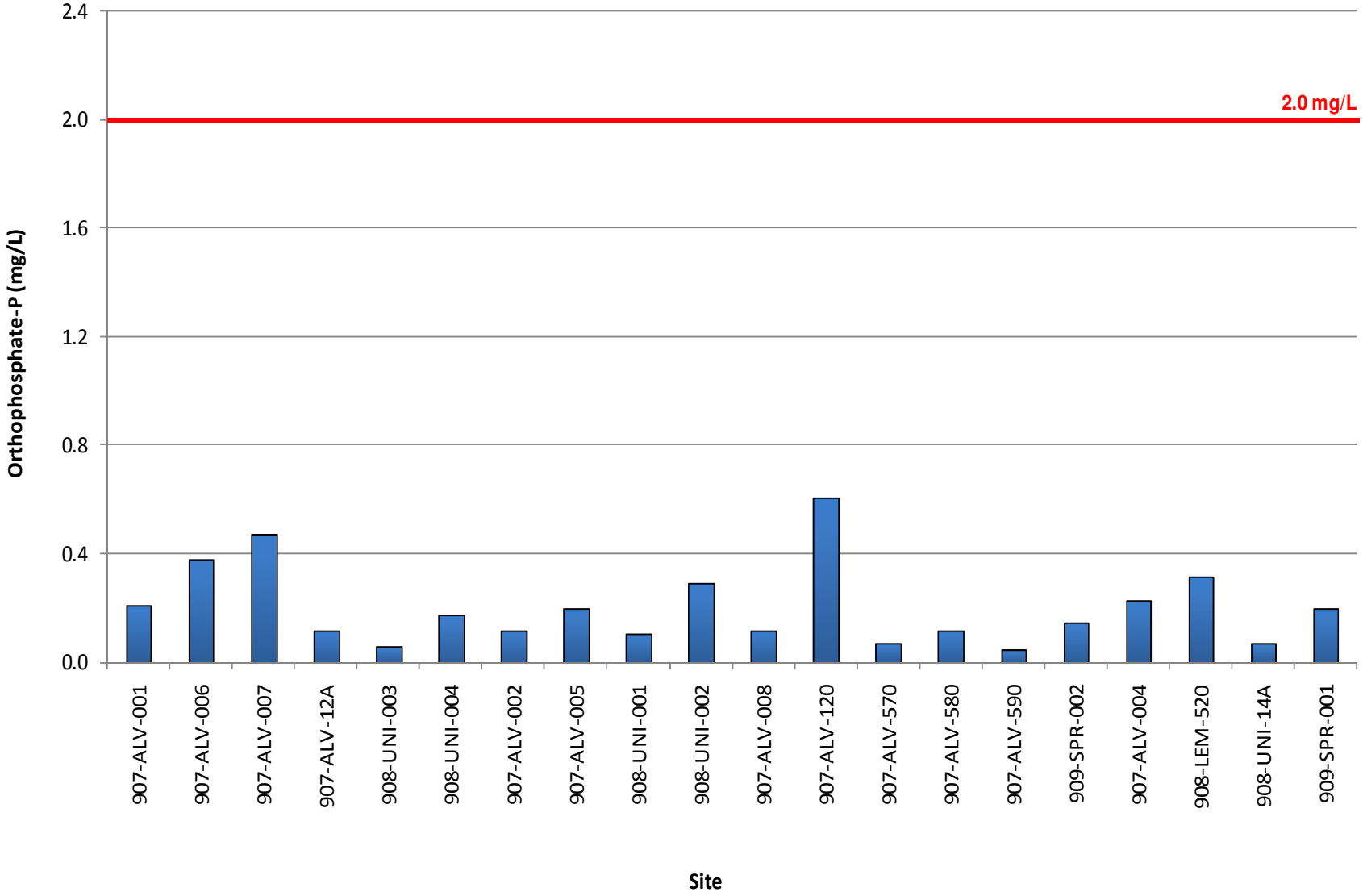

GRAPH 4-9: SURFACTANTS

Action Level = 1.0 mg/L

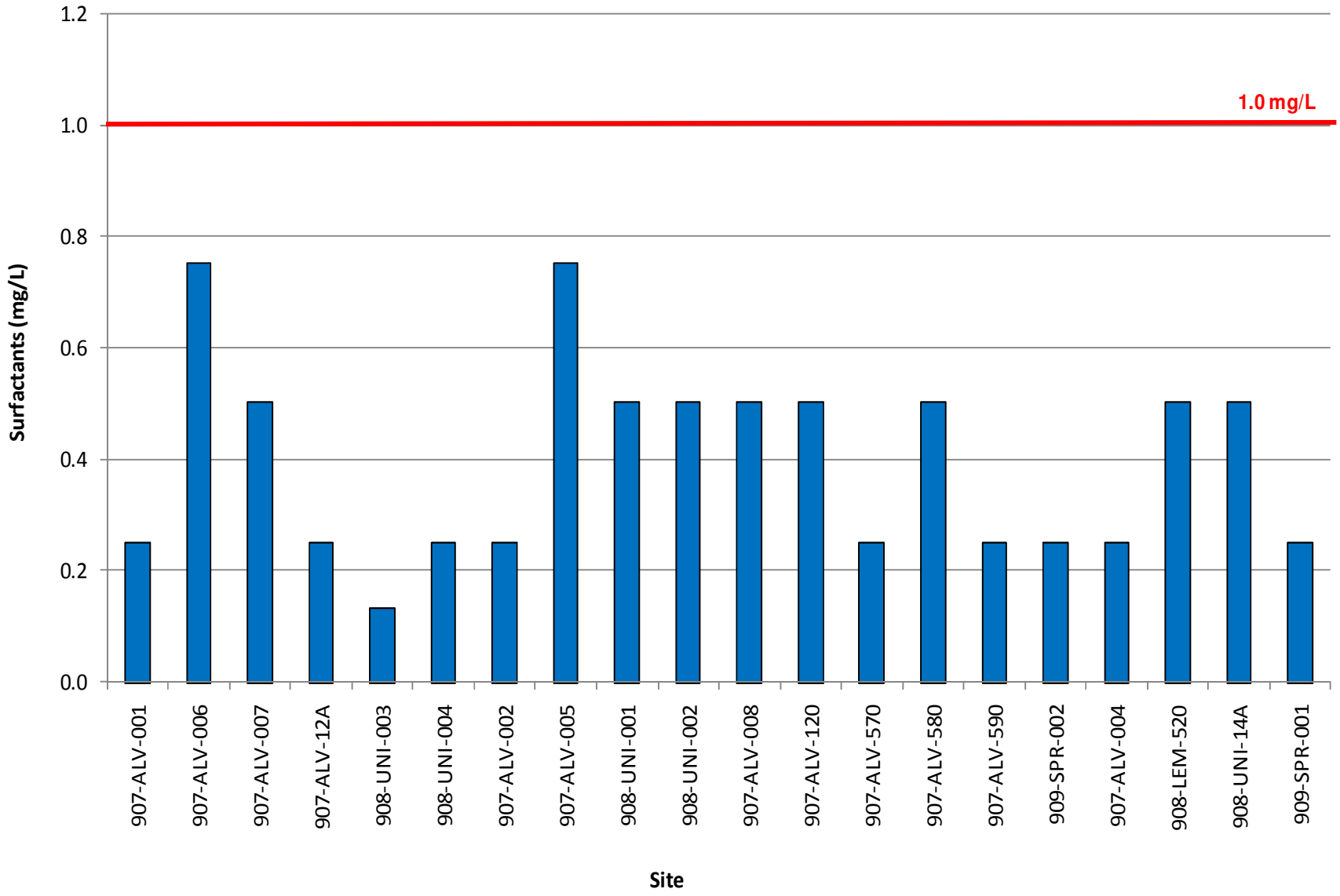

5 TRASH ASSESSMENT

5.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather monitoring site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Sub-workgroup developed a Trash Assessment Form to document the amount and extent of trash at each evaluated site. The form categorizes the site into one of five trash categories: optimal, suboptimal, marginal, submarginal, or poor. The form also addresses any potential threats that the trash may pose to human or aquatic health. For sites rating submarginal or poor, the form includes a section to record types, prevalence, potential routes, and sources of trash.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form's five categories are primarily qualitative descriptions of the amount and extent of trash although the number of trash pieces is also included in each category as a rough guideline. The five categories are defined as follows.

- Optimal: On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
- Suboptimal: On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
- Marginal: Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
- Submarginal: Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (~100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
- Poor: Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* – Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment.
- *Threat to Aquatic Health* – Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amounts of settleable,

degradable, and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. *Large amount is defined as 50 pieces or more.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Form.

If a site is labeled as submarginal or poor, it is assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on their prevalence and the potential threat to water quality they pose. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

Seventy-seven percent of the sites evaluated during the 2010 Dry Weather Monitoring Program were rated "optimal." The remaining 23 percent of the sites were rated "suboptimal". Table 5-1 and Graph 5-1 summarize the trash assessment results. Figure 5-1 provides a map of sampling sites and their corresponding trash assessment ratings.

TABLE 5-1
2010 TRASH ASSESSMENT RESULTS

Optimal	Suboptimal
907-ALV-001	907-ALV-008
907-ALV-002	907-ALV-590
907-ALV-004	908-LEM-520
907-ALV-005	908-UNI-002
907-ALV-006	908-UNI-14A
907-ALV-007	
907-ALV-12A	
907-ALV-120	
907-ALV-570	
907-ALV-580	
907-ALV-640	
908-UNI-001	
908-UNI-003	
908-UNI-004	
908-UNI-005	
909-SPR-001	
909-SPR-002	

GRAPH 5-1
2010 TRASH ASSESSMENT RESULTS

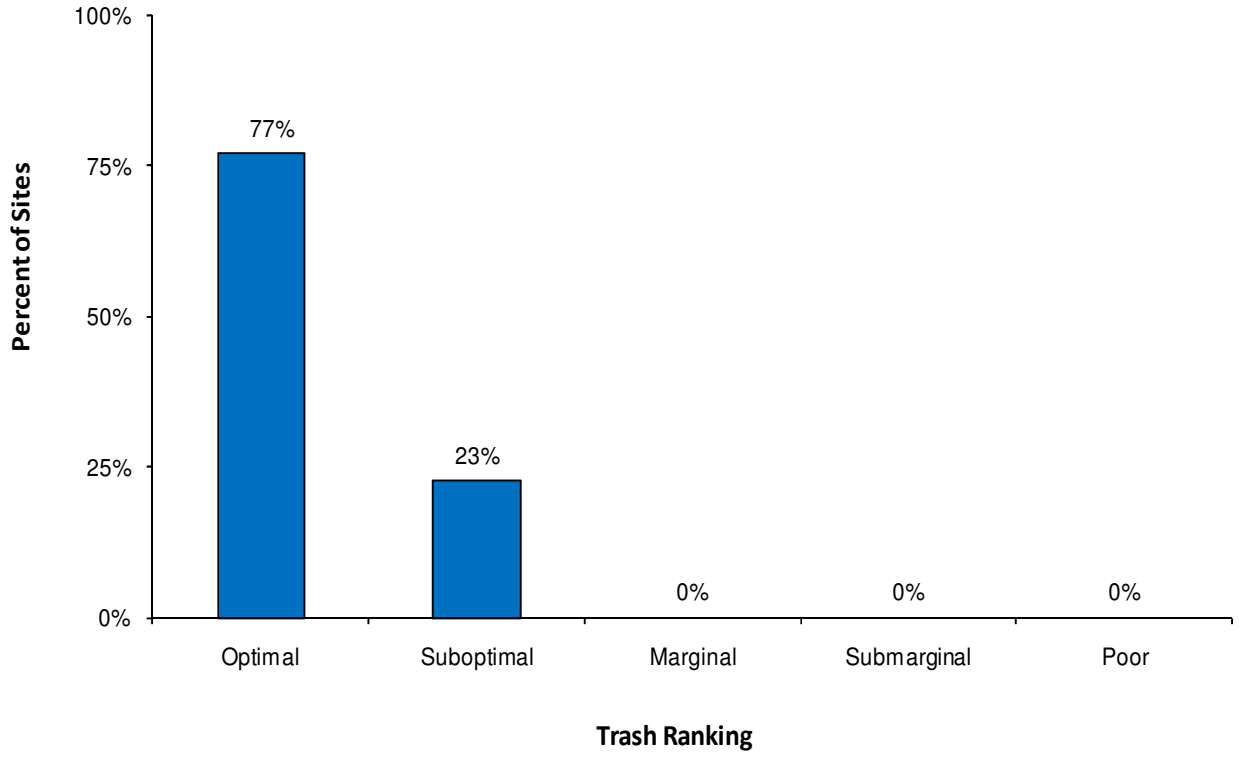

FIGURE 5-1
TRASH ASSESSMENT MAP

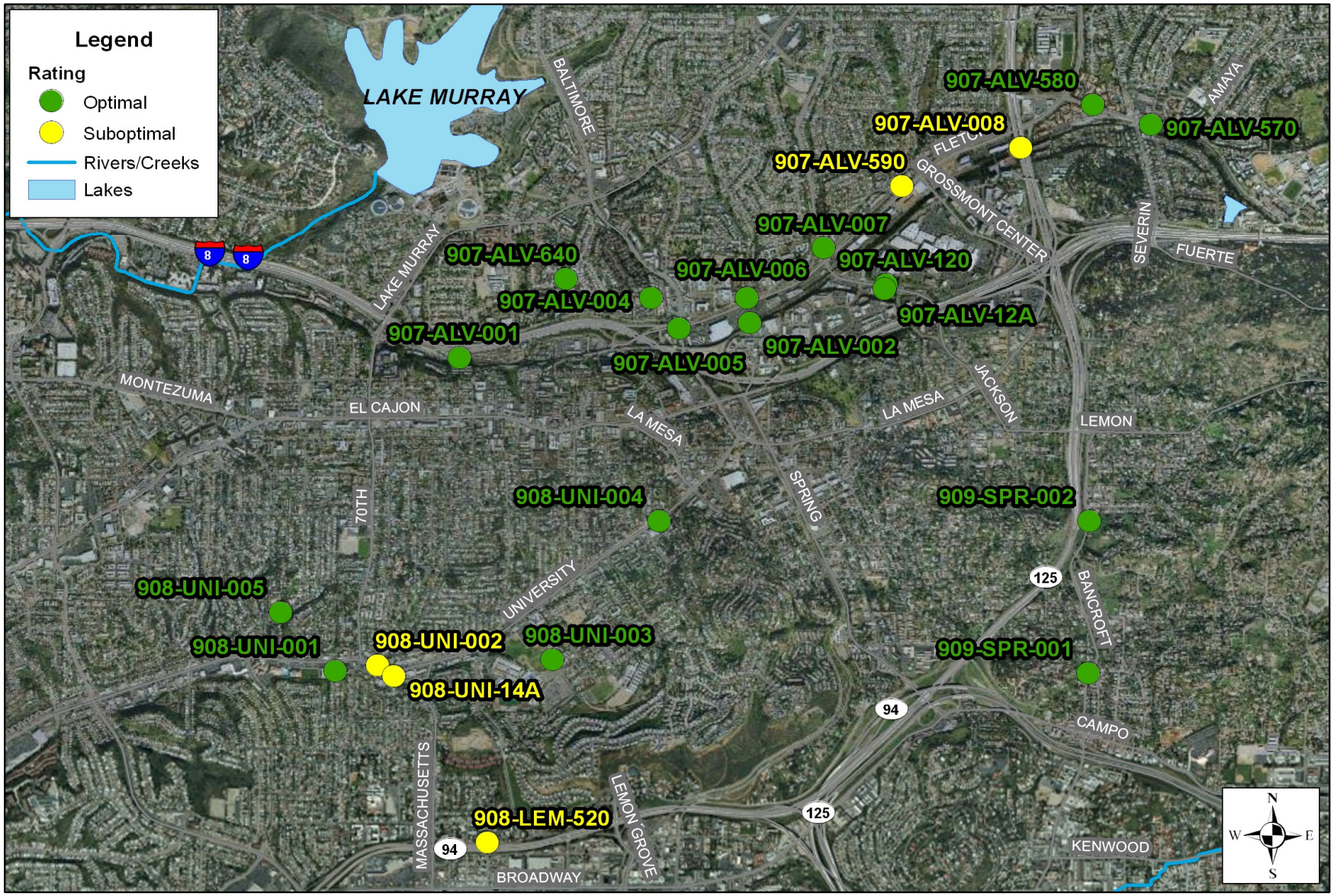

Base Data Sources: USGS, SanGIS, SANDAG

0 0.45 0.9 Miles

6 LABORATORY ANALYTICAL RESULTS

6.1 Summary

Laboratory analyses were conducted at six sites, representing over 25 percent of all sites with ponded or flowing water. The laboratory constituents measured are defined below.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Hardness itself is not considered a pollutant, but is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms.

The CTR for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness, with toxicity decreasing as hardness increases. For a specific hardness, each dissolved metal has a Criterion Maximum Concentration (CMC), a short term concentration limit in which aquatic life can be sustained. The laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 6-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

Diazinon and **chlorpyrifos** are organophosphate pesticides that can be harmful to aquatic organisms if transported in urban runoff. Diazinon and chlorpyrifos are highly toxic to birds, mammals, and insects. They are also highly toxic to freshwater fish and invertebrates following acute exposure.

Coliform bacteria are present in mammalian digestive tracts and are relatively harmless to humans. Coliform bacteria are naturally found in most surface waters and soils. Water samples are tested for total coliform in the interest of public health, serving as an indicator of the presence of other more harmful pathogenic organisms of potentially fecal origin. Water is tested for total coliform in lieu of these pathogens as they occur in much smaller quantities that may be difficult to detect.

Fecal coliform, a subset of coliform bacteria, and **Enterococci** are found primarily in the gastrointestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material present in water is human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

A summary of the laboratory analytical results is presented in Table 6-2. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included in Appendix C.

TABLE 6-1
CTR – CMC FOR DISSOLVED METALS

Site*	Total Hardness (mg/L)	Concentration (µg/L)	CMC (µg/L)
Dissolved Cadmium			
907-ALV-002	903	0.8 J	19
908-UNI-002	1,720	0.5 J	19
Dissolved Copper			
907-ALV-001	646	1 J	49.6
907-ALV-002	903	2 J	49.6
908-UNI-001	748	5 J	49.6
908-UNI-002	1,720	4 J	49.6
908-UNI-003	340	11	42.6
908-UNI-004	541	3 J	49.6
Dissolved Zinc			
907-ALV-001	646	3 J	379.3
907-ALV-002	903	2 J	379.3
908-UNI-001	748	8 J	379.3
908-UNI-002	1,720	38	379.3
908-UNI-003	340	5 J	330.5
908-UNI-004	541	11 J	379.3

Notes:
*Sites listed are those at which a particular dissolved metal was detected.
CMC = Criterion Maximum Concentration
For equations and constants used in CTR calculations, see www.epa.gov/ost/standards/ctr/toxic.pdf.
J = Detected below the reporting limit; therefore, result is an estimated concentration.

TABLE 6-2
LABORATORY ANALYSES STATISTICAL SUMMARY*

Parameter (units)	Maximum	Minimum	# of Exceedances
Oil and Grease (mg/L)	nd	nd	0
Total Hardness (mg/L CaCo3)	1,720	340	**
Dissolved Cadmium (µg/L)	0.8 J	nd	0
Dissolved Copper (µg/L)	11	1 J	0
Dissolved Lead (µg/L)	nd	nd	0
Dissolved Zinc (µg/L)	38	2 J	0
Diazinon (µg/L)	nd	nd	0
Chlorpyrifos (µg/L)	nd	nd	0
Total Coliform (MPN/100 mL)	130,000	3,000	2
Fecal Coliform (MPN/100 mL)	1,700	80	0
Enterococcus (MPN/100 mL)	28,000	90	1

Notes:
nd = not detected

*Calculations include complete routine visit data only. Confirmation visits, follow-up visits and dry sites not incorporated.

** Total hardness is not considered a pollutant and does not have an established action level.
J = Detected below the reporting limit; therefore, result is an estimated concentration.

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L CaCO3)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)	Enterococci (MPN/100 mL)
907-ALV-001	6/23/10	13:30	nd	646	nd	1	nd	3 J	nd	nd	3,000	300*	110
907-ALV-002	6/24/10	15:00	nd	903	0.8 J	2 J	nd	2 J	nd	nd	8,000	120*	230
908-UNI-001	6/24/10	13:50	nd	748	nd	5 J	nd	8 J	nd	nd	11,000	80*	90
908-UNI-002	6/24/10	11:45	nd	1,720	0.5 J	4 J	nd	38	nd	nd	**130,000**	500*	**28,000**
908-UNI-002	7/6/10	14:30	na	na	na	na	na	na	na	na	17,300	115*	480
908-UNI-003	6/23/10	11:50	nd	340	nd	11	nd	5 J	nd	nd	**130,000**	1,300*	5,000
908-UNI-003	7/6/10	15:45	na	na	na	na	na	na	na	na	4,110	36*	na
908-UNI-004	6/23/10	14:40	nd	541	nd	3 J	nd	11 J	nd	nd	80,000	1,700*	300
Analytical Reporting Limit			**5**	**10**	**1**	**10**	**5**	**20**	**0.05**	**0.05**	**20****	**20****	**20****
Action Levels			**15**	*******	**CTR**	**CTR**	**CTR**	**CTR**	**0.5**	**0.5**	**130,000**	**13,000**	**7,000**

Notes:
Red values exceed action level.
Denotes a confirmation visit.
nd = not detected
na = not analyzed
J = Detected below the reporting limit; therefore, result is an estimated concentration.
CTR = California Toxics Rule; CTR action levels for metals are calculated based upon on the total hardness value of the water sample.
* Number of fecal coliforms is derived from *E. coli* count. Number of fecal coliforms = (Number of *E. coli*) / 0.85
** Reporting limit is 10 MPN/100 mL for IDEXX tests used during confirmation and upstream testing.
*** Total hardness is not considered a pollutant (see section 3.4 for details), and thus has no established action level for the purposes of dry weather monitoring.

Denotes a confirmation visit.

7 DATA ANALYSIS

This first part of this section provides an overall evaluation of test results obtained from the 2010 Dry Weather Monitoring Program. The second portion of this section describes historical trends for various constituent exceedances.

7.1 2010 Results

Of the 20 sites sampled, two sites had exceedances in total coliform bacteria, and one site had an *Enterococcus* count above the action level. Table 7-1 presents a snapshot of the exceedances found during the 2010 Dry Weather Monitoring Program.

TABLE 7-1
2010 EXCEEDANCES SUMMARY

Site	Total Coliforms	Enterococci
907-UNI-002	✔	✔
908-UNI-003	✔	

Note: Table reflects exceedances occurring during routine visits only. Confirmation and follow-up visits are not included.

7.2 Previous Results

Historical results of exceedances are presented in Table 7-2, Graph 7-1, and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances for field constituents, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

Since 2002, no exceedances were measured in water temperature, oil and grease, cadmium, lead, zinc, diazinon, or chlorpyrifos, so these constituents have not been incorporated into the following table and graphs.

Based on historical dry weather data, the following observations have been made:

- Conductivity has not exceeded the action level since 2003. The action level for conductivity was changed from a numeric value to BPJ to account for sites which contain salt water or groundwater which increases conductivity.
- There is a decreasing trend in ammonia-N and orthophosphate-P exceedances. No orthophosphate-P exceedances have been measured since 2005.
- No exceedances of ammonia-N have been observed since 2006.
- A nitrate-N exceedance was measured during 2009 only.
- With the exception of 2009, there appears to be a generally decreasing trend in surfactants exceedances.
- Total coliform, fecal coliform, and *Enterococcus* exceedance rates have generally decreased over time. Note that dry weather action levels for bacterial indicators were revised in 2010. Constituents have been compared to action levels in effect at the time of sampling to identify exceedances.

TABLE 7-2
PERCENT OF SITES WITH EXCEEDANCES BY YEAR

Year	Field Testing								Laboratory Analyses				
	Number of Field Testing Sites	pH	Turbidity	Conductivity*	Ammonia-N	Nitrate-N	Orthophosphate-P	Surfactants	Number of Laboratory Sampling Site	Copper	Total Coliforms	Fecal Coliforms	Enterococci
2002	18	0	6	6	28	0	6	17	5	0	100	80	40
2003	18	0	0	6	17	0	6	6	5	0	60	60	20
2004	18	0	0	0	11	0	0	0	5	0	60	20	20
2005	18	0	0	0	11	0	6	6	5	0	60	20	20
2006	18	0	0	0	17	0	0	6	5	0	80	20	0
2007	18	6	0	0	0	0	0	0	5	0	0	0	20
2008	20	0	5	0	0	0	0	0	6	0	50	17	33
2009	20	5	0	0	0	5	0	15	6	17	17	0	17
2010**	20	0	0	0	0	0	0	0	6	0	33	0	17

Notes: Results based on complete routine visits only. Confirmation visits, follow-up visits, and dry sites not included.

* By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

** Note that dry weather action levels for bacterial indicators were revised in 2010. Constituents have been compared to action levels in effect at the time of sampling to identify exceedances.

GRAPH 7-1
PERCENT OF SITES WITH FIELD CONSTITUENT EXCEEDANCES BY YEAR

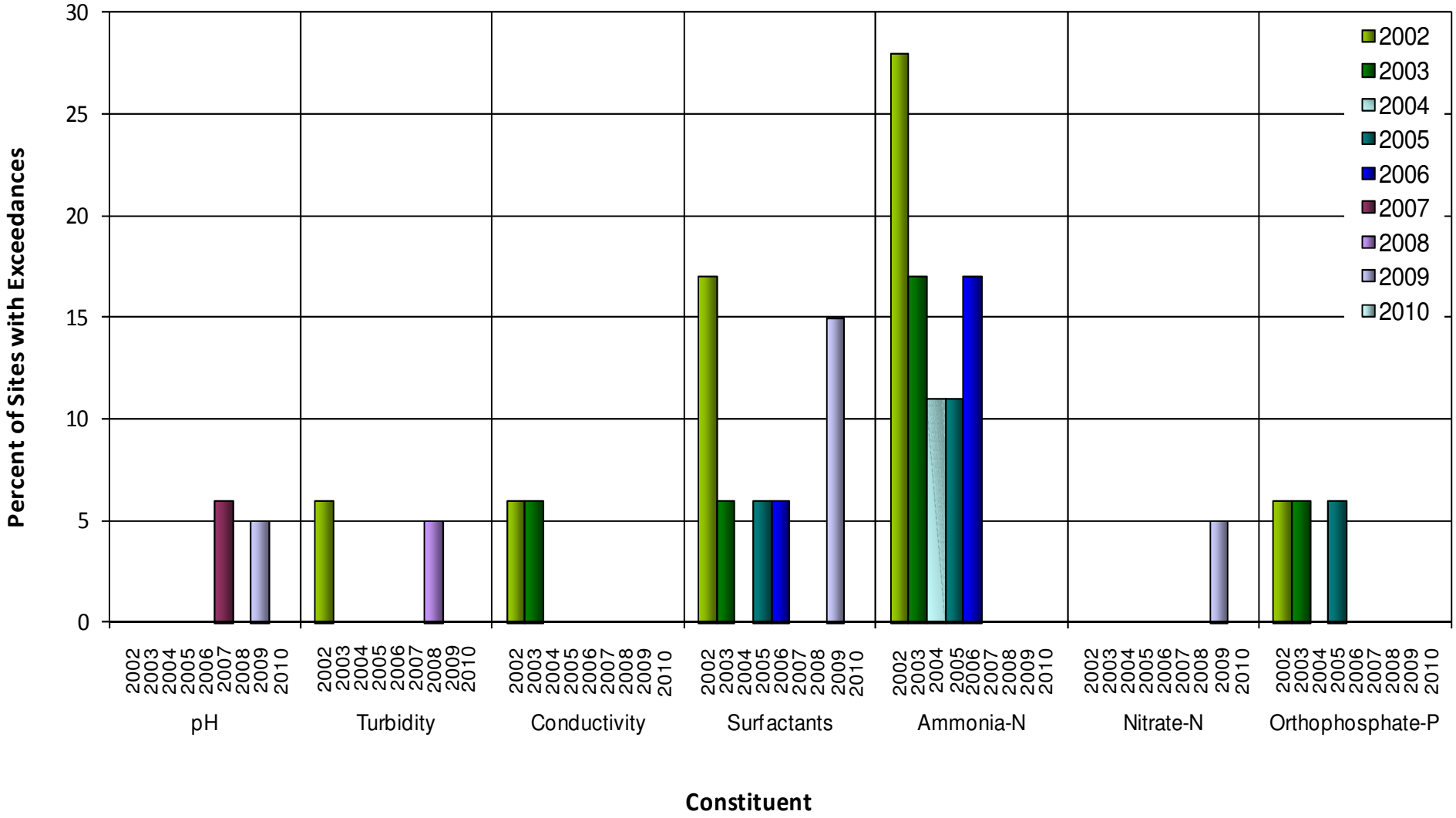

GRAPH 7-2
PERCENT OF SITES WITH LABORATORY EXCEEDANCES BY YEAR

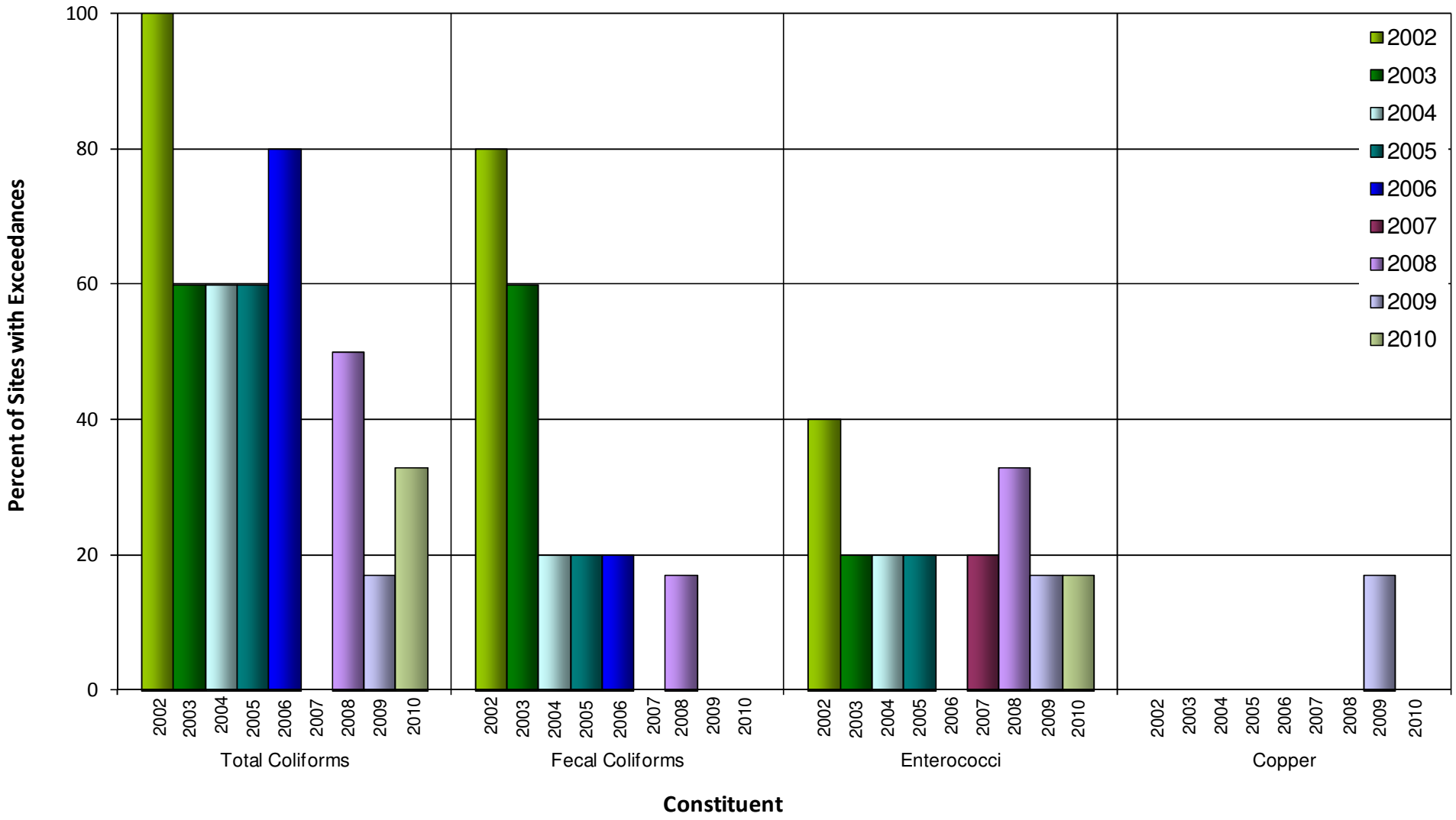

8 FOLLOW-UP INVESTIGATIONS

One of the primary purposes of the Dry Weather Monitoring Program is to identify IC/IDs. When a parameter is measured at or above the regionally accepted action level, it is possible that an IC/ID is present and further investigation is performed. Procedures for such investigations are described below, followed by a discussion of the 2010 investigations.

8.1 Investigation Procedures

In the event that a constituent measurement is above the associated action level during the routine visit, a confirmation visit is typically conducted within two business days of receiving the result. The visit includes returning to the routine site to retest the water for the parameters initially in exceedance. The purpose of the confirmation visit is to identify whether the initial exceedance is persistent or due to transient conditions.

If during the follow-up investigations, flow rates are measured, visual observations are performed, and field testing is conducted. Visual observations, such as water color, clarity, odor, floatable materials, deposits, vegetation, and biology are recorded on field data sheets at each site. Field data sheets are included in Appendix D.

Source identification investigations begin by testing the water at the site again. This is referred to as a “confirmation” visit, as its purpose is to confirm the initial findings. If confirmation testing results in constituent concentrations below specified action levels, the exceedance found during the initial sampling may have been due to a transient flow. If confirmation testing at a site finds constituent concentrations again above the specified action levels, an upstream investigation will be conducted. The field crew will progress upstream to isolate and identify potential pollutant sources.

Upstream investigations are also referred to as “follow-up” visits, as the purpose is to identify illicit connections and illegal discharges. They are conducted by examining a number of upstream branches for any potential sources of the constituent of concern. The estimated flow rate in each branch and any relevant observations are recorded. Depending upon the constituent(s) under investigation, laboratory samples may be collected for analysis.

The laboratory test for investigating upstream bacteria sources differs from routine bacteria testing by using the IDEXX Colilert and IDEXX Enterolert tests. Information about these methods is provided in Table 3-2. Results for the Colilert and Enterolert tests are typically available within 24 hours, as opposed to the five business days needed for routine testing. The quicker turnaround time allows for additional upstream investigations as needed.

8.2 Investigated Sites

During the 2010 Dry Weather Monitoring Program, two sites required follow-up investigations for constituent exceedances. The total coliform action level was exceeded at both sites, and *Enterococcus* bacteria was elevated at one site. This section includes a description of the sites, analytical results, and the results of upstream investigations. Table 9-2 in Section 9 of this report provides a summary of the investigation results.

8.2.1 Site 908-UNI-002

Site 908-UNI-002 is located in a manhole near the intersection of Harbison Avenue and University Avenue. Laboratory results indicated a total coliform bacteria count at the action level of 130,000 MPN/100 mL and *Enterococcus* bacteria at 28,000 MPN/100mL, above the action level of 7,000 MPN/100 mL. Both total coliform and *Enterococcus* bacteria measured

below respective action levels at the confirmation visit. A sample taken from a manhole in the upstream residential area, at location 908-UNI-002-1, also contained *Enterococcus* bacteria above the action level. Several catch basins in this area contained large amounts of organic debris and trash, and flow through these areas was very low (Photo 8-1). These conditions are likely the result of debris decomposition and bacterial growth. This is the likely source of *Enterococcus* bacteria at the upstream location, and may be the source of the initial exceedance at Site 908-UNI-002. The results of the upstream investigation are presented in Table 8-1 and the sampling locations are displayed in Figure 8-1 below.

PHOTO 8-1: Dirty catch basin upstream from Site 908-UNI-002

In addition, ammonia-N was measured at 0.95 mg/L, just below the action level of 1.0 mg/L. Since this value was near to the action level, a confirmation visit was performed at the City's request. At the time of the confirmation visit, the ammonia-N concentration measured 0.47 mg/L. It was concluded that the relatively higher ammonia-N concentration observed during the initial visit was also the result of a transient flow.

TABLE 8-1
SITE 908-UNI-002 BACTERIA & AMMONIA-N UPSTREAM INVESTIGATION RESULTS

Site	Location	Flow (gpm)	Total Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
908-UNI-002 *(Routine Visit)*	Harbinson Avenue and University Avenue intersection, west sidewalk east of CB Hair and Nails	1	**130,000**	**28,000**
908-UNI-002 *(Confirmation 2)*	*(Same as above)*	2	17,300	480
908-UNI-002-1	Between 4678 and 4688 Dauer Avenue, immediately east of alley.	2	3,300	**7,701**

Notes:
Red values were at or above the measured constituent's action level.
na = not analyzed
ns = not sampled

FIGURE 8-1
SITE 908-UNI-002 BACTERIA & AMMONIA-N UPSTREAM INVESTIGATION

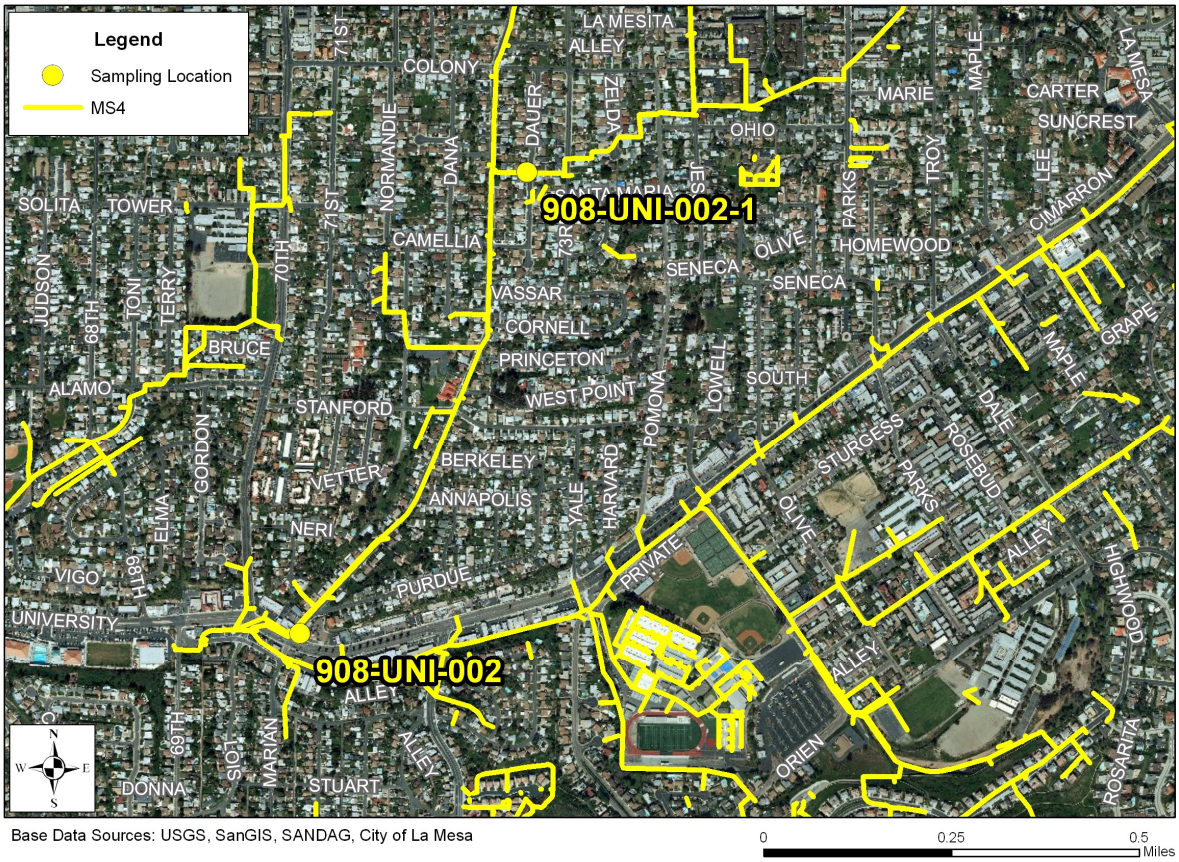

Base Data Sources: USGS, SanGIS, SANDAG, City of La Mesa

0 0.25 0.5 Miles

8.2.2 Site 908-UNI-003

Site 908-UNI-003 is located at the convergence of two pipes in a manhole on the north side of Lowell Street, between University Avenue and Normal Avenue (Photo 8-2). During the routine site visit, the total coliform bacteria count was measured at the action level of 130,000 MPN/100mL. No obvious source of bacteria was noted in the immediate area, and the site received an optimal trash rating. During the confirmation visit, the total coliform bacteria count was measured below the action level. The initial exceedance was most likely the result of a transient flow. The results of the upstream investigation are presented in Table 8-2, and the sampling locations are located in Figure 8-2 below.

PHOTO 8-2: Site 908-UNI-003

TABLE 8-2
SITE 908-UNI-003 TOTAL COLIFORM UPSTREAM INVESTIGATION RESULTS

Site	Location	Flow (gpm)	Total Coliform (MPN/100 mL)
908-UNI-003 *(Routine Visit)*	Lowell Street, halfway between University Ave. and Normal Avenue, north side of street.	17	**130,000**
908-UNI-003 *(Confirmation)*	*(Same as above)*	9	4,110
908-UNI-003-1	Normal Avenue, at the north corner of the Normal Avenue and Olive Avenue intersection.	4	15,500
908-UNI-003-2	In the sidewalk on the northeast corner of Normal Avenue and Lowell Street.	9	11,200

Note: **Red** values were at or above the measured constituent's action level.

FIGURE 8-2
SITE 908-UNI-003 TOTAL COLIFORM UPSTREAM INVESTIGATION

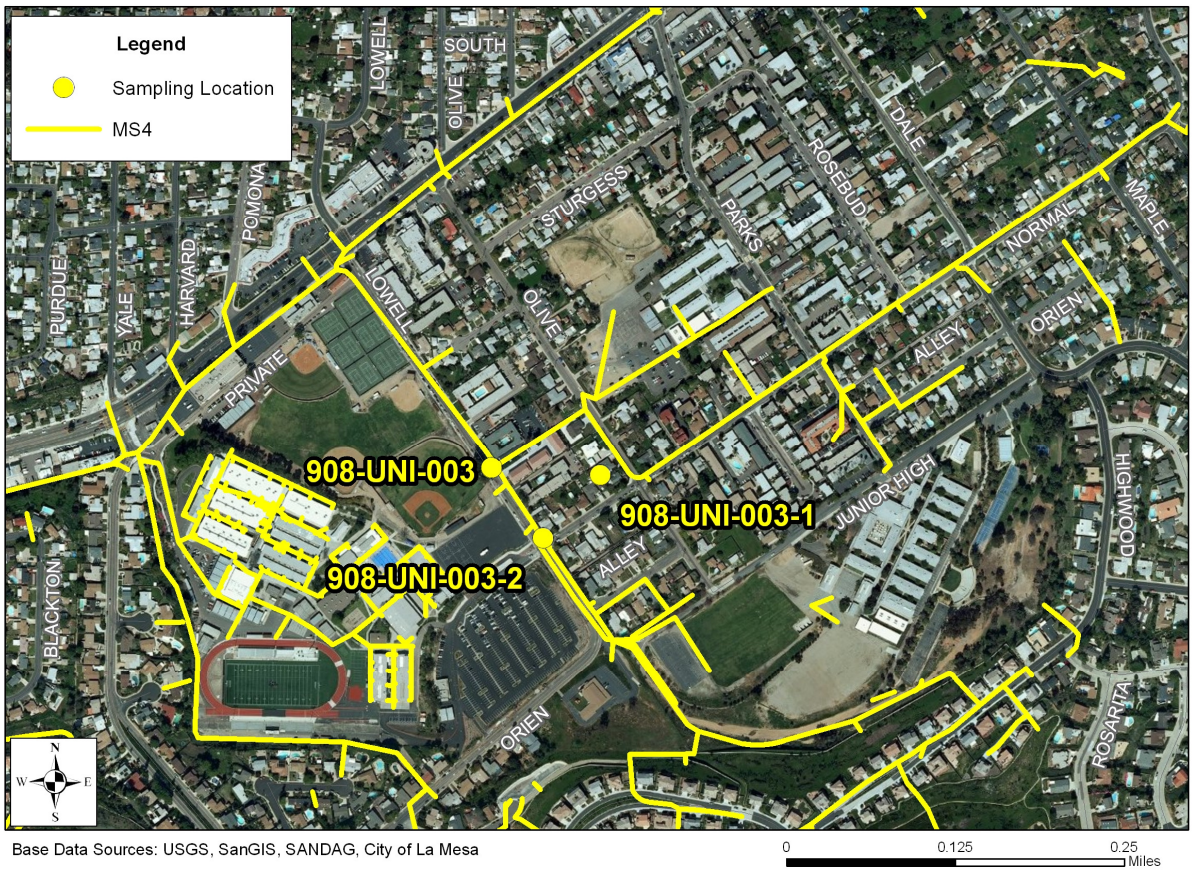

Base Data Sources: USGS, SanGIS, SANDAG, City of La Mesa

0 0.125 0.25 Miles

9 SUMMARY AND RECOMMENDATIONS

9.1 Summary of Field Screening and Laboratory Analysis Data

In the City of La Mesa's 2010 Dry Weather Monitoring Program, 22 sites were visited, 20 of which had flowing or ponded water. Samples from six sites were submitted for laboratory analyses. Confirmation visits and upstream investigations were performed for two sites having constituents at or above respective action levels. A summary of action level exceedances is provided in Table 9-1. Conclusions based on confirmation visits and upstream investigations are presented in Table 9-2.

Notable results and observations of the 2010 Dry Weather Monitoring Program include the following: the majority of water samples were odorless, and all sites had clear water; samples at six sites were yellow in color, and the remaining sites were colorless; algae and insects were present at seven sites, and six sites were host to snails; trash assessment ratings were optimal at the majority of sites, and five sites were ranked suboptimal.

TABLE 9-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (20 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
pH	0	0	-
Conductivity	0	0	-
Turbidity	0	0	-
Surfactants	0	0	-
Ammonia-N*	0	0	-
Nitrate-N	0	0	-
Orthophosphate-P	0	0	-
Laboratory Analyses (6 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
Oil & Grease	0	0	-
Cadmium	0	0	-
Copper	0	0	-
Lead	0	0	-
Zinc	0	0	-
Diazinon	0	0	-
Chlorpyrifos	0	0	-
Total Coliforms	2	33	908-UNI-002, 908-UNI-003
Fecal Coliforms	0	0	-
Enterococci	1	17	908-UNI-002

Note: Data is from the initial site visits only. Confirmation visits, follow-up visits and dry sites not included.
*Ammonia-N was not measured above the action level at any site, but one upstream investigation was conducted for a borderline measurement. See Section 8 for a description of the investigation.

9.2 Summary of Follow-up Data

Table 9-2 presents the conclusions based on the results of the confirmation and upstream investigations conducted at seven sites for the 2010 Dry Weather Monitoring Program.

TABLE 9-2
SUMMARY OF FOLLOW-UP INVESTIGATIONS

Site	Upstream Investigation Target Constituent(s)		Results / Probable Source
	Field	Laboratory	
908-UNI-002	---	Total Coliforms, Enterococci	Transient flow
908-UNI-003	---	Total Coliforms	Transient flow

9.3 Recommendations

9.3.1 2009 Recommendation Implementation

In response to the recommendations presented in the 2009 Dry Weather Field Screening Program, the City took the following actions:

- Removed leaf debris from Memorial Avenue, located along the conveyance upstream of Site 907-ALV-002.
- Removed decomposing leaves and trash from Site 907-ALV-002 and location 907-ALV-002-2, which had total coliform bacteria exceedances in 2009.
- Removed the household debris and trash from the area surrounding Site 907-ALV-590, which received a submarginal trash rating in 2009.
- The City also cleaned up trash from sites 908-UNI-001 and 908-UNI-002, which received marginal trash ratings in 2009.
- Substituted primary Site 907-ALV-003, which has been dry for several years, with alternate Site 907-ALV-580, which has been sampled for the past two years.

9.3.2 2010 Recommendations

Based on the results of the City of La Mesa's 2010 Dry Weather Monitoring Program, it is recommended that the City continues regular maintenance of the MS4 to prevent the introduction of debris to the stormwater conveyance system.

10 REFERENCES

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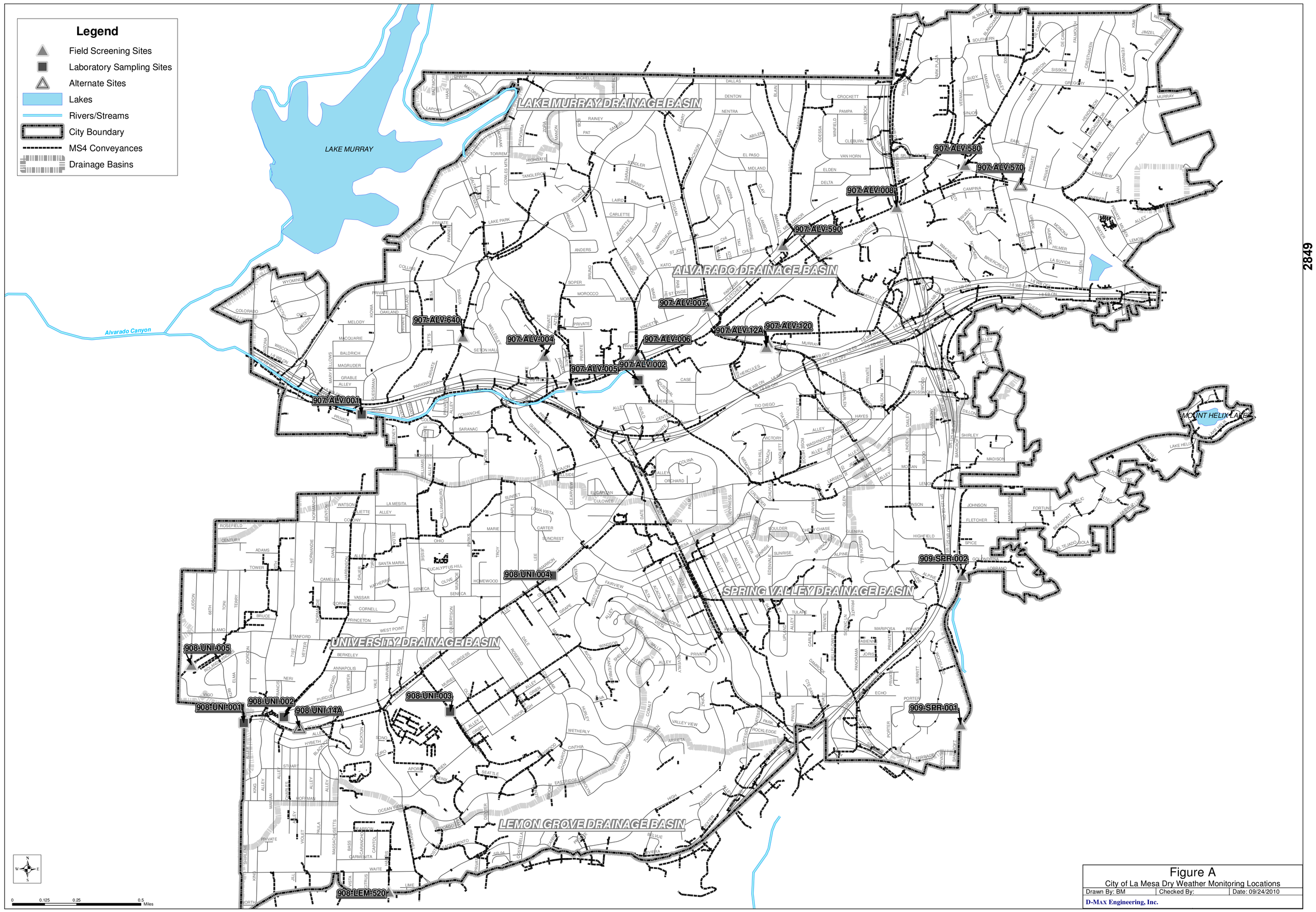

Figure A
City of La Mesa Dry Weather Monitoring Locations

Drawn By: BM	Checked By:	Date: 09/24/2010

D-MAX Engineering, Inc.

Base Data Sources: USGS, SanGIS, SANDAG, City of La Mesa

FIGURE B
CITY OF LA MESA WATERSHED MAP

Base Data Sources: USGS, SanGIS, SANDAG

0 4,250 8,500 Feet

Appendix A

Historical Dry Weather Data Tables

City of La Mesa Dry Weather Historical Data

Site No.	1	2	3	4	4A	5	6	7	7A	8	9	10	10A	11	12	12A	13	13A	13B	13C	14	15	16	17	18	19	20	21	22	23	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1993																																														
Ammonia mg/l	1.4	1.4	4.5	2.2		1.3	1.4	1.1		0.7	0.7	0.5		1.1	2.2		0.8				2.1	1.0																								
Chlorine mg/l	0.6	0.4	1.3	0.7		0.9	1.0	1.1		0.6	0.5	0.9		0.4	0.6		0.6				0.7	0.4																								
Copper mg/l	1.0	1.4	1.6	1.5		1.0	0.6	2.5		2.2	2.5	1.8		1.1	0.7		2.1				2.2	2.8																								
Surfactants mg/l	1.0	1.0	6.0	0.5		0.5	0.3	0.5		0.3	3.0	0.5		1.0	0.5		0.5				0.8	0.5																								
Phenols mg/l	0.6	0.1	0.7	0.4		0.04	2.8	2.3		3.3	3.0	0.5		1.0	0.5		0.5				0.8	0.5																								
1994																																														
Ammonia mg/l			1.7	2.1				1.7	na	3.4	0.3						na				0.9		0.5	2.0	1.8	na	na	nd	na	2.0																
Chlorine mg/l			0.2	0.3				0.5	na	0.2	0.3						na				0.1		0.3	0.7	0.2	na	na	0.0	na	0.2																
Copper mg/l			1.1	0.0				0.3	na	0.5	0.0						na				3.0		1.4	0.2	nd	na	na	nd	na	0.2																
Surfactants mg/l			0.5	0.5				0.8	na	0.5	0.4						na				0.4		0.4	0.6	0.3	na	na	0.3	na	0.3																
Phenols mg/l			0.2	0.1				4.9	na	1.7	0.04						na				0.1		nd	0.5	0.1	na	na	nd	na	nd																
1995																																														
Ammonia mg/l			0.2	na											0.7						0.1				0.3			0.3			0.1	0.4	0.0	7.6	na	0.1	0.2									
Chlorine mg/l			0.2	na											nd						0.4				0.1			0.3			0.3	0.4	0.4	0.3	na	0.1	0.2									
Copper mg/l			nd	na											nd						nd				nd			nd			nd	nd	nd	nd	na	nd	nd									
Surfactants mg/l			1.0	na											0.5						0.5				0.5			0.3			0.8	0.5	0.3	7.5	na	0.5	0.5									
Phenols mg/l			nd	na											nd						nd				nd			nd			nd	nd	nd	nd	na	nd	nd									
1996																																														
Ammonia mg/l			0.7		0.2				na	0.6			0.4		1.5	1.0		0.4	0.1		0.5		na						na					0.1				0.2	0.9							
Chlorine mg/l			0.1		0.4				na	0.2			0.1		nd	nd		0.1	0.3		0.3		na						na					0.1				0.3	0.4							
Copper mg/l			nd		0.1				na	nd			nd		0.1	0.1		0.1	nd		nd		na						na					nd				nd	0.3							
Surfactants mg/l			0.5		0.4				na	0.5			0.5		0.5	>3.0		0.3	0.6		0.8		na						na					0.3				0.4	0.3							
Phenols mg/l			0.1		0.1				na	0.3			0.1		0.1	0.1		0.1	0.1		0.1		na						na					0.1				0.1	0.1							
1997																																														
Ammonia mg/l			0.6												0.6	0.8			0.9	0.6	0.8																	0.5	>10	na	na	na	1.0		
Chlorine mg/l			0.1												nd	0.4			0.9	0.3	0.5																	0.3	0.3	na	na	na	0.9		
Copper mg/l			nd												0.1	0.1			nd	nd	nd																	0.1	nd	na	na	na	nd		
Surfactants mg/l			0.3												1.0	0.3			>3.0	0.4	0.5																	1.0	0.3	na	na	na	0.4		
Phenols mg/l			nd												nd	nd			nd	nd	0.3																	nd	nd	na	na	na	nd		
1998																																														
Ammonia mg/l			0.3		0.3										9.5	0.3			0.2	0.2	0.3										0.1							0.6	0.4	na	na	na	4.0		
Chlorine mg/l			nd		nd										nd	nd			0.2	0.1	nd										0.1							0.1	0.2	na	na	na	nd		
Copper mg/l			nd		nd										nd	nd			nd	nd	nd										nd							nd	0.4	na	na	na	nd		
Surfactants mg/l			0.4		0.3										0.8	0.8			0.3	0.6	0.5										0.3							0.5	0.3	na	na	na	0.5		
Phenols mg/l			nd		nd										nd	nd			nd	nd	nd										nd							nd	nd	na	na	na	nd		

City of La Mesa Dry Weather Historical Data

Site No.	1	2	3	4	4A	5	6	7	7A	8	9	10	10A	11	12	12A	13	13A	13B	13C	14	15	16	17	18	19	20	21	22	23	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
1999, Round One																																														
Ammonia mg/l			0.5		0.2										0.6	0.4			0.4	0.2	0.3													0.2					0.5	na	na	na	na	7.0		
Chlorine mg/l			nd		0.1										nd	0.1			0.1	0.2	0.1													0.3					0.1	na	na	na	na	nd		
Copper mg/l			0.2		0.1										0.2	nd			0.1	0.1	0.1													0.1					0.2	na	na	na	na	0.2		
Surfactants mg/l			0.3		0.25										0.25	0.5			0.25	0.8	0.25													0.25					0.25	na	na	na	na	0.5		
Phenols mg/l			0.2		nd										0.1	nd			nd	0.1	0.1													nd					nd	na	na	na	na	0.1		
1999, Round Two																																														
Ammonia mg/l			0.4		30.0										1.5	0.2			0.5	0.6	0.2													0.5					0.6	0.2	na	na	na	4.0		
Chlorine mg/l			0.1		nd										0.2	0.2			0.1	0.1	<0.1													0.3					0.5	0.1	na	na	na	nd		
Copper mg/l			nd		0.1										0.2	nd			0.1	0.1	0.1													0.1					0.3	0.6	na	na	na	0.1		
Surfactants mg/l			0.8		>3.0										2.0	0.25			0.25	0.3	0.25													2.0					0.5	0.25	na	na	na	1.8		
Phenols mg/l			nd		0.1										nd	nd			0.1	0.1	nd													0.1					nd	nd	na	na	na	0.1		
2000, Round One																																														
Ammonia mg/l					6.0										0.8	0.4			0.2	0.4	0.8													0.2					0.8	0.2	na	na	na	8.0	5.0	na
Chlorine mg/l					nd										nd	nd			nd	nd	nd													nd					nd	nd	na	na	na	0.1	nd	na
Copper mg/l					nd										nd	nd			nd	nd	nd													nd					nd	0.2	na	na	na	nd	nd	na
Surfactants mg/l					0.75										0.5	0.25			0.25	0.5	0.25													0.25					0.25	0.25	na	na	na	0.5	0.25	na
Phenols mg/l					nd										nd	nd			nd	nd	nd													nd					nd	0.1	na	na	na	nd	nd	na
2000, Round Two																																														
Ammonia mg/l					0.1										0.6	0.3			0.2	0.3	0.2													0.2					1.0	1.0	Dry	Dry	Dry	4.0	5.0	Dry
Copper mg/l					nd										nd	nd			nd	nd	nd													nd					0.1	0.4	Dry	Dry	Dry	nd	nd	Dry
Chlorine mg/l					nd										nd	nd			nd	0.1	nd													0.1					nd	0.6	Dry	Dry	Dry	nd	nd	Dry
Surfactants mg/l					0.25										0.5	0.5			0.25	0.5	0.5													0.25					0.25	0.25	Dry	Dry	Dry	0.5	0.75	Dry
Phenols mg/l					nd										nd	nd			nd	nd	nd													0.1					nd	nd	Dry	Dry	Dry	nd	nd	Dry
2001																																														
Ammonia mg/l					6.0										0.8	0.4			0.2	0.4	0.8													0.2					0.8	0.2	na	na	na	8.0	5.0	na
Chlorine mg/l					nd										nd	nd			nd	nd	nd													nd					nd	nd	na	na	na	0.1	nd	na
Copper mg/l					nd										nd	nd			nd	nd	nd													nd					nd	0.2	na	na	na	nd	nd	na
Surfactants mg/l					0.75										0.5	0.25			0.25	0.5	0.25													0.25					0.25	0.25	na	na	na	0.5	0.25	na
Phenols mg/l					nd										nd	nd			nd	nd	nd													nd					nd	0.1	na	na	na	nd	nd	na

City of La Mesa Dry Weather Historical Data

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	60	61	64
2002																				
Temp.℃	22	20	19	21	22	20	21	19	20	19	19	22	20	23	23	21	19		Dry	26
pH	7.9	6.9	7.5	7.4	7.6	7.5	7.8	6.9	7.8	7.4	7.1	7.4	6.8	7.9	8.1	7.4	7.5		Dry	8.9
Turbidity,NTU	8.35	36.0	19.1	5.35	4.48	15.51	2.66	5.23	11.32	23.29	463	6.18	35.08	7.4	11.49	19.87	12.05		Dry	6.7
Conductivity,µmhos/cm	2,710	2,810	2,850	3,910	3,730	4,710	4,100	1,938	1,906	2,530	2,350	5,010	1,394	3,180	3,500	2,420	1,594		Dry	1,403
Surfactants mg/l	4.0	0.25	0.25	0.5	0.37	0.25	0.37	0.25	0.25	0.25	**24**	0.5	**1.5**	0.25	0.5	0.25	0.75		Dry	0.5
Ammonia,mg/l	**8.0**	**1.0**	0.4	0.4	0.3	0.5	0.2	0.4	0.2	**1.0**	0.2	0.2	**1.0**	0.2	0.6	0.6	0.4		Dry	**1**
Nitrate,mg/l	1.5	1.0	5.0	2.5	2.5	3.0	1.0	5.0	4.0	1.0	0.2	5.0	nd	0.3	0.2	0.2	0.8		Dry	nd
Orthophosphate-P, mg/L	0.65	0.65	0.13	0.26	0.196	0.49	0.13	0.26	0.10	0.26	**7.83**	0.65	0.82	nd	0.13	0.33	0.49		Dry	0.16
Surfactants,mg/l	**4.8**	nd		0.6		nd														nd
Oil and Grease, mg/l	8.0	1.0		nd		1.0														nd
Total Hardness,mg/l	608	614		864		1060														331
Cadmium,mg/l	nd	nd		nd		nd														nd
Copper, mg/l	nd	nd		nd		nd														nd
Lead, mg/l	nd	nd		nd		nd														nd
Zinc, mg/l	nd	nd		nd		nd														nd
Diazinon, µg/L	nd	nd		nd		nd														nd
Chlorpyrifos, µg/L	nd	nd		nd		nd														nd
Total Coliform, MPN/100ml	> 1,600	> 1,600		> 1,600		> 1,600														>1,600
Fecal Coliform, MPN/100ml	> 1,600	> 1,600		> 1,600		500														>1,600
Enterococcus, MPN/100ml	500	500		> 1,600		240														>1,600
2003																				
Temp.℃	23	23	21.5	25	23	22.5	26	23.5	29	23	27	25	31	24.5	20	23	28		na	26
pH	8.3	7.9	8.2	7.8	8.4	8.5	8.2	8.1	8.4	8.2	8.5	8.4	7.8	8.2	8.3	8.2	8.2		na	7.8
Turbidity,NTU	2.57	15.00	11.81	3.73	2.76	1.05	1.23	11.53	1.33	24.46	66.0	0.54	64.0	4.34	10.54	17.17	2.32		na	29.04
Conductivity,µmhos/cm	2,550	2,690	2,730	2,760	3,270	4,180	3,090	2,360	1,310	2,280	2,760	6,320	1,290	620	1,690	2,680	2,290		na	3,040
Surfactants mg/l, field screening	0.25	0.63	0.50	0.25	0.25	0.38	0.25	0.50	nd	0.50	**1.0**	0.38	0.25	0.13	0.13	0.25	0.25		na	0.5
Ammonia,mg/l	0.3	0.6	0.3	0.1	0.2	0.2	0.2	0.8	0.2	**10.0**	**10.0**	0.3	0.8	0.3	0.3	0.6	0.4		na	**5.0**
Nitrate,mg/l	1.0	4.5	6.4	3.0	3.0	2.5	0.6	6.4	2.4	0.3	0.3	4.8	0.1	0.6	0.1	1.0	0.2		na	nd
Orthophosphate-P, mg/L	0.20	1.30	0.10	0.13	0.13	0.13	0.20	1.63	0.07	**>3.0**	1.63	0.33	0.65	0.07	0.49	0.07	0.26		na	0.49
Surfactants,mg/l	nd		nd				nd			0.5					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	545		647				616			387					460					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	nd		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				nd			nd					nd					
Diazinon, µg/L	0.05		nd				nd			nd					nd					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**90,000**		**90,000**				5,000			**160,000**					1,700					
Fecal Coliform, MPN/100ml	**50,000**		**24,000**				2,300			**90,000**					1,300					
Enterococcus, MPN/100ml	800		300				80			**13,000**					800					
2004																				
Temp.℃	25	23	24	27	25		24	26	23	23	26	26	26	27	25	26	29		20	31
pH	8.4	7	7.6	7.8	7.9		7.8	7.8	7.9	7.5	7.3	7.8	8.1	8.2	8.3	7.5	7.4		7.7	8.5
Turbidity,NTU	2.71	12.5	14.01	2.18	3.9		0.82	15.29	3.02	26.98	48.15	2.95	4.85	7.75	4.29	19.67	0.45		20.94	7.52
Conductivity,µmhos/cm	2,230	2,350	2,630	3,180	2,880		3,120	2,400	1,880	2,280	2,070	5,470	980	2,900	1,830	2,300	2,070		1,000	1,080
Ammonia,mg/l	0.1	0.7	0.3	0.2	0.2		0.1	0.8	0.4	**1.5**	**3.0**	0.1	0.2	0.2	0.4	0.4	0.8		0.6	0.3
Nitrate,mg/l	3.75	6.25	6.25	6.25	3.75		5.0	6.25	1.25	3.8	1.25	6.25	1.25	1.25	1.25	2.5	1.25		1.25	nd
Orthophosphate-P, mg/L	0.23	0.26	0.1	0.26	0.2		0.33	0.33	0.33	0.65	0.98	1.3	0.98	0.1	0.98	0.07	0.82		0.1	0.65
Surfactants mg/l, field screening	0.5	0.38	0.5	0.75	0.5		0.25	0.25	0.25	0.63	0.63	0.75	0.75	0.25	0.25	0.25	0.38		0.63	0.5
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	2.0		2.0				nd			nd					nd					
Total Hardness,mg/l	522		687				673			392					504					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	0.005		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				0.029			nd					nd					
Diazinon, µg/L	nd		nd				nd			nd					0.052					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**80,000**		**80,000**				8,000			**1,600,000**					9,000					
Fecal Coliform, MPN/100ml	1,400		700				220			**160,000**					nd					
Enterococcus, MPN/100ml	1,300		3,000				1,700			**30,000**					3,000					

City of La Mesa Dry Weather Historical Data

Site No.	4A	12	12A	13B	13C	14	14A	34	35	39	40	50	52	55	57	58	59	60	61	64
2005																				
Temp.℃	20.3	22.0	20.5	24.2	22.8		21.1	21.1	22.9	21.2	22.1	23.6	25.7	21.2	19.2	21.4	26.1		19.9	25.7
pH	8.1	6.8	7.4	7.5	7.8		7.6	7.5	7.2	7.4	7.2	7.6	7.2	8.0	7.6	7.2	8.4		7.4	8.8
Turbidity,NTU	10.71	22.94	7.86	15.14	17.87		0.52	6.49	15.81	9.02	14.74	1.01	15.43	1.70	1.18	17.57	0.32		4.78	2.35
Conductivity,µmhos/cm	1,891	1,670	1,740	1,590	2,830		2,200	1,457	434	990	977	2,110	2,690	2,690	1,736	2,010	1,980		900	930
Surfactants mg/l, field screening	0.75	0.50	0.50	0.38	0.38		0.50	0.50	0.13	0.50	0.25	0.50	**1.0**	0.25	0.25	0.25	0.25		0.88	0.50
Ammonia,mg/l	**1.0**	0.7	0.8	0.3	0.2		0.2	0.4	**10.0**	0.3	0.8	0.2	0.7	0.1	0.3	0.6	0.2		0.4	0.4
Nitrate,mg/l	2.50	5.00	7.50	5.00	3.75		3.75	6.25	1.25	1.25	1.25	3.75	1.25	1.25	1.25	1.25	2.50		1.25	1.25
Orthophosphate-P, mg/L	0.33	0.26	0.10	1.63	0.20		0.20	0.26	**2.12**	0.10	0.13	0.33	0.49	0.13	0.26	0.07	0.20		0.10	0.49
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	791		794				871			461					521					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	nd		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				0.026			0.027					nd					
Diazinon, µg/L	nd		nd				nd			nd					**0.11**					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**240,000**		**130,000**				**240,000**			30,000					30,000					
Fecal Coliform, MPN/100ml	**24,000**		230				170			nd					230					
Enterococcus, MPN/100ml	**160,000**		800				80			500					800					
2006																				
Temp.℃	25.0	23.8	23.4	24.4	24.3		25.5	24.5	25.6	24.4	24.5	25.3	29.7	22.9	27.5	23.7	29.5		24.3	27.0
pH	8.3	6.9	7.7	7.9	7.8		7.8	8.2	6.9	7.7	7.5	7.7	8.4	8.1	7.7	7.4	8.0		7.4	8.9
Turbidity,NTU	1.83	47.13	9.94	2.02	4.43		1.02	10.09	7.77	11.93	22.31	1.64	8.27	4.56	3.51	13.32	2.34		9.37	6.24
Conductivity,µmhos/cm	2.16	1.95	2.31	5.16	2.44		2.51	1.94	2.50	1.55	2.19	5.56	2.40	2.62	1.71	2.33	1.86		2.3	0.90
Surfactants mg/l, field screening	0.25	0.25	0.50	0.25	0.50		0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.25	0.25	0.50	0.25		0.25	**1.5**
Ammonia,mg/l	0.3	0.6	0.2	0.6	0.1		0.1	0.3	**1.50**	0.2	**1.0**	0.2	0.4	0.2	0.8	0.8	0.4		**2.5**	0.8
Nitrate,mg/l	3.75	3.75	5.00	6.25	3.75		5.00	5.00	2.50	2.50	2.50	7.50	3.75	1.25	2.50	2.50	2.50		3.75	2.50
Orthophosphate-P, mg/L	0.10	0.26	0.10	0.26	0.33		0.07	0.20	0.07	0.07	0.20	0.26	0.33	0.10	0.26	0.10	0.07		1.14	0.49
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	524		686				508			434					438					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	0.008		nd				nd			0.005					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	0.028		nd				nd			0.028					nd					
Diazinon, µg/L	nd		nd				nd			nd					nd					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	**130,000**		**50,000**				**80,000**			23,000					**240,000**					
Fecal Coliform, MPN/100ml	5,000		**30,000**				3,000			220					20					
Enterococcus, MPN/100ml	5000		500				80			40					900					
2007																				
Temp.℃	20.2	23.1	20.8	22.2	22.4		23	22.2	25.7	22.8	25.2	22.5	24.1	22.7	21.1	23.1	26.4	23.9	ns	26
pH	8.5	7.2	7.7	8.0	8.0		8.3	8.0	8.7	7.9	7.6	8	8.3	8.2	7.7	7.5	8.1	8	ns	**10.0**
Turbidity,NTU	4.05	12.51	10.85	2.22	8.07		1.27	6.47	2.36	9.24	4.91	2.25	4.95	3.34	2.52	14.63	1.54	3.18	ns	3.43
Conductivity,mS/cm	2.22	2.14	2.25	3.94	3.32		2.56	2.01	1.78	1.9	1.79	5.3	3.72	2.65	2.19	2.14	2	2.63	ns	1.12
Surfactants mg/l, field screening	0.5	0.5	0.5	0.75	0.5		0.38	0.38	0.25	0.62	0.38	0.5	0.5	0.25	0.38	0.25	0.25	0.63	ns	0.63
Ammonia,mg/l	0.2	0.5	0.3	0.3	0.2		0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.4	0.2	0.2	ns	0.1
Nitrate,mg/l	1.81	2.01	3.96	5.49	2.67		3.25	3.77	1.72	0.68	0.45	5.85	2.98	0.41	0.09	0.23	1.63	0.81	ns	0.1
Orthophosphate-P, mg/L	0.16	0.26	0.13	0.52	0.26		0.13	0.36	0.03	0.2	0.33	0.34	0.49	0.11	0.33	0.03	0.16	0.29	ns	0.1
Surfactants,mg/l	nd		nd				nd			nd					nd					
Oil and Grease, mg/l	nd		nd				nd			nd					nd					
Total Hardness,mg/l	631		688				592			564					664					
Cadmium,mg/l	nd		nd				nd			nd					nd					
Copper, mg/l	0.005		nd				nd			nd					nd					
Lead, mg/l	nd		nd				nd			nd					nd					
Zinc, mg/l	nd		nd				nd			nd					nd					
Diazinon, µg/L	nd		nd				nd			nd					nd					
Chlorpyrifos, µg/L	nd		nd				nd			nd					nd					
Total Coliform, MPN/100ml	17,000		5,000				8,000			13,000					2,200					
Fecal Coliform, MPN/100ml	8,000		1,700				2,300			3,000					nd					
Enterococcus, MPN/100ml	1,300		500				1,300			**14,000**					170					

City of La Mesa Dry Weather Historical Data

Old Site Name	---	---	---	---	---	---	---	---	12	12A	58	59	64	52	14	50	---	---	---	---	---
Site	**907-ALV-001**	**907-ALV-002**	**907-ALV-003**	**907-ALV-004**	**907-ALV-005**	**907-ALV-006**	**907-ALV-007**	**907-ALV-008**	**907-ALV-120**	**907-ALV-12A**	**907-ALV-580**	**907-ALV-590**	**907-ALV-640**	**908-LEM-520**	**908-UNI-001**	**908-UNI-002**	**908-UNI-003**	**908-UNI-004**	**908-UNI-005**	**909-SPR-001**	**909-SPR-002**
2008																					
Temperature (℃)	23.4	22.5	ns	22.1	26.9	26.5	25.5	22.8	24.0	23.8	25.5	26.8	23.0	25.1	23.7	24.4	24.5	24.4	24.0	23.9	25.5
pH	7.8	7.3	ns	7.7	7.0	7.1	7.9	7.7	7.1	7.7	7.5	7.4	8.8	8.2	7.8	7.9	8.1	7.4	7.2	7.5	8.2
Turbidity (NTU)	3.97	**421**	ns	3.34	1.85	8.57	1.47	3.12	16.78	8.70	12.91	1.58	3.30	7.56	1.05	13.95	0.45	2.39	3.23	2.30	8.56
Conductivity (mS/cm)	3.17	1.89	ns	1.19	3.7	2.49	2.84	2.77	2.16	2.56	2.35	2.45	1.17	4.79	2.95	5.7	2.27	2.65	4.31	2.41	2.2
Surfactants (mg/L)	0.25	0.75	ns	0.38	0.25	0.38	0.50	0.38	0.25	0.25	0.25	0.25	0.25	0.50	0.50	0.75	0.25	0.50	0.50	0.13	0.13
Ammonia-N (mg/L)	0.3	0.6	ns	0.4	0.3	0.3	0.2	0.3	0.4	0.4	0.5	0.3	0.1	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.3
Nitrate-N (mg/L)	1.27	2.44	ns	1.31	2.64	1.18	1.20	2.40	2.33	4.86	1.27	1.31	0.45	3.96	3.41	6.08	4.00	1.56	5.83	2.67	9.63
Orthophosphate-P (mg/L)	0.36	0.33	ns	0.33	0.13	0.29	0.26	0.13	0.36	0.13	0.07	0.16	0.26	0.42	0.10	0.33	0.13	0.29	0.62	0.27	0.23
Oil and Grease (mg/L)	nd	nd													nd	nd	nd	nd			
Total Hardness (mg/L)	851	536													753	1,570	527	646			
Dissolved Cadmium (mg/L)	nd	nd													nd	nd	nd	nd			
Dissolved Copper (mg/L)	nd	0.014													nd	0.01	nd	0.005			
Dissolved Lead (mg/L)	nd	nd													nd	nd	nd	nd			
Dissolved Zinc (mg/L)	nd	0.075													nd	0.038	nd	nd			
Diazinon (µg/L)	nd	nd													nd	nd	nd	nd			
Chlorpyrifos (µg/L)	nd	nd													nd	nd	nd	nd			
Total Coliform (MPN/100 mL)	30,000	**300,000**													30,000	**50,000**	30,000	**50,000**			
Fecal Coliform (MPN/100 mL)	7,000	**50,000**													800	7,000	1,700	13,000			
Enterococcus (MPN/100 mL)	800	**90,000**													1,300	**24,000**	900	8,000			
2009																					
Temperature (℃)	19.1	21.5	ns	21.7	23.6	24.0	21.3	22.0	22.2	22.0	21.5	24.2	24.8	22.3	22.8	24.3	21.8	22.6	21.6	22.2	22.8
pH	7.6	7.2	ns	8.1	7.4	7.1	7.8	8.0	7.0	7.5	7.6	8.0	**10.1**	7.5	8.1	7.8	8.1	7.5	8.5	7.5	8.2
Turbidity (NTU)	3.37	16.36	ns	11.51	1.23	7.92	1.52	4.82	20.39	8.47	20.42	0.01	4.76	6.41	0.01	1.45	0.52	4.04	1.68	1.00	3.13
Conductivity (mS/cm)	3.24	2.03	ns	1.15	3.35	2.34	3.63	2.42	2.00	2.55	2.00	2.43	1.27	4.26	2.90	5.63	2.55	2.71	2.67	2.47	2.17
Surfactants (mg/L)	0.50	0.25	ns	0.25	0.25	**2.0**	0.5	0.50	0.75	0.63	0.25	0.38	0.75	**1.50**	0.50	**2.00**	0.25	0.50	0.75	0.38	0.13
Ammonia-N (mg/L)	0.110	0.399	ns	0.134	0.161	0.212	0.163	0.088	0.336	0.309	0.281	0.213	0.064	0.214	0.292	0.159	0.118	0.194	0.476	0.189	0.220
Nitrate-N (mg/L)	0.860	0.952	ns	0.307	3.503	0.582	2.410	0.857	3.490	4.360	0.567	0.918	0.083	1.485	2.890	7.150	4.490	2.076	**17.250**	2.390	5.640
Orthophosphate-P (mg/L)	0.220	0.226	ns	0.193	0.070	0.322	0.161	0.074	0.338	0.112	0.067	0.036	0.108	0.365	0.103	0.291	0.030	0.183	1.030	0.185	0.127
Oil and Grease (mg/L)	nd	nd													nd	nd	nd	nd			
Total Hardness (mg/L)	801	596													796	1740	529	628			
Dissolved Cadmium (mg/L)	nd	nd													nd	nd	nd	nd			
Dissolved Copper (mg/L)	0.003	0.002													0.003	0.005	**0.076**	0.006			
Dissolved Lead (mg/L)	nd	nd													nd	nd	nd	nd			
Dissolved Zinc (mg/L)	nd	nd													ND	0.048	nd	nd			
Diazinon (µg/L)	nd	nd													nd	nd	nd	nd			
Chlorpyrifos (µg/L)	nd	nd													nd	nd	nd	nd			
Total Coliform (MPN/100 mL)	23,000	**50,000**													7,000	22,000	800	5,000			
Fecal Coliform (MPN/100 mL)	270	17,000													300	220	80	220			
Enterococcus (MPN/100 mL)	800	**17,000**													1,300	1,300	130	90			

Appendix B

Photographs of Sampling Locations

Site 907-ALV-001	
Site 907-ALV-002	
Site 907-ALV-003	

Site 907-ALV-004	
Site 907-ALV-005	
Site 907-ALV-006	

Site 907-ALV-007	
Site 907-ALV-008	
Site 907-ALV-120	

Site 907-ALV-12A	
Site 907-ALV-570	
Site 907-ALV-580	

Site 907-ALV-590	
Site 907-ALV-640	
Site 908-LEM-520	

Site 908-UNI-001	
Site 908-UNI-002	
Site 908-UNI-003	

Site 908-UNI-004	
Site 908-UNI-005	
Site No 908-UNI-14A	

Site 909-SPR-001	
Site 909-SPR-002	

Appendix C

Laboratory Analytical Reports

07 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0694

Project Name: La Mesa Additional Study
Project Desc./#: 201025W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/23/10 13:51. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0694

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-001	10F0694-01	Stormwater	06/23/10 10:30	06/23/10 13:51
908-UNI-003	10F0694-02	Stormwater	06/23/10 11:50	06/23/10 13:51
908-UNI-004	10F0694-03	Stormwater	06/23/10 12:40	06/23/10 13:51

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0694

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (10F0694-01) Stormwater Sampled: 06/23/10 10:30 Received: 06/23/10 13:51										
Malathion	ND	0.05	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*			"	"	"	"	
908-UNI-003 (10F0694-02) Stormwater Sampled: 06/23/10 11:50 Received: 06/23/10 13:51										
Malathion	ND	0.05	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*			"	"	"	"	
908-UNI-004 (10F0694-03) Stormwater Sampled: 06/23/10 12:40 Received: 06/23/10 13:51										
Malathion	ND	0.05	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Surrogate: Triphenyl phosphate		*104 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0694

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (10F0694-01) Stormwater Sampled: 06/23/10 10:30 Received: 06/23/10 13:51										
Nitrate/Nitrite as N	**0.19**	0.009	0.05	mg/l	1	0062401	06/24/10	06/24/10	SM4500 NO3 E	
Total Kjeldahl Nitrogen	**0.6**	0.3	0.5	"	"	0062801	06/28/10	06/28/10	SM4500 N C	
Total Nitrogen	**0.8**	0.5	0.5	"	"	0062944	06/28/10	"	Calculation	
Phosphorus, Total	**0.32**	0.02	0.05	"	"	0063030	06/30/10	06/30/10	SM4500 P B, E	
Total Dissolved Solids	**1830**	1.0	20.0	"	"	0062822	06/28/10	06/28/10	SM2540 C	
Total Suspended Solids	ND	1.0	20.0	"	"	0063036	06/30/10	07/01/10	SM2540 D	
908-UNI-003 (10F0694-02) Stormwater Sampled: 06/23/10 11:50 Received: 06/23/10 13:51										
Total Suspended Solids	**2.0**	1.0	20.0	mg/l	1	0063036	06/30/10	07/01/10	SM2540 D	J
908-UNI-004 (10F0694-03) Stormwater Sampled: 06/23/10 12:40 Received: 06/23/10 13:51										
Total Suspended Solids	**3.0**	1.0	20.0	mg/l	1	0063036	06/30/10	07/01/10	SM2540 D	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0694

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0070228											
Blank (0070228-BLK1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Malathion	ND	0.01	0.01	ug/l							
Surrogate: Triphenyl phosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS (0070228-BS1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Bolstar	0.44	0.09	0.10	ug/l	0.500		88	60-130			
Diazinon	0.49	0.04	0.05	"	0.500		98	60-130			
Ethoprop	0.45	0.05	0.05	"	0.500		90	60-130			
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130			
Methyl parathion	0.44	0.07	0.10	"	0.500		88	60-130			
Phorate	0.40	0.03	0.05	"	0.500		80	60-130			
Ronnel	0.49	0.16	0.25	"	0.500		98	60-130			
Trichlorinate	0.46	0.05	0.05	"	0.500		92	60-130			
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			
LCS Dup (0070228-BSD1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	5	30	
Diazinon	0.43	0.04	0.05	"	0.500		86	60-130	13	30	
Ethoprop	0.48	0.05	0.05	"	0.500		96	60-130	6	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	0	30	
Methyl parathion	0.41	0.07	0.10	"	0.500		82	60-130	7	30	
Phorate	0.41	0.03	0.05	"	0.500		82	60-130	2	30	
Ronnel	0.43	0.16	0.25	"	0.500		86	60-130	13	30	
Trichlorinate	0.52	0.05	0.05	"	0.500		104	60-130	12	30	
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0694

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062401											
Blank (0062401-BLK1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l							
LCS (0062401-BS1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.52	0.009	0.05	mg/l	0.500		103	80-120			
LCS Dup (0062401-BSD1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.50	0.009	0.05	mg/l	0.500		100	80-120	3	20	
Duplicate (0062401-DUP1)			**Source: 10F0668-02**		Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l		ND				20	
Matrix Spike (0062401-MS1)			**Source: 10F0668-02**		Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.48	0.009	0.05	mg/l	0.500	ND	96	80-120			
Matrix Spike Dup (0062401-MSD1)			**Source: 10F0668-02**		Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.50	0.009	0.05	mg/l	0.500	ND	99	80-120	3	20	
Reference (0062401-SRM1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.46	0.009	0.05	mg/l	0.442		103	4.16-115.1			
Batch 0062801											
Blank (0062801-BLK1)					Prepared & Analyzed: 06/28/10						
Total Kjeldahl Nitrogen	ND	0.3	0.5	mg/l							
LCS (0062801-BS1)					Prepared & Analyzed: 06/28/10						
Total Kjeldahl Nitrogen	3.4	0.3	0.5	mg/l	4.10		82	80-120			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0694

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062801											
LCS Dup (0062801-BSD1)					Prepared & Analyzed: 06/28/10						
Total Kjeldahl Nitrogen	3.3	0.3	0.5	mg/l	4.10		81	80-120	2	20	
Duplicate (0062801-DUP1)			**Source: 10F0385-01**		Prepared & Analyzed: 06/28/10						
Total Kjeldahl Nitrogen	ND	0.3	0.5	mg/l		ND				20	
Matrix Spike (0062801-MS1)			**Source: 10F0385-01**		Prepared & Analyzed: 06/28/10						
Total Kjeldahl Nitrogen	3.0	0.3	0.5	mg/l	4.10	ND	72	80-120			QM-05
Matrix Spike Dup (0062801-MSD1)			**Source: 10F0385-01**		Prepared & Analyzed: 06/28/10						
Total Kjeldahl Nitrogen	2.7	0.3	0.5	mg/l	4.10	ND	66	80-120	8	20	QM-05
Batch 0062822											
Blank (0062822-BLK1)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Blank (0062822-BLK2)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0062822-DUP1)			**Source: 10F0694-01**		Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	1750	1.0	20.0	mg/l		1830			4	20	
Duplicate (0062822-DUP2)			**Source: 10F0723-03**		Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	2150	1.0	20.0	mg/l		2140			0.5	20	
Reference (0062822-SRM1)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	304	1.0	20.0	mg/l	269		113	87-113			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0694

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062822											
Reference (0062822-SRM2)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	274	1.0	20.0	mg/l	269		102	87-113			
Batch 0063030											
Blank (0063030-BLK1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	ND	0.02	0.05	mg/l							
LCS (0063030-BS1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.52	0.02	0.05	mg/l	0.500		104	80-120			
LCS Dup (0063030-BSD1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.51	0.02	0.05	mg/l	0.500		102	80-120	2	20	
Duplicate (0063030-DUP1)		**Source: 10F0691-01**			Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.17	0.02	0.05	mg/l		0.17			0.6	20	
Matrix Spike (0063030-MS1)		**Source: 10F0691-01**			Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.61	0.02	0.05	mg/l	0.500	0.17	88	80-120			
Matrix Spike Dup (0063030-MSD1)		**Source: 10F0691-01**			Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.62	0.02	0.05	mg/l	0.500	0.17	90	80-120	2	20	
Batch 0063036											
Blank (0063036-BLK1)					Prepared: 06/30/10 Analyzed: 07/01/10						
Total Suspended Solids	ND	1.0	20.0	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0694

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063036											
Duplicate (0063036-DUP1)			**Source: 10F0805-01**		Prepared: 06/30/10		Analyzed: 07/01/10				
Total Suspended Solids	7.6	1.0	20.0	mg/l		7.4			3	20	J
Reference (0063036-SRM1)					Prepared: 06/30/10		Analyzed: 07/01/10				
Total Suspended Solids	46.0	1.0	20.0	mg/l	49.9		92	84.8-105			

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Notes and Definitions

QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather Monitoring

Project #: 201025W-1 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease ☐ 413.1 ☐ 413.2 ☐	8015B (TPH) ☐ Gas ☐ Diesel ☐	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) ☐ PAH only	608 / 8081 (Organochlorine Pest	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	☐ pH ☐ EC ☒ TSS ☐ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ N	CAC Title 22/CAM17 Metals ☐ T	TCLP (RCRA) ☐ Metals ☐ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. ☒ Total (MTF) ☒ Feca	Colilert, T+E.Coli ☐ P/A ☐ Enum	Enterococcus, ☒ MTF ☐ Enteroc	Heterotrophic Plate Count (HPC)
1	907-ALV-001	6/23/10	10:30	SW	2/g 6/p	X						X		X				X	X		X	
2	908-UN1-003	"	11:50	SW	2/g 5/p	X						X		X				X	X		X	
3	908-UN1-004	"	12:40	SW	2/g 5/p	X						X		X				X	X		X	
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: ☐ Courier ☐ UPS ☐ FedEx ☐ USPS ☐ Client Drop Off ☐ Other

[1]**Turn-Around-Time:** ☐ Same Day ☐ 24 hr ☐ 48 hr ☐ 3 day ☐ 4 day ☐ 5 day ☐ STD (7 day)

[1]**Reporting Requirements:** ☐ Fax ☐ PDF ☐ Excel ☐ Geotracker/EDF ☐ Hard Copy ☐ EDT

[1]**Sample Disposal:** ☐ By Laboratory ☐ [2]Return to Client: P/U or Delivery ☐ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	
Signature [signature]	6/23/10 13:35	Signature [signature]
Print Annika Kubischta		Print Ke
Company: D-Max Engineering		Company:
Signature Kelly Leyden	6/23/10 13:51	Signature
Print Kelly Leyden		Print
Company: EMA		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=9 °C on ice

07 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0694

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#: 201025W-1

Enclosed are the results of analyses for samples received by the laboratory on 06/23/10 13:51. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0694

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-001	10F0694-01	Stormwater	06/23/10 10:30	06/23/10 13:51
908-UNI-003	10F0694-02	Stormwater	06/23/10 11:50	06/23/10 13:51
908-UNI-004	10F0694-03	Stormwater	06/23/10 12:40	06/23/10 13:51

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0694

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (10F0694-01) Stormwater Sampled: 06/23/10 10:30 Received: 06/23/10 13:51										
Zinc	**0.003**	0.0003	0.020	mg/l	1	0063031	06/30/10	06/30/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.001**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
908-UNI-003 (10F0694-02) Stormwater Sampled: 06/23/10 11:50 Received: 06/23/10 13:51										
Lead	ND	0.001	0.005	mg/l	1	0063031	06/30/10	06/30/10	EPA 200.8	
Copper	**0.011**	0.001	0.010	"	"	"	"	"	"	
Zinc	**0.005**	0.0003	0.020	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
908-UNI-004 (10F0694-03) Stormwater Sampled: 06/23/10 12:40 Received: 06/23/10 13:51										
Cadmium	ND	0.0002	0.001	mg/l	1	0063031	06/30/10	06/30/10	EPA 200.8	
Copper	**0.003**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.011**	0.0003	0.020	"	"	"	"	"	"	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0694

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (10F0694-01) Stormwater Sampled: 06/23/10 10:30 Received: 06/23/10 13:51										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*			"	"	"	"	
908-UNI-003 (10F0694-02) Stormwater Sampled: 06/23/10 11:50 Received: 06/23/10 13:51										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*			"	"	"	"	
908-UNI-004 (10F0694-03) Stormwater Sampled: 06/23/10 12:40 Received: 06/23/10 13:51										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*104 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0694

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (10F0694-01) Stormwater Sampled: 06/23/10 10:30 Received: 06/23/10 13:51										
Hardness (Total)	**646**	100	100	mg CaCO3/L	10	0062922	06/28/10	07/02/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0063032	06/30/10	06/30/10	EPA 1664A	
908-UNI-003 (10F0694-02) Stormwater Sampled: 06/23/10 11:50 Received: 06/23/10 13:51										
Hardness (Total)	**340**	100	100	mg CaCO3/L	10	0062922	06/28/10	07/02/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0063032	06/30/10	06/30/10	EPA 1664A	
908-UNI-004 (10F0694-03) Stormwater Sampled: 06/23/10 12:40 Received: 06/23/10 13:51										
Hardness (Total)	**541**	100	100	mg CaCO3/L	10	0062922	06/28/10	07/02/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0063032	06/30/10	06/30/10	EPA 1664A	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0694

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-001 (10F0694-01) Stormwater Sampled: 06/23/10 10:30 Received: 06/23/10 13:51										
Total Coliforms	**3000**	200	200	MPN/100 ml	100	0062416	06/23/10	06/27/10	SM 9221 B, E	
Fecal Coliforms	**300**	20	20	"	10	"	"	06/26/10	"	
Enterococcus	**110**	20	20	"	"	0062417	"	06/27/10	SM 9230 A, B	
908-UNI-003 (10F0694-02) Stormwater Sampled: 06/23/10 11:50 Received: 06/23/10 13:51										
Total Coliforms	**130000**	2000	2000	MPN/100 ml	1000	0062416	06/23/10	06/27/10	SM 9221 B, E	
Fecal Coliforms	**1300**	20	20	"	10	"	"	06/26/10	"	
Enterococcus	**5000**	200	200	"	100	0062417	"	06/27/10	SM 9230 A, B	
908-UNI-004 (10F0694-03) Stormwater Sampled: 06/23/10 12:40 Received: 06/23/10 13:51										
Total Coliforms	**80000**	2000	2000	MPN/100 ml	1000	0062416	06/23/10	06/27/10	SM 9221 B, E	
Fecal Coliforms	**1700**	20	20	"	10	"	"	06/26/10	"	
Enterococcus	**300**	20	20	"	"	0062417	"	06/27/10	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0694

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063031											
Blank (0063031-BLK1)					Prepared & Analyzed: 06/30/10						
Cadmium	ND	0.0002	0.001	mg/l							
Copper	ND	0.001	0.010	"							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
LCS (0063031-BS1)					Prepared & Analyzed: 06/30/10						
Zinc	0.049	0.0003	0.020	mg/l	0.0500		98	75-125			
Lead	0.051	0.001	0.005	"	0.0500		101	75-125			
Copper	0.052	0.001	0.010	"	0.0500		104	75-125			
Cadmium	0.049	0.0002	0.001	"	0.0500		98	75-125			
LCS Dup (0063031-BSD1)					Prepared & Analyzed: 06/30/10						
Zinc	0.048	0.0003	0.020	mg/l	0.0500		97	75-125	1	20	
Copper	0.051	0.001	0.010	"	0.0500		103	75-125	0.8	20	
Cadmium	0.049	0.0002	0.001	"	0.0500		98	75-125	0.3	20	
Lead	0.051	0.001	0.005	"	0.0500		101	75-125	0.06	20	
Duplicate (0063031-DUP1)			**Source: 10F0666-01**		Prepared & Analyzed: 06/30/10						
Copper	ND	0.001	0.010	mg/l		ND				20	
Cadmium	ND	0.0002	0.001	"		ND				20	
Lead	ND	0.001	0.005	"		ND				20	
Zinc	ND	0.0003	0.020	"		ND				20	
Matrix Spike (0063031-MS1)			**Source: 10F0666-01**		Prepared & Analyzed: 06/30/10						
Lead	0.052	0.001	0.005	mg/l	0.0500	ND	103	75-125			
Zinc	0.042	0.0003	0.020	"	0.0500	ND	84	75-125			
Copper	0.045	0.001	0.010	"	0.0500	ND	91	75-125			
Cadmium	0.046	0.0002	0.001	"	0.0500	ND	91	75-125			

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0694

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063031											
Matrix Spike Dup (0063031-MSD1)			**Source: 10F0666-01**		Prepared & Analyzed: 06/30/10						
Lead	0.053	0.001	0.005	mg/l	0.0500	ND	105	75-125	2	20	
Zinc	0.041	0.0003	0.020	"	0.0500	ND	83	75-125	0.9	20	
Cadmium	0.046	0.0002	0.001	"	0.0500	ND	91	75-125	0.4	20	
Copper	0.046	0.001	0.010	"	0.0500	ND	91	75-125	0.2	20	

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0694

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0070228											
Blank (0070228-BLK1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Surrogate: Triphenyl phosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS (0070228-BS1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Bolstar	0.44	0.09	0.10	ug/l	0.500		88	60-130			
Diazinon	0.49	0.04	0.05	"	0.500		98	60-130			
Ethoprop	0.45	0.05	0.05	"	0.500		90	60-130			
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130			
Methyl parathion	0.44	0.07	0.10	"	0.500		88	60-130			
Phorate	0.40	0.03	0.05	"	0.500		80	60-130			
Ronnel	0.49	0.16	0.25	"	0.500		98	60-130			
Trichlorinate	0.46	0.05	0.05	"	0.500		92	60-130			
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			
LCS Dup (0070228-BSD1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	5	30	
Diazinon	0.43	0.04	0.05	"	0.500		86	60-130	13	30	
Ethoprop	0.48	0.05	0.05	"	0.500		96	60-130	6	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	0	30	
Methyl parathion	0.41	0.07	0.10	"	0.500		82	60-130	7	30	
Phorate	0.41	0.03	0.05	"	0.500		82	60-130	2	30	
Ronnel	0.43	0.16	0.25	"	0.500		86	60-130	13	30	
Trichlorinate	0.52	0.05	0.05	"	0.500		104	60-130	12	30	
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0694

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062922											
Blank (0062922-BLK1)					Prepared: 06/28/10	Analyzed: 07/02/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0062922-DUP1)			**Source: 10F0634-01**		Prepared: 06/28/10	Analyzed: 07/02/10					
Hardness (Total)	708	100	100	mg CaCO3/L		785			10	20	
Batch 0063032											
Blank (0063032-BLK1)					Prepared & Analyzed: 06/30/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0063032-BS1)					Prepared & Analyzed: 06/30/10						
Oil & Grease	36	5	5	mg/l	40.0		90	78-114			
LCS Dup (0063032-BSD1)					Prepared & Analyzed: 06/30/10						
Oil & Grease	35	5	5	mg/l	40.0		88	78-114	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather Monitoring

Project #: 201025W-1 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □	8015B (TPH) □ Gas □ Diesel □	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pest	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	□ pH □ EC ☒ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ N	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. ☒ Total (MTF) ☒ Feca	Colilert, T+E.Coli □ P/A □ Enum	Enterococcus, ☒ MTF □ Enteroc	Heterotrophic Plate Count (HPC)
1	907-ALV-001	6/23/10	10:30	SW	2/g 6/p	X						X		X				X	X		X	
2	908-UN1-003	"	11:50	SW	2/g 5/p	X						X		X				X	X		X	
3	908-UN1-004	"	12:40	SW	2/g 5/p	X						X		X				X	X		X	
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temp @ Receipt: _____

COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	
Signature: [signature]	6/23/10 13:35	Signature: [signature]
Print: Annika Kubischta		Print: Ke
Company: D-Max Engineering		Company:
Signature: [signature]	6/23/10 13:51	Signature: [signature]
Print: Kelly Leyden		Print:
Company: EMA		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=9 °C on ice

EnviroMatrix Analytical, Inc.

07 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0723

Project Name: La Mesa Additional Study
Project Desc./#: 201025W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/24/10 15:41. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0723

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
908-UNI-002	10F0723-01	Stormwater	06/24/10 11:45	06/24/10 15:41
908-UNI-001	10F0723-02	Stormwater	06/24/10 13:50	06/24/10 15:41
907-ALV-002	10F0723-03	Stormwater	06/24/10 15:00	06/24/10 15:41

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0723

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10F0723-01) Stormwater Sampled: 06/24/10 11:45 Received: 06/24/10 15:41										
Malathion	ND	0.05	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*			"	"	"	"	
908-UNI-001 (10F0723-02) Stormwater Sampled: 06/24/10 13:50 Received: 06/24/10 15:41										
Malathion	ND	0.05	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*84 %*	*60-130*			"	"	"	"	
907-ALV-002 (10F0723-03) Stormwater Sampled: 06/24/10 15:00 Received: 06/24/10 15:41										
Malathion	ND	0.05	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*76 %*	*60-130*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10F0723-01) Stormwater Sampled: 06/24/10 11:45 Received: 06/24/10 15:41										
Total Suspended Solids	**5.0**	1.0	20.0	mg/l	1	0062820	06/28/10	06/29/10	SM2540 D	J
908-UNI-001 (10F0723-02) Stormwater Sampled: 06/24/10 13:50 Received: 06/24/10 15:41										
Total Suspended Solids	**6.0**	1.0	20.0	mg/l	1	0062820	06/28/10	06/29/10	SM2540 D	J
907-ALV-002 (10F0723-03) Stormwater Sampled: 06/24/10 15:00 Received: 06/24/10 15:41										
Nitrate/Nitrite as N	**6.30**	0.09	0.50	mg/l	10	0062401	06/25/10	06/25/10	SM4500 NO3 E	
Total Kjeldahl Nitrogen	ND	0.3	0.5	"	1	0062435	06/24/10	06/24/10	SM4500 N C	
Total Nitrogen	**6.3**	0.5	0.5	"	"	0062943	06/24/10	06/24/10	Calculation	
Phosphorus, Total	**0.24**	0.02	0.05	"	"	0063030	06/30/10	06/30/10	SM4500 P B, E	
Total Dissolved Solids	**2140**	1.0	20.0	"	"	0062822	06/28/10	06/28/10	SM2540 C	
Total Suspended Solids	**7.0**	1.0	20.0	"	"	0062820	06/28/10	06/29/10	SM2540 D	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0723

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0070228											
Blank (0070228-BLK1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Malathion	ND	0.01	0.01	ug/l							
Surrogate: Triphenyl phosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS (0070228-BS1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Bolstar	0.44	0.09	0.10	ug/l	0.500		88	60-130			
Diazinon	0.49	0.04	0.05	"	0.500		98	60-130			
Ethoprop	0.45	0.05	0.05	"	0.500		90	60-130			
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130			
Methyl parathion	0.44	0.07	0.10	"	0.500		88	60-130			
Phorate	0.40	0.03	0.05	"	0.500		80	60-130			
Ronnel	0.49	0.16	0.25	"	0.500		98	60-130			
Trichlorinate	0.46	0.05	0.05	"	0.500		92	60-130			
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			
LCS Dup (0070228-BSD1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	5	30	
Diazinon	0.43	0.04	0.05	"	0.500		86	60-130	13	30	
Ethoprop	0.48	0.05	0.05	"	0.500		96	60-130	6	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	0	30	
Methyl parathion	0.41	0.07	0.10	"	0.500		82	60-130	7	30	
Phorate	0.41	0.03	0.05	"	0.500		82	60-130	2	30	
Ronnel	0.43	0.16	0.25	"	0.500		86	60-130	13	30	
Trichlorinate	0.52	0.05	0.05	"	0.500		104	60-130	12	30	
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062401											
Blank (0062401-BLK1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l							
LCS (0062401-BS1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.52	0.009	0.05	mg/l	0.500		103	80-120			
LCS Dup (0062401-BSD1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.50	0.009	0.05	mg/l	0.500		100	80-120	3	20	
Duplicate (0062401-DUP1)			**Source: 10F0668-02**		Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l		ND				20	
Matrix Spike (0062401-MS1)			**Source: 10F0668-02**		Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.48	0.009	0.05	mg/l	0.500	ND	96	80-120			
Matrix Spike Dup (0062401-MSD1)			**Source: 10F0668-02**		Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.50	0.009	0.05	mg/l	0.500	ND	99	80-120	3	20	
Reference (0062401-SRM1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.46	0.009	0.05	mg/l	0.442		103	4.16-115.1			
Batch 0062435											
Blank (0062435-BLK1)					Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	ND	0.3	0.5	mg/l							
LCS (0062435-BS1)					Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	3.4	0.3	0.5	mg/l	4.10		83	80-120			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062435											
LCS Dup (0062435-BSD1)					Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	3.4	0.3	0.5	mg/l	4.10		82	80-120	2	20	
Duplicate (0062435-DUP1)			**Source: 10F0341-06**		Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	ND	0.3	0.5	mg/l		ND				20	
Matrix Spike (0062435-MS1)			**Source: 10F0341-06**		Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	2.1	0.3	0.5	mg/l	4.10	ND	51	80-120			QM-05
Matrix Spike Dup (0062435-MSD1)			**Source: 10F0341-06**		Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	2.3	0.3	0.5	mg/l	4.10	ND	56	80-120	9	20	QM-05
Batch 0062820											
Blank (0062820-BLK1)					Prepared: 06/28/10 Analyzed: 06/29/10						
Total Suspended Solids	ND	1.0	20.0	mg/l							
Duplicate (0062820-DUP1)			**Source: 10F0682-03**		Prepared: 06/28/10 Analyzed: 06/29/10						
Total Suspended Solids	208	1.0	20.0	mg/l		200			4	20	
Reference (0062820-SRM1)					Prepared: 06/28/10 Analyzed: 06/29/10						
Total Suspended Solids	50.0	1.0	20.0	mg/l	49.9		100	84.8-105			
Batch 0062822											
Blank (0062822-BLK1)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	ND	1.0	20.0	mg/l							

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Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062822											
Blank (0062822-BLK2)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0062822-DUP1)			**Source: 10F0694-01**		Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	1750	1.0	20.0	mg/l		1830			4	20	
Duplicate (0062822-DUP2)			**Source: 10F0723-03**		Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	2150	1.0	20.0	mg/l		2140			0.5	20	
Reference (0062822-SRM1)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	304	1.0	20.0	mg/l	269		113	87-113			
Reference (0062822-SRM2)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	274	1.0	20.0	mg/l	269		102	87-113			
Batch 0063030											
Blank (0063030-BLK1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	ND	0.02	0.05	mg/l							
LCS (0063030-BS1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.52	0.02	0.05	mg/l	0.500		104	80-120			
LCS Dup (0063030-BSD1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.51	0.02	0.05	mg/l	0.500		102	80-120	2	20	
Duplicate (0063030-DUP1)			**Source: 10F0691-01**		Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.17	0.02	0.05	mg/l		0.17			0.6	20	

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Client Name: D-Max Engineering
Project Name: La Mesa Additional Study

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063030											
Matrix Spike (0063030-MS1)			**Source: 10F0691-01**		Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.61	0.02	0.05	mg/l	0.500	0.17	88	80-120			
Matrix Spike Dup (0063030-MSD1)			**Source: 10F0691-01**		Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.62	0.02	0.05	mg/l	0.500	0.17	90	80-120	2	20	

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Notes and Definitions

QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather / MS4 / Additional

Project #: 201025W-3 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □	8015B (TPH) □ Gas □ Diesel □	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesti	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	□ pH □ EC ☒ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ N	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. ☒ Total (MTF) ☒ Feca	Colilert, T+E.Coli □ P/A □ Enum	Enterococcus, ☒ MTF □ Enterol	Heterotrophic Plate Count (HPC)
1	908-UNI-002	6/24/10	11:45	SW	2/g 5/p	X						X		X				X	X		X	
2	908-UNI-001	"	13:50	"	2/g 5/p	X						X		X				X	X		X	
3	907-ALV-002	"	1500	"	2/g 6/p	X						X		X				X	X		X	
4																						
5																						
6																						
7																						
8																						
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10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	
Signature [signature]	6/24/10 3:20	Signature [signature]
Print Annika Kubischta		Print Ke
Company: D-Max Engineering		Company:
Signature [signature]	6/24/10 15:41	Signature
Print Kelley Leyden		Print
Company: EMA		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

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T=3 °C on ice

EnviroMatrix Analytical, Inc.

07 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0723

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#: 201025W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/24/10 15:41. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0723

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
908-UNI-002	10F0723-01	Stormwater	06/24/10 11:45	06/24/10 15:41
908-UNI-001	10F0723-02	Stormwater	06/24/10 13:50	06/24/10 15:41
907-ALV-002	10F0723-03	Stormwater	06/24/10 15:00	06/24/10 15:41

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Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0723

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10F0723-01) Stormwater Sampled: 06/24/10 11:45 Received: 06/24/10 15:41										
Cadmium	**0.0005**	0.0002	0.001	mg/l	1	0063031	06/30/10	06/30/10	EPA 200.8	J
Copper	**0.004**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.038**	0.0003	0.020	"	"	"	"	"	"	
908-UNI-001 (10F0723-02) Stormwater Sampled: 06/24/10 13:50 Received: 06/24/10 15:41										
Lead	ND	0.001	0.005	mg/l	1	0063031	06/30/10	06/30/10	EPA 200.8	
Copper	**0.005**	0.001	0.010	"	"	"	"	"	"	J
Zinc	**0.008**	0.0003	0.020	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
907-ALV-002 (10F0723-03) Stormwater Sampled: 06/24/10 15:00 Received: 06/24/10 15:41										
Cadmium	**0.0008**	0.0002	0.001	mg/l	1	0063031	06/30/10	06/30/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.002**	0.0003	0.020	"	"	"	"	"	"	J
Copper	**0.002**	0.001	0.010	"	"	"	"	"	"	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0723

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10F0723-01) Stormwater Sampled: 06/24/10 11:45 Received: 06/24/10 15:41										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*			"	"	"	"	
908-UNI-001 (10F0723-02) Stormwater Sampled: 06/24/10 13:50 Received: 06/24/10 15:41										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*84 %*	*60-130*			"	"	"	"	
907-ALV-002 (10F0723-03) Stormwater Sampled: 06/24/10 15:00 Received: 06/24/10 15:41										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*76 %*	*60-130*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10F0723-01) Stormwater Sampled: 06/24/10 11:45 Received: 06/24/10 15:41										
Hardness (Total)	**1720**	100	100	mg CaCO3/L	10	0063023	06/29/10	07/02/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0063032	06/30/10	06/30/10	EPA 1664A	
908-UNI-001 (10F0723-02) Stormwater Sampled: 06/24/10 13:50 Received: 06/24/10 15:41										
Hardness (Total)	**748**	100	100	mg CaCO3/L	10	0063023	06/29/10	07/02/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0063032	06/30/10	06/30/10	EPA 1664A	
907-ALV-002 (10F0723-03) Stormwater Sampled: 06/24/10 15:00 Received: 06/24/10 15:41										
Hardness (Total)	**903**	100	100	mg CaCO3/L	10	0063023	06/29/10	07/02/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0063032	06/30/10	06/30/10	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0723

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10F0723-01) Stormwater Sampled: 06/24/10 11:45 Received: 06/24/10 15:41										
Total Coliforms	**130000**	2000	2000	MPN/100 ml	1000	0062514	06/24/10	06/28/10	SM 9221 B, E	
Fecal Coliforms	**500**	20	20	"	10	"	"	06/27/10	"	
Enterococcus	**28000**	200	200	"	100	0062515	"	06/28/10	SM 9230 A, B	
908-UNI-001 (10F0723-02) Stormwater Sampled: 06/24/10 13:50 Received: 06/24/10 15:41										
Total Coliforms	**11000**	200	200	MPN/100 ml	100	0062514	06/24/10	06/28/10	SM 9221 B, E	
Fecal Coliforms	**80**	20	20	"	10	"	"	06/27/10	"	
Enterococcus	**90**	20	20	"	"	0062515	"	06/28/10	SM 9230 A, B	
907-ALV-002 (10F0723-03) Stormwater Sampled: 06/24/10 15:00 Received: 06/24/10 15:41										
Total Coliforms	**8000**	200	200	MPN/100 ml	100	0062514	06/24/10	06/28/10	SM 9221 B, E	
Fecal Coliforms	**120**	20	20	"	10	"	"	06/27/10	"	
Enterococcus	**230**	20	20	"	"	0062515	"	06/28/10	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0723

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063031											
Blank (0063031-BLK1)					Prepared & Analyzed: 06/30/10						
Cadmium	ND	0.0002	0.001	mg/l							
Zinc	ND	0.0003	0.020	"							
Lead	ND	0.001	0.005	"							
Copper	ND	0.001	0.010	"							
LCS (0063031-BS1)					Prepared & Analyzed: 06/30/10						
Copper	0.052	0.001	0.010	mg/l	0.0500		104	75-125			
Cadmium	0.049	0.0002	0.001	"	0.0500		98	75-125			
Zinc	0.049	0.0003	0.020	"	0.0500		98	75-125			
Lead	0.051	0.001	0.005	"	0.0500		101	75-125			
LCS Dup (0063031-BSD1)					Prepared & Analyzed: 06/30/10						
Lead	0.051	0.001	0.005	mg/l	0.0500		101	75-125	0.06	20	
Zinc	0.048	0.0003	0.020	"	0.0500		97	75-125	1	20	
Copper	0.051	0.001	0.010	"	0.0500		103	75-125	0.8	20	
Cadmium	0.049	0.0002	0.001	"	0.0500		98	75-125	0.3	20	
Duplicate (0063031-DUP1)			**Source: 10F0666-01**		Prepared & Analyzed: 06/30/10						
Zinc	ND	0.0003	0.020	mg/l		ND				20	
Cadmium	ND	0.0002	0.001	"		ND				20	
Copper	ND	0.001	0.010	"		ND				20	
Lead	ND	0.001	0.005	"		ND				20	
Matrix Spike (0063031-MS1)			**Source: 10F0666-01**		Prepared & Analyzed: 06/30/10						
Zinc	0.042	0.0003	0.020	mg/l	0.0500	ND	84	75-125			
Copper	0.045	0.001	0.010	"	0.0500	ND	91	75-125			
Lead	0.052	0.001	0.005	"	0.0500	ND	103	75-125			
Cadmium	0.046	0.0002	0.001	"	0.0500	ND	91	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0723

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063031											
Matrix Spike Dup (0063031-MSD1)			**Source: 10F0666-01**		Prepared & Analyzed: 06/30/10						
Copper	0.046	0.001	0.010	mg/l	0.0500	ND	91	75-125	0.2	20	
Lead	0.053	0.001	0.005	"	0.0500	ND	105	75-125	2	20	
Zinc	0.041	0.0003	0.020	"	0.0500	ND	83	75-125	0.9	20	
Cadmium	0.046	0.0002	0.001	"	0.0500	ND	91	75-125	0.4	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0723

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0070228											
Blank (0070228-BLK1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Surrogate: Triphenyl phosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS (0070228-BS1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Bolstar	0.44	0.09	0.10	ug/l	0.500		88	60-130			
Diazinon	0.49	0.04	0.05	"	0.500		98	60-130			
Ethoprop	0.45	0.05	0.05	"	0.500		90	60-130			
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130			
Methyl parathion	0.44	0.07	0.10	"	0.500		88	60-130			
Phorate	0.40	0.03	0.05	"	0.500		80	60-130			
Ronnel	0.49	0.16	0.25	"	0.500		98	60-130			
Trichlorinate	0.46	0.05	0.05	"	0.500		92	60-130			
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			
LCS Dup (0070228-BSD1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	5	30	
Diazinon	0.43	0.04	0.05	"	0.500		86	60-130	13	30	
Ethoprop	0.48	0.05	0.05	"	0.500		96	60-130	6	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	0	30	
Methyl parathion	0.41	0.07	0.10	"	0.500		82	60-130	7	30	
Phorate	0.41	0.03	0.05	"	0.500		82	60-130	2	30	
Ronnel	0.43	0.16	0.25	"	0.500		86	60-130	13	30	
Trichlorinate	0.52	0.05	0.05	"	0.500		104	60-130	12	30	
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063023											
Blank (0063023-BLK1)					Prepared: 06/29/10	Analyzed: 06/30/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0063023-DUP1)			**Source: 10F0723-01**		Prepared: 06/29/10	Analyzed: 06/30/10					
Hardness (Total)	1120	100	100	mg CaCO3/L		1720			43	20	QR-02
Batch 0063032											
Blank (0063032-BLK1)					Prepared & Analyzed: 06/30/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0063032-BS1)					Prepared & Analyzed: 06/30/10						
Oil & Grease	36	5	5	mg/l	40.0		90	78-114			
LCS Dup (0063032-BSD1)					Prepared & Analyzed: 06/30/10						
Oil & Grease	35	5	5	mg/l	40.0		88	78-114	3	20	

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Notes and Definitions

QR-02	The RPD result exceeded the QC limits due to non-homogeneity of sample.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather / MS4 / Additional

Project #: 201025W-3 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □	8015B (TPH) □ Gas □ Diesel □	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesti	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	□ pH □ EC ☒ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ N	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. ☒ Total (MTF) ☒ Feca	Colilert, T+E.Coli □ P/A □ Enum	Enterococcus, ☒ MTF □ Enteroc	Heterotrophic Plate Count (HPC)
1	908-UNI-002	6/24/10	11:45	SW	2/g 5/p	X						X		X				X	X		X	
2	908-UNI-001	"	13:50	"	2/g 5/p	X						X		X				X	X		X	
3	907-ALV-002	"	1500	"	2/g 6/p	X						X		X				X	X		X	
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	
Signature [signature]	6/24/10 3:20	Signature [signature]
Print Annika Kubischta		Print Ke
Company: D-Max Engineering		Company:
Signature [signature]	6/24/10 15:41	Signature
Print Kelley Leyden		Print
Company: EMA		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=3 °C on ice

EnviroMatrix Analytical, Inc.

07 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0723

Project Name: La Mesa MS4 Monitoring
Project Desc./#: 201025W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/24/10 15:41. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
908-UNI-002	10F0723-01	Stormwater	06/24/10 11:45	06/24/10 15:41
908-UNI-001	10F0723-02	Stormwater	06/24/10 13:50	06/24/10 15:41
907-ALV-002	10F0723-03	Stormwater	06/24/10 15:00	06/24/10 15:41

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10F0723-01) Stormwater Sampled: 06/24/10 11:45 Received: 06/24/10 15:41										
Zinc	**0.038**	0.0003	0.020	mg/l	1	0063031	06/30/10	06/30/10	EPA 200.8	
Cadmium	**0.0005**	0.0002	0.001	"	"	"	"	"	"	J
Copper	**0.004**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
908-UNI-001 (10F0723-02) Stormwater Sampled: 06/24/10 13:50 Received: 06/24/10 15:41										
Cadmium	ND	0.0002	0.001	mg/l	1	0063031	06/30/10	06/30/10	EPA 200.8	
Copper	**0.005**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Zinc	**0.008**	0.0003	0.020	"	"	"	"	"	"	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10F0723-01) Stormwater Sampled: 06/24/10 11:45 Received: 06/24/10 15:41										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*80 %*	*60-130*			"	"	"	"	
908-UNI-001 (10F0723-02) Stormwater Sampled: 06/24/10 13:50 Received: 06/24/10 15:41										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0070228	06/29/10	07/07/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*100 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*84 %*	*60-130*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10F0723-01) Stormwater Sampled: 06/24/10 11:45 Received: 06/24/10 15:41										
Hardness (Total)	**1720**	100	100	mg CaCO3/L	10	0063023	06/29/10	07/02/10	EPA 200.7	
Total Suspended Solids	**5.0**	1.0	20.0	mg/l	1	0062820	06/28/10	06/29/10	SM2540 D	J
908-UNI-001 (10F0723-02) Stormwater Sampled: 06/24/10 13:50 Received: 06/24/10 15:41										
Hardness (Total)	**748**	100	100	mg CaCO3/L	10	0063023	06/29/10	07/02/10	EPA 200.7	
Total Suspended Solids	**6.0**	1.0	20.0	mg/l	1	0062820	06/28/10	06/29/10	SM2540 D	J
907-ALV-002 (10F0723-03) Stormwater Sampled: 06/24/10 15:00 Received: 06/24/10 15:41										
Nitrate/Nitrite as N	**6.30**	0.09	0.50	mg/l	10	0062401	06/25/10	06/25/10	SM4500 NO3 E	
Total Kjeldahl Nitrogen	ND	0.3	0.5	"	1	0062435	06/24/10	06/24/10	SM4500 N C	
Total Nitrogen	**6.3**	0.5	0.5	"	"	0062943	06/24/10	06/24/10	Calculation	
Phosphorus, Total	**0.24**	0.02	0.05	"	"	0063030	06/30/10	06/30/10	SM4500 P B, E	
Total Dissolved Solids	**2140**	1.0	20.0	"	"	0062822	06/28/10	06/28/10	SM2540 C	
Total Suspended Solids	**7.0**	1.0	20.0	"	"	0062820	06/28/10	06/29/10	SM2540 D	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10F0723-01) Stormwater Sampled: 06/24/10 11:45 Received: 06/24/10 15:41										
Total Coliforms	**130000**	2000	2000	MPN/100 ml	1000	0062514	06/24/10	06/28/10	SM 9221 B, E	
Fecal Coliforms	**500**	20	20	"	10	"	"	06/27/10	"	
Enterococcus	**28000**	200	200	"	100	0062515	"	06/28/10	SM 9230 A, B	
908-UNI-001 (10F0723-02) Stormwater Sampled: 06/24/10 13:50 Received: 06/24/10 15:41										
Total Coliforms	**11000**	200	200	MPN/100 ml	100	0062514	06/24/10	06/28/10	SM 9221 B, E	
Fecal Coliforms	**80**	20	20	"	10	"	"	06/27/10	"	
Enterococcus	**90**	20	20	"	"	0062515	"	06/28/10	SM 9230 A, B	
907-ALV-002 (10F0723-03) Stormwater Sampled: 06/24/10 15:00 Received: 06/24/10 15:41										
Total Coliforms	**8000**	200	200	MPN/100 ml	100	0062514	06/24/10	06/28/10	SM 9221 B, E	
Fecal Coliforms	**120**	20	20	"	10	"	"	06/27/10	"	
Enterococcus	**230**	20	20	"	"	0062515	"	06/28/10	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063031											
Blank (0063031-BLK1)					Prepared & Analyzed: 06/30/10						
Lead	ND	0.001	0.005	mg/l							
Cadmium	ND	0.0002	0.001	"							
Copper	ND	0.001	0.010	"							
Zinc	ND	0.0003	0.020	"							
LCS (0063031-BS1)					Prepared & Analyzed: 06/30/10						
Copper	0.052	0.001	0.010	mg/l	0.0500		104	75-125			
Zinc	0.049	0.0003	0.020	"	0.0500		98	75-125			
Lead	0.051	0.001	0.005	"	0.0500		101	75-125			
Cadmium	0.049	0.0002	0.001	"	0.0500		98	75-125			
LCS Dup (0063031-BSD1)					Prepared & Analyzed: 06/30/10						
Cadmium	0.049	0.0002	0.001	mg/l	0.0500		98	75-125	0.3	20	
Zinc	0.048	0.0003	0.020	"	0.0500		97	75-125	1	20	
Lead	0.051	0.001	0.005	"	0.0500		101	75-125	0.06	20	
Copper	0.051	0.001	0.010	"	0.0500		103	75-125	0.8	20	
Duplicate (0063031-DUP1)			**Source: 10F0666-01**		Prepared & Analyzed: 06/30/10						
Cadmium	ND	0.0002	0.001	mg/l		ND				20	
Copper	ND	0.001	0.010	"		ND				20	
Lead	ND	0.001	0.005	"		ND				20	
Zinc	ND	0.0003	0.020	"		ND				20	
Matrix Spike (0063031-MS1)			**Source: 10F0666-01**		Prepared & Analyzed: 06/30/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500	ND	91	75-125			
Lead	0.052	0.001	0.005	"	0.0500	ND	103	75-125			
Copper	0.045	0.001	0.010	"	0.0500	ND	91	75-125			
Zinc	0.042	0.0003	0.020	"	0.0500	ND	84	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063031											
Matrix Spike Dup (0063031-MSD1)			**Source: 10F0666-01**		Prepared & Analyzed: 06/30/10						
Copper	0.046	0.001	0.010	mg/l	0.0500	ND	91	75-125	0.2	20	
Zinc	0.041	0.0003	0.020	"	0.0500	ND	83	75-125	0.9	20	
Cadmium	0.046	0.0002	0.001	"	0.0500	ND	91	75-125	0.4	20	
Lead	0.053	0.001	0.005	"	0.0500	ND	105	75-125	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0070228											
Blank (0070228-BLK1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Chlorpyrifos	ND	0.008	0.01	ug/l							
Diazinon	ND	0.008	0.01	"							
Malathion	ND	0.01	0.01	"							
Surrogate: Triphenyl phosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
Surrogate: Tribuytlphosphate	*0.150*			*"*	*0.250*		*60*	*60-130*			
LCS (0070228-BS1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Bolstar	0.44	0.09	0.10	ug/l	0.500		88	60-130			
Diazinon	0.49	0.04	0.05	"	0.500		98	60-130			
Ethoprop	0.45	0.05	0.05	"	0.500		90	60-130			
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130			
Methyl parathion	0.44	0.07	0.10	"	0.500		88	60-130			
Phorate	0.40	0.03	0.05	"	0.500		80	60-130			
Ronnel	0.49	0.16	0.25	"	0.500		98	60-130			
Trichlorinate	0.46	0.05	0.05	"	0.500		92	60-130			
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			
LCS Dup (0070228-BSD1)					Prepared: 06/29/10	Analyzed: 07/06/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	5	30	
Diazinon	0.43	0.04	0.05	"	0.500		86	60-130	13	30	
Ethoprop	0.48	0.05	0.05	"	0.500		96	60-130	6	30	
Mevinphos	0.40	0.21	0.25	"	0.500		80	60-130	0	30	
Methyl parathion	0.41	0.07	0.10	"	0.500		82	60-130	7	30	
Phorate	0.41	0.03	0.05	"	0.500		82	60-130	2	30	
Ronnel	0.43	0.16	0.25	"	0.500		86	60-130	13	30	
Trichlorinate	0.52	0.05	0.05	"	0.500		104	60-130	12	30	
Surrogate: Triphenyl phosphate	*0.250*			*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.200*			*"*	*0.250*		*80*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062401											
Blank (0062401-BLK1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l							
LCS (0062401-BS1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.52	0.009	0.05	mg/l	0.500		103	80-120			
LCS Dup (0062401-BSD1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.50	0.009	0.05	mg/l	0.500		100	80-120	3	20	
Duplicate (0062401-DUP1)			**Source: 10F0668-02**		Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l		ND				20	
Matrix Spike (0062401-MS1)			**Source: 10F0668-02**		Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.48	0.009	0.05	mg/l	0.500	ND	96	80-120			
Matrix Spike Dup (0062401-MSD1)			**Source: 10F0668-02**		Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.50	0.009	0.05	mg/l	0.500	ND	99	80-120	3	20	
Reference (0062401-SRM1)					Prepared & Analyzed: 06/24/10						
Nitrate/Nitrite as N	0.46	0.009	0.05	mg/l	0.442		103	4.16-115.1			
Batch 0062435											
Blank (0062435-BLK1)					Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	ND	0.3	0.5	mg/l							
LCS (0062435-BS1)					Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	3.4	0.3	0.5	mg/l	4.10		83	80-120			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062435											
LCS Dup (0062435-BSD1)					Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	3.4	0.3	0.5	mg/l	4.10		82	80-120	2	20	
Duplicate (0062435-DUP1)			**Source: 10F0341-06**		Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	ND	0.3	0.5	mg/l		ND				20	
Matrix Spike (0062435-MS1)			**Source: 10F0341-06**		Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	2.1	0.3	0.5	mg/l	4.10	ND	51	80-120			QM-05
Matrix Spike Dup (0062435-MSD1)			**Source: 10F0341-06**		Prepared & Analyzed: 06/24/10						
Total Kjeldahl Nitrogen	2.3	0.3	0.5	mg/l	4.10	ND	56	80-120	9	20	QM-05
Batch 0062820											
Blank (0062820-BLK1)					Prepared: 06/28/10 Analyzed: 06/29/10						
Total Suspended Solids	ND	1.0	20.0	mg/l							
Duplicate (0062820-DUP1)			**Source: 10F0682-03**		Prepared: 06/28/10 Analyzed: 06/29/10						
Total Suspended Solids	208	1.0	20.0	mg/l		200			4	20	
Reference (0062820-SRM1)					Prepared: 06/28/10 Analyzed: 06/29/10						
Total Suspended Solids	50.0	1.0	20.0	mg/l	49.9		100	84.8-105			
Batch 0062822											
Blank (0062822-BLK1)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	ND	1.0	20.0	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062822											
Blank (0062822-BLK2)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0062822-DUP1)			**Source: 10F0694-01**		Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	1750	1.0	20.0	mg/l		1830			4	20	
Duplicate (0062822-DUP2)			**Source: 10F0723-03**		Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	2150	1.0	20.0	mg/l		2140			0.5	20	
Reference (0062822-SRM1)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	304	1.0	20.0	mg/l	269		113	87-113			
Reference (0062822-SRM2)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	274	1.0	20.0	mg/l	269		102	87-113			
Batch 0063023											
Blank (0063023-BLK1)					Prepared: 06/29/10 Analyzed: 06/30/10						
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0063023-DUP1)			**Source: 10F0723-01**		Prepared: 06/29/10 Analyzed: 06/30/10						
Hardness (Total)	1120	100	100	mg CaCO3/L		1720			43	20	QR-02
Batch 0063030											
Blank (0063030-BLK1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	ND	0.02	0.05	mg/l							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0723

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063030											
LCS (0063030-BS1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.52	0.02	0.05	mg/l	0.500		104	80-120			
LCS Dup (0063030-BSD1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.51	0.02	0.05	mg/l	0.500		102	80-120	2	20	
Duplicate (0063030-DUP1)			**Source: 10F0691-01**		Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.17	0.02	0.05	mg/l		0.17			0.6	20	
Matrix Spike (0063030-MS1)			**Source: 10F0691-01**		Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.61	0.02	0.05	mg/l	0.500	0.17	88	80-120			
Matrix Spike Dup (0063030-MSD1)			**Source: 10F0691-01**		Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.62	0.02	0.05	mg/l	0.500	0.17	90	80-120	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QR-02	The RPD result exceeded the QC limits due to non-homogeneity of sample.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather / MS4 / Additional

Project #: 201025W-3 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □	8015B (TPH) □ Gas □ Diesel □	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesti	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticio	TBT (Organotin Compounds)	□ pH □ EC ☒ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ N	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. ☒ Total (MTF) ☒ Feca	Colilert, T+E.Coli □ P/A □ Enum	Enterococcus, ☒ MTF □ Enterol	Heterotrophic Plate Count (HPC)
1	908-UNI-002	6/24/10	11:45	SW	2/g 5/p	X						X		X				X	X		X	
2	908-UNI-001	"	13:50	"	2/g 5/p	X						X		X				X	X		X	
3	907-ALV-002	"	1500	"	2/g 6/p	X						X		X				X	X		X	
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	
Signature [signature]	6/24/10 3:20	Signature [signature]
Print Annika Kubischta		Print Ke
Company: D-Max Engineering		Company:
Signature [signature]	6/24/10 15:41	Signature
Print Kelley Leuder		Print
Company: EMA		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=3 °C on ice

EnviroMatrix Analytical, Inc.

02 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0737

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#: 201025W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/25/10 13:30. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0737

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-570	10F0737-02	Stormwater	06/25/10 10:50	06/25/10 13:30

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0737

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-570 (10F0737-02) Stormwater Sampled: 06/25/10 10:50 Received: 06/25/10 13:30										
Total Coliforms	**40**	20	20	MPN/100 ml	10	0062534	06/25/10	06/29/10	SM 9221 B, E	
Fecal Coliforms	**20**	20	20	"	"	"	"	06/28/10	"	
Enterococcus	**230**	20	20	"	"	0062535	"	06/29/10	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10F0737

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather /MS4 Sampling

Project #: 201025W-3 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease ☐ 413.1 ☐ 413.2 ☐	8015B (TPH) ☐ Gas ☐ Diesel ☐	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) ☐ PAH only	608 / 8081 (Organochlorine Pesti	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	☐ pH ☐ EC ☒ TSS ☒ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ NH	CAC Title 22/CAM17 Metals ☐ T	TCLP (RCRA) ☐ Metals ☐ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. ☒ Total (MTF) ☒ Feca	Colilert, T+E.Coli ☐ P/A ☐ Enum	Enterococcus, ☒ MTF ☐ Enterc	Heterotrophic Plate Count (HPC)
1	907-ALV-590	6/25/10	10:00	SW	4p									X					X		X	
2	907-ALV-570	6/25/10	10:50	SW	2p														X		X	
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: ☒ Courier ☐ UPS ☐ FedEx ☐ USPS ☐ Client Drop Off ☐ Other

[1]**Turn-Around-Time:** ☐ Same Day ☐ 24 hr ☐ 48 hr ☐ 3 day ☐ 4 day ☒ 5 day ☐ STD (7 day)

[1]**Reporting Requirements:** ☐ Fax ☐ PDF ☐ Excel ☐ Geotracker/EDF ☐ Hard Copy ☐ EDT

[1]**Sample Disposal:** ☐ By Laboratory ☐ [2]Return to Client: P/U or Delivery ☐ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	
Signature [signature]	6/25/10 13:13	Signature
Print Anil Kubacha		Print Ke
Company: Dimax Engineering		Company:
Signature [signature]	6/25/10 13:30	Signature
Print Kelly Cuyda		Print
Company: EMA		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 7 °C on ice

City of La Mesa – 2010 Dry Weather, MS4 Monitoring, & Additional Study Laboratory Reports
06/25/2010

Date	Site	Dry Weather Report	MS4 Report	Additional Study Report
	□ 907-ALV-590	(none)	Total Coliform Fecal Coliform Enterococcus TDS TSS Total Nitrogen Total Phosphate	(none)

Separate "As-Needed" Report:

	□ 907-ALV-570	Total Coliform Fecal Coliform Enterococcus

02 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10F0737

Project Name: La Mesa MS4 Monitoring
Project Desc./#: 201025W-3

Enclosed are the results of analyses for samples received by the laboratory on 06/25/10 13:30. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0737

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
907-ALV-590	10F0737-01	Stormwater	06/25/10 10:00	06/25/10 13:30

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0737

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-590 (10F0737-01) Stormwater Sampled: 06/25/10 10:00 Received: 06/25/10 13:30										
Nitrate/Nitrite as N	**1.73**	0.04	0.25	mg/l	5	0062901	06/29/10	06/29/10	SM4500 NO3 E	
Total Kjeldahl Nitrogen	**1.4**	0.3	0.5	"	1	0063003	06/30/10	06/30/10	SM4500 N C	
Total Nitrogen	**3.1**	0.5	0.5	"	"	0070133	06/30/10	"	Calculation	
Phosphorus, Total	**0.16**	0.02	0.05	"	"	0063030	06/30/10	06/30/10	SM4500 P B, E	
Total Dissolved Solids	**1700**	1.0	20.0	"	"	0062822	06/28/10	06/28/10	SM2540 C	
Total Suspended Solids	**3.0**	1.0	20.0	"	"	0062819	06/28/10	06/29/10	SM2540 D	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0737

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
907-ALV-590 (10F0737-01) Stormwater Sampled: 06/25/10 10:00 Received: 06/25/10 13:30										
Total Coliforms	**500**	20	20	MPN/100 ml	10	0062534	06/25/10	06/29/10	SM 9221 B, E	
Fecal Coliforms	**130**	20	20	"	"	"	"	06/28/10	"	
Enterococcus	**40**	20	20	"	"	0062535	"	06/29/10	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0737

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062819											
Blank (0062819-BLK1)					Prepared: 06/28/10	Analyzed: 06/29/10					
Total Suspended Solids	ND	1.0	20.0	mg/l							
Duplicate (0062819-DUP1)			**Source: 10F0681-03**		Prepared: 06/28/10	Analyzed: 06/29/10					
Total Suspended Solids	1.2	1.0	20.0	mg/l		1.3			8	20	J
Reference (0062819-SRM1)					Prepared: 06/28/10	Analyzed: 06/29/10					
Total Suspended Solids	50.0	1.0	20.0	mg/l	49.9		100	84.8-105			
Batch 0062822											
Blank (0062822-BLK1)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Blank (0062822-BLK2)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	ND	1.0	20.0	mg/l							
Duplicate (0062822-DUP1)			**Source: 10F0694-01**		Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	1750	1.0	20.0	mg/l		1830			4	20	
Duplicate (0062822-DUP2)			**Source: 10F0723-03**		Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	2150	1.0	20.0	mg/l		2140			0.5	20	
Reference (0062822-SRM1)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	304	1.0	20.0	mg/l	269		113	87-113			
Reference (0062822-SRM2)					Prepared & Analyzed: 06/28/10						
Total Dissolved Solids	274	1.0	20.0	mg/l	269		102	87-113			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0737

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0062901											
Blank (0062901-BLK1)					Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l							
LCS (0062901-BS1)					Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	0.50	0.009	0.05	mg/l	0.500		99	80-120			
LCS Dup (0062901-BSD1)					Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	0.48	0.009	0.05	mg/l	0.500		96	80-120	3	20	
Duplicate (0062901-DUP1)			**Source: 10F0766-02**		Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	ND	0.009	0.05	mg/l		ND				20	
Matrix Spike (0062901-MS1)			**Source: 10F0766-02**		Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	0.57	0.009	0.05	mg/l	0.500	ND	114	80-120			
Matrix Spike Dup (0062901-MSD1)			**Source: 10F0766-02**		Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	0.52	0.009	0.05	mg/l	0.500	ND	104	80-120	8	20	
Reference (0062901-SRM1)					Prepared & Analyzed: 06/29/10						
Nitrate/Nitrite as N	0.46	0.009	0.05	mg/l	0.442		105	4.16-115.1			
Batch 0063003											
Blank (0063003-BLK1)					Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	ND	0.3	0.5	mg/l							
LCS (0063003-BS1)					Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	3.4	0.3	0.5	mg/l	4.10		83	80-120			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0737

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063003											
LCS Dup (0063003-BSD1)					Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	3.8	0.3	0.5	mg/l	4.10		93	80-120	11	20	
Duplicate (0063003-DUP1)			**Source: 10F0533-03**		Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	0.4	0.3	0.5	mg/l		0.6			34	20	QR-06, J
Matrix Spike (0063003-MS1)			**Source: 10F0533-03**		Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	4.0	0.3	0.5	mg/l	4.10	0.6	85	80-120			
Matrix Spike Dup (0063003-MSD1)			**Source: 10F0533-03**		Prepared & Analyzed: 06/30/10						
Total Kjeldahl Nitrogen	4.1	0.3	0.5	mg/l	4.10	0.6	88	80-120	2	20	
Batch 0063030											
Blank (0063030-BLK1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	ND	0.02	0.05	mg/l							
LCS (0063030-BS1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.52	0.02	0.05	mg/l	0.500		104	80-120			
LCS Dup (0063030-BSD1)					Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.51	0.02	0.05	mg/l	0.500		102	80-120	2	20	
Duplicate (0063030-DUP1)			**Source: 10F0691-01**		Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.17	0.02	0.05	mg/l		0.17			0.6	20	
Matrix Spike (0063030-MS1)			**Source: 10F0691-01**		Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.61	0.02	0.05	mg/l	0.500	0.17	88	80-120			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa MS4 Monitoring

EMA Log #: 10F0737

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0063030											
Matrix Spike Dup (0063030-MSD1)			**Source: 10F0691-01**		Prepared & Analyzed: 06/30/10						
Phosphorus, Total	0.62	0.02	0.05	mg/l	0.500	0.17	90	80-120	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QR-06	The RPD value was exceeded due to the sample concentration being less than 10 times the reporting limit. The QC batch was accepted based on the LCS or QCS results.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6649

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather / MS4 Sampling

Project #: 201025W-3 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □	8015B (TPH) □ Gas □ Diesel □	624/8260 (VOC) Full BTXE MTBE	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pest	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	□ pH □ EC ☒ TSS ☒ TDS	□ Nitrate □ Nitrite □ TKN □ NH	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. ☒ Total (MTF) ☒ Feca	Colilert, T+E.Coli □ P/A □ Enur	Enterococcus, ☒ MTF □ Enteroc	Heterotrophic Plate Count (HPC)
1	907-ALV-590	6/25/10	10:00	SW	4p									X					X		X	
2	907-ALV-570	6/25/10	10:50	SW	2p														X		X	
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: ☒ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

RELINQUISHED BY	DATE/TIME	
Signature [signature]	6/25/10 13:13	Signature [signature]
Print Annikat Kubischta		Print Ke
Company: Dimax Engineering		Company:
Signature [signature]	6/25/10 13:30	Signature
Print Kelly Lynda		Print
Company: EMA		Company:
Signature		Signature
Print		Print
Company:		Company:

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 7 °C on ice

10F0 737

City of La Mesa – 2010 Dry Weather, MS4 Monitoring, & Additional Study Laboratory Reports
06/25/2010

Date	Site	Dry Weather Report	MS4 Report	Additional Study Report
	☐ 907-ALV-590	(none)	Total Coliform Fecal Coliform Enterococcus TDS TSS Total Nitrogen Total Phosphate	(none)

Separate "As-Needed" Report:

	☐ 907-ALV-570	Total Coliform Fecal Coliform Enterococcus

EnviroMatrix Analytical, Inc.

12 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0128

Project Name: La Mesa Dry Weather Monitoring
Project Desc./#: 201025W-2

Enclosed are the results of analyses for samples received by the laboratory on 07/06/10 16:46. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10G0128

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
908-UNI-002	10G0128-01	Stormwater	07/06/10 14:30	07/06/10 16:46
908-UNI-002-1	10G0128-02	Stormwater	07/06/10 15:20	07/06/10 16:46
908-UNI-003	10G0128-03	Stormwater	07/06/10 15:45	07/06/10 16:46
908-UNI-003-1	10G0128-04	Stormwater	07/06/10 16:05	07/06/10 16:46
908-UNI-003-2	10G0128-05	Stormwater	07/06/10 16:25	07/06/10 16:46

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10G0128

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
908-UNI-002 (10G0128-01) Stormwater Sampled: 07/06/10 14:30 Received: 07/06/10 16:46										
Total Coliforms	**17300**	10	10	MPN/100 ml	10	0070730	07/06/10	07/07/10	SM9223	
E. Coli	**98**	10	10	"	"	"	"	"	"	
Enterococcus	**480**	10	10	"	"	0070731	07/06/10	07/07/10	Idexx	
908-UNI-002-1 (10G0128-02) Stormwater Sampled: 07/06/10 15:20 Received: 07/06/10 16:46										
Total Coliforms	**3300**	10	10	MPN/100 ml	10	0070730	07/06/10	07/07/10	SM9223	
E. Coli	**41**	10	10	"	"	"	"	"	"	
Enterococcus	**7701**	10	10	"	"	0070731	07/06/10	07/07/10	Idexx	
908-UNI-003 (10G0128-03) Stormwater Sampled: 07/06/10 15:45 Received: 07/06/10 16:46										
Total Coliforms	**4110**	10	10	MPN/100 ml	10	0070730	07/06/10	07/07/10	SM9223	
E. Coli	**31**	10	10	"	"	"	"	"	"	
908-UNI-003-1 (10G0128-04) Stormwater Sampled: 07/06/10 16:05 Received: 07/06/10 16:46										
Total Coliforms	**15500**	10	10	MPN/100 ml	10	0070730	07/06/10	07/07/10	SM9223	
E. Coli	**30**	10	10	"	"	"	"	"	"	
908-UNI-003-2 (10G0128-05) Stormwater Sampled: 07/06/10 16:25 Received: 07/06/10 16:46										
Total Coliforms	**11200**	10	10	MPN/100 ml	10	0070730	07/06/10	07/07/10	SM9223	
E. Coli	**95**	10	10	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: La Mesa Dry Weather Monitoring

EMA Log #: 10G0128

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: La Mesa Dry Weather Follow-up

Project #: 201025W-2 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □	8015B (TPH) □ Gas □ Diesel □	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pest	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. Total (MTF) □ Feca	Colilert, T+E.Coli □ P/A X Enur	Enterococcus, □ MTF X Enteroc	Heterotrophic Plate Count (HPC)
1	908-UNI-002	7/6/10	14:30	SW	2p														X	X	X	
2	908-UNI-002-1	"	15:20	"	2p														X	X	X	
3	908-UNI-003	"	15:15	"	1p														X	X		
4	908-UNI-003-1	"	16:05	"	1p														X	X		
5	908-UNI-003-2	"	16:25	"	1p														X	X		
6																						
7																						
8																						
9																						
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS X Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temp @ Receipt:

COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	
Signature [signature]	7/6/10 1640	Signature
Print Annita Lubischka		Print
Company: D-Max Engineering		Company:
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

Appendix D

Field Data & Trash Assessment Sheets

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-001			Latitude	32.77209	Watershed: Hydrologic Unit	907
Location	Alvarado Road, east of the trolley station			Longitude	-117.04136	Hydrologic Area	907.1
				TB Page	1270-F2	Hydrologic Subarea (Optional)	907.11
Date	6/23/10	Time	10:30	Observer	CG / AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6732-6734

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.1	NH_3-N (mg/L)	0.222	NO_3 (mg/L)	1.101	Ortho-PO_4 (mg/L)	0.653
pH (pH units)	7.5	TURB (NTU)	0.35	NO_3-N (mg/L)	0.249	Ortho-PO_4-P (mg/L)	0.213
COND (mS/cm)	3.14	MBAS (mg/L)	0.25	Do (mg/L)	7.03		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	~~3.5'~~ 42	in
Depth	.75	in
Velocity	10/60	ft/sec
Flow	104	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-001 DATE: 6-23-10

OBSERVER: CG/AK TIME: 10:30

LOCATION: Alvarado Road, east of the trolley station

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 60 x 25

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-002			Latitude	32.77414	Watershed: Hydrologic Unit	907
Location	Along the southern edge of the Costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection			Longitude	-117.02287	Hydrologic Area	907.1
				TB Page	1270-H1	Hydrologic Subarea (Optional)	907.11
Date	6/24/10	Time	1500	Observer	IT/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6771-6774

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.3	NH_3-N (mg/L)	0.435	NO_3 (mg/L)	21.43	Ortho-PO_4 (mg/L)	0.367
pH (pH units)	7.3	TURB (NTU)	8.36	NO_3-N (mg/L)	4.843	Ortho-PO_4-P (mg/L)	0.120
COND (mS/cm)	3.66	MBAS (mg/L)	0.25	Do (mg/L)	6.86		

Analytical Lab Samples Collected? ☒ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-002 DATE: 6/24/10

OBSERVER: IT/AK TIME: 1500

LOCATION: Along the southern edge of the costco parking lot, just south of the Marengo Avenue and Fletcher Parkway intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-004			Latitude	32.77546	Watershed: Hydrologic Unit	907
Location	7780 Parkway Drive, inside Parkway Manor condominiums parking lot, by visitor parking at the top of the driveway			Longitude	-117.02918	Hydrologic Area	907.1
				TB Page	1270-G1	Hydrologic Subarea (Optional)	907.11
Date	6/28/10	Time	9:30	Observer	LM AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** ~~6793 6795~~ 6752 - 6754

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	18.7	NH_3-N (mg/L)	0.137	NO_3 (mg/L)	2.898	Ortho-PO_4 (mg/L)	0.705
pH (pH units)	7.8	TURB (NTU)	17.65	NO_3-N (mg/L)	0.655	Ortho-PO_4-P (mg/L)	0.230
COND (mS/cm)	1.23	MBAS (mg/L)	0.25	Do (mg/L)	N/A		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-004 **DATE:** 6/28/10

OBSERVER: FT/AK **TIME:** 9:30

LOCATION: 7780 Parkway Drive, Inside Parkway Manor Condominiums parking lot, by visitor parking at the top of the driveway

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-005		Latitude	32.77380	Watershed	Hydrologic Unit	907
Location	Alvarado channel, underneath the intersection of Fletcher Parkway and Baltimore Drive, north side of the channel		Longitude	-117.02737		Hydrologic Area	907.1
			TB Page	1270-H1		Hydrologic Subarea (Optional)	907.11
Date	6/24/10	Time 11:00	Observer	IT/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6760 - 6761

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.272	NO_3 (mg/L)	24.91	Ortho-PO_4 (mg/L)	0.609
pH (pH units)	7.2	TURB (NTU)	1.21	NO_3-N (mg/L)	5.63	Ortho-PO_4-P (mg/L)	0.199
COND (mS/cm)	3.50	MBAS (mg/L)	0.75	Do (mg/L)	N/A		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	5	in
Depth	.2	in
Velocity	1/1	ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-005 DATE: 6/24/10

OBSERVER: IT/AK TIME: 11:00

LOCATION: Alvarado channel, underneath the intersection of Fletcher Parkway and Baltimore Drive, north side of the channel

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

LC

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-006		Latitude	32.77550	Watershed	Hydrologic Unit	907
Location	Fletcher Parkway and Marengo Avenue intersection, in planter		Longitude	-117.03309		Hydrologic Area	907.1
			TB Page	1270-H1		Hydrologic Subarea (Optional)	907.11
Date	6/23/10	Time 14:10	Observer	CG/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6742-6744

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.7	NH_3-N (mg/L)	0.369	NO_3 (mg/L)	3.886	Ortho-PO_4 (mg/L)	1.169
pH (pH units)	7.7	TURB (NTU)	5.00	NO_3-N (mg/L)	0.878	Ortho-PO_4-P (mg/L)	0.381
COND (mS/cm)	2.84	MBAS (mg/L)	0.75	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	< 1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-006 DATE: 6/23/10

OBSERVER: CG/AK TIME: 14:10

LOCATION: Fletcher Parkway and Marengo Avenue intersection, in planter

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-007			Latitude	32.77832	Watershed: Hydrologic Unit	907
Location	Jackson Drive and Parkway Drive, behind Amex Auto Repair			Longitude	-117.01821	Hydrologic Area	907.1
				TB Page	1270-J1	Hydrologic Subarea (Optional)	907.11
Date	6/23/10	Time	16:00	Observer	AK, CG	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6745-6749

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.1	NH_3-N (mg/L)	0.450	NO_3 (mg/L)	6.770	Ortho-PO_4 (mg/L)	1.458
pH (pH units)	7.8	TURB (NTU)	30.84	NO_3-N (mg/L)	1.530	Ortho-PO_4-P (mg/L)	0.475
COND (mS/cm)	2.410	MBAS (mg/L)	0.50	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	14	in
Depth	.10	in
Velocity	1/1	ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-007 DATE: 6/23/10

OBSERVER: CG/AK TIME: 16:00

LOCATION: Jackson Drive and Parkway Drive, behind Amex auto repair

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

JQ
LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-008		Latitude	32.78400	Watershed	Hydrologic Unit	907.
Location	South of Fletcher Parkway, under SR-125 overpass, west of the outfalls from the north		Longitude	-117.00570		Hydrologic Area	907.1
			TB Page	1251-A7		Hydrologic Subarea (Optional)	907.11
Date	6-25-10	Time 11:35	Observer	LN/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6780-6782

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	18.1	NH_3-N (mg/L)	0.582	NO_3 (mg/L)	12.43	Ortho-PO_4 (mg/L)	0.354
pH (pH units)	7.8	TURB (NTU)	3.69	NO_3-N (mg/L)	2.809	Ortho-PO_4-P (mg/L)	0.115
COND (mS/cm)	2.66	MBAS (mg/L)	0.50	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	12	in
Depth	1.25	in
Velocity	6.17	ft/sec
Flow	40	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-008 DATE: 6-25-10

OBSERVER: LN/AK TIME: 11:35

LOCATION: South of Fletcher Parkway, under OR-125 overpass, west of the outfalls from the north

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 25 x 14

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

1C

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-12A		Latitude	32.77605	Watershed	Hydrologic Unit	907
Location	Jackson Drive, 100 feet west of Murray Drive, south side of Street in front of 8304 Jackson Drive		Longitude	-117.01434		Hydrologic Area	907.1
			TB Page	1270-J1		Hydrologic Subarea (Optional)	907.11
Date	6/23/10	Time 9:45	Observer	IT/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☒ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☒ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	**Tide Height:** ____ ft.
Last Rain	☒ > 72 hours	☐ < 72 hours				
Rainfall	☒ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other		
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other		
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other		
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other		
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other		
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other		
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6755-6757

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	19.6	NH_3-N (mg/L)	0.296	NO_3 (mg/L)	22.80	Ortho-PO_4 (mg/L)	0.361
pH (pH units)	7.45	TURB (NTU)	19.53	NO_3-N (mg/L)	5.15	Ortho-PO_4-P (mg/L)	0.118
COND (mS/cm)	2.54	MBAS (mg/L)	0.25	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	12	in
Depth	.5	in
Velocity	2/1	ft/sec
Flow	22	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-124 DATE: 6/23/10

OBSERVER: IT/AK TIME: 9:45

LOCATION: Jackson Drive, 100 feet west of Murray Drive, south side of the street, in front of 5304 Jackson Drive

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LN

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-120			Latitude	32.77630	Watershed: Hydrologic Unit	907
Location	Jackson Drive, 100 feet west of Murray Drive, north side of street			Longitude	-117.01423	Hydrologic Area	907.1
				TB Page	1270-J1	Hydrologic Subarea (Optional)	907.11
Date	6/25/10	Time	13:35	Observer	LN/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6783-6784

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)	0.484	NO_3 (mg/L)	4.925	Ortho-PO_4 (mg/L)	1.857
pH (pH units)	7.2	TURB (NTU)	23.32	NO_3-N (mg/L)	1.113	Ortho-PO_4-P (mg/L)	0.605
COND (mS/cm)	1.98	MBAS (mg/L)	0.50	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-120 DATE: 6-29-10

OBSERVER: LN/AK TIME: 13:35

LOCATION: Jackson Drive, 100 feet west of Murray Drive, north side of street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	A 907-ALV-570		Latitude	32.78532	Watershed	Hydrologic Unit	907
Location	Amaya Drive, east of Severin Drive, across from Howell Drive		Longitude	-116.99744		Hydrologic Area	907.1
			TB Page	1270-G7		Hydrologic Subarea (Optional)	907.11
Date	6/25/10	Time 10:50	Observer	LU/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6778-6779

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.2	NH_3-N (mg/L)	0.590	NO_3 (mg/L)	0.668	Ortho-PO_4 (mg/L)	0.221
pH (pH units)	7.8	TURB (NTU)	0.89	NO_3-N (mg/L)	0.151	Ortho-PO_4-P (mg/L)	0.072
COND (mS/cm)	2.98	MBAS (mg/L)	0.25	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	7	in
Depth	.15	in
Velocity	1/1.5	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-570 DATE: 6/25/10

OBSERVER: LN/AK TIME: 10:50

LOCATION: Amaya Drive, east of Severin Drive, across from Howell Drive.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	970-ALV-580		Latitude	32.78640	Watershed	Hydrologic Unit	907
Location	Northeast corner of Amaya Drive and Amaya Court intersection		Longitude	-117.00116		Hydrologic Area	907.1
			TB Page	1251-B7		Hydrologic Subarea (Optional)	907.11
Date	6/25/10	Time 1415	Observer	LN/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6785-6787

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.6	NH_3-N (mg/L)	0.444	NO_3 (mg/L)	5.226	Ortho-PO_4 (mg/L)	0.366
pH (pH units)	7.6	TURB (NTU)	17.78	NO_3-N (mg/L)	1.181	Ortho-PO_4-P (mg/L)	0.119
COND (mS/cm)	2.39	MBAS (mg/L)	0.50	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	10	in
Depth	.2	in
Velocity	1/1	ft/sec
Flow	40	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 970-ALV-580 DATE: 6/25/10

OBSERVER: LN/AK TIME: 1415

LOCATION: Northeast corner of Amaya Drive and Amaya Court intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907-ALV-590			Latitude	32.78180	Watershed: Hydrologic Unit	907
Location	Southeast corner of Parkway Drive and Amarillo Avenue intersection			Longitude	-117.01328	Hydrologic Area	907.1
				TB Page	1250-J7	Hydrologic Subarea (Optional)	907.11
Date	6/25/10	Time	10:00	Observer	LN / AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☒ Sheen (Oil) Slight	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6776 - 6777

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	19.3	NH_3-N (mg/L)	0.174	NO_3 (mg/L)	5.894	Ortho-PO_4 (mg/L)	0.148
pH (pH units)	7.3	TURB (NTU)	1.12	NO_3-N (mg/L)	1.332	Ortho-PO_4-P (mg/L)	0.048
COND (mS/cm)	2.60	MBAS (mg/L)	0.25	Do (mg/L)	4.83		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	14	in
Depth	.15	in
Velocity	5/3	ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907-ALV-590 DATE: 6-25-10

OBSERVER: LN/AK TIME: 10:00

LOCATION: Southeast corner of Parkway Drive and Amarillo Avenue intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Submarginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	907 - ALV - 640		Latitude	32.77651	Watershed	Hydrologic Unit	907
Location	North side of Seton Hall Street, between Swarthmore Street and Wheaton Street		Longitude	-117.03462		Hydrologic Area	907.1
			TB Page	1270-G1		Hydrologic Subarea (Optional)	907.11
Date	6-24-10	Time 9:15	Observer	IT / AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other NSA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other NSA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other NSA
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other NSA
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6750 - 6751

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Do (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 907- ALV-640 DATE: 6-24-10

OBSERVER: IT / AK TIME: 9:15

LOCATION: North side of Seton Hall Street, between Swarthmore Street and Wheaton Street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-LFM-520			Latitude	32.74516	Watershed: Hydrologic Unit	908
Location	Near Waite Drive and Harris Street intersection, south end of Harris Street			Longitude	-117.03931	Hydrologic Area	908.2
				TB Page	1270-F5	Hydrologic Subarea (Optional)	908.22
Date	6/28/10	Time	11:25	Observer	LN/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/~~Gravel~~	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☒ Yes ☐ No ☐ Irrigation Runoff ☒ Other: Sump discharge - residential

Photo Taken ☒ Yes ☐ No **Photo #** 6799-6800

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)	~~0.426~~ 0.87	NO_3 (mg/L)	5.945	Ortho-PO_4 (mg/L)	0.967
pH (pH units)	7.8	TURB (NTU)	4.27	NO_3-N (mg/L)	1.344	Ortho-PO_4-P (mg/L)	0.315
COND (mS/cm)	4.560	MBAS (mg/L)	0.50	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	8	in
Depth	.25	in
Velocity	10/10	ft/sec
Flow	6	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 908-LEM-520 DATE: 6/28/10

OBSERVER: LN/AK TIME: 11:25

LOCATION: Near Waite Drive and Harris Street intersection, south end of Harris Street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-001			Latitude	32.754163	Watershed: Hydrologic Unit	908
Location	69th Street and Boulevard Drive intersection			Longitude	-117.04908	Hydrologic Area	908.2
				TB Page	1270-E4	Hydrologic Subarea (Optional)	908.22
Date	6/24/10	Time	13:50	Observer	IT/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6765-6770

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.4	NH_3-N (mg/L)	0.197	NO_3 (mg/L)	11.17	Ortho-PO_4 (mg/L)	0.329
pH (pH units)	8.2	TURB (NTU)	0.51	NO_3-N (mg/L)	2.524	Ortho-PO_4-P (mg/L)	0.107
COND (mS/cm)	3.05	MBAS (mg/L)	0.50	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	18	in
Depth	.5	in
Velocity	1/1	ft/sec
Flow	28	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 908-UNI-001 **DATE:** 6/24/10

OBSERVER: IT/AK **TIME:** 13:50

LOCATION: 69th Street and Boulevard Drive intersection

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20 x 12

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-WN1-002		Latitude	32.75498	Watershed	Hydrologic Unit	908
Location	Harbison Avenue and University Avenue intersection, west sidewalk, east of CB Hair & Nails		Longitude	-117.04639		Hydrologic Area	908.2
			TB Page	1270-E4		Hydrologic Subarea (Optional)	908.22
Date	6/24/10	Time 11:45	Observer	IT/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6762-6764

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.7	NH_3-N (mg/L)	0.945	NO_3 (mg/L)	29.07	Ortho-PO_4 (mg/L)	0.904
pH (pH units)	7.9	TURB (NTU)	7.72	NO_3-N (mg/L)	6.569	Ortho-PO_4-P (mg/L)	0.295
COND (mS/cm)	6.41	MBAS (mg/L)	0.5	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 908-UNI-002 DATE: 6-24-10

OBSERVER: IT/AK TIME: 11:45

LOCATION: Harbison Avenue and University Avenue intersection, west sidewalk, east of CB Hair & Nails

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6x6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For NH3 ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-002			Latitude	32.75498	Watershed: Hydrologic Unit	908
Location	Harbison Avenue and University Avenue intersection west sidewalk east of CB Hair & Nails			Longitude	-117.04639	Hydrologic Area	908.2
				TB Page	1270-E4	Hydrologic Subarea (Optional)	908.22
Date	6/25/10	Time	9:15	Observer	LN/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/Barnacles ☐ Insect/Algae ☐ Insect/Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.1	NH_3-N (mg/L)	0.467	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.9	TURB (NTU)	6.91	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	3.98	MBAS (mg/L)	NA	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRM

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Total Coliforms / Enterococcus ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-002		Latitude	32.75498	Watershed	Hydrologic Unit	908
Location	Harbison Avenue and University Avenue intersection west sidewalk, east of CB Hair & Nails		Longitude	-117.04639		Hydrologic Area	908.2
			TB Page	1270-E4		Hydrologic Subarea (Optional)	908.22
Date	7/6/10	Time 14:30	Observer	LN/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.9	TURB (NTU)	~~2.32~~ NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	6.04	MBAS (mg/L)	NA	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	60	in
Depth	0.1	in
Velocity	1/1	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRH

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Total Coliforms/ Enterococcus

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-002-1			Latitude	32.76396	Watershed: Hydrologic Unit	908
Location	Between 4678 and 4688 Dwier Avenue, immediately east of alley			Longitude	-117.04128	Hydrologic Area	908.2
				TB Page	1270-F3	Hydrologic Subarea (Optional)	908.22
Date	7/6/10	Time	15:20	Observer	AK/LN/BN	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Do (mg/L)	NS		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	.25	in
Velocity	1/2	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

1C

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-003		Latitude	32.755336	Watershed	Hydrologic Unit	908
Location	Along Lowell Street, about halfway between University Avenue and Normal Avenue, north side of street		Longitude	-117.02855		Hydrologic Area	908.2
			TB Page	1270-G4		Hydrologic Subarea (Optional)	908.22
Date	6/23/10	Time 11:50	Observer	CG/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** ~~4~~ 6735-6738

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)	0.152	NO_3 (mg/L)	12.79	Ortho-PO_4 (mg/L)	0.184
pH (pH units)	8.1	TURB (NTU)	0.60	NO_3-N (mg/L)	2.89	Ortho-PO_4-P (mg/L)	0.060
COND (mS/cm)	1.85	MBAS (mg/L)	0.13	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	9	in
Depth	1	in
Velocity	3/5	ft/sec
Flow	17	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 908-UNI-003 DATE: 6/23/10

OBSERVER: CG/AK TIME: 11:50

LOCATION: Along Lowell Street, about halfway between University Avenue and Normal Avenue, north side of street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Total Coliforms ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UU1-003		Latitude	32.75536	Watershed	Hydrologic Unit	908
Location	Along Lowell street, about halfway between University Avenue and Normal Avenue, north side of street, 4291 Lowell Street Driveway		Longitude	-117.03528		Hydrologic Area	908.2
			TB Page	1270-G4		Hydrologic Subarea (Optional)	908.22
Date	7/6/10	Time 15:45	Observer	AK/LN/BN		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.7	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.4	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	2.11	MBAS (mg/L)	NA	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.5	in
Velocity	1/1	ft/sec
Flow	9	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRM

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Total Coliforms

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	908-UNI-003-1	Latitude	32.75529	Watershed	Hydrologic Unit	908
Location	Normal Avenue, at the north corner of the Normal Avenue and Olive Avenue intersection	Longitude	-117.0339		Hydrologic Area	908.2
		TB Page	1270-G4		Hydrologic Subarea (Optional)	908.22
Date	7/6/10 Time 16:05	Observer	AK/LW/BN		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6945- 6946

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Do (mg/L)	NS		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	5	in
Depth	0.25	in
Velocity	1/1	ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash - food packaging

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRM

San Diego Stormwater Copermittees

City of Carlsbad
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Total Coliform

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UN1-003-2	Latitude	32.75461	Watershed	Hydrologic Unit	908
Location	In the sidewalk on the north east corner of Normal Avenue and Lowell Street	Longitude	-117.03462		Hydrologic Area	908.2
		TB Page	1270-G4		Hydrologic Subarea (Optional)	908.22
Date	7/6/10 Time 16:25	Observer	LN/AK/BN		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6948-6958

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Others	NS		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.25	in
Velocity	2/1	ft/sec
Flow	9	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-004		Latitude	32.76308	Watershed	Hydrologic Unit	908
Location	In front of 7851 University Avenue along the south side of the street		Longitude	-117.02855		Hydrologic Area	908.2
			TB Page	1270-H5		Hydrologic Subarea (Optional)	908.22
Date	6/23/10	Time 12:40	Observer	CG/AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** ~~8-10~~ 6739-6741

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.1	NH_3-N (mg/L)	0.174	NO_3 (mg/L)	7.291	Ortho-PO_4 (mg/L)	0.533
pH (pH units)	7.6	TURB (NTU)	1.41	NO_3-N (mg/L)	1.648	Ortho-PO_4-P (mg/L)	0.174
COND (mS/cm)	2.48	MBAS (mg/L)	0.25	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	8	in
Depth	.25	in
Velocity	3/2	ft/sec
Flow	9	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 908-UN1-004 DATE: 6/23/10

OBSERVER: CG / AK TIME: 12:40

LOCATION: In front of 7851 University Avenue along the south side of the street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LC

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UWI-005		Latitude	32.75787	Watershed	Hydrologic Unit	908
Location	Rolando Park, in gated area by left field of baseball field		Longitude	-117.05260		Hydrologic Area	908.2
			TB Page	1270-E4		Hydrologic Subarea (Optional)	908.22
Date	6/23/10	Time 10:35	Observer	FT / AK		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other NSA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other NSA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other NSA
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other NSA
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☒ Yes ☐ No **Photo #** 6758-6759

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS	Do (mg/L)	NS		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 908-UNT-005 DATE: 6-24-10

OBSERVER: IT/AK TIME: 10:35

LOCATION: Rolando Park, in gated area ~~between~~ by left field of baseball field

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Ln

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	908-UNI-14A			Latitude	32.75438	Watershed: Hydrologic Unit	908
Location	Boulevard Drive between Harbinson Avenue and Massachusetts Avenue across from 7105-7033			Longitude	-117.04535	Hydrologic Area	908.2
				TB Page	1270 - F4	Hydrologic Subarea (Optional)	908.22
Date	6/28/10	Time	12:05	Observer	LN/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ ~~Sediment~~/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6801-6803

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.1	NH_3-N (mg/L)	0.205	NO_3 (mg/L)	13.93	Ortho-PO_4 (mg/L)	0.210
pH (pH units)	7.9	TURB (NTU)	0.22	NO_3-N (mg/L)	3.189	Ortho-PO_4-P (mg/L)	0.0685
COND (mS/cm)	3.16	MBAS (mg/L)	0.50	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	18	in
Depth	0.75	in
Velocity	2/3	ft/sec
Flow	23	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 908-UNI-14A DATE: 6/28/10

OBSERVER: LN/AK TIME: 12:05

LOCATION: Boulevard Drive between Harbinson Avenue and Massachusetts Avenue, across from 7105-7033

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): N/A

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 12

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of La Mesa

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	909-SPR-001			Latitude	32.75483	Watershed: Hydrologic Unit	909
Location	Spring Street and Spring Gardens Road intersection, inside La Mesa Seventh Day Adventist Church lot			Longitude	-117.00118	Hydrologic Area	909.1
				TB Page	1270-J4	Hydrologic Subarea (Optional)	909.12
Date	6/28/10	Time	10:35	Observer	LN/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray			☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive				☐ Other
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6796-6797

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	19.2	NH_3-N (mg/L)	0.173	NO_3 (mg/L)	10.20	Ortho-PO_4 (mg/L)	0.607
pH (pH units)	7.8	TURB (NTU)	0.58	NO_3-N (mg/L)	2.309	Ortho-PO_4-P (mg/L)	0.198
COND (mS/cm)	2.36	MBAS (mg/L)	0.25	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	40	in
Depth	.1	in
Velocity	5/3	ft/sec
Flow	21	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 901-SPR-001 DATE: 6/28/10

OBSERVER: LN/AK TIME: 10:35

LOCATION: Spring Street and Spring Gardens Road intersection inside La Mesa Seventh Day Adventist Church lot.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 12

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of La Mesa
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	909-SPR-002			Latitude	32.76324	Watershed: Hydrologic Unit	909
Location	In front of 4621 Bancroft Drive, just south of Golondrina Drive			Longitude	-117.00118	Hydrologic Area	909.1
				TB Page	1271-B3	Hydrologic Subarea (Optional)	909.12
Date	6/25/10	Time	1500	Observer	LN/AK	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/~~Gravel~~	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 6788 - 6792

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	0.286	NO_3 (mg/L)	26.45	Ortho-PO_4 (mg/L)	0.446
pH (pH units)	8.1	TURB (NTU)	3.48	NO_3-N (mg/L)	5.989	Ortho-PO_4-P (mg/L)	0.145
COND (mS/cm)	2.20	MBAS (mg/L)	0.25	Do (mg/L)	NA		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	.2	in
Velocity	5.3	ft/sec
Flow	6	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 909-SPR-002 DATE: 6-25-10

OBSERVER: LN / AK TIME: 1500

LOCATION: In front of 4621 Bancroft Drive, just south of Golondrina Drive

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
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Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Attachment 1

Historical Data Graphs:
San Diego River Watershed

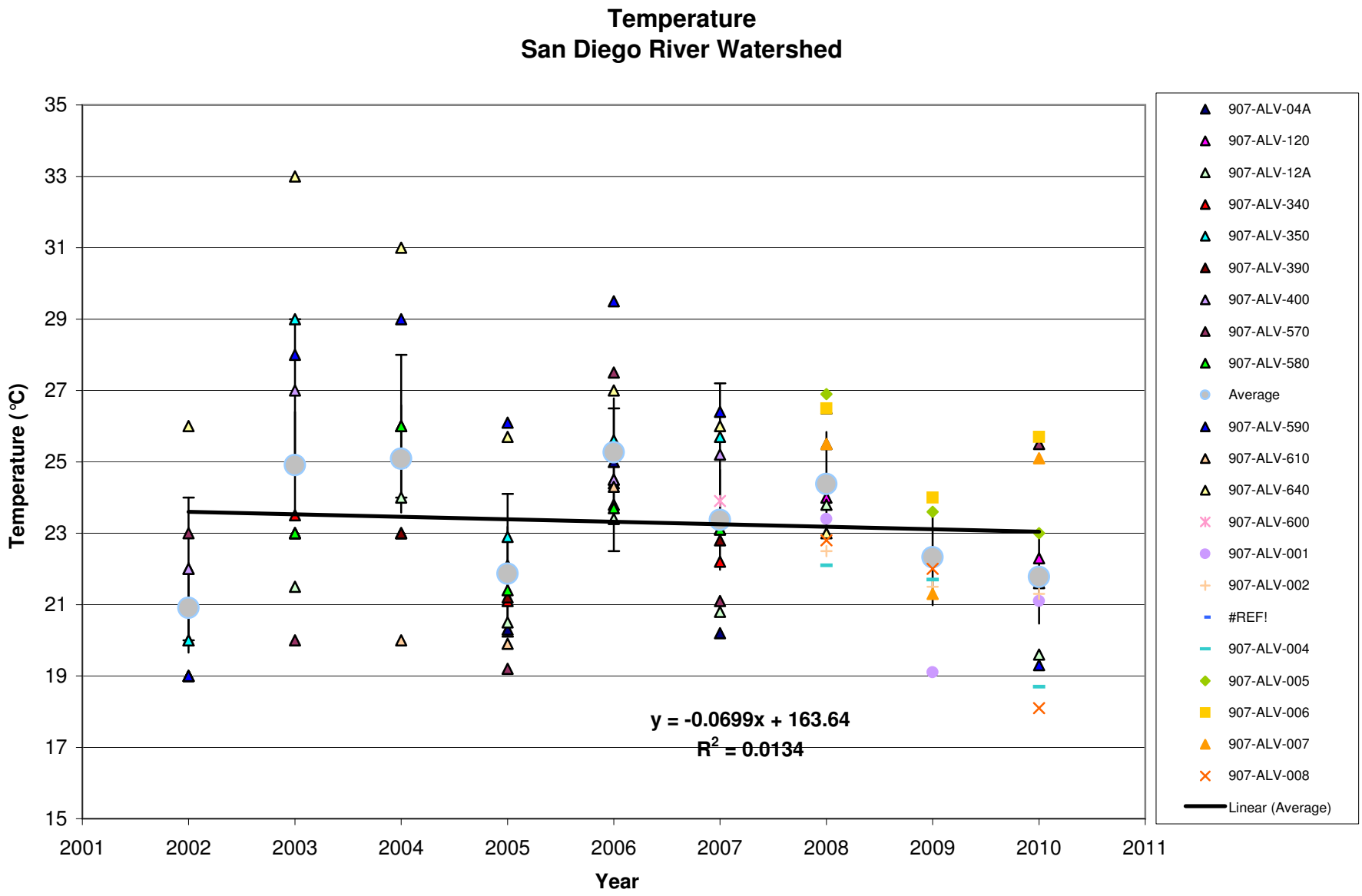
Temperature
San Diego River Watershed
Temperature (°C)
35
33
31
29
27
25
23
21
19
17
15
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = -0.0699x + 163.64
R2 = 0.0134
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
Average
907-ALV-590
907-ALV-610
907-ALV-640
907-ALV-600
907-ALV-001
907-ALV-002
#REF!
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

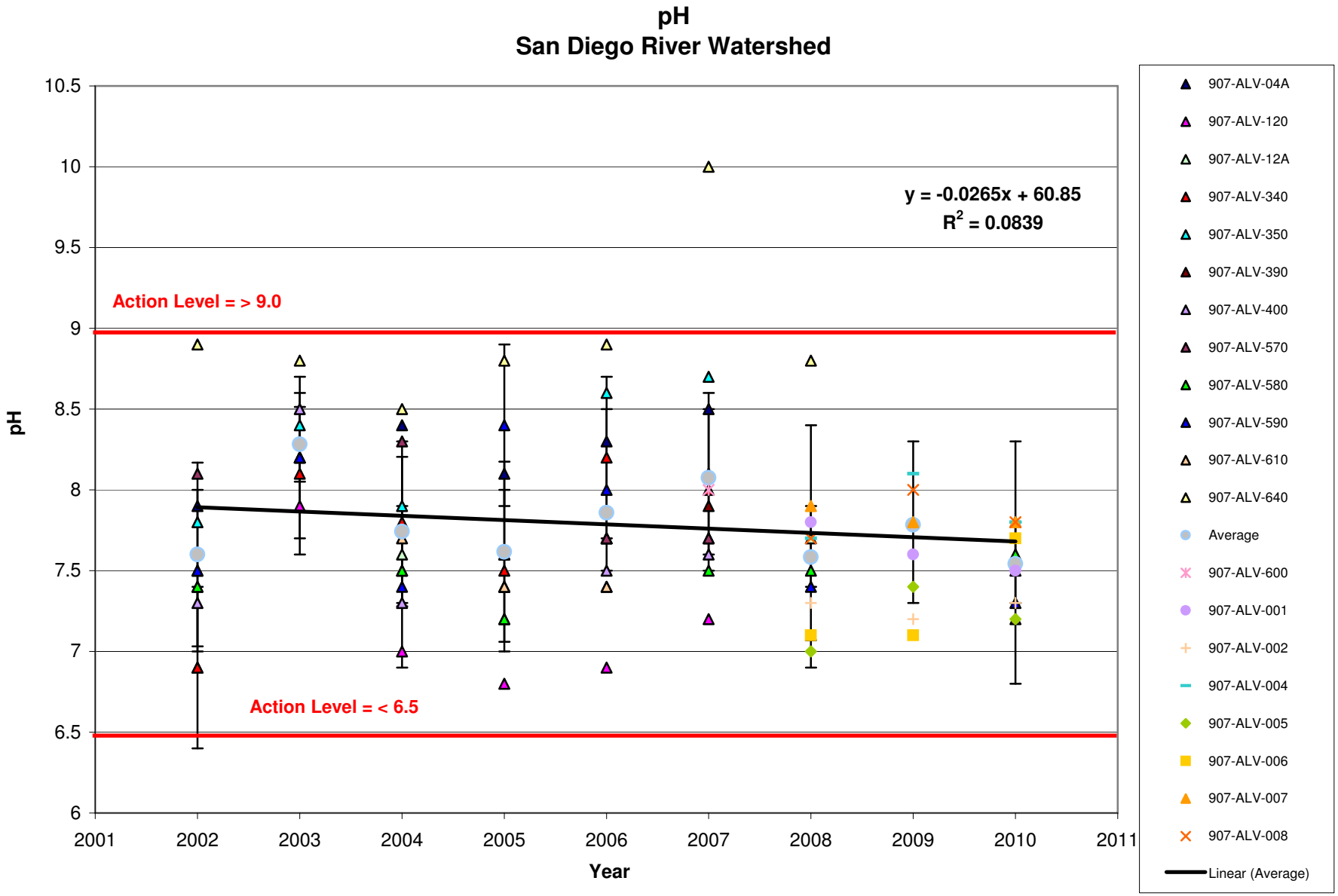
pH
San Diego River Watershed
y = -0.0265x + 60.85
R2 = 0.0839
Action Level = > 9.0
Action Level = < 6.5
pH
Year
10.5
10
9.5
9
8.5
8
7.5
7
6.5
6
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

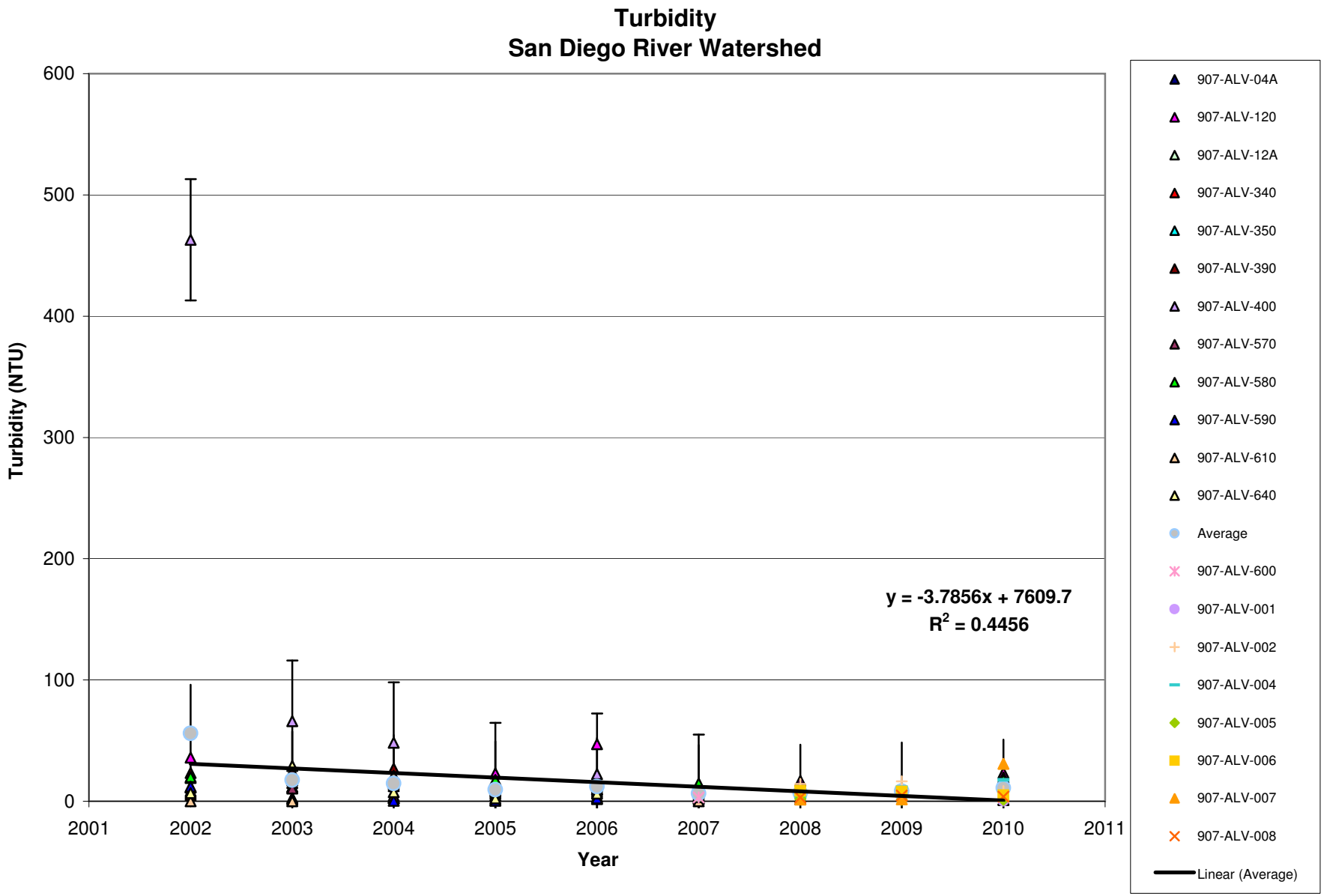
Turbidity
San Diego River Watershed
Turbidity (NTU)
600
500
400
300
200
100
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = -3.7856x + 7609.7
R2 = 0.4456
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

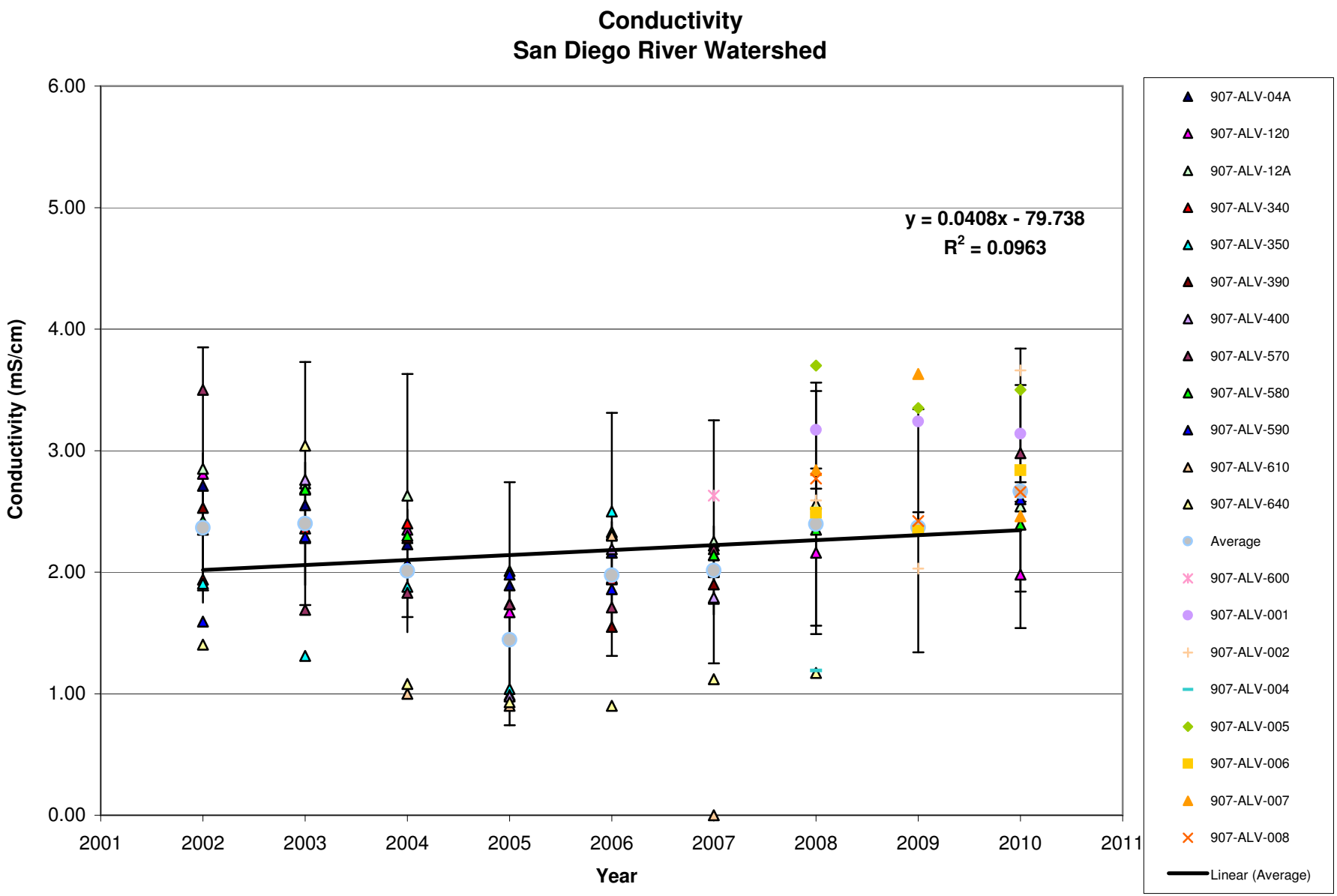
Conductivity
San Diego River Watershed
Conductivity (mS/cm)
6.00
5.00
4.00
3.00
2.00
1.00
0.00
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = 0.0408x - 79.738
R2 = 0.0963
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

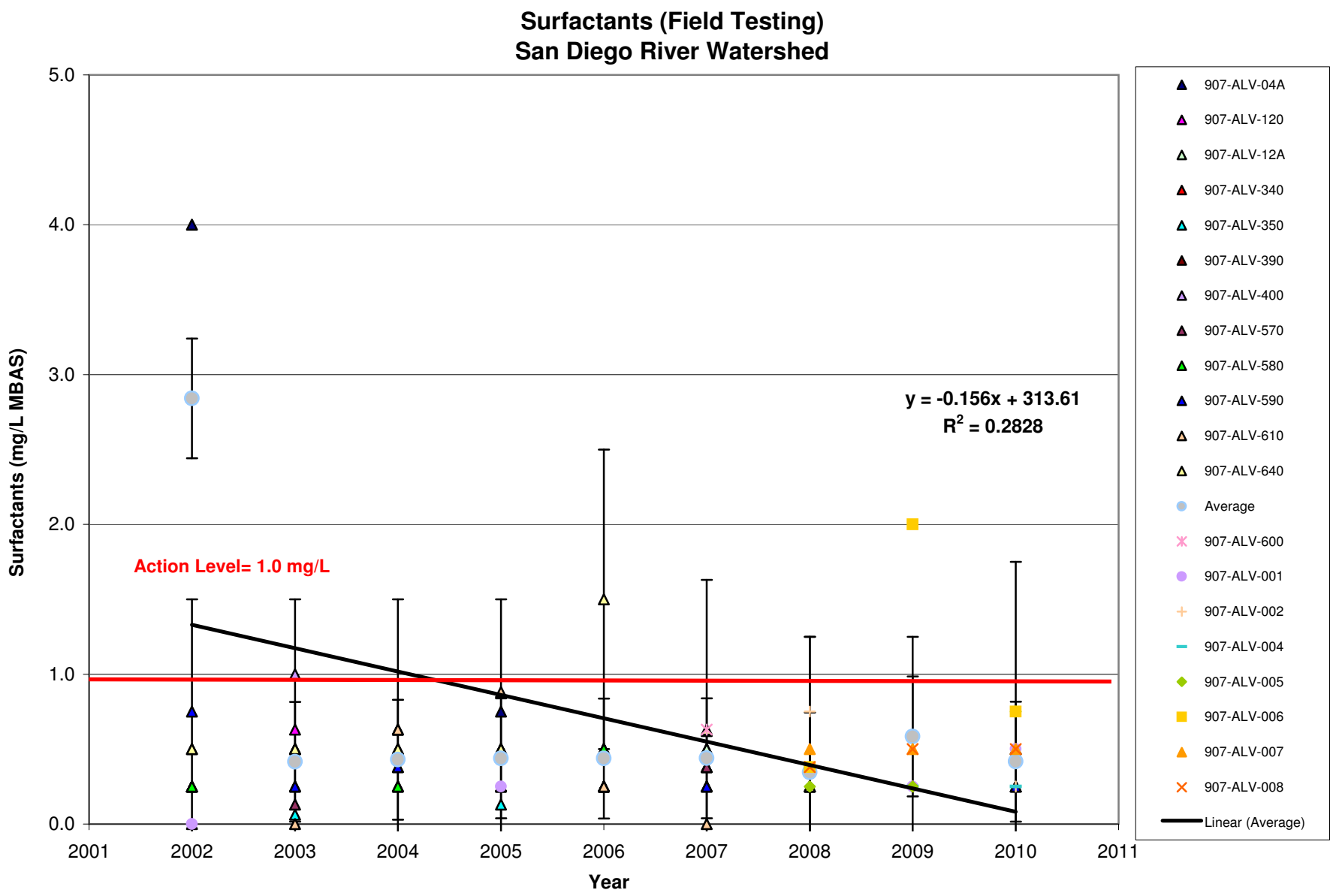
Surfactants (Field Testing)
San Diego River Watershed
Surfactants (mg/L MBAS)
5.0
4.0
3.0
2.0
1.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = -0.156x + 313.61
R2 = 0.2828
Action Level= 1.0 mg/L
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

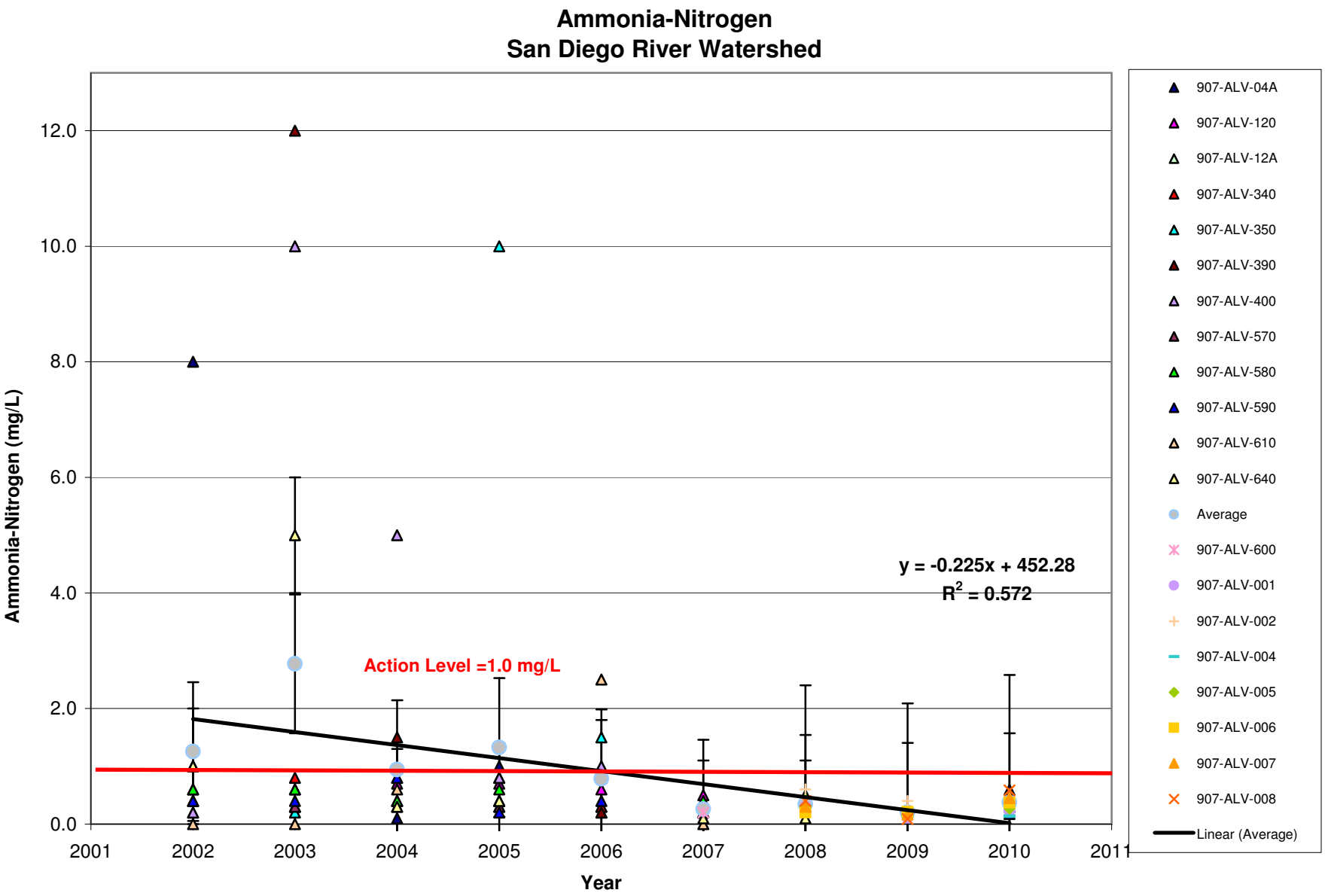
Ammonia-Nitrogen
San Diego River Watershed
Ammonia-Nitrogen (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = -0.225x + 452.28
R2 = 0.572
Action Level =1.0 mg/L
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

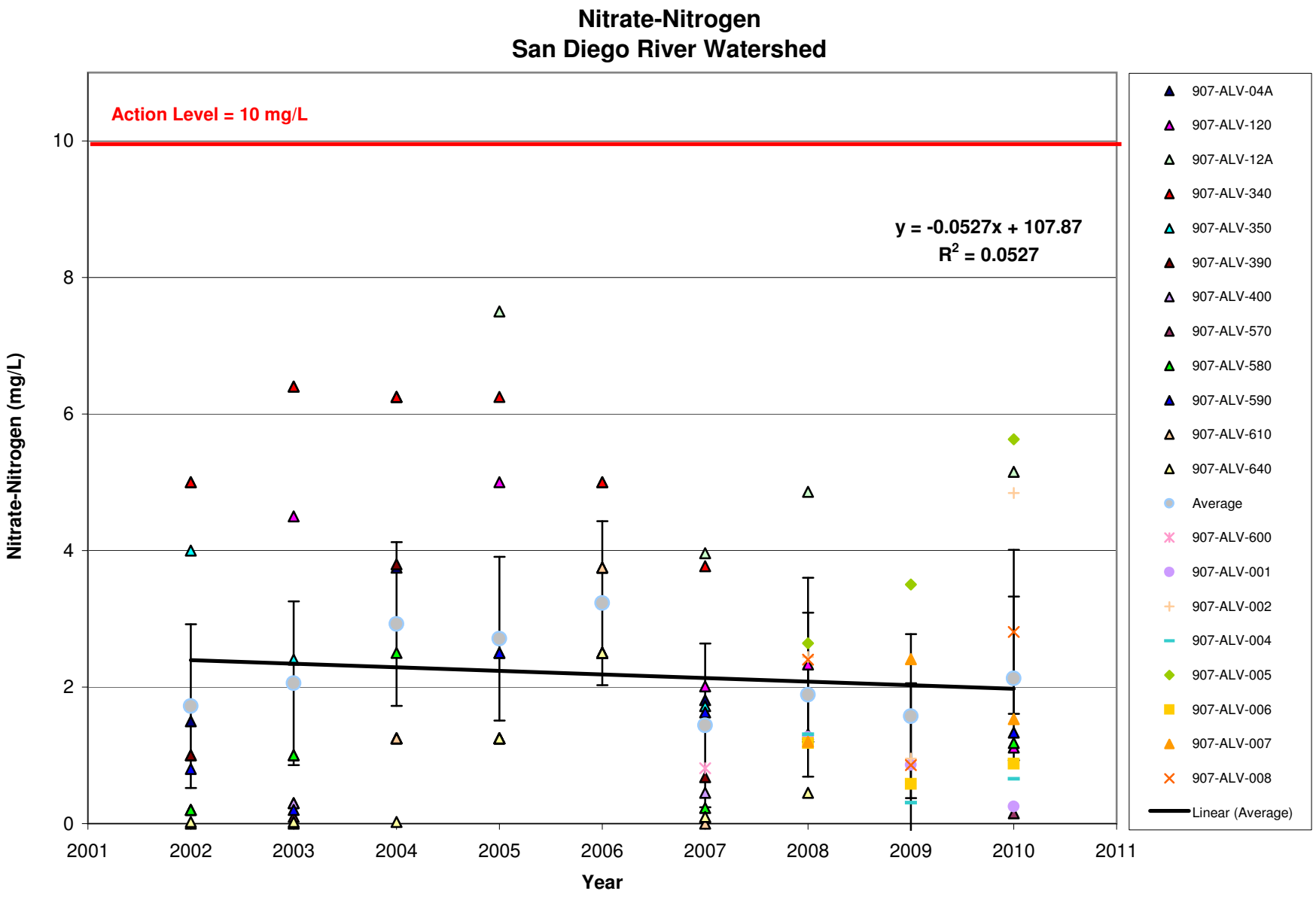
Nitrate-Nitrogen
San Diego River Watershed
Action Level = 10 mg/L
y = -0.0527x + 107.87
R2 = 0.0527
Nitrate-Nitrogen (mg/L)
Year
0
2
4
6
8
10
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

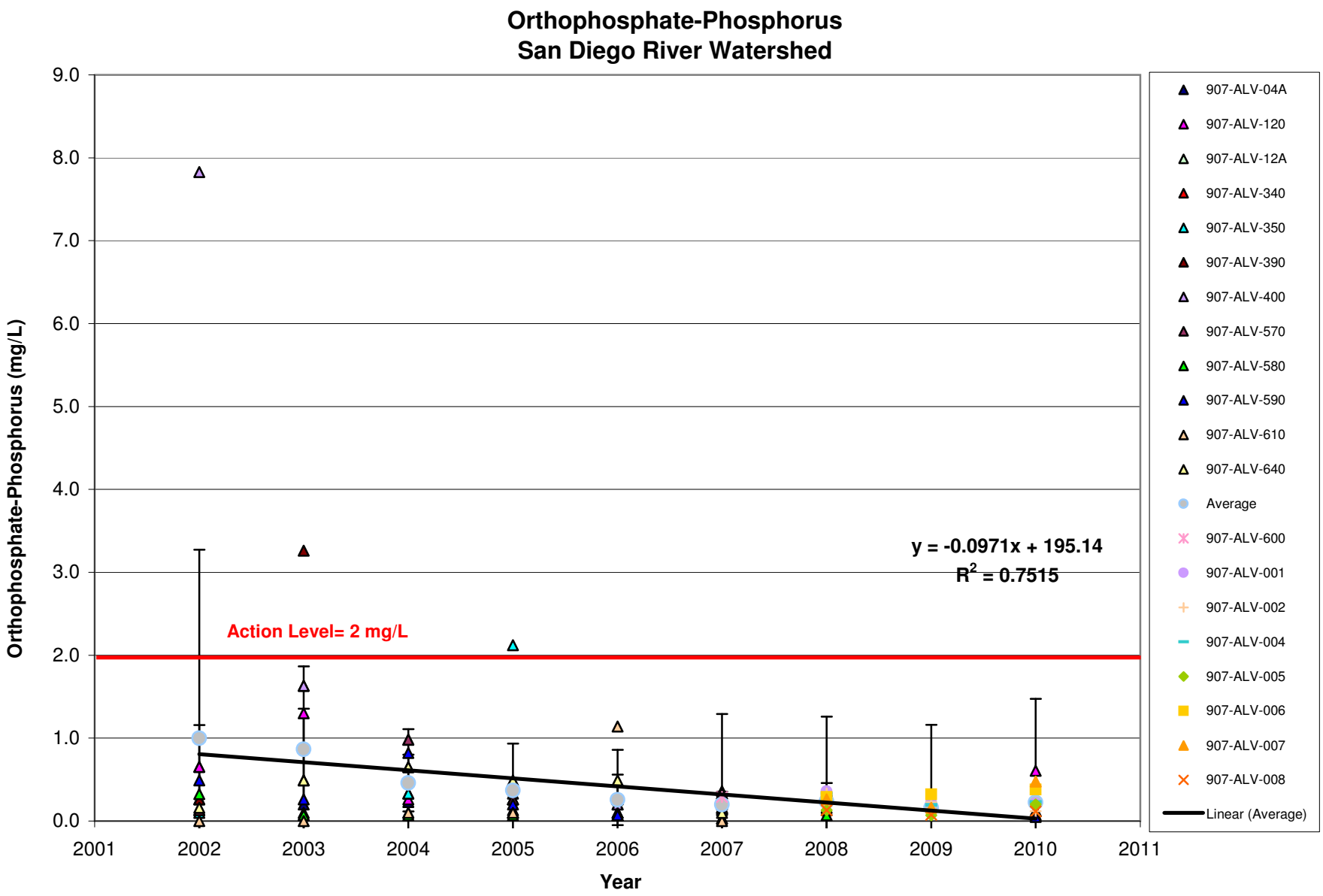
Orthophosphate-Phosphorus
San Diego River Watershed
Orthophosphate-Phosphorus (mg/L)
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
Action Level= 2 mg/L
y = -0.0971x + 195.14
R2 = 0.7515
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-340
907-ALV-350
907-ALV-390
907-ALV-400
907-ALV-570
907-ALV-580
907-ALV-590
907-ALV-610
907-ALV-640
Average
907-ALV-600
907-ALV-001
907-ALV-002
907-ALV-004
907-ALV-005
907-ALV-006
907-ALV-007
907-ALV-008
Linear (Average)

Surfactants (Laboratory Analysis)
San Diego River Watershed

Note: All "nd" values have been plotted as half the reporting limit of 0.5 mg/L.

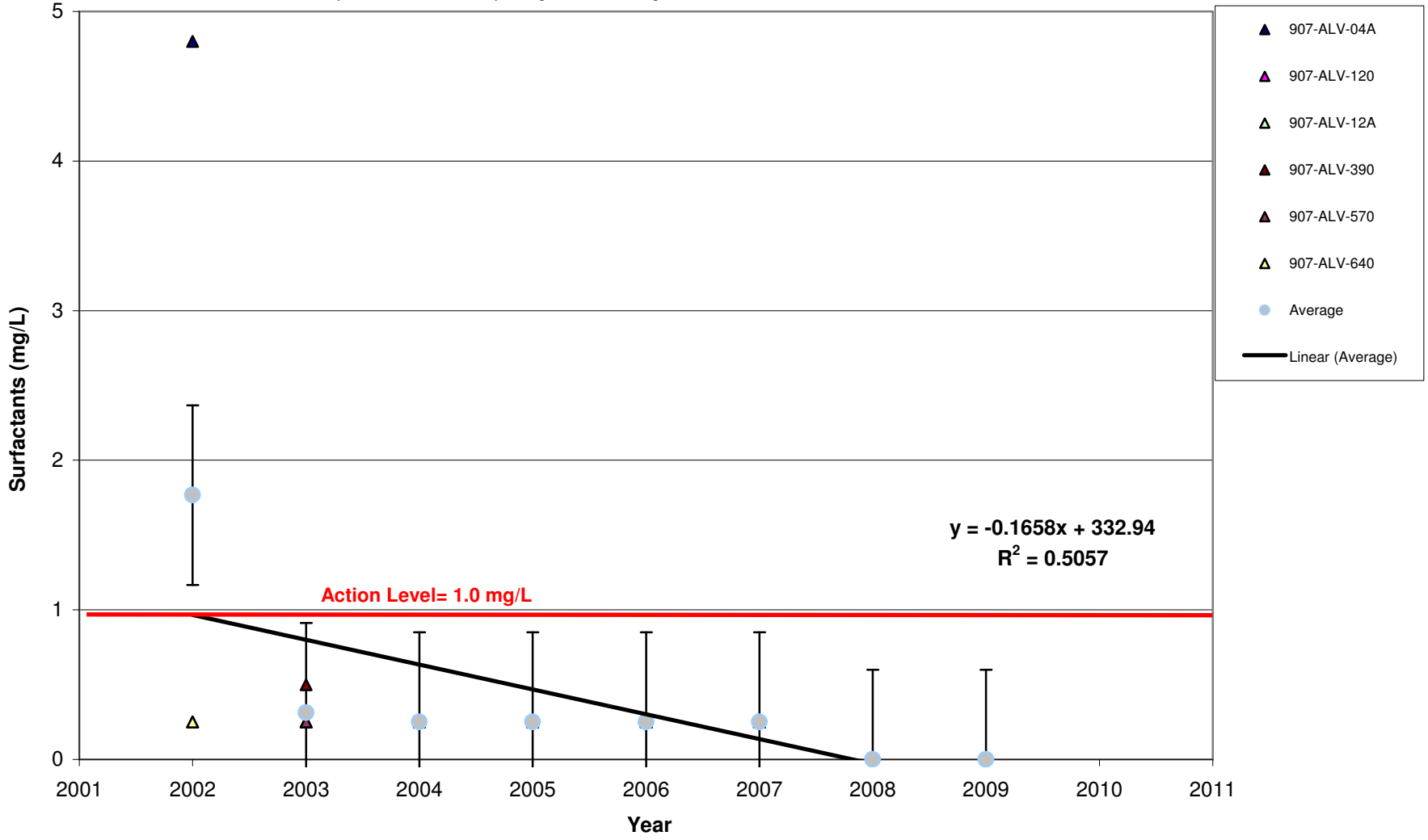

Oil & Grease
San Diego River Watershed

Note: All "nd" values have been plotted with a value of half the reporting or detection limit: 2002-2004 reporting limit = 0.5 mg/L, 2005-2009 reporting limit = 5 mg/L, 2010 detection limit = 5 mg/L

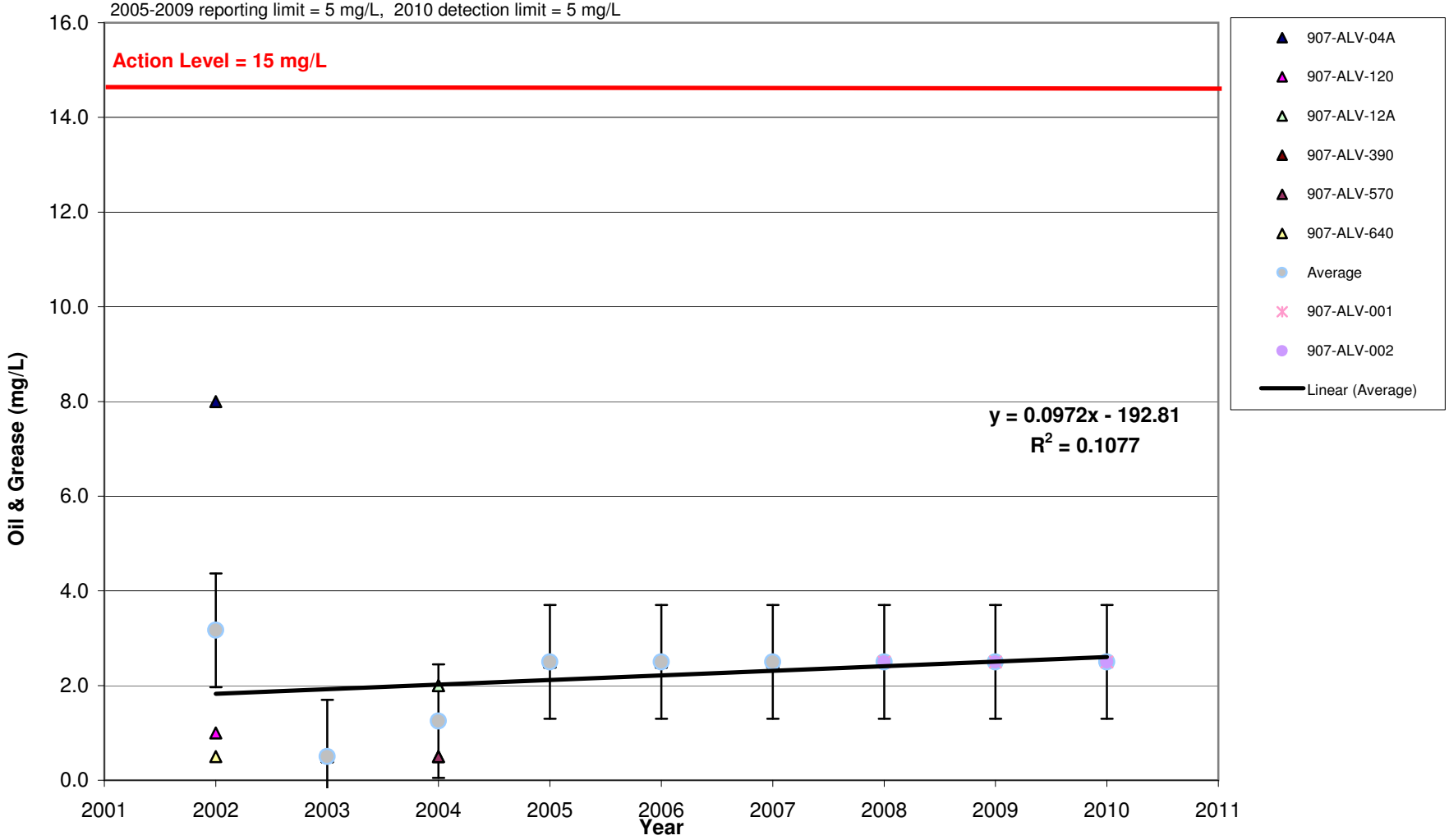

Dissolved Cadmium
San Diego River Watershed

Note: No detectable levels of dissolved cadmium have been measured. All "nd" values have been plotted as half the reporting or detection limit; 2002-2008 reporting limit = 0.005 mg/L, 2009 reporting limit = 0.001 mg/L, 2010 detection limit = 0.0002 mg/L

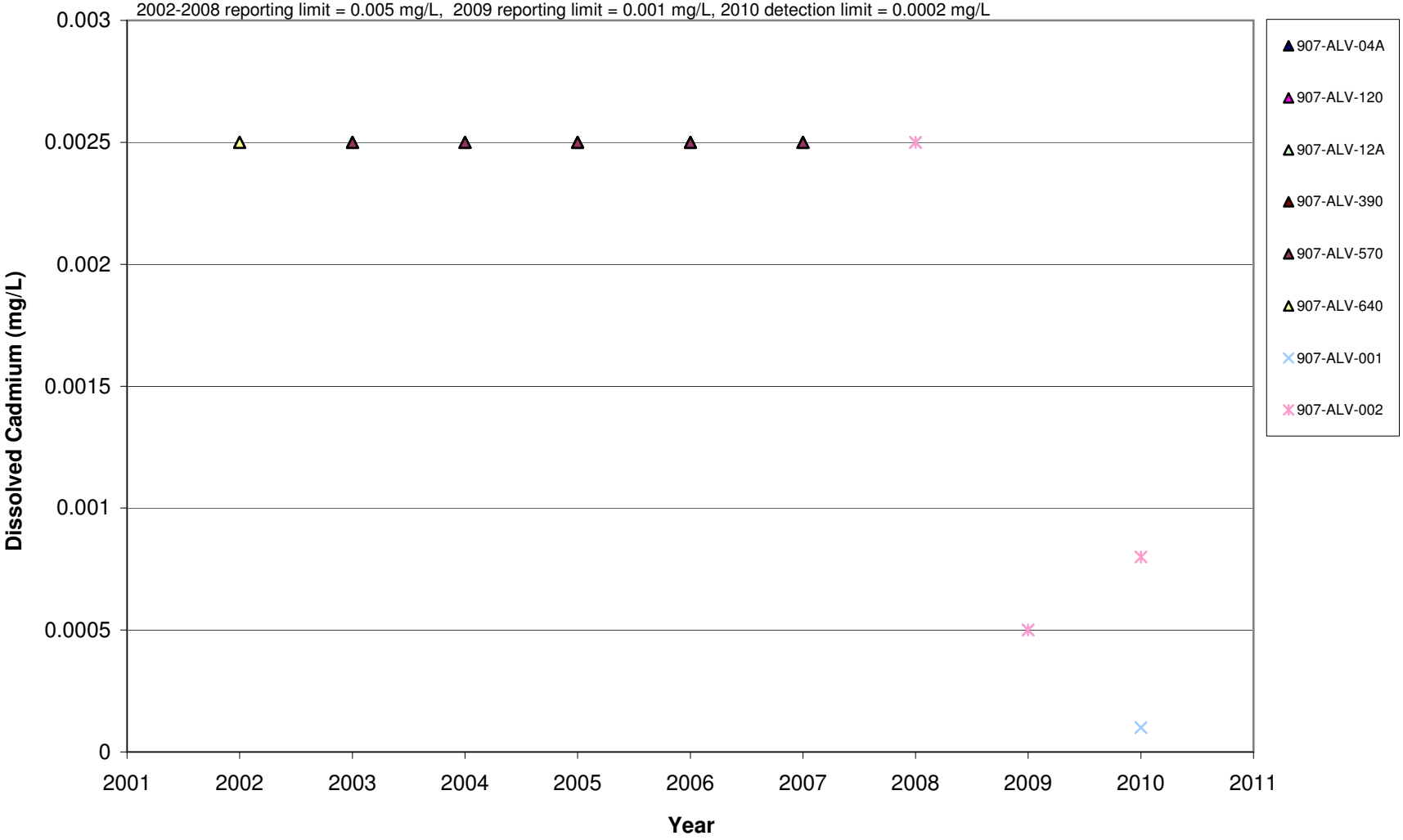

Dissolved Copper
San Diego River Watershed

Note: All "nd" values have been plotted as half the reporting or detection limit: 2002-2008 reporting limit = 0.005 mg/L, 2009 reporting limit = 0.001 mg/L, 2010 detection limit = 0.001 mg/L

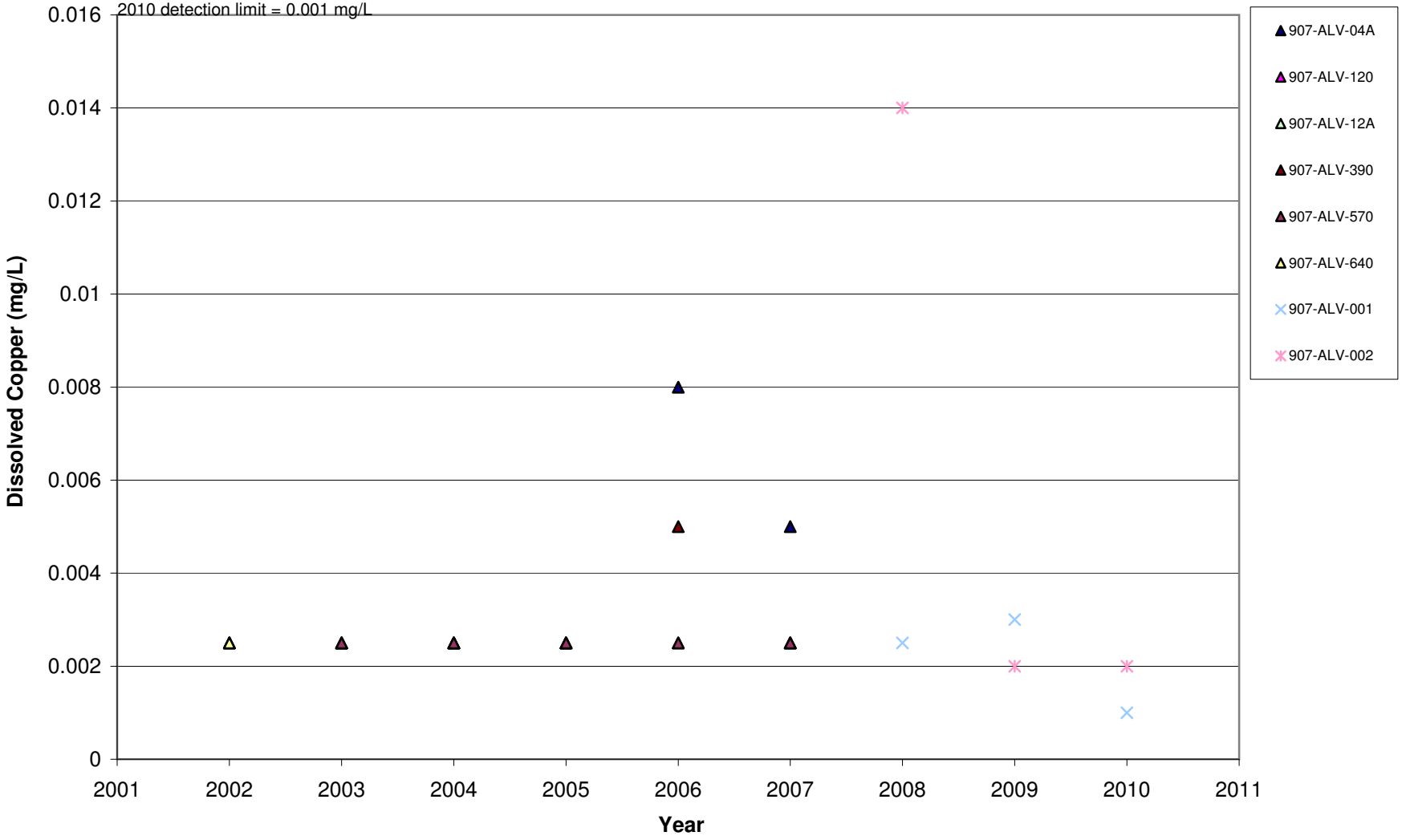

Dissolved Lead
San Diego River Watershed

Note: No detectable levels of dissolved lead have been measured. All "nd" values have been plotted as half the reporting or detection limit:
2002-2009 reporting limit = 0.001 mg/L, 2010 detection limit = 0.001 mg/L

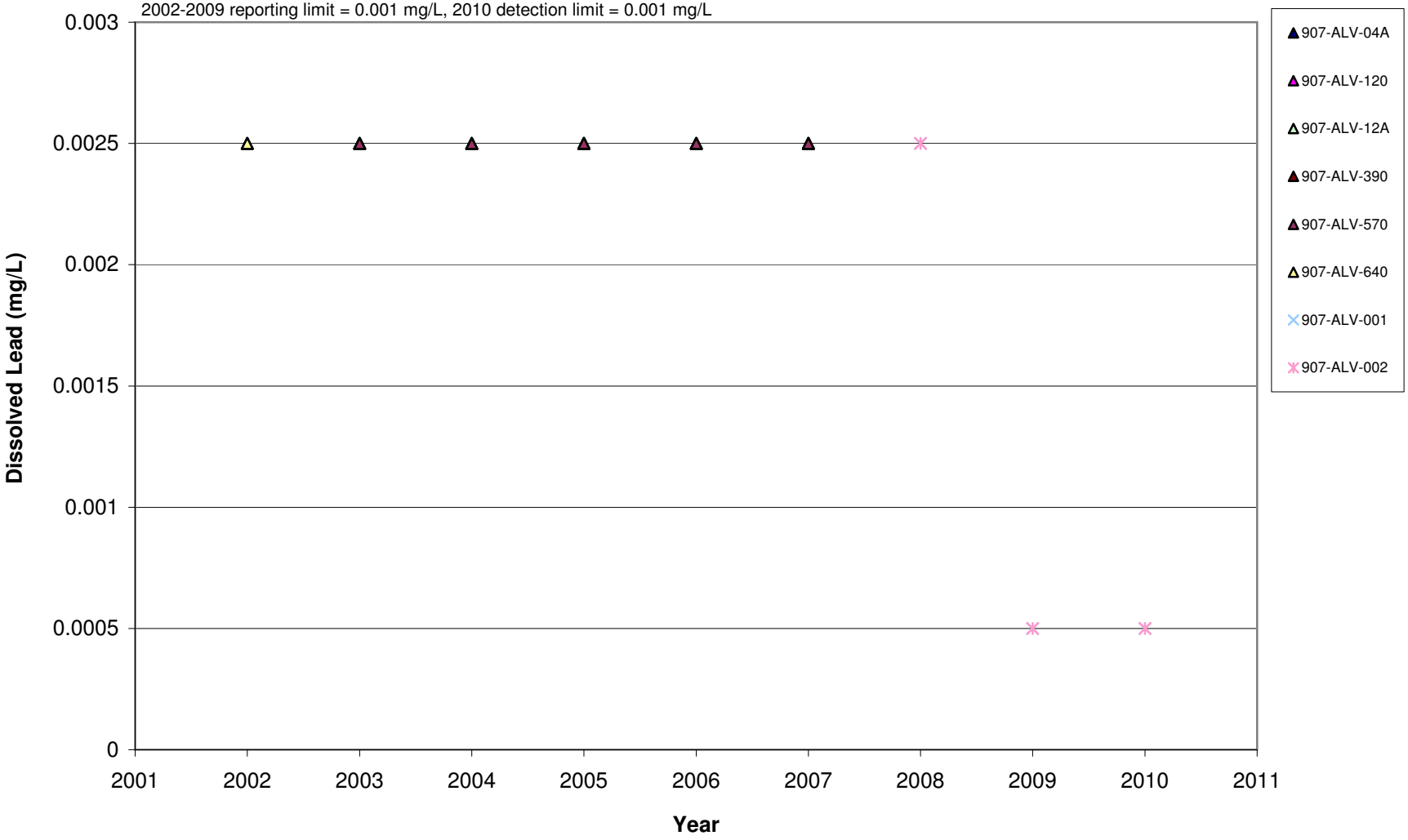

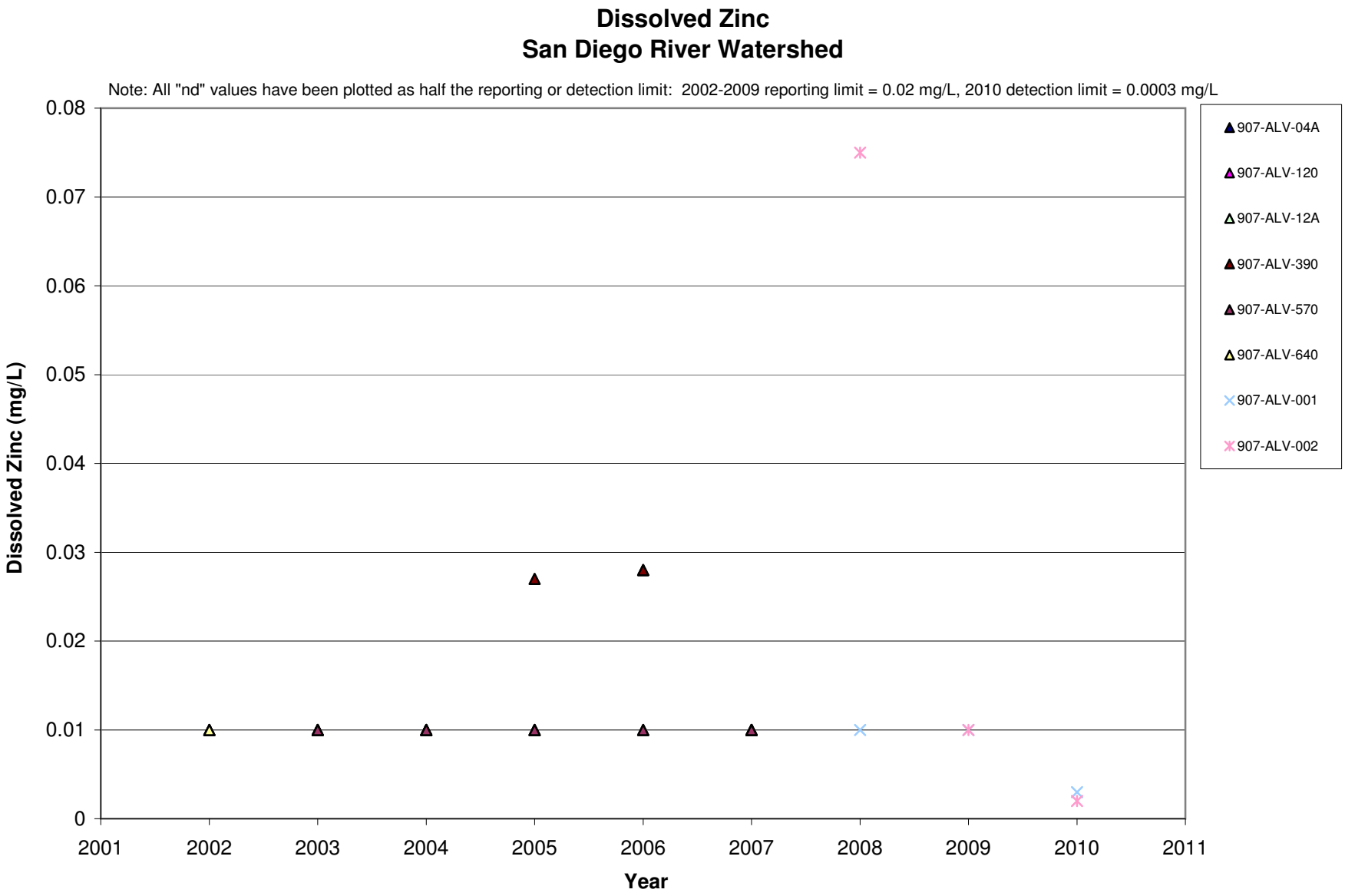
Dissolved Zinc
San Diego River Watershed
Note: All "nd" values have been plotted as half the reporting or detection limit: 2002-2009 reporting limit = 0.02 mg/L, 2010 detection limit = 0.0003 mg/L
Dissolved Zinc (mg/L)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-390
907-ALV-570
907-ALV-640
907-ALV-001
907-ALV-002

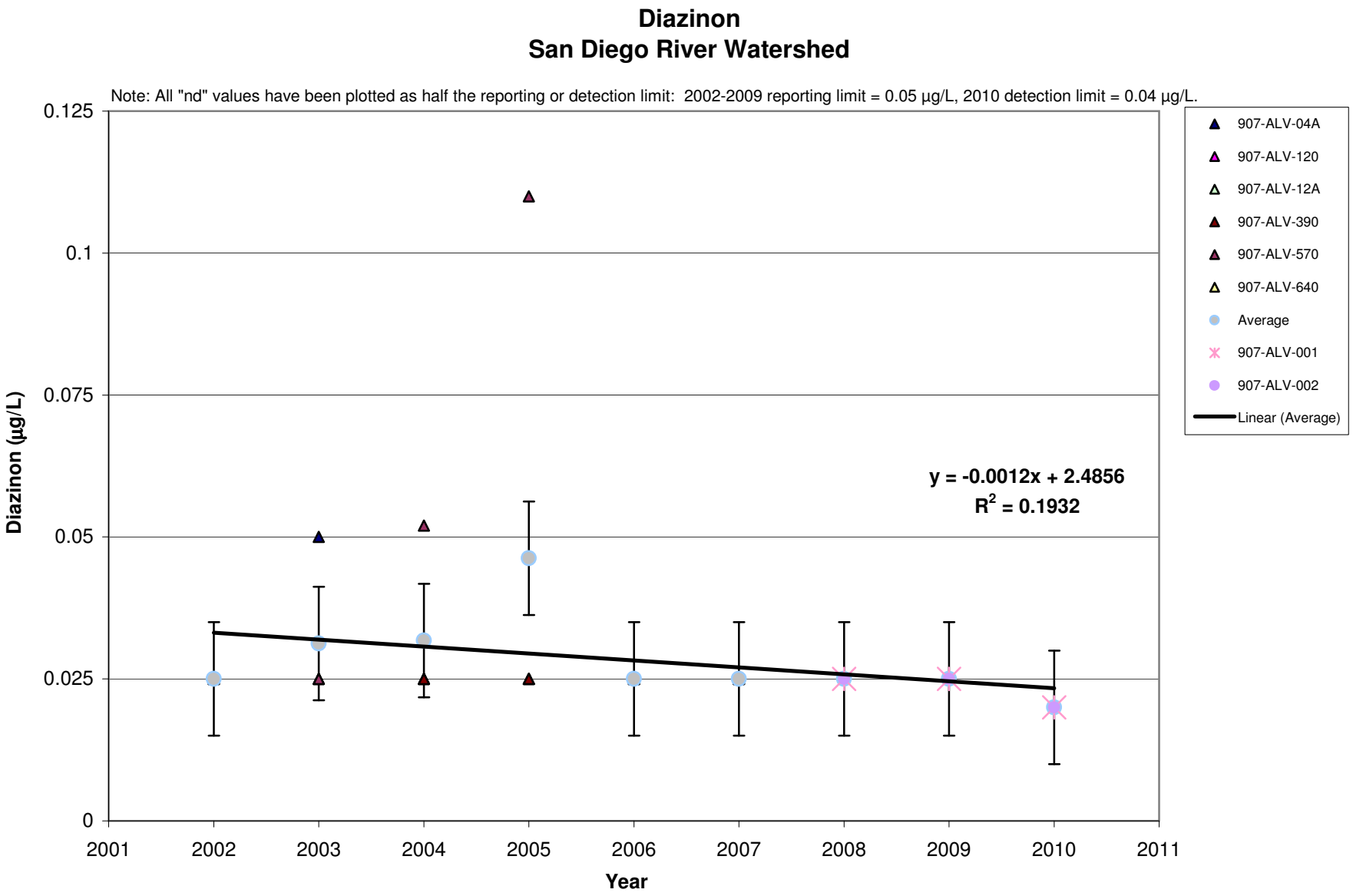
Diazinon
San Diego River Watershed
Note: All "nd" values have been plotted as half the reporting or detection limit: 2002-2009 reporting limit = 0.05 µg/L, 2010 detection limit = 0.04 µg/L.
Diazinon (µg/L)
0.125
0.1
0.075
0.05
0.025
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = -0.0012x + 2.4856
R2 = 0.1932
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-390
907-ALV-570
907-ALV-640
Average
907-ALV-001
907-ALV-002
Linear (Average)

Chlorpyrifos
San Diego River Watershed

Note: No detectable levels of chlorpyrifos have been measured. All "nd" values have been plotted as half the reporting or detection limit: 2002-2009 reporting limit = 0.05 µg/L; 2010 detection limit = 0.04 µg/L.

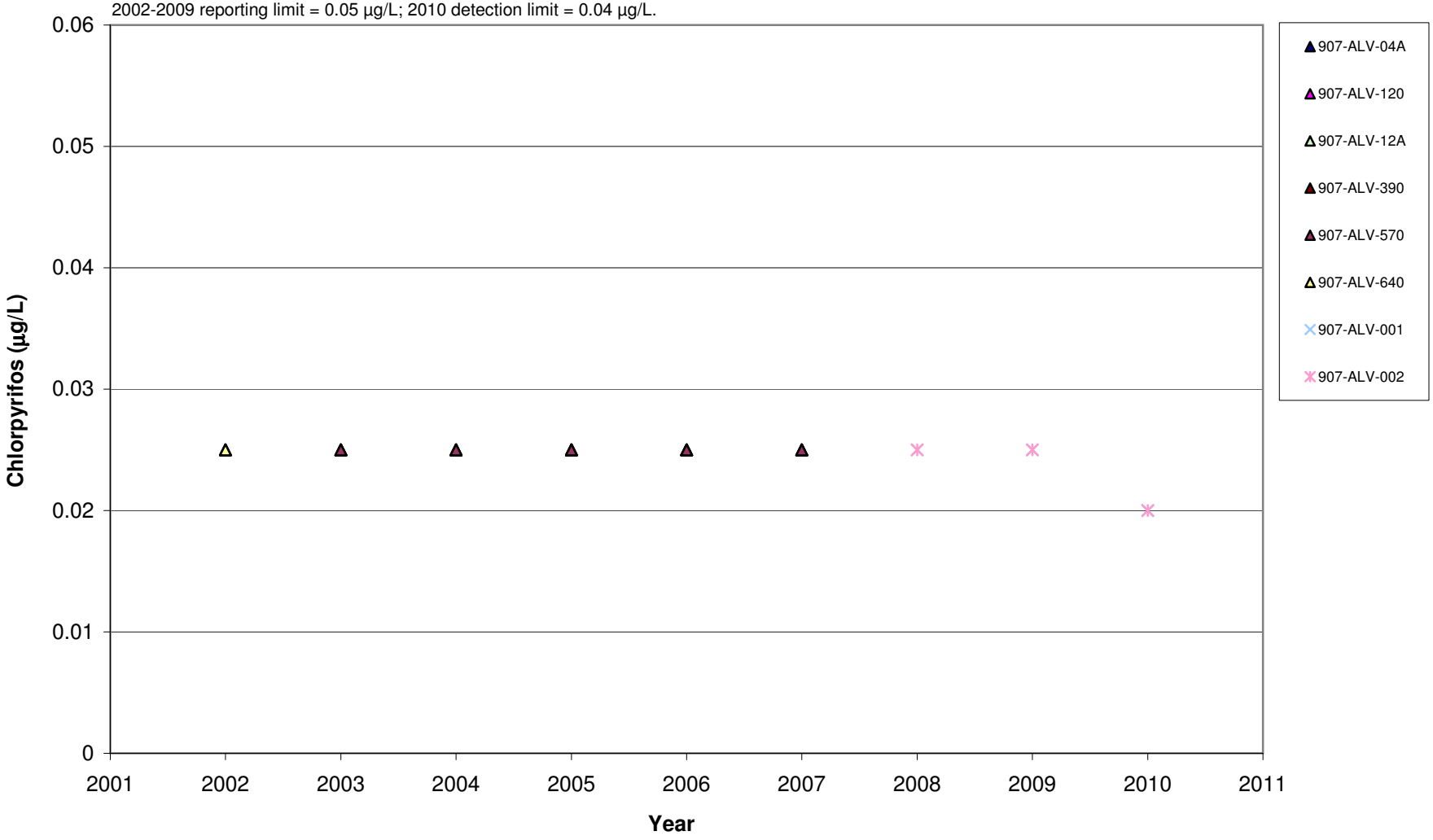

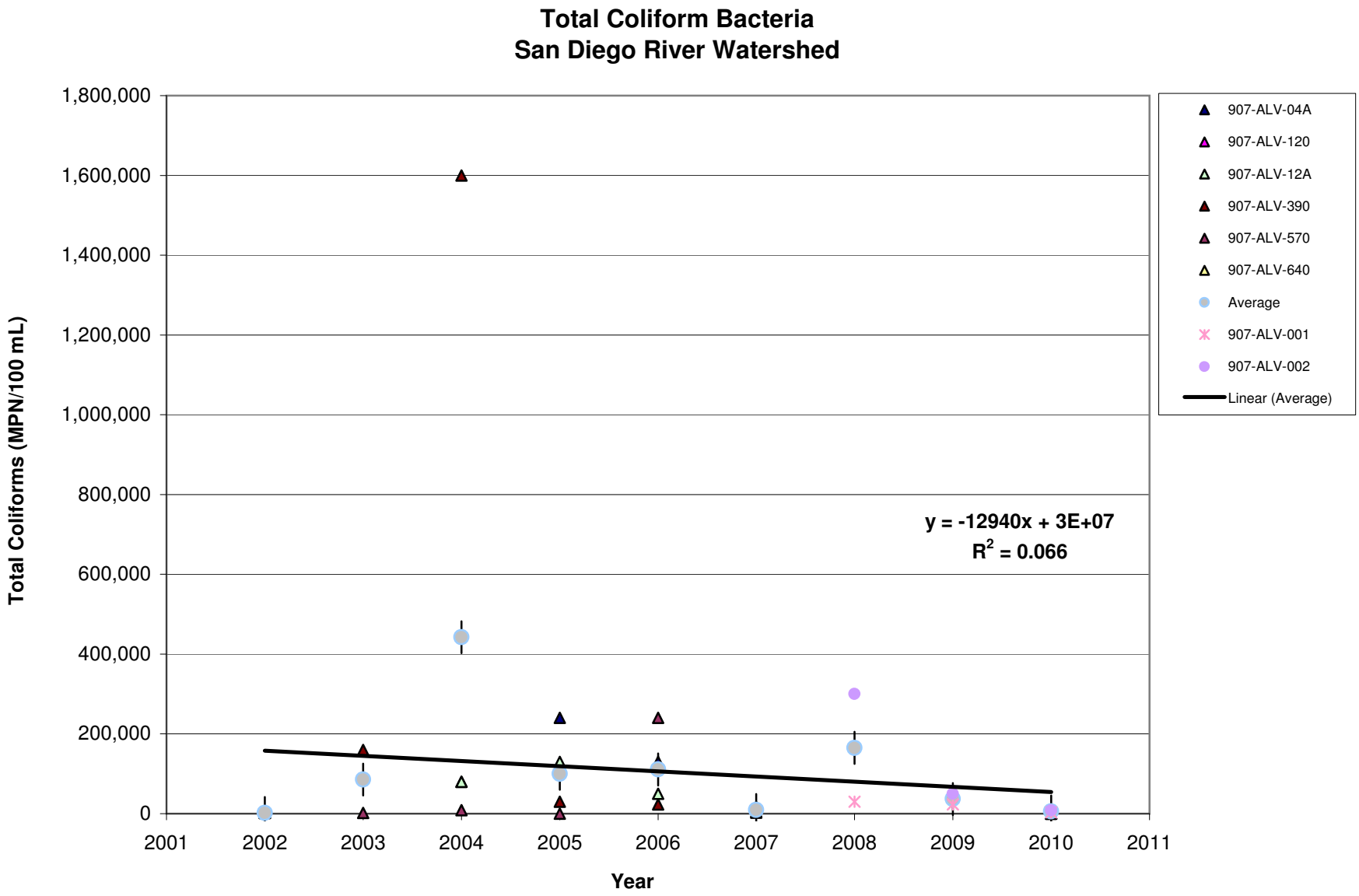
Total Coliform Bacteria
San Diego River Watershed
Total Coliforms (MPN/100 mL)
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = -12940x + 3E+07
R2 = 0.066
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-390
907-ALV-570
907-ALV-640
Average
907-ALV-001
907-ALV-002
Linear (Average)

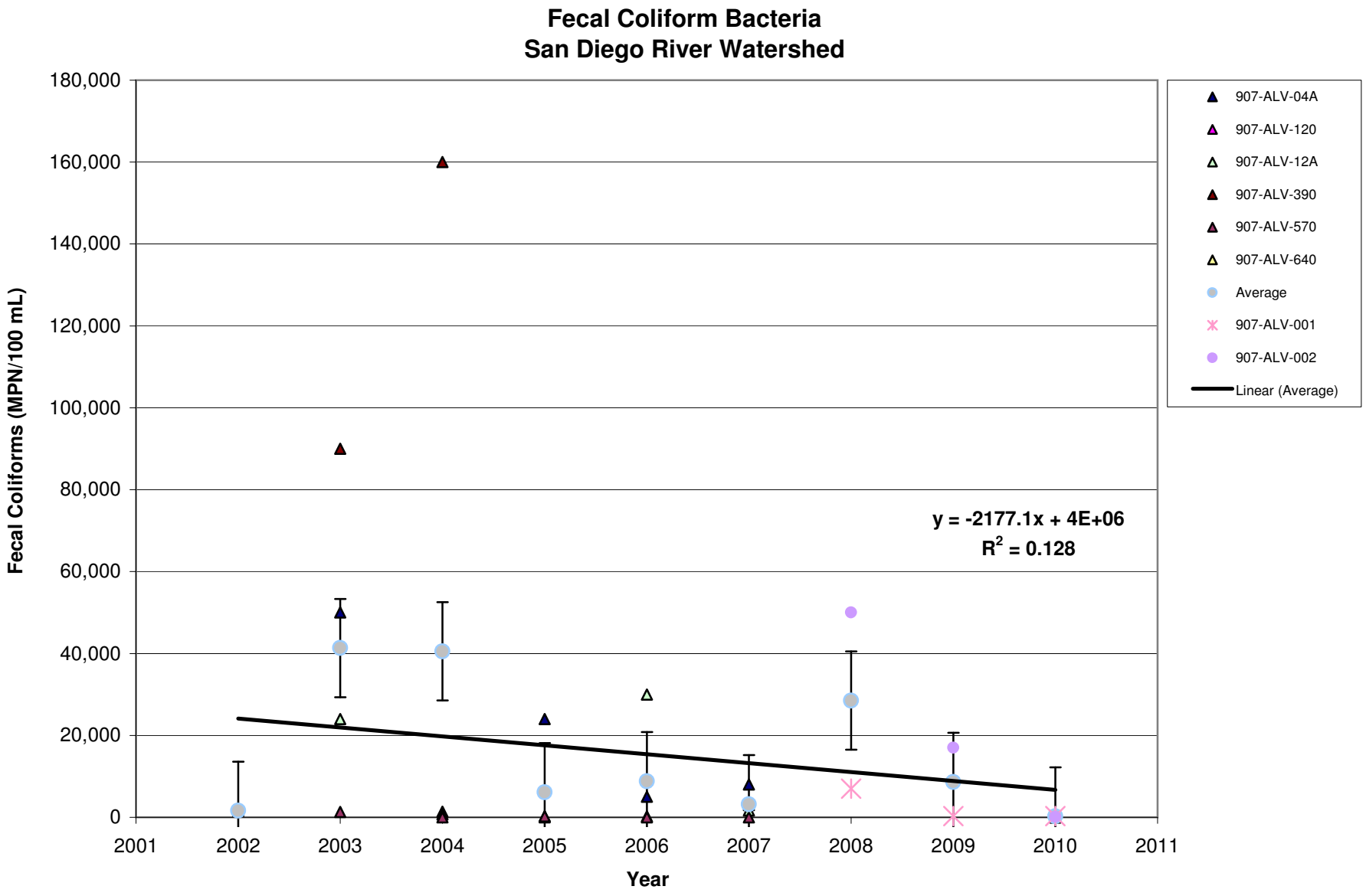
Fecal Coliform Bacteria
San Diego River Watershed
Fecal Coliforms (MPN/100 mL)
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = -2177.1x + 4E+06
R2 = 0.128
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-390
907-ALV-570
907-ALV-640
Average
907-ALV-001
907-ALV-002
Linear (Average)

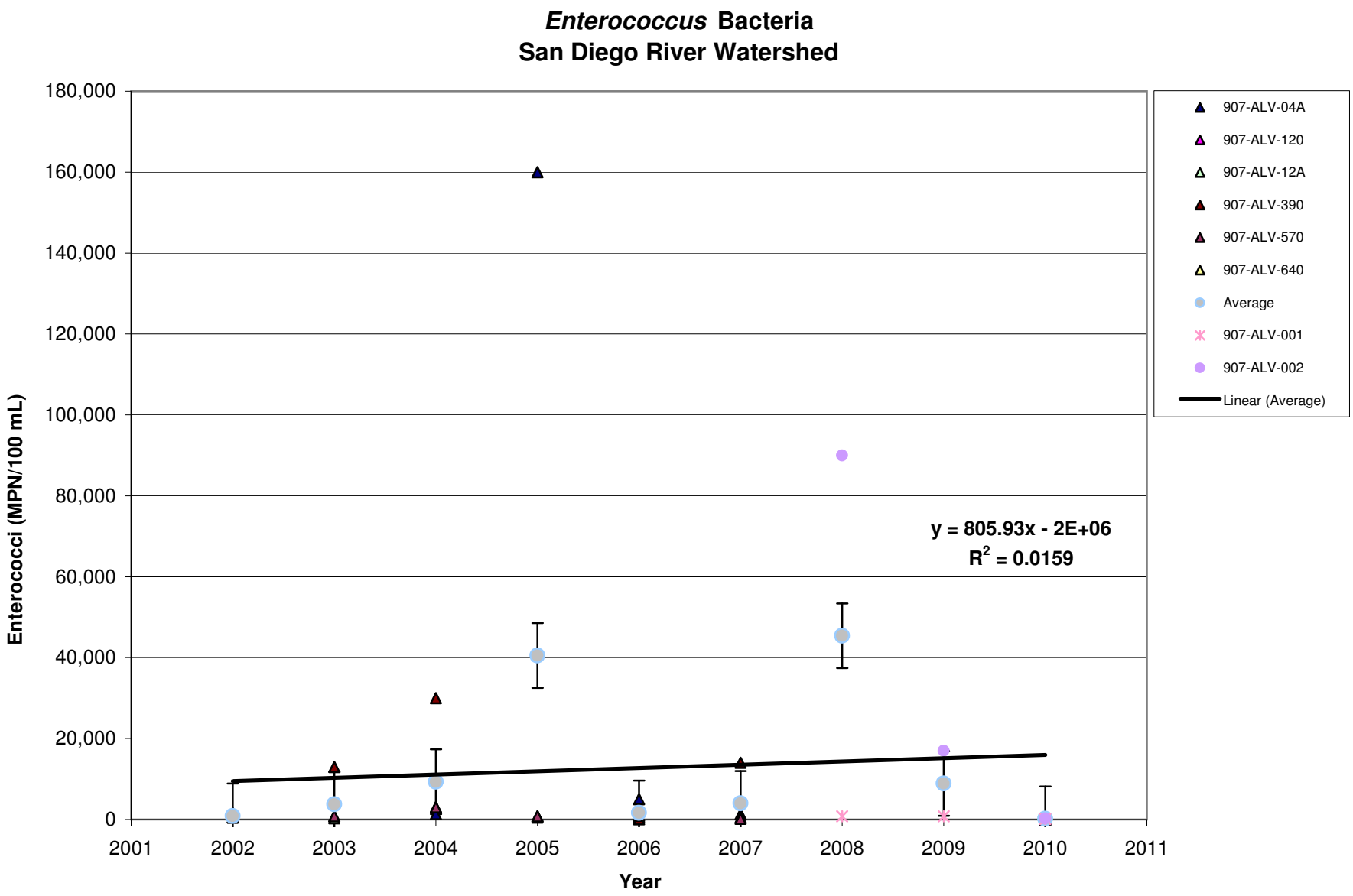
Enterococcus Bacteria
San Diego River Watershed
Enterococci (MPN/100 mL)
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
907-ALV-04A
907-ALV-120
907-ALV-12A
907-ALV-390
907-ALV-570
907-ALV-640
Average
907-ALV-001
907-ALV-002
Linear (Average)
y = 805.93x - 2E+06
R2 = 0.0159

Attachment 2

Historical Data Graphs:
San Diego Bay Watershed

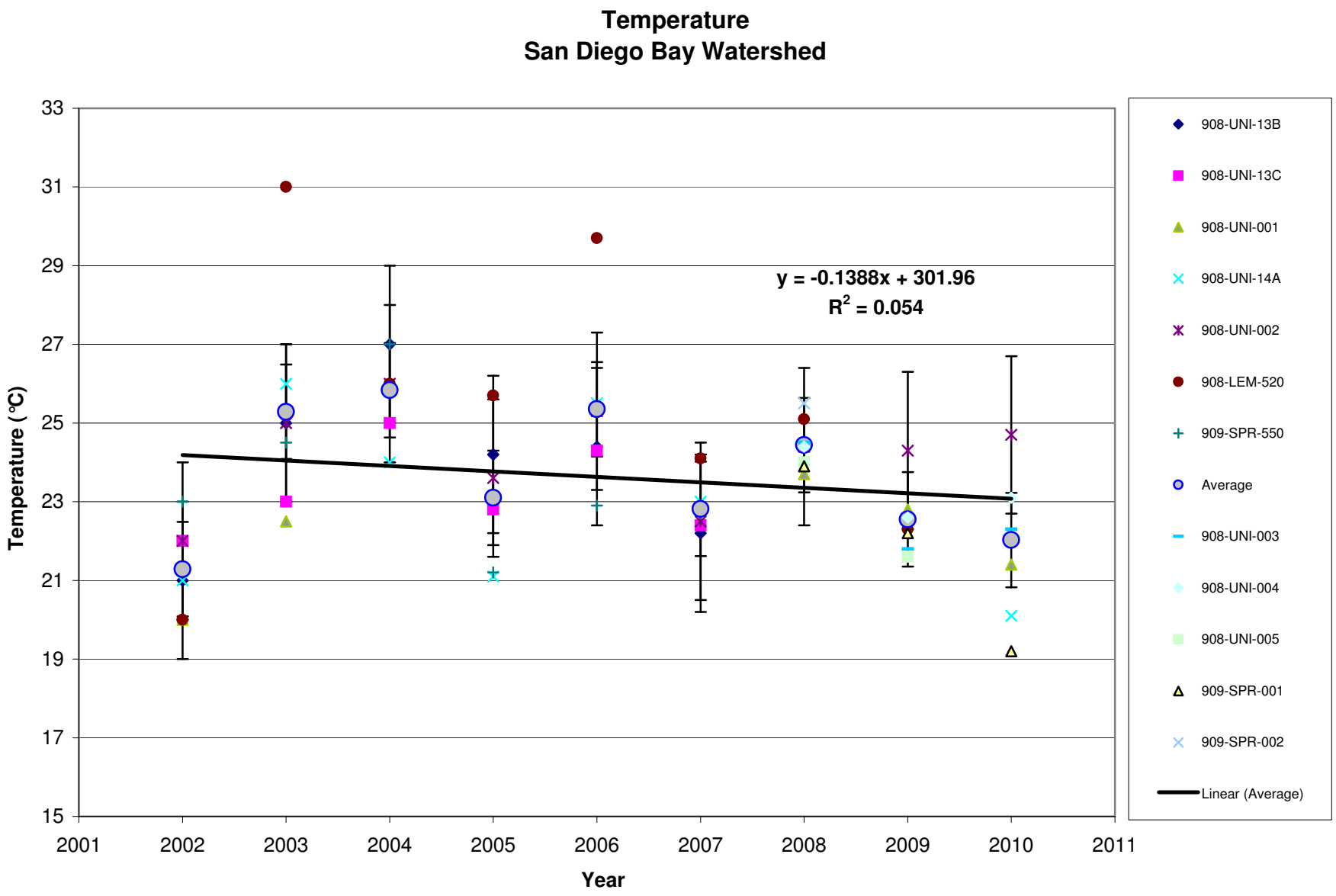
Temperature
San Diego Bay Watershed
y = -0.1388x + 301.96
R2 = 0.054
Temperature (°C)
Year
33
31
29
27
25
23
21
19
17
15
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

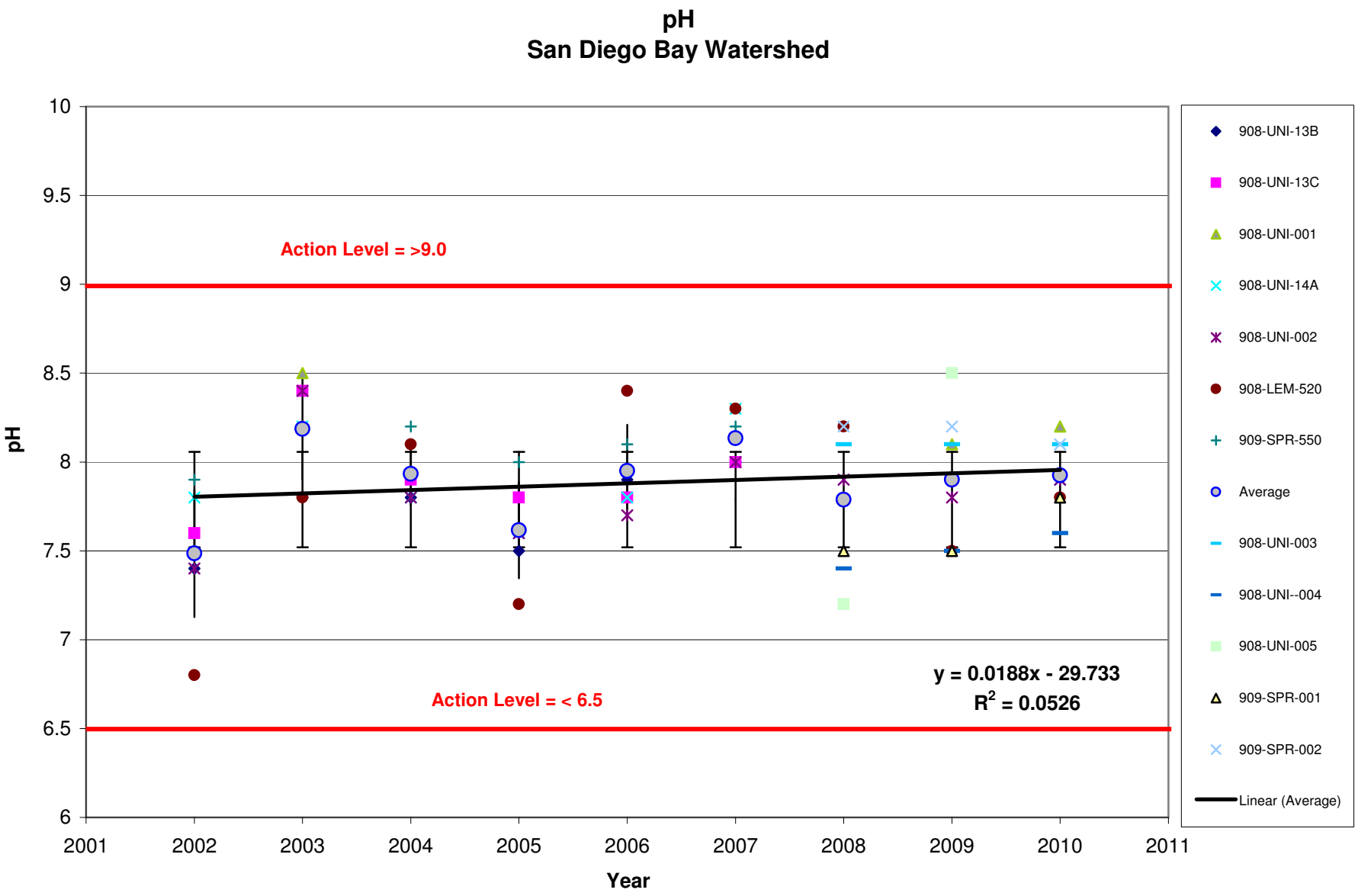
pH
San Diego Bay Watershed
Action Level = >9.0
Action Level = < 6.5
y = 0.0188x - 29.733
R2 = 0.0526
pH
Year
10
9.5
9
8.5
8
7.5
7
6.5
6
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI--004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

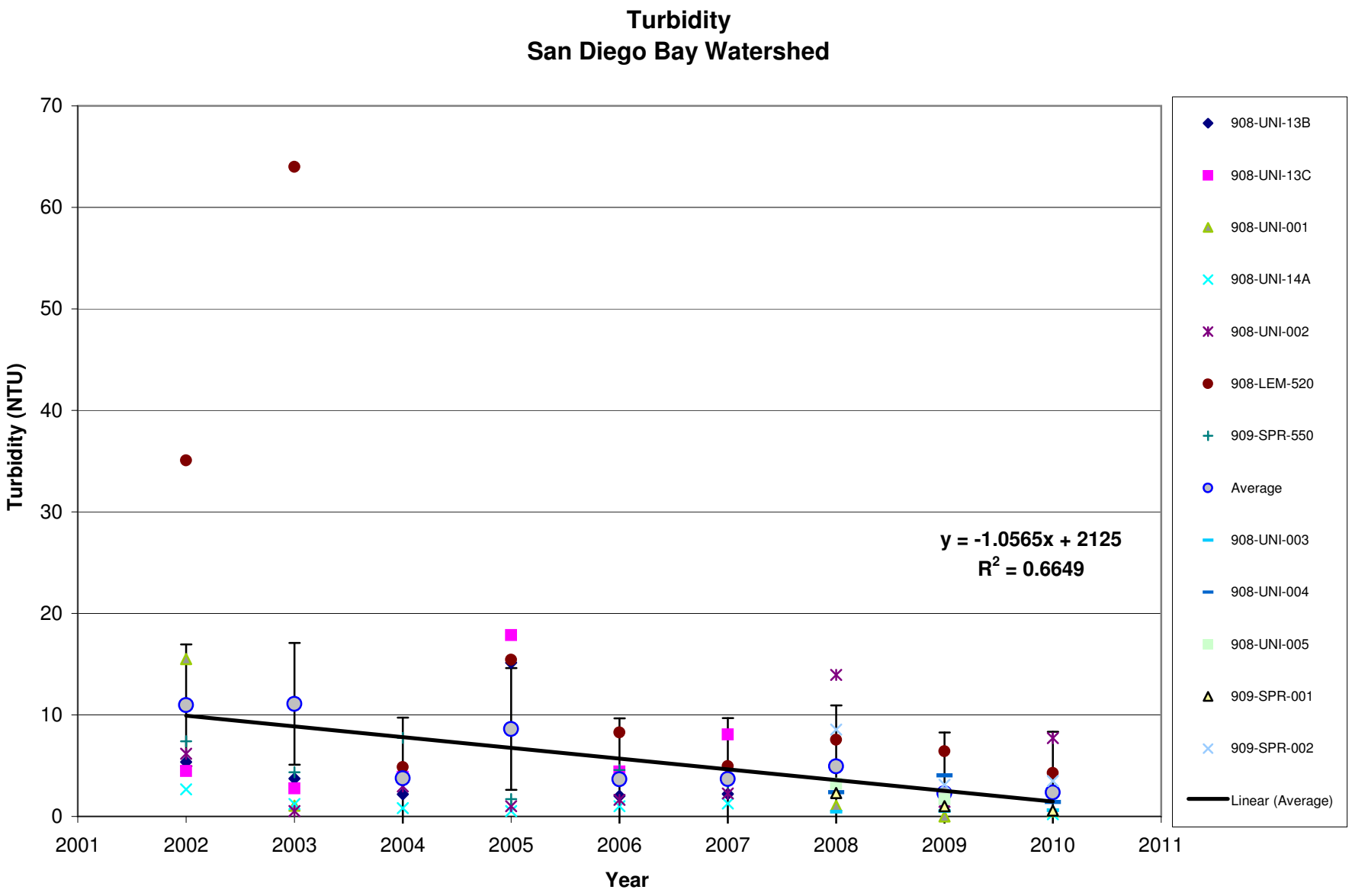
Turbidity
San Diego Bay Watershed
Turbidity (NTU)
Year
70
60
50
40
30
20
10
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
y = -1.0565x + 2125
R2 = 0.6649
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

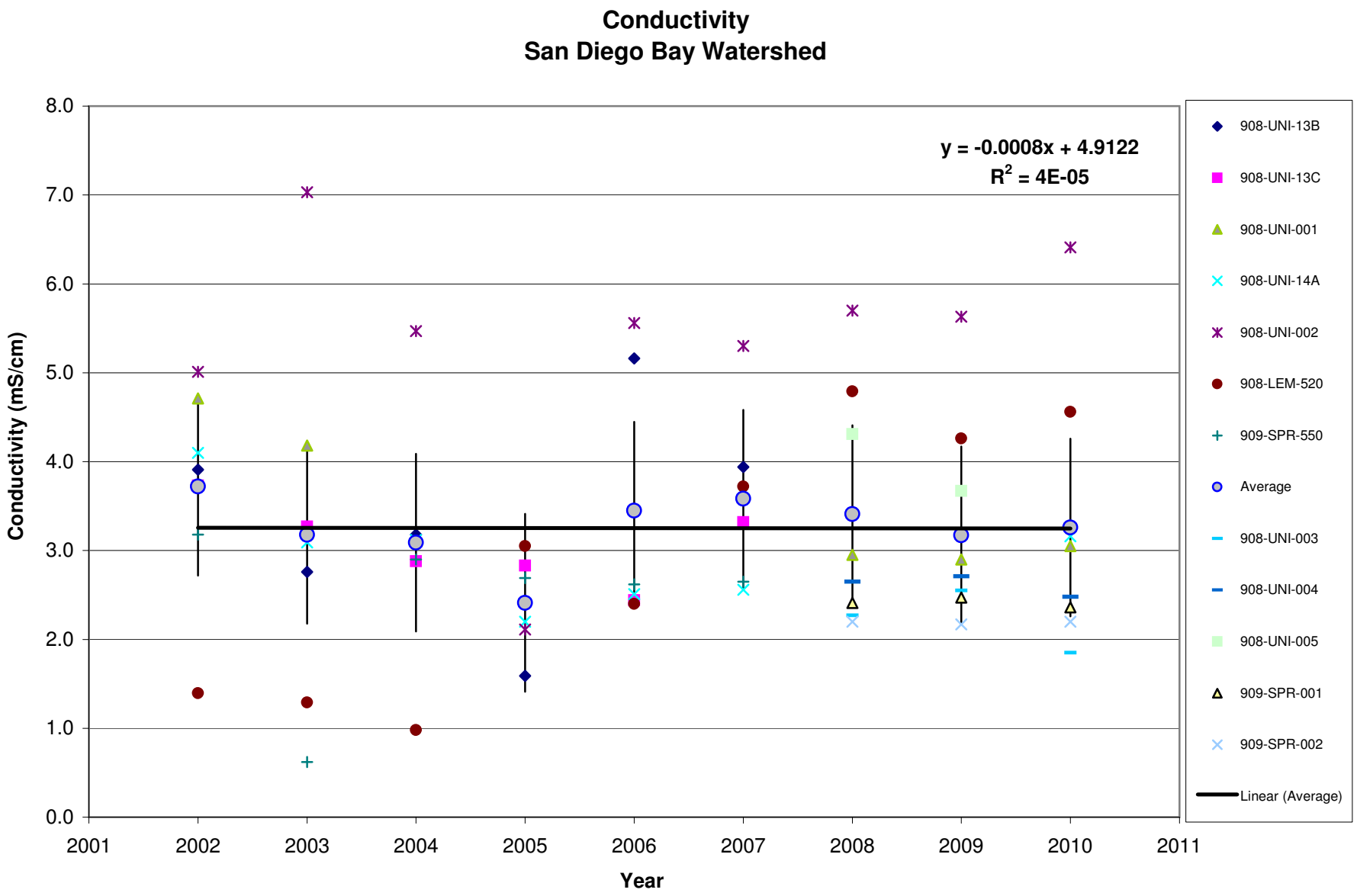
Conductivity
San Diego Bay Watershed
y = -0.0008x + 4.9122
R2 = 4E-05
Conductivity (mS/cm)
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

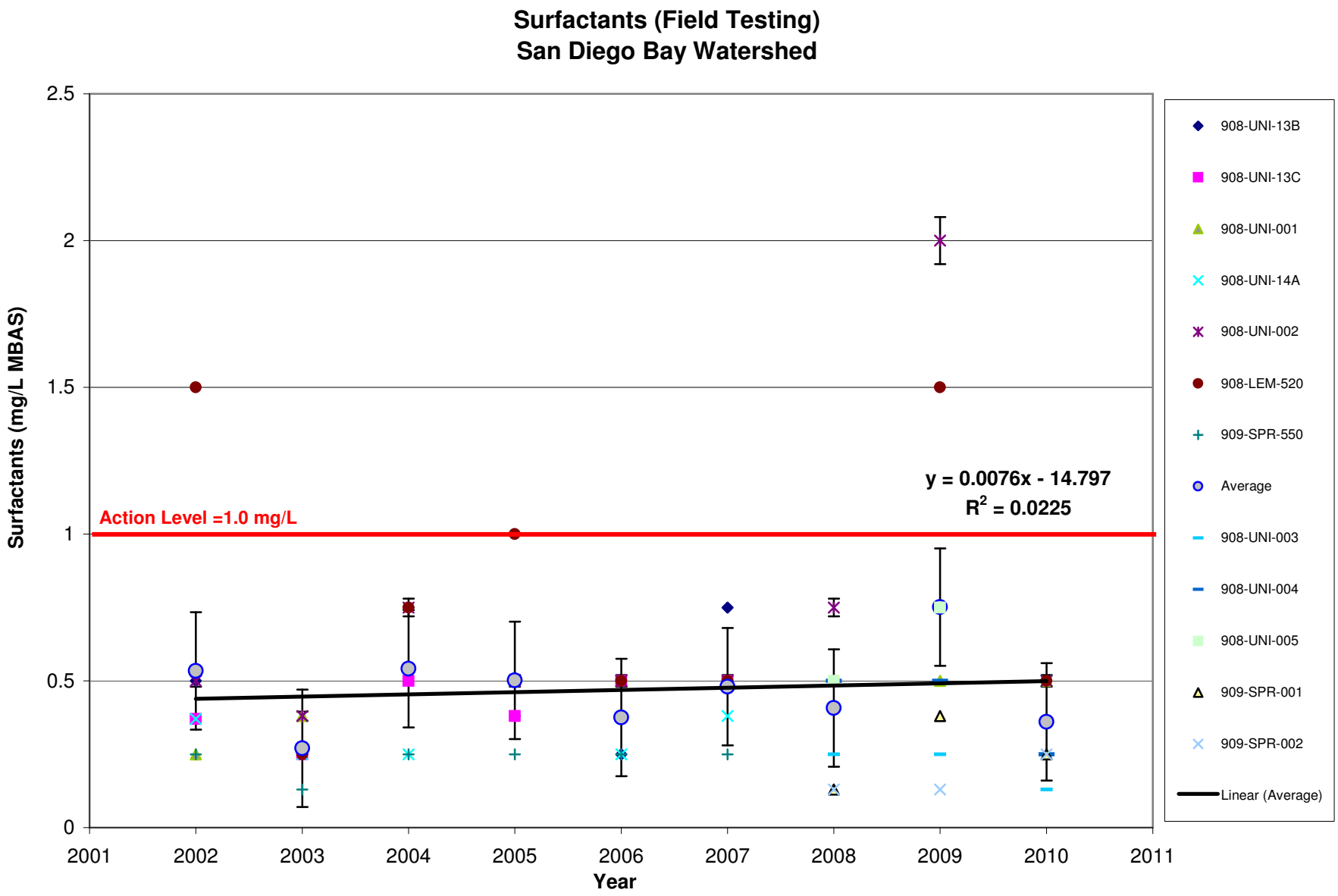
Surfactants (Field Testing)
San Diego Bay Watershed
Surfactants (mg/L MBAS)
2.5
2
1.5
1
0.5
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
Action Level =1.0 mg/L
y = 0.0076x - 14.797
R2 = 0.0225
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

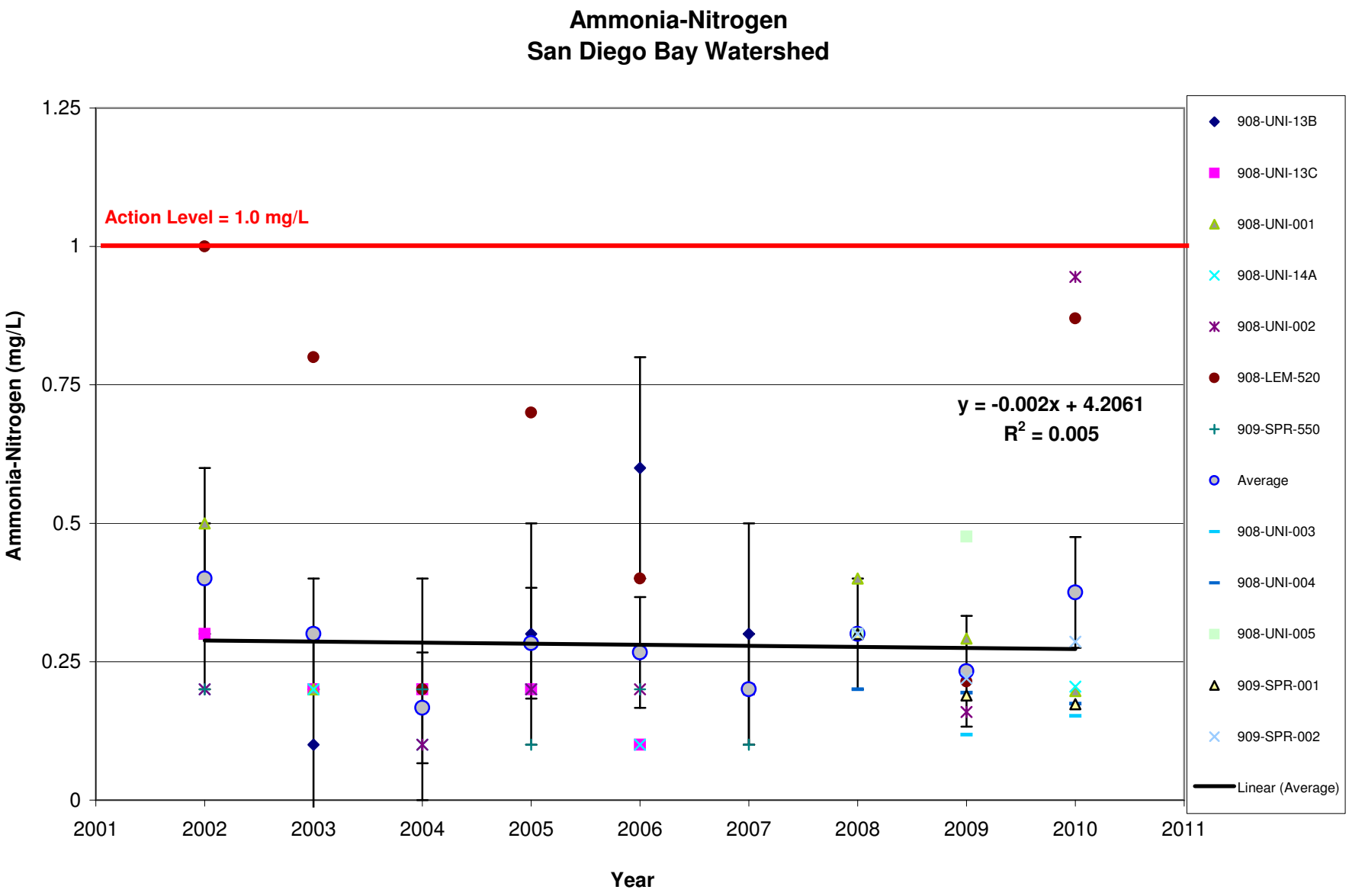
Ammonia-Nitrogen
San Diego Bay Watershed
Action Level = 1.0 mg/L
y = -0.002x + 4.2061
R2 = 0.005
Ammonia-Nitrogen (mg/L)
Year
1.25
1
0.75
0.5
0.25
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

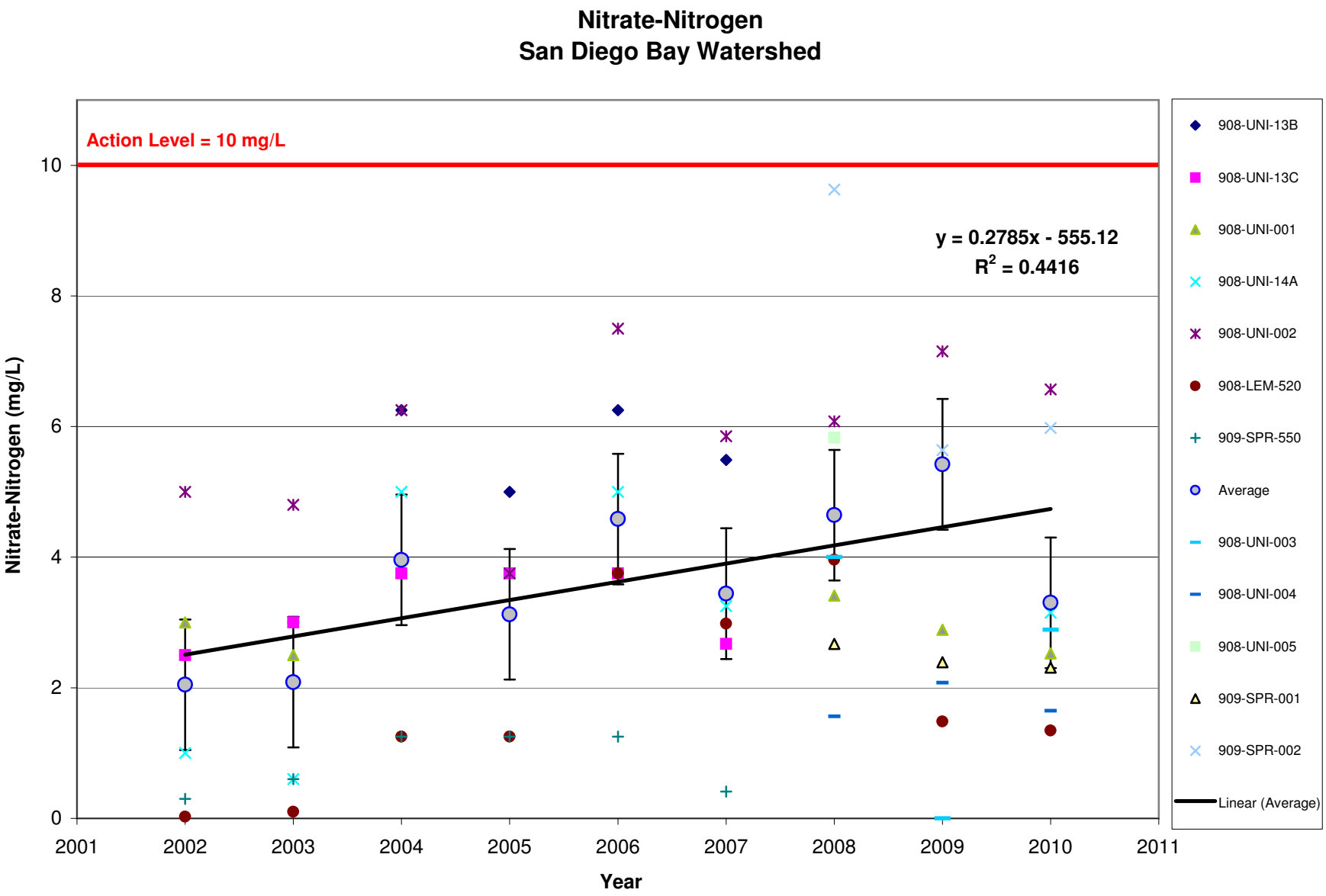
Nitrate-Nitrogen
San Diego Bay Watershed
Action Level = 10 mg/L
y = 0.2785x - 555.12
R2 = 0.4416
Nitrate-Nitrogen (mg/L)
Year
0
2
4
6
8
10
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

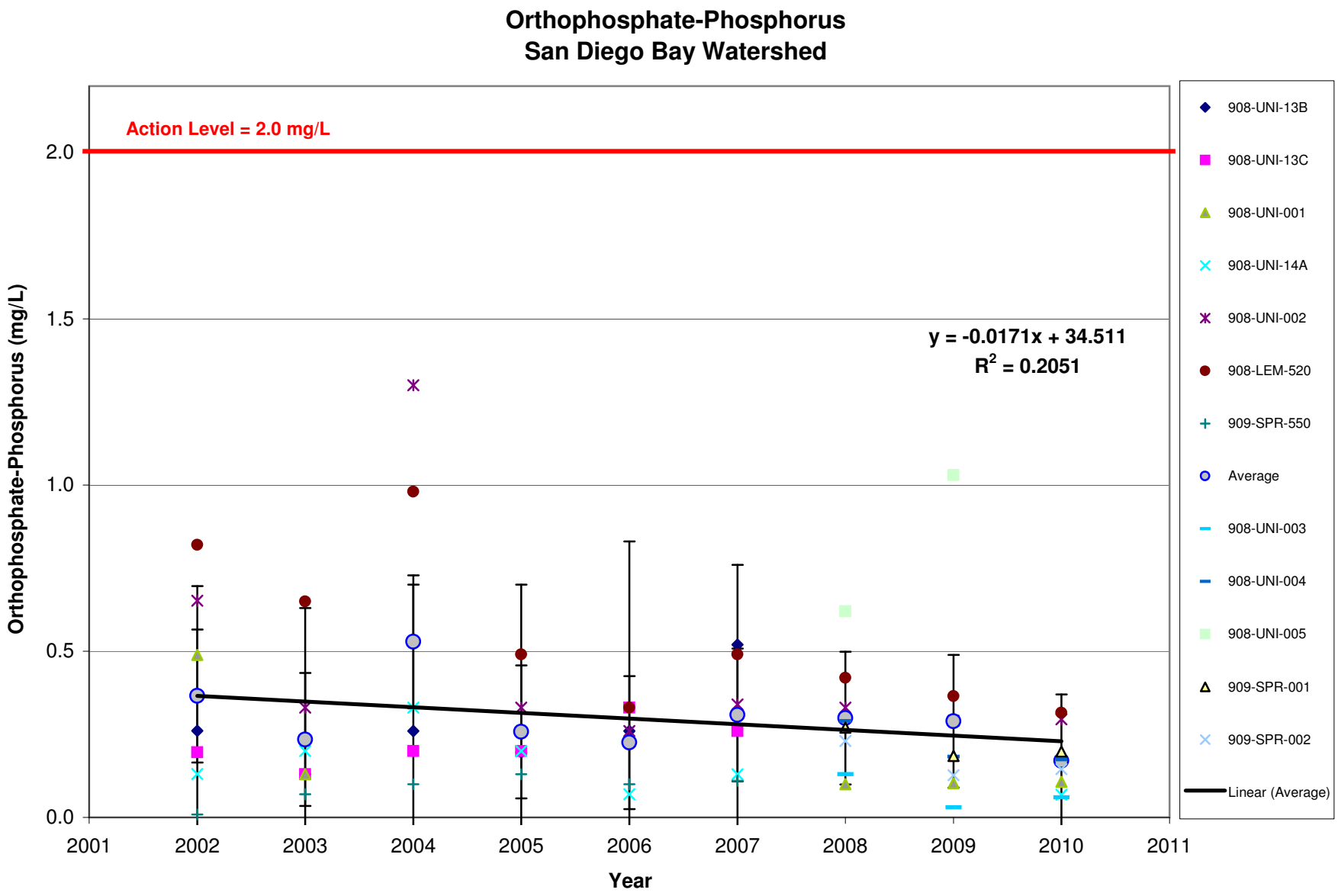
Orthophosphate-Phosphorus
San Diego Bay Watershed
Action Level = 2.0 mg/L
y = -0.0171x + 34.511
R2 = 0.2051
Orthophosphate-Phosphorus (mg/L)
2.0
1.5
1.0
0.5
0.0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
908-UNI-13B
908-UNI-13C
908-UNI-001
908-UNI-14A
908-UNI-002
908-LEM-520
909-SPR-550
Average
908-UNI-003
908-UNI-004
908-UNI-005
909-SPR-001
909-SPR-002
Linear (Average)

Surfactants (Laboratory Analysis)
San Diego Bay Watershed

Note: All "nd" values have been plotted as half the reporting limit of 0.5 mg/L.

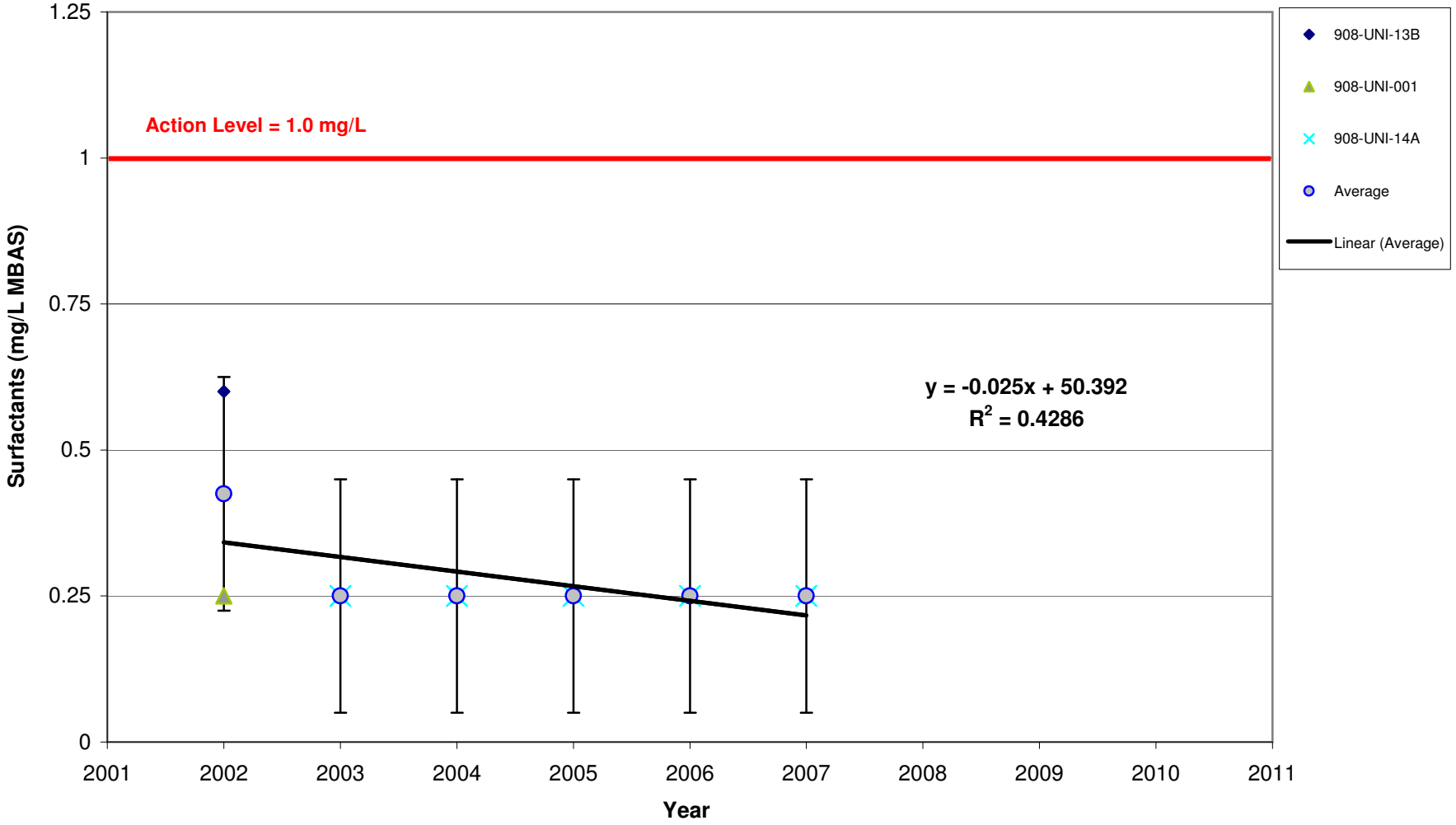

Oil & Grease
SanDiego Bay Watershed

Note: No detectable levels of oil and grease have been noted. All "nd" values have been plotted with a value of half the reporting or detection limit:
2002-2004 reporting limit = 0.5 mg/L, 2005-2009 reporting limit = 5 mg/L, 2010 detection limit = 5 mg/L

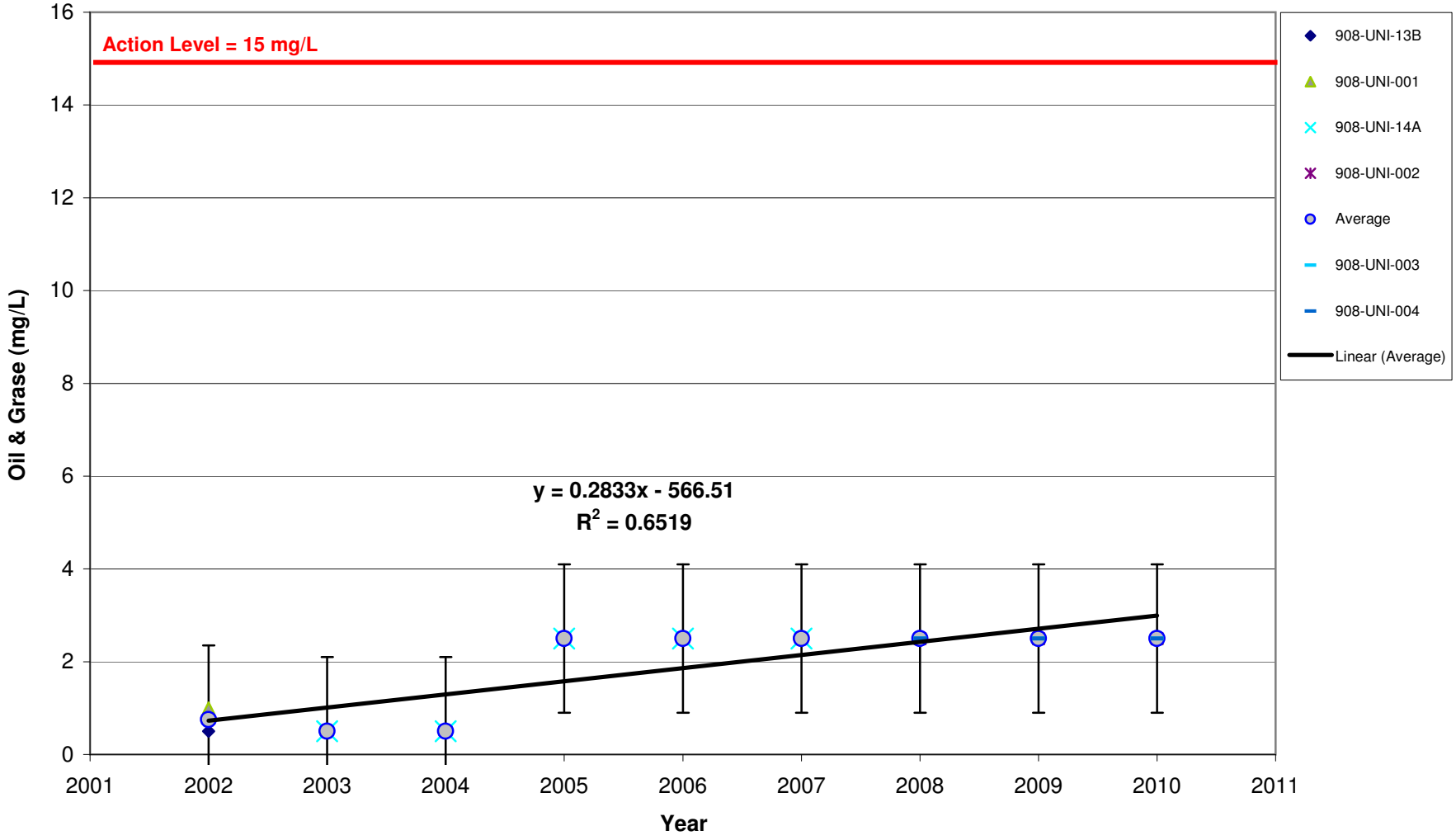

Dissolved Cadmium
San Diego Bay Watershed

Note: No detectable levels of dissolved cadmium have been measured. All "nd" values have been plotted as half the reporting or detection limit; 2002-2008 reporting limit = 0.005 mg/L, 2009 reporting limit = 0.001 mg/L, 2010 detection limit = 0.0002 mg/L

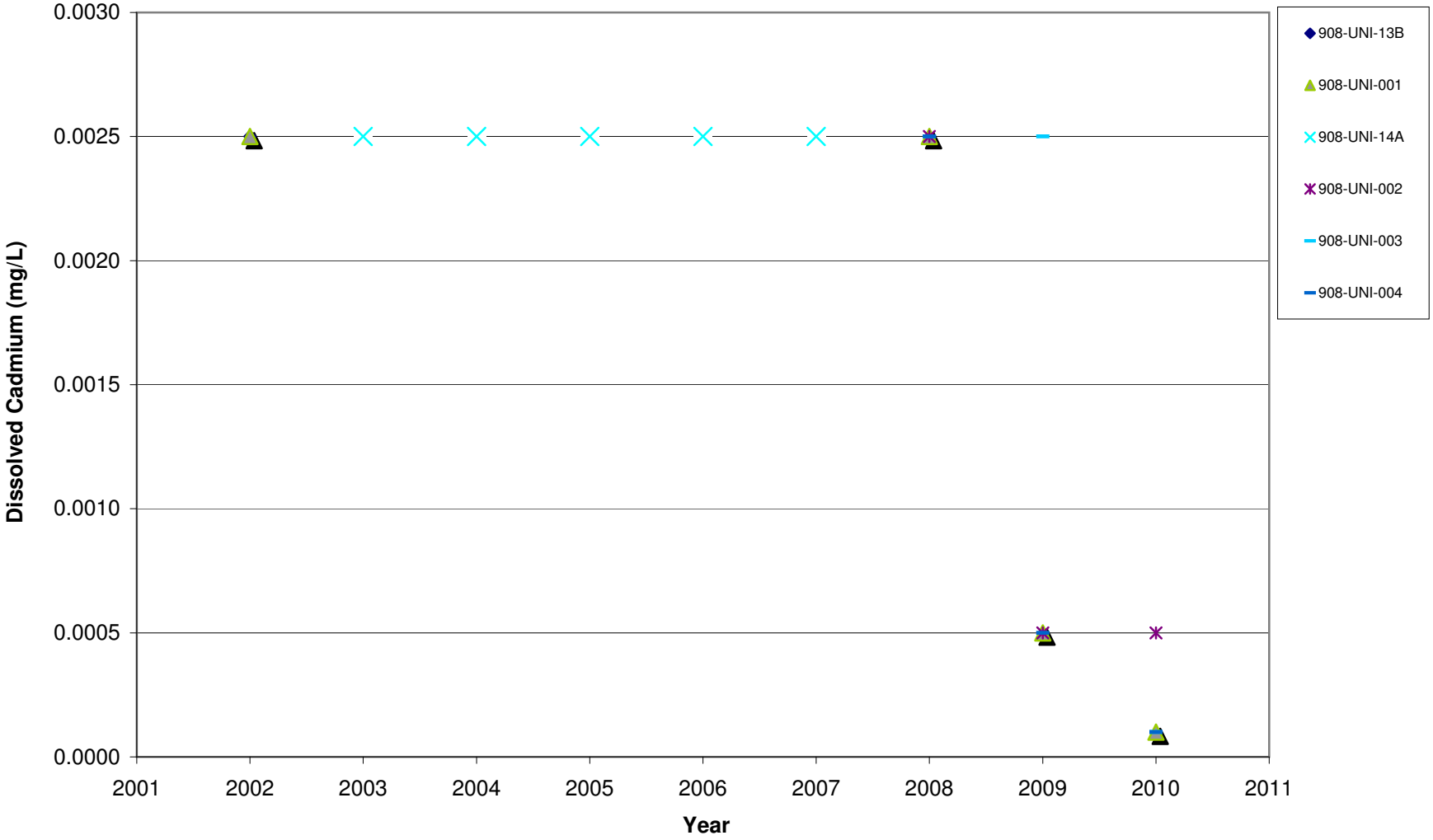

Dissolved Copper
San Diego Bay Watershed

Note: All "nd" values have been plotted as half the reporting or detection limit: 2002-2008 reporting limit = 0.005 mg/L, 2009 reporting limit = 0.001 mg/L, 2010 detection limit = 0.001 mg/L

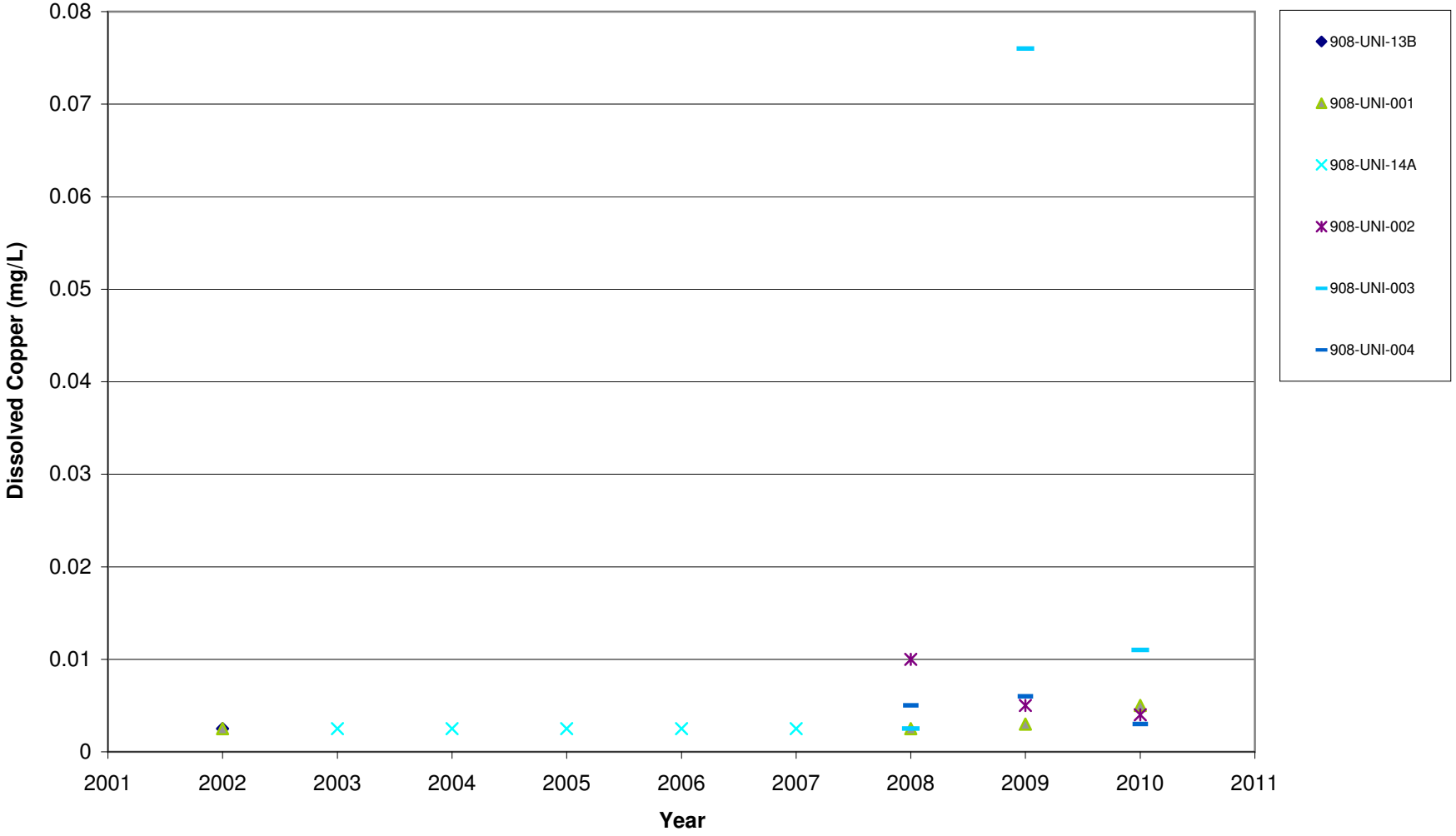

Dissolved Lead
San Diego Bay Watershed

Note: No detectable levels of dissolved lead have been measured. All "nd" values have been plotted as half the reporting or detection limit:
2002-2009 reporting limit = 0.001 mg/L, 2010 detection limit = 0.001 mg/L

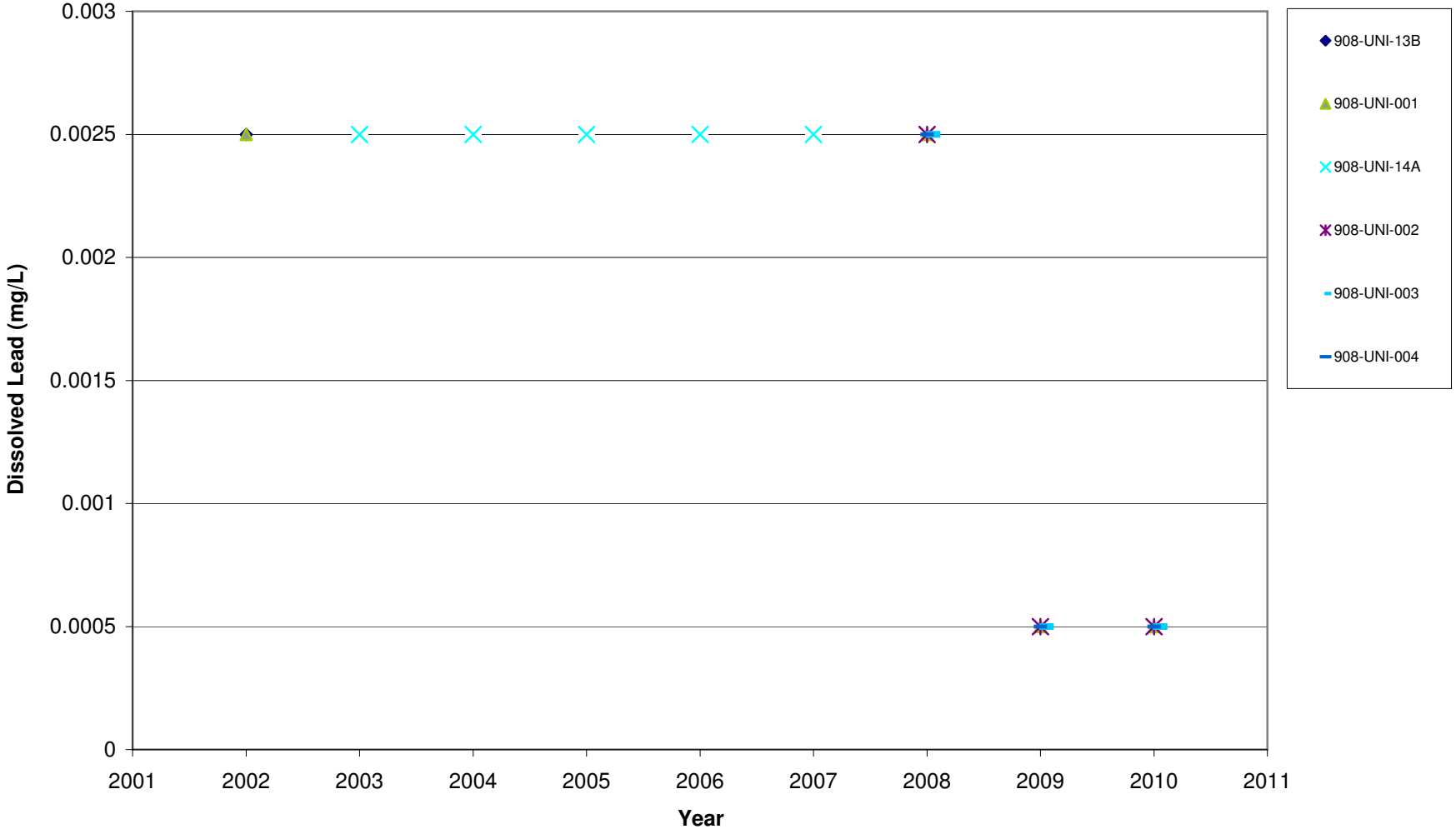

Dissolved Zinc
San Diego Bay Watershed

Note: All "nd" values have been plotted as half the reporting or detection limit: 2002-2009 reporting limit = 0.02 mg/L, 2010 detection limit = 0.0003 mg/L

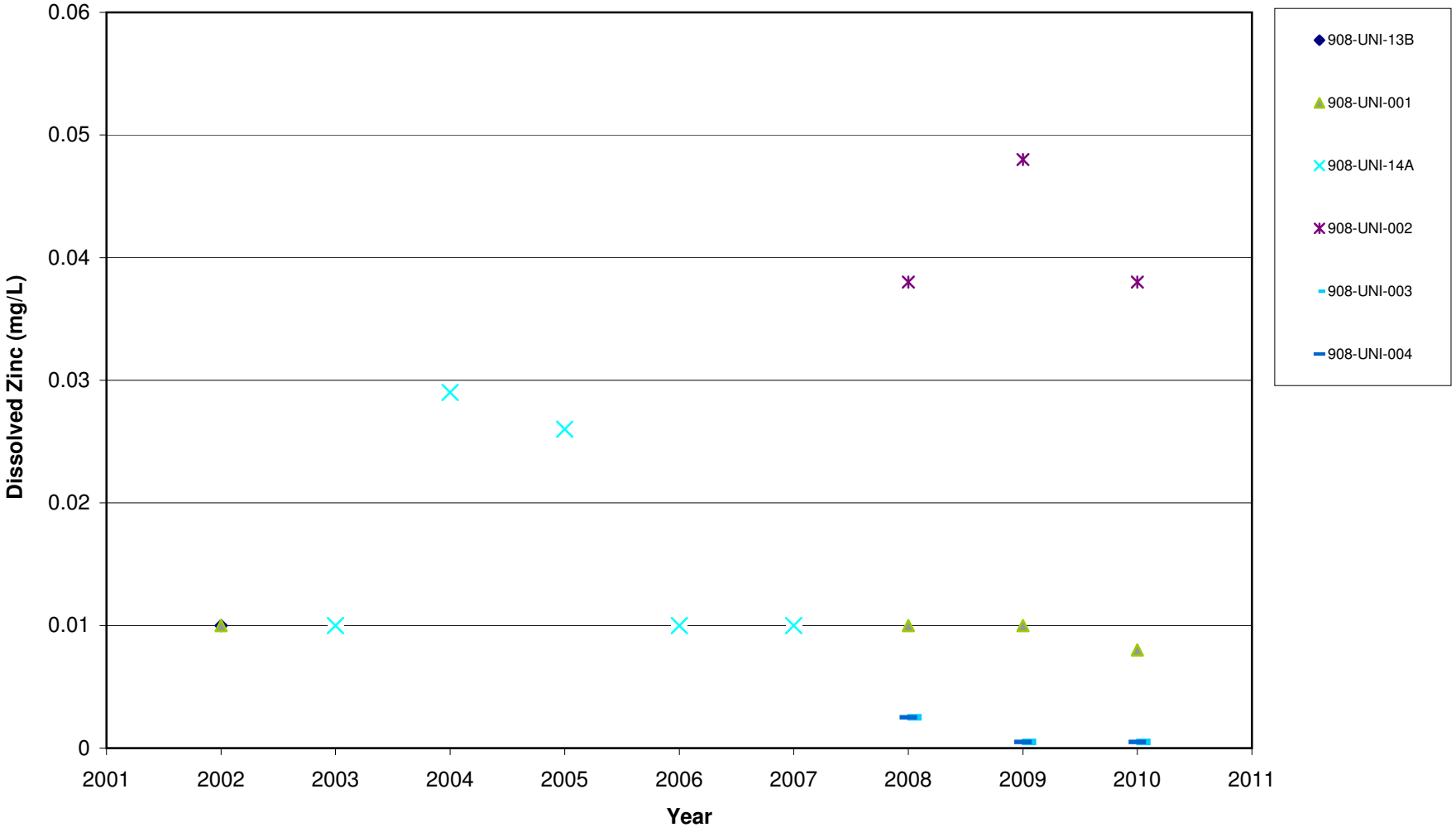

Diazinon
San Diego Bay Watershed

Note: No detectable levels of diazinon have been measured. All "nd" values have been plotted as half the reporting or detection limit: 2002-2009 reporting limit = 0.05 µg/L, 2010 detection limit = 0.04 µg/L.

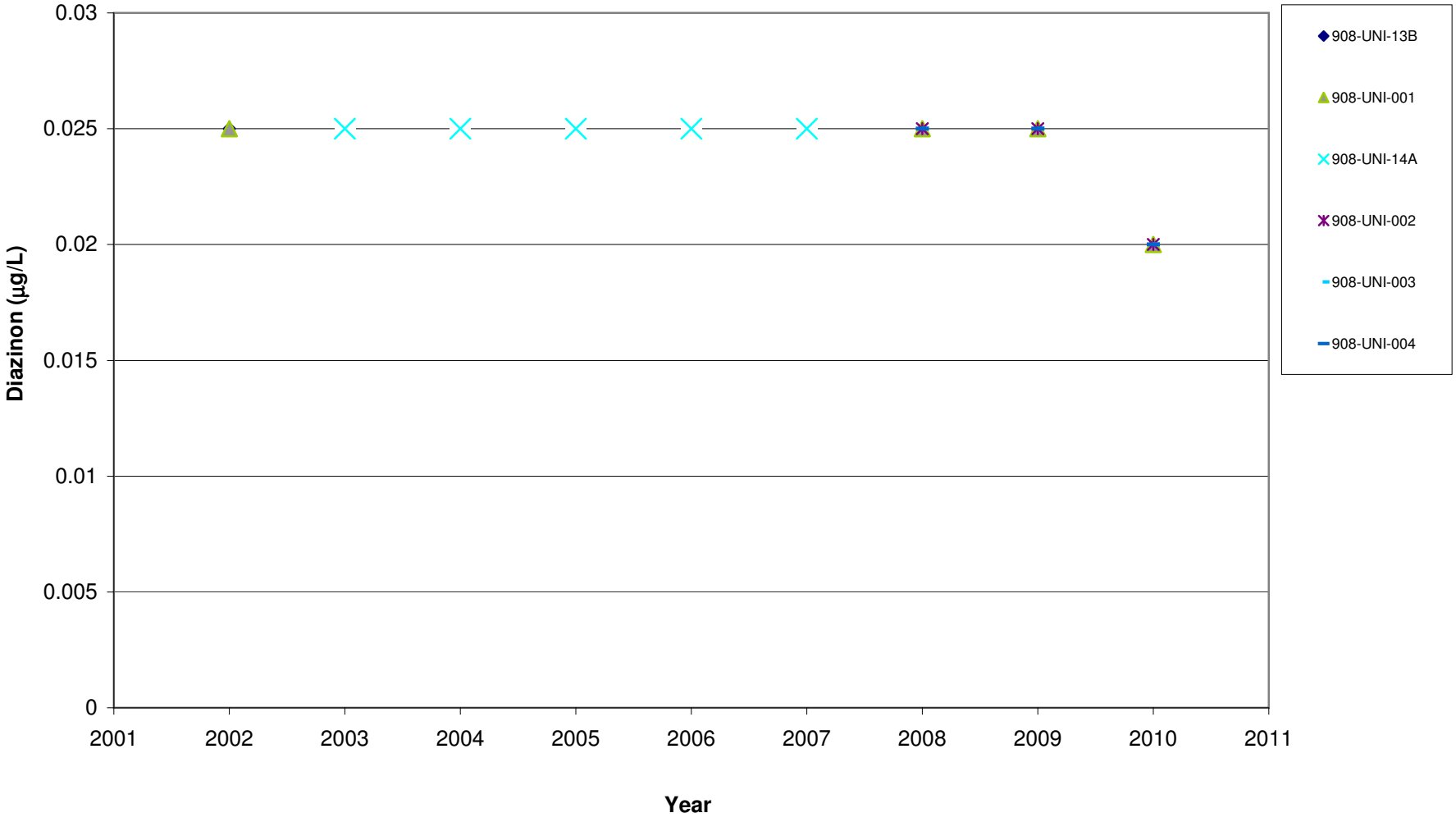

Chlorpyrifos
San Diego Bay Watershed

Note: No detectable levels of chlorpyrifos have been measured. All "nd" values have been plotted as half the reporting or detection limit: 2002-2009 reporting limit = 0.05 µg/L; 2010 detection limit = 0.04 µg/L.

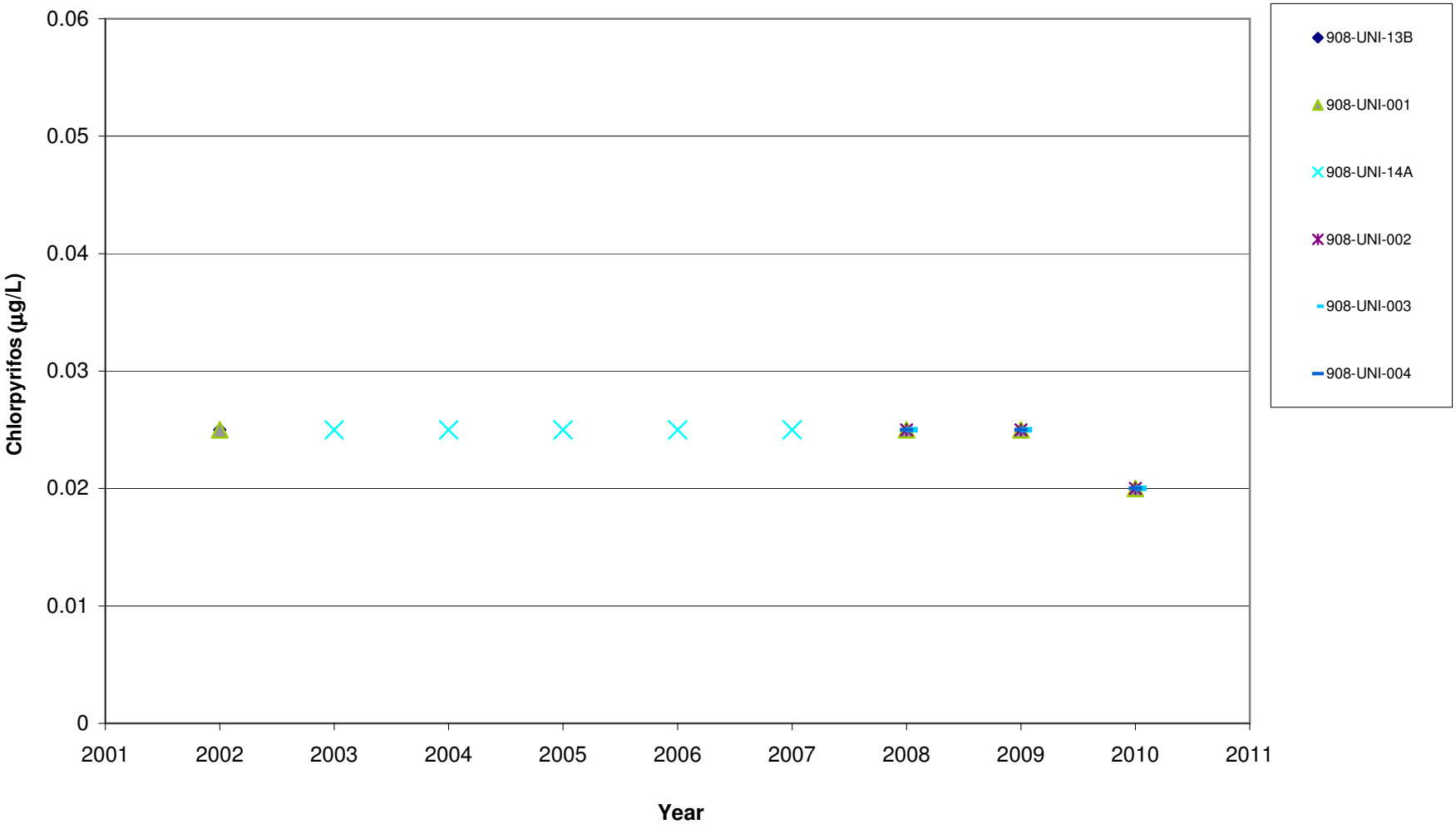

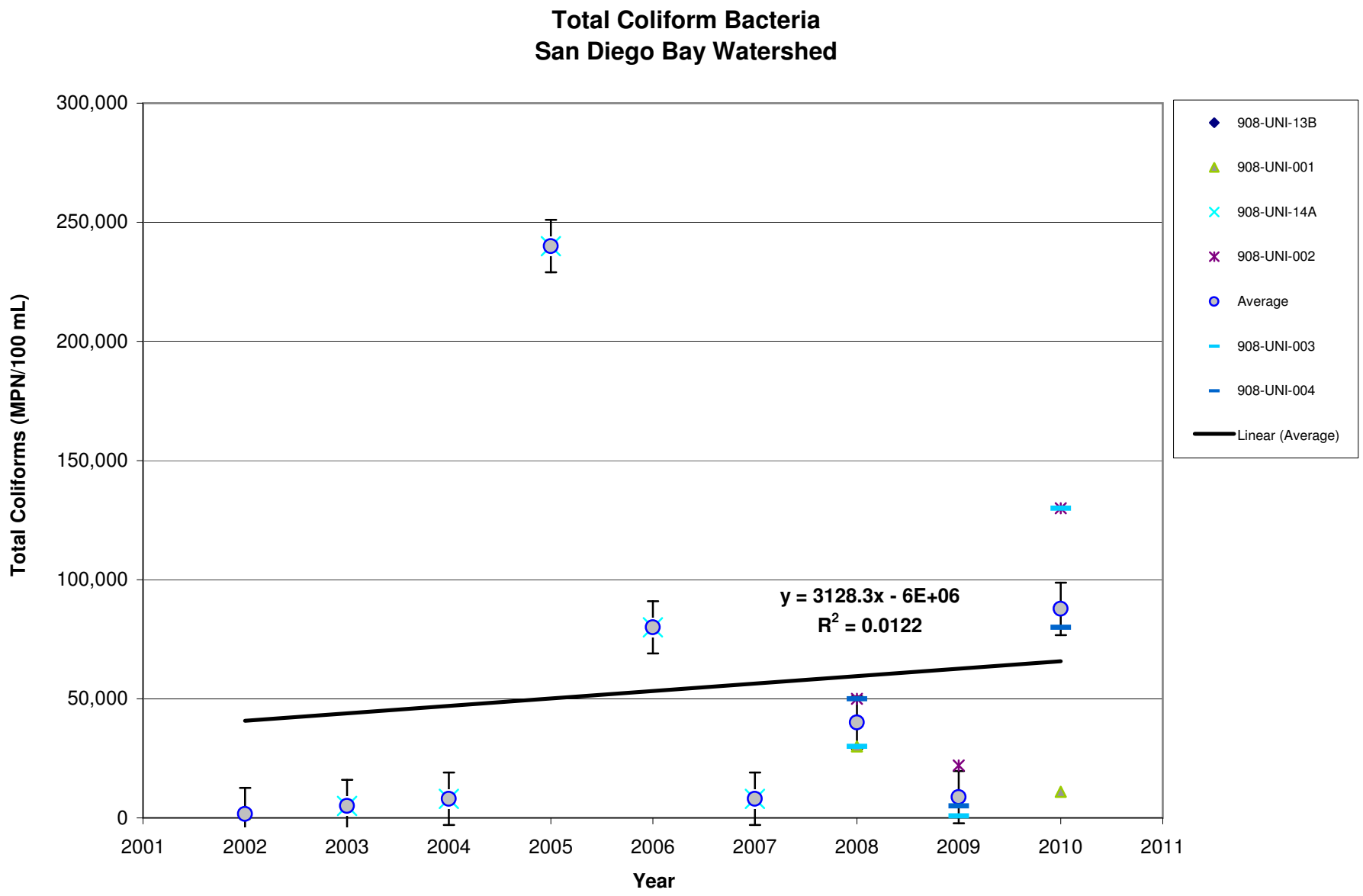
Total Coliform Bacteria
San Diego Bay Watershed
Total Coliforms (MPN/100 mL)
300,000
250,000
200,000
150,000
100,000
50,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = 3128.3x - 6E+06
R2 = 0.0122
908-UNI-13B
908-UNI-001
908-UNI-14A
908-UNI-002
Average
908-UNI-003
908-UNI-004
Linear (Average)

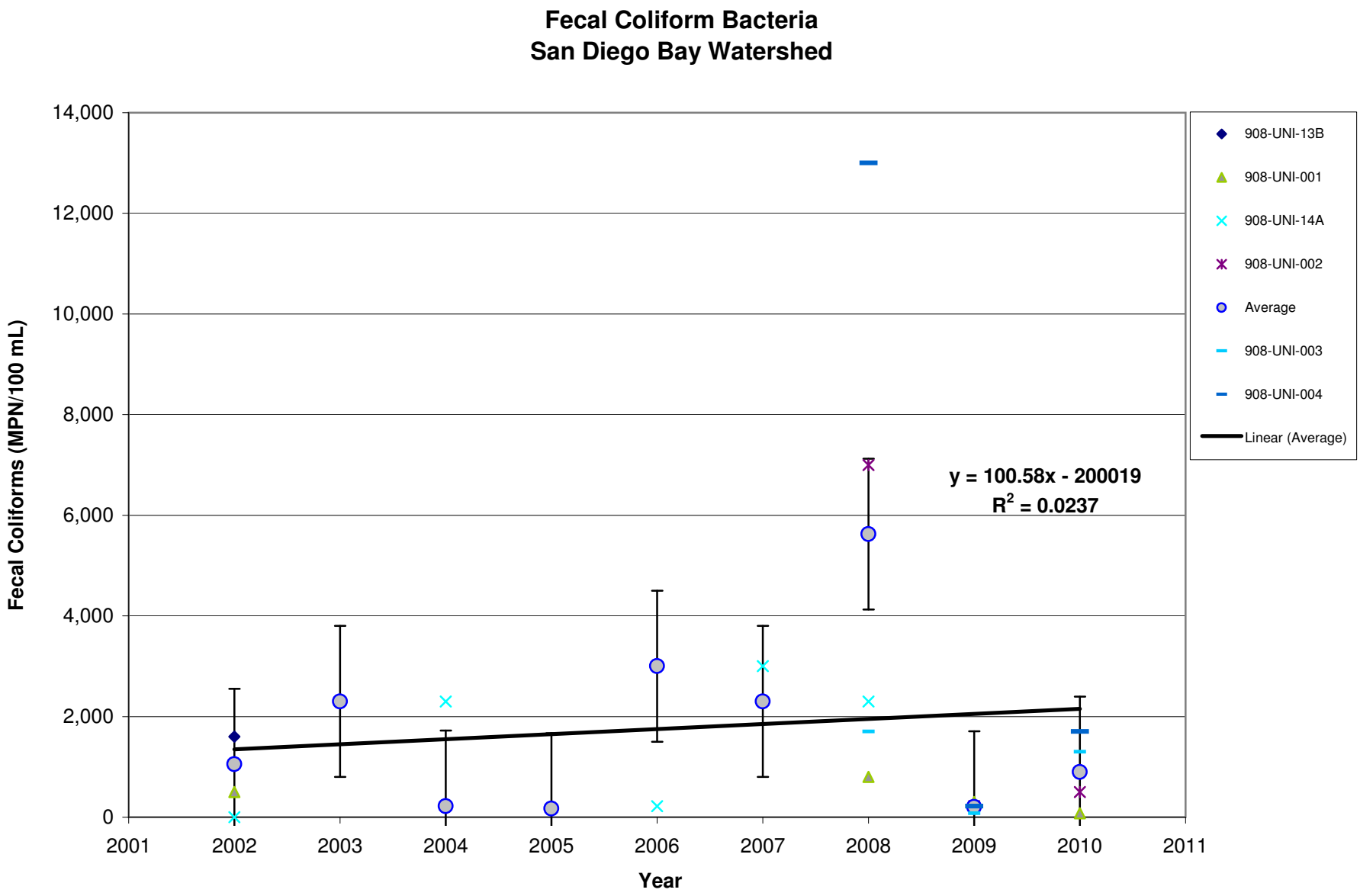
Fecal Coliform Bacteria
San Diego Bay Watershed
Fecal Coliforms (MPN/100 mL)
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = 100.58x - 200019
R2 = 0.0237
908-UNI-13B
908-UNI-001
908-UNI-14A
908-UNI-002
Average
908-UNI-003
908-UNI-004
Linear (Average)

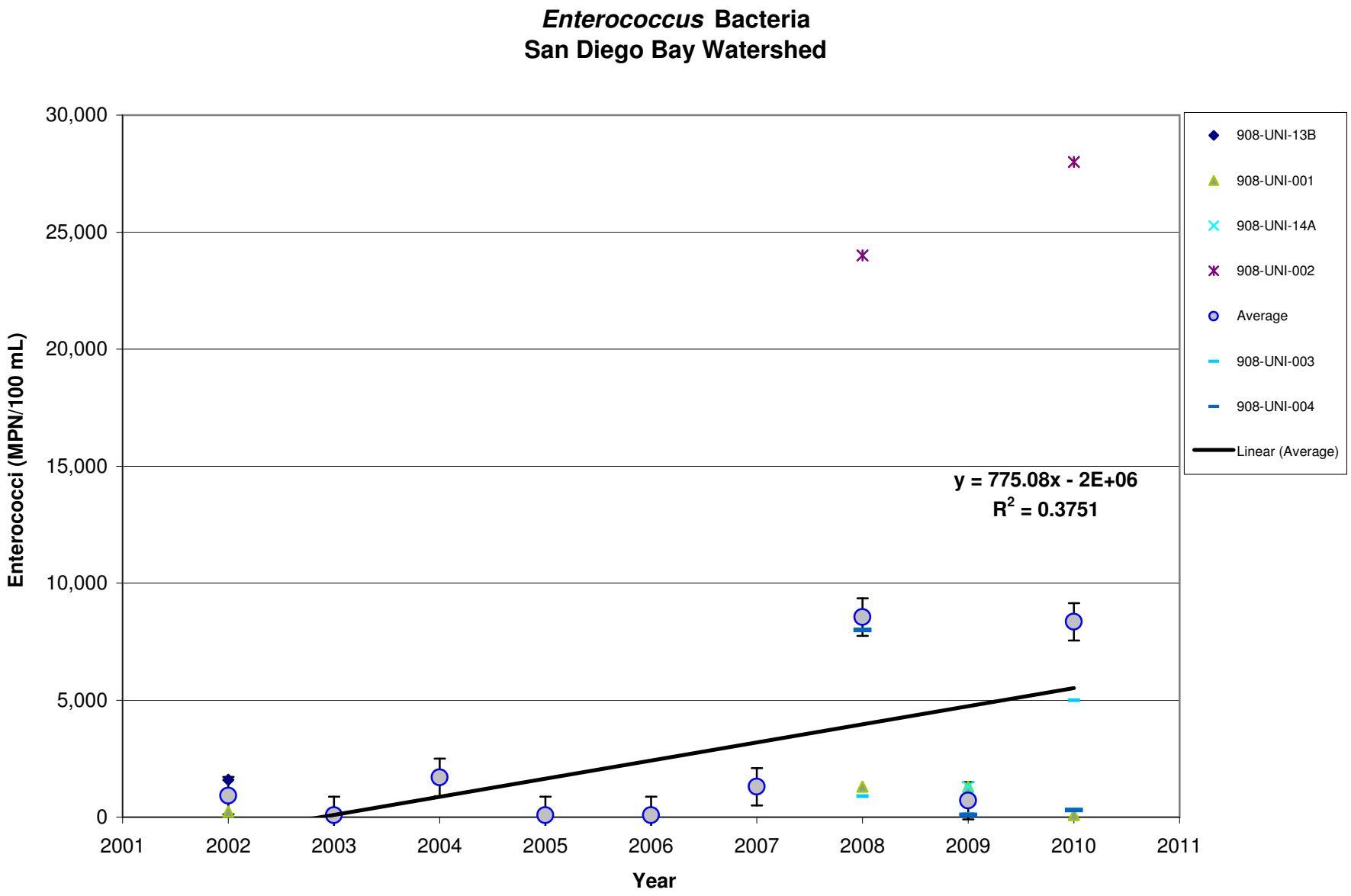
Enterococcus Bacteria
San Diego Bay Watershed
Enterococci (MPN/100 mL)
30,000
25,000
20,000
15,000
10,000
5,000
0
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
Year
y = 775.08x - 2E+06
R2 = 0.3751
908-UNI-13B
908-UNI-001
908-UNI-14A
908-UNI-002
Average
908-UNI-003
908-UNI-004
Linear (Average)

CITY OF LA MESA

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT 2010/2011

SEPTEMBER 2011

PREPARED BY:

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Acronyms and Abbreviations

Acronym	Abbreviation
°C	Degrees Celsius
303(d) List	2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments
Appendix A	Appendix A of BMP Manual Part I
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
BMP Manual Part I	The City of La Mesa Storm Water Best Management Practices Manual – Part I
BMP Manual Part II	The City of La Mesa Storm Water Best Management Practices Manual – Part II
Calsense	Calsense Computerized Irrigation Control
CASQA	California Stormwater Quality Association
CEQA	California Environmental Quality Act
CIP	Capital Improvement Project
City	City of La Mesa
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CMC	Criteria Maximum Concentration
CMP	Corrugated Metal Pipe
CSWMP	Construction Storm Water Management Plan
CTR	California Toxics Rule
CWA	Clean Water Act/Federal Water Pollution Control Act
D-MAX	D-MAX Engineering, Inc.
DAB	Development Advisory Board
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FOG	Fats, Oils, and Grease
General Construction Permit	State of California General Construction Permit
gpm	Gallons Per Minute
HA	Hydrologic Area
HDPE	High Density Polyethylene
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HOA	Home Owners' Association
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illicit Discharge
IDDE	Illicit Discharge Detection and Elimination

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
IHC	Interim Hydromodification Criteria
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ
IMP	Integrated Management Practice
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
LID	Low Impact Development
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable
mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) Per 100 Milliliters
MS4	Municipal Separate Storm Sewer System
mS/cm	MilliSiemens Per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
nt	Not Tested
NTU	Nephelometric Turbidity Unit
PDPA	Pollutant Discharge Potential Assessment
Priority Project	Priority Development Project
RCP	Reinforced Concrete Pipe
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Government
SIC	Standard Industrial Classification
Solana Center	Solana Center for Environmental Innovations
SPCBMPP	Standard Post Construction Best Management Practices Plan
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 7.18 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TSS	Total Suspended Solids
TTWQ	Threat to Water Quality
WDID	Waste Discharge Identification Number

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
WQO	Basin Plan Water Quality Objectives
WQTR	Water Quality Technical Report
WURMP	Watershed Urban Runoff Management Program
μg/L	Micrograms Per Liter

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David E. Witt
City Manager

Date: September 2011

Telephone Number: (619) 667-1105

EXECUTIVE SUMMARY

San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit), a National Pollution Discharge Elimination (NPDES) Permit, regulates discharges to the storm drain systems of 21 municipal agencies in San Diego County, including the City of La Mesa (City). The Municipal Permit requires the City to develop and implement a Jurisdictional Urban Runoff Management Program (JURMP), with the overall goal of reducing discharges of pollutants to the City's storm drain system to the maximum extent practicable. The City's JURMP includes required "Best Management Practices" (BMP) to control pollution. Specific lists of BMPs apply to businesses, construction and development projects, residents, and the City's own activities. The JURMP also includes programs for water quality monitoring and educational outreach.

At the end of each fiscal year, the City is required to report a summary of its JURMP implementation activities to the RWQCB. This JURMP Annual Report presents the City's activities during the 2010/2011 fiscal year, which began on July 1, 2010 and ended on June 30, 2011. Each section of this JURMP Annual Report discusses how the City's efforts during 2010/2011 met the requirements of the Municipal Permit. Key actions taken for the major components of the City's storm water program are summarized below.

Development Planning Component

The City continued to oversee development activities occurring in the City to mitigate potential threats to water quality at the design stage. The City maintained and updated its inventory of installed treatment control BMPs and implemented its maintenance verification program through which parties responsible for maintaining BMPs at each of the City's 17 inventoried sites certify in writing that their treatment devices have been maintained and are in working order. Nine sites in the City with approved treatment control BMPs were also inspected by City staff. Enforcement actions successfully achieved the return of all maintenance verification forms and the correction of all deficiencies noted during inspections.

Construction Component

During 2010/2011, a total of 48 routine construction inspections were completed at 32 sites. The City's plan check and inspection program required projects to comply with the City's minimum BMP requirements. Enforcement actions were taken where necessary and were effective in bringing about compliance. Notably, the City inspected almost every low priority construction site during the wet season and notified small projects and homeowners of the City's BMP requirements.

Municipal Component

The City inspected all high threat to water quality (TTWQ) municipal fixed facilities, as required by the Municipal Permit. Over 525.29 tons of trash and debris were removed during street sweeping activities, and 178 cubic yards of debris and sediment were removed during standard MS4 maintenance. An additional 8.75 cubic yards of debris were removed during the cleaning of the filter inserts installed in the University drainage basin. The City

also televised 6,838 linear feet of sewer line and continued to maintain its sanitary sewer system to decrease the potential for sanitary sewer overflows (SSO). In keeping with its regular practice, the City trained its staff regarding the most current storm water pollution prevention concepts and practices.

Industrial and Commercial Component

During 2010/2011, the City's full-time inspector continued to build upon cooperative working relationships with local businesses, to keep businesses accountable to the storm water education they have received, and to track compliance from routine inspection through enforcement resolution. The City met the Municipal Permit requirement to inspect at least 25 percent of the City's industrial and commercial inventory. The City inspected all high TTWQ sites on its industrial and commercial inventory as well as additional medium TTWQ sites. An inspection fee is collected to recover costs for site visits. Since the institution of fees assessed for each visit, including follow-up visits, businesses have generally become more willing to comply with BMP requirements in a smaller number of inspection visits. During 2010/2011, no inspected businesses were observed to be out of compliance with the General Industrial Permit (Industrial Permit).

Residential Component

Residential areas comprise more than half of the City of La Mesa's land use, and the City worked to educate these residents through a variety of means. The City provided its quarterly *La Mesa Focus* newsletter to City residents via email and the City's website. Each newsletter published during 2010/2011 contained storm water articles relating to residential activities. The City encouraged its residents to participate in a variety of waste disposal events and volunteer-based cleanup events, and 898 participants dropped off 99,878 pounds of household hazardous waste (HHW) during the City's eight HHW events. The City's residents are considered important allies in reporting complaints to the City storm water hotline. Complaint investigations in residential areas were used as opportunities both to enforce BMP requirements and to educate residents about storm water pollution prevention.

Illicit Discharge Detection and Elimination Component

On September 10, 2008, the RWQCB adopted Addendum No. 2 to the Municipal Permit. This addendum requires the City to wait to submit the illicit discharge detection and elimination (IDDE) section of its JURMP Annual Report until the report for 2011 Dry Weather Monitoring Program, which took place after July 1, 2011, is finalized. The section must be submitted to the RWQCB no later than December 15, 2011.

While the full section will not be submitted until after September 30, 2011, the City did implement its IDDE program component during 2010/2011. During this period, the City responded to and resolved 151 complaints made to its storm water hotline and the Public Works maintenance hotline. The City completed its 2010 Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program). The recommendations in the final report for the 2010 Dry Weather Monitoring Program were addressed during this reporting period. The City also continued maintenance of the sanitary sewer system to prevent SSOs.

Education Component

As a means to raise storm water awareness in various communities, the City continued to conduct various education and outreach activities throughout 2010/2011. The City's efforts resulted in an estimated 22,843 impressions. I Love A Clean San Diego (ILACSD) partnered with the City to educate residents of all ages at special events and school presentations. The City continued to circulate the quarterly *La Mesa Focus* newsletter to businesses and residents, and each newsletter sent during the reporting included storm water-related articles. Additionally, the City continued to maintain a storm water bulletin board at City Hall, which is strategically located to maximize exposure to both City personnel and project proponents that visit the Engineering Division. To better serve the City's diverse population, some educational materials were distributed in Spanish and English. Additionally, City staff were provided various training sessions.

Public Participation Component

Public participation activities in 2010/2011 included multiple volunteer-based cleanup events, which have a direct effect on water quality, and public outreach activities intended to increase general knowledge and awareness regarding storm water issues. The City participated in Coastal Cleanup Day and the Creek to Bay Cleanup, with two cleanup sites located in the City for each event. During these events over 978 pounds of trash and 107 pounds of recyclables were collected. Other cleanup activities completed during 2010/2011 included Park Appreciation Day, Adopt-a-Park, Adopt-a-Block, and the La Mesa Spring Cleanup. A variety of waste disposal events, including HHW disposal events, were also held in the City.

Fiscal Analysis Component

The City continued to fund its storm water program though the City's Sanitation Fund and the collection of commercial and industrial storm water inspection fees. As required by the Municipal Permit, the City has used the new fiscal analysis reporting standards, developed and implemented by the Copermittees starting in 2009/2010.

Effectiveness Assessment Component

The City continued evaluating the effectiveness of its storm water program based on the approach presented in the City's JURMP. The City has seen a consistent trend of decreasing median concentrations and exceedance numbers for various polluting constituents in its Dry Weather Monitoring Program. In both the treatment control BMP program and the industrial and commercial inspection program, enforcement has been very effective in reaching compliance. The City has implemented additional City-maintained treatment control BMPs for the University drainage area and its Public Works Operation Center, and the City also conducts additional street sweeping to aid in meeting watershed requirements.

Special Investigations

Aside from upstream investigations conducted as part of the Dry Weather Monitoring Program, no special investigations were needed or conducted during this reporting period.

Conclusions and Recommendations

The City will continue to implement the programs in its JURMP during 2011/2012; it is anticipated that some program refinements will be made as implementation progresses. The City will also continue to collaborate with other Copermittees as applicable within its watersheds and regionally.

Beyond the JURMP Program, City is also subject to additional requirements associated with Total Maximum Daily Load (TMDL) regulations, which set numeric compliance limits. The City of La Mesa has been collaborating with other Copermittees in the Chollas Creek watershed to conduct annual reporting and monitoring for the Chollas Creek Diazinon and dissolved metals TMDLs. During 2010/2011, the City also developed a Strategic Plan for Watershed and TMDL Activity Implementation, coinciding with the adoption of bacteria TMDLs for both the San Diego River and Chollas Creek watersheds. Since that time, the City has been collaborating with other Copermittees to conduct monitoring and modeling, as well as developing the Implementation Plan for San Diego River's bacteria TMDL, and updating the Chollas Creek Implementation Plan to include the new bacteria TMDL. These efforts will continue throughout the TMDL implementation and compliance timelines.

1.0 INTRODUCTION

1.1 BACKGROUND

This Jurisdictional Urban Runoff Management Program (JURMP) Annual Report presents an activity summary for the City of La Mesa (City) during the 2010/2011 fiscal year. The JURMP Annual Report preparation and submission are required by San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit).

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), established a framework for regulating Municipal Separate Storm Sewer System (MS4) discharges under the National Pollutant Discharge Elimination System (NPDES). In 1990, the RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region, followed by a revised permit in 2001. RWQCB Order No. 2001-01 was replaced by the current Municipal Permit in 2007.

In 2002, the City, like all regulated municipalities in the San Diego region (collectively referred to as Copermittees), developed and submitted a JURMP to the RWQCB. The City then submitted an updated JURMP, as required by the Municipal Permit, in March 2008. The JURMP explains management measures for different sectors, including municipal, industrial, commercial, construction, and significant development and re-development activities.

Annual reports documenting the implementation of the JURMP are required to be submitted to the RWQCB by September 30. This JURMP Annual Report presents data from the 2010/2011 fiscal year, which extended from July 1, 2010, to June 30, 2011.

1.1.2 CITY SETTING

The City of La Mesa, located in central San Diego County, covers an area of approximately nine square miles and has a population size of over 56,000 residents. Although the primary land use in La Mesa is residential, there are areas of industrial and commercial development, parks and open space, and other types of development.

Approximately 52 percent of La Mesa is located within the San Diego River Watershed, while the remaining 48 percent is located in the San Diego Bay Watershed. In total, the City constitutes about one percent of the land area in each watershed. Runoff generated in La Mesa is conveyed through five drainage basins: Alvarado, University, Spring Valley, Lemon Grove, and Lake Murray. Table 1-1 lists the approximate percentage of each drainage area in La Mesa, the corresponding hydrologic unit (HU) of the basin, and the receiving water body to which each basin drains. Figure 1-1 presents the drainage basins as they relate to land use activities in the City.

Table 1-1
City of La Mesa Drainage Basins

Drainage Basin	Percent of City Area	Hydrologic Sub Area	Receiving Water Body	Watershed
Alvarado	51	907.11 Mission San Diego	San Diego River	San Diego River
University	28	908.22 Chollas	Chollas Creek	San Diego Bay
Spring Valley	14	909.12 La Nacion	Sweetwater River	San Diego Bay
Lemon Grove	6	908.22 Chollas	Chollas Creek	San Diego Bay
Lake Murray	1	907.11 Mission San Diego	San Diego River	San Diego River

Please note that while runoff from the City drains to these water bodies, the actual receiving water bodies are not themselves located within the City.

Figure 1-1
City of La Mesa Land Use and Drainage Basins

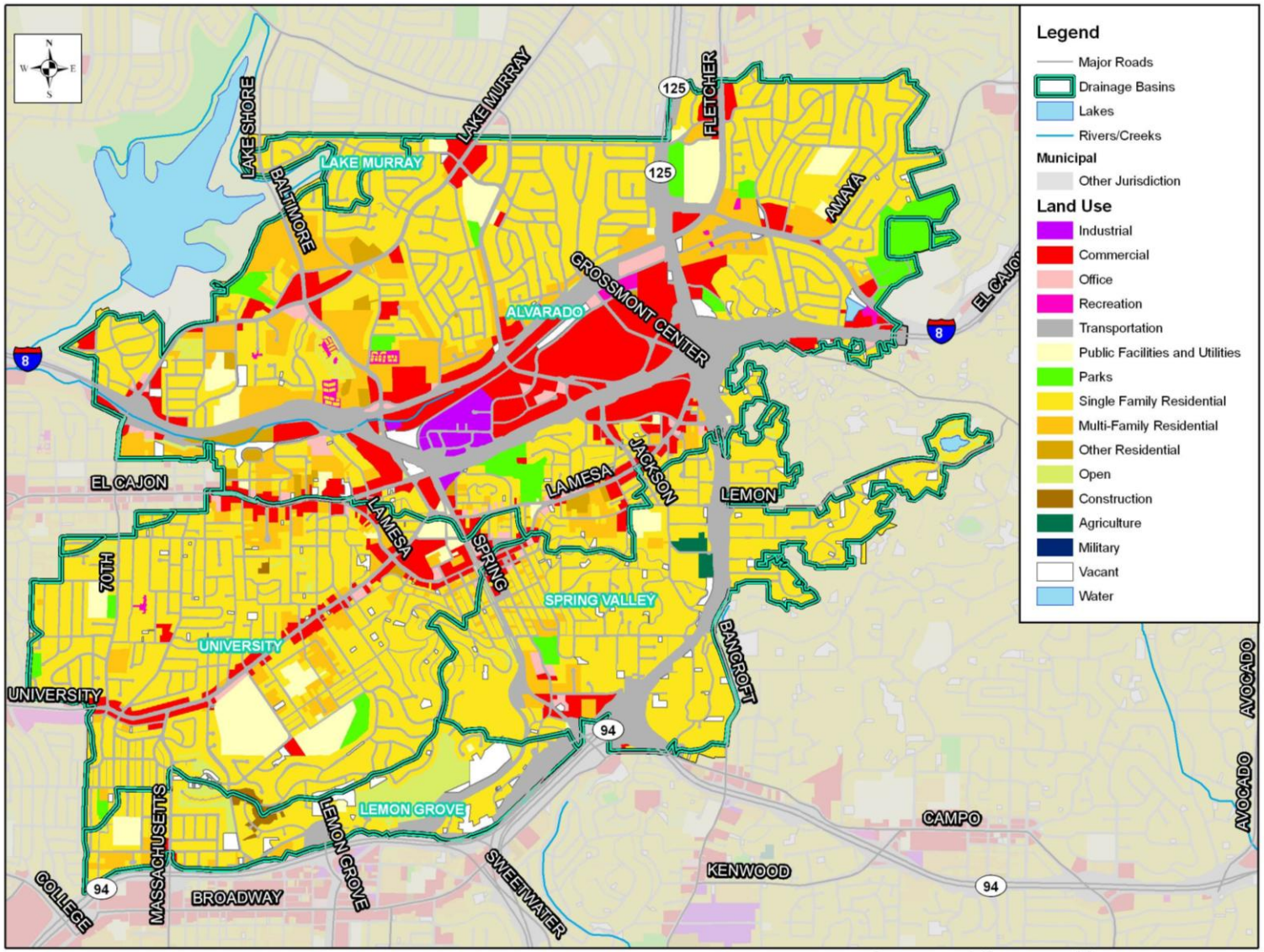

Base Data Sources: City of La Mesa, SANDAG, SanGIS

1.2 Purpose and Objectives

The City's JURMP presents strategies to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The JURMP describes various programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the implementation of the City of La Mesa's JURMP during the 2010/2011 reporting period.

1.3 Report Organization

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning Component**
Section 3	**Construction Component**
Section 4	**Municipal Component**
Section 5	**Industrial and Commercial Component**
Section 6	**Residential Component**
Section 7	**Illicit Discharge Detection and Elimination Component**
Section 8	**Education Component**
Section 9	**Public Participation Component**
Section 10	**Fiscal Analysis Component**
Section 11	**Effectiveness Assessment Component**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all components required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a more detailed explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Background, subsection 1.1, has been divided into Regulatory Background, subsection 1.1.1, and City Setting, subsection 1.1.2, for clarity.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of pollutants from development projects to the MEP and by managing the increase in runoff from development project that have the potential to negatively affect downstream water bodies. During the 2010/2011 fiscal year, the City accomplished these goals through implementation of its JURMP document.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2010/2011 reporting period are presented in the following bulleted list. The remainder of this section provides more detail about the City's implementation of this component of its storm water program.

- Distributed the City's development requirements checklist ("Appendix A" of BMP Manual Part II) to projects applying for permits.
- Updated the City's SUSMP Manual to include Regional Hydromodification Management Plan (HMP) requirements in January 2011.
- Used the City's treatment control BMP database to track completed Priority Development Projects.
- Conducted maintenance inspections of treatment control BMPs at nine completed development projects in the City. See Table 2-1 in this section for a comparison of inspection numbers and Municipal Permit requirements.
- Obtained verification of BMP maintenance from all inventoried projects.

2.2 LAND USE PLANNING

2.2.1 BACKGROUND

The City's General Plan was last updated in 1996 and contains water quality and watershed protection principles in its Public Services and Facilities Element. The principles established in 1996 provide a framework for implementing the requirements of the current Municipal Permit, and no changes to these policies were necessary during the reporting period. An update to the General Plan is planned for 2012.

2.2.2 SOURCE CHARACTERIZATION

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts to the surrounding environment. No changes to the development restrictions in the City's

General Plan for storm water purposes were implemented during the reporting period. The City Council has authorized a comprehensive update to the General Plan to be completed by the City's centennial celebration in 2012.

2.2.3 Best Management Practice Requirements

Please refer to the City's updated JURMP document for a list of the water protection policies included in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 Program Implementation

The City implemented its water protection related land use policies during the reporting period mainly through the City's Municipal Code. The City updated its BMP Manual II, a formatted guidance manual based on the regional Model SUSMP document, in January 2011. The City's BMP Manual II is an uncodified appendix to Chapter 7.18 of its Municipal Code. The updates made at this time were consistent with the regional HMP document, prepared by the Copermittees and adopted by the RWQCB in July 2010, and the updated Model SUSMP. The regional HMP document was also added as an appendix to the City's BMP Manual II. The updated City of La Mesa BMP Manual II is included as Attachment 2.1. This BMP manual and other documents for development project proponents are available on the development tab at the City's storm water pollution prevention website at http://www.cityoflamesa.com/stormwater.

Details on how the City implemented its established storm water protection policies through its environmental review process and its development project approval and verification processes during the reporting period are provided in Sections 2.3 and 2.4 of this JURMP Annual Report document.

2.3 Environmental Review Process

The City's current environmental review process is detailed in the City's updated JURMP. The overall structure of the review process, such as the City's departments involved and the document submissions required, remains the same as in previous reporting years. No modifications to the City's environmental review process have been made since the submittal of the updated JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

During the 2010/2011 fiscal year, the City implemented the watershed protection principles in the City's General Plan through various aspects of the City's development project approval and verification process, as detailed below.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's BMP Manual Part II, which contains the City's SUSMP regulations. The City's SUSMP regulations are included in Municipal Code Chapter 7.18. Projects subject to SUSMP regulations are identified by completion of applicability checklists. More detail about this process is provided in Section 2.4.4.2.

2.4.3 Best Management Practice Requirements

The City updated its SUSMP requirements for development projects in January 2011, as described in Section 2.2.4 above.

2.4.4 Program Implementation

During the 2010/2011 fiscal year, the City required implementation of its BMP requirements for all development projects through education, a comprehensive development project approval process, and a treatment control BMP inspection and maintenance verification program.

2.4.4.1 Outreach and Staff Training

The City provides training for staff involved in the planning and review of development projects within the City and works closely with the development community to communicate its development requirements throughout the entire approval process. City staff performs reviews of WQTR's submitted for development purposes. Outside consultants may also be used for review assistance. On March 15th, a training session was provided to City staff that covered the City's new hydromodification requirements, management techniques, and methods for demonstrating compliance. Details on trainings conducted and educational materials developed and distributed during the reporting period can be found in Section 8 of this JURMP Annual Report document. Based on results from the first years of the program, distribution of treatment BMP maintenance verification letters appears to continue increasing the level of knowledge of regulated parties.

2.4.4.2 Urban Runoff Approval Process for Development Projects

All development projects that required City permits were required to undergo the City's urban runoff approval process as detailed in the City's JURMP. Forms completed by project applicants are kept with the project's file at the City for future reference. As discussed in the City's JURMP, the City required all projects applying for construction and building permits with any potential to impact storm water to complete an "Appendix 'A' –Storm Water Requirements and Project Data Sheet" that guides project applicants to submit proper documents to the City for review. An updated "Appendix A" form is available as Attachment 2.2. All development projects determined to be Priority Projects after completing the "Appendix A" form were required to implement the City's SUSMP

requirements and prepare Post Construction WQTRs in accordance with the City's BMP Manual II. All priority projects are tracked using the City's database.

During the reporting year, six development projects submitted WQTRs, which were subjected to the City's SUSMP requirements, as applicable. The projects and the results of the reviews are listed below.

- Care Meridian. The WQTR for this Priority Project was reviewed and not approved during 2010/2011, but is likely to be approved in the 2011/2012 fiscal year.
- Comerica Bank. The WQTR for this Priority Project was reviewed and approved during 2010/2011.
- Grossmont Summit Drive. The WQTR for this Priority Project was reviewed and approved during 2010/2011.
- Park Station – Kitzman. The WQTR for this Priority Project was reviewed and not approved during 2010/2011. This project awaits discretionary approvals by the City Council.
- Severin Drive. The WQTR for this Priority Project was reviewed and approved during 2010/2011.
- Hilltop Project. The WQTR was initially submitted in the 2004-2005 reporting period. The project was subsequently sold and the WQTR resubmitted in the 2008-2009 reporting period, but was not approved. In the 2010-2011 reporting period, the project was sold yet again and the WQTR was submitted and approved. Although the project received discretionary permits prior to 2008, the City required the project to submit a WQTR showing water quality features meeting the new SUSMP standard. The project is now in construction.

Several projects subjected to SUSMP requirements in previous reporting periods have not submitted revised plans nor have the existing plans been approved. If these projects are resumed, they will be subjected to the City's SUSMP requirements at the time of approval. Some other proposed development projects have been abandoned. No projects approved during 2010/2011 were allowed to implement low removal efficiency BMPs. During the reporting period, no projects received a SUSMP waiver for implementation of treatment control BMPs. The City has never issued a SUSMP waiver, and at this time the City has no plans to develop a SUSMP waiver mitigation program.

The Comerica Bank project is one example of a priority development project that was conditioned to meet SUSMP requirements in 2010/2011. This project, located at 5450 Jackson Drive, proposed three flow-through planter facilities that will receive surface runoff from the project site, allowing the water to infiltrate through soil media to a perforated under drain. In an onsite location where the flows were not able to reach the flow through planters, a Filterra bioretention-type media filter was proposed to treat the storm water. This project represents an urban infill location where the future development (which is currently in construction as of September 2011) will be more protective of storm water quality than the previous urbanized land use.

Hydromodification Management Plan
During the reporting period the Copermittee Land Development Workgroup met regularly to discuss key Hydromodification Management Plan (HMP) development issues and provide updates on the status of consultant work products. City staff regularly participated in the workgroup meetings. The final regional HMP was adopted by the RWQCB just after the end of the 2009/2010 reporting period on July 14, 2010. The City incorporated the HMP requirements into its local development requirements in January 2011, as discussed above. Before the new HMP requirements were adopted in January 2011, the BMP Manual II contained Interim Hydromodification Criteria (IHC), but no approved projects were subject to these requirements since all were less than 50 acres in size. All three Priority Projects approved during the reporting period received discretionary approvals prior to January 2011; therefore the new hydromodification requirements did not apply. The two Priority Projects that have been reviewed but not yet approved during the 2010/2011 fiscal year will be required to address hydromodification requirements.

BMP Installation Verification
During the course of 2010/2011, after maintenance verification letters had been sent out during the summer of 2010, the City tracked Priority Projects within the City's jurisdiction completed during the remainder of the reporting period to be added to the treatment control BMP inventory. When a project is completed, the City checks for BMPs prior to occupancy, records the site information, assigns it a TTWQ priority, and then adds it to the inventory of projects subject to the City's inspection and annual maintenance verification program the following fiscal year. This process helps the City focus its inspection resources on sites more likely to have maintenance deficiencies, as maintenance deficiencies are generally less likely at sites with recently installed BMPs.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

2010/2011 Annual Maintenance Verification
The Municipal Permit requires annual verification of operation and maintenance of treatment control BMPs installed within the City's jurisdiction. Annual verification must be provided by the party responsible for treatment control BMP maintenance and must be returned to the City prior to the start of the wet season (October 1st). Using the property owner names and addresses recorded in the City's BMP database, BMP maintenance verification forms were mailed to all the projects included in the City's BMP database in early 2010/2011.

The City required that completed maintenance verification forms be returned no later than October 1, 2010. The City was able to obtain appropriate responses from every site on the inventory in 2010/2011. Out of the 17 projects on the City's inventory, seven projects did not return their verification forms by the deadline and were issued NOVs in October 2010. After receiving NOVs, nearly all promptly submitted the annual maintenance verification form. Two sites failed to comply in a timely manner, so the City issued a second NOV to the Castle Breckenridge Management, the management company for the Providence Square

development, in December 2010, and to Fairfield Grossmont Trolley LLC, the management company for the Alterra/Pravada development. The completed maintenance verification form was submitted shortly after the second NOVs were issued.

Operation and Maintenance Inspections

During the 2010/2011 fiscal year, the City contracted D-MAX to conduct inspections of projects with treatment control BMPs in accordance with the inspection frequencies outlined in the City's JURMP. Table 2-1 provides a summary of the number of inspections performed and how these met the requirements of the Municipal Permit. All high TTWQ inspections were performed prior to October 1, 2010.

Table 2-1
Assessment of Compliance with Required Inspection Frequencies

Site Class	Number of Sites	Full BMP Assessments	Percent Inspected	Permit Requirement	Requirement Met
All Inventoried Sites	17	9	53%	20%	Yes
Sites with Drainage Inserts	9	6	67%	50%	Yes
High TTWQ	5	5	100%	100%	Yes

During full inspections, each BMP was visually assessed, GPS coordinates were recorded, and deficiencies were documented in writing and in photographs. Table 2-2 lists the development projects inspected, the number of BMPs installed at each site, the number of BMPs inspected, the number of BMPs found in need of maintenance, a brief description of inspection findings, and, if applicable, any follow-up actions taken. Public Priority Projects are indicated with the marker "(CIP)," which is short for capital improvement project. The BMP types installed at these sites and the TTWQ priority for each site is included in the City's treatment control BMP inventory, which is included in Appendix A.1 of this JURMP Annual Report. Further discussion of some of the inspection results and follow-up actions is provided in the text below.

Enforcement

Follow-up actions were recommended for all development projects with BMPs observed in need of maintenance. Since sites are notified by mail of deficiencies in BMP maintenance, with specific corrective actions listed, official verbal and written warnings are typically not used. The City has found that there is often significant turnover at property management companies responsible for BMP maintenance, and the City typically follows-up with non-responders by phone to verify that documents have reached the correct individual prior to issuance of an NOV. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP. The City follows up with any sites that fail to verify that the required corrective actions and regular BMP maintenance were conducted. The City issued nine NOVs to projects failing to respond with appropriate maintenance verification documents and/or projects with deficiencies discovered during routine

inspection. All deficiencies noted in the 2009/2010 reporting period have been resolved. Some examples of follow-up action and resolution are described below.

During the inspection at the Grossmont Medical Offices Building and Parking Structure at 8860/8870 Center Drive, multiple deficiencies were noted. One catch basin did not contain a drainage insert as proposed, a significant amount of trash and/or debris was observed in the vortex separator, and the vegetated swale was not well maintained. The City worked with the responsible party to verify that appropriate maintenance was performed and that the missing drainage insert would be installed. The maintenance verification letter was returned to the City, showing maintenance had been performed by mid-October 2010. City staff also worked with the site to order and install the correct missing BMP by March 2011.

It is the City's policy to verify the installation of treatment control BMPs prior to granting occupancy at completed projects. Past installation deficiencies were rectified by inspection and enforcement during 2010/2011 as described above. Recent improvements to installation verification at project completion, more stringent SUSMP requirements for the clarity of site maps, and additional visits to completed sites by storm water staff have ensured that projects completed in 2010/2011 would not have installation deficiencies similar to projects completed in previous years.

Copies of the forms utilized to administer the above enforcement actions can be found in Appendix D of the City's JURMP.

During the reporting period, no sites were observed to present a significant threat to human health or the environment during inspections, so none were reported to the RWQCB.

2.5 Development Planning Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 Program Review and Modification

The City's SUSMP requirements have been updated as described above in Section 2.2.4.

Table 2-2
Summary of Treatment Control BMP Inspection Results

#	Project Name	Inspection Date	TTWQ	BMP(s) Installed	BMP(s) Inspected	BMPs Requiring Maintenance	Inspection Notes	Follow-Up Notes	Resolution Status
1	Bougainvilla Walk	8/17/2010	Medium	3	3	2	Brow ditch insert had significant trash and/or debris; insert by stairs had significant amount of sediment and trash and/or debris; inlets/outlets were obstructed with vegetation debris.	NOV issued on 10/4/10; maintenance indicated on verification form.	Resolved
2	Grossmont Medical Offices and Parking Structure	8/17/10	Medium	2	3	2	The drainage insert indicated on development plans was not installed; vortex separator had a significant amount of trash and/or debris as well as standing water with an unpleasant odor; vegetated swale had an inadequate vegetative cover.	Maintenance indicated on 10/15/10 and 10/18/10 on verification form. Missing BMP was installed by the responsible party by March 2011, through City follow-up correspondence.	Resolved
3	Grossmont Trolley Theatre Conversion	8/17/2010	High	2	2	0	No maintenance deficiencies noted.	N/A	N/A
4	Kaiser	8/17/2010	High	1	1	0	No maintenance deficiencies noted.	N/A	N/A

Table 2-2 (Continued)
Summary of Treatment Control BMP Inspection Results

#	Project Name	Inspection Date	TTWQ	BMP(s) Installed	BMP(s) Inspected	BMPs Requiring Maintenance	Inspection Notes	Follow-Up Notes	Resolution Status
5	La Mesa Fire Station #11	8/18/2010	High	1	1	1	Excessive sediment was observed in storm screen and needed to be cleaned out.	Maintenance indicated on 4/8/2011 on verification form	Resolved
6	La Mesa Teen Center	8/18/10	Medium	2	2	1	Vegetated swale needed additional vegetation.	Maintenance indicated on 8/30/2010 on verification form	Resolved
7	Providence Square (AKA Talmadge East Apts)	8/18/10	Medium	3	3	3	A significant amount of trash and debris was observed in three drainage inserts; excessive sediment was observed in the insert within landscaping.	Maintenance indicated on 10/24/2010 on verification form.	Resolved
8	Alterra/Pravada Grossmont Trolley Apartments (AKA Fairfield)	9/1/10	High	20	20	0	No maintenance deficiencies noted.	N/A	N/A
9	County Library, La Mesa Branch	9/22/10	High	1	1	0	No maintenance deficiencies noted.	N/A	N/A

3.0 CONSTRUCTION

3.1 INTRODUCTION

The City's construction program is designed to control construction and grading activities in the City. These types of projects have the potential to impact nearby water bodies due to the presence of disturbed soils and building materials and the potential for associated pollutants to be transported off site by storm water or non-storm water flows. The City continued to implement its construction program throughout 2010/2011.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2010/2011 reporting period are presented in the following bulleted list. The following subsections provide more detail on how the City complied with the Municipal Permit during the reporting period.

- Distributed appropriate checklists to all projects applying for grading and building permits.
- Conducted plan checks of erosion control plans to ensure construction projects comply with the City's minimum BMP requirements.
- Conducted training for applicable City staff.
- Conducted 48 construction inspections at 32 sites during 2010/2011.
- Issued 47 verbal warnings and two NOVs to construction sites and activities during 2010/2011.
- Required construction sites less than one acre to complete a Construction Storm Water Management Plan (CSWMP), similar to a Storm Water Pollution Prevention Plan, which details the planned construction phase BMPs for the project.

3.2 SOURCE CHARACTERIZATION

An inventory of active construction projects during the reporting period is presented in Appendix A.2 of this JURMP Annual Report. The City's inventory was maintained throughout the reporting period by the City's Engineering Division. New construction projects were added to the inventory at the start of construction, and projects were removed from the inventory after construction was completed. Since construction projects were continually being added and removed throughout the fiscal year, inventory updates were usually performed more frequently than the minimum once per month.

Since construction activities that involve grading activities are generally more of a threat to water quality than other construction activities such as tenant improvements, the City has chosen to include only projects that have applied for grading permits on the construction inventory. Although other, smaller, construction projects are not included on the City's construction inventory; the City requires BMP implementation and maintains oversight of these projects. The City's building inspectors inspect these sites for proper BMP implementation during their routine building construction inspections. Building inspectors will notify the Engineering Division of the Public Works Department if any major BMP deficiencies are noted or if a facility is required to submit an application for a grading permit, and thus be included on the City's construction inventory. Inspections by the Building Department are not tracked by Storm Water Staff like the City's construction inspections, but these inspections are used as a supplemental tool to implement the City's construction storm water requirements.

3.3 Updates to Ordinances and Approval Processes

The City did not make any changes or updates to City ordinances during 2010/2011. However, the City changed its approval process for Capital Improvement Program (CIP) encroachment projects. These projects are now required to submit a BMP Plan Sheet through the Virtual Project Manager (VPM) website for approval. After review and approval by the City, any changes to the BMP Plan Sheet are to be annotated and uploaded to the VPM. Additional bid language was added and designed to penalize the contractor for poor BMP implementation by deducting the line item daily BMP amounts from their payment.

3.4 Best Management Practice Requirements

The City's updated construction and grading project requirements are detailed in the City's updated BMP Manual Part II, which can be found as Appendix C in the City's JURMP and Attachment 2.1. The City did not make any changes to these BMPs during 2010/2011.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below.

3.5.1 Education and Staff Training

During 2010/2011, City staff involved in construction program implementation was trained on dry weather and wet weather requirements, erosion control, material management BMPs, enforcement action and procedures. Please see Section 8 of this JURMP Annual Report document for details on trainings performed and construction-related educational materials distributed.

3.5.2 Construction and Grading Approval Process

The City's grading approval process is described thoroughly in Section 5 of the City's JURMP. During 2010/2011, City personnel verified that all construction projects planned to implement the City's minimum BMP requirements prior to issuing any building or grading permits. The City continued to distribute Appendix A, which helps the City and the project proponent identify whether coverage under the State of California General Construction Permit (Construction Permit) is needed. Appendix A was updated in January 2011 to include Hydromodification requirements. Additionally, the City continued to require construction projects that are not subject to the General Construction Permit to complete a Construction Storm Water Management Plan (CSWMP), which details BMPs planned for construction sites not required to develop a storm water pollution prevention plan (SWPPP). A copy of the City's CSWMP form is included as Attachment 3.1. Approved forms and documents completed by project proponents are kept with the each project's file at the City for reference.

During 2010/2011, the City continued to enforce a 17 acre maximum disturbed area for grading activities. None of the City's active construction sites were larger than 17 acres, and the maximum disturbed area limitation did not apply. However, all construction sites were still required to limit exposed cleared or graded areas to the amount of area that could be protected prior to a rain event, as prescribed in the City's seasonal BMP requirements.

The City also continued implementing advanced treatment requirements during the reporting period. Criteria for determining when advanced treatment is required are detailed in the City's JURMP. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites within the City's jurisdiction, and advanced treatment methods were not required at any construction sites.

3.5.3 Inspection of Construction Sites

Construction projects that were active during 2010/2011, along with their assigned TTWQ, the number of weeks the site was active during the rainy season, the number of inspections conducted during wet and dry seasons, and the total number of inspections for each site are included in Appendix A.2. A total of 48 routine construction inspections were performed at 32 construction sites during 2010/2011.

Construction inspections conducted during the reporting period were performed as described in the City's JURMP. Key components of the inspections include checks for coverage under the Construction Permit during the initial inspection and assessment of compliance with the City's BMP and discharge requirements. Responsible parties at the sites are educated as needed during inspections. Copies of the inspection forms are kept on file at the City.

3.5.4 Enforcement Measures

Any violations were noted on the project's inspection form, and the sites were given a list of corrective actions necessary to fix the observed violations. When necessary, a verbal or written warning was issued for the violation, and the City followed up with the site until compliance was achieved. Verbal warnings are often relayed through the City's inspection staff, and generally involved minor BMP issues which require quick resolution. The City prefers to check sites frequently and use a more informal, hands-on approach to ensure contractors are implementing correct BMPs onsite. Table 3-1, below, includes the number of violations and enforcement actions taken during the reporting period in response to violations of the City's minimum construction BMP requirements. Enforcement actions are administered in an escalating manner as described in the City's JURMP. Copies of the forms utilized to administer enforcement actions can be found in Appendix D of the City's JURMP.

Table 3-1
Construction Enforcement Actions Taken

Enforcement Context	Verbal Warnings	Written Warnings	NOVs	Stop Work Orders
Routine Inspections	47	0	2	0

For example, one NOV was issued to a single family residence for not installing the erosion control BMPs per the approved Erosion Control Plan. The City followed up with the residence to confirm that all BMPs indicated on the Erosion Control Plan were installed onsite during construction.

None of the violations observed at construction sites during the reporting period were found to endanger human health or the environment. The City was able to bring about compliance at all sites for which enforcement actions were taken, and it was not necessary to report any of these sites to the RWQCB.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 Program Review and Modification

The City's JURMP was updated in March 2008. No significant changes to the City's construction component have been made since that time.

4.0 MUNICIPAL COMPONENT

4.1 INTRODUCTION

Throughout the 2010/2011 reporting period, the City continued to manage municipal areas and activities to reduce municipal discharges of pollutants to the MS4 to the MEP. As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and conducts various municipal activities. Public parks and recreation facilities, administrative buildings, fire stations, and public works facilities make up the bulk of the municipal facilities in the City. Municipal activities conducted by the City or City contractors include power washing, graffiti abatement, building maintenance, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. Information about the City's prioritized street sweeping program can be found in Table 4-1, and information about the City's MS4 maintenance program can be found in Table 4-2. Information about sanitary sewer overflows (SSO) that occurred during 2010/2011 can be found in Table 4-3. The City continued to respond to complaints made to the City's Storm Water Hotline. All complaints made to the City's Storm Water Hotline are included in Appendix B; enforcement actions taken in response to complaint investigations are included in Table 4-4. The City's municipal inspection results can be found in Table 4-5.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the 2010/2011 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the municipal component and of its storm water program during the reporting period are provided in the remainder of Section 4.

- The City inspected all high TTWQ fixed municipal facilities.
- The City hosted several training events/meetings for municipal personnel.
- The City maintained an informational storm water bulletin board in City Hall.
- The City removed a total of 525.29 tons of sediment and debris from street sweeping activities.
- The City removed over 178 cubic yards of sediment and debris from standard MS4 cleaning activities, not including drainage insert maintenance.
- The City removed over 8.75 cubic yards of sediment and debris from filter inserts maintained by the City. City personnel continued to restock the pet waste bag dispensers in City parks, using approximately 22,500 pet waste bags during 2010/2011.
- A total of 6,838 linear feet of sewer line were televised during 2010/2011, which led to the discovery of some areas of the sanitary sewer in need of repair. The City also replaced or rehabilitated 584 linear feet of sanitary sewer line.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities. As mentioned in the City's JURMP, municipal fixed facilities have been grouped under one category, fixed facilities. This is because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar.

4.2.2 SOURCE CHARACTERIZATION

All fixed facilities are included on the City's municipal inventory; descriptions of the facilities and activities can be found in the City's JURMP. The City's inventory is included in this JURMP Annual Report as Appendix A.3. The designations of pollutants potentially generated by municipal facilities on the inventory are based on the pollutant loading potentials shown in Table 6-1 of the City's JURMP. TTWQ prioritizations are assigned via the process laid out in the flow chart shown in Figure 6-1 of the City's JURMP.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City continues to implement and assess the effectiveness of BMPs at fixed municipal facilities. As mentioned in the City's JURMP, the City uses the California Stormwater Quality Association (CASQA) Municipal BMP Handbook to establish appropriate BMPs for fixed municipal facilities. Table 6-2 in the City's JURMP describes the CASQA fact sheets that are used for specific facility types.

The City continues to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. The City also continues to use Calsense Computerized Irrigation Control (Calsense) at a number of fixed municipal facilities to reduce water use and decrease the chance of transporting pollutants to the City's MS4 by over-irrigation. BMP implementation for parks and recreational facilities, as described in the City's JURMP, has not changed.

City public works employees, fire station employees, and employees at other fixed facilities in the City continue to implement BMPs appropriate to the facility type as described in the City's JURMP. City fire response personnel continue to be trained in implementing BMPs for non-emergency fire fighting activities as described in Section 3 of the City's JURMP. There have been no changes in BMP requirements for any fixed municipal facilities.

4.2.4 PROGRAM IMPLEMENTATION

As mentioned above, the City's BMP requirements have not changed since the development of the revised JURMP. Some notable examples of implementation of those BMPs are provided below.

Calsense Computerized Central Irrigation Control

The City continues to use Calsense, an advanced automated irrigation system designed to prevent over irrigation at several fixed municipal facilities. Since Calsense is automated, it has a lower chance of malfunction than manual irrigation systems and allows the City to monitor irrigation activity from a central computer. During 2010/2011, the City added two clocks to the new landscaping installed on Allison Avenue and one clock to the landscaping at the new Police Station. A total of 24 municipal facilities, including both parks and various fixed facilities, are now equipped with Calsense technology.

The Calsense system monitors irrigation by including the use of master valves and flow sensing to prevent over-irrigation and also decrease the amount of water that is used. A break in the system is recognized as a high flow, and the system is shut off until it is repaired. The use of this technology allows the City to prevent major leaks by detecting smaller leaks that might otherwise go undetected earlier than with a manual system. The automatic shutoff by Calsense saves thousands of gallons of water and prevents the runoff generated by a leak from carrying pollutants from parks and other fixed municipal facilities to the storm drain system. The irrigation system can be controlled by a central computer, which calculates the best time for irrigation based on moisture readings, weather, and real time flow rates at every valve. Additionally, the system allows staff to manage the system more efficiently and with less chance of over-irrigation. The irrigation schedules can be designed for a long period of time or easily modified for weekly or daily needs if necessary. The system allows for the most efficient usage of water while minimizing the chance of over-irrigation and consequent introduction of pollutants to the City's storm drain system.

Parks and Recreational Facilities

During 2010/2011, City continued to maintain the 34 pet waste bag dispensers installed throughout 14 parks. City personnel restock the dispensers as necessary; 22,500 pet waste bags were used during the reporting period. As mentioned in the City's JURMP, a number of volunteers continue to assist in keeping the designated dog area at Harry Griffen Park free of pet waste as part of the Canine Corners Program. The City also continues to host the Adopt-A-Park program, which engages residents of the City in volunteering to pick up trash throughout local parks. The City continued its partnership with the St. Madeline Sophie's Center, which employs developmentally disabled individuals in park maintenance activities.

During 2010/2011, the City maintained the informational kiosks in four City parks: La Mesita Park, Vista La Mesa Park, and Jackson Park, and Harry Griffen Park. These kiosks present storm water pollution prevention information to park patrons and are updated with information regarding upcoming outreach events. The Adopt-A-Park program, the partnership with St. Madeline Sophie's Center, and the storm water kiosks are also discussed in Section 9 of this Annual Report.

As previously mentioned, the City continued to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as

described in the City's JURMP. In 2010/2011, the City used 10.6 tons of fertilizer, 97.5 gallons of herbicide, and 38.5 pounds of pesticides.

Public Works Facilities, Fire Stations, Other Fixed Facilities
As previously mentioned, City personnel continued to implement appropriate BMPs for municipal fixed facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance (i.e. landscaping, building maintenance, etc.) as necessary. Parking facilities associated with fixed municipal facilities are conducted as part of the regular sweeping activities and were swept weekly during 2010/2011. The large paved area at the City's Public Works Operation Center was swept at least once weekly during 2010/2011, and twice weekly if needed. Public Works employees continued to implement the storm water management plan (SWMP) at the Public Works Operations Center. Public Works employees also continued to maintain the seven filter inserts on the property; these inserts are cleaned twice annually.

Municipal Inspections
All high TTWQ fixed municipal facilities received a routine annual inspection in 2010/2011. Table 4-5 at the end of this section lists all high TTWQ municipal fixed facilities requiring inspection in 2010/2011, the date the inspection was performed, and the recommended corrective actions from the inspection. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2010/2011. The City's municipal inspection form is included as Attachment 4.1.

The Public Works yard was the only municipal facility recommended for follow-up during 2010/2011. Since the inspection was conducted near the end of the 2010/2011 reporting period, corrective actions will be completed in 2011-2012.

4.3 Roads, Streets, Highways, and Parking Facilities

4.3.1 Background

The City conducts regular maintenance of roads, streets, highways, and parking facilities in the City to control pollutants such as sediment, metals, and litter and debris.

4.3.2 Source Characterization

The City maintains roads, streets, and highways; the City also maintains four stand-alone parking facilities. Roads, streets, and highways, are included as one entity on the City's municipal inventory and each individual stand-alone parking facility is also included on the City's municipal inventory, which is included in Appendix A.3.

4.3.3 Best Management Practices

The City's primary BMP for roads, streets, highways, and parking facilities is street sweeping. Other BMPs are chosen as needed based on the CASQA Municipal Handbook. The City's sweeping frequency is outlined in the JURMP and described in the following

subsection. There were no changes to the BMPs implemented for roads, streets, highways, and parking facilities in 2010/2011.

4.3.4 PROGRAM IMPLEMENTATION

During 2010/2011, the City swept a total of 8,985 curb miles, removing approximately 525.29 tons of debris. Similar to previous reporting periods, the debris removed by sweeping activities was approximately 80 percent sediment and 20 percent leaves, debris, and trash. Table 4-1, below, describes the areas assigned high, medium, and low sweeping priorities, and the associated sweeping frequency. The City met the sweeping frequency requirements of the high, medium, and low priority streets as described in both the JURMP and in the table below. Parking lots associated with City parks were swept every two weeks; parking lots associated with all other fixed facilities in the City were swept every week during 2010/2011.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
High	Downtown areas, designated residential areas, designated commercial areas, four stand-alone parking facilities	10.6 miles	At least every two weeks
Medium	Center islands	9 miles	At least once per month
Low	Designated residential areas	140 miles	As needed, at least annually
Fixed Facilities	Eleven parking lots associated with municipal fixed facilities	N/A*	Weekly
Fixed Facilities - Parks	Twelve parking lots associated with parks	N/A*	Every two weeks
Fixed Facilities – PW Operations Center	Public Works Operation Center, including the two parking lots	N/A*	At least weekly, twice weekly if needed
Total Amount of Debris Collected from Street Sweeping Activities: 525.29 tons			

* Mileage data is not available for the swept area of stand-alone parking facilities, parking facilities associated with municipal facilities, and the PW Operations Center. Mileage accrued while sweeping these facilities is included in the total mileage.

As a means to address priority pollutants in the San Diego Bay and the San Diego River Watersheds, the City continued to conduct additional sweepings of some City streets.

Designated residential areas that are low priority were swept monthly during 2010/2011 and selected high priority streets were swept weekly.

Inspections
Trash, debris, and sediment that have accumulated on City streets are identified and cleaned up via street sweeping, so additional inspections beyond this effort are not necessary.

4.4 MS4

4.4.1 Background

The City's storm water conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during rain events. The City's MS4 consists of approximately 56 miles of pipes of varying materials, natural channels, concrete channels, and culverts and over 400 curb inlets and catch basins.

4.4.2 Source Characterization

The City's MS4, as one complete entity, is included on the City's high TTWQ municipal inventory.

4.4.3 Best Management Practices

The City maintains a strict MS4 maintenance and cleaning schedule in order to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. As described in the City's JURMP, BMPs for MS4 maintenance activities are chosen based on the CASQA Municipal Handbook and have not changed during 2010/2011.

The City has installed and maintains 21 filter inserts in catch basins in the University drainage basin, which are designed to prevent debris from entering the MS4. These filter inserts are maintained as part of the routine MS4 maintenance schedule. Figure 4-1 shows the locations of these drainage inserts.

During 2009/2010, two Filterra Bioretention System units were installed at Orien Avenue at Lowell Street. The manufacturer's warranty includes maintenance for the first two years, after which the City's Public Works employees will maintain the units twice per year, once prior to the rainy season. These two Filterra Bioretention System units are located in the University drainage basin and are included with the drainage inserts in Figure 4-1.

4.4.4 Program Implementation

The City implemented a rigorous MS4 inspection and cleaning schedule during 2010/2011. The City inspected and cleaned all MS4 cleanout locations twice in 2010/2011; at least one cleaning was conducted between May 1 and September 30. The City's MS4 inspection and cleaning schedule for 2010/2011 is shown in Table 4-2.

Table 4-2
MS4 Maintenance Data

	Percent Inspected and/or Cleaned*	Percent of Open Channels Found with Anthropogenic Litter Cleaned	Amount of Debris Removed from Cleaning Activities
Catch Basins/Self Cleaning MS4 Facilities	**100%**	N/A	**66.25 cubic yards**
Open Channels	**100%**	**100%**	**103 cubic yards**
Drainage Inserts	**100%**	N/A	**8.75 cubic yards**
Total Debris Removed From MS4 Maintenance Activities: 178 cubic yards or 69.4 tons			

* No structures were observed at least 33% of capacity during the reporting period. However, the City cleans out any structures, including self-cleaning structures, in which trash and debris is observed at the time of inspection.

The City's cleanout locations are access points to various sections in the City's MS4, so no additional pipe beyond the cleanout location is typically cleaned. The City may flush the MS4 line and then reclaim the water in the event of a spill. During 2010/2011, there was no need to flush any MS4 line, so there is no data to report for additional MS4 cleanout activities. As previously mentioned, the City continued to maintain the filter inserts installed in the University drainage basin.

During 2010/2011, the City continued to inspect the open channels in the City and remove trash and debris as necessary. If litter or debris is observed during the routine inspections, it is removed immediately. The total length of the channel segments inspected and cleaned by City staff was approximately 4,930 feet.

As described in Table 4-2, 178 cubic yards of debris was removed during MS4 maintenance activities. The weight of the material removed was not recorded, though an overall estimation of the composition of debris removed from MS4 maintenance activities is 80 percent trash and leaves and 20 percent rocks and soil. The volumes were converted to estimated weights using the percent composition estimates from City maintenance staff and conversion factors of 2,300 pounds per cubic yard of rocks and soil and 400 pounds per cubic yard of trash, leaves, and similar material. The total weight of material removed was estimated at 69.4 tons.

4.5 Sanitary Sewer System

4.5.1 Background

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. A spill that introduces untreated sewage to receiving waters can contain high concentrations of

bacteria, viruses, and even hazardous chemicals. Routine inspection and maintenance of the sanitary sewer system works to reduce the potential for a spill or SSO and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 Source Characterization

The City maintains a system of public sanitary sewer pipes to convey wastewater from the City to be treated. The sanitary sewer system, as one complete entity, is included on the City's high TTWQ municipal inventory.

4.5.3 Best Management Practices

The City implements BMPs from the CASQA Municipal Handbook, as described in the City's JURMP, during sanitary sewer maintenance. There have been no changes to these BMPs during 2010/2011. The City inspects and maintains the sanitary sewer system as part of regular wastewater activities. The City clears blockages and repairs leaks as needed.

4.5.4 Program Implementation

As part of the City's regular maintenance schedule, the City maintains areas known to be "hot spots" for grease buildup on a monthly basis. During 2010/2011, the City continued to implement a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs. Additionally, the City's FOG Ordinance, No. 2009-2794 and 2009-2795, went into effect on July 1, 2009. The FOG Ordinance provides legal authority for the City to regulate grease producing facilities and outlines specific details of the program. During 2010/2011, the City conducted approximately 180 FOG inspections at FOG facilities. The City will continue to conduct FOG inspections during 2011/2012. The City also will enforce any storm water violations noted during FOG inspections.

In addition to the monthly maintenance at known grease "hot spots," the City seeks to eliminate seepage from the sanitary sewer system to the MS4 by routine preventative maintenance of both systems. Routine maintenance of both systems allows the City to find areas that are likely to become problems in the future and make the necessary repairs/replacements before any larger issues arise. A total of 6,838 linear feet of sewer line was televised during 2010/2011 in order to find and repair any areas where seepage could occur. The City also continued to conduct flow metering in its sanitary sewer system to monitor for evidence of potential problems. During 2010/2011, the City replaced or rehabilitated 584 linear feet of sewer line. The majority of this sewer replacement is through a multi-phase program whereby the City has been replacing older sewer in sections of the City. The City received a low interest loan from the State Water Resources Board in 2007 to upgrade the system and protect against infiltration and inflow, as well as SSOs. Additional sewer replacement projects may continue in 2011/2012 as additional funding is secured.

In case of an SSO, the City maintains a spill response plan that establishes procedures for responding to an SSO. Detailed information about the City's SSO spill response plan is included in the City's JURMP. During 2010/2011, there were nine SSOs. These spills were reported to the State Water Resources Control Board (SWQCB) within 24 hours through the California Integrated Water Quality System (CIWQS), as required by the Municipal Permit. The City submitted a technical report to the RWQCB about the results of its investigations into the spills, which contains the details of the City's mitigation efforts.

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City conducts a variety of different mobile municipal activities, typically involving infrastructure maintenance, landscape maintenance, graffiti removal, and power washing. Power washing is not considered a part of any normal maintenance activities, but it is used when other methods of cleaning or graffiti removal are not effective.

4.6.2 Source Characterization

Both power washing and graffiti removal are listed on the City's high TTWQ municipal inventory. Infrastructure maintenance and landscape maintenance are listed on the City's medium TTWQ municipal inventory.

4.6.3 Best Management Practices

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel are trained to implement BMPs for the specific activity in which they are involved. For example, City personnel performing power washing are trained to collect all waste water and City personnel conducting graffiti removal are trained to store and handle any chemicals properly.

4.6.4 Program Implementation

Power washing and graffiti removal, both high TTWQ activities, are conducted on an as needed basis and are therefore not on a set schedule. Neither power washing nor graffiti removal was scheduled to be conducted during the timeframe that routine municipal inspections were conducted. Facility personnel responsible for graffiti removal and power washing have been trained and are aware of the BMPs necessary for each activity to prevent discharge to the MS4. Water produced by these activities is either directed to landscaping or storm drains are blocked and water is vacuumed up once the project is complete.

Municipal personnel that conduct other mobile activities such as infrastructure maintenance and landscape maintenance are trained regularly regarding BMPs for material use and disposal. Emergency vehicle maintenance personnel are trained on the proper handling and use of pesticides, herbicides, and fertilizers as described in the City's JURMP.

4.7 Special Events

4.7.1 Background

The La Mesa Oktoberfest is the only priority designated annual special event that occurs in the City. Oktoberfest is a three-day celebration occurring in early October. There are no other regular major special events, although smaller events may occur on occasion.

4.7.2 Source Characterization

As required by the Municipal Permit, special events are included on the city's high TTWQ municipal inventory.

4.7.3 Best Management Practices

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter/debris from the event, and raise storm water awareness among the vendors and patrons of the event, as applicable. During smaller events, City staff ensure that any trash and debris left over from the events is cleaned up.

4.7.4 Program Implementation

Individuals or groups wishing to host events in the City meeting certain criteria are required to obtain a permit from the City. Both Community Assembly Permits and Block Party Permits are available from Public Works and Park Use Permits are available from the Community Services Department. Permits require individuals responsible for the event to control trash and clean up after the event. If vendors are anticipated at the event, the "Tips for Outdoor Vendors" fact sheet (Attachment 8.1) is provided to the permit applicant.

During 2010/2011, the City provided "Tips for Outdoor Vendors" to the vendors of the Oktoberfest event. This fact sheet informed the vendors of the difference between the storm drain system and the sanitary sewer system and the effects of polluted urban runoff. The sheet also included event-specific BMPs, such as using dry cleaning methods, having spill response materials if using cooking grease, and managing trash and other wastes properly. The City distributed approximately 50 copies of the aforementioned fact sheet.

On the Monday following the three-day Oktoberfest event, the City conducted a post inspection of the area where the event took place. Minor amounts of litter and debris were observed on the ground, which were cleaned up as part of the routine special event BMPs.

4.8 Public Reporting of Illicit Discharges and Connections

Reporting and Response

Public and municipal involvement is crucial to preventing and eliminating IC/IDs from the storm water conveyance system. The Storm Water Hotline provides an effective means for

individuals in the City to report suspected IC/IDs. The hotline number is provided on the City's website, in distributed storm water educational material, in storm water articles in the *La Mesa Focus* newsletter, and on the Storm Water Bulletin Board. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged onto a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges. The Public Works Department also receives complaints regarding storm water, often due to infrastructure concerns. Complaints to the Public Works Department are also tracked and investigated.

Complaints received by the City during the 2010/2011 reporting period and the City's response to each are listed in Appendix B. A total of 151 complaints were documented this year.

Enforcement

As previously stated, complaints received via the Storm Water Hotline, City website, and Public Works Hotline are included in a table in Appendix B. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, violations, and/or educational material. Table 4-4, below, summarizes the enforcement actions taken in response to complaints received.

Table 4-3
Enforcement Actions Resulting from Complaints Received by the Storm Water Hotline

	Verbal Warning	Compliance/ Enforcement Letter	Written Warning	NOV
Commercial	5	29	2	8
Industrial	0	1	0	0
Mobile	0	0	0	0
Municipal	0	1	0	0
Residential	8	20	4	7
Construction	8	1	0	1

Note: Hotline calls received that are not represented in this table were able to be resolved without requiring formal enforcement means. Generally, formal warnings, enforcement letters, and violations are issued if a discharge is observed or facilitating responsible party action requires higher levels of enforcement.

4.9 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to sanitary sewer overflows. Preventative maintenance is regularly conducted on the City's sanitary sewer system, and video inspections and sewer surveys are regularly conducted to monitor the condition of the public sewer lines and to determine the necessity of maintenance. City

crews do not maintain private laterals, but the City assists in the containment and cleanup of spills from private laterals if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report any SSOs to the City's Storm Water Hotline. As previously mentioned, there were nine SSOs during 2010/2011; there were no other spills during the reporting period. Additional information regarding the City's mitigation efforts for the SSOs can be found in the technical report that was submitted to the RWQCB during 2010/2011.

4.10 Education and Outreach

During 2010/2011, the City continued to educate municipal personnel regarding proper BMP implementation and other storm water and watershed concepts. The City held a variety of training sessions for City personnel. The City also continued to maintain a storm water bulletin board in City Hall, which provided storm water information and brochures.

During 2010/2011, the City also played a central role in the development of a training video for municipal employees, a product of the Regional Municipal Workgroup. City staff wrote the script for the video, coordinated filming and voiceovers, and worked with the production company to edit the final product. Upon completion in 2011/2012, this video can be used region-wide to train municipal employees on appropriate BMP implementation.

Detailed information regarding the education and outreach conducted for City personnel is described in detail in Section 8 of this Annual Report.

4.11 Municipal Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.12 Program Modification and Review

The City's JURMP was updated in March 2008. No changes to the City's municipal component have been made since that time.

Table 4-4
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
1	Allison Avenue Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	6/1/11	Cigarette butts were observed in the eastern corner of the lot and should be swept regularly. Surrounding businesses have been talked to about this issue.	Surrounding businesses have been talked to about this issue.	Resolved
2	Aztec Park	High	Parks and Recreation Facilities	5/2/11	No significant corrective actions	N/A	N/A
3	Briercrest Park	High	Parks and Recreation Facilities	5/20/11	No significant corrective actions	N/A	N/A
4	Collier Park and Pump House	High	Parks and Recreation Facilities	6/1/11	Vegetative debris is a major concern at this site. Concrete channel in the middle of the park is full of this debris and it is creating a blockage at the bridge in the middle.	Will be completed in beginning of FY 11-12.	TBD
5	Community Pool	High	Parks and Recreation Facilities	6/30/11	No significant corrective actions	N/A	N/A
6	Harry Griffen Park	High	Parks and Recreation Facilities	6/6/11	No significant corrective actions	N/A	N/A
7	Highwood Park	High	Parks and Recreation Facilities	6/6/11	No significant corrective actions	N/A	N/A
8	Jackson Park	High	Parks and Recreation Facilities	5/4/11	No significant corrective actions	N/A	N/A
9	Junior Seau Sports Complex	High	Parks and Recreation Facilities	6/6/11	Sediment is a concern in the inlets around the fields.	Will be completed in beginning of FY 11-12.	TBD

Table 4-4 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
10	La Mesa Blvd (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	5/26/11	No significant corrective actions	N/A	N/A
11	La Mesita Park and Gardener's Shack	High	Parks and Recreation Facilities	5/9/11	No significant corrective actions	N/A	N/A
12	Lemon Ave Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	6/1/11	No significant corrective actions	N/A	N/A
13	MacArthur Park	High	Parks and Recreation Facilities	5/26/11	No significant corrective actions	N/A	N/A
14	Northmont Park	High	Parks and Recreation Facilities	5/6/11	No significant corrective actions	N/A	N/A
15	Palm Avenue Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	6/1/11	No significant corrective actions	N/A	N/A
16	Porter Hall	High	Parks and Recreation Facilities	5/26/11	No significant corrective actions	N/A	N/A
17	Porter Park	High	Parks and Recreation Facilities	5/26/11	No significant corrective actions	N/A	N/A

Table 4-4 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
18	Public Works Facility	High	Public Works Facilities	6/29/11	(1) Catch basin at west end along the wall(across from sign shop) needs immediate maintenance. The inlet filter seemed to be in good condition but basin was full of trash and debris and needed to be cleaned out. (2) Area where the paver is kept needs improvement. Drip pans should be used under the truck. Any spills should be cleaned immediately. Make sure that the fiber rolls and absorbent rolls on the east side of the building are kept in good condition. (3) Stockpile adjacent to the drying bed area needs improvement. Areas around containment should be swept as needed. When the piles are not in use they should be covered, and fiber rolls should be placed across the openings. (4) Materials and debris (shopping cart w/ buckets and bottles) that are located by the storage container in the middle of the yard need to be thrown away if they are empty, or kept under cover. (5) Granular rubber in the Northeast corner needs to be covered, broken bags should be replaced or fixed.	Will be completed in beginning of FY 11-12.	TBD
19	Rolando Park	High	Parks and Recreation Facilities	6/2/11	Sediment was observed in the parking lot and has been an issue in the past. (6) Trash cans on the upper field were overflowing and garbage bags were filled and stacked near the cans.	Will be completed in beginning of FY 11-12.	TBD

Table 4-4 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
20	Sunset Park, Gardener's Shack and Recreational Building	High	Parks and Recreation Facilities	5/6/11	Slope along the northwest side of the park is contributing large amounts of sediment into the parking lot and cross gutters.	Will be completed in beginning of FY 11-12.	TBD
21	Sunshine Park	High	Parks and Recreation Facilities	6/2/11	No significant corrective actions	N/A	N/A
22	Vista La Mesa Park	High	Parks and Recreation Facilities	5/2/11	Landscape debris should be picked up after all work is finished. Do not leave debris on the ground.	Will convey info to Parks Supervisor.	N/A

Note: Roads, streets, highways, and parking lots; the MS4; and the sanitary sewer system were inspected via the maintenance effort described earlier in this section.

Figure 4-1
City Maintained Treatment Control BMPs Installed in the University Drainage Basin

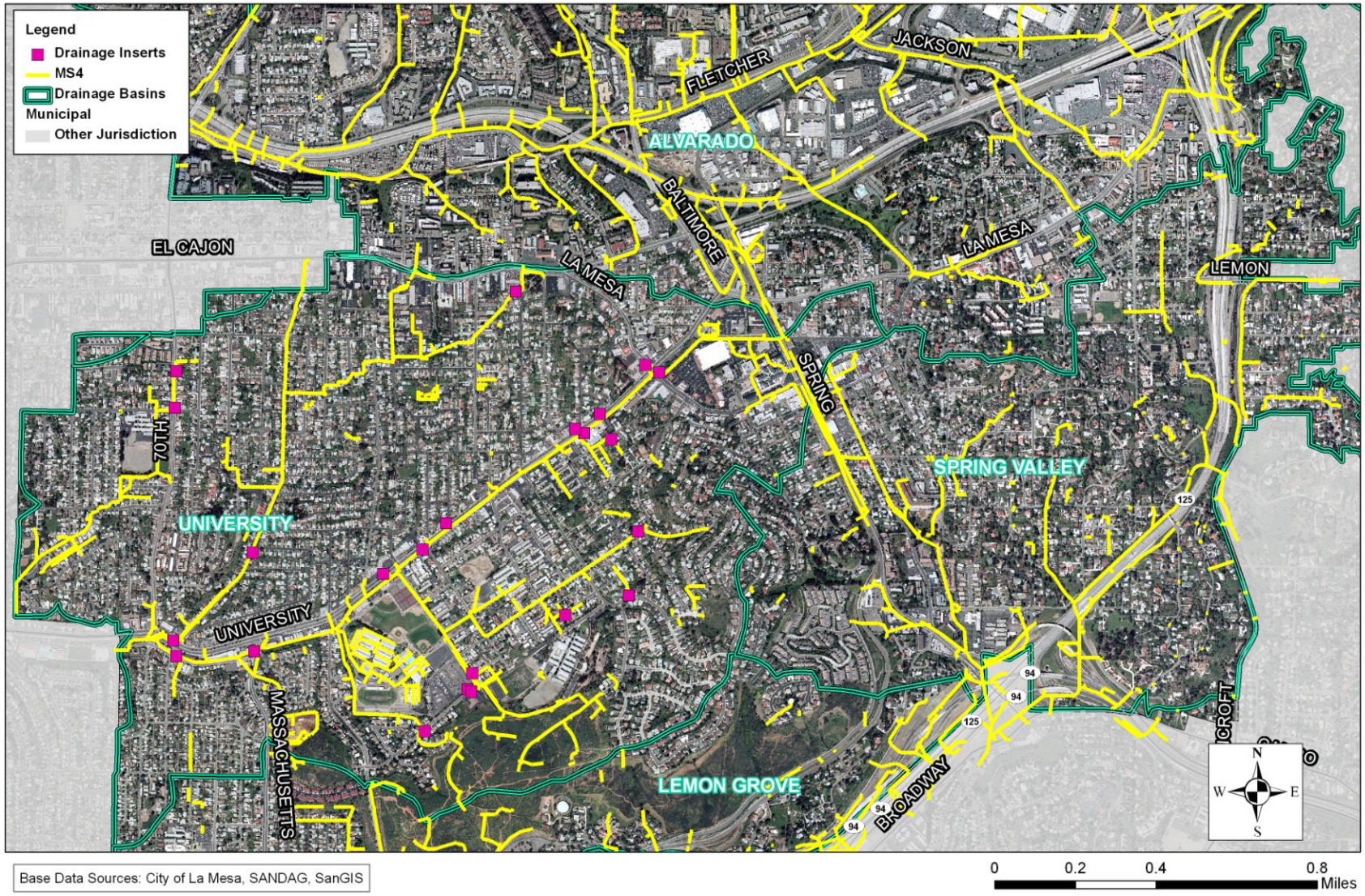

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During 2010/2011, the City continued to implement a storm water program to reduce urban runoff pollution from the areas and activities of industrial and commercial businesses. The City aims to reduce the amount of pollutants discharged from industrial and commercial facilities by implementing various aspects of its industrial and commercial program.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Notable achievements for the industrial and commercial component during the 2010/2011 reporting period are outlined below. Additional details about the City's implementation of the industrial and commercial component and of its storm water program during the reporting period are provided in the remainder of Section 5.

- The City met the Municipal Permit requirement of inspecting at least 25 percent of its stationary industrial and commercial inventory.
- The City inspected all high TTWQ stationary industrial and commercial facilities.
- The City completed pollutant discharge potential assessment (PDPA) forms and additional watershed-specific questionnaires at inspections to aid watershed management and source identification efforts.
- Based on inspection findings and complaints made to the hotline, the City took enforcement actions against industrial and commercial businesses, as necessary.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 BACKGROUND

The City's updated commercial and industrial inventory is included as Appendix A.4 to this JURMP Annual Report and includes all stationary facilities known to be operating in the City that are required to be included on the City's inventory. Stationary facilities in the City include, but are not limited to, manufacturing facilities, wholesalers, auto dealerships, auto repair shops, and restaurants. The City requires industrial and commercial businesses to implement pollution prevention measures and minimum, activity-specific BMPs to mitigate the impacts of business activities on water quality.

5.2.2 SOURCE CHARACTERIZATION

The City's commercial and industrial inventory includes both stationary and mobile businesses, as required by the Municipal Permit, and were updated during 2010/2011.

Information on how the City prioritizes the commercial and industrial inventory based on TTWQ is discussed in detail in the City's JURMP. The City considers the following factors when prioritizing the inventory:

- Industrial Permit subjectivity
- Consideration of downstream waterbody and whether the business is likely to discharge pollutants for which the waterbody is impaired
- Results from previous inspections and institutional knowledge
- Proximity to the receiving waterbody

The City's updated inventory includes 366 stationary industrial and commercial facilities.

In August 2011 the City received comments from Coastkeeper indicating that Coastkeeper could not find the list of pollutants potentially generated by inventoried businesses or the identification of which businesses are tributary to impaired water bodies and likely generating pollutants for which the water bodies are impaired. For pollutants generated, this year the City's inventory has been reformatted to explicitly show the information about pollutants generated all in one table rather than in two separate tables—one listing the businesses and their categories, the other listing the categories and their pollutant discharge potentials. The City has also taken steps to individually evaluate pollutant discharge potentials during site inspections, and that site-specific information is also reflected on the updated inventory where applicable. The information about which businesses are believed to be tributary to impaired water bodies and likely generating pollutants for which the downstream water bodies are impaired is reported in a column now titled "Generating Pollutants Tributary to 303(d) Listed." This is the same information as has been reported in a column titled "Likely Source" in previous years, but the column title has been changed to ensure the meaning is clearly conveyed to the reader.

5.2.3 Best Management Practice Requirements

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other designated BMPs to reduce or potentially eliminate the generation of pollutants from business areas/activities. The City has established a set of minimum BMPs based on the CASQA Industrial and Commercial Handbook. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. The City's BMP requirements are described in more detail in the City's BMP Manual Part I, which is an attachment to the City's JURMP. BMP requirements for stationary industrial and commercial businesses did not change during 2010/2011.

5.2.4 Program Implementation

As previously mentioned, the City updated its industrial and commercial inventory during 2010/2011. The updated commercial and industrial inventory is included as Appendix A.4 to this JURMP Annual Report.

Industrial and Commercial Inspections

During 2010/2011, the City conducted storm water compliance inspections at selected stationary industrial and commercial facilities. All high TTWQ sites were selected for routine inspection. Additional sites selected for routine inspection were selected randomly, with consideration for sites with previous issues that had not recently been inspected.

Table 5-1, on the following page, provides a summary of the industrial and commercial site visits. In the table, full inspections have been counted as one full inspection. Because facilities move/go out of business, are duplicates of other businesses listed on the City's inventory, or are conducting activities for which inclusion on the City's inventory is not necessary, full inspections are not conducted at all visited facilities. Since time and effort are required to visit these facilities, visits where a full inspection is not conducted are considered equivalent to one half of a full inspection. The only time a site visit would not count as half of a full inspection is if the facility moved and was replaced by a facility where a full inspection was conducted or if the facility was a duplicate of another facility selected for inspection.

Table 5-1
Summary of Routine Site Visits

Facility Category	Inventoried Stationary Sites	Equivalent Full Inspections*	Percentage of Total Inventory
High TTWQ Sites	38	37.5**	10.2%
Additional Sites	328	57	15.6%
Totals	**366**	**94.5**	**25.8%**

* "Equivalent Full Inspections" includes full inspections and also counts at 50 percent value the site visits where a full inspection could not be conducted but where effort was taken to document the visit and update the inventory. It does not include any businesses that were duplicate listings of other inspected facilities or facilities replaced by other businesses inspected during the reporting period.
** One high TTWQ facility, Rainbow Steel Inc., is no longer conducting business within the City; however the existing site was still inspected in 2010/2011 in order to evaluate site conditions. As a full inspection could not be completed with facility personnel, this inspection is considered to account for half of one full inspection.

Facility inspections were conducted in accordance with the protocol set in the City's JURMP. Inspections involved a thorough examination of the facility and all outdoor activities. BMP deficiencies and corrective actions were recorded on the City's industrial and commercial inspection form and discussed with facility personnel present during the inspection. Businesses were given a copy of corrective actions at the time of inspection.

During the inspection process, the City also checked Industrial Permit compliance status when applicable. The City also reviews storm water pollution prevention plans (SWPPP) and monitoring results when applicable. Furthermore, the City completed PDPA forms and supplemental watershed questionnaire forms during the inspections in an effort to collect more data from inspected facilities. These forms are included with the City's inspection form, which is included in Attachment 5.1.

During 2010/2011, the City conducted the following inspections:

- Follow-up inspections at sites not in compliance in 2009/2010
- Routine inspections for 2010/2011
- Brief re-inspections at sites with minor violations during routine 2010/2011 inspections

Follow-up inspections performed in 2010/2011 are included in Table 5-2. Results of full routine inspections performed in 2010/2011 are included in Table 5-3.

In 2010/2011, a minor re-inspection form was developed to document a no-fee inspection that is completed within 48 hours of the initial inspection. These are for minor issues that do not warrant a full fee-imposed re-inspection (e.g. small amounts of trash). These inspections are still categorized as a failure to comply and re-prioritized as such. The purpose of this minor re-inspection form is to get small issues corrected quickly. If the issues are not corrected within 48 hours, then a full re-inspection is required. Facilities where minor re-inspections were completed and a full re-inspection was not required have a correction status of "Completed" in Table 5-3.

The conditions at two facilities inspected at the end of the reporting period warranted a full re-inspection, and the City's follow-up and enforcement activities at these sites will continue into 2011/2012. In some cases, a facility recommended for follow-up during 2009/2010 was observed to be in compliance during the follow-up inspection conducted during 2010/2011. These sites received a routine inspection subsequent to the follow-up inspection to confirm continued compliance with City requirements. In some cases, businesses were out of compliance during the 2010/2011 routine inspections. The City performed brief re-inspections at these sites and achieved full compliance during 2010/2011.

Additionally the City completed approximately 180 Fats, Oil, and Grease (FOG) inspections during 2010/2011. These inspections also include a quick check for storm water compliance in addition to the FOG requirements for restaurants.

The City did not rely on third party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third party inspection program.

General Industrial Permit

Subjectivity to the Industrial Permit was evaluated during the industrial and commercial inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector gathered information about the business activities that occur on site and assigned or reassigned the business' standard industrial classification (SIC) code(s). Based on the assigned SIC code, the inspector evaluated the Industrial Permit subjectivity of the business. Notably, none of the inspected businesses in the City were observed to be in violation regarding obtaining coverage under the Industrial Permit in 2010/2011.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to give site-specific one-on-one education regarding storm water concepts and BMPs. The City Inspector discusses a variety of topics including watershed concepts, the Industrial Permit, and minimum, activity-specific BMP requirements. Prior to performing industrial and commercial inspections, the City sent a letter to all businesses informing them of the upcoming inspection. At the time of inspection, businesses are given a copy of corrective actions. Additionally, automotive-related facilities receive the "Green Wrench Guide". This year, approximately 25 San Diego Bay or River Watershed factsheets were distributed to businesses interested in more information on storm water beyond basic compliance.

The City Inspector works directly with businesses that have had repeat violations, such as A-1 Equipment and Walter H. Barber & Sons, Inc., to ensure long term compliance. The City's inspector has visited businesses more frequently than for official annual inspections in order to build a relationship with the personnel and to clarify storm water regulations. Also, the City provides a customized list of corrective actions during the inspection to facilitate prompt compliance.

The City continued to publish storm water-related articles in the *La Mesa Focus* newsletter. The 2010/2011 issues were distributed to the residents and businesses in the City that have elected to receive it; 908 were sent electronically, and 21 were mailed hard copies. In addition, a hard copy of each newsletter is available at the City Library. Summaries of the articles in the newsletter can be found in Section 6; the newsletters are included as Attachment 5.2 to this JURMP Annual Report.

Enforcement

Ten industrial and commercial facilities were observed to be out of compliance with the City's municipal storm water ordinance during routine inspections conducted in 2010/2011. As previously mentioned, brief re-inspections were performed in 2010/2011 in order to address minor corrective actions. Eight of the ten facilities had achieved compliance at the time of the re-inspection. One industrial and one commercial facility were found to have ongoing issues that will require additional follow-up. These inspections were conducted near the end of the 2010/2011 reporting period, so actions to bring the sites into compliance will continue into the 2011/2012 reporting period. The City did, however, send NOVs to both of these businesses for failing to properly implement BMPs. Notably, a smaller percentage of business inspections resulted in the need for a follow-up visit than in previous years. The likely explanation for this increase in compliance is the storm water inspection fee program. While the initial purpose of the inspection fee was to fund the storm water program, charging businesses for each routine inspection and follow-up visit provides the additional benefit of encouraging businesses to come into compliance with the City requirements to avoid the fees associated with additional follow-up inspections. Businesses are required to pay for all necessary re-inspections until they are in compliance, which has made it fiscally possible for the City to have one inspector as point person who personally coordinates compliance assistance and enforcement. No industrial and commercial IC/IDs were discovered during routine inspections.

During the course of the 2010/2011 reporting period, the City received 26 complaints regarding stationary industrial and commercial businesses. These came directly from residents as calls into the storm water hotline, complaints entered through La Mesa's Request Tracker and the Civic Plus websites, or complaints from City staff. Details of the industrial and commercial complaint investigations are included in the City's complaint log, which is included as Appendix B. The City took appropriate enforcement actions during investigations conducted in response to these complaints including verbal discussions, distribution of educational materials, written warnings, enforcement letters, and NOVs, as necessary.

There were no instances of noncompliance that posed significant threat to human health or the environment observed during 2010/2011. No non-filers were noted, as discussed earlier in this section, and no other businesses were reported to the RWQCB.

5.3 Mobile Sources

5.3.1 Background

Due to the nature of activities of most mobile businesses, a major area of concern is illegal discharges. In general, mobile businesses can be difficult to identify, as many do not have City business licenses. Additionally, many mobile businesses may be home-based and/or conduct activities that do not occur in one fixed location, so inspections of such facilities are impractical.

5.3.2 Source Characterization

Known mobile industrial and commercial businesses, as described in the City's JURMP, are included on the City's inventory and are marked as mobile. A total of 981 businesses are included on the City's 2010/2011 mobile inventory. The City has also contributed its mobile business inventory for upload to the regional database, which was developed in 2008/2009, by the Regional Industrial and Commercial Workgroup for use by all Copermittees. The goal of developing this database is to allow Copermittees to share information about mobile businesses, which may be active in more than one jurisdiction.

5.3.3 Best Management Practice Requirements

BMPs for stationary industrial and commercial facilities are required to be implemented for all outdoor activities, as applicable. BMPs for mobile businesses, including key principles, such as proper collection and disposal of any discharge, are discussed in the City's JURMP. The City has also established a program that requires mobile businesses operating in the City to sign an affidavit making businesses aware of the City's BMP requirements and commits them to implementing the required BMPs.

The City participates in the Regional Industrial and Commercial Workgroup, which developed regional mobile business BMP standards in 2008/2009. These standards were devised to create a uniform set of minimum BMPs for mobile businesses operating within

the region. The regional mobile business BMP standards are provided on the Project Clean Water website.

5.3.4 Program Implementation

During the 2010/2011 inspection program, the City responded to two calls to the City's storm water hotline regarding mobile businesses. More detail about the complaints is included in the City's complaint log, included in Appendix B.

In addition to the regional effort to standardize mobile business BMPs, the Regional Industrial and Commercial Workgroup continued to develop the regional mobile business database. The database is designed to store information regarding mobile businesses operating within the region and to facilitate communication regarding mobile business activities and enforcement actions between Copermittees.

Mobile Affidavits
The City requires mobile businesses to sign an affidavit when applying for a business license to acknowledge the City's BMP requirements. Additionally, the affidavit states that the business owner agrees to implement BMPs as required by the City's JURMP and acknowledges that failure to do so will result in enforcement action and possible legal action. During 2010/2011, affidavits were distributed to mobile auto detailing businesses that applied for business licenses, and one affidavit was signed during this reporting period.

Education and Outreach and Enforcement
As previously mentioned, two complaints were made to the City's Storm Water Hotline regarding mobile businesses. City personnel investigated these cases, and both were resolved.

In 2010/2011, the City's Storm Water Staff conducted early morning compliance investigations to look for mobile washing violations that would not be apparent during normal working hours. Staff checked approximately 31 locations on October 13th and 28th between 4:00-7:30 am, including commercial loading docks. No storm water violations were discovered, but City staff communicated the City's requirements and pollution prevention tips to business employees that were encountered during the investigations.

There were no instances of noncompliance of mobile businesses that were believed to present potential threats to human health or the environment observed during 2010/2011, so none were reported to the RWQCB.

5.4 Industrial and Commercial Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was updated in March 2008. No changes to the City's industrial and commercial component have been made since that time.

Table 5-2
Follow-Up Inspections

#	Business	Street Address	Inspection Date
1	A-1 Hire, Ltd.	7190 University Ave.	9/8/2010
2	Chili's Bar & Grill	8285 Fletcher Pkwy.	9/10/2010
3	China Super Buffet	7984 La Mesa Blvd.	9/8/2010
4	Fuddrucker's	5500 Grossmont Center Dr.	9/7/2010
5	Jack in the Box (Jackson)	5141 Jackson Dr.	8/31/2010
6	La Mesa Transfer and Storage	8336 Case St.	9/1/2010
7	Rainbow Steel Inc.	8332 Case St.	9/1/2010
8	Vine Ripe Market	8191 Fletcher Parkway	9/10/2010
9	Walter H. Barber	8179 Center St.	9/1/2010

Table 5-3
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code(s)	Basin	Inspection Date	Follow-Up Required?	Correction Status
1	5 Star Market and Liquor	7495 University Avenue	Medium	5411	University	5/3/2011		
2	7-Eleven Food Store #17945	7602 University Avenue	Medium	5411	University	4/5/2011		
3	A A A Auto Repair & Transmission	7025 University Ave	High	7537	University	5/9/2011		
4	A-1 Hire, Ltd.	7190 University Ave.	High	7353, 7694	University	6/2/2011	✔	In Progress
5	A-1 Self Storage (Spring St.)	4981 Spring St.	Low	4225	Alvarado	6/2/2011		
6	Ace Coating Co.	8333 Case St.	High	1799	Alvarado	5/3/2011		
7	Affordable Paint and Body	8181 Center Street	High	7532	Alvarado	6/30/2011		
8	American Tanks	8111 Commercial St	High	3444	Alvarado	6/8/2011		
9	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr	High	7542, 7549	Alvarado	5/17/2011		
10	Auto Fix	7227 University Ave.	High	7539	University	5/9/2011		
11	Azure Construction, Inc.	7423 El Cajon Blvd.	Medium	1799	University	5/25/2011		
12	Babies R' Us	8150 Fletcher Parkway	Low	5137	Alvarado	5/16/2011		
13	Bamboo Fresh Thai Cuisine	7953 University Ave.	Medium	5812	University	2/25/2011		
14	Beck's Repair Shop	8838 La Mesa Blvd.	Low	7539	Alvarado	5/16/2011		
15	Big Daddy's Oil Inc. #14	9600 Murray Dr.	High	5541	Alvarado	5/16/2011	✔	Completed
16	Big O Tires	7589 El Cajon Blvd Suite A	Medium	7534, 7538	University	5/16/2011		
17	BJ's Pizza & Grill	5500 Grossmont Ctr Dr #M1	High	5812	Alvarado	1/26/2011		
18	Bob Stall Chevrolet	7601 Alvarado Road	High	5511, 7538	Alvarado	6/8/2011		
19	Brady Co. / San Diego Inc.	8100 Commercial Street	Medium	1742	Alvarado	6/16/2011		
20	Bridgestone Retail	5577 Lake Murray Blvd.	Low	5531, 7539	Alvarado	5/11/2011		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code(s)	Basin	Inspection Date	Follow-Up Required?	Correction Status
21	Broding's Battery Warehouse	8188 Commercial St.	High	5013	Alvarado	5/11/2011		
22	Burger Auto Group, LLC	8355 Hercules Street	High	5511, 7538, 7532	Alvarado	5/11/2011		
23	California Countertops, Inc.	7811 Alvarado Rd	High	3089	Alvarado	6/7/2011		
24	Centex Glazing	8260 Commercial St.	High	1791	Alvarado	6/9/2011		
25	Chili's Bar & Grill	8285 Fletcher Pkwy	High	5812, 5813	Alvarado	5/10/2011		
26	China Super Buffet	7984 La Mesa Blvd.	High	5812	University	5/19/2011	✔	Completed
27	Chipotle Mexican Grill	8005 Fletcher Parkway	High	5812	Alvarado	2/3/2011		
28	Circle K Stores Inc. #8675 (Convenience Retailers LLC)	8899 La Mesa Blvd	Low	5541	Alvarado	4/6/2011		
29	Classic Screen Print	8176 Center St, Ste. C	Medium	2759	Alvarado	6/2/2011		
30	Coco's #132	5550 Lake Murray Blvd	High	5812	Alvarado	4/5/2011		
31	Continental Catering	8232 Parkway Drive	Medium	5812	Alvarado	4/21/2011		
32	Country Villa La Mesa Healthcare Center	5696 Lake Murray Blvd.	Low	8059	Alvarado	6/16/2011		
33	Denny's, Inc. #1743	6970 Alvarado Rd	Medium	5812	Alvarado	3/9/2011		
34	Dixieline Lumber & Home Centers	8372 Center Dr	High	2432	Alvarado	6/29/2011		
35	Don Keating Used Cars	8381 La Mesa Boulevard	Low	7538	Spring Valley	5/10/2011		
36	Eastridge Liquor	7705 University Ave.	Low	5411	University	5/3/2011		
37	Edco Transfer Station	8182 Commercial St	High	4953	Alvarado	6/28/2011		
38	Emerald Oil Co.	5600 Baltimore Dr.	Medium	5541	Alvarado	5/12/2011		
39	Five Star Collision Center Inc.	7643 University Avenue Suite H	High	7532	University	6/7/2011		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code(s)	Basin	Inspection Date	Follow-Up Required?	Correction Status
40	Fuddrucker's	5500 Grossmont Center Drive	High	5812	Alvarado	4/26/2011		
41	G & M Oil #176 (76 Station)	6085 Lake Murray Blvd.	Medium	5541	Alvarado	5/31/2011		
42	GIO	8384 La Mesa Blvd.	High	5812, 5813	University	5/20/2011		
43	Helix Pet Hospital	4223 Palm Ave.	Low	742	Spring Valley	6/23/2011		
44	Heritage Landscape Services, Inc.	8115 Commercial St.	Medium	1799	Alvarado	6/22/2011	✔	Completed
45	Jack in the Box (DMSD Foods).	5141 Jackson Dr	High	5812	Alvarado	3/1/2011		
46	Jack in the Box (Nfarooqi Enterprises LLC)	6140 Lake Murray Blvd	High	5812	Alvarado	5/26/2011		
47	Jack in the Box (University)	6987 University Ave	High	5812	University	5/18/2011		
48	Jason's Auto Garage	7643 University Ave.	Medium	7539	University	6/7/2011		
49	Jejjoni Sign MFG.	8169 Center St.	Medium	3993	University	6/1/2011		
50	La Casa Blanca Mexican Restaurant	9570 Murray Dr.	Low	5812	Alvarado	6/27/2011		
51	La Mesa Auto Care	8692 La Mesa Blvd.	Medium	7539	Alvarado	6/2/2011		
52	La Mesa Auto Spa Smog Test and Repair	8303 Parkway Dr.	Medium	5541	Alvarado	5/31/2011		
53	La Mesa Bistro & Bakery	8697 La Mesa Blvd. Suite A	Medium	5812	Alvarado	3/3/2011		
54	La Mesa College Auto Repair	7501 University Ave.	High	7538	University	6/9/2011		
55	La Mesa Motor Clinic, Inc.	5120 Guild St	Medium	7538	Alvarado	6/28/2011		
56	La Mesa Nine Diamonds LLC (AM/PM)	3775 Massachusetts Avenue	Medium	5411	Lemon Grove	6/6/2011		
57	La Mesa Smog Check	7801 El Cajon Blvd #1	Medium	7549	Alvarado	6/27/2011		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code(s)	Basin	Inspection Date	Follow-Up Required?	Correction Status
58	La Mesa Transfer & Storage, Inc.	8336 Case St	High	4214	Alvarado	6/27/2011		
59	Lake Murray Shell	5302 Lake Murray Blvd.	Medium	5411	Alvarado	5/31/2011		
60	Little Caesars Pizza	6107 Lake Murray Blvd.	Low	5812	Alvarado	2/1/2011		
61	Madina Market	6957 University Ave.	Medium	5411	University	6/8/2011	✔	Completed
62	Marie Callender's #74	6950 Alvarado Rd	High	5812	Alvarado	1/18/2011		
63	Mario's De La Mesa	8425 La Mesa Blvd.	Medium	5812	Alvarado	4/25/2011		
64	McDonald's	8045 Fletcher Pkwy	High	5812	Alvarado	3/7/2011		
65	Nacho's Taco Shop	7589 University Ave	High	5812	University	2/24/2011		
66	Palm Springs Market	4301 Palm Avenue	Low	5411	Spring Valley	6/6/2011		
67	Panda Express #226	8011 University Ave	High	5812	University	4/21/2011	✔	Completed
68	PAW Service Center	8230 Commercial Street	Low	7538	Alvarado	6/2/2011		
69	Peanuts Auto Repair	5387 Lake Murray Blvd	Medium	7539	Alvarado	5/26/2011		
70	Pick Up Stix La Mesa	8025 Fletcher Pkwy	High	5812	Alvarado	2/8/2011		
71	Premium Auto Inc.	7643 University Ave. Suite M	Medium	7539	University	6/30/2011	✔	Completed
72	Preston's Tire & Wheel	8300 Center Drive	Medium	7538	Alvarado	6/22/2011		
73	Primary Mechanical	5345 Timken St. Suite I	Medium	1711	Alvarado	6/8/2011		
74	Raindance Roofing Company, Inc.	8176 Commercial St.	High	1761	Alvarado	6/30/2011		
75	Rigoberto's Mexican Food	5454 Jackson Dr.	Medium	5812	Alvarado	2/8/2011		
76	Riha Construction Co.	8173 Commercial Street	Low	1542	Alvarado	6/23/2011		
77	Sammy's Woodfired Pizza	8555 Fletcher Parkway Suite 104	Medium	5812	Alvarado	4/14/2011		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ*	SIC Code(s)	Basin	Inspection Date	Follow-Up Required?	Correction Status
78	San Diego Top Tune	6982 University Ave.	Medium	7538	University	6/28/2011	✔	Completed
79	Shell Gas Station	9090 Dallas St	Low	5541	Alvarado	6/17/2011		
80	Southern California, Discount Tire	8867 Grossmont Blvd.	Low	7534	Alvarado	6/21/2011		
81	Summit Transmissions	7633 El Cajon Blvd. #208	Medium	7537	University	6/30/2011		
82	The Little Warehouse	5175 Baltimore Dr	Low	4225	Alvarado	6/20/2011		
83	Thomas J Taylor Construction	8189 Center St.	Low	2434, 0782	Alvarado	6/22/2011		
84	Trailers Plus	7651 Alvarado Rd.	High	5561	Alvarado	6/29/2011		
85	VCA Grossmont Animal Hospital	8274 Parkway Drive	Medium	742	Alvarado	6/28/2011		
86	Vine Ripe Market	8191 Fletcher Parkway	High	5411, 5812	Alvarado	6/29/2011	✔	Completed
87	Walter H. Barber & Sons, Inc.	8179 Center St.	High	1629	Alvarado	6/30/2011	✔	In Progress
88	Win's Auto Repair	7633 El Cajon Blvd. Suite 205B	Medium	7539	Alvarado	6/30/2011		

Table 5-4
Industrial and Commercial Partial Inspections

#	Business	Street Address	TTWQ*	SIC Code	Inspection Result
1	Advanced Painting Specialists	8411 La Mesa Blvd.	Medium	1721	Moved, Vacant
2	All American Carpets	8186 Center Street Suite E	Medium	1742	Moved, Vacant
3	Cappuccino House	7334 University Avenue	Medium	5812	Moved, Vacant
4	Cesar F. Nillaga, Systems Specialist Inc.	8139 Center St. Suite 100	Low	1793	Moved, Vacant
5	Coast Restaurant Supply	8120 Commercial St.	Medium	5046	Moved, Vacant
6	Custom Constructors	8200 Commercial St. Suite 102	Medium	5712	Moved, Vacant
7	Dasina Building Group	8204 Parkway Dr., #5	Low	2434	Moved, Vacant
8	Essential Flooring	8216 Parkway Drive	Low	1752	Moved, Vacant
9	Family Carpets & Drapes, Inc.	7111 University Avenue	Low	1542	Moved, Vacant
10	J.A. MacDonald, Inc.	8338 Center Drive	Medium	1522	Moved, Vacant
11	Lars Construction Co.	4703 Spring Street	Low	1799	Moved, Vacant
12	Rainbow Steel Inc.	8332 Case St.	High	3499	Moved, Vacant
13	Smogs R Us Too	8855 La Mesa Blvd. Suite A	Medium	7533	Moved, Vacant

6.0 RESIDENTIAL

6.1 INTRODUCTION

Over half of the land use in the City of La Mesa is designated as residential. Due to the large residential area, activities that take place within these areas have the potential to impact the quality of the receiving water bodies. Residential activities such as vehicle washing, over-irrigation, pesticide and fertilizer application, and home maintenance can potentially contribute pollutants to the City's MS4 if BMPs are not properly implemented. Additionally, improper disposal of household hazardous waste (HHW) can also contribute pollutants to the MS4. Pollutants of concern include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has worked to implement a range of programs to address these residential activities with the goal of reducing pollutant loads associated with such activities.

Figure 6-1 depicts the residential land use in the City. Yellow areas indicate single-family homes, orange areas indicate multi-family homes such as duplexes and apartment buildings, brown areas indicate mobile home parks, and purple areas indicate other residential areas such as nursing homes.

Figure 6-1
Residential Land Use in the City

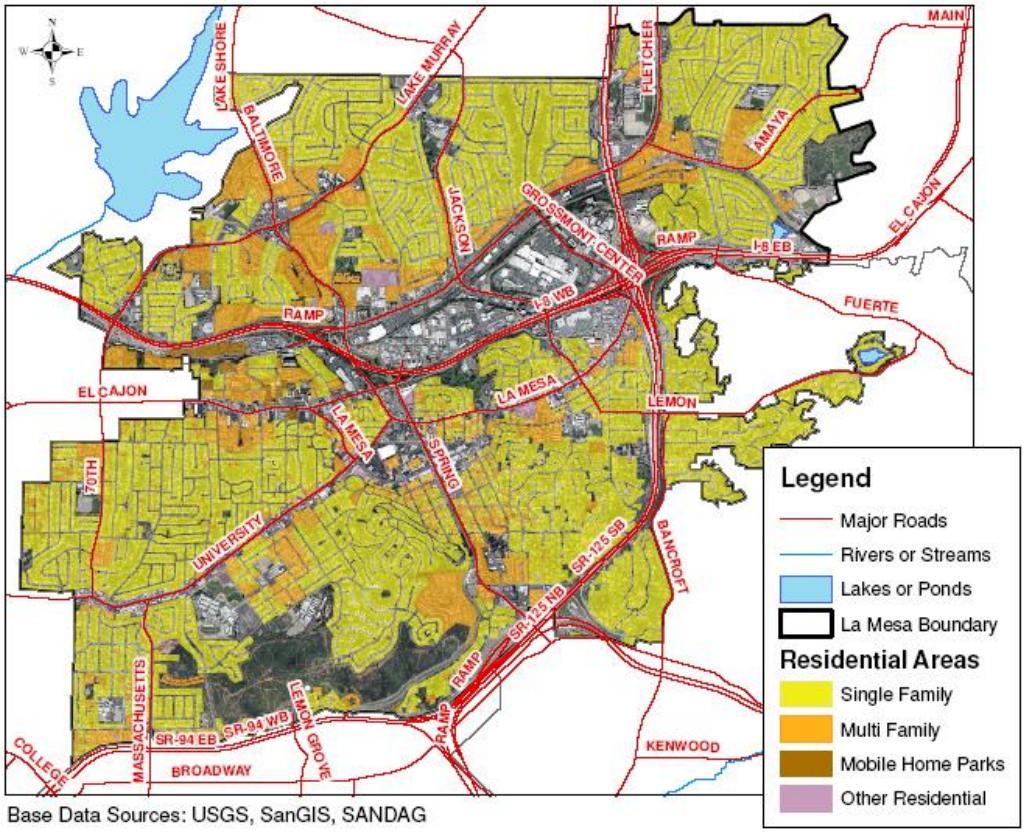

Base Data Sources: USGS, SanGIS, SANDAG

6.1.1 Summary of Notable Accomplishments

Some notable achievements for the residential component during the 2010/2011 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the residential component and of its storm water program during the reporting period are provided in the remainder of Section 6.

- The City continued to work with local Eagle Scouts to construct and install informational storm water kiosks. A new storm water kiosk was constructed in Harry Griffen Regional Park in 2010/2011.
- The City hosted eight HHW events; 898 participants dropped off 99,878 pounds of HHW.
- The City hosted the La Mesa Spring Clean Up on two consecutive Saturdays during 2010/2011. The event was held at the City's EDCO station and allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste free of charge.
- The City continued to distribute the *La Mesa Focus* newsletter to residents in the City.
- The City continued to respond to complaints made to the City's Storm Water Hotline and submitted online regarding residential areas and activities.

6.2 Source Characterization

The City has identified several high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities, which are discussed in the following subsections.

6.2.1 High TTWQ Activities

During 2010/2011, the City continued to identify the following activities as high TTWQ:

- Automobile repair and maintenance
- Automobile washing
- Automobile parking
- Home and garden care activities and product use
- Disposal of pet waste

6.2.2 High Threat to Water Quality Areas

In addition to high TTWQ activities, the City has identified residential areas that pose a high TTWQ relative to other residential areas. High TTWQ residential areas are designated by considering complaint investigations, institutional knowledge, data from the City's Dry Weather Monitoring Program, and criteria as defined in the Municipal Permit. The following residential areas have been designated high TTWQ.

East of Helix High School
This area drains to University Channel and includes the residential area east of Helix High School around Lowell Street, Normal Avenue, and Olive Avenue. University Channel serves as a part of the storm water conveyance system for the City and is part of the Chollas Creek Watershed. During the 2009 Dry Weather Monitoring Program, a transient dissolved copper exceedance was detected in this area.

Baltimore Drive, North of Interstate 8
The area surrounding Baltimore Drive is largely composed of high-density housing. Runoff from this area drains to Alvarado Channel via two internal storm drain networks. Storm Water Hotline calls related to high TTWQ activities in this area have been recorded in past years. Some past Dry Weather Monitoring results have indicated that this area could be a source of bacteria, although that has not been found in monitoring programs during recent sampling years. The area is still classified as a high TTWQ to be conservative, although the City may reevaluate the prioritization in future years if recent dry weather monitoring trends continue. Potential runoff sources include residences located on Parkway Drive, Aztec Drive, and Baltimore Drive.

Nagel Street and Sarita Street
The residential area around the intersection of Nagel Street and Sarita Street drains to Alvarado Channel. Past Dry Weather Monitoring Program upstream investigations have indicated that this area has been a source of bacteria.

Residential areas within the City designated as high TTWQ receive additional attention and periodic visual inspection from storm water staff to check for evidence of IC/IDs and high TTWQ activities.

6.3 Best Management Practice Requirements

The City has continued to provide information regarding the implementation of pollution prevention measures, such as good housekeeping practices, for residential areas and activities. The City's BMP Manual Part I includes lists of general residential BMP requirements and BMP requirements for specific residential activities. The manual is included in Appendix C of the JURMP. General residential BMPs include erosion control; non-storm water discharge management, including elimination of IC/IDs; and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Specific BMPs for the high priority activities outlined above are also included in the City's BMP Manual Part I. There have been no changes to the City's residential BMP requirements as discussed in Appendix C of the City's JURMP.

6.4 Program Implementation

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted. This ensures that pollutants associated with residential activities and areas are minimized. The residential program has an education component so that residents are made aware of appropriate BMPs and high TTWQ activities.

6.4.1 TRAINING, EDUCATION, AND OUTREACH

The City has continued to conduct training, education, and outreach activities for residents, which are described below.

***La Mesa Focus* Newsletter Articles**

The City publishes storm water related articles in the quarterly *La Mesa Focus* newsletter. Four newsletters were printed during the reporting period. The issues are archived on the City's website; 960 individuals are signed up to receive e-mail notification when a new newsletter has been posted on the website. Additionally, copies were left out at the Friends of La Mesa Library for patrons to read and are accessible on the La Mesa Neighborhood Watch website. Articles related to storm water that were published in 2010/2011 are summarized below and included as Attachment 5.2.

The August 2010 newsletter contained the following storm water-related articles and announcements:

- "PARK APPRECIATION DAY" announced the upcoming park cleanup event and encouraged residents to participate.
- "3RD ANNUAL SUSTAIN LA MESA ENVIRONMENTAL FESTIVAL" informed residents of the free upcoming event, which provided resources on water conservation, waste reduction and recycling, pollution prevention, and other environmental issues.
- "OUR PLANET, OUR HOME" K-12 Environmental Art and Literacy Contest was announced.
- "INTERGENERATIONAL GAMES" announced the upcoming event to residents. I Love A Clean San Diego (ILACSD) demonstrated storm water pollution concepts at during this event.
- "RECYCLING PROGRAM EXPANDS TO ACCEPT ALL RIGID PLASTICS" described the new items accepted by EDCO's recycling program.
- "FREE HOUSEHOLD HAZARDOUS WASTE AND ELECTRONIC WASTE DISPOSAL" identified different types of HHW and notified residents of the next collection date.
- "9th ANNUAL KIDS CARE FEST" was advertised. I Love A Clean San Diego (ILACSD) provided information about watersheds and storm water during this event.
- "8th ANNUAL CREEK TO BAY CLEANUP" highlighted the accomplishments of the April 2010 clean-up event and advertised the upcoming California Coastal Cleanup Day. Residents were directed to the Storm Water Program Manager for additional information.

The November 2010 newsletter contained the following storm water-related articles and announcements:

- "WHAT IS YOUR VISION FOR LA MESA?" discussed tips for everyday sustainability, including cleaning with dry methods rather than using water.
- "EL CAJON BOULEVARD AND LA MESA BOULEVARD AND SPRING STREET AND HIGH STREET: Intersection Modifications" described the upcoming modifications including a Low Impact Design (LID) grass swale to treat storm water runoff.
- "LA MESA'S WATERSHEDS IN FOCUS" discussed the definition of a watershed, identified the watersheds that La Mesa is a part of, and highlighted the water quality concerns in these areas. The article concluded with a discussion of what residents and business owners can do to reduce storm water pollution, including reporting to the City's Storm Water Hotline.
- "VOLUNTEERS CLEAR OVER 500 LBS OF TRASH FROM LOCAL WATERWAYS" celebrated the accomplishments of the 26th Annual California Coastal Cleanup Day in September 2010.
- "CITY OF LA MESA PARK APPRECIATION DAY 2010" highlighted the success of the event, thanked participants for their support, and informed them of the next Park Appreciation Day.
- "FREE HOUSEHOLD HAZARDOUS WASTE AND ELECTRONIC WASTE DISPOSAL" notified residents of the next collection date and directed them to the City's website for more information on HHW.
- "SMALL STEPS TO BIG CHANGE" discussed the definition of sustainability and the importance of water conservation, smart landscaping, and teaching others about sustainable practices.

The February 2011 newsletter contained the following storm water-related articles and announcements:

- "FREE HOUSEHOLD HAZARDOUS WASTE AND ELECTRONIC WASTE DISPOSAL" notified residents of the next collection date and directed them to the City's website for more information on HHW.
- "9th ANNUAL CREEK TO BAY CLEANUP – APRIL 30, 2011" announced the upcoming cleanup event and highlighted the successes of the 2010 event. Residents were directed to the Storm Water Program Manager for additional information.
- "ARE YOU A YOUNG PERSON CONCERNED ABOUT THE ENVIRONMENT?" advertised a vacant position to represent the youth population with the Environmental Sustainability Commission.

- "CONVENIENT RECYCLING FOR APARTMENTS AND CONDOS" announced a grant from CalRecycle to improve recycling in apartments and condos, including the new recycling opportunities and contact information for participation.
- "2011 SPRING CLEAN UP" notified residents of the free event to dispose of unwanted items at the EDCO station.

The May 2011 newsletter contained the following storm water-related articles and announcements:

- "SPRING, GARDENS, AND STORM WATER POLLUTION?" discussed ways to reduce the impact of gardening on water quality including the use of non-toxic and natural pesticides, composting, and growing native vegetation.
- "FREE HOUSEHOLD HAZARDOUS WASTE AND ELECTRONIC WASTE DISPOSAL" notified residents of the next collection dates and directed them to the City's website for more information on HHW.
- "CUT OUT FOG!" informed residents on how to help maintain the wastewater system and directed them to the City's website for more information.

Other Educational Outreach Materials and Activities
The City has continued to provide storm water information and contacts on their website (www.cityoflamesa.com). The City's Storm Water Hotline also provides an avenue for City residents to obtain storm water information and file storm water related complaints. Other educational outreach materials and activities that targeted residents are discussed in detail in Sections 8 of this report.

During 2010/2011, the City continued to participate in the Regional Residential Education Program.

6.4.1.1 HHW Events

The City hosted eight HHW collection events throughout the 2010/2011 reporting period at the City's EDCO station on Commercial Street. Door-to-door pick-up was also offered for disabled and senior residents. A total of 898 people participated in the events, and 99,878 pounds of HHW were collected. HHW flyers or the Regional Guide for Household Hazardous Waste Reduction & Disposal in San Diego County were on hand if residents requested educational materials. Approximately 20 educational HHW brochures were distributed at HHW events.

Other Collection Events
In addition to the HHW disposal events, the City hosted the La Mesa Spring Clean Up on two consecutive Saturdays during 2010/2011 The event was held at the City's EDCO station and allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste without charge. All Spring Clean Up participants (2,088 vehicles) were provided HHW brochures or the Regional Guide for Household Hazardous Waste Reduction & Disposal in San Diego County. Details about this event can be found in Section 9 of this report.

6.4.2 Compliance and Enforcement

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the Storm Water Hotline, and observations made by the City's municipal personnel. To help focus efforts on high priority areas, the City maintains a map of the high TTWQ areas in the City, which is available to City staff. Staff are especially vigilant for potential threats to storm water quality in these areas of the City and report any observed threats to the Storm Water Hotline. A copy of the map is included as Attachment 6.1. If a potential to impact water quality is present the City provides a verbal warning, written warning, Notice to Comply (NTC), and NOVs as applicable. The City received 111 residential-related complaints during this reporting period. Complaints were submitted through the Storm Water Hotline and through La Mesa's Request Tracker and the Civic Plus website as well as internally through the Public Works Department; the City's complaint log is included as Appendix B to this annual report.

Four written warnings, one verbal warning, 12 NOVs, 11 compliance letters, and four enforcement letters were issued to residents and/or landlords during this reporting period. Many of the verified complaints involved residents who were unaware of residential BMPs. These issues were resolved with a verbal warning and distribution of educational materials. The City issued NOVs to more serious violations including power washing, concrete or drywall dust discharge into the street, presence of uncontained sediment piles, wastewater discharge, and spills of oil. City personnel also cleaned areas in the public right of way as necessary to resolve complaints. All residential complaints were resolved and no further actions, such as fines or reports to the RWQCB aside from this JURMP Annual Report, were deemed necessary.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's residential component have been made since that time.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008 RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the 2010/2011 Illicit Discharge Detection and Elimination section and attachments to the RWQCB no later than December 15, 2011.

8.0 EDUCATION COMPONENT

8.1 INTRODUCTION

During 2010/2011, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, residents, and underserved audiences. The City aims to reduce storm water pollution by increasing awareness about the storm water conveyance system and promoting the implementation of BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the 2010/2011 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the education component and of its storm water program during the reporting period are provided in the remainder of Section 8.

- The City worked in conjunction with the Industrial/Commercial and Municipal Workgroup to produce a training video for municipal employees.
- Storm water staff attended several outside training events and also provided training sessions for other municipal personnel.
- During 2010/2011, the City's quarterly newsletter, the *La Mesa Focus*, featured several articles highlighting storm water topics aimed at businesses and residents of the City.
- Educational materials were made available to project proponents and City personnel at City Hall through the informational Storm Water Bulletin Board.
- The City partnered with ILACSD to educate residents at special events and through school presentations during 2010/2011.
- Approximately 50 vendors at the City's Oktoberfest event were provided with a handout entitled "Tips for Outdoor Vendors."
- A new storm water kiosk was constructed in Harry Griffen Regional Park to display educational materials to park patrons, bringing the total number of kiosks to four.

8.2 STAFF TRAINING ELEMENT

The City has provided extensive training and educational outreach to its municipal personnel. Many municipal personnel are out in the field on a daily basis, so it is important that they understand the importance of implementing BMPs. During 2010/2011, the City also played a central role in the development of a training video for municipal employees, a

product of the Industrial/Commercial and Municipal Workgroup. City staff wrote the script for the video, coordinated filming and voiceovers, and worked with the production company to edit the final product. Upon completion in 2011/2012, this video can be used regionally to train municipal employees on appropriate BMP implementation.

Additionally, municipal personnel are encouraged to report any IC/IDs observed to the appropriate City staff and to educate other municipal personnel and the general public about storm water pollution prevention.

The informational storm water bulletin board at City Hall is continually updated with information about storm water topics. The bulletin board is visible to City personnel, project proponents, and other City Hall visitors. In addition, there are educational materials for the public to take located at the bulletin board such as storm water hotline magnets, Integrated Pest Management (IPM) cards, and residential storm water pollution prevention trifolds. Additionally, staff were reminded about the City's Park Appreciation Day and posters for California Coastal Cleanup Day and the Creek to Day Cleanup were displayed to encourage participation.

Table 8-1, below, includes all training sessions that were provided for various municipal departments during 2010/2011.

Table 8-1
Municipal Training Sessions

#	Date	Event	Topic(s)	Participants
1	7/22/2010	EPA Training Course	Developing an Effective Municipal Storm Water Management Program for Construction sites	Engineering Technician I
2	7/26/2010	EPA Training Course	Illicit Discharge Detection and Elimination (IDDE) 301 – Finding and Fixing Illicit Discharges and Connections	Engineering Technician I
3	8/21/2010	Pesticide Applicators Professional Association Seminar	Worker safety, Laws and regulations, Irrigation essentials, Reduced risk chemicals	3 Parks Department Staff Members
4	8/22/2010	Professional Horticultural Seminar	Controlling pests with IPM, Pesticide Safety programs for compliance	3 Parks Department Staff Members
5	8/31/2010	Municipal Training	Sanitary Sewer Overflow (SSO) reporting	15 Public Works/ Engineering Employees
6	9/6/2010	Target IPM	IPM, How soil and water relationships effect Pest Management	3 Parks Department Staff Members

Table 8-1
Municipal Training Sessions

#	Date	Event	Topic(s)	Participants
7	9/10/2010	EPA Training Course	Fundamental Inspector Course (FIC)	Engineering Technician I
8	9/13 – 9/16/2010	EPA Training Course	Basic Inspector Academy	Engineering Technician I
9	9/29/2010	Municipal Training	Construction Best Management Practices (BMPs)	10 Public Works/ Engineering and Community Development Employees
10	3/2011	Sustainable Urban Landscape	Sustainable urban forestry, Regional Storm Water Regulations, residential sustainability	4 Parks Department Staff Members
11	3/15/2011	Municipal Training	City's Hydromodification Requirements including an introduction to hydromodification management and methods for demonstrating compliance	7 Public Works/ Engineering and Community Development Employees
12	3/29 – 3/31/2011	California Construction General Permit Training	Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP) course	Storm Water Program Manager

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, residential areas, and underserved audiences. These efforts promote storm water awareness and BMP implementation.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Violations of the City's BMP requirements are corrected through enforcement actions as necessary. For each inspection, facility personnel received verbal education on the importance of implementing proper BMPs. Additionally, a letter

describing the City's inspection program and BMP requirements was sent to all industrial and commercial businesses selected for routine inspection during 2010/2011.

As previously mentioned, the City's quarterly *La Mesa Focus* newsletter 2010/2011 featured several articles highlighting storm water topics that were aimed at businesses and residents of the City. Examples of such articles included "La Mesa's Watersheds in Focus", "Small Steps to Big Change", and "Spring, Gardens, and Storm Water Pollution. Newsletters published during 2010/2011 are included as Attachment 5.2.

During 2010/2011 reporting period, the City again distributed a handout with tips for outdoor commercial vendors (Attachment 8.1). These handouts were distributed to vendors that had booths at the Oktoberfest event, which is the City's largest special event. Approximately 50 of these handouts were distributed. The handout detailed specific BMPs that could be implemented by the vendors at the event and detailed the difference between the storm drain system and the sanitary sewer system.

8.3.2 Construction Site Owners and Developers

Due to the nature of activities, construction sites have the potential to discharge many types of pollutants to receiving waters if not managed properly. Many construction site owners, contractors, and developers visit the City's Engineering Division to apply for necessary permits. The Storm Water Bulletin Board located across from the front counter where permits are issued, includes material about construction BMPs to provide education for these parties. Several construction related brochures, specifically the construction site management tri fold and a construction SWPPP tri fold are available for project proponents to take from the bulletin board.

8.3.3 Residential Areas

Since residential areas make up more than half the City, the City understands the importance of reaching this particular audience through educational outreach programs. During January, February, and March 2011, ILACSD visited local schools of various aged students with prepared storm water presentations. The City also continued to publish the *La Mesa Focus* newsletter (Attachment 5.2), which reaches residents in the City. As previously mentioned, several storm water articles were included in the newsletters distributed in 2010/2011.

The City's Storm Water Bulletin Board provided information to residents that may have been visiting City Hall. Various posters provide storm water information and information about clean-up events. Additionally, there are several brochures and fact sheets available for the public to take, which included the Over-irrigation Fact Sheet (Attachment 8.2), Chollas Creek TDML Fact Sheet (Attachment 8.3), Residential Preventing Urban Runoff Pollution brochure (Attachment 8.4), Pools and Spa Fact Sheet (Attachment 8.5), and IPM cards (Attachment 8.6).

Educational material was also distributed at various events in the City, such as the "Sustain La Mesa" Environmental Festival, Intergenerational Games, and Kids Care Fest. Materials

distributed included the residential Preventing Urban Runoff Pollution brochure (Attachment 8.4) and San Diego River and San Diego Bay Fact Sheets (Attachment 8.7). Other media like pencils, temporary tattoos, and stickers with storm water messages on them were also provided during special events. Details of the events are included in Section 9.

In addition to the educational materials that were provided at various locations and during various events, the City continued to display storm water-related educational material at storm water kiosks at select City parks. The City now maintains four kiosks in four City parks since a new storm water kiosk was constructed in Harry Griffen Regional Park during 2010/2011 (Figure 8-1). Educational material such as the San Diego River Watershed Fact Sheet (Attachment 8.7), Over-irrigation Fact Sheet (Attachment 8.2), Pool and Spa Fact Sheet (Attachment 8.5), the Residential Preventing Urban Runoff Pollution brochure (Attachment 8.4), along with excerpts from storm water calendars and a Helix Water District brochure, were displayed at the kiosks for patrons of the park.

Figure 8-1. Storm Water Kiosk

The City website, www.cityoflamesa.com, is another resource for City residents to become familiar with the design and intended utilization of the storm drain system, proper HHW disposal, alternatives to hazardous household products, find information regarding volunteer opportunities, applicable City contact information, and IPM. As previously mentioned, the City provided electronic copies of each *La Mesa Focus* newsletter on the website during 2010/2011.

8.3.4 UNDERSERVED COMMUNITIES

As discussed in the City's JURMP, the City has identified the several residential areas along University Avenue as "underserved" communities. Two residential areas have been identified as Low/Moderate Income Block Groups. A third area has been identified as a

Hispanic Household Concentration area. In an effort to promote outreach and education in these underserved communities, the City has developed Spanish versions of several educational materials distributed to residents. Another effort implemented by the City is the utilization of the Spanish language option on the City's Storm Water Hotline. The City plans to continue outreach to these underserved communities by providing more educational programs in future reporting years.

8.3.5 Complaint Investigations

To further aid the process of identifying illegal discharges, the City encourages the public and City staff to report IC/IDs. In addition to the City's Storm Water Hotline, Public Works also has a maintenance hotline for complaints regarding issues with the MS4 and sewer lines. These complaints are followed up by Public Works personnel. If a representative for the targeted business, residential area, or construction site is present, the inspector will provide site-specific information regarding storm water issues including applicable educational materials.

8.4 Outreach Component Effectiveness Assessment

The estimated number of impressions made by the City's education and outreach efforts during 2010/2011 is presented and described below. Please refer to Section 11 of this JURMP Annual Report for the remainder the effectiveness assessment for this program component.

Impressions Made

The City has continued to provide residents and businesses storm water-related education through inspections, distribution, and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees because it is likely that the attendees will discuss the content with others after the training session. Printed educational materials and other items such as pencils and stickers are assumed to generate three impressions each.

Table 8-2 details the number of impressions made by the City during this reporting year.

Table 8-2
Impressions Made by the City

Impression Type	Count	Unit	Estimated Impressions
Municipal Inspections	22	Inspections	110
Industrial/Commercial Inspections	88	Inspections	264
Construction Inspections	48	Inspections	144
Training Session/Activities and Events	1,747	Attendees	6,988
Complaint Investigation	151	Investigations	453
FOG Binder	30	Binders	90
Alternative Household Product Guide	100	Brochures	300
Chollas Creek TMDL Fact Sheet	40	Brochures	120
Door Hanger	300	Brochures	900
Household Hazardous Waste Brochure	2,108	Brochures	6,324
Over-Irrigation Fact Sheet	25	Brochures	75
Residential Preventing Urban Runoff Pollution	30	Brochures	90
San Diego Bay Watershed Fact Sheets	30	Brochures	90
San Diego River Watershed Fact Sheet	60	Brochures	180
Tips for Outdoor Vendors	50	Brochures	150
La Mesa Focus Newsletter	960	Newsletters	2,880
FOG Poster	200	Posters	600
Recycling Badge	50	Badges	150
Recycling Pencil	420	Pencils	1,260
Recycling Sticker	100	Stickers	300
Storm Water Coaster	50	Coasters	150
Storm Water Key Chain	50	Key Chains	150
Storm Water Magnets	150	Magnets	450
"Sustain La Mesa" Bookmarks	120	Bookmarks	360
Temporary Recycling Tattoos	150	Tattoos	450
		Total	***22,843***

8.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was updated in March 2008. No changes to the City's education component have been made since that time.

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to foster storm water awareness and improve water quality. Public participation includes, but is not limited to, cleanup events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Collaboration between the City and the community should help encourage a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed in this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the 2010/2011 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the public participation component and of its storm water program during the reporting period are provided in the remainder of Section 9.

- During 2010/2011, the City hosted clean-up events at Alvarado and University channels as part of California Coastal Cleanup and Creek to Bay Cleanup. Approximately 120 volunteers removed over 978 pounds of trash and debris and 107 pounds of recyclables during these events.
- The City hosted 8 HHW collection events. A total of 898 vehicle loads disposed of 99,878 pounds of HHW in these events.
- Similar to previous years, the City hosted the La Mesa Spring Cleanup event on two separate weekends during 2010/2011. A total of 2,088 participants disposed of almost 699 tons of large items, green waste, and other trash and recyclables.
- Volunteers for the City's Adopt-a-Block, Adopt-a-Park, and Canine Corner programs, continued to involve residents in keeping local streets and parks free of litter and pet waste.
- Similar to previous years, the City held Park Appreciation Day, a cleanup event occurring throughout 12 City parks. A total of 234 volunteers collected 89 cubic yards of green waste and 5.5 cubic yards of trash.
- The City contracted ILACSD to present "Operation Cleanup," an interactive watershed game, at the Intergenerational Games and Kids Care Fest.

9.2 Public Participation Activities

Cleanup Events and Programs

During 2010/2011, the City hosted various cleanup events and activities at various locations in the City. Cleanup events provide a direct benefit to water quality and an opportunity for the City to distribute educational materials and information to the event's volunteers.

California Coastal Cleanup Day

The City hosted the California Coastal Cleanup Day in specific areas of Alvarado and University channels on September 25, 2010. A total of 34 volunteers removed over 250 pounds of trash and 50 pounds of recyclables at the Alvarado site (Figure 9-1), and 29 volunteers removed 55 pounds of trash and 20 pounds of recyclables in the channel and surrounding walkways at the University site.

At both the Alvarado and University Channels, volunteers were given pre- and post-event knowledge assessment tests. The pre-test was given to participants before City personnel presented an overview of storm water pollution prevention and watershed concepts. A post-test was given immediately after City personnel finished the brief presentation. The results of the survey showed that the event left participants with a better understanding of which watershed they were in at the event, what defines a watershed, and how their indirect and direct actions can impact the environment. Pre-test accuracy improved from 77 to 92 percent at the Alvarado Channel (30 tests) and from 73 to 92 percent at the University Channel (20 tests).

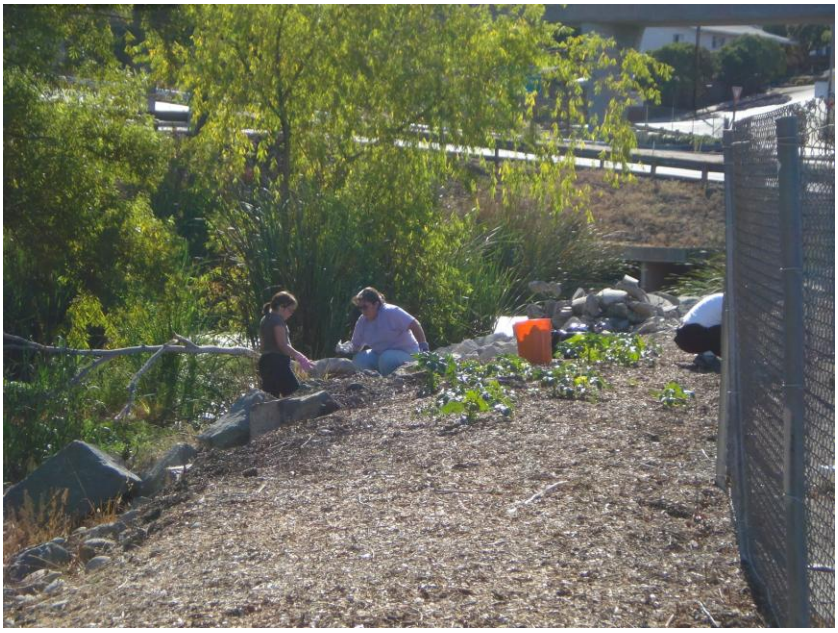

Figure 9-1 – Coastal Cleanup Day at Alvarado Channel

Park Appreciation Day

Park Appreciation Day was a cleanup event held throughout 12 parks in the City on October 23, 2010. A short presentation was given by the site captain regarding watershed concepts, local watersheds' constituents of concern, the benefits of cleanups, and the TMDL for the San Diego Bay. Chollas Creek was mentioned at the parks that fell within the San Diego Bay Watershed. A total of 234 volunteers worked to collect over 89 cubic yards of green waste and 5.5 cubic yards of trash between all 12 locations.

Creek to Bay Cleanup

The City hosted the Creek to Bay Cleanup in specific areas of Alvarado and University channels on April 30, 2011. At Alvarado Channel, 35 volunteers participated in removing 320 pounds of trash and 19 pounds of recyclables. At University Channel, 22 volunteers removed 353 pounds of trash and 18 pounds of recyclables (Figure 9-2). City personnel briefly explained watershed concepts, pollutants of concern, and required BMPs to all event volunteers. At the University Channel site, event volunteers were also presented with information on the TMDL for Chollas Creek. These cleanup events and results were advertised on the City website and were posted on the City's Storm Water Bulletin Board.

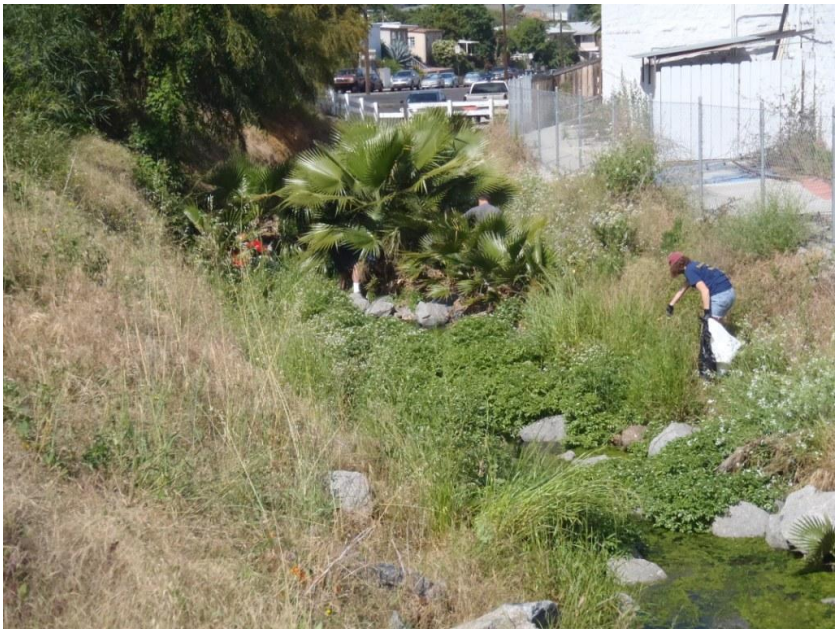

Figure 9-2 – Creek to Bay Cleanup at University Channel

Adopt-a-Park and Adopt-a-Block

The City's Adopt-a-Park Program has continued to involve local businesses, schools, service organizations, families, and other individuals in keeping the City's parks free of trash. Currently, many of the public parks in La Mesa have been adopted. Volunteers involved in this program are encouraged to remove trash on a regular basis from City parks and open spaces.

Similarly, the City's Adopt-a-Block Program promotes cleanliness in the City by encouraging City residents to keep neighborhoods free of trash and debris. Volunteers pick up trash during normal daily activities, such as daily walks in their neighborhood. Individuals use City-provided trash bags or collect trash prior to trash collection day so that litter and debris can be deposited into any available trash can along the street.

Canine Corners
Canine Corners volunteers pick up pet waste in designated areas of Harry Griffen Regional Park and encourage patrons of the park to pick up after their pets. This prevents bacteria and viruses associated with pet waste from being discharged to the City's MS4. In combination with the City's Adopt-a-Park and Adopt-a-Block programs, volunteers remove trash and pet waste from parks and streets throughout the City.

Saint Madeline Sophie's Center
The City maintains a contract with Saint Madeline Sophie's Center, which employs developmentally disabled individuals to aid in picking up trash and debris at various parks throughout the City. The scope of services includes trash and debris cleanup, emptying trash receptacles and replacement of plastic liners, sweeping/cleaning picnic area tables, as well as some janitorial responsibilities at the park restrooms. Crews consist of three to five individuals and a job coach. Parks included in this program are Aztec Park, Collier Park, Highwood Park, Jackson Park, La Mesita Park, Northmont Park, Rolando Park, Sunset Park, Sunshine Park, and Vista La Mesa Park.

Hazardous Waste Collection and Used Oil Recycling Program
The City's Community Hazardous Waste Collection and Used Oil Recycling Programs encourage City residents and business owners to properly dispose of HHW. The City hosted eight HHW collection events at EDCO's disposal transfer station facility, which is located near the center of the City. As previously mentioned, events were advertised in the City's *La Mesa Focus* newsletter (Attachment 5.2), which was circulated electronically to hundreds of residents and businesses in the City. A total of 763 participants from La Mesa and an additional 135 residents from Lemon Grove and other jurisdictions disposed of hazardous waste at the events; a total of 99,878 pounds of HHW was collected. Door-to-door pickup service was also provided for the senior and disabled communities.

Throughout the City of La Mesa, there are also 10 certified collection centers for used oil that are advertised on the HHW disposal dates flyer as well as four tire recycling centers.

Other Waste Disposal
The City hosted the La Mesa Spring Clean Up event on two consecutive Saturdays in 2010/2011 (April 9 and 16, 2011). Residents were allowed to bring large items, unwanted household materials (not including HHW), and green waste to the EDCO location in the City for free disposal. A total of 2,088 vehicles disposed of approximately 699 tons of waste and recycling. Recyclable materials were estimated to account for 68 percent of the disposed waste. Participants were provided with a flyer that included information regarding HHW disposal dates at the City.

Public Reporting

As discussed in Section 4, complaints are received through the City's Storm Water Hotline and online website reporting system. The number for the hotline is advertised in articles published in the *La Mesa Focus* newsletter and on various educational materials given out at public outreach events. The residential, industrial, commercial, construction and municipal communities are encouraged to utilize the hotline to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable.

9.3 Outreach Events

The City has continued to provide educational outreach programs for a variety of different communities in the City. Since it is an effective way of reaching large numbers of individuals, educational outreach is typically associated with an event. Other outreach events in the City include the participation of commercial businesses in distributing educational materials and the City's participation in regional meetings and events.

Kids Care Fest

Kids Care Fest is a free event designed to promote healthy choices and attitudes for children and their families. The festival was held at Briercrest Park on September 25, 2010. I Love A Clean San Diego (ILACSD) hosted a booth and used the interactive watershed model to demonstrate storm water pollution concepts and emphasize the importance of keeping waterways free of pollutants (Figure 9-3). Approximately 500 people visited the ILACSD storm water booth during the festival. During the event, 60 temporary recycling tattoos, 200 recycling pencils, 150 storm water magnets, 40 Chollas Creek TMDL fact sheets, 40 San Diego River fact sheets, and 100 recycling stickers were distributed to the public.

Figure 9-3 – ILACSD booth with "Operation Cleanup" at Kids Care Fest

Intergenerational Games

ILACSD also hosted a booth at the Intergenerational Games at the La Mesa Middle School on October 14, 2010. During this event, ILACSD displayed the "Operation Cleanup", an interactive watershed game for children, where pollutants are located and removed from the model (Figure 9-4). This allowed for explanation of storm water pollution concepts, emphasizing the importance of a healthy environment. Approximately 110 students visited the booth and a total of 60 recycling temporary tattoos, 90 recycling pencils, 120 "Sustain La Mesa" bookmarks, 50 recycling badges, five San Diego Bay fact sheets, five residential Preventing Urban Runoff Pollution trifolds, and five over-irrigation fact sheets were distributed.

Figure 9-4 – ILACSD booth with "Operation Cleanup" at the Intergenerational Games

Oktoberfest

Oktoberfest is the largest festival in the City and was held from October 1, 2010 through October 3, 2010. As previously mentioned in Section 8.3.1, approximately 50 vendors at the event were provided a handout entitled "Tips for Outdoor Vendors" (Attachment 8.1). This handout listed constituents of concern and BMPs during events designed to eliminate pollutant discharges.

La Mesa Rotary Club Presentation

The City's Storm Water Program manager presented storm water and watershed concepts at the La Mesa Rotary Club meeting on June 22, 2011. Approximately 50 people were in attendance at the meeting.

Girl Scout Door Hanger Project

La Mesa girl scouts from ages six to eight were enlisted to help distribute door hangers that provided storm water pollution prevention education to local residences. The girl scouts distributed approximately 300 door hangers.

"Sustain La Mesa" Environmental Festival

On October 9, 2010, the "Sustain La Mesa" Environmental Festival was held at Harry Griffen Regional Park that was attended by more than 500 people. There were booths and activities emphasizing water conservation, storm water pollution prevention, energy efficiency, sustainable gardening techniques, and recycling. During this event there was an electronic waste and recyclables collection. Electronic waste, metal, plastic numbers 1-7, plastic bags, blister pack, six pack rings, bubble wrap, and Styrofoam packaging were collected. Throughout the festival, speakers from the Solana Center, National Wildlife Foundation, and the California Center for Sustainable Energy spoke to the public. The City's Public Works Department also hosted a booth at the event and distributed 25 residential trifolds, 20 over-irrigation fact sheets, 20 San Diego River fact sheets, 80 recycling pencils, 30 temporary recycling tattoos, and 100 alternative household products guides.

Figure 9-5 – Public Works booth at the "Sustain La Mesa" Environmental Festival

San Diego RiverFest

The City collaborated with the San Diego River WURMP workgroup to host a booth at this festival in May 2011 and distributed 78 dog bag dispensers, 52 reusable tote bags, 40 coloring books, and 20 pencils. Additionally, approximately 75 pet waste surveys were filled out by participants, which increased awareness of the effects of pet waste on water quality and proper disposal methods.

Storm Water Information Kiosks

As mentioned in Section 8, the City has continued to work with local Eagle Scouts to construct storm water kiosks. The park kiosks present storm water pollution prevention information to park patrons. During 2010/2011, outreach material was updated and

educational events were publicized throughout the year at the kiosks. Additionally, a new storm water kiosk was constructed in 2010/2011 at the Harry Griffen Regional Park.

ILACSD School Presentations

During 2010/2011, ILACSD was contracted to conduct storm water pollution prevention presentations for Rolando Elementary School and La Mesa Dale Elementary School. One presentation was made to 105 5th graders at Rolando Elementary in January 2011. Additionally, two presentations were given to 75 2nd graders at Rolando Elementary in February 2011. Three presentations were made to 70 2nd graders at La Mesa Dale Elementary in March 2011.

Figure 9-6 – Students Using the ILACSD Enviroscape Watershed Model

Chollas Creek TMDL Stakeholder Meetings

The jurisdictions named as dischargers for Chollas Creek TMDLs regularly meet to share information, develop reports, and discuss strategies. The City actively engaged in the annual public stakeholder meeting on June 23, 2011 in Lemon Grove, CA.

Storm Water Copermittee Meetings and Other City Participation

The meetings of various storm water Copermittee workgroups provide a forum for representatives from various jurisdictions within San Diego County and other interested parties, including the general public, to exchange information and ideas regarding the management of storm water programs. The City continued to attend several of these meetings during the reporting period and will continue to do so during the 2011/2012 reporting period.

9.4 Public Participation Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

9.5 Program Review and Modification

The City's JURMP was updated in March 2008. No significant changes to the City's public participation component have been made since that time.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

The City's Sanitation Fund provides almost all funding for the Storm Water Program. There have not been any changes to this funding mechanism during this reporting period. During 2009/2010, a fiscal analysis reporting template was developed collectively by the Copermittees. The City has used this template to report the 2010/2011 expenditures and funding sources in this JURMP Annual Report.

San Diego County Copermittees Fiscal Analysis Report
for Urban Runoff Management Programs

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	
Administration	$122,161.77
Development Planning	$15,998.96
Construction	$13,195.34
Municipal	$3,663.48
Industrial and Commercial	$49,494.32
Residential	$1,316.00
IDDE	$42,451.82
Education	$7,335.98
Public Participation	$6,304.51
Special Investigations	$21,361.00
Non-Emergency Firefighting	$0.00
Jurisdictional Total	**$283,283.19**

WATERSHED	
Watershed 1 – San Diego River	$7,937.02
Watershed 2 – San Diego Bay	$19,740.06
Watershed Total	**$27,677.08**

REGIONAL	
Annual Permit Fee to Regional Board	$13,499.00
Copermittee Cost Share of Regional Budget	$47,472.00
Regional Total	**$60,971.00**

TOTAL COSTS	**$371,931.27**

FUND SUMMARY

FUNDING BY SOURCE	
General Fund	$10,816.81
Storm Water Fee	$0.00
Permit Fees	$0.00
Developer Deposits and Fees	$7,686.87
Registration and Inspection Fees	$22,185.00
Flood Control Fees	$0.00
Franchise Fees	$0.00
Gas Tax	$0.00
Utility Tax	$0.00
Road Fund	$0.00
Enterprise Funds	$0.00
Trust Funds	$0.00
Special Assessment Districts	$0.00
State Appropriated Funds	$0.00
Grant Funds	$0.00
Other – Sanitation Fund	$353,427.58
Total	**$394,116.27**

ONE-TIME FUNDING	
Grants	$0.00
Donations	$0.00
Total	**$0.00**

TOTAL FUNDING	**$394,116.27**

Watershed Urban Runoff Management Program (WURMP)

	Watershed 1 – San Diego River	Watershed 2 – San Diego Bay
Administration (1)	$3,290.01	$9,870.03
Cost Share	$1,357.00	$0.00
Watershed Activities	$3,290.01	$9,870.03
Other	$0.00	$0.00
TOTAL	**$7,937.02**	**$19,740.06**

(1) Administration – includes Watershed strategic planning, management, mapping, assessment, and reporting.

Regional Urban Runoff Management Program (RURMP)

Regional Programs	Jurisdictional Cost Share Amount
Administration (1)	$0.00
Cost Share Contribution	$50.00
Other (2)	$0.00
TOTAL	**$50.00**

(1) Administration – includes assessment, reporting, management, etc.
(2) Other – examples include regional and special studies.

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City regularly evaluates its storm water program to make it as effective as possible at reducing discharges of urban runoff related pollution to the MEP. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next, the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

Based on participation in regional efforts and its experience implementing its JURMP, the City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP, and the City has refined those metrics in the reporting periods since then.

The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual

program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome Level Assessments

Level 1

Level 1 outcomes are basic measures of permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix C of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement.

Levels 2 and 3

See tables 11-1 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Figure 11-1 compares storm water complaint data from this fiscal year to past years. Please note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

Level 4

Tables 11-1 through 11-8 at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is possible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. Reliable load estimation methods have not yet been developed for most other programs. Note that the City has installed Calsense in various City parks and medians, as described in Section 4. Calsense is designed to decrease water usage, which is likely to have reduced the load of pollutants potentially transported by irrigation runoff.

Level 5

The Dry Weather Monitoring Program is the City's primary mechanism of measuring the quality of discharges. The City also performs an additional monitoring program at six sites; five of these sites are located in the City's MS4, and one is located in an improved channel that has also been identified as a receiving water body. In 2009, the City began collecting MS4 outfall water quality data to help characterize pollutant discharges from its MS4, although not enough data to make definitive conclusions has been collected at this point.

Figures 11-2 through 11-5 are graphs that present historical Dry Weather Monitoring results and trends. Ammonia–nitrogen and detergents, the two constituents with the longest historical data record, both show decreasing trends over time. No discernable trend is apparent for other field screening constituents.

Level 6

No Regional Monitoring Program stations are located within or close to the City of La Mesa. The western portion of Alvarado Channel is the only receiving water body within City limits. The City has monitored sites at the downstream point of the Alvarado and

University drainage basins in the past and continues to monitor the University site as a collaborative activity associated with the Chollas Creek TMDL. No long term trends have been identified in data from these sites. The City will continue to work with the San Diego River and San Diego Bay WURMP workgroups to improve the quality of water bodies downstream of the City of La Mesa.

Beyond the JURMP Program, City is also subject to additional requirements associated with Total Maximum Daily Load (TMDL) regulations, which set numeric compliance limits. The City of La Mesa has been collaborating with other Copermittees in the Chollas Creek watershed to conduct annual reporting and monitoring for the Chollas Creek Diazinon and dissolved metals TMDLs. During 2010/2011, the City also developed a Strategic Plan for Watershed and TMDL Activity Implementation targeted at TMDL requirements for the San Diego River and Chollas Creek watersheds. Since that time, the City has been collaborating with other Copermittees to develop an implementation plan for the San Diego River bacteria TMDL and an updated implementation plan that incorporates bacteria TMDL requirements along with previously adopted TMDLs for dissolved metals and Diazinon in the Chollas Creek watershed.

11.2.2 Overall Component Assessments

Development Planning

The City's review process for development projects effectively requires BMPs with higher pollutant removal efficiency. City interaction with responsible parties during the reporting period has resulted in BMP installation and a greater level of awareness of the need for regular treatment control BMP maintenance within the City, particularly with newly completed projects. The City will continue to work with the parties responsible for maintenance of treatment control BMPs during 2011/2012.

Construction

Available data indicate that on the whole the City's construction program effectively requires BMP implementation. Any BMP deficiencies noted are typically remedied promptly. Since the City continued to require even small projects to complete a Construction Storm Water Management Plan (CSWMP) and performed inspections on low priority construction sites beyond the minimum requirements of the Municipal Permit to ensure compliance.

Municipal

The City's municipal activities effectively implement BMPs and reduce pollutant loading. The City's municipal staff are regularly trained on storm water issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit frequency requirements. In particular, the City sweeps its streets more often than the permit requirements to aid in WURMP efforts. The City has also installed drainage inserts along University Avenue and at the Public Works Operation Center to reduce the discharge of pollutants. Additional treatment controls, two Filterra bioretention system units, were installed in the University drainage basin during 2009/2010. The City continues

implementation of a sophisticated system, Calsense, to control irrigation runoff from parks and medians. The City also distributes pet waste bags through dispensers in its parks.

Industrial and Commercial
The City employs a dedicated storm water inspector that works with businesses during and following inspections to ensure compliance. In 2010/2011 the City followed-up with non-compliant sites and will continue to do so into 2011/2012.

The City continued invoicing businesses in order to recover costs of inspections and it appears that this practice has stimulated more interest in the program and more of a desire to comply with regulations. The practice of charging businesses for each routine inspection and follow-up visit provides the additional benefit of encouraging businesses to comply in a timely manner.

Residential
The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. Residential areas within the City designated as high TTWQ receive additional attention from storm water staff to check for evidence of IC/IDs and high TTWQ activities.

Illicit Discharge Detection and Elimination
The City's IDDE program has effectively responded to complaints. No IC/IDs were observed during the 2010 Dry Weather Monitoring Program. There were nine SSOs during the reporting period, the effects of which were assessed and found to be minimal. The City submitted a technical report to the RWQCB about the results of its investigations into the spills, which contains the details of the City's monitoring and mitigation efforts. The City will continue to respond appropriately to SSOs and take action to prevent and eliminate IC/IDs.

Education
During 2010/2011, the City continued to educate various communities in the City. The City also continued to distribute the quarterly *La Mesa Focus* newsletter, each issue of which included articles about storm water pollution prevention, to residents and businesses in the City.

Public Participation
The City continued to encourage participation in public events, such as cleanup events, and reporting potential storm water violations via the City's Storm Water Hotline. Hotline calls increased between 2009/2010 and 2010/2011, which may indicate an increased awareness of the hotline and storm water program.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-1
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review and approve project plans	External A small number of projects submitted reports during 2010/2011. Based on meetings with applicants and BMPs proposed, it appears that the level of knowledge is increasing. Internal The City's Storm Water Program Manager worked with engineers in the City to improve their level of understanding of the new SUSMP and HMP requirements in March 2011. The City's consultant is also available to review WQTRs submitted to the City.	Overall WQTR approval rate during reporting period	67%; four of six new priority projects were reviewed and approved	N/A, addressed through other significant activities for this component
		Percent of projects proposing BMPs besides filter inserts	100%	
		Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects implementing proposed BMPs	100%, due to City follow-up	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	See Section 2	
Verify BMPs are properly maintained	External Verification letters were sent to all 17 projects on the City's inventory. Internal N/A, verification letters were prepared by the City's consultant.	Percent of sites properly maintaining BMPs	100%, due to City follow-up	Load reduction can be achieved through regular BMP maintenance.
		Resolution status of enforcement actions	See Section 2	
		Percent of sites submitting proper verification forms	100%, due to City follow-up	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-2
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by permit conditions, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of BMP deficiencies resolved by City follow-up within the reporting period	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Details about resolution and enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff are regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	95%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4	Number of pet waste bags distributed	22,500
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.		Amount of sediment and debris removed (weight or volume)	525.29 tons
				Amount of sediment and debris removed per length of street swept (weight or volume per curb mile)	0.06 tons/ curb mile
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume) not including debris removed from treatment BMPs	178 cubic yards
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge recovered	107 gallons
Maintain municipal treatment control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment BMPs	8.75 cubic yards
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External The City's inspector regularly interacts with business owners and provides site-specific BMP corrective actions at each full inspection visit. See Section 8 for more detail on educational materials and other outreach efforts. Internal The City regularly hosts and attends training events. See Section 8 for more detail on specific training sessions.	Percent of inspected sites in compliance with BMP requirements (not including follow-ups)	88%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Percent of inspected sites in compliance with BMP requirements following brief re-inspection.	98%		
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	0	Number of IC/IDs encountered during inspections	0
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5: Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External Residents were educated in variety of ways in 2010/2011; see sections 6 and 8 for details. Internal The City's Storm Water Program Manager is heavily involved in the implementation of the residential component. Other City staff involved in the program also have a good understanding of the goals of the storm water program.	Number of residential incidents reported to storm water hotline	11	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution of enforcement actions	See Section 6	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6: Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were eliminated, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to storm water hotline	The City's Storm Water Program Manager trains City staff as needed. See sections 4 and 8. City staff were responsible for some of the reports made to the hotline.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 7 are likely to have resulted in a pollutant loading reduction.
Respond to and clean up SSOs	City staff are thoroughly trained on how to respond to SSOs.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems. See Section 4 for details.	There were nine SSOs during the reporting period; 107 gallons of wastewater were recaptured.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-7: Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for 2010/2011.
	Estimated number of impressions made	22,843		

Notes

Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8: Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details. See Figure 11-1 for a summary of hotline reports in recent years.	Number of attendees at events	4,750	Amount of trash and debris collected at cleanup events	38,885 pounds
		Number of calls received to the storm water hotline	151	Amount of HHW collected	99,878 pounds

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Storm Water Complaints Logged

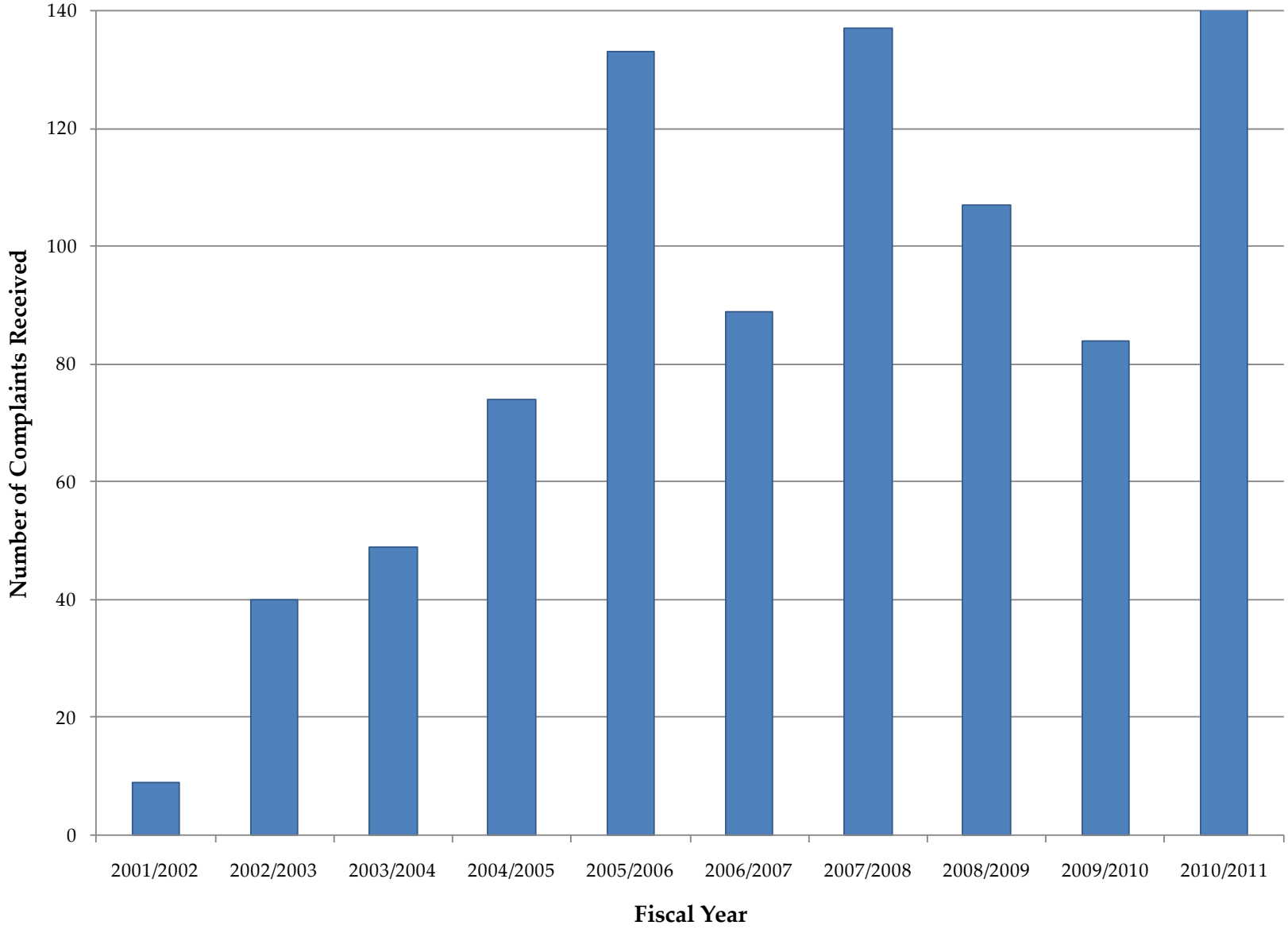

Figure 11-2
Dry Weather Monitoring, Averages of Tested Constituents

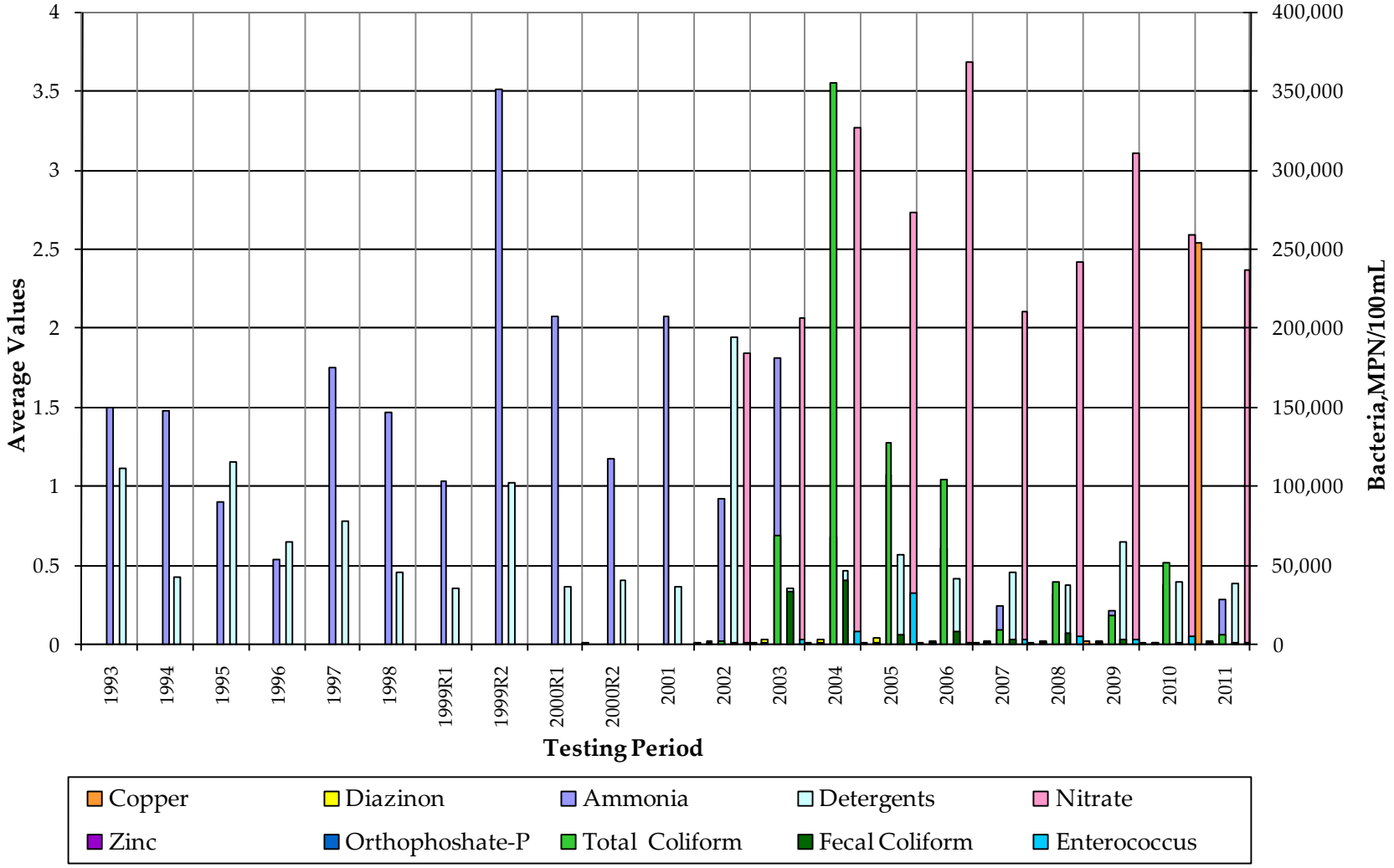

Figure 11-3
Dry Weather Monitoring, Ammonia-Nitrogen 1993-2011

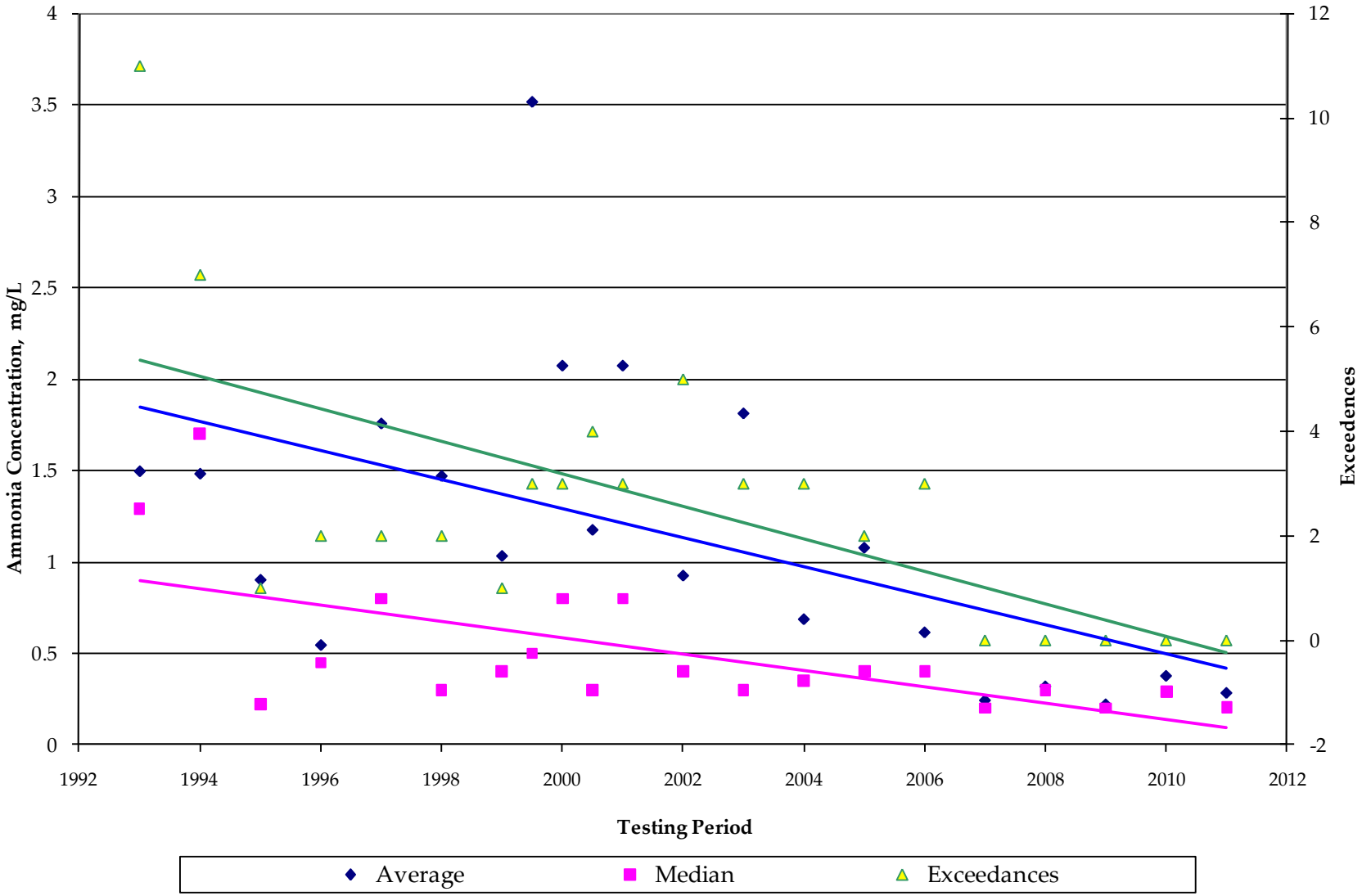

Figure 11-4
Dry Weather Monitoring, Detergents, 1993-2011

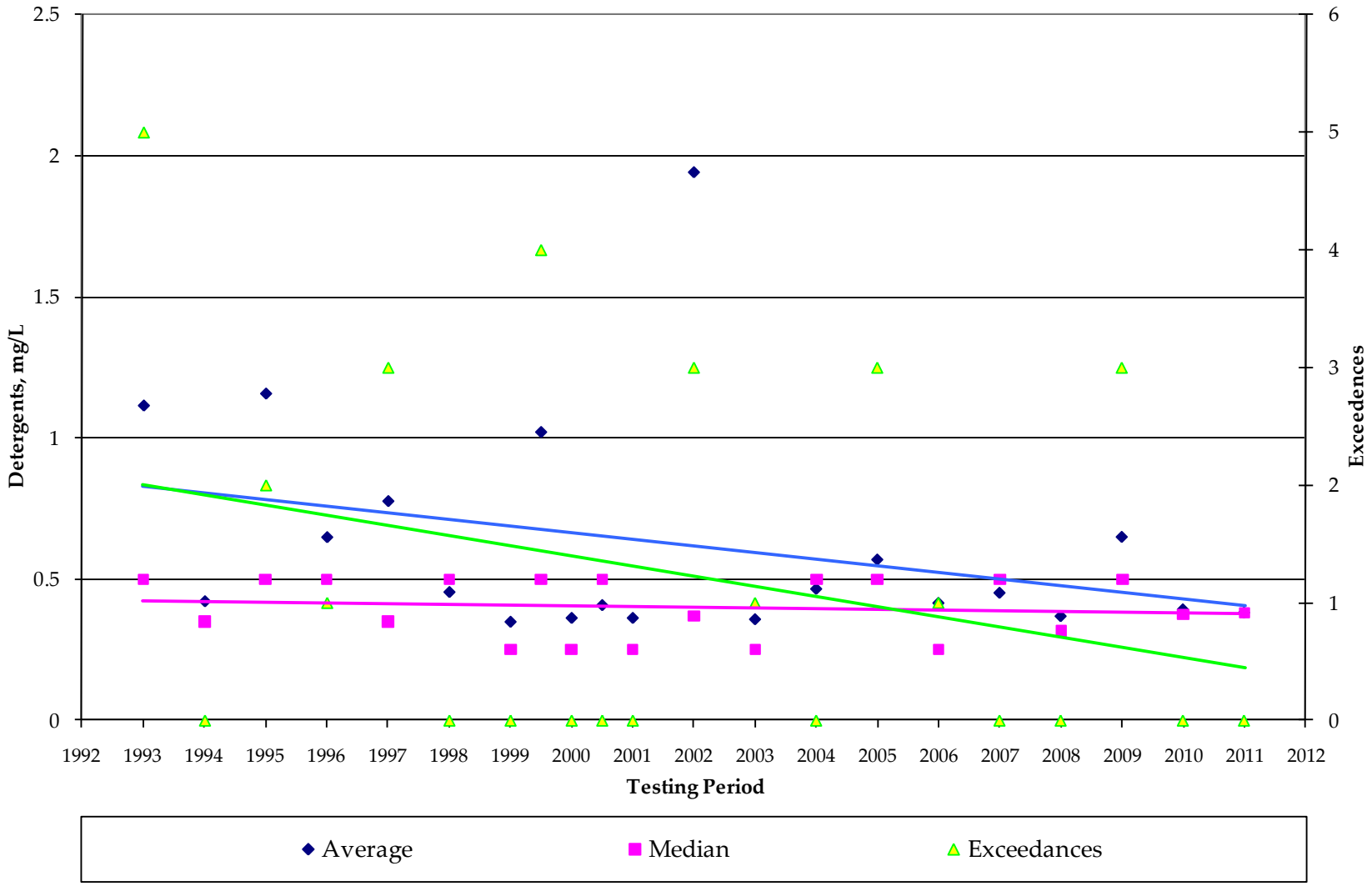

Figure 11-5
Dry Weather Results, Fecal Coliform and Enterococcus Bacteria 2002-2011

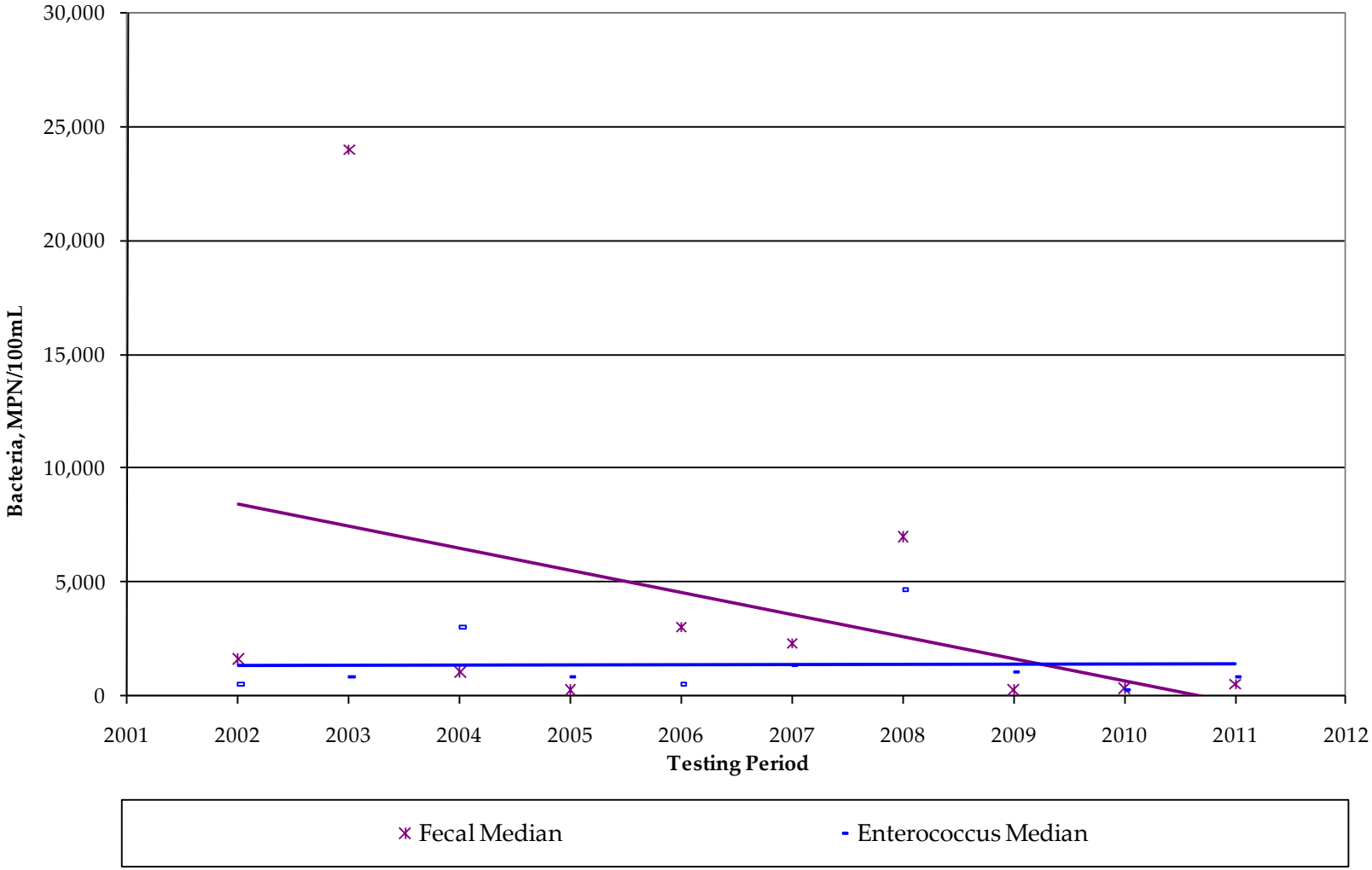

12.0 Special Investigations

The City takes a proactive approach to storm water management in an attempt not only to protect receiving water quality, but also to improve the quality of water that is discharged from the City's MS4. Data collected through the City's various monitoring and inspection programs are used to identify locations within the City that may be contributing to storm water contamination. Source identification investigations are then initiated to pinpoint the exact cause of detected pollution. Aside from upstream investigations conducted as part of the dry weather monitoring and sampling program (to be reported as part of the Illicit Discharge Detection and Elimination component in December), no special investigations were needed or conducted during this reporting period.

13.0 NON-EMERGENCY FIRE FIGHTING

Please reference Section 4.2.3 of this JURMP Annual Report for information about BMPs and procedures associated with non-emergency fire fighting activities.

14.0 JURMP REVISIONS

Changes to the JURMP made since the overall JURMP update in the spring of 2008 are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 Conclusions and Recommendations

During 2010/2011, the City of La Mesa continued to implement its storm water program based on the 2008 JURMP. Additionally, the City continued to work collaboratively with the other Copermittees to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City will continue to refine and improve its storm water program based on information made available by these collaborative efforts.

Beyond the JURMP Program, City is also subject to additional requirements associated with Total Maximum Daily Load (TMDL) regulations, which set numeric compliance limits. The City of La Mesa has been collaborating with other Copermittees in the Chollas Creek watershed to conduct annual reporting and monitoring for the Chollas Creek Diazinon and dissolved metals TMDLs. During 2010/2011, the City also developed a Strategic Plan for Watershed and TMDL Activity Implementation, coinciding with the adoption of bacteria TMDLs for both the San Diego River and Chollas Creek watersheds. Since that time, the City has been collaborating with other Copermittees to conduct monitoring and modeling, develop the Implementation Plan for San Diego River's bacteria TMDL, and update the Chollas Creek Implementation Plan to include the new bacteria TMDL. These efforts will continue throughout the TMDL timelines.

16.0 REFERENCES

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APPENDIX A.1

Appendix A.1
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Year Finaled	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Other	
1	Former Car Dealership	7604 El Cajon Blvd.	Alvarado	2003	Y		X								Medium
2	Parkview	4111 Massachusetts Ave.	University	2004	N			X			X			Porous concrete	Medium
3	Briercrest Park (CIP)	9051 Wakarusa St.	Alvarado	2005	Y					X					Medium
4	Aragon	7701 El Cajon Blvd	University	2006	N								X		Medium
5	Fire Station (CIP)	8054 Allison Avenue	University	2006	Y									Storm screens	High
6	Lowell Street Condominiums	4241 Lowell Street	University	2006	N		X				X				Medium
7	Bougainvillea Walk	Milden Street	Alvarado	2007	N						X				Medium
8	Eastridge Serramar	3957 Murray Hill Rd	University and Spring Valley	2007	N			X					X		Medium
9	Kaiser	8010 Parkway Drive	Alvarado	2007	Y								X		High
10	La Mesa Teen Center (CIP)	7775 Junior High Dr.	University	2007	Y		X				X				Medium

Appendix A.1 (Continued)
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Year Finaled	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Other	
11	Providence Square (Formerly Talmadge East Apartments)	5090 Guava Street	Alvarado	2007	N						X				Medium
12	Grossmont Medical Offices	8860/8870 Grossmont Center Dr	Alvarado	2008	Y		X				X		X		Medium
13	Grossmont Trolley Theater Commercial	8555 Fletcher Pkwy	Alvarado	2008	Y						X				High
14	Davis YMCA Expansion (CIP)	8881 Dallas St	Alvarado	2009	N		X					X			Medium
15	La Mesita	7360 La Mesita Place	University	2009	Y						X				Medium
16	County Libray, La Mesa Branch (CIP)	8074 Allison Avenue	University	2010	N								X		High
17	Alterra/Pravada at Grossmont Trolley Apartments	8727 Fletcher Pkwy	Alvarado	2010	N		X				X	X		Downspout filters	High

Notes
- Alvarado and Lake Murray drainage basins are in HSA 907.11 (San Diego River Watershed)
- University and Lemon Grove drainage basins are in HSA 908.22 (San Diego Bay Watershed)
- Spring Valley drainage basin is in HSA 909.12 (San Diego Bay Watershed)

APPENDIX A.2

Appendix A.2
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Total Insp.
Public Projects								
1	New Police Station	8085 University Ave	SD Bay	High	0	0	1	1
2	Allison Ave Improvements	Allison Ave	SD Bay	Medium	31	8	0	8
3	CIP 10-04 Collector Street Resurfacing and Utilities Project	Various Streets	SD Bay & SD River	Medium	0	0	1	1
4	CIP 10-13 Slurry Coating and Crack Sealing	Various Streets	SD Bay & SD River	Medium	0	0	1	1
5	I&I Mitigation Project Phase IV	City-Wide	SD Bay & SD River	Medium	0	0	1	1
6	Intersection Improvements El Cajon Blvd/La Mesa Blvd and Spring St/High St	El Cajon Blvd/La Mesa Blvd and Spring St/High St	SD Bay	Medium	9	2	0	2
7	La Mesa Post Office Demolition	4700 Nebo Dr	SD Bay	Medium	0	0	1	1
8	Sewer Replacement CIP 09-19	Parks, University, Normal, and Orien Area, Also Lake Murray Café Sewer (T&M)	SD Bay	Medium	5	1	0	1
Private Projects								
9	Elderly Home Construction	5640 Aztec Dr	SD River	Medium	0	0	1	1
10	Mesa Del Sol (Hilltop 37 Homes)	7378 Orien Ave	SD Bay	Medium	31	7	0	7
11	Severin Office Building	5980 Severin Dr	SD River	Medium	13	3	0	3
12	CoAmerica (Wendy's)	5450 Jackson Dr	SD River	Low	23	1	0	1

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Total Insp.
13	Condos (Aragon)	7701 El Cajon Blvd	SD Bay	Low	31	1	0	1
14	Elderly Home Demolition	5640 Aztec Dr	SD River	Low	9	0	0	0
15	Grading RV Parking	4661 Maple Ave	SD Bay	Low	31	1	0	1
16	MTS Grossmont Center Bridge	8725 Fletcher Pkwy	SD River	Low	31	1	0	1
17	Other Old Shell Station	4200 Spring St	SD River	Low	23	1	0	1
18	SFH	9038 Mollywoods Ave	SD River	Low	23	1	0	1
19	SFH	9222 Briercrest Dr	SD River	Low	23	1	0	1
20	SFH	9035 Lemon Ave	SD Bay	Low	23	1	0	1
21	SFH	4667 Judson Way	SD Bay	Low	23	1	0	1
22	SFH	9120 Johnson Ave	SD River	Low	0	0	1	1
23	SFH	9105 Southern Rd	SD River	Low	0	0	1	1
24	SFH	4560 3rd St	SD Bay	Low	31	1	0	1
25	SFH	4480 Panorama Ave	SD Bay	Low	31	1	0	1
26	SFH	4958 Pine St	SD River	Low	0	0	1	1
27	SFH	9589 Alto Dr	SD Bay	Low	31	1	0	1
28	SFH	4292 Merritt Blvd	SD Bay	Low	31	1	0	1
29	SFH	7531-7537 Ohio Pl	SD Bay	Low	23	1	0	1
30	SFH	4290 Bancroft Dr	SD Bay	Low	13	1	0	1
31	SFH	8229 Pasadena Ave	SD Bay	Low	13	1	0	1
32	SFH (Demolition)	4851 Palm Ave	SD Bay	Low	26	1	0	1
33	SFH Addition	4518 Nebo Dr	SD Bay	Low	5	1	0	1

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Total Insp.
34	Storm Drain/Sidewalk Frontage	4779 Bancroft Dr	SD Bay	Low	9	0	0	0

APPENDIX A.3

Appendix A.3
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source[1]
1	Allison Avenue Lot (Parking Facility)	Palm & Allison Avenues	High	San Diego River	Roads, Streets, Highways, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	
2	Aztec Park	Corner of Aztec Drive and Morocco Dr.	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
3	Briercrest Park	9000 Block Wakarusa Street	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
4	Collier Park and Pump House	4401 Palm Avenue	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
5	Community Pool	5100 Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
6	Graffiti Removal	Throughout City	High	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	PO	PO	PO	PO	PO	PO	PO	PO	UL	
7	Harry Griffen Park	9550 Milden Street	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
8	Highwood Park	4200 Parks Avenue	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
9	Jackson Park	Jackson Drive and Laird Street	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
10	Junior Seau Sports Complex	9001 Park Plaza Drive	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
11	La Mesa Blvd (Parking Facility)	La Mesa Blvd & Acacia Avenue	High	San Diego Bay	Roads, Streets, Highways, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	X
12	La Mesita Park and Gardener's Shack	8855 Dallas Street	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
13	Lemon Ave Lot (Parking Facility)	Lemon Avenue & 3rd Street	High	San Diego Bay	Roads, Streets, Highways, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	X
14	MacArthur Park	University Avenue and Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
15	Municipal Separate Storm Sewer	53 miles of pipes, storm drains, storm drain boxes, and open channel sections throughout the City	High	San Diego Bay/ San Diego River	MS4	UL	UL	UL	PO**	UL	UL	PO**	PO**	UL	
16	Northmont Park	Severin Drive and Amaya Drive	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
17	Palm Avenue Lot (Parking Facility)	Palm & Lemon Avenues	High	San Diego River	Roads, Streets, Highways, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	
18	Porter Hall	4910 Memorial Drive	High	San Diego River/ San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source[1]
19	Porter Park	8425 University Avenue	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
20	Power Washing	Throughout City	High	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	PO	PO	PO	PO	PO	PO	PO	PO	UL	
21	Public Works Operation Center	8152 Commercial Street	High	San Diego River	Public Works Facilities	L	PO	L	L	PO	PO	PO	PO	PO	
22	Roads, Streets, and Highways	149 miles of roadways throughout the City	High	San Diego Bay/ San Diego River	Roads, Streets, Highways, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	X
23	Rolando Park	Alamo Way and Vigo Street	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
24	Sanitary Sewer Maintenance	Throughout City	High	San Diego Bay/ San Diego River	Sanitary Sewer Maintenance	PO***	UL	PO***	UL	UL	PO***	PO***	PO***	UL	
25	Special Events	Throughout City	High	San Diego Bay/ San Diego River	Special Events	UL	UL	UL	UL	UL	UL	PO	PO	L	
26	Sunset Park, Gardener's Shack, and Recreational Building	5540 Lake Park Way	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
27	Sunshine Park	70th and Tower Street	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
28	Vista La Mesa Park	King Street and Hoffman Avenue	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
29	Fire Station No. 11	8034 Allison Avenue	Medium	San Diego Bay	Fire Stations	PO	PO	PO	PO	UL	UL	UL	PO	PO	
30	Fire Station No. 12	8834 Dallas Street	Medium	San Diego River	Fire Stations	PO	PO	PO	PO	UL	UL	UL	PO	PO	
31	Fire Station No. 13	9110 Grossmont Boulevard	Medium	San Diego River/ San Diego Bay	Fire Stations	PO	PO	PO	PO	UL	UL	UL	PO	PO	
32	Infrastructure Maintenance	Throughout City	Medium	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	PO	PO	PO	PO	PO	PO	PO	PO	UL	
33	Landscape Maintenance	Throughout City	Medium	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	PO	PO	PO	PO	PO	PO	PO	PO	UL	
34	Police Station	8181 Allison Avenue	Medium	San Diego River	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
35	PW Maintenance Building	8152 Commercial Street, Building 100	Medium	San Diego River	Public Works Facilities	L	PO	L	L	PO	PO	PO	PO	PO	
36	PW Traffic Operation Trailer	8152 Commercial Street, Building 600	Medium	San Diego River	Public Works Facilities	L	PO	L	L	PO	PO	PO	PO	PO	
37	Adult Enrichment Center	8450 La Mesa Boulevard	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
38	Adult Enrichment Center Clubhouse	8425 La Mesa Boulevard	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
39	City Hall and Modular Buildings	8130 Allison Avenue	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source[1]
40	City Hall Annex	8130 Allison Avenue	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
41	Community Center	4975 Memorial Drive	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
42	Helix Water District	7911 University Avenue	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
43	Historical Society	8369 University Avenue	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
44	Library/Fine Arts	8055 University Avenue	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
45	Nan Couts Cottage (Recreational Bldg)	4875 Memorial Dr.	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
46	Postal Facility	4800 Nebo Drive	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
47	PW Administration	8152 Commercial Street, Building 300	Low	San Diego River	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
48	PW Document Storage	8152 Commercial Street, Building 500	Low	San Diego River	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
49	Recreation Center	4975 Memorial Drive	Low	San Diego River/ San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	

Notes

[1]Likely Source: Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

L = Likely, PO = Possible, UL= Unlikely

* Discharge of heavy metals and oil and grease is possible if the facility has on-site parking

** Sediment and oxygen demanding substances are possible pollutants for earthen or natural conveyances. Bacteria, but generally not viruses and other pathogens, may regrow in MS4s under certain conditions. While other pollutants may be discharged from the MS4, the MS4 itself is not a direct source of those pollutants.

***The sanitary sewer system is only a potential source of pollutants in the event of sewer line breaks or SSOs.

APPENDIX A.4

Appendix A.4
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1	American Tanks	8111 Commercial St.	High	907.1	Industrial	No	3444	Manufacturing, Fabricated Metal	No	No	Yes	No	No	No	No	No	Yes	Yes	No	Yes	No
2	California Countertops, Inc.	7811 Alvarado Rd.	High	907.1	Industrial	No	3089	Manuacturing and Installation of Counter Tops	No	No	No	No	No	No	No	Yes	Yes	Yes	No	Yes	Yes
3	Centex Glazing	8260 Center Dr.	High	907.1	Industrial	No	1791	Other Contractor	No	No	No	No	No	Yes	No	No	Yes	Yes	No	Yes	No
4	Dixieline Lumber & Home Centers	8372 Center Dr.	High	907.1	Industrial	No	5211	Lumber and Building Materials	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes
5	Edco Transfer Station	8182 Commercial St.	High	907.1	Industrial	No	4953	Waste Management	Yes	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes
6	La Mesa Transfer & Storage, Inc.	8336 Case St.	High	907.1	Industrial	No	4214	Wholesale/ Storage/ Warehousing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	Yes	No
7	Rainbow Steel Inc.	8332 Case St.	High	907.1	Industrial	No	3499	Manufacturing, Fabricated Metal	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
8	Walter H. Barber & Sons, Inc.	8179 Center St.	High	907.1	Industrial	No	1629	Heavy Construction, Not Elsewhere Classified	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
9	A-1 Self Storage (Center Dr.)	8328 Center Dr.	Medium	907.1	Industrial	No	4225	Wholesale/ Storage/ Warehousing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
10	Albert J. Becker dba Wood Design West	8333 Case St.	Medium	907.1	Industrial	No	2434, 2511	Manufacturing, Misc.	No	No	Yes	No	No	Yes	No	Yes	Yes	Yes	No	No	No
11	Classic Screen Print	8176 Center St. Suite C	Medium	907.1	Industrial	No	2759	Printing	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
12	Moran Canvas Products	8135 Center Dr.	Medium	907.1	Industrial	No	3444	Manufacturing, Fabricated Metal	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
13	Schaefer Ambulance	7285 University	Medium	908.2	Industrial	No	4119	Ground Transportation	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
14	A-1 Self Storage (Spring St.)	4981 Spring St.	Low	907.1	Industrial	No	4225	Wholesale/ Storage/ Warehousing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
15	Dasina Building Group	8204 Parkway Dr. #5	Low	907.1	Industrial	No	2434	Manufacturing, Wood/ Furniture	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	No	No
16	Equality Plating Co.	8172 Center St.	Low	907.1	Industrial	No	3471	Plating, Fabricated Metals	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
17	L & R Neon	8200 Commercial St. #101	Low	907.1	Industrial	No	3993	Signs and Advertising Specialists	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
18	Lyons & O'Haver, Inc. Taxidermy	8180 Parkway Dr.	Low	907.1	Industrial	No	3999	Manufacturing, Misc.	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
19	The Little Warehouse	5175 Baltimore Dr.	Low	907.1	Industrial	No	4225	Wholesale/ Storage/ Warehousing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
20	A A A Auto Repair & Transmission	7025 University Ave	High	908.2	Commercial	No	7537	Auto Repair	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
21	A-1 Hire, Ltd.	7190 University Ave	High	908.2	Commercial	No	7353,7694	Vehicle, Equipment Rental	No	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
22	Ace Coating Co.	8333 Case St. Suite 584	High	907.1	Commercial	No	1799	Other Contractor	No	No	No	Yes	No	Yes	No	No	No	Yes	No	Yes	No
23	Affordable Paint and Body	8181 Center St.	High	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	Yes	No	No	No	Yes	No	Yes	No
24	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr.	High	907.1	Commercial	No	7542,7549	Vehicle Washing and Fluid Changing	No	Yes	Yes	No	Yes	No	No	No	No	Yes	No	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
25	Auto Fix	7227 University Ave	High	908.2	Commercial	No	7538	General Automotive Repair	No	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
26	Big Daddy's Oil Inc. #14	9600 Murray Dr.	High	907.1	Commercial	No	5541	Gasoline Service Station w/ Food Store	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
27	BJ's Pizza & Grill	5500 Grossmont Center Dr. #M1	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
28	Bob Stall Chevrolet	7601 Alvarado Rd.	High	907.1	Commercial	No	5511, 7538	Vehicle Dealers w/ Service	No	No	Yes	No	Yes	No	No	No	No	Yes	No	Yes	No
29	Broding's Battery Warehouse	8188 Commercial St.	High	907.1	Commercial	No	5013	Auto Supplies	No	Yes	No	No	No	No	No	No	No	Yes	No	Yes	No
30	Burger Auto Group, LLC	8355 Hercules St.	High	907.1	Commercial	No	5511, 7538, 7532	Automotive Sales and Repair Work	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No
31	Chili's Bar & Grill	8285 Fletcher Pkwy.	High	907.1	Commercial	No	5812, 5813	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
32	China Super Buffet	7984 La Mesa Blvd.	High	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
33	Chipotle Mexican Grill	8005 Fletcher Pkwy.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
34	Coco's #132	5550 Lake Murray Blvd.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
35	Dan's Automotive	7501 University Ave	High	908.2	Commercial	No	7538	Auto Repair	No	Yes	Yes	No	Yes	No	No	Yes	No	Yes	Yes	Yes	No
36	Five Star Collision Center Inc.	7643 University Ave Suite H	High	908.2	Commercial	No	7532	Auto Paint/Body	No	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
37	Fuddrucker's	5500 Grossmont Center Dr.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
38	Gio	8384 La Mesa Blvd.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
39	Jack in the Box (DMSD Foods).	5141 Jackson Dr	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
40	Jack in the Box (Nfarooqi Enterprises LLC)	6140 Lake Murray Blvd.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
41	Jack in the Box (University)	6987 University Ave	High	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
42	La Mesa College Auto Repair	7643 University Ave	High	908.2	Commercial	No	7538	General Automotive Repair	No	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
43	Marie Callender's #74	6950 Alvarado Rd.	High	907.1	Commercial	No	5812, 5813	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	Yes	No	Yes	No	Yes	No
44	McDonald's	8045 Fletcher Pkwy.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
45	Nacho's Taco Shop	7589 University Ave	High	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
46	Panda Express #226	8011 University Ave	High	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
47	Pick Up Stix La Mesa	8025 Fletcher Pkwy.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
48	Raindance Roofing Company, Inc.	8176 Commercial St.	High	907.1	Commercial	No	1761	Roofing Contractor	No	No	No	No	No	No	No	Yes	No	Yes	No	No	No
49	Trailers Plus	7651 Alvarado Rd.	High	907.1	Commercial	No	5561	Recreational Vehicle Dealer	No	No	Yes	No	Yes	No	No	No	No	Yes	No	Yes	No
50	Vine Ripe Market	8191 Fletcher Pkwy.	High	907.1	Commercial	No	5411	Grocery Store	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
51	7-Eleven Food Store #13647	8300 Parkway Dr.	Medium	907.1	Commercial	No	5411	Grocery / Convenience Store	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
52	7-Eleven Food Store #13649	5746 Amaya Dr.	Medium	907.1	Commercial	No	5411	Grocery / Convenience Store	No	No	No	No	No	No	No	Yes	Yes	Yes	No	Yes	No
53	7-Eleven Food Store #16119	5255 Baltimore Dr.	Medium	907.1	Commercial	No	5411	Grocery / Convenience Store	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
54	7-Eleven Food Store #17945	7602 University Ave	Medium	908.2	Commercial	No	5411	Grocery / Convenience Store	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
55	7-Eleven Food Store #20884	4253 Palm Ave.	Medium	909.1	Commercial	No	5411	Convenience Store w/ Fueling Pumps	Yes	No	No	No	Yes	No	No	No	Yes	No	No	No	No
56	99 Cents Only	7908 El Cajon Blvd.	Medium	907.1	Commercial	No	5411	Grocery Store	No	No	No	No	No	No	No	No	No	Yes	No	No	No
57	A to Z Auto Repair	7159 University Ave	Medium	908.2	Commercial	No	7538	General Automotive Repair	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
58	A&A Garden Equipment Parts Service	7243 University Ave	Medium	908.2	Commercial	No	5261	Nurseries, Lawn and Garden Supply Stores	No	No	No	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes	No
59	Advanced Painting Specialists	8411 La Mesa Blvd.	Medium	909.1	Commercial	No	1721	Painting & Wall Covering	No	No	No	No	No	Yes	No	No	No	No	No	No	No
60	Albertson's #6710	8920 Fletcher Pkwy.	Medium	907.1	Commercial	No	5411	Grocery Store	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
61	Aliberto's Mexican Food	7819 El Cajon Blvd.	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
62	All American Carpets	8186 Center St. Suite E	Medium	907.1	Commercial	No	1752	Floor Laying and Other Floor Work	No	No	No	No	No	Yes	No	No	Yes	Yes	No	No	No
63	Amira Auto Sales & Broker	6942 University Ave Suite C	Medium	908.2	Commercial	No	5521	Motor Vehicle Dealer (Used)	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
64	Andeli Café	5525 Jackson Dr	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
65	Anthony's Fish Grotto La Mesa	9530 Murray Dr.	Medium	907.1	Commercial	No	5812, 5813	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
66	Antica Trattoria Inc.	5654 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
67	Arby's #5822	5341 Jackson Dr	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
68	Arco Sunshine Food Store #9543	7594 University Ave	Medium	908.2	Commercial	No	5541	Gasoline Service Station w/ Food Store	No	No	No	No	Yes	No	No	No	Yes	Yes	No	Yes	No
69	Arco Sunshine Food Store #9596	7974 University Ave	Medium	908.2	Commercial	No	5541	Gasoline Service Station w/ Food Store	No	No	No	No	Yes	No	No	No	Yes	Yes	No	Yes	No
70	Are Con, Inc.	8171 Center St.	Medium	907.1	Commercial	No	1771	Cement Mixing / Cutting	No	No	No	No	No	No	No	Yes	No	Yes	No	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
71	Arigato Japanese Restaurant	5575 Baltimore Dr. #110	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
72	Audio Associates	8200 Center Dr.	Medium	907.1	Commercial	No	3663	Audio / Video Equipment Installation	No	No	No	No	No	No	No	No	No	Yes	No	No	No
73	Auto Center	8203 University Ave	Medium	907.1	Commercial	No	7539	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	No	No	Yes	No	No	No
74	Auto Forza	7633 El Cajon Blvd.	Medium	907.1	Commercial	No	7539	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	No	No	Yes	No	No	No
75	Auto Repair Specialists	8120 Center St.	Medium	907.1	Commercial	No	7539	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	No	No	Yes	No	No	No
76	Aztec Fire & Safety	8107 Commercial St.	Medium	907.1	Commercial	No	1799	Fire Protection Specialists	No	No	Yes	No	No	No	No	No	No	Yes	No	No	No
77	Azure Construction, Inc.	7423 El Cajon Blvd.	Medium	908.2	Commercial	No	1799	Other Contractor	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	No	No
78	Baldwin Auto Sales	8174 Center St.	Medium	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	Yes	No	Yes	No	No	No
79	Bamboo Fresh Thai Cuisine	7953 University Ave	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
80	Banbu Sushi Bar & Grill	8555 Fletcher Pkwy. Suite 105	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
81	Bangkok Orchid Thai Cuisine	9168 Fletcher Pkwy.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
82	Baskin Robbins 31 Flavors	8807 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
83	Big O Tires	7589 El Cajon Blvd. Suite A	Medium	908.2	Commercial	No	7534, 7538	Automotive Repair Shop w/ Tire Sales	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
84	BMH Italian LLC	7670 El Cajon Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
85	Bob Bowen's Auto Service	7191 Alvarado Rd.	Medium	907.1	Commercial	No	7538	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	No	No	Yes	No	Yes	No
86	Bob Stall Chevrolet	7631-7651 Alvarado Rd.	Medium	907.1	Commercial	No	5599	Vehicle Dealers	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
87	Brady Co. / San Diego Inc.	8100 Commercial St.	Medium	907.1	Commercial	No	1742	Plaster, Drywall, Insulation Installation	No	No	No	No	No	No	No	Yes	No	Yes	No	No	No
88	Brigantine Restaurant	9350 Fuerte Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
89	C & D Auto Care	7163 University Ave	Medium	908.2	Commercial	No	7538	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
90	C & D Towing Specialists	8332 Case St.	Medium	907.1	Commercial	No	7549	Vehicle Towing	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
91	Caffe Bar e Restoranti	5263 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
92	Caliber Collision Center	8310 Center Dr.	Medium	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
93	Cape-Able Canines	8150 Commercial St.	Medium	907.1	Commercial	No	0752	Animal Services, Except Vet	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
94	Cappuccino House	7334 University Ave	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
95	Carini Electric, Inc.	8104 Center St.	Medium	907.1	Commercial	No	1731	Electrical Work	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
96	Carl's Junior #284	8110 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
97	Casa De Pico Restaurant	5500 Grossmont Center Dr. #404	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
98	Casual Café	8881 Fletcher Pkwy.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
99	Centifonti	8365 La Mesa Blvd.	Medium	909.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No
100	Centre City Shell #2	3810 Massachusetts Ave.	Medium	908.2	Commercial	No	5541	Gasoline Service Station	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
101	Century Motors	7474 University Ave	Medium	908.2	Commercial	No	5511	Auto Sales	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
102	Chang's Express	5500 Grossmont Center Dr. #FC4	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
103	Charcoal House	9566 Murray Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
104	Chefaxel Inc. Bistro	7097 University Ave	Medium	908.2	Commercial	No	5812, 5963	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
105	Chin's Restaurant	8260 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
106	Chopstick's Inn Restaurant	8687 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
107	Chuck E. Cheese	5500 Grossmont Center Dr. #J 34	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
108	Citlalli Mexican Food	7327 University Ave	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
109	Claim Jumper Restaurant La Mesa	5500 Grossmont Center Dr. #406	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
110	Coast Restaurant Supply	8120 Commercial St.	Medium	907.1	Commercial	No	5046	Wholesale / Storage / Warehousing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
111	College/La Mesa Smog Test Only	7643 University Ave #G	Medium	908.2	Commercial	No	7549	Auto Repair / Smog Testing	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
112	Collins Plumbing, Inc.	8130 Commercial St.	Medium	907.1	Commercial	No	1711	Plumbing Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
113	Colony Mobile Plaza	7440 Colony Dr.	Medium	907.1	Commercial	No	7033	Trailer Park	No	No	No	No	Yes	No	No	No	Yes	Yes	No	No	No
114	Commercial Electric & Gas Appliance Service	8110 Commercial St.	Medium	907.1	Commercial	No	7699	Equipment Repair	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
115	Continental Catering	8232 Parkway Dr.	Medium	907.1	Commercial	No	5812	Catering Business	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
116	Cosmos Café	8278 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
117	Costco Wholesale	8125 Fletcher Pkwy.	Medium	907.1	Commercial	No	5411, 5812	Eating Establishment and Wholesale Store	Yes	No	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
118	Custom Constructors	8200 Commercial St.	Medium	907.1	Commercial	No	5712	Furniture Manufacturing	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	No	No
119	D'amatos Pizza	8807 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No	No
120	Dante's Pizza	5500 Grossmont Center Dr.	Medium	907.1	Commercial	No	5812	Eatiing Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
121	De Albas Spring Street Collision Center	4867 Spring St.	Medium	907.1	Commercial	No	7532	Auto Body & Paint	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
122	Denny's Restaurant #6488	4235 Spring St.	Medium	909.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	No	Yes	Yes	No
123	Denny's, Inc. #1743	6970 Alvarado Rd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
124	Detail 2000	8760 Campo Rd.	Medium	909.1	Commercial	No	7538, 7542	Auto Repair / Detailing	No	No	Yes	No	Yes	No	No	No	Yes	No	No	Yes	No
125	Discount Smog Centers	7633 El Cajon Blvd. Suite 200	Medium	908.2	Commercial	No	7549	Auto Emissions Testing w/out Repairs	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	No	No
126	Domino's Pizza	7960 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
127	Dream Dinner's	5208 Jackson Dr Suite 116	Medium	907.1	Commercial	No	5499	Miscellaneous Food Stores	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
128	Drew Ford / Drew Hyundai	8970 La Mesa Blvd.	Medium	907.1	Commercial	No	5511, 7538	Vehicle Dealers and Service	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	No
129	Eastridge Veterinary Clinic	7750 University Ave Suite A	Medium	908.2	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
130	EC Auto Repair	8176 Commercial St.	Medium	907.1	Commercial	No	7539	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
131	El Azteca Taco Shop Mexican Food	8306 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
132	El Cerrito Veterinary Hospital	6911 University Ave	Medium	908.2	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
133	El Torito	5024 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
134	Elite Auto Collision Repair Center	4949 Baltimore Dr.	Medium	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
135	Elite Auto Group	7658 University Ave	Medium	908.2	Commercial	No	5511	Vehicle Dealer	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
136	Emerald Oil Co.	5600 Baltimore Dr.	Medium	907.1	Commercial	No	5541	Gasoline Service Station w/ Food Store	No	No	No	No	Yes	No	No	No	Yes	Yes	No	Yes	No
137	Enterprise Rent-A-Car	8363 Center Dr. Suite 6-H	Medium	907.1	Commercial	No	7514	Vehicle/Equipment Rental	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
138	European Bistro	6062 Lake Murray Blvd. Suite 102	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
139	European Delicatessen	6062 Lake Murray Blvd. Suite 101	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
140	Express Auto Service	7633 El Cajon Blvd. Suite 300	Medium	908.2	Commercial	No	7538	Auto Repair	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
141	Extreme Auto Recovery	8180 Commercial St.	Medium	907.1	Commercial	No	7389	Auto Repossession Services	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
142	Fletcher Hills Pet Clinic	9160 Fletcher Pkwy.	Medium	907.1	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
143	G & M Oil #176 (76 Station)	6085 Lake Murray Blvd.	Medium	907.1	Commercial	No	5541	Gasoline Service Station w/ Food Store	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
144	Gold Coast Bagel Co.	5658 Lake Murray Blvd.	Medium	907.1	Commercial	No	5461	Bagel Shop	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
145	Golden Spoon	5640 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
146	Golden State Auto of La Mesa, Inc.	7224 University Ave	Medium	908.2	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No
147	Growers Direct	7055 University Ave	Medium	908.2	Commercial	No	5431	Fruit & Vegetable Market	Yes	No	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes	No
148	Gus's Subs & Pizza #2	5620 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
149	Harloff Automotive	7445 University Ave	Medium	908.2	Commercial	No	5531, 7538	Auto Repair and Supply Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
150	Hearth House, The	5505 Jackson Dr	Medium	907.1	Commercial	No	5812, 5813	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
151	Heritage Landscape Services, Inc.	8115 Commercial St.	Medium	907.1	Commercial	No	0781	Landscape Services	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
152	Himalayan Cuisine	7918 El Cajon Blvd. Suite P	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
153	J.A. MacDonald, Inc.	8338 Center Dr.	Medium	907.1	Commercial	No	1522	Other Contractor	No	No	No	No	No	No	No	No	No	Yes	No	No	No
154	Jack Orr Auto Body	7253 University Ave	Medium	908.2	Commercial	No	7532	Auto Body & Paint	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
155	Jamba Juice #143	5500 Grossmont Center Dr.	Medium	907.1	Commercial	No	5812	Smoothies and Drinks	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
156	Jason's Auto Garage	7643 University Ave	Medium	908.2	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
157	Jejjoni Sign MFG.	8169 Center St.	Medium	907.1	Commercial	No	3993	Electrical Sign & Equipment Manufacturing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	Yes	No
158	Jitter's Coffee Shop	8201 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
159	JK's Greek Café	7749 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
160	Knott's Pest Control	5141 Guild St.	Medium	907.1	Commercial	No	7342	Disinfecting and Pest Control Services	No	No	No	No	No	No	Yes	No	Yes	Yes	No	Yes	No
161	Konnichiwa Sushi	8350 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
162	La Mesa Auto Care	8692 La Mesa Blvd.	Medium	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
163	La Mesa Auto Repair	7801 El Cajon Blvd.	Medium	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
164	La Mesa Auto Spa Smog Test and Repair	8303 Parkway Dr.	Medium	907.1	Commercial	No	5541	Gasoline Service Station	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
165	La Mesa Billiards (Jolt n Joes)	8076 La Mesa Blvd.	Medium	908.2	Commercial	No	5812, 7999	Eating/Drinking Establishment w/ Amusement	Yes	No	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
166	La Mesa Bistro & Bakery	8697 La Mesa Blvd. Suite A	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
167	La Mesa Car Wash	5322 Jackson Dr	Medium	907.1	Commercial	No	5541, 7542	Gasoline Service Station w/ Car Wash	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	No
168	La Mesa Diner	7520 El Cajon Blvd. Suite 300	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
169	La Mesa Lumber	8255 University Ave	Medium	907.1	Commercial	No	5211	Lumber & Building Materials Dealer	No	No	No	Yes	No	No	No	Yes	Yes	Yes	No	Yes	No
170	La Mesa Motor Clinic, Inc.	5120 Guild St.	Medium	907.1	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
171	La Mesa Nine Diamonds LLC (AM/PM)	3775 Massachusetts Ave.	Medium	908.2	Commercial	No	5411	Gasoline Service Station w/ Food Store	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
172	La Mesa Paint & Body	8170 Parkway Dr.	Medium	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
173	La Mesa Smog Check	7801 El Cajon Blvd.	Medium	908.2	Commercial	No	7549	Auto Emissions Testing w/out Repairs	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
174	La Mesita Mexican Food	7012 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
175	La Salsa Restaurant	4990 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
176	La Torta Café	8356 Allison Ave. Suite A	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
177	Lake Murray Café	5465 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
178	Lake Murray Shell	5302 Lake Murray Blvd.	Medium	907.1	Commercial	No	5411	Gasoline Service Station w/ Car Wash	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	No
179	Lake Murray Village Veterinarian	5644 Lake Murray Blvd.	Medium	907.1	Commercial	No	0742	Animal Facilities	No	No	No	Yes	No	No	No	No	Yes	Yes	No	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
180	Little Roma Italian Cuisine	5575 Baltimore Dr. Suite 104	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
181	Los Pinos Taco Shop	5660 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
182	Madina Market	6957 University Ave	Medium	908.2	Commercial	No	5411	Grocery / Convenience Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
183	Marieta's	8949 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
184	Mario's De La Mesa	8425 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
185	Midas Mufflers	7207 University Ave	Medium	908.2	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
186	Millenium Motors	8090 University Ave	Medium	907.1	Commercial	No	5521	Vehicle Dealer / Used Only	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
187	Mr. D's Mini Mart	8292 La Mesa Blvd.	Medium	908.2	Commercial	No	5411	Grocery / Convenience Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
188	Mr. G's Tavern	7081 University Ave	Medium	908.2	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
189	Mystic Grill & Bakery	6990 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
190	New York Giant Pizza	9083 Dallas St.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
191	Nonno's Pizza	5314 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
192	Norma Jean's	5286 Baltimore Dr.	Medium	907.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
193	Norm's Cocktails	7403 El Cajon Blvd.	Medium	908.2	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
194	Olive Garden GMRI, Inc. #1301	5500 Grossmont Center Dr. J-2	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
195	Outback Steakhouse	5628 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
196	P.G. King	5575 Baltimore Dr. #105-A	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
197	Pacific Southwest Structures	8140 Commercial St.	Medium	907.1	Commercial	No	1771	Cement Mixing / Cutting	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No	No
198	Palm Springs Deli	8363 Center Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
199	Palmer Painting Company	8104 Center Dr.	Medium	907.1	Commercial	No	1721	Painting & Wall Covering	No	No	No	No	No	Yes	No	No	No	Yes	No	No	No
200	Panda Express #606	5500 Grossmont Center Dr. E-1	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
201	Panera Bread	5500 Grossmont Center Dr. #145	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
202	Parkway Bar	9188 Fletcher Pkwy.	Medium	907.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
203	Parkway Market	9085 Dallas St.	Medium	907.1	Commercial	No	5411	Grocery / Convenience Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
204	Parkway Pet Hospital	8200 Parkway Dr.	Medium	907.1	Commercial	No	0742	Animal Facilities	No	No	No	Yes	No	No	No	No	Yes	Yes	No	Yes	No
205	Parky's	6149 Lake Murray Blvd.	Medium	907.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
206	Peanuts Auto Repair	5387 Lake Murray Blvd.	Medium	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
207	Pedro's Mexican Cocina	6155 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
208	Pet Emergency Clinic East County	5232 Jackson Dr Suite 105	Medium	907.1	Commercial	No	0742	Animal Facilities	No	No	No	Yes	No	No	No	No	Yes	Yes	No	Yes	No
209	Pho Superbowl	8342 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
210	Pietros Cucina Italiana	8378 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
211	Pizza Hut	8011 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
212	Por Favor Restaurant	8302 La Mesa Blvd.	Medium	909.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	No	Yes	Yes	No
213	Premium Auto Inc.	7643 University Ave Suite M	Medium	908.2	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
214	Preston's Tire & Wheel	8300 Center Dr.	Medium	907.1	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
215	Primary Mechanical	5345 Timken St. Suite I	Medium	907.1	Commercial	No	1711	Other Contractor	No	No	No	No	No	No	No	No	No	Yes	No	No	No
216	Ralph's Grocery Company 104	8800 Grossmont Blvd.	Medium	907.1	Commercial	No	5411	Grocery Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
217	Rapid Transmissions	8861 La Mesa Blvd.	Medium	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
218	Red Lobster GMRI, Inc. #504	8703 Murray Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
219	Restaurant El Chentin	4233 Spring St.	Medium	909.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
220	Restaurant Russ	6062 Lake Murray Blvd. Suite 102	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
221	Rhino Floor Covering / Stemar Restoration	8161 Commercial St.	Medium	907.1	Commercial	No	1752	Flooring Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
222	Rich's Kustom & Collisions	7589 El Cajon Blvd. Suite D	Medium	908.2	Commercial	No	7532	Auto Restoration	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
223	Rigoberto's Mexican Food	5454 Jackson Dr	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
224	Rita's Fine Food	8900 Grossmont Blvd. Suite 5	Medium	907.1	Commercial	No	5812	Food Processing	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
225	Riviera Supper Club	7777 University Ave	Medium	908.2	Commercial	No	5812	Eating / Drinking Establishment	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
226	Rob's Automotive	7589 El Cajon Blvd. Unit E	Medium	908.2	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
227	Rosaritos Mexican Food	6062 Lake Murray Blvd. Suite 204	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
228	Rosaritos Mexican Food #3	7941 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
229	Round Table Pizza	8032 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
230	Round Table Pizza	5999 Severin Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
231	Rowe's La Mesa Pet Hotel	8126 Center St.	Medium	907.1	Commercial	No	0752	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
232	Rubio's Restaurant	5500 Grossmont Center Dr. #D 22	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
233	Sammy's Woodfired Pizza	8555 Fletcher Pkwy. Suite 104	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
234	Sam's Market	7587 University Ave	Medium	908.2	Commercial	No	5411	Grocery / Convenience Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
235	San Diego Top Tune	6982 University Ave	Medium	908.2	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
236	San Marcos Restaurant	7303 El Cajon Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
237	Sanfilippo's Pizza La Mesa	8141 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
238	Schlotzsky's	5500 Grossmont Center Dr. #219	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
239	Shakey's Pizza La Mesa	5500 Grossmont Center Dr. #267	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
240	Shenanigan's Irish Pub	7030 University Ave	Medium	908.2	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
241	Shirley's Kitchen	7118 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
242	Shizuoka Japanese Restaurant	9118 Fletcher Pkwy.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
243	Sid's Auto Body, Inc.	7473 El Cajon Blvd.	Medium	908.2	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
244	Silvia's Windows	8176 Center St. Suite D	Medium	907.1	Commercial	No	5039	Building Materials	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
245	Smogs R Us / California Inspection Station	9089 Dallas St.	Medium	907.1	Commercial	No	7549	Auto Emissions Testing w/out Repairs	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
246	Smogs R Us Too	8855 La Mesa Blvd. Suite A	Medium	907.1	Commercial	No	7549	Auto Emissions Testing w/out Repairs	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
247	Souplantation / Garden Fresh	9158 Fletcher Pkwy. #3	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
248	South Coast Petroleum	5261 Baltimore Dr.	Medium	907.1	Commercial	No	5541	Gasoline Service Station w/ Convenience	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
249	Spring Chevron	8200 University Ave	Medium	907.1	Commercial	No	5541	Gasoline Service Station w/ Convenience	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
250	Spring St. Gas & Market	4925 Spring St.	Medium	907.1	Commercial	No	5541	Gasoline Service Station w/ Car Wash	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
251	Starbucks #10938	8138 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
252	Starbucks Coffee #5222	5500 Grossmont Center Dr.	Medium	907.1	Commercial	No	5499	Coffee Shop	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
253	Starbucks Coffee #5953	8497 Fletcher Pkwy.	Medium	907.1	Commercial	No	5499	Coffee Shop	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
254	Starbucks Coffee #6876	5416 Lake Murray Blvd.	Medium	907.1	Commercial	No	5499	Coffee Shop	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
255	Starbucks Coffee #8905	5020 Baltimore Dr.	Medium	907.1	Commercial	No	5499	Coffee Shop	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
256	Su Robertos Mexican Food	5307 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
257	Subway	8396 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
258	Subway #32859	7900 El Cajon Blvd. Suite L	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
259	Subway (Jaspal Ent.)	7404 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
260	Subway Sandwiches	8142 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
261	Subway Sandwiches Lake Murray	5307 Lake Murray Blvd. Suite A	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
262	Summit Transmissions	7633 El Cajon Blvd. #208	Medium	908.2	Commercial	No	7537	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
263	Sun Tacos	5100 Jackson Dr	Medium	907.1	Commercial	No	5812	Eaiting Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
264	Sun Valley Golf Course	5080 Memorial Dr.	Medium	907.1	Commercial	No	7992	Golf Courses / Parks	No	No	No	Yes	No	No	No	Yes	Yes	Yes	No	No	No
265	Sunset Glazing, Inc.	8834 La Mesa Blvd.	Medium	907.1	Commercial	No	1793	Other Contractor	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No	No
266	Super Oscars Mexican Food	7102 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
267	Tacos & Grill	7520 El Cajon Blvd. Suite 101	Medium	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
268	Talon Auto Adjusters	8163 Commercial St.	Medium	907.1	Commercial	No	7389	Automobile Repossesion Services	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
269	Tamarind Thai Restaurant	7970 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
270	Thai Dragon House	6062 Lake Murray Blvd. Suite 201	Medium	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
271	The Chickenest 95, Inc.	7200 Parkway Dr. #111	Medium	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
272	The Chico Club	7366 El Cajon Blvd.	Medium	907.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
273	The Greek Gyro II	5500 Grossmont Center Dr.	Medium	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
274	The Omelette Factory	5270 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
275	The Pet Hospital of La Mesa	5336 Jackson Dr	Medium	907.1	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
276	The Yogurt Mill	8158 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
277	Trader Joe's #24	5475 Grossmont Center Dr. Suite A	Medium	907.1	Commercial	No	5411	Grocery Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
278	Trattoria Tiramisu	8273 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
279	Trolley Stop Deli	8150 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
280	Trust Auto Repair	7633 El Cajon Blvd. Suite 110	Medium	908.2	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
281	University Animal Clinic	7134 University Ave	Medium	908.2	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
282	V House Pho & Grill	9200 Fletcher Pkwy.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
283	Value Cars Inc.	5335 Jackson Dr	Medium	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
284	VCA Grossmont Animal Hospital	8274 Parkway Dr.	Medium	907.1	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
285	Villa's Mexican Food	5500 Grossmont Center Dr. FC - 9	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
286	Von's Co. Inc. #2093	8011 University Ave	Medium	908.2	Commercial	No	5411	Grocery Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
287	Von's Grocery Co. #2137	5630 Lake Murray Blvd.	Medium	907.1	Commercial	No	5411	Grocery Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
288	Weevil Burger Restaurant	9104 Fletcher Pkwy.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
289	West Coast Barbecue & Catering	6126 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
290	Wienerschnitzel #58	6949 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
291	Win's Auto Repair	7633 El Cajon Blvd. Suite 205B	Medium	908.2	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
292	Wong's Golden Palace, Inc.	7126 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
293	Yogurt Express	6195 Lake Murray Blvd. #C	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
294	Yum Yum Donuts Franchise #5228	7550 El Cajon Blvd.	Medium	907.1	Commercial	No	5461, 5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
295	5 Star Market and Liquor	7495 University Ave	Low	908.2	Commercial	No	5411	Grocery / Convenience Store	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
296	70th St. Service Station	5151 70th St.	Low	907.1	Commercial	No	5541	Gasoline Service Station w/ Convenience	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
297	7-Eleven Food Store #21453	5650 Baltimore Dr.	Low	907.1	Commercial	No	5411	Grocery / Convenience Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
298	Al & Eds Autosound	5208 Jackson Dr #117	Low	907.1	Commercial	No	7549	Car Audio Install	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
299	All Lines Dealer Alds Inc.	7373 Mohawk St.	Low	907.1	Commercial	No	7549	Auto Repair	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
300	Alvarado Parkway Institute	7050 Parkway Dr.	Low	907.1	Commercial	No	8322	Substance Abuse Hospital	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No
301	Auntie M's Cup n' Cake Bakery	7406 University Ave	Low	908.2	Commercial	No	2051	Bread and Other Bakery Products	No	No	No	n	No	No	No	No	Yes	Yes	No	No	No
302	AutoZone #2809	7791 El Cajon Blvd.	Low	908.2	Commercial	No	5531	Auto Supplies	No	No	No	No	Yes	No	No	Yes	Yes	Yes	No	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
303	Babies R' Us	8150 Fletcher Pkwy.	Low	907.1	Commercial	No	5137	Clothing Retailer	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
304	Baja Borthers Grill	8038 La Mesa Blvd.	Low	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
305	Beck's Repair Shop	8838 La Mesa Blvd.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
306	BFF	5500 Grossmont Center Dr.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
307	Bridgestone Retail	5577 Lake Murray Blvd.	Low	907.1	Commercial	No	5531	Tire & Auto Repair	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
308	California Special Care Center	8787 Center Dr.	Low	907.1	Commercial	No	8361	Rehabilitation Center	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No
309	Candy Island	5500 Grossmont Center Dr.	Low	907.1	Commercial	No	5441	Candy Store	Yes	No	No	No	No	No	No	No	No	Yes	Yes	No	No
310	Center Glass Co. #3	7853 El Cajon Blvd.	Low	907.1	Commercial	No	1793	Other Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
311	Cesar F Nillaga, Systems Spec.	8139 Center St. Suite 100	Low	907.1	Commercial	No	1793	Other Contractor	No	No	No	No	No	No	No	No	No	Yes	No	No	No
312	Circle K Stores Inc. #8675 (Convenience Retailers LLC)	8899 La Mesa Blvd.	Low	907.1	Commercial	No	5541	Gasoline Service Station w/ Convenience	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
313	Country Villa La Mesa Healthcare Center	5696 Lake Murray Blvd.	Low	907.1	Commercial	No	8059	Nursing & Personal Care Facility	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
314	Davis Framing Inc.	8103 Commercial St.	Low	907.1	Commercial	No	1521	Other Contractor	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	No	No
315	Dennis Sherman Foreign Car	8620 La Mesa Blvd.	Low	907.1	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
316	Dieter Fischer's Five Star Car Service	8699 La Mesa Blvd.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
317	Don Keating Used Cars	8381 La Mesa Blvd.	Low	909.1	Commercial	No	5521, 7539	Auto Repair Shop w/ Vehicle Sales	No	No	Yes	No	Yes	No	No	No	Yes	No	No	No	No
318	Earl W. Fite & Sons, Inc.	8878 La Mesa Blvd.	Low	907.1	Commercial	No	1711	Plumbing Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
319	Eastridge Liquor	7705 University Ave	Low	908.2	Commercial	No	5921, 5411	Liquor Store w/ Market	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
320	Essential Flooring	8216 Parkway Dr.	Low	907.1	Commercial	No	1752	Flooring Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
321	European Car Service	8855 La Mesa Blvd.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
322	Excalibur Liquor	5575 Baltimore Dr. Suite 113	Low	907.1	Commercial	No	5921, 5411	Liquor Store w/ Market	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
323	Family Carpets & Drapes, Inc.	7111 University Ave	Low	908.2	Commercial	No	1542	Other Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
324	German Auto Repair	4654 Nebo Dr.	Low	909.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	No	No	No	No
325	Harold's Automotive	7860 El Cajon Blvd.	Low	907.1	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
326	Helix Center Pure Water Store	7309 University Ave Suite C	Low	908.2	Commercial	No	5812, 5078	Eating Establishment & Retail Water	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
327	Helix Pet Hospital	4223 Palm Ave.	Low	909.1	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	No	Yes	No	No
328	Henry's Marketplace	4630 Palm Ave.	Low	909.1	Commercial	No	5411	Grocery Store	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No
329	Hooley's Irish Pub & Grill	5500 Grossmont Center Dr. Suite 277	Low	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
330	Hunter's Construction Co.	7374 El Cajon Blvd.	Low	907.1	Commercial	No	1522	Other Contractor	No	No	No	No	No	No	No	No	No	Yes	No	No	No
331	Ideal Door & Window Co.	7859 El Cajon Blvd.	Low	907.1	Commercial	No	1793	Other Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
332	India Express	5500 Grossmont Center Dr.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
333	Jiffy Lube #831	5540 Lake Murray Blvd.	Low	907.1	Commercial	No	7549	Auto Services	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
334	Johnny B's Bar & Grill	8393 La Mesa Blvd.	Low	909.1	Commercial	No	5812, 5813	Eating / Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	No	Yes	No	No
335	K-1 Tire	7259 University Ave	Low	908.2	Commercial	No	5531	Auto Suplies	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	No	No
336	La Casa Blanca Mexican Restaurant	9570 Murray Dr.	Low	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
337	Lake Murray Liquor	6001 Lake Murray Blvd.	Low	907.1	Commercial	No	5921	Liquor Store	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
338	Lars Construction Co.	4703 Spring St.	Low	908.2	Commercial	No	1799	Other Contractor	No	No	No	No	No	No	No	No	No	Yes	No	No	No
339	Little Caesars Pizza	6107 Lake Murray Blvd.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
340	M&M Patisserie	7668 El Cajon Blvd.	Low	907.1	Commercial	No	5461	Bakery	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
341	Manhattan Pizza	6195 Lake Murray Blvd. Suite D	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
342	Maui Express	5500 Grossmont Center Dr.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
343	McDonald's (Wal-Mart)	5500 Grossmont Center Dr.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
344	Murray Lake Liquor	5395 Lake Murray Blvd.	Low	907.1	Commercial	No	5921	Liquor Store	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
345	Nick's Auto Group	4949 Baltimore Dr.	Low	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
346	O'Connor's	8758 La Mesa Blvd.	Low	907.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
347	Palm Springs Market	4301 Palm Ave.	Low	909.1	Commercial	No	5411	Liquor Store w/ Market	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No
348	Para Quality Construction Inc.	7853 El Cajon Blvd.	Low	907.1	Commercial	No	1742	Other Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
349	Paradise Auto Sales, LLC	7640 El Cajon Blvd.	Low	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
350	PAW Service Center	8230 Commercial St.	Low	907.1	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
351	Performance Motoring	8620 La Mesa Blvd.	Low	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
352	Pete's Place	8330 La Mesa Blvd.	Low	909.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	No	No	No	No
353	Riha Construction Co.	8173 Commercial St.	Low	907.1	Commercial	No	1542	Other Contractor	No	No	Yes	No	No	No	No	Yes	Yes	Yes	No	No	No
354	RPM Exhaust	7633 El Cajon Blvd. Suite 210	Low	908.2	Commercial	No	7533	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
355	San Diego RV	7407 Alvarado Rd.	Low	907.1	Commercial	No	6515	Mobile Home Park	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
356	San Diego Shirt Works	7729 University Ave	Low	908.2	Commercial	No	2396	Manufacturing, Fabric/Clothes	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
357	San Diego Tint	7147 University Ave	Low	908.2	Commercial	No	7549	Auto Services	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
358	Shell Gas Station	9090 Dallas St.	Low	907.1	Commercial	No	5541	Gasoline Service Station w/ Convenience	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
359	SNN Salmu Ent. Inc. dba A&W Liquor	7021 University Ave	Low	908.2	Commercial	No	5921, 5411	Liquor Store w/ Market	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
360	Southern California, Discount Tire	8867 Grossmont Blvd.	Low	907.1	Commercial	No	7534	Auto Repair	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
361	Spacebar, @	7454 University Ave	Low	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
362	Steve Bancroft Motor	8760 Campo Rd. Suite A	Low	909.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
363	Sunny Donuts	4199 Spring St.	Low	909.1	Commercial	No	5461	Retail Bakery	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No
364	The Car Shop	4999 Baltimore Dr.	Low	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
365	The Lunch Box	8751 La Mesa Blvd.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
366	The Truck and SUV Center	5301 Lake Murray Blvd.	Low	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
367	Thomas J Taylor Construction	8189 Center St.	Low	907.1	Commercial	No	2434, 0782	Other Contractor	No	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	No
368	TJ's Auto Repair	8090 University Ave Suite B	Low	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
369	Trotter Door & Trim	8186 Commercial St.	Low	907.1	Commercial	No	1521	Other Contractor	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No	No
370	Truly Nolen of America	7170 University Ave	Low	908.2	Commercial	No	7342	Pest Control	No	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	No
371	Tune Craft, Inc.	8802 La Mesa Blvd.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
372	Valvoline Instant Oil Change	7981 El Cajon Blvd.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
373	Vic's Deli and Café	7777 Alvarado Rd. Suite 400	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
374	Village Awards & Engraving	7769 University	Low	908.2	Commercial	No	2796	Printing and Engraving	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	No	No
375	Worldwide Auto Parts	9089 Dallas St.	Low	907.1	Commercial	No	5531	Auto Supplies	No	No	No	No	Yes	No	No	Yes	Yes	Yes	No	No	No
376	Abundant Life Landscape	5484 Wellesley Street #E (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
377	All Star Powerwash	3123 Reservoir Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	7349	Power Washing	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
378	Al's T L C Landscape	9255 Magnolia Avenue #240 (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
379	Aqua Pool Plastering	1137 Naranca (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
380	Aristocrat Landscape	PO Box 15601 (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
381	Asplundh Tree Expert	708 Blair Mill Road (Out of the City)	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
382	Belle Saveur	7040 Neri Drive (La Mesa)	Medium	Throughout City	Commercial	Yes	5812	Eating/Drinking Establishments	Yes	Yes	No	No	No	No	No	No	Yes	Potential	Potential	Yes	No
383	Blue Dolphin	4213 Kansas St. #1 (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
384	Bonded Carpet & Drapery Service	7831 Ostrow Street (Out of the City)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
385	Bostrom Landscaping	Not Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
386	Bright Side Detail	10325 Baron Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
387	Budget Lawn Maintenance	9204 Sombria Road (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
388	California Scenic Landscape	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
389	Cecilio Ramirez Landscaping	328 S.30th Street (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
390	Charlies Carpet Cleaning	10707 Jamacha Blvd #182 (Out of the City)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
391	Classic Image Mobile Detailing	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
392	Coastal Chem Dry	4901 Morena Blvd Suite 316 (Out of the City)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
393	Coles Carpets	1170 W.Morena Blvd (Out of the City)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
394	Complete Car Care Pros	2703 Rhoades Road (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
395	Considerate Tree Care, Inc	PO Box 2595 (Out of the City)	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
396	Contreras Landscape	856 Morrison Street (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
397	Cortez Tree Service	2527 Guajowe Lake Road (Out of the City)	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
398	Crossman Landscape & Maintenance	8617 Cuyamaca Street (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
399	Crown Point Clippers, Inc.	PO Box 177108 (Out of the City)	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
400	Crystal Pool Service	1109 N.2nd Street (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
401	Custom Landscaping And Irrigation	9461 Grossmont Summit Drive Suite A (La Mesa)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
402	Dan's Maintenance	8901 Zencaro Avenue (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
403	Deep Cleaning And Restoration	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
404	Detailing Concepts by Laura	6152 Horton Drive (La Mesa)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
405	Detailing Concepts By Laura	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7549	Auto Repair	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	Yes	No
406	Diego Puga Vargas	3828 Cherokee Street #5 (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
407	Doan's Landscape	9550 Mavin Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
408	Eagle Landscape Maintenance	2924 Poinsettia Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
409	Emilio	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
410	Environmental Landscape Engineers	9210 Grossmont Blvd (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
411	Estrada Land Planning, Inc.	755 Broadway Circle Suite 300 (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
412	Exquisite Mobile Detailing	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
413	Finn Pool & Spa	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
414	Fitzgerald Carpet & Upholstery	5500 Grossmont Center Drive #111 (La Mesa)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
415	Focus Landscape	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
416	Foothills Pool Service	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
417	G.G. Landscaping, Inc.	9737 Jeremy Street (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
418	Garden Design	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
419	Garden Environmentals	9415 Los Coches Road (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
420	Gary F. Hoyt Landscape	13625 Adrian Street (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
421	Goins Landscaping	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
422	Grass Doctor Landscape Inc	9600 Campo Road Suite C (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
423	Halsey Design Group, Inc.	9340 Fuerte Dr. Suite 303 (La Mesa)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
424	Happy Landscaping	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
425	Irriscape Construction, Inc.	20182 Carancho Road (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
426	J C Landscaping & Maintenance	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
427	JC Brooks Construction	8383 Center Drive Suite A (La Mesa)	Medium	Throughout City	Commercial	Yes	7349	Power Washing	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
428	Jerry Frazee	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
429	John Guevera Clear Water Pool	3533 Harris Street (La Mesa)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
430	Justo Huezo Landscaping	1824 Teton Pass Street (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
431	Kar Tek	2034 Hidden Crest Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
432	Ken Bojok Tree Service Inc.	12443 Gay Rio Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
433	Ken Myers Pool Service & Repair	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
434	Kostos Tree Service, Inc.	12810 Wildcat Canyon Road (Out of the City)	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
435	La Bahn's Landscaping	5000 Thorne Drive Suite B (La Mesa)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
436	Lee Landscaping	4511 Cannington Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
437	Linda Clark Roseworks	10656 Fuerte Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
438	Logistics International, Inc.	5255 Maryland Ave. (La Mesa)	Medium	Throughout City	Commercial	Yes	4789	Ground Transportation	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
439	McClain, Inc.	1272 Tuttle Lane (Out of the City)	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
440	Mikes Mobile Auto Detailing	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
441	Mike's Mobile Detailing	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
442	Mo Mo's Trees	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
443	Mobile Airbag Installation	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7549	Auto Repair	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	Yes	No
444	Mow Blow N Go	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
445	Mr. Crabgrass Santos Landscape	10426 Park Avenue (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
446	My Carpet Guy	9074 Prospect Avenue (Out of the City)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
447	Nissho Of California, Inc.	1902 S.Santa Fe Avenue (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
448	Ocean Blue Pool Service	13983 Chicarita Creek Road (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
449	Olympic Carpet Cleaning	538 Front Street (Out of the City)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
450	Orozco's Tree Trimming	138 Richfield Avenue (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
451	Oscar & Sons Co.	1512 Altadena Avenue (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
452	Pacific Edge Landscape Maintenance	5780 Tex St. (La Mesa)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
453	Pacific Green Landscape, Inc.	8834 Winter Gardens Blvd (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
454	Pacific Sun Pool N Spa Center	8550 Production Avenue Suite B (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
455	Paradise Power Washing	8220 Vincetta Dr. (Out of the City)	Medium	Throughout City	Commercial	Yes	7349	Power Washing	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Potential	Potential	No	No
456	Patons Pond Service	5308 Camino Playa Malaga (La Mesa)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
457	Plant House Landscaping	1633 Fuerte Knolls Lane (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
458	Pool Rite Service	1129 Whitsett Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
459	R J C Window Cleaning Company	1642 Folkestone Street (Out of the City)	Medium	Throughout City	Commercial	Yes	7349	Power Washing	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Potential	Potential	No	No
460	Rafael Gardening Landscape Svc	8843 Cottonwood Avenue (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
461	Rightway Landscaping	898 Galopago Street (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
462	Rods & Customs Unlimited	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7549	Auto Repair	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	Yes	No
463	Rogelio Valdez Gardening	2655-1/2 Broadway St. Suite A (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
464	Rojas Garden Services	2858 Beatrice Street (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
465	Rosendo's Pool Service	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
466	Ruiz Tree Service	2016 E.Avenue (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
467	San Diego Erosion Control	6920 Miramar Road Suite 303 (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
468	Shawn Hillman	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7549	Auto Repair	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	Yes	No
469	Spurlock Poirier Landscape	2122 Hancock Street (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
470	Stanley Steemer Carpet Cleaners	9655 Via Excelencia (Out of the City)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
471	Steve Wolff And Associates, Inc.	9602 Santiago Blvd (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
472	Superior Carpet Care	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
473	Swains Mobile Auto Detailing	11988 Via Granero (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
474	Tates Mobile Detailing	5500 Grossmont Center Dr. Suite 213 (La Mesa)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
475	The Davey Tree Expert Company	6914 Mission Gorge Road (Out of the City)	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
476	The Water's Edge Pool & Spa	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
477	Tony Lawrence Care (T L C)	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
478	Torresdey Landscaping	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
479	Triton Power Clean	1930 Quidort Ct (Out of the City)	Medium	Throughout City	Commercial	Yes	7349	Power Washing	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	Yes	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
480	Trujillo Auto Detail	208 Tremont Street (Out of the City)	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	Yes	No
481	Truong Gardener	2960 Murray Ridge Road (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	No	No
482	Villa Pool & Spa	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
483	Vision Apartment Landscape &	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
484	Warrens Carpet Cleaning Service	7343 Ronson Road Suite S (Out of the City)	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
485	Water Tech Pool Service	1533 Greenfield Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
486	West Coast Arborists, Inc	2200 E.Via Burton Street (Out of the City)	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
487	Western Tree Service	815 Telegraph Canyon Road #815 (Out of the City)	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
488	Weststar Landscape Services	3553 Harris Street (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
489	Wins Pools	13227 Idyl Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
490	Wittmayer Landscape Maintenance	1400 Country Crest Drive (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
491	Yard Man	Not Listed (Out of the City)	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
492	1 800 Anytyme	1410 S.Santa Fe (Out of the City)	Medium	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
493	1st Choice Signs	610 Rock Springs Road (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
494	A & P Plumbing	6940 Schilling Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
495	A & S Construction	4130 Bancroft Drive (La Mesa)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
496	A C S Construction, L P	1235 W.Collins Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
497	A D S Environmental Services	4820 Mercury Street Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
498	A Hardwood Floor Co.	12025 Lemon Crest Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
499	A M G Demolition & Environmental	1102 Fleetridge Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1795	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
500	A M S Paving, Inc.	10400 Banana Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
501	A Michael Mallow Const	8629 Via Del Luz Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
502	A O Reed & Company	4777 Ruffner St (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
503	A P Southwest, L L C	5002 S.Ash Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
504	A R B, Inc.	26000 Commercentre Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
505	A R C Roofing	451 Marshall Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
506	A S C Builders	5190 Rebel Road (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
507	A S I Hastings, Inc.	1250 Greenfield Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
508	A To Z Plumbing, Inc.	7811 Mission Gorge Road Suite L (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
509	A&D Steel, Inc.	10520 Kenney Street (Out of the City)	Low	Throughout City	Commercial	Yes	1791	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
510	A-1 Budget Roofing, Inc.	1980 Summit Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
511	A-1 Lawns	4536 Nebo Drive (La Mesa)	Low	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	No	No
512	Aardvark Ant & Pest Control Inc	2514 Jamacha Road #502-40 (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
513	Absolutely Electric	3146 L Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
514	Access Professional Systems, Inc.	8250 Vickers Street Suite E (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
515	Accu Air Inc.	1318 Bermuda View (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
516	Action Air Conditioning & Heating	2750 Santa Fe Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
517	Adolfson And Peterson	5002 S.Ash Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
518	Adrian's Custom Woodworks	5925 Warren Place (La Mesa)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
519	Advanced Electronic Solutions	1830 John Towers Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
520	Advanced Engery Insulation, Inc.	14368 Olde Highway 80 Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
521	Affordable Raingutters	1402 N.Magnolia Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
522	Affordable Water Heaters And	24707 San Fernando Road (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
523	Air Doc Inc	1444 Pioneer Way Suite 8 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
524	Air Plus Mechanical, Inc	9191 Chesapeake Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
525	Air Systems Mechanical, Inc	6101 Jackson Drive (La Mesa)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
526	Air Tek	9424 Chesapeake Drive Suite 1302 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
527	Akenson Electric	8843 Prospect Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
528	Al T. Sejut Electrical	4060 Vista Calaveras (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
529	Alarms Unlimited, Inc.	4584 Park Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
530	Alcal Arcade Contracting, Inc.	31164 Huntwood Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
531	Alcoa Signage	9535 Arjons Dr. #E (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
532	Alessio Heating & Air, Inc	740 Metcalf Street #14 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
533	All American Mechanical	431 Park Industrial Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
534	All American Sewer & Drain	PO Box 1482 (Out of the City)	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	Yes	No
535	All Drains Plumbing	7541 Girard Avenue #533 (Out of the City)	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
536	All Pro Air	1265 Avocado Blvd Suite 104-148 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
537	All Star Water Heaters	30300 Puerto Vallarta (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
538	Aloha City Pest Control, Inc.	8100 Broadway Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
539	American Asphalt & Concrete Inc	9011 Memory Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
540	American Asphalt South, Inc	14436 Santa Ana Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
541	American Automatic Fire	9510 Pathway Street #B (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
542	American Fence Co, Inc.	9944 Prospect Ave (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
543	American Fireplaces, Inc.	9938 Mesa Rim Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
544	American Leak Detection	656 Metcalf Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
545	American Mechanical Services Of Ca	2664 Vista Pacific Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
546	American Pest Control	8100 Broadway Suite #E (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
547	American Residential Services Of	6162 Nancy Ridge Drive Suite 100 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
548	American Residential Services,L L	9895 Olson Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
549	American Technologies	8444 Miralani Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
550	Ampam Parks Mechanical	1060 N.Wilmington Blvd. (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
551	Ampolos Construction	4979 Paguera Street (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
552	Amtech Lighting Service	13350 Gregg Street (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
553	Anderson Drilling	10303 Channel Road (Out of the City)	Low	Throughout City	Commercial	Yes	1781	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
554	Anderson Piping Contractors, Inc.	339 Cypress Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
555	Andrade & Company	2123 Vuelta Court (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
556	Angus Asphalt Inc	9959 Prospect Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
557	Anthony & Son Painting	4175 Avocado Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
558	Antimite	4017 42nd Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
559	Any Hour Septic Service	10119 Prince Charming Lane (Out of the City)	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
560	Apex Lighting & Electric	1939 Friendship Drive Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
561	Applied Waterproofing Technology	3562 Grove Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
562	Armando Jara Almanza	1461 Remembrance Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
563	Arrow Swimming Pool Construction	15525 Old Hwy 80 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
564	Asaro Construction Co.	6924 Hyde Park Drive #214 (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
565	Aspen Cooling & Heating, Inc.	3720 Oceanic Way Suite 207 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
566	Astra Flooring Company	3402 Kurtz St (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
567	Astro Mechanical Contractors, Inc.	603 S Marshall Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
568	Atlantis Pools And Spas	1106 Leonard Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
569	Atlas Fence Company	1211 32nd Street Suite S (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
570	Atlas Footing Repair Inc	1136 Greenfield Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
571	Atlas Termite Co	25 2nd Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
572	Avalanche Mechanical	5575 Magnatron Blvd Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
573	Award Roofing Services	8731 Winter Gardens Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
574	Axium Electric	6042 Carol Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
575	Ayala Boring, Inc.	10150 Poplar Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
576	Aztec Landscaping, Inc.	7980 Lemon Grove Way (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
577	B & J Jackson-Stone Enterprises,	345 Vernon Way (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
578	B & W Precast Construction, Inc.	2511 Harmony Grove Road (Out of the City)	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
579	B A E Co Builder	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
580	B B C Construction	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
581	B D R Communications, Inc.	1944 Kellogg Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
582	B E Kaylor Restoration Inc.	4820 Mercury Street Suite D (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
583	B E T Construction	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
584	B T Construction	5711 Lancaster Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
585	B&B Acoustics, Inc.	12115 Lakeside Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
586	B. O' Brien Electric Service	13655 Highway 8 Business 52 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
587	Banker Insulation Of Ca, Inc.	2357 Vineyard Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
588	Banner Builders Inc	1530 Jamacha Road Suite P (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
589	Barner Electric	9435 Wheatlands Court Suite K (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
590	Barratt American Inc.	5950 Priestly Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
591	Basile Construction Inc	7840 Dunbrook Road (Out of the City)	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
592	Bath Co. Shower Door	613 W.Main Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
593	Bauer Cabling Solutions, Inc.	1027 S.Claremont Street (Out of the City)	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
594	Bay City Electric Works Inc.	12208 Industry Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
595	Bay Sheet Metal, Inc	1263 Greenfield Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
596	Beach Cities Landscape, Inc.	8911 Olive Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
597	Beck Electric	3707 5th Avenue Suite 556 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
598	Belfor Property Restoration	11545 Sorrento Valley Road Suite 308 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
599	Ben Martindill	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
600	Benchmark Landscape, Inc.	12575 Stowe Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
601	Bernard's Plumbing, Inc.	1884 Powell Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
602	Besek Electric	525 F Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
603	Best Interiors, Inc.	2100 E.Via Burton (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
604	Best Rain Gutters	550 Ramon Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
605	Best Value Glass, Inc.	1517 N.Cuyamaca Street (Out of the City)	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
606	Betz Concrete, Inc.	2301 Vineyard Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
607	Bill Hutson Installations & Repair	622 Margarita Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
608	Bill's Construction Assistance	2222 Escondido Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
609	Bill's Home Repair	5401 Pennsylvania Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
610	Blaine Tech Services	20735 Belshaw Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1781	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
611	Blasingame Custom Building	81 Matscher Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
612	Bledsoe Masonry, Inc.	4680 Felspar Street (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
613	Blue Diamond Plumbing And	16382 Pauhaska Road (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
614	Blue Fountain Pools	6136 Mission Gorge Road #117 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
615	Blue Haven Pools	655 Venture Street Suite 101 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
616	Bluewater Environmental Services,	2075 Williams Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
617	Bob Jenson A/C & Heating	1347 Broadway (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
618	Bob Piva Roofing	1192 Industrial Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
619	Bornholdt Construction, Inc.	1027 Greenfield Drive #2 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
620	Bowie Handyman Service	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
621	Boyce Construction Co., Inc.	10463 Austin Drive Suite D (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
622	Brabazon's Alpine Paving &	5738 Willows Road #A (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
623	Brad L. Stoner Painting, Inc.	9245 Dowdy Drive #112 (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
624	Bray Construction	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
625	Brett Lanz Construction	10705 Prince Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1700	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
626	Brookstone Telecom, Inc.	43300 Business Park Drive Suite B-106 (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
627	Brookwood Plastering, Inc.	13675 Choisser Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
628	Brundage Bone Concrete Pumping	1630 W.Pellessier Road (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
629	Buckskin Welding	2480 Bass Rd (Out of the City)	Low	Throughout City	Commercial	Yes	7692	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
630	Budge- It Home Remodeling, Inc	9150 Sesi Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
631	Buildercraft Construction	1820 Avenida Del Mundo Suite 406 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
632	Builders Termite & Pest Control,	1139 S.Placentia Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
633	Building Restorations, Inc.	6975 North Avenue Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
634	Burgio Plastering	1937 Friendship Drive Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
635	Bycor General Contractor	6867 Nancy Ridge Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
636	C & J Builders, Inc.	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
637	C & R Systems, Inc.	1835 Capital Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
638	C A Skyhook, Inc	8733 Magnolia Avenue Suite 134 (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
639	C C M Enterprises	10848 Wheatlands Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
640	C E Wilson Corporation	662 Grand Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
641	C G P Maintenance And Construction	7270 Engineer Road Suite D (Out of the City)	Low	Throughout City	Commercial	Yes	1700	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
642	C M I Plumbing And Piping Inc.	1029 Vernon Way (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
643	C P C Mechanical, Inc.	13664 Willow Road (Out of the City)	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
644	C W A Development, Inc.	3494 Harris Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
645	C. L. Anderson Company	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
646	C. Leafdale Plumbing	2775 Kurtz Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
647	C. Lilley Construction Inc	592 Westwind Dr #N (Out of the City)	Low	Throughout City	Commercial	Yes	1500	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
648	California Comfort Systems U S A,	9750 Distribution Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
649	California Concrete Cutting &	388 Citrus Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
650	California Construction Clean-Up	3336 Adams Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
651	California Delta Mechanical	1235 Grand Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
652	Calsoft Water Service Inc.	4635 Ruffner Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
653	Campbell Construction	6550 Van Buren Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
654	Can-Do Electric	1100 N.Magnolia Avenue Suite J (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
655	Capacity Construction Inc.	9323 Chesapeake Drive Suite A-1 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
656	Carol E. Patterson	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
657	Carolyn E. Scheidel, Contractor	PO Box 1796 (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
658	Carpet Club	518 W.Washington Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
659	Carpet Trend	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
660	Carrion Construction, Inc.	312 W.Laurel Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
661	Carter Installation Services, Inc.	594 Front Street Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
662	Cartwright Termite & Pest Control	1376 Broadway (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
663	Casady Electric Inc	275 Camino Del Cerro Grande (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
664	Casper's Concrete Cutting	3825 Bancroft Drive #105 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
665	Cass Plumbing & Heating	4569 30th Street Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
666	Cay-Lor Construction	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
667	Cement Cutting, Inc.	3610 Hancock Street (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
668	Central Plumbing Heating Cooling	6152 Mission Gorge Road Suite H (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
669	Century Shower Door Co.	20100 S.Normandie Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
670	Certified Electric Incorporated	14781 Pomerado Road #101 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
671	Charco Construction Company	7065 El Cajon Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
672	Charlie Hughes Tile	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1743	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
673	Charrua Painting	1163 Marline Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
674	Christie Construction	10006 Country View Road (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
675	Chula Vista Electric Co	127 Press Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
676	Ciani Communications Construction	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
677	City-Wide Electronic Systems, Inc.	1540 N.Pioneer Way (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
678	Clardy Construction	15225 Sleepy Creek Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
679	Clark Home Improvement And	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
680	Clean Edge Painting	9906 Mission Vega Road #1 (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
681	Clean Power Systems, Inc.	13230 Evening Creek Drive Suite 203 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
682	Clear Sign & Design, Inc.	170 Navajo Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
683	Clearview Windows & Doors	28106 Ave Crocker (Out of the City)	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
684	C-Me Plumbing & Drain Service	10828 Charing Cross Road (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
685	Coast Sign	1500 W.Embassy Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
686	Coastal Property Care & Const,	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
687	Coating Creations	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
688	Code 3 Electrical	10934 Greencastle Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
689	College Works Painting	1682 Langley Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
690	Columbia Pest Control Co. Of San	127 W.9th Street (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
691	Comanche Contractors, Inc.	15467 Chemical Ln (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
692	Command Communication	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
693	Commercial & Industrial Roofing	9239 Olive Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
694	Communications Plus	1675 Morena Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
695	Concrete Concepts, Inc.	2317 Vineyard Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
696	Concrete Cutting Company	PO Box 910503 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
697	Connie Jo's Services Unlimited	21000 Plummer Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
698	Continental Western Transportation	9235 Harris Plant Road (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
699	Copper Electric, Inc.	10054 Prospect Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
700	Corky's Pest Control, Inc.	909 Rancheros Drive (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
701	Corlett Electrical Construction	8315 Tommy Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
702	Coronado Heating & A C	1512 Palm Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
703	Cosco Fire Protection, Inc.	10695 Treena Street Suite 105 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
704	Countywide Mechanical	1997 Friendship Drive Unit G (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
705	Cox Roofing	5429 Alpine Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
706	Creative Touch Interiors, Inc.	7720 Kenamar Court #C (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
707	Crew Builders	5752 Oberilin Drive Suite 105 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
708	Crisler Electric	539 Telegraph Canyon Road #636 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
709	Cromwell Contracting, Inc.	9540 Palomino Ridge (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
710	Curto Const Co.	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
711	Custom Antenna & Garage Door	5833 El Cajon Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
712	Custom Electrical	10739 Oak Creek Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
713	Custom Media Mfg Sign Co.	136 Neptune Place (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
714	Cut N Core, Inc.	9194 Chesapeake Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
715	D & M Welding	7952 North Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
716	D & S Termite Control	3638 Bancroft Drive (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
717	D C Construction	14789 Bonita Vista Way (Out of the City)	Low	Throughout City	Commercial	Yes	1794	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
718	D F S Flooring	15651 Saticoy Street (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
719	D G A M, Inc	1961 Main Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
720	D G Behrens Pool Construction	13031 Poway Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
721	D G Plumbing	206 Greenfield Drive Suite G (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
722	D P R Construction	6333 Greenwich Drive Suite 170 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
723	D S H Solar Electric	2785 Kurtz Street Suite 5 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
724	D.G. Handyman	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
725	Daniel Heisinger Plumbing	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
726	Darby Painting Plus+, Inc	1626 Onyx Court (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
727	Daryl Griffis Acoustics, Inc.	4958 Naples Street (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
728	Dave Wallace, General	8039 Golden Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
729	Dave's Home Repair	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
730	David Spinks	2146 Lemon Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
731	Davies Electric Co., Inc.	9085 Kenamar Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
732	Davis & Adams Construction, Inc.	7986 Dagget Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
733	Davis Roofing	10027 Beck Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
734	De Marco Plumbing & Drain, Inc.	4401 Twain Avenue Suite 11 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
735	Dean Toneys Heating & Air	401 Washingtonia Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
736	Democo, Inc.	2386 N.Batavia Street (Out of the City)	Low	Throughout City	Commercial	Yes	1795	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
737	Dennis Cook Roofing	8824 Lakeview Road (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
738	Dennis Design	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
739	Dennis R. Williams	13392 Johnson Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
740	Dewey Pest Control	9386 Bond Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
741	Diamond Pools	10520 Kenney Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
742	Diamond Termite & Pest Control	12038 Woodside Avenue Suite D (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
743	Dietrich Corporation	1243 Greenfield Drive Suite H (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
744	Digital Voice & Data	3621-96 Avocado Village Court (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
745	Dillard Builders, Inc.	262 Garden Grove Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
746	Diroma, Inc.	13838 Poway Road (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
747	Diversified Window Coverings, Inc.	8410 Juniper Creek Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
748	Dock Pros, Inc.	2870 Ragle Way (Out of the City)	Low	Throughout City	Commercial	Yes	1796	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
749	Don Wallingsford, Inc.	4741 E.Hunter C (Out of the City)	Low	Throughout City	Commercial	Yes	7623	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
750	Double B Concrete Cutting, Inc.	1532 Plover Street (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
751	Doug Lister Construction	1655 Laslo Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
752	Downstream Services, Inc	2855 Progress Place (Out of the City)	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
753	Drain Medic, Inc.	7868 Lester Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
754	Drain Patrol	7764 Arjons Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
755	Drum Plumbing	2550 Fortune Way (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
756	Drywall Specialties	6512 ElCajon Blvd. Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
757	Dynalectric Co.	9505 Chesapeake Drive #S (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
758	E B C O Steel Inc.	1355 Presioca Street (Out of the City)	Low	Throughout City	Commercial	Yes	1791	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
759	Earl K. Powers Construction	678 Enterprise Street (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
760	East County Grading & Paving, Inc.	PO Box 712020 (Out of the City)	Low	Throughout City	Commercial	Yes	1794	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
761	East County Handyman	1232 Portola Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
762	East County Heating & Air	721 S Lincoln Ave. (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
763	East County Tile And Marble, Inc.	9855 Prospect Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1743	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
764	Easy-Turf, Inc.	750 N.Citracado Parkway Suite 17 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
765	Eberhard Benton Roof Company	3691 Hancock Street (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
766	Ecosse Electric	Not Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
767	Edick & Watt, Inc.	270 Millar Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
768	Ehinger Electric	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
769	El Cajon Electric Co	985 Greenfield Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
770	El Cajon Roofing Inc	1354 Broadway Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
771	Electric Required	6118 Hersholt Ave (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
772	Ellis Mc Kinney, Inc.	1410 Monument Hill Road (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
773	Emergency Plumbing & Drain	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
774	Emig Construction Company	9915 Tangor Way (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
775	Equitable Construction & Remodel	4724 Divine Way (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
776	Erickson - Hall Construction	500 Corporate Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
777	European Natural Stone Co., Inc.	10051 Prospect Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
778	Exceptional Restorations	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
779	Exit Light Co	3525 Del Mar Heights Road #304 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
780	Express/ Champion Harwood Floors	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
781	F T Emory Plumbing Co., Inc.	4340 Viewridge Avenue Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
782	F. J. Willert Contracting Co.,	1869 Nirvana Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1500	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
783	F. R. Ghianni Drywall	1937 Friendship Drive Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
784	Farwest Insulation Contracting	1375 S. Acacia Ave. SuiteA (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
785	Fast Water Heaters, Inc.	275 N.Marshall Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
786	Finest City Heating & Air	1069 Vernon Way (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
787	Fire & Ice Heating & Air	9911 Maine Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
788	First Line Security Inc.	370 W.Center Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
789	First Page	3280 Olive Street #18 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
790	First Quality Painting, Inc.	13933 Sycamore Way (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
791	Fischbeck Plumbing Co.	277 Blanchard Road (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
792	Fix Plumbing And Drains	180 Mace Street Suite C15 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
793	Flores Air	2931 Adrian Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
794	Floyd & Howerton Plumbing Inc	1269 Greenfield Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
795	Force Electric	8201 Winter Gardens Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
796	Foshay Electric Company, Inc.	7676 Engineer Road (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
797	Fox & Turner Construction Co., Inc.	Not Not Listed (La Mesa)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
798	Frontier Concrete Inc.	717 Mercantile Street (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
799	Fudge's Carpets & Blinds, Inc.	314 S.Johnson Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
800	Fueling & Service Technologies,	7050 Village Drive Suite D (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
801	G And H Electric	345 First Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
802	G D T Construction	701 B Street Suite 340 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
803	G E Brown Service, Inc.	497 11th Street Suite 7 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
804	G M G Stone, Inc.	165 Denny Way (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
805	G M W Drywall, Inc.	272 Gemini Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
806	G. Agundez Concrete	3211 Peg Leg Mine Road (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
807	G. Scott Asphalt, Inc	358 Trousdale Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
808	Garcia's Precision Acoustics	3162 Carlsbad Blvd Suite B (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
809	Gardner Pool Plastering, Inc.	801 Gable Way (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
810	Generation Contracting & Emergency	13750 Danielson Street Suite 100 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
811	Genesis Power Management	2455 La Ramada Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
812	Geoff Waugh Construction	13149 Lakeview Granda Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
813	Geogrid Retaining Wall Systems Inc	1295 Distribution Way (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
814	Gerry Roy, Inc.	2030 Dale Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
815	Gifford's Home Repair	8730 Our Way (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
816	Gilbert Construction	9699 Carta Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
817	Global Power Group, Inc.	202 Greenfield Drive Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
818	Golden State Garage Doors, Inc.	10540 Kenney Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
819	Gomez Handyman Services	7584 Ohio Place (La Mesa)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
820	Good And Roberts	1330 Park Center Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
821	Good Guys Painting Company	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
822	Gossmeyer Construction	3021 Ridgecliff Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
823	Gould Electric Inc.	12130 Dearborn Place (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
824	Greenbrier Lawn & Tree Expert	3616 Bancroft Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
825	Greene & St. John Inc.	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
826	Gregg Drilling & Testing, Inc.	2726 Walnut Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1781	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
827	Grossmont Drain Cleaning	8949 Alpine Avenue (La Mesa)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
828	Groundwater And Environmental	6160 Fairmount Avenue Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
829	Grove Plumbing, Inc.	7637 Lemon Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
830	Gudino Electric	824 Santa Isabel Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
831	Gula Roofing Co.	1352 Hillcrest Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
832	Gulf Engineering & Construction	675 S.2nd Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
833	H & A Construction	191 Glover Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
834	H & H Steel Enterprises, Inc.	16891 Sunrise Vista (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
835	H & W Custom Builders, Inc.	14511 Olde Highway 80 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
836	H B Shaffer	968 Waterloo Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
837	H H S Construction, Inc.	14455 Ramona Avenue Unit D (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
838	H L Masonary Builders Inc.	20891 Viento Valle (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
839	H M Construction	1530 Jamacha Road Suite Z (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
840	H M S Construction, Inc.	1225 Linda Vista Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
841	H P Communications	13341 Temescal Canyon Road (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
842	H S B Real Estate And Investments,	4481 Palo Verde Terrace (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
843	Hackouts Glass Co.	747 W.Main Street (Out of the City)	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
844	Haenggi Heating And Air	1179 N.Cuyamaca Avenue Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
845	Hamel's Refrigeration, A/C & Heat	1909 Sonett Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
846	Hammer Construction Company	1294 Cardinal Place (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
847	Hammond & Masing General	9770 Carroll Centre Road Suite E (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
848	Handyman Matters	2820 Via Orange Way Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
849	Hannibal Painting	9325 Goyette Place (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
850	Hans Construction Mechanical, Inc.	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
851	Harbor Pest Control Inc	6160 Fairmount Avenue Suite K (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
852	Har-Bro Construction	7192 Clairemont Mesa Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
853	Hawkins Construction, Inc.	Not Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
854	Hawkins Door & Trim, Inc.	1320 Grand Avenue Suite5 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
855	Hazard Construction Company	6465 Marindustry Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
856	Hec's Construction	1708 Horseshoe Court (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
857	Heiman Construction Co.	742 Genevieve Street Suite M (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
858	Heintschel Plastering, Inc.	475 Corporate Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
859	Helix Mechanical, Inc.	1100 N.Magnolia Avenue Suite G (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
860	Hersum Construction Inc	6365 Marindustry Drive Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
861	Hess Roofing, Inc.	1681 Magnolia Avenue #N (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
862	Hillcrest Contracting, Inc.	1467 Circle City Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
863	Hitt Contracting, Inc.	2704 Dorr Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
864	Hodge General Contractors	3815 Linda Vista Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
865	Hofstee Drywall	1491 Curtis Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
866	Holland's Custom Kitchens, Inc.	14511 Olde Highway 80 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
867	Home Energy Systems	6996 Convoy Court (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
868	Homestead Sheet Metal	9031 Memory Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
869	Hometeam Pest Defense	10070 Carrol Canyon Road Suite 105 (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
870	Hondo Electric, Inc.	420 K Street Suite 261 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
871	Honeywell International, Inc.	6 Centerpointe Drive Suite 300 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
872	Horizon Solar Systems, Inc	120 N.Pacific Street Suite G7 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
873	Howards Rug Co Of San Diego Inc	6110 Nancy Ridge Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
874	Hughes Heating & Air Conditioning	PO Box 2965 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
875	Hydrex Pest Control	PO Box 261127 (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
876	I-Con Electric	4109 Morning Star Court (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
877	Ideal Mechanical	8524 Ablette Road (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
878	Ideal Plumbing & Heating	5161 Waring Road (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
879	Imperial Custom Cabinets	8093 Lemon Grove Way (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
880	Ink Electric, Inc.	7845 North Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
881	Inland Plaster, Inc.	38372 Innovation Court Suite C-301 (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
882	Integrated Sign Associates	1160-M Pioneer Way (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
883	Integrity Concrete	540 Opper Street (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
884	Integrity Home Improvements	5725 Kearny Villa Road Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
885	Integrity Restoration Inc	4901 Morena Blvd Suite 502 (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
886	Interior Specialists, Inc.	1630 Faraday Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
887	International Iron Products	10883 Thornmint Road (Out of the City)	Low	Throughout City	Commercial	Yes	1791	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
888	Interstate Striping Of Calif.,	8511-B Ablette Road (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
889	Interwest Electric	8135 Engineer Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
890	Irish Setters Inc.	674 Rancheros Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1743	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
891	Issac Sanders Company	4752 68th Street #A (Out of the City)	Low	Throughout City	Commercial	Yes	1743	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
892	J & L Insulation, Inc.	10035 Maine Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
893	J & M Keystone Inc	2709 Via Orange Way Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
894	J & S Maintenance	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
895	J & S Sealing & Striping	6121 Fairmount Ave (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
896	J C Electric	24857 Abalar Way (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
897	J N Horn Construction Co., Inc.	1301 Pepper Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
898	J P Plumbing	9051 La Mar Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
899	J P Witherow Roofing Company	1001 Morena Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
900	J R Electric	1717 Wind River Road (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
901	J R Masonry, Inc.	1447 Peach Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
902	J. D. Paving, Inc.	1412 Barham Road (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
903	J. Munoz Concrete	6160 Seascape Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
904	J. W. Warren Construction, Inc	3113 Calle Allejandro (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
905	J.H. O'Brien Landscaping &	3435 Ocean Park Blvd Suite 103 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
906	Jackpot Painting Contractors, Inc.	391 Olive Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
907	Jackson & Blanc	7929 Arjons Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
908	Jackson Design & Remodeling	4797 Mercury Street Suite B (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
909	Jacobs Construction	4244 Spring Court (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
910	Jamar Electric, Inc.	9830 Prospect Avenue Suite D (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
911	James Dennis Mc Alexander	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
912	James Grey Construction	9960 Estrella Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
913	Jason Will Do It	1390 Ryan Ridge Road (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
914	Jensen Electric	9101 Heatherdale Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
915	Jerry's Heating & Air	9717 Airport Vista Road (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
916	Jessee Fence	24061 N.Viejas Grade (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
917	Jie Da Handyman	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
918	Jim Simmons Electric	13439 Samantha Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
919	Joe Sherlock Construction, Inc.	16290 Summer Sage Road (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
920	Joe Silva Plumbing	16951 Old Coach Road (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
921	Joe Vaughn Drywall	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
922	John H. Pearce Construction	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
923	John Tessitore Concrete, Inc	5574 Pray Street (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
924	John Weber Construction &	334 Mulberry Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1629	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
925	Johnson Controls, Inc.	12393 Slauson Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
926	Johnson Electric, Inc.	1650 Maple Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
927	Juice Electric	4005 Citradora Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
928	Just Water Heaters, Inc.	3400 Investment Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
929	Just-Star Construction, Inc.	9292 Chesapeake Drive Suite 100 (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
930	K & J Construction	8864 Ellsworth Circle (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
931	K T M Construction	10020 Prospect Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
932	K.P. Electric	1423 E.Washington Avenue #36 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
933	Kalabat Building Company	980 E.Chase Avenue Suite 2 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
934	K-Designers	7472 Orangewood Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
935	Keith Monroe & Co.	3186 Adams Avenue Suite 200 (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
936	Keith Okonski Construction Inc.	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
937	Kenard Construction, Inc.	1830 Gillespie Way Suite 105 (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
938	Kennedy Electric	5884 Samuel Street (La Mesa)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
939	Kennedy Masonry, Inc	7313 Melodia Terrace (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
940	Kimball Construction	1804 Garnet Avenue Suite 508 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
941	Kincade Excavation	774 Muirwood Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1794	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
942	King Of The Painters Co	4155 Camino Alegre (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
943	Kiowa Construction Services	1601 Plantation Way (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
944	Kirk Paving Incorporated	8722 Winter Gardens Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
945	Krushensky's Construction Co.,	1988 Alpine Creek Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
946	Kunkel Heating Service	7445 Roosevelt Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
947	Kyler Construction, Inc.	38725 Calle De Companero (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
948	L 2 Specialties, Inc.	3613 W.Macarthur Blvd. Suite 611 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
949	L A County Masonry	27811 Avenue Hopkins Unit 2 (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
950	L D I Mechanical Inc.	1740 Delilah Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
951	L T Handyman Company	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
952	L. B. Powers & Sons, Inc.	1705 W.Lewis Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
953	L. W. Carson Construction	11855 Sorrento Valley Road (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
954	La Jolla Electric, Inc.	9153 Chesapeake Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
955	La Mesa Glass, Inc.	6691 Federal Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
956	La Mesa Management And Maintenance	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
957	La Mesa Stucco, Inc.	976 Leland Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
958	La Tourrette Painting	8675 Hayes St. (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
959	Lampert Murray M Company Inc	3545 Camino Del Rio South Suite C (La Mesa)	Low	Throughout City	Commercial	Yes	1541	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
960	Landsmith Landscape Construction	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
961	Landsystems	8720 Miramar Place (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
962	Lang Electric	47900 Oasis Court (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
963	Lanier Construction, Inc.	10888 Buggywhip Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
964	Larry's Electrical Service, Inc.	1043 Worthington Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
965	Lasco Bathware, Inc.	3255 E.Miraloma Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
966	Le Perv Landscape, Inc.	5002 Santa Fe Street Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
967	Ledcor Petty Construction, L.P.	9466 Black Mountain Road Suite 200 (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
968	Lehnert General Contracting	17125 Skyline Truck Trail (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
969	Lekos Electric, Inc.	1370 Pioneer Way (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
970	Lemon Grove Stucco Inc	1057 Elkelton Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
971	Lester's Plumbing	9733 Saint George Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
972	License-To-Kill Inc.	4618 Avocado Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
973	Life Deck	770 Gateway Center Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
974	Lightning Electric	1707 Coronado Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
975	Lightworks Architectural Lighting	9883 Pacific Heights Blvd Suite E (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
976	Linear Electric Inc	7676 Engineer Road Unit L (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
977	Lloyd Pest Control Company, Inc.	935 Sherman Street (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
978	Lockard Electric, Inc.	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
979	Los Angeles Signal Construction,	15100 E.Nelson Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
980	Lot Management, Inc.	7200 Ponto Drive Suite B (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
981	Lucas & Mercier Construction	29712 Avenida De Las Banderas (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
982	Lucas And Mercier Development	630 AltaVista Suite 203 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
983	Lundco Cleaning Systems	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
984	Luzaich Striping Inc.	14219 Olde Highway 80 (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
985	M C Communications, Inc.	199 E.27th Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
986	M D Painting	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
987	M D Plumbing	3793 35th Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
988	M J B Heating & Air Conditioning,	1348 La Mirada Drive Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
989	M J Kennedy Electric	2032 Diamond Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
990	M J M Handyman	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
991	M W Reynolds Construction Co.,	1908 Friendship Drive Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
992	M. C. Brown Construction&	10777 Eureka Road (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
993	M. Gehring Construction	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
994	M.C. McMurray Painting &	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
995	Macord Construction Corp	101-H Copperwood Way (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
996	Magna Window Corporation	1879 Lincoln Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
997	Magnum Electric Inc.	1174 Pierre Way (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
998	Mallucci Builders	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
999	Marathon General Inc	130 S.Hale Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1000	Mark Snyder Electric	12900 Brookprinter Place Suite 200 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1001	Marrokal Construction Company	9842 River Street (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1002	Marshall Roofing Company	11729 Calle Albara (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1003	Martin Electric II	1841 Westward Ho Circle (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1004	Martin Roofing Co Inc	6608 Federal Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1005	Marzola Construction Co., Inc.	17025 Industry Place (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1006	Master Electric Company, Inc.	8055 El Capitan Dr. (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1007	Master Plumbing And Leak Detection	8726 Production Avenue Suite B (La Mesa)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1008	Masterpiece Leaded Windows	13831 Danielson Street (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1009	Mastersev Inc.	560 Library Street (Out of the City)	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1010	Mattia Concrete Cleaning	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1011	Maxim Floor Systems	1189 N.Grove Street Bldg.C (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1012	Mayer Roofing, Inc.	490 Corporate Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1013	Mc Bride Electric	9919 Hibert Street Suite F (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1014	Mc Guire Electric	8605 Fiona Way (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1015	Mc Kay Roofing Company, Inc.	10622 Keeney Street (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1016	Mc Millan Water Treatment	8450 Tamarind Avenue Suite D (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1017	Mc Minn Contruction Inc.	13350 Birch Tree Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1018	Mc Neil Construction	5009 Gasconade Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1019	Mechanical Industries, Inc.	314 Yampa Street (Out of the City)	Low	Throughout City	Commercial	Yes	1791	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1020	Michael M. Carson Const. Co.	946 S Lincoln Ave. (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1021	Mickey's Electric	1513 Winsome Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1022	Mike Jackson Electrical	11464 Crazy Horse Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1023	Mike Oliver Plumbing, Inc.	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1024	Mike Simpson Plumbing	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1025	Mike's Home Repair & Maintenance	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1026	Milgard Manufacturing Inc	26879 Diaz Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1027	Milholland Electric, Inc.	9169 Chespeake Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1028	Miller Brooks Environmental, Inc	2124 Main Street Suite 200 (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1029	Miller Construction	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1030	Miller Paving Corp	9236 Olive Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1031	Milton Electric	5167 Hilda Road (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1032	Minute Man Pest Management, Inc.	1625 Cuyamaca Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1033	Mirstone Plastering Inc.	1374 Presioca Street (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1034	Mission Pools Of Escondido	755 W.Grand Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1035	Mission Valley Roofing, Inc.	9908 Prospect (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1036	MLS Construction Co.	Not Listed (La Mesa)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1037	Mocon Pipebursting	82204 Highway 111 C 201 (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1038	Monterey Park Roofing Co.	10 Scrub Oak (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1039	My Electrician Online	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1040	My Plumber S.D., L L P	9975 Pennsylvania Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1041	N E C Unified Solutions, Inc.	6535 N.State Hwy 161 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1042	N P L Mechanical	731 Terra Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1043	National Air, Inc.	2053 Kurtz Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1044	National Electric Works, Inc.	4440 Rainier Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1045	Natural Environmental, Inc	1162 N.Marshall Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1046	Neal Electric Inc	13250 Kirkham Way (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1047	Network Pavers	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1048	Newman Replacement Windows, Inc.	6110 Yarrow Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1049	Nicholas Grant Corporation Dba	5370 Eastgate Mall (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1050	Nielsen Development	1224 Greenfield Street (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1051	Normac Kitchens, Inc.	607 N.Central Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1052	North County Acoustics	8315 Miralani Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1053	North County Gunite Company	12562 Highway 67 (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1054	Northbrook Inc	3101-G Orange Grove Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1055	O J Insulation, Inc.	600 S.Vincent Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1056	On Time Construction & Landscape	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1057	One Way Audio Video &	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1796	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1058	Orestano Painting And Decorating	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1059	Orion Construction Corp.	1232 Keystone Way (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1060	Orkin Exterminating Company	2420 Grand Avenue Suite J (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1061	Ozzy's Plumbing & Drain Services	2695 Calle Quebrada (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1062	P.w. Marsh & Sons, Inc	1068 Broadway 220 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1063	Pacific Building Group	5754 Pacific Center Blvd Suite 203 (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1064	Pacific Electric Co	9328 Lakeview Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1065	Pacific Lath And Plaster	360 S.Spruce Street (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1066	Pacific Production Plumbing	1584 Pioneer Way (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1067	Pacific Refrigeration, Inc.	1440 Broadway (Out of the City)	Low	Throughout City	Commercial	Yes	7623	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
1068	Pacific Rim Mechanical, Inc.	7655 Convoy Court (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1069	Pacific Sewer Maintenance Corp.	8244 W.Hillsdale Court Unit #3 (Out of the City)	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1070	Pacific Structures Construction,	101 State Place Suite E (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1071	Pacific Sundance Construction Inc.	2911 W.Warner Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1072	Pacifica Glass Co., Inc.	1997 Friendship Drive Suite G (Out of the City)	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1073	Pac-West Sheet Metal	528 Amigas Drive Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1074	Padre Pools	9679 Marilla Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1075	Paint Plus, Inc.	1647 Dewitt Estates Road (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1076	Palm Engineering Construction	3770 Hancock Street Suite H (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1077	Par Electrical Contractors, Inc.	2410 Vineyard Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1078	Paradise Custom Pools	PO Box 900454 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1079	Paramount R & R, Inc.	9340 Hazard Way (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1080	Paramount Scaffold, Inc.	16631 S.Avalon Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1081	Passage Supply Inc.	1505 S.Dupont Avenue #F (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1082	Patriot Plumbing, Inc.	870 N.Second Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1083	Patterson Brothers Lighting, Inc	12047 Riverside Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1084	Paul Hansen Equipment	603 S.Marshall Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1085	Pavement Recycling Systems	121 N.Main Street (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1086	Payco Specialties Inc	120 N.2nd Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1087	Pebble Paving Co.	7954 Convoy Court (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1088	Perry Plumbing	2810 Sandover Court (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1089	Pete Paniagua Termite & Pest	3736 Grove Street (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1090	Peterbuilt Corporation	6235 Lusk Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1091	Peterson Roofing, Inc.	549 W.Central Park Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1092	Phazer Electric Inc	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1093	Phil J. Maynard	8653 Washington Avenue (La Mesa)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1094	Phillips Welding	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1095	Plumbing Solutions, Inc.	17701 W.Danielson Street Apartment 102 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1096	Porterfield Home Enhancements	7827 Segovia Way (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1097	Portillo Concrete, Inc.	3528 Harris Street (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1098	Pota Landscape	6344 Arms Lake Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1099	Power Communication Systems	4643 Mission Gorge Place Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1100	Power Drain Service	5622 Meade Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1101	Power Fabricating Inc.	625 S.Fee Ana Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1102	Power Plus - S. R. Bray Corp	1005 N.Edward Court (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1103	Precision Concrete Cutting	32428 Campo Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1104	Precision Electric Co	8137 Winter Gardens Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1105	Premier Roofing	9054 Olive Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1106	Pro Coat Systems, Inc.	1131 N.Citrus Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1107	Pro Drain & Plumbing Service Inc.	7440 Central Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1108	Pro Line Construction	13240 Morning Glory Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1109	Pro Tech Insulation, Inc.	2041 Skyview Glen (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1110	Pro Wall Lath & Plaster, Inc.	360 S.Spruce Street (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1111	Progressive Investments, Inc.	1168 Greenfield Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1112	Promark Roofing	302 Hunter Court (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1113	Pro-Vlad	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1114	Pullman Comm Inc	2530 Lynn Way (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1115	Purser Construction, Inc.	9474 Kearny Villa Road Suite 101 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1116	Quality Interiors, Inc.	803 E.Parkridge Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1117	Quality Patio & Sunrooms	8388 Mary Dean Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1118	Quality Rooter And Plumbing, Inc.	1798 Pepper Villa Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1119	Quick Plumbing	1692 N.Mollison Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1120	Quintessa Construction, Inc.	2210 Encinitas Blvd Suite S (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1121	R & C Structures, Inc.	1615 La Mirada Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1122	R & M Electrical Contractor, Inc.	4912 E.Florence Circle (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1123	R A D Construction, Inc.	3479 Citrus Street Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1124	R B E	1177 Greefield Drive Suite B (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1125	R B Electrical	1248 Andover Road (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1126	R C Grading, Inc.	1650 W.Pellisier Road (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1127	R C Morse General Contractor	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1128	R D Hammond Builders	10041 Medina Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1129	R L I	1967 Brockhurst Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1130	R. E. Paxton Contracting	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1131	R. J. Dutch Devos	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
1132	R.C. Young Roofing Co., Inc.	875 34th Street (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1133	Race Way Electric, Inc.	PO Box 710885 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1134	Radford Doors U S A, Inc.	2130 Newton Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1135	Rain For Rent	3404 State Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1136	Ram Electric	12365 Lakeshore Dr (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1137	Ramona Paving & Construction	1303 Olive Street (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1138	Ranbar Plumbing Contractors, Inc.	10149 Channel Road Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1139	Ranbar Plumbing Contractors, Inc.	10149 Channel Road Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1140	Rapid Plumbing	5595 Magnatron Blvd Suite Q (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1141	Raver Contruction, Inc.	14978 Skyline Truck Trail (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1142	Rawson Enterprises, Inc.	10233 Jefferson Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1143	Raymar Construction	43931 Via Montalban (Out of the City)	Low	Throughout City	Commercial	Yes	1700	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1144	Ray's Cement Work	2477-1/2 Hardy Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1145	Ray's Plumbing	10346 Bosque Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1146	Real Time Plumbing	180 Mace Street Suite B7 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1147	Reasonable Drain And Plumbing	1765 Garnet Avenue Suite 104 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1148	Renewable Energy Concepts, Inc.	684 Clarion Court (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1149	Republic I T S	371 Bel Marin Keys Blvd #200 (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1150	Rescom Overhead Doors, Inc.	1738 Brackett Street (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1151	Reuben's Plumbing	1759 Linwood Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1152	Richard Murray Painting	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1153	Rick Skinner Construction	6965 Endens Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1154	Ricks Sign & Lighting Service	PO Box 219 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1155	Ritch Builder Co	4629 Calle De Vida (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1156	Rivera's Iron Works, Inc.	2534 S.Santa Fe Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1157	Robeck Electrical Maintenance	1070 Commerce Street Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1158	Robert Brown Electric	455 Pepper Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1159	Robert Rubidoux Roofing	1261 La Paloma Glen (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1160	Robinson Electric	8871 Troy Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1161	Robinson Roofing & Consulting	PO Box 902 (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1162	Roejack Roofing, Inc.	1107 Petree Street (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1163	Roel Construction Co Inc	3366 Kurtz Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1164	Roger H. Proulx & Co.	6833 E.Rosecrans Avenue Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1165	Roger L. Ballantyne	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1166	Romero's Roofing Service, Inc.	1827 Cleveland Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1167	Ronald Jay Cappello	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1168	Ronces-McKinney Painting, Inc	4418 Avocado Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1169	Ron's Plumbing	9962 Prospect Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1170	Roofcorp Of C A, Inc.	2130 S.Dupont Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1171	Roofing Services Of San Diego	8285 Buckhorn Street (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1172	Rossi Painting Co, Inc.	4025 E.6th Street (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1173	Roth Construction Corporation	4850 Talmadge Park Row (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1174	Roto Rooter Sewer Service	180 Denny Way (Out of the City)	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
1175	Royster Group Construction, Inc.	696 State Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1176	Russell Plumbing & Supplies Inc	9030 Wintergardens Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1177	Rye Built Construction Corp	6319 Badger Lake Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1178	S E Pipeline Construction Company	11832 S.Bloomfield Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1179	S G Plastering	14475 Olde Highway 80 Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1180	S O S Rooter	3485 Pickwick Street (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1181	Sadler Roofing	125 Grand Canal (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1182	Safway Steel Products	1107 Petree Street Suite 103 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1183	Salvador Flores, Jr.	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1184	San Diego Electric Co.	7906 Linen Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1185	San Diego Fence Co., Inc.	7920 Engineer Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1186	San Diego Mirror & Window	2515 Industry Street (Out of the City)	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1187	San Diego Pool Plastering	10750 Valle Vista Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1188	San Diego Preferred Plumbing Inc	8898 Clairemont Mesa Blvd Suite J (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1189	San Diego Roofing, Inc.	7364 El Cajon Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1190	San Diego Stucco Company Inc	625 North Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1191	San Diego Trane Company	9555 Chesapeake Drive Suite 201 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1192	San Marcos Roofing	1580 Grapevine Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1193	Santa Fe Plaster	620 Alpine Way (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1194	Santee Electric Company	8461 Melrose Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1195	Saw Core Inc.	12111 Lakeside Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1795	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1196	Schearing Construction Company	4339 Mount Putman Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1197	Schilling Corporation	697 Greenfield Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1198	Schillreff Mechanical Inc.	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1199	Schindler Elevator Corporation	16450 Foothill Blvd Suite 200 (Out of the City)	Low	Throughout City	Commercial	Yes	1796	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1200	Schmid Building Products	13000 Kirkham Way Suite 101 (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1201	Schmidt Fire Protection Co, Inc.	4760 Murphy Canyon Road (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1202	Seal Electric Inc.	9216 Abraham Way Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1203	Sears Home Improvement Product	10415 Slusher Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1204	Secure Roof, Inc.	976-B Andreasen Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1205	Sedco Plumbing	1265 Hayden Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1206	Select Electric, Inc	1425 Presioca Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1207	Service Master All Phase	1466 Pioneer Way Suite 6 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1208	Sherwood Mechanical, Inc.	13630 Danielson (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1209	Sid's Carpet Barn, Inc.	132 W.8th Street (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1210	Sierra Painting	11389 Reidy Canyon Place (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1211	Sierra Window Concepts, Ltd.	5252 Balboa Avenue Suite 304 (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1212	Sign Ad Corporation	9540 Waples Street Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1213	Signtech Electrical Advertising	4444 Federal Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1214	Silva And Silva Asphalt	9642 Prospect Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1215	Silverthorn Construction, Inc.	1674 Alpine Terrace Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1216	Sim J. Harris, Inc.	4375 Jutland Drive Suite 260 (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1217	Simmons Sheet Metal Fab. Inc.	2950 San Luis Rey Road (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1218	Simonsen Solutions	Not Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1219	Simplexgrinnell L P	9855 Carroll Canyon Road (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1220	Smart Systems Technologies, Inc.	9 Goodyear (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1221	Smith Roofing Co, Inc	4211 Whittier Street (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1222	So Cal Custom Roofing	625 North Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1223	Soclaris Contracting	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1224	Solomon Electrical Services	3812 Superior Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1225	Source Refrigeration & H V A C,	800 E.Orangethorpe Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1226	South Bay Fence Inc	3084 Main St (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1227	South Coast Erosion Control, Inc.	1014 E.Washington Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1228	South Coast Patio	8927 Lakeview Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1229	Southern Contracting Company	559 Twin Oaks Valley Road #N (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1230	Southern Lighting & Graphics Inc.	10370 Regis Court (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1231	Southwest Window Co., Inc.	8666 Production Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1232	Spectra Contract Flooring	8320 Caminto Santa Fe #1 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1233	Sperry Construction & Electric,	9938 Blossom Valley Road (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1234	Spooner's Woodworks, Inc.	12305 Crosthwaite Circle (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1235	Sprekelmeyer & Muessigmann	522 Trailridge Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1236	Spring Valley Insulation	3151 Bancroft Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1237	Stabler Building Company Inc.	11496 Cypress Terrace Place (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1238	Stanley Access Technologies	244 Miller Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1239	Steele Plumbing Inc.	1304 Pepper Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1240	Steve Fox Plumbing, Inc.	4172 Cartagena (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1241	Steve's Delivery Service	9320 Earl Street Unit 8 (La Mesa)	Low	Throughout City	Commercial	Yes	4215	Ground Transportation	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	No	No
1242	Stillson General Contracting	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1243	Stokely Construction, Inc	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1244	Strauwald Co. And Supply	9449 Calle Del Lago (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1245	Streamline Plumbing, Inc	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1246	Strickland Brothers Carpet	728 Hawthorne (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1247	Summit Steel Fabrications, Inc.	4468 Parkhurst Street (Out of the City)	Low	Throughout City	Commercial	Yes	1791	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1248	Sunlite Landscape	567 Anderson Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1249	Sunrise Concrete	12012 Riverside Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1250	Sunshine Carpet And Upholstery	9145 Dillon Drive (Out of the City)	Low	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Potential	Potential	No	No
1251	Sunshine Communications, Inc	10981 San Diego Mission Road Suite 100 (La Mesa)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1252	Sunwest Plumbing	9899 Hibert Unit #E (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1253	Superior Door Systems Inc	8059 Wing Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1254	Superior Gunite	12306 Van Nuys Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1255	Sweetwater Plumbing & Hardware	8300 Paradise Valley Road Suite 120 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1256	Sylvania Lighting Services Corp.	2851 Pomona Blvd (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1257	T & M Framing, Inc.	1224 Greenfield Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1258	T C Construction	10540 Prospect Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1259	T C P Company	7080 Mt.Vernon (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1260	T D Construction	319 River Trail Place (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1261	T F Kaiser Construction, Inc.	4525 Mount Frissell Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1262	T G C Builders	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1263	T L C Plumbing, Inc.	4569 Mission Gorge Place Suite E (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1264	T- Mar Construction Inc	2340 Meyers Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1265	T P Acoustics Inc	9225 Mira Este Court Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1266	T R C	9471 Ridgehaven Court Suite E (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1267	T R Construction Co	13100 Kirkham Way Suite 204 (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1268	Tanknology, Inc.	8501 N.Mopac Expressway Suite 400 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1269	Taylor Signs And Graphics	14537 Kittery Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1270	Taylor Trim & Supply, Inc.	2057 Aldergrove Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1271	Team C Construction	1208 N.2nd Street (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1272	Tejeda & Tejeda Asphalt &	9714 Sutton Crt (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1273	Temecon Gen. Bldg. Contractor,	9715 Carroll Centre Road Suite 108 (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1274	Temecula Valley Drywall, Inc.	41228 Raintree Court (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1275	Temperature Design Energy Systems	9141 Hillman Way (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1276	Temperatures Unlimited, Inc.	26841 Ruether Avenue Suite G (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1277	Terminix International Company	1736 N.Magnolia Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1278	Terra West Grading	37035 Yuma Ln (Out of the City)	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1279	Terry Lindquist Roofing	877 Hale Court (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1280	Testamerica Drilling Corp.	1016 E.Katella Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1781	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1281	The Brickman Group, Ltd	6218 Fairmount Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1282	The Ghianni-Larussa Group, Inc.	13880 Stowe Drive Suite A (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1283	The Whole Nine Yards	Not Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1284	The Wright Painting Co.	12642 Casa Vista Road (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1285	Thomas' Handyman Services	2570 Granada Circle (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1286	Thomas Lukasiewicz Construction	8874 Gowdy Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1287	Thompson Heating & Air	888 Rancheros Drive Suite E (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1288	Thornton Steel & Iron Works, Inc.	1323 State College Parkway (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1289	Tidwell Masonry	Not Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1290	Tierra Verde Resources, Inc.	1545 Lake Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1291	Tile King, Inc.	595 N.Smith # A (Out of the City)	Low	Throughout City	Commercial	Yes	1743	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1292	Tim Walford Roofing	10699 San Diego Mission Road Apt 313 (Out of the City)	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1293	Timberline Building Services	418 Edmard Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1294	Timberwood Landscape, Inc.	2731 Via Orange Way Suite 111 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1295	Todd Enterprises, Inc.	3040 Clairemont Drive Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1296	Todd F. Metcalf	630 W.Foothill Blvd Suite C (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1297	Tom Reed General Contractor	1721 Yale Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1298	Tom's Handyman Service	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1299	Tony Gallo Painting	20 Surfbird Lane (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1300	Tool Time Construction, Inc	7546 Trade Street (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1301	Top Notch Termite Company, Inc	6041 Fairmount Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1302	Torres General, Inc.	10783 Jamacha Blvd. Suite 8 (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1303	Torres Tile, Inc.	1255 Linda Vista Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1304	Town & Country Construction	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1305	Town & Country Custom Pools	9920 Prospect Avenue Suite 106 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1306	Traffic Control Service, Inc	584 N.Marshall Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1307	Transcal Construction	3622 Eagle Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1308	Translatin Productions	5706 Baltimore Drive Suite 345 (La Mesa)	Low	Throughout City	Commercial	Yes	3911	Manufacturing, Fabricated Metal	No	No	Yes	No	Yes	Yes	No	No	No	Potential	Potential	No	No
1309	Travcon Builders, Inc.	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1310	Treebeard Landscape	9917 Campo Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1311	Tri City Glass Of S D, Inc.	2555-B Sweerwater Springs Blvd. (Out of the City)	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1312	Tri Com Telecommunications Inc.	2845 Bancroft Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1313	Tri County Drilling	9631 Candida Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1314	Tribal Painting, Inc.	1263 Bermuda Place (Out of the City)	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1315	Triple D Concrete Pumping	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1316	True Lawn Care, Inc.	9820 Maine Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1317	Truly Nolen Of America	7170 University Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1318	Tubbs Enterprises, Inc.	2620 Aurora Glen (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1319	Tupper's Custom Works	Not Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1320	Ulm Plumbing & Heating	7525 Mission Gorge Road Suite B (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1321	Ultrasigns Inc.	5458 Complex Street Suite 401 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1322	V I C O	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1323	V W C	425 W.La Cadena Suite 12 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1324	Valley Crest Landscape Maint., Inc	8500 Miramar Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1325	Valleycrest Tree Company	12087-40 N.Lopez Canyon Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1326	Van Con Builders Inc.	1301 Pepper Drive Suite D (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1327	Van Deutch Refrigeration	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	7623	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
1328	Vanberg Constuction	2521 B Street Suite 102 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1329	Vanguard Fire Protection, Inc.	1604 La Mirada Del Suite105 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1330	Ventura's Plumbing & Drain	8425 Pueblo Road (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1331	Viacom Outdoor, Inc.	1731 Workman Street (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1332	Vic's Plumbing	687 Alveda Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1333	Vigil Handyman Service	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1334	Viking Electric	1549 Fair Valley Rd (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1335	Viking Insulation Co., Inc.	3014 Floyd Street (Out of the City)	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1336	Vinyard Doors, Inc.	3605 Pacific Highway (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1337	Volks Electric	6646 Julie Street (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1338	W & S Electric	1050 Pioneer Way Suite K (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1339	Walker Wood Products	43195 Business Park Drive (Out of the City)	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1340	Walldesign Inc.	2350 SE.Bristol Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1341	Walter Anderson Plumbing Inc	1150 N.Marshall Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1342	Water Heaters Only, Inc.	970 E.Main Street Suite 200 (Out of the City)	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1343	Wavecrest Construction, Inc.	5333 Mission Center Road (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1344	Wayne Perry Construction Inc	8281 Commonwealth (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1345	Weather Machines	9858 Hawley Road (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1346	Wedcon Systems, Inc.	1660 Chicago Avenue Suite N9 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1347	West Co Construction	1212 S.Pacific Street #1 (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1348	West Coast Appliance Service	10744 Prospect Avenue Suite B (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1349	West Coast D B I, Inc	4240 Francis Way (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1350	Western Cable Construction	3420 University Avenue (La Mesa)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1351	Western Exterminator Co	1320 Hill Street (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1352	Western Foundations & Shoring	10875 Highway 67 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1353	Western Pump, Inc.	3235 F Street (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1354	Westmac Enterprises, Inc.	9830 Vine Street Suite 100 (Out of the City)	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1355	Whillock Contracting Inc	PO Box 2322 (Out of the City)	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1356	Whitson C M	10603 Rancho Bernardo Road (Out of the City)	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1357	Wilfrido Concrete Construction	303 H Street Suite 407 (Out of the City)	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1358	Winfield Floor Window Covering	7031 Carroll Road (Out of the City)	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1359	Wire Pros Electric, Inc.	1753 Kyrsten Terrace Court (Out of the City)	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	Threat to water quality (TTWQ)	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1360	Woodruff Trenching, Inc.	9735 Prospect Avenue (Out of the City)	Low	Throughout City	Commercial	Yes	1629	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1361	Xunda Handyman	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1362	Ye Olde Handyman Service	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1363	Your Way Fumigation	41880 Kalmia Street Suite 170 (Out of the City)	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1364	Zeller Drain Cleaning	Not Listed (Out of the City)	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No

Notes

SIC – Standard Industrial Classification Code

Potential Pollutants – Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Potential pollutants for each facility are determined by category if no inspection information is available.

Tributary to 303(d) – The facility is tributary to a waterbody listed in the Clean Water Act Section 303(d) list of impaired waterbodies

Generating Pollutants Tributary to 303(d) Listed – The facility is tributary to 303(d) listed receiving water and has potential to generate pollutants for which the water body is impaired

TTWQ – Threat to Water Quality

APPENDIX B

Appendix B
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
1	7/1/2010	Storm Water Hotline	6040 Nancy Dr	Residential	Report of a resident discharging laundry wash water to the street.	Resident does not believe the discharge has occurred and is aware of storm water regulations. No evidence of wastewater discharge was observed.	Notice of Violation
2	7/6/2010	Storm Water Hotline	5530 Jackson Dr	Residential	Report of a broken pipe leaking at location.	The property manager was notified and personnel was sent to repair the leak.	N/A
3	7/7/2010	Storm Water Hotline	4572 Nebo Dr	Residential	Report of consistent stagnant water at location.	Source of water was determined to be from footing drains. No evidence of wastewater discharge was observed. Investigation of alternative drainage solutions is in progress.	N/A
4	7/20/2010	Storm Water Hotline	8240 Parkway Dr	Construction	Report of a contractor discharging sawcutting water into gutter.	No evidence of discharge was observed. Responsible contractor indicated some water had been allowed to discharge and was advised of proper disposal methods and storm water regulations.	Verbal Warning
5	7/26/2010	Request Tracker	5575 Baltimore	Residential	Report of a storm drain clogged with roots/debris at the NW end of the property, in the grass.	PW evaluated and cleaned/maintained as applicable	N/A
6	7/26/2010	RWQCB Staff	7883 La Mesa Blvd	Residential	Resident contacted SDRWQCB to report a vehicle leaking oil at location.	The responsible party placed drip pans and beneath the vehicle and cleaned the area using absorbant.	Residential Trifold, Compliance Letter
7	7/27/2010	Public Works	Mariposa St Bridge at SR-125	Construction	Report of a white powder tracking through the neighborhood due to recent bridge resurfacing by CalTrans.	CalTrans enlisted a street sweeping contractor to remove the material.	Notice of Violation

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
8	7/29/2010	Public Works Service Request	4975 Memorial Drive	Municipal	The storm drain within the fenced area on the E side of the Community Center is reportedly clogged with vegetation.	PW evaluated and cleaned/maintained as applicable	N/A
9	8/9/2010	Code Compliance	8011 University Ave	Commercial	Report of leaking Fire Department connection.	Helix water district personnel responded and resolved the issue.	N/A
10	8/9/2010	Request Tracker	8011 University Ave	Commercial	Report of leaking irrigation system at location.	No discharge was observed during the site visit. The site maintenance personnel indicated portions of the irrigation system were in the process of being replaced.	N/A
11	8/9/2010	Public Works	4370 Date Ave	Residential	Neighborhood children spilled soap into pool area drains.	A small amount of foam was observed in the gutter and residents were warned not to allow future discharges.	N/A
12	8/11/2010	Public Works Service Request	N Bound Spring St	Residential	Report of storm drain clogged with vegetation at location.	PW evaluated and cleaned/maintained as applicable	N/A
13	8/11/2010	City Engineer	7996 Anders Circle	Residential	Report of consistent irrigation runoff from location.	Educational materials were distributed. No evidence of discharge was noted. Complaint appears unfounded.	Over Irrigation Fact Sheet
14	8/12/2010	Storm Water Hotline	6140 Horton Dr	Residential	Report of overirrigation at location.	Educational materials were distributed. No evidence of discharge was noted. Complaint appears unfounded.	Over Irrigation Fact Sheet
15	8/18/2010	Public Works	Intersection of La Mesa Blvd & Wilson St	Construction	Report of uncontained sandblasting activities at location.	No evidence of discharge was observed, all water was contained within landscaping. Additional precautinary BMPs were recommended.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
16	8/23/2010	Public Works	8161 Kato St	Residential	Report of an unknown white debris that could be concrete dust dischaged to street from location.	The resident removed the material and cleaned the area.	Notice of Violation
17	8/30/2010	Public Works Service Request	6219 Severin	Residential	Report that the drainage ditch behind the residence is overgrown with vegetation and clogged with trash.	PW evaluated and cleaned/maintained as applicable	N/A
18	8/30/2010	Storm Water Hotline	4612 4th St	Residential	Report water being pumped from one residential property to the neighboring property.	Determined to be a private property concern. No discharge to the City's MS4 occurred.	None
19	9/1/2010	Storm Water Hotline	5480 Marengo Ave	Residential	Report of occasional private street hosing.	Facility personnel indicated that they are well aware of storm water regulations and do not perform uncontained washing. No evidence of wash water discharge was observed.	None
20	9/7/2010	Public Works	5151 70th St	Commercial	Report of a small sewage spill onto a parking lot where a plumber had opened the cleanout.	A plumber and pump truck responded to clear the sewer line and clean up the spill.	None
21	9/7/2010	Storm Water Hotline	4701 Troy Lane	Residential	Report of an unknown liquid discharge into the storm drain from a pest control company vehicle.	The pest control company was contacted and has conducted an independent investigation which found no leaks. No evidence of wastewater discharge was observed. Complaint appears to be unfounded.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
22	9/8/2010	Storm Water Hotline	5851 Jackson Dr	Residential	Report of a resident discharging laundry wash water to the curb from a pipe visible on the side of the house.	The resident indicated the discharge did not contain of wastewater. No storm water compliance issues were noted at location.	Compliance letter
23	9/16/2010	Public Works	8439 Lemon Ave	Residential	Report of waste water discharge to street due to a resident's attempt to clear a blocked sewer line.	The discharge was stopped and the responsible party cleaned the area and enlisted a plumber to resolve the issue.	N/A
24	9/20/2010	Code Compliance	8384 La Mesa Blvd	Commercial	Report of uncontained power washing at location.	Business was called and notified of the escalating enforcement actions the City will take if violations continue.	Notice of Violation, Enforcement Letter
25	9/22/2010	Public Works Service Request	Primrose	Residential	Report of clogged storm drains at location.	PW evaluated and cleaned/maintained as applicable	N/A
26	9/23/2010	Storm Water Hotline	4174 Blackton Dr	Residential	Report of residents washing and detailing vehicles in the rear of the property. Wash water is reportedly conveyed to the street.	Warning and compliance letter were issued. The activity was stopped.	Enforcement Letter, Written Warning
27	9/30/2010	Storm Water Hotline	8687 Lemon Ave	Residential	Report of an irrigation system leak at location.	No evidence of discharge was observed.	N/A
28	10/4/2010	Public Works Service Request	La Mesa Blvd.	Residential	Report of storm drain inlets that require maintenance.	PW evaluated and cleaned/maintained as applicable	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
29	10/5/2010	Storm Water Hotline	5040 Comanche Dr	Residential	Report of excessive dog waste being left on the lawn in front of a residence.	The property management provides waste bag dispensers, has posted signs indicating that penalties are assessed for non-compliance, sends bi-annual reminders to all residents, and has staff monitor and remove waste twice per day. Maintenance appears to be sufficient.	N/A
30	10/6/2010	Storm Water Hotline	5151 70th St	Commercial	Property owner reported that he TV'd the sewer line in the City's easment and found the pipe to be broken.	The property owner and contractor were contacted to arrange maintenance.	N/A
31	10/6/2010	Public Works	5425 Connecticut Ave	Residential	Report of uncontained sediment piles that lack erosion control BMPs at location.	Fiber rolls were recommended until the landscape project can be completed.	Notice of Violation
32	10/7/2010	Storm Water Hotline	4851 Palm Ave	Construction	A dump truck was observed dumping dirt and debris onto an abandoned residential property.	The dump truck driver was contacted and indicated that the activities were permitted and that the debris would be removed within 2 days. No further action was required.	None
33	10/8/2010	Storm Water Hotline	8006 University Pl	Commercial	Reported sewer leak in landscaped area due to a pipe blockage at location.	The responsible party enlisted a plumber to clear the line. All wastewater was contained within the landscaping.	None
34	10/11/2010	Storm Water Hotline	8141 La Mesa Blvd	Commercial	Report of a sewer leak into the alley from location.	No evidence of discharge was observed.	N/A
35	10/12/2010	Code Compliance	8805 Murray Dr	Commercial	Report of overirrigation at location.	The property manager investigated and fixed the issue.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
36	10/13/2010	Code Compliance	7984 La Mesa Blvd	Commercial	The business was observed spraying down debris on the hardscape.	Warning and compliance letter were issued. The activity was stopped.	Compliance Letter, Written Warning
37	10/19/2010	Public Works Service Request	Not Specified	Residential	Report of water and debris from neighborhood and drainage ditch flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
38	10/19/2010	Storm Water Hotline	8527 Chevy Chase Dr	Residential	Report of pool water discharge to the street from location.	No evidence of discharge was observed.	N/A
39	10/19/2010	Storm Water Hotline	8843 Alpine Ave	Residential	Report of pool filter wash water discharge to street.	The responsible contractor returned to remove the material and was advised regarding proper disposal methods and storm water regulations.	None
40	10/20/2010	Public Works	4970 Porter Hill Rd	Construction	Report of a pile of Class II material being left in the street.	The responsible party removed the material.	Notice of Violation
41	10/20/2010	Public Works Service Request	Behind La Mesa Jr. High School	Commercial	The drainage ditch behind La Mesa Jr. High is reported to be clogged with trash and debris.	PW evaluated and cleaned/maintained as applicable	N/A
42	10/20/2010	Public Works Service Request	Harry Griffen Regional Park	Municipal	The storm drain at Harry Griffen Regional Park is reported to be clogged with debris.	PW evaluated and cleaned/maintained as applicable	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
43	10/28/2010	Storm Water Hotline	4635-4637 Palm Ave	Residential	Report of overirrigation causing the walk area to become slippery.	Source of water was determined to be an irrigation system leak. The responsible party repaired the leak and cleaned the sidewalk.	Compliance Letter
44	11/1/2010	Storm Water Hotline	8730 Chevy Chase Dr	Residential	Report of an unmaintained pool at location causing health concerns.	Forwarded case to County Vector Control; larvacide and mosquito fish were added to pool. No discharge to the City's MS4 occurred.	N/A
45	11/3/2010	Public Works	8011 University Ave	Commercial	Report of uncontained hosing at location.	Issue was discussed with the property management company. No evidence of discharge or other deficiencies observed. The City continues to inspect the site frequently to verify continued compliance.	Enforcement Letter
46	11/3/2010	Storm Water Hotline	8321 Lemon Ave	Mobile	Report of a mobile detailer working within the public right-of-way.	No evidence of discharge was observed. Responsible contractor and property owner were contacted to discuss the issue.	N/A
47	11/15/2010	Storm Water Hotline	7380 Parkway Dr	Commercial	Report of an irrigation leak causing algae growth and a slippery walkway.	The landscaping contractor found and replaced the leaking pipe.	N/A
48	11/15/2010	Storm Water Hotline	9462 Grossmont Blvd	Residential	Report of vehicles leaking oil in driveway at location.	Resident cleaned up the area.	Written Warning
49	11/16/2010	Public Works	7380 University Ave	Residential	Report of the illegal dumping of paint buckets near the dumpster area of the apartment complex.	All paint buckets had been removed by the time of the site visit.	Compliance Letter

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
50	11/17/2010	Public Works	8250 La Mesa Blvd	Commercial	Report of an oil leak from building machinery into the alley at location.	Public Works applied absorbant and the property manager hired a contractor to remove the absorbant, power wash, and reclaim all wash water. Cleanup was verified.	Notice of Violation
51	11/17/2010	Code Compliance	8354 University Ave	Commercial	Report of overirrigation at location.	The responsible party resolved the issue.	N/A
52	11/22/2010	Public Works	8011 University Ave	Commercial	Report of uncontained powerwashing at location.	Activity was discontinued and the responsible parties were advised of proper powerwashing BMPs.	None
53	11/23/2010	City Staff	7339 El Cajon Blvd	Commercial	Report of water flow from a broken irrigation system.	The maintenance crew reduced the irrigation frequency and replaced the broken sprinkler head.	N/A
54	11/29/2010	Public Works Service Request	6267 De Camp Drive	Residential	Report that the drainage ditch at the location is clogged and flow is impeded.	PW evaluated and cleaned/maintained as applicable	N/A
55	12/14/2010	Public Works Service Request	Behind Highwood Park	Municipal	The drainage areas behind Highwood Park are reported to be filled with debris.	PW evaluated and cleaned/maintained as applicable	N/A
56	12/20/2010	Storm Water Hotline	8250 La Mesa Blvd	Commercial	Report of an oil sheen discharge from the elevator sump pump at location during a rain event.	The sump pump was cleaned, and a downstream sample was taken and contained no detectable oil or grease. No additional action was required.	Notice of Violation

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
57	12/21/2010	Storm Water Hotline	5322 Jackson Dr	Commercial	Report of drums of water being dumped into the gutter during heavy rain.	The drum was found to have contained only rainwater and had been dumped and turned upside down to prevent taking on additional water from the roof.	N/A
58	12/21/2010	Storm Water Hotline	7050 Alvarado Rd	Commercial	Report of a sanitary sewer overflow reaching the business.	PW evaluated and cleaned/maintained as applicable	N/A
59	12/21/2010	Storm Water Hotline	8278 La Mesa Blvd	Commercial	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
60	12/21/2010	Public Works Service Request	3985 Charles Street	Residential	The storm drain is clogged causing flooding of the residence.	PW evaluated and cleaned/maintained as applicable	N/A
61	12/21/2010	Public Works Service Request	4350 Palm Ave	Residential	Report of a clogged storm drain causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
62	12/21/2010	Public Works Service Request	5454 Jackson Drive	Residential	Report of rainwater rushing down the hill which may cause a landslide.	PW evaluated and cleaned/maintained as applicable	N/A
63	12/21/2010	Public Works Service Request	7539 Normal Ave	Residential	Report of a clogged storm drain causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
64	12/21/2010	Public Works Service Request	7743 Normal Ave	Residential	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
65	12/21/2010	Public Works Service Request	8278 La Mesa Blvd	Residential	Report of clogged storm drain at location causing flooding.	PW evaluated and cleaned/maintained as applicable	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
66	12/21/2010	Public Works Service Request	9621 Lemon Ave	Residential	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
67	12/21/2010	Public Works Service Request	Coming from High/Waite	Residential	Report of storm water causing erosion/sliding of the hillside at location.	PW evaluated and cleaned/maintained as applicable	N/A
68	12/21/2010	Public Works Service Request	Lemon Avenue	Residential	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
69	12/21/2010	Public Works Service Request	Not Specified	Residential	Report of a manhole being displaced at location due to excessive flow.	PW evaluated and cleaned/maintained as applicable	N/A
70	12/21/2010	Public Works Service Request	Not Specified	Residential	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
71	12/21/2010	Public Works Service Request	Not Specified	Residential	Report of a clogged culvert causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
72	12/21/2010	Public Works Service Request	Not Specified	Residential	Report of a clogged storm drain causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
73	12/21/2010	Public Works Service Request	Not Specified	Residential	Report of a clogged storm drain causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
74	12/21/2010	Public Works Service Request	Not Specified	Residential	Report of a drainage channel reaching capacity and threatening to cause flooding.	PW evaluated and cleaned/maintained as applicable	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
75	12/21/2010	Public Works Service Request	Not Specified	Residential	Report of a clogged culvert causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
76	12/21/2010	Public Works Service Request	Not Specified	Residential	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
77	12/21/2010	Public Works Service Request	Not Specified	Residential	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
78	12/21/2010	Public Works Service Request	Not Specified	Residential	Report of a clogged storm drain causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
79	12/21/2010	Public Works Service Request	University & 70th	Residential	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
80	12/22/2010	Public Works Service Request	5308 Lake Murray.	Residential	The ditch is overflowing causing flooding.	PW evaluated and cleaned/maintained as applicable	N/A
81	12/22/2010	Public Works Service Request	7122 University Ave	Residential	Report of area flooding.	PW evaluated and cleaned/maintained as applicable	N/A
82	12/22/2010	Public Works Service Request	End of cul-de-sac on Bramble	Residential	Report of storm drain clogged with vegetation at location.	PW evaluated and cleaned/maintained as applicable	N/A
83	12/22/2010	Public Works Service Request	Not Specified	Residential	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
84	12/22/2010	Public Works Service Request	Not Specified	Residential	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
85	12/22/2010	Public Works Service Request	Not Specified	Residential	Report of a clogged storm drain causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
86	12/22/2010	Public Works Service Request	Not Specified	Residential	Report of flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
87	12/22/2010	Public Works Service Request	Not Specified	Residential	Report of a drainage easement reaching capacity.	PW evaluated and cleaned/maintained as applicable	N/A
88	12/22/2010	Public Works Service Request	Not Specified	Residential	Report of a clogged storm drain causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
89	12/22/2010	Public Works Service Request	on Madison, E of Bancroft	Residential	Report of a clogged storm drain causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
90	12/23/2010	Police Report	5322 Jackson Dr	Commercial	Report of water from underground tanks being pumped into barrels and discharged to the storm drain and the clarifier in the car wash.	The owner was contacted and indicated that the water is never discharged to the storm drain system and that all staff are trained on storm water pollution prevention. No evidence of wastewater discharge was observed.	N/A
91	12/27/2010	Public Works Service Request	Not Specified	Residential	Report of a clogged drainage outlet causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
92	12/27/2010	Public Works Service Request	Not Specified	Residential	Report of a clogged storm drain whose grate needs to be secured.	PW evaluated and cleaned/maintained as applicable	N/A
93	12/30/2010	Public Works Service Request	Not Specified	Residential	Report of erosion due to the storm drainage system in the area.	PW evaluated and cleaned/maintained as applicable	N/A
94	12/30/2010	Code Compliance	4932 Baltimore Dr	Residential	Report of painters at location washing down the area during work.	Complaint was determined to be unfounded. The souce of water was determined to be flow from the hillside due to recent rains.	N/A
95	12/31/2010	Storm Water Hotline	4345 Lowell St	Residential	Report of possible broken irrigation leak from neighboring property threatening to destabilize a retaining wall.	The property management was contacted and repaired the leak.	Compliance Letter
96	1/4/2011	Storm Water Hotline	Intersection of Lemon Ave & Glen St	Residential	Report of overirrigation at location.	No evidence of discharge was observed. Educational materials were distributed to area residents.	Door Hangers
97	1/9/2011	Storm Water Hotline	4515 3rd St	Residential	Report of a pool of stagnant water at location. Algae growth has made the area slippery.	Property manager was notified and no irrigation leaks were present. Drainage configuration causes the water accummulation. No discharge to the City's MS4 occurred. The maintenance crew cleaned the area and will continue to monitor for algae growth.	Compliance Letter
98	1/9/2011	Storm Water Hotline	735 Grant Ave	Residential	Report of flooding entering the residence at location.	Out of the City's jurisdiction. Resident instructed to call the County.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
99	1/10/2011	Storm Water Hotline	4268 Olive Ave	Residential	Report of standing water approximately one foot deep across 2,000 square feet in the backyard causing a foul odor and health concerns.	The owner was notified and was aware of the drainage issue. No discharge to the City's MS4 occurred. The area was later confirmed to be dry.	Compliance Letter
100	1/12/2011	Public Works Service Request	8450 La Mesa Boulevard	Residential	Report of a clogged storm drain causing flooding at location.	PW evaluated and cleaned/maintained as applicable	N/A
101	1/17/2011	San Diego County Haz Mat	4269 Lowell Ave	Residential	Report of ponded water in the rear of the building causing health concerns.	Case forwarded to County Vector Control who added larvacide and mosquito fish tot he pool. No discharge to the City's MS4 occurred. The area was later confirmed to be dry.	Compliance Letter
102	1/24/2011	City Staff	6145 Lake Murray Blvd	Commercial	Sediment observed tracked into street from multiple land slides that occurred at location.	The slide was determined to have occurred on SDG&E property, who performed the cleanup.	N/A
103	1/24/2011	Storm Water Hotline	4150 Violet St	Residential	Report of a resident draining pool water to the dirt alley at the rear of the property.	Source of water was determined to be from an irrigation leak. The water had been turned off and the irrigation line was repaired.	Written Warning
104	1/24/2011	Request Tracker	Residences on Anders Circle & Aztec Dr	Residential	Reported overirrigation at location.	Educational materials were distributed.	None
105	1/25/2011	Public Works	8000 Parkway Dr	Commercial	Report of a sewer lateral overflow due to a pipe blockage.	The responsible party cleaned the area and enlisted a plumber to clear the line.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
106	2/1/2011	Public Works Service Request	Not Specified	Residential	Report of stagnant water in storm drain at location.	PW evaluated and cleaned/maintained as applicable	N/A
107	2/2/2011	Storm Water Hotline	4667 Judson Way	Residential	Report of residents detailing and washing cars at location.	No discharge was observed during the site visit. Code enforcement discussed the issues with the detailer and came to a solution.	N/A
108	2/2/2011	Public Works	9365 Carmichael Dr	Residential	Report of a septic tank overflow.	No evidence of discharge was observed.	N/A
109	2/4/2011	SDGE Staff	6201 Falmouth St	Utility	Report of a vehicle striking a SDG&E generator, releasing non PCB mineral oil into the gutter.	SDG&E recovered the spilled material.	N/A
110	2/9/2011	Storm Water Hotline	Intersection of Riviera Dr & Quarry Rd	Mobile	Report of spilled buckets of paint in street at location.	Public Works crew cleaned the area.	N/A
111	2/9/2011	Storm Water Hotline	8345 Monona Dr	Residential	Report of continual discharge from drainage pipe to the street.	The residence appeared vacant. The property owner was contacted and the investigation is ongoing.	Written Warning
112	2/11/2011	Public Works	6920 Tower St	Residential	Report of a clogged sewer line causing a small amount of wastewater discharge to the street. The wastewater did not reach the inlet.	The property owner hired a plumber to repair the sewer line and install a cleanout, and remedied the wastewater issue.	N/A
113	2/14/2011	Storm Water Hotline	4989 Taltec Dr	Residential	Report of a resident draining pool water onto a hillside causing erosion into the street.	No evidence of erosion was observed. Complaint was determined to be unfounded.	Pool Fact Sheet

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
114	2/15/2011	Storm Water Hotline	Intersection of Severin Dr & Gregory St	Residential	Report of a vehicle leaking oil in street at location.	No evidence of recent leaks observed. Truck is no longer parked at location. No additional action was necessary.	Compliance Letter, Residential Trifold
115	2/19/2011	Public Works Service Request	Orien Avenue	Residential	Report of storm drain at location blocked by contractor, impeding flow during rain event.	PW evaluated and cleaned/maintained as applicable	N/A
116	2/23/2011	Resident via Community Development	5640 Aztec Dr	Residential	Report of a vacant property lacking erosion control BMPs following tree removal.	The property owner was contacted and no evidence of erosion was noted.	N/A
117	2/28/2011	Storm Water Hotline	4710, 4712, & 4712 1/2 Hillcrest Dr	Residential	Report of overirrigation or irrigation system leak.	The property owner was notified and charged with remediation.	Compliance Letter, Over Irrigation Fact Sheet
118	3/1/2011	Public Works Service Request	Intersection of Normal and Parks	Residential	Report of a lost skateboard in the storm drain at location.	Advised over phone.	N/A
119	3/8/2011	Request Tracker	Alvarado west of Comanche	Residential	Report of drainage channel in need of maintenance.	PW evaluated and cleaned/maintained as applicable	N/A
120	3/9/2011	SDGE Staff	5424 Pennsylvania Ln	Utility	SDG&E crews broke a Helix Water District water main.	Helix water district personnel responded and resolved the issue.	N/A
121	3/10/2011	City Engineer	5900 El Cajon Blvd Ste L	Commercial	Grease interceptor/ sewer lateral was clogged leading to observed overflow into parking lot.	The building department condemned use of the sinks until cleanup could be performed. The responsible party had the sewer line cleared and the property management company had the parking lot cleaned. No additional action was neccesary.	Notice of Violation

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
122	3/11/2011	Public Works Service Request	Not Specified	Residential	Report of consistent standing water in the gutter at location.	PW evaluated and cleaned/maintained as applicable	N/A
123	3/14/2011	Storm Water Hotline	8308 Parkway Dr	Commercial	Gas odor in floor drains reported to County Hazmat.	County Hazmat staff responded and flushed the sewer line. No clear source could be identified but likely was the result of chemical dumping to sewer. City staff performed dye test and found no connection to the City's MS4.	None
124	3/19/2011	Public Works Service Request	7210 Blackton Drive	Residential	Report of oil in the storm drain.	PW evaluated and cleaned/maintained as applicable	N/A
125	3/21/2011	Public Works Service Request	Not Specified	Residential	Report of a clogged storm drain and landslide at location.	PW evaluated and cleaned/maintained as applicable	N/A
126	3/21/2011	Storm Water Hotline	7212 Blackton Dr	Residential	Report of a resident discharging oil to a backyard storm drain inlet.	Resident removed the material from the property.	Notice of Violation
127	3/24/2011	Public Works Service Request	6340 Meadowcrest	Residential	Report of a hole in the concrete channel behind the residence causing slope erosion.	PW evaluated and cleaned/maintained as applicable	N/A
128	3/30/2011	Storm Water Hotline	8899 La Mesa Blvd	Commercial	Report of water leaking through sidewalk at location.	Helix water district personnel responded, determined that the issue was a leaking irrigation system and had the responsible party repair the leak.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
129	3/31/2011	Storm Water Hotline	4655 Normandie Pl	Residential	Resident requested information regarding automotive fluid disposal.	Resident was advised regarding waste disposal.	N/A
130	4/5/2011	Public Works Service Request	4057 King St	Residential	The storm drain is clogged causing flooding and standing water.	PW evaluated and cleaned/maintained as applicable	N/A
131	4/8/2011	City Staff	Glen St	Residential	Report of a resident discharging laundry wash water to the street.	Source of water was determined to be from foundation drains. No water quality concerns observed.	None
132	4/11/2011	Public Works Service Request	Not Specified	Residential	Report of a possible sinkhole forming at location.	PW evaluated and cleaned/maintained as applicable	N/A
133	4/11/2011	Storm Water Hotline	4533 Lee St	Residential	Report of a consistent water discharge from a residence that leaves a residue in the curb.	Source of water was determined to be a foundation sump pump. No evidence of wastewater discharge was observed. Resident was also found to be washing his car and was informed of storm water regulations regarding car washing.	Residential Trifold
134	4/13/2011	City Staff	4471-4451 Glen St	Residential	Discharge of unknown origin was observed flowing from a pipe located between two properties.	Resident was contacted and the pipe was found to be connected to a storm water inlet. No evidence of wastewater discharge was observed.	None
135	4/19/2011	Request Tracker	7990 Anders Circle	Residential	Report of water discharge from a curb outlet at location.	Source of water was determined to be a sump pump discharge. No further action was neccesary.	N/A
136	4/20/2011	Storm Water Hotline	8155 & 8125 St. Onge Dr	Residential	Report of vehicles leaking oil onto street at location.	The responsible party could not be identified.	None

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
137	4/22/2011	Public Works Service Request	Comanche Drive, at Saranac	Residential	Report of a sinkhole at location.	PW evaluated and cleaned/maintained as applicable	N/A
138	4/27/2011	Public Works Service Request	9223 Lovell Ln	Residential	Report of clogged storm drain at location causing flooding.	PW evaluated and cleaned/maintained as applicable	N/A
139	5/2/2011	Public Works	7213 Blackton Dr	Residential	Report of a dried white powder or paint being discharged from a residence.	Resident had their contractor remove the material.	N/A
140	5/9/2011	Public Works Service Request	8141 La Mesa Blvd	Residential	Report of storm drain clogged with debris and attracting insects.	PW evaluated and cleaned/maintained as applicable	N/A
141	5/12/2011	Storm Water Hotline	10833 Explorer Rd	Utility	Report of a hydraulic oil spill in the street.	Out of the City's jurisdiction. SDG&E performed cleanup.	N/A
142	5/26/2011	City Staff	8302 La Mesa Blvd	Commercial	Report of grease dumping into dumpster area at location.	Responsible party cleaned the area and arranged to have a new dumpster delivered.	N/A
143	5/30/2011	Public Works Service Request	West end of Highwood Park	Residential	Report of storm drain clogged at location.	PW evaluated and cleaned/maintained as applicable	N/A
144	6/8/2011	Storm Water Hotline	4389 Dale Ave	Residential	Report of spilled paint at location that has dried.	Area was powerwashed to remove paint residue. All wash water was reclaimed. No additional action was neccesary.	N/A
145	6/13/2011	City Staff	4309 Harbinson Ave	Residential	Report of erosion due to grading activities at residence withour erosion control BMPs.	Investigation/remediation is in progress.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
146	6/14/2011	Public Works	6345 Meadowcrest Dr	Residential	Report of an unmaintained pool at location causing health concerns.	Case was forwarded to County Vector Control.	N/A
147	6/14/2011	Public Works	7284 Princeton Dr	Residential	Report of drywall or plaster discharge into the street from a residence.	The homeowner removed the material from the location.	Notice of Violation
148	6/20/2011	City Engineer	7779 Highwood Ave	Residential	Report of a mulch pile leaking into the gutter.	Resident cleaned up the area.	Notice of Violation, Enforcement Letter
149	6/22/2011	Storm Water Hotline	7080 Saranac Dr	Residential	Report of neighborhood children wasting water.	The activity was stopped and the responsible parties could not be contacted. The City will monitor for any recurring issues.	N/A
150	6/23/2011	Public Works Service Request	Not Specified	Residential	Report of a clogged storm drain at location.	PW evaluated and cleaned/maintained as applicable	N/A
151	6/28/2011	Public Works	3752 Harris Dr	Residential	Report of foul smelling water discharge from a pipe in front of residence.	Source of water was determined to be from foundation drains. No water quality concerns observed.	N/A

APPENDIX C

Appendix C
JURMP Annual Report Requirements Checklist

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.2
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	Appendix A.1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-1 and 2-2
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.2

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.2
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3, Table 2-2
xviii. A description of notable activities conducted to manage urban runoff from development projects.	Throughout Section

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A.2
viii. A description of the general results of the inspections.	3.5
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5 Table 3-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	Throughout Section

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix A.3
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	2.4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4 Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4 Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4 Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A for 2010/2011
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3 Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4 Table 4-1
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4 Table 4-1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3.4 Table 4-1
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3 Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3 Table 4-1
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.3.4, Table 4-5
xviii. A description of the general results of the inspections.	Table 4-5
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	Throughout Section

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.2 (mobile), Appendices A.4, A.5
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4, 5.3.3, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	N/A (5.2.4)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	N/A (5.2.4)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	Throughout Section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	Throughout Section

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2010/2011Annual Report, will be submitted to the RWQCB no later than December 15, 2011.	

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2010/2011 Annual Report, will be submitted to the RWQCB no later than December 15, 2011.	

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3

Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.2 and 9.3

Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11

Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order. (For 2007-2008, the requirements that apply are essentially the same as those found in Order No. 2001-01)	10

Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12

Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	4.2.3, 13

JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14 and each program component section

ATTACHMENTS

ATTACHMENT 2.1

UPDATED BMP MANUAL II

City of La Mesa
Department of Public Works
Engineering Division

The City of La Mesa Storm Water Best Management Practices Manual – Part II

LA MESA LOCAL STANDARD URBAN STORM WATER MITIGATION PLAN (LOCAL SUSMP)
Adopted 2002
Updated January 2011

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Glossary

Advanced Treatment

Using mechanical or chemical means to flocculate and remove suspended **sediment** from runoff from construction sites prior to discharge.

Attached Residential Development

Any development that provides residential units that share an interior/exterior wall. This category includes, but is not limited to: dormitories, condominiums, and apartments.

Automotive Repair Shop

A facility that is categorized in any one of the following **Standard Industrial Classification (SIC)** codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

Best Management Practice (BMP)

Any procedure or device designed to minimize the quantity of pollutants that enter the storm drain system. BMPs also include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. This manual groups storm water BMPs into the following categories: (1) Construction Storm Water BMPs, which are practices, procedures, devices or materials used to prevent the transport and introduction of pollutants both on and from a project during construction; and (2) Permanent Storm Water BMPs, which are the **Low Impact Development** design features, **source control** features, and **treatment control BMP**s that become a permanent part of a project site.

California Association of Stormwater Quality Association (CASQA)

Publisher of the California Stormwater Best Management Practices Handbooks, available at www.cabmphandbooks.com. Successor to the Storm Water Quality Task Force (SWQTF).

California BMP Method

A method for determining the required volume of storm water treatment facilities. Described in Section 5.5.1 of the California Stormwater Best Management Practice Manual (New Development) (CASQA, 2003).

Commercial Development

Commercial development is defined as any development on private land that is not for heavy industrial or residential uses. The category includes, but is not limited to, hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; commercial airfields; and other light industrial facilities. Any development on private land that is not exclusively industrial or residential uses. The **Priority Development Project** category is defined as commercial developments resulting in the disturbance of one acre or more of land.

Conditions of Approval (COAs)

Requirements a municipality may adopt for a project in connection with a discretionary action (e.g., adoption of an EIR or negative declaration or issuance of a use permit). COAs may include features to be incorporated into the final plans for the project and may also specify uses, activities, and operational measures that must be observed over the life of the project.

Construction Storm Water Management Plan (CSWMP)	A CSWMP is the document prepared and submitted to meet the City of La Mesa's construction BMP requirements for a project that causes land disturbance of less than one acre.
Continuous Simulation Modeling	A method of hydrological analysis in which a set of rainfall data (typically hourly for 30 years or more) is used as input, and runoff rates are calculated on the same time step. The output is then analyzed statistically for the purposes of comparing runoff patterns under different conditions (for example, pre- and post-development-project).
Copermittees	See **Dischargers**.
Detached Residential Development	Any development that provides freestanding residential units. This category includes, but is not limited to: detached homes, such as single-family homes and detached condominiums.
Detention	The practice of holding storm water runoff in ponds, vaults, within berms, or in depressed areas and letting it discharge slowly to the storm drain system. See definitions of **infiltration** and **retention**.
Direct Discharge	Connection of project site runoff to an exempt receiving water body, which could include an exempt river reach, reservoir or lagoon. To qualify as a direct discharge, the discharge elevation from the project site outfall must be below the elevations detailed in the HMP Applicability section of this BMP Manual.
Direct Infiltration	Infiltration via methods or devices, such as dry wells or infiltration trenches, designed to bypass unsaturated surface soils and transmit runoff directly to groundwater.
Directly Connected Impervious Area	Any **impervious surface** which drains into a catch basin, area drain, or other conveyance structure without first allowing flow across pervious areas (e.g. lawns).
Dischargers	The agencies named in the **storm water NPDES permit** (see definition): the County of San Diego; the Cities of Carlsbad, El Cajon, La Mesa, Poway, Solana Beach, Chula Vista, Encinitas, Lemon Grove, San Diego, Vista, Coronado, Escondido, National City, San Marcos, Del Mar, Imperial Beach, Oceanside, and Santee; the San Diego Unified Port District, and the San Diego County Regional Airport Authority.
Drainage Management Areas	Areas delineated on a map of the development site showing how drainage is detained, dispersed, or directed to **Integrated Management Practices**. There are four types of Drainage Management Areas, and specific criteria apply to each type of area. See Chapter 4.
Drawdown time	The time required for a storm water detention or infiltration facility to drain and return to the dry-weather condition. For detention facilities, drawdown time is a function of basin volume and outlet orifice size. For infiltration facilities, drawdown time is a function of basin volume and infiltration rate.

Areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other equivalent environmentally sensitive areas which have been identified by the City of La Mesa.

Environmentally Sensitive Areas This **Priority Development Project** category includes all development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (where discharges from the development or redevelopment will enter receiving waters within the environmentally sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the Environmentally Sensitive Area (ESA). "Discharging directly to "means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

Flow Control Control of runoff rates and durations as required by the Hydromodification Management Plan.

Head In hydraulics, energy represented as a difference in elevation. In slow-flowing open systems, the difference in water surface elevation, e.g., between an inlet and outlet.

Higher-Rate Biofilter A biofilter with a design surface loading rate higher than the 5 inches per hour rate specified in this document for bioretention facilities and planter boxes.

Hillside Lands that have a natural gradient of 25 percent (4 feet of horizontal distance for every 1 foot of vertical distance) or greater and a minimum elevation differential of 50 feet, or a natural gradient of 200 percent (1 foot of horizontal distance for every 2 feet of vertical distance) or greater and a minimum elevation differential of 10 feet.

Hillside Development Greater Than 5,000 Square Feet This **Priority Development Project** category includes any development which creates 5,000 square feet of **impervious surface** which is located in an area with known erosive soil conditions, where the development will grade any natural slope that is 25 percent or greater.

Hydrograph Runoff flow rate plotted as a function of time.

Hydromodification The change in the natural hydrologic processes and runoff characteristics (i.e. interception, infiltration, overland flow, interflow, and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and changes in sediment transport. In addition, alteration of stream and river channels, installation of dams and water impoundments, and excessive stream bank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

Hydromodification Management Plan (HMP)	A Plan implemented by the **dischargers** so that post-project runoff shall not exceed estimated pre-project rates and/or durations, where increased runoff would result in increased potential for erosion or other adverse impacts to beneficial uses. Also see definition for **flow control**. Specifically, Final HMP refers to the most recent Hydromodification Management Plan developed for San Diego County jurisdictions and approved by the San Diego RWQCB.
Hydrologic Soil Group	Classification of soils by the Natural Resources Conservation Service (NRCS) into A, B, C, and D groups according to infiltration capacity.
Industrial Development	Industrial facilities include those defined at 40 CFR 122.26(b)(14), including those subject to the General Industrial Permit or other individual NPDES permit, operating and closed landfills, facilities subject to SARA Title III, and hazardous waste treatment, disposal, storage and recovery facilities. Examples of industrial facilities includes manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.). The **Priority Development Project** category includes development of heavy industry resulting in the disturbance of one acre or more of land.
Impervious surface	Any material that prevents or substantially reduces infiltration of water into the soil. See discussion of imperviousness in Chapter Two.
Infeasible	As applied to best management practices, impossible to implement because of technical constraints specific to the site.
Infiltration	Seepage of runoff into soils underlying the site. See definition of **retention.**
Infiltration Device	Any structure, such as a dry well, that is designed to infiltrate storm water into the subsurface and, as designed, bypasses the natural groundwater protection afforded by surface or near-surface soil. See definition for **direct infiltration**.
Integrated Management Practice (IMP)	A facility **(BMP)** that provides small-scale treatment, retention, and/or detention and is integrated into site layout, landscaping, and drainage design. See **Low Impact Development.**
Integrated Pest Management (IPM)	An approach to pest management that relies on information about the life cycles of pests and their interaction with the environment. Pest control methods are applied with the most economical means and with the least possible hazard to people, property, and the environment.
Jurisdictional Urban Runoff Management Plan (JURMP)	A written description of the specific jurisdictional urban runoff management measures and programs that the City of La Mesa implements to comply with the **storm water NPDES permit** and ensure pollutant discharges are reduced to the MEP and do not cause or contribute to a violation of water quality standards. See **Storm Water Pollution Prevention Program.**
Lead Agency	The public agency that has the principal responsibility for carrying out or approving a project. (CEQA Guidelines §15367).

Low Impact Development	An integrated site design methodology that uses small-scale detention and retention (Integrated Management Practices, or **IMPs**) to mimic pre-existing site hydrological conditions.
Maximum Extent Practicable (MEP)	Standard, established by the 1987 amendments to the Clean Water Act, for the implementation of municipal **storm water pollution prevention programs** (see definition). According to the Act, municipal storm water NPDES permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."
National Pollutant Discharge Elimination System (NPDES)	As part of the 1972 Clean Water Act, Congress established the NPDES permitting system to regulate the discharge of pollutants from municipal sanitary sewers and industries. The NPDES was expanded in 1987 to incorporate permits for storm water discharges as well.
Natural Drainage	A natural swale or topographic depression which gathers and/or conveys runoff to a permanent or intermittent watercourse or waterbody.
New Development	Land disturbing activities; surface grading for structural development, including construction or installation of a building or structure, the creation of **impervious surfaces**; and land subdivision.
Numeric Criteria	Sizing requirements for storm water treatment facilities established in Provision D.1.d.(6)(c) of the San Diego RWQCB's storm water NPDES permit.
Operation and Maintenance (O&M)	Refers to requirements in the **Storm Water NPDES Permit** to inspect treatment BMPs and implement preventative and corrective maintenance in perpetuity. See Chapter Five.
Parking Lot	A land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. This **Priority Development Project** category includes parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.
Permeable Pavements	Pavements for roadways, sidewalks, or plazas that are designed to infiltrate a portion of rainfall, including pervious concrete, pervious asphalt, unit-pavers-on-sand, and crushed gravel.
Pollutant Generating Development Project	Generally all projects which include **impervious surfaces** and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces.
Post Construction Water Quality Technical Report (PCWQTR)	A PCWQTR is the **Project Submittal** of a **Priority Development Project** to demonstrate compliance.

Priority Development Project A project subject to SUSMP requirements. Defined in **Storm water NPDES Permit** Provision D.1.d.(1). See Appendix A.

Project Area The entire project area comprises all areas to be altered or developed by the project, plus any additional areas that drain on to areas to be altered or developed.

Projects Discharging to Receiving Waters within Environmentally Sensitive Areas All development and significant redevelopment that would create 2,500 square feet of **impervious surfaces** or increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition, and either (1) discharge urban runoff to a receiving water within or directly adjacent (where any portion of the project footprint is located within 200 feet of the **environmentally sensitive area**) to an environmentally sensitive area or (2) discharge to a receiving water within an environmentally sensitive area without mixing with flows from adjacent lands (where the **project footprint** is located more than 200 feet from the environmentally sensitive area).

Project Footprint The limits of all grading and ground disturbance, including landscaping, associated with a project.

Project Submittal Documents submitted to the City of La Mesa in connection with an application for development approval and demonstrating compliance with Storm Water NPDES Permit requirements for the project. Priority Development Projects submit a **Post Construction Water Quality Technical Report** and all other projects submit a **Standard Post Construction BMP Plan**.

Proprietary A proprietary device is one marketed under legal right of the manufacturer.

Receiving Waters Surface bodies of water, which directly or indirectly receive discharges from urban runoff conveyance systems, including naturally occurring wetlands, streams (perennial, intermittent, and ephemeral [exhibiting bed, bank, and ordinary high water mark]), creeks, rivers, reservoirs, lakes, lagoons, estuaries, harbors, bays and the Pacific Ocean. La Mesa will determine the definition for wetlands and the limits thereof for the purposes of this definition as protective as the United States Environmental Protection Agency. Constructed wetlands are not considered wetlands under this definition, unless the wetlands were constructed as mitigation for habitat loss. Other constructed **BMP**s are not considered receiving waters under this definition, unless the BMP was originally constructed in receiving waters. Construction of treatment control BMPs in "Receiving Waters" is prohibited and therefore may not be used to satisfy **SUSMP** requirements.

Redevelopment The creation, addition, and or replacement of **impervious surface** on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces.

Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair.

Rational Method	A method of calculating runoff flows based on rainfall intensity, tributary area, and a factor representing the proportion of rainfall that runs off.
Regional (or Watershed) Storm Water Treatment Facility	A facility that treats runoff from more than one project or parcel.
Regional Water Quality Control Board (Regional Water Board or RWQCB)	California RWQCBs are responsible for implementing pollution control provisions of the Clean Water Act and California Water Code within their jurisdiction. There are nine California RWQCBs.
Residential Development	Any development on private land that provides living accommodations for one or more persons, including but not limited to: single-family homes, multi-family homes, condominiums, and apartments. This **Priority Development Category** is defined as housing subdivisions resulting in the disturbance of one acre or more of land or comprised of 10 or more dwelling units.
Residential Development of 10 Units or More	Any development that provides 10 or more residential units. Residential units can be attached or detached.
Restaurant	"Restaurant" means a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (**SIC** code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all **SUSMP** requirements except for structural treatment BMP, numeric sizing criteria requirement, and hydromodification requirement.
Retail Gasoline Outlets (RGOs)	This **Priority Development Project** category includes RGOs that meet the following criteria: (a) 5,000 square feet or more, or (b) a projected average daily traffic (ADT) of 100 or more vehicles per day.
Retention	The practice of holding storm water in ponds or basins, or within berms or depressed areas, and allowing it to slowly infiltrate into underlying soils. Some portion will evaporate. See definitions for **infiltration** and **detention**.
Sediment	Soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organism survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.
Self-retaining area	An area designed to retain runoff. Self-retaining areas may include graded depressions with landscaping or pervious pavements and may also include tributary impervious areas up to a 2:1 impervious-to-pervious ratio.
Self-treating area	A natural, landscaped, or turf area drains directly off site or to the public storm drain system.

Significant Redevelopment	**Redevelopment** that would create or add or replace at least 5,000 square feet of **impervious surfaces** on an already developed site that falls under one or more priority development project categories. When redevelopment results in an increase of, or replacement of, 50% or more of the previously existing impervious surface, and the existing development was not subject to SUSMP requirements, then the entire project must be included in the treatment measure design. If less than 50% of the previously impervious surface is to be affected, only that portion must be included in the treatment measure design.
Source Control	Land use or site planning practices, or structural or nonstructural measures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff.
Standard Industrial Classification (SIC)	A Federal government system for classifying industries by 4-digit code. It is being supplanted by the North American Industrial Classification System but SIC codes are still referenced by the Regional Water Board in identifying development sites subject to regulation under the NPDES permit. Information and an SIC search function are available at http://www.bls.gov/bls/NAICS.htm
Standard Post Construction BMP Plan (SPCBMPP)	A SPCBMPP is the **Project Submittal** to demonstrate compliance for a project subject to only standard permanent BMP requirements.
Storm Water Conveyance System	Private and public drainage facilities by which storm water may be conveyed to Receiving Waters, such as: natural drainages, roads, streets, constructed channels, aqueducts, storm drains, pipes, street gutters, or catch basins.
Storm Water NPDES Permit	A permit issued by a **Regional Water Quality Control Board** (see definition) to local government agencies (**Dischargers**) placing provisions on allowable discharges of municipal storm water to waters of the state.
Storm Water Pollution Prevention Plan (SWPPP)	A plan providing for temporary measures to control sediment and other pollutants during construction as required by the statewide storm water NPDES permit for construction activities. A SWPPP is required for projects causing land disturbance of one acre or more.
Storm Water Pollution Prevention Program	A comprehensive program of activities designed to minimize the quantity of pollutants entering storm drains. See **Jurisdictional Urban Runoff Management Plan.**
Standard Urban Storm Water Mitigation Plan (SUSMP)	Refers to various documents prepared in connection with implementation of the storm water **NPDES permit** mandate to control pollutants from new development and redevelopment. Each **discharger** will adapt the **model countywide SUSMP** to create a local SUSMP for their respective jurisdiction. Applicants for development project approvals will use the local SUSMP to prepare a submittal for each **Priority Development Project** they propose.

Streets, Roads, Highways, and Freeways	This **Priority Development Project** category includes any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. For the purposes of SUSMP requirements, Streets, Roads, Highways and Freeways do not include trenching and resurfacing associated with utility work; applying asphalt overlay to existing pavement; new sidewalk, pedestrian ramps, or bike lane construction on existing roads; and replacement of damaged pavement.
Treatment	Removal of pollutants from runoff, typically by filtration or settling.
Treatment Control (Structural) BMP	Any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption, or any other physical, biological, or chemical process.
Water Board	See **Regional Water Quality Control Board.**
Water Quality Volume (WQV)	For storm water treatment facilities that depend on detention to work, the volume of water that must be detained to achieve maximum extent practicable pollutant removal. This volume of water must be detained for a specified **drawdown time**.

How to Use the Storm Water Best Management Practices Manual

Review Chapters 1 and 2 to get a general understanding of the requirements. Then follow step-by-step instructions in Chapter 3 to prepare your Project Submittal.

THIS Storm Water Best Management Practices Manual (BMP Manual) will help you ensure your project complies with both the Local Standard Urban Storm Water Mitigation Plan (SUSMP) requirements and the Construction BMP requirements of the City of La Mesa (City). Most applicants will require the assistance of a qualified civil engineer, architect, and/or landscape architect. Because every project is different, you should begin by checking specific requirements with municipal staff.

To use the BMP Manual, note that Construction BMPs are temporary measures to control sediment and other pollutants during construction, while SUSMP requirements apply to the development process during all stages of design, construction, completion, use, and maintenance in perpetuity. Start by completing Appendix A to find out how storm water quality requirements apply to your project.

To meet post-construction SUSMP requirements, see chapters one through five of the BMP Manual. To comply with construction BMP requirements, skip ahead to Chapter Six.

Chapter One provides an overview of the process of planning, design, construction, operation, and maintenance leading to compliance with post-construction SUSMP requirements.

If there are terms and issues you find confusing, try finding answers in the glossary or in **Chapter Two**. Chapter Two provides background on key storm water concepts and water quality regulations, including design criteria.

Then proceed to **Chapter Three** and follow the step-by-step guidance to prepare a Project Submittal for your site.

Chapter Four, the Low Impact Development Design Guide, includes design procedures, calculation procedures, and instructions for presenting your design and calculations in your Project Submittal.

In **Chapter Five** you'll find a detailed description of the process for ensuring operation and maintenance of your storm water facilities over the life of the project. The chapter includes step-by-step instructions for preparing a Storm Water Facilities Operation and Maintenance Plan.

The City of La Mesa's specific construction BMP requirements and performance standards are included in **Chapter Six**.

Throughout each Chapter, you'll find references and resources to help you understand the regulations, complete your Project Submittal, and design storm water control measures for your project.

Construction-Phase Controls

Your Project Submittal for SUSMP compliance is a separate document from the Storm Water Pollution Prevention Plan (SWPPP). A SWPPP provides for temporary measures to control sediment and other pollutants during construction at sites that disturb one acre or more. See Chapter 6 of this BMP manual for more information on SWPPPs.

The most recent, updated version of the BMP Manual is on the City website. The on-line BMP Manual is in Adobe Acrobat format. If you are reading the Acrobat version on a computer with an internet connection, you can use hyperlinks to navigate the document and to access various references. The hyperlinks are throughout the text, as well as in "References and Resources" sections within chapters and in "Bibliography and Suggested Resources" in Appendix F. Some of these links (URLs) may be outdated. In that case, try entering portions of the title or other keywords into a web search engine.

► PLAN AHEAD TO AVOID THE THREE MOST COMMON MISTAKES

The most common (and costly) errors made by applicants for development approvals with respect to storm water quality compliance are:

1. Not planning for compliance early enough. You should think about your strategy for storm water quality compliance before completing a conceptual site design or sketching a layout of subdivision lots (Chapter 3).

2. Assuming proprietary storm water treatment facilities will be adequate for compliance. Most aren't (Chapter 2).

3. Not planning for periodic inspections and maintenance of treatment and flow-control facilities. Consider who will own and who will maintain the facilities in perpetuity and how they will obtain access, and identify which arrangements are acceptable to the City of La Mesa (Chapter 5).

Chapter 1

Policies and Procedures

Determine if your development project must comply with storm water quality requirements, and review the steps to compliance.

Background

Urban runoff discharged from municipal storm water conveyance systems has been identified by local, regional, and national research programs as one of the principal causes of water quality problems in most urban areas. The City of La Mesa's storm water conveyance system, which collects runoff from our streets, rooftops, driveways, parking lots, and other impervious areas, flows directly to our rivers, beaches, and bays without receiving treatment (our storm water conveyance system is separate from our sanitary sewer system). Urban runoff potentially contains a host of pollutants like trash and debris, bacteria and viruses, oil and grease, sediments, nutrients, metals, and toxic chemicals. These contaminants can adversely affect receiving and coastal waters, associated wildlife, and public health. Urban runoff pollution is not only a problem during rainy seasons, but also year-round due to many types of urban water use that discharge runoff (dry weather flow) to the storm water conveyance system.

Land development and construction activities significantly alter drainage patterns and contribute pollutants to urban runoff primarily through erosion and removal or change of existing natural vegetation during construction, and the creation of new impervious surfaces, such as parking lots, which often permanently contribute pollutants throughout the "use" of the project site. When homes, work places, recreational areas, roads, parking lots, and structures are built, new impervious areas are built- creating the potential for an impact to water quality. The natural landscape's ability to infiltrate and cleanse storm water and urban runoff is "capped" by the impervious surfaces. As impervious surfaces increase, water that normally would have percolated into the soil now flows over the land surface directly to downstream wetlands, creeks, and eventually the Pacific Ocean. Accordingly, increases in impervious cover can increase the frequency and intensity of storm water flows. Second, new impervious surfaces often become a source of pollutants associated with development, such as automotive fluids, cleaning solvents, toxic or hazardous chemicals, detergents, sediment, metals, pesticides, oil and grease, and food wastes. These pollutants, which are often temporarily captured on impervious surfaces, are

transported to the storm water conveyance system by storm water and urban runoff. The pollutants flow untreated through the storm water conveyance system and ultimately into our creeks, rivers, beaches, and bays. With the growing concerns of urban runoff and storm water pollution, local, state, and federal agencies devised regulations requiring development planning and construction controls to treat storm water-related pollution from new development projects before it reaches any receiving waters.

On January 24th, 2007, the Regional Board issued Order No. R9-2007-0001, hereinafter referred to as "Municipal Permit." This Municipal Permit replaces the previous municipal permit, RWQCB Order No. 2001-01. The City has updated parts I and II of its BMP Manual to reflect the updated requirements of the current Municipal Permit. The primary objectives of the updated BMP Manual are to (1) Effectively prohibit non-storm water discharges; and (2) Reduce the discharge of pollutants from storm water conveyance systems to the MEP both during construction and throughout the use of a developed site. To maximize the use of LID practices as a means of reducing storm water runoff, Order No. R9-2007-0001 further required that the City define minimum LID and other BMP requirements in a document called the Model Standard Urban Storm Water Mitigation Plan (Model SUSMP), which was approved by the Regional Board on March 25, 2009. The permanent BMP requirements within the Model SUSMP were updated to comply with the current Municipal Permit, and these changes are included in this BMP Manual.

Legal Framework

The requirement to implement storm water BMP requirements for development projects is based on Section 402 (p) of the Clean Water Act. The Federal Clean Water Act amendments of 1987 established a framework for regulating storm water discharges from municipal, industrial, and construction activities under the NPDES program. Under the Federal Clean Water Act, municipalities throughout the nation are issued a Municipal NPDES Permit. The primary goal of the Municipal Permit is to stop polluted discharges from entering the storm water conveyance system and local receiving and coastal waters.

In California, the State Water Resources Control Board (SWRCB), through the nine Regional Boards, administers the NPDES storm water municipal permitting program. Based on the San Diego Municipal Permit issued by the San Diego Regional Board, the City is required to develop and implement construction and permanent storm water BMPs addressing pollution from new development projects.

In order to comply with the conditions of Order No. 2001-01, the City of La Mesa adopted the City of La Mesa Watercourse Protection, Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance") codified in Chapter 7.18 of the La Mesa Municipal Code. These ordinances have been updated as necessary to comply with the current Municipal Permit. This manual is an uncodified ordinance adopted by reference as Part II of the City of La Mesa Storm Water Best Practices Manual. The current Municipal Permit requires the City to categorize and prioritize land uses in order to establish effective BMPs. The City's current Storm Water Ordinance authorizes the City Engineer to establish Best Management Practices

(BMPs), including permanent improvements, for all types of land uses. This manual provides instructions on the City's construction phase and permanent BMP requirements, based on the most recent Model SUSMP, for development projects in the City of La Mesa.

The City Engineer may establish alternative BMPs. The allowable use of alternative BMPs at a specific site shall be determined at the sole discretion of the City Engineer. The City Engineer may establish BMPs for a specific site or activity if necessary to reduce Pollutants to the MEP or to comply with an order of the San Diego Regional Water Board. The City Engineer may also establish additional BMPs for a specific site if the City Engineer determines that the BMPs implemented at the site have not reduced the pollutants to the MEP.

A Low Impact Development Design Procedure

The San Diego Regional Water Board reissued a municipal storm water NPDES permit to the municipal **Copermittees** in January 2007. The permit updates and expands storm water requirements for new developments and redevelopments. Storm water treatment requirements have been made more stringent, minimum standards for **Low Impact Development** (LID) have been added, and the Copermittees are required to develop and implement criteria for the control of runoff peaks and durations from development sites.

To assist the land development community, streamline project reviews, and maximize cost-effective environmental benefits, the Copermittees have developed a unified LID design procedure, which has been adapted for use by the City of La Mesa. This design procedure integrates site planning and design measures with engineered, small-scale **Integrated Management Practices** (IMPs) such as bioretention. By following the procedure, applicants can develop a single integrated design which complies with the complex and overlapping NPDES permit LID requirements, storm water treatment requirements, and flow-control (hydromodification management) requirements.

The design approach is detailed in Chapter 4. General instructions for preparing a complete Project Submittal are in Chapter 3, and project-specific submittal requirements are available from municipal staff.

Applicants may choose not to use this design procedure, in which case they will need to demonstrate, in their submittal, compliance with applicable LID criteria, storm water treatment criteria, and flow-control criteria. These criteria are described in Chapter 2 and in the NPDES permit.

Requirements for All Development Projects

All development projects must include control measures to reduce the discharge of storm water pollutants to the maximum extent practicable.

Standard permanent storm water requirements, even for projects that are not "Priority Development Projects," include:

- Implementation of source control BMPs as listed in Appendix C.
- Inclusion of feasible LID features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, direct runoff to landscaping, and retain and slow runoff.
- Submittal of proof of a mechanism under which on-going long-term maintenance of all structural post-construction BMPs will be conducted.
- Compliance with requirements for construction-phase controls on sediment and other pollutants as described in Chapter 6.

Projects (requiring either discretionary actions or construction permits), subject to only standard permanent BMP requirements need to prepare a Standard Post Construction BMP Plan (SPCBMPP). See Appendix G for specific SPCBMPP requirements. Analysis of the project's anticipated pollutants of concern must also be included with the project submittal. Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. Municipal staff may also require additional controls appropriate to the project, which may include storm water treatment controls. LID treatment controls such as infiltration or bioretention are preferred. See "Selection of Treatment Facilities" on page 39.

Priority Development Projects

The NPDES permit requires more specific criteria be applied to Priority Development Projects. Projects (requiring either discretionary actions or construction permits), subject to the priority development project permanent BMP requirements must complete all of the analyses and incorporate all of the applicable BMP requirements in chapters 2 through 5 of this BMP Manual. This includes the LID and source control BMPs, and treatment control BMP requirements.

Projects subject to priority development project requirements must prepare and submit a Post Construction Water Quality Technical Report (PCWQTR) in accordance with Chapter 3 of this BMP Manual. Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type.

► NEW DEVELOPMENT

Projects on previously undeveloped land are Priority Development Projects if they are in one or more of the categories listed in Appendix A. If a project feature such as a parking lot falls into a Priority Development Project category, then the entire project footprint is subject to Priority Project requirements. Note some thresholds are defined by square footage of impervious area created; others by the total area of the development.

► PREVIOUSLY DEVELOPED SITES

Projects on previously developed sites ("**redevelopment** projects") are Priority Development Projects if they create, add, or replace 5,000 square feet or more of impervious surface and also are in one of the categories listed in Appendix A.

Municipal staff may choose to designate projects not within the categories in Appendix A as Priority Development Projects, based on potential impacts to storm water quality.

► THE "50% RULE" FOR PREVIOUSLY DEVELOPED PROJECTS

Projects on previously developed sites may also need to retrofit drainage of **all** impervious areas of the **entire** site. For sites creating or replacing more than 5,000 square feet of impervious area:

- If the new project results in an increase of, or replacement of, 50% or more of the previously existing impervious surface, and the existing development was not subject to SUSMP requirements, then the entire project must be included in the treatment measure design.
- If less than 50% of the previously impervious surface is to be affected, only that portion must be included in the treatment measure design.

If a new Development Project feature such as a parking lot falls into a Priority Development Project category, then the entire project footprint is subject to SUSMP requirements.

Projects limited to interior remodels, routine maintenance or repair, roof or exterior surface replacement, resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, or bike lanes on existing roads and routine replacement of damaged pavement such as pothole repair are not subject to treatment requirements. However, other requirements, including incorporation of appropriate source controls, still apply.

► POLLUTANT GENERATING PROJECTS WHICH DISTURB ONE ACRE OR MORE OF LAND

Projects that generate pollutants at levels greater than background levels and disturb one acre or more of land are considered Priority Development Projects. In most cases linear pathway projects that are for infrequent vehicle use (such as emergency or maintenance access) or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they allow runoff to sheet flow to surrounding pervious surfaces.

Project Review and Permitting Process

The City of La Mesa's Watercourse Protection, Storm Water Management and Discharge Control Ordinance requires that all new development and redevelopment activities comply with the storm water pollution prevention requirements in Chapter 7.18 of the La Mesa Municipal Code, and Parts I and II of the City Of La Mesa Best Management Practices Manual. Applicants must also comply with the grading regulations in Chapter 14.05 of the Municipal Code. These storm water pollution prevention requirements, which are described in detail in this BMP Manual are site specific and vary based on the project's potential impact on receiving water quality.

The flow chart in Figure 1-1, "Review Process for Discretionary Actions" demonstrates how storm water requirements are incorporated into projects requiring subdivision approvals,

development permits or other discretionary actions. For information on the construction permit and review process, see Chapter 6 of this BMP Manual. The steps below in "Compliance Process at a Glance" describe the elements of the plan review and permitting processes for storm water best management practice (BMP) requirements.

FIGURE 1-1. Review Process for Discretionary Actions

The following figure provides an overview of the project review process for projects that require a discretionary action by the City of La Mesa. Discretionary actions include land use plan amendments, re-zonings, subdivisions, planned development permits, conditional use permits, site development permits, variances, neighborhood development permits, and neighborhood use permits.

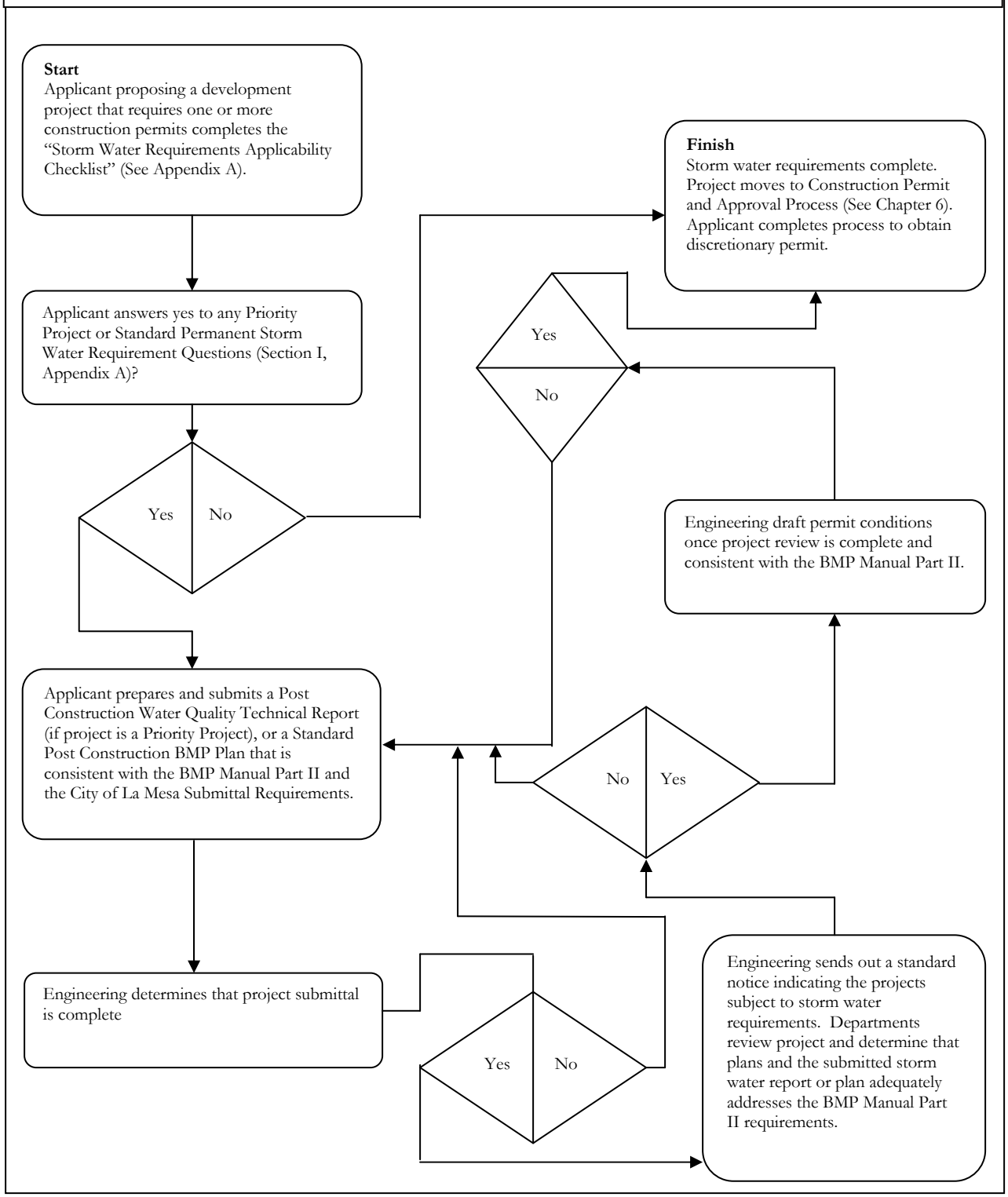

Compliance Process at a Glance

For the applicant for development project approval, storm water compliance follows these general steps:

1. Discuss requirements during a pre-application meeting with municipal staff.
2. Determine applicable storm water BMP requirements by completing the "Storm Water Requirements Applicability Checklist" in Appendix A prior to submittal.
3. Review the instructions in this BMP manual before you prepare your tentative map, preliminary site plan, drainage plan, and landscaping plan.
4. Prepare your Project Submittal, which is typically made with your application for development approvals (entitlements).
5. Prepare a draft Storm Water Facility Operation and Maintenance Plan and include it with your Project Submittal.
6. Under the authority of the City Engineer, Engineering staff will review the Project Submittal with Storm Water Facility Operation and Maintenance Plan for compliance with the applicable storm water requirements contained in this manual.
7. Create your detailed project design, incorporating the features described in your Project Submittal.
8. In a table on your construction plans, list each storm water compliance feature and facility and the plan sheet where it appears.
9. Maintain storm water facilities during construction and following construction.
10. The owner must periodically verify storm water facilities are properly maintained.

Preparation of a complete and detailed Project Submittal is the key to cost-effective storm water compliance and expeditious review of your project. Additional notes about these steps are provided below. Instructions for preparing your Project Submittal are in Chapter 3.

► ADDITIONAL NOTES ON COMPLIANCE

Storm Water Requirements Applicability Checklist. Prior to submittal, applicants must complete the "Storm Water Requirements Applicability Checklist" in Appendix A, to determine if their project is subject to construction and/or permanent storm water best management practice (BMP) requirements. (Note: this form must be completed for all permit applications, even if previous approvals exist. Projects requesting additional construction permits or discretionary approvals, even though previous permits and/or approvals have been obtained, will be required to comply with the storm water requirements in this document). This checklist must be

completed, signed by the responsible party for the project, and submitted with your permit application. Applicants may also verify the project's storm water BMP requirements through a single discipline preliminary review of the project. The project design must include all required permanent BMPs (as determined from the Storm Water Requirements Applicability Checklist in Appendix A), prior to deeming the application package complete.

Determining Adequacy of Proposed Plans. The City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs.

Phased Projects

When determining whether SUSMP requirements apply, a "project" should be defined consistent with California Environmental Quality Act (CEQA) definitions of "project." That is, the "project" is the whole of an action which has the potential for adding or replacing or resulting in the addition or replacement of roofs, pavement, or other impervious surfaces and thereby resulting in increased flows and storm water pollutants. "Whole of an action" means the project may not be segmented or piecemealed into small parts if the effect is to reduce the quantity of impervious area for any part to below the SUSMP thresholds.

Municipal staff may require, as part of an application for approval of a phased development project, a conceptual or master Project Submittal which describes and illustrates, in broad outline, how the drainage for the project will comply with the SUSMP requirements. The level of detail in the conceptual or master Project Submittal should be consistent with the scope and level of detail of the development approval being considered. The conceptual or master Project Submittal should specify that a more detailed Project Submittal for each later phase or portion of the project will be submitted with subsequent applications for discretionary approvals.

Note these minimum standards for SUSMP applicability are for the purpose of ensuring a consistent minimum level or "floor" for implementation consistent with the requirements of the NPDES permit. The City Engineer reserves the right to choose a more expansive interpretation of the NPDES permit's applicability and may also choose to apply source control, treatment, and flow-control requirements to projects that would be exempt under these minimum standards.

New Subdivisions

If a tentative map approval would potentially entitle future owners to construct new or replaced impervious area which, in aggregate, could exceed one of the SUSMP thresholds (Appendix A), then the applicant must take steps to ensure SUSMP requirements can and will be implemented as the subdivision is built out.

If the tentative map application does not include plans for site improvements, the applicant should nevertheless identify the type, size, location, and final ownership of storm water treatment and flow-control facilities adequate to serve common private roadways and any other common areas, and to also manage runoff from an expected reasonable estimate of the square footage of future roofs, driveways, and other impervious surfaces on each individual lot. The City Engineer may condition approval of the map on implementation of storm water treatment and other SUSMP measures when construction occurs on the individual lots. At the City Engineer's discretion, this condition may be enforced by a grant deed of development rights or by a development agreement.

If the City Engineer deems it necessary, the future impervious area of one or more lots may be limited by a deed restriction. This might be necessary when a project is exempted from one or all SUSMP provisions because the total impervious area is below a threshold, or to ensure runoff from impervious areas added after the project is approved does not overload a storm water treatment and flow-control facility.

The City Engineer may require subdivision maps to dedicate an "open space easement, as defined by Government Code Section 51075," to suitably restrict the future building of structures at each storm water facility location if necessary.

In general, in new subdivisions **storm water treatment, infiltration, or flow-control facilities should not be located on individual single-family residential lots**, particularly when those facilities manage runoff from other lots, from streets, or from common areas. A better alternative is to locate storm water facilities on one or more separate, jointly owned parcels.

After consulting with local planning staff, applicants for subdivision approvals will propose one of the following four options, depending on project characteristics and local policies:

1. Show the number of parcels and the total impervious area to be created on all parcels could not, in the future, exceed any of the thresholds in Appendix A.

2. Show that, for each and every lot, the intended use can be achieved with a design which disperses runoff from roofs, driveways, streets, and other impervious areas to self-retaining pervious areas, using the criteria in Chapter 4.

3. Prepare improvement plans showing drainage to treatment and/or flow-control facilities designed in accordance with this BMP manual, and commit to constructing the facilities prior to transferring the lots.

4. Prepare improvement plans showing drainage to treatment and/or flow-control facilities designed in accordance with this BMP manual, and provide appropriate legal instruments to ensure the proposed facilities will be constructed and maintained by subsequent owners.

For the option selected, municipal staff will determine the appropriate conditions of approval, easements, deed restrictions, or other legal instruments necessary to assure future compliance.

Compliance with Flow-Control Requirements

Priority Development Projects (Appendix A) must be designed so that runoff rates and durations are controlled to maintain or reduce pre-project downstream erosion conditions and protect stream habitat. The following text regarding HMP applicability requirements is based on the HMP document, provided in Appendix H. Additionally, the City has prepared an FAQ document related to hydromodification management, which is available on the City's website at www.cityoflamesa.com/stormwater under the "Development Requirements" tab.

► HMP APPLICABILITY REQUIREMENTS

To determine if a proposed project must implement hydromodification controls, refer to the HMP Decision Matrix in Figure 1-2. The HMP Decision Matrix can be used for all projects. For redevelopment projects, flow controls would only be required if the redevelopment project increases impervious area or peak flow rates as compared to pre-project conditions.

It should be noted that all Priority Development Projects will be subject to the Permit's LID and water quality treatment requirements even if hydromodification flow controls are not required.

As noted in Figure 1-2, projects may be exempt from HMP criteria under the following conditions.

- If the project is not a Priority Development Project.
- If the proposed project does not increase the impervious area or peak flows to any discharge location without flow mitigation.
- If the proposed project discharges runoff directly to an exempt receiving water such as the Pacific Ocean, San Diego Bay, an exempt river reach, an exempt reservoir, or a tidally-influenced area.
- If the proposed project discharges to a stabilized conveyance system that extends to the Pacific Ocean, San Diego Bay, a tidally-influenced area, an exempt river reach or reservoir.
- If the contributing watershed area to which the project discharges has an impervious area percentage greater than 70 percent.
- If an urban infill project discharges to an existing hardened or rehabilitated conveyance system that extends beyond the "domain of analysis," the potential for cumulative impacts in the watershed are low, and the ultimate receiving channel has a Low susceptibility to erosion as defined in the SCCWRP channel assessment tool.

If the proposed project decreases the pre-project impervious area and peak flows to each discharge location, without flow mitigation, then a flow-duration analysis is implicitly not required. If continuous simulation flow-frequency and flow duration curves were developed for

such a scenario, the unmitigated post-project flows and durations would be less as compared to pre-project curves.

Proposed exemptions for projects discharging runoff directly to the Pacific Ocean, San Diego Bay or to hardened conveyance systems which transport runoff directly to the Pacific Ocean or San Diego Bay are referred to the 2007 Municipal Permit. Per the Permit, hardened conveyance systems can include existing concrete channels, storm drain systems, etc.

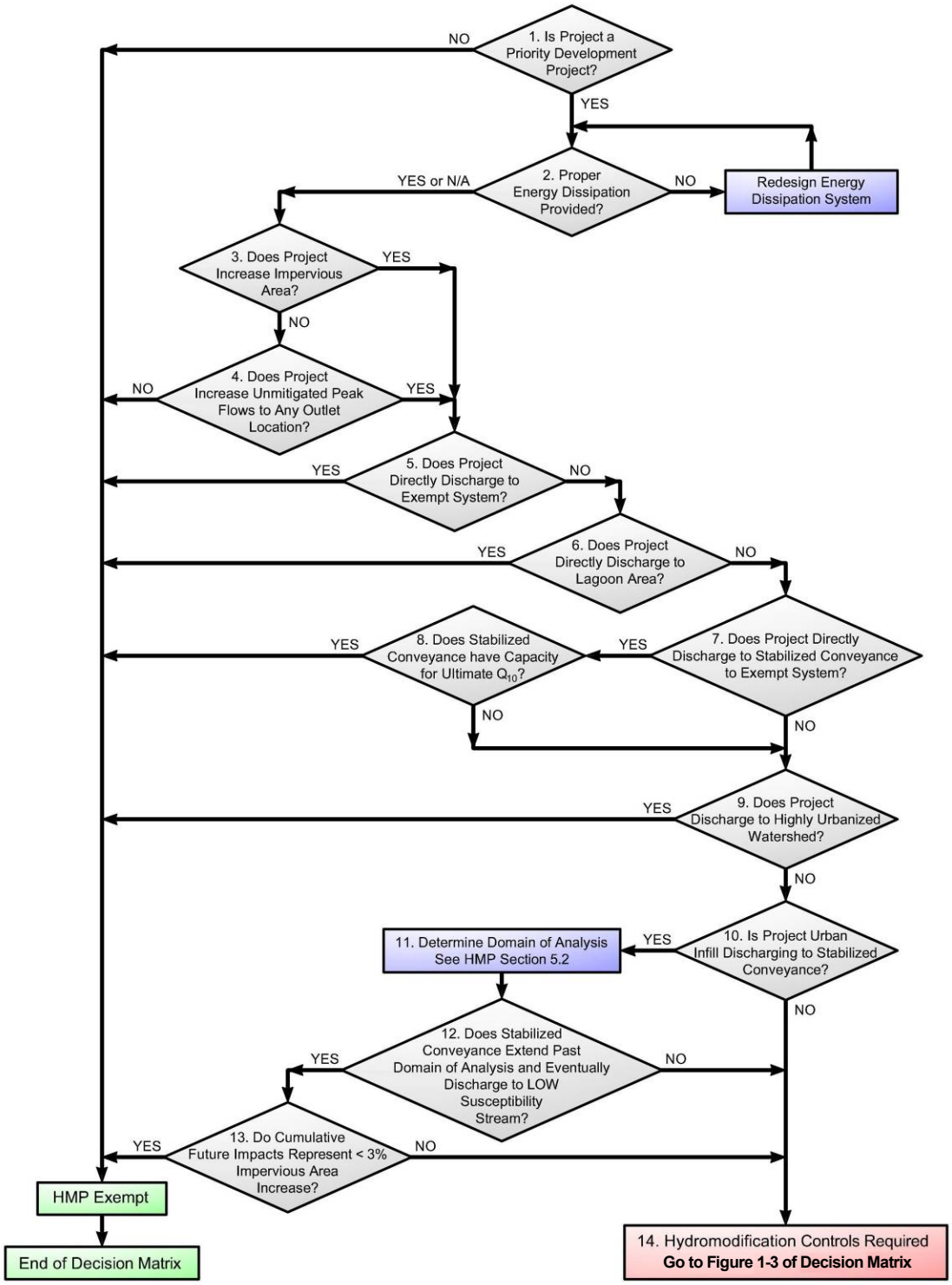

FIGURE 1-2. HMP Applicability Determination

The Municipal Permit also contains language to support exemptions for projects located in highly urbanized areas where the impervious percentage exceeds 70 percent (as calculated for the sub-watershed between the project outfall downstream to the exempt receiving water).

- Figure 1-2, Node 1 – Hydromodification mitigation measures are only required if the proposed project is a Priority Development Project.

- Figure 1-2, Node 2 – Properly designed energy dissipation systems are required for all project outfalls to unlined channels. Such systems should be designed in accordance with the County of San Diego's Drainage Design Manual to ensure downstream channel protection from concentrated outfalls.

- Figure 1-2, Nodes 3 and 4 – Projects may be exempt from hydromodification criteria if the proposed project reduces the pre-project impervious area and if unmitigated post-project outflows (outflows without detention routing) to each outlet location are less as compared to the pre-project condition. The pre and post-project hydrologic analysis should be conducted for the 2 and 10-year design storms and follow single-event methodology set forth in the San Diego Hydrology Manual. This scenario may apply to redevelopment projects in particular.

- Figure 1-2, Node 5 – Potential exemptions may be granted for projects discharging runoff directly to an exempt receiving water, such as the Pacific Ocean, San Diego Bay, an exempt river system (detailed in Table 1-2), or an exempt reservoir system (detailed in Table 1-2). To qualify for this exemption, projects must discharge runoff at an elevation, to be determined by the City, below the 10-year floodplain elevation for a river exemption or below the typical water surface level in a reservoir system. The City may grant, on a case-by-case basis, additional exemptions for projects discharging runoff in the immediate vicinity of exempt river or reservoir systems provided that a stabilized, natural conveyance (non-hardened) is provided between the project discharge location and exempt river or reservoir water surface elevation.

- Figure 1-2, Node 6 – For projects discharging runoff directly to a tidally-influenced lagoon, potential exemptions may also be granted. To qualify for this exemption, projects must discharge runoff at an elevation, to be determined by the City, below the typical water surface level in the lagoon system (such as the mean high tide elevation). The City may grant, on a case-by-case basis, additional exemptions for projects discharging runoff in the immediate vicinity of lagoon systems provided that a stabilized, natural conveyance (non-hardened) is provided between the project discharge location and typical lagoon water surface elevation. Exemptions related to runoff discharging directly to tidally-influenced areas were drafted based upon precedent set in the Santa Clara HMP. Regarding the potential exemption, additional analysis would be required to assess the effects of the freshwater / saltwater balance and the resultant effects on lagoon-system biology. This assessment, which would be required by other permitting processes such as the Army Corps of Engineers, California Department of Fish and Game, etc., must be provided by a certified biologist or other specialist as approved by the City. Such discharges would include an energy dissipation system

(riprap, etc.) designed to mitigate 100-year outlet velocities based upon a free outfall condition. Such a design would be protective of the channel bed and bank from an erosion standpoint.

- Figure 1-2, Nodes 7 and 8 – For projects discharging runoff directly to a hardened conveyance or rehabilitated stream system that extends to exempt receiving waters detailed in Node 5, potential exemptions from hydromodification criteria may be granted. Such hardened or rehabilitated systems could include existing storm drain systems, existing concrete channels, or stable engineered unlined channels. To qualify for this exemption, the existing hardened or rehabilitated conveyance system must continue uninterrupted to the exempt system. In other words, the hardened or rehabilitated conveyance system cannot discharge to an unlined, non-engineered channel segment prior to discharge to the exempt system. Additionally, the project proponent must demonstrate that the hardened or rehabilitated conveyance system has capacity to convey the 10-year ultimate condition flow through the conveyance system. The 10-year flow should be calculated based upon single-event hydrologic criteria as detailed in the San Diego County Hydrology Manual.

- Figure 1-2, Node 9 – As allowed per the Municipal Permit, projects discharging runoff to a highly urbanized watershed (defined as an existing, pre-project impervious percentage greater than 70 percent) may be eligible for an exemption from hydromodification criteria.

  Watershed impervious area calculations for this potential exemption will be measured between the project site discharge location and the connection to a downstream exempt receiving conveyance system, such as the Pacific Ocean, San Diego Bay, or an exempt river system. If a tributary area connects with the main line drainage path between the project site and the exempt system, then the entire watershed area contributing to the tributary shall be included in the calculation. Initial review of County land use indicates that this exemption will likely only apply in a limited number of urbanized coastal areas.

  Percent imperviousness will be calculated based on an area-weighted average of impervious areas associated with commercial, industrial, single-family residential, multi-family residential, open space, and other miscellaneous areas (schools, churches, etc.) representative for the watershed. Representative percent imperviousness values for each land use type may correspond to values recommended in Table 3-1 of the County of San Diego's Hydrology Manual and detailed below or by more specific representative percent impervious calculations (using GIS, etc.), which are often required to represent impervious area percentages for park, school and church sites.

- Figure 1-2, Nodes 10 through 13 – For urban infill projects discharging runoff to an existing hardened or rehabilitated conveyance system, potential limited exemptions from hydromodification criteria may apply where the existing impervious area percentage in the watershed exceeds 40 percent. For the potential exemption application, the domain of analysis must be determined and the existing hardened or rehabilitated conveyance system must extend beyond the downstream terminus of the domain of analysis. The hardened or rehabilitated conveyance system must discharge to a receiving channel with a Low potential for channel susceptibility for this exemption to be granted (channel susceptibility determined using SCCWRP tool). Finally, continuous simulation sensitivity analysis shows that an exemption could only be granted if the potential future development impacts in the watershed would increase the watershed's impervious area percentage by less than 3 percent (as compared to the existing condition in the year 2010). If the potential future cumulative impacts in the watershed could increase the impervious area percentage by more than 3 percent (as compared to existing condition), then no exemption could be granted based on this item. Watershed impervious area calculations for this potential exemption, in which a project discharges to a watershed with an existing impervious areas greater than 40 percent, will be measured upstream from the outfall of the urban conveyance system (to a non-concrete, non-riprap-lined or non-engineered channel) to the contributing watershed boundary (the entire watershed contributing to the discharge outfall).

  Percent imperviousness will be calculated based on an area-weighted average of impervious areas associated with commercial, industrial, single-family residential, multi-family residential, open space, and other miscellaneous areas (schools, churches, etc.) representative for the watershed. Representative percent imperviousness values for each land use type may correspond to values recommended in Table 3-1 of the County of San Diego's Hydrology Manual or by more specific representative percent impervious calculations (using GIS, etc.), which are often required to represent impervious area percentages for park, school and church sites.

Exemptions related to runoff discharging directly to certain river reaches were initially based upon the majority Technical Advisory Committee (TAC) opinion that such river reaches were depositional (aggrading) and that the effects of cumulative watershed impacts to these reaches is minimal. Subsequent justifications for the river reach exemptions were the result of a flow duration curve analysis for the San Diego River

Potential river reaches that would be exempt from hydromodification criteria include only those reaches for which the contributing drainage area exceeds 100 square miles and which have a 100-year design flow in excess of 20,000 cfs. For reference, proposed Caltrans HMP criteria allows for river/creek exemptions for drainage areas of only 10 square miles.

Per recommendations from members of the TAC, San Diego river systems meeting the drainage area and peak flow criteria are typically aggrading (depositional) and have very wide floodplain areas when in the natural condition. In all cases, river reaches meeting the drainage area and peak flow criteria are located downstream of large reservoir systems which effectively block outflows for most storm events. In addition, the river systems meeting these criteria typically have very low gradients. The combination of low gradients, significant peak flow attenuation, and wide floodplain areas translate to a low potential for channel erosion at the upper limit of the proposed geomorphic flow range (10-year flow event).

All exempt river reaches, which are presented in Table 1-1, have drainage areas in excess of 100 square miles and 100-year flow rates in excess of 20,000 cfs. In addition, all proposed river reaches are subject to significant upstream reservoir flow regulation, have wide floodplain or stabilized channel areas, and low gradients. This combination of factors, in association with field observations and years of historical perspective from the TAC members, justifies exemptions for direct discharges to the exempt river reaches provided that properly sized energy dissipation is provided at the outfall location.

TABLE 1-1. Summary of Exempt River Reaches in San Diego County

River	Downstream Limit	Upstream Limit
Otay River	Outfall to San Diego Bay	Lower Otay Reservoir Dam
San Diego River	Outfall to Pacific Ocean	Confluence with San Vicente Creek
San Dieguito River	Outfall to Pacific Ocean	Lake Hodges Dam
San Luis Rey River	Outfall to Pacific Ocean	Upstream river limit of Basin Plan subwatershed 903.1 upstream of Bonsall and near Interstate 15
Sweetwater River	Outfall to San Diego Bay	Sweetwater Reservoir Dam

Table 1-2 provides a summary of exempt reservoirs in San Diego County. Large reservoirs can be exempt systems from a hydromodification standpoint since reservoir storm water inflow velocities are naturally mitigated by the significant tailwater condition in the reservoir. HMP exemptions would only be granted for projects discharging runoff directly to the exempt reservoirs. The City will define "direct discharge" based on the project site conditions. To qualify for the potential exemption, the outlet elevation must be at or below either the normal operating water surface elevation or the reservoir spillway elevation and properly designed energy dissipation must be provided.

TABLE 1-2. Summary of Exempt Reservoirs in San Diego County

Reservoir	Watershed
Barrett Lake	Tijuana River
El Capitain Reservoir	San Diego River
Lake Dixon	Escondido Creek
Lake Heneshaw	San Luis Rey River
Lake Hodges	San Dieguito River
Lake Jennings	San Diego River
Lake Murray	San Diego River
Lake Poway	San Dieguito River
Lake San Marcos	San Marcos Creek
Lake Wohlford	Escondido Creek
Loveland Reservoir	Sweetwater River
Lower Otay Reservoir	Otay River
Miramar Lake	Los Penasquitos Creek
San Vicente Reservoir	San Diego River
Sweetwater Reservoir	Sweetwater River
Upper Otay Reservoir	Otay River

The final exemption category focuses on small urban infill projects where the potential for future cumulative watershed impacts is minimal.

Urban infill projects may be exempt from HMP criteria if:

1. The potential future development impacts within the sub-watershed, as measured from the entire sub-watershed area draining to the existing conveyance system outfall, would not increase the composite impervious area percentage of the sub-watershed by more than 3 percent

2. The project discharges runoff to an existing hardened or rehabilitated conveyance system (storm drain, concrete channel, or engineered vegetated channel) that extends beyond the Domain of Analysis determined for the project site, and

3. The stabilized conveyance system eventually discharges to a channel with a Low susceptibility to erosion, as designed by the SCCWRP channel assessment tool.

► FLOW CONTROL PERFORMANCE CRITERIA

Figures 1-2 and 1-3, which are part of the HMP Decision Matrix, detail how lower flow thresholds would be determined for a project site. Figures 1-4 and 1-5, which detail the SCCWRP lateral and vertical channel susceptibility requirements, complete the HMP Decision Matrix.

The project applicant must first determine whether field investigations will be conducted pursuant to the SCCWRP channel screening tools. If the screening tools are not completed for a proposed project, then the site must mitigate peak flows and durations based on a pre-project condition lower flow threshold of $0.1Q_2$. While a project applicant would be held to the $0.1Q_2$ standard if channel screening tools and assessments are not conducted, less restrictive standards are possible for more erosion-resistant receiving channel sections if the screening tools are completed and the SCCWRP method indicates either a Medium or Low susceptibility to channel erosion .

In such a scenario, the project applicant would also use the critical shear stress calculator to assist in determination of the predicted lower flow threshold. The SCCWRP screening tools and critical shear stress calculator work in concert to determine the lower flow threshold for a given site. Lower flow limits determined by the calculator have been grouped into one of three thresholds – $0.1Q_2$, $0.3Q_2$ or $0.5Q_2$. "Low" susceptibilities from the SCCWRP tool generally correspond to the $0.5Q_2$ threshold, "Medium" susceptibilities generally correspond to the $0.3Q_2$ threshold, and "High" susceptibilities generally correspond to the $0.1Q_2$ threshold. The SCCWRP channel screening tools are required to identify channel conditions not considered by the critical shear stress calculator, which focuses on channel material and cross section. Conversely, the SCCWRP channel screening tools considers other channel conditions including channel braiding, mass wasting, and proximity to the erosion threshold. In cases where the critical shear stress calculator and the SCCWRP screening tools return divergent values, then the most conservative value shall be used as the lower flow threshold for the analysis.

Low-Impact Development (LID) and extended detention facilities are required to meet peak flow and duration controls as follows:

4. For flow rates ranging from 10 percent, 30 percent or 50 percent of the pre-project 2-year runoff event ($0.1Q_2$, $0.3Q_2$, or $0.5Q_2$) to the pre-project 10-year runoff event (Q10), the post-project discharge rates and durations shall not deviate above the pre-project rates and durations by more than 10 percent over and more than 10 percent of the length of the flow duration curve. The specific lower flow threshold will depend on results from the SCCWRP channel screening study and the critical flow calculator.

5. For flow rates ranging from the lower flow threshold to Q_5, the post-project peak flows shall not exceed pre-project peak flows. For flow rates from Q_5 to Q_{10}, post-project peak flows may exceed pre-project flows by up to 10 percent for a 1-year frequency interval. For example, post-project flows could exceed pre-project flows by up to 10 percent for the interval from Q_9 to Q_{10} or from $Q_{5.5}$ to $Q_{6.5}$, but not from Q_8 to Q_{10}.

This HMP recommends the use of LID facilities to satisfy both 85th percentile water quality treatment as well as HMP flow control criteria. Detailed standards for LID implementation have been developed. These standards are provided in the City of La Mesa BMP Manual Part II.

The following methods may be used to meet mitigation requirements.

- Install BMPs that meet design requirements to control runoff from new impervious areas. BMPs including bioretention basins, vegetated swales, planter boxes, extended detention basins, etc. shall be designed pursuant to standard sizing and specification criteria detailed in the City of La Mesa BMP Manual Part II and the HMP/LID Sizing Calculator to ensure compliance with hydromodification criteria.

- Use of the automated sizing calculator (San Diego Sizing Calculator) that will allow project applicants to select and size LID treatment devices or flow control basins. The tool, akin to the sizing calculator developed for compliance with the Contra Costa HMP, uses pre-calculated sizing factors to determine required footprint sizes for flow control BMPs. Continuous simulation hydrologic analyses are currently being developed to determine the sizing factors for various flow control options and development scenarios. The Sizing Calculator also includes an automated pond sizing tool to assist in the design of extended detention facilities for mitigation of hydromodification effects. Because of the Sizing Calculator's ease of implementation, and since hydromodification BMPs can also serve as treatment BMPs, it is anticipated that most project applicants will choose this option instead of seeking compliance through site-specific continuous simulation model preparation. The HMP/LID Sizing Calculator is an implementation tool, which is currently under development by the consultant team and will be completed by the time final HMP criteria go into effect.

- Prepare continuous simulation hydrologic models and compare the pre-project and mitigated post-project runoff peaks and durations (with hydromodification flow controls) until compliance to flow control standards can be demonstrated. The project applicant will be required to quantify the long-term pre- and post-project runoff response from the site and establish runoff routing and stage-storage-discharge relationships for the planned flow control devices. Public domain software such as HSPF, HEC-HMS and SWMM can be used for preparation of a continuous simulation hydrologic analysis.

- Points of compliance must be selected to conduct the comparisons of pre-project and post-project flows and durations. Generally, points of compliance are selected at locations along the project boundary where concentrated flows discharge from the project site. If a point of compliance is selected downstream of the project boundary, then the City should be consulted in advance of the hydromodification analysis. For projects which convey offsite runoff through the site, it is assumed that the offsite runoff would be separated from site runoff. If this is not the case, then the City should be consulted to further refine the points of compliance for the site (an interior project site point of compliance could be required in such a scenario).

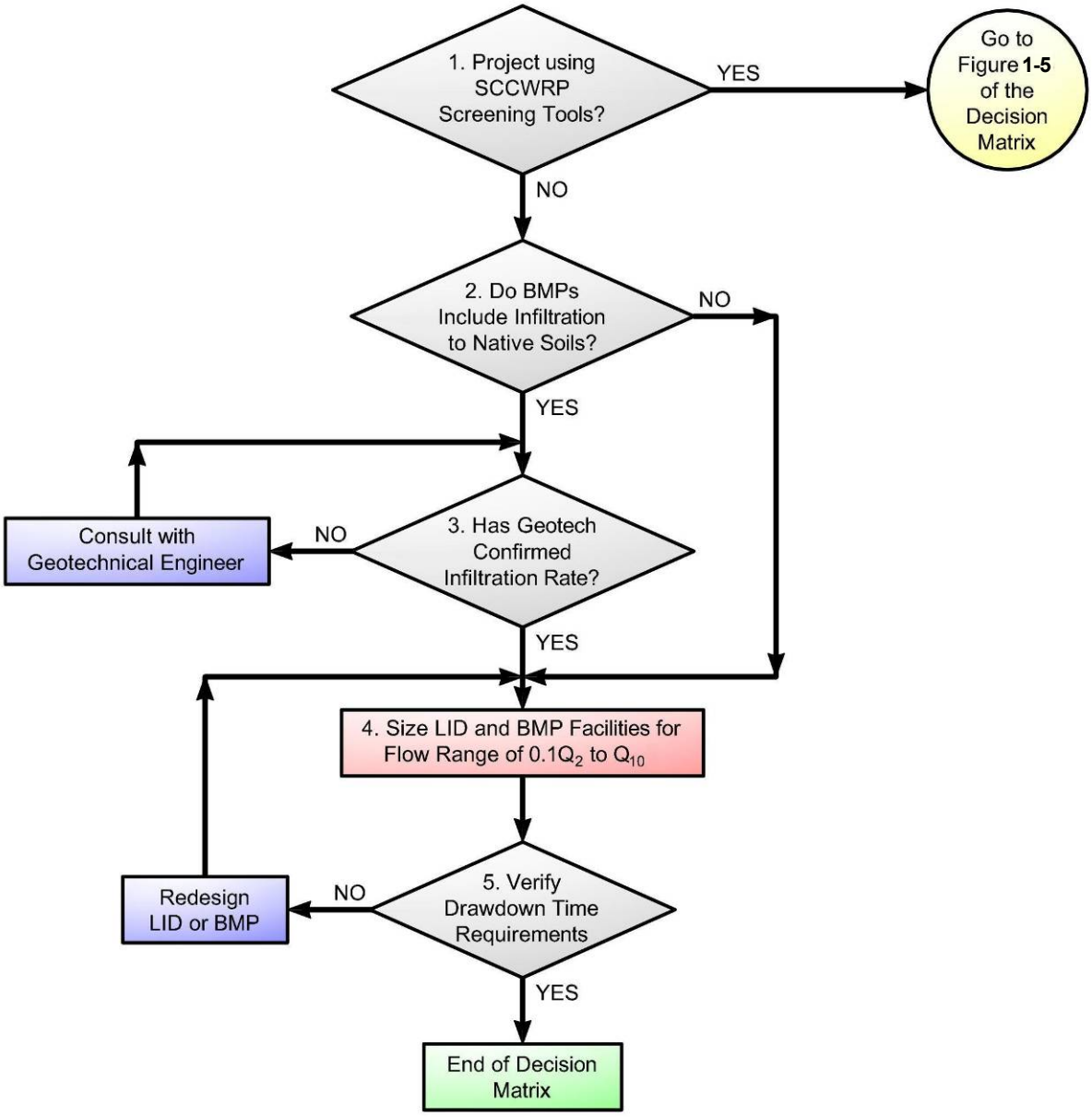

FIGURE 1-3. Mitigation Criteria and Implementation (Part 1)

- Figure 1-3, Node 1 – If the project applicant chooses to complete SCCWRP channel screening tools, then the applicant moves to Figures 1-4 and 1-5 to assess the vertical and lateral susceptibility of the receiving channel systems. Depending on the results of the SCCWRP screening tools and critical flow calculator, it is possible that lower flow thresholds in excess of $0.1Q_2$ may be used. If the project applicant chooses not to complete the SCCWRP channel assessment, then the applicant proceeds with Figure 1-3 of the Decision Matrix.

- Figure 1-3, Node 2 – If the project's LID or BMP approach accounts for the infiltration of runoff to native surrounding soils (below amended soil layers), then consultation with a geotechnical engineer is required (Box 3). If the project mitigation approach does not account for infiltration of runoff, then the applicant would proceed to Box 4.

- Figure 1-3, Node 3 – A geotechnical engineer should determine the allowable infiltration rates to be used for the design of each LID or BMP facility. The geotechnical assessment should also identify potential portions of the project which are feasible for infiltration of runoff.

- Figure 1-3, Node 4 – In this scenario, the SCCWRP channel assessment was not conducted. Therefore, the project applicant would be held to the $0.1Q_2$ lower flow threshold. LID and extended detention facilities must be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.1Q_2$ to Q_{10}.

- Figure 1-3, Node 5 - The Decision Matrix includes language regarding a drawdown time requirements so that standards set forth by the City of La Mesa are met. As a side note, the drawdown requirement would be applied to underground vaults in addition to extended detention basins and the surface ponding areas of LID facilities. Proper maintenance of hydromodification mitigation facilities is essential to guard against potential vector issues as well potential safety issues resulting from long-term standing water. If mitigation facility outlets clog, then runoff will bypass the system and potentially result in additional erosion problems downstream of a site. The City of La Mesa drawdown time requirement is 72 hours.

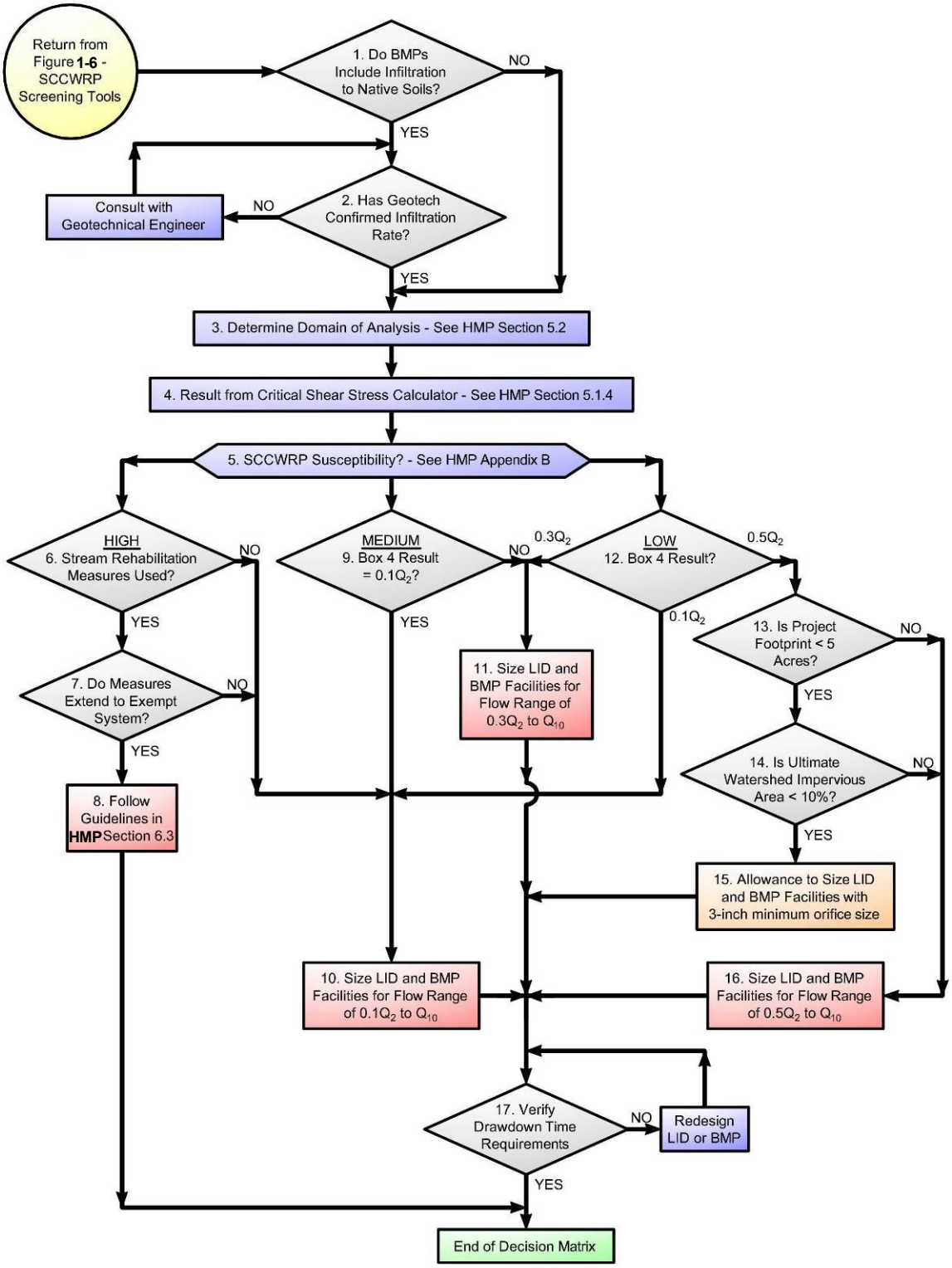

FIGURE 1-4. Mitigation Criteria and Implementation (Part 2)

- Figure 1-4, Node 1 – Use of Figure 1-4 assumes that the project applicant conducted the SCCWRP channel assessment. Box 1 would begin following completion of both the lateral and vertical susceptibility flow charts depicted in Figures 1-4 and 1-5. Box 1 is a decision box asking if the project's LID or BMP approach accounts for the infiltration of runoff to native surrounding soils (below amended soil layers). If the answer is Yes, then consultation with a geotechnical engineer is required (Box 2). If the project mitigation approach does not account for infiltration of runoff, then the applicant would proceed to Box 3.

- Figure 1-4, Node 2 – A geotechnical engineer should determine the allowable infiltration rates to be used for the design of each LID or BMP facility. The geotechnical assessment should also identify potential portions of the project which are feasible for infiltration of runoff.

- Figure 1-4, Node 3 – Pursuant to criteria detailed in HMP Section 5.2, the Domain of Analysis is determined downstream and upstream of the project site. This determination is used to ascertain the required reach length for data collection (channel bed and bank material, channel cross section data, etc.) required for the critical flow calculator (see Box 4).

- Figure 1-4, Node 4 – Pursuant to criteria detailed in HMP Section 5.1.4, the project applicant would run the critical shear stress calculator to determine if the recommended critical flow threshold should be $0.1Q_2$, $0.3Q_2$, or $0.5Q_2$. This result will be compared to the result from the SCCWRP screening analysis (Box 5) to determine the final lower flow threshold for the project.

- Figure 1-4, Node 5 – Pursuant to criteria detailed in HMP Appendix B, the project applicant would determine both the lateral and vertical channel susceptibility rating per guidelines set forth by SCCWRP. If the lateral and vertical tools returned divergent results, then the more conservative result would be used. SCCWRP susceptibility ratings include "High," "Medium" and "Low."

- Figure 1-4, Node 6 – A project applicant would arrive at Box 6 if the SCCWRP channel susceptibility rating was determined to be "High." This decision box inquires as to whether stream rehabilitation measures such as grade control and channel widening will be used as a mitigation measure instead of flow control. It should be noted that stream rehabilitation options are only allowed if the existing receiving channel susceptibility is considered to be "High."

- Figure 1-4, Node 7 – Stream rehabilitation measures are only allowed if the proposed mitigation project extends to a downstream exempt system (such as an exempt river system). If the mitigation measure did not extend to an exempt system, then the potential for cumulative watershed impacts would be more pronounced.

- Figure 1-4, Node 8 – If stream rehabilitation measures are allowed, then guidelines outlined in Section 6.3 of the HMP should be followed to design the in-stream mitigation approach.

- Figure 1-4, Node 9 - A project applicant would arrive at Box 9 if the SCCWRP channel susceptibility rating was determined to be "Medium." If the result from the critical shear stress calculator is also "Medium" (or $0.3Q_2$), then the lower flow threshold would be $0.3Q_2$ (Box 11). If the result from the critical shear stress calculator is "High" (or $0.1Q_2$), then the more conservative value would be used and the lower flow threshold would be $0.1Q_2$ (Box 10).

- Figure 1-4, Node 10 – For stream reaches determined by either the critical flow calculator or the SCCWRP screening tools to have a "High" susceptibility to erosion, LID and extended detention flow control facilities should be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.1Q_2$ to Q_{10}.

- Figure 1-4, Node 11 - For stream reaches determined by either the critical flow calculator or the SCCWRP screening tools to have a "Medium" susceptibility to erosion, LID and extended detention flow control facilities should be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.3Q_2$ to Q_{10}.

- Figure 1-4, Node 12 - A project applicant would arrive at Box 12 if the SCCWRP channel susceptibility rating was determined to be "Low." If the result from the critical shear stress calculator is also "Low" (or $0.5Q_2$), then the lower flow threshold would be $0.5Q_2$ (Box 16 – note potential waiver in Box 13). If the result from the critical shear stress calculator is "High" (or $0.1Q_2$), then the more conservative value would be used and the lower flow threshold would be $0.1Q_2$ (Box 10). If the result from the critical flow calculator is "Medium" (or $0.3Q_2$), then the more conservative value would be used and the lower flow threshold would be $0.3Q_2$ (Box 11).

- Figure 1-4, Node 13 – In some limited situations, namely small developments in rural or lightly developed areas, an allowance for a minimum outlet orifice size may be granted when the receiving channel susceptibility is "Low." This criteria may potentially be used for project footprints less than 5 acres. If the project footprint is greater than 5 acres, then the allowance may not be granted and the applicant would proceed to Box 16.

- Figure 1-4, Node 14 – The potential allowance discussed in Box 13 could only be granted if the ultimate potential impervious area in the sub-watershed is less than 10 percent. If there is potential for the sub-watershed impervious area to exceed 10 percent, then the minimum orifice size criteria may not be granted.

- Figure 1-4, Node 15 – If Boxes 12, 13, and 14 are satisfied, then mitigation facilities may be designed using a 3-inch minimum outlet orifice size.

- Figure 1-4, Node 16 - For stream reaches determined by either the critical flow calculator or the SCCWRP screening tools to have a "Low" susceptibility to erosion – and for projects where the minimum outlet orifice criteria does not apply - LID and extended detention flow control facilities should be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.5Q_2$ to Q_{10}.

- Figure 1-4, Node 17 – For all hydromodification mitigation designs, the Decision Matrix includes language regarding a drawdown time requirements so that standards set forth by the City of La Mesa are met. As a side note, the drawdown requirement would be applied to underground vaults in addition to extended detention basins and the surface ponding areas of LID facilities. Proper maintenance of hydromodification mitigation facilities is essential to guard against potential vector issues as well potential safety issues resulting from long-term standing water. If mitigation facility outlets clog, then runoff will bypass the system and potentially result in additional erosion problems downstream of a site. The City of La Mesa drawdown time requirement is 72 hours.

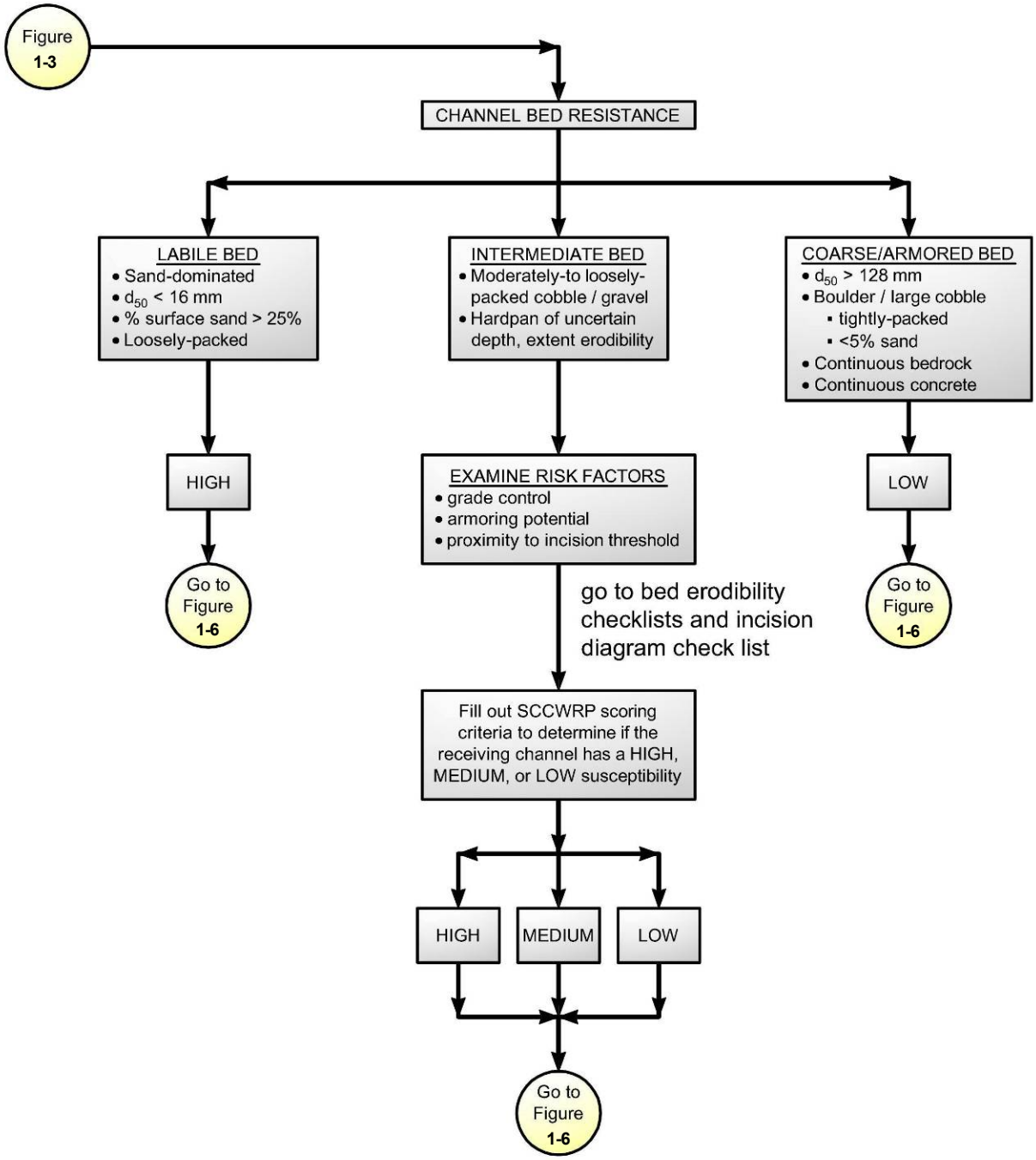

FIGURE 1-5. SCCWRP Vertical Susceptibility

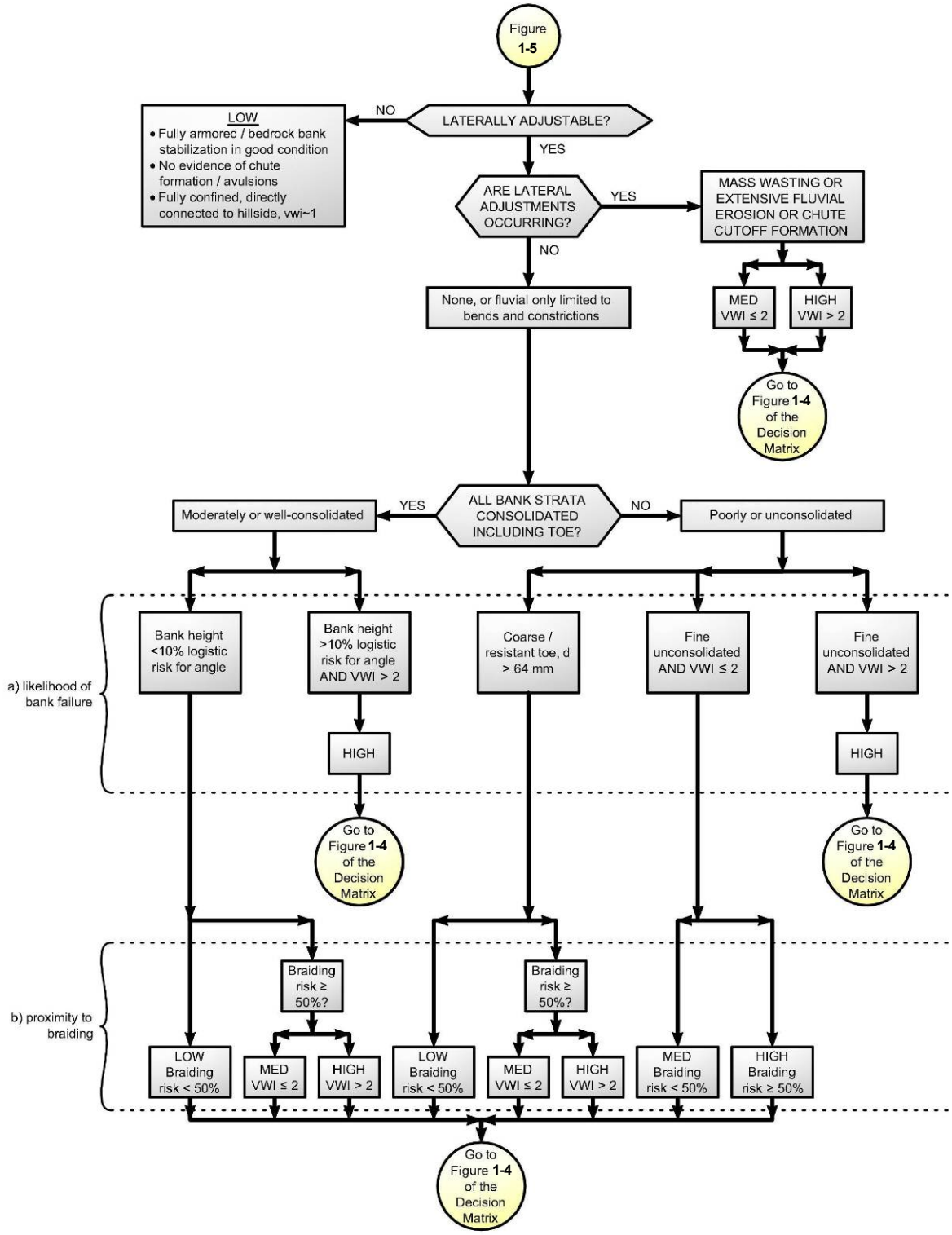

FIGURE 1-6. Lateral Channel Susceptibility

Grandfathering. Projects with lawful approval prior to January 14, 2011 (such as a development agreement, vested tentative map, or a building or grading permit), may not have to meet the hydromodification management requirements. Verify with municipal staff.

Waivers from Numeric Sizing Criteria

The NPDES permit allows for a project to be waived from numeric sizing criteria for storm water treatment only if all available treatment facilities have been considered and found **infeasible**. Municipal staff must inform the Water Board within 5 days of granting a waiver. Other SUSMP requirements—including site designs to minimize imperviousness and source control BMPs—will still apply.

Experience has shown implementation of LID facilities, as described in Chapter 4, is feasible on nearly all development sites. However, the use of LID to retrofit existing drainage systems, to manage runoff from sites smaller than one acre in pedestrian-oriented developments, or to manage runoff from widened portions of roadways, sometimes presents special challenges. In these special situations, applicants should see the discussion of "Selection of Storm Water Treatment Facilities" in Chapter 2 and evaluate the options described on page 41 in order (depending on the specific characteristics of the project and as determined by the City Engineer). All the options listed meet the numeric sizing criteria in the NPDES permit.

If infeasibility of all these options can be established, the City Engineer may determine eligibility of the project for a waiver.

References and Resources:

- RWQCB Order R9-2007-0001 (Storm Water NPDES Permit)
- Project Clean Water web page

Chapter 2

Concepts and Criteria

Technical background and explanations of policies and design requirements

The Regional Water Board reissued a municipal storm water NPDES permit to San Diego County, its 18 cities, the San Diego Unified Port District, and the San Diego Regional Airport Authority in January 2007. The permit mandates a comprehensive program to prevent storm water pollution. That program now includes street sweeping, maintenance of storm drains, business inspections, public outreach, construction site inspections, monitoring, and studies of stream and ocean health, and control of runoff pollutants from new developments and redevelopments.

Permit Provision D.1.d. requires the City of La Mesa to regulate projects in specific categories (Appendix A) to:

1. Reduce discharges of pollutants to the maximum extent practicable.
2. Prevent runoff discharges from causing or contributing to a violation of water quality standards.

The City of La Mesa, along with the other Copermittees, have created a Low Impact Development (LID) design procedure (Chapter 4) that ensures consistent and thorough implementation of the Regional Water Board's requirements. This chapter explains the technical background of the LID approach and how it was derived.

The previous permit, issued in 2001, included a requirement to control the post-development peak storm water runoff rates and velocities to maintain or reduce pre-development downstream erosion and protect stream habitat. The 2007 permit includes, in addition to this ongoing requirement, a new requirement to develop a hydromodification management plan (HMP) to identify and define a methodology and performance criteria to ensure flow rates and durations do not exceed pre-project runoff where increased runoff could cause erosion or other significant adverse impacts to beneficial uses.

As required by the NPDES permit, the City of La Mesa has adopted final hydromodification criteria. See Chapter One.

Water-Quality Regulations

Provision D.1 requires the City of La Mesa to condition development approvals on incorporation of specified storm water controls.

Provision D.1 requires applicable new developments and redevelopments:

- Design the site to conserve natural areas, existing trees and vegetation and soils, to maintain natural drainage patterns, to minimize imperviousness, to detain runoff, and to infiltrate runoff where feasible
- Cover or control sources of storm water pollutants
- Treat runoff prior to discharge. Provision E.10 states: "Urban runoff treatment and/or mitigation must occur prior to the discharge of urban runoff into a receiving water. Federal regulations at 40 CFR 131.10(a) state that in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S."
- Ensure runoff does not exceed pre-project peaks and durations where increases could affect downstream habitat or other beneficial uses
- Maintain treatment and flow-control facilities

The City of La Mesa maintains a database to track approved installations of treatment facilities and to verify facilities are maintained. The City's annual report to the Regional Water Board includes a list of development projects subject to SUSMP conditions and descriptions of those projects that:

- Received a waiver from SUSMP criteria; or
- Used hydrologic controls used to meet HMP requirements, including a description of the controls.

The City of La Mesa must also report the number of violations and enforcement actions taken upon development projects. The City of La Mesa's programs are subject to audit by the Regional Water Board.

The City of La Mesa—not the Regional Water Board or its staff—is charged with ensuring development projects comply with the D.1 requirements. Regional Water Board staff sometimes review storm water controls and hydromodification impacts in connection with applications for Clean Water Act Section 401 water-quality certification, which is required for projects that involve work, such as dredging or placement of fill, within streams, creeks, or other waters of the US.

► MAXIMUM EXTENT PRACTICABLE

Clean Water Act Section 402(p)(3)(iii) sets the standard for storm water controls as "maximum extent practicable," but doesn't define that term. As implemented, "maximum extent practicable" is ever-changing and varies with conditions.

Many storm water controls, including LID facilities, have proven to be practicable in most site development projects. To achieve fair and effective implementation, criteria, and guidance, requirements for controls must be detailed and specific—while also offering the right amount of flexibility or exceptions for special cases. The NPDES permit includes various standards, including hydrologic criteria, which have been found to comprise "maximum extent practicable." This BMP Manual is to be continuously improved and refined based on the experience of municipal planners and engineers, with input from land developers and development professionals. By following the BMP Manual, applicants can ensure their project design meets "maximum extent practicable."

► BEST MANAGEMENT PRACTICES

Clean Water Act Section 402(p) and USEPA regulations (40 CFR 122.26) specify a municipal program of "management practices" to control storm water pollutants. **Best Management Practice (BMP)** refers to any kind of procedure, activity, or device designed to minimize the quantity of pollutants that enter the storm drain system. BMPs are typically used in place of assigning numeric effluent limits. The criteria for source control BMPs and treatment and flow-control facilities are crafted to fulfill "maximum extent practicable."

To minimize confusion, this guidebook refers to "facilities," "features," or "controls" to be incorporated into development projects. All of these are BMPs.

Pollutants of Concern

NPDES Permit Provision D.1.d.(3) requires the City of La Mesa to develop and implement a procedure for pollutants of concern to be identified for each Priority Development Project.

Documentation of the approach to identifying pollutants of concern and selecting BMPs and facilities follows.

► GROUPING OF POTENTIAL POLLUTANTS OF CONCERN

Urban runoff from a developed site has the potential to contribute pollutants, including oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system and receiving waters. For the purposes of identifying pollutants of concern and associated storm water BMPs, pollutants are grouped in nine general categories as follows:

- **Sediments** are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms

survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

- **Nutrients** are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

- **Metals** are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary sources of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

- **Organic compounds** are carbon-based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.

- **Trash** (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.

- **Oxygen-Demanding Substances** includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-

demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

- Primary sources of **oil and grease** are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

- **Bacteria and Viruses** are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

- **Pesticides** (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

► IDENTIFYING POLLUTANTS OF CONCERN BASED ON LAND USES

Table 2-1 associates pollutants with the categories of Priority Development Projects. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

► WATERSHEDS WITH SPECIAL POLLUTANT CONCERNS

Receiving water conditions may require specialized attention. The three conditions to consider include:

- Ocean waters designated as an "Area of Special Biological Significance" (ASBS)
- 303(d) listed waters; and
- Waters with established TMDLs.

TABLE 2-1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Land Use Type	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft²	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

The State Water Resources Control Board's California Ocean Plan identifies thirty-four locations along the California coast as **Areas of Special Biological Significance (ASBS)**. Currently, there are no ASBS downstream of the City of La Mesa. See Table 2-2 for a list of applicable downstream water bodies. Please note that while runoff from the City drains to these water bodies, the actual water bodies are not located within the City itself.

TABLE 2-2. City of La Mesa Drainage Basins.

Drainage Basin	Percent of City of La Mesa Area	Receiving Waterbody	Hydrologic Subarea	Watershed
Alvarado	51	San Diego River	907.11	San Diego River
Lake Murray	1	Lake Murray		
University	28	Chollas Creek	908.22	San Diego Bay
Lemon Grove	6			
Spring Valley	14	Sweetwater River	909.12	

The NPDES Permit identifies several receiving waters as impaired for constituents or water quality effects pursuant to **Section 303(d)** of the Clean Water Act. Placement of a water onto the list requires the Regional Board to make further analysis of the impairment and development of total maximum daily loads (TMDLs) for addressing the impairment. The 303(d) listing in itself does not demand that a project proponent select BMPs on the basis of the impairment; however, the project proponent should be cognizant of the impairment and the future implications a TMDL might have upon the proposed land use. The San Diego River, Chollas Creek, and Lake Murray, all of which are on the 2010 CWA Section 303(d) list, are located downstream of the City of La Mesa. The San Diego River is impaired for *Enterococcus*, fecal coliform, low dissolved oxygen, nitrogen, phosphorus, total dissolved solids (TDS), and toxicity. Chollas Creek is impaired for indicator bacteria, copper, diazinon, lead, zinc, phosphorus, total nitrogen as N, and trash. Lake Murray, which drains a very small portion of the City, is 303(d) listed for nitrogen and pH.

Check the website below for the most current 303(d) listings.
http://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/index.shtml

Once a TMDL is established it may impose conditions on development either through an implementation plan and schedule for the listed water, or through special conditions required of the City of La Mesa affected by the numeric criteria of the TMDL. At this time, several 303(d) listings in San Diego County are at various stages of TMDL development with only four TMDLs having been adopted by the Regional Board. However, there are approximately 190 pending TMDLs in the county.

Applicable current and pending **TMDLs** in the La Mesa area include:

- Adopted TMDL for diazinon for Chollas Creek;

- Adopted TMDL for copper, lead, and zinc for Chollas Creek,
- Adopted TMDL for indicator bacteria for twenty beaches and creeks in the San Diego Region.
- Pending TMDL for sediment toxicity for the mouth of Chollas Creek,

The applicant should meet with municipal staff to determine if any project characteristics or watershed characteristics affect selection and design of BMPs. Except in rare circumstances, the use of the LID Design Guide (Chapter 4) and the Storm Water Pollutant Sources/Source Control Checklist (Appendix C) will ensure your project complies with all storm water requirements.

Selection of Permanent Source Control BMPs

Based on identification of potential pollutants of concern associated with various types of facilities, the City of La Mesa has developed a Storm Water Pollutant Sources/Source Control Checklist (Appendix C) of "maximum extent practicable" source controls associated with each facility type. This approach ensures appropriate BMPs are applied to potential sources of each pollutant of concern.

Selection of Storm Water Treatment Facilities

Table 2-3, below, categorizes pollutants of concern related to fate and pathways.

Table 2-4, below, includes a general comparison of how various types of treatment facilities perform for each group of pollutants.

TABLE 2-3. Grouping of Potential Pollutants of Concern by Fate During Storm Water Treatment

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

TABLE 2-4. Groups of Pollutants and Relative Effectiveness of Treatment Facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro -dynamic Devices	Vegetated Swales
Coarse Sediment and Trash	High	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low	Medium
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low	Low

*See page 41 for a discussion of selection of treatment facilities in special situations.

Based on this analysis, the City of La Mesa has determined that the following types of facilities are appropriate for treatment of runoff potentially containing most pollutants of concern. These types of facilities can be used for storm water treatment and hydromodification flow control for all land uses in all watersheds, except where site-specific constraints make them infeasible.

- Infiltration facilities or practices, including dry wells, infiltration trenches, infiltration basins, and other facilities that infiltrate runoff to native soils (sized to detain and infiltrate a volume equivalent to the 85th percentile 24-hour water quality runoff event – greater capacity required to provide hydromodification flow control).

- Bioretention facilities and media filters that detain storm water and filter it slowly through soil or sand (sized with a surface area at least 0.04 times the effectively impervious tributary area for water quality treatment – a larger sizing factor is required to provide hydromodification control).

- Extended detention basins, wet ponds, and wetlands or other facilities using settling (sized to detain a volume equivalent to runoff from the tributary area generated by the 85th percentile 24-hour water quality runoff event – greater capacity required to provide hydromodification flow control).

The recommended design procedure in Chapter 4 integrates LID practices—optimizing the site design, using pervious surfaces, and dispersing of runoff to adjacent pervious areas—with the use of infiltration facilities, detention basins, and bioretention facilities to meet NPDES permit LID requirements, treatment requirements, and flow-control requirements in a cost-effective, unified design.

Oil/water separators ("water quality inlets"), storm drain inlet filters, and hydrodynamic separators, including vortex separators and continuous deflection separators ("CDS units"), are

less effective means of storm water treatment, although they may be used in series with more effective facilities.

Underground vaults typically lack the detention time required for settling of fine particles associated with storm water pollutants. They also require frequent maintenance and may retain stagnant water, potentially providing harborage for mosquitoes. Because vaults may be "out of sight, out of mind," experience shows that the required maintenance may not occur.

Lack of space, in itself, is not a suitable justification for using a less-effective treatment on a development site, because the uses of the site and the site design can be altered as needed to accommodate bioretention facilities or planter boxes. In most cases, these effective facilities can be fit into required landscaping setbacks, easements, or other unbuildable areas.

Where possible, drainage to inlets, and drainage away from overflows and underdrains, should be by gravity. Where site topography makes it infeasible to accommodate gravity-fed facilities in the project design, the design flow may be captured in a vault or sump and pumped via force main to an effective facility.

The following situations sometimes present special challenges:

- Portions of sites which are not being developed or redeveloped, but which must be retrofit to meet treatment requirements in accordance with Provision D.1.d.(1)(a) which states in part: "Where redevelopment results in an increase of, or replacement of, more than fifty percent of the impervious surface of a previously existing development, the numeric sizing criteria applies to the entire development."

- Sites smaller than one acre approved for development or redevelopment as part of a municipality's stated objective to preserve or enhance a pedestrian-oriented "smart-growth" type of urban design.

- Roadway widening projects.

In these special situations, the following types of facilities should each be evaluated in priority order (depending on the specific characteristics of the site and as determined by the municipal storm water coordinator) until a feasible design is found.

1. Bioretention areas or planter boxes fed by gravity.

2. Capture of the design flow in a vault or sump and pumping to bioretention areas or planter boxes.

3. A subsurface sand or media filter with a maximum design surface loading rate of 5 inches per hour and a minimum media depth of 18 inches. The sand surface must be made accessible for periodic inspection and maintenance (for example, via a removable grating).

4. A higher-rate surface biofilter, such as a tree-pit-style unit. The grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units.

5. A higher-rate vault-based filtration unit (for example, vaults with replaceable cartridge filters filled with inorganic media).

Proprietary Devices
Many currently available proprietary devices do not meet City of La Mesa requirements when used alone for storm water treatment. Consult with municipal staff before proposing these devices.

Many proprietary storm water treatment devices are currently marketed, and new brands will be introduced. Applicants and applicants' engineers and design professionals should review with municipal staff any proposals for using proprietary devices for storm water treatment before they commence work on preliminary site layout, drainage plans, grading plans, or landscape plans.

Hydrology for NPDES Compliance

► IMPERVIOUSNESS

Schueler (1995) proposed **imperviousness** as a "unifying theme" for the efforts of planners, engineers, landscape architects, scientists, and local officials concerned with urban watershed protection. Schueler argued (1) that imperviousness is a useful indicator linking urban land development to the degradation of aquatic ecosystems, and (2) imperviousness can be quantified, managed, and controlled during land development.

Imperviousness has long been understood as the key variable in urban hydrology. Peak runoff flow and total runoff volume from small urban catchments is usually calculated as a function of the ratio of impervious area to total area **(rational method)**. The ratio correlates to the runoff factor, usually designated "C". Increased flows resulting from urban development tend to increase the frequency of small-scale flooding downstream.

Imperviousness links urban land development to degradation of aquatic ecosystems in two ways.

First, the combination of paved surfaces and piped runoff efficiently collects urban pollutants and transports them, in suspended or dissolved form, to surface waters. These pollutants may originate as airborne dust, be washed from the atmosphere during rains, or may be generated by automobiles and outdoor work activities.

Second, increased peak flows and runoff durations typically cause erosion of stream banks and beds, transport of fine sediments, and disruption of aquatic habitat. Measures taken to control stream erosion, such as hardening banks with riprap or concrete, may permanently eliminate habitat. By reducing infiltration to groundwater, imperviousness may also reduce dry-weather stream flows.

Imperviousness has two major components: rooftops and transportation (including streets, highways, and parking areas). The transportation component is usually larger and is more likely to be **directly connected** to the storm drain system.

The effects of imperviousness can be mitigated by disconnecting impervious areas from the drainage system and by encouraging detention and retention of runoff near the point where it is generated. Detention and retention reduce peak flows and volumes and allow pollutants to settle out or adhere to soils before they can be transported downstream.

► LOW IMPACT DEVELOPMENT REQUIREMENTS

The NPDES permit requires LID be used on all projects to minimize directly connected impervious area and promote infiltration. For Priority Development Projects, the minimum standards are:

- Drain a portion of impervious areas into pervious areas, if any.
- Design and construct pervious areas, if any, to effectively receive and infiltrate runoff from impervious areas, taking into account soil conditions, slope, and other pertinent factors.
- Construct a portion of paved areas with low traffic and appropriate soil conditions with permeable surfaces.

The LID design procedure in Chapter 4 incorporates these requirements into an integrated design which meets sizing requirements for storm water treatment facilities and flow-control (hydromodification management) requirements.

► SIZING REQUIREMENTS FOR STORM WATER TREATMENT FACILITIES

The guidance in Chapter 4 was crafted to ensure LID facilities comply with the NPDES permit's hydraulic sizing requirements for storm water treatment facilities and flow-control facilities. The technical background follows.

Most runoff is produced by frequent storms of small or moderate intensity and duration. Treatment facilities are designed to treat smaller storms and the first flush of larger storms—approximately 80% of average annual runoff.

The NPDES permit identifies two types of treatment facilities—volume-based and flow-based.

Volume-based facilities must be designed to infiltrate, filter, or treat the volume of runoff produced from a 24-hour 85th percentile storm event as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map. As shown on the map, rainfall depths vary from about 0.55" to 1.55".

For **flow-based** facilities, the NPDES permit specifies the rational method be used to determine flow. The rational method uses the equation

$Q = CiA$, where

Q = flow

C = weighted runoff factor between 0 and 1

i = rainfall intensity

A = area

The permit identifies two alternatives for calculating rainfall intensity:

1. the 85th percentile rainfall intensity times two, or
2. 0.2 inches per hour.

It is typically found that both methods yield similar results. The 0.2 inches per hour rainfall intensity should be used for sizing flow-based treatment facilities.

The 0.2 inches per hour criterion is the basis for a **consistent countywide sizing factor** for bioretention facilities when used for storm water treatment only (i.e., not for flow control). The factor is based on maintaining a minimum percolation rate of 5 inches per hour through the engineered soil mix. The sizing factor is the ratio of the design intensity of rainfall on tributary impervious surfaces (0.2 inches/hour) to the design percolation rate in the facility (5 inches/hour), or **0.04** (dimensionless).

► FLOW-CONTROL (HYDROMODIFICATION MANAGEMENT)

The NPDES permit specifies for applicable projects:

> … post-project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

Refer to Appendix H to review the final Hydromodification Management Plan (HMP) developed by the San Diego Copermittees and approved by the RWQCB in July 2010. A summary of the applicability criteria from the HMP document is provided in Chapter 1 of this BMP Manual.

Criteria for Infiltration Devices

The NPDES permit restricts the design and location of "infiltration devices" that, as designed, may bypass filtration through surface soils before reaching groundwater. These devices include:

- Infiltration basins.
- Infiltration trenches (includes French drains).
- Unlined retention basins (i.e., basins with no outlets).

- Unlined or open-bottomed vaults or boxes installed below grade (dry wells).

Infiltration devices may not be used in:

- Areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway);
- Automotive repair shops;
- Car washes;
- Fleet storage areas (bus, truck, etc.);
- Nurseries;
- Other areas with pollutant sources that could pose a threat to groundwater, as designated by the City of La Mesa.

The vertical distance from the base of any infiltration device to the seasonal high groundwater mark shall be at least 10 feet. Infiltration devices shall be located a minimum of 100 feet horizontally from any known water supply wells.

In addition, infiltration devices are not recommended where:

- The infiltration device would receive drainage from areas where chemicals are used or stored, where vehicles or equipment are washed, or where refuse or wastes are handled.
- Surface soils or groundwater are polluted.
- The facility could receive sediment-laden runoff from disturbed areas or unstable slopes.
- Increased soil moisture could affect the stability of slopes of foundations.
- Soils are insufficiently permeable to allow the device to drain within 72 hours.

► MOST LID FEATURES AND FACILITIES ARE NOT INFILTRATION DEVICES

Self-treating and self-retaining areas, pervious pavements, bioretention facilities, and planter boxes are not considered to be infiltration devices.

Bioretention facilities work by percolating runoff through 18 inches or more of engineered soil. This removes most pollutants before the runoff is allowed to seep into native soils below. Further pollutant removal typically occurs in the unsaturated (vadose) zone before moisture reaches groundwater.

Where there is concern about the effects of increased soil moisture on slopes or foundations, an impermeable barrier may be added so the facility is "flow through" and all treated runoff is underdrained away from the facility. See the design sheets for Bioretention Facilities and Flow-Through Planters in Appendix B.

References and Resources:

- RWQCB Order R9-2007-0001 (Storm Water NPDES Permit)
- *County of San Diego Low Impact Development Handbook*
- Clean Water Act Section 402(p)
- 40 CFR 122.26
- San Diego Regional Water Quality Control Board—TMDLs
- State Water Resources Control Board—Ocean Standards
- *Site Planning for Urban Stream Protection* (Schueler, 1995).
- "Application of Water-Quality Engineering Fundamentals to the Assessment of Stormwater Treatment Devices" (Salvia, 2000).

Chapter 3

Preparing Your Project Submittal

Step-by-step assistance to demonstrate compliance.

Your Project Submittal will demonstrate your project complies with all applicable requirements in the storm water NPDES permit—to minimize imperviousness, retain or detain storm water, slow runoff rates, incorporate required source controls, treat storm water prior to discharge, control runoff rates and durations, and provide for operation and maintenance of treatment and flow-control facilities.

Submittal requirements vary from jurisdiction to jurisdiction. See below for the specific requirements of the City of La Mesa.

Typically, your Project Submittal must be coordinated with your application for discretionary approvals and must have sufficient detail to ensure the storm water design, site plan, and landscaping plan are congruent.

A complete and thorough Project Submittal will facilitate quicker review and fewer cycles of review. The City of La Mesa requires a submittal for every applicable project. The procedures outlined in this chapter are preferred by the City of La Mesa; any other approaches to meeting the requirements of this BMP Manual must be shown by the project proponent to be defensibly equivalent or better. Review and approval of water quality documents by City of La Mesa staff will be most efficient when proponents follow the methodology and direction outlined in this Chapter.

In order to meet SUSMP requirements, your submittal will be a Standard Post Construction BMP Plan (SPCBMPP) or a Post Construction Water Quality Technical Report (PCWQTR), depending on the outcome of the "Storm Water Requirements Applicability Checklist" in Appendix A. If you need to prepare a SPCBMPP, see Appendix G for appropriate guidance. If your project is a Priority Development Project, you will need to prepare a PCWQTR as directed in this chapter. **Municipal staff may use a review checklist** such as the following example to evaluate your Project Submittal:

EXAMPLE PROJECT SUBMITTAL CHECKLIST

SUBMITTAL COMPONENT REQUIREMENTS FOR PRIORITY DEVELOPMENT PROJECTS

- ❒ Completed "Storm Water Requirements Applicability Checklist" (Appendix A)
- ❒ Vicinity Map
- ❒ Site Map (See below for contents of Exhibit.)
- ❒ PCWQTR (See below for contents of Report.)
- ❒ Drainage Study (with Hydromodification, if applicable)

CONTENTS OF EXHIBIT (SITE MAP)

Show all of the following on drawings:

- ❒ Show entire property on one map. Use key map if multiple sheets are necessary. (Step 1 in the following step-by-step instructions)
- ❒ Existing natural hydrologic features (depressions, watercourses, floodplains, relatively undisturbed areas) and significant natural resources. (Step 1)
- ❒ Areas of potential soil erosion on the property and downstream of the project. (Step 1)
- ❒ Soil types and depth to groundwater. (Step 1)
- ❒ Existing and proposed site drainage network and connections to drainage off-site, including surface conveyances, private storm drain systems, and municipal storm drain inlets. (Step 3)
- ❒ Proposed design features and surface treatments used to minimize imperviousness. (Step 3)
- ❒ Entire site divided into separate drainage areas, with each area identified as self-treating, self-retaining (zero-discharge), draining to a self-retaining area, or draining to an IMP. (Step 3)
- ❒ For each drainage area, types of impervious area proposed (roof, plaza/sidewalk, and streets/parking) and area of each. (Step 3)
- ❒ Proposed locations and sizes of treatment or flow-control facilities. (Step 3)
- ❒ Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix C and corresponding required source controls. (Step 4)

CONTENTS OF REPORT

Include all of the following in your PCWQTR:

- ❒ Table of Contents
- ❒ Identification of the watershed(s), downstream waterbodies, waterbody impairments, and pollutants of concern (Step 1)
- ❒ Narrative analysis or description of site features and conditions that constrain, or provide opportunities for, storm water control. (Step 2)
- ❒ If the project is exempt from HMP requirements, a discussion must be included demonstrating which exemption is being claimed and why the project qualifies (Step 2).

- ❒ Demonstrate how hydromodification requirements are met, including calculations justifying determination of lower flow thresholds and the sizing of LID or extended detention facilities to provide for hydromodification flow control. Field investigation results and continuous simulation results should also be included where applicable (Step 3).
- ❒ Narrative description of site design characteristics that protect natural resources. (Step 3)
- ❒ Narrative description and/or tabulation of site design characteristics, building features, and pavement selections that reduce imperviousness of the site. (Step 3)
- ❒ Basis for selection of each proposed engineered LID IMP or alternative treatment facility. (Step 3)
- ❒ Tabulation of proposed pervious and impervious area, showing self-treating areas, self-retaining areas, and areas tributary to each treatment or flow-control facility. (Step 3)
- ❒ Preliminary designs, including calculations, for each infiltration, treatment, or flow-control facility. Elevations should show sufficient hydraulic head for each. (Step 3)
- ❒ A table of identified pollutant sources and for each source, the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix C. (Step 4)
- ❒ General maintenance requirements for infiltration, treatment, and flow-control facilities (Step 5)
- ❒ Means by which facility maintenance will be financed and implemented in perpetuity. (Step 5)
- ❒ Statement accepting responsibility for operation & maintenance of facilities (Step 5).
- ❒ Identification of any conflicts with codes or requirements or other anticipated obstacles to implementing the proposed facilities in the submittal (Step 6).
- ❒ Construction Plan SUSMP Checklist (Step 6).
- ❒ Certification by a registered civil engineer (Step 6).

Step by Step

Suggested coordination with site and landscape design

Plan and design your storm water controls integrally with the site planning and landscaping for your project. It's best to start with general project requirements and preliminary site design concepts, then prepare the detailed site design, landscape design, and storm water control design simultaneously. **This will help ensure that your site plan, landscape plan, and Project Submittal are congruent.**

Begin with general project requirements and program.

The following step-by-step procedure should optimize your design by identifying the best opportunities for storm water controls **early in the design process.**

The recommended steps are:

Sketch conceptual site layout, building locations, and circulation.

1. Assemble needed information.
2. Identify site opportunities and constraints.
3. Follow the LID design guidance in Chapter 4 to analyze your project for LID and to develop and document your drainage design.
4. Specify source controls using the sources/source control checklist in Appendix C.
5. Plan for ongoing maintenance of treatment and flow-control facilities.
6. Complete the Project Submittal.

Revise site layout, building locations, and circulation to accommodate LID design. Develop land-scaping plan.

Submit Site Plan, Landscape Plan, and SUSMP Submittal

Municipal staff may recommend you prepare and submit a preliminary site design prior to formally applying for planning and zoning approvals. Your preliminary site design should incorporate a conceptual plan for site drainage, including self-treating and self-retaining areas and the location and approximate sizes of any treatment facilities. This additional up-front design effort will save time and avoid potential delays later in the review process.

Step 1: Assemble Needed Information

To select types and locations of treatment facilities, the designer needs to know the following site characteristics:

- **Existing natural hydrologic features** and natural resources, including any contiguous natural areas, wetlands, watercourses, seeps, or springs.

- **Existing site topography**, including contours of any slopes of 4% or steeper, general direction of surface drainage, local high or low points or depressions, any outcrops or other significant geologic features.
- **Zoning**, including requirements for **setbacks** and **open space**.
- **Public Works Standards** or other local codes governing minimum street widths, sidewalk construction, allowable pavement types, and drainage. These codes may conflict with Low Impact Development objectives to minimize imperviousness and to maintain or restore natural site hydrology.
- Soil types (including **hydrologic soil groups**) and depth to groundwater, which may determine whether infiltration is a feasible option for managing site runoff. Depending on site location and characteristics, and on the selection of treatment and flow-control facilities, site-specific information (e.g. from boring logs or geotechnical studies) may be required.
- **Existing site drainage.** For undeveloped sites, this should be obtained by inspecting the site and examining topographic maps and survey data. For previously developed sites, site drainage and connection to the municipal storm drain system can be located from site inspection, municipal storm drain maps, and plans for previous development.
- Existing **vegetative cover** and **impervious areas**, if any.
- **Watershed(s)** in which the project area is located.
- **Applicable hydromodification management requirements** for the project, or evidence for any exemptions from requirements based on the Final HMP. Note that field investigation is typically required for projects subject to hydromodification management requirements.
- **Pollutants of Concern** in receiving waters. For each of the proposed project discharge points, identify the receiving water(s), including hydrologic unit basin number(s), as identified in the most recent version of the Water Quality Control Plan for the San Diego Basin[1], prepared by the San Diego Regional Water Quality Control Board. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies[2]. List any and all pollutants for which the receiving waters are impaired. Use Table 2-1 of this BMP Manual to list anticipated pollutants based on land use.

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[1] Go to: http://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/index.shtml

[2] Under Section 303(d) of the 1972 Clean Water Act, states, territories, and authorized tribes are required to develop a list of water quality limited segments. These waters on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. Go to: http://www.swrcb.ca.gov/rwqcb9/water_issues/programs/303d_list/index.shtml. San Diego is in Region 9.

References and Resources

- *Site Planning for Urban Stream Protection* (Schueler 1995).
- *Start at the Source* (BASMAA 1999), p. 36

Step 2: Identify Constraints & Opportunities

Review the information collected in Step 1. Identify the principal constraints on site design and selection of treatment and flow-control facilities as well as opportunities to reduce imperviousness and incorporate facilities into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, restricted right-of-way, or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention facilities), and differences in elevation (which can provide hydraulic head). Note storm water treatment facilities should not be located within protected riparian areas.

Prepare a brief **narrative** describing site opportunities and constraints. This narrative will help you as you proceed with LID design and explain your design decisions to others.

Step 3: Prepare and Document Your LID Design

Use the Low Impact Development Design Guide (Chapter 4) to analyze your project for LID, design and document drainage, and specify preliminary design details for integrated management practices. **Follow the detailed instructions in Chapter 4 to ensure your project complies with NPDES permit LID requirements (Provision D.1.d.(4)) and storm water treatment requirements in Provision D.1.d.(6)).** The LID Design Guide has been designed so that hydromodification management requirements are also met via this unified design procedure. Chapter 4 includes calculation procedures and formats for presenting your calculations.

As shown in the example checklist (page 48), your Project Submittal may need to include a drawing showing:

- The entire site divided into separate drainage management areas (DMAs), with each area identified as one of the following: self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. Each area should be clearly marked with a unique identifier.
- For each drainage area, the types of impervious area proposed, and the area of each.
- Proposed locations and sizes of treatment facilities. Each facility should be clearly marked with a unique identifier.

Compliance

The design criteria for DMAs in Chapter 4 ensure the required volume of flow from all developed portions of the project, including landscaped areas, is infiltrated, filtered, or treated (Provision D.1.d.(6)(a).

Your Project Submittal may need to include:

- Tabulation of proposed self-treating areas, self-retaining areas, areas draining to self-retaining areas, and areas draining to IMPs, and the corresponding IMPs identified on the Exhibit.
- Calculations, in the format shown in Chapter 4, showing the minimum square footage required and proposed square footage for each IMP.
- Preliminary designs for each IMP. The design sheets and accompanying drawings in Appendix B may be used or adapted for this purpose.

The following may also be required, or may be advisable to assist the reviewer to understand your design:

- A narrative overview of your design and how your design decisions optimize the site layout, use pervious surfaces, disperse runoff from impervious surfaces, and drain impervious surfaces to engineered IMPs. See Chapter 4.
- A narrative briefly describing each **drainage management area** (DMA), its drainage, and where drainage will be directed.
- A narrative briefly describing each IMP. Include any special characteristics or features distinct from the design sheets in Appendix B.

References and Resources

- Chapter 4
- *County of San Diego Low Impact Development Handbook*
- *The City of La Mesa General Plan*
- *The City of La Mesa Zoning Ordinance* (Title 24 of the La Mesa Municipal Code)
- City of La Mesa Development Codes (La Mesa Municipal Code)
- *Low Impact Development Manual* (Prince George's County, Maryland, 1999).
- *Bioretention Manual* (Prince George's County, Maryland, rev. 2002)
- *Site Planning for Urban Stream Protection* (Schueler, 1995b).
  Low Impact Development Technical Guidance Manual for Puget Sound (Puget Sound Action Team, 2005)
- *LID for Big Box Retailers* (Low Impact Development Center, 2006)

Step 4. Specify Source Control BMPs

Some everyday activities – such as trash recycling/disposal and washing vehicles and equipment – generate pollutants that tend to find their way into storm drains. These pollutants can be minimized by applying **source control BMPs**.

Source control BMPs include **permanent**, structural features that must be incorporated into your project plans and **operational** BMPs, such as regular sweeping and "housekeeping," that must be implemented by the site's occupant or user. The maximum extent practicable standard typically requires both types of BMPs. In general, operational BMPs cannot be substituted for a feasible and effective permanent BMP.

Use the following procedure to specify source control BMPs for your site:

► IDENTIFY POLLUTANT SOURCES

Review the first column in the **Pollutant Sources/Source Control Checklist** (Appendix C). Check off the potential sources of pollutants that apply to your site.

► NOTE LOCATIONS ON SUBMITTAL DRAWING

Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist (Appendix C). Show the location of each pollutant source and each permanent source control BMP in your submittal drawing.

► PREPARE A TABLE AND NARRATIVE

Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist (Appendix C). Now, create a table using the format in Table 3-1. In the left column, list each potential source on your site (from Appendix C, Column 1). In the middle column, list the corresponding **permanent, structural BMPs** (from Columns 2 and 3, Appendix C) used to prevent pollutants from entering runoff. Accompany this table with a narrative that explains any special features, materials, or methods of construction that will be used to implement these permanent, structural BMPs.

► IDENTIFY OPERATIONAL SOURCE CONTROL BMPS

TABLE 3-1. Format for Table of Permanent and Operational Source Control Measures.

Potential source of runoff pollutants	*Permanent source control BMPs*	*Operational source control BMPs*

To complete your table, refer once again to the Pollutant Sources/Source Control Checklist (Appendix C, Column 4). List in the right column of your table the operational BMPs that should be implemented as long as the anticipated activities continue at the site. The same BMPs may also be required as a condition of a use permit or other revocable discretionary approval for use of the site.

References and Resources

- Appendix C: Storm Water Pollutant Sources/Source Control Checklist
- RWQCB Order R9-2007-0001, Provision D.1.d.(5)
- *Start at the Source*, Section 6.7: Details, Outdoor Work Areas
- *California Stormwater Industrial/Commercial Best Management Practice Handbook*
- *Urban Runoff Quality Management* (WEF/ASCE, 1998) Chapter 4: Source Controls

Step 5: Storm Water Facility Maintenance

As required by NPDES Permit Provision D.1.c.(5), projects that include permanent BMPs shall be conditioned to require submittal of proof of a mechanism under which ongoing long-term maintenance of storm water treatment and flow-control facilities will be conducted, satisfactory to the City Engineer. The City of La Mesa requires the following items be included in your Project Submittal:

1. A means to finance and implement facility maintenance in perpetuity.
2. Acceptance of responsibility for maintenance from the time the facilities are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the treatment and flow-control facilities you have selected.

The City Engineer may also require that you prepare and submit a detailed plan that sets forth a maintenance schedule for each of the treatment and flow-control facilities built on your site.

Details of these requirements, and instructions for preparing a detailed operation and maintenance plan, are in Chapter 5.

References and Resources

- *Chapter 5*
- Operation, Maintenance, and Management of Stormwater Management Systems (Watershed Management Institute, 1997)

Step 6: Complete Your Project Submittal

City staff may provide specific instructions for the content and format of your Project Submittal. Your Project Submittal should document the information gathered and decisions made in Steps 1-5. A clear, complete, well-organized Project Submittal will make it possible to confirm your design meets the minimum requirements of the NPDES permit, the City of La Mesa Storm Water Ordinance Municipal Code Chapter 7.18, and this BMP manual.

► COORDINATION WITH SITE, ARCHITECTURAL, AND LANDSCAPING PLANS

Before completing your Project Submittal, ensure your storm water control design is fully coordinated with the site plan, grading plan, and landscaping plan being proposed for the site.

Information submitted and presentations to design review committees, planning commissions, and other decision-making bodies must incorporate relevant aspects of the storm water design. In particular, ensure:

- Curb elevations, elevations, grade breaks, and other features of the drainage design are consistent with the delineation of DMAs.

- The top edge (overflow) of each bioretention facility is level all around its perimeter—this is particularly important in parking lot medians.
- The resulting grading and drainage design is consistent with the design for parking and circulation.
- Bioretention facilities and other IMPs do not create conflicts with pedestrian access between parking and building entrances.
- Vaults and utility boxes can be accommodated outside bioretention facilities and will not be placed within bioretention facilities.
- The visual impact of storm water facilities, including planter boxes at building foundations and any terracing or retaining walls required for the storm water control design, is shown in renderings and other architectural drawings.
- Landscaping plans, including planting plans, show locations of bioretention facilities, and the plant requirements are consistent with the engineered soils and conditions in the bioretention facilities.
- Renderings and representation of street views incorporate any storm water facilities located in street-side buffers and setbacks

► CONSTRUCTION PLAN SUSMP CHECKLIST

When you submit construction plans for City review and approval, the reviewer will compare that submittal with your earlier Project Submittal. By creating a Construction Plan SUSMP Checklist for your project, you can facilitate the reviewer's comparison and speed review of your project.

TABLE 3-2. Format for Construction Plan SUSMP Checklist.

SUSMP Page #	*BMP Description*	*See Plan Sheet #s*

Here's how:

4. Create a table similar to Table 3-2. Number and list each measure or BMP you have specified in your Project Submittal in Columns 1 and 2 of the table. Leave Column 3 blank. Incorporate the table into your Project Submittal.

5. When you submit construction plans, **duplicate the table** (by photocopy or electronically). Now fill in Column 3, identifying the plan sheets where the BMPs are shown. List all plan sheets on which the BMP appears. Submit the updated table with your construction plans.

Note that the updated table—or Construction Plan SUSMP Checklist—is **only a reference tool** to facilitate comparison of the construction plans to your Project Submittal. City Engineering staff can advise you regarding the process required to propose changes to your approved Project Submittal.

► CERTIFICATION

Your Project Submittal shall be certified by a registered civil engineer.

The certification should state: "The selection, sizing, and preliminary design of storm water treatment and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments."

► EXAMPLE PROJECT SUBMITTAL OUTLINE AND CONTENTS

Check with City Engineering staff for requirements specific to your project.

I. Project Setting

- A. Project Name, Location, Description of project activities
- B. Vicinity Map
- C. Existing site features and conditions
- D. Opportunities and constraints for storm water control
- E. Watershed(s), receiving water bodies, and water body impairments
- F. Pollutants of concern based on land use and downstream water body impairments
- G. Impacts to hydrologic regime

II. Low Impact Development Design Strategies

- A. Optimization of site layout
  - (1) Limitation of development envelope
  - (2) Preservation of natural drainage features
  - (3) Setbacks from creeks, wetlands, and riparian habitats
  - (4) Minimization of imperviousness
  - (5) Using drainage as a design element
- B. Use of permeable pavements
- C. Dispersal of runoff to pervious areas
- D. Use of Integrated Management Practices

III. Hydromodification Analysis

- A. Hydromodification Applicability
- B. Flow Control Performance Criteria

IV. Documentation of Drainage Design

- A. Drainage Management Areas
  - (1) Tabulation

(2) Descriptions

B. Integrated Management Practices

(1) Tabulation and Sizing Calculations

(2) Descriptions

V. Source Control Measures

A. Description of site activities and potential sources of pollutants

B. Table showing sources, permanent source controls, and operational source controls

VI. Facility Maintenance Requirements

A. Ownership and responsibility for maintenance in perpetuity.

(1) Commitment to execute any necessary agreements.

(2) Statement accepting responsibility for operation and maintenance of facilities until that responsibility is formally transferred.

B. Summary of maintenance requirements for each storm water facility.

VII. Construction Plan SUSMP Checklist

VIII. Certifications

IX. Attachment: SUSMP Exhibit (Site Map) clearly showing:

A. Entire property

B. Nearby water bodies and municipal storm drain inlets

C. Private storm drain systems

D. Drainage Management Areas

E. Integrated Management Practices

F. Source control measures and potential sources of pollutants

G. Any other proposed BMPs

► SPECIFIC PROJECT CONSIDERATIONS

Your submittal will reflect the unique character of your own project and should meet the requirements identified in this BMP manual. City Engineering staff can assist you to determine how specific requirements apply to your project.

Chapter 4

Low Impact Development Design Guide

Guidance for designing and documenting your LID site drainage, storm water treatment facilities, and flow-control facilities

Follow the Low Impact Development (LID) design in this BMP manual to achieve compliance with the storm water treatment requirements as well as the LID requirements in the storm water NPDES permit. The City of La Mesa encourages the use of the design and documentation strategies outlined in this chapter. While other approaches may be used, they must be defensibly shown by the project proponent to meet or exceed the low impact development standards in this BMP Manual.

This will require careful documentation of:

- Pervious and impervious areas in the planned project.
- Drainage from each of these areas.
- Locations, sizes, and types of proposed treatment facilities.

Your Project Submittal must include calculations showing the site drainage and proposed LID treatment facilities meet the criteria in this BMP Manual.

This Low Impact Development Design Guide will help you:

- **Analyze your project** and identify and select options for implementing LID techniques to meet runoff treatment requirements—and flow-control requirements, if they apply.
- **Design and document drainage** for the whole site and document how that design meets this BMP Manual's storm water treatment criteria.
- **Specify preliminary design details** and integrate your LID drainage design with your paving and landscaping design.

Alternatives to LID design are discussed in the final section of this chapter.

Analyze Your Project for LID

Conceptually, there are four LID strategies for managing runoff from buildings and paving:

1. **Optimize the site layout** by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.

2. **Use pervious surfaces** such as turf, gravel, or pervious pavement—or use surfaces that retain rainfall, such as vegetated roofs. All drainage from these surfaces is considered to be "self-retained" (a detailed definition corresponding to this concept is on page 67). No further management of runoff is necessary. An emergency overflow should be provided for extreme events.

3. **Disperse runoff** from impervious surfaces on to adjacent pervious surfaces (e.g., direct a roof downspout to disperse runoff onto a lawn).

4. Drain impervious surfaces to engineered **Integrated Management Practices** (IMPs), such as bioretention facilities, planter boxes, cisterns, or dry wells. IMPs infiltrate runoff to groundwater and/or percolate runoff through engineered soil and allow it to drain away slowly. Depending on site conditions and local regulations, it may be possible to harvest and reuse rainwater in conjunction with IMPs.

A combination of two or more strategies may work best for your project. With forethought in design, the four strategies can provide multiple, complementary benefits to your development. Pervious surfaces reduce heat island effects and temperature extremes. Landscaping improves air quality, creates a better place to live or work, and upgrades value for rental or sale. Retaining natural hydrology helps preserve and enhance the natural character of the area. LID drainage design can also conserve water and reduce the need for drainage infrastructure.

Table 4-1 includes ideas for applying LID strategies to site conditions and types of development.

TABLE 4-1. Ideas for Runoff Management

Site Features and Design Objectives	Vegetated Roof	Self-retaining Areas	Pervious Pavement	Bioretention Facility	Flow-through Planter	Dry Well	Cistern with bioretention
Clayey native soils	✓			✓	✓		✓
Permeable native soils	✓		✓	✓	✓	✓	
Very steep slopes	✓				✓		
Shallow groundwater	✓				✓		
Avoid saturating subsurface soils	✓		✓		✓		
Connect to roof downspouts		✓		✓	✓	✓	✓
Parking lots/islands and medians			✓	✓		✓	
Sites with extensive landscaping		✓	✓	✓			
Densely developed sites with limited space/landscape	✓		✓		✓	✓	✓
Fit IMPs into landscape and setback areas				✓			✓
Make drainage a design feature		✓		✓			✓
Convey as well as treat storm water				✓			

► OPTIMIZE THE SITE LAYOUT

To minimize storm water-related impacts, apply the following design principles to the layout of newly developed and redeveloped sites.

Conserve natural areas, soils, and vegetation. Define the development envelope and protected areas, identifying areas that are most suitable for development and areas that should be left undisturbed. Use the following guideline to determine the least sensitive areas of the site, in order of increasing sensitivity:

1. Areas devoid of vegetation, including previously graded areas and agricultural fields.
2. Areas of non-native vegetation, disturbed habitats, and eucalyptus woodlands where receiving waters are not present.
3. Areas of chamise or mixed chaparral, and non-native grasslands.
4. Areas containing coastal scrub communities.
5. All other upland communities.
6. Occupied habitat of sensitive species and all wetlands.

Within each of the previous categories, hillside areas should be considered more sensitive than flatter areas.

Coordination
Chapter One includes a presentation of how review of your project's site design and landscape design is coordinated with review for compliance with storm water NPDES requirements.

Where possible, conform the site layout along natural landforms, avoid excessive grading and disturbance of vegetation and soils, and replicate the site's natural drainage patterns. Set back development from creeks, wetlands, and riparian habitats. Preserve significant trees, especially native trees and shrubs, and identify locations for planting additional native or drought tolerant trees and large shrubs. Concentrate development on portions of the site with less permeable soils, and preserve areas that can promote infiltration.

For all types of development, **limit overall coverage** of paving and roofs. Where allowed by La Mesa zoning and design standards—and provided public safety and a walkable environment are not compromised—this can be accomplished by designing compact, taller structures, narrower and shorter streets and sidewalks, smaller parking lots (fewer stalls, smaller stalls, and more efficient lanes), and indoor or underground parking. Examine site layout and circulation patterns and identify areas where landscaping can be substituted for pavement.

Detain and retain runoff throughout the site. On flatter sites, it typically works best to intersperse landscaped areas and IMPs among the buildings and paving. On hillside sites, drainage from upper areas may be collected in conventional catch basins and piped to landscaped areas and IMPs in lower areas.

Use drainage as a design element. Use depressed landscape areas, vegetated buffers, and bioretention areas as amenities and focal points within the site and landscape design. Bioretention areas can be almost any shape and should be located at low points. Bioretention areas shaped as swales can detain and treat low runoff flows and also convey higher flows.

► USE PERVIOUS SURFACES

Consider a vegetated roof. Although not yet widely used in California, vegetated or "green" roofs are growing in popularity. Potential benefits include longer roof life, lower heating and cooling costs, and better sound insulation, in addition to air quality and water quality benefits. For SUSMP compliance purposes, vegetated roofs are considered not to produce increased runoff or runoff pollutants (i.e., any runoff from a vegetated roof requires no further treatment or detention). For more information on vegetated roofs, see www.greenroofs.org.

Consider permeable pavements and surface treatments. Inventory paved areas on your preliminary site plan. Identify where permeable pavements, such as crushed aggregate, turf block, unit pavers, pervious concrete, or pervious asphalt could be substituted for impervious concrete or asphalt paving.

► DISPERSE RUNOFF TO ADJACENT PERVIOUS AREAS

Look for opportunities to direct runoff from impervious areas to adjacent landscaping. The design, including slopes and soils, must reflect a reasonable expectation that an inch of rainfall will soak into the soil and produce no runoff. For example, a lawn or garden depressed 3-4" below surrounding walkways or driveways provides a simple but functional landscape design element.

For sites subject to storm water treatment requirements only, a 2:1 maximum ratio of impervious to pervious area is acceptable. Be sure soils will drain adequately.

Under some circumstances, it may be allowable to direct runoff from impervious areas to pervious pavement (for example, from roof downspouts to a parking lot paved with crushed aggregate or turf block). The pore volume of pavement and base course must be sufficient to retain an inch of rainfall, including runoff from the tributary area. The slopes and soils must be compatible with infiltrating that volume without producing runoff.

► DIRECT RUNOFF TO INTEGRATED MANAGEMENT PRACTICES

Design criteria have been developed for the following IMPs:

- **Bioretention facilities**, which can be configured as swales, free-form areas, or planters to integrate with your landscape design.
- **Flow-through planters**, which can be used near building foundations and other locations where infiltration to native soils is not desired.
- **Dry wells** and other infiltration facilities, which can be used only where soils are permeable.
- **Cisterns or vaults**, in combination with a bioretention facility.

See the design sheets in Appendix B.

It may be possible to create a site-specific design that uses cisterns to achieve storm water flow control, storm water treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Such a design could expand the multiple benefits of LID to include water conservation. Keep in mind:

- Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8 below. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse.

- Storage of water for longer than minimum standards set forth by the City of La Mesa (72 hours) creates the potential for mosquito harborage. Cisterns and vaults must be designed to prevent entry by mosquitoes.

- Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Some references and resources for water harvesting appear at the end of this chapter.

Finding the right location for treatment facilities on your site involves a careful and creative integration of several factors:

- To make the most efficient use of the site and to maximize aesthetic value, **integrate IMPs with site landscaping**. Zoning codes may require landscape setbacks or buffers, or may specify that a minimum portion of the site be landscaped. It may be possible to locate some or all of your site's treatment and flow-control facilities within this same area, or within utility easements or other non-buildable areas.

- Planter boxes and bioretention areas must be **level or nearly level** all the way around. Bioretention areas configured as swales may be gently sloped in the linear direction, but opposite sides must be at the same elevation.

- For effective, low-maintenance operation, **locate facilities so drainage into and out of the device is by gravity flow.** Pumped systems are feasible, but are expensive, require more maintenance, are prone to untimely failure, and can cause mosquito control problems.

- If the property is being subdivided now or in the future, the facility should be in a **common, accessible area.** In particular, avoid locating facilities on private residential lots. Even if the facility will serve only one site owner or operator, make sure the facility is located for ready access by inspectors from the City of La Mesa and local vector control agency.

- The facility must be accessible to equipment needed for its maintenance. **Access requirements for maintenance** will vary with the type of facility selected. Planter

boxes and bioretention areas will typically need access for the same types of equipment used for landscape maintenance.

To complete your analysis, include in your Project Submittal a brief **narrative** documenting the site layout and site design decisions you made. This will provide background and context for how your design meets the quantitative LID design criteria.

Develop and Document Your Drainage Design

The **design documentation procedure** begins with careful delineation of pervious areas and impervious areas (including roofs) throughout the site. The procedure accounts for how runoff from each delineated area is managed. For areas draining to IMPs, the procedure ensures each IMP is appropriately sized.

The procedure results in a space-efficient, cost-efficient LID design for meeting SUSMP requirements on most residential and commercial/industrial developments. The procedure arranges documentation of drainage design and IMP sizing in a consistent format for presentation and review.

This procedure is intended to facilitate, not substitute for, creative interplay among site design, landscape design, and drainage design. **Several iterations may be needed** to optimize your drainage design as well as aesthetics, circulation, and use of available area for your site.

You should be able to complete the needed calculations using only the project's site development plan.

► STEP 1: DELINEATE DRAINAGE MANAGEMENT AREAS

This is the key first step. You must divide the **entire project area** into individual, discrete Drainage Management Areas (DMAs). Typically, lines delineating DMAs follow grade breaks and roof ridge lines. The Exhibit, tables, text, and calculations in your Project Submittal will illustrate, describe, and account for runoff from each of these areas.

Use separate DMAs for each surface type (e.g., landscaping, pervious paving, or roofs). Each DMA must be assigned a single hydrologic soil group. Assign each DMA an identification number and determine its size in square feet.

► STEP 2: CLASSIFY DMAS AND DETERMINE RUNOFF FACTORS

Next, determine how drainage from each DMA will be handled. Each DMA will be one of the following four types:

1. Self-treating areas.
2. Self-retaining areas (also called "zero-discharge" areas).
3. Areas that drain to self-retaining areas.
4. Areas that drain to IMPs.

Self-treating areas are landscaped or turf areas that do not drain to IMPs, but rather drain directly off site or to the storm drain system. Examples include upslope undeveloped areas which are ditched and drained around a development and grassed slopes which drain off-site to a street or storm drain. In general, self-treating areas include no impervious areas, unless the impervious area is very small (5 percent or less) in relationship to the receiving pervious area and slopes are gentle enough to ensure runoff will be absorbed into the vegetation and soil. Criteria for self-treating areas are in the design sheet "Self Treating and Self-Retaining Areas" in Appendix B.

Rationale

Pollutants in rainfall and windblown dust will tend to become entrained in the vegetation and soils of landscaped areas, so no additional treatment is needed. It is assumed the self-treating landscaped areas will produce runoff less than or equal to the pre-project site condition.

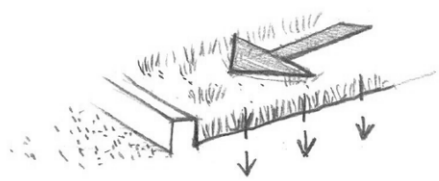

FIGURE 4-1. Self-treating areas are entirely pervious and drain directly off-site or to the storm drain system.

Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that a one-inch rainfall event would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Specify slopes, if any, toward the center of the pervious area. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

Criteria for self-retaining areas are in the design sheet "Self Treating and Self-Retaining Areas" in Appendix B.

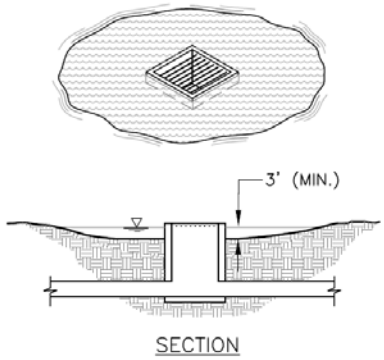

FIGURE 4-2. Self-retaining areas. Berm or depress the grade to retain at least an inch of rainfall and set inlets of any area drains at least 3 inches above low point to allow ponding.

Areas draining to self-retaining areas. Runoff from impervious or partially pervious areas can be managed by routing it to self-retaining pervious areas. For example, roof downspouts can be directed to lawns, and driveways can be sloped toward landscaped areas. The maximum ratio is 2 parts impervious area for every 1 part pervious area.

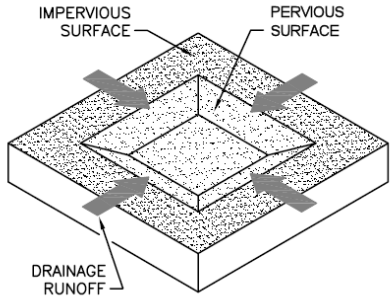

FIGURE 4-3. Relationship of impervious to pervious area for self-retaining areas.
Ratio: ***pervious ≥ ½ impervious***

The drainage from the impervious area must be directed to and dispersed within the pervious area, and the entire area must be designed to retain an inch of rainfall without flowing off-site. For example, if the maximum ratio of 2 parts impervious area into 1 part pervious area is used, then the pervious area must absorb 3 inches of water over its surface before over-flowing to an off-site drain.

A partially pervious area may be drained to a self-retaining area. For example, a driveway composed of unit pavers may drain to an adjacent lawn. In this case, the maximum ratios are:

(Runoff factor) x (tributary area) ≤ 2 x (self-retaining area) *Equation 4-1*

Use the runoff factors in Table 4-2.

Prolonged ponding is a potential problem at higher impervious/pervious ratios. In your design, ensure that the pervious area soils can handle the additional run-on and are sufficiently well-drained.

Under some circumstances, pervious pavement (e.g., crushed stone, pervious asphalt or pervious concrete) can be self-retaining. Adjacent roofs or impervious pavement may drain on to the pervious pavement in the same maximum ratios as described above.

To design a pervious pavement to be a self-treating area, ensure:

- The gravel base course is a minimum of four or more inches deep.
- The base course is not to be underdrained.
- A qualified engineer has been consulted regarding infiltration rates, pavement stability, and suitability for the intended traffic.

Runoff from self-treating and self-retaining areas does not require any further treatment or flow control.

TABLE 4-2. Example Runoff Factors for Surfaces Draining to IMPs.

Surface	Factor
Roofs	1.0
Concrete	1.0
Pervious Concrete	0.1
Porous Asphalt	0.1
Grouted Unit Pavers	1.0
Solid Unit Pavers on granular base, min. 3/16 inch joint space	0.2
Crushed Aggregate	0.1
Turfblock	0.1
Amended, mulched soil	0.1
Landscape	0.1

Areas draining to IMPs are multiplied by a sizing factor to calculate the required size of the IMP. On most densely developed sites—such as commercial and mixed-use developments and small-lot residential subdivisions—most DMAs will drain to IMPs.

More than one drainage area can drain to the same IMP. However, because the minimum IMP sizes are determined by ratio to drainage area size, a drainage area may not drain to more than one IMP. See Figures 4-4 and 4-5.

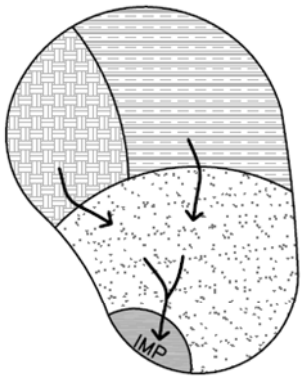

FIGURE 4-4. More than one Drainage Management Area can drain to a single IMP.

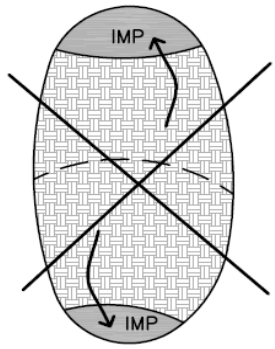

FIGURE 4-5. One Drainage Management Area cannot drain to more than one IMP. Use a grade break to divide the DMA.

Where possible, design site drainage so **only impervious roofs and pavement** drain to IMPs. This yields a simpler, more efficient design and also helps protect IMPs from becoming clogged by sediment.

If it is necessary to include turf, landscaping, or pervious pavements within the area draining to an IMP, list each surface as a separate DMA. A runoff factor (similar to a "C" factor used in the rational method) is applied to account for the reduction in the quantity of runoff. For example, when a turf or landscaped drainage management area drains to an IMP, the resulting increment in IMP size is:

$$\Delta \text{ (Area)} = \text{(pervious area)} \times \text{(runoff factor)} \times \text{(sizing factor)}.$$

Use the runoff factors in Table 4-2.

► STEP 3: TABULATE DRAINAGE MANAGEMENT AREAS

- Tabulate self-treating areas in the format shown in Table 4-3.
- Tabulate self-retaining areas in the format shown in Table 4-4.
- Tabulate areas draining to self-retaining areas in the format shown in Table 4-5. Check to be sure the total product of (square feet of tributary area × runoff factor) for all DMAs draining to a receiving self-retaining area is no greater than a 2:1 ratio to the square footage of the receiving self-retaining area itself.

- Compile a list of DMAs draining to IMPs. Proceed to Step 4 to check the sizing of the IMPs.

TABLE 4-3. Format for Tabulating Self-Treating Areas

DMA Name	Area (square feet)

TABLE 4-4. Format for Tabulating Self-Retaining Areas

DMA Name	Area (square feet)

TABLE 4-5. Format for Tabulating Areas Draining to Self-Retaining Areas

DMA Name	Area (square feet)	Post-project surface type	Runoff factor	Receiving self-retaining DMA	Receiving self-retaining DMA Area (square feet)

► STEP 4: SELECT AND LAY OUT IMPS ON SITE PLAN

Select from the list of IMPs in Table 4-6. Illustrations, designs, and design criteria for the IMPs are in the "IMP Design Details and Criteria" at the end of this chapter.

Once you have laid out the IMPs, calculate the square footage you have set aside on your site plan for each IMP.

► STEP 5: REVIEW SIZING FOR EACH IMP

For each of the IMPs, use the appropriate "water quality only" sizing from Table 4-6. Sizing factors for integrated facilities that provide both water quality treatment and hydromodification flow control may be obtained using the BMP Sizing Calculator, BMP sizing factor tables, or other methods outlined in Chapter 1 of this document or in the Final HMP (Appendix H).

TABLE 4-6. "Water Quality Only" Sizing Factors

Bioretention Facilities	Sizing Factor for Area = 0.04
Flow-through Planters	Sizing Factor for Area = 0.04
Dry Well or Infiltration Basin	See Step 6 to Calculate Min. Volume
Cistern/Vault with Bioretention	See Step 6 to Calculate Min. Volume of Cistern or Vault; then use 0.04 to calculate minimum size of bioretention area

TABLE 4-7. Sizing Factors – Bioretention Facilities

Flat Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.070	0.103	0.130	0.130
V_1	0.058	0.085	0.108	0.108
V_2	N/A	N/A	0.078	0.078
$0.3Q_2 – Q_{10}$				
A	0.070	0.098	0.100	0.085
V_1	0.058	0.081	0.083	0.071
V_2	N/A	N/A	0.060	0.051
$0.5Q_2 – Q_{10}$				
A	0.070	0.098	0.075	0.065
V_1	0.058	0.081	0.063	0.054
V_2	N/A	N/A	0.045	0.039

Moderate Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.065	0.090	0.130	0.130
V_1	0.054	0.075	0.108	0.108
V_2	N/A	N/A	0.078	0.078
$0.3Q_2 – Q_{10}$				
A	0.065	0.090	0.100	0.085
V_1	0.054	0.075	0.083	0.071
V_2	N/A	N/A	0.060	0.051
$0.5Q_2 – Q_{10}$				
A	0.065	0.090	0.075	0.065
V_1	0.054	0.075	0.063	0.054
V_2	N/A	N/A	0.045	0.039

Steep Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.060	0.075	0.110	0.065
V_1	0.050	0.063	0.092	0.054
V_2	N/A	N/A	0.067	0.039
$0.3Q_2 – Q_{10}$				
A	0.060	0.075	0.080	0.065
V_1	0.050	0.063	0.067	0.054
V_2	N/A	N/A	0.048	0.039

$0.5Q_2 – Q_{10}$				
A	0.060	0.075	0.060	0.050
V_1	0.050	0.063	0.050	0.042
V_2	N/A	N/A	0.036	0.030

Q_2 = 2-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

Q_{10} = 10-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

A = Surface area sizing factor

V_1 = Surface volume sizing factor

V_2 = Subsurface volume sizing factor

Note: The Oceanside Rain Gauge was selected for use in La Mesa based on rain basin analysis performed by the consultant team for the San Diego regional Storm Water Co-permitees. The analysis took into account average annual rainfall, proximity, elevation, and data availability.

TABLE 4-8. Sizing Factors – Flow Through Planter Facilities

Flat Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	N/A	0.190	0.160
V_1	N/A	N/A	0.158	0.133
V_2	N/A	N/A	0.114	0.096
$0.3Q_2 – Q_{10}$				
A	N/A	N/A	0.105	0.090
V_1	N/A	N/A	0.088	0.075
V_2	N/A	N/A	0.063	0.054
$0.5Q_2 – Q_{10}$				
A	N/A	N/A	0.075	0.070
V_1	N/A	N/A	0.063	0.058
V_2	N/A	N/A	0.045	0.042

Moderate Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	N/A	0.190	0.160
V_1	N/A	N/A	0.158	0.133
V_2	N/A	N/A	0.114	0.096
$0.3Q_2 – Q_{10}$				
A	N/A	N/A	0.105	0.090
V_1	N/A	N/A	0.088	0.075
V_2	N/A	N/A	0.063	0.054
$0.5Q_2 – Q_{10}$				
A	N/A	N/A	0.075	0.070
V_1	N/A	N/A	0.063	0.058
V_2	N/A	N/A	0.045	0.042

Steep Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	N/A	0.140	0.105
V_1	N/A	N/A	0.117	0.088
V_2	N/A	N/A	0.084	0.063
$0.3Q_2 – Q_{10}$				
A	N/A	N/A	0.085	0.070
V_1	N/A	N/A	0.071	0.058

V_2	N/A	N/A	0.051	0.042
$0.5Q_2 – Q_{10}$				
A	N/A	N/A	0.065	0.050
V_1	N/A	N/A	0.054	0.042
V_2	N/A	N/A	0.039	0.030

Q_2 = 2-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

Q_{10} = 10-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

A = Surface area sizing factor

V_1 = Surface volume sizing factor

V_2 = Subsurface volume sizing factor

Note: The Oceanside Rain Gauge was selected for use in La Mesa based on rain basin analysis performed by the consultant team for the San Diego regional Storm Water Co-permitees. The analysis took into account average annual rainfall, proximity, elevation, and data availability.

TABLE 4-9. Sizing Factors – Dry Well/Infiltration Facilities

Flat Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A

Moderate Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A

Steep Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.040	0.060	N/A	N/A
V_1	0.104	0.156	N/A	N/A
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.040	0.060	N/A	N/A
V_1	0.104	0.156	N/A	N/A
V_2	N/A	N/A	N/A	N/A

$0.5Q_2 – Q_{10}$				
A	0.040	0.060	N/A	N/A
V_1	0.104	0.156	N/A	N/A
V_2	N/A	N/A	N/A	N/A

Q_2 = 2-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

Q_{10} = 10-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

A = Surface area sizing factor

V_1 = Surface volume sizing factor

V_2 = Subsurface volume sizing factor

Note: The Oceanside Rain Gauge was selected for use in La Mesa based on rain basin analysis performed by the consultant team for the San Diego regional Storm Water Co-permitees. The analysis took into account average annual rainfall, proximity, elevation, and data availability.

TABLE 4-10. Sizing Factors – Bioretention + Vault Facilities

Flat Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.430	0.260	0.220
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.250	0.160	0.140
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.210	0.140	0.140
V_2	N/A	N/A	N/A	N/A

Moderate Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.430	0.260	0.220
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.200	0.160	0.140
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.180	0.140	0.140
V_2	N/A	N/A	N/A	N/A

Steep Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.240	0.200	0.160
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.160	0.140	0.120
V_2	N/A	N/A	N/A	N/A

$0.5Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.140	0.120	0.120
V_2	N/A	N/A	N/A	N/A

Q_2 = 2-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

Q_{10} = 10-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

A = Surface area sizing factor

V_1 = Surface volume sizing factor

V_2 = Subsurface volume sizing factor

Note: The Oceanside Rain Gauge was selected for use in La Mesa based on rain basin analysis performed by the consultant team for the San Diego regional Storm Water Co-permitees. The analysis took into account average annual rainfall, proximity, elevation, and data availability.

TABLE 4-11. Sizing Factors – Cistern + Bioretention Facilities

Flat Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.020	0.020	0.020	0.020
V_1	0.160	0.510	0.260	0.200
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.020	0.020	0.020	0.020
V_1	0.160	0.220	0.160	0.140
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	0.020	0.020	0.030	0.035
V_1	0.160	0.190	0.140	0.120
V_2	N/A	N/A	N/A	N/A

Moderate Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.020	0.020	0.020	0.020
V_1	0.140	0.340	0.260	0.200
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.020	0.020	0.020	0.025
V_1	0.140	0.180	0.160	0.140
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	0.020	0.025	0.035	0.040
V_1	0.160	0.160	0.140	0.120
V_2	N/A	N/A	N/A	N/A

Steep Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.020	0.020	0.020	0.020
V_1	0.120	0.240	0.200	0.180
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.020	0.020	0.025	0.030
V_1	0.120	0.160	0.140	0.120
V_2	N/A	N/A	N/A	N/A

$0.5Q_2 - Q_{10}$				
A	0.030	0.035	0.040	0.040
V_1	0.120	0.140	0.120	0.100
V_2	N/A	N/A	N/A	N/A

Q_2 = 2-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

Q_{10} = 10-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

A = Surface area sizing factor

V_1 = Surface volume sizing factor

V_2 = Subsurface volume sizing factor

Note: The Oceanside Rain Gauge was selected for use in La Mesa based on rain basin analysis performed by the consultant team for the San Diego regional Storm Water Co-permitees. The analysis took into account average annual rainfall, proximity, elevation, and data availability.

► STEP 6: CALCULATE MINIMUM AREA AND VOLUME OF EACH IMP

The minimum area of bioretention facilities and flow-through planters is found by summing up the contributions of each tributary DMA and multiplying by the adjusted sizing factor for the IMP. Note that if the IMP is designed to provide hydromodification flow control, then sizing factors from the using the BMP Sizing Calculator, BMP sizing factor tables, or other methods outlined in Chapter 1 of this document or in the Final HMP (Appendix H) may be used in lieu of the "water quality only" sizing factors presented in Table 4-6.

Equation 4-7

$$Min.\,IMP\,Area = \sum \begin{pmatrix} DMA & DMA \\ Square & \times Runoff \\ Footage & Factor \end{pmatrix} \times \begin{pmatrix} IMP \\ Sizing \\ Factor \end{pmatrix}$$

Use the format of Table 4-12 to present the calculations of the required minimum area and volumes for **bioretention areas** and **planter boxes**:

TABLE 4-12. Format for Presenting Calculations of Minimum IMP Areas for Bioretention Areas and Planter Boxes.

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area × runoff factor	Soil Type:	IMP Name			
					IMP Sizing factor (WQ only)		Minimum Area	Proposed Area	
			Total		*0.04*				*IMP Area*

To size **dry wells**, **infiltration basins**, or **infiltration trenches for the "water quality only" treatment option**, use the following procedure:

1. Use the County of San Diego's 85th Percentile Isopluvial Map to determine the minimum unit volume.
2. Determine the weighted runoff factor ("C" factor) for the area tributary to the facility. The factors in Table 4-2 may be used.
3. Multiply the weighted runoff factor times the tributary area times the minimum unit volume.

Equation 4-8

$$Volume = [Tributary\ Area] \times [weighted\ runoff\ \ factor] \times [unit\ volume]$$

4. Select a facility depth.
5. Determine the required facility area. Dry wells may be designed as an open vault or with rock fill. If rock fill is used, assume a porosity of 40%.
6. Ensure the facility can infiltrate the entire volume within 72 hours, or the minimum drawdown time determined by the City.

To size a **cistern or vault in series with a bioretention facility (criteria below for "water quality**:

1. Use Equation 4-12 to calculate the required cistern or vault volume.
2. Design a discharge orifice for a drawdown time of 24 hours.
3. Determine the maximum discharge from the orifice.
4. The minimum area of the bioretention facility must treat this flow based on a percolation rate of 5" per hour through the engineered soil.

If a facility is designed to provide both water quality treatment and hydromodification flow control, using the BMP Sizing Calculator, BMP sizing factor tables, or other methods outlined in Chapter 1 of this document or in the Final HMP (Appendix H) may be used to determine the appropriate sizing factors for the IMP design.

► STEP 7: DETERMINE IF AVAILABLE SPACE FOR IMP IS ADEQUATE

Sizing and configuring IMPs may be an iterative process. After computing the minimum IMP area using Steps 1 – 6, review the site plan to determine if the reserved IMP area is sufficient. If so, the planned IMPs will meet the SUSMP sizing requirements. If not, revise the plan accordingly. Revisions may include:

- Reducing the overall imperviousness of the project site.
- Changing the grading and drainage to redirect some runoff toward other IMPs which may have excess capacity.
- Making tributary landscaped DMAs self-treating or self-retaining.
- Expanding IMP surface area.

► STEP 8: COMPLETE YOUR SUMMARY REPORT

Present your IMP sizing calculations in tabular form. Adapt the following format as appropriate to your project. Coordinate your presentation of DMAs and calculation of minimum IMP sizes with the Project Submittal drawing (labeled to show delineation of DMAs and locations of IMPs). It is also helpful to incorporate a brief description of each DMA and each IMP.

Sum the total area of all DMAs and IMPs listed and show it is equal to the total project area. This step may include adjusting the square footage of some DMAs to account for area used for IMPs.

Format:

Project Name:

Project Location:

APN or Subdivision Number:

Total Project Area (square feet):

Mean Annual Precipitation at Project Site:

I. Self-treating areas:

DMA Name	Area (square feet)

II. Self-retaining areas:

DMA Name	Area (square feet)

III. Areas draining to self-retaining areas:

DMA Name	Post-project surface type	Runoff factor	Area (square feet)	Receiving self-retaining DMA	Receiving self-retaining DMA Area (square feet)

IV. Areas draining to IMPs (repeat for each IMP):

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area × runoff factor	Soil Type:	IMP Name			
					IMP Sizing factor		Minimum Area or Volume	Proposed Area or Volume	
				Total					*IMP Area*

Specify Preliminary Design Details

In your Project Submittal, describe your IMPs in sufficient detail to demonstrate the area, volume, and other criteria of each can be met within the constraints of the site.

Ensure these details are consistent with preliminary site plans, landscaping plans, and architectural plans submitted with your application for planning and zoning approvals.

Appendix B includes design sheets for:

- Self-treating and self-retaining areas
- Pervious pavements
- Bioretention facilities
- Flow-through planter
- Dry wells and infiltration basins
- Cistern or vault with bioretention facility

These design sheets include recommended configurations and details, and example applications, for these IMPs. **The information in these design sheets must be adapted and applied to the**

conditions specific to the development project such as unstable slopes or the lack of available head. Designated municipal staff have final review and approval authority over the project design.

Keep in mind that proper and functional design of the IMP is the responsibility of the applicant. Effective operation of the IMP throughout the project's lifetime will be the responsibility of the property owner.

Alternatives to Integrated LID Design

If you believe design of features and facilities as described above is infeasible for your development site, consult with Engineering staff before preparing an alternative design for storm water treatment, flow control, and LID compliance.

For all alternative designs, the applicant must prepare a complete Project Submittal, including a drawing showing the entire site divided into discrete Drainage Management Areas, text and tables showing how drainage is routed from each DMA to a treatment facility, and calculations demonstrating that the design achieves the applicable design criteria for each storm water treatment facility. Alternative treatment facilities are limited to the circumstances and selection criteria identified beginning on page 39. The Project Submittal must also show how the project meets the minimum LID criteria (page 43) and ensures runoff rates, durations, and velocities are controlled to maintain or reduce downstream erosion conditions and protect stream habitat (NPDES Permit Provision D.1.d.(10)).

► DESIGN OF ALTERNATIVE TREATMENT FACILITIES

Here are criteria and design considerations for some alternative treatment facilities, also known as treatment control BMPs:

Sand Filters. To ensure effectiveness is not compromised by compacting or clogging of the filter surface, sand filters must be maintained frequently.

The following criteria apply to sand filters:

- Calculate the design flow using the rational method with an intensity of 0.2"/hour and the "C" factors for "treatment only" from Table 4-2.
- To determine the required filter surface area, divide the design flow by an allowable design surface loading rate of 5"/hour.
- The minimum depth of filter media is 18". The media should be washed sand, with gradation similar to that specified for fine aggregate in ASTM C-33.
- The entire filter area must be accessible for easy maintenance without the need to enter a confined space.

A typical filter design includes a gravel drain layer and a perforated pipe underdrain. Filter fabric may be used to prevent the filter media from entering the gravel layer.

The design should not include any permanent pool or other standing water. Instead of including a pretreatment basin, consider the following features in the area tributary to the filter to reduce the potential for filter clogging:

- Limit the size of the Drainage Management Area.
- Include only impervious areas in the DMA.
- Stabilize slopes and eliminate sources of sediment in the DMA.
- Provide screens for trash and leaves at storm drain inlets (if allowed by the City of La Mesa).

For additional design considerations and details, see *Design of Stormwater Filtering Systems* by Richard A. Claytor and Thomas R. Schueler, The Center for Watershed Protection, 1996, and *California Stormwater BMP Handbooks* Fact Sheet TC-40, Media Filter.

Sand filters do not provide adequate hydromodification flow controls.

Extended ("Dry") Detention Basins. The required detention volume for water quality treatment is based on the 85th percentile 24-hour storm depth. The steps to calculate the required detention volume are:

1. Use the County of San Diego's 85th Percentile Isopluvial Map to determine the unit basin volume.
2. Determine the weighted runoff factor ("C" factor) for the area tributary to the basin. The factors in Table 4-2 may be used.
3. Multiply the weighted runoff factor times the tributary area times the unit basin volume.

For maximum effectiveness the basin should not be sized substantially larger than this volume. If the basin is to be used for hydromodification flow control, then the BMP Sizing Calculator pond sizer or a continuous simulation model must be used to prove the basin meets peak flow and flow duration criteria.

For design considerations and details, see the *California Stormwater Best Management Practice Handbooks*, Fact Sheet TC-22, "Extended Detention Basins." The basin outlet should be designed for a 24-hour drawdown time.

As noted in Fact Sheet TC-22, "dry" detention basins may not be practicable for drainage areas less than 5 acres. The potential for mosquito harborage is a concern. In the design, do not create any areas that will hold standing water for 72 hours or more, the maximum drawdown time as determined by the City of La Mesa.

"Wet" Detention Ponds and Constructed Wetlands. The required water quality detention volume is determined as with a "dry" detention basin. If the pond is to be used for hydromodification flow control, then the BMP Sizing Calculator pond sizer or a continuous simulation model must be used to prove the pond meets peak flow and flow duration criteria. Before proceeding with design, contact the local mosquito control agency to coordinate the design and plan ongoing inspection and maintenance of the facility for mosquito control. For design considerations and details, see the *California Stormwater Best Management Practices Handbooks*, Fact Sheet TC-20, "Wet Ponds," and Fact Sheet TC-21, "Constructed Wetlands."

Vegetated Swales. Design recommendations for conventional vegetated swales are in the *California Stormwater Best Management Practices Handbooks*. The conventional swale design uses available on-site soils and does not include an underdrain system. Where soils are clayey, there is little infiltration. Treatment occurs as runoff flows through grass or other vegetation before exiting at the downstream end. Recommended detention times are on the order of 10 minutes. It should be noted that such designs likely would not provide the required hydromodification flow control.

Conventional vegetated swales may be used to meet NPDES permit treatment requirements and LID requirements (see page 39). The following should be incorporated in the design:

- Determine the weighted runoff factor ("C" factor) for the area tributary to the swale. The factors in Table 4-2 may be used.
- Calculate the design flow by multiplying the weighted runoff factor times the tributary area times either (1) 0.2 inches of rainfall per hour, or (2) twice the 85th percentile hourly rainfall intensity.
- When sizing the swale, use a value of 0.25 for Manning's "n".
- Ensure that all flow enters the swale near its highest point and that no flow short-circuits treatment by entering the swale along its length.
- The swale should be a minimum 100 feet in length.
- Longitudinal slopes should not exceed 2.5%; on flatter slopes, incorporate measures to avoid prolonged surface ponding.

Consider using linear-shaped bioretention areas in place of conventional vegetated swales because:

- Conventional swale design has resulted in standing water and associated nuisances.
- Conventional swales often don't obtain even the design residence time because of the length required and because proper design requires runoff enter the swale at the upstream end rather than at various locations along its length, and
- Bioretention areas provide a more flexible drainage design, more effective practicable treatment, and more effective flow control within the same footprint.

In the western part of San Diego County (west of the Pacific Ocean drainage divide), rock swales would not generally provide adequate water quality treatment. In the eastern portion of the County, rock swales could potentially be used as part of the water quality treatment design given the prevalence of high-infiltration sandy soils and the harsh climatic conditions which prevent vegetation establishment. Implementation of rock swales would require approval from the City. The design of vegetated strips, potentially allowed by the City on a case-by-case basis, should follow Caltrans design guidance.

► TREATMENT FACILITIES FOR SPECIAL CIRCUMSTANCES

Higher-rate surface filters and vault-based proprietary filters can only be used in the circumstances described beginning on page 39 and when sand filters, extended "dry" detention basins, and "wet" detention ponds or constructed wetlands have been found infeasible.

For surface filters, the grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units. Proprietary facilities should be installed consistent with the manufacturer's instructions. It should be noted that such designs likely would not provide the required hydromodification flow control.

References and Resources:

- RWQCB Order R9-2007-0001 (Storm Water NPDES Permit)
- Low Impact Development Center
- *County of San Diego Low Impact Development Handbook*
- *California Best Management Practices Handbooks*
- *Design of Stormwater Filtering Systems* (Claytor and Schueler, 1996)
- American Rainwater Catchment Systems Association
- Water Conservation Alliance of Southern Arizona
- *Rainwater Harvesting for Drylands and Beyond*
- *The Texas Manual on Rainwater Harvesting*
- *Managing Wet Weather With Green Infrastructure: Municipal Handbook, Rainwater Harvesting Policies* (Low Impact Development Center, 2008)

Chapter 5

Operation & Maintenance of Storm Water Facilities

How to prepare a customized Storm Water Maintenance Plan for the treatment BMPs on your site.

The storm water NPDES Permit requires the City of La Mesa to verify all treatment and flow-control facilities are adequately maintained. Note that treatment facilities include both LID IMPs and treatment control BMPs. Facilities you install as part of your project will be verified for effectiveness and proper performance. The City of La Mesa may also verify the ongoing function of storm water management features that are not treatment or flow control facilities, such as permeable pavements and limitations on impervious area.

Operation and maintenance of storm water facilities is a six-stage process:

1. Determine **who will own** the facility and be responsible for the maintenance of treatment facilities. Identify the means by which ongoing maintenance will be assured (for example, a maintenance agreement that runs with the land).

2. Identify typical maintenance requirements, and allow for these requirements in your project planning and preliminary design.

3. Prepare a **maintenance plan** for the site incorporating detailed requirements for **each treatment and flow-control facility**.

4. **Maintain** the facilities from the time they are constructed until ownership and maintenance responsibility is formally transferred.

5. **Formally transfer** operation and maintenance **responsibility** to the site owner or occupant. A warranty, secured by a bond, or other financial instrument, may be required to secure against lack of performance due to flaws in design or construction.

6. Maintain the facilities in perpetuity and comply with self-inspection, reporting, and verification requirements.

See the schedule for these stages in Table 5-1.

Stage 1: Ownership and Responsibility

You must specify a means to **ensure maintenance** of treatment and flow-control facilities **in perpetuity.**

Depending on the intended use of your site, this will require one or more of the following:

- Project proponent agreement to maintain storm water BMPs: The City may enter into a contract with the project proponent obliging the project proponent to maintain, repair, and replace the storm water BMP as necessary into perpetuity. Security may be required.

- Assessment districts: The City may approve an Assessment District or other funding mechanism proposed by the project proponent to provide funds for storm water BMP maintenance, repair, and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.

- Lease provisions: In those cases where the City holds title to the land in question, and the land is being leased to another party for private or public use, the City may assure storm water BMP maintenance, repair, and replacement through conditions in the lease.

- Public entity maintenance: The City may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the permanent treatment BMP. Unless acceptable to the City, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed, (e.g., through a trust fund, assessment district fees, bond, letter of credit or similar means). In addition, the City may seek protection from liability by appropriate releases and indemnities. The City shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The City shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions; and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the facilities. The City must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

The City may accept alternative maintenance mechanisms if such mechanisms are as protective as those listed above.

Ownership and maintenance responsibility for treatment and flow-control facilities should be discussed at the **beginning of project planning**, typically at the pre-application meeting for

planning and zoning review. Experience has shown provisions to finance and implement maintenance of treatment and flow-control facilities can be a major stumbling block to project approval, particularly for **small residential subdivisions**. (See "New Subdivisions" in Chapter 1.)

► PRIVATE OWNERSHIP AND MAINTENANCE

The City of La Mesa requires—as a condition of project approval—that a maintenance agreement be executed.

TABLE 5-1. Schedule for Planning Operation and Maintenance of Storm Water Treatment BMPs

Stage	*Description*	*Schedule*
1	Determine facility ownership and maintenance responsibility	Discuss with planning staff at pre-application meeting
2	Identify typical maintenance requirements	In initial submittal, coordinate with planning & zoning application
3	Develop detailed operation and maintenance plan	Provided with Project Submittal, and updated as necessary if any information changes prior to Stage 5.
4	Interim operation and maintenance of facilities	During and following construction including warranty period
5	Formal transfer of operation & maintenance responsibility	On sale and transfer of property or permanent occupancy
6	Ongoing maintenance and compliance with inspection & reporting requirements	In perpetuity

These agreements could provide that the City of La Mesa may collect a management and/or inspection fee established by a standard fee schedule, as applicable. In addition, the agreement may provide that, if the property owner fails to maintain the storm water facility, the City may enter the property, restore the storm water facility to good working order, and obtain reimbursement, including administrative costs, from the property owner.

► TRANSFER TO PUBLIC OWNERSHIP

The City of La Mesa may sometimes choose to have a treatment and flow-control facility deeded to the public, in fee or as an easement, and maintain the facility as part of the municipal storm drain system. The City may recoup the costs of maintenance through a special tax, assessment district, or similar mechanism.

Locating an IMP in a public right-of-way or easement creates an additional design constraint—along with hydraulic grade, aesthetics, landscaping, and circulation. However, because sites typically drain to the street, it may be possible to locate a bioretention swale parallel with the edge of the parcel. The facility may complement, or substitute for, an underground storm drain system.

Even if the facility is to be transferred to the City of La Mesa after construction is complete, it is still the responsibility of the builder to identify general operation and maintenance requirements, prepare a detailed operation and maintenance plan, and to maintain the facility until that responsibility is formally transferred.

Stage 2: General Maintenance Requirements

Include in your Project Submittal a general description of anticipated facility maintenance requirements. This will help ensure that:

- Ongoing costs of maintenance have been considered in your facility selection and design.
- Site and landscaping plans provide for access for inspections and by maintenance equipment.
- Landscaping plans incorporate irrigation requirements for facility plantings.
- Initial maintenance and replacement of facility plantings is incorporated into landscaping contracts and guarantees.

Fact sheets available on the Project Clean Water web page describe general maintenance requirements for the types of storm water facilities featured in the LID Design Guide (Chapter 4). You can use this information to specify general maintenance requirements in your Project Submittal.

Maintenance fact sheets for conventional storm water facilities are available in the California Stormwater BMP Handbooks.

Stage 3: Detailed Maintenance Plan

Prepare a detailed maintenance plan and submit it as required by the City of La Mesa. A detailed maintenance plan must be included with the initial Project Submittal; however the maintenance plan may later be updated to incorporate solutions to any problems or changes that occurred during project construction.

Your detailed maintenance plan should be kept on-site for use by maintenance personnel and during site inspections. It is also recommended that a copy of your initial Project Submittal be kept onsite as a reference.

► YOUR DETAILED MAINTENANCE PLAN: STEP BY STEP

The following step-by-step guidance will help you prepare your detailed maintenance plan.

Preparation of the plan will require familiarity with your storm water facilities as they have been or will be constructed and a fair amount of "thinking through" plans for their operation and maintenance.

► STEP 1: DESIGNATE RESPONSIBLE INDIVIDUALS

To begin creating your detailed maintenance plan, designate and identify:

- The individual who will have direct responsibility for the maintenance of storm water controls. This individual should be the designated contact with City inspectors and should sign self-inspection reports and any correspondence with the City of La Mesa regarding verification inspections.
- Employees or contractors who will report to the designated contact and are responsible for carrying out BMP operation and maintenance.
- The corporate officer authorized to negotiate and execute any contracts that might be necessary for future changes to operation and maintenance or to implement remedial measures if problems occur.
- Your designated respondent to problems, such as clogged drains or broken irrigation mains, that would require immediate response should they occur during off-hours.

Updated contact information must be provided to the City of La Mesa immediately whenever a property is sold and whenever designated individuals or contractors change.

Draw or sketch an **organization chart** to show the relationships of authority and responsibility between the individuals responsible for maintenance. This need not be elaborate, particularly for smaller organizations.

Describe how **funding for BMP operation and maintenance** will be assured, including sources of funds, budget category for expenditures, process for establishing the annual maintenance budget, and process for obtaining authority should unexpected expenditures for major corrective maintenance be required.

Describe how your organization will accommodate initial **training** of staff or contractors regarding the purpose, mode of operation, and maintenance requirements for the storm water facilities on your site. Also, describe how your organization will ensure ongoing training as needed and in response to staff changes.

► STEP 2: SUMMARIZE DRAINAGE AND BMPS

Incorporate the following information from your Project Submittal into your maintenance plan:

- Figures delineating and designating pervious and impervious areas.
- Figures showing locations of storm water facilities on the site.
- Tables of pervious and impervious areas served by each facility.

Review the Project Submittal narrative, if any, that describes each facility and its tributary drainage area and update the text to incorporate any changes that may have occurred during planning and zoning review, building permit review, or construction. Incorporate the updated text into your maintenance plan.

► STEP 3: DOCUMENT FACILITIES "AS BUILT"

Include the following information from final construction drawings:

- Plans, elevations, and details of all facilities. Annotate if necessary with designations used in the initial Project Submittal.
- Design information or calculations submitted in the detailed design phase (i.e., not included in the initial Project Submittal.)
- Specifications of construction for facilities, including sand or soil, compaction, pipe materials and bedding.

In the maintenance plan, note field changes to design drawings, including changes to any of the following:

- Location and layouts of inflow piping, flow splitter boxes, and piping to off-site discharge
- Depths and layering of soil, sand, or gravel
- Placement of filter fabric or geotextiles
- Changes or substitutions in soil or other materials.
- Natural soils encountered (e.g., sand or clay lenses)

► STEP 4: PREPARE MAINTENANCE PLANS FOR EACH FACILITY

Prepare a maintenance plan, schedule, and inspection checklists (routine, annual, and after major storms) for each facility. Plans and schedules for two or more similar facilities on the same site may be combined.

Use the following resources to prepare your customized maintenance plan, schedule, and checklists.

- Specific information noted in Steps 2 and 3, above.
- Other input from the facility designer, municipal staff, or other sources.
- Operation and Maintenance Fact Sheets (available on the Project Clean Water website).

Note any particular characteristics or circumstances that could require attention in the future, and include any troubleshooting advice.

Also include manufacturer's data, operating manuals, and maintenance requirements for any:

- Pumps or other mechanical equipment.
- Proprietary devices used as BMPs.

Manufacturers' publications should be referenced in the text (including models and serial numbers where available). Copies of the manufacturers' publications should be included as an attachment in the back of your maintenance plan or as a separate document.

► STEP 5: COMPILE MAINTENANCE PLAN

The following general outline is provided as an example.

I. Inspection and Maintenance Log

II. Updates, Revisions and Errata

III. Introduction

A. Narrative overview describing the site; drainage areas, routing, and discharge points; and treatment facilities.

IV. Responsibility for Maintenance

A. General

(1) Name and contact information for responsible individual(s).

(2) Organization chart or charts showing organization of the maintenance function and location within the overall organization.

(3) Reference to Operation and Maintenance Agreement (if any). A copy of the agreement should be attached.

(4) Maintenance Funding

(1) Sources of funds for maintenance

(2) Budget category or line item

(3) Description of procedure and process for ensuring adequate funding for maintenance

B. Staff Training Program

C. Records

D. Safety

V. Summary of Drainage Areas and Storm Water Facilities

A. Drainage Areas

(1) Drawings showing pervious and impervious areas (copied or adapted from initial Project Submittal).

(2) Designation and description of each drainage area and how flow is routed to the corresponding facility.

B. Treatment and Flow-Control Facilities

(1) Drawings showing location and type of each facility

(2) General description of each facility (Consider a table if more than two facilities)

(1) Area drained and routing of discharge.

(2) Facility type and size

VI. Facility Documentation

A. "As-built" drawings of each facility (design drawings in the draft Plan)

B. Manufacturer's data, manuals, and maintenance requirements for pumps, mechanical or electrical equipment, and proprietary facilities (include a "placeholder" in the draft plan for information not yet available).

C. Specific operation and maintenance concerns and troubleshooting

VII. Maintenance Schedule or Matrix

A. Maintenance Schedule for each facility with specific requirements for:

(1) Routine inspection and maintenance

(2) Annual inspection and maintenance

(3) Inspection and maintenance after major storms

B. Service Agreement Information

Assemble and make copies of your maintenance plan. One copy must be submitted to the City of La Mesa, and at least one copy kept on-site. Here are some suggestions for formatting the maintenance plan:

- Format plans to 8½" x 11" to facilitate duplication, filing, and handling.
- Include the revision date in the footer on each page.
- Scan graphics and incorporate with text into a single electronic file. Keep the electronic file backed-up so that copies of the maintenance plan can be made if the hard copy is lost or damaged.

► STEP 6: UPDATES

Your maintenance plan will be **a living document**.

Operation and maintenance personnel may change; mechanical equipment may be replaced, and additional maintenance procedures may be needed. Throughout these changes, the maintenance plan must be kept up-to-date.

Updates may be transmitted to the City of La Mesa at any time. However, at a minimum, updates to the maintenance plan must be reported with the annual submittal of the "BMP Inspection & Maintenance Verification Form," or equivalent, to the City.

Stage 4: Interim Maintenance

Applicants will typically be required to warranty storm water facilities against lack of performance due to flaws in design or construction. The warranty may need to be secured by a bond or other financial instrument.

Stage 5: Transfer Responsibility

As part of the detailed maintenance plan, note the expected date when responsibility for operation and maintenance will be transferred. Notify the City of La Mesa when this transfer of responsibility takes place.

Stage 6: Operation & Maintenance Verification

The City of La Mesa implements an operation and maintenance verification program, including periodic site inspections.

Contact municipal staff to determine the frequency of inspections, whether self-inspections are allowed, and applicable fees, if any.

References and Resources

- *Urban Runoff Quality Management* (WEF/ASCE, 1998). pp 186-189.
- *Stormwater Management Manual* (Portland, 2004). Chapter 3.
- *California Storm Water Best Management Practice Handbooks* (CASQA, 2003).
- *Best Management Practices Guide* (Public Telecommunications Center for Hampton Roads, 2002).
- Operation, Maintenance, and Management of Stormwater Management Systems (Watershed Management Institute, 1997)

Chapter 6

Construction BMP Requirements and Performance Standards

Guideline to meeting construction BMP requirements in the SWPPP or CSWMP for your site.

The storm water NPDES Permit requires the City of La Mesa to regulate construction activities within the City in order to reduce construction site discharges of pollutants from the MS4 to the maximum extent practicable and to prevent construction site discharges from the MS4 from causing or contributing to a violation of water quality standards.

Compliance with the City of La Mesa's construction BMP requirements is a four-step process:

1. Determine the applicable storm water requirements for your site.
2. Prepare and submit the appropriate plans.
3. Determine the adequacy of the plans proposed.
4. Assure implementation and maintenance of the requirements.

These steps are described below in greater detail.

Construction Storm Water BMP Requirements

The flow chart in Figure 6-1, "Construction Permit Review & Approval Process" describes how storm water requirements are incorporated into projects during the construction permit review process. The steps below describe the elements of the plan review and permitting processes for storm water best management practice (BMP) requirements.

FIGURE 6-1. Construction Permit Review and Approval Process

The following figure provides an overview of the project review process for projects that require a construction permit from the City of La Mesa. Construction permits include building permits, grading permits, demolition permits, and encroachment permits.

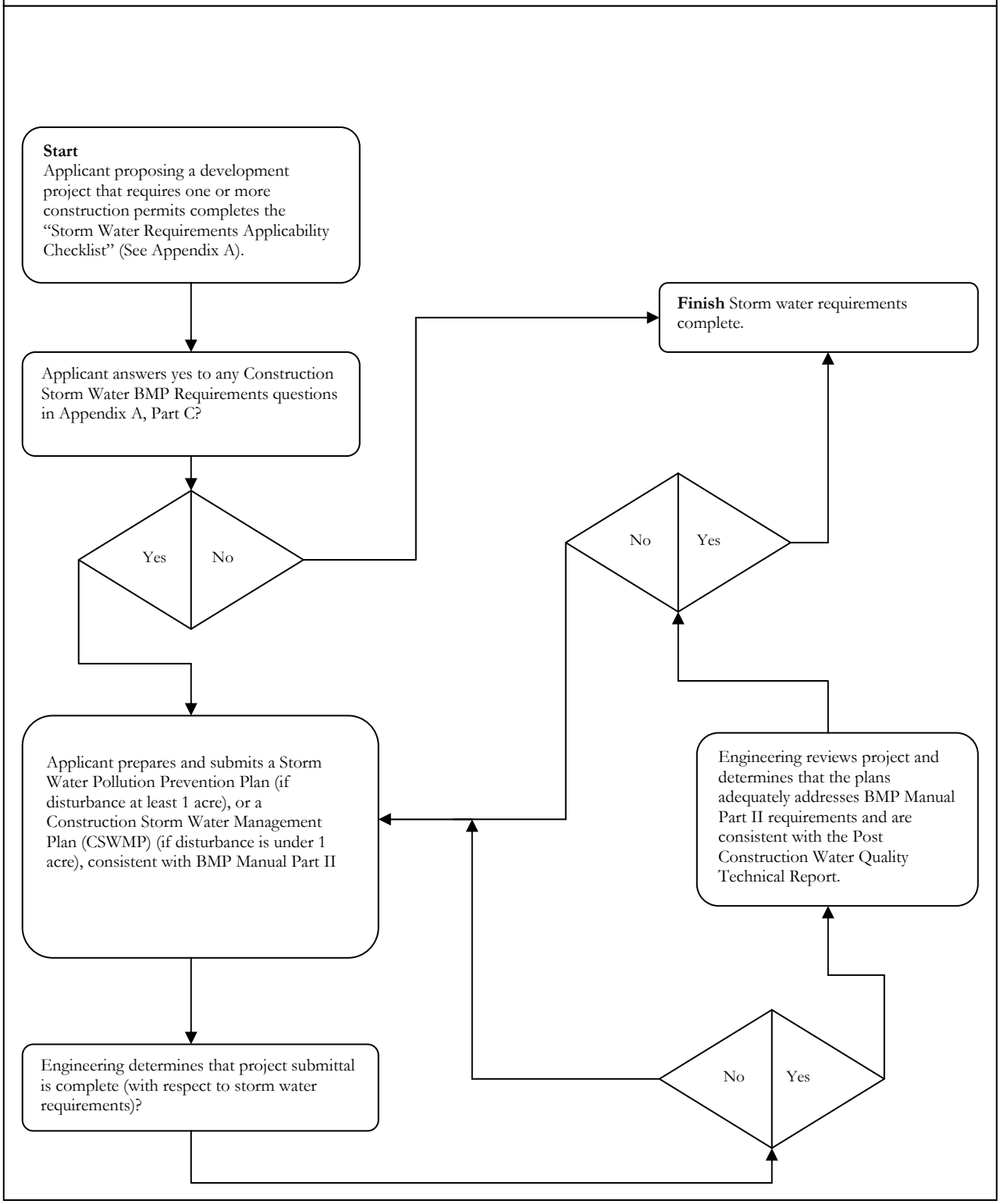

► STEP 1: DETERMINE APPLICABLE STORM WATER BMP REQUIREMENTS

Prior to submittal, applicants must complete the "Storm Water Requirements Applicability Checklist" in Appendix A, to determine if their project is subject to construction and/or permanent storm water best management practice (BMP) requirements. Projects subject to the construction storm water best management practices requirements must comply with the standards included in this BMP Manual, as appropriate depending on the site conditions, season, and project design, and construction methods. Each project must be given a priority ranking (high, medium, or low) for the construction phase (see Appendix A). The prioritization will determine the inspection frequency by the City but will not change the construction BMP requirements. Refer to Step 2: "Prepare & Submit Appropriate Plans," for guidance in navigating through this BMP Manual to ensure construction BMP performance standards are met.

► STEP 2: PREPARE & SUBMIT APPROPRIATE PLANS

This BMP Manual describes the construction site management requirements that contractors must comply with. In addition, the next section of this chapter ("Construction Storm Water BMP Performance Standards") lists the performance standards that construction sites must meet, and provides a list of required erosion control, sediment control, and materials management BMPs for reference. Additionally, each project must determine if they are subject to s requirements and be given a priority of high, medium or low (see Appendix A).

Construction Projects Over 1 Acre. Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in the next section of this chapter, "Construction Storm Water BMP Performance Standards." If a project disturbs 1 acre or more, the applicant must provide a Storm Water Pollution Prevention Plan (SWPPP), which identifies all construction BMP requirements required by this chapter, in accordance with the current State General Permit for Storm Water Discharges Associated with Construction Activity (State General Construction Permit). Consistent with the State General Construction Permit, the City will require that <u>both</u> erosion and sediment control BMPs be installed and maintained for all applicable projects in addition to good housekeeping and site and materials management. Additionally, the State General Construction Permit has a requirement for a sampling and monitoring program to be implemented. Additionally, each project determined to be subject to the City's advanced treatment requirements (see Appendix A) will need to include details on how the site plans to meet these requirements in the SWPPP and/or erosion control plan. Appendix D provides general guidelines for preparation of a SWPPP as well as a more detailed checklist to meet the requirements.

Construction Projects Under 1 Acre. Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in the next section of this chapter, "Construction Storm Water BMP Performance Standards." For projects that disturb less than 1-acre and are determined to have a potential to impact water quality during construction, the applicant must provide a Construction Storm Water Management Plan (CSWMP), which identifies all

construction BMP requirements required in this chapter, with the project submittal. The CSWMP shall depict the BMPs to be implemented during construction to reduce/eliminate discharges of pollutants to the storm drain conveyance system. The CSWMP shall include but not be limited to erosion and sediment control BMPs, good housekeeping measures and site and materials management.

After preparing plans and supporting documents according to the requirements in this BMP Manual, submit plans to the Department of Public Works/Engineering for review (See Step 3).

► STEP 3: DETERMINE ADEQUACY OF PROPOSED PLANS

Under the authority of the City Engineer, Engineering staff will review submitted plans for compliance with the applicable storm water requirements contained in this BMP Manual. The City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs. After all storm water requirements have been approved by the City Engineer, proceed to Step 4 to assure implementation and maintenance of the approved BMPs through permit conditions, plan notes, and if necessary, maintenance agreements.

► STEP 4: ASSURE IMPLEMENTATION & MAINTENANCE OF REQUIREMENTS

Applicants must provide assurances that permanent storm water BMPs will be constructed and permanently maintained throughout the use of a developed site, and that construction BMPs will be implemented and maintained until construction is complete. The summaries below describe how construction and permanent BMP requirements must be assured during both discretionary actions and construction permit review processes. After the City Engineer has approved all construction and/or permanent BMPs, refer to the final section of this chapter, "Implementation and Maintenance of Requirements," to determine how construction and permanent BMP implementation and maintenance will be assured.

Discretionary Action. For any discretionary action, permanent storm water requirements shall be incorporated into the project design and be shown on the plans. In addition, project shall be conditioned to execute a maintenance agreement for ongoing permanent BMP maintenance, satisfactory to the City Engineer, prior to the issuance of any construction permits. This requirement shall be noted on the plans for the discretionary action. If the project will be required to provide construction BMPs, the permit/approval shall include the "Standard Construction BMP Implementation and Maintenance Condition" listed in "Implementation and Maintenance of Requirements" at the end of this chapter.

Construction Permits. For projects requiring construction permits, construction and permanent BMP requirements shall be incorporated into the project design and shown on the plans prior to the issuance of any permits. The project applicant shall execute a permanent BMP maintenance agreement, satisfactory to the City Engineer, prior to issuance of any construction permits. Construction maintenance requirements and the specific permanent BMP maintenance procedures shall be noted on the plans. Any construction BMP requirements that cannot be shown graphically must be noted on the plans.

Construction Storm Water BMP Performance Standards

Those projects that have been determined to require construction BMPs in Steps 1 and 2 of this chapter must identify the construction BMPs to be implemented in accordance with the performance standards in this section. The construction BMPs must be identified in a Storm Water Pollution Prevention Plan or Construction Storm Water Management Plan (CSWMP) for projects disturbing more than or less than 1 acre, respectively. Because all projects require BMPs during construction, those projects that disturb less than 1 acre are required to have a Construction Storm Water Management Plan (CSWMP) which identifies the pollution prevention measures that will be taken. These plans must be prepared in accordance with the guidelines in Appendix D.

► 1. MINIMUM CONSTRUCTION BMP REQUIREMENTS

The City has developed a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to select, install, and maintain general site management, soil stabilization and erosion prevention, and sediment containment BMPs to reduce, retain, and manage pollutant discharges to the MEP. Table 6-1 outlines the minimum construction BMPs required by the City along with the corresponding current fact sheets obtained from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual (2003), where applicable. Additional information on the BMPs included in Table 6-1 can be found in the City of La Mesa Jurisdictional Urban Runoff Management Plan (JURMP), the Model Construction Program for San Diego Copermittees, the City of Los Angeles "Reference Guide for Stormwater Best Management Practices," and the California Stormwater Quality Association (CASQA) BMP Handbook for Construction.

It is the responsibility of the property owner or his/her designee to select, install and maintain appropriate BMPs that meet the City's minimum BMP requirements outlined in Table 6-1 below. BMPs must be installed in accordance with an industry recommended standard or in accordance with the requirements of the State General Construction Permit.

TABLE 6-1. Minimum Required BMPs for Construction

BMP Type	Minimum Required BMP(s)	Corresponding Caltrans Fact sheet
General Site Management		
Project Planning	Preserve natural hydrologic features where feasible	-
	Preserve riparian buffers and corridors where feasible	-
	Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction	-
	Minimize exposure time of disturbed soil areas	SS-1
	Minimize grading during the wet season and correlate grading with seasonal dry weather periods to the extent feasible	SS-1
	Temporarily stabilize and reseed disturbed soil areas as rapidly as feasible	SS-1

BMP Type	Minimum Required BMP(s)	Corresponding Caltrans Fact sheet
	Educate construction site employees and subcontractors on minimum BMP requirements	-
Pollution Prevention	Prevent the contamination of storm water from vehicles and equipment through proper management of the following types of activities: - Cleaning - Fueling - Maintenance	 NS-8 NS-9 NS-10
	Prevent the contamination of storm water from construction materials through proper management of the following types of activities: - Material Delivery and Storage - Material Use - Stockpile Management[1] - Spill Prevention and Control	 WM-1 WM-2 WM-3 WM-4
	Prevent the contamination of storm water by wastes through proper management of the following types of wastes: - Solid Waste - Hazardous Waste - Contaminated Soil - Concrete - Sanitary Waste - Liquid	 WM-5 WM-6 WM-7 WM-8 WM-9 WM-10
	Prevent the contamination of storm water through proper management of the follow activities: - Water Conservation Practices - Dewatering Operations - Paving and Grinding - Potable Water/Irrigation and Flushing	 NS-1 NS-2 NS-3 NS-7
Erosion Prevention and Sediment Containment		
Soil Stabilization and Erosion Prevention	Preserve existing vegetation where feasible	SS-2
	Prevent erosion and sediment runoff from exposed graded areas through physical stabilization and/or vegetation stabilization[2] by implementing one or more of the following BMPs: - Hydraulic Mulch - Hydroseeding - Soil Binders - Straw Mulch - Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats - Wood Mulch - Earth Dikes/Drainage Swales	 SS-3 SS-4 SS-5 SS-6 SS-7 SS-8 SS-9
	Reduce the velocity of storm water by using one or more of the following: - Outlet Protection/Velocity Dissipation - Slope Drains	 SS-10 SS-11
	Establish permanent re-vegetation or landscaping as early as feasible	SS-1

BMP Type	Minimum Required BMP(s)	Corresponding Caltrans Fact sheet
Sediment Containment	Protect the Perimeter of the site or exposed area from sediment discharge using one or more of the following: - Silt Fence - Gravel Bag Berm - Fiber Rolls	 SC-1 SC-6 SC-5
	Capture sediments in channeled storm water by using one or more of the following: - De-silting Basin[3] - Storm Drain Inlet Protection - Sediment Trap - Gravel Bag Barrier	 SC-2 SC-10 SC-3 SC-8
	Prevent sediment from being tracked off-site by using one or more of the following: - Stabilized Construction Entrance - Construction Road Stabilization - Entrance/Exit Tire Wash - Street Sweeping	 TC-1 TC-2 TC-3 SC-7

1. Stockpiles should be fully covered when materials are not being added or removed.
2. Vegetation stabilization BMPs must be installed, irrigated, and established (uniform vegetative coverage with 70% coverage established) prior to October 1st. In the event stabilizing vegetation has not been established by October 1st, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.
3. De-silting basins must be designed in accordance with industry standards such as Caltrans. If the project is one acre or greater the de-silting basin must be designed in accordance with the current State General Construction Permit.

► 2. SITE MANAGEMENT REQUIREMENTS

Construction is a dynamic operation where changes are expected. Storm water BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain their effectiveness and may require relocation, revision, and re-installation, particularly as project grading progresses. Therefore, owner/contractor self- inspections are required. They shall be performed by the owner's/contractor's Qualified Contact Person specifically trained in storm water pollution prevention site management and storm water BMPs, including the installation and maintenance of sediment and erosion control measures. Additional qualified persons may assist with the inspection activities under the direction of the Qualified Contact Person. A Qualified Contact Person is required for all sites during both wet and dry weather conditions.

There are four primary purposes of the self-inspections conducted by owners and contractors:

- To ensure that the owners/contractors take full responsibility for managing storm water pollution caused by their activities.
- To ensure that storm water BMPs are properly documented and implemented and are functioning effectively.
- To identify maintenance (e.g., sediment removal) and repair needs.

- To ensure that the project proponents implement their storm water management plans.

A self-inspection checklist, noting date, time, conditions and inspection date, must be kept on-site and made available for inspection, if requested (note: the State General Construction Permit has additional inspection requirements that must be met to comply with the permit). Self-inspections must be performed by a Qualified Contact Person according to the following schedule:

- Daily forecasting at all times
- At 24-hour intervals during extended rainfall events
- Daily evaluations as earth moving/grading is being conducted during the wet season
- Weekly (every 7 days) in the dry season as earth moving/grading is progressing

Storm water pollution prevention site management requirements include:

A. A qualified person who is trained and competent in the use of BMPs shall be on site daily, although not necessarily full time, to evaluate the conditions of the site with respect to storm water pollution prevention. This qualified contact person shall represent the contractor/ owner on storm water issues.

B. The qualified person shall implement the conditions of the Storm Water Pollution Prevention Plan, contract documents, and/or local ordinances with respect to erosion and sediment control and other waste management regulations.

C. The qualified person is responsible for monitoring the weather and implementation of any emergency plans as needed. The weather shall be monitored on a 5-day forecast plan and a full BMP protection plan shall be activated when there is a 40% chance of rain.

D. The qualified person is responsible for overseeing any site grading and operations and evaluating the effectiveness of the BMPs. This person shall modify the BMPs as necessary to keep the dynamics of the site in compliance. This person or other qualified persons are responsible for checking the BMPs routinely for maintenance and documenting the BMPs being implemented.

► 3. PERFORMANCE STANDARDS

Construction The City Engineer will evaluate the adequacy of the owner's/contractor's site management for storm water pollution prevention, inclusive of BMP implementation, on construction sites based on performance standards for storm water BMPs. Poor BMP practices shall be challenged. Performance standards shall include:

A. No measurable increase of pollution (including sediment) in runoff from the site.

B. No slope erosion.

C. Water velocity moving offsite must not be greater than pre-construction levels.

A site will be considered inactive if construction activities have ceased for a period of 7 or more consecutive calendar days. At any time of year, an inactive site must be fully protected from erosion and discharges of sediment. It is also the owner's/contractor's responsibility at both active and inactive sites to implement a plan to address all potential non-storm water discharges.

Regardless of any inspections conducted by the City, property owners or contractors are required to prevent any construction-related materials, wastes, spills, or residues from entering a storm water conveyance system and to apply for coverage under the State General Construction Permit as applicable for the site.

► 4. SEASONAL REQUIREMENTS

BMP requirements differ between the wet season (Oct. 1 – Apr. 30) and the dry season (May 1 – Sept. 30), the type of the project and topography of the site, as described below.

A. Dry Season Requirements (May 1 through September 30) include but are not limited to:

A. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)

B. Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).

C. Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).

D. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

E. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.

F. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).

G. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

H. The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.

I. A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.

J. Properly protected, designated storage areas are required for materials and wastes.

K. All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.

L. Remnant trash and debris shall be removed and/or properly stored/disposed of daily.

M. Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.

N. Materials for spill control/containment must be stockpiled onsite.

O. Non-storm water discharges must be eliminated or controlled to the MEP.

B. Rainy Season Requirements (October 1 through April 30) include but are not limited to:

A. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)

B. Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).

C. Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).

D. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

E. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.

F. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).

G. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

H. The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.

I. A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.

J. Properly protected, designated storage areas are required for materials and wastes.

K. All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.

L. Remnant trash and debris shall be removed and/or properly stored/disposed of daily.

M. Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.

N. Materials for spill control/containment must be stockpiled onsite.

O. Non-storm water discharges must be eliminated or controlled to the MEP.

P. Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.

Q. Perimeter protection and sediment containment BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.

R. Adequate soil stabilization and erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a selected BMP fails, it must be repaired, improved, or replaced with an acceptable alternate as soon as it is safe to do so.

S. All vegetation erosion prevention BMPs must be established prior to the rainy season to be considered as a BMP.

T. Standby erosion and sediment control BMPs must be able to protect all exposed soil areas. A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for seven or more calendar days. The ability to deploy standby BMP materials is not sufficient for these areas.

► 5. ADVANCED TREATMENT REQUIREMENTS

The City requires advanced treatment methods to be employed at construction sites determined to be an exceptional threat to water quality (see Appendix A). Advanced treatment involves using mechanical or chemical means to flocculate and remove suspended sediment from construction site runoff. Projects required to implement advanced treatment must comply with the following:

1. Treatment effluent water quality shall meet or exceed the water quality objectives for sediment, turbidity, and any other parameter deemed necessary by the City Engineer as listed in the Water Quality Control Plan for the San Diego Basin (9) for inland surface waters and lagoons and estuaries for the appropriate hydrologic unit.

2. Applicant shall provide design, operations and maintenance schedule, monitoring plan, certification of training of staff to the satisfaction of the City Engineer.

► 6. ADDITIONAL CONTROLS FOR CONSTRUCTION SITES

The Municipal Permit requires implementation of additional controls for construction sites tributary to 303(d) listed water body segments impaired for sediment or within, adjacent to, or discharging directly to coastal lagoons or other receiving waters within ESAs. Additional requirements for theses site will be determined on a site-by-site basis at the discretion of the City Engineer.

Implementation and Maintenance of Requirements

Discretionary Actions. Projects seeking discretionary approvals are not required to graphically demonstrate any construction BMP requirements on the project plans. Instead, the discretionary action shall include the following standard condition, which shall also be noted on the plans:

> "The Permittee or designee shall incorporate any construction best management practices (BMPs) necessary to comply with the grading regulations in Chapter 14.05 of the La Mesa Municipal Code, into the construction plans and/or specifications, satisfactory to the City Engineer, prior to the issuance of any construction permits."

Construction Permits for Projects Under 1 Acre. Projects proposing to disturb less than 1 acre during construction shall include construction BMP requirements, where possible, on the plans. Any remaining construction BMPs that cannot be shown graphically on the plans shall be either noted on, or stapled to, the plans and made a condition of the permit. The project's construction priority ranking (see Appendix A) must also be noted on the construction plans. Applicants proposing projects that include permanent BMPs must prepare (if not already prepared as part of a previous permit or approval), and execute a maintenance agreement, prepared satisfactory to the City, following the program described in Chapter 5 of this BMP Manual prior to the issuance of any construction permits. The permanent BMPs shall be

graphically shown on the plans, where possible, and made a condition of the project's permit/approval. The permanent BMP's operation and maintenance requirements (O & M plan discussed in Chapter 5 of this BMP Manual) shall also be noted on the plans and made a condition of the project's permit/approval.

Construction Permits for Projects Over 1 Acre. Projects proposing to disturb more than 1 acre during construction shall include all construction BMPs in a Storm Water Pollution Prevention Plan, prepared in accordance with Appendix D. The construction BMPs shall also be shown on the plans, where possible. Any remaining construction BMPs that cannot be shown graphically on the plans shall be either noted or stapled to the plans and made a condition of the permit. The project's construction priority ranking (see Appendix A) must also be noted on the construction plans. Applicants proposing projects that include permanent BMPs must prepare (if not already prepared as part of a previous permit or approval), and execute a maintenance agreement, prepared satisfactory to the City, following the program described in Chapter 5 of this BMP Manual prior to the issuance of any construction permits. The permanent BMPs shall be graphically shown on the plans, where possible, and made a condition of the project's permit/approval. The permanent BMP's operation and maintenance requirements (O & M plan discussed in Chapter 5 of this BMP Manual) shall also be noted on the plans and made a condition of the project's permit/approval.

Appendix

A

Storm Water Requirements Applicability Checklist

STORM WATER PROJECT DATA SHEET

PROJECT DATA:

Owner's Name & Phone No: _____

Address: _____ Permit No: _____

Project: _____ Date Applied: _____

PROJECT SITE DATA:

1. Area of the lot/parcel = _____ sf
2. Existing impervious area (roof/building foot print) = _____ sf
3. Existing impervious area (driveway, parking, walkway, hardscape etc.) = _____ sf
4. Impervious area after development (roof/building foot print) = _____ sf
5. Impervious area after development (driveway, parking, walkway, hardscape, etc.) = _____ sf
6. Total area to be disturbed = _____ sf
7. Storm water runoff based on Hydrology Study:

Existing runoff = _____ cfs, Post construction runoff = _____ cfs

8. Identify if the runoff from the site discharges to the public street or storm drain or open channel, detention or retention basin: _____
9. Watershed (Check One): San Diego River _____ San Diego Bay _____

---

a. Total disturbed area includes impervious area, construction material storage, staging area, graded slopes, new slopes and landscape areas.

b. The information shall be shown on the site/grading plans.

c. Complete the Storm Water Requirements Applicability Checklist

Notes:

- Items 1 through 9 shall be shown on the site development plan/grading plan.
- The applicant may be required to submit SWPPP or CSWMP, and PCWQTR or SPCBMPP depending on the "Priority" as stated below.

A Hydrology report may be required.

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the checklist to determine which permanent best management practices (BMPs) and which construction BMPs are required for your project for storm water. *This form must be completed and submitted with your permit application.*

SECTION 1. PERMANENT STORM WATER BMP REQUIREMENTS:

	YES	NO
1. Is the project a new development?	☐	☐
2. Is the project a significant redevelopment that adds/replaces/creates at least 5,000 ft^2 of impervious surface?*	☐	☐
** Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for an expanded definition of "significant redevelopment".*		

If both of the above answers are "No", go to Part B. If either of the above answers is "Yes," Complete Part A Below.

PART A: DETERMINE PRIORITY DEVELOPMENT PROJECT PERMANENT STORM WATER BMP REQUIREMENTS.

DOES THE PROJECT MEET THE DEFINITION OF ONE OR MORE OF THE PRIORITY DEVELOPMENT PROJECT CATEGORIES AS DEFINED IN LA MESA'S BMP MANUAL PART II? (SEE GLOSSARY)*	YES	NO
1. Residential development resulting in the disturbance of one acre or more of land or comprised of 10 or more attached or detached dwelling units?	☐	☐
2. Commercial development resulting in the disturbance of one acre or more of land?	☐	☐
3. Industrial development resulting in the disturbance of one acre or more of land?	☐	☐
4. Automotive repair shop?	☐	☐
5. Restaurant greater than 5,000 square feet?	☐	☐
6. Steep (slope of 25% or more) hillside development that will create greater than 5,000 square feet of impervious surface?	☐	☐
7. Project located within or directly adjacent to (within 200 feet) or directly discharging to an Environmentally Sensitive Area (ESA) and creates at least 2,500 square feet of impervious area or increases impervious area to 10% or more of its naturally occurring condition?	☐	☐
8. "Parking lot" greater than or equal to 5,000 square feet or with at least 15 parking spaces, and potentially exposed to urban runoff?	☐	☐
9. "Streets, roads, highways, and freeways" that would create a new paved surface that is 5,000 square feet or greater?	☐	☐
10. "Retail Gasoline Outlets" either 5,000 square feet or greater or with a projected "Average Daily Traffic" of 100 or more vehicles per day	☐	☐
11. All other pollutant generating Development Projects that result in the disturbance of one acre or more of land. Generally all projects which include impervious surfaces and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels.	☐	☐
**** Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for expanded definitions of the priority development project categories.***		

Limited Exclusion: Trenching and resurfacing work associated with utility projects, such as resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, bike lanes on existing roads, and routine replacement of damaged pavement, such as pothole repair, are not considered priority development projects. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces. Parking lots, buildings and other structures associated with utility projects are priority development projects if one or more of the criteria in Part A are met.

If all answers to Part A are "No", continue to Part B.

PART B: DETERMINE STANDARD PERMANENT STORM WATER REQUIREMENTS.

DOES THE PROJECT PROPOSE:	YES	NO
1. New impervious areas such as rooftops, roads, parking lots, driveways, paths and sidewalks?	☐	☐
2. New pervious landscape areas and irrigation systems?	☐	☐
3. Permanent structures within 100 feet of any natural water body?	☐	☐
4. Trash storage areas?	☐	☐
5. Liquid or solid material loading and unloading areas?	☐	☐
6. Vehicle or equipment fueling, washing, or maintenance areas?	☐	☐
7. Require a General NPDES Permit for storm water discharges associated with industrial activities* (except construction)?	☐	☐
8. Commercial/ industrial waste handling or storage, excluding typical office or household waste?	☐	☐
9. Any grading or ground disturbance during construction?	☐	☐
10. Any new storm drains, or alteration to existing storm drains?	☐	☐
**To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml.*		

If any of the answers provided in Section 1, Part A are "Yes," the project is subject to the "Priority Development Project Permanent Storm Water BMP Requirements". A Post Construction Water Quality Technical Report (PCWQTR) shall be submitted; the requirements of the City's Storm Water BMP Manual Part II must be satisfied. In particular, see Chapters 1 through 5 of the BMP Manual. All Priority Development Projects are also subject to hydromodification management requirements (unless an exemption applies) as discussed in the City's Storm Water BMP Manual Part II and must demonstrate compliance.

If all answers provided in Section 1, Part A are "No," and any answers to Part B are "Yes," the project is only subject to the Standard Permanent Storm Water BMP Requirements and shall submit a Standard Post-Construction BMP Plan (SPCBMPP). In particular, see Appendix G of the City's Storm Water BMP Manual Part II.

If every question in Part A and B is answered "No," the project is exempt from permanent storm water requirements.

Required submittals, Section 1:	**PCWQTR**	☐	**SPCBMPP**	☐	**Hydromodification**	☐

SECTION 2. CONSTRUCTION STORM WATER BMP REQUIREMENTS:

PART C: DETERMINE CONSTRUCTION PHASE STORM WATER REQUIREMENTS.

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	YES	NO
1. Does the project propose grading or soil disturbance of one acre or more?	☐	☐
2. Does the project propose any grading or soil disturbance?	☐	☐
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	☐	☐
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete and stucco)?	☐	☐

If the answer to question 1 of Part C is answered "Yes," your project is subject to California's statewide NPDES General Permit for Storm Water Discharges Associated with Construction Activities (General Construction Permit) and the City's Construction Storm Water BMP Performance Standards. To enroll in the General Construction Permit, see the website at www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml. A Storm Water Pollution Prevention Plan (SWPPP), a Notice of Intent (NOI), and other documents must be submitted electronically. Parts D and E of this form must also be completed.

If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Construction Storm Water BMP Performance Standards. A Construction Storm Water Management Plan (CSWMP) must be prepared, and Part E of this form must be completed.

If every question in Part C is answered "No," you do not need to complete Parts D and E of this form, and neither a SWPPP nor CSWMP is required.

PART D: DETERMINE ADVANCED TREATMENT SUBJECTIVITY

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	YES	NO
1. Is the project located within, adjacent to, or is a portion of the site within 200 feet of waters listed on the CWA Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation or turbidity?	☐	☐
2. Will the project disturb more than five acres, including all phases of the development?	☐	☐
If the answers to 1 and 2 are both "yes", please answer questions 3 and 4 below.		
3. Will the project disturbed slopes steeper than 4:1 (horizontal: vertical) and higher than 10 feet that drain toward the 303(d) listed receiving water?	☐	☐
4. Does the project contain a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4?	☐	☐

If all answers to part D are "yes", the project is subject to the City's advanced treatment requirements for construction. Advanced treatment requirements are detailed in Chapter 6 of the Storm Water BMP Manual Part II. Note that even if the above criteria do not apply, advanced treatment may be required at the discretion of the City Engineer.

Required submittals, Section 2:	**SWPPP, NOI** ☐	**CSWMP** ☐	**Advanced Treatment** ☐

PART E: DETERMINE CONSTRUCTION SITE PRIORITY

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans and included in the SWPPP or CSWMP. See the attached flow chart for guidance on determining the construction prioritization. The City Engineer may adjust the priority of the projects both before and during construction.

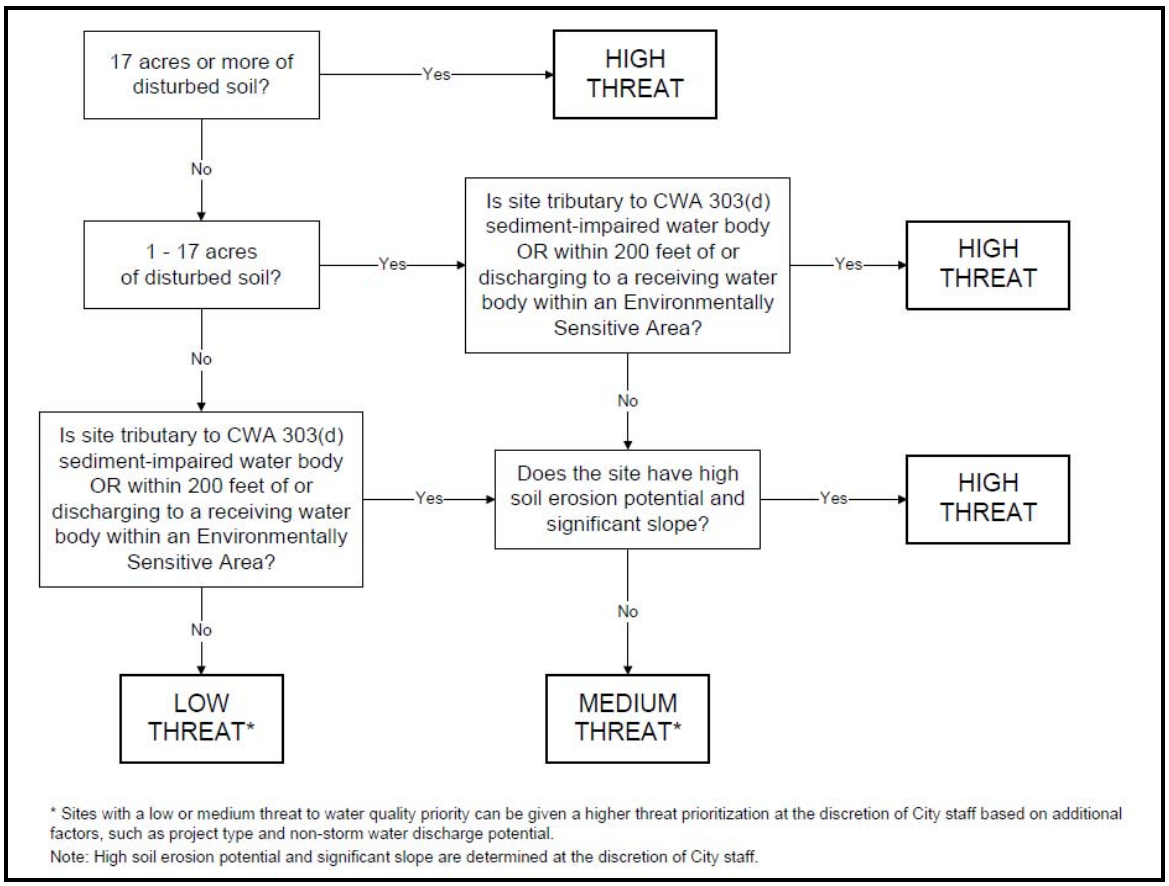

According to the attached flow chart, this project has the following threat to water quality priority:

☐ **High** ☐ **Medium** ☐ **Low**

[Note: The construction priority DOES NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority DOES affect the frequency of inspections that will be conducted by the City.]

Completed By: _____

Name, Address & Phone

Appendix

B

Low Impact Development (LID) Integrated Management Practice (IMP) Design Sheets

Self-Treating and Self-Retaining Areas

Best Uses

- Heavily landscaped sites

Advantages

- No maintenance verification requirement
- Complements site landscaping

Limitations

- Requires substantial square footage
- Grading requirements must be coordinated with landscape design

► CRITERIA

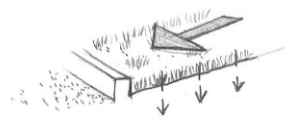

Rainfall on self-treating areas infiltrates or—during intense storms— drains directly off-site or to the storm drain system.

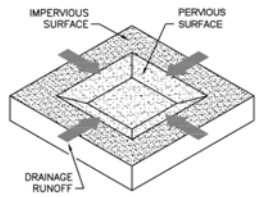

Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. During intense storms, runoff may drain off-site, to the storm drain system, or to IMPs.

LID design seeks to manage runoff from roofs and paving so effects on water quality and hydrology are minimized. Runoff from landscaping, however, does not need to be managed the same way.

Runoff from landscaping can be managed by creating self-treating and self-retaining areas.

Self-treating areas are natural, landscaped, or turf areas that drain directly off site or to the storm drain system. Examples include upslope undeveloped areas that are ditched and drained around a development and grassed slopes that drain offsite to a street or storm drain. Self-treating areas may not drain on to adjacent paved areas.

Where a landscaped area is upslope from or surrounded by paved areas, a **self-retaining area** (also called a zero-discharge area) may be created. Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that the first inch of rainfall would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

Areas draining to self retaining areas. Drainage from roofs and paving can be directed to self-retaining areas and allowed to infiltrate into the soil. The maximum allowable ratio is 2 parts impervious: 1 part pervious.

The self-retaining area must be bermed or depressed to retain an inch of rainfall including the flow from the tributary impervious area.

► DETAILS

Drainage from self-treating areas must flow to off-site streets or storm drains without flowing on to paved areas.

Pavement within a self-treating area cannot exceed 5% of the total area.

In self-retaining areas, overflows and area drain inlets should be set high enough to ensure ponding over the entire surface of the self-retaining area.

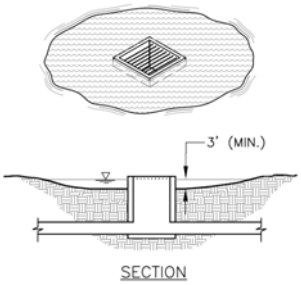

Set overflows and area drain inlets high enough to ensure ponding (3" deep) over the surface of the self-retaining area.

Self–retaining areas should be designed to promote even distribution of ponded runoff over the area.

Leave enough reveal (from pavement down to landscaped surface) to accommodate buildup of turf or mulch.

► APPLICATIONS

Lawn or landscaped areas adjacent to streets can be considered self-treating areas.

Self-retaining areas can be created by depressing lawn and landscape below surrounding sidewalks and plazas.

Runoff from walkways or driveways in parks and park-like areas can sheet-flow to self-retaining areas.

Roof leaders can be connected to self-retaining areas by piping beneath plazas and walkways. If necessary, a "bubble-up" can be used.

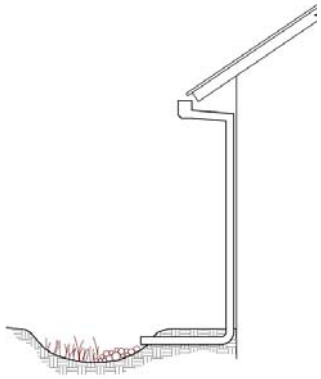

Connecting a roof leader to a self-retaining area. The head from the eave height makes it possible to route roof drainage some distance away from the building.

Self-retaining areas can be created by terracing mild slopes. The elevation difference promotes subsurface drainage.

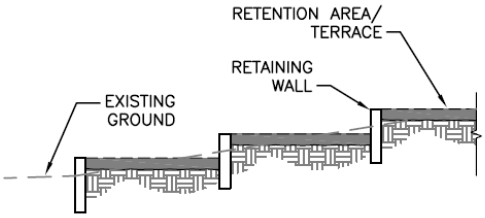

Mild slopes can be terraced to create self-retaining areas.

► DESIGN CHECKLIST FOR SELF-TREATING AREAS

- ❒ The self-treating area is at least 95% lawn or landscaping (not more than 5% impervious).
- ❒ Re-graded or re-landscaped areas have amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- ❒ Runoff from the self-treating area does not enter an IMP or another drainage management area, but goes directly to the storm drain system.

► DESIGN CHECKLIST FOR SELF-RETAINING AREAS

- ❒ Area is bermed all the way around or graded concave.

- ❒ Slopes do not exceed 4%.
- ❒ Entire area is lawn, landscaping, or pervious pavement (see criteria in Chapter 4).
- ❒ Area has amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- ❒ Any area drain inlets are at least 3 inches above surrounding grade.

► DESIGN CHECKLIST FOR AREAS DRAINING TO SELF-RETAINING AREAS

- ❒ Ratio of tributary impervious area to self-retaining area is not greater than 2:1.
- ❒ Roof leaders collect runoff and route it to the self-retaining area.
- ❒ Paved areas are sloped so drainage is routed to the self-retaining area.
- ❒ Inlets are designed to protect against erosion and distribute runoff across the area.

Pervious Pavements

► **CRITERIA**

Impervious roadways, driveways, and parking lots account for much of the hydrologic impact of land development. In contrast, pervious pavements allow rainfall to collect in a gravel or sand base course and infiltrate into native soil.

Pervious pavements are designed to transmit rainfall through the surface to storage in a base course. For example, a 4-inch-deep base course provides approximately 1.6 inches of storage. Runoff stored in the base course infiltrates to native soils over time. Except in the case of solid pavers, the surface course provides additional storage.

Areas with the following pervious pavements may be regarded as "self-treating" and require no additional treatment or flow control if they drain off-site (not to an IMP).

- Pervious concrete
- Porous asphalt
- Crushed aggregate (gravel)
- Open pavers with grass or plantings
- Open pavers with gravel
- Artificial turf

Areas with these pervious pavements can also be **self-retaining areas** and may receive runoff from impervious areas if they are bermed or depressed to retain the first one inch of rainfall, including runoff from the tributary impervious area.

Solid unit pavers—such as bricks, stone blocks, or precast concrete shapes—are considered to reduce runoff compared to impervious pavement, when the unit pavers are set in sand or gravel with d" gaps between the pavers. Joints must be filled with an open-graded aggregate free of fines.

Best Uses

- Areas with permeable native soils
- Low-traffic areas
- Where aesthetic quality can justify higher cost

Advantages

- No maintenance verification requirement
- Variety of surface treatments can complement landscape design

Limitations

- Initial cost
- Placement requires specially trained crews
- Geotechnical concerns, especially in clay soils
- Concerns about pavement strength and surface integrity
- Some municipalities do not allow in public right of way

When draining pervious pavements to an IMP, use the runoff factors in Table 4-2.

► DETAILS

Permeable pavements can be used in clay soils; however, special design considerations, including an increased depth of base course, typically apply and will increase the cost of this option. Geotechnical fabric between the base course and underlying clay soil is recommended.

Pavement strength and durability typically determines the required depth of base course. If underdrains are used, the outlet elevation must be a minimum of 3 inches above the bottom elevation of the base course.

Pervious concrete and porous asphalt must be installed by crews with special training and tools. Industry associations maintain lists of qualified contractors.

Parking lots with crushed aggregate or unit pavers may require signs or bollards to organize parking.

► DESIGN CHECKLIST FOR PERVIOUS PAVEMENTS

- ❒ No erodible areas drain on to pavement.
- ❒ Subgrade is uniform. Compaction is minimal.
- ❒ Reservoir base course is of open-graded crushed stone. Base depth is adequate to retain rainfall and support design loads.
- ❒ If a subdrain is provided, outlet elevation is a minimum of 3 inches above bottom of base course.
- ❒ Subgrade is uniform and slopes are not so steep that subgrade is prone to erosion.
- ❒ Rigid edge is provided to retain granular pavements and unit pavers.
- ❒ Solid unit pavers are installed with open gaps filled with open-graded aggregate free of fines.
- ❒ Permeable pavements are installed by industry-certified professionals according to vendor's recommendations.
- ❒ Selection and location of pavements incorporates Americans with Disabilities Act requirements, site aesthetics, and uses.

Resources

- Southern California Concrete Producers www.concreteresources.net.
- California Asphalt Pavement Association
  http://www.californiapavements.org/stormwater.html
- Interlocking Concrete Pavement Institute
  http://www.icpi.org/
- *Start at the Source Design Manual for Water Quality Protection,* pp. 47-53.
  http://www.cccleanwater.org/Publications/StartAtTheSource/Start_At_The_Source_Full.pdf
- *Porous Pavements,* by Bruce K. Ferguson. 2005. ISBN 0-8493-2670-2.

Bioretention Facilities

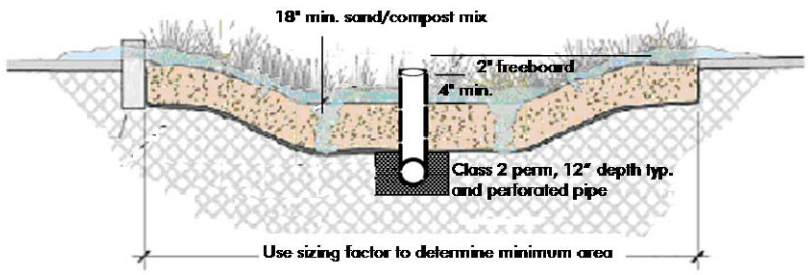

Bioretention facility configured for treatment-only requirements. Bioretention facilities can rectangular, linear, or nearly any shape.

Bioretention detains runoff in a surface reservoir, filters it through plant roots and a biologically active soil mix, and then infiltrates it into the ground. Where native soils are less permeable, an underdrain conveys treated runoff to storm drain or surface drainage.

Bioretention facilities can be configured in nearly any shape. When configured as linear **swales**, they can convey high flows while percolating and treating lower flows.

Bioretention facilities can be configured as in-ground or above-ground planter boxes, with the bottom open to allow infiltration to native soils underneath. Bioretention basins must be hydrologically connected with the underlying soil. Any Bioretention basin which is completely lined and sealed shall be sized as a Flow Through Planter.

Best Uses

- Commercial areas
- Residential subdivisions
- Industrial developments
- Roadways
- Parking lots
- Fit in setbacks, medians, and other landscaped areas

Advantages

- Can be any shape
- Low maintenance
- Can be landscaped

Limitations

- Require 4% of tributary impervious square footage
- Typically requires 3-4 feet of head
- Irrigation typically required

► CRITERIA

For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum

Parameter	Criterion
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)
Soil mix surface area	0.04 times tributary impervious area (or equivalent)
Surface reservoir depth	6 inches minimum; may be sloped to 4 inches where adjoining walkways.
Underdrain	Required in Group "C" and "D" soils. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► DETAILS

Plan. On the surface, a bioretention facility should be one level, shallow basin—or a series of basins. As runoff enters each basin, it should flood and fill throughout before runoff overflows to the outlet or to the next downstream basin. This will help prevent movement of surface mulch and soil mix.

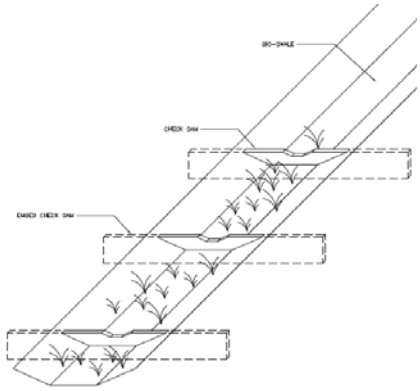

Use check dams for linear bioretention facilities (swales) on a slope.

In a linear swale, check dams should be placed so that the lip of each dam is at least as high as the toe of the next upstream dam. A similar principle applies to bioretention facilities built as terraced roadway shoulders.

Inlets. Paved areas draining to the facility should be graded, and inlets should be placed, so that runoff remains as sheet flow or as dispersed as possible. Curb cuts should be wide (12" is recommended) to avoid clogging with leaves or debris. Allow for a minimum reveal of 4"-6" between the inlet and soil mix elevations to ensure turf or mulch buildup does not block the

inlet. In addition, place an apron of stone or concrete, a foot square or larger, inside each inlet to prevent vegetation from growing up and blocking the inlet.

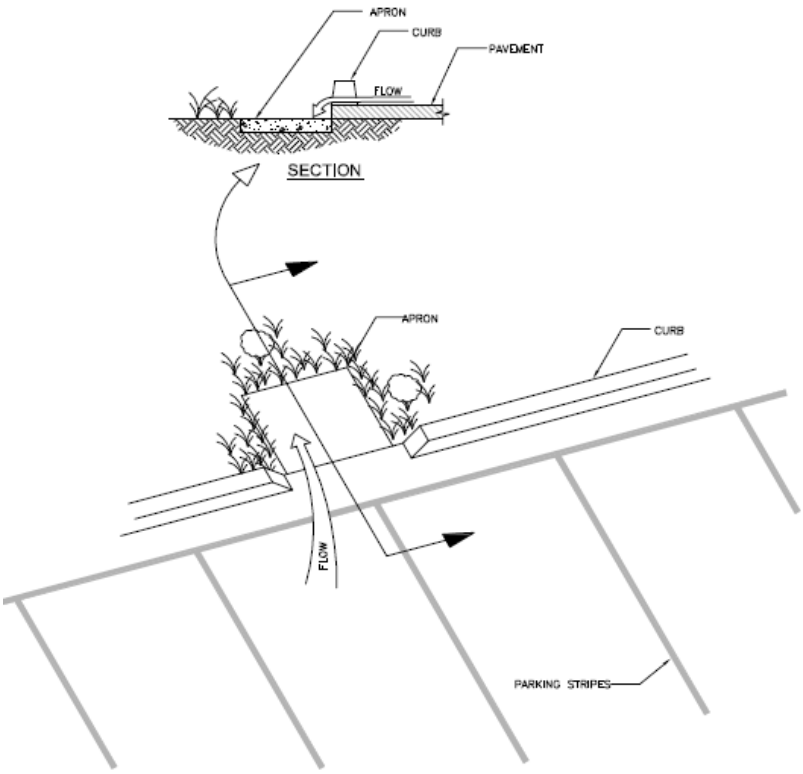

Recommended design details for bioretention facility inlets (see text).

Where runoff is collected in pipes or gutters and conveyed to the facility, protect the landscaping from high-velocity flows with energy-dissipating rocks. In larger installations, provide cobble-lined channels to better distribute flows throughout the facility.

Upturned pipe outlets can be used to dissipate energy when runoff is piped from roofs and upgradient paved areas.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" washed pea gravel be substituted at the top of the crushed rock gravel layers. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer or the gravel drainage layer from the native soil.

Underdrains. No underdrain is required where native soils beneath the facility are Hydrologic Soil Group A or B. For treatment-only facilities where native soils are Group C or D, a perforated pipe must be bedded in the gravel layer and must terminate at a storm drain or other approved discharge point.

Outlets. In treatment-only facilities, outlets must be set high enough to ensure the surface reservoir fills and the entire surface area of soil mix is flooded before the outlet elevation is reached. In swales, this can be achieved with appropriately placed check dams.

The outlet should be designed to exclude floating mulch and debris.

Vaults, utility boxes, and light standards. It is best to locate utilities outside the bioretention facility—in adjacent walkways or in a separate area set aside for this purpose. If utility structures are to be placed within the facility, the locations should be anticipated and adjustments made to ensure the minimum bioretention surface area and volumes are achieved. Leaving the final locations to each individual utility can produce a haphazard, unaesthetic appearance and make the bioretention facility more difficult to maintain.

Emergency overflow. The site grading plan should anticipate extreme events and potential clogging of the overflow and route emergency overflows safely.

Trees. Bioretention areas can accommodate small or large trees. There is no need to subtract the area taken up by roots from the effective area of the facility. Extensive tree roots maintain soil permeability and help retain runoff. Normal maintenance of a bioretention facility should not affect tree lifespan.

The bioretention facility can be integrated with a tree pit of the required depth and filled with structural soil. If a root barrier is used, it can be located to allow tree roots to spread throughout the bioretention facility while protecting adjacent pavement. Locations and planting elevations should be selected to avoid blocking the facility's inlets and outlets.

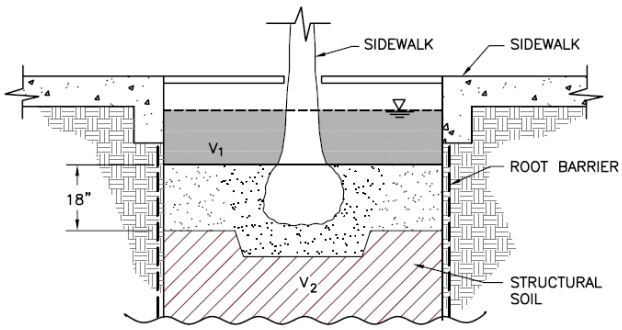

Bioretention facility configured as a tree well.
The root barrier is optional.

► APPLICATIONS

Multi-purpose landscaped areas. Bioretention facilities are easily adapted to serve multiple purposes. The loamy sand soil mix will support turf or a plant palette suitable to the location and a well-drained soil.

Example landscape treatments:

- Lawn with sloped transition to adjacent landscaping.
- Swale in setback area
- Swale in parking median
- Lawn with hardscaped edge treatment
- Decorative garden with formal or informal plantings
- Traffic island with low-maintenance landscaping
- Raised planter with seating
- Bioretention on a terraced slope

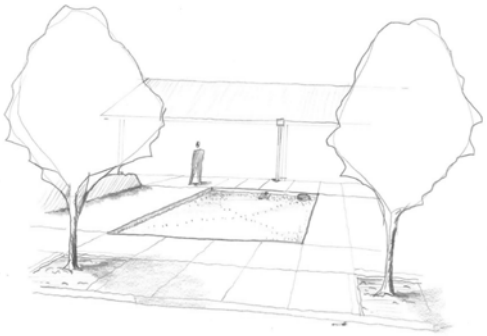

Bioretention facility configured as a recessed decorative lawn with hardscaped edge.

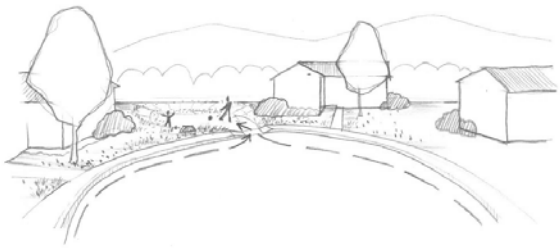

Bioretention facility configured and planted as a lawn/ play area.

Residential subdivisions. Some subdivisions are designed to drain roofs and driveways to the streets (in the conventional manner) and then drain the streets to bioretention areas, with one bioretention area for each 1 to 6 lots, depending on subdivision layout and topography.

If allowed by the local jurisdiction, bioretention areas can be placed on a separate, dedicated parcel with joint ownership.

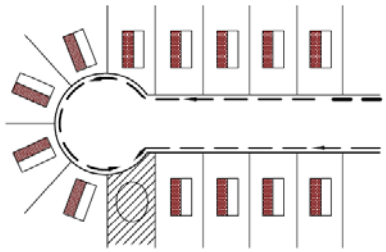

Bioretention facility receiving drainage from individual lots and the street in a residential subdivision.

Sloped sites. Bioretention facilities must be constructed as a basin, or series of basins, with the circumference of each basin set level. It may be necessary to add curbs or low retaining walls.

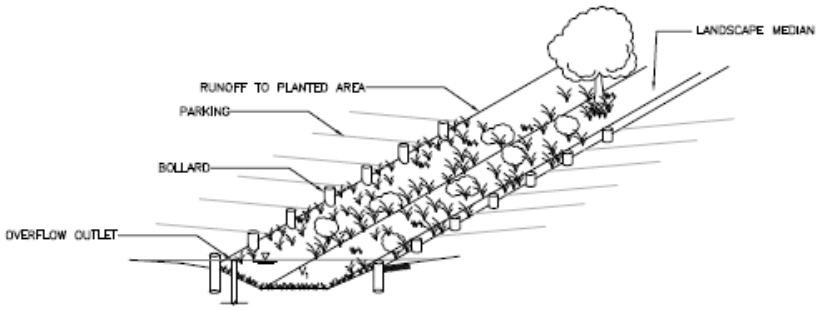

Bioretention facility configured as a parking median.
Note use of bollards in place of curbs, eliminating the need for curb cuts.

Design Checklist for Bioretention

- ❒ Volume or depth of surface reservoir meets or exceeds minimum.
- ❒ 18" depth "loamy sand" soil mix with minimum long-term percolation rate of 5"/hour.
- ❒ Area of soil mix meets or exceeds minimum.
- ❒ Perforated pipe underdrain bedded in "Class 2 perm" with connection and sufficient head to storm drain or discharge point (except in "A" or "B" soils).
- ❒ No filter fabric.
- ❒ Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, with a minimum diameter of 6 inches and a watertight cap.
- ❒ Location and footprint of facility are shown on site plan and landscaping plan.
- ❒ Bioretention area is designed as a basin (level edges) or a series of basins, and grading plan is consistent with these elevations. If facility is designed as a swale, check dams are set so the lip of each dam is at least as high as the toe of the next upstream dam.
- ❒ Inlets are 12" wide, have 4"-6" reveal and an apron or other provision to prevent blockage when vegetation grows in, and energy dissipation as needed.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Plantings are suitable to the climate and a well-drained soil.
- ❒ Irrigation system with connection to water supply.
- ❒ Vaults, utility boxes, and light standards are located outside the minimum soil mix surface area.
- ❒ When excavating, avoid smearing of the soils on bottom and side slopes. Minimize compaction of native soils and "rip" soils if clayey and/or compacted. Protect the area from construction site runoff.

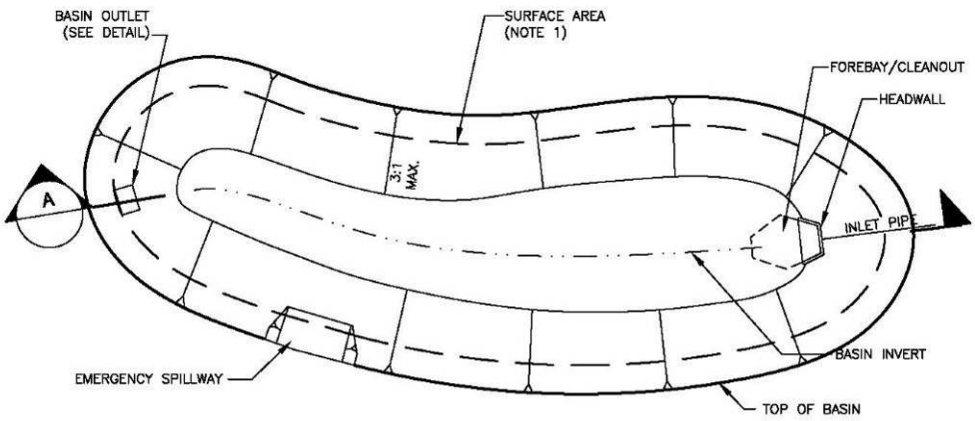

PLAN VIEW
NOT TO SCALE

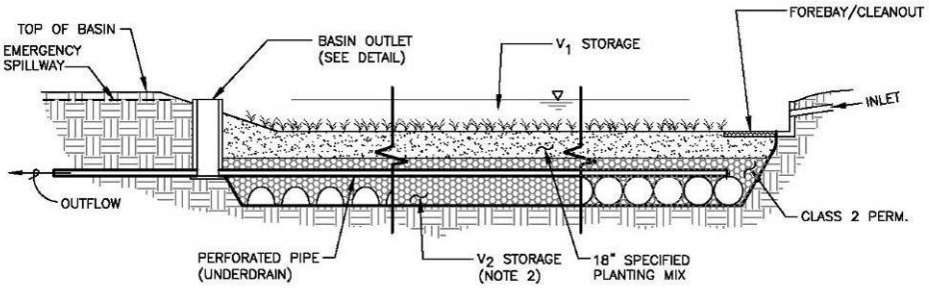

A SECTION
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NOTE

1. SURFACE AREA LIMIT DETERMINED BY EXTENT OF SPECIFIED PLANTING MIX, WHICH IS GOVERNED BY THE OUTLET SPILL ELEVATION. FOR REQUIRED SURFACE AREA REFER TO THE FACTORS AND EQUATIONS IN THE STORMWATER C.3 GUIDEBOOK.
2. V_2 STORAGE ACCOMPLISHED WITH INFILTRATION ARCHES, PERFORATED PIPES, CLASS 2 PERM OR OTHER AT THE DESIGNERS DISCRETION.

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Bioretention Facility

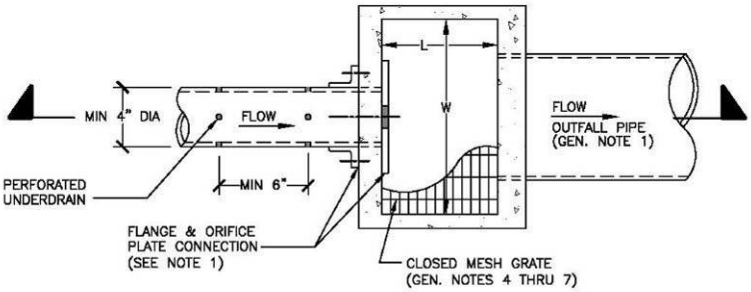

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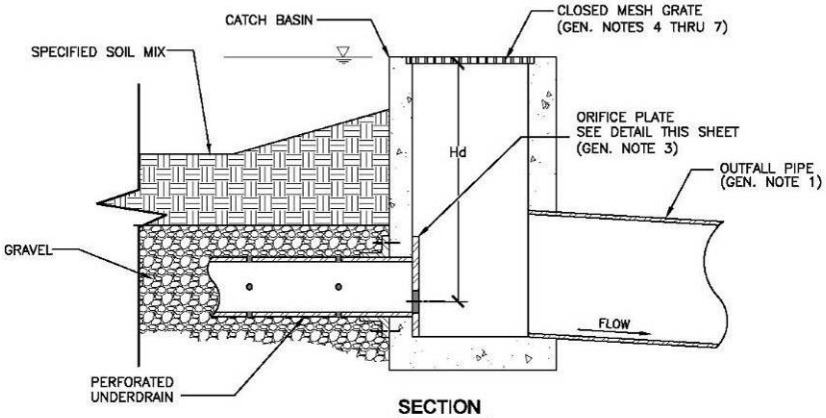

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ORIFICE PLATE: MIN SQUARE DIMENSIONS 1.0 FT GREATER THAN PIPE DIA. HOT-DIP GALVANIZED PLATE AFTER HOLES HAVE BEEN DRILLED

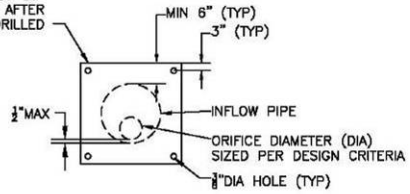

FLOW CONTROL ORIFICE PLATE

NOTE

1. ORIFICE PLATE & FLANGE CONNECTION TO CONCRETE SHALL BE FITTED WITH 30 DUROMETER NEOPRENE RING.

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Bioretention Facility Outlet Detail - A

Flow-through Planter

Portland 2004 Stormwater Manual

Best Uses

- Management of roof runoff
- Next to buildings
- Dense urban areas
- Where infiltration is not desired

Advantages

- Can be used next to structures
- Versatile
- Can be any shape
- Low maintenance

Limitations

- Can be used for flow-control only on sites with "C" and "D" soils
- Requires underdrain
- Requires 3-4 feet of head

Flow-through planters treat and detain runoff without allowing seepage into the underlying soil. They can be used next to buildings and on slopes where stability might be affected by adding soil moisture.

Flow-through planters typically receive runoff via downspouts leading from the roofs of adjacent buildings. However, they can also be set in-ground and receive sheet flow from adjacent paved areas.

Pollutants are removed as runoff passes through the soil layer and is collected in an underlying layer of gravel or drain rock. A perforated-pipe underdrain is typically connected to a storm drain or other discharge point. An overflow inlet conveys flows which exceed the capacity of the planter.

► CRITERIA

Treatment only. For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)

Parameter	Criterion
Soil mix surface area	0.04 times tributary impervious area (or equivalent)
Surface reservoir depth	6" minimum; may be sloped to 4" where adjoining walkways.
Underdrain	Typically used. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► DETAILS

Configuration. The planter must be level. To avoid standing water in the subsurface layer, set the perforated pipe underdrain and orifice as nearly flush with the planter bottom as possible.

Inlets. Protect plantings from high-velocity flows by adding rocks or other energy-dissipating structures at downspouts and other inlets.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Gravel storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" of washed pea gravel be substituted at the top of the crushed rock layer. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer.

Emergency overflow. The planter design and installation should anticipate extreme events and potential clogging of the overflow and route emergency overflows safely.

► APPLICATIONS

Adjacent to buildings. Flow-through planters may be located adjacent to buildings, where the planter vegetation can soften the visual effect of the building wall. A setback with a raised planter box may be appropriate even in some neo-traditional pedestrian-oriented urban streetscapes.

At plaza level. Flow-through planters have been successfully incorporated into podium-style developments, with the planters placed on the plaza level and receiving runoff from the tower roofs above. Runoff from the plaza level is typically managed separately by additional flow-through planters or bioretention facilities located at street level.

Steep slopes. Flow-through planters provide a means to detain and treat runoff on slopes that cannot accept infiltration from a bioretention facility. The planter can be built into the slope similar to a retaining wall. The design should consider the need to access the planter for

periodic maintenance. Flows from the planter underdrain and overflow must be directed in accordance with local requirements. It is sometimes possible to disperse these flows to the downgradient hillside.

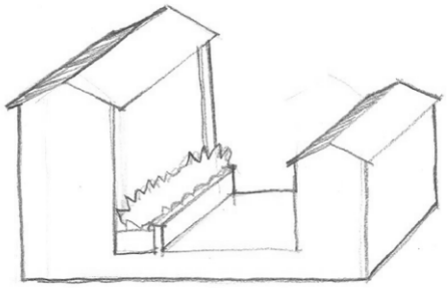

Flow-through planter on the plaza level of a podium-style development.

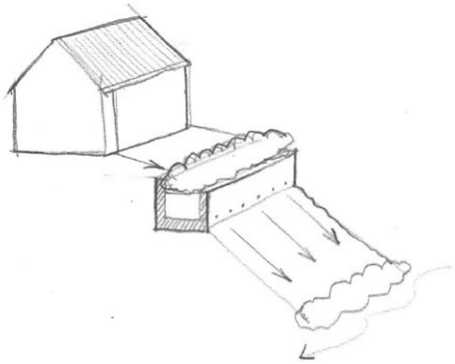

Flow-through planter built into a hillside. Flows from the underdrain and overflow must be directed in accordance with local requirements.

Design Checklist for Flow-through Planter

- ❒ Reservoir depth is 4-6" minimum.
- ❒ 18" depth "loamy sand" soil mix with minimum long-term infiltration rate of 5"/hour.
- ❒ Area of soil mix meets or exceeds minimum.
- ❒ "Class 2 perm" drainage layer.
- ❒ No filter fabric.
- ❒ Perforated pipe underdrain with outlet located flush or nearly flush with planter bottom. Connection with sufficient head to storm drain or discharge point.
- ❒ Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, with a minimum diameter of 6 inches and a watertight cap.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Location and footprint of facility are shown on site plan and landscaping plan.
- ❒ Planter is set level.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Plantings are suitable to the climate and a well-drained soil.
- ❒ Irrigation system with connection to water supply.

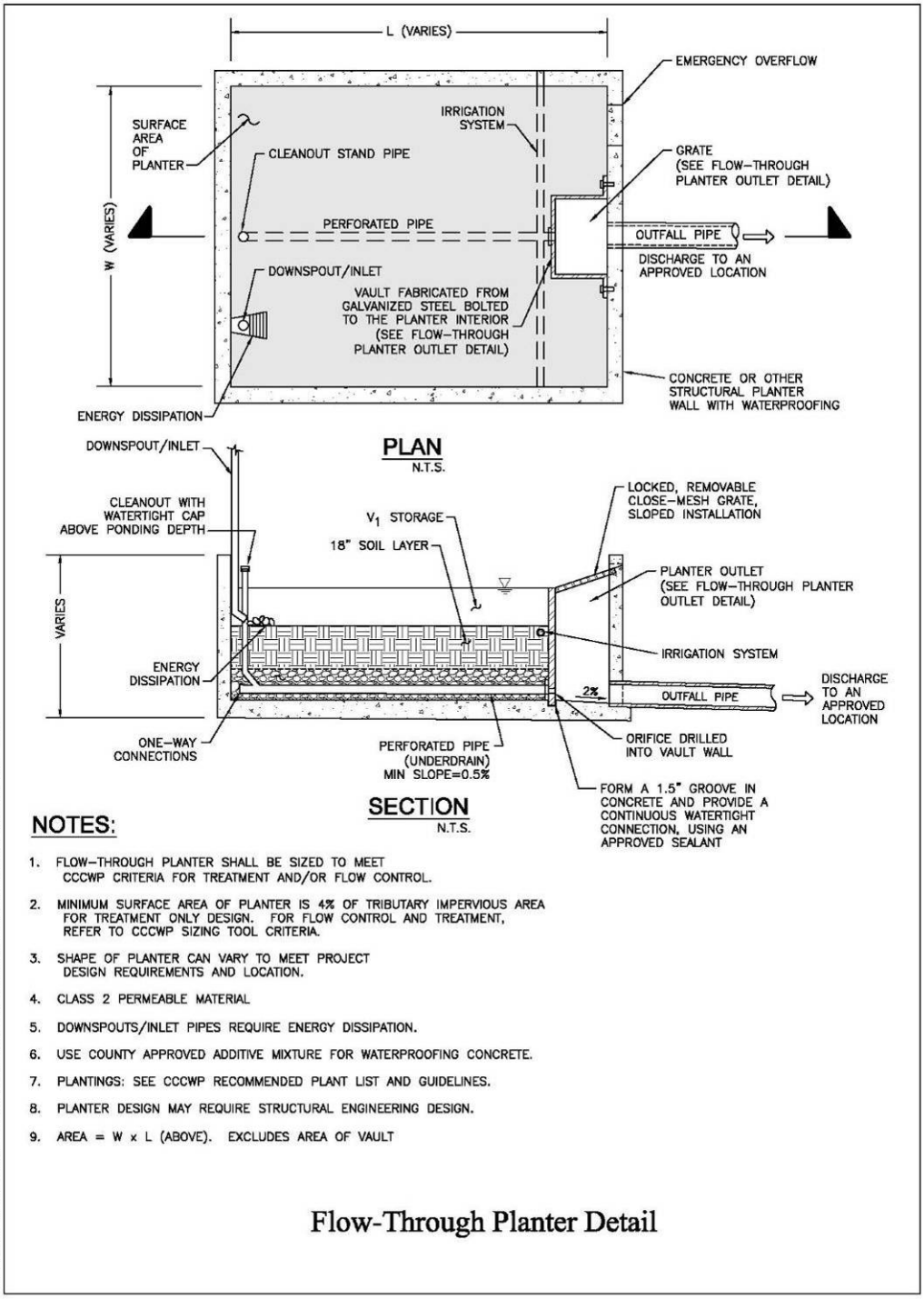

NOTES:

1. FLOW-THROUGH PLANTER SHALL BE SIZED TO MEET CCCWP CRITERIA FOR TREATMENT AND/OR FLOW CONTROL.
2. MINIMUM SURFACE AREA OF PLANTER IS 4% OF TRIBUTARY IMPERVIOUS AREA FOR TREATMENT ONLY DESIGN. FOR FLOW CONTROL AND TREATMENT, REFER TO CCCWP SIZING TOOL CRITERIA.
3. SHAPE OF PLANTER CAN VARY TO MEET PROJECT DESIGN REQUIREMENTS AND LOCATION.
4. CLASS 2 PERMEABLE MATERIAL
5. DOWNSPOUTS/INLET PIPES REQUIRE ENERGY DISSIPATION.
6. USE COUNTY APPROVED ADDITIVE MIXTURE FOR WATERPROOFING CONCRETE.
7. PLANTINGS: SEE CCCWP RECOMMENDED PLANT LIST AND GUIDELINES.
8. PLANTER DESIGN MAY REQUIRE STRUCTURAL ENGINEERING DESIGN.
9. AREA = W x L (ABOVE). EXCLUDES AREA OF VAULT

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Flow-Through Planter Detail

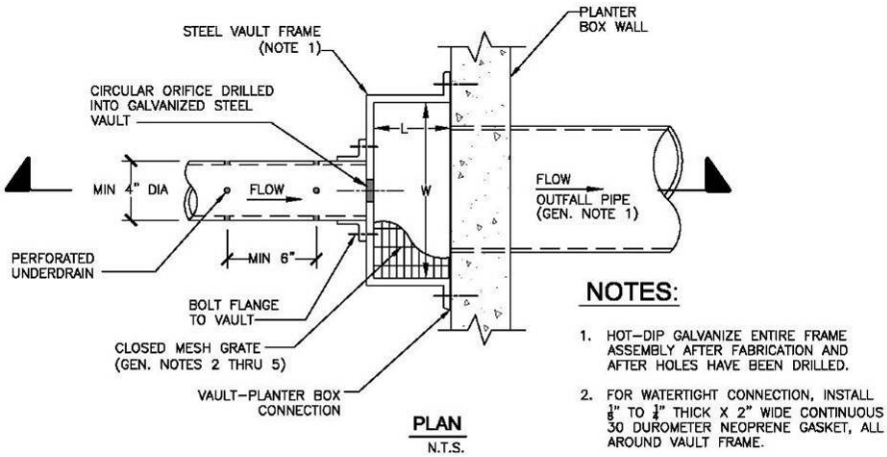

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NOTES:

1. HOT-DIP GALVANIZE ENTIRE FRAME ASSEMBLY AFTER FABRICATION AND AFTER HOLES HAVE BEEN DRILLED.
2. FOR WATERTIGHT CONNECTION, INSTALL $\frac{1}{8}$" TO $\frac{1}{4}$" THICK X 2" WIDE CONTINUOUS 30 DUROMETER NEOPRENE GASKET, ALL AROUND VAULT FRAME.

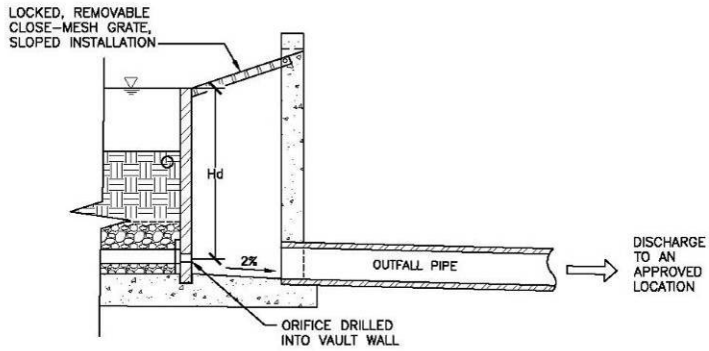

SECTION
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GENERAL OUTLET DETAIL NOTES:

1. OUTFALL PIPE SHALL BE SIZED TO CONVEY DESIGN STORM PER CCCWP DESIGN CRITERIA.
2. GRATE SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
3. GRATE SHALL BE STAINLESS STEEL, ALUMINUM OR STEEL. STEEL GRATES SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER PAINTED AFTER GALVANIZING.
4. GRATE SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
5. STRUCTURAL DESIGN OF GRATE SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF GRATE.

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Flow-Through Planter Outlet Detail

Dry Wells and Infiltration Basins

The typical dry well is a prefabricated structure, such as an open-bottomed vault or box, placed in an excavation or boring. The vault may be empty, which provides maximum space efficiency, or may be filled in rock.

An infiltration basin has the same functional components—a volume to store runoff and sufficient area to infiltrate that volume into the native soil—but is open rather than covered.

Note: Small diameter deep drilled storm water dry wells are not included in this sheet. These shall be considered "Alternative BMPs" and shall be sized per flow or volume based requirements.

Best Uses

- Alternative to bioretention in areas with permeable soils

Advantages

- Compact footprint
- Can be installed in paved areas

Limitations

- Can be used only on sites with "A" and "B" soils
- Requires minimum of 10' from bottom of facility to seasonal high groundwater
- Not suitable for drainage from some industrial areas or arterial roads
- Must be maintained to prevent clogging.

► CRITERIA

Dry wells and infiltration basins must be designed with the minimum volume calculated by Equation 4-8 using a unit volume based on the County of San Diego's 85th Percentile Isopluvial Map.

Consult with the local jurisdiction engineer regarding the need to verify soil permeability and other site conditions are suitable for dry wells and infiltration basins. Some proposed criteria are on Page 5-12 of Caltrans' 2004 *BMP Retrofit Pilot Study Final Report* (CTSW-RT-01-050).

The infiltration rate and infiltrative area must be sufficient to drain a full facility within 72 hours.

► DETAILS

Dry wells should be sited to allow for the potential future need for removal and replacement.

In locations where native soils are coarser than a medium sand, the area directly beneath the facility should be over-excavated by two feet and backfilled with sand as a groundwater protection measure.

Design Checklist for Dry Well

- ❒ Volume and infiltrative area meet or exceed minimum.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Depth from bottom of the facility to seasonally high groundwater elevation is ≥10'.
- ❒ Areas tributary to the facility do not include automotive repair shops; car washes; fleet storage areas (Bus, truck, etc.); nurseries, or other uses that may present an exceptional threat to groundwater quality.
- ❒ Underlying soils are in Hydrologic Soil Group A or B. Infiltration rate is sufficient to ensure a full basin will drain completely within 72 hours. Soil infiltration rate has been confirmed.
- ❒ Set back from structures 10' or as recommended by structural or geotechnical engineer.

Cistern or Vault with Bioretention Facility

A cistern or vault in series with a bioretention facility can meet treatment requirements where space is limited. In this configuration, the cistern or vault is equipped with a flow-control orifice and the bioretention facility is sized to treat a trickle outflow from the cistern or vault.

Best Uses

- In series with a bioretention facility to meet treatment requirement in limited space.
- Management of roof runoff
- Dense urban areas

Advantages

- Storage volume can be in any configuration

Limitations

- Somewhat complex to design, build, and operate
- Requires head for both cistern and bioretention facility

► CRITERIA

Cistern or Vault. The cistern or vault must detain the volume calculated by Equation 4-8 and must include an orifice or other device designed for a 24-hour drawdown time.

Bioretention facility. See the design sheet for bioretention facilities. The area of the bioretention facility must be sized to treat the maximum discharge flow, assuming a percolation rate of 5" per hour through the engineered soil.

Use with sand filter. A cistern or vault in series with a sand filter can meet treatment requirements. See the discussion of treatment facility selection in Chapter 2 and the design guidance for sand filters in Chapter 4.

► DETAILS

Flow-control orifice. The cistern or vault must be equipped with an orifice plate or other device to limit flow to the bioretention area.

Preventing mosquito harborage. Cisterns and vaults should be designed to drain completely, leaving no standing water. Drains should be located flush with the bottom of the cistern. Alternatively—or in addition—all entry and exit points, should be provided with traps or sealed or screened to prevent mosquito entry. Note mosquitoes can enter through openings 1/16" or larger and will fly for many feet through pipes as small as ¼".

Exclude debris. Provide leaf guards and/or screens to prevent debris from accumulating in the cistern.

Ensure access for maintenance. Design the cistern or vault to allow for cleanout. Avoid creating the need for maintenance workers to enter a confined space. Ensure the outlet orifice can be easily accessed for cleaning and maintenance.

► APPLICATIONS

Shallow ponding on a flat roof. The "cistern" storage volume can be designed in any configuration, including simply storing rainfall on the roof where it falls and draining it away slowly. See the County of San Diego's 85th percentile isopluvial diagrams for required average depths.

Cistern attached to a building and draining to a planter. This arrangement allows a planter box to be constructed with a smaller area.

Vault with pumped discharge to bioretention facility. In this arrangement, runoff from a parking lot and/or building roofs can be captured and detained underground and then pumped to a bioretention facility on the surface. Alternatively, treatment can be accomplished with a sand filter. See the discussion of selection of storm water treatment facilities in Chapter 2.

Water harvesting or gray water reuse. It may be possible to create a site-specific design that uses cisterns or vaults to achieve storm water flow control, storm water treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse. Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Design Checklist for Cistern or Vault

- ❒ Volume meets or exceeds minimum.
- ❒ Outlet with orifice or other flow-control device restricts flow and is designed to provide a 24-hour drawdown time.
- ❒ Outlet is piped to a bioretention facility designed to treat the maximum discharge from the cistern orifice.
- ❒ Cistern or vault is designed to drain completely and/or sealed to prevent mosquito harborage.
- ❒ Design provides for exclusion of debris and accessibility for maintenance.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.

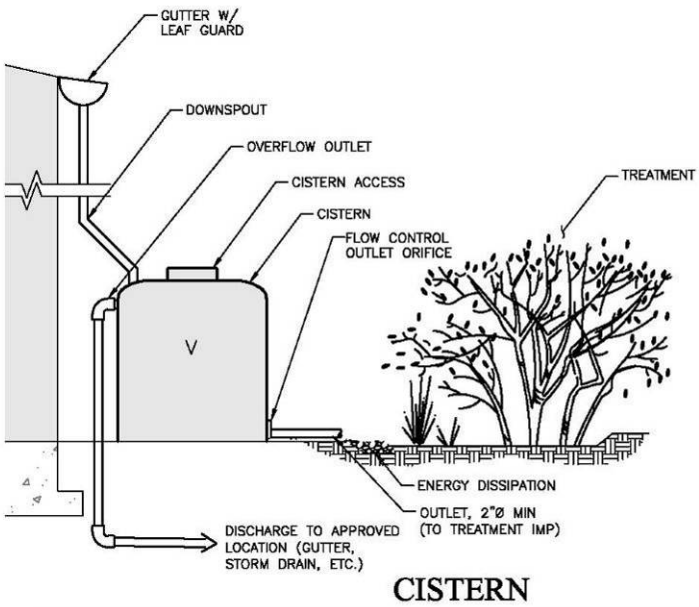

NOTES:
1. DESIGNER SHALL ACCOUNT FOR AND ACCOMODATE FOR POSSIBLE OVERFLOW.
2. OVERFLOW OUTLET CAPACITY SHALL EQUAL OR EXCEED POTENTIAL RUNOFF VOLUME AND RATE.
3. CISTERN PROVIDES FLOW CONTROL ONLY. USE IN COMBINATION WITH TREATMENT IMP.
4. PROVIDE ACCESS FOR CLEAN OUT OF OUTLET ORIFICE. SEE FLOW-THROUGH PLANTER OUTLET DETAIL.
5. PREVENT MOSQUITO BREEDING BY SEALING OR SCREENING ALL OPENINGS TO THE WATER SURFACE AND/OR ENSURE COMPLETE DRAINAGE.

CISTERN

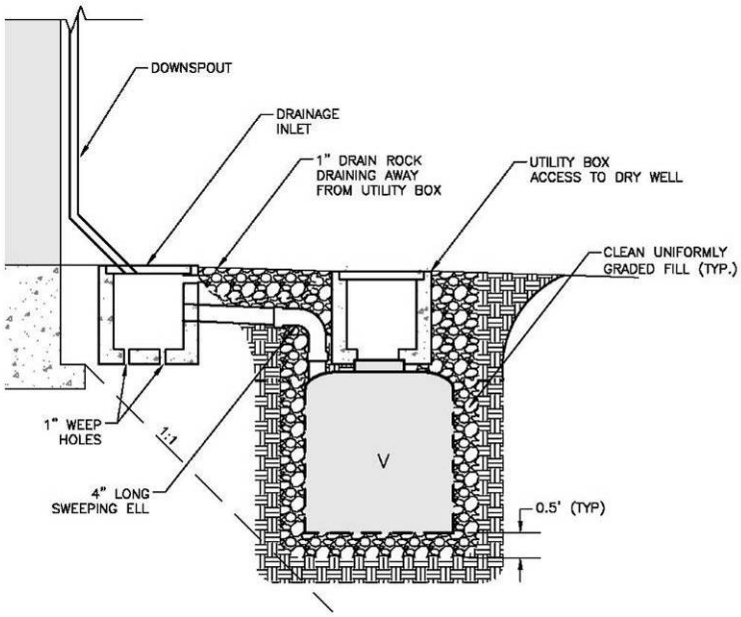

DRY WELL

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Appendix

C

Storm Water Pollutant Sources/ Source Control Checklist

How to use this worksheet (also see instructions in Step 4 of Chapter 3 of this BMP Manual):

1. Review Column 1 and identify which of these potential sources of storm water pollutants apply to your site. Check each box that applies.

2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your Project-Specific SUSMP drawings.

3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in a table in your Project-Specific SUSMP. Use the format shown in Table 3-1 in Step 4 of Chapter 3 of this BMP Manual. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternatives.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **A.** On-site storm drain inlets	❑ Locations of inlets.	❑ Mark all inlets with the words "No Dumping! Flows to Bay" or similar.	❑ Maintain and periodically repaint or replace inlet markings. ❑ Provide storm water pollution prevention information to new site owners, lessees, or operators. ❑ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ❑ Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
❑ **B.** Interior floor drains and elevator shaft sump pumps		❑ State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.
❑ **C.** Interior parking garages		❑ State that parking garage floor drains will be plumbed to the sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.
❑ **D1.** Need for future indoor & structural pest control		❑ Note building design features that discourage entry of pests.	❑ Provide Integrated Pest Management information to owners, lessees, and operators.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **D2.** Landscape/ Outdoor Pesticide Use	❑ Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. ❑ Show self-retaining landscape areas, if any. ❑ Show storm water treatment facilities.	State that final landscape plans will accomplish all of the following. ❑ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ❑ Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to storm water pollution. ❑ Where landscaped areas are used to retain or detain storm water, specify plants that are tolerant of saturated soil conditions. ❑ Consider using pest-resistant plants, especially adjacent to hardscape. ❑ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	❑ Maintain landscaping using minimum or no pesticides. ❑ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ❑ Provide IPM information to new owners, lessees, and operators.
❑ **E.** Pools, spas, ponds, decorative fountains, and other water features.	❑ Show location of water feature, nearest landscaped areas, and nearest storm drains.	❑ Describe how water removed from the water feature would drain to nearby landscaping or be dechlorinated before discharge in accordance with City requirements.	❑ See applicable operational BMPs in Fact Sheet SC-72, "Fountain and Pool Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **F.** Food service	❑ For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. ❑ On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	❑ Describe the location and features of the designated cleaning area. ❑ Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	❑
❑ **G.** Refuse areas	❑ Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. ❑ If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. ❑ Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	❑ State how site refuse will be handled and provide supporting detail to what is shown on plans. ❑ State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	❑ State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **H.** Industrial processes.	❑ Show process area.	❑ If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."	❑ See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
❑ **I.** Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	❑ Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. ❑ Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. ❑ Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	❑ Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains. Where appropriate, reference documentation of compliance with the requirements of local Hazardous Materials Programs for: ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank	❑ See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials " in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **J.** Vehicle and Equipment Cleaning	❑ Show on drawings as appropriate: (1) Commercial/industrial facilities having vehicle /equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses. (2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use). (3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer. (4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.	❑ If a car wash area is not provided, describe measures taken to discourage on-site car washing and explain how these will be enforced.	Describe operational measures to implement the following (if applicable): ❑ Wash water from vehicle and equipment washing operations shall not be discharged to the storm drain system. ❑ See Fact Sheet SC-21, "Vehicle and Equipment Cleaning," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **K.** Vehicle/Equipment Repair and Maintenance	❑ Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of storm water. ❑ Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. ❑ Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.	❑ State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. ❑ State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. ❑ State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	In the SUSMP report, note that all of the following restrictions apply to use the site: ❑ No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinse water from parts cleaning into storm drains. ❑ No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. ❑ No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **L.** Fuel Dispensing Areas	❑ Fueling areas[3] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of storm water to the maximum extent practicable. ❑ Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.		❑ The property owner shall dry sweep the fueling area routinely. ❑ See the Business Guide Sheet, "Automotive Service—Service Stations" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

[3] The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **M.** Loading Docks	❑ Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct storm water away from the loading area. Water from loading dock areas should be drained to the sanitary sewer where feasible. Direct connections to storm drains from depressed loading docks are prohibited. ❑ Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer. ❑		❑ Move loaded and unloaded items indoors as soon as possible. ❑ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **N.** Fire Sprinkler Test Water		❑ Provide a means to drain fire sprinkler test water to the sanitary sewer.	❑ See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
O. Miscellaneous Drain or Wash Water ❑ Boiler drain lines ❑ Condensate drain lines ❑ Rooftop equipment ❑ Drainage sumps ❑ Roofing, gutters, and trim.		❑ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. ❑ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. ❑ Rooftop mounted equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ❑ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. ❑ Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.	

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **P.** Plazas, sidewalks, and parking lots.			❑ Plazas, sidewalks, and parking lots shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing shall be collected to prevent entry into the storm drain system. Wash water containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain.

Appendix

D

SWPPP and CSWMP Guidelines

STORM WATER POLLUTION PREVENTION PLAN/CONSTRUCTION STORM WATER MANAGEMENT PLAN GUIDELINES

At a minimum, the Storm Water Pollution Prevention Plan (SWPPP) or Construction Storm Water Management Plan (CSWMP) whichever is required, must cover the areas listed below.

If a project disturbs 1-acre or more, the applicant must provide a Storm Water Pollution Prevention Plan (SWPPP), which identifies all construction BMP requirements required by Chapter Six, in accordance with the State General Permit for Storm Water Discharges Associated with Construction Activity (State General Construction Permit). The SWPPP must be kept on site and made available upon request of a representative of the City. Additionally, the State General Construction Permit has a requirement for a sampling and monitoring program to be implemented. Projects that are also required to obtain a general construction National Pollutant Discharge Elimination System (NPDES) Permit are encouraged to visit the State Water Resource Control Board's website for permit application instructions, NOI and NOT forms and guidance in preparing a Storm Water Pollution Prevention Plan (go to: http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml).

For projects that disturb less than 1-acre and are determined to have a potential to impact water quality during construction, the applicant must provide a Construction Storm Water Management Plan (CSWMP), which identifies all construction BMP requirements required by Chapter Six, with the project submittal. The CSWMP shall depict the BMPs to be implemented during construction to reduce/eliminate discharges of pollutants to the storm drain conveyance system. The CSWMP shall include but not be limited to erosion and sediment control BMPs, good housekeeping measures and site and materials management.

Planning and Organization

- Identify the pollution prevention team members who will maintain and implement the SWPPP/CSWMP.
- If applicable, incorporate or reference the appropriate elements of other regulatory requirements.

Site Map

Features displayed on the map must include:

- An outline of the entire property
- Drainage areas on the property and direction of flow
- Areas of soil erosion
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing storm water controls (oil/ water separators, sumps, etc.)
- Location of "impervious" areas- paved areas, buildings, covered areas
- Locations where materials are directly exposed to storm water
- Locations where toxic or hazardous materials have spilled in the past
- Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)

List of Significant Materials

List materials stored and handled at the site. Include the location and typical quantities.

Description of Potential Pollutant Sources

- Provide a narrative description of the site's activities and list the potential pollutant sources and the

potential pollutants that could be discharged in storm water discharges from each activity.

- List non-storm water discharges including the source, quantity, frequency, and characteristics of the discharges and drainage area.

Assessment of Potential Sources

Describe which activities are likely to be sources of pollution in storm water and which pollutants are likely to be present in storm water discharges.

Best Management Practices

Describe the BMPs that will be implemented at the site for each potential pollutant and its source.

Appendix

E

Example Construction Best Management Practices

A. Erosion Control

Physical stabilization BMPs, vegetation stabilization BMPs, or both, will be required to prevent erosion and sediment runoff from exposed graded areas. BMPs for physical and vegetation stabilization include:

1) Physical Stabilization

a) Geotextiles
b) Mats
c) Fiber blankets
d) Hydraulic mulch, Bonded Fiber Matrix
e) Sprayed on binders
f) Mulch on flat areas
g) Other material approved by the City Engineer for use in specific circumstances

If physical stabilization is selected, materials must be appropriate to the circumstances in which they are deployed, and sufficient material must be deployed.

2) Vegetation Stabilization

h) Preservation of existing vegetation
i) Established interim vegetation (via Hydroseed, seeded mats, etc.)
j) Established permanent landscaping

If vegetation stabilization is selected, the stabilizing vegetation must be installed, irrigated and established (uniform vegetative coverage with 70% coverage established) prior to October 1. In the event stabilizing vegetation has not been established by October 1, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.

B. Sediment Control

1) Perimeter protection. Protect the perimeter of the site or exposed area from sediment ingress/discharge in sheet flows using:

k) Silt fencing
l) Gravel bag barriers
m) Fiber rolls

2) Resource protection. Protect Environmentally Sensitive Areas and watercourses from sediment in sheet flows by using**:**

a) Silt fencing
b) Gravel bag barriers
c) Fiber rolls

3) Sediment Capture. Capture sediments in channeled storm water by using:

a) Storm-drain inlet protection measures
b) De-silting basins (Designed in accordance with an industry standard such as Caltrans, California Storm water BMP manual etc. If the project is 5 acres or greater the desilting basin(s) must be designed in accordance with the State General Construction Permit, Order DWQ 99-08.)

4) Velocity Reduction. Reduce the velocity of storm water by using:

a) Outlet protection (energy dissipater)
b) Equalization basins
c) Check dams

5) Off-site Sediment Tracking. Prevent sediment from being tracked off-site by using:

a) Stabilized construction entrances/exits
b) Construction road stabilization
c) Tracking control (i.e., corrugated steel panels, wheel washes)
d) Dust control

C. Materials Management

6) Prevent the contamination of storm water by wastes through proper management of the following types of wastes:

a) Solid
b) Sanitary
c) Concrete
d) Hazardous
e) Equipment – related wastes
f) Stock piles (protection from wind and rain)

7) Prevent the contamination of storm water by construction materials by:

a) Covering and/or providing secondary containment of storage areas
b) Taking adequate precautions when handling materials.

Appendix

F

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Appendix

G

SPCBMPP Worksheet

CITY OF LA MESA
JEWEL of the HILLS

Standard Post-Construction BMP Plan

Standard Permanent Storm Water BMPs

Project Name: _____ Project Address: _____
Person completing form: _____Telephone number: (____)____-_____
Signature: _____ Date: ____/_____/_____

The following planning, design, and post-construction BMPs are required for all land development and redevelopment projects in the City of La Mesa. All BMPs listed below shall be selected and implemented where applicable and feasible.

List pollutants of concern: _____

Each selected BMP must be shown on the applicable plan(s) for the project.

Required BMPs	Check if Selected	If the BMP is not selected, explain why below (attach additional pages if necessary).
1. BMPs for permanent control of erosion from slopes.		
a. Convey runoff safely from the tops of slopes		
b. Vegetate slopes with native or drought tolerant vegetation		
c. Other (describe):		
2. BMPs to control flows, velocity and erosion. Flow control and downstream erosion protection measures shall prevent any significant increase in downstream erosion as a result of the new development, but shall not prevent flows needed to sustain downstream riparian habitats or wetlands.		
a. Minimize disturbances to Natural Drainages		
b. Stabilize permanent channel crossings		
c. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels		
d. Provide buffer zones for natural water bodies		
e. Other (describe):		
3. Low Impact Development (LID) and site design BMPs.		
a. Conserve natural areas, soils, and vegetation where feasible		
b. Construct walkways, trails, patios. overflow parking lots, alleys, and other low-traffic areas with permeable surfaces		
c. Construct impervious surfaces to minimum widths necessary		
d. Use natural drainage systems		
e. Minimize soil compaction in areas that will remain pervious after development		

Required BMPs	Check if Selected	If the BMP is not selected, explain why below (attach additional pages if necessary).
f. Drain runoff from impervious roofs into adjacent landscaping		
g. Drain runoff from impervious sidewalks and/or walkways into adjacent landscaping		
h. Drain runoff from impervious parking lots into adjacent landscaping		
i. Drain runoff from other impervious areas into adjacent landscaping		
j. Other (describe):		
4. Storm drain stenciling and signage		
5. BMPs for outdoor materials storage and exposed work areas, to reduce pollution introduction.		
a. Provide overhead coverage for outdoor storage or work areas		
b. Divert storm water run-on away from outdoor storage or work areas		
6. BMPs for trash storage areas, to reduce pollution introduction. Store trash containers on an impervious surface in a screened or walled area designed to prevent run-on from flowing through the trash area, and provide a roof or awning to prevent direct contact with rain.		
7. BMPs for irrigation systems and landscape design, to minimize the runoff of excess irrigation water into the storm water conveyance system. (Limited exclusion: detached residential developments)		
a. Use rain shutoff devices		
b. Design irrigation system to each landscape area's water requirements		
c. Use flow reducers		
d. Other (describe):		
8. Structural BMPs[1] to treat and/or to infiltrate storm water where a development project would otherwise cause or contribute to a violation of water quality standards in receiving waters.		

[1] Off-site structural BMPs may be used for treatment and infiltration necessary to meet water quality standards only if the conveyance of run-off to those facilities prior to treatment will not cause or contribute to an exceedance of water quality standards or deprive wetlands or riparian habitats of needed flows. Offsite facilities shall not substitute for the use of any on-site source control BMPs required by the manual. When an infiltration BMP is used, related BMPs set out in the manual (including but not limited to siting constraints), to protect present uses of ground water and future uses of that ground water as currently designated in the applicable RWQCB Basin Plan. (Discharges to infiltration BMPs may also require an RWQCB permit and additional state requirements may also be applicable to these discharges.)

City Use Only

If Structural BMPs are proposed, a maintenance agreement is required. Has a maintenance agreement for this project been submitted? □ Yes □ No □ NA

Approved □ Yes □ No

_____ _____/_____/_____ _____

Signature Date Department

Appendix

H

Hydromodification Management Plan

ATTACHMENT 2.2

UPDATED APPENDIX 'A' STORM WATER REQUIREMENTS CHECKLIST

APPENDIX 'A' – STORM WATER REQUIREMENTS AND PROJECT DATA SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91942
Phone: 619.667.1166 • Fax: 619.667.1380

PROJECT DATA:

Owner's Name & Phone No: _____

Address: _____ **Permit No:** _____

Project: _____ **Date Applied:** _____

PROJECT SITE DATA:

1. Total area of the lot/parcel = _____ sf
2. Existing impervious area = _____ sf
3. Impervious area after development = _____ sf
4. Total area to be disturbed = _____ sf
5. Identify if the runoff from the site discharged to the public street or storm drain or open channel, detention or retention basin: Choose One
6. Watershed (Check One): San Diego River Watershed _____ San Diego Bay Watershed _____

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a. Total disturbed area includes impervious area, construction material storage, staging area, graded slopes, new slopes and landscape areas.

b. The information shall be shown on the site/grading plans.

c. Complete Storm Water Requirements Applicability Checklist.

Notes:

- Items 1 through 6 shall be shown on the site development plan/grading plan.
- The applicant may be required to submit SWPPP or CSWMP, and PCWQTR or SPCBMPP depending on the "Priority" as stated below.
- A Hydrology report may be required.

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the checklist to determine which permanent best management practices (BMPs) and which construction BMPs are required for your project for storm water. *This form must be completed and submitted with your permit application.*

SECTION 1. PERMANENT STORM WATER BMP REQUIREMENTS:

	Yes	No
1. Is the project a new development?	☐	☐
2. Is the project a significant redevelopment that adds/replaces/creates at least 5,000 ft^2 of impervious surface?*	☐	☐
* *Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for an expanded definition of "significant redevelopment".*		

If both of the above answers are "No", go to Part B. If either of the above answers is "Yes", complete Part A below.

PART A: DETERMINE PRIORITY DEVELOPMENT PROJECT PERMANENT STORM WATER BMP REQUIREMENTS.

DOES THE PROJECT MEET THE DEFINITION OF ONE OR MORE OF THE PRIORITY PROJECT CATEGORIES AS DEFINED IN LA MESA'S BMP MANUAL, PART II? (SEE GLOSSARY)*	**Yes**	**No**
1. Residential development resulting in the disturbance of one acre or more of land or comprised of 10 or more attached or detached dwelling units?	☐	☐
2. Commercial development resulting in the disturbance of one acre or more of land?	☐	☐
3. Industrial development resulting in the disturbance of one acre or more of land?	☐	☐
4. Automotive repair shop?	☐	☐
5. Restaurant greater than 5,000 square feet?	☐	☐
6. Steep (slope of 25% or more) hillside development that will create greater than 5,000 square feet of impervious surface?	☐	☐
7. Project located within or directly adjacent to (within 200 feet) or directly discharging to an Environmentally Sensitive Area (ESA) and creates at least 2,500 square feet of impervious area or increases impervious area to 10% or more of its naturally occurring condition?	☐	☐
8. "Parking lot" greater than or equal to 5,000 square feet or with at least 15 parking spaces, and potentially exposed to urban runoff?	☐	☐
9. "Streets, roads, highways, and freeways" that would create a new paved surface that is 5,000 square feet or greater?	☐	☐
10. "Retail Gasoline Outlets" either 5,000 square feet or greater or with a projected "Average Daily Traffic" of 100 or more vehicles per day	☐	☐
11. All other pollutant generating Development Projects that result in the disturbance of one acre or more of land. Generally all projects which include impervious surfaces and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels.	☐	☐
***** *Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for expanded definitions of the priority development project categories.*		

Limited Exclusion: Trenching and resurfacing work associated with utility projects, such as resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, bike lanes on existing roads, and routine replacement of damaged pavement, such as pothole repair, are not considered priority development projects. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces. Parking lots, buildings and other structures associated with utility projects are priority development projects if one or more of the criteria in Part A are met.

If all answers to Part A are "No", continue to Part B.

PART B: DETERMINE STANDARD PERMANENT STORM WATER REQUIREMENTS.

DOES THE PROJECT PROPOSE:	**Yes**	**No**
1. New impervious areas such as rooftops, roads, parking lots, driveways, paths and sidewalks?	☐	☐
2. New pervious landscape areas and irrigation systems?	☐	☐
3. Permanent structures within 100 feet of any natural water body?	☐	☐
4. Trash storage areas?	☐	☐
5. Liquid or solid material loading and unloading areas?	☐	☐
6. Vehicle or equipment fueling, washing, or maintenance areas?	☐	☐
7. Require a General NPDES Permit for storm water discharges associated with industrial activities* (Except construction)?	☐	☐
8. Commercial/ industrial waste handling or storage, excluding typical office or household waste?	☐	☐
9. Any grading or ground disturbance during construction?	☐	☐
10. Any new storm drains, or alteration to existing storm drains?	☐	☐
**To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml*		

If any of the answers provided in Section 1, Part A are "Yes," the project is subject to the "Priority Development Project Permanent Storm Water BMP Requirements". A Post Construction Water Quality Technical Report (PCWQTR) shall be submitted; the requirements of the City's Storm Water BMP Manual Part II must be satisfied. In particular, see Chapters 1 through 5 of the *Storm Water BMP Manual*. All Priority Development Project are also subject to the Hydromodification Management Requirements as discussed in the City's *Storm Water BMP Manual, Part II*, and must demonstrate compliance.

If all answers provided in Section 1, Part A are "No," and any answers to Part B are "Yes," the project is only subject to the Standard Permanent Storm Water BMP Requirements and shall submit a Standard Post-Construction BMP Plan (SPCBMPP). In particular, see Appendix G of the City's *Storm Water BMP Manual*, Part II.

If every question in Part A and B is answered "No," the project is exempt from permanent storm water requirements.

Required submittals, Section 1:	☐	PCWQTR	☐	SPCBMPP	☐	Hydromodification

SECTION 2. CONSTRUCTION STORM WATER BMP REQUIREMENTS:

PART C: DETERMINE CONSTRUCTION PHASE STORM WATER REQUIREMENTS.

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	**Yes**	**No**
1. Does the project proposed grading or soil disturbance over one acre?	☐	☐
2. Does the project propose any grading or soil disturbance?	☐	☐
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	☐	☐
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete and stucco)?	☐	☐

If the answer to question 1 of Part C is answered "Yes," your project is subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities and the City's Construction Storm Water BMP Performance Standards. A Storm Water Pollution Prevention Plan (SWPPP) and Notice of Intent to enroll in the General Construction Permit must be prepared. Parts D and E of this form must also be completed.

If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Construction Storm Water BMP Performance Standards and a Construction Storm Water Management Plan (CSWMP) must be prepared and Part E of this form must be completed.

If every question in Part C is answered "No," you do not need to completed Parts D and E of this form and neither a SWPPP nor a CSWMP is required.

PART D: DETERMINE ADVANCE TREATMENT SUBJECTIVITY

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	**Yes**	**No**
1. Is the project located within, adjacent to, or a portion of the site within 200 feet of waters listed on the CWA Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation or turbidity?	☐	☐
2. Will the project disturb more than five acres, including all phases of the development?	☐	☐
If the answers to 1 and 2 are both "yes", please answer questions 3 and 4 below.		
3. Will the project disturbed slopes steeper than 4:1 (horizontal: vertical) and higher than 10 feet that drain toward the 303(d) listed receiving water?	☐	☐
4. Does the project contain a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4?	☐	☐

If <u>all</u> answers to part D are "yes", the project is subject to the City's advanced treatment requirements for construction. Advanced treatment requirements are detailed in Chapter 6 of the *Storm Water BMP Manual,* Part II. Note that even if the above criteria do not apply, advanced treatment may be required at the discretion of the City Engineer based.

<u>Required submittals, Section 2</u>:	☐	SWPPP, NOI	☐	CSWMP	☐	Advanced Treatment

PART E: DETERMINE CONSTRUCTION SITE PRIORITY

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans and included in the SWPPP or CSWMP. See the attached flow chart for guidance on determining the construction prioritization. The City Engineer may adjust the priority of the projects both before and during construction.

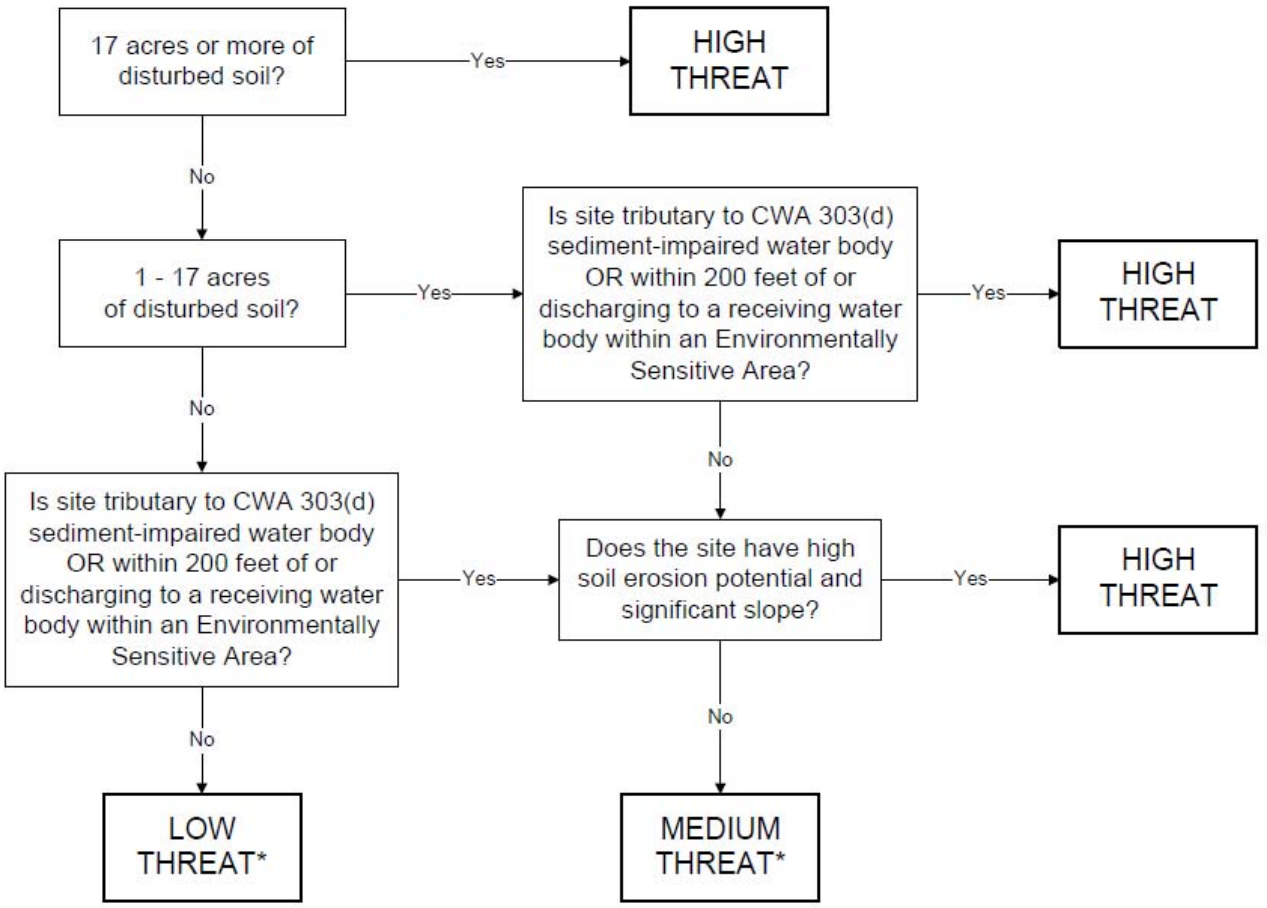

* Sites with a low or medium threat to water quality priority can be given a higher threat prioritization at the discretion of City staff based on additional factors, such as project type and non-storm water discharge potential.

Note: High soil erosion potential and significant slope are determined at the discretion of City staff.

According to the attached flow chart this project has the following threat to water quality priority:

☐ A) High Priority ☐ B) Medium Priority ☐ C) Low Priority

[Note: The construction priority DOES NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority DOES affect the frequency of inspections that will be conducted by the City.]

Completed By: _____

Name, Address & Phone Number

ATTACHMENT 3.1

CONSTRUCTION STORM WATER MANAGEMENT PLAN

CITY OF LA MESA
JEWEL of the HILLS

CONSTRUCTION STORM WATER MGMT. PLAN

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

Project Name: _____ Project Address: _____
Person completing form: _____ Telephone number: (_____)_____-_____
Signature: _____ Date: ____/____/_____

Construction projects less than one acre but answer "Yes" to questions 2, 3, or 4 in Section 2 Part C of the City's Appendix A document are required to prepare a Construction Storm Water Management Plan (CSWMP). Completion of this form along with submittal of a site map with the features described at the end of this form can adequately meet this requirement.

Planning and Organization

Person responsible for implementing items in this CSWMP:_____

Is this project subject to other construction regulations? ~ Yes ~ No
If yes, please list: _____

Significant Materials

List all significant materials that will be stored and handled at the site in the table below.
Include a brief description of the location where the materials will be stored and expected quantities.

Material	Storage Location	Expected Quantity

Potential Pollutant Sources

Provide a brief narrative description of the site's activities and list the potential pollutants that could be transported from the site by storm water in the following table.

Activity	Potential Pollutants Sources and Pollutants Generated by Activity

Best Management Practices

Every construction site within the City's jurisdiction is required to select, install, and maintain construction BMPs to reduce, retain, and manage pollutant discharges to the maximum extent practicable. The BMPs listed below are required by the City where applicable. The corresponding Caltrans fact sheet for the listed BMPs is indicated in parenthesis. These fact sheets are obtainable from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual (2003) and provide additional details on how to implement the BMP.

Please check all BMPs below that are applicable and feasible for the construction that will be implemented and maintained for the length of construction.

- ☐ Preserve natural hydrologic features where feasible
- ☐ Preserve riparian buffers and corridors where feasible
- ☐ Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction
- ☐ Minimize exposure time of disturbed soil areas
- ☐ Minimize grading during the wet season and correlate grading with seasonal dry weather periods to the extent feasible
- ☐ Temporarily stabilize and reseed disturbed soil areas as rapidly as feasible
- ☐ Preserve existing vegetation where feasible (SS-2)
- ☐ Establish permanent re-vegetation or landscaping as early as feasible

Prevent the contamination of storm water from vehicles and equipment through proper management of the following types of activities:

- ☐ Cleaning (NS-8)
- ☐ Fueling (NS-9)

☐ Maintenance (NS-10)

Prevent the contamination of storm water from construction materials through proper management of the following types of activities:

☐ Material Delivery and Storage (WM-1)
☐ Material Use (WM-2)
☐ Stockpile Management1 (WM-3)
☐ Spill Prevention and Control (WM-4)

Prevent the contamination of storm water by wastes through proper management of the following types of wastes:

☐ Solid Waste (WM-5)
☐ Hazardous Waste (WM-6)
☐ Contaminated Soil (WM-7)
☐ Concrete (WM-8)
☐ Sanitary Waste (WM-9)
☐ Liquid (WM-10)

Prevent the contamination of storm water through proper management of the follow activities:

☐ Water Conservation Practices (NS-1)
☐ Dewatering Operations (NS-2)
☐ Paving and Grinding (NS-3)
☐ Potable Water/Irrigation and Flushing (NS-7)

Prevent erosion and sediment runoff from exposed graded areas through physical stabilization and/or vegetation stabilization[2] by implementing <u>one or more</u> of the following BMPs:

☐ Hydraulic Mulch (SS-3)
☐ Hydroseeding (SS-4)
☐ Soil Binders (SS-5)
☐ Straw Mulch (SS-6)
☐Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats (SS-7)
☐ Wood Mulch (SS-8)
☐ Earth Dikes/Drainage Swales (SS-9)

Reduce the velocity of storm water by using <u>one or more</u> of the following:

☐ Outlet Protection/Velocity Dissipation (SS-10)
☐ Slope Drains (SS-11)

Protect the Perimeter of the site or exposed area from sediment discharge using <u>one or more</u> of the following:

☐ Silt Fence (SC-1)
☐ Gravel Bag Berm (SC-6)
☐ Fiber Rolls (SC-5)

Capture sediments in channeled storm water by using <u>one or more</u> of the following:

☐ De-silting Basin3 (SC-2)
☐ Storm Drain Inlet Protection (SC-10)
☐ Sediment Trap (SC-3)
☐ Gravel Bag Barrier (SC-8)

Prevent sediment from being tracked off-site by using <u>one or more</u> of the following:

☐ Stabilized Construction Entrance (TC-1)
☐ Construction Road Stabilization (TC-2)
☐ Entrance/Exit Tire Wash (TC-3)
☐ Street Sweeping (SC-7)

Notes on above BMPs:

1. Stockpiles should be fully covered when materials are not being added or removed.
2. Vegetation stabilization BMPs must be installed, irrigated, and established (uniform vegetative coverage with 70% coverage established) prior to October 1st. In the event stabilizing vegetation has not been established by October 1st, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.
3. De-silting basins must be designed in accordance with industry standards such as Caltrans.

All construction sites must implement the above BMPs in accordance with the City's dry and wet season requirements, which are detailed below.

A. Dry Season Requirements (May 1 through September 30) include but are not limited to:

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
- Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.
- The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).
- Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.
- Properly protected, designated storage areas are required for materials and wastes.
- All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.
- Remnant trash and debris shall be removed and/or properly stored/disposed of daily.
- Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.
- Materials for spill control/containment must be stockpiled onsite.
- Non-storm water discharges must be eliminated or controlled to the MEP.

B. Rainy Season Requirements (October 1 through April 30) include but are not limited to:

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
- Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not

considered to be "exposed" for purposes of this requirement.

- The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).
- Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.
- Properly protected, designated storage areas are required for materials and wastes.
- All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.
- Remnant trash and debris shall be removed and/or properly stored/disposed of daily.
- Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.
- Materials for spill control/containment must be stockpiled onsite.
- Non-storm water discharges must be eliminated or controlled to the MEP.
- Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- Perimeter protection and sediment containment BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- adequate soil stabilization and erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a selected BMP fails, it must be repaired, improved, or replaced with an acceptable alternate as soon as it is safe to do so.
- All vegetation erosion prevention BMPs must be established prior to the rainy season to be considered as a BMP.
- Standby erosion and sediment control BMPs must be able to protect all exposed soil areas. A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for seven or more calendar days. The ability to deploy standby BMP materials is not sufficient for these areas.

Project Site Map

A site map of the project must be attached to this form and contain the following features:

- An outline of the entire property
- Drainage areas on the property and direction of flow
- Areas of soil erosion
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing storm water controls (oil water separators, sumps, etc.)
- Location of impervious areas (paved areas, buildings, covered areas)
- Locations where toxic or hazardous materials spilled in the past
- Location of building and activity areas (e.g. fueling islands, garages, waste container areas, wash racks, hazardous material storage areas, etc.)
- Locations where BMPs proposed in this document will be installed
- Locations where materials will be temporarily stored onsite

City Use Only

Approved □ **Yes** □ **No**

_____ Signature ____/____/____ Date _____ Department

ATTACHMENT 4.1

MUNICIPAL INSPECTION FORM

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. Contact Information

Facility Name_____

Street Address_____ Mailing Address_____

_____ _____

Manager/Operator(s)_____

Telephone (□□□□□□) _____ - □□□□□□□□□□ ext._____ Fax (□□□□□□□) _____ - □□□□□□□□□□

Manager/Operator(s) Email:_____

Facility Personnel Present_____

B. Facility Site Information

Principal activity:_____

JURMP Classification_____

New JURMP Classification?_____

Does facility maintain SWPPP/BMP Plan? ☐ Yes ☐ No

If yes, what is the date of last SWPPP/BMP Plan revision?_____

If yes, does the SWPPP/BMP Plan include applicable minimum BMPs from the JURMP? (if no, describe in Section E) ☐ Yes ☐ No

If yes, does the SWPPP/BMP Plan include a current list of individuals Responsible for implementing BMPs at the site? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

C. Initial Observations

Drainage basin: ☐ Alvarado ☐ University ☐ Spring Valley ☐ Lemon Grove ☐ Lake Murray

Nearest conveyances or water bodies: _____ Hydrologic Area: _____

Approximate distance to water bodies: ☐ □ 200 ft. ☐ 200 □ 1000 ft. ☐ 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities: _____ square feet

Approximate □ impervious surface of this area_____□

Exposed areas of intensive outdoor activity: _____

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

D. BMP Assessment

BMPs	N/A	Yes	No	Comments
D.1 General				
Is the site free of excessive litter and debris?				
Are discharge locations free of excessive sediment and debris?				
Are parking lots, sidewalks and streets free of excessive sediment and debris?				
Are roof downspouts directed away from areas of potential pollutants?				
Is wash water from pressure washing / hosing managed appropriately?				
Are employees trained in storm water management?				
Does the facility have a current log of employees who have participated in training?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
If reclaimed water is used for irrigation, is the site free of evidence of irrigation water entering the storm drain?				
Are stockpiles of soil or landscape waste covered when feasible and equipped to prevent runoff transport?				
Are pesticides, herbicides, and fertilizers managed in accordance with the JURMP BMPs?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area adequately covered (closed lids or permanent overhead cover)?				
Is the trash/recycling area free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor materials that pose a threat to water quality stored appropriately (covered or in sealed containers)?				
Are outdoor storage containers properly labeled?				
Is there an accessible, appropriate spill response kit?				
Is there a written spill response plan? If so, please provide to inspector. (NA if no significant materials to spill)				
Are liquid storage containers/tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
Is water from pools and/or fountains disposed of properly?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				
Are vehicle maintenance activities conducted within contained areas when feasible (garage, canopy, work shop)?				

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

BMPs	N/A	Yes	No	Comments
Are equipment and vehicles inspected daily for leaks and repaired as necessary?				
Are storm drain inlets near vehicle-fueling areas protected from spills and leaks?				
Is vehicle washing preformed in a designated area where runoff does not enter the MS4?				
Are biodegradable soaps used when appropriate?				
D.5 Building Repair/Construction				
Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				
Are impervious areas free of debris and spills from painting, scraping, and/or sandblasting activities?				
D.6 Structural BMPs				
Are structural BMPs adequately maintained? (NA if no structural BMPs at facility)				
D.7 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.8 Other				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
E. ADDITIONAL COMMENTS (describe any additional deficiencies not represented above and/or notable BMP improvements)				

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

F. Corrective Action

Is corrective action needed? ☐ Yes ☐ No (If **BMP-related** corrective action is required, describe below.)

Operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax ☐ E-Mail

G. Violations

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described in Section F.

☐ Violation of City Ordinance(s):

- ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
  Description
- ☐ Illegal connection(s) to the storm drain system
  Location_____
- ☐ Littering
- ☐ Failure to properly implement required BMPs

☐ Other Violation_____

Specific action(s) required to correct the violation described above:

☐ Implement the recommended corrective actions listed in Section F.

Additional actions required:

H. Additional Recommended City Actions

Recommended City Actions listed at the time of inspection are subject to change based on later review by office staff

Does this facility require a follow-up inspection? ☐ Yes ☐ No

Assessment

Level of knowledge regarding storm water issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

ATTACHMENT 5.1

INDUSTRIAL/COMMERCIAL INSPECTION FORM

CITY OF LA MESA
Storm Water Compliance Inspection for Industrial and Commercial Facilities (FY 09-10)

Inspector Name _____ Date_____Time_____

Type of Inspection: ☐Routine ☐Follow-up ☐Complaint

Result:☐Full Insp. ☐Could not Contact ☐Not Inventoried ☐Moved, Vacant ☐Moved, Replaced by_____ ☐Refused ☐Mobile ☐Duplicate of_____

A. CONTACT INFORMATION

Original	Changes
Business Name_____	Business Name_____
_____	_____
Street Address _____	Street Address_____
_____	☐change _____
Responsible Person(s)_____	Responsible Person(s)_____
Title:_____	Title:_____
Business Telephone _____ext._____	Business Telephone _____ext._____
Business Fax _____	Business Fax _____

Home Based? ☐Yes ☐No Mobile Business? ☐Yes ☐No **APN**:_____

Is this facility located in a multi-suite complex? ☐Yes ☐No

Facility personnel present:_____

B. FACILITY SITE INFORMATION

Principal activity:_____

Assigned SIC code(s) _____ _____ _____ _____

Does SIC Code best represent principal activity: ☐Yes ☐No

Recommended change of SIC Code(s)?_____ _____ _____ _____

Existing SIC code(s) _____ _____ _____ _____

Status Update (if no longer active in City or does not need an inspection):☐Moved/Out of Business ☐Duplicate ☐Not Inventoried ☐Out of Jurisdiction

Does facility have a current business certificate? ☐Yes ☐No _____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐Mandatory ☐Conditional ☐No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐Yes ☐No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐Yes ☐No WDID: 9 37I0_____

Has facility filed a Notice Of Termination (NOT) for the WDID listed above? ☐Yes ☐No Approval date:_____ month/yr

Does facility maintain SWPPP or BMP Plan? ☐Yes ☐No

Does facility have a storm water monitoring program? ☐Yes ☐No

C. INITIAL OBSERVATIONS

Discharge points: _____

_____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate impervious surface of this area_____

Exposed areas of significant outdoor activity or storage? ☐Permanent ☐Occasional ☐No

D. BMP ASSESSMENT

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.1 General					
Keep site free of litter, debris, and sediment using dry methods	☐	☐	☐	☐	
Keep storm drains on site free of litter and debris	☐	☐	☐	☐	
Keep outdoor areas free of spills and leaks	☐	☐	☐	☐	
Collect water from pressure washing or hosing and dispose of appropriately	☐	☐	☐	☐	☐Unknown Performed by:
Direct roof downspouts away from areas of potential pollutants	☐	☐	☐	☐	
D.2 Landscaping					
Properly manage pesticides/fertilizer; use IPM when feasible	☐	☐	☐	☐	☐Unknown Landscaping Co:
Employ adequate erosion prevention measures (vegetation or physical stabilization)	☐	☐	☐	☐	
Eliminate over watering/over-irrigation	☐	☐	☐	☐	
Properly store stockpiles to prevent material transport	☐	☐	☐	☐	
D.3 Materials and Wastes					
Protect trash area from contact with storm water	☐	☐	☐	☐	
Keep trash area free of litter and debris, liquids, powders, sediment	☐	☐	☐	☐	
Keep grease bin and area surrounding grease bin free of grease stains/spills	☐	☐	☐	☐	
Do oil-recycling/grease bins have overhead coverage?	☐	☐	☐	☐	
Adequately cover materials stored outside	☐	☐	☐	☐	
Prevent run-on from contacting materials stored outdoors	☐	☐	☐	☐	
Provide an accessible, functional spill response kit	☐	☐	☐	☐	
Equip liquid storage containers with spill containment	☐	☐	☐	☐	
Keep spill containment free of spills and rainwater	☐	☐	☐	☐	
Properly store and dispose of hazardous materials	☐	☐	☐	☐	
Keep loading and unloading areas, including drains, free of debris	☐	☐	☐	☐	
Dispose of water generated by processing activities appropriately	☐	☐	☐	☐	
Dispose of pool, spa, fountain, and filter backwash water properly	☐	☐	☐	☐	☐Unknown Performed by:
Clean floor mats in locations that do not drain to street or storm drain system	☐	☐	☐	☐	

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.4 Equipment, Vehicles, and Outdoor Activities					
Conduct outdoor activities within contained areas (garage, under canopy, work shop)	☐	☐	☐	☐	
Use drip pans to collect leaks/spills	☐	☐	☐	☐	
Provide materials (berm, mat, etc.) to protect storm drain inlets from spills and leaks	☐	☐	☐	☐	
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4	☐	☐	☐	☐	
D.5 Other					
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff	☐	☐	☐	☐	
Identify and eliminate illicit connections and illegal discharges	☐	☐	☐	☐	

D.6 Additional Required Actions

D.7 Additional Questions	Comments/Results
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐Painting ☐Sandblasting ☐Fuel Distribution ☐Dust dispersion or mineral processing ☐Metal smelting ☐Metal plating or anodizing ☐Chemical production or mixing ☐Large fuel burning device ☐Incinerator
Are there any treatment control BMPs on site?	☐Filter insert ☐Hydrodynamic separator ☐Debris screen ☐Sewer diversion ☐Vegetated swale ☐Vegetated filter strip ☐Biofiltration ☐Detention/sedimentation basin ☐Containment and evaporation or reuse ☐Filtration
Are treatment control BMPs regularly maintained?	☐Yes ☐No ☐Unknown ☐N/A
What is the approximate percentage of the site that drains to the treatment control BMPs?	☐N/A
Do major potential pollutant sources drain to treatment BMP(s)?	☐All ☐Some ☐None ☐N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐Yes ☐No ☐N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐Yes ☐No ☐N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐Yes ☐No ☐N/A
Were any educational materials distributed?	NOI ☐ NONA/NEC ☐

E. STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE

☐ Non-compliance with the State Industrial Storm Water General Permit noted.

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit; see Attachment 3 of the Industrial Permit (www.waterboards.ca.gov/stormwtr/industrial.html).

- ☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP); see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required:

F. CORRECTIVE ACTION SUMMARY

☐ **Corrective Actions and Re-inspection Required.** Please refer to sections D.1-D.6, E, and F of this form.

☐ No Corrective Actions Required at this time.

G. RECOMMENDED CITY ACTIONS

ASSESSMENT

Level of knowledge regarding stormwater issues:	☐1	☐2	☐3	☐4	☐5
Level of cleanliness, BMP implementation, orderliness of site:	☐1	☐2	☐3	☐4	☐5

Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Nutrients	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Aluminum	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Iron	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Heavy Metals	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Check if evidence indicates specific metals may have significant PDPs: ☐Copper ☐Cadmium ☐Lead ☐Zinc ☐Mercury												
Organic Compounds	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐PCBs ☐PAHs ☐Chlordane ☐DDT												
Trash & Debris	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Oxygen Demanding	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Oil & Grease	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Bacteria & Viruses	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Pesticides	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Check if evidence indicates the following are used on site: ☐Diazinon ☐Chlorpyrifos												
Acid/Base (pH effects)	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Others (list):	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

RW 303(d) Receiving water impairments, as listed in the most recent 303(d) list
WS COC High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
PDP pollutant discharge potential.
Emp. Training employee training activities focused on storm water pollution prevention
Housekeeping standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
Minor Struct. minor structural BMPs that do not require building permits, such as covering with tarps or building berms
Major Struct. major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results exceed the EPA benchmark by an order of magnitude or more

CITY OF LA MESA

SUPPLEMENTAL WATERSHED ASSESSMENT QUESTIONNAIRE AND INSPECTION

Business Name _____ Date:_____

Watershed (circle one): ---

Questions for Facility Contact Person

When water (from rain, sprinklers, etc.) leaves your site where does it go? ☐ Treatment Plant/Sewer ☐ Storm Drain System ☐ A Water Body (any) ☐ Don't Know/Unsure

Runoff leaving your site eventually reaches what water body (more than one can be checked)? ☐ San Diego Bay ☐ Chollas Creek ☐ Pacific Ocean ☐ San Diego River ☐ Mission Bay ☐ Don't Know/Unsure

What is your impression of the water quality/condition of the downstream water body? ☐ Good ☐ Fair ☐ Poor ☐ Don't Know

In general, what do you think are the main areas or activities at local businesses that could contribute to pollution of runoff? ☐ Washing Activities ☐ Washing Activities Done by Mobile Businesses ☐ Material Storage ☐ Material Processing ☐ Landscaping ☐ Repair Services ☐ Illegal Dumping ☐ Trash Area ☐ Don't Know/Unsure ☐ Other

Other than today's inspection, have you received any information or education about what your business should do to prevent pollution from entering the environment? ☐ Yes ☐ No

Observations

Was evidence of any non-storm water discharge (including allowable discharges) observed? ☐ Significant ☐ Minimal ☐ No

If irrigation system is present, which sprinkler head types are present (check all that apply)? ☐ Spray ☐ Rotor ☐ Microspray ☐ Drip ☐ Bubblers ☐ Water by hand ☐ Other ☐ NA

Approximate percentage of site's total pervious area that is landscaped: _____ %

Attitude toward compliance with storm water regulations: ☐ Receptive ☐ Neutral ☐ Resistant

Overall Source Ranking (for Watershed Pollutants of Concern)

☐ Significant ☐ Not Significant

Industrial Commercial Storm Water Compliance Inspection Corrective Actions (City Copy)

Inspection Date: _____

Business Name: _____

Address: _____

Responsible Person: _____

Inspector Name/Phone: _____

Re-inspection Required? **Yes** ☐ **No** ☐

Corrective Actions:

1._____

_____

2._____

_____

3._____

_____

4._____

_____

5._____

_____

6._____

_____

Industrial Commercial Storm Water Compliance Inspection Corrective Actions (Business Copy)

Inspection Date: _____

Business Name: _____

Address: _____

Responsible Person: _____

Inspector Name/Phone: _____

Re-inspection Required? **Yes** ☐ **No** ☐

Corrective Actions:

1._____

_____

2._____

_____

3._____

_____

4._____

_____

5._____

_____

6._____

_____

ATTACHMENT 5.2

LA MESA FOCUS NEWSLETTERS

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • August 2010

La Mesa COMMUNITY SERVICES

Enroll now for Fall Activities

- Aquatics
- Classes

Convenient enrollment is available online OR print the enrollment form to mail in.

DEADLINE FOR VOTER REGISTRATION

MONDAY, OCT 18

FOR THE GENERAL ELECTION ON NOVEMBER 2

YOUR VOTE COUNTS!

You will need to register to vote if you:

- Have moved recently
- Changed your name
- Wish to change your political affiliation
- Will be at least 18 years of age on or before the next election

Postcard registration forms are available at a variety of public offices including:

- Registrar of Voters Main Office
- All City Clerk Offices
- Department of Motor Vehicles
- U.S. Postal Services
- Public Libraries

Call the Registrar of Voters main office at 858.565.5800 or visit their website at www.sdvote.com for more information.

Grossmont Transit Center Begins Pedestrian Improvements

The construction of the public improvements at the Grossmont Transit Center began earlier this year. The improvements are being completed by SANDAG and funded through multiple sources, including funds from the City of La Mesa, the Metropolitan Transit System (MTS), SANDAG, and stimulus dollars, for a total of $8 million. The public improvements include platform enhancements and two elevators with a bridge structure that allows ease of access from the transit platform to the host of businesses that are located around Grossmont Center Drive and Center Drive, including Grossmont Shopping Center and Grossmont Hospital.

SANDAG chose a La Mesa contractor, Riha Construction, to construct the public improvements and MTS will maintain and operate the facility. The contractor has installed a temporary stairway for continual access to the trolley platform during construction. The temporary stairway starts near the roadway across from the trolley platform and goes up to Grossmont Center Drive, near Fletcher Parkway. The project is expected to be completed in the summer of 2011.

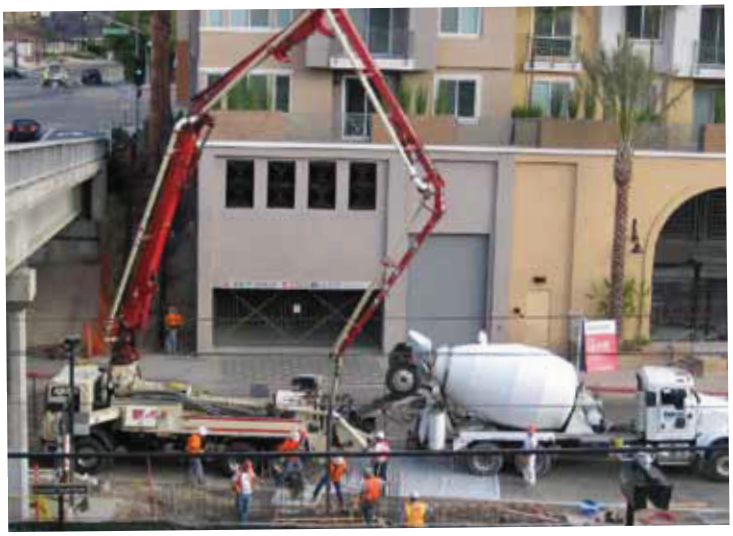

Coming in September New La Mesa Police Facility

GRAND OPENING

Check the calendar for opening date and events.

SWIPE SOME PARKING:
Smart Meters to be Installed in the Village

Let's say you're running late for a lunch appointment at one of the many restaurants in the Downtown Village such as Gio's, Por Favor, Tira Misu, San Fillippo's, or Johnny B's. You arrive downtown on time, pull into your parking space on La Mesa Blvd; bolt out of your car to the parking meter, reach into your pocket for change but come up empty. What do you do? Look under your car seats for stray coins? Ask a passerby to break a dollar for you? Leave the meter unpaid and risk a parking citation while you run into a shop to ask for change? In the very near future you'll be able to pull out your credit or debit card, swipe it, and get to your appointment on time.

As yet another sign of the City's commitment to modernize and upgrade the Downtown Village area, the City Council voted 5-0 on June 22 to accept the recommendation of the La Mesa Community Parking Commission to purchase and install 100 smart parking meters for the Downtown Village. The new parking meters, manufactured by IPS Group, Inc., will offer visitors and shoppers greater flexibility when paying for parking by accepting credit cards, debit cards or coins. Credit or debit card transactions are processed wirelessly, using secure, encrypted cellular technology. Identical meters are already in service in parts of San Diego and in Del Mar, and representatives of both cities report the public response has been overwhelmingly positive. The meters will replace existing coin-only meters on both sides of La Mesa Blvd, between 4th Street and Acacia Avenue, and La Mesa will provide the added payment flexibility to parking customers at no additional charge. The cost of these smart meters is being funded as a reinvestment of Downtown Parking Fund monies generated from parking meter revenues. No change to the existing parking meter rates will result from the installation of the new smart parking meters.

GOOD OUTDOOR LA MESA FUN

Free Youth Golf Clinic
La Mesa Residents Only

Saturday, Sept. 18—3:00 pm

Complete this coupon and return to:
Sun Valley Golf Club
5080 Memorial Dr., La Mesa, CA 91942

Name: _____

_____

Address: _____

_____

Phone: _____

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91942

7:00 am to Sunset
7 Days a Week

Adults $10 for 9 holes, $14 for 18 holes
Students* $7 for 9 holes, $10 for 18 holes
*(*includes college with valid student ID)*

Clinics, lessons, and special programs are available.
For details go to
www.sunvalleygolfclub.com
or call 466.6102

Adult Softball

(Ages 18 and up)

Leagues forming later this year!

Watch for more details in the November issue of the **La Mesa FOCUS** or leave your contact information at 667.1172 and press 6

Update of La Mesa's General Plan

The General Plan contains the City's vision for the future of La Mesa. The City Council authorized a comprehensive update to the General Plan to be completed by the City's centennial celebration in 2012. The General Plan Update will look ahead 20 years and document the goals, objectives, and policies that will get us there. City Staff has been working on getting the community involved in the General Plan Update. Two workshops are scheduled for 2010 to receive citizen input. One workshop took place on April 15. The second workshop will be held on September 23. There are two surveys on the City's website so check out both and sign up for email updates.

General Plans are divided into individual sections called "elements." State law mandates specific topics that must be covered in every General Plan (land use, mobility, housing, open space, conservation, noise and safety) but there are additional, optional topics that can also be included. La Mesa's current General Plan contains the following elements:

LAND USE AND URBAN DESIGN - specifies the general location and intensity of housing, business, industry, open space, education, public buildings and grounds, and other land uses.

CIRCULATION - describes the planned road systems in our community, as well as other ways that people and goods move around—by foot, bicycle, and rail.

CONSERVATION AND OPEN SPACE - addresses the demands placed on the City's parks and open space areas and discusses regional resource conservation issues.

HISTORIC PRESERVATION - describes the cultural and historic resources our community has and how the City will enhance and preserve them.

NOISE - describes existing and future noise sources and the City's standards for protecting residents from excessive noise.

SAFETY - identifies hazards within the community and contains policies designed to mitigate the risk to the public.

PUBLIC SERVICES & FACILITIES - outlines the City's policies and programs for keeping our community safe during both manmade and natural hazards like earthquakes and floods.

HOUSING - provides strategies for providing adequate housing to meet the current and future housing needs of everyone in our community. The Housing element is required to be updated more frequently than the other elements and was most recently revised in 2005.

In addition, the updated General Plan will address health and sustainability to respond to new laws and initiatives related to childhood obesity and climate change.

All citizens are encouraged to get involved in this update to the General Plan. This is your opportunity to give input about your community's future.

ARE YOU READY?

Here are some tools to help you prepare for a natural disaster...

September is National Disaster Preparedness Month. In order to encourage Americans to prepare themselves, their families and their communities, the Ready Campaign was created by the Federal Emergency Management Agency (FEMA) and asks individuals to do three key things to prepare for the unexpected: (1) get an emergency supply kit, (2) make a family emergency plan, and (3) be informed about the different types of emergencies that could occur and their appropriate responses. To help you prepare go to www.ready.gov for helpful tips.

Another way to prepare you and your family for an earthquake is to practice what you should do in the event of one. Join millions of Californians who are getting ready, sign up at www.shakeout.org for the earthquake drill slated for October 21, 2010 at 10:21 am. This is one way to get better prepared for major earthquakes, and to practice how to protect ourselves when they happen.

SMOKE ALARMS:
Up, Down and All Around

La Mesa Fire Department Reinforces Newer Smoke Alarm Recommendations During Fire Prevention Week, October 3-9

In an effort to better educate communities throughout the U.S. about smoke alarm recommendations, the nonprofit National Fire Protection Association (NFPA) is promoting "Smoke Alarms: A Sound You Can Live With!" as the theme for this year's Fire Prevention Week campaign, October 3 through 9.

La Mesa Fire Department offers the following tips for making sure smoke alarms are maintained and working properly:

- Test smoke alarms at least once a month using the test button, and make sure everyone in your home knows their sound.
- If an alarm "chirps," warning the battery is low, replace the battery right away.
- Replace all smoke alarms, including alarms that use 10-year batteries and hard-wired alarms, when they're 10 years old (or sooner) if they do not respond properly when tested.
- Never remove or disable a smoke alarm.

The La Mesa Fire Department will be hosting a Fire Prevention Week Open House on October 9 from 10:00 am until 2:00 pm at Fire Station 11, 8034 Allison Avenue. Through educational, family-oriented activities residents can learn more about the power of smoke alarms, newer options for installing and maintaining them properly, and ultimately, how to better protect their loved ones from fire. There will also be refreshments available and giveaway items for the kids!

To learn more about "Smoke Alarms: A Sound You Can Live With!," visit NFPA's Web site at www.firepreventionweek.org.

PARK APPRECIATION DAY

Volunteers clean up landscaping at the Adult Enrichment Center during 2009 Park Appreciation Day

Saturday October 23

8:00 am to 12:00 pm

La Mesa's Parks are Our City's Jewels, Help Make Them Shine!

For individuals – Bring your own gloves, rakes, or trowels to your favorite park. Signed waivers are required – download from the City website and bring with you to the park. Parents must accompany children under age 18 unless with a supervised large group.

Have a large group? We can help you find a project all your members can do. Give us a call at 667.1300.

Miss La Mesa and Miss Santee Pageants

LA MESA AND SANTEE PAGEANTS ANNOUNCE

2nd ANNUAL SCHOLARSHIP FUNDRAISER

The City of La Mesa and the City of Santee will hold the second annual fashion show fundraiser "Fashion Rocks the East" benefiting the Miss La Mesa and Miss Santee Pageants Scholarship Fund.

Sunday, August 8
3:00 pm
La Mesa Community Center
Arbor View Room

Tickets are $20 each and can be purchased by contacting pageant director Alexandra Kuty at 698.4163 or misslamesapageant@yahoo.com.

Curfew Ordinance Amended

This summer the La Mesa City Council approved several changes to the City's curfew ordinance. The curfew ordinance deals with juveniles under the age of 18, and regulates how late they can be out at night without parental supervision or permission. The changes approved by the City Council are designed to keep the ordinance consistent with the most recent court case dealing with curfew provisions. These changes clarify that juveniles may be present in public space during curfew hours when going to or coming from an activity related to expressing First Amendment rights or when traveling directly to an activity excepted from curfew restrictions from another such activity.

Generally, juveniles are not allowed to be out in public between the hours of 10:00 pm and 5:00 am. The ordinance lists several exceptions to this prohibition however. These include when they are accompanied by a parent, guardian, or responsible adult; going to or coming from a job; in an emergency; going to or coming from an activity organized by a school, church, or other similar organization; on an errand at the direction of a parent, guardian, or responsible adult; and exercising First Amendment rights.

Complete information on the changes to the City's curfew ordinance is available in the Staff Report to the City Council, presented on June 22, item 12.

City's Pavement Management Program – What's Your Zone?

As part of the City's Pavement Management Program, the City hires contractors to perform maintenance work on streets throughout the City. The work includes tree trimming, installation of pedestrian ramps, replacement of broken curb and gutter, filling street cracks and applying a slurry seal to select streets. Preparation work for this contract is completed in advance by City crews. With this year's contract approximately 3 million square feet of slurry will be applied to Zone 1, the area located in the northwest corner of the City which is bound by City Limits on the north and west sides, Interstate 8/Fletcher Parkway on the south side, and Jackson Drive to the east. Other streets recently disturbed to complete sewer repairs will also be treated under this contract. The City performs this work annually to different areas of the City in an effort to protect and prolong pavement life on City streets. The City uses rubberized slurry that makes use of recycled rubber from tires to complete this process. The application of crack seal and slurry seal act as a protective coating to protect the streets against further deterioration. Not every street within a zone will be completed. Streets are selected by their condition, availability of funding, and coordination of other work with agencies, City projects and private developments.

To see a map of Zone 1, streets to be completed with this year's contract, and find your zone, go to www.cityoflamesa.com. We treat one zone per year on a rotational basis, and will be working in Zone 2 next year.

Allison Avenue Streetscape Improvement Project

Allison Avenue is the main access road to the newly revitalized civic center that includes the library, post office, city hall, Fire Station 11 and administration building, and the new police station. Allison Avenue also provides a connection to the downtown village. With a number of bus routes and the adjacent trolley station on Spring Street, Allison Avenue also serves as a major transit and pedestrian corridor.

The streetscape improvement project along Allison Avenue will continue the improvements that were recently completed on University Avenue around the north side of the Civic Center, all designed to improve walkability. Improvements will include: landscaped and sheltered bus stops, mid-block crosswalks in front of the new library and bus stop, street lighting, sidewalk, enhanced crosswalks, street trees, landscaping, and an asphalt overlay. The design of Allison Avenue is consistent with La Mesa's walkability and smart growth plans. The work will take place along Allison Avenue between Palm Avenue and University Avenue.

The City has awarded a construction contract to Hazard Construction. Construction is phased to minimize inconvenience to property owners, businesses, and the general public. Construction of that portion of the project between Spring Street and Palm Avenue is scheduled for completion over the summer. The portion of the project from Spring Street to University Avenue will begin in September and is scheduled for completion in early 2011.

During construction traffic flow may be restricted and parking will be limited. Please seek alternate routes if possible. The City apologizes for any inconvenience. Should you have any questions regarding this project, please call the Engineering Department at 667.1166.

The La Mesa Environmental Sustainability Commission is pleased to announce the

3rd ANNUAL "SUSTAIN LA MESA" Environmental Festival

October 9, 10:00 am – 2:00 pm

Harry Griffen Park, 9550 Milden St., La Mesa

See exhibits and interactive displays on water and energy conservation, waste reduction and recycling, composting, healthy gardening and living, pollution prevention and more. Speakers will be presenting special topics throughout the event and free items will be handed out.

AND

"OUR PLANET, OUR HOME" K-12 Environmental Art & Literacy Contest

Deadline September 29

Award Ceremony at the Festival on October 9

Winning pieces to be exhibited at the La Mesa Library

For information or booth reservations please contact Scott Munzenmaier at 667.1338 or envirosvcs@ci.la-mesa.ca.us. For contest rules and entry form visit www.cityoflamesa.com/EnvironmentalAwareness.

Intergenerational Games

Thursday, October 14
9:00 am – 12:30 pm

This FREE fun filled half-day event pairs active older adults with local students in grades 4 through 6 in a circuit of physical activity games and knowledge challenges. Focus is on non-competitive fun activities that encourage lifelong fitness.

Active adults age 55+ and La Mesa/Spring Valley students in grades 4 through 6 are encouraged to sign up. It's a great way to get kids active during the fall school break. Sponsorships are available. Go to the City website for registration forms and information or call the Community Center office at 667.1300 or the Adult Enrichment Center at 464.0505.

ATTENTION DOG OWNERS

Animals Prohibited on Athletic Fields

On April 27, City Council adopted an ordinance that prohibits animals on athletic fields in La Mesa. The second reading occurred on May 11 and the ordinance went into effect June 10.

Section 9.08.115 – Animals prohibited on athletic fields reads as follows:

"It shall be unlawful to allow any animal, except a certified assistance dog, to enter or be on any city owned or operated athletic field and any accessory facilities serving or related to the use."

The ordinance applies to athletic fields in City parks as well as fields on school properties scheduled by the Community Services Department for community use outside of school hours. City crews have posted notification signs at City park fields and the La Mesa-Spring Valley School District is installing signs at school fields.

RECYCLING PROGRAM EXPANDS TO ACCEPT ALL RIGID PLASTICS!

EDCO's recycling program which is available to all residents and businesses now includes all rigid plastics marked 1 through 7. Previously only some plastics and CRV items were accepted.

NEW ACCEPTABLE ITEMS (but not limited to): Plastic buckets with metal handles, plastic drums, totes & empty garbage cans, plastic milk crates, kitty litter buckets, laundry baskets, lawn furniture, and pet carriers, plastic toys, plastic agricultural trays/pots, plastic pallets, yogurt containers, cottage cheese containers, and other mixed plastic containers.

NON-ACCEPTABLE COMPONENTS: Styrofoam, PVC pipe, vinyl siding, plastic film (grocery bags & stretch film).

LARGE ITEMS: Recyclable items that are too large to place in blue recycling carts can be dropped off at no cost at EDCO's Buyback Center at 8184 Commercial Street.

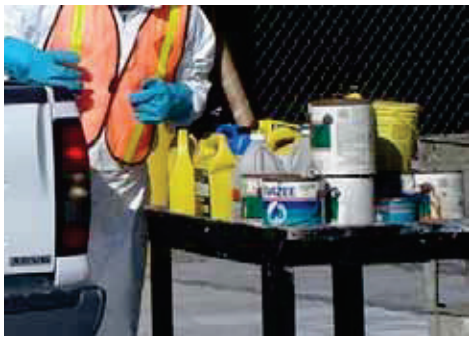

-FREE-

Household Hazardous Waste and Electronic Waste Disposal

NEXT COLLECTION:

AUGUST 28

This is your chance to safely and properly dispose of the following materials and items:

GENERAL

Batteries, Fluorescent lights, Medical sharps, Latex & oil based paints, Solvents & cleaners, Pesticides & garden products, Pool products, Propane, Any items labeled flammable, hazardous, toxic, or corrosive

ELECTRONICS

TVs, Computer monitors & hardware, Cell phones & telephones, MP3 players, VCRs, Radios

AUTOMOTIVE

Batteries, Used oil & filters, Antifreeze

Collection events for City residents are available by appointment only by calling EDCO at 619.287.5696 x4270 or emailing to lmhhw@edcodisposal.com.

These items are considered hazardous and are not allowed to be placed in the trash because of their destructive effect on the environment. If you reside within the City limits of La Mesa, you are eligible to participate in the City's free HHW drop-off program.

E-waste can be recycled at the EDCO Station buy back center during business hours without an appointment. The center is open Monday through Saturday from 8:00 am to 4:00 pm. A small fee may apply to some items.

To request additional information about the program, please contact the Department of Public Works Environmental Services Division at 667.1338 or by email at envirosvcs@ci.la-mesa.ca.us. For general HHW information or other disposal and recycling options, visit www.cityoflamesa.com/hhw.

La Mesa Centennial Logo Unveiled at Flag Day Parade

The City of La Mesa Centennial Logo was officially presented to the community at the annual Flag Day Parade on June 5. Committee volunteers were on hand to provide centennial stickers and request volunteer support. The year 2012 will mark the City of La Mesa's 100th birthday, having incorporated on February 16, 1912. The La Mesa's Centennial Committee Volunteers, a community based volunteer committee, is looking to coordinate efforts to mark the City's 100th anniversary year through the work of volunteers and through private donations. The committee hopes to promote La Mesa's 100th birthday, through a community directed celebration of its heritage--past, present, and future. Our goals are to:

- Provide a structure to celebrate the City's history and culture through exhibits, educational venues, institutional presentations and community events.
- Create opportunities to participate and to celebrate the Centennial for service, educational, civic, faith-based groups, businesses, and tourist organizations.
- Foster civic pride and economic prosperity through Centennial promotional activities recognizing historical achievements of businesses.
- Develop a centennial project that would leave a legacy for future generations.

The committee is seeking community groups, businesses, individuals, or organizations that would like to participate in Centennial Celebration events by providing sponsorships or donations, volunteering, or incorporating the Centennial Celebration theme, goals, items or information into their own existing events and programs.

For more information about Centennial opportunities, you can contact the Committee at 667.1172, option #5; email at LaMesa100@ci.la-mesa.ca.us or visit the Centennial webpage.

Historic Homes Tour

Saturday, November 6 will be the fifth annual Historic Home Tour presented by the La Mesa Historical Society (LMHS), co-sponsored by the Historic Preservation Commission of the City of La Mesa. The tour, which highlights five La Mesa/Grossmont historic homes, will run from 10:00 am to 3:00 pm. The sites to visit include Spanish eclectic, Cottswald Cottage/Tudor, Mission revival, and 1940s storybook homes. La Mesa's Foothills Art Association will provide working artists at the sites with displays of original art by local artists. Some artists' works will be available for sale.

Due to limited parking and vehicle access to the homes, free Old Town Trolley shuttle buses will operate from the Tour Center at the La Mesa Women's Club located at 5220 Wilson Street on Grossmont Blvd, opposite the former Linens 'n Things and Circuit City stores, just west of Drew Ford. Abundant free parking will be available.

Tickets purchased the day of the event will be $15 for LMHS members and $18 for non-members. Pre-sale tickets at $12 for LMHS members and $15 non-members are available until October 29 by telephoning 465.1883.

SAVE THE DATE

ARE YOU DROWNING IN PAPER?
Would you like to discard old bank statements and other personal records, but are concerned with identity theft?

The City of La Mesa is sponsoring a free shredding event on Saturday, November 13, from 9:00 am to 12:00 pm at La Mesa's EDCO Station, 8184 Commercial Street. The special program is available to La Mesa residents only and will be limited to TWO bankers boxes (10"x12"x15") per household.

This City event is made possible through the generous support of the EDCO Disposal Corporation.

9th Annual

Kids Care Fest

Saturday, September 25 • 9:00 am – 2:00 pm

Briercrest Park and Grossmont Healthcare District
9001 Wakarusa Street, La Mesa

A FREE event for kids and the whole family!

- health information
- fun zone
- children's fingerprinting
- health screenings
- art activities
- meet fire & police

In partnership between the City of La Mesa, Grossmont Healthcare District, and La Mesa Park & Recreation Foundation

Details coming soon on the City website or www.grossmonthealthcare.org

La Mesa Library is a Terrific Two!

The La Mesa Library celebrated its second anniversary this June. Since opening the new facility in 2008 more than 700,000 people have walked through the doors and 1,134,619 items have been checked out. Liz Hildreth, La Mesa Branch Librarian, reported this April the La Mesa Branch was #1 in circulation (items checked out - books, movies, music) among the 33 San Diego County Library braches!

The La Mesa Branch Library is open seven days a week and now offers a better check out system, RFID (radio frequency identifier device), that customers have found really easy to use. The County library system has expanded its service. If a book isn't in the system the library can borrow it from one of four local universities (Circuit System) or (Link+ System) which is 15 public library systems like San Francisco Public and 38 Academic Libraries like Claremont Colleges. Stop by and ask the friendly library staff to show you how this works.

The library continues to offer popular story time programs for infants, toddlers, and pre-schoolers, afternoon science programs, and tween programs, as well as a teen book club and a teen advisory group. Adult programs include a book club, coffee and books, concerts and more. The library has a great 'Friends of the La Mesa Library' group and their book-store just off the lobby is open daily from 1:00 to 4:00 pm.

Some of our hottest days of the year are yet to come so don't forget that the La Mesa Branch Library is a local Cool Zone. Come cool off and enjoy everything the library has to offer. If you'd like more information about library programs and services please call 469.2151 or Text-a-Librarian at 928.2251.

Now that summer school vacation is over or nearly over, students need to focus their attention on back to school type safety measures. Whether walking or riding bicycles to and from school, students must remember all of the bicycle and pedestrian traffic safety measures taught in elementary school:

- Look both ways before crossing the street
- Ride bicycles on the right side of the street
- Always wear approved helmets when riding bicycles
- Cross the street only at street corners
- When crossing the street at street lights, make sure you have enough time left to cross before the green light turns to red.
- When entering or exiting vehicles, make sure the driver pulls over to the curb to stop first
- When walking and using cell phones use good instincts and always be aware of your surroundings
- When walking to and from school, always walk with a friend, and never approach unknown persons in vehicles to give directions or answer questions
- Never hitchhike

All of the above listed safety tips should not be new to students and along with many others they should help insure that students' back to school travels are filled with fun and adequate personal safety.

HALLOWEEN SAFETY

Most people think Halloween is only a time for fun, games, costumes, and treats for children. While this may be true, Halloween is also a time for parents to think about safety issues for their children and their residences. All parents should consider taking adequate safety measures to insure that their children's Halloween night is a safe night, filled with fun and lasting good memories, and that their homes are safe and secure with all windows and doors secured. The following is a list of basic Halloween safety suggestions to keep your children safe:

PLAN YOUR EVENING

To help keep children safe on Halloween night, the American Academy of Pediatrics, the Centers for Disease Control and Prevention, and the National Safety Council, make the following suggestions:

- Visit only well lit houses in familiar neighborhoods and remain outside
- Travel in small groups visible to parents and have someone carry a cell phone
- Use flashlights and stay on sidewalks
- Cross streets at the corner and never between parked cars
- Have names and addresses attached to your child's costume
- Have a predetermined meeting place if child is separated from parent or group

COSTUME SAFETY

Within reason, allowing your child to choose his/her own costume will probably add to their sense of pride and lead to a fun filled night. However, make sure their costume is made of a flame retardant material, reflective to light, properly fitted, and if wearing a mask, make sure the eye holes are large enough to see from side to side. Never allow your child to carry toy guns or weapons that appear to be real.

TRICK OR TREAT SAFETY

Even though kids enjoy the process of dressing-up and going trick or treating on Halloween night, they really enjoy eating the candy and other treats they receive. However, parents should set guidelines regarding the consumption of these treats:

- Take all candy home for parental inspection before eating
- Don't eat anything that isn't commercially wrapped
- Wash all fresh fruit thoroughly and inspect for holes and punctures

DON'T FORGET YOUR PETS:

Halloween night, with kids yelling and screaming, along with doorbells ringing for hours, can be a frightening time for dogs, cats, or other animals at your home. If possible, set aside a room near the rear of your home to keep your animals as far away from the noise as possible. Also, for those of you who like to dress your pets in their own costumes, remember, what you think looks cute, can be uncomfortable and cumbersome for your pets.

The La Mesa Police Department is available for all emergency (9-1-1) and non emergency (667.1400) situations. Please use the appropriate telephone number.

8th Annual Creek to Bay Cleanup

Creek to Bay Cleanup Day was held on Saturday, April 24. This county-wide cleanup event featured 69 clean-up sites with 5,181 volunteers removing 160,000 pounds of debris from the shorelines, coast and inland areas. The City of La Mesa coordinated and sponsored cleanup locations located along Alvarado Creek and University Channel. We would like to thank the 39 local volunteers who took part in removing over 800 pounds of trash and debris from our local waterways.

Mark your calendars! Our next clean-up event will be California Coastal Cleanup Day on September 25. The City of La Mesa will again sponsor sites along Alvarado Creek and University Channel and will be looking for more volunteers to ensure as much trash and debris is removed from our local waterways as is possible.

For more information, call Joe Kuhn, storm water program manager, at 667.1134.

Want to get more involved in your Community?

The La Mesa Police Department has a large contingent of volunteers who assist the Department by providing a variety of services. The Department has a number of volunteer opportunities available and is currently seeking applications from community members interested in donating their time.

The Department will be moving into its new police station, at 8085 University Avenue, and would like to add volunteers to our staff who will work at the reception counter. These volunteers will serve as the first point of contact for people who come into the police station and will assist them by answering questions and arranging for needed services.

We are also recruiting community members who are interested in serving in our Retired Senior Volunteer Patrol (RSVP) program. These volunteers work in uniform and their duties include patrolling the city, assisting with traffic control, working at special events, parking enforcement, and conducting vacation home checks. As part of our RSVP program, the Police Department is also recruiting volunteers to assist in the RSVP office in the new police station to help coordinate appointments and payments for people who need fingerprinting services.

If you are at least 50 years of age, want to be part of the Police Department, and feel you could usually volunteer six hours a week, the Police Department would love to talk to you and give you more information about volunteer opportunities. Contact Maxine Lynch at 667.1447 for applications or more information.

Attention Middle and High School Students

The City is currently seeking applicants for several upcoming vacancies on the Youth Advisory Commission. Applicants must live within the city limits of La Mesa and be at least 13 years old, but not more than 20 years old, at the time of appointment in September.

The Commission serves as an advisory body to the City Council on matters pertaining to programs, projects, and issues that address the concerns of the youth in our community. It is also the Commission's responsibility to explore and develop activities that will promote positive youth relations in the City.

Commission meetings are held on the second and fourth Monday of each month at 4:30 pm in the Community Center, 4975 Memorial Drive.

Applications are available at City Hall, 8130 Allison Avenue or by calling the City Clerk's office at 667.1120. Applications must be received in the City Clerk's office no later than 5:30 pm, Friday, September 10.

La Mesa Commission on Aging Community Forums

Tuesday, September 28, 1:30 pm

" La Mesa Candidates' Forum"

Adult Enrichment Center
8450 La Mesa Blvd.,

RSVP for each presentation you wish to attend at 464.0505

Council Actions

April 13, 2010

Adopted a resolution accepting bid proposal of Russ Bassett Corporation and awarding contract for design, supply and installation of radio communications dispatch furniture for new Police Facility.

Adopted a resolution adopting the Negative Declaration and authorizing the execution of a Purchase and Sale Agreement presented in substantial form for 4865-67 Cypress Street and related parking lot located at the southeast corner of University Avenue and Cypress Street from the Esther M. Ludwick Trust.

Appointed members to fill unscheduled vacancies on the Community Services Commission and Youth Advisory Commission.

April 27, 2010

Ratified the Design Review Board's approval of DRB-09-09 (Rutherford) – for a proposed addition to a single family residence at 8229 Pasadena Avenue.

Approved a letter of support from the San Diego County Board of Supervisors and the Mayors of San Diego County encouraging the Governor to issue another Executive Order for increased firefighting resources in San Diego County for the 2010 fire season.

Adopted a resolution authorizing execution of an Agreement with the San Diego Unified School District for the use of the La Mesa Municipal Pool.

Approved the installation of speed cushions on Parks Avenue between University Avenue and El Cajon Boulevard.

Adopted the Fee Schedule for Fiscal Year 2010-2011.

May 11, 2010

Adopted a resolution authorizing execution of the First Amendment to the Heartland Fire Training Authority Joint Powers Agreement.

Adopted a resolution approving Rules of Conduct for Community Services Department Facilities.

Adopted a resolution awarding a contract to Roy Allan Slurry Seal, Inc. for Bid No. 09-24, Annual Street Maintenance Project, Crack Sealing and Rubberized Emulsion Aggregate Slurry Coating of Various Streets.

Adopted a resolution authorizing the execution of Grant Agreements between the San Diego Association of Governments (SANDAG) and the City for three projects funded by the TDA/Transnet Bicycle, Pedestrian and Neighborhood Safety Program Funds.

Adopted an ordinance adding Section 9.08.115 to the La Mesa Municipal Code to Prohibit Animals on Athletic Fields.

Appointed an alternate member to fill an unscheduled vacancy on the Youth Advisory Commission.

May 25, 2010

Adopted a resolution declaring there were weeds, rubbish and refuse existing upon certain streets, sidewalks and private property in the City which constitute a public nuisance and declaring the intention of the Council to order its abatement.

Adopted a resolution amending Section 12.44.130 of the La Mesa Municipal Code installing a disabled persons parking space at 9405 Gregory Street.

Adopted a resolution amending Section 12.64.010 of the La Mesa Municipal Code to reflect approved speed limits on three City streets – Allison Avenue, High Street and Amaya Drive.

June 8, 2010

Ratified the Design Review Board's approval of DRB 08-03 (Mansour) - for proposed modifications to previously approved design review for a new commercial/retail building on a vacant site addressed as 5980 Severin Drive.

Ratified the Design Review Board's approval of DRB-09-24 (Clearwire) – for a proposed wireless communications facility at 6062 Lake Murray Boulevard.

Approved the special event permit application for the 2010 Oktoberfest, subject to conditions; and adopted a resolution authorizing the temporary closure of portions of City streets for the event.

June 22, 2010

Ratified the Design Review Board's approval of DRB-09-16 (Clearwire) – for a proposed wireless communications facility at 5565 Grossmont Center Drive.

Ratified the Design Review Board's approval of DRB-09-17 (Clearwire) – for a proposed wireless communications facility at 7840 El Cajon Boulevard.

Ratified the Design Review Board's approval of DRB-09-23 (Clearwire) – for a proposed wireless communications facility at 7484 University Avenue.

Ratified the Design Review Board's approval of DRB-10-05 (Union Bank) – for proposed exterior alterations to a commercial building at 4771 Spring Street.

Adopted resolutions calling and giving notice of the holding of a General Municipal Election to be held in the City on Tuesday, November 2, 2010; requesting the County Board of Supervisors to conduct the election and to consolidate it with the Statewide General Election; and adopting regulations for candidates for elective office pertaining to candidates' statements.

Adopted a resolution awarding Bid No.10-01 for an annual contract for furnishing labor, equipment and material for supplying and delivering asphalt and asphalt emulsions to the cities of La Mesa, National City, Carlsbad and Santee.

Adopted a resolution awarding a contract for Bid No. 09-30 for building demolition project to Flores Sierra Contractors Incorporated for the old Post Office building and the buildings located at 4865 Cypress Street.

Adopted a resolution amending Section 12.44.130 of the La Mesa Municipal Code deleting disabled persons parking spaces at 4144 Blackton Drive, 7330 Mohawk Street, and 7311 Waite Drive.

Authorized the introduction and first reading of an ordinance amending Chapter 10.20 of the La Mesa Municipal Code to bring the curfew ordinance into conformance with the most current court ruling.

Adopted resolutions approving the 2010-2011 amended final budget; and adopting the Appropriations Limit for Fiscal Year ending June 30, 2011 and the annual adjustment factors used to calculate the limit.

Adopted a resolution approving the purchase and installation of new smart parking meters on La Mesa Boulevard in the Downtown Parking District.

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91942
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Mayor ..... Art Madrid
Vice Mayor ..... Dave Allan
Councilmember ..... Ruth Sterling
Councilmember ..... Ernie Ewin
Councilmember ..... Mark Arapostathis
City Manager ..... David E. Witt
Focus Editor ..... Käaren McElroy
Editorial Staff ..... Heather Moore Sheppard
Ofelia Andrade

Watch for the next issue of the
La Mesa FOCUS
AVAILABLE NOVEMBER 1

Want email notification when the next issue of FOCUS goes online?

Visit NOTIFY ME on our site to request automatic email notification so you won't miss the most up-to-date publication.

Cool Spots In & Around La Mesa

La Mesa residents who may be at risk from extreme heat can seek relief during the hot summer months at these La Mesa locations:

Christian Science Reading Room,
8370 La Mesa Blvd., 463.8470,

La Mesa Adult Enrichment Center,
8450 La Mesa Blvd., 464.0505

La Mesa library,
8074 Allison Ave., 469.2151

City of La Mesa Monthy Meeting Schedule

Meetings are held at City Hall
8130 Allison Avenue - La Mesa
(unless indicated otherwise)

CITY COUNCIL
Second Tuesday - 4:00 pm
Fourth Tuesday - 6:00 pm

PLANNING COMMISSION
First and Third Wednesday - 7:00 pm

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 am

DESIGN REVIEW BOARD
Every other Monday - 12:30 pm

ENVIRONMENTAL SUSTAINABILITY COMMISSION
Third Monday - 6:00 pm

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 pm

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 am
(as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 pm

HUMAN RELATIONS ADVISORY COMMISSION
Second Monday - 5:30 pm

LA MESA COMMUNITY PARKING COMMISSION
First Thursday - 5:30 pm

TRAFFIC COMMISSION
First Wednesday - 9:00 am

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 pm

YOUTH ADVISORY COMMISSION
Second & Fourth Monday - 4:15 pm
The above meetings are held at the Community Center Conference Room 4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 pm
(except July, Aug., Nov., & Dec.)
The above meeting is held at the Adult Enrichment Center 8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS (Area code 619)

Adult Enrichment Center	464.0505
Animal Control	667.1436
Building Inspection	667.1176
Business Licenses	667.1118
Cable TV	262.1122
City Attorney	667.1128
City Clerk	667.1120
City Council	667.1106
City Hall	463.6611
City Manager	667.1105
Crime Prevention	667.1445
Dog Licenses	667.1114
Engineering	667.1166
Fire (Business)	667.1355
Human Resources	667.1175
Library	469.2151
Mayor	667.1100
Municipal Pool	466.4177
Park Permits	667.1300
Parking Citations	667.1117
Planning	667.1177
Police (Business)	667.1400
Public Works	667.1450
Recreation	667.1300
Recycling/Trash	287.7555
Rides4Neighbors	464.0109
Senior Taxi Scrip	667.1321
Sewer Charges	667.1126
Sidewalk Maint.	667.1450
Storm Water Hotline	667.1134
Streetlight Maint.	667.1450
Traffic Eng. Hotline	667.1144
Traffic Signal Maint.	667.1166
Zoning	667.1177

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • November 2010

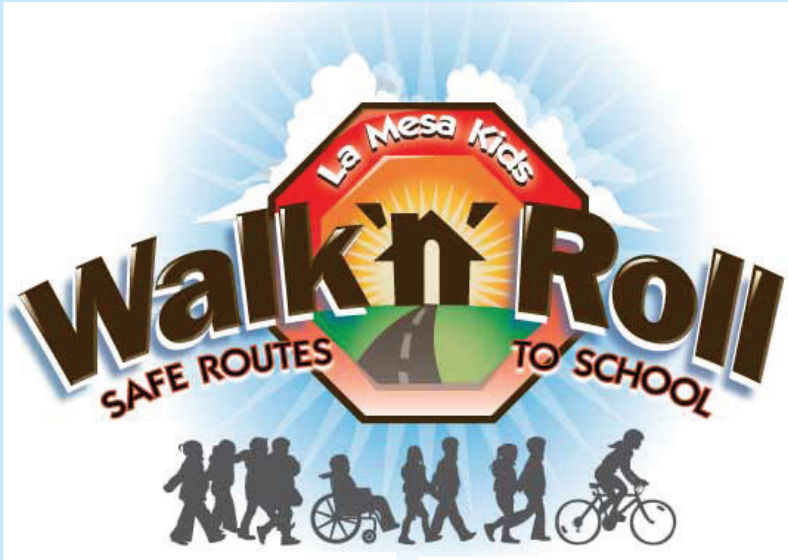

Students Celebrate International Walk to School Day

It never rains in La Mesa, California. Well, almost never. But it did on October 6 when more than 500 enthusiastic students donned walking shoes and rain gear and made their way to school from their homes or other predetermined starting points within their school communities.

Students at Lemon Avenue Elementary, Rolando Elementary, Maryland Avenue Elementary, Northmont Elementary, and La Mesa Middle School were joined by elected officials, Police, Firefighters, and City staff in walks and assembly events to celebrate the advantages of walking and riding bikes to school.

Continued on page 2

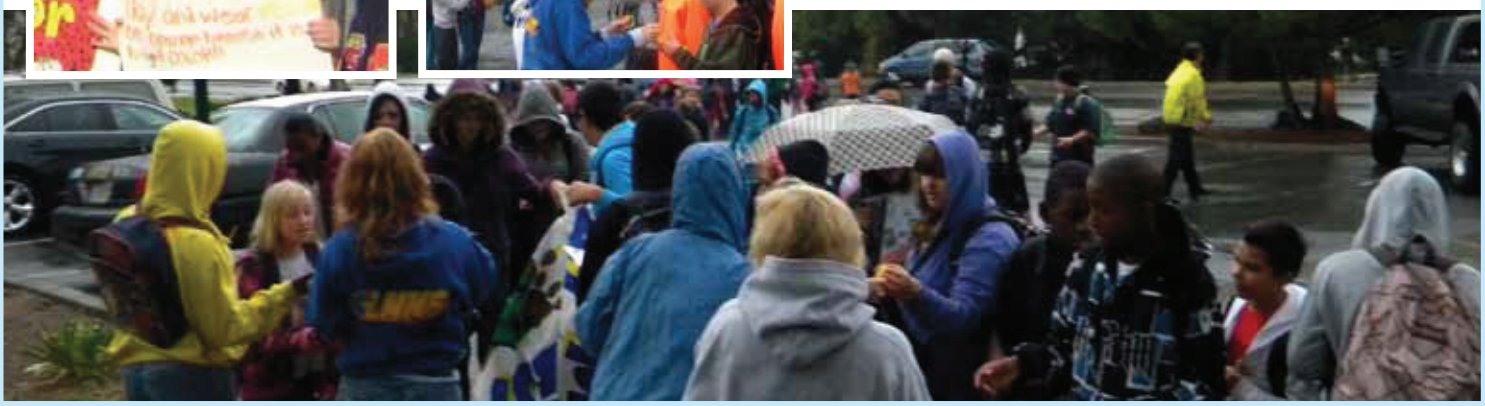

2011 LA MESA TOWN HALL MEETINGS

Tue, Jan 18, 6:30 – 8:30 pm
Parkway Middle School,9009 Park Plaza Dr.

Thu, Jan 20, 6:30 – 8:30 pm
Maryland Avenue Elementary School, 5400 Maryland Avenue

The City Council encourages all who are interested in the present and future of La Mesa to attend and provide their ideas, comments, and opinions. Information gathered at Town Hall meetings is used by staff and the City Council to recommend and set priorities for the City's next budget.

Daylight Savings Time

Ends at 2:00am Sunday, November 7.

Set your clocks back 1 hour before you go to bed Saturday night and enjoy an extra hour of sleep!

This is also a good time to change the batteries in your smoke alarms. Have a Happy and Safe Holiday Season.

Are You Drowning in Paper?

Would you like to discard personal records but have concerns with identity theft? The City of La Mesa is sponsoring a free shredding event for La Mesa residents only on Saturday, November 13, from 9:00 am to noon at EDCO Station, 8184 Commercial Street in La Mesa. There will be a limit of two boxes (approximate size 10"x12"x15") per household. Proof of residency will be required. This City event is made possible through the generous support of EDCO Disposal. Questions can be directed to 667.1167.

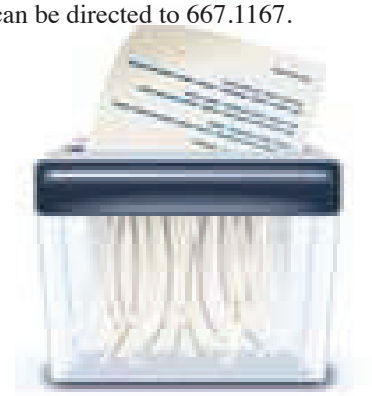

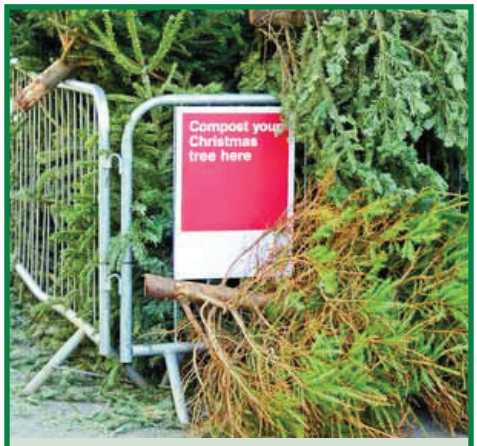

RECYCLE THOSE CHRISTMAS TREES!

Christmas trees, including flocked trees, may be recycled in EDCO's yard waste recycling program. Place cut trees in your designated yard waste recycling container, or bundle tree sections together with twine (maximum 4 feet in length and 18 inches in diameter) and place at the curb on collection day.

Residents may also drop off holiday trees to be recycled at EDCO Station, located at 8184 Commercial Street in La Mesa from December 26 to January 15. Holiday tree drop-off available: Monday - Saturday, 7:00 am - 4:30 pm, and Sunday, 8:00 am - 4:30 pm (Closed Christmas and New Year's Day.) Free holiday tree mulch will be available on a self-load/self-haul basis.

La Mesa Employees Take Health and Wellness to New Heights

The City has actively supported several programs to promote health and wellness in the community this year. One group of City employees literally has taken this objective to new heights. The group set a goal for themselves of climbing Mount Whitney, the tallest peak in the lower 48 states. Training started last Spring and lasted through the Summer with a summit attempt on August 31, 2010. All the hard work and commitment paid off with all 8 staff in the group successfully and safely making it to the summit and back with a real sense of accomplishment and many tales to tell. Congratulations goes out to La Mesa's healthy mountaineers: Tamaryn Boston, Bill Chopyk, Michele Greenberg-McClung, Enrique Nunez, John O'Donnell, Don Palmer, Karen Rakestraw, and Patty Rios.

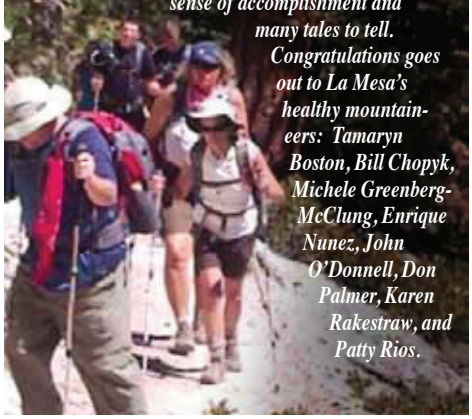

International Walk to School Day

Continued from page 1

La Mesa's celebration of Walk to School Day was organized by the City and the non-profit WALKSan Diego as part of a 4-year Safe Routes to School federal grant project entitled La Mesa Kids Walk and Roll to School. With increasing concerns over childhood obesity rates, school transportation budget cuts, and personal safety, parents are searching for alternate ways to get their children to school. This project emphasizes the importance of increasing physical activity among students, pedestrian safety, preserving the environment, improving air quality, and decreasing traffic congestion, especially around schools. As more and more kids and adults walk to school, traffic congestion will diminish and safety in school neighborhoods will increase.

La Mesa has received over $1.6 million in grants to improve walkability around schools, with the latest award of $165,000 to fund the addition of sidewalks across from La Mesa Middle School awarded in October 2010.

Holiday Open House

Free Event!

Come celebrate the holiday season with friends

Thursday, December 16th
9:30 am

La Mesa Adult Enrichment Center
8450 La Mesa Boulevard

RSVP 667.1322

Refreshments and entertainment provided

New Year's Eve Party

La Mesa Adult Enrichment Center
8450 La Mesa Boulevard

Friday, December 31
8:00 pm until midnight

$22 per person
Call 667.1322 for ticket information

Tickets on sale late October. Space is limited. First come-first served.

Pay at the Adult Enrichment Center or the Friday Night Dance.

CITY OF LA MESA

THE CITY OF LA MESA
HUMAN RELATIONS
ADVISORY COMMISSION PRESENTS

The 15th Annual MULTICULTURAL FESTIVAL

Sunday, January 16, 2011 • 2:00-3:30 pm
La Mesa Community Center
4975 Memorial Drive

The Festival will feature music and entertainment in celebration of the rich cultural heritage of our great nation as we honor Dr. Martin Luther King Jr.'s vision of a world where people are judged by the content of their character, not the color of their skin.

REFRESHMENTS FOLLOWING THE PROGRAM
FOR MORE INFORMATION CALL 667.1120

FREE ADMISSION!

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91942

7:00 am to Sunset
7 Days a Week

Adults $10 for 9 holes, $14 for 18 holes
Students* $7 for 9 holes, $10 for 18 holes
*(*includes college with valid student ID)*

Clinics, lessons, and special programs are available.
For details go to
www.sunvalleygolfclub.com
or call 466.6102

New Police Station Complete

On September 20 the La Mesa Police Department began full time operations in a new police station located at 8085 University Avenue.

Public tours of the new La Mesa Police Station will be available beginning Saturday, January 8, 2011 and will be offered the second Saturday of each month thereafter at either 9:00 or 11:00 am. Reservations are required. If you are interested in taking the tour contact the La Mesa Police Department at 667.7514 to schedule.

City officials and members of the Independent Citizens' Bond Oversight Committee (ICBOC) gathered in front of the new Police Station to unveil the dedication plaque. Pictured left to right: Chief Alan Lanning, Councilmember Dave Allan, ICBOC member Bob Duggan, Councilmember Ernie Ewin, Councilmember Mark Arapostathis, Vice Mayor Ruth Sterling, ICBOC member Helen Givens, ICBOC member John Camp, ICBOC member Dr. Glen Sparrow, Mayor Art Madrid, ICBOC Vice Chairman Robert Duff, and City Manager Dave Witt. Not pictured: ICBOC Chairman Steve South.

DOWNTOWN VILLAGE DESIGN UPDATE

City is on schedule with Village renovation

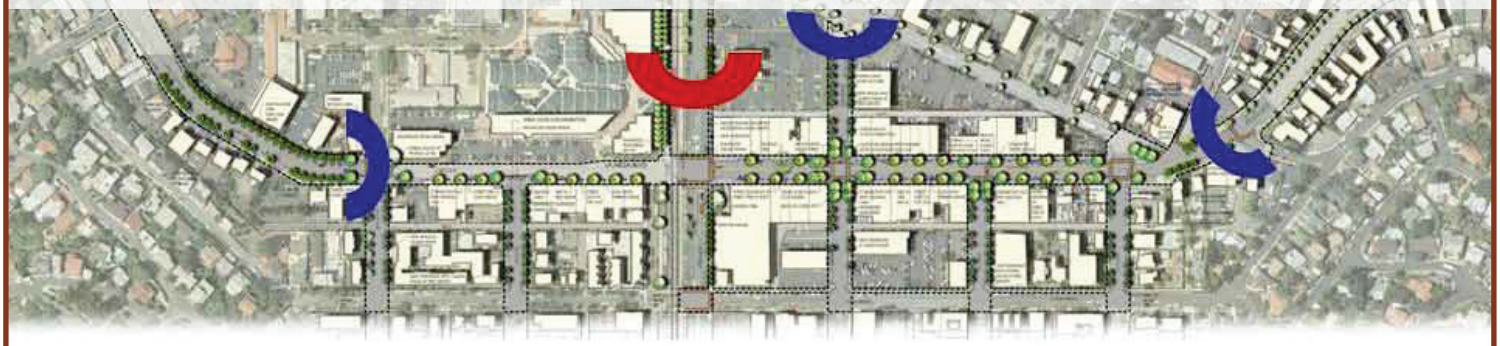

The City of La Mesa has been hard at work to stay on schedule in the design of the downtown Village renovation. A concept plan was recently finalized and the project is proceeding with construction plans for Village Streetscape Improvements. The plan includes replacing sidewalks, lighting, landscaping, street furnishings, and crosswalks with new equipment and new treatments. In addition, the project introduces new amenities, such as safety bollards and power supplies for special events and will create lighted entry points or "gateways" to the Village to let visitors know they have arrived at a destination. The project will enhance the sense of place for the downtown Village and further establish the area as a competitive commercial district offering patrons a wide array of dining options, products, and services in a safe and visually appealing environment. The City is pursuing grant funds to supplement the $991,000 in American Recovery and Reinvestment Act funds already awarded for this project. Visit www.cityoflamesa.com/DowntownVillage for additional information and project updates.

What is your vision for La Mesa?

EVERYDAY SUSTAINABILITY:

- Wash only full loads in dishwashers and washing machines
- Always sweep with a broom, never a hose
- Reduce use of dryers and air conditioning units
- Buy minimally packaged goods
- Check out EDCO for recycling tips
- Condense auto trips and try to replace trips with biking, walking or public transit
- Check out La Mesa's Friday afternoon Farmer's Market for fresh local produce

The City is updating the General Plan (GP) for La Mesa's centennial celebration in 2012. The GP document guides the vision of the future of La Mesa through goals and policies. The document is divided into individual sections called "elements" currently: land use, circulation, conservation and open space, noise, safety, historic preservation, public services and facilities, and housing. New for the centennial update, the GP will also address health, wellness, and sustainability in response to new laws and initiatives related to childhood obesity and climate change.

Sustainability is a way of life, not an end goal. For the City of La Mesa this means protecting water quality and supply, strengthening alternative transportation options, encouraging land uses and buildings that conserve energy, and reducing greenhouse gas (GHG) emissions. Preserving quality of life in our "jewel of the hills" will require measures that ensure environmental sustainability and the health of all residents.

Public participation remains a valuable component of the GP update. If you would like the City to know about your vision for the future of La Mesa, please take a few minutes to fill out the online survey.

The City held the second workshop for citizen input on the GP Thursday, September 23 in the La Mesa Community Center. The workshop was an open forum so attendees were able to speak with City staff and consultants about land use, sustainability, and bicycle and pedestrian accessibility. If you'd like to stay informed about the GP update process or about a future workshop, sign up for "General Plan Update" through Notify Me on the City website.

Attention Drivers!

The City of La Mesa Rides4Neighbors Program needs your help for riders like the the gentleman pictured here. We have many other riders who need drivers!

- We are seeking adult volunteer drivers with excellent driving records willing to use their personal vehicles to provide a ride to a neighbor in need.
- Volunteers complete an application, provide a copy of a valid Drivers' License and insurance certificate, authorize a DMV records check, complete a Livescan background check, and complete orientation and training.
- Volunteer drivers are reimbursed for mileage and receive secondary liability insurance.
- As a volunteer, you decide your availability and choose the rides you wish to provide. There is no minimum time commitment or number of rides required to be a volunteer.

Please call 667.1321 for information on becoming a Rides-4Neighbors volunteer! ***We need you!***

El Cajon Boulevard and La Mesa Blvd. & Spring St. and High St.

INTERSECTION MODIFICATIONS

Beginning this winter, modifications will begin to the intersection of El Cajon Boulevard and La Mesa Boulevard and the intersection of Spring Street and High Street. Work will consist of upgrades to signals, installation of an environmentally friendly Low Impact Design grass swale to treat storm water runoff, and ADA pedestrian improvements. Construction is anticipated to last approximately four months. Residents are asked to be aware of traffic control within these areas. The project is funded through a grant from the San Diego Association of Governments Transnet Funds and Community Development Block Grants. For questions regarding this project contact Dirk Epperson in the Engineering Department at 667.1152 or depperson@ci.la-mesa.ca.us.

Ordinance Regarding Animal Noises Revised

On September 28th the City Council approved changes to Section 8.04.060 of the La Mesa Municipal Code, the City's "Animal Noises" ordinance, based on recommendations received from City Attorney Glenn Sabine. To establish a bona-fide complaint under the revised ordinance, the animal noise disturbance must rise to a level that disturbs a person of normal sensitivity in the vicinity, and requires a written affirmation of disturbance by people living in two separate residences. The revised ordinance exempts areas where animal noises are related to the permitted use of the property. The ordinance revisions will take effect November 10.

Adult Softball

(18 years and older)

Spring 2011

New team registration:
Please leave message at voicemail
667.1172, option #6

Fee: $525 for season payable in full at time of registration. Umpire fees not included - $15/game each team

Visit the Adult Softball for additional information regarding registration and season schedule.

Jackson Park Playground Renovation Watch the City Calendar for information regarding a Grand Reopening of the playground at Jackson Park.

La Mesa's Watersheds In Focus

DO YOU KNOW YOUR WATERSHEDS?

Watersheds are areas of land which drain water, sediment, and dissolved materials to a common receiving water body or outlet. These areas serve to provide water in the form of drainage to a river or stream.Therefore, a watershed consists of all land and waterways that drain into the same body of water.

San Diego County is situated within 11 major watersheds. The City of La Mesa are within two of these watersheds: San Diego River Watershed and San Diego Bay Watershed.

SAN DIEGO RIVER WATERSHED

The San Diego River Watershed is comprised of 443 square miles and extends from the mountains near Julian to the San Diego River mouth at Ocean Beach. Portions of the watershed fall within the cities of El Cajon, Poway, San Diego, Santee, several unincorporated areas, and the City of La Mesa. Primary tributaries to the San Diego River include Boulder Creek, Conejos Creek, Los Coches Creek, San Vicente Creek, and Forester Creek.

Water quality concerns associated with the watershed include elevated bacteria levels, low dissolved oxygen, and the presence of elevated levels of dissolved solids and nutrients. Ensuring that urban runoff is not contaminated with pollutants is very important to the City and your responsibility as a resident and business owner in the City of La Mesa.

SAN DIEGO BAY WATERSHED

The San Diego Bay Watershed is comprised of 415 square miles. It extends from the Laguna Mountains to San Diego Bay. The watershed falls within the cities of Chula Vista, Coronado, Imperial Beach, Lemon Grove, National City, San Diego, unincorporated areas of the County, and the City of La Mesa. Approximately four square miles in the southern portion of the City of La Mesa are part of this watershed. The major discharge sources to San Diego Bay include Sweetwater River, Otay River, Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek.

Water quality concerns associated with the watershed include elevated levels of bacteria, copper, lead, and zinc. The sources of these pollutants are the result of many factors, including, automobile brake dust and exhaust, industrial waste, pet waste, littering, and improper commercial/industrial materials storage.

WHAT CAN YOU DO?

It is your responsibility as residents and business owners in La Mesa to help keep these pollutants from impacting our water bodies. Keep in mind, the only water that should enter the storm drain is rain water. Do not hose down your property. Pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris may inadvertently be flushed into the storm drain contributing to gross contamination of urban runoff. Moreover, store materials properly to ensure they are not exposed to storm water, and do not over irrigate your landscape. If you observe storm water pollution or potential for activities around the City to contribute to storm water pollution, report it to the City Storm Water Hotline 667.1134.

Volunteers Clear Over 500 lbs. of Trash from Local Waterways

The 26th Annual California Coastal Cleanup Day was held on Saturday, September 25.

This statewide event featured volunteers removing trash and debris from designated clean up sites across California. In San Diego County alone more than 10,000 volunteers removed over 50 tons of trash from waterways, parks, and beaches.

The City of La Mesa coordinated and sponsored clean-up locations along Alvarado Creek and University Channel. We would like to thank the 60 local volunteers who took part in removing over 500 pounds of trash and debris from our local waterways. Their hard work on a very hot Saturday morning was greatly appreciated. The removal of this trash helps improve water quality as well as the appearance of our community.

For more information about future events, call Storm Water Program Manager Joe Kuhn at 667.1134.

City of La Mesa PARK APPRECIATION DAY 2010 held on Saturday, October 23

The staff of the City of La Mesa would like to thank the 234 participants in La Mesa's 2010 Park Appreciation Day. Volunteers removed 89 yards of green material and 5.5 yards of trash from City parks, in addition to painting tables, trimming, and raking. Special thanks to the following groups: Christ Lutheran Church, Cub Scout Pack 319, Friends of Canine Corners, Grossmont Navy ROTC, Helix High Interact, Journey Community Church, La Mesa Beautiful, La Mesa Kiwanis, La Mesa Lions, La Mesa Rotary, St. Andrews Episcopal Church, and City staff volunteers from the Police Department and City Hall.

Plan on joining next year's one-day event on October 22, 2011. Don't miss an opportunity to join others in the camaraderie of community involvement.

Free Household Hazardous Waste and Electronic Waste Disposal

UPCOMING COLLECTION DATE: November 20

Collection events are available by appointment only by calling EDCO at 287.5696 x4270 or emailing to lmhhw@edcodisposal.com.

E-waste can be recycled at the EDCO Station buy back center during business hours without an appointment. The center is open Monday through Saturday from 8:00 am to 4:00 pm. A small fee may apply to some items.

A list of household hazardous waste and electronic waste items included in these programs can be found on the City website. To request additional information about the program, please contact the Department of Public Works Environmental Services Division at 667.1338 or by email at envirosvcs@ci.la-mesa.ca.us. For general HHW information or other disposal and recycling options, visit www.cityoflamesa.com/hhw.

HEAD FOR THE HILLS!

Saturday, November 6, 2010 will be the 5th Annual Historic Home Tour presented by the La Mesa Historical Society and the La Mesa Historic Preservation Commission. The tour will run from 10:00 am to 3:00 pm and highlights five La Mesa/Grossmont historic homes.

Vehicle access and parking at the homes is limited. Free Old Town Trolley shuttle buses will operate from the Tour Center at the La Mesa Women's Club, 5220 Wilson Street at Grossmont Blvd, (opposite the former Circuit City store and across the street from Discount Tire). Abundant free parking is available at the Tour Center.

Tickets may be purchased on the day of the event for $18. Call 465.1883 for additional information.

SMALL STEPS TO BIG CHANGE!

Part 3 of 3

You do not have to be rich or famous to make healthy choices. There are small steps that anyone can take to live more sustainably.

WHAT IS SUSTAINABILITY?

"Sustainable societies are those whose infrastructure, institutions, practices (social, economic, and environmental) meet the needs of the present generation without compromising the ability of future generations to meet their own needs."

- Brundtland Commission, U.N. Commission on Sustainable Development

CHANGE THE WORLD ONE LIGHT AT A TIME.

Turn off lights when you leave a room, install dimmers, sensors, and timers to reduce energy use, and best of all, take advantage of natural sunlight. Compact fluorescent lights (CFLs) use about a quarter of the energy compared to incandescent, and last ten times longer.

Did you know? It would be like taking eight million cars off the road if each home in America replaced five bulbs in frequently used rooms. 150 pounds of carbon dioxide are saved by replacing just one regular light bulb with a CFL.

BE WATER WISE.

While waiting for tap water to heat, collect it in a bucket to water plants. Adjust automatic watering systems to prevent runoff and detect leaks and repair them within 48 hours. Dispose of hazardous waste and medicines properly, not down the drain. Water outdoors in the early morning or evening, and sweep, don't hose, patios and driveways.

Did you know? Less than 1% of all water on earth can be used by people. It is important that we use our water wisely and not waste it.

LANDSCAPE SMART.

Plant more trees and replace lawns and thirsty plants with low-water varieties. The garden section of bewaterwise.com has plant lists. Use pesticides and herbicides only with restraint and knowledge (visit ipm.ucdavis.edu). Design landscape to attract birds, butterflies, bees, bats, lizards, frogs and beneficial insects. Call the free UCCE Master Gardener Hotline for help at 858.694.2860 or online at mastergardenerssandiego.org.

Did you know? Trees reduce CO_2 in the atmosphere, reduce storm water runoff, provide shade, fruit and nuts for food, and habitat for wildlife.

TEACH YOUR CHILDREN.

Model sustainable practices. Tell your children what you are doing. Ask your children to share in making smart purchasing choices.

(Parts 1 and 2 of this article can be reviewed in the February 2010 and May 2010 issues of FOCUS available in City website archives.)

COUNCIL ACTIONS

July 13, 2010

Adopted a resolution authorizing reapplication for a Playful City USA designation in 2010 as part of the City's continuing Wellness Initiative.

Adopted a resolution waiving formal bidding and authorizing integration and installation of upgrades to TV Broadcast and Media Systems Equipment for the City Council Chambers.

Adopted a resolution to award a contract for household hazardous waste services with PSC Environmental Services, LLC.

Adopted a resolution authorizing the City Manager to sign a permanent household hazardous waste collection facility use agreement with the City of Lemon Grove allowing their residents to continue to use La Mesa's facility for disposal.

Adopted a resolution amending Section 12.44.130 of the La Mesa Municipal Code installing a disabled persons parking space at 8018 University Avenue.

Adopted a resolution authorizing staff to submit an application for a State funded Safe Routes to School Grant for the purpose of designing and constructing a sidewalk on the north side of Junior High Drive.

Adopted an ordinance amending La Mesa Municipal Code Chapter 10.20 pertaining to minors' curfew.

Appointed Members to the City's Boards, Commissions and Committees

July 27, 2010

Ratified the Design Review Board's approval of DRB-10-03 (Clearwire) for a proposed wireless communications facility at 4711 Spring Street.

Adopted a resolution establishing the property tax rate for bonded indebtedness for fiscal year 2010-2011.

Adopted a resolution authorizing the delegation of authority to request disbursements on behalf of the employer from the other post employment prefunding plan.

Adopted a resolution approving the 2010-2011 Memorandum of Understanding between the City of La Mesa and the La Mesa City Employees' Association.

Adopted a resolution authorizing unrepresented employees to receive same changes to retirement and benefits as the La Mesa City Employees' Association.

Adopted a resolution awarding a specialized professional services agreement for design of sewer replacement project at various locations to Psomas.

Adopted an ordinance amending Chapter 10.80 pertaining to the regulation of the operation of sound amplifying equipment.

Adopted an ordinance repealing La Mesa Municipal Code Section 12.36.020 pertaining to pedestrian crossings.

Appointed members to the Community Services Commission and Planning Commission.

Adopted a resolution confirming the list of delinquent sewer service charges and making each charge a special assessment against the respective parcel of land.

August 10, 2010

Ratified the Design Review Board's approval of DRB-10-02 (AT&T) for a proposed wireless communications facility at 6001 Lake Murray Boulevard.

Adopted a resolution authorizing extension of a contract for move management and relocation services for the new police facility with Changing Places.

September 14, 2010

Ratified the Design Review Board's approval of DRB-10-09 (La Mesa Learning Center) for a proposed exterior alterations to an existing commercial building at 8208-8216 Parkway Drive.

Adopted a resolution approving the 2010-2011 Memorandum of Understanding between the City of La Mesa and the La Mesa Police Officers' Association.

Adopted a resolution amending the 2010-11 Capital Improvement Program to add CIP Account 30211BOT and allocating $38,800 from the Downtown Parking Fund Reserve to same the account to pay for current and future municipal parking lot maintenance.

Adopted a resolution awarding a professional services contract for north Spring Street pedestrian improvements to Kimley-Horn and Associates.

Adopted a resolution awarding Bid 10-06 for the Jackson Park and Briercrest Park fencing project to Exquisite Fence Company.

September 28, 2010

Ratified the Design Review Board's approval of DRB-10-08 (Clearwire) for a proposed wireless communications facility at 6952 University Avenue.

Adopted a resolution of intention authorizing the execution of the fourth amendment to the agreement for management and implementation of a HOME Investment Partnerships Program Project with the County of San Diego to fund the La Mesa Down Payment and Closing Cost Assistance Loan Program and accept the HOME allocation of $1,985,170.95.

Adopted a resolution approving the 2010-2011 HOME administration contract for management and implementation of a HOME Investment Partnerships Project.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a local DUI Enforcement and Awareness Program by approving the addition of the grant funds to the fiscal year 2010-2011 budget.

Adopted a resolution awarding the contract for citywide replacement of high pressure sodium street lights with energy saving induction lights using American Recovery and Reinvestment Act grant funds to Republic Intelligent Transportation Services.

Adopted a resolution allocating $27,000 from the Downtown Parking Fund to pay for Property Based Business Improvement District (PBID) formation services, as requested by the Downtown Steering Committee, and authorizing the execution of a contract with Ed Henning Associates to provide PBID formation services.

Adopted a resolution authorizing the preparation of a downtown parking garage feasibility study using Downtown Parking Funds as recommended by the La Mesa Community Parking Commission.

Directed staff to enhance the City's community notification system by promoting the County of San Diego's Office of Emergency Services "Alert San Diego" efforts; expand the number of e-service tools to improve the City's community notification system; and allocated $2,500 to implement a marketing plan for the City's e services.

Approved an administrative charge of 45 percent to recover costs for the 2010 Weed Abatement Program and adopted a resolution confirming the report of the cost of abatement, and making each charge a special assessment against the respective parcel of land.

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
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CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Mayor ..... Art Madrid
Vice Mayor ..... Ruth Sterling
Councilmember ..... Dave Allan
Councilmember ..... Ernie Ewin
Councilmember ..... Mark Arapostathis
City Manager ..... David E. Witt
Focus Editor ..... Käären McElroy
Editorial Staff ..... Heather Moore Sheppard
Ofelia Andrade

Watch for the next issue of the
La Mesa FOCUS
AVAILABLE FEBRUARY 1

La Mesa
COMMUNITY SERVICES

Fall into Fitness

Enroll NOW for classes starting in November

View a sampling of adult classes to help you shape up for the holiday season. Convenient enrollment is available online OR print the enrollment form to mail in.

Reminder: Spring schedule available December 1.

City of La Mesa Monthy Meeting Schedule

Meetings are held at City Hall
8130 Allison Avenue - La Mesa
(*unless indicated otherwise*)

CITY COUNCIL
Second Tuesday - 4:00 pm
Fourth Tuesday - 6:00 pm

PLANNING COMMISSION
First and Third Wednesday - 7:00 pm

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 am

DESIGN REVIEW BOARD
Every other Monday - 12:30 pm

ENVIRONMENTAL SUSTAINABILITY COMMISSION
Third Monday - 6:00 pm

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 pm

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 am
(as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 pm

HUMAN RELATIONS ADVISORY COMMISSION
Second Monday - 5:30 pm

LA MESA COMMUNITY PARKING COMMISSION
First Thursday - 5:30 pm

TRAFFIC COMMISSION
First Wednesday - 9:00 am

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 pm

YOUTH ADVISORY COMMISSION
Second & Fourth Monday - 4:15 pm
The above meetings are held at the Community Center Conference Room 4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 pm
(except July, Aug., Nov., & Dec.)
The above meeting is held at the Adult Enrichment Center 8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS (Area code 619)

Adult Enrichment Center	667.1322	Engineering	667.1166	Recreation	667.1300
Animal Control	667.1436	Fire (Business)	667.1355	Recycling/Trash	287.7555
Building Inspection	667.1176	Graffiti Hotline	667.7560	Rides4Neighbors	667.1321
Business Licenses	667.1118	Human Resources	667.1175	Senior Taxi Scrip	667.1321
Cable TV	262.1122	Library	469.2151	Sewer Charges	667.1126
City Attorney	667.1128	Mayor	667.1100	Sidewalk Maint.	667.1450
City Clerk	667.1120	Municipal Pool	667.1494	Storm Water Hotline	667.1134
City Council	667.1106	Park Permits	667.1300	Streetlight Maint.	667.1450
City Hall	463.6611	Parking Citations	667.1117	Traffic Eng. Hotline	667.1144
City Manager	667.1105	Planning	667.1177	Traffic Signal Maint.	667.1166
Crime Prevention	667.1445	Police (Business)	667.1400	Zoning	667.1177
Dog Licenses	667.1114	Public Works	667.1450		

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • February 2011

La Mesa Continues to Focus on Live Well Initiative by Improving Walkability

The City of La Mesa has focused on community wellness through its award winning "ready…set…Live Well" Initiative for the last several years. New sidewalks near schools, urban walking trails, modified vending machines, and new playgrounds are just a few of the additions that have been made in the community to support increased access to healthier eating and active lifestyles. In 2011 the City continues its focus to support living well.

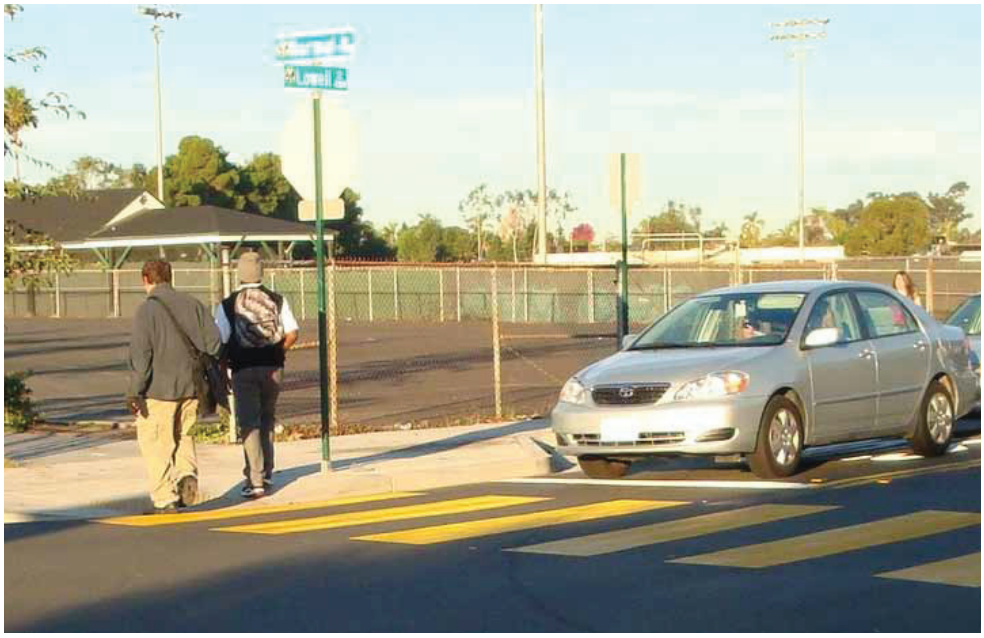

In 2009, the City was awarded a planning grant to increase walking and biking around La Mesa's eight schools. The "La Mesa Kids Walk & Roll to School" Safe Routes program will host a series of workshops, in several school neighborhoods including Murray Manor Elementary, Northmont Elementary, La Mesa Dale Elementary, and Parkway Middle School. Parents, school staff, and other interested stakeholders will receive education on identifying barriers to walking and bicycling to school, along with education on traffic calming methods. Workshop attendees will then perform Walk Audits within a ¼ mile radius of each school to identify and prioritize barriers. The information gained from these workshops will then be compiled into reports and submitted to the City of La Mesa's Public Works Department to be used as leverage for funding to mediate identified barriers. The workshops are also the first step in creating "Parent Suggested Safe Routes to School" maps.

Other schools, Rolando Elementary, Lemon Avenue Elementary, Maryland Avenue Elementary, and La Mesa Middle, are in their second year of "Walk to School" programming – therefore drivers should be aware of more children walking and bicycling to school. In addition, the City recently received a Safe Routes to School Grant to add a sidewalk across

Continued on next page.

CENTENNIAL 100 YEARS LA MESA 1912 2012 Jewel of the Hills

La Mesa is Gearing Up for its 100th Birthday in 2012… *Find out more!*

La Mesa COMMUNITY SERVICES

Summer Day Camp Schedules are Now Available!

Make the New Year Safer

At the beginning of the year many people make New Year's resolutions. Resolutions often include weight loss or exercise goals, eating more healthfully, or quitting a bad habit. These are all great plans to improve your life but it's not too late to make another resolution this year. Make a resolution to help yourself and the community by

Continue on next page.

Make the New Year Safer — *continued*

learning what you can do to prevent crime in La Mesa. You can practice safety at home, online, and in your neighborhood.

Here are a few ideas:

PERSONAL SAFETY AND HOME SECURITY

- Stay alert! Be aware of your surroundings.
- Park your car in well lit areas.
- Always close and lock windows and doors in your home and car.
- Consider installing an alarm system in your home.

ONLINE SAFETY

- Use security software that updates automatically.
- Create complex passwords and keep them secure.
- Don't reply to an email, text, or pop-up message that asks for personal or financial information, and don't click on links in the message. If you want to go to a bank or business's website, type the web address into your browser yourself. If you need to reach an organization with which you do business, call the number on your financial statement, or use a telephone directory.

NEIGHBORHOOD SAFETY

- Get to know your neighbors.
- Start or rejuvenate a Neighborhood Watch Group.
- Report suspicious activity to the Police Department by calling 667.1400. Dial 9-1-1 for emergencies only.

Learn more about protecting yourself and your home by viewing the Police Department's Crime Prevention Video for Residents and other resources available. For more information on the Neighborhood Watch program, contact the Crime Prevention Specialist at 667.7545.

Improving Walkability... — *continued*

from La Mesa Middle School. The grant in the amount of $162,000 brings the total amount for walkability improvements around schools to $1.6 million in the last three years. This work is slated for 2012.

Additionally the City has received both a Community Development Block Grant and SANDAG Pedestrian/Bike funds for intersection improvements at Spring St and High St, and at El Cajon Blvd and La Mesa Blvd. Improvements at these intersections will help to increase pedestrian safety, improve accessibility, and improve traffic flow through the intersections.

Improvements at El Cajon Blvd and La Mesa Blvd include creating a pedestrian crosswalk, extending curbs and sidewalk to narrow the street on the north side of El Cajon Blvd, and installing drainage and plants. An island will provide a refuge area for pedestrians between lanes of traffic on La Mesa Blvd. Bike lanes will be added to El Cajon Blvd from Parks Av to Guava St. In addition, various traffic signal improvements will improve traffic flow. At the intersection of Lee Av and La Mesa Blvd, new pedestrian signals and high visibility crosswalks will be installed to improve safety for pedestrians and vehicles.

More improvements will be made at the intersection of Spring St and High St. The pedestrian crosswalk across Spring St will be extended on the east side of the street and new pedestrian signals and high visibility crosswalks will be added to improve accessibility. A sidewalk will be built on the trolley station property to provide a continuous path of travel from Spring St to the trolley station. Finally, bike lanes will be added along Spring St near the intersection. The design was recently completed for this work – so look for construction to begin in early 2011.

For more information about these intersection improvements, please contact Dirk Epperson at 667.1152 or depperson@ci.la-mesa.ca.us. For more information on how you can participate in the Safe Routes program, please contact Kim Shannon at 667.1319 or kshannon@ci.la- mesa.ca.us.

The La Mesa Arts Alliance is pleased to hold

Arts in the Parks on April 9!

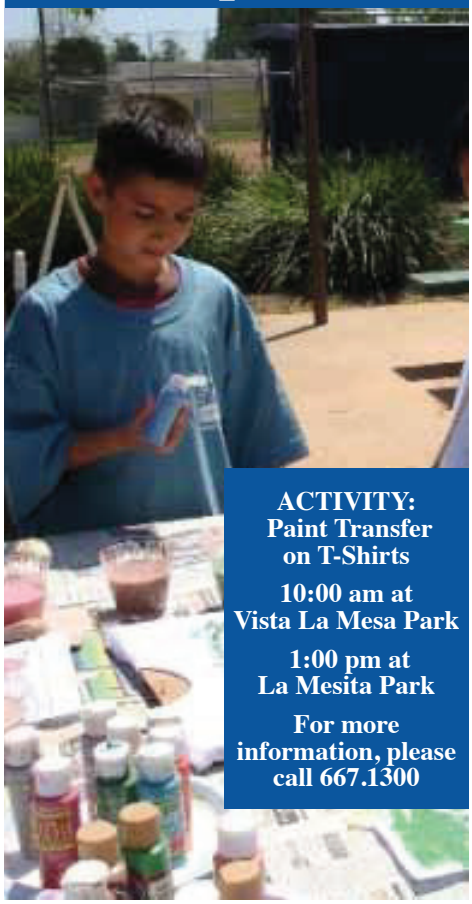

ACTIVITY: Paint Transfer on T-Shirts

10:00 am at Vista La Mesa Park

1:00 pm at La Mesita Park

For more information, please call 667.1300

2011 FLAG DAY PARADE
"A Salute to Old Glory"

We are asking for your help to honor the flag of our country by supporting the 2011 Flag Day Parade "A Salute to Old Glory." The Parade is organized by volunteers and supported financially by community individuals, organizations, and businesses. The cost for hosting the parade is $15,000 and we need financial donations to begin Parade planning and production. The Parade will march through La Mesa Village at 10:00 am on Saturday, June 4th. This parade is one of many events that make La Mesa a special town – we hope you become on of our sponsoring partners!

VIEW DONOR OPPORTUNITIES AND BENEFITS FORM

SAVE THE DATE!

The 2011 Transportation and Mobility Expo will take place on **WEDNESDAY, JUNE 15,** at the La Mesa Community Center. This half-day event is geared toward older adults, adult children of aging parents, and persons with disabilities who want to learn more about transportation resources and mobility options.

More information will appear in the May edition of FOCUS!

VOLUNTEER FOR A CITY BOARD, COMMISSION, OR COMMITTEE

La Mesa residents are encouraged to get involved in local government by serving on a City Board, Commission, or Committee. Please use the links below to review specific information regarding qualifications, requirements for serving, and meeting days and times for each board, commission, and committee.

Commission on Aging
Design Review Board
Environmental Sustainability Commission
Historic Preservation Commission
Human Relations Advisory Commission
La Mesa Community Parking Commission
Planning Commission
Loan Committee for Real Estate Rehabilitation
Personnel Appeals Board
Youth Advisory Commission

You will find an application and can learn more about the roles and responsibilities of the various boards, commissions, and committees by visiting the Boards & Commissions Overview page.

Please consider this opportunity to serve on a board, commission, or committee.

Completed applications must be submitted to the City Clerk's office no later than 5:30 pm, Thursday, June 16, to be included in the June interview process that has been tentatively scheduled for 6:30 pm on Tuesday, June 28. The interview and selection process for the Youth Advisory Commission occurs in September.

La Mesa e-Gov

Access City Hall 24 hours a day, from your home or mobile device

nixle

- Sign-up to receive an email alert or text message from NIXLE regarding events in your neighborhood.

Citizen REQUEST TRACKER

- Report a problem such as pothole, park maintenance, graffiti, and much more. CITIZEN REQUEST TRACKER can be accessed on the City's Website and on your iPhone.

- TWITTER users can now follow us to receive news and calendar items.

- Subscribe on NOTIFY ME to receive an email or text message when new information is posted on our website. Choose from City Council Agendas, News and Events, Police Department Press Releases, General Plan Update, and many more.

NOTIFY ME

Learn more about these and other e-services at www.cityoflamesa.com/e-gov
Get started today!

FREE

Household Hazardous Waste and Electronic Waste Disposal

March 19

This is your chance to safely and properly dispose of paint, electronics, batteries, fluorescent lights, medical sharps, garden products, automotive fluids, and more. See complete list.

These items are considered hazardous and are not allowed to be placed in the trash because of their destructive effect on the environment.

Collection for City residents is available by appointment only, Email EDCO at lmhhw@edcodisposal.com or call 287.5696, extension 4270. Please provide your name, address, and phone number.

To request additional information about the program, please contact the Department of Public Works Environmental Services Division at 667.1338 or email at envirosvcs@ci.la-mesa.ca.us. For more information, visit cityoflamesa.com/hhw.

9th Annual Creek to Bay Cleanup - April 30th 2011

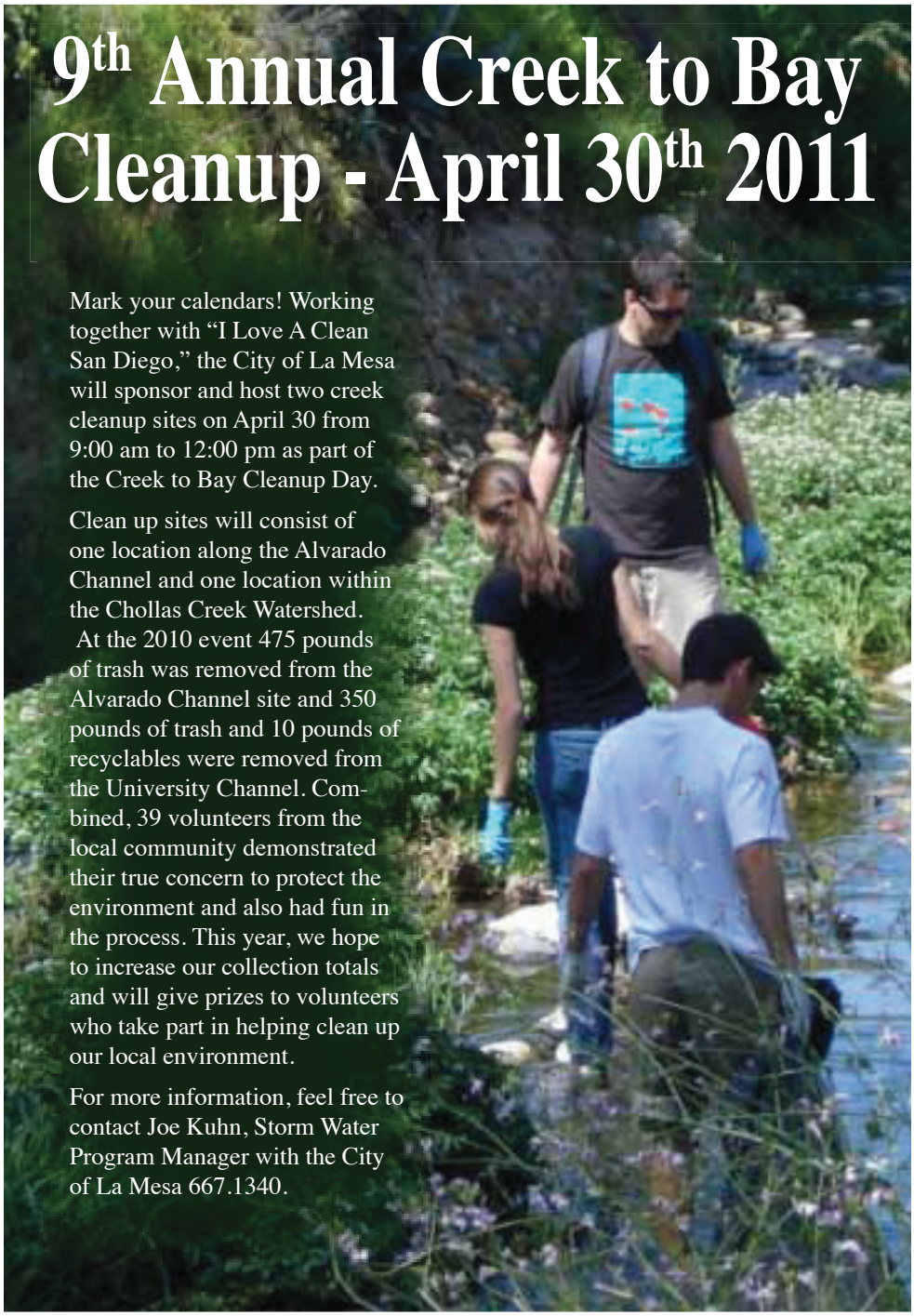

Mark your calendars! Working together with "I Love A Clean San Diego," the City of La Mesa will sponsor and host two creek cleanup sites on April 30 from 9:00 am to 12:00 pm as part of the Creek to Bay Cleanup Day.

Clean up sites will consist of one location along the Alvarado Channel and one location within the Chollas Creek Watershed. At the 2010 event 475 pounds of trash was removed from the Alvarado Channel site and 350 pounds of trash and 10 pounds of recyclables were removed from the University Channel. Combined, 39 volunteers from the local community demonstrated their true concern to protect the environment and also had fun in the process. This year, we hope to increase our collection totals and will give prizes to volunteers who take part in helping clean up our local environment.

For more information, feel free to contact Joe Kuhn, Storm Water Program Manager with the City of La Mesa 667.1340.

GOOD OUTDOOR LA MESA FUN

Free Youth Golf Clinic — La Mesa Residents Only
Saturday, March 12 – 1-2 pm
Complete this coupon and return to:
Sun Valley Golf Club • 5080 Memorial Dr., La Mesa CA 91941

Name: _____

Address: _____

Phone: _____

SPACE IS LIMITED. REGISTER NOW!

Are you a young person concerned about the environment?

Among the many projects of the Environmental Sustainability Commission is the annual "Sustain La Mesa" Environmental Festival

The City is currently looking for someone to represent the youth population of La Mesa on the Environmental Sustainability Commission. Applicants must live within the city limits of La Mesa and shall be not more than 21 years of age.

The purpose of the Commission is to advise the City Council on how the actions and policies of the City may preserve and enhance the quality of La Mesa's environment, address the effects of climate change and assist in the identification of measures that will improve environmental sustainability in La Mesa and the region.

Applications will be accepted until the position is filled.

If you have any questions about the Commission, please call Greg Humora, Director of Public Works at 667.1146 or the City Clerk's office at 667.1120.

FUN WITH PHYSICS

FREE hands-on science activities and fun for the entire family!

Sat, April 2

9:00 am – 12 noon

Highwood Park and Boys & Girls Club Teen Center

7775 Jr. High Drive
La Mesa, 91941

Fun experiments include:

Bottle Rockets, Oobleck, Alka Seltzer Poppers, Bubbles, Glue Balls, It's a Gas, Barges, Periodic Table Bingo, and Roller Coasters

Call 667.1300 for more information

La Mesa ARTS Alliance presents

Radio Daze...*again*

A theatrical production remembering the glory days of radio!

Thursday, February 10
6:00 pm reception
7:00 pm curtain
Arbor View Room
La Mesa Community Center
4975 Memorial Dr., La Mesa CA 91942

Admission $10 per person. No host food and beverages. Seating is limited, please complete and return RSVP form by February 4.

Information 667.1300

commservices@ci.lamesa.ca.us

LA MESA ARTS ALLIANCE
fostering the arts in our community

CONVENIENT RECYCLING FOR APARTMENTS AND CONDOS

The City of La Mesa has received a grant for $113,000 from the Department of Resources Recycling and Recovery (CalRecycle) to improve recycling opportunities for apartment and condominium complexes. Under the grant, eligible properties may receive indoor/outdoor recycling receptacles for use in common areas, can crushers and/or smaller below-the-counter containers for indoor use. The goal of the grant is to increase recycling opportunities for items with a California Redemption Value (CRV) such as beverage containers. Notices of the program inviting participation will be mailed directly to property owners and managers.

Look for your eligibility notice and the program flyer in the mail in the coming months. For more information about the program or to be placed on the participation list, please contact the Department of Public Works Environmental Services Division at 667.1338 or by email at envirosvcs@ci.la-mesa.ca.us. Find additional resources and information at cityoflamesa.com/environmentalawareness.

2011 SPRING CLEAN UP

Want to clean out the garage or spruce up the yard but don't know what to do with all that stuff? Bring it to the annual Spring Clean Up event being held on two Saturdays in April – It's free to City of La Mesa residents!

The event will be held from 7:00 am to 2:00 pm at EDCO Station, located at 8184 Commercial Street. Proof of residency is required, so bring a California Driver's License showing your La Mesa address.

If you live SOUTH of Interstate 8, your clean-up day is April 9

If you live NORTH of Interstate 8, your clean-up day is April 16

This is your opportunity to dispose of old appliances, broken or unwanted furniture, reusable items, landscape material, waste debris from improvement projects, trash and yard waste, or just plain junk.

There are some restrictions on the items than can be accepted.
We will NOT accept waste from businesses, contractors or professional landscapers.

For questions please call 667.1338 or email envirosvcs@ci.la-mesa.ca.us.

La Mesa Seeks Contestants for 2011 Pageant

On Friday, March 4 the cities of La Mesa and Santee will hold one of their most grand traditions, the Miss La Mesa and Miss Santee Pageants. Pageant organizers are currently seeking outgoing women ages 13-26 to participate in a program that has been a tradition in the cities since the late 1960's and is an outstanding mentoring program for young women. The pageants are sponsored by the local Chamber of Commerce and focus on community service. There is no swimsuit competition and there is no entry fee to participate.

Miss La Mesa and Miss Santee 2011 will each receive at $1,000.00 scholarship while Miss La Mesa Teen and Miss Santee Teen 2011 will each receive a $500.00 scholarship. Scholarships are funded through the successful "Fashion Rocks the East" fashion show fundraiser held at the La Mesa Community Center in August 2010.

For more information including information on the Princess Program for girls ages 6-16, or to become a contestant please contact pageant director, Alexandra Kuty at 698.4163 or via email MissLaMesaPageant@yahoo.com.

St. Patrick's Day Celebrate Responsibly

St. Patrick's Day is a holiday often celebrated by wearing green clothing and getting together with family and friends to celebrate the day with food and drink.

While most show restraint during the holiday, some take it upon themselves to consume too many alcoholic drinks.

The serious problem with drinking and driving is that most people who have had a few drinks feel like they are fine to drive, when in fact they are impaired and pose a significant danger. A general rule of thumb is in order for someone to likely not be impaired; they should drink no more than one normal size alcoholic drink per hour.

Law enforcement agencies throughout the State of California are on the lookout for drivers driving under the influence of alcohol and/or drugs every day and night throughout the year.

The La Mesa Police Department encourages people to celebrate with restraint and responsibility.

HERE ARE SOME SUGGESTIONS:

- **Establish a designated driver among friends and family.**
- **Rent a limo for the evening. Share the cost of the limo service with friends/ family and let the driver get you to your destination safely.**
- **Take the trolley. The trolley runs throughout San Diego, and maybe with a short cab ride to and from the trolley station you can get to your destination safely.**

Abandoned Shopping Carts an Unsightly Nuisance

We all use shopping carts, thus we all share responsibility in keeping shopping carts in their proper place. In the City of La Mesa it is illegal to remove a cart from the premises of a business.

If you see a cart that has been abandoned 1 – Please note the cart owner and the location. (Example: a Vons cart at the intersection of Jackson Dr and Fletcher Pkwy). 2 – Call the store manager and notify them of the cart location. 3 – If shopping carts are not picked up in a reasonable period of time, call the California Shopping Cart Retrieval Corporation (CSCRC) at 800.252.4613. The CSCRC will typically pick up the cart(s) within 2-3 days. If you have any questions please call the City of La Mesa Planning Division, 667.1177.

99 Cents Only (Baltimore Dr & El Cajon Blvd) 697.7599
Albertson's (8920 Fletcher Pkwy).....667.4343
Burlington Coat Factory (7938 El Cajon Blvd) 460.7624
Costco (8125 Fletcher Pkwy).....697.9933
CVS-Pharmacy (Grossmont Shopping Center) 465.1011
Henry's (Palm Av & Finley Av).....460.7722
Petco (8501 Fletcher Pkwy).....337.0701
Ralphs (Jackson Dr & Grossmont Blvd) 469.2161
Target (Grossmont Shopping Center).....461.1960
Vons (Baltimore Dr & Lake Murray Blvd) 464.1099
Vons (University Av & La Mesa Blvd) 464.1011
Walmart (Grossmont Shopping Center).....337.3655

Outdoor Wedding Venues

Springtime wedding plans naturally turn thoughts to an outdoor wedding that is beautiful and romantic. Lush grass, trees, and plants are natural decorations as the bride and groom exchange vows in a park setting that they have chosen for their special day.

The City of La Mesa offers two scenic locations for an outdoor wedding. The Amphitheatre at Harry Griffen Park sets the stage with a gazebo where the bride may wait until she makes her entrance walking down the paved path to join her groom. Seating for up to 350 guests face the staging area where the wedding party awaits.

The West Terrace Patio at the La Mesa Community Center offers another choice for an outdoor wedding. Vine-covered red brick columns edge a semi-circular patio that overlooks a golf course. White fan-back chairs provide seating for up to 150 guests, and a decorated trellis is available to provide a frame for the bride and groom as they exchange vows.

An outdoor wedding can be the dream wedding for many couples. If you would like additional information and pricing for La Mesa's outdoor wedding sites, please call the Facilities Specialist at 667.1307.

COUNCIL ACTIONS

October 12, 2010

Adopted a resolution authorizing the acceptance of Grossmont Healthcare District Grant Funds in the amount of $4,930 for the provision of equipment and services for transmission of patient EKG data to the hospital.

Adopted an Ordinance amending La Mesa Municipal Code Section 8.04.060 pertaining to animal noises.

Adopted a resolution confirming the appointments of applicants to various City boards, commissions and committees.

October 26, 2010

Adopted a resolution to adopt a policy for the painting of address numbers on curb faces in the City of La Mesa.

Adopted a resolution amending Sections 12.44.060(b) and 12.44.070 of the La Mesa Municipal Code to allow diagonal parking on a portion of Wilson Street and adding streets to the list of streets designated for diagonal parking.

Approved the designation of the property located at 9125 Dillon Drive as a historic landmark and established a Property Preservation (Mills Act) Agreement for the site.

November 9, 2010

Ratified the Design Review Board's approval of DRB-10-07 (Vine Ripe Market) – for proposed exterior alterations to an existing retail property at 8191 Fletcher Parkway.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a sobriety checkpoint mini-grant project and approving the addition of the grant funds to the FY 2010-2011 and 2011-2012 budgets.

Adopted a resolution authorizing the acceptance of a grant from the California Office of Traffic Safety to conduct a local seat belt compliance traffic safety project and approving the addition of the grant funds to the FY 2010-2011 and 2011-2012 budgets.

Adopted a resolution approving the submission of an application for one-year grant funding for the San Diego Association of Governments (SANDAG) New Freedom Grant Program.

Adopted a resolution approving the submission of an application for two-year grant funding for the San Diego Association of Governments (SANDAG) TransNet Senior Mini Grant Program.

Adopted a resolution waiving formal bidding and authorizing purchase and installation of diesel particulate filters for Public Works vehicles with Action Turbo, Inc.

Adopted a resolution of adoption of the renewal of the Automatic Aid Agreement with the City of San Diego.

November 23, 2010

Adopted a resolution approving and adopting amendments to the body and appendix of the City's amended Local Conflict of Interest Code.

Adopted a resolution waiving formal bidding and authorizing purchase of a stencil paint legend truck.

Adopted a resolution confirming the appointment of an applicant to the Youth Advisory Commission.

Adopted an Ordinance adopting by reference the 2010 edition of the California Building Standards Code, known as the California Code of Regulations, Title 24 (CCR, T-24).

Adopted an Ordinance adopting by reference the 2010 edition of the California Fire Code, known as the California Code of Regulations, Title 24, Part 9 (CCR, T-24, P-9).

December 14, 2010

Adopted a resolution reciting the fact of the General Municipal Election held on November 2, 2010, declaring the results and such other matters as provided by law.

Accepted the Annual Report, including the Audit, of the La Mesa Community Redevelopment Agency for fiscal year ending June 30, 2010.

Accepted the Audit Report for the City of La Mesa for the year ending June 30, 2010.

Accepted the Single Audit of Federally Assisted Grant Programs for the year ending June 30, 2010.

Adopted a resolution approving the reallocation of CDBG-R funding from a completed CDBG Program Administration Professional Services Project to the West La Mesa Sidewalks Project.

Adopted a resolution executing extension of carry over agreement for Bid 02-14 and options for monthly extension of contract for street sweeping services for the City of La Mesa to Clean Street.

Adopted a resolution awarding a contract for specialized professional services to PBS&J for the design of Phase 2 of the Alvarado Trunk Sewer.

Award of Bid No. 10-03 for intersection modifications at El Cajon Boulevard/La Mesa Boulevard and Spring Street/High Street project to Ramona Paving and Contracting, Inc.

Adopted a resolution supporting La Mesa-Spring Valley School District's grant application to the National Football League for the Junior Seau Sports Complex.

Adopted a resolution approving the San Diego Regional Analysis of Impediments to Fair Housing Choice.

Adopted a resolution approving a memorandum of understanding with San Diego County to receive "Graffiti Tracker" program services and approved a transfer of $1,000 for the purpose of developing and implementing a reward program.

SUN VALLEY GOLF COURSE

5080 Memorial Dr., La Mesa, CA 91942

7:00 am to Sunset • 7 Days a Week

Adults $10 for 9 holes, $14 for 18 holes

Students* $8 for 9 holes, $12 for 18 holes

*(*includes college with valid student ID)*

Clinics, lessons, and special programs are available.

For details go to **www.sunvalleygolfclub.com** or call 466.6102

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91942
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Mayor ..... Art Madrid
Vice Mayor ..... Ruth Sterling
Councilmember ..... Dave Allan
Councilmember ..... Ernie Ewin
Councilmember ..... Mark Arapostathis
City Manager ..... David E. Witt
Focus Editor ..... Käären McElroy
Editorial Staff ..... Heather Moore Sheppard
Ofelia Andrade

Watch for the next issue of the
La Mesa FOCUS
AVAILABLE MAY 1

La Mesa COMMUNITY SERVICES

Class Enrollment

Spring enrichment and aquatics classes are starting soon…

Enroll now online, by mail, drop-off, or fax enrollments to 619.464.3761

La Mesa Community Services
4975 Memorial Drive
www.cityoflamesa.com/classes

Reminder: Summer day camp schedules also available.

City of La Mesa Monthy Meeting Schedule

Meetings are held at City Hall
8130 Allison Avenue - La Mesa
(*unless indicated otherwise*)

CITY COUNCIL
Second Tuesday - 4:00 pm
Fourth Tuesday - 6:00 pm

PLANNING COMMISSION
First and Third Wednesday - 7:00 pm

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 am

DESIGN REVIEW BOARD
Every other Monday - 12:30 pm

ENVIRONMENTAL SUSTAINABILITY COMMISSION
Third Monday - 6:00 pm

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 pm

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 am
(as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 pm
(as needed)

HUMAN RELATIONS ADVISORY COMMISSION
Second Monday - 5:30 pm

LA MESA COMMUNITY PARKING COMMISSION
Second Tuesday - 5:30 pm

TRAFFIC COMMISSION
First Wednesday - 9:00 am

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 pm

YOUTH ADVISORY COMMISSION
Second & Fourth Monday - 4:30 pm
The above meetings are held at the Community Center Conference Room 4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 pm
(except July, Aug., Nov., & Dec.)
The above meeting is held at the Adult Enrichment Center 8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS (Area code 619)

Adult Enrichment Center	667.1322
Animal Control	667.7536
Building Inspection	667.1176
Business Licenses	667.1118
Cable TV	262.1122
City Attorney	667.1128
City Clerk	667.1120
City Council	667.1106
City Hall	463.6611
City Manager	667.1105
Crime Prevention	667.7845
Dog Licenses	667.1114
Engineering	667.1166
Fire (Business)	667.1355
Graffiti Hotline	667.7560
Human Resources	667.1175
Library	469.2151
Mayor	667.1100
Municipal Pool	667.1494
Park Permits	667.1300
Parking Citations	667.1117
Planning	667.1177
Police (Business)	667.1400
Public Works	667.1450
Recreation	667.1300
Recycling/Trash	287.7555
Rides4Neighbors	667.1321
Senior Taxi Scrip	667.1321
Sewer Charges	667.1126
Sidewalk Maint.	667.1450
Storm Water Hotline	667.1134
Streetlight Maint.	667.1450
Traffic Eng. Hotline	667.1144
Traffic Signal Maint.	667.1166
Zoning	667.1177

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • May 2011

EVENTS CALENDAR

May 6	Farmers' Market Moves!
May 7	Household Haz Waste Collection
May 7-8	La Mesa Beautiful Plant Sale
June 3	Veterans Memorial Sign Unveiling
June 4	Flag Day Parade
June 11	Household Haz Waste Collection
June 12	Sundays @ 6 Concert
June 15	Transportation & Mobility Expo
June 18	Reading in the Park
June 19	Sundays @ 6 Concert
June 25	Free Paper Shredding
June 26	Sundays @ 6 Concert
July 10	Sundays @ 6 Concert
July 15	Dive-In Movie
July 17	Sundays @ 6 Concert
July 24	Sundays @ 6 Concert
July 29	Movie Under the Stars

CIVIC CENTER STREETSCAPE IMPROVEMENTS

Street and landscape improvements were recently completed on Allison Avenue west of Spring Street.

Crosswalks on Allison Avenue at Date Avenue by City Hall and in front of the La Mesa Library improve pedestrian access to those buildings.

STREET RESURFACING & SIDEWALK ADDITIONS

There will soon be fewer potholes to fill and safer paths for La Mesa pedestrians. Sixteen collector streets will be resurfaced within the next year as well as two new sidewalks installed along busy streets. This project alleviates the ongoing problem of potholes along these streets and addresses pedestrian safety concerns in two high traffic areas.

Portions of the following streets [as shown on the map] will be affected by resurfacing:

- Center Street
- Guild Street
- Commercial Street
- Center Drive
- Marengo Avenue
- Dallas Street
- La Mesa Boulevard
- Bancroft Drive
- Waite Drive
- Yale Avenue
- Orien Avenue
- Lowell Street
- Normal Avenue
- Parks Avenue
- Dale Avenue
- Lee Avenue

The resurfacing process will grind out approximately two inches of existing asphalt and replace it with new asphalt to provide these streets with many more years of comfortable travel.

Continued on page 2

Graffiti Tracker and Graffiti Reporting

In 2011 the La Mesa Police Department received a new tool to combat graffiti. The tool is called Graffiti Tracker and it was approved by the City Council to enhance the City's anti-graffiti program. Graffiti Tracker gives police the ability to track graffiti suspects countywide. How it works is each law enforcement agency in the County downloads graffiti photographs from their area into a central database. These photographs can then be viewed and compared to known suspects using the same type design, moniker, or image. This makes it easier for police to build a case against a suspect and obtain court ordered restitution for the crime.

In addition to the Graffiti Tracker Program, the City Council approved transfer of $1,000 from the Police Department's Donation fund to the San Diego County Crime Stoppers fund. This provides the ability to offer financial rewards for information related to graffiti vandalism in La Mesa.

The La Mesa Police Department receives hundreds of vandalism calls for service each year. The majority of these calls involve some form of graffiti on either public or private property. The Police and Public Works Departments do their best to quickly clean or paint over the graffiti on public property and encourage private citizens and business owners to take care of graffiti quickly on their own property.

Here are several ways to report graffiti:

- *Call the non-emergency Police Department line at 667.1400*
- *Call the Graffiti Hotline at 466.3789 and report the location of the graffiti*
- *Go to cityoflamesa.com, click on "Report a Problem" on the left side of the screen, select the "Police" section for non-emergency requests and follow the prompts*

LA MESA FLAG DAY PARADE

"A Salute to Old Glory"

Saturday, June 4 • 10:00 am

Best viewing along La Mesa Blvd. in the Downtown Village

Thanks to our major donors who make this year's event possible:
Drew Ford, Sycuan Band of the Kumeyaay Nation, Viejas Enterprises, Robert & Laura Duggan, Pamela Wagner, South Baltimore LLC, Shannon O'Dunn, EDCO, Barona Band of Mission Indians

Street Resurfacing Continued from page 1

Sewer repairs will be performed on Center Street and Commercial Street prior to resurfacing. Additionally, the first phase of undergrounding overhead utilities on Normal Avenue will take place as conduit is installed for the electrical and communication cables. The second phase will be to install cables, remove the poles, and install new street lights. This phase is expected to take another year to complete.

One new sidewalk project will occur on Waite Drive and Murray Hill Road connecting the existing sidewalk on Murray Hill Road to High Street. This is a very busy route for students walking to Helix Charter High School. The second new sidewalk project will be on Bancroft Drive from Spice Street to Johnson Drive. This will complete a missing section of sidewalk along that major street.

The entire resurfacing and sidewalk project will take approximately one year to complete. Residents can receive updated information as it becomes available by signing up for Nixle, a La Mesa e-Gov service, through the City website.

CITY OF LA MESA AWARDED FOUR GRANTS

The City was recently awarded four grants totaling $182,233 from the San Diego Association of Governments (SANDAG) as part of the County's distribution of $16 million received through the Centers for Disease Control and Prevention Communities Putting Prevention to Work Program. "We are proud to have received funding for all four of the proposals the City submitted," reported Assistant City Manager Yvonne Garrett. Funding received will be used for the following projects:

- $75,000 Healthy Community Planning Grant for a citywide Parks Master Plan
- $50,000 Active Community Transportation Grant for a study "Closing the Last Half Mile" that will identify barriers to walking and biking in the community and develop a prioritized plan to improve La Mesa residents' access to transit service points
- $47,583 Safe Routes to School Capacity Building and Planning Grant for a citywide Safe Routes to School Implementation Plan that will provide a training curriculum and recruitment program walking school bus and crossing guard volunteers in the "La Mesa Kids Walk & Roll to School" Safe Routes program
- $9,650 Safe Routes to School Education, Encouragement, and Enforcement Grant to conduct "WalkShops" to engage middle school students in the official planning process to create a prioritization list of infrastructure improvements that will encourage walking and biking to school

Projects began in April with completion scheduled for the end of the grant program period in February 2012.

Rides4Neighbors –

VOLUNTEERS NEEDED!!

- Give a ride to an elderly "neighbor" in need
- Drive your personal vehicle
- Riders live in La Mesa or east county
- Monday through Friday – no weekends
- Choose the rides that fit your schedule
- No amount of time is too little!
- Receive mileage reimbursement
- Receive secondary liability insurance

Be a Hero ~ Help a Neighbor

PLEASE CALL TODAY!

619-667-1321

www.cityoflamesa.com/seniors

UPDATE

La Mesa Kids Walk & Roll to School

Workshops have been held at six elementary and two middle schools in La Mesa to map barriers to walking and biking at each school and prioritize mitigation projects as part of La Mesa Kids Walk & Roll to School – Safe Routes to School Grant Program. Two additional grants recently awarded to the City will serve to enhance this Safe Routes program through 1) development of a training curriculum and recruitment plan for volunteers at each school; and 2) special workshops specifically conducted to engage and involve middle school students who represent the lowest number of students walking and biking to school.

WANT TO MAKE A DIFFERENCE IN YOUR COMMUNITY?

Volunteer for a City Board, Commision, or Committee

The City of La Mesa is currently seeking La Mesa residents interested in serving their community by becoming a member of a City board, commission, or committee.

The City encourages citizen participation in municipal government and welcomes your interest in serving on a board, commission, or committee. These groups provide valuable public input into government and assist in the decision making process.

Recruitment is currently open for appointments on the City's boards, commissions, and committees. Serving in an advisory capacity, each group has specific roles and responsibilities. Most advisory groups meet once a month for a couple of hours. Use these links to learn more about the various boards, commissions, and committees:

Building Codes Review Board
Commission on Aging
Design Review Board
Environmental Sustainability Commission
Historic Preservation Commission
Human Relations Advisory Commission
La Mesa Community Parking Commission
Loan Committee for Real Estate Rehabilitation
Personnel Appeals Board
Planning Commission
Youth Advisory Commission

Applications and specific information regarding qualifications, requirements for serving, and meeting days and times are available on the City's website, by visiting the City Clerk's office at City Hall, 8130 Allison Avenue, or by calling the Clerk's office at 667.1120.

Applications must be submitted to the City Clerk's office no later than 5:30 pm, Tuesday, June 7 to be included in the interview process tentatively scheduled for 6:30 pm Tuesday, June 28. The interview and selection process for the Youth Advisory Commission will occur in September.

Spring, Gardens, and Storm Water Pollution?

Summer is not too far away and flowers are beginning to bloom, but did you know your garden maintenance activities may be a threat to our environment? Yes, your activities may be compromising water quality in nearby streams and creeks such as the San Diego River or Chollas Creek. Simple modifications to your gardening technique can keep pollutants from being introduced into the environment and our receiving water bodies without compromising the aesthetics and health of your landscape. Here are some garden tips:

Change the Spray! Make bug sprays from garlic, onions, horseradish, hot pepper, and/or mint. There are many non-toxic organic remedies that may be used to kill insects. Many commonly available chemical pesticides can increase toxicity in our local creeks when they are washed off by rainwater.

Go Natural! Attract or acquire bugs that feed on pests. Ladybugs, praying mantis, and parasitic wasps are just a few insects that are beneficial in reducing pests that destroy your garden. Plants such as mints, catnip, and marigolds also make great insect deterrents.

Compost It! Eliminate the need for pesticides and synthetic fertilizers by adding two inches of compost to the top six to eight inches of topsoil. This improves the quality of your soil and produces plants that are healthier and more resistant to pests and diseases.

Grow Native! Native vegetation is suited for the terrain and rainfall we receive in Southern California. Planting varieties of sage, laurel sumac, buckwheat, monkey flowers, and other natives requires less irrigation, fertilizers, and pesticides because they are less prone to disease.

Try some of the above methods and know that you are eliminating many of the pollutants that make their way through the storm drain system to nearby creeks and ultimately to the ocean. Moreover, you will have removed harmful toxins from your home garden and created a healthier environment for your family!

CITY OF LA MESA PRESCRIPTION DISCOUNT CARD

Lower the cost of your prescriptions and start saving today! The City of La Mesa has partnered with the National League of Cities to offer this free Prescription Discount Card. It's easy to use and can be used any time your prescription is not covered by insurance. The program includes:

- Average savings of 20%
- It's FREE, no enrollment or membership fees
- All family members are covered
- Even some pet prescriptions are covered
- No limit on how many times you use the card
- Accepted by 9 out of 10 pharmacies

For more program information visit www.caremark.com/nlc or call toll free 1.888.620.1749.

It's easy to get a card from the Internet, go to www.caremark.com/nlc, select 'Print a Card Now' and follow the easy steps. Cards are also available at the following locatio La Mesa Community Center, and La Mesa Adult Enrichment Center.

SAVE THE DATE

Transportation and Mobility Expo

Wednesday, June 15, 10:00 am – 2:00 pm

La Mesa Community Center, 4975 Memorial Drive

Hosted by CITY OF LA MESA JEWEL of the HILLS

Powered by SANDAG

FEATURING

- How to talk to elderly loved ones about giving up their car keys
- Transportation options throughout the county
- City of La Mesa Rides4Neighbors & Travel Training programs
- Aging in place ~ home remodel options
- Adaptive driving program for stroke survivors
- Silver Sneakers chair exercise
- Wheelchair dancers demonstrating ballroom & Latin dance

EXHIBITORS INCLUDE

Scooter Store, Better Life Mobility, Elderhelp of San Diego, Challenge Center, Advanced Medical Supply, Aging & Independence Services, Sharp Senior Resource Center, Yellow Cab, SOL Transportation, AARP, Accessible San Diego, Southern California Caregivers Coalition, and many, many more!

FREE

Summer Movies

(movie selections to be determined – watch the City website for updates!)

DIVE-IN MOVIE

Friday, July 15, 8:00 pm
La Mesa Municipal Pool
5100 Memorial Drive
Pool opens at 7:30 pm
Floatation devices allowed during movie
667.1494

MOVIE UNDER THE STARS

Friday, July 29, 8:00 pm
La Mesita Park, 8855 Dallas Street
Pre-show at 7:30 pm
667.1300

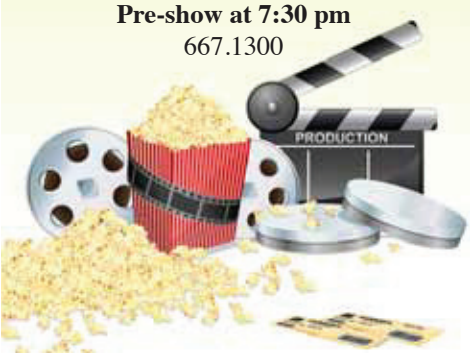

FREE HOUSEHOLD HAZARDOUS WASTE AND ELECTRONIC WASTE DISPOSAL

Upcoming collection dates:
May 7 and June 11

Household hazardous waste (HHW) collection events are available to City residents by appointment only. Call EDCO at 287.5696x4270 or email lmhhw@edcodisposal.com. Be sure to provide your name, address, and phone number.

E-waste is accepted at the EDCO Station recycling buyback center during business hours, Monday through Saturday, without an appointment. A small fee may apply to some electronics. Visit edcodisposal.com for more information and directions.

To request additional information about the HHW program, please contact the Department of Public Works Environmental Services Division at 667.1338 or by email at envirosvcs@ci.la-mesa.ca.us. For a complete HHW list or other information, visit cityoflamesa.com/hhw.

LA MESA BEAUTIFUL ANNUAL PLANT SALE

Saturday and Sunday
May 7 and 8
Sale begins at 9:00 am
St. Andrews Episcopal Church
Corner of Lemon Avenue and Glen Street, La Mesa

Proceeds benefit the following La Mesa Beautiful programs:

Cuyamaca College Horticultural Scholarship Fund

Arbor Day celebrations conducted in schools within the La Mesa-Spring Valley School District

For more sale information or to donate plants or your time email LaMesaBeautiful@yahoo.com

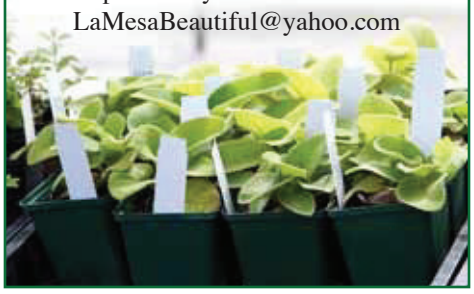

Sundays at Six Summer Concert Series

Concerts from 6:00 – 7:00 pm • Harry Griffen Park, 9550 Milden Street, La Mesa

Save the following dates:

June 12 Navy Jazz Band Southwest
June 19 San Diego Concert Band
June 26 Tinku (Latin Folk Music)
July 10 Rhythm Jacks (Rhythm and Blues)
July 17 Trails and Rails (Cowboy & Train songs)
July 24 Jazz West

FREE concerts. Bring a picnic and spend "Sundays at Six" relaxing to music in the company of friends.

Thanks to our sponsors: Wells Fargo, Oakdale, and La Mesa Patch

Free Paper Shredding Event

Don't discard – shred your household documents in a quick and easy way!

La Mesa's EDCO Station
8184 Commercial St.

Saturday, June 25 • 9:00 a.m. to noon

- Limit two boxes per household
- Staples ok
- Shredding will be done onsite by ShredEx
- No appointment necessary

This City event is made possible through the generous support of the EDCO Disposal and ShredEx. Questions can be directed to 619.667.1167.

Are You Ready for Kitten Season?

Kitten Season is the time of year when cats give birth, flooding animal shelters and rescue groups nation wide. La Mesa Animal Control receives an influx of kitten calls during spring every year, usually starting in May.

Kitten season presents many challenges for shelters and rescue groups caring for cats. Resources already hard to come by—like food, money, and space—are often stretched to their limit as shelters and other rescue groups, which often take in thousands of animals every year, are inundated with homeless cats. The easiest way to help reduce the overwhelming numbers of unwanted cats is to spay and neuter your own cat and encourage others to do the same.

If you know that a litter of kittens has been orphaned, or you have found a sick or injured kitten, it is best to call La Mesa Animal Control at 667.7536 or the El Cajon Animal Shelter at 441.1580 for assistance.

F R E E E V E N T !

Reading in the Park

Sat, June 18 • 10:00 am to noon

Collier Park, 4401 Palm Avenue, La Mesa

Hear children's authors give theatrical readings of their works and explain how they create their stories.

Free drawing for autographed books

Book exchange

Sign up for La Mesa Library's Summer Reading Program

Call 667.1300 for details.

This event made possible by a grant from TARGET

And our community partners: La Mesa Park & Recreation Foundation, Readers Inc., La Mesa Branch Library, and Friends of the La Mesa Library

Rides4Neighbors

Enhancing Community Mobility

Did you know?

- On average, men outlive their ability to drive by 6 years and women outlive their driving ability by 10 years.
- More than 600,000 people age 70+ stop driving each year.
- By the time the youngest baby boomers turn 65 in 2029, 1 in 5 Americans will be 65 or older. The percentage of 85-year-olds will grow even faster.

Participants learn practical skills to maintain their independence

Remaining independent as they age is a concern of many La Mesa residents. What happens when they are no longer able to drive? Under a SANDAG grant awarded to the City of La Mesa, the Rides4Neighbors program developed a unique solution for adults who are 60+ or disabled to address their concerns.

"Travel San Diego" is a group travel training program educating adults on how to confidently and safely use public transportation. Successfully piloted in 2010, classes are held over a nine-week period teaching adults the logistics of using buses, trains, and trolleys. The goals of the program are to develop confidence, knowledge, and skills so participants can independently use public transportation in their daily lives and remain mobile within the community.

The program begins with an orientation on fare cards, schedules, personal safety, and transportation resources. Subsequent classes are conducted in the community and include trips to Encinitas, Coronado, Chula Vista, and El Cajon.

Each trip is designed to build practical skills needed to travel independently throughout San Diego County. Traveling as a group provides participants with social interaction, physical activity, and knowledge of public transportation. By the end of the program participants have extensively used buses, trolleys, and learned to plan trips. What do participants say? "It's expanded my world," "I'm able to go places without worrying about driving and parking," "My fare card is magic."

Perhaps you have a family member or know of someone in the community who can benefit from the program. If so have them contact Judi Bonilla, Travel Trainer at 667.1322 for more information.

SMOKE ALARM SAFETY

FACTS: Roughly two-thirds of home fire deaths occur in homes without smoke alarms. Working smoke alarms cut the risk of dying in reported home fires in half.

SAFETY TIPS: Install smoke alarms inside every bedroom, outside each sleeping area, and on every level of the home, including basements.

Replace batteries in all smoke alarms at least once a year. If an alarm "chirps" a low battery warning, replace it right away.

DON'T FORGET: All smoke alarms should be tested at least once a month using the alarm's test button.

More information is available from the National Fire Protection Association at www.nfpa.org/education.

Adult Softball

REGISTRATION

Leave your name and daytime telephone number at 667-1172 #6

Last day to register new teams for fall is July 29

Team rosters will be issued once teams have registered.

Fee: $525 for season payable in full at time of registration. Umpire fees not included - $15/game each team

Visit the City website for additional information regarding registration and season schedule.

(18 years and older)

Cut Out FOG!

FOG refers to the Fats, Oil, and Grease that can solidify and clog drains and pipes. FOG is the City's number one maintenance problem in sewer pipes. Clogged sewer laterals are the responsibility of property owners and repairs can be costly. This problem can be minimized if we all do our part. Dispose of FOG in the proper manner; don't pour it down the drain! For more information concerning FOG control methods or questions concerning the City's Food Service Establishment FOG program visit cityoflamesa.com/FOG or call 667.1340.

ready • set • live well
la mesa • spring valley

FREE – Live Well Seminar

May 7 — 11:00 am to 12 noon

at the La Mesa 24 FITNESS 7450 University Avenue

Featuring Elite Personal Trainer—Evanis Hart, B.A./A.C.E./N.E.S.T.A./N.C.S.F.

Nutrition basics
Map out your fitness goals
Proper techniques for a total body workout

Participants must be 14 years or older. Download a registration form from the City website and bring your completed form to the event.
Questions? Call La Mesa Community Services at 667-1300.

PHONEBOOKS WILL BE APPEARING

Surprised to find another yellow pages at your door? If you are wondering why you get so many, or any at all in the age of Internet - you have control! Delivery of Yellowbook phone books will be taking place during the months of May and June. By registering at http://www.yellowpagesoptout.com, a collaborative of the Yellow Pages Association and the Association of Directory Publishers, you can opt out of any or all of the different yellow pages that are delivered. Help sustain La Mesa by saving resources and reducing the number of unwanted phonebooks printed.

Not sure what to do with all those old books? Recycle them! Phone books are 100% recyclable through EDCO's recycling program available to all residents and businesses in La Mesa. Just drop them in your blue recycling bin or dumpster and EDCO will do the rest.

CITY HONORS VETERANS

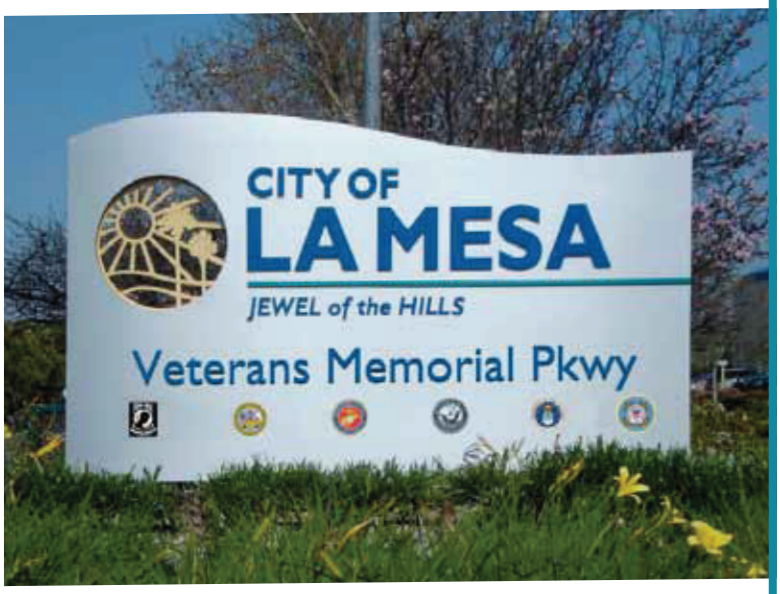

The La Mesa City Council has been honoring veterans of major military actions since January as part of an effort to recognize our armed forces. The City of La Mesa will be designating a portion of Fletcher Parkway, one of our main thoroughfares, as "Veterans Memorial Parkway" by adding three signs along the parkway. The project does not change the name of Fletcher Parkway. This picture shows how the existing sign at Baltimore and Fletcher Parkway will be modified to include the new designation. A monument sign will be added on Fletcher Parkway and Dallas and a vehicular sign at Fletcher Parkway and Grossmont Center will complete the additions. A Veterans Memorial Recognition Committee has been meeting since June 2010 to plan and raise funds for the project. The community has raised nearly $10,000 and the City has matched up to $13,000 for the project.

The signs will be unveiled at a festive ceremony on Friday, June 3 at 10:00 am at Parkway Middle School, 9009 Park Plaza Dr. The ceremony will be preceeded by a FREE pancake breakfast to be held at La Mesita Park, 8855 Dallas St. from 8-9:30am, hosted by the La Mesa Firemen's Association. Please RSVP attendance for the breakfast by calling 667-1105 or email cmoff@ci.la-mesa.ca.us. We will continue honoring our country's freedom the next day at the La Mesa Flag Day Parade. See page 2 for parade information.

COUNCIL ACTIONS

January 11, 2011

Ratified the Design Review Board's approval of DRB-07-31 (Schmidt / Naranjo) and approval of the Negative Declaration for a proposed 4-unit condominium project on two parcels located at 4740 Hillcrest Avenue.

Ratified the Design Review Board's approval of DRB-10-13 (Banks & Banks Fiduciary Services) for proposed exterior alterations to a commercial building at 8270 La Mesa Boulevard.

Ratified the Design Review Board's approval of DRB-03-04 (Zephyr Partners) for proposed modifications to an approved 36-unit residential development on an 8.34-acre site located between Massachusetts and Orien Avenues.

Adopted a resolution updating and approving revised penalties pertaining to the City's civil parking penalty schedule pursuant to state law.

Adopted a resolution implementing the National League of Cities (NLC) prescription discount card program for a one-year trial period.

January 25, 2011

Adopted a resolution authorizing the filing of grant applications under the Communities Putting Prevention to Work program through the San Diego Association of Governments, accepting the terms of the grant agreement, and stating the assurance of the City of La Mesa to complete the project(s) by February 1, 2012.

Approved a Memorandum of Understanding between the San Diego Sheriff's Department and the La Mesa Police Department for the operation Stonegarden Grant for reimbursement of expenses related to regional border crime enforcement.

Adopted a resolution adopting the Athletic Fields Capital Improvement Plan User Fee

February 8, 2011

Adopted a resolution authorizing the Chief of Police to enter into a Memorandum of Understanding between the Police Department and the County of San Diego for the San Diego County Regional Gang Enforcement Collaborative Grant.

Approved an extension of amplified sound on March 17, 2011 from 10:00 p.m. to 12 a.m. in accordance with La Mesa Municipal Code Section 10.80.170(B) for a special event sponsored by Hooley's Irish Pub and Grill.

February 22, 2011

Adopted a resolution authorizing execution of an easement agreement with AP-Fletcher Parkway LLC, and payment of a lump sum amount to compensate for removal of existing landscaping necessary for sewer construction.

Adopted a resolution authorizing the Mayor to execute the cooperative agreement to form a HOME Consortium.

Approved the enhancement of the existing entry monument sign at Baltimore and Fletcher Parkway; construction of a new entry sign near the eastern border of the City; the addition of a vehicular sign to Fletcher Parkway; and adopted a resolution allocating $13,000 from the unallocated general fund to pay for three signs designating Fletcher Parkway as a Veterans Memorial Parkway.

Adopted a resolution authorizing the Chief of Police to receive relinquished prescription medications for destruction.

March 8, 2011

Adopted a resolution authorizing contract Change Order No. 1 to PBS&J for amendment of environmental study and permits for the Massachusetts Avenue and Boulevard Drive Sewer Upgrade Project.

March 22, 2011

Accepted the 2010 Annual Report – Implementation of the General Plan and authorized staff to transmit the report to the state Office of Planning and Research and Department of Housing and Community Development.

Adopted a resolution authorizing the application and acceptance of funding from the California Department of Resources Recycling and Recovery for beverage container recycling and litter abatement projects for City facilities, parks, and other public places and the reduction and diversion of household hazardous waste through used oil collection center support and public education.

Adopted a resolution accepting Bid 10-04 and awarding a contract for the 2011 Collector Street Resurfacing Project to TC Construction Company and allocating Wastewater Fund reserves to the project.

Adopted a resolution authorizing the execution of an agreement to perform construction inspection services for the 2011 Collector Street Resurfacing Project with Infrastructure Engineering Corporation.

Adopted a resolution authorizing the execution of an agreement to perform materials testing services for the 2011 Collector Street Resurfacing Project with GEOCON Incorporated.

Adopted a resolution authorizing the acceptance of the FY07 State Homeland Security Grant Program (SHSGP) grant of $43,579 for terrorism preparedness.

SUN VALLEY GOLF COURSE

5080 Memorial Drive

7:00 am to Sunset • 7 Days a Week

Adults $10 for 9 holes, $14 for 18 holes

Students* $8 for 9 holes, $12 for 18 holes

*(*includes college with valid student ID)*

Clinics, lessons, and special programs are available.

For details go to **www.sunvalleygolfclub.com** or call 466.6102

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91942
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Mayor ..... Art Madrid
Vice Mayor ..... Ruth Sterling
Councilmember ..... Dave Allan
Councilmember ..... Ernie Ewin
Councilmember ..... Mark Arapostathis
City Manager ..... David E. Witt
Focus Editor ..... Käaren McElroy
Editorial Staff ..... Heather Moore Sheppard
Ofelia Andrade

La Mesa Farmers' Market

MOVES TO NEW LOCATION

Beginning May 6

New Hours: 2 – 6 pm

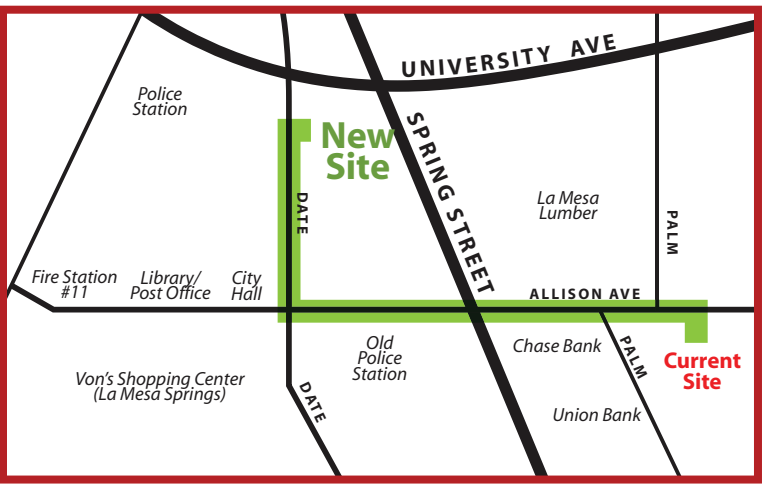

Watch for the next issue of the
La Mesa FOCUS
AVAILABLE AUG 1

La Mesa COMMUNITY SERVICES
Enroll NOW for Summer Activities

City of La Mesa Monthy Meeting Schedule

Meetings are held at City Hall
8130 Allison Avenue - La Mesa
(unless indicated otherwise)

CITY COUNCIL
Second Tuesday - 4:00 pm
Fourth Tuesday - 6:00 pm

PLANNING COMMISSION
First and Third Wednesday - 7:00 pm

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 am

DESIGN REVIEW BOARD
Every other Monday - 12:30 pm

ENVIRONMENTAL SUSTAINABILITY COMMISSION
Third Monday - 6:00 pm

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 pm

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 am
(as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 pm
(as needed)

HUMAN RELATIONS ADVISORY COMMISSION
Second Monday - 5:30 pm

LA MESA COMMUNITY PARKING COMMISSION
Second Tuesday - 5:30 pm

TRAFFIC COMMISSION
First Wednesday - 9:00 am

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 pm

YOUTH ADVISORY COMMISSION
Second & Fourth Monday - 4:30 pm
The above meetings are held at the Community Center Conference Room 4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 pm
(except July, Aug., Nov., & Dec.)
The above meeting is held at the Adult Enrichment Center 8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS (Area code 619)

Adult Enrichment Center	667.1322
Animal Control	667.7536
Building Inspection	667.1176
Business Licenses	667.1118
City Attorney	667.1128
City Clerk	667.1120
City Council	667.1106
City Hall	463.6611
City Manager	667.1105
Crime Prevention	667.7845
Dog Licenses	667.1114
Engineering	667.1166
Fire (Business)	667.1355
Graffiti Hotline	667.7560
Human Resources	667.1175
Library	469.2151
Mayor	667.1100
Municipal Pool	667.1494
Park Permits	667.1300
Parking Citations	667.1117
Planning	667.1177
Police (Business)	667.1400
Public Works	667.1450
Recreation	667.1300
Recycling/Trash	287.7555
Rides4Neighbors	667.1321
Senior Taxi Scrip	667.1321
Sewer Charges	667.1126
Sidewalk Maint.	667.1450
Storm Water Hotline	667.1134
Streetlight Maint.	667.1450
Traffic Eng. Hotline	667.1144
Traffic Signal Maint.	667.1166
Zoning	667.1177

ATTACHMENT 6.1

MAP OF HIGH TTWQ RESIDENTIAL AREAS

High Threat to Water Quality Areas - City of La Mesa -

Nagel and Sarita Streets

Baltimore Drive - North of I-8

East of Helix High School

Legend

- Roads
- Water Quality Threat Areas
- Hydrological Sub Areas

Land Use

- Rural Spaced Residential
- Single Family Residential
- Multi Family Residential
- Mobile Home Parks
- Group Quarters Residential
- Hotels/Motels/Resort
- Light Industrial
- Junkyards/Dumps/Landfill
- Heavy Industrial
- Extractive Industries
- Airports
- Other Transportation
- Commercial
- Office
- Public Services
- Health Care
- Miltary
- Schools
- Commercial Recreation
- Parks
- Agricultural
- Vacant
- Water
- Construction

Feet
0 500 1,000 2,000
1 inch equals 917 feet

CITY OF LA MESA
JEWEL of the HILLS

Data Sources:
Parcels. SanGIS: February 2008.
San Diego Trolley. City of La Mesa: March 2007.
Land Use. SANDAG: January 2007.
Printed: April 4, 2008

ATTACHMENT 8.1

TIPS FOR OUTDOOR VENDORS

CITY OF LA MESA
JEWEL of the HILLS

VENDOR FACT SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

City of La Mesa
Storm Water Pollution Prevention
Tips for Outdoor Vendors

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying storm water runoff into receiving water bodies, such as creeks, lakes and oceans. Unlike the sewer system, storm water runoff entering the storm drain system is not treated. Harmful pollutants, as listed below, can be transported during non-storm water discharges such as hosing down side walks or equipment. These types of pollutants are harmful to the environment and negatively impact water quality, aquatic animal and plant life as well as our quality of life. Non-storm water discharges are prohibited and in violation of the City Ordinance. A list of common pollutants and pollution prevention tips are provided below.

Pollutants of Concern

1. Sediment
2. Fertilizers
3. Metals
4. Detergents
5. Pesticides
6. Organic Compounds (solvents)
7. Trash and Debris
8. Oil and Grease
9. Bacteria

Good House Keeping

- Dry sweep exterior paved areas. **Do not use a hose or water!** Place debris in dumpster and keep dumpster lid closed.
- If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer system (sink or toilet). Wash water is not allowed to enter the storm drain.

Outdoor Material and Equipment Management

- Store material under covered areas.
- Place liquid material in secondary containment to ensure spills are contained.
- Ensure that frying oil is contained and managed properly without dropping/leaking on to the pavement.
- If using frying oil, ensure that you purchase absorbent material (absorbent pads) to address cleanup of potential oil spills.
- Inspect/fix equipment to ensure no leaks.
- Do not wash equipment at the event!

Waste Management

- Place trash in dumpsters with lids always closed.
- Cleanup leaks/spills immediately and place waste material into the dumpster

Should you require clarification or additional information on storm water pollution prevention, please contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.2

OVER IRRIGATION FACT SHEET

City of La Mesa
Storm Water Pollution Prevention
Over-Irrigation

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

With La Mesa's clay soils, it doesn't take much to moisten the ground before water starts running off your property to the curb, down the street and into the storm drain. Runoff from over-irrigation may transport pollutants such as sediment, pesticides, fertilizers, pet waste, bacteria, and automobile fluids. These pollutants enter our local creeks and streams and discharge into the ocean.

Over-irrigation is not prohibited; however, the following measures are recommended.

1. Over-irrigation runoff shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Irrigate to meet site-specific conditions to prevent over-watering.
3. Ensure that your irrigation system has control devices, sensors or shut-off switches to address malfunctions.
4. Place or group plants with similar water needs within the same area.
5. Don't irrigate non-planted areas.
6. Inspect your irrigation system regularly for potential problems
7. Consider drip irrigation to save water and prevent over-irrigation and runoff.
8. Adjust irrigation rates according to seasons, weather conditions and the soil's ability to absorb water. Instead of watering for 15-minutes straight, break up the session into 5-minute intervals, allowing water to soak in before the next application.
9. Irrigate in the early morning; it's the most efficient time to water plants with minimal evaporation.
10. Refrain from irrigation during hot, windy periods of the day. Do not let water run out into the street.

Do the right thing, stay in compliance and protect our environment. For more information contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.3

CHOLLAS CREEK TMDL FACT SHEET

Chollas Creek TMDL Fact Sheet

What are the Chollas Creek TMDLs?
In 2003 and 2007, Total Maximum Daily Load (TMDL) allocations for the pesticide diazinon and for heavy metals (copper, lead, and zinc), respectively, were adopted by the Regional Water Quality Control Board (a State Regulatory Agency) for Chollas Creek. The regulations establish strict numeric limits on the amounts of heavy metals and diazinon that can be present in urban runoff. Southwestern La Mesa, roughly bounded by El Cajon Boulevard to the north and Spring Street to the east (see map), eventually drains to Chollas Creek and is subject to these requirements. Businesses within this area are impacted by these new requirements. The City is monitoring water quality near your business to identify and eliminate sources of these pollutants to comply with new State regulations. The following activities/sources contribute to the discharge of heavy metals and diazinon.

Heavy metals are commonly associated with industrial waste, uncontained storage of certain metal products or materials (such as galvanized steel), cutting and grinding activities, atmospheric deposition, metal smelting or plating, and automobile tires and brakes.
Diazinon is a pesticide associated with landscaping activities. It has been banned for use and is no longer available at retail outlets. Diazinon acquired prior to the ban should be disposed of in accordance with state and federal regulations.

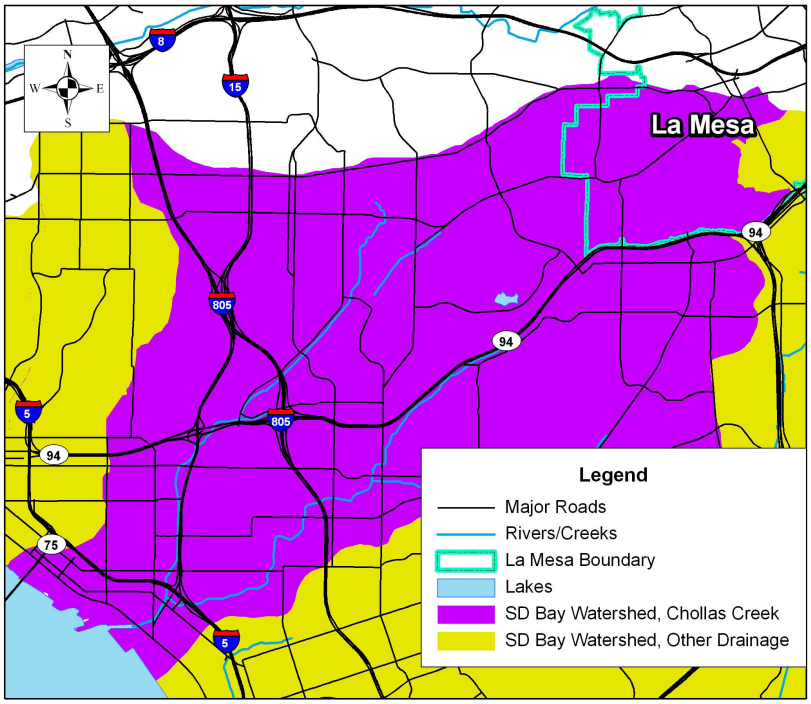

What is the City of La Mesa doing about these TMDLs?
The City's many efforts to protect water quality and comply with State regulations include regularly sweeping its streets and cleaning out its storm drain system, inspecting businesses and construction sites, and applying strict water pollution control standards to new development projects.

What do these TMDLs mean for my business?
The City's Municipal Code requires that businesses take measures to ensure that urban runoff (water that leaves your business and enters storm drains) is not contaminated with pollutants. Chapter 7.18 of the Municipal Code requires businesses to implement measures including those listed below. Taking these actions will help meet TMDL requirements.

- Eliminate non-storm water discharges, such as hosing off property and allowing the water to leave the site, dumping liquids into a storm drain, and runoff from excessive irrigation.
- Cover and contain metal products or materials that may contain heavy metals where feasible. Examples of such materials include galvanized metal, brake pads, tires, and metal recycling bins.
- Conduct metal cutting, grinding, welding, automotive or equipment repair, and similar activities in indoor, contained areas where feasible.
- Regularly sweep paved areas of your site to keep them clean and dispose of debris appropriately.
- Do not use any product containing diazinon. Contact County of San Diego Hazmat for instructions on proper disposal (619-338-2231).
- Store all pesticides and fertilizers in covered and contained areas. Consider alternative, non-chemical pest control methods.
- Do not apply pesticides before storms and eliminate overspray of pesticides onto paved surfaces.

If you observe illegal dumping into a storm drain, please report it to the City at 619-667-1134.

ATTACHMENT 8.4

RESIDENTIAL PREVENTING URBAN RUNOFF POLLUTION BROCHURE

Sanitary Sewer vs. Storm Drain System

The water that drains down a sink or toilet in a home or business flows to the sanitary sewer and is treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – terminating at the Pacific Ocean!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our watersheds.

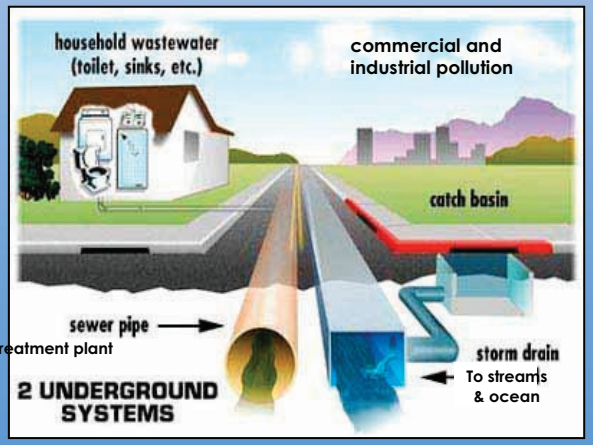

REPORT ILLEGAL DUMPING
City of La Mesa.
(619) 667-1134

(After Hours Hotline)
County Storm Water Hotline
1-888-846-0800

HOUSEHOLD HAZARDOUS WASTE DISPOSAL
EDCO
8184 Commercial Street
By Appointment
Questions: (619) 466-3355

RECYCLING
EDCO: (619) 466-3355

QUESTIONS AND COMMENTS
City of La Mesa Storm Water Program
(619) 667-1340

LOOK ON THE WEB

USED OIL RECYCLING CENTERS
http://www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
http://www.ipm.ucdavis.edu/

County of San Diego Storm Water Management Program
www. co.san-diego.ca.us/deh/stormwater/stormwater.html

State Water Resources Control Board (SWRCB) Storm Water Program
www.swrcb.ca.gov/stormwtr/construction.html

US Environmental Protection Agency
www.epa.gov/OWOW/NPS/

Clean Water Network
www.cwn.org

Preventing Urban Runoff Pollution

A Guide for Residents

Urban storm water runoff is the **largest contributor** to **watershed pollution** in San Diego County.

The City of La Mesa's Storm Water Ordinance Requires the implementation of **Best Management Practices** (BMPs) to prevent urban runoff pollution.

The City monitors activities within the City's jurisdiction and may take enforcement measures to ensure the prevention of urban runoff pollution.

Pollutants of Concern

As rainfall flows over the ground, it picks up a variety of pollutants and deposits them into our watersheds. The following pollutants are commonly transported in the storm drain system and have been found to degrade water quality.

- Sediments
- Fertilizers
- Metals
- Detergents
- Pesticides
- Organic Compounds (solvents)
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

The following Best Management Practices (BMPs) are required to be used in residential areas to reduce urban runoff pollution in our streams and waterways. To do your part in protecting our water quality, please implement the following BMPs, where applicable or checked by the City inspector.

Maintenance & Good Housekeeping

- ❑ Regularly, dry sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- ❑ If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- ❑ Water used for cleaning exterior surfaces must be contained and disposed of into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the storm drain or leave the property.
- ❑ Regularly inspect and maintain storm drain inlets.

Landscaping

- ❑ Only irrigate during early morning or late evening to avoid evaporation.
- ❑ Aim sprinklers to avoid watering other areas.
- ❑ Time sprinklers to avoid over watering and causing runoff.
- ❑ Minimize pesticide, herbicide and fertilizer use, which are harmful to animals downstream.
- ❑ Hand pull weeds instead of using herbicides.
- ❑ Do not use pesticides that eliminate beneficial insects (i.e., Integrated Pest Management).

Outdoor Material Storage

- ❑ Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid material.
- ❑ Have a spill response kit available to clean up potential spills such as kitty litter or other absorbents.
- ❑ Keep material storage areas free from rainwater accumulation.
- ❑ Keep lids closed on all outdoor storage containers and ensure containers are labeled.

Waste Management

- ❑ Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- ❑ Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- ❑ Fix any leaks in garbage cans or dumpsters.
- ❑ Schedule regular waste pick-up.

Vehicle /Equipment Maintenance

- ❑ Perform all vehicle maintenance indoors when possible.
- ❑ Use drip-pans to collect fluids from leaky vehicles.
- ❑ Clean up spills immediately using kitty litter or other absorbents. Properly dispose of used absorbents.

Vehicle /Equipment Washing

- ❑ Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- ❑ Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- ❑ Minimize the use of soaps and water while washing.
- ❑ Protect storm drains or curb inlets and then collect all wash water by vacuum. Recycle or dispose of wash water via the sanitary sewer system.
- ❑ Drain excess wash water to the sanitary sewer (sink or toilet), not to storm drains.

Loading Areas & Operations

- ❑ Load and unload in designated areas.
- ❑ Regularly dry sweep loading and unloading areas.
- ❑ If possible, cover loading areas.
- ❑ Divert storm water away from all loading and unloading areas.
- ❑ Check shipments and trucks for leaks and spills.
- ❑ Cleanup spills/leaks immediately and dispose of properly.
- ❑ If you must use water for cleaning, use a mop and bucket and dispose of wash water into the sanitary sewer.
- ❑ Major cleaning of exterior surfaces must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water should not be allowed to enter the street gutter or storm drains.

ATTACHMENT 8.5

POOL AND SPA FACT SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91942
Phone: 619.667.1166 • Fax: 619.667.1380

City of La Mesa
Storm Water Pollution Prevention
Pools & Spas

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

Discharging of pool or spa water is not prohibited; however, the following measures are required.

1. Water shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Pool water must be dechlorinated
3. Water pH acceptable range from 7 to 8
4. No algae present in water
5. Water shall not contain chemicals to counteract the chlorine
6. Water does not contain hydrogen peroxide based products
7. Controlled discharge eliminating potential for erosion

Chlorine

Test pool or spa water for chlorine prior to discharge. Chlorine naturally dissipates overtime and if pool or spa water is left 3 to 5 days, it will become dechlorinated. Pool water needs to be drained before it turns green. Draining pool water gradually over landscaped areas will help prevent erosion problems.

Pool Filters

Pool filters should be cleaned over landscaped areas or anything that will absorb the discharge. Material may be collected over a filter cloth and disposed of in the trash. Filter backwash must be discharged into the sewer system with a pH of 5 to 12.5.

Pool Construction

Material must be contained and disposed of appropriately. Waste generated from plaster, gunite, cement, sediment, and other construction materials is prohibited from entering the storm drain system.

Do the Right Thing, Stay in Compliance and Protect Our Environment. For more information, contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.6

INTEGRATED PEST MANAGEMENT CARDS

Ants

Ants are one of the most prevalent pests in California. Although ants are annoying when they come indoors, they can be beneficial by feeding on fleas, termites, and other pests in the garden. While spraying chemicals inside the house may seem effective, it won't prevent more ants from entering your home, which is essential for control because most ants nest outside. Focus management efforts on excluding ants from buildings or valuable plants.

Make your house less attractive to ants:

- Caulk cracks and crevices that provide entry inside.
- Store attractive food in closed containers.
- Clean up grease and spills.
- Look for and remove indoor nesting sites, such as inside potted plants.
- Ant-proof kitchen garbage pails with sticky barriers such as petroleum jelly under the lip and pet dishes by placing them in a moat of water.
- Remove sweet food sources next to your house such as aphid-infested bushes and ripened fruit on trees.

When ants invade your house, take these steps:

- Sponge invaders with soapy water as soon as they enter.
- Plug up ant entryways with caulk or petroleum jelly.
- Remove infested potted plants.
- Clean up food sources.
- Rely on baits to control the ant colony.
- Indoor sprays are not usually necessary.

How and why baits work best:

When using bait, place it along ant trails and at nest openings. Worker ants will be attracted to bait and take it back to the nest where the entire colony, including queens, may be killed. The bait must be slow-acting so workers won't be killed before they get back to the nest. It may take several weeks for results to be evident. Just killing workers foraging in your home or garden does little to control the colony, because as few as one percent of a colony's foraging worker ants are able to provide sufficient food to support nestbound queens and larvae. Baits in bait stations or ant stakes are easiest to use and safest for the environment.

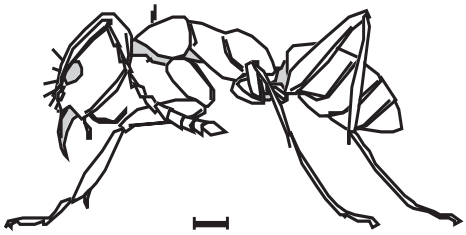

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*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

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Aphids

HEALTHY GARDEN HEALTHY HOME

Almost every plant has one or more aphid species that occasionally feeds on it, but low to moderate numbers of aphids are usually not damaging in gardens or on landscape trees. Although aphids can curl leaves and produce sticky honeydew, they rarely kill plants and can often be washed off with water. When aphid numbers get high, natural enemies frequently feed on them, eliminating the need for pesticides. Insecticidal soaps and oils are less toxic pesticides that can be used when treatment is necessary.

Aphids are common in your garden because:

- Aphids like lush new growth. Don't over fertilize. Use organic fertilizers or slow-release products.
- Aphids build up on flowering plums, roses, tulip trees, crape myrtles, apples, and many vegetables. Expect aphids when you grow these plants.
- Ants protect aphids from their natural enemies. Keep ants off plants to get more benefit from these beneficial insects.

To reduce aphids:

- Prune out infested leaves and stems.
- Knock aphid populations off plants by shaking or spraying with a strong stream of water.
- Protect seedlings with covers or aluminum soil mulches.
- Wait for hot weather; most aphids are heat-intolerant and will be gone by mid-June.

Protect aphids' natural enemies:

- Lady beetles, both adults and larvae
- Lacewings
- Syrphid fly larvae
- Soldier beetles
- Parasitic mini-wasps that turn aphids into crusty mummies (See reverse for insect drawings.)

Natural enemies of aphids such as lady beetles and lacewings will come into your garden naturally when aphids are abundant. Protect these good bugs by avoiding the use of insecticides that may be toxic to a broad variety of insects.

If insecticides seem necessary, use the safest products:

- Nonchemical pest control methods should be used first to manage aphid populations. However, if you feel insecticides are necessary, choose less toxic products.
- Insecticidal oils and soaps are the safest products. When properly used, these materials solve most pest problems.
- Oils and soaps work by smothering aphids, so application must be thorough. Don't apply to drought-stressed plants or when it is very hot. A few plants are sensitive to these products.
- Insecticidal soaps, soap-pyrethrum mixtures, or neem oils are often applied on vegetables or small bushes like roses.
- Narrow range oils, like parafinic, supreme or superior oils, are appropriate for larger trees.
- Oils and soaps don't kill aphids hidden within curled leaves. Prune these out. Systemic insecticides can kill hidden aphids, but they are much more toxic and not registered for use on garden vegetables or fruit trees.

aphid

lady beetle

parasitic mini-wasp killing aphid

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Cockroaches

HEALTHY GARDEN HEALTHY HOME

Cockroaches thrive in warm environments that provide food, water, and shelter. Roaches hide in cracks, crawl spaces, and other dark places during the day and come out at night to feed. Pesticide sprays alone will not control roaches and are not usually required. Baits provide better control. You must integrate several strategies to make your home a less roach-friendly environment. Thoroughness is essential for effective control.

Identify your cockroach species first:

- Effective management options vary according to species.
- Cockroach traps provide an easy way to catch roaches for identification.
- Control practices for outdoor invaders (American, oriental roaches) and indoor residents (brownbanded and German roaches) differ.
- For help with identification go to www.ipm.ucdavis.edu.

Remove food and water sources:

- Even tiny crumbs or liquids in cracks provide good food sources.
- Store food in sealed containers.
- Keep trash in containers with tight lids.
- Eliminate plumbing leaks.
- Vacuum cracks and crevices and clean floors and counters daily.

Remove roach hiding places:

- Seal cracks and other openings to prevent invaders from the outside.
- Seal cracks in false bottoms of cupboards and other indoor hiding places.
- Seal or clean up other areas where you find roaches or their egg cases hiding.
- Remove old newspapers, boxes, and other clutter in kitchens and bathrooms.
- The oriental cockroach hides outdoors under ivy and other shelter. Check to see if you have this roach and remove outdoor hiding places or bait.

Use traps to identify and track cockroach populations:

- Cockroach traps are available in hardware stores.
- Place traps on the floor around edges of walls, in cupboards and other places where you think roaches are foraging. Place bait stations at locations where you trap roaches.
- Check traps daily.
- Sticky traps with pheromones may provide some control of German cockroaches.

Using chemicals to control cockroaches:

- Avoid use of foggers, bombs, or aerosol sprays — they just disperse populations.
- Boric acid powder blown into cracks, crevices, hollow walls, under refrigerators, or other undisturbed hiding places is very effective (allow 7 days or more for an effect to be seen).
- Bait stations containing boric acid, abamectin, fipronil, or hydramethylnon placed near hiding places can be effective if other food sources are removed (allow 7 days or more for an effect to be seen). Replace stations as needed as long as roaches are being caught.
- Insecticide sprays alone do not give long-term control. They are not necessary if other methods such as baits and boric acid powder are combined along with cleanup and removal of hiding places.
- Contact a professional pest control operator for very serious infestations, but be sure they use an integrated program as described above.

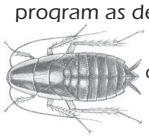

German cockroach nymph

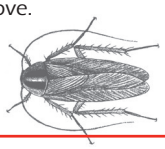

German cockroach adult

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Earwigs

HEALTHY GARDEN HEALTHY HOME

While their prominent tail-end pincers may look ferocious, earwigs are not harmful to people. Earwigs may seriously damage seedling vegetables and chew holes in annual flowers, soft fruit, and corn silks, but earwigs also play a beneficial role by feeding on aphids and other insects. Nocturnal in habit, earwigs feed at night and hide during the day in dark, cool, moist places in the yard or within flowers or vegetables. To manage earwigs, reduce hiding places and moisture, and employ a vigilant trapping program.

Should you be concerned about earwigs in your garden?

- Yes, if you are growing vegetables, herbaceous flowering plants, sweet corn, or plants with soft fruits like strawberries and apricots.
- No, if your garden is primarily lawn, trees, and woody ornamentals or native plants.

Reduce outdoor hiding places:

- Eliminate dense undergrowth of vines, ground cover and weeds around vegetable and flower gardens.
- Prune away fruit tree suckers.
- Remove leaves, boards, boxes, trash, and other debris from planting areas.
- Move flower pots and other garden objects and structures that can harbor earwigs.
- Check plastic or organic mulches and remove them to limit earwig numbers.

Trap earwigs until they are gone!

- Trap earwigs with rolled newspaper, bamboo tubes, or short pieces of hose. Place these traps on the soil near plants just before dark, and shake accumulated earwigs out into a pail of soapy water in the morning. A low-sided can filled with oil and a drop of bacon grease or fish oil also makes a good trap. Daily trapping will reduce earwig populations to tolerable levels.

Other ways to reduce earwig problems:

- Drip irrigate where possible to reduce surface moisture.
- Keep earwigs out of stone fruit trees with a band of sticky substance like Tanglefoot, around the trunk, and harvest fruit as soon as it ripens.
- Insecticides should rarely be needed.

Inside the home:

Earwigs may seek refuge indoors when conditions outside are too dry, hot, or cold. Large accumulations of earwigs can be annoying but present no health hazards. When earwigs invade your home follow these steps:

- Sweep or vacuum up invading earwigs.
- Seal up cracks or other entry points.
- Remove debris from gutters and around entryways.
- Keep water and moisture away from structures.
- Replace white outdoor lights with yellow ones, which are less attractive to earwigs.
- Indoor application of pesticides is not recommended.

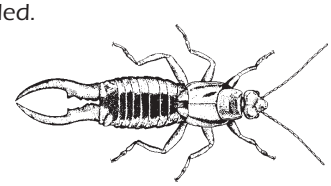

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Fleas

Fleas are particularly annoying to people and pets, especially during spring and early summer when their numbers tend to increase dramatically. The common flea in California is the cat flea. Despite its name, it attacks both dogs and cats and will also bite humans. To keep fleas out of your home, control fleas on your pet and regularly clean pet sleeping areas.

On the pet:

Recently, a number of very effective and safe new products for flea control on the pet have become available. Remember to supplement pet treatments with regular cleaning of your home and periodic combing with a pet flea comb to detect new infestations.

- Spot-on formulations are applied to the animal's coat, providing flea control for 1 to 3 months. Available from veterinarians or over-the-counter.
- Systemic flea control products, available from vets, are given as a pill or food additive. While they do not kill adult fleas, they prevent reproduction.
- Flea collars containing insect growth regulators (IGRs) give protection for up to 6 months on dogs and up to a year on cats. Be sure to choose collars containing methoprene or pyriproxyfen.
- Flea shampoos and soaps, powders and dusts, spray-on liquids, and dips are less effective and more hazardous to pets, people, and the environment than the three types of products above.

In the yard:

Outdoor treatment is rarely needed, but if your pet regularly sleeps outside and flea numbers are high, these areas can be treated with a spray containing pyriproxyfen. If possible, open sleeping areas to sunlight by removing low hanging vegetation. Immature fleas are unlikely to survive in areas with exposure to sunlight.

Inside the home:

Whether or not you are aware of fleas in your home, regularly vacuum and launder areas where your pet rests to avoid flea buildup. If you have a major flea problem, treat your pet with one of the options on the front of this card and follow the steps below.

- Locate heavily infested areas (usually areas where the pet rests) and concentrate treatment there.
- Wash throw rugs and pet bedding.
- Vacuum upholstered furniture, cleaning under cushions and in crevices.
- Vacuum carpets, especially beneath furniture.
- Use a hand sprayer or aerosol to treat all carpets and unwashable upholstered furniture with an insecticide that contains an IGR (methoprene or pyriproxyfen). This treatment kills larvae but not pupae, so fleas may continue to emerge for up to 2 weeks.
- Over the next 2 weeks vacuum regularly to remove adult fleas that emerge from pupae. Do not reapply pesticides.
- Seal vacuum bags and discard them so fleas don't escape.

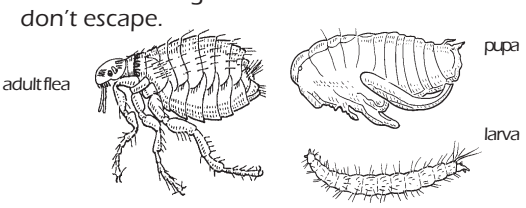

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Gardening with Good Bugs

HEALTHY GARDEN HEALTHY HOME

Most gardens contain far more types of good bugs,or beneficial insects, than pest insects. Beneficial insects and other organisms that kill pest insects are called natural enemies. In any pest management or plant care program, it is important to encourage these natural enemies by avoiding pesticides that kill them. You can also encourage beneficial insects by choosing plants that provide them with pollen, nectar, and shelter and keeping ants out of pest-infested plants. Learn to identify good bugs, both in their adult forms and immature (larval) stages.

Common good bugs found in California gardens include:

- Lady beetles: Both adults and larvae consume aphids.
- Lacewings: Lacewing larvae feed on many insect pests; adults are often seen around lights.
- Syrphid flies: Syrphid fly larvae consume aphids; adults hover around flowers.
- Parasitic mini-wasps: Many species of tiny wasps lay their eggs in pests like aphids or caterpillars; their hatching larvae consume the pest and kill it.
- Spiders: All spiders feed on insects or other arthropods and are beneficial in the garden.

(See reverse for drawings of good bugs mentioned above.)

What is Integrated Pest Management?

Integrated pest management (IPM) uses environmentally sound, yet effective, ways to keep pests from annoying you or damaging plants. IPM programs usually combine several pest control methods for long- term prevention and management of pest problems without harming you, your family, or the environment — IPM also reduces pollution in California waterways. Successful IPM begins with correct identification of the pest. Only then can selection of the appropriate IPM methods and materials be made.

Preferred IPM methods include:

- Planting pest-resistant or well-adapted plant varieties like native plants.
- Discouraging pests by modifying the way you design, irrigate, fertilize, and manage your garden.
- Altering the garden or home environment to deprive pests of the food, water, shelter or other requirements they need to thrive.
- Keeping pests out of the home and garden using barriers, screens, and caulking.
- Squashing, trapping, washing off or pruning out pests.
- Relying on good bugs in your garden to eat pests, thereby eliminating the need for insecticides that may end up in our waterways.

Turning to pesticides:

- Only use pesticides when non-chemical controls are ineffective and pests are reaching intolerable levels.
- Use pesticides in combination with the methods described above.
- Choose pesticides carefully so that the least toxic, most effective material is used to protect human health and the environment.

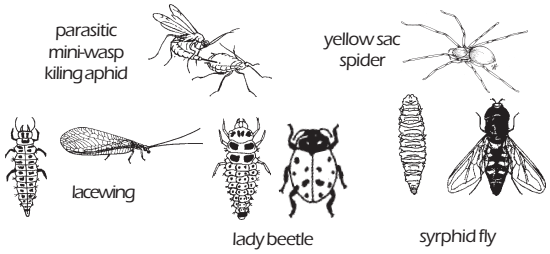

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Head Lice

HEALTHY GARDEN HEALTHY HOME

Head lice can infest anybody, but children are prone to infestations because they play closely and share items that come in contact with the head like hats, headphones, and combs. Head lice are not known to transmit any infectious diseases; they are more of a nuisance than a health risk. Children with head lice, however, are generally not allowed to attend school as long as nits are found in their hair.

Head lice facts:

- Head lice cannot hop, fly, or jump; they crawl. Lice spread only through direct contact with an infested object or person.
- Head lice spend their entire life in head hair and can only survive off a human head for about 1 or 2 days.
- A newly hatched louse must ingest blood within minutes of birth to survive.
- Head lice cannot live on family pets.
- Nits (eggs) that are more than 1 1/4 inch from the scalp probably are dead or have already hatched.

What to look for:

- Intense scratching on the back of the head or neck.
- Tiny white eggs (nits) glued to hair near the scalp.
- Small, rapidly crawling flat insects.

Four steps necessary to manage an infestation of head lice:

1 Use a head louse shampoo if you observe active lice or viable eggs.

- Avoid shampoo products containing lindane, which are available by prescription only. Pyrethrin and permethrin are safer, more effective, and less polluting to wastewater than lindane. Not all eggs will be killed.
- To avoid insecticides entirely, use soap shampoos that contain coconut or olive oils. Most soap shampoos kill all stages of the louse except the egg. Because they are not as effective as products containing pesticides, you must be sure to comb and repeat these shampoos four times at 3-day intervals. Successive shampooing kills newly hatched lice.

2 Remove nits from the head by combing with a specially designed nit comb.

- This step is the key to successful control. Repeat daily as long as you find live lice or nits within 1¦4 inch of the scalp. Use a metal comb specially designed for removing head lice and their eggs. Combs sold with head lice shampoos are not generally effective. Infested hair can also be cut out with small safety scissors.

3 Remove lice and nits from the household.

- Wash clothing and bedding of the infested person in hot water (at least 140°F) and dry in a hot dryer or have them dry cleaned. Place other items (earphones, bike helmets) in plastic and put in a freezer that is 5°F or lower for at least 10 hours. Clean any object that might have come in contact with the infested person's head (stuffed animals, car seats). Vacuum carpets and upholstery. Pesticide sprays are not recommended.

4 Check heads and remove nits daily until infestation is gone. Follow with weekly head checks to detect reinfestation.

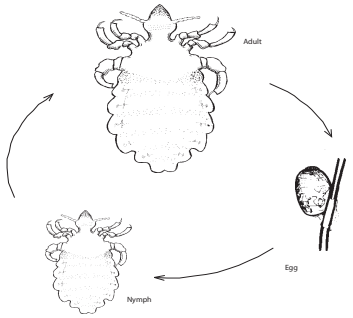

For more information see Pest Notes: Head Lice, available at Cooperative Extension offices and at www.ipm.ucdavis.edu

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Lawn Insects

HEALTHY GARDEN HEALTHY HOME

Contrary to popular belief, insects are not a common cause of residential lawn damage in California. Poor lawn care, especially improper watering and planting inappropriate grass species, are more likely causes of unhealthy or dying lawns. Disease-causing agents, excess orinappropriate use of chemicals such as fertilizer and herbicides, or dog urine also produce lawn damage resembling that of insects. Many insects in the lawn are beneficial. Never apply an insecticide unless a damaging level of a known insect pest is confirmed. Insecticides are only effective if applied at the right time and in the right manner. Some insecticides may kill good bugs too.

How do you know if insects are causing damage?

- Brown spots in lawns can be caused by over- or under-irrigation, plant disease, improper use of chemicals, or dog urine as well as insects.
- Confirm presence of insects before applying an insecticide. For grubs, dig around roots, for other insects perform a drench test. (See reverse.)

Keep your lawn healthy by:

- Planting grass species that do well in your area
- Irrigating deeply and infrequently
- Doing routine maintenance on sprinkler heads
- Applying only 3 to 6 pounds of actual nitrogen per 1000 square feet per year when fertilizing
- Aerating your lawn annually; remove thatch if it exceeds 1/2 inch
- Cutting only one-third to one-half of grass height at each mowing and keeping lawnmower blades sharp

See the UC Guide to Healthy Lawns at www.ipm.ucdavis.edu

If a damaging level of insects is confirmed, do the following:

- Choose an insecticide based on the pest you're targeting.
- Find out which insecticide ingredients target specific lawn insects:
  - *Bacillus thuringiensis* (Bt) kills only caterpillars, including cutworms, lawn moths, and skippers.
  - Insect-attacking nematodes control caterpillars or grubs.
  - Azadirachtin controls cutworms, armyworms, and larvae of lawn moths.
  - Imidacloprid is effective against young lawn grubs.
  - Pyrethroids (e.g., cyfluthrin, bifenthrin) are broadly toxic insecticides that kill chinch bugs, lawn moths, and cutworms, but also kill beneficial insects and should be avoided.
- Get help from UC Cooperative Extension.

HOW TO PERFORM A DRENCH TEST

- Mix 3–4 tablespoons of dishwashing liquid to 2 gallons of water.
- Evenly apply the 2 gallons to 1 square yard of your lawn.
- Monitor the area for 10 minutes and count the number of armyworms, cutworms, or lawn moth larvae that rise to the surface.
- Treat the area only if insect numbers exceed 5 armyworms or cutworms or 15 lawn moths per square yard.

chinch bug

sod webworm larva

cutworm larva

grub larva

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Safe Use & Disposal of Pesticides

HEALTHY GARDEN HEALTHY HOME

Pesticides are designed to be toxic to the pests they target — insects, weeds, and other unwanted home and garden invaders. Always read pesticide product labels carefully and follow all directions on proper use, storage, and disposal of empty pesticide containers. Product labels are your main source of information on how to use a product safely and legally. They include guidelines needed to protect you, your family, and pets. The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For the site nearest you in San Diego County call 1-877-713-2784 .

If you must use pesticides, follow these tips to reduce pesticide effects on your local waterways:

- Identify your pest problem and choose the least toxic pesticide that targets your pest and achieves the results you want. If you need help identifying the least toxic pest control method, contact your University of California Cooperative Extension office.
- Determine the right amount of pesticide to purchase. Purchasing exactly the amount you need for the application eliminates the need for storing unused pesticides.
- Use spot treatments whenever possible.

Outdoors

- Avoid overwatering after applying pesticides. Never let pesticide runoff flow into storm drains.
- Do not apply pesticides outdoors when rain is forecast or when it is windy.
- Avoid applying pesticides on paved areas.

Indoors

- Avoid applying pesticides in or near floor drains or sinks.
- Avoid applying pesticides on areas that will be washed or mopped with water, or where food is prepared or stored.

When using and storing pesticides take these precautions:

- Always wear a long-sleeved shirt, pants, and eye protection, and other equipment suggested on the label.
- Store products tightly capped in a locked cabinet out of reach from children and pets.
- Always keep pesticides in their original container.
- Know where to call for help in an emergency!

Pesticide disposal:

- If you cannot use up your pesticides, fertilizers, and weed killers, give them to a friend who may need them.
- Sewage treatment plants are not designed to treat for certain toxic pesticides like diazinon and chlorpyrifos — dumping pesticides into the stormdrain or down the sink is never an option.
- The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For household pesticide disposal information for San Diego County, call 877-713-2784.

Finding active ingredients on a pesticide label:

Pesticide labels are required by law to show the active ingredient and its percentage. Minimize or avoid the use of products that contain diazinon and chlorpyrifos – these materials are polluting our waterways. Always read the label before you buy!

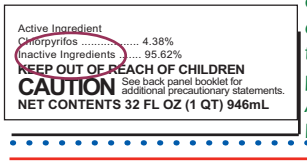
Active Ingredient
Chlorpyrifos 4.38%
Inactive Ingredients 95.62%
KEEP OUT OF REACH OF CHILDREN
CAUTION See back panel booklet for additional precautionary statements.
NET CONTENTS 32 FL OZ (1 QT) 946mL

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Snails & Slugs

HEALTHY GARDEN HEALTHY HOME

Snails and slugs rank among our most despised garden pests. These slimy mollusks emerge from hiding at night and chew holes in leaves and flowers of many succulent garden plants and fruit. Slugs and snails are similar in structure and biology, except slugs lack the snails' external spiral shell. Management requires a vigilant and integrated approach that includes eliminating moisture and hiding spots, trapping, barriers, and handpicking. Baits can be helpful, but by themselves, don't provide adequate control in gardens that contain plenty of shelter, food, and moisture.

How do you know snails and slugs are causing damage?

- You may not observe these pests at first because they feed at night and hide during the day. Go out at night or early morning to view them in action.
- Other pests can cause holes in leaves, flowers, and fruit. Look for the shiny, slimy trails slugs and snails leave behind.

What must be done to reduce snails and slugs?

- Remove daytime hiding places — ivy, weedy areas, debris, or boards.
- Regularly remove snails from shelters you cannot eliminate such as low ledges on fences, undersides of decks, meter boxes.
- Place traps in your garden and dispose of trapped snails and slugs daily.
- Reduce moist surfaces by switching to drip irrigation or sprinkling in the morning rather than later in the day.
- Consider snail-proof plants such as impatiens, geraniums, begonias, lantana, nasturtiums, and many plants with stiff leaves and highly scented foliage like sage, rosemary,and lavender.

How can I manage snails and slugs without using pesticides?

- Make sure the garden is mollusk-free before planting. Then erect a copper barrier around it. Use a 4- to 6-inch-wide band of copper, buried an inch below the soil and bent over at the top or attach it around the edge of a raised bed.
- Place your garden in the sunniest spot possible. Remove garden objects or adjacent plants or ground cover that may serve as shady shelter. Reduce moist surfaces as much as possible.
- Build a trap using a 12"x15" board raised off the ground by 1-inch runners. As the mollusks collect under the board, scrape them off and destroy them daily.

What about baits?

- Baits will not be very effective unless you also remove shelter, food, and moisture.
- Metaldehyde baits are especially poisonous to dogs and birds. Metaldehyde also loses its effectiveness rapidly in sunlight and after rain or irrigation.
- Iron phosphate baits are safe for use around dogs, children, and wildlife.
- Irrigate before applying bait and apply in evening on warm days when mollusks are active.
- Scatter bait around sprinklers and in moist and protected areas where snails and slugs travel.

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Spiders

HEALTHY GARDEN HEALTHY HOME

Spiders are mostly beneficial because they feed on pest insects. However, many people think that all spiders are dangerous and aggressive. In California, the main spider capable of causing serious injury is the black widow, which generally remains outdoors and out of sight. Spiders seen out in the open during the day are unlikely to bite people. Focus pest management efforts on removing webs and hiding places. Pesticides are not generally recommended.

What to know about spiders:

- In California, the main spider capable of causing serious injury is the black widow:
  - The poisonous black widow spider is commonly found outdoors, in sheltered, dry, undisturbed areas such as wood piles.
  - Female black widows have shiny black bodies with a red hourglass marking on the underside.
  - Only large female black widows can injure people.

  Anyone bitten by a black widow spider should remain calm and seek medical advice, or call California's Poison Control Center at 1-800-8-POISON (1-800-876-4766).
- The brown recluse spider does not live in California.
- The jaws of most spiders are too small to bite humans.
- Some other spiders bite when trapped in clothing, but the reaction is usually no more severe than itching or a bee sting. See www.ipm.ucdavis.edu for more information about these spiders.

To prevent spiders from entering your house, take these steps:

- Seal home foundation cracks and other access holes.
- Inspect window and door screens for good seals that keep out spiders and the insects they prey on.
- Keep areas around home foundations free of clutter.

Manage spiders using these tips:

- Indoors, regular housecleaning provides adequate spider control.
- Vacuum up the spider and its web.
- Prevent clutter buildup that can provide hiding places.
- Remove spider webs from the exterior of the house with a broom or high pressure hose.
- Indoors, squash spiders or capture them in a jar and release them outdoors.

When removing spiders, don't overlook the fact that spiders eat a large number and variety of nuisance and pest insects. Spiders also have natural enemies — wasps, other spiders, birds, reptiles, and others — that sometimes keep them from becoming too numerous.

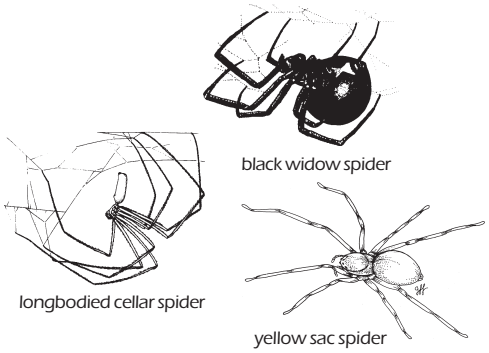

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Termites

Because of the serious damage they can cause to wooden structures, termites are among the pests most feared by homeowners. However, swarms of flying termites do not always mean your building is infested. A careful inspection of the structure is required to confirm an infestation. People also frequently mistake swarms of flying ants for termites. If you suspect that your house is infested, call a professional. Do-it-yourself sprays cannot be relied on to reduce a damaging infestation. Common termites in California are the subterranean termites that build nests in soil, dampwood termites that nest in moist wood and soil, and drywood termites that nest above ground in dry wood. Management of each termite species is different.

Distinguish flying ants from termites:

- Check the antennae, wings and waist to confirm that pest insects are termites. (Please refer to ant vs. termite drawing on back.)

Design your building to keep termites out:

- Keep a 12-inch barrier of smooth concrete, sand, or other material between the soil surface and substructure wood beneath a building.
- Choose termite-resistant wood for fences or other structures that must contact soil.
- Remove wood piles, untreated fence posts, and buried scrap wood near structures.
- Provide adequate ventilation to substructures and keep them dry.
- Immediately repair foundation cracks.

If termites are invading your home:

- Destroy shelter tubes that subterranean termites build between soil and wood structures.
- If dampwood termite nests are accessible, remove infested wood and eliminate excess moisture.
- Drywood termites can be controlled with heat, freezing, electricity, microwaves, fumigation, or spot treatments of chemicals.
- For any infestation, contact a professional for help. Pesticides licensed only for use by a pest control operator are usually necessary to control subterranean and dampwood infestations.

Using pesticides for termite control:

- Pesticides may be injected into the soil by professional applicators through drilling or rodding. Special procedures must be followed to prevent contamination of ground or surface water.
- For soil injections, ask your applicator to use a product other than chlorpyrifos. Newer types of products such as fipronil and chloronicotinyls are safer for your health and the environment.
- Baits can be effective in some cases, but may take several months to control the problem and must be followed up with constant monitoring.

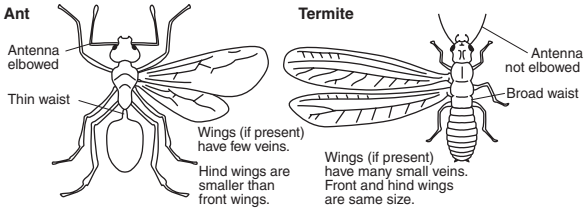

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Giant Whitefly

HEALTHY GARDEN HEALTHY HOME

Giant whiteflies can cover a beautiful plant with white fuzzy wax and sticky honeydew, turning it into an unsightly mess. First discovered in San Diego County in October 1992, this whitefly has spread northward into other areas of California. Since its introduction into San Diego, giant whitefly has spread rapidly northward along the coast. Although affected plants may be weakened, they rarely die. To manage giant whitefly, wash plants off with water and encourage natural enemies.

What plants are affected?

- Many ornamentals including hibiscus, giant bird of paradise, begonia, Xylosma.
- Fruit trees including citrus, avocado, mulberry and banana.

Look for these damage symptoms on affected plants:

- Long, white, waxy filaments produced by the whitefly give the leaf surface a bearded appearance. These hairlike strands may be mistaken for a fungal infection.
- Large amounts of sticky honeydew excreted by the whitefly as it feeds on plant sap.
- Black sooty mold growing on the honeydew.

How to recognize the whitefly:

- Adults are small (3/16") and white with light brown markings on wings and usually found in groups on undersides of leaves.
- Nymphs are yellowish, small, oval, have no legs and don't move.

To reduce problems, use an integrated program that includes:

- Removing infested leaves.
- Washing giant whiteflies off leaves with a strong stream of water.
- Planting species less susceptible to giant whitefly.
- Avoiding insecticides that injure natural enemies, such as lacewings, lady beetles, syrphid flies, and parasitic wasps.

What about insecticides?

- **Don't use insecticides if beneficial insects, including parasites and predators, are present in the area.**
- **To confirm the presence of parasitic wasps, use a magnifying glass to look for parasite exit holes on giant whitefly nymphs or darkened nymphs as indicated in drawings below.**
- **If you do choose to use an insecticide, select least toxic products such as insecticidal soaps or oils. Remember to follow label directions and spray the undersides of the leaves where whitefly colonies are found.**

(adult) 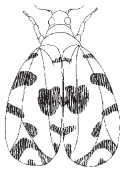 (actual size) I

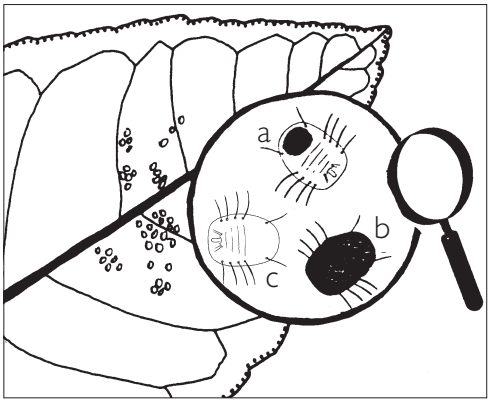

Examine whitefly colonies for grayish-black or yellow nymphs with exit holes (a), or darkened nymphs (b), or healthy nymphs (c).

Use NON-CHEMICAL methods & LEAST TOXIC pesticides. WHY? Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes, and oceans.

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ATTACHMENT 8.7

SAN DIEGO RIVER AND SAN DIEGO BAY FACT SHEETS

San Diego River Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego River and the San Diego Bay. Your business or facility is located within the San Diego River Watershed.

San Diego River Watershed

The San Diego River Watershed is comprised of 443 square miles. It extends from the mountains near Julian to the Pacific Ocean. Portions of the watershed fall within the cities of El Cajon, Poway, San Diego, Santee, several unincorporated areas, and the City of La Mesa. Primary tributaries to the San Diego River include Boulder Creek, Conejos Creek, Los Coches Creek, San Vicente Creek, and Forester Creek. Alvarado Creek in La Mesa is also tributary to the San Diego River. Alvarado Creek flows into the San Diego River and ultimately into the Pacific Ocean between South Mission Beach and Ocean Beach near Dog Beach.

Pollutants of concern listed in the 2002 Clean Water Act Section 303(d) List Of Water Quality for the lower San Diego River Watershed include fecal coliform (sewage/urban runoff), low dissolved oxygen (decay of organic matter), total dissolved solids (industrial waste/chemical spills), and phosphorus (phosphate based detergents). Between 1996 and 1999, coliform bacteria more than doubled due to urban runoff and sewage.

Other pollutants of concern not listed above include pesticides such as Diazinon and Chlorpyrifos (commercial, agricultural, and residential application), Total Suspended Solids/Turbidity (suspended sediment/solids, construction, sewage, eutrophication), Copper and Zinc (industrial waste or automobiles), and pH/Phosphate (industrial waste, automobiles, sewage, fertilizers, eutrophication, hardening/concrete of creeks).

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Store materials properly to ensure it is not exposed to storm water. Do not over-irrigate your landscape. If you observe illegal dumping into a storm drain, you should call the City's storm water pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

San Diego Bay Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego Bay and the San Diego River. Your business or facility is located within the San Diego Bay Watershed.

San Diego Bay Watershed

The San Diego Bay Watershed is comprised of 415 square miles. It extends from the Laguna Mountains to San Diego Bay. The watershed falls within the cities of La Mesa, Chula Vista, Coronado, Imperial Beach, Lemon Grove, National City, San Diego, and unincorporated areas of the County. Approximately 4 square miles in the southern portion of the City of La Mesa is part of this watershed. The major discharge sources to San Diego Bay include Sweetwater River, Otay River, Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek.

Three drainage basins in the City of La Mesa are part of the San Diego Bay Watershed. Runoff from the Spring Valley Basin flows to the Sweetwater River. Runoff from the University Channel and Lemon Grove Basin contribute to Chollas Creek. The aforementioned creek and river flow into San Diego Bay.

Pollutants of concern associated with the watershed include diazinon, copper and zinc, fecal coliform, turbidity, and total suspended solids. The sources of these pollutants are a result of residential, agriculture or commercial pesticide application, automobiles and industrial waste, sewer spills, encampments, wildlife, erosion, suspended sediment, and fertilizers. Pollutants of concern for Chollas Creek in particular include metals such as copper, lead, zinc, cadmium, and coliform bacteria.

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Moreover, store materials properly to ensure it is not exposed to storm water and do not over-irrigate your landscape. If you observe storm water pollution or illegal dumping into a storm drain, you should call the City's Storm Water Pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

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CITY OF LA MESA

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT 2011/2012

SEPTEMBER 2012

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
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Acronyms and Abbreviations

℃	Degrees Celsius
303(d) List	Clean Water Act Section 303(d) List of Water Quality Limited Segments
Appendix A	The Storm Water Requirements Applicability Checklist (Appendix A of BMP Manual Part I)
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
BMP Manual I	The City of La Mesa Storm Water Best Management Practices Manual – Part I
BMP Manual II	The City of La Mesa Storm Water Best Management Practices Manual – Part II
Calsense	Calsense Computerized Irrigation Control
CASQA	California Stormwater Quality Association
CIP	Capital Improvement Program
City	City of La Mesa
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CMC	Criteria Maximum Concentration
CSWMP	Construction Storm Water Management Plan
CTR	California Toxics Rule
D-MAX	D-MAX Engineering, Inc.
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
FOG	Fats, Oils, and Grease
GCD	Grease Control Device
Construction Permit	State of California General Construction Permit
gpm	Gallons Per Minute
HA	Hydrologic Area
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HSA	Hydrologic Subarea
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illicit Discharge
IDDE	Illicit Discharge Detection and Elimination
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable

ACRONYMS AND ABBREVIATIONS (CONTINUED)

mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) Per 100 Milliliters
MS4	Municipal Separate Storm Sewer System
mS/cm	Millisiemens Per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
PDPA	Pollutant Discharge Potential Assessment
PDP	Priority Development Project
RWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 7.18 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWPPP	Storm Water Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TTWQ	Threat to Water Quality
WQO	Basin Plan Water Quality Objective
WQTR	Water Quality Technical Report
µg/L	Micrograms Per Liter

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Gregory P. Humora
Director of Public Works/City Engineer

Date: September 2012

Telephone Number: (619) 667-1105

EXECUTIVE SUMMARY

In January 2007, the San Diego Regional Water Quality Control Board (RWQCB) issued Order No. R9-2007-0001 (Municipal Permit), a National Pollutant Discharge Elimination System (NPDES) permit regulating discharges to the municipal separate storm sewer system (MS4) within 18 municipalities in San Diego County, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (collectively referred to as "Copermittees"). As required by the Municipal Permit, the City of La Mesa (City) has developed and maintains a Jurisdictional Urban Runoff Management Program (JURMP) intended to minimize the amount of pollutants present in runoff that may be generated within the City's jurisdiction.

Through the development and implementation of the City's JURMP, the City strives to improve the water quality of local receiving water bodies and to protect human and aquatic health from potentially harmful pollutants such as bacteria/viruses, organic compounds, oil & grease, etc.

The City's JURMP includes Best Management Practice (BMP) standards for internal activities, industrial and commercial businesses, construction and development projects, and residents. It also incorporates programs for water quality monitoring, public participation, and educational outreach.

This JURMP Annual Report presents the City's activities implemented as its JURMP during the 2011/2012 fiscal year, which began on July 1, 2011, and ended on June 30, 2012. Each section of this JURMP Annual Report discusses the City's efforts to protect and enhance storm water quality during the current reporting period and how those efforts met the requirements of the Municipal Permit. Significant activities conducted for the major components of the City's JURMP are summarized below.

Development Planning Component

The City continued to oversee development activities occurring in the City to mitigate potential threats to water quality at the design stage. This included distributing a development requirements checklist to all projects applying for permits to identify Priority Development Projects. Additionally, the City implemented updated hydromodification requirements as applicable. The City maintained and updated its inventory of installed treatment control BMPs and implemented its maintenance verification program through which parties responsible for maintaining BMPs at each of the City's 18 inventoried sites certify in writing that their treatment devices have been maintained and are in working order. Eleven sites in the City with approved treatment control BMPs were also inspected by City staff. Enforcement actions successfully achieved the return of all maintenance verification forms and the correction of all deficiencies noted during inspections.

Construction Component

During 2011/2012, a total of 65 routine construction inspections were completed at 27 sites. The City's plan check and inspection program required projects to comply with the City's

minimum BMP requirements. Enforcement actions were taken where necessary and were effective in bringing about compliance. Notably, the City inspected almost every low priority construction site during the wet season and notified small projects and homeowners of the City's BMP requirements.

Municipal Component

The City inspected all high threat to water quality (TTWQ) municipal fixed facilities, as required by the Municipal Permit. Over 526 tons of sediment and debris were removed during routine street sweeping activities. Approximately 263 cubic yards of sediment and debris were also removed during standard MS4 maintenance; this is the largest amount yet collected. The City also televised 25,214 linear feet of sewer line and replaced or rehabilitated 2,451 linear feet of sanitary sewer line to decrease the potential for sanitary sewer overflows (SSOs). In keeping with its regular practice, the City trained its staff regarding the most current storm water pollution prevention concepts and practices.

Industrial and Commercial Component

During 2011/2012, the City's full-time Storm Water Inspector continued to build upon cooperative working relationships with local businesses, in order to keep businesses accountable to the storm water education they have received, and to achieve BMP compliance through routine inspections and in some cases, through enforcement actions. The City met the Municipal Permit requirement to inspect at least 25 percent of the City's industrial and commercial inventory. The City inspected all high TTWQ sites on its industrial and commercial inventory as well as additional medium TTWQ sites. An inspection fee continues to be collected to recover costs for site visits. Since the institution of fees assessed for each visit, including follow-up visits, businesses have generally become more willing to comply with BMP requirements in a smaller number of inspection visits. In 2011/2012, 89 percent of inspected businesses were in compliance with the City's minimum BMPs during routine inspections and required no follow-up actions. After brief re-inspections were conducted, this increased to 97 percent of businesses that were in compliance. No inspected businesses were observed to be out of compliance with the State of California Industrial General Permit, Order No. 97-03-DWQ (Industrial Permit).

Residential Component

Residential areas comprise more than half of the City of La Mesa's land use, and the City worked to educate these residents through a variety of means. The City provided its quarterly *La Mesa Focus* newsletter to City residents via email and the City's website. Some newsletters published during 2011/2012 contained storm water articles and announcements relating to residential activities. The City encouraged its residents to participate in a variety of waste disposal events and volunteer-based cleanup events, and 784 participants dropped off 87,249 pounds of household hazardous waste (HHW) during the City's eight HHW events. The City's residents are considered important allies in reporting complaints to the City Storm Water Hotline. During 2011/2012, 96 complaints related to residential issues were received by the City's Storm Water Hotline and Public Works maintenance hotline. This is the greatest number of residential complaints reported over the past five years, possibly suggesting an increased knowledge among residents regarding storm water

regulations. Complaint investigations in residential areas were used as opportunities both to enforce BMP requirements and to educate residents about storm water pollution prevention.

Illicit Discharge Detection and Elimination Component

On September 10, 2008, the RWQCB adopted Addendum No. 2 to the Municipal Permit. This addendum requires the City to wait to submit the illicit discharge detection and elimination (IDDE) section of its JURMP Annual Report until the report for 2012 Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program), which took place after July 1, 2012, is finalized. The section must be submitted to the RWQCB no later than December 15, 2012.

While the full section will not be submitted until after September 30, 2012, the City did implement its IDDE program component during 2011/2012. During this period, the City responded to and resolved 119 complaints made to its Storm Water Hotline and the Public Works maintenance hotline. The City also continued maintenance of the sanitary sewer system to prevent SSOs.

Education Component

As a means to raise storm water awareness in various communities, the City continued to conduct various educational and outreach activities throughout 2011/2012. The City's efforts resulted in an estimated 26,933 impressions made, which is 4,090 more impressions than the previous reporting period. I Love A Clean San Diego (ILACSD) partnered with the City to educate residents of all ages at special events and school presentations. The City continued to circulate the *La Mesa Focus* newsletter to businesses and residents, and some newsletters sent during the reporting period included storm water-related announcements and articles. Additionally, the City continued to maintain a storm water bulletin board at City Hall, which is strategically located to maximize exposure to both City personnel and project proponents that visit the Engineering Division. To better serve the City's diverse population, some educational materials were also distributed in Spanish. Additionally, City staff participated in various training sessions.

Public Participation Component

Public participation activities in 2011/2012 included multiple volunteer-based cleanup events, which have a direct effect on water quality, and public outreach activities intended to increase general knowledge and awareness regarding storm water issues. The City participated in Coastal Cleanup Day and the Creek to Bay Cleanup, with two cleanup sites located in the City for each event. During these events over 1,234 pounds of trash and 157 pounds of recyclables were collected. Other cleanup activities completed during 2011/2012 included Park Appreciation Day, Adopt-a-Park, Adopt-a-Block, and the La Mesa Spring Cleanup. A variety of waste disposal events, including HHW disposal events, were also held in the City.

Fiscal Analysis Component

The City continued to fund its storm water program though the City's Sanitation Fund and the collection of a storm water inspection fee. As required by the Municipal Permit, the City

continued to use the new fiscal analysis reporting standards, developed and implemented by the Copermittees starting in 2009/2010.

Effectiveness Assessment Component

The City continued to evaluate the effectiveness of its storm water program based on the approach presented in the City's JURMP. The City has seen a consistent trend of decreasing median concentrations and exceedance numbers for various polluting constituents in its Dry Weather Monitoring Program. Additionally, a decrease in dry weather flow rates has been measured since 2008, suggesting that the City's efforts to reduce dry weather discharges to the MS4 have been successful.

In both the treatment control BMP program and the industrial and commercial inspection program, enforcement has been very effective in reaching compliance. The City has implemented additional City-maintained treatment control BMPs for the University drainage area and its Public Works Operation Center, and also conducts additional street sweeping to aid in meeting watershed requirements.

Special Investigations

Aside from upstream investigations conducted as part of the Dry Weather Monitoring Program, no special investigations were needed or conducted during this reporting period.

Conclusions and Recommendations

The City will continue to implement the programs in its JURMP during 2012/2013; it is anticipated that some program refinements will be made as implementation progresses. The City will also continue to collaborate with other Copermittees as applicable within its watersheds and regionally.

Beyond the JURMP Program, the City is also subject to additional requirements associated with Total Maximum Daily Load (TMDL) regulations, which set numeric compliance limits. The City of La Mesa has been collaborating with other Copermittees in the Chollas Creek watershed to conduct annual reporting and monitoring for the Chollas Creek Diazinon and dissolved metals TMDLs. During 2010/2011, the City also developed a Strategic Plan for Watershed and TMDL Activity Implementation, coinciding with the adoption of bacteria TMDLs for both the San Diego River and Chollas Creek watersheds. Since that time, the City has been collaborating with other Copermittees to conduct monitoring and modeling, develop the Implementation Plan for San Diego River's bacteria TMDL, and update the Chollas Creek Implementation Plan to include the new bacteria TMDL. These efforts will continue throughout the TMDL timelines.

1.0 INTRODUCTION

1.1 BACKGROUND

This JURMP Annual Report presents an activity summary for the City of La Mesa during the 2011/2012 fiscal year. The JURMP Annual Report preparation and submission are required by the Municipal Permit.

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), established a framework for regulating MS4 discharges under the NPDES. In 1990, the RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region, followed by a revised permit in 2001. RWQCB Order No. 2001-01 was replaced by the current Municipal Permit in 2007.

In 2002, the City, like all Copermittees, developed and submitted a JURMP to the RWQCB. The City then submitted an updated JURMP, as required by the Municipal Permit, in March 2008. The JURMP explains management measures for different sectors, including municipal, industrial, commercial, construction, and significant development and re-development activities.

Annual reports documenting the implementation of the JURMP are required to be submitted to the RWQCB by September 30. This JURMP Annual Report presents data from the 2011/2012 fiscal year, which extended from July 1, 2011, to June 30, 2012.

1.1.2 CITY SETTING

The City of La Mesa, located in central San Diego County, covers an area of approximately nine square miles and has a population size of almost 58,000 residents. Although the primary land use in La Mesa is residential, there are areas of industrial and commercial development, parks and open space, and other types of development.

Approximately 52 percent of La Mesa is located within the San Diego River Watershed, while the remaining 48 percent is located in the San Diego Bay Watershed. In total, the City constitutes about one percent of the land area in each watershed. Runoff generated in La Mesa is conveyed through five drainage basins: Alvarado, University, Spring Valley, Lemon Grove, and Lake Murray.

Table 1-1 lists the approximate percentage of each drainage area in La Mesa, the corresponding hydrologic unit (HU) of the basin, and the receiving water body to which each basin drains. Figure 1-1 presents the drainage basins as they relate to land use activities in the City.

Table 1-1
City of La Mesa Drainage Basins

Drainage Basin	Percent of City Area	Hydrologic Subarea	Receiving Water Body	Watershed
Alvarado	51	907.11 Mission San Diego	San Diego River	San Diego River
University	28	908.22 Chollas	Chollas Creek	San Diego Bay
Spring Valley	14	909.12 La Nacion	Sweetwater River	San Diego Bay
Lemon Grove	6	908.22 Chollas	Chollas Creek	San Diego Bay
Lake Murray	1	907.11 Mission San Diego	San Diego River	San Diego River

The Alvarado and Lake Murray drainage basins ultimately discharge to the San Diego River. The Lower San Diego River is listed in the 2010 CWA Section 303(d) for fecal coliform, *Enterococcus*, phosphorus, low dissolved oxygen, total dissolved solids, manganese, toxicity, and nitrogen. Alvarado Creek, a receiving water body located within the City of La Mesa jurisdiction and tributary to the San Diego River, is listed as impaired for selenium. Runoff from the University and Lemon Grove drainage basins drains to Chollas Creek, which is impaired for indicator bacteria, dissolved copper, lead and zinc, diazinon, phosphorus, total nitrogen, and trash. Finally, the Spring Valley drainage basin in La Mesa is part of the larger watershed of the Sweetwater River. The Lower Sweetwater River is listed in the 2010 CWA Section 303(d) for *Enterococcus*, fecal coliform, phosphorus, selenium, total dissolved solids, total nitrogen, and toxicity. The City is also subject to additional requirements associated with TMDLs for bacteria in the San Diego River watershed and for bacteria, dissolved metals, and the pesticide diazinon in the Chollas Creek watershed.

Figure 1-1
City of La Mesa Land Use and Drainage Basins

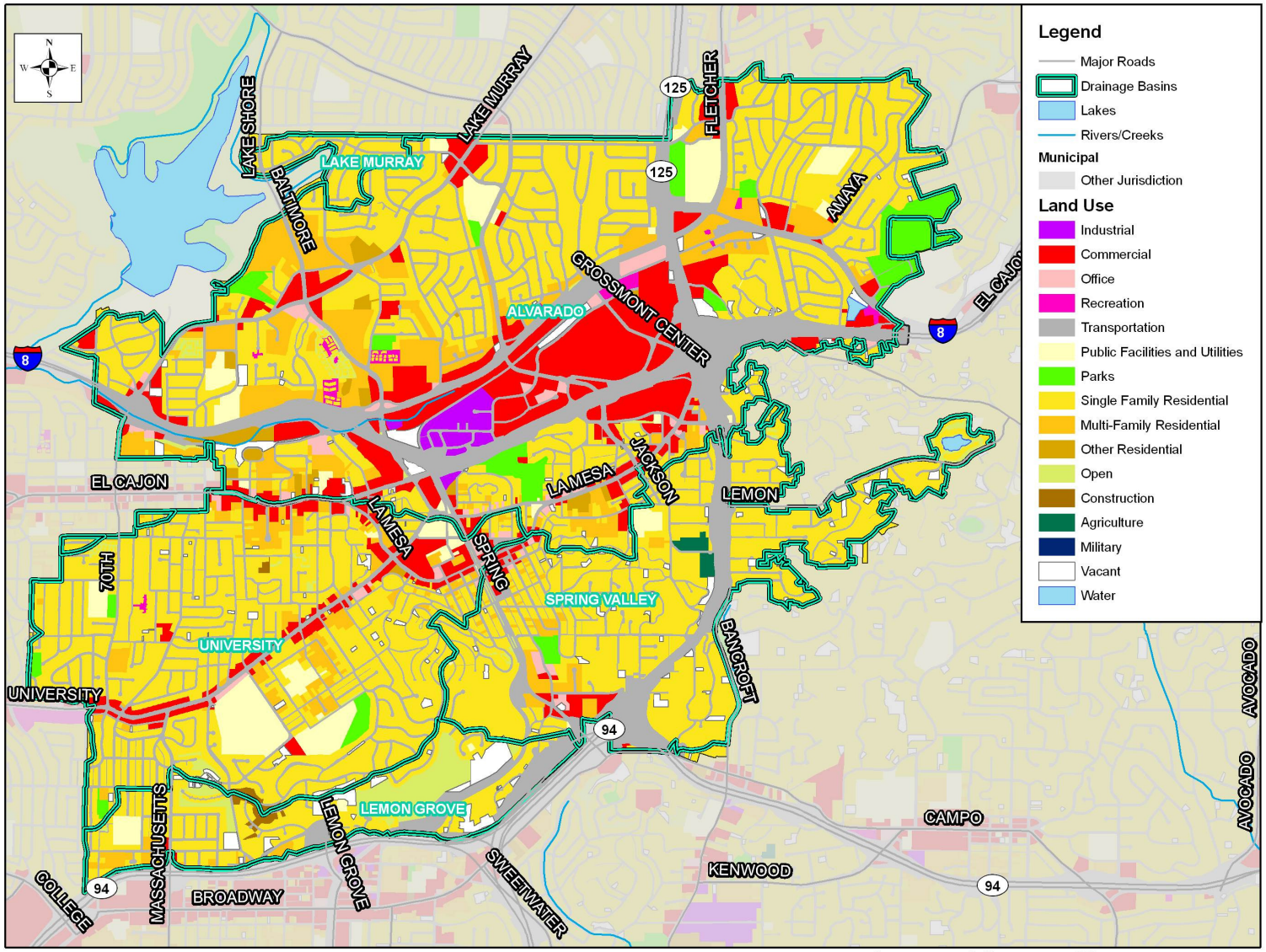

Base Data Sources: City of La Mesa, SANDAG, SanGIS

0 0.45 0.9 Miles

1.2 Purpose and Objectives

The City's JURMP presents strategies to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The JURMP describes various programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the implementation of the City of La Mesa's JURMP during the 2011/2012 reporting period.

1.3 Report Organization

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning Component**
Section 3	**Construction Component**
Section 4	**Municipal Component**
Section 5	**Industrial and Commercial Component**
Section 6	**Residential Component**
Section 7	**Illicit Discharge Detection and Elimination Component**
Section 8	**Education Component**
Section 9	**Public Participation Component**
Section 10	**Fiscal Analysis Component**
Section 11	**Effectiveness Assessment Component**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all components required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a more detailed explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Background, subsection 1.1, has been divided into Regulatory Background, subsection 1.1.1, and City Setting, subsection 1.1.2, for clarity.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of pollutants from development projects to the MEP and by managing the increase in runoff from development projects that have the potential to negatively affect downstream water bodies. During the 2011/2012 fiscal year, the City accomplished these goals through implementation of its JURMP document.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2011/2012 reporting period are presented in the following bulleted list. The remainder of this section provides more detail about the City's implementation of this component of its storm water program.

- Distributed the City's development requirements checklist ("Appendix A" of the City of La Mesa BMP Manual II) to projects applying for permits.
- Implemented updated hydromodification requirements as required by the Municipal Permit.
- Used the City's treatment control BMP database to track completed Priority Development Projects (PDPs).
- Conducted maintenance inspections of treatment control BMPs at eleven completed development projects in the City. See Table 2-1 in this section for a comparison of inspection numbers and Municipal Permit requirements.
- Obtained verification of BMP maintenance from all inventoried projects.

2.2 LAND USE PLANNING

2.2.1 BACKGROUND

The City's General Plan was last updated in 1996 and contains water quality and watershed protection principles in its Public Services and Facilities Element. The principles established in 1996 provide a framework for implementing the current Municipal Permit requirements, and no changes to these policies were made during the reporting period. An update to the General Plan had been planned for 2012; however, no updates were completed during the 2011/2012 reporting period.

2.2.2 SOURCE CHARACTERIZATION

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts

to the surrounding environment. No changes to the development restrictions in the City's General Plan for storm water purposes were implemented during the reporting period. The City Council-approved comprehensive update to the General Plan has not yet been completed.

2.2.3 Best Management Practice Requirements

Please refer to the City's updated JURMP document for a list of the water protection policies included in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 Program Implementation

The City implemented its water protection related land use policies during the reporting period primarily through the City's Municipal Code. The City's BMP Manual II, a formatted guidance manual based on the regional Model SUSMP document, is an uncodified appendix to Chapter 7.18 of its Municipal Code. No updates were made to the BMP Manual II during 2011/2012. The current City of La Mesa Storm Water BMP Manual – Part II (BMP Manual II) is included as Attachment 2.1. The BMP Manual and other documents for development project proponents are available on the City's website at http://www.cityoflamesa.com/index.aspx?NID=988.

Details on how the City implemented its established water protection policies through its environmental review process and its development project approval and verification processes during the reporting period are provided in Sections 2.3 and 2.4 of this JURMP Annual Report document.

2.3 Environmental Review Process

The City's current environmental review process is detailed in the City's updated JURMP. The overall structure of the review process, such as the City's departments involved and the document submissions required, remains the same as in previous reporting years. No modifications to the City's environmental review process have been made since the submittal of the updated JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

During the 2011/2012 fiscal year, the City implemented the watershed protection principles in the City's General Plan through various aspects of the City's development project approval and verification process, as detailed below.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's BMP Manual II, which contains the City's SUSMP regulations. These regulations are included in Municipal Code Chapter 7.18. Projects subject to SUSMP regulations are identified by completion of applicability checklists. More detail about this process is provided in Section 2.4.4.2.

2.4.3 Best Management Practice Requirements

The BMP requirements for development projects did not change during 2011/2012.

2.4.4 Program Implementation

During the 2011/2012 fiscal year, the City required BMP implementation for all development projects through education, a comprehensive development project approval process, and a treatment control BMP inspection and maintenance verification program.

2.4.4.1 Outreach and Staff Training

The City provides training for staff involved in the planning and review of development projects within the City and works closely with the development community to communicate its development requirements throughout the entire approval process. City staff review Water Quality Technical Reports (WQTRs) submitted for development purposes. Outside consultants may also be used for review assistance. Details on trainings conducted and educational materials developed and distributed during the reporting period can be found in Section 8 of this JURMP Annual Report document. Based on results from the beginning years of the program, distribution of treatment control BMP maintenance verification letters appears to continue increasing the level of knowledge of regulated parties.

2.4.4.2 Urban Runoff Approval Process for Development Projects

All development projects that required City permits were subject to the City's urban runoff approval process as detailed in the City's JURMP. Forms completed by project applicants are kept with the project's file at the City for future reference. As discussed in the City's JURMP, the City required all projects applying for construction and building permits with any potential to impact storm water to complete an "Appendix 'A' – Storm Water Requirements and Project Data Sheet" that guides project applicants to submit proper documents to the City for review. A current "Appendix A" form is available as Attachment 2.2. All development projects determined to be PDPs after completing "Appendix A" were required to implement the City's SUSMP requirements and prepare Post Construction WQTRs in accordance with the City's BMP Manual II. All PDPs are tracked by the City.

During the reporting year, five development projects submitted WQTRs, which were subjected to the City's SUSMP requirements, as applicable. The projects and the results of the reviews are listed below.

- 7171 Stanford Residential. The WQTR for this PDP was reviewed once and not approved during 2011/2012.
- Big Lots Parking Lot. The WQTR for this PDP was reviewed twice and approved during 2011/2012.
- Care Meridian. The WQTR for this PDP was reviewed once and approved during 2011/2012.
- Grossmont Hospital Prop G Improvements. The WQTR for this PDP was reviewed once and not approved during 2011/2012.
- Lemon Avenue Apartments. The WQTR for this PDP was reviewed twice and not approved during 2011/2012.
- Park Station – Kitzman. The WQTR for this PDP was reviewed and not approved during 2010/2011. This project continues to await discretionary approvals by the City Council.

Several projects subjected to SUSMP requirements in previous reporting periods have not submitted revised plans nor have the existing plans been approved. If these projects are resumed, they will be subjected to the City's SUSMP requirements at the time of approval. Some other proposed development projects have been abandoned. Additionally, some projects listed above as approved may have had additional submittals during previous program years. No projects approved during 2011/2012 were allowed to implement low removal efficiency BMPs. During the reporting period, no projects received a SUSMP waiver for implementation of treatment control BMPs. The City has never issued a SUSMP waiver, and at this time the City has no plans to develop a SUSMP waiver mitigation program.

The Big Lots Parking Lot is one example of a Priority Development Project that was conditioned to meet SUSMP requirements in 2011/2012. The project involved the removal and replacement of an asphalt concrete parking lot with subgrade compaction at a large commercial site. City staff initially determined that the project was working without the appropriate permits and immediately issued a stop work order (see Section 3.5.4). The project was then retroactively subjected to the City's development approval process. After the City's rigorous reviews of the project's WQTR, a Filterra unit was approved for treatment of onsite runoff.

Hydromodification Management Plan

During the reporting period the Copermittee Land Development Workgroup met to discuss Hydromodification Management Plan (HMP) development issues and provide updates on the status of consultant work products. The City of La Mesa continued participation in the workgroup meetings. The City incorporated the final regional HMP requirements into its

local development requirements in January 2011 and posted information about the new HMP requirements on its website to educate project proponents. These requirements have superseded the Interim Hydromodification Criteria (IHC) that were effective prior to that time.

All of the projects approved during 2011/2012 qualified for an HMP exemption, and were therefore not subject to HMP requirements. All projects currently under review are subject to the new hydromodification requirements unless they qualify for one of the exemption categories. This will be evaluated during review and reported in the applicable reporting period.

BMP Installation Verification

During the course of 2011/2012, after maintenance verification letters had been sent out during the summer of 2011, the City tracked PDPs within the City's jurisdiction completed during the remainder of the reporting period to be added to the treatment control BMP inventory. When a project is completed, the City checks for BMPs prior to occupancy, records the site information, assigns it a TTWQ priority, and then adds it to the inventory of projects subject to the City's inspection and annual maintenance verification program the following fiscal year. This process helps the City focus its inspection resources on sites more likely to have maintenance deficiencies, as maintenance deficiencies are generally less likely at sites with recently installed BMPs.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

2011/2012 Annual Maintenance Verification

The Municipal Permit requires annual verification of operation and maintenance of treatment control BMPs installed within the City's jurisdiction. Annual verification must be provided by the party responsible for treatment control BMP maintenance and must be returned to the City prior to the start of the wet season (October 1st). Using the property owner names and addresses recorded in the City's BMP database, BMP maintenance verification forms were mailed to all the projects included in the City's BMP database in early 2011/2012.

The City required that completed maintenance verification forms be returned no later than October 1, 2011. The City was able to obtain appropriate responses from every site on the inventory in 2011/2012. Out of the 18 projects on the City's inventory, five projects did not return their verification forms by the deadline and were issued NOVs in October 2011. After receiving NOVs, all sites promptly submitted the annual maintenance verification form.

Operation and Maintenance Inspections

During the 2011/2012 fiscal year, the City conducted inspections of projects with treatment control BMPs in accordance with the inspection frequencies outlined in the City's JURMP. Table 2-1 provides a summary of the number of inspections performed and how these met

the requirements of the Municipal Permit. All high TTWQ inspections were performed prior to October 1, 2011.

Table 2-1
Assessment of Compliance with Required Inspection Frequencies

Site Class	Number of Sites	Full BMP Assessments	Percent Inspected	Permit Requirement	Requirement Met
All Inventoried Sites	18	11	61%	20%	Yes
Sites with Drainage Inserts	9	5	56%	50%	Yes
High TTWQ	6	6	100%	100%	Yes

During full inspections, each BMP was visually assessed, GPS coordinates were recorded, and deficiencies were documented in writing and in photographs. Table 2-2 lists the development projects inspected, the number of BMPs installed at each site, the number of BMPs inspected, the number of BMPs found in need of maintenance, a brief description of inspection findings, and, if applicable, any follow-up actions taken. The BMP types installed at these sites and the TTWQ priority for each site is included in the City's treatment control BMP inventory, which is included in Appendix A.1 of this JURMP Annual Report. Further discussion of some of the inspection results and follow-up actions is provided in the text below.

Enforcement

Follow-up actions were recommended for all development projects with BMPs observed in need of maintenance. Since sites are notified by mail of deficiencies in BMP maintenance, with specific corrective actions listed, official verbal and written warnings are typically not used. The City has found that there is often significant turnover at property management companies responsible for BMP maintenance, and the City typically follows-up with non-responders by phone to verify that documents have reached the correct individual prior to issuance of an NOV. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP. The City follows up with any sites that fail to verify that the required corrective actions and regular BMP maintenance were conducted. The City issued five NOVs to projects failing to respond with appropriate maintenance verification documents and/or projects with deficiencies discovered during routine inspection. All deficiencies noted in the 2011/2012 reporting period have been resolved. An example of follow-up action and resolution is described below.

During the inspection at the Grossmont Medical Offices Building and Parking Structure at 8860/8870 Center Drive, multiple deficiencies were noted. Significant trash, debris, and sediment were observed in the drainage insert and vortex separator. Additionally, the vegetated swale had sparse vegetation and was not in working order. The City worked with the responsible party to verify that appropriate maintenance was conducted. The

maintenance verification letter was returned to the City, showing maintenance had been performed by the end of September 2011.

Copies of the forms utilized to administer the above enforcement actions can be found in Appendix D of the City's JURMP.

During the reporting period, no sites were observed to present a significant threat to human health or the environment during inspections, so none were reported to the RWQCB.

2.5 Development Planning Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 Program Review and Modification

The City's SUSMP requirements have been updated as described above in Section 2.2.4.

Table 2-2
Summary of Treatment Control BMP Inspection Results

#	Project Name	Inspection Date	TTWQ	BMP(s) Installed	BMP(s) Inspected	BMPs Requiring Maintenance	Inspection Notes	Follow-Up Notes	Resolution Status
1	Grossmont Trolley Theatre Conversion	8.23.2011	High	2	2	2	Significant trash, debris, and sediment were observed in both drainage inserts. One insert appeared to have a torn filter fabric.	Maintenance indicated on 9.26.2011 on verification form.	Resolved
2	Grossmont Medical Offices and Parking Structure	8.23.2011	Medium	3	3	3	Significant trash, debris, and sediment were observed in the drainage insert. Significant trash and debris accumulation was observed in the vortex separator. Vegetated swale had very sparse vegetation and was not in working order.	Maintenance indicated on 9.17.2011 and 9.26.2011 on verification form.	Resolved
3	Alterra/Pravada at Grossmont Trolley Apartments	8.23.2011	High	20	14	16 (including 6 not accessible downspout filters)	Downspout filters could not be accessed during inspection. Significant trash, debris, and/or sediment were observed in all drainage inserts.	Maintenance indicated on verification form. City conducted a re-inspection to verify maintenance.	Resolved

Table 2-2 (Continued)
Summary of Treatment Control BMP Inspection Results

#	Project Name	Inspection Date	TTWQ	BMP(s) Installed	BMP(s) Inspected	BMPs Requiring Maintenance	Inspection Notes	Follow-Up Notes	Resolution Status
4/5	County Library, La Mesa Branch and La Mesa Police Department	8.31.2011	High	5	1	1	Significant sediment was observed in the vortex separator.	Maintenance indicated on 12.2011 on verification form.	Resolved
6	La Mesa Fire Station #11	8.31.2011	High	1	1	1	Significant sediment and standing water was observed in storm screen.	Maintenance indicated on 2.15.2012 on verification form.	Resolved
7	Parkview	9.1.2011	Medium	17	17	1	Significant trash, debris, and sediment were observed in the drainage insert.	Maintenance indicated on verification form dated 11.2.2011.	Resolved
8	La Mesita (Belvedere)	9.1.2011	Medium	2	2	2	Significant trash, debris and/or sediment were observed in both drainage inserts.	Maintenance indicated on verification form.	Resolved
9	Eastridge Serramar	9.1.2011	Medium	3	3	2	Significant trash, debris, and sediment were observed in two vortex separators. An unpleasant odor was present as well at one separator.	Maintenance indicated on verification form.	Resolved

Table 2-2 (Continued)
Summary of Treatment Control BMP Inspection Results

#	Project Name	Inspection Date	TTWQ	BMP(s) Installed	BMP(s) Inspected	BMPs Requiring Maintenance	Inspection Notes	Follow-Up Notes	Resolution Status
10	Lowell Street Condominiums	9.1.2011	Medium	4	4	2	Significant trash, debris, and/or sediment were observed in two drainage inserts. Proper installation of one filter needed to be verified.	Maintenance indicated on verification form.	Resolved
11	Kaiser	9.12.2011	High	1	1	0	No maintenance deficiencies were observed during the inspection.	N/A	N/A

3.0 CONSTRUCTION

3.1 INTRODUCTION

The City's construction program is designed to control construction and grading activities in the City. These types of projects have the potential to impact nearby water bodies due to the presence of disturbed soils and building materials and the potential for associated pollutants to be transported off site by storm water or non-storm water flows. The City continued to implement its construction program throughout 2011/2012.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the construction component during the 2011/2012 reporting period are presented in the following bulleted list. The following subsections provide more detail on how the City complied with the Municipal Permit during the reporting period.

- Distributed appropriate checklists to all projects applying for grading and building permits.
- Conducted plan checks of erosion control plans to ensure construction projects comply with the City's minimum BMP requirements.
- Conducted two training seminars prior to the wet season on construction BMPs for applicable City staff in 2011/2012.
- Conducted 65 construction inspections at 27 sites during 2011/2012.
- Issued 10 verbal warnings, 6 written warnings, three NOVs, and one stop work order to construction sites and activities during 2011/2012.
- Required construction sites less than one acre to complete a Construction Storm Water Management Plan (CSWMP), similar to a Storm Water Pollution Prevention Plan, which details the planned construction phase BMPs for the project.

3.2 SOURCE CHARACTERIZATION

An inventory of active construction projects during the reporting period is presented in Appendix A.2 of this JURMP Annual Report. The City's inventory was maintained throughout the reporting period by the City's Engineering Division. New construction projects were added to the inventory at the start of construction, and projects were removed from the inventory after construction was completed. Inventory updates were completed once per month.

Since construction activities that involve grading activities are generally more of a threat to water quality than other construction activities such as tenant improvements, the City has chosen to include projects that have applied for grading permits on the construction inventory. Although other, smaller, construction projects are not included on the City's construction inventory; the City requires BMP implementation and maintains oversight of these projects. The City's building inspectors inspect these sites for proper BMP implementation during their routine building construction inspections. Building inspectors will notify the Engineering Division of the Public Works Department if any major BMP deficiencies are noted or if a facility is required to submit an application for a grading permit, and thus be included on the City's construction inventory. Inspections by the Building Department are not tracked by Storm Water Staff like the City's construction inspections, but these inspections are used as a supplemental tool to implement the City's construction storm water requirements.

3.3 Updates to Ordinances and Approval Processes

The City did not make any changes or updates to City ordinances during 2011/2012. However, the City revised the CSWMP, which is required to be completed by construction sites not subject to the State of California General Construction Permit (Construction Permit). Additionally, Capital Improvement Program (CIP) projects are now required to submit CSWMP plan sheets for approval through the Virtual Project Manager website. This requirement facilitates the process of issuing penalties for poor BMP implementation and withholding payment to those contractors involved in the CIP projects.

3.4 Best Management Practice Requirements

The City's current construction and grading project requirements are detailed in the City's current BMP Manual Part II, which can be found as Appendix C in the City's JURMP and Attachment 2.1. The City did not make any changes to these BMPs during 2011/2012.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below.

3.5.1 Education and Staff Training

During 2011/2012, City staff involved in construction program implementation was trained on dry weather and wet weather requirements, erosion control, material management BMPs, enforcement action and procedures. Please see Section 8 of this JURMP Annual Report document for details on trainings performed and construction-related educational materials distributed.

3.5.2 Construction and Grading Approval Process

The City's grading approval process is described thoroughly in Section 5 of the City's JURMP. During 2011/2012, City personnel verified that all construction projects planned to implement the City's minimum BMP requirements prior to issuing any building or grading permits. The City continued to distribute Appendix A, which helps the City and the project proponent identify whether coverage under the Construction Permit is needed. Appendix A was not updated during 2011/2012. Additionally, the City continued to require construction projects that are not subject to the Construction Permit to complete a CSWMP, which details BMPs planned for construction sites not required to develop a storm water pollution prevention plan (SWPPP). A copy of the City's updated CSWMP form is included as Attachment 3.1. Approved forms and documents completed by project proponents are kept with the each project's file at the City for reference.

During 2011/2012, the City continued to enforce a 17 acre maximum disturbed area for grading activities. None of the City's active construction sites were larger than 17 acres, and the maximum disturbed area limitation did not apply. However, all construction sites were still required to limit exposed cleared or graded areas to the amount of area that could be protected prior to a rain event, as prescribed in the City's seasonal BMP requirements.

The City also continued implementing advanced treatment requirements during the reporting period. Criteria for determining when advanced treatment is required are detailed in the City's JURMP. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites within the City's jurisdiction, and advanced treatment methods were not required at any construction sites.

3.5.3 Inspection of Construction Sites

Construction projects that were active during 2011/2012, along with their assigned TTWQ, the number of weeks the site was active during the rainy season, the number of inspections conducted during wet and dry seasons, and the total number of inspections for each site are included in Appendix A.2. A total of 65 routine construction inspections were performed at 27 construction sites during 2011/2012.

Construction inspections conducted during the reporting period were performed as described in the City's JURMP. Key components of the inspections include checks for coverage under the Construction Permit during the initial inspection and assessment of compliance with the City's BMP and discharge requirements. Responsible parties at the sites are educated as needed during inspections. Copies of the inspection forms are kept on file at the City.

3.5.4 Enforcement Measures

Any violations were noted on the project's inspection form, and the sites were given a list of corrective actions necessary to fix the observed violations. When necessary, a verbal or

written warning was issued for the violation, and the City followed up with the site until compliance was achieved. Table 3-1, below, includes the number of violations and enforcement actions taken during the reporting period in response to violations of the City's minimum construction BMP requirements. Enforcement actions are administered in an escalating manner as described in the City's JURMP. Copies of the forms utilized to administer enforcement actions can be found in Appendix D of the City's JURMP.

Table 3-1
Construction Enforcement Actions Taken

Enforcement Context	Verbal Warnings	Written Warnings	NOVs	Stop Work Orders
Routine Inspections	10	6	3	1

During the reporting period, one stop work order was issued to the Big Lots Parking Lot project (referred to as Park Lot Slurry and Water Quality in Appendix A.2). City staff determined that the project was active without the necessary permits and water quality controls, and required the site to stop work immediately. City staff met with the responsible party and retroactively subjected the project to the City's development approval process. The project applied for the appropriate permits and submitted a Water Quality Technical Report as required for Priority Development Projects. Refer to Section 2.4.4.2 for additional details.

None of the violations observed at construction sites during the reporting period were found to endanger human health or the environment. The City was able to bring about compliance at all sites for which enforcement actions were taken, and it was not necessary to report any of these sites to the RWQCB.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 Program Review and Modification

The City's JURMP was updated in March 2008. No significant changes to the City's construction component have been made since that time.

4.0 MUNICIPAL COMPONENT

4.1 INTRODUCTION

Throughout the 2011/2012 reporting period, the City managed municipal areas and activities to reduce municipal discharges of pollutants to the MS4 to the MEP. As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and conducts various municipal activities. Public parks and recreation facilities, administrative buildings, fire stations, and public works facilities make up the bulk of the municipal facilities in the City. Municipal activities conducted by the City or City contractors include power washing, graffiti abatement, building maintenance, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. Additionally, the City continued to respond to complaints made to the City's Storm Water Hotline. All complaints made to the City's Storm Water Hotline are included in Appendix B.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the 2011/2012 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the municipal component and of its storm water program during the reporting period are provided in the remainder of Section 4.

- The City inspected all high TTWQ fixed municipal facilities.
- Municipal personnel participated in several training seminars and meetings.
- The City maintained an informational storm water bulletin board in City Hall.
- The City removed a total of 526.12 tons of sediment and debris from street sweeping activities.
- The City removed approximately 263 cubic yards of sediment and debris from standard MS4 cleaning activities, not including drainage insert maintenance.
- The City removed over 12.5 cubic yards of sediment and debris from filter inserts maintained by the City.
- City personnel continued to restock the pet waste bag dispensers in City parks, using approximately 22,500 pet waste bags during 2011/2012.
- A total of 25,214 linear feet of sewer line were televised during 2011/2012, which led to the discovery of some areas of the sanitary sewer in need of repair. The City also replaced or rehabilitated 2,451 linear feet of sanitary sewer line.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities. As mentioned in the City's JURMP, municipal fixed facilities have been grouped under one category, fixed facilities. This is because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar.

4.2.2 SOURCE CHARACTERIZATION

All fixed facilities are included on the City's municipal inventory; descriptions of the facilities and activities can be found in the City's JURMP. The City's inventory is included in this JURMP Annual Report as Appendix A.3. The designations of pollutants potentially generated by municipal facilities on the inventory are based on the pollutant loading potentials shown in Table 6-1 of the City's JURMP. TTWQ prioritizations are assigned via the process laid out in the flow chart shown in Figure 6-1 of the City's JURMP.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City continues to implement and assess the effectiveness of BMPs at fixed municipal facilities. As mentioned in the City's JURMP, the City uses the California Stormwater Quality Association (CASQA) Municipal BMP Handbook to establish appropriate BMPs for fixed municipal facilities. Table 6-2 in the City's JURMP describes the CASQA fact sheets that are used for specific facility types.

The City continues to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. The City also continues to use Calsense Computerized Irrigation Control (Calsense) at a number of fixed municipal facilities to reduce water use and decrease the chance of transporting pollutants to the City's MS4 by over-irrigation. BMP implementation for parks and recreational facilities, as described in the City's JURMP, has not changed.

City public works employees, fire station employees, and employees at other fixed facilities in the City continue to implement BMPs appropriate to the facility type as described in the City's JURMP. City fire response personnel continue to be trained in implementing BMPs for non-emergency fire fighting activities as described in Section 3 of the City's JURMP. There have been no changes in BMP requirements for any fixed municipal facilities.

4.2.4 PROGRAM IMPLEMENTATION

As mentioned above, the City's BMP requirements have not changed since the development of the revised JURMP. Some notable examples of implementation of those BMPs are provided below.

Calsense Computerized Central Irrigation Control

The City continues to use Calsense, an advanced automated irrigation system designed to prevent over irrigation at several fixed municipal facilities. Since Calsense is automated, it has a lower chance of malfunction than manual irrigation systems and allows the City to monitor irrigation activity from a central computer. A total of 24 municipal facilities, including both parks and various fixed facilities, are equipped with Calsense technology.

The Calsense system monitors irrigation by including the use of master valves and flow sensors to prevent over-irrigation and also decrease the amount of water that is used. A break in the system is recognized as a high flow, and the system is shut off until it is repaired. The use of this technology allows the City to prevent major leaks by the early detection of smaller leaks. The automatic shut-off by Calsense saves thousands of gallons of water and prevents the runoff generated by a leak from carrying pollutants from parks and other fixed municipal facilities to the storm drain system. The irrigation system can be controlled by a central computer, which calculates the best time for irrigation based on moisture readings, weather, and real time flow rates at every valve. Additionally, the system allows staff to manage it more efficiently and with less chance of over-irrigation. The irrigation schedules can be designed for a long period of time or easily modified for weekly or daily needs if necessary. The system allows for the most efficient usage of water while minimizing the chance of over-irrigation and consequent introduction of pollutants to the City's storm drain system.

Parks and Recreational Facilities

During 2011/2012, the City continued to maintain 38 pet waste bag dispensers installed throughout 14 parks. City personnel restock the dispensers as necessary; approximately 22,500 pet waste bags were used during the reporting period. As mentioned in the City's JURMP, a number of volunteers continue to assist in keeping the designated dog area at Harry Griffen Park free of pet waste as part of the Canine Corners Program. The City also continues to host the Adopt-A-Park program, which engages residents of the City in volunteering to pick up trash throughout local parks. In 2011/2012, the Adopt-A-Park program sponsored several events at various locations and welcomed six new volunteer groups. The City continued its partnership with the St. Madeline Sophie's Center, which employs developmentally disabled individuals in park maintenance activities.

During 2011/2012, the City maintained the informational kiosks in four City parks: La Mesita Park, Vista La Mesa Park, and Jackson Park, and Harry Griffen Park. These kiosks present storm water pollution prevention information to park patrons and are updated with information regarding upcoming outreach events. The Adopt-A-Park program, the partnership with St. Madeline Sophie's Center, and the storm water kiosks are also discussed in Section 9 of this Annual Report.

As previously mentioned, the City continued to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. In 2011/2012, the City used 3.5 tons of fertilizer, 75.2 gallons of herbicide, and 9 pounds of pesticides.

Public Works Facilities, Fire Stations, Other Fixed Facilities
As previously mentioned, City personnel continued to implement appropriate BMPs for municipal fixed facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance (i.e. landscaping, building maintenance, etc.) as necessary. Parking facilities associated with fixed municipal facilities are included as part of the regular sweeping activities and were swept weekly during 2011/2012. The large paved area at the City's Public Works Operation Center was swept at least once weekly during 2011/2012, and twice weekly if needed. Public Works employees continued to implement the storm water management plan at the Public Works Operations Center. Public Works employees also continued to maintain the seven filter inserts on the property; these inserts are cleaned twice annually. Additionally, the City performed additional periodic inspections at the Public Works Operations Center to ensure compliance is achieved year round. Corrective actions were relayed to the superintendent who then coordinates the cleanup/remedy.

Municipal Inspections
All high TTWQ fixed municipal facilities received a routine annual inspection in 2011/2012. Table 4-4 at the end of this section lists all high TTWQ municipal fixed facilities requiring inspection in 2011/2012, the date the inspection was performed, and the recommended corrective actions from the inspection. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2011/2012. The City's municipal inspection form is included as Attachment 4.1.

Six municipal facilities were recommended for follow-up during 2011/2012: Collier Park/Pump House, MacArthur Park, Porter Hall, Public Works yard, Sunset Park/Gardener's Shack and Recreational Building, and Sunshine Park. Since the inspections were conducted near the end of the 2011/2012 reporting period, confirmation that the corrective actions required to achieve full compliance were completed will be assessed in 2012-2013.

4.3 Roads, Streets, Highways, and Parking Facilities

4.3.1 Background

The City conducts regular maintenance of roads, streets, highways, and parking facilities in the City to control pollutants such as sediment, metals, and litter and debris.

4.3.2 Source Characterization

The City maintains roads, streets, and highways; the City also maintains four stand-alone parking facilities. Roads, streets, and highways, are included as one entity on the City's municipal inventory and each individual stand-alone parking facility is also included on the City's municipal inventory, which is included in Appendix A.3.

4.3.3 BEST MANAGEMENT PRACTICES

The City's primary BMP for roads, streets, highways, and parking facilities is street sweeping. Other BMPs are chosen as needed based on the CASQA Municipal Handbook. The City's sweeping frequency is outlined in the JURMP and described in the following subsection. There were no changes to the BMPs implemented for roads, streets, highways, and parking facilities in 2011/2012.

4.3.4 PROGRAM IMPLEMENTATION

During 2011/2012, the City swept a total of 9,038 curb miles, removing approximately 526.12 tons of debris. Similar to previous reporting periods, the debris removed by sweeping activities was approximately 80 percent sediment and 20 percent leaves, debris, and trash. Table 4-1, below, describes the areas assigned high, medium, and low sweeping priorities, and the associated sweeping frequency. The City met the Municipal Permit sweeping frequency requirements of the high, medium, and low priority streets as described in both the table below and in the JURMP. Parking lots associated with City parks were swept every two weeks; parking lots associated with all other fixed facilities in the City were swept every week during 2011/2012.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
High	Downtown areas, designated residential areas, designated commercial areas, four stand-alone parking facilities	10.6 miles	At least every two weeks
Medium	Center islands	9 miles	At least once per month
Low	Designated residential areas	140 miles	As needed, at least annually
Fixed Facilities	Eleven parking lots associated with municipal fixed facilities	N/A*	Weekly
Fixed Facilities - Parks	Twelve parking lots associated with parks	N/A*	Every two weeks
Fixed Facilities – PW Operations Center	Public Works Operation Center, including the two parking lots	N/A*	At least weekly, twice weekly if needed
Total Amount of Debris Collected from Street Sweeping Activities: 526.12 tons			

* Mileage data is not available for the swept area of stand-alone parking facilities, parking facilities associated with municipal facilities, and the PW Operations Center. Mileage accrued while sweeping these facilities is included in the total mileage.

As a means to address priority pollutants in the San Diego Bay and the San Diego River Watersheds, the City continued to conduct additional sweepings of some City streets. Designated residential areas that are low priority were actually swept monthly during 2011/2012 and selected high priority streets were actually swept weekly.

Inspections
Trash, debris, and sediment that have accumulated on City streets are identified and cleaned up via street sweeping, so additional inspections beyond this effort are not necessary.

4.4 MS4

4.4.1 Background

The City's storm water conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during rain events. The City's MS4 consists of approximately 56 miles of pipes of varying materials, natural channels, concrete channels, and culverts and over 400 curb inlets and catch basins.

4.4.2 SOURCE CHARACTERIZATION

The City's MS4, as one complete entity, is included on the City's high TTWQ municipal inventory.

4.4.3 BEST MANAGEMENT PRACTICES

The City maintains a strict MS4 maintenance and cleaning schedule in order to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. As described in the City's JURMP, BMPs for MS4 maintenance activities are chosen based on the CASQA Municipal Handbook and have not changed during 2011/2012.

The City has installed and maintains 21 filter inserts in catch basins in the University drainage basin, which are designed to prevent debris from entering the MS4. These filter inserts are maintained as part of the routine MS4 maintenance schedule. Figure 4-1 shows the locations of these drainage inserts.

During 2009/2010, two Filterra Bioretention System units were installed at Orien Avenue at Lowell Street. The manufacturer's warranty included maintenance for the first two years, and now the City's Public Works employees maintain the units twice per year, once prior to the rainy season. These two Filterra Bioretention System units are located in the University drainage basin and are included with the drainage inserts in Figure 4-1.

4.4.4 PROGRAM IMPLEMENTATION

The City implemented a rigorous MS4 inspection and cleaning schedule during 2011/2012. The City inspected and cleaned all MS4 cleanout locations twice in 2011/2012; at least one cleaning was conducted between May 1 and September 30. The City's MS4 inspection and cleaning data for 2011/2012 is shown in Table 4-2.

Table 4-2
MS4 Maintenance Data

	Percent Inspected and/or Cleaned*	Percent of Open Channels Found with Anthropogenic Litter Cleaned	Amount of Debris Removed from Cleaning Activities
Catch Basins/Self Cleaning MS4 Facilities	100%	N/A	143 cubic yards
Open Channels	100%	100%	120 cubic yards
Drainage Inserts	100%	N/A	12.5 cubic yards
Filterras	100%	N/A	0 cubic yards
Total Debris Removed From MS4 Maintenance Activities: 275.5 cubic yards or 74.4 tons			

* No structures were observed at least 33% of capacity during the reporting period. However, the City cleans out any structures, including self-cleaning structures, in which trash and debris is observed at the time of inspection.

The City's cleanout locations are access points to various sections in the City's MS4, so no additional pipe beyond the cleanout location is typically cleaned. The City may flush the MS4 line and then reclaim the water in the event of a spill. During 2011/2012, there was no need to flush any MS4 line, so there is no data to report for additional MS4 cleanout activities. As previously mentioned, the City continued to maintain the filter inserts installed in the University drainage basin.

During 2011/2012, the City continued to inspect the open channels in the City and remove trash and debris as necessary. If litter or debris is observed during the routine inspections, it is removed immediately. The total length of the channel segments inspected and cleaned by City staff was approximately 4,930 feet.

As described in Table 4-2, approximately 275.5 cubic yards of debris was removed during MS4 maintenance activities. The weight of the material removed was not recorded, though an overall estimation of the composition of debris removed from MS4 maintenance activities is 80 percent trash and leaves and 20 percent rocks and soil. The volumes were converted to estimated weights using the percent composition estimates from City maintenance staff and conversion factors of 2,300 pounds per cubic yard of rocks and soil and 400 pounds per cubic yard of trash, leaves, and similar material. The total weight of material removed was estimated at 74.4 tons.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. A spill that introduces untreated sewage to receiving waters can contain high concentrations of

bacteria, viruses, and even hazardous chemicals. Routine inspection and maintenance of the sanitary sewer system works to reduce the potential for a spill or SSO and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 Source Characterization

The City maintains a system of public sanitary sewer pipes to convey wastewater from the City to be treated. The sanitary sewer system, as one complete entity, is included on the City's high TTWQ municipal inventory.

4.5.3 Best Management Practices

The City implements BMPs from the CASQA Municipal Handbook, as described in the City's JURMP, during sanitary sewer maintenance. There have been no changes to these BMPs during 2011/2012. The City inspects and maintains the sanitary sewer system as part of regular wastewater activities. The City clears blockages and repairs leaks as needed.

4.5.4 Program Implementation

As part of the City's regular maintenance schedule, the City maintains areas known to be "hot spots" for grease buildup on a monthly basis. During 2011/2012, the City continued to implement a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs. Additionally, the City's FOG Ordinance, No. 2009-2794 and 2009-2795, went into effect on July 1, 2009. The FOG Ordinance provides legal authority for the City to regulate grease producing facilities and outlines specific details of the program. During 2011/2012, the City conducted FOG inspections at FOG facilities and will continue to conduct FOG inspections during 2012/2013. The City also will enforce any storm water violations noted during FOG inspections.

In addition to the monthly maintenance at known grease "hot spots," the City seeks to eliminate seepage from the sanitary sewer system to the MS4 by routine preventative maintenance of both systems. Routine maintenance of both systems allows the City to find areas that are likely to become problems in the future and make the necessary repairs/replacements before any larger issues arise. A total of 25,214 linear feet of sewer line was televised during 2011/2012 in order to find and repair any areas where seepage could occur. The City also continued to conduct flow metering in its sanitary sewer system to monitor for evidence of potential problems. During 2011/2012, the City replaced or rehabilitated 2,451 linear feet of sewer line. The City is awaiting final decisions regarding funding for a subsequent phase of the State Revolving Fund loan program in order to conduct wastewater infrastructure upgrades. The City has completed California Environmental Quality Act and engineering documentation for these future projects; however the funding process has been delayed. The City is hopeful that funding will be secured in 2012/2013.

In case of an SSO, the City maintains a spill response plan that establishes procedures for responding to an SSO. Detailed information about the City's SSO spill response plan is included in the City's JURMP. Spills were reported to the RWQCB within 24 hours through the California Integrated Water Quality System, as required by the Municipal Permit.

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City conducts a variety of different mobile municipal activities, typically involving infrastructure maintenance, landscape maintenance, graffiti removal, and power washing. Power washing is not considered a part of any normal maintenance activities, but it is used when other methods of cleaning or graffiti removal are not effective.

4.6.2 Source Characterization

Both power washing and graffiti removal are listed on the City's high TTWQ municipal inventory. Infrastructure maintenance and landscape maintenance are listed on the City's medium TTWQ municipal inventory.

4.6.3 Best Management Practices

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel are trained to implement BMPs for the specific activity in which they are involved. For example, City personnel performing power washing are trained to collect all waste water and City personnel conducting graffiti removal are trained to store and handle any chemicals properly.

4.6.4 Program Implementation

Power washing and graffiti removal, both high TTWQ activities, are conducted on an as needed basis and are therefore not on a set schedule. Neither power washing nor graffiti removal was scheduled to be conducted during the timeframe that routine municipal inspections were conducted. Facility personnel responsible for graffiti removal and power washing have been trained and are aware of the BMPs necessary for each activity to prevent discharge to the MS4. Water produced by these activities is either directed to landscaping or storm drains are blocked and water is vacuumed up once the project is complete.

Municipal personnel that conduct other mobile activities such as infrastructure maintenance and landscape maintenance are trained regularly regarding BMPs for material use and disposal. Emergency vehicle maintenance personnel are trained on the proper handling and use of pesticides, herbicides, and fertilizers as described in the City's JURMP.

4.7 Special Events

4.7.1 Background

The La Mesa Oktoberfest is the only priority designated annual special event that occurs in the City. Oktoberfest is a three-day celebration occurring in early October. There are no other regular major special events, although smaller events may occur on occasion.

4.7.2 Source Characterization

As required by the Municipal Permit, special events are included on the city's high TTWQ municipal inventory.

4.7.3 Best Management Practices

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter/debris from the event, and raise storm water awareness among the vendors and patrons of the event, as applicable. During smaller events, City staff ensure that any trash and debris left over from the events is cleaned up.

4.7.4 Program Implementation

Individuals or groups interested in hosting events in the City are required to obtain a permit from the City, if applicable. Both Community Assembly Permits and Block Party Permits are available from Public Works and Park Use Permits are available from the Community Services Department. Permits require individuals responsible for the event to control trash and clean up after the event. If vendors are anticipated at the event, the "Tips for Outdoor Vendors" fact sheet (Attachment 8.1) is provided to the permit applicant.

During 2011/2012, the City provided "Tips for Outdoor Vendors" to the vendors of the Oktoberfest event. This fact sheet informed the vendors of the difference between the storm drain system and the sanitary sewer system and the effects of polluted urban runoff. The sheet also included event-specific BMPs, such as using dry cleaning methods, having spill response materials if using cooking grease, and managing trash and other wastes properly. The City distributed approximately 50 copies of the aforementioned fact sheet.

On the Monday following the three-day Oktoberfest event, the City conducted a post inspection of the area where the event took place. Minor amounts of litter and debris were observed, which were cleaned up as part of the routine special event BMPs.

4.8 Public Reporting of Illicit Discharges and Connections

Reporting and Response

Public and municipal involvement is crucial to preventing and eliminating Illicit Connections and Illicit Discharges (IC/IDs) from the MS4. The Storm Water Hotline

provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is provided on the City's website, in distributed storm water educational material, in storm water articles in the *La Mesa Focus* newsletter, and on the Storm Water Bulletin Board. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged onto a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges. The Public Works Department also receives complaints regarding storm water, often due to infrastructure concerns. Complaints to the Public Works Department are also tracked and investigated.

Complaints received by the City during the 2011/2012 reporting period and the City's response to each are listed in Appendix B. A total of 119 complaints were documented this year.

Enforcement

As previously stated, complaints received via the Storm Water Hotline, City website, and Public Works Hotline are included in a table in Appendix B. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, violations, and/or educational material. Table 4-3, below, summarizes the enforcement actions taken in response to complaints received.

Table 4-3
Enforcement Actions Resulting from Complaints Received by the Storm Water Hotline

	Educational Material Distributed	Verbal Warning	Compliance/ Enforcement Letter	Written Warning	NOV
Commercial	2	0	4	0	2
Industrial	0	0	0	0	0
Mobile	0	0	0	0	0
Municipal	0	0	0	0	0
Residential	3	1	10	3	5
Construction	0	1	0	0	0

Note: Hotline calls received that are not represented in this table were able to be resolved without requiring formal enforcement means. Generally, formal warnings, enforcement letters, and violations are issued if a discharge is observed or facilitating responsible party action requires higher levels of enforcement.

4.9 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to sanitary sewer overflows. Preventative maintenance is regularly conducted on the City's sanitary sewer system, and video inspections and sewer surveys are regularly conducted to monitor the condition of the public sewer lines and to determine the necessity of maintenance. City

crews do not maintain private laterals, but the City assists in the containment and cleanup of spills from private laterals if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report any SSOs to the City's Storm Water Hotline. Additional information regarding the City's mitigation efforts for the SSOs can be found in the technical report that was submitted to the RWQCB during 2011/2012.

4.10 Education and Outreach

During 2011/2012, the City continued to educate municipal personnel regarding proper BMP implementation and other storm water and watershed concepts. The City held a variety of training sessions for City personnel. The City also continued to maintain a storm water bulletin board in City Hall, which provided storm water information and brochures.

Detailed information regarding the education and outreach conducted for City personnel is described in detail in Section 8 of this Annual Report.

4.11 Municipal Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.12 Program Modification and Review

The City's JURMP was updated in March 2008. No changes to the City's municipal component have been made since that time.

Table 4-4
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
1	Allison Avenue Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	6.20.12	None	N/A	N/A
2	Aztec Park	High	Parks and Recreation Facilities	6.6.12	None	N/A	N/A
3	Briercrest Park	High	Parks and Recreation Facilities	6.19.12	None	N/A	N/A
4	Collier Park and Pump House	High	Parks and Recreation Facilities	6.21.12	Vegetative debris is a major concern on this site. Concrete channel in the middle of the park is full of debris and it is creating a blockage at the bridge in the middle.	Parks Maintenance Notified	Re-Assess in 2012-2013
5	Community Pool	High	Parks and Recreation Facilities	6.28.12	None	N/A	N/A
6	Harry Griffen Park	High	Parks and Recreation Facilities	6.19.12	None	N/A	N/A
7	Highwood Park	High	Parks and Recreation Facilities	5.31.12	None	N/A	N/A
8	Jackson Park	High	Parks and Recreation Facilities	6.18.12	None	N/A	N/A
9	Junior Seau Sports Complex	High	Parks and Recreation Facilities	6.21.12	None	N/A	N/A
10	La Mesa Blvd (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	6.11.12	None	N/A	N/A
11	La Mesita Park and Gardener's Shack	High	Parks and Recreation Facilities	6.18.12	None	N/A	N/A

Table 4-4 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
12	Lemon Ave Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	6.11.12	None	N/A	N/A
13	MacArthur Park	High	Parks and Recreation Facilities	6.12.12	Trash needs to be picked up along the northern fence and around the bullpen.	Parks Maintenance Notified	Re-Assess in 2012-2013
14	Northmont Park	High	Parks and Recreation Facilities	6.6.12	None	N/A	N/A
15	Palm Avenue Lot (Parking Facility)	High	Roads, Streets, Highways, and Parking Facilities	6.7.12	None	N/A	N/A
16	Porter Hall	High	Parks and Recreation Facilities	6.12.12	Lids should remain closed on the dumpster.	Parks Maintenance Notified	Re-Assess in 2012-2013
17	Porter Park	High	Parks and Recreation Facilities	6.12.12	None	N/A	N/A

Table 4-4 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
18	Public Works Facility	High	Public Works Facilities	10.26.11	1) Catch basin at west end along the wall (across from sign shop) needs maintenance. The inlet filter appeared to be in good condition but basin was full of trash and debris and needed to be cleaned out. 2) Area where the paver is kept has improved but drip pans should be used under the truck because a leak was observed. Any spills should be cleaned up immediately. 3) Most stockpiles adjacent to the drying bed area have been covered but the plastic could be secured better. Broken asphalt and dirt needs to be covered. Areas around containment should be swept as needed; significant dirt and sediment was observed. 4) Materials and debris that are located by the storage container in the middle of the yard need to be properly thrown away if they are empty, or kept under cover. 5) White sand/silt was observed at the north end of the yard and should be swept up.	PW Operations Superintendent Notified.	Re-Assess in 2012-2013
19	Rolando Park	High	Parks and Recreation Facilities	6.26.12	None	N/A	N/A
20	Sunset Park, Gardener's Shack and Recreational Building	High	Parks and Recreation Facilities	5.31.12	Slope along the northwest side of the park is contributing large amounts of sediment into the paved parking lot and cross gutters.	Parks Maintenance Notified	Re-Assess in 2012-2013

Table 4-4 (Continued)
Routine Municipal Inspection Results

#	Facility Name	TTWQ	Municipal Category	Inspection Date	Corrective Actions Needed	Follow-Up Steps Taken	Resolution Status
21	Sunshine Park	High	Parks and Recreation Facilities	6.15.12	Leaves and debris along the south and west sides of the park are a significant problem. Part of the issue is located on the opposite side of the fence and may be the responsibility of the resident.	Parks Maintenance Notified	Re-Assess in 2012-2013
22	Vista La Mesa Park	High	Parks and Recreation Facilities	6.26.12	None	N/A	N/A

Note: Roads, streets, highways, parking lots, the MS4, and the sanitary sewer system were inspected via the maintenance effort described earlier in this section.

Figure 4-1
City Maintained Treatment Control BMPs Installed in the University Drainage Basin

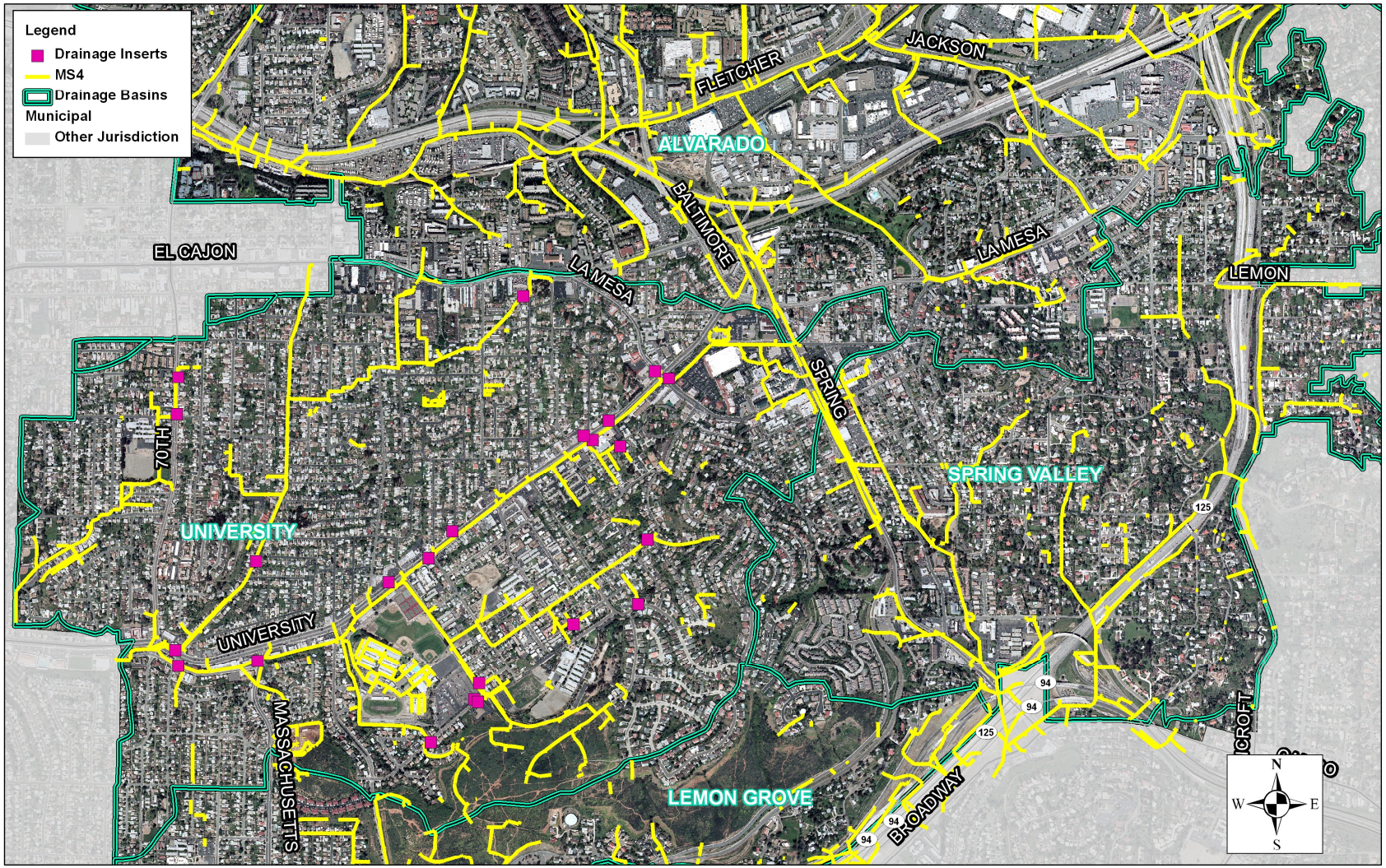

Base Data Sources: City of La Mesa, SANDAG, SanGIS

0 0.2 0.4 0.8 Miles

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During 2011/2012, the City continued to implement a storm water program to reduce urban runoff pollution from the areas and activities of industrial and commercial businesses. The City aims to reduce the amount of pollutants discharged from industrial and commercial facilities by implementing various aspects of its industrial and commercial program.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Notable achievements for the industrial and commercial component during the 2011/2012 reporting period are outlined below. Additional details about the City's implementation of the industrial and commercial component and of its storm water program during the reporting period are provided in the remainder of Section 5.

- The City met the Municipal Permit requirement of inspecting at least 25 percent of its stationary industrial and commercial inventory.
- The City inspected all high TTWQ stationary industrial and commercial facilities.
- The City completed pollutant discharge potential assessment (PDPA) forms and additional watershed-specific questionnaires at inspections to aid watershed management and source identification efforts.
- The City continued to conduct brief re-inspections at sites with minor violations to achieve full compliance in a timely and efficient manner.
- In 2011/2012, the City conducted an outreach effort to small car lots where auto detailing was done and distributed mobile washing pamphlets explaining storm water regulations and proper BMP implementation.
- Based on inspection findings and complaints made to the Storm Water Hotline, the City took enforcement actions against industrial and commercial businesses, as necessary.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 BACKGROUND

The City's updated industrial and commercial inventories can be found in Appendix A.4 and include all stationary facilities known to be operating in the City that are required to be included on the City's inventories. Stationary facilities in the City include, but are not limited to, manufacturing facilities, wholesalers, auto dealerships, auto repair shops, and restaurants. The City requires industrial and commercial businesses to implement pollution

prevention measures and minimum, activity-specific BMPs to mitigate the impacts of business activities on water quality.

5.2.2 Source Characterization

The City's industrial and commercial inventories include both stationary and mobile businesses, as required by the Municipal Permit, and were updated during 2011/2012. The City's updated inventory includes 367 stationary industrial and commercial facilities.

Information on how the City prioritizes the industrial and commercial inventories based on TTWQ is discussed in detail in the City's JURMP. The City considers the following factors when prioritizing the inventories:

- Industrial Permit subjectivity
- Consideration of downstream water bodies and whether the business is likely to discharge pollutants for which the water body is impaired
- Results from previous inspections and institutional knowledge
- Proximity to the receiving water body

In August 2011, the City received comments from Coastkeeper indicating that information could not be located regarding pollutants potentially generated by inventoried businesses, the identification of which businesses may discharge to impaired water bodies, and the businesses most likely generating pollutants for which the receiving water bodies are impaired. As presented in the 2010/2011 JURMP Annual Report, the City's 2011/2012 industrial and commercial inventory in Appendix A.4 clearly shows this information. Additionally, the City continues to conduct PDPAs during routine site inspections, and utilizes a numeric scoring system to quantify the level of discharge potential. Site-specific information is reflected on the updated inventory where applicable.

5.2.3 Best Management Practice Requirements

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other designated BMPs to reduce or potentially eliminate the generation of pollutants from business areas and activities. The City has established a set of minimum BMPs based on the CASQA Industrial and Commercial Handbook. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. The City's BMP requirements are described in more detail in the City's BMP Manual Part I, which is an attachment to the City's JURMP. BMP requirements for stationary industrial and commercial businesses did not change during 2011/2012.

5.2.4 Program Implementation

As previously mentioned, the City updated its industrial and commercial inventory during 2011/2012. The updated industrial and commercial inventories are included as Appendix A.4, to this JURMP Annual Report.

Industrial and Commercial Inspections

During 2011/2012, the City conducted storm water compliance inspections at selected stationary industrial and commercial facilities. All high TTWQ sites were selected for routine inspection. Additional sites selected for routine inspection were selected randomly, with consideration for sites with previous issues that had not recently been inspected.

Table 5-1 provides a summary of the industrial and commercial site visits. In the table, full inspections have been counted as one full inspection. Because facilities move/go out of business, are duplicates of other businesses listed on the City's inventory, or are conducting activities for which inclusion on the City's inventory is not necessary, full inspections are not conducted at all visited facilities. Since time and effort are required to visit these facilities, visits where a full inspection is not conducted are considered equivalent to one half of a full inspection. The only time a site visit would not count as half of a full inspection is if the facility moved and was replaced by a facility where a full inspection was conducted or if the facility was a duplicate of another facility selected for inspection.

Table 5-1
Summary of Routine Site Visits

Facility Category	Inventoried Stationary Sites	Equivalent Full Inspections*	Percentage of Total Inventory
High TTWQ Sites	36	35**	9.5%
Additional Sites	332	57	15.5%
Totals	**367**	**92**	**25.0%**

* "Equivalent Full Inspections" includes full inspections and also counts at 50 percent value the site visits where a full inspection could not be conducted but where effort was taken to document the visit and update the inventory. It does not include any businesses that were duplicate listings of other inspected facilities or facilities replaced by other businesses inspected during the reporting period.
** One high TTWQ facility, Rainbow Steel Inc., is no longer conducting business within the City, however the existing site was still inspected in 2011/2012 in order to evaluate site conditions and corrective actions were communicated to the property owner.

Facility inspections were conducted in accordance with the protocol set in the City's JURMP. Inspections involved a thorough examination of the facility and all outdoor activities. BMP deficiencies and corrective actions were recorded on the City's industrial and commercial inspection form and discussed with facility personnel present during the inspection. Businesses were given a copy of corrective actions at the time of inspection.

During the inspection process, the City also checked Industrial Permit compliance status when applicable. The City also reviews SWPPPs and monitoring results when applicable. Furthermore, the City completed PDPA forms and supplemental watershed questionnaire forms during the inspections in an effort to collect more data from inspected facilities. These forms are included with the City's inspection form, which is included in Attachment 5.1.

During 2011/2012, the City conducted the following inspections:

- Follow-up inspections at sites not in compliance in 2010/2011
- Routine inspections for 2011/2012
- Brief re-inspections at sites with minor violations during routine 2011/2012 inspections

Follow-up inspections conducted in 2011/2012 are included in Table 5-2. Results of full routine inspections conducted in 2011/2012 are included in Table 5-3.

In 2010/2011, a minor re-inspection form was developed to document a no-fee inspection that is completed within 48 hours of the initial inspection. These are for minor issues that do not warrant a full fee-imposed re-inspection (e.g. small amounts of trash). These inspections are still categorized as a failure to comply and re-prioritized as such. The purpose of this minor re-inspection form is to get small issues corrected quickly. If the issues are not corrected within 48 hours, then a full re-inspection is required. Facilities where minor re-inspections were completed and a full re-inspection was not required have a correction status of "Completed" in Table 5-3. The conditions at three facilities inspected at the end of the reporting period warranted a full re-inspection, and the City's follow-up and enforcement activities at these sites will continue into 2012/2013. These sites have a correction status of "In Progress" in Table 5-3.

One of the two facilities recommended for follow-up during 2010/2011 was observed to be in compliance during the follow-up inspection conducted in 2011/2012. This site received a routine inspection subsequent to the follow-up inspection to confirm continued compliance with City requirements during which it was determined that the business was no longer in operation. The other facility recommended for follow-up during 2010/2011 was out of compliance during the 2011/2012 follow-up and routine inspections but continues to show effort and improvement. The City is committed to working with them to achieve long term full compliance.

Additionally, the City completed approximately 170 FOG inspections during 2011/2012. These inspections also include a quick check for storm water compliance in addition to the FOG requirements for restaurants.

The City did not rely on third party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third party inspection program.

General Industrial Permit

Subjectivity to the Industrial Permit was evaluated during the industrial and commercial inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector gathered information about the business activities that occur on site and assigned or reassigned the business' standard industrial classification (SIC) code(s). Based on the assigned SIC code, the inspector evaluated the Industrial Permit subjectivity of the business. Notably, none of the inspected

businesses in the City were observed to be in violation regarding obtaining coverage under the Industrial Permit in 2011/2012.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to give site-specific one-on-one education regarding storm water concepts and BMPs. The City Inspector discusses a variety of topics including watershed concepts, the Industrial Permit, and minimum, activity-specific BMP requirements. Prior to performing industrial and commercial inspections, the City sent a letter to all businesses informing them of the upcoming inspection. At the time of inspection, businesses are given a copy of corrective actions. Additionally, automotive-related facilities receive the "Green Wrench Guide", and food-related facilities receive the "What's Cookin'?" brochure as applicable. The San Diego Bay or River Watershed factsheets were also distributed to businesses interested in more information on storm water beyond basic compliance.

The City Inspector works directly with businesses that have historically had repeat violations, such as A-1 Equipment and Walter H. Barber & Sons, Inc., to ensure long term compliance. The City's inspector has visited businesses more frequently than for official annual inspections in order to build a relationship with the personnel and to clarify storm water regulations. Also, the City provides a customized list of corrective actions during the inspection to facilitate prompt compliance.

The City continued to publish storm water-related articles in the *La Mesa Focus* newsletter. The 2011/2012 issues were distributed to the residents and businesses in the City that have elected to receive it; approximately 960 were sent electronically. Summaries of the articles in the newsletter can be found in Section 6; the newsletters are included as Attachment 5.2 to this JURMP Annual Report.

Enforcement

Ten industrial and commercial facilities were observed to be out of compliance with the City's municipal storm water ordinance during routine inspections conducted in 2011/2012. As previously mentioned, brief re-inspections were performed in 2011/2012 in order to address minor corrective actions. Seven of the ten facilities had achieved compliance at the time of the re-inspection. Three commercial facilities were found to have ongoing issues that will require additional follow-up. These inspections were conducted near the end of the 2011/2012 reporting period, so actions to bring the sites into compliance will continue into the 2012/2013 reporting period. The City did, however, give Corrective Action Sheets to all businesses for failing to properly implement BMPs. Again this year, a smaller percentage of business inspections resulted in the need for a follow-up visit compared to previous years. The likely explanation for this continued increase in compliance is the storm water inspection fee program. While the initial purpose of the inspection fee was to fund the inspection program, charging businesses for each routine inspection and follow-up visit provides the additional benefit of encouraging businesses to come into compliance with the City requirements to avoid the fees associated with additional follow-up inspections. Businesses are required to pay for all necessary re-inspections until they are in

compliance, which has made it fiscally possible for the City to have one inspector as point person who personally coordinates compliance assistance and enforcement. No industrial and commercial IC/IDs were discovered during routine inspections.

During the course of the 2011/2012 reporting period, the City received 15 complaints regarding stationary industrial and commercial businesses. These came directly from residents as calls into the Storm Water Hotline, complaints entered through La Mesa's Request Tracker and the Civic Plus websites, or complaints from City staff. Details of the industrial and commercial complaint investigations are included in the City's complaint log, which is included as Appendix B. The City took appropriate enforcement actions during investigations conducted in response to these complaints including verbal discussions, distribution of educational materials, written warnings, enforcement letters, and NOVs, as necessary.

There were no instances of noncompliance that posed significant threat to human health or the environment observed during 2011/2012. No non-filers were noted, as discussed earlier in this section, and no other businesses were reported to the RWQCB.

5.3 Mobile Sources

5.3.1 Background

Due to the nature of activities of most mobile businesses, a major area of concern is illegal discharges. In general, mobile businesses can be difficult to identify, as many do not have City business licenses. Additionally, many mobile businesses may be home-based and/or conduct activities that do not occur in one fixed location, so inspections of such facilities are impractical.

5.3.2 Source Characterization

Known mobile industrial and commercial businesses, as described in the City's JURMP, are included on the City's inventory and are marked as mobile. A total of 989 businesses are included on the City's 2011/2012 mobile inventory.

5.3.3 Best Management Practice Requirements

BMPs for stationary industrial and commercial facilities are required to be implemented for all outdoor activities, as applicable. BMPs for mobile businesses, including key principles, such as proper collection and disposal of any discharge, are discussed in the City's JURMP. The City has also established a program that requires mobile businesses operating in the City to sign an affidavit making businesses aware of the City's BMP requirements and commits them to implementing the required BMPs.

The City participates in the Regional Industrial and Commercial Workgroup, which developed regional mobile business BMP standards in 2008/2009. These standards were devised to create a uniform set of minimum BMPs for mobile businesses operating within the region. The regional mobile business BMP standards are provided on the Project Clean Water website.

5.3.4 Program Implementation

During the 2011/2012 inspection program, the City responded to one call to the City's Storm Water Hotline regarding a mobile business. More detail about the complaint is included in the City's complaint log, included in Appendix B.

Mobile Affidavits
The City requires mobile businesses to sign an affidavit when applying for a business license to acknowledge the City's BMP requirements. Additionally, the affidavit states that the business owner agrees to implement BMPs as required by the City's JURMP and acknowledges that failure to do so will result in enforcement action and possible legal action. During 2011/2012, affidavits were distributed to mobile auto detailing businesses that applied for business licenses, and one affidavit was signed during this reporting period.

Education and Outreach and Enforcement
As previously mentioned, one complaint was made to the City's Storm Water Hotline regarding a mobile business. City personnel investigated this case and resolved it.

This year, the City's Storm Water Staff conducted outreach to small car lots where auto detailing was being done on site. They distributed approximately 25 mobile washing pamphlets to these sites explaining the storm water regulations and proper BMP implementation.

There were no instances of noncompliance of mobile businesses that were believed to present potential threats to human health or the environment observed during 2011/2012, so none were reported to the RWQCB.

5.4 Industrial and Commercial Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's industrial and commercial component have been made since that time.

Table 5-2
Follow-Up Inspections

#	Business	Street Address	Inspection Date
1	A-1 Hire, Ltd.	7190 University Ave.	8/25/2011
2	Walter H. Barber	8179 Center St.	10/7/2011

Table 5-3
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ	SIC Code(s)	Basin	Inspection Date	Follow-Up Required	Correction Status
1	7-Eleven Food Store #21453	5650 Baltimore Drive	Low	5411	907.1	4/6/2012		
2	A A A Auto Repair & Transmission	7025 University Ave	High	7537	908.2	6/25/2012		
3	A-1 Hire, Ltd.	7190 University Ave.	High	7353,7694	908.2	6/29/2012	✔	In Progress
4	Ace Coating Co.	8333 Case St.	High	1799	907.1	6/29/2012		
5	Al & Eds Autosound	5208 Jackson Dr. 117	Low	7549	907.1	6/18/2012		
6	All Lines Dealer Alds Inc.	7373 Mohawk St.	Low	7549	907.1	6/27/2012		
7	American Tanks	8111 Commercial St	High	3444	907.1	6/29/2012		
8	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr	High	7542,7549	907.1	6/27/2012		
9	Auto Center	8203 University Ave.	Medium	7539	907.1	6/27/2012		
10	Auto Fix	7227 University Ave.	High	7538	908.2	6/28/2012	✔	Completed
11	Banbu Sushi Bar & Grill	8555 Fletcher Parkway Suite 105	Medium	5812	907.1	4/10/2012	✔	Completed
12	BJ's Pizza & Grill	5500 Grossmont Ctr Dr #M1	High	5812	907.1	4/23/2012	✔	Completed
13	Bob Stall Chevrolet	7601 Alvarado Road	High	5511, 7538	907.1	6/6/2012		
14	Bridgestone Retail	5577 Lake Murray Blvd.	Low	5531	907.1	6/27/2012	✔	In Progress
15	Broding's Battery Warehouse	8188 Commercial St.	High	5013	907.1	6/28/2012		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ	SIC Code(s)	Basin	Inspection Date	Follow-Up Required	Correction Status
16	Burger Auto Group, LLC	8355 Hercules Street	High	5511, 7538, 7532	907.1	6/28/2012		
17	C & D Auto Care	7163 University Avenue	Medium	7538	908.2	6/26/2012	✔	Completed
18	California Countertops, Inc.	7811 Alvarado Rd	High	3089	907.1	6/29/2012		
19	Casual Café	8881 Fletcher Parkway	Medium	5812	907.1	6/12/2012		
20	Centex Glazing	8260 Commercial St.	High	1791	907.1	5/23/2012		
21	Chili's Bar & Grill	8285 Fletcher Pkwy	High	5812, 5813	907.1	5/1/2012		
22	China Super Buffet	7984 La Mesa Blvd.	High	5812	908.2	4/11/2012		
23	Chipotle Mexican Grill	8005 Fletcher Parkway	High	5812	907.1	3/26/2012		
24	Denny's Restaurant #6488	4235 Spring St.	Medium	5812	909.1	4/25/2012		
25	Dixieline Lumber & Home Centers	8372 Center Dr	High	5211	907.1	6/28/2012		
26	Domino's Pizza	7960 University Ave	Medium	5812	908.2	4/2/2012		
27	Earl W. Fite & Sons, Inc.	8878 La Mesa Blvd	Low	1711	907.1	6/28/2012		
28	Edco Transfer Station	8182 Commercial St	High	4953	907.1	6/15/2012		
29	Enterprise Rent-A-Car	8363 Center Drive, Ste 6 H	Medium	7514	907.1	6/13/2012		
30	European Car Service	8855 La Mesa Blvd	Low	7539	907.1	6/20/2012		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ	SIC Code(s)	Basin	Inspection Date	Follow-Up Required	Correction Status
31	Five Star Collision Center Inc.	7643 University Avenue Suite H	High	7532	908.2	6/28/2012		
32	Fuddrucker's	5500 Grossmont Center Drive	High	5812	907.1	3/29/2012		
33	Helix Center Pure Water Store	7309 University Ave. Suite C	Low	5812, 5078	908.2	6/25/2012		
34	Ideal Door & Window Co.	7859 El Cajon Blvd	Low	1793	907.1	6/18/2012		
35	Jack in the Box (DMSD Foods).	5141 Jackson Dr	High	5812	907.1	3/15/2012		
36	Jack in the Box (Nfarooqi Enterprises LLC)	6140 Lake Murray Blvd	High	5812	907.1	4/17/2012		
37	Jack in the Box (University)	6987 University Ave	High	5812	908.2	4/18/2012		
38	Konnichiwa Sushi	8350 La Mesa Blvd.	Medium	5812	908.2	5/3/2012		
39	La Mesa Auto Center Boutique	8202 Parkway Dr.	Low	7539	907.1	6/15/2012		
40	La Mesa Billiards (Jolt n Joes)	8076 La Mesa Boulevard	Medium	5812, 7999	908.2	4/9/2012		
41	La Mesa College Auto Repair	7501 University Ave.	Medium	7538	908.2	6/28/2012		
42	La Torta Café	8356 Allison Ave. Suite A	Medium	5812	907.1	5/2/2012		
43	Lake Murray Village Veterinarian	5644 Lake Murray Blvd.	Medium	0742	907.1	5/15/2012		
44	Lars Construction Co.	4703 Spring Street	Low	1799	908.2	6/13/2012		
45	Lyons & O'Haver, Inc. Taxidermy	8180 Parkway Drive	Medium	3999	907.1	6/15/2012		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ	SIC Code(s)	Basin	Inspection Date	Follow-Up Required	Correction Status
46	M&M Patisserie	7668 El Cajon Blvd	Low	5461	907.1	6/28/2012		
47	Madina Market	6957 University Ave.	High	5411	908.2	6/25/2012		
48	Marie Callender's #74	6950 Alvarado Rd	High	5812, 5813	907.1	3/29/2012		
49	McDonald's	8045 Fletcher Pkwy	High	5812	907.1	3/26/2012		
50	MGH Granite Workz	8332 Case St. Suite 4	Medium	3281	907.1	6/29/2012		
51	Mr. D's Mini Mart	8292 La Mesa Blvd	Medium	5411	908.2	6/26/2012		
52	Mystic Grill & Bakery	6990 University Ave	Medium	5812	908.2	6/29/2012		
53	Nacho's Taco Shop	7589 University Ave	High	5812	908.2	4/2/2012		
54	Panda Express #226	8011 University Ave	High	5812	908.2	4/2/2012		
55	Parkway Market	9085 Dallas Street	Medium	5411	907.1	6/26/2012		
56	Pick Up Stix La Mesa	8025 Fletcher Pkwy	High	5812	907.1	2/21/2012		
57	Por Favor Restaurant	8302 La Mesa Blvd.	High	5812	909.1	4/12/2012		
58	Premium Auto Inc.	7643 University Ave. Suite M	High	7539	908.2	6/26/2012		
59	Primo Cars	8200 Commercial St. Suite 102	Low	5521	907.1	6/28/2012	✔	Completed
60	Quality Car Care	4999 Baltimore Dr. Suite G	Low	7539	907.1	6/27/2012		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ	SIC Code(s)	Basin	Inspection Date	Follow-Up Required	Correction Status
61	Rainbow Steel	8332 Case St.	High	3499	907.1	6/29/2012		
62	Raindance Roofing Company, Inc.	8176 Commercial St.	High	1761	907.1	6/28/2012		
63	Rapid Transmissions	8861 La Mesa Blvd.	Medium	7539	907.1	6/20/2012		
64	Ray Sugo LLC dba Synfast Oil Change	7981 El Cajon Blvd	Low	7539	907.1	6/29/2012		
65	Rosaritos Mexican Food #3	7941 University Ave	Medium	5812	908.2	6/5/2012		
66	Sam's Market	7587 University Avenue	Medium	5411	908.2	6/18/2012	✔	Completed
67	San Diego Auto	5335 Jackson Dr.	Medium	5521	907.1	6/27/2012		
68	Skeeter's Motorsports	8160 Center St.	Medium	5012	907.1	6/29/2012	✔	In Progress
69	Souplantation / Garden Fresh	9158 Fletcher Pkwy #3	Medium	5812	907.1	5/4/2012		
70	Speed Auto Gallery	7675 University Ave.	Low	5521	908.2	6/26/2012		
71	Starbucks #10938	8138 La Mesa Blvd.	Medium	5812	908.2	5/1/2012		
72	Starbucks Coffee #8905	5020 Baltimore Dr.	Medium	5499	907.1	6/26/2012		
73	Subway	8396 Parkway Drive	Medium	5812	907.1	4/19/2012		
74	Subway Sandwiches Lake Murray	5307 Lake Murray Blvd A	Medium	5812	907.1	4/19/2012		
75	Super Oscars Mexican Food	7102 University Ave.	Medium	5812	908.2	6/4/2012		

Table 5-3 (Continued)
Routine Industrial and Commercial Inspection Results

#	Business	Street Address	TTWQ	SIC Code(s)	Basin	Inspection Date	Follow-Up Required	Correction Status
76	Swami's Café	8284 La Mesa Blvd.	Medium	5812	908.2	5/30/2012		
77	Target Stores	5500 Grossmont Center Dr.	Low	5399	907.1	2/13/2012	✔	Completed
78	The Truck and SUV Center	5301 Lake Murray Blvd.	Low	5521	907.1	6/25/2012		
79	Trotter Door & Trim	8186 Commercial St.	Low	1521	907.1	6/28/2012		
80	University Pet Hospital	7134 University Ave.	Medium	0742	908.2	6/26/2012		
81	Village Awards & Engraving	7769 University Ave.	Low	2796	908.2	6/12/2012		
82	Vine Ripe Market	8191 Fletcher Parkway	High	5411	907.1	6/29/2012		
83	Von's Co. Inc. #2093	8011 University Avenue	Medium	5411	908.2	6/29/2012		
84	Von's Grocery Co. #2137	5630 Lake Murray Blvd	Medium	5411	907.1	6/7/2012		
85	Wal-Mart	5500 Grossmont Center Blvd.	Medium	5399	907.1	6/28/2012		
86	Wienerschnitzel #58	6949 University Ave	Medium	5812	908.2	4/20/2012		

Table 5-4
Industrial and Commercial Partial Inspections

#	Business	Street Address	TTWQ	SIC Code	Inspection Result
1	7-Eleven Food Store #20884	4253 Palm Ave.	Medium	5411	Moved, Vacant
2	Auto Forza	7633 El Cajon Blvd. Suite 217	Medium	7539	Moved, Vacant
3	Big Daddy's Oil Inc. #14	9600 Murray Dr.	High	5541	Moved, Vacant
4	Detail 2000	8760 Campo Road Suite B	Medium	7538, 7542	Moved, Vacant
5	EC Auto Repair	8176 Commercial St.	Medium	7539	Moved, Vacant
6	Elite Auto Group	7658 University Avenue	Medium	5511	Moved, Vacant
7	La Salsa Restaurant	4990 Baltimore Dr	Medium	5812	Moved, Vacant
8	Manhattan Pizza	6195 Lake Murray Blvd Suite D	Medium	5812	Moved, Vacant
9	Pedro's Mexican Cocina	6155 Lake Murray Blvd.	Medium	5812	Moved, Vacant
10	Trailers Plus	7651 Alvarado Rd.	High	5561	Moved, Vacant
11	Walter H. Barber & Sons, Inc.	8179 Center St.	High	1629	Moved, Vacant

6.0 RESIDENTIAL

6.1 INTRODUCTION

Over half of the land use in the City of La Mesa is designated as residential. Therefore, residential activities that take place within these areas have the potential to impact the quality of the receiving water bodies. Residential activities like vehicle washing, over-irrigation, pesticide and fertilizer application, and home maintenance can potentially contribute pollutants to the City's MS4 if BMPs are not properly implemented. Additionally, improper disposal of household hazardous waste (HHW) can also contribute pollutants to the MS4. Pollutants of concern typically include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has worked to implement a range of programs to address these residential activities and reduce pollutant loads associated with such activities.

Figure 6-1 depicts the residential land use in the City. Yellow areas indicate single-family homes, orange areas indicate multi-family homes such as duplexes and apartment buildings, brown areas indicate mobile home parks, and purple areas indicate other residential areas such as nursing homes.

Figure 6-1
Residential Land Use in the City

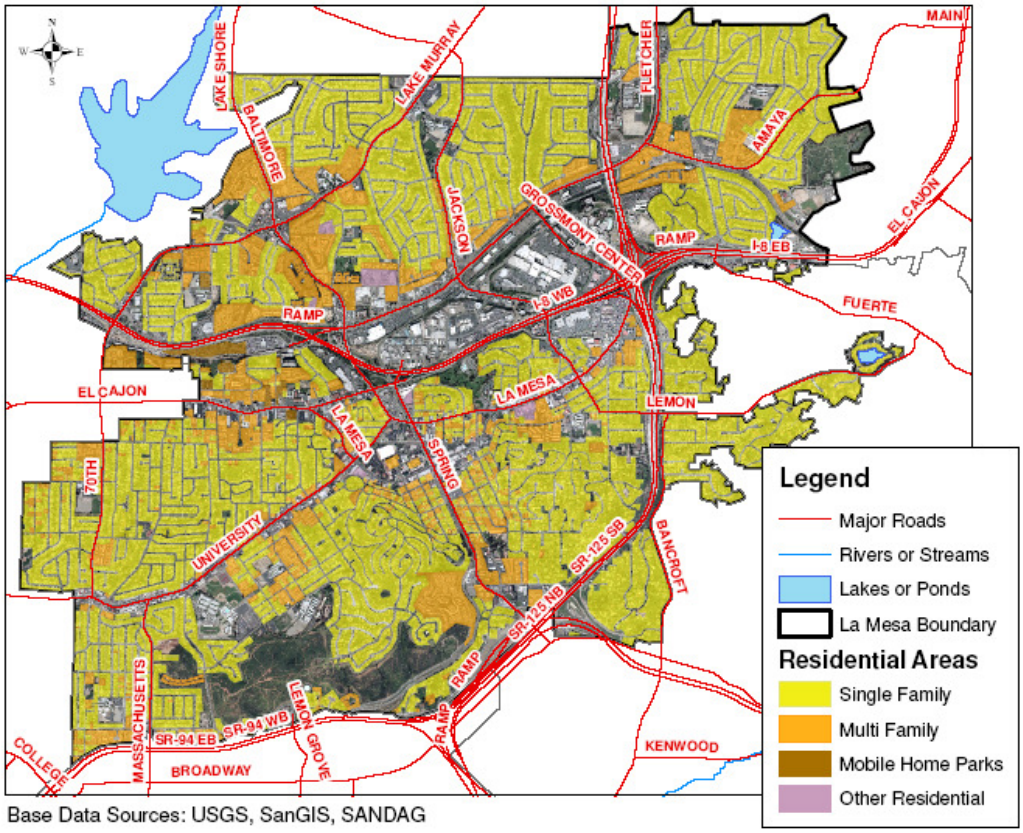

Base Data Sources: USGS, SanGIS, SANDAG

6.1.1 Summary of Notable Accomplishments

Some notable achievements for the residential component during the 2011/2012 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the residential component and of its storm water program during the reporting period are provided in the remainder of Section 6.

- The City continued to maintain four informational storm water kiosks located in City parks.
- The City hosted eight HHW events; 784 participants dropped off 87,249 pounds of HHW.
- The City hosted the La Mesa Spring Clean Up on two consecutive Saturdays during 2011/2012. The event was held at the City's EDCO station and allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste free of charge.
- The City continued to distribute the *La Mesa Focus* newsletter to residents in the City.
- The City continued to respond to complaints made to the City's Storm Water Hotline and submitted online regarding residential areas and activities.

6.2 Source Characterization

The City has identified several high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities, which are discussed in the following subsections.

6.2.1 High TTWQ Activities

During 2011/2012, the City continued to identify the following activities as high TTWQ:

- Automobile repair and maintenance
- Automobile washing
- Automobile parking
- Home and garden care activities and product use
- Disposal of pet waste

6.2.2 High Threat to Water Quality Areas

In addition to high TTWQ activities, the City has identified residential areas that pose a high TTWQ relative to other residential areas. High TTWQ residential areas are designated by considering complaint investigations, institutional knowledge, data from the City's Dry Weather Monitoring Program, and criteria as defined in the Municipal Permit. The following residential areas have been designated high TTWQ.

East of Helix High School
This area drains to University Channel and includes the residential area east of Helix High School around Lowell Street, Normal Avenue, and Olive Avenue. University Channel serves as a part of the storm water conveyance system for the City and is part of the Chollas Creek Watershed. During the 2009 Dry Weather Monitoring Program, a transient dissolved copper exceedance was detected in this area.

Baltimore Drive, North of Interstate 8
The area surrounding Baltimore Drive is largely composed of high-density housing. Runoff from this area drains to Alvarado Channel via two internal storm drain networks. Storm Water Hotline calls related to high TTWQ activities in this area have been recorded in past years. Some past Dry Weather Monitoring results have indicated that this area could be a source of bacteria, although that has not been found in monitoring programs during recent sampling years. The area is still classified as a high TTWQ to be conservative, although the City may reevaluate the prioritization in future years if recent dry weather monitoring trends continue. Potential runoff sources include residences located on Parkway Drive, Aztec Drive, and Baltimore Drive.

Nagel Street and Sarita Street
The residential area around the intersection of Nagel Street and Sarita Street drains to Alvarado Channel. Past Dry Weather Monitoring Program upstream investigations have indicated that this area has been a source of bacteria.

Residential areas within the City designated as high TTWQ receive additional attention and periodic visual inspection from storm water staff to check for evidence of IC/IDs and high TTWQ activities.

6.3 Best Management Practice Requirements

The City has continued to provide information regarding the implementation of pollution prevention measures, like good housekeeping practices, for residential areas and activities. The City's BMP Manual Part I includes lists of general residential BMP requirements as well as BMP requirements for specific residential activities. The manual is included in Appendix C of the JURMP. General residential BMPs include erosion control; non-storm water discharge management, including elimination of IC/IDs; and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Specific BMPs for the high priority activities outlined above are also included in the City's BMP Manual Part I. There have been no changes to the City's residential BMP requirements as discussed in Appendix C of the City's JURMP.

6.4 Program Implementation

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted. This ensures that pollutants associated with residential activities and areas are minimized. The residential program has an educational component so that residents are made aware of appropriate BMPs and high TTWQ activities.

6.4.1 TRAINING, EDUCATION, AND OUTREACH

The City has continued to conduct training, education, and outreach activities for residents, as described below.

***La Mesa Focus* Newsletter Articles**

The City publishes storm water related articles in the *La Mesa Focus* newsletter. The newsletter had been published quarterly but was redesigned in February 2012. Based on community input, each issue of the newsletter is now shorter in length and is published more frequently. Six newsletters were printed during the reporting period (August 2011, February 2012, March 2012, April 2012, May 2012, and June 2012). The issues are archived on the City's website; approximately 960 individuals are signed up to receive e-mail notification when a new newsletter has been posted on the website. Additionally, copies were left out at the Friends of La Mesa Library for patrons to read and are accessible on the La Mesa Neighborhood Watch website. The newsletter is also available in presentation format on Cox Cable channel 24 and AT&T U-verse channel 99. Articles related to storm water that were published in 2011/2012 are summarized below and included as Attachment 5.2.

The August 2011 newsletter contained the following storm water-related articles and announcements:

- "GRANT TO INCREASE RECYCLING OPPORTUNITIES FOR RESIDENTS IN MULTIFAMILY HOUSING" discussed how a grant received from the California Department of Resources Recycling and Recovery will be used to improve recycling opportunities for apartment and condominium complexes.
- "FREE HOUSEHOLD HAZARDOUS WASTE AND ELECTRONIC WASTE DISPOSAL" notified residents of the details and dates of the next collection events.
- "10th ANNUAL KIDS CARE FEST" was advertised. ILACSD provided information about watersheds and storm water during this event.
- "2011 SUSTAIN LA MESA ENVIRONMENTAL FESTIVAL" informed residents of the free upcoming event, which provided resources on water conservation, waste reduction and recycling, pollution prevention, and other environmental issues.
- "INTERGENERATIONAL GAMES" announced the upcoming event to residents. ILACSD demonstrated storm water pollution concepts at during this event.
- "I&I AND YOU" discussed the problems of sewer inflow and infiltration and educated residents on ways to reduce them.
- "SAY 'NO' TO RUNOFF. STOP OVER WATERING!" discussed the problem of over irrigation and listed tips for residents to eliminate over watering. The article also directed readers to the Helix Water District for information on water conservation rebates.
- "PARK APPRECIATION DAY" announced the upcoming park cleanup event and encouraged residents to participate.

The February 2012 newsletter contained the following storm water-related announcement:

- "HOUSEHOLD HAZARDOUS WASTE COLLECTION" announced the date of the next collection event.

The March 2012 newsletter focused on recycling and contained the following storm water-related articles and announcements:

- "NEW BACKYARD COMPOSTING BINS AVAILABLE…DISCOUNT TO LA MESA RESIDENTS"discussed a partnership with Dixieline ProBuild that allowed residents to purchase composting bins at a reduced cost. The article also directed residents to classes on backyard composting.
- "HOUSEHOLD HAZARDOUS WASTE COLLECTION – EDCO STATION" announced the date of the next collection event.

The April 2012 newsletter contained the following storm water-related announcements:

- "SPRING CLEAN UP" notified residents of the upcoming event, which provided free disposal of unwanted items at the EDCO station.
- "ANNUAL CREEK TO BAY CLEANUP" announced the upcoming cleanup event and directed residents to the Creek to Bay website for more information.

The May 2012 newsletter contained the following storm water-related articles and announcements:

- "HOUSEHOLD HAZARDOUS WASTE COLLECTION" announced the date of the next collection event.
- "LUBBOCK PARK SAFE ROUTES TO SCHOOL CLEAN-UP DAY" announced the park clean-up date.
- "WANT TO MAKE A DIFFERENCE IN YOUR COMMUNITY" invited residents to get involved and volunteer for a City Board, Commission, or Committee.
- "STYROFOAM CAN NOW BE RECYCLED IN YOUR BLUE BIN" notified residents that Styrofoam is now accepted in their EDCO bins.

The June 2012 newsletter contained the following storm water-related announcements:

- "HOUSEHOLD HAZARDOUS WASTE COLLECTION" announced the date of the next collection event.
- "FREE PAPER SHREDDING EVENT" notified residents of the event details and date at the EDCO Station.

Other Educational Outreach Materials and Activities

The City has continued to provide storm water information and contacts on their website (www.cityoflamesa.com). The City's Storm Water Hotline also provides an avenue for City residents to obtain storm water information and file storm water related complaints. Other educational outreach materials and activities that targeted residents are discussed in detail in Sections 8 of this report.

During 2011/2012, the City continued to participate in the Regional Residential Education Program.

6.4.1.1 HHW EVENTS

The City hosted eight HHW collection events throughout the 2011/2012 reporting period at the City's EDCO station on Commercial Street. Door-to-door pick-up was also offered for disabled and senior residents. A total of 784 people participated in the events, and 87,249 pounds of HHW were collected. Storm water pollution prevention tri-folds were distributed to participants as requested. Approximately 15 storm water brochures were distributed at HHW events.

Other Collection Events
In addition to the HHW disposal events, the City hosted the La Mesa Spring Clean Up on two consecutive Saturdays during 2011/2012. The event was held at the City's EDCO station and allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste without charge. Details about this event can be found in Section 9 of this report.

6.4.2 COMPLIANCE AND ENFORCEMENT

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the Storm Water Hotline, and observations made by the City's municipal personnel. To help focus efforts on high priority areas, the City maintains a map of the high TTWQ areas in the City, which is available to City staff. The staff are especially vigilant for potential threats to storm water quality in these areas of the City and report any observed threats to the Storm Water Hotline. A copy of the map is included as Attachment 6.1. If a potential to impact water quality is present, the City provides a verbal warning, written warning, Notice to Comply, and NOVs as applicable. The City received 96 residential-related complaints during this reporting period. Complaints were submitted through the Storm Water Hotline and through La Mesa's Request Tracker and the Civic Plus website as well as internally through the Public Works Department; the City's complaint log is included as Appendix B to this annual report.

Three written warnings, one verbal warning, 5 NOVs, and 10 compliance letters were issued to residents and/or landlords during this reporting period. Many of the verified complaints involved residents who were unaware of residential BMPs. These issues were resolved with a verbal warning and distribution of educational materials. The City issued NOVs to more serious violations including stucco and mud discharge into the street, wastewater discharge, and dumping of illegal fill. City personnel also cleaned areas in the public right of way as necessary to resolve complaints. All residential complaints were resolved and no further actions, such as fines or reports to the RWQCB aside from this JURMP Annual Report, were deemed necessary.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's residential component have been made since that time.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008 RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the 2011/2012 Illicit Discharge Detection and Elimination section and attachments to the RWQCB no later than December 15, 2012.

8.0 EDUCATION COMPONENT

8.1 INTRODUCTION

During 2011/2012, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, residents, and underserved audiences. The City aims to reduce storm water pollution by increasing awareness about the storm water conveyance system and promoting the implementation of BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community regarding storm water.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the 2011/2012 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the education component and of its storm water program during the reporting period are provided in the remainder of Section 8.

- Storm water staff attended outside training events and provided training sessions for other municipal personnel.
- During 2011/2012, the City's newsletter, the *La Mesa Focus*, featured storm water-related articles and announcements aimed at businesses and residents of the City.
- Educational materials were made available to project proponents and City personnel at City Hall through the informational Storm Water Bulletin Board.
- The City partnered with ILACSD to educate residents at special events and through school presentations during 2011/2012.
- Approximately 50 vendors at the City's Oktoberfest event were provided with a handout entitled "Tips for Outdoor Vendors."
- The City conducted 36 FOG inspections in conjunction with routine Storm Water Compliance Inspections for commercial businesses and distributed educational materials on FOG during the "Sustain La Mesa" Festival.
- The City maintained four storm water kiosks in City parks, which provided educational material to park patrons.

8.2 STAFF TRAINING ELEMENT

The City has provided extensive training and educational outreach to its municipal personnel. Many municipal personnel are out in the field on a daily basis, so it is imperative that they understand the importance of implementing BMPs. Additionally, municipal personnel are encouraged to report any IC/IDs observed to the appropriate City staff and to

educate other municipal personnel and the general public about storm water pollution prevention.

During 2011/2012, five training sessions outlining Integrated Pest Management (IPM) procedures and Construction BMPs were provided for the Parks and Public Works divisions. The City's Storm Water Inspector also participated in a meeting that reviewed Grease Control Devices (GCD's). This presentation discussed appropriate GCD maintenance activities and frequencies, which were then incorporated into the City's FOG inspection program of local businesses. Two City staff members also received certificates of completion for a U.S. Environmental Protection Agency webcast course on Conducting Effective Stormwater Outreach.

The informational storm water bulletin board at City Hall is continually updated with information about storm water topics. The bulletin board is visible to City personnel, project proponents, and other City Hall visitors. In addition, there are educational materials for the public to take located at the bulletin board including storm water hotline magnets, IPM cards, and residential storm water pollution prevention trifolds. Additionally, staff members were reminded about the City's Park Appreciation Day and posters for California Coastal Cleanup Day and the Creek to Day Cleanup were displayed to encourage participation.

Table 8-1, below, includes all training sessions that were provided for various municipal departments during 2011/2012.

Table 8-1
Municipal Training Sessions

#	Date	Event	Topic(s)	Participants
1	9/2011	Pesticide Applicators Professional Association Seminar	Invasive pests and alternative treatments, Pesticide safety programs for compliance	4 Parks Department Staff Members
2	9/7/2011	ICC San Diego Area Chapter Plumbing and Mechanical Subcommittee Meeting	Discussed of proper sizing, maintenance, and types of Grease Control Devices	1 Engineering Staff Member
3	9/22/2011	Construction BMP Training Seminar	Controlling sediment and erosion	3 Public Works Department Staff Members
4	9/28/2011	Construction BMP Training Seminar	Controlling sediment and erosion	9 Public Works Department Staff Members
5	11/2011	Professional Horticultural Seminar	Controlling weeds, pests, and fungus with IPM, Worker safety standards	4 Parks Department Staff Members

Table 8-1
Municipal Training Sessions

#	Date	Event	Topic(s)	Participants
6	3/2012	Ewing Irrigation	IPM for turf pest problems, Worker safety standards	2 Parks Department Staff Members

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, residential areas, and underserved audiences. These efforts promote storm water awareness and BMP implementation.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Violations of the City's BMP requirements are corrected through enforcement actions as necessary. During each inspection, facility personnel received verbal education on the importance of implementing proper BMPs. Additionally, a letter describing the City's inspection program and BMP requirements was sent to all industrial and commercial businesses selected for routine inspection during 2011/2012. A discussion of the City's FOG program and BMPs that industrial or commercial businesses can implement is available on the City's website at www.cityoflamesa.com.

As previously mentioned, the City's *La Mesa Focus* newsletter featured articles highlighting storm water topics that were aimed at businesses and residents of the City. For example, the August 2011 issue included an article entitled "Say 'No' to Runoff. Stop Overwatering", along with announcements and details of various storm water-related events. These events included clean-up days and recycling programs available to residents and businesses within the City. Newsletters published during 2011/2012 are included as Attachment 5.2.

During the 2011/2012 reporting period, the City again distributed a handout with tips for outdoor commercial vendors (Attachment 8.1). These handouts were distributed to vendors that had booths at the Oktoberfest event, which is the City's largest special event. Approximately 50 handouts were distributed, which detailed specific BMPs that could be implemented by the vendors at the event and explained the difference between the storm drain system and the sanitary sewer system.

8.3.2 Construction Site Owners and Developers

Due to the nature of activities, construction sites have the potential to discharge many types of pollutants to receiving waters if not managed properly. Many construction site owners, contractors, and developers visit the City's Engineering Division to apply for necessary permits. The Storm Water Bulletin Board located across from the front counter where permits are issued, includes material about construction BMPs to provide education for these parties. Several construction related brochures, specifically the construction site management tri fold and a construction SWPPP tri fold are available for project proponents to take from the bulletin board.

8.3.3 Residential Areas

Since residential areas make up more than half the City, the City understands the importance of reaching this particular audience through educational outreach programs. During January, February, and May 2012, ILACSD visited local schools for grades Kindergarten through 6th grade, and gave storm water presentations to the students. The City also continued to publish the *La Mesa Focus* newsletter (Attachment 5.2), which reaches residents in the City. As previously mentioned, storm water-related articles and announcements were included in the newsletters distributed in 2011/2012.

The City's Storm Water Bulletin Board provided information to residents that may have been visiting City Hall. Various posters provide storm water information and information about clean-up events. Additionally, there are several brochures and fact sheets available for the public to take, which included the Over-irrigation Fact Sheet (Attachment 8.2), Chollas Creek TDML Fact Sheet (Attachment 8.3), Residential Preventing Urban Runoff Pollution brochure (Attachment 8.4), Pools and Spa Fact Sheet (Attachment 8.5), and IPM cards (Attachment 8.6).

Educational material was also distributed at various events in the City, such as the "Sustain La Mesa" Environmental Festival, Intergenerational Games, and Kids Care Fest. Materials distributed included the residential Preventing Urban Runoff Pollution brochure (Attachment 8.4) and San Diego River Fact Sheet (Attachment 8.7). Other media like pencils, temporary tattoos, coasters, magnets, jar openers, and stickers with storm water messages on them were also provided during these special events. Details of the events are included in Section 9.

In addition to the educational materials that were provided at various locations and during various events, the City continued to display storm water-related educational material at storm water kiosks at select City parks. The City now maintains four kiosks in four City parks. Storm water-related educational material including the San Diego River Watershed Fact Sheet (Attachment 8.7), Over-irrigation Fact Sheet (Attachment 8.2), Pool and Spa Fact Sheet (Attachment 8.5), the Residential Preventing Urban Runoff Pollution brochure (Attachment 8.4), and excerpts from storm water calendars and a Helix Water District brochure, were displayed at the kiosks for patrons of the park.

The City website, www.cityoflamesa.com, is another resource for City residents to become familiar with the design and intended utilization of the storm drain system, proper HHW disposal, IPM, and other residential activity BMPs, as well as find information regarding volunteer opportunities and applicable City contact information. As previously mentioned, the City provided electronic copies of each *La Mesa Focus* newsletter on the website during 2011/2012.

8.3.4 Underserved Communities

As discussed in the City's JURMP, the City has identified the several residential areas along University Avenue as "underserved" communities. Two residential areas have been identified as Low/Moderate Income Block Groups. A third area has been identified as a Hispanic Household Concentration area. In an effort to promote outreach and education in these underserved communities, the City has developed Spanish versions of several educational materials distributed to residents. Additionally, the City continues to offer the Spanish language option on the City's Storm Water Hotline. The City plans to continue outreach to these underserved communities by providing more educational programs in future reporting years.

8.3.5 Complaint Investigations

To further aid the process of identifying illegal discharges, the City encourages the public and City staff to report IC/IDs. In addition to the City's Storm Water Hotline, Public Works also has a maintenance hotline for complaints regarding issues with the MS4 and sewer lines. These complaints are followed up by Public Works personnel. If a representative for the targeted business, residential area, or construction site is present, the inspector will provide site-specific information regarding storm water issues as well as applicable educational materials.

8.4 Outreach Component Effectiveness Assessment

The estimated number of impressions made by the City's education and outreach efforts during 2011/2012 is presented and described below. Please refer to Section 11 of this JURMP Annual Report for the remainder the effectiveness assessment for this program component.

Impressions Made

The City has continued to provide residents and businesses storm water-related education through inspections, distribution, and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of

municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees because it is likely that the attendees will discuss the content with others after the training session. Printed educational materials and other items such as pencils and stickers are assumed to generate three impressions each.

Table 8-2 details the number of impressions made by the City during this reporting year.

Table 8-2
Impressions Made by the City

Impression Type	Count	Unit	Estimated Impressions
Complaint Investigation	119	Investigations	357
Construction Inspection	65	Inspections	195
Industrial/ Commercial Inspection	87	Inspections	261
Industrial/ Commercial Inspection BMP letter	87	Letters	261
Mobile Detailing Pamphlet	25	Brochures	75
Green Wrench Guide	10	Brochures	30
What's Cookin'? Brochure	5	Brochures	15
Municipal Inspection	22	Inspections	110
Treatment Control BMP Inspection	10	Inspections	30
Training Session/ Activities and Events	4086	Attendees	16,344
La Mesa Focus Newsletter	960	News letter	2,880
Residential Preventing Urban Runoff Pollution	100	Brochures	300
San Diego Bay Watershed Fact Sheet	5	Brochures	15
San Diego River Watershed Fact Sheet	60	Brochures	180
Tips for Outdoor Vendors	50	Brochures	150
FOG Scraper	100	Scrapers	300
Recycling Coaster	275	Coasters	825
Recycling Magnet	275	Magnets	825
Recycling Pencil	300	Pencils	900
Recycling Sticker	150	Stickers	450
Recycling Temporary Tattoo	150	Tattoos	450
Storm Water Coaster	210	Coasters	630
Storm Water Jar Openers	200	Jar Openers	600
Storm Water Magnets	250	Magnets	750
		Total	***26,933***

8.5 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's education component have been made since that time.

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to foster storm water awareness and improve water quality. Public participation includes, but is not limited to, cleanup events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Collaboration between the City and the community should help encourage a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed within this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the 2011/2012 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the public participation component and of its storm water program during the reporting period are provided in the remainder of Section 9.

- During 2011/2012, the City hosted clean-up events at Alvarado and University channels as part of California Coastal Cleanup and Creek to Bay Cleanup. Approximately 96 volunteers removed over 1,234 pounds of trash and debris and 157 pounds of recyclables during these events.
- The City hosted 8 HHW collection events. A total of 784 vehicle loads disposed of 87,249 pounds of HHW in these events.
- Similar to previous years, the City hosted the La Mesa Spring Cleanup event on two separate weekends in April during 2011/2012. A total of 1,353 vehicles disposed of over 724 tons of large items, green waste, and other trash and recyclables.
- Volunteers for the City's Park Appreciation Day event and Adopt-a-Block, Adopt-a-Park, and Canine Corner programs, continued to get residents and community members involved in keeping local streets and parks free of litter and pet waste.
- The City contracted ILACSD to conduct 6 watershed presentations at 4 elementary schools and present "Operation Cleanup," an interactive watershed game, at the Intergenerational Games and Kids Care Fest.

9.2 PUBLIC PARTICIPATION ACTIVITIES

Cleanup Events and Programs

During 2011/2012, the City hosted cleanup events and activities at various locations in the City. Cleanup events provide a direct benefit to water quality and an opportunity for the City to distribute educational materials and information to the event's volunteers.

California Coastal Cleanup Day

The City hosted the California Coastal Cleanup Day in specific areas of Alvarado and University channels on September 17, 2011. A total of 16 volunteers removed over 401 pounds of trash and 25 pounds of recyclables at the Alvarado site, and 22 volunteers removed 481 pounds of trash and 10 pounds of recyclables in the channel and surrounding walkways at the University site (Figure 9-1). In addition to trash and recyclables removal, volunteers were taught to identify items that do not belong in the waterways and the importance of keeping creeks cleans.

Figure 9-1 – Coastal Cleanup Day at University Channel

Park Appreciation Day

Park Appreciation Day was a cleanup event held throughout 14 parks in the City on October 22, 2011. Site captains briefly discussed watershed concepts, local watersheds' constituents of concern, the benefits of cleanups, and the TMDL for the San Diego Bay. Chollas Creek was mentioned at the parks that fell within the San Diego Bay Watershed. Over nine groups of volunteers worked to collect green waste and trash within the City's parks. Volunteers that were not affiliated with a group were still encouraged to come out to their local parks for trash pickup and park maintenance.

Creek to Bay Cleanup

The City hosted the Creek to Bay Cleanup in specific areas of Alvarado and University channels on April 28, 2012. At Alvarado Channel, 22 volunteers participated in removing 122 pounds of trash and 116 pounds of recyclables (Figure 9-2). At University Channel, 36 volunteers removed 230 pounds of trash and 6 pounds of recyclables. City personnel explained general watershed concepts, pollutants of concern, and required BMPs to all event volunteers. At the University Channel site, event volunteers were also presented with information on the TMDL for Chollas Creek. These cleanup events and results were advertised on the City website and were posted on the City's Storm Water Bulletin Board.

Figure 9-2 – Creek to Bay Cleanup at Alvarado Channel

Adopt-a-Park and Adopt-a-Block

The City's Adopt-a-Park Program has continued to involve local businesses, schools, service organizations, families, and other individuals in keeping the City's parks free of trash. Currently, about half of the public parks in La Mesa have been adopted. Volunteers involved in this program are encouraged to remove trash on a regular basis from City parks and open spaces. The program hosted clean-ups events and other volunteer-related activities at the teen center, Harry Griffen Park, Collier Park, and Lubbock mini-park in 2011/2012. Additionally, the Adopt-a-Park program welcomed six new volunteer groups this year.

The City's Adopt-a-Block Program promotes cleanliness in the City by encouraging City residents to keep neighborhoods free of trash and debris. Information about this program is made available to residents and businesses on the City's website at http://www.cityoflamesa.com.

Canine Corners

Canine Corners volunteers pick up pet waste in designated areas of Harry Griffen Regional Park and encourage patrons of the park to pick up after their pets. This prevents bacteria and viruses associated with pet waste from being discharged to the City's MS4. In combination with the City's Adopt-a-Park and Adopt-a-Block programs, volunteers remove trash and pet waste from parks and streets throughout the City.

Saint Madeline Sophie's Center

The City maintains a contract with Saint Madeline Sophie's Center, which employs developmentally disabled individuals to aid in picking up trash and debris at various parks throughout the City. The scope of services includes trash and debris cleanup, emptying trash receptacles and replacement of plastic liners, sweeping/cleaning picnic area tables, as well as some janitorial responsibilities at the park restrooms. Crews consist of three to five individuals and a job coach. Parks included in this program are Aztec Park, Collier Park,

Highwood Park, Jackson Park, La Mesita Park, Northmont Park, Rolando Park, Sunset Park, Sunshine Park, and Vista La Mesa Park.

Hazardous Waste Collection and Used Oil Recycling Program
The City's Community Hazardous Waste Collection and Used Oil Recycling Programs encourage City residents and business owners to properly dispose of HHW. The City hosted eight HHW collection events at EDCO's disposal transfer station facility, which is located near the center of the City. As previously mentioned, events were advertised in the City's *La Mesa Focus* newsletter (Attachment 5.2), which was circulated electronically to hundreds of residents and businesses within the City. A total of 784 participants disposed of hazardous waste at the events and a total of 87,249 pounds of HHW was collected. Door-to-door pickup service was also provided for the senior and disabled communities. Storm water pollution prevention brochures were distributed as requested during the collection events.

Throughout the City of La Mesa, there are also 10 certified collection centers for used oil that are advertised on the HHW disposal dates flyer, as well as four tire recycling centers.

Additionally, I Love A Clean San Diego participated in the La Mesa Car Show, Sustain La Mesa, and Christmas in the Village events during which they distributed 121 oil pans, 72 oil filters, 8 oil filter holders, 2 funnels, and other materials to residents. Participants were also provided with informational materials on used oil recycling locations. ILACSD also hosted an oil filter exchange event on February 25, 2012 at the La Mesa O'Reilly Auto Parts store where twenty-five oil filters were exchanged.

Other Waste Disposal
The City hosted the La Mesa Spring Clean Up event on two consecutive Saturdays in 2011/2012 (April 14 and 21, 2012). Residents were allowed to bring large items, unwanted household materials (not including HHW), and green waste to the EDCO location in the City for free disposal. A total of 1,353 vehicles disposed of over 724 tons of waste and recycling. Recyclable materials were estimated to account for 41 percent (on 4/14) and 50 percent (on 4/21) of the disposed waste.

Public Reporting
As discussed in Section 4, complaints are received through the City's Storm Water Hotline and online website reporting system. The number for the hotline is advertised in articles published in the *La Mesa Focus* newsletter and on various educational materials given out at public outreach events. The residential, industrial, commercial, construction and municipal communities are encouraged to utilize the hotline to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable.

9.3 Outreach Events

The City has continued to provide educational outreach programs for a variety of different communities in the City. Since it is an effective way of reaching large numbers of individuals, educational outreach is typically associated with an event. Other outreach

events in the City include the participation of commercial businesses in distributing educational materials and the City's participation in regional meetings and events.

Kids Care Fest

Kids Care Fest is a free event designed to promote healthy choices and attitudes for children and their families. The festival was held at Briercrest Park on September 24, 2011. ILACSD hosted a booth and used the interactive watershed model, "Operation Cleanup", to demonstrate storm water pollution concepts and emphasize the importance of keeping waterways free of pollutants (Figure 9-3). Approximately 350 people visited the ILACSD storm water booth during the festival. During the event, 50 temporary recycling tattoos, 125 storm water magnets, 150 recycling magnets and coasters, 25 San Diego River fact sheets, and 25 residential preventing urban runoff brochures were distributed to the public.

Figure 9-3 – ILACSD booth with "Operation Cleanup" at Kids Care Fest

Intergenerational Games

ILACSD also hosted a booth at the Intergenerational Games at the La Mesa Middle School on October 13, 2011. During this event, ILACSD displayed the "Operation Cleanup", an interactive watershed game for children, where pollutants are located and removed from the model (Figure 9-4). This allowed for explanation of storm water pollution concepts, emphasizing the importance of a healthy environment. Approximately 150 students visited the booth and a total of 100 recycling temporary tattoos, 100 recycling pencils, 150 recycling stickers, 25 storm water and recycling magnets, 25 recycling coasters, and 30 residential Preventing Urban Runoff Pollution brochures were distributed.

Figure 9-4 – ILACSD booth with "Operation Cleanup" at the Intergenerational Games

Oktoberfest

Oktoberfest is the largest festival in the City and was held from September 30, 2011 through October 2, 2011. As previously mentioned in Section 8.3.1, approximately 50 vendors at the event were provided a handout entitled "Tips for Outdoor Vendors" (Attachment 8.1). This handout listed constituents of concern and BMPs during events designed to eliminate pollutant discharges.

"Sustain La Mesa" Environmental Festival

On October 8, 2011, the "Sustain La Mesa" Environmental Festival was held at Harry Griffen Regional Park that was attended by more than 500 people. There were booths and activities emphasizing water conservation, storm water pollution prevention, energy efficiency, sustainable gardening techniques, and recycling. During this event there was an electronic waste and recyclables collection. Electronic waste, metal, plastic numbers 1-7, plastic bags, blister pack, six pack rings, bubble wrap, and Styrofoam packaging were collected. Throughout the festival, speakers from the Solana Center for Environmental Innovations, National Wildlife Foundation, and the California Center for Sustainable Energy spoke to the public. The City's Public Works Department also hosted a booth (Figure 9-5) at the event and distributed 30 residential trifolds, 30 San Diego River fact sheets, 100 FOG scrapers, 200 recycling pencils, 200 storm water coasters and jar openers, 100 storm water and recycling magnets, and 100 recycling coasters to an estimated 250 booth visitors.

Figure 9-5 – Public Works booth at the "Sustain La Mesa" Environmental Festival

Storm Water Information Kiosks

As mentioned in Section 8, the City has maintained the storm water kiosks that were constructed with the help of the local Eagle Scouts. The park kiosks present storm water pollution prevention information to park patrons. During 2011/2012, outreach material was updated and educational events were publicized throughout the year at the four kiosks.

ILACSD School Presentations

During 2011/2012, ILACSD was contracted to conduct six watershed education presentations for Rolando, Murdock, Northmont, and Lemon Avenue Elementary Schools. Two presentations were given on May 25, 2012 at Lemon Avenue Elementary School to 350 students ranging from kindergarten through 3rd grade, and 300 4th through 6th graders. Similarly, two presentations were given to 58 3rd graders at Northmont Elementary School on May 9, 2012. Storm water knowledge surveys were collected for these 58 students. Additionally, ILACSD provided a watershed presentation to 29 5th graders at Murdock Elementary and and 86 5th graders at Rolando Elementary School.

Chollas Creek TMDL Stakeholder Meetings

The jurisdictions named as dischargers for Chollas Creek TMDLs regularly meet to share information, develop reports, and discuss strategies. The City actively engaged in the annual public stakeholder meeting on July 23, 2012. During this year's meeting, a portion was devoted to discussing a source control project within the City.

Storm Water Copermittee Meetings and Other City Participation

The meetings of various storm water Copermittee workgroups provide a forum for representatives from various jurisdictions within San Diego County and other interested parties, including the general public, to exchange information and ideas regarding the management of storm water programs. Several of these meetings were attended by the City during the reporting period and this will continue for the 2012/2013 reporting period.

9.4 Public Participation Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

9.5 Program Review and Modification

The City's JURMP was updated in March 2008. No significant changes to the City's public participation component have been made since that time.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

The City's Sanitation Fund provides almost all funding for the Storm Water Program. There have not been any changes to this funding mechanism during this reporting period. During 2009/2010, a fiscal analysis reporting template was developed collectively by the Copermittees. The City has used this template to report the 2011/2012 expenditures and funding sources in this JURMP Annual Report.

San Diego County Copermittees Fiscal Analysis Report
for Urban Runoff Management Programs

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	
Administration	$101,780.98
Development Planning	$26,213.96
Construction	$13,272.63
Municipal	$3,715.00
Industrial and Commercial	$51,297.72
Residential	$1,316.00
IDDE	$42,967.08
Education	$7,215.00
Public Participation	$6,132.01
Special Investigations	$10,215.00
Non-Emergency Firefighting	$0.00
Jurisdictional Total	**$264,125.39**

WATERSHED	
Watershed 1 – San Diego River	$29,236.02
Watershed 2 – San Diego Bay	$62,501.06
Watershed Total	**$91,737.08**

REGIONAL	
Annual Permit Fee to Regional Board	$18,196.00
Copermittee Cost Share of Regional Budget	$46,062.00
Regional Total	**$64,258.00**

TOTAL COSTS	**$420,120.47**

FUND SUMMARY

FUNDING BY SOURCE	
General Fund	$10,016.73
Storm Water Fee	$0.00
Permit Fees	$0.00
Developer Deposits and Fees	$7,686.87
Registration and Inspection Fees	$22,185.00
Flood Control Fees	$0.00
Franchise Fees	$0.00
Gas Tax	$0.00
Utility Tax	$0.00
Road Fund	$0.00
Enterprise Funds	$0.00
Trust Funds	$0.00
Special Assessment Districts	$0.00
State Appropriated Funds	$0.00
Grant Funds	$0.00
Other – Sanitation Fund	$391,726.87
Total	**$431,615.47**

ONE-TIME FUNDING	
Grants	$0.00
Donations	$0.00
Total	**$0.00**

TOTAL FUNDING	**$431,615.47**

Watershed Urban Runoff Management Program (WURMP)

	Watershed 1 – San Diego River	Watershed 2 – San Diego Bay
Administration (1)	3,290.01	9,870.03
Cost Share	1,942.00	475.00
Watershed Activities	3,290.01	9,870.03
Other	$0.00	$0.00
TOTAL	**$8,522.02**	**$20,215.06**

(1) Administration – includes Watershed strategic planning, management, mapping, assessment, and reporting.

Regional Urban Runoff Management Program (RURMP)

Regional Programs	Jurisdictional Cost Share Amount
Administration (1)	$0.00
Cost Share Contribution	$0.00
Other (2)	$0.00
TOTAL	**$0.00**

(1) Administration – includes assessment, reporting, management, etc.
(2) Other – examples include regional and special studies.

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

Per the Municipal Permit, the City's JURMP is routinely assessed in order to evaluate its effectiveness at reducing pollutants in urban runoff to the MEP. The overall structure of the City's JURMP consists of three major components: Program Planning, Program Implementation, and Effectiveness Assessment.

Program Planning
The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next, the program developed during the planning step is implemented.

Program Implementation
Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

Effectiveness Assessment
Results of the program implementation phase of the JURMP provide the City with various metrics used to interpret the overall effectiveness of the program in achieving progress toward targeted outcomes. Example metrics were provided in Section 13 of the City's 2008 JURMP, and the City has refined those metrics in the reporting periods since then. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes (Level 1) to more difficult to measure, quality-based outcomes (Level 6). The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment

that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome Level Assessments

Level 1

Level 1 outcomes are basic measures of permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix C of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement.

Levels 2 and 3

See tables 11-1 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Figure 11-1 compares storm water complaint data from this fiscal year to previous years. Please note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

Level 4

Tables 11-1 through 11-8, at the end of this section, provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is possible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. Reliable load estimation methods have not yet been developed for most other programs. Note that the City has installed Calsense in various City parks and medians, as described in Section 4. Calsense is designed to decrease water usage, which is likely to have reduced the load of pollutants potentially transported by irrigation runoff.

Figures 11-2 and 11-3, at the end of this section, present historical dry weather flow rates for monitoring sites located downstream of the Alvarado, Spring Valley, and University drainage basins. Each graph illustrates a general decrease in dry weather flows, which may indicate that dry weather discharges to the MS4 have decreased since 2008. A decrease in dry weather flow rates may further indicate a decrease in pollutant loads.

Level 5

The Dry Weather Monitoring Program is the City's primary mechanism for measuring the quality of discharges. The City also conducts an additional monitoring program at six sites; five of these sites are located in the City's MS4, and one is located in an improved channel that has also been identified as a receiving water body. In 2009, the City began collecting MS4 outfall water quality data to help characterize pollutant discharges from its MS4, although not enough data to make definitive conclusions has been collected at this point.

Figure 11-4, at the end of this section, presents historical average dry weather monitoring results for selected field constituents. Figures 11-5 and 11-6 present the average and median concentrations for selected constituents, along with the number of exceedances noted since 1993. Both graphs show a general decrease in concentration and in number of exceedances for ammonia-nitrogen and detergents. *Enterococcus* bacteria counts have been consistently

low since 2002 while fecal coliform bacteria counts show a general decrease over time as shown in Figure 11-7.

Level 6
No Regional Monitoring Program stations are located within or close to the City of La Mesa. The western portion of Alvarado Channel is the only receiving water body within City limits. The City has monitored sites at the downstream point of the Alvarado and University drainage basins in the past and continues to monitor the University site as a collaborative activity associated with the Chollas Creek TMDL. No long term trends have been identified in data from these sites. The City will continue to work with the San Diego River and San Diego Bay WURMP workgroups to improve the quality of water bodies downstream of the City of La Mesa.

Beyond the JURMP Program, the City is also subject to additional requirements associated with TMDL regulations, which set numeric compliance limits. The City of La Mesa has been collaborating with other Copermittees in the Chollas Creek watershed to conduct annual reporting and monitoring for the Chollas Creek Diazinon and dissolved metals TMDLs. During 2010/2011, the City also developed a Strategic Plan for Watershed and TMDL Activity Implementation targeted at TMDL requirements for the San Diego River and Chollas Creek watersheds. Since that time, the City has been collaborating with other Copermittees to develop an implementation plan for the San Diego River bacteria TMDL and an updated implementation plan that incorporates bacteria TMDL requirements along with previously adopted TMDLs for dissolved metals and Diazinon in the Chollas Creek watershed.

11.2.2 Overall Component Assessments

Development Planning
The City's review process for development projects effectively requires BMPs with higher pollutant removal efficiency. City interaction with responsible parties during the reporting period has resulted in BMP installation and a greater level of awareness of the need for regular treatment control BMP maintenance within the City, particularly with newly completed projects. The City will continue to work with the parties responsible for maintenance of treatment control BMPs during 2012/2013.

Construction
Available data indicate that on the whole the City's construction program effectively requires BMP implementation. Any BMP deficiencies observed during inspection are typically remedied promptly through City follow-up. As a result, there have not been any unresolved construction BMP deficiencies from 2002-2012. The City continued to require even small projects to complete a CSWMP and performed inspections on low priority construction sites beyond the minimum requirements of the Municipal Permit to ensure compliance.

Municipal
The City's municipal activities effectively implement BMPs and reduce pollutant loading. The City's municipal staff are regularly trained on storm water issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit frequency requirements. In particular, the City sweeps its streets more often than the permit requirements to aid in WURMP efforts. The City has also installed drainage inserts along University Avenue and at the Public Works Operation Center to reduce the discharge of pollutants. Additional treatment controls, two Filterra bioretention system units, were installed in the University drainage basin during 2009/2010. The City continues implementation of a sophisticated system, Calsense, to control irrigation runoff from parks and medians. The City also distributes pet waste bags through dispensers in its parks.

Industrial and Commercial
The City employs a dedicated storm water inspector that works with businesses during and following inspections to ensure compliance. During this reporting period, the City followed-up with non-compliant sites and will continue to do so into 2012/2013. The City continued invoicing businesses in order to recover costs of inspections and it appears that this practice has stimulated more interest in the program and more of a desire to comply with regulations. The practice of charging businesses for each routine inspection and follow-up visit provides the additional benefit of encouraging businesses to comply in a timely manner. Notably, there has been an increase in the number of fully compliant sites each year since 2007. In 2011/2012, compliance was 26 percent greater than it was following the 2007 inspection results.

Residential
The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. In 2011/2012, the largest number of residential-related complaints was received by the City's Storm Water Hotline and Public Works maintenance hotline. This suggests that the City's efforts to increase residential awareness of storm water pollution prevention through various measures have been effective. Residential areas within the City designated as high TTWQ receive additional attention from City staff to check for evidence of IC/IDs and high TTWQ activities.

Illicit Discharge Detection and Elimination
The City's IDDE program has effectively responded to complaints. No IC/IDs were observed during the 2011 or 2012 Dry Weather Monitoring Programs. The City will continue to respond appropriately and take action to prevent and eliminate IC/IDs.

Education
During 2011/2012, the City continued to educate various communities in the City. The City also continued to distribute the *La Mesa Focus* newsletter, which often included articles or announcements regarding storm water and pollution prevention, to residents and businesses in the City. The City also contracted ILACSD to conduct school presentations to children and provide interactive educational booths at events such as at the Kids Care Fest and the Intergenerational Games.

Public Participation
The City continued to encourage participation in public events, such as cleanup events, and reporting potential storm water violations via the City's Storm Water Hotline. While the total number of hotline calls decreased between 2010/2011 and 2011/2012, possibly indicating a decreased overall number of storm water issues occurring in the City, the majority of calls received were from residents, suggesting an increased public awareness of storm water pollution prevention.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-1
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review and approve project plans	External A small number of projects submitted reports during 2011/2012. Based on meetings with applicants and BMPs proposed, it appears that the level of knowledge is increasing. Internal The City's Storm Water Program Manager worked with engineers in the City to improve their level of understanding of the new SUSMP and HMP requirements. The City's consultant is also available to review WQTRs submitted to the City.	Overall WQTR approval rate during reporting period	40%; two of five new priority projects were reviewed and approved	N/A, addressed through other significant activities for this component
		Percent of projects proposing BMPs besides filter inserts	100%	
		Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City performs treatment control BMP inspections.	Percent of projects implementing proposed BMPs	100%, due to City follow-up	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	See Section 2	
Verify BMPs are properly maintained	External Verification letters were sent to all 18 projects on the City's inventory. Internal N/A, verification letters were prepared by the City	Percent of sites properly maintaining BMPs	100%, due to City follow-up	Load reduction can be achieved through regular BMP maintenance.
		Resolution status of enforcement actions	See Section 2	
		Percent of sites submitting proper verification forms	100%, due to City follow-up	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-2
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by permit conditions, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of BMP deficiencies resolved by City follow-up within the reporting period	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Details about resolution and enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff are regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	73%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4	Number of pet waste bags distributed	22,500
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.		Amount of sediment and debris removed (weight or volume)	526.12 tons
				Amount of sediment and debris removed per length of street swept (weight or volume per curb mile)	0.06 tons/ curb mile
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume) not including debris removed from treatment BMPs	263 cubic yards
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge recovered	100 gallons
Maintain municipal treatment control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment BMPs	12.5 cubic yards
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External The City's inspector regularly interacts with business owners and provides site-specific BMP corrective actions at each full inspection visit. See Section 8 for more detail on educational materials and other outreach efforts. Internal The City regularly hosts and attends training events. See Section 8 for more detail on specific training sessions.	Percent of inspected sites in compliance with BMP requirements (not including follow-ups)	89%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Percent of inspected sites in compliance with BMP requirements following brief re-inspection.	97%		
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	0	Number of IC/IDs encountered during inspections	0
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5: Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External Residents were educated in variety of ways in 2011/2012; see sections 6 and 8 for details. Internal The City's Storm Water Program Manager is heavily involved in the implementation of the residential component. Other City staff involved in the program also have a good understanding of the goals of the storm water program.	Number of residential incidents reported to storm water hotline	96	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution of enforcement actions	See Section 6	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6: Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were eliminated, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to storm water hotline	The City's Storm Water Program Manager trains City staff as needed. See sections 4 and 8. City staff were responsible for some of the reports made to the hotline.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 7 are likely to have resulted in a pollutant loading reduction.
Respond to and clean up SSOs	City staff are thoroughly trained on how to respond to SSOs.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems. See Section 4 for details.	There was one public SSO during the reporting period; 100gallons of wastewater were recaptured.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-7: Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for 2011/2012.
	Estimated number of impressions made	26,933		

Notes

Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8: Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details. See Figure 11-1 for a summary of hotline reports in recent years.	Number of attendees at events	4,086	Amount of trash and debris collected at cleanup events	1,234 pounds
		Number of calls received to the storm water hotline	119	Amount of HHW collected	87,249 pounds

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Storm Water Complaints Logged

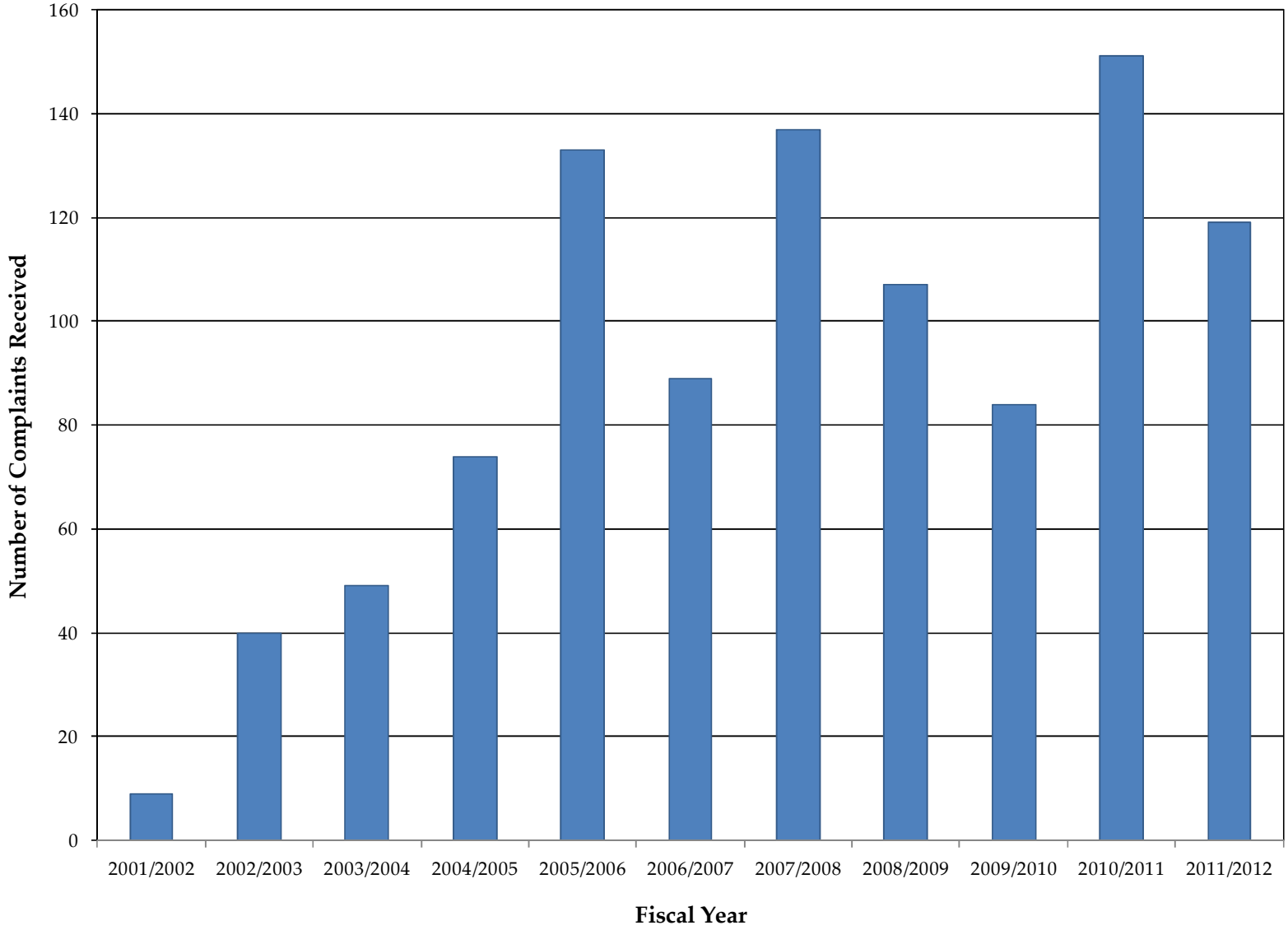

Figure 11-2
Dry Weather Monitoring, Alvarado and Spring Valley Drainage Basin Flow Rates, 2008-2012

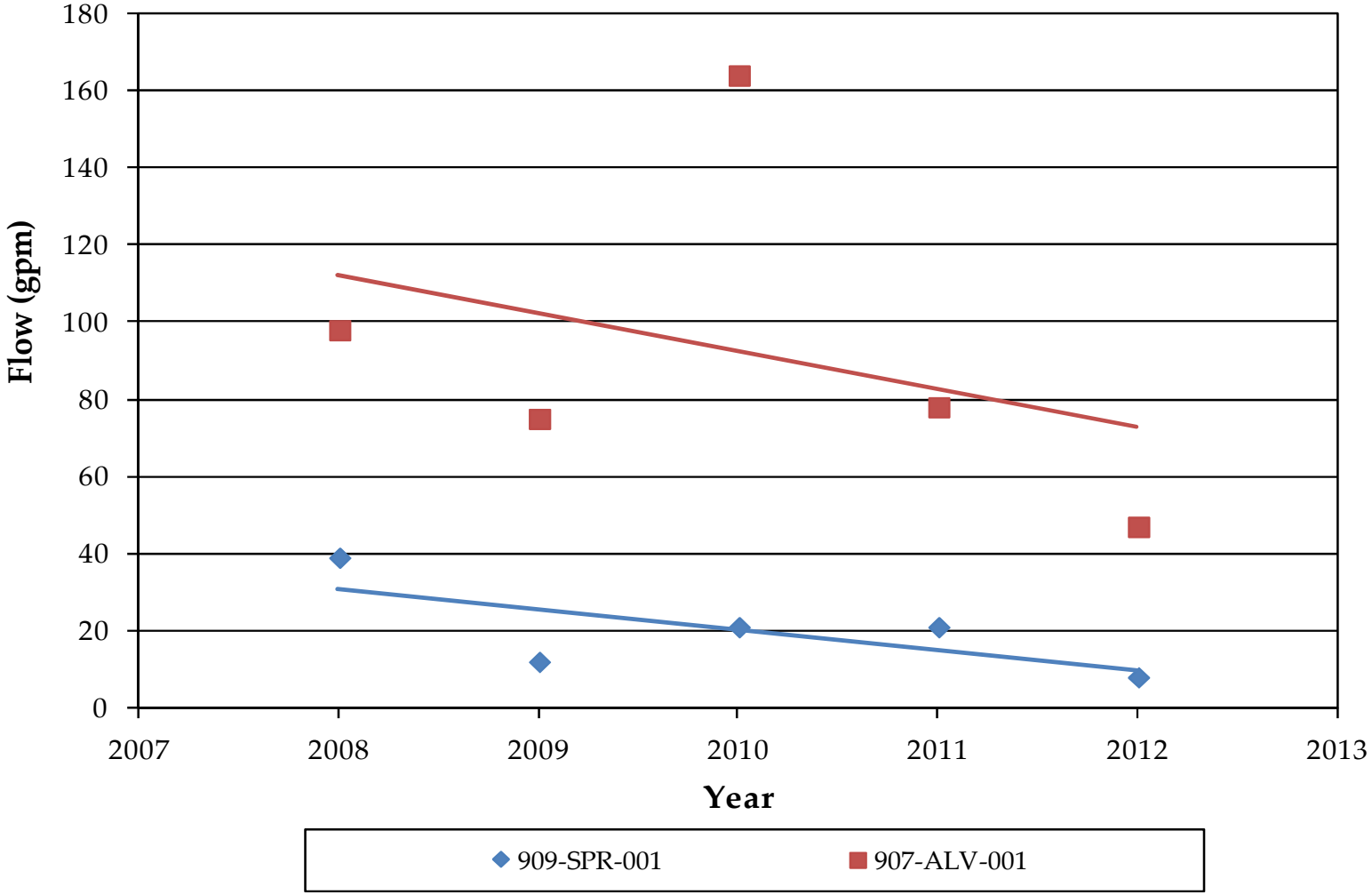

Note: gpm – gallons per minute

Figure 11-3
Dry Weather Monitoring, University Drainage Basin Flow Rates, 2002-2012

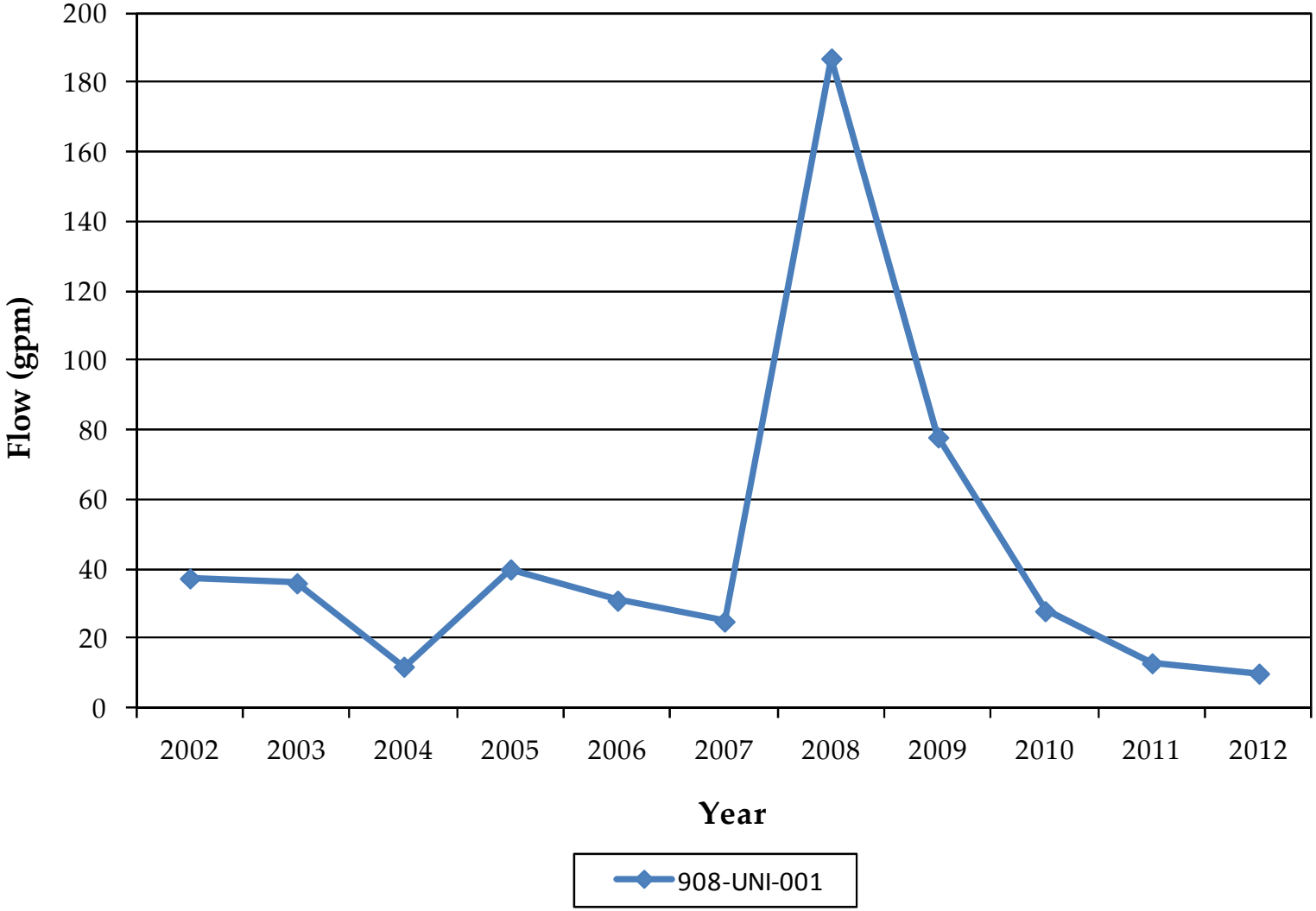

Note: Flow measurements for years 2004-2007 are a sum of flow rates measured at sites 908-UNI-002 and 908-UNI-14A since flow at these sites contribute to site 908-UNI-001 and routine dry weather monitoring was not conducted at 908-UNI-001 during that time.

Figure 11-4
Dry Weather Monitoring, Averages of Tested Field Constituents

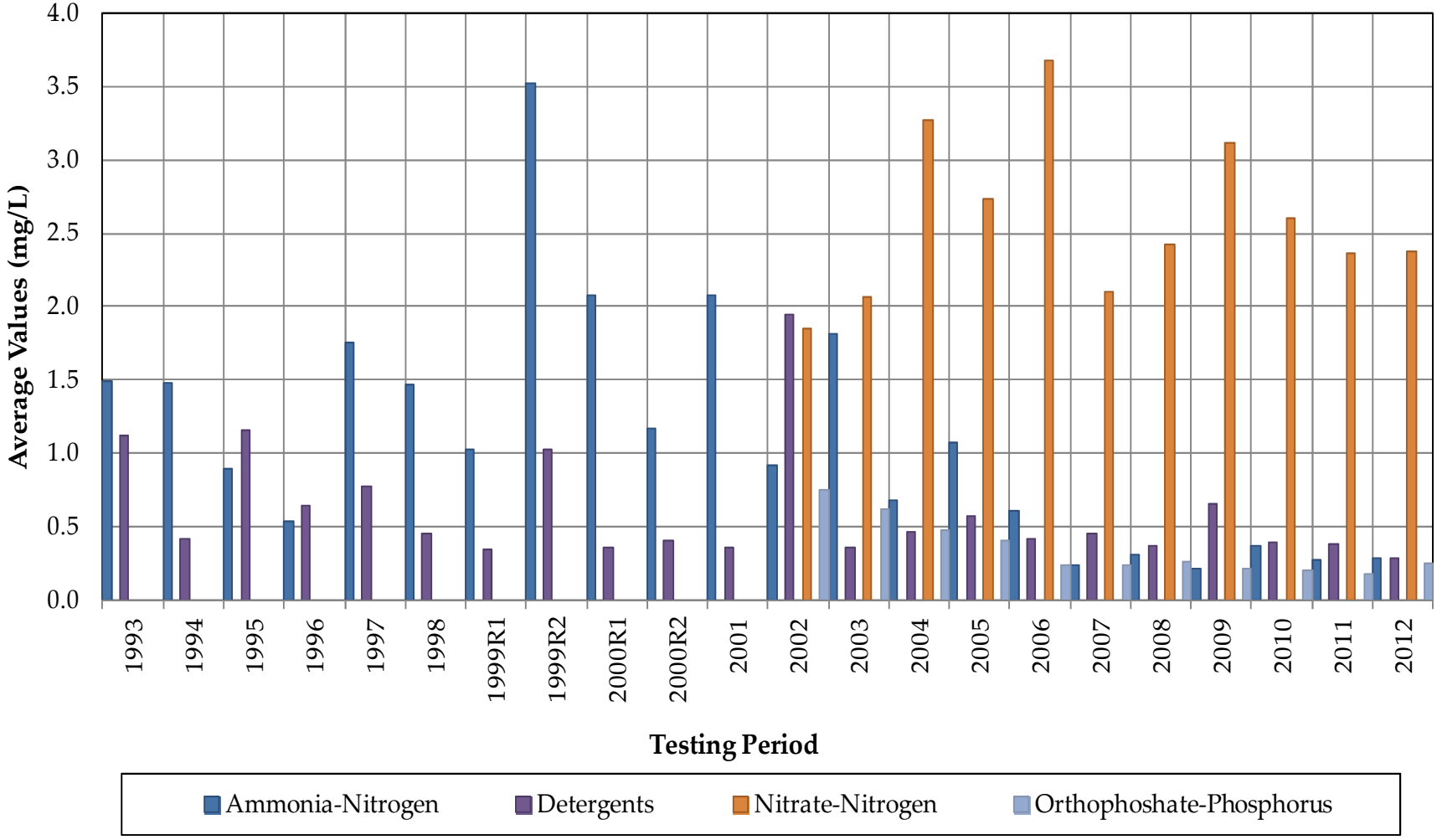

Figure 11-5
Dry Weather Monitoring, Ammonia-Nitrogen, 1993-2012

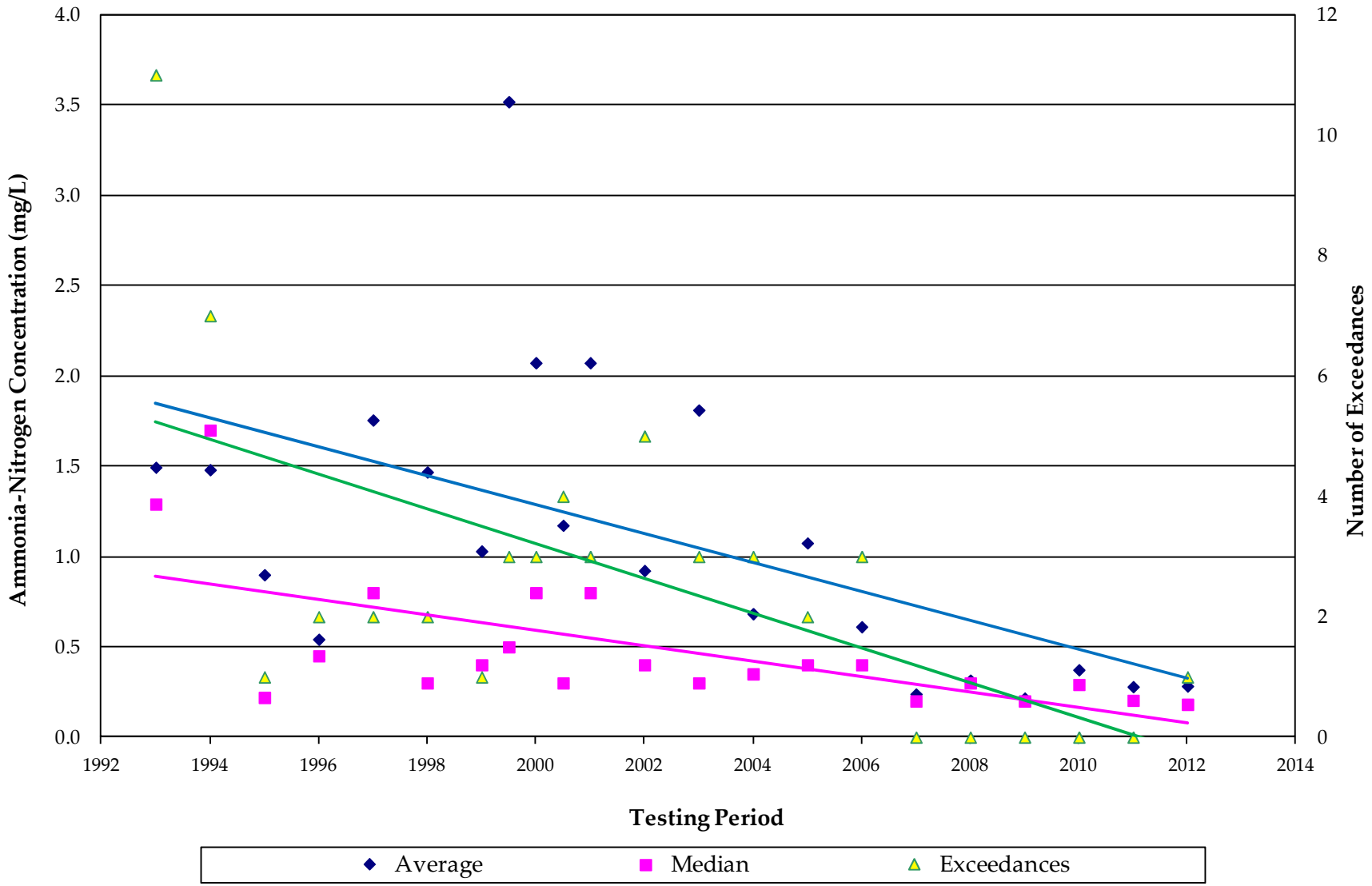

Figure 11-6
Dry Weather Monitoring, Detergents, 1993-2012

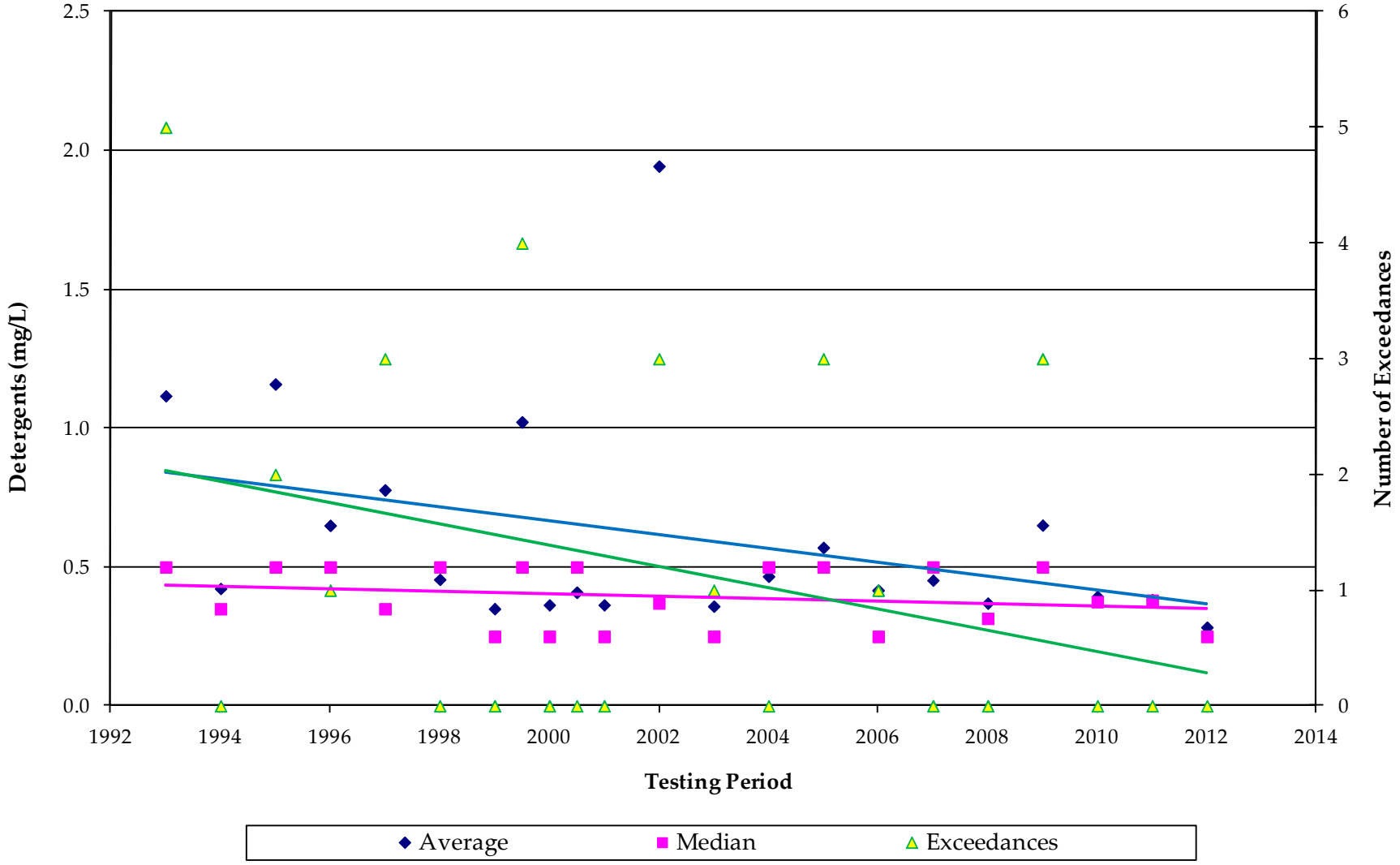

Figure 11-7
Dry Weather Results, Fecal Coliform and *Enterococcus* Bacteria, 2002-2012

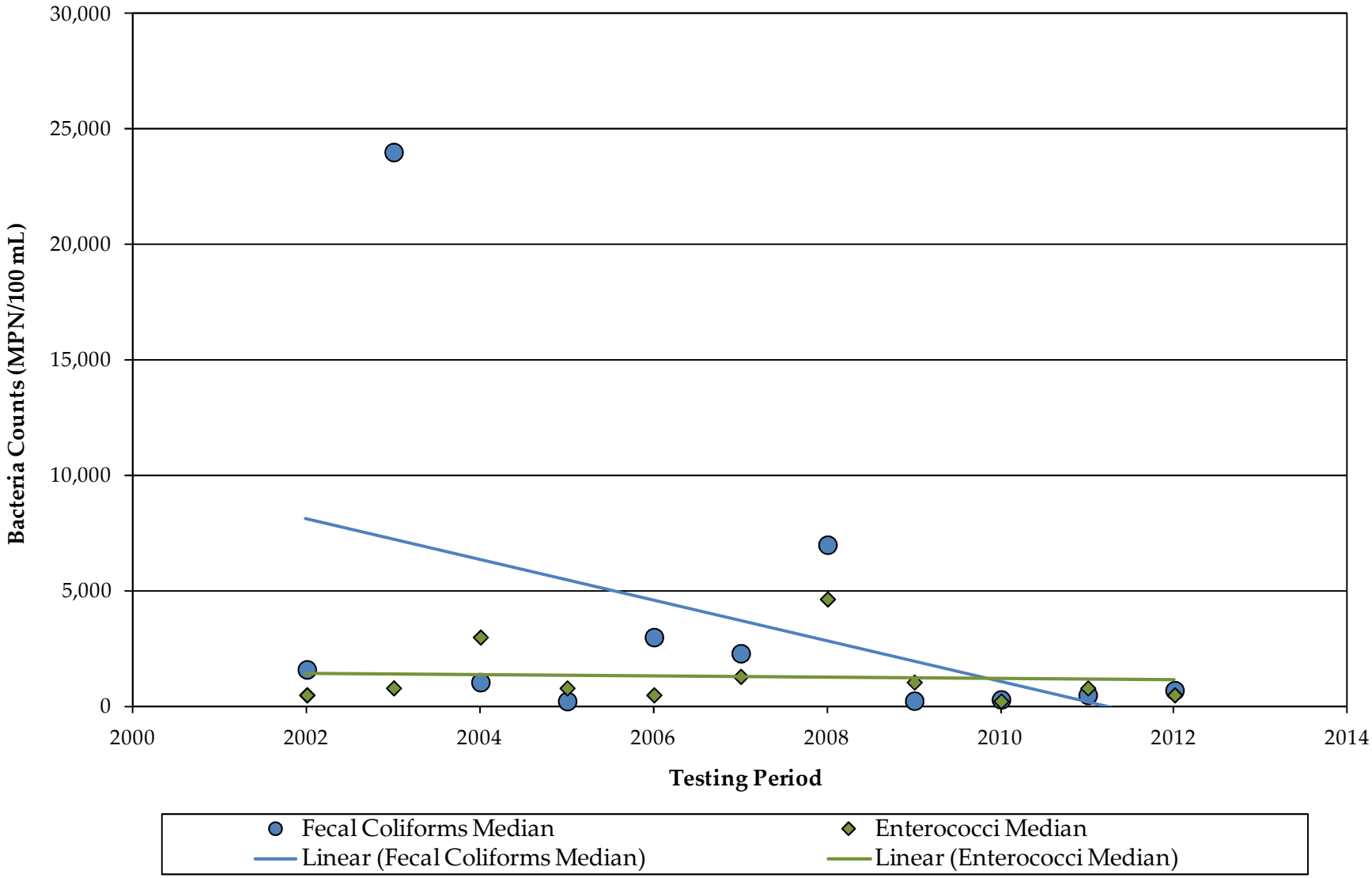

12.0 Special Investigations

The City takes a proactive approach to storm water management in an attempt not only to protect receiving water quality, but also to improve the quality of water that is discharged from the City's MS4. Data collected through the City's various monitoring and inspection programs are used to identify locations within the City that may be contributing to storm water contamination. Source identification investigations are then initiated to pinpoint the exact cause of detected pollution. Aside from upstream investigations conducted as part of the dry weather monitoring and sampling program (to be reported as part of the Illicit Discharge Detection and Elimination component in December), no special investigations were needed or conducted during this reporting period.

13.0 NON-EMERGENCY FIRE FIGHTING

Please reference Section 4.2.3 of this JURMP Annual Report for information about BMPs and procedures associated with non-emergency fire fighting activities.

14.0 JURMP REVISIONS

Changes to the JURMP made since the overall JURMP update in the spring of 2008 are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 Conclusions and Recommendations

During 2011/2012, the City of La Mesa continued to implement its storm water program based on the 2008 JURMP. Additionally, the City continued to work collaboratively with the other Copermittees to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City will continue to refine and improve its storm water program based on information made available by these collaborative efforts.

Beyond the JURMP Program, City is also subject to additional requirements associated with TMDL regulations, which set numeric compliance limits. The City of La Mesa has been collaborating with other Copermittees in the Chollas Creek watershed to conduct annual reporting and monitoring for the Chollas Creek Diazinon and dissolved metals TMDLs. During 2010/2011, the City also developed a Strategic Plan for Watershed and TMDL Activity Implementation, coinciding with the adoption of bacteria TMDLs for both the San Diego River and Chollas Creek watersheds. Since that time, the City has been collaborating with other Copermittees to conduct monitoring and modeling, develop the Implementation Plan for San Diego River's bacteria TMDL, and update the Chollas Creek Implementation Plan to include the new bacteria TMDL. These efforts will continue throughout the TMDL timelines.

16.0 REFERENCES

California Regional Water Quality Control Board, 2007. Order No. R9-2007-0001. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

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City of La Mesa, 2008. *Jurisdictional Urban Runoff Management Program.*

County of San Diego, 2007. *Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Report.*

State Water Resources Control Board, 1997. Order No. 97-03-DWQ. *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.*

State Water Resources Control Board, 2009. Order No. 2009-0009-DWQ. *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.*

State Water Resources Control Board, 2010. *Clean Water Act Sections 305(b) and 303(d) Integrated Report on Evaluation of Surface Water Quality and Listing of Impaired Water Body Segments for the San Diego Region (2010 Integrated Report).*

County of San Diego, 2011. *Countywide Model SUSMP: Standard Urban Stormwater Mitigation Plan Requirements for Development Applications*.

County of San Diego, 2011. *Final Hydromodification Management Plan.*

APPENDIX A.1

Appendix A.1
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Year Finalized	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Other	
1	Former Car Dealership	7604 El Cajon Blvd.	Alvarado	2003	Y		X								Medium
2	Parkview	4111 Massachusetts Ave.	University	2004	N			X			X			Porous concrete	Medium
3	Briercrest Park (CIP)	9001 Wakarusa St.	Alvarado	2005	Y					X					Medium
4	Aragon	7701 El Cajon Blvd	University	2006	N								X		Medium
5	La Mesa Fire Station #11 (CIP)	8054 Allison Avenue	University	2006	Y									Storm screens	High
6	Lowell Street Condominiums	4241 Lowell Street	University	2006	N		X				X				Medium
7	Bougainvillea Walk	Milden Street	Alvarado	2007	N						X				Medium
8	Eastridge Serramar	3957 Murray Hill Rd	University and Spring Valley	2007	N			X					X		Medium
9	Kaiser	8010 Parkway Drive	Alvarado	2007	Y								X		High
10	La Mesa Teen Center (CIP)	7775 Junior High Dr.	University	2007	Y		X				X				Medium

Appendix A.1 (Continued)
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Year Finalized	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Other	
11	Providence Square (Formerly Talmadge East Apartments)	5090 Guava Street	Alvarado	2007	N						X				Medium
12	Grossmont Medical Offices and Parking Structure	8860/8870 Grossmont Center Dr	Alvarado	2008	Y		X				X		X		Medium
13	Grossmont Trolley Theater Conversion	8555 Fletcher Pkwy	Alvarado	2008	Y						X				High
14	John A. Davis YMCA (CIP)	8881 Dallas St	Alvarado	2009	N		X					X			Medium
15	La Mesita (Belvedere)	7360 La Mesita Place	University	2009	Y						X				Medium
16	County Library, La Mesa Branch (CIP)	8074 Allison Avenue	University	2010	N								X		High
17	Alterra/Pravada at Grossmont Trolley Apartments	8727 Fletcher Pkwy	Alvarado	2010	N		X				X	X		Downspout filters	High

Appendix A.1 (Continued)
Permanent Treatment Control BMP Inventory

#	Project Name	Project Address	Drainage Basin	Year Finalized	Com/Ind > One Acre	Treatment Control BMPs									TTWQ Priority
						Bioretention	Biofilters	Detention Basins	Infiltration Basins	Wet Pond	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Other	
18	La Mesa Police Department (CIP)	8085 University Ave	University	2011	Y		X						X		High

Notes:

- Alvarado and Lake Murray drainage basins are in HSA 907.11 (San Diego River Watershed)
- University and Lemon Grove drainage basins are in HSA 908.22 (San Diego Bay Watershed)
- Spring Valley drainage basin is in HSA 909.12 (San Diego Bay Watershed)

APPENDIX A.2

Appendix A.2
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Total Insp.
Public Projects								
1	CIP 10-04 Collector Street Resurfacing and Utilities Project	Various Streets	SD Bay, SD River	Medium	32	7	0	7
2	CIP 10-13 Slurry Coating and Crack Sealing	Various Streets	SD Bay, SD River	Medium	0	0	1	1
3	Allison Ave. Parking Lot	Allison Ave. at Date Ave.	SD Bay	Medium	0	0	1	1
4	CIP 11-02 CMP Replacement Project Marengo and Morro	Marengo and Morro, other locations	SD River	Medium	19	4	0	4
5	CIP 11-03 Storm Drain and Sewer Improvements	University Ave., La Mesita Park, Butte St.	SD Bay, SD River	Medium	32	7	0	7
6	CIP 12-07 Old Police Station Demolition	8181 Allison Ave.	SD Bay	Medium	14	3	0	3
7	Alvarado RV Park Sewer	7407 Alvarado Rd.	SD River	Low	5	1	0	1
Private Projects								
8	Mesa Del Sol (Hilltop 37 Homes)	7378 Orien Ave.	SD Bay	Medium	32	8	1	9
9	Severin Office Building	5980 Severin Dr.	SD River	Medium	19	4	0	4
10	Demo/Elderly Home Construction	5640 Aztec Dr.	SD River	Medium	32	7	0	7
11	Demolition Red Oak	5130 Baltimore Dr.	SD River	Medium	0	0	1	1
12	CoAmerica Bank	5450 Jackson Dr.	SD River	Medium	23	5	0	5

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Total Insp.
13	Condos (Aragon)	7701 El Cajon Blvd.	SD Bay	Low	32	1	0	1
14	Grading RV Parking	4661 Maple Ave.	SD Bay	Low	32	1	0	1
15	SFH	4560 3rd St.	SD Bay	Low	32	0	0	0
16	SFH	4480 Panorama Ave.	SD Bay	Low	32	1	0	1
17	SFH	9589 Alto Dr.	SD Bay	Low	32	1	0	1
18	SFH	4292 Merritt Blvd.	SD Bay	Low	32	1	0	1
19	MTS Grossmont Center Bridge	8725 Fletcher Pkwy.	SD River	Low	19	1	0	1
20	SFH	4851 Palm Ave.	SD Bay	Low	32	1	0	1
21	SFH	4290 Bancroft Dr.	SD Bay	Low	32	1	0	1
22	SFH	8229 Pasadena Ave.	SD Bay	Low	32	1	0	1
23	Storm Drain/Sidewalk Frontage	4779 Bancroft St.	SD Bay	Low	32	1	0	1
24	SFH Addition	4518 Nebo Dr.	SD Bay	Low	32	1	0	1
25	SFH Retaining Wall	7566 University Ave.	SD Bay	Low	32	1	0	1
26	SFH	9038 Molly Woods Ave.	SD Bay	Low	18	1	0	1
27	7-11 Gas Station Tank Removal	4253 Palm Ave.	SD Bay	Low	0	0	1	1
28	Park Lot Slurry and Water Quality	6145 Lake Murray Blvd.	SD River	Low	0	0	1	1

APPENDIX A.3

Appendix A.3
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source[1]
1	Allison Avenue Lot (Parking Facility)	Palm & Allison Avenues	High	San Diego River	Roads, Streets, Highways, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	
2	Aztec Park	Corner of Aztec Drive and Morocco Drive	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
3	Briercrest Park	9000 Block Wakarusa Street	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
4	Collier Park and Pump House	4401 Palm Avenue	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
5	Community Pool	5100 Memorial Drive	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
6	Graffiti Removal	Throughout City	High	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	PO	PO	PO	PO	PO	PO	PO	PO	UL	
7	Harry Griffen Park	9550 Milden Street	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
8	Highwood Park	4200 Parks Avenue	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
9	Jackson Park	Jackson Drive and Laird Street	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
10	Junior Seau Sports Complex	9001 Park Plaza Drive	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
11	La Mesa Boulevard (Parking Facility)	La Mesa Boulevard & Acacia Avenue	High	San Diego Bay	Roads, Streets, Highways, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	X
12	La Mesita Park and Gardener's Shack	8855 Dallas Street	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
13	Lemon Ave Lot (Parking Facility)	Lemon Avenue & 3rd Street	High	San Diego Bay	Roads, Streets, Highways, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	
14	MacArthur Park	University Avenue and Memorial Drive	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
15	MS4	53 miles of pipes, storm drains, storm drain boxes, and open channel sections throughout the City	High	San Diego Bay/ San Diego River	MS4	UL	UL	UL	PO**	UL	UL	PO**	PO**	UL	
16	Northmont Park	Severin Drive and Amaya Drive	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
17	Palm Avenue Lot (Parking Facility)	Palm & Lemon Avenues	High	San Diego River	Roads, Streets, Highways, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	
18	Porter Hall	4910 Memorial Drive	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
19	Porter Park	8425 University Avenue	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
20	Power Washing	Throughout City	High	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	PO	PO	PO	PO	PO	PO	PO	PO	UL	

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source[1]
21	Public Works Operation Center	8152 Commercial Street	High	San Diego River	Public Works Facilities	L	PO	L	L	PO	PO	PO	PO	PO	
22	Roads, Streets, and Highways	149 miles of roadways throughout the City	High	San Diego Bay/ San Diego River	Roads, Streets, Highways, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	X
23	Rolando Park	Alamo Way and Vigo Street	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
24	Sanitary Sewer Maintenance	Throughout City	High	San Diego Bay/ San Diego River	Sanitary Sewer Maintenance	PO***	UL	PO***	UL	UL	PO***	PO***	PO***	UL	
25	Special Events	Throughout City	High	San Diego Bay/ San Diego River	Special Events	UL	UL	UL	UL	UL	UL	PO	PO	L	X
26	Sunset Park, Gardener's Shack, and Recreational Building	5540 Lake Park Way	High	San Diego River	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
27	Sunshine Park	70th and Tower Street	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
28	Vista La Mesa Park	King Street and Hoffman Avenue	High	San Diego Bay	Parks and Recreation Facilities	UL*	UL	UL*	L	L	L	L	L	PO	X
29	Fire Station No. 11	8034 Allison Avenue	Medium	San Diego Bay	Fire Stations	PO	PO	PO	PO	UL	UL	UL	PO	PO	
30	Fire Station No. 12	8834 Dallas Street	Medium	San Diego River	Fire Stations	PO	PO	PO	PO	UL	UL	UL	PO	PO	
31	Fire Station No. 13	9110 Grossmont Boulevard	Medium	San Diego River/ San Diego Bay	Fire Stations	PO	PO	PO	PO	UL	UL	UL	PO	PO	
32	Infrastructure Maintenance	Throughout City	Medium	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	PO	PO	PO	PO	PO	PO	PO	PO	UL	
33	Landscape Maintenance	Throughout City	Medium	San Diego Bay/ San Diego River	Mobile Municipal Facilities, Including Power Washing	PO	PO	PO	PO	PO	PO	PO	PO	UL	
34	Police Station	8181 Allison Avenue	Medium	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
35	PW Maintenance Building	8152 Commercial Street, Building 100	Medium	San Diego River	Public Works Facilities	L	PO	L	L	PO	PO	PO	PO	PO	
36	PW Traffic Operation Trailer	8152 Commercial Street, Building 600	Medium	San Diego River	Public Works Facilities	L	PO	L	L	PO	PO	PO	PO	PO	
37	Adult Enrichment Center	8450 La Mesa Boulevard	Low	San Diego River	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
38	Adult Enrichment Center Clubhouse	8425 La Mesa Boulevard	Low	San Diego River	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
39	City Hall and Modular Buildings	8130 Allison Avenue	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
40	City Hall Annex	8130 Allison Avenue	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
41	Community Center	4975 Memorial Drive	Low	San Diego River	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
42	Helix Water District	7911 University Avenue	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source[1]
43	Historical Society	8369 University Avenue	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
44	Library/Fine Arts	8055 University Avenue	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
45	Nan Couts Cottage (Recreational Bldg)	4875 Memorial Drive	Low	San Diego River	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
46	Postal Facility	4800 Nebo Drive	Low	San Diego Bay	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
47	PW Administration	8152 Commercial Street, Building 300	Low	San Diego River	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
48	PW Document Storage	8152 Commercial Street, Building 500	Low	San Diego River	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
49	Recreation Center	4975 Memorial Drive	Low	San Diego River	Other Fixed Facilities	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	

Notes:

[1]Likely Source: Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

L = Likely, PO = Possible, UL= Unlikely

* Discharge of heavy metals and oil and grease is possible if the facility has on-site parking

** Sediment and oxygen demanding substances are possible pollutants for earthen or natural conveyances. Bacteria, but generally not viruses and other pathogens, may regrow in MS4s under certain conditions. While other pollutants may be discharged from the MS4, the MS4 itself is not a direct source of those pollutants.

***The sanitary sewer system is only a potential source of pollutants in the event of sewer line breaks or SSOs.

APPENDIX A.4

Appendix A.4
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1	American Tanks	8111 Commercial St.	High	907.1	Industrial	No	3444	Manufacturing, Fabricated Metal	No	No	Yes	No	No	No	No	No	Yes	Yes	No	Yes	No
2	California Countertops, Inc.	7811 Alvarado Rd.	High	907.1	Industrial	No	3089	Manufacturing and Installation of Counter Tops	No	No	No	No	No	No	No	Yes	Yes	Yes	No	Yes	Yes
3	Centex Glazing	8260 Center Dr.	High	907.1	Industrial	No	1791	Other Contractor	No	No	No	No	No	Yes	No	No	Yes	Yes	No	Yes	No
4	Dixieline Lumber & Home Centers	8372 Center Dr.	High	907.1	Industrial	No	5211	Lumber and Building Materials	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes
5	EDCO Transfer Station	8182 Commercial St.	High	907.1	Industrial	No	4953	Waste Management	Yes	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes
6	Rainbow Steel Inc.	8332 Case St.	High	907.1	Industrial	No	3499	Manufacturing, Fabricated Metal	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
7	Walter H. Barber & Sons, Inc.	8179 Center St.	High	907.1	Industrial	No	1629	Heavy Construction, Not Elsewhere Classified	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
8	A-1 Self Storage (Center Dr.)	8328 Center Dr.	Medium	907.1	Industrial	No	4225	Wholesale/ Storage/ Warehousing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
9	Albert J. Becker dba Wood Design West	8333 Case St.	Medium	907.1	Industrial	No	2434, 2511	Manufacturing, Misc.	No	No	Yes	No	No	Yes	No	Yes	Yes	Yes	No	No	No
10	Classic Screen Print	8176 Center St. Suite C	Medium	907.1	Industrial	No	2759	Printing	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
11	Jejjoni Sign MFG.	8169 Center St.	Medium	907.1	Industrial	No	3993	Electrical Sign & Equipment Manufacturing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	Yes	No
12	L & R Neon	8200 Commercial St. #101	Medium	907.1	Industrial	No	3993	Signs and Advertising Specialists	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
13	La Mesa Transfer & Storage, Inc.	8336 Case St.	Medium	907.1	Industrial	No	4214	Wholesale/ Storage/ Warehousing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	Yes	No
14	Lyons & O'Haver, Inc. Taxidermy	8180 Parkway Dr.	Medium	907.1	Industrial	No	3999	Manufacturing, Misc.	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
15	MGH Granite Workz	8332 Case St. Unit 4	Medium	907.1	Industrial	No	3281	Granite Cutting & Finishing	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No
16	Moran Canvas Products	8135 Center Dr.	Medium	907.1	Industrial	No	3444	Manufacturing, Fabricated Metal	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
17	Schaefer Ambulance	7285 University	Medium	908.2	Industrial	No	4119	Ground Transportation	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
18	The Little Warehouse	5175 Baltimore Dr.	Medium	907.1	Industrial	No	4225	Wholesale/ Storage/ Warehousing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
19	A-1 Self Storage (Spring St.)	4981 Spring St.	Low	907.1	Industrial	No	4225	Wholesale/ Storage/ Warehousing	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
20	A A A Auto Repair & Transmission	7025 University Ave	High	908.2	Commercial	No	7537	Auto Repair	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
21	A-1 Hire, Ltd.	7190 University Ave	High	908.2	Commercial	No	7353, 7694	Vehicle, Equipment Rental	No	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
22	Ace Coating Co.	8333 Case St. Suite 584	High	907.1	Commercial	No	1799	Other Contractor	No	No	No	Yes	No	Yes	No	No	No	Yes	No	Yes	No
23	Aqua Clean Hand Car Wash & Express Lube	7959 Parkway Dr.	High	907.1	Commercial	No	7542, 7549	Vehicle Washing and Fluid Changing	No	Yes	Yes	No	Yes	No	No	No	No	Yes	No	Yes	No
24	Auto Fix	7227 University Ave	High	908.2	Commercial	No	7538	General Automotive Repair	No	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
25	Big Daddy's Oil Inc. #14	9600 Murray Dr.	High	907.1	Commercial	No	5541	Gasoline Service Station w/ Food Store	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
26	BJ's Pizza & Grill	5500 Grossmont Center Dr. #M1	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
27	Bob Stall Chevrolet	7601 Alvarado Rd.	High	907.1	Commercial	No	5511, 7538	Vehicle Dealers w/ Service	No	No	Yes	No	Yes	No	No	No	No	Yes	No	Yes	No
28	Broding's Battery Warehouse	8188 Commercial St.	High	907.1	Commercial	No	5013	Auto Supplies	No	Yes	No	No	No	No	No	No	No	Yes	No	Yes	No
29	Burger Auto Group, LLC	8355 Hercules St.	High	907.1	Commercial	No	5511, 7538, 7532	Automotive Sales and Repair Work	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No
30	Chili's Bar & Grill	8285 Fletcher Pkwy.	High	907.1	Commercial	No	5812, 5813	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
31	China Super Buffet	7984 La Mesa Blvd.	High	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
32	Chipotle Mexican Grill	8005 Fletcher Pkwy.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
33	Five Star Collision Center Inc.	7643 University Ave Suite H	High	908.2	Commercial	No	7532	Auto Paint/Body	No	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
34	Fuddrucker's	5500 Grossmont Center Dr.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
35	Jack in the Box (DMSD Foods).	5141 Jackson Dr	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
36	Jack in the Box (Nfarooqi Enterprises LLC)	6140 Lake Murray Blvd.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
37	Jack in the Box (University)	6987 University Ave	High	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
38	Madina Market	6957 University Ave	HIgh	908.2	Commercial	No	5411	Grocery / Convenience Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
39	Marie Callender's #74	6950 Alvarado Rd.	High	907.1	Commercial	No	5812, 5813	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	Yes	No	Yes	No	Yes	No
40	McDonald's	8045 Fletcher Pkwy.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
41	Nacho's Taco Shop	7589 University Ave	High	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
42	Panda Express #226	8011 University Ave	High	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
43	Pick Up Stix La Mesa	8025 Fletcher Pkwy.	High	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
44	Por Favor Restaurant	8302 La Mesa Blvd.	High	909.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	No	Yes	Yes	No
45	Premium Auto Inc.	7643 University Ave Suite M	High	908.2	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
46	Raindance Roofing Company, Inc.	8176 Commercial St.	High	907.1	Commercial	No	1761	Roofing Contractor	No	No	No	No	No	No	No	Yes	No	Yes	No	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
47	Trailers Plus	7651 Alvarado Rd.	High	907.1	Commercial	No	5561	Recreational Vehicle Dealer	No	No	Yes	No	Yes	No	No	No	No	Yes	No	Yes	No
48	Vine Ripe Market	8191 Fletcher Pkwy.	High	907.1	Commercial	No	5411	Grocery Store	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
49	7-Eleven Food Store #13647	8300 Parkway Dr.	Medium	907.1	Commercial	No	5411	Grocery / Convenience Store	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
50	7-Eleven Food Store #13649	5746 Amaya Dr.	Medium	907.1	Commercial	No	5411	Grocery / Convenience Store	No	No	No	No	No	No	No	Yes	Yes	Yes	No	Yes	No
51	7-Eleven Food Store #16119	5255 Baltimore Dr.	Medium	907.1	Commercial	No	5411	Grocery / Convenience Store	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
52	7-Eleven Food Store #17945	7602 University Ave	Medium	908.2	Commercial	No	5411	Grocery / Convenience Store	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
53	7-Eleven Food Store #20884	4253 Palm Ave.	Medium	909.1	Commercial	No	5411	Convenience Store w/ Fueling Pumps	Yes	No	No	No	Yes	No	No	No	Yes	No	No	No	No
54	99 Cents Only	7908 El Cajon Blvd.	Medium	907.1	Commercial	No	5411	Grocery Store	No	No	No	No	No	No	No	No	No	Yes	No	No	No
55	A to Z Auto Repair	7159 University Ave	Medium	908.2	Commercial	No	7538	General Automotive Repair	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
56	A&A Garden Equipment Parts Service	7243 University Ave	Medium	908.2	Commercial	No	5261	Nurseries, Lawn and Garden Supply Stores	No	No	No	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes	No
57	Achieving The Dream dba Bob Bowen Auto Service	7191 Alvarado Rd.	Medium	907.1	Commercial	No	7538	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	No	No	Yes	No	Yes	No
58	Affordable Paint and Body	8181 Center St.	Medium	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	Yes	No	No	No	Yes	No	Yes	No
59	Albertson's #6710	8920 Fletcher Pkwy.	Medium	907.1	Commercial	No	5411	Grocery Store	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
60	Aliberto's Mexican Food	7819 El Cajon Blvd.	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
61	Amira Auto Sales & Broker	6942 University Ave Suite C	Medium	908.2	Commercial	No	5521	Motor Vehicle Dealer (Used)	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
62	Anthony's Fish Grotto La Mesa	9530 Murray Dr.	Medium	907.1	Commercial	No	5812, 5813	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
63	Antica Trattoria Inc.	5654 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
64	Arby's #5822	5341 Jackson Dr	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
65	Arco Sunshine Food Store #9543	7594 University Ave	Medium	908.2	Commercial	No	5541	Gasoline Service Station w/ Food Store	No	No	No	No	Yes	No	No	No	Yes	Yes	No	Yes	No
66	Arco Sunshine Food Store #9596	7974 University Ave	Medium	908.2	Commercial	No	5541	Gasoline Service Station w/ Food Store	No	No	No	No	Yes	No	No	No	Yes	Yes	No	Yes	No
67	Are Con, Inc.	8171 Center St.	Medium	907.1	Commercial	No	1771	Cement Mixing / Cutting	No	No	No	No	No	No	No	Yes	No	Yes	No	No	No
68	Arigato Japanese Restaurant	5575 Baltimore Dr. #110	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
69	Audio Associates	8200 Center Dr.	Medium	907.1	Commercial	No	3663	Audio / Video Equipment Installation	No	No	No	No	No	No	No	No	No	Yes	No	No	No
70	Auto Center	8203 University Ave	Medium	907.1	Commercial	No	7539	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	No	No	Yes	No	No	No
71	Auto Forza	7633 El Cajon Blvd.	Medium	907.1	Commercial	No	7539	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	No	No	Yes	No	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
72	Auto Repair Specialists	8120 Center St.	Medium	907.1	Commercial	No	7539	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	No	No	Yes	No	No	No
73	Aztec Fire & Safety	8107 Commercial St.	Medium	907.1	Commercial	No	1799	Fire Protection Specialists	No	No	Yes	No	No	No	No	No	No	Yes	No	No	No
74	Azure Construction, Inc.	7423 El Cajon Blvd.	Medium	908.2	Commercial	No	1799	Other Contractor	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	No	No
75	Baldwin Auto Sales	8327 Hercules St.	Medium	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	Yes	No	Yes	No	No	No
76	Bamboo Fresh Thai Cuisine	7953 University Ave	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
77	Banbu Sushi Bar & Grill	8555 Fletcher Pkwy. Suite 105	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
78	Bangkok Orchid Thai Cuisine	9168 Fletcher Pkwy.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
79	Baskin Robbins 31 Flavors	8807 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
80	Big O Tires	7589 El Cajon Blvd. Suite A	Medium	908.2	Commercial	No	7534, 7538	Automotive Repair Shop w/ Tire Sales	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
81	BMH Italian LLC	7670 El Cajon Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
82	Bob Stall Chevrolet	7631-7651 Alvarado Rd.	Medium	907.1	Commercial	No	5599	Vehicle Dealers	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
83	Brady Co. / San Diego Inc.	8100 Commercial St.	Medium	907.1	Commercial	No	1742	Plaster, Drywall, Insulation Installation	No	No	No	No	No	No	No	Yes	No	Yes	No	No	No
84	Brigantine Restaurant	9350 Fuerte Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
85	C & D Auto Care	7163 University Ave	Medium	908.2	Commercial	No	7538	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
86	C & D Towing Specialists	8332 Case St.	Medium	907.1	Commercial	No	7549	Vehicle Towing	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
87	Caliber Collision Center	8310 Center Dr.	Medium	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
88	Cape-Able Canines	8150 Commercial St.	Medium	907.1	Commercial	No	0752	Animal Services, Except Vet	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
89	Carini Electric, Inc.	8104 Center St.	Medium	907.1	Commercial	No	1731	Electrical Work	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
90	Carl's Junior #284	8110 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
91	Carnitas Uruapan Mexican Food	4233 Spring St.	Medium	909.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
92	Casa De Pico Restaurant	5500 Grossmont Center Dr. #404	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
93	Casual Café	8881 Fletcher Pkwy.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
94	Centifonti	8365 La Mesa Blvd.	Medium	909.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No
95	Centre City Shell #2	3810 Massachusetts Ave.	Medium	908.2	Commercial	No	5541	Gasoline Service Station	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
96	Century Motors	7474 University Ave	Medium	908.2	Commercial	No	5511	Auto Sales	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
97	Chang's Express	5500 Grossmont Center Dr. #FC4	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
98	Chin's Restaurant	8260 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
99	Chopstick's Inn Restaurant	8687 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
100	Chuck E. Cheese	5500 Grossmont Center Dr. #J 34	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
101	Citlalli Mexican Food	7327 University Ave	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
102	Claim Jumper Restaurant La Mesa	5500 Grossmont Center Dr. #406	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
103	Coco's #132	5550 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
104	College/La Mesa Smog Test Only	7643 University Ave #G	Medium	908.2	Commercial	No	7549	Auto Repair / Smog Testing	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
105	Collins Plumbing, Inc.	8130 Commercial St.	Medium	907.1	Commercial	No	1711	Plumbing Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
106	Colony Mobile Plaza	7440 Colony Dr.	Medium	907.1	Commercial	No	7033	Trailer Park	No	No	No	No	Yes	No	No	No	Yes	Yes	No	No	No
107	Commercial Electric & Gas Appliance Service	8110 Commercial St.	Medium	907.1	Commercial	No	7699	Equipment Repair	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
108	Continental Catering	8232 Parkway Dr.	Medium	907.1	Commercial	No	5812	Catering Business	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
109	Cosmos Café	8278 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
110	Costco Wholesale	8125 Fletcher Pkwy.	Medium	907.1	Commercial	No	5411, 5812	Eating Establishment and Wholesale Store	Yes	No	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
111	D'amatos Pizza	8807 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	No	No	No
112	Dallo Restaurant Group dba Charcoal House	9566 Murray Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
113	Dante's Pizza	5500 Grossmont Center Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
114	De Albas Spring Street Collision Center	4867 Spring St.	Medium	907.1	Commercial	No	7532	Auto Body & Paint	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
115	Denny's Restaurant #6488	4235 Spring St.	Medium	909.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	No	Yes	Yes	No
116	Denny's, Inc. #1743	6970 Alvarado Rd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
117	Detail 2000	8760 Campo Rd.	Medium	909.1	Commercial	No	7538, 7542	Auto Repair / Detailing	No	No	Yes	No	Yes	No	No	No	Yes	No	No	Yes	No
118	Discount Smog Centers	7633 El Cajon Blvd. Suite 200	Medium	908.2	Commercial	No	7549	Auto Emissions Testing w/out Repairs	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	No	No
119	Domino's Pizza	7960 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
120	Dream Dinner's	5208 Jackson Dr Suite 116	Medium	907.1	Commercial	No	5499	Miscellaneous Food Stores	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
121	Drew Ford / Drew Hyundai	8970 La Mesa Blvd.	Medium	907.1	Commercial	No	5511, 7538	Vehicle Dealers and Service	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	No
122	EC Auto Repair	8176 Commercial St.	Medium	907.1	Commercial	No	7539	Automotive Repair Shop	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
123	El Azteca Taco Shop Mexican Food	8306 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
124	El Cerrito Veterinary Hospital	6911 University Ave	Medium	908.2	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
125	El Cilantro Café	7520 El Cajon Blvd. Suite 301	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
126	El Torito	5024 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
127	Elite Auto Collision Repair Center	4949 Baltimore Dr.	Medium	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
128	Elite Auto Group	7658 University Ave	Medium	908.2	Commercial	No	5511	Vehicle Dealer	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
129	Emerald Oil Co.	5600 Baltimore Dr.	Medium	907.1	Commercial	No	5541	Gasoline Service Station w/ Food Store	No	No	No	No	Yes	No	No	No	Yes	Yes	No	Yes	No
130	Enterprise Rent-A-Car	8363 Center Dr. Suite 6-H	Medium	907.1	Commercial	No	7514	Vehicle/Equipment Rental	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
131	Express Auto Service	7633 El Cajon Blvd. Suite 300	Medium	908.2	Commercial	No	7538	Auto Repair	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
132	Extreme Auto Recovery	8180 Commercial St.	Medium	907.1	Commercial	No	7389	Auto Repossession Services	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
133	Fletcher Hills Pet Clinic	9160 Fletcher Pkwy.	Medium	907.1	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
134	G & M Oil #176 (76 Station)	6085 Lake Murray Blvd.	Medium	907.1	Commercial	No	5541	Gasoline Service Station w/ Food Store	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
135	Gingham	8384 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
136	Gold Coast Bagel Co.	5658 Lake Murray Blvd.	Medium	907.1	Commercial	No	5461	Bagel Shop	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
137	Golden Spoon	5640 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
138	Golden State Auto of La Mesa, Inc.	7224 University Ave	Medium	908.2	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No
139	Growers Direct	7055 University Ave	Medium	908.2	Commercial	No	5431	Fruit & Vegetable Market	Yes	No	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes	No
140	Gus's Subs & Pizza #2	5620 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
141	Haritna Mediterranean Restaurant	7303 El Cajon Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
142	Harloff Automotive	7445 University Ave	Medium	908.2	Commercial	No	5531, 7538	Auto Repair and Supply Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
143	Hearth House, The	5505 Jackson Dr	Medium	907.1	Commercial	No	5812, 5813	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
144	Heritage Landscape Services, Inc.	8115 Commercial St.	Medium	907.1	Commercial	No	0781	Landscape Services	No	No	No	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	No
145	Himalayan Cuisine	7918 El Cajon Blvd. Suite P	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
146	J.A. MacDonald, Inc.	8338 Center Dr.	Medium	907.1	Commercial	No	1522	Other Contractor	No	No	No	No	No	No	No	No	No	Yes	No	No	No
147	Jack Orr Auto Body	7253 University Ave	Medium	908.2	Commercial	No	7532	Auto Body & Paint	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No
148	Jamba Juice #143	5500 Grossmont Center Dr.	Medium	907.1	Commercial	No	5812	Smoothies and Drinks	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
149	Jason's Auto Garage	7643 University Ave	Medium	908.2	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
150	JK's Greek Café	7749 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
151	Knott's Pest Control	5141 Guild St.	Medium	907.1	Commercial	No	7342	Disinfecting and Pest Control Services	No	No	No	No	No	No	Yes	No	Yes	Yes	No	Yes	No
152	Konnichiwa Sushi	8350 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
153	La Mesa Auto Care	8692 La Mesa Blvd.	Medium	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
154	La Mesa Auto Repair	7801 El Cajon Blvd.	Medium	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
155	La Mesa Auto Spa Smog Test and Repair	8303 Parkway Dr.	Medium	907.1	Commercial	No	5541	Gasoline Service Station	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
156	La Mesa Billiards (Jolt n Joes)	8076 La Mesa Blvd.	Medium	908.2	Commercial	No	5812, 7999	Eating/Drinking Establishment w/ Amusement	Yes	No	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
157	La Mesa Bistro & Bakery	8697 La Mesa Blvd. Suite A	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
158	La Mesa Car Wash	5322 Jackson Dr	Medium	907.1	Commercial	No	5541, 7542	Gasoline Service Station w/ Car Wash	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	No
159	La Mesa College Auto Repair	7501 University Ave	Medium	908.2	Commercial	No	7538	General Automotive Repair	No	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
160	La Mesa Lumber	8255 University Ave	Medium	907.1	Commercial	No	5211	Lumber & Building Materials Dealer	No	No	No	Yes	No	No	No	Yes	Yes	Yes	No	Yes	No
161	La Mesa Motor Clinic, Inc.	5120 Guild St.	Medium	907.1	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
162	La Mesa Nine Diamonds LLC (AM/PM)	3775 Massachusetts Ave.	Medium	908.2	Commercial	No	5411	Gasoline Service Station w/ Food Store	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
163	La Mesa Paint & Body	8170 Parkway Dr.	Medium	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
164	La Mesa Smog Check	7801 El Cajon Blvd.	Medium	908.2	Commercial	No	7549	Auto Emissions Testing w/out Repairs	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
165	La Mesita Mexican Food	7012 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
166	La Salsa Restaurant	4990 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
167	La Torta Café	8356 Allison Ave. Suite A	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
168	Lake Murray Café	5465 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
169	Lake Murray Shell	5302 Lake Murray Blvd.	Medium	907.1	Commercial	No	5411	Gasoline Service Station w/ Car Wash	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	No	Yes	No
170	Lake Murray Village Veterinarian	5644 Lake Murray Blvd.	Medium	907.1	Commercial	No	0742	Animal Facilities	No	No	No	Yes	No	No	No	No	Yes	Yes	No	Yes	No
171	Little Roma Italian Cuisine	5575 Baltimore Dr. Suite 104	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
172	Los Pinos Taco Shop	5660 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
173	Manhattan Pizza	6195 Lake Murray Blvd. Suite D	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
174	Marieta's	8949 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
175	Mario's De La Mesa	8425 La Mesa Blvd.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
176	Midas Mufflers	7207 University Ave	Medium	908.2	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
177	Millenium Motors	8090 University Ave	Medium	907.1	Commercial	No	5521	Vehicle Dealer / Used Only	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
178	Mr. D's Mini Mart	8292 La Mesa Blvd.	Medium	908.2	Commercial	No	5411	Grocery / Convenience Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
179	Mr. G's Tavern	7081 University Ave	Medium	908.2	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
180	Mystic Grill & Bakery	6990 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
181	New York Buffalo Wings	7520 El Cajon Blvd. Suite 101	Medium	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
182	New York Giant Pizza	9083 Dallas St.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
183	Nonno's Pizza	5314 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
184	Norma Jean's	5286 Baltimore Dr.	Medium	907.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
185	Norm's Cocktails	7403 El Cajon Blvd.	Medium	908.2	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
186	Olive Garden GMRI, Inc. #1301	5500 Grossmont Center Dr. J-2	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
187	Outback Steakhouse	5628 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
188	P.G. King	5575 Baltimore Dr. #105-A	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
189	Pacific Southwest Structures	8140 Commercial St.	Medium	907.1	Commercial	No	1771	Cement Mixing / Cutting	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No	No
190	Palmer Painting Company	8104 Center Dr.	Medium	907.1	Commercial	No	1721	Painting & Wall Covering	No	No	No	No	No	Yes	No	No	No	Yes	No	No	No
191	Panda Express #606	5500 Grossmont Center Dr. E-1	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
192	Panera Bread	5500 Grossmont Center Dr. #145	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
193	Parkway Bar	9188 Fletcher Pkwy.	Medium	907.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
194	Parkway Market	9085 Dallas St.	Medium	907.1	Commercial	No	5411	Grocery / Convenience Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
195	Parkway Pet Hospital	8200 Parkway Dr.	Medium	907.1	Commercial	No	0742	Animal Facilities	No	No	No	Yes	No	No	No	No	Yes	Yes	No	Yes	No
196	Parky's	6149 Lake Murray Blvd.	Medium	907.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
197	Peanuts Auto Repair	5387 Lake Murray Blvd.	Medium	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
198	Pedro's Mexican Cocina	6155 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
199	Pet Emergency Clinic East County	5232 Jackson Dr Suite 105	Medium	907.1	Commercial	No	0742	Animal Facilities	No	No	No	Yes	No	No	No	No	Yes	Yes	No	Yes	No
200	Pho Superbowl	8342 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
201	Pietros Cucina Italiana	8378 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
202	Preston's Tire & Wheel	8300 Center Dr.	Medium	907.1	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
203	Primary Mechanical	5345 Timken St. Suite I	Medium	907.1	Commercial	No	1711	Other Contractor	No	No	No	No	No	No	No	No	No	Yes	No	No	No
204	Ralph's Grocery Company 104	8800 Grossmont Blvd.	Medium	907.1	Commercial	No	5411	Grocery Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
205	Rapid Transmissions	8861 La Mesa Blvd.	Medium	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
206	Red Lobster GMRI, Inc. #504	8703 Murray Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
207	Restaurant and Deli Russ	6062 Lake Murray Blvd. Suite 102	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
208	Rhino Floor Covering / Stemar Restoration	8161 Commercial St.	Medium	907.1	Commercial	No	1752	Flooring Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
209	Rich's Kustom & Collisions	7589 El Cajon Blvd. Suite D	Medium	908.2	Commercial	No	7532	Auto Restoration	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
210	Rico's Café	5575 Baltimore Dr. Suite 112	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
211	Rigoberto's Mexican Food	5454 Jackson Dr	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
212	Rita's Fine Food	8900 Grossmont Blvd. Suite 5	Medium	907.1	Commercial	No	5812	Food Processing	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
213	Riviera Supper Club	7777 University Ave	Medium	908.2	Commercial	No	5812	Eating / Drinking Establishment	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
214	Rob's Automotive	7589 El Cajon Blvd. Unit E	Medium	908.2	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
215	Rosaritos Mexican Food	6062 Lake Murray Blvd. Suite 204	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
216	Rosaritos Mexican Food #3	7941 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
217	Round Table Pizza	8032 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
218	Round Table Pizza	5999 Severin Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
219	Rowe's La Mesa Pet Hotel	8126 Center St.	Medium	907.1	Commercial	No	0752	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
220	Rubio's Restaurant	5500 Grossmont Center Dr. #D 22	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
221	Sammy's Woodfired Pizza	8555 Fletcher Pkwy. Suite 104	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
222	Sam's Market	7587 University Ave	Medium	908.2	Commercial	No	5411	Grocery / Convenience Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
223	San Diego Auto	5335 Jackson Dr	Medium	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
224	San Diego Top Tune	6982 University Ave	Medium	908.2	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
225	Sanfilippo's Pizza La Mesa	8141 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
226	Schlotzsky's	5500 Grossmont Center Dr. #219	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
227	Shakey's Pizza La Mesa	5500 Grossmont Center Dr. #267	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
228	Shenanigan's Irish Pub	7030 University Ave	Medium	908.2	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
229	Shirley's Kitchen	7118 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
230	Shizuoka Japanese Restaurant	9118 Fletcher Pkwy.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
231	Sid's Auto Body, Inc.	7473 El Cajon Blvd.	Medium	908.2	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
232	Silvia's Windows	8176 Center St. Suite D	Medium	907.1	Commercial	No	5039	Building Materials	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
233	Skeeter's Motorsports	8160 Center St.	Medium	907.1	Commercial	No	5012	Recreational Vehicle Dealer	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
234	Smog Test Inc.	9089 Dallas St.	Medium	907.1	Commercial	No	7549	Auto Emissions Testing w/out Repairs	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
235	Smogs R Us Too	8855 La Mesa Blvd. Suite A	Medium	907.1	Commercial	No	7549	Auto Emissions Testing w/out Repairs	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
236	Souper Bowl Party Planner	5525 Jackson Dr	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
237	Souplantation / Garden Fresh	9158 Fletcher Pkwy. #3	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
238	South Coast Petroleum	5261 Baltimore Dr.	Medium	907.1	Commercial	No	5541	Gasoline Service Station w/ Convenience	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
239	Spring Chevron	8200 University Ave	Medium	907.1	Commercial	No	5541	Gasoline Service Station w/ Convenience	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
240	Spring St. Gas & Market	4925 Spring St.	Medium	907.1	Commercial	No	5541	Gasoline Service Station w/ Car Wash	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
241	Starbucks #10938	8138 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
242	Starbucks Coffee #5222	5500 Grossmont Center Dr.	Medium	907.1	Commercial	No	5499	Coffee Shop	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
243	Starbucks Coffee #5953	8497 Fletcher Pkwy.	Medium	907.1	Commercial	No	5499	Coffee Shop	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
244	Starbucks Coffee #6876	5416 Lake Murray Blvd.	Medium	907.1	Commercial	No	5499	Coffee Shop	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
245	Starbucks Coffee #8905	5020 Baltimore Dr.	Medium	907.1	Commercial	No	5499	Coffee Shop	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
246	Su Robertos Mexican Food	5307 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
247	Subway	8396 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
248	Subway #32859	7900 El Cajon Blvd. Suite L	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
249	Subway (Jaspal Ent.)	7404 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
250	Subway Sandwiches	8142 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
251	Subway Sandwiches Lake Murray	5307 Lake Murray Blvd. Suite A	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
252	Summit Pizza West	8011 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
253	Summit Transmissions	7633 El Cajon Blvd. #208	Medium	908.2	Commercial	No	7537	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
254	Sun Tacos	5100 Jackson Dr	Medium	907.1	Commercial	No	5812	Eaiting Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
255	Sun Valley Golf Course	5080 Memorial Dr.	Medium	907.1	Commercial	No	7992	Golf Courses / Parks	No	No	No	Yes	No	No	No	Yes	Yes	Yes	No	No	No
256	Sunset Glazing, Inc.	8834 La Mesa Blvd.	Medium	907.1	Commercial	No	1793	Other Contractor	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No	No
257	Super Oscars Mexican Food	7102 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No
258	Swami's Café	8284 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
259	Talon Auto Adjusters	8163 Commercial St.	Medium	907.1	Commercial	No	7389	Automobile Repossesion Services	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	No
260	Tamarind Thai Restaurant	7970 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
261	Thai Dragon House	6062 Lake Murray Blvd. Suite 201	Medium	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
262	The Chico Club	7366 El Cajon Blvd.	Medium	907.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
263	The Greek Gyro II	5500 Grossmont Center Dr.	Medium	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
264	The Omelette Factory	5270 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
265	The Pet Hospital of La Mesa	5336 Jackson Dr	Medium	907.1	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
266	The Village House	8302 Parkway Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
267	The Yogurt Mill	8158 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
268	Tito's Taco Shop	5257 Baltimore Dr.	Medium	907.1	Commercial	No	5812	Eating/Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
269	Trader Joe's #24	5475 Grossmont Center Dr. Suite A	Medium	907.1	Commercial	No	5411	Grocery Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
270	Trattoria Tiramisu	8273 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
271	Trolley Stop Deli	8150 La Mesa Blvd.	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
272	Trust Auto Repair	7633 El Cajon Blvd. Suite 110	Medium	908.2	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
273	University Pet Hospital	7134 University Ave	Medium	908.2	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
274	V House Pho & Grill	9200 Fletcher Pkwy.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
275	VCA Grossmont Animal Hospital	8274 Parkway Dr.	Medium	907.1	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
276	Villa's Mexican Food	5500 Grossmont Center Dr. FC - 9	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
277	Von's Co. Inc. #2093	8011 University Ave	Medium	908.2	Commercial	No	5411	Grocery Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
278	Von's Grocery Co. #2137	5630 Lake Murray Blvd.	Medium	907.1	Commercial	No	5411	Grocery Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
279	Wal-Mart	5500 Grossmont Center Blvd.	Medium	907.1	Commercial	No	5399	General Retail Store	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
280	Weevil Burger Restaurant	9104 Fletcher Pkwy.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
281	West Coast Barbecue & Catering	6126 Lake Murray Blvd.	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
282	Wienerschnitzel #58	6949 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
283	Win's Auto Repair	7633 El Cajon Blvd. Suite 205B	Medium	908.2	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
284	Wong's Golden Palace, Inc.	7126 University Ave	Medium	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
285	Yogurt Express	6195 Lake Murray Blvd. #C	Medium	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
286	Yum Yum Donuts Franchise #5228	7550 El Cajon Blvd.	Medium	907.1	Commercial	No	5461, 5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
287	Abundant Life Landscape	5484 Wellesley Street #E	Medium	907.1	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
288	All Star Powerwash	3123 Reservoir Drive	Medium	Throughout City	Commercial	Yes	7349	Power Washing	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
289	Al's T L C Landscape	9255 Magnolia Avenue #240	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
290	Aqua Pool Plastering	1137 Naranca	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
291	Aristocrat Landscape	PO Box 15601	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
292	Asplundh Tree Expert	708 Blair Mill Road	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
293	Belle Saveur	7040 Neri Drive	Medium	908.2	Commercial	Yes	5812	Eating/Drinking Establishments	Yes	Yes	No	No	No	No	No	No	Yes	Potential	Potential	Yes	No
294	Blue Dolphin	4213 Kansas St. #1	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
295	Bonded Carpet & Drapery Service	7831 Ostrow Street	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
296	Bostrom Landscaping	Not Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
297	Bright Side Detail	10325 Baron Drive	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
298	Budget Lawn Maintenance	9204 Sombria Road	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
299	California Scenic Landscape	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
300	Cecilio Ramirez Landscaping	328 S.30th Street	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
301	Charlies Carpet Cleaning	10707 Jamacha Blvd #182	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
302	Classic Image Mobile Detailing	Not Listed	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
303	Coastal Chem Dry	4901 Morena Blvd Suite 316	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
304	Coles Carpets	1170 W.Morena Blvd	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
305	Complete Car Care Pros	2703 Rhoades Road	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
306	Considerate Tree Care, Inc	PO Box 2595	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
307	Contreras Landscape	856 Morrison Street	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
308	Cortez Tree Service	2527 Guajowe Lake Road	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
309	Crossman Landscape & Maintenance	8617 Cuyamaca Street	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
310	Crown Point Clippers, Inc.	PO Box 177108	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
311	Crystal Pool Service	1109 N.2nd Street	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
312	Custom Landscaping And Irrigation	9461 Grossmont Summit Drive Suite A	Medium	907.1	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
313	Dan's Maintenance	8901 Zencaro Avenue	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
314	Deep Cleaning And Restoration	Not Listed	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
315	Detailing Concepts by Laura	6152 Horton Drive	Medium	907.1	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
316	Detailing Concepts By Laura	Not Listed	Medium	Throughout City	Commercial	Yes	7549	Auto Repair	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	Yes	No
317	Diego Puga Vargas	3828 Cherokee Street #5	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
318	Doan's Landscape	9550 Mavin Drive	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
319	Eagle Landscape Maintenance	2924 Poinsettia Drive	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
320	Emilio	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
321	Environmental Landscape Engineers	9210 Grossmont Blvd	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
322	Estrada Land Planning, Inc.	755 Broadway Circle Suite 300	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
323	Exquisite Mobile Detailing	Not Listed	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
324	Finn Pool & Spa	Not Listed	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
325	Fitzgerald Carpet & Upholstery	5500 Grossmont Center Drive #111	Medium	907.1	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
326	Focus Landscape	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
327	Foothills Pool Service	Not Listed	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
328	G.G. Landscaping, Inc.	9737 Jeremy Street	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
329	Garden Design	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
330	Garden Environmentals	9415 Los Coches Road	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
331	Gary F. Hoyt Landscape	13625 Adrian Street	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
332	Goins Landscaping	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
333	Grass Doctor Landscape Inc	9600 Campo Road Suite C	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
334	Halsey Design Group, Inc.	9340 Fuerte Dr. Suite 303	Medium	907.1	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
335	Happy Landscaping	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
336	Irriscape Construction, Inc.	20182 Carancho Road	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
337	J C Landscaping & Maintenance	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
338	JC Brooks Construction	8383 Center Drive Suite A	Medium	907.1	Commercial	Yes	7349	Power Washing	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
339	Jerry Frazee	Not Listed	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
340	John Guevera Clear Water Pool	3533 Harris Street	Medium	908.2	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
341	Justo Huezo Landscaping	1824 Teton Pass Street	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
342	Kar Tek	2034 Hidden Crest Drive	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
343	Ken Bojok Tree Service Inc.	12443 Gay Rio Drive	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
344	Ken Myers Pool Service & Repair	Not Listed	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
345	Kostos Tree Service, Inc.	12810 Wildcat Canyon Road	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
346	La Bahn's Landscaping	5000 Thorne Drive Suite B	Medium	908.2	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
347	Lee Landscaping	4511 Cannington Drive	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
348	Linda Clark Roseworks	10656 Fuerte Drive	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
349	Logistics International, Inc.	5255 Maryland Ave.	Medium	907.1	Commercial	Yes	4789	Ground Transportation	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
350	McClain, Inc.	1272 Tuttle Lane	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
351	Mikes Mobile Auto Detailing	Not Listed	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
352	Mike's Mobile Detailing	Not Listed	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
353	Mobile Airbag Installation	Not Listed	Medium	Throughout City	Commercial	Yes	7549	Auto Repair	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	Yes	No
354	Mow Blow N Go	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
355	Mr. Crabgrass Santos Landscape	10426 Park Avenue	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
356	My Carpet Guy	9074 Prospect Avenue	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
357	Nissho Of California, Inc.	1902 S. Santa Fe Avenue	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
358	Ocean Blue Pool Service	13983 Chicarita Creek Road	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
359	Olympic Carpet Cleaning	538 Front Street	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
360	Orozco's Tree Trimming	138 Richfield Avenue	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
361	Oscar & Sons Co.	1512 Altadena Avenue	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
362	Pacific Edge Landscape Maintenance	5780 Tex St.	Medium	907.1	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
363	Pacific Green Landscape, Inc.	8834 Winter Gardens Blvd	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
364	Pacific Sun Pool N Spa Center	8550 Production Avenue Suite B	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
365	Paradise Power Washing	8220 Vincetta Dr.	Medium	Throughout City	Commercial	Yes	7349	Power Washing	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Potential	Potential	No	No
366	Patons Pond Service	5308 Camino Playa Malaga	Medium	907.1	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
367	Plant House Landscaping	1633 Fuerte Knolls Lane	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
368	Pool Rite Service	1129 Whitsett Drive	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
369	R J C Window Cleaning Company	1642 Folkestone Street	Medium	Throughout City	Commercial	Yes	7349	Power Washing	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Potential	Potential	No	No
370	Rafael Gardening Landscape Svc	8843 Cottonwood Avenue	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
371	Rightway Landscaping	898 Galopago Street	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
372	Rods & Customs Unlimited	Not Listed	Medium	Throughout City	Commercial	Yes	7549	Auto Repair	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	Yes	No
373	Rogelio Valdez Gardening	2655-1/2 Broadway St. Suite A	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
374	Rojas Garden Services	2858 Beatrice Street	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
375	Rosendo's Pool Service	Not Listed	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
376	Ruiz Tree Service	2016 E. Avenue	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
377	San Diego Erosion Control	6920 Miramar Road Suite 303	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
378	Shawn Hillman	Not Listed	Medium	Throughout City	Commercial	Yes	7549	Auto Repair	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	Yes	No
379	Spurlock Poirier Landscape	2122 Hancock Street	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
380	Stanley Steemer Carpet Cleaners	9655 Via Excelencia	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
381	Steve Wolff And Associates, Inc.	9602 Santiago Blvd	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
382	Superior Carpet Care	Not Listed	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
383	Swains Mobile Auto Detailing	11988 Via Granero	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
384	Tates Mobile Detailing	5500 Grossmont Center Dr. Suite 213	Medium	907.1	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	No	No
385	The Davey Tree Expert Company	6914 Mission Gorge Road	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
386	The Water's Edge Pool & Spa	Not Listed	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
387	Tony Lawrence Care (T L C)	Not Listed	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
388	Torresdey Landscaping	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
389	Triton Power Clean	1930 Quidort Ct	Medium	Throughout City	Commercial	Yes	7349	Power Washing	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	Yes	No
390	Trujillo Auto Detail	208 Tremont Street	Medium	Throughout City	Commercial	Yes	7542	Vehicle Washing	No	Yes	Yes	No	Yes	No	No	Yes	No	Potential	Potential	Yes	No
391	Truong Gardener	2960 Murray Ridge Road	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	No	No
392	Villa Pool & Spa	Not Listed	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
393	Vision Apartment Landscape &	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
394	Warrens Carpet Cleaning Service	7343 Ronson Road Suite S	Medium	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	No	Yes	No	No	No	No	No	No	Yes	Potential	No	No	No
395	Water Tech Pool Service	1533 Greenfield Drive	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
396	West Coast Arborists, Inc	2200 E. Via Burton Street	Medium	Throughout City	Commercial	Yes	781	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
397	Western Tree Service	815 Telegraph Canyon Road #815	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
398	Weststar Landscape Services	3553 Harris Street	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
399	Wins Pools	13227 Idyl Drive	Medium	Throughout City	Commercial	Yes	7389	Pool/Fountain Cleaning	No	No	Yes	Yes	No	Yes	No	No	No	Potential	Potential	No	No
400	Wittmayer Landscape Maintenance	1400 Country Crest Drive	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
401	Yard Man	Not Listed	Medium	Throughout City	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
402	1 800 Anytyme	1410 S. Santa Fe	Medium	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
403	Mo Mo's Trees	Not Listed	Medium	Throughout City	Commercial	Yes	783	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	Yes	No
404	5 Star Market and Liquor	7495 University Ave	Low	908.2	Commercial	No	5411	Grocery / Convenience Store	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No
405	70th St. Service Station	5151 70th St.	Low	907.1	Commercial	No	5541	Gasoline Service Station w/ Convenience	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
406	7-Eleven Food Store #21453	5650 Baltimore Dr.	Low	907.1	Commercial	No	5411	Grocery / Convenience Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
407	Advanced Painting Specialists	8411 La Mesa Blvd.	Low	909.1	Commercial	No	1721	Painting & Wall Covering	No	No	No	No	No	Yes	No	No	No	No	No	No	No
408	Al & Eds Autosound	5208 Jackson Dr #117	Low	907.1	Commercial	No	7549	Car Audio Install	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
409	Albert's Mexican Food	8038 La Mesa Blvd.	Low	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
410	All Lines Dealer Alds Inc.	7373 Mohawk St.	Low	907.1	Commercial	No	7549	Auto Repair	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
411	Alvarado Parkway Institute	7050 Parkway Dr.	Low	907.1	Commercial	No	8322	Substance Abuse Hospital	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No
412	Auntie M's Cup n' Cake Bakery	7406 University Ave	Low	908.2	Commercial	No	2051	Bread and Other Bakery Products	No	No	No	n	No	No	No	No	Yes	Yes	No	No	No
413	AutoZone #2809	7791 El Cajon Blvd.	Low	908.2	Commercial	No	5531	Auto Supplies	No	No	No	No	Yes	No	No	Yes	Yes	Yes	No	No	No
414	Babies R' Us	8150 Fletcher Pkwy.	Low	907.1	Commercial	No	5137	Clothing Retailer	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
415	Beck's Repair Shop	8838 La Mesa Blvd.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
416	BFF	5500 Grossmont Center Dr.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
417	Bridgestone Retail	5577 Lake Murray Blvd.	Low	907.1	Commercial	No	5531	Tire & Auto Repair	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
418	California Special Care Center	8787 Center Dr.	Low	907.1	Commercial	No	8361	Rehabilitation Center	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No	No
419	Center Glass Co. #3	7853 El Cajon Blvd.	Low	907.1	Commercial	No	1793	Other Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
420	Circle K Stores Inc. #8675 (Convenience Retailers LLC)	8899 La Mesa Blvd.	Low	907.1	Commercial	No	5541	Gasoline Service Station w/ Convenience	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
421	Country Villa La Mesa Healthcare Center	5696 Lake Murray Blvd.	Low	907.1	Commercial	No	8059	Nursing & Personal Care Facility	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
422	Davis Framing Inc.	8103 Commercial St.	Low	907.1	Commercial	No	1521	Other Contractor	No	No	Yes	No	Yes	No	No	Yes	Yes	Yes	No	No	No
423	Dennis Sherman Foreign Car	8620 La Mesa Blvd.	Low	907.1	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
424	Dieter Fischer's Five Star Car Service	8699 La Mesa Blvd.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
425	Don Keating Used Cars	8381 La Mesa Blvd.	Low	909.1	Commercial	No	5521, 7539	Auto Repair Shop w/ Vehicle Sales	No	No	Yes	No	Yes	No	No	No	Yes	No	No	No	No
426	Earl W. Fite & Sons, Inc.	8878 La Mesa Blvd.	Low	907.1	Commercial	No	1711	Plumbing Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
427	Eastridge Animal Hospital	7750 University Ave Suite A	Low	908.2	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
428	Eastridge Liquor	7705 University Ave	Low	908.2	Commercial	No	5921, 5411	Liquor Store w/ Market	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
429	European Car Service	8855 La Mesa Blvd.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
430	Excalibur Liquor	5575 Baltimore Dr. Suite 113	Low	907.1	Commercial	No	5921, 5411	Liquor Store w/ Market	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
431	Family Carpets & Drapes, Inc.	7111 University Ave	Low	908.2	Commercial	No	1542	Other Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
432	German Auto Repair	4654 Nebo Dr.	Low	909.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	No	No	No	No
433	Harold's Automotive	7860 El Cajon Blvd.	Low	907.1	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
434	Helix Center Pure Water Store	7309 University Ave Suite C	Low	908.2	Commercial	No	5812, 5078	Eating Establishment & Retail Water	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
435	Helix Pet Hospital	4223 Palm Ave.	Low	909.1	Commercial	No	0742	Animal Facilities	Yes	No	No	Yes	No	No	No	No	Yes	No	Yes	No	No
436	Henry's Marketplace	4630 Palm Ave.	Low	909.1	Commercial	No	5411	Grocery Store	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No
437	Hooley's Irish Pub & Grill	5500 Grossmont Center Dr. Suite 277	Low	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
438	Ideal Door & Window Co.	7859 El Cajon Blvd.	Low	907.1	Commercial	No	1793	Other Contractor	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
439	India Express	5500 Grossmont Center Dr.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No

Appendix A.4 (Continued)
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#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
440	Jiffy Lube #831	5540 Lake Murray Blvd.	Low	907.1	Commercial	No	7549	Auto Services	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
441	Johnny B's Bar & Grill	8393 La Mesa Blvd.	Low	909.1	Commercial	No	5812, 5813	Eating / Drinking Establishment	Yes	No	No	No	No	No	No	No	Yes	No	Yes	No	No
442	La Casa Blanca Mexican Restaurant	9570 Murray Dr.	Low	907.1	Commercial	No	5812	Eating Establishments	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
443	La Mesa Auto Center Boutique	8202 Parkway Dr.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
444	Lake Murray Liquor	6001 Lake Murray Blvd.	Low	907.1	Commercial	No	5921	Liquor Store	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
445	Lars Construction Co.	4703 Spring St.	Low	908.2	Commercial	No	1799	Other Contractor	No	No	No	No	No	No	No	No	No	Yes	No	No	No
446	Little Caesars Pizza	6107 Lake Murray Blvd.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
447	M&M Patisserie	7668 El Cajon Blvd.	Low	907.1	Commercial	No	5461	Bakery	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
448	Maui Express	5500 Grossmont Center Dr.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
449	McDonald's (Wal-Mart)	5500 Grossmont Center Dr.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
450	Murray Lake Liquor	5395 Lake Murray Blvd.	Low	907.1	Commercial	No	5921	Liquor Store	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
451	Nick's Auto Group	4949 Baltimore Dr.	Low	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
452	O'Connor's	8758 La Mesa Blvd.	Low	907.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	Yes	No	No	No
453	Palm Springs Market	4301 Palm Ave.	Low	909.1	Commercial	No	5411	Liquor Store w/ Market	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No
454	Paradise Auto Sales, LLC	7640 El Cajon Blvd.	Low	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
455	PAW Service Center	8230 Commercial St.	Low	907.1	Commercial	No	7538	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
456	Performance Motoring	8620 La Mesa Blvd.	Low	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
457	Pete's Place	8330 La Mesa Blvd.	Low	909.1	Commercial	No	5813	Drinking Establishment	No	No	No	No	No	No	No	No	Yes	No	No	No	No
458	Primo Cars	8200 Commercial St. Suite 102	Low	907.1	Commercial	No	5521	Motor Vehicle Dealer (Used)	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
459	Quality Car Care	4999 Baltimore Dr.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
460	Ray Sugo LLC dba Valvoline	7981 El Cajon Blvd.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
461	Riha Construction Co.	8173 Commercial St.	Low	907.1	Commercial	No	1542	Other Contractor	No	No	Yes	No	No	No	No	Yes	Yes	Yes	No	No	No
462	San Diego RV	7407 Alvarado Rd.	Low	907.1	Commercial	No	6515	Mobile Home Park	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
463	San Diego Tint	7147 University Ave	Low	908.2	Commercial	No	7549	Auto Services	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
464	Shell Gas Station	9090 Dallas St.	Low	907.1	Commercial	No	5541	Gasoline Service Station w/ Convenience	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	Yes	No
465	SNN Salmu Ent. Inc. dba A&W Liquor	7021 University Ave	Low	908.2	Commercial	No	5921, 5411	Liquor Store w/ Market	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
466	Southern California, Discount Tire	8867 Grossmont Blvd.	Low	907.1	Commercial	No	7534	Auto Repair	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
467	Spacebar, @	7454 University Ave	Low	908.2	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
468	Speed Auto Gallery	7695 University Ave	Low	908.2	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No
469	Speedy Smog of La Mesa	7482 El Cajon Blvd. Suite B	Low	907.1	Commercial	No	7549	Auto Emissions Testing w/out Repairs	No	No	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	No
470	Steve Bancroft Motor	8760 Campo Rd. Suite A	Low	909.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
471	Sunny Donuts	4199 Spring St.	Low	909.1	Commercial	No	5461	Retail Bakery	Yes	No	No	No	No	No	No	No	Yes	No	No	No	No
472	Target Stores	5500 Grossmont Center Blvd.	Low	907.1	Commercial	No	5399	General Retail Store	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
473	The Car Shop	4999 Baltimore Dr.	Low	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
474	The Lunch Box	8751 La Mesa Blvd.	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
475	The Truck and SUV Center	5301 Lake Murray Blvd.	Low	907.1	Commercial	No	5521	Vehicle Dealers	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
476	Thomas J Taylor Construction	8189 Center St.	Low	907.1	Commercial	No	2434, 0782	Other Contractor	No	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	No
477	TJ's Auto Repair	8090 University Ave Suite B	Low	907.1	Commercial	No	7532	Auto Paint/Body	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
478	Trolley Stop Deli #2	8363 Center Dr. Suite 8-B	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
479	Trotter Door & Trim	8186 Commercial St.	Low	907.1	Commercial	No	1521	Other Contractor	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No	No
480	Truly Nolen of America	7170 University Ave	Low	908.2	Commercial	No	7342	Pest Control	No	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	No
481	Tune Craft, Inc.	8802 La Mesa Blvd.	Low	907.1	Commercial	No	7539	Auto Repair Shop	No	No	Yes	No	Yes	No	No	No	Yes	Yes	No	No	No
482	Vic's Deli and Café	7777 Alvarado Rd. Suite 400	Low	907.1	Commercial	No	5812	Eating Establishment	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No
483	Village Awards & Engraving	7769 University	Low	908.2	Commercial	No	2796	Printing and Engraving	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	No	No
484	Worldwide Auto Parts	9089 Dallas St.	Low	907.1	Commercial	No	5531	Auto Supplies	No	No	No	No	Yes	No	No	Yes	Yes	Yes	No	No	No
485	1st Choice Signs	610 Rock Springs Road	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
486	A & P Plumbing	6940 Schilling Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
487	A & S Construction	4130 Bancroft Drive	Low	909.1	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
488	A C S Construction, L P	1235 W. Collins Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
489	A D S Environmental Services	4820 Mercury Street Suite C	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
490	A Hardwood Floor Co.	12025 Lemon Crest Drive	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
491	A M G Demolition & Environmental	1102 Fleetridge Drive	Low	Throughout City	Commercial	Yes	1795	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
492	A M S Paving, Inc.	10400 Banana Avenue	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
493	A Michael Mallow Const	8629 Via Del Luz Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
494	A O Reed & Company	4777 Ruffner St	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
495	A P Southwest, L L C	5002 S. Ash Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
496	A R B, Inc.	26000 Commercentre Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
497	A R C Roofing	451 Marshall Avenue	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
498	A S C Builders	5190 Rebel Road	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
499	A S I Hastings, Inc.	1250 Greenfield Drive	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
500	A To Z Plumbing, Inc.	7811 Mission Gorge Road Suite L	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
501	A&D Steel, Inc.	10520 Kenney Street	Low	Throughout City	Commercial	Yes	1791	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
502	A-1 Budget Roofing, Inc.	1980 Summit Drive	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
503	A-1 Lawns	4536 Nebo Drive	Low	909.1	Commercial	Yes	782	Landscaping	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Potential	Potential	No	No
504	Aardvark Ant & Pest Control Inc	2514 Jamacha Road #502-40	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
505	Absolutely Electric	3146 L Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
506	Access Professional Systems, Inc.	8250 Vickers Street Suite E	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
507	Accu Air Inc.	1318 Bermuda View	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
508	Action Air Conditioning & Heating	2750 Santa Fe Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
509	Adolfson And Peterson	5002 S. Ash Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
510	Adrian's Custom Woodworks	5925 Warren Place	Low	907.1	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
511	Advanced Electronic Solutions	1830 John Towers Avenue	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
512	Advanced Energy Insulation, Inc.	14368 Olde Highway 80 Suite A	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
513	Affordable Raingutters	1402 N. Magnolia Avenue	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
514	Affordable Water Heaters And	24707 San Fernando Road	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
515	Air Doc Inc	1444 Pioneer Way Suite 8	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
516	Air Plus Mechanical, Inc	9191 Chesapeake Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
517	Air Systems Mechanical, Inc	6101 Jackson Drive	Low	907.1	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
518	Air Tek	9424 Chesapeake Drive Suite 1302	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
519	Akenson Electric	8843 Prospect Avenue	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
520	Al T. Sejut Electrical	4060 Vista Calaveras	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
521	Alarms Unlimited, Inc.	4584 Park Blvd	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
522	Alcal Arcade Contracting, Inc.	31164 Huntwood Avenue	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
523	Alcoa Signage	9535 Arjons Dr. #E	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
524	Alessio Heating & Air, Inc	740 Metcalf Street #14	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
525	All American Mechanical	431 Park Industrial Drive	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
526	All American Sewer & Drain	PO Box 1482	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	Yes	No
527	All Drains Plumbing	7541 Girard Avenue #533	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
528	All Pro Air	1265 Avocado Blvd Suite 104-148	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
529	All Star Water Heaters	30300 Puerto Vallarta	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
530	Aloha City Pest Control, Inc.	8100 Broadway Suite C	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
531	American Asphalt & Concrete Inc	9011 Memory Lane	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
532	American Asphalt South, Inc	14436 Santa Ana Avenue	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
533	American Automatic Fire	9510 Pathway Street #B	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
534	American Fence Co, Inc.	9944 Prospect Ave	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
535	American Fireplaces, Inc.	9938 Mesa Rim Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
536	American Leak Detection	656 Metcalf Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
537	American Mechanical Services Of Ca	2664 Vista Pacific Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
538	American Pest Control	8100 Broadway Suite #E	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
539	American Residential Services Of	6162 Nancy Ridge Drive Suite 100	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
540	American Residential Services,L L	9895 Olson Drive	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
541	American Technologies	8444 Miralani Drive	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
542	Ampam Parks Mechanical	1060 N. Wilmington Blvd.	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
543	Ampolos Construction	4979 Paguera Street	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
544	Amtech Lighting Service	13350 Gregg Street	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
545	Anderson Drilling	10303 Channel Road	Low	Throughout City	Commercial	Yes	1781	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
546	Anderson Piping Contractors, Inc.	339 Cypress Lane	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
547	Andrade & Company	2123 Vuelta Court	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
548	Angus Asphalt Inc	9959 Prospect Avenue	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
549	Anthony & Son Painting	4175 Avocado Blvd	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
550	Antimite	4017 42nd Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
551	Any Hour Septic Service	10119 Prince Charming Lane	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
552	Apex Lighting & Electric	1939 Friendship Drive Suite A	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
553	Applied Waterproofing Technology	3562 Grove Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
554	Armando Jara Almanza	1461 Remembrance Drive	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
555	Arrow Swimming Pool Construction	15525 Old Hwy 80	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
556	Asaro Construction Co.	6924 Hyde Park Drive #214	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
557	Aspen Cooling & Heating, Inc.	3720 Oceanic Way Suite 207	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
558	Astra Flooring Company	3402 Kurtz St	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
559	Astro Mechanical Contractors, Inc.	603 S Marshall Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
560	Atlantis Pools And Spas	1106 Leonard Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
561	Atlas Fence Company	1211 32nd Street Suite S	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
562	Atlas Footing Repair Inc	1136 Greenfield Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
563	Atlas Termite Co	25 2nd Avenue	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
564	Avalanche Mechanical	5575 Magnatron Blvd Suite C	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
565	Award Roofing Services	8731 Winter Gardens Blvd	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
566	Axium Electric	6042 Carol Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
567	Ayala Boring, Inc.	10150 Poplar Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
568	Aztec Landscaping, Inc.	7980 Lemon Grove Way	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
569	B & J Jackson-Stone Enterprises,	345 Vernon Way	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
570	B & W Precast Construction, Inc.	2511 Harmony Grove Road	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
571	B A E Co Builder	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
572	B B C Construction	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
573	B D R Communications, Inc.	1944 Kellogg Avenue	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
574	B E Kaylor Restoration Inc.	4820 Mercury Street Suite D	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
575	B E T Construction	Not Listed	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
576	B T Construction	5711 Lancaster Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
577	B&B Acoustics, Inc.	12115 Lakeside Avenue	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
578	B. O' Brien Electric Service	13655 Highway 8 Business 52	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
579	Banker Insulation Of Ca, Inc.	2357 Vineyard Avenue	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
580	Banner Builders Inc	1530 Jamacha Road Suite P	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
581	Barner Electric	9435 Wheatlands Court Suite K	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
582	Barratt American Inc.	5950 Priestly Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
583	Basile Construction Inc	7840 Dunbrook Road	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
584	Bath Co. Shower Door	613 W. Main Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
585	Bauer Cabling Solutions, Inc.	1027 S. Claremont Street	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
586	Bay City Electric Works Inc.	12208 Industry Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
587	Bay Sheet Metal, Inc	1263 Greenfield Drive	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
588	Beach Cities Landscape, Inc.	8911 Olive Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
589	Beck Electric	3707 5th Avenue Suite 556	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
590	Belfor Property Restoration	11545 Sorrento Valley Road Suite 308	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
591	Ben Martindill	Not Listed	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
592	Benchmark Landscape, Inc.	12575 Stowe Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
593	Bernard's Plumbing, Inc.	1884 Powell Drive	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
594	Besek Electric	525 F Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
595	Best Interiors, Inc.	2100 E. Via Burton	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
596	Best Rain Gutters	550 Ramon Avenue	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
597	Best Value Glass, Inc.	1517 N. Cuyamaca Street	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
598	Betz Concrete, Inc.	2301 Vineyard Avenue	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
599	Bill Hutson Installations & Repair	622 Margarita Avenue	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
600	Bill's Construction Assistance	2222 Escondido Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
601	Bill's Home Repair	5401 Pennsylvania Lane	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
602	Blaine Tech Services	20735 Belshaw Avenue	Low	Throughout City	Commercial	Yes	1781	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
603	Blasingame Custom Building	81 Matscher Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
604	Bledsoe Masonry, Inc.	4680 Felspar Street	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
605	Blue Diamond Plumbing And	16382 Pauhaska Road	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
606	Blue Fountain Pools	6136 Mission Gorge Road #117	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
607	Blue Haven Pools	655 Venture Street Suite 101	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
608	Bluewater Environmental Services,	2075 Williams Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
609	Bob Jenson A/C & Heating	1347 Broadway	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
610	Bob Piva Roofing	1192 Industrial Avenue	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
611	Bornholdt Construction, Inc.	1027 Greenfield Drive #2	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
612	Bowie Handyman Service	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
613	Boyce Construction Co., Inc.	10463 Austin Drive Suite D	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
614	Brabazon's Alpine Paving & Trucking Inc.	5738 Willows Road #A	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
615	Brad L. Stoner Painting, Inc.	9245 Dowdy Drive #112	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
616	Bray Construction	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
617	Brett Lanz Construction	10705 Prince Lane	Low	Throughout City	Commercial	Yes	1700	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
618	Brookstone Telecom, Inc.	43300 Business Park Drive Suite B-106	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
619	Brookwood Plastering, Inc.	13675 Choisser Lane	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
620	Brundage Bone Concrete Pumping	1630 W. Pellessier Road	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
621	Buckskin Welding	2480 Bass Rd	Low	Throughout City	Commercial	Yes	7692	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
622	Budge- It Home Remodeling, Inc	9150 Sesi Lane	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
623	Buildercraft Construction	1820 Avenida Del Mundo Suite 406	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
624	Builders Termite & Pest Control,	1139 S. Placentia Avenue	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
625	Building Restorations, Inc.	6975 North Avenue Suite A	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
626	Burgio Plastering	1937 Friendship Drive Suite C	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
627	Bycor General Contractor	6867 Nancy Ridge Drive	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
628	C & J Builders, Inc.	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
629	C & R Systems, Inc.	1835 Capital Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
630	C A Skyhook, Inc	8733 Magnolia Avenue Suite 134	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
631	C C M Enterprises	10848 Wheatlands Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
632	C E Wilson Corporation	662 Grand Avenue	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
633	C G P Maintenance And Construction	7270 Engineer Road Suite D	Low	Throughout City	Commercial	Yes	1700	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
634	C M I Plumbing And Piping Inc.	1029 Vernon Way	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
635	C P C Mechanical, Inc.	13664 Willow Road	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
636	C W A Development, Inc.	3494 Harris Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
637	C. L. Anderson Company	Not Listed	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
638	C. Leafdale Plumbing	2775 Kurtz Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
639	C. Lilley Construction Inc	592 Westwind Dr #N	Low	Throughout City	Commercial	Yes	1500	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
640	California Comfort Systems U S A,	9750 Distribution Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
641	California Concrete Cutting &	388 Citrus Avenue	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
642	California Construction Clean-Up	3336 Adams Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
643	California Delta Mechanical	1235 Grand Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
644	Calsoft Water Service Inc.	4635 Ruffner Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
645	Campbell Construction	6550 Van Buren Blvd	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
646	Can-Do Electric	1100 N. Magnolia Avenue Suite J	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
647	Capacity Construction Inc.	9323 Chesapeake Drive Suite A-1	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
648	Carol E. Patterson	Not Listed	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
649	Carolyn E. Scheidel, Contractor	PO Box 1796	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
650	Carpet Club	518 W. Washington Avenue	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
651	Carpet Trend	Not Listed	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
652	Carrion Construction, Inc.	312 W. Laurel Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
653	Carter Installation Services, Inc.	594 Front Street Suite A	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
654	Cartwright Termite & Pest Control	1376 Broadway	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
655	Casady Electric Inc	275 Camino Del Cerro Grande	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
656	Casper's Concrete Cutting	3825 Bancroft Drive #105	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
657	Cass Plumbing & Heating	4569 30th Street Suite C	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
658	Cay-Lor Construction	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
659	Cement Cutting, Inc.	3610 Hancock Street	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
660	Central Plumbing Heating Cooling	6152 Mission Gorge Road Suite H	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
661	Century Shower Door Co.	20100 S. Normandie Avenue	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
662	Certified Electric Incorporated	14781 Pomerado Road #101	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
663	Charco Construction Company	7065 El Cajon Blvd	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
664	Charlie Hughes Tile	Not Listed	Low	Throughout City	Commercial	Yes	1743	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
665	Charrua Painting	1163 Marline Avenue	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
666	Christie Construction	10006 Country View Road	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
667	Chula Vista Electric Co	127 Press Lane	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
668	Ciani Communications Construction	Not Listed	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
669	City-Wide Electronic Systems, Inc.	1540 N. Pioneer Way	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
670	Clardy Construction	15225 Sleepy Creek Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
671	Clark Home Improvement And	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
672	Clean Edge Painting	9906 Mission Vega Road #1	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
673	Clean Power Systems, Inc.	13230 Evening Creek Drive Suite 203	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
674	Clear Sign & Design, Inc.	170 Navajo Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
675	Clearview Windows & Doors	28106 Ave Crocker	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
676	C-Me Plumbing & Drain Service	10828 Charing Cross Road	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
677	Coast Sign	1500 W. Embassy Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
678	Coastal Property Care & Const,	Not Listed	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
679	Coating Creations	Not Listed	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
680	Code 3 Electrical	10934 Greencastle Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
681	College Works Painting	1682 Langley Avenue	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
682	Columbia Pest Control Co. Of San	127 W.9th Street	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
683	Comanche Contractors, Inc.	15467 Chemical Lane	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
684	Command Communication	Not Listed	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
685	Commercial & Industrial Roofing	9239 Olive Drive	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
686	Communications Plus	1675 Morena Blvd	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
687	Concrete Concepts, Inc.	2317 Vineyard Avenue	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
688	Concrete Cutting Company	PO Box 910503	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
689	Connie Jo's Services Unlimited	21000 Plummer Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
690	Continental Western Transportation	9235 Harris Plant Road	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
691	Copper Electric, Inc.	10054 Prospect Avenue	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
692	Corky's Pest Control, Inc.	909 Rancheros Drive	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
693	Corlett Electrical Construction	8315 Tommy Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
694	Coronado Heating & A C	1512 Palm Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
695	Cosco Fire Protection, Inc.	10695 Treena Street Suite 105	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
696	Countywide Mechanical	1997 Friendship Drive Unit G	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
697	Cox Roofing	5429 Alpine Blvd	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
698	Creative Touch Interiors, Inc.	7720 Kenamar Court #C	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
699	Crew Builders	5752 Oberilin Drive Suite 105	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
700	Crisler Electric	539 Telegraph Canyon Road #636	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
701	Cromwell Contracting, Inc.	9540 Palomino Ridge	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
702	Curto Const Co.	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
703	Custom Antenna & Garage Door	5833 El Cajon Blvd	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
704	Custom Electrical	10739 Oak Creek Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
705	Custom Media Mfg Sign Co.	136 Neptune Place	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
706	Cut N Core, Inc.	9194 Chesapeake Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
707	D & M Welding	7952 North Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
708	D & S Termite Control	3638 Bancroft Drive	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
709	D C Construction	14789 Bonita Vista Way	Low	Throughout City	Commercial	Yes	1794	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
710	D F S Flooring	15651 Saticoy Street	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
711	D G A M, Inc	1961 Main Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
712	D G Behrens Pool Construction	13031 Poway Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
713	D G Plumbing	206 Greenfield Drive Suite G	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
714	D P R Construction	6333 Greenwich Drive Suite 170	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
715	D S H Solar Electric	2785 Kurtz Street Suite 5	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
716	D.G. Handyman	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
717	Daniel Heisinger Plumbing	Not Listed	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
718	Darby Painting Plus+, Inc	1626 Onyx Court	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
719	Daryl Griffis Acoustics, Inc.	4958 Naples Street	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
720	Dave Wallace, General	8039 Golden Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
721	Dave's Home Repair	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
722	David Spinks	2146 Lemon Avenue	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
723	Davies Electric Co., Inc.	9085 Kenamar Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
724	Davis & Adams Construction, Inc.	7986 Dagget Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
725	Davis Roofing	10027 Beck Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
726	De Marco Plumbing & Drain, Inc.	4401 Twain Avenue Suite 11	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
727	Dean Toneys Heating & Air	401 Washingtonia Drive	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
728	Democo, Inc.	2386 N. Batavia Street	Low	Throughout City	Commercial	Yes	1795	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
729	Dennis Cook Roofing	8824 Lakeview Road	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
730	Dennis Design	Not Listed	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
731	Dennis R. Williams	13392 Johnson Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
732	Dewey Pest Control	9386 Bond Avenue	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
733	Diamond Pools	10520 Kenney Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
734	Diamond Termite & Pest Control	12038 Woodside Avenue Suite D	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
735	Dietrich Corporation	1243 Greenfield Drive Suite H	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
736	Digital Voice & Data	3621-96 Avocado Village Court	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
737	Dillard Builders, Inc.	262 Garden Grove Lane	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
738	Diroma, Inc.	13838 Poway Road	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
739	Diversified Window Coverings, Inc.	8410 Juniper Creek Lane	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
740	Dock Pros, Inc.	2870 Ragle Way	Low	Throughout City	Commercial	Yes	1796	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
741	Don Wallingsford, Inc.	4741 E. Hunter C	Low	Throughout City	Commercial	Yes	7623	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
742	Double B Concrete Cutting, Inc.	1532 Plover Street	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
743	Doug Lister Construction	1655 Laslo Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
744	Downstream Services, Inc	2855 Progress Place	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
745	Drain Medic, Inc.	7868 Lester Drive	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
746	Drain Patrol	7764 Arjons Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
747	Drum Plumbing	2550 Fortune Way	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
748	Drywall Specialties	6512 ElCajon Blvd. Suite C	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
749	Dynalectric Co.	9505 Chesapeake Drive #S	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
750	E B C O Steel Inc.	1355 Presioca Street	Low	Throughout City	Commercial	Yes	1791	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
751	Earl K. Powers Construction	678 Enterprise Street	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
752	East County Grading & Paving, Inc.	PO Box 712020	Low	Throughout City	Commercial	Yes	1794	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
753	East County Handyman	1232 Portola Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
754	East County Heating & Air	721 S Lincoln Ave.	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
755	East County Tile And Marble, Inc.	9855 Prospect Avenue	Low	Throughout City	Commercial	Yes	1743	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
756	Easy-Turf, Inc.	750 N.Citracado Parkway Suite 17	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
757	Eberhard Benton Roof Company	3691 Hancock Street	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
758	Ecosse Electric	Not Not Listed	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
759	Edick & Watt, Inc.	270 Millar Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
760	Ehinger Electric	Not Listed	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
761	El Cajon Electric Co	985 Greenfield Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
762	El Cajon Roofing Inc	1354 Broadway Avenue	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
763	Electric Required	6118 Hersholt Ave	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
764	Ellis Mc Kinney, Inc.	1410 Monument Hill Road	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
765	Emergency Plumbing & Drain	Not Listed	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
766	Emig Construction Company	9915 Tangor Way	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
767	Equitable Construction & Remodel	4724 Divine Way	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
768	Erickson - Hall Construction	500 Corporate Drive	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
769	European Natural Stone Co., Inc.	10051 Prospect Avenue	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
770	Exceptional Restorations	Not Listed	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
771	Exit Light Co	3525 Del Mar Heights Road #304	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
772	Express/ Champion Harwood Floors	Not Listed	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
773	F T Emory Plumbing Co., Inc.	4340 Viewridge Avenue Suite C	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
774	F. J. Willert Contracting Co.,	1869 Nirvana Avenue	Low	Throughout City	Commercial	Yes	1500	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
775	F. R. Ghianni Drywall	1937 Friendship Drive Suite A	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
776	Farwest Insulation Contracting	1375 S. Acacia Ave. SuiteA	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
777	Fast Water Heaters, Inc.	275 N.Marshall Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
778	Finest City Heating & Air	1069 Vernon Way	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
779	Fire & Ice Heating & Air	9911 Maine Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
780	First Line Security Inc.	370 W.Center Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
781	First Page	3280 Olive Street #18	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
782	First Quality Painting, Inc.	13933 Sycamore Way	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
783	Fischbeck Plumbing Co.	277 Blanchard Road	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
784	Fix Plumbing And Drains	180 Mace Street Suite C15	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
785	Flores Air	2931 Adrian Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
786	Floyd & Howerton Plumbing Inc	1269 Greenfield Drive	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
787	Force Electric	8201 Winter Gardens Blvd	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
788	Foshay Electric Company, Inc.	7676 Engineer Road	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
789	Fox & Turner Construction Co., Inc.	Not Not Listed	Low	907.1	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
790	Frontier Concrete Inc.	717 Mercantile Street	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
791	Fudge's Carpets & Blinds, Inc.	314 S.Johnson Avenue	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
792	Fueling & Service Technologies,	7050 Village Drive Suite D	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
793	G And H Electric	345 First Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
794	G D T Construction	701 B Street Suite 340	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
795	G E Brown Service, Inc.	497 11th Street Suite 7	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
796	G M G Stone, Inc.	165 Denny Way	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
797	G M W Drywall, Inc.	272 Gemini Avenue	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
798	G. Agundez Concrete	3211 Peg Leg Mine Road	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
799	G. Scott Asphalt, Inc	358 Trousdale Drive	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
800	Garcia's Precision Acoustics	3162 Carlsbad Blvd Suite B	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
801	Gardner Pool Plastering, Inc.	801 Gable Way	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
802	Generation Contracting & Emergency	13750 Danielson Street Suite 100	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
803	Genesis Power Management	2455 La Ramada Lane	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
804	Geoff Waugh Construction	13149 Lakeview Granda Drive	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
805	Geogrid Retaining Wall Systems Inc	1295 Distribution Way	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
806	Gerry Roy, Inc.	2030 Dale Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
807	Gifford's Home Repair	8730 Our Way	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
808	Gilbert Construction	9699 Carta Lane	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
809	Global Power Group, Inc.	202 Greenfield Drive Suite C	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
810	Golden State Garage Doors, Inc.	10540 Kenney Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
811	Gomez Handyman Services	7584 Ohio Place	Low	908.2	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
812	Good And Roberts	1330 Park Center Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
813	Good Guys Painting Company	Not Listed	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
814	Gossmeyer Construction	3021 Ridgecliff Lane	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
815	Gould Electric Inc.	12130 Dearborn Place	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
816	Greenbrier Lawn & Tree Expert	3616 Bancroft Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
817	Greene & St. John Inc.	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
818	Gregg Drilling & Testing, Inc.	2726 Walnut Avenue	Low	Throughout City	Commercial	Yes	1781	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
819	Grossmont Drain Cleaning	8949 Alpine Avenue	Low	909.1	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
820	Groundwater And Environmental	6160 Fairmount Avenue Suite A	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
821	Grove Plumbing, Inc.	7637 Lemon Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
822	Gudino Electric	824 Santa Isabel Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
823	Gula Roofing Co.	1352 Hillcrest Drive	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
824	Gulf Engineering & Construction	675 S.2nd Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
825	H & A Construction	191 Glover Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
826	H & H Steel Enterprises, Inc.	16891 Sunrise Vista	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
827	H & W Custom Builders, Inc.	14511 Olde Highway 80	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
828	H B Shaffer	968 Waterloo Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
829	H H S Construction, Inc.	14455 Ramona Avenue Unit D	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
830	H L Masonary Builders Inc.	20891 Viento Valle	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
831	H M Construction	1530 Jamacha Road Suite Z	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
832	H M S Construction, Inc.	1225 Linda Vista Drive	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
833	H P Communications	13341 Temescal Canyon Road	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
834	H S B Real Estate And Investments,	4481 Palo Verde Terrace	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
835	Hackouts Glass Co.	747 W.Main Street	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
836	Haenggi Heating And Air	1179 N.Cuyamaca Avenue Suite C	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
837	Hamel's Refrigeration, A/C & Heat	1909 Sonett Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
838	Hammer Construction Company	1294 Cardinal Place	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
839	Hammond & Masing General	9770 Carroll Centre Road Suite E	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
840	Handyman Matters	2820 Via Orange Way Suite A	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
841	Hannibal Painting	9325 Goyette Place	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
842	Hans Construction Mechanical, Inc.	Not Listed	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
843	Harbor Pest Control Inc	6160 Fairmount Avenue Suite K	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
844	Har-Bro Construction	7192 Clairemont Mesa Blvd	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
845	Hawkins Construction, Inc.	Not Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
846	Hawkins Door & Trim, Inc.	1320 Grand Avenue Suite5	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
847	Hazard Construction Company	6465 Marindustry Drive	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
848	Hec's Construction	1708 Horseshoe Court	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
849	Heiman Construction Co.	742 Genevieve Street Suite M	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
850	Heintschel Plastering, Inc.	475 Corporate Drive	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
851	Helix Mechanical, Inc.	1100 N.Magnolia Avenue Suite G	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
852	Hersum Construction Inc	6365 Marindustry Drive Suite A	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
853	Hess Roofing, Inc.	1681 Magnolia Avenue #N	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
854	Hillcrest Contracting, Inc.	1467 Circle City Drive	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
855	Hitt Contracting, Inc.	2704 Dorr Avenue	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
856	Hodge General Contractors	3815 Linda Vista Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
857	Hofstee Drywall	1491 Curtis Lane	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
858	Holland's Custom Kitchens, Inc.	14511 Olde Highway 80	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
859	Home Energy Systems	6996 Convoy Court	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
860	Homestead Sheet Metal	9031 Memory Lane	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
861	Hometeam Pest Defense	10070 Carrol Canyon Road Suite 105	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
862	Hondo Electric, Inc.	420 K Street Suite 261	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
863	Honeywell International, Inc.	6 Centerpointe Drive Suite 300	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
864	Horizon Solar Systems, Inc	120 N.Pacific Street Suite G7	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
865	Howards Rug Co Of San Diego Inc	6110 Nancy Ridge Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
866	Hughes Heating & Air Conditioning	PO Box 2965	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
867	Hydrex Pest Control	PO Box 261127	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
868	I-Con Electric	4109 Morning Star Court	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
869	Ideal Mechanical	8524 Ablette Road	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
870	Ideal Plumbing & Heating	5161 Waring Road	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
871	Imperial Custom Cabinets	8093 Lemon Grove Way	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
872	Ink Electric, Inc.	7845 North Avenue	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
873	Inland Plaster, Inc.	38372 Innovation Court Suite C-301	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
874	Integrated Sign Associates	1160-M Pioneer Way	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
875	Integrity Concrete	540 Opper Street	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
876	Integrity Home Improvements	5725 Kearny Villa Road Suite A	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
877	Integrity Restoration Inc	4901 Morena Blvd Suite 502	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
878	Interior Specialists, Inc.	1630 Faraday Avenue	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
879	International Iron Products	10883 Thornmint Road	Low	Throughout City	Commercial	Yes	1791	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
880	Interstate Striping Of Calif.,	8511-B Ablette Road	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
881	Interwest Electric	8135 Engineer Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
882	Irish Setters Inc.	674 Rancheros Drive	Low	Throughout City	Commercial	Yes	1743	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
883	Issac Sanders Company	4752 68th Street #A	Low	Throughout City	Commercial	Yes	1743	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
884	J & L Insulation, Inc.	10035 Maine Avenue	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
885	J & M Keystone Inc	2709 Via Orange Way Suite A	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
886	J & S Maintenance	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
887	J & S Sealing & Striping	6121 Fairmount Ave	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
888	J C Electric	24857 Abalar Way	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
889	J N Horn Construction Co., Inc.	1301 Pepper Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
890	J P Plumbing	9051 La Mar Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
891	J P Witherow Roofing Company	1001 Morena Blvd	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
892	J R Electric	1717 Wind River Road	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
893	J R Masonry, Inc.	1447 Peach Avenue	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
894	J. D. Paving, Inc.	1412 Barham Road	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
895	J. Munoz Concrete	6160 Seascape Drive	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
896	J. W. Warren Construction, Inc	3113 Calle Allejandro	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
897	J.H. O'Brien Landscaping &	3435 Ocean Park Blvd Suite 103	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
898	Jackpot Painting Contractors, Inc.	391 Olive Avenue	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
899	Jackson & Blanc	7929 Arjons Drive	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
900	Jackson Design & Remodeling	4797 Mercury Street Suite B	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
901	Jacobs Construction	4244 Spring Court	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
902	Jamar Electric, Inc.	9830 Prospect Avenue Suite D	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
903	James Dennis Mc Alexander	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
904	James Grey Construction	9960 Estrella Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
905	Jason Will Do It	1390 Ryan Ridge Road	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
906	Jensen Electric	9101 Heatherdale Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
907	Jerry's Heating & Air	9717 Airport Vista Road	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
908	Jessee Fence	24061 N.Viejas Grade	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
909	Jie Da Handyman	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
910	Jim Simmons Electric	13439 Samantha Avenue	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
911	Joe Sherlock Construction, Inc.	16290 Summer Sage Road	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
912	Joe Silva Plumbing	16951 Old Coach Road	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
913	Joe Vaughn Drywall	Not Listed	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
914	John H. Pearce Construction	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
915	John Tessitore Concrete, Inc	5574 Pray Street	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
916	John Weber Construction &	334 Mulberry Drive	Low	Throughout City	Commercial	Yes	1629	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
917	Johnson Controls, Inc.	12393 Slauson Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
918	Johnson Electric, Inc.	1650 Maple Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
919	Juice Electric	4005 Citradora Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
920	Just Water Heaters, Inc.	3400 Investment Blvd	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
921	Just-Star Construction, Inc.	9292 Chesapeake Drive Suite 100	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
922	K & J Construction	8864 Ellsworth Circle	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
923	K T M Construction	10020 Prospect Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
924	K.P. Electric	1423 E.Washington Avenue #36	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
925	Kalabat Building Company	980 E.Chase Avenue Suite 2	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
926	K-Designers	7472 Orangewood Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
927	Keith Monroe & Co.	3186 Adams Avenue Suite 200	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
928	Keith Okonski Construction Inc.	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
929	Kenard Construction, Inc.	1830 Gillespie Way Suite 105	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
930	Kennedy Electric	5884 Samuel Street	Low	907.1	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
931	Kennedy Masonry, Inc	7313 Melodia Terrace	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
932	Kimball Construction	1804 Garnet Avenue Suite 508	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
933	Kincade Excavation	774 Muirwood Drive	Low	Throughout City	Commercial	Yes	1794	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
934	King Of The Painters Co	4155 Camino Alegre	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
935	Kiowa Construction Services	1601 Plantation Way	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
936	Kirk Paving Incorporated	8722 Winter Gardens Blvd	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
937	Krushensky's Construction Co.,	1988 Alpine Creek Lane	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
938	Kunkel Heating Service	7445 Roosevelt Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
939	Kyler Construction, Inc.	38725 Calle De Companero	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
940	L 2 Specialties, Inc.	3613 W.Macarthur Blvd. Suite 611	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
941	L A County Masonry	27811 Avenue Hopkins Unit 2	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
942	L D I Mechanical Inc.	1740 Delilah Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
943	L T Handyman Company	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
944	L. B. Powers & Sons, Inc.	1705 W.Lewis Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
945	L. W. Carson Construction	11855 Sorrento Valley Road	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
946	La Jolla Electric, Inc.	9153 Chesapeake Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
947	La Mesa Glass, Inc.	6691 Federal Blvd	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
948	La Mesa Management And Maintenance	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
949	La Mesa Stucco, Inc.	976 Leland Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
950	La Tourrette Painting	8675 Hayes St.	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
951	Lampert Murray M Company Inc	3545 Camino Del Rio South Suite C	Low	907.1	Commercial	Yes	1541	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
952	Landsmith Landscape Construction	Not Listed	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
953	Landsystems	8720 Miramar Place	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
954	Lang Electric	47900 Oasis Court	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
955	Lanier Construction, Inc.	10888 Buggywhip Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
956	Larry's Electrical Service, Inc.	1043 Worthington Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
957	Lasco Bathware, Inc.	3255 E.Miraloma Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
958	Le Perv Landscape, Inc.	5002 Santa Fe Street Suite A	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
959	Ledcor Petty Construction, L.P.	9466 Black Mountain Road Suite 200	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
960	Lehnert General Contracting	17125 Skyline Truck Trail	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
961	Lekos Electric, Inc.	1370 Pioneer Way	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
962	Lemon Grove Stucco Inc	1057 Elkelton Blvd	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
963	Lester's Plumbing	9733 Saint George Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
964	License-To-Kill Inc.	4618 Avocado Blvd	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
965	Life Deck	770 Gateway Center Drive	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
966	Lightning Electric	1707 Coronado Avenue	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
967	Lightworks Architectural Lighting	9883 Pacific Heights Blvd Suite E	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
968	Linear Electric Inc	7676 Engineer Road Unit L	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
969	Lloyd Pest Control Company, Inc.	935 Sherman Street	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
970	Lockard Electric, Inc.	Not Listed	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
971	Los Angeles Signal Construction,	15100 E.Nelson Avenue	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
972	Lot Management, Inc.	7200 Ponto Drive Suite B	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
973	Lucas & Mercier Construction	29712 Avenida De Las Banderas	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
974	Lucas And Mercier Development	630 AltaVista Suite 203	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
975	Lundco Cleaning Systems	Not Listed	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
976	Luzaich Striping Inc.	14219 Olde Highway 80	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
977	M C Communications, Inc.	199 E.27th Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
978	M D Painting	Not Listed	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
979	M D Plumbing	3793 35th Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
980	M J B Heating & Air Conditioning,	1348 La Mirada Drive Suite A	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
981	M J Kennedy Electric	2032 Diamond Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
982	M J M Handyman	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
983	M W Reynolds Construction Co.,	1908 Friendship Drive Suite A	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
984	M. C. Brown Construction&	10777 Eureka Road	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
985	M. Gehring Construction	Not Listed	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
986	M.C. McMurray Painting &	Not Listed	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
987	Macord Construction Corp	101-H Copperwood Way	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
988	Magna Window Corporation	1879 Lincoln Avenue	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
989	Magnum Electric Inc.	1174 Pierre Way	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
990	Mallucci Builders	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
991	Marathon General Inc	130 S.Hale Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
992	Mark Snyder Electric	12900 Brookprinter Place Suite 200	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
993	Marrokal Construction Company	9842 River Street	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
994	Marshall Roofing Company	11729 Calle Albara	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
995	Martin Electric II	1841 Westward Ho Circle	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
996	Martin Roofing Co Inc	6608 Federal Blvd	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
997	Marzola Construction Co., Inc.	17025 Industry Place	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
998	Master Electric Company, Inc.	8055 El Capitan Dr.	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
999	Master Plumbing And Leak Detection	8726 Production Avenue Suite B	Low	907.1	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1000	Masterpiece Leaded Windows	13831 Danielson Street	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1001	Mastersev Inc.	560 Library Street	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1002	Mattia Concrete Cleaning	Not Listed	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1003	Maxim Floor Systems	1189 N.Grove Street Bldg.C	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1004	Mayer Roofing, Inc.	490 Corporate Drive	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1005	Mc Bride Electric	9919 Hibert Street Suite F	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1006	Mc Guire Electric	8605 Fiona Way	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1007	Mc Kay Roofing Company, Inc.	10622 Keeney Street	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1008	Mc Millan Water Treatment	8450 Tamarind Avenue Suite D	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1009	Mc Minn Contruction Inc.	13350 Birch Tree Lane	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1010	Mc Neil Construction	5009 Gasconade Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1011	Mechanical Industries, Inc.	314 Yampa Street	Low	Throughout City	Commercial	Yes	1791	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1012	Michael M. Carson Const. Co.	946 S Lincoln Ave.	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1013	Mickey's Electric	1513 Winsome Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1014	Mike Jackson Electrical	11464 Crazy Horse Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1015	Mike Oliver Plumbing, Inc.	Not Listed	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1016	Mike Simpson Plumbing	Not Listed	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1017	Mike's Home Repair & Maintenance	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1018	Milgard Manufacturing Inc	26879 Diaz Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1019	Milholland Electric, Inc.	9169 Chespeake Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1020	Miller Brooks Environmental, Inc	2124 Main Street Suite 200	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1021	Miller Construction	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1022	Miller Paving Corp	9236 Olive Drive	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1023	Milton Electric	5167 Hilda Road	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1024	Minute Man Pest Management, Inc.	1625 Cuyamaca Avenue	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1025	Mirstone Plastering Inc.	1374 Presioca Street	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1026	Mission Pools Of Escondido	755 W.Grand Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1027	Mission Valley Roofing, Inc.	9908 Prospect	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1028	MLS Construction Co.	Not Listed	Low	908.2	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1029	Mocon Pipebursting	82204 Highway 111 C 201	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1030	Monterey Park Roofing Co.	10 Scrub Oak	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1031	My Electrician Online	Not Listed	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1032	My Plumber S.D., L L P	9975 Pennsylvania Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1033	N E C Unified Solutions, Inc.	6535 N.State Hwy 161	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1034	N P L Mechanical	731 Terra Lane	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1035	National Air, Inc.	2053 Kurtz Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1036	National Electric Works, Inc.	4440 Rainier Avenue	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1037	Natural Environmental, Inc	1162 N.Marshall Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1038	Neal Electric Inc	13250 Kirkham Way	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1039	Network Pavers	Not Listed	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1040	Newman Replacement Windows, Inc.	6110 Yarrow Drive	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1041	Nicholas Grant Corporation Dba	5370 Eastgate Mall	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1042	Nielsen Development	1224 Greenfield Street	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1043	Normac Kitchens, Inc.	607 N.Central Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1044	North County Acoustics	8315 Miralani Drive	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1045	North County Gunite Company	12562 Highway 67	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1046	Northbrook Inc	3101-G Orange Grove Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1047	O J Insulation, Inc.	600 S.Vincent Avenue	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1048	On Time Construction & Landscape	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1049	One Way Audio Video &	Not Listed	Low	Throughout City	Commercial	Yes	1796	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1050	Orestano Painting And Decorating	Not Listed	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1051	Orion Construction Corp.	1232 Keystone Way	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1052	Orkin Exterminating Company	2420 Grand Avenue Suite J	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1053	Ozzy's Plumbing & Drain Services	2695 Calle Quebrada	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1054	P.w. Marsh & Sons, Inc	1068 Broadway 220	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1055	Pacific Building Group	5754 Pacific Center Blvd Suite 203	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1056	Pacific Electric Co	9328 Lakeview Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1057	Pacific Lath And Plaster	360 S.Spruce Street	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1058	Pacific Production Plumbing	1584 Pioneer Way	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1059	Pacific Refrigeration, Inc.	1440 Broadway	Low	Throughout City	Commercial	Yes	7623	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
1060	Pacific Rim Mechanical, Inc.	7655 Convoy Court	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1061	Pacific Sewer Maintenance Corp.	8244 W.Hillsdale Court Unit #3	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1062	Pacific Structures Construction,	101 State Place Suite E	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1063	Pacific Sundance Construction Inc.	2911 W.Warner Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1064	Pacifica Glass Co., Inc.	1997 Friendship Drive Suite G	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1065	Pac-West Sheet Metal	528 Amigas Drive Suite C	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1066	Padre Pools	9679 Marilla Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1067	Paint Plus, Inc.	1647 Dewitt Estates Road	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1068	Palm Engineering Construction	3770 Hancock Street Suite H	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1069	Par Electrical Contractors, Inc.	2410 Vineyard Avenue	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1070	Paradise Custom Pools	PO Box 900454	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1071	Paramount R & R, Inc.	9340 Hazard Way	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1072	Paramount Scaffold, Inc.	16631 S.Avalon Blvd	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1073	Passage Supply Inc.	1505 S.Dupont Avenue #F	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1074	Patriot Plumbing, Inc.	870 N.Second Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1075	Patterson Brothers Lighting, Inc	12047 Riverside Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1076	Paul Hansen Equipment	603 S.Marshall Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1077	Pavement Recycling Systems	121 N.Main Street	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1078	Payco Specialties Inc	120 N.2nd Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1079	Pebble Paving Co.	7954 Convoy Court	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1080	Perry Plumbing	2810 Sandover Court	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1081	Pete Paniagua Termite & Pest	3736 Grove Street	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1082	Peterbuilt Corporation	6235 Lusk Blvd	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1083	Peterson Roofing, Inc.	549 W.Central Park Avenue	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1084	Phazer Electric Inc	Not Listed	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1085	Phil J. Maynard	8653 Washington Avenue	Low	907.1	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1086	Phillips Welding	Not Listed	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1087	Plumbing Solutions, Inc.	17701 W.Danielson Street Apartment 102	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1088	Porterfield Home Enhancements	7827 Segovia Way	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1089	Portillo Concrete, Inc.	3528 Harris Street	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1090	Pota Landscape	6344 Arms Lake Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1091	Power Communication Systems	4643 Mission Gorge Place Suite A	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1092	Power Drain Service	5622 Meade Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1093	Power Fabricating Inc.	625 S.Fee Ana Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1094	Power Plus - S. R. Bray Corp	1005 N.Edward Court	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1095	Precision Concrete Cutting	32428 Campo Drive	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1096	Precision Electric Co	8137 Winter Gardens Blvd	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1097	Premier Roofing	9054 Olive Drive	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1098	Pro Coat Systems, Inc.	1131 N.Citrus Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1099	Pro Drain & Plumbing Service Inc.	7440 Central Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1100	Pro Line Construction	13240 Morning Glory Drive	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1101	Pro Tech Insulation, Inc.	2041 Skyview Glen	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1102	Pro Wall Lath & Plaster, Inc.	360 S.Spruce Street	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1103	Progressive Investments, Inc.	1168 Greenfield Drive	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1104	Promark Roofing	302 Hunter Court	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1105	Pro-Vlad	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1106	Pullman Comm Inc	2530 Lynn Way	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1107	Purser Construction, Inc.	9474 Kearny Villa Road Suite 101	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1108	Quality Interiors, Inc.	803 E.Parkridge Avenue	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1109	Quality Patio & Sunrooms	8388 Mary Dean Lane	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1110	Quality Rooter And Plumbing, Inc.	1798 Pepper Villa Drive	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1111	Quick Plumbing	1692 N.Mollison Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1112	Quintessa Construction, Inc.	2210 Encinitas Blvd Suite S	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1113	R & C Structures, Inc.	1615 La Mirada Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1114	R & M Electrical Contractor, Inc.	4912 E.Florence Circle	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1115	R A D Construction, Inc.	3479 Citrus Street Suite A	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1116	R B E	1177 Greefield Drive Suite B	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1117	R B Electrical	1248 Andover Road	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1118	R C Grading, Inc.	1650 W.Pellisier Road	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1119	R C Morse General Contractor	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1120	R D Hammond Builders	10041 Medina Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1121	R L I	1967 Brockhurst Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1122	R. E. Paxton Contracting	Not Listed	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1123	R. J. Dutch Devos	Not Listed	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
1124	R.C. Young Roofing Co., Inc.	875 34th Street	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1125	Race Way Electric, Inc.	PO Box 710885	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1126	Radford Doors U S A, Inc.	2130 Newton Avenue	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1127	Rain For Rent	3404 State Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1128	Ram Electric	12365 Lakeshore Dr	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1129	Ramona Paving & Construction	1303 Olive Street	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1130	Ranbar Plumbing Contractors, Inc.	10149 Channel Road Suite A	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1131	Ranbar Plumbing Contractors, Inc.	10149 Channel Road Suite A	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1132	Rapid Plumbing	5595 Magnatron Blvd Suite Q	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1133	Raver Contruction, Inc.	14978 Skyline Truck Trail	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1134	Rawson Enterprises, Inc.	10233 Jefferson Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1135	Raymar Construction	43931 Via Montalban	Low	Throughout City	Commercial	Yes	1700	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1136	Ray's Cement Work	2477-1/2 Hardy Drive	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1137	Ray's Plumbing	10346 Bosque Drive	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1138	Real Time Plumbing	180 Mace Street Suite B7	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1139	Reasonable Drain And Plumbing	1765 Garnet Avenue Suite 104	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1140	Renewable Energy Concepts, Inc.	684 Clarion Court	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1141	Republic I T S	371 Bel Marin Keys Blvd #200	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1142	Rescom Overhead Doors, Inc.	1738 Brackett Street	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1143	Reuben's Plumbing	1759 Linwood Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1144	Richard Murray Painting	Not Listed	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1145	Rick Skinner Construction	6965 Endens Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1146	Ricks Sign & Lighting Service	PO Box 219	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1147	Ritch Builder Co	4629 Calle De Vida	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1148	Rivera's Iron Works, Inc.	2534 S.Santa Fe Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1149	Robeck Electrical Maintenance	1070 Commerce Street Suite C	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1150	Robert Brown Electric	455 Pepper Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1151	Robert Rubidoux Roofing	1261 La Paloma Glen	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1152	Robinson Electric	8871 Troy Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1153	Robinson Roofing & Consulting	PO Box 902	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1154	Roejack Roofing, Inc.	1107 Petree Street	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1155	Roel Construction Co Inc	3366 Kurtz Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1156	Roger H. Proulx & Co.	6833 E.Rosecrans Avenue Suite C	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1157	Roger L. Ballantyne	Not Listed	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1158	Romero's Roofing Service, Inc.	1827 Cleveland Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1159	Ronald Jay Cappello	Not Listed	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1160	Ronces-McKinney Painting, Inc	4418 Avocado Blvd	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1161	Ron's Plumbing	9962 Prospect Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1162	Roofcorp Of C A, Inc.	2130 S.Dupont Drive	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1163	Roofing Services Of San Diego	8285 Buckhorn Street	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1164	Rossi Painting Co, Inc.	4025 E.6th Street	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1165	Roth Construction Corporation	4850 Talmadge Park Row	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1166	Roto Rooter Sewer Service	180 Denny Way	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No
1167	Royster Group Construction, Inc.	696 State Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1168	Russell Plumbing & Supplies Inc	9030 Wintergardens Blvd	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1169	Rye Built Construction Corp	6319 Badger Lake Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1170	S E Pipeline Construction Company	11832 S.Bloomfield Avenue	Low	Throughout City	Commercial	Yes	1623	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1171	S G Plastering	14475 Olde Highway 80 Suite A	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1172	S O S Rooter	3485 Pickwick Street	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1173	Sadler Roofing	125 Grand Canal	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1174	Safway Steel Products	1107 Petree Street Suite 103	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1175	Salvador Flores, Jr.	Not Listed	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1176	San Diego Electric Co.	7906 Linen Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1177	San Diego Fence Co., Inc.	7920 Engineer Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1178	San Diego Mirror & Window	2515 Industry Street	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1179	San Diego Pool Plastering	10750 Valle Vista Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1180	San Diego Preferred Plumbing Inc	8898 Clairemont Mesa Blvd Suite J	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1181	San Diego Roofing, Inc.	7364 El Cajon Blvd	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1182	San Diego Stucco Company Inc	625 North Avenue	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1183	San Diego Trane Company	9555 Chesapeake Drive Suite 201	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1184	San Marcos Roofing	1580 Grapevine Lane	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1185	Santa Fe Plaster	620 Alpine Way	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1186	Santee Electric Company	8461 Melrose Lane	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1187	Saw Core Inc.	12111 Lakeside Avenue	Low	Throughout City	Commercial	Yes	1795	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1188	Schearing Construction Company	4339 Mount Putman Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1189	Schilling Corporation	697 Greenfield Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1190	Schillreff Mechanical Inc.	Not Listed	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1191	Schindler Elevator Corporation	16450 Foothill Blvd Suite 200	Low	Throughout City	Commercial	Yes	1796	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1192	Schmid Building Products	13000 Kirkham Way Suite 101	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1193	Schmidt Fire Protection Co, Inc.	4760 Murphy Canyon Road	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1194	Seal Electric Inc.	9216 Abraham Way Suite C	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1195	Sears Home Improvement Product	10415 Slusher Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1196	Secure Roof, Inc.	976-B Andreasen Drive	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1197	Sedco Plumbing	1265 Hayden Lane	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1198	Select Electric, Inc	1425 Presioca Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1199	Service Master All Phase	1466 Pioneer Way Suite 6	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1200	Sherwood Mechanical, Inc.	13630 Danielson	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1201	Sid's Carpet Barn, Inc.	132 W.8th Street	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1202	Sierra Painting	11389 Reidy Canyon Place	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1203	Sierra Window Concepts, Ltd.	5252 Balboa Avenue Suite 304	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1204	Sign Ad Corporation	9540 Waples Street Suite C	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1205	Signtech Electrical Advertising	4444 Federal Blvd	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1206	Silva And Silva Asphalt	9642 Prospect Avenue	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1207	Silverthorn Construction, Inc.	1674 Alpine Terrace Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1208	Sim J. Harris, Inc.	4375 Jutland Drive Suite 260	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1209	Simmons Sheet Metal Fab. Inc.	2950 San Luis Rey Road	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1210	Simonsen Solutions	Not Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1211	Simplexgrinnell L P	9855 Carroll Canyon Road	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1212	Smart Systems Technologies, Inc.	9 Goodyear	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1213	Smith Roofing Co, Inc	4211 Whittier Street	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1214	So Cal Custom Roofing	625 North Avenue	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1215	Soclaris Contracting	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1216	Solomon Electrical Services	3812 Superior Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1217	Source Refrigeration & H V A C,	800 E.Orangethorpe Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1218	South Bay Fence Inc	3084 Main St	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1219	South Coast Erosion Control, Inc.	1014 E.Washington Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1220	South Coast Patio	8927 Lakeview Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1221	Southern Contracting Company	559 Twin Oaks Valley Road #N	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1222	Southern Lighting & Graphics Inc.	10370 Regis Court	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1223	Southwest Window Co., Inc.	8666 Production Avenue	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1224	Spectra Contract Flooring	8320 Caminto Santa Fe #1	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1225	Sperry Construction & Electric,	9938 Blossom Valley Road	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1226	Spooner's Woodworks, Inc.	12305 Crosthwaite Circle	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1227	Sprekelmeyer & Muessigmann	522 Trailridge Drive	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1228	Spring Valley Insulation	3151 Bancroft Drive	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1229	Stabler Building Company Inc.	11496 Cypress Terrace Place	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1230	Stanley Access Technologies	244 Miller Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1231	Steele Plumbing Inc.	1304 Pepper Drive	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1232	Steve Fox Plumbing, Inc.	4172 Cartagena	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1233	Steve's Delivery Service	9320 Earl Street Unit 8	Low	907.1	Commercial	Yes	4215	Ground Transportation	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	No	No
1234	Stillson General Contracting	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1235	Stokely Construction, Inc	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1236	Strauwald Co. And Supply	9449 Calle Del Lago	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1237	Streamline Plumbing, Inc	Not Listed	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1238	Strickland Brothers Carpet	728 Hawthorne	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1239	Summit Steel Fabrications, Inc.	4468 Parkhurst Street	Low	Throughout City	Commercial	Yes	1791	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1240	Sunlite Landscape	567 Anderson Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1241	Sunrise Concrete	12012 Riverside Drive	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1242	Sunshine Carpet And Upholstery	9145 Dillon Drive	Low	Throughout City	Commercial	Yes	7217	Carpet/Furniture Cleaning	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Potential	Potential	No	No
1243	Sunshine Communications, Inc	10981 San Diego Mission Road Suite 100	Low	909.1	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1244	Sunwest Plumbing	9899 Hibert Unit #E	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1245	Superior Door Systems Inc	8059 Wing Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1246	Superior Gunite	12306 Van Nuys Blvd	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1247	Sweetwater Plumbing & Hardware	8300 Paradise Valley Road Suite 120	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1248	Sylvania Lighting Services Corp.	2851 Pomona Blvd	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1249	T & M Framing, Inc.	1224 Greenfield Drive	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1250	T C Construction	10540 Prospect Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1251	T C P Company	7080 Mt.Vernon	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1252	T D Construction	319 River Trail Place	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1253	T F Kaiser Construction, Inc.	4525 Mount Frissell Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

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									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1254	T G C Builders	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1255	T L C Plumbing, Inc.	4569 Mission Gorge Place Suite E	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1256	T- Mar Construction Inc	2340 Meyers Avenue	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1257	T P Acoustics Inc	9225 Mira Este Court Suite A	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1258	T R C	9471 Ridgehaven Court Suite E	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1259	T R Construction Co	13100 Kirkham Way Suite 204	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1260	Tanknology, Inc.	8501 N.Mopac Expressway Suite 400	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1261	Taylor Signs And Graphics	14537 Kittery Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1262	Taylor Trim & Supply, Inc.	2057 Aldergrove Avenue	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1263	Team C Construction	1208 N.2nd Street	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1264	Tejeda & Tejeda Asphalt &	9714 Sutton Crt	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1265	Temecon Gen. Bldg. Contractor,	9715 Carroll Centre Road Suite 108	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1266	Temecula Valley Drywall, Inc.	41228 Raintree Court	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1267	Temperature Design Energy Systems	9141 Hillman Way	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1268	Temperatures Unlimited, Inc.	26841 Ruether Avenue Suite G	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1269	Terminix International Company	1736 N.Magnolia Avenue	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1270	Terra West Grading	37035 Yuma Ln	Low	Throughout City	Commercial	Yes	1611	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1271	Terry Lindquist Roofing	877 Hale Court	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1272	Testamerica Drilling Corp.	1016 E.Katella Avenue	Low	Throughout City	Commercial	Yes	1781	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1273	The Brickman Group, Ltd	6218 Fairmount Avenue	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1274	The Ghianni-Larussa Group, Inc.	13880 Stowe Drive Suite A	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1275	The Whole Nine Yards	Not Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1276	The Wright Painting Co.	12642 Casa Vista Road	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1277	Thomas' Handyman Services	2570 Granada Circle	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1278	Thomas Lukasiewicz Construction	8874 Gowdy Avenue	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1279	Thompson Heating & Air	888 Rancheros Drive Suite E	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1280	Thornton Steel & Iron Works, Inc.	1323 State College Parkway	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1281	Tidwell Masonry	Not Not Listed	Low	Throughout City	Commercial	Yes	1741	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1282	Tierra Verde Resources, Inc.	1545 Lake Drive	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1283	Tile King, Inc.	595 N.Smith # A	Low	Throughout City	Commercial	Yes	1743	Masonry	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1284	Tim Walford Roofing	10699 San Diego Mission Road Apt 313	Low	Throughout City	Commercial	Yes	1761	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1285	Timberline Building Services	418 Edmard Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1286	Timberwood Landscape, Inc.	2731 Via Orange Way Suite 111	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1287	Todd Enterprises, Inc.	3040 Clairemont Drive Suite C	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1288	Todd F. Metcalf	630 W.Foothill Blvd Suite C	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1289	Tom Reed General Contractor	1721 Yale Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1290	Tom's Handyman Service	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1291	Tony Gallo Painting	20 Surfbird Lane	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1292	Tool Time Construction, Inc	7546 Trade Street	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1293	Top Notch Termite Company, Inc	6041 Fairmount Avenue	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1294	Torres General, Inc.	10783 Jamacha Blvd. Suite 8	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1295	Torres Tile, Inc.	1255 Linda Vista Drive	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1296	Town & Country Construction	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1297	Town & Country Custom Pools	9920 Prospect Avenue Suite 106	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1298	Traffic Control Service, Inc	584 N.Marshall Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1299	Transcal Construction	3622 Eagle Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1300	Translatin Productions	5706 Baltimore Drive Suite 345	Low	907.1	Commercial	Yes	3911	Manufacturing, Fabricated Metal	No	No	Yes	No	Yes	Yes	No	No	No	Potential	Potential	No	No
1301	Travcon Builders, Inc.	Not Listed	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1302	Treebeard Landscape	9917 Campo Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1303	Tri City Glass Of S D, Inc.	2555-B Sweerwater Springs Blvd.	Low	Throughout City	Commercial	Yes	1793	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1304	Tri Com Telecommunications Inc.	2845 Bancroft Drive	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1305	Tri County Drilling	9631 Candida Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1306	Tribal Painting, Inc.	1263 Bermuda Place	Low	Throughout City	Commercial	Yes	1721	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1307	Triple D Concrete Pumping	Not Listed	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1308	True Lawn Care, Inc.	9820 Maine Avenue	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1309	Truly Nolen Of America	7170 University Avenue	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1310	Tubbs Enterprises, Inc.	2620 Aurora Glen	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1311	Tupper's Custom Works	Not Not Listed	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1312	Ulm Plumbing & Heating	7525 Mission Gorge Road Suite B	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1313	Ultrasigns Inc.	5458 Complex Street Suite 401	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1314	V I C O	Not Listed	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1315	V W C	425 W.La Cadena Suite 12	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1316	Valley Crest Landscape Maint., Inc	8500 Miramar Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1317	Valleycrest Tree Company	12087-40 N.Lopez Canyon Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1318	Van Con Builders Inc.	1301 Pepper Drive Suite D	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1319	Van Deutch Refrigeration	Not Listed	Low	Throughout City	Commercial	Yes	7623	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1320	Vanberg Constuction	2521 B Street Suite 102	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1321	Vanguard Fire Protection, Inc.	1604 La Mirada Del Suite105	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1322	Ventura's Plumbing & Drain	8425 Pueblo Road	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1323	Viacom Outdoor, Inc.	1731 Workman Street	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1324	Vic's Plumbing	687 Alveda Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1325	Vigil Handyman Service	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1326	Viking Electric	1549 Fair Valley Rd	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1327	Viking Insulation Co., Inc.	3014 Floyd Street	Low	Throughout City	Commercial	Yes	1742	Painting/Coating	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1328	Vinyard Doors, Inc.	3605 Pacific Highway	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1329	Volks Electric	6646 Julie Street	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1330	W & S Electric	1050 Pioneer Way Suite K	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1331	Walker Wood Products	43195 Business Park Drive	Low	Throughout City	Commercial	Yes	1751	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1332	Walldesign Inc.	2350 SE.Bristol Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1333	Walter Anderson Plumbing Inc	1150 N.Marshall Avenue	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1334	Water Heaters Only, Inc.	970 E.Main Street Suite 200	Low	Throughout City	Commercial	Yes	1711	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1335	Wavecrest Construction, Inc.	5333 Mission Center Road	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1336	Wayne Perry Construction Inc	8281 Commonwealth	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1337	Weather Machines	9858 Hawley Road	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1338	Wedcon Systems, Inc.	1660 Chicago Avenue Suite N9	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1339	West Co Construction	1212 S.Pacific Street #1	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1340	West Coast Appliance Service	10744 Prospect Avenue Suite B	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1341	West Coast D B I, Inc	4240 Francis Way	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No

Appendix A.4 (Continued)
Commercial and Industrial Inventory

#	Facility Name	Address	Business Priority	Hydrologic Area	Industrial or Commercial	Mobile	SIC	Principal Products / Services	Potential Pollutants									Tributary to 303(d)	Generating Pollutants Tributary to 303(d) Listed	TTWQ	Industrial Permit
									Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash				
1342	Western Cable Construction	3420 University Avenue	Low	908.2	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1343	Western Exterminator Co	1320 Hill Street	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1344	Western Foundations & Shoring	10875 Highway 67	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1345	Western Pump, Inc.	3235 F Street	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1346	Westmac Enterprises, Inc.	9830 Vine Street Suite 100	Low	Throughout City	Commercial	Yes	1799	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1347	Whillock Contracting Inc	PO Box 2322	Low	Throughout City	Commercial	Yes	1542	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1348	Whitson C M	10603 Rancho Bernardo Road	Low	Throughout City	Commercial	Yes	1521	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1349	Wilfrido Concrete Construction	303 H Street Suite 407	Low	Throughout City	Commercial	Yes	1771	Cement Mixing/Cutting	No	Yes	Yes	Yes	No	No	No	No	No	Potential	Potential	No	No
1350	Winfield Floor Window Covering	7031 Carroll Road	Low	Throughout City	Commercial	Yes	1752	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1351	Wire Pros Electric, Inc.	1753 Kyrsten Terrace Court	Low	Throughout City	Commercial	Yes	1731	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1352	Woodruff Trenching, Inc.	9735 Prospect Avenue	Low	Throughout City	Commercial	Yes	1629	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1353	Xunda Handyman	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1354	Ye Olde Handyman Service	Not Listed	Low	Throughout City	Commercial	Yes	1522	Other Contractor	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Potential	Potential	No	No
1355	Your Way Fumigation	41880 Kalmia Street Suite 170	Low	Throughout City	Commercial	Yes	7342	Pest Control	No	No	Yes	No	No	Yes	Yes	No	No	Potential	Potential	No	No
1356	Zeller Drain Cleaning	Not Listed	Low	Throughout City	Commercial	Yes	7699	Equipment Repair	No	No	Yes	No	Yes	No	No	No	No	Potential	Potential	Yes	No

Notes:

SIC – Standard Industrial Classification Code

Potential Pollutants – Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant. Potential pollutants for each facility are determined by category if no inspection information is available.

Tributary to 303(d) – The facility is tributary to a waterbody listed in the Clean Water Act Section 303(d) list of impaired waterbodies

Generating Pollutants Tributary to 303(d) Listed – The facility is tributary to 303(d) listed receiving water and has potential to generate pollutants for which the water body is impaired

TTWQ – Threat to Water Quality

APPENDIX B

Appendix B
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
1	7/1/2011	Storm Water Hotline	3814 Costa Bella Way	Residential	Report of ponded water and clogged storm drains.	Contacted Helix Water District. They are responsible for drains in this location.	N/A
2	7/7/2011	Public Works Service Request	Not specified	Residential	Report of degraded storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
3	7/11/2011	Storm Water Hotline	Two houses north of 4424 Pomona Dr	Residential	Report of boat washing and painting within the public right-of-way.	Homeowner was advised of storm water regulations and issued a verbal warning.	Verbal Warning
4	7/14/2011	Storm Water Hotline	6140 Horton Dr	Residential	Report of over-irrigation.	Homeowner was advised of storm water regulations and received the over-irrigation fact sheet. Homeowner reported that he closely monitors water and has no problem with over-irrigation.	Compliance Letter, Over-Irrigation Fact Sheet
5	7/25/2011	Storm Water Hotline	Not specified	Residential	Report of pool water discharge to the street.	Caller was given the County storm water hotline number since the issue was in County jurisdiction.	N/A
6	7/27/2011	Code Compliance	4625 Acacia Ave	Commercial	Report of business hosing store front to sidewalk.	Business owner was advised of the storm water regulations and appropriate BMPs to contain wash water.	N/A
7	7/28/2011	Request Tracker	4680 Rolando Ct	Residential	Report of pet waste.	Citizen was given the County storm water hotline number since the issue was in County jurisdiction.	N/A
8	7/28/2011	Public Works Service Request	Zelda Ave	Residential	Report of missing manhole cover.	PW evaluated and cleaned/maintained as applicable.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
9	8/3/2011	Public Works Service Request	Bancroft Dr	Residential	Report of drains that need to be cleared of sand bags and straw waddles.	PW evaluated and cleaned/maintained as applicable.	N/A
10	8/4/2011	Public Works	3854 Capitol St	Residential	Report of stucco and mud washed into the street.	Contractor was issued an NOV and required to properly clean the area. Clean up verified.	Notice of Violation
11	8/7/2011	Public Works Service Request	Normal Ave	Residential	Report of storm drain grate that needs to be secured.	PW evaluated and cleaned/maintained as applicable.	N/A
12	8/8/2011	Storm Water Hotline	8002 High St	Residential	Report of car leaking oil.	No evidence of discharge was noted. Complaint appears unfounded.	N/A
13	8/8/2011	Public Works	South Side of Normal Ave at Windsor	Residential	Report of dirt on sidewalk.	Homeowner was advised of storm water regulations and cleaned up the sidewalk.	N/A
14	8/8/2011	Storm Water Hotline	7474 El Cajon Blvd and neighboring businesses	Commercial	Report of trash and debris dumping.	Cigarette butt debris was noted at the location. Compliance letters were sent to the neighboring apartment complex and business.	2 Compliance Letters
15	8/9/2011	Public Works	4925 Colina Dr	Residential	Report of water leaking from property.	Homeowner was advised of his responsibility to ensure proper drainage and directed to the City Engineering counter to discuss options.	N/A
16	8/18/2011	Storm Water Hotline	10815 Queen Ave	Utility	Report of small mineral oil spill from transformer that was cleaned up by SDGE.	Caller was given the County storm water hotline number since the issue was in County jurisdiction.	N/A
17	8/22/2011	Public Works Service Request	Junior High Dr and Lowell intersection	Residential	Report of loose manhole cover.	PW evaluated and cleaned/maintained as applicable.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
18	8/30/2011	City Manager	8301 La Mesa Blvd	Commercial	Report of plaster washed into storm drain.	Contractor was issued an NOV and required to properly clean the inlet and continue to the next downstream manhole. Clean up verified.	Notice of Violation
19	8/30/2011	Public Works	8697 Lemon Ave	Commercial	Report of paint spilled into street.	Paint was dried and had not reached the storm drain system. No responsible party could be identified.	N/A
20	9/6/2011	Storm Water Hotline	6140 Horton Dr	Residential	Report of over-irrigation.	Tenant and homeowner had already been advised of storm water regulations and issued compliance letters.	N/A
21	9/12/2011	Storm Water Hotline	4700 Block Zelda Ave	Residential	Report of high water flows from manhole.	PW evaluated and cleaned/maintained as applicable.	N/A
22	9/13/2011	Engineering	9192 Shirley St	Residential	Report of paint cans and buckets left curbside.	Door hanger was left that described proper paint storage and disposal. Removal of paint supplies verified.	Door hanger
23	9/26/2011	Storm Water Hotline	7475 Muriel Pl	Residential	Report of pool water discharge to neighboring property.	Determined to be a private property concern. No discharge to the City's MS4 occurred.	N/A
24	9/28/2011	Storm Water Hotline	7050 Parkway Dr	Commercial	Report of landscaping debris discharge to the street and curb inlet.	Compliance letter issued to the site management advising them of storm water regulations.	Compliance Letter
25	10/3/2011	Public Works Service Request	Alpine Ave	Residential	Report of exposed soil and erosion.	PW evaluated and cleaned/maintained as applicable.	N/A
26	10/3/2011	Storm Water Hotline	8359 University Ave	Residential	Report of cigarette butts in gutter and storm drain.	Compliance letter issued to the resident advising him/her of storm water regulations.	Compliance Letter

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
27	10/3/2011	Storm Water Hotline	6115 Broadmoor Dr	Residential	Report of trash accumulation.	Compliance letter issued to homeowner to cover or remove all material that has the potential to contaminate storm water. Clean up verified.	Compliance Letter
28	10/3/2011	Storm Water Hotline	Fletcher Parkway Dr and Southern Rd	Utility	Report of water line leak.	Contacted Helix Water District.	N/A
29	10/3/2011	Public Works Service Request	La Mesa Blvd	Residential	Report of debris in catch basins.	PW evaluated and cleaned/maintained as applicable.	N/A
30	10/5/2011	Public Works Service Request	Urban Dr	Residential	Report of missing cleanout cover.	PW evaluated and cleaned/maintained as applicable.	N/A
31	10/6/2011	Public Works Service Request	Beaumont Dr	Residential	Report of storm drain that needs to be replaced.	PW evaluated and cleaned/maintained as applicable.	N/A
32	10/6/2011	Public Works Service Request	Normal Ave	Residential	Report of storm drain stenciling that needs to be redone.	PW evaluated and cleaned/maintained as applicable.	N/A
33	10/12/2011	Public Works	Parks Ave	Construction	Report of dirt discharge to the street.	PW evaluated the site and issued a verbal warning.	Verbal Warning
34	10/18/2011	Storm Water Hotline	4390 Gordon Way neighbor	Residential	Report of car wash water discharge to the street.	Compliance letter issued to the resident advising him/her of storm water regulations. Resident implemented a containment system.	Compliance Letter, Residential Trifold
35	10/19/2011	Public Works Service Request	Baltimore Dr	Residential	Report of clogged storm drain outlets.	PW evaluated and cleaned/maintained as applicable.	N/A
36	10/19/2011	Code Compliance	Harbinson Ave at Juliette Ave	Mobile	Report of power washing within the right-of-way.	No evidence of discharge was noted. All wash water was effectively reclaimed on-site.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
37	10/19/2011	Storm Water Hotline	4725 68th St	Residential	Report of water discharge from motor home.	Resident was advised of responsibility to fix leaky hose. No discharge to the City's MS4 occurred.	N/A
38	10/26/2011	Public Works	3715 Corona Dr	Residential	Report of oil and grease discharge to storm drain.	No evidence of discharge was noted. Complaint appears unfounded.	N/A
39	10/29/2011	Storm Water Hotline	6076 Winfield Dr	Residential	Report of degreaser discharge to curb.	No evidence of discharge was noted. Complaint appears unfounded.	N/A
40	10/30/2011	Storm Water Hotline	Colony Dr	Residential	Report of transmission fluid discharge to street.	Responsible party reported accidental vehicle leak that was cleaned up with absorbent and disposed of properly. Clean up verified.	N/A
41	10/30/2011	Storm Water Hotline	7633 El Cajon Blvd	Commercial	Report of car washing on-site and discharge of oil and antifreeze to storm drain. Report of improper car parts storage as well.	Compliance letter issued to the business owner. No evidence of washing or outdoor storage was observed during site visit. Business owner was advised of storm water regulations and re-inspection will occur if necessary.	Compliance Letter
42	11/4/2011	Public Works Service Request	Randlett Dr	Residential	Report of flooding caused by clogged storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
43	11/4/2011	Storm Water Hotline	Cul-de-sac at the end of Alta Mira Dr	Residential	Report of curb inlet blocked by trash and debris.	Caller was given the County storm water hotline number since the issue was in County jurisdiction.	N/A
44	11/7/2011	Public Works Service Request	Normal Ave	Residential	Report of debris in storm drains.	PW evaluated and cleaned/maintained as applicable.	N/A
45	11/7/2011	Public Works Service Request	Apore St	Residential	Report of debris clogging storm drain inlet.	PW evaluated and cleaned/maintained as applicable.	N/A
46	11/8/2011	Public Works Service Request	Lemon Ave	Residential	Report of clogged storm drain inlet.	PW evaluated and cleaned/maintained as applicable.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
47	11/9/2011	Public Works Service Request	Williamsburg Ln	Residential	Report of sink hole caused by storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
48	11/9/2011	Public Works Service Request	Acacia Ave	Residential	Report of flooding caused by clogged storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
49	11/12/2011	Public Works Service Request	Amaya Dr	Residential	Report of degraded storm drain grate.	PW evaluated and cleaned/maintained as applicable.	N/A
50	11/14/2011	Public Works Service Request	Highfield Ave	Residential	Report of flooding caused by clogged storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
51	11/15/2011	Public Works Service Request	Amarillo Ave	Residential	Report of sofa in storm drain ditch.	PW evaluated and cleaned/maintained as applicable.	N/A
52	11/21/2011	Public Works Service Request	Blackton Dr	Residential	Report of debris in storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
53	11/28/2011	Storm Water Hotline	5540 Kiowa Dr	Industrial	Report of sludge discharge from water treatment facility.	Spill occurred in City of San Diego and the issue was resolved by their staff.	N/A
54	11/28/2011	Public Works Service Request	Hybeth Dr	Residential	Report of clogged storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
55	12/1/2011	Storm Water Hotline	4390 Gordon Way	Residential	Report of landscaping crew washing down driveway.	Homeowner was advised of storm water regulations and the appropriate dry methods to implement.	N/A
56	12/11/2011	Storm Water Hotline	7670 Troy Terrace	Commercial	Report of paint chips blowing into yard from contracting work off site.	Contractors and tenants off site were advised of storm water regulations. Homeowner was advised to call Air Pollution Control District as well.	N/A
57	12/12/2011	Public Works Service Request	Palm Ave	Residential	Report of flooding.	PW evaluated and cleaned/maintained as applicable.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
58	12/21/2011	Storm Water Hotline	8699 La Mesa Blvd	Commercial	Report of hosing down apron of parking lot.	Business owner was advised of the storm water regulations and confirmed that staff would be trained accordingly.	N/A
59	12/28/2011	Public Works Service Request	Not specified	Residential	Report of cat stuck in storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
60	1/3/2012	Public Works Service Request	Marengo Ln	Residential	Report of storm drain lines to be CCTV'd.	PW evaluated and cleaned/maintained as applicable.	N/A
61	1/4/2012	Storm Water Hotline	Alpine Ave near Mission Bell Ln	Utility	Report of dirt patch left after water line construction.	Contacted Helix Water District to resolve the issue with the contractor.	N/A
62	1/4/2012	Storm Water Hotline	8580 Chevy Chase Ave	Residential	Report of water discharge onto property.	Contacted Helix Water District. They were already remedying the issue.	N/A
63	1/7/2012	Storm Water Hotline	4062 Violet St	Residential	Report of water discharge from property to alley.	Compliance letter issued to the homeowner advising him/her of storm water regulations.	Compliance Letter
64	1/9/2012	Public Works Service Request	Williamsburg Ln	Residential	Report of storm drain grates that need to be replaced.	PW evaluated and cleaned/maintained as applicable.	N/A
65	1/11/2012	Public Works	7315 Ouro Pl	Construction	Report of minor grading in front yard with no sediment controls.	Contractor was advised of storm water regulations and implemented sediment controls.	N/A
66	1/23/2012	Public Works Service Request	Chevy Chase Dr	Residential	Report of clogged storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
67	1/23/2012	Request Tracker	8186 Center St	Commercial	Report of car washing and detailing on-site.	Business owner reported that the responsible party is a mobile detailer. Business owner was advised of storm water regulations and acknowledged that detailing was done in compliance.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
68	1/31/2012	Public Works Service Request	Nebo Dr	Residential	Report of ponded water caused by clogged storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
69	2/1/2012	Public Works	5058 Pine St	Residential	Report of waste water leaking from sewer lateral.	Waste water discharge did not reach the storm drain. PW evaluated and cleaned/maintained as applicable. Homeowner also had plumber service the lateral.	Notice of Violation
70	2/2/2012	Request Tracker	Water St south of Janfred Way and Milden St	Residential/ Utility	Report of water flowing in gutter and algae growth.	Contacted Helix Water District. Water tests determined it was likely groundwater. Compliance letters issued to adjacent property owners regarding over-irrigation. PW evaluated the site for algae and cleaned/maintained as applicable. Property owner to install better drainage to prevent algae growth.	2 Compliance Letters
71	2/6/2012	Public Works Service Request	Water St	Residential	Report of water seepage.	PW evaluated and cleaned/maintained as applicable.	N/A
72	2/9/2012	Public Works Service Request	Palm Ave	Residential	Report of debris in storm drain and grate that needs to be secured.	PW evaluated and cleaned/maintained as applicable.	N/A
73	2/10/2012	Public Works	8120 Commercial St	Commercial	Report of vehicle and equipment wash water discharge to street.	Business owner was advised of the storm water regulations and associated fines for non-compliance.	N/A
74	2/15/2012	Public Works Service Request	Cinnabar Dr	Residential	Report of storm drain grate that needs to be secured.	PW evaluated and cleaned/maintained as applicable.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
75	2/15/2012	Public Works	8653 Hayes St	Residential	Report of damaged sewer lateral causing foul smell and overflows.	No overflow potential was observed during site visit. NOV issued to resident to fix lateral immediately. Installation verified.	Notice of Violation
76	2/16/2012	Storm Water Hotline	6170 Severin Dr	Residential	Report of car leaking oil to storm drain.	No evidence of discharge. Car owner reported that leak was fixed and it would be monitored. Advised to use drip pan.	N/A
77	2/21/2012	Public Works Service Request	Baltimore Dr	Residential	Report of missing storm drain grate.	PW evaluated and cleaned/maintained as applicable.	N/A
78	2/23/2012	Public Works Service Request	Lubbock Ave	Residential	Report of storm drain line to be CCTV'd.	PW evaluated and cleaned/maintained as applicable.	N/A
79	2/27/2012	Code Compliance	Lake Murray Blvd and Baltimore Dr	Commercial	Report of possible discharge from cart cleaning.	Store management was advised of storm water regulations and appropriate BMPs to implement for power washing.	Mobile Wash Pamphlet
80	3/1/2012	Storm Water Hotline	7566 Malorey St	Residential	Report of spray painting furniture on the sidewalk.	No evidence of discharge was noted. Complaint appears unfounded.	N/A
81	3/8/2012	Code Compliance	4667 Judson Way	Residential	Report of car detailing on-site.	Compliance letter issued to property owner advising him/her of storm water regulations.	Compliance Letter
82	3/12/2012	Request Tracker	Highfield Ave and Garfield St	Residential/ Construction	Report of material storage on property.	Homeowner was advised of storm water regulations and communicated them to contractor. Clean up verified.	N/A
83	3/12/2012	Public Works Service Request	Allison Ave	Residential	Report of gutter grate that needs to be secured.	PW evaluated and cleaned/maintained as applicable.	N/A
84	3/15/2012	Public Works Service Request	Lemon Ave	Residential	Report of debris in storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
85	3/19/2012	Public Works Service Request	Palm Ave	Residential	Report of storm drain overflow.	PW evaluated and cleaned/maintained as applicable.	N/A
86	3/19/2012	Public Works Service Request	Merritt Blvd	Residential	Report of flooding caused by clogged storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
87	3/22/2012	Public Works Service Request	Baltimore Dr	Residential	Report of storm drain lines to be CCTV'd.	PW evaluated and cleaned/maintained as applicable.	N/A
88	3/22/2012	Public Works	5424 Wellsley St	Construction	Report of dirt in street and gutter from construction.	Contractor advised of storm water regulations and implemented appropriate BMPs.	N/A
89	3/25/2012	Storm Water Hotline	6150 Horton Dr	Residential	Report of car leaking antifreeze.	Compliance letter issued to resident advising him/her of storm water regulations.	Compliance Letter, Written Warning
90	3/29/2012	Public Works Service Request	Wakarusa St	Residential	Report of three missing manhole covers.	PW evaluated and cleaned/maintained as applicable.	N/A
91	4/2/2012	Request Tracker	5577 Lake Murray Dr	Commercial	Report of discharge of contaminated rain water to storm drain.	Store management was advised of storm water regulations. Inspection priority of facility has been increased to "high" which will result in consistent storm water inspections.	N/A
92	4/3/2012	Request Tracker	4580 73rd St	Residential	Report of low lying gutter with stagnant water.	Contacted homeowner and explained that the issue was forwarded to the City Engineer for assessment.	N/A
93	4/9/2012	Public Works Service Request	Harris St	Residential	Report of stagnant water caused by clogged storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
94	4/12/2012	Public Works Service Request	Boulevard Dr	Residential	Report of dirt around storm drain inlet.	PW evaluated and cleaned/maintained as applicable.	N/A
95	4/12/2012	Public Works Service Request	La Mesa Blvd	Residential	Report of hazardous road condition due to bent curb.	PW evaluated and cleaned/maintained as applicable.	N/A
96	4/16/2012	Storm Water Hotline	4197 E. Arietta Cir	Residential	Report of exposed rubble and concrete.	Property owner was advised of storm water regulations and acknowledged that dirt pile would be covered.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
97	4/16/2012	Storm Water Hotline	4390 Gordon Way	Residential	Report of Styrofoam on property and in storm drain.	Written warning issued to the property owner advising him/her of storm water regulations and necessary clean up.	Written Warning
98	4/17/2012	Public Works Service Request	Primrose Dr	Residential	Report of storm drain clogged with debris.	PW evaluated and cleaned/maintained as applicable.	N/A
99	4/18/2012	Public Works Service Request	Lovell Ln	Residential	Report of abandoned inlet.	PW evaluated and cleaned/maintained as applicable.	N/A
100	4/23/2012	Storm Water Hotline	7747 Normal Ave	Residential	Report of scooter stuck in storm drain.	Scooter removed from storm drain.	N/A
101	4/24/2012	Storm Water Hotline	7640 El Cajon Blvd	Commercial	Report of auto shop spraying down shop area.	Business owner was advised of storm water regulations and issued an NOV	Notice of Violation
102	4/28/2012	Storm Water Hotline	8044 El Capitan Dr	Residential	Report of resident washing equipment, paint, and gas into the storm drain.	Resident was advised of the storm water regulations and associated fines for non-compliance.	N/A
103	4/28/2012	Public Works Service Request	Veemac Ave	Residential	Report of grate in storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
104	4/28/2012	Storm Water Hotline	5051 Jackson Dr	Commercial	Report of runoff from pipe at car wash.	Business management was advised of storm water regulations. Most of the discharge is groundwater, but they committed to making modifications to reduce the runoff.	Photos of the issue
105	5/15/2012	Storm Water Hotline	5770 Kelton Dr	Residential	Report of car oil discharge to street.	Homeowner was advised of storm water regulations. Absorbent was applied as needed and disposed of properly.	Written Warning
106	5/18/2012	Public Works Service Request	Dallas St	Residential	Report of debris in storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A
107	5/21/2012	Public Works Service Request	Moisan Way	Residential	Report of street hole.	PW evaluated and cleaned/maintained as applicable.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
108	5/24/2012	Storm Water Hotline	4614 4th St	Residential	Report of sewage smell.	NOV issued to homeowner to fix immediately. Clean up and maintenance by plumber verified.	Notice of Violation
109	5/24/2012	Public Works	7205 Colony Rd	Residential	Report of yard drain connections to sewer system.	Lateral replacement verified.	N/A
110	5/20/2012	Storm Water Hotline	Alvarado Rd at 70th St	Utility	Report of mineral oil spill due to car accident.	All mineral oil was contained by the SDGE contractor crew. No discharge reached the storm drain.	N/A
111	5/31/2012	Storm Water Hotline	4417 Parks Ave	Residential	Report of auto repairs done by a tenant on-site.	No storm water issues were observed during the site visit. Compliance letter issued to the property owner advising him/her of storm water regulations.	Compliance Letter
112	6/5/2012	Storm Water Hotline	6350 Kimi Ln	Residential	Report of leaves being blown onto property.	Determined to be a private property concern.	N/A
113	6/5/2012	RWQCB	5770 Marengo Ln	Residential	Report of illegal fill dumped along rear of property.	Site was immediately covered with Visqueen. Property owner obtained proper permits for retaining wall. Final erosion control check will be conducted upon completion.	Notice of Violation
114	6/5/2012	Storm Water Hotline	8787 Alpine Dr @ Mission Bell	Residential	Report of sewer lateral overflow.	PW evaluated and cleaned/maintained as applicable.	N/A
115	6/6/2012	Public Works Service Request	70th St	Residential	Report of degraded storm drain full of debris.	PW evaluated and cleaned/maintained as applicable.	N/A
116	6/13/2012	Public Works Service Request	Lemon Ave	Residential	Report of erosion caused by storm drain outlet pipe.	PW evaluated and cleaned/maintained as applicable.	N/A
117	6/14/2012	Public Works Service Request	70th St	Residential	Report of skateboard in storm drain.	PW evaluated and cleaned/maintained as applicable.	N/A

Appendix B (Continued)
Complaint Log

#	Date Received	Complaint Origin	Responsible Party/ Location of Problem	Responsible Party Type	Issue/Problem	Response	Enforcement Type/ Educational Material Distributed
118	6/19/2012	Public Works Service Request	Lake Park Way	Residential	Report of storm drain bars that need to be secured.	PW evaluated and cleaned/maintained as applicable.	N/A
119	6/22/2012	Public Works Service Request	Riviera Dr	Residential	Report of missing manhole cover.	PW evaluated and cleaned/maintained as applicable.	N/A

APPENDIX C

Appendix C
JURMP Annual Report Requirements Checklist

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.2
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	Appendix A.1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-1 and 2-2
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.2

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.2
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3, Table 2-2
xviii. A description of notable activities conducted to manage urban runoff from development projects.	Throughout Section

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A.2
viii. A description of the general results of the inspections.	3.5
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5 Table 3-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	Throughout Section

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix A.3
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.3, 4.4.4, 2.4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4 Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4 Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4 Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A for 2011/2012
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3 Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4 Table 4-1
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4 Table 4-1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3.4 Table 4-1
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3 Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3 Table 4-1
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.3.4, Table 4-4
xviii. A description of the general results of the inspections.	Table 4-4
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4, Table 4-4
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	Throughout Section

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.2 (mobile), Appendix A.4
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.3, 5.2.4, 5.3.3, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	N/A (5.2.4)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	N/A (5.2.4)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	Throughout Section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	Throughout Section

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2011/2012Annual Report, will be submitted to the RWQCB no later than December 15, 2012.	

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2011/2012 Annual Report, will be submitted to the RWQCB no later than December 15, 2012.	

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3

Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.2 and 9.3

Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11

Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order. (For 2007-2008, the requirements that apply are essentially the same as those found in Order No. 2001-01)	10

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i. A description of any special investigations conducted.	12

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JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	Location in Report
i. A description of any proposed revisions to the JURMP.	14 and each program component section

ATTACHMENTS

ATTACHMENT 2.1

UPDATED BMP MANUAL II

City of La Mesa
Department of Public Works
Engineering Division

The City of La Mesa Storm Water Best Management Practices Manual – Part II

LA MESA LOCAL STANDARD URBAN STORM WATER MITIGATION PLAN (LOCAL SUSMP)
Adopted 2002
Updated January 2011

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Glossary

Advanced Treatment

Using mechanical or chemical means to flocculate and remove suspended **sediment** from runoff from construction sites prior to discharge.

Attached Residential Development

Any development that provides residential units that share an interior/exterior wall. This category includes, but is not limited to: dormitories, condominiums, and apartments.

Automotive Repair Shop

A facility that is categorized in any one of the following **Standard Industrial Classification (SIC)** codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

Best Management Practice (BMP)

Any procedure or device designed to minimize the quantity of pollutants that enter the storm drain system. BMPs also include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. This manual groups storm water BMPs into the following categories: (1) Construction Storm Water BMPs, which are practices, procedures, devices or materials used to prevent the transport and introduction of pollutants both on and from a project during construction; and (2) Permanent Storm Water BMPs, which are the **Low Impact Development** design features, **source control** features, and **treatment control BMP**s that become a permanent part of a project site.

California Association of Stormwater Quality Association (CASQA)

Publisher of the California Stormwater Best Management Practices Handbooks, available at www.cabmphandbooks.com. Successor to the Storm Water Quality Task Force (SWQTF).

California BMP Method

A method for determining the required volume of storm water treatment facilities. Described in Section 5.5.1 of the California Stormwater Best Management Practice Manual (New Development) (CASQA, 2003).

Commercial Development

Commercial development is defined as any development on private land that is not for heavy industrial or residential uses. The category includes, but is not limited to, hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; commercial airfields; and other light industrial facilities. Any development on private land that is not exclusively industrial or residential uses. The **Priority Development Project** category is defined as commercial developments resulting in the disturbance of one acre or more of land.

Conditions of Approval (COAs)

Requirements a municipality may adopt for a project in connection with a discretionary action (e.g., adoption of an EIR or negative declaration or issuance of a use permit). COAs may include features to be incorporated into the final plans for the project and may also specify uses, activities, and operational measures that must be observed over the life of the project.

Construction Storm Water Management Plan (CSWMP)	A CSWMP is the document prepared and submitted to meet the City of La Mesa's construction BMP requirements for a project that causes land disturbance of less than one acre.
Continuous Simulation Modeling	A method of hydrological analysis in which a set of rainfall data (typically hourly for 30 years or more) is used as input, and runoff rates are calculated on the same time step. The output is then analyzed statistically for the purposes of comparing runoff patterns under different conditions (for example, pre- and post-development-project).
Copermittees	See **Dischargers**.
Detached Residential Development	Any development that provides freestanding residential units. This category includes, but is not limited to: detached homes, such as single-family homes and detached condominiums.
Detention	The practice of holding storm water runoff in ponds, vaults, within berms, or in depressed areas and letting it discharge slowly to the storm drain system. See definitions of **infiltration** and **retention**.
Direct Discharge	Connection of project site runoff to an exempt receiving water body, which could include an exempt river reach, reservoir or lagoon. To qualify as a direct discharge, the discharge elevation from the project site outfall must be below the elevations detailed in the HMP Applicability section of this BMP Manual.
Direct Infiltration	Infiltration via methods or devices, such as dry wells or infiltration trenches, designed to bypass unsaturated surface soils and transmit runoff directly to groundwater.
Directly Connected Impervious Area	Any **impervious surface** which drains into a catch basin, area drain, or other conveyance structure without first allowing flow across pervious areas (e.g. lawns).
Dischargers	The agencies named in the **storm water NPDES permit** (see definition): the County of San Diego; the Cities of Carlsbad, El Cajon, La Mesa, Poway, Solana Beach, Chula Vista, Encinitas, Lemon Grove, San Diego, Vista, Coronado, Escondido, National City, San Marcos, Del Mar, Imperial Beach, Oceanside, and Santee; the San Diego Unified Port District, and the San Diego County Regional Airport Authority.
Drainage Management Areas	Areas delineated on a map of the development site showing how drainage is detained, dispersed, or directed to **Integrated Management Practices**. There are four types of Drainage Management Areas, and specific criteria apply to each type of area. See Chapter 4.
Drawdown time	The time required for a storm water detention or infiltration facility to drain and return to the dry-weather condition. For detention facilities, drawdown time is a function of basin volume and outlet orifice size. For infiltration facilities, drawdown time is a function of basin volume and infiltration rate.

Areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other equivalent environmentally sensitive areas which have been identified by the City of La Mesa.

Environmentally Sensitive Areas

This **Priority Development Project** category includes all development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (where discharges from the development or redevelopment will enter receiving waters within the environmentally sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the Environmentally Sensitive Area (ESA). "Discharging directly to "means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

Flow Control

Control of runoff rates and durations as required by the Hydromodification Management Plan.

Head

In hydraulics, energy represented as a difference in elevation. In slow-flowing open systems, the difference in water surface elevation, e.g., between an inlet and outlet.

Higher-Rate Biofilter

A biofilter with a design surface loading rate higher than the 5 inches per hour rate specified in this document for bioretention facilities and planter boxes.

Hillside

Lands that have a natural gradient of 25 percent (4 feet of horizontal distance for every 1 foot of vertical distance) or greater and a minimum elevation differential of 50 feet, or a natural gradient of 200 percent (1 foot of horizontal distance for every 2 feet of vertical distance) or greater and a minimum elevation differential of 10 feet.

Hillside Development Greater Than 5,000 Square Feet

This **Priority Development Project** category includes any development which creates 5,000 square feet of **impervious surface** which is located in an area with known erosive soil conditions, where the development will grade any natural slope that is 25 percent or greater.

Hydrograph

Runoff flow rate plotted as a function of time.

Hydromodification

The change in the natural hydrologic processes and runoff characteristics (i.e. interception, infiltration, overland flow, interflow, and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and changes in sediment transport. In addition, alteration of stream and river channels, installation of dams and water impoundments, and excessive stream bank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

Hydromodification Management Plan (HMP)	A Plan implemented by the **dischargers** so that post-project runoff shall not exceed estimated pre-project rates and/or durations, where increased runoff would result in increased potential for erosion or other adverse impacts to beneficial uses. Also see definition for **flow control**. Specifically, Final HMP refers to the most recent Hydromodification Management Plan developed for San Diego County jurisdictions and approved by the San Diego RWQCB.
Hydrologic Soil Group	Classification of soils by the Natural Resources Conservation Service (NRCS) into A, B, C, and D groups according to infiltration capacity.
Industrial Development	Industrial facilities include those defined at 40 CFR 122.26(b)(14), including those subject to the General Industrial Permit or other individual NPDES permit, operating and closed landfills, facilities subject to SARA Title III, and hazardous waste treatment, disposal, storage and recovery facilities. Examples of industrial facilities includes manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.). The **Priority Development Project** category includes development of heavy industry resulting in the disturbance of one acre or more of land.
Impervious surface	Any material that prevents or substantially reduces infiltration of water into the soil. See discussion of imperviousness in Chapter Two.
Infeasible	As applied to best management practices, impossible to implement because of technical constraints specific to the site.
Infiltration	Seepage of runoff into soils underlying the site. See definition of **retention.**
Infiltration Device	Any structure, such as a dry well, that is designed to infiltrate storm water into the subsurface and, as designed, bypasses the natural groundwater protection afforded by surface or near-surface soil. See definition for **direct infiltration**.
Integrated Management Practice (IMP)	A facility **(BMP)** that provides small-scale treatment, retention, and/or detention and is integrated into site layout, landscaping, and drainage design. See **Low Impact Development.**
Integrated Pest Management (IPM)	An approach to pest management that relies on information about the life cycles of pests and their interaction with the environment. Pest control methods are applied with the most economical means and with the least possible hazard to people, property, and the environment.
Jurisdictional Urban Runoff Management Plan (JURMP)	A written description of the specific jurisdictional urban runoff management measures and programs that the City of La Mesa implements to comply with the **storm water NPDES permit** and ensure pollutant discharges are reduced to the MEP and do not cause or contribute to a violation of water quality standards. See **Storm Water Pollution Prevention Program.**
Lead Agency	The public agency that has the principal responsibility for carrying out or approving a project. (CEQA Guidelines §15367).

Low Impact Development	An integrated site design methodology that uses small-scale detention and retention (Integrated Management Practices, or **IMPs**) to mimic pre-existing site hydrological conditions.
Maximum Extent Practicable (MEP)	Standard, established by the 1987 amendments to the Clean Water Act, for the implementation of municipal **storm water pollution prevention programs** (see definition). According to the Act, municipal storm water NPDES permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."
National Pollutant Discharge Elimination System (NPDES)	As part of the 1972 Clean Water Act, Congress established the NPDES permitting system to regulate the discharge of pollutants from municipal sanitary sewers and industries. The NPDES was expanded in 1987 to incorporate permits for storm water discharges as well.
Natural Drainage	A natural swale or topographic depression which gathers and/or conveys runoff to a permanent or intermittent watercourse or waterbody.
New Development	Land disturbing activities; surface grading for structural development, including construction or installation of a building or structure, the creation of **impervious surfaces**; and land subdivision.
Numeric Criteria	Sizing requirements for storm water treatment facilities established in Provision D.1.d.(6)(c) of the San Diego RWQCB's storm water NPDES permit.
Operation and Maintenance (O&M)	Refers to requirements in the **Storm Water NPDES Permit** to inspect treatment BMPs and implement preventative and corrective maintenance in perpetuity. See Chapter Five.
Parking Lot	A land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. This **Priority Development Project** category includes parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.
Permeable Pavements	Pavements for roadways, sidewalks, or plazas that are designed to infiltrate a portion of rainfall, including pervious concrete, pervious asphalt, unit-pavers-on-sand, and crushed gravel.
Pollutant Generating Development Project	Generally all projects which include **impervious surfaces** and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces.
Post Construction Water Quality Technical Report (PCWQTR)	A PCWQTR is the **Project Submittal** of a **Priority Development Project** to demonstrate compliance.

Priority Development Project A project subject to SUSMP requirements. Defined in **Storm water NPDES Permit** Provision D.1.d.(1). See Appendix A.

Project Area The entire project area comprises all areas to be altered or developed by the project, plus any additional areas that drain on to areas to be altered or developed.

Projects Discharging to Receiving Waters within Environmentally Sensitive Areas All development and significant redevelopment that would create 2,500 square feet of **impervious surfaces** or increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition, and either (1) discharge urban runoff to a receiving water within or directly adjacent (where any portion of the project footprint is located within 200 feet of the **environmentally sensitive area**) to an environmentally sensitive area or (2) discharge to a receiving water within an environmentally sensitive area without mixing with flows from adjacent lands (where the **project footprint** is located more than 200 feet from the environmentally sensitive area).

Project Footprint The limits of all grading and ground disturbance, including landscaping, associated with a project.

Project Submittal Documents submitted to the City of La Mesa in connection with an application for development approval and demonstrating compliance with Storm Water NPDES Permit requirements for the project. Priority Development Projects submit a **Post Construction Water Quality Technical Report** and all other projects submit a **Standard Post Construction BMP Plan**.

Proprietary A proprietary device is one marketed under legal right of the manufacturer.

Receiving Waters Surface bodies of water, which directly or indirectly receive discharges from urban runoff conveyance systems, including naturally occurring wetlands, streams (perennial, intermittent, and ephemeral [exhibiting bed, bank, and ordinary high water mark]), creeks, rivers, reservoirs, lakes, lagoons, estuaries, harbors, bays and the Pacific Ocean. La Mesa will determine the definition for wetlands and the limits thereof for the purposes of this definition as protective as the United States Environmental Protection Agency. Constructed wetlands are not considered wetlands under this definition, unless the wetlands were constructed as mitigation for habitat loss. Other constructed **BMP**s are not considered receiving waters under this definition, unless the BMP was originally constructed in receiving waters. Construction of treatment control BMPs in "Receiving Waters" is prohibited and therefore may not be used to satisfy **SUSMP** requirements.

Redevelopment The creation, addition, and or replacement of **impervious surface** on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces.

Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair.

Rational Method	A method of calculating runoff flows based on rainfall intensity, tributary area, and a factor representing the proportion of rainfall that runs off.
Regional (or Watershed) Storm Water Treatment Facility	A facility that treats runoff from more than one project or parcel.
Regional Water Quality Control Board (Regional Water Board or RWQCB)	California RWQCBs are responsible for implementing pollution control provisions of the Clean Water Act and California Water Code within their jurisdiction. There are nine California RWQCBs.
Residential Development	Any development on private land that provides living accommodations for one or more persons, including but not limited to: single-family homes, multi-family homes, condominiums, and apartments. This **Priority Development Category** is defined as housing subdivisions resulting in the disturbance of one acre or more of land or comprised of 10 or more dwelling units.
Residential Development of 10 Units or More	Any development that provides 10 or more residential units. Residential units can be attached or detached.
Restaurant	"Restaurant" means a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (**SIC** code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all **SUSMP** requirements except for structural treatment BMP, numeric sizing criteria requirement, and hydromodification requirement.
Retail Gasoline Outlets (RGOs)	This **Priority Development Project** category includes RGOs that meet the following criteria: (a) 5,000 square feet or more, or (b) a projected average daily traffic (ADT) of 100 or more vehicles per day.
Retention	The practice of holding storm water in ponds or basins, or within berms or depressed areas, and allowing it to slowly infiltrate into underlying soils. Some portion will evaporate. See definitions for **infiltration** and **detention**.
Sediment	Soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organism survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.
Self-retaining area	An area designed to retain runoff. Self-retaining areas may include graded depressions with landscaping or pervious pavements and may also include tributary impervious areas up to a 2:1 impervious-to-pervious ratio.
Self-treating area	A natural, landscaped, or turf area drains directly off site or to the public storm drain system.

Significant Redevelopment	**Redevelopment** that would create or add or replace at least 5,000 square feet of **impervious surfaces** on an already developed site that falls under one or more priority development project categories. When redevelopment results in an increase of, or replacement of, 50% or more of the previously existing impervious surface, and the existing development was not subject to SUSMP requirements, then the entire project must be included in the treatment measure design. If less than 50% of the previously impervious surface is to be affected, only that portion must be included in the treatment measure design.
Source Control	Land use or site planning practices, or structural or nonstructural measures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff.
Standard Industrial Classification (SIC)	A Federal government system for classifying industries by 4-digit code. It is being supplanted by the North American Industrial Classification System but SIC codes are still referenced by the Regional Water Board in identifying development sites subject to regulation under the NPDES permit. Information and an SIC search function are available at http://www.bls.gov/bls/NAICS.htm
Standard Post Construction BMP Plan (SPCBMPP)	A SPCBMPP is the **Project Submittal** to demonstrate compliance for a project subject to only standard permanent BMP requirements.
Storm Water Conveyance System	Private and public drainage facilities by which storm water may be conveyed to Receiving Waters, such as: natural drainages, roads, streets, constructed channels, aqueducts, storm drains, pipes, street gutters, or catch basins.
Storm Water NPDES Permit	A permit issued by a **Regional Water Quality Control Board** (see definition) to local government agencies (**Dischargers**) placing provisions on allowable discharges of municipal storm water to waters of the state.
Storm Water Pollution Prevention Plan (SWPPP)	A plan providing for temporary measures to control sediment and other pollutants during construction as required by the statewide storm water NPDES permit for construction activities. A SWPPP is required for projects causing land disturbance of one acre or more.
Storm Water Pollution Prevention Program	A comprehensive program of activities designed to minimize the quantity of pollutants entering storm drains. See **Jurisdictional Urban Runoff Management Plan.**
Standard Urban Storm Water Mitigation Plan (SUSMP)	Refers to various documents prepared in connection with implementation of the storm water **NPDES permit** mandate to control pollutants from new development and redevelopment. Each **discharger** will adapt the **model countywide SUSMP** to create a local SUSMP for their respective jurisdiction. Applicants for development project approvals will use the local SUSMP to prepare a submittal for each **Priority Development Project** they propose.

Streets, Roads, Highways, and Freeways	This **Priority Development Project** category includes any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. For the purposes of SUSMP requirements, Streets, Roads, Highways and Freeways do not include trenching and resurfacing associated with utility work; applying asphalt overlay to existing pavement; new sidewalk, pedestrian ramps, or bike lane construction on existing roads; and replacement of damaged pavement.
Treatment	Removal of pollutants from runoff, typically by filtration or settling.
Treatment Control (Structural) BMP	Any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption, or any other physical, biological, or chemical process.
Water Board	See **Regional Water Quality Control Board.**
Water Quality Volume (WQV)	For storm water treatment facilities that depend on detention to work, the volume of water that must be detained to achieve maximum extent practicable pollutant removal. This volume of water must be detained for a specified **drawdown time**.

How to Use the Storm Water Best Management Practices Manual

Review Chapters 1 and 2 to get a general understanding of the requirements. Then follow step-by-step instructions in Chapter 3 to prepare your Project Submittal.

THIS Storm Water Best Management Practices Manual (BMP Manual) will help you ensure your project complies with both the Local Standard Urban Storm Water Mitigation Plan (SUSMP) requirements and the Construction BMP requirements of the City of La Mesa (City). Most applicants will require the assistance of a qualified civil engineer, architect, and/or landscape architect. Because every project is different, you should begin by checking specific requirements with municipal staff.

To use the BMP Manual, note that Construction BMPs are temporary measures to control sediment and other pollutants during construction, while SUSMP requirements apply to the development process during all stages of design, construction, completion, use, and maintenance in perpetuity. Start by completing Appendix A to find out how storm water quality requirements apply to your project.

To meet post-construction SUSMP requirements, see chapters one through five of the BMP Manual. To comply with construction BMP requirements, skip ahead to Chapter Six.

Chapter One provides an overview of the process of planning, design, construction, operation, and maintenance leading to compliance with post-construction SUSMP requirements.

If there are terms and issues you find confusing, try finding answers in the glossary or in **Chapter Two**. Chapter Two provides background on key storm water concepts and water quality regulations, including design criteria.

Then proceed to **Chapter Three** and follow the step-by-step guidance to prepare a Project Submittal for your site.

Chapter Four, the Low Impact Development Design Guide, includes design procedures, calculation procedures, and instructions for presenting your design and calculations in your Project Submittal.

In **Chapter Five** you'll find a detailed description of the process for ensuring operation and maintenance of your storm water facilities over the life of the project. The chapter includes step-by-step instructions for preparing a Storm Water Facilities Operation and Maintenance Plan.

The City of La Mesa's specific construction BMP requirements and performance standards are included in **Chapter Six**.

Throughout each Chapter, you'll find references and resources to help you understand the regulations, complete your Project Submittal, and design storm water control measures for your project.

Construction-Phase Controls

Your Project Submittal for SUSMP compliance is a separate document from the Storm Water Pollution Prevention Plan (SWPPP). A SWPPP provides for temporary measures to control sediment and other pollutants during construction at sites that disturb one acre or more. See Chapter 6 of this BMP manual for more information on SWPPPs.

The most recent, updated version of the BMP Manual is on the City website. The on-line BMP Manual is in Adobe Acrobat format. If you are reading the Acrobat version on a computer with an internet connection, you can use hyperlinks to navigate the document and to access various references. The hyperlinks are throughout the text, as well as in "References and Resources" sections within chapters and in "Bibliography and Suggested Resources" in Appendix F. Some of these links (URLs) may be outdated. In that case, try entering portions of the title or other keywords into a web search engine.

► PLAN AHEAD TO AVOID THE THREE MOST COMMON MISTAKES

The most common (and costly) errors made by applicants for development approvals with respect to storm water quality compliance are:

1. Not planning for compliance early enough. You should think about your strategy for storm water quality compliance before completing a conceptual site design or sketching a layout of subdivision lots (Chapter 3).

2. Assuming proprietary storm water treatment facilities will be adequate for compliance. Most aren't (Chapter 2).

3. Not planning for periodic inspections and maintenance of treatment and flow-control facilities. Consider who will own and who will maintain the facilities in perpetuity and how they will obtain access, and identify which arrangements are acceptable to the City of La Mesa (Chapter 5).

Chapter 1

Policies and Procedures

Determine if your development project must comply with storm water quality requirements, and review the steps to compliance.

Background

Urban runoff discharged from municipal storm water conveyance systems has been identified by local, regional, and national research programs as one of the principal causes of water quality problems in most urban areas. The City of La Mesa's storm water conveyance system, which collects runoff from our streets, rooftops, driveways, parking lots, and other impervious areas, flows directly to our rivers, beaches, and bays without receiving treatment (our storm water conveyance system is separate from our sanitary sewer system). Urban runoff potentially contains a host of pollutants like trash and debris, bacteria and viruses, oil and grease, sediments, nutrients, metals, and toxic chemicals. These contaminants can adversely affect receiving and coastal waters, associated wildlife, and public health. Urban runoff pollution is not only a problem during rainy seasons, but also year-round due to many types of urban water use that discharge runoff (dry weather flow) to the storm water conveyance system.

Land development and construction activities significantly alter drainage patterns and contribute pollutants to urban runoff primarily through erosion and removal or change of existing natural vegetation during construction, and the creation of new impervious surfaces, such as parking lots, which often permanently contribute pollutants throughout the "use" of the project site. When homes, work places, recreational areas, roads, parking lots, and structures are built, new impervious areas are built- creating the potential for an impact to water quality. The natural landscape's ability to infiltrate and cleanse storm water and urban runoff is "capped" by the impervious surfaces. As impervious surfaces increase, water that normally would have percolated into the soil now flows over the land surface directly to downstream wetlands, creeks, and eventually the Pacific Ocean. Accordingly, increases in impervious cover can increase the frequency and intensity of storm water flows. Second, new impervious surfaces often become a source of pollutants associated with development, such as automotive fluids, cleaning solvents, toxic or hazardous chemicals, detergents, sediment, metals, pesticides, oil and grease, and food wastes. These pollutants, which are often temporarily captured on impervious surfaces, are

transported to the storm water conveyance system by storm water and urban runoff. The pollutants flow untreated through the storm water conveyance system and ultimately into our creeks, rivers, beaches, and bays. With the growing concerns of urban runoff and storm water pollution, local, state, and federal agencies devised regulations requiring development planning and construction controls to treat storm water-related pollution from new development projects before it reaches any receiving waters.

On January 24th, 2007, the Regional Board issued Order No. R9-2007-0001, hereinafter referred to as "Municipal Permit." This Municipal Permit replaces the previous municipal permit, RWQCB Order No. 2001-01. The City has updated parts I and II of its BMP Manual to reflect the updated requirements of the current Municipal Permit. The primary objectives of the updated BMP Manual are to (1) Effectively prohibit non-storm water discharges; and (2) Reduce the discharge of pollutants from storm water conveyance systems to the MEP both during construction and throughout the use of a developed site. To maximize the use of LID practices as a means of reducing storm water runoff, Order No. R9-2007-0001 further required that the City define minimum LID and other BMP requirements in a document called the Model Standard Urban Storm Water Mitigation Plan (Model SUSMP), which was approved by the Regional Board on March 25, 2009. The permanent BMP requirements within the Model SUSMP were updated to comply with the current Municipal Permit, and these changes are included in this BMP Manual.

Legal Framework

The requirement to implement storm water BMP requirements for development projects is based on Section 402 (p) of the Clean Water Act. The Federal Clean Water Act amendments of 1987 established a framework for regulating storm water discharges from municipal, industrial, and construction activities under the NPDES program. Under the Federal Clean Water Act, municipalities throughout the nation are issued a Municipal NPDES Permit. The primary goal of the Municipal Permit is to stop polluted discharges from entering the storm water conveyance system and local receiving and coastal waters.

In California, the State Water Resources Control Board (SWRCB), through the nine Regional Boards, administers the NPDES storm water municipal permitting program. Based on the San Diego Municipal Permit issued by the San Diego Regional Board, the City is required to develop and implement construction and permanent storm water BMPs addressing pollution from new development projects.

In order to comply with the conditions of Order No. 2001-01, the City of La Mesa adopted the City of La Mesa Watercourse Protection, Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance") codified in Chapter 7.18 of the La Mesa Municipal Code. These ordinances have been updated as necessary to comply with the current Municipal Permit. This manual is an uncodified ordinance adopted by reference as Part II of the City of La Mesa Storm Water Best Practices Manual. The current Municipal Permit requires the City to categorize and prioritize land uses in order to establish effective BMPs. The City's current Storm Water Ordinance authorizes the City Engineer to establish Best Management Practices

(BMPs), including permanent improvements, for all types of land uses. This manual provides instructions on the City's construction phase and permanent BMP requirements, based on the most recent Model SUSMP, for development projects in the City of La Mesa.

The City Engineer may establish alternative BMPs. The allowable use of alternative BMPs at a specific site shall be determined at the sole discretion of the City Engineer. The City Engineer may establish BMPs for a specific site or activity if necessary to reduce Pollutants to the MEP or to comply with an order of the San Diego Regional Water Board. The City Engineer may also establish additional BMPs for a specific site if the City Engineer determines that the BMPs implemented at the site have not reduced the pollutants to the MEP.

A Low Impact Development Design Procedure

The San Diego Regional Water Board reissued a municipal storm water NPDES permit to the municipal **Copermittees** in January 2007. The permit updates and expands storm water requirements for new developments and redevelopments. Storm water treatment requirements have been made more stringent, minimum standards for **Low Impact Development** (LID) have been added, and the Copermittees are required to develop and implement criteria for the control of runoff peaks and durations from development sites.

To assist the land development community, streamline project reviews, and maximize cost-effective environmental benefits, the Copermittees have developed a unified LID design procedure, which has been adapted for use by the City of La Mesa. This design procedure integrates site planning and design measures with engineered, small-scale **Integrated Management Practices** (IMPs) such as bioretention. By following the procedure, applicants can develop a single integrated design which complies with the complex and overlapping NPDES permit LID requirements, storm water treatment requirements, and flow-control (hydromodification management) requirements.

The design approach is detailed in Chapter 4. General instructions for preparing a complete Project Submittal are in Chapter 3, and project-specific submittal requirements are available from municipal staff.

Applicants may choose not to use this design procedure, in which case they will need to demonstrate, in their submittal, compliance with applicable LID criteria, storm water treatment criteria, and flow-control criteria. These criteria are described in Chapter 2 and in the NPDES permit.

Requirements for All Development Projects

All development projects must include control measures to reduce the discharge of storm water pollutants to the maximum extent practicable.

Standard permanent storm water requirements, even for projects that are not "Priority Development Projects," include:

- Implementation of source control BMPs as listed in Appendix C.
- Inclusion of feasible LID features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, direct runoff to landscaping, and retain and slow runoff.
- Submittal of proof of a mechanism under which on-going long-term maintenance of all structural post-construction BMPs will be conducted.
- Compliance with requirements for construction-phase controls on sediment and other pollutants as described in Chapter 6.

Projects (requiring either discretionary actions or construction permits), subject to only standard permanent BMP requirements need to prepare a Standard Post Construction BMP Plan (SPCBMPP). See Appendix G for specific SPCBMPP requirements. Analysis of the project's anticipated pollutants of concern must also be included with the project submittal. Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. Municipal staff may also require additional controls appropriate to the project, which may include storm water treatment controls. LID treatment controls such as infiltration or bioretention are preferred. See "Selection of Treatment Facilities" on page 39.

Priority Development Projects

The NPDES permit requires more specific criteria be applied to Priority Development Projects. Projects (requiring either discretionary actions or construction permits), subject to the priority development project permanent BMP requirements must complete all of the analyses and incorporate all of the applicable BMP requirements in chapters 2 through 5 of this BMP Manual. This includes the LID and source control BMPs, and treatment control BMP requirements.

Projects subject to priority development project requirements must prepare and submit a Post Construction Water Quality Technical Report (PCWQTR) in accordance with Chapter 3 of this BMP Manual. Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type.

► NEW DEVELOPMENT

Projects on previously undeveloped land are Priority Development Projects if they are in one or more of the categories listed in Appendix A. If a project feature such as a parking lot falls into a Priority Development Project category, then the entire project footprint is subject to Priority Project requirements. Note some thresholds are defined by square footage of impervious area created; others by the total area of the development.

► PREVIOUSLY DEVELOPED SITES

Projects on previously developed sites ("**redevelopment** projects") are Priority Development Projects if they create, add, or replace 5,000 square feet or more of impervious surface and also are in one of the categories listed in Appendix A.

Municipal staff may choose to designate projects not within the categories in Appendix A as Priority Development Projects, based on potential impacts to storm water quality.

► THE "50% RULE" FOR PREVIOUSLY DEVELOPED PROJECTS

Projects on previously developed sites may also need to retrofit drainage of **all** impervious areas of the **entire** site. For sites creating or replacing more than 5,000 square feet of impervious area:

- If the new project results in an increase of, or replacement of, 50% or more of the previously existing impervious surface, and the existing development was not subject to SUSMP requirements, then the entire project must be included in the treatment measure design.
- If less than 50% of the previously impervious surface is to be affected, only that portion must be included in the treatment measure design.

If a new Development Project feature such as a parking lot falls into a Priority Development Project category, then the entire project footprint is subject to SUSMP requirements.

Projects limited to interior remodels, routine maintenance or repair, roof or exterior surface replacement, resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, or bike lanes on existing roads and routine replacement of damaged pavement such as pothole repair are not subject to treatment requirements. However, other requirements, including incorporation of appropriate source controls, still apply.

► POLLUTANT GENERATING PROJECTS WHICH DISTURB ONE ACRE OR MORE OF LAND

Projects that generate pollutants at levels greater than background levels and disturb one acre or more of land are considered Priority Development Projects. In most cases linear pathway projects that are for infrequent vehicle use (such as emergency or maintenance access) or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they allow runoff to sheet flow to surrounding pervious surfaces.

Project Review and Permitting Process

The City of La Mesa's Watercourse Protection, Storm Water Management and Discharge Control Ordinance requires that all new development and redevelopment activities comply with the storm water pollution prevention requirements in Chapter 7.18 of the La Mesa Municipal Code, and Parts I and II of the City Of La Mesa Best Management Practices Manual. Applicants must also comply with the grading regulations in Chapter 14.05 of the Municipal Code. These storm water pollution prevention requirements, which are described in detail in this BMP Manual are site specific and vary based on the project's potential impact on receiving water quality.

The flow chart in Figure 1-1, "Review Process for Discretionary Actions" demonstrates how storm water requirements are incorporated into projects requiring subdivision approvals,

development permits or other discretionary actions. For information on the construction permit and review process, see Chapter 6 of this BMP Manual. The steps below in "Compliance Process at a Glance" describe the elements of the plan review and permitting processes for storm water best management practice (BMP) requirements.

FIGURE 1-1. Review Process for Discretionary Actions

The following figure provides an overview of the project review process for projects that require a discretionary action by the City of La Mesa. Discretionary actions include land use plan amendments, re-zonings, subdivisions, planned development permits, conditional use permits, site development permits, variances, neighborhood development permits, and neighborhood use permits.

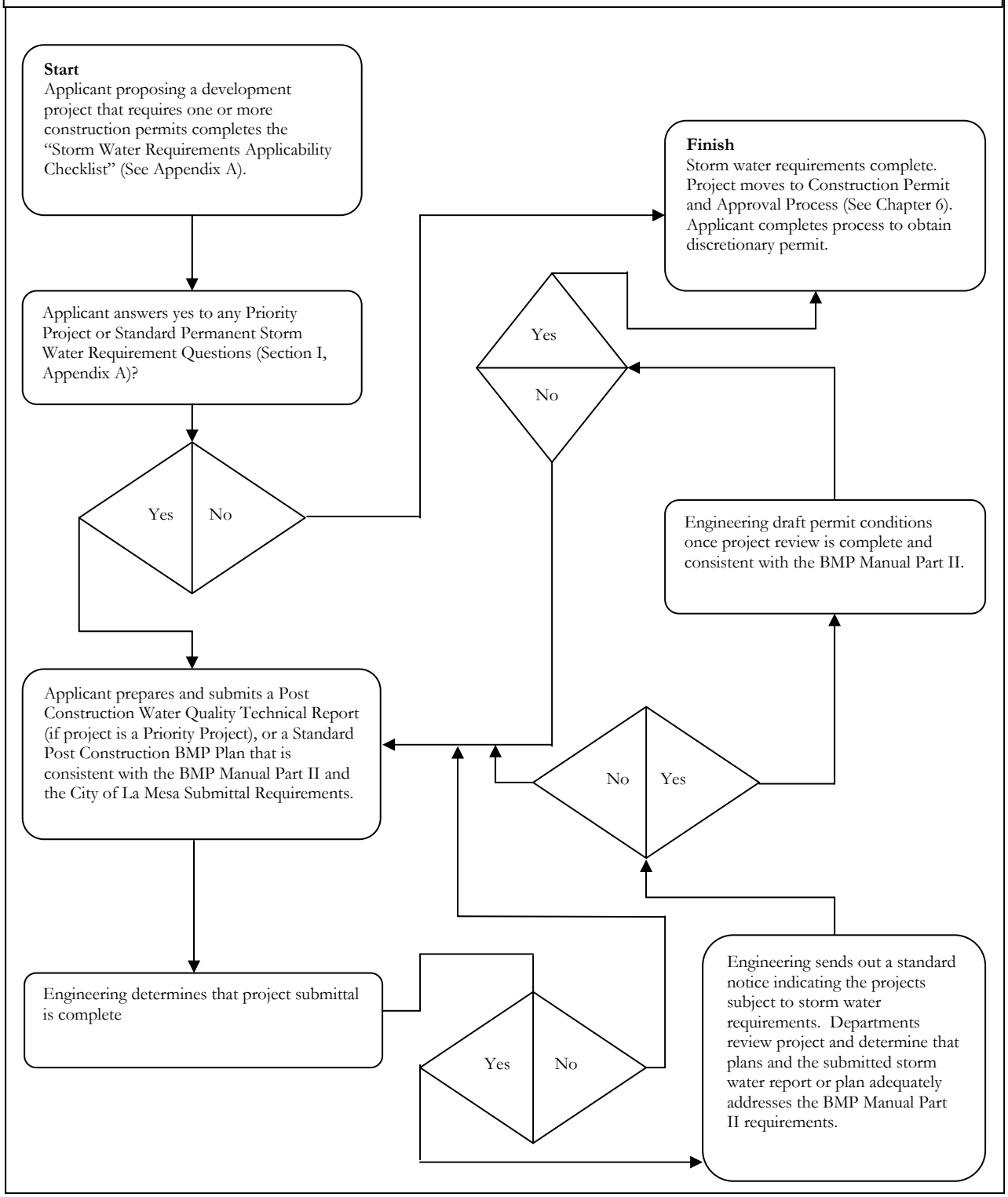

Compliance Process at a Glance

For the applicant for development project approval, storm water compliance follows these general steps:

1. Discuss requirements during a pre-application meeting with municipal staff.
2. Determine applicable storm water BMP requirements by completing the "Storm Water Requirements Applicability Checklist" in Appendix A prior to submittal.
3. Review the instructions in this BMP manual before you prepare your tentative map, preliminary site plan, drainage plan, and landscaping plan.
4. Prepare your Project Submittal, which is typically made with your application for development approvals (entitlements).
5. Prepare a draft Storm Water Facility Operation and Maintenance Plan and include it with your Project Submittal.
6. Under the authority of the City Engineer, Engineering staff will review the Project Submittal with Storm Water Facility Operation and Maintenance Plan for compliance with the applicable storm water requirements contained in this manual.
7. Create your detailed project design, incorporating the features described in your Project Submittal.
8. In a table on your construction plans, list each storm water compliance feature and facility and the plan sheet where it appears.
9. Maintain storm water facilities during construction and following construction.
10. The owner must periodically verify storm water facilities are properly maintained.

Preparation of a complete and detailed Project Submittal is the key to cost-effective storm water compliance and expeditious review of your project. Additional notes about these steps are provided below. Instructions for preparing your Project Submittal are in Chapter 3.

► ADDITIONAL NOTES ON COMPLIANCE

Storm Water Requirements Applicability Checklist. Prior to submittal, applicants must complete the "Storm Water Requirements Applicability Checklist" in Appendix A, to determine if their project is subject to construction and/or permanent storm water best management practice (BMP) requirements. (Note: this form must be completed for all permit applications, even if previous approvals exist. Projects requesting additional construction permits or discretionary approvals, even though previous permits and/or approvals have been obtained, will be required to comply with the storm water requirements in this document). This checklist must be

completed, signed by the responsible party for the project, and submitted with your permit application. Applicants may also verify the project's storm water BMP requirements through a single discipline preliminary review of the project. The project design must include all required permanent BMPs (as determined from the Storm Water Requirements Applicability Checklist in Appendix A), prior to deeming the application package complete.

Determining Adequacy of Proposed Plans. The City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs.

Phased Projects

When determining whether SUSMP requirements apply, a "project" should be defined consistent with California Environmental Quality Act (CEQA) definitions of "project." That is, the "project" is the whole of an action which has the potential for adding or replacing or resulting in the addition or replacement of roofs, pavement, or other impervious surfaces and thereby resulting in increased flows and storm water pollutants. "Whole of an action" means the project may not be segmented or piecemealed into small parts if the effect is to reduce the quantity of impervious area for any part to below the SUSMP thresholds.

Municipal staff may require, as part of an application for approval of a phased development project, a conceptual or master Project Submittal which describes and illustrates, in broad outline, how the drainage for the project will comply with the SUSMP requirements. The level of detail in the conceptual or master Project Submittal should be consistent with the scope and level of detail of the development approval being considered. The conceptual or master Project Submittal should specify that a more detailed Project Submittal for each later phase or portion of the project will be submitted with subsequent applications for discretionary approvals.

Note these minimum standards for SUSMP applicability are for the purpose of ensuring a consistent minimum level or "floor" for implementation consistent with the requirements of the NPDES permit. The City Engineer reserves the right to choose a more expansive interpretation of the NPDES permit's applicability and may also choose to apply source control, treatment, and flow-control requirements to projects that would be exempt under these minimum standards.

New Subdivisions

If a tentative map approval would potentially entitle future owners to construct new or replaced impervious area which, in aggregate, could exceed one of the SUSMP thresholds (Appendix A), then the applicant must take steps to ensure SUSMP requirements can and will be implemented as the subdivision is built out.

If the tentative map application does not include plans for site improvements, the applicant should nevertheless identify the type, size, location, and final ownership of storm water treatment and flow-control facilities adequate to serve common private roadways and any other common areas, and to also manage runoff from an expected reasonable estimate of the square footage of future roofs, driveways, and other impervious surfaces on each individual lot. The City Engineer may condition approval of the map on implementation of storm water treatment and other SUSMP measures when construction occurs on the individual lots. At the City Engineer's discretion, this condition may be enforced by a grant deed of development rights or by a development agreement.

If the City Engineer deems it necessary, the future impervious area of one or more lots may be limited by a deed restriction. This might be necessary when a project is exempted from one or all SUSMP provisions because the total impervious area is below a threshold, or to ensure runoff from impervious areas added after the project is approved does not overload a storm water treatment and flow-control facility.

The City Engineer may require subdivision maps to dedicate an "open space easement, as defined by Government Code Section 51075," to suitably restrict the future building of structures at each storm water facility location if necessary.

In general, in new subdivisions **storm water treatment, infiltration, or flow-control facilities should not be located on individual single-family residential lots**, particularly when those facilities manage runoff from other lots, from streets, or from common areas. A better alternative is to locate storm water facilities on one or more separate, jointly owned parcels.

After consulting with local planning staff, applicants for subdivision approvals will propose one of the following four options, depending on project characteristics and local policies:

1. Show the number of parcels and the total impervious area to be created on all parcels could not, in the future, exceed any of the thresholds in Appendix A.

2. Show that, for each and every lot, the intended use can be achieved with a design which disperses runoff from roofs, driveways, streets, and other impervious areas to self-retaining pervious areas, using the criteria in Chapter 4.

3. Prepare improvement plans showing drainage to treatment and/or flow-control facilities designed in accordance with this BMP manual, and commit to constructing the facilities prior to transferring the lots.

4. Prepare improvement plans showing drainage to treatment and/or flow-control facilities designed in accordance with this BMP manual, and provide appropriate legal instruments to ensure the proposed facilities will be constructed and maintained by subsequent owners.

For the option selected, municipal staff will determine the appropriate conditions of approval, easements, deed restrictions, or other legal instruments necessary to assure future compliance.

Compliance with Flow-Control Requirements

Priority Development Projects (Appendix A) must be designed so that runoff rates and durations are controlled to maintain or reduce pre-project downstream erosion conditions and protect stream habitat. The following text regarding HMP applicability requirements is based on the HMP document, provided in Appendix H. Additionally, the City has prepared an FAQ document related to hydromodification management, which is available on the City's website at www.cityoflamesa.com/stormwater under the "Development Requirements" tab.

► HMP APPLICABILITY REQUIREMENTS

To determine if a proposed project must implement hydromodification controls, refer to the HMP Decision Matrix in Figure 1-2. The HMP Decision Matrix can be used for all projects. For redevelopment projects, flow controls would only be required if the redevelopment project increases impervious area or peak flow rates as compared to pre-project conditions.

It should be noted that all Priority Development Projects will be subject to the Permit's LID and water quality treatment requirements even if hydromodification flow controls are not required.

As noted in Figure 1-2, projects may be exempt from HMP criteria under the following conditions.

- If the project is not a Priority Development Project.
- If the proposed project does not increase the impervious area or peak flows to any discharge location without flow mitigation.
- If the proposed project discharges runoff directly to an exempt receiving water such as the Pacific Ocean, San Diego Bay, an exempt river reach, an exempt reservoir, or a tidally-influenced area.
- If the proposed project discharges to a stabilized conveyance system that extends to the Pacific Ocean, San Diego Bay, a tidally-influenced area, an exempt river reach or reservoir.
- If the contributing watershed area to which the project discharges has an impervious area percentage greater than 70 percent.
- If an urban infill project discharges to an existing hardened or rehabilitated conveyance system that extends beyond the "domain of analysis," the potential for cumulative impacts in the watershed are low, and the ultimate receiving channel has a Low susceptibility to erosion as defined in the SCCWRP channel assessment tool.

If the proposed project decreases the pre-project impervious area and peak flows to each discharge location, without flow mitigation, then a flow-duration analysis is implicitly not required. If continuous simulation flow-frequency and flow duration curves were developed for

such a scenario, the unmitigated post-project flows and durations would be less as compared to pre-project curves.

Proposed exemptions for projects discharging runoff directly to the Pacific Ocean, San Diego Bay or to hardened conveyance systems which transport runoff directly to the Pacific Ocean or San Diego Bay are referred to the 2007 Municipal Permit. Per the Permit, hardened conveyance systems can include existing concrete channels, storm drain systems, etc.

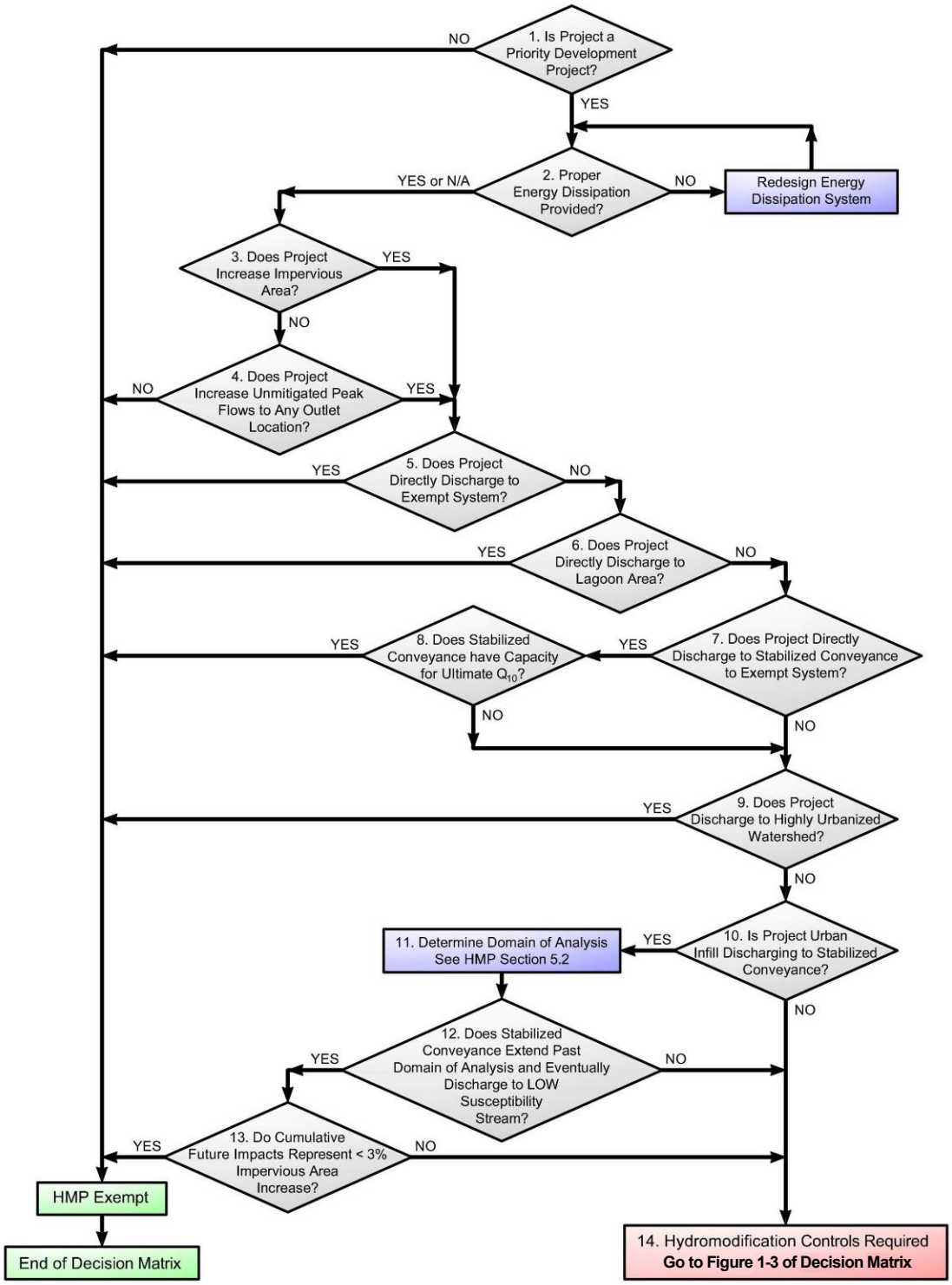

FIGURE 1-2. HMP Applicability Determination

The Municipal Permit also contains language to support exemptions for projects located in highly urbanized areas where the impervious percentage exceeds 70 percent (as calculated for the sub-watershed between the project outfall downstream to the exempt receiving water).

- Figure 1-2, Node 1 – Hydromodification mitigation measures are only required if the proposed project is a Priority Development Project.

- Figure 1-2, Node 2 – Properly designed energy dissipation systems are required for all project outfalls to unlined channels. Such systems should be designed in accordance with the County of San Diego's Drainage Design Manual to ensure downstream channel protection from concentrated outfalls.

- Figure 1-2, Nodes 3 and 4 – Projects may be exempt from hydromodification criteria if the proposed project reduces the pre-project impervious area and if unmitigated post-project outflows (outflows without detention routing) to each outlet location are less as compared to the pre-project condition. The pre and post-project hydrologic analysis should be conducted for the 2 and 10-year design storms and follow single-event methodology set forth in the San Diego Hydrology Manual. This scenario may apply to redevelopment projects in particular.

- Figure 1-2, Node 5 – Potential exemptions may be granted for projects discharging runoff directly to an exempt receiving water, such as the Pacific Ocean, San Diego Bay, an exempt river system (detailed in Table 1-2), or an exempt reservoir system (detailed in Table 1-2). To qualify for this exemption, projects must discharge runoff at an elevation, to be determined by the City, below the 10-year floodplain elevation for a river exemption or below the typical water surface level in a reservoir system. The City may grant, on a case-by-case basis, additional exemptions for projects discharging runoff in the immediate vicinity of exempt river or reservoir systems provided that a stabilized, natural conveyance (non-hardened) is provided between the project discharge location and exempt river or reservoir water surface elevation.

- Figure 1-2, Node 6 – For projects discharging runoff directly to a tidally-influenced lagoon, potential exemptions may also be granted. To qualify for this exemption, projects must discharge runoff at an elevation, to be determined by the City, below the typical water surface level in the lagoon system (such as the mean high tide elevation). The City may grant, on a case-by-case basis, additional exemptions for projects discharging runoff in the immediate vicinity of lagoon systems provided that a stabilized, natural conveyance (non-hardened) is provided between the project discharge location and typical lagoon water surface elevation. Exemptions related to runoff discharging directly to tidally-influenced areas were drafted based upon precedent set in the Santa Clara HMP. Regarding the potential exemption, additional analysis would be required to assess the effects of the freshwater / saltwater balance and the resultant effects on lagoon-system biology. This assessment, which would be required by other permitting processes such as the Army Corps of Engineers, California Department of Fish and Game, etc., must be provided by a certified biologist or other specialist as approved by the City. Such discharges would include an energy dissipation system

(riprap, etc.) designed to mitigate 100-year outlet velocities based upon a free outfall condition. Such a design would be protective of the channel bed and bank from an erosion standpoint.

- Figure 1-2, Nodes 7 and 8 – For projects discharging runoff directly to a hardened conveyance or rehabilitated stream system that extends to exempt receiving waters detailed in Node 5, potential exemptions from hydromodification criteria may be granted. Such hardened or rehabilitated systems could include existing storm drain systems, existing concrete channels, or stable engineered unlined channels. To qualify for this exemption, the existing hardened or rehabilitated conveyance system must continue uninterrupted to the exempt system. In other words, the hardened or rehabilitated conveyance system cannot discharge to an unlined, non-engineered channel segment prior to discharge to the exempt system. Additionally, the project proponent must demonstrate that the hardened or rehabilitated conveyance system has capacity to convey the 10-year ultimate condition flow through the conveyance system. The 10-year flow should be calculated based upon single-event hydrologic criteria as detailed in the San Diego County Hydrology Manual.

- Figure 1-2, Node 9 – As allowed per the Municipal Permit, projects discharging runoff to a highly urbanized watershed (defined as an existing, pre-project impervious percentage greater than 70 percent) may be eligible for an exemption from hydromodification criteria.

  Watershed impervious area calculations for this potential exemption will be measured between the project site discharge location and the connection to a downstream exempt receiving conveyance system, such as the Pacific Ocean, San Diego Bay, or an exempt river system. If a tributary area connects with the main line drainage path between the project site and the exempt system, then the entire watershed area contributing to the tributary shall be included in the calculation. Initial review of County land use indicates that this exemption will likely only apply in a limited number of urbanized coastal areas.

  Percent imperviousness will be calculated based on an area-weighted average of impervious areas associated with commercial, industrial, single-family residential, multi-family residential, open space, and other miscellaneous areas (schools, churches, etc.) representative for the watershed. Representative percent imperviousness values for each land use type may correspond to values recommended in Table 3-1 of the County of San Diego's Hydrology Manual and detailed below or by more specific representative percent impervious calculations (using GIS, etc.), which are often required to represent impervious area percentages for park, school and church sites.

- Figure 1-2, Nodes 10 through 13 – For urban infill projects discharging runoff to an existing hardened or rehabilitated conveyance system, potential limited exemptions from hydromodification criteria may apply where the existing impervious area percentage in the watershed exceeds 40 percent. For the potential exemption application, the domain of analysis must be determined and the existing hardened or rehabilitated conveyance system must extend beyond the downstream terminus of the domain of analysis. The hardened or rehabilitated conveyance system must discharge to a receiving channel with a Low potential for channel susceptibility for this exemption to be granted (channel susceptibility determined using SCCWRP tool). Finally, continuous simulation sensitivity analysis shows that an exemption could only be granted if the potential future development impacts in the watershed would increase the watershed's impervious area percentage by less than 3 percent (as compared to the existing condition in the year 2010). If the potential future cumulative impacts in the watershed could increase the impervious area percentage by more than 3 percent (as compared to existing condition), then no exemption could be granted based on this item. Watershed impervious area calculations for this potential exemption, in which a project discharges to a watershed with an existing impervious areas greater than 40 percent, will be measured upstream from the outfall of the urban conveyance system (to a non-concrete, non-riprap-lined or non-engineered channel) to the contributing watershed boundary (the entire watershed contributing to the discharge outfall).

  Percent imperviousness will be calculated based on an area-weighted average of impervious areas associated with commercial, industrial, single-family residential, multi-family residential, open space, and other miscellaneous areas (schools, churches, etc.) representative for the watershed. Representative percent imperviousness values for each land use type may correspond to values recommended in Table 3-1 of the County of San Diego's Hydrology Manual or by more specific representative percent impervious calculations (using GIS, etc.), which are often required to represent impervious area percentages for park, school and church sites.

Exemptions related to runoff discharging directly to certain river reaches were initially based upon the majority Technical Advisory Committee (TAC) opinion that such river reaches were depositional (aggrading) and that the effects of cumulative watershed impacts to these reaches is minimal. Subsequent justifications for the river reach exemptions were the result of a flow duration curve analysis for the San Diego River

Potential river reaches that would be exempt from hydromodification criteria include only those reaches for which the contributing drainage area exceeds 100 square miles and which have a 100-year design flow in excess of 20,000 cfs. For reference, proposed Caltrans HMP criteria allows for river/creek exemptions for drainage areas of only 10 square miles.

Per recommendations from members of the TAC, San Diego river systems meeting the drainage area and peak flow criteria are typically aggrading (depositional) and have very wide floodplain areas when in the natural condition. In all cases, river reaches meeting the drainage area and peak flow criteria are located downstream of large reservoir systems which effectively block outflows for most storm events. In addition, the river systems meeting these criteria typically have very low gradients. The combination of low gradients, significant peak flow attenuation, and wide floodplain areas translate to a low potential for channel erosion at the upper limit of the proposed geomorphic flow range (10-year flow event).

All exempt river reaches, which are presented in Table 1-1, have drainage areas in excess of 100 square miles and 100-year flow rates in excess of 20,000 cfs. In addition, all proposed river reaches are subject to significant upstream reservoir flow regulation, have wide floodplain or stabilized channel areas, and low gradients. This combination of factors, in association with field observations and years of historical perspective from the TAC members, justifies exemptions for direct discharges to the exempt river reaches provided that properly sized energy dissipation is provided at the outfall location.

TABLE 1-1. Summary of Exempt River Reaches in San Diego County

River	Downstream Limit	Upstream Limit
Otay River	Outfall to San Diego Bay	Lower Otay Reservoir Dam
San Diego River	Outfall to Pacific Ocean	Confluence with San Vicente Creek
San Dieguito River	Outfall to Pacific Ocean	Lake Hodges Dam
San Luis Rey River	Outfall to Pacific Ocean	Upstream river limit of Basin Plan subwatershed 903.1 upstream of Bonsall and near Interstate 15
Sweetwater River	Outfall to San Diego Bay	Sweetwater Reservoir Dam

Table 1-2 provides a summary of exempt reservoirs in San Diego County. Large reservoirs can be exempt systems from a hydromodification standpoint since reservoir storm water inflow velocities are naturally mitigated by the significant tailwater condition in the reservoir. HMP exemptions would only be granted for projects discharging runoff directly to the exempt reservoirs. The City will define "direct discharge" based on the project site conditions. To qualify for the potential exemption, the outlet elevation must be at or below either the normal operating water surface elevation or the reservoir spillway elevation and properly designed energy dissipation must be provided.

TABLE 1-2. Summary of Exempt Reservoirs in San Diego County

Reservoir	Watershed
Barrett Lake	Tijuana River
El Capitain Reservoir	San Diego River
Lake Dixon	Escondido Creek
Lake Heneshaw	San Luis Rey River
Lake Hodges	San Dieguito River
Lake Jennings	San Diego River
Lake Murray	San Diego River
Lake Poway	San Dieguito River
Lake San Marcos	San Marcos Creek
Lake Wohlford	Escondido Creek
Loveland Reservoir	Sweetwater River
Lower Otay Reservoir	Otay River
Miramar Lake	Los Penasquitos Creek
San Vicente Reservoir	San Diego River
Sweetwater Reservoir	Sweetwater River
Upper Otay Reservoir	Otay River

The final exemption category focuses on small urban infill projects where the potential for future cumulative watershed impacts is minimal.

Urban infill projects may be exempt from HMP criteria if:

1. The potential future development impacts within the sub-watershed, as measured from the entire sub-watershed area draining to the existing conveyance system outfall, would not increase the composite impervious area percentage of the sub-watershed by more than 3 percent

2. The project discharges runoff to an existing hardened or rehabilitated conveyance system (storm drain, concrete channel, or engineered vegetated channel) that extends beyond the Domain of Analysis determined for the project site, and

3. The stabilized conveyance system eventually discharges to a channel with a Low susceptibility to erosion, as designed by the SCCWRP channel assessment tool.

► FLOW CONTROL PERFORMANCE CRITERIA

Figures 1-2 and 1-3, which are part of the HMP Decision Matrix, detail how lower flow thresholds would be determined for a project site. Figures 1-4 and 1-5, which detail the SCCWRP lateral and vertical channel susceptibility requirements, complete the HMP Decision Matrix.

The project applicant must first determine whether field investigations will be conducted pursuant to the SCCWRP channel screening tools. If the screening tools are not completed for a proposed project, then the site must mitigate peak flows and durations based on a pre-project condition lower flow threshold of $0.1Q_2$. While a project applicant would be held to the $0.1Q_2$ standard if channel screening tools and assessments are not conducted, less restrictive standards are possible for more erosion-resistant receiving channel sections if the screening tools are completed and the SCCWRP method indicates either a Medium or Low susceptibility to channel erosion .

In such a scenario, the project applicant would also use the critical shear stress calculator to assist in determination of the predicted lower flow threshold. The SCCWRP screening tools and critical shear stress calculator work in concert to determine the lower flow threshold for a given site. Lower flow limits determined by the calculator have been grouped into one of three thresholds – $0.1Q_2$, $0.3Q_2$ or $0.5Q_2$. "Low" susceptibilities from the SCCWRP tool generally correspond to the $0.5Q_2$ threshold, "Medium" susceptibilities generally correspond to the $0.3Q_2$ threshold, and "High" susceptibilities generally correspond to the $0.1Q_2$ threshold. The SCCWRP channel screening tools are required to identify channel conditions not considered by the critical shear stress calculator, which focuses on channel material and cross section. Conversely, the SCCWRP channel screening tools considers other channel conditions including channel braiding, mass wasting, and proximity to the erosion threshold. In cases where the critical shear stress calculator and the SCCWRP screening tools return divergent values, then the most conservative value shall be used as the lower flow threshold for the analysis.

Low-Impact Development (LID) and extended detention facilities are required to meet peak flow and duration controls as follows:

4. For flow rates ranging from 10 percent, 30 percent or 50 percent of the pre-project 2-year runoff event ($0.1Q_2$, $0.3Q_2$, or $0.5Q_2$) to the pre-project 10-year runoff event (Q10), the post-project discharge rates and durations shall not deviate above the pre-project rates and durations by more than 10 percent over and more than 10 percent of the length of the flow duration curve. The specific lower flow threshold will depend on results from the SCCWRP channel screening study and the critical flow calculator.

5. For flow rates ranging from the lower flow threshold to Q_5, the post-project peak flows shall not exceed pre-project peak flows. For flow rates from Q_5 to Q_{10}, post-project peak flows may exceed pre-project flows by up to 10 percent for a 1-year frequency interval. For example, post-project flows could exceed pre-project flows by up to 10 percent for the interval from Q_9 to Q_{10} or from $Q_{5.5}$ to $Q_{6.5}$, but not from Q_8 to Q_{10}.

This HMP recommends the use of LID facilities to satisfy both 85th percentile water quality treatment as well as HMP flow control criteria. Detailed standards for LID implementation have been developed. These standards are provided in the City of La Mesa BMP Manual Part II.

The following methods may be used to meet mitigation requirements.

- Install BMPs that meet design requirements to control runoff from new impervious areas. BMPs including bioretention basins, vegetated swales, planter boxes, extended detention basins, etc. shall be designed pursuant to standard sizing and specification criteria detailed in the City of La Mesa BMP Manual Part II and the HMP/LID Sizing Calculator to ensure compliance with hydromodification criteria.

- Use of the automated sizing calculator (San Diego Sizing Calculator) that will allow project applicants to select and size LID treatment devices or flow control basins. The tool, akin to the sizing calculator developed for compliance with the Contra Costa HMP, uses pre-calculated sizing factors to determine required footprint sizes for flow control BMPs. Continuous simulation hydrologic analyses are currently being developed to determine the sizing factors for various flow control options and development scenarios. The Sizing Calculator also includes an automated pond sizing tool to assist in the design of extended detention facilities for mitigation of hydromodification effects. Because of the Sizing Calculator's ease of implementation, and since hydromodification BMPs can also serve as treatment BMPs, it is anticipated that most project applicants will choose this option instead of seeking compliance through site-specific continuous simulation model preparation. The HMP/LID Sizing Calculator is an implementation tool, which is currently under development by the consultant team and will be completed by the time final HMP criteria go into effect.

- Prepare continuous simulation hydrologic models and compare the pre-project and mitigated post-project runoff peaks and durations (with hydromodification flow controls) until compliance to flow control standards can be demonstrated. The project applicant will be required to quantify the long-term pre- and post-project runoff response from the site and establish runoff routing and stage-storage-discharge relationships for the planned flow control devices. Public domain software such as HSPF, HEC-HMS and SWMM can be used for preparation of a continuous simulation hydrologic analysis.

- Points of compliance must be selected to conduct the comparisons of pre-project and post-project flows and durations. Generally, points of compliance are selected at locations along the project boundary where concentrated flows discharge from the project site. If a point of compliance is selected downstream of the project boundary, then the City should be consulted in advance of the hydromodification analysis. For projects which convey offsite runoff through the site, it is assumed that the offsite runoff would be separated from site runoff. If this is not the case, then the City should be consulted to further refine the points of compliance for the site (an interior project site point of compliance could be required in such a scenario).

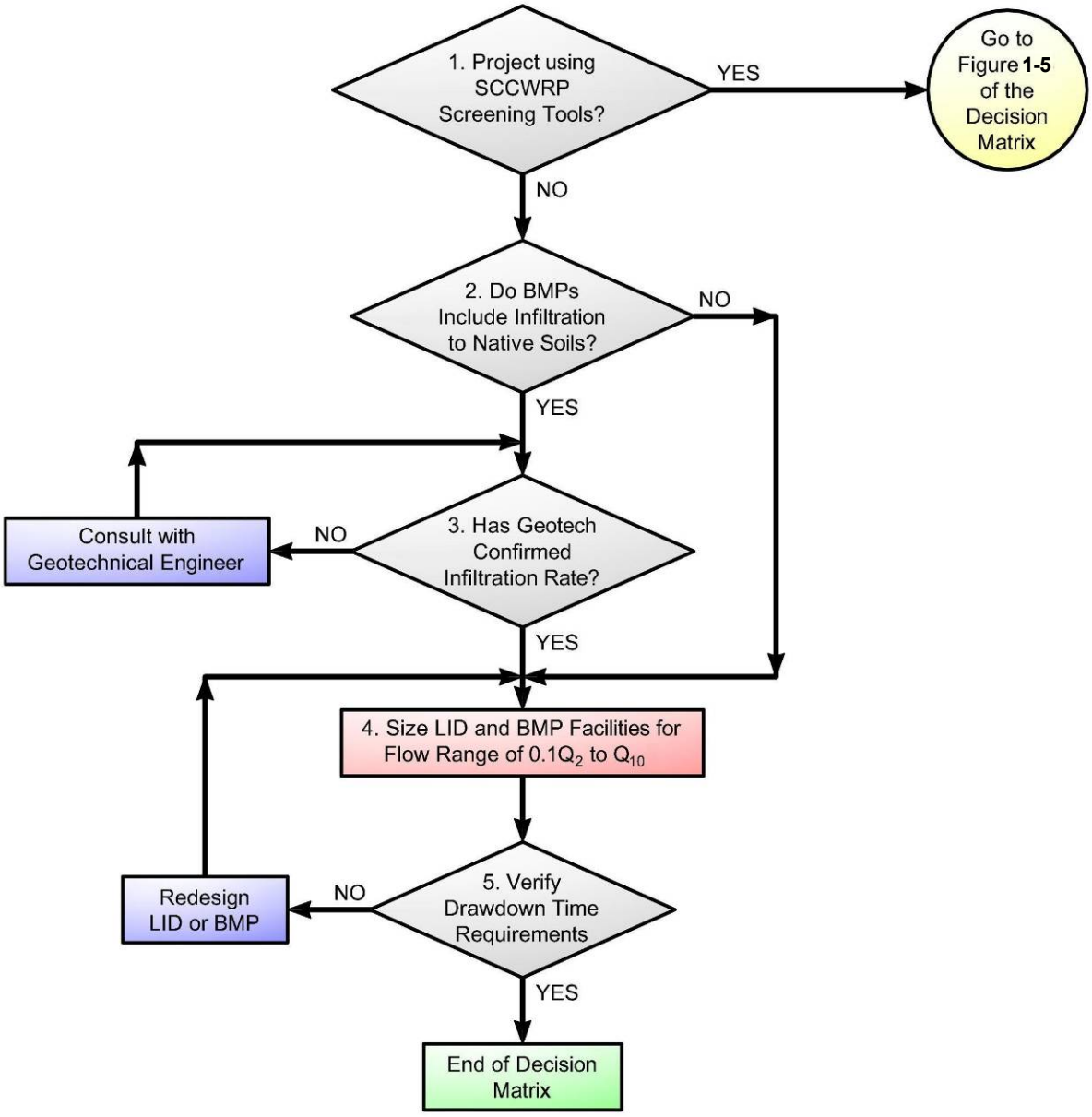

FIGURE 1-3. Mitigation Criteria and Implementation (Part 1)

- Figure 1-3, Node 1 – If the project applicant chooses to complete SCCWRP channel screening tools, then the applicant moves to Figures 1-4 and 1-5 to assess the vertical and lateral susceptibility of the receiving channel systems. Depending on the results of the SCCWRP screening tools and critical flow calculator, it is possible that lower flow thresholds in excess of $0.1Q_2$ may be used. If the project applicant chooses not to complete the SCCWRP channel assessment, then the applicant proceeds with Figure 1-3 of the Decision Matrix.

- Figure 1-3, Node 2 – If the project's LID or BMP approach accounts for the infiltration of runoff to native surrounding soils (below amended soil layers), then consultation with a geotechnical engineer is required (Box 3). If the project mitigation approach does not account for infiltration of runoff, then the applicant would proceed to Box 4.

- Figure 1-3, Node 3 – A geotechnical engineer should determine the allowable infiltration rates to be used for the design of each LID or BMP facility. The geotechnical assessment should also identify potential portions of the project which are feasible for infiltration of runoff.

- Figure 1-3, Node 4 – In this scenario, the SCCWRP channel assessment was not conducted. Therefore, the project applicant would be held to the $0.1Q_2$ lower flow threshold. LID and extended detention facilities must be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.1Q_2$ to Q_{10}.

- Figure 1-3, Node 5 - The Decision Matrix includes language regarding a drawdown time requirements so that standards set forth by the City of La Mesa are met. As a side note, the drawdown requirement would be applied to underground vaults in addition to extended detention basins and the surface ponding areas of LID facilities. Proper maintenance of hydromodification mitigation facilities is essential to guard against potential vector issues as well potential safety issues resulting from long-term standing water. If mitigation facility outlets clog, then runoff will bypass the system and potentially result in additional erosion problems downstream of a site. The City of La Mesa drawdown time requirement is 72 hours.

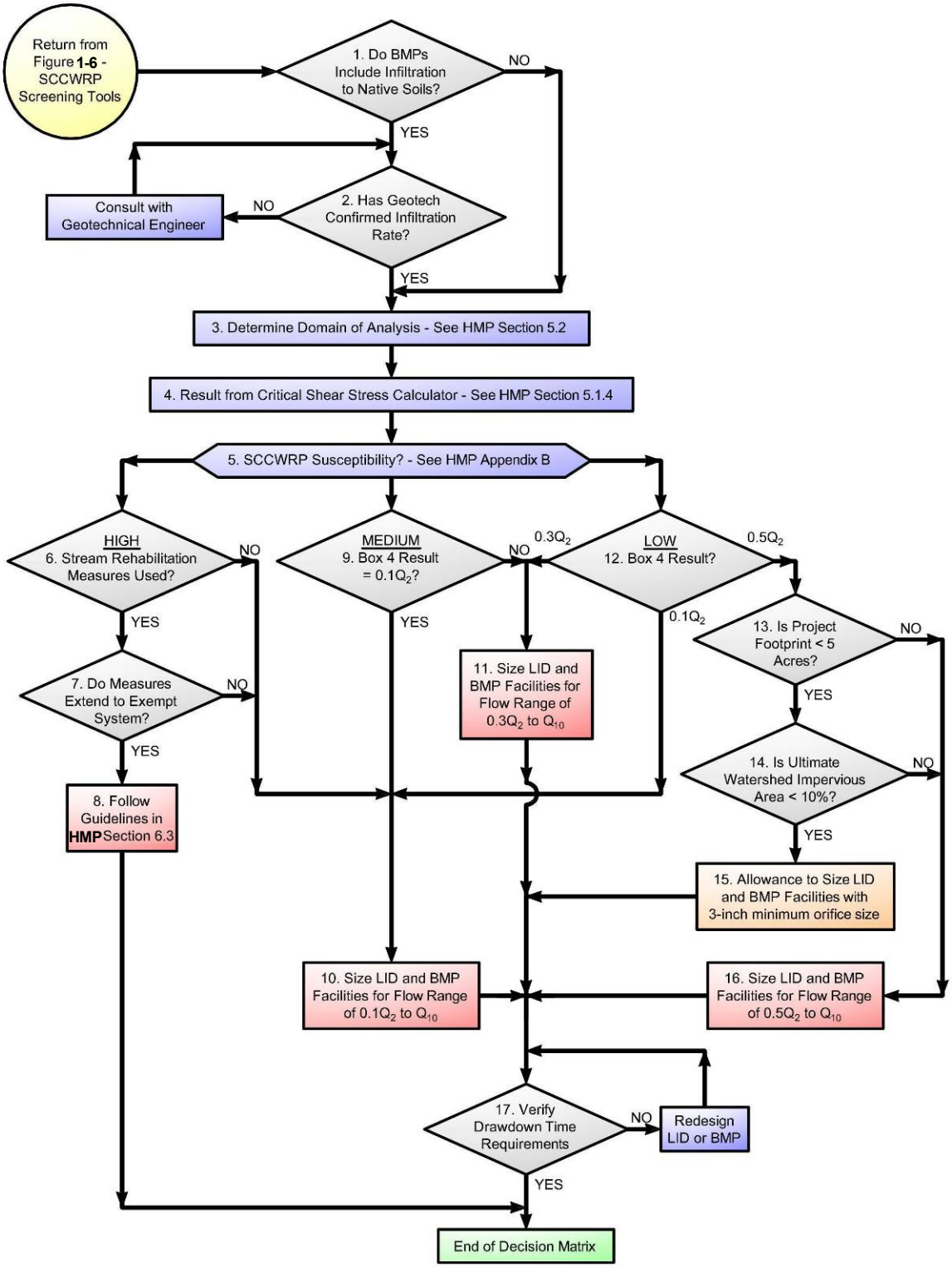

FIGURE 1-4. Mitigation Criteria and Implementation (Part 2)

- Figure 1-4, Node 1 – Use of Figure 1-4 assumes that the project applicant conducted the SCCWRP channel assessment. Box 1 would begin following completion of both the lateral and vertical susceptibility flow charts depicted in Figures 1-4 and 1-5. Box 1 is a decision box asking if the project's LID or BMP approach accounts for the infiltration of runoff to native surrounding soils (below amended soil layers). If the answer is Yes, then consultation with a geotechnical engineer is required (Box 2). If the project mitigation approach does not account for infiltration of runoff, then the applicant would proceed to Box 3.

- Figure 1-4, Node 2 – A geotechnical engineer should determine the allowable infiltration rates to be used for the design of each LID or BMP facility. The geotechnical assessment should also identify potential portions of the project which are feasible for infiltration of runoff.

- Figure 1-4, Node 3 – Pursuant to criteria detailed in HMP Section 5.2, the Domain of Analysis is determined downstream and upstream of the project site. This determination is used to ascertain the required reach length for data collection (channel bed and bank material, channel cross section data, etc.) required for the critical flow calculator (see Box 4).

- Figure 1-4, Node 4 – Pursuant to criteria detailed in HMP Section 5.1.4, the project applicant would run the critical shear stress calculator to determine if the recommended critical flow threshold should be $0.1Q_2$, $0.3Q_2$, or $0.5Q_2$. This result will be compared to the result from the SCCWRP screening analysis (Box 5) to determine the final lower flow threshold for the project.

- Figure 1-4, Node 5 – Pursuant to criteria detailed in HMP Appendix B, the project applicant would determine both the lateral and vertical channel susceptibility rating per guidelines set forth by SCCWRP. If the lateral and vertical tools returned divergent results, then the more conservative result would be used. SCCWRP susceptibility ratings include "High," "Medium" and "Low."

- Figure 1-4, Node 6 – A project applicant would arrive at Box 6 if the SCCWRP channel susceptibility rating was determined to be "High." This decision box inquires as to whether stream rehabilitation measures such as grade control and channel widening will be used as a mitigation measure instead of flow control. It should be noted that stream rehabilitation options are only allowed if the existing receiving channel susceptibility is considered to be "High."

- Figure 1-4, Node 7 – Stream rehabilitation measures are only allowed if the proposed mitigation project extends to a downstream exempt system (such as an exempt river system). If the mitigation measure did not extend to an exempt system, then the potential for cumulative watershed impacts would be more pronounced.

- Figure 1-4, Node 8 – If stream rehabilitation measures are allowed, then guidelines outlined in Section 6.3 of the HMP should be followed to design the in-stream mitigation approach.

- Figure 1-4, Node 9 - A project applicant would arrive at Box 9 if the SCCWRP channel susceptibility rating was determined to be "Medium." If the result from the critical shear stress calculator is also "Medium" (or $0.3Q_2$), then the lower flow threshold would be $0.3Q_2$ (Box 11). If the result from the critical shear stress calculator is "High" (or $0.1Q_2$), then the more conservative value would be used and the lower flow threshold would be $0.1Q_2$ (Box 10).

- Figure 1-4, Node 10 – For stream reaches determined by either the critical flow calculator or the SCCWRP screening tools to have a "High" susceptibility to erosion, LID and extended detention flow control facilities should be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.1Q_2$ to Q_{10}.

- Figure 1-4, Node 11 - For stream reaches determined by either the critical flow calculator or the SCCWRP screening tools to have a "Medium" susceptibility to erosion, LID and extended detention flow control facilities should be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.3Q_2$ to Q_{10}.

- Figure 1-4, Node 12 - A project applicant would arrive at Box 12 if the SCCWRP channel susceptibility rating was determined to be "Low." If the result from the critical shear stress calculator is also "Low" (or $0.5Q_2$), then the lower flow threshold would be $0.5Q_2$ (Box 16 – note potential waiver in Box 13). If the result from the critical shear stress calculator is "High" (or $0.1Q_2$), then the more conservative value would be used and the lower flow threshold would be $0.1Q_2$ (Box 10). If the result from the critical flow calculator is "Medium" (or $0.3Q_2$), then the more conservative value would be used and the lower flow threshold would be $0.3Q_2$ (Box 11).

- Figure 1-4, Node 13 – In some limited situations, namely small developments in rural or lightly developed areas, an allowance for a minimum outlet orifice size may be granted when the receiving channel susceptibility is "Low." This criteria may potentially be used for project footprints less than 5 acres. If the project footprint is greater than 5 acres, then the allowance may not be granted and the applicant would proceed to Box 16.

- Figure 1-4, Node 14 – The potential allowance discussed in Box 13 could only be granted if the ultimate potential impervious area in the sub-watershed is less than 10 percent. If there is potential for the sub-watershed impervious area to exceed 10 percent, then the minimum orifice size criteria may not be granted.

- Figure 1-4, Node 15 – If Boxes 12, 13, and 14 are satisfied, then mitigation facilities may be designed using a 3-inch minimum outlet orifice size.

- Figure 1-4, Node 16 - For stream reaches determined by either the critical flow calculator or the SCCWRP screening tools to have a "Low" susceptibility to erosion – and for projects where the minimum outlet orifice criteria does not apply - LID and extended detention flow control facilities should be sized so that the mitigated post project flows and durations do not exceed pre-project flows and durations for the geomorphically-significant flow range of $0.5Q_2$ to Q_{10}.

- Figure 1-4, Node 17 – For all hydromodification mitigation designs, the Decision Matrix includes language regarding a drawdown time requirements so that standards set forth by the City of La Mesa are met. As a side note, the drawdown requirement would be applied to underground vaults in addition to extended detention basins and the surface ponding areas of LID facilities. Proper maintenance of hydromodification mitigation facilities is essential to guard against potential vector issues as well potential safety issues resulting from long-term standing water. If mitigation facility outlets clog, then runoff will bypass the system and potentially result in additional erosion problems downstream of a site. The City of La Mesa drawdown time requirement is 72 hours.

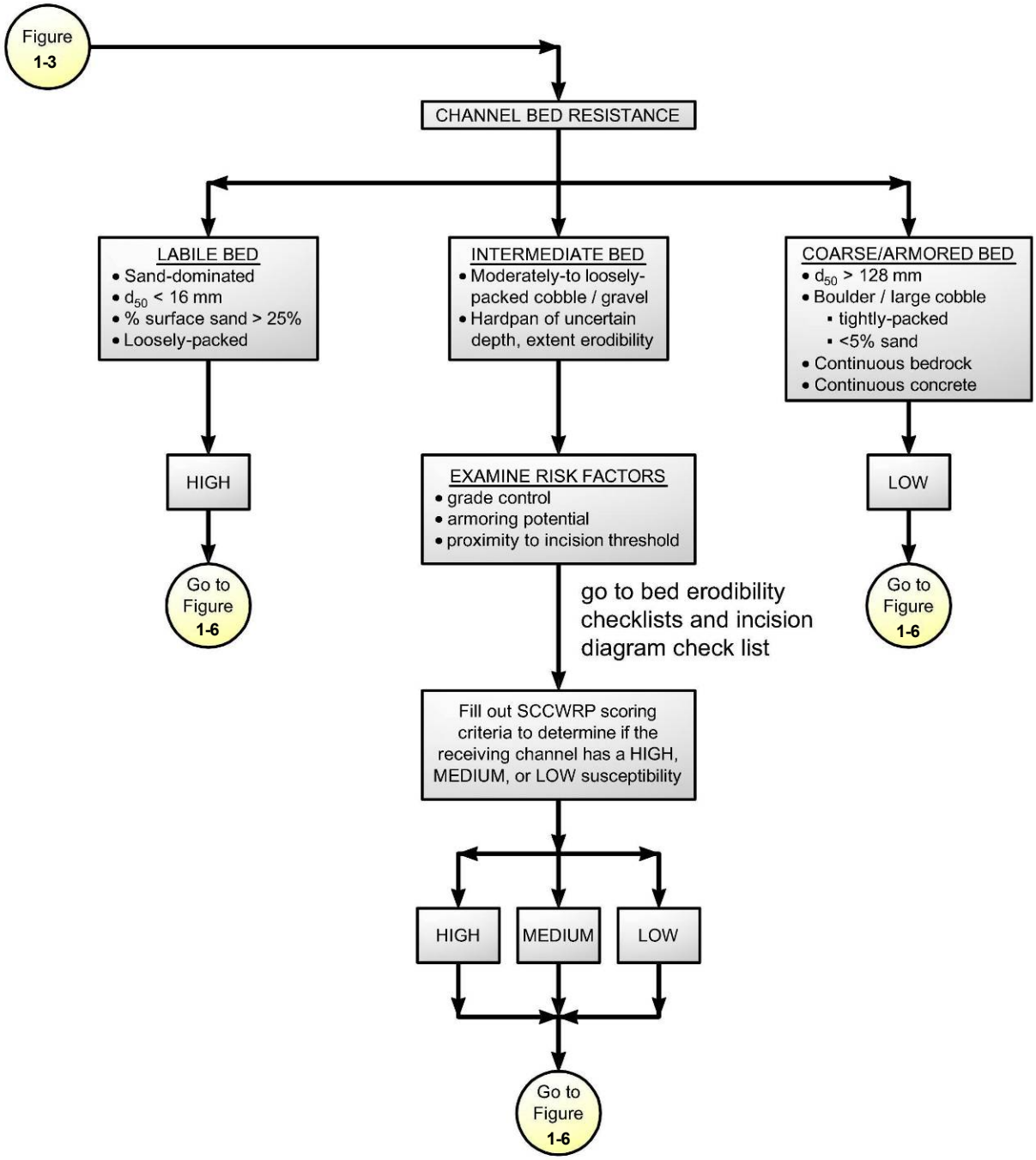

FIGURE 1-5. SCCWRP Vertical Susceptibility

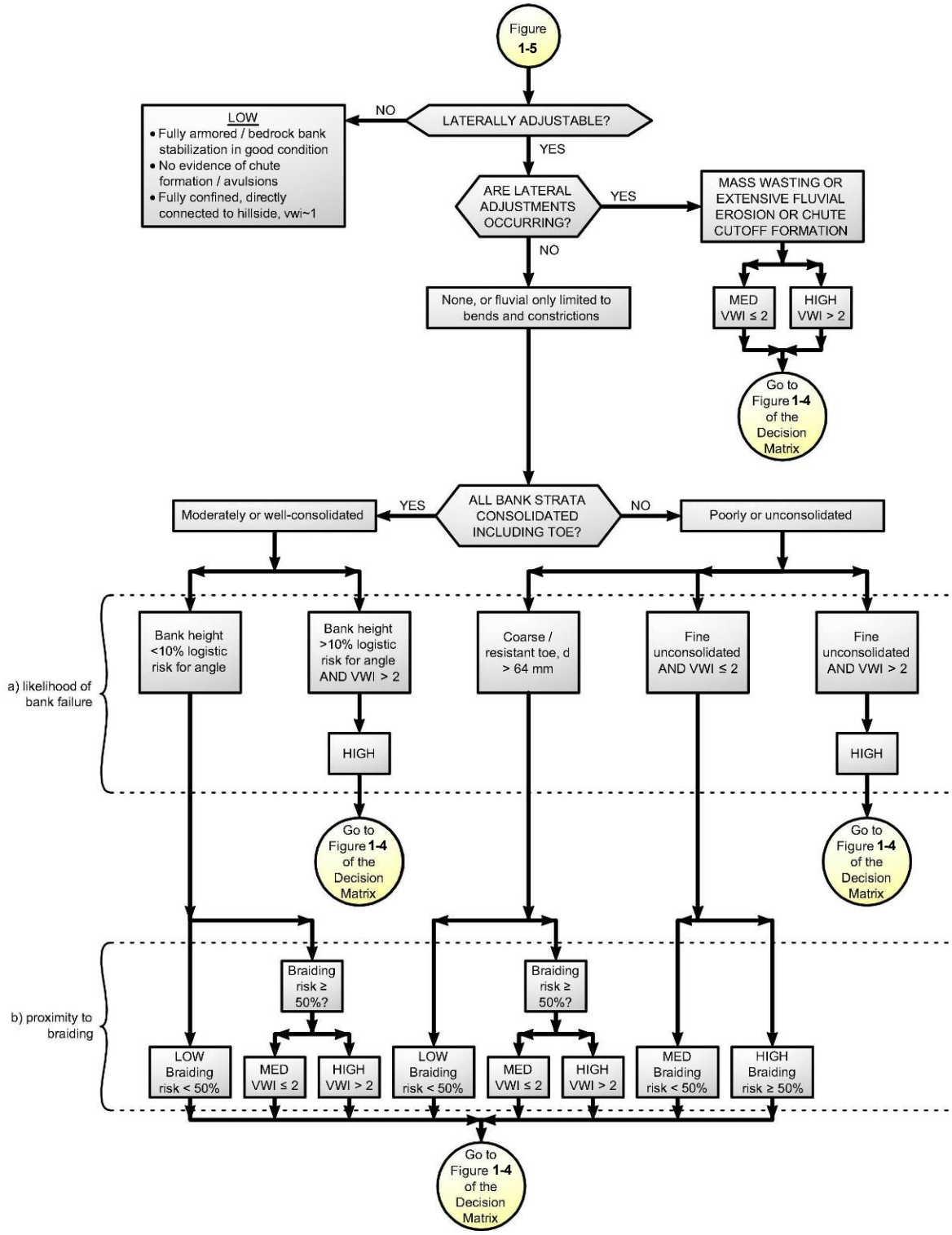

FIGURE 1-6. Lateral Channel Susceptibility

Grandfathering. Projects with lawful approval prior to January 14, 2011 (such as a development agreement, vested tentative map, or a building or grading permit), may not have to meet the hydromodification management requirements. Verify with municipal staff.

Waivers from Numeric Sizing Criteria

The NPDES permit allows for a project to be waived from numeric sizing criteria for storm water treatment only if all available treatment facilities have been considered and found **infeasible**. Municipal staff must inform the Water Board within 5 days of granting a waiver. Other SUSMP requirements—including site designs to minimize imperviousness and source control BMPs—will still apply.

Experience has shown implementation of LID facilities, as described in Chapter 4, is feasible on nearly all development sites. However, the use of LID to retrofit existing drainage systems, to manage runoff from sites smaller than one acre in pedestrian-oriented developments, or to manage runoff from widened portions of roadways, sometimes presents special challenges. In these special situations, applicants should see the discussion of "Selection of Storm Water Treatment Facilities" in Chapter 2 and evaluate the options described on page 41 in order (depending on the specific characteristics of the project and as determined by the City Engineer). All the options listed meet the numeric sizing criteria in the NPDES permit.

If infeasibility of all these options can be established, the City Engineer may determine eligibility of the project for a waiver.

References and Resources:

- RWQCB Order R9-2007-0001 (Storm Water NPDES Permit)
- Project Clean Water web page

Chapter 2

Concepts and Criteria

Technical background and explanations of policies and design requirements

The Regional Water Board reissued a municipal storm water NPDES permit to San Diego County, its 18 cities, the San Diego Unified Port District, and the San Diego Regional Airport Authority in January 2007. The permit mandates a comprehensive program to prevent storm water pollution. That program now includes street sweeping, maintenance of storm drains, business inspections, public outreach, construction site inspections, monitoring, and studies of stream and ocean health, and control of runoff pollutants from new developments and redevelopments.

Permit Provision D.1.d. requires the City of La Mesa to regulate projects in specific categories (Appendix A) to:

1. Reduce discharges of pollutants to the maximum extent practicable.
2. Prevent runoff discharges from causing or contributing to a violation of water quality standards.

The City of La Mesa, along with the other Copermittees, have created a Low Impact Development (LID) design procedure (Chapter 4) that ensures consistent and thorough implementation of the Regional Water Board's requirements. This chapter explains the technical background of the LID approach and how it was derived.

The previous permit, issued in 2001, included a requirement to control the post-development peak storm water runoff rates and velocities to maintain or reduce pre-development downstream erosion and protect stream habitat. The 2007 permit includes, in addition to this ongoing requirement, a new requirement to develop a hydromodification management plan (HMP) to identify and define a methodology and performance criteria to ensure flow rates and durations do not exceed pre-project runoff where increased runoff could cause erosion or other significant adverse impacts to beneficial uses.

As required by the NPDES permit, the City of La Mesa has adopted final hydromodification criteria. See Chapter One.

Water-Quality Regulations

Provision D.1 requires the City of La Mesa to condition development approvals on incorporation of specified storm water controls.

Provision D.1 requires applicable new developments and redevelopments:

- Design the site to conserve natural areas, existing trees and vegetation and soils, to maintain natural drainage patterns, to minimize imperviousness, to detain runoff, and to infiltrate runoff where feasible
- Cover or control sources of storm water pollutants
- Treat runoff prior to discharge. Provision E.10 states: "Urban runoff treatment and/or mitigation must occur prior to the discharge of urban runoff into a receiving water. Federal regulations at 40 CFR 131.10(a) state that in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S."
- Ensure runoff does not exceed pre-project peaks and durations where increases could affect downstream habitat or other beneficial uses
- Maintain treatment and flow-control facilities

The City of La Mesa maintains a database to track approved installations of treatment facilities and to verify facilities are maintained. The City's annual report to the Regional Water Board includes a list of development projects subject to SUSMP conditions and descriptions of those projects that:

- Received a waiver from SUSMP criteria; or
- Used hydrologic controls used to meet HMP requirements, including a description of the controls.

The City of La Mesa must also report the number of violations and enforcement actions taken upon development projects. The City of La Mesa's programs are subject to audit by the Regional Water Board.

The City of La Mesa—not the Regional Water Board or its staff—is charged with ensuring development projects comply with the D.1 requirements. Regional Water Board staff sometimes review storm water controls and hydromodification impacts in connection with applications for Clean Water Act Section 401 water-quality certification, which is required for projects that involve work, such as dredging or placement of fill, within streams, creeks, or other waters of the US.

► MAXIMUM EXTENT PRACTICABLE

Clean Water Act Section 402(p)(3)(iii) sets the standard for storm water controls as "maximum extent practicable," but doesn't define that term. As implemented, "maximum extent practicable" is ever-changing and varies with conditions.

Many storm water controls, including LID facilities, have proven to be practicable in most site development projects. To achieve fair and effective implementation, criteria, and guidance, requirements for controls must be detailed and specific—while also offering the right amount of flexibility or exceptions for special cases. The NPDES permit includes various standards, including hydrologic criteria, which have been found to comprise "maximum extent practicable." This BMP Manual is to be continuously improved and refined based on the experience of municipal planners and engineers, with input from land developers and development professionals. By following the BMP Manual, applicants can ensure their project design meets "maximum extent practicable."

► BEST MANAGEMENT PRACTICES

Clean Water Act Section 402(p) and USEPA regulations (40 CFR 122.26) specify a municipal program of "management practices" to control storm water pollutants. **Best Management Practice (BMP)** refers to any kind of procedure, activity, or device designed to minimize the quantity of pollutants that enter the storm drain system. BMPs are typically used in place of assigning numeric effluent limits. The criteria for source control BMPs and treatment and flow-control facilities are crafted to fulfill "maximum extent practicable."

To minimize confusion, this guidebook refers to "facilities," "features," or "controls" to be incorporated into development projects. All of these are BMPs.

Pollutants of Concern

NPDES Permit Provision D.1.d.(3) requires the City of La Mesa to develop and implement a procedure for pollutants of concern to be identified for each Priority Development Project.

Documentation of the approach to identifying pollutants of concern and selecting BMPs and facilities follows.

► GROUPING OF POTENTIAL POLLUTANTS OF CONCERN

Urban runoff from a developed site has the potential to contribute pollutants, including oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system and receiving waters. For the purposes of identifying pollutants of concern and associated storm water BMPs, pollutants are grouped in nine general categories as follows:

- **Sediments** are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms

survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.

- **Nutrients** are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.

- **Metals** are raw material components in non-metal products such as fuels, adhesives, paints, and other coatings. Primary sources of metal pollution in storm water are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.

- **Organic compounds** are carbon-based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.

- **Trash** (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.

- **Oxygen-Demanding Substances** includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen-

demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.

- Primary sources of **oil and grease** are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.

- **Bacteria and Viruses** are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.

- **Pesticides** (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

► IDENTIFYING POLLUTANTS OF CONCERN BASED ON LAND USES

Table 2-1 associates pollutants with the categories of Priority Development Projects. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

► WATERSHEDS WITH SPECIAL POLLUTANT CONCERNS

Receiving water conditions may require specialized attention. The three conditions to consider include:

- Ocean waters designated as an "Area of Special Biological Significance" (ASBS)
- 303(d) listed waters; and
- Waters with established TMDLs.

TABLE 2-1. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Land Use Type	Sediment	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development	P(1)	P(1)	X	P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	P(1)
Hillside Development >5,000 ft²	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X	X	P(1)

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

The State Water Resources Control Board's California Ocean Plan identifies thirty-four locations along the California coast as **Areas of Special Biological Significance (ASBS)**. Currently, there are no ASBS downstream of the City of La Mesa. See Table 2-2 for a list of applicable downstream water bodies. Please note that while runoff from the City drains to these water bodies, the actual water bodies are not located within the City itself.

TABLE 2-2. City of La Mesa Drainage Basins.

Drainage Basin	Percent of City of La Mesa Area	Receiving Waterbody	Hydrologic Subarea	Watershed
Alvarado	51	San Diego River	907.11	San Diego River
Lake Murray	1	Lake Murray		
University	28	Chollas Creek	908.22	San Diego Bay
Lemon Grove	6			
Spring Valley	14	Sweetwater River	909.12	

The NPDES Permit identifies several receiving waters as impaired for constituents or water quality effects pursuant to **Section 303(d)** of the Clean Water Act. Placement of a water onto the list requires the Regional Board to make further analysis of the impairment and development of total maximum daily loads (TMDLs) for addressing the impairment. The 303(d) listing in itself does not demand that a project proponent select BMPs on the basis of the impairment; however, the project proponent should be cognizant of the impairment and the future implications a TMDL might have upon the proposed land use. The San Diego River, Chollas Creek, and Lake Murray, all of which are on the 2010 CWA Section 303(d) list, are located downstream of the City of La Mesa. The San Diego River is impaired for *Enterococcus*, fecal coliform, low dissolved oxygen, nitrogen, phosphorus, total dissolved solids (TDS), and toxicity. Chollas Creek is impaired for indicator bacteria, copper, diazinon, lead, zinc, phosphorus, total nitrogen as N, and trash. Lake Murray, which drains a very small portion of the City, is 303(d) listed for nitrogen and pH.

Check the website below for the most current 303(d) listings.
http://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/index.shtml

Once a TMDL is established it may impose conditions on development either through an implementation plan and schedule for the listed water, or through special conditions required of the City of La Mesa affected by the numeric criteria of the TMDL. At this time, several 303(d) listings in San Diego County are at various stages of TMDL development with only four TMDLs having been adopted by the Regional Board. However, there are approximately 190 pending TMDLs in the county.

Applicable current and pending **TMDLs** in the La Mesa area include:

- Adopted TMDL for diazinon for Chollas Creek;

- Adopted TMDL for copper, lead, and zinc for Chollas Creek,
- Adopted TMDL for indicator bacteria for twenty beaches and creeks in the San Diego Region.
- Pending TMDL for sediment toxicity for the mouth of Chollas Creek,

The applicant should meet with municipal staff to determine if any project characteristics or watershed characteristics affect selection and design of BMPs. Except in rare circumstances, the use of the LID Design Guide (Chapter 4) and the Storm Water Pollutant Sources/Source Control Checklist (Appendix C) will ensure your project complies with all storm water requirements.

Selection of Permanent Source Control BMPs

Based on identification of potential pollutants of concern associated with various types of facilities, the City of La Mesa has developed a Storm Water Pollutant Sources/Source Control Checklist (Appendix C) of "maximum extent practicable" source controls associated with each facility type. This approach ensures appropriate BMPs are applied to potential sources of each pollutant of concern.

Selection of Storm Water Treatment Facilities

Table 2-3, below, categorizes pollutants of concern related to fate and pathways.

Table 2-4, below, includes a general comparison of how various types of treatment facilities perform for each group of pollutants.

TABLE 2-3. Grouping of Potential Pollutants of Concern by Fate During Storm Water Treatment

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

TABLE 2-4. Groups of Pollutants and Relative Effectiveness of Treatment Facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Facilities or Practices (LID)	Media Filters	Higher-rate biofilters*	Higher-rate media filters*	Trash Racks & Hydro -dynamic Devices	Vegetated Swales
Coarse Sediment and Trash	High	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low	Medium
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low	Low

*See page 41 for a discussion of selection of treatment facilities in special situations.

Based on this analysis, the City of La Mesa has determined that the following types of facilities are appropriate for treatment of runoff potentially containing most pollutants of concern. These types of facilities can be used for storm water treatment and hydromodification flow control for all land uses in all watersheds, except where site-specific constraints make them infeasible.

- Infiltration facilities or practices, including dry wells, infiltration trenches, infiltration basins, and other facilities that infiltrate runoff to native soils (sized to detain and infiltrate a volume equivalent to the 85th percentile 24-hour water quality runoff event – greater capacity required to provide hydromodification flow control).

- Bioretention facilities and media filters that detain storm water and filter it slowly through soil or sand (sized with a surface area at least 0.04 times the effectively impervious tributary area for water quality treatment – a larger sizing factor is required to provide hydromodification control).

- Extended detention basins, wet ponds, and wetlands or other facilities using settling (sized to detain a volume equivalent to runoff from the tributary area generated by the 85th percentile 24-hour water quality runoff event – greater capacity required to provide hydromodification flow control).

The recommended design procedure in Chapter 4 integrates LID practices—optimizing the site design, using pervious surfaces, and dispersing of runoff to adjacent pervious areas—with the use of infiltration facilities, detention basins, and bioretention facilities to meet NPDES permit LID requirements, treatment requirements, and flow-control requirements in a cost-effective, unified design.

Oil/water separators ("water quality inlets"), storm drain inlet filters, and hydrodynamic separators, including vortex separators and continuous deflection separators ("CDS units"), are

less effective means of storm water treatment, although they may be used in series with more effective facilities.

Underground vaults typically lack the detention time required for settling of fine particles associated with storm water pollutants. They also require frequent maintenance and may retain stagnant water, potentially providing harborage for mosquitoes. Because vaults may be "out of sight, out of mind," experience shows that the required maintenance may not occur.

Lack of space, in itself, is not a suitable justification for using a less-effective treatment on a development site, because the uses of the site and the site design can be altered as needed to accommodate bioretention facilities or planter boxes. In most cases, these effective facilities can be fit into required landscaping setbacks, easements, or other unbuildable areas.

Where possible, drainage to inlets, and drainage away from overflows and underdrains, should be by gravity. Where site topography makes it infeasible to accommodate gravity-fed facilities in the project design, the design flow may be captured in a vault or sump and pumped via force main to an effective facility.

The following situations sometimes present special challenges:

- Portions of sites which are not being developed or redeveloped, but which must be retrofit to meet treatment requirements in accordance with Provision D.1.d.(1)(a) which states in part: "Where redevelopment results in an increase of, or replacement of, more than fifty percent of the impervious surface of a previously existing development, the numeric sizing criteria applies to the entire development."

- Sites smaller than one acre approved for development or redevelopment as part of a municipality's stated objective to preserve or enhance a pedestrian-oriented "smart-growth" type of urban design.

- Roadway widening projects.

In these special situations, the following types of facilities should each be evaluated in priority order (depending on the specific characteristics of the site and as determined by the municipal storm water coordinator) until a feasible design is found.

1. Bioretention areas or planter boxes fed by gravity.

2. Capture of the design flow in a vault or sump and pumping to bioretention areas or planter boxes.

3. A subsurface sand or media filter with a maximum design surface loading rate of 5 inches per hour and a minimum media depth of 18 inches. The sand surface must be made accessible for periodic inspection and maintenance (for example, via a removable grating).

4. A higher-rate surface biofilter, such as a tree-pit-style unit. The grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units.

5. A higher-rate vault-based filtration unit (for example, vaults with replaceable cartridge filters filled with inorganic media).

Proprietary Devices
Many currently available proprietary devices do not meet City of La Mesa requirements when used alone for storm water treatment. Consult with municipal staff before proposing these devices.

Many proprietary storm water treatment devices are currently marketed, and new brands will be introduced. Applicants and applicants' engineers and design professionals should review with municipal staff any proposals for using proprietary devices for storm water treatment before they commence work on preliminary site layout, drainage plans, grading plans, or landscape plans.

Hydrology for NPDES Compliance

► IMPERVIOUSNESS

Schueler (1995) proposed **imperviousness** as a "unifying theme" for the efforts of planners, engineers, landscape architects, scientists, and local officials concerned with urban watershed protection. Schueler argued (1) that imperviousness is a useful indicator linking urban land development to the degradation of aquatic ecosystems, and (2) imperviousness can be quantified, managed, and controlled during land development.

Imperviousness has long been understood as the key variable in urban hydrology. Peak runoff flow and total runoff volume from small urban catchments is usually calculated as a function of the ratio of impervious area to total area **(rational method)**. The ratio correlates to the runoff factor, usually designated "C". Increased flows resulting from urban development tend to increase the frequency of small-scale flooding downstream.

Imperviousness links urban land development to degradation of aquatic ecosystems in two ways.

First, the combination of paved surfaces and piped runoff efficiently collects urban pollutants and transports them, in suspended or dissolved form, to surface waters. These pollutants may originate as airborne dust, be washed from the atmosphere during rains, or may be generated by automobiles and outdoor work activities.

Second, increased peak flows and runoff durations typically cause erosion of stream banks and beds, transport of fine sediments, and disruption of aquatic habitat. Measures taken to control stream erosion, such as hardening banks with riprap or concrete, may permanently eliminate habitat. By reducing infiltration to groundwater, imperviousness may also reduce dry-weather stream flows.

Imperviousness has two major components: rooftops and transportation (including streets, highways, and parking areas). The transportation component is usually larger and is more likely to be **directly connected** to the storm drain system.

The effects of imperviousness can be mitigated by disconnecting impervious areas from the drainage system and by encouraging detention and retention of runoff near the point where it is generated. Detention and retention reduce peak flows and volumes and allow pollutants to settle out or adhere to soils before they can be transported downstream.

► LOW IMPACT DEVELOPMENT REQUIREMENTS

The NPDES permit requires LID be used on all projects to minimize directly connected impervious area and promote infiltration. For Priority Development Projects, the minimum standards are:

- Drain a portion of impervious areas into pervious areas, if any.
- Design and construct pervious areas, if any, to effectively receive and infiltrate runoff from impervious areas, taking into account soil conditions, slope, and other pertinent factors.
- Construct a portion of paved areas with low traffic and appropriate soil conditions with permeable surfaces.

The LID design procedure in Chapter 4 incorporates these requirements into an integrated design which meets sizing requirements for storm water treatment facilities and flow-control (hydromodification management) requirements.

► SIZING REQUIREMENTS FOR STORM WATER TREATMENT FACILITIES

The guidance in Chapter 4 was crafted to ensure LID facilities comply with the NPDES permit's hydraulic sizing requirements for storm water treatment facilities and flow-control facilities. The technical background follows.

Most runoff is produced by frequent storms of small or moderate intensity and duration. Treatment facilities are designed to treat smaller storms and the first flush of larger storms—approximately 80% of average annual runoff.

The NPDES permit identifies two types of treatment facilities—volume-based and flow-based.

Volume-based facilities must be designed to infiltrate, filter, or treat the volume of runoff produced from a 24-hour 85th percentile storm event as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map. As shown on the map, rainfall depths vary from about 0.55" to 1.55".

For **flow-based** facilities, the NPDES permit specifies the rational method be used to determine flow. The rational method uses the equation

$Q = CiA$, where

Q = flow

C = weighted runoff factor between 0 and 1

i = rainfall intensity

A = area

The permit identifies two alternatives for calculating rainfall intensity:

1. the 85th percentile rainfall intensity times two, or
2. 0.2 inches per hour.

It is typically found that both methods yield similar results. The 0.2 inches per hour rainfall intensity should be used for sizing flow-based treatment facilities.

The 0.2 inches per hour criterion is the basis for a **consistent countywide sizing factor** for bioretention facilities when used for storm water treatment only (i.e., not for flow control). The factor is based on maintaining a minimum percolation rate of 5 inches per hour through the engineered soil mix. The sizing factor is the ratio of the design intensity of rainfall on tributary impervious surfaces (0.2 inches/hour) to the design percolation rate in the facility (5 inches/hour), or **0.04** (dimensionless).

► FLOW-CONTROL (HYDROMODIFICATION MANAGEMENT)

The NPDES permit specifies for applicable projects:

> … post-project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.

Refer to Appendix H to review the final Hydromodification Management Plan (HMP) developed by the San Diego Copermittees and approved by the RWQCB in July 2010. A summary of the applicability criteria from the HMP document is provided in Chapter 1 of this BMP Manual.

Criteria for Infiltration Devices

The NPDES permit restricts the design and location of "infiltration devices" that, as designed, may bypass filtration through surface soils before reaching groundwater. These devices include:

- Infiltration basins.
- Infiltration trenches (includes French drains).
- Unlined retention basins (i.e., basins with no outlets).

- Unlined or open-bottomed vaults or boxes installed below grade (dry wells).

Infiltration devices may not be used in:

- Areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway);
- Automotive repair shops;
- Car washes;
- Fleet storage areas (bus, truck, etc.);
- Nurseries;
- Other areas with pollutant sources that could pose a threat to groundwater, as designated by the City of La Mesa.

The vertical distance from the base of any infiltration device to the seasonal high groundwater mark shall be at least 10 feet. Infiltration devices shall be located a minimum of 100 feet horizontally from any known water supply wells.

In addition, infiltration devices are not recommended where:

- The infiltration device would receive drainage from areas where chemicals are used or stored, where vehicles or equipment are washed, or where refuse or wastes are handled.
- Surface soils or groundwater are polluted.
- The facility could receive sediment-laden runoff from disturbed areas or unstable slopes.
- Increased soil moisture could affect the stability of slopes of foundations.
- Soils are insufficiently permeable to allow the device to drain within 72 hours.

► MOST LID FEATURES AND FACILITIES ARE NOT INFILTRATION DEVICES

Self-treating and self-retaining areas, pervious pavements, bioretention facilities, and planter boxes are not considered to be infiltration devices.

Bioretention facilities work by percolating runoff through 18 inches or more of engineered soil. This removes most pollutants before the runoff is allowed to seep into native soils below. Further pollutant removal typically occurs in the unsaturated (vadose) zone before moisture reaches groundwater.

Where there is concern about the effects of increased soil moisture on slopes or foundations, an impermeable barrier may be added so the facility is "flow through" and all treated runoff is underdrained away from the facility. See the design sheets for Bioretention Facilities and Flow-Through Planters in Appendix B.

References and Resources:

- RWQCB Order R9-2007-0001 (Storm Water NPDES Permit)
- *County of San Diego Low Impact Development Handbook*
- Clean Water Act Section 402(p)
- 40 CFR 122.26
- San Diego Regional Water Quality Control Board—TMDLs
- State Water Resources Control Board—Ocean Standards
- *Site Planning for Urban Stream Protection* (Schueler, 1995).
- "Application of Water-Quality Engineering Fundamentals to the Assessment of Stormwater Treatment Devices" (Salvia, 2000).

Chapter 3

Preparing Your Project Submittal

Step-by-step assistance to demonstrate compliance.

Your Project Submittal will demonstrate your project complies with all applicable requirements in the storm water NPDES permit—to minimize imperviousness, retain or detain storm water, slow runoff rates, incorporate required source controls, treat storm water prior to discharge, control runoff rates and durations, and provide for operation and maintenance of treatment and flow-control facilities.

Submittal requirements vary from jurisdiction to jurisdiction. See below for the specific requirements of the City of La Mesa.

Typically, your Project Submittal must be coordinated with your application for discretionary approvals and must have sufficient detail to ensure the storm water design, site plan, and landscaping plan are congruent.

A complete and thorough Project Submittal will facilitate quicker review and fewer cycles of review. The City of La Mesa requires a submittal for every applicable project. The procedures outlined in this chapter are preferred by the City of La Mesa; any other approaches to meeting the requirements of this BMP Manual must be shown by the project proponent to be defensibly equivalent or better. Review and approval of water quality documents by City of La Mesa staff will be most efficient when proponents follow the methodology and direction outlined in this Chapter.

In order to meet SUSMP requirements, your submittal will be a Standard Post Construction BMP Plan (SPCBMPP) or a Post Construction Water Quality Technical Report (PCWQTR), depending on the outcome of the "Storm Water Requirements Applicability Checklist" in Appendix A. If you need to prepare a SPCBMPP, see Appendix G for appropriate guidance. If your project is a Priority Development Project, you will need to prepare a PCWQTR as directed in this chapter. **Municipal staff may use a review checklist** such as the following example to evaluate your Project Submittal:

EXAMPLE PROJECT SUBMITTAL CHECKLIST

SUBMITTAL COMPONENT REQUIREMENTS FOR PRIORITY DEVELOPMENT PROJECTS

- ❒ Completed "Storm Water Requirements Applicability Checklist" (Appendix A)
- ❒ Vicinity Map
- ❒ Site Map (See below for contents of Exhibit.)
- ❒ PCWQTR (See below for contents of Report.)
- ❒ Drainage Study (with Hydromodification, if applicable)

CONTENTS OF EXHIBIT (SITE MAP)

Show all of the following on drawings:

- ❒ Show entire property on one map. Use key map if multiple sheets are necessary. (Step 1 in the following step-by-step instructions)
- ❒ Existing natural hydrologic features (depressions, watercourses, floodplains, relatively undisturbed areas) and significant natural resources. (Step 1)
- ❒ Areas of potential soil erosion on the property and downstream of the project. (Step 1)
- ❒ Soil types and depth to groundwater. (Step 1)
- ❒ Existing and proposed site drainage network and connections to drainage off-site, including surface conveyances, private storm drain systems, and municipal storm drain inlets. (Step 3)
- ❒ Proposed design features and surface treatments used to minimize imperviousness. (Step 3)
- ❒ Entire site divided into separate drainage areas, with each area identified as self-treating, self-retaining (zero-discharge), draining to a self-retaining area, or draining to an IMP. (Step 3)
- ❒ For each drainage area, types of impervious area proposed (roof, plaza/sidewalk, and streets/parking) and area of each. (Step 3)
- ❒ Proposed locations and sizes of treatment or flow-control facilities. (Step 3)
- ❒ Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix C and corresponding required source controls. (Step 4)

CONTENTS OF REPORT

Include all of the following in your PCWQTR:

- ❒ Table of Contents
- ❒ Identification of the watershed(s), downstream waterbodies, waterbody impairments, and pollutants of concern (Step 1)
- ❒ Narrative analysis or description of site features and conditions that constrain, or provide opportunities for, storm water control. (Step 2)
- ❒ If the project is exempt from HMP requirements, a discussion must be included demonstrating which exemption is being claimed and why the project qualifies (Step 2).

- ❒ Demonstrate how hydromodification requirements are met, including calculations justifying determination of lower flow thresholds and the sizing of LID or extended detention facilities to provide for hydromodification flow control. Field investigation results and continuous simulation results should also be included where applicable (Step 3).
- ❒ Narrative description of site design characteristics that protect natural resources. (Step 3)
- ❒ Narrative description and/or tabulation of site design characteristics, building features, and pavement selections that reduce imperviousness of the site. (Step 3)
- ❒ Basis for selection of each proposed engineered LID IMP or alternative treatment facility. (Step 3)
- ❒ Tabulation of proposed pervious and impervious area, showing self-treating areas, self-retaining areas, and areas tributary to each treatment or flow-control facility. (Step 3)
- ❒ Preliminary designs, including calculations, for each infiltration, treatment, or flow-control facility. Elevations should show sufficient hydraulic head for each. (Step 3)
- ❒ A table of identified pollutant sources and for each source, the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix C. (Step 4)
- ❒ General maintenance requirements for infiltration, treatment, and flow-control facilities (Step 5)
- ❒ Means by which facility maintenance will be financed and implemented in perpetuity. (Step 5)
- ❒ Statement accepting responsibility for operation & maintenance of facilities (Step 5).
- ❒ Identification of any conflicts with codes or requirements or other anticipated obstacles to implementing the proposed facilities in the submittal (Step 6).
- ❒ Construction Plan SUSMP Checklist (Step 6).
- ❒ Certification by a registered civil engineer (Step 6).

Step by Step

Suggested coordination with site and landscape design

Plan and design your storm water controls integrally with the site planning and landscaping for your project. It's best to start with general project requirements and preliminary site design concepts, then prepare the detailed site design, landscape design, and storm water control design simultaneously. **This will help ensure that your site plan, landscape plan, and Project Submittal are congruent.**

Begin with general project requirements and program.

The following step-by-step procedure should optimize your design by identifying the best opportunities for storm water controls **early in the design process.**

The recommended steps are:

Sketch conceptual site layout, building locations, and circulation.

1. Assemble needed information.
2. Identify site opportunities and constraints.
3. Follow the LID design guidance in Chapter 4 to analyze your project for LID and to develop and document your drainage design.
4. Specify source controls using the sources/source control checklist in Appendix C.
5. Plan for ongoing maintenance of treatment and flow-control facilities.
6. Complete the Project Submittal.

Revise site layout, building locations, and circulation to accommodate LID design. Develop land-scaping plan.

Submit Site Plan, Landscape Plan, and SUSMP Submittal

Municipal staff may recommend you prepare and submit a preliminary site design prior to formally applying for planning and zoning approvals. Your preliminary site design should incorporate a conceptual plan for site drainage, including self-treating and self-retaining areas and the location and approximate sizes of any treatment facilities. This additional up-front design effort will save time and avoid potential delays later in the review process.

Step 1: Assemble Needed Information

To select types and locations of treatment facilities, the designer needs to know the following site characteristics:

- **Existing natural hydrologic features** and natural resources, including any contiguous natural areas, wetlands, watercourses, seeps, or springs.

- **Existing site topography**, including contours of any slopes of 4% or steeper, general direction of surface drainage, local high or low points or depressions, any outcrops or other significant geologic features.
- **Zoning**, including requirements for **setbacks** and **open space**.
- **Public Works Standards** or other local codes governing minimum street widths, sidewalk construction, allowable pavement types, and drainage. These codes may conflict with Low Impact Development objectives to minimize imperviousness and to maintain or restore natural site hydrology.
- Soil types (including **hydrologic soil groups**) and depth to groundwater, which may determine whether infiltration is a feasible option for managing site runoff. Depending on site location and characteristics, and on the selection of treatment and flow-control facilities, site-specific information (e.g. from boring logs or geotechnical studies) may be required.
- **Existing site drainage.** For undeveloped sites, this should be obtained by inspecting the site and examining topographic maps and survey data. For previously developed sites, site drainage and connection to the municipal storm drain system can be located from site inspection, municipal storm drain maps, and plans for previous development.
- Existing **vegetative cover** and **impervious areas**, if any.
- **Watershed(s)** in which the project area is located.
- **Applicable hydromodification management requirements** for the project, or evidence for any exemptions from requirements based on the Final HMP. Note that field investigation is typically required for projects subject to hydromodification management requirements.
- **Pollutants of Concern** in receiving waters. For each of the proposed project discharge points, identify the receiving water(s), including hydrologic unit basin number(s), as identified in the most recent version of the Water Quality Control Plan for the San Diego Basin[1], prepared by the San Diego Regional Water Quality Control Board. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies[2]. List any and all pollutants for which the receiving waters are impaired. Use Table 2-1 of this BMP Manual to list anticipated pollutants based on land use.

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[1] Go to: http://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/index.shtml

[2] Under Section 303(d) of the 1972 Clean Water Act, states, territories, and authorized tribes are required to develop a list of water quality limited segments. These waters on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. Go to: http://www.swrcb.ca.gov/rwqcb9/water_issues/programs/303d_list/index.shtml. San Diego is in Region 9.

References and Resources

- *Site Planning for Urban Stream Protection* (Schueler 1995).
- *Start at the Source* (BASMAA 1999), p. 36

Step 2: Identify Constraints & Opportunities

Review the information collected in Step 1. Identify the principal constraints on site design and selection of treatment and flow-control facilities as well as opportunities to reduce imperviousness and incorporate facilities into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, restricted right-of-way, or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention facilities), and differences in elevation (which can provide hydraulic head). Note storm water treatment facilities should not be located within protected riparian areas.

Prepare a brief **narrative** describing site opportunities and constraints. This narrative will help you as you proceed with LID design and explain your design decisions to others.

Step 3: Prepare and Document Your LID Design

Use the Low Impact Development Design Guide (Chapter 4) to analyze your project for LID, design and document drainage, and specify preliminary design details for integrated management practices. **Follow the detailed instructions in Chapter 4 to ensure your project complies with NPDES permit LID requirements (Provision D.1.d.(4)) and storm water treatment requirements in Provision D.1.d.(6)).** The LID Design Guide has been designed so that hydromodification management requirements are also met via this unified design procedure. Chapter 4 includes calculation procedures and formats for presenting your calculations.

As shown in the example checklist (page 48), your Project Submittal may need to include a drawing showing:

- The entire site divided into separate drainage management areas (DMAs), with each area identified as one of the following: self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. Each area should be clearly marked with a unique identifier.
- For each drainage area, the types of impervious area proposed, and the area of each.
- Proposed locations and sizes of treatment facilities. Each facility should be clearly marked with a unique identifier.

Compliance

The design criteria for DMAs in Chapter 4 ensure the required volume of flow from all developed portions of the project, including landscaped areas, is infiltrated, filtered, or treated (Provision D.1.d.(6)(a).

Your Project Submittal may need to include:

- Tabulation of proposed self-treating areas, self-retaining areas, areas draining to self-retaining areas, and areas draining to IMPs, and the corresponding IMPs identified on the Exhibit.
- Calculations, in the format shown in Chapter 4, showing the minimum square footage required and proposed square footage for each IMP.
- Preliminary designs for each IMP. The design sheets and accompanying drawings in Appendix B may be used or adapted for this purpose.

The following may also be required, or may be advisable to assist the reviewer to understand your design:

- A narrative overview of your design and how your design decisions optimize the site layout, use pervious surfaces, disperse runoff from impervious surfaces, and drain impervious surfaces to engineered IMPs. See Chapter 4.
- A narrative briefly describing each **drainage management area** (DMA), its drainage, and where drainage will be directed.
- A narrative briefly describing each IMP. Include any special characteristics or features distinct from the design sheets in Appendix B.

References and Resources

- Chapter 4
- *County of San Diego Low Impact Development Handbook*
- *The City of La Mesa General Plan*
- *The City of La Mesa Zoning Ordinance* (Title 24 of the La Mesa Municipal Code)
- City of La Mesa Development Codes (La Mesa Municipal Code)
- *Low Impact Development Manual* (Prince George's County, Maryland, 1999).
- *Bioretention Manual* (Prince George's County, Maryland, rev. 2002)
- *Site Planning for Urban Stream Protection* (Schueler, 1995b).
  Low Impact Development Technical Guidance Manual for Puget Sound (Puget Sound Action Team, 2005)
- *LID for Big Box Retailers* (Low Impact Development Center, 2006)

Step 4. Specify Source Control BMPs

Some everyday activities – such as trash recycling/disposal and washing vehicles and equipment – generate pollutants that tend to find their way into storm drains. These pollutants can be minimized by applying **source control BMPs**.

Source control BMPs include **permanent**, structural features that must be incorporated into your project plans and **operational** BMPs, such as regular sweeping and "housekeeping," that must be implemented by the site's occupant or user. The maximum extent practicable standard typically requires both types of BMPs. In general, operational BMPs cannot be substituted for a feasible and effective permanent BMP.

Use the following procedure to specify source control BMPs for your site:

► IDENTIFY POLLUTANT SOURCES

Review the first column in the **Pollutant Sources/Source Control Checklist** (Appendix C). Check off the potential sources of pollutants that apply to your site.

► NOTE LOCATIONS ON SUBMITTAL DRAWING

Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist (Appendix C). Show the location of each pollutant source and each permanent source control BMP in your submittal drawing.

► PREPARE A TABLE AND NARRATIVE

Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist (Appendix C). Now, create a table using the format in Table 3-1. In the left column, list each potential source on your site (from Appendix C, Column 1). In the middle column, list the corresponding **permanent, structural BMPs** (from Columns 2 and 3, Appendix C) used to prevent pollutants from entering runoff. Accompany this table with a narrative that explains any special features, materials, or methods of construction that will be used to implement these permanent, structural BMPs.

► IDENTIFY OPERATIONAL SOURCE CONTROL BMPS

TABLE 3-1. Format for Table of Permanent and Operational Source Control Measures.

Potential source of runoff pollutants	*Permanent source control BMPs*	*Operational source control BMPs*

To complete your table, refer once again to the Pollutant Sources/Source Control Checklist (Appendix C, Column 4). List in the right column of your table the operational BMPs that should be implemented as long as the anticipated activities continue at the site. The same BMPs may also be required as a condition of a use permit or other revocable discretionary approval for use of the site.

References and Resources

- Appendix C: Storm Water Pollutant Sources/Source Control Checklist
- RWQCB Order R9-2007-0001, Provision D.1.d.(5)
- *Start at the Source*, Section 6.7: Details, Outdoor Work Areas
- *California Stormwater Industrial/Commercial Best Management Practice Handbook*
- *Urban Runoff Quality Management* (WEF/ASCE, 1998) Chapter 4: Source Controls

Step 5: Storm Water Facility Maintenance

As required by NPDES Permit Provision D.1.c.(5), projects that include permanent BMPs shall be conditioned to require submittal of proof of a mechanism under which ongoing long-term maintenance of storm water treatment and flow-control facilities will be conducted, satisfactory to the City Engineer. The City of La Mesa requires the following items be included in your Project Submittal:

1. A means to finance and implement facility maintenance in perpetuity.
2. Acceptance of responsibility for maintenance from the time the facilities are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the treatment and flow-control facilities you have selected.

The City Engineer may also require that you prepare and submit a detailed plan that sets forth a maintenance schedule for each of the treatment and flow-control facilities built on your site.

Details of these requirements, and instructions for preparing a detailed operation and maintenance plan, are in Chapter 5.

References and Resources

- *Chapter 5*
- Operation, Maintenance, and Management of Stormwater Management Systems (Watershed Management Institute, 1997)

Step 6: Complete Your Project Submittal

City staff may provide specific instructions for the content and format of your Project Submittal. Your Project Submittal should document the information gathered and decisions made in Steps 1-5. A clear, complete, well-organized Project Submittal will make it possible to confirm your design meets the minimum requirements of the NPDES permit, the City of La Mesa Storm Water Ordinance Municipal Code Chapter 7.18, and this BMP manual.

► COORDINATION WITH SITE, ARCHITECTURAL, AND LANDSCAPING PLANS

Before completing your Project Submittal, ensure your storm water control design is fully coordinated with the site plan, grading plan, and landscaping plan being proposed for the site.

Information submitted and presentations to design review committees, planning commissions, and other decision-making bodies must incorporate relevant aspects of the storm water design. In particular, ensure:

- Curb elevations, elevations, grade breaks, and other features of the drainage design are consistent with the delineation of DMAs.

- The top edge (overflow) of each bioretention facility is level all around its perimeter—this is particularly important in parking lot medians.
- The resulting grading and drainage design is consistent with the design for parking and circulation.
- Bioretention facilities and other IMPs do not create conflicts with pedestrian access between parking and building entrances.
- Vaults and utility boxes can be accommodated outside bioretention facilities and will not be placed within bioretention facilities.
- The visual impact of storm water facilities, including planter boxes at building foundations and any terracing or retaining walls required for the storm water control design, is shown in renderings and other architectural drawings.
- Landscaping plans, including planting plans, show locations of bioretention facilities, and the plant requirements are consistent with the engineered soils and conditions in the bioretention facilities.
- Renderings and representation of street views incorporate any storm water facilities located in street-side buffers and setbacks

► CONSTRUCTION PLAN SUSMP CHECKLIST

When you submit construction plans for City review and approval, the reviewer will compare that submittal with your earlier Project Submittal. By creating a Construction Plan SUSMP Checklist for your project, you can facilitate the reviewer's comparison and speed review of your project.

TABLE 3-2. Format for Construction Plan SUSMP Checklist.

SUSMP Page #	*BMP Description*	*See Plan Sheet #s*

Here's how:

4. Create a table similar to Table 3-2. Number and list each measure or BMP you have specified in your Project Submittal in Columns 1 and 2 of the table. Leave Column 3 blank. Incorporate the table into your Project Submittal.

5. When you submit construction plans, **duplicate the table** (by photocopy or electronically). Now fill in Column 3, identifying the plan sheets where the BMPs are shown. List all plan sheets on which the BMP appears. Submit the updated table with your construction plans.

Note that the updated table—or Construction Plan SUSMP Checklist—is **only a reference tool** to facilitate comparison of the construction plans to your Project Submittal. City Engineering staff can advise you regarding the process required to propose changes to your approved Project Submittal.

► CERTIFICATION

Your Project Submittal shall be certified by a registered civil engineer.

The certification should state: "The selection, sizing, and preliminary design of storm water treatment and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments."

► EXAMPLE PROJECT SUBMITTAL OUTLINE AND CONTENTS

Check with City Engineering staff for requirements specific to your project.

I. Project Setting

- A. Project Name, Location, Description of project activities
- B. Vicinity Map
- C. Existing site features and conditions
- D. Opportunities and constraints for storm water control
- E. Watershed(s), receiving water bodies, and water body impairments
- F. Pollutants of concern based on land use and downstream water body impairments
- G. Impacts to hydrologic regime

II. Low Impact Development Design Strategies

- A. Optimization of site layout
  - (1) Limitation of development envelope
  - (2) Preservation of natural drainage features
  - (3) Setbacks from creeks, wetlands, and riparian habitats
  - (4) Minimization of imperviousness
  - (5) Using drainage as a design element
- B. Use of permeable pavements
- C. Dispersal of runoff to pervious areas
- D. Use of Integrated Management Practices

III. Hydromodification Analysis

- A. Hydromodification Applicability
- B. Flow Control Performance Criteria

IV. Documentation of Drainage Design

- A. Drainage Management Areas
  - (1) Tabulation

(2) Descriptions

B. Integrated Management Practices

(1) Tabulation and Sizing Calculations

(2) Descriptions

V. Source Control Measures

A. Description of site activities and potential sources of pollutants

B. Table showing sources, permanent source controls, and operational source controls

VI. Facility Maintenance Requirements

A. Ownership and responsibility for maintenance in perpetuity.

(1) Commitment to execute any necessary agreements.

(2) Statement accepting responsibility for operation and maintenance of facilities until that responsibility is formally transferred.

B. Summary of maintenance requirements for each storm water facility.

VII. Construction Plan SUSMP Checklist

VIII. Certifications

IX. Attachment: SUSMP Exhibit (Site Map) clearly showing:

A. Entire property

B. Nearby water bodies and municipal storm drain inlets

C. Private storm drain systems

D. Drainage Management Areas

E. Integrated Management Practices

F. Source control measures and potential sources of pollutants

G. Any other proposed BMPs

► SPECIFIC PROJECT CONSIDERATIONS

Your submittal will reflect the unique character of your own project and should meet the requirements identified in this BMP manual. City Engineering staff can assist you to determine how specific requirements apply to your project.

Chapter 4

Low Impact Development Design Guide

Guidance for designing and documenting your LID site drainage, storm water treatment facilities, and flow-control facilities

Follow the Low Impact Development (LID) design in this BMP manual to achieve compliance with the storm water treatment requirements as well as the LID requirements in the storm water NPDES permit. The City of La Mesa encourages the use of the design and documentation strategies outlined in this chapter. While other approaches may be used, they must be defensibly shown by the project proponent to meet or exceed the low impact development standards in this BMP Manual.

This will require careful documentation of:

- Pervious and impervious areas in the planned project.
- Drainage from each of these areas.
- Locations, sizes, and types of proposed treatment facilities.

Your Project Submittal must include calculations showing the site drainage and proposed LID treatment facilities meet the criteria in this BMP Manual.

This Low Impact Development Design Guide will help you:

- **Analyze your project** and identify and select options for implementing LID techniques to meet runoff treatment requirements—and flow-control requirements, if they apply.
- **Design and document drainage** for the whole site and document how that design meets this BMP Manual's storm water treatment criteria.
- **Specify preliminary design details** and integrate your LID drainage design with your paving and landscaping design.

Alternatives to LID design are discussed in the final section of this chapter.

Analyze Your Project for LID

Conceptually, there are four LID strategies for managing runoff from buildings and paving:

1. **Optimize the site layout** by preserving natural drainage features and designing buildings and circulation to minimize the amount of roofs and paving.

2. **Use pervious surfaces** such as turf, gravel, or pervious pavement—or use surfaces that retain rainfall, such as vegetated roofs. All drainage from these surfaces is considered to be "self-retained" (a detailed definition corresponding to this concept is on page 67). No further management of runoff is necessary. An emergency overflow should be provided for extreme events.

3. **Disperse runoff** from impervious surfaces on to adjacent pervious surfaces (e.g., direct a roof downspout to disperse runoff onto a lawn).

4. Drain impervious surfaces to engineered **Integrated Management Practices** (IMPs), such as bioretention facilities, planter boxes, cisterns, or dry wells. IMPs infiltrate runoff to groundwater and/or percolate runoff through engineered soil and allow it to drain away slowly. Depending on site conditions and local regulations, it may be possible to harvest and reuse rainwater in conjunction with IMPs.

A combination of two or more strategies may work best for your project. With forethought in design, the four strategies can provide multiple, complementary benefits to your development. Pervious surfaces reduce heat island effects and temperature extremes. Landscaping improves air quality, creates a better place to live or work, and upgrades value for rental or sale. Retaining natural hydrology helps preserve and enhance the natural character of the area. LID drainage design can also conserve water and reduce the need for drainage infrastructure.

Table 4-1 includes ideas for applying LID strategies to site conditions and types of development.

TABLE 4-1. Ideas for Runoff Management

Site Features and Design Objectives	Vegetated Roof	Self-retaining Areas	Pervious Pavement	Bioretention Facility	Flow-through Planter	Dry Well	Cistern with bioretention
Clayey native soils	✓			✓	✓		✓
Permeable native soils	✓		✓	✓	✓	✓	
Very steep slopes	✓				✓		
Shallow groundwater	✓				✓		
Avoid saturating subsurface soils	✓		✓		✓		
Connect to roof downspouts		✓		✓	✓	✓	✓
Parking lots/islands and medians			✓	✓		✓	
Sites with extensive landscaping		✓	✓	✓			
Densely developed sites with limited space/landscape	✓		✓		✓	✓	✓
Fit IMPs into landscape and setback areas				✓			✓
Make drainage a design feature		✓		✓			✓
Convey as well as treat storm water				✓			

► OPTIMIZE THE SITE LAYOUT

To minimize storm water-related impacts, apply the following design principles to the layout of newly developed and redeveloped sites.

Conserve natural areas, soils, and vegetation. Define the development envelope and protected areas, identifying areas that are most suitable for development and areas that should be left undisturbed. Use the following guideline to determine the least sensitive areas of the site, in order of increasing sensitivity:

1. Areas devoid of vegetation, including previously graded areas and agricultural fields.
2. Areas of non-native vegetation, disturbed habitats, and eucalyptus woodlands where receiving waters are not present.
3. Areas of chamise or mixed chaparral, and non-native grasslands.
4. Areas containing coastal scrub communities.
5. All other upland communities.
6. Occupied habitat of sensitive species and all wetlands.

Within each of the previous categories, hillside areas should be considered more sensitive than flatter areas.

Coordination
Chapter One includes a presentation of how review of your project's site design and landscape design is coordinated with review for compliance with storm water NPDES requirements.

Where possible, conform the site layout along natural landforms, avoid excessive grading and disturbance of vegetation and soils, and replicate the site's natural drainage patterns. Set back development from creeks, wetlands, and riparian habitats. Preserve significant trees, especially native trees and shrubs, and identify locations for planting additional native or drought tolerant trees and large shrubs. Concentrate development on portions of the site with less permeable soils, and preserve areas that can promote infiltration.

For all types of development, **limit overall coverage** of paving and roofs. Where allowed by La Mesa zoning and design standards—and provided public safety and a walkable environment are not compromised—this can be accomplished by designing compact, taller structures, narrower and shorter streets and sidewalks, smaller parking lots (fewer stalls, smaller stalls, and more efficient lanes), and indoor or underground parking. Examine site layout and circulation patterns and identify areas where landscaping can be substituted for pavement.

Detain and retain runoff throughout the site. On flatter sites, it typically works best to intersperse landscaped areas and IMPs among the buildings and paving. On hillside sites, drainage from upper areas may be collected in conventional catch basins and piped to landscaped areas and IMPs in lower areas.

Use drainage as a design element. Use depressed landscape areas, vegetated buffers, and bioretention areas as amenities and focal points within the site and landscape design. Bioretention areas can be almost any shape and should be located at low points. Bioretention areas shaped as swales can detain and treat low runoff flows and also convey higher flows.

► USE PERVIOUS SURFACES

Consider a vegetated roof. Although not yet widely used in California, vegetated or "green" roofs are growing in popularity. Potential benefits include longer roof life, lower heating and cooling costs, and better sound insulation, in addition to air quality and water quality benefits. For SUSMP compliance purposes, vegetated roofs are considered not to produce increased runoff or runoff pollutants (i.e., any runoff from a vegetated roof requires no further treatment or detention). For more information on vegetated roofs, see www.greenroofs.org.

Consider permeable pavements and surface treatments. Inventory paved areas on your preliminary site plan. Identify where permeable pavements, such as crushed aggregate, turf block, unit pavers, pervious concrete, or pervious asphalt could be substituted for impervious concrete or asphalt paving.

► DISPERSE RUNOFF TO ADJACENT PERVIOUS AREAS

Look for opportunities to direct runoff from impervious areas to adjacent landscaping. The design, including slopes and soils, must reflect a reasonable expectation that an inch of rainfall will soak into the soil and produce no runoff. For example, a lawn or garden depressed 3-4" below surrounding walkways or driveways provides a simple but functional landscape design element.

For sites subject to storm water treatment requirements only, a 2:1 maximum ratio of impervious to pervious area is acceptable. Be sure soils will drain adequately.

Under some circumstances, it may be allowable to direct runoff from impervious areas to pervious pavement (for example, from roof downspouts to a parking lot paved with crushed aggregate or turf block). The pore volume of pavement and base course must be sufficient to retain an inch of rainfall, including runoff from the tributary area. The slopes and soils must be compatible with infiltrating that volume without producing runoff.

► DIRECT RUNOFF TO INTEGRATED MANAGEMENT PRACTICES

Design criteria have been developed for the following IMPs:

- **Bioretention facilities**, which can be configured as swales, free-form areas, or planters to integrate with your landscape design.
- **Flow-through planters**, which can be used near building foundations and other locations where infiltration to native soils is not desired.
- **Dry wells** and other infiltration facilities, which can be used only where soils are permeable.
- **Cisterns or vaults**, in combination with a bioretention facility.

See the design sheets in Appendix B.

It may be possible to create a site-specific design that uses cisterns to achieve storm water flow control, storm water treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Such a design could expand the multiple benefits of LID to include water conservation. Keep in mind:

- Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8 below. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse.

- Storage of water for longer than minimum standards set forth by the City of La Mesa (72 hours) creates the potential for mosquito harborage. Cisterns and vaults must be designed to prevent entry by mosquitoes.

- Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Some references and resources for water harvesting appear at the end of this chapter.

Finding the right location for treatment facilities on your site involves a careful and creative integration of several factors:

- To make the most efficient use of the site and to maximize aesthetic value, **integrate IMPs with site landscaping**. Zoning codes may require landscape setbacks or buffers, or may specify that a minimum portion of the site be landscaped. It may be possible to locate some or all of your site's treatment and flow-control facilities within this same area, or within utility easements or other non-buildable areas.

- Planter boxes and bioretention areas must be **level or nearly level** all the way around. Bioretention areas configured as swales may be gently sloped in the linear direction, but opposite sides must be at the same elevation.

- For effective, low-maintenance operation, **locate facilities so drainage into and out of the device is by gravity flow.** Pumped systems are feasible, but are expensive, require more maintenance, are prone to untimely failure, and can cause mosquito control problems.

- If the property is being subdivided now or in the future, the facility should be in a **common, accessible area.** In particular, avoid locating facilities on private residential lots. Even if the facility will serve only one site owner or operator, make sure the facility is located for ready access by inspectors from the City of La Mesa and local vector control agency.

- The facility must be accessible to equipment needed for its maintenance. **Access requirements for maintenance** will vary with the type of facility selected. Planter

boxes and bioretention areas will typically need access for the same types of equipment used for landscape maintenance.

To complete your analysis, include in your Project Submittal a brief **narrative** documenting the site layout and site design decisions you made. This will provide background and context for how your design meets the quantitative LID design criteria.

Develop and Document Your Drainage Design

The **design documentation procedure** begins with careful delineation of pervious areas and impervious areas (including roofs) throughout the site. The procedure accounts for how runoff from each delineated area is managed. For areas draining to IMPs, the procedure ensures each IMP is appropriately sized.

The procedure results in a space-efficient, cost-efficient LID design for meeting SUSMP requirements on most residential and commercial/industrial developments. The procedure arranges documentation of drainage design and IMP sizing in a consistent format for presentation and review.

This procedure is intended to facilitate, not substitute for, creative interplay among site design, landscape design, and drainage design. **Several iterations may be needed** to optimize your drainage design as well as aesthetics, circulation, and use of available area for your site.

You should be able to complete the needed calculations using only the project's site development plan.

► STEP 1: DELINEATE DRAINAGE MANAGEMENT AREAS

This is the key first step. You must divide the **entire project area** into individual, discrete Drainage Management Areas (DMAs). Typically, lines delineating DMAs follow grade breaks and roof ridge lines. The Exhibit, tables, text, and calculations in your Project Submittal will illustrate, describe, and account for runoff from each of these areas.

Use separate DMAs for each surface type (e.g., landscaping, pervious paving, or roofs). Each DMA must be assigned a single hydrologic soil group. Assign each DMA an identification number and determine its size in square feet.

► STEP 2: CLASSIFY DMAS AND DETERMINE RUNOFF FACTORS

Next, determine how drainage from each DMA will be handled. Each DMA will be one of the following four types:

1. Self-treating areas.
2. Self-retaining areas (also called "zero-discharge" areas).
3. Areas that drain to self-retaining areas.
4. Areas that drain to IMPs.

Self-treating areas are landscaped or turf areas that do not drain to IMPs, but rather drain directly off site or to the storm drain system. Examples include upslope undeveloped areas which are ditched and drained around a development and grassed slopes which drain off-site to a street or storm drain. In general, self-treating areas include no impervious areas, unless the impervious area is very small (5 percent or less) in relationship to the receiving pervious area and slopes are gentle enough to ensure runoff will be absorbed into the vegetation and soil. Criteria for self-treating areas are in the design sheet "Self Treating and Self-Retaining Areas" in Appendix B.

Rationale

Pollutants in rainfall and windblown dust will tend to become entrained in the vegetation and soils of landscaped areas, so no additional treatment is needed. It is assumed the self-treating landscaped areas will produce runoff less than or equal to the pre-project site condition.

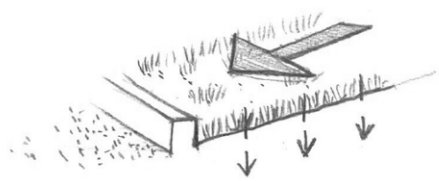

FIGURE 4-1. Self-treating areas are entirely pervious and drain directly off-site or to the storm drain system.

Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that a one-inch rainfall event would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Specify slopes, if any, toward the center of the pervious area. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

Criteria for self-retaining areas are in the design sheet "Self Treating and Self-Retaining Areas" in Appendix B.

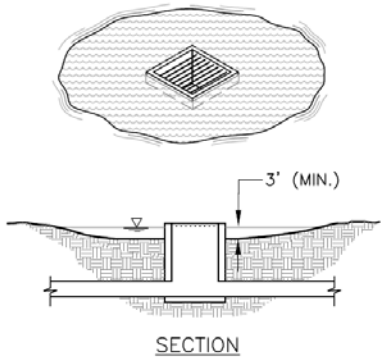

FIGURE 4-2. Self-retaining areas. Berm or depress the grade to retain at least an inch of rainfall and set inlets of any area drains at least 3 inches above low point to allow ponding.

Areas draining to self-retaining areas. Runoff from impervious or partially pervious areas can be managed by routing it to self-retaining pervious areas. For example, roof downspouts can be directed to lawns, and driveways can be sloped toward landscaped areas. The maximum ratio is 2 parts impervious area for every 1 part pervious area.

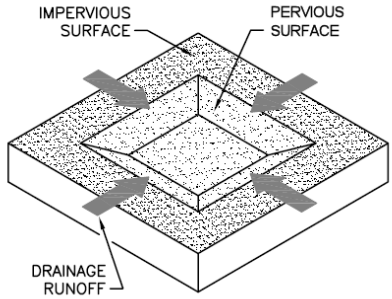

FIGURE 4-3. Relationship of impervious to pervious area for self-retaining areas.
Ratio: ***pervious ≥ ½ impervious***

The drainage from the impervious area must be directed to and dispersed within the pervious area, and the entire area must be designed to retain an inch of rainfall without flowing off-site. For example, if the maximum ratio of 2 parts impervious area into 1 part pervious area is used, then the pervious area must absorb 3 inches of water over its surface before over-flowing to an off-site drain.

A partially pervious area may be drained to a self-retaining area. For example, a driveway composed of unit pavers may drain to an adjacent lawn. In this case, the maximum ratios are:

(Runoff factor) x (tributary area) ≤ 2 x (self-retaining area) *Equation 4-1*

Use the runoff factors in Table 4-2.

Prolonged ponding is a potential problem at higher impervious/pervious ratios. In your design, ensure that the pervious area soils can handle the additional run-on and are sufficiently well-drained.

Under some circumstances, pervious pavement (e.g., crushed stone, pervious asphalt or pervious concrete) can be self-retaining. Adjacent roofs or impervious pavement may drain on to the pervious pavement in the same maximum ratios as described above.

To design a pervious pavement to be a self-treating area, ensure:

- The gravel base course is a minimum of four or more inches deep.
- The base course is not to be underdrained.
- A qualified engineer has been consulted regarding infiltration rates, pavement stability, and suitability for the intended traffic.

Runoff from self-treating and self-retaining areas does not require any further treatment or flow control.

TABLE 4-2. Example Runoff Factors for Surfaces Draining to IMPs.

Surface	Factor
Roofs	1.0
Concrete	1.0
Pervious Concrete	0.1
Porous Asphalt	0.1
Grouted Unit Pavers	1.0
Solid Unit Pavers on granular base, min. 3/16 inch joint space	0.2
Crushed Aggregate	0.1
Turfblock	0.1
Amended, mulched soil	0.1
Landscape	0.1

Areas draining to IMPs are multiplied by a sizing factor to calculate the required size of the IMP. On most densely developed sites—such as commercial and mixed-use developments and small-lot residential subdivisions—most DMAs will drain to IMPs.

More than one drainage area can drain to the same IMP. However, because the minimum IMP sizes are determined by ratio to drainage area size, a drainage area may not drain to more than one IMP. See Figures 4-4 and 4-5.

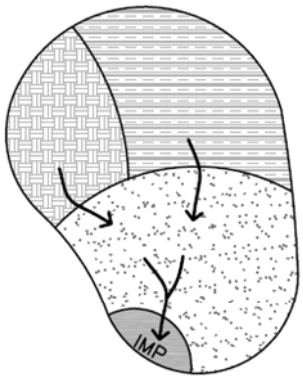

FIGURE 4-4. More than one Drainage Management Area can drain to a single IMP.

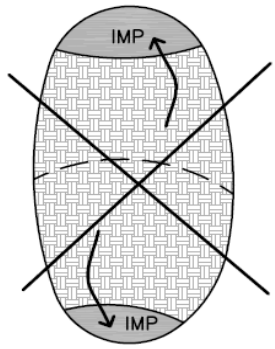

FIGURE 4-5. One Drainage Management Area cannot drain to more than one IMP. Use a grade break to divide the DMA.

Where possible, design site drainage so **only impervious roofs and pavement** drain to IMPs. This yields a simpler, more efficient design and also helps protect IMPs from becoming clogged by sediment.

If it is necessary to include turf, landscaping, or pervious pavements within the area draining to an IMP, list each surface as a separate DMA. A runoff factor (similar to a "C" factor used in the rational method) is applied to account for the reduction in the quantity of runoff. For example, when a turf or landscaped drainage management area drains to an IMP, the resulting increment in IMP size is:

$$\Delta \text{ (Area)} = \text{(pervious area)} \times \text{(runoff factor)} \times \text{(sizing factor)}.$$

Use the runoff factors in Table 4-2.

► STEP 3: TABULATE DRAINAGE MANAGEMENT AREAS

- Tabulate self-treating areas in the format shown in Table 4-3.
- Tabulate self-retaining areas in the format shown in Table 4-4.
- Tabulate areas draining to self-retaining areas in the format shown in Table 4-5. Check to be sure the total product of (square feet of tributary area × runoff factor) for all DMAs draining to a receiving self-retaining area is no greater than a 2:1 ratio to the square footage of the receiving self-retaining area itself.

- Compile a list of DMAs draining to IMPs. Proceed to Step 4 to check the sizing of the IMPs.

TABLE 4-3. Format for Tabulating Self-Treating Areas

DMA Name	Area (square feet)

TABLE 4-4. Format for Tabulating Self-Retaining Areas

DMA Name	Area (square feet)

TABLE 4-5. Format for Tabulating Areas Draining to Self-Retaining Areas

DMA Name	Area (square feet)	Post-project surface type	Runoff factor	Receiving self-retaining DMA	Receiving self-retaining DMA Area (square feet)

► STEP 4: SELECT AND LAY OUT IMPS ON SITE PLAN

Select from the list of IMPs in Table 4-6. Illustrations, designs, and design criteria for the IMPs are in the "IMP Design Details and Criteria" at the end of this chapter.

Once you have laid out the IMPs, calculate the square footage you have set aside on your site plan for each IMP.

► STEP 5: REVIEW SIZING FOR EACH IMP

For each of the IMPs, use the appropriate "water quality only" sizing from Table 4-6. Sizing factors for integrated facilities that provide both water quality treatment and hydromodification flow control may be obtained using the BMP Sizing Calculator, BMP sizing factor tables, or other methods outlined in Chapter 1 of this document or in the Final HMP (Appendix H).

TABLE 4-6. "Water Quality Only" Sizing Factors

Bioretention Facilities	Sizing Factor for Area = 0.04
Flow-through Planters	Sizing Factor for Area = 0.04
Dry Well or Infiltration Basin	See Step 6 to Calculate Min. Volume
Cistern/Vault with Bioretention	See Step 6 to Calculate Min. Volume of Cistern or Vault; then use 0.04 to calculate minimum size of bioretention area

TABLE 4-7. Sizing Factors – Bioretention Facilities

Flat Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.070	0.103	0.130	0.130
V_1	0.058	0.085	0.108	0.108
V_2	N/A	N/A	0.078	0.078
$0.3Q_2 – Q_{10}$				
A	0.070	0.098	0.100	0.085
V_1	0.058	0.081	0.083	0.071
V_2	N/A	N/A	0.060	0.051
$0.5Q_2 – Q_{10}$				
A	0.070	0.098	0.075	0.065
V_1	0.058	0.081	0.063	0.054
V_2	N/A	N/A	0.045	0.039

Moderate Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.065	0.090	0.130	0.130
V_1	0.054	0.075	0.108	0.108
V_2	N/A	N/A	0.078	0.078
$0.3Q_2 – Q_{10}$				
A	0.065	0.090	0.100	0.085
V_1	0.054	0.075	0.083	0.071
V_2	N/A	N/A	0.060	0.051
$0.5Q_2 – Q_{10}$				
A	0.065	0.090	0.075	0.065
V_1	0.054	0.075	0.063	0.054
V_2	N/A	N/A	0.045	0.039

Steep Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.060	0.075	0.110	0.065
V_1	0.050	0.063	0.092	0.054
V_2	N/A	N/A	0.067	0.039
$0.3Q_2 – Q_{10}$				
A	0.060	0.075	0.080	0.065
V_1	0.050	0.063	0.067	0.054
V_2	N/A	N/A	0.048	0.039

$0.5Q_2 – Q_{10}$				
A	0.060	0.075	0.060	0.050
V_1	0.050	0.063	0.050	0.042
V_2	N/A	N/A	0.036	0.030

Q_2 = 2-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

Q_{10} = 10-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

A = Surface area sizing factor

V_1 = Surface volume sizing factor

V_2 = Subsurface volume sizing factor

Note: The Oceanside Rain Gauge was selected for use in La Mesa based on rain basin analysis performed by the consultant team for the San Diego regional Storm Water Co-permitees. The analysis took into account average annual rainfall, proximity, elevation, and data availability.

TABLE 4-8. Sizing Factors – Flow Through Planter Facilities

Flat Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	N/A	0.190	0.160
V_1	N/A	N/A	0.158	0.133
V_2	N/A	N/A	0.114	0.096
$0.3Q_2 – Q_{10}$				
A	N/A	N/A	0.105	0.090
V_1	N/A	N/A	0.088	0.075
V_2	N/A	N/A	0.063	0.054
$0.5Q_2 – Q_{10}$				
A	N/A	N/A	0.075	0.070
V_1	N/A	N/A	0.063	0.058
V_2	N/A	N/A	0.045	0.042

Moderate Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	N/A	0.190	0.160
V_1	N/A	N/A	0.158	0.133
V_2	N/A	N/A	0.114	0.096
$0.3Q_2 – Q_{10}$				
A	N/A	N/A	0.105	0.090
V_1	N/A	N/A	0.088	0.075
V_2	N/A	N/A	0.063	0.054
$0.5Q_2 – Q_{10}$				
A	N/A	N/A	0.075	0.070
V_1	N/A	N/A	0.063	0.058
V_2	N/A	N/A	0.045	0.042

Steep Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	N/A	0.140	0.105
V_1	N/A	N/A	0.117	0.088
V_2	N/A	N/A	0.084	0.063
$0.3Q_2 – Q_{10}$				
A	N/A	N/A	0.085	0.070
V_1	N/A	N/A	0.071	0.058

V_2	N/A	N/A	0.051	0.042
$0.5Q_2 – Q_{10}$				
A	N/A	N/A	0.065	0.050
V_1	N/A	N/A	0.054	0.042
V_2	N/A	N/A	0.039	0.030

Q_2 = 2-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

Q_{10} = 10-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

A = Surface area sizing factor

V_1 = Surface volume sizing factor

V_2 = Subsurface volume sizing factor

Note: The Oceanside Rain Gauge was selected for use in La Mesa based on rain basin analysis performed by the consultant team for the San Diego regional Storm Water Co-permitees. The analysis took into account average annual rainfall, proximity, elevation, and data availability.

TABLE 4-9. Sizing Factors – Dry Well/Infiltration Facilities

Flat Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A

Moderate Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	0.045	0.065	N/A	N/A
V_1	0.117	0.169	N/A	N/A
V_2	N/A	N/A	N/A	N/A

Steep Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.040	0.060	N/A	N/A
V_1	0.104	0.156	N/A	N/A
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.040	0.060	N/A	N/A
V_1	0.104	0.156	N/A	N/A
V_2	N/A	N/A	N/A	N/A

$0.5Q_2 – Q_{10}$				
A	0.040	0.060	N/A	N/A
V_1	0.104	0.156	N/A	N/A
V_2	N/A	N/A	N/A	N/A

Q_2 = 2-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

Q_{10} = 10-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

A = Surface area sizing factor

V_1 = Surface volume sizing factor

V_2 = Subsurface volume sizing factor

Note: The Oceanside Rain Gauge was selected for use in La Mesa based on rain basin analysis performed by the consultant team for the San Diego regional Storm Water Co-permitees. The analysis took into account average annual rainfall, proximity, elevation, and data availability.

TABLE 4-10. Sizing Factors – Bioretention + Vault Facilities

Flat Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.430	0.260	0.220
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.250	0.160	0.140
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.210	0.140	0.140
V_2	N/A	N/A	N/A	N/A

Moderate Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.430	0.260	0.220
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.200	0.160	0.140
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.180	0.140	0.140
V_2	N/A	N/A	N/A	N/A

Steep Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.240	0.200	0.160
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.160	0.140	0.120
V_2	N/A	N/A	N/A	N/A

$0.5Q_2 – Q_{10}$				
A	N/A	0.040	0.040	0.040
V_1	N/A	0.140	0.120	0.120
V_2	N/A	N/A	N/A	N/A

Q_2 = 2-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

Q_{10} = 10-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

A = Surface area sizing factor

V_1 = Surface volume sizing factor

V_2 = Subsurface volume sizing factor

Note: The Oceanside Rain Gauge was selected for use in La Mesa based on rain basin analysis performed by the consultant team for the San Diego regional Storm Water Co-permitees. The analysis took into account average annual rainfall, proximity, elevation, and data availability.

TABLE 4-11. Sizing Factors – Cistern + Bioretention Facilities

Flat Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.020	0.020	0.020	0.020
V_1	0.160	0.510	0.260	0.200
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.020	0.020	0.020	0.020
V_1	0.160	0.220	0.160	0.140
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	0.020	0.020	0.030	0.035
V_1	0.160	0.190	0.140	0.120
V_2	N/A	N/A	N/A	N/A

Moderate Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.020	0.020	0.020	0.020
V_1	0.140	0.340	0.260	0.200
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.020	0.020	0.020	0.025
V_1	0.140	0.180	0.160	0.140
V_2	N/A	N/A	N/A	N/A
$0.5Q_2 – Q_{10}$				
A	0.020	0.025	0.035	0.040
V_1	0.160	0.160	0.140	0.120
V_2	N/A	N/A	N/A	N/A

Steep Slopes

Facility	Soil Group A	Soil Group B	Soil Group C	Soil Group D
Oceanside Gauge				
$0.1Q_2 – Q_{10}$				
A	0.020	0.020	0.020	0.020
V_1	0.120	0.240	0.200	0.180
V_2	N/A	N/A	N/A	N/A
$0.3Q_2 – Q_{10}$				
A	0.020	0.020	0.025	0.030
V_1	0.120	0.160	0.140	0.120
V_2	N/A	N/A	N/A	N/A

$0.5Q_2 - Q_{10}$				
A	0.030	0.035	0.040	0.040
V_1	0.120	0.140	0.120	0.100
V_2	N/A	N/A	N/A	N/A

Q_2 = 2-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

Q_{10} = 10-year pre-project flow rate based upon partial duration analysis of long-term hourly rainfall records

A = Surface area sizing factor

V_1 = Surface volume sizing factor

V_2 = Subsurface volume sizing factor

Note: The Oceanside Rain Gauge was selected for use in La Mesa based on rain basin analysis performed by the consultant team for the San Diego regional Storm Water Co-permitees. The analysis took into account average annual rainfall, proximity, elevation, and data availability.

► STEP 6: CALCULATE MINIMUM AREA AND VOLUME OF EACH IMP

The minimum area of bioretention facilities and flow-through planters is found by summing up the contributions of each tributary DMA and multiplying by the adjusted sizing factor for the IMP. Note that if the IMP is designed to provide hydromodification flow control, then sizing factors from the using the BMP Sizing Calculator, BMP sizing factor tables, or other methods outlined in Chapter 1 of this document or in the Final HMP (Appendix H) may be used in lieu of the "water quality only" sizing factors presented in Table 4-6.

Equation 4-7

$$Min.\,IMP\,Area = \sum \begin{pmatrix} DMA & DMA \\ Square & \times Runoff \\ Footage & Factor \end{pmatrix} \times \begin{pmatrix} IMP \\ Sizing \\ Factor \end{pmatrix}$$

Use the format of Table 4-12 to present the calculations of the required minimum area and volumes for **bioretention areas** and **planter boxes**:

TABLE 4-12. Format for Presenting Calculations of Minimum IMP Areas for Bioretention Areas and Planter Boxes.

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area × runoff factor	Soil Type:	IMP Name			
					IMP Sizing factor (WQ only)		Minimum Area	Proposed Area	
			Total		*0.04*				*IMP Area*

To size **dry wells**, **infiltration basins**, or **infiltration trenches for the "water quality only" treatment option**, use the following procedure:

1. Use the County of San Diego's 85th Percentile Isopluvial Map to determine the minimum unit volume.
2. Determine the weighted runoff factor ("C" factor) for the area tributary to the facility. The factors in Table 4-2 may be used.
3. Multiply the weighted runoff factor times the tributary area times the minimum unit volume.

Equation 4-8

$$Volume = [Tributary\ Area] \times [weighted\ runoff\ \ factor] \times [unit\ volume]$$

4. Select a facility depth.
5. Determine the required facility area. Dry wells may be designed as an open vault or with rock fill. If rock fill is used, assume a porosity of 40%.
6. Ensure the facility can infiltrate the entire volume within 72 hours, or the minimum drawdown time determined by the City.

To size a **cistern or vault in series with a bioretention facility (criteria below for "water quality**:

1. Use Equation 4-12 to calculate the required cistern or vault volume.
2. Design a discharge orifice for a drawdown time of 24 hours.
3. Determine the maximum discharge from the orifice.
4. The minimum area of the bioretention facility must treat this flow based on a percolation rate of 5" per hour through the engineered soil.

If a facility is designed to provide both water quality treatment and hydromodification flow control, using the BMP Sizing Calculator, BMP sizing factor tables, or other methods outlined in Chapter 1 of this document or in the Final HMP (Appendix H) may be used to determine the appropriate sizing factors for the IMP design.

► STEP 7: DETERMINE IF AVAILABLE SPACE FOR IMP IS ADEQUATE

Sizing and configuring IMPs may be an iterative process. After computing the minimum IMP area using Steps 1 – 6, review the site plan to determine if the reserved IMP area is sufficient. If so, the planned IMPs will meet the SUSMP sizing requirements. If not, revise the plan accordingly. Revisions may include:

- Reducing the overall imperviousness of the project site.
- Changing the grading and drainage to redirect some runoff toward other IMPs which may have excess capacity.
- Making tributary landscaped DMAs self-treating or self-retaining.
- Expanding IMP surface area.

► STEP 8: COMPLETE YOUR SUMMARY REPORT

Present your IMP sizing calculations in tabular form. Adapt the following format as appropriate to your project. Coordinate your presentation of DMAs and calculation of minimum IMP sizes with the Project Submittal drawing (labeled to show delineation of DMAs and locations of IMPs). It is also helpful to incorporate a brief description of each DMA and each IMP.

Sum the total area of all DMAs and IMPs listed and show it is equal to the total project area. This step may include adjusting the square footage of some DMAs to account for area used for IMPs.

Format:

Project Name:

Project Location:

APN or Subdivision Number:

Total Project Area (square feet):

Mean Annual Precipitation at Project Site:

I. Self-treating areas:

DMA Name	Area (square feet)

II. Self-retaining areas:

DMA Name	Area (square feet)

III. Areas draining to self-retaining areas:

DMA Name	Post-project surface type	Runoff factor	Area (square feet)	Receiving self-retaining DMA	Receiving self-retaining DMA Area (square feet)

IV. Areas draining to IMPs (repeat for each IMP):

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area × runoff factor	Soil Type:	IMP Name			
					IMP Sizing factor		Minimum Area or Volume	Proposed Area or Volume	
				Total					*IMP Area*

Specify Preliminary Design Details

In your Project Submittal, describe your IMPs in sufficient detail to demonstrate the area, volume, and other criteria of each can be met within the constraints of the site.

Ensure these details are consistent with preliminary site plans, landscaping plans, and architectural plans submitted with your application for planning and zoning approvals.

Appendix B includes design sheets for:

- Self-treating and self-retaining areas
- Pervious pavements
- Bioretention facilities
- Flow-through planter
- Dry wells and infiltration basins
- Cistern or vault with bioretention facility

These design sheets include recommended configurations and details, and example applications, for these IMPs. **The information in these design sheets must be adapted and applied to the**

conditions specific to the development project such as unstable slopes or the lack of available head. Designated municipal staff have final review and approval authority over the project design.

Keep in mind that proper and functional design of the IMP is the responsibility of the applicant. Effective operation of the IMP throughout the project's lifetime will be the responsibility of the property owner.

Alternatives to Integrated LID Design

If you believe design of features and facilities as described above is infeasible for your development site, consult with Engineering staff before preparing an alternative design for storm water treatment, flow control, and LID compliance.

For all alternative designs, the applicant must prepare a complete Project Submittal, including a drawing showing the entire site divided into discrete Drainage Management Areas, text and tables showing how drainage is routed from each DMA to a treatment facility, and calculations demonstrating that the design achieves the applicable design criteria for each storm water treatment facility. Alternative treatment facilities are limited to the circumstances and selection criteria identified beginning on page 39. The Project Submittal must also show how the project meets the minimum LID criteria (page 43) and ensures runoff rates, durations, and velocities are controlled to maintain or reduce downstream erosion conditions and protect stream habitat (NPDES Permit Provision D.1.d.(10)).

► DESIGN OF ALTERNATIVE TREATMENT FACILITIES

Here are criteria and design considerations for some alternative treatment facilities, also known as treatment control BMPs:

Sand Filters. To ensure effectiveness is not compromised by compacting or clogging of the filter surface, sand filters must be maintained frequently.

The following criteria apply to sand filters:

- Calculate the design flow using the rational method with an intensity of 0.2"/hour and the "C" factors for "treatment only" from Table 4-2.
- To determine the required filter surface area, divide the design flow by an allowable design surface loading rate of 5"/hour.
- The minimum depth of filter media is 18". The media should be washed sand, with gradation similar to that specified for fine aggregate in ASTM C-33.
- The entire filter area must be accessible for easy maintenance without the need to enter a confined space.

A typical filter design includes a gravel drain layer and a perforated pipe underdrain. Filter fabric may be used to prevent the filter media from entering the gravel layer.

The design should not include any permanent pool or other standing water. Instead of including a pretreatment basin, consider the following features in the area tributary to the filter to reduce the potential for filter clogging:

- Limit the size of the Drainage Management Area.
- Include only impervious areas in the DMA.
- Stabilize slopes and eliminate sources of sediment in the DMA.
- Provide screens for trash and leaves at storm drain inlets (if allowed by the City of La Mesa).

For additional design considerations and details, see *Design of Stormwater Filtering Systems* by Richard A. Claytor and Thomas R. Schueler, The Center for Watershed Protection, 1996, and *California Stormwater BMP Handbooks* Fact Sheet TC-40, Media Filter.

Sand filters do not provide adequate hydromodification flow controls.

Extended ("Dry") Detention Basins. The required detention volume for water quality treatment is based on the 85th percentile 24-hour storm depth. The steps to calculate the required detention volume are:

1. Use the County of San Diego's 85th Percentile Isopluvial Map to determine the unit basin volume.
2. Determine the weighted runoff factor ("C" factor) for the area tributary to the basin. The factors in Table 4-2 may be used.
3. Multiply the weighted runoff factor times the tributary area times the unit basin volume.

For maximum effectiveness the basin should not be sized substantially larger than this volume. If the basin is to be used for hydromodification flow control, then the BMP Sizing Calculator pond sizer or a continuous simulation model must be used to prove the basin meets peak flow and flow duration criteria.

For design considerations and details, see the *California Stormwater Best Management Practice Handbooks*, Fact Sheet TC-22, "Extended Detention Basins." The basin outlet should be designed for a 24-hour drawdown time.

As noted in Fact Sheet TC-22, "dry" detention basins may not be practicable for drainage areas less than 5 acres. The potential for mosquito harborage is a concern. In the design, do not create any areas that will hold standing water for 72 hours or more, the maximum drawdown time as determined by the City of La Mesa.

"Wet" Detention Ponds and Constructed Wetlands. The required water quality detention volume is determined as with a "dry" detention basin. If the pond is to be used for hydromodification flow control, then the BMP Sizing Calculator pond sizer or a continuous simulation model must be used to prove the pond meets peak flow and flow duration criteria. Before proceeding with design, contact the local mosquito control agency to coordinate the design and plan ongoing inspection and maintenance of the facility for mosquito control. For design considerations and details, see the *California Stormwater Best Management Practices Handbooks*, Fact Sheet TC-20, "Wet Ponds," and Fact Sheet TC-21, "Constructed Wetlands."

Vegetated Swales. Design recommendations for conventional vegetated swales are in the *California Stormwater Best Management Practices Handbooks*. The conventional swale design uses available on-site soils and does not include an underdrain system. Where soils are clayey, there is little infiltration. Treatment occurs as runoff flows through grass or other vegetation before exiting at the downstream end. Recommended detention times are on the order of 10 minutes. It should be noted that such designs likely would not provide the required hydromodification flow control.

Conventional vegetated swales may be used to meet NPDES permit treatment requirements and LID requirements (see page 39). The following should be incorporated in the design:

- Determine the weighted runoff factor ("C" factor) for the area tributary to the swale. The factors in Table 4-2 may be used.
- Calculate the design flow by multiplying the weighted runoff factor times the tributary area times either (1) 0.2 inches of rainfall per hour, or (2) twice the 85th percentile hourly rainfall intensity.
- When sizing the swale, use a value of 0.25 for Manning's "n".
- Ensure that all flow enters the swale near its highest point and that no flow short-circuits treatment by entering the swale along its length.
- The swale should be a minimum 100 feet in length.
- Longitudinal slopes should not exceed 2.5%; on flatter slopes, incorporate measures to avoid prolonged surface ponding.

Consider using linear-shaped bioretention areas in place of conventional vegetated swales because:

- Conventional swale design has resulted in standing water and associated nuisances.
- Conventional swales often don't obtain even the design residence time because of the length required and because proper design requires runoff enter the swale at the upstream end rather than at various locations along its length, and
- Bioretention areas provide a more flexible drainage design, more effective practicable treatment, and more effective flow control within the same footprint.

In the western part of San Diego County (west of the Pacific Ocean drainage divide), rock swales would not generally provide adequate water quality treatment. In the eastern portion of the County, rock swales could potentially be used as part of the water quality treatment design given the prevalence of high-infiltration sandy soils and the harsh climatic conditions which prevent vegetation establishment. Implementation of rock swales would require approval from the City. The design of vegetated strips, potentially allowed by the City on a case-by-case basis, should follow Caltrans design guidance.

► TREATMENT FACILITIES FOR SPECIAL CIRCUMSTANCES

Higher-rate surface filters and vault-based proprietary filters can only be used in the circumstances described beginning on page 39 and when sand filters, extended "dry" detention basins, and "wet" detention ponds or constructed wetlands have been found infeasible.

For surface filters, the grading and drainage design should minimize the area draining to each unit and maximize the number of discrete drainage areas and units. Proprietary facilities should be installed consistent with the manufacturer's instructions. It should be noted that such designs likely would not provide the required hydromodification flow control.

References and Resources:

- RWQCB Order R9-2007-0001 (Storm Water NPDES Permit)
- Low Impact Development Center
- *County of San Diego Low Impact Development Handbook*
- *California Best Management Practices Handbooks*
- *Design of Stormwater Filtering Systems* (Claytor and Schueler, 1996)
- American Rainwater Catchment Systems Association
- Water Conservation Alliance of Southern Arizona
- *Rainwater Harvesting for Drylands and Beyond*
- *The Texas Manual on Rainwater Harvesting*
- *Managing Wet Weather With Green Infrastructure: Municipal Handbook, Rainwater Harvesting Policies* (Low Impact Development Center, 2008)

Chapter 5

Operation & Maintenance of Storm Water Facilities

How to prepare a customized Storm Water Maintenance Plan for the treatment BMPs on your site.

The storm water NPDES Permit requires the City of La Mesa to verify all treatment and flow-control facilities are adequately maintained. Note that treatment facilities include both LID IMPs and treatment control BMPs. Facilities you install as part of your project will be verified for effectiveness and proper performance. The City of La Mesa may also verify the ongoing function of storm water management features that are not treatment or flow control facilities, such as permeable pavements and limitations on impervious area.

Operation and maintenance of storm water facilities is a six-stage process:

1. Determine **who will own** the facility and be responsible for the maintenance of treatment facilities. Identify the means by which ongoing maintenance will be assured (for example, a maintenance agreement that runs with the land).

2. Identify typical maintenance requirements, and allow for these requirements in your project planning and preliminary design.

3. Prepare a **maintenance plan** for the site incorporating detailed requirements for **each treatment and flow-control facility**.

4. **Maintain** the facilities from the time they are constructed until ownership and maintenance responsibility is formally transferred.

5. **Formally transfer** operation and maintenance **responsibility** to the site owner or occupant. A warranty, secured by a bond, or other financial instrument, may be required to secure against lack of performance due to flaws in design or construction.

6. Maintain the facilities in perpetuity and comply with self-inspection, reporting, and verification requirements.

See the schedule for these stages in Table 5-1.

Stage 1: Ownership and Responsibility

You must specify a means to **ensure maintenance** of treatment and flow-control facilities **in perpetuity.**

Depending on the intended use of your site, this will require one or more of the following:

- Project proponent agreement to maintain storm water BMPs: The City may enter into a contract with the project proponent obliging the project proponent to maintain, repair, and replace the storm water BMP as necessary into perpetuity. Security may be required.

- Assessment districts: The City may approve an Assessment District or other funding mechanism proposed by the project proponent to provide funds for storm water BMP maintenance, repair, and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.

- Lease provisions: In those cases where the City holds title to the land in question, and the land is being leased to another party for private or public use, the City may assure storm water BMP maintenance, repair, and replacement through conditions in the lease.

- Public entity maintenance: The City may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the permanent treatment BMP. Unless acceptable to the City, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed, (e.g., through a trust fund, assessment district fees, bond, letter of credit or similar means). In addition, the City may seek protection from liability by appropriate releases and indemnities. The City shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The City shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions; and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the facilities. The City must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

The City may accept alternative maintenance mechanisms if such mechanisms are as protective as those listed above.

Ownership and maintenance responsibility for treatment and flow-control facilities should be discussed at the **beginning of project planning**, typically at the pre-application meeting for

planning and zoning review. Experience has shown provisions to finance and implement maintenance of treatment and flow-control facilities can be a major stumbling block to project approval, particularly for **small residential subdivisions**. (See "New Subdivisions" in Chapter 1.)

► PRIVATE OWNERSHIP AND MAINTENANCE

The City of La Mesa requires—as a condition of project approval—that a maintenance agreement be executed.

TABLE 5-1. Schedule for Planning Operation and Maintenance of Storm Water Treatment BMPs

Stage	*Description*	*Schedule*
1	Determine facility ownership and maintenance responsibility	Discuss with planning staff at pre-application meeting
2	Identify typical maintenance requirements	In initial submittal, coordinate with planning & zoning application
3	Develop detailed operation and maintenance plan	Provided with Project Submittal, and updated as necessary if any information changes prior to Stage 5.
4	Interim operation and maintenance of facilities	During and following construction including warranty period
5	Formal transfer of operation & maintenance responsibility	On sale and transfer of property or permanent occupancy
6	Ongoing maintenance and compliance with inspection & reporting requirements	In perpetuity

These agreements could provide that the City of La Mesa may collect a management and/or inspection fee established by a standard fee schedule, as applicable. In addition, the agreement may provide that, if the property owner fails to maintain the storm water facility, the City may enter the property, restore the storm water facility to good working order, and obtain reimbursement, including administrative costs, from the property owner.

► TRANSFER TO PUBLIC OWNERSHIP

The City of La Mesa may sometimes choose to have a treatment and flow-control facility deeded to the public, in fee or as an easement, and maintain the facility as part of the municipal storm drain system. The City may recoup the costs of maintenance through a special tax, assessment district, or similar mechanism.

Locating an IMP in a public right-of-way or easement creates an additional design constraint—along with hydraulic grade, aesthetics, landscaping, and circulation. However, because sites typically drain to the street, it may be possible to locate a bioretention swale parallel with the edge of the parcel. The facility may complement, or substitute for, an underground storm drain system.

Even if the facility is to be transferred to the City of La Mesa after construction is complete, it is still the responsibility of the builder to identify general operation and maintenance requirements, prepare a detailed operation and maintenance plan, and to maintain the facility until that responsibility is formally transferred.

Stage 2: General Maintenance Requirements

Include in your Project Submittal a general description of anticipated facility maintenance requirements. This will help ensure that:

- Ongoing costs of maintenance have been considered in your facility selection and design.
- Site and landscaping plans provide for access for inspections and by maintenance equipment.
- Landscaping plans incorporate irrigation requirements for facility plantings.
- Initial maintenance and replacement of facility plantings is incorporated into landscaping contracts and guarantees.

Fact sheets available on the Project Clean Water web page describe general maintenance requirements for the types of storm water facilities featured in the LID Design Guide (Chapter 4). You can use this information to specify general maintenance requirements in your Project Submittal.

Maintenance fact sheets for conventional storm water facilities are available in the California Stormwater BMP Handbooks.

Stage 3: Detailed Maintenance Plan

Prepare a detailed maintenance plan and submit it as required by the City of La Mesa. A detailed maintenance plan must be included with the initial Project Submittal; however the maintenance plan may later be updated to incorporate solutions to any problems or changes that occurred during project construction.

Your detailed maintenance plan should be kept on-site for use by maintenance personnel and during site inspections. It is also recommended that a copy of your initial Project Submittal be kept onsite as a reference.

► YOUR DETAILED MAINTENANCE PLAN: STEP BY STEP

The following step-by-step guidance will help you prepare your detailed maintenance plan.

Preparation of the plan will require familiarity with your storm water facilities as they have been or will be constructed and a fair amount of "thinking through" plans for their operation and maintenance.

► STEP 1: DESIGNATE RESPONSIBLE INDIVIDUALS

To begin creating your detailed maintenance plan, designate and identify:

- The individual who will have direct responsibility for the maintenance of storm water controls. This individual should be the designated contact with City inspectors and should sign self-inspection reports and any correspondence with the City of La Mesa regarding verification inspections.
- Employees or contractors who will report to the designated contact and are responsible for carrying out BMP operation and maintenance.
- The corporate officer authorized to negotiate and execute any contracts that might be necessary for future changes to operation and maintenance or to implement remedial measures if problems occur.
- Your designated respondent to problems, such as clogged drains or broken irrigation mains, that would require immediate response should they occur during off-hours.

Updated contact information must be provided to the City of La Mesa immediately whenever a property is sold and whenever designated individuals or contractors change.

Draw or sketch an **organization chart** to show the relationships of authority and responsibility between the individuals responsible for maintenance. This need not be elaborate, particularly for smaller organizations.

Describe how **funding for BMP operation and maintenance** will be assured, including sources of funds, budget category for expenditures, process for establishing the annual maintenance budget, and process for obtaining authority should unexpected expenditures for major corrective maintenance be required.

Describe how your organization will accommodate initial **training** of staff or contractors regarding the purpose, mode of operation, and maintenance requirements for the storm water facilities on your site. Also, describe how your organization will ensure ongoing training as needed and in response to staff changes.

► STEP 2: SUMMARIZE DRAINAGE AND BMPS

Incorporate the following information from your Project Submittal into your maintenance plan:

- Figures delineating and designating pervious and impervious areas.
- Figures showing locations of storm water facilities on the site.
- Tables of pervious and impervious areas served by each facility.

Review the Project Submittal narrative, if any, that describes each facility and its tributary drainage area and update the text to incorporate any changes that may have occurred during planning and zoning review, building permit review, or construction. Incorporate the updated text into your maintenance plan.

► STEP 3: DOCUMENT FACILITIES "AS BUILT"

Include the following information from final construction drawings:

- Plans, elevations, and details of all facilities. Annotate if necessary with designations used in the initial Project Submittal.
- Design information or calculations submitted in the detailed design phase (i.e., not included in the initial Project Submittal.)
- Specifications of construction for facilities, including sand or soil, compaction, pipe materials and bedding.

In the maintenance plan, note field changes to design drawings, including changes to any of the following:

- Location and layouts of inflow piping, flow splitter boxes, and piping to off-site discharge
- Depths and layering of soil, sand, or gravel
- Placement of filter fabric or geotextiles
- Changes or substitutions in soil or other materials.
- Natural soils encountered (e.g., sand or clay lenses)

► STEP 4: PREPARE MAINTENANCE PLANS FOR EACH FACILITY

Prepare a maintenance plan, schedule, and inspection checklists (routine, annual, and after major storms) for each facility. Plans and schedules for two or more similar facilities on the same site may be combined.

Use the following resources to prepare your customized maintenance plan, schedule, and checklists.

- Specific information noted in Steps 2 and 3, above.
- Other input from the facility designer, municipal staff, or other sources.
- Operation and Maintenance Fact Sheets (available on the Project Clean Water website).

Note any particular characteristics or circumstances that could require attention in the future, and include any troubleshooting advice.

Also include manufacturer's data, operating manuals, and maintenance requirements for any:

- Pumps or other mechanical equipment.
- Proprietary devices used as BMPs.

Manufacturers' publications should be referenced in the text (including models and serial numbers where available). Copies of the manufacturers' publications should be included as an attachment in the back of your maintenance plan or as a separate document.

► STEP 5: COMPILE MAINTENANCE PLAN

The following general outline is provided as an example.

I. Inspection and Maintenance Log

II. Updates, Revisions and Errata

III. Introduction

A. Narrative overview describing the site; drainage areas, routing, and discharge points; and treatment facilities.

IV. Responsibility for Maintenance

A. General

(1) Name and contact information for responsible individual(s).

(2) Organization chart or charts showing organization of the maintenance function and location within the overall organization.

(3) Reference to Operation and Maintenance Agreement (if any). A copy of the agreement should be attached.

(4) Maintenance Funding

(1) Sources of funds for maintenance

(2) Budget category or line item

(3) Description of procedure and process for ensuring adequate funding for maintenance

B. Staff Training Program

C. Records

D. Safety

V. Summary of Drainage Areas and Storm Water Facilities

A. Drainage Areas

(1) Drawings showing pervious and impervious areas (copied or adapted from initial Project Submittal).

(2) Designation and description of each drainage area and how flow is routed to the corresponding facility.

B. Treatment and Flow-Control Facilities

(1) Drawings showing location and type of each facility

(2) General description of each facility (Consider a table if more than two facilities)

(1) Area drained and routing of discharge.

(2) Facility type and size

VI. Facility Documentation

A. "As-built" drawings of each facility (design drawings in the draft Plan)

B. Manufacturer's data, manuals, and maintenance requirements for pumps, mechanical or electrical equipment, and proprietary facilities (include a "placeholder" in the draft plan for information not yet available).

C. Specific operation and maintenance concerns and troubleshooting

VII. Maintenance Schedule or Matrix

A. Maintenance Schedule for each facility with specific requirements for:

(1) Routine inspection and maintenance

(2) Annual inspection and maintenance

(3) Inspection and maintenance after major storms

B. Service Agreement Information

Assemble and make copies of your maintenance plan. One copy must be submitted to the City of La Mesa, and at least one copy kept on-site. Here are some suggestions for formatting the maintenance plan:

- Format plans to 8½" x 11" to facilitate duplication, filing, and handling.
- Include the revision date in the footer on each page.
- Scan graphics and incorporate with text into a single electronic file. Keep the electronic file backed-up so that copies of the maintenance plan can be made if the hard copy is lost or damaged.

► STEP 6: UPDATES

Your maintenance plan will be **a living document**.

Operation and maintenance personnel may change; mechanical equipment may be replaced, and additional maintenance procedures may be needed. Throughout these changes, the maintenance plan must be kept up-to-date.

Updates may be transmitted to the City of La Mesa at any time. However, at a minimum, updates to the maintenance plan must be reported with the annual submittal of the "BMP Inspection & Maintenance Verification Form," or equivalent, to the City.

Stage 4: Interim Maintenance

Applicants will typically be required to warranty storm water facilities against lack of performance due to flaws in design or construction. The warranty may need to be secured by a bond or other financial instrument.

Stage 5: Transfer Responsibility

As part of the detailed maintenance plan, note the expected date when responsibility for operation and maintenance will be transferred. Notify the City of La Mesa when this transfer of responsibility takes place.

Stage 6: Operation & Maintenance Verification

The City of La Mesa implements an operation and maintenance verification program, including periodic site inspections.

Contact municipal staff to determine the frequency of inspections, whether self-inspections are allowed, and applicable fees, if any.

References and Resources

- *Urban Runoff Quality Management* (WEF/ASCE, 1998). pp 186-189.
- *Stormwater Management Manual* (Portland, 2004). Chapter 3.
- *California Storm Water Best Management Practice Handbooks* (CASQA, 2003).
- *Best Management Practices Guide* (Public Telecommunications Center for Hampton Roads, 2002).
- Operation, Maintenance, and Management of Stormwater Management Systems (Watershed Management Institute, 1997)

Chapter 6

Construction BMP Requirements and Performance Standards

Guideline to meeting construction BMP requirements in the SWPPP or CSWMP for your site.

The storm water NPDES Permit requires the City of La Mesa to regulate construction activities within the City in order to reduce construction site discharges of pollutants from the MS4 to the maximum extent practicable and to prevent construction site discharges from the MS4 from causing or contributing to a violation of water quality standards.

Compliance with the City of La Mesa's construction BMP requirements is a four-step process:

1. Determine the applicable storm water requirements for your site.
2. Prepare and submit the appropriate plans.
3. Determine the adequacy of the plans proposed.
4. Assure implementation and maintenance of the requirements.

These steps are described below in greater detail.

Construction Storm Water BMP Requirements

The flow chart in Figure 6-1, "Construction Permit Review & Approval Process" describes how storm water requirements are incorporated into projects during the construction permit review process. The steps below describe the elements of the plan review and permitting processes for storm water best management practice (BMP) requirements.

FIGURE 6-1. Construction Permit Review and Approval Process

The following figure provides an overview of the project review process for projects that require a construction permit from the City of La Mesa. Construction permits include building permits, grading permits, demolition permits, and encroachment permits.

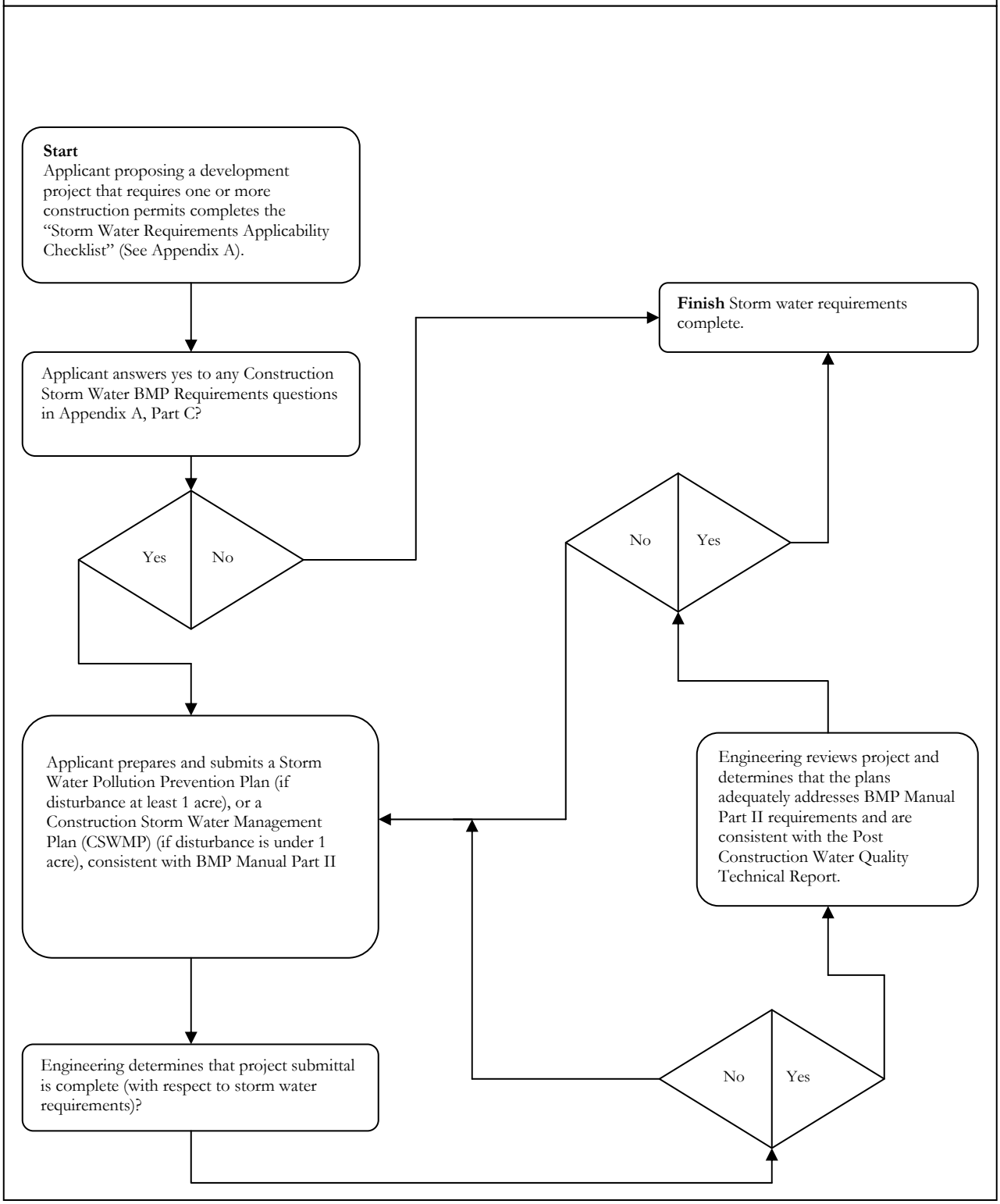

► STEP 1: DETERMINE APPLICABLE STORM WATER BMP REQUIREMENTS

Prior to submittal, applicants must complete the "Storm Water Requirements Applicability Checklist" in Appendix A, to determine if their project is subject to construction and/or permanent storm water best management practice (BMP) requirements. Projects subject to the construction storm water best management practices requirements must comply with the standards included in this BMP Manual, as appropriate depending on the site conditions, season, and project design, and construction methods. Each project must be given a priority ranking (high, medium, or low) for the construction phase (see Appendix A). The prioritization will determine the inspection frequency by the City but will not change the construction BMP requirements. Refer to Step 2: "Prepare & Submit Appropriate Plans," for guidance in navigating through this BMP Manual to ensure construction BMP performance standards are met.

► STEP 2: PREPARE & SUBMIT APPROPRIATE PLANS

This BMP Manual describes the construction site management requirements that contractors must comply with. In addition, the next section of this chapter ("Construction Storm Water BMP Performance Standards") lists the performance standards that construction sites must meet, and provides a list of required erosion control, sediment control, and materials management BMPs for reference. Additionally, each project must determine if they are subject to s requirements and be given a priority of high, medium or low (see Appendix A).

Construction Projects Over 1 Acre. Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in the next section of this chapter, "Construction Storm Water BMP Performance Standards." If a project disturbs 1 acre or more, the applicant must provide a Storm Water Pollution Prevention Plan (SWPPP), which identifies all construction BMP requirements required by this chapter, in accordance with the current State General Permit for Storm Water Discharges Associated with Construction Activity (State General Construction Permit). Consistent with the State General Construction Permit, the City will require that <u>both</u> erosion and sediment control BMPs be installed and maintained for all applicable projects in addition to good housekeeping and site and materials management. Additionally, the State General Construction Permit has a requirement for a sampling and monitoring program to be implemented. Additionally, each project determined to be subject to the City's advanced treatment requirements (see Appendix A) will need to include details on how the site plans to meet these requirements in the SWPPP and/or erosion control plan. Appendix D provides general guidelines for preparation of a SWPPP as well as a more detailed checklist to meet the requirements.

Construction Projects Under 1 Acre. Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in the next section of this chapter, "Construction Storm Water BMP Performance Standards." For projects that disturb less than 1-acre and are determined to have a potential to impact water quality during construction, the applicant must provide a Construction Storm Water Management Plan (CSWMP), which identifies all

construction BMP requirements required in this chapter, with the project submittal. The CSWMP shall depict the BMPs to be implemented during construction to reduce/eliminate discharges of pollutants to the storm drain conveyance system. The CSWMP shall include but not be limited to erosion and sediment control BMPs, good housekeeping measures and site and materials management.

After preparing plans and supporting documents according to the requirements in this BMP Manual, submit plans to the Department of Public Works/Engineering for review (See Step 3).

► STEP 3: DETERMINE ADEQUACY OF PROPOSED PLANS

Under the authority of the City Engineer, Engineering staff will review submitted plans for compliance with the applicable storm water requirements contained in this BMP Manual. The City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs. After all storm water requirements have been approved by the City Engineer, proceed to Step 4 to assure implementation and maintenance of the approved BMPs through permit conditions, plan notes, and if necessary, maintenance agreements.

► STEP 4: ASSURE IMPLEMENTATION & MAINTENANCE OF REQUIREMENTS

Applicants must provide assurances that permanent storm water BMPs will be constructed and permanently maintained throughout the use of a developed site, and that construction BMPs will be implemented and maintained until construction is complete. The summaries below describe how construction and permanent BMP requirements must be assured during both discretionary actions and construction permit review processes. After the City Engineer has approved all construction and/or permanent BMPs, refer to the final section of this chapter, "Implementation and Maintenance of Requirements," to determine how construction and permanent BMP implementation and maintenance will be assured.

Discretionary Action. For any discretionary action, permanent storm water requirements shall be incorporated into the project design and be shown on the plans. In addition, project shall be conditioned to execute a maintenance agreement for ongoing permanent BMP maintenance, satisfactory to the City Engineer, prior to the issuance of any construction permits. This requirement shall be noted on the plans for the discretionary action. If the project will be required to provide construction BMPs, the permit/approval shall include the "Standard Construction BMP Implementation and Maintenance Condition" listed in "Implementation and Maintenance of Requirements" at the end of this chapter.

Construction Permits. For projects requiring construction permits, construction and permanent BMP requirements shall be incorporated into the project design and shown on the plans prior to the issuance of any permits. The project applicant shall execute a permanent BMP maintenance agreement, satisfactory to the City Engineer, prior to issuance of any construction permits. Construction maintenance requirements and the specific permanent BMP maintenance procedures shall be noted on the plans. Any construction BMP requirements that cannot be shown graphically must be noted on the plans.

Construction Storm Water BMP Performance Standards

Those projects that have been determined to require construction BMPs in Steps 1 and 2 of this chapter must identify the construction BMPs to be implemented in accordance with the performance standards in this section. The construction BMPs must be identified in a Storm Water Pollution Prevention Plan or Construction Storm Water Management Plan (CSWMP) for projects disturbing more than or less than 1 acre, respectively. Because all projects require BMPs during construction, those projects that disturb less than 1 acre are required to have a Construction Storm Water Management Plan (CSWMP) which identifies the pollution prevention measures that will be taken. These plans must be prepared in accordance with the guidelines in Appendix D.

► 1. MINIMUM CONSTRUCTION BMP REQUIREMENTS

The City has developed a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to select, install, and maintain general site management, soil stabilization and erosion prevention, and sediment containment BMPs to reduce, retain, and manage pollutant discharges to the MEP. Table 6-1 outlines the minimum construction BMPs required by the City along with the corresponding current fact sheets obtained from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual (2003), where applicable. Additional information on the BMPs included in Table 6-1 can be found in the City of La Mesa Jurisdictional Urban Runoff Management Plan (JURMP), the Model Construction Program for San Diego Copermittees, the City of Los Angeles "Reference Guide for Stormwater Best Management Practices," and the California Stormwater Quality Association (CASQA) BMP Handbook for Construction.

It is the responsibility of the property owner or his/her designee to select, install and maintain appropriate BMPs that meet the City's minimum BMP requirements outlined in Table 6-1 below. BMPs must be installed in accordance with an industry recommended standard or in accordance with the requirements of the State General Construction Permit.

TABLE 6-1. Minimum Required BMPs for Construction

BMP Type	Minimum Required BMP(s)	Corresponding Caltrans Fact sheet
General Site Management		
Project Planning	Preserve natural hydrologic features where feasible	-
	Preserve riparian buffers and corridors where feasible	-
	Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction	-
	Minimize exposure time of disturbed soil areas	SS-1
	Minimize grading during the wet season and correlate grading with seasonal dry weather periods to the extent feasible	SS-1
	Temporarily stabilize and reseed disturbed soil areas as rapidly as feasible	SS-1

BMP Type	Minimum Required BMP(s)	Corresponding Caltrans Fact sheet
	Educate construction site employees and subcontractors on minimum BMP requirements	-
Pollution Prevention	Prevent the contamination of storm water from vehicles and equipment through proper management of the following types of activities: - Cleaning - Fueling - Maintenance	 NS-8 NS-9 NS-10
	Prevent the contamination of storm water from construction materials through proper management of the following types of activities: - Material Delivery and Storage - Material Use - Stockpile Management[1] - Spill Prevention and Control	 WM-1 WM-2 WM-3 WM-4
	Prevent the contamination of storm water by wastes through proper management of the following types of wastes: - Solid Waste - Hazardous Waste - Contaminated Soil - Concrete - Sanitary Waste - Liquid	 WM-5 WM-6 WM-7 WM-8 WM-9 WM-10
	Prevent the contamination of storm water through proper management of the follow activities: - Water Conservation Practices - Dewatering Operations - Paving and Grinding - Potable Water/Irrigation and Flushing	 NS-1 NS-2 NS-3 NS-7
Erosion Prevention and Sediment Containment		
Soil Stabilization and Erosion Prevention	Preserve existing vegetation where feasible	SS-2
	Prevent erosion and sediment runoff from exposed graded areas through physical stabilization and/or vegetation stabilization[2] by implementing one or more of the following BMPs: - Hydraulic Mulch - Hydroseeding - Soil Binders - Straw Mulch - Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats - Wood Mulch - Earth Dikes/Drainage Swales	 SS-3 SS-4 SS-5 SS-6 SS-7 SS-8 SS-9
	Reduce the velocity of storm water by using one or more of the following: - Outlet Protection/Velocity Dissipation - Slope Drains	 SS-10 SS-11
	Establish permanent re-vegetation or landscaping as early as feasible	SS-1

BMP Type	Minimum Required BMP(s)	Corresponding Caltrans Fact sheet
Sediment Containment	Protect the Perimeter of the site or exposed area from sediment discharge using one or more of the following: - Silt Fence - Gravel Bag Berm - Fiber Rolls	 SC-1 SC-6 SC-5
	Capture sediments in channeled storm water by using one or more of the following: - De-silting Basin[3] - Storm Drain Inlet Protection - Sediment Trap - Gravel Bag Barrier	 SC-2 SC-10 SC-3 SC-8
	Prevent sediment from being tracked off-site by using one or more of the following: - Stabilized Construction Entrance - Construction Road Stabilization - Entrance/Exit Tire Wash - Street Sweeping	 TC-1 TC-2 TC-3 SC-7

1. Stockpiles should be fully covered when materials are not being added or removed.
2. Vegetation stabilization BMPs must be installed, irrigated, and established (uniform vegetative coverage with 70% coverage established) prior to October 1st. In the event stabilizing vegetation has not been established by October 1st, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.
3. De-silting basins must be designed in accordance with industry standards such as Caltrans. If the project is one acre or greater the de-silting basin must be designed in accordance with the current State General Construction Permit.

► 2. SITE MANAGEMENT REQUIREMENTS

Construction is a dynamic operation where changes are expected. Storm water BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain their effectiveness and may require relocation, revision, and re-installation, particularly as project grading progresses. Therefore, owner/contractor self- inspections are required. They shall be performed by the owner's/contractor's Qualified Contact Person specifically trained in storm water pollution prevention site management and storm water BMPs, including the installation and maintenance of sediment and erosion control measures. Additional qualified persons may assist with the inspection activities under the direction of the Qualified Contact Person. A Qualified Contact Person is required for all sites during both wet and dry weather conditions.

There are four primary purposes of the self-inspections conducted by owners and contractors:

- To ensure that the owners/contractors take full responsibility for managing storm water pollution caused by their activities.
- To ensure that storm water BMPs are properly documented and implemented and are functioning effectively.
- To identify maintenance (e.g., sediment removal) and repair needs.

- To ensure that the project proponents implement their storm water management plans.

A self-inspection checklist, noting date, time, conditions and inspection date, must be kept on-site and made available for inspection, if requested (note: the State General Construction Permit has additional inspection requirements that must be met to comply with the permit). Self-inspections must be performed by a Qualified Contact Person according to the following schedule:

- Daily forecasting at all times
- At 24-hour intervals during extended rainfall events
- Daily evaluations as earth moving/grading is being conducted during the wet season
- Weekly (every 7 days) in the dry season as earth moving/grading is progressing

Storm water pollution prevention site management requirements include:

A. A qualified person who is trained and competent in the use of BMPs shall be on site daily, although not necessarily full time, to evaluate the conditions of the site with respect to storm water pollution prevention. This qualified contact person shall represent the contractor/ owner on storm water issues.

B. The qualified person shall implement the conditions of the Storm Water Pollution Prevention Plan, contract documents, and/or local ordinances with respect to erosion and sediment control and other waste management regulations.

C. The qualified person is responsible for monitoring the weather and implementation of any emergency plans as needed. The weather shall be monitored on a 5-day forecast plan and a full BMP protection plan shall be activated when there is a 40% chance of rain.

D. The qualified person is responsible for overseeing any site grading and operations and evaluating the effectiveness of the BMPs. This person shall modify the BMPs as necessary to keep the dynamics of the site in compliance. This person or other qualified persons are responsible for checking the BMPs routinely for maintenance and documenting the BMPs being implemented.

► 3. PERFORMANCE STANDARDS

Construction The City Engineer will evaluate the adequacy of the owner's/contractor's site management for storm water pollution prevention, inclusive of BMP implementation, on construction sites based on performance standards for storm water BMPs. Poor BMP practices shall be challenged. Performance standards shall include:

A. No measurable increase of pollution (including sediment) in runoff from the site.

B. No slope erosion.

C. Water velocity moving offsite must not be greater than pre-construction levels.

A site will be considered inactive if construction activities have ceased for a period of 7 or more consecutive calendar days. At any time of year, an inactive site must be fully protected from erosion and discharges of sediment. It is also the owner's/contractor's responsibility at both active and inactive sites to implement a plan to address all potential non-storm water discharges.

Regardless of any inspections conducted by the City, property owners or contractors are required to prevent any construction-related materials, wastes, spills, or residues from entering a storm water conveyance system and to apply for coverage under the State General Construction Permit as applicable for the site.

► 4. SEASONAL REQUIREMENTS

BMP requirements differ between the wet season (Oct. 1 – Apr. 30) and the dry season (May 1 – Sept. 30), the type of the project and topography of the site, as described below.

A. Dry Season Requirements (May 1 through September 30) include but are not limited to:

A. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)

B. Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).

C. Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).

D. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

E. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.

F. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).

G. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

H. The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.

I. A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.

J. Properly protected, designated storage areas are required for materials and wastes.

K. All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.

L. Remnant trash and debris shall be removed and/or properly stored/disposed of daily.

M. Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.

N. Materials for spill control/containment must be stockpiled onsite.

O. Non-storm water discharges must be eliminated or controlled to the MEP.

B. Rainy Season Requirements (October 1 through April 30) include but are not limited to:

A. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)

B. Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).

C. Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).

D. Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.

E. At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.

F. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).

G. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

H. The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.

I. A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.

J. Properly protected, designated storage areas are required for materials and wastes.

K. All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.

L. Remnant trash and debris shall be removed and/or properly stored/disposed of daily.

M. Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.

N. Materials for spill control/containment must be stockpiled onsite.

O. Non-storm water discharges must be eliminated or controlled to the MEP.

P. Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.

Q. Perimeter protection and sediment containment BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.

R. Adequate soil stabilization and erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a selected BMP fails, it must be repaired, improved, or replaced with an acceptable alternate as soon as it is safe to do so.

S. All vegetation erosion prevention BMPs must be established prior to the rainy season to be considered as a BMP.

T. Standby erosion and sediment control BMPs must be able to protect all exposed soil areas. A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for seven or more calendar days. The ability to deploy standby BMP materials is not sufficient for these areas.

► 5. ADVANCED TREATMENT REQUIREMENTS

The City requires advanced treatment methods to be employed at construction sites determined to be an exceptional threat to water quality (see Appendix A). Advanced treatment involves using mechanical or chemical means to flocculate and remove suspended sediment from construction site runoff. Projects required to implement advanced treatment must comply with the following:

1. Treatment effluent water quality shall meet or exceed the water quality objectives for sediment, turbidity, and any other parameter deemed necessary by the City Engineer as listed in the Water Quality Control Plan for the San Diego Basin (9) for inland surface waters and lagoons and estuaries for the appropriate hydrologic unit.

2. Applicant shall provide design, operations and maintenance schedule, monitoring plan, certification of training of staff to the satisfaction of the City Engineer.

► 6. ADDITIONAL CONTROLS FOR CONSTRUCTION SITES

The Municipal Permit requires implementation of additional controls for construction sites tributary to 303(d) listed water body segments impaired for sediment or within, adjacent to, or discharging directly to coastal lagoons or other receiving waters within ESAs. Additional requirements for theses site will be determined on a site-by-site basis at the discretion of the City Engineer.

Implementation and Maintenance of Requirements

Discretionary Actions. Projects seeking discretionary approvals are not required to graphically demonstrate any construction BMP requirements on the project plans. Instead, the discretionary action shall include the following standard condition, which shall also be noted on the plans:

> "The Permittee or designee shall incorporate any construction best management practices (BMPs) necessary to comply with the grading regulations in Chapter 14.05 of the La Mesa Municipal Code, into the construction plans and/or specifications, satisfactory to the City Engineer, prior to the issuance of any construction permits."

Construction Permits for Projects Under 1 Acre. Projects proposing to disturb less than 1 acre during construction shall include construction BMP requirements, where possible, on the plans. Any remaining construction BMPs that cannot be shown graphically on the plans shall be either noted on, or stapled to, the plans and made a condition of the permit. The project's construction priority ranking (see Appendix A) must also be noted on the construction plans. Applicants proposing projects that include permanent BMPs must prepare (if not already prepared as part of a previous permit or approval), and execute a maintenance agreement, prepared satisfactory to the City, following the program described in Chapter 5 of this BMP Manual prior to the issuance of any construction permits. The permanent BMPs shall be

graphically shown on the plans, where possible, and made a condition of the project's permit/approval. The permanent BMP's operation and maintenance requirements (O & M plan discussed in Chapter 5 of this BMP Manual) shall also be noted on the plans and made a condition of the project's permit/approval.

Construction Permits for Projects Over 1 Acre. Projects proposing to disturb more than 1 acre during construction shall include all construction BMPs in a Storm Water Pollution Prevention Plan, prepared in accordance with Appendix D. The construction BMPs shall also be shown on the plans, where possible. Any remaining construction BMPs that cannot be shown graphically on the plans shall be either noted or stapled to the plans and made a condition of the permit. The project's construction priority ranking (see Appendix A) must also be noted on the construction plans. Applicants proposing projects that include permanent BMPs must prepare (if not already prepared as part of a previous permit or approval), and execute a maintenance agreement, prepared satisfactory to the City, following the program described in Chapter 5 of this BMP Manual prior to the issuance of any construction permits. The permanent BMPs shall be graphically shown on the plans, where possible, and made a condition of the project's permit/approval. The permanent BMP's operation and maintenance requirements (O & M plan discussed in Chapter 5 of this BMP Manual) shall also be noted on the plans and made a condition of the project's permit/approval.

Appendix

A

Storm Water Requirements Applicability Checklist

STORM WATER PROJECT DATA SHEET

PROJECT DATA:

Owner's Name & Phone No: _____

Address: _____ Permit No: _____

Project: _____ Date Applied: _____

PROJECT SITE DATA:

1. Area of the lot/parcel = _____ sf
2. Existing impervious area (roof/building foot print) = _____ sf
3. Existing impervious area (driveway, parking, walkway, hardscape etc.) = _____ sf
4. Impervious area after development (roof/building foot print) = _____ sf
5. Impervious area after development (driveway, parking, walkway, hardscape, etc.) = _____ sf
6. Total area to be disturbed = _____ sf
7. Storm water runoff based on Hydrology Study:

Existing runoff = _____ cfs, Post construction runoff = _____ cfs

8. Identify if the runoff from the site discharges to the public street or storm drain or open channel, detention or retention basin: _____
9. Watershed (Check One): San Diego River _____ San Diego Bay _____

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a. Total disturbed area includes impervious area, construction material storage, staging area, graded slopes, new slopes and landscape areas.

b. The information shall be shown on the site/grading plans.

c. Complete the Storm Water Requirements Applicability Checklist

Notes:

- Items 1 through 9 shall be shown on the site development plan/grading plan.
- The applicant may be required to submit SWPPP or CSWMP, and PCWQTR or SPCBMPP depending on the "Priority" as stated below.

A Hydrology report may be required.

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the checklist to determine which permanent best management practices (BMPs) and which construction BMPs are required for your project for storm water. *This form must be completed and submitted with your permit application.*

SECTION 1. PERMANENT STORM WATER BMP REQUIREMENTS:

	YES	NO
1. Is the project a new development?	☐	☐
2. Is the project a significant redevelopment that adds/replaces/creates at least 5,000 ft^2 of impervious surface?*	☐	☐
** Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for an expanded definition of "significant redevelopment".*		

If both of the above answers are "No", go to Part B. If either of the above answers is "Yes," Complete Part A Below.

PART A: DETERMINE PRIORITY DEVELOPMENT PROJECT PERMANENT STORM WATER BMP REQUIREMENTS.

DOES THE PROJECT MEET THE DEFINITION OF ONE OR MORE OF THE PRIORITY DEVELOPMENT PROJECT CATEGORIES AS DEFINED IN LA MESA'S BMP MANUAL PART II? (SEE GLOSSARY)*	YES	NO
1. Residential development resulting in the disturbance of one acre or more of land or comprised of 10 or more attached or detached dwelling units?	☐	☐
2. Commercial development resulting in the disturbance of one acre or more of land?	☐	☐
3. Industrial development resulting in the disturbance of one acre or more of land?	☐	☐
4. Automotive repair shop?	☐	☐
5. Restaurant greater than 5,000 square feet?	☐	☐
6. Steep (slope of 25% or more) hillside development that will create greater than 5,000 square feet of impervious surface?	☐	☐
7. Project located within or directly adjacent to (within 200 feet) or directly discharging to an Environmentally Sensitive Area (ESA) and creates at least 2,500 square feet of impervious area or increases impervious area to 10% or more of its naturally occurring condition?	☐	☐
8. "Parking lot" greater than or equal to 5,000 square feet or with at least 15 parking spaces, and potentially exposed to urban runoff?	☐	☐
9. "Streets, roads, highways, and freeways" that would create a new paved surface that is 5,000 square feet or greater?	☐	☐
10. "Retail Gasoline Outlets" either 5,000 square feet or greater or with a projected "Average Daily Traffic" of 100 or more vehicles per day	☐	☐
11. All other pollutant generating Development Projects that result in the disturbance of one acre or more of land. Generally all projects which include impervious surfaces and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels.	☐	☐
**** Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for expanded definitions of the priority development project categories.***		

Limited Exclusion: Trenching and resurfacing work associated with utility projects, such as resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, bike lanes on existing roads, and routine replacement of damaged pavement, such as pothole repair, are not considered priority development projects. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces. Parking lots, buildings and other structures associated with utility projects are priority development projects if one or more of the criteria in Part A are met.

If all answers to Part A are "No", continue to Part B.

PART B: DETERMINE STANDARD PERMANENT STORM WATER REQUIREMENTS.

DOES THE PROJECT PROPOSE:	YES	NO
1. New impervious areas such as rooftops, roads, parking lots, driveways, paths and sidewalks?	☐	☐
2. New pervious landscape areas and irrigation systems?	☐	☐
3. Permanent structures within 100 feet of any natural water body?	☐	☐
4. Trash storage areas?	☐	☐
5. Liquid or solid material loading and unloading areas?	☐	☐
6. Vehicle or equipment fueling, washing, or maintenance areas?	☐	☐
7. Require a General NPDES Permit for storm water discharges associated with industrial activities* (except construction)?	☐	☐
8. Commercial/ industrial waste handling or storage, excluding typical office or household waste?	☐	☐
9. Any grading or ground disturbance during construction?	☐	☐
10. Any new storm drains, or alteration to existing storm drains?	☐	☐
**To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml.*		

If any of the answers provided in Section 1, Part A are "Yes," the project is subject to the "Priority Development Project Permanent Storm Water BMP Requirements". A Post Construction Water Quality Technical Report (PCWQTR) shall be submitted; the requirements of the City's Storm Water BMP Manual Part II must be satisfied. In particular, see Chapters 1 through 5 of the BMP Manual. All Priority Development Projects are also subject to hydromodification management requirements (unless an exemption applies) as discussed in the City's Storm Water BMP Manual Part II and must demonstrate compliance.

If all answers provided in Section 1, Part A are "No," and any answers to Part B are "Yes," the project is only subject to the Standard Permanent Storm Water BMP Requirements and shall submit a Standard Post-Construction BMP Plan (SPCBMPP). In particular, see Appendix G of the City's Storm Water BMP Manual Part II.

If every question in Part A and B is answered "No," the project is exempt from permanent storm water requirements.

Required submittals, Section 1:	**PCWQTR**	☐	**SPCBMPP**	☐	**Hydromodification**	☐

SECTION 2. CONSTRUCTION STORM WATER BMP REQUIREMENTS:

PART C: DETERMINE CONSTRUCTION PHASE STORM WATER REQUIREMENTS.

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	YES	NO
1. Does the project propose grading or soil disturbance of one acre or more?	☐	☐
2. Does the project propose any grading or soil disturbance?	☐	☐
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	☐	☐
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete and stucco)?	☐	☐

If the answer to question 1 of Part C is answered "Yes," your project is subject to California's statewide NPDES General Permit for Storm Water Discharges Associated with Construction Activities (General Construction Permit) and the City's Construction Storm Water BMP Performance Standards. To enroll in the General Construction Permit, see the website at www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml. A Storm Water Pollution Prevention Plan (SWPPP), a Notice of Intent (NOI), and other documents must be submitted electronically. Parts D and E of this form must also be completed.

If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Construction Storm Water BMP Performance Standards. A Construction Storm Water Management Plan (CSWMP) must be prepared, and Part E of this form must be completed.

If every question in Part C is answered "No," you do not need to complete Parts D and E of this form, and neither a SWPPP nor CSWMP is required.

PART D: DETERMINE ADVANCED TREATMENT SUBJECTIVITY

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	YES	NO
1. Is the project located within, adjacent to, or is a portion of the site within 200 feet of waters listed on the CWA Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation or turbidity?	☐	☐
2. Will the project disturb more than five acres, including all phases of the development?	☐	☐
If the answers to 1 and 2 are both "yes", please answer questions 3 and 4 below.		
3. Will the project disturbed slopes steeper than 4:1 (horizontal: vertical) and higher than 10 feet that drain toward the 303(d) listed receiving water?	☐	☐
4. Does the project contain a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4?	☐	☐

If all answers to part D are "yes", the project is subject to the City's advanced treatment requirements for construction. Advanced treatment requirements are detailed in Chapter 6 of the Storm Water BMP Manual Part II. Note that even if the above criteria do not apply, advanced treatment may be required at the discretion of the City Engineer.

Required submittals, Section 2:	**SWPPP, NOI** ☐	**CSWMP** ☐	**Advanced Treatment** ☐

PART E: DETERMINE CONSTRUCTION SITE PRIORITY

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans and included in the SWPPP or CSWMP. See the attached flow chart for guidance on determining the construction prioritization. The City Engineer may adjust the priority of the projects both before and during construction.

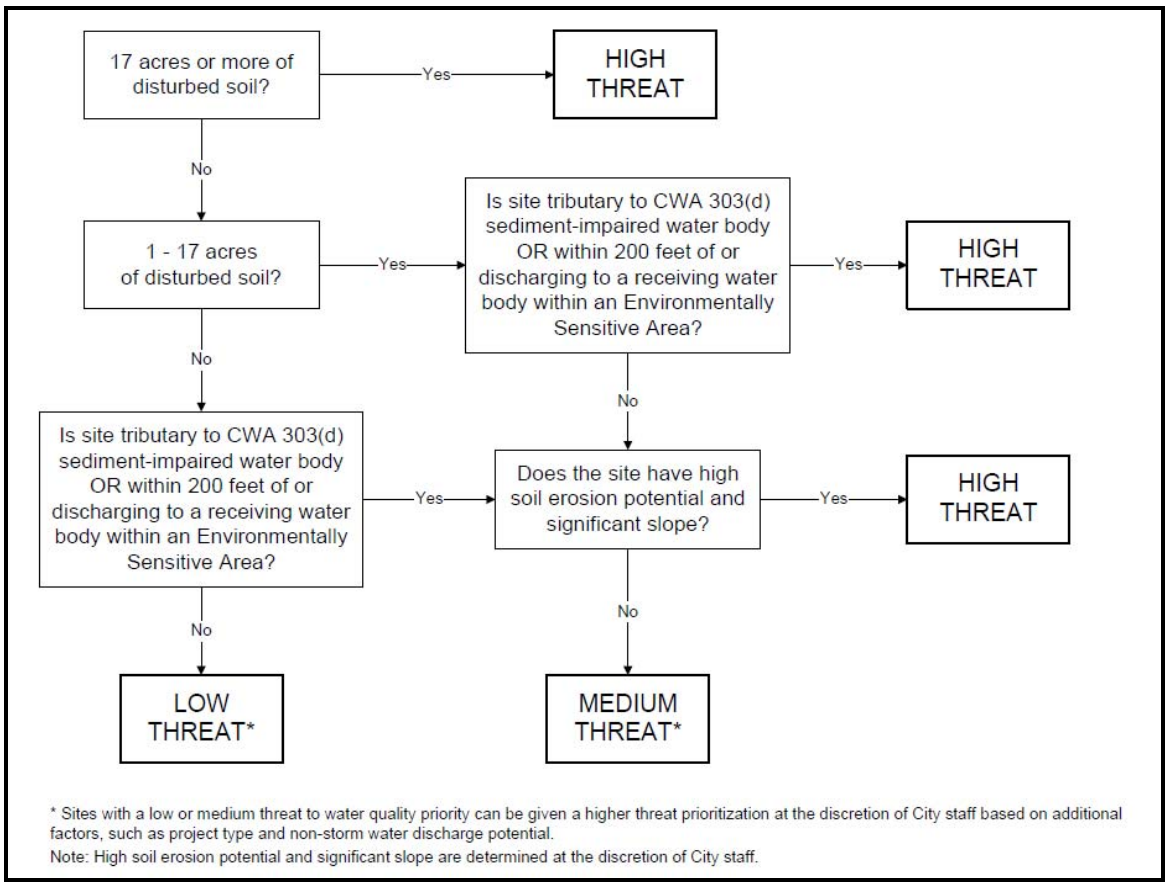

According to the attached flow chart, this project has the following threat to water quality priority:

☐ **High** ☐ **Medium** ☐ **Low**

[Note: The construction priority DOES NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority DOES affect the frequency of inspections that will be conducted by the City.]

Completed By: _____

Name, Address & Phone

Appendix

B

Low Impact Development (LID) Integrated Management Practice (IMP) Design Sheets

Self-Treating and Self-Retaining Areas

Best Uses

- Heavily landscaped sites

Advantages

- No maintenance verification requirement
- Complements site landscaping

Limitations

- Requires substantial square footage
- Grading requirements must be coordinated with landscape design

► CRITERIA

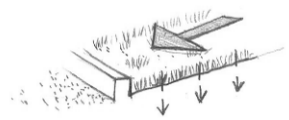

Rainfall on self-treating areas infiltrates or—during intense storms— drains directly off-site or to the storm drain system.

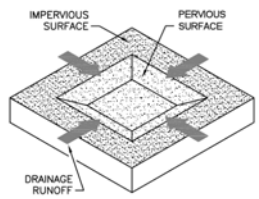

Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. During intense storms, runoff may drain off-site, to the storm drain system, or to IMPs.

LID design seeks to manage runoff from roofs and paving so effects on water quality and hydrology are minimized. Runoff from landscaping, however, does not need to be managed the same way.

Runoff from landscaping can be managed by creating self-treating and self-retaining areas.

Self-treating areas are natural, landscaped, or turf areas that drain directly off site or to the storm drain system. Examples include upslope undeveloped areas that are ditched and drained around a development and grassed slopes that drain offsite to a street or storm drain. Self-treating areas may not drain on to adjacent paved areas.

Where a landscaped area is upslope from or surrounded by paved areas, a **self-retaining area** (also called a zero-discharge area) may be created. Self-retaining areas are designed to retain the first one inch of rainfall without producing any runoff. The technique works best on flat, heavily landscaped sites. It may be used on mild slopes if there is a reasonable expectation that the first inch of rainfall would produce no runoff.

To create self-retaining turf and landscape areas in flat areas or on terraced slopes, berm the area or depress the grade into a concave cross-section so that these areas will retain the first inch of rainfall. Inlets of area drains, if any, should be set 3 inches above the low point to allow ponding.

Areas draining to self retaining areas. Drainage from roofs and paving can be directed to self-retaining areas and allowed to infiltrate into the soil. The maximum allowable ratio is 2 parts impervious: 1 part pervious.

The self-retaining area must be bermed or depressed to retain an inch of rainfall including the flow from the tributary impervious area.

► DETAILS

Drainage from self-treating areas must flow to off-site streets or storm drains without flowing on to paved areas.

Pavement within a self-treating area cannot exceed 5% of the total area.

In self-retaining areas, overflows and area drain inlets should be set high enough to ensure ponding over the entire surface of the self-retaining area.

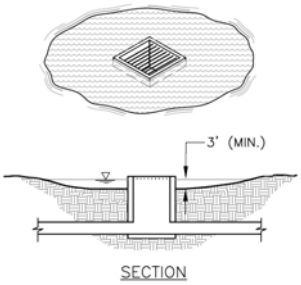

Set overflows and area drain inlets high enough to ensure ponding (3" deep) over the surface of the self-retaining area.

Self–retaining areas should be designed to promote even distribution of ponded runoff over the area.

Leave enough reveal (from pavement down to landscaped surface) to accommodate buildup of turf or mulch.

► APPLICATIONS

Lawn or landscaped areas adjacent to streets can be considered self-treating areas.

Self-retaining areas can be created by depressing lawn and landscape below surrounding sidewalks and plazas.

Runoff from walkways or driveways in parks and park-like areas can sheet-flow to self-retaining areas.

Roof leaders can be connected to self-retaining areas by piping beneath plazas and walkways. If necessary, a "bubble-up" can be used.

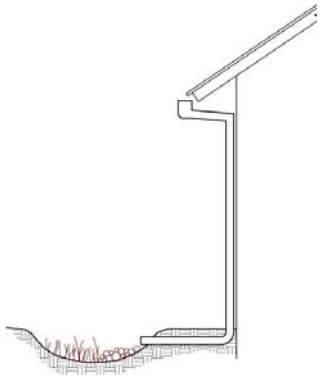

Connecting a roof leader to a self-retaining area. The head from the eave height makes it possible to route roof drainage some distance away from the building.

Self-retaining areas can be created by terracing mild slopes. The elevation difference promotes subsurface drainage.

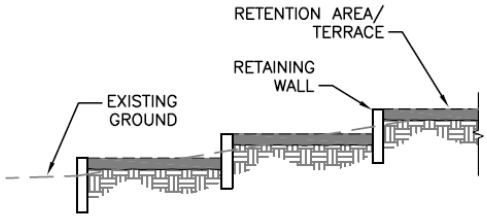

Mild slopes can be terraced to create self-retaining areas.

► DESIGN CHECKLIST FOR SELF-TREATING AREAS

- ❒ The self-treating area is at least 95% lawn or landscaping (not more than 5% impervious).
- ❒ Re-graded or re-landscaped areas have amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- ❒ Runoff from the self-treating area does not enter an IMP or another drainage management area, but goes directly to the storm drain system.

► DESIGN CHECKLIST FOR SELF-RETAINING AREAS

- ❒ Area is bermed all the way around or graded concave.

- ❒ Slopes do not exceed 4%.
- ❒ Entire area is lawn, landscaping, or pervious pavement (see criteria in Chapter 4).
- ❒ Area has amended soils, vegetation, and irrigation as may be required to maintain soil stability and permeability.
- ❒ Any area drain inlets are at least 3 inches above surrounding grade.

► DESIGN CHECKLIST FOR AREAS DRAINING TO SELF-RETAINING AREAS

- ❒ Ratio of tributary impervious area to self-retaining area is not greater than 2:1.
- ❒ Roof leaders collect runoff and route it to the self-retaining area.
- ❒ Paved areas are sloped so drainage is routed to the self-retaining area.
- ❒ Inlets are designed to protect against erosion and distribute runoff across the area.

Pervious Pavements

► CRITERIA

Impervious roadways, driveways, and parking lots account for much of the hydrologic impact of land development. In contrast, pervious pavements allow rainfall to collect in a gravel or sand base course and infiltrate into native soil.

Pervious pavements are designed to transmit rainfall through the surface to storage in a base course. For example, a 4-inch-deep base course provides approximately 1.6 inches of storage. Runoff stored in the base course infiltrates to native soils over time. Except in the case of solid pavers, the surface course provides additional storage.

Areas with the following pervious pavements may be regarded as "self-treating" and require no additional treatment or flow control if they drain off-site (not to an IMP).

- Pervious concrete
- Porous asphalt
- Crushed aggregate (gravel)
- Open pavers with grass or plantings
- Open pavers with gravel
- Artificial turf

Areas with these pervious pavements can also be **self-retaining areas** and may receive runoff from impervious areas if they are bermed or depressed to retain the first one inch of rainfall, including runoff from the tributary impervious area.

Solid unit pavers—such as bricks, stone blocks, or precast concrete shapes—are considered to reduce runoff compared to impervious pavement, when the unit pavers are set in sand or gravel with d" gaps between the pavers. Joints must be filled with an open-graded aggregate free of fines.

Best Uses

- Areas with permeable native soils
- Low-traffic areas
- Where aesthetic quality can justify higher cost

Advantages

- No maintenance verification requirement
- Variety of surface treatments can complement landscape design

Limitations

- Initial cost
- Placement requires specially trained crews
- Geotechnical concerns, especially in clay soils
- Concerns about pavement strength and surface integrity
- Some municipalities do not allow in public right of way

When draining pervious pavements to an IMP, use the runoff factors in Table 4-2.

► DETAILS

Permeable pavements can be used in clay soils; however, special design considerations, including an increased depth of base course, typically apply and will increase the cost of this option. Geotechnical fabric between the base course and underlying clay soil is recommended.

Pavement strength and durability typically determines the required depth of base course. If underdrains are used, the outlet elevation must be a minimum of 3 inches above the bottom elevation of the base course.

Pervious concrete and porous asphalt must be installed by crews with special training and tools. Industry associations maintain lists of qualified contractors.

Parking lots with crushed aggregate or unit pavers may require signs or bollards to organize parking.

► DESIGN CHECKLIST FOR PERVIOUS PAVEMENTS

- ❒ No erodible areas drain on to pavement.
- ❒ Subgrade is uniform. Compaction is minimal.
- ❒ Reservoir base course is of open-graded crushed stone. Base depth is adequate to retain rainfall and support design loads.
- ❒ If a subdrain is provided, outlet elevation is a minimum of 3 inches above bottom of base course.
- ❒ Subgrade is uniform and slopes are not so steep that subgrade is prone to erosion.
- ❒ Rigid edge is provided to retain granular pavements and unit pavers.
- ❒ Solid unit pavers are installed with open gaps filled with open-graded aggregate free of fines.
- ❒ Permeable pavements are installed by industry-certified professionals according to vendor's recommendations.
- ❒ Selection and location of pavements incorporates Americans with Disabilities Act requirements, site aesthetics, and uses.

Resources

- Southern California Concrete Producers www.concreteresources.net.
- California Asphalt Pavement Association
  http://www.californiapavements.org/stormwater.html
- Interlocking Concrete Pavement Institute
  http://www.icpi.org/
- *Start at the Source Design Manual for Water Quality Protection,* pp. 47-53.
  http://www.cccleanwater.org/Publications/StartAtTheSource/Start_At_The_Source_Full.pdf
- *Porous Pavements,* by Bruce K. Ferguson. 2005. ISBN 0-8493-2670-2.

Bioretention Facilities

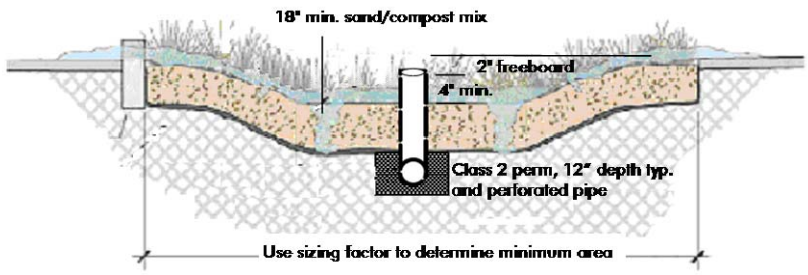

Bioretention facility configured for treatment-only requirements. Bioretention facilities can rectangular, linear, or nearly any shape.

Bioretention detains runoff in a surface reservoir, filters it through plant roots and a biologically active soil mix, and then infiltrates it into the ground. Where native soils are less permeable, an underdrain conveys treated runoff to storm drain or surface drainage.

Bioretention facilities can be configured in nearly any shape. When configured as linear **swales**, they can convey high flows while percolating and treating lower flows.

Bioretention facilities can be configured as in-ground or above-ground planter boxes, with the bottom open to allow infiltration to native soils underneath. Bioretention basins must be hydrologically connected with the underlying soil. Any Bioretention basin which is completely lined and sealed shall be sized as a Flow Through Planter.

Best Uses

- Commercial areas
- Residential subdivisions
- Industrial developments
- Roadways
- Parking lots
- Fit in setbacks, medians, and other landscaped areas

Advantages

- Can be any shape
- Low maintenance
- Can be landscaped

Limitations

- Require 4% of tributary impervious square footage
- Typically requires 3-4 feet of head
- Irrigation typically required

► CRITERIA

For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum

Parameter	Criterion
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)
Soil mix surface area	0.04 times tributary impervious area (or equivalent)
Surface reservoir depth	6 inches minimum; may be sloped to 4 inches where adjoining walkways.
Underdrain	Required in Group "C" and "D" soils. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► DETAILS

Plan. On the surface, a bioretention facility should be one level, shallow basin—or a series of basins. As runoff enters each basin, it should flood and fill throughout before runoff overflows to the outlet or to the next downstream basin. This will help prevent movement of surface mulch and soil mix.

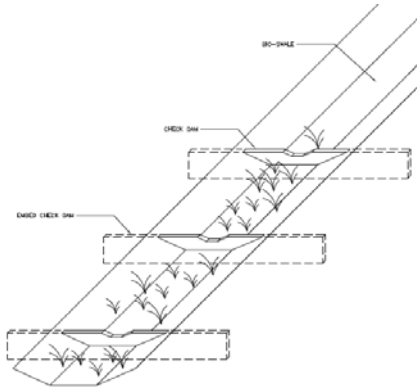

Use check dams for linear bioretention facilities (swales) on a slope.

In a linear swale, check dams should be placed so that the lip of each dam is at least as high as the toe of the next upstream dam. A similar principle applies to bioretention facilities built as terraced roadway shoulders.

Inlets. Paved areas draining to the facility should be graded, and inlets should be placed, so that runoff remains as sheet flow or as dispersed as possible. Curb cuts should be wide (12" is recommended) to avoid clogging with leaves or debris. Allow for a minimum reveal of 4"-6" between the inlet and soil mix elevations to ensure turf or mulch buildup does not block the

inlet. In addition, place an apron of stone or concrete, a foot square or larger, inside each inlet to prevent vegetation from growing up and blocking the inlet.

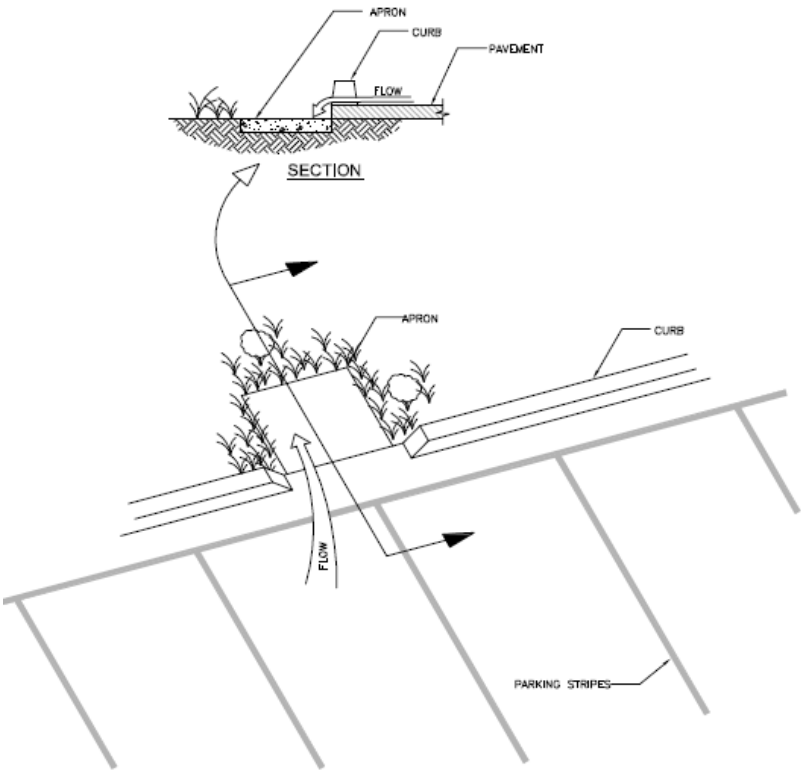

Recommended design details for bioretention facility inlets (see text).

Where runoff is collected in pipes or gutters and conveyed to the facility, protect the landscaping from high-velocity flows with energy-dissipating rocks. In larger installations, provide cobble-lined channels to better distribute flows throughout the facility.

Upturned pipe outlets can be used to dissipate energy when runoff is piped from roofs and upgradient paved areas.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" washed pea gravel be substituted at the top of the crushed rock gravel layers. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer or the gravel drainage layer from the native soil.

Underdrains. No underdrain is required where native soils beneath the facility are Hydrologic Soil Group A or B. For treatment-only facilities where native soils are Group C or D, a perforated pipe must be bedded in the gravel layer and must terminate at a storm drain or other approved discharge point.

Outlets. In treatment-only facilities, outlets must be set high enough to ensure the surface reservoir fills and the entire surface area of soil mix is flooded before the outlet elevation is reached. In swales, this can be achieved with appropriately placed check dams.

The outlet should be designed to exclude floating mulch and debris.

Vaults, utility boxes, and light standards. It is best to locate utilities outside the bioretention facility—in adjacent walkways or in a separate area set aside for this purpose. If utility structures are to be placed within the facility, the locations should be anticipated and adjustments made to ensure the minimum bioretention surface area and volumes are achieved. Leaving the final locations to each individual utility can produce a haphazard, unaesthetic appearance and make the bioretention facility more difficult to maintain.

Emergency overflow. The site grading plan should anticipate extreme events and potential clogging of the overflow and route emergency overflows safely.

Trees. Bioretention areas can accommodate small or large trees. There is no need to subtract the area taken up by roots from the effective area of the facility. Extensive tree roots maintain soil permeability and help retain runoff. Normal maintenance of a bioretention facility should not affect tree lifespan.

The bioretention facility can be integrated with a tree pit of the required depth and filled with structural soil. If a root barrier is used, it can be located to allow tree roots to spread throughout the bioretention facility while protecting adjacent pavement. Locations and planting elevations should be selected to avoid blocking the facility's inlets and outlets.

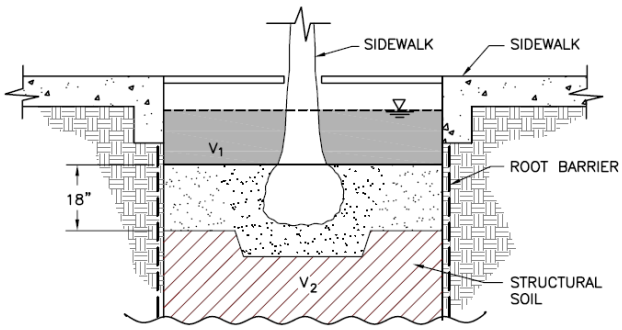

Bioretention facility configured as a tree well.
The root barrier is optional.

► APPLICATIONS

Multi-purpose landscaped areas. Bioretention facilities are easily adapted to serve multiple purposes. The loamy sand soil mix will support turf or a plant palette suitable to the location and a well-drained soil.

Example landscape treatments:

- Lawn with sloped transition to adjacent landscaping.
- Swale in setback area
- Swale in parking median
- Lawn with hardscaped edge treatment
- Decorative garden with formal or informal plantings
- Traffic island with low-maintenance landscaping
- Raised planter with seating
- Bioretention on a terraced slope

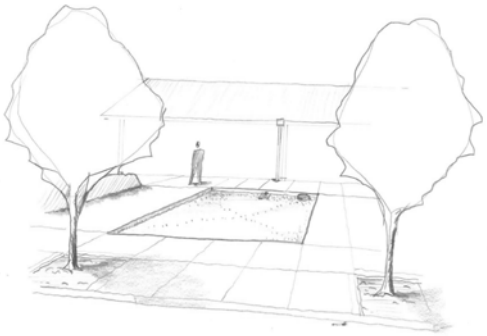

Bioretention facility configured as a recessed decorative lawn with hardscaped edge.

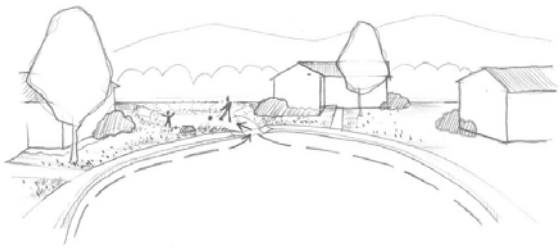

Bioretention facility configured and planted as a lawn/ play area.

Residential subdivisions. Some subdivisions are designed to drain roofs and driveways to the streets (in the conventional manner) and then drain the streets to bioretention areas, with one bioretention area for each 1 to 6 lots, depending on subdivision layout and topography.

If allowed by the local jurisdiction, bioretention areas can be placed on a separate, dedicated parcel with joint ownership.

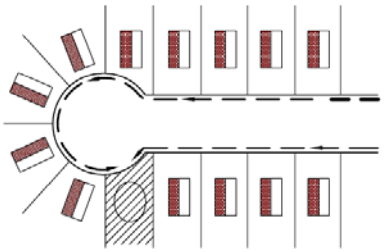

Bioretention facility receiving drainage from individual lots and the street in a residential subdivision.

Sloped sites. Bioretention facilities must be constructed as a basin, or series of basins, with the circumference of each basin set level. It may be necessary to add curbs or low retaining walls.

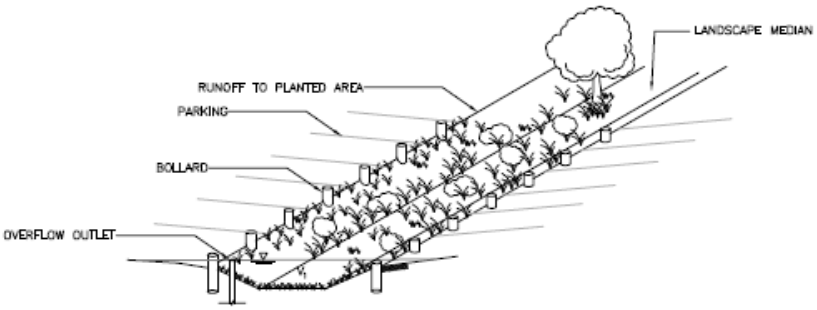

Bioretention facility configured as a parking median.
Note use of bollards in place of curbs, eliminating the need for curb cuts.

Design Checklist for Bioretention

- ❒ Volume or depth of surface reservoir meets or exceeds minimum.
- ❒ 18" depth "loamy sand" soil mix with minimum long-term percolation rate of 5"/hour.
- ❒ Area of soil mix meets or exceeds minimum.
- ❒ Perforated pipe underdrain bedded in "Class 2 perm" with connection and sufficient head to storm drain or discharge point (except in "A" or "B" soils).
- ❒ No filter fabric.
- ❒ Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, with a minimum diameter of 6 inches and a watertight cap.
- ❒ Location and footprint of facility are shown on site plan and landscaping plan.
- ❒ Bioretention area is designed as a basin (level edges) or a series of basins, and grading plan is consistent with these elevations. If facility is designed as a swale, check dams are set so the lip of each dam is at least as high as the toe of the next upstream dam.
- ❒ Inlets are 12" wide, have 4"-6" reveal and an apron or other provision to prevent blockage when vegetation grows in, and energy dissipation as needed.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Plantings are suitable to the climate and a well-drained soil.
- ❒ Irrigation system with connection to water supply.
- ❒ Vaults, utility boxes, and light standards are located outside the minimum soil mix surface area.
- ❒ When excavating, avoid smearing of the soils on bottom and side slopes. Minimize compaction of native soils and "rip" soils if clayey and/or compacted. Protect the area from construction site runoff.

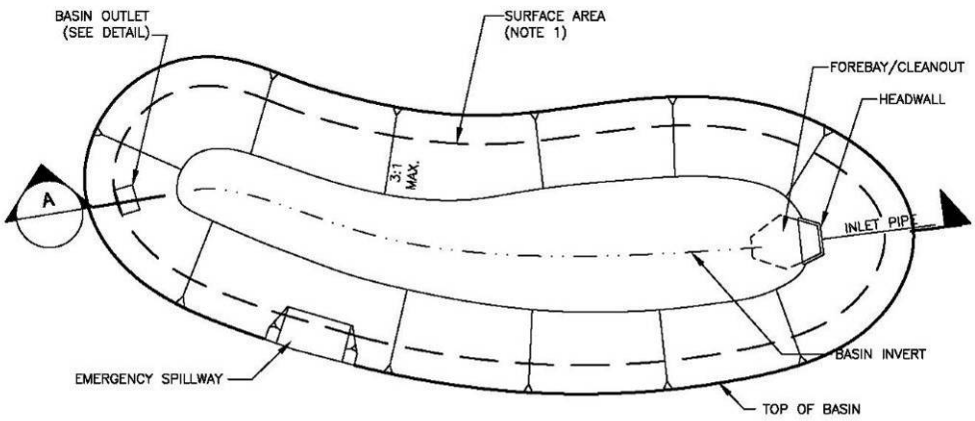

PLAN VIEW
NOT TO SCALE

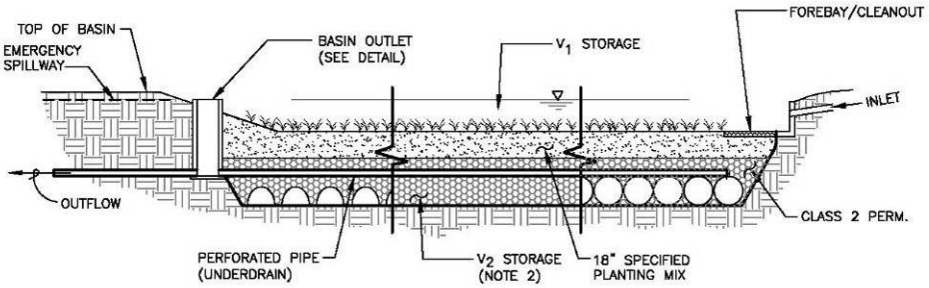

A SECTION
NOT TO SCALE

NOTE

1. SURFACE AREA LIMIT DETERMINED BY EXTENT OF SPECIFIED PLANTING MIX, WHICH IS GOVERNED BY THE OUTLET SPILL ELEVATION. FOR REQUIRED SURFACE AREA REFER TO THE FACTORS AND EQUATIONS IN THE STORMWATER C.3 GUIDEBOOK.
2. V_2 STORAGE ACCOMPLISHED WITH INFILTRATION ARCHES, PERFORATED PIPES, CLASS 2 PERM OR OTHER AT THE DESIGNERS DISCRETION.

Bioretention Facility

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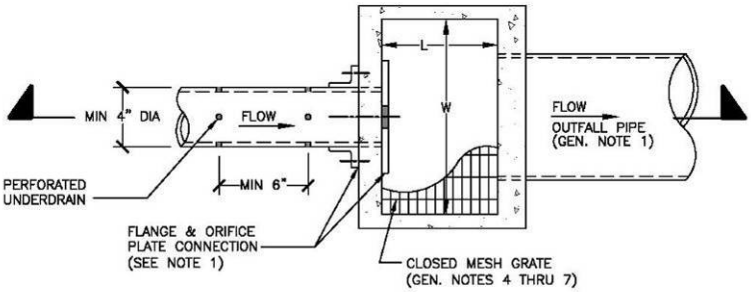

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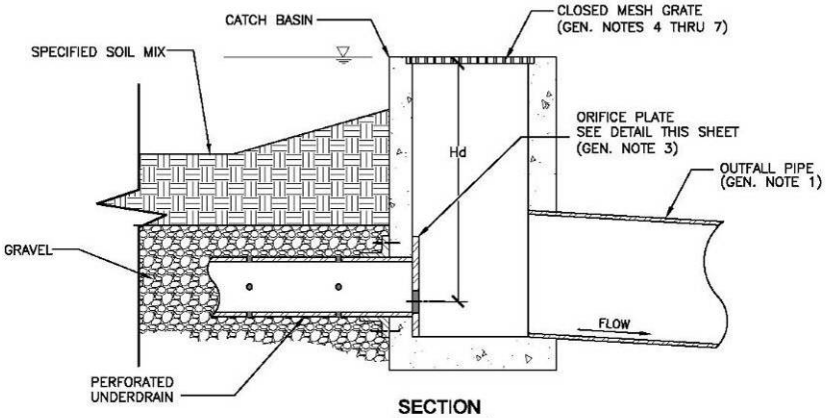

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ORIFICE PLATE: MIN SQUARE DIMENSIONS 1.0 FT GREATER THAN PIPE DIA. HOT-DIP GALVANIZED PLATE AFTER HOLES HAVE BEEN DRILLED

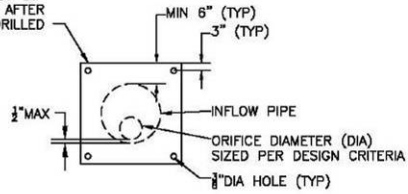

FLOW CONTROL ORIFICE PLATE

NOTE

1. ORIFICE PLATE & FLANGE CONNECTION TO CONCRETE SHALL BE FITTED WITH 30 DUROMETER NEOPRENE RING.

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Bioretention Facility Outlet Detail - A

Flow-through Planter

Portland 2004 Stormwater Manual

Best Uses

- Management of roof runoff
- Next to buildings
- Dense urban areas
- Where infiltration is not desired

Advantages

- Can be used next to structures
- Versatile
- Can be any shape
- Low maintenance

Limitations

- Can be used for flow-control only on sites with "C" and "D" soils
- Requires underdrain
- Requires 3-4 feet of head

Flow-through planters treat and detain runoff without allowing seepage into the underlying soil. They can be used next to buildings and on slopes where stability might be affected by adding soil moisture.

Flow-through planters typically receive runoff via downspouts leading from the roofs of adjacent buildings. However, they can also be set in-ground and receive sheet flow from adjacent paved areas.

Pollutants are removed as runoff passes through the soil layer and is collected in an underlying layer of gravel or drain rock. A perforated-pipe underdrain is typically connected to a storm drain or other discharge point. An overflow inlet conveys flows which exceed the capacity of the planter.

► CRITERIA

Treatment only. For development projects subject only to runoff treatment requirements, the following criteria apply:

Parameter	Criterion
Soil mix depth	18 inches minimum
Soil mix minimum percolation rate	5 inches per hour minimum sustained (10 inches per hour initial rate recommended)

Parameter	Criterion
Soil mix surface area	0.04 times tributary impervious area (or equivalent)
Surface reservoir depth	6" minimum; may be sloped to 4" where adjoining walkways.
Underdrain	Typically used. Perforated pipe embedded in gravel ("Class 2 permeable" recommended), connected to storm drain or other accepted discharge point.

► DETAILS

Configuration. The planter must be level. To avoid standing water in the subsurface layer, set the perforated pipe underdrain and orifice as nearly flush with the planter bottom as possible.

Inlets. Protect plantings from high-velocity flows by adding rocks or other energy-dissipating structures at downspouts and other inlets.

Soil mix. The required soil mix is similar to a loamy sand. It must maintain a minimum percolation rate of 5" per hour throughout the life of the facility, and it must be suitable for maintaining plant life. Typically, on-site soils will not be suitable due to clay content.

Gravel storage and drainage layer. "Class 2 permeable," Caltrans specification 68-1.025, is recommended. Open-graded crushed rock, washed, may be used, but requires 4"-6" of washed pea gravel be substituted at the top of the crushed rock layer. **Do not use filter fabric** to separate the soil mix from the gravel drainage layer.

Emergency overflow. The planter design and installation should anticipate extreme events and potential clogging of the overflow and route emergency overflows safely.

► APPLICATIONS

Adjacent to buildings. Flow-through planters may be located adjacent to buildings, where the planter vegetation can soften the visual effect of the building wall. A setback with a raised planter box may be appropriate even in some neo-traditional pedestrian-oriented urban streetscapes.

At plaza level. Flow-through planters have been successfully incorporated into podium-style developments, with the planters placed on the plaza level and receiving runoff from the tower roofs above. Runoff from the plaza level is typically managed separately by additional flow-through planters or bioretention facilities located at street level.

Steep slopes. Flow-through planters provide a means to detain and treat runoff on slopes that cannot accept infiltration from a bioretention facility. The planter can be built into the slope similar to a retaining wall. The design should consider the need to access the planter for

periodic maintenance. Flows from the planter underdrain and overflow must be directed in accordance with local requirements. It is sometimes possible to disperse these flows to the downgradient hillside.

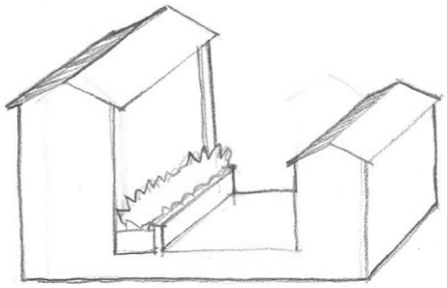

Flow-through planter on the plaza level of a podium-style development.

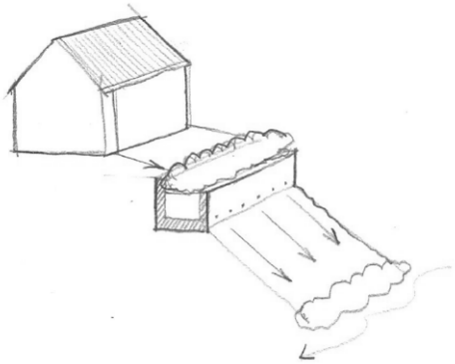

Flow-through planter built into a hillside. Flows from the underdrain and overflow must be directed in accordance with local requirements.

Design Checklist for Flow-through Planter

- ❒ Reservoir depth is 4-6" minimum.
- ❒ 18" depth "loamy sand" soil mix with minimum long-term infiltration rate of 5"/hour.
- ❒ Area of soil mix meets or exceeds minimum.
- ❒ "Class 2 perm" drainage layer.
- ❒ No filter fabric.
- ❒ Perforated pipe underdrain with outlet located flush or nearly flush with planter bottom. Connection with sufficient head to storm drain or discharge point.
- ❒ Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, with a minimum diameter of 6 inches and a watertight cap.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Location and footprint of facility are shown on site plan and landscaping plan.
- ❒ Planter is set level.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Plantings are suitable to the climate and a well-drained soil.
- ❒ Irrigation system with connection to water supply.

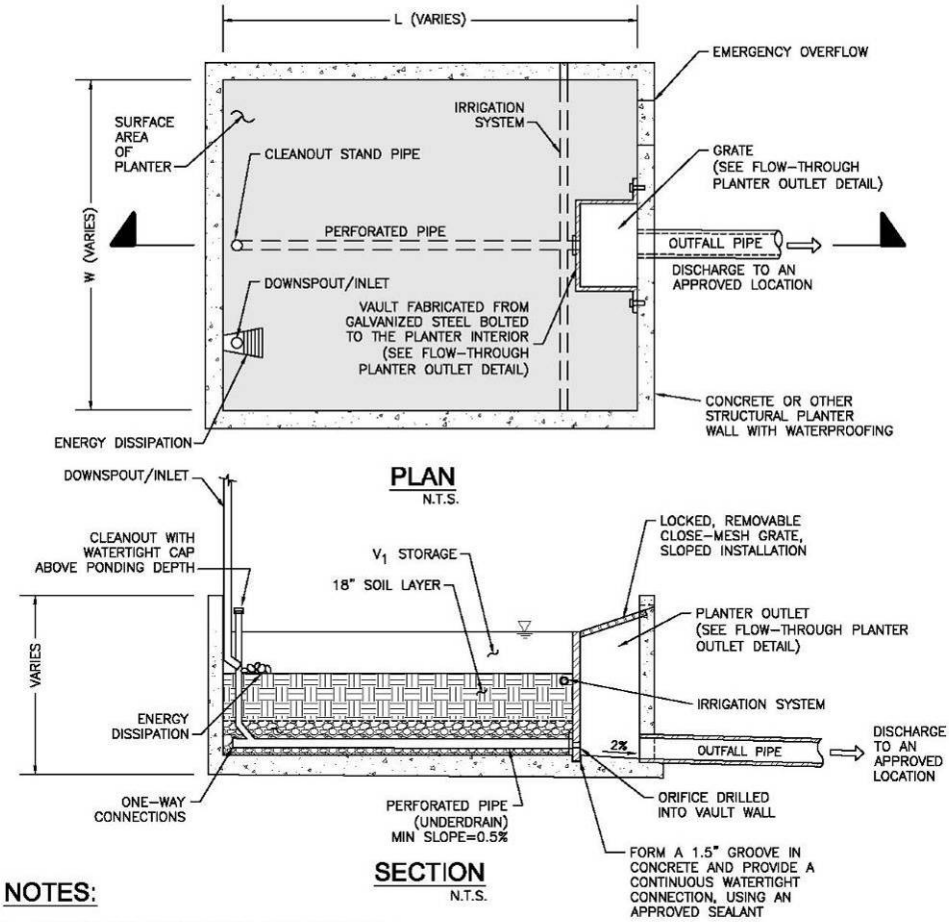

NOTES:

1. FLOW-THROUGH PLANTER SHALL BE SIZED TO MEET CCCWP CRITERIA FOR TREATMENT AND/OR FLOW CONTROL.
2. MINIMUM SURFACE AREA OF PLANTER IS 4% OF TRIBUTARY IMPERVIOUS AREA FOR TREATMENT ONLY DESIGN. FOR FLOW CONTROL AND TREATMENT, REFER TO CCCWP SIZING TOOL CRITERIA.
3. SHAPE OF PLANTER CAN VARY TO MEET PROJECT DESIGN REQUIREMENTS AND LOCATION.
4. CLASS 2 PERMEABLE MATERIAL
5. DOWNSPOUTS/INLET PIPES REQUIRE ENERGY DISSIPATION.
6. USE COUNTY APPROVED ADDITIVE MIXTURE FOR WATERPROOFING CONCRETE.
7. PLANTINGS: SEE CCCWP RECOMMENDED PLANT LIST AND GUIDELINES.
8. PLANTER DESIGN MAY REQUIRE STRUCTURAL ENGINEERING DESIGN.
9. AREA = W x L (ABOVE). EXCLUDES AREA OF VAULT

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Flow-Through Planter Detail

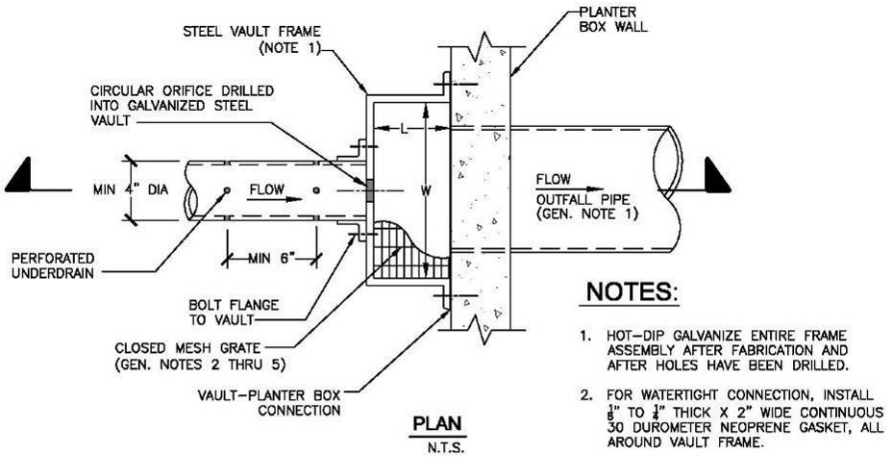

PLAN
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NOTES:

1. HOT-DIP GALVANIZE ENTIRE FRAME ASSEMBLY AFTER FABRICATION AND AFTER HOLES HAVE BEEN DRILLED.
2. FOR WATERTIGHT CONNECTION, INSTALL $\frac{1}{8}$" TO $\frac{1}{4}$" THICK X 2" WIDE CONTINUOUS 30 DUROMETER NEOPRENE GASKET, ALL AROUND VAULT FRAME.

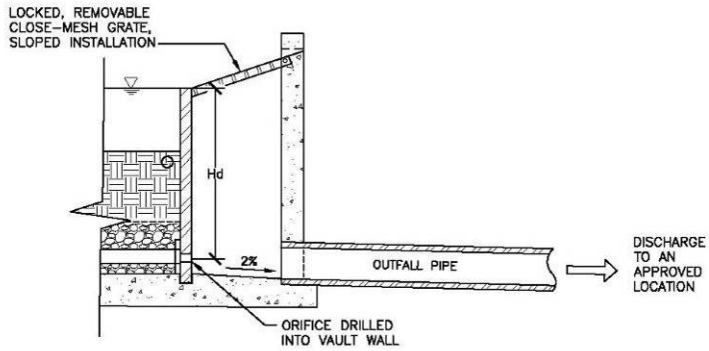

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GENERAL OUTLET DETAIL NOTES:

1. OUTFALL PIPE SHALL BE SIZED TO CONVEY DESIGN STORM PER CCCWP DESIGN CRITERIA.
2. GRATE SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
3. GRATE SHALL BE STAINLESS STEEL, ALUMINUM OR STEEL. STEEL GRATES SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER PAINTED AFTER GALVANIZING.
4. GRATE SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
5. STRUCTURAL DESIGN OF GRATE SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF GRATE.

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Flow-Through Planter Outlet Detail

Dry Wells and Infiltration Basins

The typical dry well is a prefabricated structure, such as an open-bottomed vault or box, placed in an excavation or boring. The vault may be empty, which provides maximum space efficiency, or may be filled in rock.

An infiltration basin has the same functional components—a volume to store runoff and sufficient area to infiltrate that volume into the native soil—but is open rather than covered.

Note: Small diameter deep drilled storm water dry wells are not included in this sheet. These shall be considered "Alternative BMPs" and shall be sized per flow or volume based requirements.

Best Uses

- Alternative to bioretention in areas with permeable soils

Advantages

- Compact footprint
- Can be installed in paved areas

Limitations

- Can be used only on sites with "A" and "B" soils
- Requires minimum of 10' from bottom of facility to seasonal high groundwater
- Not suitable for drainage from some industrial areas or arterial roads
- Must be maintained to prevent clogging.

► CRITERIA

Dry wells and infiltration basins must be designed with the minimum volume calculated by Equation 4-8 using a unit volume based on the County of San Diego's 85th Percentile Isopluvial Map.

Consult with the local jurisdiction engineer regarding the need to verify soil permeability and other site conditions are suitable for dry wells and infiltration basins. Some proposed criteria are on Page 5-12 of Caltrans' 2004 *BMP Retrofit Pilot Study Final Report* (CTSW-RT-01-050).

The infiltration rate and infiltrative area must be sufficient to drain a full facility within 72 hours.

► DETAILS

Dry wells should be sited to allow for the potential future need for removal and replacement.

In locations where native soils are coarser than a medium sand, the area directly beneath the facility should be over-excavated by two feet and backfilled with sand as a groundwater protection measure.

Design Checklist for Dry Well

- ❒ Volume and infiltrative area meet or exceed minimum.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.
- ❒ Depth from bottom of the facility to seasonally high groundwater elevation is ≥10'.
- ❒ Areas tributary to the facility do not include automotive repair shops; car washes; fleet storage areas (Bus, truck, etc.); nurseries, or other uses that may present an exceptional threat to groundwater quality.
- ❒ Underlying soils are in Hydrologic Soil Group A or B. Infiltration rate is sufficient to ensure a full basin will drain completely within 72 hours. Soil infiltration rate has been confirmed.
- ❒ Set back from structures 10' or as recommended by structural or geotechnical engineer.

Cistern or Vault with Bioretention Facility

A cistern or vault in series with a bioretention facility can meet treatment requirements where space is limited. In this configuration, the cistern or vault is equipped with a flow-control orifice and the bioretention facility is sized to treat a trickle outflow from the cistern or vault.

Best Uses

- In series with a bioretention facility to meet treatment requirement in limited space.
- Management of roof runoff
- Dense urban areas

Advantages

- Storage volume can be in any configuration

Limitations

- Somewhat complex to design, build, and operate
- Requires head for both cistern and bioretention facility

► CRITERIA

Cistern or Vault. The cistern or vault must detain the volume calculated by Equation 4-8 and must include an orifice or other device designed for a 24-hour drawdown time.

Bioretention facility. See the design sheet for bioretention facilities. The area of the bioretention facility must be sized to treat the maximum discharge flow, assuming a percolation rate of 5" per hour through the engineered soil.

Use with sand filter. A cistern or vault in series with a sand filter can meet treatment requirements. See the discussion of treatment facility selection in Chapter 2 and the design guidance for sand filters in Chapter 4.

► DETAILS

Flow-control orifice. The cistern or vault must be equipped with an orifice plate or other device to limit flow to the bioretention area.

Preventing mosquito harborage. Cisterns and vaults should be designed to drain completely, leaving no standing water. Drains should be located flush with the bottom of the cistern. Alternatively—or in addition—all entry and exit points, should be provided with traps or sealed or screened to prevent mosquito entry. Note mosquitoes can enter through openings $^{1}/_{16}$" or larger and will fly for many feet through pipes as small as ¼".

Exclude debris. Provide leaf guards and/or screens to prevent debris from accumulating in the cistern.

Ensure access for maintenance. Design the cistern or vault to allow for cleanout. Avoid creating the need for maintenance workers to enter a confined space. Ensure the outlet orifice can be easily accessed for cleaning and maintenance.

► APPLICATIONS

Shallow ponding on a flat roof. The "cistern" storage volume can be designed in any configuration, including simply storing rainfall on the roof where it falls and draining it away slowly. See the County of San Diego's 85th percentile isopluvial diagrams for required average depths.

Cistern attached to a building and draining to a planter. This arrangement allows a planter box to be constructed with a smaller area.

Vault with pumped discharge to bioretention facility. In this arrangement, runoff from a parking lot and/or building roofs can be captured and detained underground and then pumped to a bioretention facility on the surface. Alternatively, treatment can be accomplished with a sand filter. See the discussion of selection of storm water treatment facilities in Chapter 2.

Water harvesting or gray water reuse. It may be possible to create a site-specific design that uses cisterns or vaults to achieve storm water flow control, storm water treatment, and rainwater reuse for irrigation or indoor uses (**water harvesting**). Facilities must meet criteria for capturing and treating the volume specified by Equation 4-8. This volume must be allowed to empty within 24 hours so runoff from additional storms, which may follow, is also captured and treated. Additional volume may be required if the system also stores runoff for longer periods for reuse. Indoor uses of non-potable water may be restricted or prohibited. Check with municipal staff.

Design Checklist for Cistern or Vault

- ❒ Volume meets or exceeds minimum.
- ❒ Outlet with orifice or other flow-control device restricts flow and is designed to provide a 24-hour drawdown time.
- ❒ Outlet is piped to a bioretention facility designed to treat the maximum discharge from the cistern orifice.
- ❒ Cistern or vault is designed to drain completely and/or sealed to prevent mosquito harborage.
- ❒ Design provides for exclusion of debris and accessibility for maintenance.
- ❒ Overflow connected to a downstream storm drain or approved discharge point.
- ❒ Emergency spillage will be safely conveyed overland.

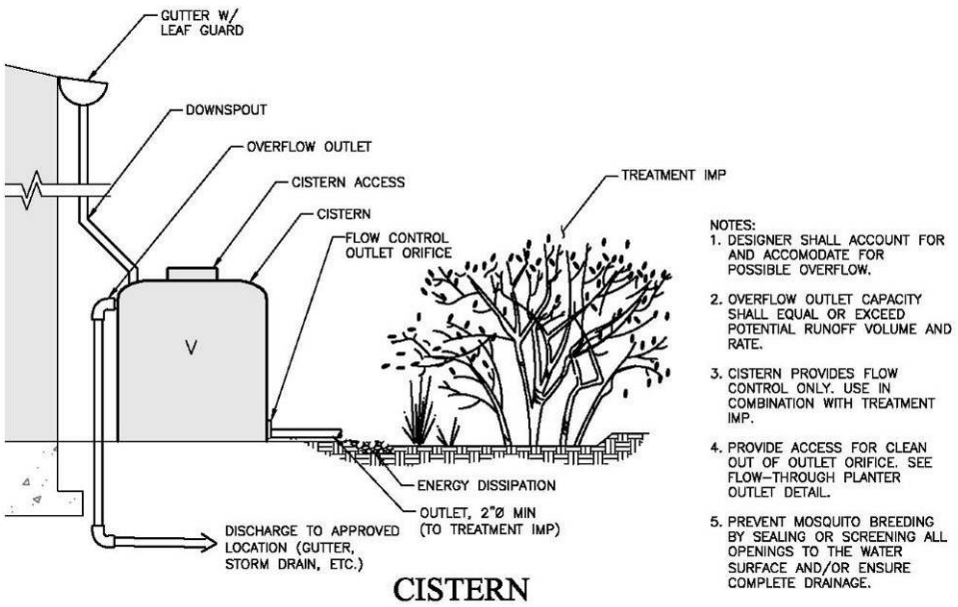

NOTES:
1. DESIGNER SHALL ACCOUNT FOR AND ACCOMODATE FOR POSSIBLE OVERFLOW.
2. OVERFLOW OUTLET CAPACITY SHALL EQUAL OR EXCEED POTENTIAL RUNOFF VOLUME AND RATE.
3. CISTERN PROVIDES FLOW CONTROL ONLY. USE IN COMBINATION WITH TREATMENT IMP.
4. PROVIDE ACCESS FOR CLEAN OUT OF OUTLET ORIFICE. SEE FLOW-THROUGH PLANTER OUTLET DETAIL.
5. PREVENT MOSQUITO BREEDING BY SEALING OR SCREENING ALL OPENINGS TO THE WATER SURFACE AND/OR ENSURE COMPLETE DRAINAGE.

CISTERN

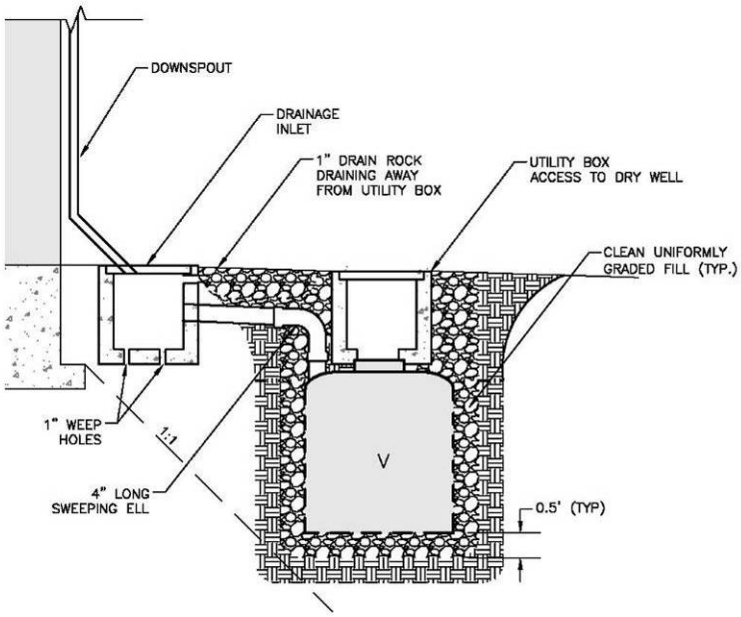

DRY WELL

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Appendix

C

Storm Water Pollutant Sources/ Source Control Checklist

How to use this worksheet (also see instructions in Step 4 of Chapter 3 of this BMP Manual):

1. Review Column 1 and identify which of these potential sources of storm water pollutants apply to your site. Check each box that applies.

2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your Project-Specific SUSMP drawings.

3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in a table in your Project-Specific SUSMP. Use the format shown in Table 3-1 in Step 4 of Chapter 3 of this BMP Manual. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternatives.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **A.** On-site storm drain inlets	❑ Locations of inlets.	❑ Mark all inlets with the words "No Dumping! Flows to Bay" or similar.	❑ Maintain and periodically repaint or replace inlet markings. ❑ Provide storm water pollution prevention information to new site owners, lessees, or operators. ❑ See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ❑ Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants	2 Permanent Controls—Show on SUSMP Drawings	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
❑ **B.** Interior floor drains and elevator shaft sump pumps		❑ State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.
❑ **C.** Interior parking garages		❑ State that parking garage floor drains will be plumbed to the sanitary sewer.	❑ Inspect and maintain drains to prevent blockages and overflow.
❑ **D1.** Need for future indoor & structural pest control		❑ Note building design features that discourage entry of pests.	❑ Provide Integrated Pest Management information to owners, lessees, and operators.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **D2.** Landscape/ Outdoor Pesticide Use	❑ Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. ❑ Show self-retaining landscape areas, if any. ❑ Show storm water treatment facilities.	State that final landscape plans will accomplish all of the following. ❑ Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. ❑ Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to storm water pollution. ❑ Where landscaped areas are used to retain or detain storm water, specify plants that are tolerant of saturated soil conditions. ❑ Consider using pest-resistant plants, especially adjacent to hardscape. ❑ To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	❑ Maintain landscaping using minimum or no pesticides. ❑ See applicable operational BMPs in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com ❑ Provide IPM information to new owners, lessees, and operators.
❑ **E.** Pools, spas, ponds, decorative fountains, and other water features.	❑ Show location of water feature, nearest landscaped areas, and nearest storm drains.	❑ Describe how water removed from the water feature would drain to nearby landscaping or be dechlorinated before discharge in accordance with City requirements.	❑ See applicable operational BMPs in Fact Sheet SC-72, "Fountain and Pool Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **F.** Food service	❑ For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. ❑ On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	❑ Describe the location and features of the designated cleaning area. ❑ Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	❑
❑ **G.** Refuse areas	❑ Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. ❑ If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. ❑ Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	❑ State how site refuse will be handled and provide supporting detail to what is shown on plans. ❑ State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	❑ State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **H.** Industrial processes.	❑ Show process area.	❑ If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."	❑ See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
❑ **I.** Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	❑ Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. ❑ Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. ❑ Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	❑ Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains. Where appropriate, reference documentation of compliance with the requirements of local Hazardous Materials Programs for: ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank	❑ See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials " in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	**2** **Permanent Controls—Show on SUSMP Drawings**	**3** **Permanent Controls—List in SUSMP Table and Narrative**	**4** **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **J.** Vehicle and Equipment Cleaning	❑ Show on drawings as appropriate: (1) Commercial/industrial facilities having vehicle /equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses. (2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use). (3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer. (4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.	❑ If a car wash area is not provided, describe measures taken to discourage on-site car washing and explain how these will be enforced.	Describe operational measures to implement the following (if applicable): ❑ Wash water from vehicle and equipment washing operations shall not be discharged to the storm drain system. ❑ See Fact Sheet SC-21, "Vehicle and Equipment Cleaning," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **K.** Vehicle/Equipment Repair and Maintenance	❑ Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of storm water. ❑ Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. ❑ Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.	❑ State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. ❑ State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. ❑ State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	In the SUSMP report, note that all of the following restrictions apply to use the site: ❑ No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinse water from parts cleaning into storm drains. ❑ No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately. ❑ No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **L.** Fuel Dispensing Areas	❑ Fueling areas[3] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of storm water to the maximum extent practicable. ❑ Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.		❑ The property owner shall dry sweep the fueling area routinely. ❑ See the Business Guide Sheet, "Automotive Service—Service Stations" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

[3] The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **M.** Loading Docks	❑ Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct storm water away from the loading area. Water from loading dock areas should be drained to the sanitary sewer where feasible. Direct connections to storm drains from depressed loading docks are prohibited. ❑ Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation. Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer. ❑		❑ Move loaded and unloaded items indoors as soon as possible. ❑ See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **N.** Fire Sprinkler Test Water		❑ Provide a means to drain fire sprinkler test water to the sanitary sewer.	❑ See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
O. Miscellaneous Drain or Wash Water ❑ Boiler drain lines ❑ Condensate drain lines ❑ Rooftop equipment ❑ Drainage sumps ❑ Roofing, gutters, and trim.		❑ Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. ❑ Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. ❑ Rooftop mounted equipment with potential to produce pollutants shall be roofed and/or have secondary containment. ❑ Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water. ❑ Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.	

IF THESE SOURCES WILL BE ON THE PROJECT SITE ...	... THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 **Potential Sources of Runoff Pollutants**	2 **Permanent Controls—Show on SUSMP Drawings**	3 **Permanent Controls—List in SUSMP Table and Narrative**	4 **Operational BMPs—Include in SUSMP Table and Narrative**
❑ **P.** Plazas, sidewalks, and parking lots.			❑ Plazas, sidewalks, and parking lots shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing shall be collected to prevent entry into the storm drain system. Wash water containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain.

Appendix

D

SWPPP and CSWMP Guidelines

STORM WATER POLLUTION PREVENTION PLAN/CONSTRUCTION STORM WATER MANAGEMENT PLAN GUIDELINES

At a minimum, the Storm Water Pollution Prevention Plan (SWPPP) or Construction Storm Water Management Plan (CSWMP) whichever is required, must cover the areas listed below.

If a project disturbs 1-acre or more, the applicant must provide a Storm Water Pollution Prevention Plan (SWPPP), which identifies all construction BMP requirements required by Chapter Six, in accordance with the State General Permit for Storm Water Discharges Associated with Construction Activity (State General Construction Permit). The SWPPP must be kept on site and made available upon request of a representative of the City. Additionally, the State General Construction Permit has a requirement for a sampling and monitoring program to be implemented. Projects that are also required to obtain a general construction National Pollutant Discharge Elimination System (NPDES) Permit are encouraged to visit the State Water Resource Control Board's website for permit application instructions, NOI and NOT forms and guidance in preparing a Storm Water Pollution Prevention Plan (go to: http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml).

For projects that disturb less than 1-acre and are determined to have a potential to impact water quality during construction, the applicant must provide a Construction Storm Water Management Plan (CSWMP), which identifies all construction BMP requirements required by Chapter Six, with the project submittal. The CSWMP shall depict the BMPs to be implemented during construction to reduce/eliminate discharges of pollutants to the storm drain conveyance system. The CSWMP shall include but not be limited to erosion and sediment control BMPs, good housekeeping measures and site and materials management.

Planning and Organization

- Identify the pollution prevention team members who will maintain and implement the SWPPP/CSWMP.
- If applicable, incorporate or reference the appropriate elements of other regulatory requirements.

Site Map

Features displayed on the map must include:

- An outline of the entire property
- Drainage areas on the property and direction of flow
- Areas of soil erosion
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing storm water controls (oil/ water separators, sumps, etc.)
- Location of "impervious" areas- paved areas, buildings, covered areas
- Locations where materials are directly exposed to storm water
- Locations where toxic or hazardous materials have spilled in the past
- Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)

List of Significant Materials

List materials stored and handled at the site. Include the location and typical quantities.

Description of Potential Pollutant Sources

- Provide a narrative description of the site's activities and list the potential pollutant sources and the

potential pollutants that could be discharged in storm water discharges from each activity.

- List non-storm water discharges including the source, quantity, frequency, and characteristics of the discharges and drainage area.

Assessment of Potential Sources

Describe which activities are likely to be sources of pollution in storm water and which pollutants are likely to be present in storm water discharges.

Best Management Practices

Describe the BMPs that will be implemented at the site for each potential pollutant and its source.

Appendix

E

Example Construction Best Management Practices

A. Erosion Control

Physical stabilization BMPs, vegetation stabilization BMPs, or both, will be required to prevent erosion and sediment runoff from exposed graded areas. BMPs for physical and vegetation stabilization include:

1) Physical Stabilization

a) Geotextiles
b) Mats
c) Fiber blankets
d) Hydraulic mulch, Bonded Fiber Matrix
e) Sprayed on binders
f) Mulch on flat areas
g) Other material approved by the City Engineer for use in specific circumstances

If physical stabilization is selected, materials must be appropriate to the circumstances in which they are deployed, and sufficient material must be deployed.

2) Vegetation Stabilization

h) Preservation of existing vegetation
i) Established interim vegetation (via Hydroseed, seeded mats, etc.)
j) Established permanent landscaping

If vegetation stabilization is selected, the stabilizing vegetation must be installed, irrigated and established (uniform vegetative coverage with 70% coverage established) prior to October 1. In the event stabilizing vegetation has not been established by October 1, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.

B. Sediment Control

1) Perimeter protection. Protect the perimeter of the site or exposed area from sediment ingress/discharge in sheet flows using:

k) Silt fencing
l) Gravel bag barriers
m) Fiber rolls

2) Resource protection. Protect Environmentally Sensitive Areas and watercourses from sediment in sheet flows by using**:**

a) Silt fencing
b) Gravel bag barriers
c) Fiber rolls

3) Sediment Capture. Capture sediments in channeled storm water by using:

a) Storm-drain inlet protection measures
b) De-silting basins (Designed in accordance with an industry standard such as Caltrans, California Storm water BMP manual etc. If the project is 5 acres or greater the desilting basin(s) must be designed in accordance with the State General Construction Permit, Order DWQ 99-08.)

4) Velocity Reduction. Reduce the velocity of storm water by using:

a) Outlet protection (energy dissipater)
b) Equalization basins
c) Check dams

5) Off-site Sediment Tracking. Prevent sediment from being tracked off-site by using:

a) Stabilized construction entrances/exits
b) Construction road stabilization
c) Tracking control (i.e., corrugated steel panels, wheel washes)
d) Dust control

C. Materials Management

6) Prevent the contamination of storm water by wastes through proper management of the following types of wastes:

a) Solid
b) Sanitary
c) Concrete
d) Hazardous
e) Equipment – related wastes
f) Stock piles (protection from wind and rain)

7) Prevent the contamination of storm water by construction materials by:

a) Covering and/or providing secondary containment of storage areas
b) Taking adequate precautions when handling materials.

Appendix

F

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Appendix

G

SPCBMPP Worksheet

CITY OF LA MESA
JEWEL of the HILLS

Standard Post-Construction BMP Plan

Standard Permanent Storm Water BMPs

Project Name: _____ Project Address: _____
Person completing form: _____Telephone number: (____)____-_____
Signature: _____ Date: ____/_____/_____

The following planning, design, and post-construction BMPs are required for all land development and redevelopment projects in the City of La Mesa. All BMPs listed below shall be selected and implemented where applicable and feasible.

List pollutants of concern: _____

Each selected BMP must be shown on the applicable plan(s) for the project.

Required BMPs	Check if Selected	If the BMP is not selected, explain why below (attach additional pages if necessary).
1. BMPs for permanent control of erosion from slopes.		
a. Convey runoff safely from the tops of slopes		
b. Vegetate slopes with native or drought tolerant vegetation		
c. Other (describe):		
2. BMPs to control flows, velocity and erosion. Flow control and downstream erosion protection measures shall prevent any significant increase in downstream erosion as a result of the new development, but shall not prevent flows needed to sustain downstream riparian habitats or wetlands.		
a. Minimize disturbances to Natural Drainages		
b. Stabilize permanent channel crossings		
c. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels		
d. Provide buffer zones for natural water bodies		
e. Other (describe):		
3. Low Impact Development (LID) and site design BMPs.		
a. Conserve natural areas, soils, and vegetation where feasible		
b. Construct walkways, trails, patios. overflow parking lots, alleys, and other low-traffic areas with permeable surfaces		
c. Construct impervious surfaces to minimum widths necessary		
d. Use natural drainage systems		
e. Minimize soil compaction in areas that will remain pervious after development		

Required BMPs	Check if Selected	If the BMP is not selected, explain why below (attach additional pages if necessary).
f. Drain runoff from impervious roofs into adjacent landscaping		
g. Drain runoff from impervious sidewalks and/or walkways into adjacent landscaping		
h. Drain runoff from impervious parking lots into adjacent landscaping		
i. Drain runoff from other impervious areas into adjacent landscaping		
j. Other (describe):		
4. Storm drain stenciling and signage		
5. BMPs for outdoor materials storage and exposed work areas, to reduce pollution introduction.		
a. Provide overhead coverage for outdoor storage or work areas		
b. Divert storm water run-on away from outdoor storage or work areas		
6. BMPs for trash storage areas, to reduce pollution introduction. Store trash containers on an impervious surface in a screened or walled area designed to prevent run-on from flowing through the trash area, and provide a roof or awning to prevent direct contact with rain.		
7. BMPs for irrigation systems and landscape design, to minimize the runoff of excess irrigation water into the storm water conveyance system. (Limited exclusion: detached residential developments)		
a. Use rain shutoff devices		
b. Design irrigation system to each landscape area's water requirements		
c. Use flow reducers		
d. Other (describe):		
8. Structural BMPs[1] to treat and/or to infiltrate storm water where a development project would otherwise cause or contribute to a violation of water quality standards in receiving waters.		

[1] Off-site structural BMPs may be used for treatment and infiltration necessary to meet water quality standards only if the conveyance of run-off to those facilities prior to treatment will not cause or contribute to an exceedance of water quality standards or deprive wetlands or riparian habitats of needed flows. Offsite facilities shall not substitute for the use of any on-site source control BMPs required by the manual. When an infiltration BMP is used, related BMPs set out in the manual (including but not limited to siting constraints), to protect present uses of ground water and future uses of that ground water as currently designated in the applicable RWQCB Basin Plan. (Discharges to infiltration BMPs may also require an RWQCB permit and additional state requirements may also be applicable to these discharges.)

City Use Only

If Structural BMPs are proposed, a maintenance agreement is required. Has a maintenance agreement for this project been submitted? □ Yes □ No □ NA

Approved □ Yes □ No

_____ _____/_____/_____ _____

Signature Date Department

Appendix

H

Hydromodification Management Plan

ATTACHMENT 2.2

UPDATED APPENDIX 'A' STORM WATER REQUIREMENTS CHECKLIST

APPENDIX 'A' – STORM WATER REQUIREMENTS AND PROJECT DATA SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91942
Phone: 619.667.1166 • Fax: 619.667.1380

PROJECT DATA:

Owner's Name & Phone No: _____

Address: _____ **Permit No:** _____

Project: _____ **Date Applied:** _____

PROJECT SITE DATA:

1. Total area of the lot/parcel = _____ sf
2. Existing impervious area = _____ sf
3. Impervious area after development = _____ sf
4. Total area to be disturbed = _____ sf
5. Identify if the runoff from the site discharged to the public street or storm drain or open channel, detention or retention basin: Choose One
6. Watershed (Check One): San Diego River Watershed ☐ San Diego Bay Watershed ☐

---

a. Total disturbed area includes impervious area, construction material storage, staging area, graded slopes, new slopes and landscape areas.

b. The information shall be shown on the site/grading plans.

c. Complete Storm Water Requirements Applicability Checklist.

Notes:

- Items 1 through 6 shall be shown on the site development plan/grading plan.
- The applicant may be required to submit SWPPP or CSWMP, and PCWQTR or SPCBMPP depending on the "Priority" as stated below.
- A Hydrology report may be required.

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the checklist to determine which permanent best management practices (BMPs) and which construction BMPs are required for your project for storm water. *This form must be completed and submitted with your permit application.*

SECTION 1. PERMANENT STORM WATER BMP REQUIREMENTS:

	Yes	No
1. Is the project a new development?	☐	☐
2. Is the project a significant redevelopment that adds/replaces/creates at least 5,000 ft^2 of impervious surface?*	☐	☐
* *Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for an expanded definition of "significant redevelopment".*		

If both of the above answers are "No", go to Part B. If either of the above answers is "Yes", complete Part A below.

PART A: DETERMINE PRIORITY DEVELOPMENT PROJECT PERMANENT STORM WATER BMP REQUIREMENTS.

DOES THE PROJECT MEET THE DEFINITION OF ONE OR MORE OF THE PRIORITY PROJECT CATEGORIES AS DEFINED IN LA MESA'S BMP MANUAL, PART II? (SEE GLOSSARY)*	Yes	No
1. Residential development resulting in the disturbance of one acre or more of land or comprised of 10 or more attached or detached dwelling units?	☐	☐
2. Commercial development resulting in the disturbance of one acre or more of land?	☐	☐
3. Industrial development resulting in the disturbance of one acre or more of land?	☐	☐
4. Automotive repair shop?	☐	☐
5. Restaurant greater than 5,000 square feet?	☐	☐
6. Steep (slope of 25% or more) hillside development that will create greater than 5,000 square feet of impervious surface?	☐	☐
7. Project located within or directly adjacent to (within 200 feet) or directly discharging to an Environmentally Sensitive Area (ESA) and creates at least 2,500 square feet of impervious area or increases impervious area to 10% or more of its naturally occurring condition?	☐	☐
8. "Parking lot" greater than or equal to 5,000 square feet or with at least 15 parking spaces, and potentially exposed to urban runoff?	☐	☐
9. "Streets, roads, highways, and freeways" that would create a new paved surface that is 5,000 square feet or greater?	☐	☐
10. "Retail Gasoline Outlets" either 5,000 square feet or greater or with a projected "Average Daily Traffic" of 100 or more vehicles per day	☐	☐
11. All other pollutant generating Development Projects that result in the disturbance of one acre or more of land. Generally all projects which include impervious surfaces and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels.	☐	☐
***** *Refer to the Glossary in La Mesa's Storm Water BMP Manual Part II for expanded definitions of the priority development project categories.*		

Limited Exclusion: Trenching and resurfacing work associated with utility projects, such as resurfacing and reconfiguring surface parking lots and existing roadways, new sidewalk construction, pedestrian ramps, bike lanes on existing roads, and routine replacement of damaged pavement, such as pothole repair, are not considered priority development projects. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces. Parking lots, buildings and other structures associated with utility projects are priority development projects if one or more of the criteria in Part A are met.

If all answers to Part A are "No", continue to Part B.

PART B: DETERMINE STANDARD PERMANENT STORM WATER REQUIREMENTS.

DOES THE PROJECT PROPOSE:	**Yes**	**No**
1. New impervious areas such as rooftops, roads, parking lots, driveways, paths and sidewalks?	☐	☐
2. New pervious landscape areas and irrigation systems?	☐	☐
3. Permanent structures within 100 feet of any natural water body?	☐	☐
4. Trash storage areas?	☐	☐
5. Liquid or solid material loading and unloading areas?	☐	☐
6. Vehicle or equipment fueling, washing, or maintenance areas?	☐	☐
7. Require a General NPDES Permit for storm water discharges associated with industrial activities* (Except construction)?	☐	☐
8. Commercial/ industrial waste handling or storage, excluding typical office or household waste?	☐	☐
9. Any grading or ground disturbance during construction?	☐	☐
10. Any new storm drains, or alteration to existing storm drains?	☐	☐
**To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml*		

If any of the answers provided in Section 1, Part A are "Yes," the project is subject to the "Priority Development Project Permanent Storm Water BMP Requirements". A Post Construction Water Quality Technical Report (PCWQTR) shall be submitted; the requirements of the City's Storm Water BMP Manual Part II must be satisfied. In particular, see Chapters 1 through 5 of the *Storm Water BMP Manual*. All Priority Development Project are also subject to the Hydromodification Management Requirements as discussed in the City's *Storm Water BMP Manual, Part II*, and must demonstrate compliance.

If all answers provided in Section 1, Part A are "No," and any answers to Part B are "Yes," the project is only subject to the Standard Permanent Storm Water BMP Requirements and shall submit a Standard Post-Construction BMP Plan (SPCBMPP). In particular, see Appendix G of the City's *Storm Water BMP Manual*, Part II.

If every question in Part A and B is answered "No," the project is exempt from permanent storm water requirements.

Required submittals, Section 1:	☐	PCWQTR	☐	SPCBMPP	☐	Hydromodification

SECTION 2. CONSTRUCTION STORM WATER BMP REQUIREMENTS:

PART C: DETERMINE CONSTRUCTION PHASE STORM WATER REQUIREMENTS.

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	**Yes**	**No**
1. Does the project proposed grading or soil disturbance over one acre?	☐	☐
2. Does the project propose any grading or soil disturbance?	☐	☐
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?	☐	☐
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete and stucco)?	☐	☐

If the answer to question 1 of Part C is answered "Yes," your project is subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities and the City's Construction Storm Water BMP Performance Standards. A Storm Water Pollution Prevention Plan (SWPPP) and Notice of Intent to enroll in the General Construction Permit must be prepared. Parts D and E of this form must also be completed.

If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Construction Storm Water BMP Performance Standards and a Construction Storm Water Management Plan (CSWMP) must be prepared and Part E of this form must be completed.

If every question in Part C is answered "No," you do not need to completed Parts D and E of this form and neither a SWPPP nor a CSWMP is required.

PART D: DETERMINE ADVANCE TREATMENT SUBJECTIVITY

WOULD THE PROJECT MEET ANY OF THESE CRITERIA DURING CONSTRUCTION?	**Yes**	**No**
1. Is the project located within, adjacent to, or a portion of the site within 200 feet of waters listed on the CWA Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation or turbidity?	☐	☐
2. Will the project disturb more than five acres, including all phases of the development?	☐	☐
If the answers to 1 and 2 are both "yes", please answer questions 3 and 4 below.		
3. Will the project disturbed slopes steeper than 4:1 (horizontal: vertical) and higher than 10 feet that drain toward the 303(d) listed receiving water?	☐	☐
4. Does the project contain a predominance of soils with USDA-NRCS Erosion factors k_f greater than or equal to 0.4?	☐	☐

If <u>all</u> answers to part D are "yes", the project is subject to the City's advanced treatment requirements for construction. Advanced treatment requirements are detailed in Chapter 6 of the *Storm Water BMP Manual,* Part II. Note that even if the above criteria do not apply, advanced treatment may be required at the discretion of the City Engineer based.

<u>Required submittals, Section 2</u>:	☐	SWPPP, NOI	☐	CSWMP	☐	Advanced Treatment

PART E: DETERMINE CONSTRUCTION SITE PRIORITY

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans and included in the SWPPP or CSWMP. See the attached flow chart for guidance on determining the construction prioritization. The City Engineer may adjust the priority of the projects both before and during construction.

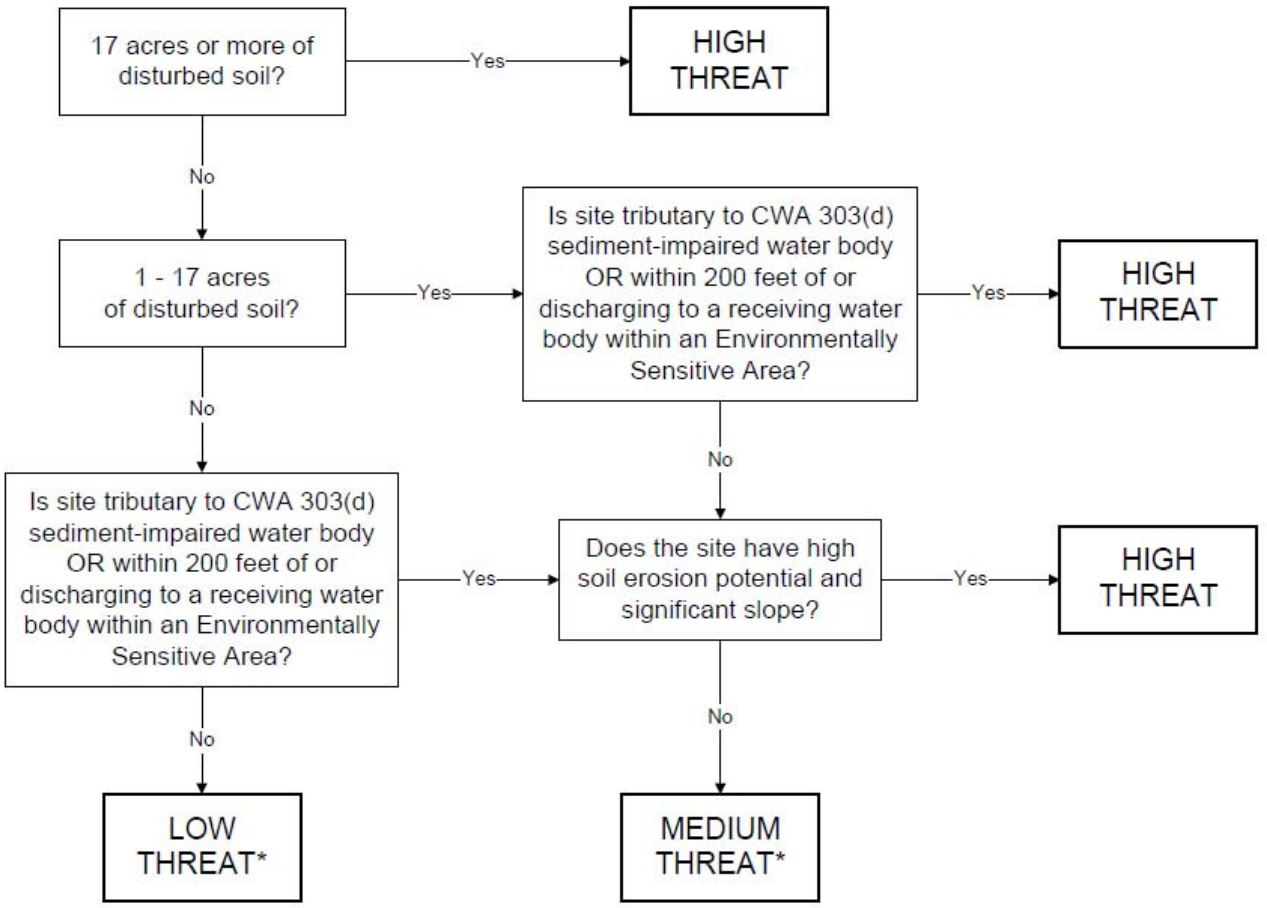

* Sites with a low or medium threat to water quality priority can be given a higher threat prioritization at the discretion of City staff based on additional factors, such as project type and non-storm water discharge potential.

Note: High soil erosion potential and significant slope are determined at the discretion of City staff.

According to the attached flow chart this project has the following threat to water quality priority:

☐ A) High Priority ☐ B) Medium Priority ☐ C) Low Priority

[Note: The construction priority DOES NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority DOES affect the frequency of inspections that will be conducted by the City.]

Completed By: _____

Name, Address & Phone Number

ATTACHMENT 3.1

CONSTRUCTION STORM WATER MANAGEMENT PLAN

CONSTRUCTION STORM WATER MANAGEMENT PLAN (CSWMP)

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91942
Phone: 619.667.1166 • Fax: 619.667.1380

Building/Grading/Encroachment Permit No: _____

Project Name: _____

Project Address/Location: _____

Person Completing Form: _____

Person Responsible for Storm Water BMPs Onsite _____

Responsible Person Telephone number: _____

STORM WATER POLLUTION PREVENTION, DISCHARGE & EROSION CONTROL

Under the regulations that govern grading and construction activities in the (City of La Mesa Municipal Code Sections 7.18. and 14.05) property owners and permit holders are required to control erosion and storm water pollution by incorporating erosion and storm water pollution prevention Best Management Practices (BMPs) into all construction projects. Property owners and employed contractors are responsible for adhering the City's Construction BMP Standards including installing as needed:

- Sediment Control BMPs
- Erosion Control BMPs
- Materials Management BMPs
- Tracking Control BMPs

Additional information related Construction BMPs can be obtained at the Engineering Counter at City Hall, or at **www.cityoflamesa.com/stormwater**.

City inspectors will be inspecting your project periodically to ensure that required BMPs are installed correctly onsite. Property owners and the contractors are responsible for ensuring that the site is in compliance. The City will issue a Notice of Violation to both the contractor and owner for occurrences of non-compliance. Repeated violators may be subject to an administrative citation penalty.

I/We the owner/agent agree to follow Construction Best Management Practices and perform construction accordingly. We, the owners also agree to comply with City Storm Water Pollution Prevention Ordinance and permit the city employees to enter our property at any time to inspect for compliance with the ordinance/municipal code sections listed above.

_____ _____ _____

Signature (Owner or Agent) Address & Phone No. Date

RELATIONSHIP BETWEEN PERFORMANCE STANDARDS, SITE MANAGEMENT REQUIREMENTS AND BMPs

Site management requirements and BMPs are the tools necessary to achieve compliance with the performance standards. When properly implemented, monitored and maintained, the site management requirements and BMPs will function as a system to prevent pollutants (including sediment) from leaving the site.

The City of La Mesa is committed to protecting the public interest and the environment from pollutants in site runoff. We are asking for your support and cooperation in making sure that all construction sites comply with these standards.

Your cooperation will enable all of us to share the benefits of a cleaner environment without the expense of enforcement actions.

GENERAL The owner/contractor shall notify the City ***at least 48 hrs*** prior to commencement of any type of grading and/or construction activities. Erosion control plans shall be required in conjunction with the grading plans in the event the site is exposed to erosion during the period between November 1 and April 15.

Erosion control measures shall include, but not be limited to the following;

1. All building pads shall be diked and the dikes maintained to prevent water from flowing from the pad until the streets and driveways are paved and water can flow from the pads without causing erosion; drainage facilities shall be constructed to the satisfaction of the City Engineer that will allow water to drain from the pad without causing erosion.
2. The tops of all slopes shall be diked or trenched to prevent water from flowing over the crests of slopes.
3. As soon as cuts or embankments are completed, but no later than November 1, all cut and fill slopes shall be stabilized with a hydro mulch mixture or an equal treatment approved by the City Engineer. Between November 1 and April 30, approved slope protection measures shall proceed immediately behind the exposure of cut slopes and/or the creation of embankment slopes.
4. An irrigation system shall be installed not later than May 15 following the planting of the slopes.
5. Gravel bag check dams shall be placed in a manner approved by the City Engineer in unpaved streets with gradients in excess of 2% and or in other graded or excavated areas as required by the City Engineer. The location and details of the sand bags shall be shown on the plans, if required.
6. Catch basins, desilting basins and storm drain systems shall be installed to the satisfaction of the City Engineer.
7. At or near every point where concentrated flow leaves the development, a desilting basin and an energy dissipater may be required to be constructed to remove silt from the water and release the water at a non-erosive velocity.
8. The owner/contractor shall maintain the plantings and erosion control measures described above. The owner/contractor shall remove all soil intercepted by the sand bags, catch basins and desilting basins and keep these facilities clean and free of silt and sand as directed by the City Engineer. The owner/contractor shall repair any eroded slopes as directed by the geotechnical engineer.
9. The City of La Mesa reserves the right to provide emergency temporary erosion control measures during, if the owner/Contractor fails to provide such controlling measures, and charge double the expenses plus overhead to the owner/contractor.

PERFORMANCE STANDARDS

- No measurable sediment pollution in runoff from the site.
- Rills or gullies on slopes shall not be greater than 3" wide or deep and must be repaired as soon as it is safe to do so.
- The velocity **of water leaving the site must not be greater than pre-construction levels.**

Property owners are responsible for meeting the performance standards described above. These performance standards cannot be achieved without proper site management and effective BMPs.

SITE MANAGEMENT REQUIREMENTS

All construction sites must implement BMPs in accordance with the City's dry and wet season requirements, which are detailed below.

A. Dry Season Requirements (May 1 through September 30) include but are not limited to:

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
- Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.
- The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).
- Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.
- Properly protected, designated storage areas are required for materials and wastes.
- All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.
- Remnant trash and debris shall be removed and/or properly stored/disposed of daily.
- Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.
- Materials for spill control/containment must be stockpiled onsite.
- Non-storm water discharges must be eliminated or controlled to the MEP.

B. Rainy Season Requirements (October 1 through April 30) include but are not limited to:

- All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads, and slopes. (Slopes greater than 33.3% or 3:1 vertical vs. horizontal may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement)
- Adequate perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
- Adequate sediment containment BMPs must be installed and maintained to comply with performance standards (above).
- Adequate BMPs designed to control off-site sediment tracking must be installed and maintained.
- At a minimum, 125% of the materials needed to install standby BMPs necessary to completely protect exposed portions of the site from erosion and to prevent sediment discharges must be stored on the site. Areas that have already been protected from erosion using physical stabilization or vegetation stabilization BMPS are not considered to be "exposed" for purposes of this requirement.
- The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a forecasted 40% chance of rain).
- Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

- The amount of cleared or graded areas left exposed at any given time is limited to 17 acres or to the alternate maximum area approved by the City in writing.
- A washout area shall be designated and maintained for materials such as concrete, stucco, paint, caulking, sealants, drywall plaster, etc.
- Properly protected, designated storage areas are required for materials and wastes.
- All stockpiles of materials and wastes should be covered when materials are not being actively added or removed.
- Remnant trash and debris shall be removed and/or properly stored/disposed of daily.
- Storage, service, cleaning, and maintenance areas for vehicles and equipment shall be identified and protected accordingly.
- Materials for spill control/containment must be stockpiled onsite.
- Non-storm water discharges must be eliminated or controlled to the MEP.
- Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- Perimeter protection and sediment containment BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- Adequate soil stabilization and erosion prevention BMPs must be installed and established for all completed slopes prior to October 1 and maintained throughout the wet season. If a selected BMP fails, it must be repaired, improved, or replaced with an acceptable alternate as soon as it is safe to do so.

- All vegetation erosion prevention BMPs must be established prior to the rainy season to be considered as a BMP.
- Standby erosion and sediment control BMPs must be able to protect all exposed soil areas. A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for seven or more calendar days. The ability to deploy standby BMP materials is not sufficient for these areas.

BEST MANAGEMENT PRACTICES

Every construction site within the City's jurisdiction is required to select, install, and maintain construction BMPs to reduce, retain, and manage pollutant discharges to the maximum extent practicable. The BMPs listed below are required by the City where applicable. The corresponding Caltrans fact sheet for the listed BMPs is indicated in parenthesis. These fact sheets are obtainable from the Caltrans Storm Water Quality Handbooks Construction Site BMP Manual (2003) and provide additional details on how to implement the BMP.

Please check all BMPs below that are applicable and feasible for the construction that will be implemented and maintained for the length of construction.

- ☐ Preserve natural hydrologic features where feasible
- ☐ Preserve riparian buffers and corridors where feasible
- ☐ Minimize areas that are cleared and graded to only the portion of the site that is necessary for construction
- ☐ Minimize exposure time of disturbed soil areas
- ☐ Minimize grading during the wet season and correlate grading with seasonal dry weather periods to the extent feasible
- ☐ Temporarily stabilize and reseed disturbed soil areas as rapidly as feasible
- ☐ Preserve existing vegetation where feasible (SS-2)
- ☐ Establish permanent re-vegetation or landscaping as early as feasible

Prevent the contamination of storm water from vehicles and equipment through proper management of the following types of activities:

- ☐ Cleaning (NS-8)
- ☐ Fueling (NS-9)
- ☐ Maintenance (NS-10)

Prevent the contamination of storm water from construction materials through proper management of the following types of activities:

- ☐ Material Delivery and Storage (WM-1)
- ☐ Material Use (WM-2)
- ☐ Stockpile Management1 (WM-3)
- ☐ Spill Prevention and Control (WM-4)

Prevent the contamination of storm water by wastes through proper management of the following types of wastes:

- ☐ Solid Waste (WM-5)
- ☐ Hazardous Waste (WM-6)
- ☐ Contaminated Soil (WM-7)
- ☐ Concrete (WM-8)
- ☐ Sanitary Waste (WM-9)
- ☐ Liquid (WM-10)

Prevent the contamination of storm water through proper management of the follow activities:

- ☐ Water Conservation Practices (NS-1)
- ☐ Dewatering Operations (NS-2)
- ☐ Paving and Grinding (NS-3)
- ☐ Potable Water/Irrigation and Flushing (NS-7)

Prevent erosion and sediment runoff from exposed graded areas through physical stabilization and/or vegetation stabilization[2] by implementing <u>one or more</u> of the following BMPs:

- ☐ Hydraulic Mulch (SS-3)
- ☐ Hydroseeding (SS-4)
- ☐ Soil Binders (SS-5)
- ☐ Straw Mulch (SS-6)
- ☐ Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats (SS-7)
- ☐ Wood Mulch (SS-8)
- ☐ Earth Dikes/Drainage Swales (SS-9)

Reduce the velocity of storm water by using <u>one or more</u> of the following:

- ☐ Outlet Protection/Velocity Dissipation (SS-10)
- ☐ Slope Drains (SS-11)

Protect the Perimeter of the site or exposed area from sediment discharge using <u>one or more</u> of the following:

- ☐ Silt Fence (SC-1)
- ☐ Gravel Bag Berm (SC-6)
- ☐ Fiber Rolls (SC-5)

Capture sediments in channeled storm water by using <u>one or more</u> of the following:

- ☐ De-silting Basin3 (SC-2)
- ☐ Storm Drain Inlet Protection (SC-10)
- ☐ Sediment Trap (SC-3)
- ☐ Gravel Bag Barrier (SC-8)

Prevent sediment from being tracked off-site by using <u>one or more</u> of the following:

- ☐ Stabilized Construction Entrance (TC-1)
- ☐ Construction Road Stabilization (TC-2)
- ☐ Entrance/Exit Tire Wash (TC-3)
- ☐ Street Sweeping (SC-7)

Notes on above BMPs:

1. Stockpiles should be fully covered when materials are not being added or removed.
2. Vegetation stabilization BMPs must be installed, irrigated, and established (uniform vegetative coverage with 70% coverage established) prior to October 1st. In the event stabilizing vegetation has not been established by October 1st, other forms of physical stabilization must be employed to prevent erosion until the stabilizing vegetation is established.
3. De-silting basins must be designed in accordance with industry standards such as Caltrans.

It is the responsibility of the property owner and permit holder to select, install and maintain appropriate BMPs. BMPs must be installed in accordance with an industry standard (e.g., Caltrans or California Storm water BMP Handbook).

At a minimum, the City requires that at least one of the BMPs listed in each category (A-E) below be installed and

maintained for all grading projects.

A. Erosion Control

Physical Stabilization BMPs, Hydraulic Stabilization BMPs, Vegetation Stabilization BMPs or a combination thereof, will be required to prevent erosion from exposed slopes. The City will not accept tracking, mulch, non-watered hydroseed or jute netting as a means to protect exposed slopes from erosion.

City approved BMPs for erosion control are as follows:

1. Physical Stabilization
   a) Geotextiles
   b) Straw or Coconut Blankets
2. Hydraulic Stabilization
   a) Bonded Fiber Matrix
3. Vegetation Stabilization
   a) Established interim vegetation (e.g., hydroseed)
   b) Established permanent landscaping

If vegetation stabilization (planting, hydroseeding) is selected for erosion control, the vegetative cover must be established by October 1st. If, in the opinion of the City Official, the vegetative cover is not established by October 1st, additional hydraulic or physical erosion control BMPs will be required.

B. Sediment Control

City approved BMPs for sediment control are as follows:

1. Perimeter Protection – Protect the perimeter of the site or disturbed area from sediment discharge.
   a) Silt Fencing
   b) Gravel Bags
   c) Straw Wattles
2. Resource Protection – Protect environmentally sensitive areas and watercourses from sediment.
   a) Silt Fencing
   b) Gravel Bags
   c) Straw Wattles

Private streets & paved area shall be swept by combination of broom and / or air vacuum sweepers.

C. Offsite Sediment Control

City approved BMPs for offsite sediment tracking control are as follows:

1. Offsite Sediment Tracking – Prevent sediment from being tracked offsite.
   a) Stabilized Construction Entrance
   b) Entrance/Exit Tire Wash
   c) Entrance/Exit Inspection and Cleaning Facility
   d) Streets shall be swept by combination of broom and / or air vacuum sweepers.

D. Velocity Reduction

City approved BMPs for velocity reduction are as follows:

1. Velocity Reduction – Reduce the velocity of stormwater runoff to prevent erosion.
   a) Outlet Protection
   b) Energy Dissipator

E. General Site Management

City approved BMPs for site management are as follows:

1. Construction Waste Handling – Prevent the contamination of storm water runoff by wastes through proper waste management.
   a) Solid Waste
   b) Sanitary Waste
   c) Concrete Waste
   d) Hazardous Waste
2. Materials Management – Prevent the contamination of storm water runoff by storage or handling of construction materials.

ATTACHMENT 4.1

MUNICIPAL INSPECTION FORM

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. Contact Information

Facility Name_____

Street Address_____ Mailing Address_____

_____ _____

Manager/Operator(s)_____

Telephone (□□□□□□) _____ - □□□□□□□□□□ ext._____ Fax (□□□□□□□) _____ - □□□□□□□□□□

Manager/Operator(s) Email:_____

Facility Personnel Present_____

B. Facility Site Information

Principal activity:_____

JURMP Classification_____

New JURMP Classification?_____

Does facility maintain SWPPP/BMP Plan? ☐ Yes ☐ No

If yes, what is the date of last SWPPP/BMP Plan revision?_____

If yes, does the SWPPP/BMP Plan include applicable minimum BMPs from the JURMP? (if no, describe in Section E) ☐ Yes ☐ No

If yes, does the SWPPP/BMP Plan include a current list of individuals Responsible for implementing BMPs at the site? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

C. Initial Observations

Drainage basin: ☐ Alvarado ☐ University ☐ Spring Valley ☐ Lemon Grove ☐ Lake Murray

Nearest conveyances or water bodies: _____ Hydrologic Area: _____

Approximate distance to water bodies: ☐ □ 200 ft. ☐ 200 □ 1000 ft. ☐ 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities: _____ square feet

Approximate □ impervious surface of this area_____□

Exposed areas of intensive outdoor activity: _____

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

D. BMP Assessment

BMPs	N/A	Yes	No	Comments
D.1 General				
Is the site free of excessive litter and debris?				
Are discharge locations free of excessive sediment and debris?				
Are parking lots, sidewalks and streets free of excessive sediment and debris?				
Are roof downspouts directed away from areas of potential pollutants?				
Is wash water from pressure washing / hosing managed appropriately?				
Are employees trained in storm water management?				
Does the facility have a current log of employees who have participated in training?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
If reclaimed water is used for irrigation, is the site free of evidence of irrigation water entering the storm drain?				
Are stockpiles of soil or landscape waste covered when feasible and equipped to prevent runoff transport?				
Are pesticides, herbicides, and fertilizers managed in accordance with the JURMP BMPs?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area adequately covered (closed lids or permanent overhead cover)?				
Is the trash/recycling area free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor materials that pose a threat to water quality stored appropriately (covered or in sealed containers)?				
Are outdoor storage containers properly labeled?				
Is there an accessible, appropriate spill response kit?				
Is there a written spill response plan? If so, please provide to inspector. (NA if no significant materials to spill)				
Are liquid storage containers/tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
Is water from pools and/or fountains disposed of properly?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				
Are vehicle maintenance activities conducted within contained areas when feasible (garage, canopy, work shop)?				

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

BMPs	N/A	Yes	No	Comments
Are equipment and vehicles inspected daily for leaks and repaired as necessary?				
Are storm drain inlets near vehicle-fueling areas protected from spills and leaks?				
Is vehicle washing preformed in a designated area where runoff does not enter the MS4?				
Are biodegradable soaps used when appropriate?				
D.5 Building Repair/Construction				
Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				
Are impervious areas free of debris and spills from painting, scraping, and/or sandblasting activities?				
D.6 Structural BMPs				
Are structural BMPs adequately maintained? (NA if no structural BMPs at facility)				
D.7 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.8 Other				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
E. ADDITIONAL COMMENTS (describe any additional deficiencies not represented above and/or notable BMP improvements)				

City of La Mesa
Storm Water Quality Inspection for Municipal Facilities

F. Corrective Action

Is corrective action needed? ☐ Yes ☐ No (If **BMP-related** corrective action is required, describe below.)

Operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax ☐ E-Mail

G. Violations

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described in Section F.

☐ Violation of City Ordinance(s):

- ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
  Description
- ☐ Illegal connection(s) to the storm drain system
  Location_____
- ☐ Littering
- ☐ Failure to properly implement required BMPs

☐ Other Violation_____

Specific action(s) required to correct the violation described above:

☐ Implement the recommended corrective actions listed in Section F.

Additional actions required:

H. Additional Recommended City Actions

Recommended City Actions listed at the time of inspection are subject to change based on later review by office staff

Does this facility require a follow-up inspection? ☐ Yes ☐ No

Assessment

Level of knowledge regarding storm water issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

ATTACHMENT 5.1

INDUSTRIAL/COMMERCIAL INSPECTION FORM

CITY OF LA MESA
Storm Water Compliance Inspection for Industrial and Commercial Facilities (FY 09-10)

Inspector Name _____ Date_____Time_____

Type of Inspection: ☐Routine ☐Follow-up ☐Complaint

Result:☐Full Insp. ☐Could not Contact ☐Not Inventoried ☐Moved, Vacant ☐Moved, Replaced by_____ ☐Refused ☐Mobile ☐Duplicate of_____

A. CONTACT INFORMATION

Original	Changes
Business Name	Business Name
Street Address	Street Address ☐change
Responsible Person(s)_____	Responsible Person(s)_____
Title:_____	Title:_____
Business Telephone _____ext._____	Business Telephone _____ext._____
Business Fax _____	Business Fax _____

Home Based? ☐Yes ☐No Mobile Business? ☐Yes ☐No **APN**:_____

Is this facility located in a multi-suite complex? ☐Yes ☐No

Facility personnel present:_____

B. FACILITY SITE INFORMATION

Principal activity:_____

Assigned SIC code(s) _____ _____ _____ _____

Does SIC Code best represent principal activity: ☐Yes ☐No

Recommended change of SIC Code(s)?_____ _____ _____ _____

Existing SIC code(s) _____ _____ _____ _____

Status Update (if no longer active in City or does not need an inspection):☐Moved/Out of Business ☐Duplicate ☐Not Inventoried ☐Out of Jurisdiction

Does facility have a current business certificate? ☐Yes ☐No _____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐Mandatory ☐Conditional ☐No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐Yes ☐No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐Yes ☐No WDID: 9 37I0_____

Has facility filed a Notice Of Termination (NOT) for the WDID listed above? ☐Yes ☐No Approval date:_____ month/yr

Does facility maintain SWPPP or BMP Plan? ☐Yes ☐No

Does facility have a storm water monitoring program? ☐Yes ☐No

C. INITIAL OBSERVATIONS

Discharge points:

Approximate area covered by industrial or commercial activities:_____square feet

Approximate impervious surface of this area_____

Exposed areas of significant outdoor activity or storage? ☐Permanent ☐Occasional ☐No

D. BMP ASSESSMENT

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.1 General					
Keep site free of litter, debris, and sediment using dry methods	☐	☐	☐	☐	
Keep storm drains on site free of litter and debris	☐	☐	☐	☐	
Keep outdoor areas free of spills and leaks	☐	☐	☐	☐	
Collect water from pressure washing or hosing and dispose of appropriately	☐	☐	☐	☐	☐Unknown Performed by:
Direct roof downspouts away from areas of potential pollutants	☐	☐	☐	☐	
D.2 Landscaping					
Properly manage pesticides/fertilizer; use IPM when feasible	☐	☐	☐	☐	☐Unknown Landscaping Co:
Employ adequate erosion prevention measures (vegetation or physical stabilization)	☐	☐	☐	☐	
Eliminate over watering/over-irrigation	☐	☐	☐	☐	
Properly store stockpiles to prevent material transport	☐	☐	☐	☐	
D.3 Materials and Wastes					
Protect trash area from contact with storm water	☐	☐	☐	☐	
Keep trash area free of litter and debris, liquids, powders, sediment	☐	☐	☐	☐	
Keep grease bin and area surrounding grease bin free of grease stains/spills	☐	☐	☐	☐	
Do oil-recycling/grease bins have overhead coverage?	☐	☐	☐	☐	
Adequately cover materials stored outside	☐	☐	☐	☐	
Prevent run-on from contacting materials stored outdoors	☐	☐	☐	☐	
Provide an accessible, functional spill response kit	☐	☐	☐	☐	
Equip liquid storage containers with spill containment	☐	☐	☐	☐	
Keep spill containment free of spills and rainwater	☐	☐	☐	☐	
Properly store and dispose of hazardous materials	☐	☐	☐	☐	
Keep loading and unloading areas, including drains, free of debris	☐	☐	☐	☐	
Dispose of water generated by processing activities appropriately	☐	☐	☐	☐	
Dispose of pool, spa, fountain, and filter backwash water properly	☐	☐	☐	☐	☐Unknown Performed by:
Clean floor mats in locations that do not drain to street or storm drain system	☐	☐	☐	☐	

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.4 Equipment, Vehicles, and Outdoor Activities					
Conduct outdoor activities within contained areas (garage, under canopy, work shop)	☐	☐	☐	☐	
Use drip pans to collect leaks/spills	☐	☐	☐	☐	
Provide materials (berm, mat, etc.) to protect storm drain inlets from spills and leaks	☐	☐	☐	☐	
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4	☐	☐	☐	☐	
D.5 Other					
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff	☐	☐	☐	☐	
Identify and eliminate illicit connections and illegal discharges	☐	☐	☐	☐	

D.6 Additional Required Actions

D.7 Additional Questions	Comments/Results
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐ Painting ☐ Sandblasting ☐ Fuel Distribution ☐ Dust dispersion or mineral processing ☐ Metal smelting ☐ Metal plating or anodizing ☐ Chemical production or mixing ☐ Large fuel burning device ☐ Incinerator
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A
What is the approximate percentage of the site that drains to the treatment control BMPs?	☐ N/A
Do major potential pollutant sources drain to treatment BMP(s)?	☐ All ☐ Some ☐ None ☐ N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	NOI ☐ NONA/NEC ☐

E. STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE

☐ Non-compliance with the State Industrial Storm Water General Permit noted.

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit; see Attachment 3 of the Industrial Permit (www.waterboards.ca.gov/stormwtr/industrial.html).

- ☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP); see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required: _____

_____

_____

F. CORRECTIVE ACTION SUMMARY

☐ **Corrective Actions and Re-inspection Required.** Please refer to sections D.1-D.6, E, and F of this form.

☐ No Corrective Actions Required at this time.

G. RECOMMENDED CITY ACTIONS

ASSESSMENT

Level of knowledge regarding stormwater issues:	☐1	☐2	☐3	☐4	☐5
Level of cleanliness, BMP implementation, orderliness of site:	☐1	☐2	☐3	☐4	☐5

Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Nutrients	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Aluminum	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Iron	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Heavy Metals	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Check if evidence indicates specific metals may have significant PDPs: ☐Copper ☐Cadmium ☐Lead ☐Zinc ☐Mercury												
Organic Compounds	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐PCBs ☐PAHs ☐Chlordane ☐DDT												
Trash & Debris	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Oxygen Demanding	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Oil & Grease	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Bacteria & Viruses	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Pesticides	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Check if evidence indicates the following are used on site: ☐Diazinon ☐Chlorpyrifos												
Acid/Base (pH effects)	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Others (list):	0	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

- RW 303(d) Receiving water impairments, as listed in the most recent 303(d) list
- WS COC High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
- PDP pollutant discharge potential.
- Emp. Training employee training activities focused on storm water pollution prevention
- Housekeeping standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
- Minor Struct. minor structural BMPs that do not require building permits, such as covering with tarps or building berms
- Major Struct. major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results exceed the EPA benchmark by an order of magnitude or more

CITY OF LA MESA

SUPPLEMENTAL WATERSHED ASSESSMENT QUESTIONNAIRE AND INSPECTION

Business Name _____ Date:_____

Watershed (circle one): ---

Questions for Facility Contact Person

When water (from rain, sprinklers, etc.) leaves your site where does it go? ☐ Treatment Plant/Sewer ☐ Storm Drain System ☐ A Water Body (any) ☐ Don't Know/Unsure

Runoff leaving your site eventually reaches what water body (more than one can be checked)? ☐ San Diego Bay ☐ Chollas Creek ☐ Pacific Ocean ☐ San Diego River ☐ Mission Bay ☐ Don't Know/Unsure

What is your impression of the water quality/condition of the downstream water body? ☐ Good ☐ Fair ☐ Poor ☐ Don't Know

In general, what do you think are the main areas or activities at local businesses that could contribute to pollution of runoff? ☐ Washing Activities ☐ Washing Activities Done by Mobile Businesses ☐ Material Storage ☐ Material Processing ☐ Landscaping ☐ Repair Services ☐ Illegal Dumping ☐ Trash Area ☐ Don't Know/Unsure ☐ Other

Other than today's inspection, have you received any information or education about what your business should do to prevent pollution from entering the environment? ☐ Yes ☐ No

Observations

Was evidence of any non-storm water discharge (including allowable discharges) observed? ☐ Significant ☐ Minimal ☐ No

If irrigation system is present, which sprinkler head types are present (check all that apply)? ☐ Spray ☐ Rotor ☐ Microspray ☐ Drip ☐ Bubblers ☐ Water by hand ☐ Other ☐ NA

Approximate percentage of site's total pervious area that is landscaped: _____ %

Attitude toward compliance with storm water regulations: ☐ Receptive ☐ Neutral ☐ Resistant

Overall Source Ranking (for Watershed Pollutants of Concern)

☐ Significant ☐ Not Significant

Industrial Commercial Storm Water Compliance Inspection
Corrective Actions (City Copy)

Inspection Date: _____

Business Name: _____

Address: _____

Responsible Person: _____

Inspector Name/Phone: _____

Re-inspection Required? **Yes** ☐ **No** ☐

Corrective Actions:

1._____

_____

2._____

_____

3._____

_____

4._____

_____

5._____

_____

6._____

_____

Industrial Commercial Storm Water Compliance Inspection Corrective Actions (Business Copy)

Inspection Date: _____

Business Name: _____

Address: _____

Responsible Person: _____

Inspector Name/Phone: _____

Re-inspection Required? **Yes** ☐ **No** ☐

Corrective Actions:

1._____

_____

2._____

_____

3._____

_____

4._____

_____

5._____

_____

6._____

_____

ATTACHMENT 5.2

LA MESA FOCUS NEWSLETTERS

CITY OF LA MESA
JEWEL of the HILLS

FOCUS

A Newsletter for the Citizens of La Mesa • August 2011

City to Distribute New Safety Handbook

The City has published a new community "Safety Handbook" as part of our ongoing efforts to provide valuable information to our citizens. The handbook contains important information on crime prevention, personal safety, emergency preparedness, and other topics. Development of the handbook is a joint project of the Police Dept. Crime Prevention Unit and the Fire Dept. The cost of publication is made possible by private donations and funds collected by the Police Dept. through asset seizure programs that target subjects involved in drug trafficking. No General Funds were required for this project.

The City is making plans to provide a copy of the handbook to each household and small business in La Mesa through distribution events beginning in mid August. Distribution will be done by volunteers walking assigned areas of the City delivering copies of the Handbook to houses, condos, apartments, and businesses. If you are interested in participating in one of more of the distribution events, contact the Police Department at 667.7514 to be placed on an interest list. Further information will be provided to you as distribution dates are confirmed. This is a great way to get to know your neighborhood better or explore areas of La Mesa you aren't familiar with while helping the City save money.

EVENTS CALENDAR

Aug 25 ..... General Plan – Housing Workshop
Aug 27 ..... Household Haz Waste Collection
Sep 5 ..... Labor Day – City offices closed
Sep 24 ..... Kids Care Fest
Oct 8 ..... Sustain La Mesa Festival
Oct 13 ..... Intergenerational Games
Oct 15 ..... Household Haz Waste Collection
Oct 22 ..... Park Appreciation Day

Pravada, located on Fletcher Parkway, is one of La Mesa's newest multi-family additions to available housing units in our community.

PLANNING FOR THE FUTURE OF HOUSING IN LA MESA

Workshop Planned for August 25

A new General Plan Housing Element is underway for the City of La Mesa. The Housing Element is the only element of the General Plan that is mandated to be updated every eight years. A primary goal of the Housing Element is to provide housing for the population growth forecasted for the next eight year planning period. The City must show adequate capacity within available sites with appropriate zoning to construct La Mesa's share of the units needed to house the future population. SANDAG predicts that La Mesa will need 1,700 housing units to support an anticipated population increase of approximately 2,800 people.

The majority of La Mesa's future growth in housing stock will be located around trolley stops and along the major transit corridors such as University Avenue, El Cajon Boulevard, and La Mesa Boulevard. These and other housing policy issues will be topics of a workshop on the Housing Element update, which will take place on Thursday, August 25 at 6:00 pm in the La Mesa Community Center, 4975 Memorial Drive. Anyone with an interest in the future of housing in La Mesa is encouraged to attend.

Participating in community workshops is just one of the ways you can make a positive contribution to your community.

ATTEND THE WORKSHOP ON AUG 25
Learn more about the General Plan Housing Element and take part in planning for La Mesa's future.

GRANT TO INCREASE RECYCLING OPPORTUNITIES FOR RESIDENTS IN MULTIFAMILY HOUSING

The City of La Mesa has received a grant from the California Department of Resources Recycling and Recovery to improve recycling opportunities for apartment and condominium complexes. Under the grant, eligible properties will receive space-saving reusable bags for separating recyclables in each unit, as well as aluminum can crushers. Properties will also be able to get indoor/outdoor recycling receptacles for use in common areas. The program is entirely grant funded so there is no cost to participate.

The goal of the grant is to increase recycling opportunities for multifamily residences in La Mesa. Program notices inviting participation will be mailed directly to property owners and managers in the coming months. For more information about the program or to be placed on the multifamily participation list, please contact the Department of Public Works Environmental Services Division at 667.1338 or by email at envirosvcs@ci.la-mesa.ca.us.

Cool Spots In & Around La Mesa

La Mesa residents who may be at risk from extreme heat can seek relief during the hot summer months at these La Mesa locations: Call sites directly for hours of operation:

Christian Science Reading Room
8370 La Mesa Blvd.
463.8470

La Mesa Adult Enrichment Center
8450 La Mesa Blvd.
464.0505

La Mesa Library
8074 Allison Ave.
469.2151

FREE Household Hazardous Waste and Electronic Waste Disposal

UPCOMING COLLECTIONS: **August 27 and October 15**

Household Hazardous Waste (HHW) collection events are available to City of La Mesa residents by appointment only at the EDCO facility, 8184 Commercial St., La Mesa. Please email appointment requests to lmhhw@edcodisposal.com or call EDCO at 287.5696 x4270. Be sure to provide your name, address, and phone number.

E-waste (electronic waste) is also accepted at the EDCO Station recycling buyback center during business hours, Monday through Saturday, without an appointment. Visit edcodisposal.com for more information.

To request additional information about the HHW program email envirosvcs@ci.la-mesa.ca.us or call the Environmental Services Division of the Public Works Department at 667.1338. For a complete HHW list or other information visit cityoflamesa.com/hhw.

LET'S CELEBRATE

10th Annual Kids Care Fest

Saturday, September 24 • 9:00 am – 2:00 pm

Briercrest Park and Grossmont Healthcare District
9001 Wakarusa Street

Fun FREE event for kids and the whole family

health info • fun zone • children's fingerprinting
health screenings • fire safety trailer • meet Fire & Police

In partnership between the City of La Mesa, Grossmont Healthcare District, and La Mesa Park & Recreation Foundation

Details coming soon on the City website or grossmonthealthcare.org

SAVE THE DATE *(and the Earth)*!

2011 "Sustain La Mesa" Environmental Festival

Saturday, October 8 • Harry Griffen Park

This year's festival will have more than 40 booths and exhibits as well as expert speakers and activities for all ages. Also featured will be the winners of the "Our Planet, Our Home" K-12 Environmental Literacy and Art Contest. The contest will have 16 winners over four different age categories and is open to all students from Kindergarten through 12th grade. Complete information about the festival and contest is available at cityoflamesa.com/SustainLaMesa.

This event is free for everyone. Watch the City website for additional details as they become available.

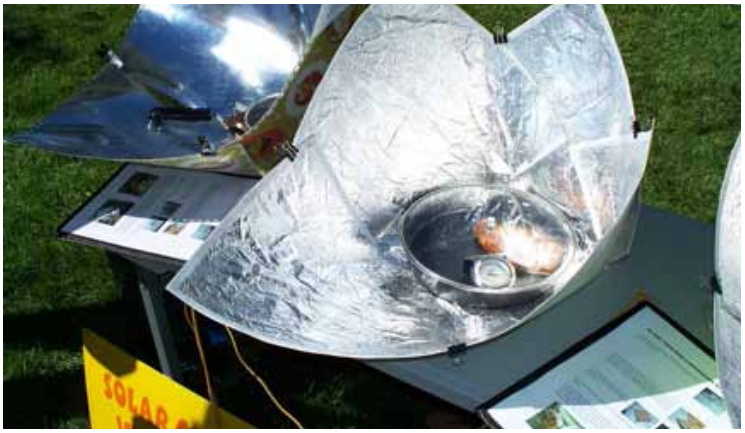

ADULT SOFTBALL

(Ages 18 and up)

Leagues forming later this year.
Watch for details on the City website or leave your contact information at 667.1172 #6

Serving the Cities of El Cajon, La Mesa and Lemon Grove

www.heartlandfire.org

Fire season is quickly approaching; do you know what to do in a Fire?

Over 350,000 home fires occur every year in the United States and more than 2,500 people a year die in these home fires. Odds are it will happen to you or someone you know. Here are a few tips on fire safety and prevention:

- Smoke alarms save lives. Install a smoke alarm outside each sleeping area and on each additional level of your home. If people sleep with doors closed, install smoke alarms inside sleeping areas, too.
  - Use the test button to check each smoke alarm once a month. When necessary, replace batteries immediately.
  - Replace all batteries at least once a year.
- Consider having one or more working fire extinguishers in your home.
- Consider installing an automatic fire sprinkler system in your home.
  - If you have a reported fire in your home, the risk of dying decreases by about 80% when sprinklers are present.
  - People in homes with sprinklers are protected against significant property loss—sprinklers reduce the average property loss by 71% per fire.
- Determine at least two ways to escape from every room of your home. Consider escape ladders for sleeping areas on the second or third floor. Learn how to use them and store them near the window.
- Select a location outside your home where everyone would meet after escaping. Practice your escape plan at least twice a year.
- Once you are out, stay out! Call the fire department from a neighbor's home.
- If you see smoke or fire in your first escape route, use your second way out. If you must exit through smoke, crawl low under the smoke to your exit. If you are escaping through a closed door, feel the door before opening it. If it is warm, use your second way out.
- If smoke, heat, or flames block your exit routes, stay in the room with the door closed.
  - If possible, stuff wet cloths around the door cracks and vents.
  - Signal for help using a bright-colored cloth at the window.
  - If there is a telephone in the room, call the fire department and tell them where you are.
- If your clothes catch on fire, you should – Stop, drop, and roll - until the fire is extinguished. Running only makes the fire burn faster.

To escape a fire, you should:

- Check closed doors for heat before you open them. If you are escaping through a closed door, use the back of your hand to feel the top of the door, the doorknob, and the crack between the door and door frame before you open it. Never use the palm of your hand or fingers to test for heat - burning those areas could impair your ability to escape a fire (i.e., ladders and crawling).

  HOT DOOR

  Do not open. Escape through a window. If you cannot escape, hang a white or light-colored sheet or bright cloth outside the window, alerting firefighters to your presence.

  COOL DOOR

  Open slowly and ensure fire and/or smoke is not blocking your escape route. If your escape route is blocked, shut the door immediately and use an alternate escape route, such as a window. If clear, leave immediately through the door and close it behind you. Be prepared to crawl. Smoke and heat rise. The air is clearer and cooler near the floor.
- Crawl low under any smoke to your exit - heavy smoke and poisonous gases collect first along the ceiling.
- Close doors behind you as you escape to delay the spread of the fire.

Your recovery from the emergency may greatly depend on your level of preparedness before the emergency happens. Take time now to prepare, visit heartlandfire.org, readysandiego.org, theredguidetorecovery.com or sdarc.org for preparedness tips and to download the "Wildfire Preparedness Guide."

Intergenerational GAMES

Thursday, October 13
9:30 am – Noon

La Mesa Middle School

This FREE fun filled half-day event pairs active older adults with local students in grades 4 through 6 in a circuit of physical activity games and knowledge challenges. Focus is on non-competitive fun activities that encourage lifelong health and fitness.

Active adults age 55+ and La Mesa/ Spring Valley students in grades 4 through 6 are encouraged to sign up. It's a great way to get kids active during the fall school break. Sponsorships are available. Registration forms can be downloaded from the City website or call the Community Center office at 667.1300 or the Adult Enrichment Center at 667.1322 for more information.

VISIT THE PUBLIC SAFETY BOOTH AT OKTOBERFEST

Friday, September 30 – Sunday, October 2

The La Mesa Police Department will be at Oktoberfest! Stop by our booth at La Mesa Boulevard and Acacia Avenue to learn more about Neighborhood Watch and discuss other crime prevention measures or concerns. A representative from Heartland Fire & Rescue will also be present to provide information on creating an emergency preparedness plan for your family. Don't miss out! Mark your calendar today.

The Sandwich Generation:
Who's Filling the Transportation Gap?

Did you know that more families are joining the "sandwich generation" - juggling jobs, children, and caring for aging parents? Are you a member of the Sandwich Generation?

Ask yourself these questions:

1. Do I have aging parents and children who need care?
2. Do I have aging parents, adult children, or grandchildren?
3. Do I have an aging friend or neighbor?
4. Do I belong to an organization that has aging members?

If you answered yes to at least one of the questions then you are a member of the Sandwich Generation. The Sandwich Generation is defined as an age group that is simultaneously caring for parents and children. The Pew Research Center reports that 1 out of every 8 Americans between the age of 40 to 60 is raising a child and providing care for a parent, while the U.S. Census Bureau reports 46% of households include an adult over 60.

Those statistics are mirrored as many juggle work, family, and social involvement while also providing care for an aging family member or friend. With most medical, personal care, and business appointments scheduled during the workday, members of the Sandwich Generation often are faced with tough choices. Do they provide transportation or do they miss all or part of their work day? MetLife Mature Market Institute reports American businesses can lose as much as $34 billion each year due to employees' need to care for loved ones 50 years of age or older.

The next time you or someone you know finds that they are trying to fill the transportation gap, call Rides4Neighbors. Our transportation assistance program provides rides for older adults age 60+ and adults with disabilities. The program offers eligible participants several service options: trained volunteer drivers who use their own vehicles to provide rides; a discount taxi scrip program; a weekly shopping shuttle; wheelchair accessible van transport if needed. And for active adults interested in maintaining their independence Travel San Diego is an exciting opportunity to learn all about public transportation. This small group class is designed for individuals aged 60+ and combines moderate walking and learning to use public transportation. Call Rides4Neighbors at 667.1321 for an application.

Sun Valley Golf Course

5080 Memorial Drive

7:00 am to sunset, 7 days a week

Adults: $10 for 9 holes, $14 for 18 holes

Students*: $7 for 9 holes, $10 for 18 holes

*(*includes college with valid student ID)*

CLINICS, LESSONS, AND SPECIAL PROGRAM ARE AVAILABLE

For details go to sunvalleygolfclub.com or call 466.6102

La Mesa Neighborhood Watch Program

You and your neighbors can make a difference in your community! A Neighborhood Watch group forges bonds among residents and provides a forum to address area specific concerns with La Mesa Police Department personnel. Here are some important reasons to start a Neighborhood Watch group:

- Develop neighborhood cohesion.
- Improve home security.
- Address particular, immediate crime problems.
- Become educated about circumstances in the community that might contribute to crime.
- Develop long-range solutions to prevent future crimes.

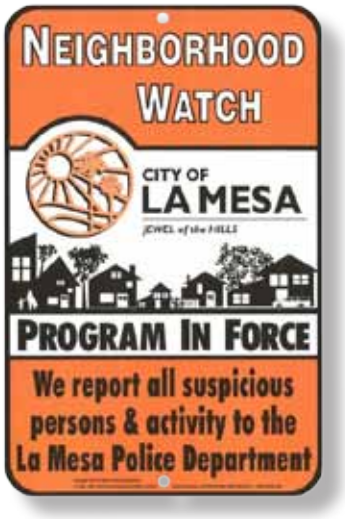

Start or join a Neighborhood Watch today! Here is how:

STEP 1: Call the Crime Prevention Specialist at 667.7545 for tips and information.

STEP 2: Speak with your neighbors and encourage their participation.

STEP 3: Pick a date, time, and location for the meeting.

STEP 4: Schedule the meeting with the Crime Prevention Specialist.

STEP 5: Publicize the meeting! Email, knock on doors, or drop off flyers.

At the first meeting you will discuss:

- Incidents of crime occurring in your neighborhood.
- How to identify and report suspicious activity.
- Crime prevention measures to protect your family and your home.
- How to maintain an active Neighborhood Watch group.
- Emergency preparedness and Neighborhood Watch.
- Crime related issues that are important to you.

The La Mesa Police Department is proud of our excellent working relationship with the community.

Thank you for taking an active role in making your La Mesa neighborhood a wonderful place to live.

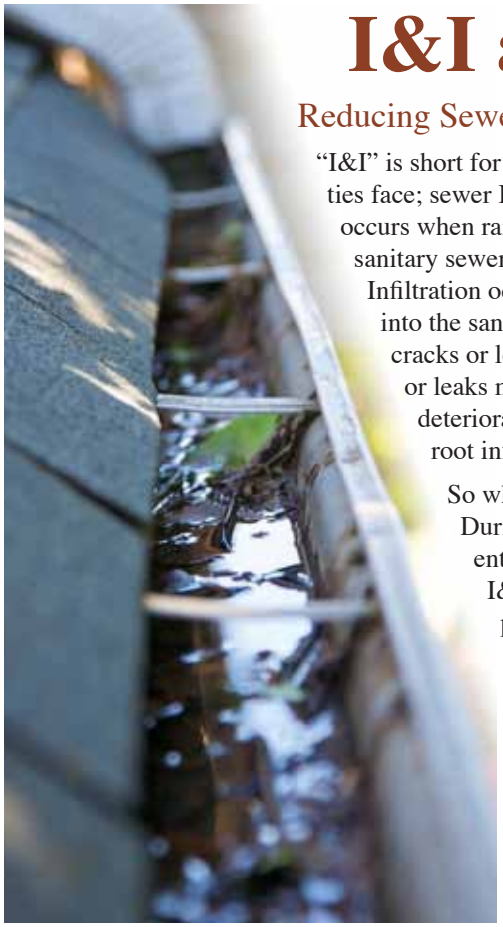

I&I and You

Reducing Sewer Inflow and Infiltration

"I&I" is short for a big problem many communities face; sewer Inflow and Infiltration. Inflow occurs when rainwater is misdirected into the sanitary sewer system instead of storm drains. Infiltration occurs when ground water seeps into the sanitary sewer system through cracks or leaks in sewer pipes. The cracks or leaks may be caused by age related deterioration, loose joints, damage, or root infiltration.

So why is I&I such a problem? During rainstorms, rain water can enter the sanitary sewer through I&I sources and consume a large portion of the sanitary sewer system. Overloaded sewer pipes can result in service interruptions, flooded households, and sewage spills. Ignored I&I results in excessive flows in the sewers and into the wastewater treatment plant. This becomes a very costly problem for all of us.

What can I do to help?

- Inspect rain gutters on your house and make sure the downspout is not connected to the sanitary sewer. Rainwater should be directed to your lawn and/or the storm drain.
- Inspect sump pump connections and area/yard drains to ensure they are not connected to the sanitary sewer.
- Inspect your sewer cleanout to ensure the cap is tightly closed and that the cleanout pipe has not been damaged (such as by a lawn mower). Replace missing caps so rainwater cannot get into the sewer system.
- Avoid planting trees and shrubs over or near sewer lines. Roots can enter and damage sewer piping. Replacement of sewer pipes can be a huge expense to private property owners.
- Contact a plumber for periodic inspections for sewer pipe cracks, separated joints, or sags.

The City is constantly working to identify I&I problem areas by a variety of methods including sewer flow metering, smoke testing, and video inspection of the sewer pipes within the City's sewer mains. Problem sewer pipes are repaired, replaced, or rehabilitated to eliminate I&I. Together we can make difference.

Please share this information with your family, friends, and neighbors. For more information contact the City's Engineering Department 667.1166.

Say "No" To Runoff. Stop Over Watering!

On an average sunny day in La Mesa you would be hard pressed not to find at least a few residences with their sprinklers running and causing overspray, often the source of water running down the street. If you think to yourself, "What a water waster," you would be right! With the type of soil found in La Mesa, it doesn't take much moisture on the ground before water starts running off your property. This runoff is not only a waste of our most precious commodity; but also a waste of your hard earned money.

Follow these tips to help eliminate over irrigation:

- Monitor the amount of time it takes for runoff to begin to occur on your property.
- Design irrigation systems with control devices, sensors, or shut-off switches to address malfunctions.
- Don't irrigate non-planted areas.
- Regularly inspect your irrigation system for potential problems.
- Consider drip irrigation to save water and prevent runoff.
- Adjust irrigation rates according to seasons and weather conditions.
- Irrigate in the early morning, the most efficient time for watering with minimal evaporation.

You may not be aware that Helix Water District has several programs to help single-family homeowners conserve water. Residents are eligible to apply for irrigation controller rebates worth up to $200. For more information, call 466.0585, visit www.hwd.com/conserv or email conserve@helixwater.org.

Please share this information with family, friends, and neighbors. For more information contact the City's Storm Water Hotline 667.1134.

PARDON OUR APPEARANCE

Update to Citywide Street Resurfacing and Sidewalk Improvements

Preparation work is well underway to pave the streets of La Mesa. Sidewalk improvements have begun along Bancroft Drive between Spice Street and Johnson Drive. Once the Bancroft Drive portion of the project is completed, work will move to Waite Drive and Murray Hill Road, connecting the existing sidewalk on Murray Hill Road to High Street.

The first phase of undergrounding overhead utility lines has begun on Normal Avenue near Lowell Street and continues to move steadily toward Windsor Drive.

Portions of the following streets will be affected by resurfacing:

- Center Street
- Guild Street
- Commercial Street
- Center Drive
- Marengo Avenue
- Dallas Street
- La Mesa Boulevard
- Bancroft Drive
- Waite Drive
- Yale Avenue
- Orien Avenue
- Lowell Street
- Normal Avenue
- Parks Avenue
- Dale Avenue
- Lee Avenue

The resurfacing process will grind out approximately two inches of existing asphalt and replace it with new asphalt to provide these streets with many more years of service life.

New pedestrian ramps at street corners are also being installed in preparation for the resurfacing project.

Notices and door hangers are being distributed to affected residences and businesses. If you have questions please contact the number on the notice or call Project Manager Dirk Epperson at 667.1152. Thank you for your patience while the City completes these important infrastructure improvements.

PARK APPRECIATION DAY

Saturday, October 22
8:00 am to 12:00 pm

La Mesa's Parks are Our City's Jewels, Help Make Them Shine!

For individuals – Bring your own gloves, rakes, or trowels to your favorite park. Parents must accompany children under age 18 unless with a previously registered and supervised large group.

Signed waivers are required for all participants – download from the City website and bring with you to the park.

Have a large group? We can help you find a project your members can participate in together. Give us a call at 667.1300.

Volunteers help spruce up their favorite parks during 2010 Park Appreciation Day.

Council Actions

April 12, 2011

Adopted a resolution approving the amendment to the Memorandum of Understanding with the San Diego Association of Governments (SANDAG) to provide advanced funding using the TransNet Commercial Paper Program for improvements to city streets.

Adopted a resolution authorizing execution of an agreement with the San Diego Unified School District for the use of the La Mesa Municipal Pool.

April 26, 2011

Adopted a resolution approving the Mitigated Negative Declaration for the La Mesa Sewer Repair and Replacement in Maintenance Zones 2 and 3 as required by the State Revolving Fund Financial Assistance Application.

Adopted a resolution authorizing the City of La Mesa to apply to the State Water Resources Control Board for the State Revolving Fund Financial Assistance.

Adopted a resolution adopting the San Diego Association of Governments (SANDAG) annual fee update to the Regional Transportation Congestion Improvement Program (RTCIP) Development Impact Fee to comply with the requirements of SANDAG Commission Ordinance 04-01 and the TransNet Extension Ordinance and Expenditure Plan.

Adopted a resolution declaring there were weeds, rubbish and refuse existing upon certain streets, sidewalks and private property in the City and opened the Weed Abatement Program for 2011.

Adopted the Fee Schedule for Fiscal Year 2011-2012

May 10, 2011

Ratified the Design Review Board's approval of DRB-09-21 (Associated Investors and Developers) – for a proposed 12-unit residential development at 8659-61, 8673-8675, and 8677 Lemon Avenue.

Adopted a resolution adopting the City of La Mesa Fiscal Year 2011/2012 Annual Plan for Community Development Block Grant and HOME-funded activities.

Adopted a resolution authorizing execution of an amendment to a professional services agreement with KTU+A for work related to the Safe Routes to Transit project under the Communities Putting Prevention to Work, Active Community Transportation Grant Program.

Adopted a resolution in support of Assembly Bill 1022 (Fletcher) regarding the expanded community notification provisions pertaining to registered sex offenders.

Adopted a resolution adopting the California Uniform Public Construction Cost Accounting Act Procedures.

Adopted a resolution adopting the Multi-Jurisdictional Hazard Mitigation Plan.

May 24, 2011

Adopted a resolution authorizing reapplication for a Playful City USA designation in 2011 as part of the City's continuing Wellness Initiative.

Adopted a resolution authorizing a professional services agreement with Atkins North America Inc. for consulting services related to environmental review of the Collier Park Master Plan.

Adopted an Ordinance adding Chapter 2.40 to the La Mesa Municipal Code to adopt alternative procedures for bidding pursuant to the Uniform Public Construction Cost Accounting Act.

Authorized the issuance of a Special Event Permit and street closures for the La Mesa Village Merchants' Association Back to the 50's Car Show and adopted a resolution temporarily closing portions of Palm Avenue and Third Street during the duration of the event.

June 14, 2011

Ratified the Design Review Board's approval of DRB-10-01 (Grossmont Healthcare District) – for a proposed diagnostic and treatment building and power plant facility at the Grossmont Medical Campus at 5555 Grossmont Center Drive.

Adopted a resolution accepting a Highway Safety Improvement Program Grant and appropriating funds for the construction of traffic signal improvements at the intersection of University Avenue and Harbinson Avenue (Marian Street).

Adopted a resolution accepting a Highway Safety Improvement Program Grant and appropriating funds for the construction of traffic signal improvements at the intersection of University Avenue and Massachusetts Avenue.

Adopted a resolution authorizing execution of a lease agreement with the Challenge Center for use of the building known as Sunset Gym at 5540 Lake Park Way.

Adopted a resolution authorizing a grant application for Proposition 84 – Statewide Park Development and Community Revitalization Program of 2008 for Collier Park construction.

Adopted a resolution accepting a grant from the California Department of Alcoholic Beverage Control Grant Assistance Program and approved the addition of the grant funds to Fiscal Year 2011-2012 Budget.

Adopted the preliminary Biennial Budget for 2011-2013.

Adopted a resolution adopting the appropriations limit for fiscal year ending June 30, 2012, and the annual adjustment factors used to calculate the appropriations limit.

Adopted a resolution supporting findings and appropriation of funds for the recommended Park In-Lieu and Impact Fee Projects.

June 28, 2011

Ratified the Design Review Board's approval of DRB 11-02 (AT&T) – a proposed wireless communications facility at 4690 Palm Avenue.

Ratified the Design Review Board's approval of DRB-11-09 (8277 La Mesa Boulevard LLC) – for proposed exterior alterations to a commercial retail building at 8277 La Mesa Boulevard.

Adopted a resolution approving the 2011-2012 Memorandum of Understanding between the City of La Mesa and the La Mesa City Employees' Association.

Adopted a resolution approving the 2011-2012 Memorandum of Understanding between the City of La Mesa and the La Mesa Police Officers' Association.

Adopted a resolution authorizing the acceptance of the Fiscal Year 2011/2012 San Diego Service Authority for Freeway Emergencies (SAFE) Motorist Aid and Safety Grant of $23,489.00 for personal protective clothing.

Adopted a resolution authorizing a grant proposal for Healthy WorksSM School and Community Gardens Program to lead a pilot project to plan a joint use garden with Helix Charter High School.

Authorized Fire Department staff to proceed with the Weed Abatement Program to reduce fire hazards.

FOCUS

CITY OF LA MESA
City Hall Administrative Offices
8130 Allison Ave., La Mesa, CA 91942
Phone: 619.463.6611
E-mail: focus@ci.la-mesa.ca.us
Website: www.cityoflamesa.com

CITY OF LA MESA FOCUS
This newsletter is produced and distributed by the City of La Mesa as a public service to La Mesa residents and businesses.

Mayor ..... Art Madrid
Vice Mayor ..... Ruth Sterling
Councilmember ..... Dave Allan
Councilmember ..... Ernie Ewin
Councilmember ..... Mark Arapostathis
City Manager ..... David E. Witt
Focus Editor ..... Käaren McElroy
Editorial Staff ..... Heather Moore Sheppard
Ofelia Andrade

La Mesa COMMUNITY SERVICES

Enroll NOW for Fall Activities

AQUATICS CLASSES

Convenient enrollment is available online OR print the enrollment form to mail in

Sign up to receive alerts from the La Mesa Police Department

Text "LAMESAPOLICE" to 888777

nixle
Alert | Advisory | Community | Traffic

City of La Mesa Monthy Meeting Schedule

Meetings are held at City Hall
8130 Allison Avenue - La Mesa
(unless indicated otherwise)

CITY COUNCIL
Second Tuesday - 4:00 pm
Fourth Tuesday - 6:00 pm

PLANNING COMMISSION
First and Third Wednesday - 7:00 pm

DEVELOPMENT ADVISORY BOARD
Every other Monday - 10:00 am

DESIGN REVIEW BOARD
Every other Monday - 12:30 pm

ENVIRONMENTAL SUSTAINABILITY COMMISSION
Third Monday - 6:00 pm

HISTORIC PRESERVATION COMMISSION
First Tuesday - 5:00 pm

LOAN COMMITTEE FOR REAL ESTATE REHABILITATION
Third Wednesday - 8:30 am
(as needed)

REDEVELOPMENT AGENCY
Fourth Tuesday - 6:00 pm
(as needed)

HUMAN RELATIONS ADVISORY COMMISSION
Second Monday - 5:30 pm

LA MESA COMMUNITY PARKING COMMISSION
Second Tuesday - 5:30 pm

TRAFFIC COMMISSION
First Wednesday - 9:00 am

COMMUNITY SERVICES COMMISSION
Second Wednesday - 6:00 pm

YOUTH ADVISORY COMMISSION
Second & Fourth Monday - 4:30 pm
The above meetings are held at the Community Center Conference Room 4975 Memorial Drive - La Mesa

COMMISSION ON AGING
Fourth Tuesday - 1:30 pm
(except July, Aug., Nov., & Dec.)
The above meeting is held at the Adult Enrichment Center 8450 La Mesa Boulevard - La Mesa

IMPORTANT PHONE NUMBERS (Area code 619)

Adult Enrichment Center	667.1322
Animal Control	667.7536
Building Inspection	667.1176
Business Licenses	667.1118
City Attorney	667.1128
City Clerk	667.1120
City Council	667.1106
City Hall	463.6611
City Manager	667.1105
Crime Prevention	667.7845
Dog Licenses	667.1114
Engineering	667.1166
Fire (Business)	667.1355
Graffiti Hotline	667.7560
Human Resources	667.1175
Library	469.2151
Mayor	667.1100
Municipal Pool	667.1494
Park Permits	667.1300
Parking Citations	667.1117
Planning	667.1177
Police (Business)	667.1400
Public Works	667.1450
Recreation	667.1300
Recycling/Trash	287.7555
Rides4Neighbors	667.1321
Senior Taxi Scrip	667.1321
Sewer Charges	667.1126
Sidewalk Maint.	667.1450
Storm Water Hotline	667.1134
Streetlight Maint.	667.1450
Traffic Eng. Hotline	667.1144
Traffic Signal Maint.	667.1166
Zoning	667.1177

LA MESA FOCUS

City News & Events

Welcome to the first issue of the redesigned La Mesa FOCUS Newsletter. Based on community input, each issue of the FOCUS will be shorter in length, will focus on one subject matter, and will be published more frequently. We hope you find the new look and format more interesting and easier to read. In addition, the FOCUS will be available in a presentation format on Cox Cable channel 24 and AT&T U-verse channel 99. View programming schedule at www.cityoflamesa.com/GovChannel

La Mesa Celebrates **100 Years of Governing**

This year, the city is honoring the Centennial by hosting a Town Hall meeting on February 7 from 6:30 to 8:30 p.m. The meeting will be held at the La Mesa Community Center, 4975 Memorial Drive. In addition to the opportunity to learn about city services such as Neighborhood Watch, Emergency Preparedness, Safe Routes to Schools, planning efforts such as the General Plan Update and Park Master Plan, members of the public can ask the City Council questions or express concerns about their city. Residents will also find out how to become involved in the city's year long Centennial celebration.

La Mesa Blvd between Third and Fourth Streets, Credit: La Mesa Historical Society

The Town Hall meeting is a part of the City Council's strategic planning process that includes gathering input from citizens, reviewing city financial data, goals, and action plans at their annual workshop. These tools are used to determine the city's biennium budget.

Calendar of Events

Jan 28
Household Hazardous Waste Collection

Feb 7
Town Hall Meeting

Feb 14
Centennial Kick Off

Feb 18
Aerial "100" La Mesans Photo

Feb 23
La Mesa Chamber's 4th Annual Casino Royale

Feb 25
Readers & Writers Festival

Feb 25
Teen Summit

For details, please go to our City website at
cityoflamesa.com

and our Centennial website at
cityoflamesa100.com

2012 Centennial General Plan Update

In honor of La Mesa's 100th birthday, the City's General Plan will be updated and available for review in Spring 2012. Go to www.cityoflamesa.com/NotifyMe to sign up to be notified when the 2012 Draft General Plan Update becomes available. A General Plan is intended to provide comprehensive, long-term direction by establishing locally important goals and policies.

The City of La Mesa adopted its first General Plan in 1965. It has been amended and updated periodically as state law has changed and as local needs have changed. A comprehensive update of the General Plan was last adopted by the City Council on March 12, 1996 and the Housing Element was last updated in 2005.

The General Plan update strengthens policies that preserve single-family neighborhoods while promoting in-fill development in commercial areas and along transit corridors in La Mesa. The Project will align the City's General Plan with regional goals and new State legislation that has been adopted since 1996.

The next step in the approval process for the General Plan Update is the preparation of an Environmental Impact Report (EIR). The EIR process allows for public review of the draft plan and its environmental consequences. The EIR process begins in 2012 and will take 12-18 months to complete. Once the EIR is complete, public hearings before the La Mesa Planning Commission and City Council will be held to adopt the updated 2012 General Plan.

The draft plan was completed by city staff with the help of consultants and funding with grants from the Kaiser Foundation and SANDAG.

Watch La Mesa's Government Access Channel

Council Meetings: 2nd Tuesday, 4 p.m.; 4th Tuesday, 6 p.m.

Residential Crime Prevention, Merchants Crime Prevention, Click It or Ticket!, Sustain La Mesa: Mondays/Wednesdays, 7 – 8 p.m.; Saturdays/Sundays, 3 – 4 p.m.

Bulletin Board: Mondays/Wednesdays/Fridays, 7 – 8 a.m.; Saturdays/Sundays, 4 – 5 p.m.

Programming is available on Cox Cable channel 24 within city limits and AT&T U-verse channel 99 within San Diego Region. View complete broadcasting schedule on City's Website.

New Initiatives in the 2012 General Plan Update include:

- The Global Warming Solutions Act of 2006 (AB 32)
- The Sustainable Communities and Climate Protection Act (SB 375)
- California Complete Streets legislation (AB 1358)
- Consistency with the Regional Comprehensive Plan (RCP), Sustainable Communities Strategy (SCS), and Regional Transportation Plan (RTP) adopted by the San Diego Association of Governments (SANDAG)
- Inclusion of the City's Hazard Mitigation Plan
- Health & Wellness Element

With a 20-year planning horizon, the General Plan update will plan for approximately 7,800 new people, 1,800 new housing units, and 1,200 new jobs based on SANDAG's regional growth forecast for La Mesa:

- 2010 La Mesa population 58,150
- 2030 La Mesa population 65,984 (13% increase)
- 2050 La Mesa population 77,780 (33% increase)

LA MESA FOCUS

City News & Events

March 2012

La Mesa Recycles!

The City currently has recycling programs to target waste streams that would otherwise be disposed of in our region's landfills. These diverted materials are given second lives through recycling programs such as EDCO's commingled recycling and the City's construction and demolition debris recycling requirement. La Mesa's recycling program has diverted 32,000 tons of material, a 43% reduction since 2004. According to statewide figures from the California Department of Resource Recycling and Recovery, 32 percent of that remaining waste sent to landfills is organic. Composting makes sense!

NEW BACKYARD COMPOSTING BINS AVAILABLE

Discount for La Mesa Residents!

The City of La Mesa is offering discounts to residents to purchase backyard compost bins for $30 in a partnership with Dixieline ProBuild. To qualify you must live in the incorporated City limits. Residents may request a coupon from the City that they can redeem at the La Mesa Dixieline ProBuild store (while supplies last). The coupon is worth $40 off $69.99 retail value of the bin.

The City uses funds collected through its existing recycling programs to reimburse the store for the cost difference. This program does not apply to businesses or multifamily property owners, although they are encouraged to purchase composters and participate in recycling of organic waste.

Interested residents may access our "Guide to Backyard Composting" and the coupon request form at **cityoflamesa.com/composting** or at City Hall. Composting classes are offered by the Water Conservation Garden and EDCO. Questions? Contact the Environmental Services Division at **envirosvcs@ci.la-mesa.ca.us** or **667.1338**.

Parks are a great place to celebrate special occasions!

Whether you're planning a wedding, birthday party, corporate event or family get-together, park use permits are required for groups of 25 or more, and for special use such as astrojumps. No alcoholic beverages are allowed without a special permit. Make your reservation today at **rsvp4parks@ci.la-mesa.ca.us** or **667.1307**.

Calendar of Events

March 2, 16, 30
City Hall Closed

March 2, 6 pm
Miss La Mesa Pageants
Sonrise Church, Santee

March 3, all day
La Mesa Kiwanis Soap Box Derby - Junior High Drive

March 17, 10 am
La Mesa 1912: A City is Born Historical Series - Grossmont Healthcare District

March 24, 9 am – 1 pm
Household Hazardous Waste Collection - EDCO Station

March 31, 9 am – 4 pm
La Mesa Garden Tour
Begins at Briercrest Park

For details,
please go to our City website at
cityoflamesa.com

and our Centennial website at
cityoflamesa100.com

NEW Enhanced Online Enrollment for Recreation Classes & Camps

Convenient – Secure – Guaranteed Class Choice

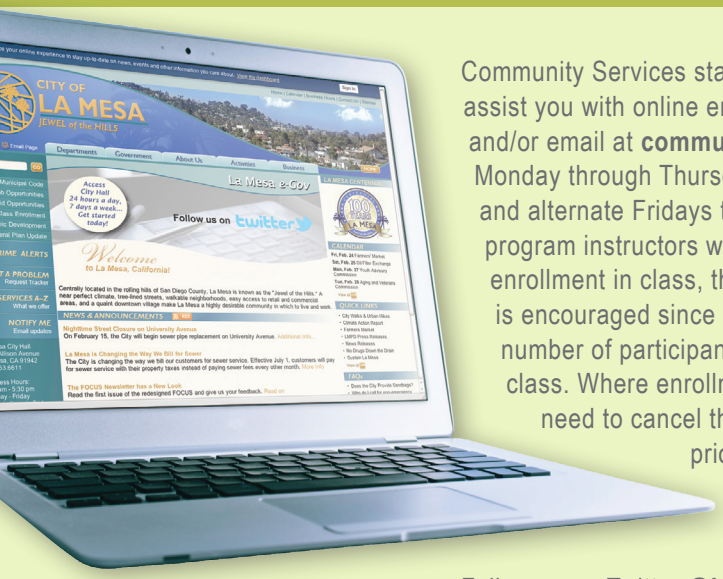

Community Services staff is available to help assist you with online enrollment at **667.1300** and/or email at **community@ci.la-mesa.ca.us** Monday through Thursday 7:30 am to 5:30 pm and alternate Fridays to 4:30 pm. Please note program instructors will no longer be accepting enrollment in class, therefore early enrollment is encouraged since there are a minimum number of participants required to hold class. Where enrollment is low, we may need to cancel the course one week prior to the start date.

Follow us on Twitter **@LaMesaCommunity**. We post relevant community services information and highlights from events and programs, in addition to fun contests and prize giveaways.

Get Out and Play!

Summer is just around the corner, and that means summer camps, enrichment classes, and youth aquatic classes are being offered. Enrollment starts March 1st for day camps and May 1st for summer activities. View activities schedules online at **cityoflamesa.com/classes**. Click on the orange "Enroll Online" button for online enrollment.

Fundraising for the La Mesa Centennial Flag Day Parade... For Today and Tomorrow

The Flag Day Parade is organized by volunteers and supported financially by community individuals, organizations and businesses. In honor of our Centennial the fundraising goal is $25,000 ($15,000 for the 2012 Parade and $10,000 to create a future parade endowment). We hope you will become one of the sponsoring partners of our Centennial Flag Day Parade. For more info, call **667.1333**.

Image Courtesy of MTS

La Mesa City Council Celebrates 100 Years

cityoflamesa100.com

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JEWEL of the HILLS

8130 Allison Avenue
La Mesa, CA 91942

619.463.6611
cityoflamesa.com

LA MESA FOCUS

City News & Events

April 2012

Important Information About Your Sewer Bill

Effective July 1 the City will discontinue bimonthly sewer billing and bill annually on property tax bills. This change does not affect the rate at which sewer charges are calculated. Charges will still be calculated for each property using winter water consumption from the previous five years and will be recalculated each year on July 1.

If you own property in La Mesa you are responsible for sewer charges incurred at that property. These charges will appear on the annual property tax bill you receive from the County Assessor-Tax Collector's office as a fixed charge special assessment. If you operate a business or rent a single-family home, condominium, apartment or commercial/industrial space in the City of La Mesa but do not own the property, you will not receive a sewer bill after July 1. Sewer charges will be billed to the property owner on the annual property tax bill.

Customers who pay property taxes through an impound account may need to adjust their monthly payment to cover the sewer service charges. The average annual single-family sewer charge is currently $400 a year. These charges are not tax-deductible on your income tax return and should not be used to reduce your tax burden.

WHY THE CHANGE?

La Mesa has shared billing systems with Helix Water District for the past 20 years. Helix Water District is changing their billing system and will no longer be able to support the City of La Mesa billing function. The City examined various options for sewer billing and found that placement of charges on the property tax bill was the most cost effective solution.
The billing change will result in a substantial reduction in processing and mailing costs. La Mesa currently processes about 13,700 sewer bills every other month.

QUESTIONS?

If you have questions about the sewer billing changes, visit our website at **cityoflamesa.com/Sewer** or call **961.2848**.

ANNUAL CREEK TO BAY CLEANUP

Saturday, April 28 • 9:00 am to 12 pm

TWO LOCATIONS IN LA MESA:

- Alvarado Channel meeting across the street from 7601 Alvarado Rd.
- University Channel meeting at Schaffer Ambulance 7285 University Ave.

For more information and to sign up visit **creektobay.org**.

Calendar of Events

April 13, 27
City Hall Closed

April 14, 21
Spring Clean Up
7:00 am to 2:00 pm
EDCO Station
8184 Commercial St.

Apr 14 if you live South of I-8
Apr 21 if you live North of I-8

For info: **667.1338** or email **envirosvcs@ci.la-mesa.ca.us**

April 28
April Pools Day
12:00 pm - 3:00 pm
La Mesa Municipal Pool
5100 Memorial Dr.

La Mesa Safety Handbook

Look for your copy of the La Mesa Safety Handbook in your mailbox soon! Learn how to contact emergency and City services, get crime prevention tips for you and your family, and plan and prepare for an emergency.

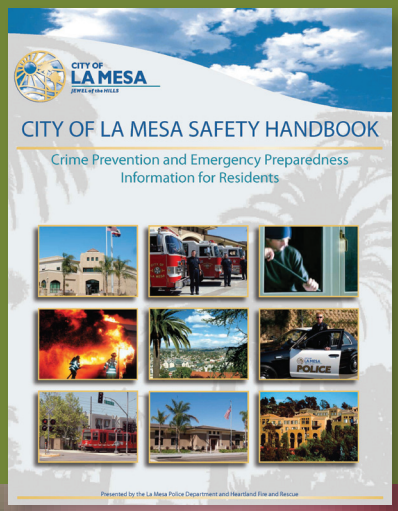

FREE Family Event!
April Pools Day

SATURDAY, APRIL 28 • 12:00 – 3:00 PM
5100 MEMORIAL DRIVE

Free swim lessons. Water safety/CPR presentations. Water Polo, lifeguard, and Fire Dept demonstrations. Swim with a Navy SEAL. Fun for the whole family!

Voter Registration Deadline

MONDAY, MAY 21 FOR THE CALIFORNIA PRIMARY ELECTION ON JUNE 5

Your Vote Counts!

The last day to register to vote in the June Primary is Monday, May 21. You will need to register to vote if you:

- Have moved recently
- Changed your name
- Wish to change your political affiliation
- Will be at least 18 years of age on or before the next election

Postcard registration forms are available at the following locations:

- Registrar of Voters Main Office
- All City Clerk Offices
- Department of Motor Vehicles
- U.S. Postal Services
- Public Libraries

Call the Registrar of Voters main office at **858.565.5800** or visit their website at **sdvote.com** for more information on voter registration.

CONSTRUCTION ACTIVITY UPDATE

The City of La Mesa is currently in construction on various projects throughout the City. The following is a status update on some of these projects:

COLLECTOR STREET RESURFACING PROJECT

TC Construction was selected to pave several collector streets throughout the City. The remaining streets to be paved are Commercial St., Center St. (from Jackson Dr. to Center Dr.), Center Dr., Guild St., La Mesa Blvd. (from Grossmont Blvd. to I-8), Bancroft Dr. (from south City limit to Grossmont Blvd.). These are scheduled to be completed by the end of May. These streets will be paved at night. There will be detours and street closures during construction. Please refer to public notices for details, including: flashing sign boards, door hangers, and press releases.

OLD POLICE STATION DEMOLITION PROJECT

Anton's Service, Inc. was selected to demolish the old police station. The hazardous materials, including asbestos and lead, were abated by Casper Construction prior to the demolition work. The demolition is moving along and is scheduled to be completed by the end of April.

Demolition of old La Mesa Police station.

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LA MESA FOCUS

City News & Events

May 2012

National Police Week

National Police Week recognizes the service and sacrifice of U.S. law enforcement and pays special recognition to those law enforcement officers who have lost their lives in the line of duty for the safety and protection of others. Several local, state, and national peace officer memorial services occur each year to commemorate National Police Week.

This year's ceremonies will include a candlelight vigil at the San Diego County Law Enforcement Memorial on Tuesday, May 1 at 8:00 pm and a memorial ceremony on Wednesday, May 2 at 12:00 pm. The San Diego Law Enforcement Memorial is located on the west lawn of the County Administration Building at 1600 Pacific Highway. The California state memorial will take place at the capital building in Sacramento on May 7. The national memorial will be held in Washington, D.C. on May 15.

Each of these ceremonies are meant to be a time to remember and honor the officers who have fallen in the line-of-duty the preceding year, recognizing the sacrifice of those loved and left behind.

Weed Abatement Season Is Coming

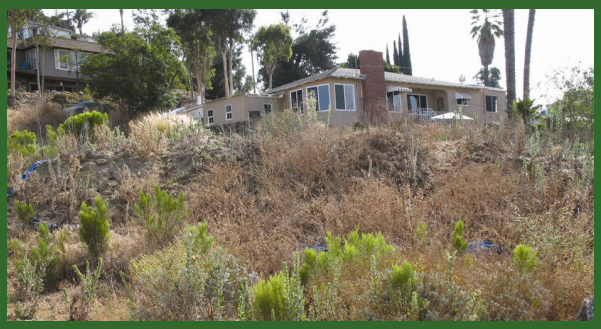

It's that time of year when the annual vegetation growth from the winter rains begins to die. This can create a nuisance and often a fire hazard.

La Mesa conducts a citywide Weed Abatement program each year to identify properties that have dead vegetation, weeds, dry grass, and debris. This year the city has contracted with Fire Prevention Services, Inc. to conduct inspections and follow up on reported complaints.

Residents are encouraged to inspect their properties and remove any dry weeds, fallen tree limbs, trash, or other nuisances. You may have to clear your property more than once during the year to keep it in compliance. Remember, it is your responsibility to keep your property maintained year round.

For more information regarding the Weed Abatement Program and how to make sure your property is safe, visit **heartlandfire.org** and click on the Fire Prevention tab. You can also call Fire Prevention Services, Inc.'s 24-hour weed abatement line at **866.779.3774** ext. **304** to report a fire hazard and/or public nuisance.

Calendar of Events

May 11, 25, 28
City Hall Closed

May 1
Summer Recreation Activity Enrollment Begins

May 5
Historical Society Rose Garden Ceremony & Annual Meeting

Household Hazardous Waste Collection

May 6
La Mesa Arts Alliance/ East County Youth Symphony

May 19
Amazing Geocache Challenge Information Session

La Mesa Kiwanis Soap Box Derby

Lubbock Park Safe Routes to School Clean-up Day

May 20-26
National Public Works Week

May 30
Spring Walk to School Day

Want to make a difference in your community?

VOLUNTEER FOR A CITY BOARD, COMMISSION, OR COMMITTEE

The City encourages citizen participation in municipal government and welcomes your interest in serving on a board, commission or committee. These groups provide valuable public input into government and assist in the decision making process.

Recruitment is currently open for appointments on City boards, commissions, and committees. Serving in an advisory capacity, each group has specific roles and responsibilities. Most groups meet once a month for a couple of hours. Additional information and application forms are available on the City website, by visiting the City Clerk's office at City Hall, 8130 Allison Avenue, or by calling the Clerk's office at **667.1120**.

Applications must be submitted to the City Clerk's office no later than 5:30 pm June 7 to be included in the interview process, tentatively scheduled for 6:30 pm on June 26. The interview and selection process for the Youth Advisory Commission occurs in September.

Styrofoam™ can now be recycled in your blue bin

You can now put polystyrene (Styrofoam™) with other recyclables in your blue EDCO collection bin! Packaging and clean food containers can be turned into new products like picture frames, interior molding, garden pots, and auto accessories. Packing peanuts are not included in this program. For more information visit **cityoflamesa.com/recycling**.

May is Drowning Prevention Month

Drowning is a leading cause of injury-related death among children under the age of five and each year near drowning accidents result in lifelong disabilities. The month of May has been identified as Drowning Prevention Month to raise awareness of the issue and remind parents and caregivers to be sure children are safe in and around the water. Learn-to-swim classes are a good place to start. Enroll now for summer swim programs on the City website or call **667-1494** for information.

CONSTRUCTION ACTIVITY UPDATE

Annual Street Maintenance Project

The City's Annual Street Maintenance Project is anticipated to start in June and extend through August. In preparation of the project, the City completed other related work such as tree and sidewalk maintenance and ADA upgrades. The Street Maintenance project primarily includes crack sealing, slurry coating and restriping of selected streets. This year's project will focus on streets in the northeast area of the City. Please refer to the City's website at **cityoflamesa.com** for additional street maintenance information.

Annual Street Maintinence

ADULT SOFTBALL

Coed and Men's Leagues (18 years and older)

For registration info leave your name and daytime telephone number at 667.1172 and select option #6. The last day to register new teams for fall is July 18. Season play begins the week of August 13.

Thursday: Coed 6:00 – 9:00 pm

Friday: Men's 6:00 – 10:00 pm

Kuhlken Baseball Field

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LA MESA FOCUS

City News & Events

June 2012

La Mesa Continues its Centennial Celebration at the Flag Day Parade

On Saturday, June 2 downtown La Mesa Village will dress up in red, white, and blue to celebrate 100 years and A Salute to Old Glory! at the La Mesa Centennial Flag Day Parade. Spectators are encouraged to dress in patriotic attire and enjoy the free Centennial events. Be advised that there will be many temporary road closures. For the safety and enjoyment of everyone, please adhere to these closures. Following is a line up of the activities.

9:00 am – Pre parade concerts

Listen to La Mesa Middle School Band at La Mesa Boulevard and Palm Avenue or East County Youth Symphony at La Mesa Boulevard and Nebo Drive.

10:00 am – Centennial Parade marches through downtown La Mesa Village

Spectators will enjoy marching bands led by the United States Marine Corps Band, floats, military vehicles, active and retired war heroes, equestrian units, service clubs, and youth groups. The Grand Marshal is Helix Charter High School CIF Division II State Football Champions. The La Mesa Centennial Flag Day Parade is sponsored by: Drew Ford, Barona Resort & Casino, SDG&E, Flood Masters, La Mesa Welfare Association, Lee & Jo Ann Knutson, Montezuma Land Co. LLC, Pamela J. Wagner, Shannon O Dunn, Viejas Tribal Government, and Walmart.

11:00 am – Community Picnic

The La Mesa Chamber of Commerce, Viejas Band of Kumeyaay Indians, Golden Acorn Casino & Travel Center, and Starbucks are sponsoring a picnic on Palm Avenue between La Mesa Boulevard and Allison Avenue until 1:00 pm or while supplies last.

12:00 pm – Community Photo

Help us recreate the 1923 community photo (shown below) at La Mesa Boulevard and Palm Avenue The photo will be available for sale on SmugMug.com, Password: 100 Continued Page 2

1923 La Mesa Village

Calendar of Events

June 8 22
City Hall Closed

Every Friday
Farmers Market, 2-6 pm
Civic Center Parking Lot

June 2
Flag Day Parade, Community Picnic & Photo
Geocaching Challenge Kick Off
9 am-1 pm, La Mesa Village

June 3
La Mesa Firefighter's Local 4759
Pancake Breakfast
8 am-12 pm, 8034 Allison Avenue

June 9
McKinney House Vintage Yard Sale
9 am-2 pm, McKinney House and Museum

La Mesa Library Birthday Party
11 am-3 pm, La Mesa Library

June 10, 17 24
Sundays at Six Summer Concert Series
6-7 pm, Harry Griffen Park Amphitheater

June 11
Taste of the Century
6-8 pm, La Mesa Community Center

June 12
City Council Meeting
4 pm, 8130 Allison Avenue

June 16
Household Hazardous Waste Collection
9 am-1 pm

June 23
Free Paper Shredding
9 am-12 pm, EDCO Station

June 26
City Council Meeting
6 pm, 8130 Allison Avenue

La Mesa Continues its Centennial Celebration at the Flag Day Parade Continued from Page 1

All Day – Amazing Geocache Challenge Begins

The La Mesa Centennial Amazing Geocache Challenge kicks off at the parade. Team up with friends and family for this outdoor adventure! Geocaches (containers) will be hidden throughout the city at local parks, attractions, and historical landmarks. Each hidden treasure will reveal interesting historical facts and a challenge question. You'll receive a set of coordinates, to which you'll navigate using your own handheld GPS device or GPS-enabled smart phone. Join the Amazing Geocache Challenge and celebrate the La Mesa Centennial!

Visit the La Mesa Centennial and La Mesa Historical Society booth at the parade for information about La Mesa's history, the Amazing Geocache Challenge, and Centennial commemorative items. For more information about these and other Centennial events, visit the official La Mesa Centennial website at **cityoflamesa100.com**.

Outdoor Cooking Safety & Awareness

Everybody loves an outdoor barbeque. However, outdoor cooking can also lead to tragedy when carelessness causes serious burns. Heartland Fire & Rescue offers the following safety checklist to use when cooking outdoors.

- When lighting a grill, the safest fire starters are chemicals in cake form or a charcoal electric starter.
- Never add fire starter after you have started your barbeque. The heat from the coals could ignite the stream of liquid and burn back into the can, causing it to explode in your hands. To speed a slow fire, tuck dry kindling under charcoal.

- Make sure the barbeque grill is level and steady and keep a container of water nearby.
- After cooking, soak the coals in water. Dispose of charcoal in a metal container with a tight fitting lid. Many brush fires start because hot coals, thought to be cool, were dumped in leaves.
- Barbeque grills should never be brought inside a house, tent, or recreational vehicle, because of the danger of carbon monoxide poisoning in sealed or confined areas.
- Keep small children away from the barbeque.
- Damp or wet charcoal should be immediately disposed of, as it can spontaneously combust.

For more information about Outdoor Cooking and other safety tips, visit **heartlandfire.org** and click on the Fire Prevention tab.

FREE Paper Shredding Event

Don't discard – shred your household documents in a quick and easy way by bringing them to La Mesa's EDCO Station, 8184 Commercial Street.

Saturday, June 23
9:00 am - Noon

- Limit 2 boxes per La Mesa household
- Staples ok
- Shredding will be done onsite
- No appointment necessary

This City event is made possible through the generous support of the EDCO Disposal Corporation. Questions can be directed to **667.1167**.

CONSTRUCTION ACTIVITY UPDATE

Annual Slurry Seal

American Asphalt South will be slurry sealing many of the streets within Maintenance Zone 3 located in the northeast area of the city. Prior to slurry sealing, trees were trimmed and concrete sidewalk maintenance was performed.
For a complete list of streets, go to: **cityoflamesa.com/2012SlurrySeal**. Call 667.1166 with questions.

Normal Avenue Utility Undergrounding

Work will continue on Normal Ave. for installation of new cables for utility service in recently placed underground conduits.

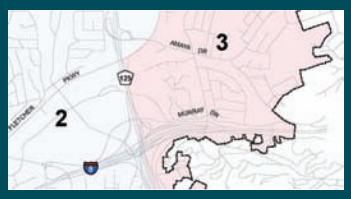

Maintenance Zone 3 Map

SUNDAYS AT SIX CONCERT SERIES

The Sundays at Six summer concert program is a series of free concerts held in the beautiful outdoor amphitheater at Harry Griffen Park. As the name implies, concerts are held on Sunday evenings beginning June 10 at 6:00 pm. In honor of La Mesa's Centennial celebration the concert run has been expanded to 10 concerts – one for each decade. The concert lineup is available at cityoflamesa100.com. Choose your favorite era or gather friends and family and attend them all.

Amphitheater at Harry Griffen Park

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ATTACHMENT 6.1

MAP OF HIGH TTWQ RESIDENTIAL AREAS

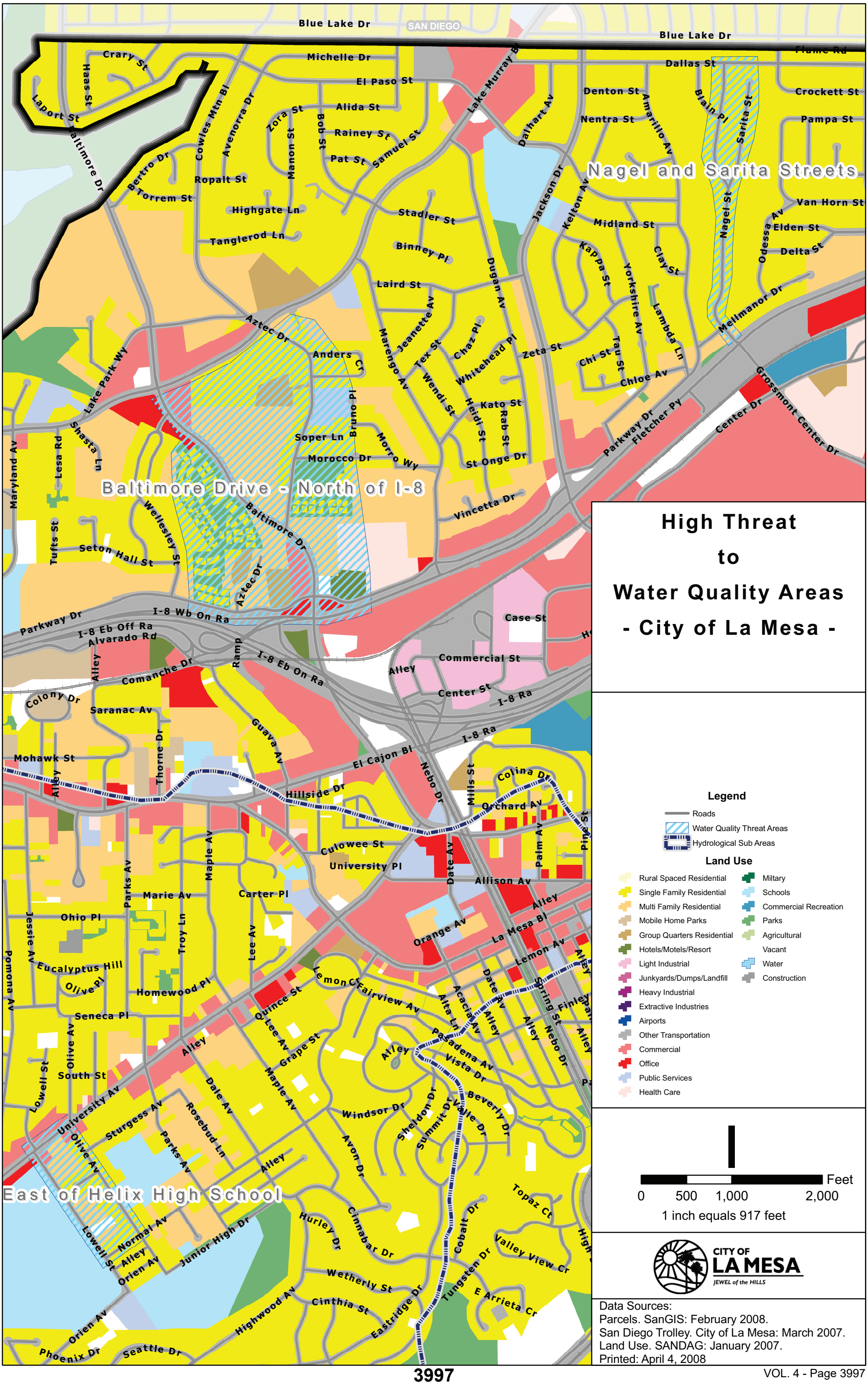
Nagel and Sarita Streets
Baltimore Drive - North of I-8
East of Helix High School
High Threat
to
Water Quality Areas
- City of La Mesa -
Legend
Roads
Water Quality Threat Areas
Hydrological Sub Areas
Land Use
Rural Spaced Residential
Single Family Residential
Multi Family Residential
Mobile Home Parks
Group Quarters Residential
Hotels/Motels/Resort
Light Industrial
Junkyards/Dumps/Landfill
Heavy Industrial
Extractive Industries
Airports
Other Transportation
Commercial
Office
Public Services
Health Care
Miltary
Schools
Commercial Recreation
Parks
Agricultural
Vacant
Water
Construction
Feet
0 500 1,000 2,000
1 inch equals 917 feet
CITY OF LA MESA
JEWEL of the HILLS
Data Sources:
Parcels. SanGIS: February 2008.
San Diego Trolley. City of La Mesa: March 2007.
Land Use. SANDAG: January 2007.
Printed: April 4, 2008

ATTACHMENT 8.1

TIPS FOR OUTDOOR VENDORS

CITY OF LA MESA
JEWEL of the HILLS

VENDOR FACT SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91941
Phone: (619) 667-1166 • Fax: (619) 667-1380

City of La Mesa
Storm Water Pollution Prevention
Tips for Outdoor Vendors

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying storm water runoff into receiving water bodies, such as creeks, lakes and oceans. Unlike the sewer system, storm water runoff entering the storm drain system is not treated. Harmful pollutants, as listed below, can be transported during non-storm water discharges such as hosing down side walks or equipment. These types of pollutants are harmful to the environment and negatively impact water quality, aquatic animal and plant life as well as our quality of life. Non-storm water discharges are prohibited and in violation of the City Ordinance. A list of common pollutants and pollution prevention tips are provided below.

Pollutants of Concern

1. Sediment
2. Fertilizers
3. Metals
4. Detergents
5. Pesticides
6. Organic Compounds (solvents)
7. Trash and Debris
8. Oil and Grease
9. Bacteria

Good House Keeping

- Dry sweep exterior paved areas. **Do not use a hose or water!** Place debris in dumpster and keep dumpster lid closed.
- If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer system (sink or toilet). Wash water is not allowed to enter the storm drain.

Outdoor Material and Equipment Management

- Store material under covered areas.
- Place liquid material in secondary containment to ensure spills are contained.
- Ensure that frying oil is contained and managed properly without dropping/leaking on to the pavement.
- If using frying oil, ensure that you purchase absorbent material (absorbent pads) to address cleanup of potential oil spills.
- Inspect/fix equipment to ensure no leaks.
- Do not wash equipment at the event!

Waste Management

- Place trash in dumpsters with lids always closed.
- Cleanup leaks/spills immediately and place waste material into the dumpster

Should you require clarification or additional information on storm water pollution prevention, please contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.2

OVER IRRIGATION FACT SHEET

City of La Mesa
Storm Water Pollution Prevention
Over-Irrigation

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

With La Mesa's clay soils, it doesn't take much to moisten the ground before water starts running off your property to the curb, down the street and into the storm drain. Runoff from over-irrigation may transport pollutants such as sediment, pesticides, fertilizers, pet waste, bacteria, and automobile fluids. These pollutants enter our local creeks and streams and discharge into the ocean.

Over-irrigation is not prohibited; however, the following measures are recommended.

1. Over-irrigation runoff shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Irrigate to meet site-specific conditions to prevent over-watering.
3. Ensure that your irrigation system has control devices, sensors or shut-off switches to address malfunctions.
4. Place or group plants with similar water needs within the same area.
5. Don't irrigate non-planted areas.
6. Inspect your irrigation system regularly for potential problems
7. Consider drip irrigation to save water and prevent over-irrigation and runoff.
8. Adjust irrigation rates according to seasons, weather conditions and the soil's ability to absorb water. Instead of watering for 15-minutes straight, break up the session into 5-minute intervals, allowing water to soak in before the next application.
9. Irrigate in the early morning; it's the most efficient time to water plants with minimal evaporation.
10. Refrain from irrigation during hot, windy periods of the day. Do not let water run out into the street.

Do the right thing, stay in compliance and protect our environment. For more information contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.3

CHOLLAS CREEK TMDL FACT SHEET

Chollas Creek TMDL Fact Sheet

What are the Chollas Creek TMDLs?
In 2003 and 2007, Total Maximum Daily Load (TMDL) allocations for the pesticide diazinon and for heavy metals (copper, lead, and zinc), respectively, were adopted by the Regional Water Quality Control Board (a State Regulatory Agency) for Chollas Creek. The regulations establish strict numeric limits on the amounts of heavy metals and diazinon that can be present in urban runoff. Southwestern La Mesa, roughly bounded by El Cajon Boulevard to the north and Spring Street to the east (see map), eventually drains to Chollas Creek and is subject to these requirements. Businesses within this area are impacted by these new requirements. The City is monitoring water quality near your business to identify and eliminate sources of these pollutants to comply with new State regulations. The following activities/sources contribute to the discharge of heavy metals and diazinon.

Heavy metals are commonly associated with industrial waste, uncontained storage of certain metal products or materials (such as galvanized steel), cutting and grinding activities, atmospheric deposition, metal smelting or plating, and automobile tires and brakes.
Diazinon is a pesticide associated with landscaping activities. It has been banned for use and is no longer available at retail outlets. Diazinon acquired prior to the ban should be disposed of in accordance with state and federal regulations.

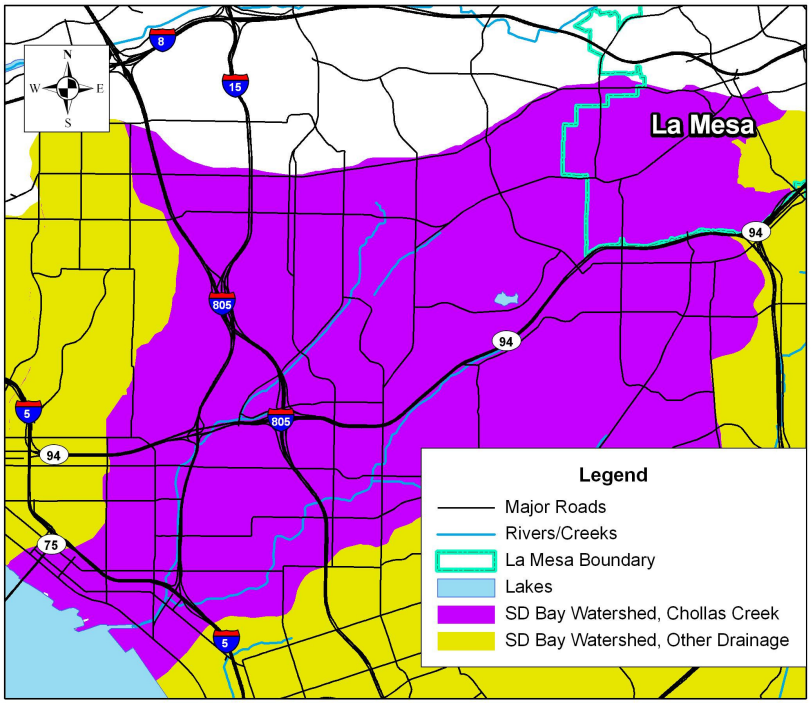

What is the City of La Mesa doing about these TMDLs?
The City's many efforts to protect water quality and comply with State regulations include regularly sweeping its streets and cleaning out its storm drain system, inspecting businesses and construction sites, and applying strict water pollution control standards to new development projects.

What do these TMDLs mean for my business?
The City's Municipal Code requires that businesses take measures to ensure that urban runoff (water that leaves your business and enters storm drains) is not contaminated with pollutants. Chapter 7.18 of the Municipal Code requires businesses to implement measures including those listed below. Taking these actions will help meet TMDL requirements.

- Eliminate non-storm water discharges, such as hosing off property and allowing the water to leave the site, dumping liquids into a storm drain, and runoff from excessive irrigation.
- Cover and contain metal products or materials that may contain heavy metals where feasible. Examples of such materials include galvanized metal, brake pads, tires, and metal recycling bins.
- Conduct metal cutting, grinding, welding, automotive or equipment repair, and similar activities in indoor, contained areas where feasible.
- Regularly sweep paved areas of your site to keep them clean and dispose of debris appropriately.
- Do not use any product containing diazinon. Contact County of San Diego Hazmat for instructions on proper disposal (619-338-2231).
- Store all pesticides and fertilizers in covered and contained areas. Consider alternative, non-chemical pest control methods.
- Do not apply pesticides before storms and eliminate overspray of pesticides onto paved surfaces.

If you observe illegal dumping into a storm drain, please report it to the City at 619-667-1134.

ATTACHMENT 8.4

RESIDENTIAL PREVENTING URBAN RUNOFF POLLUTION BROCHURE

Sanitary Sewer vs. Storm Drain System

The water that drains down a sink or toilet in a home or business flows to the sanitary sewer and is treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – terminating at the Pacific Ocean!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our watersheds.

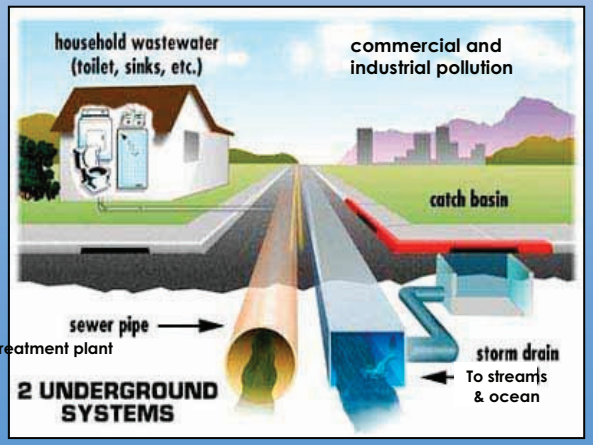

REPORT ILLEGAL DUMPING
City of La Mesa.
(619) 667-1134

(After Hours Hotline)
County Storm Water Hotline
1-888-846-0800

HOUSEHOLD HAZARDOUS WASTE DISPOSAL
EDCO
8184 Commercial Street
By Appointment
Questions: (619) 466-3355

RECYCLING
EDCO: (619) 466-3355

QUESTIONS AND COMMENTS
City of La Mesa Storm Water Program
(619) 667-1340

LOOK ON THE WEB

USED OIL RECYCLING CENTERS
http://www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
http://www.ipm.ucdavis.edu/

County of San Diego Storm Water Management Program
www. co.san-diego.ca.us/deh/stormwater/stormwater.html

State Water Resources Control Board (SWRCB) Storm Water Program
www.swrcb.ca.gov/stormwtr/construction.html

US Environmental Protection Agency
www.epa.gov/OWOW/NPS/

Clean Water Network
www.cwn.org

Preventing Urban Runoff Pollution

A Guide for Residents

Urban storm water runoff is the **largest contributor** to **watershed pollution** in San Diego County.

The City of La Mesa's Storm Water Ordinance Requires the implementation of **Best Management Practices** (BMPs) to prevent urban runoff pollution.

The City monitors activities within the City's jurisdiction and may take enforcement measures to ensure the prevention of urban runoff pollution.

Pollutants of Concern

As rainfall flows over the ground, it picks up a variety of pollutants and deposits them into our watersheds. The following pollutants are commonly transported in the storm drain system and have been found to degrade water quality.

- Sediments
- Fertilizers
- Metals
- Detergents
- Pesticides
- Organic Compounds (solvents)
- Trash and Debris
- Oil and Grease
- Bacteria and Viruses

The following Best Management Practices (BMPs) are required to be used in residential areas to reduce urban runoff pollution in our streams and waterways. To do your part in protecting our water quality, please implement the following BMPs, where applicable or checked by the City inspector.

Maintenance & Good Housekeeping

- ❑ Regularly, dry sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- ❑ If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- ❑ Water used for cleaning exterior surfaces must be contained and disposed of into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the storm drain or leave the property.
- ❑ Regularly inspect and maintain storm drain inlets.

Landscaping

- ❑ Only irrigate during early morning or late evening to avoid evaporation.
- ❑ Aim sprinklers to avoid watering other areas.
- ❑ Time sprinklers to avoid over watering and causing runoff.
- ❑ Minimize pesticide, herbicide and fertilizer use, which are harmful to animals downstream.
- ❑ Hand pull weeds instead of using herbicides.
- ❑ Do not use pesticides that eliminate beneficial insects (i.e., Integrated Pest Management).

Outdoor Material Storage

- ❑ Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid material.
- ❑ Have a spill response kit available to clean up potential spills such as kitty litter or other absorbents.
- ❑ Keep material storage areas free from rainwater accumulation.
- ❑ Keep lids closed on all outdoor storage containers and ensure containers are labeled.

Waste Management

- ❑ Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- ❑ Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- ❑ Fix any leaks in garbage cans or dumpsters.
- ❑ Schedule regular waste pick-up.

Vehicle /Equipment Maintenance

- ❑ Perform all vehicle maintenance indoors when possible.
- ❑ Use drip-pans to collect fluids from leaky vehicles.
- ❑ Clean up spills immediately using kitty litter or other absorbents. Properly dispose of used absorbents.

Vehicle /Equipment Washing

- ❑ Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- ❑ Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- ❑ Minimize the use of soaps and water while washing.
- ❑ Protect storm drains or curb inlets and then collect all wash water by vacuum. Recycle or dispose of wash water via the sanitary sewer system.
- ❑ Drain excess wash water to the sanitary sewer (sink or toilet), not to storm drains.

Loading Areas & Operations

- ❑ Load and unload in designated areas.
- ❑ Regularly dry sweep loading and unloading areas.
- ❑ If possible, cover loading areas.
- ❑ Divert storm water away from all loading and unloading areas.
- ❑ Check shipments and trucks for leaks and spills.
- ❑ Cleanup spills/leaks immediately and dispose of properly.
- ❑ If you must use water for cleaning, use a mop and bucket and dispose of wash water into the sanitary sewer.
- ❑ Major cleaning of exterior surfaces must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water should not be allowed to enter the street gutter or storm drains.

ATTACHMENT 8.5

POOL AND SPA FACT SHEET

CITY OF LA MESA
JEWEL of the HILLS

POOL & SPA FACT SHEET

PUBLIC WORKS DEPARTMENT / ENGINEERING DIVISION
8130 Allison Avenue, La Mesa, CA 91942
Phone: 619.667.1166 • Fax: 619.667.1380

City of La Mesa
Storm Water Pollution Prevention
Pools & Spas

You may not be aware that in Southern California, the sewer system and storm drain system are separate. Storm drain inlets are commonly found along curbs with the intent of transporting or conveying runoff to the nearest receiving water body, such as creeks, lakes and oceans. Unlike the sewer system, runoff entering the storm drain system is not treated but directly discharged into a receiving water body. Pollutants ultimately impact water quality, aquatic animal and plant life as well as our quality of life. Releasing pollutants into the storm water system is a violation of our City Ordinance.

Discharging of pool or spa water is not prohibited; however, the following measures are required.

1. Water shall not carry or transport sediment, leaf debris, and other pollutants into the storm drain inlets.
2. Pool water must be dechlorinated
3. Water pH acceptable range from 7 to 8
4. No algae present in water
5. Water shall not contain chemicals to counteract the chlorine
6. Water does not contain hydrogen peroxide based products
7. Controlled discharge eliminating potential for erosion

Chlorine

Test pool or spa water for chlorine prior to discharge. Chlorine naturally dissipates overtime and if pool or spa water is left 3 to 5 days, it will become dechlorinated. Pool water needs to be drained before it turns green. Draining pool water gradually over landscaped areas will help prevent erosion problems.

Pool Filters

Pool filters should be cleaned over landscaped areas or anything that will absorb the discharge. Material may be collected over a filter cloth and disposed of in the trash. Filter backwash must be discharged into the sewer system with a pH of 5 to 12.5.

Pool Construction

Material must be contained and disposed of appropriately. Waste generated from plaster, gunite, cement, sediment, and other construction materials is prohibited from entering the storm drain system.

Do the Right Thing, Stay in Compliance and Protect Our Environment. For more information, contact the City's Storm Water Hotline (619) 667-1134.

ATTACHMENT 8.6

INTEGRATED PEST MANAGEMENT CARDS

Ants

Ants are one of the most prevalent pests in California. Although ants are annoying when they come indoors, they can be beneficial by feeding on fleas, termites, and other pests in the garden. While spraying chemicals inside the house may seem effective, it won't prevent more ants from entering your home, which is essential for control because most ants nest outside. Focus management efforts on excluding ants from buildings or valuable plants.

Make your house less attractive to ants:

- Caulk cracks and crevices that provide entry inside.
- Store attractive food in closed containers.
- Clean up grease and spills.
- Look for and remove indoor nesting sites, such as inside potted plants.
- Ant-proof kitchen garbage pails with sticky barriers such as petroleum jelly under the lip and pet dishes by placing them in a moat of water.
- Remove sweet food sources next to your house such as aphid-infested bushes and ripened fruit on trees.

When ants invade your house, take these steps:

- Sponge invaders with soapy water as soon as they enter.
- Plug up ant entryways with caulk or petroleum jelly.
- Remove infested potted plants.
- Clean up food sources.
- Rely on baits to control the ant colony.
- Indoor sprays are not usually necessary.

How and why baits work best:

When using bait, place it along ant trails and at nest openings. Worker ants will be attracted to bait and take it back to the nest where the entire colony, including queens, may be killed. The bait must be slow-acting so workers won't be killed before they get back to the nest. It may take several weeks for results to be evident. Just killing workers foraging in your home or garden does little to control the colony, because as few as one percent of a colony's foraging worker ants are able to provide sufficient food to support nestbound queens and larvae. Baits in bait stations or ant stakes are easiest to use and safest for the environment.

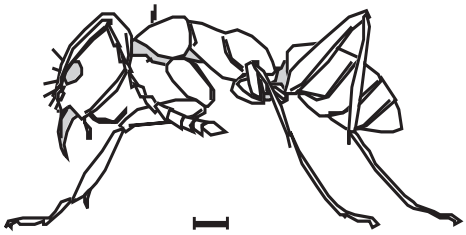

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*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

Learn more about San Diego regional water quality at: www.ThinkBlueSD.org & www.ProjectCleanWater.org. For more pest information visit the University of California IPM website at: www.ipm.ucdavis.edu or the UCCE Master Gardeners at: (858) 694-2860, Mon-Fri, 9 am to 3 pm

UC IPM
University of California Cooperative Extension

UNIVERSITY of CALIFORNIA

MASTER GARDENER ASSOCIATION SAN DIEGO COUNTY

It's the water that connects us!

Aphids

Almost every plant has one or more aphid species that occasionally feeds on it, but low to moderate numbers of aphids are usually not damaging in gardens or on landscape trees. Although aphids can curl leaves and produce sticky honeydew, they rarely kill plants and can often be washed off with water. When aphid numbers get high, natural enemies frequently feed on them, eliminating the need for pesticides. Insecticidal soaps and oils are less toxic pesticides that can be used when treatment is necessary.

Aphids are common in your garden because:

- Aphids like lush new growth. Don't over fertilize. Use organic fertilizers or slow-release products.
- Aphids build up on flowering plums, roses, tulip trees, crape myrtles, apples, and many vegetables. Expect aphids when you grow these plants.
- Ants protect aphids from their natural enemies. Keep ants off plants to get more benefit from these beneficial insects.

To reduce aphids:

- Prune out infested leaves and stems.
- Knock aphid populations off plants by shaking or spraying with a strong stream of water.
- Protect seedlings with covers or aluminum soil mulches.
- Wait for hot weather; most aphids are heat-intolerant and will be gone by mid-June.

Protect aphids' natural enemies:

- Lady beetles, both adults and larvae
- Lacewings
- Syrphid fly larvae
- Soldier beetles
- Parasitic mini-wasps that turn aphids into crusty mummies (See reverse for insect drawings.)

Natural enemies of aphids such as lady beetles and lacewings will come into your garden naturally when aphids are abundant. Protect these good bugs by avoiding the use of insecticides that may be toxic to a broad variety of insects.

If insecticides seem necessary, use the safest products:

- Nonchemical pest control methods should be used first to manage aphid populations. However, if you feel insecticides are necessary, choose less toxic products.
- Insecticidal oils and soaps are the safest products. When properly used, these materials solve most pest problems.
- Oils and soaps work by smothering aphids, so application must be thorough. Don't apply to drought-stressed plants or when it is very hot. A few plants are sensitive to these products.
- Insecticidal soaps, soap-pyrethrum mixtures, or neem oils are often applied on vegetables or small bushes like roses.
- Narrow range oils, like parafinic, supreme or superior oils, are appropriate for larger trees.
- Oils and soaps don't kill aphids hidden within curled leaves. Prune these out. Systemic insecticides can kill hidden aphids, but they are much more toxic and not registered for use on garden vegetables or fruit trees.

aphid

lady beetle

parasitic mini-wasp killing aphid

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Cockroaches

HEALTHY GARDEN HEALTHY HOME

Cockroaches thrive in warm environments that provide food, water, and shelter. Roaches hide in cracks, crawl spaces, and other dark places during the day and come out at night to feed. Pesticide sprays alone will not control roaches and are not usually required. Baits provide better control. You must integrate several strategies to make your home a less roach-friendly environment. Thoroughness is essential for effective control.

Identify your cockroach species first:

- Effective management options vary according to species.
- Cockroach traps provide an easy way to catch roaches for identification.
- Control practices for outdoor invaders (American, oriental roaches) and indoor residents (brownbanded and German roaches) differ.
- For help with identification go to www.ipm.ucdavis.edu.

Remove food and water sources:

- Even tiny crumbs or liquids in cracks provide good food sources.
- Store food in sealed containers.
- Keep trash in containers with tight lids.
- Eliminate plumbing leaks.
- Vacuum cracks and crevices and clean floors and counters daily.

Remove roach hiding places:

- Seal cracks and other openings to prevent invaders from the outside.
- Seal cracks in false bottoms of cupboards and other indoor hiding places.
- Seal or clean up other areas where you find roaches or their egg cases hiding.
- Remove old newspapers, boxes, and other clutter in kitchens and bathrooms.
- The oriental cockroach hides outdoors under ivy and other shelter. Check to see if you have this roach and remove outdoor hiding places or bait.

Use traps to identify and track cockroach populations:

- Cockroach traps are available in hardware stores.
- Place traps on the floor around edges of walls, in cupboards and other places where you think roaches are foraging. Place bait stations at locations where you trap roaches.
- Check traps daily.
- Sticky traps with pheromones may provide some control of German cockroaches.

Using chemicals to control cockroaches:

- Avoid use of foggers, bombs, or aerosol sprays — they just disperse populations.
- Boric acid powder blown into cracks, crevices, hollow walls, under refrigerators, or other undisturbed hiding places is very effective (allow 7 days or more for an effect to be seen).
- Bait stations containing boric acid, abamectin, fipronil, or hydramethylnon placed near hiding places can be effective if other food sources are removed (allow 7 days or more for an effect to be seen). Replace stations as needed as long as roaches are being caught.
- Insecticide sprays alone do not give long-term control. They are not necessary if other methods such as baits and boric acid powder are combined along with cleanup and removal of hiding places.
- Contact a professional pest control operator for very serious infestations, but be sure they use an integrated program as described above.

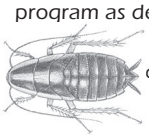

German cockroach nymph

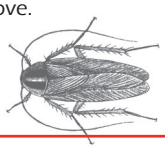

German cockroach adult

*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

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Earwigs

HEALTHY GARDEN HEALTHY HOME

While their prominent tail-end pincers may look ferocious, earwigs are not harmful to people. Earwigs may seriously damage seedling vegetables and chew holes in annual flowers, soft fruit, and corn silks, but earwigs also play a beneficial role by feeding on aphids and other insects. Nocturnal in habit, earwigs feed at night and hide during the day in dark, cool, moist places in the yard or within flowers or vegetables. To manage earwigs, reduce hiding places and moisture, and employ a vigilant trapping program.

Should you be concerned about earwigs in your garden?

- Yes, if you are growing vegetables, herbaceous flowering plants, sweet corn, or plants with soft fruits like strawberries and apricots.
- No, if your garden is primarily lawn, trees, and woody ornamentals or native plants.

Reduce outdoor hiding places:

- Eliminate dense undergrowth of vines, ground cover and weeds around vegetable and flower gardens.
- Prune away fruit tree suckers.
- Remove leaves, boards, boxes, trash, and other debris from planting areas.
- Move flower pots and other garden objects and structures that can harbor earwigs.
- Check plastic or organic mulches and remove them to limit earwig numbers.

Trap earwigs until they are gone!

- Trap earwigs with rolled newspaper, bamboo tubes, or short pieces of hose. Place these traps on the soil near plants just before dark, and shake accumulated earwigs out into a pail of soapy water in the morning. A low-sided can filled with oil and a drop of bacon grease or fish oil also makes a good trap. Daily trapping will reduce earwig populations to tolerable levels.

Other ways to reduce earwig problems:

- Drip irrigate where possible to reduce surface moisture.
- Keep earwigs out of stone fruit trees with a band of sticky substance like Tanglefoot, around the trunk, and harvest fruit as soon as it ripens.
- Insecticides should rarely be needed.

Inside the home:

Earwigs may seek refuge indoors when conditions outside are too dry, hot, or cold. Large accumulations of earwigs can be annoying but present no health hazards. When earwigs invade your home follow these steps:

- Sweep or vacuum up invading earwigs.
- Seal up cracks or other entry points.
- Remove debris from gutters and around entryways.
- Keep water and moisture away from structures.
- Replace white outdoor lights with yellow ones, which are less attractive to earwigs.
- Indoor application of pesticides is not recommended.

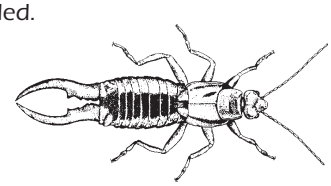

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It's the water that connects us!

Fleas

Fleas are particularly annoying to people and pets, especially during spring and early summer when their numbers tend to increase dramatically. The common flea in California is the cat flea. Despite its name, it attacks both dogs and cats and will also bite humans. To keep fleas out of your home, control fleas on your pet and regularly clean pet sleeping areas.

On the pet:

Recently, a number of very effective and safe new products for flea control on the pet have become available. Remember to supplement pet treatments with regular cleaning of your home and periodic combing with a pet flea comb to detect new infestations.

- Spot-on formulations are applied to the animal's coat, providing flea control for 1 to 3 months. Available from veterinarians or over-the-counter.
- Systemic flea control products, available from vets, are given as a pill or food additive. While they do not kill adult fleas, they prevent reproduction.
- Flea collars containing insect growth regulators (IGRs) give protection for up to 6 months on dogs and up to a year on cats. Be sure to choose collars containing methoprene or pyriproxyfen.
- Flea shampoos and soaps, powders and dusts, spray-on liquids, and dips are less effective and more hazardous to pets, people, and the environment than the three types of products above.

In the yard:

Outdoor treatment is rarely needed, but if your pet regularly sleeps outside and flea numbers are high, these areas can be treated with a spray containing pyriproxyfen. If possible, open sleeping areas to sunlight by removing low hanging vegetation. Immature fleas are unlikely to survive in areas with exposure to sunlight.

Inside the home:

Whether or not you are aware of fleas in your home, regularly vacuum and launder areas where your pet rests to avoid flea buildup. If you have a major flea problem, treat your pet with one of the options on the front of this card and follow the steps below.

- Locate heavily infested areas (usually areas where the pet rests) and concentrate treatment there.
- Wash throw rugs and pet bedding.
- Vacuum upholstered furniture, cleaning under cushions and in crevices.
- Vacuum carpets, especially beneath furniture.
- Use a hand sprayer or aerosol to treat all carpets and unwashable upholstered furniture with an insecticide that contains an IGR (methoprene or pyriproxyfen). This treatment kills larvae but not pupae, so fleas may continue to emerge for up to 2 weeks.
- Over the next 2 weeks vacuum regularly to remove adult fleas that emerge from pupae. Do not reapply pesticides.
- Seal vacuum bags and discard them so fleas don't escape.

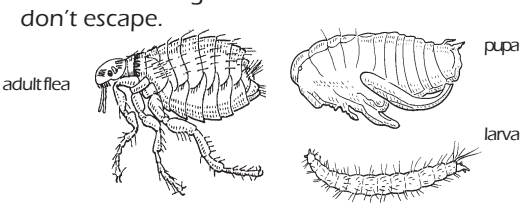

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Gardening with Good Bugs

HEALTHY GARDEN HEALTHY HOME

Most gardens contain far more types of good bugs,or beneficial insects, than pest insects. Beneficial insects and other organisms that kill pest insects are called natural enemies. In any pest management or plant care program, it is important to encourage these natural enemies by avoiding pesticides that kill them. You can also encourage beneficial insects by choosing plants that provide them with pollen, nectar, and shelter and keeping ants out of pest-infested plants. Learn to identify good bugs, both in their adult forms and immature (larval) stages.

Common good bugs found in California gardens include:

- Lady beetles: Both adults and larvae consume aphids.
- Lacewings: Lacewing larvae feed on many insect pests; adults are often seen around lights.
- Syrphid flies: Syrphid fly larvae consume aphids; adults hover around flowers.
- Parasitic mini-wasps: Many species of tiny wasps lay their eggs in pests like aphids or caterpillars; their hatching larvae consume the pest and kill it.
- Spiders: All spiders feed on insects or other arthropods and are beneficial in the garden.

(See reverse for drawings of good bugs mentioned above.)

What is Integrated Pest Management?

Integrated pest management (IPM) uses environmentally sound, yet effective, ways to keep pests from annoying you or damaging plants. IPM programs usually combine several pest control methods for long- term prevention and management of pest problems without harming you, your family, or the environment — IPM also reduces pollution in California waterways. Successful IPM begins with correct identification of the pest. Only then can selection of the appropriate IPM methods and materials be made.

Preferred IPM methods include:

- Planting pest-resistant or well-adapted plant varieties like native plants.
- Discouraging pests by modifying the way you design, irrigate, fertilize, and manage your garden.
- Altering the garden or home environment to deprive pests of the food, water, shelter or other requirements they need to thrive.
- Keeping pests out of the home and garden using barriers, screens, and caulking.
- Squashing, trapping, washing off or pruning out pests.
- Relying on good bugs in your garden to eat pests, thereby eliminating the need for insecticides that may end up in our waterways.

Turning to pesticides:

- Only use pesticides when non-chemical controls are ineffective and pests are reaching intolerable levels.
- Use pesticides in combination with the methods described above.
- Choose pesticides carefully so that the least toxic, most effective material is used to protect human health and the environment.

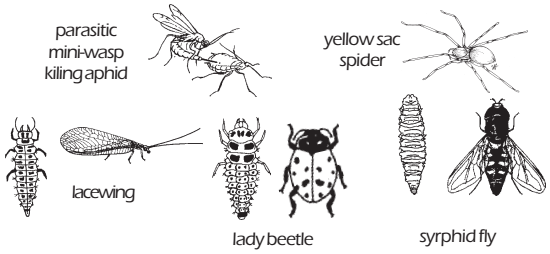

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Head Lice

HEALTHY GARDEN HEALTHY HOME

Head lice can infest anybody, but children are prone to infestations because they play closely and share items that come in contact with the head like hats, headphones, and combs. Head lice are not known to transmit any infectious diseases; they are more of a nuisance than a health risk. Children with head lice, however, are generally not allowed to attend school as long as nits are found in their hair.

Head lice facts:

- Head lice cannot hop, fly, or jump; they crawl. Lice spread only through direct contact with an infested object or person.
- Head lice spend their entire life in head hair and can only survive off a human head for about 1 or 2 days.
- A newly hatched louse must ingest blood within minutes of birth to survive.
- Head lice cannot live on family pets.
- Nits (eggs) that are more than 1 1/4 inch from the scalp probably are dead or have already hatched.

What to look for:

- Intense scratching on the back of the head or neck.
- Tiny white eggs (nits) glued to hair near the scalp.
- Small, rapidly crawling flat insects.

Four steps necessary to manage an infestation of head lice:

1 Use a head louse shampoo if you observe active lice or viable eggs.

- Avoid shampoo products containing lindane, which are available by prescription only. Pyrethrin and permethrin are safer, more effective, and less polluting to wastewater than lindane. Not all eggs will be killed.
- To avoid insecticides entirely, use soap shampoos that contain coconut or olive oils. Most soap shampoos kill all stages of the louse except the egg. Because they are not as effective as products containing pesticides, you must be sure to comb and repeat these shampoos four times at 3-day intervals. Successive shampooing kills newly hatched lice.

2 Remove nits from the head by combing with a specially designed nit comb.

- This step is the key to successful control. Repeat daily as long as you find live lice or nits within 1¦4 inch of the scalp. Use a metal comb specially designed for removing head lice and their eggs. Combs sold with head lice shampoos are not generally effective. Infested hair can also be cut out with small safety scissors.

3 Remove lice and nits from the household.

- Wash clothing and bedding of the infested person in hot water (at least 140°F) and dry in a hot dryer or have them dry cleaned. Place other items (earphones, bike helmets) in plastic and put in a freezer that is 5°F or lower for at least 10 hours. Clean any object that might have come in contact with the infested person's head (stuffed animals, car seats). Vacuum carpets and upholstery. Pesticide sprays are not recommended.

4 Check heads and remove nits daily until infestation is gone. Follow with weekly head checks to detect reinfestation.

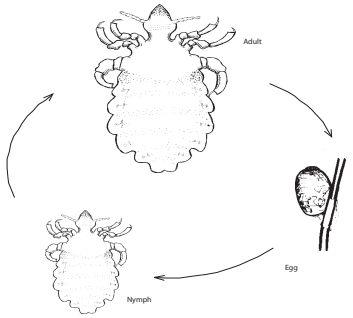

For more information see Pest Notes: Head Lice, available at Cooperative Extension offices and at www.ipm.ucdavis.edu

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Lawn Insects

HEALTHY GARDEN HEALTHY HOME

Contrary to popular belief, insects are not a common cause of residential lawn damage in California. Poor lawn care, especially improper watering and planting inappropriate grass species, are more likely causes of unhealthy or dying lawns. Disease-causing agents, excess orinappropriate use of chemicals such as fertilizer and herbicides, or dog urine also produce lawn damage resembling that of insects. Many insects in the lawn are beneficial. Never apply an insecticide unless a damaging level of a known insect pest is confirmed. Insecticides are only effective if applied at the right time and in the right manner. Some insecticides may kill good bugs too.

How do you know if insects are causing damage?

- Brown spots in lawns can be caused by over- or under-irrigation, plant disease, improper use of chemicals, or dog urine as well as insects.
- Confirm presence of insects before applying an insecticide. For grubs, dig around roots, for other insects perform a drench test. (See reverse.)

Keep your lawn healthy by:

- Planting grass species that do well in your area
- Irrigating deeply and infrequently
- Doing routine maintenance on sprinkler heads
- Applying only 3 to 6 pounds of actual nitrogen per 1000 square feet per year when fertilizing
- Aerating your lawn annually; remove thatch if it exceeds 1/2 inch
- Cutting only one-third to one-half of grass height at each mowing and keeping lawnmower blades sharp

See the UC Guide to Healthy Lawns at www.ipm.ucdavis.edu

If a damaging level of insects is confirmed, do the following:

- Choose an insecticide based on the pest you're targeting.
- Find out which insecticide ingredients target specific lawn insects:
  - *Bacillus thuringiensis* (Bt) kills only caterpillars, including cutworms, lawn moths, and skippers.
  - Insect-attacking nematodes control caterpillars or grubs.
  - Azadirachtin controls cutworms, armyworms, and larvae of lawn moths.
  - Imidacloprid is effective against young lawn grubs.
  - Pyrethroids (e.g., cyfluthrin, bifenthrin) are broadly toxic insecticides that kill chinch bugs, lawn moths, and cutworms, but also kill beneficial insects and should be avoided.
- Get help from UC Cooperative Extension.

HOW TO PERFORM A DRENCH TEST

- Mix 3–4 tablespoons of dishwashing liquid to 2 gallons of water.
- Evenly apply the 2 gallons to 1 square yard of your lawn.
- Monitor the area for 10 minutes and count the number of armyworms, cutworms, or lawn moth larvae that rise to the surface.
- Treat the area only if insect numbers exceed 5 armyworms or cutworms or 15 lawn moths per square yard.

chinch bug

sod webworm larva

cutworm larva

grub larva

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Safe Use & Disposal of Pesticides

HEALTHY GARDEN HEALTHY HOME

Pesticides are designed to be toxic to the pests they target — insects, weeds, and other unwanted home and garden invaders. Always read pesticide product labels carefully and follow all directions on proper use, storage, and disposal of empty pesticide containers. Product labels are your main source of information on how to use a product safely and legally. They include guidelines needed to protect you, your family, and pets. The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For the site nearest you in San Diego County call 1-877-713-2784 .

If you must use pesticides, follow these tips to reduce pesticide effects on your local waterways:

- Identify your pest problem and choose the least toxic pesticide that targets your pest and achieves the results you want. If you need help identifying the least toxic pest control method, contact your University of California Cooperative Extension office.
- Determine the right amount of pesticide to purchase. Purchasing exactly the amount you need for the application eliminates the need for storing unused pesticides.
- Use spot treatments whenever possible.

Outdoors

- Avoid overwatering after applying pesticides. Never let pesticide runoff flow into storm drains.
- Do not apply pesticides outdoors when rain is forecast or when it is windy.
- Avoid applying pesticides on paved areas.

Indoors

- Avoid applying pesticides in or near floor drains or sinks.
- Avoid applying pesticides on areas that will be washed or mopped with water, or where food is prepared or stored.

When using and storing pesticides take these precautions:

- Always wear a long-sleeved shirt, pants, and eye protection, and other equipment suggested on the label.
- Store products tightly capped in a locked cabinet out of reach from children and pets.
- Always keep pesticides in their original container.
- Know where to call for help in an emergency!

Pesticide disposal:

- If you cannot use up your pesticides, fertilizers, and weed killers, give them to a friend who may need them.
- Sewage treatment plants are not designed to treat for certain toxic pesticides like diazinon and chlorpyrifos — dumping pesticides into the stormdrain or down the sink is never an option.
- The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For household pesticide disposal information for San Diego County, call 877-713-2784.

Finding active ingredients on a pesticide label:

Pesticide labels are required by law to show the active ingredient and its percentage. Minimize or avoid the use of products that contain diazinon and chlorpyrifos – these materials are polluting our waterways. Always read the label before you buy!

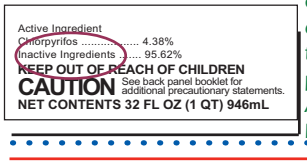
Active Ingredient
Chlorpyrifos 4.38%
Inactive Ingredients 95.62%
KEEP OUT OF REACH OF CHILDREN
CAUTION See back panel booklet for additional precautionary statements.
NET CONTENTS 32 FL OZ (1 QT) 946mL

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Snails & Slugs

HEALTHY GARDEN HEALTHY HOME

Snails and slugs rank among our most despised garden pests. These slimy mollusks emerge from hiding at night and chew holes in leaves and flowers of many succulent garden plants and fruit. Slugs and snails are similar in structure and biology, except slugs lack the snails' external spiral shell. Management requires a vigilant and integrated approach that includes eliminating moisture and hiding spots, trapping, barriers, and handpicking. Baits can be helpful, but by themselves, don't provide adequate control in gardens that contain plenty of shelter, food, and moisture.

How do you know snails and slugs are causing damage?

- You may not observe these pests at first because they feed at night and hide during the day. Go out at night or early morning to view them in action.
- Other pests can cause holes in leaves, flowers, and fruit. Look for the shiny, slimy trails slugs and snails leave behind.

What must be done to reduce snails and slugs?

- Remove daytime hiding places — ivy, weedy areas, debris, or boards.
- Regularly remove snails from shelters you cannot eliminate such as low ledges on fences, undersides of decks, meter boxes.
- Place traps in your garden and dispose of trapped snails and slugs daily.
- Reduce moist surfaces by switching to drip irrigation or sprinkling in the morning rather than later in the day.
- Consider snail-proof plants such as impatiens, geraniums, begonias, lantana, nasturtiums, and many plants with stiff leaves and highly scented foliage like sage, rosemary,and lavender.

How can I manage snails and slugs without using pesticides?

- Make sure the garden is mollusk-free before planting. Then erect a copper barrier around it. Use a 4- to 6-inch-wide band of copper, buried an inch below the soil and bent over at the top or attach it around the edge of a raised bed.
- Place your garden in the sunniest spot possible. Remove garden objects or adjacent plants or ground cover that may serve as shady shelter. Reduce moist surfaces as much as possible.
- Build a trap using a 12"x15" board raised off the ground by 1-inch runners. As the mollusks collect under the board, scrape them off and destroy them daily.

What about baits?

- Baits will not be very effective unless you also remove shelter, food, and moisture.
- Metaldehyde baits are especially poisonous to dogs and birds. Metaldehyde also loses its effectiveness rapidly in sunlight and after rain or irrigation.
- Iron phosphate baits are safe for use around dogs, children, and wildlife.
- Irrigate before applying bait and apply in evening on warm days when mollusks are active.
- Scatter bait around sprinklers and in moist and protected areas where snails and slugs travel.

snails

slug

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Spiders

HEALTHY GARDEN HEALTHY HOME

Spiders are mostly beneficial because they feed on pest insects. However, many people think that all spiders are dangerous and aggressive. In California, the main spider capable of causing serious injury is the black widow, which generally remains outdoors and out of sight. Spiders seen out in the open during the day are unlikely to bite people. Focus pest management efforts on removing webs and hiding places. Pesticides are not generally recommended.

What to know about spiders:

- In California, the main spider capable of causing serious injury is the black widow:
  - The poisonous black widow spider is commonly found outdoors, in sheltered, dry, undisturbed areas such as wood piles.
  - Female black widows have shiny black bodies with a red hourglass marking on the underside.
  - Only large female black widows can injure people.

  Anyone bitten by a black widow spider should remain calm and seek medical advice, or call California's Poison Control Center at 1-800-8-POISON (1-800-876-4766).
- The brown recluse spider does not live in California.
- The jaws of most spiders are too small to bite humans.
- Some other spiders bite when trapped in clothing, but the reaction is usually no more severe than itching or a bee sting. See www.ipm.ucdavis.edu for more information about these spiders.

To prevent spiders from entering your house, take these steps:

- Seal home foundation cracks and other access holes.
- Inspect window and door screens for good seals that keep out spiders and the insects they prey on.
- Keep areas around home foundations free of clutter.

Manage spiders using these tips:

- Indoors, regular housecleaning provides adequate spider control.
- Vacuum up the spider and its web.
- Prevent clutter buildup that can provide hiding places.
- Remove spider webs from the exterior of the house with a broom or high pressure hose.
- Indoors, squash spiders or capture them in a jar and release them outdoors.

When removing spiders, don't overlook the fact that spiders eat a large number and variety of nuisance and pest insects. Spiders also have natural enemies — wasps, other spiders, birds, reptiles, and others — that sometimes keep them from becoming too numerous.

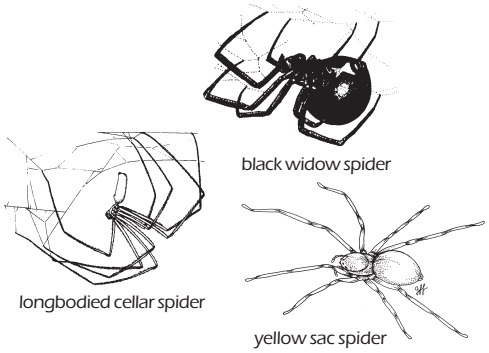

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Termites

Because of the serious damage they can cause to wooden structures, termites are among the pests most feared by homeowners. However, swarms of flying termites do not always mean your building is infested. A careful inspection of the structure is required to confirm an infestation. People also frequently mistake swarms of flying ants for termites. If you suspect that your house is infested, call a professional. Do-it-yourself sprays cannot be relied on to reduce a damaging infestation. Common termites in California are the subterranean termites that build nests in soil, dampwood termites that nest in moist wood and soil, and drywood termites that nest above ground in dry wood. Management of each termite species is different.

Distinguish flying ants from termites:

- Check the antennae, wings and waist to confirm that pest insects are termites. (Please refer to ant vs. termite drawing on back.)

Design your building to keep termites out:

- Keep a 12-inch barrier of smooth concrete, sand, or other material between the soil surface and substructure wood beneath a building.
- Choose termite-resistant wood for fences or other structures that must contact soil.
- Remove wood piles, untreated fence posts, and buried scrap wood near structures.
- Provide adequate ventilation to substructures and keep them dry.
- Immediately repair foundation cracks.

If termites are invading your home:

- Destroy shelter tubes that subterranean termites build between soil and wood structures.
- If dampwood termite nests are accessible, remove infested wood and eliminate excess moisture.
- Drywood termites can be controlled with heat, freezing, electricity, microwaves, fumigation, or spot treatments of chemicals.
- For any infestation, contact a professional for help. Pesticides licensed only for use by a pest control operator are usually necessary to control subterranean and dampwood infestations.

Using pesticides for termite control:

- Pesticides may be injected into the soil by professional applicators through drilling or rodding. Special procedures must be followed to prevent contamination of ground or surface water.
- For soil injections, ask your applicator to use a product other than chlorpyrifos. Newer types of products such as fipronil and chloronicotinyls are safer for your health and the environment.
- Baits can be effective in some cases, but may take several months to control the problem and must be followed up with constant monitoring.

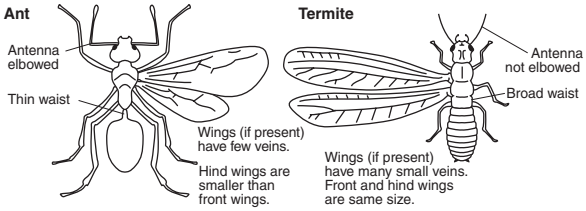

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Giant Whitefly

HEALTHY GARDEN HEALTHY HOME

Giant whiteflies can cover a beautiful plant with white fuzzy wax and sticky honeydew, turning it into an unsightly mess. First discovered in San Diego County in October 1992, this whitefly has spread northward into other areas of California. Since its introduction into San Diego, giant whitefly has spread rapidly northward along the coast. Although affected plants may be weakened, they rarely die. To manage giant whitefly, wash plants off with water and encourage natural enemies.

What plants are affected?

- Many ornamentals including hibiscus, giant bird of paradise, begonia, Xylosma.
- Fruit trees including citrus, avocado, mulberry and banana.

Look for these damage symptoms on affected plants:

- Long, white, waxy filaments produced by the whitefly give the leaf surface a bearded appearance. These hairlike strands may be mistaken for a fungal infection.
- Large amounts of sticky honeydew excreted by the whitefly as it feeds on plant sap.
- Black sooty mold growing on the honeydew.

How to recognize the whitefly:

- Adults are small (3/16") and white with light brown markings on wings and usually found in groups on undersides of leaves.
- Nymphs are yellowish, small, oval, have no legs and don't move.

To reduce problems, use an integrated program that includes:

- Removing infested leaves.
- Washing giant whiteflies off leaves with a strong stream of water.
- Planting species less susceptible to giant whitefly.
- Avoiding insecticides that injure natural enemies, such as lacewings, lady beetles, syrphid flies, and parasitic wasps.

What about insecticides?

- **Don't use insecticides if beneficial insects, including parasites and predators, are present in the area.**
- **To confirm the presence of parasitic wasps, use a magnifying glass to look for parasite exit holes on giant whitefly nymphs or darkened nymphs as indicated in drawings below.**
- **If you do choose to use an insecticide, select least toxic products such as insecticidal soaps or oils. Remember to follow label directions and spray the undersides of the leaves where whitefly colonies are found.**

(adult) 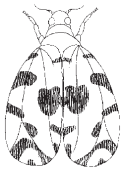 (actual size) I

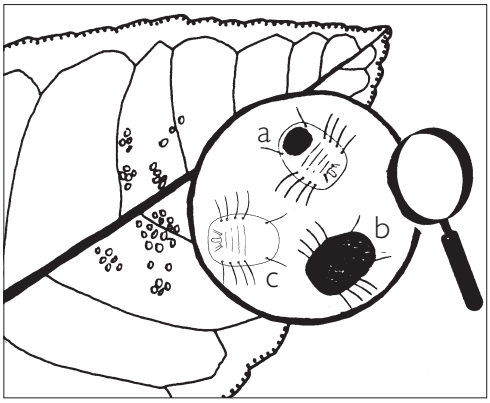

Examine whitefly colonies for grayish-black or yellow nymphs with exit holes (a), or darkened nymphs (b), or healthy nymphs (c).

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ATTACHMENT 8.7

SAN DIEGO RIVER AND SAN DIEGO BAY FACT SHEETS

San Diego River Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego River and the San Diego Bay. Your business or facility is located within the San Diego River Watershed.

San Diego River Watershed

The San Diego River Watershed is comprised of 443 square miles. It extends from the mountains near Julian to the Pacific Ocean. Portions of the watershed fall within the cities of El Cajon, Poway, San Diego, Santee, several unincorporated areas, and the City of La Mesa. Primary tributaries to the San Diego River include Boulder Creek, Conejos Creek, Los Coches Creek, San Vicente Creek, and Forester Creek. Alvarado Creek in La Mesa is also tributary to the San Diego River. Alvarado Creek flows into the San Diego River and ultimately into the Pacific Ocean between South Mission Beach and Ocean Beach near Dog Beach.

Pollutants of concern listed in the 2002 Clean Water Act Section 303(d) List Of Water Quality for the lower San Diego River Watershed include fecal coliform (sewage/urban runoff), low dissolved oxygen (decay of organic matter), total dissolved solids (industrial waste/chemical spills), and phosphorus (phosphate based detergents). Between 1996 and 1999, coliform bacteria more than doubled due to urban runoff and sewage.

Other pollutants of concern not listed above include pesticides such as Diazinon and Chlorpyrifos (commercial, agricultural, and residential application), Total Suspended Solids/Turbidity (suspended sediment/solids, construction, sewage, eutrophication), Copper and Zinc (industrial waste or automobiles), and pH/Phosphate (industrial waste, automobiles, sewage, fertilizers, eutrophication, hardening/concrete of creeks).

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Store materials properly to ensure it is not exposed to storm water. Do not over-irrigate your landscape. If you observe illegal dumping into a storm drain, you should call the City's storm water pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

San Diego Bay Watershed Fact Sheet

What is a watershed? A watershed consists of all land and waterways that drain into the same body of water. There are 11 watersheds within San Diego County. Drainage from La Mesa flows through two of these watersheds: the San Diego Bay and the San Diego River. Your business or facility is located within the San Diego Bay Watershed.

San Diego Bay Watershed

The San Diego Bay Watershed is comprised of 415 square miles. It extends from the Laguna Mountains to San Diego Bay. The watershed falls within the cities of La Mesa, Chula Vista, Coronado, Imperial Beach, Lemon Grove, National City, San Diego, and unincorporated areas of the County. Approximately 4 square miles in the southern portion of the City of La Mesa is part of this watershed. The major discharge sources to San Diego Bay include Sweetwater River, Otay River, Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek.

Three drainage basins in the City of La Mesa are part of the San Diego Bay Watershed. Runoff from the Spring Valley Basin flows to the Sweetwater River. Runoff from the University Channel and Lemon Grove Basin contribute to Chollas Creek. The aforementioned creek and river flow into San Diego Bay.

Pollutants of concern associated with the watershed include diazinon, copper and zinc, fecal coliform, turbidity, and total suspended solids. The sources of these pollutants are a result of residential, agriculture or commercial pesticide application, automobiles and industrial waste, sewer spills, encampments, wildlife, erosion, suspended sediment, and fertilizers. Pollutants of concern for Chollas Creek in particular include metals such as copper, lead, zinc, cadmium, and coliform bacteria.

Ensuring that urban runoff is not contaminated with pollutants as a result of your business activities is an integral component in preserving the quality of life in San Diego County. It is your responsibility to help prevent these pollutants from entering the watershed in order to protect the environment and safe guard the natural resources. Introducing pollutants into the environment as a result of your business activities may contribute to beach closures and limit other recreational activities.

What Can You Do?

Remember, the only water that should enter the storm drain is rainwater. Do not hose down your property to ensure pollutants such as sediment, oil and grease, fertilizers, herbicides and pesticides, surfactants (soap), metals, trash, and other debris are not inadvertently flushed into the storm drain contributing to gross contamination of urban runoff. Moreover, store materials properly to ensure it is not exposed to storm water and do not over-irrigate your landscape. If you observe storm water pollution or illegal dumping into a storm drain, you should call the City's Storm Water Pollution prevention hotline at (619) 667-1134 to report the incident or visit the City's Website *www.cityoflamesa.com/Departments/PublicWorks/NPDES.htm*.

Good housekeeping and pollution prevention equates to improved water quality, and a cleaner environment equates to a better quality of life for everyone.

DECLARATION OF SERVICE BY EMAIL

I, the undersigned, declare as follows:

I am a resident of the County of Sacramento and I am over the age of 18 years, and not a party to the within action. My place of employment is 980 Ninth Street, Suite 300, Sacramento, California 95814.

On March 29, 2024, I served the:

- **Current Mailing List dated March 28, 2024**
- **Notice of Waiver of Procedural Requirements, Extension Request Approval, and Postponement of Hearing issued March 29, 2024**
- **Claimants' Comments on the Draft Proposed Decision and Parameters and Guidelines (Volumes 1-14) filed February 20, 2024**

  San Diego Regional Water Quality Control Board Order No. R9-2007-0001, Permit CAS0108758, Parts D.3.a.(3)(b)(iii), D.5.a.(1), D.5.a.(2), D.5.b.(1)(a), D.5.b.(1)(b)(iii-vi), D.5.b.(1)(c), D.5.b.(1)(d), D.5.b.(2), D.5.b.(3), E.2.f., E.2.g., F.1., F.2., F.3., I.1., I.2., I.5., J.3.a.(3)(c)(iv)-(viii), (x)-(xv), the first sentence of L.1. as it applies to the newly mandated activities, and L.1.a.(3)-(6), 07-TC-09-R County of San Diego, Cites of Carlsbad, Del Mar, Imperial Beach, Lemon Grove, Poway, San Marcos, Santee, Solana Beach, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, San Diego, and Vista, Claimants

by making it available on the Commission's website and providing notice of how to locate it to the email addresses provided on the attached mailing list.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this declaration was executed on March 29, 2024 at Sacramento, California.

Jill Magee

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COMMISSION ON STATE MANDATES

Mailing List

Last Updated: 3/28/24

Claim Number: 07-TC-09-R

Matter: San Diego Regional Water Quality Control Board Order No. R9-2007-0001 Permit CAS0108758 Parts D.1.d.(7)-(8), D.1.g., D.3.a.(3), D.3.a.(5), D.5, E.2.f, E.2.g, F.1, F.2, F.3, I.1, I.2, I.5, J.3.a.(3)(c)iv-viii & x-xv, and L.

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City of Chula Vista
City of Del Mar
City of Encinitas
City of Escondido
City of Imperial Beach
City of La Mesa
City of Lemon Grove
City of National City
City of Oceanside
City of Poway
City of San Diego
City of San Marcos
City of Santee
City of Solana Beach
City of Vista

TO ALL PARTIES, INTERESTED PARTIES, AND INTERESTED PERSONS:

Each commission mailing list is continuously updated as requests are received to include or remove any party or person on the mailing list. A current mailing list is provided with commission correspondence, and a copy of the current mailing list is available upon request at any time. Except as provided otherwise by commission rule, when a party or interested party files any written material with the commission concerning a claim, it shall simultaneously serve a copy of the written material on the parties and interested parties to the claim identified on the mailing list provided by the commission. (Cal. Code Regs., tit. 2, § 1181.3.)

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City of Lemon Grove

Jurisdictional Urban Runoff
Management Plan
Annual Report

FY 2006 – 2007
January 2008 Report

The City of
LEMON GROVE
BEST CLIMATE ON EARTH
Incorporated in 1977

Executive Summary

The City's sixth Annual Report submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2001-02, "Permit") represents an opportunity to further explore and develop effectiveness assessment measures.

Several programmatic changes reflected in this year's report have been made in response to regulatory feedback received from the Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA). In particular, the RWQCB and the EPA's review of the Lemon Grove Standard Urban Stormwater Mitigation Plan (SUSMP) prompted a more focused effort on plan reviews, development and re-development strategies, and construction site management.

To respond to their comments, the City implemented various methods to further assist in long-term effectiveness assessments. The methods have only been utilized for one full reporting period, so annual comparisons of data are unavailable until next reporting period.

Through a collaborative workgroup process with the Copermittees, we have significantly improved our assessment strategies and analysis methods. The Copermittees worked extensively on the completion of the Report of Waste Discharge (ROWD) during FY 2004-05. The ROWD is a collaborative effort discussing the Copermittees requests and findings for the issuance of the 2006 Permit. The Copermittees also collaborated with an independent contractor to create a formal effectiveness assessment. Both the ROWD and the long-term effectiveness assessment documents were submitted to the RWQCB separately from the Annual Reports. However, the Copermittees worked extensively on these projects during FY 2004-05 and the City's participation is worthy of notice. The documents provided valuable information that the Copermittees will be using during the next reporting period to fine tune effectiveness assessment and program focus. In FY 2005-06, the City continues its extensive involvement in joint Copermittee workgroups. The City feels the collaboration is necessary to develop and maintain a well-rounded, effective program.

The City continues to improve and develop its own program effectiveness assessment strategies. The ROWD and the long-term effectiveness assessment have been extremely useful tools in helping not just the City, but the Copermittees, in analyzing the current available data. The documents have helped identify areas of improvement and program focus. The long-term effectiveness document will be critical in the City's and the Copermittee's development of regional activities to address improved water quality and pollution prevention.

The City has taken important steps in putting newly developed strategies in motion. In particular, the City has continued to develop its BMP implementation

strategy for construction sites and development proposals. During FY 2004-05, the City focused on improving its SUSMP checks, the tracking of construction site inspections, and the development of consistent standards in the Planning and Engineering Departments. The City continues these efforts into FY 2006-07. Employee training continued to focus on SUSMP implementation and those departments directly affected by the document through regularly scheduled inter-departmental meetings. In FY 2006-07, the City made large steps forward in the implementation of a city-wide GIS program. The City also evaluated its street sweeping contract and hired a new street sweeping company. The newly implemented Code Enforcement program continues to improve in efficiency and effectiveness. The City realizes that many of these new approaches are in their infancy, some still in exploration, but future reporting periods will further demonstrate the new concepts and ideals discussed in this report. The City also awaits with anxiety and trepidation the issuance of the new permit to further develop its program and compliance standards.

In FY 2005-06, the City created an independent funding source to help fund its program. However, the funding source only funds a portion of the program; requiring the City's strapped General Fund to finance this increasingly expensive program. This issue will be addressed more fully in Section 12.2 of this report.

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Section 1.0 Introduction

Lemon Grove's sixth annual report, submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2001-01, "Permit") represents the City's continued efforts to document and assess a full year of program implementation (July 1, 2006 through June 30, 2007). We are confident that the report demonstrates success in building a program that meets and often exceeds Permit requirements. At the same time, the annual reporting process offers an important opportunity to critically assess program implementation, and to identify areas in need of modification or improvement.

The report continues to demonstrate several programmatic changes in response to regulatory feedback received from the Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA). In particular, the March 2005 SUSMP audit performed by the RWQCB and the EPA prompted a reassessment of the City's SUSMP requirements and plan check procedures. The City chose to focus its improvement efforts in the SUSMP area. The City implemented a construction site inspection database to allow for future assessment strategies. The City also participated in a joint SUSMP training session with the City of El Cajon. The training was targeted toward those employees who deal directly with SUSMP implementation, the Planning and Engineering Departments. The City improved its outreach material to developers and contractors. The new information includes several checklists that detail exactly what is required on the site plans and in the stormwater management documents. The City is working on a strategy to map its waterways and drainage channels for a future GIS map layer. The City is actively exploring its GIS options and hopes to have GIS capabilities in the next 5 years. The City began developing a basic needs assessment and schedule for the implementation of a city-wide GIS program. The City will begin initial phases of implementation during fiscal year 2008-2009. These early efforts include base data entry and updating the existing layers with current technology. However, all implementation is dependant on budgetary restrictions. The City and the Copermittees are moving toward a more quantitative and qualitative approach to reporting and operational organization.

At the jurisdictional level, we have taken important steps in putting newly developed strategies in motion. The City continued to enhance its BMP implementation process. This reporting period, we focused on construction sites and SUSMP processes. We continued to improve the assessment tools through inspection databases and the plan check process. We continue to explore effective assessment options that fit within the budgetary confines and meet the requirements of the Permit. During this reporting period, it was discovered that the City's existing tracking system for building permits and code enforcement, HdL, might be a viable option for water quality personnel. It might be possible to tie water quality concerns into the existing framework. The City is working with an HdL representative to further explore the possibilities. Though the tools are

often imperfect and must continue to evolve, we have already found their use to be quite instructive in many ways.

We believe the programs described in this report to be significantly expanded and improved over past efforts. Some accomplishments of particular note include the following:

- Increased construction site inspections to a twice weekly frequency
- Use of community events for public outreach
- Improved code enforcement process for water quality
- Continue outreach to restaurant community
- Continue outreach to automotive facilities
- Targeted outreach to residents (ie: Pool Cleaning and Pet Waste)

This report is organized according to the general outline agreed upon by the Copermittees. Sections 2.0 through 7.0, each corresponding to a different category of pollutant sources (i.e. Municipal, Commercial, Residential), are organized as follows:

- Priority Sources
- BMP Requirements
- BMP Implementation
- Compliance and Enforcement

Where possible, all applicable data and information are consolidated into the sections to which they best apply so as to present a more holistic and self-contained description of each program area. For example, section 4.0 discusses every program element related to the City's commercial component (e.g. outreach to commercial audiences, inspections of businesses, responses to public complaints involving commercial dischargers, and enforcement actions taken against non-compliant businesses).

Sections 8.0 through 10.0 are intended only to summarize key statistics, and to address topics not covered in pervious sections. Section 11.0 provides a consolidated assessment of key program data and information. Much of this data is also presented in greater detail in sections 2.0 through 8.0. Section 12.0 provides an analysis of the City's projected expenditures for FY 2006-07. Section 13.0 discusses the City's conclusions and recommendations based on its assessment of this year of implementation under the Permit.

Overall, this report demonstrates, in a clear and well-organized way, the considerable thought and energy that went into developing and implementing a complex and rigorous program. We look forward to continued progress in future years.

Section 2.0 Municipal Component

This section describes actions taken by the City during the FY 2006-07 reporting period to prevent polluted runoff from its municipal facilities.

2.1 Municipal Facility Activities

The City of Lemon Grove owns and operates a wide variety of fixed facilities and an extensive system of roads, municipal separate storm sewers (MS4s), and sanitary sewers.

City personnel implements site-specific Best Management Practices (BMPs) to prevent and reduce pollutants in facility runoff. Since BMPs are tailored to the unique activities conducted at each City facility, the remainder of this section is organized according to facility type. For each facility type, information is presented as follows:

- Priority Sources
- BMP Requirements
- BMP Implementation
- Facility Inspections

2.1.1 Priority Sources

Nearly 65.5 miles of roads, streets, and highways are maintained by the City. The City is not responsible for maintaining roadways that are managed by other agencies or jurisdictions, or are privately owned. All City-maintained roads are routinely inspected annually, and more frequently upon request. Needed repairs are noted and performed as appropriate to ensure safety and riding quality for the traveling public. Roadway maintenance typically involves concrete and asphalt repair, drain inlet cleaning, litter removal, and street sweeping. Other BMPs, as listed in JURMP 2.4, are implemented as required.

2.1.1.1 BMP Requirements

JURMP 2.4 defines minimum BMP requirements for the City-maintained road system. BMPs applicable to roads, streets, and highways have been reviewed, and remain unchanged. Below is a brief listing of some of those BMPs:

- Vegetation Control
- Proper Material Storage and Coverage
- Concrete Maintenance Methods for Wash-outs
- Designated Vehicle Maintenance Area
- Vehicle Washing Area
- Employee Training

2.1.1.2 BMP Implementation

Details regarding specific road maintenance activities conducted during this reporting period are provided below. It should be noted that other road maintenance BMPs not described here were identified in JURMP 2.4 and are implemented as necessary.

Street and Facility Sweeping

The Department of Public Works (DPW) Streets Division insures that City-maintained roads and facilities at the following frequencies and locations:

- Curbed Streets (Broadway, Buena Vista Ave., Massachusetts Ave., and School Lane) – weekly
- All Other Curbed Streets – biweekly
- Non-Curbed Streets – monthly
- Center Islands and Medians – monthly
- Parking Lots and Alleys (Broadway Business Lot and Lester Ave. Alley) – weekly
- All Other Parking Lots and Alleys – monthly

The City considers sweeping to be an extremely effective BMP in that it prevents accumulated material from entering the stormdrain conveyance system. To quantify its sweeping activity, DPW Streets Division crews record the length of streets swept and the amount of debris collected on a month-by-month basis. The City swept approximately 80 miles during FY 2006-07 and collected 169.75 tons of debris. The City swept approximately 75 miles during FY 2005-06 and collected 109.88 tons of debris. These figures include the regular sweeping of roads, specialty or requested road sweeps and corporate yards.

The City swept 100% of public maintained curbs and gutters both reporting periods. The City is responsible for 65.5 miles of roadway in Lemon Grove. The extra mileage swept is due to parking lots and special request sweeping on private streets. The City also sweeps bus stops, various parking lots and miscellaneous private streets based on need.

During this reporting cycle, the City began the bid process for a new street sweeping contractor, utilizing Cannon Pacific in the interim. The new contract will take effect at the beginning of 2008 under Day and Night Street Sweeping.

2.1.1.3 Road Inspections

All City roads are inspected annually or more frequently upon request, and needed repairs noted and preformed as appropriate to ensure safety and riding quality for the traveling public. During this reporting period, all City roads were inspected prior to and during the rainy season. Based on these results,

maintenance crews evaluated potential stormwater impacts and identified the need for cleaning, maintenance, and future upgrades. Conveyance system and road right-of-way cleaning conducted as a result of these inspections is described in section 2.1.2.3 below, and street sweeping in section 2.1.1.2 above.

2.1.2 Municipal Separate Storm Sewer System (MS4)

The City maintains the publicly owned portions of the MS4 within its boundaries. The City's MS4 inventory consists of culverts, channels, ditches, pipes and related flood control structures.

2.1.2.1 Priority Sources

All City roads, streets, and highways are designated as high priority municipal sources. The Public Works Yard is also designated as high priority because of pollutant potential. See Table 2.1 which details the City's priority municipal sources.

Table 2.1 – High Priority Municipal Facilities

Facility	Address	Basis for Designation	Receiving Water
Roads, streets, highways, and parking facilities	Throughout City	Specified in Order 2001-01	Chollas Creek and Sweetwater River
Flood management projects and flood control devices	Throughout City	Specified in Order 2001-01	Chollas Creek and Sweetwater River
Public Works Yard	2873 Skyline Dr.	Specified in Order 2001-01 and has potential to discharge pollutants of concern.	Chollas Creek

2.1.2.2 BMP Requirements

JURMP 2.4 defines minimum BMP requirements for City-maintained MS4 facilities. BMPs applicable to the City-maintained MS4 have been reviewed, and remain unchanged.

2.1.2.3 BMP Implementation

Further detail about specific MS4 maintenance activities conducted during this reporting period is provided below. Other BMPs identified in JURMP 2.4, but not described here, are implemented as required.

Conveyance System Cleaning

During this reporting period, City staff inspected forty-three roads, 190 catch basins and sixteen conveyances connected with the MS4. Only six conveyances

and 60 catch basins were found to be in need of cleaning, and 100 percent of these were cleaned prior to the end of the reporting period. This resulted in the removal of approximately 1,625 pounds from the catch basins, conveyances, and roads. The cleaning of catch basins and conveyances is an annual event that takes place prior to the beginning of the rainy season and usually occurs between October and November.

During the previous reporting period, City staff inspected forty-three roads, 190 catch basins and sixteen conveyances connected with the MS4. Six conveyances were found to be in need of cleaning, and 100 percent of these were cleaned prior to the end of the reporting period. This resulted in the removal of approximately 1,625 pounds from the catch basins, conveyances, and roads. The amount of debris removed during FY 06-07 was significantly less than in previous reporting periods. DPW attributes a more effective street sweeping program and the implementation of Trident Curb Screens in several high trash areas of the City.

The City continues to locate and log new catch basins on an annual basis. The City plans to have a completed log sometime within the next permit cycle. Attachment A-1 contains the initial mapping of the City's major drainage pipes.

Storm Drain Stenciling

The City began implementing a new drain label program. Instead of painting stencils, the City began using drain labels that are more permanent and longer lasting by using thermoplastic labels. They are heat set onto the concrete any place around the drain and will last a minimum of 10 years. They are also fade, graffiti and tamper resistant. As of the end of the 2004-05 reporting period, the City had placed labels on approximately 30 drains on Broadway, a main through-way for the City and commuters. The City then placed an additional 30 labels on various inlets throughout the City with a focus on major streets first, during 2005-06. The City maintained this program in 2006-07, but installing an additional 30 labels on drains throughout the City, covering major streets first. The City plans to purchase approximately 30 each fiscal year until all the drains on public maintained streets are labeled. In the meantime, the City continues to let "I Love a Clean San Diego" stencil drains that are un-marked or have worn-out stencils.

The City continues to require developers to mark any new drains in connection with development or redevelopment. The City encourages them to use concrete wet stamps or thermoplastic labels for longevity on private streets and requires either if the street will be maintained by the City. See Attachment A-2 for a picture of the thermoplastic labels and the concrete wet stamp.

During FY 2006-07, the City installed six test Trident Curb Screens in various locations including a residential site, a school route site, and high traffic sites. The City wished to test their durability and usefulness in conjunction with the new

street sweeping program. Insufficient data is available at this time to begin judging their effectiveness, but informal visual inspections show a decrease of trash in the catch basins and the trash is curb side making it easier for the street sweeper to pick up.

2.1.2.4 MS4 Inspections

The Streets Division conducts annual field investigations in order to inspect the City-maintained MS4 to identify the need for cleaning, maintenance, potential illicit connections and illegal discharges (IC/IDs), and to assess the structural integrity of facilities. As reported above, the City inspected forty-three road segments, sixteen conveyance facilities, and 190 catch basins during this reporting period.

2.1.3 Sanitary Sewer System

The Sanitation District manages and maintains a collection system of 64.952 miles of sanitary sewer pipeline. The sanitary sewer system serves the entire Lemon Grove area and connects with San Diego and La Mesa's sewer systems. San Diego and La Mesa share sewer space with Lemon Grove. La Mesa utilizes 728.60 EDU of Lemon Grove's sewer space; San Diego uses 986.20 EDU.

2.1.3.1 Priority Sources

The City operates no high priority waste water facilities within its boundaries.

]2.1.3.2 BMP Requirements

JURMP 2.5 details minimum BMP requirements for all sanitary sewer system lines. BMPs applicable to sanitary sewer system facilities have been reviewed, and remain unchanged.

2.1.3.3 BMP Implementation

Control of Sanitary Sewer Overflow Events

DPW staff responds to sanitary sewer overflows (SSOs) according to protocol established in RWQCB Order 96-04, the current Waste Discharge Requirements and Water Quality Order 2006-0003. During FY 2006-07, the City had zero SSOs. The last spill on record took place in the third quarter of FY 2004-05 and was directly related to vandalism issues experienced earlier during that period.

Limiting Infiltration from the Sanitary Sewer System to the MS4

As a proactive means of preventing or limiting infiltration from the sanitary sewer system to the MS4, the City conducts aggressive inspection and maintenance

programs for both systems. City personnel are instructed to investigate locations exhibiting sewer-related discharge or odor during MS4 inspections (further discussed in section 2.1.2.3 above). No instances of infiltration were noted during this reporting period. Sanitary sewer system inspections are also conducted on scheduled intervals to ensure the functionality and structural integrity of the system. These are described further below. The camera/video truck was purchased and utilized during this reporting period.

2.1.3.4 Inspections

Sanitary Sewer System Inspections

The City regularly inspects its sanitary sewer system to ensure functionality and structural integrity. Towards the end of reporting period 2004-05, the City began cleaning and inspecting public sewer lines in-house. During this reporting period, all public sewer lines were cleaned and maintained in-house.

Table 2.2
Sanitary Sewer Services

	Total FY 2005-06	Total FY 2006-07
Cleaned	**298,043***	**331,369***
Root Cut	**18,370***	**20,927***

*represented in feet

2.1.4 Corporate Yards and Fleet Maintenance Facilities

The City's municipal facilities inventory includes one facility classified as a corporate yard and fleet maintenance facility. These facilities are classified as high priority, due to the potential pollutants stored on-site.

2.1.4.1 Priority Sources

Fleet Maintenance Facility

DPW operates one fleet maintenance facility that provides maintenance, repair and fueling to forty-five vehicles from all City departments. The maintenance is co-located with the DPW headquarters and is listed as the Public Works Yard on the inventory. The facility is considered a high priority threat to water quality due to the presence of hazardous materials, automotive fluids, and fuels on-site.

2.1.4.2 BMP Requirements

JURMP 2.4 defines all minimum BMP requirements at the DPW-maintained corporate yard. BMPs applicable to DPW-maintained corporate yards have been reviewed, and remain unchanged.

2.1.4.3 BMP Implementation

Fleet personnel always implement BMPs under the guidance of the facility's Fleet Manager. In addition to a periodic schedule of ground maintenance and housekeeping, the facility maintains an inventory of spill kits, absorbent, fiber rolls, and storm drain maintenance equipment. BMPs are also implemented to address particular activities of concern: vehicle and equipment repair, hazardous waste storage, vehicle washing, re-fueling, etc.

As in previous reporting periods, BMP implementation at the corporate yard and fleet maintenance facilities was verified and evaluated during routine facility inspections. Where inspectors noted a lack of BMPs or ineffective results, employees were required to implement corrective actions immediately.

2.1.4.4 Inspections

Fleet Maintenance Facilities

Though Fleet Managers are responsible for applying and maintaining BMPs on a daily basis, the Water Quality Coordinator conducted an annual inspection to verify implementation during this reporting period. The only notable infractions were an open dumpster at City Hall and a degraded straw wattle at the Public Works Yard. City staff has noticed a marked improvement in the maintenance of good housekeeping BMPs at City facilities. Water Quality staff believes this is due in part to frequent informal inspections and increased staff training, as well as the formal annual inspection.

2.1.5 Parks and Recreation Facilities

2.1.5.1 Priority Sources

The Department of Recreation Services (DRS) manages stormwater discharges from seven park sites. Included among these are local and regional parks, park buildings (including the community center), historical sites and open spaces. In the inventory submitted with the City's JURMP, all parks are considered medium priority. See Table 2.2 for a detailed description of park areas.

Table 2.2 – Medium Priority Municipal Facilities

Facility	Address	Basis for Designation	Receiving Water
Berry Street Park	7101 Mt. Vernon St.	Park facility may generate minor pollutants associated with green wastes, pesticides, and fertilizers. Not adjacent to any receiving waters.	Chollas Creek
Fireman's Park	School Lane and Central	Park facility may generate minor pollutants associated with green wastes, pesticides, and	Chollas Creek

		fertilizers. Not adjacent to any receiving waters.	
Kunkel Park	8171 Lemon Grove Way	Park facility may generate minor pollutants associated with green wastes, pesticides, and fertilizers. Not adjacent to any receiving waters.	Sweetwater River
Monterey Heights Park	Canton and Glencoe	Park facility may generate minor pollutants associated with green wastes, pesticides, and fertilizers. Not adjacent to any receiving waters.	Chollas Creek
Lemon Grove Park	Washington and Alton	Park facility may generate minor pollutants associated with green wastes, pesticides, and fertilizers. Not adjacent to any receiving waters.	Chollas Creek

2.1.5.2 BMP Requirements

JURMP 2.4.2 defines all minimum BMP requirements for City parks and recreation facilites.

2.1.5.3 BMP Implementation

Because parks vary widely in both size and function, it is difficult to generalize about BMP implementation. All park personnel are instructed to implement BMPs at all times. In addition to a periodic schedule of ground maintenance and housekeeping, most facilities maintain an inventory of spill kits, absorbent, and miscellaneous storm drain maintenance equipment. BMPs are also implemented to address particular activities of concern: material and waste storage, fueling, septic tank maintenance, etc. A complete list of facility-specific BMPs can be found in JURMP 2.4.2.

DRS has also endeavored to make the implementation of pollution prevention BMPs a priority at park facilities. Unless otherwise noted, these practices were implemented at all facilities in the DRS inventory. They include:

- The storage of used construction materials outside for future projects is being eliminated. The site that contained materials during the last reporting period is now empty of City materials. The City has plans to fence and lock the site to prevent the illegal dumping of large waste items like furniture. The fencing should be accomplished within the next two reporting periods.
- The prohibition on washing City vehicles and equipment on-site has continued to be enforced. All washing occurs off-site at appropriate locations. The majority of vehicle repair and maintenance is performed by Bob-Brown Automotive on University Ave. By having vehicle maintenance performed off-site, the City drastically decreases the number of pollutants stored at the Corporate Yard. The City is continuing to look into the possibility of in-sourcing oil-changes to allow for the use of re-refined oil. The City is currently searching for a closed loop system that would supply

the oil and then take the used oil back for further recycling. The City has not been able to locate a closed loop system. The City has postponed the implementation of re-refined oil in City vehicles until the warranty on the new fire engine expires. If the City uses re-refined oil in the new engine it will nullify the repair and maintenance warranty. The inclusion of the fire vehicles is integral to the implementation of a re-refined oil program. Without the inclusion of the fire vehicles, the City would not be able to purchase the oil in the quantities sufficient to encounter fiscal savings. The City plans to renew its efforts to establish re-refined oil after the warranty expiration in reporting period 2009-10. Maintenance on the fire engines is preformed off-site through Grossmont High School District.

- The City uses pesticides and insecticides on a very minimal basis, only when a problem is persistent and can be dealt with no other way.
- All City parks maintain recycling facilities.
- The use of drought resistant plants is encouraged. See Section 2.2.2 for further information on the plants used in the City.
- The City installed 1 additional doggie bag dispenser at the Lemon Grove Civic Center and maintained a distribution of approximately 650 bags at the existing 4 locations in City parks.

2.1.5.4 Inspections

The City's Water Quality Coordinator conducts annual stormwater inspections to verify appropriate BMP implementation at all of its parks, regardless of priority classification. All observed deficiencies were noted and scheduled for correction. Many of the deficiencies noted during FY 2006-07 involved a lack of on-site spill prevention materials (i.e. spill kits, drip pans for vehicles, etc.) or trash and debris. All deficiencies were promptly addressed. See Attachment A-3 a copy of the facility inspection report.

2.1.6 Other Municipal Facilities

The City operates and maintains several additional facilities not captured by the categories outlined above. These include office buildings, a sheriff station, and a fire station. The Fire Department re-joined the City in July of 2004. All repairs, maintenance, and equipment storage is performed in a covered and completely enclosed garage/bay area with locked doors. All hazardous materials are stored in locked self-contained areas inside the bay area and labeled appropriately. Nothing hazardous is stored outside or un-locked.

2.1.6.1 Priority Sources

Offices

The City maintains four business offices and two public safety offices including the new fire station, which previously housed the Department of Public Works

and Recreation Services. No new offices have been added during this reporting period, see list below. The Sheriff Station is connected to City Hall, therefore they are categorized together under City Hall, which is listed as a medium priority threat, as most activities are conducted in enclosed areas.

- City Hall and Sheriff's Department – 3232 Main St.
- Fire Department – 7853 Central Ave.
- City Hall Annex (Department of Recreation Services) – 3225 Olive St.
- Community Center – 3146 School Lane
- Department of Public Works – 2873 Skyline Dr.

Vacant Land and Excess Right-of-Way

The City owns one vacant property at:

- 6949 Central Ave.

This site will be considered medium priority due to the minimal on-site activity and lack of impervious surface.

2.1.6.2 BMP Requirements

All BMP requirements for the facilities discussed in 2.1.6.1 above are covered in JURMP 2.4. These BMPs have been reviewed and remain unchanged.

2.1.6.3 BMP Implementation

BMP implementation at facilities classified as miscellaneous is overseen as applicable by DPW, DRS, or facility personnel. Procedural requirements and staff training protocol are specific to each department, but in all cases are sufficient to ensure stormwater compliance at these facilities.

2.1.6.4 Inspections

Each facility identified in 2.1.6.1 was inspected at least once during FY 2006-07 to verify compliance with minimum BMP requirements. The main infraction was an open dumpster lid at City Hall, which has since been corrected and is checked by staff on a regular basis. The drip irrigation system installed in the landscaping at the front of City Hall during the previous reporting period has cut down significantly on run-off from the site. See Attachment A-3 for a copy of the facility inspection report.

2.2 Management of Pesticides, Herbicides, and Fertilizers

The City of Lemon Grove's Grounds staff uses only herbicides and algecides. The City's pest control contractor is Knott's Pest Control. Knott's Pest Control meets all BMPs for pesticide application found in JURMP 2.4.

2.2.1 BMP Implementation

The following BMPs, described further in JURMP Appendix 2.2.1, were implemented by DPW for the application of herbicides, algecides, and occasionally pesticides; although as mentioned above Knott's Pest Control handles the majority of the City's pest control needs.

- Safer Alternative Products
- Good Housekeeping Practices and Material Storage
- Vehicle and Equipment Washing and Cleaning
- Illegal Dumping Control
- Pollution Prevention

2.2.2 Use of Drought Resistant Vegetation

Grounds division of Public Works attempts to use drought resistant plants throughout the City's landscaping. Common variations of these plants used throughout the City are lavender, sage, oleanders, natal plum, rosemary, and pyracantha. The use of drought resistant vegetation allows for drip irrigation, which greatly decreases the amount of water used and limits the amount of potential runoff from sprinkler systems. A drip irrigation system also allows soils to absorb nutrients from fertilizers and compost preventing them from washing into the drains with irrigation water, a common residential pollutant problem that will be further discussed in Section 5.0.

2.2.3 Schedules for Irrigation and Chemical Applications

Weather conditions are always considered prior to outdoor pesticide applications. Depending on the formulation and characteristics of the pesticide to be applied, an application may be postponed or allowed to proceed prior to, or during, a rain event. This is because the Grounds division applies pre-emergent herbicides as part of its vegetation management program. Pre-emergent herbicides benefit from a gentle rain that soaks the pesticide into the soil where germinating seeds are killed; getting these types of herbicide to the root zone also controls existing young vegetation. The application of contact herbicides, on the other hand, is not permitted if precipitation is likely. These materials tend to wash off plant surfaces and contribute to water quality degradation.

2.2.4 Collection and Disposal of Pesticides

When available the City purchases herbicides in recyclable bulk containers. By reducing the volume and variety of herbicides, the department is able to maintain a minimal inventory of pest related chemicals.

As a general rule, emptied pesticide containers are triple rinsed and the rinse water is put in with the application solution. Containers are then disposed of in accordance with local regulations.

2.3 Employee Training

The City is committed to increasing the awareness of its employees regarding urban runoff issues, and effecting positive behavioral changes to protect water quality. To this end, two types of stormwater and water quality education are provided to employees.

- Basic Awareness Education; and
- Focused Employee Training

2.3.1 Basic Awareness Education

The goals of this element are to promote responsible behavior at home and work, and to encourage employees to act as the City's "eyes and ears." As described in section 2.4 of the City's JURMP, the City's goal is to provide some level of basic awareness education to all employees annually.

2.3.1.1 City Newsletter

The City has continued the Environmental Page in its biannual Newsletter. Each issue contains oil recycling sites and household hazardous waste information. The Fall 2006 edition contained an article on eco-friendly holiday practices, lawn care and a clean up event. The edition also featured the standard used oil information and e-waste guide. The Spring 2007 edition featured information on the Creek to Bay Clean-Up event, personal tips for cleaner beaches and water, household hazardous waste, and used oil recycling. In this edition the City increased the environmental section to a two page spread to provide more in-depth information.

The Newsletter, which is produced by City staff, is distributed to the residents and businesses of Lemon Grove, as well as City employees. Because of the public and internal distributions, City staff is kept abreast of the current issues and knows what information is being given to the public. See Attachment A-4 for copies of the Newsletter articles discussed in this section.

2.3.1.2 Informal Staff Training

Water Quality staff continues the informal educational e-mail program. At least twice a month, staff sends a City-wide e-mail with new water quality information. The e-mails contain anything that has to do with water quality and pollution prevention. New sites such as www.bewaterwise.com or new articles from the BC's California Water News (a Brown and Caldwell daily e-mail newsletter) are

shared with all City staff members. Water Quality staff has discovered that this method, although informal, provides a positive transfer of new information, up coming events, and technological advances in the water quality field. Water quality remains a primary focus for all staff through these small constant reminders and updates. It also provides staff an opportunity for internal dialogue without trying to schedule large scale meetings or trainings. The e-mails have been received favorably and will continue in future reporting periods.

Water Quality staff participated in weekly inter-departmental meetings with City planning, code enforcement, engineering and fire personnel. Current development projects, code updates, enforcement concerns, and construction site details are discussed. The meetings have provided water quality staff with the opportunity to regularly update the former mentioned department staff on concerns and changes in the water quality program. The constant re-enforcement ensures that water quality remains an issue of primary concern for the development sector of City staff.

2.3.2 Focused Employee Training

2.3.2.1 Bi-Annual Public Works Staff Training

Each fall and spring, water quality staff participates in one of the public works safety trainings. Staff provided updates on new concerns and regulations, as well as obtaining the concerns of the public works staff. This year's training focused on the developing new permit and the changes it would bring for DPW staff. Water quality staff continues to provide DPW staff with informational brochures on used oil recycling and pet waste to utilize in educating the public further on these common infractions. The regular exchanging of information has been beneficial to all staff members involved. Water quality staff believes the continued involvement has increased public awareness as well due to the readily available information and more knowledgeable public works staff. Both staffs look forward to continuing the exchange of ideas and information.

2.4 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Municipal Component in FY 2006-07. It consists of three primary elements: 1) a narrative assessment, 2) a discussion of the City's success in meeting specific quantifiable targets, and 3) a discussion of issues related to the spatial and geographic variability of program data.

2.4.1 Narrative Assessment

The City made a number of important improvements to its municipal activities programs in FY 2006-07. In spite of the large number of individual activities and programs comprising the City's Municipal Component, continued progress and

improvement was made in all areas. In particular, another year of experience in implementing BMPs at City facilities has translated to a more complete integration of stormwater mandates into standard operating procedures. City crews also continued to pound the pavement throughout the community, collecting greater amounts of debris from our streets and MS4 than they ever have before. City crews are also better educated on the water quality program and can provide more information to residents themselves. They are also more knowledge about illegal practices and many issues have been dealt without code enforcement involvement.

The City is continuing to gather GIS information. The City purchased new aerial photographs of the city limits, as well as Lidar graphs. The City is currently investigating survey equipment and GIS programs. The City currently has ArcView 3.2 with minimal mapping and levels. The City is investigating upgrades versus new systems. The City plans to have a functioning GIS system in place within the next five to eight years depending on budgetary constraints. The City has evaluated several different options for its GIS system and has performed an initial needs assessment. A needs assessment for GIS implementation was performed during this reporting period. The initial stages of implementation will involve base data and updates for the existing layers based on current technology.

Staff training continues to develop and change based on staff's needs and new incoming information. The City focused this reporting period on SUSMP specific training because of the audit and a need to improve the SUSMP review process. Staff also discovered that employees were more favorable towards specialized trainings due to the repeated generic trainings of the past two reporting periods. Water Quality staff plans to rotate specialized and generic trainings every few years. This will allow the limited Water Quality staff to provide optimal trainings regardless of the topic. The rotation also allows City staff a chance to receive more in-depth training in a field that directly relates to their daily tasks.

2.4.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changed in Knowledge / Awareness
- Level 3: Behavioral Changes / BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activity-Based Targets

The City is beginning to track activity targets and establish long-term goals for the water quality program. Below is a listing of the targets for this reporting period:

Target 1
Provide More Targeted Staff Training
100% complete

Target 2
Improve and provide permanent labels for local stormdrains
45% complete (on-going process)

Target 3
Improve catch basin inventory
75% complete (on-going process)

Target 4
Obtain educational decals for the DPW tailgates
50% complete

Target 5
Bring sewer system maintenance in-house full time
100% complete (both the camera truck and the vactor truck are now in house and being utilized full-time)

Target 6
Increase information available through the Newsletter
85% complete (more education is always needed)

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not track specific measures related to changes in knowledge or awareness. However during this reporting period, City staff showed an increased awareness of water quality issues by requesting specific, focused trainings. In discussions with water quality staff, they expressed a desire to learn more about specific segments of the water quality program like SUSMP requirements and processes.

Level 3 Outcomes: Behavioral Change/BMP Implementation

The City did not characterize or track specific measure related to behavioral changes as part of its Municipal Component in FY 2005-06. The need for the identification and assessment of such measures is being considered for the next reporting period. The City is currently working on connecting BMP

implementation to load reductions and program effectiveness. The City feels that despite the lack of official tracking, progress is being made and behaviors are changing. Staff's efforts to maintain the closed dumpster lid are evidence of the change in behavior, as well as the installation of the drip irrigation at City Hall. All City trucks are now equipped with sand bags and gravel bags to contain any emergency run-off problems, until other assistance arrives. The bags are also available to the residents in case of drainage problems.

Level 4 Outcomes: Load Reduction Estimation

As stated above the City of Lemon Grove is working on a connection between BMP implementation and Levels 4 – 6. Some program data can be used to make fairly straightforward estimates. The Municipal Component lends itself to this process easily as the City is already required to keep extensive records of daily activities. The process is also facilitated by centralized data collection. However, the process is in its infancy with a more complete picture projected for future reporting periods. As reported in Section 2.1.2, the City's street sweeping and MS4 maintenance activities resulted in the diversion or removal of a combined 1,625 pounds of debris from the MS4 this year. Unlike other waste streams likely to be only partially introduced or conveyed to the MS4, the entire amount of these totals is assumed to be a load reduction.

Table 2.4 - of Load Reduction Calculations for Municipal Activities

Activity	Amount Collected	Adjustment Factor	Estimated Load Reduction
Street Sweeping	169.75 tons	None	169.75 tons
MS4 Cleaning	1,625 pounds (.8125 tons)	None	1,625 pounds (.8125) tons
			Total 170.5628 tons

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between municipal sources and water quality outcomes. The City will continue to explore these relationships. The City is attempting to connect BMP implementation to load reductions and eventually receiving water quality. The theory is that with the proper BMPs in place, a certain percentage of load reduction is expected, load reductions equal lower pollutant levels which lead to improved water quality.

2.4.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any municipal program data during this reporting period.

Section 3.0 Industrial Component

This section describes actions taken by the City during FY 2006-07 to minimize discharges from industrial facilities and their impact on receiving water quality and other environmental resources. The City continues to implement a number of complementary and inter-related program activities, including the following:

- Maintaining a watershed-based inventory of industrial sources
- Requiring BMP implementation through ordinance and permit
- Encouraging BMP implementation through notification and outreach
- Monitoring compliance through inspection and enforcement

3.1 Priority Industrial Sources

For its January 2006 JURMP Annual Report, the City identified nine high priority industrial sites in its borders. Since a single repository of facility data does not exist, the City relies on other data sources as well as field reconnaissance, to modify its inventory. The City uses the annual industrial/commercial inspections by DMax Engineering (DMax) and the State Water Resources Control Board (SWRCB) Notice of Intent (NOI) database to keep its list of industrial facilities up to date. The City also uses the data collected annually by DMax during their facility inspections to update its high priority listing. Because the City does not experience large quantities of new development, the list remains fairly stable from year to year. The City updated its city-wide business and development database. This reporting period was spent training staff and learning to utilize the new system. No statistics are available from the updated system due to the short time in use.

3.1.1 Additions to the Industrial Inventory

There were no facilities that were recommended for addition to the City's high priority category during this reporting period.

3.1.2 Deletions from the Industrial Inventory

DMax discovered no facilities during FY 2006-07 to be deleted from the inventory.

3.1.3 Updated Industrial Inventory

The City's updated industrial inventory currently consists of 27 facilities. This number includes the above new high priority facilities, because all were listed as medium priority industrial prior to this reporting cycle. Table 3.1 provides a summary of the types of sources contained within the inventory.

Table 3.1 - Summary of High Priority Industrial Sources

Industrial Activity	Number of Facilities in Lemon Grove	Revised High Priority Category Facilities
Waste Disposal and Recycling	1	
Equipment/Transportation	3	2
Metalwork	2	3
Building Supplies and Woodworking	3	2
Industrial Paper		1
Contractor, Special Trade		1
Specialty Hardware, Drapery		1
Total	**9**	**10**
	Total Facilities	**19**

3.2 BMP Requirements

3.2.1 BMP Requirements for Industrial Dischargers

The City's SUSMP and JURMP documents lay out a set of minimum BMPs required of industrial businesses in the City. A detailed discussion of these requirements was provided in JURMP section 3.4.1. The City's tiered approach to establishing BMP requirements addresses all regulated industrial activities; broad standards apply to all types of industrial activity, and progressively tougher standards are imposed on high priority activities to reflect their greater risk to water quality. The JURMP also provides specific BMPs based on business type as well as the general ones previously discussed (waste disposal, metal work, etc.).

3.2.2 Pollution Prevention Requirements for Industrial Dischargers

In recognition of the important role that pollution plays in the long-term success of the City's industrial program, the City views pollution prevention as part of BMP implementation. The JURMP in Section 3.1 discusses the City's pollution prevention goals with respect to industrial facilities. The City feels that if BMPs are implemented, that pollution prevention is obtained to the maximum extent practicable (MEP). The section further discusses the importance of education and outreach for further pollution prevention.

3.3 BMP Implementation

3.3.1 City Strategy for Ensuring BMP Implementation

As described in section 4.0 (Commercial Component), the City and other Copermittees submitted the document *A Framework for the Implementation of Best Management Practice (BMP) Programs at Commercial and Industrial Sites*

to the RWQCB on October 16, 2003. As noted for commercial sources, the City's strategy for ensuring BMP implementation at industrial facilities builds on this framework, as well as activities it is already conducting.

The City has also contracted with DMax to inspect all industrial and high priority commercial facilities within the City. As these documents are rather extensive, a copy may be obtained upon request. Attachment B-1 contains the forms used by D-Max to evaluate the facilities. A list of the inspected facilities can be found in Attachment B-2. Currently the City has limited Code Enforcement capabilities and only one full time Water Quality Program Coordinator. Budget constraints limit the growth of these fields, however City staff is hoping to improve and increase the Code Enforcement department as the budget allows. This would allow for easier, timely follow-up on facility violations, as well as creating a consequences-for-violations policy. A new code enforcement process for water quality violations is currently being implemented by the City for use with non-compliant construction sites and illegal discharges. The City is planning to expand the process to include non-compliant industries and commercial facilities, especially with reference to monitoring and testing. First the City must first pass an ordinance pertaining to testing requirements; then the code enforcement policy can include them for regulation and penalty assessment.

The City created a stormwater fee for businesses and residents. The City has explored different billing criteria based on the experiences of other cities. The City explored solid waste services as a possible billing mechanisim. The fee was standard for residential but differentiated based on facility/business dumpster size and frequency of pick-up. The fee allowed the City to recoup some of its water quality expenditures, but would also increase public awareness and participation. People and facilities are more likely to implement BMPs if a regular reminder of their importance is provided.
During late FY 2004-05, the City developed a fee based on trash removal services. The City believed a correlation existed between the amount of trash a site produced and the site's potential for pollution contribution. However the constraints of Proposition 218 made the fee vulnerable, therefore the City decided to re-vamp the fee structure to prevent any complications. The fee is no longer based on trash services for commercial facilities, but is attached to existing City fees for licenses and permits. A flat fee remains in effect for residents based on solid waste fees. The combined commercial and residential fees only cover one third of the cost of the City's stormwater program. The percentage is expected to lower with increased costs incurred by the issuance of the new MS4 permit, however they do not compensate for increased requirements and new programs. The already strained General Fund will continue to bear the brunt of the program's cost. With the vote failure in Encinitas, a coastal city, the inland cities have little hope of passing a stormwater fee without Proposition 218 exemption.

3.3.1.1 BMP Selection and Application

As discussed in the framework document, the goal of the Copermittee program is to assist businesses in selecting appropriate combinations of BMPs that address their unique circumstances, activities, and discharge potential. While the City has existing BMP requirements in its JURMP document, BMP selection and application is an ongoing and iterative process that reflects a constantly evolving state of knowledge. As such, review and assessment of available options are standard elements of the City's program planning process.

A need exists to ensure regional consistency between Copermittee efforts. For instance, regional collaboration is beneficial in disseminating regionally consistent information to businesses, and for sharing information about practices that are working and those that are not. The Copermittees' BMP Workgroup provides a forum for exploring these and other key issues. The City will continue to participate in this venue, and in doing so will seek to provide an understandable and regionally consistent message to the businesses it regulates. The City also participates in a San Diego Bay Watershed workgroup that explores topics pertinent to the entire watershed. These topics include BMP implementation and strategies for ensuring effectiveness. Effective education is key to ensuring BMP implementation. The City participates in both the County's Green Business meetings and the Copermittee's Outreach and Education Workgroup. The groups collaborate and share ideas and solutions. The City feels its participation in these venues is valuable in developing an effective and well-rounded program. Collaboration also ensures consistent messages to area businesses. The businesses know what to expect if they re-locate to another area of the County. Where applicable, the City will advocate the use of the January 2003 Stormwater Best Management Practice Handbooks published by the California Stormwater Quality Association (CASQA). These handbooks provide detailed and up-to-date information on BMPs for both commercial and industrial activities.

3.3.1.2 Outreach and Notification

Although compliance inspections are the cornerstone of the City's industrial facilities regulatory program, education is key to ensuring effective implementation by facility operators. The City is working to improve its outreach to the industrial facilities within the city-limits. All the industrial facilities are inspected annually by DMax. The results of the inspections are not received until after the end of the reporting period, therefore any improvements and follow-up are representative of the previous year's inspections.

The City is also working to improve its notification system. Staff is working to expand its database to contain all previous and present violators. The database will contain the number of violations, the type of violations, contact information, and notification information. The database will allow the City to track repeat

offenders and establish a better code enforcement policy. By tracking violation type, the City can better target its outreach efforts, making them more effective educational tools.

The City is currently working to alter the emphasis of its outreach. The current focus is on “don’ts”; the City is attempting to turn that around and make the focus “what to do.” The City believes that many violations continue because businesses and developers are not aware of alternative methods. If the focus of the outreach becomes “what can be done”, people have an alternative behavior, not just a change in knowledge. As stated above, for industrial facilities and construction, CASQA has very comprehensive BMP handbooks, which provide a variety of treatment methods based on activities and pollutants. Informing facilities of resources is a very simple example of positive outreach that provides people with behavior alternatives. Repetition is also key in an effective outreach program. The more often facilities are notified, the harder it is to claim ignorance.

3.3.1.3 Compliance and Enforcement

The City continues to use routine inspections as its primary means of compliance certification for industrial facilities. All industrial and high priority commercial facilities in Lemon Grove are inspected by DMax. The reports are available for viewing, but as they are rather extensive are not included in this report.

The City sent no code enforcement letters during this reporting period to local industrial facilities. No complaints or investigations were needed at local facilities. The City is working on responding to the suggestions based on the inspection results. The final report was not received until after the end of the reporting period, but the City is working to schedule second inspections at several facilities and sending educational information to several others. The educational materials explain the NONA/NEC possibilities and what is required of each facility. Attachment B-3 contains a copy of the education packet now available for distribution.

3.3.2 Outreach to Industrial Businesses in FY 06-07

The City provided outreach to the industrial sector through several avenues in FY 05-06. Specific activities are described below.

3.3.2.1 Outreach Events Targeting Industrial Audiences

During this reporting period the City did not perform any outreach events that targeted Industrial audiences directly. However, through the inspection process, all industrial facilities are reached in some manner with water quality information. Each facility receives a copy of their inspection complete with recommendations for improvements. In future years the City plans to up-grade its industrial

outreach. The following is a list of the activities the City wishes to implement in future reporting periods:

- Workshops on water sampling (a number of facilities are in violation on this aspect)
- A general information sheet about compliance with the General Industrial Permit and the Permit affecting the local jurisdiction
- Workshops on dry-cleaning methods for spills and general good house-keeping practices

Some activities that the City is currently engaged in will continue. A listing of these activities is below.

- Brochures and materials available at City Hall
- Personal interaction through licensing, permitting, and complaints
- Mass mailers to commercial businesses
- Outreach at public events such as the Winter Bonfire and Spring Festival

3.3.2.2 BMP and Pollution Prevention Resources

Providing business representatives with useful sources of BMP information is a major focus of the City's stormwater program, and is emphasized in other regulatory programs as well. In this respect, particular stress is placed on pollution prevention practices.

The City's Pollution Prevention Program continued to promote pollution prevention practices among local businesses and the public during this reporting period. Stormwater and urban runoff messages are incorporated into all pollution prevention literature and program content. Through this program, the City continues to pursue partnerships, which provide important opportunities to integrate industrial stormwater program elements into existing programs, materials and avenues of distribution.

3.3.2.3 Outreach During the Inspection Process

Personal communication through the inspection process is perhaps the most effective means of imparting useful BMP information to industrial operators. As described below, DMax conducted twenty-four industrial facility inspections during this reporting period. During these inspections, DMax provided detailed compliance information for facility operators. Direct communication through the inspection process, augmented by various other outreach tools, will continue to be the City's primary means of outreach to industrial businesses.

3.4 Compliance and Enforcement

In addition to educating business owners and operators, the City contracts with DMax to conduct routine inspections and responds to business-related complaints to verify and enforce compliance with stormwater requirements. In all instances, enforcement is pursued as necessary to return violators to compliance.

3.4.1 Inspection of Industrial Facilities

DMax inspected twenty-four industrial facilities during this reporting period. One hundred percent of the City's industrial facilities were inspected including low and medium level facilities.

Each industrial inspection consists of observable behavior and asked questions. The first portion of the inspection details facility and site information. The general information includes all required codes and classification information. The inspections found an additional ten high priority sites during this reporting period. They are listed above in Section 3.1.1. All of the new sites were formerly listed as medium priority and have now been up-graded to high priority due to new activity on site and proximity to Chollas Creek.

The inspection also includes a section detailing the BMPs in use, both observed and discussed. The final portion details recommended improvements and possible City action. The majority of compliance actions that were recommended dealt with the up-graded high priority facilities and the need for them to file NOIs or NONA/NECs and create monitoring programs. The facilities will be re-inspected and the necessary paperwork followed-up with during the next reporting cycle. The City has already contacted several of the facilities and is working with them to ensure they are in compliance with the Permit.

3.4.2 Complaint Investigations Involving Industrial Facilities

To the knowledge of City staff, no complaints were filed against Lemon Grove industrial facilities during FY 2006-07.

3.4.3 Enforcement of Violations at Industrial Facilities

During FY 2006-07, all enforcement activities consisted of detailed notification by letter and a new code enforcement policy. See Attachment B-4 for the flow chart demonstrating the new policy. The City sent BMP housekeeping information to all the industrial facilities listed in the previous reporting period as having improper or poor BMP implementation. The City is currently working to ensure the upkeep of BMPs at its industrial facilities. The City's primary focus during the next reporting cycle will be collaborating with the industrial facilities to ensure

complete compliance with water quality standards and pollution prevention efforts.

3.4.4 Reporting of Non-Compliant Sites

The City did not have a situation requiring it to report any non-compliant sites to the RWQCB over the course of this reporting period.

3.5 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Industrial Component in FY 2006-07.

3.5.1 Narrative Assessment

In FY 2006-07, the City continued a revamping of its notification system. An initial step in this re-designing was the contracting of DMax in 2002 to perform annual inspections of all industrial and commercial facilities in Lemon Grove. However, the staff position has lacked consistency on a year to year basis and keeping a yearly account of facilities in violation has been difficult. The City has a record of all notices, but no database to assist in analyzing the information. The City has begun to establish a data base to chronicle notifications. A database will facilitate later effectiveness assessments by allowing the City to analyze past violations by type and frequency. If a decrease in violations or in BMP violations is evident, then levels of effectiveness are easier to assess. A continual record of violations will also enable the City to focus its education and outreach to fit the specific needs of the industrial community in Lemon Grove.

The City implemented a new database for tracking industrial facilities within the City's boundaries. The City is still inputting past data to bring the system up to date to allow for tracking. Each facility will have a file that contains past inspection data and compliance issues. DMax focused on updating the current business facility to ensure accurate database information. This was how the ten new facilities were located and re-evaluated for correct prioritization.
The City believes its current program is in compliance but can be further developed to make it an outstanding and effective program. The City is aware that the need to assess effectiveness is of high importance. Therefore, the City worked cooperatively with other Copermittees to develop a comprehensive framework for reviewing and possibly revising existing programs (*A Framework for the Implementation of Best Management Practice [BMP] Programs at Commercial and Industrial Sites*, submitted to the RWQCB on October 16, 2003). It is through the use of this framework that the City hopes to improve and further develop its existing program. The City is moving towards a more BMP based program. The City believes that BMPs are the backbone of an effective program. Through proper implementation, BMPs present an excellent measuring medium. Once the BMP is in place, the prevented pollutant load can be assessed.

In 2004, the Stormwater program came under new management. The City combined its Public Works Department and its Engineering Department. In August 2004, the City hired a new Water Quality Program Analyst. The yearly turn-over in the stormwater position has made it difficult for the program to develop and grow. However, the City is working on making certain elements standard, so that a basis is present from which growth can occur regardless of who is running the program. Combining the above mentioned departments facilitates the collection of stormwater data. Public Works personnel are the front-line, so to speak for City stormwater maintenance. By having them in the same department as the Stormwater manager, it will be easier to assess and improve collection methods and data.

No specific management practices or BMPs relating to industrial facilities or activities were identified as being ineffective during this reporting period.

3.5.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changed in Knowledge / Awareness
- Level 3: Behavioral Changes / BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activity-Based Targets

Target 1
Begin database for tracking non-compliant facilities
50% complete (the database needs more back data entries to be accurate)

Target 2
Update JURMP industrial list through DMax
100% complete

Target 3
Provide educational material to those facilities eligible for NONA or NEC
100% complete

Target 4
Create annual activity specific informational mailer
30% complete

Level 2 Outcomes: Changes in Knowledge / Awareness

The City did not track specific measures related to changes in knowledge or awareness. However during this reporting period, City staff showed an increased awareness of water quality issues by requesting specific, focused trainings. In discussions with water quality staff, they expressed a desire to learn more about specific segments of the water quality program like SUSMP requirements and processes.

Level 3 Outcomes: Behavioral Change / BMP Implementation

A new aspect of the 2005 Industrial and Commercial Inspection Program involved each inspected facility being assigned a rating to reflect the level of BMP implementation noted at the site, and a separate rating to reflect the facility manager/responsible party's level of storm water knowledge. The knowledge assessment ratings were designed to gauge knowledge of storm water pollution prevention and implementation of effective BMPs, and were assigned based on how many of the following questions were answered correctly:

- What is storm water?
- What is the difference between the storm drain system and the sanitary sewer system?
- Where does storm water flow to?
- Is storm water treated prior to discharge?
- What are examples of pollutants?
- Is sediment a pollutant?
- Do you know what good housekeeping or best management practices are?
- Do you know what NPDES is or means?

Individuals who answered all of the aforementioned questions correctly and demonstrated an in-depth knowledge of storm water pollution prevention measures and the NPDES Storm Water Program were rated "Level 5". Individuals who answered four or more of the aforementioned questions correctly, and had a strong basic understanding of storm water pollution prevention but did not know or understand what the NPDES Storm Water Program was received a "Level 4" rating. "Level 3" rating indicated an individual who answered three questions correctly, "Level 2" indicated one or two correctly answered questions, and a "Level 1" rating indicated that the individual was not able to answer any of the questions correctly.

At the conclusion of each inspection, the inspector evaluated his or her notes and corrective actions and assigned each facility a BMP assessment rating. The following provides a breakdown of how BMP assessment ratings were designated:

- "Level 5": All required general and activity specific BMPs had been implemented effectively. If available, monitoring results indicated that all constituents sampled were below established benchmarks.
- "Level 4": BMPs had been implemented effectively but the dumpster lid was observed open and/or oil stains were noted in the general parking lot not associated with the business' activities. If available, the monitoring data indicated that one or two constituents were slightly above the established benchmarks.
- "Level 3": BMPs had been implemented with the exception of two corrective actions noted, aside from dumpster lids being open or oil stains in the general parking lot. If available, monitoring data indicated that one constituent consistently exceeded the established benchmarks.
- "Level 2": Minimal BMP implementation was in place. Three or more corrective actions were noted, with the exception of dumpster lids being open and oil stains in the general parking lot. No illegal discharge or illicit connection was noted. If available, monitoring data showed concentrations of two or more constituents well above the established benchmarks.
- "Level 1": A violation of one or more of the City's Storm Water Ordinances (illegal discharge, illicit connection, failure to properly implement required BMPs, and/or significant littering) was noted. BMP implementation was poor.

The table below provides a breakdown of information from the 2005 Industrial Inpsection Program stating the average and median ratings for BMP and knowledge assessements, as well as rating frequencies:

Table 3.2 Program Scores for FY 2006-07

	Knowledge Assessment *	**BMP Assessment**
Average Rating	2.6	3.5
Median Rating	3	3
# of "Level 5" Ratings	6	25
# of "Level 4" Ratings	28	34
# of "Level 3" Ratings	30	49
# of "Level 2" Ratings	22	12
# of "Level 1" Ratings	33	4

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.

Table 3.3 Program Scores for FY 2005-06

	Knowledge Assessment *	BMP Assessment
Average Rating	2.39	3.33
Median Rating	2	3
# of "Level 5" Ratings	0	14
# of "Level 4" Ratings	9	26
# of "Level 3" Ratings	34	30
# of "Level 2" Ratings	26	11
# of "Level 1" Ratings	18	7

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.

As indicated by the assessment ratings breakdown, the overall knowledge and BMP implementation ratings were not particularly high. Knowledge assessment scores in particular were quite low. Sixteen percent of inspected facilities had BMP assessment scores of "5", indicated that no corrective action recommendations were necessary. This being the first year that this rating system was used, there is no prior standard with which to compare these ratings. It is anticipated that subsequent year's assessment ratings will increase as businesses receive more educational materials and become more familiar with the City's storm water program and what is expected of the businesses.

Level 4 Outcomes: Load Reduction Estimation

The City did not characterize or track specific measures related to load reduction estimations resulting from the implementation of its Land Use Planning Component in FY 2005-06. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 5 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

3.5.3 Spatial and Geographic Analysis

The stormwater runoff in the City of Lemon Grove drains to two waterways that eventually end in the San Diego Bay; Chollas Creek and Sweetwater River. See Attachment B-5 for drainage zones.

Section 4.0 Commercial Component

This section describes actions taken by the City during FY 2006-07 to minimize discharges from commercial businesses and their impact on receiving water quality and other environmental resources. The City implements a number of complementary and inter-related commercial program activities, including the following:

- Maintaining an inventory of commercial businesses (Section 4.1)
- Requiring BMP implementation through ordinance and permit (Section 4.2)
- Encouraging BMP implementation through notification and outreach (Section 4.3); and,
- Verifying compliance through inspection and enforcement (Section 4.4).

Inspections of commercial facilities are performed by DMax in the same manner as industrial facility inspections. See Section 3.4.1 for a detailed description of the inspection process.

4.1 Priority Commercial Sources

As required under Permit section F.3.c.(2), the City maintains and annually updates a city-wide inventory of high priority commercial sources as a basis for its outreach and regulatory programs. This inventory currently includes 139 individual sources. Table 4.1 summarizes the commercial inventory by business type and indicates the sources of information used to compile data for each type.

Table 4.1 - Summary of High Priority Commercial Sources

Commercial Activity	Number of Facilities in Lemon Grove
Automobile Dealers/Rentals	18
Automobile Supply Stores	9
Automobile Repair/Paint	9
Automobile System and Tire Repair	56
Automobile Cleaning/Washing	3
Gas Stations	7
Eating/Drinking Establishments	60
Landscaping, includes lawn care	9
Nurseries and Greenhouses	1
Pest Control	3
Equipment Repair/Maintenance/Cleaning	3
Metalwork	6
Masonry	4
Parking Lots and Storage	3
Carpet/Building Cleaning	21
Pool and Fountain Cleaning	3
Total	**215**

As Table 4.1 suggests, the City has yet to locate a single, centralized source of commercial facility information. Several of the facilities with commercial SIC codes are high priority industrial due to their proximity to Chollas Creek, a 303d listed water. This explains the discrepancy between the above number and the commercial inventory number. While the City remains hopeful that improved sources of facility data and information can be identified, in the meantime it must continue to rely on existing data sources such as permit databases, the Yellow Pages and field reconnaissance.

The City is implementing an updated version of its existing database in the next reporting period. The new format will be more complete and allow for better tracking of renewals and new licenses. The City also utilized the annual inspections performed by DMax to assist in updating its database. DMax notified the City of any business that failed to verify current licensing with the City. The update was complete in mid FY 2006-07, with the remainder of the year spent training staff and learning to utilize the updates. The new system did not identify any new business types. The existing numbers were considered accurate for this reporting period. Water quality staff is also currently exploring options for integrating water quality related data into the current business license program, HdL. It is the same program utilized for building permits and code violations and would be an excellent integrated tracking system if it is capable. Staff is working for a representative to further explore this option.

4.2 BMP Requirements for Commercial Businesses

4.2.1 BMP Requirements for Commercial Dischargers

The City's SUSMP and JURMP documents lay out a set of minimum BMPs required of commercial businesses in the City. A detailed discussion of these requirements was provided in JURMP section 4.3.1. The City's tiered approach to establishing BMP requirements addresses all regulated commercial activities regardless of priority categorization; broad standards apply to all types of commercial activity, and progressively tougher standards are imposed on high priority activities to reflect their greater risk to water quality. The JURMP does provide specific BMPs based on business activity as well as the general ones previously discussed (eating/drinking establishments, auto repair, nurseries, etc).

4.2.2 Pollution Prevention Requirements for Commercial Dischargers

In recognition of the important role that pollution plays in the long-term success of the City's commercial program, the City views pollution prevention as part of BMP implementation. The JURMP in section 4.1 discusses the City's pollution prevention goals with respect to commercial dischargers. The City feels that if BMPs are implemented properly that pollution prevention is obtained to the maximum extent practicable (MEP). The section further discusses the importance of education and outreach for further pollution prevention.

4.3 BMP Implementation at Commercial Sites

The City has developed and implemented a comprehensive strategy for ensuring BMP implementation "on the ground" at high priority commercial businesses subject to its oversight. This section describes progress during FY 2006-07 as well as an updated strategy for ensuring effective BMP implementation in the future.

4.3.1 City Strategy for Ensuring BMP Implementation

On October 16, 2003, the City and other Copermittees submitted the document *A Framework for the Implementation of Best Management Practice (BMP) Programs* at commercial and Industrial Sites to the RWQCB. This framework lays out a comprehensive set of options that Copermittees should consider in developing and updating their commercial source programs. The following description of the City's strategy builds on this framework, as well as activities it has already conducted during this and previous reporting periods. The final decision to utilize and/or emphasize specific elements will be determined as part of the City's ongoing program implementation and evaluation process.

4.3.1.1 BMP Selection and Application

As discussed in the framework document, the goal of Copermittee programs is to assist commercial facilities in selecting appropriate combinations of BMPs that address unique circumstances, activities, and discharge potential. While the City has already established extensive BMP requirements in its JURMP document, BMP selection and application is an ongoing and iterative process that reflects a constantly evolving state of knowledge. As such, review and assessment of available options is a standard element of the City's program planning process.

A need also exists to ensure regional consistency in Copermittee efforts. For instance, regional collaboration is beneficial in disseminating consistent information to businesses, and for sharing information about which practices are working and which practices are not. The Copermittees' BMP Workgroup provides a forum for exploring these and other key issues. The City will continue to participate in this venue, and in doing so, will seek to provide an understandable and regionally consistent message to the businesses it regulates. Several fact sheets are being developed for distribution to commercial businesses, several in conjunction with the County's Green Business program. The intent is to create regionally consistent material that explains the implementation of required BMPs for different types of facilities and activities. Where applicable, the City will also advocate the use of the Stormwater Best Management Practice Handbooks published by the California Stormwater Quality Association (CASQA). These handbooks provide detailed and up-to-date information on BMPs for both commercial and industrial activities.

4.3.1.2 Outreach and Notification

Several types of outreach and notification activities can be effective in ensuring that business operators have been adequately informed of their compliance obligations and provided useful information on how to meet them. As shown below, the City intends to utilize each of the following types of outreach to varying degrees as part of its outreach and notification process:

- Printed Materials
- Direct Mailings (including e-mail)
- Workshops and seminars
- Websites and hotlines
- Industry associations

The degree to which any of these tools are used will vary by specific program area, as well as the interest level of regulated parties. For instance, workshops and seminars will generally be made available upon request, but the City may specifically target certain sectors it considers to be in need of extra attention. Outreach will also play a proportionally larger role in the City's approach to businesses not subject to an active inspection process. Community groups and community outreach events can also play a useful role in reaching some types of commercial businesses. The City intends to increase its emphasis in this area on a continual basis. Three public events that lend themselves to information distribution are the Fire Department Open House held in October, the Winter Bonfire held in December, and the Spring Festival held in April or May.

During this reporting period, the City provided a Water Quality booth at all three large scale City events. City personnel staffed both booths to answer any questions and to provide stormwater and pollution prevention educational materials. These materials included brochures on pool cleaning and draining, pet waste, oil recycling, healthy garden tips, Green Wrench guides, What's Cooking guides, and household hazardous waste disposal information. Between the three events, approximately 5000 residents, business owners, and visitors were exposed to the City's stormwater and pollution prevention program. The City again mailed educational material to one hundred percent of the restaurants within the City boundaries. The information contained a calendar of free workshops provided in collaboration with SDG&E (San Diego Gas and Electric).

The City continues to investigate the implementation of a FOG (Fats, Oils, and Grease) program in conjunction with the issuance of the new Wastewater Discharge Requirements order. City personnel received grease trap and inceptor inspection training at the end of the previous reporting period and hope in future reporting periods to begin grease trap and inceptor inspections at local facilities. The needs assessment for the sanitation district showed a need for a FOG program and the City is working to develop a program that will serve the needs of the sanitation district and water quality.

4.3.1.3 Compliance and Enforcement

The City intends to utilize routine inspections (including licensing and permitting as appropriate) as its primary means of compliance verification for stationary commercial sources. Inspection programs are currently in place for all high priority commercial facilities, and are described in further detail in section 4.4.1. The City utilizes DMax to conduct its facility inspections for commercial and industrial facilities. The City, in this reporting period, focused its inspections on eating/drinking establishments, automotive repair facilities, and repeat offenders from previous reporting periods. The City observed an improvement in compliance at the repeat offender sites. Many are making noticeable strides in compliance efforts and basic good housekeeping practices have improved in all facilities inspected. The City feels the improvements are due to increased, repeated education and better trained City personnel, who observe potential non-compliance early. The City had no commercial sites requiring violation notification during this reporting period.

4.3.2 Outreach to Commercial Businesses in FY 2006-07

The goal of the City's commercial outreach program is to promote effective BMP implementation by making commercial business operators aware of their regulatory obligations and by providing them useful information on how to comply. To this end, a variety of methods were utilized during this reporting period, including mass mail-outs, informational brochures and hand-outs, and direct interaction with employees during inspections and permit processing.

4.3.2.1 Automotive Industry

During this reporting period, the City increased its outreach efforts to include the automotive industry within its boundaries. The City is aware that not only is this sector engaged in activities with a high potential to discharge pollutants, it is also large and highly visible to the community. The City met its goal of providing outreach at community events, like the Spring Festival, and Winter Bonfire. Section 4.3.1.2 provides the types of materials distributed at these events and the number of potential recipients. The materials included information on oil recycling, free oil funnels containing oil recycling site information, and Green Wrench guides in English and Spanish. The City also sponsored a Green Business workshop for automotive facilities within its boundaries and within the San Diego Bay Watershed. The workshop contained information on BMP implementation and water quality issues. Each participant received an educational video, a hydro-mop and bucket, and the EPA automotive BMP packet.

Partnerships

The County-chaired Green Business Group continues to make progress in developing a self-assessment program for small automotive businesses. The goal of the program is to recognize businesses that are in compliance with environmental regulations and that take extra steps to go beyond compliance in the areas of pollution prevention, energy, and water conservation, and solid waste reduction and recycling. The program is aligned with statewide green business standards and has already approached several businesses in San Diego County. To promote the use of "green" business practices, a public flyer was developed along with self-assessment checklists that are distributed by workgroup stakeholders during business inspections, trade association meetings, and at various community events. BMP information is included in the checklists and in the supporting materials provided to the businesses. These materials are all included as Attachment C and are available on the Workgroups website at www.projectcleanwater.org/html/wg_green_bus.html.

4.3.2.2 Eating and Drinking Establishments

The City has continued its outreach to this sector of its commercial community. The City is working to annually increase its activity specific outreach to an additional commercial or industrial sector. Automotive facilities and eating/drinking establishments are the two commercial sources that have received individual outreach materials. The City is aware that not only is this sector engaged in activities with a high potential to discharge pollutants, it is also large and highly visible to the community. The listing below shows the areas in which the City plans to increase its outreach efforts to eating and drinking establishments during the next two fiscal years.

- Basic Housekeeping workshop utilizing the *What's Cooking Guide*
- Mailer describing safe and effective grease disposal methods and dry-cleaning methods for spills (currently working with a consultant to evaluate the most effective way to implement a FOG program)
- Workshops on how to maintain health codes and improve water quality

Some activities that the City is currently engaged in will continue. A listing of these activities is below.

- Brochures and materials available at City Hall
- Personal interaction through licensing, permitting, and complaints
- Mass mailers to commercial businesses
- Continued use of the *What's Cooking Guide*
- Outreach at public events such as the Winter Bonfire and Spring Festival

The City mailed educational material to one hundred percent of the restaurants within the City boundaries. The information contained a calendar of free

workshops provided in collaboration with SDG&E (San Diego Gas and Electric). Several of the workshop topics focused on energy efficiency, fewer waste products and green business practices. The Outreach Workgroup collaborated with SDG&E to ensure that stormwater and pollution prevention are recurring themes in the majority of the presentations.

The City is also investigating the implementation of a FOG (Fats, Oils, and Grease) program in conjunction with the issuance of the new Wastewater Discharge Requirements order. City personnel received grease trap and inceptor inspection training at the end of the previous reporting period and hope in future reporting periods to begin grease trap and inceptor inspections at local facilities. After receiving the results of the needs assessment, the City is working to establish a FOG program that will serve both the sanitation district and water quality.

What's Cooking Guide

The Copermittee Outreach Workgroup, chaired by County staff, developed *What's Cooking*, a stormwater BMP guide targeting eating and drinking establishments. The guide is designed for use by local businesses as both a source of activity-specific BMP information and as an employee-training tool. It presents a set of standard BMP requirements that are found in most jurisdictional ordinances, contains contact information for each jurisdiction in San Diego County, and includes supplemental pages to aid operators in documenting employee training.

The City will continue to utilize the *What's Cooking Guide* and will use it as the basis for future workshops for eating and drinking establishments.

Partnerships

The Green Business Technical Workgroup continues to make substantial progress in developing a self-assessment program for commercial businesses, including an element focusing on the food service industry. Supporting materials are included as Attachment C and are available on the Workgroup's website at www.projectcleanwater.org/html/wg_green_bus.html.

The City plans to utilize the Green Business Program more effectively during the next reporting period. The City hopes to collaborate with other jurisdictions in its watershed and region to offer programming to local businesses. This will allow the City and other jurisdictions to provide a consistent message through out the region. A consistent message will make it easier for citizens and City staff to enforce water quality and pollution prevention measures. Based on the attendance at the previous reporting period's workshops, the Green Business Program and its collaboration agencies are exploring other outreach options and

possible incentive programs for attendance at workshops. The City will continue to participate in the program and it's efforts.

The Green Business group is also working with other state agencies to create state wide standards for acquiring a Green Business certification. The City feels that by working closely with this group, that it will benefit from a uniform message and that its businesses will see the value in promoting green practices. Water quality and pollution prevention are high priority items for the certification process. Businesses with a Green Business certification should decrease the number of potential polluters within the City. The City is hoping to be able to offer incentives for the Green Businesses in the future and looks forward to continued collaboration and growth in this partnership.

4.4 Compliance and Enforcement

While educating business owners and operators is an important first step toward achieving compliance, the City also conducts programs to verify that stormwater BMPs are being implemented "on the ground." This includes both routine inspections of commercial facilities by DMax and response to complaints received via the Stormwater Hotline. When City staff observes a stormwater violation, appropriate actions are taken to ensure that businesses are returned to compliance with all BMP requirements and discharge prohibitions.

4.4.1 Inspection of Commercial Facilities

During this reporting period, DMax inspected 54 high priority commercial facilities on behalf of the City. As stated in section 4.3.1.3 above, the City focused on eating and drinking establishments, automotive facilities, and facilities with non-compliance comments from past inspections. Inspectors' primary function is to assess compliance with minimum BMP requirements, which are specific to the types of facilities and activities designated as high priority by the Permit. Each inspection is conducted in the presence of a facility operator who has the authority and responsibility to ensure the implementation of corrective actions should they be required. For more inspection data see Attachment B1.

4.4.2 Complaint Investigations Involving Commercial Sources

The City received no recorded commercial oriented complaints during this reporting period.

4.4.3 Enforcement of Violations at Commercial Businesses

The primary objective of the City's commercial enforcement program is to return violators to compliance in a timely manner. When education is not sufficient to do so, staff may use a variety of formal enforcement tools. These vary, but generally include Verbal Warnings, Notices of Violation, and potentially fines.

The City began a trial code enforcement program for water quality during FY 2004-05. This program has continued to grow and will include a part time staff member with a water quality compliance focus during the next reporting period. The city can now issue escalating fines for water quality violators and will be able to conduct in-house inspections and community support. See Attachment B-4 for the flowchart detailing the code enforcement process. The City understands the need for immediate response on water quality compliance issues. However, this is the City's first water quality code enforcement program and it must be used with discretion. The City must also ensure that the municipal code contains the necessary ordinances to provide validation for code enforcement efforts.

4.4.4 Reporting of Non-Compliant Sites

The City's JURMP outlines standard operating procedures for reporting non-compliant facilities and sites to the RWQCB. The City did not have occasion to report any instances of significant non-compliance over the course of this reporting period.

4.5 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Commercial Component in FY 2006-07.

4.5.1 Narrative Assessment

In FY 2006-07, the City continued the improvements discussed in the previous annual report. DMax continues to inspect, on an annual basis, the majority of high priority commercial facilities. This year the City focused on automotive facilities, eating and drinking establishments, and repeat non-compliance facilities. DMax also provided the City with an updated facility inventory. The continued inspections of City facilities are beginning to show results. A change in behavior is evident in the increased number of BMPs found on site, the decrease in non-compliance issues, and the increased knowledge of the facility operator and/or manager. The City is continuing to set a precedent in its commercial community. Through the inspection program, facilities receive an annual reminder of water quality and pollution prevention in addition to any material provided by City staff or workshops attended. The inspections also set the stage for improved code enforcement measures and tracking data during future reporting cycles.

Although the City considers its existing commercial program to be both Permit-compliant and of a high quality, staff realizes the need for improved tracking to assist in obtaining load reduction data. The City believes that with the implementation of the proper BMPs in all businesses, load reduction numbers can be assessed. City staff also worked cooperatively with the Copermittees on several issues related to commercial activities. The first, the development of a

comprehensive framework for reviewing and possibly revising existing programs (*A Framework for the Implementation of Best Management Practice [BMP] Programs at Commercial and Industrial Sites*), will provide guidance to City staff in future years as we continue to implement and refine our efforts. The second, the continued development and distribution of targeted BMP guides for the restaurants and automotive businesses (*What's Cooking and The Green Wrench* G*uide*), will promote regional consistency and serve as an important source of activity-based BMP guidance for two important industries.

No specific management practices or BMPs relating to commercial facilities or activities were identified as being ineffective during this reporting period.

4.5.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activitiy-Based Targets

Target 1
Increased outreach at community events
100% complete

Target 2
Increased outreach to eating and drinking establishments
85% complete (more detailed outreach is still desired)

Target 3
Update the JURMP commercial listing through DMax
100% complete

Target 4
Increase outreach to automotive facilities
85% complete (more detailed outreach is still desired)

Target 5
Improve education through business license renewals and new business licenses 40% complete (still working on informational mailer to include in renewal notice, in-person staff interaction has increased when applicants renew at City Hall)

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not characterize or track specific measures related to changes in knowledge or awareness resulting from the implementation of its Commercial Component in FY 2006-07. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 3 Outcomes: Behavioral Change/BMP Implementation

A continued new aspect of the 2006 Industrial and Commercial Inspection Program involved each inspected facility being assigned a rating to reflect the level of BMP implementation noted at the site, and a separate rating to reflect the facility manager/responsible party's level of storm water knowledge. The knowledge assessment ratings were designed to gauge knowledge of storm water pollution prevention and implementation of effective BMPs, and were assigned based on how many of the following questions were answered correctly:

- What is storm water?
- What is the difference between the storm drain system and the sanitary sewer system?
- Where does storm water flow to?
- Is storm water treated prior to discharge?
- What are examples of pollutants?
- Is sediment a pollutant?
- Do you know what good housekeeping or best management practices are?
- Do you know what NPDES is or means?

Individuals who answered all of the aforementioned questions correctly and demonstrated an in-depth knowledge of storm water pollution prevention measures and the NPDES Storm Water Program were rated "Level 5". Individuals who answered four or more of the aforementioned questions correctly, and had a strong basic understanding of storm water pollution prevention but did not know or understand what the NPDES Storm Water Program was received a "Level 4" rating. "Level 3" rating indicated an individual who answered three questions correctly, "Level 2" indicated one or two correctly answered questions, and a "Level 1" rating indicated that the individual was not able to answer any of the questions correctly.

At the conclusion of each inspection, the inspector evaluated his or her notes and corrective actions and assigned each facility a BMP assessment rating. The following provides a breakdown of how BMP assessment ratings were designated:

- "Level 5": All required general and activity specific BMPs had been implemented effectively. If available, monitoring results indicated that all constituents sampled were below established benchmarks.
- "Level 4": BMPs had been implemented effectively but the dumpster lid was observed open and/or oil stains were noted in the general parking lot not associated with the business' activities. If available, the monitoring data indicated that one or two constituents were slightly above the established benchmarks.
- "Level 3": BMPs had been implemented with the exception of two corrective actions noted, aside from dumpster lids being open or oil stains in the general parking lot. If available, monitoring data indicated that one constituent consistently exceeded the established benchmarks.
- "Level 2": Minimal BMP implementation was in place. Three or more corrective actions were noted, with the exception of dumpster lids being open and oil stains in the general parking lot. No illegal discharge or illicit connection was noted. If available, monitoring data showed concentrations of two or more constituents well above the established benchmarks.
- "Level 1": A violation of one or more of the City's Storm Water Ordinances (illegal discharge, illicit connection, failure to properly implement required BMPs, and/or significant littering) was noted. BMP implementation was poor.

The table below provides a breakdown of information from the 2006 Industrial Inpsection Program stating the average and median ratings for BMP and knowledge assessements, as well as rating frequencies:

Table 4.2 Program Scores for FY 2006-07

	Knowledge Assessment *	BMP Assessment
Average Rating	2.6	3.5
Median Rating	3	3
# of "Level 5" Ratings	6	25
# of "Level 4" Ratings	28	34
# of "Level 3" Ratings	30	49
# of "Level 2" Ratings	22	12
# of "Level 1" Ratings	33	4

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.

Table 4.3 Program Scores for FY 2005-06

	Knowledge Assessment *	BMP Assessment
Average Rating	2.39	3.33
Median Rating	2	3
# of "Level 5" Ratings	0	14
# of "Level 4" Ratings	9	26
# of "Level 3" Ratings	34	30
# of "Level 2" Ratings	26	11
# of "Level 1" Ratings	18	7

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.

As indicated by the assessment ratings breakdown, the overall knowledge and BMP implementation ratings were not particularly high. Knowledge assessment scores in particular were quite low. Sixteen percent of inspected facilities had BMP assessment scores of "5", indicated that no corrective action recommendations were necessary. This being the first year that this rating system was used, there is no prior standard with which to compare these ratings. It is anticipated that subsequent year's assessment ratings will increase as businesses receive more educational materials and become more familiar with the City's storm water program and what is expected of the businesses.
The DMax inspections have shown a need for improved outreach with commercial sources and facilities. Even though none of the facilities had "gross" violations, many lacked basic housekeeping BMPs, such as spill kits or open dumpster lids. The last time the commercial facilities were inspected was in 2002 presenting the City with a gap in data collecting. The City plans to continue yearly inspections from this point forward, creating a more in-depth data supply.

Level 4 Outcomes: Load Reduction Estimation

Because of the diversity of facility types and operations in the City's commercial source inventory, no attempt has been made this year to estimate reductions in pollutant loading that might be expected as a result of city efforts in FY 2004-05. In the future, the City will continually seek to develop valid methods for estimating load reductions from commercial facilities. To this end, a continued inspection presence will help to improve our understanding of potential reductions.

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

4.5.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any commercial program data during this reporting period. However the Report of Waste Discharge (ROWD) contained an initial spatial analysis of commercial facilities within watershed boundaries. This information can be found in the ROWD document presented to the RWQCB.

Section 5.0 Residential Component

The City implements a variety of programs to prevent and respond to discharges from residential areas. All of these programs are predicated on the assumption that knowledge and awareness are crucial to affecting and sustaining responsible behavior. Where possible, programs and activities are tailored to reflect the unique characteristics of the many areas of Lemon Grove.

5.1 Priority Residential Sources

The City of Lemon Grove encompasses 3.78 square miles. The City has a population of approximately 26,000 residents. Attachment D-1 contains a demographics chart for the population of Lemon Grove. As Attachment D-1 shows the City expects the population to grow twenty-three percent between 1995 and 2020. As the community grows, the collective impact of residential activities on water quality will increase commensurately. Maintaining an adequate emphasis on residential areas is therefore crucial to the success of the City's water quality programs.

5.2 BMP Requirements

The JURMP document lays out minimum Best Management Practice (BMP) requirements corresponding to all identified categories of high priority residential sources.

5.2.1 Minimum BMP Requirements

As described in JURMP section 5.3, the City establishes basic BMPs for all manner of residential activity. Below is a list of the activities covered in JURMP section 5.3:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home and Garden Care
- Disposal of Household Hazardous Waste
- Disposal of Pet Waste
- Disposal of Green Waste

JURMP section 5.1 emphasizes the importance of pollution prevention, making it the basis for the BMPs described in each of the above listed activities.

5.2.2 Pollution Prevention Methods

The City encourages its residents to use pollution prevention BMPs through a variety of educational programs and activities. The core function of the City's

pollution prevention efforts is to promote the use of these practices by City residents, local businesses, and municipal employees. Pollution prevention concepts are also incorporated into virtually all of the City's literature on water quality.

Providing residents with useful sources of BMP and pollution prevention information is a major focus of the City's stormwater programs, but is emphasized in other regulatory programs as well.

5.3 BMP Implementation

The City takes a multi-faceted approach to ensuring that its residents implement required and recommended BMPs. Education remains the preferred approach, but environmentally responsible behavior can also be facilitated in other ways. For example, the City operates a Stormwater Hotline, making it easy for residents who see a potential water quality problem to communicate with City staff. We also provide and support a wide variety of recycling and hazardous waste disposal opportunities in conjunction with EDCO, the local waste disposal facility. The City also encourages public participation in clean-up events, anti-litter campaigns, and other community events. Each element of this approach is described further as follows:

- Outreach to Residents
- Outreach to Schools
- Reporting and Information Resources
- Recycling and Waste Collection Services
- Measurement of Awareness and Behavior

5.3.1 Outreach to Residents

The City implements an outreach program targeting the general residential public. Outreach typically includes a combination of regionally and locally focused activities, but this year staff focused on outreach in the schools.

The City did participate in several joint effort outreach activities with other Copermittees.

5.3.1.1 Lemon Grove Clean-up (April 28-29, 2007)

The City held one collection day through EDCO and their facilities. These events allow residents to dispose of unwanted bulky items and HHW free of charge. The elderly and disabled can schedule for curb-side service with City staff. The event during this reporting period took place on April 28-29. See Attachment D-4 for a detailed break down of the HHW collected throughout the City. The City participated in several East County events targeted towards the collection and

proper disposal of e-waste (electronic waste). However the City does not have quantity information for these events.

5.3.1.3 Chollas Creek Clean-up Event

The City participated in "I Love a Clean San Diego's Creek to Bay Clean-up" event on April 28, 2006. The City had nineteen volunteers arrive to clean the Chollas Creek tributary at the Federal Blvd and McArthur intersection. This is common illegal dumping site and has been cleaned in past events. The volunteers removed 464 pounds of debris from the site and 464 pounds of recyclable material. See Attachment D-2 for a copy of the full report.

5.3.1.4 Printed Outreach

The City utilized three distinct forms of printed outreach during FY 2006-07. The first was distributed at the Winter Bonfire on December 1, 2006 and consisted of brochures on pet waste disposal, pool water disposal, oil recycling, general stormwater information, household hazardous waste (HHW) hotline information, promotional items containing oil recycling and HHW information and household BMP brochures. The second event took place on May 18, 2006, during the Spring Festival. City staff provided healthy gardening tip booklets, HHW information, E-Waste disposal information, oil recycling funnels with drop off locations printed on the sides (English and Spanish), pet waste brochures, pool water disposal brochures, general stormwater brochures, and the City Newsletter, which contained an article on proper fertilization and watering methods. The third event took place on October 14, 2006 during the Fire Department Open House event. Informational brochures on water quality, the stormwater program and household hazardous waster were available for visitors. Stormwater personnel were on hand to answer any questions and provide further information. See Attachment D-3 for examples of the brochures available at these events.

5.3.2 Outreach to Schools

School outreach remains a key component of the City's education strategy; however, the City chose to focus its outreach efforts in the commercial and land development areas of the program during this reporting cycle. Due to limited staff and fiscal difficulties, it is important that the City perform as efficiently and effectively as possible. This often requires the City to focus its efforts in a specific area, therefore no school programs were presented during this reporting period. The intent of school programs is to stimulate long-term behavioral change by alerting students to the importance of clean water and environmental responsibility.

The City plans in future reporting cycles to increase its educational outreach. The City firmly believes that long-term behavioral changes are possible,

especially with repetition like yearly presentations. The list below details a few of the areas the City would like to explore:

- Individual presentations to science classes
- Large school presentations in conjunction with other school programming like during pollution prevention week
- Encouraging student involvement in volunteer cleanup efforts
- Creating student specific cleanup events
- Encouraging involvement in larger environmental programs and opportunities like Arbor Day and Jiminy Cricket's Environmentality Challenge
- Improved internet links for students through the City website
- Create a listing of community service projects that are water quality specific for scout troops, school groups or other volunteer groups
- Material distribution at community events targeted at school aged children

The City believes that by increasing its community/school outreach, the general population will become better acquainted with water quality issues. Eventually the City will be able to tie awareness to effectiveness and then to load reductions. The City believes BMPs are the key link and that with increased awareness more residents will implement household BMPs on a daily basis. In theory, as long as the correct BMPs are in-place to the maximum extent practicable (MEP), pollutants of concern should no longer be entering the waterways. The City can then measure the amount of prevented pollution.

5.3.3 Reporting and Information Resources

The primary goal of the City's residential program is to ensure that the public has access to useful information about urban runoff and can easily report their complaints to City staff. The City has established a Stormwater Hotline and several public information brochures for these purposes.

5.3.3.1 Stormwater Hotline (619-825-3810)

The City continued to operate its Stormwater Hotline during this reporting period. The primary purpose of this hotline is to facilitate complaint reporting, but it also serves as a direct source of water quality information for interested parties. Calls are promptly referred to the stormwater staff for resolution and/or information. The hotline referred approximately four calls during FY 2006-07. The number is not exact because some calls are attributed to the hotline, even if they are received through other channels. Most of the complaints are resident to resident issues and can be handled through verbal channels. On occasion, the City delivers a written notification to a group of residents about a persistent problem. The calls were either unfounded or dealt with on a small scale with no code enforcement involvement. The most common type of call received involves

neighborly disputes on private property, therefore it is quite common that the City offers advice but no direct action is taken.

5.3.4 Recycling and Waste Collection Services

5.3.4.1 Used Oil Collection

Statistics from the California Integrated Waste Management Board (CIWMB) indicate that 1 in 5 households in California have a do-it-yourself (DIY) oil changer. "There were 91.8 million gallons of used lubricating oil (ULO) recycled during 2003, which was 10 percent above the 83.1 million gallons collected in 2002. The ULO recycling rate for 2003 was 61 percent, which is a 24 percent increase when compared to ULO recycled in 2002."[1] Below are two charts that demonstrate this trend in increased recycling.

Table 5.1 Oil Collected by Public Collection Programs (in millions of gallons)

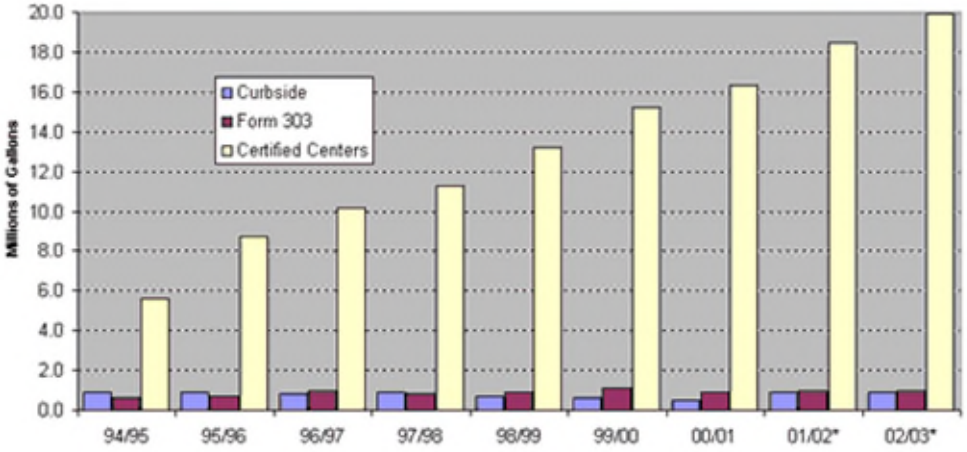

Table 5.2 Oil Collected by Public Collection Programs (in millions of gallons)

	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02*	02/03*
Curbside	0.9	0.9	0.8	0.9	0.7	0.6	0.5	0.9	.9
Form 303	0.6	0.7	1.0	0.8	0.9	1.1	0.9	1.0	1.0
Certified Centers	5.6	8.7	10.2	11.3	13.2	15.2	16.3	18.5	19.9
Total Oil	7.1	10.3	12.0	13.0	14.8	16.9	17.7	20.4	

The City places a high priority on properly managing the used oil generated by residents within its jurisdiction. Every effort is made to provide residents with convenient drop-off locations and curbside pick-up services, then to promote these services through advertisement and outreach.

[1] www.ciwmb.ca.gov/UsedOil/Facts.htm

The Motor Oil brochure, available at City Hall, contains useful information about how and why to recycle used oil. It also lists the three collection sites and the number for curb-side pick-up. See Attachment D-3 for an example of the brochure. The centers are also listed in each of the City Newsletters that are mailed to the residents bi-annually. See Attachment A-4 for copies of the Newsletter.

The three collection sites are:

- Auto Zone 7582 Broadway (oil only)
- Kragen 6925 Federal Blvd (oil and filters)
- EDCO 6670 Federal Blvd (oil only)

The curb-side service is sponsored by CIWMB. All the resident needs to do is call 1-800-HHW-PKUP (1-800-449-7587) and request a collection. Table 5.3 shows how much oil each site collected during 2007.

Table 5.3 - Oil Collection in Gallons per Site

Site	Gallons Collected in 2005	Gallons Collected in 2006	Gallons Collected in 2007
EDCO	1,690	2,710	2,830
Auto Zone	13,000*	13,300*	13, 000*
Kragen Auto Parts	8,800*	8,000*	8, 100*
Total	23,490 gallons	24,010 gallons	23,900
Increased Collection		**520 gallons**	**-110 gallons**

*These numbers include in-house used oil, not just used oil from the public. They do not separate the two collections.

5.3.4.2 Solid Waste Recycling and Household Hazardous Waste Collection

The City seeks to reduce solid waste generated in its boundaries. Conservation techniques supported by the City include source reduction, reuse, and recycling, including the procurement of recycled-content products. The City must meet the state-mandated fifty percent reduction level for solid waster disposal, which means at least half of the refuse generated in 1990, adjusted for population and economics, must be spared from a landfill. Due to reporting errors, the calculations were not complete for this reporting period. During the next reporting period the City will supply our percentage of recycled material for this reporting period.

The City has completed and approved the construction and demolition ordinance. The ordinance went into effect at the beginning of December 2005. Only one demolition site qualified and completed the program during this reporting period. Honda is building a new facility in the City and performed demolition activities to

clear the site for development in December 2006. Honda estimated a 500 ton demolition load and recycled eighty-four percent of that load.

The recycling outreach efforts include conducting public education, establishing infrastructure, and supporting existing recycling operations. Current programs focus on: revising the City's recycling plans, business recycling, enforcement (business and residential), construction and demolition waste, motor oil recycling and storm drain filters, and public education including schools, brochures, and interaction with City staff.

During this reporting period, the City participated in four collection events for solid waste disposal. Two of the events were in cooperation with a Household Hazardous Waste grant through CIWMB and focused on the collection of e-waste. The other two are an annual Lemon Grove Clean-Up event further discussed above in Section 5.3.1.1.

The City's participation in the Household Hazardous Waste (HHW) grant facilitates the proper management and disposal of toxic materials and household hazardous wastes for residents of the City. The program was created to protect landfills, receiving waters, and the environment. The focus of the clean-up and collection events is to enable residents to safely dispose of their hazardous materials and bulky discards. See Attachment D-3 for examples of educational material provided to residents.

HHW Collected

During this reporting period; 19,175 pounds of waste were collected from 188 stops in the Lemon Grove area. This amount is cumulative for all door-to-door services collected through the HHW grant program. Each stop averaged 102 pounds of waste. See Attachment D-4 for a detailed break-down of individual source collections.

In future reporting periods, the City hopes to be able to present a trend analysis of HHW and solid waste collection. Currently the data is tracked by CIWMB and EDCO. If more information is required, either of these organizations is happy to supply further data.

5.3.5 Measurement of Awareness and Behavior

The Permit requires the City to assess how effective its educational efforts are in changing the knowledge and behavior of targeted audiences. This section provides a discussion of the City's effectiveness in implementing its Residential Component in FY 2006-07.

5.3.5.1 Future Assessment Measures

During the current reporting period, the City utilized observation as the main form of awareness and behavior measurement. However in the future the City plans to incorporate the following measurement tools for the residential component:

- Surveys for school presentations
- Questionnaires for public outreach such as Lemon Grove community programs and the Winter Bonfire events
- Documented observations by City staff
- Year to year tracking of complaints and resolutions

5.4 Compliance and Enforcement

City investigation and follow-up on all complaints of a residential nature during this reporting period are described below.

5.4.1 Complaints Received

The City receives resident complaints on a regular basis both through the hotline and through the regular phone system. The majority of the calls can be handled through verbal interaction, the rest are investigated by City staff. Staff investigated several residential complaints during this reporting period; however the majority were unfounded or untraceable upstream. One incident however is detailed above in Section 5.3.3.1.

The challenge with residential complaints lies in the inability at times to confront the source of the pollutant. Often times the complaints are received after the illicit deed has been committed and the individual placing the complaint has limited knowledge of the source.

5.4.2 Investigation and Enforcement

The City had one residential event that required code enforcement involvement. These events are detailed above in section 5.3.3.1. The complaint was received through the hotline, therefore the details are presented in that section.

5.5 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Residential Component in FY 2006-07.

5.5.1 Narrative Assessment

The City made a number of important improvements to its residential activities programs in FY 2006-07. This year, the City's outreach efforts to residents and

schools demonstrated a clear intention to expose a larger segment of the Lemon Grove population. The City is clearly thinking of long-term results with the increase in school programs. By presenting material at community events, such as the Spring Festival, the Winter Bonfire and the Fire Department Open House, the City can reach a large, diverse sector of the community. By increasing door-to-door communications, the City brought water quality into the home-life of Lemon Grove's residents.

The City provided a variety of waste collection and disposal services to its residents. Through education to increase awareness, and by making these services convenient, attendance at collection facilities and events rose considerably from previous years. This increased participation not only speaks to the quality of these programs, but is encouraging as an indicator of increased support for environmental programs in general.

Recognizing the need for increased measurability, the City plans to increase its evaluation efforts in respect to resident and student awareness. Section 5.3.5.1 details the areas in which the City plans to grow and further develop in coming years. The City believes feedback is a vital part of refining and possibly redirecting future efforts.

No specific management practices or BMPs relating to residential activities were identified as being ineffective during this reporting period.

5.5.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activitiy-Based Targets

Target 1
Target outreach based on hotline calls
100% complete

Target 2
Continuted presence and outreach at community events
100% complete

Target 3
Larger variety of educational material available
75% complete

Target 4
Improved tracking of hotline calls
65% complete (a database was created near the end of the reporting period)

Target 5
Increase the information available on the City website
75% complete (a new and improved City website is being created and will contain more water quality information and links)

Target 6
Use of door hangers by DPW to notify residents of a potential issue
40% complete DPW staff now has the door hangers but data has not been collected on their effectiveness and no hotline calls were received based on distributed hangers

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not characterize or track specific measures related to changes in knowledge or awareness resulting from the implementation of its Residential Component in FY 2006-07. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 3 Outcomes: Behavioral Change/BMP Implementation

As with knowledge and awareness above, the City recognizes a need for such measures in the Residential Sector. Section 5.3.5.1 describes the ways in which the City wishes to develop assessment instruments for knowledge, behavioral change and BMP implementation.

Response to residential complaints is perhaps the only currently utilized method that involves direct observation of residential behavior. The City anticipates that an increase in complaints demonstrates an increase in awareness of urban runoff issues and available reporting resources. Another indication of behavioral change is the participation of the public in activities that prevent waste from entering the City's MS4. In particular, increases in oil recycling totals and household hazardous waste collection (Section 5.3.3) indicate the engagement of residents in environmentally protective behaviors. The City will continue to

monitor these measures and to search for additional ways to assess changes in behavior among residents.

Level 4 Outcomes: Load Reduction Estimation

Current methods are not yet sophisticated enough to accurately gauge pollutant-loading reductions resulting from implementation of the City's residential program. This is simply due to the variety and scale of polluting behaviors associated with the residential population. However, certain existing data are helpful in making some initial estimates. As reported in Section 5.3.3, City recycling and waste collection programs diverted 23,900 gallons of used oil and 19,175 pounds of household hazardous waste from landfills and the storm drain system during this reporting period. Because only a small percentage of either of these waste streams would actually be illegally disposed, adjustment factors were applied to each to estimate load reductions. Both factors were selected in consultation with staff from each of these respective programs; neither is based on data of any sort. Both figures represent the experience and best professional judgment of staff. Load reduction estimates are shown in Table 5.5.

Table 5.5 - Summary of Residential Load Reduction Calculations

Activity	Amount Collected	Adjustment Factor	Estimated Load Reduction
Used Oil Recycling	23,900 gallons	10%	2,390 gallons
Household Hazardous Waste Collection	19,175 pounds	1%	191 pounds

Because of the diversity of residential activity types in the City, no further attempt has been made this year to estimate reductions in pollutant loading that might be expected as a result of implementing the City's regulatory oversight program in FY 2006-07. In the future, The City will continue to seek to develop valid methods for estimating load reductions from residential sources.

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

5.5.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any commercial program data during this reporting period.

Section 6.0 Land-Use Planning Component

This section describes actions taken by the City during FY 2006-07 reporting period to minimize the short- and long-term post-construction impacts of new and redevelopment projects on receiving water quality and other environmental resources. This includes activities related both to land use planning controls, and the site-specific conditioning of development and redevelopment projects in the City.

6.1 Assessment of Planning Process

During the current reporting period, City staff developed mechanisms in the planning process to provide improved water quality and watershed protection for new developments. The City is working to effectively integrate these principles and practices into the entire planning process. An important objective of the improvements is to develop land use goals and policies that will maintain a built environment compatible with, and sensitive to, the City's natural setting, while retaining the unique local character.

For each development project proposed, the City requires the builder and owner to consider BMP implementation from the beginning of the project. Attachment E-1 shows the form that is presented to each applicant regardless of project size. This initial step makes water quality important from the on-set of the project, and each consecutive step further emphasizes the importance of water quality improvements for pre- and post-construction.

The Water Quality Program Coordinator is available for consultation during any phase of the project. The Coordinator plays a vital role in the pre-application phase of development by ensuring that all proposed projects incorporate water quality measures. This is done mainly through interaction with the developers and project engineers, but also involves written assessments of the project designs and any water quality documents. The assessment occurs multiple times before the applicant is permitted to submit a complete proposal. This process lengthens the pre-proposal phase, but improves the final approval phase. The Planning Commission knows that all issues have been dealt with prior to the approval hearing and that City staff has ensured a minimal environmental impact.

6.2 Mapping Impervious Cover

Water quality data is the most definitive measure of determining the quality of our watersheds. However, because extensive data sets are not always readily available for the City's watershed, mapping impervious surface coverage can provide an important predictive tool to complement empirical methods. National research over the last decade has shown a significant correlation between impervious surface coverage and water quality. Development generally results in

an increase in both pollutant sources and impervious surfaces. In the Permit, it states, "Numerous studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving water quality. Significant declines in the biological integrity and physical habitat of streams and/or receiving waters have been found to occur with as little as a 10% conversion from natural to impervious surfaces. (Developments of medium density single family homes range between twenty-five and sixty percent impervious)."[1] The increase in pollutant sources, (i.e. parking lots, buildings, rooftops, and streets) contributes to increased pollutant loads in stormwater runoff, while corresponding increases in impervious surfaces limit the land's natural ability to filter these pollutants. As a result, developed areas typically experience higher runoff volumes and lower runoff quality. The challenge presented to the Copermittees is the mandate to reduce harmful runoff (a product of development), while complying with the State mandate of increasing housing stock and creating affordable development projects.

Mapping impervious surface coverage helps land use professionals better predict watershed health and guide growth patterns to minimize the impacts of development on water quality. The City lacks the sophisticated equipment necessary to create a complete and accurate impervious surface map. However the City has made a good faith effort to determine on average how much impervious surface is present within its boundaries.

To determine the impervious surface of the commercial and industrial portion of the City, a survey of parking spaces was taken. To determine impervious surface amounts for the residential sector of the City, the City averaged each residence as having 2 parking spaces. Table 6.1 shows the results of this study and Attachment E-2 presents a partial breakdown of the parking survey taken. The full document is rather lengthy, but is available upon request.

Table 6.1 - Results of Parking Space Study

Source	Total Number of Spaces	Acres covered by Impervious Surface
Churches	1,510	5.62
Apartments	2,367	8.80
Schools	741	2.76
Commercial and Industrial	9,604	3.36
Residential[2]	17,444	64.87
Totals*	**31,666**	**117.77**

***** Totals are based on the average sized parking space, which is 18'x9' with a=162'

[1] California Regional Water Quality Control Board, San Diego Region. Order No. 2001-01; NPDES No. CAS0108758, p.2. retrieved from www.swrcb.ca.gov on May 30, 2004.
[2] Based on 8,722 housing units. Information from *2030 Cities/County Forecast*, available through www.sandag.org .

In the process of conducting the study, the City discovered some inconsistencies with parcel numbers and addresses. These inconsistencies are slowly being rectified based on need and time available.

The City hopes in future reporting years to utilize the study information in estimating load reductions.

6.3 Land Use Professionals Resources

To date, jurisdictional and project-level planning tools have been largely under-utilized because stormwater management is often viewed as an engineering issue. As a result, many site-design solutions rely significantly on structural treatment controls like detention basins and mechanical treatment devices, which can be expensive and maintenance-intensive. In most cases, it is easier and cheaper to keep pollutants out of stormwater by designing the pollutant source out of the project, while simultaneously preserving the site's natural filtration capacity.

The City encourages all new and re-development applicants to explore such options as tot-lots, on-site detention basins, infiltration ditches, and on-site landscaping to ensure that water quality is improved, the natural environment suffers less, and less maintenance is required. The City requires sites to treat for pollutants of concern to the MEP. The City recommends that its applicants utilize the BMP handbooks created by CASQA to explore the best option for each particular project. The handbooks are available on-line at www.casqa.org. CASQA is a valuable resource for both the City and the developers.

6.4 Development Project Approval Process

As required by Permit Section F, the City has modified its discretionary land use permitting process to incorporate specific water quality requirements. The basic process is laid out in the City's General Plan, Chapter 17.28 *Procedure and Administration*. The Plan, itself, does not delineate for water quality; however the City includes water quality personnel in all development proposals.

The developer must submit all required documents at the beginning of the process. The project Stormwater Maintenance Plan (SWMP), Stormwater Pollution Prevention Plan (SWPPP) and/or Standard Urban Stormwater Mitigation Plan (SUSMP); plus the Hydrology Study are all due with the Site Plans for checking and approval from the on-set of the approval process. As stated in Section 6.1 above, this is to ensure a complete presentation for project approval by the Planning Commission.

The City has updated its checklists for developers to include water quality related lists. See Attachment E-3 for the final version of those lists. The City has received positive verbal feedback from the applicants who have utilized the new

checklists. The City also refers many applicants to the Lemon Grove SUSMP on our City website for further information about water quality guidelines. The Lemon Grove SUSMP can be found at the following web address:

- http://www.ci.lemon-grove.ca.us/clg/cityhall/Default.asp

During the current reporting period, the City reviewed eight potential SUSMP development projects with in the City limits. The following chart shows the development projects under review during this reporting period.

Table 6.1 SUSMP Projects Under Review FY 2006-07

File Number	Project Name	Applicant	Description
TM 0047/PDP 04-02	Center Hilltop Condos	Kevin Leon	Small multi-family housing unit
TPM 0042/0049	Citrus Heights*	Carter Reese	78 single family home development
TPM 0180	Citron Court Condos	Community Collective	12 condo units
TM 0057/PDP 07-005	Mallard Village Condos	Thomas Fitzmaurice	9 senior living condo units
TPM 0177	6505 MacArthur Dr.	Terrence Taylor	3 lot single family subdivision
TM 0052/PDP 06-05	Mc Manus Subdivision	Randall McManus	9 lot single family subdivision
TPM 0174	7872 Mt Vernon St.	Kai Adler	3 lot single family subdivision
TPM 0178	8040 Lincoln St	Steve and Pat Worley	3 lot single family subdivision, one house existing

*Project on hold due to desire to sell.

The City requires all major projects, determined to be significant contributors to post-construction pollutant loading, to file a SWMP. The document ensures that effective BMPs will be put in place to foster long-term water quality improvements. The requirements for a significant contributor are listed below:

- Residential development of 100 units or more.
- Residential development of 10 to 99 units.
- Commercial development greater than 100,000 square feet.
- Automotive repair shops.
- Restaurants.
- Hillside development greater than 5,000 square feet.

- Projects discharging to receiving waters within Environmentally Sensitive Areas
- Parking Lots greater than 5,000 square feet or with greater than 15 parking spaces and potentially exposed to urban runoff.
- Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater.

A *Preliminary Grading Plan* and the *Preliminary Hydrology/Drainage Study* are the technical basis for the SWMP; however, changes and refinements to the SWMP may be required as technical review of the application and completion of CEQA documentation continues. The complete SWMP must provide at least the following:

- A project description;
- An identification of water quality pollutants of concern and a proposed treatment volume base on the applicable design storm, site plans and adjacent land use, and soil characteristics;
- An identification of mitigation measures, including structural treatment BMPs, to protect water quality and prevent increases in downstream erosion to the maximum extent practicable;
- Agreements, easements, and licenses relating to proposed BMP construction, location, maintenance, or changes in drainage character;
- An identification of the beneficial uses of impacted receiving water bodies, including groundwater; and
- An identification of Section 303(d) impaired water bodies potentially impacted by the project.

The associated *Preliminary Grading Plan* and *Preliminary Hydrology/Drainage Study* must be prepared by a registered civil engineer with experience in fluvial geomorphology (drainage patterns). The *Preliminary Hydrology/Drainage Study* is, at a minimum, required to: 1) Characterize pre- and post-construction hydrology, both on-site and downstream, 2) Identify potential off-site discharges of stormwater and any increased potential for downstream erosion, and 3) Identify structural BMPs sufficient to address stormwater issues in compliance with the permit. To assist applicants through the permit application process, City staff has created a checklist for the development of Grading Plans, see Attachment E-5. The City uses the County's *Hydrology/Drainage Guide*, which can be found at www.sdcounty.ca.gov/dpw/watersheds/land_dev/drainage.html.

6.5 Environmental Review Process

JURMP 6.3 summarizes the revisions made to the City's environmental review process for new development and redevelopment projects to incorporate Permit requirements. The process outlined there continues to accurately reflect the

City's environmental review efforts. Attachment E-6 provides the checklist from CEQA that the City utilizes for its environmental review process.

6.6 New Development and Redevelopment Outreach

During this reporting period, the City used a variety of means to educate its customers about the potential impacts of development and redevelopment on water quality. These included direct staff interaction with the public and the development and distribution of informational checklists.

6.6.1 Interaction with City Staff

The City predominately utilizes staff time and the pre-application process to provide water quality information to developers and residents. Attachment E-1 provides the form required of all building and grading permits regardless of project size. Large development projects are rare in Lemon Grove. The City is approximately 3 miles square and is predominately existing residential development. To ensure that even the small projects are aware of water quality measures, the City requires a signed BMP checklist to be included with any permit application. The City has also created three checklists for any SUSMP redevelopment or new development project. These checklists are used by both City personnel to review SUSMP projects and by developers to ensure complete submittals. The checklists are included in Attachment E-3. The City uses the checklists and counter visits to provide as much education as possible to anyone interested in developing or building in the city limits of Lemon Grove. Face to face time with staff is the most effective way to reach the largest number of permit applicants because they must apply in person with their plans.

For each development project proposed, the City requires the builder and owner to consider BMP implementation from the beginning of the project. This initial step makes water quality important from the on-set of the project, and each consecutive step further emphasizes the importance of water quality improvements for pre- and post-construction.

The Water Quality Program Coordinator is available for consultation during any phase of the project. The Coordinator also plays a vital role in the pre-application phase of development by ensuring that all proposed projects incorporate water quality measures. This is done mainly through interaction with the developers and project engineers, but also involves written assessments of the project designs and any water quality documents. The assessment occurs multiple times before the applicant is permitted to submit a complete proposal. This process lengthens the pre-proposal phase, but makes approval faster once the formal submittal is made. The Planning Commission knows that all issues have been dealt with prior to their approval hearing and that City staff has ensured a minimal environmental impact.

The City encourages all new and re-development applicants to explore such options as tot-lots, on-site detention basins, infiltration ditches, and on-site landscaping to ensure that water quality is improved, the natural environment suffers less, and less maintenance is required. The City recommends that its applicants utilize the BMP handbooks created by CASQA to explore the best option for each particular project. The handbooks are available on-line at www.casqa.org. CASQA is a valuable educational resource for both the City and the developers.

City staff meets with all new applicants in some way and eleven open permit applications equal at least eleven consultations within the current reporting period.

6.6.2 Informational Checklists

As discussed above and as seen in Attachments E-3, E-5, and E-6; the City provides all applicants with a variety of checklists pertaining to application requirements. These checklists represent a small portion of the application checklists available for applicants. City staff is always available for further clarification and the Lemon Grove SUSMP is available at the site listed in Section 6.4 above.

6.7 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Land Use Planning Component in FY 2006-07.

6.7.1 Narrative Assessment

Although new development projects approved during the reporting period included adequate BMPs to address stormwater discharges, the City recognized that project level planning tools were largely under-utilized as many projects relied mainly on structural treatment controls, which can be expensive, maintenance-intensive, and less effective than site-design controls. Staff recognizes that it is easier to preserve a project site's natural hydrology through site design, than to artificially control it through detention or retention. As the City increases its outreach efforts, it foresees an increase in awareness of water quality knowledge in developers and the public. By providing developers with as much information at the beginning of the application process, the City hopes to encourage creative designs that improve water quality while maintaining the environmental integrity of Lemon Grove.

Based on the City's annual review, staff has not determined that any specific management practices or BMPs relating to land use activities have been proven

to be ineffective. The City therefore does not currently recommend any changes to this program component.

6.7.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activity-Based Targets

Target 1
Improve checklists for project submittals for staff use
100%

Target 2
Create a database to track project reviews
75% complete (a database was created, but it needs to be re-vamped to accommodate multiple reviews of the same project in an efficient manner) This project is on hold due to implementation of a GIS system that would allow for integrated tracking.

Target 3
Create a working map of Waters of the State for use by City staff and developers
30% complete (data collection is slow due to limited staff numbers)

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not characterize or track specific measures related to changes in knowledge or awareness resulting from the implementation of its Land Use Planning Component in FY 2006-07. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 3 Outcomes: Behavioral Change/BMP Implementation

The City did not characterize or track specific measures related to behavioral change or BMP implementation resulting from the implementation of its Land Use Planning Component in FY 2006-07. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 4 Outcomes: Load Reduction Estimation

The primary goal of BMP implementation is to reduce the loading of pollutants to stormwater discharges. An important emphasis of annual program assessment is the estimation of loading reductions resulting from various program activities. Assuming that such reductions are properly targeted to existing or potential water quality problems, load reductions should in turn result in improvements to discharge and receiving water quality. Quantifying load reductions represents an important endpoint for City assessments. Table 6.2 below demonstrates the direction the City is moving towards for future reporting periods. In future reports, the Table below will provide an initial estimate of the effectiveness of the SWMP process and its ability to reduce the pollutant loadings of selected constituents of concern.

Table 6.2 - Sample Table to Show Pollutant Loading Reduction Estimations

Constiuents of Concern	Loading Factor (lbs/ac/yr)[3]	Total Acreage	BMP Effectiveness Adjustment	Prevented Pollution
Total Copper				
Total Nitrates				
Total Cadmium				
Total Arsenic				
Total Suspended Solids				

SAMPLE

These estimates will provide a starting point for characterizing the benefits of implementing this program element, but are subject to a number of qualifications. First, load estimates assume that all projects are low-density, single-family residential developments. Second, project proponents have discretion in the selection of specific BMPs to meet the Maximum Extent Practicable (MEP) standard required of them. As such, individual projects employ a combination of BMPs, each with varying levels of effectiveness. The percentage adjustment is an estimate of the overall effectiveness of the measures based upon best professional judgment.

This project is being re-vamped due to new collaborations at the watershed level. It is the City's understanding that the new permit increases the emphasis on

[3] Source: Minton, Gary. *Stormwater Treatment – Biological, Chemical, and Engineering Principles.* 2002

watershed collaboration and evaluation of up-stream contributors. However the concept is similar, but focused on the type of business (initially automotive facilities), its likely pollutants and the relationship of those pollutants to certain BMP effectiveness. The members of the San Diego Bay Watershed group have already looked at their inspection requirements and are drafting improvements in the BMP compliance and efficiency areas. The City feels it is important to tackle the issue of load reduction on a regional basis to ensure the highest level of effectiveness. The City believes that a more regional and/or watershed approach will result in better, longer lasting water quality improvements.

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

6.7.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any commercial program data during this reporting period. See Attachment E-7 for a City zoning map.

Section 7.0 Construction Component

The City implements a variety of programs to prevent and respond to discharges from construction sources. All of these programs are predicated on the assumption that knowledge and awareness is key to effecting and sustaining responsible behavior, but that an active oversight and enforcement presence is also necessary for long-term success. This section describes actions taken by the City to regulate construction sources during the FY 2006-07. It includes the following general types of activity:

- Requiring BMP implementation through ordinance and permit (7.2);
- Encouraging BMP implementation through outreach (7.3); and
- Verifying compliance through inspection and enforcement (7.4).

7.1 Priority Construction Sources

The City maintains a construction permit database. The City currently lists 75 open construction permits. However, because sites are continually opening and closing, that number is not definitive at all times. The number also includes all private and public construction sites. The majority of the current construction permits are for low or medium priority projects.

The City completed eleven minor infrastructure improvement projects during FY 2006-07:

- El Prado
- La Corta
- Primera
- Ramon
- Plata
- Corte del Sur
- Patero
- Alberdi
- Buena Vista
- New Jersey
- Lemon Grove Avenue

The City defines a high priority construction site by the following guidelines:

- 50 acres or more and grading during the wet season;
- 5 acres or more and on a tributary of a 303(d) list waterway
- The City may include other sources and activities that contribute significant pollutant loads to the MS4

The City continues to have only one high priority construction source at:

- St. John of the Cross Church and Preschool – this project is a multi-phase project but overall it qualifies. (This project was not active during this reporting period, but received approval for the final phase.)

The Honda site that participated in the demolition ordinance did not perform construction after during this reporting period. To assist in processing the demolition ordinance the City processed the demolition permit separate from the building permits. The building permits were under review during this reporting period.

7.2 BMP Requirements

The City requires that BMPs be implemented to reduce or eliminate the impact of discharges from construction site runoff primarily through its grading ordinance. The checklist available in Attachment E-5 gives a breakdown of the City's grading permit requirements.

7.2.1 BMP Requirements for Permitted Construction Sites

Prior to the adoption of this Permit, the City required implementation of sediment and erosion control BMPs. These controls continue today. During FY 2006-07, the following BMPs were required on all sites for which permits were issued:

- Erosion Control Methods for Disturbed Slopes: Vegetation Stabilization (Planting), Hydraulic Stabilization, Bonded Fiber or Stabilized Fiber Matrix, Physical Stabilization (Erosion Control Blankets);
- Sediment Control Methods for All Disturbed Flat Areas: Mulch, straw, wood chips, or soil application, De-silting Basin (must treat all site runoff), Energy Dissipater and Outlet Protection
- Methods for Preventing Off-Site Tracking of Sediment: Stabilized Construction Entrance, Construction Road Stabilization, Entrance/Exit Tire Wash, Entrance/Exit Inspection and Cleaning Facility; and
- General Site Management BMPs for On-Site Waste: Materials Management (Material Delivery and Storage), Waste Management (Concrete Waste Management), Solid Waste Management, Sanitary Waste Management, and Hazardous Waste Management.

7.2.1.2 BMP Requirements for Major Grading Permit Sites

Major grading permit applicants are required to submit a Storm Water Pollution Prevention Plan (SWPPP) Addendum to the Grading and/or Building Permit Application. The standards for SWPPP are closely related to those required for developers in the pre-approval process. The biggest difference is the focus during construction, not post-construction.

7.2.2 BMP Requirements for Public Construction Sites

All City-managed Capital Improvement Projects (CIPs), regardless of size, include contract specifications requiring the implementation of BMPs in compliance with the General Construction Permit even prior to this reporting period. Specific BMPs that are implemented on public construction projects were identified in JURMP 7.6 and match those required for private projects. These have not been updated.

7.2.3 Pollution Prevention Requirements

The City continues to encourage and, where appropriate, require the use of pollution prevention practices by construction site owners, developers, contractors, and other responsible parties. Specifically, pollution prevention practices are encouraged in all BMP implementation material. The City requires specific pollution prevention plans from any activity that disturbs more than five acres. These sites must also seek coverage under the General Construction Permit. The City believes that with proper and complete BMP implementation, pollution prevention is a natural consequence.

7.3 BMP Implementation

The City ensures that BMPs are implemented to the standards described in Section 7.2 through several inter-related activities including permit issuance, project approval, field inspection, and public outreach.

7.3.1 Construction and Grading Approval Process

The Preliminary Grading Plan enables the City to better evaluate stormwater and drainage impacts on permitted sites The SWMP documents how dischargers will implement BMPs.

Although CIP projects do not require City Permits, their approval process is much the same as for private sites. These projects follow a process to ensure that BMPs are addressed at all phases. Starting at the project planning phase, projects are required to submit a SWMP. The SWMP refines the project by setting source controls, site design, and treatment control requirements. Once all the elements and concerns have been addressed at the planning level, the project moves into the design phase. During design, construction and post-construction BMPs are introduced into the plans. The plans are then circulated to the Water Quality Program Coordinator for review. At a minimum, this review is conducted when the project design is 30, 70, and 100 percent complete. These checks ensure that BMPs are adequately addressed in the plans and adjoining specifications are included.

7.3.2 Compliance Verification

Actual implementation of on-site and off-site BMPs is verified during site inspections. Inspections conducted during this reporting period are discussed in Section 7.4.1 below.

7.3.3 Construction and Development Industry Outreach

The City places a high priority on educating project applicants, contractors, developers, property owners, and other responsible parties to ensure that they have an understanding of water quality principles, applicable regulations, and proper BMP implementation strategies. It is difficult to send mailers or brochures to construction sites because individual job foreman rarely have an office. The City is looking into the possibility of offering training to job site personnel to further increase its educational outreach for construction sites. On the checklist required with each project seen in Attachment E-1, education and training are required BMPs. The City is exploring the possibility of making it a required BMP. Political ramifications must be further researched. Through its Annual Report, the City will keep Regional abreast of its efforts in this area. Until that time, the following educational efforts are currently in place.

Customers are offered a number of educational resources as they progress through the permit application and approval process, including interaction with field and counter staff (Building Inspectors, Planning Personnel and City Inspectors) and distribution of informational checklists and document examples.

7.3.3.1 Interaction with City Staff

City staff (including building inspectors and counter staff) regularly interacts with permit applicants and other members of the public. Personal interaction provides an important opportunity to increase the level of stormwater awareness among City customers. A particularly important interaction takes places at the very beginning of the project. Each applicant seeking a building permit of any kind receives a checklist of required BMPs. This form is being revised for the next reporting period to improve clarity and to streamline the process. From the very beginning, applicants are forced to think of water quality issues. The form is a required part of the application. More information on the initial process is available in Section 6.6.

7.4 Compliance and Enforcement

Compliance and enforcement is an integral part of the City's efforts to address BMPs at the construction phase. Inspections are conducted on a daily basis throughout the City on various projects.

7.4.1 Inspection of Construction Sites

JURMP Section 7.7 provided a description of the City's construction site inspection process. The stormwater component of these inspections is intended to ensure that contractors, property owners, and developers implement an effective combination of BMPs to meet minimum water quality protection requirements. Inspection staff utilizes checklists to assist them in verifying appropriate BMP implementation at each site inspected, and shares with the owner/developer to increase awareness of stormwater requirements and assist them in complying. See Attachment F-1 for a copy of one such checklist. The City conducted 39 scheduled inspections of nine active constructions sites. The City also conducted an average of 3 informal inspections of these sites and potential sites weekly throughout the reporting period, providing approximately 144 inspections total during the reporting period. It should be cautioned that while average numbers of inspections are illustrative as a gross measure of program activity, they can also be misleading. As already mentioned, individual sites open and close throughout the reporting period, and significant differences also exist between these sites and their inspection records.

The City has also instituted the use of a construction inspection database to track construction site visits pertaining to water quality and pollution prevention issues. Attachment F-2 contains a print-out of the visits made to all active construction projects during the 2006-07 reporting period. City staff also performs a number of informal inspections by attending joint meetings on site with other staff members or visual inspections while out investigating complaints. City staff believes that a visible presence is an excellent deterrent to non-compliance. If the workers know the site is being observed on a regular basis, they are less likely to let BMP up-keep deteriorate.

The City has just begun to use the new tracking process for construction site inspections. The City records each inspection in a tracking database. The City, due to its small size, currently inspects all construction sites regardless of priority or size. The database also allows the City to track the number of building inspections performed at each site and ensures that each site is visited a minimum of three times. The City is currently with a representative to merge water quality data with the building permit program. This would create a centralized data source for all the businesses and building permits in the City. The building inspector's visits are tracked in a previously existing database managed by the Planning and Development Department. The City Inspector uses the new database for tracking inspections as well as a BMP checklist that each owner/developer signs and commits to uphold, see Attachment E-1. During all building inspections, water quality concerns are taken into consideration. If the inspector discovers a problem, the Water Quality Coordinator is called upon to make a separate inspection. At the completion of each project, the City requires a final inspection requiring signatures by any involved parties including building, engineering, sanitation, water quality, and

planning/development. Without the signatures, the project is not recorded and not deemed complete until all requirements are met. The City requires a water quality signature on all SUSMP projects. The City also requires all building and grading permits to comply with minimum BMPs through the use of a checklist and property owner signed confirmation of said BMPs.

The St. John's site that is listed as a high priority site continued as non-active during this reporting period; the Catholic Church was under investigation and all assets were frozen including construction expenditures. If the site had been active during this period, the frequency of inspections would comply with the Permit requirement found in Section F.2.g. It states that high priority sites will be inspected weekly during the rainy season, unless the Copermittee can justify to Regional that the site meets the listed exemption criteria.

7.4.2 Enforcement of Construction Sites

City inspectors enforce stormwater requirements according to protocols outlined in JURMP Section 7.8. The City's enforcement program is designed to educate the community, promote compliance with applicable laws and regulations, return violators to compliance in a timely manner, and penalize violators as appropriate.

The City utilizes written warnings, notices of violation, administrative citations, and stop-work orders to enforce applicable stormwater requirements on its construction projects. The City's code enforcement program was in place on a trial basis and has transitioned to permanent policy. The trial period allowed the City Council to see examples of the most common code enforcement violations and for the City to flush out any kinks with the policy. Attachment B-3 contains a copy of the flowchart for stormwater code enforcement efforts.

The policy allows the code enforcement process to be utilized making it easier to deal with any issues discovered while dry weather-testing or site inspecting. With the new code enforcement process in place, the City can deal with any stormwater violations in a more expedited manner than the previous system, which did not allow fines or recuperative costs to the violator. The City also hopes to hire a part-time code enforcement officer with a water quality focus during the next reporting period.

In severe cases of non-compliance, or in the event of significant discharges, it may be appropriate to deny or revoke a permit. As a final resort, the City may use civil and/or criminal court actions under the State Porter Cologne Water Quality Act or the Federal Clean Water Act. These last actions my result in significant fines levied upon non-compliant parties.

7.4.3 Reporting of Non-Compliant Sites

The JURMP outlines standard operating procedures for reporting non-compliant sites to the Regional Water Quality Control Board. The City did not have occasion to report any non-compliant sites over the course of this reporting period.

7.5 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Construction Component in FY 2006-07.

7.5.1 Narrative Assessment

In FY 2006-07, the City continued to move its Construction Component forward in a number of important ways. Not only has the intensity of inspections grown, but an additional year of implementation has also allowed City staff and the regulated community to grow more accustomed to assimilating new stormwater regulations into their standard operating procedures. As familiarity and experience increase, the City expects compliance and oversight to improve commensurately.

The City hopes in future reporting periods to increase its outreach in this component. The City plans to host developer and contractor specific workshops dealing with water quality issues and compliance in future reporting periods.

Based on the City's annual review, staff has not determined that any specific management practices or BMPs relating to land use activities have been proven to be ineffective. The City therefore does not currently recommend any changes to this program component.

7.5.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activity-Based Targets

Target 1
Increase construction site inspections
100% complete

Target 2
Track construction site inspections
95% complete (the database continues to be in transition due to the potential for a centralized tracking source for a number of City programs)

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not characterize or track specific measures related to changes in knowledge or awareness resulting from the implementation of its Land Use Planning Component in FY 2006-07. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 3 Outcomes: Behavioral Change/BMP Implementation

The City did not characterize or track specific measures related to behavioral change or BMP implementation resulting from the implementation of its Land Use Planning Component in FY 2006-07. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 4 Outcomes: Load Reduction Estimation

The City did not characterize or track specific measures related to load reduction estimations resulting from the implementation of its Land Use Planning Component in FY 2006-07. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

7.5.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any commercial program data during this reporting period. The City will continue to pursue its current approach to regulating construction sites.

Section 8.0 IC/ID Component

This section describes activities conducted during the FY 2006-07 reporting period to minimize the impact of discharges from illicit connections and discharges (IC/IDs) on receiving waters and other environmental resources. The City's IC/ID program consists of several complementary activities, some of which are discussed in detail in this section, and others that are briefly addressed here and deferred to other sections for more detailed treatment. What follows is a summarized list of where each IC/ID program component is discussed in this Annual Report:

- Dry Weather Monitoring (Section 8.1)
- Spill Prevention and Response (Section 8.2)
- Public Reporting of IC/IDs, Complaint Investigations, and Enforcement (Sections 3.4, 4.4, 5.4, 8.3, 8.4)
- Used Oil and Toxic Materials Disposal (Section 5.3.3)
- Limiting Infiltration from the Sanitary Sewer to the MS4 (Sections 8.5 and 2.1.4)

8.1 Dry Weather Monitoring Program

This section provides and overview of the results of the City's 2006 Dry Weather Analytical and Field Screening Monitoring Program (Dry Weather Program), which is implemented by DMax. This section will provide a complete copy of DMax's findings and report.

8.2 Public Reporting of IC/IDs

The City continued to operate the Stormwater Hotline at (619) 825-3810. The primary purpose of the hotline is to facilitate complaint reporting; but it also serves as a direct source of water quality information for interested parties. Calls are promptly referred to City staff for proper handling.

During this reporting period, 153 calls were received through the hotline. The majority of the calls received on the Hotline were either informational or related to private property issues. Of these calls four were related to illicit connections and discharges. These calls were all settled without enforcement actions or were private property disputes. All tips related to IC/IDs were investigated by City staff and dealt with accordingly. Follow-up and enforcement related to business complaints and issues is dealt with in Section 4.4 and follow-up and enforcement for residential complaints is dealt with in Section 5.4.

8.3 Complaint Investigations and Enforcement

The City conducted follow-up investigations on all complaints received during this reporting period. The primary objective of the City's commercial enforcement program is to ensure violators are brought into compliance in a timely manner. When education is not sufficient to do so, staff may use a variety of formal enforcement tools. These vary by department and program, but generally include Verbal Warnings, Notices of Violation, and Official Notices. The City may also use civil and/or criminal court actions under the State Porter-Cologne Water Quality Act or the Federal Clean Water Act. These last actions my result in significant fines levied upon non-compliant parties.

8.4 Facilitation of Used Oil and Toxic Material Disposal

During this reporting period, City staff worked diligently to promote, publicize, and facilitate the proper management and disposal of used oil, toxic materials, and other household wastes. Activities related to the City's recycling program and waste collection services are reported in detail in Section 5.3.

8.5 Limiting Infiltration from the Sanitary Sewer

The City implemented aggressive maintenance programs to limit infiltration from the sanitary sewer system to its MS4. Further details on these activities are reported in Section 2.1.

8.6 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its IC/ID Component for FY 2006-07.

8.6.1 Narrative Assessment

In FY 2006-07, the City continued its Dry Weather Program through a contract with DMax Engineering. The City saw significant improvements in its site testing. This year's sampling was further increased the City's knowledge and awareness of its watershed and waterbodies. This is reflected in the specific recommendations contained in D-Max's report and findings.

The City also continues to attend the Regional Dry Weather Monitoring Workgroup to assist in watershed improvements together with other copermittees.

8.6.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activity-Based Targets

The City did not track activity targets during this reporting period. However, the City will remedy this problem during future reporting cycles. The City believes the program was dealt with effectively, but activity-based targets were not tracked.

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not characterize or track specific measures related to changes in knowledge or awareness resulting from the implementation of its Land Use Planning Component in FY 2006-07. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 3 Outcomes: Behavioral Change/BMP Implementation

The City did not characterize or track specific measures related to behavioral change or BMP implementation resulting from the implementation of its Land Use Planning Component in FY 2006-07. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 4 Outcomes: Load Reduction Estimation

The City did not characterize or track specific measures related to load reduction estimations resulting from the implementation of its Land Use Planning Component in FY 2006-07. The need for such measures will be considered in

the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

8.6.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any commercial program data during this reporting period. The City will continue to pursue its current approach to regulating construction sites.

Section 9.0 Education Component

This section provides a brief overview of the City's educational efforts during FY 2006-07. Since education is such an integral part of the all JURMP components, outreach to specific audiences is discussed in greater detail alongside program descriptions in the Land Use, Industrial, Commercial, Residential, and Construction Sections. This integrative organization allows the reader to better understand the context in which education is conducted.

9.1 Overview of Education

City outreach efforts continued to be guided by the three objectives set out in JURMP Section 9.1: 1) configuration and purpose of municipal separate storm sewer systems and how pollutants can be released to them, 2) how urban runoff impacts local receiving waters [mainly Chollas Creek] and surrounding habitats, and 3) BMP solutions that are available for treating or controlling the various pollutants of concern. Specific tools and methods are adapted as appropriate to best convey meaningful information to the target audience. Methods emphasized during this reporting period include:

- Presentations and Workshops
- Direct Mailings
- Community Events
- Educational Material Distribution
- Hotline Resources
- Interaction with Staff

The City participated in four outreach events during FY 2006-07. (See Attachment G for a table detailing each of the events) An accounting of formal events, however, does not adequately convey the significant amount of outreach that takes place during permit processing, inspections, on websites, and via other means. For a discussion on each of these alternative forms of outreach, see sections 3.0 through 7.0 and all corresponding attachments. What follows are overviews and selected highlights from the City's major educational components.

9.1.1 Outreach to Residents

The City implements an extensive outreach program targeting school children and other members of the general public. As the program continues to evolve, the content of the City's outreach will increasingly focus on those pollutants and activities identified by water quality analysis and other program data to be high priorities. Data from the City's Dry Weather Program (See Section 8) have been used to identify combinations of areas and pollutants that may warrant increased or more focused outreach. We hope to expand on this type of program feedback as data sets become larger and program components increasingly integrated in future years. The City conducted four residential outreach events during this

reporting period, as well as four public participation events. Section 5.3 details these events more extensively. School outreach is another major component of the City's education program. The intent is to stimulate long-term behavioral change by exposing students at a young age to the importance of clean water and environmental responsibility. Similar to how recycling behavior has been significantly modified by targeting school aged children. City staff strives to ensure that classroom presentations are memorable and interactive by incorporating hands-on activities such as watershed models. The previous year's Whale Tale grant was a one year program only, but the City hopes to develop it's own elementary education program during future reporting periods.

9.1.2 Outreach to Commercial and Industrial Businesses

The goal of the City's commercial and industrial outreach program is to promote effective BMP implementation by making business operators aware of their regulatory obligations and by providing them with useful information about how to comply. To this end, a variety of methods were utilized during this reporting period (i.e., direct mailings, outreach events, personal communications, educational materials).

Every industrial business and all the high priority commercial businesses on the City's inventory received facility-specific BMP guidance during inspections this reporting period.

It is important to note that significant animosity exists within the small business community as a result of existing State and County environmental control agencies. City staff bears the complaints of the business community for the high cost and perceived over-bearance of governmental regulation.

Each reporting period, the City plans to increase outreach and improve communications with a new sector of the business and industrial community. Due to limited staff and fiscal limitations, the City must target and focus its program from year to year. However, no program will decrease once the outreach to a specific sector has been achieved. A consistent and constant message is instrumental in creating changes in behavior and increases in knowledge. Each year the City hopes to initiate a new focus area of increased outreach to provide in its annual report.

9.1.3 Outreach to the Construction Industry

The City places a high priority on education project applicants, contractors, developers, property owners, and other responsible parties to ensure that they have an understanding of water quality principles, applicable regulations, and proper BMP implementation strategies. Customers are offered a number of educational resources, the key one being regular interaction with knowledgeable City staff.

During this reporting period, the City increased its outreach to the developers and construction sites within the City. The City increased the number of inspections, both informal and formal. Water Quality personnel review all development plans that are presented to the City. The City requires all permit applicants to complete a construction BMP plan. Water Quality personnel also require a notation on all plans to verify the use of BMPs for the duration of the project. The City continues to use and further develop the information available to contractor and developers. Several checklists are available as well as other educational materials on BMPs, both pre- and post-construction. The City is working on making its stormwater information educational and easier to use for the construction and development sector. The City continues to believe that the increase in inspections confirms the importance and commitment to an effective water quality and pollution prevention program.

Section 10.0 Public Participation

During FY 2006-07 the City continued to actively encourage stakeholder participation in the development and implementation of its Jurisdictional Runoff Management Program (JURMP) through various venues:

- Informational Resources
- Community Outreach Efforts
- Stormwater Copermittee Meetings

In addition to the activities described further below, the City continued to rely heavily on the interaction of staff with members of the public during their regular duties. As described below, the interaction of these staff with the public through various means (i.e., permitting, inspections, presentations, etc.) continued to provide an additional avenue for obtaining direct feedback from the City's customers.

10.1 Public Participation Venues

A key element of an effective public participation strategy is providing the public with easily accessible resources for obtaining water quality information and reporting complaints.

10.1.1 Hotlines

The City continued to operate its Stormwater Hotline at (619) 825-3810. The primary purpose of this hotline is to facilitate complaint reporting, but it also serves as a direct source of water quality information for interested parties. Calls received are promptly referred to the correct City staff. Complaint responses are handled in a timely manner. The focus is to gain compliance from the erring source, so a speedy response time is crucial. During this reporting period, the hotline received four calls pertaining specifically to water quality issues and approximately 153 pertaining to sewer issues. These numbers do not represent the number of calls that come through the main phone line and are water quality in nature. The City is working to create a tracking system for these calls.

Table 10.1 – Comparison of Calls

Total Number of Calls	Number of Calls pertaining to Water Quality	Number of Calls with City Action
153	4	0

10.1.2 Chollas Creek Clean-up Event

The City participated in I Love a Clean San Diego's Creek to Bay Clean-up event on April 28, 2007. The City had nineteen volunteers arrive to clean the intersection of Federal Blvd and McArthur. This location is a tributary of Chollas Creek and a common illegal dumping site. The volunteers removed 464 pounds of debris from the site and 428 pounds of recyclable materials. See Attachment D-2 for a copy of the full report for the entire event.

10.2 Stormwater Copermittees

10.2.1 Copermittee Meetings

The City continued to participate in a variety of Copermittee Meetings sponsored mostly by the County. Below is a listing of the Workgroups that the City actively participates in:

- BMP Effectiveness and Assessment Workgroup
- Permit Re-Issuance Workgroup
- San Diego Regional Management Committee
- Dry Weather Monitoring Workgroup
- Regional Monitoring Workgroup
- Report of Waste Discharge Workgroup
- Outreach Workgroup
- Green Business Program Meetings
- Watershed Workgroup (through Port of San Diego)

Each of these meetings occurs once a month on various days or bi-monthly in the case of the Management Committee. The yearly activities calendar of the former Water Quality Coordinator was lost when the computer was re-formatted for a new user, so dates are un-available for attendance records. However, each meeting was accompanied by a sign-in sheet supplied by the sponsor, typically the County. The County would have records of the City's participation in the above listed groups.

10.2.2 Collaborative Efforts with Copermittees

This section will highlight two particular collaborations that will be highly beneficial to Lemon Grove and the region.

Chollas Creek Water Quality Protection and Habitat Enhancement Project

The Chollas Creek Water Quality Protection and Habitat Enhancement Project (Chollas Creek MOU) is an agreement between the City of San Diego and the members of the Chollas Creek watershed. The City of San Diego applied for the Chollas Creek Grant to create a more comprehensive education plan for areas in

the Chollas Creek watershed. The Grant included regional educational materials and programs. The Grant provided for Chollas Creek clean-ups and restoration to native habitat in and around the stream-beds. The City benefited from the programs and educational material when they joined as a Grant partner. San Diego provided the in-kind money; they are asking the partners to provide in-kind services only. The in-kind services will be equal to roughly $10,000; no actual money is exchanged. The City assisted in educational material development, local programming for businesses and schools, and offered assistance at San Diego meetings pertaining to the grant. The Chollas Creek MOU went into effect in 2005. The City feels this collaboration is beneficial to the City of San Diego, to Lemon Grove, and the residents in both cities. Although this grant is complete, the City continues its education efforts in reference to Chollas Creek.

County of San Diego Green Business Program

The City increased its involvement with this program by offering an automotive workshop during this reporting period. The City looks forward to continuing these efforts and further improving its outreach to the local and regional business communities. This partnership has provided the City with valuable insight into local, state and federal regulations pertaining to pollution prevention and hazardous materials. In turn, the City has provided the program with an increased awareness of water quality programs and regulations.

Section 11.0 Effectiveness Assessment

11.1 Introduction

This section provides an overview of the methods used in this report to assess the implementation and effectiveness of the City's JURMP for the period of July 1, 2006 through June 30, 2007. As with the programs themselves, the City's approaches to effectiveness assessment have evolved considerably during this period. An important aspect of these new and augmented programs is ensuring their measurability and their nexus to changes in discharge and receiving water quality. In particular, Permit sections F.7 and I.1.a.F.7 require that the City identify and report on measures to assess the effectiveness of JURMP implementation and identify strategies for assessing long-term program effectiveness.

The City is taking important steps toward the development of new and improved methods for conducting assessments, and in putting those methods into practice in this report. This section provides an overview of the approach that the City has taken to conduct its effectiveness assessment this year. However, the actual assessments are contained throughout the remainder of this report within their respective program components. Specifically, the following sections contain effectiveness assessment elements, each following a common organization described further in Section 11.2 below:

- 2.0 Municipal Component
- 3.0 Industrial Component
- 4.0 Commercial Component
- 5.0 Residential Component
- 6.0 Land Use Planning Component
- 7.0 Construction Component
- 8.0 Illicit Discharges Detection and Elimination Component

The scope and content of these assessments varies widely for each program element. However, in all cases, the City has included sections corresponding to each of the major effectiveness assessments elements described below.

11.2 Assessment Approach

The City and other Copermittees have in past years described a number of basic measures that can be relatively easily tracked and quantified. The City's objective is to go beyond those efforts by more closely scrutinizing existing measures with an eye toward a more complete understanding of their meaning and value to the effectiveness assessment process. From this, the City has also endeavored to identify where new or revised measures might be needed. Our starting point was the collaborative development of the document, *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management*

Programs, submitted to the RWQCB on October 16, 2003. This document represents the Copermittees' current thinking on how effectiveness assessment can best be approached now and in the future. More importantly, it procedes an important starting point for the evolution of more detailed and sophisticated strategies by the City and other Copermittees. The remainder of this section draws heavily on the content of that framework.

The City's approach to effectiveness assessment as reflected throughout this JURMP Annual Report, is organized according to three primary elements, each described below:

- Narrative Assessment
- Assessment of Specific Measures
- Spatial and Geographic Analysis

11.2.1 Narrative Assessment

In previous comments on the City's JURMP, RWQCB staff has indicated a desire for a more detailed discussion of successes, strengths and weaknesses, and outstanding program features. The narrative assessment addresses this concern by qualitatively describing major programmatic achievements from throughout the year. Other more specific and quantifiable measures are addressed in the remaining portions of the assessment.

Permit Section I.1.g also requires that the City identify in its JURMP Annual Report any management measures proven to be ineffective in reducing urban runoff pollutants and flow. Each narrative assessment section also includes the identification of any such measures identified in the reporting period.

11.2.2 Assessment of Specific Measures

This section provides a short overview of several of the key concepts and organizing principles of *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. That document should be read in its entirety for a more complete understanding of the City's long-term effectiveness assessment strategy. Due to the length of the document, the City has not included it in this report. However, a copy is available on request.

Essential to increasing measurability is the establishment of clear and meaningful measures that can be tracked over this and future reporting periods. To establish such measures, it is crucial that the desired or targeted outcomes of any particular program activity be clearly identified and understood. Attachment I illustrates six basic levels or categories of outcome that can be employed for any of these six levels. The City's assessment intends to follow this basic model. Ultimately, the objective of the effectiveness assessment process is to identify measures at the highest level of the hierarchy possible. In doing so, knowledge

gaps between program activity and water quality outcomes can best be addressed. It is important to note, though, that a single measure will rarely provide a complete picture of any program area. Multiple measures will therefore usually be utilized for many program activities.

11.2.2.1 Compliance with Activity-Based Permit Requirements (Level 1)

This level consists of activities that are prescribed by or established under the Permit (updating source inventories, training staff, conducting inspections, etc.). A fundamental feature of Permit-derived programs is the explicit establishment of specific activities that are assumed, but not proven, to be beneficial to water quality. While many of the assumptions underlying the establishment of required activities may be correct, there are currently few means of quantifying or establishing causal relationships that will make many of them more measurable. The City's long-term goal is to explore these assumptions in more depth; this year's report focuses on clearly defining the intended outcomes of these activities and identifying specific measures by which them can be accurately assessed.

11.2.2.2 Changes in Knowledge/Awareness (Level 2)

The most immediate and basic outcome of many urban runoff program activities is a change in the knowledge, awareness, or attitudes of target audiences (learning that storm drains and sanitary sewers are separate systems, that everyday activities contribute to water pollution, etc.). Such changes are most often targeted through outreach or training programs. Not an end in themselves, these changes presumably form the basis of behavioral change, or BMP implementation.

11.2.2.3 Behavioral Change/BMP Implementation (Level 3)

Building on increases in knowledge, the City's primary objective is to affect significant and lasting changes in the behavior of municipal employees, residents, and business representatives. Behavioral outcomes are usually expressed in terms of BMP implementation since this is the overriding objective of the City's programs. Since this is the level at which actions are actually taken, estimating or quantifying BMP implementation is a necessary component of a successful effectiveness assessment strategy. It is also necessary as a precursor to establishing load reductions. Several elements of this year's report include a discussion of BMP implementation.

11.2.2.4 Load Reductions (Level 4)

The primary goal of BMP implementation is to reduce the loading pollutants to stormwater discharges. Assuming that such reductions are properly targeted to existing or potential water quality problems, load reductions should in turn result in improvements to discharge and receiving water quality. The primary purpose

of conducting a load reduction estimation exercise is to better understand the benefit of conducting high priority activities (i.e., to characterize the expected reduction in loading of contaminants to the MS4).

The City regards the estimation of load reductions as the key to its assessment process. By working to establish Level 4 outcomes for lower level activities, we hope to increasingly improve our understanding of the relationship of these activities to water quality improvement. Because these efforts are both difficult and speculative, and often require data and information not readily available, this year's assessment includes load reduction estimates in only a couple of areas. In future years, our understanding of the many assumptions that must be made to address existing uncertainties, and variables that affect any given measure, will improve as we document and study them. Our goal this year was simply to develop and test some basic approaches.

11.2.2.5 Changes in Discharge Quality (Level 5)

In many respects, changes in discharge quality are the most direct expression of successful program implementation. Measurable improving the quality of discharges both into and from the City's MS4s will therefore be an important targeted outcome. Establishing relationships between discharge quality and specific program components, however, is beyond the scope of this year's assessment.

11.2.2.6 Changes in Receiving Water Quality (Level 6)

The ultimate objective of the City's programs is the protection and improvement of water bodies receiving discharges from its MS4. Both discharge quality (level 5) and receiving water quality are addressed through the City's Dry Weather Program (Section 8) and the Copermittees' Receiving Water Monitoring Program (submitted under separate cover). Establishing relationships between receiving water quality and specific program components, however, is beyond the scope of this year's assessment.

11.2.3 Spatial and Geographic Analysis

Several sections of this year's report contain analyses of program data aimed at better understanding their spatial variability and its relevance to program implementation. The approaches utilized are simple and straightforward. Data is examined regionally, by watershed, and by community to identify potentially significant trends. For instance, clustering of a particular business type may warrant outreach efforts that are specifically focused in a watershed. The City hopes to develop more sophisticated methods of spatial and geographic analyses in the future. At the same time, it is important that our understanding of the potential uses of program data evolve concurrently. Any type of meaningful

analysis is limited by the amounts and quality of data that are available to support it.

During this reporting period, the City finished a preliminary needs assessment for the implementation of a city-wide GIS program. The needs assessment encouraged the City to update its existing base data and layers using modern technolory. The City hopes to have the initial phases up and running by FY 2007-08. The City sees GIS as a powerful compliance and collaboration tool that will make tracking and reporting more efficient and accurate. The full implementation of the GIS program is dependant on budgetary constraints in future reporting periods.

Section 12.0 Fiscal Analysis

The purpose of this section is to provide a detailed analysis of the expenditures required to implement the JURMP. The main purpose of this analysis is to enable the City to determine the level of resources needed to meet the requirements of the Permit.

Although the Regional Water Quality Control Board staff down plays the importance of this portion of the analysis - based on comments made in public hearings during the new permit process and comments in Regional Board staff reports - the City considers the analysis vital in determining the City's ability to effectively meet the conditions of the Permit.

12.1 Cost Breakdown

The analysis was performed as outlined in the JURMP, by assigning specific expenditure categories into the general categories suggested in Permit section F.8. The analysis is presented in Table 12.1.

Table 12.1 – 2006/2007 Fiscal Analysis Summary

Stormwater Cost Analysis
All costs covered in the General Fund.

ACTIVITY	CURRENT YEARLY BUDGET	CURRENT BUDGET LOCATION
STORM DRAINAGE CLEANING AND MAINTENANCE		
Public Street and Parking Lot Sweeping		Streets
Streets	$30,000	
Parking Lots	$2,000	
Public Street and Parking Lot Sweeping Total	$32,000	
Litter Removal		
Litter Removal	$13,000	
Litter Removal Total	$13,000	
Storm Drainage Cleaning		
Inlets		
Inspection and Cleaning	$19,820	
Fossil filter replacements	$1,400	
Inlets Subtotal	$21,220	
Basins and Channels		
Inspection and Cleaning (Note 1)	$38,829	
Basins and Channels Subtotal	$38,829	
Video Inspections		
Video Inspections (Note 1)	$50,000	
Video Inspection Subtotal	$50,000	
Storm Drainage Cleaning and Maintenance Total	**$155,049**	
STORM EVENT ACTIVITIES		
Sandbag stock piling and placement	$4,000	
Patrols	$3,089	
Storm Event Total	**$7,089**	
ILLICIT CONNECTION/ILLEGAL DISCHARGE ENFORCEMENT PROGRAM		Engineering

		Services
Dry Weather Testing	$20,000	
Enforcement	$5,000	
Administration/Supervision	$1,000	
Stormwater HotlineComplaints	$2,000	
Illicit/Illegal Enforcement Program Total	**$28,000**	
STORM WATER POLLUTION PREVENTION PLANS (SWPPP's)		
Construction Related SWPPP	$2,000	
Plan Review (including SUSMP's)	$15,000	
Inspection	$3,000	
Construction Related SWPPP Subtotal	$20,000	
Municipal Facility SWPPP		
SWPP Implementation, Inspection, and Maintenance of Municipal Facilities	$18,798	Streets
Municipal Facility SWPPP Subtotal	$18,798	
All SWPPP Activities Total	**$38,798**	
BEST MANAGEMENT PRACTICES (BMP) IMPLEMENTATION		
Inspection of Industrial and Commercial Facilities	$50,000	
Inspection of Municipal Facilities	$1,000	
BMP Total	**$51,000**	
MISCELLANEOUS ACTIVITIES		Engineering Services
Annual Reporting (JURMP)	$5,000	
Administration (General)	$74,004	
NPDES Permit Fee	$7,500	
Public Education/Outreach	$5,000	
Miscellaneous Activities Total	**$77,504**	
PROGRAM TOTALS	**$371,440**	

Note 1 –Program still in development stages, projected cost for next fiscal year

It should be noted that the cost of program implementation during the 2006-07 reporting period does not reflect the true cost of implementation. There are cost areas that were not considered in the analysis. For example, the cost of personnel in the Grounds division, who perform stormwater maintenance activities as needed, but who do not separate those activities from their daily activities. The City is currently working to create a more thorough "type of work" tracking system to alleviate some of these omissions.

12.2 Funding Sources

There are a number of sources for program funding; grants, stormwater fees paid by both residents and businesses, fines, and general fund money to name a few. The City has created a stormwater fee for businesses and residents through developmental plan check fees, for businesses charged through the business license and solid waste services to residential users. The fees collected only fund approximately one third of the total stormwater program costs. They currently are not allocated to any specific section of the program, but are used to ease various costs as needed. The City has integrated water quality compliance into its Code Enforcement program, which includes potential fines for continued non-compliance. However, the City does not foresee this as a steady revenue source for program funding, as compliance is the primary and desired outcome.

Given California state law, the City finds difficulty in fully funding its stormwater program. Also given recent opposition State-wide to the creation of stormwater fees, the City is cautious in expanding its current funding strategy. As such, the City's General Fund will be required to continue subsidizing this increasingly costly program.

The total cost of the program for this reporting period equaled more than 3% of the General Fund budget. For comparative purposes, the cost of the stormwater program is equivalent to:

- Seven times the amount the City spends on its Code Enforcement program
- The City's expenditure on maintaining all of its parks, and
- 258 percent more than the City commits to youth sports and recreation programs.

Again, these comparisons are included to demonstrate the City's financial commitment to the program.

To further the City's and region's efforts in meeting the overall objective of the Stormwater program, the City challenges the Regional Board and the environmental community to take regional leadership in proposing a regional revenue source – similar to that of TRANSNET for transportation enhancements. The City's financial commitment to the program demonstrates the City's efforts in complying with the requirements of the JURMP and the Pemit. The City continues to be willing to brainstorm with Regional Board staff regarding this challenge. To date, this challenge has been outright rejected by Regional Board staff.

Section 13.0 Conclusions and Recommendations

The City's sixth Annual Report submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2001-01, "Permit") represents a full year of water quality activity and programming in the City of Lemon Grove. We are confident that the report demonstrates our success in building a program that meets and often exceeds Permit requirements. At this same time, the annual reporting process offers an important opportunity to critically assess program implementation, and to identify areas in need of modification or improvement.

The programs described in this report to be significantly expanded and improved over previous years, as is evidenced by the numerous accomplishments described. City staff once again responded positively to the implementation challenges presented by the Permit; thanks to a sustained team effort, we continued to improve and augment our programs.

Moving forward, it is important to keep in mind that meaningful measurement is a necessary part of a successful program strategy. This year's report reflects more monitoring, more data, more assessment, and more deliberation on the part of City staff than ever. This speaks well of the City's program, but it is only a start, the stormwater puzzle will take many years to solve. The increased focus on measurability that is manifested in this report must remain a focus. In particular, the new and innovative approaches to effectiveness assessment that the City helped to pioneer must continue to actively evolve. The framework set out in the document *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* provides a great deal of useful direction, but success is not guaranteed. Staff will need to develop and embrace the detailed measures and measurement tools necessary to track and evaluate long-term success. Similarly, we will also need to continue looking for ways to improve and best utilize our monitoring programs so that they continue providing timely and useful information.

As in previous years, the City continued to demonstrate strong collaboration with other Copermittees throughout the reporting period. This is reflected in the quality and vision of the Copermittees' many collaboratively conducted activities. Such collaboration has become a hallmark of the Copermittees' programs and must continue to be. Future success will require no less collaboration.

This year's report is characterized by a higher integration of elements than in the past. Although the City's programs are implemented over numerous departments, the coordination and communications between those efforts has been commendable. Our experience over the past year has also shown htat we have many new challenges ahead of us. Many of the City's stormwater programs and activities are still in their infancy. Unlike many other regulatory programs, the way forward is neither easy nor straightforward. Meeting the challenges ahead of us will require continued diligence and good humor.

City of Lemon Grove

Jurisdictional Urban Runoff Management Plan Annual Report

FY 2007 – 2008
September 2008 Report

The City of

LEMON GROVE

BEST CLIMATE ON EARTH

Incorporated in 1977

Executive Summary

The City's seventh Annual Report submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2007-01, "Permit") represents an opportunity to further explore and develop effectiveness assessment measures as well as re-vamp existing programs to better reflect the new Permit.

Several programmatic changes reflected in this year's report have been made in response to regulatory feedback received from the Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA). In particular, the RWQCB and the EPA's review of the Lemon Grove Standard Urban Stormwater Mitigation Plan (SUSMP) prompted a more focused effort on plan reviews, development and re-development strategies, and construction site management.

To respond to their comments and the new Permit, the City is implementing various methods to further assist in long-term effectiveness assessments. The methods are currently under revision and in a state of flux through participation in regional standardization efforts. The City will maintain existing standards, while the regional efforts continue to take shape and develop further.

Through a collaborative workgroup process with the Copermittees, the City has significantly improved our assessment strategies and analysis methods. The Copermittees worked extensively on the completion of the Report of Waste Discharge (ROWD) during FY 2004-05. The ROWD is a collaborative effort discussing the Copermittees requests and findings for the issuance of the 2006 Permit. The Copermittees also collaborated with an independent contractor to create a formal effectiveness assessment. Both the ROWD and the long-term effectiveness assessment documents were submitted to the RWQCB separately from the Annual Reports. However, the Copermittees worked extensively on these projects during FY 2004-05 and the City's participation is worthy of notice. The documents provided valuable information that the Copermittees will be using during the next reporting period to fine tune effectiveness assessment and program focus. In FY 2007-08, the City continues its extensive involvement in joint Copermittee workgroups. The City feels the collaboration is necessary to develop and maintain a well-rounded, effective program and ensure regional stability for water quality improvements.

The City continues to improve and develop its own program effectiveness assessment strategies. The ROWD and the long-term effectiveness assessment have been extremely useful tools in helping not just the City, but the Copermittees, in analyzing the current available data. The documents have helped identify areas of improvement and program focus. The long-term effectiveness document will be critical in the City's and the Copermittee's development of regional activities to address improved water quality and pollution prevention.

The City has taken important steps in putting newly developed strategies in motion. In particular, the City has continued to develop its BMP implementation strategy for construction sites and development proposals. During FY 2005-06, the City focused on improving its SUSMP checks, the tracking of construction site inspections, and the development of consistent standards in the Planning and Engineering Departments. The City continues these efforts into FY 2007-08. Employee training continued to focus on SUSMP implementation and those departments directly affected by the document through regularly scheduled inter-departmental meetings. In FY 2007-08, the City continues to make significant steps toward the implementation of a City-wide GIS program, including a City-wide needs assessment performed by a contractor. The newly implemented Code Enforcement program continues to improve in efficiency and effectiveness, including a new staff member, who functions as a water quality inspector and code enforcement officer. The City realizes that many of these new approaches are in their infancy, some still in exploration, but future reporting periods will further demonstrate the new concepts and ideals discussed in this report.

In FY 2005-06, the City created an independent funding source to help fund its program. However, the funding source only funds a small portion of the program, requiring the City's strapped General Fund to finance this increasingly expensive program. This shortage of steady funding is even more prevalent this reporting period and in the short-term future, due to cuts in State funding and a lack of re-imbursements from the State. Proposition 218 and the current economy make it even more difficult to obtain funding for the water quality program and future environmental legislation. It is even more important now, that the City take into account effectiveness and efficiency in its programs, especially its environmental programs. The City appreciates the Regional Boards understanding in these times of fiscal hardship.

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Section 1.0 Introduction

Lemon Grove's seventh annual report, submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2007-01, "Permit") represents the City's continued efforts to document and assess a full year of program implementation (July 1, 2007 through June 30, 2008). We are confident that the report demonstrates success in the continued development of a program that meets and often exceeds Permit requirements. At the same time, the annual reporting process presents a cumbersome challenge to City staff when combined with participation in the WURMP reporting process, the annual RURMP report, and the Dry Weather reporting process. The City believes in an all encompassing City and Regional program that increases effectiveness and efficiency to the maximum extent practicable. The myriad of reports causes disconnects between programs that should run seamlessly together. The City hopes that in future reporting periods, some of these challenges can be met with cooperation between the Copermittees and the Regional Board.

This report continues to demonstrate several programmatic changes in response to regulatory feedback received from the Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA). In particular, the March 2005 SUSMP audit performed by the RWQCB and the EPA prompted a reassessment of the City's SUSMP requirements and plan check procedures. The City chose to focus its improvement efforts in the SUSMP area. The City implemented a construction site inspection database to allow for future assessment strategies. The City continued its outreach material to developers and contractors and increased the participation of water quality staff in preliminary development meetings. Water Quality staff has began active involvement with environmental legislation affecting CEQA requirements and green house gas emission standards. The City is working on a strategy to map its waterways and drainage channels for a future GIS map layer. The City is actively exploring its GIS options and hopes to have GIS capabilities in the next 5 years. The City began developing a basic needs assessment and schedule for the implementation of a city-wide GIS program. The City is currently working on an implementation RFP for GIS services for the Engineering and Public Works Departments. These early efforts include base data entry and updating the existing layers with current technology. However, all implementation is dependant on budgetary restrictions. The City and the Copermittees are moving toward a more quantitative and qualitative approach to reporting and operations, while faced with sever economic challenges both on a local and state level.

At the jurisdictional level, the city has taken important steps in putting newly developed strategies in motion. The City continued to enhance its BMP implementation process. The City continued to improve the assessment tools through inspection databases and the plan check process. The City continues to explore effective assessment options that fit within the budgetary confines and meet the requirements of the Permit. During this reporting period, it was

discovered that the City's existing tracking system for building permits and code enforcement, HdL, might be a viable option for water quality personnel. The City continues to explore its existing systems to better track water quality data. Current financial restraints limit the implementation of new programs and software. Though the tools are often imperfect and must continue to evolve, we have already found their use to be quite instructive in many ways.

The City believes the programs described in this report to be significantly expanded and improved over past efforts. Some accomplishments of particular note include the following:

- Use of community events for public outreach
- Improved code enforcement process for water quality
- Continue outreach to restaurant community
- Continue outreach to automotive facilities
- A new in-house water quality inspector and code enforcement officer
- Participation in regional workshops pertaining to new and pending environmental legislation
- Increased involvement in WURMP programming

This report is organized according to the general outline agreed upon by the Copermittees. Sections 2.0 through 7.0, each corresponding to a different category of pollutant sources (i.e. Municipal, Commercial, Residential), are organized as follows:

- Priority Sources
- BMP Requirements
- BMP Implementation
- Compliance and Enforcement

Where possible, all applicable data and information are consolidated into the sections to which they best apply so as to present a more holistic and self-contained description of each program area. For example, section 4.0 discusses every program element related to the City's commercial and industrial component (e.g. outreach to commercial audiences, inspections of businesses, responses to public complaints involving commercial dischargers, and enforcement actions taken against non-compliant businesses).

Sections 8.0 through 10.0 are intended only to summarize key statistics, and to address topics not covered in pervious sections. Section 11.0 provides a consolidated assessment of key program data and information. Much of this data is also presented in greater detail in sections 2.0 through 8.0. Section 12.0 provides an analysis of the City's projected expenditures for FY 2007-08. Section 13.0 discusses the City's conclusions and recommendations based on its assessment of this year of implementation under the Permit.

Overall, this report demonstrates, in a clear and well-organized way, the considerable thought and energy that went into developing and implementing a complex and rigorous program. The City looks forward to continued progress in future years.

Section 2.0 Municipal Component

This section describes actions taken by the City during the FY 2007-08 reporting period to prevent polluted runoff from its municipal facilities.

2.1 Municipal Facility Activities

The City of Lemon Grove owns and operates a wide variety of fixed facilities and an extensive system of roads, municipal separate storm sewers (MS4s), and sanitary sewers.

City personnel implements site-specific Best Management Practices (BMPs) to prevent and reduce pollutants in facility runoff. Since BMPs are tailored to the unique activities conducted at each City facility, the remainder of this section is organized according to facility type. For each facility type, information is presented as follows:

- Priority Sources
- BMP Requirements
- BMP Implementation
- Facility Inspections

2.1.1 Priority Sources

Nearly 65.5 miles of roads, streets, and highways are maintained by the City. The City is not responsible for maintaining roadways that are managed by other agencies or jurisdictions, or are privately owned. All City-maintained roads are routinely inspected annually, and more frequently upon request. Needed repairs are noted and performed as appropriate to ensure safety and riding quality for the traveling public. Roadway maintenance typically involves concrete and asphalt repair, drain inlet cleaning, litter removal, and street sweeping. Other BMPs, as listed in JURMP 2.4, are implemented as required.

2.1.1.1 BMP Requirements

JURMP 2.4 defines minimum BMP requirements for the City-maintained road system. BMPs applicable to roads, streets, and highways have been reviewed, and remain unchanged. Below is a brief listing of some of those BMPs:

- Vegetation Control
- Proper Material Storage and Coverage
- Concrete Maintenance Methods for Wash-outs
- Designated Vehicle Maintenance Area
- Vehicle Washing Area
- Employee Training

2.1.1.2 BMP Implementation

Details regarding specific road maintenance activities conducted during this reporting period are provided below. It should be noted that other road maintenance BMPs not described here were identified in JURMP 2.4 and are implemented as necessary.

Street and Facility Sweeping

The Department of Public Works (DPW) Streets Division insures that City-maintained roads and facilities are swept at the following frequencies and locations:

- Curbed Streets (Broadway, Buena Vista Ave., Massachusetts Ave., and School Lane) – weekly
- All Other Curbed Streets – biweekly
- Non-Curbed Streets – monthly
- Center Islands and Medians – monthly
- Parking Lots and Alleys (Broadway Business Lot and Lester Ave. Alley) – weekly
- All Other Parking Lots and Alleys – monthly

The City considers sweeping to be an extremely effective BMP in that it prevents accumulated material from entering the stormdrain conveyance system. To quantify its sweeping activity, DPW Streets Division crews record the length of streets swept and the amount of debris collected on a month-by-month basis. The City swept approximately 80 miles during FY 2007-08 and collected 169.75 tons of debris. The City swept approximately 80 miles during FY 2006-07 and collected 169.75 tons of debris. These figures include the regular sweeping of roads, specialty or requested road sweeps and corporate yards.

The City swept 100% of public maintained curbs and gutters both reporting periods. The City is responsible for 65.5 miles of roadway in Lemon Grove. The extra mileage swept is due to parking lots and special request sweeping on private streets. The City also sweeps bus stops, various parking lots and miscellaneous private streets based on need.

The City is now contracting street sweeping services with Day and Night Sweeping. Their contract followed the guidelines from the previous contractor for this reporting period. Sweeping frequencies are scheduled to increase over the next few reporting periods to double the current contract amount. This increase however is based on the current level and quality of the contractor's performance. If the contractor does not meet quality standards - based on citizen complaints and visual inspections - a new bid process will take place to replace them.

2.1.1.3 Road Inspections

All City roads are inspected annually or more frequently upon request, and needed repairs noted and preformed as appropriate to ensure safety and riding quality for the traveling public. During this reporting period, all City roads were inspected prior to and during the rainy season. Based on these results, maintenance crews evaluated potential stormwater impacts and identified the need for cleaning, maintenance, and future upgrades. Conveyance system and road right-of-way cleaning conducted as a result of these inspections is described in section 2.1.2.3 below, and street sweeping in section 2.1.1.2 above.

2.1.2 Municipal Separate Storm Sewer System (MS4)

The City maintains the publicly owned portions of the MS4 within its boundaries. The City's MS4 inventory consists of culverts, channels, ditches, pipes and related flood control structures.

2.1.2.1 Priority Sources

All City roads, streets, and highways are designated as high priority municipal sources. The Public Works Yard is also designated as high priority because of pollutant potential. See Table 2.1 which details the City's priority municipal sources.

Table 2.1 – High Priority Municipal Facilities

Facility	Address	Basis for Designation	Receiving Water
Roads, streets, highways, and parking facilities	Throughout City	Specified in Order 2007-01	Chollas Creek and Sweetwater River
Flood management projects and flood control devices	Throughout City	Specified in Order 2007-01	Chollas Creek and Sweetwater River
Public Works Yard	2873 Skyline Dr.	Specified in Order 2007-01 and has potential to discharge pollutants of concern.	Chollas Creek

2.1.2.2 BMP Requirements

JURMP 2.4 defines minimum BMP requirements for City-maintained MS4 facilities. BMPs applicable to the City-maintained MS4 have been reviewed, and remain unchanged.

2.1.2.3 BMP Implementation

Further detail about specific MS4 maintenance activities conducted during this reporting period is provided below. Other BMPs identified in JURMP 2.4, but not described here, are implemented as required.

Conveyance System Cleaning

During this reporting period, City staff inspected forty-three roads, 190 catch basins and sixteen conveyances connected with the MS4. Only six conveyances and 60 catch basins were found to be in need of cleaning, and 100 percent of these were cleaned prior to the end of the reporting period. This resulted in the removal of approximately 1,830 pounds from the catch basins, conveyances, and roads. The City also manually removed invasive plant growth from those six conveyances, providing approximately another 1,800 pounds of green debris. The cleaning of catch basins and conveyances is an annual event that takes place prior to the beginning of the rainy season and usually occurs between October and November.

In the past few reporting periods, the DPW has noticed a slight decrease in the trash quantities found in and around conveyances. DPW attributes this to a more effective street sweeping program and the implementation of Trident Curb Screens in several high trash areas of the City. During FY 2007-08, the City also installed five Green Visions Solutions curb screens in high sediment areas. The screens were installed towards the end of the reporting period on a trial basis and the City is awaiting the rainy season to access their effectiveness in regards to sediment capture.

Attachment A-1 contains the initial mapping of the City's major drainage pipes.

Storm Drain Stenciling

The City began implementing a new drain label program. Instead of painting stencils, the City began using drain labels that are more permanent and longer lasting by using thermoplastic labels. They are heat set onto the concrete any place around the drain and will last a minimum of 10 years. They are also fade, graffiti and tamper resistant. As of the end of the 2004-05 reporting period, the City had placed labels on approximately 30 drains on Broadway, a main through-way for the City and commuters. The City then placed an additional 30 labels on various inlets throughout the City with a focus on major streets first, during 2005-06. The City maintained this program in 2007-08, by installing an additional 30 labels on drains throughout the City, covering major streets first; bringing the current total for labeled drains on primary streets to approximately 90. Soon the City will begin placing them on non-primary City maintained residential streets. The City plans to purchase approximately 30 each fiscal year until all the drains on public maintained streets are labeled. In the meantime, the City continues to

let “I Love a Clean San Diego” stencil drains that are un-marked or have worn-out stencils.
The City continues to require developers to mark any new drains in connection with development or redevelopment. The City encourages them to use concrete wet stamps or thermoplastic labels for longevity on private streets and requires either if the street will be maintained by the City. See Attachment A-2 for a picture of the thermoplastic labels and the concrete wet stamp.

During FY 2007-08, the City installed five test Green Vision Partner’s Curb Screens in various high sediment locations. The City wished to test their durability and usefulness in conjunction with the new street sweeping program. Insufficient data is available at this time to begin judging their effectiveness, but informal visual inspections show a decrease of trash in the catch basins and the trash is curb side making it easier for the street sweeper to pick up.

In the pervious reporting period, six Trident Curb Screens were located in various test sites throughout the City. These screens have so far proved durable and effective at preventing trash from entering the covered conveyances. DPW has noticed a considerable decrease in the need for cleaning at these locations. It is difficult to access the specific amount removed prior to entering a particular conveyance as the street sweeping contractor provides gross tons collected. However, informal visual inspections by the DPW crews verify that less trash is entering those conveyances protected by the Trident Curb Screens. As fiscal funds allow, the City will be installing more of these screens on primary roads and in high foot traffic locations, such as near schools and fast food restaurants.

2.1.2.4 MS4 Inspections

The Streets Division conducts annual field investigations in order to inspect the City-maintained MS4 to identify the need for cleaning, maintenance, potential illicit connections and illegal discharges (IC/IDs), and to assess the structural integrity of facilities. As reported above, the City inspected forty-three road segments, sixteen conveyance facilities, and 190 catch basins during this reporting period.

2.1.3 Sanitary Sewer System

The Sanitation District manages and maintains a collection system of 64.952 miles of sanitary sewer pipeline. The sanitary sewer system serves the entire Lemon Grove area and connects with San Diego and La Mesa’s sewer systems. San Diego and La Mesa share sewer space with Lemon Grove. La Mesa utilizes 728.60 EDU of Lemon Grove’s sewer space; San Diego uses 986.20 EDU.

2.1.3.1 Priority Sources

The City operates no high priority waste water facilities within its boundaries.

]2.1.3.2 BMP Requirements

JURMP 2.5 details minimum BMP requirements for all sanitary sewer system lines. BMPs applicable to sanitary sewer system facilities have been reviewed, and remain unchanged.

2.1.3.3 BMP Implementation

Control of Sanitary Sewer Overflow Events

DPW staff responds to sanitary sewer overflows (SSOs) according to protocol established in RWQCB Order 96-04, the current Waste Discharge Requirements and Water Quality Order 2006-0003. During FY 2007-08, the City had 5 Category 2 private SSOs. None of the discharge reached the MS4 or receiving waters. The new Discharge requirements require the City to tract all reported spills even if the they are from private, which the City does not track or maintain.

Limiting Infiltration from the Sanitary Sewer System to the MS4

As a proactive means of preventing or limiting infiltration from the sanitary sewer system to the MS4, the City conducts aggressive inspection and maintenance programs for both systems. City personnel are instructed to investigate locations exhibiting sewer-related discharge or odor during MS4 inspections (further discussed in section 2.1.2.3 above). No instances of infiltration were noted during this reporting period. Sanitary sewer system inspections are also conducted on scheduled intervals to ensure the functionality and structural integrity of the system. These are described further below. The camera/video truck was purchased and utilized during this reporting period.

2.1.3.4 Inspections

Sanitary Sewer System Inspections

The City regularly inspects its sanitary sewer system to ensure functionality and structural integrity. Towards the end of reporting period 2004-05, the City began cleaning and inspecting public sewer lines in-house. During this reporting period, all public sewer lines were cleaned and maintained in-house.

Table 2.2
Sanitary Sewer Services in Feet

	Total FY 2005-06	Total FY 2006-07	Total FY 2007-08
Cleaned	**298,043**	**331,369**	**52,493**
Root Cut	**18,370**	**20,927**	**36,039**

2.1.4 Corporate Yards and Fleet Maintenance Facilities

The City's municipal facilities inventory includes one facility classified as a corporate yard and fleet maintenance facility. These facilities are classified as high priority, due to the potential pollutants stored on-site.

2.1.4.1 Priority Sources

Fleet Maintenance Facility

DPW operates one fleet maintenance facility that provides maintenance, repair and fueling to forty-five vehicles from all City departments. The maintenance is co-located with the DPW headquarters and is listed as the Public Works Yard on the inventory. The facility is considered a high priority threat to water quality due to the presence of hazardous materials, automotive fluids, and fuels on-site.

2.1.4.2 BMP Requirements

JURMP 2.4 defines all minimum BMP requirements at the DPW-maintained corporate yard. BMPs applicable to DPW-maintained corporate yards have been reviewed, and remain unchanged.

2.1.4.3 BMP Implementation

Fleet personnel always implement BMPs under the guidance of the facility's Fleet Manager. In addition to a periodic schedule of ground maintenance and housekeeping, the facility maintains an inventory of spill kits, absorbent, fiber rolls, and storm drain maintenance equipment. BMPs are also implemented to address particular activities of concern: vehicle and equipment repair, hazardous waste storage, vehicle washing, re-fueling, etc.

As in previous reporting periods, BMP implementation at the corporate yard and fleet maintenance facilities was verified and evaluated during routine facility inspections. Where inspectors noted a lack of BMPs or ineffective results, employees were required to implement corrective actions immediately.

2.1.4.4 Inspections

Fleet Maintenance Facilities

Though Fleet Managers are responsible for applying and maintaining BMPs on a daily basis, the Water Quality Coordinator conducted an annual inspection to verify implementation during this reporting period. The only notable infractions were an open dumpster at City Hall and a degraded straw wattle at the Public Works Yard. City staff has noticed a marked improvement in the maintenance of good housekeeping BMPs at City facilities. Water Quality staff believes this is

due in part to frequent informal inspections and increased staff training, as well as the formal annual inspection.

2.1.5 Parks and Recreation Facilities

2.1.5.1 Priority Sources

The Department of Recreation Services (DRS) manages stormwater discharges from seven park sites. Included among these are local and regional parks, park buildings (including the community center), historical sites and open spaces. In the inventory submitted with the City's JURMP, all parks are considered medium priority. See Table 2.2 for a detailed description of park areas.

Table 2.2 – Other High Priority Municipal Facilities*

Facility	Address	Basis for Designation	Receiving Water
Berry Street Park	7101 Mt. Vernon St.	Park facility may generate minor pollutants associated with green wastes, pesticides, and fertilizers. Not adjacent to any receiving waters.	Chollas Creek
Fireman's Park	School Lane and Central	Park facility may generate minor pollutants associated with green wastes, pesticides, and fertilizers. Not adjacent to any receiving waters.	Chollas Creek
Kunkel Park	8171 Lemon Grove Way	Park facility may generate minor pollutants associated with green wastes, pesticides, and fertilizers. Not adjacent to any receiving waters.	Sweetwater River
Monterey Heights Park	Canton and Glencoe	Park facility may generate minor pollutants associated with green wastes, pesticides, and fertilizers. Not adjacent to any receiving waters.	Chollas Creek
Lemon Grove Park	Washington and Alton	Park facility may generate minor pollutants associated with green wastes, pesticides, and fertilizers. Not adjacent to any receiving waters.	Chollas Creek

2.1.5.2 BMP Requirements

JURMP 2.4.2 defines all minimum BMP requirements for City parks and recreation facilites.

2.1.5.3 BMP Implementation

Because parks vary widely in both size and function, it is difficult to generalize about BMP implementation. All park personnel are instructed to implement BMPs at all times. In addition to a periodic schedule of ground maintenance and housekeeping, most facilities maintain an inventory of spill kits, absorbent, and miscellaneous storm drain maintenance equipment. BMPs are also implemented

to address particular activities of concern: material and waste storage, fueling, septic tank maintenance, etc. A complete list of facility-specific BMPs can be found in JURMP 2.4.2.

DRS has also endeavored to make the implementation of pollution prevention BMPs a priority at park facilities. Unless otherwise noted, these practices were implemented at all facilities in the DRS inventory. They include:

- The storage of used construction materials outside for future projects is being eliminated. The site that contained materials during the last reporting period is now empty of City materials. The City has plans to fence and lock the site to prevent the illegal dumping of large waste items like furniture. The fencing should be accomplished within the next two reporting periods.
- The prohibition on washing City vehicles and equipment on-site has continued to be enforced. All washing occurs off-site at appropriate locations. The majority of vehicle repair and maintenance is performed by Bob-Brown Automotive on University Ave. By having vehicle maintenance performed off-site, the City drastically decreases the number of pollutants stored at the Corporate Yard. The City is continuing to look into the possibility of in-sourcing oil-changes to allow for the use of re-refined oil. The City is currently searching for a closed loop system that would supply the oil and then take the used oil back for further recycling. The City has not been able to locate a closed loop system. The City has postponed the implementation of re-refined oil in City vehicles until the warranty on the new fire engine expires. If the City uses re-refined oil in the new engine it will nullify the repair and maintenance warranty. The inclusion of the fire vehicles is integral to the implementation of a re-refined oil program. Without the inclusion of the fire vehicles, the City would not be able to purchase the oil in the quantities sufficient to encounter fiscal savings. The City plans to renew its efforts to establish re-refined oil after the warranty expiration in reporting period 2009-10. Maintenance on the fire engines is preformed off-site through Grossmont High School District.
- The City uses pesticides and insecticides on a very minimal basis, only when a problem is persistent and can be dealt with no other way.
- All City parks maintain recycling facilities.
- The use of drought resistant plants is encouraged. See Section 2.2.2 for further information on the plants used in the City.
- The City installed 1 additional doggie bag dispenser at the Lemon Grove Civic Center and maintained a distribution of approximately 650 bags at the existing 4 locations in City parks.

2.1.5.4 Inspections

The City's Water Quality Coordinator conducts annual stormwater inspections to verify appropriate BMP implementation at all of its parks, regardless of priority classification. All observed deficiencies were noted and scheduled for correction. Many of the deficiencies noted during FY 2007-08 involved trash and debris. All deficiencies were promptly addressed. DPW Grounds crews inspect parks on a weekly basis for the removal trash and debris and for graffiti abatement. A repeat inspection after a clean-up day, showed a significant decrease in the visible trash and debris. The park parking lots are swept twice monthly to assist in removing trash and sediment on the impervious surface areas. See Attachment A-3 a copy of the facility inspection report.

2.1.6 Other Municipal Facilities

The City operates and maintains several additional facilities not captured by the categories outlined above. These include office buildings, a sheriff station, and a fire station. The Fire Department re-joined the City in July of 2004. All repairs, maintenance, and equipment storage is performed in a covered and completely enclosed garage/bay area with locked doors. All hazardous materials are stored in locked self-contained areas inside the bay area and labeled appropriately. Nothing hazardous is stored outside or un-locked.

2.1.6.1 Priority Sources

Offices

The City maintains four business offices and two public safety offices including the new fire station, which previously housed the Department of Public Works and Recreation Services. No new offices have been added during this reporting period, see list below. The Sheriff Station is connected to City Hall, therefore they are categorized together under City Hall, which is listed as a medium priority threat, as most activities are conducted in enclosed areas.

- City Hall and Sheriff's Department – 3232 Main St.
- Fire Department – 7853 Central Ave.
- City Hall Annex (Department of Recreation Services) – 3225 Olive St.
- Community Center – 3146 School Lane
- Department of Public Works – 2873 Skyline Dr.

Vacant Land and Excess Right-of-Way

The City owns one vacant property at:

- 6949 Central Ave.

This site will be considered medium priority due to the minimal on-site activity and lack of impervious surface.

2.1.6.2 BMP Requirements

All BMP requirements for the facilities discussed in 2.1.6.1 above are covered in JURMP 2.4. These BMPs have been reviewed and remain unchanged.

2.1.6.3 BMP Implementation

BMP implementation at facilities classified as miscellaneous is overseen as applicable by DPW, DRS, or facility personnel. Procedural requirements and staff training protocol are specific to each department, but in all cases are sufficient to ensure stormwater compliance at these facilities.

2.1.6.4 Inspections

Each facility identified in 2.1.6.1 was inspected at least once during FY 2007-08 to verify compliance with minimum BMP requirements. The main infraction was an open dumpster lid at City Hall, which has since been corrected and is checked by staff on a regular basis. The drip irrigation system installed in the landscaping at the front of City Hall during the previous reporting period has cut down significantly on run-off from the site. See Attachment A-3 for a copy of the facility inspection report.

2.2 Management of Pesticides, Herbicides, and Fertilizers

The City of Lemon Grove's Grounds staff uses only herbicides and algecides. The City's pest control contractor is Knott's Pest Control. Knott's Pest Control meets all BMPs for pesticide application found in JURMP 2.4.

2.2.1 BMP Implementation

The following BMPs, described further in JURMP Appendix 2.2.1, were implemented by DPW for the application of herbicides, algecides, and occasionally pesticides; although as mentioned above Knott's Pest Control handles the majority of the City's pest control needs.

- Safer Alternative Products
- Good Housekeeping Practices and Material Storage
- Vehicle and Equipment Washing and Cleaning
- Illegal Dumping Control
- Pollution Prevention

2.2.2 Use of Drought Resistant Vegetation

Grounds division of Public Works attempts to use drought resistant plants throughout the City's landscaping. Common variations of these plants used throughout the City are lavender, sage, oleanders, natal plum, rosemary, and pyracantha. The use of drought resistant vegetation allows for drip irrigation, which greatly decreases the amount of water used and limits the amount of potential runoff from sprinkler systems. A drip irrigation system also allows soils to absorb nutrients from fertilizers and compost preventing them from washing into the drains with irrigation water, a common residential pollutant problem that will be further discussed in Section 5.0.

2.2.3 Schedules for Irrigation and Chemical Applications

Weather conditions are always considered prior to outdoor pesticide applications. Depending on the formulation and characteristics of the pesticide to be applied, an application may be postponed or allowed to proceed prior to, or during, a rain event. This is because the Grounds division applies pre-emergent herbicides as part of its vegetation management program. Pre-emergent herbicides benefit from a gentle rain that soaks the pesticide into the soil where germinating seeds are killed; getting these types of herbicide to the root zone also controls existing young vegetation. The application of contact herbicides, on the other hand, is not permitted if precipitation is likely. These materials tend to wash off plant surfaces and contribute to water quality degradation.

2.2.4 Collection and Disposal of Pesticides

When available the City purchases herbicides in recyclable bulk containers. By reducing the volume and variety of herbicides, the department is able to maintain a minimal inventory of pest related chemicals.

As a general rule, emptied pesticide containers are triple rinsed and the rinse water is put in with the application solution. Containers are then disposed of in accordance with local regulations.

2.3 Employee Training

The City is committed to increasing the awareness of its employees regarding urban runoff issues, and effecting positive behavioral changes to protect water quality. To this end, two types of stormwater and water quality education are provided to employees.

- Basic Awareness Education; and
- Focused Employee Training

2.3.1 Basic Awareness Education

The goals of this element are to promote responsible behavior at home and work, and to encourage employees to act as the City's "eyes and ears." As described in section 2.4 of the City's JURMP, the City's goal is to provide some level of basic awareness education to all employees annually.

2.3.1.1 City Newsletter

The City has continued the Environmental Page in its biannual Newsletter. Each issue contains oil recycling sites and household hazardous waste information. The Fall 2007 edition contained an article on Fats, Oils and Greases, proper disposal of prescription medications, and on rainy season homeowner BMPs for limiting pollution in the storm sewer system. The edition also featured the standard used oil information and e-waste guide. The Spring 2008 edition featured information on the Creek to Bay Clean-Up event, BMPs applicable to home improvement projects, the City's reusable shopping bag giveaway, a brief recycling survey, information on household hazardous waste, free shade trees, and used oil recycling.

The Newsletter, which is produced by City staff, is distributed to the residents and businesses of Lemon Grove, as well as City employees. Because of the public and internal distributions, City staff is kept abreast of the current issues and knows what information is being given to the public. See Attachment A-4 for copies of the Newsletter articles discussed in this section.

2.3.1.2 Informal Staff Training

Water Quality staff continues the informal educational e-mail program. At least twice a month, staff sends a City-wide e-mail with new water quality information. The e-mails contain anything that has to do with water quality and pollution prevention. New sites such as www.bewaterwise.com or new articles from the BC's California Water News (a Brown and Caldwell daily e-mail newsletter) are shared with all City staff members. Water Quality staff has discovered that this method, although informal, provides a positive transfer of new information, up coming events, and technological advances in the water quality field. Water quality remains a primary focus for all staff through these small constant reminders and updates. It also provides staff an opportunity for internal dialogue without trying to schedule large scale meetings or trainings. The e-mails have been received favorably and will continue in future reporting periods.

Water Quality staff participated in weekly inter-departmental meetings with City planning, code enforcement, engineering and fire personnel. Current development projects, code updates, enforcement concerns, and construction site details are discussed. The meetings have provided water quality staff with the opportunity to regularly update the former mentioned department staff on

concerns and changes in the water quality program. The constant re-enforcement ensures that water quality remains an issue of primary concern for the development sector of City staff.

2.3.2 Focused Employee Training

2.3.2.1 Bi-Annual Public Works Staff Training

Each fall and spring, water quality staff participates in one of the public works safety trainings. Staff provided updates on new concerns and regulations, as well as obtaining the concerns of the public works staff. This year's training focused on the developing new permit and the changes it would bring for DPW staff. Water quality staff continues to provide DPW staff with informational brochures on used oil recycling and pet waste to utilize in educating the public further on these common infractions. The regular exchanging of information has been beneficial to all staff members involved. Water quality staff believes the continued involvement has increased public awareness as well due to the readily available information and more knowledgeable public works staff. Both staffs look forward to continuing the exchange of ideas and information.

2.4 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Municipal Component in FY 2007-08. It consists of three primary elements: 1) a narrative assessment, 2) a discussion of the City's success in meeting specific quantifiable targets, and 3) a discussion of issues related to the spatial and geographic variability of program data.

2.4.1 Narrative Assessment

The City made a number of important improvements to its municipal activities programs in FY 2007-08. In spite of the large number of individual activities and programs comprising the City's Municipal Component, continued progress and improvement was made in all areas. In particular, another year of experience in implementing BMPs at City facilities has translated to a more complete integration of stormwater mandates into standard operating procedures. City crews also continued to pound the pavement throughout the community, collecting greater amounts of debris from our streets and MS4 than they ever have before. City crews are also better educated on the water quality program and can provide more information to residents themselves. They are also more knowledge about illegal practices and many issues have been dealt without code enforcement involvement.

The City is continuing to gather GIS information. The City purchased new aerial photographs of the city limits, as well as Lidar graphs. The City is currently investigating survey equipment and GIS programs. The City currently has

ArcView 3.2 with minimal mapping and levels. The City is investigating upgrades versus new systems. The City plans to have a functioning GIS system in place within the next five to eight years depending on budgetary constraints. The City has evaluated several different options for its GIS system and has performed an initial needs assessment. A needs assessment for GIS implementation was performed during this reporting period. The initial stages of implementation will involve base data and updates for the existing layers based on current technology.

Staff training continues to develop and change based on staff's needs and new incoming information. The City focused this reporting period on SUSMP specific training because of the audit and a need to improve the SUSMP review process. Staff also discovered that employees were more favorable towards specialized trainings due to the repeated generic trainings of the past two reporting periods. Water Quality staff plans to rotate specialized and generic trainings every few years. This will allow the limited Water Quality staff to provide optimal trainings regardless of the topic. The rotation also allows City staff a chance to receive more in-depth training in a field that directly relates to their daily tasks.

2.4.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changed in Knowledge / Awareness
- Level 3: Behavioral Changes / BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activity-Based Targets

The City is beginning to track activity targets and establish long-term goals for the water quality program. Below is a listing of the targets for this reporting period:

Target 1
Provide More Targeted Staff Training
100% complete

Target 2
Improve and provide permanent labels for local stormdrains

50% complete (on-going process)

Target 3
Improve catch basin inventory
75% complete (on-going process)

Target 4
Obtain educational decals for the DPW tailgates (fiscal constraints temporarily delayed the purchase of the decals, should be in place during the next reporting period)
50% complete

Target 6
Increase information available through the Newsletter
85% complete (more education is always needed)

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not track specific measures related to changes in knowledge or awareness. However during this reporting period, City staff showed an increased awareness of water quality issues by requesting specific, focused trainings. In discussions with water quality staff, they expressed a desire to learn more about specific segments of the water quality program like SUSMP requirements and processes.

Level 3 Outcomes: Behavioral Change/BMP Implementation

The City did not characterize or track specific measure related to behavioral changes as part of its Municipal Component in FY 2006-07. The need for the identification and assessment of such measures is being considered for the next reporting period. The City is currently working on connecting BMP implementation to load reductions and program effectiveness. The City feels that despite the lack of official tracking, progress is being made and behaviors are changing. Staff's efforts to maintain the closed dumpster lid are evidence of the change in behavior, as well as the installation of the drip irrigation at City Hall. All City trucks are now equipped with sand bags and gravel bags to contain any emergency run-off problems, until other assistance arrives. The bags are also available to the residents in case of drainage problems.

Level 4 Outcomes: Load Reduction Estimation

As stated above the City of Lemon Grove is working on a connection between BMP implementation and Levels 4 – 6. Some program data can be used to make fairly straightforward estimates. The Municipal Component lends itself to this process easily as the City is already required to keep extensive records of daily activities. The process is also facilitated by centralized data collection.

However, the process is in its infancy with a more complete picture projected for future reporting periods. As reported in Section 2.1.2, the City's street sweeping and MS4 maintenance activities resulted in the diversion or removal of a combined 3,360 pounds of debris from the MS4 this year. Unlike other waste streams likely to be only partially introduced or conveyed to the MS4, the entire amount of these totals is assumed to be a load reduction.

Table 2.4 - of Load Reduction Calculations for Municipal Activities

Activity	Amount Collected	Adjustment Factor	Estimated Load Reduction
Street Sweeping	169.75 tons	None	169.75 tons
MS4 Cleaning	3,360 pounds (1.815 tons)	None	3,360 pounds (1.815) tons
			Total 171.565 tons

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between municipal sources and water quality outcomes. The City will continue to explore these relationships. The City is attempting to connect BMP implementation to load reductions and eventually receiving water quality. The theory is that with the proper BMPs in place, a certain percentage of load reduction is expected, load reductions equal lower pollutant levels which lead to improved water quality.

2.4.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any municipal program data during this reporting period.

Section 3.0 Industrial – Commercial Component

This section describes actions taken by the City during FY 2007-08 to minimize discharges from industrial and commercial facilities and their impact on receiving water quality and other environmental resources. The City continues to implement a number of complementary and inter-related program activities, including the following:

- Maintaining a watershed-based inventory of industrial sources
- Requiring BMP implementation through ordinance and permit
- Encouraging BMP implementation through notification and outreach
- Monitoring compliance through inspection and enforcement

3.1 Priority Industrial-Commercial Sources

For its FY 2007-08 JURMP Annual Report, the City identified nine high priority industrial sites in its borders. Since a single repository of facility data does not exist, the City relies on other data sources as well as field reconnaissance, to modify its inventory. The City uses the annual industrial/commercial inspections to verify BMP and good housekeeping standards in its business sector. During this reporting period the City brought its water quality inspections in-house with a new part time code enforcement/water quality inspector position. The City will be transitioning data and revamping the program over the next few reporting periods. This is not as difficult a process as it first appears, because the City does not experience large quantities of new development, the facility list remains fairly stable from year to year. The City updated its city-wide business and development database through information gathered in last year's and this year's reporting periods. This reporting period was spent training staff and learning to utilize the new system. No statistics are available from the updated system due to the short time in use.

As required under Permit section D.2.b, the City maintains and annually updates a city-wide inventory of high priority commercial sources as a basis for its outreach and regulatory programs. This inventory currently includes 139 individual sources. Table 3.1 summarizes the commercial inventory by business type and indicates the sources of information used to compile data for each type.

Table 3.1 - Summary of High Priority Commercial Sources

Commercial Activity	Number of Facilities in Lemon Grove
Automobile Dealers/Rentals	18
Automobile Supply Stores	9
Automobile Repair/Paint	9
Automobile System and Tire Repair	56
Automobile Cleaning/Washing	3
Gas Stations	7
Eating/Drinking Establishments	60

Landscaping, includes lawn care	9
Nurseries and Greenhouses	1
Pest Control	3
Equipment Repair/Maintenance/Cleaning	3
Metalwork	6
Masonry	4
Parking Lots and Storage	3
Carpet/Building Cleaning	21
Pool and Fountain Cleaning	3
Total	**215**

As Table 3.1 suggests, the City has yet to locate a single, centralized source of commercial facility information. Several of the facilities with commercial SIC codes are high priority industrial due to their proximity to Chollas Creek, a 303d listed water. This explains the discrepancy between the above number and the commercial inventory number. While the City remains hopeful that improved sources of facility data and information can be identified, in the meantime it must continue to rely on existing data sources such as permit databases, the Yellow Pages and field reconnaissance.

3.1.1 Additions to the Industrial Inventory

There were no facilities that were recommended for addition to the City's high priority category during this reporting period.

3.1.2 Deletions from the Industrial Inventory

The City discovered no facilities during FY 2007-08 to be deleted from the inventory.

3.1.3 Updated Industrial Inventory

The City's updated industrial inventory currently consists of 27 facilities. This number includes all industrial facilities within the City. Table 3.2 provides a summary of the types of sources contained within the facility inventory.

Table 3.2 - Summary of High Priority Industrial Sources

Industrial Activity	Number of Facilities in Lemon Grove	Revised High Priority Category Facilities
Waste Disposal and Recycling	1	
Equipment/Transportation	3	2
Metalwork	2	3
Building Supplies and Woodworking	3	2

Industrial Paper		1
Contractor, Special Trade		1
Specialty Hardware, Drapery		1
Total	**9**	**10**
	Total Facilities	**19**

3.2 BMP Requirements

3.2.1 BMP Requirements for Industrial Dischargers

The City's SUSMP and JURMP documents lay out a set of minimum BMPs required of industrial and commercial businesses in the City. A detailed discussion of these requirements was provided in JURMP section 3.4.1 and section 4.3.1, respectively. The City's tiered approach to establishing BMP requirements addresses all regulated industrial activities; broad standards apply to all types of industrial activity, and progressively tougher standards are imposed on high priority activities to reflect their greater risk to water quality. The JURMP also provides specific BMPs based on business type as well as the general ones previously discussed (waste disposal, metal work, etc.).

3.2.2 Pollution Prevention Requirements for Industrial Dischargers

In recognition of the important role that pollution plays in the long-term success of the City's industrial and commercial program, the City views pollution prevention as part of BMP implementation. The JURMP in Section 3.1 and 4.1 discusses the City's pollution prevention goals with respect to industrial facilities. The City feels that if BMPs are implemented, that pollution prevention is obtained to the maximum extent practicable (MEP). The section further discusses the importance of education and outreach for further pollution prevention.

3.3 BMP Implementation

3.3.1 City Strategy for Ensuring BMP Implementation

The City and other Copermittees submitted the document *A Framework for the Implementation of Best Management Practice (BMP) Programs at Commercial and Industrial Sites* to the RWQCB on October 16, 2003. As noted for commercial sources, the City's strategy for ensuring BMP implementation at industrial facilities builds on this framework, as well as activities it is already conducting.

The City previously contracted with D-Max for their inspection needs. However, during this reporting period, the City brought the inspections in-house. The new staff member is working from the questionnaires and forms created by D-Max to maintain consistency in data. Attachment B-1 contains the forms used by D-Max

and now City staff to evaluate the facilities. A list of the inspected facilities can be found in Attachment B-2. The new inspector is also a code enforcement officer. The City hopes the combined position will strengthen the inspection program and close any compliance gaps. However, budget constraints limit the growth of these fields, with the position remaining a split position until such time as the budget can handle two full time positions. Even so, the new split position allows for easier, timely follow-up on facility violations, as well as creating a consequences-for-violations policy. A new code enforcement process for water quality violations is currently being implemented by the City for use with non-compliant construction sites and illegal discharges. The City has expanded the process and municipal code to include non-compliant industrial and commercial facilities, except with reference to monitoring and testing. Due to budget constraints and staff's limitations, the monitoring and testing element will be added later as the budget allows. The water quality code enforcement language is now contained in the recently passed municipal code updates in response to new Permit due dates.

The City created a stormwater fee for businesses and residents. The City has explored different billing criteria based on the experiences of other cities. The City explored solid waste services as a possible billing mechanisim. The fee was standard for residential but differentiated based on facility/business dumpster size and frequency of pick-up. The fee allowed the City to recoup some of its water quality expenditures, but would also increase public awareness and participation. People and facilities are more likely to implement BMPs if a regular reminder of their importance is provided.

During late FY 2004-05, the City developed a fee based on trash removal services. The City believed a correlation existed between the amount of trash a site produced and the site's potential for pollution contribution. However the constraints of Proposition 218 made the fee vulnerable, therefore the City decided to re-vamp the fee structure to prevent any complications. The fee is no longer based on trash services for commercial facilities, but is attached to existing City fees for licenses and permits. A flat fee remains in effect for residents based on solid waste fees. The combined commercial and residential fees only cover one third of the cost of the City's stormwater program. The percentage is expected to lower with increased costs incurred by the issuance of the new MS4 permit, however they do not compensate for increased requirements and new programs. The already strained General Fund will continue to bear the brunt of the program's cost. With the vote failure in Encinitas, a coastal city, the inland cities have little hope of passing a stormwater fee without Proposition 218 exemption.

3.3.1.1 BMP Selection and Application

As discussed in the framework document, the goal of the Copermittee program is to assist businesses in selecting appropriate combinations of BMPs that address their unique circumstances, activities, and discharge potential. While the City has existing BMP requirements in its JURMP document, BMP selection and application is an ongoing and iterative process that reflects a constantly evolving state of knowledge. As such, review and assessment of available options are standard elements of the City's program planning process.

A need exists to ensure regional consistency between Copermittee efforts. For instance, regional collaboration is beneficial in disseminating regionally consistent information to businesses, and for sharing information about practices that are working and those that are not. The Copermittees' BMP Workgroup provides a forum for exploring these and other key issues. The City will continue to participate in this venue, and in doing so will seek to provide an understandable and regionally consistent message to the businesses it regulates. The City also participates in a San Diego Bay Watershed workgroup that explores topics pertinent to the entire watershed. These topics include BMP implementation and strategies for ensuring effectiveness. Effective education is key to ensuring BMP implementation. The City participates in both the County's Green Business meetings and the Copermittee's Outreach and Education Workgroup. The groups collaborate and share ideas and solutions. The City feels its participation in these venues is valuable in developing an effective and well-rounded program. Collaboration also ensures consistent messages to area businesses. The businesses know what to expect if they re-locate to another area of the County. Where applicable, the City will advocate the use of the January 2003 Stormwater Best Management Practice Handbooks published by the California Stormwater Quality Association (CASQA). These handbooks provide detailed and up-to-date information on BMPs for both commercial and industrial activities.

3.3.1.2 Outreach and Notification

Although compliance inspections are the cornerstone of the City's industrial facilities regulatory program, education is key to ensuring effective implementation by facility operators. The City is working to improve its outreach to the industrial and commercial facilities within the city-limits. Due to the City's decision to bring the inspections in-house, the results of the inspections were not received until after the end of the reporting period, therefore any improvements and follow-up are representative of the previous year's inspections.

Several types of outreach and notification activities can be effective in ensuring that business operators have been adequately informed of their compliance obligations and provided useful information on how to meet them. As shown

below, the City attempts to utilize each of the following types of outreach to varying degrees as part of its outreach and notification process:

- Printed Materials
- Direct Mailings (including e-mail)
- Workshops and seminars
- Websites and hotlines
- Direct contact
- Industry associations

The degree to which any of these tools are used will vary by specific program area, as well as the interest level of regulated parties. For instance, workshops and seminars will generally be made available upon request, but the City may specifically target certain sectors it considers to be in need of extra attention. Outreach will also play a proportionally larger role in the City's approach to businesses not subject to an active inspection process. Community groups and community outreach events can also play a useful role in reaching some types of commercial businesses. The City intends to increase its emphasis in this area on a continual basis. Three public events that lend themselves to information distribution are the Fire Department Open House held in October, the Winter Bonfire held in December, and the Spring Festival held in April or May.

The City is also working to improve its notification system. Staff is working to expand its database to contain all previous and present violators. The database will contain the number of violations, the type of violations, contact information, and notification information. The database will allow the City to track repeat offenders and establish a better code enforcement policy. By tracking violation type, the City can better target its outreach efforts, making them more effective educational tools.

The City is currently working to alter the emphasis of its outreach. The current focus is on "don'ts"; the City is attempting to turn that around and make the focus "what to do." The City believes that many violations continue because businesses and developers are not aware of alternative methods. If the focus of the outreach becomes "what can be done", people have an alternative behavior, not just a change in knowledge. As stated above, for industrial facilities and construction, CASQA has very comprehensive BMP handbooks, which provide a variety of treatment methods based on activities and pollutants. Informing facilities of resources is a very simple example of positive outreach that provides people with behavior alternatives. Repetition is also key in an effective outreach program. The more often facilities are notified, the harder it is to claim ignorance. The City continues to investigate the implementation of a FOG (Fats, Oils, and Grease) program in conjunction with the issuance of the new Wastewater Discharge Requirements order. City personnel received grease trap and inceptor inspection training at the end of the previous reporting period and hope in future reporting periods to begin grease trap and inceptor inspections at local

facilities. The needs assessment for the sanitation district showed a need for a FOG program and the City is working to develop a program that will serve the needs of the sanitation district and water quality.

3.3.1.3 Compliance and Enforcement

The City continues to use routine inspections as its primary means of compliance certification for industrial facilities. All industrial and high priority commercial facilities in Lemon Grove are now being performed by new in-house staff. The staff turn-over and development of new internal systems will be a slow process, but the City hopes to have a database, based on the one previously utilized and created by D-Max, up and running by the next reporting cycle. All required inspections were performed this year for both commercial and industrial facilities. Frequently found concerns were lack of good housekeeping training below the management level and poor spill control programs. The City has already begun follow-up investigations. The new staff person also functions as a code enforcement officer, so if continued violations are observed, the process for dealing with those violations is more streamlined and time efficient.

The City sent no code enforcement letters based on inspections during this reporting period to local industrial and commercial facilities. No complaints or investigations were needed at local facilities. The City is working on responding to the suggestions based on the inspection results for any follow-up visits. The final report was not received until after the end of the reporting period, but the City is working to schedule second inspections at several facilities and sending educational information to several others. The educational materials explain the NONA/NEC possibilities and what is required of each facility. Attachment B-3 contains a copy of the education packet now available for distribution.

3.3.2 Outreach to Industrial and Commercial Businesses in FY 2007-08

The City provided outreach to the industrial and commercial sector through several avenues in FY 2007-08. Specific activities are described below.

3.3.2.1 Outreach Events Targeting Industrial and Commercial Audiences

During this reporting period the City did not perform any outreach events that targeted Industrial audiences directly. However, through the inspection process, all industrial facilities are reached in some manner with water quality information. Each facility receives a copy of their inspection complete with recommendations for improvements. In future years the City plans to up-grade its industrial outreach. The following is a list of the activities the City wishes to implement in future reporting periods:

- Workshops on water sampling (a number of facilities are in violation on this aspect)

- A general information sheet about compliance with the General Industrial Permit and the Permit affecting the local jurisdiction
- Workshops on dry-cleaning methods for spills and general good house-keeping practices

Some activities that the City is currently engaged in will continue. A listing of these activities is below.

- Brochures and materials available at City Hall
- Personal interaction through licensing, permitting, and complaints
- Mass mailers to commercial businesses
- Outreach at public events such as the Winter Bonfire and Spring Festival

The City continues to increase and develop its outreach to the automotive facilities and food and beverage facilities. Some of the tactics used during inspections include:

- Brochures and materials available at City Hall
- Personal interaction through licensing, permitting, and complaints
- Mass mailers to commercial businesses
- Continued use of the *What's Cooking Guide*
- Outreach at public events such as the Fire Station open house and the Winter Bonfire

The City also hopes that by bringing their inspections in-house, more detailed outreach will obtainable and pursueable. Simply having a staff person perform the inspections increases the level and quality of outreach. Violations can be dealt with in a speedy, consistent manner.

Partnerships

The County-chaired Green Business Group continues to make progress in developing a self-assessment program for small automotive businesses. The goal of the program is to recognize businesses that are in compliance with environmental regulations and that take extra steps to go beyond compliance in the areas of pollution prevention, energy, and water conservation, and solid waste reduction and recycling. The program is aligned with statewide green business standards and has already approached several businesses in San Diego County. To promote the use of "green" business practices, a public flyer was developed along with self-assessment checklists that are distributed by workgroup stakeholders during business inspections, trade association meetings, and at various community events. BMP information is included in the checklists and in the supporting materials provided to the businesses. These materials are all included as Attachment C and are available on the Workgroups website at www.projectcleanwater.org/html/wg_green_bus.html.

3.3.2.2 BMP and Pollution Prevention Resources

Providing business representatives with useful sources of BMP information is a major focus of the City's stormwater program, and is emphasized in other regulatory programs as well. In this respect, particular stress is placed on pollution prevention practices.

The City's Pollution Prevention Program continued to promote pollution prevention practices among local businesses and the public during this reporting period. Stormwater and urban runoff messages are incorporated into all pollution prevention literature and program content. Through this program, the City continues to pursue partnerships, which provide important opportunities to integrate industrial stormwater program elements into existing programs, materials and avenues of distribution.

3.3.2.3 Outreach During the Inspection Process

Personal communication through the inspection process is perhaps the most effective means of imparting useful BMP information to industrial operators. As described below, DMax conducted twenty-four industrial facility inspections during this reporting period. During these inspections, DMax provided detailed compliance information for facility operators. Direct communication through the inspection process, augmented by various other outreach tools, will continue to be the City's primary means of outreach to industrial businesses.

3.4 Compliance and Enforcement

In addition to educating business owners and operators, the City now provides in-house inspection services to conduct routine inspections and respond to business-related complaints to verify and enforce compliance with stormwater requirements. In all instances, enforcement is pursued as necessary to return violators to compliance.

3.4.1 Inspection of Industrial Facilities

The City inspected all twenty-seven industrial facilities during this reporting period. One hundred percent of the City's industrial facilities were inspected including low and medium level facilities.

Each industrial inspection consists of observable behavior and asked questions. The first portion of the inspection details facility and site information. The general information includes all required codes and classification information.

The inspection also includes a section detailing the BMPs in use, both observed and discussed. The final portion details recommended improvements and possible City action. The majority of compliance actions that were recommended

dealt with the up-graded high priority facilities and the need for them to file NOIs or NONA/NECs and create monitoring programs. The facilities will be re-inspected and the necessary paperwork followed-up with during the next reporting cycle. The City has already contacted several of the facilities and is working with them to ensure they are in compliance with the Permit.

During this reporting period, the City inspected 54 high priority commercial facilities. As stated in section 4.3.1.3 above, the City focused on eating and drinking establishments, automotive facilities, and facilities with non-compliance comments from past inspections. Inspectors' primary function is to assess compliance with minimum BMP requirements, which are specific to the types of facilities and activities designated as high priority by the Permit. Each inspection is conducted in the presence of a facility operator who has the authority and responsibility to ensure the implementation of corrective actions should they be required. For more inspection data see Attachment B1.

3.4.2 Complaint Investigations Involving Industrial Facilities

To the knowledge of City staff, no complaints were filed against Lemon Grove industrial facilities during FY 2007-08.

3.4.3 Enforcement of Violations at Industrial Facilities

During FY 2007-08, all enforcement activities consisted of detailed notification by letter and a new code enforcement policy. See Attachment B-4 for the flow chart demonstrating the new policy. The City sent BMP housekeeping information to all the industrial facilities listed in the previous reporting period as having improper or poor BMP implementation. The City is currently working to ensure the upkeep of BMPs at its industrial facilities. The City's primary focus during the next reporting cycle will be collaborating with the industrial facilities to ensure complete compliance with water quality standards and pollution prevention efforts.

3.4.4 Reporting of Non-Compliant Sites

The City did not have a situation requiring it to report any non-compliant sites to the RWQCB over the course of this reporting period.

3.5 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Industrial Component in FY 2007-08.

3.5.1 Narrative Assessment

In FY 2007-08, the City continued a revamping of its notification system. An initial step in this re-designing was the contracting of DMax in 2002 to perform annual inspections of all industrial and commercial facilities in Lemon Grove. However, the staff position has lacked consistency on a year to year basis and keeping a yearly account of facilities in violation has been difficult. The City has a record of all notices, but no database to assist in analyzing the information. During this reporting period, the City began to establish a data base to chronicle notifications as well as hiring in-house staff to perform facility inspections. A database will facilitate later effectiveness assessments by allowing the City to analyze past violations by type and frequency. If a decrease in violations or in BMP violations is evident, then levels of effectiveness are easier to assess. The new staff person is a split position being a part time code enforcement officer and a part time water quality inspector. The City hopes the combination will stream line any compliance issues and limit repeat violations. A continual record of violations will also enable the City to focus its education and outreach to fit the specific needs of the industrial community in Lemon Grove.

The City implemented a new database for tracking industrial and commercial facilities within the City's boundaries. The City is still inputting past data to bring the system up to date to allow for tracking and figuring out how to maintain consistency with the data gathered by D-Max. Each facility will have a file that contains past inspection data and compliance issues. DMax and the City have focused on updating the current business facility list to ensure accurate database information. This was how the ten new facilities were located and re-evaluated for correct prioritization during FY 2006-07.

The City believes its current program is in compliance but can be further developed to make it an outstanding and effective program. The City is aware that the need to assess effectiveness is of high importance. Therefore, the City worked cooperatively with other Copermittees to develop a comprehensive framework for reviewing and possibly revising existing programs (*A Framework for the Implementation of Best Management Practice [BMP] Programs at Commercial and Industrial Sites*, submitted to the RWQCB on October 16, 2003). It is through the use of this framework that the City hopes to improve and further develop its existing program. The City is moving towards a more BMP based program. The City believes that BMPs are the backbone of an effective program. Through proper implementation, BMPs present an excellent measuring medium. Once the BMP is in place, the prevented pollutant load can be assessed.

In 2004, the Stormwater program came under new management. The City combined its Public Works Department and its Engineering Department. In August 2004, the City hired a new Water Quality Program Analyst. The yearly turn-over in the stormwater position has made it difficult for the program to develop and grow. However, the City is working on making certain elements

standard, so that a basis is present from which growth can occur regardless of who is running the program. Combining the above mentioned departments facilitates the collection of stormwater data. Public Works personnel are the front-line, so to speak for City stormwater maintenance. By having them in the same department as the Stormwater manager, it will be easier to assess and improve collection methods and data.

No specific management practices or BMPs relating to industrial facilities or activities were identified as being ineffective during this reporting period.

3.5.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changed in Knowledge / Awareness
- Level 3: Behavioral Changes / BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activity-Based Targets

Target 1
Begin database for tracking non-compliant facilities
50% complete (the database needs more back data entries to be accurate)

Target 2
Update JURMP industrial and commercial list through the new inspection process
85% complete

Target 3
Provide educational material to those facilities eligible for NONA or NEC
100% complete

Target 4
Create annual activity specific informational mailer
30% complete

Target 5
Increased outreach at community events

100% complete

Target 6
Increased outreach to eating and drinking establishments
85% complete (more detailed outreach is still desired)

Target 7
Increase outreach to automotive facilities
85% complete (more detailed outreach is still desired)

Target 8
Improve education through business license renewals and new business licenses
40% complete (still working on informational mailer to include in renewal notice, in-person staff interaction has increased when applicants renew at City Hall)

Level 2 Outcomes: Changes in Knowledge / Awareness

The City did not characterize or track specific measures related to changes in knowledge or awareness resulting from the implementation of its Commercial Component in FY 2007-08. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 3 Outcomes: Behavioral Change / BMP Implementation

A new aspect of the 2005 Industrial and Commercial Inspection Program involved each inspected facility being assigned a rating to reflect the level of BMP implementation noted at the site, and a separate rating to reflect the facility manager/responsible party's level of storm water knowledge. The knowledge assessment ratings were designed to gauge knowledge of storm water pollution prevention and implementation of effective BMPs, and were assigned based on how many of the following questions were answered correctly:

- What is storm water?
- What is the difference between the storm drain system and the sanitary sewer system?
- Where does storm water flow to?
- Is storm water treated prior to discharge?
- What are examples of pollutants?
- Is sediment a pollutant?
- Do you know what good housekeeping or best management practices are?
- Do you know what NPDES is or means?

Individuals who answered all of the aforementioned questions correctly and demonstrated an in-depth knowledge of storm water pollution prevention

measures and the NPDES Storm Water Program were rated “Level 5”. Individuals who answered four or more of the aforementioned questions correctly, and had a strong basic understanding of storm water pollution prevention but did not know or understand what the NPDES Storm Water Program was received a “Level 4” rating. “Level 3” rating indicated an individual who answered three questions correctly, “Level 2” indicated one or two correctly answered questions, and a “Level 1” rating indicated that the individual was not able to answer any of the questions correctly.

At the conclusion of each inspection, the inspector evaluated his or her notes and corrective actions and assigned each facility a BMP assessment rating. The following provides a breakdown of how BMP assessment ratings were designated:

- “Level 5”: All required general and activity specific BMPs had been implemented effectively. If available, monitoring results indicated that all constituents sampled were below established benchmarks.
- “Level 4”: BMPs had been implemented effectively but the dumpster lid was observed open and/or oil stains were noted in the general parking lot not associated with the business’ activities. If available, the monitoring data indicated that one or two constituents were slightly above the established benchmarks.
- “Level 3”: BMPs had been implemented with the exception of two corrective actions noted, aside from dumpster lids being open or oil stains in the general parking lot. If available, monitoring data indicated that one constituent consistently exceeded the established benchmarks.
- “Level 2”: Minimal BMP implementation was in place. Three or more corrective actions were noted, with the exception of dumpster lids being open and oil stains in the general parking lot. No illegal discharge or illicit connection was noted. If available, monitoring data showed concentrations of two or more constituents well above the established benchmarks.
- “Level 1”: A violation of one or more of the City’s Storm Water Ordinances (illegal discharge, illicit connection, failure to properly implement required BMPs, and/or significant littering) was noted. BMP implementation was poor.

The table below provides a breakdown of information from the 2005 Industrial Inpsection Program stating the average and median ratings for BMP and knowledge assessements, as well as rating frequencies:

Table 3.2 Program Scores for FY 2006-07 & 2007-08**

	Knowledge Assessment *	BMP Assessment
Average Rating	2.6	3.5
Median Rating	3	3
# of "Level 5" Ratings	6	25
# of "Level 4" Ratings	28	34
# of "Level 3" Ratings	30	49
# of "Level 2" Ratings	22	12
# of "Level 1" Ratings	33	4

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.
**The scores from these two reporting periods were consistent.

Table 3.3 Program Scores for FY 2005-06

	Knowledge Assessment *	BMP Assessment
Average Rating	2.39	3.33
Median Rating	2	3
# of "Level 5" Ratings	0	14
# of "Level 4" Ratings	9	26
# of "Level 3" Ratings	34	30
# of "Level 2" Ratings	26	11
# of "Level 1" Ratings	18	7

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.

As indicated by the assessment ratings breakdown, the overall knowledge and BMP implementation ratings were not particularly high. Knowledge assessment scores in particular were quite low. Sixteen percent of inspected facilities had BMP assessment scores of "5", indicated that no corrective action recommendations were necessary. This being the first year that this rating system was used, there is no prior standard with which to compare these ratings. It is anticipated that subsequent year's assessment ratings will increase as businesses receive more educational materials and become more familiar with the City's storm water program and what is expected of the businesses.

Level 4 Outcomes: Load Reduction Estimation

The City did not characterize or track specific measures related to load reduction estimations resulting from the implementation of its Land Use Planning Component in FY 2007-08. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 5 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

3.5.3 Spatial and Geographic Analysis

The stormwater runoff in the City of Lemon Grove drains to two waterways that eventually end in the San Diego Bay; Chollas Creek and Sweetwater River. See Attachment B-5 for drainage zones.

Section 4.0 Residential Component

The City implements a variety of programs to prevent and respond to discharges from residential areas. All of these programs are predicated on the assumption that knowledge and awareness are crucial to affecting and sustaining responsible behavior. Whenever possible, programs and activities are tailored to reflect the unique characteristics of the many areas of Lemon Grove and the diversity of its residents.

4.1 Priority Residential Sources

The City of Lemon Grove encompasses 3.78 square miles. The City has a population of approximately 26,000 residents. Attachment C-1 contains a demographics chart for the population of Lemon Grove. As Attachment C-1 shows the City expects the population to grow twenty-three percent between 1995 and 2020. As the community grows, the collective impact of residential activities on water quality will increase commensurately. Maintaining an adequate emphasis on residential areas is therefore crucial to the success of the City's water quality programs.

4.2 BMP Requirements

The JURMP document lays out minimum Best Management Practice (BMP) requirements corresponding to all identified categories of high priority residential sources.

4.2.1 Minimum BMP Requirements

As described in JURMP section 5.3, the City establishes basic BMPs for all manner of residential activity. Below is a list of the activities covered in JURMP section 5.3:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home and Garden Care
- Disposal of Household Hazardous Waste
- Disposal of Pet Waste
- Disposal of Green Waste

JURMP section 5.1 emphasizes the importance of pollution prevention, making it the basis for the BMPs described in each of the above listed activities.

4.2.2 Pollution Prevention Methods

The City encourages its residents to use pollution prevention BMPs through a variety of educational programs and activities. The core function of the City's pollution prevention efforts is to promote the use of these practices by City residents, local businesses, and municipal employees. Pollution prevention concepts are also incorporated into virtually all of the City's literature on water quality.

Providing residents with useful sources of BMP and pollution prevention information is a major focus of the City's stormwater programs, but is emphasized in other regulatory programs as well.

4.3 BMP Implementation

The City takes a multi-faceted approach to ensuring that its residents implement required and recommended BMPs. Education remains the preferred approach, but environmentally responsible behavior can also be facilitated in other ways. For example, the City operates a Stormwater Hotline, making it easy for residents who see a potential water quality problem to communicate with City staff. We also provide and support a wide variety of recycling and hazardous waste disposal opportunities in conjunction with EDCO, the local waste disposal facility. The City also encourages public participation in clean-up events, anti-litter campaigns, and other community events. Each element of this approach is described further as follows:

- Outreach to Residents
- Outreach to Schools
- Reporting and Information Resources
- Recycling and Waste Collection Services
- Measurement of Awareness and Behavior

4.3.1 Outreach to Residents

The City implements an outreach program targeting the general residential public. Outreach typically includes a combination of regionally and locally focused activities, but this year staff focused on outreach in the schools.

The City did participate in several joint effort outreach activities with other Copermittees.

4.3.1.1 Lemon Grove Clean-up (April 26-27, 2008)

The City held one collection day through EDCO and their facilities. These events allow residents to dispose of unwanted bulky items and HHW free of charge. The elderly and disabled can schedule for curb-side service with City staff. The

event during this reporting period took place on April 26-27. Due to the earlier due date of this report, the City is unable to supply HHW totals for the previous fiscal year. The totals for FY 2007-08, as per the HHW program, are not due to the State regulating agency until October 1, 2008; making the City's finalized data unavailable until mid-October at the earliest. The City is currently cooperating in a different capacity with the management of the local HHW program. The City of La Mesa is now the lead agency for the HHW collection contract through EDCO. EDCO's La Mesa HHW facility is the closest drop-off location to the City of Lemon Grove. The City pays La Mesa a small contract management fee to utilize the EDCO HHW facility and then obtains mass totals from the City of La Mesa. The City is happy to provide the Regional Board with those totals upon request after October 30, 2008.

The City has revamped its e-waste collection program and now contracts with Recycle San Diego to provide local events. During FY 2007-08, the City held four e-waste recycle events at the park adjacent to City Hall. At the time of this report, the contractor has not yet compiled the collection data for these events. That data will be available upon request after November 30, 2008.

4.3.1.3 Chollas Creek Clean-up Event

The City participated in "I Love a Clean San Diego's Creek to Bay Clean-up" event on April 26, 2008. The City chose a new event site this year, a vacant lot adjacent to Palm Middle School in the Swetwater Watershed. Due to the high temperatures experienced that day, only four volunteers participated plus two City staff. The volunteers removed 132 pounds of debris from the site and 87 pounds of recyclable material. See Attachment C-2 for a copy of the full regional report.

4.3.1.4 Printed Outreach

The City utilized three distinct forms of printed outreach during FY 2007-08. The first event was held at the Fire Station Open House and Pancake breakfast on October 13, 2007. The City provided a manned booth that contained HHW information, Creek to Bay Clean-up information, information for service project clean-up events, and the standard stormwater brochures pertaining to pools, over-irrigation, used oil and pet waste. The second event involved distribution of similar brochures and information at the Winter Bonfire on December 7, 2007 and included promotional give-aways pertaining to clean water and HHW. Due to public safety issues, the City is no longer sponsoring a City event in the Spring. Stormwater personnel were on hand at all events to answer any questions and provide further information. Water Quality staff also participated in the Regional outreach event at the San Diego County Fair on June 15 and June 29, 2008. Lemon Grove specific materials were available on those dates. See Attachment C-3 for examples of the brochures available at these events.

4.3.2 Outreach to Schools

School outreach remains a key component of the City's education strategy; however, the City chose to focus its outreach efforts in the commercial and land development areas of the program during this reporting cycle. Due to limited staff and fiscal difficulties, it is important that the City perform as efficiently and effectively as possible. This often requires the City to focus its efforts in a specific area, therefore no school programs were presented during this reporting period. The intent of school programs is to stimulate long-term behavioral change by alerting students to the importance of clean water and environmental responsibility.

The City plans in future reporting cycles to increase its educational outreach. The City firmly believes that long-term behavioral changes are possible, especially with repetition like yearly presentations. The list below details a few of the areas the City would like to explore:

- Individual presentations to science classes
- Large school presentations in conjunction with other school programming like during pollution prevention week
- Encouraging student involvement in volunteer cleanup efforts
- Creating student specific cleanup events
- Encouraging involvement in larger environmental programs and opportunities like Arbor Day and Jiminy Cricket's Environmentality Challenge
- Improved internet links for students through the City website
- Create a listing of community service projects that are water quality specific for scout troops, school groups or other volunteer groups
- Material distribution at community events targeted at school aged children

The City believes that by increasing its community/school outreach, the general population will become better acquainted with water quality issues. Eventually the City will be able to tie awareness to effectiveness and then to load reductions. The City believes BMPs are the key link and that with increased awareness more residents will implement household BMPs on a daily basis. In theory, as long as the correct BMPs are in-place to the maximum extent practicable (MEP), pollutants of concern should no longer be entering the waterways. The City can then measure the amount of prevented pollution.

4.3.3 Reporting and Information Resources

The primary goal of the City's residential program is to ensure that the public has access to useful information about urban runoff and can easily report their complaints to City staff. The City has established a Stormwater Hotline and several public information brochures for these purposes.

4.3.3.1 Stormwater Hotline (619-825-3827)

The City continued to operate its Stormwater Hotline during this reporting period. The Hotline number is now a direct line to Water Quality Staff. The primary purpose of this hotline is to facilitate complaint reporting, but it also serves as a direct source of water quality information for interested parties. Calls are promptly referred to the stormwater staff for resolution and/or information. The hotline referred approximately six calls during FY 2007-08. Occasionally the Hotline receives complaints that are not related to water quality and those are forwarded to the applicable departments. Most of the complaints are resident to resident issues and can be handled through verbal channels. On occasion, the City delivers a written notification to a group of residents about a persistent problem. The calls were either unfounded or dealt with on a small scale with no code enforcement involvement. The most common type of call received involves neighborly disputes on private property, therefore it is quite common that the City offers advice but no direct action is taken.

4.3.4 Recycling and Waste Collection Services

4.3.4.1 Used Oil Collection

Statistics from the California Integrated Waste Management Board (CIWMB) indicate that 1 in 5 households in California have a do-it-yourself (DIY) oil changer. "There were 91.3 million gallons of used lubricating oil (ULO) were recycled during 2005, which was 5 percent above the 87.0 million gallons collected in 2004. The ULO recycling rate for 2005 was 59.5 percent, which is a 3 percent increase when compared to ULO recycled in 2004. The lubricating oil recycling rate does not account for oil burned off or spilled during use, which is estimated to range from 20 to 40 percent."[1] Below are four charts that demonstrate this trend in increased recycling.

[1] http://www.ciwmb.ca.gov/usedoil/RateInfo/default.htm

Table 4.1 Amount of Lubricating Oil Recycled as a Percentage of Sales, 1994-2005 (Calendar Years)

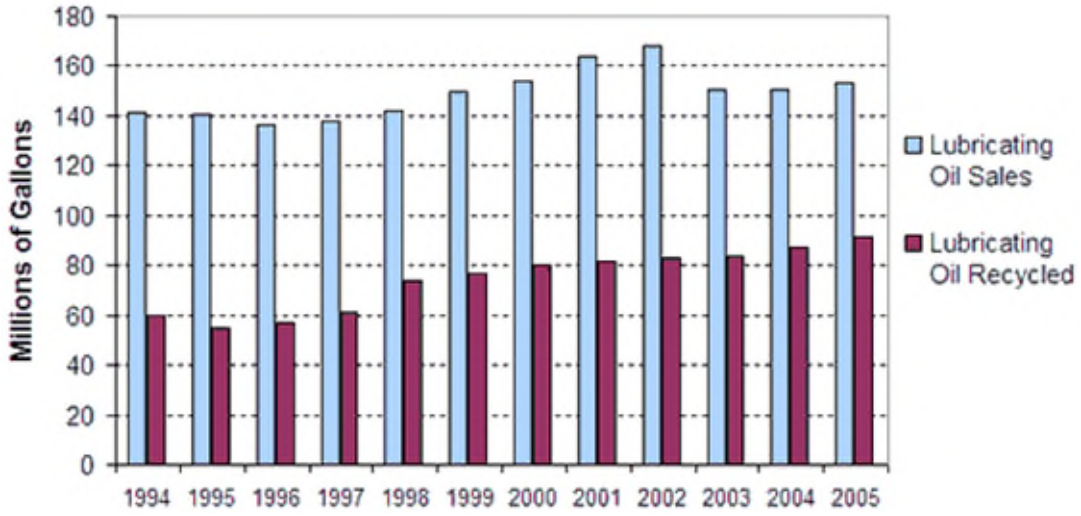

Table 4.2 Annual Oil Sales and Used Oil Recycling Rates (in millions of gallons)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Lubricating Oil Sales	141.2	140.8	136.2	137.5	142.1	150.0	154.3	163.6	168.0	150.2	150.5	153.5
Industrial Oil Sales	78.0	117.3	140.9	141.7	152.4	176.4	155.7	149.1	147.1	135.8	144.6	123.1
Total Oil Sales*	219.2	258.1	277.1	279.5	294.5	326.4	310.0	312.7	315.1	286.0	295.0	276.6
Lubricating Oil Recycled**	59.9	54.6	56.8	60.9	73.6	76.9	80.0	81.9	83.1	83.7	87.0	91.3
Industrial Oil Recycled**	16.7	19.5	20.8	19.3	11.6	10.4	7.9	15.5	17.5	32.4	32.5	31.4
Total Oil Recycled	76.6	74.1	77.6	80.2	85.2	87.3	87.9	97.4	100.6	116.1	119.4	122.7

***** The volumes for oil sales and used oil collections are revised as used oil recycling fees are collected or refunded. Sales totals for lubricating oil are subject to change. Fees on oil sales and refunds for exempt lubricating oils may be reported up to one year after the initial sale.

****** Figures include used oil collected in California and used oil sent outside of California.

Table 4.3 Oil Collected by Public Collection Programs (in millions of gallons)

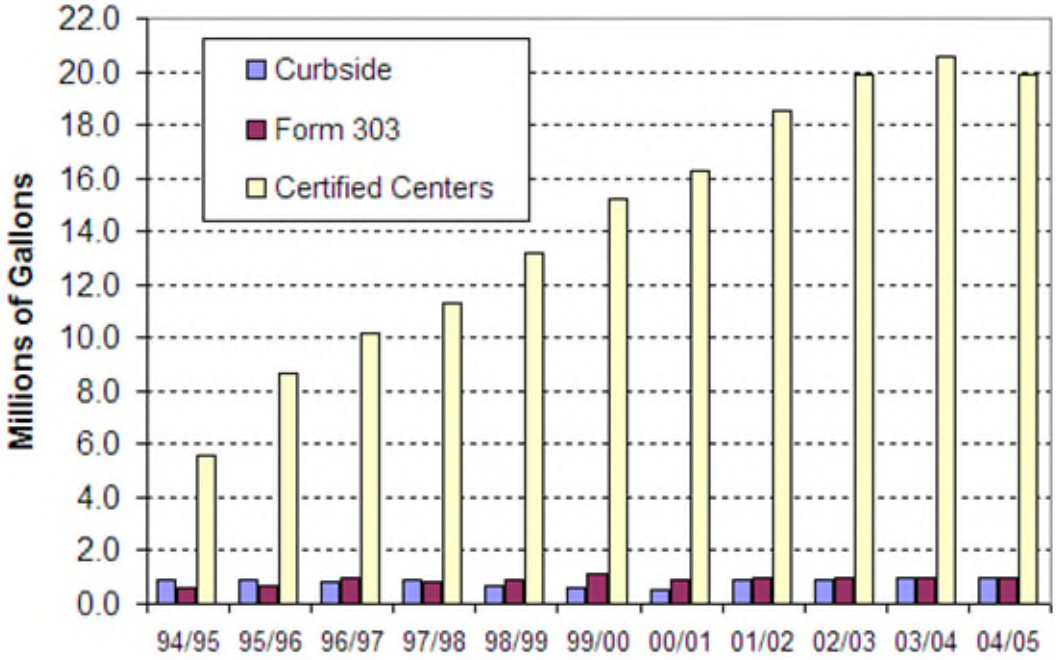

Table 4.4 Oil Collected by Public Collection Programs (in millions of gallons)

	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02*	02/03*	03/04	04/05
Curbside	0.9	0.9	0.8	0.9	0.7	0.6	0.5	0.9	.9	1.0	1.0
Form 303	0.6	0.7	1.0	0.8	0.9	1.1	0.9	1.0	1.0	1.0	1.0
Certified Centers	5.6	8.7	10.2	11.3	13.2	15.2	16.3	18.5	19.9	20.6	19.9
Total Oil	7.1	10.3	12.0	13.0	14.8	16.9	17.7	20.4	21.8	22.6	21.9

The City places a high priority on properly managing the used oil generated by residents within its jurisdiction. Every effort is made to provide residents with convenient drop-off locations and curbside pick-up services, then to promote these services through advertisement and outreach.

The Motor Oil brochure, available at City Hall, contains useful information about how and why to recycle used oil. It also lists the three collection sites and the number for curb-side pick-up. See Attachment C-3 for an example of the brochure. The centers are also listed in each of the City Newsletters that are mailed to the residents bi-annually. See Attachment A-4 for copies of the Newsletter.

The three collection sites are:

- Auto Zone 7582 Broadway (oil only)
- Kragen 6925 Federal Blvd (oil and filters)
- EDCO 6670 Federal Blvd (oil only)

The curb-side service is sponsored by CIWMB. All the resident needs to do is call 1-800-HHW-PKUP (1-800-449-7587) and request a collection.

4.3.4.2 Solid Waste Recycling and Household Hazardous Waste Collection

The City seeks to reduce solid waste generated in its boundaries. Conservation techniques supported by the City include source reduction, reuse, and recycling, including the procurement of recycled-content products. The City must meet the state-mandated fifty percent reduction level for solid waster disposal, which means at least half of the refuse generated in 1990, adjusted for population and economics, must be spared from a landfill. Due to reporting errors, the calculations were not complete for this reporting period. During the next reporting period the City will supply our percentage of recycled material for this reporting period.

The City has completed and approved the construction and demolition ordinance. The ordinance went into effect at the beginning of December 2005. Only one demolition site qualified and completed the program during this reporting period. Citron Court is a new mixed use redevelopment project located at 7385 Broadway that began construction during this reporting period. According to their reports, their demolition site generated 108.2 tons of recyclable materials.

The recycling outreach efforts include conducting public education, establishing infrastructure, and supporting existing recycling operations. Current programs focus on: revising the City's recycling plans, business recycling, enforcement (business and residential), construction and demolition waste, motor oil recycling and storm drain filters, and public education including schools, brochures, and interaction with City staff.

During this reporting period, the City participated in six collection events for solid waste disposal. Four of the events were in cooperation with a Household Hazardous Waste grant through CIWMB and focused on the collection of e-waste. The other two are an annual Lemon Grove Clean-Up event further discussed above in Section 4.3.1.1.

The City's participation in the Household Hazardous Waste (HHW) grant facilitates the proper management and disposal of toxic materials and household hazardous wastes for residents of the City. The program was created to protect landfills, receiving waters, and the environment. The focus of the clean-up and collection events is to enable residents to safely dispose of their hazardous

materials and bulky discards. See Attachment C-3 for examples of educational material provided to residents.

HHW Collected

See section 4.3.1.1 above for information pertaining to the City's HHW program.

4.3.5 Measurement of Awareness and Behavior

The Permit requires the City to assess how effective its educational efforts are in changing the knowledge and behavior of targeted audiences. This section provides a discussion of the City's effectiveness in implementing its Residential Component in FY 2007-08.

4.3.5.1 Future Assessment Measures

During the current reporting period, the City utilized observation as the main form of awareness and behavior measurement. However in the future the City plans to incorporate the following measurement tools for the residential component:

- Surveys for school presentations
- Questionnaires for public outreach such as Lemon Grove community programs and the Winter Bonfire events
- Documented observations by City staff
- Year to year tracking of complaints and resolutions

4.4 Compliance and Enforcement

City investigation and follow-up on all complaints of a residential nature during this reporting period are described below.

4.4.1 Complaints Received

The City receives resident complaints on a regular basis both through the hotline and through the regular phone system. The majority of the calls can be handled through verbal interaction, the rest are investigated by City staff. Staff investigated several residential complaints during this reporting period; however the majority were unfounded or untraceable upstream. One incident however is detailed above in Section 4.3.3.1.

The challenge with residential complaints lies in the inability at times to confront the source of the pollutant. Often times the complaints are received after the illicit deed has been committed and the individual placing the complaint has limited knowledge of the source.

4.4.2 Investigation and Enforcement

The City had one residential event that required code enforcement involvement. These events are detailed above in section 4.3.3.1. The complaint was received through the hotline, therefore the details are presented in that section.

4.5 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Residential Component in FY 2007-08.

4.5.1 Narrative Assessment

The City made a number of important improvements to its residential activities programs in FY 2007-08. This year, the City's outreach efforts to residents and schools demonstrated a clear intention to expose a larger segment of the Lemon Grove population. The City is clearly thinking of long-term results with the increase in school programs. By presenting material at community events, such as the Spring Festival, the Winter Bonfire and the Fire Department Open House, the City can reach a large, diverse sector of the community. By increasing door-to-door communications, the City brought water quality into the home-life of Lemon Grove's residents.

The City provided a variety of waste collection and disposal services to its residents. Through education to increase awareness, and by making these services convenient, attendance at collection facilities and events rose considerably from previous years. This increased participation not only speaks to the quality of these programs, but is encouraging as an indicator of increased support for environmental programs in general.

Recognizing the need for increased measurability, the City plans to increase its evaluation efforts in respect to resident and student awareness. Section 5.3.5.1 details the areas in which the City plans to grow and further develop in coming years. The City believes feedback is a vital part of refining and possibly redirecting future efforts.

No specific management practices or BMPs relating to residential activities were identified as being ineffective during this reporting period.

4.5.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness

- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activitiy-Based Targets

Target 1
Target outreach based on hotline calls
100% complete

Target 2
Continued presence and outreach at community events
100% complete

Target 3
Larger variety of educational material available
75% complete

Target 4
Improved tracking of hotline calls
65% complete (a database was created near the end of the reporting period)

Target 5
Increase the information available on the City website
75% complete (a new and improved City website is being created and will contain more water quality information and links)

Target 6
Use of door hangers by DPW to notify residents of a potential issue
40% complete DPW staff now has the door hangers but data has not been collected on their effectiveness and no hotline calls were received based on distributed hangers

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not characterize or track specific measures related to changes in knowledge or awareness resulting from the implementation of its Residential Component in FY 2007-08. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 3 Outcomes: Behavioral Change/BMP Implementation

As with knowledge and awareness above, the City recognizes a need for such measures in the Residential Sector. Section 5.3.5.1 describes the ways in which the City wishes to develop assessment instruments for knowledge, behavioral change and BMP implementation.

Response to residential complaints is perhaps the only currently utilized method that involves direct observation of residential behavior. The City anticipates that an increase in complaints demonstrates an increase in awareness of urban runoff issues and available reporting resources. Another indication of behavioral change is the participation of the public in activities that prevent waste from entering the City's MS4. In particular, increases in oil recycling totals and household hazardous waste collection (Section 5.3.3) indicate the engagement of residents in environmentally protective behaviors. The City will continue to monitor these measures and to search for additional ways to assess changes in behavior among residents.

Level 4 Outcomes: Load Reduction Estimation

Current methods are not yet sophisticated enough to accurately gauge pollutant-loading reductions resulting from implementation of the City's residential program. This is simply due to the variety and scale of polluting behaviors associated with the residential population. However, certain existing data are helpful in making some initial estimates. As reported in Section 4.3.3, City recycling and waste collection programs diverted 25,600 gallons of used oil and as yet unobtained number of pounds of household hazardous waste from landfills and the storm drain system during this reporting period; as well as the 108.2 tons of recyclable demolition debris from the Citron Court site. Because only a small percentage of either of these waste streams would actually be illegally disposed, adjustment factors were applied to each to estimate load reductions. Both factors were selected in consultation with staff from each of these respective programs; neither is based on data of any sort. Both figures represent the experience and best professional judgment of staff. Load reduction estimates are shown in Table 4.5.

Table 4.5 - Summary of Residential Load Reduction Calculations

Activity	Amount Collected	Adjustment Factor	Estimated Load Reduction
Used Oil Recycling	25,600 gallons	10%	2,560 gallons
C&D Ordinance Recycling	17,852 pounds	1%	179 pounds

Because of the diversity of residential activity types in the City, no further attempt has been made this year to estimate reductions in pollutant loading that might be expected as a result of implementing the City's regulatory oversight program in

FY 2007-08. In the future, The City will continue to seek to develop valid methods for estimating load reductions from residential sources.

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

4.5.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any commercial program data during this reporting period.

Section 5.0 Land-Use Planning Component

This section describes actions taken by the City during FY 2007-08 reporting period to minimize the short- and long-term post-construction impacts of new and redevelopment projects on receiving water quality and other environmental resources. This includes activities related both to land use planning controls, and the site-specific conditioning of development and redevelopment projects in the City.

5.1 Assessment of Planning Process

During the current reporting period, City staff developed mechanisms in the planning process to provide improved water quality and watershed protection for new developments. The City is working to effectively integrate these principles and practices into the entire planning process. An important objective of the improvements is to develop land use goals and policies that will maintain a built environment compatible with, and sensitive to, the City's natural setting, while retaining the unique local character.

For each development project proposed, the City requires the builder and owner to consider BMP implementation from the beginning of the project. Attachment D-1 shows the form that is presented to each applicant regardless of project size. This initial step makes water quality important from the on-set of the project, and each consecutive step further emphasizes the importance of water quality improvements for pre- and post-construction.

The Water Quality Program Coordinator is available for consultation during any phase of the project. The Coordinator plays a vital role in the pre-application phase of development by ensuring that all proposed projects incorporate water quality measures. This is done mainly through interaction with the developers and project engineers, but also involves written assessments of the project designs and any water quality documents. The assessment occurs multiple times before the applicant is permitted to submit a complete proposal. This process lengthens the pre-proposal phase, but improves the final approval phase. The Planning Commission knows that all issues have been dealt with prior to the approval hearing and that City staff has ensured a minimal environmental impact.

5.2 Mapping Impervious Cover

Water quality data is the most definitive measure of determining the quality of our watersheds. However, because extensive data sets are not always readily available for the City's watershed, mapping impervious surface coverage can provide an important predictive tool to complement empirical methods. National research over the last decade has shown a significant correlation between impervious surface coverage and water quality. Development generally results in

an increase in both pollutant sources and impervious surfaces. In the Permit, it states, "Numerous studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving water quality. Significant declines in the biological integrity and physical habitat of streams and/or receiving waters have been found to occur with as little as a 10% conversion from natural to impervious surfaces. (Developments of medium density single family homes range between twenty-five and sixty percent impervious)."[1] The increase in pollutant sources, (i.e. parking lots, buildings, rooftops, and streets) contributes to increased pollutant loads in stormwater runoff, while corresponding increases in impervious surfaces limit the land's natural ability to filter these pollutants. As a result, developed areas typically experience higher runoff volumes and lower runoff quality. The challenge presented to the Copermittees in the mandate is to reduce harmful runoff (a product of development), while complying with the State mandate of increasing housing stock and creating affordable development projects.

Mapping impervious surface coverage helps land use professionals better predict watershed health and guide growth patterns to minimize the impacts of development on water quality. The City lacks the sophisticated equipment necessary to create a complete and accurate impervious surface map. However the City has made a good faith effort to determine on average how much impervious surface is present within its boundaries.

To determine the impervious surface of the commercial and industrial portion of the City, a survey of parking spaces was taken. To determine impervious surface amounts for the residential sector of the City, the City averaged each residence as having two parking spaces. Table 5.1 shows the results of this study and Attachment D-2 presents a partial breakdown of the parking survey taken. The full document is rather lengthy, but is available upon request.

Table 5.1 - Results of Parking Space Study

Source	Total Number of Spaces	Acres covered by Impervious Surface
Churches	1,510	5.62
Apartments	2,367	8.80
Schools	741	2.76
Commercial and Industrial	9,604	3.36
Residential[2]	17,444	64.87
Totals*	**31,666**	**117.77**

***** Totals are based on the average sized parking space, which is 18'x9' with a=162'

[1] California Regional Water Quality Control Board, San Diego Region. Order No. 2001-01; NPDES No. CAS0108758, p.2. retrieved from www.swrcb.ca.gov on May 30, 2004.
[2] Based on 8,722 housing units. Information from *2030 Cities/County Forecast*, available through www.sandag.org .

In the process of conducting the study, the City discovered some inconsistencies with parcel numbers and addresses. These inconsistencies are slowly being rectified based on need and time available.

The City hopes in future reporting years to utilize the study information in estimating load reductions.

5.3 Land Use Professionals Resources

To date, jurisdictional and project-level planning tools have been largely under-utilized because stormwater management is often viewed as an engineering issue. As a result, many site-design solutions rely significantly on structural treatment controls like detention basins and mechanical treatment devices, which can be expensive and maintenance-intensive. In most cases, it is easier and cheaper to keep pollutants out of stormwater by designing the pollutant source out of the project, while simultaneously preserving the site's natural filtration capacity.

The City encourages all new and re-development applicants to explore such options as tot-lots, on-site detention basins, infiltration ditches, and on-site landscaping to ensure that water quality is improved, the natural environment suffers less, and less maintenance is required. The City requires sites to treat for pollutants of concern to the MEP. The City recommends that its applicants utilize the BMP handbooks created by CASQA to explore the best option for each particular project. The handbooks are available on-line at www.casqa.org. CASQA is a valuable resource for both the City and the developers.

5.4 Development Project Approval Process

As required by Permit Section F, the City has modified its discretionary land use permitting process to incorporate specific water quality requirements. The basic process is laid out in the City's General Plan, Chapter 17.28 *Procedure and Administration*. The Plan, itself, does not delineate for water quality; however the City includes water quality personnel in all development proposals.

The developer must submit all required documents at the beginning of the process. The project Stormwater Maintenance Plan (SWMP), Stormwater Pollution Prevention Plan (SWPPP) and/or Standard Urban Stormwater Mitigation Plan (SUSMP); plus the Hydrology Study are all due with the Site Plans for checking and approval from the on-set of the approval process. As stated in Section 6.1 above, this is to ensure a complete presentation for project approval by the Planning Commission.

The City has updated its checklists for developers to include water quality related lists. See Attachment D-3 for the final version of those lists. The City has received positive verbal feedback from the applicants who have utilized the new

checklists. The City also refers many applicants to the Lemon Grove SUSMP on our City website for further information about water quality guidelines. The Lemon Grove SUSMP can be found at the following web address:

- http://www.ci.lemon-grove.ca.us/clg/cityhall/Default.asp

During the current reporting period, the City reviewed eight potential SUSMP development projects with in the City limits. The following chart shows the development projects under review during this reporting period.

Table 5.2 SUSMP Projects Under Review FY 2007-08

File Number	Project Name	Applicant	Description
TM 0047/PDP 04-02	Center Hilltop Condos	Kevin Leon	Small multi-family housing unit
TPM 0042/0049	Citrus Heights*	Carter Reese	78 single family home development
TPM 0180	Citron Court Condos	Community Collective	12 condo units
TM047/PDP04-002/VA06-001	8137 Casio Ct.	Kevin Leon	12 condo units
PDP06-008	8247 Broadway**	Troy Richardson	Used auto sales
Engineering Review	6670 & 6700 Federal Blvd	EDCO Waste and Recycling	Public Improvements and SUSMP update
TPM 0174	7872 Mt Vernon St.	Kai Adler	3 lot single family subdivision

*Project on hold due to desire to sell. **This project is in Code Enforcement for illegal usage as per their conditional use permit.

The City requires all major projects, determined to be significant contributors to post-construction pollutant loading, to file a SWMP. The document ensures that effective BMPs will be put in place to foster long-term water quality improvements. The requirements for a significant contributor are listed below:

- Residential development of 100 units or more.
- Residential development of 10 to 99 units.
- Commercial development greater than 100,000 square feet.
- Automotive repair shops.
- Restaurants.
- Hillside development greater than 5,000 square feet.

- Projects discharging to receiving waters within Environmentally Sensitive Areas
- Parking Lots greater than 5,000 square feet or with greater than 15 parking spaces and potentially exposed to urban runoff.
- Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater.

A *Preliminary Grading Plan* and the *Preliminary Hydrology/Drainage Study* are the technical basis for the SWMP; however, changes and refinements to the SWMP may be required as technical review of the application and completion of CEQA documentation continues. The complete SWMP must provide at least the following:

- A project description;
- An identification of water quality pollutants of concern and a proposed treatment volume base on the applicable design storm, site plans and adjacent land use, and soil characteristics;
- An identification of mitigation measures, including structural treatment BMPs, to protect water quality and prevent increases in downstream erosion to the maximum extent practicable;
- Agreements, easements, and licenses relating to proposed BMP construction, location, maintenance, or changes in drainage character;
- An identification of the beneficial uses of impacted receiving water bodies, including groundwater; and
- An identification of Section 303(d) impaired water bodies potentially impacted by the project.

The associated *Preliminary Grading Plan* and *Preliminary Hydrology/Drainage Study* must be prepared by a registered civil engineer with experience in fluvial geomorphology (drainage patterns). The *Preliminary Hydrology/Drainage Study* is, at a minimum, required to: 1) Characterize pre- and post-construction hydrology, both on-site and downstream, 2) Identify potential off-site discharges of stormwater and any increased potential for downstream erosion, and 3) Identify structural BMPs sufficient to address stormwater issues in compliance with the permit. To assist applicants through the permit application process, City staff has created a checklist for the development of Grading Plans, see Attachment D-5. The City uses the County's *Hydrology/Drainage Guide*, which can be found at www.sdcounty.ca.gov/dpw/watersheds/land_dev/drainage.html.

5.5 Environmental Review Process

JURMP 5.3 summarizes the revisions made to the City's environmental review process for new development and redevelopment projects to incorporate Permit requirements. The process outlined there continues to accurately reflect the

City's environmental review efforts. Attachment D-6 provides the checklist from CEQA that the City utilizes for its environmental review process.

5.6 New Development and Redevelopment Outreach

During this reporting period, the City used a variety of means to educate its customers about the potential impacts of development and redevelopment on water quality. These included direct staff interaction with the public and the development and distribution of informational checklists.

5.6.1 Interaction with City Staff

The City predominately utilizes staff time and the pre-application process to provide water quality information to developers and residents. Attachment D-1 provides the form required of all building and grading permits regardless of project size. Large development projects are rare in Lemon Grove. The City is approximately three miles square and is predominately existing residential development. To ensure that even the small projects are aware of water quality measures, the City requires a signed BMP checklist to be included with any permit application. The City has also created three checklists for any SUSMP redevelopment or new development project. These checklists are used by both City personnel to review SUSMP projects and by developers to ensure complete submittals. The checklists are included in Attachment D-3. The City uses the checklists and counter visits to provide as much education as possible to anyone interested in developing or building in the city limits of Lemon Grove. Face to face time with staff is the most effective way to reach the largest number of permit applicants because they must apply in person with their plans.

For each development project proposed, the City requires the builder and owner to consider BMP implementation from the beginning of the project. This initial step makes water quality important from the on-set of the project, and each consecutive step further emphasizes the importance of water quality improvements for pre- and post-construction.

The Water Quality Program Coordinator is available for consultation during any phase of the project. The Coordinator also plays a vital role in the pre-application phase of development by ensuring that all proposed projects incorporate water quality measures. This is done mainly through interaction with the developers and project engineers, but also involves written assessments of the project designs and any water quality documents. The assessment occurs multiple times before the applicant is permitted to submit a complete proposal. This process lengthens the pre-proposal phase, but makes approval faster once the formal submittal is made. The Planning Commission knows that all issues have been dealt with prior to their approval hearing and that City staff has ensured a minimal environmental impact.

The City encourages all new and re-development applicants to explore such options as tot-lots, on-site detention basins, infiltration ditches, and on-site landscaping to ensure that water quality is improved, the natural environment suffers less, and less maintenance is required. The City recommends that its applicants utilize the BMP handbooks created by CASQA to explore the best option for each particular project. The handbooks are available on-line at www.casqa.org. CASQA is a valuable educational resource for both the City and the developers.

City staff meets with all new applicants in some way and eleven open permit applications equal at least eleven consultations within the current reporting period.

5.6.2 Informational Checklists

As discussed above and as seen in Attachments D-3, D-5, and D-6; the City provides all applicants with a variety of checklists pertaining to application requirements. These checklists represent a small portion of the application checklists available for applicants. City staff is always available for further clarification and the Lemon Grove SUSMP is available at the site listed in Section 5.4 above.

5.7 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Land Use Planning Component in FY 2007-08.

5.7.1 Narrative Assessment

Although new development projects approved during the reporting period included adequate BMPs to address stormwater discharges, the City recognized that project level planning tools were largely under-utilized as many projects relied mainly on structural treatment controls, which can be expensive, maintenance-intensive, and less effective than site-design controls. Staff recognizes that it is easier to preserve a project site's natural hydrology through site design, than to artificially control it through detention or retention. As the City increases its outreach efforts, it foresees an increase in awareness of water quality knowledge in developers and the public. By providing developers with as much information at the beginning of the application process, the City hopes to encourage creative designs that improve water quality while maintaining the environmental integrity of Lemon Grove.

Based on the City's annual review, staff has not determined that any specific management practices or BMPs relating to land use activities have been proven to be ineffective. The City therefore does not currently recommend any changes to this program component.

5.7.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activity-Based Targets

Target 1
Improve checklists for project submittals for staff use
100%

Target 2
Create a database to track project reviews
75% complete (a database was created, but it needs to be re-vamped to accommodate multiple reviews of the same project in an efficient manner) This project is on hold due to implementation of a GIS system that would allow for integrated tracking.

Target 3
Create a working map of Waters of the State for use by City staff and developers
30% complete (data collection is slow due to limited staff numbers and budget constraints)

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not characterize or track specific measures related to changes in knowledge or awareness resulting from the implementation of its Land Use Planning Component in FY 2007-08. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 3 Outcomes: Behavioral Change/BMP Implementation

The City did not characterize or track specific measures related to behavioral change or BMP implementation resulting from the implementation of its Land Use Planning Component in FY 2007-08. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 4 Outcomes: Load Reduction Estimation

The primary goal of BMP implementation is to reduce the loading of pollutants to stormwater discharges. An important emphasis of annual program assessment is the estimation of loading reductions resulting from various program activities. Assuming that such reductions are properly targeted to existing or potential water quality problems, load reductions should in turn result in improvements to discharge and receiving water quality. Quantifying load reductions represents an important endpoint for City assessments. Table 6.2 below demonstrates the direction the City is moving towards for future reporting periods. In future reports, the Table below will provide an initial estimate of the effectiveness of the SWMP process and its ability to reduce the pollutant loadings of selected constituents of concern.

Table 5.3 - Sample Table to Show Pollutant Loading Reduction Estimations

Constiuents of Concern	Loading Factor (lbs/ac/yr)[3]	Total Acreage	BMP Effectiveness Adjustment	Prevented Pollution
Total Copper				
Total Nitrates				
Total Cadmium				
Total Arsenic				
Total Suspended Solids				

SAMPLE

These estimates will provide a starting point for characterizing the benefits of implementing this program element, but are subject to a number of qualifications. First, load estimates assume that all projects are low-density, single-family residential developments. Second, project proponents have discretion in the selection of specific BMPs to meet the Maximum Extent Practicable (MEP) standard required of them. As such, individual projects employ a combination of BMPs, each with varying levels of effectiveness. The percentage adjustment is an estimate of the overall effectiveness of the measures based upon best professional judgment.

[3] Source: Minton, Gary. *Stormwater Treatment – Biological, Chemical, and Engineering Principles.* 2002

This project is being re-vamped due to new collaborations at the watershed level. It is the City's understanding that the new permit increases the emphasis on watershed collaboration and evaluation of up-stream contributors. However the concept is similar, but focused on the type of business (initially automotive facilities), its likely pollutants and the relationship of those pollutants to certain BMP effectiveness. The members of the San Diego Bay Watershed group have already looked at their inspection requirements and are drafting improvements in the BMP compliance and efficiency areas. The City feels it is important to tackle the issue of load reduction on a regional basis to ensure the highest level of effectiveness. The City believes that a more regional and/or watershed approach will result in better, longer lasting water quality improvements.

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

5.7.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any commercial program data during this reporting period. See Attachment D-7 for a City zoning map.

Section 6.0 Construction Component

The City implements a variety of programs to prevent and respond to discharges from construction sources. All of these programs are predicated on the assumption that knowledge and awareness is key to effecting and sustaining responsible behavior, but that an active oversight and enforcement presence is also necessary for long-term success. This section describes actions taken by the City to regulate construction sources during the FY 2007-08. It includes the following general types of activity:

- Requiring BMP implementation through ordinance and permit (6.2);
- Encouraging BMP implementation through outreach (6.3); and
- Verifying compliance through inspection and enforcement (6.4).

6.1 Priority Construction Sources

The City maintains a construction permit database. The City currently lists 180 open construction permits. However, because sites are continually opening and closing, that number is not definitive at all times. The number also includes all private and public construction sites. The majority of the current construction permits are for low or medium priority projects.

The City completed 8 minor infrastructure improvement projects during FY 2007-08. Many of them were continuations of partial resurfacing projects from the previous reporting period:

- El Prado
- La Corta
- Primera
- Ramon
- Alberdi
- Buena Vista
- New Jersey
- Lemon Grove Avenue

The City defines a high priority construction site by the following guidelines:

- 50 acres or more and grading during the wet season;
- 5 acres or more and on a tributary of a 303(d) list waterway
- The City may include other sources and activities that contribute significant pollutant loads to the MS4

The City had only one high priority construction source at:

- 3615 Lemon Grove Avenue

This was the Honda site mentioned the 2006-07 report that had completed demolition. During reporting period 2007-08, building permits were approved and construction completed on this site. The site became operational toward the end of the reporting and final inspection by water quality personnel was performed. All permanent BMPs were in place as designed and functioning properly. The site was inspected on a weekly basis at a minimum to maintain proper BMP placement and functionality during the construction phase. The following reporting period will be the first year with fully operational permanent BMPs and required maintenance verification.

St. John of the Cross finally completed the last of their phases during this reporting period as well. However, they are currently experiencing some difficulties with Helix water district over the placement of a tree. Renovations maybe required during subsequent reporting periods.

6.2 BMP Requirements

The City requires that BMPs be implemented to reduce or eliminate the impact of discharges from construction site runoff primarily through its grading ordinance. The checklist available in Attachment E-5 gives a breakdown of the City's grading permit requirements.

6.2.1 BMP Requirements for Permitted Construction Sites

Prior to the adoption of this Permit, the City required implementation of sediment and erosion control BMPs. These controls continue today. During FY 2006-07, the following BMPs were required on all sites for which permits were issued:

- Erosion Control Methods for Disturbed Slopes: Vegetation Stabilization (Planting), Hydraulic Stabilization, Bonded Fiber or Stabilized Fiber Matrix, Physical Stabilization (Erosion Control Blankets);
- Sediment Control Methods for All Disturbed Flat Areas: Mulch, straw, wood chips, or soil application, De-silting Basin (must treat all site runoff), Energy Dissipater and Outlet Protection
- Methods for Preventing Off-Site Tracking of Sediment: Stabilized Construction Entrance, Construction Road Stabilization, Entrance/Exit Tire Wash, Entrance/Exit Inspection and Cleaning Facility; and
- General Site Management BMPs for On-Site Waste: Materials Management (Material Delivery and Storage), Waste Management (Concrete Waste Management), Solid Waste Management, Sanitary Waste Management, and Hazardous Waste Management.

6.2.1.2 BMP Requirements for Major Grading Permit Sites

Major grading permit applicants are required to submit a Storm Water Pollution Prevention Plan (SWPPP) Addendum to the Grading and/or Building Permit Application. The standards for SWPPP are closely related to those required for developers in the pre-approval process. The biggest difference is the focus during construction, not post-construction.

6.2.2 BMP Requirements for Public Construction Sites

All City-managed Capital Improvement Projects (CIPs), regardless of size, include contract specifications requiring the implementation of BMPs in compliance with the General Construction Permit even prior to this reporting period. Specific BMPs that are implemented on public construction projects were identified in JURMP 7.6 and match those required for private projects. These have not been updated.

6.2.3 Pollution Prevention Requirements

The City continues to encourage and, where appropriate, require the use of pollution prevention practices by construction site owners, developers, contractors, and other responsible parties. Specifically, pollution prevention practices are encouraged in all BMP implementation material. The City requires specific pollution prevention plans from any activity that disturbs more than five acres. These sites must also seek coverage under the General Construction Permit. The City believes that with proper and complete BMP implementation, pollution prevention is a natural consequence.

6.3 BMP Implementation

The City ensures that BMPs are implemented to the standards described in Section 6.2 through several inter-related activities including permit issuance, project approval, field inspection, and public outreach.

6.3.1 Construction and Grading Approval Process

The Preliminary Grading Plan enables the City to better evaluate stormwater and drainage impacts on permitted sites The SWMP documents how dischargers will implement BMPs.

Although CIP projects do not require City Permits, their approval process is much the same as for private sites. These projects follow a process to ensure that BMPs are addressed at all phases. Starting at the project planning phase, projects are required to submit a SWMP. The SWMP refines the project by setting source controls, site design, and treatment control requirements. Once all

the elements and concerns have been addressed at the planning level, the project moves into the design phase. During design, construction and post-construction BMPs are introduced into the plans. The plans are then circulated to the Water Quality Program Coordinator for review. At a minimum, this review is conducted when the project design is 30, 70, and 100 percent complete. These checks ensure that BMPs are adequately addressed in the plans and adjoining specifications are included.

6.3.2 Compliance Verification

Actual implementation of on-site and off-site BMPs is verified during site inspections. Inspections conducted during this reporting period are discussed in Section 7.4.1 below.

6.3.3 Construction and Development Industry Outreach

The City places a high priority on educating project applicants, contractors, developers, property owners, and other responsible parties to ensure that they have an understanding of water quality principles, applicable regulations, and proper BMP implementation strategies. It is difficult to send mailers or brochures to construction sites because individual job foreman rarely have an office. The City is looking into the possibility of offering training to job site personnel to further increase its educational outreach for construction sites. On the checklist required with each project seen in Attachment D-1, education and training are required BMPs. The City is exploring the possibility of making it a required BMP. Political ramifications must be further researched. Through its Annual Report, the City will keep Regional abreast of its efforts in this area. Until that time, the following educational efforts are currently in place.

Customers are offered a number of educational resources as they progress through the permit application and approval process, including interaction with field and counter staff (Building Inspectors, Planning Personnel and City Inspectors) and distribution of informational checklists and document examples.

6.3.3.1 Interaction with City Staff

City staff (including building inspectors and counter staff) regularly interacts with permit applicants and other members of the public. Personal interaction provides an important opportunity to increase the level of stormwater awareness among City customers. A particularly important interaction takes places at the very beginning of the project. Each applicant seeking a building permit of any kind receives a checklist of required BMPs. This form is being revised for the next reporting period to improve clarity and to streamline the process. From the very beginning, applicants are forced to think of water quality issues. The form is a required part of the application. More information on the initial process is available in Section 5.6.

6.4 Compliance and Enforcement

Compliance and enforcement is an integral part of the City's efforts to address BMPs at the construction phase. Inspections are conducted on a daily basis throughout the City on various projects.

6.4.1 Inspection of Construction Sites

JURMP Section 7.7 provided a description of the City's construction site inspection process. The stormwater component of these inspections is intended to ensure that contractors, property owners, and developers implement an effective combination of BMPs to meet minimum water quality protection requirements. Inspection staff utilizes checklists to assist them in verifying appropriate BMP implementation at each site inspected, and shares with the owner/developer to increase awareness of stormwater requirements and assist them in complying. See Attachment E-1 for a copy of one such checklist. The City conducted 35 scheduled inspections of six active constructions sites. The City also conducted an average of 3 informal inspections of these sites and potential sites weekly throughout the reporting period, providing approximately 156 inspections total during the reporting period. It should be cautioned that while average numbers of inspections are illustrative as a gross measure of program activity, they can also be misleading. As already mentioned, individual sites open and close throughout the reporting period, and significant differences also exist between these sites and their inspection records.

The City has also instituted the use of a construction inspection database to track construction site visits pertaining to water quality and pollution prevention issues. Attachment E-2 contains a print-out of the visits made to all active construction projects during the 2007-08 reporting period. City staff also performs a number of informal inspections by attending joint meetings on site with other staff members or visual inspections while out investigating complaints. City staff believes that a visible presence is an excellent deterrent to non-compliance. If the workers know the site is being observed on a regular basis, they are less likely to let BMP up-keep deteriorate.

The City has just begun to use the new tracking process for construction site inspections. The City records each inspection in a tracking database. The City, due to its small size, currently inspects all construction sites regardless of priority or size. The database also allows the City to track the number of building inspections performed at each site and ensures that each site is visited a minimum of three times. The City is currently with a representative to merge water quality data with the building permit program. This would create a centralized data source for all the businesses and building permits in the City. The building inspector's visits are tracked in a previously existing database

managed by the Planning and Development Department. The City Inspector uses the new database for tracking inspections as well as a BMP checklist that each owner/developer signs and commits to uphold, see Attachment D-1. During all building inspections, water quality concerns are taken into consideration. If the inspector discovers a problem, the Water Quality Coordinator is called upon to make a separate inspection. At the completion of each project, the City requires a final inspection requiring signatures by any involved parties including building, engineering, sanitation, water quality, and planning/development. Without the signatures, the project is not recorded and not deemed complete until all requirements are met. The City requires a water quality signature on all SUSMP projects. The City also requires all building and grading permits to comply with minimum BMPs through the use of a checklist and property owner signed confirmation of said BMPs.

As stated above the City had one active high priority construction site during this reporting period at 3615 Lemon Grove Avenue, the DCH Honda site. This site was inspected according to the weekly inspection requirement even after the rainy season ended.

6.4.2 Enforcement of Construction Sites

City inspectors enforce stormwater requirements according to protocols outlined in JURMP Section 7.8. The City's enforcement program is designed to educate the community, promote compliance with applicable laws and regulations, return violators to compliance in a timely manner, and penalize violators as appropriate.

The City utilizes written warnings, notices of violation, administrative citations, and stop-work orders to enforce applicable stormwater requirements on its construction projects. The City's code enforcement program was in place on a trial basis and has transitioned to permanent policy. The trial period allowed the City Council to see examples of the most common code enforcement violations and for the City to flush out any kinks with the policy. Attachment B-3 contains a copy of the flowchart for stormwater code enforcement efforts.

The policy allows the code enforcement process to be utilized making it easier to deal with any issues discovered while dry weather-testing or site inspecting. With the new code enforcement process in place, the City can deal with any stormwater violations in a more expedited manner than the previous system, which did not allow fines or recuperative costs to the violator. The City also hopes to hire a part-time code enforcement officer with a water quality focus during the next reporting period.

In severe cases of non-compliance, or in the event of significant discharges, it may be appropriate to deny or revoke a permit. As a final resort, the City may use civil and/or criminal court actions under the State Porter Cologne Water

Quality Act or the Federal Clean Water Act. These last actions my result in significant fines levied upon non-compliant parties.

6.4.3 Reporting of Non-Compliant Sites

The JURMP outlines standard operating procedures for reporting non-compliant sites to the Regional Water Quality Control Board. The City did not have occasion to report any non-compliant sites over the course of this reporting period.

6.5 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its Construction Component in FY 2007-08.

6.5.1 Narrative Assessment

In FY 2007-08, the City continued to move its Construction Component forward in a number of important ways. Not only has the intensity of inspections grown, but an additional year of implementation has also allowed City staff and the regulated community to grow more accustomed to assimilating new stormwater regulations into their standard operating procedures. As familiarity and experience increase, the City expects compliance and oversight to improve commensurately.

The City hopes in future reporting periods to increase its outreach in this component. The City plans to host developer and contractor specific workshops dealing with water quality issues and compliance in future reporting periods.

Based on the City's annual review, staff has not determined that any specific management practices or BMPs relating to land use activities have been proven to be ineffective. The City therefore does not currently recommend any changes to this program component.

6.5.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activity-Based Targets

Target 1
Increase construction site inspections
100% complete

Target 2
Track construction site inspections
95% complete (the database continues to be in transition due to the potential for a centralized tracking source for a number of City programs)

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not characterize or track specific measures related to changes in knowledge or awareness resulting from the implementation of its Land Use Planning Component in FY 2006-07. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 3 Outcomes: Behavioral Change/BMP Implementation

The City did not characterize or track specific measures related to behavioral change or BMP implementation resulting from the implementation of its Land Use Planning Component in FY 2007-08. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 4 Outcomes: Load Reduction Estimation

The City did not characterize or track specific measures related to load reduction estimations resulting from the implementation of its Land Use Planning Component in FY 2007-08. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between

commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

6.5.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any commercial program data during this reporting period. The City will continue to pursue its current approach to regulating construction sites.

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Section 8.0 Education Component

This section provides a brief overview of the City's educational efforts during FY 2007-08. Since education is such an integral part of the all JURMP components, outreach to specific audiences is discussed in greater detail alongside program descriptions in the Land Use, Industrial, Commercial, Residential, and Construction Sections. This integrative organization allows the reader to better understand the context in which education is conducted.

8.1 Overview of Education

City outreach efforts continued to be guided by the three objectives set out in JURMP Section 9.1: 1) configuration and purpose of municipal separate storm sewer systems and how pollutants can be released to them, 2) how urban runoff impacts local receiving waters [mainly Chollas Creek] and surrounding habitats, and 3) BMP solutions that are available for treating or controlling the various pollutants of concern. Specific tools and methods are adapted as appropriate to best convey meaningful information to the target audience. Methods emphasized during this reporting period include:

- Presentations and Workshops
- Direct Mailings
- Community Events
- Educational Material Distribution
- Hotline Resources
- Interaction with Staff

The City participated in four outreach events during FY 2007-08. (See Attachment G for a table detailing each of the events) An accounting of formal events, however, does not adequately convey the significant amount of outreach that takes place during permit processing, inspections, on websites, and via other means. For a discussion on each of these alternative forms of outreach, see sections 3.0 through 7.0 and all corresponding attachments. What follows are overviews and selected highlights from the City's major educational components.

8.1.1 Outreach to Residents

The City implements an extensive outreach program targeting school children and other members of the general public. As the program continues to evolve, the content of the City's outreach will increasingly focus on those pollutants and activities identified by water quality analysis and other program data to be high priorities. Data from the City's Dry Weather Program (See Section 7 due on December 15, 2008) have been used to identify combinations of areas and pollutants that may warrant increased or more focused outreach. We hope to expand on this type of program feedback as data sets become larger and program components increasingly integrated in future years. The City conducted

four residential outreach events during this reporting period, as well as four public participation events. Section 4.3 details these events more extensively. School outreach is another major component of the City's education program. The intent is to stimulate long-term behavioral change by exposing students at a young age to the importance of clean water and environmental responsibility. Similar to how recycling behavior has been significantly modified by targeting school aged children. City staff strives to ensure that classroom presentations are memorable and interactive by incorporating hands-on activities such as watershed models. The previous year's Whale Tale grant was a one year program only, but the City hopes to develop its own elementary education program during future reporting periods.

8.1.2 Outreach to Commercial and Industrial Businesses

The goal of the City's commercial and industrial outreach program is to promote effective BMP implementation by making business operators aware of their regulatory obligations and by providing them with useful information about how to comply. To this end, a variety of methods were utilized during this reporting period (i.e., direct mailings, outreach events, personal communications, educational materials).

Every industrial business and all the high priority commercial businesses on the City's inventory received facility-specific BMP guidance during inspections this reporting period.

It is important to note that significant animosity exists within the small business community as a result of existing State and County environmental control agencies. City staff bears the complaints of the business community for the high cost and perceived over-bearance of governmental regulation.

Each reporting period, the City plans to increase outreach and improve communications with a new sector of the business and industrial community. Due to limited staff and fiscal limitations, the City must target and focus its program from year to year. However, no program will decrease once the outreach to a specific sector has been achieved. A consistent and constant message is instrumental in creating changes in behavior and increases in knowledge. Each year the City hopes to initiate a new focus area of increased outreach to provide in its annual report.

8.1.3 Outreach to the Construction Industry

The City places a high priority on education project applicants, contractors, developers, property owners, and other responsible parties to ensure that they have an understanding of water quality principles, applicable regulations, and proper BMP implementation strategies. Customers are offered a number of

educational resources, the key one being regular interaction with knowledgeable City staff.

During this reporting period, the City increased its outreach to the developers and construction sites within the City. The City increased the number of inspections, both informal and formal. Water Quality personnel review all development plans that are presented to the City. The City requires all permit applicants to complete a construction BMP plan. Water Quality personnel also require a notation on all plans to verify the use of BMPs for the duration of the project. The City continues to use and further develop the information available to contractor and developers. Several checklists are available as well as other educational materials on BMPs, both pre- and post-construction. The City is working on making its stormwater information educational and easier to use for the construction and development sector. The City continues to believe that the increase in inspections confirms the importance and commitment to an effective water quality and pollution prevention program.

Section 9.0 Public Participation

During FY 2007-08 the City continued to actively encourage stakeholder participation in the development and implementation of its Jurisdictional Runoff Management Program (JURMP) through various venues:

- Informational Resources
- Community Outreach Efforts
- Stormwater Copermittee Meetings

In addition to the activities described further below, the City continued to rely heavily on the interaction of staff with members of the public during their regular duties. As described below, the interaction of these staff with the public through various means (i.e., permitting, inspections, presentations, etc.) continued to provide an additional avenue for obtaining direct feedback from the City's customers.

9.1 Public Participation Venues

A key element of an effective public participation strategy is providing the public with easily accessible resources for obtaining water quality information and reporting complaints.

9.1.1 Hotlines

The City continued to operate its Stormwater Hotline at (619) 825-3827. This is a new hotline number for the City. The number is a direct line to water quality staff. The primary purpose of this hotline is to facilitate complaint reporting, but it also serves as a direct source of water quality information for interested parties. Calls received are promptly referred to the correct City staff. Complaint responses are handled in a timely manner. The focus is to gain compliance from the erring source, so a speedy response time is crucial. During this reporting period, the hotline received six calls pertaining specifically to water quality issues. Two of those numbers were in reference to construction sites that were not maintaining their sediment BMPs over the weekend. Both instances were rectified without formal code enforcement involvement. These numbers do not represent the number of calls that come through the main phone line and are water quality in nature. The City is working to create a tracking system for these calls.

Table 9.1 – Comparison of Calls

Number of Calls pertaining to Water Quality	Number of Calls with City Action
6	2

9.1.2 Chollas Creek Clean-up Event

The City participated in I Love a Clean San Diego's Creek to Bay Clean-up event on April 26, 2008. Due to the high temperatures that day, the City had four volunteers and two staff members arrive to clean the vacant field adjacent to Palm Middle School on Camino De Las Palmas. This location is in the Sweetwater watershed and was a new clean-up location for the City. The volunteers removed 464 pounds of debris from the site and 428 pounds of recyclable materials. See Attachment C-2 for a copy of the full report for the entire event.

9.2 Stormwater Copermittees

9.2.1 Copermittee Meetings

The City continued to participate in a variety of Copermittee Meetings sponsored mostly by the County. Below is a listing of the Workgroups that the City actively participates in:

- BMP Effectiveness and Assessment Workgroup
- Permit Re-Issuance Workgroup
- San Diego Regional Management Committee
- Dry Weather Monitoring Workgroup
- Regional Monitoring Workgroup
- Report of Waste Discharge Workgroup
- Outreach Workgroup
- Green Business Program Meetings
- Watershed Workgroup (through Port of San Diego)

Each of these meetings occurs once a month on various days or bi-monthly in the case of the Management Committee. The yearly activities calendar of the former Water Quality Coordinator was lost when the computer was re-formatted for a new user, so dates are un-available for attendance records. However, each meeting was accompanied by a sign-in sheet supplied by the sponsor, typically the County. The County would have records of the City's participation in the above listed groups.

9.2.2 Collaborative Efforts with Copermittees

This section will highlight two particular collaborations that will be highly beneficial to Lemon Grove and the region.

Chollas Creek Water Quality Protection and Habitat Enhancement Project

The Chollas Creek Water Quality Protection and Habitat Enhancement Project (Chollas Creek MOU) is an agreement between the City of San Diego and the members of the Chollas Creek watershed. The City of San Diego applied for the Chollas Creek Grant to create a more comprehensive education plan for areas in the Chollas Creek watershed. The Grant included regional educational materials and programs. The Grant provided for Chollas Creek clean-ups and restoration to native habitat in and around the stream-beds. The City benefited from the programs and educational material when they joined as a Grant partner. San Diego provided the in-kind money; they are asking the partners to provide in-kind services only. The in-kind services will be equal to roughly $10,000; no actual money is exchanged. The City assisted in educational material development, local programming for businesses and schools, and offered assistance at San Diego meetings pertaining to the grant. The Chollas Creek MOU went into effect in 2005. The City feels this collaboration is beneficial to the City of San Diego, to Lemon Grove, and the residents in both cities. Although this grant is complete, the City continues its education efforts in reference to Chollas Creek.

County of San Diego Green Business Program

The City increased its involvement with this program by offering an automotive workshop during this reporting period. The City looks forward to continuing these efforts and further improving its outreach to the local and regional business communities. This partnership has provided the City with valuable insight into local, state and federal regulations pertaining to pollution prevention and hazardous materials. In turn, the City has provided the program with an increased awareness of water quality programs and regulations.

Section 10.0 Effectiveness Assessment

10.1 Introduction

This section provides an overview of the methods used in this report to assess the implementation and effectiveness of the City's JURMP for the period of July 1, 2007 through June 30, 2008. As with the programs themselves, the City's approaches to effectiveness assessment have evolved considerably during this period. An important aspect of these new and augmented programs is ensuring their measurability and their nexus to changes in discharge and receiving water quality. In particular, Permit sections F.7 and I.1.a.F.7 require that the City identify and report on measures to assess the effectiveness of JURMP implementation and identify strategies for assessing long-term program effectiveness.

The City is taking important steps toward the development of new and improved methods for conducting assessments, and in putting those methods into practice in this report. This section provides an overview of the approach that the City has taken to conduct its effectiveness assessment this year. However, the actual assessments are contained throughout the remainder of this report within their respective program components. Specifically, the following sections contain effectiveness assessment elements, each following a common organization described further in Section 11.2 below:

- 2.0 Municipal Component
- 3.0 Industrial Component
- 4.0 Commercial Component
- 5.0 Residential Component
- 6.0 Land Use Planning Component
- 7.0 Construction Component
- 8.0 Illicit Discharges Detection and Elimination Component

The scope and content of these assessments varies widely for each program element. However, in all cases, the City has included sections corresponding to each of the major effectiveness assessments elements described below.

10.2 Assessment Approach

The City and other Copermittees have in past years described a number of basic measures that can be relatively easily tracked and quantified. The City's objective is to go beyond those efforts by more closely scrutinizing existing measures with an eye toward a more complete understanding of their meaning and value to the effectiveness assessment process. From this, the City has also endeavored to identify where new or revised measures might be needed. Our starting point was the collaborative development of the document, *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management*

Programs, submitted to the RWQCB on October 16, 2003. This document represents the Copermittees' current thinking on how effectiveness assessment can best be approached now and in the future. More importantly, it procedes an important starting point for the evolution of more detailed and sophisticated strategies by the City and other Copermittees. The remainder of this section draws heavily on the content of that framework.

The City's approach to effectiveness assessment as reflected throughout this JURMP Annual Report, is organized according to three primary elements, each described below:

- Narrative Assessment
- Assessment of Specific Measures
- Spatial and Geographic Analysis

10.2.1 Narrative Assessment

In previous comments on the City's JURMP, RWQCB staff has indicated a desire for a more detailed discussion of successes, strengths and weaknesses, and outstanding program features. The narrative assessment addresses this concern by qualitatively describing major programmatic achievements from throughout the year. Other more specific and quantifiable measures are addressed in the remaining portions of the assessment.

Permit Section I.1.g also requires that the City identify in its JURMP Annual Report any management measures proven to be ineffective in reducing urban runoff pollutants and flow. Each narrative assessment section also includes the identification of any such measures identified in the reporting period.

10.2.2 Assessment of Specific Measures

This section provides a short overview of several of the key concepts and organizing principles of *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. That document should be read in its entirety for a more complete understanding of the City's long-term effectiveness assessment strategy. Due to the length of the document, the City has not included it in this report. However, a copy is available on request.

Essential to increasing measurability is the establishment of clear and meaningful measures that can be tracked over this and future reporting periods. To establish such measures, it is crucial that the desired or targeted outcomes of any particular program activity be clearly identified and understood. Attachment I illustrates six basic levels or categories of outcome that can be employed for any of these six levels. The City's assessment intends to follow this basic model. Ultimately, the objective of the effectiveness assessment process is to identify measures at the highest level of the hierarchy possible. In doing so, knowledge

gaps between program activity and water quality outcomes can best be addressed. It is important to note, though, that a single measure will rarely provide a complete picture of any program area. Multiple measures will therefore usually be utilized for many program activities.

10.2.2.1 Compliance with Activity-Based Permit Requirements (Level 1)

This level consists of activities that are prescribed by or established under the Permit (updating source inventories, training staff, conducting inspections, etc.). A fundamental feature of Permit-derived programs is the explicit establishment of specific activities that are assumed, but not proven, to be beneficial to water quality. While many of the assumptions underlying the establishment of required activities may be correct, there are currently few means of quantifying or establishing causal relationships that will make many of them more measurable. The City's long-term goal is to explore these assumptions in more depth; this year's report focuses on clearly defining the intended outcomes of these activities and identifying specific measures by which them can be accurately assessed.

10.2.2.2 Changes in Knowledge/Awareness (Level 2)

The most immediate and basic outcome of many urban runoff program activities is a change in the knowledge, awareness, or attitudes of target audiences (learning that storm drains and sanitary sewers are separate systems, that everyday activities contribute to water pollution, etc.). Such changes are most often targeted through outreach or training programs. Not an end in themselves, these changes presumably form the basis of behavioral change, or BMP implementation.

10.2.2.3 Behavioral Change/BMP Implementation (Level 3)

Building on increases in knowledge, the City's primary objective is to affect significant and lasting changes in the behavior of municipal employees, residents, and business representatives. Behavioral outcomes are usually expressed in terms of BMP implementation since this is the overriding objective of the City's programs. Since this is the level at which actions are actually taken, estimating or quantifying BMP implementation is a necessary component of a successful effectiveness assessment strategy. It is also necessary as a precursor to establishing load reductions. Several elements of this year's report include a discussion of BMP implementation.

10.2.2.4 Load Reductions (Level 4)

The primary goal of BMP implementation is to reduce the loading pollutants to stormwater discharges. Assuming that such reductions are properly targeted to existing or potential water quality problems, load reductions should in turn result in improvements to discharge and receiving water quality. The primary purpose

of conducting a load reduction estimation exercise is to better understand the benefit of conducting high priority activities (i.e., to characterize the expected reduction in loading of contaminants to the MS4).

The City regards the estimation of load reductions as the key to its assessment process. By working to establish Level 4 outcomes for lower level activities, we hope to increasingly improve our understanding of the relationship of these activities to water quality improvement. Because these efforts are both difficult and speculative, and often require data and information not readily available, this year's assessment includes load reduction estimates in only a couple of areas. In future years, our understanding of the many assumptions that must be made to address existing uncertainties, and variables that affect any given measure, will improve as we document and study them. Our goal this year was simply to develop and test some basic approaches.

10.2.2.5 Changes in Discharge Quality (Level 5)

In many respects, changes in discharge quality are the most direct expression of successful program implementation. Measurable improving the quality of discharges both into and from the City's MS4s will therefore be an important targeted outcome. Establishing relationships between discharge quality and specific program components, however, is beyond the scope of this year's assessment.

10.2.2.6 Changes in Receiving Water Quality (Level 6)

The ultimate objective of the City's programs is the protection and improvement of water bodies receiving discharges from its MS4. Both discharge quality (level 5) and receiving water quality are addressed through the City's Dry Weather Program (Section 8) and the Copermittees' Receiving Water Monitoring Program (submitted under separate cover). Establishing relationships between receiving water quality and specific program components, however, is beyond the scope of this year's assessment.

10.2.3 Spatial and Geographic Analysis

Several sections of this year's report contain analyses of program data aimed at better understanding their spatial variability and its relevance to program implementation. The approaches utilized are simple and straightforward. Data is examined regionally, by watershed, and by community to identify potentially significant trends. For instance, clustering of a particular business type may warrant outreach efforts that are specifically focused in a watershed. The City hopes to develop more sophisticated methods of spatial and geographic analyses in the future. At the same time, it is important that our understanding of the potential uses of program data evolve concurrently. Any type of meaningful

analysis is limited by the amounts and quality of data that are available to support it.

During this reporting period, the City finished a preliminary needs assessment for the implementation of a city-wide GIS program. The needs assessment encouraged the City to update its existing base data and layers using modern technology. The City hoped to have the initial phase up and running by FY 2007-08. However, due to budget constraints, the City was forced to put the initial phases on hold until the next reporting period. The City sees GIS as a powerful compliance and collaboration tool that will make tracking and reporting more efficient and accurate. The full implementation of the GIS program is dependant on budgetary constraints in future reporting periods.

Section 11.0 Fiscal Analysis

The purpose of this section is to provide a detailed analysis of the expenditures required to implement the JURMP. The main purpose of this analysis is to enable the City to determine the level of resources needed to meet the requirements of the Permit.

Although the Regional Water Quality Control Board staff down plays the importance of this portion of the analysis - based on comments made in public hearings during the new permit process and comments in Regional Board staff reports - the City considers the analysis vital in determining the City's ability to effectively meet the conditions of the Permit.

11.1 Cost Breakdown

The analysis was performed as outlined in the JURMP, by assigning specific expenditure categories into the general categories suggested in Permit section F.8. The analysis is presented in Table 12.1.

Table 11.1 – 2007/2008 Fiscal Analysis Summary

Stormwater Cost Analysis
All costs covered in the General Fund.

ACTIVITY	CURRENT YEARLY BUDGET	CURRENT BUDGET LOCATION
STORM DRAINAGE CLEANING AND MAINTENANCE		
Public Street and Parking Lot Sweeping		Streets
Streets	$30,000	
Parking Lots	$2,000	
Public Street and Parking Lot Sweeping Total	$32,000	
Litter Removal		
Litter Removal	$13,000	
Litter Removal Total	$13,000	
Storm Drainage Cleaning		
Inlets		
Inspection and Cleaning	$19,820	
Fossil filter replacements	$1,400	
Inlets Subtotal	$21,220	
Basins and Channels		
Inspection and Cleaning (Note 1)	$38,829	
Basins and Channels Subtotal	$38,829	
Video Inspections		
Video Inspections (Note 1)	$50,000	
Video Inspection Subtotal	$50,000	
Storm Drainage Cleaning and Maintenance Total	**$155,049**	
STORM EVENT ACTIVITIES		
Sandbag stock piling and placement	$4,000	
Patrols	$3,089	
Storm Event Total	**$7,089**	
ILLICIT CONNECTION/ILLEGAL DISCHARGE ENFORCEMENT PROGRAM		Engineering

		Services
Dry Weather Testing	$20,000	
Enforcement	$5,000	
Administration/Supervision	$1,000	
Stormwater HotlineComplaints	$2,000	
Illicit/Illegal Enforcement Program Total	**$28,000**	
STORM WATER POLLUTION PREVENTION PLANS (SWPPP's)		
Construction Related SWPPP	$2,000	
Plan Review (including SUSMP's)	$15,000	
Inspection	$3,000	
Construction Related SWPPP Subtotal	$20,000	
Municipal Facility SWPPP		
SWPP Implementation, Inspection, and Maintenance of Municipal Facilities	$18,798	Streets
Municipal Facility SWPPP Subtotal	$18,798	
All SWPPP Activities Total	**$38,798**	
BEST MANAGEMENT PRACTICES (BMP) IMPLEMENTATION		
Inspection of Industrial and Commercial Facilities	$50,000	
Inspection of Municipal Facilities	$1,000	
BMP Total	**$51,000**	
MISCELLANEOUS ACTIVITIES		Engineering Services
Annual Reporting (JURMP)	$5,000	
Administration (General)	$74,004	
NPDES Permit Fee	$7,500	
Public Education/Outreach	$5,000	
Miscellaneous Activities Total	**$77,504**	
PROGRAM TOTALS	**$371,440**	

Note 1 –Program still in development stages, projected cost for next fiscal year

It should be noted that the cost of program implementation during the 2006-07 reporting period does not reflect the true cost of implementation. There are cost areas that were not considered in the analysis. For example, the cost of personnel in the Grounds division, who perform stormwater maintenance activities as needed, but who do not separate those activities from their daily activities. The City is currently working to create a more thorough "type of work" tracking system to alleviate some of these omissions.

11.2 Funding Sources

There are a number of sources for program funding; grants, stormwater fees paid by both residents and businesses, fines, and general fund money to name a few. The City has created a stormwater fee for businesses and residents through developmental plan check fees, for businesses charged through the business license and solid waste services to residential users. The fees collected only fund approximately one third of the total stormwater program costs. They currently are not allocated to any specific section of the program, but are used to ease various costs as needed. The City has integrated water quality compliance into its Code Enforcement program, which includes potential fines for continued non-compliance. However, the City does not foresee this as a steady revenue source for program funding, as compliance is the primary and desired outcome.

Given California state law, the City finds difficulty in fully funding its stormwater program. Also given recent opposition State-wide to the creation of stormwater fees, the City is cautious in expanding its current funding strategy. As such, the City's General Fund will be required to continue subsidizing this increasingly costly program.

The total cost of the program for this reporting period equaled more than 3% of the General Fund budget. For comparative purposes, the cost of the stormwater program is equivalent to:

- Seven times the amount the City spends on its Code Enforcement program
- The City's expenditure on maintaining all of its parks, and
- 258 percent more than the City commits to youth sports and recreation programs.

Again, these comparisons are included to demonstrate the City's financial commitment to the program.

To further the City's and region's efforts in meeting the overall objective of the Stormwater program, the City challenges the Regional Board and the environmental community to take regional leadership in proposing a regional revenue source – similar to that of TRANSNET for transportation enhancements. The City's financial commitment to the program demonstrates the City's efforts in complying with the requirements of the JURMP and the Pemit. The City continues to be willing to brainstorm with Regional Board staff regarding this challenge. To date, this challenge has been outright rejected by Regional Board staff.

The City's seventh Annual Report overall and the first submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2007-01, "Permit") represents a full year of water quality activity and programming in the City of Lemon Grove. We are confident that the report demonstrates our success in building a program that meets and often exceeds Permit requirements. At this same time, the annual reporting process offers an important opportunity to critically assess program implementation, and to identify areas in need of modification or improvement.

The programs described in this report to be significantly expanded and improved over previous years, as is evidenced by the numerous accomplishments described. City staff once again responded positively to the implementation challenges presented by the Permit; thanks to a sustained team effort, we continued to improve and augment our programs.

Moving forward, it is important to keep in mind that meaningful measurement is a necessary part of a successful program strategy. This year's report reflects more monitoring, more data, more assessment, and more deliberation on the part of City staff than ever. This speaks well of the City's program, but it is only a start, the stormwater puzzle will take many years to solve. The increased focus on measurability that is manifested in this report must remain a focus. In particular, the new and innovative approaches to effectiveness assessment that the City helped to pioneer must continue to actively evolve. The framework set out in the document *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* provides a great deal of useful direction, but success is not guaranteed. Staff will need to develop and embrace the detailed measures and measurement tools necessary to track and evaluate long-term success. Similarly, we will also need to continue looking for ways to improve and best utilize our monitoring programs so that they continue providing timely and useful information.

As in previous years, the City continued to demonstrate strong collaboration with other Copermittees throughout the reporting period. This is reflected in the quality and vision of the Copermittees' many collaboratively conducted activities. Such collaboration has become a hallmark of the Copermittees' programs and must continue to be. Future success will require no less collaboration.

This year's report is characterized by a higher integration of elements than in the past. Although the City's programs are implemented over numerous departments, the coordination and communications between those efforts has been commendable. Our experience over the past year has also shown that we have many new challenges ahead of us. Many of the City's stormwater programs and activities are still in their infancy. Unlike many other regulatory programs, the way forward is neither easy nor straightforward. The City has also

dealt with severe budget constraints during this reporting period and does not expect them to mitigate during the next reporting period. The issues being confronted on the national and state levels have drastically affected our local communities and budgets. These factors continue to make meeting the demands of this program fiscally challenging. Meeting these challenges and the challenges ahead of us will require continued diligence and good humor.

Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Signatory

Dec. 10, 2008
Date

Name: Graham Mitchell
Title: City Manager for City of Lemon Grove
Phone No: 619-825-3800

Section 7.0 IC/ID Component

This section describes activities conducted during the FY 2007-08 reporting period to minimize the impact of discharges from illicit connections and discharges (IC/IDs) on receiving waters and other environmental resources. The City's IC/ID program consists of several complementary activities, some of which are discussed in detail in this section, and others that are briefly addressed here and deferred to other sections for more detailed treatment. What follows is a summarized list of where each IC/ID program component is discussed in this Annual Report:

- Dry Weather Monitoring (Section 7.1)
- Spill Prevention and Response (Section 7.2)
- Public Reporting of IC/IDs, Complaint Investigations, and Enforcement (Sections 3.4, 4.4, 7.3, 7.4)
- Used Oil and Toxic Materials Disposal (Section 4.3.4)
- Limiting Infiltration from the Sanitary Sewer to the MS4 (Sections 7.5 and 2.1.4)

7.1 Dry Weather Monitoring Program

This section provides and overview of the results of the City's 2007 Dry Weather Analytical and Field Screening Monitoring Program (Dry Weather Program), which is implemented by DMax. This section will provide a complete copy of DMax's findings and report.

7.2 Public Reporting of IC/IDs

The City continued to operate the Stormwater Hotline at (619) 825-3810. The primary purpose of the hotline is to facilitate complaint reporting; but it also serves as a direct source of water quality information for interested parties. Calls are promptly referred to City staff for proper handling.

During this reporting period, 123 calls were received through the hotline. The majority of the calls received on the Hotline were either informational or related to private property issues. Of these calls five were related to illicit connections and discharges. These calls were all settled without enforcement actions or were private property disputes. All tips related to IC/IDs were investigated by City staff and dealt with accordingly. Follow-up and enforcement related to business complaints and issues is dealt with in Section 3.4 and follow-up and enforcement for residential complaints is dealt with in Section 4.4.

7.3 Complaint Investigations and Enforcement

The City conducted follow-up investigations on all complaints received during this reporting period. The primary objective of the City's commercial enforcement program is to ensure violators are brought into compliance in a timely manner. When education is not sufficient to do so, staff may use a variety of formal enforcement tools. These vary by department and program, but generally include Verbal Warnings, Notices of Violation, and Official Notices. The City may also use civil and/or criminal court actions under the State Porter-Cologne Water Quality Act or the Federal Clean Water Act. These last actions my result in significant fines levied upon non-compliant parties.

7.4 Facilitation of Used Oil and Toxic Material Disposal

During this reporting period, City staff worked diligently to promote, publicize, and facilitate the proper management and disposal of used oil, toxic materials, and other household wastes. Activities related to the City's recycling program and waste collection services are reported in detail in Section 5.3.

7.5 Limiting Infiltration from the Sanitary Sewer

The City implemented aggressive maintenance programs to limit infiltration from the sanitary sewer system to its MS4. Further details on these activities are reported in Section 2.1.

7.6 Effectiveness Assessment

This section provides a discussion of the City's effectiveness in implementing its IC/ID Component for FY 200-08.

7.6.1 Narrative Assessment

In FY 200-08, the City continued its Dry Weather Program through a contract with DMax Engineering. The City saw significant improvements in its site testing. This year's sampling was further increased the City's knowledge and awareness of its watershed and waterbodies. This is reflected in the specific recommendations contained in D-Max's report and findings found attached to this section.

The City also continues to attend the Regional Dry Weather Monitoring Workgroup to assist in watershed improvements together with other copermittees.

7.6.2 Assessment of Specific Measures

A variety of specific measures of program effectiveness are discussed below. These are presented according to the following general categories of outcomes:

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Levels 5 & 6: Changes in Discharge and Receiving Water Quality

Section 11.2 also provides a more detailed explanation of the conceptual basis for this categorization and the selection of specific outcomes and measures described throughout this report.

Level 1 Outcomes: Success in Meeting Activity-Based Targets

The City did not track activity targets during this reporting period. However, the City will remedy this problem during future reporting cycles. The City believes the program was dealt with effectively, but activity-based targets were not tracked.

Level 2 Outcomes: Changes in Knowledge/Awareness

The City did not characterize or track specific measures related to changes in knowledge or awareness resulting from the implementation of its Land Use Planning Component in FY 2007-08. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 3 Outcomes: Behavioral Change/BMP Implementation

The City did not characterize or track specific measures related to behavioral change or BMP implementation resulting from the implementation of its Land Use Planning Component in FY 2007-08. The need for such measures will be considered in the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 4 Outcomes: Load Reduction Estimation

The City did not characterize or track specific measures related to load reduction estimations resulting from the implementation of its Land Use Planning Component in FY 2007-08. The need for such measures will be considered in

the future, and, if determined necessary, the City will consider incorporating additional tools such as surveys to characterize knowledge and awareness.

Level 5 & 6 Outcomes: Discharge and Receiving Water Quality

As described in *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*, sufficient data and methodology do not currently exist to establish either correlations or causal relationships between commercial sources and water quality outcomes. The City will continue to explore these relationships in future years.

7.6.3 Spatial and Geographic Analysis

A spatial and geographic analysis was not conducted for any commercial program data during this reporting period. The City will continue to pursue its current approach to regulating construction sites.

City of Lemon Grove
Dry Weather Field Screening and Analytical Monitoring Program
2008

Submitted to:

City of Lemon Grove
3232 Main Street
Lemon Grove, CA 91945

Prepared by:

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D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

November 19, 2008
Project No. 200842W-1

Ms. Cora Long
City of Lemon Grove
3232 Main Street
Lemon Grove, CA 91945

Re: 2008 Dry Weather Field Screening and Analytical Monitoring Program
City of Lemon Grove, California

Dear Ms. Long:

Per your request D-MAX Engineering, Inc. (D-MAX) has completed the 2008 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of Lemon Grove during the 2008 dry weather season. The contents include field screening data and analytical laboratory test results, trash assessment, analyses of the collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions.

It has been our pleasure working with the City of Lemon Grove on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering, Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

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1 INTRODUCTION

1.1 Regulatory Requirements

In accordance with San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit), each of the Copermittees, including the City of Lemon Grove, is required to annually perform dry weather field screening of discharges into its storm drain system. This procedure is comprised of recording field observations, estimating observed flow rates, and conducting field testing at selected locations along the storm drain conveyance system during the dry weather season, May 1 through September 30. The Municipal Permit also necessitates that Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station should be visited. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. A more detailed trash assessment component has also been required. The Dry Weather Monitoring Program is an integral part of the City of Lemon Grove's Urban Runoff Monitoring Program.

1.2 Program Overview

The primary purpose of the Dry Weather Monitoring Program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following three components.

- Field screening observations
- Field analytical testing
- Laboratory analytical testing

Information collected from the dry weather monitoring is used to characterize dry weather discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations were conducted as necessary to detect and eliminate the sources of these pollutants. The results from the 2008 Dry Weather Monitoring Program conducted by D-MAX Engineering, Inc., (D-MAX) are presented herein.

1.3 Hydrologic Setting

The City of Lemon Grove (City), located in the southeastern portion of San Diego County, is situated within the Pueblo San Diego Hydrologic Unit (HU 908) and Sweetwater River Hydrologic Unit (HU 909). These two Hydrologic Units, along with the Otay River Hydrologic Unit, form the San Diego Bay Watershed and ultimately drain into San Diego Bay. Most of the City of Lemon Grove is located within the San Diego Mesa Hydrologic Area (HA 908.2) of the Pueblo HU, while the remainder of the City is in the Lower Sweetwater HA (909.1).

The City of Lemon Grove drains to San Diego Bay. Three of the four main drainage basins in the City drain to the San Diego Mesa HA, primarily via Chollas Creek. The approximately 1.7 square mile **Lemon Grove Avenue drainage basin** and the 0.3 square mile **Madera Street drainage basin** are both located in the southeast portion of the City; the **Federal**

Boulevard/Broadway drainage basin is 1.9 square miles and is located in the northern portion of the City. The fourth drainage basin, known as the **Broadway/Sweetwater drainage basin**, is approximately 0.4 square miles. It constitutes the northeast region of the City and drains to the Sweetwater River, eventually terminating in San Diego Bay.

Based primarily on wet weather data from mass loading stations (MLS), ambient bay and lagoon monitoring, bioassessments, and 303(d) listings in Chollas Creek and/or the Sweetwater River, the high priority water quality issues for the San Diego Bay Watershed as a whole have been identified in the 2008 San Diego Bay Watershed Urban Runoff Management Plan (WURMP) as bacteria, gross pollutants, metals, oil and grease, pesticides, sediment, and trash. It should be noted that the Sweetwater River is not on the 303(d) list, unlike Chollas Creek, which is 303(d) listed for bacterial indicators, copper, diazinon, lead, and zinc.

1.4 Previous Work

The numbers of historical dry weather monitoring sites since 2002 are presented in Table 1-2. Historical dry weather monitoring data is included in Appendix A.

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER SITES

Year	Number of Field Screening Sites [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1998	11	9	2	0	---
1999	13	11	2	2	---
2000	10	9	1	4	---
2001	12	12	0	3	---
2002	15	14	1	3	4
2003	15	15	0	2	4
2004	15	14	1	4	4
2005	15	15	0	4	4
2006	15	13	2	4	4
2007	15	14	1	3	4

Notes:
[1] Number of Sites Screened = Number Flowing + Number Ponded. Field screening cannot be conducted at sites found to be dry. Dry sites are replaced by either a flowing or ponded site.
[2] Laboratory analyses commenced in 2002 as required by RWQCB Order 2001-001.

1.5 Report Outline

Section 1, Introduction, includes regulatory background, a program overview, a discussion of the City of Lemon Grove's hydrologic setting, a summary of previous work, and the report outline.

Section 2, Sampling Locations, describes the field screening sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and results of the field screening analyses.

Section 5, Trash Assessment, discusses the procedure and results of the trash assessment.

Section 6, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 7, Data Analysis, provides an analysis of field and laboratory data collected in 2008, as well as a comparison with the results of previous years.

Section 8, Follow-Up Investigations, details the results of follow-up investigations undertaken to isolate the sources of pollutants detected during the field screening program.

Section 9, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Historical Dry Weather Monitoring Data

Appendix B Photographs of Sampling Locations

Appendix C Laboratory Analytical Reports

Appendix D Field Data Sheets

2 SAMPLING LOCATIONS

The City of Lemon Grove has 15 designated primary monitoring stations. If no flowing or ponded water is observed at primary monitoring stations, alternate field screening sites are visited. Four of the 15 primary sites are also designated as sites for laboratory analysis.

During the 2008 Dry Weather Monitoring Program, primary sites 4 and 13 were observed to be dry, so alternate sites 19 and 20 were selected as locations for monitoring.

Table 2-1 provides the location, conveyance configuration, land uses, hydrological subarea, and GPS coordinates of the sampling locations that were visited. Photographs of sampling locations are included as Appendix B. A map of sampling locations is included as Figure A at the end of this report. A map of the watersheds in and around the City of Lemon Grove, broken down into HSAs, is included as Figure B.

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS

Site I.D	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
Site 1	100 feet southeast of the Sweetwater Road and Broadway intersection	Outlet	Residential	Commercial	909.12	32.74512	-117.01826
Site 2	Behind the building at 6420A Federal Boulevard	Natural Creek	Industrial	Residential	908.22	32.73127	-117.06124
Site 3	Next to 6691 Federal Boulevard	Natural Creek	Commercial	Residential	908.22	32.73569	-117.05477
Site 4	Between 7102 and 7106 Westview Place, west end of street, before driveway	Catch Basin	Residential	Commercial	908.22	32.74118	-117.04557
Site 5	6883 College Avenue, behind Discount Tire	Outlet	Commercial	Residential	908.22	32.74035	-117.04941
Site 6	Buena Vista and Lemon Avenue., in Home Depot parking lot, in front of nursery	Manhole	Commercial	Industrial	908.22	32.74360	-117.03484
Site 7	Corner of Primera Street and Madera Street	Catch Basin	Residential	Commercial	908.22	32.72054	-117.04865
Site 8	Lemon Grove Avenue, 100 feet south of Massachusetts Avenue Trolley Station	Outlet	Residential	Commercial	908.22	32.72255	-117.04050
Site 9	Main Street, under trolley tracks, between Davidson Street and Mt. Vernon Street	Outlet	Commercial	Residential	908.22	32.73259	-119.03365
Site 10	Across from 2220 and 2196 Main Street, under trolley tracks	Earthen Channel	Residential	Commercial	908.22	32.72869	-117.03591
Site 11	100 feet west of the Broadway and Massachusetts Avenue intersection in front of McDonald's, on divider	Manhole	Commercial	None	908.22	32.74255	-117.04378
Site 12	North side of Lemon Grove Way, between residential address 8156 and the Grove Condominiums	Catch Basin	Residential	Open	909.12	32.74559	-117.02408
Site 13	Northeast corner of the Palm Street and Lemon Grove Avenue intersection	Manhole	Residential	Commercial	908.22	32.73486	-117.03152

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site I.D	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
Site 15	6636 Federal Boulevard, in front of Thompson Building Materials	Earthen Channel	Industrial	Commercial	908.22	32.73566	-117.05503
Site 16	Citronella Street and Palm Street intersection, east of Arco station	Outlet	Residential	None	908.22	32.73524	-117.03071
Site 19*	In a small cul-de-sac on west side of Skyline Drive, south of Lincoln Street	Manhole	Commercial	Residential	908.22	32.73726	-117.02695
Site 20*	Intersection of Alberdi Drive and San Altos Place, 100 ft and north on dirt Road	Earthen Channel	Residential	Commercial	908.22	32.71822	-117.04422

Note: * Alternate sites 19 and 20 replaced dry primary sites 4 and 13.

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of flow measurement, quantitative field analyses of selected water quality parameters, and qualitative field observations. Information relating to weather conditions, the amount of time since last rainfall, and the type of storm water conveyance are recorded. Specific observations and results of the field water quality analyses are documented on field data sheets, which are included in Appendix D. The data sheets also serve as a record of the field visit and are completed for every site visit regardless of whether or not samples were collected.

For 2008, field data sheets were updated to include three categories of visits. Previously they included check boxes for either routine field screening or follow-up visits. This year there are check boxes for routine field screening, confirmation, and IC/ID follow-up visits. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation. For the purposes of this report, confirmation and IC/ID follow-up visits are both referred to as "follow-up" visits.

Field screening and analyses were conducted according to the following procedures and methods.

Qualitative Observations

Irrespective of flow, qualitative field observations are made during each site visit. These observations provide a general site assessment and describe factors like water odor, clarity, the presence of floatables, visible deposits or stains, vegetation and biological organisms. Evidence of present or past illicit connections and illegal discharges to the storm drain system may also be ascertained through careful field observations. Each field screening location is photographed to provide additional information and documentation of site conditions. Photographs are included in Appendix B.

Flow Measurement

Flow measurements can be utilized to estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may indicate an illegal discharge upstream. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, grab samples were collected and analyzed in the field for the following constituents:

- Specific conductance
- Temperature
- pH
- Turbidity
- Surfactants (MBAS)*
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)
- Orthophosphate-Phosphorus (Orthophosphate-P)

* Surfactants may also be referred to as detergents

The methods that were used to perform the above field analyses along with each method's detection limit, range and accuracy, are listed in Table 3-1.

3.2 Laboratory Analytical Methods

Consistent with the Municipal Permit's requirements, samples were collected for laboratory analyses at eight sites, representing over 25 percent of all sites where ponded or flowing water was observed. These samples were submitted to EnviroMatrix Analytical, Inc., a California Department of Health Services-certified laboratory, for analysis of the following constituents:

- Oil and Grease
- Total Hardness
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Diazinon
- Chlorpyrifos
- Total Coliform Bacteria
- Fecal Coliform Bacteria
- *Enterococcus* Bacteria

The methods used to perform each laboratory analysis along with method detection limits and holding times are listed in Table 3-2.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01 mS/cm	0 – 20 mS/cm	± 2% of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.1℃	0.0℃ – 60.0℃	± 0.5℃
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703-11 Portable Turbidity Meter***	0.01 NTU	0.01 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) Methylene Blue Active Substances	0.13 mg/L	0.0 mg/L – 3.0 mg/L*	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[3]***	2.26 mg/L**	2.26 mg/L –13.6 mg/L**	± 30%
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate***	0.10 mg/L**	0.10 mg/L – 3.00 mg/L**	Varies with measured concetration[4,5]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[6]***	0.25 mg/L**	0.25 mg/L – 2.61 mg/L**	Varies with measured concetration[4,5]

Notes:

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14 g/mol) to NO_3 (62 g/mol). The detection limit for nitrate is 10.0 mg/L; however, the detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range. "Full range" is equal to the upper limit of the test kit's range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31 g/mol) to PO_4 (95 g/mol). The detection limit for orthophosphate is 0.75 mg/L; however, the detection limit for orthophosphate-P is lowered due to the conversion.

*Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Reporting limit, range, and accuracy information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com. Additional information regarding CHEMetrics accuracy was obtained from the manufacturer via email.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Detection Limit	Maximum Holding Time [1]
Oil and Grease	EPA 1664	5 mg/L	28 days
Total Hardness	EPA 200.7	10 mg/L	14 days
Dissolved Cadmium	EPA 6020	0.00100 mg/L	24 hours
Dissolved Copper	EPA 6020	0.00100 mg/L	24 hours
Dissolved Lead	EPA 6020	0.00100 mg/L	24 hours
Dissolved Zinc	EPA 6020	0.00500 mg/L	24 hours
Diazinon	EPA 8141A	0.05 µg/L	7 days
Chlorpyrifos	EPA 8141A	0.05 µg/L	7 days
Total Coliforms	SM 9221	[2] 20 – 1,600,000 MPN/100 mL	6 hours
Fecal Coliforms	SM 9221	[2] 20 – 160,000 MPN/100 mL	6 hours
Enterococci	SM 9230	[2] 20 – 160,000 MPN/100 mL	6 hours
Total Coliforms	SM 9223 (IDEXX Colilert) [4]	10 – 2,400,000 MPN/100 mL	6 hours
Escherichia coli (*E. coli*) [3]	SM 9223 (IDEXX Colilert) [4]	10 – 2,400,000 MPN/100 mL	6 hours
Enterococci	IDEXX Enterolert [4]	10 – 240,000 MPN/100 mL	6 hours

Notes:

µg/L = micrograms per liter

MPN/100 mL = most probable number (of colony-forming units) per 100 milliliters

[1] Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.

[2] For D-MAX's Dry Weather Monitoring Program, EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100 mL). For fecal coliforms and *Enterococci*, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.

[3] Number of fecal coliforms is derived from number of *E. coli* through the following formula:
Fecal Coliforms = *E. coli* / 0.85. The converted fecal coliform count, not the number of *E. coli*, is reported in this report's data tables.

[4] IDEXX Colilert and Enterolert tests are performed by EnviroMatrix Analytical. This test is used during upstream investigations only.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project includes the United States Environmental Protection Agency (EPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters are calibrated periodically with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter is calibrated and periodically checked for accuracy using standard solutions. The conductivity meter is checked periodically with standard solutions and calibrated as necessary.

Field sample collection containers are first rinsed with distilled water and then with the sample water before sample collection. Upon completion of sampling at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water and dried.

The accuracy of field analytical techniques is assessed at the beginning of each sampling week by analyzing solutions of known concentrations for ammonia-nitrogen, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration (mg/L)	Acceptable Range* (mg/L)	Field Test Kit Results (mg/L)
9/16/08	Ammonia-Nitrogen	1.0	0.8 – 1.2	0.802
9/16/08	Surfactants	1.0	0.75 – 1.25	1.0
9/16/08	Nitrate *	44.3	31.0 – 57.6	55.93
9/16/08	Orthophosphate *	1.0	0.75 – 1.25	0.904

Notes:

* Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1.

** Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by multiplying the results by 0.226 for nitrate and 0.326 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis are collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed, and samples are delivered and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain-of-custody forms are included in Appendix C.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation is necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a re-sampling is conducted within one day. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by the laboratory analyses, a comprehensive follow-up pollutant source investigation is conducted within two days of receiving the analytical reports from the lab. The results of these investigations are included in Section 8 of this report. Recommendations based on these investigations are included in Section 9.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (see Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels, which are based on county-wide sampling data and have been used by all Copermittees since the 2003 dry weather season. If pH, orthophosphate-P, nitrate-N, ammonia-N, or surfactants are observed above the numeric action level, a follow-up investigation is conducted within one day to investigate the source unless best professional judgment indicates otherwise. If oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, or *Enterococcus* laboratory analytical results exceed numeric action levels, then source investigations are conducted within two business days of receiving the test results from the lab.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in EPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total

hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is used as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the field crew. Best professional judgment may indicate that results which either exceed certain action levels or statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
pH	<6.5 or >9.0	Basin Plan, w/ allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	EPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity), and unusual odors.
Temperature (°C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Values > 5 mS/cm may indicate IC/ID however; EC may be highly elevated in some regions due to high-TDS groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values < 0.75 mS/cm may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Oil and Grease (mg/L)	15	EPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	California Toxics Rule	Use California Toxics Rule Table, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)	California Toxics Rule	
Dissolved Lead (µg/L)	California Toxics Rule	
Dissolved Zinc (µg/L)	California Toxics Rule	
Total Coliform (MPN/ 100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliform (MPN/ 100 mL)	20,000	
Enterococcus (MPN/ 100 mL)	10,000	

Notes

[1]The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry Weather Monitoring Program data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

°C	degrees Celsius
mS/cm	milliSiemens per centimeter
mg/L	milligram per liter
IC/ID	illegal connection/illicit discharge
MBAS	methylene blue active substances
MPN/100 mL	most probable number per 100 milliliters
NTU	nephelometric turbidity unit
ppb	parts per billion
EPA	United States Environment Protection Agency
WQO	Water Quality Objectives

4 FIELD SCREENING RESULTS

The 2008 Dry Weather Monitoring Program took place from September 17th to October 3rd of 2008. Field screening was conducted at the 15 sites where ponded or flowing water was observed. Primary sampling station sites 4 and 13 were dry, and replaced with alternate sites 19 and 20. A confirmation visit was also performed at one site where a field constituent was found to exceed its action level. Field data sheets for each site visit are included in Appendix D.

4.1 Qualitative Observations

Qualitative observations, which are a routine part of the Dry Weather Monitoring Program, are summarized below and presented in Table 4-1:

Light Conditions
Light conditions were sunny during all site visits.

Odor
Water samples from the majority of sites were odorless. One sample had a slight chemical odor.

Color
Water samples taken from most of the sites were colorless, with the exception of two yellow water samples.

Clarity
Aside from negligible amounts of suspended particles, nearly all sites had clear water samples. One site had cloudy water.

Floatable Materials
Two sites had some bubbles and three sites had a sheen on the water surface. Eight of the screened sites had trash in contact with the water. Section 5 of this report includes the results of full trash assessment conducted at each site.

Deposits
Sediment and fine particulates were observed at most sites. No stains or oily deposits were observed.

Vegetation
Each of the sites supported vegetation in accordance with soil availability and sunlight exposure. For example, while manholes lacking soil and sunlight had no vegetation, natural creeks had normal vegetative growth.

Biology
The presence of aquatic flora and fauna can indicate healthy water conditions. Algal growth is an indicator of persistent water flow. Many of the sampling locations were home to insects, snails, fish, and/or crayfish.

TABLE 4-1
FIELD OBSERVATIONS

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
Site 1	9/17/08	11:20	Sunny	None	None	Clear	Trash	Sediment/gravel, fine particulates	Normal	Insects, algae, fish, snails
Site 2	9/17/08	10:00	Sunny	Chemical	None	Clear	Bubbles/foam	Sediment/gravel, fine particulates	Normal	Insects, algae, fish, snails, crayfish
Site 3	9/18/08	15:25	Sunny	None	None	Clear	Trash	Sediment/gravel, fine particulates	Normal	Insects, algae, fish, crayfish
Site 4	9/18/08	9:05	Sunny	ns	ns	ns	ns	Sediment/gravel, fine particulates	Limited	None
Site 5	9/19/08	11:00	Sunny	None	None	Clear	None	Sediment/gravel, fine particulates	Normal	Insects, algae
Site 6	9/18/08	9:30	Sunny	None	None	Clear	None	Sediment/gravel, fine particulates	None	Insects
Site 7	9/18/08	12:05	Sunny	None	None	Clear	None	Sediment/gravel, fine particulates	Limited	Insects
Site 8	9/17/08	13:20	Sunny	None	Yellow	Clear	Trash	Sediment/gravel, fine particulates	Normal	Algae, fish
Site 9	9/19/08	10:15	Sunny	None	None	Clear	Trash	Sediment/gravel, fine particulates	Normal	Insects, algae, fish, crayfish
Site 10	9/17/08	12:30	Sunny	None	Yellow	Clear	Trash, sheen (dust)	Sediment/gravel, fine particulates	Normal	Algae
Site 11	9/18/08	10:25	Sunny	None	None	Clear	None	Sediment/gravel, fine particulates	None	None
Site 12	9/18/08	14:00	Sunny	None	None	Clear	None	Sediment/gravel, fine particulates	None	None
Site 13	9/17/08	16:15	Sunny	ns	ns	ns	ns	Sediment/gravel, fine particulates	None	None

TABLE 4-1
FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
Site 15	9/18/08	14:50	Sunny	None	None	Clear	Trash, sheen, bubbles/foam	Sediment/gravel, fine particulates	Normal	Algae
Site 16	9/17/08	15:35	Sunny	None	None	Clear	Trash	Sediment/gravel, fine particulates	Normal	Insects, algae
Site 19	9/18/08	11:10	Sunny	None	None	Clear	Trash	Sediment/gravel, fine particulates	None	None
Site 19 (Confirmation)	9/19/08	12:00	Sunny	None	None	Clear	Trash	Sediment/gravel, fine particulates	None	None
Site 20	9/19/08	9:25	Sunny	None	None	Clear	Trash, sheen	Sediment/gravel, fine particulates	Normal	Insects

Notes:

denotes a confirmation visit

ns = not sampled (dry site)

4.2 Field Analytical Results

Field analyses are conducted at all sites with flowing or ponded water. The measured constituents are described below.

Flow rates are the measurements of the volume of fluid passing through a given surface per unit time. Flow rate measurements are needed to calculate the load or particular amount of a pollutant discharged.

Water temperature is needed to assess the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. In the field, water temperature is measured immediately upon sample collection at each site with ponded or flowing water.

The **pH** is an expression of acidity or alkalinity of a water sample. The pH of an aquatic system will drive a variety of chemical reactions, including the availability of nutrients or the solubility of chemical substances, particularly heavy metals.

Turbidity describes the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation, thus reducing photosynthetic capacity, but excessive suspended particles can also absorb heat and increase water temperatures.

Specific Conductance (Conductivity) values indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water and potentially help indicate the presence of dissolved pollutants.

Surfactant concentrations in water samples often reflect illegal discharge from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms.

Ammonia-Nitrogen (ammonia-N) is an indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-Nitrogen (nitrate-N) is a common sign of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, which can deplete oxygen from the water during decomposition and eventually suffocate other aquatic life. During the field analysis, nitrate is measured in milligrams per liter (mg/L) NO_3 and converted into mg/L nitrate-N using a conversion factor of 0.226. This process is explained in Note 3 of Table 3-1.

Orthophosphate-Phosphorus (orthophosphate-P) is also an indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate-N, orthophosphate-P pollution can cause nutrient enrichment (eutrophication), stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient in plant growth. During the field analysis, orthophosphate is measured in mg/L PO_4 and converted into mg/L orthophosphate-P using a conversion factor of 0.326. This process is explained in Note 6 of Table 3-1.

A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 shows the results of all field analyses conducted at the sampled sites. Graphs of the

various parameters and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceedances	Graph Number
Flow Rate (gpm)	27	0	5.6	2.0	8.2	N/A	4-1
Temperature (ºC)	29.1	20.8	24.6	24.1	2.2	0	4-2
pH	8.53	6.83	7.96	8.06	0.48	0	4-3
Turbidity (NTU)	25.22	0.20	5.01	3.35	6.37	0	4-4
Conductivity (mS/cm)	16.17	0.95	4.53	4.08	3.70	0	4-5
Ammonia-Nitrogen (mg/L NH_3-N)	0.384	0.030 *	0.197	0.207	0.084	0	4-6
Surfactants (mg/L MBAS)	0.88	0.25	0.39	0.32	0.19	0	4-7
Nitrate-Nitrogen (mg/L NO_3-N)	10.58	0.587 *	3.347	1.728	3.15	1	4-8
Orthophosphate-Phosphorus (mg/L PO_4-P)	1.319	0.088 *	0.321	0.171	0.404	0	4-9

Notes:
gpm = gallons per minute
N/A = not applicable
Calculations include complete routine visit data only. Confirmation visits, follow-up visits, and dry sites are not incorporated.
* Value reported is below the Practical Detection Limit

TABLE 4-3
FIELD ANALYTICAL RESULTS

Site No.	Date	Time	Flow gpm	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants mg/L MBAS	Ammonia-N mg/L NH_3-N	Nitrate-N mg/L NO_3-N	Orthophosphate-P mg/L PO_4-P
Site 1	9/17/08	11:20	1.0	24.1	8.34	3.65	2.34	0.25	0.213	2.830	0.135*
Site 1 (Confirmation)	10/3/08	10:20	1.0	22.8	8.35	1.08	2.45	na	na	na	na
Site 2	9/17/08	10:00	22.0	22.6	7.63	0.20	4.53	0.50	0.194	0.817*	0.167*
Site 3	9/18/08	15:25	27.0	26.7	8.01	1.32	4.63	0.50	0.174	0.961*	0.226*
Site 4	9/18/08	9:05	Dry	ns	ns	ns	ns	ns	ns	ns	ns
Site 5	9/19/08	11:00	5.0	22	8.14	4.15	2.59	0.38	0.249	3.623	0.258
Site 6	9/18/08	9:30	< 1	25.9	8.06	25.22	0.95	nd	0.097*	1.171*	0.098*
Site 7	9/18/08	12:05	< 1	26.1	8.53	5.40	1.24	0.25	0.030*	1.728*	1.288
Site 8	9/17/08	13:20	Ponded	22.4	7.76	3.34	3.2	0.63	0.384	0.587*	1.319
Site 9	9/19/08	10:15	8.0	23.6	8.37	3.35	4.46	0.25	0.207	7.607	0.134*
Site 10	9/17/08	12:30	Ponded	23.6	7.95	5.67	4.85	0.25	0.244	0.862*	0.091*
Site 10 (Confirmation)	10/3/08	12:00	Ponded	23.2	7.93	6.97	2.34	na	na	na	na
Site 11	9/18/08	10:25	5.0	25.4	8.36	2.48	3	0.25	0.242	4.712	0.292
Site 12	9/18/08	14:00	2.0	27.7	8.31	0.31	2.69	0.25	0.260	3.801	0.211*
Site 13	9/17/08	16:15	Dry	ns	ns	ns	ns	ns	ns	ns	ns
Site 15	9/18/08	14:50	3.0	29.1	6.83	6.43	8.52	0.50	0.239	0.597*	0.213*
Site 16	9/17/08	15:35	8.0	25	7.91	1.01	4.72	0.38	0.165	8.658	0.125*
Site 19	9/18/08	11:10	2.0	23.9	8.15	0.68	4.08	0.25	0.157	**10.58**	0.088*
Site 19 (Confirmation)	9/19/08	12:00	2.0	24	8.08	0.33	4.25	na	na	8.328	na
Site 20	9/19/08	9:25	Ponded	20.8	7.04	11.95	16.17	0.88	0.100	1.678*	0.171*

Notes:

Red Bold values denote action level exceeded

denotes a confirmation visit

ns = not sampled (dry site)

* value reported is below the Practical Detection Limit (see Table 3-1 for values)

denotes a location sampled for laboratory analysis

na = not analyzed

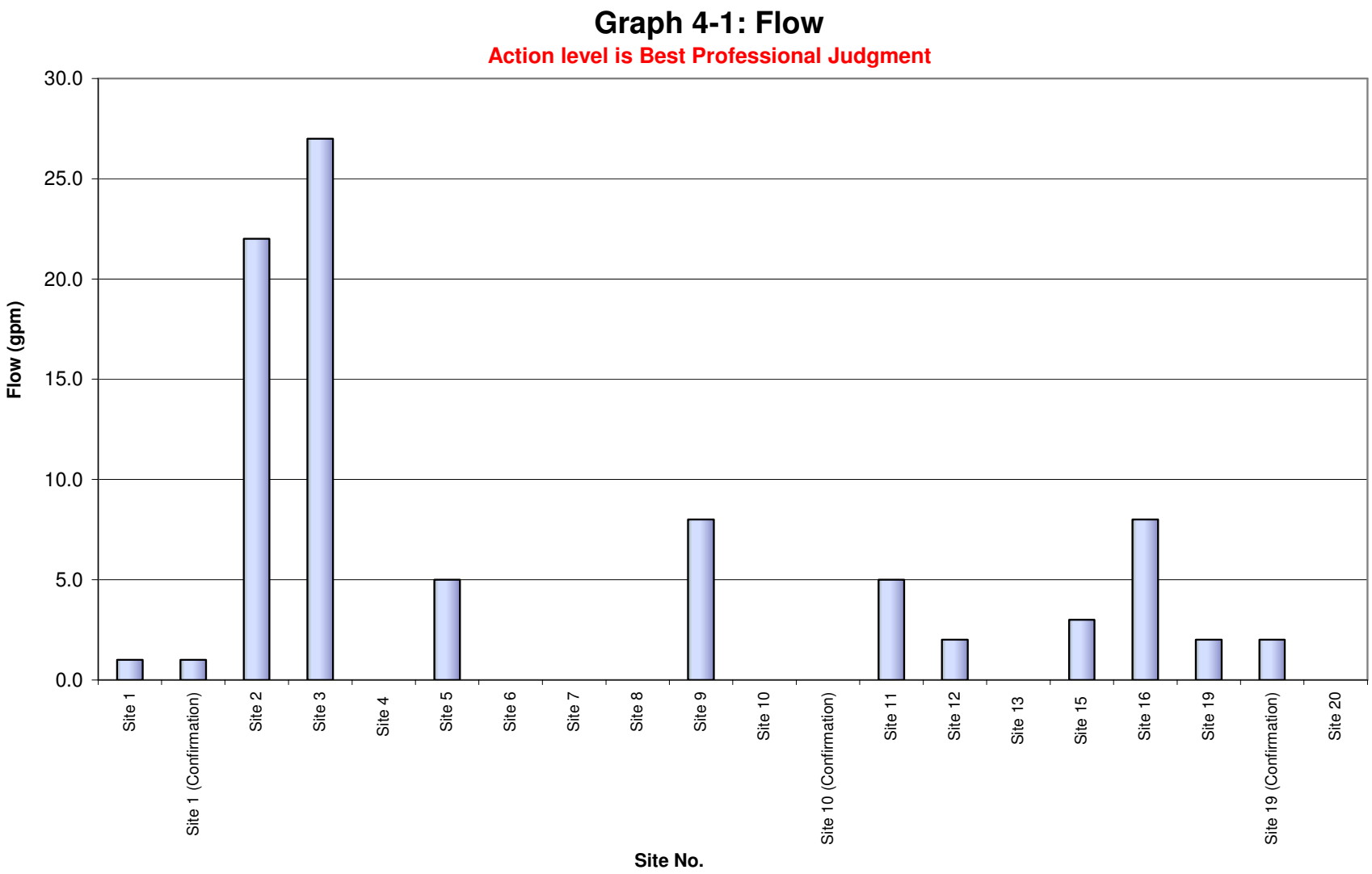

Note: Sites 4 and 13 were dry, and sites 8, 10, and 20 were ponded.

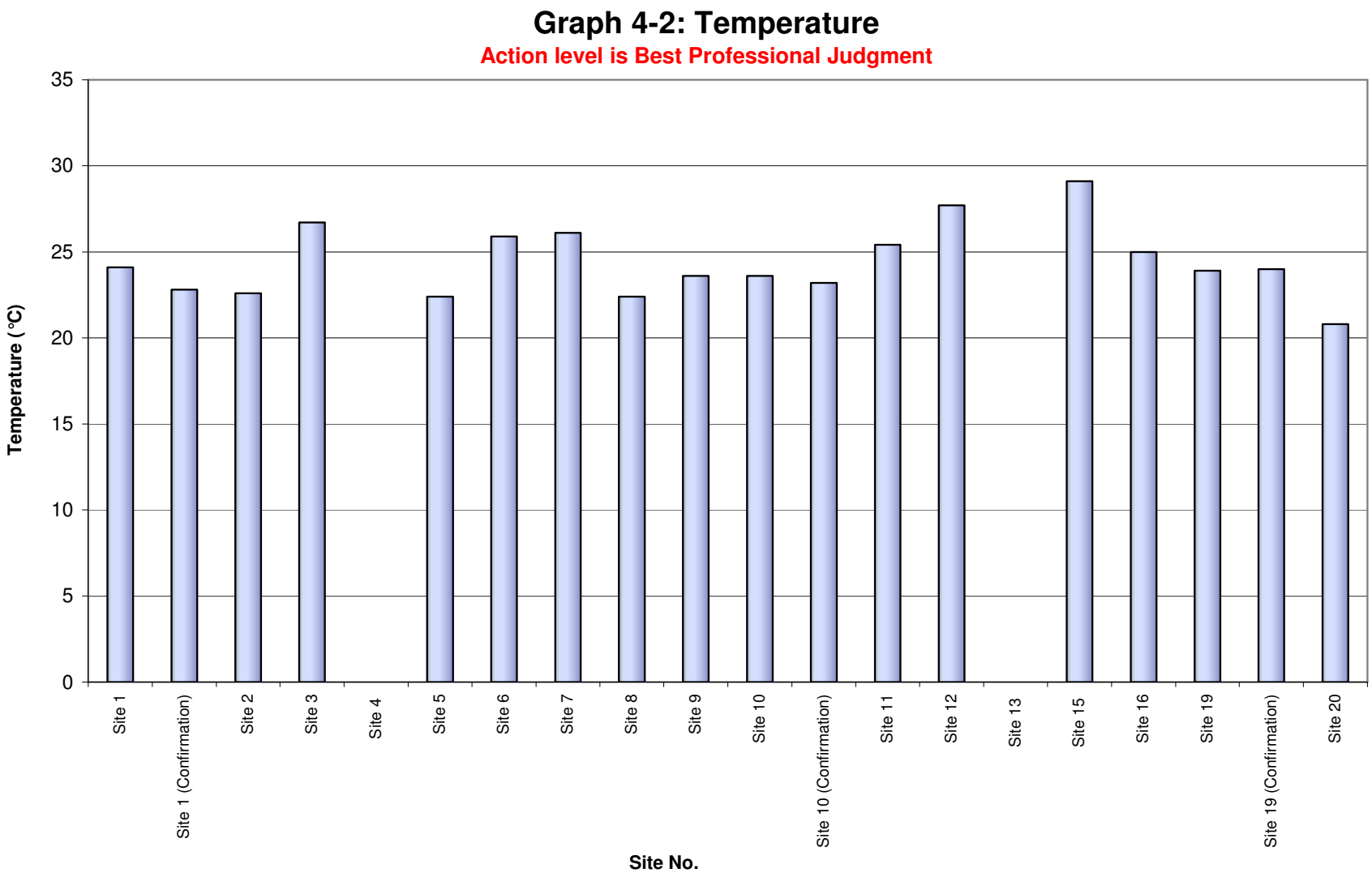
Graph 4-2: Temperature
Action level is Best Professional Judgment
Temperature (°C)
35
30
25
20
15
10
5
0
Site 1
Site 1 (Confirmation)
Site 2
Site 3
Site 4
Site 5
Site 6
Site 7
Site 8
Site 9
Site 10
Site 10 (Confirmation)
Site 11
Site 12
Site 13
Site 15
Site 16
Site 19
Site 19 (Confirmation)
Site 20
Site No.

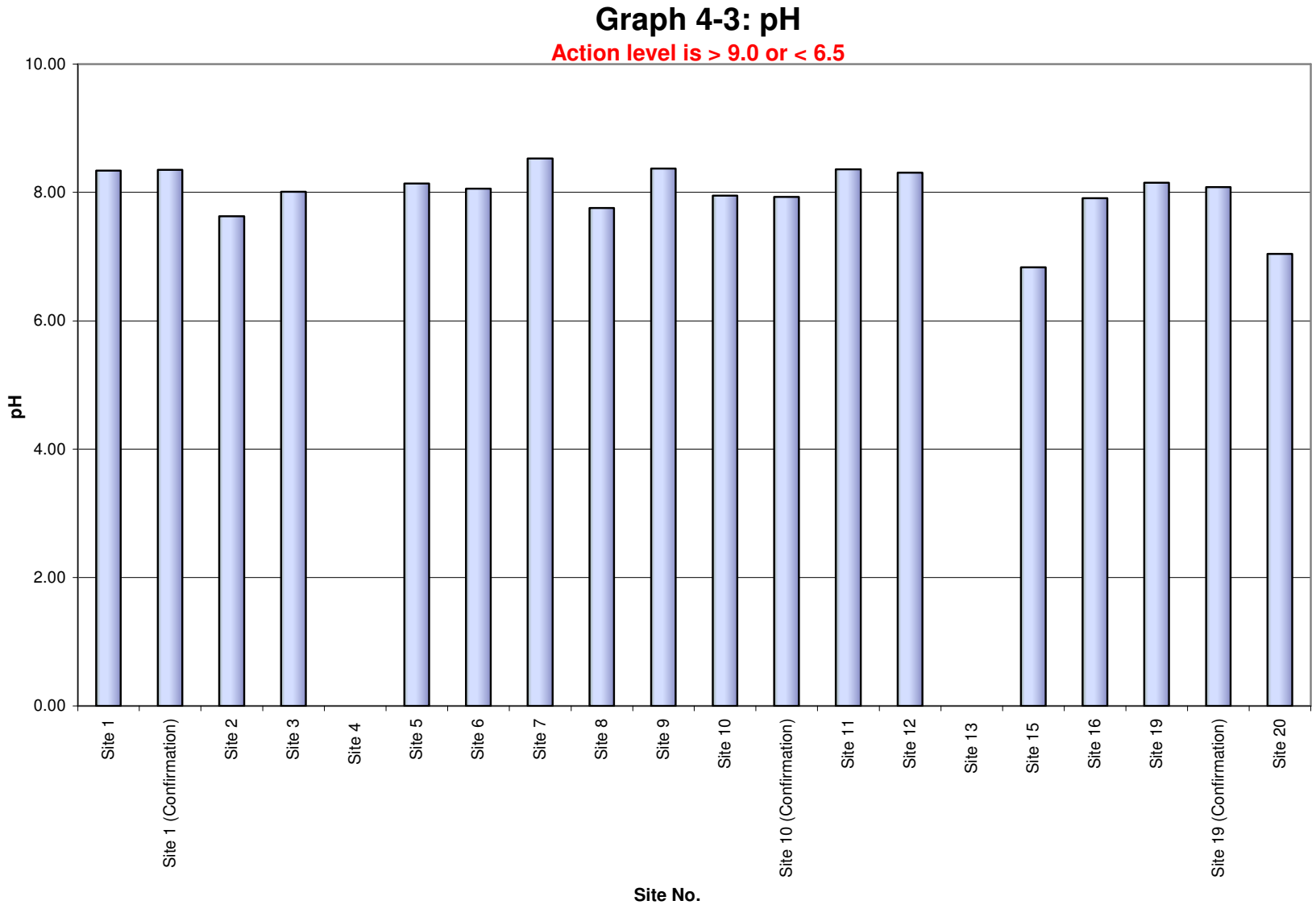
Graph 4-3: pH
Action level is > 9.0 or < 6.5
10.00
8.00
6.00
4.00
2.00
0.00
pH
Site 1
Site 1 (Confirmation)
Site 2
Site 3
Site 4
Site 5
Site 6
Site 7
Site 8
Site 9
Site 10
Site 10 (Confirmation)
Site 11
Site 12
Site 13
Site 15
Site 16
Site 19
Site 19 (Confirmation)
Site 20
Site No.

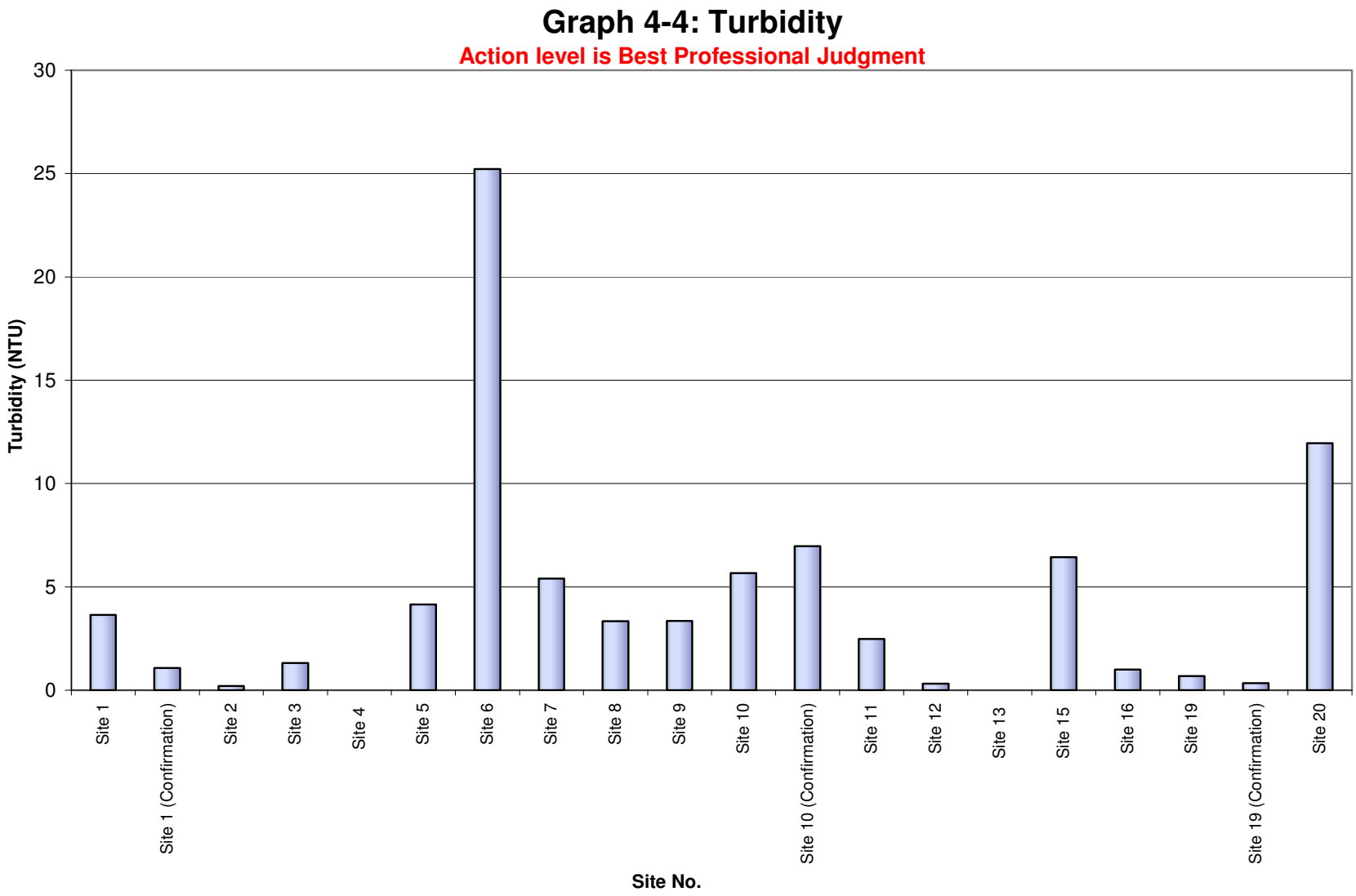
Graph 4-4: Turbidity
Action level is Best Professional Judgment
Turbidity (NTU)
30
25
20
15
10
5
0
Site 1
Site 1 (Confirmation)
Site 2
Site 3
Site 4
Site 5
Site 6
Site 7
Site 8
Site 9
Site 10
Site 10 (Confirmation)
Site 11
Site 12
Site 13
Site 15
Site 16
Site 19
Site 19 (Confirmation)
Site 20
Site No.

Graph 4-5: Conductivity

Action level is Best Professional Judgment

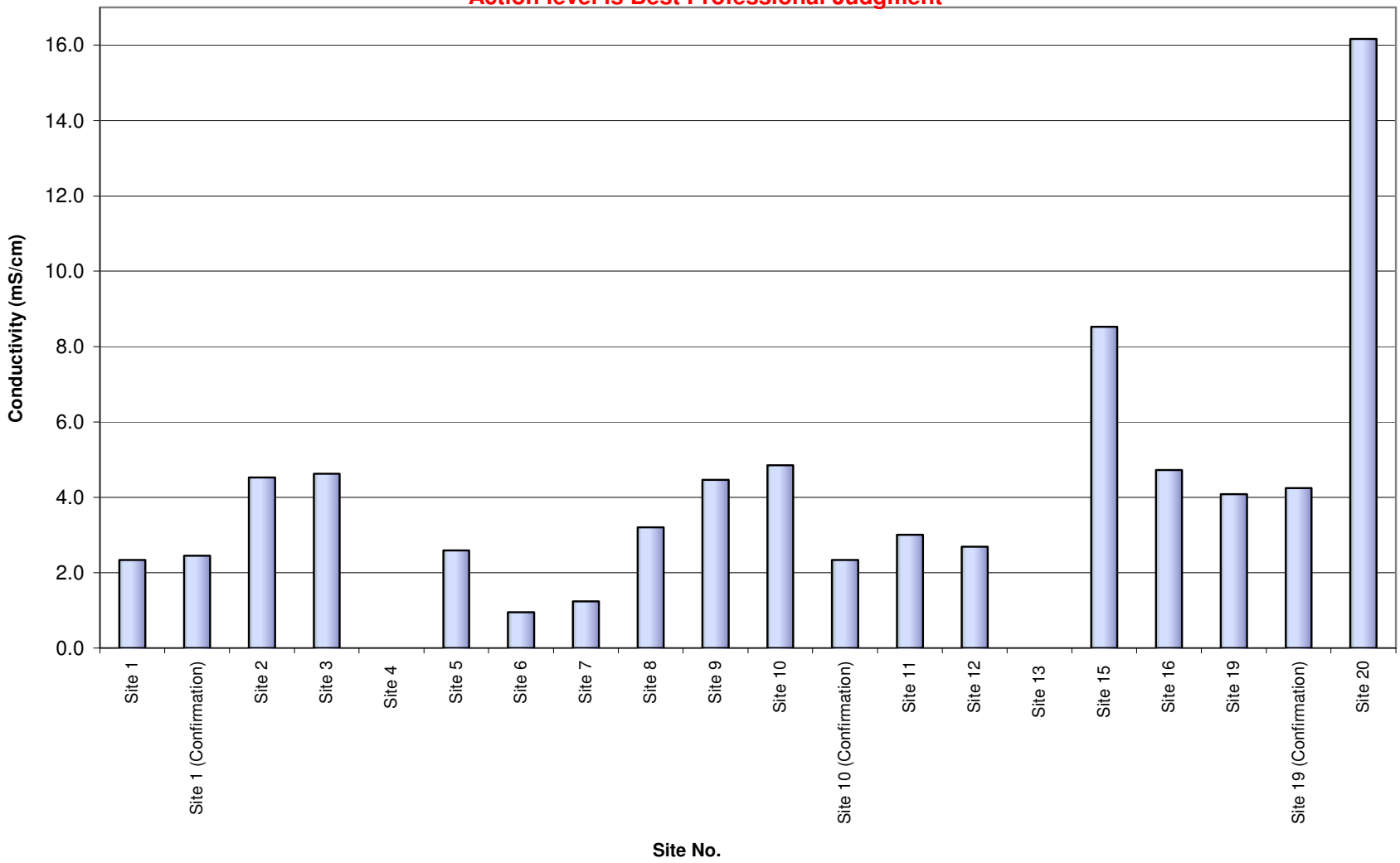

Note: Water at Site 20 was ponded with no evidence of recent flow. Evaporation was judged to be the likely cause of elevated conductivity.

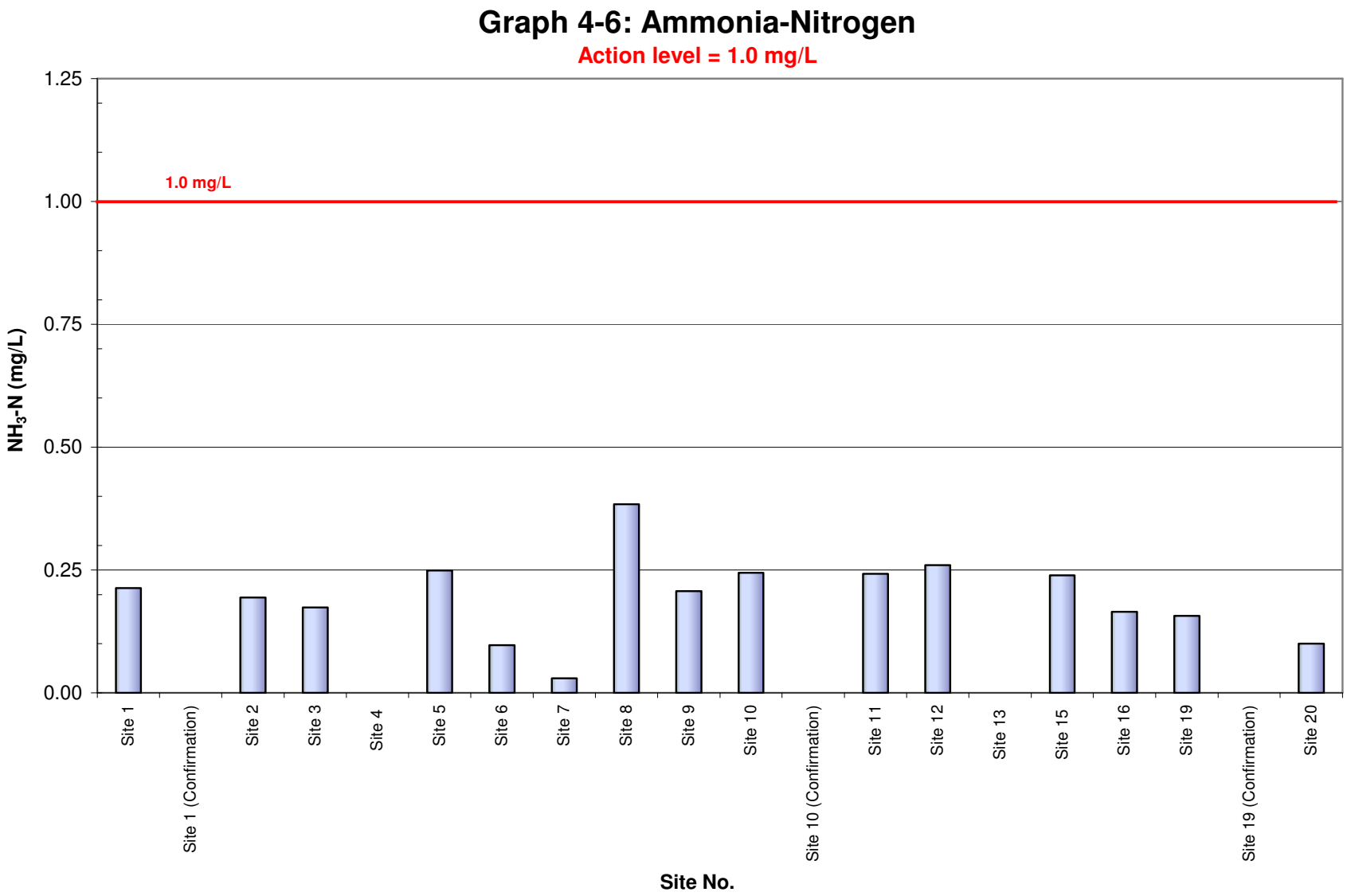
Graph 4-6: Ammonia-Nitrogen
Action level = 1.0 mg/L
1.0 mg/L
1.25
1.00
0.75
0.50
0.25
0.00
NH3-N (mg/L)
Site 1
Site 1 (Confirmation)
Site 2
Site 3
Site 4
Site 5
Site 6
Site 7
Site 8
Site 9
Site 10
Site 10 (Confirmation)
Site 11
Site 12
Site 13
Site 15
Site 16
Site 19
Site 19 (Confirmation)
Site 20
Site No.

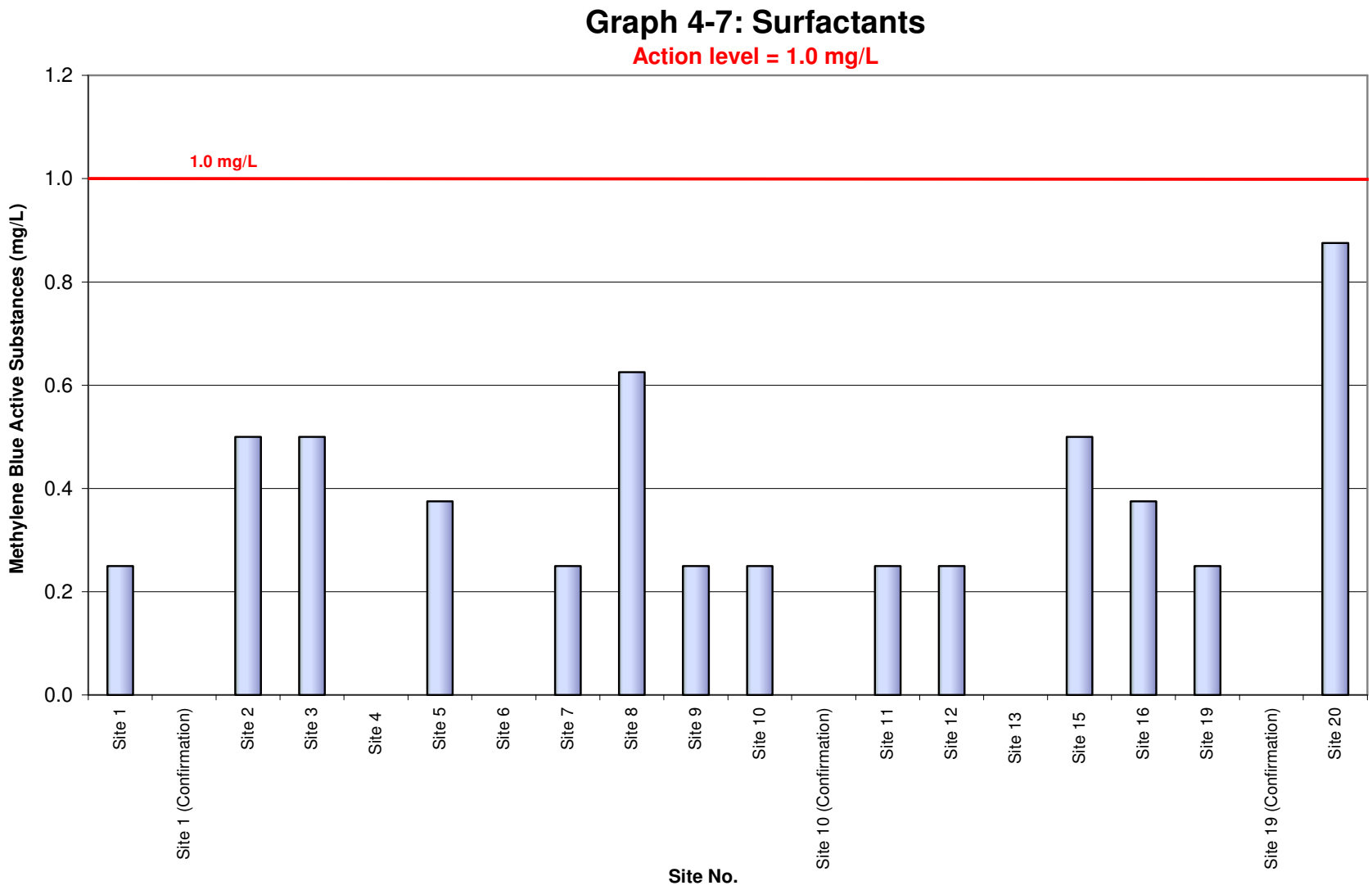
Graph 4-7: Surfactants
Action level = 1.0 mg/L
1.0 mg/L
Methylene Blue Active Substances (mg/L)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Site 1
Site 1 (Confirmation)
Site 2
Site 3
Site 4
Site 5
Site 6
Site 7
Site 8
Site 9
Site 10
Site 10 (Confirmation)
Site 11
Site 12
Site 13
Site 15
Site 16
Site 19
Site 19 (Confirmation)
Site 20
Site No.

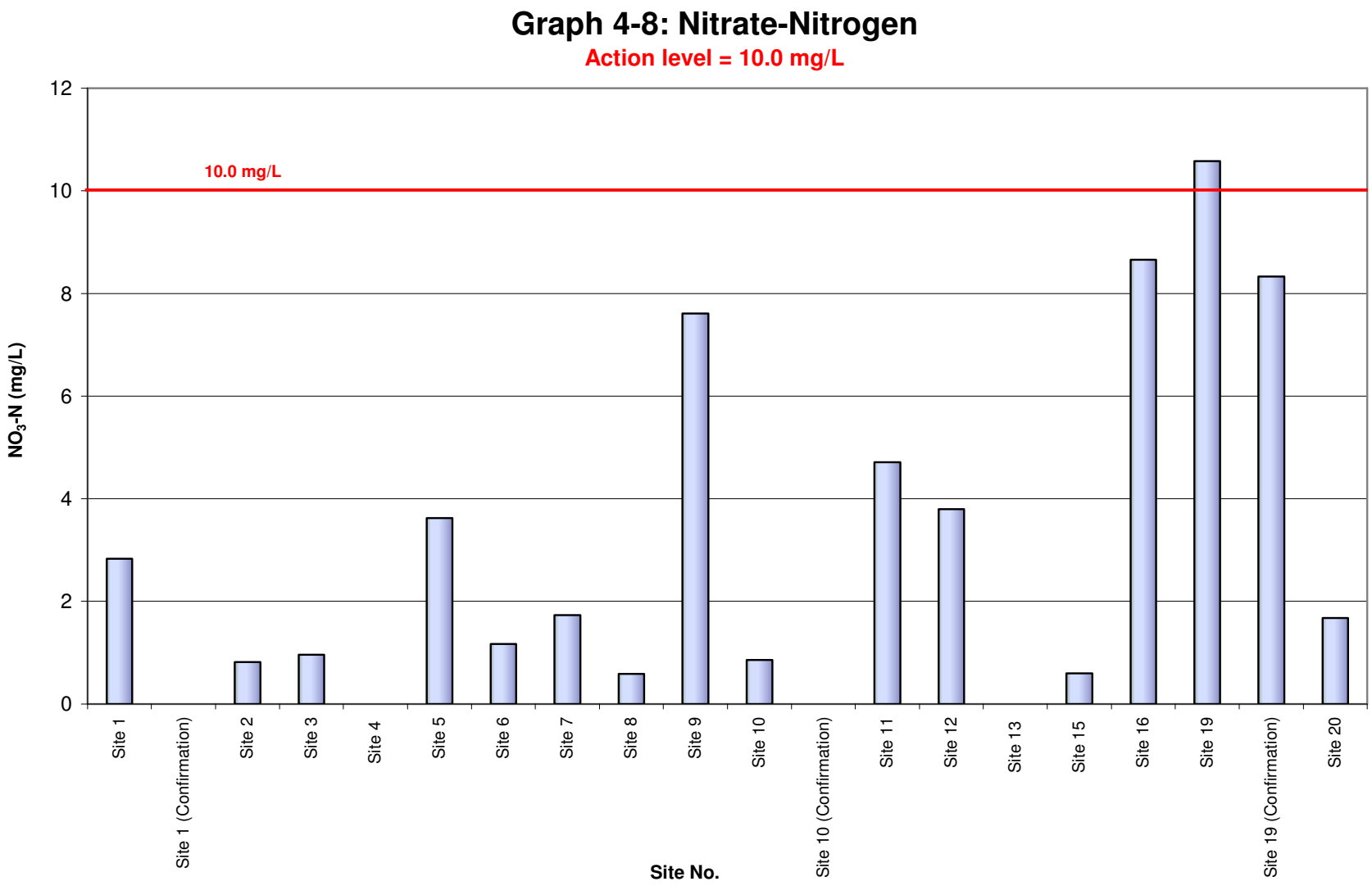
Graph 4-8: Nitrate-Nitrogen
Action level = 10.0 mg/L
10.0 mg/L
NO3-N (mg/L)
0
2
4
6
8
10
12
Site 1
Site 1 (Confirmation)
Site 2
Site 3
Site 4
Site 5
Site 6
Site 7
Site 8
Site 9
Site 10
Site 10 (Confirmation)
Site 11
Site 12
Site 13
Site 15
Site 16
Site 19
Site 19 (Confirmation)
Site 20
Site No.

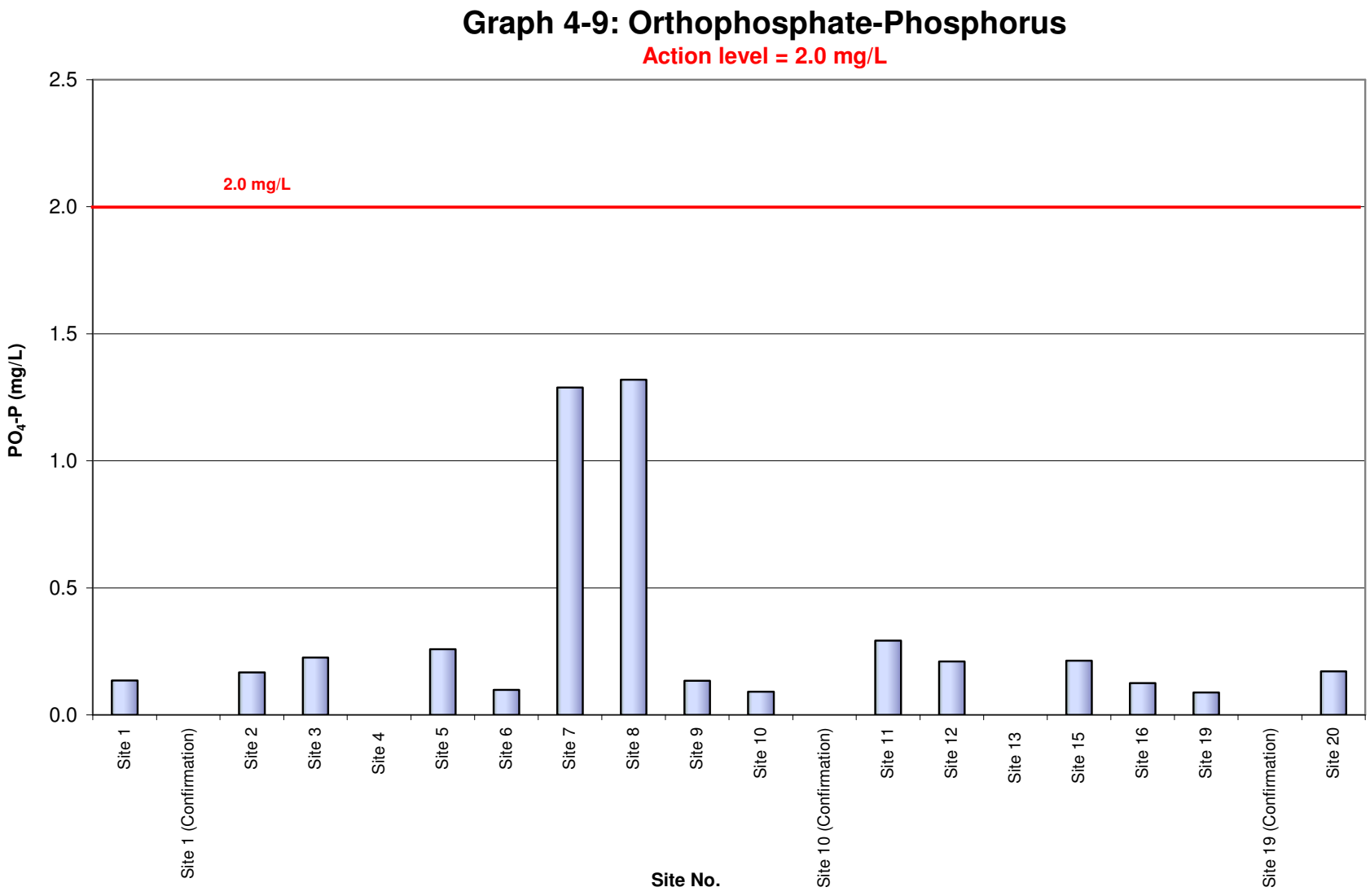
Graph 4-9: Orthophosphate-Phosphorus
Action level = 2.0 mg/L
2.0 mg/L
PO4-P (mg/L)
2.5
2.0
1.5
1.0
0.5
0.0
Site 1
Site 1 (Confirmation)
Site 2
Site 3
Site 4
Site 5
Site 6
Site 7
Site 8
Site 9
Site 10
Site 10 (Confirmation)
Site 11
Site 12
Site 13
Site 15
Site 16
Site 19
Site 19 (Confirmation)
Site 20
Site No.

5 TRASH ASSESSMENT

5.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather field screening site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form to document the amount and extent of trash and the threat to human and aquatic health. The first page is completed at every site. The second page, which includes information about the types, prevalence, potential routes, and sources of trash, is also completed at sites where a larger amount of trash is observed.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although numbers of trash pieces are also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g., medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).
- *Threat to Aquatic Health* – Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and

other materials that have the potential for entanglement. Oil and other visible chemicals or chemical containers fall in this category.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Form.

If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

Table 5-1 and Graph 5-1 summarize the trash assessment results for 17 sites, including two dry sites. Figure 5-1 provides a map of the sites and their corresponding trash assessment.

TABLE 5-1
TRASH ASSESSMENT RESULTS

Optimal (1site)	**Suboptimal** (5 sites)	**Marginal** (9 sites)	**Submarginal** (2 sites)	**Poor** (0 sites)
2	1 6 7 11 12	3 5 8 9 10 13 16 19 20	4 15	

GRAPH 5-1
TRASH ASSESSMENT SUMMARY

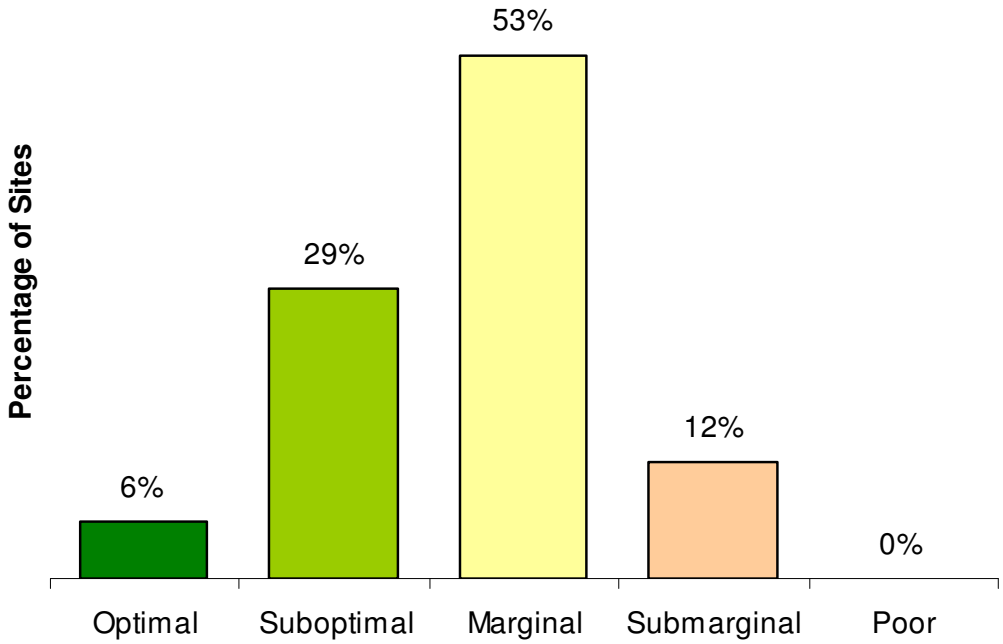

Six sites sampled in the City of Lemon Grove received either an "optimal" or "suboptimal" trash rating. Nine sites were considered "marginal," and two sites were rated "submarginal." None of the sites were considered to have "poor" trash levels. Conditions at one site were noted as posing a potential threat to aquatic health due to the presence of an aerosol paint can.

5.3.1 Threat to Aquatic Health

Site 8 is located at an outlet 100 feet south of the Massachusetts Avenue trolley station, next to Lemon Grove Avenue. The site was assessed as marginal due to various bottles, cans, and a folding chair observed during field screening. The presence of an aerosol paint may also be a threat to aquatic health.

5.3.2 Submarginal Sites

TABLE 5-2
BREAKDOWN OF SUBMARGINAL SITES

Site	Types of Trash	Ranking	Potential Route 1	Potential Route 2	Potential Source 1	Potential Source 2
4	Food Packaging	1	Littering	---	Household	---
	Household	2	Littering	---	Household	---
	Cigarette Butts	3	Littering	---	Household	---
15	Food Packaging	1	Littering	---	Commercial	Industrial
	Business Related	2	Littering	---	Commercial	Industrial
	Cigarette Butts	3	Littering	---	Commercial	Industrial

Site 4 is a catch basin between 7102 and 7106 Westview Place, in a primarily residential area. The site was dry, however a "submarginal" level of trash was noted. Observed litter items at Site 4 included styrofoam and plastic food packaging, balls and toys, toiletry items, and cigarette butts. It appears that most of the trash could have originated in the residential area from littering, improper trash disposal, or, in the case of toys, accidental loss.

Site 15 is an earthen channel in front of Thompson Building Materials at 6636 Federal Boulevard. The site was rated "submarginal" due to the quantity of trash items noted. Observed litter items at Site 15 included many types of food packaging, business related packaging (e.g., styrofoam peanuts, cardboard, plastic twine), paper waste (e.g., mail, receipts, coupons), a large amount of shredded paper, and cigarette butts. The site is also very near a garbage handling facility.

FIGURE 5-1
TRASH ASSESSMENT GIS MAP

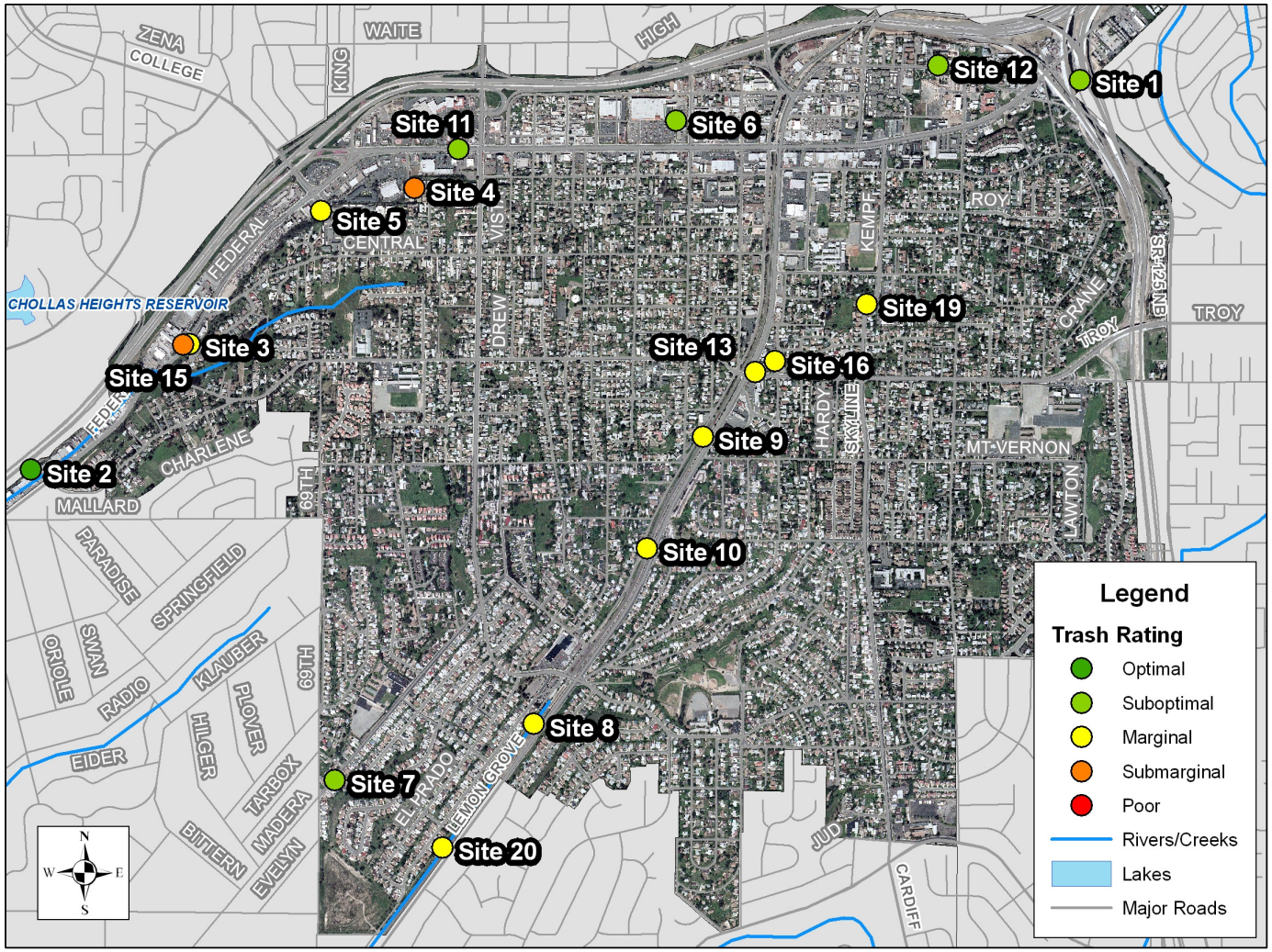

Base Data Sources: USGS, SanGIS, SANDAG, City of Lemon Grove

6 LABORATORY ANALYTICAL RESULTS

6.1 Summary

Laboratory analyses were conducted at four sites, representing over 25 percent of the 15 primary sites. The laboratory constituents measured are defined below.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Hardness itself is not considered a pollutant, but is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Diazinon and **chlorpyrifos** are organophosphate pesticides that can be harmful to aquatic organisms if transported in urban runoff. Diazinon and chlorpyrifos are highly toxic to birds, mammals, and insects. They are also highly toxic to freshwater fish and invertebrates following acute exposure.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness, with toxicity decreasing as hardness increases. Therefore, each dissolved metal has a CMC for a specific total hardness. The laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 6-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

TABLE 6-1
CTR – CMC FOR DISSOLVED METALS

Site	Total Hardness (mg/L)	CMC (mg/L)	Concentration (mg/L)
Dissolved Copper			
Site 1	680	0.0818	0.00469
Site 2	1,210	0.1408	0.00299
Site 8	502	0.0615	0.00287
Site 10	972	0.1145	0.00858
Dissolved Zinc			
Site 1	680	0.595	0.0174
Site 2	1,210	0.969	0.0117
Site 8	502	0.460	0.00827
Site 10	972	0.805	0.109
Dissolved Lead			
Site 10	972	0.679	0.0169

Notes:
Dissolved cadmium and lead were not detected at any sampled sites.
For equations and constants used in CTR calculations, see http://www.epa.gov/ost/standards/ctr/toxic.pdf

Coliform bacteria are relatively harmless to humans and are present in mammalian digestive tracts and are naturally found in most surface waters and soils. Testing water samples for total coliform bacteria is a standard practice in public health since a high level of total coliform bacteria often may indicate the presence of other more harmful, pathogenic organisms, sometimes of fecal origin. Total coliform is measured in lieu of these pathogens since the various pathogens are generally present in much smaller quantities and are difficult to detect.

Fecal coliform, a subset of coliform bacteria, and ***Enterococcus*** are found primarily in the gastro-intestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. A host of human diseases, particularly those of the gastro-intestinal tract, are spread through water contaminated with fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material was human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

A summary of the laboratory analytical results is presented in Table 6-2. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included in Appendix C.

TABLE 6-2
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Number of Exceedances
Total Hardness (mg/L $CaCO_3$)	1,210	502	na
Oil and Grease (mg/L)	nd	nd	0
Diazinon (µg/L)	nd	nd	0
Chlorpyrifos (µg/L)	nd	nd	0
Cadmium (dissolved, mg/L)	nd	nd	0
Copper (dissolved, mg/L)	0.00858	0.00287	0
Lead (dissolved, mg/L)	0.0169	nd	0
Zinc (dissolved, mg/L)	0.109	0.00827	0
Total Coliform (MPN/100 mL)	170,000	11,000	2
Fecal Coliform (MPN/100 mL)	90,000	800	1
Enterococcus (MPN/100 mL)	90,000	500	1

Notes:
nd = not detected
* Total hardness is not considered a pollutant (see section 3.4 for details), and thus has no established action level for the purposes of dry weather monitoring.
Calculations include complete routine visit data only. Confirmation visits, follow-up visits, and dry sites are not incorporated.

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Oil & Grease mg/L	Total Hardness	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliforms MPN/100mL	Fecal Coliforms MPN/100mL	*Enterococci* MPN/100mL
Site 1	9/17/08	11:20	nd	680	nd	0.00469	nd	0.0174	nd	nd	**170,000**	**90,000**	**90,000**
Site 1 (Confirmation)	10/3/08	10:20	na	na	na	na	na	na	na	na	**68,700**	5,118	4,352
Site 2	9/17/08	10:00	nd	1,210	nd	0.00299	nd	0.0117	nd	nd	11,000	1,400	800
Site 8	9/17/08	13:20	nd	502	nd	0.00287	nd	0.00827	nd	nd	23,000	800	500
Site 10	9/17/08	12:30	nd	972	nd	0.00858	0.0169	0.109	nd	nd	**130,000**	1,700	500
Site 10 (Confirmation)	10/3/08	12:00	na	na	na	na	na	na	na	na	**61,300**	na	na
Reporting Limits			**1.0**	**10**	**0.00100**	**0.00100**	**0.00100**	**0.00500**	**0.05**	**0.05**	**20**	**20**	**20**
Action Levels			**15.0**	*****	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**50,000**	**20,000**	**10,000**

Notes:
Red Bold Type = value exceeds action level
[ ] denotes a confirmation visit
nd = not detected
na = not analyzed
CTR = California Toxics Rule; CTR action levels for metals are calculated based upon on the total hardness value of the water sample.
* Total hardness is not considered a pollutant (see section 3.4 for details), and thus has no established action level for the purposes of dry weather monitoring.

7 DATA ANALYSIS

This first part of this section provides an overall evaluation of test results obtained from the 2008 Dry Weather Monitoring Program. The second portion of this section describes historical trends for various constituent exceedances.

7.1 2008 Results

This year, three sites had action level exceedances. Site 1 had high levels of all three bacteria indicator tests; Site 10 had a total coliforms exceedance; and nitrate–nitrogen was measured above the action level at Site 19. Table 7-1 displays the 2008 action level exceedances.

TABLE 7-1
2008 EXCEEDANCES AT A GLANCE

Site No.	Nitrate-N	Total Coliforms	Fecal Coliforms	*Enterococci*
1		✓	✓	✓
10		✓		
19	✓			

Note: Table reflects exceedances occurring during routine visits only, not confirmation or follow-up visits.

7.2 Previous Results

Historical results of exceedances are presented in Table 7-2, Graph 7-1, and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances for field constituents, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

Beginning in 2002, no exceedances were measured in temperature, oil and grease, cadmium, copper, lead, zinc, or chlorpyrifos. Thus, these constituents have not been included in the following table or graphs. Orthophosphate-phosphorus, turbidity, and pH were detected above the action level only in 2002. A diazinon exceedance was noted in 2003 only. There have been nitrate-nitrogen exceedances since 2002, and total coliforms have routinely measured above the action level since 2003.

TABLE 7-2
PERCENT OF SITES WITH EXCEEDANCES BY YEAR

Year	Field Screening								Laboratory Analyses				
	Number of Field Screening Sites	pH	Turbidity	Conductivity *	Surfactants	Ammonia-N	Nitrate-N	Orthophosphate-P	**Number of Laboratory Sampling Sites**	Diazinon	Total Coliforms	Fecal Coliforms	*Enterococci*
2002	15	7	7	27	7	33	13	13	4	0	0	0	0
2003	15	0	0	53	0	7	13	0	4	25	75	75	0
2004	15	0	0	0	7	7	7	0	4	0	50	25	25
2005	15	0	0	0	7	0	27	0	4	0	75	25	25
2006	15	0	0	0	7	7	13	0	4	0	75	25	0
2007	15	0	0	0	0	0	20	0	4	0	25	0	0
2008	15	0	0	0	0	0	7	0	4	0	50	25	25

Notes:
Results based on complete routine visits only. Confirmation visits, follow-up visits and dry sites not included.

* By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

GRAPH 7-1
PERCENT OF SITES WITH FIELD CONSTITUENT EXCEEDANCES BY YEAR

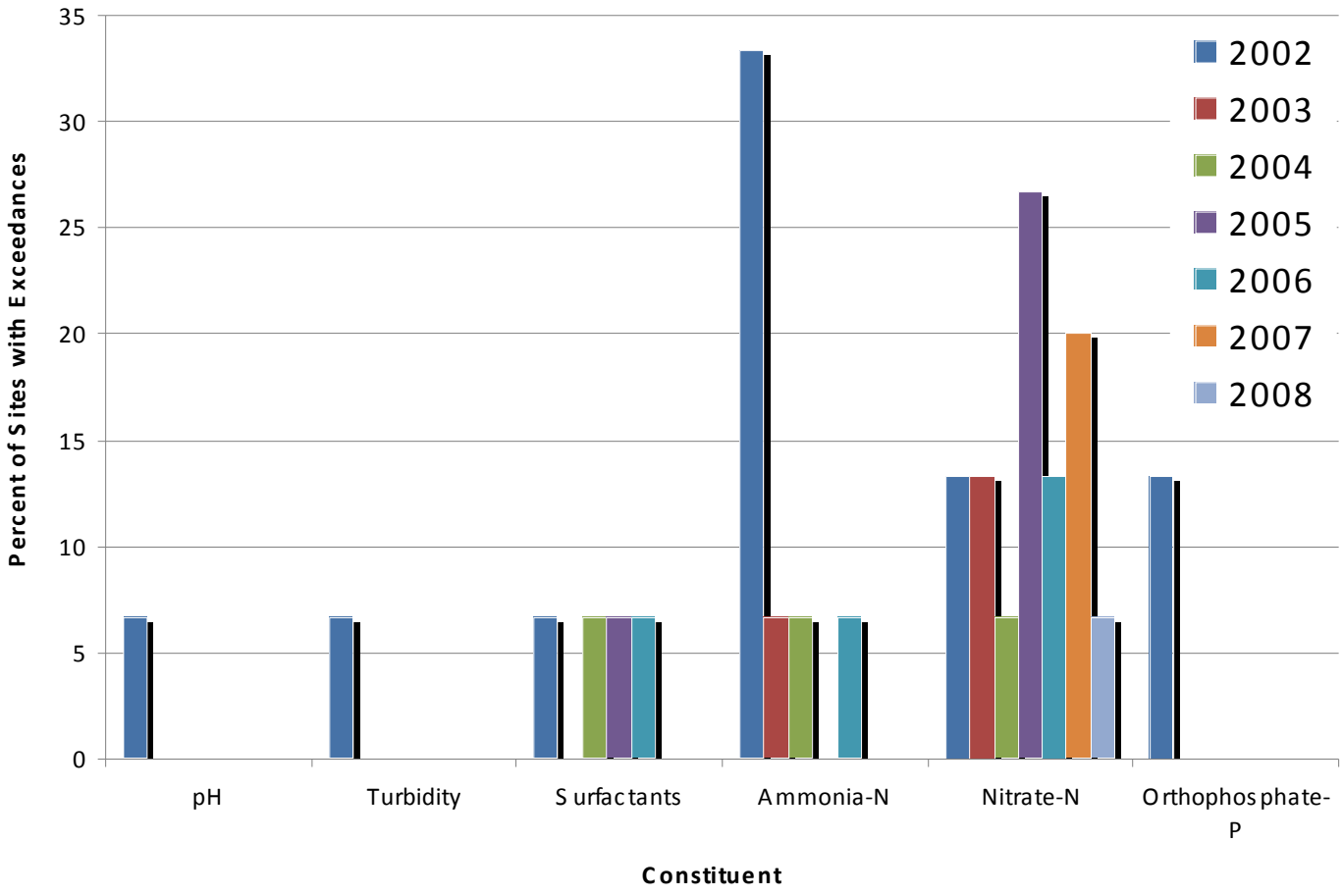

GRAPH 7-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

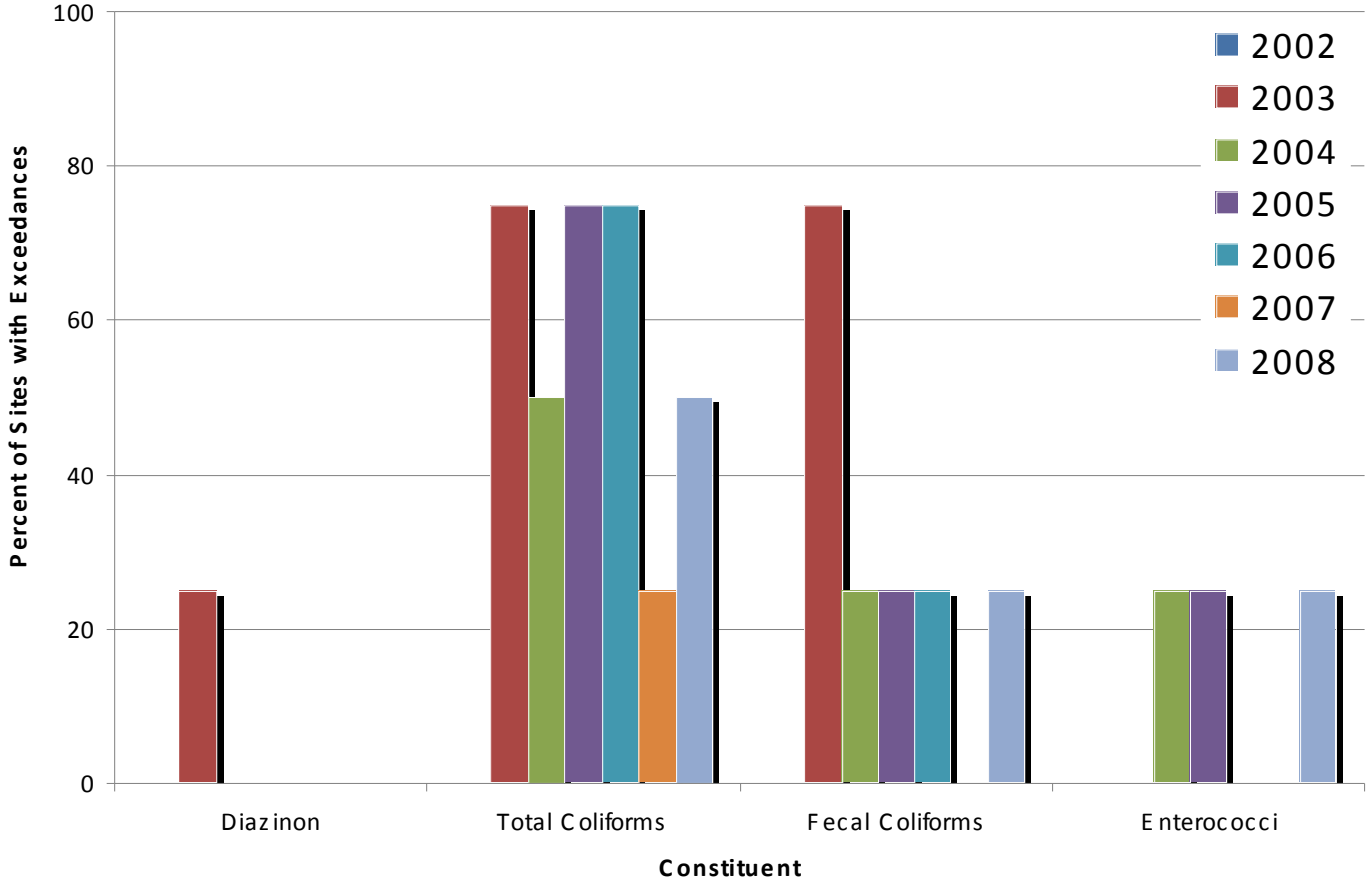

8 FOLLOW-UP INVESTIGATIONS

One of the main purposes of the Dry Weather Monitoring Program is to identify IC/IDs. Both field screening and laboratory analytical results are compared to regionally developed action levels (Table 3-4). When a parameter is measured at or above its action level, it is possible that an IC/ID is present. To further investigate potential IC/IDs, additional investigation is initiated whenever action levels are exceeded. Procedures for such investigations are described below.

8.1 Investigation Procedures

When Dry Weather Monitoring Program results exceed action levels, the City either conducts an investigation to identify the source of the discharge or provides rationale for why the discharge does not pose a threat to water quality and does not need further investigation. An immediate source identification investigation is initiated if visual and/or analytical evidence of gross contamination is present at a site during a routine investigation. Examples of gross contamination include substantial petroleum sheens, constituent concentrations well above action levels, abnormal colors or odors not attributable to natural site conditions, or evidence of a sewage release; such conditions would typically be considered a threat to human health or the environment. Immediate source identification investigations are also often conducted when surfactants exceedances are noted. Past experience has shown that an immediate investigation is much more likely to identify the source of the exceedance for this particular constituent. This is because such exceedances are often related to washing activities, which are typically intermittent in nature.

When further investigation is needed but an immediate upstream investigation is not necessary, the City initially confirms the results by resampling within two business days of being informed of the exceedance. For field screening, this is within two business days of the initial test. The overall time frame for laboratory analytical results depends on the time that results are received from the lab, but investigations will be conducted within two days of receiving the data, where applicable. These investigations are labeled as “confirmation” visits in this report, and they are used to guide further upstream investigations where necessary.

When confirmation sampling confirms continued exceedance of action levels, then the City conducts further investigation to identify the source of the exceedance. This type of investigation is referred to as “follow-up” in this report. Additional investigation is not conducted when exceedances are not noted during the confirmation visit or when the exceedance is known not to be the result of IC/IDs, as without a high constituent level to track upstream, the investigation is unlikely to identify any sources. As noted earlier, when gross contamination is observed during a routine visit, an immediate upstream source investigation is initiated. Prior to beginning an upstream source investigation, field staff review previous dry weather monitoring reports and consult MS4 maps to plan the investigation.

Dry weather flows are generally traced from the site in an upstream direction along the conveyance system. Photos, narrative descriptions of relevant visual observations made, and GPS coordinates are recorded to aid in documentation and in potential enforcement procedures. Water samples are collected at upstream confluences for analyses of the constituent(s) being tracked. All samples are documented through the completion of field data sheets, which are provided in Appendix D. If the samples are being submitted for laboratory analysis, they are delivered within the appropriate holding time, and all appropriate

chain-of-custody procedures are followed. Sampling and analysis methods are typically the same as those used for the routine portion of the Dry Weather Monitoring Program, with the exception of bacteria analyses. During confirmation and follow-up sampling IDEXX Colilert and Enterolert methods are used instead of the multiple tube fermentation (MTF) methods used for routine visits. The IDEXX methods provide faster turn-around time than the MTF methods: results can be provided within 24 hours instead of several days. Shorter turn-around time allows investigators to conduct further follow-up testing sooner where necessary. The IDEXX methods are also less expensive than MTF methods, which allows field investigators to take samples from a larger number of locations.

If the results of the upstream investigation indicate that an IC/ID may be present, appropriate City personnel will be notified. Where appropriate and feasible, field staff may also contact the party responsible for the discharge directly regarding the IC/IDs and potential BMPs.

8.2 Investigated Sites

During the 2008 Dry Weather Monitoring Program additional investigations to investigate potential IC/IDs were completed at three sites. One site had a nitrate-nitrogen exceedance, and two sites had exceedances for bacteria. A brief description of each site, the field and/or laboratory analytical results, photographs of selected upstream locations, and the results of upstream investigations are included below. Table 9-2 in Section 9 of this report provides a summary of the investigation results.

Site 1

Site 1 is located at a 76" corrugated metal pipe (CMP) outfall, 100 feet southeast of the Sweetwater Road and Broadway intersection. During the initial visit to the site the water at the site was nearly ponded, with a small flow of less than 1 gpm. Laboratory analysis of the water sample resulted in levels of total coliform, fecal coliform, and *Enterococcus* bacteria above each of their respective action levels. Upon receiving the laboratory results a confirmation visit and upstream investigation were conducted.

Photo 8-1: Litter, sediment, and a sandbag in manhole at upstream location 1-1.

During the confirmation visit the sample had a high count of total coliforms, but fecal coliforms and Enterococci were below their action levels. The condition of the site appeared similar to the initial visit, when a small flow of water was observed downstream of a pooled area. The flow was traced upstream to a manhole at the eastern corner of Broadway and Lemon Grove Way, in front of a Valero gas station (upstream location 1-1). A similarly small flow was observed in the manhole, where litter and a sandbag were also noted. The sample at upstream location 1-1 had high counts of all three indicator bacteria (see Table 8-1). Of the two pipes upstream of this manhole, the southwestern pipe was dry upstream, and no sample was taken. However a significant amount of litter was observed in the manhole located

Photo 8-2: Litter and sediment in manhole near 8165 Broadway, southwest of upstream location 1-1.

in front of 8165 Broadway. The northwestern pipe into upstream location 1-1 comes from primary Site 12 on Lemon Grove Way (upstream location 1-2). The sample taken from upstream location 1-2 had relatively low levels of bacteria and did not appear likely to be a source of downstream exceedances.

From the evidence available it seemed likely that conditions in the manhole at upstream location 1-1 or transient input from the dry line southwest of upstream location 1-1 could be the cause of bacterial growth. Both upstream location 1-1 and the manhole near 8165 Broadway had a significant amount of litter and sediment in the cleanouts. Much of the trash observed was consistent with litter that may be generated by customers of convenience stores, such as the adjacent Valero, or fast food restaurants. In 2006 strong evidence of wildlife activity (i.e., feces, a carcass) was found in the storm water conveyance. While this evidence was not observed in 2008, significant amounts of food packaging litter would provide a reasonable incentive for scavenging animal activity in the storm water conveyances along Broadway upstream of Site 1, a potential source of fecal indicator bacteria. A summary of the upstream investigation at Site 1 for bacteria is presented in the following map and table.

FIGURE 8-1
SITE 1 UPSTREAM INVESTIGATION MAP

Base Data Sources: USGS, SanGIS, SANDAG, City of Lemon Grove

TABLE 8-1
SITE 1 UPSTREAM INVESTIGATION

ID	Location	Flow (gpm)	Total Coliform (MPN/100mL)	Fecal Coliform (MPN/100mL)	*Enterococcus* (MPN/100mL)
1 (routine)	100 ft southeast of the Sweetwater Way and Broadway intersection	1	170,000	90,000	90,000
1 (confirm)	100 ft southeast of the Sweetwater Way and Broadway intersection	1	68,700	5,118	4,352
1-1	Manhole in sidewalk at northwest corner of Broadway and Lemon Grove Way	1	345,000	141,176	61,310
1-2	Dry Weather Site 12, Lemon Grove Way, across from 8156	1	13,000	462	341

* Fecal coliform values were obtained from *E. coli* values by dividing by a factor of 0.85.

Site 10

Site 10 is located in an earthen channel across from 2220 and 2196 Main Street, by the trolley tracks, and is between Site 9 (upstream) and Site 8 (downstream). The sample taken during the initial visit had a total coliform count of 130,000 MPN/100mL, above the action level of 50,000 MPN/100mL. Upon receiving these laboratory results a confirmation visit and upstream investigation were conducted.

Photo 8-3: Litter and decaying organic matter in dense vegetation upstream of Site 10 at Site 16.

The sample from the confirmation visit also had a high level of total coliforms, 61,300 MPN/100mL. Site 9 (upstream location 10-1) is separated from Site 10 by a stretch of densely-vegetated earthen channel and had an even higher total coliform count, as well as some litter and a shopping cart. The flow was then traced upstream to a catch basin at the corner of Cypress Avenue and Lemon Grove Avenue (upstream location 10-2). This location had a similarly high level of total coliforms. Further upstream along the same line, Site 13 was dry. Visual observations in the upstream areas noted dense vegetation and trash in the upstream conveyance at primary Site 16. The *E. coli* bacteria counts at the upstream locations 10-1 and 10-2 indicated fecal coliforms were below the action level and fecal contamination was unlikely. Therefore, trash and decaying organic matter are the most likely sources of total coliforms at Site 10. Notably, the levels of bacteria appear to decrease as the flow moves downstream to the site. Additionally, runoff appeared to pond at Site 10 and not reach the downstream Site 8, which had a total coliform bacteria count that was below the action level.

A summary of the upstream investigation at Site 10 is presented in the map and table located below.

FIGURE 8-2
SITE 10 UPSTREAM INVESTIGATION MAP

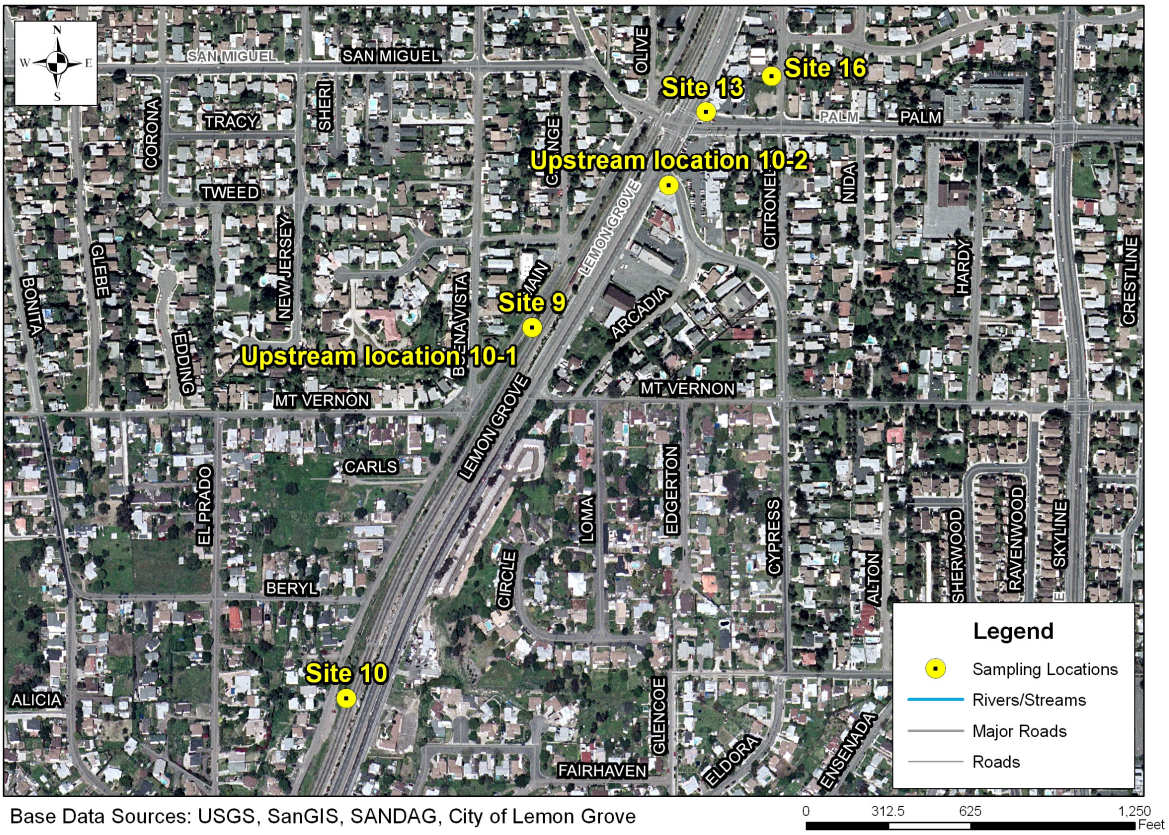

Base Data Sources: USGS, SanGIS, SANDAG, City of Lemon Grove

TABLE 8-2
SITE 10 UPSTREAM INVESTIGATION

ID	Location	Flow (gpm)	Total Coliform (MPN/100mL)	Fecal Coliform (MPN/100mL)
10 (routine)	Across from 2220 and 2196 Main Street, under trolley tracks.	ponded	130,000	1,700
10 (confirm)	Across from 2220 and 2196 Main Street, under trolley tracks.	ponded	61,300	469*
10-1	Dry Weather Site 9 on Main Street, under trolley tracks, between Davidson & Mt. Vernon.	4	120,000	12,353*
10-2	Intersection of Cypress Ave & Lemon Grove Ave in front of 2643 Cypress Ave, west inlet.	< 1	130,000	18,235*
Site 13	Northeast corner of the Palm Street and Lemon Grove Avenue intersection	dry	**	**
Site 16	Citronella Street and Palm Street intersection, east of Arco station	8	**	**

* Fecal coliform values were obtained from *E. coli* values by dividing by a factor of 0.85.
** Visual observations only recorded at these locations during the upstream investigation.

Site 19

Site 19 is located in a manhole at a small cul-de-sac on the west side of Skyline Drive, south of Lincoln Street. This site has a history of nitrate-nitrogen exceedances, and again this year the nitrate-nitrogen concentration was above the action level during the initial site visit at 10.58 mg/L. However, a confirmation visit found that the nitrate-nitrogen concentration had dropped below the action level to 8.33 mg/L on the following day. A brief look in upstream conveyances revealed that they were dry and that flow likely still arose from groundwater ingress into the storm water conveyance, similar to observations in previous years.

9.0 SUMMARY AND RECOMMENDATIONS

9.1 Summary of Field Screening and Laboratory Analysis Data

9.1.1 Summary of Field Screening and Laboratory Analysis Data

Fifteen monitoring locations were selected and visited for the 2008 Dry Weather Monitoring Program. Two alternate sites were visited and sampled to replace the two primary sites that were dry. Table 9-1 provides a summary of action level exceedances.

TABLE 9-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (15 Samples)			
Analyte	**Number of Exceedances**	**Percentage of Sampled Sites with Exceedance**	**Site(s) Exceeding Action Level**
Nitrate-Nitrogen	1	7 %	19
Laboratory Analyses (4 Samples)			
Analyte	**Number of Exceedances**	**Percentage of Analyzed Sites with Exceedance**	**Site(s) Exceeding Action Level**
Total Coliforms	2	50 %	1, 10
Fecal Coliforms	1	25 %	1
Enterococci	1	25 %	1

Note: Data is from the initial site visits only.

A formal trash assessment was performed for the first time in 2008 in accordance with the Municipal Permit. Seventeen sites, including dry sites, were assessed, and six of the sites were scored as optimal or suboptimal, having little or no trash. Nine sites had marginal levels of trash, and two were considered submarginal. An aerosol paint can observed at Site 8 was also considered to be a potential threat to aquatic health.

9.1.2 Summary of Follow-Up Investigation Data

Table 9-2 presents the conclusions based on the results of confirmation visits and upstream investigations conducted at three sites for the 2008 Dry Weather Monitoring Program.

TABLE 9-2
SUMMARY OF FOLLOW-UP INVESTIGATIONS

Site	Follow-Up Investigation Target Constituents		Results/Probable Source
	Field	Laboratory	
1		Total Coliforms, Fecal Coliforms, Enterococci	Only total coliforms remained above the action level during the confirmation visit. Significant amounts of trash observed in two upstream catch basins is the likely source of bacteria. Previous investigations have also found evidence of wildlife activity in the area, which could also be a source.
10		Total Coliforms	Trash and dead organic matter were observed upstream where water flowed slowly through dense vegetation. Since fecal coliforms were low, trash and organic matter are the likely source of bacteria.
19	Nitrate-Nitrogen		Nitrate-nitrogen was below the action level during the confirmation visit. History of elevated nitrate-nitrogen levels at this site has been attributed to upstream groundwater ingress in the past.

9.2 Recommendations

Based on the results of the 2008 Dry Weather Monitoring Program, the following actions are recommended for consideration.

9.2.1 Maintenance

- Clean out trash in the storm water conveyance upstream of Site 1, particularly focusing on the manhole at the east corner of Broadway and Lemon Grove Way and the manhole in front of 8165 Broadway.
- Prioritize removal of trash from sites 3, 4, 5, 8, 9, 10, 13, 15, 16, 19, and 20, which were scored as submarginal or marginal by the trash assessment during routine site visits. In particular, remove the aerosol can from Site 8, which may be a threat to aquatic health. Add these sites to the City's existing clean up schedule as appropriate
    - The above list of sites includes the sites upstream of Site 10. Trash and organic debris accumulation at these locations were thought to be a likely source of total coliform bacteria at Site 10.
- Of the remaining sites with a suboptimal trash score prioritize removal of trash from Site 1, where the trash was also in contact with the water. Other suboptimal sites should also be cleaned up and added to the City's existing clean up schedule as appropriate, including sites 6, 7, 11, and 12.

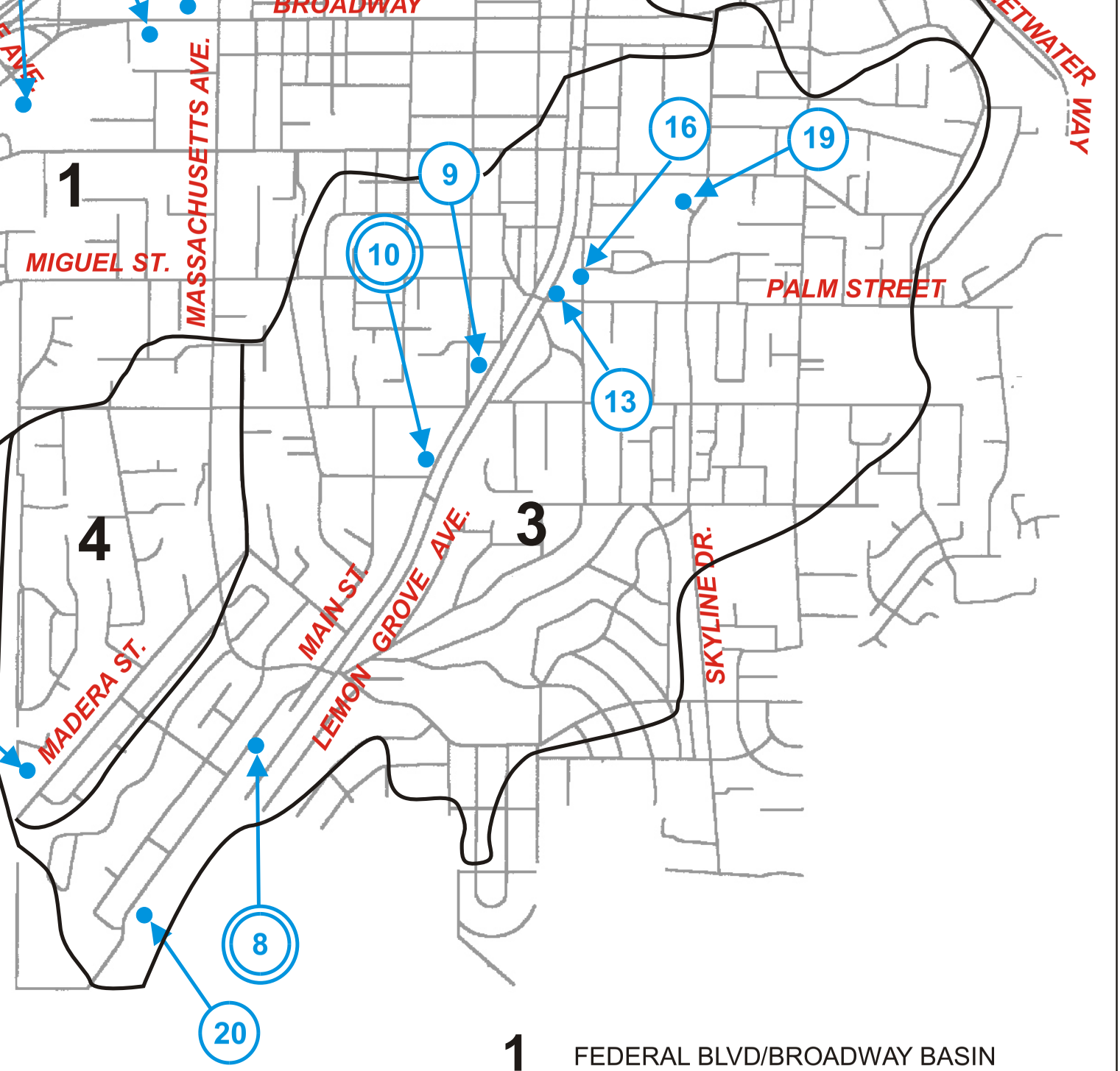

D SCREENING LOCATION

D SCREENING AND LABORATORY
PLING LOCATION

NAGE BASINS

1	FEDERAL BLVD/BROADWAY BASIN
2	BROADWAY/SWEETWATER BASIN
3	LEMON GROVE AVE. BASIN
4	MADERA ST. BASIN

N

Not to Scale

YEAR 2008 DRY WEATHER SAMPLING LOCATIONS
CITY OF LEMON GROVE

CHECKED BY:	PROJECT NO: 200842W-1	DATE: 11-03-08	FIGURE A

ing, Inc.

DMAX

FIGURE B
CITY OF LEMON GROVE WATERSHED MAP

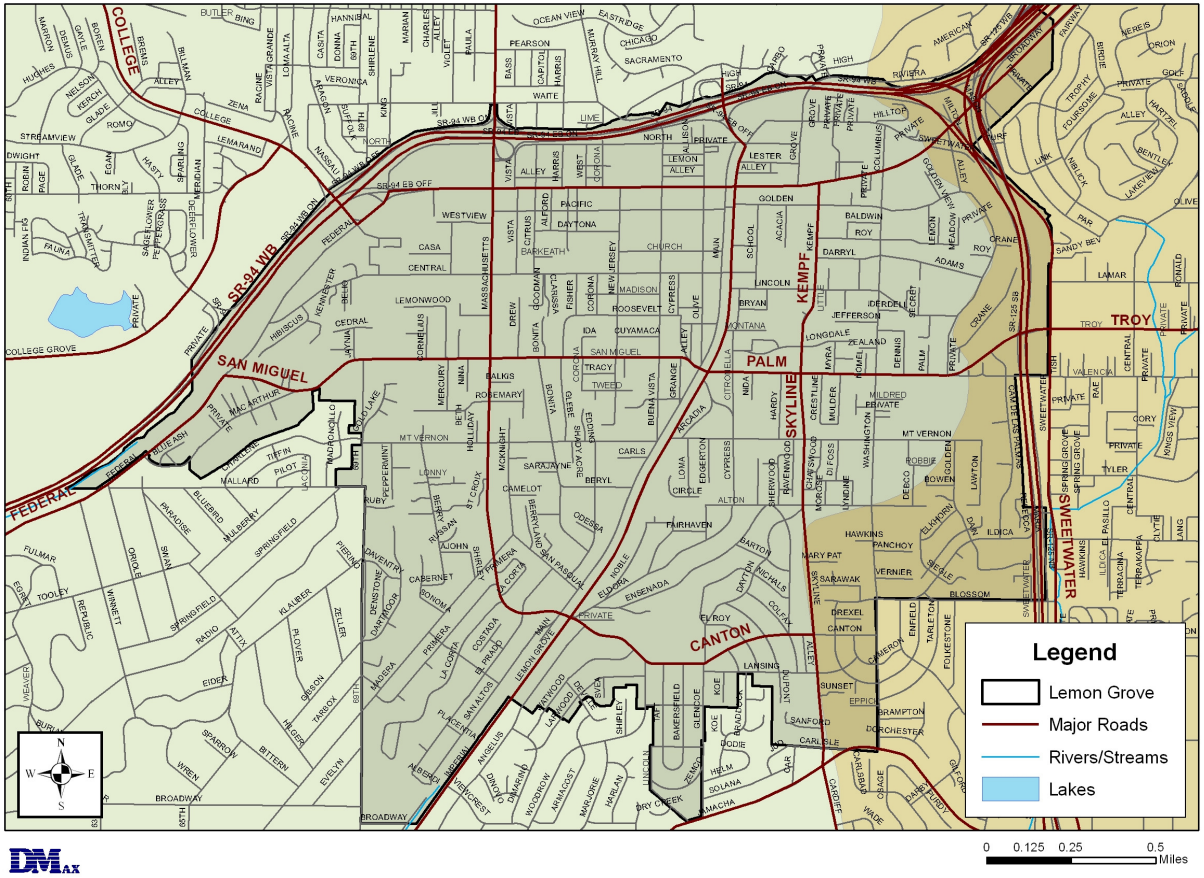

DMAX

Appendix A

Historical Dry Weather Monitoring Data

Site No.	1	1A	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1998																					
Phenols (mg/L)	nd		nd	nd	nd	0.25	0.1	nd	nd	0.2	nd	nd									
Surfactants (mg/L)	0.38		0.75	1.0	20.1	>3.0	1.0	0.75	0.5	0.75	0.75	1.0									
Chlorine (mg/L)	0.2		<0.1	0.15	0.6	0.1	nd	0.1	nd	0.1	0.1	0.1									
Copper (mg/L)	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd									
Ammonia-N (mg/L)	0.1		1.0	1.0	7.9	1.1	1.0	1.0	0.6	0.6	0.8	0.5									
1999																					
Phenols (mg/L)	nd		nd	nd	0.6	0.1	ns	nd	0.1	nd	nd	0.1	0.1	nd	ns	nd					
Surfactants (mg/L)	0.25		0.5	0.5	2.0	2.0	ns	2.5	0.25	0.5	0.25	0.75	0.25	2.0	ns	0.5					
Chlorine (mg/L)	0.1		nd	0.4	0.2	0.1	ns	0.5	nd	<0.1	0.1	0.1	0.1	1.0	ns	0.2					
Copper (mg/L)	0.2		0.1	0.1	0.2	0.1	ns	0.1	nd	0.1	0.1	0.2	nd	0.2	ns	0.1					
Ammonia-N (mg/L)	1.5		0.3	0.2	3.5	0.5	ns	1.0	0.4	0.4	0.2	2.0	0.2	1.5	ns	0.2					
2000																					
Phenols (mg/L)	nd		nd	nd	ns	0.1	ns	ns	nd	0.1	nd	nd	nd	ns		nd					
Surfacatants (mg/L)	0.25		0.25	0.5	ns	<0.5	ns	ns	0.25	0.25	0.25	0.5	0.25	ns		0.5					
Chlorine (mg/L)	<0.1		0.1	0.1	ns	<0.1	ns	ns	<0.1	nd	nd	0.3	0.1	ns		nd					
Copper (mg/L)	nd		nd	nd	ns	nd	ns	ns	nd	nd	nd	nd	nd	ns		nd					
Ammonia-N (mg/L)	0.5		0.4	0.7	ns	1.5	ns	ns	0.8	0.5	0.5	0.6	0.3	ns		0.6					
2001																					
Phenols (mg/L)	nd		nd	nd	ns	nd	ns	nd	nd	nd	nd	nd	nd	ns		0.1	nd				
Surfactants (mg/L)	0.5		0.5	0.25	ns	0.5	ns	0.5	0.25	0.5	0.5	0.75	0.5	ns		0.5	0.25				
Chlorine (mg/L)	nd		0.1	nd	ns	nd	ns	nd	nd	nd	nd	nd	nd	ns		nd	0.1				
Copper (mg/L)	nd		nd	nd	ns	nd	ns	nd	nd	nd	nd	nd	nd	ns		nd	nd				
Ammonia-N (mg/L)	0.2		0.5	0.3	ns	0.8	ns	0.3	0.4	0.6	0.2	0.6	0.1	ns		0.3	0.5				
2002																					
Temperature (°C)	20.5	27.5	22.0	29.0	30.0	20.0	ns	22.0	17.0	19.5	27.5	24.5	23.0	ns		26.0	21.0	21.0			
pH	7.9	8.6	8.0	9.4	7.6	8.1	ns	8.3	7.8	8.3	8.4	7.7	7.5	ns		7.6	8.3	8.1			
Turbidity (NTU)	1.05	25.73	1.15	1.22	187	21.65	ns	9.79	3.25	1.93	8.51	24.6	1.86	ns		0.83	5.0	14.78			
Conductivity (mS/cm)	3.08	3.83	4.9	4.21	2.26	2.74	ns	2.12	3.98	5.04	5.39	1.92	2.96	ns		6.59	5.28	4.07			
Ammonia-N (mg/L)	0.2	0.4	0.3	0.4	20	1.0	ns	2.0	1.0	0.5	0.3	1.0	0.2	ns		0.3	0.2	0.2			
Nitrate-N (mg/L)	3.5	12	nd	nd	nd	0.3	ns	2.0	0.6	8.0	nd	0.8	7.0	ns		1.0	12	8.0			
Orthophosphate-P (mg/L)	0.49	0.07	0.98	0.2	6.52	1.3	ns	5.22	0.49	0.33	0.07	0.98	0.17	ns		1.79	0.49	0.2			
Chlorine (mg/L)	nd	nd	0.1	nd	nd	nd	ns	0.1	nd	nd	0.1	nd	0.05	ns		nd	0.1	nd			
Surfactants (mg/L) (Field)	0.25	0.25	0.5	0.5	12	0.5	ns	0.5	0.25	0.5	0.25	0.5	0.25	ns		0.5	0.5	0.25			
Surfactants (mg/L MBAS)(Lab)	nd		nd						nd		nd										
Oil & Grease (mg/L)	nd		1.9						nd		nd										
Total Hardness (mg/L)	754		927						623		883										
Cadmium (mg/L)	nd		nd						nd		nd										
Copper (mg/L)	nd		nd						nd		nd										
Lead (mg/L)	nd		nd						nd		nd										
Zinc (mg/L)	0.12		nd						nd		nd										
Diazinon (µg/l)	nd		nd						nd		nd										
Chlopyrifos (µg/l)	nd		nd						nd		nd										
Total Coliform (MPN/100mL)	30,000		2,200						17,000		24,000										
Fecal Coliform (MPN/100mL)	8,000		700						3,000		5,000										
Enterococcus (MPN/100mL)	110		130						2,300		80										

Site No.	1	1A	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2003																					
Temperature (℃)	17.5	26.0	25.0	25.0	32.0	21.0	ns	22.0	21.0	20.0	20.5	20.5	21.0	ns		25.5	21.0	23.0			
pH	8.4	8.2	8.6	8.4	8.3	8.2	ns	8.7	8.6	8.7	8.5	8.6	8.7	ns		7.6	8.6	8.6			
Conductivity (mS/cm)	3.11	7.5	5.57	4.54	1.03	3.52	ns	1.59	5.16	6.05	5.9	2.56	3.25	ns		7.86	6.54	5.65			
Turbidity (NTU)	1.4	5.78	2.46	1.2	4.27	10.71	ns	2.44	2.12	0.83	3.57	4.00	0.53	ns		1.52	0.95	3.14			
Ammonia-N (mg/L)	0.4	0.3	0.2	0.4	1.0	0.4	ns	0.8	0.4	0.2	0.3	0.2	0.2	ns		0.2	0.5	0.3			
Nitrate-N (mg/L)	2.0	24.0	0.2	0.4	0.3	1.5	ns	2.0	1.5	8.0	1.0	3.0	5.0	ns		2.0	10.0	5.0			
Orthophosphate-P (mg/L)	0.20	0.03	0.10	0.82	0.13	0.26	ns	0.65	0.16	0.10	nd	0.10	0.07	ns		0.07	0.13	0.20			
Surfactants (mg/L) (Field)	0.25	0.50	0.25	0.25	0.75	0.25	ns	0.50	0.25	0.375	0.25	0.25	0.25	ns		0.50	0.50	0.25			
Surfactants (mg/L MBAS)(Lab)	nd		nd						nd		nd										
Oil & Grease (mg/L)	nd		nd						nd		nd										
Total Hardness (mg/L)	644		917						727		865										
Cadmium (mg/L)	nd		nd						nd		nd										
Copper (mg/L)	nd		nd						nd		nd										
Lead (mg/L)	nd		nd						nd		nd										
Zinc (mg/L)	0.023		0.023						0.024		nd										
Diazinon (µg/l)	nd		nd						0.95		nd										
Chlorpyrifos (µg/l)	nd		nd						nd		nd										
Total Coliform (MPN/100mL)	160,000		22,000						90,000		160,000										
Fecal Coliform (MPN/100mL)	50,000		13,000						50,000		90,000										
Enterococcus (MPN/100mL)	40		nd						1,300		130										
2004																					
Temperature (℃)	22.5	30.2	27.0	24.0	ns	24.5	ns	27.4	22.1	22.1	23.1	27.1	27.7	ns		27.4	24.0	25.6	ns	24.9	
pH	8.2	8.0	7.9	7.5	ns	7.7	ns	8.4	7.9	8.3	7.9	8.0	8.3	ns		6.8	8.3	8.0	ns	8.0	
Conductivity (mS/cm)	1.38	1.79	5.54	4.7	ns	1.52	ns	1.36	3.76	4.57	4.3	1.67	2.6	ns		7.5	4.65	4.55	ns	4.94	
Turbidity (NTU)	3.13	17.62	1.98	1.71	ns	14.49	ns	11.81	64.00	4.72	18.63	5.35	4.03	ns		10.02	4.90	0.89	ns	1.36	
Ammonia-N (mg/L)	0.2	0.6	0.3	0.3	ns	0.6	ns	0.8	1.0	0.2	0.3	0.7	0.1	ns		0.3	0.4	0.2	ns	0.3	
Nitrate-N (mg/L)	2.50	6.25	2.50	1.25	ns	1.25	ns	1.25	1.25	6.25	2.50	3.80	5.00	ns		3.80	7.50	6.25	ns	25.00	
Orthophosphate-P (mg/L)	0.16	0.33	0.07	0.13	ns	0.82	ns	0.82	1.14	0.10	0.03	0.98	0.03	ns		0.1	0.10	0.10	ns	0.03	
Surfactants (mg/L) (Field)	0.25	0.25	0.75	0.50	ns	0.75	ns	0.75	1.50	0.63	0.50	0.50	0.25	ns		0.75	0.63	0.63	ns	0.50	
Surfactants (mg/L MBAS)(Lab)	nd		nd						0.8		nd										
Oil & Grease (mg/L)	1.0		2.0						2.0		nd										
Total Hardness (mg/L)	413		1,200						669		799										
Cadmium (mg/L)	nd		nd						nd		nd										
Copper (mg/L)	nd		nd						nd		nd										
Lead (mg/L)	nd		nd						nd		nd										
Zinc (mg/L)	nd		nd						nd		nd										
Diazinon (µg/l)	nd		nd						nd		nd										
Chlorpyrifos (µg/l)	nd		nd						nd		nd										
Total Coliform (MPN/100mL)	130,000		13,000						1,600,000		17,000										
Fecal Coliform (MPN/100mL)	200		230						90,000		40										
Enterococcus (MPN/100mL)	1,400		13,000						3,000		200										

Site No.	1	1A	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2005																					
Temperature (℃)	21.4	23.9	21.9	25	ns	23	ns	23.5	21.6	23.7	25.3	25.6	25.6	ns		26.8	23	24.4	ns	21.9	
pH	8.3	8.8	8.1	8.5	ns	8.0	ns	8.1	8.4	8.4	8.5	8.3	8.4	ns		6.9	7.7	8.3	ns	8.3	
Conductivity (mS/cm)	1.78	8.98	4.33	3.27	ns	1.6	ns	1.43	4.66	4.95	4.71	2.2	2.74	ns		6.57	4.79	4.98	ns	4.26	
Turbidity (NTU)	1.8	8.87	1.71	0.98	ns	15.51	ns	9.61	1.4	0.88	5.03	15.73	0.28	ns		0.2	3.82	0.51	ns	5.83	
Ammonia-N (mg/L)	0.2	0.3	0.1	0.3	ns	0.60	ns	0.8	0.1	0.2	0.2	0.2	0.1	ns		0.4	0.2	0.1	ns	0.1	
Nitrate-N (mg/L)	5	30	2.5	2.5	ns	2.50	ns	7.5	6.25	15	7.5	2.5	5	ns		1.25	15	8.75	ns	20	
Orthophosphate-P (mg/L)	0.03	0.03	0.03	0.10	ns	0.20	ns	1.63	0.03	0.08	0.03	0.65	0.03	ns		0.13	0.07	0.07	ns	0.07	
Surfactants (mg/L) (Field)	0.25	1	0.5	0.5	ns	0.50	ns	0.75	0.5	0.5	0.75	0.75	0.25	ns		0.75	0.5	0.5	ns	0.5	
Surfactants (mg/L MBAS) (Lab)	nd		nd						nd		nd										
Oil & Grease (mg/L)	nd		nd						nd		nd										
Total Hardness (mg/L)	507		954						896		1,030										
Cadmium (mg/L)	nd		nd						nd		nd										
Copper (mg/L)	nd		nd						0.005		nd										
Lead (mg/L)	nd		nd						nd		nd										
Zinc (mg/L)	nd		0.034						nd		nd										
Diazinon (µg/l)	nd		nd						nd		nd										
Chlorpyrifos (µg/l)	nd		nd						nd		nd										
Total Coliform (MPN/100mL)	>160,000		30,000						50,000		300,000										
Fecal Coliform (MPN/100mL)	50,000		110						1,700		800										
Enterococcus (MPN/100mL)	28,000		14						13		80										
2006																					
Temperature (℃)	27	ns	25.1	25.5	ns	26	ns	25	23.8	23.3	27.2	27.8	26.9	ns		25.2	27	25.5		26.5	25.5
pH	7.7	ns	7.7	7.7	ns	7.6	ns	8.2	8.0	8.1	8.1	8.0	8.1	ns		7.6	7.7	7.9		8.0	7.2
Conductivity (mS/cm)	3.43	ns	4.74	3.91	ns	2.04	ns	1.19	4.07	5.68	5.04	2.33	2.63	ns		4.75	5.49	4.58		7.04	7.37
Turbidity (NTU)	3.19	ns	0.05	0.5	ns	7.65	ns	6.57	3.99	10.73	10.82	6.94	4.38	ns		3.26	1.16	0.22		0.8	13.36
Ammonia-N (mg/L)	0.1	ns	0.2	0.3	ns	0.30	ns	0.3	2.5	0.4	0.2	0.1	0.25	ns		0.2	0.2	0.3		0.1	0.2
Nitrate-N (mg/L)	2.5	ns	2.5	1.25	ns	5.00	ns	2.5	3.75	10	6.75	2.5	5	ns		1.25	15	6.75		25	1.25
Orthophosphate-P (mg/L)	0.20	ns	0.13	0.49	ns	0.98	ns	1.47	0.65	0.20	0.05	0.16	0.10	ns		0.26	0.23	0.29		0.13	0.1956
Surfactants (mg/L) (Field)	0.25	ns	0.25	0.5	ns	1.00	ns	0.75	1	0.75	0.25	0.25	0.25	ns		0.5	0.75	0.5		0.5	0.5
Surfactants (mg/L MBAS) (Lab)	nd		nd						nd		nd										
Oil & Grease (mg/L)	nd		nd						nd		nd										
Total Hardness (mg/L)	891		1,090						760		895										
Cadmium (mg/L)	nd		nd						nd		nd										
Copper (mg/L)	0.007		nd						0.005		0.005										
Lead (mg/L)	nd		nd						nd		nd										
Zinc (mg/L)	nd		0.025						0.02		nd										
Diazinon (µg/l)	nd		nd						nd		nd										
Chlorpyrifos (µg/l)	nd		nd						nd		nd										
Total Coliform (MPN/100mL)	80,000		50,000						500,000		30,000										
Fecal Coliform (MPN/100mL)	500		2,400						50,000		3,000										
Enterococcus (MPN/100mL)	500		1,300						8,000		3,000										

Site No.	1	1A	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2007																					
Temperature (℃)	23.3		22.6	27.7	ns	23.8	ns	23.5	23	23.8	19.6	27	26.3	ns		28	23.6	27.1		24.4	21.4
pH	8.2		7.8	8.1	ns	7.8	ns	8.2	7.5	8.2	7.9	8.4	8.2	ns		6.9	8.2	8.1		8.1	7.4
Conductivity (mS/cm)	1.84		4.98	4.22	ns	2.2	ns	1.1	2.42	3.84	3.74	2.77	2.3	ns		7.49	4.27	4.17		3.75	9.19
Turbidity (NTU)	0.59		0.48	5.49	ns	5.97	ns	0.71	3.22	0.37	6.74	0.1	0.1	ns		0.39	0.2	0.1		0.17	5.29
Ammonia-N (mg/L)	0.1		0.1	0.2	ns	0.2	ns	nd	0.1	0.2	0.3	0.2	0.2	ns		0.2	0.2	0.3		0.3	0.3
Nitrate-N (mg/L)	2.44		0.2	0.16	ns	3.01	ns	0.61	0.2	5.83	0.54	8.88	4.25	ns		0.23	11.33	13.11		14.01	0.25
Orthophosphate-P (mg/L)	0.16		0.16	0.33	ns	0.42	ns	0.72	0.46	0.26	0.1	0.23	0.26	ns		0.16	0.26	0.23		0.1	0.16
Surfactants (mg/L) (Field)	0.25		0.63	0.5	ns	0.63	ns	0.5	0.75	0.5	0.5	0.5	0.5	ns		0.75	0.63	0.5		0.5	0.75
Surfactants (mg/L MBAS) (Lab)	nd		nd						nd		nd										
Oil & Grease (mg/L)	nd		nd						nd		nd										
Total Hardness (mg/L)	540		1,290						523		852										
Cadmium (mg/L)	nd		nd						0.007		nd										
Copper (mg/L)	0.008		nd						nd		nd										
Lead (mg/L)	nd		nd						nd		nd										
Zinc (mg/L)	nd		nd						nd		nd										
Diazinon (µg/l)	nd		nd						nd		nd										
Chlorpyrifos (µg/l)	nd		nd						nd		nd										
Total Coliform (MPN/100mL)	8,000		23,000						50,000		8,000										
Fecal Coliform (MPN/100mL)	3,000		1,700						11,000		300										
Enterococcus (MPN/100mL)	1,300		300						1,300		40										

Notes:

nd = not detected

ns = not sampled (dry site)

Appendix B

Photographs of Sampling Locations

Site 1	
Site 2	
Site 3	

Site 4	
Site 5	
Site 6	

Site 7	
Site 8	
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Site 10	
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Site 13	
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Appendix C

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

26 September 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0809390

Project Name: Lemon Grove Dry Weather
Project Desc./#:200842W-1

Enclosed are the results of analyses for samples received by the laboratory on 09/17/08 14:52. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Lemon Grove Dry Weather

EMA Log #: 0809390

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
2	0809390-01	Water	09/17/08 10:00	09/17/08 14:52
1	0809390-02	Water	09/17/08 11:20	09/17/08 14:52
10	0809390-03	Water	09/17/08 12:30	09/17/08 14:52
8	0809390-04	Water	09/17/08 13:20	09/17/08 14:52

NOTE: Due to a instrument failure the dissolved metals were performed by a subcontract laboraory, results to follow in a separate report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Lemon Grove Dry Weather

EMA Log #: 0809390

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2 (0809390-01) Water Sampled: 09/17/08 10:00 Received: 09/17/08 14:52									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8091820	09/18/08	09/26/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*100 %*	*60-130*		"	"	"	"	
1 (0809390-02) Water Sampled: 09/17/08 11:20 Received: 09/17/08 14:52									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8091820	09/18/08	09/26/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*114 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*90 %*	*60-130*		"	"	"	"	
10 (0809390-03) Water Sampled: 09/17/08 12:30 Received: 09/17/08 14:52									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8091820	09/18/08	09/26/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*108 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*100 %*	*60-130*		"	"	"	"	
8 (0809390-04) Water Sampled: 09/17/08 13:20 Received: 09/17/08 14:52									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8091820	09/18/08	09/26/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*108 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*88 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Lemon Grove Dry Weather

EMA Log #: 0809390

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2 (0809390-01) Water Sampled: 09/17/08 10:00 Received: 09/17/08 14:52									
Hardness (Total)	**1210**	100	mg CaCO3/L	10	8091719	09/17/08	09/18/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8092303	09/22/08	09/23/08	EPA 1664A	
1 (0809390-02) Water Sampled: 09/17/08 11:20 Received: 09/17/08 14:52									
Hardness (Total)	**680**	100	mg CaCO3/L	10	8091719	09/17/08	09/18/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8092303	09/22/08	09/23/08	EPA 1664A	
10 (0809390-03) Water Sampled: 09/17/08 12:30 Received: 09/17/08 14:52									
Hardness (Total)	**972**	100	mg CaCO3/L	10	8091719	09/17/08	09/18/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8092303	09/22/08	09/23/08	EPA 1664A	
8 (0809390-04) Water Sampled: 09/17/08 13:20 Received: 09/17/08 14:52									
Hardness (Total)	**502**	100	mg CaCO3/L	10	8091719	09/17/08	09/18/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8092303	09/22/08	09/23/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Lemon Grove Dry Weather

EMA Log #: 0809390

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
2 (0809390-01) Water Sampled: 09/17/08 10:00 Received: 09/17/08 14:52									
Total Coliforms	**11000**	200	MPN/100 ml	100	8092003	09/17/08	09/21/08	SM 9221 B, E	
Fecal Coliforms	**1400**	20	"	10	"	"	09/20/08	"	
Enterococcus	**800**	20	"	"	8092004	"	09/21/08	SM 9230 A, B	
1 (0809390-02) Water Sampled: 09/17/08 11:20 Received: 09/17/08 14:52									
Total Coliforms	**170000**	2000	MPN/100 ml	1000	8092003	09/17/08	09/21/08	SM 9221 B, E	
Fecal Coliforms	**90000**	200	"	100	"	"	09/20/08	"	
Enterococcus	**90000**	200	"	"	8092004	"	09/21/08	SM 9230 A, B	
10 (0809390-03) Water Sampled: 09/17/08 12:30 Received: 09/17/08 14:52									
Total Coliforms	**130000**	2000	MPN/100 ml	1000	8092003	09/17/08	09/21/08	SM 9221 B, E	
Fecal Coliforms	**1700**	20	"	10	"	"	09/20/08	"	
Enterococcus	**500**	20	"	"	8092004	"	09/21/08	SM 9230 A, B	
8 (0809390-04) Water Sampled: 09/17/08 13:20 Received: 09/17/08 14:52									
Total Coliforms	**23000**	2000	MPN/100 ml	1000	8092003	09/17/08	09/21/08	SM 9221 B, E	
Fecal Coliforms	**800**	20	"	10	"	"	09/20/08	"	
Enterococcus	**500**	20	"	"	8092004	"	09/21/08	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Lemon Grove Dry Weather

EMA Log #: 0809390

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091820										
Blank (8091820-BLK1)				Prepared: 09/18/08	Analyzed: 09/25/08					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.212*		*"*	*0.250*		*85*	*60-130*			
Surrogate: Tribuytlphosphate	*0.204*		*"*	*0.250*		*82*	*60-130*			
LCS (8091820-BS1)				Prepared: 09/18/08	Analyzed: 09/25/08					
Bolstar	0.36	0.10	ug/l	0.500		72	60-130			
Diazinon	0.37	0.05	"	0.500		74	60-130			
Ethoprop	0.37	0.05	"	0.500		74	60-130			
Mevinphos	0.39	0.25	"	0.500		78	60-130			
Methyl parathion	0.37	0.10	"	0.500		73	60-130			
Phorate	0.36	0.05	"	0.500		72	60-130			
Ronnel	0.36	0.25	"	0.500		73	60-130			
Trichlorinate	0.40	0.05	"	0.500		79	60-130			
Surrogate: Triphenyl phosphate	*0.250*		*"*	*0.250*		*100*	*60-130*			
Surrogate: Tribuytlphosphate	*0.263*		*"*	*0.250*		*105*	*60-130*			
LCS Dup (8091820-BSD1)				Prepared: 09/18/08	Analyzed: 09/25/08					
Bolstar	0.40	0.10	ug/l	0.500		79	60-130	10	30	
Diazinon	0.39	0.05	"	0.500		78	60-130	6	30	
Ethoprop	0.40	0.05	"	0.500		80	60-130	7	30	
Mevinphos	0.43	0.25	"	0.500		85	60-130	9	30	
Methyl parathion	0.40	0.10	"	0.500		80	60-130	9	30	
Phorate	0.38	0.05	"	0.500		76	60-130	6	30	
Ronnel	0.40	0.25	"	0.500		80	60-130	9	30	
Trichlorinate	0.40	0.05	"	0.500		80	60-130	2	30	
Surrogate: Triphenyl phosphate	*0.228*		*"*	*0.250*		*91*	*60-130*			
Surrogate: Tribuytlphosphate	*0.265*		*"*	*0.250*		*106*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Lemon Grove Dry Weather

EMA Log #: 0809390

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8091719										
Blank (8091719-BLK1)				Prepared: 09/17/08	Analyzed: 09/18/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8091719-DUP1)		**Source: 0809390-01**		Prepared: 09/17/08	Analyzed: 09/18/08					
Hardness (Total)	1220	100	mg CaCO3/L		1210			0.5	20	
Batch 8092303										
Blank (8092303-BLK1)				Prepared & Analyzed: 09/22/08						
Oil & Grease	ND	5	mg/l							
LCS (8092303-BS1)				Prepared & Analyzed: 09/22/08						
Oil & Grease	31	5	mg/l	40.0		78	75-125			
LCS Dup (8092303-BSD1)				Prepared & Analyzed: 09/22/08						
Oil & Grease	32	5	mg/l	40.0		81	75-125	4	20	
Matrix Spike (8092303-MS1)		**Source: 0809280-01**		Prepared & Analyzed: 09/22/08						
Oil & Grease	28	5	mg/l	40.0	ND	70	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: same

Project ID: Lemon Grove Dry Weather

Project #: 200842W-1 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 X	8015B (TPH) □ Gas □ Diesel □ Ex	624/8260 (VOC) Full BTXE MTB	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestic	608 / 8082 (Polychlorinated Biphe	8141 (Organophosphorus Pesticide	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TT	TCLP (RCRA) □ Metals □ Organ	Cd Cr Cu Pb Ni Ag Zn	Coliform, Total (MTF) Fecal X	Colilert, T+E.Coli □ P/A □ Enume
1	2	9/17/08	10:00	water	4P/2G	X						X						X	X	
2	1	"	11:20	"	"	X						X						X	X	
3	10	"	12:30	"	"	X						X						X	X	
4	8	"	13:20	"	"	X						X						X	X	
5																				
6																				
7																				
8																				
9																				
10																				

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

	RELINQUISHED BY	DATE/TIME
Signature	Crystal Grover	9/17/08 1430
Print	Crystal Grover	
Company:	D-Max Eng	
Signature		9/17/08 1452
Print	Adam Queen	
Company:	EMA Inc	
Signature		
Print		
Company:		

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

T = 6°C on ice

[1]Additional costs may apply, consult a project manager for details.

White- EMA Canary - Accounting Pink - Client (w

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 day of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

25 September 2008

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0809390

Project Name: Lemon Grove Dry Weather
Project Number: 200842W-1

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- Dissolved Metals by EPA 6020

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Calscience Environmental Laboratories, Inc.

September 25, 2008

Jamey Cote
EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Subject: **Calscience Work Order No.: 08-09-1742**
Client Reference: 0809390

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/18/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Amanda Porter

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/18/08
Work Order No:	08-09-1742
Preparation:	EPA 3005A Filt.
Method:	EPA 6020
Units:	mg/L

Project: 0809390

Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
0809390-01	**08-09-1742-1-A**	**09/17/08 10:00**	**Aqueous**	**ICP/MS A**	**09/19/08**	**09/19/08 23:31**	**080919L02F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	0.00299	0.00100	1		Zinc	0.0117	0.00500	1	

0809390-02	**08-09-1742-2-A**	**09/17/08 11:20**	**Aqueous**	**ICP/MS A**	**09/19/08**	**09/19/08 23:35**	**080919L02F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	0.00469	0.00100	1		Zinc	0.0174	0.00500	1	

0809390-03	**08-09-1742-3-A**	**09/17/08 12:30**	**Aqueous**	**ICP/MS A**	**09/19/08**	**09/19/08 23:40**	**080919L02F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	0.0169	0.00100	1	
Copper	0.00858	0.00100	1		Zinc	0.109	0.00500	1	

0809390-04	**08-09-1742-4-A**	**09/17/08 13:20**	**Aqueous**	**ICP/MS A**	**09/19/08**	**09/19/08 23:44**	**080919L02F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	0.00287	0.00100	1		Zinc	0.00827	0.00500	1	

Method Blank	**096-06-003-1,721**	**N/A**	**Aqueous**	**ICP/MS A**	**09/19/08**	**09/19/08 20:55**	**080919L02F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EnviroMatrix Analytical, Inc.		Date Received:	09/18/08
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-1742
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project 0809390

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-1544-1	**Aqueous**	**ICP/MS A**	**09/19/08**	**09/19/08**	**080919S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	99	100	84-114	1	0-8	
Copper	99	100	72-108	1	0-10	
Lead	106	109	79-121	3	0-10	
Zinc	90	96	43-145	5	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received	09/18/08
Work Order No:	08-09-1742
Preparation:	EPA 3005A Filt.
Method:	EPA 6020

Project: 0809390

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
08-09-1544-1	**Aqueous**	**ICP/MS A**	**09/19/08**	**09/19/08**	**080919S02**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	95	96	75-125	1	0-8	
Copper	96	95	75-125	1	0-10	
Lead	105	104	75-125	1	0-10	
Zinc	91	90	75-125	1	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

EnviroMatrix Analytical, Inc.		Date Received:	N/A
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-1742
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project: 0809390

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,721	Aqueous	ICP/MS A	09/19/08	09/19/08	080919L02F

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	102	102	80-120	0	0-20	
Copper	106	109	80-120	2	0-20	
Lead	100	100	80-120	0	0-20	
Zinc	107	108	80-120	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-1742

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809390

1742

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0809390-01	**Water**	**Sampled:09/17/08 10:00**		
Cu Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 10:00		
Metals Digestion/Prep-Liq	~~09/24/08 16:00~~	03/16/09 10:00		
Pb Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 10:00		
Zn Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 10:00		
Cd Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 10:00		
Containers Supplied:				
500 mL Poly Unpres (E)				
Sample ID: 0809390-02	**Water**	**Sampled:09/17/08 11:20**		
Zn Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 11:20		
Cd Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 11:20		
Cu Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 11:20		
Metals Digestion/Prep-Liq	~~09/24/08 16:00~~	03/16/09 11:20		
Pb Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 11:20		
Containers Supplied:				
500 mL Poly Unpres (E)				
Sample ID: 0809390-03	**Water**	**Sampled:09/17/08 12:30**		
Cu Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 12:30		
Metals Digestion/Prep-Liq	~~09/24/08 16:00~~	03/16/09 12:30		
Pb Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 12:30		
Zn Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 12:30		
Cd Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 12:30		
Containers Supplied:				
500 mL Poly Unpres (E)				

Send reports to jbeyer@enviromatrixinc.com, lhick@enviromatrixinc.com, and reports@enviromatrixinc.com

Released By	Date	Received By	Date
	9/18/08 1226	CEL	9/18/8 1226
	9/18/8		9/18/8 1620

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809390

1742

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0809390-04	**Water**	**Sampled:09/17/08 13:20**		
Zn Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 13:20		
Cd Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 13:20		
Cu Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 13:20		
Metals Digestion/Prep-Liq	~~09/24/08 16:00~~	03/16/09 13:20		
Pb Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 13:20		
Containers Supplied:				
500 mL Poly Unpres (E)				

Released By	Date	Received By	Date
	9/18/08 1226	CEL	9/18/8 13:46
	9/18/8		9/18/8 1620

Page 2 of 2

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 0 9 - 1 7 4 3

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: EMA DATE: 9/18/8

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
✓ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter Only).
3.1 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

___ ___ . ___ °C Temperature blank.
___ ___ . ___ °C IR Thermometer.
_____ Ambient temperature (For Air & Filter Only).

Initial: [signature]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: [signature]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC		✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [signature]

COMMENTS:

SOP T100_081 (9/19/08)

San Diego, CA 92121

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: same

Project ID: Lemon Grove Dry Weather

Project #: 2008 42W-1 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 X 1664	8015B (TPH) □ Gas □ Diesel □ Ext.	624/8260 (VOC) Full BTXE MTBE	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticid	608 / 8082 (Polychlorinated Biphenyl	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTL	TCLP (RCRA) □ Metals □ Organi	Cd Cr Cu Pb Ni Ag Zn	Coliform, Total (MTF) Fecal (M
1	2	9/17/08	10:00	water	4P/2G	X						X						X X	X
2	1	"	11:20	"	"	X						X						X X	X
3	10	"	12:30	"	"	X						X						X X	X
4	8	"	13:20	"	"	X						X						X X	X
5																			
6																			
7																			
8																			
9																			
10																			

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

RELINQUISHED BY	DATE/TIME
Signature: Crystal Grove	9/17/08 1430
Print: Crystal Grove	
Company: D-Max Eng	
Signature:	9/17/08 1452
Print: Adam Queen	
Company: EMA Inc	
Signature	
Print	
Company:	

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt: _____
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

T = 6°C on ice

[1]Additional costs may apply, consult a project manager for details. White- EMA Canary - Accounting Pink - Client

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809390

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0809390-01	**Water**	**Sampled:09/17/08 10:00**		
Cu Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 10:00		
Metals Digestion/Prep-Liq	~~09/24/08 16:00~~	03/16/09 10:00		
Pb Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 10:00		
Zn Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 10:00		
Cd Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 10:00		
Containers Supplied:				
500 mL Poly Unpres (E)				
Sample ID: 0809390-02	**Water**	**Sampled:09/17/08 11:20**		
Zn Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 11:20		
Cd Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 11:20		
Cu Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 11:20		
Metals Digestion/Prep-Liq	~~09/24/08 16:00~~	03/16/09 11:20		
Pb Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 11:20		
Containers Supplied:				
500 mL Poly Unpres (E)				
Sample ID: 0809390-03	**Water**	**Sampled:09/17/08 12:30**		
Cu Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 12:30		
Metals Digestion/Prep-Liq	~~09/24/08 16:00~~	03/16/09 12:30		
Pb Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 12:30		
Zn Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 12:30		
Cd Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 12:30		
Containers Supplied:				
500 mL Poly Unpres (E)				

Send reports to jbeyer@enviromatrixinc.com, lluick@enviromatrixinc.com, and reports@enviromatrixinc.com

Released By	Date	Received By	Date
	9/18/08 12:26	CEL	9/18/8 1226

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0809390

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0809390-04	**Water**	**Sampled:09/17/08 13:20**		
Zn Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 13:20		
Cd Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 13:20		
Cu Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 13:20		
Metals Digestion/Prep-Liq	~~09/24/08 16:00~~	03/16/09 13:20		
Pb Diss EPA-6020	~~09/24/08 16:00~~	03/16/09 13:20		
Containers Supplied:				
500 mL Poly Unpres (E)				

Released By	Date	Received By	Date
[signature]	9/18/08 1226	[signature] CEL	9/18/8 13:46

EnviroMatrix Analytical, Inc.

10 October 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0810071

Project Name: Lemon Grove Dry Weather
Project Desc./#: 200842W-2

Enclosed are the results of analyses for samples received by the laboratory on 10/03/08 13:39. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: Lemon Grove Dry Weather

EMA Log #: 0810071

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1	0810071-01	Water	10/03/08 10:20	10/03/08 13:39
1-1	0810071-02	Water	10/03/08 10:50	10/03/08 13:39
1-2	0810071-03	Water	10/03/08 11:35	10/03/08 13:39
10	0810071-04	Water	10/03/08 12:00	10/03/08 13:39
10-1	0810071-05	Water	10/03/08 12:10	10/03/08 13:39
10-2	0810071-06	Water	10/03/08 12:50	10/03/08 13:39

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Lemon Grove Dry Weather

EMA Log #: 0810071

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
1 (0810071-01) Water Sampled: 10/03/08 10:20 Received: 10/03/08 13:39								
Total Coliforms	**68700**	100	MPN/100 ml	100	8100814	10/03/08 15:10 10/04/08 15:10	SM9223	
E. Coli	**4350**	10	"	10	"	10/03/08 15:10 10/04/08 15:10	"	
Enterococcus	**4352**	10	"	"	8100815	10/03/08 15:20 10/04/08 15:50	Idexx	
1-1 (0810071-02) Water Sampled: 10/03/08 10:50 Received: 10/03/08 13:39								
Total Coliforms	**345000**	1000	MPN/100 ml	1000	8100814	10/03/08 15:10 10/04/08 15:10	SM9223	
E. Coli	**120000**	100	"	100	"	10/03/08 15:10 10/04/08 15:10	"	
Enterococcus	**61310**	100	"	"	8100815	10/03/08 15:20 10/04/08 15:50	Idexx	
1-2 (0810071-03) Water Sampled: 10/03/08 11:35 Received: 10/03/08 13:39								
Total Coliforms	**13000**	10	MPN/100 ml	10	8100814	10/03/08 15:10 10/04/08 15:10	SM9223	
E. Coli	**393**	10	"	"	"	10/03/08 15:10 10/04/08 15:10	"	
Enterococcus	**341**	10	"	"	8100815	10/03/08 15:20 10/04/08 15:50	Idexx	
10 (0810071-04) Water Sampled: 10/03/08 12:00 Received: 10/03/08 13:39								
Total Coliforms	**61300**	100	MPN/100 ml	100	8100814	10/03/08 15:10 10/04/08 15:10	SM9223	
E. Coli	**399**	10	"	10	"	10/03/08 15:10 10/04/08 15:10	"	
10-1 (0810071-05) Water Sampled: 10/03/08 12:10 Received: 10/03/08 13:39								
Total Coliforms	**120000**	100	MPN/100 ml	100	8100814	10/03/08 15:10 10/04/08 15:10	SM9223	
E. Coli	**10500**	10	"	10	"	10/03/08 15:10 10/04/08 15:10	"	
10-2 (0810071-06) Water Sampled: 10/03/08 12:50 Received: 10/03/08 13:39								
Total Coliforms	**130000**	100	MPN/100 ml	100	8100814	10/03/08 15:10 10/04/08 15:10	SM9223	
E. Coli	**15500**	10	"	10	"	10/03/08 15:10 10/04/08 15:10	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: Lemon Grove Dry Weather

EMA Log #: 0810071

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: Lemon Grove Dry Weather Follow-Up

Project #: 200842W-2 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 16	8015B (TPH) □ Gas □ Diesel □ Ex	624/8260 (VOC) Full BTXE MTB	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestic	608 / 8082 (Polychlorinated Biphe	8141 (Organophosphorus Pesticide	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TT	TCLP (RCRA) □ Metals □ Organ	Cd Cr Cu Pb Ni Ag Zn	Coliform, □ Total (MTF) □ Fecal	Colilert, T+E.Coli □ P/A ☒ Enume
1	1	10/3/08	10:20	water	2P															X
2	1-1	"	10:50	"	2P															X
3	1-2	"	11:35	"	2P															X
4	10	"	12:00	"	1P															X
5	10-1	"	12:10	"	1P															X
6	10-2	"	12:50	"	1P															X
7																				
8																				
9																				
10																				

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

RELINQUISHED BY	DATE/TIME
Signature: Crystal Grover	10/3/08
Print: Crystal Grover	13:39
Company: D-Max Engineering	
Signature	
Print	
Company:	
Signature	
Print	
Company:	

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:_____
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details. White- EMA Canary - Accounting Pink - Client (w

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 day of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T=6°C On Ice

Appendix D

Field Data Sheets

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	1		Latitude	32.74507	Watershed	Hydrologic Unit	909
Location	100 feet southeast of the Sweetwater Road and Broadway intersection		Longitude	-117.01834		Hydrologic Area	909.1
			TB Page	1270-J5		Hydrologic Subarea (Optional)	909.12
Date	9/17/08	Time 11:20	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☒ Fish ☒ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1199-1201

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.1	NH_3-N (mg/L)	0.213	NO_3 (mg/L)	12.52	Ortho-PO_4 (mg/L)	0.414
pH (pH units)	8.34	TURB (NTU)	3.65	NO_3-N (mg/L)	2.830	Ortho-PO_4-P (mg/L)	0.135
COND (mS/cm)	2.34	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	4	in
Depth	0.25	in
Velocity	5/12	ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 1 **DATE:** 9/17/08

LOCATION: 100 ft SE of the Sweetwater Road and Broadway intersection **TIME:** 11:20

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Total Coliform & Fecal Coliform, Enterococcus ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	1		Latitude	32.74512	Watershed	Hydrologic Unit	909
Location	100 feet southeast of the Sweetwater Road and Broadway intersection		Longitude	-117.08826		Hydrologic Area	909.1
			TB Page	1270-J5		Hydrologic Subarea (Optional)	909.12
Date	10/3/08	Time 10:20	Observer	CG, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☒ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0033-0035

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.35	TURB (NTU)	1.08	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.95	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash (small amount): wrappers, cans, styrofoam cups

San Diego Stormwater Copermittees
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Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Total ~~Coli~~form, Fecal Coliform, Enterococcus

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	1-1		Latitude	32.74456	Watershed	Hydrologic Unit	909
Location	Northwest corner of Broadway Drive & Lemon Grove Way intersection		Longitude	-117.02087		Hydrologic Area	909.1
			TB Page	1270-J5		Hydrologic Subarea (Optional)	909.12
Date	10/3/08	Time 10:50	Observer	CG, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage			☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray			☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque				☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter			☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits			☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive				☐ Other
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0036-~~0010~~

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.1	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.4	TURB (NTU)	~~39.00~~ 28.9	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	3.48	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Lots of trash: sandbag inside, plastic, cans, food wrappers, paper, styrofoam

San Diego Stormwater Copermittees
City of Lemon Grove
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☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For ~~Total coliform, fecal coliform, Enterococcus~~

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	1-2		**Latitude**	32.74559	**Watershed**	**Hydrologic Unit**	909
Location	Site 12, Lemon Grove Way, between residential address 8156 and the Grove Condominiums ~~across from 8156~~		**Longitude**	-117.02408		**Hydrologic Area**	909.1
			TB Page	1270-H5		**Hydrologic Subarea** (Optional)	909.12
Date	10/3/08	**Time** 11:35	**Observer**	CG, DM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0044 - 0046

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	~~[illegible]~~	NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)					

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1 cfs	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
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Dry Weather Monitoring Field Datasheet

✓

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☒ Receiving Water

Site ID	2		Latitude	32.73127	Watershed	Hydrologic Unit	908
Location	Behind the building at 6420A Federal Boulevard		Longitude	-117.06124		Hydrologic Area	908.2
			TB Page	1270-D7		Hydrologic Subarea (Optional)	908.22
Date	9/17/08	Time 10:00	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☒ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☒ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other Crayfish

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1196, 1198

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.6	NH_3-N (mg/L)	0.194	NO_3 (mg/L)	3.613	Ortho-PO_4 (mg/L)	0.512
pH (pH units)	7.63	TURB (NTU)	0.20	NO_3-N (mg/L)	0.817	Ortho-PO_4-P (mg/L)	0.167
COND (mS/cm)	4.53	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	12	in
Depth	1.5	in
Velocity	5/13	ft/sec
Flow	22	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 2 **DATE:** 9/17/08

LOCATION: Behind the building at 6420A Federal Blvd **TIME:** 10:00

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☒ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☒ Receiving Water

Site ID	3		**Latitude**	32.73569	**Watershed**	**Hydrologic Unit**	908
Location	Next to 6691 Federal Boulevard		**Longitude**	-117.05477		**Hydrologic Area**	908.2
			TB Page	1270-E7		**Hydrologic Subarea** (Optional)	908.22
Date	9/18/08	**Time** 15:25	**Observer**	CG, CM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☒ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☒ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other Crayfish

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1243-1245

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.7	NH_3-N (mg/L)	0.174	NO_3 (mg/L)	4.254	Ortho-PO_4 (mg/L)	0.694
pH (pH units)	8.01	TURB (NTU)	1.32	NO_3-N (mg/L)	0.961	Ortho-PO_4-P (mg/L)	0.226
COND (mS/cm)	4.63	MBAS (mg/L)	0.50				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	24	in
Depth	0.5	in
Velocity	5/7	ft/sec
Flow	27	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 3 DATE: 9/18/08

LOCATION: Next to 6691 Federal Boulevard TIME: 15:25

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☒ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☒ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	4		Latitude	32.74118	Watershed	Hydrologic Unit	908
Location	Between 7102 and 7106 Westview place, west end of street before driveway		Longitude	-117.04557		Hydrologic Area	908.2
			TB Page	1270-F6		Hydrologic Subarea (Optional)	908.22
Date	9/18/08	Time 9:05	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other	NA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other	NA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☒ Other	NA
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☒ Other	NA
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1220-1221

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4-P (mg/L)	
COND (mS/cm)		MBAS (mg/L)					

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	DM	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 4 **DATE:** 9/18/08

LOCATION: Between 7102 and 7106 Westview Place, west end of street before driveway **TIME:** 9:05

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☒ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts	3		✓			✓						
Construction												
Fabric/Clothing												
Food Packaging	1		✓			✓						
Food Waste												
Household	2		✓			✓						
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Styrofoam and plastic food packaging, balls and toys, toiletry items, cigarette butts

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	5			Latitude	32.74035	Watershed: Hydrologic Unit	908
Location	6883 College Avenue, behind Discount Tire			Longitude	-117.04941	Hydrologic Area	908.2
				TB Page	1270-E6	Hydrologic Subarea (Optional)	908.22
Date	9/19/08	Time	11:00	Observer	CG, CM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1254-1257

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.4	NH_3-N (mg/L)	0.249	NO_3 (mg/L)	16.03	Ortho-PO_4 (mg/L)	0.790
pH (pH units)	8.14	TURB (NTU)	4.15	NO_3-N (mg/L)	3.623	Ortho-PO_4-P (mg/L)	0.258
COND (mS/cm)	2.59	MBAS (mg/L)	0.375				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	5	in
Depth	0.5	in
Velocity	4/6	ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash included food packaging, plastic bags and an office chair, mainly caught in nearby vegetation. Flow was measured ~300 yards downstream in natural creek.

Trash Assessment Form

SITE ID: 5 DATE: 9/19/08

LOCATION: 6883 College Avenue, behind Discount Tire TIME: 11:00

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	6		Latitude	32.74360	Watershed	Hydrologic Unit	908
Location	Buena Vista Ave and Lemon Ave., in Home Depot parking lot in front of nurseries		Longitude	-117.03484		Hydrologic Area	908.2
			TB Page	1270-G6		Hydrologic Subarea (Optional)	908.22
Date	9/18/08	Time 9:30	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1222 - 1224

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.9	NH_3-N (mg/L)	0.097	NO_3 (mg/L)	5.180	Ortho-PO_4 (mg/L)	0.301
pH (pH units)	8.06	TURB (NTU)	25.22	NO_3-N (mg/L)	1.171	Ortho-PO_4-P (mg/L)	0.098
COND (mS/cm)	0.95	MBAS (mg/L)	ND				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sample water appeared ~~very~~ clear, but had small reflective particulate.

Trash Assessment Form

SITE ID: 6 **DATE:** 9/18/08

LOCATION: Buena Vista Ave and Lemon Ave., in Home Depot parking lot, in front of nursery **TIME:** 9:30

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

✓

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	7		Latitude	32.72054	Watershed	Hydrologic Unit	908
Location	Corner of Primera Street and Madera Street		Longitude	-117.04865		Hydrologic Area	908.2
			TB Page	1290-E2		Hydrologic Subarea (Optional)	908.22
Date	9/18/08	Time 12:05	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1232-1233

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.1	NH_3-N (mg/L)	0.030	NO_3 (mg/L)	7.645	Ortho-PO_4 (mg/L)	3.951
pH (pH units)	8.53	TURB (NTU)	5.40	NO_3-N (mg/L)	1.728	Ortho-PO_4-P (mg/L)	1.288
COND (mS/cm)	1.24	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 7 DATE: 9/18/08

LOCATION: Corner of Primera Street and Madera Street TIME: 12:05

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees

City of Lemon Grove

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	8		Latitude	32.72255	Watershed	Hydrologic Unit	908
Location	Lemon Grove Avenue, 100 feet south of Massachusetts Avenue Trolley Station		Longitude	-117.04050		Hydrologic Area	908.2
			TB Page	1290-F2		Hydrologic Subarea (Optional)	908.22
Date	9/17/08	Time 13:20	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☒ Algae ☒ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1206 - 1210

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.4	NH_3-N (mg/L)	0.384	NO_3 (mg/L)	2.599	Ortho-PO_4 (mg/L)	4.047
pH (pH units)	7.76	TURB (NTU)	3.34	NO_3-N (mg/L)	0.587	Ortho-PO_4-P (mg/L)	1.319
COND (mS/cm)	3.20	MBAS (mg/L)	0.625				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash included bottles, cans, folding chair, and aerosol paint can.

Trash Assessment Form

SITE ID: 8 **DATE:** 9/17/08

LOCATION: Lemon Grove Ave, 100 ft south of Massachusetts Ave Trolley Station **TIME:** 13:20

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☒ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	9		Latitude	32.73259	Watershed	Hydrologic Unit	908
Location	Main Street, under trolley tracks, between Davidson St and Mt. Vernon St.		Longitude	-117.0336		Hydrologic Area	908.2
			TB Page	1270-G7		Hydrologic Subarea (Optional)	908.22
Date	9/19/08	Time 10:15	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☒ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☒ Other Crayfish

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1251-1253

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.6	NH_3-N (mg/L)	0.207	NO_3 (mg/L)	33.66	Ortho-PO_4 (mg/L)	0.411
pH (pH units)	8.37	TURB (NTU)	3.35	NO_3-N (mg/L)	7.607	Ortho-PO_4-P (mg/L)	0.134
COND (mS/cm)	4.46	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	3	in
Depth	1	in
Velocity	5/6	ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash at the site included a shopping cart and various food packaging items.

Trash Assessment Form

SITE ID: 9 **DATE:** 9/19/08

LOCATION: Main Street, under trolley tracks, between Davidson St. and Mt. Vernon St. **TIME:** 10:15

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	10		Latitude	32.72869	Watershed	Hydrologic Unit	908
Location	Across from 2220 and 2196 Main Street, under trolley tracks		Longitude	-117.03591		Hydrologic Area	908.2
			TB Page	1270-G7		Hydrologic Subarea (Optional)	908.22
Date	9/17/08	Time 12:30	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☒ Sheen (Dust)	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1202-1205

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.6	NH_3-N (mg/L)	0.244	NO_3 (mg/L)	3.813	Ortho-PO_4 (mg/L)	0.279
pH (pH units)	7.95	TURB (NTU)	5.67	NO_3-N (mg/L)	0.862	Ortho-PO_4 -P (mg/L)	0.091
COND (mS/cm)	4.85	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 10 **DATE:** 9/17/08

LOCATION: Across from 2220 and 2196 Main Street, under the trolley tracks **TIME:** 12:30

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50 x 15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Total Coliform ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	10			Latitude	32.72869	Watershed: Hydrologic Unit	908
Location	Across from 2220 & 2196 Main Street, under trolley tracks			Longitude	-117.035991	Hydrologic Area	908.2
				TB Page	1270-G7	Hydrologic Subarea (Optional)	908.22
Date	10/3/08	Time	12:00	Observer	CG, DM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		CG ☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae ☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.2	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.93	TURB (NTU)	6.97	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	2.34	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Total Coliform

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	10-1		Latitude	32.73259	Watershed	Hydrologic Unit	908
Location	Dry weather site 9 on Main Street, under trolley tracks, btwn Davidson & Mt. Vernon		Longitude	-117.03365		Hydrologic Area	908.2
			TB Page	1270-G7		Hydrologic Subarea (Optional)	908.22
Date	10/3/08	Time 12:10	Observer	CG, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☒ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0047-050

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4 -P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash: food wrappers, a shopping cart

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Total Coliform

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	10-2		Latitude	32.73409	Watershed	Hydrologic Unit	908
Location	Intersection of Cypress Ave & Lemon Grove Ave in front of 2643 Cypress Ave, West Inlet		Longitude	-117.03197		Hydrologic Area	908.2
			TB Page	1270-G7		Hydrologic Subarea (Optional)	908.22
Date	10/3/08	Time 12:50	Observer	CG, DM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1051-1053

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Water sampled from confluence of flow from E & W pipes (in front of W pipe)

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	11		Latitude	32.74255	Watershed	Hydrologic Unit	908
Location	100 feet west of the Broadway and Massachusetts Avenue intersection in front of McDonald's, on divider		Longitude	-117.04378		Hydrologic Area	908.2
			TB Page	1270-F6		Hydrologic Subarea (Optional)	908.22
Date	9/18/08	Time 10:25	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1227-1229

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.4	NH_3-N (mg/L)	0.242	NO_3 (mg/L)	20.85	Ortho-PO_4 (mg/L)	0.895
pH (pH units)	8.36	TURB (NTU)	2.48	NO_3-N (mg/L)	4.712	Ortho-PO_4-P (mg/L)	0.292
COND (mS/cm)	3.00	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 11 **DATE:** 9/18/08

LOCATION: 100 ft west of Broadway and Massachusetts Ave. intersection in front of McDonalds, on divider **TIME:** 10:25

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 8 x 8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	12		Latitude	32.74559	Watershed	Hydrologic Unit	909
Location	North side of Lemon Grove Way, between residential address 8156 and the Grove Condominiums		Longitude	-117.02408		Hydrologic Area	909.1
			TB Page	1270-H5		Hydrologic Subarea (Optional)	909.12
Date	9/18/08	Time 14:00	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1234-1237

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.7	NH_3-N (mg/L)	0.260	NO_3 (mg/L)	16.82	Ortho-PO_4 (mg/L)	0.646
pH (pH units)	8.31	TURB (NTU)	0.31	NO_3-N (mg/L)	3.801	Ortho-PO_4-P (mg/L)	0.211
COND (mS/cm)	2.69	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	3	in
Depth	0.25	in
Velocity	1	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 12 **DATE:** 9/18/08

LOCATION: North side of Lemon Grove Way, between 8156 and Grove Condominiums **TIME:** 14:00

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	13		**Latitude**	32.73486	**Watershed**	**Hydrologic Unit**	908
Location	Northeast corner of the Palm Street and Lemon Grove Avenue intersection		**Longitude**	-117.03152		**Hydrologic Area**	908.2
			TB Page	1270-G7		**Hydrologic Subarea** (Optional)	908.22
Date	9/17/08	**Time** 16:15	**Observer**	CG, CM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other	NA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other	NA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☒ Other	NA
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1217-1218

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4-P (mg/L)	
COND (mS/cm)		MBAS (mg/L)					

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 13 **DATE:** 9/17/08

LOCATION: NE corner of Palm St and Lemon Grove Ave intersection **TIME:** 16:15

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	15		Latitude	32.73566	Watershed	Hydrologic Unit	908
Location	6636 Federal Boulevard, in front of Thompson Building Materials		Longitude	-117.05503		Hydrologic Area	908.2
			TB Page	1270-E7		Hydrologic Subarea (Optional)	908.22
Date	9/18/08	Time 14:50	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☒ Bubbles/Foam	☒ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1239-1242

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	29.1	NH_3-N (mg/L)	0.239	NO_3 (mg/L)	2.641	Ortho-PO_4 (mg/L)	0.652
pH (pH units)	6.83	TURB (NTU)	6.43	NO_3-N (mg/L)	0.597	Ortho-PO_4-P (mg/L)	0.213
COND (mS/cm)	8.52	MBAS (mg/L)	0.50				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	4	in
Depth	0.125	in
Velocity	5/3	ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Orange colored algae and an oil sheen were observed immediately upstream in a pooled water area

Trash Assessment Form

SITE ID: 15 **DATE:** 9/18/08

LOCATION: 6636 Federal Boulevard, in front of Thompson Building Materials **TIME:** 14:50

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L X W (FT): 50 × 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☒ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☒ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related	2		✓					✓	✓			
Cigarette Butts	3		✓					✓	✓			
Construction												
Fabric/Clothing												
Food Packaging	1		✓					✓	✓			
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: All kinds of food packaging, also business-related packaging such as styrofoam peanuts, cardboard, plastic twine. Junk mail, receipts and coupons, and a large amount of shredded paper

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	16		Latitude	32.73524	Watershed	Hydrologic Unit	908
Location	Citronella Street and Palm Street intersection, east of Arco Station		Longitude	-117.03071		Hydrologic Area	908.2
			TB Page	1270-G7		Hydrologic Subarea (Optional)	908.22
Date	9/17/08	Time 15:35	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1212-1216

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.0	NH_3-N (mg/L)	0.165	NO_3 (mg/L)	38.31	Ortho-PO_4 (mg/L)	0.384
pH (pH units)	7.91	TURB (NTU)	1.01	NO_3-N (mg/L)	8.658	Ortho-PO_4-P (mg/L)	0.125
COND (mS/cm)	4.[redacted]72	MBAS (mg/L)	0.375				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.5	in
Velocity	5/6	ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Two shopping carts and various food packaging items in the water.

Trash Assessment Form

SITE ID: 16 **DATE:** 9/17/08

LOCATION: Citronella Street and Palm St intersection, east of ARCO station **TIME:** 15:35

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	19		Latitude	32.73726	Watershed	Hydrologic Unit	908
Location	In a small cul-de-sac on west side of Skyline Drive, south of Lincoln Street		Longitude	-117.02695		Hydrologic Area	908.2
			TB Page	1270-H6		Hydrologic Subarea (Optional)	908.22
Date	9/18/08	Time 11:10	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1230-1231

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	0.157	NO_3 (mg/L)	46.81	Ortho-PO_4 (mg/L)	0.270
pH (pH units)	8.15	TURB (NTU)	0.68	NO_3-N (mg/L)	10.58	Ortho-PO_4-P (mg/L)	0.088
COND (mS/cm)	4.08	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.25	in
Velocity	0.5	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ten pound weight and flashlight observed

Trash Assessment Form

SITE ID: 19 **DATE:** 9/18/08

LOCATION: In a small cul-de-sac on westside of Skyline Dr., south of Lincoln St. **TIME:** 11:10

OBSERVER: CG, LM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Nitrate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	19		Latitude	32.73726	Watershed	Hydrologic Unit	908
Location	In a small cul-de-sac on west side of Skyline Drive, south of Lincoln Street		Longitude	-117.02695		Hydrologic Area	908.2
			TB Page	1270-H6		Hydrologic Subarea (Optional)	908.22
Date	9/19/08	Time 12:00	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1230-1231

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	NA	NO_3 (mg/L)	36.85	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.08	TURB (NTU)	0.33	NO_3-N (mg/L)	8.328	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	4.25	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.25	in
Velocity	0.5	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of Lemon Grove
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	20		Latitude	32.718[illegible]22	Watershed	Hydrologic Unit	908
Location	Intersection of San Altos Place and Alberdi Drive, 200 [illegible] northon dirt road.		Longitude	-117.04422		Hydrologic Area	908.2
			TB Page	1290-F2		Hydrologic Subarea (Optional)	908.22
Date	9/19/08	Time 9:25	Observer	CG, CM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☒ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☒ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1247-1250

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.8	NH_3-N (mg/L)	0.1	NO_3 (mg/L)	7.424	Ortho-PO_4 (mg/L)	0.525
pH (pH units)	7.06	TURB (NTU)	11.95	NO_3-N (mg/L)	1.678	Ortho-PO_4-P (mg/L)	0.171
COND (mS/cm)	16.17	MBAS (mg/L)	0.875				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	ponded	gpm				Flow		gpm

COMMENTS: Trash at site included food packaging and household items such as a chair, pillow, and other fabric. High conductivity in the sample water appeared to interfere with the ammonia test kit, making the ampule cloudy, but not producing significant color change that would indicate the presence of ammonia. Field screening result is based on visual color evaluation.

Trash Assessment Form

SITE ID: 20 **DATE:** 9/19/08

LOCATION: Intersection of San Altos Place and Alberdi Dr. 200 yards north on dirt road. **TIME:** 9:25

OBSERVER: CG, CM

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

City of Lemon Grove

Jurisdictional Urban Runoff Management Plan Annual Report

FY 2008 – 2009
September 2009 Report

The City of

LEMON GROVE

BEST CLIMATE ON EARTH

Incorporated in 1977

Executive Summary

The City's seventh Annual Report submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2007-01, "Permit") represents an opportunity to further explore and develop effectiveness assessment measures as well as re-vamp existing programs to better reflect the new Permit.

Several programmatic changes reflected in this year's report have been made in response to regulatory feedback received from the Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA). In particular, the RWQCB and the EPA's review of the Lemon Grove Standard Urban Stormwater Mitigation Plan (SUSMP) prompted a more focused effort on plan reviews, development and re-development strategies, and construction site management.

To respond to their comments and the new Permit, the City is implementing various methods to further assist in long-term effectiveness assessments. The methods are currently under revision and in a state of flux through participation in regional standardization efforts. The City will maintain existing standards, while the regional efforts continue to take shape and develop further.

Through a collaborative workgroup process with the Copermittees, the City has significantly improved our assessment strategies and analysis methods. The Copermittees worked extensively on the completion of the Report of Waste Discharge (ROWD) during FY 2004-05. The ROWD is a collaborative effort discussing the Copermittees requests and findings for the issuance of the 2006 Permit. The Copermittees also collaborated with an independent contractor to create a formal effectiveness assessment. Both the ROWD and the long-term effectiveness assessment documents were submitted to the RWQCB separately from the Annual Reports. However, the Copermittees worked extensively on these projects during FY 2004-05 and the City's participation is worthy of notice. The documents provided valuable information that the Copermittees will be using during the next reporting period to fine tune effectiveness assessment and program focus. In 2008, the City updated its JURMP and Municipal Codes to reflect the requirements of the new Permit, Order 2007-01. The Model SUSMP was completed by the Copermittees and submitted for Regional Board approval during this reporting period and will be added to the City's Municipal Code in the next reporting period. In FY 2008-09, the City continued its extensive involvement in joint Copermittee workgroups. The City feels the collaboration is necessary to develop and maintain a well-rounded, effective program and ensure regional stability for water quality improvements.

The City continues to improve and develop its own program effectiveness assessment strategies. The ROWD and the long-term effectiveness assessment have been extremely useful tools in helping not just the City, but the Copermittees, in analyzing the current available data. The documents have

helped identify areas of improvement and program focus. The long-term effectiveness document will be critical in the City's and the Copermittee's development of regional activities to address improved water quality and pollution prevention.

The City has taken important steps in putting newly developed strategies in motion. In particular, the City has continued to develop its BMP implementation strategy for construction sites and development proposals. During FY 2005-06, the City focused on improving its SUSMP checks, the tracking of construction site inspections, and the development of consistent standards in the Planning and Engineering Departments. The City continues these efforts into FY 2008-09. Employee training continued to focus on SUSMP implementation and those departments directly affected by the document through regularly scheduled inter-departmental meetings. In FY 2008-09, the City continues to make significant steps toward the implementation of a City-wide GIS program, including the beginning of service contract to install GIS layers for the sanitary sewer system. Other departments and layers will be added as the budget allows. Currently the budget does not allow for other layers, but the City hopes this will change in future reporting periods, although perhaps not until the next permit cycle. The implemented Code Enforcement program continues to improve in efficiency and effectiveness, including a new staff member, who functions as a water quality inspector and code enforcement officer. The City realizes that many of these new approaches are in their infancy, some still in exploration, but future reporting periods will further demonstrate the new concepts and ideals discussed in this report.

In FY 2005-06, the City created an independent funding source to help fund its program. However, the funding source only funds a small portion of the program, requiring the City's strapped General Fund to finance this increasingly expensive program. This shortage of steady funding is even more prevalent this reporting period and in the short-term future, due to cuts in State funding and a lack of re-imbursements from the State. Proposition 218 and the current economy make it even more difficult to obtain funding for the water quality program and future environmental legislation. It is even more important now, that the City take into account effectiveness and efficiency in its programs, especially its environmental programs. The City appreciates the Regional Boards understanding in these times of fiscal hardship.

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Section 1.0 Introduction

Lemon Grove's eighth annual report, submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2007-01, "Permit"), represents the City's continued efforts to document and assess a full year of program implementation (July 1, 2008 through June 30, 2009). We are confident that the report demonstrates success in the continued development of a program that meets and often exceeds Permit requirements. At the same time, the annual reporting process presents a cumbersome challenge to City staff when combined with participation in the WURMP reporting process, the annual RURMP report, and the Dry Weather reporting process. The City strongly supports the concept of an all encompassing City and Regional program that increases effectiveness and efficiency to the maximum extent practicable. The myriad of reports causes disconnects between programs that should run seamlessly together. The City also feels a stronger regional program could help alleviate the cost burden the current program forces on the City. The end result would be a maximization of severely scarce funds and funding. The City is currently experiencing, as are many others, serious financial hardship due primarily to the economy and the State raids on local funds to support its own programs. The loss of revenue in the past year has forced the City to redistribute General Funds to maintain even basic service levels, such as pothole repair. The City feels the current program meets regulatory requirements, but is leery of program expansion without a secure revenue source. The unfunded mandate aspect of this program continues to stress the City's already stretched thin General Fund. The City encourages the Regional Board to take a stronger leadership role in facilitating more cooperation with State agencies in obtaining long-term funding for this program. The City hopes that in future reporting periods, some of these challenges can be met with more cooperation between the Copermittees and the Regional Board.

This report continues to demonstrate several programmatic changes in response to regulatory feedback received from the Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA). In particular, the March 2005 SUSMP audit performed by the RWQCB and the EPA prompted a reassessment of the City's SUSMP requirements and plan check procedures. The City chose to focus its improvement efforts in the SUSMP area. The City implemented a construction site inspection database to allow for future assessment strategies. The City's construction and BMP databases continue to evolve as more information is gathered and tracked. Water Quality staff continues active involvement with environmental legislation affecting CEQA requirements and green house gas emission standards. The City believes in a comprehensive and collaborative approach for environmental concerns and solutions. The City is working on a strategy to map its waterways and drainage channels for a future GIS map layer. The City is actively exploring its GIS options and hopes to have GIS capabilities in the next 5 years. The City began developing a basic needs assessment and schedule for the implementation of a

city-wide GIS program. The City is currently working on implementing initial GIS programs and layers through the Sanitation District. These initial layers will include the mapping of our sewer mains and City maintained laterals, as well as the tracking of maintenance activities. All further implementation is dependant on budgetary restrictions. The City and the Copermittees are moving toward a more quantitative and qualitative approach to reporting and operations, while faced with sever economic challenges both on a local and state level.

At the jurisdictional level, the city has taken important steps in putting newly developed strategies in motion. The City continued to enhance its BMP implementation process. The City continued to improve the assessment tools through inspection databases and the plan check process. The City continues to explore effective assessment options that fit within the budgetary confines and meet the requirements of the Permit. The City continues to explore its existing systems to better track water quality data. Current financial restraints limit the implementation of new programs and software. Though the tools are often imperfect and must continue to evolve, we have already found their use to be quite instructive in many ways.

The City believes the programs described in this report to be significantly expanded and improved over past efforts. Some accomplishments of particular note include the following:

- Use of community events for public outreach
- Improved code enforcement process for water quality
- A new in-house water quality inspector and code enforcement officer
- Participation in regional workshops pertaining to new and pending environmental legislation
- Increased involvement in WURMP programming
- A burgeoning sustainability program of which stormwater is a key element

This report is organized according to the general outline agreed upon by the Copermittees. Sections 2.0 through 7.0, each corresponding to a different category of pollutant sources (i.e. Municipal, Commercial, Residential), are organized as follows:

- Priority Sources
- BMP Requirements
- BMP Implementation
- Compliance and Enforcement

Where possible, all applicable data and information are consolidated into the sections to which they best apply so as to present a more holistic and self-contained description of each program area. For example, section 5.0 discusses every program element related to the City's commercial and industrial component (e.g. outreach to commercial audiences, inspections of businesses, responses to

public complaints involving commercial dischargers, and enforcement actions taken against non-compliant businesses).

Sections 8.0 through 10.0 are intended only to summarize key statistics, and to address topics not covered in pervious sections. Section 11.0 provides a consolidated assessment of key program data and information. Much of this data is also presented in greater detail in sections 2.0 through 8.0. Section 12.0 provides an analysis of the City's projected expenditures for FY 2008-09. Section 13.0 discusses the City's conclusions and recommendations based on its assessment of this year of implementation under the Permit.

Overall, this report demonstrates, in a clear and well-organized way, the considerable thought and energy that went into developing and implementing a complex and rigorous program. The City looks forward to continued progress in future years.

Section 2.0 Development Planning Component

This section describes actions taken by the City during FY 2008-09 reporting period to minimize the short- and long-term post-construction impacts of new and redevelopment projects on receiving water quality and other environmental resources. This includes activities related both to land use planning controls, and the site-specific conditioning of development and redevelopment projects in the City.

2.1 Land Use Planning

The City's land use planning process facilitates the reduction of development project discharges of pollutants from the MS4 to the MEP, the prevention of development project discharges to the MS4 from causing or contributing to a violation of water quality standards, and of increases in runoff discharge rates and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force. The water quality staff works closely with engineering staff in these efforts, presenting a united, collaborative process to developers.

The City's land-use planning process consists of development and implementation of the following documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- SUSMP
- Municipal Code, which includes the City's Development Code, Grading and Excavation standards, and all Stormwater regulations

The utilization and regular update of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections will describe the City's land use planning process and the four planning documents in more detail.

The City of Lemon Grove was incorporated in 1977 from the County of San Diego. The City's General Plan was adopted in 1996 and is currently undergoing an in-depth review and amendment process. The City's JURMP, Stormwater Ordinance and SUSMP were originally developed and adopted under Order 2001-01 in 2002-2003. These documents have been reviewed and updated under the new Order 2007-01.

2.1.1 Source Characterization

The City addresses eleven major land use categories in its General Plan:

- Low density residential
- Low/medium density residential
- Medium density residential
- Medium/high density residential
- Mixed use
- Retail commercial
- General Business
- Industrial
- Parks and recreation
- Transportation
- Special treatment area (STA)

The General Plan also recognizes eleven zoning categories:

- Residential low
- Residential low/medium
- Residential medium
- Residential medium/high
- Residential professional
- Central commercial
- General commercial
- Limited commercial
- Heavy commercial
- Light Industrial
- Special treatment area (STA)

Each of these land-use and zoning categories is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their specific sections of this report.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Municipal Code, Grading Ordinance and SUSMP, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.1.2 Best Management Practice Requirements

For each development project proposed, the City requires the builder and owner to consider BMP implementation from the beginning of the project. Attachment D-1 shows the form that is presented to each applicant regardless of project size.

This initial step makes water quality important from the on-set of the project, and each consecutive step further emphasizes the importance of water quality improvements for pre- and post-construction.

The City encourages all new and re-development applicants to explore such options as tot-lots, on-site detention basins, infiltration ditches, and on-site landscaping to ensure that water quality is improved, the natural environment suffers less, and less maintenance is required. The City requires sites to treat for pollutants of concern to the MEP. The City recommends that its applicants utilize the BMP handbooks created by CASQA to explore the best option for each particular project. The handbooks are available on-line at www.casqa.org. CASQA is a valuable resource for both the City and the developers.

To date, jurisdictional and project-level planning tools have been largely under-utilized because stormwater management is often viewed as an engineering issue by developers. As a result, many site-design solutions rely significantly on structural treatment controls like detention basins and mechanical treatment devices, which can be expensive and maintenance-intensive. In most cases, it is easier and cheaper to keep pollutants out of stormwater by designing the pollutant source out of the project, while simultaneously preserving the site's natural filtration capacity. Through a series of updates and reviews, the City is working to include low impact development concepts through-out the applicant review process and in its codes and regulations, specifically the General Plan.

2.1.3 Program Implementation

The Water Quality Program Coordinator is available for consultation during any phase of the project. The Coordinator plays a vital role in the pre-application phase of development by ensuring that all proposed projects incorporate water quality measures. This is done mainly through interaction with the developers and project engineers, but also involves written assessments of the project designs and any water quality documents. The assessment occurs multiple times before the applicant is permitted to submit a complete proposal. This process lengthens the pre-proposal phase, but improves the final approval phase. The Planning Commission knows that all issues have been dealt with prior to the approval hearing and that City staff has ensured a minimal environmental impact.

2.1.3.1 General Plan/Municipal Code/SUSMP

As a component of the 2008 JURMP update (conducted during FY 2007-08), an assessment of the City's General Plan and Municipal Code were conducted to determine the City's consistency with the watershed protection policies and principles found in the Permit. The analysis found that the City's General Plan goals and policies are consistent with the Permit and that no amendments to General Plan were required as a direct result of the JURMP update. The

General Plan discourages the use of large amounts of connected impervious surfaces, requires a landscape minimum, works to protect environmental sensitive areas, and prohibits development near or in a known watercourse. However, the City's General Plan is currently undergoing a comprehensive review process with plans for amendments occurring over subsequent reporting cycles. The City plans to ensure that each area covered in the General Plan contains environmental and sustainable options and concepts. Low Impact Development ideas will be presented and encouraged throughout the document. The City's General Plan is meant to cross reference and openly comply with the City's Municipal Code and all other pertinent development documents.

The City's General Plan serves as the blueprint for the long-range, orderly, physical development of the City. The Development Code section of the Municipal Code contains all zoning and land use requirements and stipulations. These two documents together are designed to protect the City's environmental, social, cultural, and economic resources as the City develops and redevelops.

The Municipal Code did undergo a lengthy review and amendment process due to the issuance of Order 2007-01. Section 8.48 Stormwater Management and Discharge Control was broadened and made more comprehensive. A BMP specific section was added, Section 8.48.060-110. Section 8.48.140 contains regulations for all land development and redevelopment projects and Section 8.48.150 contains BMP maintenance requirements. All of these additional sections, strengthen the City's water quality program by providing a legal basis for implementation and enforcement. During the review process, the City decided to also include the SUSMP as a Municipal Code section, Section 8.52 now contains the City's SUSMP document. This section will be further updated during the next reporting period with the approval of the new County-wide SUSMP document. During this reporting period, the City collaborated with the Copermittees to create the final draft SUSMP, which was then turned over to the Regional Board for review and approval.

2.1.3.2 JURMP

In compliance with Order 2007-01, the City's JURMP document underwent a major update during FY 2007-08. This update process was continued after receiving comments from the Regional Board in early 2009. The JURMP document serves as the City's foundational storm water program management tool, capturing the developed process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Lemon Grove.

2.2 Environmental Review Process

As part of the 2008 JURMP update, the City evaluated its environmental review process and confirmed that the current process accurately evaluates water quality, cumulative impacts, and identifies appropriate measures to avoid, minimize and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality.

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.3 Development Project Approval and Verification Process

As discussed previously, the City has an established multi-departmental review process for all new development and redevelopment projects. By using all of the above mentioned regulations, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP. Each proposed discretionary and ministerial project is subject to the City's development approval process. The following sections describe this process in detail.

2.3.1 Source Characterization

As discussed above, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments, whereas grease and oil are more likely contributed by parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP, which was updated and added to the Municipal Code during FY 2007-08, describes specific categories for priority projects and indicates common pollutants associated with each category. A priority project must

identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

In the City, all development projects, including building and ministerial permits are required to implement minimum BMPs. These BMPs include construction BMPs and good housekeeping practices. Discretionary projects, however, generally pose a greater potential threat to water quality and are subject to an additional set of BMPs and more intense scrutiny.

2.3.2 Best Management Practice Requirements

The City's minimum BMP requirements for all discretionary development projects are summarized here and are included in the City's SUSMP. All discretionary development projects are required to explore and implement where applicable the following principles:

- Source control BMPs that reduce stormwater pollutants of concern in urban runoff, including but not limited to storm drain stenciling and signage, properly designated and covered material and trash storage areas, and the use of efficient irrigation systems.
- LID BMPs that provide retention, slow runoff, minimize impervious footprint, direct runoff into landscaping, and promote water conservation.
- Grading and construction activities must implement all requirements outlined in the City's JURMP and Municipal Code.
- Submittal of proof of on-going long term maintenance for all structural post-construction BMPs.

SUSMP priority projects must submit a water quality document, which includes identification of potential pollutants from the project, proposed LID, source control and treatment control BMPs, and an attached maintenance agreement. The document must also include how the project will manage increases in runoff discharge rates and durations associated with the project. It is the City's policy to prevent permitted projects from increasing the runoff coefficient that eventually enters the City's MS4. Both the water quality document and hydrology report must provide retention and detention details for any runoff increase due to the development or redevelopment of a site.

2.3.2.1 Hydromodification Management Plan and Interim Hydromodification Criteria

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order 2007-01, the City is currently collaborating with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP).

The final draft HMP will be submitted to the Regional Board during the next reporting cycle. However in FY 2007-08, the City established interim hydromodification criteria that will be in effect until the final HMP is approved by the Regional Board and adopted by the City. The City requires all priority projects disturbing 50 or more acres to comply with the interim hydromodification criteria, except those sites that are considered exempt as per Section D.1.(g)(6) of the Permit. These interim requirements are consistent with the regionally adopted interim hydromodification standards. The City of Lemon Grove is a small developed community and does not anticipate any projects during the following reporting period that will meet these criteria. The City also connects almost exclusively to concrete channelized streams at its borders and does not anticipate frequent projects subject to future hydromodification requirements.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to the development project's proposed stormwater BMPs during project construct must be reviewed and reapproved by City staff before being implemented.

2.3.3 Program Implementation

As required by the Permit, the City has implemented a program to ensure that development and redevelopment projects comply with post-construction BMP requirements, including Low Impact Development (LID), source control, and treatment control BMPs. The Permit further requires the City ensure proper installation of treatment control BMPs and their maintenance into perpeturity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following sections provide an overview of the City's SUSMP implementation practices and tracking during FY 2007-08.

2.3.3.1 Model and Local SUSMP updates

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into the Municipal Code. In compliance with the interim SUSMP update standards established in Order 2007-01, the following tasks were performed during the review and interim update of the SUSMP:

- Priority project categories were updated
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained
- LID requirements and additional source control requirements were added to meet or exceed Permit requirements

- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary

In addition to the changes discussed above, a comprehensive model SUSMP update was completed by a regional workgroup during FY 2007-08. The comprehensive model SUSMP update includes the following as required by the Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Permit
- Establishment of siting, design, and maintenance criteria for each LID and treatment control BMP listed in the model SUSMP
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the model SUSMP is applicable and feasible
- Addition of a requirement for priority projects with low traffic areas and appropriate soil conditions to use permeable surfaces
- Addition of any necessary restrictions for infiltration BMPs from priority projects that generate high levels of pollutants

Once the model SUSMP is accepted by the Regional Board as described in Section D.1.d(8)(b) of the Permit, the City will update its local SUSMP within one year to include requirements at least as stringent as those in the newly adopted model SUSMP. Additionally, the City's local SUSMP will include a review process to verify all proposed BMPs for priority projects meet the criteria designated in the updated local SUSMP.

The City will also incorporate a Hydromodification Management Plan (HMP) into the City's local SUSMP. The HMP was developed by a consultant and regional workgroup during this reporting period and the draft HMP was submitted to the Regional Board for approval.

2.3.3.2 Development Project Approval Process

The following includes a summary of the City's current development review process.

Discretionary Projects

Projects requiring a discretionary review are subject to an in-depth review by City staff. During the first submittal or pre-meeting, it is determined if the project is a SUSMP priority project and if a water quality document will be required. The project is reviewed by engineering, planning, sanitation, building, and water quality staff; through all permit phases. After review at the City, the project is

reviewed by the City's Planning Commission and conditions of approval are set for the project and approved by the City Council. These conditions require the applicant to uphold all proposed water quality measures and any changes are subject to review and approval by City staff and potentially the Planning Commission and City Council depending on the significance of the changes.

The City of Lemon Grove requires applicants to complete their water quality documents at the time of discretionary review and approval. During this process, the applicants and their engineers are guided by City staff to provide adequate post-construction BMP facilities and to document those facilities on the site plans and documents being submitted. This process results in better designed, more comprehensive, post-construction BMPs since the facilities are included in the project design even in the earliest phases of the project. Each applicant who prepares a water quality report for a priority project is provided a self checklist to assist in their report preparation. This checklist provides the applicant with an outline and details pertaining to the requirements of the SUSMP and the Permit for BMP implementation and sizing.

All hydrology reports and treatment control BMP sizing are done during this phase and are upheld through the remainder of the grading and building phase through the conditions of approval. The same City staff that performs the discretionary review also performs the grading and building permit reviews. This also maintains consistency throughout the review process and ensures the conditions of approval are upheld. City staff provides constant feedback and assistance to the applicant and their engineers through out this process and all additional permit processes. The City continues to discourage the use of mechanical treatment systems. Natural systems are easier and more cost effective to maintain in the long term, as well as encouraging landscaping and additional green space with little if any additional irrigation. All proposed BMPs must meet the standards set forth in the City's SUSMP document, which upholds the requirements put forth in the Permit. If the submittal is inadequate in any regard, approval is withheld and re-submittal is required.

Ministerial Projects

Grading, improvement plans and building permits are all ministerial permits, which means they only require the approval of City staff, not the Planning Commission or the City Council. However, if the project is not completed to staff's approval, no permits are issued and no actual work can be done on the project site. These projects are reviewed by all the same departments and staff as the discretionary projects. Lemon Grove is a small city and has a small staff, which allows the full spectrum of departments to be intimately knowledgeable about the projects being reviewed and any concerns pertaining to the project. If it is discovered that a ministerial project meets priority project conditions as per the SUSMP, all the requirements discussed above are applicable. No permits

are issued by City staff until the project satisfactorily meets all of City staff's requirements, particularly water quality requirements.

All ministerial projects, except water heater installations and electrical wiring, are reviewed by water quality staff. Even if the project does not meet priority project standards, water quality staff reviews the project for LID concepts, proper drainage design, proper erosion control, and smart irrigation.

Post-Construction BMP Maintenance Agreements

All priority projects under review for permits must execute a stormwater maintenance agreement guaranteeing the maintenance and/or replacement of permanent BMPs as necessary into perpetuity. The maintenance agreement is recorded against and runs with the property. This ensures that all future owners maintain the permanent BMPs to the original standards and any changes require the approval of City staff.

Capital Improvement Projects

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear or repair projects, often only construction BMPs are necessary. However, SUSMP qualifying projects must also install post-construction BMPs. Priority CIP projects are designed to incorporate the City's SUSMP requirements and LID, source control, and treatment control BMPs will be implemented. The city takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.3.3.3 SUSMP Project Approval

During the planning process, the City reviewed eleven SUSMP projects during this reporting period. A list of those projects can be found in Appendix D4. All applicable SUSMP BMP requirements specified in the City's local SUSMP were applied to each of these projects. Under no circumstances was any priority project permitted to implement treatment control BMPs with low pollutant removal efficiency ratings. In addition, all of the development projects approved in FY 2008-09 were less than fifty acres in size; therefore none of the projects were required to meet Interim Hydromodification Standards. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2008-09. Depending on the date in which the project was reviewed and approved, conditional SUSMP requirements may vary as a result of the migration to the new Permit requirements and the required adoption of the new local SUSMP.

2.3.3.4 SUSMP Project and Treatment Control BMP Tracking

Over the past fiscal year, water quality staff worked to implement a watershed-based SUSMP tracking system. In the future, this tracking system will be transitioned to a GIS based system. However, it is currently only a tracking database. Since the City is predominately in the Chollas Creek watershed with only a small portion in the Sweetwater watershed, it is not difficult to track projects by watershed. The database tracks the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located
- Date of construction of the BMP
- Responsible BMP maintenance party information
- Owner information if different from maintainer
- Receipt of annual maintenance verification
- Inspection findings
- Corrective actions if necessary

The City is continually working to refine the database as more permanent BMPs are implemented and tracked. The City currently has less than 10 tracked BMPs, although several more are still in the proposal and review stage as evidenced by the priority project list. Due to the small number of permanent BMPs in the City, staff inspects all of them regardless of JURMP priority level. They are inspected formally on an annual basis, but frequently informally inspected when staff is in the vicinity. If, in the future, the number becomes significantly larger, the City will begin to utilize the priority rating to determine inspection frequency.

2.3.3.5 BMP Installation Verification Process

The City has always verified the proper installation of all permanent BMPs and LID components, which are similar to the site design elements of the previous Permit. The City continues this practice under the new Permit. Each project requires closing signatures from staff once construction is completed. This involves an on-site staff visit to verify the project was constructed per the plans and appropriate documents including any water quality reports, hydrology reports, and soil findings. If corrections are needed, staff does not provide a signature and can withhold that signature for as long as it is needed to gain compliance. Without compliance, the site cannot be used for its final purpose. If compliance is not reached within a reasonable amount of time, Code Enforcement proceedings are begun. Each project under goes frequent staff inspections during the construction as detailed in Chapter 3 of this report to ensure that any underground elements are being built according to the approved plans and provide regular staff feedback and assistance. All in the hopes of a properly designed site at signature request time. The final signature process involves the same departments that reviewed the project from its initial stages,

typically this includes planning, engineering, sanitation, and building. This means that the staff providing the final implementation inspection is the same staff that reviewed and approved the project, meaning they are very knowledgeable of the project and its requirements. The City's interdepartmental cooperation is instrumental in making this process effective and efficient. Problems are viewed and solved jointly and comprehensively.

2.3.3.6 Annual Treatment Control BMP Operation and Maintenance Verification and Inspection

As required by the new Permit, all treatment control BMPs installed at development projects must be inspected annually and maintained in perpetuity by the responsible party. As part of the JURMP update, the City established a Treatment Control BMP tracking program. Because implementation of the City's JURMP did not begin until January 2008, this reporting period is the first year the tracking system has been used. Annual inspections took place by City staff during this reporting period of all permanent BMPs that have been in operation for at least one full year and rainy season. Again, due to the small size of the City and the currently small number of permanent BMPs, the City was able to inspect all of the BMPs meeting the one full year of operation criteria. As stated before, should that number increase drastically, the City will then begin to use the priority ratings established in the JURMP. A listing of the BMPs inspected during this reporting period can be found in Appendix D5. The City currently does not have any permanent BMPs that meet the new requirement of annual owner/operator verification letters. This information will however, be tracked in the same database that tracks BMP location and inspection results. The City has mailed a notification letter to all those owners/operators that will be required to provide annual BMP verification letters to the City. These letters must be submitted prior to the start of each year's rainy season.

In the first year of implementation, the City anticipates a significant amount of information gathering and validation. Through initial contacts with responsible parties, the City will refine its inventories as well as methodologies to effectively assure proper maintenance and management of permanent BMPs.

2.3.3.7 Enforcement Measures for Development Sites

Since the City's Treatment Control BMP Operation and Maintenance Verification and Inspection Programs did not commence until FY 2007-08 and prior to that the City had a very small inventory of operational treatment BMPs, no enforcement action was required. Verifications and inspections will be completed as required prior to the rainy season of each reporting period and any subsequent enforcement action will be tracked and reported in the next annual report.

The City will use a variety of escalating enforcement methods to implement storm water requirements for all development projects within the City's jurisdiction. This process is standard for any code violation does not threaten the public's health or immediate safety. Most issues are handled informally with a verbal warning and follow up inspection. These are not always tracked, as this is considered the informal part of the compliance process. The City believes it is important to provide the owner/operator a chance to correct a violation prior to beginning a retribution process. However, if a verbal warning is insufficient, formal proceedings begin with a written notification sent certified mail to verify receipt and detailing the time of the next inspection. The City is flexible on the compliance time frame depending on the severity of the work required for compliance. If a swale needs to be mowed, the City would allow seven days for compliance. However, if a private channel needs concrete work, the City is apt to allow 30 days for compliance as this requires significantly more labor, equipment and cost. Subsequent inspections verify compliance and if continued non-compliance is found; notices of violation, monetary fines, property liens, withheld permits, and small claims court are all viable follow-up actions based on length and severity of non-compliance. A detailed description of the Code Enforcement process is available in the City's JURMP document or through the City's Municipal Code which can be found on-line at www.ci.lemon-grove.ca.us.

2.3.3.8 Notable Activities

Several notable activities were conducted as part of the Development Planning Component during FY 2007-08 and FY 2008-09. Notable activities included:

- Comprehensive review and update of the City's JURMP
- Comprehensive review and update of the City's Municipal Code
- Comprehensive review and update of the regional Model SUSMP
- Development and Implementation of the BMP Verification and Inspection tracking database
- Comprehensive review and revamp of the annual report based on Regional Board feedback
- Continued education of project developers
- Revision of checklists provided to developers to reflect new standards and language

The City will continue to develop and amend its water quality development processes to meet new requirements and demands based on water quality results and improvements in technology. Future annual reports will detail these changes as they take place.

Section 3.0 Construction Component

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site BMPs, inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Permit as outlined in Section D.2.

3.1 Source Characterization

3.1.1 Site Inventory

Within the defined reporting period of this report, the City has compiled, maintained, and updated a watershed based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2008-09 included a total of eight operating construction sites, mostly private driveways and private sewer laterals. Only two of the projects were SUSMP priority projects and they are discussed below. The City formally inspected all of these sites on a monthly basis and informally almost weekly. All of the sites during this reporting period were within the City's main watershed, Chollas Creek.

The City completed 4 minor infrastructure improvement projects during FY 2008-09. The City has been forced to drastically decrease its street resurfacing due to current budgetary constraints.

- Northbound Lemon Grove Ave.
- Lincoln St.
- Grove Pl.
- Golden
- Sewer Main pipe replacement on Lemon Grove Ave.

The City defines a high priority construction site by the following guidelines:

- 50 acres or more and grading during the wet season;
- 5 acres or more and on a tributary of a 303(d) list waterway
- The City may include other sources and activities that contribute significant pollutant loads to the MS4

According to the above definition, the City had no high priority construction sites during this reporting period. However, the City had two construction sites that it monitored very closely during this reporting period.

- EDCO Federal Blvd widening, which required a 401 Permit for the affected drainage area
- Citron Court, a politically charged redevelopment project located off Broadway

The City performed weekly inspections at both of these locations, during both the dry and wet seasons, to ensure the proper placement of BMPs and general site upkeep.

3.1.2 Ordinance Updates

As required by Section d.2.a of the Permit, applicable City documents and ordinances were updated in March 2008 to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code 8.48 Stormwater Management and Discharge Control and 18.08 Excavation and Grading. The following construction specific provisions have been made to these two sections:

- Best Management Practice requirements and general requirements applicable to all dischargers (8.48.060)
- Additional requirements for land disturbance activity (8.48.130)
- Minimum BMPs for land disturbance activity (18.08.140)
- BMP maintenance (18.08.180)
- Stormwater runoff (18.08.450)
- General Construction permit requirements (18.08.900)

3.2 Best Management Practice Requirements

The City requires that BMPs be implemented to reduce or eliminate the impact of discharges from construction site runoff primarily through its grading ordinance. The checklist available in Attachment E-5 gives a breakdown of the City's grading permit requirements.

3.2.1 BMP Requirements for Permitted Construction Sites

Through the JURMP update process completed in March 2008, the City reviewed and updated a set of minimum BMps that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion control BMPs to reduce, retain, and manage pollutant discharges to the MEP. During FY 2008-09, the following BMPs were required on all sites for which permits were issued:

- Erosion Control Methods for Disturbed Slopes: Vegetation Stabilization (Planting), Hydraulic Stabilization, Bonded Fiber or Stabilized Fiber Matrix, Physical Stabilization (Erosion Control Blankets);
- Sediment Control Methods for All Disturbed Flat Areas: Mulch, straw, wood chips, or soil application, De-silting Basin (must treat all site runoff), Energy Dissipater and Outlet Protection

- Methods for Preventing Off-Site Tracking of Sediment: Stabilized Construction Entrance, Construction Road Stabilization, Entrance/Exit Tire Wash, Entrance/Exit Inspection and Cleaning Facility; and
- General Site Management BMPs for On-Site Waste: Materials Management (Material Delivery and Storage), Waste Management (Concrete Waste Management), Solid Waste Management, Sanitary Waste Management, and Hazardous Waste Management.

3.2.2 Seasonal Site Management Requirements

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are additional for the wet season (October 1st – April 30th). These requirements include:

- If necessary, upgraded perimeter protection for pending storms
- Erosion prevention BMPs must be installed, maintained, repaired, improved or replaced to the MEP and as is safe
- Amount of exposed soil shall not exceed seventeen acres, exceptions must be approved by the City Engineer
- Any incomplete disturbed area not being actively graded must be fully protected if left inactive for 10 or more days

Prior to the beginning of the wet season, the City sends a letter to the owners of all active construction sites explaining the wet weather BMP requirements and reminding them of the standard minimum requirements.

3.3 Program Implementation

The City ensures that BMPs are implemented to the standards described in Section 3.2 through several inter-related activities including permit issuance, project approval, field inspection, and public outreach.

3.3.1 Construction and Grading Approval Process

The City has an established and thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards. All other projects require a building permit. Both permits require that plans be submitted and approved by the City. The City's grading ordinance requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all projects requiring a grading permit are required to prepare an erosion and sediment

control plan. All permits that go through the City's review and approval process are tracked within a City wide data management system called HdL.

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As part of this approval process, the City's water quality staff also reviews the grading plans to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Plans are checked by planning, engineering, water quality, and sanitation. Engineering staff reviews the plans for overall compliance with the grading ordinance. Planning checks to verify the plans are consistent with any previously approved discretionary plans and to verify landscaping, if applicable. Sanitation checks for the location of any sewer laterals and ensures that all tie-ins are legal and properly located. Water quality staff checks the plans for specific compliance with the stormwater section of the Municipal Code, the Permit, the local SUSMP, and any other applicable State or Federal regulations. If the site falls under the jurisdiction of the State's General Construction Permit, staff follows up with the developer to ensure that a SWPPP is properly prepared and submitted. In addition, the SWPPP is reviewed and approved as part of the normal approval process and must be complete before the grading permit is issued to the applicant. The City also requires proof that a Notice of Intent (NOI) has been submitted for sites that are subject to the General Construction Permit.

Prior to issuing building and grading permits, staff verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP.

3.3.2 BMP Implementation

Water quality staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the Engineering Department and the City Inspector.

Staff constantly monitors weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all applicable inspectors to inform them of the possibility of incoming rain. This e-mail reminds them to verify BMP compliance at all active construction sites. If the forecast exceeds 40% over the coming five day period, letters are sent to site owners and inspectors check for any additional, applicable BMPs at each of the active sites and any inactive sites with exposed soil. The upkeep of these BMPs is monitored daily while the rain lasts.

Staff approved only two projects with SWPPPs during this reporting period:

- EDCO Federal Blvd widening
- Citron Court Condos

Other project reviews completed by staff as part of the permitting process are addressed in more detail in Section 2.0, Development Planning.

Through the review and plan check process, staff may require additional or alternative BMPs to be implemented on individual projects. This allows the stormwater program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site. Any changes to on-site construction BMPs require the approval of the City Inspector and are tracked as red line changes on the construction site drawings.

3.3.3 Construction Sites Requiring Advanced Treatment

There were no sites in FY 2008-09 that required advanced treatment. For the majority of the construction sites with the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined that a project site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat to Water Quality (TTWQ), advanced treatment will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are included in the City's Municipal Code and in the new local Model SUSMP.

3.3.4 Inspections and BMP Verification

The City has an established inspection program to evaluate compliance with stormwater regulations at all construction sites within the City's jurisdiction. The City Inspector is responsible for inspections at all construction sites in the City. Stormwater issues, such as compliance with the grading and stormwater ordinances, are a main focus, especially during the rainy season. It is quite common for water quality staff to also assist in regular inspections and for building inspectors to notify City staff if a violation is observed or if compliance is questionable.

Due to the small number of active sites in the City during any given reporting period, the City inspects all active construction sites regardless of priority and extra attention is paid to any site with a higher threat to water quality during the rainy season. All sites are formally inspected monthly at a minimum and often receive informal inspections on an almost weekly basis.

The City Inspector tracks all inspection notes in a tracking database for future reference and enforcement actions if applicable. This database is updated after each inspection performed, so on a monthly basis at a minimum.

3.3.5 Compliance and Enforcement Actions

3.3.5.1 General Compliance

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites in its jurisdiction. Enforcement for construction projects is administered by the City Inspector and other applicable City staff, such as Code Enforcement.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may by applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to b corrected and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's stormwater regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop Work Notice. The NOV will provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City for construction sites are reported to the RWQCB per the reporting requirements of the Permit.

Civil penalties for violations of the Municipal Code are established in Section 1.24 of the Municipal Code. Determined violations of the stormwater regulations may be subject to administrative citations and associated administrative fines. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector and the severity of the violation.

3.3.5.2 Reporting and Non-Compliance

During the FY 2008-09, approximately 35 known complaints were received through the City's hotline and other phone lines. The majority of the calls were related to the work occurring on the Citron Court project. The surrounding neighbors had unfavorable attitudes towards the project as a whole and frequently called hoping to cause trouble for the site. All calls were investigated the day of the call; the majority of the complaints were unwarranted. Any violations that were discovered were corrected within 24 working hours of verbal notification to the site manager. The site was inspected by the Regional Board during this reporting period and only minimal corrections were required and all were completed within 24 hours of notification.

Section 4.0 Municipal Component

The municipal component of the City's stormwater program includes proper management of facilities owned and operated by the City of Lemon Grove to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, sewers, the storm drain system, and municipally owned facilities which includes six public parks, a fire station, a municipal yard, four office type buildings, a senior center, a public parking lot, one recreation center with a gymnasium, and one vacant lot. The updated municipal facilities index and inspection results are in Attachment C. The City also conducts high threat to water quality activities, as defined in the Permit, such as street and sidewalk repair, painting, graffiti abatement, equipment maintenance, and minor vehicle maintenance. The City, however, also performs a number of activities that are beneficial to water quality, such as street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel, annual MS4 inspection and cleaning, and regular upkeep of the sanitary sewer to prevent overflows and illegal connections.

4.1 Roads, Streets, Highways, and Parking Facilities

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.1.1 Source Characterization

The City maintains 65.5 miles of roadway in Lemon Grove and one public parking lot. This number includes main arterials, curbed residential, and non-curbed residential streets. The City also maintains center islands and medians on these streets and in all parking lots including those attached to municipal buildings. The City does not maintain any highways.

4.1.2 Best Management Practice Requirements

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's JURMP and the CASQA Municipal Handbook to choose applicable BMPs to implement for roads, streets, and parking facilities within the City. Street sweeping is the main BMP that is implemented for these sources. Treatment control BMPs are used for all road sections which are subject to SUSMP requirements, described in more detail in Section 2.0.

4.1.3 Program Implementation

This section describes the steps that were taken in FY 2008-09 to require and verify the implementation of designated BMPs for all City maintained roads, streets, and parking areas and related activites as outlined in the Permit Section D.3.a(5)(a-c).

The City currently implements an aggressive sweeping schedule for its roads, streets, and parking facilities. Long before Order 2007-01 was approved, the City was sweeping to its standards.

The frequency of street sweeping is as follows:

- Major arterial curbed streets – weekly
- All other curbed streets – biweekly
- Non-curbed streets – monthly
- Center islands and medians – monthly
- Major parking lots and alleys – weekly
- All other parking lots and alleys – monthly

During FY 2008-09, the maintained it's street sweeping mileage from the previous reporting period, approximately 80 miles and 175 tons of debris were collected. These figures include the regular sweeping of roads and parking lots, as well as specialty or requested road sweeps and the municipal yard. The City also sweeps bus stops, various parking lots and miscellaneous private streets based on need.

4.2 Fixed Facilities

The City owns and operates a variety of fixed facilities that have been grouped in this section because these facilities received formal inspections as part of the stormwater program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreation Facilities
- Public Works Facilities
- Fire Stations
- Other Fixed Facilities

4.2.1 Source Characterization

The City inspects all municipal facilities on an annual basis. This includes the following list of facilities:

- All six public parks (Kunkel, Berry Street, Lemon Grove, City Center, Fireman's, and Monterey Heights)

- Fire Station
- Recreation Center
- The Community Center
- City Hall/Sheriff's Station
- Senior Center
- City Hall Annex
- Trolley Depot

The City's JURMP does rank each of these facilities based on their threat to water quality, however due to the City's small size it is possible to inspect each facility on an annual basis.

Parks and Recreation Facilities
The City operates six public parks:

- Berry Street Park – 7101 Mt. Vernon St., Chollas Creek watershed
- City Center Park – 7715 Church St., Chollas Creek watershed
- Fireman's Park – School Ln and Central Ave, Chollas Creek watershed
- Kunkel Park – 8171 lemon Grove Way, Sweetwater River watershed
- Monterey Heights Park – Canton and Glencoe, Chollas Creek watershed
- Lemon Grove Park – Washington and Alton, Chollas Creek watershed

All landscape maintenance activities are performed through the City's Grounds Division. In previous reporting periods, a portion of the parks were maintained through a private contractor. However, due to current budget constraints, those services were cut and taken over in-house. The Grounds division is trained and certified to handle pesticides, herbicides and fertilizers properly. They perform all landscaping and irrigation maintenance, as well as all trash and debris removal for all six parks.

Public Works Facility

The City owns and operates one public works yard. The only equipment maintained on site is the landscaping equipment used by the Ground's Division. This frequently includes mowers, the Gator (a small all terrain vehicle), chain saws, and other small devices. The City maintains a small fleet of large vehicles including several pick-up trucks, a dump truck, a paver, a video camera truck, and a vactor truck. All large vehicle service is performed off site under a private contract at a non-City facility. The public works yard does not contain a gas filling station and all materials are stored under covered areas, in doors, or surrounded by BMPs like straw wattle and gravel bags.

Fire Stations

Fire fighting is an essential element of municipal activities conducted in the City. The City has one fire station at 7853 Central Ave. The fire station is home to

three engines and one ambulance response vehicle. All servicing on these vehicles is done off site under contract at a non-City owned facility. Very minimal equipment maintenance is performed on site. It includes the cleaning and maintaining of the hoses and chainsaws.

Other Fixed Facilities

Other fixed facilities include the City's office and administrative facilities.

- City Hall/Sheriff's Station – 3232 and 3240 Main St.
- City Hall Annex – 3225 Olive St.
- Community Center – 3146 School Lane
- Recreation Center – 3131 Main St.
- Senior Center – 8235 Mt. Vernon St.

Despite theses facilities being low threats to water quality, all are inspected annually. Inspection results are in Appendix C.

4.2.2 Best Management Practices

4.2.2.1 Updated BMPs

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP and the City's Municipal Code. The City also references the CASQA Municipal Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2008-09, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas, such as medians and traffic islands. The City is maintaining general waste management BMPs and encouraging facility users to recycle, properly dispose of trash, and pick up dog waste by providing conveniently located receptacles at parks and in common dog walk areas. Doggie bag dispensers are available at the 3 largest, most frequently used parks (Berry Street, Lemon Grove, and Kunkel) and at City Center Park. These are frequently vandalized, but the City works hard to keep them full and operational. They are checked weekly and maintained as needed.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: a) runoff from improper irrigation after application, b) application of chemicals during or prior to storm events, c) use of chemicals that do not properly absorb into soil or plants, and d) overspray from chemical applications that may eventually enter the MS4. The City maintains the following procedures and BMPs pertaining to integrated pest management:

- Educating and training staff and contractors on all BMPs
- Requiring any contracted party to adhere to all City codes and procedures pertaining to proper use of pesticides, herbicides and fertilizers
- Implementing a process for identifying pests and/or problems by site
- Selecting less toxic treatments
- Proper training and licensing of all personnel who handle pesticides, herbicides, and fertilizers
- Use integrated pest management techniques whenever possible
- Record keeping for application dates, times, locations, and quantities.
- Pesticides, herbicides and fertilizers are applied per manufacturers directions and only as needed.
- Compost, mulch, and soil amendments are used whenever possible.
- All federal, state and local regulations are followed
- Pesticides, herbicides and fertilizers are not applied prior to a predicted rain event
- Native and drought tolerant plants are used whenever possible
- Small weeding is done by hand
- Diseased or infected plants are removed completely, if proper treatment is ineffective
- Irrigation systems are remotely controlled and weather and flow sensitive to prevent over watering due to rain or a broken line

Public Works Facility

Public works staff implements appropriate BMPs for all activities that take place at the Public Works yard. This facility uses good housekeeping BMPs most frequently, including but not limited to spill kits, sweeping, dry clean up methods for any oil spills, and proper cleaning of painting equipment. Minimal small equipment maintenance is performed on site, limiting potential pollutants from vehicle maintenance and repair. All of the large vehicles are maintained off site. The site has a SWPPP which includes a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs is kept at the facility and the facility is inspected annually by water quality staff and monthly on an informal basis. All Public Works employees receive monthly informal training as detailed in Section 8 of this report.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities in the City. The City's fire station uses source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City. All the engines and emergency vehicles are maintained off site. Only small equipment such as chainsaws are cleaned and maintained on site, always using best housekeeping practices to prevent pollutant generation. The Fire Marshal receives regular water quality updates at a weekly joint meeting with water quality, planning and engineering. Water quality staff has worked jointly with the fire department on several occasions when dealing weed abatement, commercial inspections, or illegal dumps. These occasions have provided excellent informal opportunities for education, which have been passed on to other fire personnel. It is common for fire personnel to call water quality personnel from the field with potential water quality concerns. They are an invaluable set of eyes in the community on a daily basis for potential water quality concerns.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management as per the Municipal Code and the CASQA Municipal Handbook.

The City employs a number of pollution prevention practices at City Hall. These practices have been expanded in recent years to include:

- The use of recycled paper for all copiers and printers
- Programmable thermostats to control heating and cooling systems
- Implementing a furlough work schedule, so main City buildings are closed very Friday
- Installing timers on exterior lighting
- Supplying each employee with a personal recycling container
- Providing large recycling containers near all dumpsters and access doors
- Lids on all dumpsters
- A battery collection site accessible by employees only
- Allowing City employees to participate in all local e-waste events

4.2.2.2 Additional Controls for Municipal Areas and Activities

If the City identifies any potential sources of other pollutants of concern for which water bodies in the City are 303(d) listed that could be a result of activities at

fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no municipal fixed facilities that have been determined to need additional BMPs due to 303(d) listings. The City's primary watershed, Chollas Creek, is 303(d) listed for several pollutants, including heavy metals and Diazinon. The City's current BMPs are preventing these pollutants and many others to the MEP. Any changes would be detailed in the applicable future annual report.

4.2.3 Program Implementation

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and enforcement actions if necessary. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.2.3.1 Maintenance

In FY 2008-09, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot,and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular street sweeping hours.

City personnel are trained and required to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly and to report illegal discharges/illicit connections, as they may come across them during normal work activities.

4.2.3.2 Training and Education

Municipal personnel are trained on implementing appropriate BMPs and preventing non-storm water discharges. In FY 2008-09, water quality staff provided regular training and updates to the following municipal departments: Public Works, Engineering, Planning, and Fire. A detailed description of the municipal education program can be found in Section 8 of this report.

4.2.3.3 Municipal Inspections

Water quality staff performs annual inspections at all of the City facilities. As part of the FY 2008-09 program, staff conducted 14 inspections, one at each facility. The results of these inspections can be found in Appendix C. Any required

corrective actions have been taken. No enforcement actions were required at any of the municipal facilities during this reporting period.

4.3 MS4

The primary function of municipal separate storm sewer systems are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consists of streets, curbs, gutters, catch basins, inlets, pipes, natural channels, natural and piped creeks, and culverts. The City also maintains a number of treatment control BMPs such as filter inserts and curb inlet protection, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the MEP.

4.3.1 Source Characterization

The City maintains a variety of MS4 facilities which includes 190 catch basins and inlets, approximately 75 miles of piping, and approximately 2.5 miles of open channel. The City plans to put all of these facilities in GIS during future reporting periods. However, due to budget constraints, these plans are currently on hold.

4.3.2 Best Management Practice Requirements

4.3.2.1 Updated BMP Requirements

In FY 2007-08, the City prepared a JURMP update which directs staff to utilize the CASQA Municipal Handbook in addition to the Municipal code to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste and pollutants from entering the MS4 system as well as ensuring that waste which is collected during maintenance for the City's MS4 does not re-enter the system.

The 2007 Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City does not own or operate any flood management projects or flood control devices that may be retrofitted.

4.3.2.2 Additional Controls For Municipal Areas/Activities

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined necessary.

4.3.3 Program Implementation

The City's MS4 management program includes responding to complaints, detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, by repairing and/or replacing damaged or failing MS4 structures; and by providing signage on storm drain inlets. The City trains and requires field staff to implement BMPs, inspect equipment and follow an action plan for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a vactor truck during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance.

All maintenance activities during this reporting period were in compliance with the current Permit. All maintenance BMPs were updated in FY 2007-08 to correspond with any new Permit requirements.

4.3.3.1 Maintenance

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year is included below:

- Within this reporting period, the City inspected forty-three roads, 190 catch basins and sixteen conveyances connected with the MS4. Only seven conveyances and 68 catch basins were found to be in need of cleaning and 100 percent of these were cleaned prior to the end of the reporting period. This resulted in the removal of approximately 1,860 pounds of trash and debris from the catch basins, conveyances, and roads. The City also manually removed invasive plant growth from those seven conveyances, providing approximately another 1,500 pounds of green debris. The cleaning of catch basins and conveyances is an annual event that takes place prior to the beginning of the rainy season and usually occurs between October and November.
- The City continues to install Trident Curb screens and has added Streamhawks to several curb inlets as well. Both of these devices prevent trash, debris, and sediment from entering the MS4 by keeping the debris in the curb line and easily accessible to the street sweepers. The City attributes the decreases in trash quantities found in and around conveyances to these devices and the more efficient use of the street sweepers.

4.4 Sanitary Sewer System

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the

potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.4.1 Source Characterization

The City maintains 64.952 miles of sanitary sewer pipeline. The sanitary sewer system serves the entire Lemon Grove area and connects with San Diego and La Mesa's sewer systems. La Mesa utilizes 728.60 EDU of Lemon Grove's sewer space and San Diego uses 986.20 EDU.

4.4.2 Best Management Practice Requirements

4.4.2.1 Updated BMP Requirements

The City has created and maintains basic BMPs in the JURMP and the Municipal Code. The City also utilizes the CASQA Municipal Handbook as a reference guide for BMP implementation, including the maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.4.2.1 Additional Controls for Municipal Areas and Activites

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program the minimizes sanitary sewer overflows (SSO) and is described briefly below and in more detail in the City's Sanitary Sewer Management Plan (SSMP) in accordance with Order 2006-03.

4.4.3 Program Implementation

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines,

remediation of existing lines as necessary, and proper disposal of hazardous waste.

4.4.3.1 Maintenance

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2008-09, the City cleaned and maintained the following portions of the sewer system. Hotspots are inspected three times annually and easements are inspected twice annually.

Table 4.1
Sanitary Sewer Services in Feet

	Total FY 2005-06	Total FY 2006-07	Total FY 2007-08	Total FY 2008-09
Cleaned	**298,043**	**331,369**	**52,493**	**646,943**
Root Cut	**18,370**	**20,927**	**36,039**	**596,943**

Within those numbers is the following information:

- 24,901 feet of hotspot line was cleaned and root cut
- 153,066 feet of easement line was cleaned and root cut
- 234,438 feet of right of way line was cleaned
- 184,438 feet of right of way was root cut
- 50,000 feet of right of way was row jetted for clearing

All SSO information was reported electronically to the Regional Board through the SSMP program. However, the City had no mainline overflows during this reporting period. The appropriate City staff are trained in detecting, reporting, and responding to all SSOs.

4.5 Mobile Municipal Activities

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.5.1 Source Characterization

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- Power washing for graffiti removal
- Street and sidewalk repair and maintenance (striping, repainting, and pothole repair)
- Landscape maintenance

4.5.2 Best Management Practice Requirements

4.5.2.1 Updated BMP requirements

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities described above. During the City's JURMP update, minimum BMPs were established for all municipal activities. The City also references the CASQA handbook and the Municipal Code to ensure the use of all applicable BMPs for any given activity.

4.5.2.2 Additional Controls for Municipal Areas and Activities

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined necessary. Presently, City related mobile activities have not been determined a high threat to water quality. Public Works and Grounds division staff are vigilant about the use of proper BMPs when doing any mobile activity. Pollutant generation is limited to the MEP through temporary BMPs such as gravel bags and straw wattles or good housekeeping practices such as dry spill cleaning, wet vacuums, and sweeping. During this reporting period, the current BMPs were evaluated and determined to be sufficient and to the MEP.

4.5.3 Program Implementation

In FY 2008-09, City staff were sufficiently educated in the proper BMPs to utilized during mobile activities. These BMPs include proper containment, control, and capture of any discharge generated by a mobile activity and possibly carrying pollutants.

4.6 Special Events

The City hosts a very limited number of special events each year. The current line-up consists of the Winter Bonfire, the Fire Station Open House, and Concerts in the Park. Special events have the potential to generate significant trash and litter caused by the patrons and activities of the special event. The City utilizes many of the controls listed in Permit Section D.3(2)(f). These BMPs are described in more detail below and are implemented during and/or after special events, when and where applicable.

4.6.1 Source Characterization

The City hosts a few special events each year that have the potential to produce trash and debris pollutants.

4.6.2 Best Management Practice Requirements

4.6.2.1 Updated BMP Requirements

In FY 2008-09, the City implemented many of the controls specific to special events listed in Section D.3(2)(f) of the Permit. The City has chosen the following BMPs as most effective and efficient for City needs.

Anyone outside of the City seeking a Special Events Permit, must ensure the following BMPs are maintained:

- Proper management of trash and litter, including temporary trash receptacles
- Post clean up activities, such as catch basin cleaning and general litter pick-up, when necessary
- Post event street sweeping, when necessary
- Other BMPs when considered necessary by City staff

The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.6.2.2 Additional Controls for Municipal Areas and Activities

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary.

4.6.2.3 Program Implementation

In FY 2008-09, there were the following City sponsored special events:

- Movie Night in the Park
- 6 Concerts in the Park
- Winter Bonfire
- Fire Station Open House

At a minimum, these events were required to provide extra trash and recycling containers, proper disposal of grease if food preparation was involved, and proper secondary containment for port-a-potties.

During the events, City staff was on hand to ensure that the event remained free of illegal discharges and/or illicit connections to the MS4. City staff were available for the duration of the event and afterwards for immediate trash removal and to notify the appropriate staff if a problem was observed.

Section 5.0 Industrial – Commercial Component

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4. The City has implemented a program that aims to reduce and prevent industrial and commercial pollution discharges from the MS4 to the MEP, to protect local receiving water bodies, and to comply with the Permit.

Commercial facilities within the City include a wide range of oriented businesses from restaurants to nurseries. There is one main commercial area within the City, along Broadway and down Lemon Grove Ave. This area contains many different commercial businesses ranging from restaurants to automotive outlets. The City's industrial area runs along Federal Blvd adjacent to SR 94.

Throughout FY 2008-09, City staff has worked diligently to fulfill the requirements of Order 2007-01. The City worked to ensure our current inspection program met the requirements of the current Permit and made any adjustments necessary. Due to the City's small size, staff is able to inspect a larger than needed majority of its commercial facilities and all of its industrial facilities. The City also continues to participate in the development of a regional mobile business program. The following section will demonstrate the City's successful implementation of the requirements of the Permit (Section D.3.b) during FY 2008-09.

5.1 Industrial-Commercial Sites/Sources Element

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The City emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Permit.

For the rest of Section 5.1, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial sites/sources component is described in Section 5.2.

5.1.1 Source Characterization

A watershed-based inventory of the industrial and commercial sites/sources within the City was compiled as part of the 2008 JURMP update. As required by the Permit, the inventory includes the following information for each site/source: facility name, address, possible pollutants, if the site drains to a 303(d) listed

waterbody, and a brief description including SIC codes which best reflect the principal products or services provide by each facility. This list can be found in the 2008 JURMP. Because mobile commercial businesses do not have a fixed address at which they operated, they are tracked within a separate, non-spatial database.

The commercial inventory is continually updated as facilities go out of business and new facilities open. This process is performed primarily through the business license data base. Staff also collaborates with the Fire Marshal to verify existing and new facilities and to combine inspections. In addition, the City identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered or licensed with the City. When this occurs, these facilities are added to the inventory and the proper City staff are notified to ensure the business is brought into compliance with City licensing requirements. During annual facility inspections, City staff has the opportunity to identify new or closed businesses and update the inventory with these findings.

In FY 2008-09, the City continued its focus on high priority commercial businesses by inspecting all restaurants, manufacturers, and automotive repair facilities with in the City. This totaled 34 facilities for this reporting period, the list of which is located in Attachment K 2. Table 5-1 contains a summary of the commercial facilities found in the City. The summary includes home businesses like carpet cleaners and household cleaning services, which the City finds to be difficult to inspect due to their transitory nature and small size (typically one person operations). The City deals with these operations more from a residential perspective than a commercial perspective and requires the standard minimum residential BMPs of these services. The City also inspects parking lots in conjunction with their respective buildings and does count them separately in the site total.

Table 5-1 - Summary of High Priority Commercial Sources

Commercial Activity	Number of Facilities in Lemon Grove
Automobile Dealers/Rentals	18
Automobile Supply Stores	9
Automobile Repair/Paint	9
Automobile System and Tire Repair	56
Automobile Cleaning/Washing	3
Gas Stations	7
Eating/Drinking Establishments	60
Landscaping, includes lawn care	9
Nurseries and Greenhouses	1
Pest Control	3
Equipment Repair/Maintenance/Cleaning	3
Metalwork	6
Masonry	4
Parking Lots and Storage	3
Carpet/Building Cleaning	21

Pool and Fountain Cleaning	3
Total	**215**

The City has 19 industrial facilities, most of which are high priority due to their proximately to Chollas Creek, a 303(d) listed waterbody. The City inspects all of these facilities on an annual basis. This number includes the three facilities which fall under the Statewide Industrial Permit as well. Table 5-2 contains a summary of these facilities.

Table 5-2 - Summary of High Priority Industrial Sources

Industrial Activity	Number of Facilities in Lemon Grove	Revised High Priority Category Facilities
Waste Disposal and Recycling	1	
Equipment/Transportation	3	2
Metalwork	2	3
Building Supplies and Woodworking	3	2
Industrial Paper		1
Contractor, Special Trade		1
Specialty Hardware, Drapery		1
Total	**9**	**10**
	Total Facilities	**19**

As part of the 2008 JURMP update and development of the interim SUSMP, the City collaborated with Copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-3 in Attachment K2 lists the pollutants that may be generated by each category of business. The pollutants that many be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in the JURMP.

All industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR S. 122.26 (b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing*
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling
- Pest control services
- Eating and drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning*
- Cement mixing and cutting*
- Masonry*
- Painting and Coating*
- Botanical or zoological gardens and exhibits
- Landscaping*
- Nurseries and green houses
- Golf courses, parks, and other recreational areas/facilities
- Cemetaries
- Pool and fountain cleaning*
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services*

*All mobile commercial businesses are discussed in Section 5.2.

Both Industrial and Commercial Facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired waterbody segment, where the site/source generates pollutants for which the waterbody is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e. within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA)
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.1.2 Best Management Practice Requirements

5.1.2.1 Updated BMP Requirements

During the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sties and incorporated these into the City's Municipal Code Sections 8.48.080 and 8.48.090. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's JURMP and Municipal Code. The Municipal Code can be accessed through the City's website: www.ci.lemon-grove.ca.us.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP and implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are based on a review of the site's SWPPP and site inspections, where needed.

5.1.2.2 Additional Controls

The City requires the implementation of additional controls for industrial and commercial sties and sources that are 1)tributary to CWA Section 303(d) impaired water body segments or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

The City prescribed additional controls during inspections of commercial and industrial facilities, as needed, depending on the proximity of the facility to the waterbody and the observed potential of the site to be a significant source of pollutants that may threaten the downstream waterbody as necessary and appropriate.

5.1.3 Program Implementation

This section describes the steps employed by the City to require and verify the implementation of designated BMPs for stationary industrial and commercial sources. During FY 2008-09, the City updated its program as needed, provided education and outreach through inspection actions, inspected inventoried businesses to evaluate compliance with established minimum BMP requirements

and the local stormwater ordinance, and took enforcement action as necessary to bring violators into compliance.

5.1.3.1 Inventory Prioritization

Since the new Permit no longer requires industrial and commercial facilities to be prioritized as high, medium, or low; the City prioritized industrial and commercial businesses as either high priority or non-priority.

When evaluating threat to water quality, the City considered the following attributes of each industrial and commercial business to determine priority or non-priority status:

- Type of activity (SIC code)
- Materials used at the facility
- Wastes generated
- Pollutant discharge potential
- Non-stormwater discharges
- Size of facility
- Proximity to receiving water bodies
- Sensitivity of receiving water bodies
- If the facility is subject to the General Industrial Permit or an individual NPDES permit
- Filing of a No Exposure Certification/Notice of Non-Applicability
- Facility design
- Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff
- Compliance history
- Any other relevant factors

Although not specifically required by the Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City uses the following additional spatial attributes to prioritize industrial and commercial facilities:

- Proximity to a 303(d) listed waterbody
- Pollutant potential of the facility type
- Stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. In addition, if during the City's commercial inspection process or based on institutional knowledge, it is determined that additional sites that would otherwise have a lower priority should be classified as high priority industrial or commercial facilities based on the Permit criteria, they were noted as such in the inventory and inspected as required.

The City's commercial inventory was updated and prioritized during the 2008 JURMP update and will be prioritized at least once per year prior to conducting annual inspections.

5.1.3.2 Inspection Frequency

FY 2008-09 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in the Permit. As part of the JURMP update, a new process to determine high priority facilities was formulized and put into effect during the previous reporting period. To determine which industrial and commercial sties were inspected in FY 2008-09, the following steps were taken:

- Confirm that the current industrial and commercial inventories are up-to-date.
- Prioritize each facility based on the prioritization process described in Section 5.1.3.1 of this document
- Review the list of facilities that were inspected the previous year
- Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with Permit standards, the inspected over 50 percent of all stationary industrial and commercial facilities inventoried as high threat to water quality and over 20 percent of all stationary inventoried sites. Mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Permit were met.

During the 2008 JURMP update, the City identified the businesses that would be inspected as part of the 2008-09 reporting period. The City's facility summaries can be found in Tables 5-1 and 5-2 of this section. The list of high treat to water quality stationary commercial facilities can be found in Attachment K2. The City inspected all of these facilities and all of the industrial facilities in Table 5-2 during FY 2008-09.

5.1.3.3 Routine Facility Inspections

The City routinely inspects its commercial and industrial facilities. Inspections are intended to:

- Provide facilities with information regarding the City's stormwater program
- Provide guidance in complying with stormwater regulations
- Validate and manage the inventory

During FY 2008-09, the City conducted 19 industrial and 34 commercial inspections for compliance with ordinances, permits, and policies. All inspections included, as applicable:

- Review of BMP implementation plans, if the site uses or is required to use such a plan
- Review of facility monitoring data, if the site monitors its runoff
- Check for coverage under the General Industrial Permit (NOI or WDID), if applicable
- Assessment of compliance with Copermittee ordinances and permits related to urban runoff
- Assessment of BMP implementation, maintenance, and effectiveness
- Visual observations for non-stormwater discharges, potential illicit connections, and potential discharge of pollutants to stormwater runoff
- Education and training on stormwater pollution prevention, as conditions warrant

Based on the results of each site evaluation, City staff completed an inspection form, which can be found in Attachment K1.

Staff generally works with site contacts to provide examples of BMP solutions that could be implemented. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the inspector is at the site. The responsible party is always provided a copy of the inspection findings after the inspection. For any sites found not in compliance, corrective actions are written on the inspection form along with any follow-up actions or inspections, as needed.

Inspection Tracking

Complaint and inspection documentation is filed in a tracking database and is kept up to date on a regular basis.

Third Party Inspections

All commercial inspections conducted in FY 2008-09 were completed by City staff. The City has one full-time Code Enforcement officer with a stormwater focus, who is dedicated to conducting routine commercial, industrial, and residential inspections and follow up for routine inspections as well as complaint calls. A third party was not employed to conduct inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting stormwater compliance inspections and enforcement of industrial and commercial facilities are training regularly on inspection and enforcement procedures, BMP implementation, and assessment of monitoring data. Water quality staff actively collaborates with inspection staff throughout the region to share methodologies and approaches that may be beneficial region wide.

Inspection Follow-up and Enforcement

Staff conducted follow-up inspections at all facilities that were directed to implement corrective actions. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. The City only had one non-compliant industrial facility. The facility was storing materials uncovered, outside. The corrective actions were given to the facility contact and all corrections were made by the follow up inspection. Twelve restaurants were found in non-compliance on the initial inspections, all corrective actions were minor and completed by the follow-up inspections. The restaurants continue to display confusion over the water quality inspections versus health code inspections and fire code inspections. For this reason, staff has worked diligently to provide on site education and to coordinate inspections with the City's Fire Marshal. It is not possible to coordinate inspections with the health inspectors as that is a County program with its own staff and own time lines for inspection requirements.

5.1.3.4 Notification

The City will notify each inventoried industrial and commercial business of the City's updated BMP requirements that are applicable to the site/source. During FY 2007-08, the City provided a formal letter notifying the facilities of any changes and that a new Permit had been issued. During FY 2008-09, the City did not feel a second formal notification was required and dealt with education during the actual inspection.

5.1.3.5 Complaint investigations, Violations, Enforcement, Follow-up and Compliance

When a complaint is registered with the City's hotline, e-mail, other phone line, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City staff with enforcement authority within a reasonable time frame. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or clean up activities by the City or responsible party.

As required by the Permit and depending on the severity of the violation, the City enforces its stormwater ordinances for all commercial and industrial facilities as

necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for staff to establish appropriate compliance time frames on a case by case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's Code Enforcement database.

During FY 2008-09, the City had two commercial related complaints and no industrial related complaints. The two commercial complaints were the hosing of parking lots. The behavior was stopped immediately upon investigation and both dischargers were educated on the proper dry methods for cleaning impervious surfaces.

Reporting of Non-Filers

The City did not identify any industrial sites that may require coverage under the General Industrial Permit, but which, to the City's knowledge did not file NOIs.

5.2 Mobile Sources

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City and do not typically have a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.2.1 Source Characterization of Mobile Sources

The mobile businesses known to operate within the City's jurisdiction are listed on an inventory found in Attachment K2. This inventory was prepared as part of the 2008 JURMP update. The following business types are addressed by the mobile sources element of the City's industrial and commercial program:

- Mobile automobile and other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades such as: cement mixing or cutting, masonry, painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile businesses that the City determines to have a significant threat to water quality will be added

to the inventory. Because not all mobile businesses have obtained business licenses in the City or have a base of operations outside the City, staff is continually refining and updating the mobile inventory. In addition, the City is participating in the creation of a regional mobile businesses list.

5.2.2 Best Management Practice Requirements

5.2.2.1 Updated BMP Requirements for Mobile Sources

All BMPs required for station sources, described in Section 5.1.2.1 of this document and listed in detail in the City's JURMP, are also required of mobile businesse, where applicable. The most important BMPs for most mobile businesses are typically those that address non-stormwater discharge control and spill prevention, control, and clean-up.

5.2.3 Program Implementation

5.2.3.1 Education/Outreach and Notification of Mobile Sources

The City will provide information and outreach regarding stormwater quality to mobile business owners and operators. Businesses will be given educational materials outlining pollution prevention methods and other related BMPs if businesses are found to be in violation of the City's stormwater ordinance or the Permit. City staff will also give recommendations to businesses, where applicable.

Because the mobile business program is a new element of the industrial and commercial program; it is anticipated that some mobile businesses are not aware of stormwater requirements and that education will be a significant portion of the program. The education is described in more detail in Section 8 of this report. It is worthy to note, that even before the issuance of the new Permit, City staff reviewed and gave verbal stormwater education to any mobile or automotive business license applicant.

The City will continue to coordinate and collaborate with the regional Education and Outreach Workgroup to notify the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three years of implementation of the updated JURMP.

5.2.3.2 Inter-Jurisdictional Cooperation

During this and the previous reporting periods, the City has participated with other Copermittees in a Mobile Business subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the

Copermittees have chose to collaborate on a regional mobile business strategy, which addresses the following elements:

- Inventory Development and Maintenance
- Establishment of Minimum BMP Requirements
- Outreach and Education including notifications

A consultant may be hired at some point to assist with this process. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy.

5.2.3.3 Inspections

The inspections for mobile businesses generally follow the same procedure described in Section 5.1.3.3 of this report. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, staff works directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.2.3.4 Complaint Investigations, Violations, Enforcement, Follow-up, and Compliance

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to Section 5.1.3.5 of this report.

In FY 2008-09, City staff investigated six complaints based on mobile business activities. Investigation of mobile business activities can be difficult based on the transient nature of their operations and their habit of operating primarily on weekends. The City has limited Code Enforcement abilities during non-working hours, but has managed to educated several mobile businesses by actual staff observation of activities. All calls were investigated and followed up with to the best of staff's ability to obtain contact information for the mobile business operator. All contacted operators were provided BMP requirement education and told if complaints persisted, administrative fines would be processed. To the City's knowledge, all have complied with the BMP requirements.

Section 6.0 Residential Component

Approximately 80 percent of the City's 3.7 square mile area is designated as residential on the land-use map. Residential land use comprises a large area of the City and residential activities can have a considerable effect on water quality of receiving waters. The City's residential component of the stormwater program aims to reduce pollutant runoff from residential areas and activities to the MEP.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Lemon Grove and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2008-09 that contributed to the successful implementation of the City's Residential Component.

6.1 Source Characterization

The City of Lemon Grove encompasses 3.78 square miles. The City has a population of approximately 26,000 residents. Attachment L-1 contains a demographics chart for the population of Lemon Grove. As Attachment L-1 shows the City expects the population to grow twenty-three percent between 1995 and 2020. As the community grows, the collective impact of residential activities on water quality will increase commensurately. Maintaining an adequate emphasis on residential areas is therefore crucial to the success of the City's water quality programs.

This section identifies the high threat to water quality residential areas and activities that were focused on during FY 2008-09. The high threat to water quality areas and activities within the City were identified during the 2008 JURMP update process and are described in detail in the JURMP. The following section will briefly summarize this process.

6.1.1 High Threat to Water Quality Activities

In consideration of the minimum required high threat to water quality residential activities listed in Section D.3.c(1) of Order 2007-01, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.1.2 High Threat to Water Quality Areas

Section D.3.c(1) of Order 2007-01, requires that Copermittees identify all high threat to water quality residential areas. During the 2008 JURMP update, the City identified high threat to water quality residential areas using the following criteria:

- Any residential areas tributary to a CWS section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within environmentally sensitive areas (as defined in Attachment C of the Permit)

The City has one section 303(d) impaired water body within or directly adjacent to its boundaries. The 303(d) impaired water body within the City is Chollas Creek and is the main watershed for the City. Based on the definition in Attachment C of the Permit, the City does not have any coastal lagoons or environmentally sensitive areas within its boundaries. By collaborating with other copermittees, the City has identified the following pollutants as pollutants of concern for residential areas:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

In consideration of identified 303(d) listed water body and the primary pollutants of concern, City staff has identified the locations of high threat to water quality residential areas as follows:

- All houses within 500 ft of Chollas Creek, USGS blueline
- All houses within 500 ft of any major Chollas Creek drainage channels

This primary affects houses along Main St, San Miguel, and Bakersfield at Ensenada.

6.1.3 Evaluation of Oversight of Residential Areas and Activities

The City is planning to conduct a formal evaluation of the methods used for oversight of residential areas and activities during the permit cycle of Order 2007-01. The evaluation will coincide with the City's effectiveness assessment for the Residential Component. Since the methods used for residential oversight were recently updated within this last fiscal year, City staff determined that it would be

most appropriate and most accurate to evaluate the success of these methods in following reporting periods.

6.2 Best Management Practice Requirements

This section describes the updates made to the City's minimum BMPs that were implemented during FY 2008-09. The minimum BMPs for residential high threat to water quality activities were established in the City's 2002 JURMP. As part of the 2008 updated, the minimum BMPs were reviewed and updated as necessary.

6.2.1 Pollution Prevention

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for high threat to water quality areas and activities.

6.2.2 List of Minimum BMPs

As part of the City's JURMP update, the City designated the following minimum BMPs for high threat to water quality residential activities and areas. The minimum BMPs are primarily nonstructural and area targeted at activities specified in Section 6.2 as having a high threat to water quality. Pollution prevention methods were incorporated into this set of BMPs, where appropriate.

Automobile Repair and Maintenance

Pollution Prevention: a) employ routine preventative maintenance practices, b) reduce vehicle use whenever possible (carpool, use public transportation, bike or walk for short trips, alter driving habits), c) make timely vehicle repairs
Leaks and Spills: prevent leaks and spills from entering the stormdrain by using or doing: drip pans, plastic sheeting, or other containment devices, work indoors or under shelter and never in the rain, immediately clean spills, use dry cleaning methods, establish clean up standards, and require that tools and parts be cleaned in a contained area
Materials and Waste Management: properly manage and dispose of automotive wastes and materials by: draining fluids from automobiles, disposing of wastes and fluids properly and lawfully, store materials, parts and tools indoors or under cover, use secure and watertight containers when storing materials and wastes

Automobile Washing

Management/Reduction of Wash Water: a) whenever possible, use commercial self-serve or full-serve car washes that properly dispose of or recycle the water, b) when washing at a residence be sure to: wash over a porous surface such as grass or dirt when possible, use dry cleaning methods, turn off the water when not in use or use a controllable spray nozzle, encourage the use of a neighborhood wash area where contaminants can be easily manged
Materials and Waste Management: a) properly dispose of soapy water or bucket water to a sanitary sewer or landscaped area, b) use dry methods to degrease or clean especially dirty areas such as tires

Automobile Parking

a) use routine preventative maintenance practices and make timely vehicle repairs to prevent fluid leaks
b) design and construct parking areas to minimize stormwater impacts; covered garages should be plumbed to the sanitary sewer

Home and Garden Care Activities and Product Use

Garden and Yard Care
Pollution Prevention: a) use safe substitutes and alternative gardening methods such as IPM techniques, native and drought tolerant plants, use compost or vermiculture for green waste recycling, follow manufacturers instructions for the application of any chemicals, identify pests before treatment, b) read all labels on products, c)implement water conservation, d) consider xeroscape gardens, e) repair and maintain irrigation system to prevent over watering, f) recycle green waste, g) plant or mulch hillsides and slopes to prevent erosion
Leaks and Spills: a) immediately clean any chemical spills, fertilizers, or soil, b) return spilt items to container for future use or proper disposal
Materials and Waste Management: a) store lawn care products in closed labeled containers indoors or covered areas, b) refrain from using chemicals on windy or rainy days, c) cover stockpiles of soil, compose, or fertilizer, d) dispose of chemicals through the HHW program, e) utilize dry sweeping methods for clean up
Restrictions on Activities: a) do not hose off paved surfaces to the street or gutter, b) do not put hazardous waste in the trash, landfill or stormdrain

Home Care and Maintenance
Pollution Prevention: a) utilize smart purchasing practices that reduce waste, b) use less toxic or non-toxic substitutes for cleaning, c) read and follow product labels, d) recycle used or unwanted products, e) use water based paints when possible, f) recycle unwanted appliances and equipment
Leaks and Spills: a) clean up spills immediately, b) properly dispose of waste from clean up materials

Materials and Waste Management: a) store HHW materials in closed labeled containers and in covered areas, b) recycle latex paint through local programs, c) dispose of hazardous products though the HHW program, d) dispose of trash in the proper receptacles with lids
Restrictions: do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter or storm drain

Disposal of Pet Waste

Pollution Prevention: spay or neuter pets to reduce feral populations
Waste Management/Disposal: a) clean up after pets when walking them in public places, b) clean up yards or other commonly used areas, c) properly dispose of the waste in the trash or toilet
Pet Management (Dogs and Cats): do not allow pets to run free in residential neighborhoods, whenever possible

6.3 Program Implementation

This section describes the steps that were taken in FY 2008-09 to require and verify the implementation of designated BMPs for residential areas and activities.

6.3.1 Outreach and Training

The City has an education program that is consistent with the Permit and the jurisdictional program. A significant element of this program consists of educating residents about ways in which they can minimize their impact on local waterways and the environment in general. Education of the citizens in Lemon Grove contributes to the implementation of the residential component of the stormwater program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between the MS4 and the sanitary sewer
- Pollution prevention and safe alternatives
- HHW collection and recycling
- BMP implementation and maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment and recovery
- Water conservation

During FY 2008-09, City staff conveyed these messages to the public through a variety of mechanisms, including:

- City's Website
- Production and distribution of brochures and promotional items

- Public participation in community events
- Response to residential complaints
- One on one conversations
- Public participation events such as clean-ups

Implementation of these mechanisms by the City helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the City can be found in Section 8.

6.3.2 Used Oil, E-Waste, and HHW Collection Services

The City facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City participates in door to door home collection, a permanent recycling facility is located in the City, and collection events for all HHW and e-waste. In addition, the City encourages weekly curbside garbage, recycling, and yard waste pick-up services through a franchise with EDCO. The various components of the solid waste and hazardous waste collection services provided by or for the City are described in detail below.

HHW Collection Program

The City seeks to reduce solid waste generated in its boundaries. Conservation techniques supported by the City include source reduction, reuse, and recycling, including the procurement of recycled-content products. The City must meet the state-mandated fifty percent reduction level for solid waster disposal, which means at least half of the refuse generated in 1990, adjusted for population and economics, must be spared from a landfill. This information is lengthy and is available upon request.

The City has completed and approved the construction and demolition ordinance. The ordinance went into effect at the beginning of December 2005. Only one demolition site qualified and completed the program during this reporting period. Citron Court is a new mixed use redevelopment project located at 7385 Broadway that began construction during this reporting period. According to their reports, their demolition site generated 108.2 tons of recyclable materials.

The recycling outreach efforts include conducting public education, establishing infrastructure, and supporting existing recycling operations. Current programs focus on: revising the City's recycling plans, business recycling, enforcement (business and residential), construction and demolition waste, motor oil recycling and storm drain filters, and public education including schools, brochures, and interaction with City staff.

During this reporting period, the City participated in eight collection events for solid waste disposal. All of the events were in cooperation with a Household Hazardous Waste grant through CIWMB. .

The City held one collection day through EDCO and their facilities at the same time as the curb side clean up day. These events allow residents to dispose of unwanted bulky items and HHW free of charge. The elderly and disabled can schedule for curb-side service with City staff. The event during this reporting period took place on April 25-26. Due to the earlier due date of this report, the City is unable to supply HHW totals for the previous fiscal year. The totals for FY 2007-08, as per the HHW program, are not due to the State regulating agency until October 1, 2008; making the City's finalized data unavailable until mid-October at the earliest. The City is currently cooperating in a different capacity with the management of the local HHW program. The City of La Mesa is now the lead agency for the HHW collection contract through EDCO. EDCO's La Mesa HHW facility is the closest drop-off location to the City of Lemon Grove. The City pays La Mesa a small contract management fee to utilize the EDCO HHW facility and then obtains mass totals from the City of La Mesa. The City is happy to provide the Regional Board with those totals upon request after October 30, 2009.

The City has revamped its e-waste collection program and now contracts with Recycle San Diego to provide local events. During FY 2008-09, the City held eleven e-waste recycle events at the park adjacent to City Hall. At the time of this report, the contractor has not yet compiled the collection data for these events. That data will be available upon request after November 30, 2009.

Used Oil Recycling Program

Statistics from the California Integrated Waste Management Board (CIWMB) indicate that 1 in 5 households in California have a do-it-yourself (DIY) oil changer. "There were 91.3 million gallons of used lubricating oil (ULO) were recycled during 2005, which was 5 percent above the 87.0 million gallons collected in 2004. The ULO recycling rate for 2005 was 59.5 percent, which is a 3 percent increase when compared to ULO recycled in 2004. The lubricating oil recycling rate does not account for oil burned off or spilled during use, which is estimated to range from 20 to 40 percent."[1] Below are four charts that demonstrate this trend in increased recycling.

[1] http://www.ciwmb.ca.gov/usedoil/RateInfo/default.htm

Table 6-1 Amount of Lubricating Oil Recycled as a Percentage of Sales, 1994-2005 (Calendar Years)

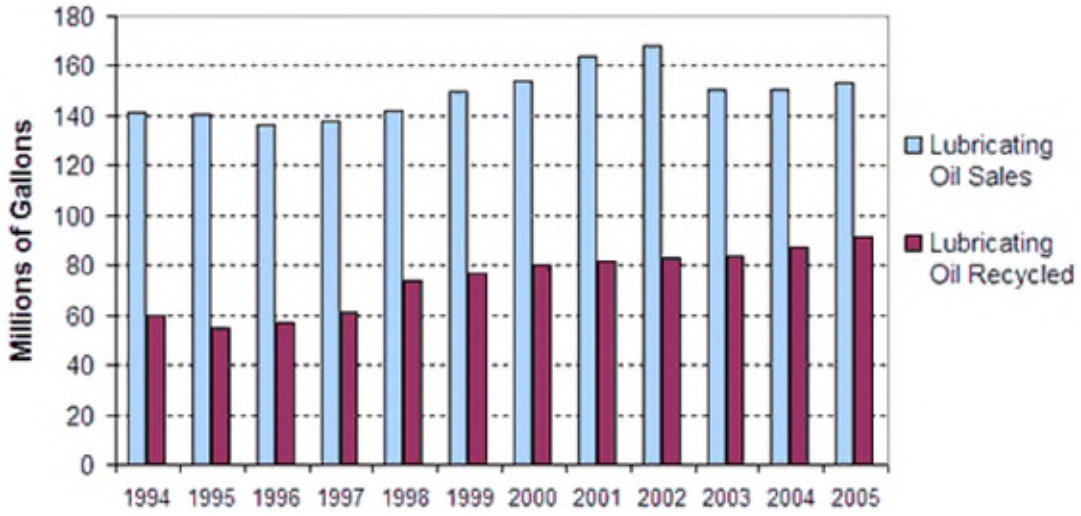

Table 6-2 Annual Oil Sales and Used Oil Recycling Rates (in millions of gallons)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Lubricating Oil Sales	141.2	140.8	136.2	137.5	142.1	150.0	154.3	163.6	168.0	150.2	150.5	153.5
Industrial Oil Sales	78.0	117.3	140.9	141.7	152.4	176.4	155.7	149.1	147.1	135.8	144.6	123.1
Total Oil Sales*	219.2	258.1	277.1	279.5	294.5	326.4	310.0	312.7	315.1	286.0	295.0	276.6
Lubricating Oil Recycled**	59.9	54.6	56.8	60.9	73.6	76.9	80.0	81.9	83.1	83.7	87.0	91.3
Industrial Oil Recycled**	16.7	19.5	20.8	19.3	11.6	10.4	7.9	15.5	17.5	32.4	32.5	31.4
Total Oil Recycled	76.6	74.1	77.6	80.2	85.2	87.3	87.9	97.4	100.6	116.1	119.4	122.7

***** The volumes for oil sales and used oil collections are revised as used oil recycling fees are collected or refunded. Sales totals for lubricating oil are subject to change. Fees on oil sales and refunds for exempt lubricating oils may be reported up to one year after the initial sale.

****** Figures include used oil collected in California and used oil sent outside of California.

Table 6-3 Oil Collected by Public Collection Programs (in millions of gallons)

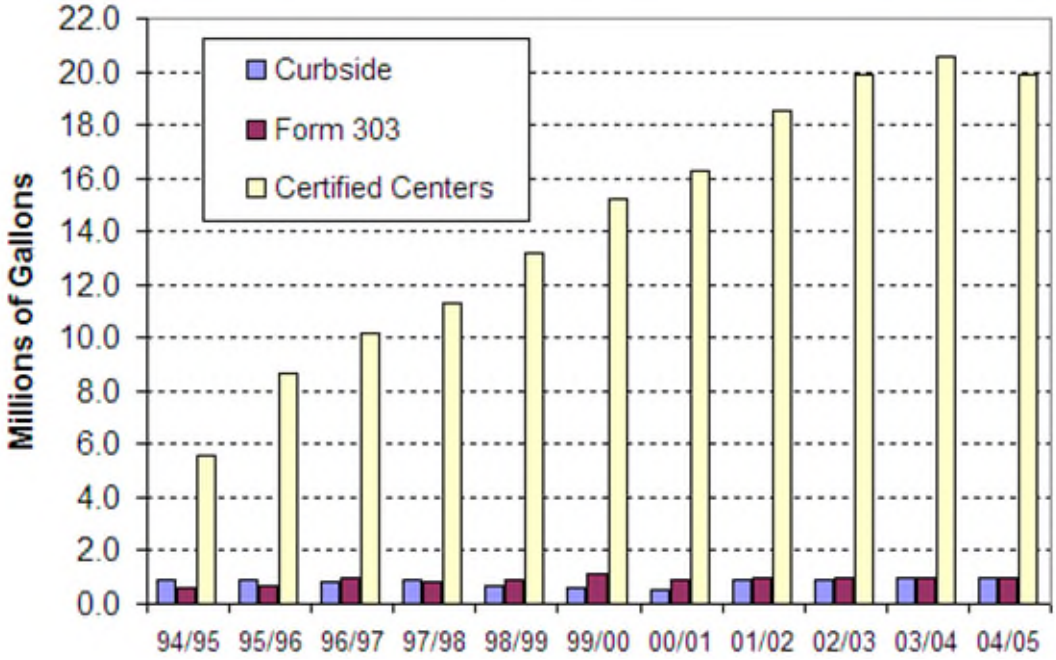

Table 6-4 Oil Collected by Public Collection Programs (in millions of gallons)

	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02*	02/03*	03/04	04/05
Curbside	0.9	0.9	0.8	0.9	0.7	0.6	0.5	0.9	.9	1.0	1.0
Form 303	0.6	0.7	1.0	0.8	0.9	1.1	0.9	1.0	1.0	1.0	1.0
Certified Centers	5.6	8.7	10.2	11.3	13.2	15.2	16.3	18.5	19.9	20.6	19.9
Total Oil	7.1	10.3	12.0	13.0	14.8	16.9	17.7	20.4	21.8	22.6	21.9

The City places a high priority on properly managing the used oil generated by residents within its jurisdiction. Every effort is made to provide residents with convenient drop-off locations and curbside pick-up services, then to promote these services through advertisement and outreach.

The Motor Oil brochure, available at City Hall, contains useful information about how and why to recycle used oil. It also lists the two collection sites and the number for curb-side pick-up. See Attachment L-2 for an example of the brochure. The centers are also listed in each of the City Newsletters that are mailed to the residents bi-annually. See Attachment L-4 for copies of the Newsletter.

The two collection sites are:

- Kragen 6925 Federal Blvd (oil and filters)
- EDCO 6670 Federal Blvd (oil only)

The curb-side service is sponsored by CIWMB. All the resident needs to do is call 1-800-HHW-PKUP (1-800-449-7587) and request a collection.

6.3.3 Complaint Investigations, Violations, Enforcement, Follow-up and Compliance

When a complaint is registered with the stormwater hotline or other form of communication such as e-mail, a County hotline referral, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City staff with enforcement authority within a reasonable time frame. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

The City enforces its stormwater ordinance for all residential areas and activities as necessary to maintain compliance with the Permit and ensure water quality. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for the City to establish appropriate compliance time frames on a case by case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the Code Enforcement data base.
In FY 2008-09, the City received 89 Residential IC/ID complaint calls. Thirty five of those calls were construction related and are discussed in Section 3. Eight of them were related to illegal dumping in the street or gutter. All were abated within 24 hours of notification to the City and all known dischargers were educated on proper disposal methods. No citations or fines were leveed for residential complaints during this reporting period. The remaining calls were either unfounded or not related to stormwater and were delivered to the appropriate department.

6.3.4 Regional Residential Education Program

The City collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. The Plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale.

This reporting period's collaboration on a regional level was promotion of residential stormwater BMPs at the San Diego County Fair. The Copermittees combined funds to pay for a fair booth, material distribution, signage and advertisements at several locations on the fairgrounds for the duration of the fair. Booth staffers promoted the Think Blue message and presented stormwater educational materials to all fair attendees.

Section 7.0 IC/ID Component

This section describes activities conducted during the FY 2008-09 reporting period to minimize the impact of discharges from illicit connections and discharges (IC/IDs) on receiving waters and other environmental resources. The City's IC/ID program consists of several complementary activities, some of which are discussed in detail in this section, and others that are briefly addressed here and deferred to other sections for more detailed treatment.

7.1 Dry Weather Monitoring Program

This portion of the report will be submitted on December 15 as required in the Permit.

7.2 Public Reporting of IC/IDs

The City continued to operate the Stormwater Hotline at (619) 825-3810. The primary purpose of the hotline is to facilitate complaint reporting; but it also serves as a direct source of water quality information for interested parties. Calls are promptly referred to City staff for proper handling.

During this reporting period, 104 calls were received through the hotline. The majority of the calls received on the Hotline were either informational or related to private property issues. Of these calls eight were related to illicit connections and discharges. These calls were all settled without enforcement actions or were private property disputes. All tips related to IC/IDs were investigated by City staff and dealt with accordingly. Follow-up and enforcement related to business complaints and issues is dealt with in Section 5 and follow-up and enforcement for residential complaints is dealt with in Section 6.

7.3 Complaint Investigations and Enforcement

The City conducted follow-up investigations on all complaints received during this reporting period. The primary objective of the City's commercial enforcement program is to ensure violators are brought into compliance in a timely manner. When education is not sufficient to do so, staff may use a variety of formal enforcement tools. These vary by department and program, but generally include Verbal Warnings, Notices of Violation, and Official Notices. The City may also use civil and/or criminal court actions under the State Porter-Cologne Water Quality Act or the Federal Clean Water Act. These last actions my result in significant fines levied upon non-compliant parties.

7.4 Facilitation of Used Oil and Toxic Material Disposal

During this reporting period, City staff worked diligently to promote, publicize, and facilitate the proper management and disposal of used oil, toxic materials, and other household wastes. Activities related to the City's recycling program and waste collection services are reported in detail in Section 6 of this report.

7.5 Limiting Infiltration from the Sanitary Sewer

The City implemented aggressive maintenance programs to limit infiltration from the sanitary sewer system to its MS4. Further details on these activities are reported in Section 4 of this report.

Section 8.0 Education Component

8.1 Overview of Education

The City's outreach program includes an education and public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the City's water quality staff.

The Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

- Measurably increase the knowledge of the target audience regarding MS4s, impacts to urban runoff on receiving waters, and potential BMP solutions appropriate for the target audience and their activities.
- Measurably change the behavior of the target audience and thereby reduce pollutant releases to MS4s and the environment.

The City performed a wide variety of storm water education activities during FY 2008-09. Education and outreach was performed on three levels – Jurisdictional, Watershed, and Regional. Budgetary constraints are currently severely limiting the City's outreach abilities to in-house staff and resources only. However, the City has always worked hard to openly communicate with its community and staff has always been available for face to face meetings both at City facilities and while out in the community. The community also has easy access to all City staff by phone or e-mail. The City feels that this informal accessibility works in our favor and actually provides our residents with more meaningful, in depth education than multitudes of printed material.

8.2 Municipal Staff Training

Public Works. Water quality staff participates in monthly meetings with all of the public work division and weekly meetings with the public works supervisors. At these regular meetings, water quality staff provides updates on current policies

and areas of concern. Due to the regularity of interaction between water quality staff and public works staff, no separate annual training is currently being provided. Any questions or comments can be dealt with more effectively at the regular meetings and changes to regulations or activities can be instituted quickly and efficiently. Water quality staff is also integrally involved in ensuring that public works staff receives and maintains all required certifications, such as Confined Space certification, Hazwoper certification, Cal OSHA updates, pesticide application qualification, and other risk management trainings applicable to their daily jobs and their stormwater activities. Towards the end of this reporting period, the City began exploring a newly available training tracking program, which in future reporting periods will make it even easier to verify staff trainings.

New Employees. Water quality staff is working with the City's HR department to establish a new employee interactive training power point presentation, which will include basic stormwater information and an evaluation test at the end. This video will be shown to all new employees regardless of department and their end test results will be tracked. The City is participating in the Regional Municipal Workgroup, which is working on developing a series of employee educational videos that would be available to all Copermittees. These videos would include new employee, management and task specific trainings. With the City's new training tracking system, it will be easy to track employee trainings and track pre and post-test results to evaluate a change in knowledge.

Engineering and Planning Departments. Water quality staff meets weekly with these two departments to discuss development review projects, new policies, streamlining of existing policies and to participate in consistent interdepartmental education. The City finds these regularly scheduled meetings a much more efficient and effective way of updating and educating staff on water quality concerns, regulations and improvements. They are the foundation for the City's new sustainability mindset and have been vital initiating the overhaul of the City's General Plan. It allows the City to present an ideologically unified front to its residents, developers, contractors, and business owners.

8.3 Educational Outreach

This section describes education efforts conducted for each target community during FY 2008-09.

8.3.1 Underserved Target Audiences and Mobile Businesses

Underserved Target Audiences. For those segments of Lemon Grove community that do not speak English as their first language, the City provides many of its brochures and handouts in both English and Spanish. The City also employs bilingual staff to assist our residents, answer questions, and translate information. The current water quality brochures available in dual languages are

IPM pest tip cards, recycling and HHW information. The City also has available the Green Wrench BMP guide for automotive repair shops and the Green Cooking BMP guide for restaurants in Spanish. The City also works with the County's Green Business group which provides BMP information in Spanish and in English. Despite these efforts, the City realizes this continues to be an underserved audience and by collaborating with the other Copermittees hopes to continue to develop new ways to provide them with water quality data and information.

Mobile Businesses. During FY 2008-09, the continued to participate and provide information to the Regional Mobile Business Subcommittee for the development of the Regional Mobile Business Outreach and Education Strategy. Mobile businesses inherently provide services across jurisdictional lines; therefore the Copermittees chose to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory development and maintenance
- Establishment of minimum BMP requirements
- Outreach and education

The City's water quality staff, for several reporting periods, has reviewed any business license that pertains to a mobile business and required them to provide applicable BMP information on the business license application. Until the new Permit, however, these businesses were not an independent category in the business license directory. They were filed by business type, such as automotive or food service. During this reporting period, the City created the mobile business category and has begun transferring the known mobile businesses into the correct category. One of the challenges faced by Code Enforcement, in conjunction with mobile businesses, is their tendency to conduct business during off hours. City staff is very limited in their ability to work off hours and since the economic downfall, all overtime is prohibited unless emergency related. The City hopes that a Regional database of mobile businesses will help to track and regulate their activities and improve education opportunities.

8.3.2 New Development and Construction Communities

The City uses the following strategies to provide education and outreach to its development and construction communities:

- BMP training request as part of the permit application process
- Meetings with project developers, owners, on-site contractors and site supervisors
- SUSMP checklists as part of the development review process
- Signed BMP checklist for all ministerial permit applications (training request sheet is attached to this checklist)

- Informal meetings with developers and contractors due to questions, comments, concerns, etc. Generally occurs during the review process or normal site inspection process
- All changes to construction site BMPs are required to be submitted to City staff for approval

As previously stated, City staff prides themselves on being available to its residents and business community with few complications or intermediaries. Staff is always available to discuss current projects, both under review and construction, with any concerned or curious party.

8.3.3 Commercial/Industrial Owners and Operators

The following is a summary of the education and outreach provided to commercial and industrial owners and operators during FY 2008-09.

- Annual inspections of all industrial facilities, restaurants and automotive facilities in the City by our in-house Code Enforcement staff. During these inspections, individual one-on-one education was presented to each facility manager/owner. Information presented included general storm water quality information and BMP requirements.
- The City also has Green Wrench and What's Cooking guides available for interested parties.
- Mailings to facilities about applicable local workshops and education opportunities, such as those offered by SDG&E and the San Diego Energy Commission.

As previously stated, City staff prides themselves on being available to its residents and business community with few complications or intermediaries. Staff is always available to discuss current projects, both under review and construction, with any concerned or curious party. However, it is important to note that significant animosity exists within the small business community as a result of existing State and County environmental control agencies. City staff bears the complaints of the business community for the high cost and perceived over-bearance of governmental regulation. They perceive stormwater inspections as part of this over-bearance and are often reluctant to make changes without the involvement of Code Enforcement proceedings.

8.3.4 Residential Community and General Public

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential and public audiences:

- City Newsletter containing an environmental section with water quality and environmental tips (such as how to properly care for your lawn, list of

basic household BMPs, or home improvement – BMPs your contractor should know) and information about HHW and recycling

- Various brochures available at City Hall: Used oil recycling, car washing, pet waste disposal, etc
- Maintenance of the stormwater hotline (619) 825-3827, which monitored by water quality staff
- Water quality staffed informational Booths at the following events: Fire Station Open House and Winter Bonfire.
- Participation and staffing at the Regional Education Outreach booth at the San Diego County Fair
- Participation and collaboration in watershed-based efforts such as Creek to Bay Clean-up and watershed based school presentations

As previously stated, City staff prides themselves on being available to its residents and business community with few complications or intermediaries. Staff is always available to discuss current projects, both under review and construction, with any concerned or curious party.

The City is constantly striving to improve its outreach and education opportunities within the limited means of the current budget. Much of the current education is done by City staff in an informal manner with the public and business communities. Having a small City staff, means a consistent message is provided because staff is easily kept up to date on the current regulations and policies. This program will continue to evolve as necessary and as funds allow.

9.1 Public Participation

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in stormwater and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about stormwater issues. Second, they become educators and stewards for the stormwater program. Finally, they provide important feedback to the stormwater program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

9.2 Public Participation Approach

The City's approach for the outreach program is to develop an understanding among its residents and businesses of some fundamental storm water concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches untreated)
- The economic value of our beaches and inland waterways and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a stormwater violation (stormwater hotline or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and oceans.
- Reducing pollutants of concern.
- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. creeks and parks) and not to be part of the pollution problem (littering, illegal dumping, improper disposal of household chemicals).

Some of the tools that are used by the City to implement the public participation activities are:

- public outreach events
- public reporting methods
- pet waste dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- public opinion surveys
- copermittee collaborations

9.3 Program Implementation

This section describes the specific public participation tools used during the FY 2008-09 reporting period.

9.3.1 Public Outreach Events

The City participated in several outreach events during FY 2008-08:

- Coastal Clean up Day - April 25, 2009, 12 volunteers, Federal Blvd/San Miguel drainage channel, graffiti abatement on adjacent k-rail
- Youth Group Community Service Project – April 7-8, 2009, 35 volunteers, Lemon Grove Park clean up and mural re-painting
- Church Community Service Project – October 12, 2008, 40 volunteers, median clean up and re-landscaping with drought tolerant plants

9.3.2 Public Reporting Methods

The City has a local hotline that connects the caller directly to the City's water quality staff. The number is (619) 825-3827. A public works person is available for after-hours emergencies, who will contact the best staff person to handle the emergency. There are also two regional stormwater hotline numbers promoted within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800 and the Think Blue Hotline, 1-888-844-6525 (1-888-THINK BLUE). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00am - 5:00pm. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voice mail message for 24-hour public access.

The City's stormwater hotline has been heavily advertised since the programs inception. In FY 2008-09, the hotline received eight stormwater related calls, typically pertaining to the illegal discharge of fluids in the gutter over the weekend or a business hosing off their parking lot. All calls are investigated by Code Enforcement and are usually handled with a verbal warning and education about household BMPs. None of the calls during this reporting period requied formal Code Enforcement proceedings. The hotline is advertised in the newsletters and

on the City's website, in brochures, on give-aways, and at City events like the Winter Bonfire and the Fire Station Open House.

The City's website also provides water quality information and event updates: www.ci.lemon-grove.ca.us.

9.3.3 Pet Waste Dispensers

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier; pet waste dispensers can be found at all the City parks and in the vacinity of City Hall, all areas where people frequently walk their dogs. Trash cans are also readily available in all of these areas. Both the trash cans and bag dispensers are maintained by the City's Grounds division.

9.3.4 Household Hazardous Waste Collection and Used Oil Recycling

The City co-sponsors several HHW and e-waste events over the course of the reporting period. During these events, residents can drop off any HHW or e-waste free of charge. The City collaborates with the Cities of Chula Vista and La Mesa for HHW events and data collection. The City participated in eight HHW events and eleven e-waste events. The City has two used oil collection points in the City:

- EDCO Recycling Center 6670 Federal Blvd
- Kragen Auto Parts 6925 Federal Blvd

9.3.5 Copermittee Collaborations

The City continues its collaboration and encouragement of the County's Green Business program for restaurants and automotive repair shops. This effort continues to develop and explore a State wide collaboration and standards. The City will continue to promote these programs to the applicable commercial facilities where-ever possible.

Section 10.0 Fiscal Analysis

The purpose of this section is to provide a detailed analysis of the expenditures required to implement the JURMP. The main purpose of this analysis is to enable the City to determine the level of resources needed to meet the requirements of the Permit.

Although the Regional Water Quality Control Board staff down plays the importance of this portion of the analysis - based on comments made in public hearings during the new permit process and comments in Regional Board staff reports - the City considers the analysis vital in determining the City's ability to effectively meet the conditions of the Permit.

10.1 Cost Breakdown

The analysis was performed as outlined in the JURMP, by assigning specific expenditure categories into the general categories suggested in Permit section F.8. The analysis is presented in Table 11.1.

Table 10.1 – 2008/2009 Fiscal Analysis Summary

Stormwater Cost Analysis
All costs covered in the General Fund.

ACTIVITY	CURRENT YEARLY BUDGET	CURRENT BUDGET LOCATION
STORM DRAINAGE CLEANING AND MAINTENANCE		
Public Street and Parking Lot Sweeping		Streets
Streets	$30,000	
Parking Lots	$2,000	
Public Street and Parking Lot Sweeping Total	$32,000	
Litter Removal		
Litter Removal	$13,000	
Litter Removal Total	$13,000	
Storm Drainage Cleaning		
Inlets		
Inspection and Cleaning	$19,820	
Fossil filter replacements	$1,400	
Inlets Subtotal	$21,220	
Basins and Channels		
Inspection and Cleaning (Note 1)	$38,829	
Basins and Channels Subtotal	$38,829	
Video Inspections		
Video Inspections (Note 1)	$50,000	

Video Inspection Subtotal	$50,000	
Storm Drainage Cleaning and Maintenance Total	**$155,049**	
STORM EVENT ACTIVITIES		
Sandbag stock piling and placement	$4,000	
Patrols	$3,089	
Storm Event Total	**$7,089**	
ILLICIT CONNECTION/ILLEGAL DISCHARGE ENFORCEMENT PROGRAM		Engineering Services
Dry Weather Testing	$20,000	
Enforcement	$5,000	
Administration/Supervision	$1,000	
Stormwater HotlineComplaints	$2,000	
Illicit/Illegal Enforcement Program Total	**$28,000**	
STORM WATER POLLUTION PREVENTION PLANS (SWPPP's)		
Construction Related SWPPP	$2,000	
Plan Review (including SUSMP's)	$15,000	
Inspection	$3,000	
Construction Related SWPPP Subtotal	$20,000	
Municipal Facility SWPPP		
SWPP Implementation, Inspection, and Maintenance of Municipal Facilities	$18,798	Streets
Municipal Facility SWPPP Subtotal	$18,798	
All SWPPP Activities Total	**$38,798**	
BEST MANAGEMENT PRACTICES (BMP) IMPLEMENTATION		
Inspection of Industrial and Commercial Facilities	$50,000	
Inspection of Municipal Facilities	$1,000	
BMP Total	**$51,000**	
MISCELLANEOUS ACTIVITIES		Engineering Services
Annual Reporting (JURMP)	$5,000	
Administration (General)	$74,004	
NPDES Permit Fee	$7,500	
Public Education/Outreach	$5,000	
Miscellaneous Activities Total	**$77,504**	
PROGRAM TOTALS	**$371,440**	

Note 1 –Program still in development stages, projected cost for next fiscal year

It should be noted that the cost of program implementation during the 2006-07 reporting period does not reflect the true cost of implementation. There are cost areas that were not considered in the analysis. For example, the cost of personnel in the Grounds division, who perform stormwater maintenance

activities as needed, but who do not separate those activities from their daily activities. The City is currently working to create a more thorough "type of work" tracking system to alleviate some of these omissions.

10.2 Funding Sources

There are a number of sources for program funding; grants, stormwater fees paid by both residents and businesses, fines, and general fund money to name a few. The City has created a stormwater fee for businesses and residents through developmental plan check fees, for businesses charged through the business license and solid waste services to residential users. The fees collected only fund approximately one third of the total stormwater program costs. They currently are not allocated to any specific section of the program, but are used to ease various costs as needed. The City has integrated water quality compliance into its Code Enforcement program, which includes potential fines for continued non-compliance. However, the City does not foresee this as a steady revenue source for program funding, as compliance is the primary and desired outcome.
Given California state law, the City finds difficulty in fully funding its stormwater program. Also given recent opposition State-wide to the creation of stormwater fees, the City is cautious in expanding its current funding strategy. As such, the City's General Fund will be required to continue subsidizing this increasingly costly program.

The total cost of the program for this reporting period equaled more than 3% of the General Fund budget. For comparative purposes, the cost of the stormwater program is equivalent to:

- Seven times the amount the City spends on its Code Enforcement program
- The City's expenditure on maintaining all of its parks, and
- 258 percent more than the City commits to youth sports and recreation programs.

Again, these comparisons are included to demonstrate the City's financial commitment to the program.

To further the City's and region's efforts in meeting the overall objective of the Stormwater program, the City challenges the Regional Board and the environmental community to take regional leadership in proposing a regional revenue source – similar to that of TRANSNET for transportation enhancements. The City's financial commitment to the program demonstrates the City's efforts in complying with the requirements of the JURMP and the Pemit. The City continues to be willing to brainstorm with Regional Board staff regarding this challenge. To date, this challenge has been outright rejected by Regional Board staff.

11.1 Introduction

The City began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008 and as an ongoing process. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs, so the City prepared its own effectiveness assessment approach and measures modeled after conventional strategies and the existing levels of effectiveness assessment as detailed in the October 2003 document.

Since the submittal of the JURMP in March 2008, no additional progress has been made on regionally standardized approaches to program effectiveness assessment. It is anticipated that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will undertake the issue of standardized assessment metrics and procedures in the near future. The City is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's stormwater program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three maybe in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments

are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities uniques to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics are provided in SEction 13 of the City's revised 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step towards the more difficult level of improvements to water quality in receiving waters. The levels are listed below.

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

11.2 Effectiveness Assessment Results

The new Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the stormwater program as a whole. Level 1, Level 5, and Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment - assessment that combines both monitoring data and programmatic data - are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome Level Assessments

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP annual report, can be found in Appendix G.

Level 2 and 3

Tables 11-3 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City within each program component. Note that only Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the Regional Board adopted Addendum 2 to Order 2007-01, effectively extending the annual due date of the illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City, and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 Overall Component Assessments

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. Further, two new significant program elements were in production and in early stages of implementation within the defined reporting period of this report; both new programs are demonstrating positive trends. BMP installation verification and BMP operation and maintenance verification efforts, while not wholly implemented at the time of report production, have resulted in the establishment of programs that will support long term effectiveness assessment measures for development planning.

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures. It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue.

Municipal

The defined reporting period of this report is marked by significant expansion of municipal operations and maintenance activities to meet the standards established in Order 2007-01. Enhanced stormwater conveyance, drainage facility, channel maintenance and inspection and street sweeping activities, were developed and implemented, equating to the removal of salient volumes of debris. Effective operations and maintenance activities are demonstrated in the Table 11-1 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will support the efficacy of municipal activities.

Table 11-1

Activity	Amount Collected	Adjustment Factor	Estimated Load Reduction
Street Sweeping	169.75 tons	None	169.75 tons
MS4 Cleaning	3,360 pounds (1.815 tons)	None	3,360 pounds (1.815) tons
			Total 171.565 tons

Industrial and Commercial

Stormwater activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (See Table 11-2) through the gathering of critical statistics, including a knowledge and BMP assessment scoring system. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Table 11-2 Program Scores for 2008-09**

	Knowledge Assessment *	BMP Assessment
Average Rating	2.6	3.5
Median Rating	3	3

# of “Level 5” Ratings	6	25
# of “Level 4” Ratings	28	34
# of “Level 3” Ratings	30	49
# of “Level 2” Ratings	22	12
# of “Level 1” Ratings	33	4

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.
**The scores from these two reporting periods were consistent.

Table 11-2 cont. Program Scores for FY 2005-06
(This was the first year the analysis was done and is provided for comparision)

	Knowledge Assessment *	BMP Assessment
Average Rating	2.39	3.33
Median Rating	2	3
# of “Level 5” Ratings	0	14
# of “Level 4” Ratings	9	26
# of “Level 3” Ratings	34	30
# of “Level 2” Ratings	26	11
# of “Level 1” Ratings	18	7

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Lemon Grove.

Table 11-3

Activity	Amount Collected	Adjustment Factor	Estimated Load Reduction
Used Oil Recycling	25,600 gallons	10%	2,560 gallons
C&D Ordinance Recycling	17,852 pounds	1%	179 pounds

Education

Education effectiveness is assessed for a variety of program elements. In terms of education opportunities provided to the various community sectors and City

staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success.

Public Participation

The City provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however the assessment measure are focused on success of the venues ad outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, hotline calls, and volumes of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 have been made since the submittal of this document.

City of Lemon Grove

Jurisdictional Urban Runoff Management Plan Annual Report

FY 2009 – 2010
September 2010 Report

The City of

LEMON GROVE

BEST CLIMATE ON EARTH

Incorporated in 1977

Executive Summary

The City's eighth Annual Report submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2007-01, "Permit") represents an opportunity to further explore and develop effectiveness assessment measures as well as re-vamp existing programs to better reflect the new Permit.

Several programmatic changes reflected in this year's report have been made in response to regulatory feedback received from the Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA). In particular, the RWQCB and the EPA's review of the Lemon Grove Standard Urban Stormwater Mitigation Plan (SUSMP) prompted a more focused effort on plan reviews, development and re-development strategies, and construction site management.

To respond to their comments and the new Permit, the City is implementing various methods to further assist in long-term effectiveness assessments. The methods are currently under revision and in a state of flux through participation in regional standardization efforts. The City will maintain existing standards, while the regional efforts continue to take shape and develop further.

Through a collaborative workgroup process with the Copermittees, the City has significantly improved our assessment strategies and analysis methods. The Copermittees worked extensively on the completion of the Report of Waste Discharge (ROWD) during FY 2004-05. The ROWD is a collaborative effort discussing the Copermittees requests and findings for the issuance of the 2006 Permit. The Copermittees also collaborated with an independent contractor to create a formal effectiveness assessment. Both the ROWD and the long-term effectiveness assessment documents were submitted to the RWQCB separately from the Annual Reports. However, the Copermittees worked extensively on these projects during FY 2004-05 and the City's participation is worthy of notice. The documents provided valuable information that the Copermittees will be using during the next reporting period to fine tune effectiveness assessment and program focus. In 2008, the City updated its JURMP and Municipal Codes to reflect the requirements of the new Permit, Order 2007-01. The Model SUSMP was completed by the Copermittees and submitted for Regional Board approval during this reporting period and will be added to the City's Municipal Code in the next reporting period. In FY 2009-10, the City continued its extensive involvement in joint Copermittee workgroups. The City feels the collaboration is necessary to develop and maintain a well-rounded, effective program and ensure regional stability for water quality improvements.

The City continues to improve and develop its own program effectiveness assessment strategies. The ROWD and the long-term effectiveness assessment have been extremely useful tools in helping not just the City, but the Copermittees, in analyzing the current available data. The documents have

helped identify areas of improvement and program focus. The long-term effectiveness document will be critical in the City's and the Copermittee's development of regional activities to address improved water quality and pollution prevention.

The City has taken important steps in putting newly developed strategies in motion. In particular, the City has continued to develop its BMP implementation strategy for construction sites and development proposals. During FY 2005-06, the City focused on improving its SUSMP checks, the tracking of construction site inspections, and the development of consistent standards in the Planning and Engineering Departments. The City continues these efforts into FY 2009-10. Employee training continued to focus on SUSMP implementation and those departments directly affected by the document through regularly scheduled inter-departmental meetings. In FY 2009-10, the City continues to make significant steps toward the implementation of a City-wide GIS program, including the beginning of service contract to install GIS layers for the sanitary sewer system. Other departments and layers will be added as the budget allows. Currently the budget does not allow for other layers, but the City hopes this will change in future reporting periods, although perhaps not until the next permit cycle. The implemented Code Enforcement program continues to improve in efficiency and effectiveness, including a new staff member, who functions as a water quality inspector and code enforcement officer. The City realizes that many of these new approaches are in their infancy, some still in exploration, but future reporting periods will further demonstrate the new concepts and ideals discussed in this report.

In FY 2005-06, the City created an independent funding source to help fund its program. However, the funding source only funds a small portion of the program, requiring the City's strapped General Fund to finance this increasingly expensive program. This shortage of steady funding is even more prevalent this reporting period and in the short-term future, due to cuts in State funding and a lack of re-imbursements from the State. Proposition 218 and the current economy make it even more difficult to obtain funding for the water quality program and future environmental legislation. It is even more important now, that the City take into account effectiveness and efficiency in its programs, especially its environmental programs. The City appreciates the Regional Boards understanding in these times of fiscal hardship.

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Section 1.0 Introduction

Lemon Grove's ninth annual report, submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2007-01, "Permit"), represents the City's continued efforts to document and assess a full year of program implementation (July 1, 2009 through June 30, 2010). We are confident that the report demonstrates success in the continued development of a program that meets and often exceeds Permit requirements. At the same time, the annual reporting process presents a cumbersome challenge to City staff when combined with participation in the WURMP reporting process, the annual RURMP report, and the Dry Weather reporting process. The City strongly supports the concept of an all encompassing City and Regional program that increases effectiveness and efficiency to the maximum extent practicable. The myriad of reports causes disconnects between programs that should run seamlessly together. The City also feels a stronger regional program could help alleviate the cost burden the current program forces on the City. The end result would be a maximization of severely scarce funds and funding. The City is currently experiencing, as are many others, serious financial hardship due primarily to the economy and the State raids on local funds to support its own programs. The loss of revenue in the past year has forced the City to redistribute General Funds to maintain even basic service levels, such as pothole repair. The City feels the current program meets regulatory requirements, but is leery of program expansion without a secure revenue source. The unfunded mandate aspect of this program continues to stress the City's already stretched thin General Fund. The City encourages the Regional Board to take a stronger leadership role in facilitating more cooperation with State agencies in obtaining long-term funding for this program. The City hopes that in future reporting periods, some of these challenges can be met with more cooperation between the Copermittees and the Regional Board.

This report continues to demonstrate several programmatic changes in response to regulatory feedback received from the Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA). In particular, the March 2005 SUSMP audit performed by the RWQCB and the EPA prompted a reassessment of the City's SUSMP requirements and plan check procedures. The City chose to focus its improvement efforts in the SUSMP area. The City implemented a construction site inspection database to allow for future assessment strategies. The City's construction and BMP databases continue to evolve as more information is gathered and tracked. Water Quality staff continues active involvement with environmental legislation affecting CEQA requirements and green house gas emission standards. The City believes in a comprehensive and collaborative approach for environmental concerns and solutions. The City is working on a strategy to map its waterways and drainage channels for a future GIS map layer. The City is actively exploring its GIS options and hopes to have GIS capabilities in the next 5 years. The City began developing a basic needs assessment and schedule for the implementation of a

city-wide GIS program. The City is currently working on implementing initial GIS programs and layers through the Sanitation District. These initial layers will include the mapping of our sewer mains and City maintained laterals, as well as the tracking of maintenance activities. All further implementation is dependant on budgetary restrictions. The City and the Copermittees are moving toward a more quantitative and qualitative approach to reporting and operations, while faced with sever economic challenges both on a local and state level.

At the jurisdictional level, the city has taken important steps in putting newly developed strategies in motion. The City continued to enhance its BMP implementation process. The City continued to improve the assessment tools through inspection databases and the plan check process. The City continues to explore effective assessment options that fit within the budgetary confines and meet the requirements of the Permit. The City continues to explore its existing systems to better track water quality data. Current financial restraints limit the implementation of new programs and software. Though the tools are often imperfect and must continue to evolve, we have already found their use to be quite instructive in many ways.

The City believes the programs described in this report to be significantly expanded and improved over past efforts. Some accomplishments of particular note include the following:

- Use of community events for public outreach
- Improved code enforcement process for water quality
- A new in-house water quality inspector and code enforcement officer
- Participation in regional workshops pertaining to new and pending environmental legislation
- Increased involvement in WURMP programming
- A burgeoning sustainability program of which stormwater is a key element

This report is organized according to the general outline agreed upon by the Copermittees. Sections 2.0 through 7.0, each corresponding to a different category of pollutant sources (i.e. Municipal, Commercial, Residential), are organized as follows:

- Priority Sources
- BMP Requirements
- BMP Implementation
- Compliance and Enforcement

Where possible, all applicable data and information are consolidated into the sections to which they best apply so as to present a more holistic and self-contained description of each program area. For example, section 5.0 discusses every program element related to the City's commercial and industrial component (e.g. outreach to commercial audiences, inspections of businesses, responses to

public complaints involving commercial dischargers, and enforcement actions taken against non-compliant businesses).

Sections 8.0 through 10.0 are intended only to summarize key statistics, and to address topics not covered in pervious sections. Section 11.0 provides a consolidated assessment of key program data and information. Much of this data is also presented in greater detail in sections 2.0 through 8.0. Section 12.0 provides an analysis of the City's projected expenditures for FY 2009-10. Section 13.0 discusses the City's conclusions and recommendations based on its assessment of this year of implementation under the Permit.

Overall, this report demonstrates, in a clear and well-organized way, the considerable thought and energy that went into developing and implementing a complex and rigorous program. The City looks forward to continued progress in future years.

Section 2.0 Development Planning Component

This section describes actions taken by the City during FY 2009-10 reporting period to minimize the short- and long-term post-construction impacts of new and redevelopment projects on receiving water quality and other environmental resources. This includes activities related both to land use planning controls, and the site-specific conditioning of development and redevelopment projects in the City.

2.1 Land Use Planning

The City's land use planning process facilitates the reduction of development project discharges of pollutants from the MS4 to the MEP, the prevention of development project discharges to the MS4 from causing or contributing to a violation of water quality standards, and of increases in runoff discharge rates and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force. The water quality staff works closely with engineering staff in these efforts, presenting a united, collaborative process to developers.

The City's land-use planning process consists of development and implementation of the following documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- SUSMP
- Municipal Code, which includes the City's Development Code, Grading and Excavation standards, and all Stormwater regulations

The utilization and regular update of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections will describe the City's land use planning process and the four planning documents in more detail.

The City of Lemon Grove was incorporated in 1977 from the County of San Diego. The City's General Plan was adopted in 1996 and is currently undergoing an in-depth review and amendment process. The City's JURMP, Stormwater Ordinance and SUSMP were originally developed and adopted under Order 2001-01 in 2002-2003. These documents have been reviewed and updated under the new Order 2007-01.

2.1.1 Source Characterization

The City addresses eleven major land use categories in its General Plan:

- Low density residential
- Low/medium density residential
- Medium density residential
- Medium/high density residential
- Mixed use
- Retail commercial
- General Business
- Industrial
- Parks and recreation
- Transportation
- Special treatment area (STA)

The General Plan also recognizes eleven zoning categories:

- Residential low
- Residential low/medium
- Residential medium
- Residential medium/high
- Residential professional
- Central commercial
- General commercial
- Limited commercial
- Heavy commercial
- Light Industrial
- Special treatment area (STA)

Each of these land-use and zoning categories is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their specific sections of this report.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Municipal Code, Grading Ordinance and SUSMP, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.1.2 Best Management Practice Requirements

For each development project proposed, the City requires the builder and owner to consider BMP implementation from the beginning of the project. Attachment H-1 shows the form that is presented to each applicant regardless of project size.

This initial step makes water quality important from the on-set of the project, and each consecutive step further emphasizes the importance of water quality improvements for pre- and post-construction.

The City encourages all new and re-development applicants to explore such options as tot-lots, on-site detention basins, infiltration ditches, and on-site landscaping to ensure that water quality is improved, the natural environment suffers less, and less maintenance is required. The City requires sites to treat for pollutants of concern to the MEP. The City recommends that its applicants utilize the BMP handbooks created by CASQA to explore the best option for each particular project. The handbooks are available on-line at www.casqa.org. CASQA is a valuable resource for both the City and the developers.

To date, jurisdictional and project-level planning tools have been largely under-utilized because stormwater management is often viewed as an engineering issue by developers. As a result, many site-design solutions rely significantly on structural treatment controls like detention basins and mechanical treatment devices, which can be expensive and maintenance-intensive. In most cases, it is easier and cheaper to keep pollutants out of stormwater by designing the pollutant source out of the project, while simultaneously preserving the site's natural filtration capacity. Through a series of updates and reviews, the City is working to include low impact development concepts through-out the applicant review process and in its codes and regulations, specifically the General Plan.

2.1.3 Program Implementation

The Water Quality Program Coordinator is available for consultation during any phase of the project. The Coordinator plays a vital role in the pre-application phase of development by ensuring that all proposed projects incorporate water quality measures. This is done mainly through interaction with the developers and project engineers, but also involves written assessments of the project designs and any water quality documents. The assessment occurs multiple times before the applicant is permitted to submit a complete proposal. This process lengthens the pre-proposal phase, but improves the final approval phase. The Planning Commission knows that all issues have been dealt with prior to the approval hearing and that City staff has ensured a minimal environmental impact.

2.1.3.1 General Plan/Municipal Code/SUSMP

As a component of the 2008 JURMP update (conducted during FY 2007-08), an assessment of the City's General Plan and Municipal Code were conducted to determine the City's consistency with the watershed protection policies and principles found in the Permit. The analysis found that the City's General Plan goals and policies are consistent with the Permit and that no amendments to General Plan were required as a direct result of the JURMP update. The

General Plan discourages the use of large amounts of connected impervious surfaces, requires a landscape minimum, works to protect environmental sensitive areas, and prohibits development near or in a known watercourse. However, the City's General Plan is currently undergoing a comprehensive review process with plans for amendments occurring over subsequent reporting cycles. The City plans to ensure that each area covered in the General Plan contains environmental and sustainable options and concepts. Low Impact Development ideas will be presented and encouraged throughout the document. The City's General Plan is meant to cross reference and openly comply with the City's Municipal Code and all other pertinent development documents.

The City's General Plan serves as the blueprint for the long-range, orderly, physical development of the City. The Development Code section of the Municipal Code contains all zoning and land use requirements and stipulations. These two documents together are designed to protect the City's environmental, social, cultural, and economic resources as the City develops and redevelops.

The Municipal Code did undergo a lengthy review and amendment process due to the issuance of Order 2007-01. Section 8.48 Stormwater Management and Discharge Control was broadened and made more comprehensive. A BMP specific section was added, Section 8.48.060-110. Section 8.48.140 contains regulations for all land development and redevelopment projects and Section 8.48.150 contains BMP maintenance requirements. All of these additional sections, strengthen the City's water quality program by providing a legal basis for implementation and enforcement. During the review process, the City decided to also include the SUSMP as a Municipal Code section, Section 8.52 now contains the City's SUSMP document. This section will be further updated during the next reporting period with the approval of the new County-wide SUSMP document. During this reporting period, the City collaborated with the Copermittees to create the final draft SUSMP, which was then turned over to the Regional Board for review and approval.

2.1.3.2 JURMP

In compliance with Order 2007-01, the City's JURMP document underwent a major update during FY 2007-08. This update process was continued after receiving comments from the Regional Board in early 2009. The JURMP document serves as the City's foundational storm water program management tool, capturing the developed process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Lemon Grove.

2.2 Environmental Review Process

As part of the 2008 JURMP update, the City evaluated its environmental review process and confirmed that the current process accurately evaluates water quality, cumulative impacts, and identifies appropriate measures to avoid, minimize and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality.

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.3 Development Project Approval and Verification Process

As discussed previously, the City has an established multi-departmental review process for all new development and redevelopment projects. By using all of the above mentioned regulations, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP. Each proposed discretionary and ministerial project is subject to the City's development approval process. The following sections describe this process in detail.

2.3.1 Source Characterization

As discussed above, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments, whereas grease and oil are more likely contributed by parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP, which was updated and added to the Municipal Code during FY 2007-08, describes specific categories for priority projects and indicates common pollutants associated with each category. A priority project must

identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

In the City, all development projects, including building and ministerial permits are required to implement minimum BMPs. These BMPs include construction BMPs and good housekeeping practices. Discretionary projects, however, generally pose a greater potential threat to water quality and are subject to an additional set of BMPs and more intense scrutiny.

2.3.2 Best Management Practice Requirements

The City's minimum BMP requirements for all discretionary development projects are summarized here and are included in the City's SUSMP. All discretionary development projects are required to explore and implement where applicable the following principles:

- Source control BMPs that reduce stormwater pollutants of concern in urban runoff, including but not limited to storm drain stenciling and signage, properly designated and covered material and trash storage areas, and the use of efficient irrigation systems.
- LID BMPs that provide retention, slow runoff, minimize impervious footprint, direct runoff into landscaping, and promote water conservation.
- Grading and construction activities must implement all requirements outlined in the City's JURMP and Municipal Code.
- Submittal of proof of on-going long term maintenance for all structural post-construction BMPs.

SUSMP priority projects must submit a water quality document, which includes identification of potential pollutants from the project, proposed LID, source control and treatment control BMPs, and an attached maintenance agreement. The document must also include how the project will manage increases in runoff discharge rates and durations associated with the project. It is the City's policy to prevent permitted projects from increasing the runoff coefficient that eventually enters the City's MS4. Both the water quality document and hydrology report must provide retention and detention details for any runoff increase due to the development or redevelopment of a site.

2.3.2.1 Hydromodification Management Plan and Interim Hydromodification Criteria

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order 2007-01, the City is currently collaborating with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP).

The final draft HMP was submitted to the Regional Board at the end of this reporting cycle and will be approved and integrated into the City's program during the next reporting cycle. However in FY 2007-08, the City established interim hydromodification criteria that will be in effect until the final HMP is approved by the Regional Board and adopted by the City. The City requires all priority projects disturbing 50 or more acres to comply with the interim hydromodification criteria, except those sites that are considered exempt as per Section D.1.(g)(6) of the Permit. These interim requirements are consistent with the regionally adopted interim hydromodification standards. The City of Lemon Grove is a small developed community and does not anticipate any projects during the following reporting period that will meet these criteria. The City also connects almost exclusively to concrete channelized streams at its borders and does not anticipate frequent projects subject to future hydromodification requirements.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to the development project's proposed stormwater BMPs during project construct must be reviewed and reapproved by City staff before being implemented.

2.3.3 Program Implementation

As required by the Permit, the City has implemented a program to ensure that development and redevelopment projects comply with post-construction BMP requirements, including Low Impact Development (LID), source control, and treatment control BMPs. The Permit further requires the City ensure proper installation of treatment control BMPs and their maintenance into perpeturity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following sections provide an overview of the City's SUSMP implementation practices and tracking during FY 2009-010.

2.3.3.1 Model and Local SUSMP updates

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into the Municipal Code. In compliance with the interim SUSMP update standards established in Order 2007-01, the following tasks were performed during the review and interim update of the SUSMP:

- Priority project categories were updated
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained

- LID requirements and additional source control requirements were added to meet or exceed Permit requirements
- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary

In addition to the changes discussed above, a comprehensive model SUSMP update was completed by a regional workgroup during FY 2007-08. The comprehensive model SUSMP update includes the following as required by the Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Permit
- Establishment of siting, design, and maintenance criteria for each LID and treatment control BMP listed in the model SUSMP
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the model SUSMP is applicable and feasible
- Addition of a requirement for priority projects with low traffic areas and appropriate soil conditions to use permeable surfaces
- Addition of any necessary restrictions for infiltration BMPs from priority projects that generate high levels of pollutants

The City adopted the new Model SUSMP during this reporting period. The SUSMP includes a review process to verify all proposed BMPs for priority projects meet the criteria designated in the updated local SUSMP.

The City will also incorporate a Hydromodification Management Plan (HMP) into the City's local SUSMP during the next reporting period. The HMP was developed by a consultant and regional workgroup during this reporting period and the draft HMP was submitted to the Regional Board for approval.

2.3.3.2 Development Project Approval Process

The following includes a summary of the City's current development review process.

Discretionary Projects

Projects requiring a discretionary review are subject to an in-depth review by City staff. During the first submittal or pre-meeting, it is determined if the project is a SUSMP priority project and if a water quality document will be required. The project is reviewed by engineering, planning, sanitation, building, and water quality staff; through all permit phases. After review at the City, the project is reviewed by the City's Planning Commission and conditions of approval are set

for the project and approved by the City Council. These conditions require the applicant to uphold all proposed water quality measures and any changes are subject to review and approval by City staff and potentially the Planning Commission and City Council depending on the significance of the changes.

The City of Lemon Grove requires applicants to complete their water quality documents at the time of discretionary review and approval. During this process, the applicants and their engineers are guided by City staff to provide adequate post-construction BMP facilities and to document those facilities on the site plans and documents being submitted. This process results in better designed, more comprehensive, post-construction BMPs since the facilities are included in the project design even in the earliest phases of the project. Each applicant who prepares a water quality report for a priority project is provided a self checklist to assist in their report preparation. This checklist provides the applicant with an outline and details pertaining to the requirements of the SUSMP and the Permit for BMP implementation and sizing.

All hydrology reports and treatment control BMP sizing are done during this phase and are upheld through the remainder of the grading and building phase through the conditions of approval. The same City staff that performs the discretionary review also performs the grading and building permit reviews. This also maintains consistency throughout the review process and ensures the conditions of approval are upheld. City staff provides constant feedback and assistance to the applicant and their engineers through out this process and all additional permit processes. The City continues to discourage the use of mechanical treatment systems. Natural systems are easier and more cost effective to maintain in the long term, as well as encouraging landscaping and additional green space with little if any additional irrigation. All proposed BMPs must meet the standards set forth in the City's SUSMP document, which upholds the requirements put forth in the Permit. If the submittal is inadequate in any regard, approval is withheld and re-submittal is required.

Ministerial Projects

Grading, improvement plans and building permits are all ministerial permits, which means they only require the approval of City staff, not the Planning Commission or the City Council. However, if the project is not completed to staff's approval, no permits are issued and no actual work can be done on the project site. These projects are reviewed by all the same departments and staff as the discretionary projects. Lemon Grove is a small city and has a small staff, which allows the full spectrum of departments to be intimately knowledgeable about the projects being reviewed and any concerns pertaining to the project. If it is discovered that a ministerial project meets priority project conditions as per the SUSMP, all the requirements discussed above are applicable. No permits are issued by City staff until the project satisfactorily meets all of City staff's requirements, particularly water quality requirements.

All ministerial projects, except water heater installations and electrical wiring, are reviewed by water quality staff. Even if the project does not meet priority project standards, water quality staff reviews the project for LID concepts, proper drainage design, proper erosion control, and smart irrigation.

Post-Construction BMP Maintenance Agreements

All priority projects under review for permits must execute a stormwater maintenance agreement guaranteeing the maintenance and/or replacement of permanent BMPs as necessary into perpetuity. The maintenance agreement is recorded against and runs with the property. This ensures that all future owners maintain the permanent BMPs to the original standards and any changes require the approval of City staff.

Capital Improvement Projects

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear or repair projects, often only construction BMPs are necessary. However, SUSMP qualifying projects must also install post-construction BMPs. Priority CIP projects are designed to incorporate the City's SUSMP requirements and LID, source control, and treatment control BMPs will be implemented. The city takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.3.3.3 SUSMP Project Approval

During the planning process, the City reviewed eleven SUSMP projects during this reporting period. A list of those projects can be found in Appendix H4. All applicable SUSMP BMP requirements specified in the City's local SUSMP were applied to each of these projects. Under no circumstances was any priority project permitted to implement treatment control BMPs with low pollutant removal efficiency ratings. In addition, all of the development projects approved in FY 2008-09 were less than fifty acres in size; therefore none of the projects were required to meet Interim Hydromodification Standards. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2009-10. Depending on the date in which the project was reviewed and approved, conditional SUSMP requirements may vary as a result of the migration to the new Permit requirements and the required adoption of the new local SUSMP.

2.3.3.4 SUSMP Project and Treatment Control BMP Tracking

Over the past fiscal year, water quality staff worked to implement a watershed-based SUSMP tracking system. In the future, this tracking system will be transitioned to a GIS based system. However, it is currently only a tracking database. Since the City is predominately in the Chollas Creek watershed with only a small portion in the Sweetwater watershed, it is not difficult to track projects by watershed. The database tracks the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located
- Date of construction of the BMP
- Responsible BMP maintenance party information
- Owner information if different from maintainer
- Receipt of annual maintenance verification
- Inspection findings
- Corrective actions if necessary

The City is continually working to refine the database as more permanent BMPs are implemented and tracked. The City currently has less than 10 tracked BMPs, although several more are still in the proposal and review stage as evidenced by the priority project list. Due to the small number of permanent BMPs in the City, staff inspects all of them regardless of JURMP priority level. They are inspected formally on an annual basis, but frequently informally inspected when staff is in the vicinity. If, in the future, the number becomes significantly larger, the City will begin to utilize the priority rating to determine inspection frequency.

2.3.3.5 BMP Installation Verification Process

The City has always verified the proper installation of all permanent BMPs and LID components, which are similar to the site design elements of the previous Permit. The City continues this practice under the new Permit. Each project requires closing signatures from staff once construction is completed. This involves an on-site staff visit to verify the project was constructed per the plans and appropriate documents including any water quality reports, hydrology reports, and soil findings. If corrections are needed, staff does not provide a signature and can withhold that signature for as long as it is needed to gain compliance. Without compliance, the site cannot be used for its final purpose. If compliance is not reached within a reasonable amount of time, Code Enforcement proceedings are begun. Each project under goes frequent staff inspections during the construction as detailed in Chapter 3 of this report to ensure that any underground elements are being built according to the approved plans and provide regular staff feedback and assistance. All in the hopes of a properly designed site at signature request time. The final signature process involves the same departments that reviewed the project from its initial stages,

typically this includes planning, engineering, sanitation, and building. This means that the staff providing the final implementation inspection is the same staff that reviewed and approved the project, meaning they are very knowledgeable of the project and its requirements. The City's interdepartmental cooperation is instrumental in making this process effective and efficient. Problems are viewed and solved jointly and comprehensively.

2.3.3.6 Annual Treatment Control BMP Operation and Maintenance Verification and Inspection

As required by the new Permit, all treatment control BMPs installed at development projects must be inspected annually and maintained in perpetuity by the responsible party. As part of the JURMP update, the City established a Treatment Control BMP tracking program. Because implementation of the City's JURMP did not begin until January 2008, this reporting period is the second year the tracking system has been used. Annual inspections took place by City staff during this reporting period of all permanent BMPs that have been in operation for at least one full year and rainy season. Again, due to the small size of the City and the currently small number of permanent BMPs, the City was able to inspect all of the BMPs meeting the one full year of operation criteria. As stated before, should that number increase drastically, the City will then begin to use the priority ratings established in the JURMP. A listing of the BMPs inspected during this reporting period can be found in Appendix H5. The City is currently working to implement the annual verification letter requirement. As this is a new and additional requirement for businesses, there have been some initial delays in receipt of these letters and receipt of incomplete information. However, the City is working with the businesses to obtain all the required information in a more timely manner. The City is working to integrate the letter process into its annual commercial and industrial inspection program to solve the previously mentioned difficulties. This information is tracked in the same database that tracks BMP location and inspection results. The City has mailed a notification letter to all those owners/operators that will be required to provide annual BMP verification letters to the City. These letters must be submitted prior to the start of each year's rainy season.

In the first year of implementation, the City anticipates a significant amount of information gathering and validation. Through initial contacts with responsible parties, the City will refine its inventories as well as methodologies to effectively assure proper maintenance and management of permanent BMPs.

2.3.3.7 Enforcement Measures for Development Sites

Since the City's Treatment Control BMP Operation and Maintenance Verification and Inspection Programs did not commence until FY 2007-08 and prior to that the City had a very small inventory of operational treatment BMPs, no enforcement action was required. Verifications and inspections will be completed

as required prior to the rainy season of each reporting period and any subsequent enforcement action will be tracked and reported in the next annual report.

The City will use a variety of escalating enforcement methods to implement storm water requirements for all development projects within the City's jurisdiction. This process is standard for any code violation does not threaten the public's health or immediate safety. Most issues are handled informally with a verbal warning and follow up inspection. These are not always tracked, as this is considered the informal part of the compliance process. The City believes it is important to provide the owner/operator a chance to correct a violation prior to beginning a retribution process. However, if a verbal warning is insufficient, formal proceedings begin with a written notification sent certified mail to verify receipt and detailing the time of the next inspection. The City is flexible on the compliance time frame depending on the severity of the work required for compliance. If a swale needs to be mowed, the City would allow seven days for compliance. However, if a private channel needs concrete work, the City is apt to allow 30 days for compliance as this requires significantly more labor, equipment and cost. Subsequent inspections verify compliance and if continued non-compliance is found; notices of violation, monetary fines, property liens, withheld permits, and small claims court are all viable follow-up actions based on length and severity of non-compliance. A detailed description of the Code Enforcement process is available in the City's JURMP document or through the City's Municipal Code which can be found on-line at www.ci.lemon-grove.ca.us.

2.3.3.8 Notable Activities

Several notable activities were conducted as part of the Development Planning Component during the last several reporting periods. Notable activities included:

- Comprehensive review and update of the City's JURMP
- Comprehensive review and update of the City's Municipal Code
- Comprehensive review, update, and adoption of the regional Model SUSMP
- Development and Implementation of the BMP Verification and Inspection tracking database
- Comprehensive review and revamp of the annual report based on Regional Board feedback
- Continued education of project developers
- Revision of checklists provided to developers to reflect new standards and language

The City will continue to develop and amend its water quality development processes to meet new requirements and demands based on water quality results and improvements in technology. Future annual reports will detail these changes as they take place.

Section 3.0 Construction Component

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site BMPs, inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Permit as outlined in Section D.2.

3.1 Source Characterization

3.1.1 Site Inventory

Within the defined reporting period of this report, the City has compiled, maintained, and updated a watershed based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2009-10 included a total of eight operating construction sites, mostly private driveways and private sewer laterals. Only two of the projects were SUSMP priority projects and they are discussed below. The City formally inspected all of these sites on a monthly basis and informally almost weekly. All of the sites during this reporting period were within the City's main watershed, Chollas Creek.

The City completed 12 minor infrastructure improvement projects during FY 2009-10. All of the projects were minor street resurfacing or pavement rehavilitation. The City has been forced to drastically decrease its street resurfacing due to current budgetary constraints.

- Hardy Drive
- Siegle Court
- Blossom Hill Drive and Court
- Craig Court
- El Verde Court
- Olive Street
- San Altos Place
- Loma Drive
- Circle Drive
- Roosevelt Street
- Edgerton Street
- Lemon Grove Ave, N
- Mount Vernon Street

The City defines a high priority construction site by the following guidelines:

- 50 acres or more and grading during the wet season;
- 5 acres or more and on a tributary of a 303(d) list waterway
- The City may include other sources and activities that contribute significant pollutant loads to the MS4

According to the above definition, the City had no high priority construction sites during this reporting period. However, the City had one construction site that it monitored very closely during this reporting period.

- The rehabilitation project at the City's Recreation Center, which was not a priority project and had a decrease in impervious surface area.

The City performed weekly inspections this location, during both the dry and wet seasons, to ensure the proper placement of BMPs and general site upkeep.

3.1.2 Ordinance Updates

As required by Section d.2.a of the Permit, applicable City documents and ordinances were updated in March 2008 to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code 8.48 Stormwater Management and Discharge Control and 18.08 Excavation and Grading. The following construction specific provisions have been made to these two sections:

- Best Management Practice requirements and general requirements applicable to all dischargers (8.48.060)
- Additional requirements for land disturbance activity (8.48.130)
- Minimum BMPs for land disturbance activity (18.08.140)
- BMP maintenance (18.08.180)
- Stormwater runoff (18.08.450)
- General Construction permit requirements (18.08.900)

3.2 Best Management Practice Requirements

The City requires that BMPs be implemented to reduce or eliminate the impact of discharges from construction site runoff primarily through its grading ordinance. The checklist available in Attachment I-5 gives a breakdown of the City's grading permit requirements.

3.2.1 BMP Requirements for Permitted Construction Sites

Through the JURMP update process completed in March 2008, the City reviewed and updated a set of minimum BMps that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion control BMPs to reduce, retain, and manage pollutant discharges to the MEP. During FY 2009-10, the following BMPs were required on all sites for which permits were issued:

- Erosion Control Methods for Disturbed Slopes: Vegetation Stabilization (Planting), Hydraulic Stabilization, Bonded Fiber or Stabilized Fiber Matrix, Physical Stabilization (Erosion Control Blankets);

- Sediment Control Methods for All Disturbed Flat Areas: Mulch, straw, wood chips, or soil application, De-silting Basin (must treat all site runoff), Energy Dissipater and Outlet Protection
- Methods for Preventing Off-Site Tracking of Sediment: Stabilized Construction Entrance, Construction Road Stabilization, Entrance/Exit Tire Wash, Entrance/Exit Inspection and Cleaning Facility; and
- General Site Management BMPs for On-Site Waste: Materials Management (Material Delivery and Storage), Waste Management (Concrete Waste Management), Solid Waste Management, Sanitary Waste Management, and Hazardous Waste Management.

3.2.2 Seasonal Site Management Requirements

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are additional for the wet season (October 1st – April 30th). These requirements include:

- If necessary, upgraded perimeter protection for pending storms
- Erosion prevention BMPs must be installed, maintained, repaired, improved or replaced to the MEP and as is safe
- Amount of exposed soil shall not exceed seventeen acres, exceptions must be approved by the City Engineer
- Any incomplete disturbed area not being actively graded must be fully protected if left inactive for 10 or more days

Prior to the beginning of the wet season, the City sends a letter to the owners of all active construction sites explaining the wet weather BMP requirements and reminding them of the standard minimum requirements.

3.3 Program Implementation

The City ensures that BMPs are implemented to the standards described in Section 3.2 through several inter-related activities including permit issuance, project approval, field inspection, and public outreach.

3.3.1 Construction and Grading Approval Process

The City has an established and thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards. All other projects require a building permit. Both permits require that plans be submitted and approved by the City. The City's grading ordinance

requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a City wide data management system called HdL.

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As part of this approval process, the City's water quality staff also reviews the grading plans to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Plans are checked by planning, engineering, water quality, and sanitation. Engineering staff reviews the plans for overall compliance with the grading ordinance. Planning checks to verify the plans are consistent with any previously approved discretionary plans and to verify landscaping, if applicable. Sanitation checks for the location of any sewer laterals and ensures that all tie-ins are legal and properly located. Water quality staff checks the plans for specific compliance with the stormwater section of the Municipal Code, the Permit, the local SUSMP, and any other applicable State or Federal regulations. If the site falls under the jurisdiction of the State's General Construction Permit, staff follows up with the developer to ensure that a SWPPP is properly prepared and submitted. In addition, the SWPPP is reviewed and approved as part of the normal approval process and must be complete before the grading permit is issued to the applicant. The City also requires proof that a Notice of Intent (NOI) has been submitted for sites that are subject to the General Construction Permit.

Prior to issuing building and grading permits, staff verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP.

3.3.2 BMP Implementation

Water quality staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the Engineering Department and the City Inspector.

Staff constantly monitors weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all applicable inspectors to inform them of the possibility of incoming rain. This e-mail reminds them to verify BMP compliance at all active construction sites. If the forecast exceeds 40% over the coming five day period, letters are sent to site owners and inspectors check for any additional, applicable BMPs at each of the active sites and any inactive sites with exposed soil. The upkeep of these BMPs is monitored daily while the rain lasts.

Staff approved only no projects with SWPPPs during this reporting period:

Other project reviews completed by staff as part of the permitting process are addressed in more detail in Section 2.0, Development Planning.

Through the review and plan check process, staff may require additional or alternative BMPs to be implemented on individual projects. This allows the stormwater program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site. Any changes to on-site construction BMPs require the approval of the City Inspector and are tracked as red line changes on the construction site drawings.

3.3.3 Construction Sites Requiring Advanced Treatment

There were no sites in FY 2009-10 that required advanced treatment. For the majority of the construction sites with the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined that a project site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat to Water Quality (TTWQ), advanced treatment will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are included in the City's Municipal Code and in the new local Model SUSMP.

3.3.4 Inspections and BMP Verification

The City has an established inspection program to evaluate compliance with stormwater regulations at all construction sites within the City's jurisdiction. The City Inspector is responsible for inspections at all construction sites in the City. Stormwater issues, such as compliance with the grading and stormwater ordinances, are a main focus, especially during the rainy season. It is quite common for water quality staff to also assist in regular inspections and for building inspectors to notify City staff if a violation is observed or if compliance is questionable.

Due to the small number of active sites in the City during any given reporting period, the City inspects all active construction sites regardless of priority and extra attention is paid to any site with a higher threat to water quality during the rainy season. All sites are formally inspected monthly at a minimum and often receive informal inspections on an almost weekly basis.

The City Inspector tracks all inspection notes in a tracking database for future reference and enforcement actions if applicable. This database is updated after each inspection performed, so on a monthly basis at a minimum.

3.3.5 Compliance and Enforcement Actions

3.3.5.1 General Compliance

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites in its jurisdiction. Enforcement for construction projects is administered by the City Inspector and other applicable City staff, such as Code Enforcement.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may by applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to b corrected and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's stormwater regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop Work Notice. The NOV will provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City for construction sites are reported to the RWQCB per the reporting requirements of the Permit.

Civil penalties for violations of the Municipal Code are established in Section 1.24 of the Municipal Code. Determined violations of the stormwater regulations may be subject to administrative citations and associated administrative fines.

Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector and the severity of the violation.

3.3.5.2 Reporting and Non-Compliance

During the FY 2009-10, approximately six known complaints were received through the City's hotline and other phone lines pertaining to construction sites. All calls were investigated the day of the call; the majority of the complaints were unwarranted and not related to stormwater. Any violations that were discovered were corrected within 24 working hours of verbal notification to the site manager. The site was inspected by the Regional Board during this reporting period and only minimal corrections were required and all were completed within 24 hours of notification.

The municipal component of the City's stormwater program includes proper management of facilities owned and operated by the City of Lemon Grove to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, sewers, the storm drain system, and municipally owned facilities which includes six public parks, a fire station, a municipal yard, four office type buildings, a senior center, a public parking lot, one recreation center with a gymnasium, and one vacant lot. The updated municipal facilities index and inspection results are in Attachment J. The City also conducts high threat to water quality activities, as defined in the Permit, such as street and sidewalk repair, painting, graffiti abatement, equipment maintenance, and minor vehicle maintenance. The City, however, also performs a number of activities that are beneficial to water quality, such as street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel, annual MS4 inspection and cleaning, and regular upkeep of the sanitary sewer to prevent overflows and illegal connections.

4.1 Roads, Streets, Highways, and Parking Facilities

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.1.1 Source Characterization

The City maintains 65.5 miles of roadway in Lemon Grove and one public parking lot. This number includes main arterials, curbed residential, and non-curbed residential streets. The City also maintains center islands and medians on these streets and in all parking lots including those attached to municipal buildings. The City does not maintain any highways.

4.1.2 Best Management Practice Requirements

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's JURMP and the CASQA Municipal Handbook to choose applicable BMPs to implement for roads, streets, and parking facilities within the City. Street sweeping is the main BMP that is implemented for these sources. Treatment control BMPs are used for all road sections which are subject to SUSMP requirements, described in more detail in Section 2.0.

4.1.3 Program Implementation

This section describes the steps that were taken in FY 2009-10 to require and verify the implementation of designated BMPs for all City maintained roads, streets, and parking areas and related activites as outlined in the Permit Section D.3.a(5)(a-c).

The City currently implements an aggressive sweeping schedule for its roads, streets, and parking facilities. Long before Order 2007-01 was approved, the City was sweeping to its standards.

The frequency of street sweeping is as follows:

- Major arterial curbed streets – weekly
- All other curbed streets – biweekly
- Non-curbed streets – monthly
- Center islands and medians – monthly
- Major parking lots and alleys – weekly
- All other parking lots and alleys – monthly

During FY 2009-10, the City maintained its street sweeping mileage from the previous reporting period, approximately 80 miles and 175 tons of debris were collected. These figures include the regular sweeping of roads and parking lots, as well as specialty or requested road sweeps and the municipal yard. The City also sweeps bus stops, various parking lots and miscellaneous private streets based on need.

4.2 Fixed Facilities

The City owns and operates a variety of fixed facilities that have been grouped in this section because these facilities received formal inspections as part of the stormwater program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreation Facilities
- Public Works Facilities
- Fire Stations
- Other Fixed Facilities

4.2.1 Source Characterization

The City inspects all municipal facilities on an annual basis. This includes the following list of facilities:

- All six public parks (Kunkel, Berry Street, Lemon Grove, City Center, Fireman's, and Monterey Heights)

- Fire Station
- Recreation Center
- The Community Center
- City Hall/Sheriff's Station
- Senior Center
- City Hall Annex
- Trolley Depot

The City's JURMP does rank each of these facilities based on their threat to water quality, however due to the City's small size it is possible to inspect each facility on an annual basis.

Parks and Recreation Facilities

The City operates six public parks:

- Berry Street Park – 7101 Mt. Vernon St., Chollas Creek watershed
- City Center Park – 7715 Church St., Chollas Creek watershed
- Fireman's Park – School Ln and Central Ave, Chollas Creek watershed
- Kunkel Park – 8171 lemon Grove Way, Sweetwater River watershed
- Monterey Heights Park – Canton and Glencoe, Chollas Creek watershed
- Lemon Grove Park – Washington and Alton, Chollas Creek watershed

All landscape maintenance activities are performed through the City's Grounds Division. In previous reporting periods, a portion of the parks were maintained through a private contractor. However, due to current budget constraints, those services were cut and taken over in-house. The Grounds division is trained and certified to handle pesticides, herbicides and fertilizers properly. They perform all landscaping and irrigation maintenance, as well as all trash and debris removal for all six parks.

Public Works Facility

The City owns and operates one public works yard. The only equipment maintained on site is the landscaping equipment used by the Ground's Division. This frequently includes mowers, the Gator (a small all terrain vehicle), chain saws, and other small devices. The City maintains a small fleet of large vehicles including several pick-up trucks, a dump truck, a paver, a video camera truck, and a vactor truck. All large vehicle service is performed off site under a private contract at a non-City facility. The public works yard does not contain a gas filling station and all materials are stored under covered areas, in doors, or surrounded by BMPs like straw wattle and gravel bags.

Fire Stations

Fire fighting is an essential element of municipal activities conducted in the City. The City has one fire station at 7853 Central Ave. The fire station is home to three engines and one ambulance response vehicle. All servicing on these vehicles is done off site under contract at a non-City owned facility. Very minimal equipment maintenance is performed on site. It includes the cleaning and maintaining of the hoses and chainsaws.

Other Fixed Facilities

Other fixed facilities include the City's office and administrative facilities.

- City Hall/Sheriff's Station – 3232 and 3240 Main St.
- City Hall Annex – 3225 Olive St.
- Community Center – 3146 School Lane
- Recreation Center – 3131 Main St.
- Senior Center – 8235 Mt. Vernon St.

Despite theses facilities being low threats to water quality, all are inspected annually. Inspection results are in Appendix C.

4.2.2 Best Management Practices

4.2.2.1 Updated BMPs

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP and the City's Municipal Code. The City also references the CASQA Municipal Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2009-10, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas, such as medians and traffic islands. The City is maintaining general waste management BMPs and encouraging facility users to recycle, properly dispose of trash, and pick up dog waste by providing conveniently located receptacles at parks and in common dog walk areas. Doggie bag dispensers are available at the 3 largest, most frequently

used parks (Berry Street, Lemon Grove, and Kunkel) and at City Center Park. These are frequently vandalized, but the City works hard to keep them full and operational. They are checked weekly and maintained as needed.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: a) runoff from improper irrigation after application, b) application of chemicals during or prior to storm events, c) use of chemicals that do not properly absorb into soil or plants, and d) overspray from chemical applications that may eventually enter the MS4. The City maintains the following procedures and BMPs pertaining to integrated pest management:

- Educating and training staff and contractors on all BMPs
- Requiring any contracted party to adhere to all City codes and procedures pertaining to proper use of pesticides, herbicides and fertilizers
- Implementing a process for identifying pests and/or problems by site
- Selecting less toxic treatments
- Proper training and licensing of all personnel who handle pesticides, herbicides, and fertilizers
- Use integrated pest management techniques whenever possible
- Record keeping for application dates, times, locations, and quantities.
- Pesticides, herbicides and fertilizers are applied per manufacturers directions and only as needed.
- Compost, mulch, and soil amendments are used whenever possible.
- All federal, state and local regulations are followed
- Pesticides, herbicides and fertilizers are not applied prior to a predicted rain event
- Native and drought tolerant plants are used whenever possible
- Small weeding is done by hand
- Diseased or infected plants are removed completely, if proper treatment is ineffective
- Irrigation systems are remotely controlled and weather and flow sensitive to prevent over watering due to rain or a broken line

Public Works Facility

Public works staff implements appropriate BMPs for all activities that take place at the Public Works yard. This facility uses good housekeeping BMPs most frequently, including but not limited to spill kits, sweeping, dry clean up methods for any oil spills, and proper cleaning of painting equipment. Minimal small equipment maintenance is performed on site, limiting potential pollutants from vehicle maintenance and repair. All of the large vehicles are maintained off site. The site has a SWPPP which includes a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The

SWPPPs is kept at the facility and the facility is inspected annually by water quality staff and monthly on an informal basis. All Public Works employees receive monthly informal training as detailed in Section 8 of this report.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities in the City. The City's fire station uses source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City. All the engines and emergency vehicles are maintained off site. Only small equipment such as chainsaws are cleaned and maintained on site, always using best housekeeping practices to prevent pollutant generation. The Fire Marshal receives regular water quality updates at a weekly joint meeting with water quality, planning and engineering. Water quality staff has worked jointly with the fire department on several occasions when dealing weed abatement, commercial inspections, or illegal dumps. These occasions have provided excellent informal opportunities for education, which have been passed on to other fire personnel. It is common for fire personnel to call water quality personnel from the field with potential water quality concerns. They are an invaluable set of eyes in the community on a daily basis for potential water quality concerns.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management as per the Municipal Code and the CASQA Municipal Handbook.

The City employs a number of pollution prevention practices at City Hall. These practices have been expanded in recent years to include:

- The use of recycled paper for all copiers and printers
- Programmable thermostats to control heating and cooling systems
- Implementing a furlough work schedule, so main City buildings are closed very Friday
- Installing timers on exterior lighting
- Supplying each employee with a personal recycling container
- Providing large recycling containers near all dumpsters and access doors
- Lids on all dumpsters
- A battery collection site accessible by employees only
- Allowing City employees to participate in all local e-waste events

4.2.2.2 Additional Controls for Municipal Areas and Activities

If the City identifies any potential sources of other pollutants of concern for which water bodies in the City are 303(d) listed that could be a result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no municipal fixed facilities that have been determined to need additional BMPs due to 303(d) listings. The City's primary watershed, Chollas Creek, is 303(d) listed for several pollutants, including heavy metals and Diazinon. The City's current BMPs are preventing these pollutants and many others to the MEP. Any changes would be detailed in the applicable future annual report.

4.2.3 Program Implementation

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and enforcement actions if necessary. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.2.3.1 Maintenance

In FY 2009-10, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot,and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular street sweeping hours.

City personnel are trained and required to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly and to report illegal discharges/illicit connections, as they may come across them during normal work activities.

4.2.3.2 Training and Education

Municipal personnel are trained on implementing appropriate BMPs and preventing non-storm water discharges. In FY 2008-09, water quality staff provided regular training and updates to the following municipal departments: Public Works, Engineering, Planning, and Fire. A detailed description of the municipal education program can be found in Section 8 of this report.

4.2.3.3 Municipal Inspections

Water quality staff performs annual inspections at all of the City facilities. As part of the FY 2009-10 program, staff conducted 14 inspections, one at each facility. The results of these inspections can be found in Appendix J. Any required corrective actions have been taken. No enforcement actions were required at any of the municipal facilities during this reporting period.

4.3 MS4

The primary function of municipal separate storm sewer systems are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consists of streets, curbs, gutters, catch basins, inlets, pipes, natural channels, natural and piped creeks, and culverts. The City also maintains a number of treatment control BMPs such as filter inserts and curb inlet protection, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the MEP.

4.3.1 Source Characterization

The City maintains a variety of MS4 facilities which includes 190 catch basins and inlets, approximately 75 miles of piping, and approximately 2.5 miles of open channel. The City plans to put all of these facilities in GIS during future reporting periods. However, due to budget constraints, these plans are currently on hold.

4.3.2 Best Management Practice Requirements

4.3.2.1 Updated BMP Requirements

In FY 2007-08, the City prepared a JURMP update which directs staff to utilize the CASQA Municipal Handbook in addition to the Municipal code to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste and pollutants from entering the MS4 system as well as ensuring that waste which is collected during maintenance for the City's MS4 does not re-enter the system.

The 2007 Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City does not own or operate any flood management projects or flood control devices that may be retrofitted.

4.3.2.2 Additional Controls For Municipal Areas/Activities

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined necessary.

4.3.3 Program Implementation

The City's MS4 management program includes responding to complaints, detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, by repairing and/or replacing damaged or failing MS4 structures; and by providing signage on storm drain inlets. The City trains and requires field staff to implement BMPs, inspect equipment and follow an action plan for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a vactor truck during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance.

All maintenance activities during this reporting period were in compliance with the current Permit. All maintenance BMPs were updated in FY 2007-08 to correspond with any new Permit requirements.

4.3.3.1 Maintenance

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year is included below:

- Within this reporting period, the City inspected forty-three roads, 190 catch basins and sixteen conveyances connected with the MS4. The same numbers as the previous reporting cycle. Only seven conveyances and 68 catch basins were found to be in need of cleaning and 100 percent of these were cleaned prior to the end of the reporting period. This resulted in the removal of approximately 1,860 pounds of trash and debris from the catch basins, conveyances, and roads. The City also manually removed invasive plant growth from those seven conveyances, providing approximately another 1,500 pounds of green debris. The cleaning of catch basins and conveyances is an annual event that takes place prior to the beginning of the rainy season and usually occurs between October and November.
- The City continues to install Trident Curb screens and has added Streamhawks to several curb inlets as well. Both of these devices prevent trash, debris, and sediment from entering the MS4 by keeping the debris in the curb line and easily accessible to the street sweepers. The City attributes the decreases in trash quantities found in and around conveyances to these devices and the more efficient use of the street sweepers.

4.4 Sanitary Sewer System

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.4.1 Source Characterization

The City maintains 64.952 miles of sanitary sewer pipeline. The sanitary sewer system serves the entire Lemon Grove area and connects with San Diego and La Mesa's sewer systems. La Mesa utilizes 728.60 EDU of Lemon Grove's sewer space and San Diego uses 986.20 EDU.

4.4.2 Best Management Practice Requirements

4.4.2.1 Updated BMP Requirements

The City has created and maintains basic BMPs in the JURMP and the Municipal Code. The City also utilizes the CASQA Municipal Handbook as a reference guide for BMP implementation, including the maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.4.2.1 Additional Controls for Municipal Areas and Activites

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program the minimizes sanitary sewer overflows (SSO) and is described briefly below and in more detail in the City's Sanitary Sewer Management Plan (SSMP) in accordance with Order 2006-03.

4.4.3 Program Implementation

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediation of existing lines as necessary, and proper disposal of hazardous waste.

4.4.3.1 Maintenance

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2009-10, the City cleaned and maintained the following portions of the sewer system. Hotspots are inspected three times annually and easements are inspected twice annually.

Table 4.1
Sanitary Sewer Services in Feet

	Total FY 2005-06	Total FY 2006-07	Total FY 2007-08	Total FY 2008-09	Total FY 2009-10
Cleaned	**298,043**	**331,369**	**52,493**	**646,943**	**359,174**
Root Cut	**18,370**	**20,927**	**36,039**	**596,943**	**329,174**

Within those numbers is the following information:

- 26,919 feet of hotspot line was cleaned and root cut
- 124,265 feet of easement line was cleaned and root cut
- 207,990 feet of right of way line was cleaned and root cut

All SSO information was reported electronically to the Regional Board through the SSMP program. However, the City had no mainline overflows during this reporting period. The appropriate City staff are trained in detecting, reporting, and responding to all SSOs.

4.5 Mobile Municipal Activities

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.5.1 Source Characterization

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- Power washing for graffiti removal
- Street and sidewalk repair and maintenance (striping, repainting, and pothole repair)
- Landscape maintenance

4.5.2 Best Management Practice Requirements

4.5.2.1 Updated BMP requirements

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities described above. During the City's JURMP update, minimum BMPs were established for all municipal activities. The City also references the CASQA handbook and the Municipal Code to ensure the use of all applicable BMPs for any given activity.

4.5.2.2 Additional Controls for Municipal Areas and Activities

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined necessary. Presently, City related mobile activities have not been determined a high threat to water quality. Public Works and Grounds division staff are vigilant about the use of proper BMPs when doing any mobile activity. Pollutant generation is limited to the MEP through temporary BMPs such as gravel bags and straw wattles or good housekeeping practices such as dry spill cleaning, wet vacuums, and sweeping. During this reporting period, the current BMPs were evaluated and determined to be sufficient and to the MEP.

4.5.3 Program Implementation

In FY 2009-10, City staff were sufficiently educated in the proper BMPs to utilized during mobile activities. These BMPs include proper containment, control, and capture of any discharge generated by a mobile activity and possibly carrying pollutants.

4.6 Special Events

The City hosts a very limited number of special events each year and even fewer under the current economic climate. The current line-up consists of the Winter Bonfire, the Fire Station Open House, and Concerts in the Park. Special events have the potential to generate significant trash and litter caused by the patrons

and activities of the special event. The City utilizes many of the controls listed in Permit Section D.3(2)(f). These BMPs are described in more detail below and are implemented during and/or after special events, when and where applicable.

4.6.1 Source Characterization

The City hosts a few special events each year that have the potential to produce trash and debris pollutants.

4.6.2 Best Management Practice Requirements

4.6.2.1 Updated BMP Requirements

In FY 2009-10, the City implemented many of the controls specific to special events listed in Section D.3(2)(f) of the Permit. The City has chosen the following BMPs as most effective and efficient for City needs.

Anyone outside of the City seeking a Special Events Permit, must ensure the following BMPs are maintained:

- Proper management of trash and litter, including temporary trash receptacles
- Post clean up activities, such as catch basin cleaning and general litter pick-up, when necessary
- Post event street sweeping, when necessary
- Other BMPs when considered necessary by City staff

The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.6.2.2 Additional Controls for Municipal Areas and Activities

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary.

4.6.2.3 Program Implementation

In FY 2009-10, there were the following City sponsored special events:

- Movie Night in the Park
- 6 Concerts in the Park
- Winter Bonfire
- Fire Station Open House

At a minimum, these events were required to provide extra trash and recycling containers, proper disposal of grease if food preparation was involved, and proper secondary containment for port-a-potties.

During the events, City staff was on hand to ensure that the event remained free of illegal discharges and/or illicit connections to the MS4. City staff were available for the duration of the event and afterwards for immediate trash removal and to notify the appropriate staff if a problem was observed.

Section 5.0 Industrial – Commercial Component

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4. The City has implemented a program that aims to reduce and prevent industrial and commercial pollution discharges from the MS4 to the MEP, to protect local receiving water bodies, and to comply with the Permit.

Commercial facilities within the City include a wide range of oriented businesses from restaurants to nurseries. There is one main commercial area within the City, along Broadway and down Lemon Grove Ave. This area contains many different commercial businesses ranging from restaurants to automotive outlets. The City's industrial area runs along Federal Blvd adjacent to SR 94.

Throughout FY 2009-10, City staff has worked diligently to fulfill the requirements of Order 2007-01. The City worked to ensure our current inspection program met the requirements of the current Permit and made any adjustments necessary. Due to the City's small size, staff is able to inspect a larger than needed majority of its commercial facilities and all of its industrial facilities. The City also continues to participate in the development of a regional mobile business program. The following section will demonstrate the City's successful implementation of the requirements of the Permit (Section D.3.b) during FY 2009-10.

5.1 Industrial-Commercial Sites/Sources Element

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The City emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Permit.

For the rest of Section 5.1, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial sites/sources component is described in Section 5.2.

5.1.1 Source Characterization

A watershed-based inventory of the industrial and commercial sites/sources within the City was compiled as part of the 2008 JURMP update. As required by the Permit, the inventory includes the following information for each site/source: facility name, address, possible pollutants, if the site drains to a 303(d) listed

waterbody, and a brief description including SIC codes which best reflect the principal products or services provide by each facility. This list can be found in the 2008 JURMP. Because mobile commercial businesses do not have a fixed address at which they operated, they are tracked within a separate, non-spatial database.

The commercial inventory is continually updated as facilities go out of business and new facilities open. This process is performed primarily through the business license data base. Staff also collaborates with the Fire Marshal to verify existing and new facilities and to combine inspections. In addition, the City identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered or licensed with the City. When this occurs, these facilities are added to the inventory and the proper City staff are notified to ensure the business is brought into compliance with City licensing requirements. During annual facility inspections, City staff has the opportunity to identify new or closed businesses and update the inventory with these findings.

In FY 2009-10, the City continued its focus on high priority commercial businesses by inspecting all restaurants, manufacturers, and automotive repair facilities with in the City. This totaled 34 facilities for this reporting period, the list of which is located in Attachment K 2. Table 5-1 contains a summary of the commercial facilities found in the City. The summary includes home businesses like carpet cleaners and household cleaning services, which the City finds to be difficult to inspect due to their transitory nature and small size (typically one person operations). The City deals with these operations more from a residential perspective than a commercial perspective and requires the standard minimum residential BMPs of these services. The City also inspects parking lots in conjunction with their respective buildings and does count them separately in the site total.

Table 5-1 - Summary of High Priority Commercial Sources

Commercial Activity	Number of Facilities in Lemon Grove
Automobile Dealers/Rentals	18
Automobile Supply Stores	9
Automobile Repair/Paint	9
Automobile System and Tire Repair	56
Automobile Cleaning/Washing	3
Gas Stations	7
Eating/Drinking Establishments	60
Landscaping, includes lawn care	9
Nurseries and Greenhouses	1
Pest Control	3
Equipment Repair/Maintenance/Cleaning	3
Metalwork	6
Masonry	4
Parking Lots and Storage	3
Carpet/Building Cleaning	21

Pool and Fountain Cleaning	3
Total	**215**

The City has 19 industrial facilities, most of which are high priority due to their proximately to Chollas Creek, a 303(d) listed waterbody. The City inspects all of these facilities on an annual basis. This number includes the three facilities which fall under the Statewide Industrial Permit as well. Table 5-2 contains a summary of these facilities.

Table 5-2 - Summary of High Priority Industrial Sources

Industrial Activity	Number of Facilities in Lemon Grove	Revised High Priority Category Facilities
Waste Disposal and Recycling	1	
Equipment/Transportation	3	2
Metalwork	2	3
Building Supplies and Woodworking	3	2
Industrial Paper		1
Contractor, Special Trade		1
Specialty Hardware, Drapery		1
Total	**9**	**10**
	Total Facilities	**19**

As part of the 2008 JURMP update and development of the interim SUSMP, the City collaborated with Copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-3 in Attachment K2 lists the pollutants that may be generated by each category of business. The pollutants that many be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in the JURMP.

All industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR S. 122.26 (b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing*
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling
- Pest control services
- Eating and drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning*
- Cement mixing and cutting*
- Masonry*
- Painting and Coating*
- Botanical or zoological gardens and exhibits
- Landscaping*
- Nurseries and green houses
- Golf courses, parks, and other recreational areas/facilities
- Cemetaries
- Pool and fountain cleaning*
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services*

*All mobile commercial businesses are discussed in Section 5.2.

Both Industrial and Commercial Facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired waterbody segment, where the site/source generates pollutants for which the waterbody is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e. within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA)
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.1.2 Best Management Practice Requirements

5.1.2.1 Updated BMP Requirements

During the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sties and incorporated these into the City's Municipal Code Sections 8.48.080 and 8.48.090. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's JURMP and Municipal Code. The Municipal Code can be accessed through the City's website: www.ci.lemon-grove.ca.us.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP and implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are based on a review of the site's SWPPP and site inspections, where needed.

5.1.2.2 Additional Controls

The City requires the implementation of additional controls for industrial and commercial sties and sources that are 1)tributary to CWA Section 303(d) impaired water body segments or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

The City prescribed additional controls during inspections of commercial and industrial facilities, as needed, depending on the proximity of the facility to the waterbody and the observed potential of the site to be a significant source of pollutants that may threaten the downstream waterbody as necessary and appropriate.

5.1.3 Program Implementation

This section describes the steps employed by the City to require and verify the implementation of designated BMPs for stationary industrial and commercial sources. During FY 2009-10, the City updated its program as needed, provided education and outreach through inspection actions, inspected inventoried businesses to evaluate compliance with established minimum BMP requirements

and the local stormwater ordinance, and took enforcement action as necessary to bring violators into compliance.

5.1.3.1 Inventory Prioritization

Since the new Permit no longer requires industrial and commercial facilities to be prioritized as high, medium, or low; the City prioritized industrial and commercial businesses as either high priority or non-priority.

When evaluating threat to water quality, the City considered the following attributes of each industrial and commercial business to determine priority or non-priority status:

- Type of activity (SIC code)
- Materials used at the facility
- Wastes generated
- Pollutant discharge potential
- Non-stormwater discharges
- Size of facility
- Proximity to receiving water bodies
- Sensitivity of receiving water bodies
- If the facility is subject to the General Industrial Permit or an individual NPDES permit
- Filing of a No Exposure Certification/Notice of Non-Applicability
- Facility design
- Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff
- Compliance history
- Any other relevant factors

Although not specifically required by the Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City uses the following additional spatial attributes to prioritize industrial and commercial facilities:

- Proximity to a 303(d) listed waterbody
- Pollutant potential of the facility type
- Stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. In addition, if during the City's commercial inspection process or based on institutional knowledge, it is determined that additional sites that would otherwise have a lower priority should be classified as high priority industrial or commercial facilities based on the Permit criteria, they were noted as such in the inventory and inspected as required.

The City's commercial inventory was updated and prioritized during the 2008 JURMP update and will be prioritized at least once per year prior to conducting annual inspections.

5.1.3.2 Inspection Frequency

FY 2009-10 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in the Permit. As part of the JURMP update, a new process to determine high priority facilities was formulized and put into effect during the previous reporting period. To determine which industrial and commercial sties were inspected in FY 2009-10, the following steps were taken:

- Confirm that the current industrial and commercial inventories are up-to-date.
- Prioritize each facility based on the prioritization process described in Section 5.1.3.1 of this document
- Review the list of facilities that were inspected the previous year
- Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with Permit standards, the inspected over 50 percent of all stationary industrial and commercial facilities inventoried as high threat to water quality and over 20 percent of all stationary inventoried sites. Mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Permit were met.

During the 2008 JURMP update, the City identified the businesses that would be inspected as part of the 2009-10 reporting period. The City's facility summaries can be found in Tables 5-1 and 5-2 of this section. The list of high treat to water quality stationary commercial facilities can be found in Attachment K2. The City inspected all of these facilities and all of the industrial facilities in Table 5-2 during FY 2009-10.

5.1.3.3 Routine Facility Inspections

The City routinely inspects its commercial and industrial facilities. Inspections are intended to:

- Provide facilities with information regarding the City's stormwater program
- Provide guidance in complying with stormwater regulations
- Validate and manage the inventory

During FY 2009-10, the City conducted 19 industrial and 34 commercial inspections for compliance with ordinances, permits, and policies. All inspections included, as applicable:

- Review of BMP implementation plans, if the site uses or is required to use such a plan
- Review of facility monitoring data, if the site monitors its runoff
- Check for coverage under the General Industrial Permit (NOI or WDID), if applicable
- Assessment of compliance with Copermittee ordinances and permits related to urban runoff
- Assessment of BMP implementation, maintenance, and effectiveness
- Visual observations for non-stormwater discharges, potential illicit connections, and potential discharge of pollutants to stormwater runoff
- Education and training on stormwater pollution prevention, as conditions warrant

Based on the results of each site evaluation, City staff completed an inspection form, which can be found in Attachment K1.

Staff generally works with site contacts to provide examples of BMP solutions that could be implemented. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the inspector is at the site. The responsible party is always provided a copy of the inspection findings after the inspection. For any sites found not in compliance, corrective actions are written on the inspection form along with any follow-up actions or inspections, as needed.

Inspection Tracking

Complaint and inspection documentation is filed in a tracking database and is kept up to date on a regular basis.

Third Party Inspections

All commercial inspections conducted in FY 2009-10 were completed by City staff. The City has one full-time Code Enforcement officer with a stormwater focus, who is dedicated to conducting routine commercial, industrial, and residential inspections and follow up for routine inspections as well as complaint calls. A third party was not employed to conduct inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting stormwater compliance inspections and enforcement of industrial and commercial facilities are training regularly on inspection and enforcement procedures, BMP implementation, and assessment of monitoring data. Water quality staff actively collaborates with inspection staff throughout the region to share methodologies and approaches that may be beneficial region wide.

Inspection Follow-up and Enforcement

Staff conducted follow-up inspections at all facilities that were directed to implement corrective actions. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. The City only had one non-compliant industrial facility. The facility was storing materials uncovered, outside. The corrective actions were given to the facility contact and all corrections were made by the follow up inspection. Twelve restaurants were found in non-compliance on the initial inspections, all corrective actions were minor and completed by the follow-up inspections. The restaurants continue to display confusion over the water quality inspections versus health code inspections and fire code inspections. For this reason, staff has worked diligently to provide on site education and to coordinate inspections with the City's Fire Marshal. It is not possible to coordinate inspections with the health inspectors as that is a County program with its own staff and own time lines for inspection requirements.

5.1.3.4 Notification

The City will notify each inventoried industrial and commercial business of the City's updated BMP requirements that are applicable to the site/source. During FY 2007-08, the City provided a formal letter notifying the facilities of any changes and that a new Permit had been issued. During FY 2008-09, the City did not feel a second formal notification was required and dealt with education during the actual inspection.

5.1.3.5 Complaint investigations, Violations, Enforcement, Follow-up and Compliance

When a complaint is registered with the City's hotline, e-mail, other phone line, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City staff with enforcement authority within a reasonable time frame. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or clean up activities by the City or responsible party.

As required by the Permit and depending on the severity of the violation, the City enforces its stormwater ordinances for all commercial and industrial facilities as

necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for staff to establish appropriate compliance time frames on a case by case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's Code Enforcement database.

During FY 2009-10, the City had four commercial related complaints and no industrial related complaints. The two commercial complaints were the hosing of parking lots. The behavior was stopped immediately upon investigation and both dischargers were educated on the proper dry methods for cleaning impervious surfaces.

Reporting of Non-Filers

The City did not identify any industrial sites that may require coverage under the General Industrial Permit, but which, to the City's knowledge did not file NOIs.

5.2 Mobile Sources

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City and do not typically have a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.2.1 Source Characterization of Mobile Sources

The mobile businesses known to operate within the City's jurisdiction are listed on an inventory found in Attachment K2. This inventory was prepared as part of the 2008 JURMP update. The following business types are addressed by the mobile sources element of the City's industrial and commercial program:

- Mobile automobile and other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades such as: cement mixing or cutting, masonry, painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile businesses that the City determines to have a significant threat to water quality will be added

to the inventory. Because not all mobile businesses have obtained business licenses in the City or have a base of operations outside the City, staff is continually refining and updating the mobile inventory. In addition, the City is participating in the creation of a regional mobile businesses list.

5.2.2 Best Management Practice Requirements

5.2.2.1 Updated BMP Requirements for Mobile Sources

All BMPs required for station sources, described in Section 5.1.2.1 of this document and listed in detail in the City's JURMP, are also required of mobile businesse, where applicable. The most important BMPs for most mobile businesses are typically those that address non-stormwater discharge control and spill prevention, control, and clean-up.

5.2.3 Program Implementation

5.2.3.1 Education/Outreach and Notification of Mobile Sources

The City will provide information and outreach regarding stormwater quality to mobile business owners and operators. Businesses will be given educational materials outlining pollution prevention methods and other related BMPs if businesses are found to be in violation of the City's stormwater ordinance or the Permit. City staff will also give recommendations to businesses, where applicable.

Because the mobile business program is a new element of the industrial and commercial program; it is anticipated that some mobile businesses are not aware of stormwater requirements and that education will be a significant portion of the program. The education is described in more detail in Section 8 of this report. It is worthy to note, that even before the issuance of the new Permit, City staff reviewed and gave verbal stormwater education to any mobile or automotive business license applicant.

The City will continue to coordinate and collaborate with the regional Education and Outreach Workgroup to notify the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three years of implementation of the updated JURMP.

5.2.3.2 Inter-Jurisdictional Cooperation

During this and the previous reporting periods, the City has participated with other Copermittees in a Mobile Business subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the

Copermittees have chose to collaborate on a regional mobile business strategy, which addresses the following elements:

- Inventory Development and Maintenance
- Establishment of Minimum BMP Requirements
- Outreach and Education including notifications

A consultant may be hired at some point to assist with this process. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy.

5.2.3.3 Inspections

The inspections for mobile businesses generally follow the same procedure described in Section 5.1.3.3 of this report. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, staff works directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.2.3.4 Complaint Investigations, Violations, Enforcement, Follow-up, and Compliance

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to Section 5.1.3.5 of this report.

In FY 2009-10, City staff investigated six complaints based on mobile business activities. Investigation of mobile business activities can be difficult based on the transient nature of their operations and their habit of operating primarily on weekends. The City has limited Code Enforcement abilities during non-working hours, but has managed to educated several mobile businesses by actual staff observation of activities. All calls were investigated and followed up with to the best of staff's ability to obtain contact information for the mobile business operator. All contacted operators were provided BMP requirement education and told if complaints persisted, administrative fines would be processed. To the City's knowledge, all have complied with the BMP requirements.

Section 6.0 Residential Component

Approximately 80 percent of the City's 3.7 square mile area is designated as residential on the land-use map. Residential land use comprises a large area of the City and residential activities can have a considerable effect on water quality of receiving waters. The City's residential component of the stormwater program aims to reduce pollutant runoff from residential areas and activities to the MEP.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Lemon Grove and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2009-10 that contributed to the successful implementation of the City's Residential Component.

6.1 Source Characterization

The City of Lemon Grove encompasses 3.78 square miles. The City has a population of approximately 26,000 residents. Attachment L-1 contains a demographics chart for the population of Lemon Grove. As Attachment L-1 shows the City expects the population to grow twenty-three percent between 1995 and 2020. As the community grows, the collective impact of residential activities on water quality will increase commensurately. Maintaining an adequate emphasis on residential areas is therefore crucial to the success of the City's water quality programs.

This section identifies the high threat to water quality residential areas and activities that were focused on during FY 2009-10. The high threat to water quality areas and activities within the City were identified during the 2008 JURMP update process and are described in detail in the JURMP. The following section will briefly summarize this process.

6.1.1 High Threat to Water Quality Activities

In consideration of the minimum required high threat to water quality residential activities listed in Section D.3.c(1) of Order 2007-01, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.1.2 High Threat to Water Quality Areas

Section D.3.c(1) of Order 2007-01, requires that Copermittees identify all high threat to water quality residential areas. During the 2008 JURMP update, the City identified high threat to water quality residential areas using the following criteria:

- Any residential areas tributary to a CWS section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within environmentally sensitive areas (as defined in Attachment C of the Permit)

The City has one section 303(d) impaired water body within or directly adjacent to its boundaries. The 303(d) impaired water body within the City is Chollas Creek and is the main watershed for the City. Based on the definition in Attachment C of the Permit, the City does not have any coastal lagoons or environmentally sensitive areas within its boundaries. By collaborating with other copermittees, the City has identified the following pollutants as pollutants of concern for residential areas:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

In consideration of identified 303(d) listed water body and the primary pollutants of concern, City staff has identified the locations of high threat to water quality residential areas as follows:

- All houses within 500 ft of Chollas Creek, USGS blueline
- All houses within 500 ft of any major Chollas Creek drainage channels

This primary affects houses along Main St, San Miguel, and Bakersfield at Ensenada.

6.1.3 Evaluation of Oversight of Residential Areas and Activities

The City is planning to conduct a formal evaluation of the methods used for oversight of residential areas and activities during the permit cycle of Order 2007-01. The evaluation will coincide with the City's effectiveness assessment for the Residential Component. Since the methods used for residential oversight were recently updated within this last fiscal year, City staff determined that it would be

most appropriate and most accurate to evaluate the success of these methods in following reporting periods.

6.2 Best Management Practice Requirements

This section describes the updates made to the City's minimum BMPs that were implemented during FY 2009-10. The minimum BMPs for residential high threat to water quality activities were established in the City's 2002 JURMP. As part of the 2008 updated, the minimum BMPs were reviewed and updated as necessary.

6.2.1 Pollution Prevention

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for high threat to water quality areas and activities.

6.2.2 List of Minimum BMPs

As part of the City's JURMP update, the City designated the following minimum BMPs for high threat to water quality residential activities and areas. The minimum BMPs are primarily nonstructural and area targeted at activities specified in Section 6.2 as having a high threat to water quality. Pollution prevention methods were incorporated into this set of BMPs, where appropriate.

Automobile Repair and Maintenance

Pollution Prevention: a) employ routine preventative maintenance practices, b) reduce vehicle use whenever possible (carpool, use public transportation, bike or walk for short trips, alter driving habits), c) make timely vehicle repairs
Leaks and Spills: prevent leaks and spills from entering the stormdrain by using or doing: drip pans, plastic sheeting, or other containment devices, work indoors or under shelter and never in the rain, immediately clean spills, use dry cleaning methods, establish clean up standards, and require that tools and parts be cleaned in a contained area
Materials and Waste Management: properly manage and dispose of automotive wastes and materials by: draining fluids from automobiles, disposing of wastes and fluids properly and lawfully, store materials, parts and tools indoors or under cover, use secure and watertight containers when storing materials and wastes

Automobile Washing

Management/Reduction of Wash Water: a) whenever possible, use commercial self-serve or full-serve car washes that properly dispose of or recycle the water, b) when washing at a residence be sure to: wash over a porous surface such as grass or dirt when possible, use dry cleaning methods, turn off the water when not in use or use a controllable spray nozzle, encourage the use of a neighborhood wash area where contaminants can be easily manged
Materials and Waste Management: a) properly dispose of soapy water or bucket water to a sanitary sewer or landscaped area, b) use dry methods to degrease or clean especially dirty areas such as tires

Automobile Parking

a) use routine preventative maintenance practices and make timely vehicle repairs to prevent fluid leaks
b) design and construct parking areas to minimize stormwater impacts; covered garages should be plumbed to the sanitary sewer

Home and Garden Care Activities and Product Use

Garden and Yard Care
Pollution Prevention: a) use safe substitutes and alternative gardening methods such as IPM techniques, native and drought tolerant plants, use compost or vermiculture for green waste recycling, follow manufacturers instructions for the application of any chemicals, identify pests before treatment, b) read all labels on products, c)implement water conservation, d) consider xeroscape gardens, e) repair and maintain irrigation system to prevent over watering, f) recycle green waste, g) plant or mulch hillsides and slopes to prevent erosion
Leaks and Spills: a) immediately clean any chemical spills, fertilizers, or soil, b) return spilt items to container for future use or proper disposal
Materials and Waste Management: a) store lawn care products in closed labeled containers indoors or covered areas, b) refrain from using chemicals on windy or rainy days, c) cover stockpiles of soil, compose, or fertilizer, d) dispose of chemicals through the HHW program, e) utilize dry sweeping methods for clean up
Restrictions on Activities: a) do not hose off paved surfaces to the street or gutter, b) do not put hazardous waste in the trash, landfill or stormdrain

Home Care and Maintenance
Pollution Prevention: a) utilize smart purchasing practices that reduce waste, b) use less toxic or non-toxic substitutes for cleaning, c) read and follow product labels, d) recycle used or unwanted products, e) use water based paints when possible, f) recycle unwanted appliances and equipment
Leaks and Spills: a) clean up spills immediately, b) properly dispose of waste from clean up materials

Materials and Waste Management: a) store HHW materials in closed labeled containers and in covered areas, b) recycle latex paint through local programs, c) dispose of hazardous products though the HHW program, d) dispose of trash in the proper receptacles with lids
Restrictions: do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter or storm drain

Disposal of Pet Waste

Pollution Prevention: spay or neuter pets to reduce feral populations
Waste Management/Disposal: a) clean up after pets when walking them in public places, b) clean up yards or other commonly used areas, c) properly dispose of the waste in the trash or toilet
Pet Management (Dogs and Cats): do not allow pets to run free in residential neighborhoods, whenever possible

6.3 Program Implementation

This section describes the steps that were taken in FY 2009-10 to require and verify the implementation of designated BMPs for residential areas and activities.

6.3.1 Outreach and Training

The City has an education program that is consistent with the Permit and the jurisdictional program. A significant element of this program consists of educating residents about ways in which they can minimize their impact on local waterways and the environment in general. Education of the citizens in Lemon Grove contributes to the implementation of the residential component of the stormwater program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between the MS4 and the sanitary sewer
- Pollution prevention and safe alternatives
- HHW collection and recycling
- BMP implementation and maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment and recovery
- Water conservation

During FY 2009-10, City staff conveyed these messages to the public through a variety of mechanisms, including:

- City's Website
- Production and distribution of brochures and promotional items

- Public participation in community events
- Response to residential complaints
- One on one conversations
- Public participation events such as clean-ups

Implementation of these mechanisms by the City helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the City can be found in Section 8.

6.3.2 Used Oil, E-Waste, and HHW Collection Services

The City facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City participates in door to door home collection, a permanent recycling facility is located in the City, and collection events for all HHW and e-waste. In addition, the City encourages weekly curbside garbage, recycling, and yard waste pick-up services through a franchise with EDCO. The various components of the solid waste and hazardous waste collection services provided by or for the City are described in detail below.

HHW Collection Program

The City seeks to reduce solid waste generated in its boundaries. Conservation techniques supported by the City include source reduction, reuse, and recycling, including the procurement of recycled-content products. The City must meet the state-mandated fifty percent reduction level for solid waster disposal, which means at least half of the refuse generated in 1990, adjusted for population and economics, must be spared from a landfill. This information is lengthy and is available upon request.

The City has completed and approved the construction and demolition ordinance. The ordinance went into effect at the beginning of December 2005. Only two demolition sites qualified and completed the program during this reporting period. Both projects were very small private development projects and the City has not calculated the waste totals as of this report. The totals will be available upon request by October 30, 2010.

The recycling outreach efforts include conducting public education, establishing infrastructure, and supporting existing recycling operations. Current programs focus on: revising the City's recycling plans, business recycling, enforcement (business and residential), construction and demolition waste, motor oil recycling and storm drain filters, and public education including schools, brochures, and interaction with City staff.

During this reporting period, the City participated in eight collection events for solid waste disposal. All of the events were in cooperation with a Household Hazardous Waste grant through CIWMB. .

The City held one collection day through EDCO and their facilities at the same time as the curb side clean up day. These events allow residents to dispose of unwanted bulky items and HHW free of charge. The elderly and disabled can schedule for curb-side service with City staff. The event during this reporting period took place on April 24-25. Due to the earlier due date of this report, the City is unable to supply HHW totals for the previous fiscal year. The totals for FY 2009-10, as per the HHW program, are not due to the State regulating agency until October 1, 2010; making the City's finalized data unavailable until mid-October at the earliest. The City is currently cooperating in a different capacity with the management of the local HHW program. The City of La Mesa is now the lead agency for the HHW collection contract through EDCO. EDCO's La Mesa HHW facility is the closest drop-off location to the City of Lemon Grove. The City pays La Mesa a small contract management fee to utilize the EDCO HHW facility and then obtains mass totals from the City of La Mesa. The City is happy to provide the Regional Board with those totals upon request after October 30, 2010.

The City has revamped its e-waste collection program and now contracts with Recycle San Diego to provide local events. During FY 2009-10, the City held eleven e-waste recycle events at the park adjacent to City Hall. At the time of this report, the contractor has not yet compiled the collection data for these events. That data will be available upon request after November 30, 2010.

Used Oil Recycling Program

Statistics from the California Integrated Waste Management Board (CIWMB) indicate that 1 in 5 households in California have a do-it-yourself (DIY) oil changer. "There were 91.3 million gallons of used lubricating oil (ULO) were recycled during 2005, which was 5 percent above the 87.0 million gallons collected in 2004. The ULO recycling rate for 2005 was 59.5 percent, which is a 3 percent increase when compared to ULO recycled in 2004. The lubricating oil recycling rate does not account for oil burned off or spilled during use, which is estimated to range from 20 to 40 percent."[1] Below are four charts that demonstrate this trend in increased recycling.

[1] http://www.ciwmb.ca.gov/usedoil/RateInfo/default.htm

Table 6-1 Amount of Lubricating Oil Recycled as a Percentage of Sales, 1994-2005 (Calendar Years)

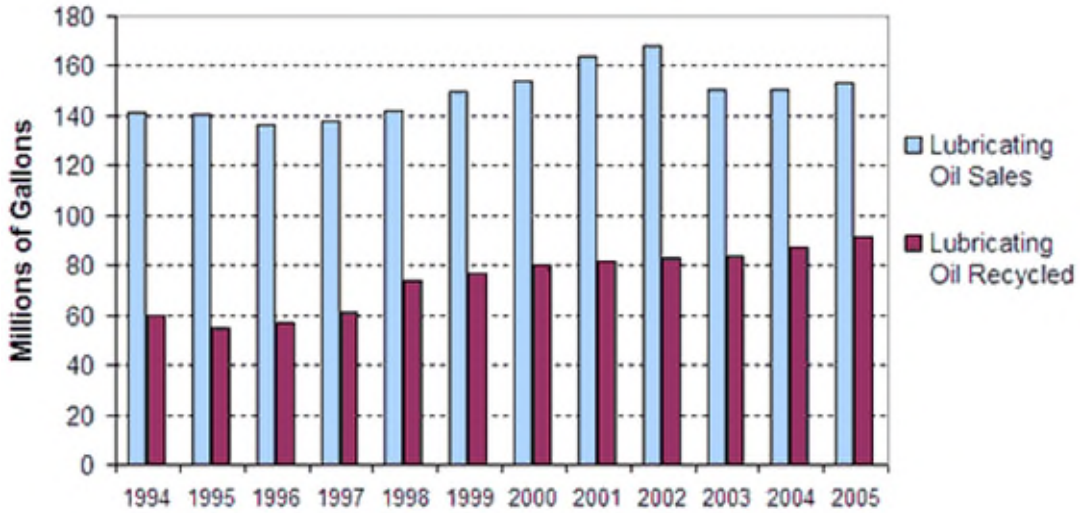

Table 6-2 Annual Oil Sales and Used Oil Recycling Rates (in millions of gallons)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Lubricating Oil Sales	141.2	140.8	136.2	137.5	142.1	150.0	154.3	163.6	168.0	150.2	150.5	153.5
Industrial Oil Sales	78.0	117.3	140.9	141.7	152.4	176.4	155.7	149.1	147.1	135.8	144.6	123.1
Total Oil Sales*	219.2	258.1	277.1	279.5	294.5	326.4	310.0	312.7	315.1	286.0	295.0	276.6
Lubricating Oil Recycled**	59.9	54.6	56.8	60.9	73.6	76.9	80.0	81.9	83.1	83.7	87.0	91.3
Industrial Oil Recycled**	16.7	19.5	20.8	19.3	11.6	10.4	7.9	15.5	17.5	32.4	32.5	31.4
Total Oil Recycled	76.6	74.1	77.6	80.2	85.2	87.3	87.9	97.4	100.6	116.1	119.4	122.7

***** The volumes for oil sales and used oil collections are revised as used oil recycling fees are collected or refunded. Sales totals for lubricating oil are subject to change. Fees on oil sales and refunds for exempt lubricating oils may be reported up to one year after the initial sale.

****** Figures include used oil collected in California and used oil sent outside of California.

Table 6-3 Oil Collected by Public Collection Programs (in millions of gallons)

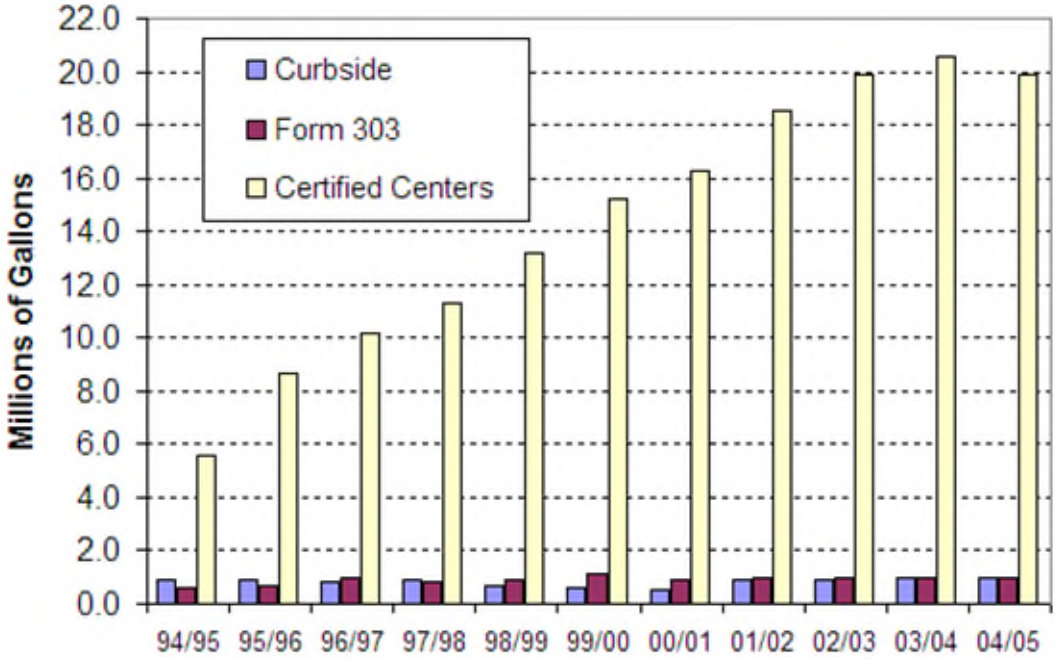

Table 6-4 Oil Collected by Public Collection Programs (in millions of gallons)

	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02*	02/03*	03/04	04/05
Curbside	0.9	0.9	0.8	0.9	0.7	0.6	0.5	0.9	.9	1.0	1.0
Form 303	0.6	0.7	1.0	0.8	0.9	1.1	0.9	1.0	1.0	1.0	1.0
Certified Centers	5.6	8.7	10.2	11.3	13.2	15.2	16.3	18.5	19.9	20.6	19.9
Total Oil	7.1	10.3	12.0	13.0	14.8	16.9	17.7	20.4	21.8	22.6	21.9

The City places a high priority on properly managing the used oil generated by residents within its jurisdiction. Every effort is made to provide residents with convenient drop-off locations and curbside pick-up services, then to promote these services through advertisement and outreach.

The Motor Oil brochure, available at City Hall, contains useful information about how and why to recycle used oil. It also lists the two collection sites and the number for curb-side pick-up. See Attachment L-2 for an example of the brochure. The centers are also listed in each of the City Newsletters that are mailed to the residents bi-annually. See Attachment L-3 for copies of the Newsletter.

The two collection sites are:

- Kragen 6925 Federal Blvd (oil and filters)
- EDCO 6670 Federal Blvd (oil only)

The curb-side service is sponsored by CIWMB. All the resident needs to do is call 1-800-HHW-PKUP (1-800-449-7587) and request a collection.

6.3.3 Complaint Investigations, Violations, Enforcement, Follow-up and Compliance

When a complaint is registered with the stormwater hotline or other form of communication such as e-mail, a County hotline referral, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City staff with enforcement authority within a reasonable time frame. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

The City enforces its stormwater ordinance for all residential areas and activities as necessary to maintain compliance with the Permit and ensure water quality. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for the City to establish appropriate compliance time frames on a case by case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the Code Enforcement data base.
In FY 2009-10, the City received 54 Residential IC/ID complaint calls. Six of those calls were construction related and are discussed in Section 3. Eight of them were related to illegal dumping in the street or gutter. All were abated within 24 hours of notification to the City and all known dischargers were educated on proper disposal methods. No citations or fines were leveed for residential complaints during this reporting period. The remaining calls were either unfounded or not related to stormwater and were delivered to the appropriate department.

6.3.4 Regional Residential Education Program

The City collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. The Plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale.

This reporting period's collaboration on a regional level was promotion of residential stormwater BMPs at the San Diego County Fair. The Copermittees combined funds to pay for a fair booth, material distribution, signage and advertisements at several locations on the fairgrounds for the duration of the fair. Booth staffers promoted the Think Blue message and presented stormwater educational materials to all fair attendees.

Section 7.0 IC/ID Component

This section describes activities conducted during the FY 2009-10 reporting period to minimize the impact of discharges from illicit connections and discharges (IC/IDs) on receiving waters and other environmental resources. The City's IC/ID program consists of several complementary activities, some of which are discussed in detail in this section, and others that are briefly addressed here and deferred to other sections for more detailed treatment.

7.1 Dry Weather Monitoring Program

This portion of the report will be submitted on December 15 as required in the Permit.

7.2 Public Reporting of IC/IDs

The City continued to operate the Stormwater Hotline at (619) 825-3810. The primary purpose of the hotline is to facilitate complaint reporting; but it also serves as a direct source of water quality information for interested parties. Calls are promptly referred to City staff for proper handling.

During this reporting period, 54 calls were received through the hotline. The majority of the calls received on the Hotline were either informational or related to private property issues. Of these calls eight were related to illicit connections and discharges. These calls were all settled without enforcement actions or were private property disputes. All tips related to IC/IDs were investigated by City staff and dealt with accordingly. Follow-up and enforcement related to business complaints and issues is dealt with in Section 5 and follow-up and enforcement for residential complaints is dealt with in Section 6.

7.3 Complaint Investigations and Enforcement

The City conducted follow-up investigations on all complaints received during this reporting period. The primary objective of the City's commercial enforcement program is to ensure violators are brought into compliance in a timely manner. When education is not sufficient to do so, staff may use a variety of formal enforcement tools. These vary by department and program, but generally include Verbal Warnings, Notices of Violation, and Official Notices. The City may also use civil and/or criminal court actions under the State Porter-Cologne Water Quality Act or the Federal Clean Water Act. These last actions my result in significant fines levied upon non-compliant parties.

7.4 Facilitation of Used Oil and Toxic Material Disposal

During this reporting period, City staff worked diligently to promote, publicize, and facilitate the proper management and disposal of used oil, toxic materials, and other household wastes. Activities related to the City's recycling program and waste collection services are reported in detail in Section 6 of this report.

7.5 Limiting Infiltration from the Sanitary Sewer

The City implemented aggressive maintenance programs to limit infiltration from the sanitary sewer system to its MS4. Further details on these activities are reported in Section 4 of this report.

Section 8.0 Education Component

8.1 Overview of Education

The City's outreach program includes an education and public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the City's water quality staff.

The Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

- Measurably increase the knowledge of the target audience regarding MS4s, impacts to urban runoff on receiving waters, and potential BMP solutions appropriate for the target audience and their activities.
- Measurably change the behavior of the target audience and thereby reduce pollutant releases to MS4s and the environment.

The City performed a wide variety of storm water education activities during FY 2009-10. Education and outreach was performed on three levels – Jurisdictional, Watershed, and Regional. Budgetary constraints are currently severely limiting the City's outreach abilities to in-house staff and resources only. However, the City has always worked hard to openly communicate with its community and staff has always been available for face to face meetings both at City facilities and while out in the community. The community also has easy access to all City staff by phone or e-mail. The City feels that this informal accessibility works in our favor and actually provides our residents with more meaningful, in depth education than multitudes of printed material.

8.2 Municipal Staff Training

Public Works. Water quality staff participates in monthly meetings with all of the public work division and weekly meetings with the public works supervisors. At these regular meetings, water quality staff provides updates on current policies

and areas of concern. Due to the regularity of interaction between water quality staff and public works staff, no separate annual training is currently being provided. Any questions or comments can be dealt with more effectively at the regular meetings and changes to regulations or activities can be instituted quickly and efficiently. Water quality staff is also integrally involved in ensuring that public works staff receives and maintains all required certifications, such as Confined Space certification, Hazwoper certification, Cal OSHA updates, pesticide application qualification, and other risk management trainings applicable to their daily jobs and their stormwater activities. Towards the end of this reporting period, the City began exploring a newly available training tracking program, which in future reporting periods will make it even easier to verify staff trainings.

New Employees. Water quality staff is working with the City's HR department to establish a new employee interactive training power point presentation, which will include basic stormwater information and an evaluation test at the end. This video will be shown to all new employees regardless of department and their end test results will be tracked. The City is participating in the Regional Municipal Workgroup, which is working on developing a series of employee educational videos that would be available to all Copermittees. These videos would include new employee, management and task specific trainings. With the City's new training tracking system, it will be easy to track employee trainings and track pre and post-test results to evaluate a change in knowledge.

Engineering and Planning Departments. Water quality staff meets weekly with these two departments to discuss development review projects, new policies, streamlining of existing policies and to participate in consistent interdepartmental education. The City finds these regularly scheduled meetings a much more efficient and effective way of updating and educating staff on water quality concerns, regulations and improvements. They are the foundation for the City's new sustainability mindset and have been vital initiating the overhaul of the City's General Plan. It allows the City to present an ideologically unified front to its residents, developers, contractors, and business owners.

8.3 Educational Outreach

This section describes education efforts conducted for each target community during FY 2009-10.

8.3.1 Underserved Target Audiences and Mobile Businesses

Underserved Target Audiences. For those segments of Lemon Grove community that do not speak English as their first language, the City provides many of its brochures and handouts in both English and Spanish. The City also employs bilingual staff to assist our residents, answer questions, and translate information. The current water quality brochures available in dual languages are

IPM pest tip cards, recycling and HHW information. The City also has available the Green Wrench BMP guide for automotive repair shops and the Green Cooking BMP guide for restaurants in Spanish. The City also works with the County's Green Business group which provides BMP information in Spanish and in English. Despite these efforts, the City realizes this continues to be an underserved audience and by collaborating with the other Copermittees hopes to continue to develop new ways to provide them with water quality data and information.

Mobile Businesses. During FY 2009-10, the continued to participate and provide information to the Regional Mobile Business Subcommittee for the development of the Regional Mobile Business Outreach and Education Strategy. Mobile businesses inherently provide services across jurisdictional lines; therefore the Copermittees chose to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory development and maintenance
- Establishment of minimum BMP requirements
- Outreach and education

The City's water quality staff, for several reporting periods, has reviewed any business license that pertains to a mobile business and required them to provide applicable BMP information on the business license application. Until the new Permit, however, these businesses were not an independent category in the business license directory. They were filed by business type, such as automotive or food service. During this reporting period, the City created the mobile business category and has begun transferring the known mobile businesses into the correct category. One of the challenges faced by Code Enforcement, in conjunction with mobile businesses, is their tendency to conduct business during off hours. City staff is very limited in their ability to work off hours and since the economic downfall, all overtime is prohibited unless emergency related. The City hopes that a Regional database of mobile businesses will help to track and regulate their activities and improve education opportunities.

8.3.2 New Development and Construction Communities

The City uses the following strategies to provide education and outreach to its development and construction communities:

- BMP training request as part of the permit application process
- Meetings with project developers, owners, on-site contractors and site supervisors
- SUSMP checklists as part of the development review process
- Signed BMP checklist for all ministerial permit applications (training request sheet is attached to this checklist)

- Informal meetings with developers and contractors due to questions, comments, concerns, etc. Generally occurs during the review process or normal site inspection process
- All changes to construction site BMPs are required to be submitted to City staff for approval

As previously stated, City staff prides themselves on being available to its residents and business community with few complications or intermediaries. Staff is always available to discuss current projects, both under review and construction, with any concerned or curious party.

8.3.3 Commercial/Industrial Owners and Operators

The following is a summary of the education and outreach provided to commercial and industrial owners and operators during FY 2009-10.

- Annual inspections of all industrial facilities, restaurants and automotive facilities in the City by our in-house Code Enforcement staff. During these inspections, individual one-on-one education was presented to each facility manager/owner. Information presented included general storm water quality information and BMP requirements.
- The City also has Green Wrench and What's Cooking guides available for interested parties.
- Mailings to facilities about applicable local workshops and education opportunities, such as those offered by SDG&E and the San Diego Energy Commission.

As previously stated, City staff prides themselves on being available to its residents and business community with few complications or intermediaries. Staff is always available to discuss current projects, both under review and construction, with any concerned or curious party. However, it is important to note that significant animosity exists within the small business community as a result of existing State and County environmental control agencies. City staff bears the complaints of the business community for the high cost and perceived over-bearance of governmental regulation. They perceive stormwater inspections as part of this over-bearance and are often reluctant to make changes without the involvement of Code Enforcement proceedings.

8.3.4 Residential Community and General Public

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential and public audiences:

- City Newsletter containing an environmental section with water quality and environmental tips (such as how to properly care for your lawn, list of

basic household BMPs, or home improvement – BMPs your contractor should know) and information about HHW and recycling

- Various brochures available at City Hall: Used oil recycling, car washing, pet waste disposal, etc
- Maintenance of the stormwater hotline (619) 825-3827, which monitored by water quality staff
- Water quality staffed informational Booths at the following events: Fire Station Open House and Winter Bonfire.
- Participation and staffing at the Regional Education Outreach booth at the San Diego County Fair
- Participation and collaboration in watershed-based efforts such as Creek to Bay Clean-up and watershed based school presentations

As previously stated, City staff prides themselves on being available to its residents and business community with few complications or intermediaries. Staff is always available to discuss current projects, both under review and construction, with any concerned or curious party.

The City is constantly striving to improve its outreach and education opportunities within the limited means of the current budget. Much of the current education is done by City staff in an informal manner with the public and business communities. Having a small City staff, means a consistent message is provided because staff is easily kept up to date on the current regulations and policies. This program will continue to evolve as necessary and as funds allow.

9.1 Public Participation

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in stormwater and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about stormwater issues. Second, they become educators and stewards for the stormwater program. Finally, they provide important feedback to the stormwater program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

9.2 Public Participation Approach

The City's approach for the outreach program is to develop an understanding among its residents and businesses of some fundamental storm water concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches untreated)
- The economic value of our beaches and inland waterways and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a stormwater violation (stormwater hotline or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and oceans.
- Reducing pollutants of concern.
- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. creeks and parks) and not to be part of the pollution problem (littering, illegal dumping, improper disposal of household chemicals).

Some of the tools that are used by the City to implement the public participation activities are:

- public outreach events
- public reporting methods
- pet waste dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- public opinion surveys
- copermittee collaborations

9.3 Program Implementation

This section describes the specific public participation tools used during the FY 2009-10 reporting period.

9.3.1 Public Outreach Events

The City participated in several outreach events during FY 2009-10:

- Coastal Clean up Day – September 19, 2009; 10 volunteers; Federal Blvd/San Miguel drainage channel
- Fire Station Open House – October 10, 2009; 60 participants
- Winter Bonfire – December 4, 2009, 800 participants
- Creek to Bay Clean up Day - April 24, 2010; 18 volunteers; Federal Blvd/San Miguel drainage channel
- San Diego County Fair – June 12, 2010; 4,500 participants

9.3.2 Public Reporting Methods

The City has a local hotline that connects the caller directly to the City's water quality staff. The number is (619) 825-3827. A public works person is available for after-hours emergencies, who will contact the best staff person to handle the emergency. There are also two regional stormwater hotline numbers promoted within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800 and the Think Blue Hotline, 1-888-844-6525 (1-888-THINK BLUE). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00am - 5:00pm. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voice mail message for 24-hour public access.

The City's stormwater hotline has been heavily advertised since the programs inception. In FY 2009-10, the hotline received eight stormwater related calls, typically pertaining to the illegal discharge of fluids in the gutter over the weekend or a business hosing off their parking lot. All calls are investigated by Code Enforcement and are usually handled with a verbal warning and education about household BMPs. None of the calls during this reporting period requied formal

Code Enforcement proceedings. The hotline is advertised in the newsletters and on the City's website, in brochures, on give-aways, and at City events like the Winter Bonfire and the Fire Station Open House.

The City's website also provides water quality information and event updates: www.ci.lemon-grove.ca.us.

9.3.3 Pet Waste Dispensers

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier; pet waste dispensers can be found at all the City parks and in the vacinity of City Hall, all areas where people frequently walk their dogs. Trash cans are also readily available in all of these areas. Both the trash cans and bag dispensers are maintained by the City's Grounds division.

9.3.4 Household Hazardous Waste Collection and Used Oil Recycling

The City co-sponsors several HHW and e-waste events over the course of the reporting period. During these events, residents can drop off any HHW or e-waste free of charge. The City collaborates with the Cities of Chula Vista and La Mesa for HHW events and data collection. The City participated in eight HHW events and eleven e-waste events. The City has two used oil collection points in the City:

- EDCO Recycling Center 6670 Federal Blvd
- Kragen Auto Parts 6925 Federal Blvd

9.3.5 Copermittee Collaborations

The City continues its collaboration and encouragement of the County's Green Business program for restaurants and automotive repair shops. This effort continues to develop and explore a State wide collaboration and standards. The City will continue to promote these programs to the applicable commercial facilities where-ever possible.

Section 10.0 Fiscal Analysis

The purpose of this section is to provide a detailed analysis of the expenditures required to implement the JURMP. The main purpose of this analysis is to enable the City to determine the level of resources needed to meet the requirements of the Permit.

Although the Regional Water Quality Control Board staff down plays the importance of this portion of the analysis - based on comments made in public hearings during the new permit process and comments in Regional Board staff reports - the City considers the analysis vital in determining the City's ability to effectively meet the conditions of the Permit.

10.1 Cost Breakdown

The analysis was performed as outlined in the JURMP, by assigning specific expenditure categories into the general categories suggested in Permit section F.8. The analysis is presented in Table 10.1.

Table 10.1 – 2009/2010 Fiscal Analysis Summary

Stormwater Cost Analysis
All costs covered in the General Fund.

ACTIVITY	CURRENT YEARLY BUDGET	CURRENT BUDGET LOCATION
STORM DRAINAGE CLEANING AND MAINTENANCE		
Public Street and Parking Lot Sweeping		Streets
Streets	$30,000	
Parking Lots	$2,000	
Public Street and Parking Lot Sweeping Total	$32,000	
Litter Removal		
Litter Removal	$13,000	
Litter Removal Total	$13,000	
Storm Drainage Cleaning		
Inlets		
Inspection and Cleaning	$19,820	
Fossil filter replacements	$1,400	
Inlets Subtotal	$21,220	
Basins and Channels		
Inspection and Cleaning (Note 1)	$38,829	
Basins and Channels Subtotal	$38,829	
Video Inspections		
Video Inspections (Note 1)	$50,000	

Video Inspection Subtotal	$50,000	
Storm Drainage Cleaning and Maintenance Total	**$155,049**	
STORM EVENT ACTIVITIES		
Sandbag stock piling and placement	$4,000	
Patrols	$3,089	
Storm Event Total	**$7,089**	
ILLICIT CONNECTION/ILLEGAL DISCHARGE ENFORCEMENT PROGRAM		Engineering Services
Dry Weather Testing	$20,000	
Enforcement	$5,000	
Administration/Supervision	$1,000	
Stormwater HotlineComplaints	$2,000	
Illicit/Illegal Enforcement Program Total	**$28,000**	
STORM WATER POLLUTION PREVENTION PLANS (SWPPP's)		
Construction Related SWPPP	$2,000	
Plan Review (including SUSMP's)	$15,000	
Inspection	$3,000	
Construction Related SWPPP Subtotal	$20,000	
Municipal Facility SWPPP		
SWPP Implementation, Inspection, and Maintenance of Municipal Facilities	$18,798	Streets
Municipal Facility SWPPP Subtotal	$18,798	
All SWPPP Activities Total	**$38,798**	
BEST MANAGEMENT PRACTICES (BMP) IMPLEMENTATION		
Inspection of Industrial and Commercial Facilities	$50,000	
Inspection of Municipal Facilities	$1,000	
BMP Total	**$51,000**	
MISCELLANEOUS ACTIVITIES		Engineering Services
Annual Reporting (JURMP)	$5,000	
Administration (General)	$74,004	
NPDES Permit Fee	$7,500	
Public Education/Outreach	$5,000	
Miscellaneous Activities Total	**$77,504**	
PROGRAM TOTALS	**$371,440**	

Note 1 –Program still in development stages, projected cost for next fiscal year

It should be noted that the cost of program implementation during the 2009-10 reporting period does not reflect the true cost of implementation. There are cost areas that were not considered in the analysis. For example, the cost of personnel in the Grounds division, who perform stormwater maintenance

activities as needed, but who do not separate those activities from their daily activities. The City is currently working to create a more thorough "type of work" tracking system to alleviate some of these omissions.

10.2 Funding Sources

There are a number of sources for program funding; grants, stormwater fees paid by both residents and businesses, fines, and general fund money to name a few. The City has created a stormwater fee for businesses and residents through developmental plan check fees, for businesses charged through the business license and solid waste services to residential users. The fees collected only fund approximately one third of the total stormwater program costs. They currently are not allocated to any specific section of the program, but are used to ease various costs as needed. The City has integrated water quality compliance into its Code Enforcement program, which includes potential fines for continued non-compliance. However, the City does not foresee this as a steady revenue source for program funding, as compliance is the primary and desired outcome.
Given California state law, the City finds difficulty in fully funding its stormwater program. Also given recent opposition State-wide to the creation of stormwater fees, the City is cautious in expanding its current funding strategy. As such, the City's General Fund will be required to continue subsidizing this increasingly costly program.

The total cost of the program for this reporting period equaled more than 3% of the General Fund budget. For comparative purposes, the cost of the stormwater program is equivalent to:

- Seven times the amount the City spends on its Code Enforcement program
- The City's expenditure on maintaining all of its parks, and
- 258 percent more than the City commits to youth sports and recreation programs.

Again, these comparisons are included to demonstrate the City's financial commitment to the program.

To further the City's and region's efforts in meeting the overall objective of the Stormwater program, the City challenges the Regional Board and the environmental community to take regional leadership in proposing a regional revenue source – similar to that of TRANSNET for transportation enhancements. The City's financial commitment to the program demonstrates the City's efforts in complying with the requirements of the JURMP and the Pemit. The City continues to be willing to brainstorm with Regional Board staff regarding this challenge. To date, this challenge has been outright rejected by Regional Board staff.

11.1 Introduction

The City began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008 and as an ongoing process. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs, so the City prepared its own effectiveness assessment approach and measures modeled after conventional strategies and the existing levels of effectiveness assessment as detailed in the October 2003 document.

Since the submittal of the JURMP in March 2008, no additional progress has been made on regionally standardized approaches to program effectiveness assessment. It is anticipated that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will undertake the issue of standardized assessment metrics and procedures in the near future. The City is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's stormwater program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three maybe in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments

are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities uniques to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics are provided in SEction 13 of the City's revised 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step towards the more difficult level of improvements to water quality in receiving waters. The levels are listed below.

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

11.2 Effectiveness Assessment Results

The new Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the stormwater program as a whole. Level 1, Level 5, and Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment - assessment that combines both monitoring data and programmatic data - are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome Level Assessments

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP annual report, can be found in Appendix G.

Level 2 and 3

Tables 11-3 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City within each program component. Note that only Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the Regional Board adopted Addendum 2 to Order 2007-01, effectively extending the annual due date of the illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City, and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 Overall Component Assessments

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. Further, two new significant program elements were in production and in early stages of implementation within the defined reporting period of this report; both new programs are demonstrating positive trends. BMP installation verification and BMP operation and maintenance verification efforts, while not wholly implemented at the time of report production, have resulted in the establishment of programs that will support long term effectiveness assessment measures for development planning.

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures. It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue.

Municipal

The defined reporting period of this report is marked by significant expansion of municipal operations and maintenance activities to meet the standards established in Order 2007-01. Enhanced stormwater conveyance, drainage facility, channel maintenance and inspection and street sweeping activities, were developed and implemented, equating to the removal of salient volumes of debris. Effective operations and maintenance activities are demonstrated in the Table 11-1 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will support the efficacy of municipal activities.

Table 11-1

Activity	Amount Collected	Adjustment Factor	Estimated Load Reduction
Street Sweeping	150.75 tons	None	150.75 tons
MS4 Cleaning	3,360 pounds (1.815 tons)	None	3,360 pounds (1.815) tons
			Total 152.565 tons

Industrial and Commercial

Stormwater activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (See Table 11-2) through the gathering of critical statistics, including a knowledge and BMP assessment scoring system. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Table 11-2 Program Scores for 2009-10**

	Knowledge Assessment *	BMP Assessment
Average Rating	2.6	3.5
Median Rating	3	3

# of “Level 5” Ratings	6	25
# of “Level 4” Ratings	28	34
# of “Level 3” Ratings	30	49
# of “Level 2” Ratings	22	12
# of “Level 1” Ratings	33	4

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.
**The scores from these two reporting periods were consistent.

Table 11-2 cont. Program Scores for FY 2005-06
(This was the first year the analysis was done and is provided for comparision)

	Knowledge Assessment *	**BMP Assessment**
Average Rating	2.39	3.33
Median Rating	2	3
# of “Level 5” Ratings	0	14
# of “Level 4” Ratings	9	26
# of “Level 3” Ratings	34	30
# of “Level 2” Ratings	26	11
# of “Level 1” Ratings	18	7

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Lemon Grove.

Table 11-3

Activity	**Amount Collected**	**Adjustment Factor**	**Estimated Load Reduction**
Used Oil Recycling	25,600 gallons	10%	2,560 gallons
C&D Ordinance Recycling	17,852 pounds	1%	179 pounds

Education

Education effectiveness is assessed for a variety of program elements. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success.

Public Participation

The City provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however the assessment measure are focused on success of the venues ad outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, hotline calls, and volumes of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of this document.

City of Lemon Grove

Jurisdictional Urban Runoff Management Plan Annual Report

FY 2010 – 2011
September 2011 Report

The City of
LEMON GROVE
BEST CLIMATE ON EARTH
Incorporated in 1977

Executive Summary

The City's eighth Annual Report submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2007-01, "Permit") represents an opportunity to further explore and develop effectiveness assessment measures as well as re-vamp existing programs to better reflect the new Permit.

Several programmatic changes reflected in this year's report have been made in response to regulatory feedback received from the Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA). In particular, the RWQCB and the EPA's review of the Lemon Grove Standard Urban Stormwater Mitigation Plan (SUSMP) prompted a more focused effort on plan reviews, development and re-development strategies, and construction site management.

To respond to their comments and the new Permit, the City is implementing various methods to further assist in long-term effectiveness assessments. The methods are currently under revision and in a state of flux through participation in regional standardization efforts. The City will maintain existing standards, while the regional efforts continue to take shape and develop further.

Through a collaborative workgroup process with the Copermittees, the City has significantly improved our assessment strategies and analysis methods. The Copermittees worked extensively on the completion of the Report of Waste Discharge (ROWD) during FY 2004-05. The ROWD is a collaborative effort discussing the Copermittees requests and findings for the issuance of the 2006 Permit. The Copermittees also collaborated with an independent contractor to create a formal effectiveness assessment. Both the ROWD and the long-term effectiveness assessment documents were submitted to the RWQCB separately from the Annual Reports. However, the Copermittees worked extensively on these projects during FY 2004-05 and the City's participation is worthy of notice. The documents provided valuable information that the Copermittees will be using during the next reporting period to fine tune effectiveness assessment and program focus. In 2008, the City updated its JURMP and Municipal Codes to reflect the requirements of the new Permit, Order 2007-01. The Model SUSMP was completed by the Copermittees and submitted for Regional Board approval during this reporting period and will be added to the City's Municipal Code in the next reporting period. In FY 2010-11, the City continued its extensive involvement in joint Copermittee workgroups. The City feels the collaboration is necessary to develop and maintain a well-rounded, effective program and ensure regional stability for water quality improvements.

The City continues to improve and develop its own program effectiveness assessment strategies. The ROWD and the long-term effectiveness assessment have been extremely useful tools in helping not just the City, but the Copermittees, in analyzing the current available data. The documents have

helped identify areas of improvement and program focus. The long-term effectiveness document will be critical in the City's and the Copermittee's development of regional activities to address improved water quality and pollution prevention.

The City has taken important steps in putting newly developed strategies in motion. In particular, the City has continued to develop its BMP implementation strategy for construction sites and development proposals. During FY 2005-06, the City focused on improving its SUSMP checks, the tracking of construction site inspections, and the development of consistent standards in the Planning and Engineering Departments. The City continues these efforts into FY 2010-11. Employee training continued to focus on SUSMP implementation and those departments directly affected by the document through regularly scheduled inter-departmental meetings. In FY 2010-11, the City continues to make significant steps toward the implementation of a City-wide GIS program, including the beginning of service contract to install GIS layers for the sanitary sewer system. Other departments and layers will be added as the budget allows. Currently the budget does not allow for other layers, but the City hopes this will change in future reporting periods, although perhaps not until the next permit cycle. The implemented Code Enforcement program continues to improve in efficiency and effectiveness, including a new staff member, who functions as a water quality inspector and code enforcement officer. The City realizes that many of these new approaches are in their infancy, some still in exploration, but future reporting periods will further demonstrate the new concepts and ideals discussed in this report.

In FY 2005-06, the City created an independent funding source to help fund its program. However, the funding source only funds a small portion of the program, requiring the City's strapped General Fund to finance this increasingly expensive program. This shortage of steady funding is even more prevalent this reporting period and in the short-term future, due to cuts in State funding and a lack of re-imbursements from the State. Proposition 218 and the current economy make it even more difficult to obtain funding for the water quality program and future environmental legislation. It is even more important now, that the City take into account effectiveness and efficiency in its programs, especially its environmental programs. The City appreciates the Regional Boards understanding in these times of fiscal hardship.

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Section 1.0 Introduction

Lemon Grove's ninth annual report, submitted pursuant to the San Diego Municipal Stormwater Permit (NPDES Order 2007-01, "Permit"), represents the City's continued efforts to document and assess a full year of program implementation (July 1, 2010 through June 30, 2011). We are confident that the report demonstrates success in the continued development of a program that meets and often exceeds Permit requirements. At the same time, the annual reporting process presents a cumbersome challenge to City staff when combined with participation in the WURMP reporting process, the annual RURMP report, and the Dry Weather reporting process. The City strongly supports the concept of an all encompassing City and Regional program that increases effectiveness and efficiency to the maximum extent practicable. The myriad of reports causes disconnects between programs that should run seamlessly together. The City also feels a stronger regional program could help alleviate the cost burden the current program forces on the City. The end result would be a maximization of severely scarce funds and funding. The City is currently experiencing, as are many others, serious financial hardship due primarily to the economy and the State raids on local funds to support its own programs. The loss of revenue in the past year has forced the City to redistribute General Funds to maintain even basic service levels, such as pothole repair. The City feels the current program meets regulatory requirements, but is leery of program expansion without a secure revenue source. The unfunded mandate aspect of this program continues to stress the City's already stretched thin General Fund. The City encourages the Regional Board to take a stronger leadership role in facilitating more cooperation with State agencies in obtaining long-term funding for this program. The City hopes that in future reporting periods, some of these challenges can be met with more cooperation between the Copermittees and the Regional Board.

This report continues to demonstrate several programmatic changes in response to regulatory feedback received from the Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA). In particular, the March 2005 SUSMP audit performed by the RWQCB and the EPA prompted a reassessment of the City's SUSMP requirements and plan check procedures. The City chose to focus its improvement efforts in the SUSMP area. The City implemented a construction site inspection database to allow for future assessment strategies. The City's construction and BMP databases continue to evolve as more information is gathered and tracked. Water Quality staff continues active involvement with environmental legislation affecting CEQA requirements and green house gas emission standards. The City believes in a comprehensive and collaborative approach for environmental concerns and solutions. The City is working on a strategy to map its waterways and drainage channels for a future GIS map layer. The City is actively exploring its GIS options and hopes to have GIS capabilities in the next 5 years. The City began developing a basic needs assessment and schedule for the implementation of a

city-wide GIS program. The City is currently working on implementing initial GIS programs and layers through the Sanitation District. These initial layers will include the mapping of our sewer mains and City maintained laterals, as well as the tracking of maintenance activities. All further implementation is dependant on budgetary restrictions. The City and the Copermittees are moving toward a more quantitative and qualitative approach to reporting and operations, while faced with severe economic challenges both on a local and state level.

At the jurisdictional level, the City has taken important steps in putting newly developed strategies in motion. The City continued to enhance its BMP implementation process. The City continued to improve the assessment tools through inspection databases and the plan check process. The City continues to explore effective assessment options that fit within the budgetary confines and meet the requirements of the Permit. The City continues to explore its existing systems to better track water quality data. Current financial restraints limit the implementation of new programs and software. Though the tools are often imperfect and must continue to evolve, we have already found their use to be quite instructive in many ways.

The City believes the programs described in this report to be sufficiently updated over past efforts. Some accomplishments of particular note include the following:

- Use of community events for public outreach
- Improved code enforcement process for water quality
- Participation in regional workshops pertaining to new and pending environmental legislation
- Increased involvement in WURMP programming
- A continuing sustainability effort of which stormwater is a key element

This report is organized according to the general outline agreed upon by the Copermittees. Sections 2.0 through 7.0, each corresponding to a different category of pollutant sources (i.e. Municipal, Commercial, Residential), are organized as follows:

- Priority Sources
- BMP Requirements
- BMP Implementation
- Compliance and Enforcement

Where possible, all applicable data and information are consolidated into the sections to which they best apply so as to present a more holistic and self-contained description of each program area. For example, section 5.0 discusses every program element related to the City's commercial and industrial component (e.g. outreach to commercial audiences, inspections of businesses, responses to public complaints involving commercial dischargers, and enforcement actions taken against non-compliant businesses).

Sections 8.0 through 10.0 are intended only to summarize key statistics, and to address topics not covered in pervious sections. Section 11.0 provides a consolidated assessment of key program data and information. Much of this data is also presented in greater detail in sections 2.0 through 8.0. Section 12.0 provides an analysis of the City's projected expenditures for FY 2009-10. Section 13.0 discusses the City's conclusions and recommendations based on its assessment of this year of implementation under the Permit.

Overall, this report demonstrates, in a clear and well-organized way, the considerable thought and energy that went into developing and implementing a complex and rigorous program. The City looks forward to continued progress in future years.

Section 2.0 Development Planning Component

This section describes actions taken by the City during FY 2010-11 reporting period to minimize the short- and long-term post-construction impacts of new and redevelopment projects on receiving water quality and other environmental resources. This includes activities related both to land use planning controls, and the site-specific conditioning of development and redevelopment projects in the City.

2.1 Land Use Planning

The City's land use planning process facilitates the reduction of development project discharges of pollutants from the MS4 to the MEP, the prevention of development project discharges to the MS4 from causing or contributing to a violation of water quality standards, and of increases in runoff discharge rates and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force. The water quality staff works closely with engineering staff in these efforts, presenting a united, collaborative process to developers.

The City's land-use planning process consists of development and implementation of the following documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- SUSMP
- Municipal Code, which includes the City's Development Code, Grading and Excavation standards, and all Stormwater regulations

The utilization and regular update of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections will describe the City's land use planning process and the four planning documents in more detail.

The City of Lemon Grove was incorporated in 1977 from the County of San Diego. The City's General Plan was adopted in 1996 and is currently undergoing an in-depth review and amendment process. The City's JURMP, Stormwater Ordinance and SUSMP were originally developed and adopted under Order 2001-01 in 2002-2003. These documents have been reviewed and updated under the new Order 2007-01.

2.1.1 Source Characterization

The City addresses eleven major land use categories in its General Plan:

- Low density residential
- Low/medium density residential
- Medium density residential
- Medium/high density residential
- Mixed use
- Retail commercial
- General Business
- Industrial
- Parks and recreation
- Transportation
- Special treatment area (STA)

The General Plan also recognizes eleven zoning categories:

- Residential low
- Residential low/medium
- Residential medium
- Residential medium/high
- Residential professional
- Central commercial
- General commercial
- Limited commercial
- Heavy commercial
- Light Industrial
- Special treatment area (STA)

Each of these land-use and zoning categories is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their specific sections of this report.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Municipal Code, Grading Ordinance and SUSMP, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.1.2 Best Management Practice Requirements

For each development project proposed, the City requires the builder and owner to consider BMP implementation from the beginning of the project. Attachment H-1 shows the form that is presented to each applicant regardless of project size.

This initial step makes water quality important from the on-set of the project, and each consecutive step further emphasizes the importance of water quality improvements for pre- and post-construction.

The City encourages all new and re-development applicants to explore such options as tot-lots, on-site detention basins, infiltration ditches, and on-site landscaping to ensure that water quality is improved, the natural environment suffers less, and less maintenance is required. The City requires sites to treat for pollutants of concern to the MEP. The City recommends that its applicants utilize the BMP handbooks created by CASQA to explore the best option for each particular project. The handbooks are available on-line at www.casqa.org. CASQA is a valuable resource for both the City and the developers.

To date, jurisdictional and project-level planning tools have been largely under-utilized because stormwater management is often viewed as an engineering issue by developers. As a result, many site-design solutions rely significantly on structural treatment controls like detention basins and mechanical treatment devices, which can be expensive and maintenance-intensive. In most cases, it is easier and cheaper to keep pollutants out of stormwater by designing the pollutant source out of the project, while simultaneously preserving the site's natural filtration capacity. Through a series of updates and reviews, the City is working to include low impact development concepts through-out the applicant review process and in its codes and regulations, specifically the General Plan.

2.1.3 Program Implementation

The Water Quality Program Coordinator is available for consultation during any phase of the project. The Coordinator plays a vital role in the pre-application phase of development by ensuring that all proposed projects incorporate water quality measures. This is done mainly through interaction with the developers and project engineers, but also involves written assessments of the project designs and any water quality documents. The assessment occurs multiple times before the applicant is permitted to submit a complete proposal. This process lengthens the pre-proposal phase, but improves the final approval phase. The Planning Commission knows that all issues have been dealt with prior to the approval hearing and that City staff has ensured a minimal environmental impact.

2.1.3.1 General Plan/Municipal Code/SUSMP

As a component of the 2008 JURMP update (conducted during FY 2007-08), an assessment of the City's General Plan and Municipal Code were conducted to determine the City's consistency with the watershed protection policies and principles found in the Permit. The analysis found that the City's General Plan goals and policies are consistent with the Permit and that no amendments to General Plan were required as a direct result of the JURMP update. The

General Plan discourages the use of large amounts of connected impervious surfaces, requires a landscape minimum, works to protect environmental sensitive areas, and prohibits development near or in a known watercourse. However, the City's General Plan is currently undergoing a comprehensive review process with plans for amendments occurring over subsequent reporting cycles. The City plans to ensure that each area covered in the General Plan contains environmental and sustainable options and concepts. Low Impact Development ideas will be presented and encouraged throughout the document. The City's General Plan is meant to cross reference and openly comply with the City's Municipal Code and all other pertinent development documents.

The City's General Plan serves as the blueprint for the long-range, orderly, physical development of the City. The Development Code section of the Municipal Code contains all zoning and land use requirements and stipulations. These two documents together are designed to protect the City's environmental, social, cultural, and economic resources as the City develops and redevelops.

The Municipal Code did undergo a lengthy review and amendment process due to the issuance of Order 2007-01. Section 8.48 Stormwater Management and Discharge Control was broadened and made more comprehensive. A BMP specific section was added, Section 8.48.060-110. Section 8.48.140 contains regulations for all land development and redevelopment projects and Section 8.48.150 contains BMP maintenance requirements. All of these additional sections, strengthen the City's water quality program by providing a legal basis for implementation and enforcement. During the review process, the City decided to also include the SUSMP as a Municipal Code section, Section 8.52 now contains the City's SUSMP document. This section will be further updated during the next reporting period with the approval of the new County-wide SUSMP document. During this reporting period, the City collaborated with the Copermittees to create the final draft SUSMP, which was then turned over to the Regional Board for review and approval.

2.1.3.2 JURMP

In compliance with Order 2007-01, the City's JURMP document underwent a major update during FY 2007-08. This update process was continued after receiving comments from the Regional Board in early 2009. The JURMP document serves as the City's foundational storm water program management tool, capturing the developed process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Lemon Grove.

2.2 Environmental Review Process

As part of the 2008 JURMP update, the City evaluated its environmental review process and confirmed that the current process accurately evaluates water quality, cumulative impacts, and identifies appropriate measures to avoid, minimize and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality.

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.3 Development Project Approval and Verification Process

As discussed previously, the City has an established multi-departmental review process for all new development and redevelopment projects. By using all of the above mentioned regulations, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP. Each proposed discretionary and ministerial project is subject to the City's development approval process. The following sections describe this process in detail.

2.3.1 Source Characterization

As discussed above, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments, whereas grease and oil are more likely contributed by parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP, which was updated and added to the Municipal Code during FY 2007-08, describes specific categories for priority projects and indicates common pollutants associated with each category. A priority project must

identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

In the City, all development projects, including building and ministerial permits are required to implement minimum BMPs. These BMPs include construction BMPs and good housekeeping practices. Discretionary projects, however, generally pose a greater potential threat to water quality and are subject to an additional set of BMPs and more intense scrutiny.

2.3.2 Best Management Practice Requirements

The City's minimum BMP requirements for all discretionary development projects are summarized here and are included in the City's SUSMP. All discretionary development projects are required to explore and implement where applicable the following principles:

- Source control BMPs that reduce stormwater pollutants of concern in urban runoff, including but not limited to storm drain stenciling and signage, properly designated and covered material and trash storage areas, and the use of efficient irrigation systems.
- LID BMPs that provide retention, slow runoff, minimize impervious footprint, direct runoff into landscaping, and promote water conservation.
- Grading and construction activities must implement all requirements outlined in the City's JURMP and Municipal Code.
- Submittal of proof of on-going long term maintenance for all structural post-construction BMPs.

SUSMP priority projects must submit a water quality document, which includes identification of potential pollutants from the project, proposed LID, source control and treatment control BMPs, and an attached maintenance agreement. The document must also include how the project will manage increases in runoff discharge rates and durations associated with the project. It is the City's policy to prevent permitted projects from increasing the runoff coefficient that eventually enters the City's MS4. Both the water quality document and hydrology report must provide retention and detention details for any runoff increase due to the development or redevelopment of a site.

2.3.2.1 Hydromodification Management Plan and Interim Hydromodification Criteria

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order 2007-01, the City is currently collaborating with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP).

The final draft HMP was submitted to the Regional Board at the end of this reporting cycle and will be approved and integrated into the City's program during the next reporting cycle. However in FY 2007-08, the City established interim hydromodification criteria that will be in effect until the final HMP is approved by the Regional Board and adopted by the City. The City requires all priority projects disturbing 50 or more acres to comply with the interim hydromodification criteria, except those sites that are considered exempt as per Section D.1.(g)(6) of the Permit. These interim requirements are consistent with the regionally adopted interim hydromodification standards. The City of Lemon Grove is a small developed community and does not anticipate any projects during the following reporting period that will meet these criteria. The City also connects almost exclusively to concrete channelized streams at its borders and does not anticipate frequent projects subject to future hydromodification requirements.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to the development project's proposed stormwater BMPs during project construct must be reviewed and reapproved by City staff before being implemented.

2.3.3 Program Implementation

As required by the Permit, the City has implemented a program to ensure that development and redevelopment projects comply with post-construction BMP requirements, including Low Impact Development (LID), source control, and treatment control BMPs. The Permit further requires the City ensure proper installation of treatment control BMPs and their maintenance into perpeturity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following sections provide an overview of the City's SUSMP implementation practices and tracking during FY 2009-010.

2.3.3.1 Model and Local SUSMP updates

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into the Municipal Code. In compliance with the interim SUSMP update standards established in Order 2007-01, the following tasks were performed during the review and interim update of the SUSMP:

- Priority project categories were updated
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained

- LID requirements and additional source control requirements were added to meet or exceed Permit requirements
- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary

In addition to the changes discussed above, a comprehensive model SUSMP update was completed by a regional workgroup during FY 2007-08. The comprehensive model SUSMP update includes the following as required by the Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Permit
- Establishment of siting, design, and maintenance criteria for each LID and treatment control BMP listed in the model SUSMP
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the model SUSMP is applicable and feasible
- Addition of a requirement for priority projects with low traffic areas and appropriate soil conditions to use permeable surfaces
- Addition of any necessary restrictions for infiltration BMPs from priority projects that generate high levels of pollutants

The City adopted the new Model SUSMP during this reporting period. The SUSMP includes a review process to verify all proposed BMPs for priority projects meet the criteria designated in the updated local SUSMP.

The City will also incorporate a Hydromodification Management Plan (HMP) into the City's local SUSMP during the next reporting period. The HMP was developed by a consultant and regional workgroup during this reporting period and the draft HMP was submitted to the Regional Board for approval.

2.3.3.2 Development Project Approval Process

The following includes a summary of the City's current development review process.

Discretionary Projects

Projects requiring a discretionary review are subject to an in-depth review by City staff. During the first submittal or pre-meeting, it is determined if the project is a SUSMP priority project and if a water quality document will be required. The project is reviewed by engineering, planning, sanitation, building, and water quality staff; through all permit phases. After review at the City, the project is reviewed by the City's Planning Commission and conditions of approval are set

for the project and approved by the City Council. These conditions require the applicant to uphold all proposed water quality measures and any changes are subject to review and approval by City staff and potentially the Planning Commission and City Council depending on the significance of the changes.

The City of Lemon Grove requires applicants to complete their water quality documents at the time of discretionary review and approval. During this process, the applicants and their engineers are guided by City staff to provide adequate post-construction BMP facilities and to document those facilities on the site plans and documents being submitted. This process results in better designed, more comprehensive, post-construction BMPs since the facilities are included in the project design even in the earliest phases of the project. Each applicant who prepares a water quality report for a priority project is provided a self checklist to assist in their report preparation. This checklist provides the applicant with an outline and details pertaining to the requirements of the SUSMP and the Permit for BMP implementation and sizing.

All hydrology reports and treatment control BMP sizing are done during this phase and are upheld through the remainder of the grading and building phase through the conditions of approval. The same City staff that performs the discretionary review also performs the grading and building permit reviews. This also maintains consistency throughout the review process and ensures the conditions of approval are upheld. City staff provides constant feedback and assistance to the applicant and their engineers through out this process and all additional permit processes. The City continues to discourage the use of mechanical treatment systems. Natural systems are easier and more cost effective to maintain in the long term, as well as encouraging landscaping and additional green space with little if any additional irrigation. All proposed BMPs must meet the standards set forth in the City's SUSMP document, which upholds the requirements put forth in the Permit. If the submittal is inadequate in any regard, approval is withheld and re-submittal is required.

Ministerial Projects

Grading, improvement plans and building permits are all ministerial permits, which means they only require the approval of City staff, not the Planning Commission or the City Council. However, if the project is not completed to staff's approval, no permits are issued and no actual work can be done on the project site. These projects are reviewed by all the same departments and staff as the discretionary projects. Lemon Grove is a small city and has a small staff, which allows the full spectrum of departments to be intimately knowledgeable about the projects being reviewed and any concerns pertaining to the project. If it is discovered that a ministerial project meets priority project conditions as per the SUSMP, all the requirements discussed above are applicable. No permits are issued by City staff until the project satisfactorily meets all of City staff's requirements, particularly water quality requirements.

All ministerial projects, except water heater installations and electrical wiring, are reviewed by water quality staff. Even if the project does not meet priority project standards, water quality staff reviews the project for LID concepts, proper drainage design, proper erosion control, and smart irrigation.

Post-Construction BMP Maintenance Agreements

All priority projects under review for permits must execute a stormwater maintenance agreement guaranteeing the maintenance and/or replacement of permanent BMPs as necessary into perpetuity. The maintenance agreement is recorded against and runs with the property. This ensures that all future owners maintain the permanent BMPs to the original standards and any changes require the approval of City staff.

Capital Improvement Projects

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear or repair projects, often only construction BMPs are necessary. However, SUSMP qualifying projects must also install post-construction BMPs. Priority CIP projects are designed to incorporate the City's SUSMP requirements and LID, source control, and treatment control BMPs will be implemented. The city takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.3.3.3 SUSMP Project Approval

During the planning process, the City reviewed eleven SUSMP projects during this reporting period. A list of those projects can be found in Appendix H4. All applicable SUSMP BMP requirements specified in the City's local SUSMP were applied to each of these projects. Under no circumstances was any priority project permitted to implement treatment control BMPs with low pollutant removal efficiency ratings. In addition, all of the development projects approved in FY 2008-09 were less than fifty acres in size; therefore none of the projects were required to meet Interim Hydromodification Standards. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2009-10. Depending on the date in which the project was reviewed and approved, conditional SUSMP requirements may vary as a result of the migration to the new Permit requirements and the required adoption of the new local SUSMP.

2.3.3.4 SUSMP Project and Treatment Control BMP Tracking

Over the past fiscal year, water quality staff worked to implement a watershed-based SUSMP tracking system. In the future, this tracking system will be transitioned to a GIS based system. However, it is currently only a tracking database. Since the City is predominately in the Chollas Creek watershed with only a small portion in the Sweetwater watershed, it is not difficult to track projects by watershed. The database tracks the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located
- Date of construction of the BMP
- Responsible BMP maintenance party information
- Owner information if different from maintainer
- Receipt of annual maintenance verification
- Inspection findings
- Corrective actions if necessary

The City is continually working to refine the database as more permanent BMPs are implemented and tracked. The City currently has less than 10 tracked BMPs, although several more are still in the proposal and review stage as evidenced by the priority project list. Due to the small number of permanent BMPs in the City, staff inspects all of them regardless of JURMP priority level. They are inspected formally on an annual basis, but frequently informally inspected when staff is in the vicinity. If, in the future, the number becomes significantly larger, the City will begin to utilize the priority rating to determine inspection frequency.

2.3.3.5 BMP Installation Verification Process

The City has always verified the proper installation of all permanent BMPs and LID components, which are similar to the site design elements of the previous Permit. The City continues this practice under the new Permit. Each project requires closing signatures from staff once construction is completed. This involves an on-site staff visit to verify the project was constructed per the plans and appropriate documents including any water quality reports, hydrology reports, and soil findings. If corrections are needed, staff does not provide a signature and can withhold that signature for as long as it is needed to gain compliance. Without compliance, the site cannot be used for its final purpose. If compliance is not reached within a reasonable amount of time, Code Enforcement proceedings are begun. Each project under goes frequent staff inspections during the construction as detailed in Chapter 3 of this report to ensure that any underground elements are being built according to the approved plans and provide regular staff feedback and assistance. All in the hopes of a properly designed site at signature request time. The final signature process involves the same departments that reviewed the project from its initial stages,

typically this includes planning, engineering, sanitation, and building. This means that the staff providing the final implementation inspection is the same staff that reviewed and approved the project, meaning they are very knowledgeable of the project and its requirements. The City's interdepartmental cooperation is instrumental in making this process effective and efficient. Problems are viewed and solved jointly and comprehensively.

2.3.3.6 Annual Treatment Control BMP Operation and Maintenance Verification and Inspection

As required by the new Permit, all treatment control BMPs installed at development projects must be inspected annually and maintained in perpetuity by the responsible party. As part of the JURMP update, the City established a Treatment Control BMP tracking program. Because implementation of the City's JURMP did not begin until January 2008, this reporting period is the second year the tracking system has been used. Annual inspections took place by City staff during this reporting period of all permanent BMPs that have been in operation for at least one full year and rainy season. Again, due to the small size of the City and the currently small number of permanent BMPs, the City was able to inspect all of the BMPs meeting the one full year of operation criteria. As stated before, should that number increase drastically, the City will then begin to use the priority ratings established in the JURMP. A listing of the BMPs inspected during this reporting period can be found in Appendix H5. The City is currently working to implement the annual verification letter requirement. As this is a new and additional requirement for businesses, there have been some initial delays in receipt of these letters and receipt of incomplete information. However, the City is working with the businesses to obtain all the required information in a more timely manner. The City is working to integrate the letter process into its annual commercial and industrial inspection program to solve the previously mentioned difficulties. This information is tracked in the same database that tracks BMP location and inspection results. The City has mailed a notification letter to all those owners/operators that will be required to provide annual BMP verification letters to the City. These letters must be submitted prior to the start of each year's rainy season.

In the first year of implementation, the City anticipates a significant amount of information gathering and validation. Through initial contacts with responsible parties, the City will refine its inventories as well as methodologies to effectively assure proper maintenance and management of permanent BMPs.

2.3.3.7 Enforcement Measures for Development Sites

Since the City's Treatment Control BMP Operation and Maintenance Verification and Inspection Programs did not commence until FY 2007-08 and prior to that the City had a very small inventory of operational treatment BMPs, no enforcement action was required. Verifications and inspections will be completed

as required prior to the rainy season of each reporting period and any subsequent enforcement action will be tracked and reported in the next annual report.

The City will use a variety of escalating enforcement methods to implement storm water requirements for all development projects within the City's jurisdiction. This process is standard for any code violation does not threaten the public's health or immediate safety. Most issues are handled informally with a verbal warning and follow up inspection. These are not always tracked, as this is considered the informal part of the compliance process. The City believes it is important to provide the owner/operator a chance to correct a violation prior to beginning a retribution process. However, if a verbal warning is insufficient, formal proceedings begin with a written notification sent certified mail to verify receipt and detailing the time of the next inspection. The City is flexible on the compliance time frame depending on the severity of the work required for compliance. If a swale needs to be mowed, the City would allow seven days for compliance. However, if a private channel needs concrete work, the City is apt to allow 30 days for compliance as this requires significantly more labor, equipment and cost. Subsequent inspections verify compliance and if continued non-compliance is found; notices of violation, monetary fines, property liens, withheld permits, and small claims court are all viable follow-up actions based on length and severity of non-compliance. A detailed description of the Code Enforcement process is available in the City's JURMP document or through the City's Municipal Code which can be found on-line at www.ci.lemon-grove.ca.us.

2.3.3.8 Notable Activities

Several notable activities were conducted as part of the Development Planning Component during the last several reporting periods. Notable activities included:

- Comprehensive review and update of the City's JURMP
- Comprehensive review and update of the City's Municipal Code
- Comprehensive review, update, and adoption of the regional Model SUSMP
- Development and Implementation of the BMP Verification and Inspection tracking database
- Comprehensive review and revamp of the annual report based on Regional Board feedback
- Continued education of project developers
- Revision of checklists provided to developers to reflect new standards and language

The City will continue to develop and amend its water quality development processes to meet new requirements and demands based on water quality results and improvements in technology. Future annual reports will detail these changes as they take place.

Section 3.0 Construction Component

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site BMPs, inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Permit as outlined in Section D.2.

3.1 Source Characterization

3.1.1 Site Inventory

Within the defined reporting period of this report, the City has compiled, maintained, and updated a watershed based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2010-11 included a total of eight operating construction sites, mostly private driveways and private sewer laterals. Only two of the projects were SUSMP priority projects and they are discussed below. The City formally inspected all of these sites on a monthly basis and informally almost weekly. All of the sites during this reporting period were within the City's main watershed, Chollas Creek.

The City completed 12 minor infrastructure improvement projects during FY 2010-11. All of the projects were minor street resurfacing or pavement rehavilitation. The City has been forced to drastically decrease its street resurfacing due to current budgetary constraints.

- Hardy Drive
- Siegle Court
- Blossom Hill Drive and Court
- Craig Court
- El Verde Court
- Olive Street
- San Altos Place
- Loma Drive
- Circle Drive
- Roosevelt Street
- Edgerton Street
- Lemon Grove Ave, N
- Mount Vernon Street

The City defines a high priority construction site by the following guidelines:

- 50 acres or more and grading during the wet season;
- 5 acres or more and on a tributary of a 303(d) list waterway
- The City may include other sources and activities that contribute significant pollutant loads to the MS4

According to the above definition, the City had no high priority construction sites during this reporting period. However, the City had one construction site that it monitored very closely during this reporting period.

- The rehabilitation project at the City's Recreation Center, which was not a priority project and had a decrease in impervious surface area.

The City performed weekly inspections this location, during both the dry and wet seasons, to ensure the proper placement of BMPs and general site upkeep.

3.1.2 Ordinance Updates

As required by Section d.2.a of the Permit, applicable City documents and ordinances were updated in March 2008 to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code 8.48 Stormwater Management and Discharge Control and 18.08 Excavation and Grading. The following construction specific provisions have been made to these two sections:

- Best Management Practice requirements and general requirements applicable to all dischargers (8.48.060)
- Additional requirements for land disturbance activity (8.48.130)
- Minimum BMPs for land disturbance activity (18.08.140)
- BMP maintenance (18.08.180)
- Stormwater runoff (18.08.450)
- General Construction permit requirements (18.08.900)

3.2 Best Management Practice Requirements

The City requires that BMPs be implemented to reduce or eliminate the impact of discharges from construction site runoff primarily through its grading ordinance. The checklist available in Attachment I-5 gives a breakdown of the City's grading permit requirements.

3.2.1 BMP Requirements for Permitted Construction Sites

Through the JURMP update process completed in March 2008, the City reviewed and updated a set of minimum BMps that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion control BMPs to reduce, retain, and manage pollutant discharges to the MEP. During FY 2009-10, the following BMPs were required on all sites for which permits were issued:

- Erosion Control Methods for Disturbed Slopes: Vegetation Stabilization (Planting), Hydraulic Stabilization, Bonded Fiber or Stabilized Fiber Matrix, Physical Stabilization (Erosion Control Blankets);

- Sediment Control Methods for All Disturbed Flat Areas: Mulch, straw, wood chips, or soil application, De-silting Basin (must treat all site runoff), Energy Dissipater and Outlet Protection
- Methods for Preventing Off-Site Tracking of Sediment: Stabilized Construction Entrance, Construction Road Stabilization, Entrance/Exit Tire Wash, Entrance/Exit Inspection and Cleaning Facility; and
- General Site Management BMPs for On-Site Waste: Materials Management (Material Delivery and Storage), Waste Management (Concrete Waste Management), Solid Waste Management, Sanitary Waste Management, and Hazardous Waste Management.

3.2.2 Seasonal Site Management Requirements

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are additional for the wet season (October 1st – April 30th). These requirements include:

- If necessary, upgraded perimeter protection for pending storms
- Erosion prevention BMPs must be installed, maintained, repaired, improved or replaced to the MEP and as is safe
- Amount of exposed soil shall not exceed seventeen acres, exceptions must be approved by the City Engineer
- Any incomplete disturbed area not being actively graded must be fully protected if left inactive for 10 or more days

Prior to the beginning of the wet season, the City sends a letter to the owners of all active construction sites explaining the wet weather BMP requirements and reminding them of the standard minimum requirements.

3.3 Program Implementation

The City ensures that BMPs are implemented to the standards described in Section 3.2 through several inter-related activities including permit issuance, project approval, field inspection, and public outreach.

3.3.1 Construction and Grading Approval Process

The City has an established and thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards. All other projects require a building permit. Both permits require that plans be submitted and approved by the City. The City's grading ordinance

requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a City wide data management system called HdL.

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As part of this approval process, the City's water quality staff also reviews the grading plans to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Plans are checked by planning, engineering, water quality, and sanitation. Engineering staff reviews the plans for overall compliance with the grading ordinance. Planning checks to verify the plans are consistent with any previously approved discretionary plans and to verify landscaping, if applicable. Sanitation checks for the location of any sewer laterals and ensures that all tie-ins are legal and properly located. Water quality staff checks the plans for specific compliance with the stormwater section of the Municipal Code, the Permit, the local SUSMP, and any other applicable State or Federal regulations. If the site falls under the jurisdiction of the State's General Construction Permit, staff follows up with the developer to ensure that a SWPPP is properly prepared and submitted. In addition, the SWPPP is reviewed and approved as part of the normal approval process and must be complete before the grading permit is issued to the applicant. The City also requires proof that a Notice of Intent (NOI) has been submitted for sites that are subject to the General Construction Permit.

Prior to issuing building and grading permits, staff verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP.

3.3.2 BMP Implementation

Water quality staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the Engineering Department and the City Inspector.

Staff constantly monitors weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all applicable inspectors to inform them of the possibility of incoming rain. This e-mail reminds them to verify BMP compliance at all active construction sites. If the forecast exceeds 40% over the coming five day period, letters are sent to site owners and inspectors check for any additional, applicable BMPs at each of the active sites and any inactive sites with exposed soil. The upkeep of these BMPs is monitored daily while the rain lasts.

Staff approved only no projects with SWPPPs during this reporting period:

Other project reviews completed by staff as part of the permitting process are addressed in more detail in Section 2.0, Development Planning.

Through the review and plan check process, staff may require additional or alternative BMPs to be implemented on individual projects. This allows the stormwater program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site. Any changes to on-site construction BMPs require the approval of the City Inspector and are tracked as red line changes on the construction site drawings.

3.3.3 Construction Sites Requiring Advanced Treatment

There were no sites in FY 2010-11 that required advanced treatment. For the majority of the construction sites with the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined that a project site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat to Water Quality (TTWQ), advanced treatment will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are included in the City's Municipal Code and in the new local Model SUSMP.

3.3.4 Inspections and BMP Verification

The City has an established inspection program to evaluate compliance with stormwater regulations at all construction sites within the City's jurisdiction. The City Inspector is responsible for inspections at all construction sites in the City. Stormwater issues, such as compliance with the grading and stormwater ordinances, are a main focus, especially during the rainy season. It is quite common for water quality staff to also assist in regular inspections and for building inspectors to notify City staff if a violation is observed or if compliance is questionable.

Due to the small number of active sites in the City during any given reporting period, the City inspects all active construction sites regardless of priority and extra attention is paid to any site with a higher threat to water quality during the rainy season. All sites are formally inspected monthly at a minimum and often receive informal inspections on an almost weekly basis.

The City Inspector tracks all inspection notes in a tracking database for future reference and enforcement actions if applicable. This database is updated after each inspection performed, so on a monthly basis at a minimum.

3.3.5 Compliance and Enforcement Actions

3.3.5.1 General Compliance

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites in its jurisdiction. Enforcement for construction projects is administered by the City Inspector and other applicable City staff, such as Code Enforcement.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may by applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to b corrected and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's stormwater regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop Work Notice. The NOV will provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City for construction sites are reported to the RWQCB per the reporting requirements of the Permit.

Civil penalties for violations of the Municipal Code are established in Section 1.24 of the Municipal Code. Determined violations of the stormwater regulations may be subject to administrative citations and associated administrative fines. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector and the severity of the violation.

3.3.5.2 Reporting and Non-Compliance

During the FY 2010-11, approximately six known complaints were received through the City's hotline and other phone lines pertaining to construction sites. All calls were investigated the day of the call; the majority of the complaints were unwarranted and not related to stormwater. Any violations that were discovered were corrected within 24 working hours of verbal notification to the site manager. The site was inspected by the Regional Board during this reporting period and only minimal corrections were required and all were completed within 24 hours of notification.

Section 4.0 Municipal Component

The municipal component of the City's stormwater program includes proper management of facilities owned and operated by the City of Lemon Grove to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, sewers, the storm drain system, and municipally owned facilities which includes six public parks, a fire station, a municipal yard, four office type buildings, a senior center, a public parking lot, one recreation center with a gymnasium, and one vacant lot. The updated municipal facilities index and inspection results are in Attachment J. The City also conducts high threat to water quality activities, as defined in the Permit, such as street and sidewalk repair, painting, graffiti abatement, equipment maintenance, and minor vehicle maintenance. The City, however, also performs a number of activities that are beneficial to water quality, such as street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel, annual MS4 inspection and cleaning, and regular upkeep of the sanitary sewer to prevent overflows and illegal connections.

4.1 Roads, Streets, Highways, and Parking Facilities

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.1.1 Source Characterization

The City maintains 65.5 miles of roadway in Lemon Grove and one public parking lot. This number includes main arterials, curbed residential, and non-curbed residential streets. The City also maintains center islands and medians on these streets and in all parking lots including those attached to municipal buildings. The City does not maintain any highways.

4.1.2 Best Management Practice Requirements

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's JURMP and the CASQA Municipal Handbook to choose applicable BMPs to implement for roads, streets, and parking facilities within the City. Street sweeping is the main BMP that is implemented for these sources. Treatment control BMPs are used for all road sections which are subject to SUSMP requirements, described in more detail in Section 2.0.

4.1.3 Program Implementation

This section describes the steps that were taken in FY 2010-11 to require and verify the implementation of designated BMPs for all City maintained roads, streets, and parking areas and related activites as outlined in the Permit Section D.3.a(5)(a-c).

The City currently implements an aggressive sweeping schedule for its roads, streets, and parking facilities. Long before Order 2007-01 was approved, the City was sweeping to its standards.

The frequency of street sweeping is as follows:

- Major arterial curbed streets – weekly
- All other curbed streets – biweekly
- Non-curbed streets – monthly
- Center islands and medians – monthly
- Major parking lots and alleys – weekly
- All other parking lots and alleys – monthly

During FY 2010-11, the City maintained its street sweeping mileage from the previous reporting period, approximately 80 miles and 175 tons of debris were collected. These figures include the regular sweeping of roads and parking lots, as well as specialty or requested road sweeps and the municipal yard. The City also sweeps bus stops, various parking lots and miscellaneous private streets based on need.

4.2 Fixed Facilities

The City owns and operates a variety of fixed facilities that have been grouped in this section because these facilities received formal inspections as part of the stormwater program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreation Facilities
- Public Works Facilities
- Fire Stations
- Other Fixed Facilities

4.2.1 Source Characterization

The City inspects all municipal facilities on an annual basis. This includes the following list of facilities:

- All six public parks (Kunkel, Berry Street, Lemon Grove, City Center, Fireman's, and Monterey Heights)

- Fire Station
- Recreation Center
- The Community Center
- City Hall/Sheriff's Station
- Senior Center
- City Hall Annex
- Trolley Depot

The City's JURMP does rank each of these facilities based on their threat to water quality, however due to the City's small size it is possible to inspect each facility on an annual basis.

Parks and Recreation Facilities

The City operates six public parks:

- Berry Street Park – 7101 Mt. Vernon St., Chollas Creek watershed
- City Center Park – 7715 Church St., Chollas Creek watershed
- Fireman's Park – School Ln and Central Ave, Chollas Creek watershed
- Kunkel Park – 8171 lemon Grove Way, Sweetwater River watershed
- Monterey Heights Park – Canton and Glencoe, Chollas Creek watershed
- Lemon Grove Park – Washington and Alton, Chollas Creek watershed

All landscape maintenance activities are performed through the City's Grounds Division. In previous reporting periods, a portion of the parks were maintained through a private contractor. However, due to current budget constraints, those services were cut and taken over in-house. The Grounds division is trained and certified to handle pesticides, herbicides and fertilizers properly. They perform all landscaping and irrigation maintenance, as well as all trash and debris removal for all six parks.

Public Works Facility

The City owns and operates one public works yard. The only equipment maintained on site is the landscaping equipment used by the Ground's Division. This frequently includes mowers, the Gator (a small all terrain vehicle), chain saws, and other small devices. The City maintains a small fleet of large vehicles including several pick-up trucks, a dump truck, a paver, a video camera truck, and a vactor truck. All large vehicle service is performed off site under a private contract at a non-City facility. The public works yard does not contain a gas filling station and all materials are stored under covered areas, in doors, or surrounded by BMPs like straw wattle and gravel bags.

Fire Stations

Fire fighting is an essential element of municipal activities conducted in the City. The City has one fire station at 7853 Central Ave. The fire station is home to three engines and one ambulance response vehicle. All servicing on these vehicles is done off site under contract at a non-City owned facility. Very minimal equipment maintenance is performed on site. It includes the cleaning and maintaining of the hoses and chainsaws.

Other Fixed Facilities

Other fixed facilities include the City's office and administrative facilities.

- City Hall/Sheriff's Station – 3232 and 3240 Main St.
- City Hall Annex – 3225 Olive St.
- Community Center – 3146 School Lane
- Recreation Center – 3131 Main St.
- Senior Center – 8235 Mt. Vernon St.

Despite theses facilities being low threats to water quality, all are inspected annually. Inspection results are in Appendix C.

4.2.2 Best Management Practices

4.2.2.1 Updated BMPs

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP and the City's Municipal Code. The City also references the CASQA Municipal Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2010-11, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas, such as medians and traffic islands. The City is maintaining general waste management BMPs and encouraging facility users to recycle, properly dispose of trash, and pick up dog waste by providing conveniently located receptacles at parks and in common dog walk areas. Doggie bag dispensers are available at the 3 largest, most frequently

used parks (Berry Street, Lemon Grove, and Kunkel) and at City Center Park. These are frequently vandalized, but the City works hard to keep them full and operational. They are checked weekly and maintained as needed.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: a) runoff from improper irrigation after application, b) application of chemicals during or prior to storm events, c) use of chemicals that do not properly absorb into soil or plants, and d) overspray from chemical applications that may eventually enter the MS4. The City maintains the following procedures and BMPs pertaining to integrated pest management:

- Educating and training staff and contractors on all BMPs
- Requiring any contracted party to adhere to all City codes and procedures pertaining to proper use of pesticides, herbicides and fertilizers
- Implementing a process for identifying pests and/or problems by site
- Selecting less toxic treatments
- Proper training and licensing of all personnel who handle pesticides, herbicides, and fertilizers
- Use integrated pest management techniques whenever possible
- Record keeping for application dates, times, locations, and quantities.
- Pesticides, herbicides and fertilizers are applied per manufacturers directions and only as needed.
- Compost, mulch, and soil amendments are used whenever possible.
- All federal, state and local regulations are followed
- Pesticides, herbicides and fertilizers are not applied prior to a predicted rain event
- Native and drought tolerant plants are used whenever possible
- Small weeding is done by hand
- Diseased or infected plants are removed completely, if proper treatment is ineffective
- Irrigation systems are remotely controlled and weather and flow sensitive to prevent over watering due to rain or a broken line

Public Works Facility

Public works staff implements appropriate BMPs for all activities that take place at the Public Works yard. This facility uses good housekeeping BMPs most frequently, including but not limited to spill kits, sweeping, dry clean up methods for any oil spills, and proper cleaning of painting equipment. Minimal small equipment maintenance is performed on site, limiting potential pollutants from vehicle maintenance and repair. All of the large vehicles are maintained off site. The site has a SWPPP which includes a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The

SWPPPs is kept at the facility and the facility is inspected annually by water quality staff and monthly on an informal basis. All Public Works employees receive monthly informal training as detailed in Section 8 of this report.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities in the City. The City's fire station uses source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City. All the engines and emergency vehicles are maintained off site. Only small equipment such as chainsaws are cleaned and maintained on site, always using best housekeeping practices to prevent pollutant generation. The Fire Marshal receives regular water quality updates at a weekly joint meeting with water quality, planning and engineering. Water quality staff has worked jointly with the fire department on several occasions when dealing weed abatement, commercial inspections, or illegal dumps. These occasions have provided excellent informal opportunities for education, which have been passed on to other fire personnel. It is common for fire personnel to call water quality personnel from the field with potential water quality concerns. They are an invaluable set of eyes in the community on a daily basis for potential water quality concerns.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management as per the Municipal Code and the CASQA Municipal Handbook.

The City employs a number of pollution prevention practices at City Hall. These practices have been expanded in recent years to include:

- The use of recycled paper for all copiers and printers
- Programmable thermostats to control heating and cooling systems
- Implementing a furlough work schedule, so main City buildings are closed very Friday
- Installing timers on exterior lighting
- Supplying each employee with a personal recycling container
- Providing large recycling containers near all dumpsters and access doors
- Lids on all dumpsters
- A battery collection site accessible by employees only
- Allowing City employees to participate in all local e-waste events

4.2.2.2 Additional Controls for Municipal Areas and Activities

If the City identifies any potential sources of other pollutants of concern for which water bodies in the City are 303(d) listed that could be a result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no municipal fixed facilities that have been determined to need additional BMPs due to 303(d) listings. The City's primary watershed, Chollas Creek, is 303(d) listed for several pollutants, including heavy metals and Diazinon. The City's current BMPs are preventing these pollutants and many others to the MEP. Any changes would be detailed in the applicable future annual report.

4.2.3 Program Implementation

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and enforcement actions if necessary. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.2.3.1 Maintenance

In FY 2010-11, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot,and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular street sweeping hours.

City personnel are trained and required to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly and to report illegal discharges/illicit connections, as they may come across them during normal work activities.

4.2.3.2 Training and Education

Municipal personnel are trained on implementing appropriate BMPs and preventing non-storm water discharges. In FY 2008-09, water quality staff provided regular training and updates to the following municipal departments: Public Works, Engineering, Planning, and Fire. A detailed description of the municipal education program can be found in Section 8 of this report.

4.2.3.3 Municipal Inspections

Water quality staff performs annual inspections at all of the City facilities. As part of the FY 2010-11 program, staff conducted 14 inspections, one at each facility. The results of these inspections can be found in Appendix J. Any required corrective actions have been taken. No enforcement actions were required at any of the municipal facilities during this reporting period.

4.3 MS4

The primary function of municipal separate storm sewer systems are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consists of streets, curbs, gutters, catch basins, inlets, pipes, natural channels, natural and piped creeks, and culverts. The City also maintains a number of treatment control BMPs such as filter inserts and curb inlet protection, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the MEP.

4.3.1 Source Characterization

The City maintains a variety of MS4 facilities which includes 190 catch basins and inlets, approximately 75 miles of piping, and approximately 2.5 miles of open channel. The City plans to put all of these facilities in GIS during future reporting periods. However, due to budget constraints, these plans are currently on hold.

4.3.2 Best Management Practice Requirements

4.3.2.1 Updated BMP Requirements

In FY 2007-08, the City prepared a JURMP update which directs staff to utilize the CASQA Municipal Handbook in addition to the Municipal code to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste and pollutants from entering the MS4 system as well as ensuring that waste which is collected during maintenance for the City's MS4 does not re-enter the system.

The 2007 Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City does not own or operate any flood management projects or flood control devices that may be retrofitted.

4.3.2.2 Additional Controls For Municipal Areas/Activities

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined necessary.

4.3.3 Program Implementation

The City's MS4 management program includes responding to complaints, detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, by repairing and/or replacing damaged or failing MS4 structures; and by providing signage on storm drain inlets. The City trains and requires field staff to implement BMPs, inspect equipment and follow an action plan for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a vactor truck during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance.

All maintenance activities during this reporting period were in compliance with the current Permit. All maintenance BMPs were updated in FY 2007-08 to correspond with any new Permit requirements.

4.3.3.1 Maintenance

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year is included below:

- Within this reporting period, the City inspected forty-three roads, 190 catch basins and sixteen conveyances connected with the MS4. The same numbers as the previous reporting cycle. Only seven conveyances and 68 catch basins were found to be in need of cleaning and 100 percent of these were cleaned prior to the end of the reporting period. This resulted in the removal of approximately 1,860 pounds of trash and debris from the catch basins, conveyances, and roads. The City also manually removed invasive plant growth from those seven conveyances, providing approximately another 1,500 pounds of green debris. The cleaning of catch basins and conveyances is an annual event that takes place prior to the beginning of the rainy season and usually occurs between October and November.
- The City continues to install Trident Curb screens and has added Streamhawks to several curb inlets as well. Both of these devices prevent trash, debris, and sediment from entering the MS4 by keeping the debris in the curb line and easily accessible to the street sweepers. The City attributes the decreases in trash quantities found in and around conveyances to these devices and the more efficient use of the street sweepers.

4.4 Sanitary Sewer System

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.4.1 Source Characterization

The City maintains 64.952 miles of sanitary sewer pipeline. The sanitary sewer system serves the entire Lemon Grove area and connects with San Diego and La Mesa's sewer systems. La Mesa utilizes 728.60 EDU of Lemon Grove's sewer space and San Diego uses 986.20 EDU.

4.4.2 Best Management Practice Requirements

4.4.2.1 Updated BMP Requirements

The City has created and maintains basic BMPs in the JURMP and the Municipal Code. The City also utilizes the CASQA Municipal Handbook as a reference guide for BMP implementation, including the maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.4.2.1 Additional Controls for Municipal Areas and Activites

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program the minimizes sanitary sewer overflows (SSO) and is described briefly below and in more detail in the City's Sanitary Sewer Management Plan (SSMP) in accordance with Order 2006-03.

4.4.3 Program Implementation

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediation of existing lines as necessary, and proper disposal of hazardous waste.

4.4.3.1 Maintenance

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2009-10, the City cleaned and maintained the following portions of the sewer system. Hotspots are inspected three times annually and easements are inspected twice annually.

Table 4.1
Sanitary Sewer Services in Feet

	Total FY 2006-07	Total FY 2007-08	Total FY 2008-09	Total FY 2009-10	Total FY 2010-11
Cleaned	**331,369**	**52,493**	**646,943**	**359,174**	**365,174**
Root Cut	**20,927**	**36,039**	**596,943**	**329,174**	**331,174**

Within those numbers is the following information:

- 26,919 feet of hotspot line was cleaned and root cut
- 124,265 feet of easement line was cleaned and root cut
- 207,990 feet of right of way line was cleaned and root cut

All SSO information was reported electronically to the Regional Board through the SSMP program. However, the City had no mainline overflows during this reporting period. The appropriate City staff are trained in detecting, reporting, and responding to all SSOs.

4.5 Mobile Municipal Activities

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.5.1 Source Characterization

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- Power washing for graffiti removal
- Street and sidewalk repair and maintenance (striping, repainting, and pothole repair)
- Landscape maintenance

4.5.2 Best Management Practice Requirements

4.5.2.1 Updated BMP requirements

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities described above. During the City's JURMP update, minimum BMPs were established for all municipal activities. The City also references the CASQA handbook and the Municipal Code to ensure the use of all applicable BMPs for any given activity.

4.5.2.2 Additional Controls for Municipal Areas and Activities

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined necessary. Presently, City related mobile activities have not been determined a high threat to water quality. Public Works and Grounds division staff are vigilant about the use of proper BMPs when doing any mobile activity. Pollutant generation is limited to the MEP through temporary BMPs such as gravel bags and straw wattles or good housekeeping practices such as dry spill cleaning, wet vacuums, and sweeping. During this reporting period, the current BMPs were evaluated and determined to be sufficient and to the MEP.

4.5.3 Program Implementation

In FY 2010-11, City staff were sufficiently educated in the proper BMPs to utilized during mobile activities. These BMPs include proper containment, control, and capture of any discharge generated by a mobile activity and possibly carrying pollutants.

4.6 Special Events

The City hosts a very limited number of special events each year and even fewer under the current economic climate. The current line-up consists of the Winter Bonfire, the Fire Station Open House, and Concerts in the Park. Special events have the potential to generate significant trash and litter caused by the patrons

and activities of the special event. The City utilizes many of the controls listed in Permit Section D.3(2)(f). These BMPs are described in more detail below and are implemented during and/or after special events, when and where applicable.

4.6.1 Source Characterization

The City hosts a few special events each year that have the potential to produce trash and debris pollutants.

4.6.2 Best Management Practice Requirements

4.6.2.1 Updated BMP Requirements

In FY 2010-11, the City implemented many of the controls specific to special events listed in Section D.3(2)(f) of the Permit. The City has chosen the following BMPs as most effective and efficient for City needs.

Anyone outside of the City seeking a Special Events Permit, must ensure the following BMPs are maintained:

- Proper management of trash and litter, including temporary trash receptacles
- Post clean up activities, such as catch basin cleaning and general litter pick-up, when necessary
- Post event street sweeping, when necessary
- Other BMPs when considered necessary by City staff

The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.6.2.2 Additional Controls for Municipal Areas and Activities

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary.

4.6.2.3 Program Implementation

In FY 2010-11, there were the following City sponsored special events:

- Movie Night in the Park
- 6 Concerts in the Park
- Winter Bonfire
- Fire Station Open House

At a minimum, these events were required to provide extra trash and recycling containers, proper disposal of grease if food preparation was involved, and proper secondary containment for port-a-potties.

During the events, City staff was on hand to ensure that the event remained free of illegal discharges and/or illicit connections to the MS4. City staff were available for the duration of the event and afterwards for immediate trash removal and to notify the appropriate staff if a problem was observed.

Section 5.0 Industrial – Commercial Component

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4. The City has implemented a program that aims to reduce and prevent industrial and commercial pollution discharges from the MS4 to the MEP, to protect local receiving water bodies, and to comply with the Permit.

Commercial facilities within the City include a wide range of oriented businesses from restaurants to nurseries. There is one main commercial area within the City, along Broadway and down Lemon Grove Ave. This area contains many different commercial businesses ranging from restaurants to automotive outlets. The City's industrial area runs along Federal Blvd adjacent to SR 94.

Throughout FY 2010-11, City staff has worked diligently to fulfill the requirements of Order 2007-01. The City worked to ensure our current inspection program met the requirements of the current Permit and made any adjustments necessary. Due to the City's small size, staff is able to inspect a larger than needed majority of its commercial facilities and all of its industrial facilities. The City also continues to participate in the development of a regional mobile business program. The following section will demonstrate the City's successful implementation of the requirements of the Permit (Section D.3.b) during FY 2009-10.

5.1 Industrial-Commercial Sites/Sources Element

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The City emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Permit.

For the rest of Section 5.1, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial sites/sources component is described in Section 5.2.

5.1.1 Source Characterization

A watershed-based inventory of the industrial and commercial sites/sources within the City was compiled as part of the 2008 JURMP update. As required by the Permit, the inventory includes the following information for each site/source: facility name, address, possible pollutants, if the site drains to a 303(d) listed

waterbody, and a brief description including SIC codes which best reflect the principal products or services provide by each facility. This list can be found in the 2008 JURMP. Because mobile commercial businesses do not have a fixed address at which they operated, they are tracked within a separate, non-spatial database.

The commercial inventory is continually updated as facilities go out of business and new facilities open. This process is performed primarily through the business license data base. Staff also collaborates with the Fire Marshal to verify existing and new facilities and to combine inspections. In addition, the City identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered or licensed with the City. When this occurs, these facilities are added to the inventory and the proper City staff are notified to ensure the business is brought into compliance with City licensing requirements. During annual facility inspections, City staff has the opportunity to identify new or closed businesses and update the inventory with these findings.

In FY 2010-11, the City continued its focus on high priority commercial businesses by inspecting all restaurants, manufacturers, and automotive repair facilities with in the City. This totaled 34 facilities for this reporting period, the list of which is located in Attachment K 2. Table 5-1 contains a summary of the commercial facilities found in the City. The summary includes home businesses like carpet cleaners and household cleaning services, which the City finds to be difficult to inspect due to their transitory nature and small size (typically one person operations). The City deals with these operations more from a residential perspective than a commercial perspective and requires the standard minimum residential BMPs of these services. The City also inspects parking lots in conjunction with their respective buildings and does count them separately in the site total.

Table 5-1 - Summary of High Priority Commercial Sources

Commercial Activity	Number of Facilities in Lemon Grove
Automobile Dealers/Rentals	18
Automobile Supply Stores	9
Automobile Repair/Paint	9
Automobile System and Tire Repair	56
Automobile Cleaning/Washing	3
Gas Stations	7
Eating/Drinking Establishments	60
Landscaping, includes lawn care	9
Nurseries and Greenhouses	1
Pest Control	3
Equipment Repair/Maintenance/Cleaning	3
Metalwork	6
Masonry	4
Parking Lots and Storage	3
Carpet/Building Cleaning	21

Pool and Fountain Cleaning	3
Total	**215**

The City has 19 industrial facilities, most of which are high priority due to their proximately to Chollas Creek, a 303(d) listed waterbody. The City inspects all of these facilities on an annual basis. This number includes the three facilities which fall under the Statewide Industrial Permit as well. Table 5-2 contains a summary of these facilities.

Table 5-2 - Summary of High Priority Industrial Sources

Industrial Activity	Number of Facilities in Lemon Grove	Revised High Priority Category Facilities
Waste Disposal and Recycling	1	
Equipment/Transportation	3	2
Metalwork	2	3
Building Supplies and Woodworking	3	2
Industrial Paper		1
Contractor, Special Trade		1
Specialty Hardware, Drapery		1
Total	**9**	**10**
	Total Facilities	**19**

As part of the 2008 JURMP update and development of the interim SUSMP, the City collaborated with Copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-3 in Attachment K2 lists the pollutants that may be generated by each category of business. The pollutants that many be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in the JURMP.

All industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR S. 122.26 (b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing*
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling
- Pest control services
- Eating and drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning*
- Cement mixing and cutting*
- Masonry*
- Painting and Coating*
- Botanical or zoological gardens and exhibits
- Landscaping*
- Nurseries and green houses
- Golf courses, parks, and other recreational areas/facilities
- Cemetaries
- Pool and fountain cleaning*
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services*

*All mobile commercial businesses are discussed in Section 5.2.

Both Industrial and Commercial Facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired waterbody segment, where the site/source generates pollutants for which the waterbody is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e. within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA)
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.1.2 Best Management Practice Requirements

5.1.2.1 Updated BMP Requirements

During the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sties and incorporated these into the City's Municipal Code Sections 8.48.080 and 8.48.090. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's JURMP and Municipal Code. The Municipal Code can be accessed through the City's website: www.ci.lemon-grove.ca.us.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP and implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are based on a review of the site's SWPPP and site inspections, where needed.

5.1.2.2 Additional Controls

The City requires the implementation of additional controls for industrial and commercial sties and sources that are 1) tributary to CWA Section 303(d) impaired water body segments or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

The City prescribed additional controls during inspections of commercial and industrial facilities, as needed, depending on the proximity of the facility to the waterbody and the observed potential of the site to be a significant source of pollutants that may threaten the downstream waterbody as necessary and appropriate.

5.1.3 Program Implementation

This section describes the steps employed by the City to require and verify the implementation of designated BMPs for stationary industrial and commercial sources. During FY 2010-11, the City updated its program as needed, provided education and outreach through inspection actions, inspected inventoried businesses to evaluate compliance with established minimum BMP requirements

and the local stormwater ordinance, and took enforcement action as necessary to bring violators into compliance.

5.1.3.1 Inventory Prioritization

Since the new Permit no longer requires industrial and commercial facilities to be prioritized as high, medium, or low; the City prioritized industrial and commercial businesses as either high priority or non-priority.

When evaluating threat to water quality, the City considered the following attributes of each industrial and commercial business to determine priority or non-priority status:

- Type of activity (SIC code)
- Materials used at the facility
- Wastes generated
- Pollutant discharge potential
- Non-stormwater discharges
- Size of facility
- Proximity to receiving water bodies
- Sensitivity of receiving water bodies
- If the facility is subject to the General Industrial Permit or an individual NPDES permit
- Filing of a No Exposure Certification/Notice of Non-Applicability
- Facility design
- Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff
- Compliance history
- Any other relevant factors

Although not specifically required by the Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City uses the following additional spatial attributes to prioritize industrial and commercial facilities:

- Proximity to a 303(d) listed waterbody
- Pollutant potential of the facility type
- Stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. In addition, if during the City's commercial inspection process or based on institutional knowledge, it is determined that additional sites that would otherwise have a lower priority should be classified as high priority industrial or commercial facilities based on the Permit criteria, they were noted as such in the inventory and inspected as required.

The City's commercial inventory was updated and prioritized during the 2008 JURMP update and will be prioritized at least once per year prior to conducting annual inspections.

5.1.3.2 Inspection Frequency

FY 2010-11 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in the Permit. As part of the JURMP update, a new process to determine high priority facilities was formulized and put into effect during the previous reporting period. To determine which industrial and commercial sites were inspected in FY 2009-10, the following steps were taken:

- Confirm that the current industrial and commercial inventories are up-to-date.
- Prioritize each facility based on the prioritization process described in Section 5.1.3.1 of this document
- Review the list of facilities that were inspected the previous year
- Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with Permit standards, the inspected over 50 percent of all stationary industrial and commercial facilities inventoried as high threat to water quality and over 20 percent of all stationary inventoried sites. Mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Permit were met.

During the 2008 JURMP update, the City identified the businesses that would be inspected as part of the 2009-10 reporting period. The City's facility summaries can be found in Tables 5-1 and 5-2 of this section. The list of high treat to water quality stationary commercial facilities can be found in Attachment K2. The City inspected all of these facilities and all of the industrial facilities in Table 5-2 during FY 2010-11.

5.1.3.3 Routine Facility Inspections

The City routinely inspects its commercial and industrial facilities. Inspections are intended to:

- Provide facilities with information regarding the City's stormwater program
- Provide guidance in complying with stormwater regulations
- Validate and manage the inventory

During FY 2010-11, the City conducted 19 industrial and 34 commercial inspections for compliance with ordinances, permits, and policies. All inspections included, as applicable:

- Review of BMP implementation plans, if the site uses or is required to use such a plan
- Review of facility monitoring data, if the site monitors its runoff
- Check for coverage under the General Industrial Permit (NOI or WDID), if applicable
- Assessment of compliance with Copermittee ordinances and permits related to urban runoff
- Assessment of BMP implementation, maintenance, and effectiveness
- Visual observations for non-stormwater discharges, potential illicit connections, and potential discharge of pollutants to stormwater runoff
- Education and training on stormwater pollution prevention, as conditions warrant

Based on the results of each site evaluation, City staff completed an inspection form, which can be found in Attachment K1.

Staff generally works with site contacts to provide examples of BMP solutions that could be implemented. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the inspector is at the site. The responsible party is always provided a copy of the inspection findings after the inspection. For any sites found not in compliance, corrective actions are written on the inspection form along with any follow-up actions or inspections, as needed.

Inspection Tracking

Complaint and inspection documentation is filed in a tracking database and is kept up to date on a regular basis.

Third Party Inspections

All commercial inspections conducted in FY 2010-11 were completed by City staff. The City has one full-time Code Enforcement officer with a stormwater focus, who is dedicated to conducting routine commercial, industrial, and residential inspections and follow up for routine inspections as well as complaint calls. A third party was not employed to conduct inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting stormwater compliance inspections and enforcement of industrial and commercial facilities are training regularly on inspection and enforcement procedures, BMP implementation, and assessment of monitoring data. Water quality staff actively collaborates with inspection staff throughout the region to share methodologies and approaches that may be beneficial region wide.

Inspection Follow-up and Enforcement

Staff conducted follow-up inspections at all facilities that were directed to implement corrective actions. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. The City only had one non-compliant industrial facility. The facility was storing materials uncovered, outside. The corrective actions were given to the facility contact and all corrections were made by the follow up inspection. Twelve restaurants were found in non-compliance on the initial inspections, all corrective actions were minor and completed by the follow-up inspections. The restaurants continue to display confusion over the water quality inspections versus health code inspections and fire code inspections. For this reason, staff has worked diligently to provide on site education and to coordinate inspections with the City's Fire Marshal. It is not possible to coordinate inspections with the health inspectors as that is a County program with its own staff and own time lines for inspection requirements.

5.1.3.4 Notification

The City will notify each inventoried industrial and commercial business of the City's updated BMP requirements that are applicable to the site/source. During FY 2010-11, the City provided a formal letter notifying the facilities of any changes and that a new Permit had been issued. During FY 2010-11, the City did not feel a second formal notification was required and dealt with education during the actual inspection.

5.1.3.5 Complaint investigations, Violations, Enforcement, Follow-up and Compliance

When a complaint is registered with the City's hotline, e-mail, other phone line, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City staff with enforcement authority within a reasonable time frame. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or clean up activities by the City or responsible party.

As required by the Permit and depending on the severity of the violation, the City enforces its stormwater ordinances for all commercial and industrial facilities as

necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for staff to establish appropriate compliance time frames on a case by case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's Code Enforcement database.

During FY 2010-11, the City had four commercial related complaints and no industrial related complaints. The two commercial complaints were the hosing of parking lots. The behavior was stopped immediately upon investigation and both dischargers were educated on the proper dry methods for cleaning impervious surfaces.

Reporting of Non-Filers

The City did not identify any industrial sites that may require coverage under the General Industrial Permit, but which, to the City's knowledge did not file NOIs.

5.2 Mobile Sources

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City and do not typically have a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.2.1 Source Characterization of Mobile Sources

The mobile businesses known to operate within the City's jurisdiction are listed on an inventory found in Attachment K2. This inventory was prepared as part of the 2008 JURMP update. The following business types are addressed by the mobile sources element of the City's industrial and commercial program:

- Mobile automobile and other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades such as: cement mixing or cutting, masonry, painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile businesses that the City determines to have a significant threat to water quality will be added

to the inventory. Because not all mobile businesses have obtained business licenses in the City or have a base of operations outside the City, staff is continually refining and updating the mobile inventory. In addition, the City is participating in the creation of a regional mobile businesses list.

5.2.2 Best Management Practice Requirements

5.2.2.1 Updated BMP Requirements for Mobile Sources

All BMPs required for station sources, described in Section 5.1.2.1 of this document and listed in detail in the City's JURMP, are also required of mobile businesse, where applicable. The most important BMPs for most mobile businesses are typically those that address non-stormwater discharge control and spill prevention, control, and clean-up.

5.2.3 Program Implementation

5.2.3.1 Education/Outreach and Notification of Mobile Sources

The City will provide information and outreach regarding stormwater quality to mobile business owners and operators. Businesses will be given educational materials outlining pollution prevention methods and other related BMPs if businesses are found to be in violation of the City's stormwater ordinance or the Permit. City staff will also give recommendations to businesses, where applicable.

Because the mobile business program is a new element of the industrial and commercial program; it is anticipated that some mobile businesses are not aware of stormwater requirements and that education will be a significant portion of the program. The education is described in more detail in Section 8 of this report. It is worthy to note, that even before the issuance of the new Permit, City staff reviewed and gave verbal stormwater education to any mobile or automotive business license applicant.

The City will continue to coordinate and collaborate with the regional Education and Outreach Workgroup to notify the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three years of implementation of the updated JURMP.

5.2.3.2 Inter-Jurisdictional Cooperation

During this and the previous reporting periods, the City has participated with other Copermittees in a Mobile Business subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the

Copermittees have chose to collaborate on a regional mobile business strategy, which addresses the following elements:

- Inventory Development and Maintenance
- Establishment of Minimum BMP Requirements
- Outreach and Education including notifications

A consultant may be hired at some point to assist with this process. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy.

5.2.3.3 Inspections

The inspections for mobile businesses generally follow the same procedure described in Section 5.1.3.3 of this report. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, staff works directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.2.3.4 Complaint Investigations, Violations, Enforcement, Follow-up, and Compliance

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to Section 5.1.3.5 of this report.

In FY 2010-11, City staff investigated six complaints based on mobile business activities. Investigation of mobile business activities can be difficult based on the transient nature of their operations and their habit of operating primarily on weekends. The City has limited Code Enforcement abilities during non-working hours, but has managed to educated several mobile businesses by actual staff observation of activities. All calls were investigated and followed up with to the best of staff's ability to obtain contact information for the mobile business operator. All contacted operators were provided BMP requirement education and told if complaints persisted, administrative fines would be processed. To the City's knowledge, all have complied with the BMP requirements.

Section 6.0 Residential Component

Approximately 80 percent of the City's 3.7 square mile area is designated as residential on the land-use map. Residential land use comprises a large area of the City and residential activities can have a considerable effect on water quality of receiving waters. The City's residential component of the stormwater program aims to reduce pollutant runoff from residential areas and activities to the MEP.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Lemon Grove and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2010-11 that contributed to the successful implementation of the City's Residential Component.

6.1 Source Characterization

The City of Lemon Grove encompasses 3.78 square miles. The City has a population of approximately 26,000 residents. Attachment L-1 contains a demographics chart for the population of Lemon Grove. As Attachment L-1 shows the City expects the population to grow twenty-three percent between 1995 and 2020. As the community grows, the collective impact of residential activities on water quality will increase commensurately. Maintaining an adequate emphasis on residential areas is therefore crucial to the success of the City's water quality programs.

This section identifies the high threat to water quality residential areas and activities that were focused on during FY 2010-11. The high threat to water quality areas and activities within the City were identified during the 2008 JURMP update process and are described in detail in the JURMP. The following section will briefly summarize this process.

6.1.1 High Threat to Water Quality Activities

In consideration of the minimum required high threat to water quality residential activities listed in Section D.3.c(1) of Order 2007-01, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.1.2 High Threat to Water Quality Areas

Section D.3.c(1) of Order 2007-01, requires that Copermittees identify all high threat to water quality residential areas. During the 2008 JURMP update, the City identified high threat to water quality residential areas using the following criteria:

- Any residential areas tributary to a CWS section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within environmentally sensitive areas (as defined in Attachment C of the Permit)

The City has one section 303(d) impaired water body within or directly adjacent to its boundaries. The 303(d) impaired water body within the City is Chollas Creek and is the main watershed for the City. Based on the definition in Attachment C of the Permit, the City does not have any coastal lagoons or environmentally sensitive areas within its boundaries. By collaborating with other copermittees, the City has identified the following pollutants as pollutants of concern for residential areas:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

In consideration of identified 303(d) listed water body and the primary pollutants of concern, City staff has identified the locations of high threat to water quality residential areas as follows:

- All houses within 500 ft of Chollas Creek, USGS blueline
- All houses within 500 ft of any major Chollas Creek drainage channels

This primary affects houses along Main St, San Miguel, and Bakersfield at Ensenada.

6.1.3 Evaluation of Oversight of Residential Areas and Activities

The City is planning to conduct a formal evaluation of the methods used for oversight of residential areas and activities during the permit cycle of Order 2007-01. The evaluation will coincide with the City's effectiveness assessment for the Residential Component. Since the methods used for residential oversight were recently updated within this last fiscal year, City staff determined that it would be

most appropriate and most accurate to evaluate the success of these methods in following reporting periods.

6.2 Best Management Practice Requirements

This section describes the updates made to the City's minimum BMPs that were implemented during FY 2010-11. The minimum BMPs for residential high threat to water quality activities were established in the City's 2002 JURMP. As part of the 2008 updated, the minimum BMPs were reviewed and updated as necessary.

6.2.1 Pollution Prevention

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for high threat to water quality areas and activities.

6.2.2 List of Minimum BMPs

As part of the City's JURMP update, the City designated the following minimum BMPs for high threat to water quality residential activities and areas. The minimum BMPs are primarily nonstructural and area targeted at activities specified in Section 6.2 as having a high threat to water quality. Pollution prevention methods were incorporated into this set of BMPs, where appropriate.

Automobile Repair and Maintenance

Pollution Prevention: a) employ routine preventative maintenance practices, b) reduce vehicle use whenever possible (carpool, use public transportation, bike or walk for short trips, alter driving habits), c) make timely vehicle repairs
Leaks and Spills: prevent leaks and spills from entering the stormdrain by using or doing: drip pans, plastic sheeting, or other containment devices, work indoors or under shelter and never in the rain, immediately clean spills, use dry cleaning methods, establish clean up standards, and require that tools and parts be cleaned in a contained area
Materials and Waste Management: properly manage and dispose of automotive wastes and materials by: draining fluids from automobiles, disposing of wastes and fluids properly and lawfully, store materials, parts and tools indoors or under cover, use secure and watertight containers when storing materials and wastes

Automobile Washing

Management/Reduction of Wash Water: a) whenever possible, use commercial self-serve or full-serve car washes that properly dispose of or recycle the water, b) when washing at a residence be sure to: wash over a porous surface such as grass or dirt when possible, use dry cleaning methods, turn off the water when not in use or use a controllable spray nozzle, encourage the use of a neighborhood wash area where contaminants can be easily manged
Materials and Waste Management: a) properly dispose of soapy water or bucket water to a sanitary sewer or landscaped area, b) use dry methods to degrease or clean especially dirty areas such as tires

Automobile Parking

a) use routine preventative maintenance practices and make timely vehicle repairs to prevent fluid leaks
b) design and construct parking areas to minimize stormwater impacts; covered garages should be plumbed to the sanitary sewer

Home and Garden Care Activities and Product Use

Garden and Yard Care
Pollution Prevention: a) use safe substitutes and alternative gardening methods such as IPM techniques, native and drought tolerant plants, use compost or vermiculture for green waste recycling, follow manufacturers instructions for the application of any chemicals, identify pests before treatment, b) read all labels on products, c)implement water conservation, d) consider xeroscape gardens, e) repair and maintain irrigation system to prevent over watering, f) recycle green waste, g) plant or mulch hillsides and slopes to prevent erosion
Leaks and Spills: a) immediately clean any chemical spills, fertilizers, or soil, b) return spilt items to container for future use or proper disposal
Materials and Waste Management: a) store lawn care products in closed labeled containers indoors or covered areas, b) refrain from using chemicals on windy or rainy days, c) cover stockpiles of soil, compose, or fertilizer, d) dispose of chemicals through the HHW program, e) utilize dry sweeping methods for clean up
Restrictions on Activities: a) do not hose off paved surfaces to the street or gutter, b) do not put hazardous waste in the trash, landfill or stormdrain

Home Care and Maintenance
Pollution Prevention: a) utilize smart purchasing practices that reduce waste, b) use less toxic or non-toxic substitutes for cleaning, c) read and follow product labels, d) recycle used or unwanted products, e) use water based paints when possible, f) recycle unwanted appliances and equipment
Leaks and Spills: a) clean up spills immediately, b) properly dispose of waste from clean up materials

Materials and Waste Management: a) store HHW materials in closed labeled containers and in covered areas, b) recycle latex paint through local programs, c) dispose of hazardous products though the HHW program, d) dispose of trash in the proper receptacles with lids
Restrictions: do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter or storm drain

Disposal of Pet Waste

Pollution Prevention: spay or neuter pets to reduce feral populations
Waste Management/Disposal: a) clean up after pets when walking them in public places, b) clean up yards or other commonly used areas, c) properly dispose of the waste in the trash or toilet
Pet Management (Dogs and Cats): do not allow pets to run free in residential neighborhoods, whenever possible

6.3 Program Implementation

This section describes the steps that were taken in FY 2010-11 to require and verify the implementation of designated BMPs for residential areas and activities.

6.3.1 Outreach and Training

The City has an education program that is consistent with the Permit and the jurisdictional program. A significant element of this program consists of educating residents about ways in which they can minimize their impact on local waterways and the environment in general. Education of the citizens in Lemon Grove contributes to the implementation of the residential component of the stormwater program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between the MS4 and the sanitary sewer
- Pollution prevention and safe alternatives
- HHW collection and recycling
- BMP implementation and maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment and recovery
- Water conservation

During FY 2009-10, City staff conveyed these messages to the public through a variety of mechanisms, including:

- City's Website
- Production and distribution of brochures and promotional items

- Public participation in community events
- Response to residential complaints
- One on one conversations
- Public participation events such as clean-ups

Implementation of these mechanisms by the City helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the City can be found in Section 8.

6.3.2 Used Oil, E-Waste, and HHW Collection Services

The City facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City participates in door to door home collection, a permanent recycling facility is located in the City, and collection events for all HHW and e-waste. In addition, the City encourages weekly curbside garbage, recycling, and yard waste pick-up services through a franchise with EDCO. The various components of the solid waste and hazardous waste collection services provided by or for the City are described in detail below.

HHW Collection Program

The City seeks to reduce solid waste generated in its boundaries. Conservation techniques supported by the City include source reduction, reuse, and recycling, including the procurement of recycled-content products. The City must meet the state-mandated fifty percent reduction level for solid waster disposal, which means at least half of the refuse generated in 1990, adjusted for population and economics, must be spared from a landfill. This information is lengthy and is available upon request.

The City has completed and approved the construction and demolition ordinance. The ordinance went into effect at the beginning of December 2005. Only two demolition sites qualified and completed the program during this reporting period. Both projects were very small private development projects and the City has not calculated the waste totals as of this report. The totals will be available upon request by October 30, 2011.

The recycling outreach efforts include conducting public education, establishing infrastructure, and supporting existing recycling operations. Current programs focus on: revising the City's recycling plans, business recycling, enforcement (business and residential), construction and demolition waste, motor oil recycling and storm drain filters, and public education including schools, brochures, and interaction with City staff.

During this reporting period, the City participated in eight collection events for solid waste disposal. All of the events were in cooperation with a Household Hazardous Waste grant through CIWMB. .

The City held one collection day through EDCO and their facilities at the same time as the curb side clean up day. These events allow residents to dispose of unwanted bulky items and HHW free of charge. The elderly and disabled can schedule for curb-side service with City staff. The event during this reporting period took place on April 24-25. Due to the earlier due date of this report, the City is unable to supply HHW totals for the previous fiscal year. The totals for FY 2010-11, as per the HHW program, are not due to the State regulating agency until October 1, 2011; making the City's finalized data unavailable until mid-October at the earliest. The City is currently cooperating in a different capacity with the management of the local HHW program. The City of La Mesa is now the lead agency for the HHW collection contract through EDCO. EDCO's La Mesa HHW facility is the closest drop-off location to the City of Lemon Grove. The City pays La Mesa a small contract management fee to utilize the EDCO HHW facility and then obtains mass totals from the City of La Mesa. The City is happy to provide the Regional Board with those totals upon request after October 30, 2011.

The City has revamped its e-waste collection program and now contracts with Recycle San Diego to provide local events. During FY 2010-11, the City held eleven e-waste recycle events at the park adjacent to City Hall. At the time of this report, the contractor has not yet compiled the collection data for these events. That data will be available upon request after November 30, 2011.

Used Oil Recycling Program

Statistics from the California Integrated Waste Management Board (CIWMB) indicate that 1 in 5 households in California have a do-it-yourself (DIY) oil changer. "There were 91.3 million gallons of used lubricating oil (ULO) were recycled during 2005, which was 5 percent above the 87.0 million gallons collected in 2004. The ULO recycling rate for 2005 was 59.5 percent, which is a 3 percent increase when compared to ULO recycled in 2004. The lubricating oil recycling rate does not account for oil burned off or spilled during use, which is estimated to range from 20 to 40 percent."[1] Below are four charts that demonstrate this trend in increased recycling.

[1] http://www.ciwmb.ca.gov/usedoil/RateInfo/default.htm

Table 6-1 Amount of Lubricating Oil Recycled as a Percentage of Sales, 1994-2005 (Calendar Years)

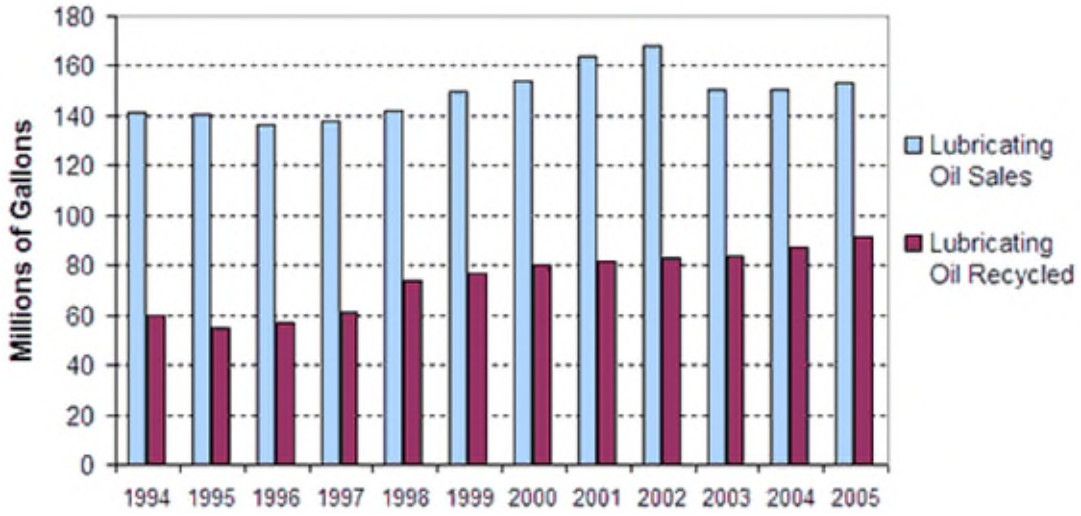

Table 6-2 Annual Oil Sales and Used Oil Recycling Rates (in millions of gallons)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Lubricating Oil Sales	141.2	140.8	136.2	137.5	142.1	150.0	154.3	163.6	168.0	150.2	150.5	153.5
Industrial Oil Sales	78.0	117.3	140.9	141.7	152.4	176.4	155.7	149.1	147.1	135.8	144.6	123.1
Total Oil Sales*	219.2	258.1	277.1	279.5	294.5	326.4	310.0	312.7	315.1	286.0	295.0	276.6
Lubricating Oil Recycled**	59.9	54.6	56.8	60.9	73.6	76.9	80.0	81.9	83.1	83.7	87.0	91.3
Industrial Oil Recycled**	16.7	19.5	20.8	19.3	11.6	10.4	7.9	15.5	17.5	32.4	32.5	31.4
Total Oil Recycled	76.6	74.1	77.6	80.2	85.2	87.3	87.9	97.4	100.6	116.1	119.4	122.7

***** The volumes for oil sales and used oil collections are revised as used oil recycling fees are collected or refunded. Sales totals for lubricating oil are subject to change. Fees on oil sales and refunds for exempt lubricating oils may be reported up to one year after the initial sale.

****** Figures include used oil collected in California and used oil sent outside of California.

Table 6-3 Oil Collected by Public Collection Programs (in millions of gallons)

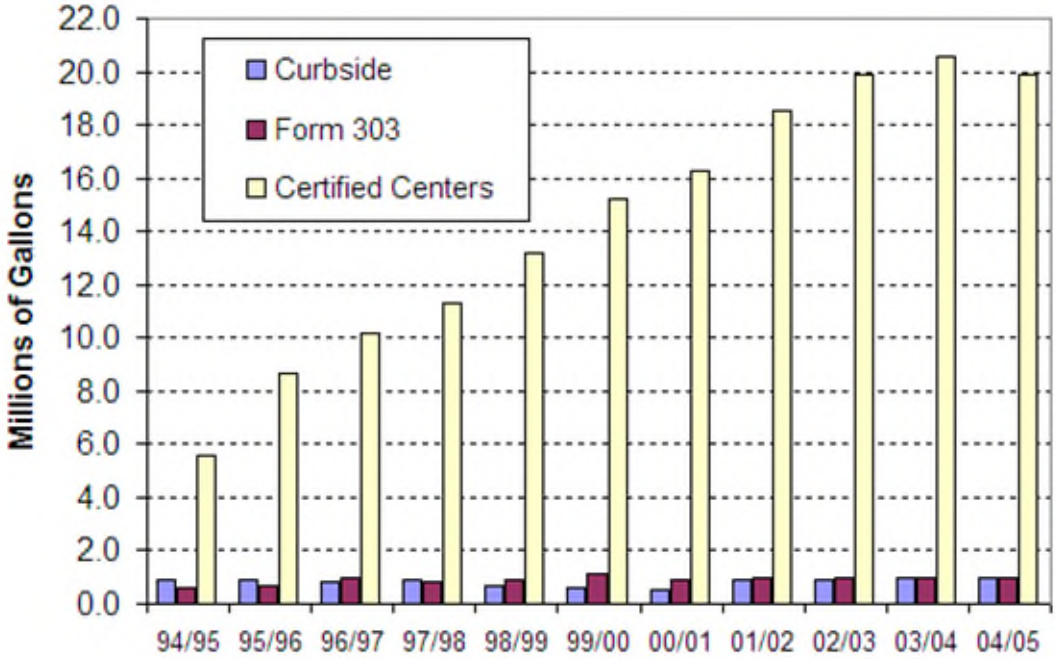

Table 6-4 Oil Collected by Public Collection Programs (in millions of gallons)

	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02*	02/03*	03/04	04/05
Curbside	0.9	0.9	0.8	0.9	0.7	0.6	0.5	0.9	.9	1.0	1.0
Form 303	0.6	0.7	1.0	0.8	0.9	1.1	0.9	1.0	1.0	1.0	1.0
Certified Centers	5.6	8.7	10.2	11.3	13.2	15.2	16.3	18.5	19.9	20.6	19.9
Total Oil	7.1	10.3	12.0	13.0	14.8	16.9	17.7	20.4	21.8	22.6	21.9

The City places a high priority on properly managing the used oil generated by residents within its jurisdiction. Every effort is made to provide residents with convenient drop-off locations and curbside pick-up services, then to promote these services through advertisement and outreach.

The Motor Oil brochure, available at City Hall, contains useful information about how and why to recycle used oil. It also lists the two collection sites and the number for curb-side pick-up. See Attachment L-2 for an example of the brochure. The centers are also listed in each of the City Newsletters that are mailed to the residents bi-annually. See Attachment L-3 for copies of the Newsletter.

The two collection sites are:

- Kragen 6925 Federal Blvd (oil and filters)
- EDCO 6670 Federal Blvd (oil only)

The curb-side service is sponsored by CIWMB. All the resident needs to do is call 1-800-HHW-PKUP (1-800-449-7587) and request a collection.

6.3.3 Complaint Investigations, Violations, Enforcement, Follow-up and Compliance

When a complaint is registered with the stormwater hotline or other form of communication such as e-mail, a County hotline referral, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City staff with enforcement authority within a reasonable time frame. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

The City enforces its stormwater ordinance for all residential areas and activities as necessary to maintain compliance with the Permit and ensure water quality. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for the City to establish appropriate compliance time frames on a case by case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the Code Enforcement data base.
In FY 2010-11, the City received 54 Residential IC/ID complaint calls. Six of those calls were construction related and are discussed in Section 3. Eight of them were related to illegal dumping in the street or gutter. All were abated within 24 hours of notification to the City and all known dischargers were educated on proper disposal methods. No citations or fines were leveed for residential complaints during this reporting period. The remaining calls were either unfounded or not related to stormwater and were delivered to the appropriate department.

6.3.4 Regional Residential Education Program

The City collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. The Plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale.

This reporting period's collaboration on a regional level was promotion of residential stormwater BMPs at the San Diego County Fair. The Copermittees combined funds to pay for a fair booth, material distribution, signage and advertisements at several locations on the fairgrounds for the duration of the fair. Booth staffers promoted the Think Blue message and presented stormwater educational materials to all fair attendees.

Section 7.0 IC/ID Component

This section describes activities conducted during the FY 2010-11 reporting period to minimize the impact of discharges from illicit connections and discharges (IC/IDs) on receiving waters and other environmental resources. The City's IC/ID program consists of several complementary activities, some of which are discussed in detail in this section, and others that are briefly addressed here and deferred to other sections for more detailed treatment.

7.1 Dry Weather Monitoring Program

This portion of the report will be submitted on December 15 as required in the Permit.

7.2 Public Reporting of IC/IDs

The City continued to operate the Stormwater Hotline at (619) 825-3810. The primary purpose of the hotline is to facilitate complaint reporting; but it also serves as a direct source of water quality information for interested parties. Calls are promptly referred to City staff for proper handling.

During this reporting period, 52 calls were received through the hotline. The majority of the calls received on the Hotline were either informational or related to private property issues. Of these calls eight were related to illicit connections and discharges. These calls were all settled without enforcement actions or were private property disputes. All tips related to IC/IDs were investigated by City staff and dealt with accordingly. Follow-up and enforcement related to business complaints and issues is dealt with in Section 5 and follow-up and enforcement for residential complaints is dealt with in Section 6.

7.3 Complaint Investigations and Enforcement

The City conducted follow-up investigations on all complaints received during this reporting period. The primary objective of the City's commercial enforcement program is to ensure violators are brought into compliance in a timely manner. When education is not sufficient to do so, staff may use a variety of formal enforcement tools. These vary by department and program, but generally include Verbal Warnings, Notices of Violation, and Official Notices. The City may also use civil and/or criminal court actions under the State Porter-Cologne Water Quality Act or the Federal Clean Water Act. These last actions my result in significant fines levied upon non-compliant parties.

7.4 Facilitation of Used Oil and Toxic Material Disposal

During this reporting period, City staff worked diligently to promote, publicize, and facilitate the proper management and disposal of used oil, toxic materials, and other household wastes. Activities related to the City's recycling program and waste collection services are reported in detail in Section 6 of this report.

7.5 Limiting Infiltration from the Sanitary Sewer

The City implemented aggressive maintenance programs to limit infiltration from the sanitary sewer system to its MS4. Further details on these activities are reported in Section 4 of this report.

Section 8.0 Education Component

8.1 Overview of Education

The City's outreach program includes an education and public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the City's water quality staff.

The Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

- Measurably increase the knowledge of the target audience regarding MS4s, impacts to urban runoff on receiving waters, and potential BMP solutions appropriate for the target audience and their activities.
- Measurably change the behavior of the target audience and thereby reduce pollutant releases to MS4s and the environment.

The City performed a wide variety of storm water education activities during FY 2010-11. Education and outreach was performed on three levels – Jurisdictional, Watershed, and Regional. Budgetary constraints are currently severely limiting the City's outreach abilities to in-house staff and resources only. However, the City has always worked hard to openly communicate with its community and staff has always been available for face to face meetings both at City facilities and while out in the community. The community also has easy access to all City staff by phone or e-mail. The City feels that this informal accessibility works in our favor and actually provides our residents with more meaningful, in depth education than multitudes of printed material.

8.2 Municipal Staff Training

Public Works. Water quality staff participates in monthly meetings with all of the public work division and weekly meetings with the public works supervisors. At these regular meetings, water quality staff provides updates on current policies

and areas of concern. Due to the regularity of interaction between water quality staff and public works staff, no separate annual training is currently being provided. Any questions or comments can be dealt with more effectively at the regular meetings and changes to regulations or activities can be instituted quickly and efficiently. Water quality staff is also integrally involved in ensuring that public works staff receives and maintains all required certifications, such as Confined Space certification, Hazwoper certification, Cal OSHA updates, pesticide application qualification, and other risk management trainings applicable to their daily jobs and their stormwater activities. Towards the end of this reporting period, the City began exploring a newly available training tracking program, which in future reporting periods will make it even easier to verify staff trainings.

New Employees. Water quality staff is working with the City's HR department to establish a new employee interactive training power point presentation, which will include basic stormwater information and an evaluation test at the end. This video will be shown to all new employees regardless of department and their end test results will be tracked. The City is participating in the Regional Municipal Workgroup, which is working on developing a series of employee educational videos that would be available to all Copermittees. These videos would include new employee, management and task specific trainings. With the City's new training tracking system, it will be easy to track employee trainings and track pre and post-test results to evaluate a change in knowledge.

Engineering and Planning Departments. Water quality staff meets weekly with these two departments to discuss development review projects, new policies, streamlining of existing policies and to participate in consistent interdepartmental education. The City finds these regularly scheduled meetings a much more efficient and effective way of updating and educating staff on water quality concerns, regulations and improvements. They are the foundation for the City's new sustainability mindset and have been vital initiating the overhaul of the City's General Plan. It allows the City to present an ideologically unified front to its residents, developers, contractors, and business owners.

8.3 Educational Outreach

This section describes education efforts conducted for each target community during FY 2010-11.

8.3.1 Underserved Target Audiences and Mobile Businesses

Underserved Target Audiences. For those segments of Lemon Grove community that do not speak English as their first language, the City provides many of its brochures and handouts in both English and Spanish. The City also employs bilingual staff to assist our residents, answer questions, and translate information. The current water quality brochures available in dual languages are

IPM pest tip cards, recycling and HHW information. The City also has available the Green Wrench BMP guide for automotive repair shops and the Green Cooking BMP guide for restaurants in Spanish. The City also works with the County's Green Business group which provides BMP information in Spanish and in English. Despite these efforts, the City realizes this continues to be an underserved audience and by collaborating with the other Copermittees hopes to continue to develop new ways to provide them with water quality data and information.

Mobile Businesses. During FY 2010-11, the continued to participate and provide information to the Regional Mobile Business Subcommittee for the development of the Regional Mobile Business Outreach and Education Strategy. Mobile businesses inherently provide services across jurisdictional lines; therefore the Copermittees chose to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory development and maintenance
- Establishment of minimum BMP requirements
- Outreach and education

The City's water quality staff, for several reporting periods, has reviewed any business license that pertains to a mobile business and required them to provide applicable BMP information on the business license application. Until the new Permit, however, these businesses were not an independent category in the business license directory. They were filed by business type, such as automotive or food service. During this reporting period, the City created the mobile business category and has begun transferring the known mobile businesses into the correct category. One of the challenges faced by Code Enforcement, in conjunction with mobile businesses, is their tendency to conduct business during off hours. City staff is very limited in their ability to work off hours and since the economic downfall, all overtime is prohibited unless emergency related. The City hopes that a Regional database of mobile businesses will help to track and regulate their activities and improve education opportunities.

8.3.2 New Development and Construction Communities

The City uses the following strategies to provide education and outreach to its development and construction communities:

- BMP training request as part of the permit application process
- Meetings with project developers, owners, on-site contractors and site supervisors
- SUSMP checklists as part of the development review process
- Signed BMP checklist for all ministerial permit applications (training request sheet is attached to this checklist)

- Informal meetings with developers and contractors due to questions, comments, concerns, etc. Generally occurs during the review process or normal site inspection process
- All changes to construction site BMPs are required to be submitted to City staff for approval

As previously stated, City staff prides themselves on being available to its residents and business community with few complications or intermediaries. Staff is always available to discuss current projects, both under review and construction, with any concerned or curious party.

8.3.3 Commercial/Industrial Owners and Operators

The following is a summary of the education and outreach provided to commercial and industrial owners and operators during FY 2010-11.

- Annual inspections of all industrial facilities, restaurants and automotive facilities in the City by our in-house Code Enforcement staff. During these inspections, individual one-on-one education was presented to each facility manager/owner. Information presented included general storm water quality information and BMP requirements.
- The City also has Green Wrench and What's Cooking guides available for interested parties.
- Mailings to facilities about applicable local workshops and education opportunities, such as those offered by SDG&E and the San Diego Energy Commission.

As previously stated, City staff prides themselves on being available to its residents and business community with few complications or intermediaries. Staff is always available to discuss current projects, both under review and construction, with any concerned or curious party. However, it is important to note that significant animosity exists within the small business community as a result of existing State and County environmental control agencies. City staff bears the complaints of the business community for the high cost and perceived over-bearance of governmental regulation. They perceive stormwater inspections as part of this over-bearance and are often reluctant to make changes without the involvement of Code Enforcement proceedings.

8.3.4 Residential Community and General Public

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential and public audiences:

- City Newsletter containing an environmental section with water quality and environmental tips (such as how to properly care for your lawn, list of

basic household BMPs, or home improvement – BMPs your contractor should know) and information about HHW and recycling

- Various brochures available at City Hall: Used oil recycling, car washing, pet waste disposal, etc
- Maintenance of the stormwater hotline (619) 825-3827, which monitored by water quality staff
- Water quality staffed informational Booths at the following events: Fire Station Open House and Winter Bonfire.
- Participation and staffing at the Regional Education Outreach booth at the San Diego County Fair
- Participation and collaboration in watershed-based efforts such as Creek to Bay Clean-up and watershed based school presentations

As previously stated, City staff prides themselves on being available to its residents and business community with few complications or intermediaries. Staff is always available to discuss current projects, both under review and construction, with any concerned or curious party.

The City is constantly striving to improve its outreach and education opportunities within the limited means of the current budget. Much of the current education is done by City staff in an informal manner with the public and business communities. Having a small City staff, means a consistent message is provided because staff is easily kept up to date on the current regulations and policies. This program will continue to evolve as necessary and as funds allow.

9.1 Public Participation

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in stormwater and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about stormwater issues. Second, they become educators and stewards for the stormwater program. Finally, they provide important feedback to the stormwater program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

9.2 Public Participation Approach

The City's approach for the outreach program is to develop an understanding among its residents and businesses of some fundamental storm water concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches untreated)
- The economic value of our beaches and inland waterways and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a stormwater violation (stormwater hotline or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and oceans.
- Reducing pollutants of concern.
- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. creeks and parks) and not to be part of the pollution problem (littering, illegal dumping, improper disposal of household chemicals).

Some of the tools that are used by the City to implement the public participation activities are:

- public outreach events
- public reporting methods
- pet waste dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- public opinion surveys
- copermittee collaborations

9.3 Program Implementation

This section describes the specific public participation tools used during the FY 2010-11 reporting period.

9.3.1 Public Outreach Events

The City participated in several outreach events during FY 2009-10:

- Coastal Clean up Day – September 19, 2009; 10 volunteers; Federal Blvd/San Miguel drainage channel
- Fire Station Open House – October 10, 2009; 60 participants
- Winter Bonfire – December 4, 2009, 800 participants
- Creek to Bay Clean up Day - April 24, 2010; 18 volunteers; Federal Blvd/San Miguel drainage channel
- San Diego County Fair – June 12, 2010; 4,500 participants

9.3.2 Public Reporting Methods

The City has a local hotline that connects the caller directly to the City's water quality staff. The number is (619) 825-3827. A public works person is available for after-hours emergencies, who will contact the best staff person to handle the emergency. There are also two regional stormwater hotline numbers promoted within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800 and the Think Blue Hotline, 1-888-844-6525 (1-888-THINK BLUE). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00am - 5:00pm. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voice mail message for 24-hour public access.

The City's stormwater hotline has been heavily advertised since the programs inception. In FY 2010-11, the hotline received eight stormwater related calls, typically pertaining to the illegal discharge of fluids in the gutter over the weekend or a business hosing off their parking lot. All calls are investigated by Code Enforcement and are usually handled with a verbal warning and education about household BMPs. None of the calls during this reporting period requied formal

Code Enforcement proceedings. The hotline is advertised in the newsletters and on the City's website, in brochures, on give-aways, and at City events like the Winter Bonfire and the Fire Station Open House.

The City's website also provides water quality information and event updates: www.ci.lemon-grove.ca.us.

9.3.3 Pet Waste Dispensers

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier; pet waste dispensers can be found at all the City parks and in the vacinity of City Hall, all areas where people frequently walk their dogs. Trash cans are also readily available in all of these areas. Both the trash cans and bag dispensers are maintained by the City's Grounds division.

9.3.4 Household Hazardous Waste Collection and Used Oil Recycling

The City co-sponsors several HHW and e-waste events over the course of the reporting period. During these events, residents can drop off any HHW or e-waste free of charge. The City collaborates with the Cities of Chula Vista and La Mesa for HHW events and data collection. The City participated in eight HHW events and eleven e-waste events. The City has two used oil collection points in the City:

- EDCO Recycling Center 6670 Federal Blvd
- Kragen Auto Parts 6925 Federal Blvd

9.3.5 Copermittee Collaborations

The City continues its collaboration and encouragement of the County's Green Business program for restaurants and automotive repair shops. This effort continues to develop and explore a State wide collaboration and standards. The City will continue to promote these programs to the applicable commercial facilities where-ever possible.

Section 10.0 Fiscal Analysis

The purpose of this section is to provide a detailed analysis of the expenditures required to implement the JURMP. The main purpose of this analysis is to enable the City to determine the level of resources needed to meet the requirements of the Permit.

Although the Regional Water Quality Control Board staff down plays the importance of this portion of the analysis - based on comments made in public hearings during the new permit process and comments in Regional Board staff reports - the City considers the analysis vital in determining the City's ability to effectively meet the conditions of the Permit.

10.1 Cost Breakdown

The analysis was performed as outlined in the JURMP, by assigning specific expenditure categories into the general categories suggested in Permit section F.8. The analysis is presented in Table 10.1.

Table 10.1 – 2010/2011 Fiscal Analysis Summary

Stormwater Cost Analysis
All costs covered in the General Fund.

ACTIVITY	CURRENT YEARLY BUDGET	CURRENT BUDGET LOCATION
STORM DRAINAGE CLEANING AND MAINTENANCE		
Public Street and Parking Lot Sweeping		Streets
Streets	$30,000	
Parking Lots	$2,000	
Public Street and Parking Lot Sweeping Total	$32,000	
Litter Removal		
Litter Removal	$13,000	
Litter Removal Total	$13,000	
Storm Drainage Cleaning		
Inlets		
Inspection and Cleaning	$19,820	
Fossil filter replacements	$1,400	
Inlets Subtotal	$21,220	
Basins and Channels		
Inspection and Cleaning (Note 1)	$38,829	
Basins and Channels Subtotal	$38,829	
Video Inspections		
Video Inspections (Note 1)	$50,000	

Video Inspection Subtotal	$50,000	
Storm Drainage Cleaning and Maintenance Total	**$155,049**	
STORM EVENT ACTIVITIES		
Sandbag stock piling and placement	$4,000	
Patrols	$3,089	
Storm Event Total	**$7,089**	
ILLICIT CONNECTION/ILLEGAL DISCHARGE ENFORCEMENT PROGRAM		Engineering Services
Dry Weather Testing	$20,000	
Enforcement	$5,000	
Administration/Supervision	$1,000	
Stormwater HotlineComplaints	$2,000	
Illicit/Illegal Enforcement Program Total	**$28,000**	
STORM WATER POLLUTION PREVENTION PLANS (SWPPP's)		
Construction Related SWPPP	$2,000	
Plan Review (including SUSMP's)	$15,000	
Inspection	$3,000	
Construction Related SWPPP Subtotal	$20,000	
Municipal Facility SWPPP		
SWPP Implementation, Inspection, and Maintenance of Municipal Facilities	$18,798	Streets
Municipal Facility SWPPP Subtotal	$18,798	
All SWPPP Activities Total	**$38,798**	
BEST MANAGEMENT PRACTICES (BMP) IMPLEMENTATION		
Inspection of Industrial and Commercial Facilities	$50,000	
Inspection of Municipal Facilities	$1,000	
BMP Total	**$51,000**	
MISCELLANEOUS ACTIVITIES		Engineering Services
Annual Reporting (JURMP)	$5,000	
Administration (General)	$74,004	
NPDES Permit Fee	$7,500	
Public Education/Outreach	$5,000	
Miscellaneous Activities Total	**$77,504**	
PROGRAM TOTALS	**$371,440**	

Note 1 –Program still in development stages, projected cost for next fiscal year

It should be noted that the cost of program implementation during the 2010-11 reporting period does not reflect the true cost of implementation. There are cost areas that were not considered in the analysis. For example, the cost of personnel in the Grounds division, who perform stormwater maintenance

activities as needed, but who do not separate those activities from their daily activities. The City is currently working to create a more thorough "type of work" tracking system to alleviate some of these omissions.

10.2 Funding Sources

There are a number of sources for program funding; grants, stormwater fees paid by both residents and businesses, fines, and general fund money to name a few. The City has created a stormwater fee for businesses and residents through developmental plan check fees, for businesses charged through the business license and solid waste services to residential users. The fees collected only fund approximately one third of the total stormwater program costs. They currently are not allocated to any specific section of the program, but are used to ease various costs as needed. The City has integrated water quality compliance into its Code Enforcement program, which includes potential fines for continued non-compliance. However, the City does not foresee this as a steady revenue source for program funding, as compliance is the primary and desired outcome.
Given California state law, the City finds difficulty in fully funding its stormwater program. Also given recent opposition State-wide to the creation of stormwater fees, the City is cautious in expanding its current funding strategy. As such, the City's General Fund will be required to continue subsidizing this increasingly costly program.

The total cost of the program for this reporting period equaled more than 3% of the General Fund budget. For comparative purposes, the cost of the stormwater program is equivalent to:

- Seven times the amount the City spends on its Code Enforcement program
- The City's expenditure on maintaining all of its parks, and
- 258 percent more than the City commits to youth sports and recreation programs.

Again, these comparisons are included to demonstrate the City's financial commitment to the program.

To further the City's and region's efforts in meeting the overall objective of the Stormwater program, the City challenges the Regional Board and the environmental community to take regional leadership in proposing a regional revenue source – similar to that of TRANSNET for transportation enhancements. The City's financial commitment to the program demonstrates the City's efforts in complying with the requirements of the JURMP and the Pemit. The City continues to be willing to brainstorm with Regional Board staff regarding this challenge. To date, this challenge has been outright rejected by Regional Board staff.

11.1 Introduction

The City began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008 and as an ongoing process. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs, so the City prepared its own effectiveness assessment approach and measures modeled after conventional strategies and the existing levels of effectiveness assessment as detailed in the October 2003 document.

Since the submittal of the JURMP in March 2008, no additional progress has been made on regionally standardized approaches to program effectiveness assessment. It is anticipated that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will undertake the issue of standardized assessment metrics and procedures in the near future. The City is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's stormwater program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three maybe in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments

are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities uniques to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics are provided in SEction 13 of the City's revised 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step towards the more difficult level of improvements to water quality in receiving waters. The levels are listed below.

- Level 1: Compliance with Activity-based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

11.2 Effectiveness Assessment Results

The new Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the stormwater program as a whole. Level 1, Level 5, and Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment - assessment that combines both monitoring data and programmatic data - are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome Level Assessments

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP annual report, can be found in Appendix G.

Level 2 and 3

Tables 11-3 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City within each program component. Note that only Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the Regional Board adopted Addendum 2 to Order 2007-01, effectively extending the annual due date of the illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City, and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 Overall Component Assessments

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. Further, two new significant program elements were in production and in early stages of implementation within the defined reporting period of this report; both new programs are demonstrating positive trends. BMP installation verification and BMP operation and maintenance verification efforts, while not wholly implemented at the time of report production, have resulted in the establishment of programs that will support long term effectiveness assessment measures for development planning.

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures. It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue.

Municipal

The defined reporting period of this report is marked by significant expansion of municipal operations and maintenance activities to meet the standards established in Order 2007-01. Enhanced stormwater conveyance, drainage facility, channel maintenance and inspection and street sweeping activities, were developed and implemented, equating to the removal of salient volumes of debris. Effective operations and maintenance activities are demonstrated in the Table 11-1 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will support the efficacy of municipal activities.

Table 11-1

Activity	Amount Collected	Adjustment Factor	Estimated Load Reduction
Street Sweeping	150.75 tons	None	150.75 tons
MS4 Cleaning	3,360 pounds (1.815 tons)	None	3,360 pounds (1.815) tons
			Total 152.565 tons

Industrial and Commercial

Stormwater activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (See Table 11-2) through the gathering of critical statistics, including a knowledge and BMP assessment scoring system. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Table 11-2 Program Scores for 2010-11**

	Knowledge Assessment *	BMP Assessment
Average Rating	2.6	3.5

Median Rating	3	3
# of "Level 5" Ratings	6	25
# of "Level 4" Ratings	28	34
# of "Level 3" Ratings	30	49
# of "Level 2" Ratings	22	12
# of "Level 1" Ratings	33	4

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.
**The scores from these two reporting periods were consistent.

Table 11-2 cont. Program Scores for FY 2005-06
(This was the first year the analysis was done and is provided for comparision)

	Knowledge Assessment *	**BMP Assessment**
Average Rating	2.39	3.33
Median Rating	2	3
# of "Level 5" Ratings	0	14
# of "Level 4" Ratings	9	26
# of "Level 3" Ratings	34	30
# of "Level 2" Ratings	26	11
# of "Level 1" Ratings	18	7

*Deft Companies was not assigned a knowledge assessment score because no business representative was onsite at the time of inspection.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Lemon Grove.

Table 11-3

Activity	**Amount Collected**	**Adjustment Factor**	**Estimated Load Reduction**
Used Oil Recycling	25,600 gallons	10%	2,560 gallons
C&D Ordinance Recycling	17,852 pounds	1%	179 pounds

Education

Education effectiveness is assessed for a variety of program elements. In terms of education opportunities provided to the various community sectors and City

staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success.

Public Participation

The City provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however the assessment measure are focused on success of the venues ad outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, hotline calls, and volumes of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of this document.

CITY OF LEMON GROVE

FY 2011-12
JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

SEPTEMBER 2012

PREPARED BY:
City of Lemon Grove
3232 Main Street
Lemon Grove, CA 91945
619-825-3800

CITY OF LEMON GROVE

FY 2011-12

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

SEPTEMBER 2012

PREPARED BY:

CITY OF LEMON GROVE
3232 MAIN STREET
LEMON GROVE, CA 91945
619-825-3800

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Graham Mitchell
City Manager

Date: September 30, 2012

Telephone Number: 619-825-3800

EXECUTIVE SUMMARY

In January 2007, the Regional Water Quality Control Board (RWQCB) issued Order No. R9-2007-0001 (Municipal Permit), a National Pollution Discharge Elimination Permit regulating discharges to the storm drain system within 18 municipalities in San Diego County, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (collectively referred to as "Copermittees"). As required by the Municipal Permit, the City of Lemon Grove (City) has created and maintains a Jurisdictional Urban Runoff Management Program (JURMP). The City's JURMP includes Best Management Practices (BMP) standards for businesses, construction and development projects, residents, and the City's own activities. The JURMP also includes programs for water quality monitoring and educational outreach.

This annual report presents the City's implementation efforts of its JURMP during Fiscal Year 2011-2012 (FY 2011-12), which began on July 1, 2011 and ended on June 30, 2012. Each section of this JURMP Annual Report discusses the City's efforts during FY 2011-12 and how those efforts met the requirements of the Municipal Permit. Key actions taken for the major components of the City's stormwater program are summarized below.

Development Planning Component

The City continued to implement the requirements of the *2011 Model Standard Urban Stormwater Mitigation Plan* and *Hydromodification Management Plan*. During this reporting period, three projects were identified as priority development projects but were not subject to hyromodification management due to no net increase in pervious area or discharge rates. The City reviewed last year's treatment control BMP inventory and addressed discrepancies. A new inspection form was also developed and used during the inspection of all five inventoried sites. A new self-certification letter and maintenance form were developed and used during this reporting period. Treatment control BMPs at all five sites were observed to be adequately maintained and no enforcement action was deemed necessary during this reporting period.

Construction Component

During FY 2011-12, the City had eight active construction sites: five private development projects and three Capital Improvement Projects. Three of the eight sites were prioritized as medium Threat To Water Quality (TTWQ) and five as low TTWQ. The City conducted checks of erosion control plans to ensure construction projects complied with the City's minimum BMP requirements. The City conducted 165 site visits to verify BMP implementation, and issued four verbal Correct Work Notices. Deficiencies associated with the four verbal Correct Work Notices were appropriately addressed within 24-hours.

Municipal Component

The City inspected 14 high TTWQ municipal fixed facilities during FY 2011-12. The City also continued its street sweeping and Municipal Separate Storm Sewer System (MS4) maintenance programs. A total of 147.15 tons of trash and debris was removed through street sweeping activities and 572.55 cubic yards of debris were removed during routine

MS4 maintenance activities. The City video inspected 16.75 miles of sewer main to locate blockages and areas of needed repair. All 67 miles of sewer main was cleaned during this reporting period. City personnel attended several in-house training on stormwater pollution prevention concepts and practices.

Industrial and Commercial Component

During this reporting period, the City conducted 59 site visits and inspections of industrial and commercial facilities considered high TTWQ. The overall inventory included 225 businesses as presented in the 2010-2011 JURMP Annual Report. The City was able to meet the Municipal Permit requirement of inspecting at least 25 percent of all inventoried sites. There were no industrial or commercial businesses found to be out of compliance. In-house training on the industrial commercial program was also conducted during this reporting period. At the end of the reporting period, City staff revised its prioritization process and established new industrial commercial and mobile business inventories. The pollutant loading potential for each stationary and mobile business was included in the respective inventories. The new inventory will be used in the FY 2012-13 reporting period to conduct stormwater compliance inspections.

Residential Component

Eighty percent of land use in the City is residential, and the City used a variety of methods to educate its residents. The City published the Summer 2011 and Spring 2012 editions of *The Grove Gazette* newsletter. Each issue was available on the City's website. The newsletters contained a variety of environmental and stormwater-related articles and opportunities for public involvement. During FY 2011-12 the City hosted a variety of waste disposal events and encouraged residents to participate in these events. Residents properly disposed of 570 pounds of household hazardous waste (HHW) and 15,425 gallons of used oil during these events. The City also responded to and resolved nine complaints made by residents to the City's stormwater hotline regarding residential areas.

Illicit Discharge Detection and Elimination Component

On September 10, 2008, the RWQCB adopted Addendum No. 2 to the Municipal Permit. This addendum requires the City to wait to submit the Illicit Discharge Detection and Elimination (IDDE) section of its JURMP Annual Report until the 2012 Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) is finalized. This section must be submitted to the RWQCB no later than December 15, 2012.

During FY 2011-12, the City responded to 37 complaints made to its stormwater hotline and the Public Works maintenance hotline. The recommendations in the final report for the 2011 Dry Weather Monitoring Program were addressed during this reporting period. The City also continued maintenance of the sanitary sewer system to prevent sanitary sewer overflows (SSOs).

Education Component

The City continued to educate a variety of audiences within Lemon Grove as a means to raise stormwater awareness in various communities throughout FY 2011-12. During this reporting period, the City's efforts resulted in an estimated 6,757 impressions. City staff

attended municipal training sessions that covered different chapters of the JURMP and municipal permit requirements as well as proper BMP implementation. The City continued to post the *The Grove Gazette* newsletter on its website and to notify 411 subscribers of its posting. Newsletters issued during FY 2011-12 included stormwater-related articles aimed at both residents and businesses in the City. Industrial and commercial businesses met with the City's inspector who answered questions and provided information verbally on pollution prevention and BMPs pertaining to their business activities. Additionally, the City continued working with I Love a Clean San Diego to provide six educational presentations at four elementary schools and the Lemon Grove Public Library with a total of 398 participants. The presentations were interactive and used the hands-on watershed model to discuss topics including pollution prevention, waste reduction, recycling, and used motor oil recycling.

Public Participation Component

During FY 2011-12, the City continued to provide opportunities for the public to participate in stormwater related events and activities. Creek to Bay Cleanup event resulted in 42 volunteers participating, HHW comprised of 97 appointments for HHW drop off, and Spring Cleanup event counted 770 vehicles originating from Lemon Grove. Additionally, 750 reusable bags were distributed to the public on *A Day without a Bag*. The majority of these events were published in *The Grove Gazette* and the City's website and Facebook page to encourage public participation.

Fiscal Analysis Component

The City continues to use its General Fund as the primary source to fund the implementation of its stormwater program. During FY 2009-10, a fiscal analysis reporting template was developed collectively by the Copermittees. The City used this template to report the FY 2011-12 program budget in this JURMP Annual Report.

Effectiveness Assessment Component

During FY 2011-12, the City continued to evaluate the effectiveness of its JURMP implementation. The City has seen some encouraging signs of the effect of its program, such as lower amounts of pollutants in its Dry Weather Monitoring Program in recent years and increased public reporting of stormwater issues.

Special Investigations

The upstream investigation was conducted as part of the Dry Weather Monitoring and Sampling Program. A Total Maximum Daily Load compliance monitoring report and a special studies report were prepared during this reporting period.

Non-Emergency Fire Fighting

City staff continues to implement BMPs during regular maintenance of fire and emergency vehicles and equipment, training exercises, facilities maintenance, and post-emergency rehabilitation of response equipment.

JURMP Revisions

Any changes made to the JURMP since the JURMP update in the spring of 2008 and subsequent changes reported in the 2010 JURMP Annual Report are discussed throughout this JURMP Annual Report where applicable.

Conclusions and Recommendations

During future fiscal years, the City will continue to implement the programs detailed in its JURMP; it is anticipated that some program refinements will continue to be made as implementation progresses. The City will also continue to collaborate with the other Copermittees to improve the overall efficiency of its program and to develop updated methods of assessing program effectiveness.

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ACRONYMS AND ABBREVIATIONS

Acronym	Abbreviation
BMP	Best Management Practice
CASQA	California Stormwater Quality Association
CIP	Capital Improvement Project
City	City of Lemon Grove
CIWQS	California Integrated Water Quality System
Copermittees	Eighteen cities within San Diego County, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
EDCO	EDCO Waste & Recycling Services
FOG	Fats, Oils, and Grease
FY 2011-12	Fiscal Year 2011-2012 from July 1, 2011 through June 30, 2012
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illegal Discharge
IDDE	Illicit Discharge Detection and Elimination
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
MEP	Maximum Extent Practicable
MLS	Mass Loading Station
MS4	Municipal Separate Storm Sewer System
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
NPDES	National Pollutant Discharge Elimination System
Priority Project	Priority Development Project
RWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 8.48 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWPPP	Storm Water Pollution Prevention Plan
TMDLs	Total Maximum Daily Loads
TTWQ	Threat to Water Quality

1.0 INTRODUCTION

1.1 BACKGROUND

This Jurisdictional Urban Runoff Management Program (JURMP) Annual Report presents an activity summary for the City of Lemon Grove (City) during the Fiscal Year 2011-2012 (FY 2011-12). The JURMP Annual Report preparation and submission are required by San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit).

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act, also known as the Clean Water Act, established a framework for regulating Municipal Separate Storm Sewer System (MS4) discharges under the National Pollutant Discharge Elimination System (NPDES). In 1990, the RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region, followed by a revised permit in 2001. RWQCB Order No. 2001-01 was replaced by the current Municipal Permit in 2007.

In 2002, the City, as all regulated municipalities in the San Diego region (collectively referred to as Copermittees), developed and submitted a JURMP to the RWQCB. The City then submitted an updated JURMP, as required by the Municipal Permit, in March 2008. The JURMP explains management measures for different sectors, including municipal, industrial, commercial, construction, and significant development and redevelopment activities.

Annual reports documenting the implementation of the JURMP are required to be submitted to the RWQCB by September 30. This JURMP Annual Report presents data from FY 2011-12, which extended from July 1, 2011, to June 30, 2012.

1.1.2 CITY SETTING

The City is located inland in the southwest portion of San Diego County, which encompasses the southwest corner of California. As of the year 2010, there are approximately 25,320 residents in the City. San Diego County is located about 130 miles south of downtown Los Angeles, and immediately north of the United States-Mexico border. The City is centrally located within the greater San Diego and Tijuana urban area. The City encompasses 3.75 square miles and its boundaries are delineated by the SR-94 freeway to the north, Sweetwater Road to the east, 69th Street and Madera Drive to the west, and various residential streets located within the City of San Diego to the south. The SR-125 freeway runs along the City's eastern border.

The City is characterized by a mix of commercial, industrial, residential, and natural settings, which require a detailed understanding of the City's drainage, the series of local canyons, and the upper elevation topography in developing proper stormwater quality

controls. Runoff characteristics within the San Diego Bay Watershed (Pueblo San Diego Hydrologic Unit (HU) and Sweetwater HU) affect recreational, commercial, and aesthetic properties in Lemon Grove.

1.2 Purpose and Objectives

The City's JURMP presents strategies to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP). The JURMP describes various programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the implementation of the City of Lemon Grove's JURMP during the FY 2011-12 reporting period.

1.3 Report Organization

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning**
Section 3	**Construction**
Section 4	**Municipal**
Section 5	**Industrial and Commercial**
Section 6	**Residential**
Section 7	**Illicit Discharge Detection and Elimination**
Section 8	**Education**
Section 9	**Public Participation**
Section 10	**Fiscal Analysis**
Section 11	**Effectiveness Assessment**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all components required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a more detailed explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Background, subsection 1.1, has been divided into Regulatory Background, subsection 1.1.1, and City Setting, subsection 1.1.2, for clarity.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall stormwater quality by reducing the discharge of pollutants from development projects to the MEP and managing increases in runoff from development projects that have the potential to negatively affect downstream water bodies.

The major components of the City's program include development project reviews to apply Standard Urban Stormwater Mitigation Plan (SUSMP) requirements inclusive of hydromodification management, Best Management Practice (BMP) inspections, and requiring parties responsible for installed treatment control BMPs to certify that appropriate maintenance has been conducted each fiscal year.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the reporting period are presented in the following bulleted list. More details about the City's activities for this component of its stormwater program are provided in the remainder of this section.

- Inspected treatment control BMPs at all five sites with approved treatment control BMPs and met the permit required inspection frequencies, as shown in Table 2-1.
- Reviewed and updated treatment control BMP inventory.
- Developed a new self-certification letter and form for use during this reporting period.
- Developed a new stormwater compliance inspection form for use during this reporting period.
- Attended Copermittees' Land Development Workgroup meetings.

2.2 LAND USE PLANNING

2.2.1 BACKGROUND

The City's General Plan was revised in October of 1996 and includes a Conservation and Recreation Element that address the water quality and watershed protection principles and policies. Chapter 6, Section 6.1 of the City's JURMP presents the various elements referenced in the General Plan that meet the Municipal Permit requirements. This provides the City with a sufficient framework for implementing the development planning requirements of the Municipal Permit. No changes to these policies were necessary during this reporting period.

2.2.2 Source Characterization

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts to the surrounding environment. No changes to the development restrictions in the City's General Plan for stormwater purposes were implemented during the reporting period.

2.2.3 Best Management Practice Requirements

Please refer to the City's updated JURMP document Chapter 6, Section 6.1 for a list of the water protection policies presented in the JURMP and referenced in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 Program Implementation

The City implemented its water protection-related land use policies during the reporting period mainly through the City's Municipal Code. Additionally, the City required project proponents to comply with the *2011 Countywide Model SUSMP* and *Hydromodification Management Plan (HMP)* developed by the San Diego Region Copermittees.

Sections 2.3 and 2.4 of this JURMP Annual Report detail how the City implemented its established water protection policies through its environmental review process and its development project approval and verification processes during the reporting period.

2.3 Environmental Review Process

The City's current environmental review process is detailed in Chapter 6 of the City's JURMP. No modifications to the City's environmental review process were made during the reporting period.

2.4 Development Project Approval and Verification Process

2.4.1 Background

During FY 2011-12, the City implemented the watershed protection principles in the City's General Plan (see Chapter 6 of the City's JURMP) through various aspects of the City's development project approval and verification process, as detailed below.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's Municipal Code, JURMP, and staff enforcement of the *2011 Countywide Model SUSMP* and *HMP*. Projects subject to SUSMP regulations are identified by completion of an applicability checklist (Attachment 2.1). More detail about this process is provided in Section 2.4.4.2.

2.4.3 Best Management Practice Requirements

City staff continues to implement the requirements of the *2011 Countywide Model SUSMP* and *HMP* for all development projects described in Section 2.2.4 above.

2.4.4 Program Implementation

During FY 2011-12, the City required implementation of its BMP requirements for all development projects through education, the development project approval process, and the treatment control BMP inspection and maintenance verification program.

In response to key staff turnover during the beginning of FY 2011-12, the City completed a comprehensive review of the treatment control BMP inspection and maintenance verification programs. As a result of that review, some discrepancies were noted relative to the number and specific location of previously reported Priority Development Projects (Priority Projects). Section 2.4.4.3 describes the discrepancies observed and Appendix A.1 presents the updated inventory.

2.4.4.1 Outreach and Staff Training

During FY 2011-12, the City's land development engineer and planning staff met regularly to discuss SUSMP and hydromodification management requirements as well as the status of SUSMP projects in the City. This regular communication among City staff ensures that development projects subject to SUSMP requirements are effectively identified and appropriate water quality protection measures are applied.

Project proponents were also made aware of SUSMP requirements through the development review process, including interaction with staff at the front counter as well as during meetings with City staff.

Distribution of maintenance verification letters to parties responsible for maintenance of treatment control BMPs at completed projects has also increased the level of knowledge of regulated parties.

The City's Land Development Engineer participated in the Copermittees' Land Development Workgroup meetings during this reporting period. This provided a forum for beneficial discussions on SUSMP requirements and hydromodification management.

2.4.4.2 Urban Runoff Approval Process for Development Projects

All development projects that required City permits were also required to undergo the City's urban runoff approval process as detailed in the City's JURMP. Checklists were completed to determine stormwater requirements for each project, including whether SUSMP requirements applied. Attachment 2.1 shows the form that is presented to each applicant regardless of project size. The City has recently implemented a system to record SUSMP related information for each project in a spreadsheet continuously throughout the year. A summary of the projects submitted during the reporting period and whether each was subject to SUSMP requirements is presented in Table 2-2 at the end of this section.

Of the submitted projects, three were determined to be subject to SUSMP requirements. These three projects are listed with the types of treatment control BMPs proposed in Table 2-3 at the end of this section. City reviewers use requirement checklists to verify that applicable SUSMP requirements are addressed in the proposed designs and to document the proposed BMPs.

During FY 2011-12, every SUSMP project approved by the City proposed high or medium removal efficiency treatment control BMPs. No projects received a SUSMP waiver for implementation of treatment control BMPs, and at this time the City has no plans to develop a SUSMP waiver mitigation program.

Hydromodification Management Plan

The final regional HMP was approved by the RWQCB on July 14, 2010 and the City subsequently incorporated the updated standards into its review process for development projects, as discussed earlier in this section. City staff participated in the Copermittees' Land Development Workgroup, which regularly discussed the HMP and its implementation on a jurisdictional level. Of the three Priority Projects approved by the City during the reporting period, none were subject to hydromodification management requirements because they did not result in increased impervious area or discharge rates.

BMP Installation Verification

City inspectors check to see that proposed post construction BMPs have been implemented prior to granting occupancy for development projects subject to SUSMP. City inspectors continued documenting BMP installation during pre-occupancy verification visits using a camera during the reporting period, and are working to implement a system for documentation using Global Positioning System technology.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

Toward the beginning of each fiscal year, the City updates its inventory of completed projects with approved treatment control BMPs. Once the inventory is updated, City staff attains the required self-certification statement of BMP maintenance from all property owners with SUSMP treatment control BMPs. In addition to attaining the self-certification statements from the property owners, the City identifies the sites that require annual inspections based on the frequency established in the Municipal Permit.

Should additional projects be completed during the reporting period, but after the inventory is established for the fiscal year, the City's procedure is as follows: Complete the check for BMPs prior to occupancy, record the site information and assign it a Threat To Water Quality (TTWQ) priority, and then add the project and its BMPs to the inventory of projects subject to the City's inspection and annual maintenance verification program the following fiscal year.

In FY 2011-12, City staff reviewed the existing treatment control BMP inventory presented in the 2010-11 JURMP Annual Report and determined that two private residences were not Priority Projects and should not have been placed on the aforementioned inventory. A

private residence at 2210 & 2212 El Prado with a grassy swale and 2680 Davenport with a grassy swale were both removed from the treatment control inventory presented in last year's annual report. Both were not subject to SUSMP. The update has been made to the inventory of completed development projects with approved treatment control BMPs in Appendix A.1.

During this reporting period, the City developed a new self-certification letter and form (Attachment 2.2). Self-certification statements of BMP maintenance was received from four of the five properties listed in Appendix A.1. The City was not able to obtain a statement from residents at Mary Pat Lane; however, the City did conduct a stormwater compliance inspection of the treatment control BMPs. The treatment control BMPs were operational and no corrective actions were noted during the inspection. City staff will continue to work with the residence of Mary Pat Lane to attain the self-certification statements on an annual basis prior to October 1st.

The City's land development engineer conducted stormwater compliance inspections of all five post construction treatment control BMP sites (DCH Honda, Citron Court, Chevron, Mary Pat Lane, and EDCO). Although the Municipal Permit only requires the high and medium TTWQs to be inspected annually, City staff inspected all five sites. Appendix A.1 presents the project names, location, development type, BMP type, hydrologic subarea, fiscal year completed and TTWQ. Table 2-1 below summarizes all the relevant frequency requirements listed in the Municipal Permit. Table 2-4 at the end of this chapter presents the findings of the inspections. No corrective actions were required for any of the five sites inspected. The City also developed and used a new inspection form for the post construction treatment control BMP inspection during this reporting period (Attachment 2.3).

Table 2-1
Assessment of Compliance with Required Inspection Frequencies

Class	Number of Sites	Inspections	Percent Inspected	Permit Requirement	Requirement Met
All Inventoried Sites	5	5	100%	20%	**Yes**
Sites with Drainage Inserts	4	4	100%	50%	**Yes**
High Priority Sites	2	2	100%	100%	**Yes**

2.5 Development Planning Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 PROGRAM REVIEW AND MODIFICATION

The City created a new post construction treatment control BMP self-certification maintenance letter and form and a stormwater compliance inspection form for immediate implementation (Attachments 2.2 & 2.3). The City has also performed a thorough review of its treatment control BMP inventory and updated its records as discussed in section 2.4.4.3 above.

Table 2-2
Applicability of SUSMP Requirements to Development Projects

Project Number	Project Name	Subject to SUSMP (Yes or No?)
B11-000-288	**Citronica - 7755 North Avenue**	**Yes**
B10-000-382	**Walgreens - 7195 Broadway**	**Yes**
B11-000-189	**Lemon Grove Community Church - 3122 Main Street**	**Yes**
B11-000-165	Lemon Grove Holdings, LLC - 3099 Lemon Grove Avenue	No
B11-000-126	Demo of Storage Unit - 7752-56 North Avenue	No
B11-000-129	Demo of Downtown Buildings – 3510-16 Main Street	No
B11-000-130	Demo of Downtown Buildings – 3504 Main Street	No
B11-000-131	Demo of Downtown Buildings – 3494-96 Main Street	No
B11-000-269	Demo of Downtown Buildings – 3466 Main Street	No
B11-000-339	CIF Holdings, LP – Demo existing building - 7195 Broadway	No
B11-000-.340	First Interstate Bank – Demo existing building - 3320 Massachusetts	No
B12-000-040	Demo of foundation – 3466 Main Street	No
B11-000-128	Demo of Downtown Buildings – 3524-30 Main Street	No
B11-000-352	Borjan Family Trust – 2112 Glencoe Drive	No
B12-000-028	Moore – 8326 Blossom Hill Drive	No
B12-000-168	Vega – 1874 Massachusetts Avenue	No
B11-000-216	Castillo – 7326 Sarajane Lane	No
B12-000-202	Dutta – 1619 Dupont Drive	No
B11-000-213	Deleon – 1830 Noble Street	No
B11-000-219	Ghaderi – 1949 Sonoma Lane	No
B11-000-323	Carrillo – 7156 San Miguel	No
B11-000-360	Jarvis – 8157 Baldwin Road	No
B11-000-307	Stebler – 1909 La Corta Court	No
B11-000-276	Vega – 2912 New Jersey	No
B11-000-383	Strzelecki – 1915 Washington Street	No
B12-000-042	Pathfinder Raintree Residential – 2073 El Prado	No
B11-000-215	Cano – 7009 Central Avenue	No
B11-000-226	Gomez – 1902 Skyline Drive	No
B11-000-230	Asmeron – 3042 Washington Street	No
B11-000-236	Wellington – 2128 Dayton Drive	No
B11-000-278	Huynh – 3332-34 Alford Street	No
B11-000-286	Develasquez – 7659 Madison Avenue	No
B11-000-302	King – 1534 Larwood Road	No
B11-000-317	PGI Investments – 1462 El Prado Avenue	No
B11-000-331	Leyva-Padilla – 7429 Ida Street	No
B12-000-024	Fitzsimmons – 8105 Alton Drive	No
B12-000-036	Darby – 2636 Nida Place	No
B12-000-048	SE Trust – 2030 Massachusetts Avenue	No
B12-000-061	Perez – 8124 Blossom Lane	No

Table 2-2 (Continued)
Applicability of SUSMP Requirements to Development Projects

Project Number	Project Name	Subject to SUSMP (Yes or No?)
B12-000-067	Mitchell – 2370 Massachusetts Avenue	No
B12-000-068	Kazalonis – 1751-53 Englewood Drive	No
B12-000-092	Du – 7171-73 Central Avenue	No
B12-000-128	SD Realty – 1751 Colfax Drive	No
B12-000-148	Jessee – 6829 San Miguel Avenue	No
B11-000-237	Machado – 8253 Golden Avenue	No
B12-000-022	Olsen – 2535 69th Street	No
B11-000-234	City of Lemon Grove – 7701 Nichals Street	No
B11-000-174	Fimpel – 2201 Dain Court	No

Table 2-3
Development Projects Subjected to SUSMP Requirements

Project Number	Project Name	Location	Type of Project	Treatment BMPs	HSA	High/Medium Efficiency Treatment BMP	Date Reviewed
B11-000-288	Citronica I[1]	7775 Main Street	Mixed use > 10 dwelling units	Bioretention Facility, Infiltration Devices	908.22	Yes	12/1/11
B10-000-382	Walgreens[1]	7195 Broadway	Commercial > 15 parking spaces	Bio Swales	908.22	Yes	09/09/11
B11-000-189	Lemon Grove Community Church[1]	3122 Main Street	Church > 15 parking spaces	Porous Pavement, Filter Insert, Detention pond	908.22	Yes	10/25/11

Notes
1. Project exempt from hydromodification management requirements due to no increase in impervious area or discharge.

Table 2-4
FY 2011-12 Treatment Control BMP Inspections and Follow-Up Actions

No.	Project	Inspection Date	Inspection Findings	Follow-Up	Resolution Status
1	DCH Honda	6/28/2012	No corrective actions	None required	N/A
2	Citron Court	6/28/2012	No corrective actions	None required	N/A
3	Chevron	6/28/2012	No corrective actions	None required	N/A
4	Mary Pat Lane	6/20/2012	No corrective actions	None required	N/A
5	EDCO	6/28/2012	No corrective actions	None required	N/A

3.0 CONSTRUCTION

3.1 INTRODUCTION

The City's construction program is designed to control construction and grading activities in the City. These types of projects have the potential to affect nearby water bodies due to the presence of disturbed soils and building materials, and the potential for associated pollutants to be transported off site by stormwater or non-stormwater flows. The City continued to implement its construction program throughout FY 2011-12.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the construction component during the FY 2011-12 reporting period are presented in the bulleted list below. The following subsections provide more detail about how the City complied with the Municipal Permit during the reporting period.

- Conducted plan checks of erosion control plans to ensure construction projects were in compliance with the City's minimum BMP requirements.
- Educated project proponents and contractors on stormwater pollution prevention requirements at preconstruction meetings.
- Conducted Municipal Permit required training for appropriate City staff on the City's stormwater construction program requirements. This included the annual stormwater compliance inspector training and a general overview of the construction program for the City's Engineering Division.
- Conducted 165 site visits during the reporting period at five active private developments and three active Capital Improvement Project (CIP) sites to inspect BMP implementation. Three private development sites were designated as medium priority TTWQ and the remaining five as low priority TTWQ.
- Issued four Correct Work Notices in response to non-compliance with the City's minimum BMP requirements.

3.2 SOURCE CHARACTERIZATION

The City maintains a watershed-based inventory of all private and public construction projects, both active and completed. The database where the inventory is stored is updated on a regular basis. During this reporting period, there were eight active construction projects. A total of five of these projects were private development construction projects and three of these projects were CIPs. Appendix A.2 includes a list of all construction projects that were active during FY 2011-12.

3.3 Updates to Ordinances and Approval Process

The City addresses stormwater pollution through implementation of various components of its Municipal Code. The City's grading ordinance and JURMP Chapter 7 includes specific requirements for erosion prevention, seasonal restrictions on grading, slope stabilization, preservation of natural hydrologic features, and maintenance of all BMPs. The requirements of the 2007 Municipal Permit and the updated model SUSMP are also enforced by City staff through the review of grading plans and building permit applications. No changes were made to the City's project approval process during this reporting period.

3.4 Best Management Practice Requirements

The City requires BMP implementation at all construction sites to reduce and or eliminate the impact of discharges from construction site runoff on receiving water quality. Section 7.6 of the City's JURMP outlines the minimum construction BMPs required by the City. There were no changes to these requirements during this reporting period.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below. A discrepancy in the frequency of construction stormwater compliance inspections was observed in the City's JURMP and adjusted during this reporting period to reflect the 2007 Municipal Permit frequency of inspections.

3.5.1 Education and Staff Training

The City provides information regarding stormwater quality to project proponents, project personnel, employees, contractors, subcontractors, and other parties involved with construction activities. The following is a list of construction-related training activities that the City has provided or participated in during FY 2011-12:

- All new development and redevelopment project proponents attended preconstruction meetings that included education on stormwater management topics such as federal, state, and local regulations, compliance with grading ordinance, stormwater requirements, implementation of Stormwater Pollution Prevention Plans (SWPPPs), and implementation of BMPs.
- The City's inspector verbally notified construction site managers of enhanced construction BMP requirements prior to the rainy season and also prior to significant rain events during this reporting period.
- The annual construction inspector training was conducted during FY 2011-12.
- The City's Engineering Division participated in an overview of the City's construction program. The training session covered the inspection program, BMP

implementation, enforcement and other miscellaneous construction requirements including information on the new State of California General Construction Permit.

3.5.2 Construction and Grading Approval Process

The City requires that all proposed construction and grading projects implement measures to ensure that pollutants from the site will be reduced to MEP and will not cause or contribute to an exceedance of water quality objectives. Proponents of all construction and grading projects are required to comply with practices detailed in the City's JURMP Section 7.6 and the City's grading ordinance.

As previously mentioned, all new development and redevelopment project proponents are informed by City staff of stormwater management topics including federal, state, and local regulations, implementation of a SWPPP, if required, and implementation and maintenance of BMPs. The City also has an educational video covering construction site BMPs and stormwater management information that is available to the developer, owner, and contractor to view.

During FY 2011-12, all construction projects were required to undergo the approval process described above. These requirements are tracked by the City's staff as part of the routing and record-keeping database.

The City also continued implementing advanced treatment requirements during the reporting period as described in the Municipal Permit. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites. Advanced treatment methods were not required at any construction sites. Lastly, there were no construction sites that were greater than 17 acres that required additional erosion control and sediment control BMPs.

3.5.3 Inspection of Construction Sites

Construction inspections conducted during the reporting period were performed as described in the City's JURMP Chapter 7 and based on the frequency established in the 2007 Municipal Permit (high priority bi-monthly, medium priority monthly, and low priority as needed in the rainy season). A discrepancy was noted in the City's JURMP document for inspection frequency and it was adjusted during this reporting period to reflect the 2007 Municipal Permit requirements.

During the City's routine stormwater compliance inspections, inspectors discuss BMPs with each site project manager, developer, or owner and complete an inspection form for the high and medium TTWQ sites. Additionally, the City's building inspectors may forward non-compliant sites to the engineering inspector for follow-up inspections and enforcement.

Inspected construction sites, along with their TTWQ, the number of weeks the site was active within the rainy season, the number of inspections conducted during both the rainy and dry seasons, and the total number of inspections for each site is included with the inventory in Appendix A.2.

The City conducted 165 site visits and visual inspections at the eight active construction sites during FY 2011-12. Three of the eight sites were designated as medium priority TTWQ. Stormwater compliance inspection forms were only filled out for the medium priority construction sites at the frequency established in the 2007 Municipal Permit (monthly in the rainy season). Five of the eight sites were designated as low priority TTWQ and are required to be inspected as needed per the 2007 Municipal Permit. As noted above, the City's construction compliance inspection form is filled out for high and medium priority sites and not for the low priority sites; however, notes on some of the deficiencies for the low priority sites were included in the engineering inspector's journal. Many of the deficiencies observed during the site visits were corrected immediately.

It is worth noting that the City's small size and relatively low number of construction sites at any given time allow City staff to provide focused, personal attention to every active construction site with daily inspections and regular personal communication with project superintendents responsible for implementing and maintaining stormwater protection measures.

3.5.4 Enforcement Measures

The City's enforcement procedures require corrective actions when non-compliance is observed. Non-compliant sites receive a written or verbal Correct Work Notice and timeframe for compliance. They are also required to become compliant within one to three working days, unless rain is imminent, in which case a Stop Work Notice is issued immediately. Failure to install BMPs indicated in a Correct Work Notice within the appropriate timeframe results in issuance of a Stop Work Notice, and notification is sent to the RWQCB. Additional enforcement actions including revocation of permits, and issuance of citations also can be taken as necessary.

The City issued four verbal Correct Work Notices to four construction projects for stormwater BMP deficiencies during this reporting period. Table 3-1 describes each notice, along with the follow-up actions taken to correct the deficiency. Additional enforcement actions were not necessary during this reporting period.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 Program Review and Modification

A discrepancy was noted in the City's JURMP document Chapter 7 for inspection frequency and it was adjusted during this reporting period to reflect the 2007 Municipal Permit requirements. No other changes to the City's construction component were made during FY 2011-12.

Table 3-1
Enforcement Actions Taken at Construction Sites During FY 2011-12

#	Date	Project	Address	Type of Notice Issued	Resolution
1	October 2011	HAPPY TINNIE LLC	2889 ORANGE PLACE	Correct Work Notice: cover spoils (verbal)	Contractor Complied within 24 hours
2	January 2012	WALGREENS	7195 BROADWAY BOULEVARD	Correct Work Notice: concrete spill (verbal)	cleaned up, put in washout within 24 hours
3	January 2012	KROGER FOODS	7428 BROADWAY BOULEVARD	Correct Work Notice: re-establish construction entrance (verbal)	Contractor Complied within 24 hours
4	June 2012	IDA STREET DRAINAGE IMPROVEMENTS	IDA STREET CUL-DE-SAC	Correct Work Notice: cover spoil piles (verbal)	Contractor complied within 24 hours

4.0 MUNICIPAL

4.1 INTRODUCTION

Throughout FY 2011-12, the City of Lemon Grove continued to manage municipal areas and activities to reduce municipal discharges of pollutants to the MS4 and to the MEP. As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and activities. Public parks and recreation facilities, administrative buildings, a fire station, and public works facilities make up the bulk of the municipal areas in the City. Municipal activities conducted by the City include power washing, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. These activities are conducted by City staff and or City contractors. Information about the City's prioritized street sweeping program can be found in Table 4-1, and information about the City's MS4 maintenance program can be found in Table 4-2. The City's municipal inspection results can be found in Table 4-3 and Sanitary Sewer Overflow (SSO) reports in Table 4-4. The City continued to respond to public stormwater related complaints at City Hall and the Public Works Yard. All stormwater related complaints made to the City are included in Appendix B; enforcement actions taken in response to complaint investigations are discussed in Section 4.8.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the FY 2011-12 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the municipal component of its stormwater program during the reporting period are provided in the remainder of Section 4.

- The City inspected 14 TTWQ fixed municipal facilities.
- The City performed nine special event inspections.
- The City conducted inspections at 23 restaurants for Fats, Oils, and Grease (FOG) program.
- The City reported five SSOs.
- The City responded to 37 stormwater related complaints.
- The City removed an estimated 147.15 tons of debris from street sweeping activities.
- The City removed an estimated 572.55 cubic yards of debris through standard MS4 cleaning activities.
- The City cleaned 100 percent of its sewer mains (67 miles) and video inspected 16.75 miles of its sewer main to locate blockages and areas of needed repair.
- The City conducted several in house training for Development Services and Public Works staff.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities. As mentioned in the City's JURMP, municipal fixed facilities have been grouped under one category: fixed facilities. This is because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar.

4.2.2 SOURCE CHARACTERIZATION

All fixed facilities are included in the City's municipal inventory, which is included in this JURMP Annual Report as Appendix A.3. The designations of pollutants potentially generated by municipal facilities on the inventory are based on a pollutant loading potential table generated from the San Diego Region Copermittees' Baseline Long-Term Effectiveness Assessment report. The high TTWQ prioritizations are assigned based on criteria presented in the 2007 Municipal Permit.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City continues to implement and assess the effectiveness of BMPs for fixed municipal facilities as set forth in the City's JURMP. City staff are trained to recognize the need for additional BMPs and implement them as necessary. The City maintains a contract with a landscape maintenance company, ensuring implementation of BMPs for the management of pesticides, herbicides, and fertilizers to be protective of water quality. Similarly City staff conducts some landscape maintenance activities and ensure implementation of Integrated Pest Management (IPM) principles. Public Works, Fire Station, and staff at other fixed municipal facilities in the City continue to implement BMPs appropriate to the facility type as described in the City's JURMP. Parking lots at fixed facilities are swept monthly. There have been no changes in BMP requirements for any fixed municipal facilities.

4.2.4 PROGRAM IMPLEMENTATION

Parks

During FY 2011-12, the City's Street Division and contractor continued to implement the BMPs described in its JURMP for the management and use of pesticides, herbicides, and fertilizers, including implementation of IPM principles. City staff and contractor implemented BMPs to control landscaping waste from parks and to keep City parks free of trash and other debris. Street sweeping was conducted in the parking lots at the parks on a monthly basis as part of their maintenance.

Public Works Yard, Fire Station, Other Fixed Facilities

As previously mentioned, City personnel continued to implement appropriate BMPs for fixed municipal facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance, such as landscaping and building maintenance, as necessary.

City staff implemented a series of BMPs to address the various activities conducted at the Public Works Yard. Monthly checklists are also used to maintain compliance with stormwater requirements. This facility, the fire station, and other fixed facilities receive annual inspections by stormwater staff as part of the City's stormwater municipal inspection program.

Municipal Inspections

Fourteen high TTWQ fixed municipal facilities received a formal annual inspection in FY 2011-12. There were an additional seven high TTWQ facilities and activities that were either not available for inspection or were inspected by staff on a regular basis that did not require a formal annual inspection. During this reporting period, City staff created and used a new inspection form based off of the City's existing industrial and commercial inspection form. The City's inspection approach, as described in the JURMP, was implemented for all inspections at fixed municipal facilities conducted in FY 2011-12. Inspected facilities and their associated corrective actions are included in Table 4-3. Inspections were also conducted at nine special events during this reporting period.

No municipal facilities, activities or special events were recommended for follow-up inspection based on routine municipal inspection results, but appropriate City staff members were notified of any recommended minor corrective actions. The City's municipal inspection form is included as Attachment 4.1.

4.3 Roads, Streets, and Parking Facilities

4.3.1 Background

The City conducts regular maintenance of roads, streets, and parking facilities in the City to control pollutants such as sediment, metals, and litter and debris.

4.3.2 Source Characterization

The City maintains 65.5 miles of roads and streets. Roads and streets are included as one entity on the City's municipal inventory, which is included in Appendix A.3.

4.3.3 Best Management Practices

The City's primary BMP for roads, streets, and parking facilities is street sweeping; other BMPs are outlined in the JURMP. There were no changes to the BMPs implemented for roads, streets, and parking facilities in FY 2011-12.

4.3.4 Program Implementation

During FY 2011-12, 111.79 curb miles that comprises the City's sweeping route was swept at the appropriate frequencies. A cumulative total of 147.15 tons of debris was collected during this fiscal year. Table 4-1, below, describes the areas assigned high, medium, and

low sweeping priorities and the associated sweeping frequency. The City sweeps all major arterials every two weeks. Municipal parking lots and residential areas are swept monthly.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route (curb miles)	Sweeping Frequency
High	Commercial Area Downtown	0.59 miles	Once a week
High	Main arterials/Business Areas/Residential	38.84 miles	Once every two weeks
Medium	Residential Areas	72.36 miles	Once every month
Parking Lots at Fixed Facilities	Seven Parking lots associated with fixed municipal facilities	147,979 square feet	Once every month
Total Amount of Debris Collected from Street Sweeping Activities: 147.15 tons			

Inspections
Trash, debris, and sediment that had accumulated on City streets is identified and cleaned up via street sweeping, so additional inspections beyond this effort are not necessary.

4.4 MS4

4.4.1 Background

The City's stormwater conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during rain events.

4.4.2 Source Characterization

The City's MS4, as one complete entity, is included in the City's high TTWQ municipal inventory. The City's MS4 consists of over 190 catch basins and drop inlets, 45 miles of underground drainage pipe, and approximately 2.5 miles of open channels.

4.4.3 Best Management Practices

The City maintained an MS4 inspection, maintenance, and cleaning schedule throughout the reporting period. Maintenance and cleaning are conducted to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. BMPs for MS4 maintenance activities did not change during FY 2011-12.

4.4.4 Program Implementation

The City's MS4 inspection and cleaning schedule for FY 2011-12 is shown in Table 4-2. The City has approximately 2.5 miles of concrete and earthen channels within urban areas of the City that undergo routine inspections and maintenance as needed. Additional conveyances

are located on private property. The City does not maintain channels located on private property without dedicated easements. If maintenance of private channels is needed, the City requires the property owner to complete the maintenance.

Table 4-2
MS4 Maintenance Data

	Percent Inspected and or Cleaned*	Percent of Open Channels Found with Anthropogenic Litter	Amount of Material Removed by Cleaning Activities
Catch Basins/ Self-Cleaning MS4 Facilities	100%	N/A	Silt: 8.44 cubic yards Vegetation: 1.58 cubic yards Debris: 0.53 cubic yards
Concrete/ Earthen Channels	100%	100%	Silt: 0 cubic yards Vegetation: 500 cubic yards Debris: 62 cubic yards
Total Debris Removed From MS4 Maintenance Activities: 572.55 cubic yards			

* The City inspects 100% of the MS4 and cleans out all structures observed at or above 33% capacity at a minimum before the rainy season.

As described in Table 4-2, 572.55 cubic yards of material was removed during MS4 maintenance conducted in FY 2011-12. City staff involved in maintenance activities reported materials removed by category for each type of MS4 maintenance activity. The volumes were converted to estimated weights using the conversion factors of 2,300 pounds per cubic yard of sediment and silt and 400 pounds per cubic yard of vegetation, trash, and debris. The total vegetation collected was 200,632 pounds or 100.32 tons, total debris 25,012 pounds or 12.51 tons, and total sediment and silt 19,412 pounds or 9.71 tons. The total weight of material removed was estimated to be 122.5 tons.

All MS4 facilities were inspected and all inlets and catch basins observed at or above 33 percent capacity were cleaned before the rainy season. The remaining facilities were inspected and cleaned as needed throughout the fiscal year. Additional inspections beyond this effort, such as the formal inspections conducted for the fixed facilities, were not necessary.

4.5 Sanitary Sewer System

4.5.1 Background

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. A spill that introduces untreated sewage to receiving waters can contain high concentrations of bacteria, viruses, and even hazardous chemicals. Routine inspection and maintenance of the sanitary sewer system works to reduce the potential for a spill or SSO and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 SOURCE CHARACTERIZATION

The City maintains a system of public sanitary sewer facilities to convey wastewater from the City to be treated. The City's sanitary sewer system includes 67 miles of collection system and a lift station.

4.5.3 BEST MANAGEMENT PRACTICES

The City implements BMPs for the sanitary sewer system as per the City's JURMP. There have been no changes to these BMPs during FY 2011-12. The City inspects and maintains the sanitary sewer system as part of regular sanitation activities and clears blockages and repairs leaks as needed.

4.5.4 PROGRAM IMPLEMENTATION

The City continually inspects and maintains various aspects of the City's sanitary sewer system and cleans out or repairs any identified problem areas as necessary. The City continued to use a video camera to locate blockages, locate areas in need of repair, and identify any illegal connections during FY 2011-12. Identifying areas of the sewer system that require repair and making prompt repairs prevents those areas from becoming future seepage points or point of origin of an SSO. During FY 2011-12, the City used a video camera to inspect 16.75 miles of sewer mains to locate blockages and areas of needed repair. The City also cleaned 100 percent (67 miles) of its sewer mains during this reporting period. The City conducts monthly inspections at a City-owned lift station.

During FY 2011-12, the City continued to implement a FOG program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs. The City conducted FOG inspections at 23 eating establishments during FY 2011-12, and continued cross-referencing the City's business license database to verify that all grease-producing businesses are identified.

In case of an SSO, the City maintains a spill response plan that establishes procedures for responding to an SSO. There were five SSOs during FY 2011-12, which were appropriately reported through the California Integrated Water Quality System (CIWQS).

Table 4-4
FY 2011-12 Sanitary Sewer Overflows (SSO)

Date	Event ID	Location/Description	Volume
July 18, 2011, 11:00 am	768781	Private lateral cleanout in parking lot. 7155 Broadway, Lemon Grove, CA	220 Gallons
August 24, 2011	770584	City of San Diego Spill on Federal Blvd. 6588 Federal Blvd, Lemon Grove, CA	1,800 Gallons
December 22, 2011, 1:20pm	777399	Sewer Manhole (Mass Ave). 2211 Massachusetts Ave, Lemon Grove, CA	350 Gallons
March 7, 2012, 11:45 am	781944	Car Quest Auto Parts. 7702 Broadway, Lemon Grove, CA	540 Gallons
March 13, 2012, 7:30 pm	779418	Apartment Complex 3274 Main Street, Lemon Grove, CA	200 Gallons

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City staff or contractors conduct a variety of mobile municipal activities, typically involving vehicle maintenance, landscape maintenance, street and sidewalk repair, and power washing. These activities are not confined to a specific location; as such, BMPs must be implemented wherever one of these activities is taking place.

4.6.2 Source Characterization

Emergency vehicle maintenance, landscape maintenance, power washing, and street and sidewalk repair are listed on the City's high TTWQ municipal inventory as mobile activities.

4.6.3 Best Management Practices

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel and contractors are trained to implement BMPs for the specific activity in which they are involved. The City's contractor continued to use a pressure-washing unit with a vacuum and debris boom to prevent discharge during pressure-washing operations. Contractor personnel performing power washing are trained to collect all waste water for proper disposal. City personnel and contractor conducting emergency vehicle maintenance activities are trained to use drip pans and other spill containment during emergency vehicle maintenance. City personnel and contractors for landscape maintenance are trained in IPM principles. Similarly, street and sidewalk repair personnel and contractors implement BMPs per the City's JURMP.

4.6.4 PROGRAM IMPLEMENTATION

Power washing (bus stop cleaning) and emergency vehicle maintenance are both high TTWQ activities. Neither power washing nor emergency vehicle maintenance was scheduled to be conducted during the timeframe that routine municipal inspections were conducted. BMPs are implemented during these activities to prevent discharge of any pollutants to the storm drain system. Wastewater from pressure-washing activities is not discharged to the MS4. Personnel responsible for these activities were contacted to discuss BMP implementation, and they confirmed the use of a vacuum and debris boom to prevent discharge of wastewater during cleaning activities. Similarly, City staff confirmed the use of spill kits and drip pans in the event of an emergency vehicle maintenance operation.

Municipal personnel and contractors that conduct other mobile activities such as infrastructure maintenance and landscape maintenance are trained regarding BMPs for material use and disposal during tail-gate meetings at the Public Works Yard. City personnel routinely inspect park facilities to ensure that the City's landscape maintenance contractor is implementing IPM principles and appropriate BMPs at municipal parks. City staff is trained to look for signs of over-irrigation, overspray of fertilizers and pesticides, and proper disposal of green waste. City staff and contractors will continue to be trained on appropriate BMPs for mobile activities as described in the City's JURMP.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

As discussed in the City's JURMP, special events have the potential to generate trash and litter as a result of the patrons and activities of the special event. The City hosts several special events throughout the year. These events include annual bonfire, concerts in the park, and movies in the park, and other events for various causes and occasions.

4.7.2 SOURCE CHARACTERIZATION

As required by the Municipal Permit, special events are included on the City's high TTWQ municipal inventory.

4.7.3 BEST MANAGEMENT PRACTICES

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter and debris from the event, and raise stormwater awareness among the vendors and patrons of the event, as applicable.

4.7.4 PROGRAM IMPLEMENTATION

The City's minimum BMPs were in place for each special event in the City during FY 2011-12. Additionally, City staff was available throughout the duration of each event to address any immediate issues. Individuals applying for a permit (temporary use or encroachment permit) to hold an event on City property are notified that approval of the activity does not excuse compliance with City ordinances, including Chapter 8.48 of the Municipal Code Stormwater Management and Discharge Control (Storm Water Ordinance). Illegal discharges are prohibited and storm drain protection, trash BMPs, and appropriate storage of liquids are required.

During FY 2011-12, the City routinely inspected and cleaned-up during and after all nine special events, and took preventive measures as applicable. These events included six concerts held at Berry Street Park, two movies in the park at Lemon Grove Recreation Center, and a Bonfire at Civic Center Park. Additional trash receptacles were provided for the events to address litter and debris concerns.

4.8 PUBLIC REPORTING OF ILLICIT CONNECTIONS AND DISCHARGES

Reporting and Response

Public and municipal involvement is crucial to preventing and eliminating illicit connections and illegal discharges (IC/IDs) from the stormwater conveyance system. The Public Works and City Hall dispatch numbers provide effective means for individuals in the City to report suspected IC/IDs. All complaints received by the City are logged for documentation and tracking purposes. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and or cited as necessary and required to stop or clean up any and all illegal discharges.

Complaints received by the City during the FY 2011-12 reporting period and the City's response to each are listed in Appendix B. Thirty-seven complaints were documented this year.

Enforcement

As previously stated, complaints received by the City, are included in a table in Appendix B. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included clean-up, discussing stormwater concepts with individuals involved in the complaint, and verbal warnings. Three verbal warnings and one written notice were given and no notice of violation was issued during this reporting period in response to stormwater related complaints received by the City. There are also three complaints that have not been fully resolved and are listed as *"In Progress"*.

4.9 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to SSOs. Preventive maintenance is regularly conducted on the City's sanitary sewer system, and inspections are regularly conducted to monitor the condition of the public sewer mains and to determine the necessity of maintenance. Private lateral lines do not receive preventive maintenance, but the City assists in the containment and cleanup of sewer spills if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report all SSOs. During the FY 2011-12 reporting period, there were five SSOs (Table 4-4). All SSOs were reported to the RWQCB via the CIWQS website.

4.10 Education and Outreach

During FY 2011-12, the City continued to educate municipal personnel regarding stormwater requirements and proper BMP implementation during several in-house training sessions. The City held five in-house training sessions for City personnel during this reporting period. City staff went over different sections of the JURMP including Municipal, Industrial, Commercial, and Construction chapters. Inspector training was also conducted as well as an in-house BMP refresher for Public Works staff. Detailed information regarding the education and outreach conducted for City personnel is provided in Section 8 of this Annual Report.

4.11 Municipal Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.12 Program Modification and Review

Minor updates were made to this component of the program. Updates were made to the municipal inventory to include pollutant loading potential. The length of storm drain pipe estimate presented in past annual reports was reduced from an estimated 75 miles to 45 miles based on City staff knowledge. A municipal inspection form similar to the industrial and commercial inspection form was developed for the fixed facilities inspections. A new special event inspection form and food vendor fact sheet will be developed and used in the next reporting period. Additional program modifications are anticipated for the next reporting period.

Table 4-3
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Facility Category	Inspection Date	Corrective Actions
1	Berry Street Park	7101 Mount Vernon Street	High	Recreational Park with Open Field	6/19/12	• No corrective actions noted.
2	Civic Center Park	7715 Church Street	High	Recreation, Museum, and Historic Site	6/19/12	• No corrective actions noted.
3	City Hall/Sheriff's Station	3232 Main Street/3240 Main Street	High	Administration and Public Safety and Jail	6/19/12	• No corrective actions noted.
4	Community Center	3146 School Lane	High	Public Service	6/19/12	• No corrective actions noted.
5	City Hall Annex	7853 Olive	High	Administrative Recreational Facility	6/19/12	• No corrective actions noted.
6	Emergency Vehicle Maintenance	Throughout City	High	Mobile Municipal Activities	*NA	• No corrective actions noted.
7	Fire Fighter's Park/Skate Park	School Lane/Central Avenue	High	Recreational Park, Skate Park and Open Field	6/19/12	• No corrective actions noted.
8	Kunkel Park	8171 Lemon Grove Way	High	Recreational Park	6/19/12	• No corrective actions noted.
9	Landscape Maintenance	Throughout City	High	Mobile Municipal Activities	*NA	• No corrective actions noted.

Table 4-3 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Facility Category	Inspection Date	Corrective Actions
10	Lemon Grove Fire Station	7853 Central Avenue	High	Fire and Safety	6/19/12	• Cover sandbag sand in parking lot. • Keep parking lot free of sediment.
11	Lemon Grove Park	Washington and Alton	High	Recreational Park	6/19/12	• No corrective actions noted.
12	Lemon Grove Senior Center	8235 Mount Vernon Street	High	Recreation, Nutrition, and Education	6/19/12	• No corrective actions noted.
13	Lemon Grove Little League Fields	Nichols and Glencoe	High	Recreational Park	6/19/12	• Keep parking lot free of sediment. • Increase frequency of lot sweeping. • Keep dumpster lids closed.
14	MS4	Throughout City	High	MS4	*NA	• No corrective actions noted.
15	Power Washing	Throughout City	High	Mobile Municipal Activities, Including Power Washing	*NA	• No corrective actions noted.
16	Public Works Yard	2873 Skyline Drive	High	Equipment Storage and Maintenance	6/19/12	• No corrective actions noted.
17	Recreation Center	3131 School Lane	High	Recreational Facility	6/19/12	• Increase frequency of trash removals. • Keep site free of litter.
18	Roads, Streets, and Parking Facilities	Throughout City	High	Roads, Streets, and Parking Facilities (Street Sweeping)	*NA	• No corrective actions noted.
19	Sanitary Sewer System	Throughout City	High	Sanitary Sewer System and Lift Station	*NA	• No corrective actions noted.
20	Special Events	Throughout City	High	Special Events	Various	• No corrective actions noted.
21	Street and Sidewalk Repair	Throughout City	High	Mobile Municipal Activities	*NA	• No corrective actions noted.

Table 4-3 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Facility Category	Inspection Date	Corrective Actions
22	Trolley Depot	3443 Main Street	High	Office Space	6/19/12	• No corrective actions noted.

* These facilities and activities were either regularly inspected or did not occur during this reporting period or during regular working hours.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During the FY 2011-12 reporting period, the City continued to implement its program to mitigate urban runoff pollution from industrial and commercial sites and sources. The City aims to reduce the amount of pollutants discharged from industrial and commercial facilities through various aspects of the industrial and commercial program.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Notable achievements for the industrial and commercial component during the FY 2011-12 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the industrial and commercial component of its stormwater program during the reporting period are provided in the remainder of Section 5.

- The City met the Municipal Permit requirement of inspecting at least 25 percent of its stationary industrial and commercial inventory.
- The City continued to inspect high TTWQ industrial and commercial facilities.
- Conducted training for City staff on the Industrial and Commercial Program.
- The City updated its prioritization process and developed a new updated inventory for both stationary industrial commercial facilities and mobile businesses.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES AND SOURCES ELEMENT

5.2.1 BACKGROUND

The City's updated industrial and commercial inventory (Appendix A.4) includes all stationary facilities known to be operating in the City that are required to be included on the City's inventories. Stationary facilities in the City include, but are not limited to, manufacturing facilities, wholesalers, auto dealerships, auto repair shops, and restaurants. The City requires industrial and commercial businesses to implement pollution prevention measures and activity-specific minimum BMPs to mitigate the impacts of business activities on water quality.

5.2.2 SOURCE CHARACTERIZATION

As previously mentioned, the City's inventories include stationary industrial and commercial businesses, as required by the Municipal Permit. Information on how the City prioritizes the industrial and commercial inventories based on TTWQ is discussed in detail in the City's JURMP.

The updated inventory presented in the FY 2010-11 JURMP Annual Report is what this reporting period's inspections are based on. However, it is worth noting that the updated inventory prepared for the FY 2012-13 as presented in Appendix A.4 in this report is based on a different prioritization flowchart that will be presented in the FY 2012-13 JURMP Annual Report. The new prioritization flowchart considered factors including those listed below when prioritizing the inventories:

- Subjectivity to coverage under the State of California Industrial General Permit, Order No. 97-03-DWQ (Industrial Permit)
- Consideration of downstream water body and whether the business is likely to discharge pollutants for which the water body is impaired
- Outdoor storage of material or activities
- Results from previous inspections and institutional knowledge
- Proximity to the receiving water body
- Municipal Permit requirements for prioritization of high TTWQ facilities

At the end of the FY 2011-12, the City updated its industrial and commercial inventory and prioritization flowchart. The list of all businesses with active business certificates was generated and prioritized to create a new and updated inventory. The City's updated inventory includes 324 stationary industrial and commercial facilities that will be used in the FY 2012-13 reporting period.

5.2.3 Best Management Practice Requirements

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other BMPs to reduce or potentially eliminate the generation of pollutants from business areas and activities. The City has established a set of minimum BMPs presented in Chapter 4 of the City's JURMP. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. No changes have been made to the City's BMP requirements during this reporting period.

5.2.4 Program Implementation

Industrial and Commercial Inspections

During FY 2011-12, the City conducted stormwater compliance inspections at selected stationary industrial and commercial facilities. The inspected facilities were selected by using the following criteria:

- High TTWQ facilities
- Facilities with History of Non-Compliance
- Inventory established FY 2010-11

Table 5-1 provides a summary of industrial and commercial site visits that occurred during FY 2011-12. The purpose of the City's inspection program is to confirm that the City's minimum BMPs are being implemented at stationary industrial and commercial facilities.

Table 5-1
Summary of Industrial and Commercial Inspections

Facility Category	Inventoried Sites	Inspections	Percentage Inspected
High TTWQ Sites	225*	59	26%
Totals	**225**	**59**	**26%**

*The number of facilities in the above table is based on the inventory established in the 2010-11 JURMP Annual Report and includes some mobile businesses.

Facility inspections were conducted in accordance with the protocol set in the City's JURMP. Inspections involved a thorough examination of the facility and all outdoor activities. A training session on the industrial commercial inspection program was provided for staff conducting the City's industrial and commercial inspections. This training ensured the City met the Municipal Permit requirement for annual inspector training. More information about staff training is provided in Section 8 of this JURMP Annual Report.

BMP deficiencies and corrective actions were recorded on the City's industrial and commercial inspection form, which is included in the City's JURMP, and discussed with facility personnel present during the inspection. The City's industrial and commercial inspection form is included as Attachment 5.1. Table 5-2 provides a list of all facilities visited as part of the routine inspection program. The City completed 59 site visits with 50 facilities receiving full inspections.

During the inspection process, the City checked the Industrial Permit compliance status when applicable. The City also reviewed SWPPP and monitored results when applicable. There were no businesses observed to be in violation of the Industrial Permit.

The City did not rely on third-party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third-party inspection program.

General Industrial Permit

As previously mentioned, Industrial Permit compliance status was evaluated during the inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector gathered information about the business activities that occur on site and assigned or reassigned the business' standard industrial classification (SIC) code(s). The inspector then evaluated Industrial Permit subjectivity based on the assigned SIC code(s). Violations of any aspect of Industrial Permit requirements were recorded on the standard industrial and commercial inspection form. There were no violations of any aspect of the Industrial Permit based on inspections conducted during this reporting period.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to provide site-specific one-on-one education regarding stormwater concepts and BMPs. Inspectors discussed a variety of topics such as watershed concepts and the City's BMP requirements. Typically each inspected business that required corrective action was mailed a copy of the inspection form as a written record of the need for corrective actions observed at the time of inspection via post or electronic mail, as their preferences dictated. There were no significant recommended corrective actions during this reporting period based on inspection findings.

Enforcement

During FY 2011-12, none of the industrial and commercial facilities inspected were recommended for follow-up. In addition to the industrial and commercial stormwater compliance inspection program, the City regulates industrial and commercial facilities through complaints received by City's stormwater hotline. No complaints regarding stationary industrial and commercial facilities were received by the City's stormwater hotline (Appendix B).

5.3 Mobile Sources

5.3.1 Background

Due to the nature of activities of most mobile businesses, a major area of concern tends to be the potential for illegal discharges. In general, mobile businesses can be hard to identify, as many may not have City business licenses. Additionally, because many mobile businesses may be home based and activities do not occur in one fixed location, inspections of such facilities are impractical.

5.3.2 Source Characterization

Known mobile businesses described in the City's JURMP are included in Appendix A.5. The Regional Industrial and Commercial Workgroup also developed a web-based mobile business database for use by all Copermittees. The goal of developing this database is to allow Copermittees to share information about mobile businesses, which may be active in more than one jurisdiction. Appendix A.5 includes the mobile businesses presented in the 2010-11 Lemon Grove Annual Report combined with mobile businesses in the regional mobile business database.

5.3.3 Best Management Practice Requirements

BMPs for stationary industrial and commercial facilities, as discussed earlier in this section, are also required to be implemented for mobile activities, as applicable. BMPs applicable to mobile businesses, including key principles such as proper collection and disposal of any discharge, are discussed in the City's JURMP.

5.3.4 PROGRAM IMPLEMENTATION

The City continues to use business license records to identify mobile businesses located in or performing services within the City as well as the regional mobile business database. Complaints received by the City's stormwater hotline regarding mobile business activities also help the City identify mobile businesses. Complaints received by the stormwater hotline regarding insufficient BMP implementation by mobile businesses are responded to by code compliance officers or other City staff. During FY 2011-12, the City received no mobile business complaints.

Education and Outreach and Enforcement

During FY 2011-12, the City continued to use mobile business complaints as an opportunity for City personnel to discuss the BMP requirements of mobile businesses with the responsible party. There were no complaints or enforcement actions associated with mobile businesses this reporting period.

5.4 INDUSTRIAL AND COMMERCIAL COMPONENT EFFECTIVENESS ASSESSMENT

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 PROGRAM REVIEW AND MODIFICATION

The City used a new prioritization flowchart at the end of this reporting period to generate the industrial commercial inventory for the FY 2012-13 inspection program. The flowchart will be presented in the next annual report. The City also created a new mobile business inventory based on the City's 2010-11 JURMP Annual Report and the regional mobile business database. No other changes to its industrial and commercial inspection program were made during this reporting period.

Table 5-2
Industrial and Commercial Inspection Results

#	BUSINESS	STREET ADDRESS	TTWQ*	SIC Code	Hydrologic Area	Follow-Up Required?	Correction Status
1	ANTIQUE ROW CAFE	3251 LEMON GROVE AVE	High	5812	908.22	None	
2	MAGGIES CAKE & ICE CREAM	7963 BROADWAY	High	2835	908.22	None	
3	CARNITAS URUAPAN	8035 BROADWAY	High	5812	908.22	None	
4	PEARL CAR WASH	8016 BROADWAY	High	7542	908.22	None	
5	DIRTY HARRY'S CAR WASH	7716 PACIFIC AVENUE	High	7542	908.22	None	
6	CHARLEY'S FAMOUS HAMBURGERS	8213 BROADWAY	High	5812	909.12	None	
7	REX FOSTER ORCHIDS	2645 MASSACHUSETTS AVENUE	High	5992	908.22	None	
8	LEMON GROVE TRANSMISSION	3483 GROVE STREET	High	7537	908.22	None	
9	IN N OUT BURGER 57	7160 BROADWAY	High	5812	908.22	None	
10	MAGIC AUTO BODY	7636 NORTH AVENUE B	High	7532	908.22	None	
11	CULLIGAN WATER CONDITIONING	3515 OLIVE STREET	High	2086	908.22	None	
12	PRECISION TOWING 2 INC	3511 CITRUS AVENUE	High	5013	908.22	None	
13	LA MESA GLASS, INC	6691 FEDERAL BOULEVARD	High	1793	908.22	None	
14	EDCO DISPOSAL CORP	6670 FEDERAL BOULEVARD	High	4953	908.22	None	
15	THOMPSON BUILDING MATERIALS	6618 FEDERAL BOULEVARD	High	5032	908.22	None	
16	CREATIVE IDEAS	6420 FEDERAL BOULEVARD #G	High	5031	908.22	None	
17	LAGUNA WOODWORKS	6420 FEDERAL BOULEVARD #G	High	2434	908.22	None	

Table 5-2 (Continued)
Industrial and Commercial Inspection Results

#	BUSINESS	STREET ADDRESS	TTWQ*	SIC Code	Hydrologic Area	Follow-Up Required?	Correction Status
18	DUTCH MASTER CABINETS	6420 FEDERAL BLVD #G	High	2434	908.22	None	
19	LEMON GROVE CYCLE SUPPLY	7630 BROADWAY	High	5571	908.22	None	
20	IMPERIAL AUTO ELECTRIC #2	2295 LEMON GROVE AVE	High	7539	908.22	None	
21	SUBMARINA	7036 BROADWAY	High	5812	908.22	None	
22	VICTOR GOMEZ AUTO REPAIR	6306-B FEDERAL BLVD	High	7538	908.22	None	
23	MARCOS AUTO REPAIR	2241 LEMON GROVE AVENUE	High	7538	908.22	None	
24	SKYLINE PIZZERIA & SUBS	1501 SKYLINE DRIVE	High	5812	909.12	None	
25	AUTO GLASS & SUPPLY	6510 FEDERAL BOULEVARD	High	7536	908.22	None	
26	CHEROKEE AUTO RECOVERY	3494 HARRIS STREET	High	7389	908.22	None	
27	EL CAJON MOTORS	8141 BROADWAY	High	5599	908.22	None	
28	JACK IN THE BOX 10	7979 BROADWAY	High	5812	908.22	None	
29	DEL TACO 956	7162 BROADWAY	High	5812	908.22	None	
30	KFC	7012 BROADWAY	High	5812	908.22	None	
31	MCDONALDS	7164 BROADWAY	High	5812	908.22	None	
32	CARL'S JR	7162 BROADWAY	High	5812	908.22	None	
33	MARTIN ROOFING	6608 FEDERAL BOULEVARD	High	1761	908.22	None	
34	SMITH SHADE	6588 FEDERAL BOULEVARD	High	2591	908.22	None	
35	REPUBLIC BRASS SALES, INC	6566 FEDERAL BOULEVARD	High	5051	908.22	None	
36	JCI METAL PRODUCTS	6540 FEDERAL BOULEVARD	High	3444	908.22	None	

Table 5-2 (Continued)
Industrial and Commercial Inspection Results

#	BUSINESS	STREET ADDRESS	TTWQ*	SIC Code	Hydrologic Area	Follow-Up Required?	Correction Status
37	LENCO EQUIPMENT CO, INC	6470 FEDERAL BOULEVARD	High	3714	908.22	None	
38	SOLIDARITY STORING	6448 FEDERAL BOULEVARD	High	4214	908.22	None	
39	MICRO TOOL & MFG, INC	6494 FEDERAL BOULEVARD	High	3542	908.22	None	
40	SD TRUCK BODY & EQUIPMENT	8373 BROADWAY	High	7532	909.12	None	
41	GOLDCREST COLLISION	8373 BROADWAY	High	7532	909.12	None	
42	TNT AUTO SALES	8247 BROADWAY	High	5521	909.12	None	
43	AAMCO TRANSMISSIONS	8074 BROADWAY	High	7537	908.22	None	
44	LEMON GROVE SMOG TEST ONLY #2	8068 BROADWAY	High	7549	908.22	None	
45	BURGER KING 910	6960 BROADWAY	High	5812	908.22	None	
46	YUM YUM DONUT #518	6998 FEDERAL BOULEVARD	High	5812	908.22	None	
47	SUBWAY #3061	6971 BROADWAY	High	5812	908.22	None	
48	JACK IN THE BOX 3004	7015 BROADWAY	High	5812	908.22	None	
49	EL POLLO LOCO	7087 BROADWAY	High	5812	908.22	None	
50	SUBWAY #47113	7582 BROADWAY	High	5812	908.22	None	
51	COTIJA TACO SHOP 6	7695 BROADWAY	High	5812	908.22	None	
52	LOS RIOS MEXICAN & SEAFOOD RESTAURANT	7977 BROADWAY #B	High	5812	908.22	None	
53	K.C.'S CHINESE FOOD	7975 BROADWAY	High	5812	908.22	None	
54	ARCO AM/PM	8001 BROADWAY	High	5499	908.22	None	
55	VALEROS	8170 BROADWAY	High	5541	908.22	None	

Table 5-2 (Continued)
Industrial and Commercial Inspection Results

#	BUSINESS	STREET ADDRESS	TTWQ*	SIC Code	Hydrologic Area	Follow-Up Required?	Correction Status
56	RCP BLOCK AND BRICK INC	8240 BROADWAY	High	5032	909.12	None	
57	SBJ	8056 BROADWAY	High	7538	908.22	None	
58	TACO BELL #24593	7232 BROADWAY	High	5812	908.22	None	
59	ROJELIO'S TACO SHOP	6914 FEDERAL BOULEVARD	High	5812	908.22	None	

* Note that the TTWQ should coincide with the inventory established in the 2010-11 JURMP Annual Report. It will not coincide with the updated inventory presented in this report that will be used during the 2012-13 reporting period to conduct inspections.

6.0 RESIDENTIAL

6.1 INTRODUCTION

Eighty percent of land use in the City is residential. Due to the large residential area, activities that take place in residential areas have the potential to affect the quality of receiving waters. Residential activities such as vehicle washing, over-irrigation, and home maintenance can potentially contribute pollutants to the City's MS4 if BMPs are not implemented. Additionally, improper disposal of household hazardous waste (HHW) can also contribute pollutants to the City's MS4. The City has worked to implement a range of programs to address these high TTWQ residential activities with the goal of reducing pollutant loads associated with such activities. Pollutants of concern for Lemon Grove's watersheds include pesticides, metals, bacteria, and trash.

6.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the residential component during the FY 2011-12 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the residential component of its stormwater program during the reporting period are provided in the remainder of Section 6.

- The City has a contract with the City of La Mesa to use their permanent HHW collection facility; 97 participants from the City properly disposed of 570 pounds of HHW during the eight HHW events held during this reporting period.
- The City's Used Oil Recycling Program was available at five locations in Lemon Grove (O'Reilly Autoparts, DCH Honda of Lemon Grove, Bob Baker Toyota Scion, Autozone, and EDCO Waste & Recycling Services (EDCO)) with 15,425 gallons of used oil collected. Additionally, a Used Oil Filter Exchange event was held on February 18, 2012 in Lemon Grove.
- The City issued two editions of *The Grove Gazette* (Summer 2011 & Spring 2012) with dedicated pages to environmental concerns. The City's newsletter was distributed electronically to 411 residents and is available to residents on the City's website.
- I Love a Clean San Diego (ILACSD) conducted six presentations for adults and youths focused on pollution prevention. They also managed the Recycling and HHW Hotline and Database used by 52 residents this fiscal year.
- *A Day without a Bag* was held in the City with 750 reusable bags distributed at three locations on December 15, 2011.
- Residents of the City participated in Creek to Bay Cleanup and Spring Cleanup events on April 28, 2012.
- The City continued to promote the use of the stormwater hotline for residents to call in potential violations of the City's stormwater ordinance.

6.2 SOURCE CHARACTERIZATION

The City has identified high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities, which are discussed in the following subsections.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

During the FY 2011-12 reporting period the City continued to identify the following residential activities as high TTWQ:

- Automobile repair and maintenance,
- Automobile washing,
- Automobile parking,
- Home and garden care activities and product use, and
- Disposal of trash and pet waste.

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

In addition to high TTWQ activities, the City has identified several residential areas that pose a high TTWQ. High TTWQ residential areas are designated by considering complaint investigations, institutional knowledge, data from the City's Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program), and criteria as defined in the Municipal Permit. Residential areas that have not been designated as high TTWQ but may be sources of pollutants are also monitored by the City.

The City has mapped out areas identified as high TTWQ. The maps delineate the residential areas described below, and a series of smaller maps provide more detail about each individual area. Public Works staff is aware of these high TTWQ locations and routinely monitor these areas.

Westview Place Residential Area
Located in the northern section of the City, Westview Place has been deemed by City staff as a high TTWQ residential area. Significant amount of trash and debris is regularly observed on this street by City staff. Storm drain inlets eventually flow to Chollas Creek from this area.

San Altos Place Residential Area
Located in the southern section of the City, San Altos Place has been deemed by City staff as a high TTWQ residential area. Significant amount of trash and debris is regularly observed in a swale just east of the street. Illegal dumping is a common occurrence in the swale.

Ensenada Street Residential Area
Located in the southeast section of the City, Ensenada Street has been deemed by City staff as a high TTWQ residential area. Significant amount of trash and debris is found in the

creek that runs parallel to the street. Illegal dumping may be a source of the trash and debris observed in the creek.

6.3 Best Management Practice Requirements

The City has continued to provide information regarding the implementation of pollution prevention measures, such as good housekeeping practices, for residential areas and activities. General residential BMPs include conscientious automotive maintenance and care, erosion control, and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Other residential BMPs include non-stormwater discharge management, including elimination of IC/IDs. There have been no changes to the City's residential BMP requirements.

6.4 Program Implementation

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting are conducted to ensure that the required BMPs are implemented. This minimizes pollutants associated with residential activities and areas. The residential program has an education component so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities.

6.4.1 Training, Education, and Outreach

The City has continued to conduct training, education, and outreach activities for residents, which are described below.

***The Grove Gazette* Newsletter Articles**

The City publishes environmental articles in *The Grove Gazette* newsletter. Both newsletters published during the reporting period contained articles on stormwater pollution prevention. An electronic copy of each edition was provided to 411 residential subscribers within the City. Each issue was also available on the City's website. The stormwater-related articles published in FY 2011-12 are summarized below. All newsletters published during FY 2011-12 reporting period are included as Attachment 6.1 & 6.2.

The Summer 2011 newsletter contained the following stormwater-related and general environmental articles and announcements:

- "IT'S ALMOST HERE" reminded residents of stormwater pollution prevention measures. Good housekeeping measures and BMPs were presented in the article to better manage pollutants such as pesticides and fertilizers, trash and debris, pet waste, and erosion control.
- "ANTS!! A COMMON SUMMERTIME ANNOYANCE IN SOUTHERN CALIFORNIA" informed residents and businesses how to address ant infestations without using harmful pesticides that can be released into the environment and impact water quality.

- "CITY OF LEMON GROVE STORMDRAIN HOTLINE" reminded residents to contact the City's stormwater hotline number to report illegal dumping and other stormwater pollution concerns within the City.
- "RECYCLING CONSTRUCTION & DEMOLITION DEBRIS, SAN DIEGO COUNTY'S ULTIMATE RECYCLING SOURCES, FREE HOUSEHOLD BATTERY RECYCLING AND SHARPS DISPOSAL, HOUSEHOLD HAZARDOUS WASTE RECYCLING, FREE E-WASTE RECYCLING FOR RESIDENTS AND BUSINESSES" reminded residents of proper waste disposal in support of pollution prevention. All the aforementioned articles have stormwater pollution prevention benefits and are included in Attachment 6.1.

The Spring 2012 newsletter contained the following environmental articles and announcements:

- "I LOVE A CLEAN SAN DIEGO" article presented general information on the organization and also advertised the Creek to Bay Cleanup Day and cleanup site in Lemon Grove held on April 28, 2012.
- "SPRING CLEANUP DAY" informed residents of the April 28, 2012 self-haul cleanup event sponsored by EDCO. Residents were able to dispose of large items or unwanted household materials (not including HHW) free of charge.
- "FREE HOUSEHOLD BATTERY RECYCLING AND SHARPS DISPOSAL, HOUSEHOLD HAZARDOUS WASTE RECYCLING, FREE E-WASTE RECYCLING FOR RESIDENTS AND BUSINESSES" reminded residents of proper waste disposal in support of pollution prevention. All the aforementioned articles have stormwater pollution prevention benefits and are included in Attachment 6.2.

Other Educational Outreach Materials and Activities

Educational materials were distributed during community events to further encourage pollution prevention measures and to increase knowledge about stormwater. Efforts further included six adult and youth presentations by ILACSD on stormwater pollution prevention using the hands-on watershed model, waste reduction, proper waste disposal and recycling.

ILACSD also maintained the Recycling and HHW Hotline and Database on behalf of the City. This service helped residents with recycling and proper waste disposal questions. A total of 52 residents used this service during this fiscal year.

The City continued to provide stormwater information and contacts on its website (http://www.lemongrove.ca.gov/) and Facebook. The City's stormwater hotline provided a medium for City residents and business owners to obtain stormwater information and file stormwater related complaints.

Residents were also encouraged to participate in local activities to improve water quality, such as the Creek to Bay Cleanup event and EDCO sponsored cleanup events and HHW

drop offs, and recycling programs advertised in *The Grove Gazette*. More information regarding the City's public participation is included in Section 9 of this report.

6.4.1.1 Public Events

HHW Events

The City has a contract with the City of La Mesa to use their permanent collection facility for HHW and electronic waste. Residents must make an appointment with EDCO on select dates to drop of HHW. Ninety-Seven residents made appointments to drop off HHW. A total of 570 pounds of HHW was collected at this facility during eight events held during the fiscal year. For home-bound residents, door-to-door pickup services were provided.

BERRY STREET PARK CLEANUP Events

A group of two to four City residents participated in weekly cleanup of Berry Street Park during this fiscal year. The residents met at the park once a week for an estimated period of eight months to pick up trash to help keep the park free of trash and debris.

A DAY WITHOUT A BAG Event

The City contracted with ILACSD to coordinate the regional *Day without a Bag* campaign within the City on December 15, 2011. Reusable bags were distributed at three targeted locations in Lemon Grove: *Food 4 Less*, *City Hall*, and *The 99 Cent Only Store*. An estimated 750 reusable bags were distributed to City residents.

CHRISTMAS TREE RECYCLING Event

EDCO provided roll-off bins to encourage residents to properly dispose of their Christmas Trees. The event was held from December 26, 2011 through January 16, 2012. The roll-off bin was located at Central Avenue and Olive Street near City Hall.

USED OIL FILTER EXCHANGE Event

The City contracted with ILACSD to host a used oil filter exchange event on February 18, 2012. O'Reilly at 6925 Federal Boulevard was the drop off site from 9:00 a.m. to 12:00 p.m. A total of 14 filters were exchanged and 11 oil pans distributed. The event was published in the local *Penny Saver*. The City's five Used Oil Recycling Program collection centers (O'Reilly Autoparts, DCH Honda of Lemon Grove, Bob Baker Toyota Scion, Autozone, and EDCO) continued to collect used motor oil during the FY 2011-12 reporting year. A total of 15,425 gallons of used motor oil was dropped off at O'Reilly Autoparts and AutoZone.

CREEK TO BAY CLEANUP Event

The City hosted a cleanup site for the annual Creek to Bay Cleanup held on April 28, 2012. The site location was at Federal Boulevard and San Miguel Avenue, and Federal Boulevard and Central Avenue. There were 42 volunteers, including residents from the City. An estimated 1,486 pounds of trash and 213 pounds of recyclables were collected during the cleanup event. The City's Management Analyst introduced the cleanup site to volunteers, discussed watershed concepts inclusive of Total Maximum Daily Loads (TMDLs) and stormwater pollution prevention measures.

SPRING CLEANUP Event

EDCO hosted Spring Cleanup Day on April 28, 2012 from 7:00 a.m. to 4:00 p.m. The City advertised this event to Lemon Grove residents on the City's website and newsletter. An estimated 770 vehicles from the City participated in this event with 413.13 tons of debris collected.

6.4.2 Compliance and Enforcement

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the stormwater hotline, and observations made by the City's municipal personnel. If a potential to affect water quality is present, the City can provide a verbal warning, written warning, order to abate or correct, or monetary fines as applicable.

The City received nine residential-related complaints during this reporting period. Two of the nine received verbal warnings and one received a written letter from the City. Many of the verified complaints involved residents who were unaware of residential BMPs. The City's Code Compliance Officer educated residents during the complaint investigation. Public Works staff also cleaned areas in the public right of way as necessary to resolve complaints. The resolutions of all residential complaints are provided in Appendix B of this JURMP Annual Report.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 Program Review and Modification

The addition of three high TTWQ residential areas was added during this reporting period. No other changes to the residential component of the City's JURMP were made during the reporting period.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008, RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the FY 2011-12 Illicit Discharge Detection and Elimination (IDDE) section and attachments to the RWQCB no later than December 15, 2012.

8.0 EDUCATION

8.1 INTRODUCTION

During the FY 2011-12, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, and residents. The City aims to reduce stormwater pollution by increasing awareness about the stormwater conveyance system and promoting the implementation of BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the FY 2011-12 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the education component of its stormwater program during the reporting period are provided in the remainder of Section 8.

- Five municipal staff trainings were conducted during this reporting period.
- The City's newsletter, *The Grove Gazette*, featured several articles highlighting stormwater and other relevant environmental topics in the Summer 2011 and Spring 2012 editions. These newsletters were made available to businesses and residents on the City's website.
- City staff provided education outreach at the Creek to Bay Cleanup in April 2012.
- ILACSD conducted six presentations for adults and youths focused on pollution prevention.

8.2 STAFF TRAINING ELEMENT

The City has provided training and educational outreach to its municipal personnel. Many municipal personnel are out in the field on a daily basis; as such, it is important that they understand the importance of implementing BMPs. Additionally, municipal personnel are encouraged to report any IC/IDs observed to the appropriate City staff and to educate other municipal personnel and the general public about stormwater pollution prevention. City staff provided five training sessions to other City staff during the fiscal year. In addition to the formal training sessions, City stormwater staff regularly provided guidance to other City staff on implementation of stormwater requirements. Table 8-1 includes all training sessions that were provided for various municipal staff and departments during FY 2011-12.

Table 8-1
Municipal Training Sessions

Date(s)	Event	Topic(s)	Number of Participants
5/08/12	NPDES Stormwater Training	Review Municipal Chapter of JURMP	5
5/22/12	NPDES Stormwater Training	Review Industrial/Commercial Chapter of JURMP	6
5/31/12	NPDES Stormwater Training	Review Construction Chapter of JURMP	5
6/19/12	NPDES Stormwater Training	Annual Construction Inspector Training	1
6/29/12	NPDES Stormwater Training	BMP Refresher at Public Works Yard	8

In addition to the training sessions discussed above, Public Works staff are aware of the high TTWQ residential areas, as discussed in Section 6 of this JURMP Annual Report.

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, and residents. These efforts promote stormwater awareness and BMP implementation and are discussed in the following subsections.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Results of the inspections conducted in FY 2011-12 are discussed in Section 5 of this report. Each facility inspected received verbal education on stormwater issues and recommended corrective actions.

During the FY 2011-12 reporting period, the City's newsletter, *The Grove Gazette*, featured several stormwater-related articles (Attachment 6.2). The newsletters were made available on the City's website. Details about the newsletters can be found in Section 6 of this report.

8.3.1.1 MOBILE BUSINESSES

Mobile businesses, such as mobile car detailers or power washers, may present threats to water quality due to the nature of their business activities and the possibility of prohibited non-stormwater discharges if proper BMPs are not implemented. Mobile businesses are not confined to a single area and many may not have City business licenses, making them difficult to identify. The City keeps track of mobile businesses that are discovered through business licenses and during field inspections. Mobile businesses are directed to the *project clean water mobile business toolbox* for site specific BMPs.

8.3.2 Construction Site Owners and Developers

During the project design process, City Development Services staff work closely with developers and project engineers to ensure requirements are understood prior to and during the review process. SUSMP regulations and BMP information included in the City's JURMP are also made available at the front counter of Development Services.

Due to the nature of activities, construction sites have the potential to discharge various types of pollutants to receiving waters if not managed properly. To ensure that construction site owners, contractors, and developers are abiding by regional and federal regulation, new development and redevelopment project proponents are required to attend a preconstruction meeting that includes education on stormwater management topics. These meetings include federal, state, and local regulations, implementation of a SWPPP, if required, and implementation and maintenance of BMPs.

8.3.3 Residential Areas

Distribution of Educational Material

Since residential areas make up a large portion of Lemon Grove, the City understands the importance of reaching this particular audience through educational outreach programs. The City continued to publish and post the *The Grove Gazette* newsletter (Attachment 6.2) on the City's website and inform 411 resident subscribers. Two editions of *The Grove Gazette* (Summer 2011 and Spring 2012) were published during FY 2011-12. As detailed in Section 6, several stormwater and relevant environmental articles were included in the newsletters that were posted on the City's website.

The City website, http://www.lemongrove.ca.gov/, is another way in which City residents can become familiar with the design and intended use of the storm drain system, minimum BMPs for various high TTWQ activities, reporting illegal dumping, and City contact information.

Training Events

During FY 2011-12, ILACSD provided six presentations to students at four elementary schools and at the Lemon Grove Public Library. The presentations were interactive and used the hands-on watershed model to discuss topics including pollution prevention, waste reduction, recycling, and used motor oil recycling. A total of 398 students and adults attended these presentations. Table 8-2, below, includes the locations and number of presentations delivered to the select student groups.

Table 8-2
ILACSD Stormwater Presentations

Date	Location	Description
10/6/2011	Lemon Grove Library	Pollution Prevention Presentation with 18 Youth/Adults
5/30/12	San Miguel Elementary	1 Pollution Prevention Presentation, 3rd Graders with 90 Participants
6/04/12	Mount Vernon Elementary	1 Pollution Prevention Presentation, 5th Graders with 70 Participants
6/11/12	San Altos Elementary	1 Pollution Prevention Presentation, 3rd-4th Graders with 105 Participants
6/11/12	Monterey Heights Elementary	1 Pollution Prevention Presentation, 2nd Graders with 80 Participants
6/18/12	Mount Vernon Elementary	1 Pollution Prevention Presentation, 5th Graders with 35 Participants

8.3.4 Underserved Communities

The City of Lemon Grove is focusing on identifying underserved communities based on demographic and socioeconomic data provided by San Diego Association of Government. Once identified, education outreach efforts can be developed for the various underserved communities.

8.3.5 Complaint Investigations

To further aid the process of identifying illicit discharges, the City encourages the public and City staff to report IC/IDs to the City's stormwater hotline. All complaints are investigated by City staff. If a representative for the reported business, residential address, or construction site is present, the inspector will provide one-on-one verbal education about the complaint and stormwater in general. Pollution prevention concepts are emphasized, and educational materials are distributed as applicable. The City received 37 complaints during this reporting period.

8.4 Outreach Component Effectiveness Assessment

The estimated number of impressions made by the City's education and outreach efforts during FY 2011-12 is presented and described below.

Impressions Made
As discussed in this section, the City has continued to provide stormwater-related education to different audiences in the City through inspections, newsletter articles and during events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES stormwater program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees because it is likely that the attendees will discuss the content with others after the training session or event. Printed educational materials distributed are assumed to generate three impressions each. Table 8-3, below, details the number of impressions made by the City during this reporting year.

Table 8-3
Impressions Made by the City

Impression Type	Count	Unit	Estimated Impressions
Industrial And Commercial Inspections	59*	Inspections	150
Municipal Inspections	14	Inspections	70
Municipal Staff Training Sessions	25	Attendees	100
School Presentations	398	Attendees	1,592
Creek To Bay Cleanup	42	Participants	168
HHW Drop Off Events	97	Participants	388
Used Oil Filter Exchange Event	14	Participants/Filters Exchanged	56
Day Without A Bag Event	750	Participants/Bags Distributed	3,000
The Grove Gazette Newsletter (Summer 2011 & Spring 2012)	411	Subscribers	1,233
Total City Impressions			***6,757***

Note:
*Nine Industrial and Commercial inspections were of facilities no longer in business; therefore, the nine inspections may not count towards impressions.

Please refer to Section 11 of this JURMP Annual Report for the remainder of the effectiveness assessment for this program component.

8.5 Program Review and Modification

No significant changes to the education component of the City's JURMP were made during FY 2011-12.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to develop stormwater awareness and improve water quality. Public participation includes, but is not limited to, clean-up events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal and collection events. Collaboration between the City and the community should help foster a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed in this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the FY 2011-12 reporting period are presented in the following bulleted list. Additional details about the City's implementation of the public participation component of its stormwater program during the reporting period are provided in the remainder of Section 9.

- City sponsored and coordinated with ILACSD to host the Creek to Bay Cleanup Event in April 2012. Forty-two volunteers collected 1,486 pounds of trash and 213 pounds of recyclables.
- Volunteers continued cleanup Berry Street Park on a weekly basis during the majority of the reporting period.
- The City's year-round HHW collection facility received 570 pounds of HHW from approximately 97 visits by City residents.
- The City's collected 15,425 gallons of used motor oil at the City's used oil recycling program collection centers. The City contracted with ILACSD for a used oil filter exchange event with 14 filters being exchanged.
- Spring Cleanup event and a self-haul clean-up event were hosted by the City in conjunction with EDCO. The events allowed residents to dispose of large items, unwanted household materials (not including HHW), and green waste free of charge. A total of 770 vehicles from the City participated in this event and 413.13 tons of debris was collected.
- The City sponsored and coordinated with ILACSD to participate in the regional *Day Without A Bag*-750 reusable bags were distributed to City residents.

9.2 PUBLIC PARTICIPATION ACTIVITIES

CREEK TO BAY CLEANUP Event

The City sponsored and coordinated with ILACSD to host a cleanup site on April 28, 2012. Information on how to participate was posted on ILACSD's website, the City's website and

Facebook page, and posters advertising the event at City Hall and Lemon Grove Public Library. Forty-two volunteers participated in the event, collecting 1,486 pounds of trash and 213 pounds of recyclables.

BERRY STREET PARK CLEANUP Events

Several residents participated in removing trash and debris from Berry Street Park on a weekly basis for an estimated period of eight months during this reporting period. The volunteers met on the weekends and walked through the park picking up litter to keep the park clean.

HHW Events

The City in conjunction with EDCO, hosted eight HHW drop off events during this reporting period. Although the City does not host the event within its jurisdiction, the City continues to contract with the City of La Mesa to use their permanent collection facility for HHW and electronic waste. A total of 97 City residents made appointments to drop off HHW at the EDCO HHW collection facility in the City of La Mesa. An estimated 570 pounds of HHW was collected during this FY 2011-12.

USED OIL FILTER EXCHANGE Events

The City hosted a used oil filter exchange event during this reporting period. The event was advertised in the local *Penny Saver* and held at O'Reilly at 6925 Federal Boulevard on February 18, 2012. A total of 14 filters were exchanged and 11 oil pans distributed. Additionally, the City's five Used Oil Recycling Program collection centers collected 15,425 gallons of used motor oil during this reporting period.

SPRING CLEANUP Event

The City hosted the annual Spring Cleanup event, a self-haul cleanup, on April 28, 2012 to encourage proper disposal of unwanted bulk items and other refuse. The City's waste hauler, EDCO, coordinated the event for Lemon Grove residents to drop off any unwanted trash and debris, excluding HHW, free of charge. An estimated 770 vehicles from the City participated in this event with 413.13 tons of debris dropped off at the EDCO facility.

CHRISTMAS TREE RECYCLING Event

EDCO provided roll-off bins at Central Avenue and Olive Street near City Hall to encourage residents to dispose of their Christmas Trees appropriately. The event was held from December 26, 2011 through January 16, 2012. EDCO advertised the event in its local newsletter to encourage public participation.

PUBLIC REPORTING

As discussed in Section 4, complaints are received through the City's stormwater hotline and through the City's Public Works Department. The number for the hotline is advertised in articles published in *The Grove Gazette* newsletter and on the City's website. The residential, industrial and commercial, construction, and municipal communities are encouraged to use the hotline to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable. A total of 37 complaints and service requests were made and responded to during FY 2011-12.

9.3 Outreach Events

The City has continued to provide educational outreach programs for a variety of different communities in the City. Since it is an effective way of reaching large numbers of individuals, educational outreach is typically associated with an event. Another outreach event in the City included the City's participation in regional meetings and workgroups.

CREEK TO BAY CLEANUP Event

On April 28, 2012, San Miguel Avenue and Central Avenue at Federal Boulevard were selected for cleanup as part of the statewide California Creek to Bay Cleanup event. The event was sponsored by ILACSD and 42 volunteers participated in the event as presented in Section 9.2. Prior to commencing with the site cleanup, City staff conducted education outreach to the volunteers by introducing watershed concepts, TMDLs, and stormwater pollution prevention measures.

DAY WITHOUT A BAG Event

On December 15, 2011, the City participated in a region-wide effort to encourage the use of reusable shopping bags. The event included free reusable bag giveaways along with tips for remembering to bring reusable bags when shopping. Two retailers in the City (*Food 4 Less* and *The 99 Cent Only Store*) and City Hall participated in the event, and distributed 750 reusable bags. This event promoted waste reduction in the Lemon Grove community.

STORMWATER COPERMITTEE MEETING AND OTHER CITY PARTICIPATION

City personnel attended and were active in various stormwater Copermittee workgroups during FY 2011-12. The workgroups provide a forum for representatives from various jurisdictions within San Diego County and other interested parties, including the general public, to exchange information and ideas regarding the management of stormwater programs. The City participated in many Copermittee meetings and workgroups. These meetings will continue to be attended by City personnel during the FY 2012-13 reporting period. The City is also a member of the stakeholder advisory group for the Chollas Creek pesticide, metals, and bacteria TMDLs, which includes representatives of Caltrans, the United States Navy, the Port of San Diego, County and City of San Diego, and the City of La Mesa.

9.4 Public Participation Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

9.5 Program Review and Modification

No changes were made to the public participation component of the City's JURMP during the reporting period.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

The City relies on several funding sources to support implementation of the Stormwater Program; however, the primary funding source is the City's General Fund. Other funding sources to assist offsetting the use of the General Fund include fees on building, residential and commercial pollutant sources. The City's Sanitation Fund and AB939 trash fee support multiple programs including implementation of the stormwater program.

During FY 2009-10, a fiscal analysis reporting template was developed collectively by the Copermittees. Fiscal information from FY 2011-12 is reported in the tables below, which follow the standard format adopted by the Copermittees.

Table 10-1
Expenditure Summary

JURISDICTIONAL COMPONENTS	
Administration	$35,270
Development Planning	$2,100
Construction	$7,439
Municipal	$67,340
Industrial and Commercial	$2,537
Residential	$6,755
IDDE	$19,375
Education	$2,250
Public Participation	$1,658
Special Investigations	$0
Non-Emergency Firefighting	$0
Jurisdictional Total	**$144,724**

WATERSHED And TMDL	
San Diego Bay Watershed	$895
Chollas Creek TMDLs	$49,991
Watershed And TMDL Total	**$50,886**

REGIONAL	**$37,865**

TOTAL COSTS	**$233,475**

Table 10-2
Fund Summary

FUNDING BY SOURCE	
General Fund	$162,012
Sanitation	$4,660
Commercial Fee	$44,929
Building Permit Cost Recovery	$8,370
Residential Fee	$2,841
AB 939 Fee	$10,663
Total	**$233,475**

Table 10-3
Watershed Urban Runoff Management Program (WURMP) Expenses

	San Diego Bay Watershed	Chollas Creek TMDL
Administration	$288	$900
Cost Share Contribution	$463	$48,947
Watershed Activities	$144	$144
SUBTOTAL	**$895**	**$49,991**
TOTAL		**$50,886**

Table 10-4
Regional Urban Runoff Management Program (RURMP) Expenses

Regional Programs	Jurisdictional Cost
Administration	$760
Cost Share Contribution	$28,305
RWQCB Annual Permit Fee	$8,800
TOTAL	**$37,865**

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City regularly evaluates its stormwater program to make it as effective as possible at reducing discharges of urban runoff related pollution to the MEP. The overall structure of the City's stormwater program has three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes as well as ways to measure those outcomes. Next, the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

Based on participation in regional efforts and its experience implementing its JURMP, the City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation.

The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge and Awareness
Level 3: Behavioral Change and BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the stormwater program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in Section 11.2.1. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in California

Stormwater Quality Association (CASQA) effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome Level Assessments

Level 1

Level 1 outcomes are essentially measures of Municipal Permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix C of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement.

The City's Management Analyst is responsible for coordinating with various staff in the City who have stormwater responsibilities, such as engineers, planners, and public works maintenance staff. Modifications have been made to improve the effectiveness of the implementation of several components of the City's stormwater program since the new Management Analyst was hired.

Levels 2 and 3

See Tables 11-2 through 11-9 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Please note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included. For example, see Figure 11-1 and Figure 11-2 for industrial and commercial business assessments of knowledge and BMP implementation, respectively.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load estimation methods have not yet been developed.

Level 5

The Dry Weather Monitoring Program is the City's primary mechanism of measuring the quality of discharges. Table 11-1 below presents historical dry weather data with percent of exceedances per year. The last three years has shown only one site out of 15 dry weather monitoring sites as having an exceedance of nitrate. The remaining constituents have been below the established Dry Weather Monitoring Program action levels. Bacteria results from the past three Dry Weather Monitoring Seasons have demonstrated a significant improvement, with no exceedances.

Table 11-1
Dry Weather Monitoring Historical Data
Percent of Sites With Exceedances Per Year

Year	Field Screening								Laboratory Analyses				
	Number of Field Screening Sites	pH	Turbidity	Conductivity *	Surfactants	Ammonia-N	Nitrate-N	Orthophosphate-P	**Number of Laboratory Sampling Sites**	Diazinon	Total Coliforms **	Fecal Coliforms **	Enterococci **
2002	15	7	7	27	7	33	13	13	4	0	0	0	0
2003	15	0	0	53	0	7	13	0	4	25	75	75	0
2004	15	0	0	0	7	7	7	0	4	0	50	25	25
2005	15	0	0	0	7	0	27	0	4	0	75	25	25
2006	15	0	0	0	7	7	13	0	4	0	75	25	0
2007	15	0	0	0	0	0	20	0	4	0	25	0	0
2008	15	0	0	0	0	0	7	0	4	0	50	25	25
2009	15	0	7	0	7	7	7	7	4	0	25	25	0
2010**	15	0	0	0	0	0	7	0	4	0	0	0	0
2011	15	0	0	0	0	0	7	0	4	0	0	0	0
2012	15	0	0	0	0	0	7	0	4	0	0	0	0

Notes:
Results are based on complete routine visits only. Confirmation visits, follow-up visits and dry sites not included.
*By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgement in order to account for sites in which salt water and groundwater increase the conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

**Note that dry weather action levels for bacterial indicators were revised in 2010. Constituents have been compared to action levels in effect at the time of sampling to identify exceedances.

Level 6

The City recognizes the importance of protecting water quality of receiving water bodies in and around the City, and continues to participate in regional monitoring efforts. The long-term trend monitoring station in the Chollas Creek subwatershed, referred to as a mass loading station (MLS), is well downstream of the City. However, results from water quality monitoring conducted along the City of San Diego and Lemon Grove jurisdictional boundary within Chollas Creek indicated that water quality objectives for metals were being met. Both acute and chronic water quality objectives for dissolved copper, lead, and zinc were met based on the results of two wet weather sampling events during this reporting period. Additional information can be found in the Chollas Creek TMDL 2011-

2012 Special Studies Report. However, it is worth noting that several years of wet weather monitoring data would be necessary for a Level 6 Assessment.

11.2.2 Overall Component Assessments

Development Planning

The operation and maintenance verification program, which requires responsible parties to certify that their BMPs have been maintained properly, along with site inspections, has increased the responsible parties' understanding of the requirements. As a result of this contact with the City, many sites have been able to conduct the necessary maintenance required of their treatment control BMPs.

Construction

The available data indicate that on the whole the City's construction program is effective in requiring BMP implementation at both public and private construction sites. Any BMP deficiencies noted are typically remedied promptly. The City's size and low number of construction projects allow the City's inspector to visit construction sites on a weekly basis, at a minimum. Any corrective actions or recommendations are dealt with in the field and addressed immediately. The City will continue its efforts to notify project proponents and homeowners of the City's BMP requirements. The City's engineering inspector attends annual stormwater inspector training.

Municipal

The City's municipal activities effectively implement BMPs and reduce pollutant loading. The City's staff are regularly trained on stormwater issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit frequency requirements. The City also continues to repair and clean sewer mains in an effort to prevent SSOs.

Industrial and Commercial

The City continues to implement its comprehensive inspection program. Inspection findings have demonstrated a high level of compliance with stormwater requirements. The City inspector continues to educate business owners verbally during the stormwater compliance inspection. Deficiencies noted are addressed immediately during the site inspection. The City continued to utilize BMP implementation and knowledge scores to assess the level of BMP implementation and level of knowledge at inspected facilities. These scores help the City understand which categories of businesses are most in need of education outreach and which will require additional attention during inspections.

Residential

The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. City staff that conduct routine maintenance in residential areas are trained to observe and respond to potential stormwater issues such as pet waste and minor trash and debris. Public Works staff has increased staff awareness of the location and sensitivity of high TTWQ residential areas.

Illicit Discharge Detection and Elimination

The City's IDDE program has effectively responded to complaints. No IC/IDs were identified during the 2012 Dry Weather Monitoring Program. There were five SSOs during the reporting period, which were reported through CIWQS to the RWQCB. The City will continue to take action to prevent and eliminate IC/IDs.

Education

During FY 2011-12, the City has continued to educate various audiences on stormwater concepts and BMPs. The estimated number of impressions made thorough the City's education component during FY 2011-12 was similar to those seen in previous years.

Public Participation

The City will continue looking for new opportunities for public involvement, while continuing the existing clean-up and recycling events. Attendance at public events was similar to those seen in previous years.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment component of the City's JURMP were made during the reporting period.

Table 11-2
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review and approve project plans	External A relatively small number of projects submitted reports during FY 2012-11. Based on meetings with applicants and BMPs proposed, it appears that the level of knowledge is the same, if not a little higher. Internal City stormwater staff provided informal training on post-construction BMPs. City staff also participated in Copermittee Land Development workgroup meetings that focused on SUSMP and Hydromodification Management.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City's Land Development Engineer performs treatment control BMP inspections.	Percent of inspected projects requiring follow-up	0%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	See Section 2	
Verify BMPs are properly maintained	External Contacting responsible parties increased their awareness of the need for BMP maintenance. Internal N/A, City staff is aware of the need for BMP maintenance.	Percent of sites returning verification forms	100%	Additional load reduction could be achieved through improved BMP maintenance.
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge and Awareness; Level 3 - Behavioral Change and BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspector and engineers are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs by end of reporting period	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of projects in compliance with BMP requirements during all inspections	100%	
		Resolution status of enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge and Awareness; Level 3 - Behavioral Change and BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8. Public Works staff attended annual training session in FY 2011-12, ensuring that they maintain a high level of stormwater knowledge.	Percent of inspected facilities and activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	N/A, see Section 4	Amount of sediment and debris removed from Street Sweeping (weight or volume)	147.15 tons
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.			
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed from MS4 (weight or volume)	572.55 cubic yards
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO recovered from MS4 (gallons)	1,240 gallons
Maintain an accurate inventory				BMP effectiveness studies	Attachment 11.1
	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge and Awareness; Level 3 - Behavioral Change and BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External Knowledge assessment scores indicated a mid to high level of understanding of relevant stormwater concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on education outreach efforts. Internal Staff was provided training on the industrial and commercial component of the JURMP prior to conducting field inspections during FY 2011-12 to ensure a high level of knowledge.	Percent of inspected sites requiring follow-up	0%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	1	Number of IC/IDs eliminated (inspections and complaint investigations)	1
		Implementation of BMPs and a high rate of site cleanliness demonstrates a positive change in behavior. See Figure 11-2 on the following page for a score distribution based on site cleanliness and BMP implementation.			
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge and Awareness; Level 3 - Behavioral Change and BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores

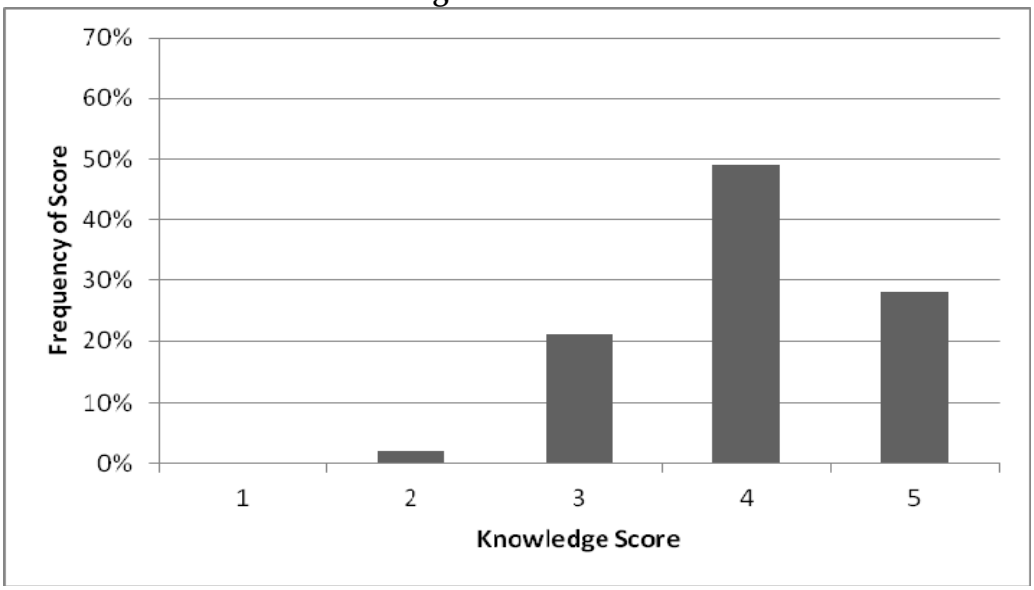

Figure 11-2
BMP Assessment Scores

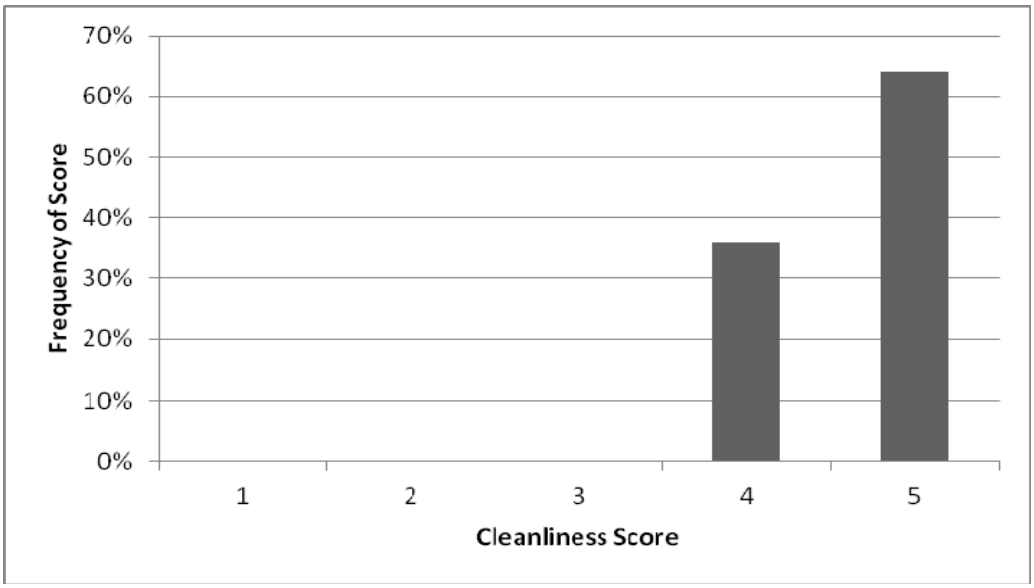

Table 11-6: Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External Residents were educated in a variety of ways in FY 2011-12; see sections 6 and 8 for details. Internal High TTWQ residential areas were identified by Public Works staff and conveyed to other City staff to increase their awareness of the location and sensitivity of these areas.	Number of residential incidents reported to stormwater hotline	9	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through education outreach emphasizing appropriate BMP implementation.
		Resolution of enforcement actions	See Section 6	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge and Awareness; Level 3 - Behavioral Change and BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-7: Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long-term IC/IDs were eliminated, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to stormwater hotline	The City's Management Analyst trains City staff as needed. See sections 4 and 8. City staff was responsible for many of the reports made to the hotline, as shown in Appendix B.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Appendix B are likely to have resulted a pollutant loading reduction.
Respond to and clean up SSOs	City staff is thoroughly trained on how to respond to SSOs.	The City conducts sewer main cleaning annually and implements Fats Oils and Grease (F.O.G) program. See Section 4 for details.	1,240 gallons of sewage were recovered after SSOs during FY 2011-12.

Notes: Level 2 - Changes in Knowledge and Awareness; Level 3 - Behavioral Change and BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8: Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide stormwater education to the public	External The City actively educates the various audiences in its jurisdiction. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2011-12.
	Estimated number of impressions made	6,757		

Notes: Level 2 - Changes in Knowledge and Awareness; Level 3 - Behavioral Change and BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9: Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to stormwater protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Number of attendees at events	810	Amount of trash and debris collected at cleanup events (including large item disposal event)	413.98 tons
		Number of drop-offs of large items and HHW to the City's recycling facility	867		
		Number of complaints received (see Appendix B for details)	37	Amount of HHW collected	570 pounds of HHW, 15,425 gallons of used oil

Notes: Level 2 - Changes in Knowledge and Awareness; Level 3 - Behavioral Change and BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

12.0 SPECIAL INVESTIGATIONS

The City takes a proactive approach to stormwater management in an attempt not only to protect receiving water quality, but also to improve the quality of water that is discharged from the City's MS4. Data collected through the City's various monitoring and inspection programs are used to identify locations within the City that may be contributing to stormwater contamination. Source identification investigations are then initiated to pinpoint the exact cause of detected pollution.

Aside from upstream investigations conducted as part of the dry weather monitoring and sampling program (to be reported as part of the IDDE component in December), a compliance monitoring report and a special studies report were submitted to the Regional Board during this reporting period. Both reports were in support of the Chollas Creek Pesticides and Metals TMDLs and are titled (1) *Final Chollas Creek Total Maximum Daily Load 2011-2012 Water Quality Compliance Monitoring Report*, and (2) *Final Chollas Creek Total Maximum Daily Load 2011-2012 Special Studies Report*.

13.0 NON-EMERGENCY FIRE FIGHTING

A program of BMPs for non-emergency fire fighting flows was adopted in March 2008 as part of the City's JURMP. These BMPs are implemented during regular maintenance of fire and emergency vehicles and equipment, training exercises, facilities maintenance, and post-emergency rehabilitation of response equipment. No significant changes to the program presented in the City's JURMP have been made since the submittal of that document.

In response to municipal facility inspections performed during FY 2011-12, the City provided recommended corrective actions to fire-fighting staff during this reporting period.

14.0 JURMP REVISIONS

Changes to the JURMP made during the reporting period are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 CONCLUSIONS AND RECOMMENDATIONS

During FY 2011-12, the City continued to implement its stormwater program based on its 2008 JURMP. During this time, the City identified several elements in the JURMP that required changes to improve program implementation. Updates to the City's program were made as necessary and are discussed in each individual section of this Annual Report. One highlight of the City's stormwater program for FY 2011-12 was the continued trend of increasing public participation through cleanup events, HHW waste recycling, and reporting stormwater concerns to the City's hotlines.

Additionally, the City continued to work collaboratively with the other Copermittees to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City will continue to refine and improve its stormwater program based on information made available by these collaborative efforts.

16.0 REFERENCES

Amec Environmental and Infrastructure, Inc., 2012. *Chollas Creek Total Maximum Daily Load 2011-2012 Water Quality Compliance Monitoring Report.*

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California Storm Water Quality Association, 2007. *Municipal Stormwater Program Effectiveness Assessment Guidance.*

City of Lemon Grove, 1996. *General Plan Update.*

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County of San Diego, 2007. *Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Report.*

County of San Diego, 2009. *Standardized Fiscal Analysis Method and Format.*

County of San Diego, 2011. *Countywide Model SUSMP: Standard Urban Stormwater Mitigation Plan Requirements for Development Applications*.

County of San Diego, 2011. *Final Hydromodification Management Plan.*

State Water Resources Control Board, 1997. Order No. 97-03-DWQ. *Waste Discharge Requirements for Discharges of Stormwater Associated with Industrial Activities Excluding Construction Activities.*

State Water Resources Control Board, 2009. Order No. 2009-0009-DWQ. *National Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities.*

Weston Solutions, Inc., Larry Walker Associates, and Mikhail Ogawa Engineering, 2005. *Baseline Long Term Effectiveness Assessment: San Diego Copermittees Jurisdictional Urban Runoff Management Program.*

CITY OF LEMON GROVE

FY 2011-12

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

ATTACHMENTS

Date

Address
Lemon Grove, CA 91945

Re: Required Treatment Control BMP Maintenance Certification

Dear Mr. Sir/Madame,

According to City records, you are jointly responsible for the permanent storm water treatment devices, known as treatment control best management practices (BMPs), located at _____. Annual verification of effective operation and maintenance for all treatment control BMPs on this property was a condition of the permit to develop the site. Treatment control BMPs are required to be maintained by the appropriate party as stated in the site's operation and maintenance agreement.

You are required by City of Lemon Grove to perform annual maintenance of the treatment control BMPs and to complete a form certifying this maintenance before the beginning of the rainy season. This notice is being sent as a reminder of the upcoming deadline.

Please ensure that the BMPs have been maintained and are in proper working order. Once the maintenance has been performed, please complete the attached form and return it to the City along with any maintenance records. The completed form must be received no later than September 30, 2011.

If you would like more information regarding this program, please contact me at (619) 825-3800.

Sincerely,

Tamara O'Neal
Assistant Civil Engineer
City of Lemon Grove
3232 Main Street
Lemon Grove, CA 91945

Site Address: _____

BMP Type	Onsite (Y/N)	Onsite	Date(s) Maintained

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Responsible Party Date

Printed Name of Responsible Party Title

Daytime Phone Fax

Email

Lemon Grove SUSMP Checklist
Stormwater Compliance
For Personal Use Only
Does not fulfill development review requirements

Project Information

Project Name:_____

Project Address:_____

Project Size (acres):_____

Engineer:_____ Report Date:_____

SUSMP Category

Check all SUSMP categories that apply to the project:
☐Residential development of 10 or more units
☐Commercial development greater than 100,000 ft²
☐Automotive repair shops
☐Retail Gasoline Outlets
☐Restaurants
☐Developments of heavy industry greater than one acre
☐Steep hillside development >5,000 ft²
☐Projects discharging to receiving waters within Environmentally Sensitive Areas (ESA) that create 2,500 ft² or more of impervious surfaces or increases are of imperviousness of project site to 10% or more of its naturally occurring condition and:
    ☐Project is within 200 ft of an ESA
    ☐Project is more than 200 ft from and ESA but discharges urban runoff to receiving water within ESA without mixing with flows from adjacent land
☐Parking lots >5,000 ft² or with >15 parking spaces and potentially exposed to urban runoff
☐Streets, roads, highways, and freeways with would create a new paved surface that is ≥5,000 ft²
☐Pollutant generating development project disturbing one acre or more of land.

☐Significant redevelopment – create or add ≥ 5,000 ft² of impervious surfaces on an already developed site
☐None

IF NONE OF THE ABOVE STIPULATIONS APPLY TO YOUR PROJECT STOP HERE FOR NOW. City staff will need to verify SUSMP exemption.

Identify Pollutants from the Project Area

☐Check that all pollutants anticipated to be generated from the project area correspond with the anticipated pollutants in Table 1.

Identify Primary and Secondary Pollutants of Concern

Check that primary and secondary pollutants of concern for the project have been correctly identified and compared with pollutants identified in Table 1.
☐Which receiving water(s) does the project discharge to?

_____

☐What are the pollutants for which the receiving water is impaired?

_____
_____
_____

☐Did project compare receiving water pollutants with pollutants generated from project are? Y / N

☐What are the primary pollutants of concern?

_____
_____
_____

☐What are the secondary pollutants of concern?

_____
_____
_____

Identify Conditions of Concern
☐Was a drainage study report prepared? Y / N
☐Was the report prepared by a registered civil engineer? Y / N
Who?_____
☐Was a field reconnaissance conducted? Y / N
☐Did drainage study compute:

☐Peak flow rate	☐2-year frequency storm
☐Flow velocity	☐10-year frequency stormwater
☐Runoff volume	What duration storm was used?

☐Time of concentration ☐6 hour or ☐24 hour
☐Retention volume
☐Were conditions of concern adequately identified? Y / N
If so, has the project implemented site design, source control, and/or trea
control BMPs to maintain pre-project hydrologic conditions affecting dow
conditions of concern? Y / N

Establish Stormwater BMPs (Best Management Practices)

LID/Site Design BMPs

SUSMPs must consider, incorporate and implement where determined applicable and feasible by Lemon Grove (check all that were considered, incorporated, or implemented):
☐Maintain Pre-Development Rainfall Runoff Conditions
☐Minimize project's impervious footprint
☐Conserve natural areas
☐Construct low traffic areas (walkway, trails, patios, parking lots, etc.) of permeable surfaces
☐Construct streets, sidewalks, and parking lot aisles to minimum
☐Maximize canopy interception by preserving existing trees and
☐Minimize use of impervious surfaces, such as decorative concr landscape design
☐Preserve natural drainage systems
☐Minimize directly connected impervious areas
☐Drain rooftops into landscaping
☐Drain sidewalks, walkways, trails, and patios into landscaping
☐Protect slopes and channels
Comments:
_____
_____
_____

Source Control BMPs
Does the project:
☐Provide storm drain system stenciling and signage
☐Design outdoor material storage areas to reduce pollution introd
☐Design trash storage areas to reduce pollution introduction
☐Use efficient irrigations systems & landscape design

☐Outdoor Processing Areas

Treatment Control BMPs

Check the treatment control(s) selected:

- ☐Biofilters
- ☐Detention Basin
- ☐Infiltration Basin
  - ☐Infiltration Trench
  - ☐Porous asphalt, concrete, or modular concrete block
- ☐Drainage Insert
  - ☐Oil/Water Separator
  - ☐Catch Basin Insert
  - ☐Other: _____
- ☐Wet Pond
- ☐Constructed Wetland
- ☐Filtration System
- ☐Hydrodynamic Separation System

☐Do treatment controls effectively address primary pollutants of concern? Y / N

If No, describe:

_____

_____

_____

Verify the design of selected treatment controls:

Was the treatment control BMP designed for:

- ☐Volume
- ☐Flow

☐Did the project use the 85th percentile storm event? Y / N

☐Did the project consider both the 10 yr and 100 yr event? Y / N

If No, describe:

_____

_____

_____

☐Did the project cover both pre- and post- construction drainage? Y / N

If No, describe:

_____

_____

_____

☐Did the project calculate current usage of any existing drainage structures and compare post-construction increases to available capacity? Y / N

If No, describe:

_____

_____

_____

☐Is BMP(s) located near pollutant sources? Y / N
If No, describe:

_____
_____
_____

☐Is BMP(s) effective for primary pollutant type? Y / N
If No, describe:

_____
_____
_____

Maintenance Requirements

☐Was an O&M plan attached?

☐Does plan require annual inspection and maintenance of all structural BMPs?
If No, describe:

_____
_____
_____

☐Was an access easement/agreement included?
If No, describe:

_____
_____
_____

Hydromodification Management

☐ Is project a priority development project and if so, is there a net increase in impervious area and in runoff as a result of project? Project may be subject to 2011 Hydromodification Management. If yes, describe.

_____
_____
_____

CITY OF LEMON GROVE

POST CONSTRUCTION BMP INSPECTION FORM

STREET ADDRESS _____ APN _____

SITE REPRESENTATIVE (Title) _____ PHONE NUMBER _____

CITY INSPECTOR _____ DATE/TIME _____

APPLICABLE PRIORITY PROJECT CATEGORIES:

☐ RESIDENTIAL > 10 UNITS ☐ COMMERCIAL > 1ac ☐ HEAVY INDUSTRY > 1ac

☐ AUTOMOTIVE REPAIR ☐ RESTAURANT ☐ HILLSIDE DEV ☐ ESA/303d

☐ PARKING LOT > 5000 sf ☐ ST/ROAD > 5000 sf ☐ RETAIL GASOLINE OUTLET

TREATMENT CONTROL BMP TYPE: _____

BMP LOCATION(S): _____

IS BMP IN GOOD CONDITION AND PROPERLY IMPLEMENTED? ☐ YES ☐ NO

CORRECTIVE ACTION REQUIRED: _____

_____

ADDITIONAL NOTES:

_____

_____

CITY OF LEMON GROVE

STORM WATER QUALITY INSPECTION FOR MUNICIPAL ACTIVITIES FACILITIES

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Annual ☐ Follow-up ☐ Complaint

Result: ☐ Full Insp. ☐ Couldn't Contact ☐ Low Com ☐ Moved, Vacant ☐ Out of Jurisdiction ☐ Refused ☐ Duplicate ☐ Moved, Replaced by_____

A. CONTACT INFORMATION

Original	Changes
Facility/Activity Name_____	Facility/Activity Name_____
_____	_____
Street Address_____	Street Address_____
_____	_____
Responsible Person(s)_____	Responsible Person(s)_____
Business Telephone (____) _____ -_____ext._____	Business Telephone (____) _____ -_____ext._____
Business Fax (_____) _____ - _____	Business Fax (_____) _____ - _____

B. FACILITY SITE INFORMATION

Principal activity:_____

Assigned JURMP Classification: ☐ High ☐ Medium ☐ Low

Is this facility currently listed in the City's JURMP Inventories? ☐ Yes ☐ No

Assigned SIC Code(s) If Applicable_____ _____ _____ _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

Recommended change of SIC Code(s)?_____ _____ _____ _____

New JURMP Classification? ☐ High ☐ Medium ☐ Low

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID _____

If no, does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility maintain a storm water monitoring program? ☐ Yes ☐ No

Existing Status: ☐ High ☐ Med ☐ Low

Existing SIC code(s) _____ _____

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____ Hydrologic Area:_____

Approximate distance to water bodies: ☐ 200 ft. ☐ 200 1000 ft. ☐ 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by municipal activities:_____square feet

Approximate □ impervious surface of this area_____□

Exposed areas of intensive outdoor activity: _____

D. BMP ASSESSMENT

D.1 General

BMPs	N/A	Yes	No	Comments
Is the site free of litter and debris?				
Are discharge locations free of sediment and debris?				
Are parking lots, sidewalks and streets free of sediment and debris?				
Is pressure washing of parking lots or sidewalks conducted at the facility?				
Is pressure washing waste water captured and disposed appropriately?				
Are roof downspouts directly away from areas of potential pollutants?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area enclosed and free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor material storage areas adequate (covered area with secondary containment)?				
Are outdoor storage containers properly labeled?				
Is there an accessible spill response kit?				
Are storage tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				
Are heavy equipment and vehicles stored in garages or under canopies?				
Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				
Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
Are biodegradable soaps used for cleaning activities?				
D.5 Food Establishments				
Does facility have a grease trap or grease interceptor?				
When was the last time the grease trap was maintained? _____				

Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____

How many grease fryers are at the facility? _____

About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually

BMPs	N/A	Yes	No	Comments
How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Do oil-recycling/grease bins have overhead coverage?				
Do oil-recycling/grease bins have secondary containment?				
Are deep fryer oil-recycling drums stored properly?				
At what time is cleaning performed? _____				
What is the cleaning method? _____				
Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
Where is used cleaning water discharged? _____				
Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.7 Other				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
Were any educational materials distributed? (Please list:)				

D.8 BMP Summary

E. SWPPP REVIEW

Does facility maintain a SWPPP: ☐ **Yes** ☐ **No** ☐ **Not Applicable**

SWPPP Component	Provided	Adequate	Comments
Site Map/Description	☐ Yes ☐ No	☐ Yes ☐ No	
Materials List	☐ Yes ☐ No	☐ Yes ☐ No	
Significant Spills/Leaks	☐ Yes ☐ No	☐ Yes ☐ No	
Pollution Prevention Team	☐ Yes ☐ No	☐ Yes ☐ No	
Industrial Activities	☐ Yes ☐ No	☐ Yes ☐ No	
Pollutant Sources/Risks	☐ Yes ☐ No	☐ Yes ☐ No	
Annual Compliance Activity	☐ Yes ☐ No	☐ Yes ☐ No	
Employee Training	☐ Yes ☐ No	☐ Yes ☐ No	
Accessible to staff	☐ Yes ☐ No	☐ Yes ☐ No	
Existing BMPs	☐ Yes ☐ No	☐ Yes ☐ No	

MONITORING PROGRAM REVIEW

☐ **Not Applicable**

Was sampling performed during the most recent, complete wet season? ☐ Yes ☐ No ☐ Unknown

If not: Does the facility have documentation of no qualifying rain events? ☐ Yes ☐ No

Was the facility in a GMP and not scheduled to sample that year? ☐ Yes ☐ No

Do recent monitoring results show that existing BMPs are effective in removing pollutants? ☐ Yes ☐ No ☐ None Available

If not, were potential sources of the identified pollutants observed during the inspection? ☐ No

If yes, list the potential sources and their associated pollutants: _____

_____

If exceedances were found in sampling results, were BMPs re-evaluated and were any modifications made to address the elevated constituents? ☐ Yes ☐ No ☐ Unknown

Was the monitoring program implemented in accordance with Industrial Permit requirements during the most recent, complete wet season? ☐ Yes ☐ No ☐ Unknown

(For exceedances noted (constituent(s) and numeric value(s)) and SWPPP/monitoring deficiency specifics, please see Section D.

F. RECOMMENDED CORRECTIVE ACTION

Is corrective action needed? ☐ Yes ☐ No

If **BMP-related** corrective action is required, describe below. If other corrective action, check the appropriate box in section G.

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax

G. VIOLATIONS

☐ No violations have been noted at this time
☐ No violations have been noted, but recommend taking corrective action described in Section F.
☐ Violation of the City's storm water ordinance:
  ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
    Description
  ☐ Illegal connection(s) to the storm drain system
    Location_____
  ☐ Littering
  ☐ Failure to properly implement required BMPs
☐ Failure to comply with the requirements of applicable State or Regional Permit(s):
  ☐ Non-compliance with the State Industrial Storm Water General Permit.
    Subjectivity, based on SIC Code: ☐ Mandatory ☐ Conditional
    ☐ In the future, under a new Industrial Permit which has not yet been adopted, this facility may be able to qualify for a No Exposure Certification (NEC) and exemption from Permit coverage.
  ☐ Non-compliance with the Municipal Storm Water Permit (NPDES NO. CAS0108758).
☐ Other Violation_____

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

☐ Implement the recommended corrective actions listed in Section F.
☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit; see Attachment 3 of the Industrial Permit (http://www.waterboards.ca.gov/stormwtr/industrial.html).
  ☐ For "Conditional" facilities only: if you implement all the recommended BMPs and eliminate outdoor exposure, contact the City to request a re-inspection. If it is determined that you qualify, NONA/NEC paperwork will be provided for you to complete, and you will not have to file an NOI.
☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP); see Section A of the Industrial Permit.
☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.
☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional actions required:

H. RECOMMENDED CITY ACTIONS

☐ None
☐ A Follow-up action / inquiry is recommended.
☐ Update the following: ☐ JURMP priority ☐ SIC code ☐ Facility Contact Information

Other:

Does this business require a follow-up site inspection? ☐ **Yes** ☐ **No**

ASSESSMENT

Level of knowledge regarding stormwater issues: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ Unknown

Level of cleanliness, BMP implementation, orderliness of site: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

.

CITY OF LEMON GROVE

STORM WATER QUALITY INSPECTION FOR INDUSTRIAL/COMMERCIAL FACILITIES

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Annual ☐ Follow-up ☐ Complaint

Result: ☐ Full Insp. ☐ Couldn't Contact ☐ Low Com ☐ Moved, Vacant ☐ Out of Jurisdiction ☐ Refused ☐ Duplicate ☐ Moved, Replaced by_____

A. CONTACT INFORMATION

Original

Business Name_____

_____

Street Address_____

_____

Responsible Person(s)_____

Business Telephone (□□□□) _____ -□□□□□□□□ext._____

Business Fax (□□□□□□□□□) _____ - □□□□□□□□□□□

Home Based? ☐ Yes ☐ No

Changes

Business Name_____

_____

Street Address_____

_____

Responsible Person(s)_____

Business Telephone (□□□□) _____ -□□□□□□□□ext._____

Business Fax (□□□□□□□□□) _____ - □□□□□□□□□□□

B. FACILITY/SITE INFORMATION

Principal activity:_____

Assigned JURMP Classification: ☐ High Ind ☐ Medium Ind ☐ Low Ind ☐ High Comm ☐ Unassigned

Is this facility currently listed in the City's JURMP Inventories? ☐ Yes ☐ No

Assigned SIC Code(s)_____ _____ _____ _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

Recommended change of SIC Code(s)?_____ _____ _____ _____

New JURMP Classification? ☐ High Ind ☐ Medium Ind ☐ Low Ind ☐ High Comm ☐ Low Comm

Did facility provide evidence of a current business certificate? ☐ Yes ☐ No _____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID _____

If no, does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility maintain a storm water monitoring program? ☐ Yes ☐ No

Existing Status: ☐ High Ind ☐ Med Ind ☐ Low Ind ☐ High Com ☐ Moved/Out of Business ☐ Dup ☐ Low Com ☐ Not in City Jurisdiction

Existing SIC code(s) _____ _____

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____ Hydrologic Area:_____

Approximate distance to water bodies: ☐ □ 200 ft. ☐ 200 □ 1000 ft. ☐ 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate impervious surface of this area_____

Exposed areas of intensive outdoor activity: _____

D. BMP ASSESSMENT

D.1 General

BMPs	N/A	Yes	No	Comments
Is the site free of litter and debris?				
Are discharge locations free of sediment and debris?				
Are parking lots, sidewalks and streets free of sediment and debris?				
Is pressure washing of parking lots or sidewalks conducted at the facility?				
Is pressure washing waste water captured and disposed appropriately?				
Are roof downspouts directly away from areas of potential pollutants?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area enclosed and free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor material storage areas adequate (covered area with secondary containment)?				
Are outdoor storage containers properly labeled?				
Is there an accessible spill response kit?				
Are storage tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				
Are heavy equipment and vehicles stored in garages or under canopies?				
Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				
Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
Are biodegradable soaps used for cleaning activities?				
D.5 Food Establishments				
Does facility have a grease trap or grease interceptor?				
When was the last time the grease trap was maintained? _____				

Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____

How many grease fryers are at the facility? _____

About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually

BMPs	N/A	Yes	No	Comments
How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Do oil-recycling/grease bins have overhead coverage?				
Do oil-recycling/grease bins have secondary containment?				
Are deep fryer oil-recycling drums stored properly?				
At what time is cleaning performed? _____				
What is the cleaning method? _____				
Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
Where is used cleaning water discharged? _____				
Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.7 Other				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
Were any educational materials distributed? (Please list:)				

D.8 BMP Summary

E. SWPPP REVIEW

Does facility maintain a SWPPP: ☐ **Yes** ☐ **No** ☐ **Not Applicable**

SWPPP Component	Provided	Adequate	Comments
Site Map/Description	☐ Yes ☐ No	☐ Yes ☐ No	
Materials List	☐ Yes ☐ No	☐ Yes ☐ No	
Significant Spills/Leaks	☐ Yes ☐ No	☐ Yes ☐ No	
Pollution Prevention Team	☐ Yes ☐ No	☐ Yes ☐ No	
Industrial Activities	☐ Yes ☐ No	☐ Yes ☐ No	
Pollutant Sources/Risks	☐ Yes ☐ No	☐ Yes ☐ No	
Annual Compliance Activity	☐ Yes ☐ No	☐ Yes ☐ No	
Employee Training	☐ Yes ☐ No	☐ Yes ☐ No	
Accessible to staff	☐ Yes ☐ No	☐ Yes ☐ No	
Existing BMPs	☐ Yes ☐ No	☐ Yes ☐ No	

MONITORING PROGRAM REVIEW

☐ **Not Applicable**

Was sampling performed during the most recent, complete wet season? ☐ Yes ☐ No ☐ Unknown

If not: Does the facility have documentation of no qualifying rain events? ☐ Yes ☐ No

Was the facility in a GMP and not scheduled to sample that year? ☐ Yes ☐ No

Do recent monitoring results show that existing BMPs are effective in removing pollutants? ☐ Yes ☐ No ☐ None Available

If not, were potential sources of the identified pollutants observed during the inspection? ☐ No

If yes, list the potential sources and their associated pollutants: _____

_____

If exceedances were found in sampling results, were BMPs re-evaluated and were any modifications made to address the elevated constituents? ☐ Yes ☐ No ☐ Unknown

Was the monitoring program implemented in accordance with Industrial Permit requirements during the most recent, complete wet season? ☐ Yes ☐ No ☐ Unknown

(For exceedances noted (constituent(s) and numeric value(s)) and SWPPP/monitoring deficiency specifics, please see Section D.

F. RECOMMENDED CORRECTIVE ACTION

Is corrective action needed? ☐ Yes ☐ No

If **BMP-related** corrective action is required, describe below. If other corrective action, check the appropriate box in section G.

_____

_____

_____

_____

_____

_____

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax

G. VIOLATIONS

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described in Section F.

☐ Violation of the City's storm water ordinance:

- ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
  Description_____
- ☐ Illegal connection(s) to the storm drain system
  Location_____
- ☐ Littering
- ☐ Failure to properly implement required BMPs

☐ Failure to comply with the requirements of applicable State or Regional Permit(s):

- ☐ Non-compliance with the State Industrial Storm Water General Permit.
  Subjectivity, based on SIC Code: ☐ Mandatory ☐ Conditional
  - ☐ In the future, under a new Industrial Permit which has not yet been adopted, this facility may be able to qualify for a No Exposure Certification (NEC) and exemption from Permit coverage.
- ☐ Non-compliance with the Municipal Storm Water Permit (NPDES NO. CAS0108758).

☐ Other Violation_____

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

☐ Implement the recommended corrective actions listed in Section F.

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit; see Attachment 3 of the Industrial Permit (http://www.waterboards.ca.gov/stormwtr/industrial.html).

- ☐ For "Conditional" facilities only: if you implement all the recommended BMPs and eliminate outdoor exposure, contact the City to request a re-inspection. If it is determined that you qualify, NONA/NEC paperwork will be provided for you to complete, and you will not have to file an NOI.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP); see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional actions required: _____

_____

_____

_____

H. RECOMMENDED CITY ACTIONS

☐ None

☐ A Follow-up action / inquiry is recommended.

☐ Update the following: ☐ JURMP priority ☐ SIC code ☐ Facility Contact Information

☐ Add this business to the City's JURMP inventories.

☐ Based on the observed business activities, this facility may be reclassified as "low priority commercial" and may be removed from the City's JURMP inventories.

☐ This business is no longer at its listed address. If further investigation does not determine that it is still operating at another address within City jurisdiction, it should be removed from the JURMP inventories.

☐ Review City business license records to determine if this business has a current license on file.

☐ Remove this (duplicate/out of jurisdiction) business listing from the JURMP inventory.

Other: _____

_____

_____

_____

Does this business require a follow-up site inspection? ☐ **Yes** ☐ **No**

ASSESSMENT

Level of knowledge regarding stormwater issues: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ Unknown

Level of cleanliness, BMP implementation, orderliness of site: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

RECOMMENDED VIOLATIONS CORRECTIVE AND CITY ACTIONS LISTED AT THE TIME OF INSPECTION ARE SUBJECT TO CHANGE BASED ON LATER REVIEW BY OFFICE STAFF.

"Best Climate on Earth"

The GROVE GAZETTE

Municipal Newsletter for the Residents and Businesses of Lemon Grove, California

Summer 2011

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THE FUTURE OF REDEVELOPMENT IN LEMON GROVE

Recent actions taken by the California State Assembly and Senate threaten the existence of redevelopment in Lemon Grove. The City's redevelopment agency—the Lemon Grove Community Development Agency—has created significant economic stimulus over the years and is needed to revitalize the City's downtown district.

This newsletter article answers three questions:

1. **What has redevelopment done for Lemon Grove?**
2. **What was the State Legislature thinking?**
3. **How will this impact Lemon Grove?**

What has redevelopment done for Lemon Grove?

Since 1986, redevelopment has been a powerful tool to build the community's current economic base. The use of redevelopment has literally generated millions of sales tax dollars for the City and a significant amount of additional property tax dollars for Lemon Grove schools.

As an example, in 1993, the Lemon Grove Community Development Agency (the Agency) assisted in the attraction and development of The Home Depot. Since that time, this business has generated millions of dollars in sales and property tax revenue. These funds have helped pay for vital municipal services such as law enforcement, fire protection, street paving, and park maintenance.

Also, in 2007, the City used redevelopment resources to assist in the development of Citron Court, a mixed-use affordable housing project on Broadway (across the street from Food-4-Less).

Presently, the City is relying on redevelopment tools and funds to assist with the Lemon Grove Avenue Realignment project, the Main Street Promenade project, and mixed-use development projects adjacent to the Trolley Depot (for more information about these projects visit ***www.ci.lemon-grove.ca.us/redevelopment***).

What was the State Legislature thinking?

"The Goose that Laid the Golden Eggs" is a classic Aesop's Fable. In this story, we read about a peasant that kills a goose that lays golden eggs. Assuming the goose has a large lump of gold inside of it, the peasant kills the goose to get the gold. The phrase "killing the goose that laid the golden eggs" has become a common phrase in our language referring to a reckless action motivated by greed.

In June, the State legislature passed a bill that will end all redevelopment agencies by October 1, 2011. This action is an excellent illustration of the meaning of the phrase *"killing the goose that lays the golden eggs."*

Under its plan, the legislation would supposedly redistribute redevelopment funds to taxing agencies. In Lemon Grove, this would result in dividing up less than $800,000 a year among the City of Lemon Grove, Lemon Grove School District, Grossmont Unified High School District, Grossmont/Cuyamaca Community College District, Grossmont Healthcare District, County of San Diego, State of California, Helix Water District, Regional Occupation Centers, Lemon Grove Roadway Lighting District, as well as eight other entities.

Through this State plan, each taxing agency would receive a larger piece of the property tax pie. However, that pie's size would grow at a very slow pace. On the other hand, the purpose of redevelopment is to help property owners maximize the value of their property—thus growing a bigger pie. **Increasing property value more quickly is much like *taking good care of the goose, so it can lay even more golden eggs.***

Continued on Page 2...

Community Interest

The Future of Redevelopment in Lemon Grove—continued...

The California Redevelopment Association and the League of California Cities have petitioned the California Supreme Court to declare the recent legislation unconstitutional. If the court upholds the legislation, the City will be placed in a difficult dilemma — just as it is beginning to recover from the recent economic recession.

How will this Impact Lemon Grove?

The State legislation allows projects that are currently in the pipeline to continue to move forward. *However*, until the court rules on the redevelopment case, all Agency operations must cease. Since the State legislature adopted the redevelopment killing bill, the Agency has had opportunities to sell off land for future development. *But, with the pending case, the Agency's hands are tied.*

Critical projects currently in the pipeline:

- Lemon Grove Avenue Realignment project,
- Main Street Promenade project, and
- Two Citronica mixed-use development projects.

If any of these projects needs ***even one additional dollar***, the Agency will be ***unable*** to assist in any way, unless the court rules the State legislation unconstitutional. Stopping these projects will result in hundreds of lost jobs for engineers, architects, construction workers, inspectors, etc. who are currently working on them. Stopping these projects will *also* ensure that the Lemon Grove pie remains the same size, *rather than growing the City's economic base*.

Conclusion

The California Supreme Court indicates that it will render a decision by mid-January 2012. **In the next few months, we will all find out the future of redevelopment in Lemon Grove.**

Main Street Promenade Project

BUDGET RESTRUCTURE

On June 2, 2011, the Lemon Grove City Council adopted the Fiscal Year 2011-12 (FY 12) consolidated budget. As revenues grow and expenditures are kept in check, the City's General Fund will experience a balanced budget *for the first time in four years*.

Interesting highlights of the FY 12 budget:

***The Numbers*—Budget trends in the FY 12 budget:**

- Sales tax revenue is anticipated to increase by 3.5% over FY 11,
- Overall revenue is anticipated to increase by 3% over FY 11,
- Overall expenditures are anticipated to decrease by 1% over FY 11, and
- The City's reserve fund will grow by $234,000 in FY 12.

***The Outcomes & Policy Directions*—Outcomes and policy directions in the FY 12 budget:**

- A 12-day furlough plan,
- 6 positions were eliminated,
- City Departments were restructured, eliminating the Recreation Services Department and folding components into the Public Works Department, providing the opportunity to restructure the way recreation services are provided, and
- Employees now pay 100% of the employees' share of retirement costs.

See the City's FY 12 budget: *www.ci.lemon-grove.ca.us/budget*.

Community Interest

NOW YOU SEE THEM… SOON YOU WON'T!

Finally… it's time for some demolition! The empty buildings along Main Street and the self-storage buildings on North Avenue will soon be just a memory. Once the hazardous materials are removed from the buildings, the wrecking balls will be coming to town. *Watch for them in late August*.

Example of anamorph—this anamorph was created by István Orosz, a Hungarian artist known for his mathematically inspired works, impossible objects, optical illusions, double-meaning images and anamorphoses.

Making Way for the Main Street Promenade… Imagine a long, linear park and bustling transit plaza… with plenty of shady spots, broad walkways, benches and bike racks, and places to play.

Enjoy the artful nods to local history and learn about the water cycle and sustainability. Just wait until you see the windspire sitting atop the anamorph. *A what sitting atop a what??* The windspire is a vertical windmill that actually works and will produce energy for the night lighting.

Anamorphic art places a greatly distorted image on the ground around a mirrored surface (in this case a polished stainless steel cone), but when you look at the reflection, the image looks completely normal.

Project Funding: No City funds are being used for this project. Design and construction are primarily funded by two grants. The balance of the project, about 10% of the five million dollar project, will be funded by the City's redevelopment agency.

The Promenade will have a little something for everyone! The construction plans are almost complete. Watch for construction to begin in January. Completion is expected by late 2012.

Project questions? Call Barbara Kraber, Project Manager, 825-3800, ***bkraber@ci.lemon-grove.ca.us***.

GRANT FUNDS HELP MAKE LEMON GROVE A SAFER PLACE TO WALK AND BIKE FOR CHILDREN

The goals of the "Safe Routes to School Grant Program," managed by the California Department of Transportation, are to reduce injuries and fatalities to school children and encourage walking and bicycling.

Since 2008, the City has submitted Safe Routes to School Grant funding applications for three projects:

1. Palm Street/Golden Avenue,
2. Madera Street, and
3. San Miguel Avenue.

All three applications have been successful!

The projects include construction of sidewalk, curb, gutter, curb ramps, and pedestrian crosswalk improvements. Federal and State funds for the three projects total over $1.1 million and the City's share of the cost will total approximately $250,000.

Construction on both the Palm Street/Golden Avenue and Madera Street projects are expected to be complete by Fall, 2012. The San Miguel Avenue project is awaiting design consultant selection. Construction on this project is anticipated in the Fall of 2013.

SALES TAX DECREASE

With the cost of everything rising these days, it is good news that the sales tax rate in Lemon Grove actually ***decreased*** one percent on July 1st. A temporary rate increase enacted by the State Legislature a few years ago expired on June 30 2011.

Community Interest

WHAT'S HAPPENING IN PUBLIC WORKS?

The new fiscal year has brought with it a renewed goal of *"doing more with less."* At 6:00 a.m. each day, the eleven members of the Public Works field staff energetically tackle each day's tasks. The photograph at right is an example of a recent project is the completed by the Public Works crew.

City crews make the most of space and materials available in the median at Kempf Street and Broadway.

Projects completed during the past few months:

- ⇒ **Citywide restriping (white and yellow lines throughout the City),**
- ⇒ **Elkhorn Street storm drain improvements,**
- ⇒ **Kempf Street median improvements,**
- ⇒ **Lemon Grove Way, Grove Street, Buena Vista Avenue, Tweed Street, and Corona Street paving,**
- ⇒ **Lemon Grove Avenue median landscaping improvements,**
- ⇒ **Plant Lemon Grove improvements (at the LGA and SR94 on and off ramps), and**
- ⇒ **Installing speed limit signs on Massachusetts Avenue.**

Typically, the Public Works field staff performs three types of tasks — *Routine Tasks, Special Projects, and Response Tasks.*

Routine Tasks

While very few things in life are routine, these tasks are those that must be completed and integrated into the daily accomplishments. Routine tasks consist of picking up trash from the medians on Broadway and Lemon Grove Avenue, mowing grass in parks, filling potholes, repairing facilities, picking up illegal trash dumping, cleaning graffiti.

Special Projects

Special tasks are calls for service that are above and beyond routine tasks. Paving streets, replacing damaged signs from traffic accidents, inspecting tree fungus, and restriping City streets are a few examples of special projects performed by Public Works staff throughout the year.

Response Tasks

Response tasks consist of helping citizens with special requests. On average, the Public Works Department receives 50 services request per month. These sometimes complex projects must be scheduled with the routine tasks and special projects. Finding the time is the greatest challenge to completing the tasks associated with resident requests. As such, with a small staff of eleven (four less than 4 years ago because of staffing reductions), the Public Works Department asks that you allow 30 to 60 days complete these tasks. Projects are prioritized higher if there is a threat to public safety.

What's next on the horizon?

Public Works Projects Preview (Upcoming Projects Between July 2011 and June 2012)

- ⇒ 69th Street paving,
- ⇒ Buena Vista Avenue paving (between North Avenue and Broadway),
- ⇒ Installation of pavement markers on Lemon Grove Way,
- ⇒ Installation of thermal plastic crosswalks on Massachusetts Avenue at San Miguel Avenue and SR-94,
- ⇒ Mt. Vernon Street paving,
- ⇒ Mural revitalization at Lemon Grove Park,
- ⇒ Installation of stop and yield signs,
- ⇒ Landscape improvements at Veteran's Park, and
- ⇒ Weed abatement services.

Community Interest

FACILITY RENTALS: *Host a Quality Event Without Busting the Budget!*

The City of Lemon Grove offers facilities specifically designed for receptions, meetings, sporting events, and other special events. The facilities accommodate varying size groups and reservations may be made up to one year in advance. **Tours are available by appointment.**

Please call the Community Services Department at (619) 825-3830 ext. 3902 for information, or visit the City's website at: *www.ci.lemon-grove.ca.us/Rentals*

With the holidays just around the corner, many are starting to plan their holiday parties with friends, family and co-workers. Often times, this process also includes spending countless hours preparing the house weeks in advance, to ensure it's pristine for visitors. Not to mention the grueling days of clean-up that follow the shindig itself. **This year, the City of Lemon Grove invites you to skip the hassle of house parties and celebrate the holidays at one of our attractive, yet affordable, facilities.**

From grand receptions to intimate gatherings, our versatile facilities can accommodate any occasion of varying size:

- **Lemon Grove Senior Center** (8235 Mt. Vernon Street) is a refined facility that can seat up to 200 for banquet style events, and up to 300 for theater style events. Adjacent to Lemon Grove Park, this beautiful facility features large French doors that open to a spacious patio. Borders of grassy areas and walkways provide a private, peaceful setting amongst nature, ideal for a wedding ceremony. The large, fully equipped kitchen is designed to handle all of your catering needs.

- **Lemon Grove Community Center** (3146 School Lane) is appealing for its convenient location and full kitchen amenities, and an ideal setting for smaller meetings, conferences and private parties. The Community Center seats up to 75 for banquet style events, and up to 100 for theater style events. If needed, tables and chairs are provided free of charge and City staff will set up and break down the equipment for you.

- **Berry Street or Lemon Grove Park gazebos**—Does an indoor event seem too stuffy for your special occasion? Take advantage of the *"Best Climate on Earth,"* by holding a birthday party, shower or fundraiser outdoors. Both parks span six acres and offer playgrounds, picnic areas and tables, restrooms, a basketball court and walking paths. Gazebo rentals are $80 and provide you with peace of mind that no one else can intrude on your special day.

- **H. Lee House** (3225 Olive Street) — For a more private event, the historical H. Lee House boasts an elegant courtyard and features a stunning Victorian-style gazebo for ceremonies or entertainment surrounded by inlaid brickwork and grass. With a capacity for approximately 100 guests, the H. Lee House Courtyard is the perfect setting for a private outdoor wedding, anniversary party, or baby shower.

- **Lemon Grove Recreation Center Now Available for Birthday Parties & Sporting Events!**

Manny Jansen is a bona fide soccer fanatic! For his 10th birthday party, his parents wanted to incorporate his passion for the sport, while staying within their budget. After exhausting options at other corporate sports and play centers in San Diego, Manny's folks ventured into the Lemon Grove Recreation Center. *They were blown away with everything it had to offer*—**a full size gymnasium, two game rooms, an activity room and large shaded patio** *for only $50 an hour*. The kids had a blast playing soccer, creating arts & crafts in the activity room and playing pool, ping pong, and air hockey in the game rooms. ***"This is going to be a tough act to follow for his next birthday,"*** Manny's mom said with a smile.

Reduce the stress of holiday entertaining, and let the City of Lemon Grove host your social gathering. Reservations are made on a first come first serve basis, and fill up fast for the holiday season…so book your event today!

Community Interest

SIGN-UP FOR E-SERVICES NOTIFICATION ON CITY WEBSITE

Sign up on the City's website for *automatic email and/or text message notification* for new issues of the City newsletter, City Council agendas and much more:

- Community Events
- Youth Activities
- Adult Sports
- City Newsletter
- City Council Agenda
- Planning Commission Agenda
- Contracting Opportunities
- Press Releases
- Job Postings

Visit the City website at *www.ci.lemon-grove.ca.us* and follow these simple instructions:

1. Click on **"E-Services"** on the left navigation bar.
2. Click on **"Notify Me."**
3. Enter your email address and click **"ok."**
4. Enter your cell phone number if you wish to be notified by text.
5. Select the items for which you'd like notification by clicking on the envelope and/or phone icon for each item.
6. Click **"Save Profile Information"** and you're done!

You will receive a confirmation e-mail with instructions on how to unsubscribe should you wish to do so. Your e-mail address is kept confidential and will not be sold or disclosed to third parties.

SHERIFF'S CORNER — Introducing Crime Prevention Specialist Jim Wieboldt

The Sheriff's Crime Prevention unit is an important part of Sheriff William Gore's overall program to make Lemon Grove and San Diego County ***"the safest urban county in the nation."***

Services provided to our community by Sheriff's Crime Prevention:

- **Neighborhood Watch**
- **Ranch Watch**
- **Business Alert**
- **Residential and Commercial Security Consultations**
- **Crime Free Multi-Housing (CFMH)**
- **Crime Prevention Through Environmental Design (CPTED)**
- **START SMART – Teen Driving and Safety**
- **Safe Streets**
- **Personal Safety – Home and Away**
- **Internet Safety**
- **Identity Theft Education and Prevention Techniques**
- **Senior Crime Alerts**
- **Crime Information Systems – NIXLE and CRIMEMAPPING.COM**
- **Children's Programs – McGruff, the "Crime Dog"**

Crime Prevention Specialist Jim Wieboldt

Jim Wieboldt joined the Lemon Grove Sheriff's Station on July 29, 2011 as the Crime Prevention Specialist assigned to the City of Lemon Grove.

An East County resident for more than fifty years, Jim has been with the Sheriff's Department since 2000 and brings a wide range of experience. He comes to Lemon Grove after serving as a Community Service Officer at the Santee Sheriff's Station since 2004.

Contact Jim directly:

(619) 337-2039 or *james.wieboldt@sdsheriff.org*.

Lemon Grove Sheriff Station: (619) 337-2000.

For additional information about other programs the Sheriff's Department offers the citizens it serves, please visit: *www.sdsheriff.net*.

Community Interest

CLEARING BRUSH THE NATURAL WAY—WITH GOATS!

The City of Lemon Grove's fire department took steps to clear brush from 8-1/2 acres of abandoned property on a hillside near Lawton Drive and Camino De Las Palmas—with help from a herd of "Boer" goats. According to City fire officials, this type of brush abatement is a tremendous help for firefighters in protecting land and nearby homes from fast moving brush fires.

Johnny Gonzalez, owner/operations manager of Environmental Land Management (ELM), brought the herd of about 150 goats to a staging area and paddock on July 29th where they were penned overnight. A shepherd and a herd dog were housed on site with the goats 24 hours a day until the job was done. Early Saturday morning, a small nursery paddock with baby goats was open to viewing. Afterward, the public was invited to watch the "running of the goats" as the herd was guided into the brush to get to work doing what they do best — eating the materials that fuel fires. The goats finished the job in four days.

On August 17, after making a clean sweep of the Lawton Drive job, the goats were moved to a lot across from the Lemon Grove Depot on Main Street, which is the site of the future "Main Street Promenade." City officials, several City staff members, and many residents were on hand for the "running of the goats" when the animals were transferred from the staging area onto the property to begin work.

A film crew was on site taping for a segment on the CBS national morning news show "The Early Show, which aired the next day." See the segment: ***The Early Show - Lemon Grove clearing brush with goats***.

Lemon Grove Mayor Mary Sessom was impressed with the way the goats got out and did the job and hoped that local children on site watch the goats clearing brush would learn that "not only can animals look cute and fuzzy, but they can also serve a purpose in our society, helping us to keep our environment clean," and Lemon Grove Fire Department Deputy Fire Chief Tim Smith called the operation "a win-win situation."

Allyson Russell and "friend."

"Running of the Goats" on Lawton Drive.

At work on Main Street property.

For more information on these weed abatement projects or future projects planned for Lemon Grove, please contact Lemon Grove Fire Inspector Thomas Rosenberger at (619) 573-7966. Contact Environmental Land Management at (619) 234-4555.

Photos Courtesy of Luis J. Jimenez/Lemon Grove Patch

Community Interest

FIRE SEASON IS APPROACHING—Do you know what to do in a fire?

Tips For Fire Safety and Prevention:

⇒ **Smoke alarms save lives.** Install a smoke alarm outside each sleeping area and on each additional level of your home. If people sleep with doors closed, install smoke alarms inside sleeping areas, too.

- Use the test button to check each smoke alarm once a month and replace batteries immediately when necessary. Replace all batteries at least once a year.

⇒ **Consider having one or more working fire extinguishers in your home.**

⇒ **Consider installing an automatic fire sprinkler system in your home.** Sprinklers reduce the average property loss by 71% and the risk of dying *decreases* by about 80% when sprinklers are present.

Over 350,000 home fires occur every year in the United States and more than 2,500 people a year die in these home fires.

Odds are it could happen to you or someone you know. ..

⇒ **Determine at least two ways to escape from every room of your home.** If you see smoke or fire in your first escape route, use your second escape route. Consider escape ladders for sleeping areas on the second or third floor. Learn how to use them and store them near the window. **Select a location outside your home where everyone would meet after escaping.** Practice your escape plan at least twice a year.

⇒ **To escape a fire, you should:**

Escape Tips

1. ***Check closed doors for heat before you open them.*** Use the back of your hand to feel the top of the door, the doorknob, and the crack between the door and door frame before you open it. *Never use the palm of your hand or fingers to test for heat* - burning those areas could impair your ability to escape a fire (i.e., ladders and crawling).

Hot Door	Cool Door
Do not open! Escape through a window. If you cannot escape, hang a white or light-colored sheet outside the window, alerting fire fighters to your presence.	Open slowly and ensure fire and/or smoke is not blocking your escape route. If your escape route is blocked, shut the door immediately and use an alternate escape route, such as a window. If the escape route is clear, leave immediately through the door and close it behind you. Be prepared to crawl . Smoke and heat rise. The air is clearer and cooler near the floor. Close doors behind you as you escape to delay the spread of the fire.

2. ***If smoke, heat, or flames block your exit routes, stay in the room with the door closed.***
   - — If possible, stuff wet cloths around the door cracks and vents.
   - — Signal for help using a bright-colored cloth at the window.
   - — If there is a telephone in the room, call the fire department and tell them where you are.
3. ***If your clothes catch on fire – Stop, drop, and roll*** - until the fire is extinguished. Running only makes the fire burn faster.

⇒ **Once you are out, stay out! Call 9-1-1 from a neighbor's home.**

Your recovery from the emergency may greatly depend on your level of preparedness before the emergency happens. Take time now to prepare, visit www.heartlandfire.org, www.readysandiego.org, www.theredguidetorecovery.com or www.sdarc.org for preparedness tips and to download the **"Wildfire Preparedness Guide".**

HEARTLAND FIRE & RESCUE

SERVING THE CITIES OF EL CAJON, LA MESA AND LEMON GROVE

Community Events

SOROPTIMIST INTERNATIONAL OF LEMON GROVE

7th Annual WESTERN ROUND UP & CHILI COOK-OFF

$15.00 Donation

Saturday, November 5, 2011
6:00pm—9:00pm
St. John of the Cross Parish Hall
8086 Broadway
(Columbus Drive and Broadway)

Tickets, entry forms, sponsorship:
Jennifer Mendoza (619) 741-6748, or
jmendoza@csgrr.com

- Western grub
- Boot-stompin'tunes
- Saloon
- Raffles
- Silent auctions
- Door prizes

ST. JOHN OF THE CROSS FALL FESTIVAL

SEPTEMBER 23-25, 2011

8086 Broadway, Lemon Grove
(Columbus Drive and Broadway)

Free Admission!

Friday:	5:00—10:00p.m.
Saturday:	12:00 Noon—10:00p.m.
Sunday:	9:30a.m.—9:00p.m.

- Live entertainment
- Rides & Games
- Laser maze
- Food Booths
- Beer Garden
- White Elephant
- Silent Auction
- Nightly Laser Show

Event proceeds benefit:

Lemon Grove Holiday Food & Toy Drive, Lemon Grove Food Bank, Scholarships and Charitable Programs

St. John of the Cross Church charities and all denomination Teen Youth Center building fund.

SHREDDING EVENT FOR RESIDENTS AND BUSINESSES

FREE!

Saturday, October 8, 2011
9:00 a.m. — 12:00 Noon

Civic Center Park
3200 Main Street

Are you drowning in paper? Would you like to discard old bank statements and other personal records, but are concerned with identity theft? The City of Lemon Grove and EDCO are sponsoring a ***FREE*** shredding event. ***Limited to two bankers boxes (10"x12"x15") per household.***

BEAT THE "HEAT"! SPAY OR NEUTER YOUR DOG OR CAT!

Low-Cost SPAY~NEUTER CLINICS in Chula Vista

Pets of Residents of Chula Vista, Imperial Beach, Lemon Grove and National City

MONTHLY

SNAP
SPAY NEUTER ACTION PROJECT

Spay Neuter Action Project
Post Office Box 1373
La Jolla, CA 92038
phone: 619-525-3047
fax: 858-456-1547
scheduling: 866-SPAY BUS
www.snap-sandiego.org

Price Includes:

- SPAY OR NEUTER
- ADVANTAGE FLEA COTROL
- NAIL TRIM

Call SNAP now for your appointment
(619) 525-3047

Community Events

FIRE DEPARTMENT PANCAKE BREAKFAST & OPEN HOUSE

YOU'RE INVITED!

Lemon Grove Fire Department

Saturday, October 8th

7853 Central Avenue, Lemon Grove, (619) 825-3835

ANNUAL BREAKFAST AT THE FIRE STATION

Presented by
Lemon Grove Professional Firefighters Association
Local 2728

7:00 a.m.— 11:00 a.m.

ALL YOU CAN EAT PANCAKES!

Served with

Sausage, Eggs, Orange Juice & Coffee

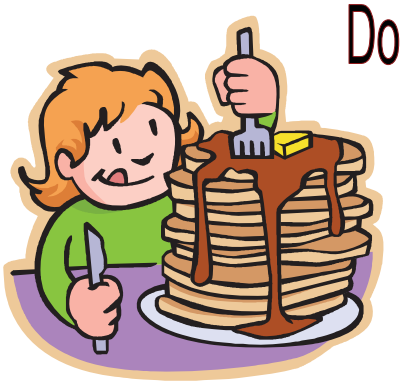

Donation:

Adults $5.00

Children $3.00 (under 12)

All proceeds benefit local charities

OPEN HOUSE

8:00 a.m. — 12:00 Noon

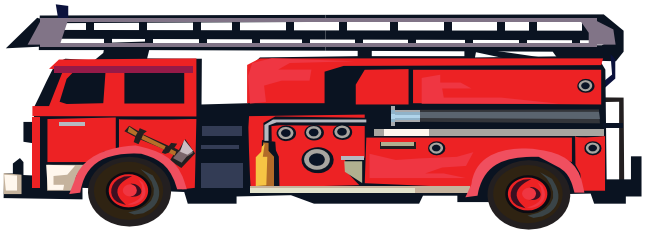

Firehouse Safety Trailer
Home Depot Kid's Workshop
Blood Pressure Testing by AMR
Auto Extrication Demonstration
Fire Station and Engine Tours
Fire Safety Movie
SDG&E Gas Simulator
Sheriff
California Highway Patrol
Car Show
Dunking Booth
Handouts
Displays
Meet our Firefighters!

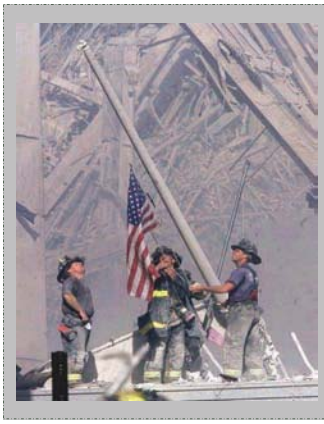

World Trade Center Display

Honoring SEPTEMBER 11, 2001

134 lb. section of structural steel beam

Presented to the Lemon Grove Fire Department by the New York and New Jersey Port Authority 2011

Community Event—Wrap Up

RELAY FOR LIFE WRAP-UP

This year's **Lemon Grove Relay For Life,** held the weekend of May 21-22 at Lemon Grove Middle School, did not disappoint! This was the City's sixth annual partnership with the American Cancer Society to host one of their signature fundraisers, which brings together friends, family, and co-workers to **celebrate** the lives of those who have battled cancer; **remember** loved ones lost to the disease; and ***fight back*** against a disease that takes too much.

The event featured a moving opening ceremony, round-the-clock DJ, quality volunteer entertainment, food and drink to keep the walkers going, a kids corral with fun activities, and much, MUCH more…

Behind every successful event, there's a successful organizing committee. **MANY THANKS** to ours! Jennifer Mendoza, Event Chair; Elizabeth McBrayer, Team Development; Tammy Graham, Team Recruitment; Brenda Renfroe, Survivor Chair; Sophia Assaad, Fight Back Chair; Jesse Colmenero, Fight Back Sponsorship; Linda Fisher, Entertainment/Food/Hospitality; Amber Gentle, Registration; Stephanie Boyce, Online Chair; Marjie Cappiello, Off-line Donations; Faith Wilbur, Logistics; Katie Dexter, Accounting; Janet Colmenero, Luminaria; Shirley Burcks, Publicity; Bob Cota, American Cancer Society Liaison; and *MANY event-day volunteers who pitched in wherever needed!*

And the bottom line: $40,000
raised for cancer research and programs!

EVENT SPONSORS

SILVER

Sam's EMW Foundation
Sungarden Terrace

BRONZE

Qualcomm
City of Lemon Grove
Lemon Grove School District
Dr. Kevin Swartzberg
COPART
MJ Richards Company

DONORS & IN-KIND PARTNERS

Bolam Dental Office
Courtesy TV
Edco Disposal
Grove Grinder
Jesslyn Ponce-Dick
Lemon Grove Fire Department
Lemon Grove Kiwanis
United Rentals

Mark your calendars **for the** ***2012 Lemon Grove Relay For Life*** ***on May 19, 2012, which*** **promises to be a spectacular event!!**

WANTED!

Committee Volunteers **Sponsor Opportunities Available!**

HOW YOU CAN GET INVOLVED:

- **Serve on the volunteer planning committee.**
- **Form a team with friends, family, neighbors, and co-workers, or join an existing team.**
- **Donate to a Relay team or team member.**
- **Become an event-day volunteer.**

To be a part of the 2012 *LEMON GROVE RELAY FOR LIFE,* contact our American Cancer Society liaison Bob Cota at (619) 682-7433 or *Robert.Cota@cancer.org*.

SDG&E LIGHTING EVENT

The SDG&E lighting event that took place at the Lemon Grove Home Depot on June 18 received a *record breaking* number of customers for Lemon Grove!

A total of 634 residential customers participated and 2,784 light bulbs were exchanged.

Over 50 customers sign-up for SDG&E's CARE program (California Alternate Rates for Energy). The CARE program is an income qualified program that allows customers to receive up to 35% off their gas & electric bill.

For further program information and to see the schedule of upcoming events: *www.sdge.com/lightingturnin*.

Potpourri

LEMON GROVE SENIOR CENTER—Services, Activities, Classes

Senior Volunteer Opportunities Available

8235 Mt. Vernon Street, (619) 337-1425
Monday—Friday, 8:00 a.m.—2:00 p.m.

Senior Lunch Program

Hot, nutritious meals

Make reservations by 12:00Noon two days in advance.

Suggested donation $3.50 age 60 and over.

Services

Free Legal Services/Tax Preparation
Blood Pressure Checks
Home Delivered Meals
Hearing Aid Screening & Cleaning

Activities

Tuesday Movies & Entertainment
Holiday Celebrations
Bingo and Billiards

Exercise Classes

Aerobic Conditioning ($10/semester)
Feeling Fit Club ($10/semester)
Hatha Yoga ($5/class)

TENANT/LANDLORD SERVICES

The **Center for Social Advocacy** promotes fair housing practices, and provides free assistance to renters, land owners, and property managers.

The Center for Social Advocacy provides many services including:

- tenant/landlord mediation
- education to tenants
- education to land owners and property managers
- fair housing advocacy

The Center's housing specialists are equipped to answer many questions and provide additional resources to those in need. To contact the Center for Social Advocacy, call (619) 444-5700 or visit ***www.c4sa.org***.

TOO MUCH FRUIT ON THE VINE?

Don't let your unpicked fruit go to waste!... We're asking for the donation of your unwanted fruit from your residential property and ***we will come pick it!*** Think of it! Rather than have a peach, pear, plum or any fruit dry on your branch or drop, give this fruit to a child or senior who will savor every bite.

Harvest C.R.O.P.S.

Community Residents Offering Produce Seasonally

Sponsored by St. John Youth group

***Please call today!* (619) 461-2681**

www.harvestcrops.org

Check the website for other ways you can donate.

Environmental

RECYCLING CONSTRUCTION & DEMOLITION DEBRIS

Did you know that most unwanted and leftover materials created by construction and demolition activities are *RECYCLABLE*?

Did you know that State and local laws require you to *recycle those items*?

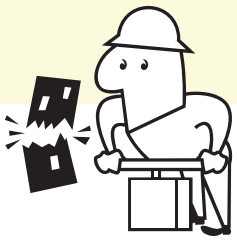

Lemon Grove's ***Diversion Deposit Program*** establishes a deposit for construction and demolition projects. This program assists the City with its recycling efforts and with meeting State mandates.

What you need to know:

- To qualify for a complete refund, your paperwork must show that at least 75% of the debris was recycled or reused.
- Before starting your project – determine how you will manage the waste. Large projects must also submit a formal Waste Management Plan that includes estimating types and quantities of waste the project will generate.
- Then, when you apply for a building permit, the City will collect a deposit based on the size of the project.
- A list of nearby recycling centers is provided in the permit application. For small loads of mixed debris, the SANCO Resource Recovery is located on Federal Blvd. right here in Lemon Grove.
- Get receipts for everything!!! (including whatever goes to the landfill).
- If you donate the items, be sure to get a receipt. No receipt available? Take photos of the items being donated and attach a signed note that states the name and address of donation site.
- If you plan to reuse any of the items, take photos of the items and attach a signed note that states how you will be reusing the debris. (think scrap wood for firewood or installing old kitchen cabinets in the garage).

Help us create a sustainable Lemon Grove by participating in this required program!

SAN DIEGO COUNTY'S ULTIMATE RECYCLING RESOURCE

Over the last few years, "Going Green" has become a mainstream message. From the grocery store to car dealerships, there is no shortage of eco-friendly options. While not everyone can afford to buy a hybrid or always eat organic foods, there is a common factor shared between the levels of "green" lifestyles. The majority of people recycle and I Love A Clean San Diego provides the ultimate recycling resource. **WasteFreeSD.org** is an online database for all your recycling needs. The database is a quick and convenient way to find out what can be recycled and the closest location to take those items. I Love A Clean San Diego provides the only Disposal Solution Center database in the county. Just log onto ***www.wastefreesd.org*** and check out how easy it is!

- **Doing some spring cleaning? Find out where to get rid of hazardous cleaning products.**
- **Got leftover propane tanks from recent BBQs? Have extra pool chemicals lying around from recent cleanings? *WasteFreeSD.org* will show you where to get rid of these.**
- **Did you know all rigid plastics are now recyclable? That's right, your local trash hauler (EDCO) is now accepting things like yogurt containers, plastic toys, lawn furniture and much more.**

Log onto *www.wastefreesd.org* for all your recycling needs!

FREE HOUSEHOLD BATTERY RECYCLING AND SHARPS DISPOSAL

For your convenience, the **EDCO Buyback Center** located at 6700 Federal Boulevard, in Lemon Grove is **open every day of the week** from 8:00 a.m. to 4:00 p.m. for recycling household batteries and disposing of sharps waste. Questions? Call EDCO at (619) 287-7555.

Household Batteries — AAA, AA, C, D, AND 9V ONLY

Batteries contain heavy metals such as mercury, lead, cadmium, and nickel, which can contaminate the environment when batteries are improperly disposed of. Recycling batteries keeps heavy metals out of landfills and the air and saves resources because recovered plastic and metals can be used to make new batteries.

Sharps Waste (Needles, lancets, or other devices used to penetrate the skin for the delivery of medications.)

Put sharps in approved sharps containers or in sturdy, puncture resistant, tightly sealed containers like bleach bottles, liquid detergent bottles or coffee cans with lids. **DO NOT STORE IN:** paper or plastic bags, glass containers, cardboard or coated paper containers, plastic bottles that have a CRV (CA Redemption Value) or milk jugs. ***LOOSE SHARPS ARE NOT ACCEPTED.***

Environmental

IT'S ALMOST HERE...

That time of year so rare in Southern California – the rainy season. When it rains, the water washes into the gutters and then into nearby storm drains, eventually flowing into local creeks and to the ocean. Since water entering storm drains is not treated, it will also carry along with it various pollutants and debris, which can result in unsafe swimming conditions at the beaches of due to the pollution and toxins.

You can help! **Suggestions to help you prepare *and* assist the City's clean stormwater efforts:**

- Be aware of manufacturer's instructions on pesticides and fertilizers - a little goes a long way,
- Clear your yard and driveway of trash and debris to prevent it from flowing to the storm drains,
- Scoop the poop when walking your pooch! Dog droppings are big contributors to harmful bacteria levels in local creeks,
- Collect yard and green waste to recycle or to use as mulch and fertilizer,
- Protect bare slopes to prevent erosion and mudslides.

Call (619) 825-3800 to report illegal dumping or blocked storm drains. Questions about stormwater and what you can do? Email Cora Long at clong@ci.lemon-grove.ca.us.

ANTS!! A Common Summertime Annoyance in Southern California

Control ***ANTS*** *the non-toxic way!*

1. Ant-proof kitchen garbage pails with sticky barriers such as petroleum jelly under the lip.
2. Put pet dishes in a moat of water.
3. Sponge invaders with soapy water as soon as you see them enter.
4. Fill cracks and crevices that have become ant entryways with caulk or petroleum jelly.
5. Remove infested indoor plants.
6. Use baits to control the colony—sprays are rarely necessary.

Use NON-CHEMICAL methods & LEAST TOXIC pesticides.

WHY? Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.

For more information on ants and other household pests, go to *www.ThinkBlueSD.org*.

City of Lemon Grove

STORMDRAIN Hotline

(619) 825-3827

Please report illegal dumping (paint, chemicals, etc.) into the City's stormdrain system.

What is stormwater pollution? Untreated urban runoff (pollutants like trash, pet waste, cigarette butts, motor oil or antifreeze, paint, pesticide and fertilizer runoff) that flows untreated through the storm drain system, eventually making its way into the ocean.

Find out more:
http://www.ci.lemon-grove.ca.us/stormwater

I LOVE A CLEAN SAN DIEGO

Organizes cleanups throughout San Diego County!

Volunteer registration is open for the **27th Annual Coastal Cleanup Day** on **Saturday, September 17**. Visit *http://www.cleanupday.org/* for more information.

ILACSD also coordinates inland cleanups at parks, lakes, and other recreation areas that are littered with debris. These cleanups are open to the public, and volunteers of all ages are encouraged to participate.

View calendar:
http://www.ilacsd.org/calendar/month.php?cid=3&catid=3

Environmental

HOUSEHOLD HAZARDOUS WASTE RECYCLING

FREE!

By appointment only, City residents may drop-off Household Hazardous Waste (HHW) on selected dates at EDCO's La Mesa Station.

It's easy to dispose of HHW safely...

1. Call (**619) 287-5696**, ext. **4270**, to make an appointment for an upcoming drop-off event. You may also request an appointment via email at ***lmhhw@edcodisposal.com***. Be sure to include your name, address, and daytime telephone number.
2. Drop-off events are scheduled for: **October 15, December 3.**

Home Pickup Program—Only seniors (65+) and disabled residents are eligible to participate in the HHW/ Electronic Waste Home Pickup Program. (619) 287-5696, ext. 4270.

It is illegal to dispose of hazardous materials such as these in the trash!

HOUSEHOLD	YARD AND GARDEN	GARAGE
All Purpose Cleaners	Lighter Fluid	Motor Oil and Filters
Ammonia, Disinfectants	Pesticides	Car Batteries, Gear Oil
Drain Cleaners, Polishes	Paints, Stains, Thinners	Transmission Fluid
Fluorescent Light Bulbs	Pool Chemicals	Antifreeze, Gasoline
Household Batteries	Fertilizers	Glues, Adhesives

FREE E-WASTE RECYCLING for Residents AND Businesses

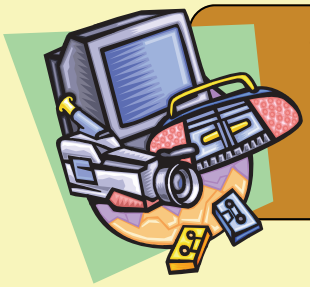

Civic Center Park
3200 Main Street
9:00 a.m.—Noon
No appointment required

Upcoming Drop-Off Events:

- **September 17**
- **October 15**
- **November 19**

Items Accepted:

Camcorders	Laptops	Radios	Transparency markers
Car batteries	*** Microwave ovens	Remote controls	Two-way radios
CD players	Modems	Scanners	Typewriters
Cell phones	Monitors	Servers	UPS's
Computers	Pagers PDA's	Stereos	VCR's
Copiers	PC boards	Tape players	Word processors
DVD players	Personal computers	Telephones	
Electric typewriters	Phone systems	Televisions	
Hard drives	Printers	Testing equipment	

******$10 fee for microwave ovens.***

NOT Accepted: Appliances and Household Batteries

HANDY INFORMATION

CITY HALL
Mayor & City Council.....825-3800
City Manager, Finance.....825-3800
Planning/Building 825-3805
Public Works/Engineering.....825-3810

CITY HOTLINES
Jobline.....825-3813
Code Enforcement 825-3807
Graffiti.....825-3813
Stormdrain.....825-3827
Please report illegal dumping (paint, chemicals, etc.) into the City's stormdrain system.
http://www.ci.lemon-grove.ca.us/stormwater

FIRE DEPARTMENT
7853 Central Avenue
Business (non-emergency) 825-3835
Emergency 911
http://www.ci.lemon-grove.ca.us/fire

SHERIFF DEPARTMENT
3240 Main Street
Business (non-emergency) 337-2000
Emergency 911
http://www.sdsheriff.net/index.html

ANIMAL CONTROL
General info 691-5123
Report animal concerns.....476-2476

OTHER...

La Mesa Swimming Pool Info.....698-2502
Historical Society.....460-4353
Library 463-9819
Senior Center 337-1425

MEETINGS...

CITY COUNCIL
1st and 3rd Tuesday of each month, 6:00 p.m. at the Community Center, 3146 School Lane.

PLANNING COMMISSION
4th Monday of each month, 6:30 p.m. at the Community Center, 3146 School Lane.

2-1-1 Non-Emergency Hotline 211
1000's of community resources with a single call
http://www.211sandiego.org/

5-1-1 Traffic, Transit, & Travel Information 511
http://www.511sd.com/

Bus-Metropolitan Transit System (MTS) 233-3004
1255 Imperial Ave
San Diego, CA 92101-7490
http://www.transit.511sd.com/

California Highway Patrol
1722 East Main St
El Cajon, CA 92020
Business (non-emergency)..... 401-2000
Emergency..... 911
http://www.chp.ca.gov/

Crime Stoppers 1-888-580-TIPS (8477)
PO Box 600726
San Diego, CA 92160
http://www.sdcrimestoppers.com/

EDCO Disposal Corp..... 287-7555
Trash/Recycling Services
6670 Federal Blvd
Lemon Grove, CA 91945
http://www.edcodisposal.com/

Friends of the Library..... 962-6688
Bookstore at Lemon Grove Library
8073 Broadway
Lemon Grove, CA 91945

Lemon Grove School District 825-5600
8025 Lincoln St
Lemon Grove, CA 91945
http://lemongroveschools1.net/lgsd/site/default.asp

Poison Control Center-San Diego area 1-800-222-1222
UC San Diego Medical Center
200 West Arbor Drive
San Diego, CA 92103
http://www.calpoison.com/

Senior Resource Center..... 740-4214
Referrals, health appraisals, Project Care, Vial of Life
Sharp Grossmont Hospital
9000 Wakarusa St
La Mesa, CA 91942
http://www.sharp.com/seniors/index.cfm

WEB-EXTRAS!

- Code Enforcement Administrative Citation Procedures
- Recreation Brochure
- Youth Recreation Registration Packet
- Facility Rental Application
- Why Spay or Neuter Your Pets?

"Best Climate on Earth"

The GROVE GAZETTE

Municipal Newsletter for the Residents and Businesses of Lemon Grove, California

Spring 2012

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CITY'S REDEVELOPMENT AGENCY DISSOLVED

Two California bills and one California Supreme Court case ended California's seventy year history of redevelopment. Lemon Grove's Community Development Agency—its redevelopment agency—has existed since 1983. Redevelopment abuses around the State have served as the poster child for terminating redevelopment; however, in Lemon Grove, redevelopment has been a powerful companion to the City.

Through its Community Development Agency, the City has been able to invest in aging business corridors, attract businesses that finance the backbone of community services, provide housing opportunities for residents, and create jobs that benefit the local economy.

A few of the more significant redevelopment projects in the City include:

- The Home Depot development
- Rehabilitated storefronts, inclusion of outdoor dining, and new business signs on Broadway between Grove Street and Lemon Grove Avenue
- Lester Street parking lot
- Bob Baker Toyota development
- Citron Court apartments on Broadway

Despite the decision by the State of California to terminate redevelopment in Lemon Grove, provisions in the law ***do*** allow the City to finish several of the projects currently in the redevelopment pipeline that rely on either grant funds or redevelopment bond proceeds—meaning no General Fund dollars are being used to complete these projects.

The following projects will continue to be constructed, despite the demise of redevelopment:

♦ ***Citronica I —*** this 56-unit mixed-use affordable housing and retail project is underway. Located at the corner of Main Street and North Avenue, the project will be complete by February 2013.

Citronica I

♦ ***Citronica II*** — located at the corner of Olive Street and North Avenue, the developer of this 86-unit senior apartment complex is currently seeking State housing tax credits to complete the financing of the project. Once financing is secured, The project should take 18 months to complete.

♦ ***Main Street Promenade*** — with funding secured through two grants, land acquired, and a contractor selected, the Main Street Promenade project is slated to begin construction in May 2012. This project will transform the existing Main Street, between Broadway and North Avenue, into a walkable park with energy generating components, educational features, a play area, and restrooms. The project will be complete by the end of 2012.

Continued on Page 2...

Community Interest

Revitalization Projects Around Town...continued from cover

- ***Lemon Grove Avenue Realignment*** — the City has been working to modify the alignment of Lemon Grove Avenue with Highway 94. The primary aim of the project is to improve traffic circulation for vehicles traveling on North Avenue, Lemon Grove Avenue, and entering and exiting Highway 94. The project will also allow for greater walkability in the area and will create a better "gateway" for the City. Due to unforeseen complications with land acquisition and coordination with other governmental agencies, this project is behind schedule. Currently, the City aims to complete this project by the end of 2013.

Re-routing of Lemon Grove Avenue

SHAKE, SHAKE, SHAKE— WHAT'S ALL THAT EARTH MOVEMENT ABOUT?

Have you noticed the new, non-City projects throughout Lemon Grove?

- ***Lemon Grove Middle School*** — the Lemon Grove School District secured bond funding to upgrade its campuses, including the conversion of Lemon Grove Middle School into a "STEM Academy" (Science, Technology, Engineering, and Math). In addition to the campus rehabilitation, the Lemon Grove School District is constructing a joint-use library for the community. The school is scheduled to open in Fall 2012 and the library is planned to be open March 2013.
- ***Walgreens*** — look for the new Walgreens opening in late summer 2012 at the corner of Massachusetts Avenue and Broadway .
- ***PetCo — a PetCo will soon be open for business*** in the shopping center at Massachusetts and the north side of Broadway next to In N Out Burger.
- ***Lemon Grove Community Church*** — construction has just begun on a Spanish Colonial Revival church on the south side of Civic Center Park at the corner of Central Avenue and Main Street. This 8,001 square foot building is planned to be completed by September 2012.
- ***Trolley Station Upgrades*** — the San Diego Metropolitan Transit Authority and SANDAG are coordinating trolley station upgrades at Lemon Grove's two trolley stops. The upgrades are intended to raise the platform to accommodate the new low-floor trolley cars that accommodate wheelchair access without a lift, making trips faster and more convenient for passengers.

Stay tuned – more building is in the pipeline!

CHANGE IN DOG LICENSING FEES

For the first time since 1990, the City modified dog licensing fees in 2011. The intention of the new fee schedule is to encourage spay and neutering of dogs to reduce the number of unwanted dogs in the City. The fee schedule also encourages the purchase of a 3-year license as opposed to a 1-year license, which should reduce the staff time involved in processing the licenses as well. The puppy and 2-year license options were eliminated.

New fee schedule:

1 Year License (Altered):	$15	Transfer Fee:	$10
1 Year License (Unaltered):	$40	Penalty (Altered):	$10
3 Year License (Altered):	$35	Penalty (Unaltered):	$25
3 Year License (Unaltered):	$75	Tag Replacement:	$ 5

Community Interest

SUMMER DAY CAMP IS BACK!

The City's Summer Day Camp is designed to provide 1st through 8th graders with an active, safe and fun environment for ten weeks out of the year. Campers will enjoy a wide variety of activities that continues the learning process throughout the summer, all supervised by our trained, caring and enthusiastic staff. Your child's safety, well-being and positive camp experience are our top priorities.

Children will participate in a variety of games, sports, arts, and crafts including four square, tether ball, board games, pool, ping pong, air hockey, movies, reading, and more. All activities take place throughout the recreation center which includes a huge two court gymnasium, arts & crafts room, two game rooms and athletic fields. Children will also discover more of San Diego County on nine fun-filled field trips.

June 25th to August 31st, 6:30 a.m. to 6:00 p.m.
Lemon Grove Recreation Center, 3131 School Lane

Registration begins: .....Monday, April 16, 2012
Registration/Information: .....Lemon Grove City Hall, 3232 Main Street, (619) 825-3800 (M-F, 8am-5pm, *Closed Fridays*)

2012 Pricing	
$95	Weekly rate
$80	3-day rate
$35	Single day rate

Gym Activities:	Pillow polo, dodge ball, indoor soccer, basketball, volleyball and mad ball.
Athletic Fields:	Flag footballs, kickball, capture the flag, wiffle ball, Kings & Queens and soccer.

SIGN-UP FOR AUTOMATIC NOTIFICATION ON CITY WEBSITE

Sign up on the City's website for E-Services notification — ***automatic email and/or text message notification*** for new issues of the City newsletter, City Council agendas and much more:

- Community Events
- Youth Activities
- Adult Sports
- City Newsletter
- City Council Agenda
- Planning Commission Agenda
- Contracting Opportunities
- Press Releases
- Job Postings

Visit the City website at *www.ci.lemon-grove.ca.us* and follow these simple instructions:

1. Click on **"E-Services"** on the left navigation bar.
2. Click on **"Notify Me."**
3. Enter your **email address** and click **"ok."**
4. Enter your **cell phone number** if you wish to be notified by text.
5. **Select** the items for which you'd like notification by clicking on the **envelope and/or phone icon** for each item.
6. Click **"Save Profile Information"** and you're done!

You will receive a confirmation e-mail with instructions on how to unsubscribe should you wish to do so. Your e-mail address is kept confidential and will not be sold or disclosed to third parties.

CLOTHING DONATION BOXES

Clothing donation boxes (sometimes red, sometimes blue) look very similar to mail collection boxes in our neighborhoods – ***but tend to attract illegal dumping that if not reported can continue to attract more trash and debris!*** **These boxes are not approved by the City for just that reason. Donate your clothes to a thrift store instead**. In Lemon Grove, there is a United Cerebal Palsy Thrift Store at 7875 Broadway. Donations benefit families afflicted with the disease and aid in pursuing a cure.

Please report locations of the donation boxes to the City at (619) 825-3800 so that they can be removed.

Community Interest

CITY'S FIRST "CELEBRATION SHOWCASE" *Party Planning Made Simple*

Muevette Dance Studio performing "Folklorico" - LaBarge Photography

Feel like you missed out on the action?

Watch the recap video on the *City's Facebook page* or *YouTube*.

Over 100 attendees came out to the Lemon Grove Senior Center on Saturday, January 21st for the **Lemon Grove Celebration Showcase**, a 3-hour special events expo featuring 12 local vendors.

They also attended for a chance to win a ***$7,500 prize package*** to help plan the party of their dreams! *Lucky winner Lemon Grove resident Elida Cortez is using the prize package to throw her granddaughter a Quinceañera.*

Guests enjoyed food samples, live music, demonstrations and an exciting dance performance while exploring the features of our stunning 3,000 square foot banquet hall.

A special thank you to our sponsors for helping to make the City's first Celebration Showcase a success!

- **A Touch D' Elegance**
- **Casa de Pico**
- **C. Withers Media**
- **Designs by Estelle**
- **Forever Blooms**
- **The Fotobox**
- **Grove Pastry Shop**
- **J. Dean Entertainment**
- **LaBarge Photography**
- **Make-up by K.C.**
- **Muevete Dance Studio**

LOW-COST ALTERNATIVES FOR HIGH QUALITY EVENTS

The City of Lemon Grove offers facilities specifically designed for receptions, meetings, sporting events, and other special events. The facilities accommodate varying size groups and reservations may be made up to one year in advance. Tours are available by appointment.

For pricing, reservations, or more information, please contact the Community Services Division at (619) 825-3800 ext. 3902, or visit the City's website at: *www.ci.lemon-grove.ca.us/rentals*.

Lemon Blossom Hall
8235 Mt. Vernon Street

A refined facility that can seat up to 200 for banquet style events, and up to 300 for theater style events. Adjacent to Lemon Grove Park, this beautiful facility features large French doors that open to a spacious patio. Borders of grassy areas and walkways provide a private, peaceful setting amongst nature, ideal for a wedding ceremony. The large, fully equipped kitchen is designed to handle all of your catering needs.

Community Center
3146 School Lane

Appealing for its convenient location and full kitchen amenities, this is an ideal setting for smaller meetings, conferences and private parties. The Community Center seats up to 75 for banquet style events, and up to 100 for theater style events. Tables and chairs are provided free of charge and City staff will set up and break down the equipment for you.

Berry Street or Lemon Grove Park Gazebos

Does an indoor event seem too stuffy for your special occasion? Take advantage of the *"Best Climate on Earth,"* by holding a birthday party, shower or fundraiser outdoors. Both parks span six acres and offer playgrounds, picnic areas and tables, restrooms, a basketball court and walking paths. Gazebo rentals are $80 and provide you with peace of mind that no one else can intrude on your special day. To reserve a gazebo, visit City Hall at 3232 Main Street or call (619) 825-3800 for more information.

H. Lee House Courtyard
3225 Olive Street

For a more intimate outdoor event, the historical H. Lee House boasts an elegant courtyard and features a stunning Victorian-style gazebo for ceremonies or entertainment surrounded by inlaid brickwork and grass. With a capacity for approximately 100 guests, the H. Lee House Courtyard is the perfect setting for a private outdoor wedding, anniversary party, or baby shower.

Community Interest

ILLEGAL SIGNS ON PUBLIC PROPERTY

The City of Lemon Grove is stepping up its efforts to prevent illegal signs on public property that negatively impact the appearance of streets, neighborhoods and business districts throughout our city.

Illegal signs create an unsightly appearance in our neighborhoods and business districts, a distraction on street corners and along roadways, and pose a visual barrier to motorists. For the overall safety of our neighborhoods, posting illegal signs must be discouraged.

Section 18.12.070 of the Lemon Grove Municipal Code prohibits all signs displayed on public property that are not approved by the City Council. A few examples of illegally posted signs that Public Works staff has removed in the recent past include: Garage Sale, Work From Home, and Yard Care Services.

The City asks its residents, businesses, and visitors to be more conscious of posting signs on public property, and encourages everyone to help in the efforts to rid our community of unnecessary, unsightly and unsafe clutter. ***The end result is a cleaner, safer, more attractive city for everyone to enjoy!***

TAKING RECYCLABLES FROM RECYCLING BINS IS STEALING!

"When recyclable materials are placed in collection containers or any designated pickup location, they shall become the property of the city or its duly authorized agent. It is unlawful for any person other than the city or its agent to move, remove, interfere with, disturb, or tamper with said materials or their containers." **Lemon Grove Municipal Code, Section 13.24.140**

Have you ever seen someone rummaging through your blue recycling bin? They are usually looking for valuable CRV materials—soda cans and water bottles. ***And, they are stealing***.

The problem isn't just here in Lemon Grove. It is an issue throughout California, which is why Assembly Bill (AB) 1778 was passed. AB 1778 requires scrap yards that buy $100 or more of CRV bottles and cans or $50 or more of newsprint, to document transactions and to pay for these materials by check. AB 1778 is designed to reduce organized recycling theft in California.

Locally, scavenging recyclables is a violation of Lemon Grove Municipal Code Section 13.24.140. Violators may be prosecuted and are subject to a fine.

Scavengers are not only stealing from the City and EDCO, they're stealing from the residents of Lemon Grove. The revenue generated from the sale of recyclables goes directly back to the rate payers in the form of lower service rates. So, when scavengers steal the recyclables, they remove that revenue and cut the funding to the waste hauling.

The next time you see someone scavenging through a recycling bin, remember that it is a crime and YOU can do something about it!

Tips to help prevent recycling theft:

1. **Bring your recycling bins out to the curb the morning of your scheduled pick-up instead of the night before.**
2. **Remove all CRV containers from your recycling bin. You can either redeem them at a recycling center or drop them off at EDCO at 6700 Federal Boulevard.**

SEE IT, HEAR IT, REPORT IT! ***If you see someone removing recyclables from a bin:***

- **Get the license plate number of the vehicle being used to transport the recyclables.**
- **Get a detailed description of the individual scavenging.**
- **If possible and if it is safe, take a picture of the individual and send it to: mjames@ci.lemon-grove.ca.us.**
- **Call the Sheriff Department's non-emergency number (858) 565-5200 to report the crime.**
- **When reporting a theft, it is important that you provide your name and contact information to the Sheriff's Department.** ***Without your acknowledgement that you have witnessed a crime, action cannot be taken against the violator.***

Community Interest

POLITICAL CAMPAIGN SIGN REGULATIONS

Avoid Campaign Sign Chaos This Election Season

The City of Lemon Grove wants YOU to be aware of the regulations relating to posting political campaign signs:

- Signs are <u>not allowed</u> on public property.
- Maximum 16 square feet for any single temporary, noncommercial sign.
- There are no quantity limits of temporary, noncommercial signs on a private property.
- Display period for temporary, noncommercial signs is limited to a total of 60 days and not later than five days after the event conclusion.
- Signs that obstruct vehicular sight distance are prohibited.

More Information:
Please refer to the Lemon Grove Municipal Code, Chapter 18.12 or call the City's Development Services Department at (619) 825-3800.

Community Interest

HEARTLAND FIRE & RESCUE CELEBRATES TWO YEAR MARK

It has been two years since the cities of El Cajon, La Mesa and Lemon Grove entered into a joint powers agreement for management and delivery of fire protection and emergency medical services. This joint powers agreement is known as Heartland Fire & Rescue. The management team includes a fire chief, three deputy fire chiefs, two division chiefs, five battalion chiefs, and four support staff.

Together our departments provide services for all types of emergencies and hazards, including first responder advanced life support, paramedic transport services, structural fire protection, wildland fire protection, vehicle extrication, vehicle fires, airport responses, hazardous materials first responder, regional urban search and rescue program, public service calls, public education, community preparedness, fire prevention and fire code enforcement.

Through this cooperative effort, these three cities have realized a combined savings of over $1.2 million while improving service levels to the community. This relationship is a great example of how communities can come together for the greater good.

For more information, visit us on the web: *www.heartlandfire.org*.

HEARTLAND FIRE & RESCUE
SERVING THE CITIES OF EL CAJON, LA MESA AND LEMON GROVE

WEEDS. WEEDS, WEEDS...

It's time to cut down those pesky weeds that popped up after the winter rains! This is a *friendly reminder* from the Fire Department that we all need to do our part by voluntarily removing fire hazards before the summer fire season starts. **Be sure to remove weeds by May**.

In the meantime, Fire Inspectors will be actively making a list of properties that are already overgrown. Beginning in June, "NOTICE to ABATE" letters will be mailed to property owners whose properties have become a fire hazard. Noticed property owners then have 30 days to clear the property. If the property has still not been cleared by that time, the City may fine the owner, hire a contractor to cut the weeds to protect neighboring properties, and bill the property owner for the cost of removal.

To report a fire hazard, call the Fire Department at 619) 825-3835 or report it online at *www.ci.lemon-grove.ca.us*, click on *"Report a Problem"* in the left–hand panel, choose "Weed Abatement" and follow the simple instructions.

SHERIFF'S CORNER — DISTRACTED DRIVING

The San Diego Sheriff's Department conducted a distracted driver campaign in conjunction with the California Highway Patrol (CHP) during the week of February 13th – 17th, the first detail of its type for San Diego County and the CHP,

Deputies assigned to the City of Lemon Grove and unincorporated areas, cited **61 drivers** during the week-long campaign and the enforcement resulted in 467 adult drivers and 3 juveniles receiving citations for talking or texting while driving in San Diego County.

Distracted driving is an epidemic on America's roadways. You see it every day—drivers swerving in their lanes, stopping at green lights, running red ones, or narrowly missing a pedestrian because they have their eyes and minds on their phones instead of the road.

The *Minimum fine* for talking without a hands-free device or texting on a cell phone is $159 for the first offense. *Repeat offenders pay $279 or more.*

***For more information*: http://www.distraction.gov or http://www.dot.gov/**

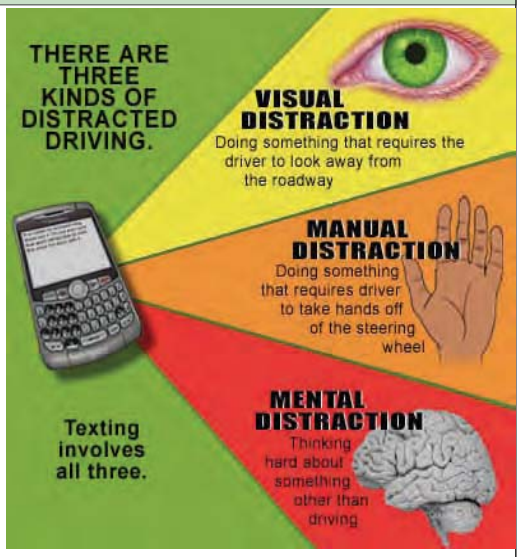

Drivers using hand-held devices have a four times greater risk of a crash resulting in a serious injury - California Office of Traffic Safety (OTS)

Community Events

SPRING CLEAN UP DAY

EDCO Station
8184 Commercial Street
La Mesa

FREE!
For Lemon Grove Residents
(Picture I.D. required)

ONE DAY ONLY...

SATURDAY, APRIL 28, 2012

7:00a.m. – 4:00p.m.

DIRECTIONS

- North on Lemon Grove Avenue.
- Right (east) onto Broadway.
- Left onto Spring Street.
- Right onto Center Street.
- Left onto Commercial Street at the stop sign.
- Right into EDCO Station entrance.

SENIORS (65+) AND DISABLED RESIDENTS
Call EDCO (619) 287-7555 to make an appointment for curbside collection.
Deadline to call—Friday, April 22nd, 5:00 p.m.

ACCEPTED ITEMS

No trucks over 1-ton or trailers longer than 8-ft.

- Debris from home improvement projects
- Furniture
- Green waste (tree trimmings, etc.)
- Large appliances (washers, dryers, stoves, refrigerators, water heaters, etc.)
- Metals (steel, aluminum, copper, etc.)

NOT ACCEPTED

- Tires
- Batteries
- Electronic equipment (cell phones, computers, monitors, printers, televisions, etc.)
- Household Hazardous Waste (HHW) (chemicals, paint, solvents, gasoline, motor oil, etc.)
- Contractor, landscaper, or commercial business waste

Event sponsored by: EDCO WASTE & RECYCLING SERVICES www.edcodisposal.com "We'll Take Care of It"

Community Events

GOLDEN DELICIOUS FARM STAND—Local organic produce!

Fresh, Affordable, Local, Organic!

GOLDEN AVENUE ELEMENTARY

7885 Golden Avenue, front lawn

Farm Stand Hours
1:30—3:30 p.m.
Every Friday
When school is in session.

Scott's Farm of Lemon Grove

SAN DIEGO GROWERS

100% Organic farm fresh produce from the San Diego Growers Collaborative, a small group of local growers.

For more information:
Scott Caneday (619) 517-3597
or scottssmallfarm@cox.net

Fresh, Affordable, Local, Organic!

Photos: Ron Sanchez, Lemon Grove Patch

SAN MIGUEL SCHOOL COMMUNITY GARDEN TRANSFORMED!

San Miguel Elementary School's community garden has been transformed by the popular Home and Garden Television (HGTV) television show "Yard Crashers," DIY Network's top show, and SCOTTS®! In preparation for the event day, 30,000 lbs of soil, 400 pavers, assorted plants, benches, wheel barrows and gardening materials were delivered to the grounds. The transformation took place on January 30th from 8:30 a.m. to dusk. Film crews from HGTV and the DIY Network were on campus to capture the day's excitement and the miracles of teamwork, community building and making dreams come true. After 15 retakes of the first scene caused by an overabundance of giggling sixth grade girls, the day's filming went smoothly. The show is scheduled to air on HGTV in late March.

All Students visited the garden during their regularly-scheduled school day and Extended Day Program students were invited to help out in shifts from 3:00-6:00 p.m. Principal Heidi Bergener invited community members, neighbors and San Miguel Elementary's extended family to stop by to see the action. In total, over 1,000 students, families, community members, and district employees took part in transforming the school's garden into a safe place where students can come to learn about giving back, gardening and the true meaning of building community.

Cooking demonstrations and taste testing in school will be the primary focus of the harvested produce and community members will benefit from the abundance of fruit as well.

Tomatoes, cucumbers, peppers, strawberries, onions, cabbage, lettuce and basic spices will grow in raised planter beds.

Stepping stone pathway created from pavers painted by students.

A variety of citrus trees.

Community Events

7TH ANNUAL LEMON GROVE RELAY FOR LIFE — MAY 19 - 20, 2012

RELAY FOR LIFE
American Cancer Society

One day. One night. One community. *One Fight.*

Relay For Life is a life-changing event that brings people together to **celebrate** the lives of those who have battled cancer; **remember** loved ones lost to the disease; and ***fight back*** against a disease that takes too much. ***Won't you join us?***

Relay For Life began in 1985 when Dr. Gordy Klatt, a colorectal surgeon in Tacoma, Washington, ran and walked around a track for 24 hours to raise money for the American Cancer Society. Since then, Relay has grown from a single man's passion to fight cancer into the world's largest movement to end the disease, with more than 3.5 million participants in 5,000 communities in the United States and 19 countries around the world.

The ***2012 Lemon Grove Relay For Life*** promises to be a great event featuring a moving opening ceremony, entertainment, food, activities for kids of all ages, and much, MUCH more!!

Throughout the event, we ***celebrate*** our cancer survivors, ***remember*** those who've lost their battle, and learn to ***fight back*** against a disease that takes too much. As darkness falls and the stars come out, the night is brightened by the glow of illuminated bags called luminarias, each bearing the name of someone who has battled cancer. The luminarias line the track and keep walkers motivated to keep going. The following morning as the event draws to a close, the crowd takes part in a meaningful closing ceremony and pledges to spend the next year ***fighting back*** against cancer!

Join us! **Saturday, May 19, 9:00am—Sunday, May 20, 9:00 am**

Palm Middle School, 8425 Palm Street (note new location for 2012)

Join teams of family, friends, neighbors, and co-workers at Palm Middle School. Teams are asked to have a representative on the track at all times during the event, representing the reality that *cancer never sleeps*. By participating, you ***celebrate*** cancer survivors, ***remember*** the lives we've lost to the disease, and raise money to help ***fight back*** against cancer in our community.

More information? **Call (619) 741-6748 or visit www.relayforlife.org/lemongroveca**

2012 Planning Committee

Jennifer Mendoza	Event Chair
Linda Fisher	Event Co-Chair
Stephanie Boyce & Janet Colmenero	Teams
Bud Boyce	Online
Shirley Burcks	Luminaria
Valerie Burcks	Registration
Marjie Cappiello	Off-line Donations
Tammy Graham	Accounting
Elizabeth McBrayer	Entertainment
Brenda Renfroe & Hortencia Jordan	Survivors
Faith Wilbur	Fight Back
Keri Yednak	Publicity
Katie Dexter	Sponsors
Michelle Gonzales	American Cancer Society Liaison

Relay For Life Needs You!

HOW YOU CAN GET INVOLVED:

- Form a team with friends, family, co-workers and neighbors.
- Join an existing team.
- Donate to a team or team member.
- Serve on the volunteer planning committee.
- Become an event-day volunteer.

Committee Volunteers WANTED!

Sponsor Opportunities Available!

Contact our American Cancer Society liaison Michelle Gonzales at (619) 682-7449 or *Michelle.Gonzales@cancer.org*.

Potpourri

Harvest C.R.O.P.S.—"Community Residents Offering Produce Seasonally"

Harvest C.R.O.P.S. ***(Community Residents Offering Produce Seasonally)*** was founded in 2009 after Lemon Grove resident Sergio Padilla decided to do something about the unpicked residential fruit he had observed rot and fall to the ground for years on his drive daily to and from work. Sponsored by Lemon Grove's St. John of the Cross Youth Group and currently operating under the umbrella of the church's tax-exempt status, *the organization's mission is to serve those less fortunate by coordinating volunteers to "pick to be brought," rather than "drop and rot."* Since 2009, volunteers have picked and distributed ***thousands of pounds*** of fruit to low-income families, seniors, and food banks.

Goals for the organization in 2012 are for the development and creation of a mobile display booth for public presentations and an independent California 501(c)(3) tax-exempt ID to "seed" into its own independent identity, encouraging all faiths to support the mission of feeding low-income families and seniors with residential fruit that would otherwise drop to the ground to rot.

Volunteers and tax-deductible contributions for expenses such as fuel and supplies for harvesting such as buckets, gloves, and tools make Harvest C.R.O.P.S. mission a reality.

HERE'S HOW YOU CAN HELP…

Volunteer:

Youth groups or clubs are encouraged to participate! **Most harvests take place on Saturday mornings. The average volunteer time commitment is 3-4 hours. Groups of 5-20 volunteers meet at 9:00 a.m. in the parking lot at St. John of the Cross Church, 8086 Broadway. Call (619) 318-3423 or email *info@harvestcrops.org* to be placed on the "Call-up" roster. Participants will receive an email or phone call prior to a harvest appointment.**

Make an Appointment for a Harvest:

Call (619) 461-2681 or email *info@harvestcrops.org* to make an appointment to have residential fruit picked.

Donate:

Harvest C.R.O.P.S. appreciates your support through donations for fuel and safety supplies for volunteers. Call (619) 318-3423 or visit *http://members.cox.net/harvestcrops/Donate.htm*.

The pictures at right are from the Harvest C.R.O.P.S. traditional first harvest of the year in January—32 lemon trees at Civic Center Park, behind City Hall.

The trees yielded 45 twenty-pound buckets of lemons picked by 16 volunteers from Harvest CR.O.P.S. and the Grossmont Interact Club.

The fruit was distributed to the Lemon Grove Senior Center and the El Cajon Chaldean Community.

www.harvestcrops.org

or visit them on Facebook

http://www.facebook.com/pages/Harvest-CROPS/305013744158

Potpourri

LEMON GROVE SENIOR CENTER—Services, Activities, Classes

Senior Volunteer Opportunities Available

8235 Mt. Vernon Street, (619) 337-1425
Monday—Friday, 8:00 a.m.—2:00 p.m.

Senior Lunch Program

Hot, nutritious meals

Make reservations by 12:00Noon three days in advance.

Suggested donation $3.50 age 60 and over.

Services
Free Legal Services/Tax Preparation
Blood Pressure Checks
Home Delivered Meals
Hearing Aid Screening & Cleaning

Activities
Tuesday Movies
Monthly Entertainment
Holiday Celebrations
Bingo and Billiards

Exercise Classes
Aerobic Conditioning ($10/semester)
Feeling Fit Club ($10/semester)
Hatha Yoga ($5/class)

TENANT/LANDLORD SERVICES

The **Center for Social Advocacy** promotes fair housing practices, and provides free assistance to renters, land owners, and property managers.

The Center for Social Advocacy provides many services including:

- education to tenants
- education to land owners and property managers
- fair housing advocacy

The Center's housing specialists are equipped to answer many questions and provide additional resources to those in need. To contact the Center for Social Advocacy, call (619) 444-5700 or visit ***www.c4sa.org***.

REPORT ILLEGAL DUMPING

City of Lemon Grove

STORMDRAIN Hotline

(619) 825-3827

Please report illegal dumping (paint, chemicals, etc.) into the City's stormdrain system.

What is stormwater pollution? Untreated urban runoff (pollutants like trash, pet waste, cigarette butts, motor oil or antifreeze, paint, pesticide and fertilizer runoff) that flows untreated through the storm drain system, eventually making its way into the ocean.

Find out more:
http://www.ci.lemon-grove.ca.us/stormwater

Environmental

FREE HOUSEHOLD BATTERY RECYCLING AND SHARPS DISPOSAL

For your convenience, the **EDCO Buyback Center** located at 6700 Federal Boulevard, in Lemon Grove is **open every day of the week** from 8:00 a.m. to 4:00 p.m. for recycling household batteries and disposing of sharps waste. ***Questions? Call EDCO at (619) 287-7555.***

Household Batteries — *AAA, AA, C, D, AND 9V ONLY*

Batteries contain heavy metals such as mercury, lead, cadmium, and nickel, which can contaminate the environment when batteries are improperly disposed of. Recycling batteries keeps heavy metals out of landfills and the air and saves resources because recoverd plastic and metals can be used to make new batteries.

Sharps Waste *(Needles, lancets, or other devices used to penetrate the skin for the delivery of medications.)*

Put sharps in approved sharps containers or in sturdy, puncture resistant, tightly sealed containers like bleach bottles, liquid detergent bottles or coffee cans with lids. **DO NOT STORE IN:** paper or plastic bags, glass containers, cardboard or coated paper containers, plastic bottles that have a CRV (CA Redemption Value) or milk jugs. ***LOOSE SHARPS ARE NOT ACCEPTED.***

I LOVE A CLEAN SAN DIEGO

Volunteers are instrumental in the I Love A Clean San Diego (ILACSD) mission by helping them to raise public awareness throughout the community and to protect and enhance the environment.

Each year, more than 30,000 volunteers are active in ILACSD's volunteer programs, including the following:

- Coastal and Inland Cleanups
- Creek to Bay Cleanup
- Coastal Cleanup Day
- Storm Drain Stenciling
- Adopt-A-Beach
- Non-Native Plant Removal
- Student Internships
- Office Support
- Community Outreach & Booth Events
- Recycling Events & Outreach Programs
- Corporate Teambuilding Events
- Coastal and Inland Cleanups

For more information about ILACSD's many programs call (619) 291-0103.

ILACSD's Community Events Department coordinates **monthly cleanup events** both on the coast as well as in local creek beds, canyons, open space parks and everywhere in between. Volunteers see first-hand how trash makes its way from inland communities all the way to the coast through San Diego County's vast watershed system.

Creek to Bay & Coastal Cleanup Day: Volunteers gather In April and September at more than 75 cleanup sites countywide to remove trash and beautify the local community. **The 2012 Lemon Grove cleanup site will be at San Miguel and Federal Boulevard on April 28 from 9:00 a.m. to Noon. Please register online at www.creektobay.org so that adequate volunteer supplies will be at the site for the cleanup.** ***Need more information?*** **Call Natalie Roberts at (619) 704-2778 or nroberts@cleansd.org.**

Storm Drain Stenciling: Volunteers use paint and stencils to create the message "NO DUMPING" on sidewalks, parking lots and any other places with storm drain inlets. See their Storm Drain Stenciling page for more information about how you can get involved in preventing pollution.

Adopt-A-Beach: Part of the statewide Adopt-A-Beach program, this program is great for groups who want to participate in volunteer work on an ongoing basis. It requires that you perform at least three cleanups per year. While the name suggests that only beaches are available for adoption, there are also a number of inland locations that need cleaning up. Visit the Adopt-A-Beach website to learn more about adopting a local beach or inland area.

Corporate Teambuilding: I Love A Clean San Diego assists local businesses to coordinate team building cleanups at local beaches & inland areas. For a small fee, ILACSD provides event planning, coordination, marketing and supplies to coordinate a cleanup for your business. Contact Director of Community Events, Natalie Roberts by phone at (619) 704.2773 or email nroberts@cleansd.org.

I Love A Clean San Diego organizes *Cleanups throughout San Diego County.* including beach cleanups and inland cleanups at parks, lakes, and other recreation areas that are littered with debris. These cleanups are open to the public, and volunteers of all ages are encouraged to participate.

For a current listing of events, please visit the event Calendar.

Environmental

HOUSEHOLD HAZARDOUS WASTE RECYCLING

FREE!

By appointment only, City residents may drop-off Household Hazardous Waste (HHW) on selected dates at **EDCO's La Mesa Station**.

It's easy to dispose of HHW safely...

Call (**619**) **287-5696**, ext. **4270**, to make an appointment for an upcoming drop-off event. You may also request an appointment via email at ***lmhhw@edcodisposal.com***. Be sure to include your name, address, and daytime telephone number.

Home Pickup Program—Only seniors (65+) and disabled residents are eligible to participate in the HHW/Electronic Waste Home Pickup Program. (619) 287-5696, ext. 4270.

It is illegal to dispose of hazardous materials such as these in the trash!

HOUSEHOLD	YARD AND GARDEN	GARAGE
All Purpose Cleaners	Lighter Fluid	Motor Oil and Filters
Ammonia, Disinfectants	Pesticides	Car Batteries, Gear Oil
Drain Cleaners, Polishes	Paints, Stains, Thinners	Transmission Fluid
Fluorescent Light Bulbs	Pool Chemicals	Antifreeze, Gasoline
Household Batteries	Fertilizers	Glues, Adhesives

FREE E-WASTE RECYCLING for Residents AND Businesses

EDCO Disposal
6700 Federal Boulevard
(619) 287-7555
8:00 a.m.—4:00 p.m.
No appointment required

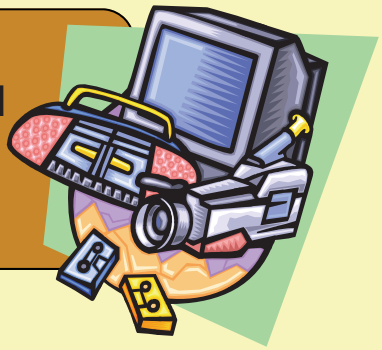

Items Accepted:

***Appliances
Batteries
Camcorders
Car batteries
CD players
Cell phones
Computers
Copiers
DVD players
Electric typewriters
Fax machines
Hard drives
Laptops
Modems
Monitors
Pagers and PDA's
PC boards
Personal computers
Phone systems
Printers
Radios
Remote controls
Scanners
Servers
Stereos
Tape players
Telephones
Televisions
Testing equipment
Transparency markers
Two-way radios
Typewriters
UPS's
VCR's
Word processors

$27 fee.

HANDY INFORMATION

CITY HALL
Mayor & City Council.....825-3800
City Manager, Finance 825-3800
Planning/Building 825-3805
Public Works/Engineering.....825-3810

CITY HOTLINES
Jobline 825-3813
Code Enforcement 825-3807
Graffiti 825-3813
Stormdrain.....825-3827
Please report illegal dumping (paint, chemicals, etc.) into the City's stormdrain system.
http://www.ci.lemon-grove.ca.us/stormwater

FIRE DEPARTMENT
7853 Central Avenue
Business (non-emergency) 825-3835
Emergency 911
http://www.ci.lemon-grove.ca.us/fire

SHERIFF DEPARTMENT
3240 Main Street
Business (non-emergency) 337-2000
Emergency 911
http://www.sdsheriff.net/index.html

ANIMAL CONTROL
General info 691-5123
Report animal concerns 476-2476

OTHER...

La Mesa Swimming Pool Info.....698-2502
Historical Society.....460-4353
Library 463-9819
Senior Center 337-1425

MEETINGS...

CITY COUNCIL
1st and 3rd Tuesday of each month, 6:00 p.m. at the Community Center, 3146 School Lane.

PLANNING COMMISSION
4th Monday of each month, 6:30 p.m. at the Community Center, 3146 School Lane.

2-1-1 Non-Emergency Hotline 211
1000's of community resources with a single call
http://www.211sandiego.org/

5-1-1 Traffic, Transit, & Travel Information 511
http://www.511sd.com/

Bus-Metropolitan Transit System (MTS) 233-3004
1255 Imperial Ave
San Diego, CA 92101-7490
http://www.transit.511sd.com/

California Highway Patrol
1722 East Main St
El Cajon, CA 92020
Business (non-emergency)..... 401-2000
Emergency..... 911
http://www.chp.ca.gov/

Crime Stoppers 1-888-580-TIPS (8477)
PO Box 600726
San Diego, CA 92160
http://www.sdcrimestoppers.com/

EDCO Disposal Corp 287-7555
Trash/Recycling Services
6670 Federal Blvd
Lemon Grove, CA 91945
http://www.edcodisposal.com/

Friends of the Library..... 962-6688
Bookstore at Lemon Grove Library
8073 Broadway
Lemon Grove, CA 91945

Lemon Grove School District 825-5600
8025 Lincoln St
Lemon Grove, CA 91945
http://lemongroveschools1.net/lgsd/site/default.asp

Poison Control Center-San Diego area 1-800-222-1222
UC San Diego Medical Center
200 West Arbor Drive
San Diego, CA 92103
http://www.calpoison.com/

Senior Resource Center..... 740-4214
Referrals, health appraisals, Project Care, Vial of Life
Sharp Grossmont Hospital
9000 Wakarusa St
La Mesa, CA 91942
http://www.sharp.com/seniors/index.cfm

WEB-EXTRAS!

- Code Enforcement Administrative Citation Procedures
- Community Services
- Youth Activities
- Facility Rental Information and Application
- Why Spay or Neuter Your Pets?

CITY OF LEMON GROVE

FY 2011-12

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

APPENDICES

Appendix A.1
Inventory of Completed Development Projects with Approved Treatment Control BMPs

No.	Project Name	Project Address	Development Type	BMPs	HSA	Fiscal Year Completed	TTWQ
1	DCH HONDA	3615 LEMON GROVE AVE.	Commercial	Underground storage treatment facility, filter inserts, grassy swale	908.22	2007	High
2	CITRON COURT	7385 BROADWAY	Residential	LID	908.22	2008	Low
3	CHEVRON	7209 BROADWAY	Commercial	South Poway Business Park detention basin, catch basin inserts	908.22	2005	Medium
4	MARY PAT LANE	MARY PAT LANE	Residential	Sand filter, catch basin insert, roof downspout filters	909.12	2006	Medium
5	EDCO	6670 FEDERAL BLVD	Commercial	Vegetated swales, catch basin insert	908.22	1990	High

Appendix A.2
FY 2011-12 Construction Inventory

#	Project	Location	HSA	TTWQ	Rainy Season		Dry Season Number of Site Visits/ Visual Inspections	Total Site Visits/ Visual Inspections
					Weeks Active	Number of Site Visits/ Visual Inspections		
Private Developments								
1	Citronica*	7775 North Avenue	908.22	M	16	16	9	25
2	Happy Tinnie LLC	2889 Orange Place	908.22	L	11	11	13	24
3	Lemon Grove Comm. Church*	3132 Main Street	908.22	M	23	23	10	33
4	Walgreens*	7195 Broadway Avenue	908.22	M	24	24	9	33
5	Kroger Foods Gas Station Improvements	7428 Broadway Avenue	908.22	L	20	20	13	33
Capital Improvements (CIP)								
6	2011 CIP Street Rehab	Various	908.22 909.12	L	0	0	3	3
7	Ida Street Drainage Improvements	Ida Street & New Jersey Avenue	908.22	L	0	0	12	12
8	Federal Blvd. Sewer	Federal Boulevard	908.22	L	0	0	2	2

Note: The following three projects designated as medium priority included filling out the City's construction stormwater compliance inspection form. Citronica had an inspection form filled out for the months of January, February, March and April. Both Lemon Grove Community Church and Walgreens had inspection forms filled out monthly during the rainy season from October 2011 through April 2012. All other inspections noted in the table were visual inspections with some notes on BMP observations documented in the engineering inspector's journal.

Appendix A.3
FY 2011-12 Municipal Inventory

#	Facility Name	Facility Address	Watershed	TTWQ	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
1	Berry Street Park	7101 Mount Vernon Street	Chollas Creek	High	Recreational Park with Open Field	UL*	UL	UL*	L	L	L	L	L	PO	X
2	Civic Center Park	7715 Church Street	Chollas Creek	High	Recreation, Museum, and Historic Site	UL*	UL	UL*	L	L	L	L	L	PO	X
3	City Hall/Sheriff's Station	3232 Main Street/3240 Main Street	Chollas Creek	High	Administration and Public Safety and Jail	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
4	Community Center	3146 School Lane	Sweetwater River	High	Public Service	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
5	City Hall Annex	7853 Olive Street	Chollas Creek	High	Administrative Recreational Facility	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
6	Emergency Vehicle Maintenance	Throughout City	Chollas Creek/ Sweetwater River	High	Mobile Municipal Activities	PO	PO	PO	PO	UL	UL	UL	PO	UL	
7	Fire Fighter's Park/Skate Park	School Lane and Central Avenue	Sweetwater River	High	Recreational Park, Skate Park and Open Field	UL*	UL	UL*	L	L	L	L	L	PO	X
8	Kunkel Park	8171 Lemon Grove Way	Sweetwater River	High	Recreational Park	UL*	UL	UL*	L	L	L	L	L	PO	X
9	Landscape Maintenance	Throughout City	Chollas Creek/ Sweetwater River	High	Mobile Municipal Activities	PO	PO	PO	PO	UL	UL	UL	PO	UL	
10	Lemon Grove Fire Station	7853 Central Avenue	Sweetwater River	High	Fire and Safety	PO	PO	PO	PO	UL	UL	UL	PO	PO	
11	Lemon Grove Park	Washington and Alton	Sweetwater River	High	Recreational Park	UL*	UL	UL*	L	L	L	L	L	PO	X
12	Mesa Valley Grove Senior Center	8235 Mount Vernon Street	Sweetwater River	High	Recreation, Nutrition, and Education	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	
13	Lemon Grove Little League Fields	Nichols and Glencoe	Sweetwater River	High	Recreational Park	UL*	UL	UL*	L	L	L	L	L	PO	X
14	MS4	Throughout City	Chollas Creek/ Sweetwater River	High	MS4	UL	UL	UL	PO**	UL	UL	PO**	PO**	UL	
15	Power Washing	Throughout City	Chollas Creek/ Sweetwater River	High	Mobile Municipal Activities	PO	PO	PO	PO	UL	UL	UL	PO	UL	
16	Public Works Yard	2873 Skyline Drive	Sweetwater River	High	Equipment Storage and Maintenance	L	PO	L	L	PO	PO	PO	PO	PO	X
17	Recreation Center	3131 School Lane	Sweetwater River	High	Recreational Facility	UL*	UL	UL*	L	L	L	L	L	PO	X
18	Roads, Streets, and Parking Facilities	Throughout City	Chollas Creek/ Sweetwater River	High	Roads, Streets, and Parking Facilities	L	L	L	L	UL	UL	UL	PO	L	X
19	Sanitary Sewer System	Throughout City	Chollas Creek/ Sweetwater River	High	Sanitary Sewer System, Including Sewage Pump Stations	PO***	UL	PO***	UL	UL	PO***	PO***	PO***	UL	
20	Special Events	Throughout City	Chollas Creek/ Sweetwater River	High	Special Events	UL	UL	UL	UL	UL	UL	PO	PO	L	
21	Street and Sidewalk Repair	Throughout City	Chollas Creek/ Sweetwater River	High	Mobile Municipal Activities	PO	PO	PO	PO	UL	UL	UL	PO	UL	
22	Trolley Depot	3443 Main Street	Chollas Creek	High	Office Space	UL*	PO	UL*	PO	PO	PO	PO	PO	PO	

Appendix A.3 (Continued)
Municipal Inventory

Notes

TTWQ – Threat to Water Quality

Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water.

L = Likely, PO = Possible, UL= Unlikely

* Discharge of heavy metals and oil and grease is possible if the facility has on-site parking

** Sediment and oxygen demanding substances are possible pollutants for earthen or natural conveyances. Bacteria, but generally not viruses and other pathogens, may regrow in MS4s under certain conditions. While other pollutants may be discharged from the MS4, the MS4 itself is not a direct source of those pollutants.

*** The sanitary sewer system is only a potential source of pollutants in the event of sewer line breaks or SSOs.

Appendix A.4
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
1	La Dolce Vita Enterprises	1445 Skyline Drive	2844	High	Industrial	909.12	Perfumes, Natural	UL	PO	PO	PO	UL	UL	PO	UL	PO	
2	Water 4 U	7121 Broadway	2899	High	Industrial	908.22	Chemicals	UL	PO	PO	PO	PO	UL	PO	UL	PO	
3	La Mesa Glass Incorporated	6691 Federal Boulevard	3211	High	Industrial	908.22	Window Glass	UL	UL	UL	L	UL	UL	PO	UL	PO	X
4	Shipler Ceramic Tile, Inc	7965 North Ave	3253	High	Industrial	908.22	Ceramic Tile, Floor	UL	UL	UL	L	UL	UL	PO	UL	PO	X
5	EDCO Disposal Corporation	6670 Federal Boulevard	4953	High	Industrial	908.22	Refuse System	PO	PO	PO	L	UL	PO	L	L	L	X
6	Culligan Water Conditioning	3515 Olive Street	2086	Medium	Industrial	909.12	Bottled And Canned Soft	UL	UL	PO	PO	UL	UL	PO	PO	PO	
7	Rios Graphics	6996 Broadway #B	2396	Medium	Industrial	908.22	Silk Screening On Fabric	UL	UL	UL	PO	UL	UL	PO	PO	PO	
8	Dutch Masters Cabinets	6420 Federal Boulevard #G	2434	Medium	Industrial	908.22	Wood Kitchen Cabinets	UL	UL	UL	PO	UL	UL	PO	PO	PO	
9	Farada Cabinet & Stone Co. Inc	7553 Broadway	2434	Medium	Industrial	908.22	Wood Kitchen Cabinets	UL	UL	UL	PO	UL	UL	PO	PO	PO	
10	Jon Krause Contractor	6420 Federal Boulevard #E	2434	Medium	Industrial	908.22	Cabinets, Wood	UL	UL	UL	PO	UL	UL	PO	PO	PO	
11	Laguna Woodworks	6420 Federal Boulevard # G	2434	Medium	Industrial	908.22	Wood Kitchen Cabinets	UL	UL	UL	PO	UL	UL	PO	PO	PO	
12	Leoadri Inc, Dba Precision	6588 Federal Boulevard #B	2434	Medium	Industrial	908.22	Cabinets, Wood	UL	UL	UL	PO	UL	UL	PO	PO	PO	
13	House 2 Home Furniture	7959 Broadway	2519	Medium	Industrial	909.12	Household Furniture	UL	UL	UL	PO	UL	UL	PO	PO	PO	
14	Jacks Cocktail & Tavern Supply	6302 Federal Boulevard	2599	Medium	Industrial	908.22	Restaurant Furniture	UL	UL	UL	PO	UL	UL	PO	PO	PO	
15	The Hanigan Company	7733 Palm St #103	2732	Medium	Industrial	909.12	Books: Printing Printing	PO	PO	UL	PO	UL	UL	PO	PO	PO	
16	Custom Auto Wrap	6969 North Avenue	2752	Medium	Industrial	908.22	Transfers, Decalcomania	PO	PO	UL	PO	UL	UL	PO	PO	PO	
17	Uhde Embossing Company	7704 North Ave	2759	Medium	Industrial	908.22	Embossing On Paper	PO	PO	UL	PO	UL	UL	PO	PO	PO	
18	Sercal	3540 Harris St	3172	Medium	Industrial	908.22	Personal Leather Goods	UL	UL	UL	PO	UL	UL	PO	PO	PO	
19	A Aaron Lock & Key	3027 Lemon Grove Avenue	3429	Medium	Industrial	909.12	Hardware, Not Elsewhere	PO	UL	PO	PO	UL	UL	PO	UL	PO	
20	JCI Metal Products	6540 Federal Boulevard	3444	Medium	Industrial	908.22	Sheet Metalwork	L	UL	PO	PO	UL	UL	PO	UL	PO	X
21	Center Metal Products	7967 Lemon Grove Way	3444	Medium	Industrial	909.12	Sheet Metalwork	L	UL	PO	PO	UL	UL	PO	UL	PO	X

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
22	Lemon Grove Iron Works	7272 Broadway	3449	Medium	Industrial	908.22	Bars, Concrete Reinforcing	L	UL	UL	PO	UL	UL	PO	UL	PO	X
23	Republic Brass Sales Inc	6566 Federal Blvd	3449	Medium	Industrial	908.22	Misc. Structural (Metal)	L	UL	UL	PO	UL	UL	PO	UL	PO	X
24	Custom Wire Products	7580 North Avenue	3499	Medium	Industrial	908.22	Fabricated Metal Products	L	UL	PO	PO	UL	UL	PO	UL	PO	X
25	Ancar International Inc	7890 Lester Avenue	3499	Medium	Industrial	909.12	Fabricated Metal Products	L	UL	PO	PO	UL	UL	PO	UL	PO	X
26	Micro Tool & Mfg Inc	6494 Federal Blvd	3542	Medium	Industrial	908.22	Machine Tools, Metal	PO	UL	PO	PO	UL	UL	PO	UL	PO	
27	Cochran & Company	3774 Grove Street #C	3545	Medium	Industrial	909.12	Tools And Accessories	PO	UL	PO	PO	UL	UL	PO	UL	PO	
28	Doug Miller Cabinetry	6580 Federal Boulevard #C	3553	Medium	Industrial	908.22	Cabinet Maker Machinery	PO	UL	PO	PO	UL	UL	PO	UL	PO	
29	Lenco Equipment Co Inc	6470 Federal Boulevard	3569	Medium	Industrial	908.22	General Industrial	PO	PO	PO	PO	UL	UL	PO	UL	PO	
30	Coin Laundry Thompson	7143 Broadway	3582	Medium	Industrial	908.22	Commercial Laundry	PO	PO	PO	PO	UL	UL	PO	UL	PO	
31	Clean Express	6935 Federal Boulevard	3633	Medium	Industrial	908.22	Drycleaning And Laundry	PO	UL	PO	PO	UL	UL	PO	UL	PO	
32	T J Alterations & Dry Cleaner	7918 Broadway Ste A	3633	Medium	Industrial	909.12	Drycleaning And Laundry	PO	UL	PO	PO	UL	UL	PO	UL	PO	
33	S H P Wireless, Inc. Dba	7396 Broadway	3663	Medium	Industrial	908.22	Mobile Communications	PO	UL	PO	PO	UL	UL	PO	UL	PO	
34	Terald Graves	3774 Grove St #K4	3711	Medium	Industrial	909.12	Cars, Electric-Highway	PO	PO	PO	PO	UL	UL	PO	UL	PO	
35	San Diego Home Care Supplies	7846-48 Broadway	3845	Medium	Industrial	909.12	Electromedical	PO	UL	PO	PO	UL	UL	PO	UL	PO	
36	My Dolly's Bebe	7838 Lester Ave	3942	Medium	Industrial	909.12	Dolls And Stuffed Toys	PO	PO	PO	PO	UL	UL	PO	UL	PO	
37	West World Company	6420 Federal Blvd #F	3999	Medium	Industrial	908.22	Manufacturing Industries	PO	PO	PO	PO	UL	UL	PO	UL	PO	
38	Max Laufer Inc. Dba Maxcare	7614 Lemon Avenue #A	4119	Medium	Industrial	908.22	Ambulance Service, Road	L	PO	L	PO	UL	UL	PO	UL	PO	X
39	Kohl's Department Stores - Storage	7648 Lemon Avenue	4225	Medium	Industrial	908.22	General Warehousing	UL	UL	PO	PO	UL	UL	PO	PO	PO	
40	So Cal Bingo Service, L L C	7764 North Ave	4225	Medium	Industrial	908.22	General Warehousing	UL	UL	PO	PO	UL	UL	PO	PO	PO	
41	Solidarity Storing Company	6448 Federal Blvd	4225	Medium	Industrial	908.22	Warehousing, Self-storage	UL	UL	PO	PO	UL	UL	PO	PO	PO	
42	Personal Space Mini Storage,LLC	8409 Broadway	4225	Medium	Industrial	909.12	General Warehousing	UL	UL	PO	PO	UL	UL	PO	PO	PO	
43	Extra Storage	2305 Lemon Grove Avenue	4226	Medium	Industrial	909.12	Special Warehousing	UL	UL	PO	PO	UL	UL	PO	PO	PO	

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
44	Bald Eagle Enterprises, Inc Dba	6500 Federal Boulevard	4783	Low	Industrial	908.22	Packing And Crating	UL	UL	PO	PO	UL	UL	PO	UL	PO	X
45	S D R Buyback Center	6670 Federal Blvd	4959	Low	Industrial	908.22	Sanitary Services	PO	PO	PO	PO	PO	PO	PO	PO	PO	
46	Aero Patio Home Improvement Inc	3564 Harris Street	1521	High	Commercial	908.22	Residential Construction	PO	PO	PO	PO	UL	UL	PO	UL	PO	
47	R A D Construction Inc	3479 Citrus St Ste A	1521	High	Commercial	908.22	General Contractor	PO	PO	PO	PO	UL	UL	PO	UL	PO	
48	Ted S Merrill & Sons Inc	7907 North Ave	1521	High	Commercial	908.22	General Contractor	PO	PO	PO	PO	UL	UL	PO	UL	PO	
49	Scott Andrews Construction Inc.	7973-7977 North Ave	1522	High	Commercial	908.22	Remodeling Buildings,	PO	PO	PO	PO	UL	UL	PO	UL	PO	
50	Harvest Construction	3444 Harris Street B	1542	High	Commercial	908.22	General Contractor	PO	PO	PO	PO	UL	UL	PO	UL	PO	
51	Rockscapes Unlimited	7642 North Ave	1741	High	Commercial	908.22	Stone Setting-contractors	UL	UL	PO	L	UL	UL	PO	UL	PO	X
52	Ray Plastering	8307 Broadway Lane	1742	High	Commercial	909.12	Plastering, Plain	UL	UL	PO	L	UL	UL	PO	UL	PO	X
53	Simpson Art Tile	7657 North Ave	1743	High	Commercial	908.22	Terrazzo, Tile, Marble	UL	UL	PO	L	UL	UL	PO	UL	PO	X
54	Lemon Grove Sheet Metal Works	3485 Olive Street	1761	High	Commercial	908.22	Roofing, Siding, And Sheet	L	PO	PO	PO	UL	UL	PO	UL	PO	X
55	CPE Construction, Inc	7371 North Avenue	1771	High	Commercial	908.22	Concrete	UL	UL	PO	L	UL	UL	PO	UL	PO	X
56	John Tessitore Concrete Inc	3529 Harris Street	1771	High	Commercial	908.22	Concrete Work	UL	UL	PO	L	UL	UL	PO	UL	PO	X
57	MAC Plastering, Inc	3494 Citrus Street	1771	High	Commercial	908.22	Stucco	UL	UL	PO	L	UL	UL	PO	UL	PO	X
58	Portillo Concrete, Inc	3527 Citrus St	1771	High	Commercial	908.22	Concrete Work: Private	UL	UL	PO	L	UL	UL	PO	UL	PO	X
59	Rock Enterprises Construction	7645 Lemon Ave	1771	High	Commercial	908.22	Concrete Work	UL	UL	PO	L	UL	UL	PO	UL	PO	X
60	AWT, Inc/Applied Restoration	3562 Grove Street	1771	High	Commercial	909.12	Concrete	UL	UL	PO	L	UL	UL	PO	UL	PO	X
61	Wessels & Ghianni Concrete, Inc	7984 Lester Ave	1771	High	Commercial	909.12	Concrete	UL	UL	PO	L	UL	UL	PO	UL	PO	X
62	Classic Sheet Metal	3463 Citrus Street	1799	High	Commercial	908.22	Special Trade Contractors	L	PO	PO	PO	UL	UL	PO	UL	PO	X
63	Legen Fence Corp	3559 Vista Avenue	1799	High	Commercial	908.22	Fence	PO	PO	PO	PO	UL	UL	PO	UL	PO	
64	Vegas Fence Company	3494 Harris St	1799	High	Commercial	908.22	Fence	PO	PO	PO	PO	UL	UL	PO	UL	PO	

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
65	R D W Motors	6935 North Ave	5012	High	Commercial	908.22	Automobiles\wholesale	L	L	L	L	UL	UL	PO	UL	PO	X
66	Beulema's Inc DBA	7473 Broadway	5013	High	Commercial	908.22	Automotive	PO	UL	PO	PO	UL	UL	PO	UL	PO	
67	Precision Towing 2 Inc	3511 Citrus Ave	5013	High	Commercial	908.22	Automobile Service Station	PO	UL	PO	PO	UL	UL	PO	UL	PO	
68	Big Boyz Tires	7841 North Avenue	5014	High	Commercial	908.22	Tires and Tubes	PO	UL	PO	PO	UL	UL	PO	UL	PO	
69	O H L Tire Shop	3575 Buena Vista Ave	5014	High	Commercial	908.22	Tires, Used-wholesale	PO	UL	PO	PO	UL	UL	PO	UL	PO	
70	American Mill/Murray Greengrass	6420 & 6530 Federal Blvd	5031	High	Commercial	908.22	Kitchen Cabinets	UL	UL	UL	PO	UL	UL	PO	PO	PO	
71	Yellow Pine Corp	7636 North Ave #A-2	5051	High	Commercial	908.22	Nails\wholesale	L	UL	PO	PO	UL	UL	PO	UL	PO	X
72	My Family Nutrition	6963 Broadway	5141	High	Commercial	908.22	Groceries, General Line	UL	UL	PO	PO	UL	UL	PO	L	PO	X
73	99 Cents Only Store #91	3275 Lemon Grove Avenue	5149	High	Commercial	909.12	Groceries and Related	UL	UL	PO	PO	UL	UL	PO	L	PO	X
74	Dave's Family Store	7865 Broadway	5149	High	Commercial	909.12	Pet Food/Wholesale	UL	UL	PO	PO	UL	UL	PO	L	PO	X
75	Thompson Building Material	6636 Federal Blvd	5211	High	Commercial	908.22	Lumber, Other Building	PO	UL	PO	L	PO	PO	PO	UL	L	X
76	R C P Block & Brick Inc	8240 Broadway	5211	High	Commercial	909.12	Concrete, Cinder Block	PO	UL	PO	L	PO	PO	PO	UL	L	X
77	The Home Depot #0659	7530 Broadway	5251	High	Commercial	908.22	Hardware Stores	PO	PO	L	L	L	L	PO	L	L	X
78	Hunter's Nursery Inc	3110 Sweetwater Road	5261	High	Commercial	909.12	Retail Nurseries, Lawn	UL	PO	UL	L	L	L	PO	L	PO	X
79	7-Eleven #24013	7607 Broadway	5411	High	Commercial	908.22	Convenience Food	PO	PO	PO	PO	UL	UL	PO	L	PO	X
80	Al Barawi Halal Meat Market	7328 Broadway	5411	High	Commercial	908.22	Food Markets/retail	PO	PO	PO	PO	UL	UL	PO	L	PO	X
81	Albertsons #6707	7090 Broadway	5411	High	Commercial	908.22	Grocery Stores	PO	PO	PO	PO	UL	UL	PO	L	PO	X
82	Food 4 Less 318	7420 Broadway	5411	High	Commercial	908.22	Grocery Stores	PO	PO	PO	PO	UL	UL	PO	L	PO	X
83	Mama's Nutrition	6939 Federal Boulevard	5411	High	Commercial	908.22	Grocery Stores	PO	PO	PO	PO	UL	UL	PO	L	PO	X
84	Smart & Final Store 466	7117 Broadway	5411	High	Commercial	908.22	Grocery Stores	PO	PO	PO	PO	UL	UL	PO	L	PO	X
85	7-Eleven Store #17450 C	7733 Palm Avenue #111	5411	High	Commercial	909.12	Convenience Food	PO	PO	PO	PO	UL	UL	PO	L	PO	X
86	Keg & Bottle	1827-29 Massachusetts Ave	5411	High	Commercial	909.12	Convenience Food	PO	PO	PO	PO	UL	UL	PO	L	PO	X

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
87	Skyline Farm Market	1505 Skyline Dr	5411	High	Commercial	909.12	Grocery Stores	PO	PO	PO	PO	UL	UL	PO	L	PO	X
88	Sprouts Farmers Market	3205 Lemon Grove Ave	5411	High	Commercial	909.12	Grocery Stores	PO	PO	PO	PO	UL	UL	PO	L	PO	X
89	Cheran Market	7968 Broadway	5421	High	Commercial	909.12	Meat Markets/retail	PO	PO	PO	PO	UL	UL	PO	L	PO	X
90	Don's Farmers Market, Inc	7155 Broadway	5431	High	Commercial	908.22	Food Markets/retail	PO	PO	PO	PO	UL	UL	PO	L	PO	X
91	Lemon Grove Ice Cream Parlor	7963 Broadway	5451	High	Commercial	909.12	Ice Cream (packaged)	PO	PO	PO	PO	UL	UL	PO	L	PO	X
92	Yum Yum Donut #518	6998 Federal Blvd	5461	High	Commercial	908.22	Donut Shops/Retail	PO	PO	PO	PO	UL	UL	PO	L	PO	X
93	Dream World Enterprises, Inc	7977 Broadway	5499	High	Commercial	909.12	Miscellaneous Food Stores	PO	PO	PO	PO	UL	UL	PO	L	PO	X
94	Bob Baker Toyota - Scion	6800 Federal Boulevard	5511	High	Commercial	908.22	Auto Dealers (new)	L	L	L	L	UL	UL	PO	UL	PO	X
95	Bob Baker Toyota/Scion	6820 Federal Boulevard	5511	High	Commercial	908.22	Automobiles, New	L	L	L	L	UL	UL	PO	UL	PO	X
96	DCH Honda of Lemon Grove	3611-15 Lemon Grove Ave	5511	High	Commercial	909.12	Cars, New And Used/retail	L	L	L	L	UL	UL	PO	UL	PO	X
97	Discount Auto Wholesale	7316 Broadway	5521	High	Commercial	908.22	Automobiles, Used Cars	L	L	L	L	UL	UL	PO	UL	PO	X
98	Lomag Corp Dba Ivan's Trucks	6933 North Avenue	5521	High	Commercial	908.22	Used Car Dealer, Retail	L	L	L	L	UL	UL	PO	UL	PO	X
99	San Diego Motors	7593 Broadway	5521	High	Commercial	908.22	Automobiles, Used Cars	L	L	L	L	UL	UL	PO	UL	PO	X
100	Alkass Enterprises, Inc Dba Auto	8141 Broadway	5521	High	Commercial	909.12	Automobiles, Used Cars	L	L	L	L	UL	UL	PO	UL	PO	X
101	Solar Automotive Sales	8215 Broadway	5521	High	Commercial	909.12	Automobiles, Used Cars	L	L	L	L	UL	UL	PO	UL	PO	X
102	T N T Auto Sales	8247 Broadway	5521	High	Commercial	909.12	Automobiles, Used Cars	L	L	L	L	UL	UL	PO	UL	PO	X
103	Best tire Buy	3536 Olive Street	5531	High	Commercial	908.22	Tire Dealers	PO	UL	PO	PO	UL	UL	PO	UL	PO	
104	Buena Vista Tire Shop	3475 Buena Vista Avenue	5531	High	Commercial	908.22	Tire Dealers	PO	UL	PO	PO	UL	UL	PO	UL	PO	
105	Evans Tire #079	7285 Broadway	5531	High	Commercial	908.22	Auto Home Supply Stores	PO	UL	PO	PO	UL	UL	PO	UL	PO	
106	So Cal Discount Tire., Inc	6883 Federal Blvd	5531	High	Commercial	908.22	Tire Dealers,	PO	UL	PO	PO	UL	UL	PO	UL	PO	
107	Darryl Smith Sand Tires	8161 Broadway	5531	High	Commercial	909.12	Tire Dealers	PO	UL	PO	PO	UL	UL	PO	UL	PO	
108	Abusham Petro/Federal ARCO	6901 Federal Boulevard	5541	High	Commercial	908.22	Gasoline Service Stations	L	L	L	PO	UL	UL	PO	UL	PO	X

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
109	B&R Cycle	7637 North Avenue	5571	High	Commercial	908.22	Motorcycle Dealers	L	L	L	L	UL	UL	PO	UL	PO	X
110	Motorcycle City	7302 Broadway	5571	High	Commercial	908.22	Motorcycle Dealers	L	L	L	L	UL	UL	PO	UL	PO	X
111	Vey's Powersports, Inc	7343-45 Broadway	5571	High	Commercial	908.22	Motorcycle Dealers Retail	L	L	L	L	UL	UL	PO	UL	PO	X
112	San West, Inc	2741 Lemon Grove #102	5571	High	Commercial	909.12	Motor Scooters Retail	L	L	L	L	UL	UL	PO	UL	PO	X
113	AJG Investments, Inc.	6935 North Avenue Suite B	5599	High	Commercial	908.22	Automotive Dealers	L	L	L	L	UL	UL	PO	UL	PO	X
114	Burger King 910	6960 Broadway	5812	High	Commercial	908.22	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
115	Carl's Jr #1101043	7162 Broadway	5812	High	Commercial	908.22	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
116	Cotija Taco Shop 6	7695 Broadway	5812	High	Commercial	908.22	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
117	Del Taco LLC #956	7060 Broadway	5812	High	Commercial	908.22	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
118	El Pollo Loco	7087 Broadway	5812	High	Commercial	908.22	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
119	Elite Buffet	7014 Broadway	5812	High	Commercial	908.22	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
120	First Chinese Express, Inc	7125 Broadway	5812	High	Commercial	908.22	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
121	Fresh Concept Sd -Subway #3061	6971 Broadway	5812	High	Commercial	908.22	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
122	Fresh Concept Subway #47113	7582 Broadway	5812	High	Commercial	908.22	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
123	Grove Grinder	3345 Olive Street	5812	High	Commercial	908.22	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
124	In N Out Burger 57	7160 Broadway	5812	High	Commercial	908.22	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
125	Jack In The Box 3004	7015 Broadway	5812	High	Commercial	908.22	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
126	KFC - Lemon Grove	7012 Broadway	5812	High	Commercial	908.22	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
127	King Burrito	6929 Federal Boulevard	5812	High	Commercial	908.22	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
128	Lemon Grove Boll Weevil	6966 Federal Boulevard	5812	High	Commercial	908.22	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
129	Lido's Italian Foods	7252 Broadway	5812	High	Commercial	908.22	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
130	Marisco Negro Durazo	6954 Federal Boulevard	5812	High	Commercial	908.22	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
131	McDonalds 3556	7164 Broadway	5812	High	Commercial	908.22	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
132	Rojelio's Taco Shop	6914 Federal Blvd	5812	High	Commercial	908.22	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
133	Sabor Mexican Grill	7123 Broadway	5812	High	Commercial	908.22	Restaurants, Carry-out	UL	UL	L	PO	UL	UL	L	L	L	X
134	Sushi Time	6950 Federal Blvd	5812	High	Commercial	908.22	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
135	Taco Bell #24593	7232 Broadway	5812	High	Commercial	908.22	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
136	Taste Of Polynesian	6937 Federal Blvd	5812	High	Commercial	908.22	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
137	Wing Stop	6969 Broadway	5812	High	Commercial	908.22	Carry-out Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
138	Anna's The Family Restaurant	8099 Broadway	5812	High	Commercial	909.12	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
139	Antique Row Café	3521 Lemon Grove Avenue	5812	High	Commercial	909.12	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
140	Barnes Bar B Que	7820 Broadway	5812	High	Commercial	909.12	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
141	Carnitas El Botanero	8035 Broadway	5812	High	Commercial	909.12	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
142	Charley's Famous Hamburgers	8213 Broadway	5812	High	Commercial	909.12	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
143	Chef John's Fish & Chips	8047 Broadway	5812	High	Commercial	909.12	Carry-out Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
144	Coop's West Texas BBQ	2625 Lemon Grove Avenue	5812	High	Commercial	909.12	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
145	Copa Cabana	7826 Broadway	5812	High	Commercial	909.12	Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
146	El Pollo Grill Products	7840 Broadway	5812	High	Commercial	909.12	Caterers	UL	UL	L	PO	UL	UL	L	L	L	X
147	El Pollo Grill, Inc	7836 Broadway	5812	High	Commercial	909.12	Carry-out Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
148	Emily Foods, Inc	2645 Lemon Grove Avenue	5812	High	Commercial	909.12	Pizzerias	UL	UL	L	PO	UL	UL	L	L	L	X
149	Food Factory	7914 Broadway	5812	High	Commercial	909.12	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
150	Fruit Mania	7941 Broadway	5812	High	Commercial	909.12	Snack Shops	UL	UL	L	PO	UL	UL	L	L	L	X
151	Jack In The Box 10	7979 Broadway	5812	High	Commercial	909.12	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
152	K.C's Chinese Food	7975 Broadway	5812	High	Commercial	909.12	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
153	Lemon Grove Deli And Grill	7860 Broadway	5812	High	Commercial	909.12	Sandwich Bars Or Shops	UL	UL	L	PO	UL	UL	L	L	L	X
154	Los Rios Mexican & Seafood	7977 Broadway #B	5812	High	Commercial	909.12	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
155	Miss Donuts	7863 Broadway	5812	High	Commercial	909.12	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
156	Nando's Taco Shop	8025 Broadway	5812	High	Commercial	909.12	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
157	Norberto & Margarita Inc,	8131 Broadway	5812	High	Commercial	909.12	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
158	Panda Restaurant	7816 Broadway	5812	High	Commercial	909.12	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
159	Papa Johns Pizza #2823	7965 Broadway	5812	High	Commercial	909.12	Pizza Parlors	UL	UL	L	PO	UL	UL	L	L	L	X
160	Pizza Hut- Summit Pizza West	8091 Broadway	5812	High	Commercial	909.12	Fast Food Restaurants	UL	UL	L	PO	UL	UL	L	L	L	X
161	Por Favor Incorporated	3307 Lemon Grove Ave	5812	High	Commercial	909.12	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
162	Rosarito's Mexican Food #7	2805 Lemon Grove Ave	5812	High	Commercial	909.12	Eating Places	UL	UL	L	PO	UL	UL	L	L	L	X
163	Starbucks Coffee #9791	7801 Broadway	5812	High	Commercial	909.12	Coffee Shops	UL	UL	L	PO	UL	UL	L	L	L	X
164	T H A Y S Dba Top Hat Catering	8053 Broadway	5812	High	Commercial	909.12	Caterers	UL	UL	L	PO	UL	UL	L	L	L	X
165	Dirk's Nite Club	7662-64 Broadway	5813	High	Commercial	908.22	Bars (Alcoholic Beverage)	UL	UL	L	PO	UL	UL	L	L	L	X
166	Good Guys Tavern	7340 Broadway	5813	High	Commercial	908.22	Taverns (Drinking Places)	UL	UL	L	PO	UL	UL	L	L	L	X
167	Grovers	3315 Buena Vista Avenue	5813	High	Commercial	908.22	Drinking Places, Alcohol	UL	UL	L	PO	UL	UL	L	L	L	X
168	Sportsman's Pub	7346-50 Broadway	5813	High	Commercial	908.22	Bars (Alcoholic Beverage	UL	UL	L	PO	UL	UL	L	L	L	X
169	M&L Professional Services, Inc	7667 North Avenue	7217	High	Commercial	908.22	Carpet Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO	
170	Thompson Carpet Cleaning Service	3774 Grove St #K3	7217	High	Commercial	909.12	Carpet Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO	
171	Aloha City Pest Control Inc	8100 Broadway	7342	High	Commercial	909.12	Pest Control in Structures	PO	PO	UL	PO	L	UL	PO	UL	PO	X
172	American Pest Control	8100 Broadway Suite #E	7342	High	Commercial	909.12	Pest Control in Structures	PO	PO	UL	PO	L	UL	PO	UL	PO	X
173	Pete Paniagua Termite Control	3736 Grove St	7342	High	Commercial	909.12	Disinfecting And Pest	PO	PO	UL	PO	L	UL	PO	UL	PO	X

Appendix A.4 (Continued)
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174	Servicemaster Absolute	6975 North Ave Ste B	7349	High	Commercial	908.22	Building Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO	
175	Innovative Home Restoration, Inc	2741 Lemon Grove Ave202C	7349	High	Commercial	909.12	Janitorial Services	UL	PO	UL	PO	UL	UL	PO	UL	PO	
176	EW Truck & Equipment Co Inc	6310-36 Federal Boulevard	7353	High	Commercial	908.22	Heavy Construction Equipment Rental	L	UL	L	PO	UL	UL	PO	UL	PO	X
177	BJ's Rentals, Inc	8121 Broadway	7353	High	Commercial	909.12	Heavy Construction Equipment Rental	L	UL	L	PO	UL	UL	PO	UL	PO	X
178	ASAP Appliance Rental Company	3631 Olive Street	7359	High	Commercial	908.22	Appliance Rental	L	UL	L	PO	UL	UL	PO	UL	PO	X
179	Courtesy Companies, Inc	7888 Broadway	7359	High	Commercial	909.12	Appliance Rental And	L	UL	L	PO	UL	UL	PO	UL	PO	X
180	Able Auto Adjusters	7636 North Avenue	7389	High	Commercial	908.22	Automobile Repossession	L	L	L	L	UL	UL	PO	UL	PO	X
181	Cherokee Auto Recovery	3494 Harris Street	7389	High	Commercial	908.22	Automobile Repossession	L	L	L	L	UL	UL	PO	UL	PO	X
182	Reliable Mobile	3774 Grove St #I	7389	High	Commercial	909.12	Drive-a-way Automobile	L	L	L	L	UL	UL	PO	UL	PO	X
183	Advanced Vet Services	7614 Lemon Avenue	7420	High	Commercial	908.22	Veterinary Services	UL	UL	UL	PO	UL	L	L	L	PO	X
184	Lemon Grove Veterinary Hospital	7572 North Avenue	7420	High	Commercial	908.22	Veterinary Services	UL	UL	UL	PO	UL	L	L	L	PO	X
185	San Diego Pet Hospital	7368 Broadway #A	7420	High	Commercial	908.22	Veterinary Services	UL	UL	UL	PO	UL	L	L	L	PO	X
186	U Haul Co Of California	1805 Massachusetts Ave	7513	High	Commercial	909.12	Truck Rental And Leasing,	L	UL	L	PO	UL	UL	PO	UL	PO	X
187	Enterprise Rent A Car Company	7370 Broadway	7514	High	Commercial	908.22	Passenger Car Retail	L	UL	L	PO	UL	UL	PO	UL	PO	X
188	Posh Poodle Dog Grooming And	7970 Broadway	7520	High	Commercial	909.12	Dog Grooming	UL	UL	UL	PO	UL	L	L	L	PO	X
189	A&C Paint & Body	7083 Broadway	7532	High	Commercial	908.22	Top, Body, and Upholstery	L	L	PO	PO	UL	UL	PO	UL	PO	X
190	Grove Auto Body, Inc	3570-3584 Olive Street	7532	High	Commercial	908.22	Automotive Body Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
191	Lemon Grove Auto Body	7666 North Avenue	7532	High	Commercial	908.22	Top, Body, And Upholstery	L	L	PO	PO	UL	UL	PO	UL	PO	X
192	Lemon Grove Auto Upholstery	7272 Broadway	7532	High	Commercial	908.22	Top, Body, And Upholstery	L	L	PO	PO	UL	UL	PO	UL	PO	X

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193	Magic Auto Body & Upholstery	7636 North Avenue B	7532	High	Commercial	908.22	Automotive Body Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
194	Sinful Enhancements	7666 Lemon Ave	7532	High	Commercial	908.22	Automotive Body Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
195	Bernie's Auto Upholstery	8373 Broadway 13	7532	High	Commercial	909.12	Top, Body, And Upholstery	L	L	PO	PO	UL	UL	PO	UL	PO	X
196	California Westys	8373 Broadway	7532	High	Commercial	909.12	Antique And Classic	L	L	PO	PO	UL	UL	PO	UL	PO	X
197	Gold Crest Collision	8373 Broadway #F	7532	High	Commercial	909.12	Automotive Body Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
198	San Diego Truck Body & Equipment,	8373 Broadway	7532	High	Commercial	909.12	Automotive Body Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
199	Speed Way Auto Body & Paint	2295 Lemon Grove Ave	7532	High	Commercial	909.12	Automotive Body Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
200	Ace Service Centers	6994 Broadway	7534	High	Commercial	908.22	Tire Repair Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
201	Nate's Transmission	7319 Broadway	7537	High	Commercial	908.22	Transmission Repair,	L	L	L	PO	UL	UL	PO	UL	PO	X
202	T&T Standard Transmissions,Inc	7586 North Ave	7537	High	Commercial	908.22	Automotive Transmission	L	L	L	PO	UL	UL	PO	UL	PO	X
203	CDO Transmission	8373 Broadway	7537	High	Commercial	909.12	Transmission Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
204	Lemon Grove Transmission, Inc	3483 Grove Street	7537	High	Commercial	909.12	Automotive Transmission	L	L	L	PO	UL	UL	PO	UL	PO	X
205	A&A Collex Experts, Inc	3463-A Harris Street	7538	High	Commercial	908.22	Automotive Repair Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
206	Bonk's Auto Repair	7620 North Avenue	7538	High	Commercial	908.22	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
207	Budget Auto Repair	7324 Broadway	7538	High	Commercial	908.22	Automotive Repair Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
208	Csk Auto Inc Dba O'Reilly Auto	6925 Federal Boulevard	7538	High	Commercial	908.22	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
209	Honest Honda & Toyota	7612 Broadway	7538	High	Commercial	908.22	Automotive Repair Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
210	Imported Car Service	7280 Broadway	7538	High	Commercial	908.22	Automotive Repair Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
211	Jim Hitt's Automotive	7644 Broadway	7538	High	Commercial	908.22	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
212	JSV Smog And Auto	3473 Buena Vista Avenue	7538	High	Commercial	908.22	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
213	LJ & Son's Automotive	7909 North Avenue	7538	High	Commercial	908.22	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
214	M&M Transmission	6998 Broadway	7538	High	Commercial	908.22	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
215	M.T. Auto Repair	7644 Broadway	7538	High	Commercial	908.22	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
216	Meineke Car Care/Econo Lube	7608 Broadway	7538	High	Commercial	908.22	Auotmotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
217	New Tek Auto Repair	7407 Broadway	7538	High	Commercial	908.22	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
218	Ochoas Auto	6996 Broadway #B	7538	High	Commercial	908.22	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
219	Pat's Auto Repair	3515 Buena Vista Ave	7538	High	Commercial	908.22	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
220	Pronto Auto Repair	3471 Harris St	7538	High	Commercial	908.22	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
221	S S Auto Repair	3575 Buena Vista Ave	7538	High	Commercial	908.22	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
222	Smog Or Tune	7644-A Broadway	7538	High	Commercial	908.22	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
223	Superior Smog And Tune	7319 Broadway	7538	High	Commercial	908.22	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
224	T B Motor Worx	3517 Buena Vista Ave	7538	High	Commercial	908.22	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
225	Tolleys Foreign Car Service	7620 North Ave	7538	High	Commercial	908.22	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
226	Trident Collision Repair Center	7315 Broadway	7538	High	Commercial	908.22	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
227	Victor Gomez Auto Repair	6306-B Federal	7538	High	Commercial	908.22	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
228	Aamco Lemon Grove	8074 Broadway	7538	High	Commercial	909.12	Automotive Repair Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
229	Amis Automotive Incorporated	3612 Grove Street	7538	High	Commercial	909.12	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
230	Don Henderson Auto Service	2835 Lemon Grove Ave A	7538	High	Commercial	909.12	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
231	Lake's Auto Repair	1505 Skyline Drive	7538	High	Commercial	909.12	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
232	Lees Automotive	8260 Broadway	7538	High	Commercial	909.12	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
233	Lemon Grove Automotive & Body	8183 Broadway	7538	High	Commercial	909.12	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
234	Lemon Grove Smog Test Only	8181 Broadway	7538	High	Commercial	909.12	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
235	Pacific Auto Body	1505 A Skyline Dr #A	7538	High	Commercial	909.12	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
236	Pickerings Friendly Auto Repr	1851 Englewood Dr	7538	High	Commercial	909.12	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
237	Pro Mex Automotive	8215 Broadway	7538	High	Commercial	909.12	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
238	S B J	8056 Broadway	7538	High	Commercial	909.12	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
239	Shift Transmissions & Auto Repair	2241 Lemon Grove Ave	7538	High	Commercial	909.12	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
240	Valley Truck & Auto	8373 Broadway	7538	High	Commercial	909.12	General Auto Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
241	A&E Broadway Smog Test Only	7407 Broadway #B	7539	High	Commercial	908.22	Automotive Repair Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
242	Broadway Auto Electric	7825 North Avenue	7539	High	Commercial	908.22	Electrical Service	L	L	L	PO	UL	UL	PO	UL	PO	X
243	Imperial Auto Electric #2	2295 Lemon Grove Avenue	7539	High	Commercial	908.22	Electrical Service	L	L	L	PO	UL	UL	PO	UL	PO	X
244	Canfield Brakes Incorporated	7817 Lemon Grove Way	7539	High	Commercial	909.12	Automotive Repair Shops	L	L	L	PO	UL	UL	PO	UL	PO	X
245	Lemon Grove Car Wash	8038 Broadway	7539	High	Commercial	909.12	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
246	Xalisco Smog Test Only	2295 Lemon Grove Ave #B	7539	High	Commercial	909.12	Automotive Repair Shops,	L	L	L	PO	UL	UL	PO	UL	PO	X
247	Dirty Harry's Car Wash	7716 Pacific Avenue	7542	High	Commercial	908.22	Carwashes	PO	L	PO	PO	UL	UL	PO	UL	PO	X
248	Pearl Car Wash Lemon GroveInc	8016 Broadway	7542	High	Commercial	909.12	Carwashes	PO	L	PO	PO	UL	UL	PO	UL	PO	X
249	Certified Auto Services Inc.	6800 Federal Boulevard	7549	High	Commercial	908.22	Automotive Services	L	L	L	PO	UL	UL	PO	UL	PO	X
250	Soledad Performance Asc.	7636 Lemon Ave	7549	High	Commercial	908.22	Automotive Services	L	L	L	PO	UL	UL	PO	UL	PO	X
251	U S A Towing & Recovery	7655 Lemon Ave	7549	High	Commercial	908.22	Towing Service, Auto	L	PO	L	PO	UL	UL	PO	UL	PO	X
252	Quality Towing And Recovery, Inc	8280 Broadway	7549	High	Commercial	909.12	Towing Service, Auto	L	PO	L	PO	UL	UL	PO	UL	PO	X
253	Calwest Appliance Exchange	3463 Citrus Street	7692	High	Commercial	908.22	Gas Appliance Repair	L	PO	PO	PO	UL	UL	PO	UL	PO	X
254	Dublin Mob Choppers/McKnight	6306 Federal Boulevard	7692	High	Commercial	908.22	Welding Repair	L	PO	PO	PO	UL	UL	PO	UL	PO	X
255	King Music	7441 Broadway	7692	High	Commercial	908.22	Musical Instrument Repair	L	L	L	PO	UL	UL	PO	UL	PO	X
256	So Cal Custom Cycles	7839 North Ave	7692	High	Commercial	908.22	Motorcycle Repair Service	L	L	L	PO	UL	UL	PO	UL	PO	X

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
257	Aztec Landscape Company	7970 Lemon Grove Way	0782	High	Commercial	908.22	Lawn, Garden Services	UL	PO	UL	PO	L	L	PO	UL	PO	X
258	Weststar Landscape	3553 Harris St	0782	High	Commercial	908.22	Lawn, Garden Services	UL	PO	UL	PO	L	L	PO	UL	PO	X
259	Martin Roofing Co Inc	6608 Federal Boulevard	1761	High	Commercial	908.22	Roofing Work	PO	PO	PO	PO	UL	UL	PO	UL	PO	
260	Food 4 Less #318 Fuel Center	7428 Broadway	5541	High	Commercial	908.22	Gasoline Service Stations	L	L	L	PO	UL	UL	PO	UL	PO	X
261	Golden State Gasoline Inc	7081 Broadway	5541	High	Commercial	908.22	Gasoline Services Stations	L	L	L	PO	UL	UL	PO	UL	PO	X
262	Lemon Grove Shell	7180 Broadway	5541	High	Commercial	908.22	Gasoline Service Stations	L	L	L	PO	UL	UL	PO	UL	PO	X
263	U S A Gas #68148	7513 Broadway	5541	High	Commercial	908.22	Gasoline Service Stations	L	L	L	PO	UL	UL	PO	UL	PO	X
264	Broadway ARCO	8001 Broadway	5541	High	Commercial	909.12	Gasoline Service Stations	L	L	L	PO	UL	UL	PO	UL	PO	X
265	Gas Stop Inc	7988 Broadway	5541	High	Commercial	909.12	Gasoline Service Stations	L	L	L	PO	UL	UL	PO	UL	PO	X
266	Jeremy's Pizza/Wash Valero	8170 Broadway	5541	High	Commercial	909.12	Gasoline Service Stations	L	L	L	PO	UL	UL	PO	UL	PO	X
267	Lemon Grove ARCO/AM PM	2717 Lemon Grove Avenue	5541	High	Commercial	909.12	Gasoline Services Stations	L	L	L	PO	UL	UL	PO	UL	PO	X
268	Chevron-Stations Inc.#1922	7209 Broadway	5541	High	Commercial	908.22	Gasoline And Oil/retail	L	L	L	PO	UL	UL	PO	UL	PO	X
269	Aqual Corp	7951 North Avenue	1521	Medium	Commercial	908.22	General Contractor	PO	PO	PO	PO	UL	UL	PO	UL	PO	
270	MD Countertops, Inc	7679 Lemon Avenue	1521	Medium	Commercial	908.22	Building Construction,	PO	PO	PO	PO	UL	UL	PO	UL	PO	
271	Woodmark Construction	3774 Grove St #B	1521	Medium	Commercial	908.22	General Contractor	PO	PO	PO	PO	UL	UL	PO	UL	PO	
272	C&P Building Solutions	3736 Grove Street	1521	Medium	Commercial	909.12	General Contractor	PO	PO	PO	PO	UL	UL	PO	UL	PO	
273	KT Construction	7868 Lester Avenue	1521	Medium	Commercial	909.12	General Contractor	PO	PO	PO	PO	UL	UL	PO	UL	PO	
274	N J M D, Inc Dba David Cohen	7840 Lester Ave	1521	Medium	Commercial	909.12	General Contractor	PO	PO	PO	PO	UL	UL	PO	UL	PO	
275	Ready Now Restoration	1625 Woodrow Ave	1521	Medium	Commercial	909.12	Residential Construction,	PO	PO	PO	PO	UL	UL	PO	UL	PO	
276	Sam's Apartments	7490-96 North Ave	1522	Medium	Commercial	908.22	Apartment Building	PO	PO	PO	PO	UL	UL	PO	UL	PO	
277	Silverstone Flood & Restoration	7579 Broadway	1629	Medium	Commercial	908.22	Flood Control Project	PO	PO	PO	PO	UL	UL	PO	UL	PO	
278	BP Plumbing	7558 Pacific Avenue	1711	Medium	Commercial	908.22	Plumbing And	PO	PO	PO	PO	UL	UL	PO	UL	PO	

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
279	Drain Medic Rx Plumbing	7622 North Avenue	1711	Medium	Commercial	908.22	Plumbing, Heating And	PO	PO	PO	PO	UL	UL	PO	UL	PO	
280	EMCOR Services, Mesa Energy	6550 Federal Boulevard	1711	Medium	Commercial	908.22	Heating Equipment	PO	PO	PO	PO	UL	UL	PO	UL	PO	
281	Kenneth D'Cruz	3454 Harris Street #B	1711	Medium	Commercial	908.22	Plumbing, Heating And	PO	PO	PO	PO	UL	UL	PO	UL	PO	
282	Mr. Rooter Plumbing Of San Diego	7965 North Ave	1711	Medium	Commercial	908.22	Plumbing, Heating And	PO	PO	PO	PO	UL	UL	PO	UL	PO	
283	Solidcold Corp	7850 North Ave	1711	Medium	Commercial	908.22	Refrigeration And Freezer	PO	PO	PO	PO	UL	UL	PO	UL	PO	
284	T C P Company	3454 Harris St	1711	Medium	Commercial	908.22	Plumbing Contractors	PO	PO	PO	PO	UL	UL	PO	UL	PO	
285	Total Plumbing & Mechanical, Inc	6610 Federal Blvd	1711	Medium	Commercial	908.22	Plumbing, Heating And	PO	PO	PO	PO	UL	UL	PO	UL	PO	
286	Pro Image Painting Services, Inc.	3774 Grove St #H1	1721	Medium	Commercial	909.12	House Painting-	PO	PO	PO	PO	UL	UL	PO	UL	PO	
287	ABS Electric	7411 Broadway	1731	Medium	Commercial	908.22	Electrical Work	PO	PO	PO	PO	UL	UL	PO	UL	PO	
288	Ink Electric Inc	7845 North Avenue	1731	Medium	Commercial	908.22	Electrical Work	PO	PO	PO	PO	UL	UL	PO	UL	PO	
289	Signtech Elec Advertising Inc	4444 Federal Blvd	1731	Medium	Commercial	908.22	Electrical Work	PO	PO	PO	PO	UL	UL	PO	UL	PO	
290	Big Boyz	1415 Skyline Drive #A	1731	Medium	Commercial	909.12	Sound Equipment	PO	PO	PO	PO	UL	UL	PO	UL	PO	
291	Metrius Electrical Services	3774 Gorve Street #H3	1731	Medium	Commercial	909.12	Electrical-Work-	PO	PO	PO	PO	UL	UL	PO	UL	PO	
292	Studio Europa, Inc	7867 North Ave	1751	Medium	Commercial	908.22	Carpentry Work	PO	PO	PO	PO	UL	UL	PO	UL	PO	
293	Lemon Grove Glass & Supply, Inc	7457 Broadway	1793	Medium	Commercial	908.22	Glass And Glazing Work	PO	PO	PO	PO	UL	UL	PO	UL	PO	
294	LM Stone, Inc	6580 Federal Boulevard #B	1799	Medium	Commercial	908.22	Counter Top	PO	PO	PO	PO	UL	UL	PO	UL	PO	
295	Smith Shade	6588 Federal Blvd	1799	Medium	Commercial	908.22	Special Trade Contractors	PO	PO	PO	PO	UL	UL	PO	UL	PO	
296	Auto Zone #5656	7281 Broadway	5013	Medium	Commercial	908.22	Automotive Parts, New	PO	UL	PO	PO	UL	UL	PO	UL	PO	
297	Carquest Auto Parts #7749	7702 Broadway	5013	Medium	Commercial	908.22	Automotive	PO	UL	PO	PO	UL	UL	PO	UL	PO	
298	Magic Carpet Inc	6304 Federal Boulevard	5023	Medium	Commercial	908.22	Carpets Wholesale	UL	UL	UL	PO	UL	UL	PO	UL	PO	
299	Creative ideas	6420 Federal Boulevard #G	5031	Medium	Commercial	908.22	Kitchen Cabinets	UL	UL	UL	PO	UL	UL	PO	PO	PO	
300	Priceless Possibilities	3468 Citrus St #G	5045	Medium	Commercial	908.22	Software	PO	UL	PO	PO	UL	UL	PO	UL	PO	

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
301	Burlingame Health Care Center	7846 Broadway	5047	Medium	Commercial	909.12	Medical Equip. Wholesale	PO	UL	PO	PO	UL	UL	PO	UL	PO	
302	Audio Masters	7342 Broadway	5065	Medium	Commercial	908.22	Tapes, Audio And Video	PO	UL	UL	PO	UL	UL	PO	UL	PO	
303	P D Q Distributors	7636 North Ave #4-A-2	5072	Medium	Commercial	908.22	Fasteners	PO	UL	PO	PO	UL	UL	PO	UL	PO	
304	Anita Fire Hose Company, Etc.	7037 North Avenue	5087	Medium	Commercial	908.22	Firefighting	UL	UL	UL	PO	UL	UL	PO	PO	PO	
305	CDC Beauty Supply & Wigs	7111 Broadway	5087	Medium	Commercial	908.22	Beauty Parlor Equipment	PO	PO	PO	PO	UL	UL	PO	UL	PO	
306	Continental Funeral Home	7735 Pacific Avenue	5087	Medium	Commercial	908.22	Caskets, Burial/wholesale	UL	UL	UL	PO	UL	UL	PO	PO	PO	
307	The Pool Store	3282 Main St	5091	Medium	Commercial	908.22	Swimming Pools	UL	UL	UL	PO	UL	UL	UL	UL	UL	
308	Herbal Life Nutrition	3435 Lemon Grove Avenue	5122	Medium	Commercial	909.12	Vitamins/wholesale	UL	UL	UL	PO	UL	UL	PO	UL	PO	
309	FP Stores Inc Dba Factory 2-U	7124 Broadway	5137	Medium	Commercial	908.22	Clothing Accessories	UL	UL	UL	PO	UL	UL	PO	UL	PO	
310	Everything A Deal	3215 Lemon Grove Avenue	5137	Medium	Commercial	909.12	Women's Clothing	UL	UL	UL	PO	UL	UL	PO	UL	PO	
311	La Carlen Boutique	8093 Broadway	5137	Medium	Commercial	909.12	Women's Clothing	UL	UL	UL	PO	UL	UL	PO	UL	PO	
312	Forever Blooms	7834 Lester Avenue	5193	Medium	Commercial	909.12	Florists/wholesale	UL	UL	PO	PO	PO	UL	PO	PO	PO	
313	Big Time Smoke Shop	7330 Broadway	5194	Medium	Commercial	908.22	Smoking Tobacco wholesale	UL	UL	PO	PO	UL	UL	PO	UL	PO	
314	ARS Auto Registration Service	7385 Broadway	7389	Medium	Commercial	908.22	Notaries Public	PO	UL	PO	PO	UL	UL	PO	UL	PO	
315	Lolly Lane Multi Media Center	7366 Broadway #A & B	7389	Medium	Commercial	908.22	Recording Studios	UL	UL	UL	PO	UL	UL	PO	PO	PO	
316	Lovely Singh, Inc, Postal Annex	7107 Broadway	7389	Medium	Commercial	908.22	Post Office Contract	UL	UL	UL	PO	UL	UL	PO	PO	PO	
317	Suavey Design	7227 Broadway #405	7389	Medium	Commercial	908.22	Textile Designers	UL	UL	UL	PO	UL	UL	PO	PO	PO	
318	A Better Mobile Notary	7733 Palm Street #218	7389	Medium	Commercial	909.12	Notaries Public	PO	UL	PO	PO	UL	UL	PO	UL	PO	
319	U S A Marketing Services	7895 Broadway	7389	Medium	Commercial	909.12	Business Services, Not	PO	UL	PO	PO	UL	UL	PO	UL	PO	
320	Broadway Smog Center	7310 Broadway	7549	Medium	Commercial	908.22	Auto Emissions Testing	PO	UL	PO	PO	UL	UL	PO	UL	PO	
321	Ken's Smog Check	6996 Broadway Suite A	7549	Medium	Commercial	908.22	Auto Emissions Testing	PO	UL	PO	PO	UL	UL	PO	UL	PO	

Appendix A.4 (Continued)
Stationary Industrial And Commercial Inventory

#	Business Name	Address	SIC Code	TTWQ	Type (Indust. or Comm.)	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source
322	Lemon Grove Smog Test Only #2	8068 Broadway	7549	Medium	Commercial	909.12	Auto Emissions Testing	PO	UL	PO	PO	UL	UL	PO	UL	PO	
323	Payless Smog	7950 Lemon Grove Way	7549	Medium	Commercial	909.12	Emissions Testing Service	PO	UL	PO	PO	UL	UL	PO	UL	PO	
324	Little Darlings	8290 Broadway	7997	Medium	Commercial	909.12	Membership Sports	UL	UL	PO	PO	UL	UL	PO	PO	PO	

Notes
SIC –Standard Industrial Classification Code
TTWQ – Threat to Water Quality
L= Likely, PO= Possible, UL=Unlikely
Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water.
This table is based on the field experience of City staff and on tables in the Copermittees's Baseline Long-Term Effectiveness Assessment in determining pollutant discharge potential from each facility.

Appendix A.5
Mobile Business Inventory

#	Business Name	Address	SIC	TTWQ	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source*
1	Alex's complete Custom Landscape & Maintenance Service	2023 El Dora Street	0782	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
2	Benitez Landscaping	1650 Cameron Drive	0782	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
3	Carlos & Sons	2025 Madera Street	0782	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
4	Hong Van Nguyen	1949 Washington St. Suite 2	0782	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
5	Riley Landscaping	8372 Golden Ave	0782	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
6	San Diego Sprinkler & Landscaping	8316 Lincoln Street	0782	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
7	Weststar Landscape Services	3553 Harris Street	0782	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
8	E Rojas Landscaping and Maintenance	8343 Robbie Way	0783	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
9	Always Good Tree Service	1822 Dayton Drive Suite 3	0783	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
10	Higueras Tree Service	2047 Ensenada Street	0783	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
11	Rosa's Tree Service	8124 Lemon Grove Way	0783	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
12	Yes We Can Tree Service	2557 Skyline Drive	0783	High	908.22, 909.12	Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO	X
13	Olympic Engineering and Construction	P.O.Box 1093, Lemon Grove 91946	1521	High	908.22, 909.12	Cement Mixing or Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO	X

Appendix A.5 (Continued)
Mobile Business Inventory

#	Business Name	Address	SIC	TTWQ	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source*
14	Ray's Cement Work	2477 Hardy Drive	1521	High	908.22, 909.12	Masonry	PO	PO	PO	L	UL	UL	PO	UL	PO	X
15	Daddy's Ice Cream	P.O. Box 2723, National City 91951	5812	High	908.22, 909.12	Mobile Food	UL	UL	L	PO	UL	UL	L	L	L	X
16	J&J Ice Cream	8777 Bigford Street, Spring Valley, Ca 91977	5812	High	908.22, 909.12	Mobile Food	UL	UL	L	PO	UL	UL	L	L	L	X
17	Moody's Lunch Service	4637 Market Street, San Diego, CA 92102	5812	High	908.22, 909.12	Mobile Food	UL	UL	L	PO	UL	UL	L	L	L	X
18	Nelly's Ice Cream	1678 Tarelton Street, Spring Valley, CA 91977	5812	High	908.22, 909.12	Mobile Food	UL	UL	L	PO	UL	UL	L	L	L	X
19	Polar Ice Cream	2682 Imperial Ave, San Diego, CA 92102	5812	High	908.22, 909.12	Mobile Food	UL	UL	L	PO	UL	UL	L	L	L	X
20	The Best California Cream	1037 Harding Ave, National City, CA 91950	5812	High	908.22, 909.12	Mobile Food	UL	UL	L	PO	UL	UL	L	L	L	X
21	Angels Carpet Care	1534 Skyline Drive	7217	High	908.22, 909.12	Mobile Carpet, Drape, or Furniture Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO	
22	Brian Erwins Carpet Care	7024 Central Avenue	7217	High	908.22, 909.12	Mobile Carpet, Drape, or Furniture Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO	
23	Henry's Carpet Cleaning Inc.	2470 Bonita Street	7217	High	908.22, 909.12	Mobile Carpet, Drape, or Furniture Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO	
24	Jeorges Carpet Cleaning	7943 Lansing Drive	7217	High	908.22, 909.12	Mobile Carpet, Drape, or Furniture Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO	
25	Simply Steamit	2793 Olive Street	7217	High	908.22, 909.12	Mobile Carpet, Drape, or Furniture Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO	
26	Sunrise Carpet Care	1630 Skyline Drive	7217	High	908.22, 909.12	Mobile Carpet, Drape, or Furniture Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO	

Appendix A.5 (Continued)
Mobile Business Inventory

#	Business Name	Address	SIC	TTWQ	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source*
27	Angels Auto Repair & Tire Shop	7636 North Avenue	7538	High	908.22, 909.12	Auto Repair, Maintenance, Fueling, Cleaning	L	L	L	PO	UL	UL	PO	UL	PO	X
28	Jose Villegas	1876 Ensenada Street	7538	High	908.22, 909.12	Auto Repair, Maintenance, Fueling, Cleaning	L	L	L	PO	UL	UL	PO	UL	PO	X
29	The Finest Auto Detail	7526 Zemco Drive	7538	High	908.22, 909.12	Auto Repair, Maintenance, Fueling, Cleaning	PO	L	PO	PO	UL	UL	PO	UL	PO	X
30	Total Eclipse Wash	7525 Pacific Ave, Suite B	7538	High	908.22, 909.12	Auto Repair, Maintenance, Fueling, Cleaning	PO	L	PO	PO	UL	UL	PO	UL	PO	X
31	MX Auto Mobile Detailing	3585 Grove Street, Suite 241	7542	High	908.22, 909.12	Mobile Automobile or Other Vehicle Washing	PO	L	PO	PO	UL	UL	PO	UL	PO	X
32	Podium Finish Mobile Detail	7810 Barton Drive	7542	High	908.22, 909.12	Mobile Automobile or Other Vehicle Washing	PO	L	PO	PO	UL	UL	PO	UL	PO	X
33	D & M Welding	7952 North Avenue	7692	High	908.22, 909.12	Other	L	PO	PO	PO	UL	UL	PO	UL	PO	X
34	Building Restorations, Inc.	6975 North Ave Suite A	1521	Medium	908.22, 909.12	Other	PO	PO	PO	PO	UL	UL	PO	UL	PO	
35	CWA Development Inc.	3494 Harris Street	1521	Medium	908.22, 909.12	Other	PO	PO	PO	PO	UL	UL	PO	UL	PO	
36	Dave Wallace, General	8039 Golden Avenue	1521	Medium	908.22, 909.12	Other	PO	PO	PO	PO	UL	UL	PO	UL	PO	
37	First Page	3280 Olive Street #18	1521	Medium	908.22, 909.12	Other	PO	PO	PO	PO	UL	UL	PO	UL	PO	
38	Grove Plumbing, Inc.	7637 Lemon Avenue	1711	Medium	908.22, 909.12	Other	PO	PO	PO	PO	UL	UL	PO	UL	PO	
39	Kunkel Heating Service	7445 Roosevelt Avenue	1711	Medium	908.22, 909.12	Other	PO	PO	PO	PO	UL	UL	PO	UL	PO	

Appendix A.5 (Continued)
Mobile Business Inventory

#	Business Name	Address	SIC	TTWQ	Hydrologic Area	Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Gross Pollutants	Bacteria/ Viruses	Trash	Likely Source*
40	Pro Drain & Plumbing Service Inc.	7440 Central Avenue	1711	Medium	908.22, 909.12	Other	PO	PO	PO	PO	UL	UL	PO	UL	PO	
41	T C P Company	7080 Mt Vernon	1711	Medium	908.22, 909.12	Other	PO	PO	PO	PO	UL	UL	PO	UL	PO	
42	Drain Medic, Inc.	7868 Lester Drive	1721	Medium	908.22, 909.12	Painting and Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO	
43	Imperial Custom Cabinets	8093 Lemon Grove Way	5031	Medium	908.22, 909.12	Other	UL	UL	UL	PO	UL	UL	PO	PO	PO	

Notes
TTWQ – Threat to Water Quality
SIC –Standard Industrial Classification Code
L= Likely, PO= Possible, UL=Unlikely
Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water.
This table was generated using the Copermittee's Regional Mobile Business Inventory and mobile business presented in The City of Lemon Grove's 2010-11 JURMP Annual Report. The pollutant loading potential component of the table is based on the field experience of City staff and on tables in the Copermittees's Baseline Long-Term Effectiveness Assessment in determining pollutant discharge potential from commercial sources.

Appendix B
Complaint Log

#	Date	Location	Complaint Type	Complaint	Resolution
1	8/11/11	8170 Broadway	Municipal	Car wash water flowing into street	City staff investigated by touring the station. Station manager informed city staff that gas station employees were rinsing off tires and wheels (prior to entering car wash) on the side of the station and water was flowing down a ramp onto the sidewalk. City staff directed the gas station manager to cease rinsing vehicles where water would flow onto public right-of-way. Manager stated they would capture any water to prevent it from flowing off the property. As of this date, no additional complaints received. **Verbal Warning. No further action.**
2	2/3/12	3515 Olive Street	Municipal	Brine water spill at Culligan	City staff investigated by touring facility. No evidence found that water reached MS4. Brine spill (used during water treatment process) was contained on the property and drained into a collector on site. **No further action.**
3	8/16/12	BERRY STREET (EXACT ADDRESS UNKNOWN)	Residential	Neighbor doing laundry in front yard	City staff investigated and found no evidence of laundry washing in any front yards on Berry Street. City staff also contacted complainant who could not provide any specifics as to when alleged violation occurred. City staff asked the complainant to call Code Enforcement when the next violation occurs on Berry Street. As of this date, staff has not received any phone calls or new information regarding this complaint. **No further action.**
4	5/14/12	2796 DENNIS LANE	Residential	Waste water seeping above ground	City staff investigated and found no evidence of waste water seepage. No waste water smell was noted. As of this date, staff has not received additional complaints. **No further action.**

Appendix B (Continued)
Complaint Log

#	Date	Location	Complaint Type	Complaint	Resolution
5	4/9/12	6983 CENTRAL AVENUE	Residential	Trimmed vegetation left in drainage ditch.	City staff requested the property owner responsible for the trimming remove vegetation from drainage ditch. Property owner complied by the next day. **Verbal Warning. No further action.**
6	3/20/12	1901 ELDORA STREET	Residential	Oil leaking from vehicle	City staff investigated but found no "fresh" leak. Only an old stain most likely dried oil was noted. City staff did not cite as numerous dried oil stains can be found the length of Eldora Street. **No further action.**
7	6/2/12	1548 EL PRADO	Residential	Pool water draining into street	City staff made contact with the property owner who stated the pool water was free of chemicals as he let it stand for a couple weeks prior to release. City staff recommended that next time he have the water drain onto his lawn in the back and front yards over a period of time. Property owner stated he would do that next summer. **Verbal Warning. No further action.**
8	7/20/11	7662-64 BROADWAY	Municipal	Overgrowth in Ditch	City staff removed weeds and trash from ditch. **No further action.**
9	7/25/11	7630 BROADWAY	Municipal	Missing storm drain grate	Temporary covered was placed, while a permanent cover for the storm drain is being fabricated. **No further action**.
10	8/3/11	EASEMENT ON WASHINGTON ST	Municipal	Clear & clean out easement on Washington St – btw Darryl & Roy St. Lots of greenery & debris.	Removal of weeds and trash from easement ditch as requested. **No further action.**

Appendix B (Continued)
Complaint Log

#	Date	Location	Complaint Type	Complaint	Resolution
11	8/8/11	MAIN ST CHANNEL (BTW GRANGE – MASS AVE)	Municipal	Annual clean up/weed abatement in channel located on Main St - from Grange to Mass Ave (both sides of roadway).	Yearly clean up completed. **No further action.**
12	9/1/11	DRAINAGE DITCH (BTW LGA - CITRONELLA AVE)	Municipal	Clean out & remove growth from drainage ditch located behind Arco on LGA/Palm	Clean up on ditch completed. **No further action.**
13	9/19/11	DRAINAGE DITCH (BEHIND 1554 ANGELUS AVE)	Residential	Overgrowth & broken concrete is an issue.	Maintenance will be the responsibility of the neighboring property owners. City sent out letters informing residents to cleanup. **No further action.**
14	9/21/11	CITY WIDE	Municipal	Storm patrol, check storm grates and channels for debris.	Routine inspections & maintenance. **No further action.**
15	10/5/11	CITY WIDE	Municipal	Storm patrol, check storm grates and channels for debris.	Routine inspections & maintenance. **No further action.**
16	10/5/11	CITY WIDE	Municipal	Storm patrol, check storm grates and channels for debris.	Routine inspections & maintenance. **No further action.**

Appendix B (Continued)
Complaint Log

#	Date	Location	Complaint Type	Complaint	Resolution
17	11/14/11	DITCH BEHIND 1847 BAKERSFIELD	Residential	Assessment of large portion of eucalyptus tree that has fallen on home at 1847 Bakersfield. Reported by Prop Management - Tom Bell has gone out to take photos & we are determining if the tree is in fact on City property/ROW, no action yet	The tree poised a safety risk to the surrounding area so City staff removed the tree. But because there is no City-owned property along the area in question, the services that staff provided will be the final action that we provide for this property. **No further action.**
18	11/29/11	8061-8063 ALTON DR	Municipal	Please clean out storm drain west of 8063 Alton Dr (by the church) & across the street.	Routine clean up completed. **No further action.**
19	12/12/11	ACROSS THE STREET FROM 8227 DARRYL ST	Municipal	Please place sandbags at drainage ditch directly in front of 8227 Darryl St to avoid flooding.	Sandbags placed. **No further action.**
20	2/7/12	2618 BONITA ST	Residential	Flood control	Class 2 base placed and compacted in front of 2618 Bonita as requested. **No further action.**
21	2/16/12	1990 MADERA ST	Municipal	There is a tree/bush growing out of the storm drain on the corner of Madera Street and Massachusetts.	Removed as much silt & debris from out of storm drain as possible. **No further action.**
22	3/5/12	N/E CORNER OF LGA & CANTON DR	Municipal	Please remove a palm tree growing out of a storm drain on the N/E corner of LGA & Canton.	Removed palm tree growing out of storm drain channel @ LGA and Canton. **No further action.**

Appendix B (Continued)
Complaint Log

#	Date	Location	Complaint Type	Complaint	Resolution
23	3/6/12	SWEETWATER RD (NEXT TO 125 OVERPASS)	Municipal	Overgrowth & debris is blocking storm drain @ appx 2500 feet north of Hunter's Nursery on the west side of the road next to the I-125 overpass. Look for the trash and shopping carts.	Determined that ROW at this location belongs to CALTRANS. Maintenance Ticket created on CALTRANS website. **No further action.**
24	3/8/12	FEDERAL BLVD & CENTRAL AVE STORM DRAIN DITCH	Municipal	Clear vegetation, palm trees from storm drain ditch @ Federal & Central Ave.	All palm trees and tully's removed from storm drain channel. 100 yards of palms, trash, and debris were removed from the site. **No further action.**
25	3/21/12	2811 DREW LN	Residential	Storm drain grate needs to be clear of debris on & around 2811 Drew Lane. Resident says the street is flooding every time it rains. If the issue is within the drainage easement located btw 2812 & 2820 Drew Ln -It is PRIVATE.	Storm drain grate was cleared of debris, easement was determined to be private so nothing else was done. **No further action.**
26	3/28/12	SOUTHEND OF PERGL ST	Municipal	Take out the bushes on the S/E end of Pergl adjacent to property at 7276 Mt. Vernon because they are poisonous to horses on site. Can you please assess the area and let me know if they can be removed.	Site has a newly installed drain pipe & the easement was cleared of overgrowth. **No further action.**

Appendix B (Continued)
Complaint Log

#	Date	Location	Complaint Type	Complaint	Resolution
27	4/10/12	7008 LEMONWOOD LN	Municipal	Please schedule routine maintenance for Drainage Easement located between Lemonwood Lane & Central Ave. Back Neighbors at 6983 or 6995 Central were contacted to remove their tree trimmings that fell into easement.	Chain saw was used to make an access road for the 4x4 gator, and also used to cut up the tree trimmings in our storm channel left behind by the surrounding residents. Then the brush & tree trimmings were removed and disposed of appropriately. **No further action.**
28	4/24/12	2870 NEW JERSEY AVE	Municipal	Please perform routine maintenance on both New Jersey & Roosevelt side. Resident would like the City to consider alleviating high points in the easement so that water won't sit resulting in flooding to her property & high weed growth.	Trash picked up and weeds abated at 2870 New Jersey Ave. **No further action.**
29	5/1/12	ROY ST STORM DRAIN CHANNEL	Municipal	Please perform routine maintenance for drainage easement between Roy St & Darryl St	Routine clean up completed. **No further action.**
30	5/1/12	7252 BROADWAY	Municipal	Stolen storm drain grate in the alley behind Lido's Restaurant.	Calvin Hunt responded & placed barricades to block off storm drain inlet missing grate. Grates were ordered & installed 4-6 weeks later. **No further action.**

Appendix B (Continued)
Complaint Log

#	Date	Location	Complaint Type	Complaint	Resolution
31	6/4/12	2815 DENNIS LN	Municipal	Please assess storm drain cover that pops off & is now missing at this address. Also check that the drain is clear of debris.	Public Works staff secured storm drain cover and cleared the debris on 6/5/12. **No further action.**
32	6/6/12	8413-8427 BROADWAY	Municipal	John -manager at Broadway Manor Apts would like to meet with Tom regarding the overgrown eucalyptus trees in a drainage easement located behind apt property. Trees causing damage & they want to know who they belong to. Tom has been out there before.	Public Works staff met with property owner. Trees are responsibility of the property owner. **No further action**.
33	6/18/12	SITE 1 - 400′ S/E OF MILTON RD & BROADWAY	Municipal	Please start initial clean-up of sites proposed within the DRY WEATHER MONITORING report - sites 1,3,16, and 20 to be completed by the end of the week, per T.Bell	Trash removal & weed abatement completed. **No further action.**
34	6/18/12	SITE 3 – S/O 6691 FEDERAL BLVD	Municipal	Please start initial clean-up of sites proposed within the DRY WEATHER MONITORING report - sites 1,3,16, and 20 to be completed by the end of the week, per T.Bell	Trash removal & weed abatement completed. **No further action.**

Appendix B (Continued)
Complaint Log

#	Date	Location	Complaint Type	Complaint	Resolution
35	6/18/12	SITE 16 – CITRONELLA 150′ N/O PALM AVE	Municipal	Please start initial clean-up of sites proposed within the DRY WEATHER MONITORING report - sites 1,3,16, and 20 to be completed by the end of the week, per T.Bell	Trash removal & weed abatement completed. **No further action.**
36	6/18/12	SITE 20 – 200 YDS N/O INTRSTN @ SAN ALTOS	Municipal	Please start initial clean-up of sites proposed within the DRY WEATHER MONITORING report - sites 1,3,16, and 20 to be completed by the end of the week, per T.Bell	Trash removal & weed abatement completed. **No further action.**
37	6/18/12	2873 SKYLINE DR	Municipal	Ground water issue just outside the public works yard on Skyline Dr. Water would puddle & collect resulting in algae.	Issue had been resolved with the installation of the 6" pipe at this site. **No further action.**

Appendix C
JURMP Annual Report Requirements Checklist

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location in Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3, 2.4
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2
iii. A listing of the development projects to which SUSMP requirements were applied.	Table 2-3
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	Table 2-2, Table 2-3, 2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	2.4.4.3, Appendix A.1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-1, Table 2-4
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	Table 2-3, 2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	Table 2-2, 2.4.4.2

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.2
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3, Table 2-4
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.1.1

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	Location in Report
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.2
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5.3
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.2
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.2
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A.2
viii. A description of the general results of the inspections.	3.5.3
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.4
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.4, Table 3-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix A.3 (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	2.4.4.2, 4.4.4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.2, 4.4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.2, 4.4.4, Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4, Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4, Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	4.4.4
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3.4, Table 4-1
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4, Table 4-1
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.3.4, Table 4-3
xviii. A description of the general results of the inspections.	Table 4-3
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	Throughout Section 4

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.4 (mobile), Appendices A.4, A.5 (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1; Appendices A.4, A.5
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	5.2.4
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4, Table 5-2
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4,
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	Throughout Section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.1
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4.2 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4; Appendix B
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.1
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the FY 2011-12 Annual Report, will be submitted to the RWQCB no later than December 15, 2012.	

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the FY 2011-12 Annual Report, will be submitted to the RWQCB no later than December 15, 2012.	

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.2, Table 8-1
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EXECUTIVE SUMMARY

In February 2001, the San Diego Regional Water Quality Control Board (RWQCB or Regional Board) issued Order No. 2001-01, a National Pollutant Discharge Elimination System (NPDES) Permit regulating discharges to storm drain systems within 18 municipalities in San Diego County, the County of San Diego, and the San Diego Unified Port District (collectively referred to a "Copermittees"). The San Diego County Regional Airport Authority was later added as the twenty-first Copermittee. Order No. 2001-01, generally referred to as the Municipal Permit, required each Copermittee, including the City of National City (City), to develop a comprehensive storm water management program known as a Jurisdictional Urban Runoff Management Program (JURMP). The City's JURMP includes storm water management strategies and protocols related to planning, construction, and existing developments. Major components include the implementation of Best Management Practices (BMP), water quality monitoring, and educational outreach efforts.

Each fiscal year, the City prepares an annual report on the implementation of its JURMP, as required by Municipal Permit Section I.1. The following JURMP Annual Report presents the activities implemented during the 2006/2007 fiscal year (July 1, 2006 through June 30, 2007). A brief summary of each of the 14 sections of the Annual Report is presented below.

Introduction
The introduction presents an overview of the City's storm water pollution prevention program and includes a bulleted summary of key accomplishments for the 2006/2007 reporting period.

Municipal
The City continues to invest significant resources in the further development and the implementation of its storm water management program. The City continues to implement an aggressive street sweeping schedule and MS4 maintenance schedule, removing approximately 1,300 tons of material from street sweeping and 23,200 pounds of material from MS4 maintenance during 2006/2007. Additionally, about 416 cubic yards of debris were removed during channel maintenance operations. The City dedicated 1,782 man-hours to clean 333,060 linear feet of sewer lines. Over 17,700 pounds of debris were removed during this maintenance.

The City held six training sessions for municipal personnel during 2006/2007. The City also developed an educational 2007 "Keep Our Community Clean" Calendar that was provided to various City departments in addition to the general public.

Industrial/Commercial
During 2006/2007 the City inspected all high priority industrial facilities. During this reporting period, 29 complete industrial inspections and 10 full commercial inspections were conducted. Visits were also made to industrial and commercial sites when warranted by public complaints, and the City ensured that such incidents were resolved satisfactorily. Based on inspection findings and complaints received by the City's storm water hotline, the City issued six Notices of Violation (NOV) to industrial facilities and 10 NOVs to

commercial facilities. The City continued to provide educational outreach material to industrial and commercial businesses, and the City continued to implement a rating system to assess BMP implementation and storm water knowledge. Additionally, the City worked with its contractor, D-MAX, to conduct two industrial/commercial-related educational workshops, one for industrial businesses and one for automotive-related businesses.

Residential

Because residential areas comprise a large portion of National City, the City has pursued a number of efforts to educate and involve residents in implementing the City's JURMP. The City held a workshop for residents in the City and provided them with a presentation and a variety of educational material, including the 2007 educational calendar. Residents of the City of National City, along with the citizens of the City of Imperial Beach and the City of Chula Vista, continue to utilize a common household hazardous waste facility. The total mass of household hazardous waste collected by all three cities during this reporting period was 142,572 pounds. Similar to previous years, the City held two large item disposal events in conjunction with EDCO. Additionally two neighborhood cleanups resulted in the disposal/removal of 12 tons of trash and debris. The City maintained residential storm water awareness through educational materials, including flyers, pamphlets, and calendars, many of which were bilingual. Residents also made use of the City's Storm Water Hotline to report observed storm water problems, including those in residential neighborhoods. The City issued seven NOVs, sent 23 corrective action letters, and gave numerous verbal warnings related to complaint investigations in residential areas.

Development Planning/Construction

All development projects that will disturb soil are required to complete a Storm Water Requirements Applicability Checklist. The checklist helps determine requirements for post-construction BMP implementation and whether the project will be subject to the State General Construction Permit or General Industrial Permit. Regardless of which department is initially contacted for the projects' permits, completed checklists are forwarded to the Engineering Department for sign off to ensure consistency. All construction projects subject to the General Construction Permit submitted SWPPPs, which the City's consultant reviewed. Twelve projects subject to the City's Standard Urban Storm Water Mitigation Plan (SUSMP) Ordinance were required to submit post-construction BMP plans, which were also reviewed. The City regularly inspected active construction sites in its jurisdiction, including weekly inspections for high priority sites. Storm water complaints received about construction sites were also promptly investigated, and enforcement actions were taken where necessary. A total of three NOVs and two administrative citations were issued to contractors or developers. The City held a SUSMP workshop for the development planning community and a construction-related workshop for construction site owners and operators. Though not required by the Municipal Permit, toward the end of the reporting period the City also inspected completed SUSMP projects for the first time. The City will use the results of this initial inspection effort to refine its SUSMP inspection programs in future years.

Illicit Discharge Detection and Elimination

The main avenues through which illicit connections and illegal discharges (IC/ID) are detected are the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program), the storm water hotline, and by observations made by City

staff. Visual observations and field screening were conducted at 15 Dry Weather Monitoring Program sites, and water samples from over 25 percent of the sites underwent laboratory analysis for additional parameters. When routine monitoring found a parameter above its established action level, a follow-up source identification investigation was undertaken. Based on the results of the investigations, the City acted to eliminate the source(s) of pollution identified by these investigations. All 143 complaints received were documented and resolved by City staff. One sewage overflow occurred during 2006/2007 and was reported to the RWQCB. The spill was cleaned up, and enforcement action was taken against the responsible party. All IC/IDs detected in 2006/2007 were eliminated during the reporting period.

Education/Public Participation

During 2006/2007 the City continued to provide the general public with educational outreach material and opportunities to participate in the implementation of the storm water program. The City provided numerous training sessions and a variety of educational material for municipal personnel, industrial and commercial business owners/operators, development and construction project proponents, and residents. The City's outreach efforts were estimated to have made over 137,000 impressions during the reporting period. The City collaborated with I Love a Clean San Diego to stencil 30 storm drains in the City. Cleanup efforts in the City, including those put on by neighborhood councils, removed approximately 14.4 tons of trash and debris.

Assessment of JURMP Effectiveness

The regionally developed approach to program effectiveness assessment includes program planning, BMP selection, and evaluation of six tiered levels of targeted outcomes. As the system progresses from Level 1 to Level 6, targeted outcomes becoming less focused on activities conducted and more focused on changes in water quality. The City used this regionally developed approach to assess its program, incorporating some City-specific components such as historical water quality monitoring data. The City has also continued to employ a numeric scoring system to assess BMP implementation and the level of storm water knowledge during industrial and commercial inspections.

Fiscal Analysis

Section 12 of this JURMP Annual Report presents information about the costs and funding of the City's storm water program. Not including special projects, budgeted outlays were $939,500 for 2006/2007 and the $936,000 for the upcoming fiscal year.

Special Investigations

In response to Dry Weather Monitoring Program results, the City initiated a more focused investigation into sources of trash and debris that might affect the City's storm drain system. Findings of the study and the City's plans for follow-up actions are discussed in Section 13.

Conclusions and Recommendations

General conclusions and recommendations are presented in Section 14. During 2006/2007, the City continued to improve the planning and implementation of its program and began to prepare for the new requirements of the recently reissued Municipal Permit, Order No. 2007-0001. During 2007/2008, the City will continue to refine and adjust existing programs and will develop new programs to meet the requirements of Order No. 2007-0001.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____

Maryam Babaki
City Engineer

Date: January 2008

1 INTRODUCTION

In early 2001, the San Diego Regional Water Quality Control Board (RWQCB or Regional Board) issued Order No. 2001-01 (Municipal Permit), a National Pollutant Discharge Elimination System (NPDES) permit that regulates discharges of urban runoff from Municipal Separate Storm Sewer Systems (MS4) in the San Diego area. The City of National City (City), like many other municipalities in California, maintains separate storm water and sanitary sewer systems. Water in the City's sanitary sewer system is directed to a wastewater treatment facility, while storm water flows directly to receiving water bodies and local beaches without being treated. The Municipal Permit regulates urban runoff discharges of 21 jurisdictions within the County of San Diego, including the City of National City, which are collectively referred to as "Copermittees."

The Municipal Permit required each Copermittee to prepare a Jurisdictional Urban Runoff Management Program (JURMP); the City's most recent JURMP was finalized in 2004. The JURMP includes program implementation and management strategies for development projects and the maintenance of existing development, including both public and private facilities. Within the JURMP document, the City included a variety of Best Management Practices (BMP), which are specific to municipal, industrial, commercial, residential, and construction sites/sources. In this document the City also outlined approaches for educating the public and encouraging public participation in the implementation of the JURMP; such measures are designed to raise awareness of storm water issues, promote BMP implementation, and foster a sense of shared responsibility in protecting water quality. The JURMP also presents procedures to prevent, detect, and eliminate illicit connections and illegal discharges (IC/ID) to the City's MS4. Various types of enforcement actions, which are at times necessary to bring about compliance, are also explained in the JURMP. Overall, the programs set forth in the JURMP document are intended to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP). The ultimate goal of the implementation of the City's JURMP is to maintain or improve the quality of receiving waters.

To raise awareness and promote the implementation of the City's JURMP by the public, the City continues to provide educational outreach materials and host public participation events. The City continues to inspect municipal facilities, construction sites, and industrial and commercial businesses and to investigate all complaints received by the City's storm water hotline or online reporting system. During inspections and complaint investigations, City personnel are able to provide site-specific one-on-one discussions regarding storm water-related topics and BMPs. The City continues to issue verbal warnings, written warnings, Notices of Violation (NOV), and administrative citations, as necessary to bring about compliance. Sites that are an immediate threat to human or environmental health, or sites that refuse to comply with applicable permits and ordinances, are reported to the RWQCB.

The City has continued to conduct water quality monitoring, most notably the City's Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program). This program allows the City to characterize dry weather flows, alerts the City of a potential illicit connection or illegal discharge (IC/ID), and provides the City with some

level of assessment of the water quality in its storm drain system. When field monitoring or laboratory results indicate an exceedance of an established action level, upstream investigations are conducted to determine what source(s) may be responsible for the exceedance. Any identified sources of IC/IDs are dealt with as necessary to eliminate the connection or discharge.

As required by the Municipal Permit Section I.1, the City has developed this Annual Report to provide information regarding the City's implementation of its JURMP during the 2006/2007 fiscal year, which is the period from July 1, 2006 to June 30, 2007.

RWQCB COMMENTS

At the time of this writing, the City has not received any comments from the RWQCB on its 2005/2006 JURMP Annual Report.

GENERAL ACCOMPLISHMENTS

During 2006/2007 the City both initiated new programs and continued to implement and refine existing programs. The following bullets briefly summarize notable achievements and activities from the 2006/2007 reporting period. Additional detail can be found in the following sections of this Annual Report.

- Inspected all high priority municipal facilities.
- Began updating the SWPPP for the City's Public Works Yards.
- Provided training sessions for municipal employees. The sessions covered topics such as good housekeeping, BMPs, and specific training for fire fighting personnel.
- Swept 17,406 curb miles, removing 1,300 tons of sediment and debris from City streets.
- Removed over 416 cubic yards of trash and debris from open channels and removed 23,200 pounds of debris from City storm drains.
- Removed over 17,000 pounds of debris from sewer lines in the City.
- Completed the construction of Paradise Creek Educational Park, which preserves a portion of Paradise Creek and provides educational signs to park patrons.
- The City distributed "Preventing Urban Runoff Pollution" brochures to business license applicants.
- Inspected all high priority industrial facilities.
- Continued to maintain and refine databases for municipal activities, construction inspections, and industrial/commercial inspections.
- Conducted 29 industrial inspections and 10 commercial inspections. One-on-one site discussions were initiated, and educational information and materials were provided.
- Used rating system for BMP implementation and knowledge assessment during industrial and commercial business inspections.

- Issued 16 NOVs and 15 administrative citations to industrial and commercial businesses. These enforcement actions were mainly related to discharges of wash water investigated during responses to complaints or during the inspection process. In each case, the City actions resulted in the resolution of the observed problem.
- Conducted a workshop specifically designed for automotive repair/service shops.
- Continued distribution of educational brochures and fact sheets during routine inspections and complaint investigations.
- Conducted a workshop specifically designed for residents.
- Distributed over 6,000 "Do You Go To the Beach When it is Raining?" handouts in residential trash bills.
- Mailed over 1,470 letters to City residents and businesses in response to recommendations associated with the 2006 Dry Weather Monitoring Program findings. The letters included explanations of BMPs residents could use to help reduce pollution.
- Worked with the City of Chula Vista to provide a venue for proper household hazardous waste (HHW) disposal. Furthermore, the City worked with EDCO to hold two large item collection events to encourage residents to dispose of these items properly.
- Continued distribution of construction educational materials, including guides for construction activity and BMP fact sheets.
- Conducted technical reviews of Storm Water Pollution Prevention Plans (SWPPPs) for construction sites equal to or greater than an acre and Standard Urban Storm Water Mitigation Plans (SUSMP) reports for Priority Projects.
- Reviewed SUSMP reports for 12 Priority Projects.
- Conducted a SUSMP requirement and BMP training session for individuals involved in development and re-development program implementation.
- Continued to maintain electronic and paper record keeping systems for SUSMP projects.
- Inspected all high priority construction sites during the wet season (October through April) each week and generally at least twice during the wet season for medium and low priority construction sites. City building inspectors also check BMP implementation during inspections of small projects.
- The City identified five illicit connections and 64 illegal discharges to the City's storm drain system. In each instance, City staff ensured that the issue was resolved via an NOV, administrative citation, corrective action notice, and/or verbal warning.

- Completed the 2006 Dry Weather Monitoring Program and follow-up investigations. The City took action to address the recommendations listed in the 2006 Dry Weather Monitoring Program final report.
- Continued the use of the storm water hotline. A total of 143 public complaints were recorded, investigated, and resolved during this reporting period.
- Worked with I Love a Clean San Diego (ILACSD) to stencil 30 storm drains with "no dumping" or similar storm water-related message.
- Removed 14.4 tons of trash and debris during three cleanup events.
- Made over 137,000 impressions through outreach efforts.
- Distributed approximately 2,000 storm water educational calendars encouraging residents and businesses in the City to prevent storm water pollution.

JURMP ANNUAL REPORT ORGANIZATION

The following presents the organization of this Annual Report.

Section 1.0	Introduction
Section 2.0	Municipal
Section 3.0	Industrial
Section 4.0	Commercial
Section 5.0	Residential
Section 6.0	Land Use Planning for New Development and Redevelopment
Section 7.0	Construction
Section 8.0	Illicit Discharge Detection and Elimination
Section 9.0	Education
Section 10.0	Public Participation
Section 11.0	JURMP Effectiveness Assessment
Section 12.0	Fiscal Analysis
Section 13.0	Special Investigations
Section 14.0	Conclusions and Recommendations

2 MUNICIPAL

The City of National City owns and operates a variety of municipal facilities including parks and recreational facilities, public works facilities, public roads, administrative facilities, and the City's extensive MS4. The City sets a good example for City residents and businesses by implementing BMPs at all municipal facilities to reduce the discharge of pollutants to the maximum extent practicable (MEP). While all City divisions are involved in storm water responsibilities related to each specific division, the City's Engineering Department manages and oversees the bulk of the City's storm water program, including the management of the municipal component.

The City is aware that preventing pollutants from entering receiving waters through the implementation of BMPs is both more efficient and cost conscience than expensive remediation efforts. The City requires that minimum BMPs be implemented at each municipal facility and during municipal activities not confined to a specific location. BMPs must be implemented during routine activities that take place at municipal facilities, and during emergency situations when practicable. The City inspects all high priority municipal facilities on an annual basis to ensure BMPs are implemented correctly and functioning properly. Public Works employees maintain and implement a Storm Water Pollution Prevention Plan (SWPPP) at the east and west public works yards. In addition to the BMPs implemented at municipal areas and during municipal activities, the City maintains a rigorous street sweeping program and MS4 and sewer maintenance programs to further reduce or eliminate pollutants from being discharged from such areas.

MUNICIPAL ACTIVITIES

The City of National City is responsible for numerous municipal activities, including the maintenance of fixed facilities and the implementation of field programs. City personnel have been trained in eliminating storm water pollution during the implementation of their specific programs. Pollution prevention methods and BMP requirements are presented in Section 2 of the JURMP. The following presents the municipal activities implemented during the 2006/2007 reporting period, including updates to existing programs.

Erosion and Sediment Control

The City's Parks and Recreation Department continues to work to maintain and preserve existing vegetation in order to mitigate the occurrence of erosion and sediment discharge. Introduction of drought tolerant plants as well as mulching for erosion control have also been implemented, where practicable. City personnel conducting municipal maintenance projects that take place throughout the City are careful to protect storm drains from sediment by placing gravel bags around storm drain inlets and sweeping up any debris noted during routine activities.

Roadway Maintenance and Street Sweeping Activities

Streets and roadways are maintained on a daily, weekly, monthly, and as needed basis. The City's Street Maintenance Division maintains three sweepers and two operators. The City continues to sweep Highland Avenue, National City Boulevard and 8th Street on a daily basis. All other streets throughout the City are swept weekly. The City maintains five

municipal parking lots that are swept and cleaned monthly or as needed. During this reporting period, the City sweepers covered 17,406 curb miles, removing over 1,300 tons of sediment and debris from the City's 110 miles of streets and alleyways.

The Street Maintenance Division is also responsible for small street and sidewalk repairs. Copies of JURMP Appendix C is kept with City personnel to ensure appropriate BMPs such as vacuuming up materials, sweeping the work area during and after repairs, and placing gravel bags around storm drain inlets are implemented. The City's NPDES Storm Water Compliance Inspector also provides in-house training on BMPs and potential storm water pollutants.

Municipal Vehicle and Equipment Maintenance Facilities

The City of National City continues to operate one vehicle maintenance facility, part of the City's East Municipal Yard. The City maintains 221 active pieces of equipment and vehicles. A SWPPP for the East and West yards continues to ensure that pollution prevention measures are implemented. The City employs the following to ensure vehicle and equipment maintenance does not contribute to storm water pollution.

- All vehicles are inspected weekly to check for leaks or any other needed repairs.
- A wash rack is used to capture wastewater generated during routine cleaning of municipal vehicles and equipment. Wastewater entering the wash rack basin is filtered prior to discharge into the sewer system.
- Spill controls are utilized by mechanics within the shop work area.
- Secondary containment is provided for liquid storage containers. Coolants and oils are recycled.
- Filter fabric has been placed over storm drain inlets to capture debris. Some inlets also have been equipped with filter inserts, which are inspected routinely, cleaned four times a year, and replaced by BioClean on an as needed basis.
- Spill response kits are visible at various locations at the yard.
- Good housekeeping measures are emphasized by the maintenance facility manager.
- Weekly inspections of the yard are conducted by City personnel.
- Training is conducted by the City's NPDES Storm Water Compliance Inspector.

No significant spills were recorded during this reporting period. The Public Works Yard is swept on a weekly basis. Additionally, the City's NPDES Storm Water Compliance Inspector routinely inspects the facility to ensure compliance with the municipal permit and implementation of the SWPPP. During this reporting period, the City began to update and revise the SWPPP document, which should be finished during the 2007/2008 reporting period. The SWPPP is being updated to ensure that the most up-to-date BMP technologies are being implemented and that all activities at the yards are included the SWPPP.

Landscaping Maintenance

Personnel from the Parks and Recreation Department, a division of Public Works, are responsible for maintenance activities at park and recreational facilities throughout the City, including landscaping. Parks maintenance staff mow, mulch, and apply landscaping

chemicals as necessary. Proper management of landscaping chemicals, such as herbicides, fertilizers, and pesticides, can greatly reduce the potential of these chemicals reaching the MS4. The following bullets present the City's continued landscape maintenance activities, ensuring the City's program does not contribute potential pollutants to the storm drain system or receiving water bodies.

- City personnel have not administered pesticide application in the past several years. Diseased plants are rinsed off with water, pulled out and replaced, or treated with systemic pesticides in fertilizers that eliminate pests. Special fertilizers for rose bushes contain pesticide products. These are kept in limited quantities (approximately fifteen pounds) at any given time to minimize storage of these products.
- Herbicides are used during different times of the year as part of the City's weed control program, and the City has primarily continued to use less persistent herbicides such as Round-Up (glyphosate) rather than organophosphate pesticides. There were a total of 3.47 gallons of herbicide used this reporting period. City applicators are state certified.
- The City minimizes the use of fertilizers and is primarily fertilizing with a slow-release fertilizer on a less frequent basis (this allows more of the product to be accepted with less leaching and the reduced frequency creates less chance for the product to exit the target area).
- City personnel manually pull weeds, mow weeds, mulch, and disk and till twice a year to minimize the amount of herbicides utilized.
- All herbicides are stored in fire safe, self–closing, weatherproof metal cabinets. Material Safety Data Sheets are kept in the storage area, as well as spill kits.
- Mixing of herbicides is conducted on site to minimize areas of exposure.
- No spills have occurred during this reporting period for routine maintenance activities associated with the City's Parks and Recreation Department Program.
- Employees are certified to properly handle and manage herbicides. Certification is kept up to date in order to comply with all applicable laws and regulations. Qualified Applicator Certificates require applicators to renew certificates every two years. Requirements include 20 hours of training and four hours on laws and regulations. This may include topics such as over sprays of chemicals and potential pollutants/impacts, and water quality.
- The City has used drought tolerant plants and native vegetation for landscaping at a number of facilities in the City including the Paradise Creek Educational Park.
- Fertilizer stock is purchased as needed and quantities are used up immediately so that it is not necessary to stockpile this material. A few hundred pounds of fertilizer may be kept on-hand.
- All fertilizers and grass clippings particles are kept within the target areas.
- The City recycles wood scraps from all trees, except palm trees, to make mulch.

- In place of vegetation for erosion control, the City uses mulching in certain municipal areas. Mulching also minimizes the need for irrigation, fertilizers, and herbicides.
- The City aerates soils three or four times per year and applies soil treatments with gypsum to increase the absorptive capacity of the soil and reduce runoff.
- The irrigation systems are inspected every other day so that necessary repairs can be made as soon as possible.
- All timers for the irrigation system are adjusted with multiple start times to allow water time to percolate into the soil and to prevent runoff.
- Irrigation schedules are seasonal; the winter schedule is such that the amount of water used is half that used in the summer.
- Many sprinklers use low angle nozzles to prevent drift of water.
- Old sprinklers are continuing to be replaced with low volume heads with in-line checks. This prevents excessive runoff if the sprinkler head is broken.
- All Public Works staff are encouraged to participate in seminars pertaining to storm water management in order to improve education of all City employees.
- The City has not officially adopted all aspects of Integrated Pest Management (IPM), but it is current practice to minimize the use of pesticides to control pests, seeing pesticides as essentially a last resort. Only herbicides were used this reporting period.

Municipal Maintenance: Trash and Debris Removal

The City's Parks and Recreation Department continues to be proactive in litter removal and containment. City personnel are responsible for the upkeep of parks and recreational areas. Litter and debris are monitored and removed routinely. The City follows the trash and debris removal procedures listed below.

- During annual training sessions, Parks and Recreation staff are reminded to check daily for open dumpster lids and overfilled dumpsters.
- Litter and debris are removed from parks, parking lots, and landscaped areas around public buildings on a daily basis.
- Pick-up frequency is increased at parks and recreational during the summer months when necessary to account for the increased number of patrons at these facilities.
- All storm drain inlets within a close proximity to where maintenance activity is scheduled are protected with absorbent pads or gravel bags prior to beginning the activity to prevent litter and debris from being introduced to the storm drain system.
- Blowers may be used to divert leaves, grass clippings, and organic material back to landscaped areas. Residual litter and debris are picked up and disposed of properly.
- Green waste is recycled and converted to mulch to be used for landscaping.
- BMP implementation refresher courses are periodically conducted.

- The City ensures that dumpsters are not overfilled by contacting EDCO for additional pick-up when necessary.
- Annual BMP training for Public Works staff includes reminders to keep the dumpster lids closed when not in use.

Maintenance of the City's MS4s

The City continued to implement an aggressive MS4 inspection and maintenance schedule for MS4 facilities throughout the City. This includes cleaning the City's storm drains, storm drain boxes, and 30 open channel sections. Responsibilities for upkeep of the City's MS4 are divided between the Street Maintenance Division and the Wastewater Division of the City's Public Works Department. Maintenance of the channels occurs twice a month. During this reporting period, municipal employees removed approximately 416.57 cubic yards of trash and debris from the channels. The trash and debris was removed by hand. During the 2004/2005 period, the RWQCB issued a channel maintenance directive restricting the removal of vegetation from storm water channels. In response to this directive, the City no longer uses heavy equipment to clean out earthen channels, and does not remove vegetation or sediment supporting vegetation. Table 2.1 lists the channel maintenance locations.

The Wastewater Division continues to execute the twelve-month maintenance cycle developed to systematically inspect the entire storm drain system. The City has been divided into eleven zones; each zone is inspected and cleaned as necessary one month of the year, with at least two days a week devoted to this task. During this reporting period, approximately 1,329 man-hours were used to clean 100 percent of the MS4 clean-out locations and collect approximately 23,200 pounds of debris. Sediment and trash were the most commonly reported materials being removed from the storm drain cleanout locations, which is similar to previous years.

Wastewater Operations

The City continues to maintain a Sewer Overflow Prevention Plan and a Sewer Overflow Response Plan. The City ensures that staff who conduct wastewater operations activities are familiar with these documents, thereby ensuring staff are educated about the nature and effects of potential pollutants that may be released as a result of wastewater operations. The aforementioned plans also discuss various good housekeeping BMPs and other procedures to be implemented during wastewater maintenance operations.

During this reporting period, one sanitary sewer overflows (SSO) occurred in the City. The SSO was reported to the RWQCB and cleaned up to the extent possible. More information on the City's mechanism for receiving notification of spills from private sewer laterals is presented in the JURMP. Additional information on the SSO from 2006/2007 is presented in Section 8 of this JURMP Annual Report.

The City continues to monitor fifteen flow meter units that are distributed throughout the City's sewer system to check for evidence of a leak or possible overflow or infiltration. In addition, City crews also check for leaks in pipes or blockages during routine maintenance. If there is a block or leak, the City responds immediately to fix the problem. The City invested about 1,782 man-hours clearing 333,060 feet of sewer lines. Over 17,730 pounds of debris were removed from the City's sewer lines. Grease, silt, sand, and rocks were common items removed during maintenance. The City also uses cameras to investigate less

accessible sewer blockages. The City invested 26 hours and televised over 4,200 feet of sewer line during this reporting period.

Municipal Activities Database

The City of National City continues to use its Microsoft Access Database Program to assist with the tracking of municipal activities. The activities tracked include street sweeping, complaints, storm drain box cleaning, sewer cleaning, storm drain channel cleaning, and parks and recreation activities. Utilizing the database has become an integral part of the City's program to track data and follow-up when necessary. The City continues to enhance the database to improve accounting and better characterize storm water problems reported in the City. The City recently updated the database and associated forms to be able categorize complaints by sector (residential, municipal, commercial, industrial); this information was not available for all of 2006/2007 but is anticipated to be useful in future years. The City has also created a field to track units of debris collected from sewer clean outs. The City also used databases to track inspections of construction and commercial/industrial sites. More information regarding these databases can be found in other sections of this report.

NPDES Storm Water Compliance Inspector

The City has a full time NPDES Storm Water Compliance Inspector, who is also authorized to issue citations and other enforcement actions. The NPDES Storm Water Compliance Inspector inspects municipal facilities, industrial/commercial businesses, construction sites, as well as addressing public complaints and reported spills within the City. The NPDES Storm Water Compliance Inspector has also led storm water workshops and presentations for the commercial, industrial, and residential sectors.

San Diego County Copermittee Meetings

The City of National City attends the bimonthly Copermittee management meetings. Updates on the City's NPDES storm water program are presented during these meetings. Additionally, the City of National City continues to be an active participant in the San Diego Bay Watershed Urban Runoff Management Program (WURMP).

NPDES Storm Water Compliance Technical Support

The City of National City has continued to contract with D-MAX Engineering, Inc. (D-MAX) as the City's NPDES Storm Water Consultant. D-MAX provides the City with technical expertise in the field of storm water. They have conducted training sessions for City employees and work closely with the City's NPDES Storm Water Compliance Inspector to address a wide range of storm water issues. D-MAX Engineering also conducts the City's annual Dry Weather Monitoring Program, which includes recommendations and notification for storm water conveyances that appear to be affected by IC/IDs or maintenance issues. More information on the Dry Weather Monitoring Program is presented in Section 8 of this Annual Report.

MUNICIPAL PRIORITIZATION AND INSPECTIONS

The City continues to maintain a prioritized watershed-based inventory of municipal facilities. All facilities on the City's inventory have been prioritized based on threat to water

quality into one of three categories: high, medium, or low. The City updates the inventory and prioritizations annually. The City reassessed facility prioritizations based on the flow chart in the 2004 JURMP. Based on present criteria and site conditions, the Civic Center was moved from the medium priority inventory to the low priority inventory. Included on the City's inventory, tables 2.2, 2.3, and 2.4 at the end of this section, are public parks and recreational facilities, administrative facilities, fire stations, community service buildings, and public works facilities. Additionally, City roads, streets, and highways and the City's MS4 are included on the inventory. City roads, streets, and highways do not include Interstate 5, Interstate 805, and State Route 54, all of which are under Caltrans jurisdiction.

The City continues to conduct annual inspections of municipal facilities. Inspections are an integral part of the City's efforts to maintain the highest standards of compliance with the Municipal Permit and provide an example of storm water quality awareness for the rest of the community at municipal facilities. Of the high priority facilities, Kimball Park and the Municipal Golf Course receive annual inspections at a minimum, and the two Public Works Yards continue to implement a weekly self-inspection program in addition to the annual inspection conducted by the City's Storm Water Compliance Inspector. The City's road, streets, and highways and MS4 are inspected and maintained throughout the year.

In addition to the inspections performed at the high priority facilities, the City's Storm Water Compliance Inspector inspected the medium and low priority facilities during the 2006/2007 reporting period. Several of these facilities were found to be fully compliant at the time of inspection. At the remaining facilities improved good housekeeping measures were recommended. The City's NPDES Storm Water Compliance Inspector followed up on these recommendations via email or additional site visits.

Beyond the official inspection programs, the City monitors its municipal areas informally throughout the year to ensure BMPs recommended during inspections are implemented consistently. The City's NPDES Storm Water Compliance Inspector frequently provides verbal suggestions in person to City employees as necessary, and also occasionally sends written reminders. Because the corrective actions were implemented during the reporting period as directed by the inspector, no further enforcement actions were necessary.

COMPLIANCE & ENFORCEMENT

As previously mentioned the City's Storm Water Compliance Inspector continues to conduct inspections at municipal faculties and provides corrective actions to ensure that facilities are in compliance with the City's BMP requirements and City Ordinances. Municipal facilities are notified of BMP deficiencies and are provided documentation of necessary corrective actions. The City's Storm Water Compliance Inspector follows up with facilities to ensure that they have effectively implemented corrective actions.

EDUCATION AND OUTREACH

The City continues to provide municipal personnel with the most up-to-date information, training, and outreach available pertaining to the improvement of storm water quality. The City's Public Works Staff attended educational sessions during this reporting period. The workshops covered NPDES program components; SUSMP requirements; storm water legislation and policy; commercial BMPs; municipal BMPs; construction BMPs; and vehicle washing, repair, and service BMPs. More information about all municipal educational

events is provided in Section 9 of this document. Attachment 2.1 presents the sign in sheets of those who attended municipal presentations. Workshops and educational materials offered to municipal workers during this reporting period are summarized below:

- Consultant SUSMP training, August 2006.
- SUSMP coordination meetings held by the City throughout the reporting period.
- A 2007 calendar was posted in municipal facilities and distributed to municipal employees encouraging individuals to protect storm water (Attachment 2.2). The calendar was redesigned for 2007 to a more user-friendly City-specific format.
- The City's consultant held a three training sessions for a total of 34 fire department personnel in the City in June 2007. Training sessions reviewed the NPDES program, BMP implementation, specifically the importance of spill response BMPs, since many times fire fighting personnel are the first to respond in such situations.
- The City's NPDES Storm Water Compliance Inspector conducted a workshop for 25 Public Works employees in June 2007.
- The City conducted annual inspections of municipal facilities during this reporting period. The inspectors educated facility managers on any BMP deficiencies noted during the inspection. More detail on the inspections was provided earlier in this section.
- Eight members of the City's landscape maintenance personnel attended a six class irrigation management course in April 2007.
- An NPDES Knowledge Assessment Test was given to individuals, including City employees that attended any of the storm water workshops. Overall, Knowledge Assessment test scores increased for municipal employees.
- Five municipal employees attended the California Compliance School for training in hazardous waste identification and overview, onsite management requirements (tanks and containers), transportation, and preparedness and prevention training. Certificates of completion are included as Attachment 2.3.

In addition to the outreach efforts mentioned above, the City of National City has completed the construction of Paradise Creek Educational Park. Construction began in September 2005 and work was completed this reporting year. The project is located on an approximately half mile stretch of the creek that remains undeveloped and the park is designed to preserve that stretch of the creek and its habitat. Additionally, the park includes a boardwalk as well as other walking trails and educational signs. Native plants were used in the landscaping, and both a construction SWPPP and a SUSMP report were maintained throughout the project. On 4/21/2007, a few days after the park officially opened, an Earth Day celebration was held there to pick up trash and sow 300 plants.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit. All programs during the 2006/2007 reporting period were conducted under the

requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2004.

Table 2.1
Open Channel Maintenance and Cleaning Sites

Channel #	Location	Address	Channel Construction	Estimated Length, ft	Estimated Work Area, ft^2
1	Paradise Creek-Kimball Park	100-300 16th Street (toward D)	Concrete	1200	12000
2	Paradise Creek SW of West Avenue	West Avenue to W 18th	Natural	800	8000
3	Paradise Creek south of W18th	W 18th to W 22nd	Natural	1200	24000
4	Paradise Creek south of W22nd	W 22nd toward Mile of Cars	Natural	500	10000
5	Palmer Way Channel	South of Palmer Elementary	Natural	1200	12000
6	Fedco Channel- Kimball Way	Kimball Way @ Walnut	Natural	500	10000
7	17th east of Lanoitan	East of Lanoitan	Natural	250	1500
8	La Paleta Creek -Harbor Drive	East of 8th on Harbor	Natural	1500	12000
9	Town & County Shopping Ctr.	Town & County Shopping Mall	Concrete	750	4500
10	Sweetwater Road @ Calmor	Sweetwater @ Calmor	Concrete	250	2500
11	Euclid Avenue 2400 Blk	2400 Euclid	Concrete	700	5600
12	Harbison Avenue 20th to24th	East of Harbison 20th to 24th	Natural	1500	15000
13	Honeysuckle Ln East	500 blk Honeysuckle	Natural	600	6000
14	Paradise Valley Road (3600 8th Street)	3600 blk 8th	Natural	1500	15000
15	Paradise Valley Road @ City limits	Plaza @ P.V.Road East	Concrete & Natural	400	2400
16	8th west of Olive south to Harbison	8th @ Olive	Concrete	1200	18000
17	Plaza @ Harbison West	1000 Harbison	Concrete	950	14250
18	Plaza @ Euclid West	Euclid @ Plaza	Concrete	350	5250
19	Plaza @ Sheryl Ln	1400 Sheryl Ln	Concrete	500	7500

Table 2.1
Open Channel Maintenance and Cleaning Sites

Channel #	Location	Address	Channel Construction	Estimated Length, ft	Estimated Work Area, ft^2
20	Sweetwater @ Ring	Sweetwater East of Ring Road	Natural	75	1500
21	Golf course @ Sweetwater	Sweetwater @ N 2nd	Natural	100	2000
22	Valley Road @ San Miguel	Avenida San Miguel	Concrete & Natural	1000	10000
23	Plaza @ 8th @ Paradise Valley Road	Plaza and E 8th Street	Brow ditch-Concrete	150	450
24	McKinley @ W 12th	McKinley Avenue	Natural	150	450
25	N.C.B. south of 35th/Bridge	National City Blvd.	Natural	500	40000
26	16th & "M" Ave	16th & "M" Ave	Natural	600	4800
27	16th and "N" Ave	16th and "N" Ave	Concrete	100	600
28	30th Street cul-de-sac	30th Street cul-de-sac	Natural	70	210
29	Plaza Bonita Bridge	S. Plaza Bonita	Rock	250	6000
30	In and Out Burger	24th Street and I-5	Natural	200	2000

Table 2.2
High Priority Municipal Facilities

	Municipal Facility	Address
1	Public Works East Yard	2100 Hoover Avenue
2	Public Works West Yard	2100 Hoover Avenue
3	Kimball Park	12th Street and D Avenue
4	National City Municipal Golf Course	1439 Sweetwater Road
5	Municipal Separate Storm Sewer	19 miles of storm drains, storm drain boxes, and open channel sections throughout the City
6	Road, Streets, and Highways	110 miles of roadways throughout the City

Table 2.3
Medium Priority Municipal Facilities

	Municipal Facility	Address
1	Municipal Swimming Pool	1800 East 22nd Street
2	Kimball Recreation Center	148 East 12th Street
3	Police Station	1200 National City Boulevard
4	National City Fire Department Headquarters	333 East 16th Street
5	Fire Station Sub-Station 15	24th Street and Euclid Avenue

Table 2.4
Low Priority Municipal Facilities

	Municipal Facility	Address
1	El Toyon Park	2005 East 4th Street
2	Civic Center	1243 National City Boulevard
3	Las Palmas Park	1800 Newell Street
4	National City Public Library	1401 National City Boulevard
5	Sweetwater Heights Park	Cagle Street and Stockman Street
6	Camacho Recreation Services	1810 East 22nd Street
7	Casa De Salud	1408 Harding Avenue
8	Senior Services Center	1221 D Avenue
9	MLK Community Center	140 East 12th Street

3 INDUSTRIAL

During the 2006/2007 reporting period, the City of National City continued to mitigate urban runoff pollution through implementation of the industrial component of the City's JURMP. The basic components of the City's industrial program include site identification and prioritization, pollution prevention, dissemination of required general and activity-specific BMPs, education, compliance inspections, and enforcement actions. The City also requires all high priority industrial sites to conduct storm water monitoring in accordance with the requirements of the Municipal Permit.

PRIORITIZATION OF INDUSTRIAL FACILITIES

The 2006/2007 JURMP Annual Report presented an updated inventory of the known industrial facilities in the City, classifying them as 23 high priority, 133 medium priority, and 143 low priority industrial facilities. These facilities were prioritized based on Standard Industrial Classification (SIC) codes, proximity to environmentally sensitive areas (ESAs), whether they had filed a Notice of Intent (NOI) to obtain coverage under the State Industrial General Storm Water Permit (Industrial Permit), and the findings of the most recent storm water compliance inspections conducted. Please note that this inventory was developed with information as of the end of the 2006/2007 reporting period. Since that time, a new inventory is being developed for the JURMP update, which uses business license findings and information gathered after the end of the 2006/2007 reporting period.

During this reporting period, the City continued the ongoing process of industrial facility prioritization. Prioritization and SIC codes were re-evaluated after each inspection and adjusted if necessary to properly demonstrate their on-site activities. Any businesses found to be no longer operating in the City, or found to be a duplicate of another business in the inventory were removed from the inventory. The City's most current inventories include (Tables 3.2, 3.3, and 3.4). An in-depth accounting of the high priority industrial businesses is given below.

As mentioned above, there are 23 high priority industrial facilities in National City. Note that as of the end of the 2005/2006 reporting period, 27 businesses were listed as high priority industrial. During this reporting period, two businesses moved or went out of business, three high priority industrial facilities were reclassified as medium industrial, one business was reclassified from high industrial to low industrial, and one business was reclassified from low priority industrial to high priority industrial. The business that was added to the high priority industrial inventory, Melhorn Construction, was reprioritized because the business was found to have begun woodworking as part of the business activities.

POLLUTION PREVENTION AND BMP REQUIREMENTS AND IMPLEMENTATION

Implementing simple pollution prevention techniques can help avoid serious discharges of pollutants and is almost always more effective and less expensive than costly remediation efforts. Recognizing this, the City of National City requires industrial facilities in its jurisdiction to employ pollution prevention methods as appropriate to their activities and

site configurations. Included in Section 3.1 of the City's revised 2004 JURMP are the following pollution prevention measures:

- Use smaller quantities of toxic materials or substitute less toxic materials.
- Change production processes to reduce waste.
- Decrease wastewater flows.
- Recycle wastes as part of the production process (most preferred), off site, or on site (least preferred).
- Segregate wastes.
- Treat wastes on site to decrease volume and/or toxicity.
- Dispose of wastes properly.

The City has developed a list of required general BMPs for all industrial and commercial facilities (revised 2004 JURMP Appendix C.2), as well as activity specific BMPs for industrial facilities (revised 2004 JURMP Appendix C.3). No changes were made to the BMP requirements listed in the City's revised 2004 JURMP during this reporting period. To ensure compliance with the City's BMP requirements and the Industrial Permit, the City has conducted routine, follow-up, and complaint investigation inspections at industrial facilities. The City conducts detailed BMP assessments as part of each inspection; all inspection findings are entered into the City's industrial/commercial database.

INSPECTIONS

Inspections are the City's means to ensuring that facilities are in compliance with the City's BMP requirements and the Industrial Permit. The City conducts routine, follow-up, and/or complaint investigation inspections at industrial facilities. During each site visit, inspectors completed a storm water compliance inspection form to assess BMP implementation, compliance with the City's Storm Water Ordinance, compliance with the Industrial Permit, and list recommended corrective actions, if necessary. In addition, monitoring data and SWPPPs are evaluated at sites that have filed NOIs. Upon inspection, businesses are verbally informed of any corrective actions. The owner/responsible party is also provided with written notice of the corrective actions that are required. Inspection form data are then entered into the City's commercial and industrial inspection database. Further details about the City's inspection method can be found in Section 3.6 of the JURMP.

In total, there were 30 industrial site visits during the reporting period. Of these visits, 29 facilities received full inspections and one business was found to have moved/gone out of business.

All of the facilities included in the high priority industrial inventory submitted with the 2005/2006 Annual Report were visited at least once during the 2006/2007 reporting period. There are 23 high priority industrial facilities in National City. Note that as of the end of the 2005/2006 reporting period, 27 businesses were listed as high priority industrial. During this reporting period, two businesses moved or went out of business, three high priority industrial facilities were reclassified as medium industrial, and one was reclassified as low industrial. One business was reclassified from low priority industrial to high priority industrial and one business was added to the inventory. The two high priority industrial

businesses that moved were San Diego Wood Preserving and Unique Granite and Marble. John D'Marco Boat Storage was moved to the medium priority industrial inventory because boat repair is no longer conducted on site. Rob North Fab was reclassified as medium industrial due to changes in activities at the site that make it no longer subject to the Industrial Permit. Presently Rob North Fab primarily engages in design services with some minor repairs, not in metal fabrication. Prochem Specialty Products was reclassified as medium industrial and Tecnico Systems was reclassified as low industrial for reasons discussed later in this section under the "Permit Compliance" heading. A low priority industrial business, Melhorn Construction, was reprioritized to high priority industrial because the business was found to have begun woodworking as part of the business activities. A high priority industrial business in the City, Collin's Marine Repair, moved locations within the City, but the priority was not changed. The address change is reflected in the inventory, however.

BMP ASSESSMENT

As part of the inspection process, each facility inspected during the reporting period was evaluated for BMP implementation and effectiveness as well as the individual's knowledge of storm water issues. Facilities were advised that they are required to implement both general BMPs and activity-specific BMPs. Based on the assessment of the facility activities and site configuration, the inspectors notified the facility's responsible person regarding any observed BMP deficiencies. They were notified verbally of all corrective actions, and written notification was provided after the inspection.

BMP assessment ratings were assigned during inspections based on a scale of 1 (low) to 5 (high). This information is intended to help the City to conduct a more quantitative assessment of BMP implementation. In future years, as more data is collected, trend analyses can be undertaken to yield a more sophisticated program assessment. During 2006/2007, BMP assessment scores were assigned mainly at high priority industrial facilities. In an effort to standardize the assignment of these ratings, the inspectors used the following assessment criteria to assign scores:

- Level 5: All required general and activity specific BMPs have been implemented effectively.
- Level 4: BMPs have been implemented effectively but the dumpster lid was observed open and/or oil stains were noted in the general parking lot not associated with this business's activities.
- Level 3: BMPs have been implemented with the exception of two corrective actions noted aside from dumpster lids being open or oil stains in the general parking lot.
- Level 2: Minimal BMP implementation is noted. Three or more corrective actions, with the exception of dumpster lids being open or oil stains in the general parking lot. No illegal discharge or illicit connection was noted.
- Level 1: Violation of the City's Storm Water Ordinances (illegal discharge, illicit connection, complete failure to implement BMPs, and/or significant littering).

Similar to previous years, many businesses needed to more effectively implement good housekeeping measures. The most common deficiencies included open dumpster lids, insufficient sweeping frequency resulting in sediment build-up on paved surfaces, and

insufficient frequency for cleanup of small oily leaks in parking lots. These businesses were advised to keep dumpster lids closed, to increase sweeping frequency, and/or to regularly check parking areas for spills, cleaning them up as needed using appropriate techniques. Over the course of the 2006/2007 industrial inspections, there was one illegal discharge to the storm drain system observed. The discharge was sediment from eroding areas of the site and the discharge had ceased upon re-inspection.

PERMIT COMPLIANCE

While conducting industrial BMP assessments, compliance with the General Industrial Permit was also evaluated. During the reporting period, the businesses inspected that were covered under the Industrial Permit were generally found to be implementing their SWPPPs and Monitoring Programs. All facilities listed on the high priority industrial list for the 2006/2007 reporting period are subject to the Industrial Permit.

At the time of inspection, four businesses were in violation of the Industrial Permit for not filing NOIs and developing and implementing a SWPPP. According to the State's Industrial Permit holder database, Valencia Stone and Tile has filed an NOI since the most recent inspection. During the next annual inspection the City's storm water compliance inspector will check to see if a SWPPP has been developed and implemented. One business, A-1 Alloys, has filed an NOI but has failed to develop and implement a SWPPP. The City's NPDES Storm Water Compliance Inspector also worked with the RWQCB's industrial compliance unit to clarify Industrial Permit requirements for industrial businesses in the City and work to bring them into compliance. The main businesses discussed during these conversations included Prochem Specialty Products, Tecnico Systems, and other ship repair facilities that conduct most repair offsite. After conversations with RWQCB staff, the SIC code for Tecnico Systems was changed to 7699, which is not subject to the Industrial Permit. Accordingly, the JURMP priority was changed to low industrial. Prochem is a detergents wholesaler that does some minor mixing; there is essentially no significant exposure at the site. As of this writing, it is still unclear if the business will be subject to the Industrial Permit. Because of its low potential to impact water quality and the uncertain status of its Industrial Permit subjectivity, it is included on the medium priority industrial this year.

During inspections, inspectors checked to see if high priority industrial facilities were conducting appropriate storm water monitoring in accordance with the Municipal Permit. If businesses had not conducted appropriate monitoring, the inspector checked to see that there was a valid reason for exemption. All sites that had not yet filed an NOI, listed previously in this section, had also not implemented a storm water monitoring program. Although they recently obtained coverage under the Industrial Permit, both Carroll Metal Works and A-1 Alloys had not yet developed and implemented a monitoring program. The City will follow-up with those businesses during the 2007/2008 reporting period, taking stricter enforcement actions as necessary. Those high priority industrial businesses that were in compliance with the Industrial Permit were conducting storm water monitoring programs that satisfy the Municipal Permit monitoring requirement for high priority industrial sites.

TRAINING AND EDUCATION

Educating all facilities about the potential threats their business poses to storm water is important in reducing and eliminating polluted runoff from industrial sites. The City

provided any business applying for a business license the "Preventing Urban Runoff Pollution" brochure (Attachment 3.1).

During inspections, facilities were primarily evaluated to determine whether they had implemented the required BMPs listed in the City's JURMP and whether they were in compliance with the Industrial Permit and the City's Storm Water Ordinance. The knowledge assessment component of the standard inspection form continued to be utilized. On a rating score of 1 (low) to 5 (high), the level of storm water knowledge of the facility representative present during an inspection was rated. The knowledge assessment scores are based on how many of the standardized questions the facility representative is able to answer correctly; a score of "1" indicates that no questions were answered correctly and a "5" indicates that all of the questions were answered correctly. These scores are intended to help the City to conduct a more quantitative assessment of business' knowledge. In addition, this allows the City to target educational materials to areas that might have a lower average score. In future years, as more data is collected, trend analyses can be undertaken to yield a more sophisticated program assessment. Each facility representative was asked the following series of questions:

Each facility representative was asked the following series of questions:

- What is storm water?
- What is the difference between storm drain system and the sanitary sewer system?
- Where does storm water flow?
- Is storm water treated prior to discharge?
- What are examples of pollutants?
- Is sediment a pollutant?
- Do you know what good house keeping or best management practices are?
- Do you know what NPDES is or means?

Asking the eight questions listed above facilitates and engages the facility representative and the inspector in a conversation about storm water. Ideally, confusion and/or misconceptions are clarified, concepts are explained, and the facility representatives come away with a strong sense of what role they play in regard to water quality.

In addition to verbal education efforts, during inspections, the City distributed an informational handout regarding the upcoming industrial workshop and the City's user-friendly calendar explaining the importance of eliminating discharges of pollutants to the storm drain system. Businesses were encouraged to hang the calendar in their place of business. The calendar is included as Attachment 2.2. Written correspondence noting corrective actions required was provided to businesses, and corrective actions were also generally explained by inspectors while on site during inspections. During the reporting period, this direct, site-specific approach was the primary method used to educate industrial businesses about storm water pollution.

City industrial business management staff and employees were offered a free Storm Water Workshop in National City on April 25, 2007. This workshop was led by the City's

consultant, D-MAX, and provided information about how to comply with the Industrial Permit through NOIs, SWPPPs, water monitoring programs, and employee education. The workshop also provided information on how to comply with the City's storm water ordinance through implementing BMPs and what to expect from an inspection. They were presented with a PowerPoint presentation and given an NPDES Knowledge/Awareness Assessment Test before and after the presentation. The average post-workshop score was higher than the pre-workshop score. Attendees were also given a sheet listing benchmarks for common constituents analyzed for storm water monitoring, the bilingual flyer, "Everything that flows down into a storm drain goes untreated directly into our creeks, lagoons, and San Diego Bay" (Attachment 3.2), and the Storm Water Hotline Card (Attachment 3.3). The benchmark list was taken from the most recent draft of the proposed next version of the Industrial Permit. Industrial and commercial workshop sign in sheets are included as Attachment 3.4.

POLLUTANT DISCHARGE POTENTIAL

The City is continuously updating its inspection form to match its information needs. The Pollutant Discharge Potential Assessment (PDPA) is intended to be a semi-qualitative tool to identify which sites are major sources of the principal pollutants of concern for storm water. The table includes a list of 12 pollutants or classes of pollutants, which are ranked on a scale from zero (0) to five (5), with five being the highest pollutant discharge potential and one being the lowest discharge potential that can be recorded for any pollutant known to be onsite. The potential pollutants included in the form are sediments, nutrients, aluminum, iron, heavy metals, organic compounds, trash and debris, oxygen demanding, oil and grease, bacteria and viruses, pesticides, acid/base, and others. A score of zero is only given when the inspector finds no evidence that a certain pollutant is present at the site. Fields to note the sources of the observed pollutants and general classes of recommended BMPs for those sources are also marked on the table. Collection of this information is intended to help the City better identify the main sources of major classes of pollutants commonly found in storm water discharges. It is anticipated that this information will be especially useful in the implementation of total maximum daily loads (TMDL) and in the assessment of overall program effectiveness. The form also prompts the inspector to designate sources needing additional BMPs to lower the pollutant discharge potential as well as recommended BMPs for those sources.

COMPLIANCE AND ENFORCEMENT

In addition to routine inspections, the City also conducts inspections based on complaints received from citizens via the City's storm water hotline. When either type of inspection finds facilities are out of compliance with the City's BMP requirements and/or the Industrial Permit, the City enforcement process is initiated. In addition to a verbal description of the violation, the City may also employ phone calls, follow-up inspections, corrective action letters, notices of violation, fines, and/or legal action.

Generally, when significant problems are noted at a facility during a routine inspection, a corrective action letter is mailed to the business from the City Engineer. The letter identifies corrective actions that the business must undertake and lists the penalties and procedures for the business may face if the listed corrections are not made. An NOV may be sent to a business if an especially serious violation of the City's storm water ordinance is occurring at

the facility or follow-up inspection determines that essentially no corrections have been undertaken since the initial inspection. The NOV advises the facility owner that his or her business is in violation of the ordinance and that immediate corrective action is necessary to avoid civil and criminal prosecution, and a fine may also be assessed. The City NPDES Storm Water Compliance Inspector has authority to issue fines up to $500. Businesses receiving an NOV are required to submit a written plan of the corrective actions they would implement to the City. Follow-ups are conducted at non-compliant sites until they come into compliance. In the event that a business refuses to cooperate with the compliance process, it is reported to the RWQCB. Any sites deemed to pose significant threats to human health or the environment are reported to the RWQCB immediately.

During this reporting period, a total of four administrative citations, six NOVs, and seven corrective action letters were given to industrial businesses. The City's NPDES Storm Water Compliance Inspector follows up after enforcement actions are taken. Most of these problems were resolved at the first issuance of a citation, NOV, or warning, and all necessary corrective actions were implemented during follow-up visits. One industrial business, Carroll Metal Works, received one administrative citation and three NOVs during this reporting period for continued non-compliance with the City's BMP requirements and Industrial Permit requirements. The City's NPDES Storm Water Compliance Inspector continues to follow-up with the business to ensure progress is made toward compliance, and the RWQCB has been copied on recent enforcement correspondence with the business. No businesses were deemed to present a significant threat to human or environmental health, and consequently none were reported to the RWQCB. The City did, however, discuss Industrial Permit compliance issues with RWQCB staff during the reporting period. Overall, the City's enforcement efforts were successful in bringing businesses into compliance.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated revised JURMP document developed in 2004.

TABLE 3.1
HIGH PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
1	A-1 Alloys Recycling Center**	724 Civic Center Drive	5093	San Diego Bay
2	Bay City Marine Inc.**	1625 Cleveland Avenue	3731	San Diego Bay
3	Carroll Metal Works, Inc.**	740 W 16th Street	3441	San Diego Bay
4	Collins Marine Repair, Inc.	1400 Cleveland Avenue	3731	San Diego Bay
5	Contactours and Charter Service (San Diego Mini Tours Inc)**	1726 Wilson Avenue	4141	San Diego Bay
6	CP Manufacturing**	1300 Wilson Avenue	3559	San Diego Bay
7	Dixieline Lumber Company**	3450 Highland Avenue	5211	San Diego Bay
8	Futura Fiberglass**	730 W 19th Street	3732, 2821	San Diego Bay
9	Greg's Fiberglass and Painting	1804 Cleveland Avenue	3732	San Diego Bay
10	Hanson Aggregates National City Batch Plant (2003 NC LLC)**	601 W 12th Street	3273	San Diego Bay
11	Hawthorne Rent-It Service**	2000 McKinley Avenue	4212	San Diego Bay
12	Hocking International**	2121 Hoover Avenue	2824	San Diego Bay
13	L3 Communications**	240 W 30th Street	3731	San Diego Bay
14	L3 Communications Parcord**	225 W 30th Street	3731, 3494	San Diego Bay
15	Master Machine Corporation (Vantage Associates)**	900 Civic Center Drive	3499	San Diego Bay
16	Melhorn Construction[1]	410 W 30th Street, B	2434, 1599	San Diego Bay
17	Pacific Defense Systems (2)**	1411 Harding Avenue	3731, 3732	San Diego Bay
18	Pacific Steel, Inc.**	1700 Cleveland Avenue	5093	San Diego Bay
19	Ransom Bros. Lumber & Supply Co.**	1740 Cleveland Avenue	5031, 2499	San Diego Bay
20	South Bay Boiler Repair, Inc.**	1224 Roosevelt Avenue	3498	San Diego Bay
21	Sun Diego Charter Co.* **	2020 Hoover Avenue	4141	San Diego Bay
22	Valencia Stone and Tile**	1124 Coolidge Ave	1743, 3281	San Diego Bay
23	Western Lift, Inc/Western Hoist, Inc.**	2200 Haffley Avenue	3536, 5084	San Diego Bay

[1] Added to the high priority industrial inventory during the 2006/2007 reporting period

* <200 feet from an ESA

** Filed NOI, has a WDID#

TABLE 3.2
MEDIUM PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
1	A-American Self Storage	525 W 20th Street	4225	San Diego Bay
2	Acropolis Space Center	3200 Highland Avenue	4225	San Diego Bay
3	Active Sign Co.	2827 Hoover Avenue, J	3993	San Diego Bay
4	Advance Plastics	225 W 30th Street	3089	San Diego Bay
5	Aerial Lift Mobil Services	2319 Melrose Street	3531	San Diego Bay
6	Amsec LLC	3201 , 3239 Hoover Avenue	4226	San Diego Bay
7	AMSEC, LLC	131 W 33rd Street	4225	San Diego Bay
8	Ancon Transportation	1800 Harrison Avenue	4226	San Diego Bay
9	Apparel Enterprises Co., Inc.	2712 Transportation Avenue, H	2389	San Diego Bay
10	Assaf Sawaya Fashion	301 W 28th Street, P	2311	San Diego Bay
11	Atomic Investments	3200 Highland Avenue	4225	San Diego Bay
12	Aztec Printing Company	710 E 3rd Street	2759	San Diego Bay
13	Bay Cabinets Inc.	111 E 31st Street	2434	San Diego Bay
14	Bear's VM Machine	241 W 35th Street, E	5015	San Diego Bay
15	Betty Jean's Multi-Copy	728 E 8th Street	2754	San Diego Bay
16	Cabinetry by Lawrence	1331 Harding Avenue	2434	San Diego Bay
17	California Moving & Storage	1305 Wilson Avenue	4731, 4214	San Diego Bay
18	Coastal Decking, Inc.	2050 Wilson Avenue	4225	San Diego Bay
19	Copy Post Printing	100 W 35th Street, B	2759	San Diego Bay
20	Coronado Island Design & Stamps	303 W 35th Street, G	3953	San Diego Bay
21	Costco Wholesale Group	1001 W 19th Street, B	3827	San Diego Bay
22	Costume Enterprises, Inc.	436 W 8th Street, D	2389	San Diego Bay
23	Courrington Woodworks	1535 Tideland Avenue, A-E	2541	San Diego Bay

TABLE 3.2 (CONTINUED)
MEDIUM PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
24	Creative Mobility Inc	320 Civic Center Drive	3799, 5012	San Diego Bay
25	Crest Offset Printing Co,	921 Coolidge Avenue	2759	San Diego Bay
26	Crockett Containers Corp	940 W 19th Street	4226	San Diego Bay
27	Custom Lights & Iron Inc	3101 Hoover Avenue	3648	San Diego Bay
28	Custom Metal Enterprises	1625 Coolidge Avenue	3599	San Diego Bay
29	Dan Fab	1110 Flarding Avenue	3499	San Diego Bay
30	De France Printing Co., Inc.	101 E 30th Street, A	2759	San Diego Bay
31	Designer's Work Room	100 W 35th Street, V/W	2392	San Diego Bay
32	DIMA-TECH	205 W 35th Street, H	3612	San Diego Bay
33	Don Gross Warehouse of San Diego	301 W 30th Street	5013	San Diego Bay
34	Dot Solutions Inc.	2500 Hoover Avenue, B	2759	San Diego Bay
35	Drapery Manufacturer	2605 Hoover Avenue, A	2391	San Diego Bay
36	Durra Ink	303 W 35th Street, E	2752	San Diego Bay
37	E.L.A Bedspreads Etc.	3200 Highland Avenue, 408	2392	San Diego Bay
38	EHMCKE SHEET METAL CORP	840 W 19th Street	3444	San Diego Bay
39	Expert Sewing	2424 Hoover Avenue, Q	2389	San Diego Bay
40	EZ Spring and Stamping	231 W 11th Street	3499	San Diego Bay
41	EZERA CLOTHING	220 W 25th Street, E	5136, 2331	San Diego Bay
42	Fabrication Technologies	2401 Haffley Avenue, A	3499	San Diego Bay
43	Family Loopya Corp	2525 Southport Way, E	2038	San Diego Bay
44	Fiesta Pacific Products, Inc	2855 A Avenue	2037	San Diego Bay
45	FTC	1433 Roosevelt Avenue	3999	San Diego Bay
46	G V Industries	1346 Cleveland Avenue	3599	San Diego Bay

TABLE 3.2 (CONTINUED)
MEDIUM PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
47	Glasswood Studio	907 A Avenue	3231	San Diego Bay
48	Golden Image Window Coverings	2827 Hoover Avenue, A	2591	San Diego Bay
49	Goulet Industries	340 W 26th Street, J	3499	San Diego Bay
50	H & B Baja Filters, LLC	337 W 35th Street, G	3559	San Diego Bay
51	Herc Products, Inc.	155 W 35th Street, C , D	4226	San Diego Bay
52	Highway 54/National Self Storage LLC	132 W 33rd Street	4225	San Diego Bay
53	HWY 54/NATIONAL SELF STOR. LLC	152 W 33th Street	4225	San Diego Bay
54	Hyperbaric Technologies	3224 Hoover Avenue	3499	San Diego Bay
55	Identity Plus	1120 Hoover Avenue	3069	San Diego Bay
56	Imagen Publishing	539 Highland Avenue	2721	San Diego Bay
57	Industrial & Architectural Sign Production	1535 Tideland Avenue, G	3993	San Diego Bay
58	J & L Print House	127 E 8th Street	2752	San Diego Bay
59	Jacobs Engine Rebuilding	938 Coolidge Avenue	3519	San Diego Bay
60	JB Litho	2602 Transportation Avenue, East	2752	San Diego Bay
61	Jessica's Fashions	2605 Hoover Avenue	2335	San Diego Bay
62	John D'Marco Boat Storage	1211 Mckinley Avenue	4226	San Diego Bay
63	K D R Company Printing	301 W 28th Street, D	2752	San Diego Bay
64	Ken's VW	1408 Mckinley Avenue	5013, 7539	San Diego Bay
65	Kim's Wear	3200 B4-2 Highland Avenue, 303	2269	San Diego Bay
66	La Espiga De Oro Bakery	320 Highland Avenue	2051	San Diego Bay
67	Leading Concepts	1535 Tideland Avenue, D	3535	San Diego Bay
68	Lemon Grove Plating, Inc.	1400 Cleveland Avenue	3471	San Diego Bay
69	Little I	301 W 28th Street, S	3999	San Diego Bay

TABLE 3.2 (CONTINUED)
MEDIUM PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
70	Lucero's Draperies	3200 Highland Avenue, 408	2391	San Diego Bay
71	M & M CONVERTER SHOP	301 W 28th Street, X	3568	San Diego Bay
72	M & N Furniture	125 W 22nd Street	2519	San Diego Bay
73	M/ K. Sproull Layout Co,	2712 Transportation Avenue, C	2396	San Diego Bay
74	Microwave Solutions Inc.	3200 Highland Avenue	3663	San Diego Bay
75	Mike's Printing	2827 Hoover Avenue, K	2752	San Diego Bay
76	Miller Marine	1430 Hoover Avenue	3498	San Diego Bay
77	Moo's Transfer and Storage	1305 Wilson Avenue	4214	San Diego Bay
78	Motivational Systems Inc. (MSI)	2200 Cleveland Avenue	2599	San Diego Bay
79	Mylyn's Fashion of San Diego	901 Coolidge Avenue	2339	San Diego Bay
80	Natalina Enterprises	1840 Harrison Avenue	4214	San Diego Bay
81	National City Discount Self Storage	131 W 33rd Street	4225	San Diego Bay
82	National City Self Storage	430 W 30th Street	4225	San Diego Bay
83	National City Transfer & Storage	2150 Mckinley Avenue	4214	San Diego Bay
84	National Iron Works	832 Hoover Avenue	3446	San Diego Bay
85	New Life Barrier (Hoa My Inc. DBA)	1616 Hoover Avenue	3449	San Diego Bay
86	Niederfrank's Ice Cream Inc.	726 A Avenue	2024	San Diego Bay
87	OCP-OFFSET COMMERCIAL PRESS	1533 Wilson Avenue, A	2752	San Diego Bay
88	Olsen-Simmons Cabinetry	426 E 30th Street	2599	San Diego Bay
89	Ooh La La (West Kid's Gear)	2602 Transportation Avenue, G	2339	San Diego Bay
90	Pacific Coast Moving & Storage	2215 Cleveland Avenue	4214	San Diego Bay
91	Patrick Shaw Engraving	1533 Tideland Avenue, J	3479	San Diego Bay
92	Planned Parenthood of SD & RIV	337 W 35th Street, S	4225	San Diego Bay

TABLE 3.2 (CONTINUED)
MEDIUM PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
93	Posture Care Mattress Mfg.	34 E 17th Street, A	2515	San Diego Bay
94	Potter Electric, Inc. Warehouse	105 W 35th Street, A	4225	San Diego Bay
95	Precision Bindery & Printing	301 W 28th Street, E	2731	San Diego Bay
96	Prochem Specialty Products, Inc.	115 E 18th Street	2841	San Diego Bay
97	Proto Machining	105 W 35th Street, L	3499	San Diego Bay
98	Puppet Safari	326 W 11th Street	3942	San Diego Bay
99	Quality Craft Inc.	1645 Tideland Avenue, K-O	2511	San Diego Bay
100	R. Harris and Co.	2520 Hoover Avenue, A	2599	San Diego Bay
101	RAS Fashions	2605 Hoover Avenue, B	2399	San Diego Bay
102	Rob North Fab	1605 Hoover Avenue	8711	San Diego Bay
103	Royal Design Studios	2602 Transportation Avenue, B	3953	San Diego Bay
104	San Diego Custom Embroidery	444 W 8th Street	2395	San Diego Bay
105	San Diego Pretzel	224 W 12th Street	2051	San Diego Bay
106	San Diego Seafood	1842 Mckinley Avenue	2092	San Diego Bay
107	Sewing Saavedra	2525 Southport Way, R	2399	San Diego Bay
108	Sew-Together	220 W 25th Street, D	2389	San Diego Bay
109	Sharp, George G, Inc.	3239 Hoover Avenue	4226	San Diego Bay
110	Silva Caseworks Inc	1337 Roosevelt Avenue	2434	San Diego Bay
111	Smart Cutting Services	220 W 25th Street, A	2399	San Diego Bay
112	Smartrunk Systems Inc.	337 W 35th Street, R	3669	San Diego Bay
113	South Bay Motorsports Warehouse 1	337 W 35th Street, H	4225	San Diego Bay
114	South Bay Motorsports Warehouse 2	105 W 35th Street, B	4225	San Diego Bay
115	South Bay Transfer and Storage	2236 Mckinley Avenue	4214	San Diego Bay

TABLE 3.2 (CONTINUED)
MEDIUM PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
116	Southland Clutch Exchange	101 E 18th Street	3599	San Diego Bay
117	Stark Mfg. Co.	206 W 35th Street, C , D	2394	San Diego Bay
118	Studio Europa Inc	313 W 33th Street, B	2434	San Diego Bay
119	Sunshine Welding	1516 Roosevelt Avenue, A	3549	San Diego Bay
120	Team Sports Beach Wear	2601 Hoover Avenue, D	2339	San Diego Bay
121	The Machine Shop & Fabricators	1925 Cleveland Avenue	3599	San Diego Bay
122	Tod Tool Inc	2601 Hoover Avenue, K	3728	San Diego Bay
123	TOGETHER-WEST INC	220 W 25th Street, D	5136, 2331	San Diego Bay
124	Universal Steel Fabrication	1702 Harding Avenue	3449	San Diego Bay
125	Upholstery Fabric Outlet (UFO)	1918 Roosevelt Avenue	2512, 5714	San Diego Bay
126	US-MEX	2500 Hoover Avenue, G	3679	San Diego Bay
127	Valmer Graphics Inc.	1400 E Plaza Blvd.	2759	San Diego Bay
128	Vanari Knitting Mills Inc.	340 W 26th Street, L	2399	San Diego Bay
129	Vimone's Garmet Co.	220 W 25th Street, G	2329	San Diego Bay
130	Window Classics	1921 Cleveland Avenue	2391	San Diego Bay
131	Withouski Cabinet	1535 Tideland Avenue, P	2434	San Diego Bay
132	WSI Metal Supply	1839 Cleveland Avenue	3599	San Diego Bay
133	X-treme Plastics	2704 Transportation Avenue, H	3089	San Diego Bay

TABLE 3.3
LOW PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
1	A & S Flooring	100 W 35th Street, E	1752	San Diego Bay
2	A & T WHOLESALE ELECTRIC & L	205 W 35th Street, B	5063	San Diego Bay
3	A B C AUTOBUYERS	40 W Plaza Blvd.	5012	San Diego Bay
4	A Mirror Décor (aka National Glass & Mirror Co.)	821 E 2nd Street	1793	San Diego Bay
5	A.L. & H.A. PINE CONST. INC.	148 30th Street, A	1521	San Diego Bay
6	A-1 Alloys/ABC Metals, Inc	1401 Cleveland Avenue	5051	San Diego Bay
7	ABC Auto Buyers	1800 National City Blvd., H	5012	San Diego Bay
8	ABC Supply Company	135 W 30th Street	5033	San Diego Bay
9	ACI Distribution	131 W 33rd Avenue, A	5039	San Diego Bay
10	ACI Postal Systems, Inc.	2702 Southport Way, A	5199	San Diego Bay
11	ADVANCED MAINTENANCE CONCEPTS	1904 Cleveland Avenue	5051	San Diego Bay
12	Alcem Fence Co. Inc	1440 Coolidge Avenue	1799	San Diego Bay
13	All American Plastic Bags	3020 Hoover Avenue	5199	San Diego Bay
14	Allegro Furniture Inc.	600 W 12th Street	5088, 5021	San Diego Bay
15	ALLSPORTS FLOORING	301 W 28th Street, K	1752	San Diego Bay
16	Amermex	241 W 35th Street, J	5199	San Diego Bay
17	Arctic Supply	213 Civic Center Drive	5078	San Diego Bay
18	Bantry Industrial & Marine CRP	241 W 35th Street, F	5085	San Diego Bay
19	BAR BET Construction	3348 Cypress Street	1623	San Diego Bay
20	Bay Shore Enterprises	301 W 28th Street, L	5084	San Diego Bay
21	BAYVIEW ELECTRIC	2827 Hoover Avenue, D	1731	San Diego Bay
22	Berlin Wall Wholesale	301 W 28th Street, R	5139	San Diego Bay

TABLE 3.3 (CONTINUED)
LOW PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
23	Blue Coast Construction Inc. (Office)	1215 W Wilson Avenue	1542	San Diego Bay
24	Blue Coast Construction, Inc.	1804 Cleveland Avenue, B	1542	San Diego Bay
25	BLUELINX DISTRIBUTION	901 Bay Marina Drive	5031	San Diego Bay
26	Bostrom Instrument Company	208 Civic Center Drive	5084	San Diego Bay
27	Brammer Electric	1920 Mckinley Avenue	1731	San Diego Bay
28	C & D Industrial Supply Inc.	303 W 35th Street, G	5084	San Diego Bay
29	C & W Diving	1706 Hoover Avenue	1629	San Diego Bay
30	C L F Warehouse Inc	2702 Southport Way, B	5013	San Diego Bay
31	C.A. WINDSHIELDS, INC	211 W Plaza Blvd.	5013	San Diego Bay
32	California Air Compressor	1630, 1635, 1640 Coolidge Ave	5084	San Diego Bay
33	Century Wheel & Rim	2101 Haffley Avenue, B	5013	San Diego Bay
34	Circus Man Ice Cream	1037 Harding Avenue	5142	San Diego Bay
35	Coastal Marine Service, Inc	1533 Wilson Avenue, B	1772	San Diego Bay
36	Column One, Inc.	241 W 35th Street, K	1721	San Diego Bay
37	Costco Wholesale Corp.	1001 W 19th Street, C , D	4783	San Diego Bay
38	CSI Supply	337 35th Street, M	5085	San Diego Bay
39	Danya B	205 W 35th Street, E	5023	San Diego Bay
40	De-Lux Roofing	1107 Harding Avenue	1761	San Diego Bay
41	Dependable Printing Supply Inc.	100 W 35th Street	5085	San Diego Bay
42	Diesel Power Trade Corp	1720 Cleveland Avenue	5084	San Diego Bay
43	Digital Wizards Inc.	2704 Transportation Avenue, C	1731	San Diego Bay
44	Door-Man	910 Hoover Avenue	1799	San Diego Bay
45	E Z Buy Auto	1124 Coolidge Avenue	5012	San Diego Bay

TABLE 3.3 (CONTINUED)
LOW PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
46	Encompass Design	301 W 28th Street, S	5137	San Diego Bay
47	Endless Design Ceramic Tile	3707 Lynda Place	1743	San Diego Bay
48	Eskay G. Company	712 E 18th Street	5112	San Diego Bay
49	Eurosytems Montgomery Co.	139 Roosevelt Avenue	5072	San Diego Bay
50	Family Loompya Wholesale	2626 Southport Way, F	5199	San Diego Bay
51	Fiber-World Products	2440 Highland Avenue	5013	San Diego Bay
52	Fleetwood Plumbing/Electric Inc	1416 Hoover Avenue	1731	San Diego Bay
53	Forest Plywood Sales dba Baker Hardwood Lumber Co.	3131 Hoover Avenue	5031	San Diego Bay
54	Framing Associates, Inc.	1248 Coolidge Avenue	1751	San Diego Bay
55	Free Form Clay and Supply	1912 Cleveland Avenue	5199	San Diego Bay
56	Furby Construction Co, Inc.	801 Civic Center Drive	1799	San Diego Bay
57	G Scott Asphalt	303 W 35th Street, D	1751	San Diego Bay
58	G. P. May Company	2424 Hoover Avenue, L	1751	San Diego Bay
59	GEMTEK USA	2602 Transportation Avenue, M	5094	San Diego Bay
60	H & R Hardware Supply	2602 Transportation Avenue, D	5072	San Diego Bay
61	Handy Metal Mart, Inc	1540 Mckinley Avenue	5051	San Diego Bay
62	Hardwood Designs Plus, Inc.	105 W 35th Street, F	1799	San Diego Bay
63	HEARTLAND MEAT CO., INC.	224 W 12th Street	4222	San Diego Bay
64	HUB Construction Supply & Equipment	402 W 35th Street, A	5082, 5039	San Diego Bay
65	Industrial Wiping Towels	3200 Highland Avenue, 407	5199	San Diego Bay
66	Integris Metals, Inc.	2300 Haffley Avenue	5051	San Diego Bay
67	Interfluid Environmental Services, Inc.	1611 Hoover Avenue	4953	San Diego Bay

TABLE 3.3 (CONTINUED)
LOW PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
68	J & L DISTRIBUTION INC	2601 Hoover Avenue, D	5169	San Diego Bay
69	J. C. Environmental Company	2504 Transportation Avenue, C	4953	San Diego Bay
70	Joy Air	2601 Hoover Avenue	5064	San Diego Bay
71	JVC CONSTRUCTION INC	415 W 12th Street	1599	San Diego Bay
72	K Surplus Sales, Inc.	1403 Cleveland Avenue	5072	San Diego Bay
73	Kool Fit America Inc.	1725 Harding Avenue	5091	San Diego Bay
74	L B C MUNDIAL CORP	914 E 8th Street, 201	4731	San Diego Bay
75	L B C MUNDIAL CORP	1420 E Plaza Blvd., D-9	4731	San Diego Bay
76	L.A. Rack	1725 Harding Avenue, B	5137	San Diego Bay
77	L.L. Applied Restoration Service, Inc.	630 National City Blvd.	1522	San Diego Bay
78	La Rue Plumbing	1515 Wilson Avenue	1711	San Diego Bay
79	LUCKY COMPANY	39 E 7th Street	5149	San Diego Bay
80	Main Squeeze Juices	2712 Transportation Avenue	5149, 7699	San Diego Bay
81	Mar-Ind of San Diego	2424 Hoover Avenue, R	5085	San Diego Bay
82	N. Glantz & Son	2530 Southport Way, C	5099	San Diego Bay
83	Napa Auto Parts	1810 Highland Avenue	5013	San Diego Bay
84	Nellans Carpet and Draperies	426 W 15th Street	1752	San Diego Bay
85	NELSON INDUSTRIAL SERVICES INC	2827 Hoover Avenue, F	1799	San Diego Bay
86	NICOLLS INC	1535 Tideland Avenue, J	5099	San Diego Bay
87	NICOM USA, Inc.	2626 Southport Way, B	5063	San Diego Bay
88	ODP SERVICES	3530 E 8th Street	4731, 5411	San Diego Bay
89	One Source Distributors	2530 Southport Way, A	5065	San Diego Bay
90	ORTIZ & ALLDS SANDBLASTING &	1313 Bay Marina Drive	1799	San Diego Bay

TABLE 3.3 (CONTINUED)
LOW PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
91	P B E Warehouse Inc	190 E 26th Street	5013	San Diego Bay
92	PAOGA CONSTRUCTION, INC.	3200 Highland Avenue, 310	1521	San Diego Bay
93	PELL MELL SUPPLY INC	402 W 35th Street, E	5072	San Diego Bay
94	Pentagon Cargo	3200 Highland Avenue	4731	San Diego Bay
95	PERRY PLUMBING CO	205 W 35th Street, K	1711	San Diego Bay
96	Philippine Mabuhay News	3142 E Plaza Blvd., N	5192	San Diego Bay
97	Phone Shop, The	835 D Avenue	1799	San Diego Bay
98	PILIPINAS KARGO & TRAVEL AGEN.	1341 E 8th Street, A	4731	San Diego Bay
99	Planet Diva Inc.	337 W 35th Street, F	5032	San Diego Bay
100	Potter Electric, Inc.	1343 Wilson Avenue	5063	San Diego Bay
101	PPG Autoglass, LLC	316 W 30th Street	5013	San Diego Bay
102	Pro Electric	2424 Hoover Avenue, M	1731	San Diego Bay
103	RAD Electric Supply Inc.	1904 Mckinley Avenue	5065	San Diego Bay
104	RADIATOR DEPOT	1533 Wilson Avenue, A	5013	San Diego Bay
105	Ranger Communications	401 W 35th Street, B	5065	San Diego Bay
106	Reliance Metal Center	2100 Cleveland Avenue	5051	San Diego Bay
107	REN INTERNATIONAL SERVICES INC	916 E 8th Street, 6	4731	San Diego Bay
108	Rick Villarin Automatic Fire	1620 B Avenue	1799	San Diego Bay
109	Riverside Cement Co.	920 Bay Marina Drive	5032	San Diego Bay
110	Romero's Roofing Service, Inc.	1827 Cleveland Avenue	1761	San Diego Bay
111	RSD TOTAL CONTROL	402 W 35th Street, G	5075	San Diego Bay
112	RTM INTERNATIONAL LLC	301 W 28th Street, V	5099	San Diego Bay

TABLE 3.3 (CONTINUED)
LOW PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
113	Ruby's Embroidery	2525 Southport Way, S	5131	San Diego Bay
114	S & K Sales Company	2626 Southport Way, C-E	5199	San Diego Bay
115	S L Fusco Inc.	2530 Southport Way	5085	San Diego Bay
116	SAN DIEGO ORGANIC SUPPLY INC	100 W 35th Street, E	5159	San Diego Bay
117	San Diego Plastics, Inc.	2220 Mckinley Avenue	5099	San Diego Bay
118	San Diego Pump & Compressor	301 W 28th Street, A	5085	San Diego Bay
119	Sicilian Marble & Granite, Inc.	1535 Tideland Avenue, J	1741	San Diego Bay
120	Sid's Carpet Barn	132 W 8th Street	1752, 5023	San Diego Bay
121	South Bay Mechanical Services	221 W 16th Street	1711	San Diego Bay
122	SUNCARGO INC	1457 E Plaza Blvd.	4731	San Diego Bay
123	Superior Foam & Upholstery Corp.	105 W 35th Street, D	5199	San Diego Bay
124	Tecnico Systems Corporation	206 W 35th Street, B	7699	San Diego Bay
125	Teyssier & Teyssier Inc.	3200 B4-2 Highland Avenue	1542	San Diego Bay
126	Teyssier Construction, Inc	3200 B-3 Highland Avenue	1521	San Diego Bay
127	The Marble Store	2120 Wilson Avenue	5032	San Diego Bay
128	Tierra y Fuego	2145 Wilson Avenue	5032	San Diego Bay
129	Tom Thumb Wholesale Ice Cream	1021 Coolidge Avenue	5143	San Diego Bay
130	Topeco Products	2525 Southport Way	5013	San Diego Bay
131	Tuff Acoustical and Thermal	1623 Cleveland Avenue	1742	San Diego Bay
132	Unidyne Corporation	2702 Southport Way, F	1799	San Diego Bay
133	United Barber & Beauty	2807 Hoover Avenue, C	5087	San Diego Bay
134	Univar USA	2100 Haffley Avenue	5169	San Diego Bay
135	Un-limited Hydraulics	27 N Euclid Avenue	Unassigned	San Diego Bay

TABLE 3.3 (CONTINUED)
LOW PRIORITY INDUSTRIAL FACILITIES

#	Business Name	Address	SIC Code	Watershed
136	Vernon Ship Supplies	1705 Hoover Avenue, B	5199	San Diego Bay
137	Villarino Construction Svc. Inc	430 W 12th Street	1542	San Diego Bay
138	West Coast Cab	121 E 31st Street	4121	San Diego Bay
139	WEST COAST FOREST PRODUCTS INC	2236 Mckinley Avenue	5031	San Diego Bay
140	WestFlex Industrial	325 W 30th Street	5085	San Diego Bay
141	XPEDX	1010 W 19th Street	5113	San Diego Bay
142	Y & M WHOLESALER	2626 Southport Way, A	5145	San Diego Bay
142	Y.Y.K. ENTERPRISES, INC.	726 W 19th Street	1721	San Diego Bay
143	A & S Flooring	100 W 35th Street, E	1752	San Diego Bay

4 COMMERCIAL

Many different categories of commercial facilities, especially auto repair shops and restaurants, have the potential to discharge pollutants in storm water runoff. These sites may not be as large as some industrial facilities, but a somewhat significant pollutant potential remains if BMPs are not implemented properly. Activities that can pose potential problems to water quality include vehicle repair activities, power washing, improper grease handling and disposal, and improper trash management. In order to reduce and potentially eliminate the pollutants discharging from commercial facilities, the City has continued to investigate complaints regarding commercial businesses and implement an education program that targets commercial businesses in the City.

In order to reduce and potentially eliminate the pollutants discharging from commercial facilities, the City has continued to implement an education program that targets these businesses. The main way in which the City's educational information reaches commercial facilities is through activity specific educational fact sheets and through visits during routine or follow-up inspections and during complaint investigations.

PRIORITIZATION OF COMMERCIAL FACILITIES

The City's commercial inventory is updated throughout the reporting period as needed. Businesses that are no longer operational in the City are removed from the inventory, duplicate facility listings are consolidated, and any changes in SIC codes are updated as needed (and their priorities are adjusted accordingly). Some reprioritization was also conducted due to new business SIC codes and proximity to ESAs. As the result of inspection findings and a sort of the City's business license database, several facilities were reprioritized, and others were found to have moved, gone out of business, or be home-based businesses that did not pose a substantial threat to storm water quality. The City's current 2006/2007 high priority commercial inventory contains 587 businesses (Table 4.1).

POLLUTION PREVENTION AND BMP REQUIREMENTS AND IMPLEMENTATION

The City's JURMP requires that commercial businesses implement certain pollution prevention methods. The commercial activities with the largest potential to generate pollutants, such as food preparation and auto repair, are generally required to be conducted in contained areas. However, there is still a potential for significant storm water pollution if BMPs are not implemented properly. The City requires the implementation of general BMPs (JURMP Appendix C.2) at all facilities and activity-specific BMPs as appropriate (JURMP Appendix C.4). The City's inspectors typically emphasize good housekeeping measures and secondary containment and overhead coverage for automotive fluids and restaurant grease stored outside. Non-structural source control BMPs are strongly emphasized for commercial facilities, although structural BMPs may be required at some facilities depending on their activity. No changes have been made to the City's BMP requirements during this reporting period. The City employs both inspections and education to ensure the required BMPs and pollution prevention methods are being implemented. The goal of these inspections and management education is to reduce and/or eliminate the amount of storm water pollution being discharged from these commercial facilities.

INSPECTIONS

During storm water compliance inspections, the inspectors assessed the extent of each facility's implementation of required BMPs and compliance with the City's Storm Water Ordinance. Five-page inspection forms and a PDPA were completed. Inspected businesses were verbally notified of any recommended corrective actions or areas of special concern, and written notices of the required corrective actions were mailed later. As discussed earlier, the inspections also included an education component. Inspection results were entered into the City's commercial and industrial inspection database.

A total of 10 commercial sites were visited during this reporting period. The 10 site visits consisted of one routine inspection and several follow-up and complaint investigations. All 10 businesses received a full inspection.

This reporting period, five commercial facilities were found to be in violation of the municipal ordinance for illegal discharges, improper BMP implementation and/or littering. Each of these businesses was notified that site conditions violated the City's Storm Water Ordinance and were given instruction on actions necessary to remedy the situation. The City's Storm Water inspector followed-up fully with each business that was out of compliance.

TRAINING AND EDUCATION

The City has found that a lack of knowledge about storm water issues is a common problem at commercial facilities since they are not inspected as frequently as industrial businesses and often have higher turnover rates among management. Recognizing that personal interaction is often the most effective means of providing storm water education, City inspectors take time to educate the responsible person at each facility during every inspection and suggest and explain appropriate BMPs that are site-specific.

In addition to verbal education efforts, during inspections, the City distributed an informational handout regarding the upcoming commercial workshop and the City's user-friendly calendar explaining the importance of eliminating discharges of pollutants to the storm drain system. Businesses were encouraged to hang the calendar in their place of business. The calendar is included as Attachment 2.2.

On May 23, 2007, the City hosted a workshop for business owners and operators working in the automotive-related business. A total of 21 people attended this training. The presentation provided a background on NPDES, watersheds, BMPs, and pollutants likely to be discharged from automotive-related businesses. They were given an NPDES Knowledge/Awareness Assessment Test before and after the presentation, and on average there was an improvement in scores. "Your Shop Can Make a Difference" handouts (Attachment 4.1), "Put Toxic Waste in its Place" brochures and notepads (Attachment 4.2), "Everything that flows down into a storm drain goes *untreated* directly into our creeks, lagoons, and San Diego Bay" handout (Attachment 3.2), and HHW informational refrigerator magnets (Attachment 4.3) were distributed. Sign in sheets for industrial and commercial workshops can be found as Attachment 3.4.

COMPLIANCE AND ENFORCEMENT

When inspections find that facilities are out of compliance with the City's BMP requirements, the City enforcement process is initiated. In addition to a verbal description

of the violation, the City may also employ phone calls, follow-up inspections and compliance checks, corrective action letters, notices of violation, stop work orders, fines, and/or legal action. Most commercial businesses historically have cooperated with the compliance process after receiving education and being notified of necessary corrective actions. However, when a business has been educated and warned but persists in non-compliance, penalties are assessed. This approach has been effective in bringing about compliance with the City's Storm Water Ordinance.

The City continues to follow-up actions until the issue with a particular business is resolved. Facilities identified as having poor BMP implementation are often re-inspected to determine if the recommended corrective actions have been implemented. If the business repeatedly refuses to take corrective action, it is reported to the RWQCB. Any sites deemed to pose significant threats to human health or the environment are reported to the RWQCB immediately. Because facilities have not always implemented BMPs to a satisfactory level by the time of the re-inspection, additional follow-up inspections are sometimes necessary to ensure compliance. In some cases a stop work order is issued until the proper BMPs are implemented. The City follows up with non-compliant businesses until they come into compliance.

In some cases, a corrective action letter is mailed to the business from the City's NPDES Storm Water Compliance Inspector. The letter identifies corrective actions that the business must undertake and lists the penalties and procedures the business may face if the listed corrections are not made. An NOV may be sent to a business when it is observed committing a particularly serious violation of the City's storm water ordinance or when follow-up inspections determine that essentially no significant corrections have been made. The NOV advises the facility owner that his or her business is in violation of the ordinance and that immediate corrective action is necessary to avoid civil and criminal prosecution, and a fine may also be assessed. The City NPDES Storm Water Compliance Inspector has authority to issue fines up to $500. Businesses receiving an NOV are required to submit a written plan of the corrective actions they will implement to the City.

During this reporting period, a total of 11 administrative citations, 10 NOVs, and three corrective action letters were issued to commercial businesses for violations of the City's Storm Water Ordinance. These violations included discharges from activities such as vehicle washing, hosing down the sidewalk/street, and improperly disposing of wastewater. The City's NPDES Storm Water Compliance Inspector followed up on these incidents; the City's enforcement process was effective in bringing noncompliant businesses into compliance. Many of the problems were resolved upon the receipt of the first citation, NOV, or letter. No commercial businesses were found to present significant threats to human or environmental health during 2006/2007, so no reports to the RWQCB were necessary.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2004.

TABLE 4.1
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
1	1-DAY PAINT & BODY CENTERS INC	1146 National City Blvd.	7532	San Diego Bay
2	99 CENT ONLY STORES	1320 Highland Avenue	5999	San Diego Bay
3	A & R Industrial Sewing Machine	2605 Hoover Avenue, D	7699	San Diego Bay
4	A-1 Auto	340 W 11th St	7532	San Diego Bay
5	A-1 Auto Repair and Detailing	100 W 30th Street	7539	San Diego Bay
6	A-1 Hydraulics Service	2100 Roosevelt Avenue	7699	San Diego Bay
7	AAA AUTO CARE	100 W 30th Street, D	7538	San Diego Bay
8	AB&A Custom Wheels & Accessories	1840 Highland Avenue	5531	San Diego Bay
9	ACRO Instruments Company	1121 Coolidge Avenue	8734, 7629	San Diego Bay
10	Adonai's	517 Mile Of Cars Way	5812	San Diego Bay
11	Advanced RV Products	303 W 35th Street, H	5331	San Diego Bay
12	ADVANTAGE AUTO GROUP	100 W 30th Street	5511	San Diego Bay
13	Alfonso's Taco Shop	321 Highland Avenue	5812	San Diego Bay
14	All Pro Auto Repair	517 National City Blvd.	7538	San Diego Bay
15	All Service Cleaners	1031 Roosevelt Avenue	7211	San Diego Bay
16	Allied Piping & Welding, Inc.	1120 Hoover Avenue	7692	San Diego Bay
17	Al's Auto Care	3030 Plaza Bonita Road	5531	San Diego Bay
18	Al's Auto Clinic	1400 Hoover Avenue	7538	San Diego Bay
19	AL'S ELECTRIC MOTORS	1640 Coolidge Avenue	7694	San Diego Bay
20	American Atheletic Club	2539 Hoover Avenue	7997	San Diego Bay
21	AMERICAN CAROUSEL WORKS	3030 Plaza Bonita Road, 9018	7999	San Diego Bay
22	Ameritac, Inc.	320 W 17th Street	7349	San Diego Bay
23	AMOR ESPRESSO CAFE & DELI	604 Highland Avenue	5812	San Diego Bay
24	Anaya's National Automotive	2125 Roosevelt Avenue	7538	San Diego Bay
25	Anchors Motors	1105 National City Blvd.	5511	San Diego Bay
26	Angel, Sonny, Motorcycles Inc	34 E 18th Street	5571	San Diego Bay
27	Apex Towing	131 W 33rd Street	7549	San Diego Bay
28	Araos Merchandising	1430 E Plaza Blvd., K-7	5531	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
29	Arco AM PM #6523	133 W 8th Street	5541	San Diego Bay
30	Arco AM/PM #9566	1606 E Plaza Blvd.	5541	San Diego Bay
31	Arco AM/PM #9570	1139 Harbinson Avenue	5541	San Diego Bay
32	Arco Jerry's	1540 Plaza Blvd.	5541	San Diego Bay
33	Arido Market	1643 Wilson Avenue	5411	San Diego Bay
34	Arroyo Brothers	128 National City Blvd.	7538	San Diego Bay
35	Asian Noodles	1430 E Plaza Blvd., E-12	5812	San Diego Bay
36	Auto Access	1609 National City Blvd.	7538	San Diego Bay
37	Auto Buyers Plus	1010 National City Blvd.	5511, 5521	San Diego Bay
38	Auto Buyers Plus	110 W. Plaza Blvd	5521	San Diego Bay
39	AUTO CARE	3030 Plaza Bonita Road	5531	San Diego Bay
40	AUTO REPAIR POPOV	710 E 8th Street	7538	San Diego Bay
41	Auto Zone #5658	1539 Highland Avenue	5531	San Diego Bay
42	Auto Zone #5659	2500 E Plaza Blvd.	5531	San Diego Bay
43	AUTOBUYERS PLUS	110 W Plaza Blvd.	5521	San Diego Bay
44	Autos R Us	110 W Plaza Blvd.	5521	San Diego Bay
45	Award Sign Company	1718 E 8th Street	7389	San Diego Bay
46	B & B Deli	105 W 35th Street, H	5812	San Diego Bay
47	B & S Autobody and Paint	223 Civic Center Drive	7532	San Diego Bay
48	BAE SYSTEMS LAND & ARMAMENTS	155 W 35th Street	7699	San Diego Bay
49	Bakery Plus	2220 E Plaza Blvd., South	5461	San Diego Bay
50	Ball Auto Repair	910 Highland Avenue, B	7539	San Diego Bay
51	Ball Automotive Group	2729 National City Blvd.	5511	San Diego Bay
52	BALL AUTOMOTIVE GROUP	2135 National City Blvd.	5511	San Diego Bay
53	BALL AUTOMOTIVE GROUP	1807 National City Blvd.	5511	San Diego Bay
54	BALL AUTOMOTIVE GROUP	1935 National City Blvd.	5511	San Diego Bay
55	BALL AUTOMOTIVE GROUP	2426 A Avenue	7532	San Diego Bay
56	BALL AUTOMOTIVE GROUP	2501 National City Blvd.	5511	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
57	BALL AUTOMOTIVE GROUP	1940 National City Blvd.	5511	San Diego Bay
58	Ball Smog Check Only	910 Highland Avenue, B	7549	San Diego Bay
59	Baskin Robbins Ice Cream	1493 E Plaza Blvd.	5812	San Diego Bay
60	Baxter Automotive & Machine	1400 Hoover Avenue	7539	San Diego Bay
61	Bay Systems, Inc.	303 W 35th Street, B	7699	San Diego Bay
62	Ben's 1615	1615 Sweetwater Road, A	5812	San Diego Bay
63	Big B Market & Deli	1540 Coolidge Avenue	5411	San Diego Bay
64	Big Ben Market	22 E 8th Street	5411	San Diego Bay
65	Bill's Quality Cars	1040 National City Blvd., B	5521	San Diego Bay
66	BJ Motor & Body Shop	1338 Roosevelt Avenue	7538	San Diego Bay
67	BJ Motors	1705 National City Blvd.	5511	San Diego Bay
68	Blue Gelaso	1343 Highland Avenue	5812	San Diego Bay
69	Boat Sellers	1730 Cleveland Avenue	5551	San Diego Bay
70	Bob's National City Auto	1504 National City Blvd.	7539	San Diego Bay
71	Bong's To Go	833 D Avenue	5812	San Diego Bay
72	Bounce 4 Fun Astro Jumps & Parts	3403 E Plaza Blvd., J-1	7359	San Diego Bay
73	Brake Depot	910 Highland Avenue	7539	San Diego Bay
74	Bread Delux Bakery, Etc.	1420 E Plaza Blvd., D-1	5461	San Diego Bay
75	Brittany's Cakes & Bakery	2429 National City Blvd.	5461	San Diego Bay
76	Burger King	815 Highland Avenue, 780	5812	San Diego Bay
77	Bush Power Brake, Inc.	25 E 17th Street, A , B	7539	San Diego Bay
78	C & J ELECTRONICS INC	1636 Wilson Avenue	7699	San Diego Bay
79	C&M Motors Inc.	904 Roosevelt Avenue	7538	San Diego Bay
80	CA Welding Iron Works	1630 Harding Avenue	7692	San Diego Bay
81	Cafe La Maze	1441 Highland Avenue	5812	San Diego Bay
82	Caliber Collision Center	3131 National City Blvd.	7532	San Diego Bay
83	California Auto Body	1921 Roosevelt Avenue	7532	San Diego Bay
84	California Auto Detailing	1509.5 National City Blvd.	7549	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
85	California's Taco Shop	51 N Highland Avenue, H	5812	San Diego Bay
86	CAMSAL ENTERPRISES	1705 Hoover Avenue, C , D	5714	San Diego Bay
87	Car Audio Exchange	1316 National City Blvd.	5531	San Diego Bay
88	Car Health Plan, Inc.	1532 National City Blvd.	7538	San Diego Bay
89	Carl's Jr.	1502 Sweetwater Road	5812	San Diego Bay
90	Carls Jr. #120	1280 E Plaza Blvd.	5812	San Diego Bay
91	Carnival Supermarket	1750 E 8th Street	5411	San Diego Bay
92	CARQUEST AUTOPARTS	1300 Highland Avenue	5531	San Diego Bay
93	Carrera's Auto Detail	2130 Roosevelt Avenue	7539	San Diego Bay
94	CARTENGO AUTO REPAIR	130 W 30th Street	7539	San Diego Bay
95	Casa De Oro Restaurant	1510 Sweetwater Road, A	5812	San Diego Bay
96	Casa Del Taco	1635 Sweetwater Road, A	5812	San Diego Bay
97	Cesar's Taco Shop	3123 D Avenue	5812	San Diego Bay
98	Chammoro Market	1235 Highland Avenue	5411	San Diego Bay
99	Chang Dong Supermarket Oriental Seafood	600 E 8th Street, 7 , 8	5411	San Diego Bay
100	Checker Auto Sales	49 E 16th Street, 1535 Ncb	5521	San Diego Bay
101	CHICANO PERK STORE 2	616 National City Blvd.	5812	San Diego Bay
102	Chicken King	1712 E 8th Street	5812	San Diego Bay
103	Chief Auto Sales	5 W 18th Street	5521	San Diego Bay
104	China King	3007 Highland Avenue	5812	San Diego Bay
105	China Wok Express	3403 E Plaza Blvd., A-1	5812	San Diego Bay
106	Chinese Canton Bakery	1132 E Plaza Blvd., 204	5461	San Diego Bay
107	Chinese City Restaurant #2	1025 Highland Avenue	5812	San Diego Bay
108	Ching's Famous Hopia	1722 E 8th Street	5461	San Diego Bay
109	ChowKing	2220 E Plaza Blvd., T	5812	San Diego Bay
110	Chrome That Hog	911 E 8th Street	5571	San Diego Bay
111	Chuck E Cheese's	1143 Highland Avenue	5812	San Diego Bay
112	Church's Chicken	3040 E 8th Street	5812	San Diego Bay
113	Chuys Auto Body Detailing Mobil	1023 Coolidge Avenue	7542	San Diego Bay
114	CINNABON	3030 Plaza Bonita Road, 2100	5461	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
115	CIVIC CENTER AUTO BODY	1304 Roosevelt Avenue	7532	San Diego Bay
116	Coin Laundry	1489 E Plaza Blvd.	7215	San Diego Bay
117	Cold Stone Creamery #1483	925 E Plaza Blvd., I	5812	San Diego Bay
118	Columbia Pest Control Co. of San Diego	127 W 9th Street	7342	San Diego Bay
119	Commercial Fleet Service	1521 Coolidge Avenue	7539	San Diego Bay
120	Conching's Café	3400 E 8th Street, 216 , 116	5812	San Diego Bay
121	Conneciton Point	1509.5 National City Blvd.	5531	San Diego Bay
122	Continental Cleaners	1312 Highland Avenue	7210	San Diego Bay
123	Cool Style Carpet Cleaning, Gustavo Gonzales	752 Madison Avenue	7217	San Diego Bay
124	COPIER SOLUTIONS	131 E 12th Street	7699	San Diego Bay
125	Cotijas Mexican Food	740 E 30th Street	5812	San Diego Bay
126	Cozines Grocery	402 Civic Center Drive	5411	San Diego Bay
127	Crash and Fix Autobody	202 , 210 W 11th Street	7532	San Diego Bay
128	Crown Transmission Center	1339 Hoover Avenue	7537	San Diego Bay
129	Crown Transmission Service	1918 Cleveland Avenue	7537	San Diego Bay
130	CROWN TRUCKS	220 W 14th Street	5521	San Diego Bay
131	Da Kines	1635 Sweetwater Road	5812	San Diego Bay
132	Dairy Queen/Orange Julius	3030 Plaza Bonita Road, 2138	5812	San Diego Bay
133	D'Best Auto Service	1620 Harding Avenue	7539	San Diego Bay
134	De La Cruz Auto Repair	36 W Civic Center Drive	7538	San Diego Bay
135	De La Torre	2137 Wilson Avenue	0782	San Diego Bay
136	Dean's West Coast Radiator Co., Inc.	105 W 18th Street	7539	San Diego Bay
137	Delia's Mexican Cafe	2241 Highland Avenue	5812	San Diego Bay
138	Dennis's Bakery	832 E 18th Street	5461	San Diego Bay
139	Denny's Restaurant	1904 Sweetwater Road, 1473	5812	San Diego Bay
140	Denny's Restaurant	424 Mile Of Cars Way	5812	San Diego Bay
141	Desserts Plus	2220 E Plaza Blvd., Q	5461	San Diego Bay
142	Dewey Pest Control	324 Civic Center Drive	7342	San Diego Bay
143	Dippin Dots	3030 Plaza Bonita Road, 9008	5812	San Diego Bay
144	Discount Tire Co. (So. Ca.)	1309 E Plaza Blvd.	5531	San Diego Bay
145	Dominguez Auto Accessories	3200 B-3 Highland Avenue, 19	5531	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
146	Domino's Pizza	702 Highland Avenue	5812	San Diego Bay
147	Don John Market	431 N Highland Avenue	5411	San Diego Bay
148	Double J Auto Repair Shop	29 E 17th Street	7538	San Diego Bay
149	Dragon Garden Chinese Cuisine	2220 E Plaza Blvd., G	5812	San Diego Bay
150	Dynomite Mobile Auto Detail	3522 Fairlomes Road	7542	San Diego Bay
151	Eat & Go Trolley Deli	530 W 21st Street	5812	San Diego Bay
152	ED'S BISTRO	933 S Harbison Avenue	5812	San Diego Bay
153	El Cubilete Tires	2315 Highland Avenue	7534	San Diego Bay
154	EL GRANO DE ORO	730 E 7th Street	5963	San Diego Bay
155	El Jaun Cafe	2316 Highland Avenue	5812	San Diego Bay
156	El Nuevo Milenio	1641 Highland Avenue	5812	San Diego Bay
157	El Nuevo Millenio Mexican Food	2323 E Division Street	5812	San Diego Bay
158	El Pescadito Mexican and Seafood	2401 Highland Avenue, 104	5812	San Diego Bay
159	EL POLLO LOCO #3430	1710 Highland Avenue	5812	San Diego Bay
160	El Trigal Bakery	319 N Highland Avenue	5461	San Diego Bay
161	ELITE AUTO BODY & PAINT	1023 Coolidge Avenue	7532	San Diego Bay
162	Embroidme	1536 Sweetwater Road, F	7389	San Diego Bay
163	Equipment Engineering Co.	2704 Transportation Avenue, E	7539	San Diego Bay
164	Ethnic Deli & Cafe	404 W Mile of Cars Way, F	5812	San Diego Bay
165	Euro Tech Auto Care	34 E 17th Street, C	7538	San Diego Bay
166	Evans Tires	3009 Highland Avenue	7534	San Diego Bay
167	EXPO Builders Supply	500 W 16th Street	5211	San Diego Bay
168	EXPRESS TIRE	1705 Sweetwater Road	7534	San Diego Bay
169	Express Tire	820 Highland Avenue	5531	San Diego Bay
170	Express Tires	840 Highland Avenue	7534	San Diego Bay
171	Fairbanks Morse Engine	1545 Tideland Avenue, J	7699	San Diego Bay
172	Family Loompya Seafood Market	2720 E Plaza Blvd., A	5411	San Diego Bay
173	Farmers Discount Market	1535 E 18th Street	5411	San Diego Bay
174	Fast Signs	1240 E Plaza Blvd., 602	7389	San Diego Bay
175	Felix Collision Center/Autobody	420 W 12th Street	7532	San Diego Bay
176	FILLCO 3009	3009 Highland Avenue, A	5541	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
177	Finishmaster Inc. #208	110 E 16th Street	5231	San Diego Bay
178	Firestone	2531 E Plaza Blvd.	5531	San Diego Bay
179	Firestone Tire & Service Center	943 Highland Avenue	5531	San Diego Bay
180	First Fruit	1453 E Plaza Blvd.	5812	San Diego Bay
181	Fleetwash	1508 Hoover Avenue	7542	San Diego Bay
182	Foodland IGA	303 Highland Avenue	5411	San Diego Bay
183	Frank Motors Hyundai	3150 National City Blvd.	5511	San Diego Bay
184	Frank Toyota	2400 National City Blvd.	5511	San Diego Bay
185	FRANK'S AUTO UPHOLSTERY	1440 Harding Avenue, A	7532	San Diego Bay
186	Fredy Auto Repair	923.5 Coolidge Avenue	7538	San Diego Bay
187	GASPAR MARKET	1810 Palm Avenue	5411	San Diego Bay
188	Gemmae Bakeshop & Cafe	450 E 8th Street, A , B	5461	San Diego Bay
189	Gengis Khan #1	3030 Plaza Bonita Road, 2128	5812	San Diego Bay
190	George's Market	2540 E 18th Street	5411	San Diego Bay
191	George's Wonderful World of Cakes	1519 Highland Avenue	5461	San Diego Bay
192	Ghetto Fab Hydraulics	1339 Hoover Avenue	7539	San Diego Bay
193	Giant New York Pizza	8 N Euclid Avenue, 8-B	5812	San Diego Bay
194	Giant Pizza King #16	1903 Highland Avenue	5812	San Diego Bay
195	GINZA SUSHI	925 E Plaza Blvd., G	5812	San Diego Bay
196	GLOBAL COM	901 E Plaza Blvd.	4899	San Diego Bay
197	Golden Chopsticks Restaurant	1430 E Plaza Blvd., E-22-23	5812	San Diego Bay
198	Golden Donuts	36 N Euclid Avenue, E	5812	San Diego Bay
199	GONZALEZ, ENRIQUE A	2535 A Avenue	7699	San Diego Bay
200	Gormsen Appliance	718 E 18th Street	7699	San Diego Bay
201	Great Happiness III	2401 Highland Avenue, 102	5812	San Diego Bay
202	Green Bamboo	550 E 8th Street, 9	5812	San Diego Bay
203	GREENWALD'S AUTOBODY &	1814 Roosevelt Avenue	7532	San Diego Bay
204	Hanaoka Restaurant	1528 Sweetwater Road, C	5812	San Diego Bay
205	Happy Bakery	3142 E Plaza Blvd., L	5812	San Diego Bay
206	Heaven Giant Pizza #2	51 N Highland Avenue, H	5812	San Diego Bay
207	Hertz Equipment Rental	415 W 30th Street	7353	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
208	HERTZ LOCAL EDITION	2001 Sweetwater Road	7514	San Diego Bay
209	HICKORY FARMS INC	3030 Plaza Bonita Road	5963	San Diego Bay
210	Higher Level	710 E 8th Street	7549	San Diego Bay
211	Highland Arco	2336 Highland Avenue	5541	San Diego Bay
212	Highland Embroidery	3200 Highland Avenue, 3	7389	San Diego Bay
213	Highland Mobile	2945 Highland Avenue	5541	San Diego Bay
214	Highland Service Center	1803 Highland Avenue	7538, 5541	San Diego Bay
215	Hilbertos Mexican Food	836 Euclid Avenue	5812	San Diego Bay
216	HODGE LOGISTICS LLC	1402 Tideland Avenue	7389	San Diego Bay
217	Hometown Buffet #714	1135 Highland Avenue	5812	San Diego Bay
218	Hong-Yun Restaurant	1231 Highland Avenue	5812	San Diego Bay
219	Hopsing Auto	1540 Roosevelt Avenue	7538	San Diego Bay
220	Hopsing Auto Repair	10 E First Street	7539	San Diego Bay
221	HORN'S WELDING	1840 Wilson Avenue, A	7692	San Diego Bay
222	HOT DOG ON A STICK #052	3030 Plaza Bonita Road, 2136	5812	San Diego Bay
223	Iceberg Enterprises, Inc.	1410 Cleveland Avenue	7359	San Diego Bay
224	Ideal Auto Sales	1741 National City Blvd.	5511	San Diego Bay
225	Ihaw Ihaw Grill & Restaurant	3421 E Plaza Blvd.	5812	San Diego Bay
226	IMPERIAL PALACE	1630 E 8th Street	5812	San Diego Bay
227	Import Car Parts & Motor Machine	106 E 17th Street	7699, 5013	San Diego Bay
228	In N Out Burger	500 Mile Of Cars Way	5812	San Diego Bay
229	Independent Superior VW Engine	130 W 30th Street	7538	San Diego Bay
230	Inspec Testing LLC	1440 Harding Avenue, B	8734	San Diego Bay
231	International House of Pancakes	1430 E Plaza Blvd., E-1	5812	San Diego Bay
232	Island Sales & Leasing	100 W 8th Street	5511	San Diego Bay
233	J&E Converter Shop	301 W 28th Street, X	7539	San Diego Bay
234	Jack Harrison Buick	2601 National City Blvd.	5511	San Diego Bay
235	Jack in the Box	700 Roosevelt Avenue	5812	San Diego Bay
236	Jack in the Box #3	1745 Highland Avenue	5812	San Diego Bay
237	Jack in the Box #80	3138 Plaza Blvd.	5812	San Diego Bay
238	JD Brothers Auto Repairs	41 E 18th Street	7538	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
239	Jeff's Sound Values	205 W 35th Street, F	7629, 5961	San Diego Bay
240	Jerauld's Muffler Brake Service	2020 National City Blvd.	7539	San Diego Bay
241	Jimmy's National City	1900 E Plaza Blvd.	5812	San Diego Bay
242	Jocson's Auto Body & Paint Inc.	1320 Coolidge Avenue	7532	San Diego Bay
243	Jollibee	1401 E Plaza Blvd.	5812	San Diego Bay
244	Jose Auto Electric	140 W 18th Street	7538	San Diego Bay
245	K M H FABRICATION	2131 Harbinson Avenue	7692	San Diego Bay
246	Karihan Filipino Food	2220 E Plaza Blvd., T	5812	San Diego Bay
247	Karinas Mexican Food	1645 Highland Avenue	5812	San Diego Bay
248	Karina's Mexican Style Seafood	1705 Highland Avenue	5812	San Diego Bay
249	Karz Plus RV	1605 National City Blvd.	5511	San Diego Bay
250	Keith's Restaurant	214 National City Blvd.	5812	San Diego Bay
251	Kelly's Auto Sales	2401 National City Blvd.	5521	San Diego Bay
252	Ken's Service Contractor	301 W 28th Street, S	7389	San Diego Bay
253	Kentucky Fried Chicken	3005 Highland Avenue	5812	San Diego Bay
254	Kentucky Fried Chicken	840 Highland Avenue	5812	San Diego Bay
255	Kim Korean Barbeque	1141 Highland Avenue	5812	San Diego Bay
256	Kragen Auto Supply #1722	1202 E Plaza Blvd.	5531	San Diego Bay
257	Kwicksilver	201 W 28th Street, B	7539	San Diego Bay
258	L & L Hawaiian Barbeque	1860 Sweetwater Road, B	5812	San Diego Bay
259	La Garrafa	3003 Highland Avenue, D	5812	San Diego Bay
260	La Hacienda Restaurant	2752 E 18th Street	5812	San Diego Bay
261	La Luz Del Dia Market	1539 E 8th Street	5411	San Diego Bay
262	La Sierra Caffe	306 Highland Avenue	5812	San Diego Bay
263	La Taquiza	1641 Highland Avenue	5812	San Diego Bay
264	Lai Thai Restaurant	1430 E Plaza Blvd., E-10	5812	San Diego Bay
265	Lamb's Players Theatre	2827 Hoover Avenue, G-1	7922	San Diego Bay
266	Las Burrito's Mexican Grill	3460 Highland Avenue, E	5812	San Diego Bay
267	LAS UVAS DELI	632 National City Blvd.	5812	San Diego Bay
268	Leemor Sound Inc.	1050 Highland Avenue, B	5531	San Diego Bay
269	Legacy Motors	100 W 30th Street, B	5521	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
270	Leo Haircut Place	3007 Highland Avenue, 12	7214	San Diego Bay
271	LICHAS CAFE	1231 Highland Avenue	5812	San Diego Bay
272	Lina's Catering	2225 E 5th Street	5812	San Diego Bay
273	Line-X San Diego	2704 Transportation Avenue, A , B	7549	San Diego Bay
274	Lisa's Desserts	2720 E Plaza Blvd., Q	5461	San Diego Bay
275	Little Dragon Chinese	2424 Hoover Avenue, K	5812	San Diego Bay
276	Lively & Sons	1635 National City Blvd.	7539	San Diego Bay
277	Lollicup Teazone	1105 E Plaza Blvd., A	5812	San Diego Bay
278	Los Aros	543 Highland Avenue	5812	San Diego Bay
279	Los Fernandez Taqueria	640 Highland Avenue	5812	San Diego Bay
280	Los Nicos Taco Shop	835 Palm Avenue	5812	San Diego Bay
281	Los Panchos	2030 Highland Avenue	5812	San Diego Bay
282	Los Panchos Taco Shop	2441 National City Blvd.	5812	San Diego Bay
283	Lourdes Family Restaurant	1123 National City Blvd.	5812	San Diego Bay
284	Lou's Automotive & Parts	1509 National City Blvd., C	7538	San Diego Bay
285	Lupitas Meat Market	2239 Highland Avenue	5411	San Diego Bay
286	Lutong Bahay Cafe & Bakery	2344 E 8th Street	5812	San Diego Bay
287	M & M Automotive Service	1112 Coolidge Avenue	7538	San Diego Bay
288	M & T Auto	1731 Wilson Avenue	7538	San Diego Bay
289	M STANTON CO	1535 Tideland Avenue, L	5712	San Diego Bay
290	MADLAIN INC DBA WRIGLEYS SUPER	34 N Euclid Avenue	5411	San Diego Bay
291	Magic Flow Manufacturing Company	1031 Roosevelt Avenue	7629	San Diego Bay
292	Maharlika Café & Grill	1819 E Plaza Blvd.	5812	San Diego Bay
293	Mailbox Express	2720 E Plaza Blvd., O	7389	San Diego Bay
294	MAMA FINA'S PIZZA	916 E 8th Street, 4	5812	San Diego Bay
295	Mandarin Gourmet Buffet	1479 E Plaza Blvd.	5812	San Diego Bay
296	Manila Manila Fast Food	3030 Plaza Bonita Road, 2132	5812	San Diego Bay
297	Manila Motorworks	1735 E National City Blvd.	7538	San Diego Bay
298	Manila Seafood Oriental Market	2220 E Plaza Blvd., K	5411	San Diego Bay
299	Manila Sunset Restaurant	925 E Plaza Blvd., E	5812	San Diego Bay
300	Manila Tokyo Restaurant	3421 E Plaza Blvd.	5812	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
301	Manila's Best Restaurant	1463 E Plaza Blvd.	5812	San Diego Bay
302	Manuel's Furniture Refinishing	301 W 28th Street, J	7641	San Diego Bay
303	Marco's Machine Shop	1022 Coolidge Avenue	7539	San Diego Bay
304	Mariscos Sinaloa #2	2435 National City Blvd.	5812	San Diego Bay
305	Mary J's Cafe	1930 Cleveland Avenue	5812	San Diego Bay
306	Master Tech Appliance Service	241 W 35th Street, H	7629	San Diego Bay
307	Max's Restaurant	500 E 8th Street	5812	San Diego Bay
308	MC Communications, Inc.	199 E 27th Street	7629	San Diego Bay
309	Mc Cune II	325 Mile Of Cars Way	5511	San Diego Bay
310	Mc Cune Motors	3000 National City Blvd.	7532	San Diego Bay
311	Mc Donalds #6773	2145 E Plaza Blvd.	5812	San Diego Bay
312	McCune Chrysler Jeep	2340 National City Blvd.	5511, 7538	San Diego Bay
313	McDini's Baja	105 E 8th Street	5813	San Diego Bay
314	McDonalds	1630 Highland Avenue	5812	San Diego Bay
315	McDonald's	3400 Highland Avenue	5812	San Diego Bay
316	McDonalds #20311	3030 Plaza Bonita Road, 2168	5812	San Diego Bay
317	McMillian Management Serv., L.P.	2807 Hoover Avenue, G-K	7538	San Diego Bay
318	Merry Maids of National City	2602 Transportation Avenue	7349	San Diego Bay
319	Mi Rinconcito	3120 E Plaza Blvd.	5812	San Diego Bay
320	Mi Tierra Super Taco	1835 Highland Avenue	5812	San Diego Bay
321	Mickey's Complete Auto Repair	415 National City Blvd.	7538	San Diego Bay
322	Mike's Automotive	115 E 17th Street, A	7538	San Diego Bay
323	Mike's Giant NY Pizza #5	1635 Sweetwater Road, C-1	5812	San Diego Bay
324	MLZ AUTO SALE	130 W 30th Street	7549, 5012	San Diego Bay
325	Monell Brake Service	1014 Coolidge Avenue	7538	San Diego Bay
326	More Glass	910 Highland Avenue, C	7699	San Diego Bay
327	Mossy Nissan	2700, 2626 National City Blvd.	5511	San Diego Bay
328	Motor City Deli	105 W 35th Street, H	5812	San Diego Bay
329	Motor Machine & Supply	1602 Hoover Avenue	3511	San Diego Bay
330	MOTOR WORKS	1625 Coolidge Avenue	7538	San Diego Bay
331	Moynahan Towing	3200 National City Blvd.	7549	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
332	MR BEST CLEANERS	1210 E Plaza Blvd., 409	7211	San Diego Bay
333	Nadel House of Filipino Cakes	914 E 8th Street, 202	5461	San Diego Bay
334	Napoleone Pizza House	619 National City Blvd.	5812	San Diego Bay
335	National Auto Repair	2125 Roosevelt Avenue, C	7538	San Diego Bay
336	NATIONAL CITY AUTO BODY	24 E 4th Street	7532	San Diego Bay
337	NATIONAL CITY AUTO TRIM INC	15 E 5th Street	7532	San Diego Bay
338	National City Car Wash	2550 E Plaza Blvd.	7542	San Diego Bay
339	National City Deli	24 E 24th Street, A	5812	San Diego Bay
340	National City Detail Shop	108 W 18th Street	7542	San Diego Bay
341	National City Golf Course	1439 Sweetwater Road	7992	San Diego Bay
342	National City Grocery Outlet	3446 Highland Avenue, 6	5411	San Diego Bay
343	National City Korea House Restaurant	1908 Sweetwater Road	5812	San Diego Bay
344	National City Market	240 E 18th Street	5411	San Diego Bay
345	National City Mile of Cars Landscape	National City Blvd.	0782	San Diego Bay
346	National City Motorcars	1900 National City Blvd., A	5521	San Diego Bay
347	NATIONAL CITY MOTORCYCLE INC	1504 National City Blvd., A	7699	San Diego Bay
348	National City Nutrition Store	925 Plaza Blvd.	5411	San Diego Bay
349	National City Smog, Brake & Lights	705.5 E 8th Street, A	7539	San Diego Bay
350	National Mechanical Services	1640 Hoover Avenue, B	7539	San Diego Bay
351	National Motorworks	1031 National City Blvd., B	7538	San Diego Bay
352	National Sunroof Auto Upholstery	140 W 18th Street	7549	San Diego Bay
353	Neil Motors	905 Hoover Avenue	5521	San Diego Bay
354	NEVWEST	1636 Wilson Avenue	7699	San Diego Bay
355	Nils Hall DBS Thunderbird	705 E 8th Street	7553	San Diego Bay
356	NINAS CAFE	1302 National City Blvd., A	5812	San Diego Bay
357	Northrop Grunman Electronic Systems	155 W 35th Street, D	7699	San Diego Bay
358	NZJ TELECOM	2625 E 15th Street	7699	San Diego Bay
359	Oak Plus Outlet	1611 Hoover Avenue	7641	San Diego Bay
360	Ohana Hawaiian Island BBQ	1430 E Plaza Blvd., E7A	5812	San Diego Bay
361	Olympic Auto Sales	1800 National City Blvd.	5521	San Diego Bay
362	Operation Samahan	2841 Highland Avenue	9431	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
363	Oriental Cafe	39 E 7th Street	5812	San Diego Bay
364	Oscars Pizzeria	1903 Highland Avenue	5812	San Diego Bay
365	Ouchi's Power Equipment	225 W 9th Street	7699	San Diego Bay
366	Outback Steak House	2980 Plaza Bonita Road	5812	San Diego Bay
367	Pacific Auto Repair	1024 Coolidge Avenue	7538	San Diego Bay
368	Pacific Auto Repairs	315 W 11th Street	7538	San Diego Bay
369	Pacific Coast Diesel	100 W 35th Street	5531	San Diego Bay
370	Pacific Coast Diesel Parts	100 W 35th Street, H	5531	San Diego Bay
371	Pacific Southwest Bilolgical Services	41 E 12th Street, A	7389	San Diego Bay
372	Panaderia Guadalajara	2401 Highland Avenue, 105	5461	San Diego Bay
373	Pancho Villa's Mexican Grill	3100 8th Street	5812	San Diego Bay
374	Panda Palace	1105 E Plaza Blvd., D , E	5812	San Diego Bay
375	Pann Autosport, Inc.	1531 National City Blvd.	5531	San Diego Bay
376	Papa John's Pizza #1335	1130 Plaza Blvd.	5812	San Diego Bay
377	Park Motors	2125 Roosevelt Avenue	5511	San Diego Bay
378	Party Expressions	2819 E Plaza Blvd.	7359	San Diego Bay
379	PAT & OSCAR'S	3030 Plaza Bonita Road, 1106	5812	San Diego Bay
380	Pedro's Cocina Mexicana	1860 Sweetwater Road, A-2	5812	San Diego Bay
381	Penske Truck Leasing	3131 Hoover Avenue	7513	San Diego Bay
382	Pentecostal Church	2410 E 8th Street	8661	San Diego Bay
383	Pepita's Cafe	524 Highland Avenue	5812	San Diego Bay
384	Perry Ford - National City	2050 National City Blvd.	5511	San Diego Bay
385	Perry Ford (Truck)	1610 National City Blvd.	5511	San Diego Bay
386	Peter Piper Pizza Store #212	3007 Highland Avenue, 11	5812	San Diego Bay
387	Pickle Barrel Deli Restaurant	340 W 26th Street, E	5812	San Diego Bay
388	PINA MEXICAN CUISINE	321 Highland Avenue	5812	San Diego Bay
389	Pinoy Fiesta	550 E 8th Street	5812	San Diego Bay
390	Pinoy Ranch	3403 E Plaza Blvd., E	5411	San Diego Bay
391	Pizza Hut	1838 Sweetwater Road	5812	San Diego Bay
392	Pizza Hut #315044	2437 E Plaza Blvd.	5812	San Diego Bay
393	Pizza Plaza	3108 E Plaza Blvd.	5812	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
394	PLAZA BONITA MALL	3030 Plaza Bonita Road	5999	San Diego Bay
395	Plaza Boulevard Pet Clinic	2415 E Plaza Blvd.	0742	San Diego Bay
396	Plaza Donuts	1548 Highland Avenue	5461	San Diego Bay
397	POINT POINT JOINT (TURO-TURO)	916 E 8th Street, 1 , 2	5812	San Diego Bay
398	Pollo Amigo #2	1604 E 18th Street	5812	San Diego Bay
399	Polytech Pest Control Services	3416 Stockman Street	7342	San Diego Bay
400	Popeyes Chicken	2210 E Plaza Blvd.	5812	San Diego Bay
401	Popeyes Famous Fried Chicken	2333 Highland Avenue	5812	San Diego Bay
402	Porlex Carpet Care	2142 N Avenue, (Rear)	7217	San Diego Bay
403	Power Tire #4	1615 E 8th Street	5531	San Diego Bay
404	PRESTIGE AUTO BROKERS	2125 Roosevelt Avenue, A	5521	San Diego Bay
405	Prestige Auto Brokers	1001 National City Blvd.	5521	San Diego Bay
406	Pro Street Lighting Inc.	3200 Highland Avenue	5531	San Diego Bay
407	PUBLIC AUTO GROUP/ DEALER DIRE	45 E 26th Street	5521	San Diego Bay
408	Quality Auto Sales & Service	423 National City Blvd., A	5521	San Diego Bay
409	Quality Motors	1900 National City Blvd.	5511	San Diego Bay
410	R P Auto Sales & Repair	130 W 30th Street	7538	San Diego Bay
411	R P M CYCLES	436 W 8th Street, B	5571	San Diego Bay
412	Ralph's Grocery Store No. 101	901 Euclid Avenue	5411	San Diego Bay
413	Raspados Michoacan	115 8th Street	5812	San Diego Bay
414	Ray Brock Auto Service	25 W 11th Street	7539	San Diego Bay
415	Red Bird Market	2035 Highland Avenue	5411	San Diego Bay
416	Red Lion Inn	801 National City Blvd.	7011	San Diego Bay
417	Red Ribbon Bake Shop, Inc.	2220 Plaza Blvd., T-1	5461	San Diego Bay
418	Reliable Spring and Suspension	225 W 16th Street	7539	San Diego Bay
419	Rent X Equipment Rental	1936 Mckinley Avenue	7359	San Diego Bay
420	Revels Striping	2602 Transportation Avenue, J	7549	San Diego Bay
421	Reynoso Auto Sales	438 National City Blvd.	5521	San Diego Bay
422	Reynozo Corporation	705 E 8th Street, A	7539	San Diego Bay
423	Rice King	3030 Plaza Bonita Road, 2122	5812	San Diego Bay
424	Rick's Mobile Glass	507 G Avenue	7699	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
425	RIOS MEXICAN FOOD	640 Highland Avenue	5812	San Diego Bay
426	Roberto's Taco Shop	1406 Highland Avenue	5812	San Diego Bay
427	Rodeo's Meat Market	422 Highland Avenue	5421	San Diego Bay
428	Rodriguez Appliance	2629 Highland Avenue	7699	San Diego Bay
429	ROMAN PALACE CAFE	540 National City Blvd.	5812	San Diego Bay
430	Ron Baker Chevrolet	2301 National City Blvd.	5511	San Diego Bay
431	RONNIE'S ELECTRONICS - AUTO	1309 Highland Avenue	7549, 5031	San Diego Bay
432	Royal Mandarin Restaurant	1132 E Plaza Blvd., 205	5812	San Diego Bay
433	RPG	1010 Coolidge Avenue	7532	San Diego Bay
434	RPM Cycles	424 W 8th Street	7699	San Diego Bay
435	Russ' Bee Removal	3421 Newberry Street	7342	San Diego Bay
436	Ryan Hydraulic Services, Inc	1817 Cleveland Avenue	3599	San Diego Bay
437	S & L Oil Inc.	1601 E 8th Street	5541	San Diego Bay
438	S & S logistics, Inc	2424 Hoover Avenue, A	7549	San Diego Bay
439	S & S Welding	1442 Mckinley Street	7692	San Diego Bay
440	Sam's Alignment Service	1028 Coolidge Avenue	7539	San Diego Bay
441	San Diego Auto Detail	110 W 11th Street	7542	San Diego Bay
442	San Diego Chicken Rotisserie	2220 E Plaza Blvd., D	5812	San Diego Bay
443	San Diego Crane & Hoist	1606 Coolidge Avenue	7699	San Diego Bay
444	San Diego Dodge	2829 National City Blvd.	5511	San Diego Bay
445	San Jose Restaurant	213 Highland Avenue	5812	San Diego Bay
446	Santana Mobile Truck Wash	1741 National City Blvd.	7349	San Diego Bay
447	Saturn of National City	2202 National City Blvd.	5511	San Diego Bay
448	Save-A-Lot	1035 Harbinson Avenue	5411	San Diego Bay
449	Sav-on Drug Store	1301 Plaza Blvd.	5912	San Diego Bay
450	Sbarro	3030 Plaza Bonita Road, 2162	5812	San Diego Bay
451	Scheib, Earl of CA Inc #189	111 National City Blvd.	7532	San Diego Bay
452	Scott's Porsche	1212 Mckinley Avenue	7537	San Diego Bay
453	SCOTT'S PORSCHE PARTS	705 Civic Center Drive	5531	San Diego Bay
454	SEAFOOD CITY SUPERMARKET	1420 E Plaza Blvd., C-E	5411	San Diego Bay
455	Seaward Marine Service Inc.	424 W 8th Street	7699	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
456	Seda Products	926 Coolidge Avenue	5551	San Diego Bay
457	Serrano's Market	2602 E 18th Street	5411	San Diego Bay
458	Service Master AA Advances Res	100 W 35th Street	7699	San Diego Bay
459	Seven Eleven #13583 D	2425 Sweetwater Road	5411	San Diego Bay
460	Seven Eleven #20785-B	2400 Highland Avenue	5411	San Diego Bay
461	Seven-Eleven #13564E	15 N Euclid Avenue	5411	San Diego Bay
462	Seven-Eleven #17265	1601 E 18th Street	5411	San Diego Bay
463	Seven-Eleven #18218C	807 E 8th Street	5411	San Diego Bay
464	Seven-Eleven #18978D	3100 E Plaza Blvd.	5411	San Diego Bay
465	Shaft Master	1031 National City Blvd., C	7539	San Diego Bay
466	Shell Gas Station	1601 8th Street	5541	San Diego Bay
467	Shell Station	2401 E Division Street	5541	San Diego Bay
468	Siete Dias Market	151 N Highland Avenue, A	5411	San Diego Bay
469	Sigma 6, incs	100 W 35th Street	7699	San Diego Bay
470	Sign Master	2424 Hoover Avenue, N	7389	San Diego Bay
471	Sizzler Family Steak House #45	1325 E Plaza Blvd.	5812	San Diego Bay
472	Skate San Diego	700 E 24th Street	7999	San Diego Bay
473	Smart and Final	1220 E Plaza Blvd.	5411	San Diego Bay
474	Smog Centro	404 Highland Avenue	7539	San Diego Bay
475	So Cal Truck Stop	2250 Tideland Avenue	5541	San Diego Bay
476	Solar Eclipse Performance	507 G Avenue	7549	San Diego Bay
477	Son's Auto Detail	100 W 30th Street	7542	San Diego Bay
478	SOUTH BAY AUTO ELECTRIC	115 E 17th Street, C	7539	San Diego Bay
479	SOUTH BAY AUTO SHOP	1112 Coolidge Avenue	7538	San Diego Bay
480	SOUTH BAY BICYCLES INC	1201 Highland Avenue	5941	San Diego Bay
481	South Bay Volkswagon	3131 National City Blvd.	5511	San Diego Bay
482	South Bay Yamaha	1 W 35th Street	5571	San Diego Bay
483	South County Volvo	2940 National City Blvd.	5511	San Diego Bay
484	Southern Auto Supply #42	1300 Highland Avenue	5531	San Diego Bay
485	Southland Autobody & Paint	141 W 18th Street	7532	San Diego Bay
486	Southland Laundry Systems	1729 Coolidge Avenue, B	7699	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
487	Southland Transmission Center	1400 Hoover Avenue	7537	San Diego Bay
488	Southtown Custom Hotrods	1805 Cleveland Avenue	7539	San Diego Bay
489	Southwest Paint and Body	1616 West Avenue	7532	San Diego Bay
490	Southwestern Auto Brokers, Inc.	333 National City Blvd.	5521	San Diego Bay
491	Speed Transmission	1031 National City Blvd.	7537	San Diego Bay
492	SPICE COPY	14 N Euclid Avenue	7389	San Diego Bay
493	Sports Auto Sales	1040 National City Blvd.	5511	San Diego Bay
494	Sports Auto Sales	1112 National City Blvd.	5511	San Diego Bay
495	Standard Parking	235 E 8th Street	7521	San Diego Bay
496	Star Automotive	423 National City Blvd.	5511	San Diego Bay
497	Star Express	3124 E Plaza Blvd.	5812	San Diego Bay
498	STARBUCKS COFFEE #2922	3030 Plaza Bonita Road	5812	San Diego Bay
499	Starbucks Coffee #6487	1860 Sweetwater Road	5812	San Diego Bay
500	Starbuck's Coffee #6783	2230 E Plaza Blvd.	5812	San Diego Bay
501	Stereo Discount Center Inc	2907 Highland Avenue	7539	San Diego Bay
502	Steve's West Coast Automotive	1732 Coolidge Avenue	7538	San Diego Bay
503	Styler's Auto Body	38 E 16th Street	7532	San Diego Bay
504	Subway Sandwich & Salad	925 E Plaza Blvd., A	5812	San Diego Bay
505	Subway Sandwich & Salad	1860 Sweetwater Road	5812	San Diego Bay
506	Subway Sandwich and Salads	3030 Plaza Bonita Road, 2176	5812	San Diego Bay
507	Sunny Donuts	724 Highland Avenue	5461	San Diego Bay
508	Super Sergios Mexican Food	1631 Sweetwater Road	5812	San Diego Bay
509	Surf City Squeeze	3030 Plaza Bonita Road, 9003	5812	San Diego Bay
510	SWAP MEET	3200 D Avenue	5999	San Diego Bay
511	SWEETWATER HARLEY-DAVIDSON	3201 Hoover Avenue	5571	San Diego Bay
512	T N H Auto Repair	25 E 17th Street	7539	San Diego Bay
513	Taco Bell #106	2425 Division Street	5812	San Diego Bay
514	Taco Bell #2800	1737 Sweetwater Road	5812	San Diego Bay
515	Taco Salsa Taco Shop	925 E Plaza Blvd., B	5812	San Diego Bay
516	Tacos El Gordo de Tijuana	1940 Highland Avenue	5812	San Diego Bay
517	Tacos El Rey	505 Highland Avenue	5812	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
518	Tamales Rainbow Produce	2708 Highland Avenue	5812	San Diego Bay
519	Tandy's Auto Body & Paint	340 W 11th Street	7538	San Diego Bay
520	Taqueria	640 Highland Avenue	5812	San Diego Bay
521	TAQUERIA EL COSTENO	505 Highland Avenue	5812	San Diego Bay
522	Taqueria El Guero #2	404 E 8th Street	5812	San Diego Bay
523	Taqueria Los Montes	2401 Highland Avenue, 104	5812	San Diego Bay
524	TED'S UPHOLSTERY	115 E 17th Street, D	7532, 7641	San Diego Bay
525	The Auto Spot, Inc	1017 National City Blvd.	5511	San Diego Bay
526	The Barbeque Pit	920 E Plaza Blvd.	5812	San Diego Bay
527	The Bread Basket Bakery	1471 E Plaza Blvd.	5461	San Diego Bay
528	THE BURRITO FACTORY	3030 Plaza Bonita Road, 2180	5812	San Diego Bay
529	The Great Steak & Fry Co.,	3030 Plaza Bonita Road, 2154	5812	San Diego Bay
530	The Jump Factory	1011 Olive Avenue	7359	San Diego Bay
531	The Original Richard's Bakery	3400 E 8th Street, 114	5461	San Diego Bay
532	THE SMOG GUYS TEST ONLY CENTER	1509.5 National City Blvd.	7539	San Diego Bay
533	The Speed Shop	623 National City Blvd.	5531	San Diego Bay
534	Thrifty Arco AM/PM #9569	1734 Highland Avenue	5541	San Diego Bay
535	Thrifty Oil	1139 Harbinson Avenue	5541	San Diego Bay
536	Thunderbird Muffler Shop	705 E 8th Street	7533	San Diego Bay
537	Tita's Kitchenette	2720 E Plaza Blvd., E , F	5812	San Diego Bay
538	Tito Ben Pho Saigon Express	1420 E Plaza Blvd., B3	5812	San Diego Bay
539	Tito Ben Saigen	1402 E Plaza Blvd.	5812	San Diego Bay
540	Tokyo Teriyaki	3030 Plaza Bonita Road, 2158	5812	San Diego Bay
541	Tom Moynahan Towing	3200 National City Blvd.	7549	San Diego Bay
542	Torres Mexican Food	640 Highland Avenue, A	5812	San Diego Bay
543	Tosha Beauty & Barber Supply	2505 E Division Street, I	7231	San Diego Bay
544	Trans Pros	130 E 17th Street	7533	San Diego Bay
545	Transmission Supply	338 W 12th Street	5531	San Diego Bay
546	TriCare Motors	5 W 8th Street, B , C	5531	San Diego Bay
547	Trophy Lounge	999 National City Blvd.	5812	San Diego Bay
548	Tropical Ice Cream and Juice Bar	3104 E Plaza Blvd.	5812	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
549	Tuneup Masters Inc.#408	1902 Highland Avenue	7539	San Diego Bay
550	Turbo Transmissions	1411 Coolidge Avenue	7537	San Diego Bay
551	United Refrigeration	2626 Southport Way, G	5722	San Diego Bay
552	Unknown	905 Plaza Blvd.	7349	San Diego Bay
553	US Save Auto	639 National City Blvd.	5521	San Diego Bay
554	Uyeji Kikvo	1111 Manchester Street	782	San Diego Bay
555	V.A. CORPORATION	1539 Roosevelt Avenue	5722	San Diego Bay
556	Vacant Lot - Thrifty Oil	1100-Block Harbinson Avenue	Unassigned	San Diego Bay
557	Valdez Mobile Auto Detailing	910 Highland Avenue	7542	San Diego Bay
558	Valerios City Bakery	1631 E 8th Street, 182	5461	San Diego Bay
559	Valerios Family Bake Shop	2720 E Plaza Blvd., H	5461	San Diego Bay
560	Value Cars	13 National City Blvd.	5521	San Diego Bay
561	Vee Parts & Accessories	704 A Avenue	5531	San Diego Bay
562	VICTOR'S TAQUERIA	1602 E 4th Street	5812	San Diego Bay
563	Vietnamese Chinese Noodle House	600 E 8th Street, 5	5812	San Diego Bay
564	VIKING AUTOBODY REPAIR & PAINT	1503 Roosevelt Avenue	7532	San Diego Bay
565	VIKING'S AUTO REPAIR	1503 Roosevelt Avenue, A	7532	San Diego Bay
566	Villa Manila	500 E 8th Street	5812	San Diego Bay
567	Volcano Custom Iron	1031 Coolidge Avenue	7692	San Diego Bay
568	Wabco Products	1429 Wilson Avenue, B	5531	San Diego Bay
569	WARRIOR CARPET CLEANING & SALE	2637 Highland Avenue	7217	San Diego Bay
570	Webco Hale	2202 Haffley Avenue	5963	San Diego Bay
571	West Coast Truck Service	201 W 18th Street	7538	San Diego Bay
572	Westcott Mazda	2800 National City Blvd.	5511	San Diego Bay
573	Wetzel's Pretzels	3030 Plaza Bonita Road, 2032	5812	San Diego Bay
574	WHEELSAVER SYSTEMS LLC	201 W 28th Street, B	7534	San Diego Bay
575	Wholesale Autos Inc	2125 Roosevelt Avenue, A	5521	San Diego Bay
576	Wienerschnitzel	1825 Highland Avenue	5812	San Diego Bay
577	Winchell's Donut House #484	2447 E Plaza Blvd.	5461	San Diego Bay
578	Wonder/Hostess Bakery Outlet	1626 Sweetwater Road, E - H	5411	San Diego Bay
579	WonYong Services, Inc.	1625 Cleveland Avenue	7349	San Diego Bay

TABLE 4.1 (CONTINUED)
HIGH PRIORITY COMMERCIAL FACILITIES

#	Business Name	Address	SIC Code(s)	Watershed
580	World Terminal Parking Inc	200 Highland Avenue	7542	San Diego Bay
581	World Terminal Parking Inc.	510 Highland Avenue	7542	San Diego Bay
582	Wrigley's Super	34 N Euclid Avenue	5411	San Diego Bay
583	YAKATA TRADING INC	2424 Hoover Avenue, F	5812	San Diego Bay
584	Yogurt King	1430 E Plaza Blvd., E7A	5812	San Diego Bay
585	Your Bakery & Sandwich Shop	36 N Euclid Avenue, F	5812	San Diego Bay
586	Yum Yum Donut Franchise #502	3122 E Plaza Blvd.	5461	San Diego Bay
587	Zarlitos Family Restaurant	505 E 8th Street	5812	San Diego Bay

5 RESIDENTIAL

Land use in the City of National City is largely residential. To address common residential activities that may pose a significant threat to storm water, the City has implemented many programs focused on reducing pollutant loads associated with such activities. Residential activities such as yard maintenance, landscaping, swimming pool and hot tub maintenance, home improvements, and vehicle care have the potential to introduce pollutants into the City's storm drain system if not managed properly. The City is dedicated to ensuring that residents are implementing activity-specific BMPs properly to eliminate the discharge of pollutants such as sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals into the storm drain system. The City recognizes the need for educational efforts and opportunities designed specifically for residents and residential activities.

The following sections present activities conducted during this reporting period with respect to priority residential sources, BMP requirements and implementation, pollution prevention, inspections, compliance and enforcement, and training, education, and outreach activities. These activities are associated with the residential component of the JURMP and include conducting ongoing HHW collection events, distributing educational materials, and participating in community events.

POLLUTION PREVENTION

The City continues to provide information regarding the implementation pollution prevention measures, such as good housekeeping practices, for residential areas and activities. Pollution prevention methods are BMPs that eliminate or reduce the generation of pollutants at the source. The City provides information regarding pollution prevention methods through targeted educational materials and one-on-one contact during complaint investigations.

BMP REQUIREMENTS AND IMPLEMENTATION

The City recognizes that preventative measures such as the implementation of BMPs are an integral part of the City's storm water pollution prevention program. The City requires the implementation of residential BMPs as described in the JURMP document and in Appendix C of the JURMP. The City has an extensive educational and public outreach program, details of which are given in Section 9 and Section 10 of this Annual Report, respectively.

The City continues to encourage residents to report observed illegal discharges and report other potential violations to the City's Storm Water Hotline. The number for this hotline is published on the City's website, in storm water brochures available in public locations, and on the City's storm water hotline business card, with the intention to reach as many people as possible. Complaints received from residents are the primary mechanism for notification of non-compliance with the City's Storm Water Ordinance in residential areas. Every effort is made to identify the responsible parties and to educate them regarding the NPDES program and City ordinances. Section 8 provides a summary of the public complaints received, all of which were investigated and resolved. The majority of the complaints were regarding residential activities. The complaints were received from individuals or City staff that witnessed potentially harmful activities, and each investigation was resolved.

PRIORITY RESIDENTIAL SOURCES

During 2006/2007, the City continued to identify priority residential sources. There have been no changes to the high threat to water quality residential areas that were designated during the last reporting period, however. High TTWQ areas are designated by considering visual observations, institutional knowledge, and Dry Weather Monitoring Program data, and the criteria as defined in updated Municipal Permit. The following residential areas were designated as being high threat to water quality:

- Similar to previous reporting periods, the residential area stretching from Highland Avenue to Euclid Avenue, north and south of Division Street was found to have elevated levels of bacteria during Dry Weather Monitoring Program. Continued irrigation seepage at a particular apartment complex was causing water to stagnant, possibly contributing to the high instances of bacterial growth in the samples taken. Evidence of illegal dumping was also noted.
- Similar to the last reporting period, residential area around 14th Street and Grove Street was found to be a source of detergents and ammonia. A significant amount of organic matter was noted in the catch basin and was determined to be the main pollutant source of ammonia. Detergents were generally traced to residences were people have recently washed a vehicle outdoors. During this reporting period, upstream investigations found levels of bacteria in this area. It was established that the cause of the elevated levels were most likely from the decomposing organic matter.
- The residential area around Harbison Avenue south of 18th Street has previously been listed as a priority residential source, mainly due to elevated levels of ammonia during dry weather monitoring events. During this reporting period, there were no exceedances above the action level on any constituent. The City has chosen to keep this residential area on this list of priority residential sources as a proactive measure.
- In previous reporting years, the residential areas off Arcadia Place have been observed to have elevated concentrations of ammonia and detergents in dry weather monitoring surveys. During this reporting period, there were no exceedances above the action level on any constituent. The City has chosen to keep this residential area on this list of priority residential sources as a proactive measure.

More information about follow-up actions to pollution observed during the Dry Weather Monitoring Program is presented in Section 8 of this Annual Report.

Because some commercial businesses or construction sites fall within residential areas, inspections at these sites may facilitate in identifying sources of pollutants from residential sources. Inspectors are able to assess BMP implementation in the residential areas around these sites while driving to and from the sites.

The City continues to maintain a storm water hotline. A business card featuring the City's storm water hotline number is available with other storm water pollution prevention material in City Hall and at other City facilities. Complaints can be submitted by phone or online and are directed to the City's NPDES Storm Water Compliance Inspector for investigation and follow-up. Once the City receives a complaint, it is investigated immediately. Section 8 presents a log of complaints, a number of which related to

residential areas and/or were reported by residents. Those complaints led to direct inspection and investigation of residential areas and activities.

TRAINING, EDUCATION AND OUTREACH

Education is a fundamental part of preventing pollutants from entering the storm water system. The City continues to provide educational materials to its residents in a variety of ways. The City has published most of their brochures in English as well as Spanish to provide the same educational opportunities to the large Spanish speaking population of National City. Training, education, and outreach activities for residents during this reporting period are described below.

2007 Calendar

The City developed a 2007 Calendar that was distributed to residents, and made available at City offices (Attachment 2.2). The calendar was printed in both English and Spanish and informs residents about pollutants found in San Diego Bay and neighboring waterways. It describes that pollutants such as fertilizers, pesticides, metals, paints, oil and grease and other debris can be transported from residential areas to the ocean. A list of BMPs and various cleanup days and HHW events are promoted. The theme for the calendar was "Let's keep our community clean" and each month showed a photograph of a landmark in the City.

Distribution of Educational Material

The City's Building and Safety division conducted inspections as part of the Healthy Homes Program in priority areas to check for lead in paint and other potential hazardous problems. Residents were provided IPM cards (Attachment 5.1) during these inspections. The IPM cards provide information regarding non-chemical solutions to pest-related problems. Additionally, in July 2007 the City sent a copy of the "Do You Go To the Beach When it is Raining" brochure (Attachment 5.2) in trash bills to residents.

As mentioned above, educational materials were provided to residents in National City in response to the recommendations from the 2006 Dry Weather Report. The City sent a letter, and applicable educational material to residences in areas where high levels of pollutants were noted.

Workshops

The City held a free storm water workshop on February 21, 2007, with 8 residents in attendance. Attendees were presented with a PowerPoint presentation on NPDES and BMPs for residential activities. A residential BMP handout was included with the presentation and is provided in Attachment 5.3. An NPDES Knowledge/Awareness Assessment Test before and after the presentation, which showed a marked improvement in awareness. Overall, post-workshop scores were higher than pre-workshop scores. In addition, attendees were provided information regarding how to properly dispose of HHW and other wastes and information regarding the storm water hotline and complaint system. 2007 Calendars (Attachment 2.2), "Everything that runs into the storm drain goes untreated directly into our creeks, lagoons, and San Diego Bay" brochures (Attachment 3.2), "Put Toxic Waste in its Place" brochures (Attachment 4.2), HHW refrigerator magnets

(Attachment 4.3) and copies of the City's Storm Water Hotline Card (Attachment 3.3) were also distributed at the workshop.

Website

Additional information regarding the City's storm water program, pollution prevention measures and BMPs is posted and continually updated on the City of National City's website, under the Public Works/Engineering Department link. For additional information on the City's educational efforts and the educational materials distributed to its residents please refer to Section 9 of this report.

Household Hazardous Waste Disposal Program

The City of National City continues to work with the City of Chula Vista to allow National City residents to drop off HHW at Chula Vista's Household Hazardous Waste Collection Facility. The Household Hazardous Waste Collection Facility is the primary location for hazardous waste collection in the South Bay, receiving HHW from the City of National City, the City of Imperial Beach, and the City of Chula Vista. The amount of waste collected by National City residents alone is not available. The total amount for all three cities is 142,572 pounds of hazardous waste, however. The following provides a breakdown of the waste collected at the facility, including curbside and door-to-door collection:

- 11,358 pounds of used oil
- 114,549 pounds of antifreeze oils and paints
- 16,665 pounds of used oil filters and batteries

The City continues to distribute brochures "Put Toxic Waste in Its Place" (Attachment 4.2) to remind residents to dispose of HHW properly. This brochure is handed out at all workshops and is available at various locations in the City.

Other Waste Disposal Programs/Activities

In addition to proper HHW disposal, the City encourages residents to recycle used oil. The City maintains seven Certified Used Oil Recycling Centers for residential oil disposal. The volume of used oil dropped off at the collection centers was not immediately available.

The City's Public Works Department held two trash collection events (June and November) during this reporting period in conjunction with EDCO Disposal Company. During these events, residents were encouraged to dispose of any unwanted large items from their homes such as furniture and appliances.

Two neighborhood councils in the City held cleanup events, and a third event was hosted by City Hall. The Eastside Neighborhood Council and the Army National Guard painted and cleaned El Toyon Recreation Center and removed 4.8 tons of dirt/trash/debris from three surrounding neighborhoods (Granger/Northside/Old Town) on February 3-4, 2007. The Northside Neighborhood Council collected 7.2 tons of dirt/trash/debris from the Northside Neighborhood on March 31, 2007. City personnel and residents collected 2.4 tons of trash and debris over June 1-2, 2007 from the areas surrounding City Hall.

Additionally, residents of Sweetwater Heights, a neighborhood in National City, continue to maintain their own birdhouse for pet waste bags, encouraging neighbors to pick up after their pets.

In addition to the above efforts, the City completed the construction of the Paradise Creek Educational Center. The site offers educational signs about pollution prevention and improving water quality in National City. The area is designed to make people more aware of their surroundings and hopefully foster more effective pollution prevention programs. On April 21, 2007, a few days after the Paradise Creek Educational Park officially opened, an Earth Day celebration was held there. During the celebration, volunteers removed trash and sowed 300 plants.

Storm Drain Stenciling

During 2006/2007, the City worked with ILACSD to stencil storm drains in the City that remind people that the storm drains drain to local creeks and the ocean. A total of 19 volunteers stenciled 30 drains.

COMPLIANCE AND ENFORCEMENT

To help bring the priority residential areas that were listed above into compliance, the City of National City has worked to ensure that these residential areas are educated on storm water issues by providing educational brochures. Homes in areas where dry weather monitoring indicated high pollutant discharge were provided with educational mailers and were encouraged to learn more about the NPDES program.

The City continues to encourage all citizens to use the storm water public complaint hotline and/or website complaint system. The hotline is publicized as widely as possible to encourage the public to use the service. The telephone number has been mailed to every residence in the City and is also posted on the city website; the online complaint form is easy to find and easy to use. The storm water hotline card is available at the City's Engineering Department, and these cards are handed out during all inspections or complaint investigations. This hotline augments the City's ability to educate and enforce by allowing staff to immediately bring erring individuals or businesses into compliance. City personnel investigate each complaint received. The City makes every attempt to identify the responsible party. Potential sources of pollution are evaluated, immediate action is taken if necessary, and corrective action is recommended verbally or via a letter. In some cases, an administrative citation, or Notice of Violation (NOV) is issued. In addition, the City also provides as much educational material as possible to prevent future activities that may pose a threat to storm water quality.

Complaints received are the City's primary mechanism for notification of noncompliance with its storm water ordinance in residential areas. The City's NPDES Storm Water Compliance Inspector records the complaints and responds to them accordingly. During the 2006/2007 reporting period, the City received several storm water complaints related to residential areas, which are included in Table 8.4 of Section 8 below. In some cases the reported noncompliance was not observed when the City inspector visited the site. In those cases, no enforcement action was taken. When discharges or improper BMP implementation is observed, the City's NPDES Storm Water Compliance Inspector takes action to ensure the violations are promptly remedied. The City issued 12 administrative citations, seven NOVs, and 23 corrective action letters to residents during the reporting year. Common problems this reporting period were vehicle washing, oil leaking from vehicles onto the street, accumulation of trash and debris on the street, and hosing off the driveway

and/or sidewalk. In most cases, problems are resolved by a verbal warning and no further action is necessary.

A notable residential enforcement action occurred in response to a complaint that a resident's garbage disposal was plumbed improperly and that the resident hoses off concrete areas. Upon investigation, the inspector noted that the kitchen sink and several washing machines were plumbed outside. Discharge of sediment and food particles and improper storage of materials was also noted. The City issued an NOV and an Administrative Citation to the resident. Upon follow up, all issues were resolved.

Another complaint that was received was regarding a homeowner pumping sewage from under the house to the gutter. The water flowed for a total of approximately 5-6 hours through a garden hose. The City's storm water consultant, D-MAX Engineering, Inc. was called to test the water and the Sewer Department was called to clean up the spill. The Building Department was also called to check safety of residents; the house was tagged as unsafe to occupy. An administrative citation was issued. A follow-up investigation revealed that the hose and pump were still observed to be under the house with one end of the hose going to the front lawn. The inspector issued an NOV. The hose and pump were removed and all storm water issues were corrected.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2004.

6 LAND-USE PLANNING FOR DEVELOPMENT

One of the major requirements of the Municipal Permit is to minimize pollutant discharges from new development and redevelopment projects in order to improve overall storm water quality in the City of National City. Development has the potential to contribute pollutants to the City's storm water runoff from demolition and construction as well as post-development activities. Thoughtful pre-construction planning has been shown to reduce the potential of pollutant discharge both during and after construction. Effective pre-construction planning activities can include identifying potential pollutants from the site, minimizing the potential for the development to negatively impact downstream channels and/or habitats, and establishing appropriate BMPs during and after construction. After the issuance of the Municipal Permit, the City of National City implemented pre-construction planning activities through revaluating the General Plan, making changes to the City's development approval process, and establishing educational programs for development projects. The City continues to reassess and update its development-related processes in order to ensure that storm water pollution is minimized.

SUSMP DATABASE AND POST-CONSTRUCTION BMP INSPECTIONS

To prepare for the treatment control BMP inspection requirement in the new Municipal Permit, D-MAX, the City's storm water consultant, developed an electronic database of the City's SUSMP projects and performed BMP inspections of completed SUSMP projects. In mid 2007, the City conducted inspections of all completed SUSMP projects within the City's jurisdiction. These projects are all included in the City's SUSMP database, which contains general site information, details on site and source control BMPs, descriptions and GIS coordinates of all treatment control BMPs, and responsible party contact information. In the future, the City plans to track inspection finding and enforcement actions using the database as well.

One of the advantages of having an electronic database is the ability to print out site specific inspection forms that contain information directly from the database. An example of a site specific inspection form generated from the City's SUSMP database is included as Attachment 6.1 of this report. Site specific inspection forms help inspectors know what BMPs to look for without having to bring the project's cumbersome SUSMP report or site plans with them to the inspection site. The form also includes the GIS coordinates of each site's treatment controls, which can be obtained during the initial BMP inspection, to help in locating the treatment controls during subsequent inspections.

To prepare the BMP database, information was gathered from the City's existing SUSMP filing system located in the City's Engineering Department and the electronic SUSMP project tracking spreadsheet maintained by the City's storm water consultant. The SUSMP and construction site plans for completed projects were reviewed and relevant information from these documents was entered into the database. The City plans on adding new projects to the database once a project's SUSMP report is approved.

Since this was the first year the City performed post-construction BMP inspections, sites were checked for proper construction of structural site and source control BMPs in addition to proper installation and maintenance of treatment control BMPs. The City does anticipate

the need to inspect site and source control BMPs during subsequent inspection at these sites, unless implementation problems in these BMPs were observed during the site's initial BMP inspection. The following deficiencies were noted during the BMP inspections of completed SUSMP projects:

- Storm drain inlets did not contain signage.
- Personnel on site were unaware of how to maintain treatment control BMPs or in some cases were not aware of the BMPs at all.
- Roof downspouts were constructed to drain towards impervious areas, despite there being adjacent landscaping available to drain to.
- Catch basin inserts contained significant trash and appeared in need of maintenance.
- BMPs included in the site's SUSMP were not included on the site's construction plans, and were not installed.

Since the City's SUSMP inspections were conducted late in the 2006/2007 reporting period, discussion of the City's follow-up actions will be included in the 2007/2008 annual report.

Many of the BMP deficiencies noted during inspections were errors in construction rather than maintenance related. Most of the completed SUSMP projects were approved early in the development of the City's SUSMP program before the City adopted their current SUSMP approval process. The City now requires all structural BMPs included in the site's SUSMP document to be included on the site's construction plans before construction may begin. This ensures that building inspectors will check for proper structural BMP construction during routine plan checks. Any changes made to structural BMPs on the site's construction plans must be approved by the City before they may be implemented. Due to the City's current review process, the City does not expect BMP deficiencies related to construction of structural BMPs to be a problem in the future. The City will assess the effectiveness of its review process once construction on Priority Project approved through the City current process are completed and post-construction BMP inspections can be conducted.

GENERAL PLAN ASSESSMENT

The City of National City General Plan currently includes policies and a number of strategies relating to water quality preservation. These are included in the Natural Setting Element of the General Plan. No modifications have been made to the City's General Plan during this reporting period.

DEVELOPMENT PROJECT APPROVAL PROCESS

Slight modifications were made to the project approval process, although the overall structure of the process remained the same. The City made minor modifications to its applicability checklist (Attachment 6.2) during this reporting period. All projects that disturb soil are required to complete the applicability checklist and the City requires that projects completing the checklist be directed to the Engineering Department for final sign off. As presented in the 2002/2003 JURMP Annual Report,

"Before permit applications are submitted to the [building] department, developers are required to fill out a storm water requirements applicability checklist that determines if the project is subject to SUSMP and if preparation of a Storm Water Pollution Prevention Plan (SWPPP) or Storm Water Management Plan (SWMP) is applicable….For public projects, project managers are required to ensure that SUSMP requirements are incorporated into the project design. The SUSMP requirements must be included in the plans before the project is allowed to proceed into the grading and/or construction phase. The SUSMP ordinance also requires that if a project requires a grading permit that the applicant complete a Storm Water Management Plan prior to the issuance of the grading permit. An erosion plan and a SWPPP are required for sites greater than an acre and must be submitted as part of the grading plans. Erosion Control Plans are required for sites smaller than an acre."

During this reporting period 12 projects submitted post-construction BMP reports. Table 6.1 presents a list of development projects that submitted reports during 2006/2007.

To more accurately track the implementation of required BMPs, the City uses a SUSMP review checklist. The City's consultant uses the checklist as a guideline when preparing written comments for submitted SUSMP reports. When a project proponent proposes a treatment control BMP that is not the most effective possible BMP for the anticipated pollutants, the City requires the proponent to either implement a more effective BMP or justify why the selected BMP is the best BMP that can feasibly be installed at the site. The City also now requires that structural BMPs be shown on the SUSMP maps and construction plans; this allows building inspectors to ensure that the BMPs are implemented during their inspections.

ENVIRONMENTAL REVIEW PROCESS

The City continues to follow the written departmental SUSMP responsibility checklist developed during the 2005/2006 reporting period during the environmental review process. The City's storm water consultant, D-MAX, generally conducts the technical reviews of WQTRs and SUSMPs submitted to the City during the project approval process. A detailed review of site design, source control, and treatment control BMPs, as well as potential impacts to the downstream hydrologic regime is conducted. The City uses its SUSMP Review Checklist to determine whether all SUSMP requirements have been met, after which a detailed letter explaining the deficiencies of the submitted document and recommendations for improvement/approval is provided to the City and then passed on to the developer. If the initial document did not meet the minimum requirements, a revised document addressing the review comments must be submitted. This process continues until the document is approved; at that time the project may commence. Reviews of post-construction BMP plans for non-priority projects follow a similar process, except that treatment control BMPs are not required. The City of National City's environmental review process did not change substantially during this reporting period.

NEW DEVELOPMENT AND REDEVELOPMENT EDUCATION

Applicants continue to be educated on the City's development and re-development requirements during pre-submittal application meetings held with City's Planning Department. Representatives from the City's Planning Department regularly attended the

interdepartmental SUSMP coordination meetings, and City planners were provided with guidance regarding site design and other post-construction BMPs. If project applications are determined to be subject to SUSMP, then discussion occurs on ways applicants can meet these requirements.

During this reporting period, the City continued to hold Development Service Group (DSG) meetings to establish policies and procedures to integrate SUSMP into the normal review process for development and redevelopment projects. Review comments on each submitted SUSMP are provided to the project proponent. These lists of comments, presented in letter format, explain to the developer what, if any, changes are required and why they must be made. Meetings and telephone conversations with project proponents also occur, during which additional instruction on SUSMP requirements may be given. These methods help promote better understanding of and compliance with SUSMP requirements. Because a relatively small group of consulting engineering firms prepare the bulk of SUSMPs for projects in National City, future submittals from those same companies are anticipated to show improved initial designs.

The City's consultant, D-MAX, conducted a training session on January 22, 2007, on SUSMP requirements and BMPs. The presentation included a development and re-development component. This included SUSMP requirements and BMPs for new development and redevelopment. Additional trainings are planned for 2007/2008.

DESCRIPTION OF SUSMP PROJECTS

During this reporting period, post-construction BMP reports were submitted for the following 12 projects. All 12 were Priority Projects subject to SUSMP. Additional information regarding these projects can be found in Table 6.1.

Carolino Hillside Homes

This project involves the construction of nine detached two-story single family homes on 1.41 acres located on a steep hillside.

Cypress Glen Condominiums and Cypress Glen Phase II

Cypress Glen Condominiums consists of the construction of 38 condominium units on a 4.22 acre site. Phase II of the project involves the construction of 6 single family residences and associated private roads on a 1.0 acre lot, adjacent to Cypress Glen Condominiums.

Harbor View Condos

This project involves demolition of four single family homes to build a multiunit condominium building with underground parking. The site covers a total of 0.67 acre.

Harley Davidson

This project consists of remodeling an existing commercial building for use as a motorcycle showroom and repair facility.

Marina Gateway

Marina Gateway consists of redevelopment of an existing industrial and commercial site into a commercial site consisting of a hotel, pool, IHOP restaurant, commercial building, and associated parking lots.

Pacific View Estates

This project includes the construction of 49 detached single family residences and associated private roads on 4.43 acres of undeveloped land.

Paradise Village

This project involves construction of a multi-family residential facility that will include residential housing, a multiple use community facility, parking, and an outdoor detention basin on 12.2 acres.

Paradise Walk

This project consists of the construction of 16 townhome buildings (96 individual units) on a 4.65 acre lot with existing single family residences.

Plaza Bonita Mall Expansion

The Plaza Bonita Mall Expansion involves a two level expansion of the Plaza Bonita Mall with retail and parking structures covering about 18 acres.

Plaza City Apartments

This project involves the construction of senior apartments on 1.67 acres.

Plaza Village

This project consists of the construction of a covered parking garage with multiple story residential units above on a 0.5 acre site.

COMMON PROBLEMS WITH SUSMP PROJECTS

While reviewing SUSMP reports as part of the approval process the City has noted a number of common problems with the documents, sometimes causing them to be unable to meet the City's requirements upon the first or second review. A submitted SUSMP report presents the developer's plan to identify pollutants likely to discharge from the site and the BMPs that are proposed to minimize potential storm water pollution. Often times, these reports lack complete or correct information on anticipated pollutants of concern and/or proposed BMPs. The City's technical review of the document results in a detailed letter explaining to the developer what changes must be made prior to the approval and commencement of the project. The following is a list of deficiencies noted during the reviews of SUSMP reports submitted during this reporting period.

- Calculation of pre- and post-development runoff is not present or not properly calculated.
- Watershed information and the project's receiving water body are missing or incorrectly identified.
- The list of anticipated and potential pollutants of concern is incomplete or incorrect. Also, if present, they are not designated as either primary or secondary pollutants of concern.
- Conditions of concern are either not discussed or not sufficiently addressed.

- Site design and source control BMP descriptions are generic, or not site specific.
- Site design BMPs are not implemented to the Maximum Extent Practicable (MEP), and there is no explanation of why more site design BMPs and/or more effective site design BMPs are not proposed.
- Individual Priority Project BMPs for applicable Priority Project categories are not proposed.
- Calculation of SUSMP flow or volume for treatment control BMP sizing is either not present or is not properly calculated.
- Calculated values are not consistent throughout the report's text, tables, and appendices.
- A treatment control BMP is chosen that does not have the highest possible removal efficiencies for anticipated pollutants, and there is no explanation present for why a more effective BMP could not be implemented.
- It is unclear whether runoff from all areas of the project site will be directed to a treatment control BMP, or the report states that some areas will not receive treatment at all. Also, the locations of these BMPs are often unclear.

The City continues to inform developers of these types of errors and has seen some improvements since the end of 2005/2006.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2004.

Table 6.1
SUSMP Projects Submitted to the City for Review
During the 2006/2007 Reporting Year

#	Project Name	Location	Description	Project Type	Number of Reviews
1	Carolino Hillside Homes	16th Street & M Avenue	Residential Development on Steep Hillside	Priority	one
2	Cypress Glen Condos	3229, 3359, 3391 Cypress St	Residential Development	Priority	three
3	Cypress Glen Phase II	2501 E 32nd Street	Residential Development	Priority	three
4	Harbor View Condos	8th Street & D Avenue	Residential Development	Priority	one
5	Harley Davidson (Revised)	3201 Hoover Ave	Commercial Development	Priority	one
6	Marina Gateway	Marina Way, south of Bay Marina Dr	Commercial Development with Restaurant and Parking Lot	Priority	one
7	Pacific View Estates	Division St & Laurel Ave	Residential Development	Priority	one
8	Paradise Village	4th St., 8th St., Arcadia Ave., & Bowron St.	Residential Development	Priority	one
9	Paradise Walk	Arcadia Ave and E. 8th St	Residential Development	Priority	one
10	Plaza Bonita Mall Expansion	3030 Plaza Bonita Road	Commercial Development	Priority	five
11	Plaza City Apartments	1535 E. Plaza Blvd	Residential Development	Priority	three
12	Plaza Village	L Avenue & Plaza Boulevard	Residential Development	Priority	two

7 CONSTRUCTION

Construction and grading activities have the potential to negatively affect storm water quality due to the presence of large amounts of sediment. Sediment is a pollutant that can also carry other pollutants such as metals and nutrients into the storm drain system and ultimately to receiving waters. Effective sediment control and soil stabilization are necessary to prevent sediment and associated pollutants present at construction sites from entering the storm drain system. Both the Municipal Permit and General Construction Permit have regulations aimed at reducing the potential for sediment discharge from construction sites. Appropriate pollution prevention BMPs related to material and waste management and equipment cleaning can also help prevent materials like concrete, fuel, paint, and detergents from being transported from construction sites into the storm drain system.

Section 7 of the 2004 JURMP outlines the City's mechanism for ensuring that storm water pollution is eliminated at construction sites. Sites equal to or greater than one acre are required to comply with the State General Construction Permit (Construction Permit) as well as local requirements. Both sets of regulations ensure that BMPs are implemented effectively at all construction project sites. The City also conducts quick, minor repairs and improvements to curb gutters, sidewalks, and portions of streets. City staff responsible for these projects are trained in BMP implementation, and inspections are also conducted to make sure appropriate BMPs are in place for these small projects. See the municipal section of this JURMP Annual Report for more information about the City's BMP practices for street maintenance.

To ensure compliance with the City's Storm Water Ordinance and the Construction Permit, the City inspectors conduct inspections of project sites based on prioritization and inspection frequency as defined in the Municipal Permit and the City's JURMP. The City of National City maintains an inventory of all active construction project sites. During this reporting period, there were 3 high priority construction sites, 14 medium priority sites, and 72 low priority sites. Note that of the 3 high priority sites, only one was active during the entire 2006/2007 wet season. Tables 7.1, 7.2, and 7.3 present the inventories of the high, medium, and low priority sites, respectively. The following sections describe the City's construction-related activities during this reporting period.

POLLUTION PREVENTION AND BMP REQUIREMENTS AND IMPLEMENTATION

Section 7.1 of the JURMP addresses pollution prevention methods. The City's required pollution prevention methods ensure that potential pollutants associated with construction sites are prevented from entering the MS4s or receiving water bodies. The City's grading ordinance, building code, and Storm Water Ordinance provide legal authority for these requirements.

Section 7.6 of the JURMP presents a list of BMP requirements. Appendix C of the JURMP presents more detailed BMP fact sheets for effective implementation of those BMPs at construction project sites. Construction sites are required to implement the following BMPs where applicable.

- Soil stabilization and erosion prevention
- Sediment containment
- Materials and equipment management
- Non-storm water discharge and drainage control

No changes have been made to the City's BMP requirements during this reporting period. The City's BMP manual for construction activities, intended for site owners, developers, and contractors, is available to any interested parties through the Engineering Department. Most major developers working in the City have received these manuals. The City also discusses the manual at CIP project pre-construction meetings to ensure contractors have received a copy and are aware of the requirements, and manuals are occasionally given out during inspections at construction sites.

EDUCATION

During this reporting period, the City continued to conduct pre-construction meetings for Capital Improvement Projects (CIP). Private high priority sites have an onsite pre-job conference in most cases. The City also often conducts pre-job conferences at the Engineering Department front counter when a permit is pulled for smaller projects, typically classified as medium or low priority. City staff explain NPDES and relevant BMP requirements to the project proponents. The City's BMP manual (Appendix C of the JURMP) continues to be available at the City's Engineering Department counter; contractors or developers are asked to pay a minimal cost for the manual to cover copying expenses. Appendix C of the JURMP also may be given out to contractors at construction sites by the City's NPDES Storm Water Compliance Inspector.

During this reporting period, the City continued to distribute the "Construction Site Best Management Practices" fact sheet created during the 2005/2006 reporting year to all construction projects obtaining construction permits. The fact sheet lists the City's minimum BMP requirements for construction activities and the document is made a condition of permit issuance. This ensures that all projects are appraised of the City's BMP requirements, including even the smallest projects that require only building permits. A copy of the storm water hotline card may also be given to contractors at construction sites.

In January 2007 the City hosted a construction stormwater workshop for the City's construction and development community. Topics covered during this training included general storm water concepts, the City's construction BMP requirements, complying with the general construction permit, and a general overview of the City's SUSMP requirements. Similar to other workshops hosted by the City, pre- and post-workshop knowledge assessment tests were given. Overall, scores improved after the workshop. The City is planning another construction workshop for the 2007/2008 implementation year.

GENERAL CONSTRUCTION PERMIT

In addition to ensuring that construction sites are in compliance with the Municipal Permit, the City has taken a proactive role in ensuring that the applicable construction sites are in compliance with Construction Permit requirements. Before receiving City permits for work on their projects, project proponents are required to complete a Storm Water Requirements Applicability Checklist, which includes a section on Construction Permit subjectivity

(Attachment 6.2). Sites over one acre in size are subject to the Construction Permit and are required to obtain coverage. The City conducts a formal technical review of the SWPPP for sites subject to the Construction Permit prior to the start of construction. The SWPPP is reviewed against the Construction Permit SWPPP guidelines to ensure all sections of the permit are addressed. A formal letter with the technical review comments is sent to the developer, who must resubmit a revised SWPPP if it is found that the document did not meet the relevant requirements. Once comments are adequately addressed, the developer may commence with the project.

The City has noted some common SWPPP deficiencies during the review process. As noted above, the developer is required to correct the deficiencies before the project is allowed to proceed. Common deficiencies are listed below.

- Base SWPPP templates were not tailored to make them site specific.
    - BMPs were not site specific.
    - Material lists were not site specific or complete.
- Some information was missing or not included.
    - Attachments referenced in the text were missing.
    - Site maps did not include all necessary information, such as drainage patterns and BMP locations.
- Post-construction BMP implementation and short-term and long-term funding were not addressed. In some cases for Priority Projects, post-construction BMPs proposed in the SWPPP did not match those proposed in the SUSMP. In these cases the City required the developer to revise the documents to be in agreement with each other.
- Project schedules and contractor information were not available.
- NOIs had not yet been sent to the State Water Resource Control Board. In these instances, the City ensured Construction Permit coverage was obtained before the project was allowed to proceed.

While the project foremen were generally quite knowledgeable on storm water issues, it was noted during inspections that some personnel on construction sites did not receive training on SWPPP implementation. In a few instances, the SWPPP was not available onsite or was inaccessible to workers.

INSPECTIONS

The Municipal Permit requires that storm water compliance inspections for construction sites be conducted based on the following frequencies:

- During the wet season (October 1st through April 30th), designated high priority construction sites must be inspected weekly, while medium and low priority construction sites must be inspected twice during the wet season.
- During the dry season (May through September), constructions sites are to be inspected as needed. The City has gone beyond this minimum requirement, also inspecting high and medium priority sites during the dry season.

The City requires all construction sites to prevent discharges to the MEP through effective project planning and research, erosion prevention, sediment containment, materials and equipment management, and non-storm water discharge and drainage control. Common examples of these measures include fiber rolls, silt fences, rip-rap, and hydroseeding. Erosion prevention measures have been found to be the most effective and least costly BMPs. In some cases, additional BMPs beyond those specifically required by the City's JURMP must be implemented to meet the City's MEP standard. To ensure these requirements are met, the City performs inspections of construction sites to evaluate if project proponents are correctly implementing required BMPs. Data collected during this reporting period indicates that the City's program has continued to be fairly effective at ensuring compliance at construction sites. Most sites were in compliance, and the City's enforcement actions resulted in the non-compliant sites implementing the necessary corrective actions.

During this reporting period, the City of National City conducted all necessary inspections to ensure compliance with the Municipal Permit requirements and meet the inspection frequency goals outlined in the City's JURMP. The City's NPDES Storm Water Compliance Inspector and D-MAX inspectors visited medium and high priority construction sites according to the frequencies described earlier in this section. The low priority construction sites were visited by construction inspectors to ensure BMPs were implemented effectively. BMP implementation was checked at all permitted projects that disturb soil, and if the construction inspector noted deficiencies in BMP implementation or a threat to water quality, the City's Storm Water Compliance Inspector was contacted immediately to address the issue with the property owner and contractor. Many of the low priority construction sites were completed in a very short period of time; thus, two inspections during the wet season were not feasible for some small projects, such as construction of new driveways. Common deficiencies in BMP implementation were noted during the inspection process. Inspectors found that for some of the medium and high priority construction sites, contractors failed to implement structural and non-structural BMPs outlined in their SWPPPs or failed to actively maintain BMPs once implemented. Selected structural BMPs are outlined in Appendix C.6 of the JURMP manual and are required to be implemented in accordance with the guidelines outlined by the California Storm Water Quality Association. Common BMP deficiencies observed during this reporting period are listed below:

- Improper material storage and stockpile protection
- Improper equipment/vehicle storage
- Improper entrance/exit stabilization
- Sediment buildup around discharge locations
- Improper or insufficient erosion control BMP implementation
- Insufficient or failed perimeter protection

Most BMP deficiencies were primarily the result of not maintaining good housekeeping practices. General areas of improvement regarding good housekeeping practices include: sweeping around storm drain inlets and other discharge areas, keeping streets around the construction site free of sediment, properly containing waste materials, and properly covering or containing stockpiles.

Where BMP deficiencies were noted, corrective actions were recommended and follow-up inspections were performed to ensure compliance. Inspectors also educated contractors and developers by discussing storm water and erosion control requirements and providing written BMP information to ensure compliance with the Municipal Permit and the Construction Permit. In instances where additional enforcement actions are required, a stop work order is issued until proper BMPs are implemented (see Compliance and Enforcement Actions below). If necessary, the inspector may reclassify the priority of a construction site if it is found to consistently lack proper BMP implementation or receive stop work notices, citations, or notices of violation.

CONSTRUCTION SITE INSPECTION TRACKING SYSTEM

The City continues to input construction site inspection findings into a storm water database. For high and medium construction inspections, a four-page inspection form is filled out per inspection. The information from the inspection is entered into the database and used to keep track of each site's compliance. Queries can be conducted to track corrective actions and notices of violation observed at various construction sites.

COMPLIANCE AND ENFORCEMENT ACTIONS

The City has developed and continues to update the compliance and enforcement protocol as identified in the JURMP Section 8, Enforcement Measures for Construction Sites. The goal of the enforcement process is to ensure facilities are compliant with local, state and federal regulations and BMP requirements.

If relatively minor BMP problems are found during an inspection, the City's NPDES Storm Water Compliance Inspector issues a verbal warning to the responsible party and follows up with the site the next day. If the problem has not been corrected, a stop work order is issued until appropriate BMPs are implemented. Note that a Corrective Action Letter may be issued if no representative is on site when a minor BMP issue is discovered. The City also follows up at these sites to ensure that corrective actions are undertaken promptly. If an inspector finds an active discharge of pollutants or gross negligence on the part of the developer in implementing BMPs, the City's NDPES Storm Water Compliance Inspector immediately issues a stop work order, and in many cases an Administrative Citation is issued as well. The developer or contractor is also required to clean up discharged materials if possible. In some cases, the City will also issue a NOV, which requires the submittal of a written corrective action plan. The stop work order is not lifted until the required BMPs have been properly implemented. The City has found stop work orders to be effective enforcement tools, largely because they impose more significant costs than do citations in the range of several hundred dollars. In some cases, contractors will implement BMPs within a very short time frame when informed they are at risk of receiving stop work order.

The City's NPDES Storm Water Compliance Inspector is authorized to administer administrative citations, stop work orders, and NOVs. In many instances during the storm water compliance inspection, contractors and developers implemented corrective actions immediately. During this reporting period, the City administered four administrative citations, two corrective action letter, and three NOVs in support of its construction program. The administrative citations were given due to lack of BMP implementation, sediment discharge, and non-storm water discharge. Most of the regularly inspected construction sites had relatively good compliance records; the majority of the enforcement

actions were taken in response to complaints reported to the City. The complaints and the City's response are discussed in Section 8 of this Annual Report. Of the construction sites that were issued enforcement actions, all came into compliance after the first citation was issued and the City did not have to issue additional enforcement measures.

During the 2006/2007 reporting period, the City issued one stop work order to the Plaza Bonita Mall redevelopment when the site was found to have begun construction without submitting an NOI, SWPPP, or a SUSMP report. Construction was not allowed to resume until a SWPPP was submitted, reviewed, and approved and an NOI was filed with the RWQCB. The site complied promptly and construction was allowed to continue. In order to prevent extended delays on the project, the City allowed the project to resume construction before the SUSMP report was approved. Since this project was a redevelopment and site constraints limited the ability for the site to implement site design BMPs or larger treatment control BMPs, the City decided that allowing the project to begin construction would not further limit the site, source, and treatment control BMP options available to the site. The project was told that once the SUSMP for the project was approved, the construction plans would have to be changed to reflect the BMPs included in the SUSMP and final approval would not be given to the project until these BMPs were installed. When the final approved SUSMP for the site included new BMPs for the site's already completed dock areas, the City required the site to go back and rebuild the dock areas as described in the site's SUSMP. The City also took extra precaution with the site by assigning it a construction priority of high despite the site meeting medium priority criteria. The City conducted weekly inspections for the site during October and November of 2006 to ensure the site was complying with City requirements. Since the site was not found to have any major deficiencies in BMP implementation during these months, the City dropped the site's priority to medium, and subsequent inspections were less frequent.

During the reporting period the City did not have to issue any stop work orders to construction sites for failure to comply with previous enforcement measures.. The City has demonstrated in past implementation years that issuance of high level enforcement measures such as stop work orders are not just empty threats, and it is likely that construction sites are complying more quickly with the City's BMP requirements to avoid these costly penalties.

Section 7.9 of the City's JURMP, "Reporting of Non-Complaint Sites," states, "The City of National City will provide oral notification to the RWQCB within 24 hours of the discovery of any non-compliant sites within its jurisdiction that are determined to pose a threat to human or environmental health. Oral notification will be followed up by a written report and submitted to the RWQCB within 5 days of the incident as required in Attachment C (B.6) of Order 2001-01." Further, in the event that a contractor or site owner refuses to cooperate with the compliance process, it is reported to the RWQCB. During this reporting period, no construction sites were found to pose a threat to human or environmental health, and the RWQCB did not need to be contacted.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit. All programs during the 2006/2007 reporting period were conducted under the

requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2004.

TABLE 7.1
HIGH PRIORITY COMMUNITY DEVELOPMENT/CAPITAL IMPROVEMENT PROJECTS AND PRIVATE CONSTRUCTION PROJECTS FOR FISCAL YEAR 2006/2007

#	Project Description	Project Location	Watershed
1	Pacific View Estates 37 Single Family Homes	Division and Laurel	SAN DIEGO BAY
2	Paradise Creek Restoration	1815 Hoover Ave.	SAN DIEGO BAY
3	Pedestrian ramp installation	Multiple locations (15th and 16th St)	SAN DIEGO BAY

TABLE 7.2
MEDIUM PRIORITY COMMUNITY DEVELOPMENT/CAPITAL IMPROVEMENT PROJECTS AND PRIVATE CONSTRUCTION PROJECTS FOR FISCAL YEAR 2006/2007

#	Project Description	Project Location	Watershed
1	1640 E Plaza - CDC	1640 E Plaza	SAN DIEGO BAY
2	18th and Lanoitan Condos	1742, 1752, 1762, 1772 Lanoitan Ave.	SAN DIEGO BAY
3	Canyon Ridge	Rachael Avenue at Blue Ridge Street	SAN DIEGO BAY
4	Carolino Condos	228 Palm	SAN DIEGO BAY
5	Cricket Wireless Tenant Improvement	1000 Highland Ave	SAN DIEGO BAY
6	Cypress Glen Condominiums, detached homes	3229 Cypress Street	SAN DIEGO BAY
7	H & H Townhomes, Seven Townhouses	3102 E. 16th St	SAN DIEGO BAY
8	Harbor View Condos 75 Units	8th and D 404 D St	SAN DIEGO BAY
9	L St Condos	900 L St	SAN DIEGO BAY
10	Paradise walk Olson Company condos (96)	8th and Arcadia	SAN DIEGO BAY
11	Plaza Bonita Mall Expansion Commercial Re-Development	Plaza Bonita Rd.	SAN DIEGO BAY
12	Plaza Senior Apartments, Residential Housing	1535 E. Plaza Blvd	SAN DIEGO BAY
13	Sweetwater Harley Davidson, Remodel	3201 Hoover Ave	SAN DIEGO BAY
14	Tremont Court, Residential Housing	Euclid Ave & Division St	SAN DIEGO BAY

TABLE 7.3
LOW PRIORITY COMMUNITY DEVELOPMENT/CAPITAL IMPROVEMENT PROJECTS AND PRIVATE CONSTRUCTION PROJECTS FOR FISCAL YEAR 2006/2007

#	Project Description	Project Location	Watershed
1	1 bedroom, 1 bath addition	1843 B. Avenue	SAN DIEGO BAY
2	Alley Section (Dirt alley converted to concrete.)	1515 E Street	SAN DIEGO BAY
3	Building expansion, conversion to commercial offices	2209 Highland Ave	SAN DIEGO BAY
4	CIP Project, curb, ped ramp, street pavement, landscaping, median	Highland Ave 8th St to 16th St	SAN DIEGO BAY
5	CIP project, test bores for City	Various Locations	SAN DIEGO BAY
6	Construction, retaining wall	2226 J St	SAN DIEGO BAY
7	Driveway	1305 K Avenue	SAN DIEGO BAY
8	Driveway	325 Drexel Ave	SAN DIEGO BAY
9	Install D-27	540 24th Street	SAN DIEGO BAY
10	Mervyn's Tenant improvement	3007 Highland Avenue	SAN DIEGO BAY
11	New construction - Single family home	2308 E 4th St	SAN DIEGO BAY
12	New single family home and garage	2831 E. 18th Street	SAN DIEGO BAY
13	On site improvements, repair of monitoring well	1602 Plaza Blvd	SAN DIEGO BAY
14	On site improvements, retaining wall	2007 Van Ness Ave	SAN DIEGO BAY
15	On site improvements, sewer lateral connection	2429 Prospect St	SAN DIEGO BAY
16	On-site improvements, 6" sewer lateral connections	820 E. 5th Street	SAN DIEGO BAY
17	on-site improvements, retaining wall	2230 Prospect St.	SAN DIEGO BAY
18	On-site improvements, retaining wall	2336 E. 4th St.	SAN DIEGO BAY
19	On-site improvements, retaining wall	3211 Alta Drive	SAN DIEGO BAY
20	On-site improvements, retaining wall	438 Q Ave	SAN DIEGO BAY
21	On-site improvements, retaining wall	545 Rachael Ave	SAN DIEGO BAY
22	Public improvement, Install 260'+/- of 8' CL/50 w/1" copper service, G-34 modified	1810 La Siesta Way	SAN DIEGO BAY
23	Public improvement, sidewalk, curb gutter, driveway, ped ramp, street pavement	Various Locations	SAN DIEGO BAY
24	Public improvements, 6" sewer LAT tie-in	1737 Grove St	SAN DIEGO BAY
25	Public improvements, 6" sewer lateral	1808 F Avenue	SAN DIEGO BAY
26	Public improvements, 6" Sewer lateral	2031 Lanoitan Ave	SAN DIEGO BAY
27	Public improvements, 6" sewer lateral	2nd St and A Avenue	SAN DIEGO BAY

TABLE 7.3 (CONTINUED)
LOW PRIORITY COMMUNITY DEVELOPMENT/CAPITAL IMPROVEMENT PROJECTS AND PRIVATE CONSTRUCTION PROJECTS FOR FISCAL YEAR 2006/2007

#	Project Description	Project Location	Watershed
28	Public improvements, alley	116 E. 4th St National City	SAN DIEGO BAY
29	Public improvements, concrete replacement, surface improvements, cross gutter	Cypress Ave @ Sweetwater Rd	SAN DIEGO BAY
30	Public improvements, construction	Plaza Blvd from Highland Ave to Euclid Ave	SAN DIEGO BAY
31	Public improvements, construction of flag pole area	1243 National City Boulevard	SAN DIEGO BAY
32	Public improvements, construction, grading pad and enclosure	1200 Highland Ave	SAN DIEGO BAY
33	Public improvements, construction, monitoring wells	110 National City Blvd	SAN DIEGO BAY
34	Public improvements, construction, sewer main repair, cleanout	413 N. Highland Ave	SAN DIEGO BAY
35	Public improvements, construction, sidewalk	205 National City Blvd	SAN DIEGO BAY
36	Public improvements, curb & gutter	18th St and Highland Ave	SAN DIEGO BAY
37	Public improvements, curb & gutter, driveway	3523 Newberry St.	SAN DIEGO BAY
38	Public improvements, driveway	2728 Virginia Drive	SAN DIEGO BAY
39	Public improvements, driveway	325 W. 30th St	SAN DIEGO BAY
40	Public improvements, driveway	505 Highland Ave	SAN DIEGO BAY
41	Public improvements, new monitoring wells	Roosevelt Ave, Plaza Blvd. and W. 8th St	SAN DIEGO BAY
42	Public improvements, pavement boring and samples	23rd St between Cleveland & Harrison	SAN DIEGO BAY
43	Public improvements, pump station	Various Locations	SAN DIEGO BAY
44	Public improvements, resurfacing and concrete work	Various Locations	SAN DIEGO BAY
45	Public improvements, sewer lateral, cleanouts	913 - 21 M Ave	SAN DIEGO BAY
46	Public improvements, sidewalk	1221 K Ave	SAN DIEGO BAY
47	Public improvements, sidewalk	1307 E. 4th St	SAN DIEGO BAY
48	Public improvements, sidewalk	1317 K Avenue	SAN DIEGO BAY
49	Public improvements, sidewalk	1425 K Ave	SAN DIEGO BAY
50	Public improvements, sidewalk	Corner of 2nd St and A Avenue	SAN DIEGO BAY
51	Public improvements, sidewalk	1112 E. 24 St.	SAN DIEGO BAY
52	Public improvements, sidewalk	1900 E. Plaza Blvd	SAN DIEGO BAY
53	Public improvements, sidewalk, curb & gutter	2335 E 4th	SAN DIEGO BAY

TABLE 7.3 (CONTINUED)
LOW PRIORITY COMMUNITY DEVELOPMENT/CAPITAL IMPROVEMENT PROJECTS AND PRIVATE CONSTRUCTION PROJECTS FOR FISCAL YEAR 2006/2007

#	Project Description	Project Location	Watershed
54	Public improvements, sidewalk, curb & gutter, driveway	920 N Avenue	SAN DIEGO BAY
55	Public improvements, sidewalk, curb & gutter, driveway, pedestrian ramp, street pavement, street medians	National City Blvd. 1st to 12th streets	SAN DIEGO BAY
56	Public improvements, sidewalk, curb and gutter, pedestrian ramp, street pavement, traffic signal	Civic Center Dr. @ McKinley Ave	SAN DIEGO BAY
57	Public improvements, sidewalk	1026 E. 8th Street	SAN DIEGO BAY
58	Public improvements, standard T-section repair, street trenching	Paradise Valley Road & Plaza Blvd	SAN DIEGO BAY
59	Public improvements, driveway	2701 Highland Ave	SAN DIEGO BAY
60	Public improvements, driveway	1822 Gamma St	SAN DIEGO BAY
61	Public improvements, driveway	1828 Gamma St.	SAN DIEGO BAY
62	Public improvements, driveway, gutter line	905 E. 20th Street	SAN DIEGO BAY
63	Public improvements, water lines, striping, markers, loops, electrical	16th and National City Blvd	SAN DIEGO BAY
64	Residential renovation	1125-1127 B avenue	SAN DIEGO BAY
65	Sewer Lateral	1605 Highland Avenue	SAN DIEGO BAY
66	Sidewalk / Curb & Gutter	1311 7th Street	SAN DIEGO BAY
67	Sidewalk R&R	None listed.	SAN DIEGO BAY
68	Single family home	2429 Prospect St.	SAN DIEGO BAY
69	Single family home	2221 E. 16th Street	SAN DIEGO BAY
70	Subdivision improvements, new sidewalk, new curb and gutter, street pavement; On-site improvements, retaining wall, sewer, storm drain, street, sidewalk	2501 E. 32nd St.	SAN DIEGO BAY
71	Traffic Signal	8th Street and V Avenue	SAN DIEGO BAY
72	Utility trench	2900 1/2 Highland Avenue	SAN DIEGO BAY

Note: CIP-Capital Improvement Project/Community Development Projects

8 ILLICIT DISCHARGE DETECTION AND ELIMINATION

The City of National City JURMP includes three mechanisms for detecting and eliminating IC/IDs within the municipality, all of which have been successfully implemented during the 2006/2007 reporting period. These programs continue to support each other, refining the City's ability to identify and eliminate sources of pollutant discharge. They are as follows:

- Conducting dry weather field screening and analytical monitoring
- Inspecting local businesses, municipal facilities, and construction sites
- Operating a public complaint hotline

Sections 2, 3, 4, and 7 of this report describe in detail the results of each of the inspection programs. This section provides a detailed discussion of the Dry Weather Monitoring Program and the public complaint hotline. During this reporting period, the Dry Weather Monitoring Program continued to identify residential and commercial areas across the City where the presence of certain pollutants warranted increased BMP implementation. Water quality data provided by the program proved again to be valuable in detecting and eliminating IC/IDs, as well as providing data about water quality in the MS4. The complaint hotline allows the public to take action and assist the City in identifying individual polluters. Public involvement proved to be greater than ever this year, as the number of hotline reports increased again during this reporting period.

DRY WEATHER MONITORING PROGRAM

The Municipal Permit and the National City JURMP state that the Dry Weather Monitoring Program's purpose is to eliminate IC/IDs to the storm drain system. An IC/ID upstream of a Dry Weather Monitoring Program field screening site is often evidenced by elevated constituent concentrations at the site itself, and in such a case the source of the IC/ID can usually be tracked. A summary of the results of the 2006 Dry Weather Field Screening and Analytical Monitoring Program is presented below. The program report is included as Attachment 8.1. The program consists of (1) field screening observations, (2) field screening analytical monitoring, and (3) laboratory analytical monitoring; all three parts of the program are conducted during the dry weather period. Data collected in the field and laboratory is compared against established action levels. Numeric action levels were adopted in 2003 based on statistical analysis of previous dry weather data. For dissolved metals, the California Toxics Rule gives the action level, which is dependent on the hardness value of the water sample. Best professional judgment was used in evaluating several field parameters, such as turbidity and temperature.

2006 Dry Weather Monitoring

The City of National City's 2006 Dry Weather Monitoring Program was conducted in September 2006. Of the fifteen primary monitoring stations, two sites were observed dry, Site 20 and Site 42. As a result, field screening was performed at two alternate stations, sites 48 and 49, to compensate for the dry sites. Dry weather site locations are listed in Table 8.1. Table 8.1 also includes a brief description of the sites, latitude and longitude coordinates,

primary and secondary land uses, and the type of storm water conveyance structure at the site. Field screening at these sites included qualitative observations, flow measurement, and field water quality analyses. Qualitative observations provided context for the quantitatively measured parameters. Water odor, color, and clarity were evaluated qualitatively along with current weather conditions, floating material, vegetation, deposition, and biological activity. Quantitative measurements were made of specific conductance, temperature, pH, turbidity, methylene blue-active substances (MBAS, typically indicative of surfactants), nitrate nitrogen, ammonia nitrogen, and orthophosphate phosphorus. Water samples for laboratory analysis were collected at four of these monitoring sites, representing more than the 25 percent of sites with ponded or flowing water. The laboratory analyses quantified total hardness, surfactants, oil and grease, diazinon, chlorpyrifos, dissolved metals (cadmium, copper, lead, and zinc), total coliform bacteria, fecal coliform bacteria, and *Enterococcus* bacteria.

During routine visits temperatures ranged from 18.4 to 29 °C, pH values ranged from 7.7 to 8.8, turbidity measurements from 1.1 to 28 NTU, and conductivity readings from 1.1 to greater than 20.0 mS/cm. Table 8.2 presents the results of all field analyses conducted at the sampled sites during the 2006 Dry Weather Monitoring Program.

Field analyses of chemical parameters resulted in a range of ammonia nitrogen concentrations from 0.1 to 1.5 mg/L NH_3-N, nitrate concentrations from 1.25 to 2.50 mg/L NO_3-N, orthophosphate phosphorus concentrations from 0.13 to 1.96 mg/L PO_4-P, and surfactants (MBAS) concentrations from 0.13 to greater than 3.0 mg/L.

There was one site that was found to have ammonia concentrations above the action level of 1.0 mg/L. Four sites initially had high surfactants concentrations, with Site 48 having the highest reading of greater than 3.0 mg/L. High conductivity was measured at three sites. These sites are located in the western part of the storm water system, which consistently have high conductivities attributed to residual salt water from the tides.

Laboratory analyses were conducted at four sites and bacterial contamination was found at three of the four sites, sites 1A, 32, and 46. The action levels for the three bacterial indicators are 50,000 MPN/100 mL for total coliform, 20,000 MPN/100 mL for fecal coliform, and 10,000 MPN/100 mL for *Enterococcus* bacteria. Elevated total coliform levels were recorded for all three of these sites. Sites 1A and 32 also had elevated fecal coliform levels, while sites 1A and 46 exceeded the action level for *Enterococcus*.

Dissolved cadmium and lead were not detected at any of the sites. The concentrations of dissolved zinc and copper did not exceed the California Toxics Rule benchmark at any site and were therefore not considered to impair water quality. None of the sites sampled for laboratory analysis had detectable levels of the pesticides diazinon or chlorpyrifos. No sites had detectable oil and grease concentrations. Laboratory analysis did not measure surfactant concentrations over the action level of 1.0 mg/L at any of the sites.

Table 8.3 presents the results of all laboratory analyses conducted during the 2006 Dry Weather Monitoring Program.

2006 Follow-Up Investigations

Data collected through the City's Dry Weather Monitoring Program are used to identify locations within National City that are contributing to storm water contamination. Source

identification investigations are then initiated to identify the causes of the detected pollution. Five sites received follow-up investigations for pollutants detected during field screening tests: Sites 1A, 11, 47, and 48 for surfactants, and Site 48 for ammonia. These follow-up visits were made within approximately 24 hours of the initial exceedance. The results of these immediate investigations were reported in the dry weather report and are summarized below.

A follow up investigation at Site 1A revealed that the surfactants concentrations had gone back below the action level and that this was most likely transient. Sites 11, and 47 had surfactants concentrations above the action level (1.5 mg/L) and Site 48 had surfactants concentrations greater than 3.0 mg/L. The elevated surfactants at Site 11 are likely to have come from illegal vehicle washing at a business upstream of the site, and during the follow up investigation surfactants concentrations had lowered below the action level, indicating that this was likely due to the cessation of washing activities. The elevated surfactants levels at Site 47 were most likely the result of run-off from commercial car washing in the vicinity of the Mile of Cars. The upstream investigation for Site 48 revealed that a resident was watering his yard and there was also evidence of washing activities, which could both contribute to the high surfactants concentrations. Site 48 also had ammonia concentrations during the initial visit at above the action level. During the follow up visit to Site 48, ammonia concentrations had dropped back below the action levels, so ammonia was likely transient.

Due to the time delay of laboratory analyses, any exceedances in constituents measured by laboratory analyses could not be investigated within 24 to 48 hours of sampling. After the laboratory analyses were received, however, a second round of follow up investigations was conducted to trace constituent exceedances detected by the laboratory testing. Three sites were included in this second round of follow-ups: Site 1A, Site 32, and Site 46. A brief description of the investigation procedure and results from these upstream investigations is summarized below; the follow-up investigations are discussed in more detail in Attachment 8.1.

During the follow-up investigations, visual observations were recorded including flow rate, floatable material, deposits, and water color, clarity, and odor. The physical parameters of temperature, pH, and conductivity were measured at all the sites, and chemical field tests were performed for ammonia and surfactants where necessary. When bacterial investigations were conducted, field investigators used 3M Petrifilm Coliform Count Plates to evaluate bacterial levels. This method provided a cost-effective and timely way to investigate bacterial contamination, compared to the expensive and relatively lengthy process of submitting samples for laboratory analysis. Field investigators began the investigations at the sites and then gradually worked upstream to try to identify sources.

Bacteria at Site 1A appeared to be from a combination of decaying trash, organic debris, and pet waste found at the site itself and in curb inlets in residential areas upstream of the site. At Site 32, the flow rate through the site was minimal, and litter at the site and human inhabitation upstream in the channel were possible contributors to the bacteria levels at the site. Debris in two catch basins upstream of Site 46 was the most likely source of bacteria at Site 46. These catch basins drain runoff from the surrounding shopping centers' parking lots, and decaying organic material and trash were also observed in the catch basins.

Follow-Up Actions

Once the sources of contaminants were identified, recommendations were made in the 2006 Dry Weather Monitoring Report. All recommendations that involved cleaning the MS4, including clean outs at sites 1A, 13A, 20, 32, 38, 40, 41, 44, and 48, completed by City Public Works crews. The City also completed an additional study to assess sources of trash and debris and has formed a working group from City departments to address sources of trash and debris. Please see Section 13 for details.

City staff did not find any more IC/IDs associated with Styler's Body Shop in 2006/2007, and the 2007 dry weather results did not find any detergents exceedances downstream of that body shop at Site 11. Courtesy inspections were conducted for businesses along Mile of Cars Way, and many of the businesses in the area also attended the City's educational workshop for commercial businesses. No exceedances for detergents were noted in that area (Site 47) during the 2007 Dry Weather Monitoring Program. To apply more pressure to businesses upstream of Site 46, the City initiated discussions with the property management about necessary improvements at the businesses. While some improvements have been made, efforts in this area are ongoing.

In response to the recommendations of the dry weather report, the City sent letters and educational materials to residences and businesses in areas believed to be sources of exceedances in monitoring results. The City also provided invitations to City hosted workshops. Educational materials were sent to areas upstream of Site 1A, Site 46, and Site 47. Over 1,470 notices were mailed.

2007 Dry Weather Monitoring

The 2007 Dry Weather Monitoring Program commenced in the late summer of 2007, beyond the date range covered by this Annual Report. Because 2007 data is utilized in some portions of this Annual Report, the 2007 dry weather monitoring and upstream investigations report is included as an attachment to this Annual Report (Attachment 8.3). The results of the 2007 report will be discussed in the 2007/2008 JURMP Annual Report.

HISTORICAL DATA

Evaluation of data collected during the Dry Weather Monitoring Programs since 2002 revealed that the City of National City has maintained relatively low levels of both nitrates and orthophosphates throughout the City. The specific conductance of the water measured throughout the City fell within normal ranges for all sites except those that were affected by tidal waters or permitted non-storm water discharges. Since 2003, all pH readings have been within the established range at each of the sites visited. Each year several of the sites have been identified to have ammonia concentrations above the established action level. The number of sites with a sample exceeding the ammonia action level has decreased from four in 2004 to two in 2005, and only one in 2006. Often the elevated ammonia concentrations are the result of stagnation and decay in sites with low flow rates or ponded water. To lessen surfactants pollution, the City of National City has inspected automotive-related businesses for uncontained washing and provided educational material to the public regarding surfactants pollution. The total number of sites with surfactants exceedances dropped from eight in 2004 to only two in 2005, and increased to four in 2006. Often

surfactants are transient and can be traced to uncontained commercial or residential washing.

The City is also able to utilize data from the Dry Weather Monitoring Program to focus its efforts on areas of the City and on particular pollutants that appear problematic. Priority residential areas are described in Section 5 of this report. The City will continue efforts to educate the public on washing practices, littering, irrigation, green waste disposal and pet waste disposal BMPs. For example, the City hosted a Residential workshop on 2/21/2007 where educational materials were distributed and residents were encouraged to ask questions.

COMPLAINT REPORTING OF IC/IDS, INVESTIGATION, AND ENFORCEMENT

The City has continued to encourage citizens and City personnel to become active participants in IC/ID elimination and storm water pollution prevention by utilizing the storm water public complaint hotline. The number for this hotline has been mailed to every residence in the City and is published in the contact information section of numerous brochures addressing storm water related issues. Additionally, the hotline number is distributed by the City Engineering Department in the form of a business card. City personnel investigate every complaint logged through the hotline to determine if pollutants are in fact being discharged to the MS4. The City's NPDES Storm Water Compliance Inspector can be contacted via cell phone to respond to calls about water main breaks, sewer spills, and other significant spills. This helps ensure that all reported spills are responded to as quickly as possible. If investigators find evidence of a violation or other IC/ID, every effort is made to find the responsible party and inform them of the complaint and their non-compliance. The responsible parties are educated or cited as necessary and required to cease any illegal discharges. If it is possible, they are required to conduct the immediate clean up of the polluting discharge. In some cases City crews conduct cleanup efforts and then bill responsible parties for cost recovery.

A summary of the reported violations that were investigated by the City between July 1, 2006 and June 30, 2007 is shown in Table 8.4. A total of 143 complaints were logged and responded to during this period. The total number of complaints handled is slightly less than the number reported during the previous reporting period.

RESPONSE TO SPILLS

The City of National City has developed a Sewer Overflow Prevention Program and a Sewer Overflow Response plan to facilitate, prompt and encourage effective spill response throughout the City. The response program includes information about safety, treatment, and reporting duties, as well as instruction on how to complete sewer spill reports.

Receipt of citizen complaints is the City's primary mechanism for notification of spills from private sewer laterals. The City typically receives about two calls per year regarding problems with private sewer laterals. These calls usually deal with roots, grease, or debris blocking the private lateral. In that case, the property owner is responsible for the resolving the problem; the City also clears the mainline sewer that services the property in every case, however. If the owner has a property line clear-out, the City tries to help out in any way it

can. Generally these minor problems with private laterals do not result in spills to the storm drain system, although more significant blockages are sometimes observed.

During this reporting period, only one SSO was documented and reported to the RWQCB, which is an improvement from the six that were reported during the last reporting period. The SSO was caused by a grease blockage that caused a pipe to rupture. Approximately 6,750 gallons of over flow was released, none of which could be recovered. None of the overflow reached any receiving waters, however. City crews flushed the line upstream of the blockage and cleaned area affected to the maximum extent practicable.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2004.

TABLE 8.1
DRY WEATHER MONITORING SITES

Site No.	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
1A	Southwest of 43rd Street and Nordica Avenue	Concrete Channel	Residential	Commercial	908	32.68575	-117.10166
11	North of 18th Street, between Roosevelt Avenue and Hoover Avenue	Earthen Channel	Commercial	Commercial	908	32.66695	-117.10516
13A	Northeast of 16th Street and National City Boulevard, inside Kimball Park	Outlet	Commercial	Residential	908	32.66942	-117.10326
20	East of Lanoitan Avenue, across from E. 13th Street, South of Palmer Way Middle School	Earthen Channel	Residential	Residential	908	32.67894	-117.07808
31	On the Sweetwater River, west of 2nd Avenue and Edgemere Avenue	Outlet	Commercial	Residential	909	32.65861	-117.08447
32	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River	Outlet	Commercial	Open	909	32.65887	-117.08274
38	Dirt road, west of Harbison Avenue, between 20th Street and 24th Street	Outlet	Residential	Residential	909	32.67265	-117.07057
40	Southwest corner of Sweetwater Rd and Plaza Bonita/Stockman St. Down in channel	Outlet	Commercial	Residential	909	32.65961	-117.06677
41	Northeast of San Miguel Court and Valley Road, inside Park Bonita Apartment complex	Earthen Channel	Residential	Residential	909	32.66588	-117.05083
42	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church	Outlet	Residential	Commercial	909	32.66785	-117.07691
43	South of National City Boulevard and 30th Street intersection, in front of South Bay Volkswagen	Manhole	Commercial	Residential	908	32.65620	-117.09911
44	Northeast of 16th Street and National City Boulevard, under the Kimball Park bridge	Concrete Channel	Commercial	Residential	908	32.66982	-117.10247
45	In front of 1243-1305 Fig Court, in the middle of street	Manhole	Residential	Parks	908	32.68739	-117.09690

TABLE 8.1 (CONTINUED)
DRY WEATHER MONITORING SITES

Site No.	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
46	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	Manhole	Commercial	Residential	908	32.67584	-117.09539
47	Southeast corner of the Mile of Cars Way and Transportation Avenue	Manhole	Commercial	Residential	908	32.66163	-117.10275
48*	Northwest of E. 14th Street and Grove Street	Catch Basin	Residential	Residential	908	32.67673	-117.08308
49*	South end of Arcadia Place (through Harbison Avenue and 11th Street)	Concrete Channel	Residential	Commercial	908	32.68102	-117.07751

* Alternate stations 48 and 49 were selected to substitute for dry primary monitoring stations 20 and 42.

TABLE 8.2
SUMMARY OF FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow (gpm)	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Detergents mg/L MBAS	Ammonia mg/L NH_3-N	Nitrate mg/L NO_3-N	Orthophosphate Phosphorus mg/L PO_4-P
1A	9/19/06	9:40	3.0	21.7	8.0	10.18	1.83	**1.0**	0.4	2.50	1.96
1A (Follow-up)	9/20/06	12:10	1.0	24	7.7	nt	1.27	0.75	nt	nt	1.63
11	9/19/06	14:15	5.0	28	8.6	3.28	>20.0	**1.50**	0.1	2.50	0.65
11 (Follow-up)	9/20/06	14:45	5.0	27.3	8.6	nt	>20.0	**1.0**	nt	nt	nt
13A	9/18/06	11:45	4.0	29	8.2	3.45	3.16	0.75	0.3	1.25	0.81
20	9/19/06	16:10	Dry	ns	ns	ns	ns	ns	ns	ns	ns
31	9/18/06	16:15	281.0	28.5	7.7	1.08	15.04	0.75	0.4	1.25	0.13
32	9/19/06	8:40	1.0	18.4	8.3	9.54	1.48	0.75	0.4	1.25	0.65
38	9/18/06	11:00	<1.0	22	8.4	24.34	1.25	0.75	0.8	1.25	1.30
40	9/18/06	14:00	2.0	22.8	8.0	4.77	3.44	0.50	0.6	1.25	0.26
41	9/19/06	10:45	10.0	20.2	8.5	5.83	3.65	0.50	0.2	2.50	0.26
42	9/18/06	15:40	Dry	ns	ns	ns	ns	ns	ns	ns	ns
43	9/20/06	10:50	<1.0	23.4	8.0	18.75	1.13	0.63	0.4	1.25	0.65
44	9/18/06	14:40	2.0	28.5	8.8	10.30	1.92	0.37	0.3	2.50	0.20
45	9/20/06	11:40	2.0	24.3	8.5	2.08	1.15	0.13	0.2	2.50	0.82
46	9/19/06	12:00	3.0	24.5	8.0	3.38	1.19	0.50	0.3	1.25	0.82

TABLE 8.3
2006 DRY WEATHER SUMMARY OF FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow (gpm)	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Detergents mg/L MBAS	Ammonia mg/L NH_3-N	Nitrate mg/L NO_3-N	Orthophosphate Phosphorus mg/L PO_4-P
47	9/19/06	15:10	1.0	26.2	7.8	13.06	>20.0	**1.5**	0.4	2.50	0.26
47 (Follow-up)	9/20/06	15:15	1.0	25.6	7.7	nt	>20.0	**1.0**	nt	nt	nt
48*	9/20/06	8:35	<1.0	21.4	7.9	27.95	3.38	**>3.0**	**1.5**	1.25	1.63
48 (Follow-up)	9/20/06	14:10	<1.0	30.1	7.8	nt	3.40	**2.5**	0.6	nt	nt
49*	9/20/06	9:30	Ponded	19.8	8.7	11.08	1.65	0.75	0.4	1.25	1.63

Notes:
nt = not tested
ns = not sampled (dry site)
* Alternate site
Red values were at or above the measured constituent's action level
Yellow shaded area denotes follow-up investigations
Light blue shaded area denotes field and laboratory sampling locations

TABLE 8.4
2006 DRY WEATHER SUMMARY OF LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Surfactants mg/L MBAS	Oil & Grease mg/L	Total Hardness mg/L	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliform MPN/100 mL	Fecal Coliform MPN/100 mL	Enterococcus MPN/100 mL
1A	9/19/06	9:40	nd	nd	391	nd	nd	nd	nd	nd	nd	**240,000**	**50,000**	**30,000**
32	9/19/06	8:40	nd	nd	249	nd	0.009	nd	0.11	nd	nd	**350,000**	**90,000**	8,000
41	9/19/06	10:45	nd	nd	774	nd	0.005	nd	0.021	nd	nd	13,000	500	2,800
46	9/19/06	12:00	nd	nd	231	nd	0.017	nd	0.02	nd	nd	**240,000**	13,000	**50,000**
Reporting Limits			**0.5**	**5.0**	**10**	**0.005**	**0.005**	**0.005**	**0.02**	**0.05**	**0.05**	**20**	**20**	**20**

Red Bold Type = Values that exceed action levels
nd = not detected

TABLE 8.5
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
1	7/5/2006	Public	1935 Via Las Palmas	Reported "dumping"	The inspector called P.D. regarding dumping. This call was from 6-30-06. The inspector went to site and found no evidence of discharge.
2	7/5/2006	Public	900 Block of Delta	Vehicle involved in accident leaking oil in gutter for approximately 1000 ft.	There was a black pick up truck parked on the south side of Delta at the 900 Block. There was front end damage to the vehicle and oil in the gutter for about 1000 ft. and on the sidewalk. The oil is not flowing and is not near an inlet. The truck had no plates and NCPD was called to tow vehicle.
3	7/10/2006	City Staff	3030 Plaza Bonita Rd.	No grading permits-stockpiles of soil.	The inspector went to site. Not all BMPs on the erosions and sediment control plan have been implemented. Stop work order issued. Need SWPPP, SUSMP, NOI, etc. Meeting was scheduled for 7/11/06.
4	7/10/2006	City Staff	Highland Avenue Medians	Stockpiles next to Paradise Creek.	Port-a-john without secondary containment. Concrete washed out onto asphalt parking lot. Topsoil stockpile not contained. Broken gravel bags in parking lot. Problems resolved upon follow up inspection. Work was stopped until BMPs were implemented. After inspector confirmed BMP implementation, work was allowed to resume.
5	7/11/2006	Storm Water Hotline	R Ave. between 4th and 5th.	Pick up truck leaking oil.	There was a 1988 white Toyota pick-up with a 1 gallon container bungee-strapped to the engine leaking oil on the street. The inspector received the registered owners' information from PD and tried to make contact. They were not home and case was referred to code enforcement

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
6	7/12/2006	Storm Water Hotline	R Ave. between 4th and 5th.	Pick up leaking oil.	Building Department unable to follow-up on vehicle leaking oil. The inspector returned today to find that vehicle has been moved about 50ft north but still on street leaking oil. N.O.V. issued with admin citation.
7	7/12/2006	Storm Water Hotline	16th and I	City vehicle leaking coolant.	City vehicle leaked coolant onto the street and in the gutter. Equipment maintenance cleaned with absorbent and pads. No further action.
8	7/18/2006	Storm Water Hotline	1500 Block Coolidge	Hosing down street.	The inspector explained NPDES and left educational material.
9	7/20/2006	Public	9th and M	Transmission fluid in gutter going into storm drain inlet.	A contractor re-surfaced a driveway. The tar ran into the street, gutter, and inlet. Property owner and contractor were contacted. Both agreed to clean street and gutter. Sewer crew was called to clean inlet.
10	7/24/2006	Storm Water Hotline	9th and M Ave.		Follow up to above complaint. Tar and sand has been removed form street and gutter. Some staining remains on street and gutter. Inlet clean.
11	7/27/2006	Public	Between Harrison Ave & 18th Street	Washing a truck at the corner of Harrison Ave and 18th Street.	Gave a warning not to wash at the public right of way.
12	8/1/2006	Storm Water Hotline	1535 NCB	Hosing down parking lot and water was entering inlet.	Second violation within 1 year period. Citation & NOV issued.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
13	8/1/2006	Public	18th & D	Wax residue in gutter.	Checked area for white wax residue. There were no signs of discharge of wax. A small amount of water was present in the surface to curb drains coming from the school. No further action.
14	8/1/2006	Public	17 E 2nd Street	Mechanical work being conducted on street. Oil being spilled.	There were signs that auto repairs had been conducted. There were 2 oil spills on the ground/street and lots of stains. There were no activities at the time of this inspection. No further action.
15	8/3/2006	Storm Water Hotline	100 Laurel Ave.	Washing paint to gutter.	There was a handyman washing drywall mud down the driveway and into the street. Admin citation issued for discharge. Area cleaned with broom and mop.
16	8/21/2006	Storm Water Hotline	42 Valva Avenue	Construction debris on property. Open paint cans on front lawn.	Open paint cans on front lawn. Building inspector stopped work and posted notice on site. Two contractors were issued citations for conducting business in National City without a valid business license. A site representative called City and agreed to have debris removed the next day. Came to the City tomorrow to required permits from building department.
17	8/21/2006	Storm Water Hotline	2744 Grove (County address)	Home business: Washing construction equipment with discharge going to inlet on Grove in N.C. possibly stucco or dry wall mud.	The inspector notified county. County phoned on 8/22/06 and agreed to take responsibility for following up with site.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
18	8/21/2006	Public	136 Valva Avenue	Paint in gutter from men washing paint brushes.	Drywall tools were washed in the street resulting a discharge of water and dry wall mud into the street, gutter and inlet. Admin citation issued. The inspector called sewer crew to clean gutter street and inlet, where pollutant was contained.
19	8/28/2006	Storm Water Hotline	1415 Orange	White lincoln leaking oil on street.	Vehicle parked legally on east side of street. There is evidence that the vehicle leaks oil, but oil is not flowing down street. Vehicle marked for 72 hours parking and referred to PD-traffic.
20	8/29/2006	Public	8th and Arcadia	Bags of trash on street, vehicle repairs being conducted on street.	There were several bags of trash, a trash can and lots of water in the street. There was no indication that auto repairs were being conducted. Trash can was placed on property by street supervisor who then called EDCO to have can removed. All bags and litter were packed up and taken to PW to properly dispose of. Asked code enforcement to notify property owner that there was debris on property.
21	8/29/2006	Storm Water Hotline	200 Block W. 35th St.	Motor home leaking sewage.	Motor home was moved from 400 block of W.35th to the 200 block. There was an odor of sewage. The inspector photographed the underside where sewage was leaking. Vehicle was towed by NCPD traffic division. Admin citation issued.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
22	8/29/2006	Public	1120 Hoover Avenue	Property owner requested courtesy inspection by City to check compliance.	8/30/06: Inspector went to location at 3:00 pm. The business was closed. 9/13/06: Inspector went to location and business was closed.
23	8/30/2006	Storm Water Hotline	2643 E 4th Street	Debris on site from house and vehicle burned six months prior.	Referred to code enforcement.
24	8/31/2006	Storm Water Hotline	17th St (Unpaved)	Trash, oil, debris etc. on street and in drainage ditch.	The inspector called PW to clean area. PW cleaned on 9/5/06.
25	8/31/2006	Storm Water Hotline	713 E 1st Street	Building in the City right of way.	Resident stated that he was building 2 play houses. There was saw dust in the gutter and on the street. Resident was told to remove lumber and clean gutter and street.
26	8/31/2006	Public	2605 Highland	Check site to make sure it is in compliance.	The inspector phoned 9-5-06 with recommendations to keep dumpster lid closed and provide tray (S/C) for port-a-potty, and clean all residue from ground.
27	9/5/2006	Storm Water Hotline	2221 E 16th Street	No BMPs.	Contractor called and will implement BMPs prior to conducting work. He will call for re-inspection when BMPs have been implemented.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
28	9/5/2006	Storm Water Hotline		Vehicle washing on the street.	The inspector explained NPDES in regards to vehicle washing for residential zones. Individual agreed to wash van in his private lot without having any discharge of soapy water. Verbal warning only.
29	9/6/2006	Storm Water Hotline	1215 Palmer Way	No Permit - dirt in city right of way.	Applicant came to Engineering counter. The inspector explained NPDES requirements for construction BMPs. Applicant purchased BMP manual to use as a guide to install BMPs, especially for soil containment and concrete washout. Permit withheld until BMPs are implemented.
30	9/6/2006	City Staff	2424 18th St.	Power washing house.	Power washing house blasting paint chips to ground. No discharge observed. The inspector explained NPDES and BMPs to prevent any discharge from leaving property.
31	9/7/2006	Storm Water Hotline	1710 Lanoitan	Hose down sidewalks.	The inspector talked with resident. The inspector explained NPDES and left flyers.
32	9/7/2006	Public	1619 Morning Breeze	Uncontained soil above inlet.	The inspector observed the landscape yard. The soil was not loose, just without ground cover.
33	9/11/2006	Storm Water Hotline	Civic Center Drive and Wilson Ave.	Truck hit and sheared off fire hydrant.	A truck hit and sheared off a fire hydrant. NCPD and Sweetwater Authority were notified. Sweetwater Authority shut off the water flow approximately 15-20 minutes after flow started. Approximately 121,100 gallons of water was discharged to the storm drain conveyance system. Verbal notification to RWQCB on 9-11-06. Written notification on 9-11-06.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
34	9/13/2006	Storm Water Hotline	1215 Palmer Way	Construction site - no BMPs and stockpiles of soil in the street.	The property owner came into Eng. to obtain a permit after beginning work. Site inspection found that a permit was required and that there were no BMPs implemented. The inspector issued a verbal stop work order until all BMPs were implemented and a permit is issued. Later inspection found BMPs in place and stockpiles in right of way removed.
35	9/13/2006	Storm Water Hotline	1512 Coolidge Ave.	Motor home leaking sewage.	Inspector observed an individual hosing down the street. Individual reported that the plumbing/pipe for the holding tank on his motor home broke loose when he was moving the motor home, discharging approximately 15 gallons of sewage to the street. The inspector stopped him from hosing down the street and immediately called the city sewer crew to conduct clean-up. Several individuals helped to contain spill until sewer crew arrived. The area was sanitized/deodorized and vacuumed up. The inlet at the corner of 15th and Wilson was cleaned. The street sweeper was called in on O/T to provide additional cleaning of the area.
36	9/13/2006	Storm Water Hotline	1507 Coolidge	Hosing down street.	While on site of a sewer spill in the street the resident at this address started hosing down the street. The inspector explained NPDES and let her know that it was against City orders to hose down street. The inspector gave a verbal warning and the problem is resolved.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
37	9/14/2006	Storm Water Hotline	1535 Tidelands	Power washing roof	The inspector explained NPDES and BMPs. The inspector notified foreman that all roofing residue must be cleaned from parking lot. The inspector did not witness any power washing. Required contractor to provide S/C for liquid in drums stored within 5ft of inlet or move to inside location.
38	9/18/2006	City Staff	3100 Block of Hoover		Homeless camp found in the storm water conveyance system (Sweetwater Marsh). Firefighters used approximately 5,000 gallons of water to extinguish a fire. Sewer crew was called to clean inlet basins on both sides of the street.Street crew was called to clean rubbish from area. Received approved to clean from state RWCB and Army Corps of Engineers.
39	9/18/2006	Storm Water Hotline	1329 Highland Ave.	Saw cutting concrete, waste entering inlet.	Waste from saw cutting concrete to install new gas line entered nearby inlet. No BMPs observed. Sewer crew was called to clean street and inlet.
40	9/19/2006	City Staff	221 W. 30th Street	Saw cutting on sidewalk with discharge to the gutter.	Discharge reached only gutter and not inlet, the nearest inlet is >1000 ft away. Verbal warning given, and company immediately began vacuuming the water.
41	9/19/2006	City Staff	1526 18th Street	Sewer coming out of clean out.	A ~ 3 in x 3 in moist area around clean out was observed but no discharge was noted.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
42	9/19/2006	City Staff	1610 E 8th (Parking lot)	Discharge of water to inlet.	There is a broken sprinkler leaking water to sidewalk gutter and inlet at the corner of 8th and Palm. Trash, landscape debris, and food in area. Corrective action sent.Remove excessive landscape debris and litter in parking lot.Remove stump grindings or provide erosion control in planting beds.Remove food products from planting beds.Repair and adjust irrigation system to prevent run-off into inlet at the corner of 8th street and Palm Ave. Follow up: parking lot cleaned of landscaping debris.Stump grindings and food particles removed.
43	9/19/2006	City Staff	835 Palm	Water leaving lot.	Employee was hosing down parking lot. Verbal warning and educational material given to employee.
44	9/20/2006	Storm Water Hotline	Site 1A (Division) Dry Weather	Significant trash.	The inspector called sewer crew to clean or refer to S.D. if under San Diego jurisdiction.
45	9/20/2006	Storm Water Hotline	14th & Grove	Decomposing trash.	The inspector called sewer crew to be cleaned.
46	9/20/2006	Storm Water Hotline	I54 and N 2nd/Edgemere	Trash dumped on side of road.	The inspector called street crew to be removed.
47	9/21/2006	Storm Water Hotline	Vacant lot on plaza, Parcel #558-0302500	Trash on lot.	There are several deteriorated bags with trash. NOV issued. Re-inspection on 10/16/2006. Trash was cleaned from lot.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
48	9/21/2006	City Staff	3116 Plaza Blvd,	Fire in Storm drain.	There was a fire along the bank of mainly concrete channel. Site was visited and no trash was noted in the area. Army Corp of Eng. Was contacted to ask if the City could remove vegetation from the bank. Authorization to remove vegetation was not given, no further action needed.
49	10/2/2006	Storm Water Hotline	Slope of I-54 at Hoover Ave and 32 Nol St	Dust (clearing and Grubbing the slope of I-54 at Hoover Ave and 32 Nol St).	The inspector spoke to contractor whom agreed to install sprinkler and shrubs on the slope of I-54. Not a NPDES issue, issue resolved.
50	10/5/2006	Storm Water Hotline	18th St. and D Ave.	White liquid coming from address and flowing into gutter.	The inspector saw white liquid along the gutter. Upon re-inspection on 10/9/2006, white liquid was gone. Inspector educated janitor about NPDES and proper BMPs.
51	10/10/2006	Storm Water Hotline	1526 E 18th St.	Pieces of old stucco scattered along alley.	The inspector went to the site and asked owner to clean the scattered stucco. Follow-up on 10/11/06, debris removed.
52	10/18/2006	Storm Water Hotline	3815 Holleyhock	Illegal fill dirt on slope.	Owner removed fill dirt. Problem resolved.
53	10/18/2006	Storm Water Hotline	2336 E 4th St	Illegal grading.	The owner was advised to implement erosion control along the fence on the east side of property. Problem resolved 10/18/06, owner to pull permit.
54	10/18/2006	Storm Water Hotline	1441 Manchester, Permit 06020011	Soil in catch basin.	Dirt was cleared by contractor when the inspector arrived on site. Dirt was contained in basin prior to being cleaned.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
55	10/18/2006	Storm Water Hotline	1140 E 7th St.	Garbage disposal plumbed to outside. Resident hoses off concrete area.	Inspection revealed several washing machines were plumbed to outside. Makeshift drain discharging sediment to area of inlet. Stockpile of soil. Two inlets dirty with food particles and sediment. Container of waste oil on slope. Several boxes and piles of landscape debris. The owner was required to pull permit within 24 hours to properly plumb kitchen sink. Owner complied. An NOV was issued on 10/23/06, along with an Administrative Citation. All issues have been resolved and an action plan for the NOV was submitted.
56	10/18/2006	Follow-up	1610 B 8th St.	Discharge of water to inlet.	Follow-up to investigation from 9/19, earlier issued observed that had previously been resolved had not recurred. No issues noted.
57	10/30/2006	Storm Water Hotline	1320 Highland Ave.	Hosing down concrete	Employees were cleaning concrete in back of store using concrete cleaner. They hosed down the area washing the waste water into nearby outlet. NOV and administrative citation issued on 10/30/2006. All issued resolved.
58	10/30/2006	Storm Water Hotline	2429 Prospect St.	Stockpiles of soil on property covering storm drain "outlet" in the basement.	Stockpiles were not from or on the construction site. The stockpiles were dumped on a vacant lot. Case referred to Engineering Department to have owner remove fill dirt from property. Visual follow up inspection found fill dirt removed.
59	11/1/2006	Storm Water Hotline	1700 Block of Roosevelt	Two trailers with oil tanks on public right of way	County of SD hazmat responded and wrote an NOV Tanks picked up on 11/1/06. PD towed trailers. Problem resolved.
60	11/1/2006	Storm Water Hotline	2nd Edgemere (site 32)	Approximately 5 truck loads of trash dumped.	Public Works cleaned area.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
61	11/1/2006	Storm Water Hotline	18th and D	Vehicle leaking oil on street.	Vehicle had recently been involved in an auto accident. The owner said he would have the vehicle moved. Sewer Department was called to clean oil from gutter. Upon re-inspection the area was clean and the vehicle had been moved.
62	11/1/2006	Storm Water Hotline	105 E 18th Street	Several containers of waste oil next to Paradise Creek.	The inspector observed landscape debris on property and several broken gravel bags. Administrative citation issued, debris was cleaned by property manager while inspector was on site.
63	11/1/2006	Storm Water Hotline	2130 Roosevelt Street	Black liquid coming from property to alley.	Business activities include detailing vehicles. At initial visit, no black liquid was observed draining to alley. 11-6-06 No black liquid was observed, but ground was damp in alley (likely from small amount of overspray/runoff from washing) at 9:20 AM. 11-9-06 No black liquid was observed, but inspector observed small amount of discharge to alley from washing. Discharge was stopped and water did not enter the storm drain system. A new owner had taken over since the previous days' visits, so that owner was given verbal instruction on BMPs and a Correction Action letter to confirm understanding of proper BMPs.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
64	11/2/2006	Storm Water Hotline	625 S Harbison Avenue	Water pumping to street.	Pipe to the toilet was broken. The owner was pumping sewage from under the house to the gutter. The water flowed for approximately 5-6 hours total through a garden hose. D-Max Engineering, Inc. was called to test the water. The Sewer Department was called to clean spill. The Building Department was called to check safety of residents. The House was red tagged unsafe to occupy. Administrative citation issued on 11/2/2006. NOV issued on 11/6/06. See complaint # 67 for follow up.
65	11/2/2006	Storm Water Hotline	National City Blvd & 3rd St	Water shooting up from ground.	A vehicle ran over a private water line. Sewage Water Authority was on site and shut water off. Owner repaired the water line.
66	11/2/2006	Storm Water Hotline	1700 Block of Roosevelt		Follow up to complaint # 59. Tanks were removed. County of San Diego Hazmat responded and wrote NOV.
67	11/6/2006	Storm Water Hotline	625 S Harbison Avenue		This was a follow up to complaint #64. Landscape debris, trash, and food have been removed from property. Hose and pump were under house with one end of hose to front lawn. Inspector told property manager to removed hose and pump. Storm water issues corrected, building dept continues with open case.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
68	11/6/2006	Storm Water Hotline	2200-2300 VanNess	Mechanic working on cars, spilling oil in the street.	White 2 door Nissan was parked on the west side of VanNess (2300) with significant oil on the ground. No one was at vehicle when inspector arrived. Owner came to site and agreed to clean oil and move vehicle to private property.
69	11/6/2006	Storm Water Hotline	1215 Harbison	Non-operational vehicles leaking oil on street.	There were 2 vehicles without plates. One was leaking oil and had airbags deployed. The other vehicle was not registered. The inspector referred to dispatch for traffic division to handle.
70	11/7/2006	Storm Water Hotline	1345 Highland Ave	No erosion and sediment control BMP.	The inspector called the contractor. The contractor agreed to implement BMP that day. 11/7/06 corrective action letter sent. 11/8/06 follow-up - BMPs in place, problem resolved
71	11/8/2006	Storm Water Hotline	1417 E 18th Street	Sewage draining to street between garage and apartment next door.	There was no discharge at time of inspection, however, there was an illegal connection on plumbing. The inspector referred to the Building Department.
72	11/9/2006	Storm Water Hotline	1525 McKinley	Oil spill in gutter.	There was oil in the gutter for about 25 feet. It was contained by landscape debris. The inspector called sewer crew to clean. Sewer crew cleaned, problem resolved.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
73	11/9/2006	Storm Water Hotline	2145 Wilson	Auto detailing with discharge.	New unlicensed business conducting auto detailing with discharge of waste water through surface to curb drain. Discharge was stopped after inspector arrived. The inspector required business to obtain business license and properly implement BMPs, and a citation was issued.
74	11/14/2006	Storm Water Hotline	303 Highland	Dead birds and grease on roof.	The inspector did not go on roof to inspect. There were no down spouts or observed discharge from roof. City consultant and contractor to clean roof prior to construction of new façade (CDC project). Problem resolved
75	11/14/2006	Storm Water Hotline	3300 Block of National City Blvd,	Road work being conducted without inlet protection.	Contractor did not have inlet protected. While inspector was on site they placed gravel bags at inlet.
76	11/16/2006	Storm Water Hotline	2200 Cleveland	2 inch pipe broke.	Contractor called to report discharge of water from 2 inch water supply line. Water was contained and disposed of.
77	11/21/2006	Storm Water Hotline	127 W 12th ST	Sewage coming from property	Upon inspection of property, it is determined that grey water is coming from 2 different units on property. The ground was saturated with several inches of water ponding above ground and running onto property at 1127 Hoover Ave. One unit appears to be an illegal dwelling. Housing Inspector was contacted to do inspection. Owner called City and said she would clean the area. Public Works was called to have main checked and flushed. Building has open case for violations.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
78	11/22/2006	Storm Water Hotline	127 W 12th ST	Sewage reportedly discharging to property.	Discharge contained on private property and resolved. No discharge was observed upon follow-up inspection.
79	11/30/2006	Storm Water Hotline	3815 Hollyhock Lane	Report of construction without permits.	Construction of retaining wall without permit was observed. No discharge or other major storm water issues noted. Responsible party was informed of the need to obtain proper permits, and the City also mailed a letter explaining the BMPs that are required for all construction permits.
80	12/4/2006	Storm Water Hotline	800 Block of Civic Center DR	Oil spill at the corner of Civic Center and Cleveland Avenue due to machinery being moved.	At approximately 10:20 a.m. there was an oil spill. There is a storm drain inlet approximately 20 feet from the spill. While lifting machinery, residual oil (estimated to be 5 gallons) in the equipment spilled onto the sidewalk, driveway, and gutter. The spill was immediately contained using absorbent and absorbent rolls. No oil or absorbent reached the inlet. Company hired another company to power wash the area after the absorbent was removed. All was re-claimed and disposed of by washing company.
81	12/7/2006	Storm Water Hotline	3102 E. 16th ST	Discharge of water hose used in dust central.	Hose was leaking or defective causing discharge into inlet approximately 100 feet down hill from site. The inspector observed some sediment and sidewalk. The inspector spoke with contractor and owner regarding NPDES and required BMPs. Administrative Citation was issued. BMPs implemented (new hose).

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
82	12/12/2006	Storm Water Hotline	3131 National City Blvd	Water from vehicle washing going to ditch then discharging off site.	Company has bermed area for vehicle washing, directing water to a brow ditch that leads to an underside-walk drain that discharged to the gutter. Inspector observed discharge of water from vehicle washing on used vehicle lot. The discharge was stopped while the inspector was on site, and a Notice of Violation and Administrative Citation were issued on 12/13/06.
83	12/18/2006	Storm Water Hotline	1213 E Avenue	A vehicle hit a fire hydrant.	A vehicle hit and sheared off the fire hydrant. The water flowed for approximately 1 hour discharging 338,160 gallons of water. There is an inlet on the northwest corner. Sweetwater Authority responded and secured the flow. Fire hydrant repair began on 12-18-06. Sewer crew was called to clean inlet. RWQCB was notified verbally on 12-18-06.
84	12/20/2006	Storm Water Hotline	2315 S. Lanoitan	Reported water discharge	The inspector could not locate flowing water or discharge and site address.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
85	1/10/2007	Storm Water Hotline	19th and Haffley	Fire hydrant sheared off.	Vehicle hit and sheared off fire hydrant. There is an inlet approximately 300 ft from hydrant (on 19th St) where water entered MS4s. Sweetwater Authority responded to the site and secured the flow.
86	1/17/2007	Storm Water Hotline	835 Bucky Lane	Auto repairs being conducted. Emptied radiator to gutter	The gutter was observed to be dry. There were no stains in front of address. Water was observed in the gutter at the end of the street.
87	1/17/2007	Storm Water Hotline	Cypress Glen	Discharge of water/sediment going down E. 32nd St - No BMPs at inlet.	The inspector went to the site to investigate, then called contractor, who stated that he would immediately implement BMPs or stop work. Provided with verbal warning, problem resolved.
88	1/17/2007	Storm Water Hotline	833 Angelo Dr	Dumping oil down storm drain and auto repairs conducted.	Oil traveled to 1001 Angelo Dr where landscape debris blocked and contained oil. Vehicles in driveway and garage unlicensed and appear to be non-operational. Driveway and sidewalk stained with what appears to be waste oil from a vehicle. Administrative Citation issued. Responsible party cleaned spill.
89	1/17/2007	Storm Water Hotline	3030 Plaza Bonita Rd	Tracking on Street.	The inspector went to the site then called contract to have tracking cleaned. Contractor reported sweeper would be on site later that day to clean area. Verbal warning, problem resolved.
90	1/24/2007	Storm Water Hotline	327 W. 11th St.	Vehicle washing	Two trucks were being washed on the sidewalk/street. Admin citation issued, but voided after violator agreed to and cleaned all water and debris from gutter.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
91	1/24/2007	Storm Water Hotline	1420 4th St	Possible storm water issues related to multiple vehicles on site.	The inspector checked site and spoke with owner. There is an oil spill in driveway and paint containers without secondary containment. A corrective action letter was issued on 1/25/07 Oil spill was cleaned up the same day.
92	1/24/2007	Storm Water Hotline	1302 E 1st	Erosion problem. Auto repair being conducted and possible oil discharging.	Owner agreed to clean junk from property, properly dispose of waste oil and prevent sediment around rose from discharging from property. A corrective action letter was issued on 1/25/2007.
93	1/24/2007	Storm Water Hotline	340 W 11th St.	Dumping engine oil on ground. No business license.	Observed car batteries being stored on the ground. Full inspection conducted. NOV issued. Batteries removed by time of follow up inspection.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
94	1/24/2007	Storm Water Hotline	1318 E 4th St	Check on possible storm water issues related to illegal construction/grading.	In the alley behind residence there was lots of litter landscape debris, tires, soil stockpile, etc.The inspector spoke with owner regarding clean-up.Within 24 hours all in entire alley loose trash must be bagged.Soil pile must be contained prior to next rain event.A notice of violation was issued 1/25/2007 Follow-Up conducted on 1/29/2007.All loose litter was bagged and placed on property.The inspector spoke with owner regarding immediately implementing BMPs for soil stockpile.All other debris must be removed and property disposed of by Feb 7, 2007. Second follow-up conducted on 4/19/2007. All loose trash in alley had been picked up and bagged within 24 hours and placed within her property. Landscape debris, roofing material, stockpiles, etc have been removed. Loose soil is still covered with tarp to prevent erosion.Most of the issue at the site were code enforcement issues, but has been addressed with Storm Water and Grading ordinances. There is no building permit or retaining wall permit for this property. Each department (Building and Engineering) will deal with their own items/permit.
95	1/24/2007	Storm Water Hotline	232 North Ave	Discharge of water.	The violator said he was cleaning the garage and hosing down floor and driveway. The inspector explained NPDES and gave the violator a calendar, magnet, and brochure.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
96	1/25/2007	Storm Water Hotline	2139 E 9th St	Cleaning engine with discharge going to gutter.	Owner/tenant said that he was working on the power steering unit on a truck when it sprang a leak. There are several oil spills on the side of the house and several in front on the driveway, included a long stain starting at the driveway and continuing down the street. A used battery was also observed on the ground uncovered. Admin citation and NOV were issued 1/29/2007 for illicit discharge of sediment and waste oil conducting auto repairs without implementing BMPs.
97	1/29/2007	Storm Water Hotline	203 Laurel Avenue	Over watering.	Corrective action letter mailed.
98	1/29/2007	Storm Water Hotline	1236 E 2nd St	Hosing down driveway.	Violator agreed to clean sidewalk and gutter. The inspector explained NPDES and gave the violator a flyer, calendar, and magnet.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
99	1/31/2007	Storm Water Hotline	410 W 30th St	Improper storage	Full inspection conducted. The following was observed: 1. No BMPs implemented for erosion and sediment control along open channel bank (south side of property) and along fence (west side of property). 2. Used battery uncovered and on the ground on the south side of property.3. Stockpile of soil without Best Management Practices (BMPs) implemented.4. Stockpile of asphalt waste on site.5. Concrete and asphalt waste and bricks along bank of open channel.6. Rusting material uncovered (rebar & stakes).7. Gas cans leaking and not protected from rainfall. Follow up inspection: Erosion control implemented. Stockpiles had been removed and used batteries and rusty materials were no longer observed outside.
100	1/31/2007	Storm Water Hotline	W 12th and Wilson	Illegal dumping of waste oil.	Inspector contacted resident supposedly responsible for the illegal dumping. They denied the allegation. Waste, oil, litter, TV, etc was picked up by the street division and contaminated rain water was removed by the sewer crew.. Parking Enforcement went to the site and said that they would return to issue tickets for the trucks parked on the sidewalk and double parked in the street. No further action will be taken on this site.
101	1/31/2007	Storm Water Hotline	340 W 30th St	Green fluid in street.	Absorbent rolls/pads were used to clean fluid. Pads were taken to PW for proper disposal.
102	2/1/2007	Storm Water Hotline	3000 Block of Hoover	Soil dumped in street at inlet.	Street division removed soil from street.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
103	2/5/2007	Storm Water Hotline	West side NC National City	Church holding on going car washes	After several visits to site, inspector was unable to find evidence that car washing is being conducted.
104	2/7/2007	Storm Water Hotline	2503 Highland	Pumping water to storm drain roof drains connected to sewer system.	Inspection found roof drains were connected to storm drain. The owner removed drains.
105	2/21/2007	Storm Water Hotline	Lot above 925 Plaza	Discharge of sediment to storm drains	No storm water issue.
106	2/22/2007	Storm Water Hotline	19th St and I 5	Sandy substance on sidewalk on 19th St under freeway.	Referred to Street Department. Returned to site 2-26-07 with street supervisor. All "blasting" sand was determined to be coming from nearby construction site. Contractor was notified to clean area.
107	2/22/2007	Storm Water Hotline	2525 Highland Ave	Open containers of oil.	Owner notified to remove and provide receipt for proper disposal.Proof of disposal provided 2-27-07.
108	2/26/2007	Storm Water Hotline	424 E Division	Sewage flowing to ground. Surface to curb drain near by but clogged.	Dumpster lid open and trash on ground in dumpster enclosure, several containers of paint and water stored behind building. Discharged sewer from an open line on the west side of building. Surface drain clogged with sediment. Corrective action letter was issued 2/26/2007. Open pipe was capped, trash was picked up, and paint cans were removed by the next day.
109	2/28/2007	Storm Water Hotline	3211 Alta Drive	Uncontained soil stockpiles and waste oil and filters on property.	The owner properly disposed of oil and filters. Stockpiles were covered and street was swept.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
110	3/1/2007	Storm Water Hotline	1900 National City Blvd.	Vehicle washing.	Inspector went to the site and found no washing. The ground was dry (sides, streets, front of property, back of property, and on Roosevelt). Inspector could not find any sign of a violation.
111	3/15/2007	Storm Water Hotline	3rd and National City Blvd.	Trash accumulates and sometimes blocks inlet causing water to pond.	Inspector did not see any trash on corners of National City Blvd. and 3rd Street.
112	3/19/2007	Storm Water Hotline	On Street between 836 and 904 Angelo	Police car lost power steering fluid (3-16-07) leaving fluid in street. Later tow-truck drove through fluid tracking fluid down street. Street sweeper swept area today, but fluid remains on street.	Street supervisor inspected area and found small amount of fluid that could be ATF. Fluid was not liquid and there was no means that would remove stain from street.
113	3/19/2007	Storm Water Hotline	3000 NC Blvd.	Saw cutting pavement with discharge to storm drain inlet.	Discharged water and sediment to inlet on NCB. Sewer crew called to clean inlet. Contractor to clean gutter. An administrative citation was given.
114	3/20/2007	Storm Water Hotline	2200 Block of Prospect (2302 Prospect St)	Mixing concrete in the street near a storm drain inlet.	The crew was mixing concrete in wheel barrels in the street. The sand was on the asphalt and concrete mix was on a tarp. Crew cleaned street.
115	3/20/2007	Storm Water Hotline	15th & 16th St (west side) 16th East Side	Tracking of newly installed ped ramps on west side.	Contractor notified to clean tracking at all ped ramps. Streets were cleaned.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
116	3/20/2007	Storm Water Hotline	16th & Coolidge	Van/motor home leaking fluids	There was a container under the vehicle on the driver's side at the rear collecting sewage from a leaking pipe at or near the holding tanks. There was also a wet spot under the vehicle in the same area on the street and a pail with a coffee can of wet paint inside. An absorbent pad was placed on the spill next to the container to help collect liquid spills, leaks, and splashes. Called 411 to obtain phone number for R.O. No number listed.No legal means to tow vehicle.No further action taken.
117	3/28/2007	Storm Water Hotline	100 Block of Roosevelt	Man working on truck allowing oil to spill into gutter.	There was an unattended Semi-truck and dump body. There was diesel fuel leaking from the tank on the right side. Public Works responded with an absorbent. P.D. notified the fire department of the fuel spill. Vehicle owner arrived on site and attempted to stop leak. He was not successful. Vehicle was towed from public street at the owner's request. Street sweeper swept area. Fuel spill was contained to gutter (approximately 40 ft). No discharge to inlet.
118	4/3/2007	Storm Water Hotline	16th and National City Blvd	Sediment on street.	Inspector noticed there was sediment on 16th Street and National City Blvd. The sediment washed down into gutter line and storm drain inlets. Inspector requested for a crew to bag around the down stream inlets and sweep the street. Public Works cleaned sediment from inlet.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
119	4/12/2007	Storm Water Hotline	14th Street	Sewer cap open on holding tanks. Vehicle parked with 15 ft of inlet	Diplomat II motor home-holding tank cap open with stains on street. Inspector called PD to have vehicle towed. Inspector contacted owner to remove vehicle immediately. Owner complied. Sewer crew cleaned sewage from street.
120	4/12/2007	Storm Water Hotline	16th and National City Blvd	Sediment going into inlet.	Contractor did not have effective BMP around inlet.Contractor opened water main when service had not yet been shut off. Emergency pumping of hole was necessary.Contractor immediately implemented effective BMPs when advised. Notice of Violation was issued.
121	4/12/2007	Storm Water Hotline	Kimball Park, National City CA 91950	Ice cream vendor putting trash (ice cream bags, boxes, etc) and bags of urine in dumpsters.	Inspector made contact with owner. Owner was notified that it was illegal for him to dispose of trash that was generated by his business activities. Area was re-inspected one week later, no problems found.
122	4/16/2007	Storm Water Hotline	1702 C St	Working on car in alley.	Checked alley from 16th to 18th and inspector did not locate problem.
123	4/18/2007	Storm Water Hotline	Alley East Coolidge between 16th & 17th St	Approximately 5 gallons of oil in alley.	Inspector called street supervisor. The street supervisor assigned clean up to his crew. The complaint has been resolved and no further action is needed.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
124	4/19/2007	Storm Water Hotline	1343 E 5th St	Landscape debris, drums, long term storage of vehicles, loose soil piles	Inspector observed relatively small amounts of uncontained soil and landscape debris as well as one 55-gallon drum, all on private property. No discharge or other major threats to storm water quality were observed. A Corrective Action letter was sent requiring the resident to clean up materials in the yard.
125	4/23/2007	Storm Water Hotline	16th and Roosevelt	Housing of equipment	Employee was hosing off equipment resulting in a discharge to the gutter on 16th St. There were gravel bags at driveway and at inlet on the corner of 16th and National City Blvd (construction site BMPs). Inspector gave verbal notification (warning) for discharge. Follow-up inspections conducted, problem resolved.
126	4/26/2007	Storm Water Hotline	130 W. 17th St	Business using residential trash cans to dispose of waste oil.	No waste oil found. There was some cardboard that had oil stains. Business owner cleaned up area and will order additional cans or recycling bin.
127	4/30/2007	Storm Water Hotline	4th and Laurel	Check inlets for debris.	The inspector did not find any debris on site.
128	4/30/2007	Storm Water Hotline	3844 Cherry Blossom St	Washing machine discharge	The inspector did not locate any discharge. The inspector referred to code enforcement.
129	5/1/2007	Storm Water Hotline	1000 Block of National City Blvd	Fire damage	PW Crew cleaned parking lot of burned furniture, lumber, ash, etc caused by fire.
130	5/3/2007	Storm Water Hotline	4th and F	Sweeper's hydraulic hose broke.	Street crew cleaned fluid from street. Mechanic repaired hose.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
131	5/7/2007	Storm Water Hotline	1243 National City Blvd	Homeless camp and toilet paper/stool in park area of Civic Center.	Public Works cleaned area.
132	5/14/2007	Storm Water Hotline	316 W 14th St	Washing machine discharging to alley then to street (W 14th St).	There was a discharge of grey water to the alley and an old battery inside yard. Owner stated that the drain for the washing machine was plugged, and agreed to not use washing machine unless waste water goes to sewer system.
133	5/15/2007	Storm Water Hotline	Bay Marina and Tidelands	Diesel fuel going into storm drain.	Driver was sleeping in his vehicle and accidentally hit the pump to the on position for the auxiliary diesel tank. Diesel overflowed to the gutter. There are no nearby inlets. Fire department contained spill until street division arrived to clean gutter of diesel fuel.
134	5/22/2007	Storm Water Hotline	340 W. 18th St	Oil spill at Paradise Creek	No oil spill was found in Paradise Creek, but some drips from a transmission were found along a walkway in Paradise Creek Educational Park. The son of the owner of a neighboring business said that a transmission was stolen from the back of a pick up truck (used as storage at the business) and taken to Paradise Creek. No transmission was found, but the truck and materials stored in it were removed from the business at the direction of the inspector.
135	5/23/2007	Storm Water Hotline	Kimball Park National City CA 91950	Washing cars in the park.	Owner was washing a car in the parking lot of Kimball Park. No water or soap reached inlet. Owner rinsed pavement and vacuumed water. Both parties were invited to automotive workshop and given NPDES flyers.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
136	6/11/2007	Storm Water Hotline	1040 Hoover Avenue	Hosing down sidewalk	Water from garden hose was traveling down 11th and down Roosevelt. Water did not make it to the inlet of time of inspection. Violators cleaned debris from gutter. NPDES was explained to violators and property owner. Inspector explained that irrigation is exempt from permit requirements, but hosing down sidewalks and over-watering was a violation. They assured the inspector that this won't happen in the future. Corrective Action Letter: 6/11/07
137	6/11/2007	Storm Water Hotline	1100 Highland Avenue	Water and sediment discharging to Highland Avenue.	Inspected site and found litter in most landscape areas and a broken irrigation pipe. Water from pipe was discharging water and litter to an inlet on Highland Avenue. Spoke with manager who said that the pipe has been broken for about 3 weeks. Initially, a plumber evaluated leak and supposedly secured water. A landscaper was scheduled to repair leak. Manager cleaned litter. Sewer crew cleaned inlet on Highland Avenue. NOV and Administrative Citation issued.
138	6/12/2007	Storm Water Hotline	545 Rachel Ave	Construction site without BMPs	There was sediment on the sidewalk and in the gutter and no BMPs in place for erosion and sediment control. Owner agreed to implement BMPs by tomorrow. Sidewalk and gutter was cleaned while inspector was on site. Stop work order was issued by the building department because permits had not been obtained. Problem Resolved.

TABLE 8.5 (CONTINUED)
PUBLIC COMPLAINT REPORTS (JULY 1, 2006 THROUGH JUNE 30, 2007)

#	Date	Origin of Complaint	Location	Violation or Complaint	Investigation Summary
139	6/19/2007	Storm Water Hotline	3618 Cherry Blossom St	Drain pipes coming out of back fence adjacent to Paradise Creek.	Inspector received several complaints in the past regarding this problem. Owner was verbally notified to disconnect drainpipes. On a recent inspection, inspector was unable to find pipes. While on an unrelated inspection in the area, the pipes were located. Notice of Violation issued 6/21/07.
140	6/20/2007	Storm Water Hotline	1026 E 8th St	Fixing sewer lateral.	Cutting the sidewalk to repair the sewer lateral. While cutting, the owner vacuumed water. No discharge to storm drain observed.
141	6/27/2007	Storm Water Hotline	1945 Orange Ave	Resident cut bushes and put debris in brow ditch going to storm drain.	Inspector spoke with the owner and explained NPDES. Park division cleaned debris.
142	6/27/2007	Storm Water Hotline	539 20th St	Piles of landscape debris in right of way.	There were grass clippings in the right of way. Inspector spoke with tenant who agreed to remove all landscape debris by Monday, July 2, 2007. Drive by re-inspection conducted, problem resolved.
143	6/29/2007	Storm Water Hotline	E Plaza Blvd	Traffic accident involving tanker truck. Approximately 120,000 gallons water, 10 gallons foam, and small quantity of unleaded fuel discharged to Paradise Creek.	Inspector called Public Works crew. Implemented BMPs (PW crew and private environmental company). Inspector gave courtesy notification to RWQCB. Present: S.D. County Hazmat, NRC Environment Services, NC PD NC Fire, County Environment Health

9 EDUCATION

The City continues to implement an extensive storm water education program to target individuals in the City and encourage storm water awareness and the implementation of pollution prevention measures and BMPs. By increasing public awareness and encouraging a change in both the attitude and the behavior of the general public and the regulated community, the City may reduce or eliminate storm water pollution caused by common daily activities. The City's program aims to increase the knowledge of City personnel, the regulated community, and the general public regarding the impacts of urban runoff and BMPs that can be implemented for certain activities to mitigate these impacts. The City's comprehensive storm water education program includes educational materials and opportunities to its personnel, industrial and commercial businesses, construction site owners and operators, and residents of the City.

EDUCATIONAL MATERIALS AVAILABLE TO THE PUBLIC AND CITY STAFF

National City is a growing community that is diverse in culture. The demographics of the City are unique, and to address various communities' needs, the City takes pride in servicing its residents by presenting some of its brochures in both English and Spanish. It is very important that educational material is not only available but also able to be understood by all residents. Therefore many of the City's educational materials are bilingual. The following brochures have been prepared and were distributed in the City during 2006/2007:

"Everything that flows down into a storm drain goes untreated directly into our creeks, lagoons, and San Diego Bay" Brochure

The City continues to distribute the "Everything that flows down into a storm drain goes untreated directly into our creeks, lagoons, and San Diego Bay" brochure (Attachment 3.2). The information is printed in English on one side of the brochure and Spanish on the other. The brochure educates residents and business owners on the difference between the storm drain and the sewer system, pollutants, pollution prevention such as recycling, proper landscaping practices, Municipal Code Chapter 14.22 Prohibitions, and the storm drain hotline number to contact with questions or to report IC/IDs.

The NPDES Storm Water Compliance Inspector continues to provide copies of this brochure during industrial and commercial inspections and to businesses and residences during public-complaint response investigations. Additionally, a copy of the brochure was provided in any storm water correspondence (corrective action letters, NOVs, etc.). This brochure may be found at various locations throughout the City such as the Chamber of Commerce, the public library, City buses, the public recreational centers, and the storm water display area at the City's Engineering Department.

"Put Toxic Waste In Its Place" Brochure

The City continued to distribute the "Put Toxic Waste In Its Place" brochure and accompanying notepad (Attachment 4.2). The brochure consists of 17 full-color pages featuring a tough-looking crowd of household hazardous waste caricatures. The brochure defines and gives examples of household hazardous waste; explains the consequences of improper storage and disposal of waste; describes the benefits of proper household hazardous waste controls; gives examples on the reduction household hazardous waste in

the home; describes proper disposal methods; provides in-depth sections regarding electronic waste, paint, and used oil; and gives contact information for local communities. The notepad has the same characters on it and says "put toxic waste in its place." The notepad also provides a website and phone number to use to gather information regarding hazardous waste disposal. During this reporting period, "Put Toxic Waste In Its Place" continued to be provided at workshops.

Integrated Pest Management (IPM) Cards

The City continued to distribute IMP cards (Attachment 5.1) to individuals in the City. The IPM cards were developed as part of a regional effort to combat pesticide pollution and encourage the use of IPM techniques. The packet of seven bound cards includes: "Gardening with Good Bugs," "Safe Use and Disposal of Pesticides," "Spiders," "Termites," "Lawn Insects," "Snails and Slugs," and "Head Lice."

"Keep the Cycle Spinning…" Brochure

The "Keep the Cycle Spinning" brochure (Attachment 9.1) was produced in English and Spanish to inform residents on recycling tips and provides information about how/where to recycle specific items. The brochure also encourages individuals to buy products made from recycled goods.

Storm Water Hotline Cards

The Storm Water Hotline Card (Attachment 3.3) was designed to inform residents and business owners of the City's storm water hotline. The City continues to provide business cards with the hotline number at the City's Engineering Department Counter. They are also distributed during inspections of construction sites and commercial and industrial facilities, and the City attaches the cards to most of its correspondences with residents, businesses, and developers.

Miscellaneous Educational Items and Sources of Information

The City distributed HHW refrigerator magnets (Attachment 4.3), which provides HHW disposal information for residents of National City and the HHW telephone number.

The City of National City's website provides information regarding the City's storm water program, pollution prevention measures, and phone numbers. The website address is http://www.ci.national-city.ca.us, with information under the Public Works/Engineering Department link.

MUNICIPAL STAFF EDUCATION AND TRAINING

Over the past year, the City of National City provided several training seminars to educate staff on both general and specific topics relating to the protection of water quality. A few City staff members also received additional training through outside educational programs. The following is a list of these educational activities, and Attachment 2.1 provides the sign in sheets from municipal training sessions:

- 2007 Calendars – bilingual calendars were available at the City library, Chamber of Commerce, City buses, public recreation centers, and the storm water display at the Engineering Department (Attachment 2.2).
- SUSMP Training - 13 people attended this training conducted by D-MAX on August 3, 2006. A handout was provided which contained a checklist, background, definitions and flowcharts for SUSMP.

- SUSMP Coordination Meetings - The City had regular SUSMP coordination meetings for Building, Planning, Engineering, and CDC departments. The meetings were to clarify departmental responsibilities. A SUSMP applicability checklist and flowchart were developed.
- Fire Department Training – The City's consultant, D-MAX, gave a presentation to 34 staff over three days from June 19, 2007 to June 21, 2007. The presentation included topics on urban runoff, storm water and sanitary sewer systems, City ordinances, BMPs, and reporting procedures. The presentation also included information regarding spill containment, since fire department personnel are often the first on scene in the event of a spill.
- Irrigation Management Course – Eight members of the City's Landscape Maintenance Personnel attended this six-class course, which focused on irrigation system design, troubleshooting and plant identification, among other topics. The course was held on April 6, 13, 20, and 27 2007 at the San Diego County Library Sunnyside Branch in Bonita.
- Public Works NPDES Training – 25 participants attended this workshop, which was held on June 7, 2007. The presentation included a background to NPDES, urban runoff, MS4s, and BMP requirements. Participants were provided with a Storm Drain Inlet Protection handout. A multiple-choice NPDES Knowledge/Awareness Assessment Test was administered to City Public Works employees before and after training sessions. By completing this test, the effectiveness of the workshops could be analyzed.

INDUSTRIAL/COMMERCIAL EDUCATION & TRAINING

The following list describes training for industrial or commercial businesses that the City of National City has provided or participated in during this reporting period. Attachment 3.4 provides the sign-in sheets from industrial and commercial training sessions.

- City industrial business management staff and employees were offered a free storm water workshop in National City on April 25, 2007. Approximately ten individuals attended the workshop. The workshop was led by the City's consultant, D-MAX, and provided information about how to comply with the State of California General Industrial Permit through NOIs, SWPPPs, water monitoring programs, and employee education. The workshop also provided information on how to comply with the City's storm water ordinance through implementing BMPs and what to expect from an inspection. They were presented with a PowerPoint presentation and given an NPDES Knowledge/Awareness Assessment Test before and after the presentation. Handouts included NONA/NEC, NOI, NOT, and SWPPP paperwork.
- Automotive Workshop – 21 people attended this training given by the City on May 23, 2007. The presentation gave a background on NPDES and the San Diego watersheds, and gave information on BMPs and pollutants participants should be aware of. They were given an NPDES Knowledge/Awareness Assessment Test before and after the presentation, and on average there was an improvement in scores. "Your Shop Can Make a Difference" handouts (Attachment 4.1), "Put Toxic Waste in its Place" brochures and notepads (Attachment 4.2), "Everything that flows

down into a storm drain goes *untreated* directly into our creeks, lagoons, and San Diego Bay" handout (Attachment 3.2), and HHW informational refrigerator magnets (Attachment 4.3) were distributed.

RESIDENTIAL

The City continues to make a variety of flyers, brochures, website postings, and other educational material available to residents of the City. Dry-weather educational mailers were mailed to homes in residential areas where dry weather monitoring indicated one or more pollutants exceeded dry weather action levels. In response to the mailers, some residents called to obtain more information about the program. Specific educational outreach designed for residents of National City is discussed below.

- "Do You Go To the Beach When it is Raining?" brochures were sent out in residential trash bills.
- Eight residents attended a City-hosted storm water workshop on February 21, 2007. Attendees were presented with a PowerPoint presentation on NPDES and BMPs for residential activities. 2007 Calendars (Attachment 2.2), "Everything that runs into the storm drain goes untreated directly into our creeks, lagoons, and San Diego Bay" brochures (Attachment 3.2), "Put Toxic Waste in its Place" brochures (Attachment 4.2), HHW refrigerator magnets (Attachment 4.3) and copies of the City's Storm Water Hotline Card (Attachment 3.3) were distributed at the workshop. A residential BMP handout was also included with the presentation and is provided in Attachment 5.3.
- The City developed a 2007 calendar that was distributed to residents and made available at City offices (Attachment 2.2). The calendar, printed in both English and Spanish, informs residents about pollutants found in San Diego Bay and neighboring waterways, and describes that pollutants such as fertilizers, pesticides, metals, paints, oil and grease, and other debris can be transported from residential areas to the ocean. A list of BMPs and various cleanup days and HHW events are given. The theme for the calendar was "Let's Keep Our Community Clean" and each month showed a photograph of a landmark in the City.

NEW DEVELOPMENT & REDEVELOPEMENT AND CONSTRUCTION EDUCATION & TRAINING

Construction site owners and developers alter the landscape and natural flow of storm water runoff and generally create increased amounts of impervious surface. During such activities, construction site owners, developers, and employees have the potential to discharge a number of different types of pollutants to receiving waters, notably sediment. The City continued to provide educational information regarding BMPs during construction site inspections, and followed up to determine if BMP deficiencies were resolved.

- The City distributed the BMP fact sheet for construction sites that was prepared during the last reporting period. This fact sheet describes specific BMPs for construction activities including soil stabilization and erosion prevention, sediment containment, materials and equipment management, non-storm water discharge control, and drainage control. This sheet was distributed with all permits issued,

including building permits; implementing the BMPs listed on the sheet is a condition of the permits.

- The City continued to hold CIP project meetings during this reporting period and discussed implementation of various BMPs. As described in Section 7 of this Annual Report, onsite pre-job conferences were held for most high priority private projects. Pre-job conferences were also held at the Engineering Department front counter for many smaller projects.
- The City held a workshop on January 22, 2006 for Construction and Development staff, which informed participants about the NPDES program, BMPs, pollutants, and inspections. An NPDES Knowledge/Awareness Assessment Test was administered to the 22 participants before and after the presentation.
- The City continued to provide applicants with the Storm Water Requirements Applicability Checklist (Attachment 6.2). Once submitted, the City reviewed the checklist and prioritized the projects. Requirements to ensure compliance with the Municipal Permit and General Construction Permit were presented to the applicant and further discussed to ensure the applicant was educated on the process.
- The City continued to make available JURMP Appendix C, containing a list of required BMPs, to proponents of construction activities when applying for a construction permit. Appendix C is also distributed during CIP project pre-construction meetings.

COUNTY OUTREACH WORKGROUP

During 2006/2007 the City continued to be an active participate in the County Outreach Workgroup, which conducts the Regional Education and Outreach Program.

IMPRESSIONS MADE

During the 2006/2007 reporting period, the City provided education primarily through inspections, distribution and mailing of educational materials, and audience-specific training sessions. Based on the number of each of these efforts, a number of impressions can be estimated. However, impressions only measure quantity, not quality. The City has endeavored to make reasonable, conservative estimates of the numbers of impressions generated by its efforts.

In order to calculate the number of impressions, each effort was multiplied by the number of impressions thought to be generated by each effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections, which usually involve more personnel and have been assumed to generate five impressions. Since the inspector interacted with the facility manager/owner and discussed storm water, these site visits were included in the number of impressions. Training sessions and clean-up events have been assumed to generate a number of impressions equal to four times the number of attendees because it is likely that the attendees will discuss the content with at least one other person after the training. Most printed educational material distributed in mass numbers are assumed to generate three impressions each, and materials distributed in person during inspections are defined as generating five impressions due to several people

likely viewing them and the content being more directly relevant. A calendar is assumed to generate significantly more impressions, as it is typically viewed on a daily basis.

Table 9.1
Impressions Generated Through Outreach Efforts

Impression type	Actual Count 2006/2007	Unit	Estimated Impressions Generated
Municipal Inspections	20	Inspections	100
Industrial Inspections	29	Inspections	87
Commercial Inspections	10	Inspections	30
Complaints Investigated	143	Investigation	429
Training Session and Activity/Event Attendees	150	Events	600
Dry Weather Monitoring Letters	1,473	Letter	4,419
Trash Courtesy Notice (Building Dept)	100	Letter	300
Residential BMP Handout	25	Handout	75
Do you Go to the Beach When it Rains	6,236	Handout	18,708
Preventing Urban Runoff Pollution	500	Brochure	1,500
Everything that flows down the storm drain….	1,000	Sheets	3,000
Put Toxic Waste in its Place Brochure and Notepad	200	Brochure	600
2007 Storm Water Program Calendar	2,000	Calendar	100,000
IPM Cards	200	Info card set	600
HHW Refrigerator Magnets	1,000	Magnets	3,000
Your Shop Can Make a Difference	5	Handout	15
Storm Water Hotline Card	250	Card	750
Keep the Cycle Spinning	80	Handout	240
Construction BMP Handouts	1,000	Handout	3,000
Total			**137,453**

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2004.

10 PUBLIC PARTICIPATION

In addition to providing education to encourage residents to implement pollution prevention measures and BMPs, the City encourages business owners and operators and the general public to participate in public participation programs. Public participation includes, but is not limited to, clean up events, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Providing the community with opportunities to participate in the implementation of the City's storm water program helps foster a sense of shared responsibility in keeping the community clean. City personnel both facilitate and participate in many of the public participation events, which also provides a platform for municipal personnel to share storm water-related information with the general public.

City employees are an integral part of the transfer of information to the general public. They are educated in storm water pollution prevention and are expected to pass on that information to the general public as often as possible. The City considers its proper management of municipal facilities and activities to be a model for the rest of the community.

The City recognizes the need to build and maintain partnerships with other agencies in preventing storm water pollution. The City actively partners with other jurisdictions and ILACSD for outreach and public participation events. The following presents the City's efforts to encourage environmental stewardship within the community during this reporting period.

PUBLIC REPORTING

The City continues to encourage City employees and the general public to report illegal storm water activities via the City's storm water hotline or the reporting section of the City's website. Continuing to operate this reporting system is one of the mechanisms the City maintains to ensure that citizens have a means to prevent storm water pollution in their neighborhoods. By utilizing the reporting system, residents of National City are able to be accountable for their actions as well as those of their neighbors. The hotline number is available on the storm water hotline card, which is given out at inspections, complaint investigations, and is made available at many public facilities. The hotline number is also available on many of the brochures distributed by the City, as well as on the City's website. This reporting period there were 143 complaints received by the City, as compared to the 190 complaints received during the last reporting period. This number of complaints is a positive reflection of the City's educational efforts. All of the 143 complaints reported during the reporting period were investigated immediately and addressed appropriately by the City's NPDES Storm Water Compliance Inspector. Section 8 of this Annual Report includes a log of the complaints and associated responses.

HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

The City continues to encourage recycling and proper disposal of household hazardous waste. Residents have access to proper disposal facilities for household hazardous wastes at the South Bay Regional Household Hazardous Waste drop-off center, located in Chula Vista. This facility is open on Saturdays from 9:00 a.m. to 1:00 p.m. and accepts up to 15

gallons or 125 lbs of waste per household for a small co-payment. This service is also available to residents in the cities of Chula Vista, Coronado, and Imperial Beach. The "Put Toxic Waste In Its Place" brochure continues to be used by the City to inform residents of how and where to dispose of HHW.

Additionally, the City offers a low cost door-to-door collection programs for residents. Residents may dispose of used oil at seven Certified Used Oil Recycling Centers are located around the City.

HOUSEHOLD TRASH COLLECTION EVENTS

The City also continued to hold household trash collection events for large items such as furniture and appliances. The City coordinates with EDCO to host both fall and spring collection events. These events are routinely held in June and November of each year. The City encourages the public to participate by bringing their debris for proper disposal. The City advertised these events with a flyer, which was distributed during the Residential workshop held on February 21, 2007 and in residential trash bills.

PUBLIC CLEANUP EVENTS AND EDUCATIONAL ACTIVITES

The City continued to collaborate with I Love a Clean San Diego (ILACSD) for the Earth Day Creek to Bay Cleanup event.

Two neighborhood councils in the City held cleanup events, and a third cleanup event was hosted by City Hall. The Eastside Neighborhood Council and the Army National Guard painted and cleaned El Toyon Recreation Center and removed 4.8 tons of dirt/trash/debris from three surrounding neighborhoods (Granger/Northside/Old Town) on February 3-4, 2007. The Northside Neighborhood Council collected 7.2 tons of dirt/trash/debris from the Northside Neighborhood on March 31, 2007. City personnel and residents collected 2.4 tons of trash and debris over June 1-2, 2007 from the areas surrounding City Hall.

On April 21, 2007, a few days after the Paradise Creek Educational Park officially opened, an Earth Day celebration was held there. During the celebration, volunteers removed trash and sowed 300 plants.

During 2006/2007, the City worked with ILACSD to stencil storm drains in the City that remind people that the storm drains drain to local creeks and the ocean. A total of 19 volunteers stenciled 30 drains.

PUBLIC WORKSHOPS

Workshops, information, and training sessions are necessary to provide the public with the tools and knowledge to participate effectively in a storm water program. This reporting period, the City took a proactive approach to storm water education by tailoring workshops for the specific needs of particular groups in National City. Workshops were provided to residents, automotive businesses, industrial businesses, and construction and development staff.

IMPLEMENTATION PLANS FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit. All programs during the 2006/2007 reporting period were conducted under the

requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2004.

11 ASSESSMENT OF JURMP EFFECTIVENESS

The City's storm water program consists of three major pieces, listed below:

- Program Planning: Includes source characterization, BMP selection, targeted outcomes, and measures of indicators.
- Program Implementation: Includes implementation of selected measures.
- Effectiveness Assessment: Includes water quality assessment, program assessment, and integrated assessment. Effectiveness is evaluated on six increasingly complex levels.

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. Assessment of the planning and implementation steps provides important information that in turn can be used to improve future planning and implementation efforts. Data is collected from a number of different sources for the assessment. The following subsections present the City's approach and activities in assessing the effectiveness of the JURMP.

PROGRAM PLANNING

When designing and modifying proposed storm water program actions, the City obtains and reviews information from inspections, water quality monitoring, complaint records, and institutional knowledge. Inventories of potential pollutant sources have been compiled based on this data; the most recent versions for the 2006/2007 reporting period have been presented earlier in this annual report. The City has further related known priority sources to key constituents, as shown in Table 11.1. Program planning involves ensuring that the City's actions will meet the minimum activity based Municipal Permit requirements and that City resources are used to reduce pollutant discharges as effectively as possible. City programs are tailored to the specific characteristics of the community. National City, for example, includes a relatively large industrial zone on the west side of the City. A focused training session for industrial businesses was held during 2006/2007, and compliance inspections are regularly conducted. The City has also regularly reviewed the monitoring results of industrial facilities that conduct sampling and analysis as part of their Industrial Permit compliance.

BMP SELECTION

To reduce discharges of pollutants from identified sources, the City requires implementation of BMPs. More detail about BMPs required for all identified sources is provided in the City's JURMP. Key BMPs for selected priority sources are also shown in Table 11.2 later in this section. Data from inspection and monitoring programs as well as overall land use information was used in preparing the table.

The City informs target audiences of the BMP requirements through general distribution of educational materials, focused distribution of specifically targeted materials, reviews of submitted plans, and direct interaction with City staff. Direct interaction may take place during inspections, when discussing comments on submitted plans, and/or when encountering City staff in the field. Providing material to the public broadly through

mailings, the City's website, and information stations in public places allows for a broader reach. The City employs a variety of methods to educate responsible parties of their responsibilities to implement BMPs. Fact sheets, brochures, and other reference materials are available at several City buildings and are periodically mailed out to members of the community.

TARGETED OUTCOMES

At the beginning of each reporting year, the City sets targets for its program. The actual numbers recorded during the year are then compared to the targets at the end of the year to assess progress. Typically, items mandated by the Permit, such conducting the Dry Weather Monitoring Program or investigating storm water complaints, are relatively easy to measure. Conversely, goals such as significant improvements in receiving water quality are more difficult to assess.

The effectiveness assessment approach jointly developed by the Copermittees recognizes this distinction by defining six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1:	Compliance with Activity-Based Permit Requirements
Level 2:	Changes in Knowledge/Awareness
Level 3:	Behavioral Change/BMP Implementation
Level 4:	Load Reductions
Level 5:	Changes in Discharge Quality
Level 6:	Changes in Receiving Water Quality

Level 1: Compliance with Activity-Based Permit Requirements

The Municipal Permit describes the requirements that Copermittees must meet. Examples of these types of requirements include, but are not limited to, inspecting construction sites on certain minimum frequencies, conducting the Dry Weather Monitoring Program, and reporting spills to the RWQCB within given time frames.

Table 11.3 summarizes the City's efforts toward meeting activity-based Municipal Permit requirements in 2006/2007. All high priority municipal and industrial facilities were inspected at least once during this reporting period. All high priority construction sites were inspected at least weekly during the time they were active in the wet season. Medium and low priority construction sites were generally inspected twice. In certain instances, low priority construction sites were inspected only once because the project was completed in a short period of time. One hundred percent of cleanout locations in the MS4 were maintained, and City streets were swept regularly.

The City regularly inspects industrial, commercial, and construction sites, which are some of the main potential sources of pollution. The inventories of these sources are also routinely updated to ensure the City has the most accurate inventory possible and have been presented in Sections 3, 4, and 7 of this Annual Report. The City inspected most industrial and commercial businesses during the current Municipal Permit cycle. Tables 11.4 and 11.5 present watershed-based inventories of various categories of industrial and commercial facilities, respectively, along with the numbers of facilities inspected and overall number of

inspections. The number of inspections is greater than the number of inspected facilities whenever facilities have been inspected more than once.

Level 2: Changes in Knowledge/Awareness

To increase storm water-related awareness and knowledge, the City provides a variety of educational outreach materials including, but not limited to training sessions, workshops, cleanup events, and the distribution of print media such as brochures and handouts.

The City continues to maintain a storm water hotline and online reporting system by which citizens may report potential storm water violations. Over the years, a general increasing trend has been observed, although the number of complaints recorded in 2006/2007 was somewhat lower than the 2005/2006 number. The overall upward trend indicates that City staff and residents are more aware of storm water requirements and how to report observed potential problems. Data from the City's Dry Weather Monitoring Program also indicates decreases in the levels of ammonia and detergents, which are typically good indicators of IC/IDs. Information regarding the City's storm water hotline is available on the City's website and is printed on a variety of print media distributed by the City, including a storm water hotline card. Figure 11.1 shows the trend in storm water complaints over the past few years.

Figure 11.1
Number of Complaints Logged

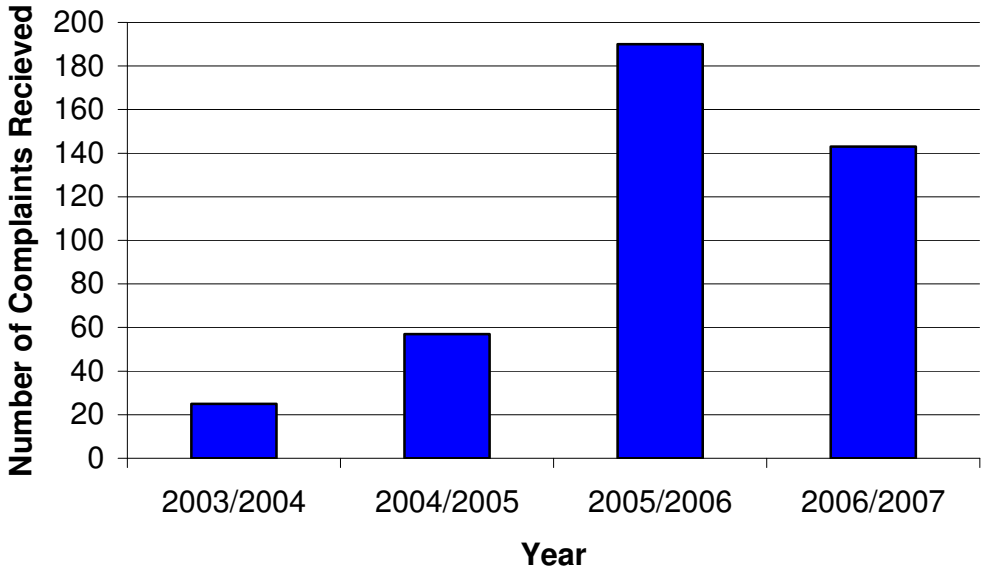

Public works employees have tailgate meetings and are aware of effective BMP implementation. The two Municipal Yards continue to maintain SWPPPs and undergo weekly inspections. Municipal staff also work closely with the City's NPDES Storm Water Compliance Inspector and implement recommended BMPs promptly. The Parks and Recreation landscape maintenance staff have been trained in proper techniques for application of chemicals. Pesticides are no longer applied to landscaping; however, fertilizers and herbicides are used. The City minimizes the use of fertilizers and herbicides and employs appropriate BMPs for their use and containment.

Storm water knowledge quizzes were given to attendees of training sessions hosted by the City. At the training sessions for public works employees, the pre-test scores were 55 percent and the post-test scores were 90 percent. At the industrial training session, the pre-test scores were 60 percent and the post-test scores were 70 percent. At the automotive workshop, pre-test scores were 70 percent and post-test scores were 90 percent. These are instances of measurable increases in knowledge.

Storm water compliance inspections of industrial facilities and commercial businesses have increased knowledge of storm water pollution prevention. During the inspection process, inspectors educate business owners on the difference between the storm drain system versus the sewer system, potential pollutants, pollution prevention measures, BMP implementation, and the Municipal Permit and General Industrial Permit requirements are discussed as deemed applicable. The City's knowledge assessment system rates the storm water knowledge of the responsible person at the facility on a scale of one (1) to five (5), with five representing the highest level of knowledge. More detail on the process is given in Section 3 of this Annual Report. Figure 11.3 presents a comparison of the 2004/2005, 2005/2006 and 2006/2007 ratings at high priority industrial facilities, which is the main place in which this type of data was collected during 2006/2007. The data are presented as relative frequencies so that differences in number of inspections between the two years do not affect the comparison. Scores of 1 and 5 have remained relatively similar from year to year with some changes in the 2 to 4 range. Though the data includes all high priority industrial businesses, these businesses change from year to year and therefore individuals with no prior knowledge of the City's NPDES program may be included in this assessment, therefore lowering the frequency of higher scores. The City plans to continue to conduct industry-specific workshops in the future.

During pre-project meetings, City representatives discuss general storm water pollution prevention concepts and site-specific BMP implementation with project proponents. The City's consultant also provides review comments on SWPPPs and SUSMP reports, which serve to further educate project proponents about City storm water requirements.

Educational information is provided to residents in areas targeted based on the results of Dry Weather Monitoring Program findings. The City's NPDES Storm Water Compliance Inspector also educates the public when responding to complaint investigations in residential areas. This approach provides residents with storm water pollution prevention material specifically targeted toward problems observed in their neighborhoods. The City also conducted a storm water workshop for residents, which discussed common BMPs residents can implement. More information about the materials distributed are presented in sections 5, 8, and 9 of this Annual Report.

Level 3: Behavioral Change/BMP Implementation

The City continues to provide education to the regulated community, municipal personnel, and the general public to not only increase knowledge regarding storm water issues, but to foster a behavioral change in regards to storm water-related activities. Such change is an important goal of the storm water program in the City.

The City's construction inspection program has resulted in proper BMP implementation at regularly inspected construction sites. Property owners and developers are compelled to be proactive in implementing proper BMPs at their sites because of the City's supervision and

strict enforcement program. During the 2006/2007 reporting period, the City inspected high priority construction sites on a weekly basis. This oversight likely led to more consistent and improved BMP implementation, which indicates a positive change in the behavior of developers and property owners directly responsible for the quality of storm water discharging from their sites.

As discussed earlier in this Annual Report, the City continued to assign a BMP assessment score during industrial and commercial inspections. Figure 11.3 presents a comparison of the 2004/2005, 2005/2006 and 2006/2007 ratings at high priority industrial facilities, which is the main place in which this type of data was collected during 2006/2007. The BMP implementation at inspected businesses is rated on a scale of one (1) to five (5), with five being the highest level. In general, scores decrease during this reporting period. Several industrial facilities in the City have had ongoing BMP implementation issues and were considered to be in violation of the City's municipal code during 2006/2007. Sites receiving a BMP-related violation are always assigned a BMP implementation score of 1.

National City municipal facilities are inspected on a regular basis. The inspections generally involve corrective actions being recommended. Corrective actions are typically minor housekeeping issues, but if more significant problems arise, the City's Storm Water Compliance Inspector works to resolve them immediately.

A total of 31 administrative citations were issued to businesses, construction sites, and residents during 2005/2006. As a result of these fines, the responsible parties were compelled to implement a more effective set of BMPs. Most violations were resolved by the first citation issued, although in a few cases additional enforcement actions were required. The City followed up in each case for which a citation was issued and ensured that the violation was resolved and any discharged material was cleaned up.

Level 4: Load Reduction

The City can qualitatively conclude that load reductions occur in many instances, although accurate estimation of numeric loads is often not possible. Numeric load data can be obtained through data from programs such as street sweeping and cleanup events.
The City reviews the SWPPP or erosion control plan that each grading project submits prior to the start of construction. This process furthers the implementation of more effective BMPs. The City's regular inspections then help ensure that the proposed BMPs are effectively implemented when construction is underway, ultimately reducing the potential load of sediment and other pollutants such as concrete waste and petroleum products.

During this reporting period, the City conducted workshops for industrial facilities, auto shops, and construction site owners/operators. It is likely that those in attendance improved BMP implementation at their businesses as a result of attending the workshops, thus resulting in reduction of pollutants discharged to the storm drain system. Municipal training sessions were provided as well. Municipal facilities promptly implemented corrective actions required by the City's NPDES Storm Water Compliance Inspector, and the staff at each municipal maintenance yard also implement SWPPPs. These actions likely resulted in a pollutant load reductions.

The City continues to implement street sweeping and storm drain inlet cleaning programs to reduce pollutants loads the MS4. During 2006/2007, 1,300 tons of debris was collected from street sweeping. Less debris was collected from street sweeping activities this

reporting period as compared last, however. The City's street sweeping schedule has not changed and the distance swept during 2006/2007 was about the same as in 2005/2006, so the decrease may suggest that there was less debris on the City's streets this reporting period as compared to last. A total of 23,200 pounds of debris was removed from the City's MS4. Over 416 cubic yards of debris was removed during channel maintenance activities, an increase from the 55 cubic yards of debris removed during 2005/2006. The City was also involved in a number of cleanup events during 2006/2007. Approximately 14.4 tons of trash and debris was collected and removed during those events. All these efforts directly led to reductions in loads of pollutants that otherwise would be discharged to receiving water bodies.

The continued use of the PDPA in inspections aided in identifying facilities that are potentially large sources of principal pollutants of concern for storm water. The form prompts the inspector to designate sources needing additional BMPs to lower the pollutant discharge potential as well as recommended BMPs for those sources. Facilities are expected to comply with these recommendations, which should result in decreases in the loads of various pollutants.

Level 5: Changes in Discharge Quality

Unlike assessments of levels 1 through 4, changes in storm water discharge quality are based on direct measurement of water quality.

In addition to helping locate IC/IDs, the City's Dry Weather Monitoring Program has provided useful water quality information for a rough Level 5 assessment. Figure 11.4 provides a graph with historical data based on the percent of sites exceeding action levels for various pollutants. Note that laboratory analyses are collected at four of the 15 dry weather sites. Exceedance rates for constituents measured in the laboratory are thus based on the number of exceedances at those four sites only. Figure 11.5 shows the median, average, and percent exceedance each year for ammonia and detergents, the two constituents with the longest historical records. The highest values were observed around 2002 and have generally decreased since then. Ammonia exceedances are usually traced to decomposing organic matter coupled with very low flows or ponded water. Detergents are typically the result of vehicle or equipment washing without proper BMPs. The City issued a relatively large number of citations for illegal discharges in 2006/2007, as described elsewhere in this Annual Report. The available monitoring data indicate that pollutants such as nitrate, orthophosphate, and oil and grease have almost never exceeded their action levels.

Level 6: Changes in Receiving Water Quality

Level 6 can be translated into the overall improvement of water quality in receiving water bodies. Examples of reaching Level 6 include changes in receiving water quality with respect to regulatory benchmarks, biological integrity, and beneficial use attainment. A long-term strategy is required to collect the volume of data necessary for assessment of Level 6. The Copermittees are collaborating as a group to establish a plan for collecting water quality data from receiving water bodies throughout the County. The City recognizes the importance of protecting the water quality of receiving water bodies in and around the City, and the City contributes to regional monitoring efforts. A sufficient data set is necessary prior to conducting a trend analysis to determine changes in receiving water

quality and further link those changes to activities conducted in the City. At this time such a data set is not available. It is therefore premature to make conclusions about the City's impact on downstream receiving water quality during this reporting period.

NARRATIVE ASSESSMENT OF PROGRAM COMPONENTS

Throughout 2006/2007 the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. Activities which have proven effective will be continued, and new or revised approaches will be suggested when the activities have proven less effective. Generally, the City has not identified one specific BMP as being ineffective for all facilities, but rather the City's inspectors recommend BMPs to each facility as are appropriate that facility's setting and potential sources of pollutants.

Permit Section F.1, Land Use

The City's SUSMP ordinance, which requires post-construction BMPs for Priority Projects, is the major land use related mechanism of mitigating urban runoff pollution. The City's storm water ordinance also includes provisions required certain non-Priority Projects to implement post-construction BMPs.

Due to additional BMP implementation, storm water runoff from SUSMP sites should carry significantly lower pollutant loads than runoff from similar non-SUSMP sites. The City has implemented both paper and electronic tracking systems for SUSMP project documents and approval status. During review of SUSMP reports, the City's storm water consultant has frequently found that a proposed project relies mainly on a treatment control BMP and does not propose adequate source control and site design BMPs. In those cases, the City requires that more comprehensive site design and source control BMPs be included to reduce storm water pollution to the MEP. For example, the City has encouraged sites to direct runoff into landscaped areas. The City's consultant also carefully examines sizing calculations, locations, and removal efficiencies for proposed treatment control BMPs. Revisions to the Storm Water Requirements Applicability Checklist have helped clarify the requirements for project proponents. Those revisions, the regular interdepartmental coordination meetings, and the recently revised Department Responsibility Checklist have helped City personnel understand their individual responsibilities for SUSMP implementation. All applicability checklists are forwarded to Engineering for final sign off as a standardization measure to make sure that the requirements are applied to projects consistently.

The City also began inspecting completed SUSMP sites in 2006/2007. This program was not yet required by the Municipal Permit, but the City initiated it to gain a better understanding of how well BMPs are being maintained. The program is also intended as a sort of pilot project that will allow the City to have a more refined program in place when SUSMP inspections are required by the new Municipal Permit. Additionally, a more advanced SUSMP database that includes entries for all BMPs at completed sites has been prepared. GPS coordinates for inspected sites were recorded during the site visits.

Permit Section F.2, Construction

Section 7 of the JURMP discusses the City's construction program; Section 7.6 lists the required BMPs. The City requires construction sites to implement BMPs for soil

stabilization and erosion control, sediment containment, materials and equipment management, and non-storm water discharge and drainage control. Common examples of these measures include fiber rolls, silt fences, rip-rap, and hydroseeding. Preventative, erosion control measures have been found to be the most effective and least costly BMPs.

In addition to inspections during the wet season, the City also inspects large construction sites during the dry season. Because contractors know that oversight does not stop during the summer, this practice has helped improve BMP implementation both during the summer and at the beginning of the wet season. The City has found stop work orders to be an effective means of achieving BMP implementation in a short amount of time, and overall the City's enforcement actions have been effective in bringing about proper BMP implementation. Quick responses to construction related complaints, backed by enforcement actions where necessary and the distribution of construction BMP fact sheets to all projects that disturb soil have helped improve BMP implementation at very small job sites.

Permit Section F.3.a, Municipal

Section 2 of the JURMP describes BMPs and pollution prevention measures for municipal activities. The City emphasizes good housekeeping BMPs, such as regular litter pick-up, in its approach because they have been observed to be effective without being prohibitively expensive.

Recognizing that proper implementation of good housekeeping and other BMPs requires informed employees; the City has conducted numerous formal storm water trainings for municipal employees. Further, the City's NPDES Storm Water Compliance Inspector regularly explains storm water concepts to City employees during inspections of municipal facilities and other interactions with them. The City's NPDES Storm Water Compliance Inspector has a good working relationship with municipal facility managers and staff, which helps ensure prompt implementation of corrective actions given during inspections. Municipal employees have also made reports to the City's storm water hotline more frequently during this reporting period. This is because the employees have a better understanding both of what constitutes a storm water violation and where to report it. Most of the reports come from municipal employees in the Public Works, Fire, and Police departments, since those staff drive around various portions of National City each day. Forming a partnership with these employees is an effective means of locating IC/IDs and other storm water violations without incurring extra expenses or hiring new staff. Street sweeping and maintenance of the MS4 are also conducted and logged into electronic reporting systems.

Permit Section F.3.b, Industrial

The City's BMP requirements for industrial facilities are listed in JURMP Appendices C.2 and C.3. Appendix C.2 includes general BMPs required of all industrial and commercial sites, while Appendix C.3 lists activity-specific BMPs for industrial sites. Almost all of the City's industrial facilities conduct their intensive industrial activities, such as cutting metal or maintaining buses, indoors. The outdoor industrial activities are usually limited to material storage, loading and unloading, and similar activities. This practice is effective in preventing many of the largest sources of pollutants from contacting storm water.

During inspections of industrial sites, the City emphasized the importance of good housekeeping measures, which are generally well known but are sometimes not conducted frequently enough. Industrial businesses in the City have typically been cooperative in the compliance process, and, when necessary, stricter enforcement measures have brought about compliance. The City conducts detailed BMP assessments as part of each inspection, and all inspection results are entered into the City's industrial/commercial database.

During the 2006/2007 reporting period, the City again updated its industrial and commercial inventories. The City's NPDES Storm Water Compliance Inspector regularly reviewed newly submitted businesses licenses to determine if new businesses needed to be added to the lists of industrial businesses. Facilities with industrial SIC codes were compared to the current industrial inventories, and those businesses not currently present were added to the inventories. All businesses that this process identified as potential new high priority industrial sites were inspected. The City also continues to update its inspection database.

As was discussed earlier in this Annual Report, the City has developed several methods to help analyze the effectiveness of its program. Storm water monitoring data is reviewed at industrial sites. BMP, knowledge, and PDPA assessments are also conducted at industrial sites and further aid the evaluation process. Regular inspections and education have helped improve BMP implementation at industrial facilities, especially high priority industrial sites.

Permit Section F.3.c, Commercial

The City's BMP requirements for commercial facilities are listed in JURMP Appendices C.2 and C.4. Similar to industrial facilities, at most commercial facilities the commercial activities with the largest potential to generate pollutants, such as food preparation and auto repair, are conducted indoors. The City's inspectors typically emphasize good housekeeping measures and secondary containment and overhead coverage for automotive fluids and cooking grease stored outdoors. Inspections are regularly conducted at commercial facilities, and the results are recorded in the City's industrial/commercial database.

The City has found that a lack of knowledge about storm water issues is a common problem at commercial facilities, particularly restaurants. This is most likely due to the relatively high level of turnover in that industry. City inspectors give verbal instruction and provide educational materials; workshops specifically for restaurants have also been held. Most commercial businesses historically have cooperated with the compliance process after receiving education and being notified of corrective actions to take. However, when a business has been educated and warned but persists in non-compliance, penalties are assessed. This approach has been effective in bringing about compliance with the City's Storm Water Ordinance.

The City developed and distributed a 2007 calendar, prompting user with ways to "keep our community clean." Workshops for automotive repair facilities and for restaurants will be held in 2007/2008. Similar to industrial facilities, the City will continue to work to identify and inspect new high priority commercial facilities. New facilities will likely be identified primarily through SIC code based searches of business license registry data. Similar to industrial facilities, BMP, knowledge, and PDPA scores will continue to be assigned during inspections.

Permit Section F.3.d, Residential

Section 5.3 of the City's JURMP lists pollution prevention measures and BMPs for residential activities.

The City's main avenue to improve BMP implementation in residential areas is storm water education and complaint responses. The City has distributed various educational materials, and during 2006/2007 the City offered a storm water workshop specifically tailored for residents. Residents were provided with a handout of residential BMPs and were encouraged to call the storm water hotline to report illegal discharges and storm water activities. The City also has an ordinance which prohibits car washing and repairs on public streets.

The City's Dry Weather Monitoring Program has found that residential areas contribute to constituent action level exceedances at several monitoring locations. Based on interactions with citizens, City staff have found that some residents do not have a good understanding of storm water issues. The City distributed the 2007 calendars to residents during 2007/2008, which was redesigned to be more user-friendly. The City has found that redesigning their calendars has them more appealing and useful to City residents. Residents then may see the materials on a fairly frequent basis, rather than reading a brochure once and setting it aside.

Permit Section F.4, Education

The City has developed a number of educational materials; they are listed in Section 9 of the Annual Report.

Many people who live and/or work in National City speak Spanish as their first language. As a result, the City has developed bilingual English/Spanish versions of educational materials. This approach has helped more effectively reach the Spanish-speaking population of National City. For example, a one page bilingual fact sheet was prepared to help people in the City to better understand that storm water flows to San Diego Bay through the City's creeks and rivers, not to the sanitary sewer. That sheet has been distributed during inspections and complaint investigations and is also readily available at the City's Engineering desk. The City's storm water calendars have also been prepared with messages in both English and Spanish. The number of impressions created by the City's storm water program during this reporting period was estimated to be over 137,000.

City staff, in particular those in the Engineering, Planning, and Public Works departments, are responsible for implementing the City's storm water program effectively. These individuals act as role models for the activities of City employees and residents. Because these staff can have a large impact on storm water quality, the City provides regular storm water training for them. Other educational activities are described in the above assessment of the residential program. The City has also been notifying industrial and commercial businesses, as well as residents of the City's storm water hotline to facilitate better reporting of non-compliance.

Permit Section F.5, IC/ID

Section 8 of the JURMP describes the City's IC/ID program.

The City's storm water hotline is a key component of IC/ID program. As mentioned previously, municipal employees have become much more involved with recognizing and

reporting storm water violations, resulting in a general increase in reports each year (Figure 11.1). The City's NPDES Storm Water Compliance Inspector has been issued a cellular phone so that contact can be made regarding complaints whenever they occur. This helps minimize the response time. Active discharges are stopped immediately, and cleanup actions are taken when necessary. Education is often provided for minor issues noted in residential areas.

The City's Dry Weather Monitoring Program, which includes upstream pollutant source investigations, has also been an effective means of identifying IC/IDs. The monitoring efforts allow identification of pollutant sources that are causing action level exceedances at regular dry weather monitoring sites. This information allows the City to more effectively target its educational and enforcement efforts on known sources of pollutants. If a live discharge, such as car washing, is observed, the City is also able to immediately respond and eliminate the discharge, resulting in an improvement in the quality of the discharge to the MS4 and to receiving waters. Importantly, the City typically conducts follow-up visits to sites where action levels are exceeded within 24 hours for field analyses and upon receiving laboratory results for lab analyses. This has helped the City more accurately identify and abate IC/IDs that have caused action level exceedances. As described in Section 8 of this Annual Report, the City has taken a number of actions in response to the 2006 dry weather monitoring findings.

Permit Section F.6, Public Participation

Section 10 of the JURMP discusses the City's public participation program.

The City has worked with outside organizations such as ILACSD and organizations within the City such as neighborhood councils during this reporting period. Other cleanup events included collaborations with neighborhood councils. The City plans to continue working with ILACSD to conduct clean up events in the City and to stencil storm drains with "no dumping, drains to ocean" or similar text. The City also participated in HHW and large waste collection events to keep residents from potentially dumping these items in a location where they would pose a threat to storm water. The City also seeks to become informed of pending public participation events by regularly attending the Copermittee Outreach Workgroup meetings.

IMPLEMENTATION PLANS AND JURMP UPDATE FOR 2007/2008

At the time of the writing of this JURMP Annual Report, the City has been working to update the City's JURMP document to meet the requirements of the new Municipal Permit, Order No. 2007-0001. All programs during the 2006/2007 reporting period were conducted under the requirements of the previous permit (Order No. 2001-01) and the associated JURMP document developed in 2004.

Table 11.1
Source Characterization
Fiscal Year 2006/2007

Constituent	Geographic Area	Land Use	Potential High Priority Source	Estimated Percent (%) of Total Sources	Priority
Sediment	Jurisdictional: residential areas	Residential	Landscaping, vacant lots	15%	Low
	Industrial and commercial zones	Commercial	Landscaping, parking lots	10%	Low
	Jurisdictional: construction sites	Various	Construction activities	45%	High
	Slopes around shopping centers, streets without designed curbs, canyons	Commercial, Roads, Open	Slopes	30%	Medium
Fertilizers (Nitrate, Phosphate)	Jurisdictional: residential areas	Residential	Landscaping	75%	Low
	Jurisdictional: industrial/commercial	Commercial, Industrial	Landscaping	20%	Low
	City parks	Parks	Fertilizer application	5%	Medium
Bacteria	North and south of Division Street, east and west of I-805	Residential	Waste management	15%	Medium
	South Bay Plaza	Commercial	Dumping, restaurants	15%	High
	Jurisdictional	Various	Wildlife waste, animal waste, SSOs, decomposing organic material	70%	Medium
Oil and Grease	Jurisdictional	Various	Roads, parking lots, vehicle maintenance, improper storage	100%	Low
Metals	Western National City, along I-5	Industrial	Outdoor storage and processing	25%	High
	Commercial zones, including area east of I-5 around Civic Center Dr.	Commercial	Automotive repair	15%	Medium
	Jurisdictional	Various	Parking Lots, Streets	60%	Low

Table 11.1 (Continued)
Source Characterization
Fiscal Year 2006/2007

Constituent	Geographic Area	Land Use	Potential High Priority Source	Estimated Percent (%) of Total Sources	Priority
Organics (Surfactants)	North and south of Division Street, east and west of I-805; area east of I-805	Residential	Washing activities	70%	Medium
	East of I-5, from around 18th Street to 32nd Street	Commercial	Car washing	30%	High
Pesticides	Jurisdictional	Residential	Landscaping	90%	Medium
		Commercial	Landscaping	10%	Low
Gross pollutants (Trash, Debris)	North and south of Division Street, east and west of I-805; area east of I-805	Residential	Dumping, litter	25%	Medium
	Commercial complexes	Commercial	Dumping, litter	20%	Medium
	Jurisdictional	Various	Litter	25%	Low
	Alleyways	Roads	Dumping	20%	Medium
	Schools	School	Litter	5%	Low
	Parks	Parks	Litter	5%	Low
Ammonia	North and south of Division Street, east and west of I-805; area east of I-805	Residential	Decomposing materials, SSOs	50%	Medium
	East of I-5, from around 18th Street to 32nd Street	Commercial	Decomposing materials	10%	Low
	Jurisdictional	Various	Decomposing materials	40%	Low

Table 11.2
BMP Selection
Fiscal Year 2006/2007

Constituent	Geographic Area	Potential High Priority Source	Potential Activities	Potential BMPs
Sediment	Jurisdictional: residential areas	Landscaping, vacant lots	Soil erosion	Street sweeping, erosion control, sediment control/perimeter protection
	Industrial and commercial zones	Landscaping, parking lots	Soil erosion	Street sweeping, erosion control, sediment control/perimeter protection
	Jurisdictional: construction sites	Construction activities	Soil erosion, sediment tracking	Erosion control, sediment control, inlet protection, tire wash, dewatering properly, structural BMPs
	Slopes around shopping centers, streets without designed curbs, canyons	Slopes	Soil erosion	Street sweeping, erosion control, maintaining vegetation on slopes, sediment control/perimeter protection
Fertilizers (Nitrate, Phosphate)	Jurisdictional: residential areas	Landscaping	Fertilizer application, over irrigation	Minimize use of fertilizers, keep chemicals in a covered storage, irrigation control
	Jurisdictional: industrial/commercial	Landscaping	Fertilizer application, over irrigation	Minimize use of fertilizers, keep chemicals in a covered storage, irrigation control
	City parks	Landscaping	Fertilizer application, over irrigation	Minimize use of fertilizers, keep chemicals in a covered storage, irrigation control
Bacteria	North and south of Division Street, east and west of I-805	Waste management	Dumping, SSOs, littering	Maintain private sewer laterals and public sewer system, education and enforcement for illegal dumping and littering, street sweeping and MS4 maintenance
	South Bay Plaza	Dumping, restaurants	Dumping, illegal discharges, improper grease bin maintenance	Keep grease bin clean, cover/contain grease bins, use only dry cleaning methods or retain and dispose of wash water properly, post signs discouraging illegal dumping

Table 11.2 (Continued)
BMP Selection
Fiscal Year 2006/2007

Constituent	Geographic Area	Potential High Priority Source	Potential Activities	Potential BMPs
	Jurisdictional	Wildlife waste, animal waste, SSOs, decomposing organic material	Dumping, littering, improper pet waste disposal	Collecting and removing waste for proper disposal, maintain private sewer laterals and public sewer system, education and enforcement for illegal dumping and littering, street sweeping and MS4 maintenance
Oil and Grease	Jurisdictional	Roads, parking lots, vehicle maintenance, improper storage	Oil change, leaks, spills	Spill prevention and control, conduct maintenance in covered areas
Metals	Western National City, along I-5	Industrial sites	Outdoor storage and processing	Coverage and containment, regular sweeping, potential use of treatment control devices, berm work areas, conduct activities indoors
	Commercial zones, including area east of I-5 around Civic Center Dr.	Automotive Shops	Auto repair, painting, and cleaning; outdoor storage	Spill prevention and control, regular sweeping, conduct activities indoors, coverage and containment
	Jurisdictional	Parking Lots, Streets	Regular wear of automotive parts, atmospheric deposition	Street sweeping, MS4 cleaning
Organics (Surfactants)	North and south of Division Street, east and west of I-805; area east of I-805	Washing activities	Washing vehicles, driveways, and other areas	Capture and properly dispose of water, minimize use of soaps, direct runoff to landscaping, minimize water use
	East of I-5, from around 18th Street to 32nd Street	Car washing	Washing vehicles	Wash vehicles in designated areas that drain to sewer, or capture and properly dispose of wash water

Table 11.2 (Continued)
BMP Selection
Fiscal Year 2006/2007

Constituent	Geographic Area	Potential High Priority Source	Potential Activities	Potential BMPs
Pesticides	Jurisdictional	Landscaping	Pesticide application, over irrigation	Use pesticides in accordance with directions, store in covered and contained area, control irrigation
Gross pollutants (Trash, Debris)	North and south of Division Street, east and west of I-805; area east of I-805	Dumping, litter	Dumping, litter	Education and enforcement for illegal dumping and littering, street sweeping and MS4 maintenance
	Commercial complexes	Dumping, litter	Dumping, litter	Post signs discouraging illegal dumping, education and enforcement for illegal dumping and littering, street sweeping and MS4 maintenance
	Jurisdictional	Litter	Litter	Education and enforcement for littering, street sweeping and MS4 maintenance
	Alleyways	Dumping	Dumping	Post signs discouraging illegal dumping, education and enforcement for illegal dumping
	Schools	Litter	Litter	Education for illegal dumping, regular litter cleanup
	Parks	Litter	Litter	Post signs discouraging littering, education and enforcement for littering, regular litter cleanup
Ammonia	North and south of Division Street, east and west of I-805; area east of I-805	Decomposing materials, SSOs	Dumping, improper landscape maintenance, SSOs	Street sweeping, MS4 maintenance, sanitary sewer system maintenance, proper disposal of landscaping waste, education and enforcement for illegal dumping
	East of I-5, from around 18th Street to 32nd Street	Decomposing materials	Dumping, improper landscape maintenance	Street sweeping, MS4 maintenance, proper disposal of landscaping waste, education and enforcement for illegal dumping

Table 11.2 (Continued)
BMP Selection
Fiscal Year 2006/2007

Constituent	Geographic Area	Potential High Priority Source	Potential Activities	Potential BMPs
	Jurisdictional	Decomposing materials, landscaping	Improper landscape maintenance, decay of natural vegetation	Street sweeping, MS4 maintenance, proper disposal of landscaping waste proper use of fertilizers, irrigation control

Table 11.3
Targeted Outcomes
Fiscal Year 2006/2007

Permit Section	Activity / Source Type	Targeted Outcome	Actual	Measures of Success	
				Actual / Target	%
F.1 Land Use	**Development Projects**	**# sites needing SUSMP** 12	**# sites subjected to SUSMP** 12	12 / 12	100%
F.2 Construction	**High Priority Sites**	**# sites targeted for inspection** 3	**# sites inspected** 3	3 / 3	100%
	Medium Priority Sites	**# sites targeted for inspection** 14	**# sites inspected** 14	14 / 14	100%
	Low Priority Sites	**# sites targeted for inspection** 72	**# sites inspected** 72	72 / 72	100%
F.3.a Municipal	**High Priority Facilities**	**# facilities targeted for inspection** 6	**# facilities inspected** 6	6 / 6	100%
	Medium Priority Facilities	**# facilities targeted for inspection** 6	**# facilities inspected** 6	6 / 6	100%
	Low Priority Facilities	**# facilities targeted for inspection** 8	**# facilities inspected** 8	8 / 8	100%
	MS4 Channel Maintenance	**Estimated quantity of material targeted for removal from MS4** 100 (CY)	**Quantity of material removed from MS4** 416.57 (CY)	416.57 / 100	417%
	Storm Drains	22,000 (lbs)	23,200 (lbs)	23,200 / 22,000	105%
	Streets, Parking Lots	**Estimated quantity of material to be prevented from entering MS4 (Tons)** 1,000	**Quantity of material prevented from entering MS4 (Tons)** 1,300	1,300 / 1,000	130%

Table 11.3
Targeted Outcomes
Fiscal Year 2006/2007

Permit Section	Activity / Source Type	Targeted Outcome	Actual	Measures of Success	
				Actual / Target	%
F.3.b Industrial	Industrial Sites	Total targeted # for inspections 27	# of inspections conducted 29	29 / 27	107%
F.3.c Commercial	High Priority Sites	# sites targeted for inspection 10	# of inspections conducted 10	10 / 10	100%
F.3.d Residential	Household Hazardous Materials	Quantity of waste targeted for collection (lbs.)	Quantity of waste collected (lbs.)		
		–	–	Available information not specific to National City.	
F.4 Education	Outreach (External)	# targeted workshops, outreach events 5	# training workshops, outreach events conducted 5	5 / 5	100%
	Staff Training	# targeted training events 6	# training events conducted 6	6 / 6	100%
F.5 IC/ID	Dry Weather Sampling	# locations targeted for monitoring 15	# locations monitored 15	15 / 15	100%
	Illicit connections	# identified 5	# eliminated or on a compliance schedule 5	5 / 5	100%
	Illegal discharges	# identified 64	# eliminated or on a compliance schedule 64	64 / 64	100%
	Complaints / referrals	# received (justified)	# resolved or on a compliance schedule		

Table 11.3
Targeted Outcomes
Fiscal Year 2006/2007

Permit Section	Activity / Source Type	Targeted Outcome	Actual	Measures of Success	
				Actual / Target	%
		143	143	143 / 143	100%
F.6 Public Participation	Opportunities for participation	Estimated # of events to be provided 4	# of events provided 6	6 / 4	150%

Table 11.4
Inspections of Industrial Businesses During the Current Permit Cycle

San Diego Bay Watershed*

Priority	Facilities	Facilities Inspected	Number of Inspections	Total Facilities Inspected
High Industrial	23	23	112	100%
Medium Industrial	133	132	161	99%
Low Industrial	143	135	195	94%
Totals	**299**	**290**	**468**	**97%**

*All of National City lies within the San Diego Bay Watershed

Table 11.5
Inspections of Commercial Businesses During the Current Permit Cycle

San Diego Bay Watershed

Commercial Category:	Inventoried Facilities	Facilities Inspected	Number of Inspections	Total Facilities Inspected
Auto Repair	99	94	169	95%
Auto Cleaning	10	10	14	100%
Equipment Repair	36	32	37	89%
Auto Paint/Body	23	23	31	100%
Vehicle Parking Lots or Storage	66	65	86	98%
Fueling	13	13	38	100%
Pest Control	4	4	5	100%
Eating or Drinking Places	187	176	230	94%
Bakery	23	22	23	96%
Mobile Food Services	2	0	0	N/A
Mobile Carpet Cleaning	3	2	2	67%
Landscaping	2	2	3	100%
Recreation	4	3	5	75%
Other: Miscellaneous	28	27	32	96%
Other: Power Washers	5	5	5	100%
Other: Auto Supply Stores	28	26	29	93%
Other: Grocery Stores	37	37	40	100%
Other: Building Supply Stores	1	1	1	100%
Other: Animal-related	1	1	1	100%
Other: Retail Stores	10	8	11	80%
Other: Dry Cleaners/Laundry	4	4	4	100%
Totals	**586**	**555**	**766**	**95%**

Figure 11.2
National City Land Use

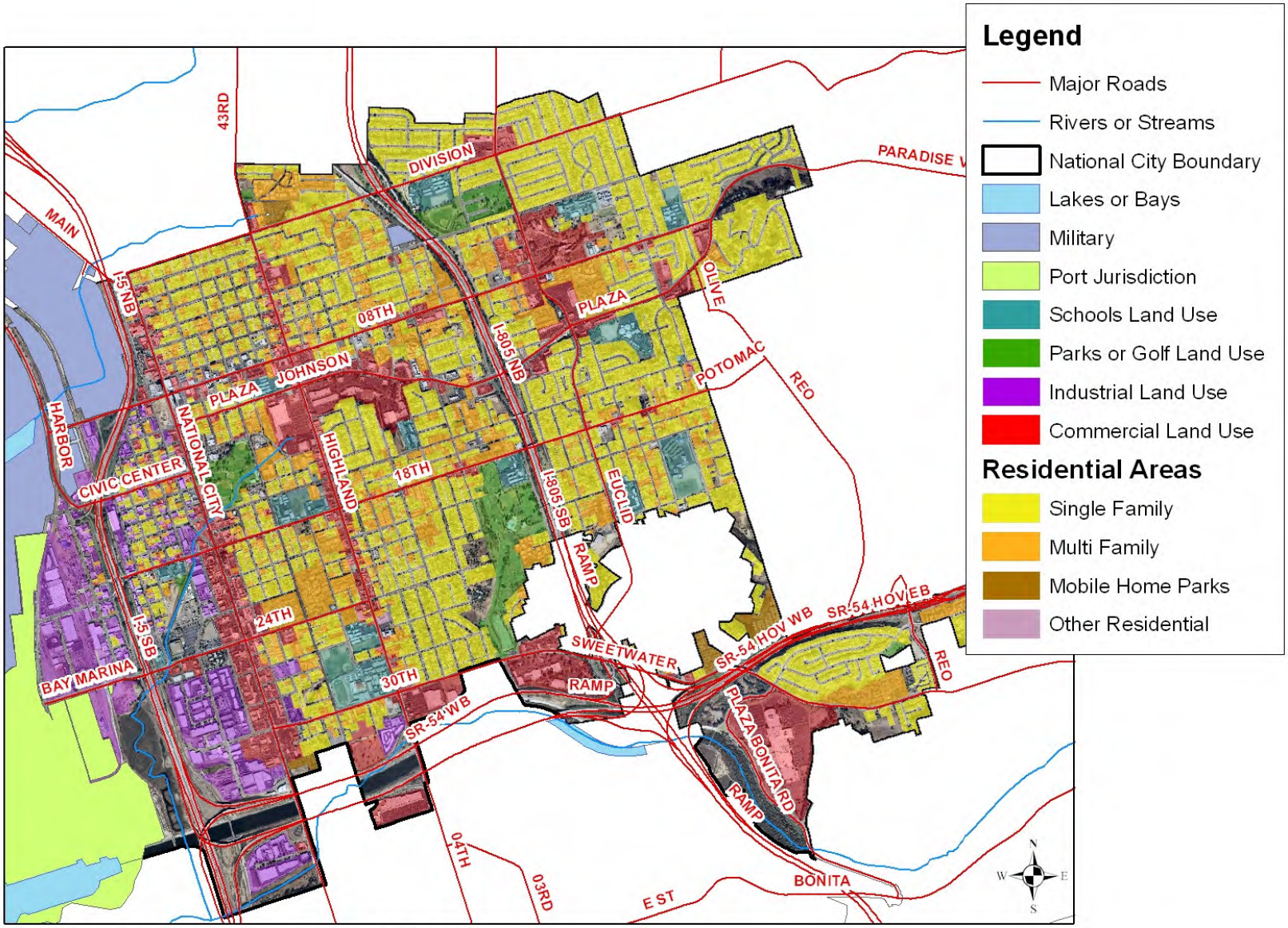

Base Data Sources: USGS, SanGIS, SANDAG

Figure 11.3
BMP and Knowledge Assessment Scores

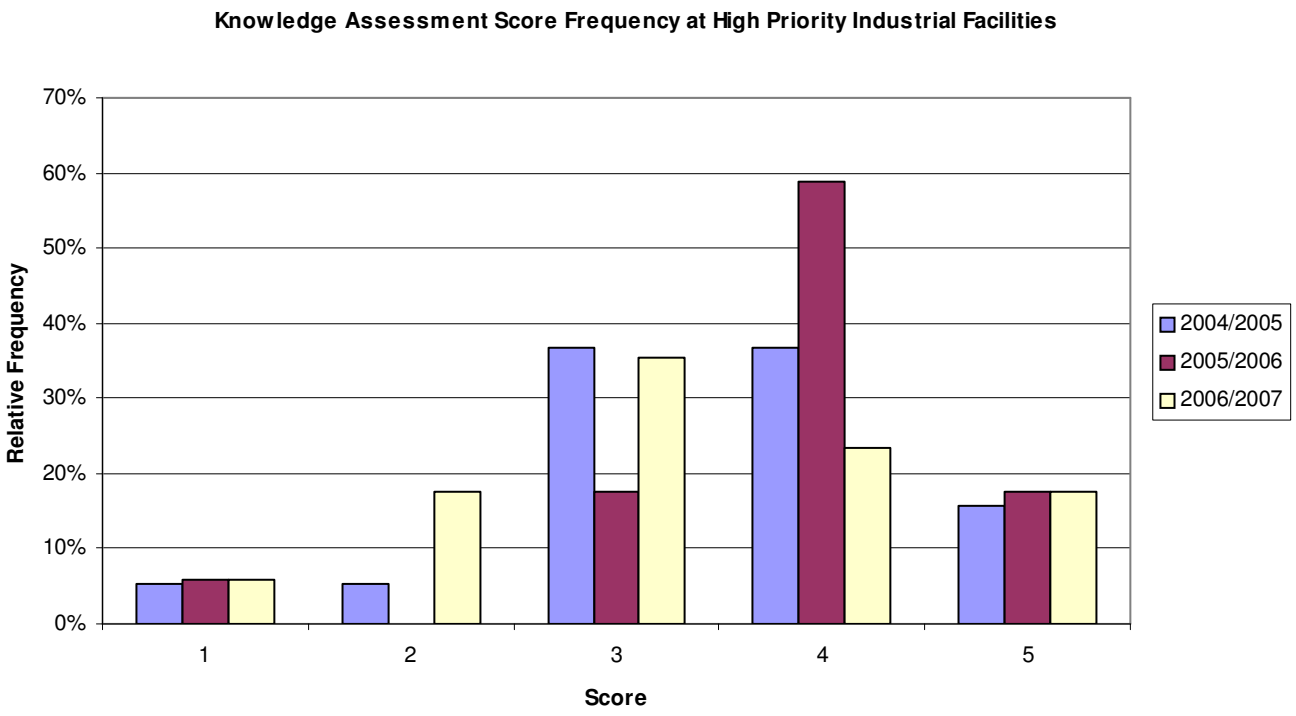

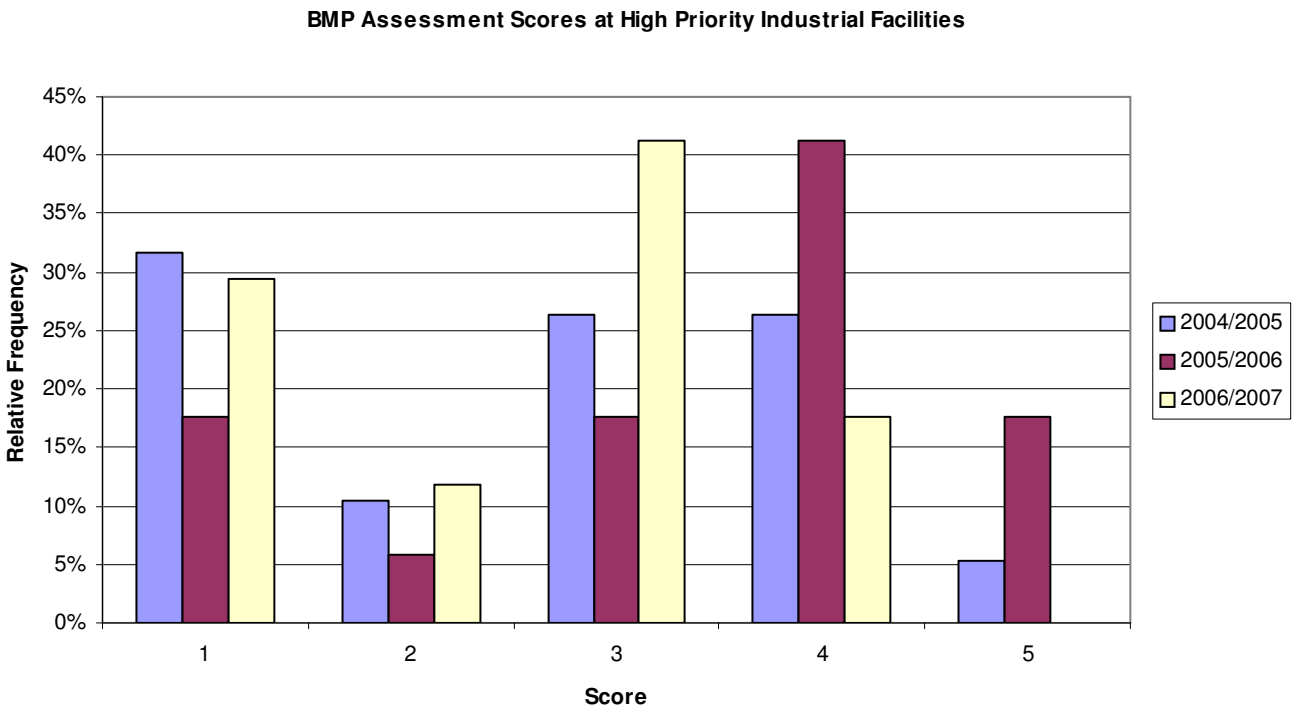

Figure 11.4
Historical Dry Weather Monitoring Data

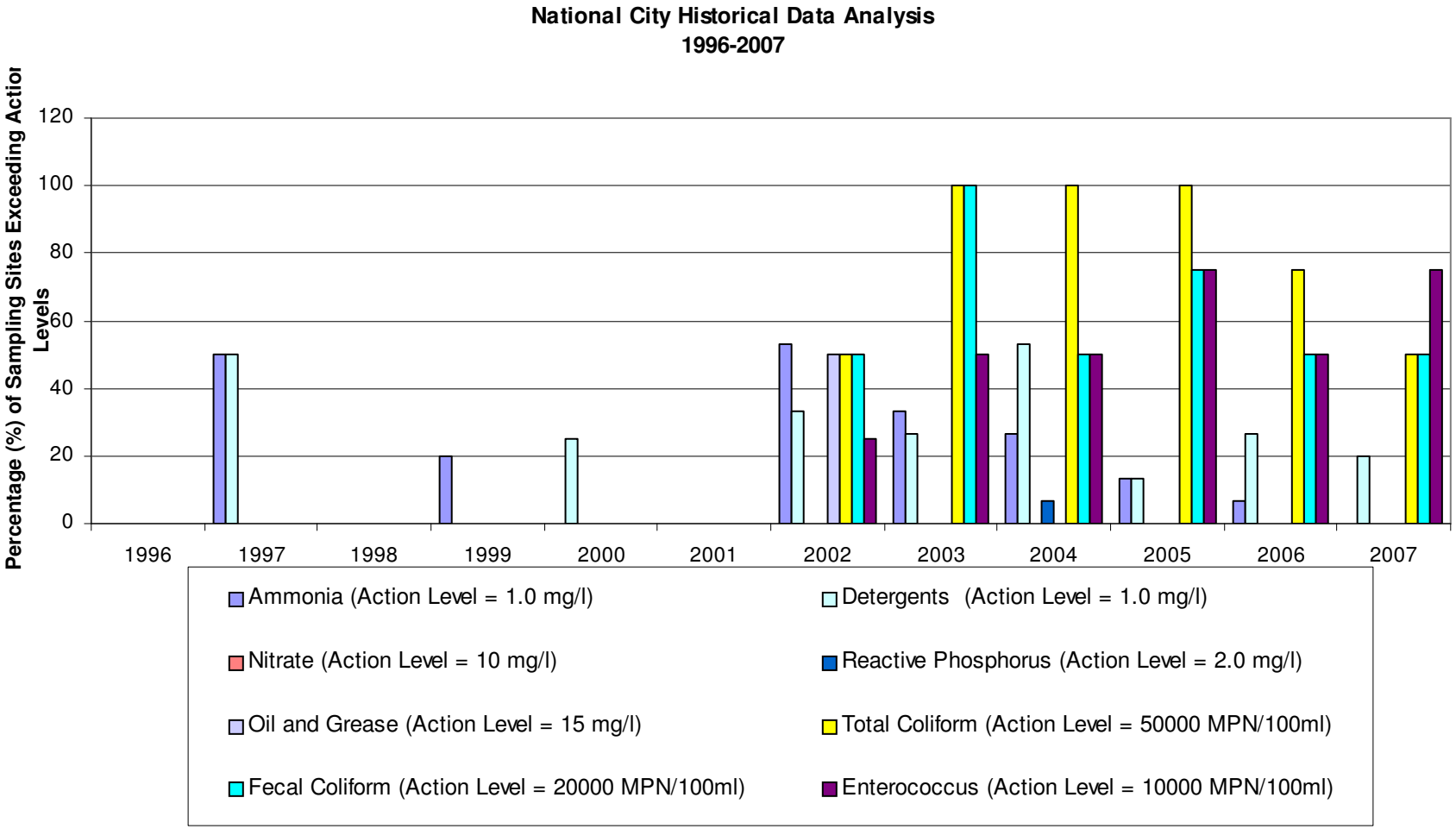

Figure 11.5
Historical Dry Weather Monitoring Data: Ammonia and Detergents

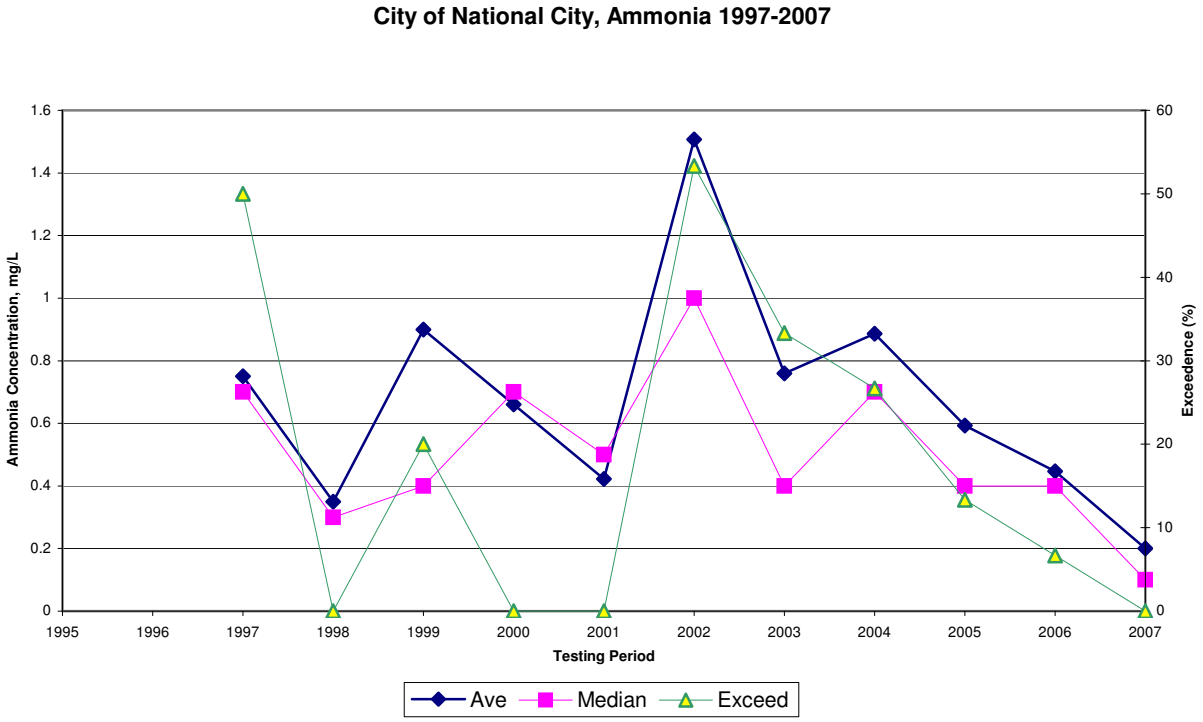

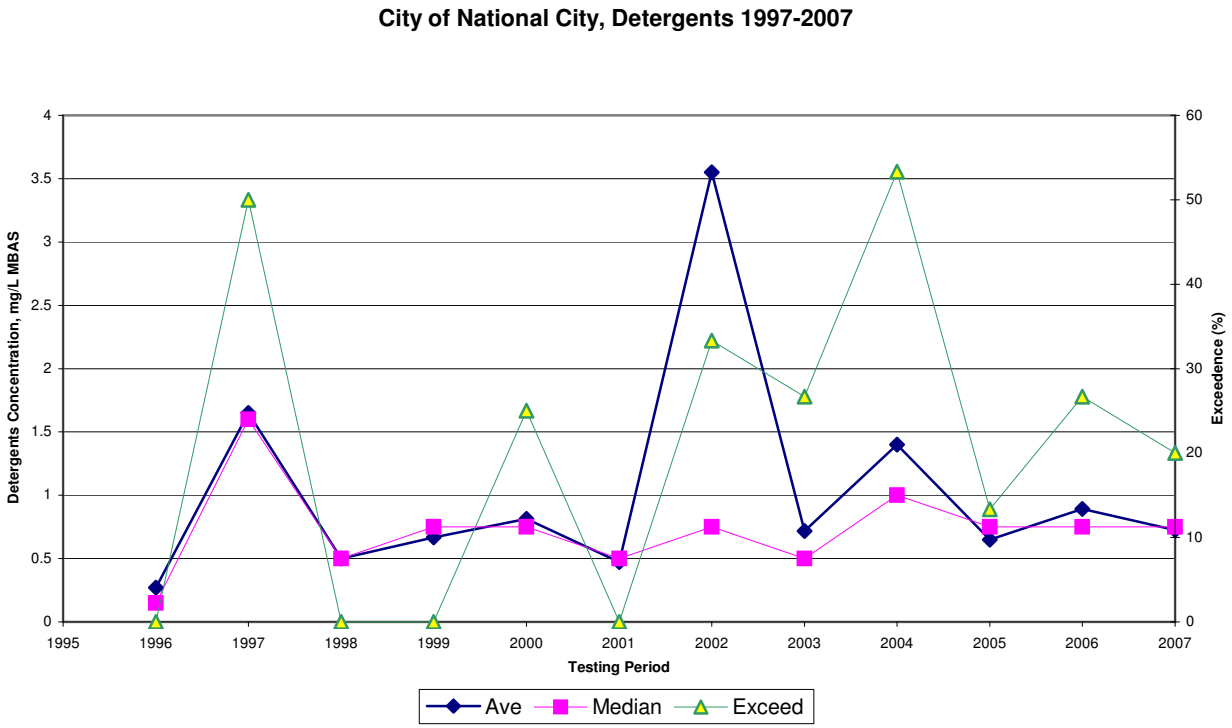

Note: Ammonia testing began in 1997, while detergents testing began in 1996.

12 FISCAL ANALYSIS

The City of National City's storm water program budget and expenditures consists of the following components:

- Staff
- Storm Water Operating Budget
- Drainage Capital Improvement Projects

City staff from different departments and divisions contribute to the implementation of the storm water program as follows:

- The Storm Water Management Team is responsible for the development and implementation of storm water programs, inspection of municipal, industrial, commercial, residential and construction sites, and responding to violations of the Municipal Storm Water Management and Discharge Control Ordinance.
- The Engineering Department is responsible for the majority of the NPDES program. The department reviews grading applications for compliance with the erosion control and other engineering ordinances, including that temporary and permanent BMPs are incorporated in the grading, proposed, and final maps. The Engineering Department is also responsible for reviewing SUSMP reports and construction SWPPPs.
- The Public Works operations crew is responsible for the maintenance of the City's storm drainage system and the sanitary sewer collection system. They are also responsible for emergency response to sewage overflows and pollutant spills on public streets. The Public Works operations crew also manages the street sweeping program and the Used Oil Recycling Program, the Household Hazardous Waste Collection Program, the Solid Waste Collection Program, the Solid Waste Reduction and Recycling Program, and the Energy Conservation Program.
- The Planning Department reviews development projects for environmental impacts to sensitive areas and requires developers to provide mitigation plans before permits are issued.
- The City Attorney's Office reviews all documents such as new ordinances and manuals and forms developed by the Storm Water Management Section, to ensure that they are in compliance with current laws and regulations. The City Attorney's Office also assists the Storm Water Management Section in the enforcement of the City's Municipal Code.

The City's storm water program is funded by sewer fees assessed for property owners or tenants of single family homes, multi-family buildings and commercial/industrial facilities, General Funds, the gas tax, community development block grant (CDBG) funds, zoning and CIP funds. No changes to the sources of funding for this program have been made during this reporting period. The implementation cost of the FY 06/07 program was $939,500. The proposed estimated budget for the FY 07/08 program implementation is $936,000. Table 12.1 presents an itemized breakdown of the program costs.

Table 12.1
Itemized Budget

Storm Water Program Fiscal Analysis	FY 06/07	FY 07/08
Staff		
Public Works	160,000	160,000
Planning	40,000	50,000
City Attorney	10,000	10,000
Building	30,000	20,000
Fire	10,000	10,000
Engineering	80,000	90,000
Community Development Center (CDC)	40,000	30,000
Sub-total	***$370,000***	***$370,000***
Operation Expenditures		
NPDES Fees	35,000	35,000
Consultant Fees for NPDES Program	200,000	200,000
Purchase Equipment	1,000	1,000
Miscellaneous Operations	5,000	5,000
Sub-total	***$241,000***	***$241,000***
CIP Appropriations		
Curb and Gutter	6,500	*
Alley Apron	7,000	*
X-Gutter	15,000	*
Drainage Improvements	300,000	325,000
Sub-total	***$328,500***	***$325,000***
Total	**$939,500**	**$936,000**
Additional Special Project Funding		
Paradise Creek Improvements	300,000	Complete
Sewer Pump Stations Rehabilitation Project	--	765,700
Grand Total	**$1,239,500**	**$1,701,700**

* Included in drainage improvements category for 2007/2008 reporting year

13 SPECIAL INVESTIGATIONS

The City takes a proactive approach to storm water management in an attempt to not only protect receiving water quality, but also to improve the quality of water that is discharged from the City's MS4 system. Data collected through the City's various monitoring and inspection programs is used to identify locations within the City that are contributing to storm water contamination. Source identification investigations are then initiated in order to pinpoint the exact cause of detected pollution.

Trash Assessment Project

During the City's 2006 Dry Weather Monitoring Program, conducted in September of that year, litter accumulation and illegally dumped objects were noted at some of the test sites. Since trash and illegally dumped items have the potential to negatively affect the quality of water discharged from the City's MS4, such as increasing the level of pollutants such as bacteria, oil and grease, and metals, the City contracted its storm water consultant, D-MAX, to perform a thorough trash assessment throughout the City. The trash assessment was a proactive measure to identify sources of trash within the City's jurisdiction to allow the City to focus future cleanup and education program.

During October and November of 2006, a D-MAX inspector drove the length of every street and alley within the City limits looking for areas of moderate to very heavy trash. Information such as location address, date and time of visit, trash amount, and trash type was recorded at each site noted to have at least moderate amounts of trash present. For the purpose of this assessment, different trash levels were recorded based on the field staff's visual estimates. The categories of different trash types were the following:

- Litter: paper, plastic bags, plastic bottles, glass, aluminum cans, etc.
- Household: household items such as small and large appliances, stereos, couches, mattresses, etc.
- Construction: wood scraps, drywall, rebar, etc.
- Large items: large items not obviously associated with household use, such as tires and shopping carts, etc.
- Yard waste: grass clippings, branches from tree trimming, etc.
- Hazardous waste: items generally considered hazardous and requiring special disposal, such as used oil, paint, or car batteries.

Results from the City's trash assessment show that litter and illegally dumped items tend to accumulate in places out of sight from the main roads within the City, such as alleys and channels. These areas also tend to be poorly lit, making it difficult to catch violators. Dumpster areas located in alleys in residential and commercial areas were a common area of litter and trash overflow. Larger trash such as mattresses, couches, and tires were also observed in alleys. While litter was found in a number of alleys within the City, these areas are typically located some distance away from storm drains, and household items such as furniture have low potential of transport from these areas into the MS4. Out of all the sites evaluated for the trash assessment, only one commercial location was found to have

hazardous waste present. Litter and large trash items were also observed in some channel locations.

In response to the trash assessment findings, the City's Public Works department cleaned City channels with observed trash accumulation. Courtesy notices discussing the negative impact litter and illegal dumping can have on receiving waters and contacts for trash and large item disposal were sent out to residents and businesses in specific areas of the City found to have multiple locations with moderate or higher levels of trash. The City has also formed a new trash management workgroup to further control trash within the City. The workgroup consists of representatives from the City Manager's office, Community Services Department, Public Works Department, and the Engineering Division. Collectively, these branches of the City are involved in a variety of programs involved with trash management including trash removals from channels, the City's storm water program, and community outreach. Together the workgroup is developing different approaches to managing trash within the City. The City plans on continuing efforts to address trash and debris during the 2007/2008 reporting period.

14 CONCLUSIONS AND RECOMMENDATIONS

The City has implemented its storm water program in accordance with Municipal Permit requirements since 2002. RWQCB Order No. 2007-0001, a revised municipal storm water permit, was issued on January 24, 2007. During the 2006/2007 reporting period the City began adjusting its program in anticipation of the new requirements of this permit and continued to refine programs already required under the existing Municipal Permit. During 2007/2008, the City will transition into implementing the requirements of the new permit. Additionally, the City will continue to work with other jurisdictions in the Paleta Creek watershed and the RWQCB to address TMDL requirements. The City will continue to refine implementation of existing programs and create new programs as needed to improve its ability to reduce or eliminate pollutant discharge and meet regulatory requirements. The City also plans to collaborate with other Copermittees to develop new programs, further refine existing programs, and develop methods for which program effectiveness may more accurately be assessed.

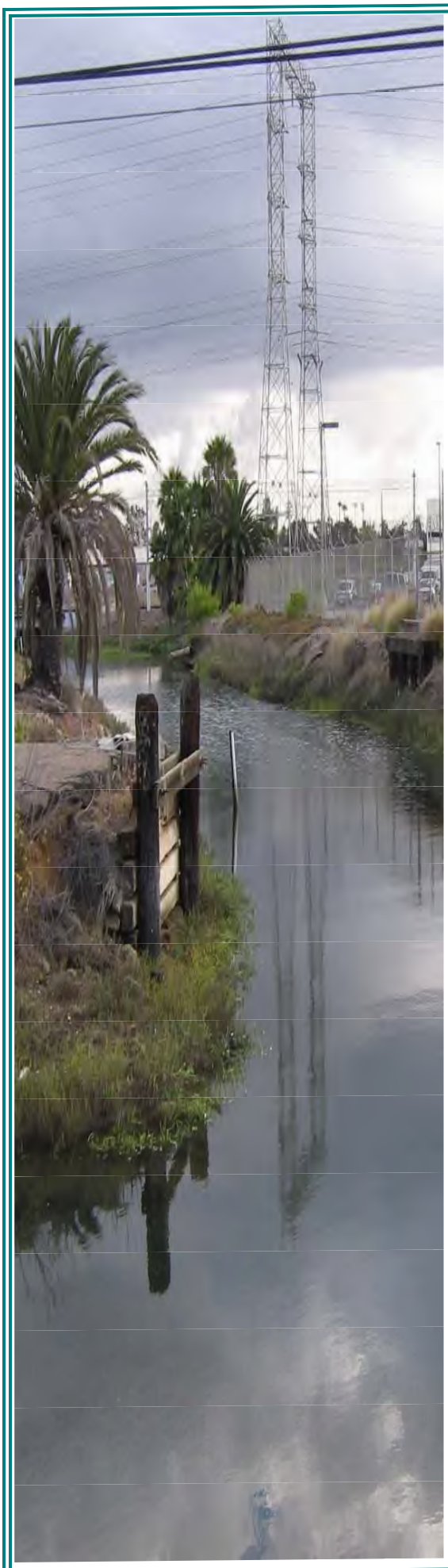

CITY OF NATIONAL CITY

2007/2008 JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

SEPTEMBER 2008

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

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ACRONYMS AND ABBREVIATIONS

Acronym	Abbreviation
°C	Degrees Celsius
303(d) List	2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
BMP Manual	The City of National City Storm Water Best Management Practices Manual
CASQA	California Stormwater Quality Association
CIP	Capital Improvement Project
CIWMB	California Integrated Waste Management Board
CIWQS	California Integrated Water Quality Management System
City	City of National City
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CMC	Criteria Maximum Concentration
CMP	Corrugated Metal Pipe
CTR	California Toxics Rule
CWA	Clean Water Act/Federal Water Pollution Control Act
D-MAX	D-MAX Engineering, Inc.
DEH	County of San Diego Department of Environmental Health
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FOG	Fats, Oils, and Grease
General Construction Permit	State of California Construction General Permit
GIS	Geographic Information System
gpm	Gallons Per Minute
HA	Hydrologic Area
HDPE	High Density Polyethylene
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HOA	Home Owners' Association
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illicit Discharge
IHC	Interim Hydromodification Criteria
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
LID	Low Impact Development
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable
mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) Per 100 Milliliters
MS4	Municipal Separate Storm Sewer System
mS/cm	MilliSiemens Per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
nt	Not Tested
NTC	Notice to Comply
NTU	Nephelometric Turbidity Unit
PDPA	Pollutant Discharge Potential Assessment
Priority Project	Priority Development Project
PW	Public Works
RCP	Reinforced Concrete Pipe
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Government
SIC	Standard Industrial Classification
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 14.22 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TSS	Total Suspended Solids
TTWQ	Threat to Water Quality
WDID	Waste Discharge Identification Number
WQO	Basin Plan Water Quality Objectives
WQTR	Water Quality Technical Report
WURMP	Watershed Urban Runoff Management Program
µg/L	Micrograms Per Liter

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Maryam Babaki, P.E.
City Engineer

Date: September 2008

Telephone Number: (619) 667-1105

EXECUTIVE SUMMARY

The City of National City (City) has been actively developing and implementing storm water pollution prevention measures since 1990. The City's Jurisdictional Urban Runoff Management Program (JURMP) was updated and submitted to the San Diego Regional Water Quality Control Board (RWQCB) in March 2008. The JURMP update was required by the recently re-issued storm water permit, RWQCB Order No. R9-2007-0001 (Municipal Permit). The Municipal Permit was jointly issued to 18 municipalities in San Diego County, including the City, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (collectively referred to as "Copermittees").

The City's JURMP includes Best Management Practice (BMP) standards for businesses, construction and development projects, residents, and the City's own activities. The JURMP also includes programs for water quality monitoring and educational outreach.

This JURMP Annual Report presents the City's activities to implement its JURMP during the 2007/2008 fiscal year, which began on July 1, 2007 and ended on June 30, 2008. The exception to this is the illicit discharge detection and elimination component of the JURMP, which per the recently adopted Addendum No. 2 to the Municipal Permit now has a reporting period that extends to September 30, 2008, three months later than all the other components of the JURMP.

Two different storm water permits were in effect during 2007/2008 reporting period: the previous permit issued to the Copermittees, Order No. 2001-01, and the current Municipal Permit. The City was required to implement its newly updated JURMP to comply with the Municipal Permit no later than March 24, 2008, but the City began implementing some aspects of the new program prior to this deadline. Each section of this JURMP Annual Report discusses how the City's efforts during 2007/2008 met the requirements of the applicable permit and when the requirements of the new Municipal Permit were implemented. Key actions taken for the major components of the City's storm water program are summarized below.

Development Planning Component

During 2007/2008, the City continued to oversee development activities occurring in the City to mitigate potential threats to water quality due to such activities. The City developed a treatment control BMP operation and maintenance verification program, which included the development of an electronic treatment control BMP database, an inspection program, and an annual maintenance verification program. The City inspected 13 sites with approved treatment control BMPs. The City also updated its BMP requirements for all development projects to include Low Impact Development (LID) principles.

Construction Component

During 2007/2008, a total of 88 construction inspections were completed at 78 sites, not including inspections for building permits, which also include a brief check for storm water BMPs. The City updated minimum construction requirements to include a maximum disturbed area limitation and guidelines for advanced treatment. The City's plan check and inspection program required projects to comply with the City's minimum BMP requirements.

Municipal Component

The City inspected all high TTWQ municipal fixed facilities and continued its rigorous street sweeping and MS4 maintenance programs. A total of 1,151 tons of trash and debris was removed from street sweeping activities, and 39.6 tons of debris were removed from standard MS4 maintenance. An additional 10 pounds of debris was removed from the cleaning of filter inserts installed at the City's Public Works Yard. The City also continued to maintain and repair or replace sanitary sewer lines, as needed, to decrease the potential for a sanitary sewer overflow (SSO).

Industrial and Commercial Component

During 2007/2008 the City met the Municipal Permit requirement to inspect at least 20 percent of the City's industrial and commercial inventory, including at least 50 percent of its high threat to water quality (TTWQ) sites. During the inspections conducted during 2007/2008, the City notified industrial and commercial businesses of the City's new BMP requirements through the City's inspection program. Inspectors also assessed each facility's compliance with the General Industrial Permit (Industrial Permit) and worked with the RWQCB to resolve compliance issues. The City also initiated a special additional data collection program focused on pollutant discharge potential assessment.

Residential Component

The City worked to educate its residents through a variety of means. The City continued to collaborate with the cities of Chula Vista and Imperial Beach to make a household hazardous waste (HHW) disposal facility available to the public. During 2007/2008 the City hosted two large item waste disposal events and encouraged residents to participate in these events. The City also responded to calls made to the City storm water hotline regarding residential areas. The hotline call investigations were used as opportunities to enforce BMP requirements and to educate residents.

Illicit Discharge Detection and Elimination Component

As required by RWQCB Addendum No. 2 to the Municipal Permit, adopted on September 10, 2008, the reporting period for this component of the JURMP has been extended to September 30, 2008. The City will submit the details of how it implemented the illicit discharge detection and elimination component of its JURMP to the RWQCB no later than December 15, 2008.

Education Component

As a means to raise storm water awareness in various communities in the City, the City continued to conduct various education and outreach activities throughout 2007/2008.

The City hosted two training sessions: one was for members of the Kiwanis Club of National City; the other was geared toward the development planning and construction community. Similar to previous years, the City developed a bilingual 2008 storm water program calendar, which presented storm water concepts as well as photos of ocean scenes. To better serve the City's diverse population, a variety of educational materials were distributed in Spanish as well as English.

Public Participation Component

During 2007/2008, the City provided a variety of opportunities for individuals in the City to participate in the City's storm water program. Activities included cleanup events, which have a direct effect on water quality, and outreach activities, through which the City works to increase general knowledge and awareness regarding storm water issues. Most notably, the City hosted a themed art contest for third grade students at public schools in the City. Students submitted drawings with the "By Keeping our Community Clean, We Can Keep the Ocean Clean" theme; 12 winners will be chosen, and their drawings will be included on the 2009 storm water program calendar. A variety of waste disposal events were held for City residents, and 45 volunteers participated in the Creek to Bay Cleanup at the site in the City of National City.

Fiscal Analysis Component

The City continued to fund its storm water program as discussed in the City's JURMP. Itemized expenditures for 2007/2008 and estimated expenditures for 2008/2009 are presented in this section.

Effectiveness Assessment Component

The City updated its effectiveness assessment approach to comply with new Municipal Permit requirements. The City has identified significant activities within each program component and metrics to assess each one. Standard tables to report this information have been created and included in Section 11 of this JURMP Annual Report. The City also has continued to work with the regional Fiscal, Reporting, and Assessment Workgroup to help develop and implement the latest assessment methods.

Special Investigations

The City continued its Clean Community Program, which includes education and will include assessment of new trash monitoring results from the 2008 Dry Weather Monitoring Program. The City also assessed pollutant discharge potential of industrial and commercial businesses; sediment, trash, and oil and grease had the highest average pollutant discharge potential scores.

Conclusions and Recommendations

The City began implementing its newly updated March 2008 JURMP toward the end of 2007/2008. The City will continue to implement the new and updated programs in its JURMP during 2008/2009; it is anticipated that some program refinements will be made as implementation progresses. The City will also collaborate with the other Copermittees to improve the efficiency of its program and to develop updated methods of assessing program effectiveness.

1.0 INTRODUCTION

1.1 BACKGROUND

This Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report presents a summary of the activities of the City of National City (City) during the 2007/2008 fiscal year. Preparation and submittal of the JURMP Annual Report is required by San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit).

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act (also known as the Clean Water Act, or CWA) established a framework for regulating MS4 discharges under the National Pollutant Discharge Elimination System (NPDES). The RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region in 1990, followed by a revised permit in 2001. The current Municipal Permit in turn replaced the 2001 permit, RWQCB Order No. 2001-01, in 2007.

Like all the other regulated municipalities in the San Diego region, collectively referred to as Copermittees, the City developed and submitted a JURMP to the RWQCB in 2002. As required by the Municipal Permit, the City submitted an updated JURMP in March 2008. The JURMP includes management measures for a variety of different sectors and activity types such as municipal, industrial, commercial, construction, and significant development and re-development activities.

Annual reports on the implementation of the JURMP are required to be submitted to the RWQCB September 30 of each year. This JURMP Annual Report presents information from the 2007/2008 fiscal year, which extended from July 1, 2007 to June 30, 2008.

1.1.2 CITY SETTING

The City of National City is located in southwest San Diego County, and is bordered by San Diego, Chula Vista, and unincorporated portions of San Diego County. The City itself includes approximately nine square miles and an estimated population of approximately 55,000. Land use within the City is mixed, with residential being the predominate land use. Land use categories with the corresponding percentage of the total area are included in Table 1-1, below, and illustrated in Figure 1-1.

Table 1-1
City of National City Land Use Breakdown

Land Use	Total Area (Acres)	Percentage
Single Family Residential	1,216	30%
Transportation	1,149	29%
Commercial	490	12%
Industrial	251	6%
Multi-Family Residential	215	5%
Open	202	5%
Public Facilities and Utilities	174	4%
Vacant	115	3%
Parks	114	3%
Other Residential	41	1%
Office	22	1%
Water	20	<1%
Construction	6	<1%
Recreation	2	<1%
Total	**4,016**	**100%**

Source: 2007 SANDAG land-use data

The City of National City lies entirely within the San Diego Bay Watershed. The City is located within two sub-watersheds: the Sweetwater and Pueblo San Diego sub-watersheds. Overall, the City of National City comprises approximately 1.6 percent of the total area of the San Diego Bay Watershed. Much of the southern portion of the City drains to the Sweetwater River, which ultimately terminates in San Diego Bay. The central portion of the City drains to Paradise Creek, a small salt marsh creek, which eventually discharges into the Sweetwater River. La Paleta Creek (also known as 7th Street Channel) drains the northern portion of the City and discharges directly to San Diego Bay. A very small western portion of the City drains directly to San Diego Bay shoreline. Virtually all of the areas of the City that drain directly to San Diego Bay are within the jurisdiction of the San Diego Unified Port District. Watersheds in the City are shown in Figure 1-2.

San Diego Bay, as a whole, is listed in the 2006 CWA Section 303(d) for polychlorinated biphenyls (PCB) based on fish tissues studies in recent years. The San Diego Bay shoreline at 7th Street Channel and at the 24th Street Marine Terminal are listed in the 2006 CWA Section 303(d) for benthic community effects and sediment toxicity. A TMDL is in progress for the mouth of 7th Street Channel. Because Sweetwater Marsh is part of a national wildlife refuge, it is considered an ESA. Paradise Creek is also considered an ESA by the City.

Figure 1-1
City of National City Land Use

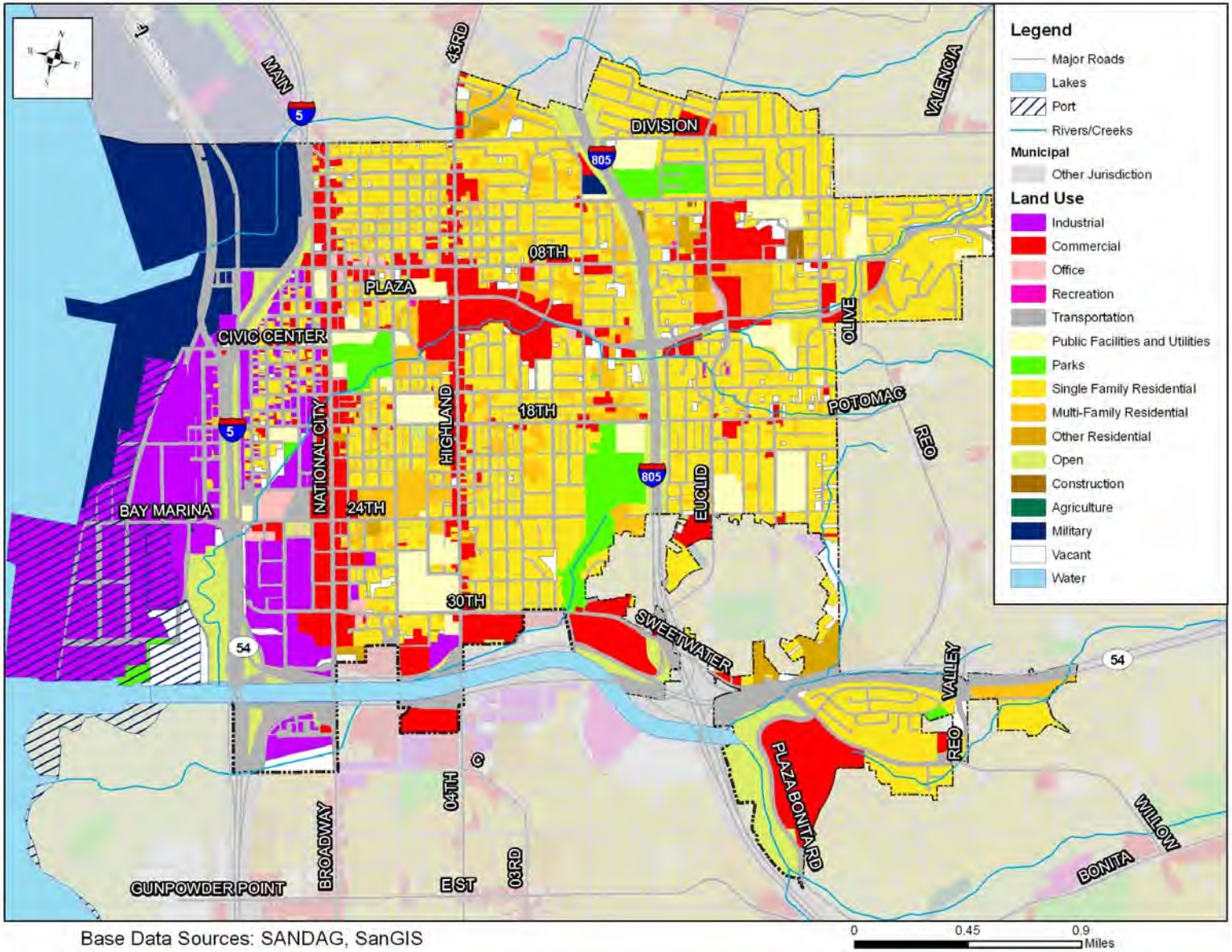

Figure 1-2
City of National City Watersheds

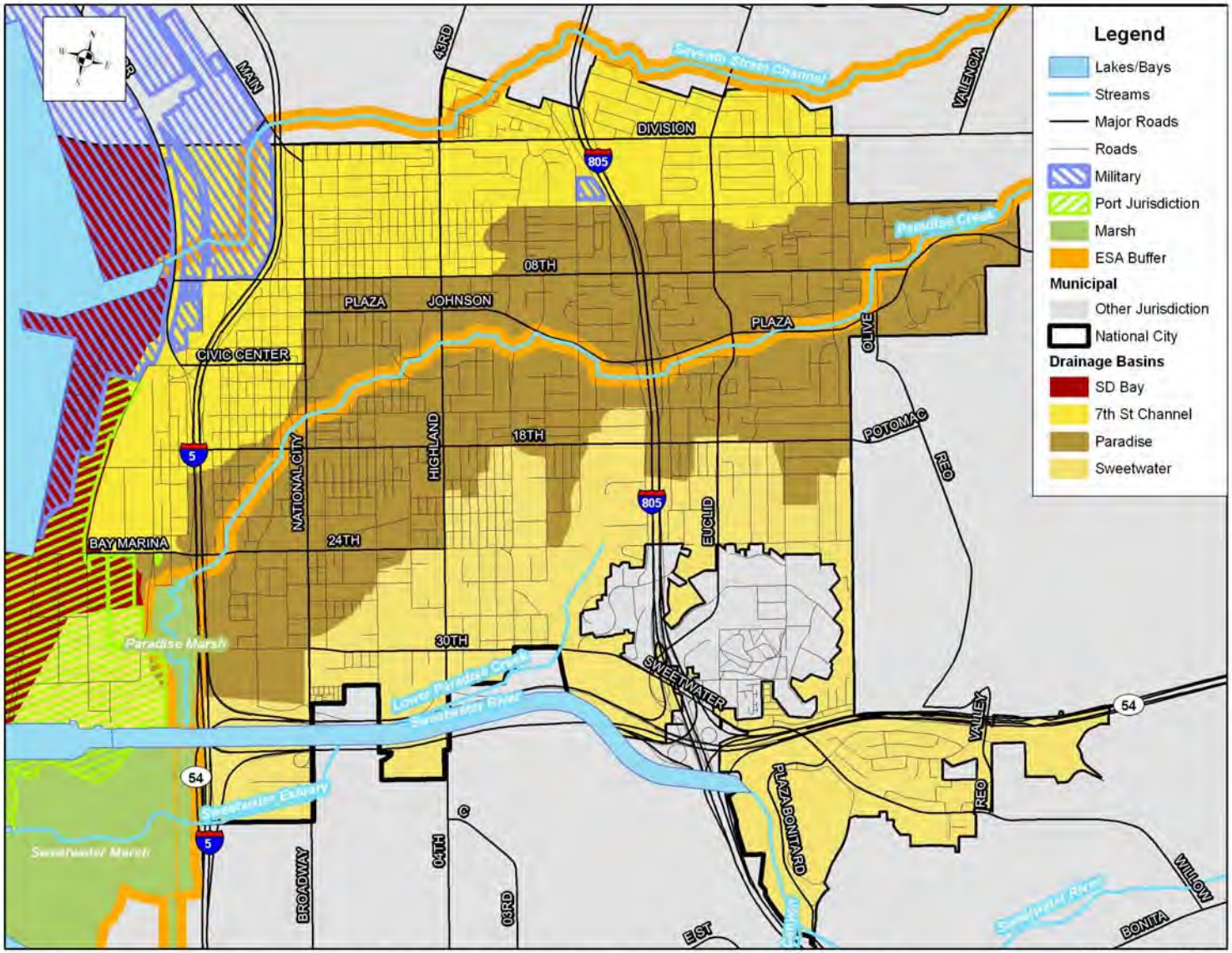

Note: Marsh boundaries based on land use data from SANDAG. The portion of the marsh west of I-5 and south of the Sweetwater River is not in the City's Jurisdiction. Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

1.2 PURPOSE AND OBJECTIVES

The City's JURMP presents a strategy to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The JURMP includes a variety of programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the City's implementation of its JURMP during the 2007/2008 reporting period.

1.3 REPORT ORGANIZATION

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning Component**
Section 3	**Construction Component**
Section 4	**Municipal Component**
Section 5	**Industrial and Commercial Component**
Section 6	**Residential Component**
Section 7	**Illicit Discharge Detection and Elimination Component**
Section 8	**Education Component**
Section 9	**Public Participation Component**
Section 10	**Fiscal Analysis Component**
Section 11	**Effectiveness Assessment Component**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all the sections required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a clearer explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Subsection 1.1, Background, has been divided into subsections 1.1.1, Regulatory Background, and 1.1.2, City Setting, for the sake of clarity.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of pollutants from development projects to the MEP and managing increases in runoff from development projects that have the potential to negatively affect downstream water bodies. During the 2007/2008 fiscal year, the City accomplished these goals through implementation of its JURMP document.

The City updated its JURMP during the reporting period and began implementing new Municipal Permit requirements for development planning on March 24, 2008. For the most part, the overall structure of the City's processes used to require post-construction BMPs of development projects remained similar throughout the reporting period. The most significant changes to the City's program apply to the implementation of the City's development project approval and verification process. For example, the City's SUSMP requirements were updated to include Low Impact Development (LID) and hydromodification concepts, and the City began a treatment control BMP inspection program and a BMP maintenance verification program.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- Updated the City's Standard Urban Storm Water Mitigation Plan (SUSMP) Ordinance, including addition of new Priority Development Project (Priority Project) categories required by the Municipal Permit.
- Updated the City's NPDES Project Applicability Form to reflect changes made to the City's updated JURMP, and distributed updated checklist starting late March 2008.
- Updated minimum BMP requirements for all development projects, including addition of Low Impact Development (LID) principles.
- Collaborated with the Copermittee hydromodification management workgroup to discuss key Hydromodification Management Plan (HMP) development issues.
- Developed an electronic SUSMP database that contains information related to all proposed site design, source control, and treatment control BMPs within the City's jurisdiction, and the parties responsible for BMP maintenance.
- Developed a treatment control BMP operation and maintenance verification program, which included the development of a treatment control BMP database,

a City-conducted inspection program, and an annual maintenance verification program.

- Conducted operation and maintenance inspections of site design, source control, and treatment control BMPs at 13 completed development projects throughout the City.
- Conducted trainings for City staff and developed educational materials for the development community regarding new Municipal Permit requirements related to development projects.

2.2 Land Use Planning

2.2.1 Background

The City's General Plan was adopted in 1996 and contains water quality and watershed protection principles in its Natural Settings Element. The comprehensive principles established in 1996 provide an ample framework for implementing the requirements of both the old permit and the new Municipal Permit, and no changes to these policies were necessary during the reporting period.

2.2.2 Source Characterization

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts to the surrounding environment. No changes to development restrictions in the City's General Plan for storm water purposes were implemented during the reporting period.

2.2.3 Best Management Practice Requirements

Please refer to the City's updated JURMP document for a list of the water protection policies included in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 Program Implementation

The City implemented its water protection-related land use policies during the reporting period mainly through the City's Municipal Code. During this time, the City's Storm Water Ordinance and Standard Urban Storm Water Mitigation Plan (SUSMP) Ordinance were updated to meet new Municipal Permit requirements. Descriptions of the changes made, as well as complete copies of the amended documents, can be found in the City's updated JURMP. Implementation of these new development requirements began on March 24, 2008. Prior to that date, the City implemented the Storm Water and SUSMP Ordinance as detailed in the 2006/2007 JURMP Annual Report.

Details on how the City implemented its established water protection policies through its environmental review process and its development project approval and verification

processes during the reporting period are provided in Sections 2.3 and 2.4 of this JURMP Annual Report document.

2.3 Environmental Review Process

The City's current environmental review process is detailed in the City's updated JURMP. While changes to specific requirements of the City's environmental review process were made during the reporting period as part of the JURMP update, the overall structure of the review process, such as the City's departments involved and the document submissions required, remains the same as in previous reporting years. No further modifications to the City's environmental review process have been made since the submittal of the updated JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

As previously discussed, the development project approval and verification process implemented prior to March was identical to the process described in the 2006/2007 JURMP Annual Report. The approval and verification process implemented after March 24, 2008 followed the process described in the City's updated JURMP.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's SUSMP Ordinance. Prior to March 2008, the SUSMP Ordinance included in the City's 2004 JURMP Revision document was used by the City and the development community, while the updated SUSMP Ordinance, revised as part of the JURMP update, was implemented starting in late March 2008. Details on changes to the City's SUSMP Ordinance, such as the addition of retail gas outlets (RGO) and industrial development as Priority Project categories, can be found in Section 4 of the updated JURMP.

2.4.3 Best Management Practice Requirements

No changes were made to the development BMP requirements presented in the 2006/2007 JURMP Annual Report prior to March 2008. The City's new BMP requirements, implemented after March 2008, are similar to the requirements prior to that date, with a few exceptions. In some cases, the new BMPs were already being required by the City, but the update provided an opportunity for the language in the JURMP to be strengthened for clarity. For example, the LID BMP requirements added to the City's SUSMP Ordinance are similar to site design concepts that were already required in the original SUSMP Ordinance developed in 2002 in compliance with the previous Municipal Permit. The City's SUSMP was only changed to stress the

importance of a few of these design principles, such as draining runoff from impervious surfaces to adjacent landscaping. Similarly, the City had already begun requiring project proponents to include justification whenever a treatment control BMP that did not have a high or medium removal efficiency for key pollutants was associated with the project. The new SUSMP Ordinance provided more explicit language in support of this requirement. All changes to BMP requirements made during the reporting period are detailed in the City's updated JURMP.

2.4.4 Program Implementation

During the 2007/2008 fiscal year, the City required implementation of its BMP requirements for all development projects through education, a comprehensive development project approval process, and a new treatment control BMP inspection and maintenance verification program.

2.4.4.1 Outreach and Staff Training

The City continually trains staff involved in the planning and review of development projects within the City and works closely with the development community to communicate its development requirements throughout the entire approval process. During the reporting period, staff and industry training was focused on changes being made to the City's JURMP in response to new Municipal Permit requirements. Details on trainings conducted and educational materials developed and distributed related to the new development during the reporting period can be found in Section 8 of this JURMP Annual Report document. Distribution of maintenance verification letters to parties responsible for maintenance of treatment control BMPs at completed projects, which began in August 2008, is also expected to increase the level of knowledge of regulated parties.

2.4.4.2 Urban Runoff Approval Process for Development Projects

All development projects that required City permits were required to undergo the City's urban runoff approval process as detailed in the City's JURMP. Forms completed by project applicants are kept with the project's file at the City for future reference. As discussed in the City's JURMP, the City required all projects applying for construction and building permits to complete a "National Pollutant Discharge Elimination System (NPDES) Project Applicability Form" (SUSMP Checklist) that guides project applicants to submit proper documents to the City for review. Prior to March 2008, the City distributed the SUSMP Checklist included in the City's 2006/2007 JURMP Annual Report. Starting in March 2008, the City began distributing an updated version of the SUSMP Checklist that included changes necessary to comply with the new Municipal Permit requirements. A copy of the updated SUSMP Checklist was included in the City's updated JURMP.

Starting in March 2008, certain non-priority development projects were required to complete a Standard Permanent Storm Water BMPs form, which was included as an Attachment to the City's updated JURMP document. This form includes a list of all standard permanent storm water BMPs required by the City's SUSMP and requires project proponents to indentify which BMPs will be implemented at the development. Note that the standard permanent storm water BMPs do not include treatment control BMPs. If any BMP is not selected, the project proponent must provide an explanation why the BMP is not applicable or feasible for the project. These completed forms are kept with the project's file at the City.

In preparation of the new BMP requirements going into effect during the middle of the reporting period, all development projects that submitted documents to the City for review were educated on upcoming changes to the City's SUSMP requirements. The City also held a workshop for the development community covering the City's updated requirements. Details on this workshop can be found in Section 8 of this Annual Report.

All development projects determined to be Priority Projects after completing the SUSMP Checklist were required to implement the City's SUSMP requirements and prepare a Storm Water Management Plan (SWMP). As part of the JURMP update, the City also developed a SWMP self checklist to be used by SWMP preparer, which was included as an attachment to the updated JURMP. In the past, the majority of deficiencies found in document reviews were missing information or sections not having enough detail about proposed BMPs. The self checklist provides a more detailed resource for project proponents to use when writing the SWMP, and the City hopes that the guidelines will reduce the number of document reviews required for development projects before they are approved. Table 2-1 lists the development projects subject to the City's SUSMP requirements during the 2007/2008 reporting period, the number of document reviews for each project, and their current approval statuses.

Table 2-1
Development Projects Subject to SUSMP Requirements During 2007/2008

#	Project Name	Location	Project Type	Number of Reviews during 07/08	Approved during 07/08?
1	940 W. 19th St.	940 W. 19th St.	Priority	2	Yes
2	Canyon Ridge (Resubmission)	Corner of Rachel Ave and Blueridge St.	Priority	2	Yes
3	Carolino Hillside Homes	NE Corner of 16th St. and M Ave.	Priority	3	Yes
4	Centro Condominiums	East side of the A Ave. extension between 11th St. and 12th St.	Priority	2	No
5	Grove Plaza	Grove St. and Plaza Blvd.	Priority	2	Yes
6	Harbor View Condos	SE Corner of 8th St and D Ave.	Priority	3	No

#	Project Name	Location	Project Type	Number of Reviews during 07/08	Approved during 07/08?
7	Hilltop View Homes	3000 8th St.	Priority	4	Yes
8	K Avenue Homes	K Ave., North of 13th St.	Priority	2	Yes
9	Marina Gateway	Marina Way, south of Bay Marina Dr.	Priority	3	Yes
10	Paradise Village	Area bounded by 4th St., 8th St., Arcadia Ave., and Bowron St.	Priority	3	Yes
11	Paradise Walk	Arcadia Ave and E. 8th St	Priority	3	Yes
12	Plaza Bonita Mall Expansion	3030 Plaza Bonita Rd.	Priority	2	Yes
13	Plaza Village	Corner of L Ave. and Plaza Blvd.	Priority	1	Yes
14	WestAir Gases	Haffley Ave. north of Bay Marina Dr.	Priority	2	Yes

Canyon Ridge went through multiple SUSMP reviews during the 2005/2006 reporting period and was found to meet the City's minimum BMP requirements late in that reporting year. Early in the 2007/2008 reporting period, changes were proposed to the project's treatment control BMPs during the site's construction. The City required the project to submit a revised SWMP with the proposed changes to the City for review before the changes were implemented at the site. The City requires that if a change to the proposed BMPs is made during construction that the substitute be comparable to the original in its efficiency and capacity to treat storm water runoff from the development. The resubmitted SWMP went through 2 reviews before the proposed changes met the City's minimum requirements.

K Avenue Homes and Plaza Bonita Mall Expansion are two additional projects that received initial approval early in the 2007/2008 reporting period and later resubmitted their SWMPs to include changes made to the proposed BMPs during construction. For Plaza Bonita, the change included the addition of a new store and restaurant in the mall's existing parking lot, which extended the footprint of the original project. The proposed site design, source control, and treatment control BMPs proposed for this additional area in the revised SWMP were found to meet the City's minimum requirements. For K Avenue Homes, changes were made to the design of the proposed grass filter strips on the property, with the new design resulting in an increase in treatment area.

Two Priority Projects, Grove Plaza and 940 W. 19th Street, were approved after March 24, 2008. Of these two projects, only Grove Plaza had approved treatment control BMPs with a low removal efficiency ranking approved (two hydrodynamic separators). Note that while the City approved this low removal efficiency BMP, the City worked closely

with the project to incorporate LID principles into the project's design throughout the review process. Flow-through planter boxes and grass swales have been proposed to treat roof and sidewalk runoff from the project. Also, instead of using conventional asphalt for the entire parking lot, the project has proposed to use pervious concrete in the parking stalls, limiting asphalt to only the drive isles. This design reduces the amount of impervious paving on the site by 48 percent. However, the proposed LID features could not be designed to meet the SUSMP's treatment control BMP sizing requirements. While the City believes that the combination of LID and treatment control BMPs for this project will provide storm water treatment to the maximum extent practicable, the City still required the project to prepare a feasibility analysis stating why the other treatment control BMPs in the City's SUSMP could not be used for the project. A copy of the project's feasibility analysis is included as Attachment 4.1 to this annual report.

During the reporting period, no projects received a SUSMP waiver for implementation of treatment control BMPs. The City has never issued a SUSMP waiver in the past, and at this time the City has no plans to develop a SUSMP waiver mitigation program.

Hydromodification Management Plan

During the reporting period the Copermittee hydromodification management workgroup met regularly to discuss key HMP development issues and provide updates on the status of consultant work products. The City of National City regularly participated in the hydromodification management workgroup during 2007/2008. Note that in the summer of 2008 the workgroup name was officially changed to the Land Development Workgroup.

The City's current SUSMP Ordinance contains detailed Interim Hydromodification Criteria (IHC) which the City will continue to implement until the HMP is finalized. None of the development projects undergoing the City's review process during the reporting period were subject to the IHC since all of these projects are less than 50 acres. Final HMP requirements have not yet been established by the Land Development Workgroup. Once the HMP is developed and approved by the Regional Board, the City will incorporate the HMP into its SUSMP Ordinance.

BMP Installation Verification

Both the Plaza Bonita Mall Expansion and Plaza City Apartments SUSMP projects were completed during the 2007/2008 reporting period. For these projects, City inspectors verified and documented that the proposed BMPs were installed according to the project's plans during routine plan checks, prior to granting occupancy for the site. Both projects have been finaled and added to the City's treatment control BMP inventory included in Appendix A. These projects have also been assigned a TTWQ priority using the prioritization flow chart presented in the City's JURMP. Operation and maintenance inspections for the installed BMPs will be performed as required for these projects during future reporting periods.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

The City's treatment control BMP inspection program did not go into effect until March 24, 2008, significantly after the start of the 2007/2008 wet season, which began on October 1, 2007. Therefore, the City did not have the opportunity to inspect the high TTWQ development projects included on its inventory prior to the start of the wet season during the reporting period. However, inspections were conducted for projects with treatment control BMPs during the 2007/2008 fiscal year after March 24, 2008 in compliance with the minimum inspection frequencies outlined in the City's updated JURMP. Only three completed SUSMP projects on the City's 2007/2008 inventory were not inspected during the reporting period. These sites have been categorized as either medium or low TTWQ, and they will still be required to submit an annual maintenance verification form documenting proper maintenance of their BMPs prior to October 1, 2008.

The site-specific inspection forms generated using the City's electronic BMP database to perform BMP inspections at the individual project sites were used. GPS coordinates and narrative location descriptions for many of the BMPs included in the City's inventory were collected during previous reporting periods are stored into the City's electronic BMP database. This location information is automatically printed on the project's customized inspection form and allows the inspector to locate BMPs efficiently without needing to carry cumbersome project plan sheets to the inspection site. While not explicitly required by the Municipal Permit, the City also examined structural site design and source control BMPs during each site visit. Table 2-2 lists the 13 development projects inspected during the reporting period, the percentage of BMPs at the site that were properly installed and maintained, and brief description of inspection findings. Public Priority Projects, known as Capital Improvement Projects (CIP) are marked as such in the table. The BMP types installed at these sites and the sites' TTWQ priorities are included in the City's treatment control BMP inventory, which is included in Appendix A.1 of this JURMP Annual Report.

Table 2-2
Summary of Treatment Control BMP Inspection Results

#	Project Name	Inspection Notes
1	Bonita Creek	Only site design/source control BMPs observed at the site.
2	Estrella Walk	CDS unit operational and well maintained.
3	Jack in the Box	All drainage inserts observed had moderate to high levels of trash and debris.
4	Mariposa Walk	Only site design/source control BMPs observed at the site.
5	National City Batch Plant	Wet ponds on site were operational and well maintained.

#	Project Name	Inspection Notes
6	National City Fire Station #34 (CIP)	All BMPs operational and well maintained.
7	Paradise Creek Park (CIP)	Only site design/source control BMPs observed at the site.
8	Penske Truck Leasing	All drainage inserts observed had moderate to high levels of trash and debris.
9	Plaza Village	No maintenance deficiencies noted.
10	Sweetwater Town & Country Mall	All drainage inserts observed had moderate to high level of trash and debris.
11	Tremont Court Condominiums	Grass filter strips and drainage inserts not observed. CDS unit operational and well-maintained.
12	Walgreens	All drainage inserts observed had moderate to high levels of trash and debris.
13	Wal-Mart	CDS unit contained significant trash and debris.

During routine inspections of SUSMP BMPs, the City discovered that some of the proposed BMPs were missing at Bonita Creek, Mariposa Walk, and Tremont Court. The City mailed letters requesting information about the status of all BMPs at the site, including BMPs that could not be located, to these sites early in the 2008/2009 reporting period. Depending on the results of the information returned from the projects and results of future site visits, the City will take additional enforcement action if necessary.

Two drainage insert were found to be missing during a routine SUSMP treatment control BMP inspection at Paradise Creek Educational Park, and the City will replace these BMPs.

Corrective actions were recommended for all development projects with BMPs observed in need of maintenance. Since inspections were conducted close to the end of the reporting period, follow-up actions were unable to be completed during the 2007/2008 fiscal year. The City did mail BMP operation and maintenance verification letters to all the inspected sites in early 2008/2009, and the City will continue to follow up with these sites during 2008/2009. No sites were observed to present a significant threat to human health or the environment during inspections, so none were reported to the RWQCB.

In addition to City-conducted maintenance inspections, the Municipal Permit requires annual verification of operation and maintenance of treatment control BMPs installed within the City's jurisdiction. Annual verification must be provided by the party responsible for treatment control BMP maintenance and must be returned to the City prior to the start of the wet season (October 1st). Since this portion of the City's program did not go into effect until March 2008, towards the end of the wet season, the City was not able to require annual maintenance verification of treatment control BMP maintenance prior to the 2007/2008 wet season, which began October 1, 2007. The City did, however, begin the process of obtaining annual BMP maintenance verifications for the 2008/2009 fiscal year.

A project-specific BMP maintenance verification form and introductory letter were developed during the 2007/2008 reporting period. Using the property owner names and addresses recorded in the City's BMP database, BMP maintenance verification forms were mailed to all the projects included in the City's BMP database in early 2008/2009. The template introductory letter and an example BMP maintenance verification form are included as Attachment 2.2 to this JURMP Annual Report. It is anticipated that this verification program will help raise the level of knowledge about storm water BMPs among the parties responsible for maintenance. The City will follow up with projects that do not return the annual maintenance verification forms or return incorrectly completed forms.

2.5 Development Planning Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 Program Review and Modification

The City's JURMP was recently updated in March 2008. No changes to the City's development planning component have been made since that time.

3.0 CONSTRUCTION

3.1 INTRODUCTION

The City began implementation of new Municipal Permit requirements related to construction activities on October 1, 2007. New inspection frequencies and minimum BMP requirements were implemented for the remainder of the fiscal year. As a result, the overall implementation of the City's construction program remained largely the same throughout the reporting period. The City made some additional modifications to improve its program in late March 2008 as part of its JURMP update. These changes included additions of requirements limiting maximum disturbed area and calling for the use of advanced treatment methods in certain instances. Some modifications to standard forms used in the construction program were also made.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- Distributed storm water requirements applicability checklists to all development projects in the City's jurisdiction.
- Conducted plan checks of erosion control plans and SWPPPs to ensure construction projects planned to comply with the City's minimum BMP requirements.
- Conducted training for applicable City staff regarding the construction requirements in the City's updated JURMP.
- Conducted 88 construction inspections at 78 sites per the frequency in the updated JURMP. During the wet season, high TTWQ sites were inspected bi-weekly, medium TTWQ sites monthly, and as needed for low TTWQ sites.
- Issued four verbal warnings, two administrative citations, and two stop work orders to construction sites in response to violations of the City's minimum BMP requirements.

3.2 SOURCE CHARACTERIZATION

An inventory of active construction projects during the reporting period is presented in Appendix A of this JURMP Annual Report document. The City's inventory was maintained throughout the reporting period by entering permit application forms into the City's inventory spreadsheet on a continuous basis. New construction projects were added to the inventory at the start of construction, and projects were removed from the inventory after construction was completed. Since construction projects were continually being added and removed throughout the fiscal year, inventory updates

were usually performed more frequently than the minimum once per month.

3.3 Updates to Ordinances and Approval Processes

The City updated its Grading Ordinance and its Storm Water Management and Discharge Control Ordinance during the reporting period as part of the City's JURMP update. Details on these revisions can be found in Section 5 of the City's updated JURMP. Details on any changes to the City's approval process during the reporting period are discussed in Section 3.5 of this document.

3.4 Best Management Practice Requirements

The City's updated construction and grading requirements are detailed in section 5.4 of the City's updated JURMP document. The City's updated BMP requirements were implemented starting in March 2008. The construction component of the updated JURMP is not significantly different than the construction element of the previous JURMP that was in effect prior to March 2008. The main differences are that the updated JURMP includes a provision that allows the City to require advanced treatment at sites that pose an exception threat to water quality and a provision that limits the maximum disturbed area to 17 acres unless special approval is obtained.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below.

3.5.1 Education and Staff Training

Education and staff training implemented during the 2007/2008 fiscal year focused on communicating changes made to the City's construction requirements to both City staff and the construction community. Please see Section 8 of this JURMP Annual Report document for details on trainings performed and educational materials distributed related to construction and grading activities.

3.5.2 Construction and Grading Approval Process

During the reporting period, City personnel verified that all construction projects planned to implement the City's minimum BMP requirements prior to issuing any building or grading permits. The City conducted its grading approval process as described thoroughly in Section 5 of the City's updated JURMP. The City requires grading construction projects to submit erosion control plans that indicate what BMPs are to be used at the site. These erosion control plans are reviewed by the City to ensure the site plans to meet the City's minimum construction BMP requirements. The City also reviews Storm Water Pollution Prevention Plans (SWPPPs) for sites greater than

one acre that are required to obtain coverage under the General Construction Permit. Approved forms and documents completed by project proponents are kept with each project's file at the City for reference. A Construction BMP fact sheet, known as the "Blue Sheet" within the City because the copies distributed are on blue paper, was also distributed with all construction permits issued (Attachment 3.1). Proper implementation of the minimum BMPs listed on the fact sheet was a condition of approval for all permits issued by the City during the 2007/2008 fiscal year.

During the report period the City began enforcing a 17 acre maximum of disturbed area for grading activities. During the reporting period, none of the City's active construction sites were larger than 17 acres, and the maximum disturbed area limitation did not apply. However, all construction sites were still required to limit exposed cleared or graded areas to the amount of area that could be protected prior to a rain event, as prescribed in the City's seasonal BMP requirements.

The City also began implementing advanced treatment requirements during the reporting period. Criteria for determining when advanced treatment is required are detailed in the City's updated JURMP. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites within the City's jurisdiction, and advanced treatment methods were not required at any construction sites.

3.5.3 Inspection of Construction Sites

Appendix A.2 of this JURMP Annual Report contains a list of construction projects that were active during the reporting period, along with their assigned TTWQ priorities, the number of weeks the site was active within the rainy season, the numbers of inspections conducted during the wet and dry seasons, the number of follow-up inspections and complaint investigations, and the total number of inspections for each site. In total, 88 construction inspections were performed for 78 construction sites, not including the building inspections at low priority sites, which also include a storm water component.

Construction inspections conducted during the reporting period were performed as described in the City's updated JURMP. Key components of the inspections include checks for coverage under the General Construction Permit during the initial inspection and assessments of compliance with the City's BMP and discharge requirements during all inspections. Responsible parties at the sites are educated as needed during inspections. Copies of the inspection forms are kept on file at the City. The City conducted inspections at high TTWQ construction sites bi-weekly during the wet season and monthly for medium TTWQ sites. Low TTWQ sites were inspected on an as needed basis. Typically, formal inspections were not conducted at low TTWQ sites unless a complaint was called into the City's storm water hotline. Building inspectors have been trained in the City's minimum construction BMP requirements and provided with additional oversight for low TTWQ construction sites that do not receive routine formal inspections. Any sites found to have problems with BMP implementation are forwarded to the City's Storm Water Compliance Inspector. During the reporting

period, 3 inspections of low TTWQ construction sites were conducted as complaint investigations. These sites are indicated on the City's inventory in Appendix A.2.

When any violations were noted during routine, follow-up, or complaint investigation inspections, these violations were noted on the project's inspection form, and the sites were given a list of corrective actions necessary to fix the observed violation. When necessary, appropriate enforcement actions were taken, and the City inspector followed up with the site until compliance was achieved. Details on the enforcement actions taken for construction sites during the implementation period are described below.

3.5.4 Enforcement Measures

Table 3-1 includes the number of violations and enforcement actions taken during the reporting period in response to violations of the City's minimum construction BMP requirements. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP.

Table 3-1
Total Number of Violations and Enforcement Actions Taken

Violations	Verbal Warnings	Written Warnings	Follow-Up Inspections	Administrative Citations	Stop Work Orders
13	4	0	2	2	2

During the reporting period, two construction projects were observed to have illegal discharges and were issued administrative citations. Additionally, two low TTWQ construction sites were issued Stop Work Orders when they failed to implement the City's minimum construction BMP requirements. In both cases, proper BMPs were implemented promptly and the Stop Work Orders were lifted. The City's updated JURMP commits to notifying the Regional Board within five working days of issuing a Stop Work Order and the City began implementing this new procedure on October 1, 2007. Since both Stop Work Orders were issued prior to October 1, 2007, the Regional Board was not notified in these instances. Further details regarding all enforcement actions taken during the reporting period can be found in Section 7 of this document.

None of the violations observed at construction sites during the reporting period were found to endanger human health or the environment. The City was able to address these violations through the City's established enforcement process, and it was not necessary to report any of these sites to the RWQCB.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was recently updated in March 2008. No changes to the City's construction component have been made since that time.

4.0 MUNICIPAL COMPONENT

4.1 INTRODUCTION

Throughout 2007/2008, the City of National City continued to manage municipal areas and activities to reduce discharges of pollutants to the MS4 to the MEP. As required by the Municipal Permit, the City updated its JURMP document in March 2008. Any changes made to the City's Municipal Component were implemented by the formal adoption date required by the Municipal Permit, March 24, 2008.

As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and activities. Public parks and recreation facilities, administrative buildings, fire stations, and public works facilities make up the bulk of the municipal areas in the City. Municipal activities conducted by the City include but are not limited to power washing, graffiti abatement, building maintenance, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. Information about the City's prioritized street sweeping program can be found in Table 4-1, and information about the City's MS4 maintenance program can be found in Table 4-2.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- The City inspected all high TTWQ fixed municipal facilities.
- The City removed a total of 1,151 tons of debris from street sweeping activities.
- The City removed a total of 39.6 tons of debris from standard MS4 cleaning activities, not including drainage insert maintenance. City personnel spent 826 man-hours completing this task.
- The City continued to maintain BioClean filter inserts in catch basins at the City's Public Works Yard. A total of 10 pounds of debris was removed from these filter inserts during 2007/2008.
- The City spent 1,500 man-hours maintaining 450,725 linear feet of sanitary sewer line.
- A total of 3,000 linear feet of sewer line was televised during 2007/2008, which led to the discovery of some areas of the sanitary sewer system in need of repair. The City replaced 500 linear feet of sewer line during 2007/2008. This prevented these areas from becoming future seepage points.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities. As mentioned in the City's JURMP, municipal fixed facilities have been grouped under one category, fixed facilities, because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar. For the purposes of organization, municipal fixed facilities are divided into the following categories: Parks and Recreational Facilities, Public Works Facilities, Fire Stations, and Other Fixed Facilities, which includes fixed facilities that could not be placed into another category.

4.2.2 SOURCE CHARACTERIZATION

All fixed facilities are included on the City's municipal inventory, which was revised during the JURMP update in early 2008. The JURMP includes detailed descriptions of each of the categories mentioned in the previous subsection and a discussion of activities beyond what is suggested by the facility's category or facility name. There were no changes to the City's municipal inventory nor were there any updates to the discussions of any fixed facilities on the City's inventory. The City's inventory is included as Appendix A.3.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City continues to implement and assess the effectiveness of BMPs at all fixed municipal facilities. As mentioned in the City's JURMP, the City uses the CASQA Municipal BMP Handbook to establish appropriate BMPs for fixed municipal facilities. Table 6-2 in the City's JURMP describes the CASQA fact sheets that are used for specific facility types.

The City continues to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. The BMP requirements have not been changed since the City's JURMP was updated in March 2008.

City public works employees, fire station employees, and employees at other fixed facilities in the City continue to implement BMPs appropriate to the facility type, as described in the City's JURMP. City fire response personnel continue to be trained in implementing BMPs for non-emergency fire fighting activities as described in Section 3 of the City's JURMP. There have been no changes in BMP requirements for public works facilities, fire stations, and other fixed facilities.

4.2.4 PROGRAM IMPLEMENTATION

As mentioned above, the City's BMP requirements have not changed since the development of the revised JURMP. Some notable examples of implementation of those BMPs are provided below.

Parks and Recreational Facilities
During 2007/2008, the City used six tons of fertilizer, 22 pounds of rose fertilizer, and 88 gallons of liquid herbicides. The rose fertilizer contains a pesticide component and is stored in limited quantities.

Public Works Facilities, Fire Stations, Other Fixed Facilities
As previously mentioned, City personnel continued to implement appropriate BMPs for municipal fixed facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance (i.e. landscaping, building maintenance, etc.) as necessary. Parking facilities associated with fixed municipal facilities were swept quarterly during 2007/2008, and the large paved areas at the City's Public Works Yard were swept weekly. Public Works employees continued to implement a SWPPP at the Public Works Yard. Public Works employees also continued to maintain the BioClean filter inserts on the property as needed.

Municipal Inspections
All high TTWQ fixed municipal facilities received an annual routine inspection in 2007/2008. An additional municipal inspection was conducted at a medium TTWQ fixed municipal facility, the George H. Waters Nutrition Center, to gain a better understanding of the type and extent of food preparation activities that take place there. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2007/2008. The City's municipal inspection form is included as Attachment 4.1.

Corrective actions recommended to the eight high TTWQ facilities were relatively minor. Table 4-3, at the end of the section, lists all inspections conducted at fixed municipal facilities in 2007/2008, the date the inspection was performed, and the recommended corrective actions from the inspections, as applicable. In addition to one annual inspection by other City personnel, public works personnel self inspect both the Public Works Yard East and Public Works Yard West weekly; street crew personnel inspect the Public Works Yard West and equipment maintenance crew inspect the Public Works Yard East. Inspection forms are completed and submitted to the City's Storm Water Compliance Inspector.

4.3 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.3.1 BACKGROUND

Roads, streets, highways, and parking facilities are often one of the first components of the City's MS4 to collect and convey runoff. These areas can collect a variety of

pollutants due to routine vehicle use and use of the surrounding areas. The City conducts regular maintenance of roads, streets, highways, and parking facilities in the City to control pollutants such as sediment, metals, and litter and debris, that may accumulate and then be discharged with runoff.

4.3.2 SOURCE CHARACTERIZATION

Roads, streets, and highways are included as one entity on the City's municipal inventory, which is included in Appendix A.3.

4.3.3 BEST MANAGEMENT PRACTICES

The City's primary BMP for roads, streets, highways, and parking facilities is street sweeping. Other BMPs are chosen as needed based on the CASQA Municipal Handbook. The City's sweeping frequency is outlined in the JURMP and described in the following subsection. There were no changes to the BMPs implemented for roads, streets, highways, and parking facilities in 2007/2008.

4.3.4 PROGRAM IMPLEMENTATION

During 2007/2008, the City swept a total of 15,500 curb miles, removing approximately 1,151 tons of debris. High priority streets in the City are swept at least every two weeks, and medium priority streets in the City are swept at least monthly. The City has not designated any streets in the City as low priority. The City does not maintain any stand-alone parking facilities that are not associated with municipal facilities. Parking facilities that are associated with municipal facilities are maintained and swept during regular maintenance activities at the respective municipal facility, and are considered part of the municipal facility on the inventory. Table 4-1, below, describes the areas assigned high and medium priorities, and the associated sweeping frequency. The table also includes the sweeping frequency for areas of fixed municipal facilities.

As a means to address priority pollutants in the San Diego Bay Watershed, the City conducted additional sweepings of the all streets in the City. High priority streets were swept daily during 2007/2008; Medium priority streets were swept every two weeks during 2007/2008.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
High	8th Street, National City Boulevard, Highland Avenue, Plaza Boulevard	11.8 miles	At least every two weeks
Medium	All other streets in the City	98.2 miles	At least once per month
Fixed Facilities	Parking lots associated with municipal fixed facilities	N/A*	Quarterly

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
Fixed Facilities - Parks	Parking lots associated with parks	N/A*	Every two weeks
Fixed Facilities – PW Yard	Public Works Operation Center	N/A*	Weekly
Total Amount of Debris Collected from Street Sweeping Activities: 1,151 tons			

* Mileage data is not available for the swept area of parking facilities associated with municipal facilities, and the PW Yard. Mileage accrued while sweeping these facilities is included in the total mileage.

4.4 MS4

4.4.1 Background

The City's extensive storm water conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during a rain event. The City's MS4 consists of approximately 19 miles of inlets, pipes of varying materials, natural channels, concrete channels, and culverts and 751 catch basins and inlets.

4.4.2 Source Characterization

The City's MS4 as one complete entity is included on the City's high TTWQ municipal inventory.

4.4.3 Best Management Practices

The City maintains a strict MS4 maintenance and cleaning schedule. Maintenance and cleaning are conducted to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. As described in the City's JURMP, BMPs for MS4 maintenance activities are chosen based on the CASQA Municipal Handbook and have not changed during 2007/2008.

4.4.4 Program Implementation

The City implemented a rigorous MS4 inspection and cleaning schedule during 2007/2008. The City continues to track municipal activities, such as MS4 channel cleaning, in a Microsoft Access database. The City inspected and cleaned all MS4 cleanout locations in 2007/2008, as described in Table 4-2, below.

Table 4-2
MS4 Maintenance Data

	Percent inspected and/or cleaned*	Percent of open channels found with anthropogenic litter	Amount of debris removed from cleaning activities
Catch Basins/Self Cleaning MS4 Facilities	100%	N/A	2,213 pounds
Open Channels	100%	100%	192.6 cubic yards
Drainage Inserts	100%	N/A	10 pounds
Total Debris Removed From MS4 Maintenance Activities: 39.6 tons**			

* No structures were observed at least 33% of capacity during the reporting period. However, the City cleans out any structures, including self-cleaning structures, in which trash and debris is observed at the time of inspection.

** 192.6 cubic yards of debris was removed during channel maintenance activities. The weight of the material removed was not recorded. Since trash the most common item removed from channel maintenance activities, a conversion factor of 400 pounds per cubic yard was used to estimate the total weight of the material removed.

The City's cleanout locations are access points to various sections in the City's MS4, so no additional pipe beyond the cleanout location is typically cleaned. The City will use the vactor truck to clean the MS4 line in the event of a spill. During 2007/2008, there were two spills for which some additional cleaning of the MS4 had to be conducted. More information about the spills that occurred in the City during 2007/2008 is included in Section 7 of this Annual report.

During 2007/2008, the City continued to inspect the open channels in the City and remove trash and debris as necessary by hand. If litter or debris is observed during the routine inspections, it is removed immediately. The total length of the channel segments inspected and cleaned by City staff is approximately 19,045 linear feet.

4.5 Sanitary Sewer System

4.5.1 Background

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. Routine inspection and maintenance of the sanitary sewer system works to reduce the potential for a spill or SSO and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 Source Characterization

The City maintains a system of public sanitary sewer pipes to convey wastewater from the City to be treated. The sanitary sewer system, as one complete entity, is included on the City's high TTWQ municipal inventory.

4.5.3 BEST MANAGEMENT PRACTICES

The City implements BMPs from the CASQA Municipal Handbook, as described in the City's JURMP, during sanitary sewer maintenance. There have been no changes to these BMPs during 2007/2008. The City inspects and maintains the sanitary sewer system as part of regular wastewater activities. The City clears blockages and repairs leaks as needed.

4.5.4 PROGRAM IMPLEMENTATION

The City has also worked to develop a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs. The City is continuing to develop this program; updates to the program will be included in future JURMP Annual Reports.

The City seeks to eliminate seepage from the sanitary sewer system to the MS4 by routine preventative maintenance of both systems. Routine maintenance of both systems allows the City to find areas that are likely to become problems in the future and make the necessary repairs/replacements before any larger issues arise. The City also continued to conduct flow metering throughout its sanitary sewer system to monitor for evidence of potential problems. A total of 1,500 man-hours were spent maintaining a total of 450,725 linear feet of sewer line during 2007/2008. Silt and grease were listed as the most common items removed from sanitary sewer maintenance activities. A total of 3,000 linear feet of sewer line was televised during 2007/2008, which led to the discovery of some areas of the sanitary sewer in need of repair. During 2007/2008, the City replaced 500 linear feet of sewer line. This prevented these areas from becoming future seepage points.

The City maintains a Sanitary Sewer Management Plan (SSMP) which establishes procedures for responding to an SSO. Detailed information about the City's SSO spill response plan is included in the City's JURMP. There was one SSO during 2007/2008, which is detailed in Section 7 of this Annual Report.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City conducts a variety of different mobile municipal activities, typically involving infrastructure maintenance, landscape maintenance, graffiti removal, and power washing.

4.6.2 SOURCE CHARACTERIZATION

Both power washing and graffiti removal are listed on the City's high TTWQ municipal inventory. Infrastructure maintenance and landscape maintenance are listed on the City's medium TTWQ municipal inventory.

4.6.3 BEST MANAGEMENT PRACTICES

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel are trained to implement BMPs for the specific activity in which they are involved. For example, City personnel performing power washing are trained to collect all waste water, and City personnel conducting graffiti removal are trained to store and handle any chemicals properly. A more detailed discussion of BMPs for specific mobile activities is included in the City's JURMP.

4.6.4 PROGRAM IMPLEMENTATION

During 2007/2008, City personnel continued to implement BMPs during mobile municipal activities such as power washing and graffiti removal. Most importantly, City personnel collect any water generated by activities such as power washing and dispose of it properly. City personnel are provided with a handout that gives a summary of appropriate BMPs for power washing activities and reminds personnel that water generated by such activities must always be collected and disposed of properly.

These activities were not available for inspection after the formal adoption of the JURMP in March 2008, so an inspection could not be conducted during the 2007/2008 reporting period. In the event that these activities are conducted during the 2008/2009 reporting period they will be inspected. There were no notable instances of BMP related infractions or other non-compliance relating to mobile municipal activities during 2007/2008.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

As detailed in the City's JURMP, a variety of different special events are hosted within the City. Notably, the City's largest special event is an annual July 4th celebration.

4.7.2 SOURCE CHARACTERIZATION

As required by the Municipal Permit, special events are included on the City's high TTWQ municipal inventory.

4.7.3 BEST MANAGEMENT PRACTICES

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage

trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter/debris from the event, and raise storm water awareness among the vendors and patrons of the event, as applicable.

4.7.4 Program Implementation

The City did not host any special events after the formal adoption of the updated JURMP, so there were no special events available for inspection during 2007/2008.

4.8 Education and Outreach

During 2007/2008, the City continued to educate municipal personnel regarding proper BMP implementation and other storm water and watershed concepts. Information regarding the education and outreach conducted for City personnel is described in detail in Section 8 of this Annual Report.

4.9 Municipal Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.10 Program Modification and Review

The City's JURMP was recently updated in March 2008. No changes to the City's municipal component have been made since that time.

Table 4-3
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Inspection Date	Recommended Corrective Actions
1	Public Works West Yard	2100 Hoover Ave	High	6/25/2008	• Keep site free of litter and debris
2	Sweetwater Heights Park	Cagle Street & Stockman Street	High	6/25/2008	• None
3	Municipal Swimming Pool	1800 East 22nd Street	High	6/25/2008	• Keep parking lot free of oil stains, litter, and sediment • Cover small soil pile properly; keep sidewalk free of soil • Keep dumpster lids closed when not in use
4	Las Palmas Park	1800 Newell Street	High	6/25/2008	• Keep site free of sediment and debris
5	El Toyon Park	2005 East 4th Street	High	6/25/2008	• Keep site free of sediment and debris • Work to eliminate over-irrigation • Keep parking lot free of oil stains
6	Kimball Park	12th Street & D Avenue	High	6/25/2008	• Keep planters free of trash • Keep surface drains free of grass clippings and trash • Keep dumpster lids closed when not in use
7	Public Works East Yard	2100 Hoover Avenue	High	6/25/2008	• Keep storage yard free of oil stains
8	National City Municipal Golf Course	1439 Sweetwater Road	High	6/25/2008	• Large outlet channel needs to be cleaned. • Clean secondary containment of debris and rainwater; cover from rainfall
9	George H. Waters Nutrition Center	1415 D Avenue	Medium	1/31/2008	• Prevent all wash water generated from washing mats from entering the storm drain. • Keep dumpster lids closed when not in use. • Contact the waste management company to determine if disposal of contained grease to the dumpster is permissible.*

*Since this inspection the City determined that disposal of grease to the dumpster is permissible if the container is sealed.

Note: Roads, streets, highways, and parking lots; the MS4; and the sanitary sewer system were inspected via the maintenance effort described earlier in this section.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During 2007/2008, the City continued to implement a program to mitigate urban runoff pollution from the areas and activities of industrial and commercial businesses. As part of the JURMP revision, updates were made to the City's industrial and commercial site/source prioritization process, minimum BMP requirements, and inspection frequencies. The City's updated program was implemented after the formal adoption date of the JURMP in March 2008. Through various aspects of the industrial and commercial program, the City aims to reduce the amount of pollutants discharged from these facilities.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the industrial and commercial component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- The City met the Municipal Permit requirement of inspecting at least 20 percent of its stationary industrial and commercial inventory.
- The City met the Municipal Permit requirement of inspecting at least 50 percent of inventoried high TTWQ industrial and commercial facilities.
- The City completed pollutant discharge potential assessment (PDPA) forms at inspections to aid in source identification efforts.
- Based on inspection findings and complaints made to the hotline, the City issued nine NOVs, 11 administrative citations, and 22 notices of correction to industrial and commercial businesses.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 BACKGROUND

The City's industrial and commercial inventories, which can be found in Appendix A, include all stationary facilities known to be operating in the City that are required to be included on the City's inventories. Stationary facilities in the City include, but are not limited to, manufacturing facilities, auto repair shops, restaurants, wholesalers, and contractors. As discussed in the following subsections, the City requires industrial and commercial businesses to implement pollution prevention measures and designated minimum BMPs to mitigate the impacts of business activities on water quality.

5.2.2 SOURCE CHARACTERIZATION

The City's industrial and commercial inventories are included as Appendix A.4 and A.5, respectively. The inventories include both stationary and mobile businesses, as required by the Municipal Permit. The inventories were updated in mid 2007/2008 as part of the JURMP update using applicable data from the City's business license registry, the 2006/2007 inventory and inspection records, and the State's list of industrial sites covered under the State of California Industrial General Permit (Industrial Permit).

Information on how the City prioritizes the industrial and commercial inventories based on TTWQ is discussed in detail in the City's JURMP. The City considers factors including those listed below when prioritizing the inventories:

- Industrial Permit subjectivity
- Consideration of downstream waterbody and whether the business is likely to discharge pollutants for which the waterbody is impaired
- Results from previous inspections and institutional knowledge
- Proximity to the receiving waterbody

The City's updated inventories include a total of 813 stationary industrial and commercial facilities.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other BMPs to reduce or potentially eliminate the generation of pollutants from business areas/activities. The City has established a set of minimum BMPs based on the CASQA Industrial and Commercial Handbook. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. The City's BMP requirements are described in more detail in the City of National City Best Management Practice Manual, which is an attachment to the City's JURMP.

5.2.4 PROGRAM IMPLEMENTATION

Industrial and Commercial Inspections

During 2007/2008, the City conducted storm water compliance inspections at selected stationary industrial and commercial facilities; Table 5-1 provides a summary of the industrial and commercial site visits. The purpose of the inspections is to confirm that the City's minimum BMPs are being implemented at stationary industrial and commercial facilities.

Since requirements of the new Municipal Permit did not go into effect until March 2008, the industrial and commercial component of the City's storm water program was conducted under the Order No. 2001-01 requirements for the first part of the 2007/2008 fiscal year and under the new Municipal Permit requirements for the latter part of the 2007/2008 fiscal year. The City inspected at least 50 percent of the inventoried high TTWQ industrial and commercial facilities, which met the Municipal Permit's requirements for the first year of program implementation. All facilities in the City with

Industrial Permit coverage were also all inspected in 2007/2008, which meets the requirements of the previous municipal permit.

Table 5-1 below provides a summary of the industrial and commercial site visits. At least 50 percent of the high TTWQ sites were selected for inspection, and additional medium TTWQ sites and industrial facilities not considered high TTWQ were also selected for routine inspection. Additional sites selected for inspections were medium TTWQ, and were industrial facilities that are subject to the Industrial Permit. During the inspection process, the City also checked Industrial Permit compliance status when applicable. Businesses observed to be in violation of the Industrial Permit are included in Table 5-2. Table 5-3, at the end of the section, summarizes the results of the 150 full inspections conducted as part of the routine inspection program. The remainder of the sites were visited, but during the visit were found to have moved, be duplicates of other businesses, or not to be conducting activities for which inclusion on the City's inventory is necessary.

Table 5-1
Summary of Industrial and Commercial Site Visits

Facility Category	Initial List	Accounted For*	Percentage of Total Inventory
High TTWQ Industrial	15	17	2%
High TTWQ Commercial	117	88	10.8%
Additional Sites Selected for Inspection	43	85	10.4%
All Stationary Inventoried Sites	**817****	**--**	**23.2%**

* "Accounted For" means that the business was inspected, assessed during a site visit and found to not need an inspection, or found to not need an inspection when called to schedule a site visit.

** The number of sites selected for inspection in 2007/2008 was based on the inventory presented in the JURMP, which included 817 businesses. The final inventory presented in this JURMP Annual Report has been updated to account for inspection results during 2007/2008 and includes 813 stationary businesses.

Facility inspections were conducted in accordance with the protocol set in the City's JURMP. Inspections involved a thorough examination of the facility and all outdoor activities. BMP deficiencies and corrective actions were recorded on the City's industrial and commercial inspection form, which is included in the City's JURMP, and discussed with facility personnel present during the inspection. The City also completed PDPA forms during the inspections as part of an additional data collection effort. The PDPA form is included with the City's inspection form, which is included in Attachment 5.1. More information about the results of this process is presented in Section 12 of this JURMP Annual Report.

The City did not rely on third party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third party inspection program.

General Industrial Permit

Industrial Permit compliance status was evaluated during the industrial and commercial inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector gathered information about the business activities that occur on site and assigned or reassigned the business's standard industrial classification (SIC) code(s). The inspector then determined Industrial Permit subjectivity based on SIC code. Violations of any aspect of Industrial Permit requirements were recorded on the standard industrial and commercial inspection form and are presented in Table 5-2. The table includes businesses directed to file a Notice of Intent (NOI) and develop a Storm Water Pollution Prevention Plan (SWPPP) and monitoring program, as well as businesses that had filed an NOI but had failed to develop a SWPPP and monitoring program. The table also includes facilities that could potentially gain exemption from Industrial Permit requirements by completing notice of non-applicability/no exposure certification (NONA/NEC) paperwork. Each business was notified of any Industrial Permit-related non-compliance by the inspector.

Table 5-2
Violations of the Industrial Permit

#	Business Name	Street Address	Permit Subjectivity	Action to Correct Violation				
				File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC	Other/Comments
1	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	Mandatory					Ensure appropriate storm water monitoring is conducted.
2	CARROLL METAL WORKS, INC.	740 W 16TH STREET	Mandatory		✔	✔		
3	EPSILON SYSTEMS SOLUTIONS INC	2101 A Haffley Ave	Mandatory	✔		✔		Update the SWPPP to include the items indicated as not provided on page 4 of this form.

#	Business Name	Street Address	Permit Subjectivity	Action to Correct Violation				
				File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC	Other/Comments
4	FABRICATION TECHNO-LOGIES INDUSTRIES	2401 HAFFLEY AVENUE, A	Conditional	✔	✔	✔		If no materials are stored outdoors once move is complete, business may not have to file NOI.
5	FUTURA FIBERGLASS	730 W 19TH STREET	Mandatory					Conduct storm water sampling as required by the Industrial Permit.
6	GREG'S FIBERGLASS AND PAINTING	1804 CLEVELAND AVENUE, A	Mandatory	✔	✔	✔		
7	HANSON AGGREGATES NATIONAL CITY BATCH PLANT (2003 NC LLC)	601 W 12TH STREET	Mandatory					Ensure appropriate storm water monitoring is conducted.
8	HYPERBARIC TECHNO-LOGIES	3224 HOOVER AVENUE	Conditional	✔	✔	✔		
9	LA ESPIGA DE ORO BAKERY	320 HIGHLAND AVENUE	Conditional				✔	
10	MELHORN CONST-RUCTION	410 W 30TH STREET, B	Conditional	✔	✔	✔		
11	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	Conditional	✔	✔	✔		
12	NATIONAL IRON WORKS	832 HOOVER AVENUE	Mandatory	✔	✔	✔		
13	PRESIDENTIAL LIMOUSINE LLC	1428 MCKINLEY AVE	Conditional	✔	✔	✔		
14	ROYCE CABINETS & GRANITE INC	2120 WILSON AVE	Mandatory	✔	✔	✔		

#	Business Name	Street Address	Permit Subjectivity	Action to Correct Violation				
				File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC	Other/Comments
15	SHUTTER BUS LEASING	1726 WILSON AVENUE	Conditional	✔	✔	✔		
16	TITAN MARINE, INC	2236 MCKINLEY AVE	Mandatory	✔	✔	✔		
17	VALENCIA STONE AND TILE	1124 COOLIDGE AVENUE	Mandatory					Provide complete SWPPP, ensure storm water monitoring is conducted, or provide documentation of no qualifying rain events.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to provide site-specific one-on-one education regarding storm water concepts and BMPs. Educational materials were provided as applicable; many businesses received a copy of the City's 2008 Storm Water Calendar, which can be found in Attachment 5.2.

Enforcement

Several industrial and commercial facilities were observed to be out of compliance with the City's municipal storm water ordinance and/or the Industrial Permit during inspections conducted in 2007/2008. Additionally, the City received a number of complaints through the City's storm water hotline. Details of the industrial and commercial complaint investigations are included in Section 7 of this Annual Report. The City issued the following enforcement actions in response to complaints:

- 22 Notices of Correction
- 11 administrative citations
- Nine NOVs

There were no instances of noncompliance found to present a significant threat to human health or the environment observed at stationary businesses during 2007/2008, so none were reported to the RWQCB.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Due to the nature of activities of most mobile businesses, a major area of concern tends to be illegal discharges. In general, mobile businesses can be hard to identify, as many may not have City business licenses. Additionally, because many mobile businesses may be home based and activities do not occur in one fixed location, inspections of such facilities are impractical.

5.3.2 SOURCE CHARACTERIZATION

Known mobile industrial and commercial businesses, as described in the City's JURMP, are included on the City's inventory and are marked as mobile.

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

BMPs for stationary industrial and commercial facilities, as discussed earlier in this section, are required to be implemented for mobile activities, as applicable. BMPs for mobile businesses, including key principles, such as proper collection and disposal of any discharge, are discussed in the City's JURMP. There have been no updates to the BMP requirements as described in the JURMP.

5.3.4 PROGRAM IMPLEMENTATION

The City responds to calls to the City's storm water hotline regarding mobile businesses; however, there were no complaints made to the City's storm water hotline regarding mobile businesses during 2007/2008.

Education and Outreach and Enforcement

Mobile businesses were provided education as applicable. There were no enforcement actions taken against mobile businesses during 2007/2008. There were no instances of noncompliance of mobile businesses that were believed to present potential threats to human health or the environment observed during 2007/2008, so none were reported to the RWQCB.

5.4 INDUSTRIAL AND COMMERCIAL COMPONENT EFFECTIVENESS ASSESSMENT

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was recently updated in March 2008. No changes to the City's industrial and commercial component have been made since that time.

Table 5-3
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
1	99 CENT ONLY STORES	1320 HIGHLAND AVENUE	2/5/2008	• Treat oil stains. • Clean up the oil spills. • Keep the parking area free of sediment and trash. • Remove trash more often to prevent the trash dumpster from overflowing. Provide one more dumpster if it is needed. • Keep the dumpster lids closed when not in use.
2	A-1 ALLOYS RECYCLING CENTER	724 CIVIC CENTER DRIVE	6/4/2008	• Keep site free of sediment. • Keep dumpster lids closed when not in use. • Cover materials stored outdoors.
3	A-1 ALLOYS/ABC METALS, INC	1401 CLEVELAND AVENUE	2/4/2008	• None
4	A-1 HYDRAULICS SERVICE	2100 ROOSEVELT AVENUE	1/9/2008	• Clean oil stains in front of shop. • Clean up sediment and black powder and keep the front of shop free of sediment and black powder. • Keep the scrap metal and hydraulic hose recycling bins indoors or cover them when not in use. • Keep the dumpster lids closed when not in use.
5	ASIAN MARKET	3400 E 8TH ST STE 111-112	3/12/2008	• Keep site free of oil stains.
6	ASIAN NOODLES	1430 E PLAZA BLVD., E-12	1/15/2008	• Work with neighbors to treat the grease spills. • Keep the dumpster lids closed when not in use.
7	ASWAN HALL CATERING & BANQUET	401 MILE OF CARS WAY	3/14/2008	• Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment and trash.
8	AUTO TECK	1023 COOLIDGE AVENUE	1/30/2008	• Treat oil stains and keep the area free of stains. • Clean up parking area and keep it free of sediment and trash. • Keep the dumpster lids closed when not in use.
9	BASKIN ROBBINS ICE CREAM	1493 E PLAZA BLVD.	1/21/2008	• Work with the neighbors to keep the dumpster area clean and free of trash. • Keep the dumpster lids closed when not in use.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
10	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	6/9/2008	• Keep discharge locations free of sediment. • Keep parking lots, sidewalks, and streets free of sediment. • Cover materials stored outdoors. • Contain outdoor work area to prevent storm water run-on or conduct all work indoors. • Keep outdoor work area(s) and/or areas behind shop free of sediment and spills. • Keep parking areas free of sediment.
11	BIRRIAS CHIVOS & CHEVES	2401 HIGHLAND AVE STE 104	3/12/2008	• Keep trash area/enclosure free of sediment, trash, and debris.
12	BREAD DELUX BAKERY, ETC.	1420 E PLAZA BLVD., D-1	1/17/2008	• Keep the dumpster lids closed when not in use.
13	C & W DIVING	1706 HOOVER AVENUE	2/1/2008	• Improve general housekeeping BMPs, including timely sweeping and clean up of sand, sediment, and metal debris. • Reduce material storage in outdoor exposed areas, especially corroding metal parts. • Keep dumpster lids closed when not in use.
14	C&M MOTORS INC.	904 ROOSEVELT AVENUE	3/14/2008	• Keep parking lots, sidewalks, and streets free of sediment and trash. • Keep dumpster lids closed when not in use. • Cover materials stored outdoors. • Raise materials stored outdoors off of the ground. • Keep outdoor work area(s) and/or areas behind shop free of sediment, trash, and spills. • Keep loading and unloading areas free of sediment, trash, and spills. • Keep parking areas free of sediment, trash, and spills. • Conduct vehicle maintenance activities in a covered area or indoors.
15	CAFÉ LA MAZE	1441 HIGHLAND AVENUE	3/12/2008	• Keep dumpster lids closed when not in use. • Keep parking areas free of spills/oil stains.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
16	CALIFORNIA AUTO DETAILING	1509.5 NATIONAL CITY BLVD.	2/1/2008	• Ensure that all spray water is prevented from leaving the building using the plastic curtains and any other means necessary. • Prevent transport of sediment in the case of water spillage by keeping sidewalk and outside free of sediment.
17	CALIFORNIA PRODUCE CORPORATION	1736 E PLAZA BL	3/13/2008	• Keep site free of sediment, trash and debris. • Ensure water generated by pressure washing activities is collected and disposed of properly. • Increase trash pick up frequency or acquire more dumpsters to prevent dumpsters from overflowing. • Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of the trash. • Cover materials stored outdoors. • Do not hose off outdoor areas of site; if hosing is necessary, collect all wash water and dispose of to the sanitary sewer system. • Keep the area behind the shop free of food debris.
18	CAR SOURCE	1 W 35TH STREET	2/4/2008	• Work with neighbors to store exposed material raised off of the ground and covered. All fluid containers and batteries should also have secondary containment. • Remove all trash and debris from site. • Keep parking area free of sediment and leaves. • Dispose of waste at a hazardous material collection facility.
19	CARLS' JR.	1502 SWEETWATER ROAD	3/17/2008	• Keep trash enclosure area free of sediment, trash and debris. • Keep parking area free of spills and oil stains. • Keep the grease bin free of grease. • Provide overhead cover for waste grease bin.
20	CARLS JR. #120	1280 E PLAZA BLVD.	1/15/2008	• Clean up the grease bin and keep it free of grease. • Clean up dumpster enclosure area and ground. • Keep the eastern parking lot free of sediment.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
21	CARRERA'S AUTO DETAIL	2130 ROOSEVELT AVENUE	2/1/2008	• Clean up the trash and debris on the site and keep it clean. • Ensure that wash water does not exit the wash area on the site. • Keep dumpster lid closed when not in use.
22	CARERRA'S AUTO DETAILERS	2130 ROOSEVELT AVENUE	2/4/2008	• Eliminate outdoor exposure of material storage, including automotive parts, scrap metal bins and batteries. • Provide secondary containment for all automotive fluid containers. • Work with neighboring businesses to eliminate the uncontained trash observed in the northwest corner and trash enclosure. • Keep dumpster lids closed when not in use.
23	CARROLL METAL WORKS, INC.	740 W 16TH STREET	6/10/2008	• Keep discharge locations free of sediment. • Keep parking lots free of sediment. • Keep parking areas free of sediment.
24	CASA DE ORO RESTAURANT	1510 SWEETWATER ROAD, A	3/17/2008	• Keep the grease bin and surrounding area free of grease. • Provide overhead cover and secondary containment for waste grease bin.
25	CHINESE CANTON BAKERY	1132 E PLAZA BLVD., 204	1/21/2008	• Keep the rear parking lot clean and free of sediment.
26	CHOWKING	2220 E PLAZA BLVD., T	3/13/2008	• Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of trash and debris. • Keep the grease bin and surrounding area free of grease. • Provide overhead cover and secondary containment for waste grease bin.
27	CHUCK E CHEESE'S	1143 HIGHLAND AVENUE	3/11/2008	• Keep dumpster lids closed when not in use.
28	CIVIC CENTER AUTO BODY	1304 ROOSEVELT AVENUE	1/29/2008	• Keep the oil recycling drum indoors or cover from rainfall. • Remove the hoods and bumpers or cover them and raise off ground. • Keep the parking area and dumpster enclosure area clean and free of sediment.
29	CONCHING'S CAFÉ	3400 E 08TH STREET	3/11/2008	• Keep the grease bin and area surrounding the grease bin free of grease. • Provide overhead cover and secondary containment for waste grease bin.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
30	COTIJAS MEXICAN FOOD	740 E 30TH STREET	2/7/2008	• Clean up the grease recycling bin. • Keep the trash enclosure area free of grease stains. • Keep the parking area clean and free of sediment.
31	COZINES GROCERY	402 CIVIC CENTER DRIVE	3/11/2008	• Keep trash area/enclosure free of sediment and trash.
32	CP MANUFACTURING	1300 WILSON AVENUE	6/5/2008	• Keep site free of sediment. • Keep dumpster lids closed when not in use. • Cover materials stored outdoors. • Keep parking areas free of sediment.
33	CRASH AND FIX AUTOBODY	202 , 210 W 11TH STREET	1/31/2008	• Clean up driveway and keep free of sanding materials. • Keep the scrap metals under cover and raised off ground or keep them indoors. • Keep the dumpster lids closed when not in use.
34	CROWN TRANSMISSION CENTER	1339 HOOVER AVENUE	2/5/2008	• Treat oil stains and oil spills. • Keep the auto parts indoors or under overhead coverage and raised off ground. • Keep site free of sediment accumulations.
35	DA KINES	1635 SWEETWATER ROAD #H	3/17/2008	• Keep dumpster lids closed when not in use. • Provide overhead cover and secondary containment for waste grease bin.
36	DISCOUNT TIRE CO. (SO. CA.)	1309 E PLAZA BLVD.	1/22/2008	• Clean up the dumpster enclosure area and keep it free of trash. • Keep the dumpster lids closed when not in use.
37	DIXIELINE LUMBER COMPANY	3450 HIGHLAND AVENUE	6/4/2008	• Keep site free of debris (sawdust). • Keep dumpster lids closed when not in use. • Cover materials stored outdoors. • Contain outdoor work area to prevent storm water run-on or conduct all work indoors. • Keep outdoor work area(s) and/or areas behind shop free of sawdust.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
38	EPSILON SYSTEMS SOLUTIONS INC	2101 A HAFFLEY AVE	6/25/2008	• Keep site free of sediment and trash. • Keep discharge locations free of sediment and debris. • Keep parking lot free of sediment. • Cover materials stored outdoors. • Raise materials stored outdoors off of the ground. • Keep outdoor work areas and/or areas behind shop free of sediment. • Protect the two storm drains on the north of the building to prevent sediment and debris from entering the drains.
39	FABRICATION TECHNOLOGIES INDUSTRIES	2401 HAFFLEY AVENUE, A	1/9/2008	• Keep the material storage area clean and free of black powder. • Minimize the materials stored outdoors and cover the rest when not in use. • Remove trash more often to prevent dumpsters from overflowing. • Keep the dumpster lids closed when not in use. • Keep the parking lot clean and free of debris.
40	FAMILY HOUSE OF PANCAKES	1900 E PLAZA BLVD	3/13/2008	• Keep discharge locations free of sediment. • Ensure water generated by pressure washing activities is collected and disposed of properly. • Keep dumpster lids closed when not in use. • Provide overhead cover and secondary containment for waste grease bin. • Do not hose off outdoor areas of site; if hosing is necessary, collect all wash water and dispose of to the sanitary sewer system.
41	FAMILY LOOMPYA SEAFOOD MARKET	2720 E PLAZA BLVD., A	3/13/2008	• Keep site free of sediment and trash. • Keep the dumpster lids closed when not in use. • Keep the trash area/enclosure free of sediment and trash. • Cover materials stored outdoors. • Raise materials stored outdoors off of the ground. • Keep the grease bin free of grease. • Provide secondary containment for the waste grease bin.
42	FIRESTONE	2531 E PLAZA BLVD.	1/31/2008	• Clean up spill in the parking lot in a timely manner.
43	FIRESTONE TIRE & SERVICE CENTER	943 HIGHLAND AVENUE	1/30/2008	• Keep dumpster lid closed when not in use. • Consider providing overhead coverage for the tire storage area.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
44	FLEETWASH	1508 HOOVER AVENUE	3/14/2008	• Keep dumpster lids closed when not in use. • Keep parking areas free of sediment.
45	FOODLAND IGA	303 HIGHLAND AVENUE	3/11/2008	• Keep site free of sediment and trash. • Keep discharge locations free of sediment. • Keep parking lot free of sediment and trash. • Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment and trash. • Cover materials stored outdoors. • Provide fluids stored outdoors with secondary containment and cover. • Keep loading and unloading areas free of sediment and trash. • Keep the grease bin and area surrounding grease bin free of grease. • Consider providing overhead cover for waste grease bin.
46	FOREST PLYWOOD SALES DBA BAKER HARDWOOD LUMBER CO.	3131 HOOVER AVENUE	3/13/2008	• Keep dumpster lids closed when not in use. • Keep loading and unloading areas free of sediment and trash. • Keep parking areas free of sediment, trash, and spills.
47	FREDDY AUTO REPAIR	923.5 COOLIDGE AVENUE	3/11/2008	• Cover materials stored outdoors. • Raise materials stored outdoors off of the ground. • Keep parking areas free of spills.
48	FUTURA FIBERGLASS	730 W 19TH STREET	6/11/2008	• Keep dumpster lids closed when not in use.
49	GINZA SUSHI	925 E PLAZA BLVD., G	1/17/2008	• Work with neighbor to clean the grease bin and keep it free of grease. • Keep the dumpster lids closed when not in use. • Keep the back of restaurant free of sediment and debris. • Clean up the dumpster enclosure area.
50	GOLDEN CHOPSTICKS RESTAURANT	1430 E PLAZA BLVD., E-22-23	1/11/2008	• Clean up top of the grease recycling bin. • Treat grease spills on the ground. • Work with neighbors to keep the dumpster lids closed when not in use.
51	GOLDILOCKS BAKERY & RESTAURANT	1420 E PLAZA BLVD D-7	1/18/2008	• Work with neighbors to keep the dumpster lids closed when not in use.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
52	GREENWALD'S AUTOBODY & FRAMEWORKS, INC	1814 ROOSEVELT AVENUE	1/30/2008	• Keep the parking area clean and free of sediment. • Contain front of vehicle washing area so that clean water does not run out from washing pits.
53	GREG'S FIBERGLASS AND PAINTING	1804 CLEVELAND AVENUE, A	1/16/2008	• Keep the dumpster lids closed when not in use.
54	HANSON AGGREGATES NATIONAL CITY BATCH PLANT (2003 NC LLC)	601 W 12TH STREET	6/9/2008	• Keep parking areas free of sediment.
55	HAWTHORNE RENT-IT SERVICE	2000 MCKINLEY AVENUE	6/6/2008	• Keep site free of sediment. • Keep dumpster lids closed when not in use. • Cover materials stored outdoors. • Raise materials stored outdoors off of the ground. • Keep loading and unloading areas free of sediment.
56	HERTZ EQUIPMENT RENTAL	415 W 30TH STREET	1/31/2008	• Improve general housekeeping BMPs. Increase the frequency of sweeping of the storage yard. • Reduce outdoor exposure of material storage (rusty digging buckets). Raise buckets off of the ground and provide overhead coverage. • Treat all oil stains and spills in a timely manner. • Acquire overhead coverage for the used oil filter containers and keep secondary containment free of spills or rainwater.
57	HOPSING AUTO	1540 ROOSEVELT AVENUE	1/30/2008	• Treat coolant and oil spills in parking area and front of shop and keep these areas clean.
58	HYPERBARIC TECHNOLOGIES	3224 HOOVER AVENUE	3/14/2008	• Cover materials stored outdoors. • Raise materials stored outdoors off of the ground.
59	INTERNATIONAL HOUSE OF PANCAKES	1430 E PLAZA BLVD., E-1	1/15/2008	• Treat grease spills and stains and keep the grease bin surrounding area clean. • Keep the grease bin lid closed. • Work with neighbors to keep the dumpster lids closed when not in use. • Clean up behind the restaurant and keep it free of sediment and debris.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
60	JACK IN THE BOX #80	3138 PLAZA BLVD.	3/13/2008	• Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment. • Keep parking areas free of spills/oil stains. • Keep the grease bin and area surrounding grease bin free of grease. • Provide overhead cover for waste grease bin.
61	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	3/18/2008	• Keep parking lto free of sediment. • Cover materials stored outdoors. • Raise materials stored outdoors off the ground. • Contain outdoor work area to prevent contact with rain water. • Keep outdoor work areas and areas behind the shop free of spills. • Properly label outdoor storage containers. • Provide fluids stored outdoors with secondary containment and cover. • Keep loading and unloading areas free of sediment and spills. • Conduct vehicle maintenance activities in a covered area or indoors.
62	JOCSON'S AUTO BODY & PAINT INC.	1320 COOLIDGE AVENUE	2/5/2008	• Treat oil stains and coolant spills and keep the parking lot clean and free of oil stains, coolant spills, and trash. • Remove trash more often to prevent the trash dumpster from overflowing. • Keep the scrap metals under overhead coverage and raised off ground. • Keep the battery and other greasy parts indoors or under cover. • Conduct auto mechanic work indoors or under canopy. • Keep the dumpster lids closed when not in use.
63	JOLLIBEE	1401 E PLAZA BLVD.	1/18/2008	• Clean up the grease recycling bin and keep it free of grease.
64	JOSE AUTO ELECTRIC	140 W 18TH STREET	1/29/2008	• Treat oil stains and keep the lot free of oil stain and sediment. • Remove used auto parts or cover them and raise off ground. • Keep the dumpster lids closed when not in use.
65	KARIHAN FILIPINO FOOD	2220 E PLAZA BLVD., #A1	3/12/2008	• Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment. • Keep the area surrounding grease bin free of grease.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
66	KARINA'S MEXICAN STYLE SEAFOOD	1705 HIGHLAND AVENUE	3/12/2008	• Keep parking lot free of sediment. • Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment and trash. • Keep grease bin and area surrounding grease bin free of grease. • Provide overhead cover and secondary containment for waste grease bin.
67	L3 COMMINCATIONS/PACORD SAN DIEGO	240 W 30TH STREET	6/5/2008	• Cover materials stored outdoors. • Keep parking areas free of sediment.
68	L3 COMMUNICATIONS PACORD SAN DIEGO	225 W 30TH STREET	6/5/2008	• Keep discharge locations free of sediment. • Cover materials stored outdoors.
69	LA ESPIGA DE ORO BAKERY	320 HIGHLAND AVENUE	3/11/2008	• Keep parking lot free of sediment. • Increase trash pick-up frequency or acquire more dumpsters to prevent dumpsters from overflowing. • Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment and trash. • Keep parking areas free of spills/oil stains.
70	LA TAQUIZA	1641 HIGHLAND AVENUE	3/12/2008	• Keep parking lot free of sediment. • Provide overhead cover and secondary containment for waste grease bin.
71	LAI THAI RESTAURANT	1430 E PLAZA BLVD., E-10	1/15/2008	• Treat the grease stains on the grease recycling bin and keep it clean and free of grease stains. • Work with neighbors to keep the dumpster lids closed when not in use.
72	LIVELY BRAKE SERVICE	115 E 17TH STREET STE B	1/30/2008	• None
73	LOLLICUP TEAZONE	1105 E PLAZA BLVD., A	1/22/2008	• Clean up the grease recycling drum and keep it under overhead coverage. • Provide secondary containment for grease drum. • Work with neighbors to keep the dumpster enclosure area clean and free of sediment and trash. • Keep the dumpster lids closed when not in use.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
74	LOS GIRASOLES MEXICAN RESTAURANT	1231 HIGHLAND AVE	3/12/2008	• Keep trash area/enclosure free of sediment, trash, and debris. • Keep the area surrounding grease bin free of grease.
75	MAHARLIKA CAFÉ & GRILL	1819 E PLAZA BLVD.	4/15/2008	• Keep the dumpster lids closed when not in use. • Keep the trash area/enclosure free of sediment and debris. • Acquire a spill kit for oil spills. • Provide fluids stored outdoors with cover. • Keep parking areas free of spills and oil stains. • Provide overhead cover for waste grease bin.
76	MANILLA SEAFOOD ORIENTAL MARKET	2220 E PLAZA BLVD., K	3/13/2008	• Keep site free of sediment and trash. • Increase trash pick-up frequency or acquire more dumpsters to prevent dumpsters from overflowing. • Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment and trash. • Keep the grease bin and surrounding area free of grease. • Provide overhead cover and secondary containment for the waste grease bin. • Do not hose off outdoor areas of the site; if hosing is necessary, collect all wash water and dispose of to the sanitary sewer system.
77	MANILLA SUNSET RESTAURANT	925 E PLAZA BLVD., E	1/17/2008	• Work with neighbors to keep the grease recycling bin clean and free of grease. • Clean up the dumpster enclosure area and keep it free of sediment. • Keep the dumpster lids closed when not in use.
78	MASTER MACHINE CORPORATION (VANTAGE ASSOCIATES)	900 CIVIC CENTER DRIVE	6/9/2008	• Cover materials stored outdoors. • Keep parking areas free of debris.
79	MCDONALDS #6773	2145 E PLAZA BLVD.	4/15/2008	• Keep dumpster lids closed when not in use. • Keep the grease bin and surrounding area free of grease. • Provide overhead cover for waste grease bin.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
80	MELHORN CONSTRUCTION	410 W 30TH STREET, B	6/6/2008	• Cover materials stored outdoors. • Provide fluids stored outdoors with secondary containment and cover. • Keep parking areas free of sediment.
81	MEZA AUTO BODY	420 W 12TH STREET	1/30/2008	• Conduct all vehicle body repairs indoors. • Contain the washing area, collect wash water, or use a commercial car wash. • Remove trash frequently to prevent the dumpster from overflowing. • Cover all exposed scrap metals and raise off ground.
82	MIKE'S GIANT NY PIZZA #5	1635 SWEETWATER ROAD, C-1	3/17/2008	• Keep dumpster lids closed when not in use. • Keep the grease bin and surrounding area free of grease. • Provide overhead cover for waste grease bin.
83	MILLER MARINE	1430 HOOVER AVENUE	6/10/2008	• Keep parking lot free of sediment.
84	MORE BRAKES N TUNE	1902 HIGH;AND AVE. #A	1/30/2008	• Keep dumpster lid closed when not in use. • Keep the parking lot free of loose sediment.
85	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	2/4/2008	• Prevent storm water from contacting corroded or greasy engines and parts. Keep all parts covered and raised off the ground. • Keep waste oil in secondary containment, free of spills or stormwater, repair cover to prevent rainwater from contacting waste oil drums.
86	NATIONAL CITY AUTO BODY	24 E 4TH STREET	1/31/2008	• Treat oil stains in front of oil storage area and keep it clean. • Cover the oil storage area. • Keep area clean and free of sediment and plant debris. • Keep the trash dumpster lids closed when not in use.
87	NATIONAL CITY CAR WASH	2550 E PLAZA BLVD.	1/29/2008	• Stop water flow to storm drain, contain area at the end of wash tunnel. • Keep the dumpster lids closed when not in use.
88	NATIONAL CITY DETAIL SHOP	108 W 18TH STREET	3/18/2008	• Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment and trash.
89	NATIONAL CITY MARKET	240 E 18TH STREET	3/12/2008	• Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of trash and debris.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
90	NATIONAL IRON WORKS	832 HOOVER AVENUE	6/11/2008	• Keep site free of sediment and debris. • Keep discharge locations free of sediment. • Keep parking lot free of sediment and debris. • Keep dumpster lids closed when not in use. • Cover materials stored outdoors. • Contain outdoor work area to prevent storm water run-on or conduct all work indoors. • Keep outdoor work area(s) and/or areas behind shop free of sediment, debris, and metal cutting debris. • Keep parking areas free of sediment and debris.
91	NELLANS CARPET AND DRAPERIES	426 W 15TH STREET	3/17/2008	• Keep parking lot free of sediment and debris.
92	OHANA HAWAIIAN ISLAND BBQ	1430 E PLAZA BLVD., E7A	1/15/2008	• Clean up the grease recycling bin and keep it clean and free of grease. • Work with neighbors to keep the dumpster lids closed when not in use.
93	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	6/5/2008	• Keep site free of debris. • Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of debris. • Cover materials stored outdoors. • Keep loading and unloading areas free of spills/stains. • Keep parking areas free of spills/stains.
94	PANCHO VILLA'S MEXICAN GRILL	3100 8TH STREET	3/11/2008	• Keep site free of sediment. • Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment and trash. • Keep the grease bin and area surrounding grease bin free of grease. • Provide overhead cover and secondary containment for waste grease bin.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
95	PANDA PALACE	1105 E PLAZA BLVD., D , E	1/21/2008	• Clean up the grease recycling container. • Clean up area surrounding grease container and keep it free of food residue. • Work with neighbors to keep the dumpster enclosure area clean and free of sediment. • Keep the dumpster lids closed when not in use. • Provide secondary containment and overhead coverage for grease bin.
96	PAPA JOHN'S PIZZA #1335	1130 PLAZA BLVD.	3/13/2008	• Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment and trash.
97	PATRICK SHAW ENGRAVING	1533 TIDELAND AVENUE, J	2/7/2008	• Work with neighbors to keep the dumpster lids closed when not in use.
98	PINOY RANCH	3403 E PLAZA BLVD., D-E	3/14/2008	• Provide overhead cover and secondary containment for waste grease bin.
99	PLATINUM AUTO BODY & PAINT	223 CIVIC CENTER DR	6/13/2008	• Keep discharge locations free of sediment. • Increase trash pick-up frequency or acquire more dumpsters to prevent dumpsters from overflowing. • Keep trash area/enclosure free of the following: sediment, trash. • Cover materials stored outdoors. • Raise materials stored outdoors off of the ground. • Keep parking areas free of spills/stains.
100	PLATINUM AUTO BODY & PAINT	223 CIVIC CENTER DR	1/31/2008	• Keep the waste oil container indoors or provide cover and secondary containment. • Cover the scrap metal container.
101	POINT POINT JOINT (TURO-TURO)	916 E 8TH STREET, 1 , 2	2/1/2008	• Work with neighboring businesses to keep the trash area free of debris and the dumpster lids closed. • Dispose of the old stove observed outside.
102	POPEYES CHICKEN	2210 E PLAZA BLVD.	4/15/2008	• Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment and debris. • Acquire a spill kit for oil spills. • Keep parking area free of oil spills and stains. • Keep the grease bin free of grease. • Provide overhead cover for the waste grease bin.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
103	PRESIDENTIAL LIMOUSINE LLC	1428 MCKINLEY AVE	6/26/2008	• Keep discharge locations free of sediment. • Keep dumpster lids closed when not in use. • Cover materials stored outdoors (rusty metal). • Raise materials stored outdoors off of the ground (rusty metal). • Conduct vehicle washing in a contained area that does not drain to the storm water conveyance system.
104	PRO SMOG TEST ONLY	34 E 17TH ST STE C	1/30/2008	• Eliminate exposure of transmission and engine block storage. • Raise items off of the ground and acquire overhead coverage, or store the items indoors.
105	ROB NORTH FABRICATION	1605 HOOVER AVENUE	6/9/2008	• Keep discharge locations free of sediment. • Keep parking lot free of sediment and debris. • Cover materials stored outdoors. • Keep parking areas free of sediment and debris.
106	ROYAL MANDARIN RESTAURANT	1132 E PLAZA BLVD., 205	1/11/2008	• Clean up grease recycling bins (top surface) and close them when not in use. • Keep the dumpster lids closed when not in use. • Clean up sediment and food residue behind the restaurant. • Contain box storage area to prevent any water flow from the area.
107	ROYCE CABINETS & GRANITE INC	2120 WILSON AVE	2/7/2008	• None
108	SAN DIEGO AUTO DETAIL	110 W 11TH STREET	1/29/2008	• Keep detailing area clean and free of trash and litter. • Treat oil stains. • Provide secondary containment for hazardous and degreaser containers. • Keep the dumpster lids closed when not in use.
109	SAN DIEGO SEAFOOD	1842 MCKINLEY AVENUE	3/18/2008	• Keep the dumpster lids closed when not in use. • Keep the loading and unloading areas free of sediment. • Keep the loading and unloading area free of black powder to comply with NONA/NEC
110	SEAFOOD CITY SUPERMARKET	1420 E PLAZA BLVD., C-E	1/11/2008	• Treat the grease spills and keep the grease recycling bin and surrounding area clean and free of spills. • Keep the rear parking lot free of sediment.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
111	SENOR PANCHO FRESH MEXICAN GRILL	2030 HIGHLAND AVENUE	3/12/2008	• Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of sediment, trash, and debris. • Keep parking areas free of spills/stains. • Keep the grease bin and area surrounding grease bin free of grease. • Provide overhead cover and secondary containment for waste grease bin.
112	SEVEN-ELEVEN #17265	1601 E 18TH STREET	3/12/2008	• Keep site free of trash and debris. • Ensure water generated by pressure washing activities is collected and disposed of properly. • Increase trash pick-up frequency of acquire more dumpsters to prevent dumpsters from overflowing. • Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of trash and debris. • Keep parking areas free of spills/leaks.
113	SEVEN-ELEVEN #18218C	807 E 8TH STREET	3/12/2008	• Keep site free of trash and debris. • Ensure water generated by pressure washing activities is collected and disposed of properly. • Keep trash area/enclosure free of trash. • Keep parking areas free of spills/leaks.
114	SEVEN-ELEVEN #18978D	3100 E PLAZA BLVD.	3/14/2008	• Keep trash area/enclosure free of sediment and trash.
115	SHUTTER BUS LEASING	1726 WILSON AVENUE	6/4/2008	• Keep parking lot free of sediment. • Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of the following: sediment, trash. • Keep loading and unloading areas free of spills/stains. • Keep parking areas free of spills/stains.
116	SID'S CARPET BARN	132 W 8TH STREET	3/18/2008	• Keep parking lot free of sediment and debris. • Keep the dumpster lids closed when not in use. • Keep trash area and enclosure free of sediment and trash. • Cover materials stored outdoors. • Keep loading and unloading areas free of sediment and debris.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
117	SIZZLER FAMILY STEAK HOUSE #45	1325 E PLAZA BLVD.	1/21/2008	• Clean up the grease recycling bin. • Keep the dumpster enclosure area clean and free of grease and trash.
118	SMART AND FINAL	1220 E PLAZA BLVD.	1/21/2008	• Clean up dumpster enclosure area and area behind the store and keep it free of sediment. • Keep the dumpster lids closed when not in use.
119	SOUTH BAY BOILER REPAIR, INC..	1224 ROOSEVELT AVENUE	6/6/2008	• Keep discharge locations free of sediment. • Keep dumpster lids closed when not in use. • Cover materials stored outdoors. • Keep parking areas free of sediment.
120	SOUTH BAY MECHANICAL SERVICES	221 W 16TH STREET	3/17/2008	• Keep parking lot free of sediment. • Keep dumpster lids closed when not in use.
121	SOUTHLAND TRANSMISSION CENTER	1400 HOOVER AVENUE	3/13/2008	• Cover materials stored outdoors. • Keep parking areas free of spills/oil stains.
122	SPECIALTY TIRES AND BRAKES	1 WEST 35TH STREET	2/4/2008	• Work with neighbors to store exposed material raised off of the ground and covered. All fluid containers and batteries should have secondary containment. • Remove all trash and debris from site. • Dispose of waste at a hazardous material collection facility.
123	STAR EXPRESS	3124 E PLAZA BLVD.	3/14/2008	• Keep discharge locations free of trash and debris. • Keep trash area/enclosure free of trash. • Keep the grease bin and area surrounding grease bin free of grease. • Provide secondary containment for waste grease bin.
124	STEVE'S WEST COAST AUTOMOTIVE	1732 COOLIDGE AVENUE	1/30/2008	• Treat oil spills and keep the area clean and free of oil spills. • Remove scrap metals or cover them. • Clean up front of shop and keep it free of kitty litter. • Keep the dumpster lids closed when not in use.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
125	STYLER'S AUTO BODY	38 E 16TH STREET	1/11/2008	• Treat oil stains in front of office. • Keep the dumpster lids closed when not in use. • Keep the parking lot and work area free of sediment. • Contain north side of wash area to prevent any water flow outside of area.
126	SUBMARINA	1210 E. PLAZA BLVD.	1/22/2008	• Work with neighbors to keep the dumpster enclosure area clean and free of sediment and trash. • Keep the dumpster lids closed when not in use.
127	SUBWAY SANDWICH & SALAD	925 E PLAZA BLVD., A	1/17/2008	• Work with the neighbors to keep the dumpster enclosure area clean and free of sediment. • Keep the dumpster lids closed when not in use.
128	SUN DIEGO CHARTER CO.	2020 HOOVER AVENUE	6/10/2008	• Cover materials stored outdoors. • Contain outdoor work area to prevent storm water run-on or conduct all work indoors. • Keep outdoor work area(s) and/or areas behind shop free of spills. • Keep loading and unloading areas free of spills/stains. • Keep parking areas free of sediment. • Conduct vehicle maintenance activities in a covered area or indoors.
129	TACO SALSA TACO SHOP	925 E PLAZA BLVD., B	1/17/2008	• Work with neighbor to keep the grease recycling bin clean and free of grease. • Clean up the dumpster enclosure area and keep it free of sediment. • Keep the dumpster lids closed when not in use.
130	THE BARBEQUE PIT	920 E PLAZA BLVD.	1/17/2008	• Work with neighbors to keep the dumpster enclosure area clean and free of sediment. • Remove trash more often to prevent dumpster from overflowing. • Keep the dumpster lids closed when not in use.
131	THE NEW LOOK	340 W. 11TH STREET	1/29/2008	• Keep the waste paint drum indoors or under overhead coverage. • Cover the hoods and bumpers and raise off ground. • Keep the dumpster lids closed when not in use. • Provide secondary containment for waste paint drum.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
132	TINO'S AUTO TECH	1 WEST 35TH STREET STE D	2/4/2008	• Work with the neighbors to store exposed material raised off of the ground and covered. All fluid containers and batteries should have secondary containment. • Remove all trash and debris from site. • Prevent run-on from entering the covered maintenance area. Ensure canopies are effective in preventing exposure of the work area to storm water.
133	TITAN MARINE, INC	2236 MCKINLEY AVE	1/16/2008	• Keep the parking lot and area between shops clean and free of trash and sediment. • Keep the scrap metals indoors or cover them. • Keep the dumpster lids closed when not in use.
134	TORTAS OASIS	1210 E PLAZA BLVD STE 404	1/21/2008	• Work with neighbors to keep the rear parking area clean and free of sediment. • Keep the dumpster lids closed when not in use.
135	TRANS PROS	130 E 17TH STREET	1/22/2008	• Lift from ground and cover all transmission cores stored outdoors at rear of shop. • Treat oil stains in front of parking lot.
136	TROPICAL DELI	2808 18TH STREET	3/12/2008	• Keep parking lot free of sediment and trash. • Increase trash pick-up frequency or acquire more dumpsters to prevent dumpsters from overflowing. • Keep trash area/enclosure free of sediment and trash.
137	TURBO TRANSMISSIONS	1411 COOLIDGE AVENUE	3/11/2008	• Cover materials stored outdoors. • Acquire a spill kit for oil. • Keep parking areas free of spills.
138	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	6/11/2008	• Cover materials stored outdoors.
139	VALENCIA STONE AND TILE	1124 COOLIDGE AVENUE	6/10/2008	• Keep parking areas free of sediment.
140	VALERIOS FAMILY BAKE SHOP	2720 E PLAZA BLVD., H	3/14/2008	• Keep dumpster lids closed when not in use. • Keep trash area/enclosure free of trash. • Keep the grease bin free of grease. • Provide overhead cover and secondary containment for waste grease bin.
141	VIKING'S AUTO REPAIR	1503 ROOSEVELT AVENUE, A	1/29/2008	• Keep the parking area clean and free of sediment and plant debris. • Keep the auto parts under overhead coverage.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
142	WEST COAST TRUCK SERVICE	201 W 18TH STREET	3/18/2008	• Keep parking lot free of sediment. • Keep dumpster lids closed when not in use. • Keep loading and unloading areas free of sediment spills and oil stains. • Conduct vehicle maintenance activities in a covered area or indoors.
143	WESTERN LIFT, INC/WESTERN HOIST, INC	1839 CLEVELAND AVENUE	6/6/2008	• Keep dumpster lids closed when not in use. • Keep parking areas free of sediment.
144	WESTSIDE BUILDING MATERIALS	500 W 16TH STREET	3/17/2008	• Keep parking lot free of sediment. • Keep dumpster lids closed when not in use. • Cover materials stored outdoors. • Keep loading and unloading areas free of sediment.
145	WILLIAM PAKCHUEN LAU	1918 CLEVELAND AVENUE	3/24/2008	• Provide secondary containment for liquids stored outside or remove. • Lift from ground and cover batteries or dispose of properly. • Lift from ground and cover used auto parts or properly dispose of. • Provide trash container(s). • Property dispose of waste oil. • Clean fresh oil spills from ground. • Obtain permit From DEH.
146	WILLIAM PAKCHUEN LAU	1918 CLEVELAND AVENUE	2/7/2008	• Clean up all oil spills and oil stains. • Keep the oil recycling drum indoors or provide a secondary containment and cover. • Remove all auto parts and loose materials from the yard. • Keep the yard clean and free of sediment. • Provide trash dumpster.
147	WINGS N THINGS	1499 E PLAZA BLVD	1/15/2008	• Clean up the top of the grease bin and keep it closed and free of grease. • Keep the back of restaurant clean and free of sediment and trash. • Work with neighbors to keep the dumpster lids closed when not in use.
148	WORLD TERMINAL PARKING INC	200 HIGHLAND AVENUE	3/11/2008	• Keep site free of sediment and debris. • Keep dumpster lids closed when not in use. • Keep parking areas free of sediment, debris, and spills/oil stains.

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Recommended Corrective Actions
149	YUM YUM DONUT FRANCHISE #502	3122 E PLAZA BLVD.	3/14/2008	• Keep the trash area/enclosure free of trash. • Do not hose off outdoor areas of site; if hosing is necessary, collect all wash water and dispose of to the sanitary sewer system.
150	ZARLITOS FAMILY RESTAURANT	505 E 8TH STREET	3/12/2008	• Keep the area surrounding grease bin free of grease. • Provide overhead cover and secondary containment for waste grease bin.

6.0 RESIDENTIAL

6.1 INTRODUCTION

Land use in the City of National City is largely residential. Due to the large residential area, activities that take place in residential areas have the potential to impact the quality of receiving waters. Residential activities such as vehicle washing, over-irrigation, home maintenance, and Household Hazardous Waste (HHW) disposal can potentially contribute pollutants to the City's MS4 if BMPs are not implemented. Pollutants of concern include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has worked to implement a range of programs to address these residential activities with the goal of to reducing pollutant loads associated with such activities. The City recognizes the need for educational efforts and opportunities designed specifically for residents and residential activities.

The following sections present activities conducted during this reporting period. These activities are associated with the residential component of the JURMP and include conducting ongoing HHW collection events, distributing educational materials, and participating in community events.

6.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the residential component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- The City developed a 2008 Calendar that was distributed to schools. The calendar was printed in both English and Spanish and informed residents about pollutants found in San Diego Bay and neighboring waterways.
- The City collaborated with the cities of Chula Vista and Imperial Beach to make HHW disposal events available to residents. The total amount of HHW collected from residents of all three cities was 220,008 pounds. Door-to-door pick up service was available for the disabled and senior communities.
- The City hosted two large item disposal events. The event allowed residents to dispose of large items, like unwanted household materials (not including HHW).

6.2 SOURCE CHARACTERIZATION

The City has identified high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities. To reduce pollutant discharges from these high TTWQ areas and activities, the City has designated specific BMPs.

6.2.1 HIGH TTWQ ACTIVITIES

During the 2007/2008 reporting period, as outlined in the City's JURMP, the City continued to identify the following activities as high priority:

- Automobile repair and maintenance, washing, and parking
- Home and garden care activities and product use, including disposal
- Disposal of trash and pet waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

In addition to these activity-based priorities, the City has noted several residential areas that pose higher threats to water quality. High priority residential areas are designated by considering complaint investigations, institutional knowledge, Dry Weather Monitoring data, and criteria as defined in the Municipal Permit. The following residential areas have been designated as being a high threat to water quality.

Division Avenue Area
The residential area located near Division Street, east of Highland Avenue, discharges to La Paleta Creek. Potential sources of pollutants may include residences located on East 2nd Street, Melrose Street, Eta Street, Fig Court, Scott Drive, 43rd Street, and Nordica Avenue. Past dry weather monitoring programs have detected elevated levels of ammonia and detergents just downstream of these residential areas.

West 18th Street Area
Runoff from residential areas in the vicinity of West 18th Street eventually discharge to Paradise Creek. Potential sources of pollutants include residences along Hoover Avenue and Roosevelt Avenue. Past dry weather monitoring programs have detected elevated levels of ammonia and detergents just downstream of these residential areas.

Paradise Creek Area, between F and L Avenues
The residential area that runs along the Southern side of Paradise Creek between F and L Avenues, which is adjacent to Paradise Creek, has been identified as being a potential source of pollutants. Residences in this area are located along East 12th Street, East 13th Street, and East 14th Street, and are upstream of dry weather site number 46. Past dry weather monitoring programs have detected elevated bacteria, ammonia, and oil and grease levels.

East 8th Street Area
The residential area near East 8th Street borders Paradise Creek and is also located upstream of dry weather site number 46, which has been found to have the same elevated constituents as the areas between F and L Avenues. Potential sources of pollution include residences near East 8th Street and East 9th Street, between L Avenue and N Avenue.

Grove Avenue Area
The residential area surrounding Grove Avenue has been identified during previous dry weather monitoring programs as a source of trash, ammonia, and detergents. This area includes residences along East 14th Street, Grove Avenue, Stancrest Lane, and Orange Street.

Arcadia Place Area
The residential area surrounding Arcadia Place has been identified during previous dry weather monitoring programs as a source of ammonia and detergents. Potential sources in this area include residences west of Harbison Avenue along East 11th Street, East 10th Street, and East Plaza Boulevard.

Harbison Avenue Area
The residential area along Harbison Avenue, between 20th Street and 24th Street, has been identified as a source of ammonia and excessive amounts of trash during past dry weather monitoring programs.

A Avenue Area
The residential area in the vicinity of the intersection of A Street and 22nd Street has been identified as a potential source of pollutants. Past dry weather monitoring programs have detected elevated levels of ammonia and detergents. Likely sources of pollutants are residential landscaping and washing activities.

B Avenue Area
The residential area in the vicinity of the intersection of 28th Street and B Avenue, near Sweetwater High School, has been identified as a potential source of ammonia during past dry weather monitoring programs.

2nd Avenue Area
The residential area around 2nd Avenue, north of the Interstate 54, has been identified as a potential source of pollutants. Previous dry weather monitoring programs have detected elevated levels of bacteria. This area is adjacent to Sweetwater River. The most likely sources of bacteria appear to be from trash decomposition and human inhabitation.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City has continued to provide information regarding the implementation of pollution prevention measures, such as good housekeeping practices, for residential areas and activities. The City's BMP Manual Part I includes lists of general residential BMP requirements and BMP requirements for specific residential activities. The manual is included in Appendix C of the JURMP. General residential BMPs include erosion control; non-storm water discharge management, including elimination of IC/IDs; and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Specific BMPs for the high priority activities outlined above are also included in the City's BMP Manual Part I.

6.4 PROGRAM IMPLEMENTATION

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted. This ensures that pollutants associated with residential activities and areas are minimized. The residential program has an education component so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities.

6.4.1 TRAINING, EDUCATION, AND OUTREACH

The City has continued to conduct training, education, and outreach activities for residents, which are described below. For additional information on the City's educational efforts and the educational materials distributed to its residents please refer to Section 8 of this report.

2008 Calendar

The City developed a 2008 Calendar that was distributed to schools (Attachment 5.2). The calendar was printed in both English and Spanish and informed residents about pollutants found in San Diego Bay and neighboring waterways. It described that pollutants such as fertilizers, pesticides, metals, paints, oil and grease and other debris can be transported from residential areas to the ocean. A list of BMPs and various cleanup days and HHW events are promoted. The theme for the calendar was "By Keeping our Community Clean, We Can Keep the Ocean Clean" and each month showed a photograph of an ocean scene.

Distribution of Educational Material

The City's Housing division conducted inspections as part of the Healthy Homes Program in high priority areas to check for lead in paint and other potential hazardous problems. Residents were provided IPM cards (Attachment 6.1) and "Put Toxic Waste in its Place" brochures during these inspections. The IPM cards provide information on topics such as non-chemical solutions and pest-related problems. The "Everything that runs into the storm drain goes untreated directly into our creeks, lagoons, and San Diego Bay" brochure (Attachment 6.2) was distributed with written correspondence with residents.

As mentioned above, educational materials were provided to residents in National City in response to the recommendations from the 2007 Dry Weather Report. The City sent a letter and applicable educational material to residences in areas where high levels of pollutants were noted.

Workshops

On July 12, 2007, the City held a storm water training session for the City's Kiwanis Club. A total of 16 individuals attended the training session and were shown a Power Point presentation. More information about the presentation is included in Section 8.

Website
Additional information regarding the City's storm water program, pollution prevention measures, and BMPs is posted and continually updated on the City of National City's website (www.nationalcityca.gov), under the Public Works/Engineering Department link.

Household Hazardous Waste Disposal Program
The City continues to work with the City of Chula Vista to allow City residents to drop off HHW at Chula Vista's Household Hazardous Waste Collection Facility. The Household Hazardous Waste Collection Facility is the primary location for hazardous waste collection in the South Bay, receiving HHW from the City, the City of Imperial Beach, and the City of Chula Vista. Curbside pick up was made available to the disabled and elderly communities. The amount of waste collected by City residents of National City alone is not available; however, the total amount of HHW collected from residents of all three cities is 220,008 pounds. The City's programs

The Healthy Homes program continues to distribute "Put Toxic Waste in Its Place" brochures to remind residents to dispose of HHW properly. This brochure is handed out during routine activities conducted by the Healthy Homes program.

Other Waste Disposal Programs/Activities
In addition to proper HHW disposal, the City encourages residents to recycle used oil. The City maintains several Certified Used Oil Recycling Centers for residential oil disposal. The volume of used oil dropped off at the collection centers was not immediately available.

The City's Public Works Department held two trash collection events (June and November) during this reporting period in conjunction with EDCO Disposal Company. During these events, residents were encouraged to dispose of any unwanted large items from their homes such as furniture and appliances.

6.4.2 COMPLIANCE AND ENFORCEMENT

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the Storm Water Hotline, and observations made by the City's municipal personnel. If a potential to impact water quality is present the City provides a verbal warning, written warning, NTCs, and NOVs as applicable. The City received 6 residential-related complaints during this reporting period. Complaints were submitted through the Storm Water Hotline and internally through the Public Works Department.

The following enforcement actions were taken with respect to residents and/or landlords in 2007/2008:

- Three notices of correction
- Two NOVs

- Three administrative citations

Many of the complaints verified involved residents who were unaware of residential BMPs. These issues were resolved with a verbal warning and discussion of required BMPs. The City issued NOVs to more serious violations such as vehicle maintenance without BMPs or washing debris into the street. City personnel also cleaned areas in the public right of way as necessary to resolve complaints. All residential complaints were resolved it was not necessary to report any instances of non-compliance to the RWQCB.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 Program Review and Modification

The City's JURMP was recently updated in March 2008. No changes to the City's residential component have been made since that time.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008 RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the 2007/2008 illicit discharge detection and elimination section and attachments to the RWQCB no later than December 15, 2008.

8.0 EDUCATION COMPONENT

8.1 INTRODUCTION

During 2007/2008, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, residents, and underserved audiences. The City aims to reduce storm water pollution by increasing awareness about storm water and promoting the implementation of pollution prevention measures and BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- The City has hosted a storm water training session for Kiwanis Club members.
- The City hosted a SUSMP training session for the development planning and construction communities.
- The City's Storm Water Inspector attended a Basic Inspector Training Course held by the California Environmental Protection Agency.
- The City distributed 2,000 2008 storm water calendars to businesses and schools.
- The City made an estimated 17,715 impressions through educational outreach material and activities.

8.2 STAFF TRAINING ELEMENT

The City has provided extensive training and educational outreach to its municipal personnel. Many municipal personnel are out in the field on a daily basis, so it is important that they understand the importance of implementing BMPs. Additionally, municipal personnel are encouraged to report any IC/IDs observed to the appropriate City staff and to educate other municipal personnel and the general public about storm water pollution prevention.

The City's Storm Water Inspector successfully completed the California Environmental Protection Agency Basic Inspector Training Course during the 2007/2008 reporting period. The four-day course is designed to teach environmental agency inspectors the knowledge and skills needed to ensure consistent, effective, and coordinated compliance and enforcement actions to protect public health and the environment according to all applicable laws or regulations within the jurisdiction of the California Environmental

Protection Agency. Topics covered during the training included: an inspection overview, elements of a violation, report writing, interviewing, sampling and evidence collection, report analysis, and testimony skills.

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, residential areas, and underserved audiences. These efforts promote storm water awareness and BMP implementation.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Violations to the City's BMP requirements are corrected through enforcement actions as necessary. Site-specific information relating to the facility's activities were discussed with businesses personnel during inspections. Some businesses also received the City's storm water calendar, which is included as Attachment 5.2. The "Everything that runs into the storm drain goes untreated directly into our creeks, lagoons, and San Diego Bay" brochure provided to industrial and commercial businesses with any written correspondence, this brochure can be found in Attachment 6.2. "Preventing Urban Runoff" trifolds were also distributed to some industrial and commercial businesses.

8.3.1.1 MOBILE BUSINESSES

Mobile businesses, specifically mobile car detailers or power washers, are considered a high threat to water quality due to the nature of the business activities and the likelihood of prohibited non-storm water discharges. Mobile businesses are not confined to a single area and many do not have City business licenses, making them difficult to identify. The City continues to respond to complaints regarding mobile businesses and provides one-on-one education during the investigation and educational outreach material as applicable.

8.3.2 CONSTRUCTION SITE OWNERS AND DEVELOPERS

Due to the nature of activities, construction sites have the potential to discharge many types of pollutants to receiving waters if not managed properly. Many construction site owners, contractors, and developers visit the City's Engineering Division to apply for necessary permits. Through this interaction with City staff, owners and developers are able to gain a better insight on required BMPs, watershed concepts, and potential pollutants.

On February 28, 2008, the City held a workshop for project proponents. Thirteen people attended the workshop; a sign in sheet is included in Attachment 8.1. The workshop

included a variety of background information, such as a characterization of the watersheds in the City as well as the impaired waterbodies in the City. The workshop included discussions of the following topics related to development planning and construction:

- SUSMP requirements
- Writing a SWMP
- Common problems with SUSMP reports
- LID concepts
- Examples of treatment control BMPs
- Project resources
- What to expect from City inspections

Attendees were given a test before the presentation and a test after the presentation to gauge the increase in knowledge of attendees. The pre-test average was 60 percent and the post-test average increased to 80 percent. At the end of the workshop, attendees were prompted to rate how helpful they found the workshop to be on a scale from one to five, five being most helpful. The average rating was a four.

In addition, the City has also provided various construction site-specific educational materials targeting various storm water concepts. This educational material includes:

- A BMP fact sheet for construction sites (Attachment 3.1) that describes specific BMPs for construction activities including soil stabilization and erosion prevention, sediment containment, materials and equipment management, non-storm water discharge control, and drainage control. This sheet was distributed with all permits issued, including building permits; implementing the BMPs listed on the sheet is a condition of the permits.
- The Storm Water Requirements Applicability Checklist. Once submitted, the City reviewed the checklist and prioritized the projects. Requirements to ensure compliance with the Municipal Permit and General Construction Permit were presented to the applicant and further discussed to ensure the applicant was educated on the process.
- Copies of JURMP Appendix C, which contains a list of required construction BMPs, is made available upon request for proponents of construction activities within the City.

In addition to distributing the previously listed construction educational materials, the City continued to hold pre-construction meetings for significant private and CIP development projects during which the implementation of various BMPs were discussed.

8.3.3 Residential Areas

Since residential areas compose most of the City, it is important to reach this particular audience through educational outreach programs. The City continued to make a variety of flyers, brochures, website postings, and other educational material available to residents of the City. Dry weather educational mailers were mailed to homes in residential areas where dry weather monitoring indicated pollutant exceedances. In response to the mailers, some residents called to obtain more information about the program.

The City developed a 2008 calendar that was distributed to schools (Attachment 5.2). The calendar, which presents information in both English and Spanish, informs residents about pollutants found in San Diego Bay and neighboring waterways, and describes that pollutants such as fertilizers, pesticides, metals, paints, oil and grease, and other debris can be transported from residential areas to the ocean. The calendar provided key dates, such as HHW events and scheduled training sessions. During 2007/2008, the City began developing a 2009 storm water calendar. The City arranged an art contest for 3rd graders in the City, which will provide images for the calendar. A handout was provided to 3rd grade students in the City informing of the contest, which also provided information about the City's storm water program (Attachment 8.2). More information about the development of the 2009 calendar is included in Section 9 of this Annual Report.

Other educational materials distributed during 2007/2008 include "Everything that runs into the storm drain goes untreated directly into our creeks, lagoons, and San Diego Bay" brochures (Attachment 6.2), "Put Toxic Waste in its Place," HHW refrigerator magnets, and copies of the City's Storm Water Hotline Card.

On July 12, 2007, the City held a storm water presentation for the City's Kiwanis Club. A total of 16 individuals attended the training session and were shown a Power Point presentation that provided information on the regulatory background of the City's program, the City's JURMP, the difference between the sanitary sewer system and the storm drain system, and the basic principals of BMPs. A sign in sheet for this event can be found in Attachment 8.1.

The City website, www.nationalcityca.gov, is another way in which City residents can become familiar with the design and intended use of the storm drain system, HHW, alternatives to hazardous household products, find information regarding volunteer opportunities, applicable City contact information, and IPM cards.

8.3.4 Underserved Communities

The City is a growing community that is diverse in culture. The demographics of the City are unique, and to address various communities' needs, the City takes pride in servicing its residents by presenting some of its brochures in English and Spanish. Additionally, brochures may be found at various locations throughout the City such as

the Chamber of Commerce, the public library, public recreational centers, and the storm water display area at the City's Engineering Department.

In addition, the City includes the bilingual educational handout entitled "Everything that flows down into a storm drains goes untreated directly to our creeks, lagoons, and San Diego Bay" in all mail-based correspondence (i.e. NOV, notice of corrective action, etc.) with residents and industrial and commercial businesses in the City.

8.3.5 Complaint Investigations

To further aid the process of identifying illicit discharges, the City encourages the public and City staff to report IC/IDs. The City's Storm Water Compliance Inspector follows up on all complaints made to the hotline. If a representative for the business, residential area, or construction site is present, the inspector will provide site-specific information regarding storm water issues including applicable educational materials.

8.4 Outreach Component Effectiveness Assessment

The estimated number of impressions made by the City's education and outreach efforts during 2007/2008 is presented and described below. Please refer to Section 11 of this JURMP Annual Report for the remainder the effectiveness assessment for this program component.

Impressions Made

The City has continued to provide residents and businesses storm water-related education through inspections, distribution and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees because it is likely that the attendees will discuss the content with others after the training session. Printed educational materials distributed in mass numbers are assumed to generate three impressions each. Impressions generated by the 2009 calendar contest are likely to generate five impressions because multiple people (teachers, students, and parents) were involved in the contest and were likely to share information about the contest with others. Table 8-1 details the number of impressions made by the City during this reporting year.

Table 8-1
Impressions Made by the City

Impression Type	Estimated Count	Unit	Estimated Impressions Generated
Municipal Inspections	9	Inspections	45
Industrial Inspections	32	Inspections	96
Commercial Inspections	118	Inspections	354
Complaints Investigated	48	Investigation	144
Training Session and Activity/Event Attendees	74	Events	296
Dry Weather Monitoring Letters	50	Letter	150
Residential BMP Handout	10	Handout	30
Preventing Urban Runoff Pollution	300	Brochure	900
Everything that flows down the storm drain….	800	Sheets	2,400
2008 Storm Water Program Calendar	2,000	Calendar	6,000
2009 Storm Water Program Calendar Art Contest Handouts	860	Handout	4,300
IPM Cards	200	Info card set	600
HHW Refrigerator Magnets	500	Magnets	1,500
Storm Water Hotline Card	100	Card	300
Construction BMP Handouts	200	Handout	600
Total			**17,715**

8.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was recently updated in March 2008. No changes to the City's education component have been made since that time.

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to foster storm water awareness and improve water quality. Public participation includes, but is not limited to, cleanup events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Collaboration between the City and the community should help encourage a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed in this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the 2007/2008 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- The City collaborated with I Love a Clean San Diego (ILACSD) to host a site for the Earth Day Creek to Bay Cleanup event. A total of 45 volunteers participated.
- The City continued to collaborate with the cities of Chula Vista and Imperial Beach to provide HHW disposal for residents of the City of National City.
- The City continued to operate a storm water hotline to receive complaints from businesses and residents in the City.
- The City held two large-item disposal events, which allowed residents to dispose of large items (not including HHW).

9.2 PUBLIC PARTICIPATION ACTIVITIES

Cleanup Events and Programs

During 2007/2008, the City hosted various cleanup events and activities at various locations in the City. Cleanup events provide a direct benefit to water quality and provide an opportunity for the City to distribute educational materials and information to the event's volunteers. The City continued to collaborate with I Love a Clean San Diego (ILACSD) for the Earth Day Creek to Bay Cleanup event. A total of 45 volunteers cleaned an area of Paradise Creek for the Creek to Bay Clean Up, which was held on 4/26/2008. As of this writing, ILACSD was not able to provide the data for the amount of debris removed from cleaning activities at the location in National City.

2009 Calendar Development

As previously mentioned, during 2007/2008, the City began to develop the 2009 storm water program calendar. Dissimilar to previous calendars developed by the City, the

City worked to involve the public in the development of the 2009 calendar. An art contest was held for 3rd grade students attending public school in the City; the 12 winning images will be included for each month of the calendar. The theme of the contest was "By keeping our community clean, we can keep the ocean clean." Teachers were provided guidelines for the contest, and were provided ideas on how they could incorporate storm water concepts into their lesson plans. An informational flyer was provided to the students that outlined the rules of the contest and presented some storm water concepts; all students that submitted an entry received a certificate of participation signed by the mayor. Winners will be selected in the 2008/2009 reporting period. The contest, which was sponsored by EDCO, will provide prizes, such as gift cards, to the contest winners. A total of forty-three 3rd grade classes in the City participated in the contest. The teacher guideline sheet, flyer, and certificate of completion are included in Attachment 8.2.

Hazardous Waste Collection and Used Oil Recycling Program

The City's Hazardous Waste Collection and Used Oil Recycling Program encourages City residents and business owners to properly dispose of HHW. Residents have access to proper disposal facilities for household hazardous wastes at the South Bay Regional Household Hazardous Waste drop-off center, located in Chula Vista. This facility is open on Saturdays from 9:00 a.m. to 1:00 p.m. and accepts up to 15 gallons or 125 lbs of waste per household for a small co-payment. This service is also available to residents in the cities of Chula Vista, Coronado, and Imperial Beach.

The "Put Toxic Waste In Its Place" brochure continues to be used by the City to inform residents of how and where to dispose of HHW; the brochure directs people to www.1800cleanup.com, which provides further information about identification and disposal of HHW.

Additionally, the City offers a low cost door-to-door collection programs for residents. Residents may dispose of used oil at seven Certified Used Oil Recycling Centers are located around the City.

Other Waste Disposal

The City also continued to hold household trash collection events for large items such as furniture and appliances. The City coordinates with EDCO to host both fall and spring collection events. These events are routinely held in June and November of each year. The City encourages the public to bring their debris for proper disposal.

Public Reporting

As discussed in Section 7, complaints are received through the City's storm water hotline and online website reporting system. The residential, industrial and commercial, construction, and municipal communities are encouraged to utilize the hotline to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable. By utilizing the reporting system, residents of the City are held accountable for their actions as well as those of their neighbors. The hotline number is available on the storm water hotline card, which is given out at inspections, complaint

investigations, and is made available at many public facilities. The hotline number is also available on brochures distributed by the City, as well as on the City's website. This reporting period there were 48 complaints received by the City. All complaints reported during the reporting period were investigated immediately and addressed appropriately by the City's NPDES Storm Water Compliance Inspector.

9.3 OUTREACH EVENTS

The City has continued to provide educational outreach programs for variety of different communities in the City.

Public Workshops

Workshops, information, and training sessions are necessary to provide the public with the tools and knowledge to participate effectively in the City's storm water program. This reporting period, the City held two separate workshops, one for the Kiwanis Club of National City and one for the development planning and construction community. These events were discussed in detail in Section 8 of this Annual Report.

Storm Drain Stenciling

In the past, ILACSD has done storm drain stenciling in the City. Due to the shorter timeline for the submittal of the JURMP Annual Report, ILACSD was not able to provide an update on any storm drain stenciling that took place in the City in 2007/2008.

10.0 FISCAL ANALYSIS

No changes to the sources of funding for this program listed in the City's update JURMP have been made during this reporting period. The budgeted cost of the 2007/2008 program was $1,701,700. The proposed estimated budget for the 2008/2009 program is $1,317,000. Table 10-1, below, presents an itemized breakdown of the program budgets.

Table 10-1
Itemized Budgets For Fiscal Years 2007/2008 and 2008/2009

Storm Water Program Fiscal Analysis	Budgeted FY 07/08	Budget FY 08/09
Staff		
Public Works	160,000	350,000
Planning	40,000	40,000
City Attorney	10,000	10,000
Building	30,000	20,000
Fire	10,000	10,000
Engineering	80,000	90,000
Community Development Department (CDD)	40,000	30,000
Sub-total	***$370,000***	***$550,000***
Operation Expenditures		
NPDES Fees	35,000	40,000
Consultant Fees for NPDES Program	200,000	200,000
Purchase Equipment	1,000	1,000
Miscellaneous Operations	5,000	5,000
Sub-total	***$241,000***	***$246,000***
CIP Appropriations		
Drainage Improvements (Curb & Gutter, Alley Apron, X-Gutter)	325,000	**
Curb and Gutter	*	68,500
Alley Apron	*	6,000
X-Gutter	*	46,500
Sub-total	***$325,000***	***$121,000***
Special Projects		
Sewer Pump Stations Rehabilitation Project	765,700	***
Storm Drain Improvements		400,000
Grand Total	**$1,701,700**	**$1,317,000**

* Included in drainage improvements
** Drainage improvement costs are broken out into specific categories for 2008/2009. Also, a special storm drain (inlets, piping, etc.) improvement project will occur in 2008/2009.
** Project complete

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City began using the standardized program effectiveness assessment soon after it was developed by the Copermittees during the last permit cycle. The City also participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs. Due to a variety of complications on a regional level, that process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures.

Since the submittal of the JURMP in March 2008, no additional progress has been made on regionally standardized approaches to program effectiveness assessment. It is likely that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will revisit the issue of standardized assessment metrics and procedures in the near future. The City anticipates participating in the process of developing such regional standards and incorporating work products produced into its own local program effectiveness assessment system.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

The City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted

outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1
Level 1 outcomes essentially are measures of permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix B of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement. .

Levels 2 and 3
See the tables 11-1 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Please note that the number of hotline calls and Dry Weather Monitoring Program results are used in the assessments for other program components besides illicit discharge detection and elimination. Those numbers are taken from the work done within the period from July 1, 2007 through June 30, 2008 to be comparable with previous years' assessments and data. Also note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

Level 4
The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly

measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed.

Level 5

The Dry Weather Monitoring Program is the City's primary mechanism of measuring the quality of discharges. The City will also begin collecting MS4 monitoring data in 2008/2009, which should also provide information about discharge quality.

Several graphs demonstrating historical Dry Weather Monitoring results are provided at the end of this section as figures 11-4 through 11-6. Ammonia and detergents, the two constituents with the longest historical data record, both show decreasing trends over time. Relatively few action level exceedances have been noted in recent monitoring years; only two measurements from the 2007 Dry Weather Monitoring Program exceeded their respective action levels.

Level 6

No Regional Monitoring Program water quality monitoring stations are located within the City of National City. The Sweetwater Mass Loading Station is located just outside the southeastern border of the City, but only a very minimal portion of the City would drain to that site. Some sediment sampling has been completed in the Sweetwater River flood control channel along southern side of the City as part of the regional Ambient Bay and Lagoon Monitoring Program. The results of that program have been relatively inconclusive to date. The RWQCB contracted Southern California Coastal Waters Research Project (SCCWRP) to conduct some wet weather monitoring in Paleta Creek (Seventh Street Channel) in support of a pending TMDL. At this point, the amount of data collected at these sites is not sufficient to determine any positive or negative trends for water quality at the site. Typically several years of data are needed before any trends become apparent. The City will continue to work with the San Diego Bay WURMP workgroup and TMDL stakeholder workgroups to improve the quality of water bodies in and around the City of National City.

11.2.2 Overall Component Assessments

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency BMPs. Based on the results of the treatment control inspections and some interaction with responsible parties after the end of the reporting period, it appears that there is a low level of awareness of the need for regular treatment control BMP maintenance. The City will work with the parties responsible for maintenance of treatment control BMPs to address this issue and improve maintenance rates during 2008/2009.

Construction

The available data indicate that on the whole the City's construction program effectively requires BMP implementation. Any BMP deficiencies noted are typically remedied promptly. The City has also implemented an approval process that notifies all

construction projects that will disturb soil of the City's BMP requirements before a permit is issued. This process has helped bring about better BMP implementation at small projects that otherwise might not be aware of the BMP requirements.

Municipal

The City's municipal staff are regularly trained on storm water issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit frequency requirements. In particular, the City sweeps its streets more often than the permit requirements to aid in WURMP efforts. City storm water staff are in close contact with municipal facility managers and maintenance staff, and storm water issues observed during inspections are typically corrected promptly.

Industrial and Commercial

The City has a comprehensive inspection program that utilizes experienced consultant inspectors. Results are tracked through a database. A comparatively high number of noncompliant sites were identified in 2007/2008. While this indicates the City correctly identified high TTWQ sites when prioritizing its inventory, the City will also need to follow up with these sites in 2008/2009 so that they comply with the City's regulations. Many of the businesses inspected had a low level of knowledge about storm water requirements, especially restaurants. Sixty-six restaurants were inspected, of which 61 had the lowest possible storm water knowledge assessment score (1). The City has held workshops for restaurants in the past, but these have not proven very effective. The City has initiated some conversations with property management companies for businesses in multi-suite complexes to see if the landlords can provide some additional assistance in bringing about compliance with storm water requirements. It is too early to determine how effective this approach is, but the City may continue to investigate it in 2008/2009, particularly for non-compliant businesses and businesses like restaurants that tend to have high staff turnover.

Residential

The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. A somewhat lower number of hotline calls was recorded during the July 1, 2007 to June 30, 2008 reporting period than had been observed in previous years, but the reason for the decrease is unknown. The City will continue to educate residents about how and when to report incidents to the hotline, and data from 2008/2009 will be assessed to see if current patterns continue or if hotline calls increase again.

IDDE

A recent RWQCB has extended the reporting period for the IDDE component of the City's program, so a full assessment of the programs effectiveness cannot be provided at this time. Some initial metrics are presented in Table 11-6.

Education

The City has expanded its education program over each of the last several years. As has already been described above, data from 2007/2008 indicate that two key target

audiences in need of additional education are industrial and commercial businesses and parties responsible for treatment control BMP maintenance.

Public Participation

New clean-up events have been added over the years, and the City will continue looking for new opportunities for public involvement. The number of hotline calls decreased in 2007/2008, but the reason for the decrease is unknown. The City will continue to ensure its own staff are aware of the hotline and when to call it and that members of the public also receive this information.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-1
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Review and approve project plans	External A relatively small number of projects submitted reports during 2008/2009. Based on meetings with applicants and BMPs proposed, it appears that the level of knowledge is increasing. Internal The City's storm water consultant and the City's Stormwater Program Manager worked with engineers in the City to improve their level of understanding of the SUSMP program. City personnel also attended training sessions—see Section 8. The City's consultant reviews SWMPs submitted to the City.	Overall SWMP approval rate during reporting period	41%	N/A, addressed through other significant activities for this component	
		Number of projects requiring three or more reviews prior to SWMP approval	7		
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects implementing all proposed BMPs	69%	Percent of projects proposing BMPs besides filter inserts*	100%
		Resolution status of enforcement actions	See Section 2	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern*	50%**
Verify BMPs are properly maintained	External N/A, verification letters were not sent out until 2008/2009. Internal N/A, verification letters were prepared by the City's consultant.	Percent of sites properly maintaining BMPs	50%	N/A, verification letters were not sent out until 2008/2009.	
		Resolution status of enforcement actions	See Section 2		
		Percent of sites submitting proper verification forms	N/A		
		Percent of sites certifying proper maintenance	N/A		
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* For period from 3/24/2008 to 6/30/2008
** One of two projects proposed a hydrodynamic separator, so a feasibility analysis was required. The project also implemented LID. See Section 2 for details.

Table 11-2
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs by end of reporting period	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of projects in compliance with BMP requirements during all inspections	86%	
		Resolution status of enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff are regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4	Number of pet waste bags distributed	Unknown
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.		Amount of sediment and debris removed (weight or volume)	1,151 pounds
				Amount of sediment and debris removed per length of street swept (weight or volume per curb mile)	0.07 pounds/ curb mile
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume)	39.6 tons
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons)	4,200
Maintain municipal treatment control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment BMPs	10 pounds
				BMP effectiveness studies	N/A
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal The City contracts with a qualified consultant to perform industrial and commercial inspections.	Percent of inspected sites in compliance with BMP requirements (not including additional study)	66%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	1	Number of IC/IDs eliminated (inspections and complaint investigations)	8
		Consistent with the intentional selection of sites with the highest TTWQ potential, many sites had a low BMP score of 1. Aside from those problem sites, the most common score was three. See Figure 11-2 on the following page for a score distribution.			
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores, 2007/2008 Inspections

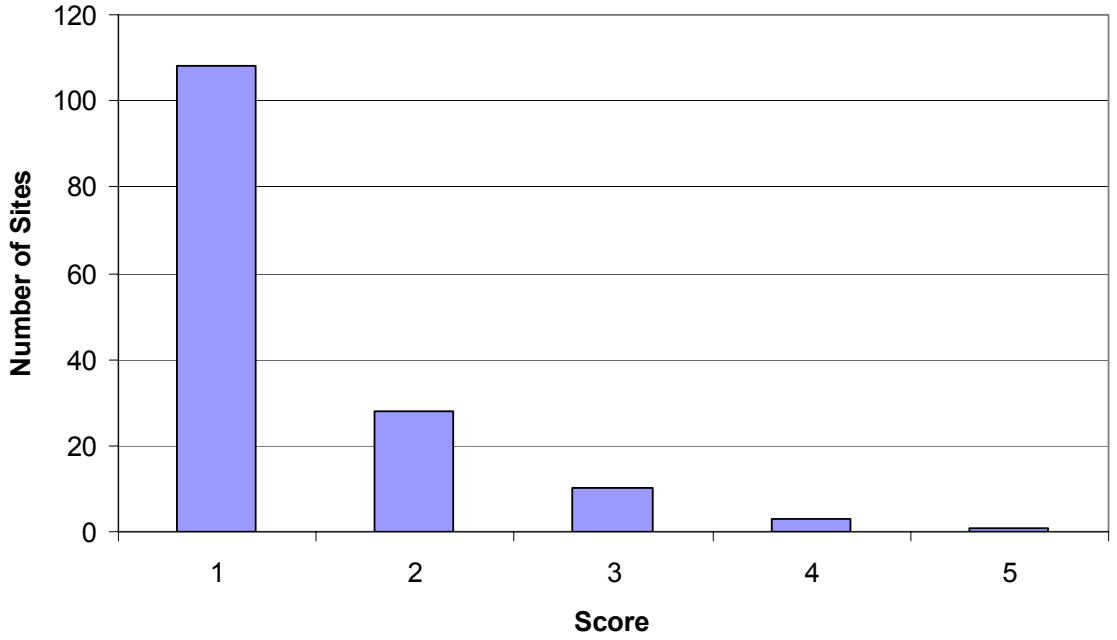

Figure 11-2
BMP Assessment Scores, 2007/2008 Inspections

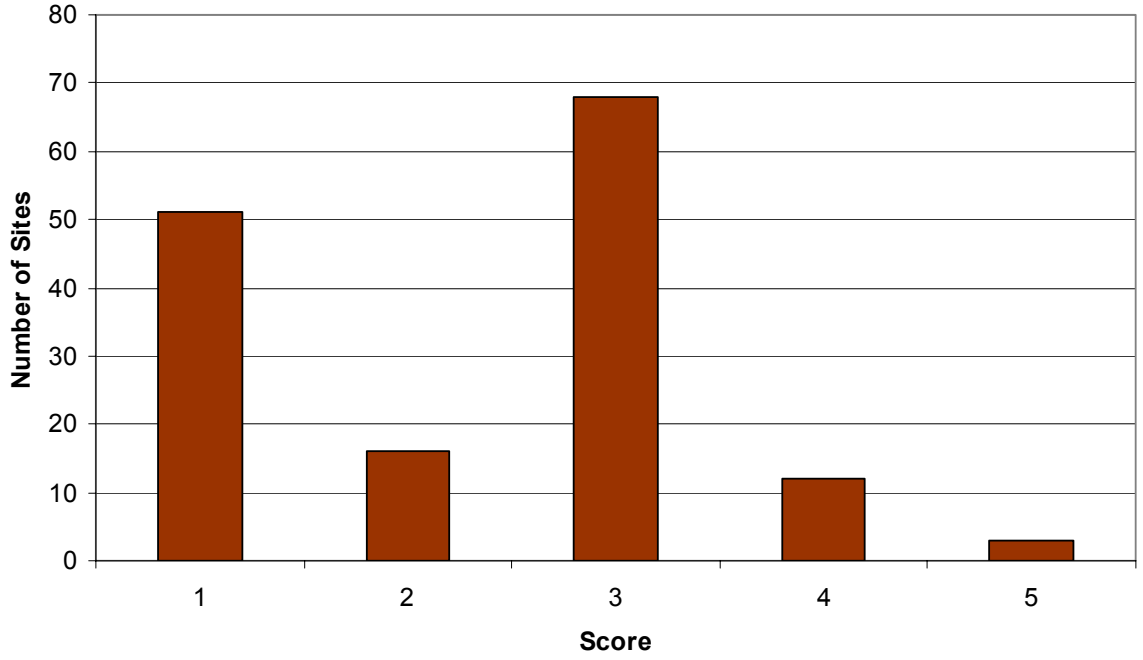

Table 11-5: Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External Residents were educated in variety of ways in 2007/2008; see sections 6 and 8 for details. Internal The City's Stormwater Program Manager is heavily involved in the implementation of the residential component. Other City staff involved in the program also have a good understanding of the goals of the storm water program.	Number of residential incidents reported to storm water hotline	9	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution of enforcement actions	See Section 6	
		Number of dry weather monitoring exceedances traced to residential sources	1	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6: Illicit Discharge Detection and Elimination Component Assessment Measures*

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were eliminated, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to storm water hotline	The City's Stormwater Program Manager trains City staff as needed. See sections 4 and 8. City staff were responsible for many of the reports made to the hotline, as shown in Section 7.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 7 are likely to have resulted a pollutant loading reduction.
Respond to and clean up SSOs	City staff are thoroughly trained on how to respond to SSOs.	See Section 4 for details.	There was one SSO during the reporting period.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Although the overall IDDE component is not being submitted until December 2008, a preliminary assessment of that component's effectiveness is provided here.

Table 11-7: Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for 2007/2008.
	Estimated number of impressions made	17,715		

Notes

Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8: Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details. See Figure 11-3 for a summary of hotline reports in recent years.	Number of attendees at events	74	Amount of trash and debris collected at cleanup events	Unknown
		Number of calls received to the storm water hotline	48	Amount of HHW collected	220,008 pounds between three cities.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-3
Storm Water Complaints Logged

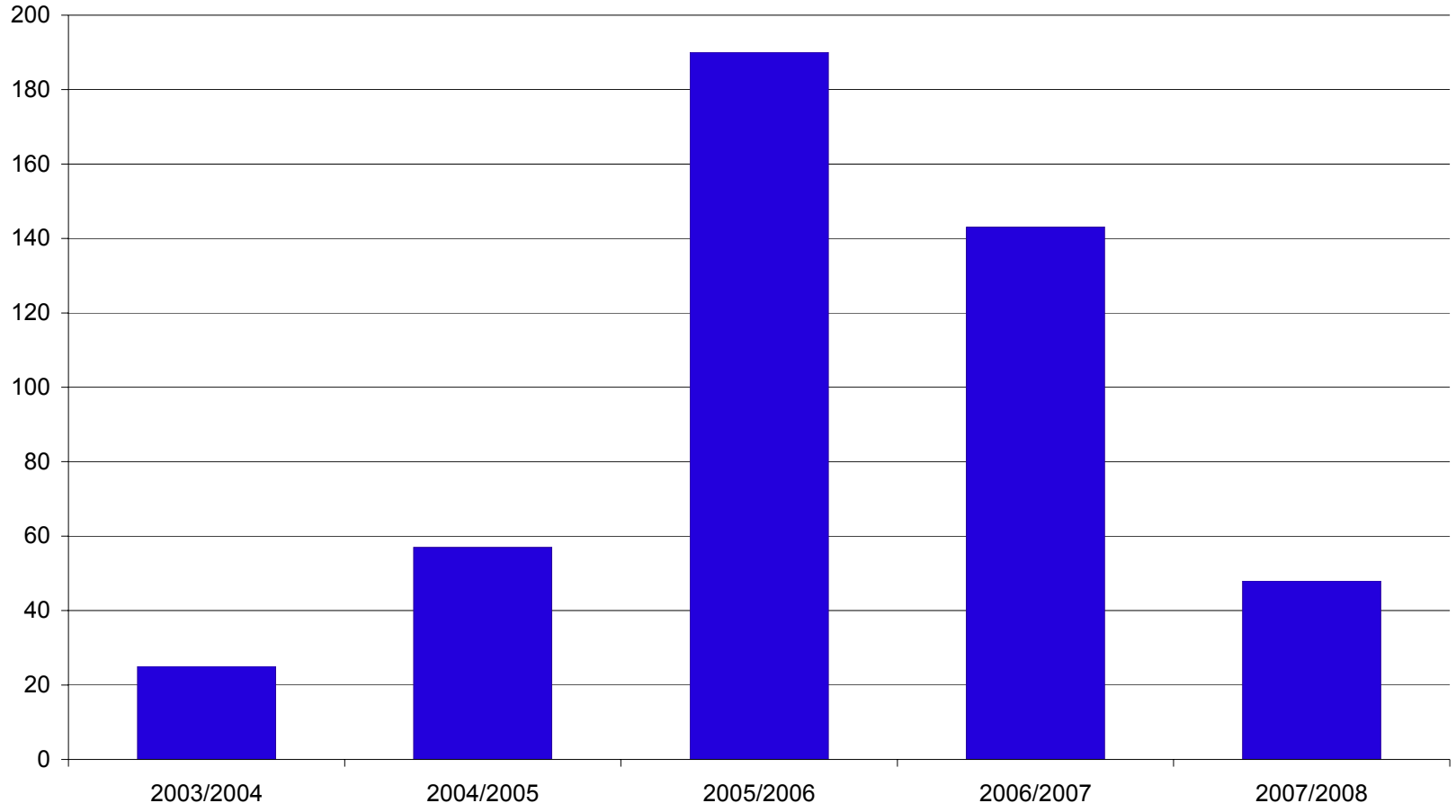

Note: 2007/2008 data is from the period from July 1, 2007 through June 30, 2008 to maintain comparability with data from previous reporting periods.

Figure 11-4
Historical Dry Weather Monitoring Data: Action Level Exceedance Rates

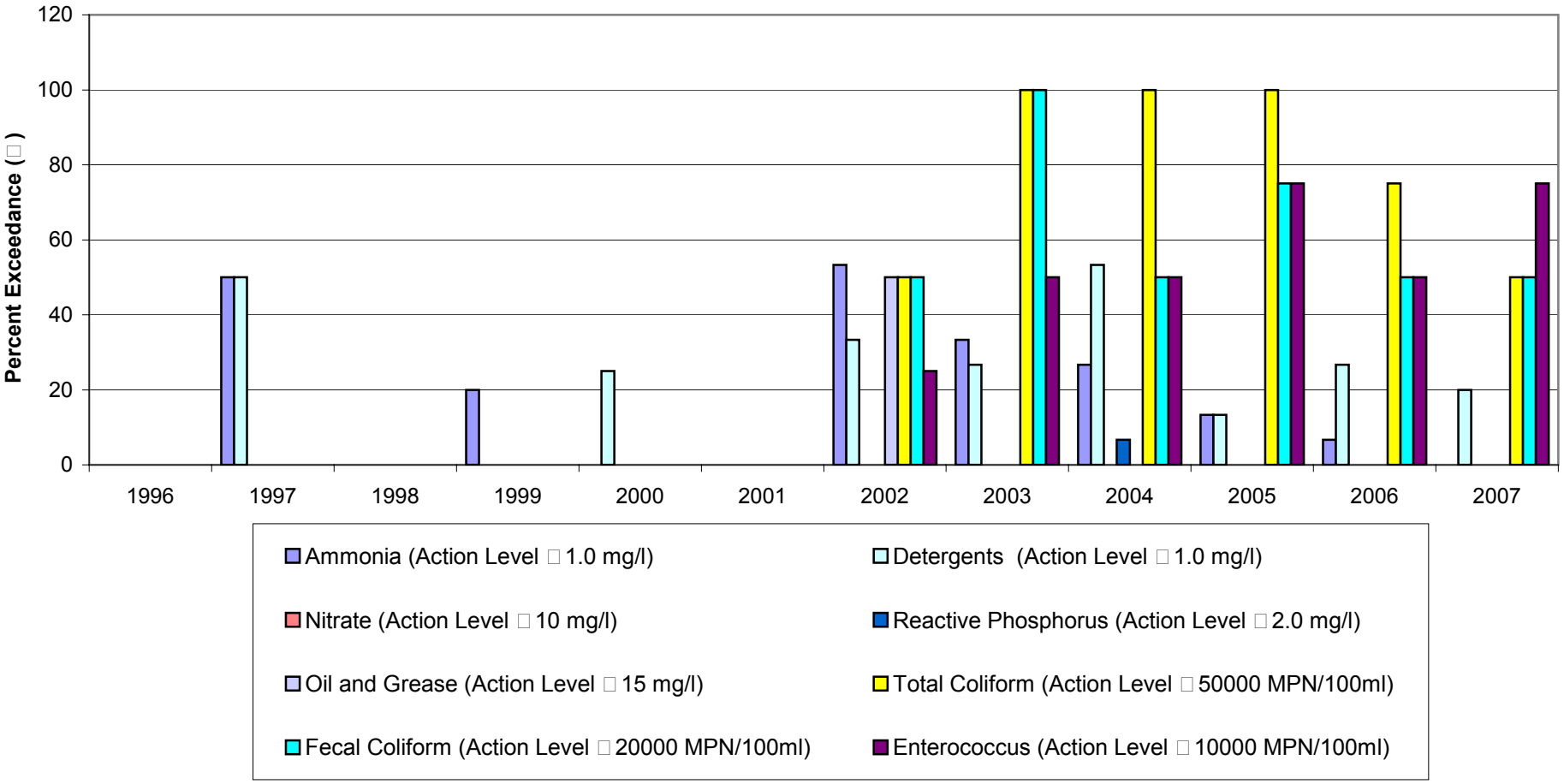

Figure 11-5
Historical Dry Weather Monitoring Data: Ammonia

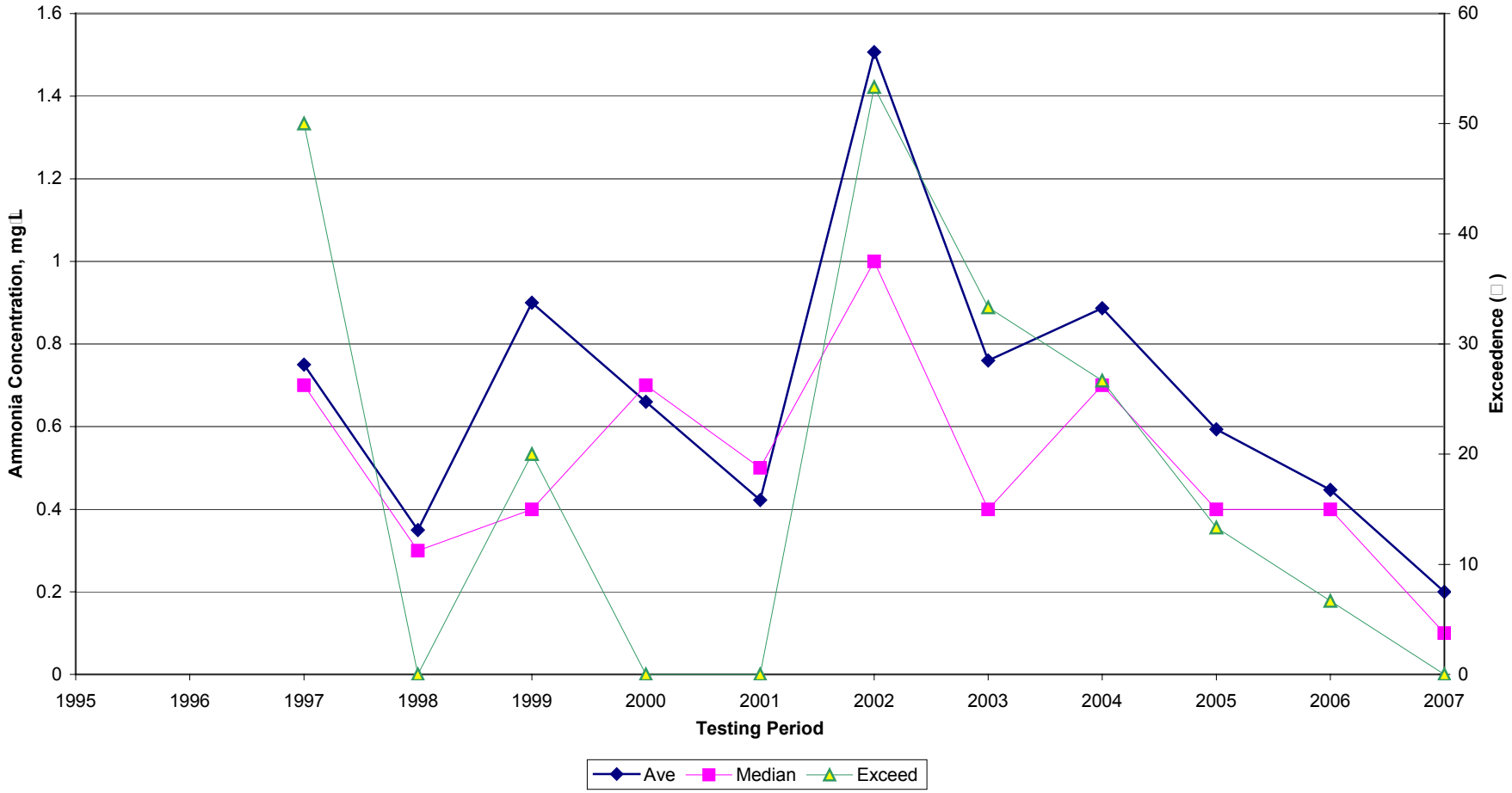

Figure 11-6
Historical Dry Weather Monitoring Data: Detergents

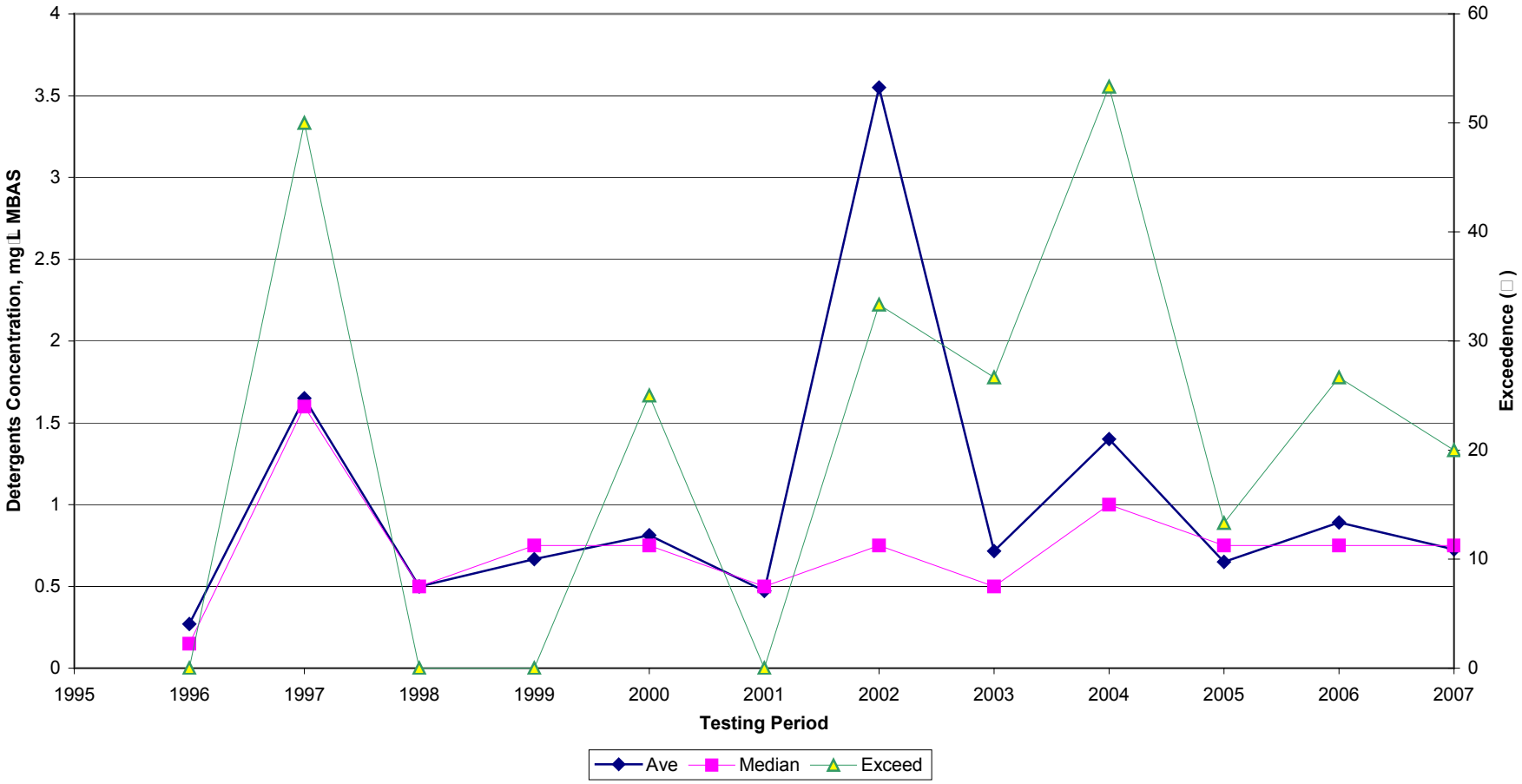

12.0 SPECIAL INVESTIGATIONS

During the reporting period the City undertook two additional programs: the Clean Community Program and a pollutant discharge potential assessment component during industrial and commercial inspections.

12.1 CLEAN COMMUNITY PROGRAM

Results from the City's trash assessment, conducted in 2006/2007, showed that litter and illegally dumped items tended to consist of household trash and large household items, likely from residents in the City. During 2007/2008, the City continued to implement its Clean Community Program. This program is designed to foster a sense of shared responsibility in keeping the community of National City clean and free of pollutants that may otherwise be carried to local receiving water bodies.

The theme of the 2008 community calendar was "By Keeping our Community Clean, We can Keep the Ocean Clean!" This slogan was printed in both English and Spanish on every month of the calendar. Each month showed a different ocean scene and featured sea life such as schools of fish or sea turtles. Storm water facts were also presented throughout the calendar in both English and Spanish; such facts included "Only rain down the drain," "Programming sprinklers to reduce over watering helps reduce pollution," and "You can dispose of large items (mattresses, appliances, etc.) twice per year during the National City Clean-Up days. Watch for event details in your trash bill." The back of the calendar provides numerous City resources for residents who choose to take action in the City's program.

As discussed in detail in Section 9 of this Annual Report, during 2007/2008, the City worked to continue implementing part of the Clean Community Program though the development of a 2009 calendar. Through integrating public participation into the development of the 2009 calendar, the City hopes increase attention to the "By Keeping our Community Clean, We Can Keep the Ocean Clean" message. The City will also use the results of the new trash assessment component of the 2008 Dry Weather Monitoring Program to better gauge the progress of its program. This data is being collected as of this writing, and an assessment cannot be completed yet.

12.2 POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

During 2007/2008, the City conducted pollutant discharge potential assessments (PDPA) at industrial and commercial facilities that received full inspection; the purpose of the assessment is to assist in source identification. The assessment is intended to be a semi-quantitative tool to identify which sites are major sources of the principal pollutants of concern for storm water. For each of several main categories of pollutants, a numeric pollutant discharge potential (PDP) on a scale from 0 (not present) to 5 (severe) is

assigned. A copy of the PDPA form is included with the standard inspection form in Attachment 5.1.

Table 12-1 shows the average scores for each pollutant; note that pH indicates substances likely to cause either an abnormally low (acidic) or abnormally high (basic) pH.

Table 12-1
Pollutant Discharge Potential Score Averages, By Category

Pollutant Category	Potential Discharge Assessment Score
Sediment	2.7
Nutrients	1.8
Aluminum	1.5
Iron	1.6
Heavy Metals	1.9
Organics	1.6
Trash	2.5
Oxygen Demanding	1.8
Oil and Grease	2.9
Bacteria	1.9
Pesticides	1.0
Acid/Base	1.3

Sediment, trash, and oil and grease were observed to be the largest issues during the industrial and commercial inspections conducted during 2007/2008. The City will use this information to help target businesses for inspection during 2008/2009. Figure 12-1, on the following page, show the distribution of PDP scores for each pollutant on the PDPA table.

Figure 12-1
PDPA Score Distribution for Facilities Inspected in 2007/2008

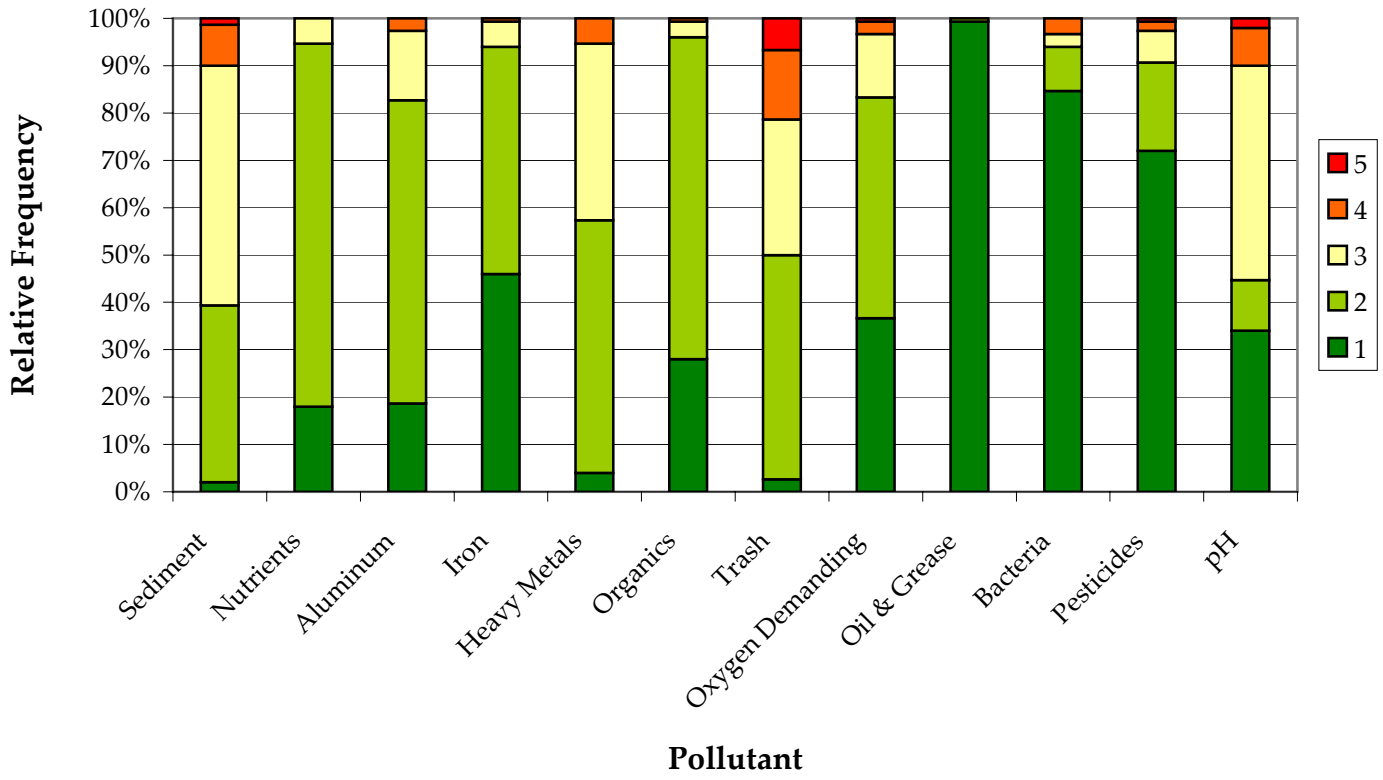

13.0 NON-EMERGENCY FIRE FIGHTING

Please reference Section 4.2.3 of this JURMP Annual Report for information about BMPs and procedures associated with non-emergency fire fighting activities.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 in response to new Municipal Permit requirements. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes to the JURMP made since the overall JURMP update in the spring of 2008 are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 CONCLUSIONS AND RECOMMENDATIONS

During the 2007/2008 reporting period the City of National City updated its JURMP, which was finalized and submitted to the RWQCB in March 2008. The City has begun implementing the new and revised programs in its updated JURMP. The Copermittees have created several new regional workgroups to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City of National City will work collaboratively with the other Copermittees in this process and continue to refine its program implementation as needed to improve its ability to reduce or eliminate pollutant discharges and meet regulatory requirements. The City will also continue its efforts related to pending TMDLs for both Seventh Street Channel and Switzer Creek.

16.0 REFERENCES

California Regional Water Quality Control Board, 2007. Order No. R9-2007-0001. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Construction.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Industrial & Commercial.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Municipal.*

California Storm Water Quality Association, 2007. *Municipal Stormwater Program Effectiveness Assessment Guidance.*

Caltrans Storm Water Quality Handbooks, 2003. *Construction Site Best Management Practices Manual.*

City of National City, 2008. *Jurisdictional Urban Runoff Management Program.*

County of San Diego, 2007. *Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Report.*

APPENDIX A.1

Inventory of Completed Development Projects with Approved Treatment Control BMPs

All Projects are Located in the San Diego Bay Watershed

			Treatment Control BMP									
#	Project Name	Project Location	Biofilters	Detention Basins	Porous Pavement	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separators	Project Type	Receiving Water Body	Priority
1	Advanced Plastics	225 W. 30th St					X	X		Industrial	Sweetwater River	Medium
2	Bell Kia	1940 National City Blvd			X					Commercial	Paradise Creek	Medium
3	Bonita Creek	Sweetwater Road	X				X			Residential	Sweetwater River	Medium
4	Estrella Walk	Plaza Blvd. & L Street							X	Residential	Paradise Creek	Medium
5	Jack In The Box	18th & Highland Avenue					X			Commercial	Paradise Creek	Medium
6	Mariposa Walk	E. 7th St and R St					X			Residential	Paradise Creek	Medium
7	National City Batch Plant	12th St & McKinley Ave				X	X			Industrial	La Paleta Creek/7th Street Channel	Medium
8	National City Fire Station #34	333 East 16th Street					X		X	Municipal	Paradise Creek	Medium
9	National City Library	1401 National City Blvd					X			Municipal	Paradise Creek	Medium

Inventory of Completed Development Projects with Approved Treatment Control BMPs (Continued)

All Projects are Located in the San Diego Bay Watershed

			Treatment Control BMP									
#	Project Name	Project Location	Biofilters	Detention Basins	Porous Pavement	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separators	Project Type	Receiving Water Body	Priority
10	Paradise Creek Park	Harding Ave, West 19th St, & West 22nd St					X			Municipal	Paradise Creek	High
11	Paradise Ridge	Hollyhock Lane	X							Residential	Paradise Creek	Medium
12	Penske Truck Leasing	3132 Hoover Avenue					X			Commercial	Paradise Creek	High
13	Plaza Bonita Mall Expansion	3030 Plaza Bonita Road	X				X		X	Commercial	Sweetwater River	Medium
14	Plaza City Apartments	1535 E. Plaza Blvd							X	Residential	Paradise Creek	High
15	Plaza Village	L Avenue and Plaza Blvd					X			Residential	Paradise Creek	Medium
16	Sweetwater Town & Country Mall	Sweetwater Road					X			Commercial	Sweetwater River	High
17	Tremont Court Condominiums	Euclid Ave & Division St	X				X		X	Residential	La Paleta Creek/7th Street Channel	Medium
18	Walgreens	885 Euclid Ave					X			Commercial	Paradise Creek	High

Inventory of Completed Development Projects with Approved Treatment Control BMPs (Continued)

All Projects are Located in the San Diego Bay Watershed

			Treatment Control BMP									
#	Project Name	Project Location	Biofilters	Detention Basins	Porous Pavement	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separators	Project Type	Receiving Water Body	Priority
19	Wal-Mart	1200 Highland Ave							X	Commercial	Paradise Creek	High

APPENDIX A.2

Appendix A.2
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
1	Marina Gateway (Hotel)	2501 Cleveland Avenue	San Diego Bay	High	0	0	1	0	0	1
2	Pacific View Estates	Division St and Laurel Ave	San Diego Bay	High	31	15	1	2	0	18
3	Canyon Ridge	Rachael Avenue at Blue Ridge Street	San Diego Bay	Medium	31	7	1	0	0	8
4	H & H Townhomes	3102 E. 16th St (16th and Harbison)	San Diego Bay	Medium	31	7	1	0	0	8
5	Harbor View Condos	D Ave. & 8th St.	San Diego Bay	Medium	31	7	2	0	0	9
6	K Avenue Homes	1209 & 1215 K Avenue	San Diego Bay	Medium	13	3	0	0	0	3
7	Mirabelle (formerly Cypress Glen)	3229 Cypress Street	San Diego Bay	Medium	31	7	1	0	0	8

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
8	Paradise Village Retirement Community	2700 east 4th St	San Diego Bay	Medium	0	0	1	0	0	1
9	Paradise Walk Townhomes	8th St and Arcadia St	San Diego Bay	Medium	31	7	1	0	0	8
10	Plaza Bonita Mall Expansion	Plaza Bonita Rd.	San Diego Bay	Medium	31	7	1	0	1	9
11	Plaza Senior Apartments	1535 E. Plaza Blvd	San Diego Bay	Medium	31	7	1	0	0	8
12	Tremont Court	Euclid Ave & Division St	San Diego Bay	Medium	9	2	1	0	0	3
13	Public Improvements: Construction: Per approved plans, On-Site Improvements: Grading: 133 CY, Others: Curb, gutter, inlet, and outlet	801 National City	San Diego Bay	Low	8	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
14	Construction: 6" sewer lateral w/6" CO at PL, Others: Trench repair per NC 113 SB, sidewalk, trench for SDGE gas connection	940 W 19th Street	San Diego Bay	Low	4	*		0	0	*
15	Construction: Installation of 3 ground water monitoring wells	1625-1635 Coolidge Ave	San Diego Bay	Low	4	*		0	0	*
16	Construction: Trench for SDGE Gas	3020 20th Street	San Diego Bay	Low	4	*		0	0	*
17	Marinelli home	2429 Prospect St.	San Diego Bay	Low	31	*		0	1	1*
18	Martinelli Residence, construction of 2 single car garages	940 E. 16th Street, National City, CA 91950	San Diego Bay	Low	31	*		0	1	1*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
19	On-site Improvements: Grading: 3800 CY cut/export, Retaining Wall: temp. shoring per plans, Check by: CN/AL	A Avenue @ E. 12th Street	San Diego Bay	Low	1	*		0	0	*
20	On Site Improvements: Retaining Wall: Per SDRSD C-3	545 Rachael Ave	San Diego Bay	Low	0	*		0	0	*
21	On Site Improvements: Sewer lateral connector (6" dia) per SORSD S-13	2431 Prospect St.	San Diego Bay	Low	4	*		0	0	*
22	On Site Improvemnts: Flat Works Construction: Trench for gas connection	1940 National City Blvd	San Diego Bay	Low	9	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
23	On-Site Improvements: Grading: Per plans 900 CYs, Retaining Wall: Removal and sloping of cut, Others: Drain to retention basin	2640 Hill Drive National City	San Diego Bay	Low	4	*		0	0	*
24	On-site Improvements: Others: Monitoring well installation	Roosevelt @ 9th St	San Diego Bay	Low	0	*		0	0	*
25	On-site Improvements: Retaining wall per approved plans	1502 Highland Ave	San Diego Bay	Low	0	*		0	0	*
26	On-site Improvements: Retaining Wall: Per SDRSD, C-3 Ht=>3 variable	332 E. 5th Street	San Diego Bay	Low	12	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
27	Public Improvements: Construction: All work per approved, Others: Building plans, On-Site Improvements: Others: Landscape and irrigation per plan	El Toyon Park, 2500 E. 4th Street	San Diego Bay	Low	0	*		0	0	*
28	Public Improvements: 6" Sewer lateral w/6" Others: Clean out	2031 Lanoitan Ave	San Diego Bay	Low	0	*		0	0	*
29	Public Improvements: 9 boring soil test per attached detail	Harbor Drive, between Civic Center Drive and Wooden Street	San Diego Bay	Low	14	*		0	0	*
30	Public improvements: Construction 6" sewer LAT tie-in	1737 Grove St	San Diego Bay	Low	0	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
31	Public Improvements: Construction/Other: Install temp. power poles along E. 11th St & 18' over alley On Site Improvements: Others: Temp power poles	11th St betweenn National City Blvd and A Ave	San Diego Bay	Low	0	*		0	0	*
32	Public Improvements: Construction/Other: water main tie-in and St. trench resurface	4th Street at Hill Street	San Diego Bay	Low	8	*		0	0	*
33	Public Improvements: Construction: 24" x 108' sidewalk Others: per SDRSD G-7, G-10	205 National City Blvd	San Diego Bay	Low	0	*		0	0	*
34	Public improvements: Construction: 6" sewer lateral "new". Others:	1752 Lanotian St	San Diego Bay	Low	0	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
35	Public Improvements: Construction: 6" Sewer main from MH #1123 Northerly to approx. 70' 4 c.o. with 6" lateral On Site Improvements: 6" Lateral w/6" C.O. at Pl	3033 C Ave National City	San Diego Bay	Low	4	*		0	0	*
36	Public Improvements: Construction: G Units New Monitoring Wells	Roosevelt Ave, Plaza Blvd. and W. 8th St	San Diego Bay	Low	0	*		0	0	*
37	Public Improvements: Construction: Install 6" sewer lateral per SDRSD S-13 & 113-S-B	2409 Granger Ave	San Diego Bay	Low	0	*		0	0	*
38	Public Improvements: Construction: Others: Contact dig alert prior to start of work	Plaza Blvd from Highland Ave to Euclid Ave	San Diego Bay	Low	0	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
39	Public Improvements: Construction: per specs # 0408 Others: Pump sta. rehab.	Various Locations	San Diego Bay	Low	1	*		0	0	*
40	Public Improvements: Construction: Resurfacing and conc. Wk. Others: Per spec 06-03	Various Locations	San Diego Bay	Low	0	*		0	0	*
41	Public Improvements: Construction: Sewer lateral installation Others: 2 x 6" Lat. w/PL Cleanouts	913 - 21 M Ave	San Diego Bay	Low	0	*		0	0	*
42	Public Improvements: Construction: Sewer Main Repair per SDRSD S-4, Cleanout per SDRSD	413 N. Highland Ave	San Diego Bay	Low	0	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
43	Public Improvements: Construction: Specs 08-04 Others: Road resurfacing	Various Locations	San Diego Bay	Low	0	*		0	0	*
44	Public Improvements: Construction: Trench for gas service National City Std. trench/backfill	3440 Valley Rd	San Diego Bay	Low	4	*		0	0	*
45	Public Improvements: Curb & Gutter (new/R&R) SDRSD G-2 Mod.	18th St and Highland Ave	San Diego Bay	Low	0	*		0	0	*
46	Public Improvements: Curb & Gutter (new/R&R), Driveway (new/R&R) residential	2503 "M" Avenue	San Diego Bay	Low	0	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
47	Public Improvements: Driveway (New) G-14A (22F8) Construction/Other: sewer lateral 6' with R clean out	2221 E 16th St	San Diego Bay	Low	0	*		0	0	*
48	Public Improvements: Driveway (New/R&R) residential Construction: Sewer lat. Connection per approved plans. Retaining wall: per approved plan	3000 E. 8th St National City	San Diego Bay	Low	0	*		0	0	*
49	Public Improvements: Driveway (new/R&R) Residential SDRSD G-14B G-2	2130 J. Avenue National City	San Diego Bay	Low	9	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
50	Public Improvements: Driveway (New/R&R) Residential: G-14B	2728 Virginia Drive	San Diego Bay	Low	0	*		0	0	*
51	Public Improvements: Driveway (New/R&R) Residential: G-2/G-26	325 W. 30th St	San Diego Bay	Low	3	*		0	0	*
52	Public Improvements: Driveway (R&R) SDRSDG-14B-G-2 MOD	1512 Coolidge Avenue	San Diego Bay	Low	1	*		0	0	*
53	Public Improvements: Others: Painting of public building	City Parks	San Diego Bay	Low	0	*		0	0	*
54	Public Improvements: Sidewalk (New/R&R) G-9/G-10. Construction: 6" sewer lateral connection per SDRSD	Corner of 2nd St and A Avenue	San Diego Bay	Low	0	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
55	Public Improvements: Sidewalk (New/R&R); Curb & Gutter (new/R&R) Others: Restore sidewalk, C & G	1307 E. 4th St	San Diego Bay	Low	0	*		0	0	*
56	Public Improvements: Sidewalk (New/R&R) Restore per G-7 Curb & Gutter (New/R&R).	2335 E 4th	San Diego Bay	Low	0	*		0	0	*
57	Public Improvements: Sidewalk (New/R&R), Curb & Gutter (New/R&R), Driveway (New/R&R) Commercial	920 N Avenue	San Diego Bay	Low	0	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
58	Public Improvements: Sidewalk (New/R&R), Curb & Gutter (New/R&R), Driveway (New/R&R) Residential	Intersection of 8th Street and Plaza Blvd	San Diego Bay	Low	11	*		0	0	*
59	Public Improvements: Sidewalk (New/R&R): 5 LFX, 50LF, Curb & Gutter (New/R&R): 90LF	1628 & 1630 J Street	San Diego Bay	Low	13	*		0	0	*
60	Public Improvements: Sidewalk (new/R&R):SDRSD G-7 L.F.X.:8' +-L.F.	135 8th Street	San Diego Bay	Low	4	*		0	0	*
61	Public Improvements: Sidewalk (R&R) 1 - panel L.F.X SDRSD, Curb & Gutter (New,R&R) G-14B	2933 K Street	San Diego Bay	Low	7	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
62	Public Improvements: Sidewalk (R&R) G-7 for SWK underdrain, Curb & Gutter, Driveway (R&R), On-Site Improvements: Grading	3110 E. 16th St	San Diego Bay	Low	6	*		0	0	*
63	Public Improvements: Sidewalk (R&R) SDRSD G-7 Others: Joints to match existing	1112 E. 24 St.	San Diego Bay	Low	0	*		0	0	*
64	Public Improvements: Sidewalk (R&R), Construction: Boring for Tel. Conduit	1800 E. 22nd Street (Camacho Gym)	San Diego Bay	Low	4	*		0	0	*
65	Public Improvements: Sidewalk (R&R): 57'± per G7, Driveway (R&R): per G-14B	1125 E. 3rd Street	San Diego Bay	Low	4	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
66	Public Improvements: Sidewalk (R&R): per G-7 L.F.X. 1-panel L.F. Construction: Trench for elec. Conduit.	310 National City Blvd (3rd Ave)	San Diego Bay	Low	0	*		0	0	*
67	Public Improvements: Sidewalk R&R G-7	2532 J Ave	San Diego Bay	Low	16	*		0	0	*
68	Public Improvements: Sidewalk(New), Curb and Gutter (R&R), Curb Driveway (R&R) commercial, Pedestrian Ramp (New/R&R):W/G-30 On site Imrovements: Grading, Retaining wall, Others	2300 Haffley Ave	San Diego Bay	Low	11	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
69	Public Improvements: Sidewalk; Curb (R&R with Std Type C & G); Driveway Residential; Pedestrian Ramp; Street pavement.	Various Locations	San Diego Bay	Low	0	*		0	0	*
70	Public Improvements: Sidewalk (New/R&R)	1026 E. 8th Street	San Diego Bay	Low	0	*		0	0	*
71	Public Improvements: Sidewalk (R&R) G-7, Curb & Gutter (R&R) G-2, G-2 Mod., Driveway (new/R&R) Residential G-14A,	3055 E. 20th Street	San Diego Bay	Low	27	*		0	0	*
72	Public Improvements: Driveway (New/R&R) Residential: G-14B, G-2	1822 Gamma St	San Diego Bay	Low	0	*		0	0	*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
73	Public Improvements: Driveway (New/R&R) Residential: SDRSD G-14B G-2	1828 Gamma St.	San Diego Bay	Low	0	*		0	0	*
74	Sidewalk: R&R SDRSDG-7, Others: Trench for Elect. House connection	2936 E. Division Street	San Diego Bay	Low	4	*		0	0	*
75	Sidewalk: SDRSDG-7 Various locations, Curb & Gutter: R&R SDRSDG-2, Driveway: SDRSDG-14, Pedestrian Ramp: SDRSDG-27-32, Street Pavement.	Various Locations	San Diego Bay	Low	17	*		0	0	*
76	Single Family Residence	3425 Cagle St	San Diego Bay	Low	31	*		0	1	1*

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
77	Sylvia Zendejas Residence	1738 L Avenue	San Diego Bay	Low	0	1		0	0	1
78	On Site Improvements: Construction: Drive lanes, sidewalks Others: Curbs Grading: 1550 CY Retaining Wall: Per plans Others: On site utilities	3102 E 16th St	San Diego Bay	Low	0	*		0	0	*

* Low priority construction sites received at least one inspection from City building inspectors during the 2007/2008 reporting period. These inspections include a check for proper construction BMP implementation and maintenance.

APPENDIX A.3

Appendix A.3
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category
1	El Toyon Park	2005 East 4th Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas
2	Graffiti Removal	Throughout City	High	San Diego Bay	Mobile Municipal Activities, Including Power Washing
3	Kimball Park	12th Street and D Avenue	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas
4	Las Palmas Park	1800 Newell Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas
5	Municipal Separate Storm Sewer	19 miles of storm drains, storm drain boxes, and open channel sections throughout the City	High	San Diego Bay	MS4
6	Municipal Swimming Pool	1800 East 22nd Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas
7	National City Municipal Golf Course	1439 Sweetwater Road	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas
8	Power Washing	Throughout City	High	San Diego Bay	Mobile Municipal Activities, Including Power Washing
9	Public Works East Yard	2100 Hoover Avenue	High	San Diego Bay	Public Works Facilities
10	Public Works West Yard	2100 Hoover Avenue	High	San Diego Bay	Public Works Facilities
11	Road, Streets, and Highways	110 miles of roadways throughout the City	High	San Diego Bay	Road, Streets, and Highways
12	Special Events	Throughout City	High	San Diego Bay	Special Events
13	Sweetwater Heights Park	Cagle Street and Stockman Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas
14	Fire Station 31	24th Street and Euclid Avenue	Medium	San Diego Bay	Fire Stations
15	George H. Waters Nutrition Center	1514 D Avenue	Medium	San Diego Bay	Other Fixed Facilities

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category
16	Infrastructure Maintenance	Throughout City	Medium	San Diego Bay	Mobile Municipal Activities, Including Power Washing
17	Landscape Maintenance	Throughout City	Medium	San Diego Bay	Mobile Municipal Activities, Including Power Washing
18	National City Fire Department Headquarters - Station 34	333 East 16th Street	Medium	San Diego Bay	Fire Stations
19	Police Station	1200 National City Boulevard	Medium	San Diego Bay	Other Fixed Facilities
20	Camacho Recreational Gymnasium	1810 East 22nd Street	Low	San Diego Bay	Other Fixed Facilities
21	Casa De Salud	1408 Harding Avenue	Low	San Diego Bay	Other Fixed Facilities
22	Civic Center	1243 National City Boulevard	Low	San Diego Bay	Other Fixed Facilities
23	El Toyon Recreational Center	2005 East 4th Street	Low	San Diego Bay	Other Fixed Facilities
24	Kimball Recreation Center	148 East 12th Street	Low	San Diego Bay	Other Fixed Facilities
25	Martin Luther King Community Center	140 East 12th Street	Low	San Diego Bay	Other Fixed Facilities
26	National City Public Library	1401 National City Boulevard	Low	San Diego Bay	Other Fixed Facilities
27	Senior Services Center	1221 D Avenue	Low	San Diego Bay	Other Fixed Facilities

APPENDIX A.4

Appendix A.4
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
1	A-1 ALLOYS RECYCLING CENTER	724 CIVIC CENTER DRIVE	High	5093	Recycling	908.31	9 37I020171
2	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	High	3731	Boat Repair	908.31	9 37I014819
3	CARROLL METAL WORKS, INC.	740 W 16TH STREET	High	3441	Manufacturing, Structural Steel	908.32	9 37I021165
4	DIXIELINE LUMBER COMPANY	3450 HIGHLAND AVENUE	High	2439	Manufacturing, Wood/Furniture	909.12	9 37I015245
5	GREG'S FIBERGLASS AND PAINTING	1804 CLEVELAND AVENUE, A	High	3732	Boat Repair	908.31	
6	HYPERBARIC TECHNOLOGIES	3224 HOOVER AVENUE	High	3499	Manufacturing, Fabricated Metal	908.32	
7	J. C. ENVIRONMENTAL COMPANY	2504 TRANSPORTATION AVENUE, C	High	4953	Waste Management	908.32	
8	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	High	7538	Manufacturing, Equipment	908.31	
9	LEMON GROVE PLATING, INC.	1400 CLEVELAND AVENUE	High	3471	Manufacturing, Fabricated Metal	908.31	
10	MELHORN CONSTRUCTION	410 W 30TH STREET, B	High	2434	Manufacturing, Wood/Furniture	908.32	
11	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	High	3519	Manufacturing, Equipment	908.31	
12	NATIONAL IRON WORKS	832 HOOVER AVENUE	High	3441	Manufacturing, Fabricated Metal	908.31	
13	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	High	5093	Recycling	908.31	9 37I000615
14	PRESIDENTIAL LIMOUSINE LLC	1428 MCKINLEY AVE	High	4119	Ground Transportation	908.31	
15	ROB NORTH FABRICATION	1605 HOOVER AVENUE	High	5571	Manufacturing, Equipment	908.31	
16	SAN DIEGO SEAFOOD	1842 MCKINLEY AVENUE	High	2092	Manufacturing, Food/Drink	908.31	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
17	SUN DIEGO CHARTER CO.	2020 HOOVER AVENUE	High	4141	Ground Transportation	908.32	9 37I018361
18	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	High	4226	Manufacturing, Fabricated Metal	908.31	
19	VALENCIA STONE AND TILE	1124 COOLIDGE AVENUE	High	3281	Manufacturing, Stone/Glass	908.31	9 37I020515
20	A-AMERICAN SELF STORAGE	525 W 20TH STREET	Medium	4225	Wholesale/Storage/ Warehousing	908.32	
21	ACTIVE SIGN CO.	2827 HOOVER AVENUE, J	Medium	3993	Printing	908.32	
22	ADVANCE PLASTICS	225 W 30TH STREET	Medium	3089	Manufacturing, Plastic/Rubber	909.12	
23	ALLGEAR SCREEN PRINTING	914 E 8TH ST #105	Medium	2396	Manufacturing, Fabric/Clothes	908.32	
24	AMEE BAY LLC	2105 CLEVELAND AVE	Medium	3732	Boat Repair	908.31	
25	AMSEC LLC	3201 , 3239 HOOVER AVENUE	Medium	4226	Wholesale/Storage/ Warehousing	908.32	
26	ANCON TRANSPORTATION	1800 HARRISON AVENUE	Medium	4226	Wholesale/Storage/ Warehousing	908.31	
27	APPAREL ENTERPRISES CO., INC.	2712 TRANSPORTATION AVENUE, H	Medium	2389	Manufacturing, Fabric/Clothes	908.32	
28	ATOMIC INVESTMENTS	3200 HIGHLAND AVENUE	Medium	4225	Wholesale/Storage/ Warehousing	909.12	
29	AZTEC PRINTING COMPANY	710 E 3RD STREET	Medium	2759	Printing	908.31	
30	BECKY BEEZ BISQUE & CERAMICS	2424 HOOVER AVE STE T	Medium	3269	Manufacturing, Stone/Glass	908.32	
31	BEST WAY PRINTING	2602 TRANSPORTATION AVE STE E	Medium	2759	Printing	908.32	
32	BORDER STEEL INTERNATIONAL	1505 CLEVELAND AVE	Medium	3441	Manufacturing, Structural Steel	908.31	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
33	CAL AM MANUFACTURING	1215 WILSON AVE	Medium	2821	Manufacturing, Chemicals	908.31	
34	CALIFORNIA MOVING & STORAGE	1305 WILSON AVENUE	Medium	4214	Ground Transportation	908.31	
35	CASA SANCHEZ FOODS	131 W 33RD ST STE 11	Medium	4225	Wholesale/Storage/ Warehousing	909.12	
36	CENTLI	221 W 33RD ST	Medium	2099	Manufacturing, Food/Drink	909.12	
37	CHAE & NAM UNIVERSE, INC	1625 CLEVELAND AVE	Medium	3731	Boat Repair	908.31	
38	CHRISTIAN TRANSPORTATION SERVICE	616 E 8TH ST	Medium	4119	Ground Transportation	908.32	
39	COASTAL DECKING, INC.	2050 WILSON AVENUE	Medium	4225	Wholesale/Storage/ Warehousing	908.32	
40	COLLINS MARINE REPAIR, INC	1400 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31	
41	CONTACTOURS AND CHARTER SERVICE (SAN DIEGO MINI TOURS INC)	1726 WILSON AVENUE	Medium	4141	Ground Transportation	908.31	9 37I001275
42	COSTCO WHOLESALE CORP.	1001 W 19TH STREET, C , D	Medium	4783	Ground Transportation	908.31	
43	COSTCO WHOLESALE GROUP	1001 W 19TH STREET, B	Medium	3827	Manufacturing, Equipment	908.31	
44	COURRINGTON WOODWORKS	1535 TIDELAND AVENUE, A-E	Medium	2541	Manufacturing, Wood/Furniture	908.31	
45	CP MANUFACTURING	1300 WILSON AVENUE	Medium	3559	Manufacturing, Equipment	908.31	9 37I016543
46	CREATIVE MOBILITY INC	320 CIVIC CENTER DRIVE	Medium	3799	Manufacturing, Equipment	908.31	
47	CUSTOM METAL ENTERPRISES	1625 COOLIDGE AVENUE	Medium	3599	Manufacturing, Equipment	908.31	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
48	D F DESIGNS	1228 HOOVER AVENUE	Medium	2434	Manufacturing, Wood/Furniture	908.31	
49	DAN FAB	1110 FLARDING AVENUE	Medium	3499	Manufacturing, Fabricated Metal	908.31	
50	DESIGNER'S WORK ROOM	100 W 35TH STREET, V/W	Medium	2392	Manufacturing, Fabric/Clothes	909.12	
51	DIMA-TECH	205 W 35TH STREET, H	Medium	3612	Manufacturing, Equipment	909.12	
52	DISCOUNT WATER SUPPLY	3403 E PLAZA BLVD STE H	Medium	3589	Manufacturing, Equipment	908.32	
53	DURRA INK	303 W 35TH STREET, E	Medium	2752	Printing	909.12	
54	E P I ENTERPRISES LLC	1434 EUCLID AVE	Medium	4119	Ground Transportation	908.32	
55	E.L.A BEDSPREADS ETC.	3200 HIGHLAND AVENUE, 408	Medium	2392	Manufacturing, Fabric/Clothes	909.12	
56	EHMCKE SHEET METAL CORP	840 W 19TH STREET	Medium	3444	Manufacturing, Fabricated Metal	908.31	
57	EZ SPRING AND STAMPING	231 W 11TH STREET	Medium	3499	Manufacturing, Fabricated Metal	908.31	
58	FABRICATION TECHNOLOGIES INDUSTRIES	2401 HAFFLEY AVENUE, A	Medium	3499	Manufacturing, Fabricated Metal	908.31	
59	FAMILY LOOPYA CORP	2525 SOUTHPORT WAY, E	Medium	2038	Manufacturing, Food/Drink	908.32	
60	FIESTA PACIFIC PRODUCTS, INC	2855 A AVENUE	Medium	2037	Manufacturing, Food/Drink	908.32	
61	FTC	1433 ROOSEVELT AVENUE	Medium	3999	Manufacturing, Misc	908.31	
62	FUTURA FIBERGLASS	730 W 19TH STREET	Medium	3732	Boat Repair	908.31	9 37I015572
63	G V INDUSTRIES	1346 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
64	GLASSWOOD STUDIO	907 A AVENUE	Medium	3231	Manufacturing, Stone/Glass	908.32	
65	GLOBAL KNITTING, MILLS USA,INC	340 W 26TH ST STE F	Medium	2252	Manufacturing, Fabric/Clothes	908.32	
66	GOULET INDUSTRIES	340 W 26TH STREET, J	Medium	3499	Manufacturing, Fabricated Metal	908.32	
67	H&B PRODUCTS	337 W 35TH ST G	Medium	3559	Manufacturing, Equipment	909.12	
68	HANSON AGGREGATES NATIONAL CITY BATCH PLANT (2003 NC LLC)	601 W 12TH STREET	Medium	3273	Manufacturing, Concrete	908.31	9 37I020195
69	HAWTHORNE RENT-IT SERVICE	2000 MCKINLEY AVENUE	Medium	4212	Vehicle/Equipment Rental	908.31	9 37I005920
70	HAULING	328 D AVENUE	Medium	4212	Ground Transportation	908.31	
71	HEARTLAND MEAT CO., INC.	224 W 12TH STREET	Medium	4222	Wholesale/Storage/ Warehousing	908.31	
72	HIGH 5 TEAM SALE	2835 HIGHLAND AVE STE A	Medium	2396	Manufacturing, Fabric/Clothes	909.12	
73	IDENTITY PLUS	1120 HOOVER AVENUE	Medium	3069	Manufacturing, Plastic/Rubber	908.31	
74	IMAGEN PUBLISHING	539 HIGHLAND AVENUE	Medium	2721	Printing	908.31	
75	INDUSTRIAL & ARCHITECTURAL SIGN PRODUCTION, INC	1440 HARDING AVE STE B	Medium	3993	Printing	908.31	
76	INDUSTRIAL AND ARCHITECTURAL	1440 HARDING AVE STE B	Medium	3993	Printing	908.31	
77	INNOVATIVE CUTTING DESIGNS COR	1805 CLEVELAND AVE	Medium	3312	Manufacturing, Primary Metal	908.31	
78	JB LITHO	2602 TRANSPORTATION AVENUE, EAST	Medium	2752	Printing	908.32	
79	K.D.R. COMPANY	301 W 28TH ST STE H	Medium	2752	Printing	908.32	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
80	L B C MUNDIAL CORP	1420 E PLAZA BLVD., D-9	Medium	4731	Ground Transportation	908.32	
81	L3 COMMINCATIONS/PACORD SAN DIEGO	240 W 30TH STREET	Medium	3812	Manufacturing, Electronics	909.12	9 37I019840
82	L3 COMMUNICATIONS PACORD SAN DIEGO	225 W 30TH STREET	Medium	3812	Manufacturing, Electronics	909.12	9 37I015864
83	LA ESPIGA DE ORO BAKERY	320 HIGHLAND AVE	Medium	2051	Manufacturing, Food Products	908.31	
84	LEADING CONCEPTS	1535 TIDELAND AVENUE, D	Medium	3535	Manufacturing, Equipment	908.31	
85	M & M CONVERTER SHOP	301 W 28TH STREET, X	Medium	3568	Manufacturing, Equipment	908.32	
86	M & N FURNITURE	125 W 22ND STREET	Medium	2519	Manufacturing, Wood/Furniture	908.32	
87	M + E LIMOUSINES	438 Q AVE	Medium	4119	Ground Transportation	908.32	
88	MAC'S TRANSFER & STORAGE	1305 WILSON AVE	Medium	4214	Ground Transportation	908.31	
89	MASTER MACHINE CORPORATION (VANTAGE ASSOCIATES)	900 CIVIC CENTER DRIVE	Medium	3499	Manufacturing, Fabricated Metal	908.31	9 37I019349
90	MILLER MARINE	1430 HOOVER AVENUE	Medium	3499	Manufacturing, Fabricated Metal	908.31	9 37I018090
91	MOTIVATIONAL SYSTEMS INC. (MSI)	2200 CLEVELAND AVENUE	Medium	2599	Manufacturing, Wood/Furniture	908.31	
92	NATALINA ENTERPRISES	1840 HARRISON AVENUE	Medium	4214	Ground Transportation	908.31	
93	NATIONAL CITY DISCOUNT SELF STORAGE	131 W 33RD STREET	Medium	4225	Wholesale/Storage/ Warehousing	909.12	
94	NATIONAL CITY TRANSFER & STORAGE	2150 MCKINLEY AVENUE	Medium	4214	Ground Transportation	908.31	
95	NEW AGE TRANSPORT INC	2120 E 10TH ST	Medium	4119	Ground Transportation	908.32	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
96	NEW LIFE BARRIER (HOA MY INC. DBA)	1616 HOOVER AVENUE	Medium	3449	Manufacturing, Fabricated Metal	908.31	
97	NIEDERFRANK'S ICE CREAM INC.	726 A AVENUE	Medium	2024	Manufacturing, Food/Drink	908.31	
98	OMNI PHASE RESEARCH LABS INC	3200 HIGHLAND AVE STE 308	Medium	3577	Manufacturing, Electronics	909.12	
99	OOH LA LA	2504 TRANSPORTATION AVE STE D	Medium	2339	Manufacturing, Fabric/Clothes	908.32	
100	PACIFIC DEFENSE SYSTEMS (2)	1411 HARDING AVENUE	Medium	3731	Boat Repair	908.31	9 37I019619
101	POSTURE CARE MATTRESS MFG.	34 E 17TH STREET, A	Medium	2515	Manufacturing, Wood/Furniture	908.32	
102	PROTO MACHINING	105 W 35TH STREET, L	Medium	3499	Manufacturing, Fabricated Metal	909.12	
103	PUPPET SAFARI	326 W 11TH STREET	Medium	3942	Manufacturing, Plastic/Rubber	908.31	
104	RAS FASHIONS	2605 HOOVER AVENUE, B	Medium	2399	Manufacturing, Fabric/Clothes	908.32	
105	ROYCE CABINETS & GRANITE INC	2120 WILSON AVE	Medium	3281	Manufacturing, Stone/Glass	908.32	
106	RYAN HYDRAULIC SERVICES, INC	1817 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31	
107	SAN DIEGO AUTOMOTIVE MUSEUM	600 W 12TH ST	Medium	4226	Wholesale/Storage/ Warehousing	908.31	
108	SAN DIEGO MEDICAL TRANSPORT	1516 ROOSEVELT AVE	Medium	4119	Ground Transportation	908.31	
109	SAN DIEGO PRETZEL	224 W 12TH STREET	Medium	2051	Manufacturing, Food/Drink	908.31	
110	SEWING SAAVEDRA	2525 SOUTHPORT WAY, R	Medium	2399	Manufacturing, Fabric/Clothes	908.32	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
111	SHUTTER BUS LEASING	1726 WILSON AVENUE	Medium	4141	Ground Transportation	908.32	
112	SMARTRUNK SYSTEMS INC.	337 W 35TH STREET, R	Medium	3669	Manufacturing, Electronics	909.12	
113	SOUTH BAY BOILER REPAIR, INC..	1224 ROOSEVELT AVENUE	Medium	3498	Manufacturing, Fabricated Metal	908.31	9 37I019728
114	SOUTH COAST HARLEY-DAVIDSON	1640 HOOVER AVE A	Medium	4225	Wholesale/Storage/ Warehousing	908.31	
115	SOUTHLAND CLUTCH EXCHANGE	101 E 18TH STREET	Medium	3599	Manufacturing, Equipment	908.32	
116	STARK MFG. CO.	206 W 35TH STREET, C , D	Medium	2394	Manufacturing, Fabric/Clothes	909.12	
117	SUPERIOR METAL WORKS, INC	1703 HOOVER AVE STE B	Medium	3441	Manufacturing, Structural Steel	908.32	
118	THE LINE DESIGN	728 E 8TH ST	Medium	2759	Printing	908.32	
119	THE MOBILE SOLUTION	3030 PLAZA BONITA RD	Medium	3663	Manufacturing, Electronics	909.12	
120	TITAN MARINE, INC	2236 MCKINLEY AVE	Medium	3732	Boat Repair	908.31	
121	TOD TOOL INC	2601 HOOVER AVENUE, K	Medium	3728	Manufacturing, Equipment	908.32	
122	UPHOLSTERY FABRIC OUTLET (UFO)	1918 ROOSEVELT AVENUE	Medium	2512	Manufacturing, Wood/Furniture	908.32	
123	US-MEX	2500 HOOVER AVENUE, G	Medium	3679	Manufacturing, Electronics	908.32	
124	VALMER GRAPHICS INC.	1400 E PLAZA BLVD.	Medium	2759	Printing	908.32	
125	VANARI KNITTING MILLS INC.	340 W 26TH STREET, L	Medium	2399	Manufacturing, Fabric/Clothes	908.32	
126	WAGGONEERS TRUCKING	1545 TIDELAND AVENUE	Medium	4212	Ground Transportation	908.31	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
127	WESTERN LIFT, INC/WESTERN HOIST, INC	1839 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31	
128	WESTERN LIFT, INC/WESTERN HOIST, INC.	W 19TH ST & CLEVELAND AVE	Medium	3536	Manufacturing, Equipment	908.31	9 37I000699
129	WESTERN MANUFACTURING COMPANY	2200 HAFFLEY AVE	Medium	3441	Manufacturing, Structural Steel	908.31	
130	WINDOW CLASSICS	1921 CLEVELAND AVENUE	Medium	2391	Manufacturing, Fabric/Clothes	908.31	
131	WITHOUSKI CABINET	1535 TIDELAND AVENUE, P	Medium	2434	Manufacturing, Wood/Furniture	908.31	
132	ACROPOLIS SPACE CENTER	3200 HIGHLAND AVENUE	Low	4225	Wholesale/Storage/ Warehousing	909.12	
133	AMSEC, LLC	131 W 33RD STREET	Low	4225	Wholesale/Storage/ Warehousing	909.12	
134	ASSAF SAWAYA FASHION	301 W 28TH STREET, P	Low	2311	Manufacturing, Fabric/Clothes	908.32	
135	BEAR'S VM MACHINE	241 W 35TH STREET, E	Low	5015	Recycling	909.12	
136	CONNECTION MEDICAL TRANSPORT	2504 TRANSPORTATION AVE STE E	Low	4789	Ground Transportation	908.32	
137	COPY POST PRINTING	100 W 35TH STREET, B	Low	2759	Printing	909.12	
138	CORONADO ISLAND DESIGN & STAMPS	303 W 35TH STREET, G	Low	3953	Manufacturing, Chemicals	909.12	
139	CREST OFFSET PRINTING CO,	921 COOLIDGE AVENUE	Low	2759	Printing	908.31	
140	DRAPERY MANUFACTURER	2605 HOOVER AVENUE, A	Low	2391	Manufacturing, Fabric/Clothes	908.32	
141	EZERA CLOTHING	220 W 25TH STREET, E	Low	2331	Manufacturing, Fabric/Clothes	908.32	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
142	H & B BAJA FILTERS, LLC	337 W 35TH STREET, G	Low	3559	Manufacturing, Equipment	909.12	
143	HIGHWAY 54/NATIONAL SELF STORAGE LLC	132 W 33RD STREET	Low	4225	Wholesale/Storage/ Warehousing	909.12	
144	HWY 54/NATIONAL SELF STOR. LLC	152 W 33TH STREET	Low	4225	Wholesale/Storage/ Warehousing	909.12	
145	INDUSTRIAL & ARCHITECTURAL SIGN PRODUCTION	1535 TIDELAND AVENUE, G	Low	3993	Printing	908.31	
146	JESSICA'S FASHIONS	2605 HOOVER AVENUE	Low	2335	Manufacturing, Fabric/Clothes	908.32	
147	K D R COMPANY PRINTING	301 W 28TH STREET, D	Low	2752	Printing	908.32	
148	KIM'S WEAR	3200 B4-2 HIGHLAND AVENUE, 303	Low	2269	Manufacturing, Fabric/Clothes	909.12	
149	L B C MUNDIAL CORP	914 E 8TH STREET, 201	Low	4731	Ground Transportation	908.32	
150	LUCERO'S DRAPERIES	3200 HIGHLAND AVENUE, 408	Low	2391	Manufacturing, Fabric/Clothes	909.12	
151	MICROWAVE SOLUTIONS INC.	3200 HIGHLAND AVENUE	Low	3663	Manufacturing, Electronics	909.12	
152	MIKE'S PRINTING	2827 HOOVER AVENUE, K	Low	2752	Printing	908.32	
153	MYLYN'S FASHION OF SAN DIEGO	901 COOLIDGE AVENUE	Low	2339	Manufacturing, Fabric/Clothes	908.31	
154	NATIONAL CITY SELF STORAGE	430 W 30TH STREET	Low	4225	Wholesale/Storage/ Warehousing	908.32	
155	OLSEN-SIMMONS CABINETRY	426 E 30TH STREET	Low	2599	Manufacturing, Wood/Furniture	908.32	
156	OOH LA LA (WEST KID'S GEAR)	2602 TRANSPORTATION AVENUE, G	Low	2339	Manufacturing, Fabric/Clothes	908.32	
157	PATRICK SHAW ENGRAVING	1533 TIDELAND AVENUE, J	Low	2796	Printing	908.31	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
158	PENTAGON CARGO	3200 HIGHLAND AVENUE	Low	4731	Ground Transportation	909.12	
159	PLANNED PARENTHOOD OF SD & RIV	337 W 35TH STREET, S	Low	4225	Wholesale/Storage/ Warehousing	909.12	
160	POTTER ELECTRIC, INC. WAREHOUSE	105 W 35TH STREET, A	Low	4225	Wholesale/Storage/ Warehousing	909.12	
161	PRECISION BINDERY & PRINTING	301 W 28TH STREET, E	Low	2731	Printing	908.32	
162	PROCHEM SPECIALTY PRODUCTS, INC.	115 E 18TH STREET	Low	2841	Manufacturing, Chemicals	908.32	
163	R. HARRIS AND CO.	2520 HOOVER AVENUE, A	Low	2599	Manufacturing, Wood/Furniture	908.32	
164	SILVA CASEWORKS INC	1337 ROOSEVELT AVENUE	Low	2434	Manufacturing, Wood/Furniture	908.31	
165	SMART CUTTING SERVICES	220 W 25TH STREET, A	Low	2399	Manufacturing, Fabric/Clothes	908.32	
166	SOUTH BAY MOTORSPORTS WAREHOUSE 1	337 W 35TH STREET, H	Low	4225	Wholesale/Storage/ Warehousing	909.12	
167	SOUTH BAY MOTORSPORTS WAREHOUSE 2	105 W 35TH STREET, B	Low	4225	Wholesale/Storage/ Warehousing	909.12	
168	STUDIO EUROPA INC	313 W 33TH STREET, B	Low	2434	Manufacturing, Wood/Furniture	909.12	
169	SUNCARGO INC	1457 E PLAZA BLVD.	Low	4731	Ground Transportation	908.32	
170	TEAM SPORTS BEACH WEAR	2601 HOOVER AVENUE, D	Low	2339	Manufacturing, Fabric/Clothes	908.32	
171	THE MACHINE SHOP & FABRICATORS	1925 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.31	
172	TOGETHER-WEST INC	220 W 25TH STREET, D	Low	2331	Manufacturing, Fabric/Clothes	908.32	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	WDID #
173	VIMONE'S GARMET CO.	220 W 25TH STREET, G	Low	2329	Manufacturing, Fabric/Clothes	908.32	
174	WSI METAL SUPPLY	1839 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.31	

APPENDIX A.5

Appendix A.5
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
1	*UNKNOWN NAME*	2130 ROOSEVELT AVENUE	High	7538	Auto Repair	908.32	
2	ACI DISTRIBUTION	131 W 33RD AVENUE, A	High	5039	Building Materials	909.12	
3	ANAYA'S NATIONAL AUTOMOTIVE	2125 ROOSEVELT AVENUE	High	7538	Auto Repair	908.32	
4	ASIAN MARKET	3400 E 8TH ST STE 111-112	High	5411	Eating/Drinking Establishments	908.32	
5	ASIAN NOODLES	1430 E PLAZA BLVD., E-12	High	5812	Eating/Drinking Establishments	908.32	
6	ASWAN HALL CATERING & BANQUET	401 MILE OF CARS WAY	High	5812	Eating/Drinking Establishments	908.32	
7	BASKIN ROBBINS ICE CREAM	1493 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	
8	BEN'S 1615	1615 SWEETWATER ROAD, A	High	5812	Eating/Drinking Establishments	909.12	
9	BLUE COAST CONSTRUCTION, INC.	1804 CLEVELAND AVENUE, B	High	1542	Other Contractor	908.31	
10	BREAD DELUX BAKERY, ETC.	1420 E PLAZA BLVD., D-1	High	5461	Eating/Drinking Establishments	908.32	
11	C & W DIVING	1706 HOOVER AVENUE	High	1629	Other Contractor	908.32	
12	C&M MOTORS INC.	904 ROOSEVELT AVENUE	High	7538	Auto Repair	908.31	
13	CAFÉ LA MAZE	1441 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32	
14	CALIFORNIA PRODUCE CORPORATION	1736 E PLAZA BL	High	5431	Eating/Drinking Establishments	908.32	
15	CAR SOURCE	1 W 35TH STREET	High	5521	Vehicle Dealers	909.12	
16	CARLS' JR.	1502 SWEETWATER ROAD	High	5812	Eating/Drinking Establishments	909.12	
17	CARLS JR. #120	1280 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
18	CASA DE ORO RESTAURANT	1510 SWEETWATER ROAD, A	High	5812	Eating/Drinking Establishments	909.12	
19	CHINESE CANTON BAKERY	1132 E PLAZA BLVD., 204	High	5461	Eating/Drinking Establishments	908.32	
20	CHOWKING	2220 E PLAZA BLVD., T	High	5812	Eating/Drinking Establishments	908.32	
21	CHUCK E CHEESE'S	1143 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32	
22	CIVIC CENTER AUTO BODY	1304 ROOSEVELT AVENUE	High	7532	Auto Paint/Body	908.31	
23	CONCHING'S CAFÉ	3400 E 08TH STREET	High	5812	Eating/Drinking Establishments	908.32	
24	COTIJAS MEXICAN FOOD	740 E 30TH STREET	High	5812	Eating/Drinking Establishments	909.12	
25	COZINES GROCERY	402 CIVIC CENTER DRIVE	High	5411	Eating/Drinking Establishments	908.31	
26	CROWN TRANSMISSION CENTER	1339 HOOVER AVENUE	High	7537	Auto Repair	908.31	
27	DA KINES	1635 SWEETWATER ROAD #H	High	5812	Eating/Drinking Establishments	909.12	
28	DE-LUX ROOFING	1107 HARDING AVENUE	High	1761	Other Contractor	908.31	
29	DESSERTS PLUS	2220 E PLAZA BLVD., Q	High	5461	Eating/Drinking Establishments	908.32	
30	EPSILON SYSTEMS SOLUTIONS INC	2101 A HAFFLEY AVE	High	3731	Equipment Repair	908.32	
31	FAMILY HOUSE OF PANCAKES	1900 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32	
32	FAMILY LOOMPYA SEAFOOD MARKET	2720 E PLAZA BLVD., A	High	5411	Eating/Drinking Establishments	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
33	FOODLAND IGA	303 HIGHLAND AVENUE	High	5411	Eating/Drinking Establishments	908.31	
34	FOREST PLYWOOD SALES DBA BAKER HARDWOOD LUMBER CO.	3131 HOOVER AVENUE	High	5031	Building Materials	908.32	
35	FRANK MOTORS HYUNDAI	3150 NATIONAL CITY BLVD.	High	5511	Vehicle Dealers	909.12	
36	FURBY CONSTRUCTION CO, INC.	801 CIVIC CENTER DRIVE	High	1799	Other Contractor	908.31	
37	GAPO RESTO AND KARAOKE	933 SO HARBISON AVE	High	5812	Eating/Drinking Establishments	908.32	
38	GINZA SUSHI	925 E PLAZA BLVD., G	High	5812	Eating/Drinking Establishments	908.32	
39	GOLDEN CHOPSTICKS RESTAURANT	1430 E PLAZA BLVD., E-22-23	High	5812	Eating/Drinking Establishments	908.32	
40	GOLDILOCKS BAKERY & RESTAURANT	1420 E PLAZA BLVD D-7	High	5812	Eating/Drinking Establishments	908.32	
41	GREENWALD'S AUTOBODY & FRAMEWORKS, INC	1814 ROOSEVELT AVENUE	High	7532	Auto Paint/Body	908.32	
42	HAPPY BAKERY	3142 E PLAZA BLVD., L	High	5812	Eating/Drinking Establishments	908.32	
43	HERTZ EQUIPMENT RENTAL	415 W 30TH STREET	High	7353	Vehicle/Equipment Rental	908.32	
44	HOPSING AUTO	1540 ROOSEVELT AVENUE	High	7538	Auto Repair	908.31	
45	INTERNATIONAL HOUSE OF PANCAKES	1430 E PLAZA BLVD., E-1	High	5812	Eating/Drinking Establishments	908.32	
46	JACK IN THE BOX #80	3138 PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	
47	JOCSON'S AUTO BODY & PAINT INC.	1320 COOLIDGE AVENUE	High	7532	Auto Paint/Body	908.31	
48	JOLLIBEE	1401 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
49	JOSE AUTO ELECTRIC	140 W 18TH STREET	High	7538	Auto Repair	908.32	
50	KARIHAN FILIPINO FOOD	2220 E PLAZA BLVD., #A1	High	5812	Eating/Drinking Establishments	908.32	
51	KARINA'S MEXICAN STYLE SEAFOOD	1705 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32	
52	KEN'S VW	1408 MCKINLEY AVENUE	High	5013	Auto Supplies	908.31	
53	LA TAQUIZA	1641 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32	
54	LAI THAI RESTAURANT	1430 E PLAZA BLVD., E-10	High	5812	Eating/Drinking Establishments	908.32	
55	LOLLICUP TEAZONE	1105 E PLAZA BLVD., A	High	5812	Eating/Drinking Establishments	908.32	
56	LOS GIRASOLES MEXICAN RESTAURANT	1231 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	908.32	
57	MAHARLIKA CAFÉ & GRILL	1819 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	
58	MANILLA SEAFOOD ORIENTAL MARKET	2220 E PLAZA BLVD., K	High	5411	Eating/Drinking Establishments	908.32	
59	MANILLA SUNSET RESTAURANT	925 E PLAZA BLVD., E	High	5812	Eating/Drinking Establishments	908.32	
60	MCDONALDS #6773	2145 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	
61	MEZA AUTO BODY	420 W 12TH STREET	High	7532	Auto Paint/Body	908.31	
62	MIKE'S GIANT NY PIZZA #5	1635 SWEETWATER ROAD, C-1	High	5812	Eating/Drinking Establishments	909.12	
63	NATIONAL CITY CAR WASH	2550 E PLAZA BLVD.	High	7542	Vehicle Washing	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
64	NATIONAL CITY MARKET	240 E 18TH STREET	High	5411	Eating/Drinking Establishments	908.32	
65	OHANA HAWAIIAN ISLAND BBQ	1430 E PLAZA BLVD., E7A	High	5812	Eating/Drinking Establishments	908.32	
66	PANCHO VILLA'S MEXICAN GRILL	3100 8TH STREET	High	5812	Eating/Drinking Establishments	908.32	
67	PANDA PALACE	1105 E PLAZA BLVD., D , E	High	5812	Eating/Drinking Establishments	908.32	
68	PAPA JOHN'S PIZZA #1335	1130 PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	
69	PINOY RANCH	3403 E PLAZA BLVD., D-E	High	5411	Eating/Drinking Establishments	908.32	
70	PLATINUM AUTO BODY & PAINT	223 CIVIC CENTER DR	High	7532	Auto Paint/Body	908.31	
71	POPEYES CHICKEN	2210 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	
72	POWER TIRE #4	1615 E 8TH STREET	High	5531	Auto Supplies	908.32	
73	RETRED RESTAURANT GROUP, LLC	1200 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32	
74	ROMERO'S ROOFING SERVICE, INC.	1827 CLEVELAND AVENUE	High	1761	Other Contractor	908.31	
75	ROYAL MANDARIN RESTAURANT	1132 E PLAZA BLVD., 205	High	5812	Eating/Drinking Establishments	908.32	
76	SAN DIEGO AUTO DETAIL	110 W 11TH STREET	High	7542	Vehicle Washing	908.31	
77	SAN DIEGO CRANE & HOIST	1606 COOLIDGE AVENUE	High	7699	Equipment Repair	908.31	
78	SAN DIEGO DODGE	2829 NATIONAL CITY BLVD.	High	5511	Vehicle Dealers	908.32	
79	SAVE-A-LOT	1035 HARBINSON AVENUE	High	5411	Eating/Drinking Establishments	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
80	SEAFOOD CITY SUPERMARKET	1420 E PLAZA BLVD., C-E	High	5411	Eating/Drinking Establishments	908.32	
81	SENOR PANCHO FRESH MEXICAN GRILL	2030 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32	
82	SEVEN-ELEVEN #17265	1601 E 18TH STREET	High	5411	Eating/Drinking Establishments	908.32	
83	SEVEN-ELEVEN #18218C	807 E 8TH STREET	High	5411	Eating/Drinking Establishments	908.31	
84	SEVEN-ELEVEN #18978D	3100 E PLAZA BLVD.	High	5411	Eating/Drinking Establishments	908.32	
85	SIZZLER FAMILY STEAK HOUSE #45	1325 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	
86	SMART AND FINAL	1220 E PLAZA BLVD.	High	5411	Eating/Drinking Establishments	908.32	
87	SO CAL TRUCK STOP	2250 TIDELAND AVENUE	High	5541	Fueling	908.30	
88	SOUTH BAY MECHANICAL SERVICES	221 W 16TH STREET	High	1711	Other Contractor	908.32	
89	SPECIALTY TIRES AND BRAKES	1 WEST 35TH STREET	High	7539	Auto Repair	909.12	
90	STAR EXPRESS	3124 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	
91	STEVE'S WEST COAST AUTOMOTIVE	1732 COOLIDGE AVENUE	High	7538	Auto Repair	908.32	
92	SUBMARINA	1210 E. PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32	
93	TACO SALSA TACO SHOP	925 E PLAZA BLVD., B	High	5812	Eating/Drinking Establishments	908.32	
94	TINO'S AUTO TECH	1 WEST 35TH STREET STE D	High	7538	Auto Repair	909.12	
95	TITA'S KITCHENETTE	2720 E PLAZA BLVD., E , F	High	5812	Eating/Drinking Establishments	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
96	TORTAS OASIS	1210 E PLAZA BLVD STE 404	High	5812	Eating/Drinking Establishments	908.32	
97	TROPICAL DELI	2808 18TH STREET	High	5812	Eating/Drinking Establishments	908.32	
98	VALERIOS FAMILY BAKE SHOP	2720 E PLAZA BLVD., H	High	5461	Eating/Drinking Establishments	908.32	
99	VALUE CARS	13 NATIONAL CITY BLVD.	High	5521	Vehicle Dealers	909.12	
100	VIKING'S AUTO REPAIR	1503 ROOSEVELT AVENUE, A	High	7532	Auto Paint/Body	908.31	
101	VILLA MANILA	500 E 8TH STREET	High	5812	Eating/Drinking Establishments	908.32	
102	WESTSIDE BUILDING MATERIALS	500 W 16TH STREET	High	5211	Building Materials	908.32	
103	WILLIAM PAKCHUEN LAU	1918 CLEVELAND AVENUE	High	7538	Auto Repair	908.31	
104	WINCHELL'S DONUT HOUSE #484	2447 E PLAZA BLVD.	High	5461	Eating/Drinking Establishments	908.32	
105	WINGS N THINGS	1499 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32	
106	YUM YUM DONUT FRANCHISE #502	3122 E PLAZA BLVD.	High	5461	Eating/Drinking Establishments	908.32	
107	ZARLITOS FAMILY RESTAURANT	505 E 8TH STREET	High	5812	Eating/Drinking Establishments	908.31	
108	99 CENT ONLY STORES	1320 HIGHLAND AVENUE	Medium	5999	Eating/Drinking Establishments	908.32	
109	A.B.C ICE CREAM TRUCK CO.	1447 PARAISO CT	Medium	5963	Eating/Drinking Establishments	908.31	
110	ABC SUPPLY COMPANY	135 W 30TH STREET	Medium	5033	Building Materials	908.32	
111	ACIM, INC	1429 WILSON AVE STE A	Medium	7699	Equipment Repair	908.31	
112	ALL PRO AUTO REPAIR	517 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
113	ALLIED PIPING & WELDING, INC.	1120 HOOVER AVENUE	Medium	7692	Equipment Repair	908.31	
114	ALOTTAS COCKTAIL LOUNGE	419 PALM AV	Medium	5813	Eating/Drinking Establishments	908.32	
115	APPLEBEE'S NEIGHBORHOOD	3030 PLAZA BONITA RD	Medium	5813	Eating/Drinking Establishments	909.12	
116	ARCO AM PM #6523	133 W 8TH STREET	Medium	5541	Fueling	908.31	
117	ARCO AM/PM #9566	1606 E PLAZA BLVD.	Medium	5541	Fueling	908.32	
118	ARCO AM/PM #9570	1139 HARBINSON AVENUE	Medium	5541	Fueling	908.32	
119	ARCTIC SUPPLY	213 CIVIC CENTER DRIVE	Medium	5078	Wholesale/Storage/Warehousing	908.31	
120	ARIDO MARKET	1643 WILSON AVENUE	Medium	5411	Eating/Drinking Establishments	908.31	
121	ARROYO BROTHERS	128 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31	
122	ASAP HAULING & DEMO	1804 CLEVELAND AVE STE B	Medium	7353	Vehicle/Equipment Rental	908.31	
123	AUNTIE ANNE'S PRETZEL'S	3030 PLAZA BONITA RD STE 2440	Medium	5812	Eating/Drinking Establishments	909.12	
124	AUTO ACCESS	1609 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.32	
125	AUTO TECK	1023 COOLIDGE AVENUE	Medium	7532	Auto Paint/Body	908.31	
126	AUTO ZONE #5659	2500 E PLAZA BLVD.	Medium	5531	Auto Supplies	908.32	
127	AUTOCOMM, INC.	2525 SOUTHPORT WAY STE C	Medium	7549	Auto Repair	908.32	
128	AVIS RENT A CAR	1536-B SWEETWATER ROAD	Medium	7512	Vehicle/Equipment Rental	909.12	
129	BAE SYSTEMS LAND & ARMAMENTS	155 W 35TH STREET	Medium	7699	Equipment Repair	909.12	
130	BALL AUTOMOTIVE GROUP	2729 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.32	
131	BALL AUTOMOTIVE GROUP	2426 A AVENUE	Medium	7532	Auto Paint/Body	908.32	
132	BAXTER AUTOMOTIVE & MACHINE	1400 HOOVER AVENUE	Medium	7539	Auto Repair	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
133	BIG B MARKET & DELI	1540 COOLIDGE AVENUE	Medium	5411	Eating/Drinking Establishments	908.31	
134	BIG BEAR AUTO SALES	1635 COOLIDGE AVE	Medium	5521	Vehicle Dealers	908.31	
135	BIG BEN MARKET	22 E 8TH STREET	Medium	5411	Eating/Drinking Establishments	908.31	
136	BIG DADDY	1922 C AVE	Medium	5963	Eating/Drinking Establishments	908.32	
137	BIRRIAS CHIVOS & CHEVES	2401 HIGHLAND AVE STE 104	Medium	5812	Eating/Drinking Establishments	909.12	
138	BJ MOTOR & BODY SHOP	1338 ROOSEVELT AVENUE	Medium	7538	Auto Repair	908.31	
139	BLUELINX DISTRIBUTION	901 BAY MARINA DRIVE	Medium	5031	Building Materials	908.31	
140	BOAT SELLERS	1730 CLEVELAND AVENUE	Medium	5551	Vehicle Dealers	908.31	
141	BRAKE DEPOT	910 HIGHLAND AVENUE	Medium	7539	Auto Repair	908.32	
142	BURGER KING	815 HIGHLAND AVENUE, 780	Medium	5812	Eating/Drinking Establishments	908.32	
143	CA WELDING IRON WORKS	1630 HARDING AVENUE	Medium	7692	Equipment Repair	908.31	
144	CAFE ESTELAS	1524 MCKINLEY AV	Medium	5813	Eating/Drinking Establishments	908.31	
145	CALIFORNIA AUTO DETAILING	1509.5 NATIONAL CITY BLVD.	Medium	7542	Vehicle Washing	908.32	
146	CALIFORNIA ICE CREAM	1021 COOLIDGE AVENUE	Medium	5963	Eating/Drinking Establishments	908.31	
147	CALIFORNIA SALES	205 W 35TH ST #B	Medium	1799	Other Contractor	909.12	
148	CALIFORNIA'S TACO SHOP	51 N HIGHLAND AVENUE, H	Medium	5812	Eating/Drinking Establishments	908.31	
149	CARNIVAL SUPERMARKET	1750 E 8TH STREET	Medium	5411	Eating/Drinking Establishments	908.32	
150	CARQUEST AUTOPARTS	1300 HIGHLAND AVENUE	Medium	5531	Auto Supplies	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
151	CARRERA'S AUTO DETAIL	2130 ROOSEVELT AVENUE	Medium	7542	Vehicle Washing	908.32	
152	CASA DEL TACO	1635 SWEETWATER ROAD, A	Medium	5812	Eating/Drinking Establishments	909.12	
153	CESAR'S TACO SHOP	3123 D AVENUE	Medium	5812	Eating/Drinking Establishments	909.12	
154	CHANG DONG SUPERMARKET ORIENTAL SEAFOOD	600 E 8TH STREET, 7 , 8	Medium	5411	Eating/Drinking Establishments	908.32	
155	CHIEF AUTO SALES	5 W 18TH STREET	Medium	5521	Vehicle Dealers	908.32	
156	CHINA KING	3007 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12	
157	CHINESE CITY RESTAURANT #2	1025 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
158	CHING'S FAMOUS HOPIA	1722 E 8TH STREET	Medium	5461	Eating/Drinking Establishments	908.32	
159	CHRISTIAN DURABLE MEDICAL EQUI	3400 E 8TH STREET	Medium	5047	Wholesale/Storage/Warehousing	908.32	
160	CHURCH'S CHICKEN	3040 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32	
161	CITY HALL DELI	1302 NATIONAL CITY BLVD	Medium	5812	Eating/Drinking Establishments	908.32	
162	CLASSIC AUTO RESTORATION INC	1400 HOOVER AVE	Medium	7539	Auto Repair	908.31	
163	CLUB 13	640 CIVIC CENTER DR	Medium	5813	Eating/Drinking Establishments	908.31	
164	COLD STONE CREAMERY #1483	925 E PLAZA BLVD., I	Medium	5812	Eating/Drinking Establishments	908.32	
165	COMMERCIAL FLEET SERVICE	1521 COOLIDGE AVENUE	Medium	7539	Auto Repair	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
166	COSINA DE EMMA	2503 SWEETWATER RD	Medium	5812	Eating/Drinking Establishments	909.12	
167	CRASH AND FIX AUTOBODY	202 , 210 W 11TH STREET	Medium	7532	Auto Paint/Body	908.31	
168	CUADROS MOTORS	1800 NATIONAL CITY BLVD STE S	Medium	5012	Vehicle Dealers	908.32	
169	DAIRY QUEEN/ORANGE JULIUS	3030 PLAZA BONITA ROAD, 2138	Medium	5812	Eating/Drinking Establishments	909.12	
170	DAKOTA INN	831 E 08TH ST	Medium	5813	Eating/Drinking Establishments	908.31	
171	DE LA CRUZ AUTO REPAIR	36 W CIVIC CENTER DRIVE	Medium	7538	Auto Repair	908.31	
172	DE LA TORRE	2137 WILSON AVENUE	Medium	0782	Landscaping	908.32	
173	DECKER'S SUBS & TORTAS	3030 PLAZA BONITA RD #2185	Medium	5812	Eating/Drinking Establishments	909.12	
174	DENNIS'S BAKERY	832 E 18TH STREET	Medium	5461	Eating/Drinking Establishments	908.31	
175	DENNY'S RESTAURANT	424 MILE OF CARS WAY	Medium	5812	Eating/Drinking Establishments	908.32	
176	DENNY'S RESTAURANT	1904 SWEETWATER ROAD, 1473	Medium	5812	Eating/Drinking Establishments	909.12	
177	DIAMANTE MOTORS	10 OSBORN ST	Medium	5521	Vehicle Dealers	908.31	
178	DIESEL POWER TRADE CORP	1720 CLEVELAND AVENUE	Medium	5084	Wholesale/Storage/Warehousing	908.31	
179	DIPPIN DOTS	3030 PLAZA BONITA ROAD, 9008	Medium	5812	Eating/Drinking Establishments	909.12	
180	DISCOUNT TIRE CO. (SO. CA.)	1309 E PLAZA BLVD.	Medium	7534	Auto Repair	908.32	
181	DOMINO'S PIZZA	702 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
182	DON JOHN MARKET	431 N HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	908.31	
183	DULCERIA FIESTA	640 HIGHLAND AVENUE STE B	Medium	5441	Eating/Drinking Establishments	908.31	
184	DULCERIA LA PINATA	140 HIGHLAND AVE	Medium	5441	Eating/Drinking Establishments	908.31	
185	EAT & GO TROLLEY DELI	530 W 21ST STREET	Medium	5812	Eating/Drinking Establishments	908.32	
186	EL AGUILA MEXICAN FOOD	640 HIGHLAND AVE STE A	Medium	5812	Eating/Drinking Establishments	908.31	
187	EL GRANO DE ORO	730 E 7TH STREET	Medium	5963	Eating/Drinking Establishments	908.31	
188	EL JAUN CAFE	2316 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12	
189	EL NUEVO MILLENIO MEXICAN FOOD	2323 E DIVISION STREET	Medium	5812	Eating/Drinking Establishments	908.31	
190	EL PARAISO	2708 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12	
191	EL POLLO LOCO #3430	1710 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
192	EL PORTILLO TACO SHOP	321 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.31	
193	EL SUPER MARKET	1811 L AVE	Medium	5411	Eating/Drinking Establishments	909.12	
194	ELBO REST	309 HIGHLAND AV	Medium	5813	Eating/Drinking Establishments	908.31	
195	ENYS CAFE	1021 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
196	ESPECIAL TIRES	1 W 35TH ST STE C	Medium	7534	Auto Repair	909.12	
197	ETHNIC DELI & CAFE	404 W MILE OF CARS WAY, F	Medium	5812	Eating/Drinking Establishments	908.32	
198	EXLINE, DENNIS L	243 E 16TH ST	Medium	1542	Other Contractor	908.32	
199	FAIRBANKS MORSE ENGINE	1545 TIDELAND AVENUE, J	Medium	7699	Equipment Repair	908.31	
200	FARMERS DISCOUNT MARKET	1535 E 18TH STREET	Medium	5411	Eating/Drinking Establishments	908.32	
201	FEDERAL EQUIPMENT WEST	2101 WILSON AVENUE	Medium	7699	Equipment Repair	908.32	
202	FIRESTONE	2531 E PLAZA BLVD.	Medium	5531	Auto Supplies	908.32	
203	FREDDY AUTO REPAIR	923.5 COOLIDGE AVENUE	Medium	7538	Auto Repair	908.31	
204	FRESCA DELI	1021 HIGHLAND AV P/B	Medium	5431	Eating/Drinking Establishments	908.32	
205	GALOREN SOUTHWESTERN INC	3200 HIGHLAND AVE STE 303	Medium	5046	Wholesale/Storage/Warehousing	909.12	
206	GAMA PRODUCE	1605 E 04TH ST	Medium	5431	Eating/Drinking Establishments	908.31	
207	GEMMAE BAKESHOP & CAFE	450 E 8TH STREET, A , B	Medium	5461	Eating/Drinking Establishments	908.32	
208	GENGIS KHAN #1	3030 PLAZA BONITA ROAD, 2128	Medium	5812	Eating/Drinking Establishments	909.12	
209	GEORGE'S MARKET	2540 E 18TH STREET	Medium	5411	Eating/Drinking Establishments	908.32	
210	GEORGE'S WONDERFUL WORLD OF CAKES	1519 HIGHLAND AVENUE	Medium	5461	Eating/Drinking Establishments	908.32	
211	GIANT NEW YORK PIZZA	8 N EUCLID AVENUE, 8-B	Medium	5812	Eating/Drinking Establishments	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
212	GOLDEN DONUTS	36 N EUCLID AVENUE, E	Medium	5812	Eating/Drinking Establishments	908.31	
213	GORMSEN APPLIANCE	718 E 18TH STREET	Medium	7699	Equipment Repair	908.31	
214	GRAND MOTORS	423 NATIONAL CITY BLVD	Medium	5012	Vehicle Dealers	908.31	
215	GREAT STEAK & POTATOE	3030 PLAZA BONITA RD STE 2154	Medium	5812	Eating/Drinking Establishments	909.12	
216	HANAOKA RESTAURANT	1528 SWEETWATER ROAD, C	Medium	5812	Eating/Drinking Establishments	909.12	
217	HAPPY WAGON III	2024 LA SIESTA WAY	Medium	5963	Eating/Drinking Establishments	909.12	
218	HAWAIIAN EXPRESS BBQ	3030 PLAZA BONITA RD #2122	Medium	5812	Eating/Drinking Establishments	909.12	
219							
220	HERTZ LOCAL EDITION	2001 SWEETWATER ROAD	Medium	7514	Vehicle/Equipment Rental	909.12	
221	HERTZ LOCAL EDITION	1814 ROOSEVELT AVENUE	Medium	7514	Vehicle/Equipment Rental	908.32	
222	HICKORY FARMS INC	3030 PLAZA BONITA ROAD	Medium	5963	Eating/Drinking Establishments	909.12	
223	HILBERTOS MEXICAN FOOD	835 PALM AVE	Medium	5812	Eating/Drinking Establishments	908.32	
224	HOMETOWN BUFFET #714	1135 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
225	HONEY BANANA	443 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31	
226	HORN'S WELDING	1840 WILSON AVENUE, A	Medium	7692	Equipment Repair	908.31	
227	HOT DOG ON A STICK #052	3030 PLAZA BONITA ROAD, 2136	Medium	5812	Eating/Drinking Establishments	909.12	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
228	HUB CONSTRUCTION SUPPLY & EQUIPMENT	402 W 35TH STREET, A	Medium	5082	Wholesale/Storage/Warehousing	909.12	
229	ICEBERG ENTERPRISES, INC.	1410 CLEVELAND AVENUE	Medium	7359	Vehicle/Equipment Rental	908.31	
230	IDEAL SMOG	10 OSBORN ST	Medium	7549	Auto Repair	908.31	
231	IHAW IHAW GRILL & RESTAURANT	3421 E PLAZA BLVD.	Medium	5812	Eating/Drinking Establishments	908.32	
232	IMELDA'S	2325 HIGHLAND AVENUE	Medium	5813	Eating/Drinking Establishments	909.12	
233	IMPERIAL FISH MARKET RESTAURAN	1903 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.32	
234	IMPERIAL PALACE	1630 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32	
235	IMPORT CAR PARTS & MOTOR MACHI	106 E 17TH ST	Medium	5013	Auto Supplies	908.32	
236	IN N OUT BURGER	500 MILE OF CARS WAY	Medium	5812	Eating/Drinking Establishments	908.32	
237	J J & K BUILDERS INC	2050 WILSON AVE STE C	Medium	1542	Other Contractor	908.32	
238	JACK IN THE BOX	700 ROOSEVELT AVENUE	Medium	5812	Eating/Drinking Establishments	908.31	
239	JACK IN THE BOX #3	1745 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
240	JESUS & CECILIA LOYA CAFE	524 HIGHLAND AV	Medium	5812	Eating/Drinking Establishments	908.31	
241	JETCLEAN USA, INC	1541 ROOSEVELT AVE	Medium	7549	Auto Repair	908.31	
242	JT MOTORSPORTS	1531 NATIONAL CITY BLVD	Medium	5531	Auto Supplies	908.32	
243	K SURPLUS SALES, INC.	1403 CLEVELAND AVENUE	Medium	5072	Wholesale/Storage/Warehousing	908.31	
244	KARZ PLUS RV	1605 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
245	KAY AUTOMOTIVE	2121 HOOVER AVE	Medium	5531	Auto Supplies	908.32	
246	KENTUCKY FRIED CHICKEN	840 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
247	KENTUCKY FRIED CHICKEN	3005 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12	
248	KER FRESH PRODUCE	1610 E 8TH ST C-1	Medium	5431	Eating/Drinking Establishments	908.32	
249	KIM KOREAN BARBEQUE	1141 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
250	L & L HAWAIIAN BARBEQUE	1860 SWEETWATER ROAD, B	Medium	5812	Eating/Drinking Establishments	909.12	
251	LA PLACITA	1860 SWEETWATER RD STE A2	Medium	5812	Eating/Drinking Establishments	909.12	
252	LA RUE PLUMBING	1515 WILSON AVENUE	Medium	1711	Other Contractor	908.31	
253	LA SIERRA CAFFE	306 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31	
254	LAS UVAS DELI	632 NATIONAL CITY BLVD.	Medium	5812	Eating/Drinking Establishments	908.31	
255	LEFORT'S CONSTRUCCION & LANDSC	34 E 17TH STREET #B	Medium	7699	Equipment Repair	908.32	
256	LISA'S DESSERTS	2720 E PLAZA BLVD., Q	Medium	5461	Eating/Drinking Establishments	908.32	
257	LITTLE DRAGON CHINESE	2424 HOOVER AVENUE, K	Medium	5812	Eating/Drinking Establishments	908.32	
258	LIVELY BRAKE SERVICE	115 E 17TH STREET STE B	Medium	7539	Auto Repair	908.32	
259	LIVING ROOM CAFE	880 NATIONAL CITY BLVD	Medium	5812	Eating/Drinking Establishments	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
260	LOS AROS	543 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31	
261	LOS PANCHOS TACO SHOP	2441 NATIONAL CITY BLVD.	Medium	5812	Eating/Drinking Establishments	908.32	
262	LUEMMA'S KITCHEN SOUTHERN STYL	36 EUCLID AVE STE 36-F	Medium	5812	Eating/Drinking Establishments	908.31	
263	LUPITAS MEAT MARKET	2239 HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	909.12	
264	LUTONG BAHAY CAFE & BAKERY	2344 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32	
265	M & T AUTO	1731 WILSON AVENUE	Medium	7538	Auto Repair	908.31	
266	MAC ARTHUR CO	2101 HAFFLEY AVE STE B	Medium	5033	Building Materials	908.31	
267	MADLAIN INC DBA WRIGLEYS SUPER	34 N EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.31	
268	MAMA FINA'S PIZZA	916 E 8TH STREET, 4	Medium	5812	Eating/Drinking Establishments	908.32	
269	MARISCOS SINALOA #2	2435 NATIONAL CITY BLVD.	Medium	5812	Eating/Drinking Establishments	908.32	
270	MARK MOTORS	905 HOOVER AVENUE	Medium	5511	Vehicle Dealers	908.31	
271	MARY J'S CAFE	1930 CLEVELAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31	
272	MC CUNE II	325 MILE OF CARS WAY	Medium	5511	Vehicle Dealers	908.32	
273	MC CUNE MOTORS	3000 NATIONAL CITY BLVD.	Medium	7532	Auto Paint/Body	908.32	
274	MC DINI'S BAJA	105 E 08TH ST	Medium	5813	Eating/Drinking Establishments	908.31	
275	MCDINI'S BAJA	105 E 8TH STREET	Medium	5813	Eating/Drinking Establishments	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
276	MCDONALDS	1630 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
277	MCDONALD'S	3400 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12	
278	MCDONALDS #20311	3030 PLAZA BONITA ROAD, 2168	Medium	5812	Eating/Drinking Establishments	909.12	
279	MENUDERIA DON VICENTE	2637 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12	
280	MI TIERRA SUPER TACO	1835 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
281	MICKEY'S COMPLETE AUTO REPAIR	415 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31	
282	MOTHER'S NUTRITIONAL CENTER	924 HIGHLAND AVE	Medium	5499	Eating/Drinking Establishments	908.32	
283	MOTOR WORKS	1625 COOLIDGE AVENUE	Medium	7538	Auto Repair	908.31	
284	MR JOEY'S TACO SHOP	1554 TAFT ST	Medium	5812	Eating/Drinking Establishments	908.31	
285	NADEL HOUSE OF FILIPINO CAKES	914 E 8TH STREET, 202	Medium	5461	Eating/Drinking Establishments	908.32	
286	NATIONAL CITY AUTO BODY	24 E 4TH STREET	Medium	7532	Auto Paint/Body	908.31	
287	NATIONAL CITY AUTO CENTER INC	1010 NATIONAL CITY BLVD	Medium	5012	Vehicle Dealers	908.31	
288	NATIONAL CITY AUTO TRIM INC	15 E 5TH STREET	Medium	7532	Auto Paint/Body	908.31	
289	NATIONAL CITY GOLF COURSE	1439 SWEETWATER ROAD	Medium	7992	Golf Courses/Parks	909.12	
290	NATIONAL CITY GROCERY OUTLET	3446 HIGHLAND AVENUE, 6	Medium	5411	Eating/Drinking Establishments	909.12	
291	NATIONAL CITY MOTORCYCLE INC	1504 NATIONAL CITY BLVD., A	Medium	7699	Equipment Repair	908.32	
292	NATIONAL CITY NUTRITION STORE	925 PLAZA BLVD.	Medium	5411	Eating/Drinking Establishments	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
293	NATIONAL CITY SMOG, BRAKE & LI	705 1/2 E 8TH ST	Medium	7539	Auto Repair	908.31	
294	NATIONAL CITY SMOG, BRAKE & LIGHTS	705.5 E 8TH STREET, A	Medium	7539	Auto Repair	908.31	
295	NATIONAL MECHANICAL SERVICES	1640 HOOVER AVENUE, B	Medium	7539	Auto Repair	908.31	
296	NATIONAL MOTOR WORKS	1440 HARDING AVE STE A	Medium	7538	Auto Repair	908.31	
297	NELGEN DISTRIBUTORS	204 SO KENTON AVENUE	Medium	5551	Vehicle Dealers	908.31	
298	NEVWEST	1636 WILSON AVENUE	Medium	7699	Equipment Repair	908.31	
299	NEWTOWN EXPRESS CHINESE FOOD	4 N EUCLID AVE STE B	Medium	5812	Eating/Drinking Establishments	908.31	
300	NILS HALL DBS THUNDERBIRD	705 E 8TH STREET	Medium	7553	Auto Repair	908.31	
301	O.K. WHOLESALE	1605 NATIONAL CITY BLVD STE A	Medium	5012	Vehicle Dealers	908.32	
302	OCEAN JAVA	916 E 8TH ST STE 3	Medium	5812	Eating/Drinking Establishments	908.32	
303	ORIENTAL CAFE	39 E 7TH STREET	Medium	5812	Eating/Drinking Establishments	908.31	
304	OUCHI'S POWER EQUIPMENT	225 W 9TH STREET	Medium	7699	Equipment Repair	908.31	
305	OUTBACK STEAK HOUSE	2980 PLAZA BONITA ROAD	Medium	5812	Eating/Drinking Establishments	909.12	
306	PACIFIC AUTO REPAIRS	315 W 11TH STREET	Medium	7538	Auto Repair	908.31	
307	PACIFIC COAST DIESEL	100 W 35TH STREET	Medium	5531	Auto Supplies	909.12	
308	PANADERIA GUADALAJARA	2401 HIGHLAND AVENUE, 105	Medium	5461	Eating/Drinking Establishments	909.12	
309	PANDA EXPRESS	3030 PLAZA BONITA RD 2172	Medium	5812	Eating/Drinking Establishments	909.12	
310	PAT & OSCAR'S	3030 PLAZA BONITA ROAD, 1106	Medium	5812	Eating/Drinking Establishments	909.12	
311	PERRY FORD (TRUCK)	1610 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
312	PETER PIPER PIZZA STORE #212	3007 HIGHLAND AVENUE, 11	Medium	5812	Eating/Drinking Establishments	909.12	
313	PHAT CITY AUTO SALES	1741 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.32	
314	PHO EXPRESS	3030 PLAZA BONITA RD STE 2132	Medium	5812	Eating/Drinking Establishments	909.12	
315	PICKLE BARREL DELI RESTAURANT	340 W 26TH STREET, E	Medium	5812	Eating/Drinking Establishments	908.32	
316	PINOY FIESTA	550 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32	
317	PIZZA HUT #315044	2437 E PLAZA BLVD.	Medium	5812	Eating/Drinking Establishments	908.32	
318	PIZZA MIA	916 E 8TH ST	Medium	5812	Eating/Drinking Establishments	908.32	
319	PLANET SMOOTHIE	2220 E PLAZA BLVD STE D	Medium	5812	Eating/Drinking Establishments	908.32	
320	PLAY BALL	2305 HIGHLAND AVE	Medium	5813	Eating/Drinking Establishments	909.12	
321	PLAZA BOULEVARD PET CLINIC	2415 E PLAZA BLVD.	Medium	0742	Animal Facilities	908.32	
322	PLAZA DONUTS	1548 HIGHLAND AVENUE	Medium	5461	Eating/Drinking Establishments	908.32	
323	POINT POINT JOINT (TURO-TURO)	916 E 8TH STREET, 1 , 2	Medium	5812	Eating/Drinking Establishments	908.32	
324	POLLO AMIGO #2	1604 E 18TH STREET	Medium	5812	Eating/Drinking Establishments	908.32	
325	POPEYES FAMOUS FRIED CHICKEN	2333 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12	
326	PRECISION BIKE PARTS	421 NATIONAL CITY BLVD	Medium	5571	Vehicle Dealers	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
327	PRIME MOTOR CENTER	28 E 16TH ST	Medium	5012	Vehicle Dealers	908.32	
328	PRIME MOTOR CENTER	1619 NATIONAL CITY BLVD	Medium	5012	Vehicle Dealers	908.32	
329	PRO SMOG TEST ONLY	34 E 17TH ST STE C	Medium	7538	Auto Repair	908.32	
330	PRO STREET LIGHTING INC	2145 WILSON AVENUE	Medium	5531	Auto Supplies	908.32	
331	QUALITY AUTO SALES & SERVICE	423 NATIONAL CITY BLVD., A	Medium	5521	Vehicle Dealers	908.31	
332	QUIZNOS SUB	928 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.32	
333	RAINBOW FRUITS EXPRESS	3030 PLAZA BONITA RD #2176	Medium	5812	Eating/Drinking Establishments	909.12	
334	RALPH'S GROCERY STORE NO. 101	901 EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.32	
335	RASPADOS MICHOACAN	115 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.31	
336	RAY BROCK AUTO SERVICE	25 W 11TH STREET	Medium	7539	Auto Repair	908.31	
337	RED BIRD MARKET	2035 HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	908.32	
338	RED RIBBON BAKE SHOP, INC.	2220 PLAZA BLVD., T-1	Medium	5461	Eating/Drinking Establishments	908.32	
339	RELIABLE SPRING AND SUSPENSION	225 W 16TH STREET	Medium	7539	Auto Repair	908.32	
340	RENT-A-CENTER #01072	1043 HIGHLAND AVE	Medium	7359	Vehicle/Equipment Rental	908.32	
341	RESTAURANT YAKATA	2424 HOOVER AVE STE F/P	Medium	5812	Eating/Drinking Establishments	908.32	
342	REYNOSO AUTO SALES	438 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.31	
343	ROBERTO'S TACO SHOP	1406 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
344	ROCKY MOUNTAIN CHOCOLATE FACTO	3030 PLAZA BONITA RD 9249	Medium	5441	Eating/Drinking Establishments	909.12	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
345	RODEO'S MEAT MARKET	422 HIGHLAND AVENUE	Medium	5421	Eating/Drinking Establishments	908.31	
346	RONNIE'S ELECTRONICS - AUTO	1309 HIGHLAND AVENUE	Medium	7549	Auto Repair	908.32	
347	ROYCE CABINETS & GRANITE INC	10 E 1ST STREET	Medium	5211	Building Materials	908.31	
348	ROYCE WINDOWS & DOORS INC	10 E 1ST STREET	Medium	5211	Building Materials	908.31	
349	RPM TRANSMISSIONS	1620 HARDING AVE	Medium	7537	Auto Repair	908.31	
350	S & S WELDING	1442 MCKINLEY STREET	Medium	7692	Equipment Repair	908.31	
351	SAM'S ALIGNMENT SERVICE	1028 COOLIDGE AVENUE	Medium	7539	Auto Repair	908.31	
352	SAN DIEGO CHICKEN ROTISSERIE	2220 E PLAZA BLVD., D	Medium	5812	Eating/Drinking Establishments	908.32	
353	SAN DIEGO HYDRAULICS INC	1720 CLEVELAND AVE	Medium	7699	Equipment Repair	908.31	
354	SAN JOSE RESTAURANT	213 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31	
355	SANDOVAL CONCRETE	827 E 13TH ST	Medium	1771	Cement Mixing/Cutting	908.32	
356	SBARRO	3030 PLAZA BONITA ROAD, 2162	Medium	5812	Eating/Drinking Establishments	909.12	
357	SCHEIB, EARL OF CA INC #189	111 NATIONAL CITY BLVD.	Medium	7532	Auto Paint/Body	908.31	
358	SEAWARD MARINE SERVICE INC.	424 W 8TH STREET	Medium	7699	Equipment Repair	908.31	
359	SEE'S CANDIES	3030 PLAZA BONITA SHOPPING CTR SPC 22	Medium	5441	Eating/Drinking Establishments	909.12	
360	SERVICE MASTER AA ADVANCES RES	100 W 35TH STREET	Medium	7699	Equipment Repair	909.12	
361	SEVEN ELEVEN #13583 D	2425 SWEETWATER ROAD	Medium	5411	Eating/Drinking Establishments	909.12	
362	SEVEN ELEVEN #20785-B	2400 HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	909.12	
363	SEVEN-ELEVEN #13564E	15 N EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
364	SHELL STATION	2401 E DIVISION STREET	Medium	5541	Fueling	908.31	
365	SIETE DIAS MARKET	151 N HIGHLAND AVENUE, A	Medium	5411	Eating/Drinking Establishments	908.31	
366	SMOG CENTRO	404 HIGHLAND AVENUE	Medium	7539	Auto Repair	908.31	
367	SMSA INC	10 OSBORN ST	Medium	5541	Fueling	908.31	
368	SOLAR ECLIPSE PERFORMANCE	507 G AVENUE	Medium	7549	Auto Repair	908.31	
369	SOUTH BAY AUTO SHOP	1112 COOLIDGE AVENUE	Medium	7538	Auto Repair	908.31	
370	SOUTH BAY DIESEL & HYDRAULIC, INC	100 W 35TH ST STE J	Medium	5531	Auto Supplies	909.12	
371	SOUTH BAY VOLKSWAGON	3131 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	909.12	
372	SOUTHLAND LAUNDRY SYSTEMS	1729 COOLIDGE AVENUE, B	Medium	7699	Equipment Repair	908.32	
373	SOUTHLAND TRANSMISSION CENTER	1400 HOOVER AVENUE	Medium	7537	Auto Repair	908.31	
374	SOUTHWEST PAINT AND BODY	1616 WEST AVENUE	Medium	7532	Auto Paint/Body	908.32	
375	SOUTHWESTERN AUTO BROKERS, INC.	333 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.31	
376	SOUTHWESTERN AUTOBROKERS INC	1535 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.32	
377	SPORTS AUTO SALES	1040 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.31	
378	STANDARD CALIBRATIONS INC	1535 TIDELANDS AVE STE H	Medium	7699	Equipment Repair	908.31	
379	STANDARD PARKING	235 E 8TH STREET	Medium	7521	Vehicle Parking/Storage	908.31	
380	STAR AUTOMOTIVE	423 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.31	
381	STARBUCKS COFFEE #2922	3030 PLAZA BONITA ROAD	Medium	5812	Eating/Drinking Establishments	909.12	
382	STARBUCKS COFFEE #6487	1860 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12	
383	STARBUCK'S COFFEE #6783	2230 E PLAZA BLVD.	Medium	5812	Eating/Drinking Establishments	908.32	
384	STEVENS CONSTRUCTION	125 E 17TH STREET	Medium	1542	Other Contractor	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
385	STONEY'S BAR & GRILL	108 W 25TH STREET D,E,F AND G	Medium	5812	Eating/Drinking Establishments	908.32	
386	STONEY'S BAR & GRILL	108 W 25TH ST D, E, F, G	Medium	5812	Eating/Drinking Establishments	908.32	
387	STREET DREAMS AUTO STYLING	1509 1/2 NATIONAL CITY BLVD B	Medium	5531	Auto Supplies	908.32	
388	STYLER'S AUTO BODY	38 E 16TH STREET	Medium	7532	Auto Paint/Body	908.32	
389	SUBWAY SANDWICH & SALAD	925 E PLAZA BLVD., A	Medium	5812	Eating/Drinking Establishments	908.32	
390	SUBWAY SANDWICH & SALAD	1860 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12	
391	SUBWAY SANDWICH AND SALADS	3030 PLAZA BONITA ROAD, 2176	Medium	5812	Eating/Drinking Establishments	909.12	
392	SUNNY DONUTS	724 HIGHLAND AVENUE	Medium	5461	Eating/Drinking Establishments	908.31	
393	SURF CITY SQUEEZE	3030 PLAZA BONITA ROAD, 9003	Medium	5812	Eating/Drinking Establishments	909.12	
394	SWEET CHEEKS BAKING CO	224 W 12TH ST	Medium	5461	Eating/Drinking Establishments	908.31	
395	SWEET SPOT	1021 HIGHLAND AVE	Medium	5441	Eating/Drinking Establishments	908.32	
396	SWIRLY CUP	1860 SWEETWATER RD STE A-2	Medium	5812	Eating/Drinking Establishments	909.12	
397	TAB SERVICE	1 W 35TH ST STE A	Medium	7538	Auto Repair	909.12	
398	TACO BELL #106	2425 DIVISION STREET	Medium	5812	Eating/Drinking Establishments	908.31	
399	TACO BELL #2800	1737 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
400	TACOS EL GORDO DE TIJUANA	1940 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
401	TACOS EL REY	505 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31	
402	TACOS Y TIENDITA "EL FLACO"	1539 E 8TH ST	Medium	5812	Eating/Drinking Establishments	908.32	
403	TED'S UPHOLSTERY	115 E 17TH STREET, D	Medium	7532	Auto Paint/Body	908.32	
404	THE BARBEQUE PIT	920 E PLAZA BLVD.	Medium	5812	Eating/Drinking Establishments	908.32	
405	THE NEW LOOK	340 W. 11TH STREET	Medium	7532	Auto Paint/Body	908.31	
406	THE ORIGINAL RICHARD'S BAKERY	3400 E 8TH STREET, 114	Medium	5461	Eating/Drinking Establishments	908.32	
407	THUNDERBIRD MUFFLER SHOP	705 E 8TH STREET	Medium	7533	Auto Repair	908.31	
408	TIJUANA TACO FACTORY	505 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.31	
409	TINO'S IRON WORK	1014 COOLIDGE AVE	Medium	7692	Equipment Repair	908.31	
410	TRANS PROS	130 E 17TH STREET	Medium	7537	Auto Repair	908.32	
411	TRI CARE MOTORS	5 W 18TH ST	Medium	5531	Auto Supplies	908.32	
412	TRICARE MOTORS	5 W 8TH STREET, B , C	Medium	5531	Auto Supplies	908.31	
413	TROPICAL ICE CREAM AND JUICE BAR	3104 E PLAZA BLVD.	Medium	5812	Eating/Drinking Establishments	908.32	
414	TURBO TRANSMISSIONS	1411 COOLIDGE AVENUE	Medium	7537	Auto Repair	908.31	
415	UNITED AUTOSPORT	49 E 16TH ST	Medium	7536	Auto Repair	908.32	
416	US SAVE AUTO	639 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.31	
417	VACA'S CONCRETE	1826 BETA STREET	Medium	1771	Cement Mixing/Cutting	908.31	
418	VALERIOS CITY BAKERY	1631 E 8TH STREET, 182	Medium	5461	Eating/Drinking Establishments	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
419	VALUE AUTO REPAIR & TIRES	115 E 17TH ST STE A	Medium	7538	Auto Repair	908.32	
420	VALUE CARS INC	1807 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.32	
421	VICTOR'S TAQUERIA	1602 E 4TH STREET	Medium	5812	Eating/Drinking Establishments	908.32	
422	VIETNAMESE CHINESE NOODLE HOUSE	600 E 8TH STREET, 5	Medium	5812	Eating/Drinking Establishments	908.32	
423	WEBCO HALE	2202 HAFFLEY AVENUE	Medium	5963	Wholesale/Storage/Warehousing	908.31	
424	WETZEL'S PRETZELS	3030 PLAZA BONITA ROAD, 2032	Medium	5812	Eating/Drinking Establishments	909.12	
425	WIENERSCHNITZEL	1825 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32	
426	WILSON MARKET AND LIQUOR	916 E 8TH STREET STE 9	Medium	5411	Eating/Drinking Establishments	908.32	
427	WONDER/HOSTESS BAKERY OUTLET	1626 SWEETWATER ROAD, E - H	Medium	5411	Eating/Drinking Establishments	909.12	
428	WRIGLEY'S SUPER	34 N EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.31	
429	XCLUSIVE MOTORSPORTS	1717 NATIONAL CITY BLVD	Medium	5531	Auto Supplies	908.32	
430	XPEDX	1010 W 19TH STREET	Medium	5113	Wholesale/Storage/Warehousing	908.31	
431	ZAVALA'S CONCRETE WORK	2840 N AVE	Medium	1771	Cement Mixing/Cutting	909.12	
432	1-DAY PAINT & BODY CENTERS INC	1146 NATIONAL CITY BLVD.	Low	7532	Auto Paint/Body	908.32	
433	A & F ASPHALT PAVING	215 E 30TH STREET	Low	1611	Cement Mixing/Cutting	909.12	
434	A & T WHOLESALE ELECTRIC & L	205 W 35TH STREET, B	Low	5063	Wholesale/Storage/Warehousing	909.12	
435	A B C AUTOBUYERS	40 W PLAZA BLVD.	Low	5012	Vehicle Dealers	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
436	A MIRROR DÉCOR (AKA NATIONAL GLASS & MIRROR CO.)	821 E 2ND STREET	Low	1793	Other Contractor	908.31	
437	A-1 ALLOYS/ABC METALS, INC	1401 CLEVELAND AVENUE	Low	5051	Wholesale/Storage/Warehousing	908.31	
438	A-1 HYDRAULICS SERVICE	2100 ROOSEVELT AVENUE	Low	7699	Equipment Repair	908.32	
439	AB&A CUSTOM WHEELS & ACCESSORIES	1840 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32	
440	ADVANCE PRODUCTS INTERNATIONAL	2626 SOUTHPORT WAY STE C	Low	5099	Wholesale/Storage/Warehousing	908.32	
441	ALCEM FENCE CO. INC	1440 COOLIDGE AVENUE	Low	1799	Other Contractor	908.31	
442	ALL AMERICAN PLASTIC BAGS	3020 HOOVER AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.32	
443	ALLSPORTS FLOORING	301 W 28TH STREET, K	Low	1752	Other Contractor	908.32	
444	ALM WINDOW & DOOR INC	337 W 35TH ST STE A	Low	1799	Other Contractor	909.12	
445	AMERMEX	241 W 35TH STREET, J	Low	5199	Wholesale/Storage/Warehousing	909.12	
446	AUDIO CITY	2907 HIGHLAND AVE	Low	7549	Auto Repair	909.12	
447	AUTO BUYERS PLUS	110 W. PLAZA BLVD	Low	5521	Vehicle Dealers	908.32	
448	AUTO ZONE #5658	1539 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32	
449	AUTOBUYERS PLUS	110 W PLAZA BLVD.	Low	5521	Vehicle Dealers	908.32	
450	BALL AUTO REPAIR	910 HIGHLAND AVENUE, B	Low	7539	Auto Repair	908.32	
451	BALL AUTOMOTIVE GROUP	1935 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
452	BALL AUTOMOTIVE GROUP	1940 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
453	BALL AUTOMOTIVE GROUP	2001 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32	
454	BALL AUTOMOTIVE GROUP	2115/2135 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32	
455	BALL RENEGADE	1935 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
456	BALL SMOG CHECK ONLY	910 HIGHLAND AVENUE, B	Low	7549	Auto Repair	908.32	
457	BANTRY INDUSTRIAL & MARINE CRP	241 W 35TH STREET, F	Low	5085	Wholesale/Storage/Warehousing	909.12	
458	BAY SYSTEMS, INC.	303 W 35TH STREET, B	Low	7699	Equipment Repair	909.12	
459	BAYVIEW ELECTRIC	2827 HOOVER AVENUE, D	Low	1731	Other Contractor	908.32	
460	BERLIN WALL WHOLESALE	301 W 28TH STREET, R	Low	5139	Wholesale/Storage/Warehousing	908.32	
461	BJ MOTORS	1705 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
462	BOB'S NATIONAL CITY AUTO	1504 NATIONAL CITY BLVD.	Low	7539	Auto Repair	908.32	
463	BONITA PIPELINE INC	2209 HIGHLAND AVENUE	Low	1711	Other Contractor	908.32	
464	BOSTROM INSTRUMENT COMPANY	208 CIVIC CENTER DRIVE	Low	5084	Wholesale/Storage/Warehousing	908.31	
465	BRAMMER ELECTRIC	1920 MCKINLEY AVENUE	Low	1731	Other Contractor	908.31	
466	BUSH POWER BRAKE, INC.	25 E 17TH STREET, A , B	Low	7539	Auto Repair	908.32	
467	C L F WAREHOUSE INC	2702 SOUTHPORT WAY, B	Low	5013	Auto Supplies	908.32	
468	CALIBER COLLISION CENTER	3131 NATIONAL CITY BLVD.	Low	7532	Auto Paint/Body	909.12	
469	CALIFORNIA AIR COMPRESSOR	1630, 1635, 1640 COOLIDGE AVE	Low	5084	Wholesale/Storage/Warehousing	908.31	
470	CALIFORNIA COMM'L SECURITY	1727 SWEETWATER RD STE R	Low	7699	Equipment Repair	909.12	
471	CAMSAL ENTERPRISES	1705 HOOVER AVENUE, C , D	Low	5099	Wholesale/Storage/Warehousing	908.32	
472	CAR AUDIO EXCHANGE	1316 NATIONAL CITY BLVD.	Low	5531	Auto Supplies	908.32	
473	CAR HEALTH PLAN, INC.	1532 NATIONAL CITY BLVD.	Low	7538	Auto Repair	908.32	
474	CENTURY WHEEL & RIM	2101 HAFFLEY AVENUE, B	Low	5013	Auto Supplies	908.31	
475	CIRCUS MAN ICE CREAM	1037 HARDING AVENUE	Low	5142	Wholesale Food	908.31	
476	CLEAN HARBORS ENVIRONMENTAL SE	131 W 33RD ST	Low	1799	Other Contractor	909.12	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
477	COASTAL MARINE SERVICE, INC	1533 WILSON AVENUE, B	Low	1772	Other Contractor	908.31	
478	COLORINO DISTRIBUTORS	131 W 33RD STREET STE 4	Low	5182	Wholesale/Storage/Warehousing	909.12	
479	COLUMN ONE, INC.	241 W 35TH STREET, K	Low	1721	Painting/Coating	909.12	
480	CONSOLIDATED INTERNATIONAL COR	436 W 8TH STREET STE A	Low	5085	Wholesale/Storage/Warehousing	908.31	
481	CSI SUPPLY	337 35TH STREET, M	Low	5085	Wholesale/Storage/Warehousing	909.12	
482	DANYA B	205 W 35TH STREET, E	Low	5023	Wholesale/Storage/Warehousing	909.12	
483	DISCOUNT FLOORING 2U, INC	829 HOOVER AVE STE A	Low	5023	Wholesale/Storage/Warehousing	908.31	
484	DISCOUNT SEWER & DRAIN CLEANIN	1414 ROOSEVELT AVE STE 40	Low	1711	Other Contractor	908.31	
485	DIXIELINE LUMBER COMPANY	1022 BAY MARINA DR STE 125	Low	5031	Building Materials	908.31	
486	DON GROSS WAREHOUSE OF SAN DIEGO	301 W 30TH STREET	Low	5013	Auto Supplies	909.12	
487	DOOR-MAN	910 HOOVER AVENUE	Low	1799	Other Contractor	908.31	
488	DOUBLE J AUTO REPAIR SHOP	29 E 17TH STREET	Low	7538	Auto Repair	908.32	
489	EL PARAISO/CHRISTMAS TREES	2708 HIGHLAND AVE	Low	5261	Nurseries/Greenhouses	909.12	
490	EMERGENCY KEYS, LOCKS	1007 NATIONAL CITY BLVD	Low	7699	Equipment Repair	908.32	
491	ENCOMPASS DESIGN	301 W 28TH STREET, S	Low	5137	Wholesale/Storage/Warehousing	908.32	
492	ENTERPRISE RENT A CAR #32FP	1145 NATIONAL CITY BL	Low	7512	Vehicle/Equipment Rental	908.32	
493	ENTERPRISE RENT-A-CAR	2700 NATIONAL CITY BLVD	Low	7514	Vehicle/Equipment Rental	908.32	
494	ENTERPRISE RENT-A-CAR OF L.A.	3000 NATIONAL CITY BLVD	Low	7514	Vehicle/Equipment Rental	908.32	
495	EQUIPMENT ENGINEERING CO.	2704 TRANSPORTATION AVENUE, E	Low	7539	Auto Repair	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
496	ESKAY, G, COMPANY	712 E 18TH ST	Low	5199	Wholesale/Storage/Warehousing	908.31	
497	EUROSYTEMS MONTGOMERY CO.	139 ROOSEVELT AVENUE	Low	5072	Wholesale/Storage/Warehousing	908.31	
498	EVANS TIRES	3009 HIGHLAND AVENUE	Low	7534	Auto Repair	909.12	
499	EXPRESS TIRE	820 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32	
500	EXPRESS TIRE	1705 SWEETWATER ROAD	Low	7534	Auto Repair	909.12	
501	FAMILY LOOMPYA WHOLESALE	2626 SOUTHPORT WAY, F	Low	5199	Wholesale/Storage/Warehousing	908.32	
502	FIBER-WORLD PRODUCTS	2440 HIGHLAND AVENUE	Low	5013	Auto Supplies	909.12	
503	FINE ORNAMENTAL	1010 COOLIDGE AVE	Low	1799	Other Contractor	908.31	
504	FIRESTONE TIRE & SERVICE CENTER	943 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32	
505	FLEETWASH	1508 HOOVER AVENUE	Low	7542	Vehicle Washing	908.31	
506	FLEETWOOD PLUMBING/ELECTRIC INC	1416 HOOVER AVENUE	Low	1731	Other Contractor	908.31	
507	FRANK TOYOTA	2400 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
508	FREE FORM CLAY AND SUPPLY	1912 CLEVELAND AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.31	
509	G. P. MAY COMPANY	2424 HOOVER AVENUE, L	Low	1751	Other Contractor	908.32	
510	GALLEGOS PLASTERING CO. INC.	1524 HARDING AVENUE	Low	1741	Masonry	908.31	
511	GROOMTECH	225 W 30TH ST	Low	5199	Wholesale/Storage/Warehousing	909.12	
512	H & R HARDWARE SUPPLY	2602 TRANSPORTATION AVENUE, D	Low	5072	Wholesale/Storage/Warehousing	908.32	
513	HARDWOOD DESIGNS PLUS, INC.	105 W 35TH STREET, F	Low	1799	Other Contractor	909.12	
514	HERNANDEZ'S ELECTRICAL SUPPLY	2135 E 9TH STREET	Low	5072	Wholesale/Storage/Warehousing	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
515	HIGH END PERFORMANCE	337 W 35TH STREET STE K	Low	5531	Auto Supplies	909.12	
516	HIGHLAND ARCO	2336 HIGHLAND AVENUE	Low	5541	Fueling	909.12	
517	HIGHLAND MOBILE	2945 HIGHLAND AVENUE	Low	5541	Fueling	909.12	
518	HIGHLAND SERVICE CENTER	1803 HIGHLAND AVENUE	Low	7538	Auto Repair	908.32	
519	HIGHLAND VALERO	804 E 08TH ST	Low	5541	Fueling	908.32	
520	INTERNATIONAL SURF VENTURE INC	301 W 28TH STREET STE B , C	Low	5091	Wholesale/Storage/Warehousing	908.32	
521	ISLAND EQUIPMENT	303 35TH ST STE B	Low	5531	Auto Supplies	909.12	
522	ISLAND SALES & LEASING	1900 NATIONAL CITY BLVD #B	Low	5511	Vehicle Dealers	908.32	
523	ISLAND SALES & LEASING	100 W 8TH STREET	Low	5511	Vehicle Dealers	908.32	
524	J & L DISTRIBUTION INC	2601 HOOVER AVENUE, D	Low	5169	Wholesale/Storage/Warehousing	908.32	
525	JACK HARRISON BUICK	2601 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
526	JB CONCRETE CONSTRUCTION	1425 K AVE	Low	1771	Cement Mixing/Cutting	908.32	
527	JD BROTHERS AUTO REPAIRS	41 E 18TH STREET	Low	7538	Auto Repair	908.32	
528	JMB ASPHALT & CONCRETE INC	1818 WILSON AVE	Low	1771	Cement Mixing/Cutting	908.31	
529	JOSEPH T RYERSON & SON, INC	2300 HAFFLEY AVE	Low	5051	Wholesale/Storage/Warehousing	908.31	
530	JOY AIR	2601 HOOVER AVENUE	Low	5064	Wholesale/Storage/Warehousing	908.32	
531	KOOL FIT AMERICA INC.	1725 HARDING AVENUE	Low	5091	Wholesale/Storage/Warehousing	908.31	
532	KRAGEN AUTO SUPPLY #1722	1202 E PLAZA BLVD.	Low	5531	Auto Supplies	908.32	
533	LEX-TEK	2704 TRANSPORTATION AVE STE G	Low	7538	Auto Repair	908.32	
534	LOPEZ, PEDRO	1527 E 18TH ST	Low	7699	Equipment Repair	908.32	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
535	LOU'S AUTOMOTIVE & PARTS	1509 NATIONAL CITY BLVD., C	Low	7538	Auto Repair	908.32	
536	LUNA CONSTRUCTION INC	1410 COOLIDGE AVENUE	Low	1542	Other Contractor	908.31	
537	MAIN SQUEEZE JUICES	2712 TRANSPORTATION AVENUE	Low	5149	Wholesale Food	908.32	
538	MCCUNE CHRYSLER JEEP	2340 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
539	MCMAHON CONSTRUCTION, INC	605 WEST 12TH	Low	1611	Cement Mixing/Cutting	908.31	
540	MCMILLIAN MANAGEMENT SERV., L.P.	2807 HOOVER AVENUE, G-K	Low	7538	Auto Repair	908.32	
541	MIKE'S AUTOMOTIVE	115 E 17TH STREET, A	Low	7538	Auto Repair	908.32	
542	MODENA MOTORS	2626 SOUTHPORT WAY STE B	Low	5511	Vehicle Dealers	908.32	
543	MONIN MARBLE AND GRANITE STORE	1105 E 17TH ST	Low	5211	Building Materials	908.32	
544	MORE BRAKES N TUNE	1902 HIGH;AND AVE. #A	Low	7538	Auto Repair	908.32	
545	MORE GLASS	910 HIGHLAND AVENUE, C	Low	7699	Equipment Repair	908.32	
546	MOSSY NISSAN	2700, 2626 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
547	MOYNAHAN TOWING	3200 NATIONAL CITY BLVD.	Low	7549	Auto Repair	909.12	
548	N. GLANTZ & SON	2530 SOUTHPORT WAY, C	Low	5099	Wholesale/Storage/Warehousing	908.32	
549	NAPA AUTO PARTS	1810 HIGHLAND AVENUE	Low	5013	Auto Supplies	908.32	
550	NATIONAL CITY DETAIL SHOP	108 W 18TH STREET	Low	7542	Vehicle Washing	908.32	
551	NATIONAL CITY MOTORCARS	1900 NATIONAL CITY BLVD., A	Low	5521	Vehicle Dealers	908.32	
552	NELLANS CARPET AND DRAPERIES	426 W 15TH STREET	Low	1752	Other Contractor	908.31	
553	NELSON INDUSTRIAL SERVICES INC	2827 HOOVER AVENUE, F	Low	1799	Other Contractor	908.32	
554	NICOLLS INC	1535 TIDELAND AVENUE, J	Low	5099	Wholesale/Storage/Warehousing	908.31	
555	OLYMPIC AUTO SALES	1800 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.32	
556	ONE SOURCE DISTRIBUTOR INC	326 W 30TH STREET	Low	5063	Wholesale/Storage/Warehousing	909.12	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
557	ONE SOURCE DISTRIBUTORS	2530 SOUTHPORT WAY, A	Low	5065	Wholesale/Storage/Warehousing	908.32	
558	OROZCO QUALITY XMAS TREES	715 HIGHLAND AVE	Low	0811	Agriculture	908.31	
559	P B E WAREHOUSE INC	190 E 26TH STREET	Low	5013	Auto Supplies	908.32	
560	PACIFIC COAST AUTO & CUSTOMIZING	710 E 8TH ST	Low	7549	Auto Repair	908.32	
561	PACIFIC COAST DIESEL PARTS	100 W 35TH STREET, H	Low	5531	Auto Supplies	909.12	
562	PACIFIC DESIGN GROUP	1620 HARDING AVE	Low	1751	Other Contractor	908.31	
563	PAL'S PUMP CLINIC	1015 NATIONAL CITY BLVD	Low	7699	Equipment Repair	908.32	
564	PARK MOTORS	2125 ROOSEVELT AVENUE	Low	5511	Vehicle Dealers	908.32	
565	PATRIOT AUTO CARE AND BRAKES	910 HIGHLAND AVE STE A	Low	7539	Auto Repair	908.32	
566	PELL MELL SUPPLY INC	402 W 35TH STREET, E	Low	5072	Wholesale/Storage/Warehousing	909.12	
567	PENSKE TRUCK LEASING	3131 HOOVER AVENUE	Low	7513	Vehicle/Equipment Rental	908.32	
568	PERRY FORD - NATIONAL CITY	2050 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
569	PHILIPPINE MABUHAY NEWS	3142 E PLAZA BLVD., N	Low	5192	Wholesale/Storage/Warehousing	908.32	
570	POTTER ELECTRIC, INC.	1343 WILSON AVENUE	Low	5063	Wholesale/Storage/Warehousing	908.31	
571	PRESTIGE AUTO BROKERS	1001 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.32	
572	PRESTIGE AUTO BROKERS	2125 ROOSEVELT AVENUE, A	Low	5521	Vehicle Dealers	908.32	
573	PRESTIGE AUTO BROKERS	2225 ROOSEVELT AVE STE A	Low	5521	Vehicle Dealers	908.32	
574	PRO TIRES	1031 NATIONAL CITY BLVD B	Low	5531	Auto Supplies	908.32	
575	PUBLIC AUTO GROUP/ DEALER DIRE	45 E 26TH STREET	Low	5521	Vehicle Dealers	908.32	
576	RAD ELECTRIC SUPPLY INC.	1904 MCKINLEY AVENUE	Low	5065	Wholesale/Storage/Warehousing	908.31	
577	RADIATOR DEPOT	1533 WILSON AVENUE, A	Low	5013	Auto Supplies	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
578	RANGER COMMUNICATIONS	401 W 35TH STREET, B	Low	5065	Wholesale/Storage/Warehousing	909.12	
579	RELIANCE METAL CENTER	2100 CLEVELAND AVENUE	Low	5051	Wholesale/Storage/Warehousing	908.31	
580	REVELS STRIPING	2602 TRANSPORTATION AVENUE, J	Low	7549	Auto Repair	908.32	
581	RIVERSIDE CEMENT CO.	920 BAY MARINA DRIVE	Low	5032	Building Materials	908.32	
582	RODRIGUEZ APPLIANCE	2629 HIGHLAND AVENUE	Low	7699	Equipment Repair	909.12	
583	RON BAKER CHEVROLET	2301 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
584	ROYCE CONSTRUCTION INC	10 E 1ST STREET	Low	1542	Other Contractor	908.31	
585	RSD TOTAL CONTROL	402 W 35TH STREET, G	Low	5075	Wholesale/Storage/Warehousing	909.12	
586	RTM INTERNATIONAL LLC	301 W 28TH STREET, V	Low	5099	Wholesale/Storage/Warehousing	908.32	
587	RUBY'S EMBROIDERY	2525 SOUTHPORT WAY, S	Low	5131	Wholesale/Storage/Warehousing	908.32	
588	S & K SALES COMPANY	2626 SOUTHPORT WAY, C-E	Low	5199	Wholesale/Storage/Warehousing	908.32	
589	S & L OIL INC.	1601 E 8TH STREET	Low	5541	Fueling	908.32	
590	S D D MAINTENANCE	2829 NATIONAL CITY BLVD	Low	7539	Auto Repair	908.32	
591	S L FUSCO INC.	2530 SOUTHPORT WAY	Low	5085	Wholesale/Storage/Warehousing	908.32	
592	SAN DIEGO METRO PUBLISHING LLC	2602 TRANSPORTATION AVE STE O	Low	5111	Wholesale/Storage/Warehousing	908.32	
593	SAN DIEGO ORGANIC SUPPLY INC	100 W 35TH STREET, E	Low	5159	Wholesale Food	909.12	
594	SAN DIEGO PLASTICS, INC.	2220 MCKINLEY AVENUE	Low	5099	Wholesale/Storage/Warehousing	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
595	SAN DIEGO PUMP & COMPRESSOR	301 W 28TH STREET, A	Low	5085	Wholesale/Storage/Warehousing	908.32	
596	SATURN OF NATIONAL CITY	2202 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
597	SCOTT'S PORSCHE PARTS	705 CIVIC CENTER DRIVE	Low	5531	Auto Supplies	908.31	
598	SEACOAST SHIPPING & RECEIVING	2702 SOUTHPORT WAY, C , D	Low	5063	Wholesale/Storage/Warehousing	908.32	
599	SEVILLA'S PARTY RENTALS	2303 F AVE	Low	7359	Vehicle/Equipment Rental	908.32	
600	SHAFT MASTER	1031 NATIONAL CITY BLVD., C	Low	7539	Auto Repair	908.32	
601	SHOW TIME AUTO INC	710 E 8TH STREET	Low	7539	Auto Repair	908.32	
602	SID'S CARPET BARN	132 W 8TH STREET	Low	1752	Other Contractor	908.31	
603	SOUTH BAY LEATHER CORP	1900 WILSON AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.32	
604	SOUTH BAY PRE-OWNED	2401 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32	
605	SOUTH COUNTY VOLVO	2940 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	909.12	
606	SOUTHLAND AUTOBODY & PAINT	141 W 18TH STREET	Low	7532	Auto Paint/Body	908.32	
607	SPORTS AUTO SALES	1112 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
608	STEREO DISCOUNT CENTER INC	2907 HIGHLAND AVENUE	Low	7539	Auto Repair	909.12	
609	STERLING CORP CUSTOM ELEVATOR INTERIORS	340 W 26TH STREET, I	Low	1796	Other Contractor	908.32	
610	SUPERIOR FOAM & UPHOLSTERY CORP.	105 W 35TH STREET, D	Low	5199	Wholesale/Storage/Warehousing	909.12	
611	SWEETWATER HARLEY-DAVIDSON	3201 HOOVER AVENUE	Low	5571	Vehicle Dealers	908.32	
612	T N H AUTO REPAIR	25 E 17TH STREET	Low	7539	Auto Repair	908.32	
613	TECNICO SYSTEMS CORPORATION	206 W 35TH STREET, B	Low	7699	Equipment Repair	909.12	
614	TEYSSIER & TEYSSIER INC.	3200 B4-2 HIGHLAND AVENUE	Low	1542	Other Contractor	908.31	
615	TEYSSIER CONSTRUCTION, INC	3200 B-3 HIGHLAND AVENUE	Low	1521	Other Contractor	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
616	THE AUTO SPOT, INC	1017 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
617	THE HANDYMAN PAINTERS	2208 E 8TH ST	Low	1721	Painting/Coating	908.32	
618	THE SPEED SHOP	623 NATIONAL CITY BLVD.	Low	5531	Auto Supplies	908.31	
619	THRIFTY ARCO AM/PM #9569	1734 HIGHLAND AVENUE	Low	5541	Fueling	908.32	
620	TOM MOYNAHAN TOWING	3200 NATIONAL CITY BLVD.	Low	7549	Auto Repair	909.12	
621	TOM THUMB WHOLESALE ICE CREAM	1021 COOLIDGE AVENUE	Low	5143	Wholesale Food	908.31	
622	TOPECO PRODUCTS	2525 SOUTHPORT WAY	Low	5013	Auto Supplies	908.32	
623	TRANSMISSION SUPPLY	338 W 12TH STREET	Low	5531	Auto Supplies	908.32	
624	TUFF ACOUSTICAL AND THERMAL	1623 CLEVELAND AVENUE	Low	1742	Painting/Coating	908.31	
625	TUNEUP MASTERS INC #408	1902 HIGHLAND AVE	Low	7539	Auto Repair	908.32	
626	UNIDYNE CORPORATION	2702 SOUTHPORT WAY, F	Low	1799	Other Contractor	908.32	
627	UNITED BARBER & BEAUTY	2807 HOOVER AVENUE, C	Low	5087	Wholesale/Storage/Warehousing	908.32	
628	UNIVAR USA	2100 HAFFLEY AVENUE	Low	5169	Wholesale/Storage/Warehousing	908.31	
629	VEE PARTS & ACCESSORIES	704 A AVENUE	Low	5531	Auto Supplies	908.31	
630	VERNON SHIP SUPPLIES	1705 HOOVER AVENUE, B	Low	5199	Wholesale/Storage/Warehousing	908.32	
631	VILLARINO CONSTRUCTION SVC. INC	430 W 12TH STREET	Low	1542	Other Contractor	908.31	
632	WEST COAST TRUCK SERVICE	201 W 18TH STREET	Low	7538	Auto Repair	908.32	
633	WESTAIR GASES & EQUIP, INC	2300 HAFFLEY AVE	Low	5084	Wholesale/Storage/Warehousing	908.31	
634	WESTCOTT MAZDA	2800 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32	
635	WESTFLEX INDUSTRIAL	325 W 30TH STREET	Low	5085	Wholesale/Storage/Warehousing	909.12	
636	WORLD TERMINAL PARKING INC	200 HIGHLAND AVENUE	Low	7542	Vehicle Washing	908.31	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
637	WORLD TERMINAL PARKING INC.	510 HIGHLAND AVENUE	Low	7542	Vehicle Washing	908.31	
638	Y & M WHOLESALER	2626 SOUTHPORT WAY, A	Low	5145	Wholesale Food	908.32	
639	Y.Y.K. ENTERPRISES, INC.	726 W 19TH STREET	Low	1721	Painting/Coating	908.31	
640	BAR BET CONSTRUCTION	3348 CYPRESS STREET	High	1623	Other Contractor	909.12	X
641	DEWEY PEST CONTROL	324 CIVIC CENTER DRIVE	High	7342	Pest Control	908.31	X
642	FINISHING TOUCH AUTO DETAILING		High	7542	Vehicle Washing		X
643	SANTANA MOBILE TRUCK WASH	1741 NATIONAL CITY BLVD.	High	7349	Power Washing	908.32	X
644	VALDEZ MOBILE AUTO DETAILING	910 HIGHLAND AVENUE	High	7542	Vehicle Washing	908.32	X
645	ALATORRE TELECOM-SUBCONTRACTOR	4126 E PLAZA BLVD.	Low	1731	Other Contractor	908.32	X
646	ALLSTOP PEST CONTROL	108 W 25TH ST STE B	Low	7342	Pest Control	908.32	X
647	ALVAREZ HOME IMPROVEMENTS	1705 L AVENUE	Low	1742	Painting/Coating	908.32	X
648	AMERICAN PEST CONTROL CO	8100 BROADWAY STE E	Low	1799	Other Contractor		X
649	AMERICAN RES SVC OF CALIF INC	6162 NANCY RIDGE DR STE 100	Low	1711	Other Contractor		X
650	ARC ROOFING	537 FRONT ST	Low	1761	Other Contractor		X
651	B & B PLUMBING AND ELECTRIC	2425 J AVENUE	Low	1711	Other Contractor	909.12	X
652	BARRIOS LANDSCAPE	1604 HARTWELL CT	Low	1799	Other Contractor		X
653	BURRIS PLUMBING INC	1305 I AVENUE	Low	1711	Other Contractor	908.32	X
654	CAROLINO CONST & DEV CORP	3035 E 8TH STREET	Low	1521	Other Contractor	908.32	X
655	COLBRESE MATERIAL HANDLING INC	12600 STOWE DR STE 3	Low	1799	Other Contractor		X
656	COLUMBIA PEST CONTROL CO. OF SAN DIEGO	127 W 9TH STREET	Low	7342	Pest Control	908.31	X
657	CUSTOM PAINTING	530 C AVENUE	Low	1721	Painting/Coating	908.31	X
658	DEMOLITION MAN	2127 PROSPECT STREET, 4	Low	1795	Other Contractor	909.12	X
659	DESIGN/BUILD TENANT	9770 CARROLL CENTRE RD STE B	Low	1599	Other Contractor		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
660	EDDY'S LANDSCAPING	1945 LANOITAN AVENUE	Low	0781	Landscaping	909.12	X
661	FIERRO CONTRUCTION COMPANY	1815 SWEETWATER RD SPC 131	Low	1599	Other Contractor	909.12	X
662	FINE LINE STRIPING & PAINTING	2608 MICHELLE CT UNIT A	Low	1799	Other Contractor	909.12	X
663	GALLERY BUILDERS GROUP	2220 EAST PLAZA BLVD STE P	Low	1799	Other Contractor	908.32	X
664	HAGENBACK CONSTRUCTION SERVICE	1915 VIA LAS PALMAS, 27	Low	1751	Other Contractor	909.12	X
665	JACKSON & BLANC	7929 ARJONS DR	Low	1711	Other Contractor		X
666	JENSEN DRYWALL	3714 LYNDA PLACE	Low	1742	Painting/Coating	909.12	X
667	KAMPS PROPANE INC	16245 ALPINE BLVD	Low	1799	Other Contractor		X
668	LAMPERT, MURRAY M, COMPANY	3545 CAMINO DEL RIO S STE C	Low	1599	Other Contractor		X
669	LANDSCAPE DEVELOPMENT INC	28447 WITHERSPOON PKWY	Low	0782	Landscaping		X
670	LARRY'S ELECTRICAL SERVICE INC	1043 WORTHINGTON ST	Low	1731	Other Contractor		X
671	LUNA, MAURICIO	1432 E 06TH ST	Low	0782	Landscaping	908.32	X
672	MAS CONSTRUCTION	1808 LA POSADA ST	Low	1599	Other Contractor	908.31	X
673	MATA ENTERPRISES	328 E 9TH STREET	Low	1731	Other Contractor	908.32	X
674	MITSUBISHI ELECTRIC &	5665 PLAZA DR	Low	1796	Other Contractor	908.32	X
675	NATIONAL CITY ELECTRIC	2424 J AVENUE	Low	1731	Other Contractor	909.12	X
676	ORTIZ & ALLDS SANDBLASTING &	1313 BAY MARINA DRIVE	Low	1799	Other Contractor	908.30	X
677	PATITO CATERING	4582 BOYLSTON ST	Low	5963	Eating/Drinking Establishments		X
678	PHONG TRUONG LAWN SERVICE	2131 ESTELA DR	Low	0782	Landscaping		X
679	R.A. CONSTRUCTION	1232 EARLE DRIVE	Low	1521	Other Contractor	908.32	X
680	R.E. STAITE ENGINEERING, INC.	2140 TIDELANDS AVE	Low	1629	Other Contractor	908.30	X
681	R.G. MOBILE AUTOMOTIVE SERV	1135 DELAWARE ST	Low	7538	Auto Repair		X
682	RICK VILLARIN AUTOMATIC FIRE	1620 B AVENUE	Low	1799	Other Contractor	908.32	X
683	RICK'S MOBILE GLASS	507 G AVENUE	Low	7699	Equipment Repair	908.31	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Address	TTWQ	SIC	Category	HSA	Mobile?
684	RUIZ TREE SERVICE	2016 E AVENUE	Low	0783	Landscaping	908.32	X
685	RUSS' BEE REMOVAL	3421 NEWBERRY STREET	Low	7342	Pest Control	909.12	X
686	SHELLYS DELI CATERING	835 MORRISON ST	Low	5963	Eating/Drinking Establishments		X
687	SHOWCASE SERVICES, INC	13100 KIRKHAM WAY STE 207	Low	1799	Other Contractor		X
688	SWIFT COMMUNICATIONS INC	4365 MEADE AVE	Low	1731	Other Contractor		X
689	TACOS Y TAMALES MEXICO	4437 CRAIGIE ST	Low	5963	Eating/Drinking Establishments		X
690	TOM REED GENERAL CONTRACTOR	1721 YALE ST	Low	1599	Other Contractor		X
691	TRI-COUNTY DRILLING , INC.	9631 CANDIDA ST	Low	1781	Other Contractor		X
692	VISTA DEL SOL APARTMENTS	1545 Q AVE	Low	1599	Other Contractor	908.32	X
693	WEATHERITE CORPORATION	21211 COMMERCE POINTE DR	Low	1711	Other Contractor		X
694	COCO'S HOUSEKEEPING	2830 PROSPECT ST	Medium	7349	Power Washing	909.12	X
695	COLONIA F.C. SERVICE	133 N CLAIRMONT AVENUE	Medium	7349	Power Washing	908.31	X
696	KAREN CLEAN UPS	1722 GAMMA ST	Medium	7349	Power Washing	908.31	X
697	MISSED A SPOT CLEANING SERVICES	630 F AVE	Medium	7349	Power Washing	908.31	X
698	MONTELO'S CLEANING SERVICES	1107 D AVE	Medium	7349	Power Washing	908.32	X
699	N.G. COMERCL & RSDNTL CLEANING	1705 L AVE	Medium	7349	Power Washing	908.32	X
700	PREMIER CHEM DRY	311 S DREXEL AVE	Medium	7217	Carpet/Furniture Cleaning	908.31	X
701	SUPERIOR CLEANING SYSTEMS	1037 A AVENUE	Medium	7349	Power Washing	908.32	X
702	UNDERWRITERS LABORATORIES INC	333 PFINGSTEN RD	Medium	7389	Pool/Fountain Cleaning		X
703	VORTEX MAINTENANCE INC	2504 TRANSPORTATION AVE STE F	Medium	7349	Power Washing	908.32	X

APPENDIX B

Appendix B
JURMP Annual Report Requirements Checklist

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location in Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.3, 2.4.4.2
iii. A listing of the development projects to which SUSMP requirements were applied.	Table 2-1
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	Appendix A (inventory)
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-2
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.2

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.2
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.1

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A (inventory)
viii. A description of the general results of the inspections.	3.5
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5 Table 3-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix A (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	2.4.3.2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.4, Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4, Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4, Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	**(N/A for 07-08)**
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-2
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3.4, Table 4-1
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4, Table 4-1 (
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.35.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.3.4, Table 4-3
xviii. A description of the general results of the inspections.	Table 4-3
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4,
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	Throughout Section

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.2 (mobile), Appendix A (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	5.2.4 (will be N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4 (will be N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4, Table 5-2
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	Throughout Section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Location in Report**
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	7.4, Table 7-2, 7-3, and 7-4
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	7.4, Attachment 7.1
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	7.5
v. The number and brief description of illicit discharges and connections identified.	7.5, Table 7-5
vi. The number of illicit discharges and connections eliminated.	7.5, Table 7-5
vii. Identification and description of all spills to the MS4 and response to the spills.	7.3, Table 7-5
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2, Table 7-5
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5, Table 7-1 and 7-5

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
xiii. A description of notable activities conducted to manage illicit discharges and connections.	7.5, Table 7-1

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	7.4
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	7.4
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	7.4
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	7.4
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	7.4
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	7.4
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	7.4

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	7.4
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	7.4
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	7.4
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	7.4
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.4
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	7.4

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	**Location in Report**
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.3
iv. A description of education efforts conducted for the new development and construction communities.	8.3
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3

Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	**Location in Report**
i. A description of public participation efforts conducted.	9.2 and 9.3

Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	**Location in Report**
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11

Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	**Location in Report**
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order. (For 2007-2008, the requirements that apply are essentially the same as those found in Order No. 2001-01)	10

Same as old Permit for 2007-2008

Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	**Location in Report**
i. A description of any special investigations conducted.	12

Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	4.2.3, 13

JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14 and each program component section

ATTACHMENTS

ATTACHMENT 2.1

TREATMENT CONTROL BMP FEASIBILITY ANALYSIS FOR GROVE PLAZA

STRUCTURAL TREATMENT

Structural Treatment

Structural treatment The area for treatment by structural treatment is very small, 0.39 acres for Building A and 0.40 acres for Building B. The small size of the parcel, the nature of the commercial development and the small flow eliminates most treatment methods.

Detention Basin – Traditional detention basins require very large amounts of area to operate properly, large enough to detain the total design flow or long enough to provide gravity sedimentation while the clarified effluent is allowed to spill out. There is no space for this type of device and given the low intermittent low flow, it would not work properly. If a water volume could be maintained long enough to operate properly, it would become a breeding area for insects and mosquitoes located in a residential neighborhood.

Infiltration Basin - An infiltration basin requires an even larger space than a detention basin to retain the runoff volume. The water detained in the basin, with all the pollutants, would be allowed to filter into the ground water. It is a better solution to treat the water and release it to the existing storm drain system. Also, the adjoining residential neighborhood would not tolerate a large muddy hole.

Wet Ponds or Wetlands - Wet ponds are similar in size to an infiltration basin but larger and, by definition, constantly filled with water. The pond uses natural plants and bacteria to process the pollutants. It is a living organism and is extremely difficult to maintain during the widely varied inflow of storm water and varied concentrations of pollutants. This solution is not suitable for the neighborhood or the size of the site. The danger of a drowning child alone would preclude the implementation of this solution.

Filtration – A media filter, constructed as part of the natural environment, as opposed to a manufactured filter treatment plant, requires a large amount of space for pretreatment and then filtration. Pretreatment usually removes trash and sediment in a settling basin then filters the effluent down through media of varying sizes to remove sediment, oil & grease and other contaminants . The method requires a large amount of space and a large elevation differential or pumping to process the storm runoff. The site neither has the space nor the elevation difference to accommodate this process.

Drainage Inserts – Drainage inserts remove sediment and trash by filtering the incoming flow through a proprietary filter. Oil and grease and other contaminates are removed by filtering through activate charcoal and other adsorbing / absorbing materials. The filters are inserted in standard trench and storm drain inlets. They are protected by a grate and un-noticed by the casual public, yet they are simple and easy to maintain. This could be a good solution but is not allowed by the city.

Biofilters – A type of biofilter will be used to treat the runoff from the south roof of Building B. However, this solution requires too much space to be used as structural treatment for the entire site. See hydrology report for calculations.

Hydrodynamic Separator Systems – These proprietary devices work in various ways or combinations to physically separate sediment and other pollutants by gravity sedimentation, centrifugal force or filtration with varying degrees of success. The most applicable methods for this site would be a combination of sedimentation and filtration. This is the Structural treatment for most of the runoff from the project.

Structural Treatment would consist of a Flo-Guard Hydrodynamic Separator, 36" square, DVA-36s, a 36". The separators are oversized and can easily handle the anticipated hydraulic and pollution loading. One each of the filters would be installed in each of the two outlets to the street and would treat all runoff from the parcels.

The listed Pollutant Categories for a Parking Lot are Heavy Metals, Trash & Debris, Oil & Grease and potentially Sediments, Nutrients, Oxygen Demanding Substances and Pesticides. Nutrients and Pesticides can be reduced by careful landscaping design and maintenance. Trash and Debris and Oxygen Demanding Substances can be controlled by maintenance of the site. The selected filtration method will remove Trash & Debris, Sediments and floating oil.

Design of the Separators The peak 100 year flow for area A1 (Building A) is calculated to be 2.38 cfs; the flow from a uniform flow of 0.2 inches per hour is 0.077 cfs. The filtered flow capacity of the DVA-36s is 0.9 cfs (see Flow Guard Capacity charts in the Appendix). The safety factor of the proposed filter is approximately 11 times the design size. The bypass capacity is 8.0 cfs or approximately 3.3 times the calculated 100 year storm runoff.

The peak 100 year flow for area A2 (Building B) is calculated to be 1.91 cfs; the flow from a uniform flow of 0.2 inches per hour is 0.147 cfs. The filtered flow capacity of the DVA-36s is 0.9 cfs . The safety factor of the proposed filter is approximately 6 times the design size. The bypass capacity is 8.0 cfs or approximately 4 times the calculated 100 year storm runoff.

Maintenance Maintenance will be the responsibility of the owner. It is recommended that the separator be inspected each month. The sediment in the tank should be vacuumed out once each year. Detailed service procedures are outlined in the Appendix.

The cost of the separators is approximately $5,000 or $10,000 for both separators. The annual cost of maintenance is approximately $300/each or $600/ year for both separators.

CONSTRUCTION BMP'S

ATTACHMENT 2.2

ANNUAL MAINTENANCE VERIFICATION FORM AND INTRODUCTORY LETTER

City of National City
BMP Operation and Maintenance Verification Form

National City Library

Address: 1401 National City Blvd
National City, CA 91950

Annual verification of effective operation and maintenance of all installed treatment control Best Management Practices (BMPs) was a condition of the permit to develop this site. Chapter 14.22 of the City's Municipal Code requires property owners to provide annual verification of proper operation and maintenance of BMPs. Please complete this form and return no later than September 10th, 2008 to the following address:

City of National City, Engineering Department
1243 National City Boulevard
National City, CA 91950
Attn: SUSMP BMP Verification Project

Please list the inspection and maintenance dates for each treatment control BMP listed at each described location. If maintenance was performed, include a brief description of the maintenance performed. If maintenance was performed by an outside company, include documentation of services.

BMP: Drainage Insert Filter

BMP Description: **Drainage insert filter**

- *Location:* Catch basin on SW corner of parking lot, GPS coordinates: (32.66996, -117.10435)

  Inspection Dates: _____

  Date of Last Maintenance: _____

  Description of Maintenance: _____

- *Location:* Catch basin on south edge of property, GPS coordinates: (32.67006, -117.10396)

  Inspection Dates: _____

  Date of Last Maintenance: _____

  Description of Maintenance: _____

- *Location:* Catch basin in landscaping, GPS coordinates: (32.67055, -117.10388)

  Inspection Dates: _____

  Date of Last Maintenance: _____

  Description of Maintenance: _____

- *Location:* East edge of parking lot facing baseball field, GPS coordinates: (32.67037, -117.10370)

Inspection Dates: _____

Date of Last Maintenance: _____

Description of Maintenance: _____

_____

_____

Certification

I certify under penalty of law that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

Signature of Responsible Party **Date**

_____

Printed Name of Responsible Party **Title**

_____

Daytime Phone **Fax** **Email**

Date

New Storm Water Treatment Device Inspection and Maintenance Requirements for Property Owners

Address and Property Owner:

Dear Property Owner,

Under a current environmental permit issued by the Regional Water Quality Control Board (RWQCB), National City is required to regularly inspect all completed new and redevelopment projects with permanent storm water treatment devices (also known as treatment control Best Management Practices (BMPs)). In addition to City conducted inspections of these devices, the permit requires that the individuals responsible for these treatment control BMPs conduct their own regular inspections and perform maintenance on these devices as needed, and submit documentation of these activities to the City.

If you are receiving this notice, it is because our City records indicate that you are the responsible party for the treatment control BMP(s) on your property. **You are required to complete and sign the attached form regarding the inspection and maintenance activities you have conducted in the past year for the treatment control(s) indicated.** Also, please correct any incorrect information on the form so we can update our records accordingly. **You must return the completed form to the City by no later than September 10th**. You can drop the form off at City Hall or mail the form to the following address:

City of National City, Engineering Department
1243 National City Boulevard
National City, CA 91950
Attn: SUSMP BMP Verification Project

Failure to comply with this requirement could result in issuing a notice of violation and being turned over to the City Attorney for legal action in accordance with the City of National City Storm Water Ordinance, Chapter 14.22. **Civil liability fines (up to $10,000 a day) could be imposed for extended non compliance.**

Please refer to your property's Standard Urban Stormwater Mitigation Plan (SUSMP) document and signed maintenance agreement for details on what maintenance is required for the treatment controls on your site. If you have any questions about this program, or would like to view your site's SUSMP report or maintenance agreement, please contact the City of National City's Storm Water Compliance Officer, Barbra Tipton, at (619) 336-4583.

For further information on maintenance of treatment control BMPs, refer to the documentation provided from the manufacturer (for commercially sold treatment control BMPs) or the California's Stormwater Quality Association's (CASQA) New Development and Redevelopment Handbook. A hard copy of the handbook is available

to read at the City's engineering counter, or you can access the handbook on CASQA's website at:

http://www.cabmphandbooks.com/Development.asp

We appreciate your cooperation with the City's storm water pollution prevention program. Your efforts help make the City's waterways and oceanfront safe and enjoyable for everyone.

Sincerely,

Barby Tipton Storm Water Compliance Inspector	Din Daneshfar Project Manager	Maryam Babaki City Engineer

Attachments:

BMP Operation and Maintenance Verification Form

Date

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We appreciate your cooperation with the City's storm water pollution prevention program. Your efforts help make the City's waterways and oceanfront safe and enjoyable for everyone.

Sincerely,

Barby Tipton Storm Water Compliance Inspector	Din Daneshfar Project Manager	Maryam Babaki City Engineer

Attachments:

BMP Operation and Maintenance Verification Form

ATTACHMENT 3.1

CONSTRUCTION BMP FACT SHEET

Construction Site Best Management Practices

As a condition of your permit, you are required to prevent construction generated or related pollutants from discharging from your project site. All construction projects within the City of National City are required to implement at least one of the Best Management Practices (BMPs) from each category and subcategory listed below, where applicable. Property owners and/or permit holders will be responsible for the selection, installation and maintenance of proper BMPs in accordance with industry recommended standards such as the Caltrans or California Storm Water BMP handbooks or in accordance with the California General Permit for Construction. Depending on site-specific information such as project scope and potential associated discharges. Additional BMPs may be required where appropriate. Project proponents will need approval from the City prior to installation of any alternate BMPs not listed below.

Minimum BMPs for Construction Activities:

1. **Planning and Scheduling**
   Planning and scheduling BMPs such as minimizing grading are required where feasible to help reduce the amount and duration of soil exposure.
   a. Preservation of natural hydrologic features
   b. Preservation of riparian buffers and corridors
   c. Minimization of areas that are cleared and graded to only the portion of the site necessary for construction
   d. Minimization of exposure time of disturbed soil areas
   e. Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods
   f. Temporary stabilization and reseeding of disturbed soil areas as rapidly as feasible
   g. Employee and Subcontractor Training

2. **Soil Stabilization and Erosion Prevention**
   Physical Stabilization BMPs such as vegetation, landscaping or structural methods are required to prevent erosion from exposed slopes.
   a. Planning and Scheduling
   b. Preservation of Existing Vegetation
   c. Physical Stabilization
      - Hydraulic Mulch
      - Hydro-seeding
      - Soil Binders
      - Straw Mulch
      - Geo-textiles, Plastic Covers, and Erosion Control Blankets/Mats
      - Wood Mulching
      - Earth Dikes/Drainage Swales and Lined Ditches
   d. Site Drainage
      - Outlet Protection/Velocity Dissipation
      - Slope Drains
   e. Permanent re-vegetation or landscaping as early as feasible

See reverse side

3. **Sediment Containment**

Sediment containment controls should be used to supplement erosion prevention methods not as a substitute for erosion control. Sediment controls act to contain sediment that has been previously eroded and may get carried on-site and/or discharged from the site in sheet flow or from tracking by equipment and vehicles.

a. Perimeter Protection
   - Silt Fencing
   - Gravel Bag Berm
   - Fiber Rolls

b. Sediment Capture
   - Storm Drain Inlet Protection
   - Sediment Trap
   - De-silting Basins designed in accordance with industry standards such as Caltrans, California Storm Water BMP manual. If the project is five acres or greater the de-silting basin must be designed in accordance with the State General Construction Permit, Order DWQ 99-08.
   - Gravel bag Barrier

c. Sediment Tracking
   - Stabilize Construction Entrances and Exits
   - Construction Road Stabilization
   - Entrance/ Outlet Tire Wash
   - Street Sweeping

4. **Materials and Equipment Management**

Pollution Prevention measures are required were applicable to prevent the contamination of storm water from waste materials, construction materials, vehicles, and equipment stored on-site. Each site must evaluate the potential pollutants on-site, which may be discharged during construction activities.

a. Materials Management
   - Material Delivery and Storage
   - Material Use
   - Stockpile Management
   - Spill Prevention and Control

b. Vehicle and Equipment Operations
   - Vehicle and Equipment Cleaning
   - Vehicle and Equipment Fueling
   - Vehicle and Equipment Maintenance

c. Waste Management
   - Solid
   - Liquid
   - Sanitary
   - Concrete
   - Hazardous
   - Contaminated Soil

5. **Non-Storm Water Discharge and Drainage Control**

Management of non-storm water discharges involves pollution prevention methods as well as drainage control. Project managers must implement appropriate drainage control methods to divert, contain and properly discharge drainage generated by construction activities.

a. General
   - Paving and Grinding Operations

b. Non-storm water discharges
   - Water Conservation Practices
   - Dewatering Operations
   - Potable Water/Irrigation and Flushing

ATTACHMENT 4.1

MUNICIPAL INSPECTION FORM

CITY OF NATIONAL CITY
STORM WATER QUALITY INSPECTION FOR MUNICIPAL FACILITIES

Inspector Name _____

Date_____/_____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. Contact Information

Facility Name_____

Address_____

_____

Manager/Operator(s)_____

Business Telephone (☐☐☐☐☐☐☐☐☐) ☐☐☐☐☐☐☐- ☐☐☐☐☐☐☐☐☐☐☐ ext._____

After hours Telephone (☐☐☐☐☐☐☐☐☐) ☐☐☐☐☐☐☐- ☐☐☐☐☐☐☐☐☐☐☐ ext._____

B. Facility/Site Information

Principal activity/function:_____

JURMP Prioritization: ☐ High ☐ Medium ☐ Low

New JURMP Prioritization?_____

C. Initial Observations

Nearest conveyances or water bodies: _____

Approximate distance to water bodies: ☐ ☐ 200 ft. ☐ 200 ☐ 1000 ft. ☐ 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area of site:_____square feet

Approximate ☐ impervious surface of this area_____☐

Exposed areas of intensive outdoor activity: _____

D. Best Management Practices (BMPs) Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
Is the site free of litter and debris?				
Are discharge locations free of sediment and debris?				
Are parking lots, sidewalks and streets free of sediment and debris?				
Is pressure washing conducted at this facility? If yes, is wash water captured?				

D.2 Landscaping

BMPs	N/A	Yes	No	Comments
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize overwatering and runoff?				
Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				
Are pest management techniques employed?				
Is drought-resistant vegetation incorporated into landscaping?				
Are pesticides, herbicides, and fertilizers managed in accordance with the JURMP BMPs?				

D.3 Materials and Wastes

Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor storage areas adequate (i.e., covered area with secondary containment)?				
Is there an accessible spill response kit?				
Are storage tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				

D.4 Equipment and Vehicles

Are parking areas exposed to storm water free of significant spills and leaks?				
Are heavy equipment and vehicles stored in garages or under canopies?				
Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
Are equipment and vehicles inspected daily for leaks and repaired as necessary?				
Are vehicle fueling areas covered and are nearby storm drain inlets protected from spills and leaks?				
Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
Are biodegradable soaps used for cleaning activities?				

D.5 Construction

Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				

D.6 Non-Storm Water Management

BMPs	N/A	Yes	No	Comments
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				

D.7 Other

Are all activity-specific BMPs from Appendix C of the JURMP being implemented?				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				

D.8 Notes:

E. SWPPP Review (PW Yard ONLY)

Does the Public Works Yard SWPPP need to be updated to reflect any changes in area/activities? ☐ Yes ☐ No

F. Recommended Corrective Action

Is corrective action needed? ☐ Yes ☐ No If yes, describe below.

Owner/operator has been notified of recommended corrective actions: ☐ Verbally ☐ Photocopy ☐ Fax ☐ E-Mail

G. Violations

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described above.

☐ Violation of storm water ordinance or other applicable regulations were found.

Type of violation:

☐ Illegal discharge(s) of pollutants into the storm drain or receiving waters

Description

☐ Illegal connection(s) to the storm drain system

Location_____

☐ Littering

☐ Improper implementation of required BMPs

☐ Other_____

Specific action required to the correct violation described above:

_____

_____

ATTACHMENT 5.1

INDUSTRIAL AND COMMERCIAL INSPECTION FORM AND PDPA FORM

CITY OF NATIONAL CITY
STORM WATER QUALITY INSPECTION FOR INDUSTRIAL/COMMERCIAL FACILITIES

Inspected by D-MAX Engineering, Inc.

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine Result: ☐ Full Insp. ☐ Could not Contact ☐ Low Commercial ☐ Moved, Vacant
☐ Follow-up ☐ Complaint ☐ Moved, Replaced by_____ ☐ Refused ☐ Duplicate

A. CONTACT INFORMATION

Original	Changes
Business Name_____	Business Name_____
_____	_____
Street Address_____	Street Address_____
_____	_____
Responsible Person(s)_____	Responsible Person(s)_____
Business Telephone (□□□□) _____ -□□□□□□□□ext._____	Business Telephone (□□□□) _____ -□□□□□□□ext._____
Business Fax (□□□□□□□□) _____ - □□□□□□□□□□□	Business Fax (□□□□□□□□) _____ - □□□□□□□□□□□
Home Based? ☐ Yes ☐ No	

B. FACILITY/SITE INFORMATION

Principal activity:_____

Assigned JURMP Classification: ☐ High Ind ☐ Medium Ind ☐ Low Ind ☐ High Comm ☐ Unassigned

Is this facility currently listed in the City's JURMP Inventories? ☐ Yes ☐ No

Assigned SIC Code(s)_____ _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

Recommended change of SIC Code(s)?_____ _____

New JURMP Classification?_____

Does facility have a current business certificate? ☐ Yes ☐ No _____ Exp._____

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID _____

If no, does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☐ No

Existing Status: ☐ High Ind ☐ Med Ind ☐ Low Ind ☐ High Com ☐ Moved/Out of Business ☐ Dup ☐ Low Com
☐ Not in City Jurisdiction

Existing SIC code(s) _____ _____

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____ Watershed:_____San Diego Bay_____

Approximate distance to water bodies: ☐ □200 ft. ☐ 200 □1000 ft. ☐ 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate □ impervious surface of this area_____□

Exposed areas of intensive outdoor activity: _____

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
Is the site free of litter and debris?				
Are discharge locations free of sediment and debris?				
Are parking lots, sidewalks and streets free of sediment and debris?				
Is pressure washing of parking lots or sidewalks conducted at the facility? Is wash water captured?				
Are roof downspouts directly away from areas of potential pollutants?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area enclosed and free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor material storage areas adequate (covered area with secondary containment)?				
Are outdoor storage containers properly labeled?				
Is there an accessible spill response kit?				
Are storage tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				
Are heavy equipment and vehicles stored in garages or under canopies?				
Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				
Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
Are biodegradable soaps used for cleaning activities?				
D.5 Food Establishments				
Does facility have a grease trap or grease interceptor?				

When was the last time the grease trap was maintained? _____

Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____

How many grease fryers are at the facility? _____

About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually

BMPs	N/A	Yes	No	Comments
How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Do oil-recycling/grease bins have overhead coverage?				
Do oil-recycling/grease bins have secondary containment?				
Are deep fryer oil-recycling drums stored properly?				
At what time is cleaning performed? _____				
What is the cleaning method? _____				
Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
Where is used cleaning water discharged? _____				
Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.7 Other				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
Were any educational materials distributed?				

D.8 BMP Summary

E. SWPPP REVIEW

Does facility maintain a SWPPP: ☐ **Yes** ☐ **No** ☐ **Not Applicable**

SWPPP Component	Provided	Adequate	Comments
Site Map/Description	☐ Yes ☐ No	☐ Yes ☐ No	_____
Materials List	☐ Yes ☐ No	☐ Yes ☐ No	_____
Significant Spills/Leaks	☐ Yes ☐ No	☐ Yes ☐ No	_____
Pollution Prevention	☐ Yes ☐ No	☐ Yes ☐ No	_____
Industrial Activities	☐ Yes ☐ No	☐ Yes ☐ No	_____
Pollutant Sources/Risks	☐ Yes ☐ No	☐ Yes ☐ No	_____
Compliance Activity Schedule	☐ Yes ☐ No	☐ Yes ☐ No	_____
Employee Training	☐ Yes ☐ No	☐ Yes ☐ No	_____
Accessible to staff	☐ Yes ☐ No	☐ Yes ☐ No	_____
Existing BMPs	☐ Yes ☐ No	☐ Yes ☐ No	_____

Does this facility have a storm water monitoring program? ☐ Yes ☐ No ☐ N/A

Was appropriate monitoring conducted during the most recent wet season? ☐ Yes ☐ No

If not, does the facility have documentation of no qualifying rain events? ☐ Yes ☐ No

If not, is the facility in a GMP and not scheduled for most recent year ? ☐ Yes ☐ No

Do monitoring results show that existing BMPs are effective in removing pollutants? ☐ Yes ☐ No

Recommended changes:

_____

_____

F. RECOMMENDED CORRECTIVE ACTION

Is corrective action needed? ☐ Yes ☐ No

If **BMP-related** corrective action is required, describe below. If other corrective action, check the appropriate box in section G.

_____

Owner/operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax

G. VIOLATIONS

- ☐ No violations have been noted at this time
- ☐ No violations have been noted, but recommend taking corrective action described in Section F.
- ☐ Violation of the City's storm water ordinance (Municipal Code Chapter 14.22):
  - ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
    Description_____
  - ☐ Illegal connection(s) to the storm drain system
    Location_____
  - ☐ Littering
  - ☐ Failure to properly implement required BMPs
- ☐ Failure to comply with the requirements of applicable State or Regional Permit(s):
  - ☐ Non-compliance with the State Industrial Storm Water General Permit.
    Subjectivity, based on SIC Code: ☐ Mandatory ☐ Conditional
    - ☐ In the future, under a new Industrial Permit which has not yet been adopted, this facility may be able to qualify for a No Exposure Certification (NEC) and exemption from Permit coverage.
  - ☐ Non-compliance with the Municipal Storm Water Permit (NPDES NO. CAS0108758).
- ☐ Other Violation_____

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

- ☐ Implement the recommended corrective actions listed in Section F.
- ☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit; see Attachment 3 of the Industrial Permit (http://www.waterboards.ca.gov/stormwtr/industrial.html).
  - ☐ For "Conditional" facilities only: if you implement all the recommended BMPs and eliminate outdoor exposure, contact the City to request a re-inspection. If it is determined that you qualify, NONA/NEC paperwork will be provided for you to complete, and you will not have to file an NOI.
- ☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP); see Section A of the Industrial Permit.
- ☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.
- ☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional actions required:_____

H. RECOMMENDED CITY ACTIONS*

- ☐ None
- ☐ Follow-up to ensure the observed violation is corrected (see Section G)
- ☐ Update the following: ☐ JURMP priority ☐ SIC code ☐ Facility Contact Information
- ☐ Add this business to the City's JURMP inventories.
- ☐ Based on the observed business activities, this facility may be reclassified as "low priority commercial" and may be removed from the City's JURMP inventories.
- ☐ This business is no longer at its listed address. If further investigation does not determine that it is still operating at another address within City jurisdiction, it should be removed from the JURMP inventories.
- ☐ No current business license was available. Review City business license records to determine if this business has a current license on file.

Other:_____

Does this business require a follow-up inspection? ☐ **Yes** ☐ **No**

ASSESSMENT

Level of knowledge regarding stormwater issues: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Level of cleanliness, BMP implementation, orderliness of site: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

*Recommended City Actions listed at the time of inspection are subject to change based on later review by office staff.

I. FOLLOW-UP (IF PREVIOUSLY INSPECTED)

Corrective actions implemented since last inspection:

Corrective actions still needed:

Corrective Action Letter Sent? ☐ Yes ☐ No Date Sent (mm/dd/yyyy): _____/_____/_____

Notice of Violation Issued? ☐ Yes ☐ No Date Issued (mm/dd/yyyy): _____/_____/_____

Administrative Citation Issued? ☐ Yes ☐ No Date Issued (mm/dd/yyyy): _____/_____/_____

Citation Number: _____

Fine Amount (if applicable): ☐_____

D. POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	RW 303(d) (Y N)	WS COC (Y N)	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
				Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments														
Nutrients														
Aluminum														
Iron														
Heavy Metals														
Check if evidence indicates specific metals may have significant PDPs: Copper Cadmium Lead Zinc Mercury														
Organic Compounds														
Check if evidence indicates there may be historical soil contamination associated with any of the following: PCBs PAHs Chlordane DDT														
Trash & Debris														
Oxygen Demanding														
Oil & Grease														
Bacteria & Viruses														
Pesticides														
Check if evidence indicates the following are used on site: Diazinon Chlorpyrifos														
Acid/Base (pH effects)														
Others (list):														

RW 303(d) Receiving water impairments, as listed in the most recent 303(d) list
WS COC High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
PDP pollutant discharge potential.
Emp. Training employee training activities focused on storm water pollution prevention
Housekeeping standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
Minor Struct. minor structural BMPs that do not require building permits, such as covering with tarps or building berms
Major Struct. major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results exceed the EPA benchmark by an order of magnitude or more

if available

ATTACHMENT 5.2

2008 STORM WATER CALENDAR

CALIFORNIA
NATIONAL CITY
1887
INCORPORATED

2008 Storm Water Program Calendar

National Pollutant Discharge Elimination System (NPDES)

Do You Go To The Beach When It Is Raining?

Do you go to the beach when it is raining? Probably not, but pollution does! Our individual daily activities create pollution that is washed into our ocean every time it rains.

Urban-runoff pollution in storm water is one of the biggest threats to our waterways and San Diego Bay. The majority of water pollution today is from urban run-off. Things that contribute to pollution in urban run-off include cars leaking oil, overuse or misuse of pesticides and fertilizers, garden debris, pet waste, litter, automotive oils and metals, vehicle washing, improper disposal of trash, and many other activities in which we partake and choices that we make daily.

Rainwater running over streets, roofs, parking lots, driveways and other developed areas carry pollutants into the bay through our storm water conveyance system. Unlike the sewer system, which carries water from indoor drains to the Point Loma Wastewater Treatment Plant, urban runoff is carried directly to the storm drain system which then releases this polluted water into the City's creeks, local channels and ultimately, into the ocean. Storm drains are not connected to the sewer system and everything that enters the storm drains goes directly to our waterways, untreated.

By following these simple guidelines of implementing Best Management Practices (BMPs), it will help reduce the pollutants in the storm water that leaves your property:

- Repair auto leaks.
- Use pesticides and fertilizers sparingly.
- Dispose of household hazardous waste, used auto fluids (antifreeze, oil, etc.) and batteries at designated collection or recycling locations.
- Clean up after your pet.
- Use a commercial car wash or wash your car on a lawn or other unpaved surface.
- Sweep up yard debris rather than hosing down areas.
- Compost or recycle yard waste when possible.
- Clean paint brushes in a sink, not outdoors.
- Properly dispose of excess paints through a household hazardous waste collection program.
- Sweep up and properly dispose of construction debris like concrete and mortar.
- Use secondary containment for liquids stored outside.
- Dry sweep driveways & sidewalks.
- Prevent accumulation of unwanted items on your property by taking advantage of National City Clean Up Day

National City Clean Up Day

The City Of National City has National City Clean Up Day, twice a year, once in the spring and again in the fall. Residents can dispose of items such as garbage, appliances, furniture, etc. Hazardous materials are not permitted in the disposal dumpsters at this event. Information regarding this event will be enclosed with your Edco Disposal Service trash bill.

Hazardous Waste Disposal

The City Of National City contracts with the City of Chula Vista to provide hazardous waste disposal for the residents of National City. The Chula Vista Household Hazardous Waste Collection Facility (1800 Maxwell Road, Chula Vista) is open on Saturdays from 9 a.m.-1 p.m. For a $5.00 fee, up to 15 gallons or 125 pounds of hazardous waste is accepted. AutoZone, Kragen, Napa, and Firestone accept used oil at no charge and other automotive fluids. Call the individual stores for details.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

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We Can Keep the Ocean Clean!

Manteniendo a nuestra comunidad limpia,
podemos mantener el océano limpio!

January/Enero 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
		1 New Year's Day City Closed	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21 Martin Luther King Jr Day City Closed	22	23	24	25	26
27	28	29	30	31		

Did You Know...?
Only Rain in the Drain.

¿Sabe Usted...?
Solamente lluvia en el dren.

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February/Febrero 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
					1	2
3	4	5	6	7	8	9
10	11	12 Lincoln's Birthday City Open	13 Construction Workshop	14	15	16
17	18 Washington's Birthday City Open	19	20	21	22	23
24	25	26	27	28	29	

To make reservations for Construction Workshop, please call (619) 336-4380.

Para hacer reservaciones para el Taller de Construcción, por favor llame al (619) 336-4580.

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March/Marzo 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
						1
2	3	4	5	6	7	8
9	10	11	12 Automotive Workshop	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31 Cesar Chavez Birthday City Closed					

To make reservations for Automotive Workshop, please call (619) 336-4380.

Para hacer reservaciones para el Taller Mecánico, por favor llame al (619) 336-4580.

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April/Abril 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16 Residential Workshop	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

To make reservations for Residential Workshop, please call (619) 336-4380.

Para hacer reservaciones para el Taller de Residencial, por favor llame al (619) 336-4380.

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podemos mantener el océano limpio!

May/Mayo 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
				1	2	3
4	5	6	7	8	9	10
11	12	13	14 Industrial Workshop	15	16	17
18	19	20	21	22	23	24
25	26 Memorial Day City Closed	27	28	29	30	31

To make reservations for Industrial Workshop, please call (619) 336-4380.

Para hacer reservaciones para el Taller de Industrial, por favor llame al (619) 336-4380.

By Keeping our Community Clean,
We Can Keep the Ocean Clean!

Manteniendo a nuestra comunidad limpia,
podemos mantener el océano limpio!

June/Junio 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Did You Know...?

All water that enters National City storm drains flows to San Diego Bay without being treated.

¿Sabe Usted...?

Toda agua que entra por las alcantarillas de National City van a dar a la Bahía de San Diego sin ser tratadas.

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podemos mantener el océano limpio!

July/Junio 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
		1	2	3	4 **Independence Day** City Closed	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Did You Know...?

Programming sprinklers to reduce overwatering helps reduce water pollution.

¿Sabe Usted...?

Programando sus regaderas electricas para no desperdiciar agua ayuda a reducir la polución de agua.

By Keeping our Community Clean,
We Can Keep the Ocean Clean!

Manteniendo a nuestra comunidad limpia,
podemos mantener el océano limpio!

August/Agosto 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Did You Know...?

Hosing down sidewalks or driveways washes pollution into the storm drain system and ultimately into San Diego Bay.

¿Sabe Usted...?

Lavando banquetas y entradas hacen que agua contaminada corra por el sistema de alcantarillado y terminan en la Bahía de San Diego.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

By Keeping our Community Clean,
We Can Keep the Ocean Clean!

Manteniendo a nuestra comunidad limpia,
podemos mantener el océano limpio!

September/Septiembre 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
	1 **Labor Day** City Closed	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Did you know...?

You can report discharges of pollution by calling the Storm Water Hotline at (619) 336-4589.

¿Sabe Usted...?

Puede reportar escapes de polución/contaminación llamando al (619) 336-4589 Centro de Alcantarillado.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

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We Can Keep the Ocean Clean!

Manteniendo a nuestra comunidad limpia,
podemos mantener el océano limpio!

October/Octubre 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
			1	2	3	4
5	6	7	8	9	10	11
12	13 Columbus Day City Open	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Did You Know...?

You can dispose of large items (mattresses, appliances, etc.) twice per year during National City Clean-up days. Watch for event details in your trash bill.

¿Sabe Usted...?

Puede deshacerse de articulos grandes (colchones, aparatos electricos, etc.) dos veces al año durante los Días de Limpieza de National City (National City Clean-up). Información sobre estos días se encuentra en su recibo de basura.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

By Keeping our Community Clean,
We Can Keep the Ocean Clean!

Manteniendo a nuestra comunidad limpia,
podemos mantener el océano limpio!

November/Noviembre 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
						1
2	3	4	5	6	7	8
9	10	11 Veteran's Day City Open	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27 Thanksgiving Day City Closed	28 City Closed	29
30						

Did You Know...?

Pesticides can be harmful to children, pets and the environment if used improperly. Always read the instructions before use.

¿Sabe Usted...?

Pesticidas son dañinas a niños, mascotas y al ambiente si son usados inapropiadamente. Siempre lea la instrucciones antes de usar.

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December/Diciembre 2008

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24 Christmas Eve Day City Closed	25 Christmas Day City Closed	26	27
28	29	30	31			

Did You Know...?

Repairing, washing, or storing your vehicle on the street can contribute pollutants to San Diego Bay.

¿Sabe Usted...?

Reparar, lavar o almacenar su vehículo en la calle puede contribuir contaminantes a la Bahía de San Diego.

ATTACHMENT 6.1

IPM CARDS

Gardening with Good Bugs

HEALTHY GARDEN HEALTHY HOME

Most gardens contain far more types of good bugs,or beneficial insects, than pest insects. Beneficial insects and other organisms that kill pest insects are called natural enemies. In any pest management or plant care program, it is important to encourage these natural enemies by avoiding pesticides that kill them. You can also encourage beneficial insects by choosing plants that provide them with pollen, nectar, and shelter and keeping ants out of pest-infested plants. Learn to identify good bugs, both in their adult forms and immature (larval) stages.

Common good bugs found in California gardens include:

- Lady beetles: Both adults and larvae consume aphids.
- Lacewings: Lacewing larvae feed on many insect pests; adults are often seen around lights.
- Syrphid flies: Syrphid fly larvae consume aphids; adults hover around flowers.
- Parasitic mini-wasps: Many species of tiny wasps lay their eggs in pests like aphids or caterpillars; their hatching larvae consume the pest and kill it.
- Spiders: All spiders feed on insects or other arthropods and are beneficial in the garden.

(See reverse for drawings of good bugs mentioned above.)

What is Integrated Pest Management?

Integrated pest management (IPM) uses environmentally sound, yet effective, ways to keep pests from annoying you or damaging plants. IPM programs usually combine several pest control methods for long- term prevention and management of pest problems without harming you, your family, or the environment — IPM also reduces pollution in California waterways. Successful IPM begins with correct identification of the pest. Only then can selection of the appropriate IPM methods and materials be made.

Preferred IPM methods include:

- Planting pest-resistant or well-adapted plant varieties like native plants.
- Discouraging pests by modifying the way you design, irrigate, fertilize, and manage your garden.
- Altering the garden or home environment to deprive pests of the food, water, shelter or other requirements they need to thrive.
- Keeping pests out of the home and garden using barriers, screens, and caulking.
- Squashing, trapping, washing off or pruning out pests.
- Relying on good bugs in your garden to eat pests, thereby eliminating the need for insecticides that may end up in our waterways.

Turning to pesticides:

- Only use pesticides when non-chemical controls are ineffective and pests are reaching intolerable levels.
- Use pesticides in combination with the methods described above.
- Choose pesticides carefully so that the least toxic, most effective material is used to protect human health and the environment.

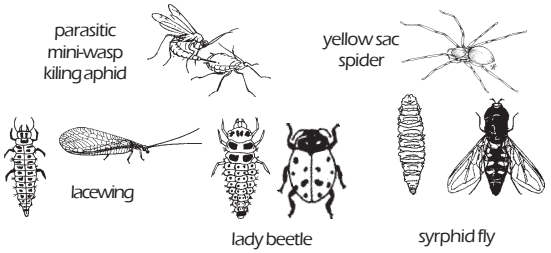

*Use **NON-CHEMICAL** methods & **LEAST TOXIC** pesticides. **WHY?** Runoff from around your home and garden carries water containing pesticides that pollute our streams, rivers, lakes and oceans.*

Learn more about San Diego regional water quality at: www.ThinkBlueSD.org & www.ProjectCleanWater.org. For more pest information visit the University of California IPM website at: www.ipm.ucdavis.edu or the UCCE Master Gardeners at: (858) 694-2860, Mon - Fri, 9 am to 3 pm

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Head Lice

HEALTHY GARDEN HEALTHY HOME

Head lice can infest anybody, but children are prone to infestations because they play closely and share items that come in contact with the head like hats, headphones, and combs. Head lice are not known to transmit any infectious diseases; they are more of a nuisance than a health risk. Children with head lice, however, are generally not allowed to attend school as long as nits are found in their hair.

Head lice facts:

- Head lice cannot hop, fly, or jump; they crawl. Lice spread only through direct contact with an infested object or person.
- Head lice spend their entire life in head hair and can only survive off a human head for about 1 or 2 days.
- A newly hatched louse must ingest blood within minutes of birth to survive.
- Head lice cannot live on family pets.
- Nits (eggs) that are more than 1 1/4 inch from the scalp probably are dead or have already hatched.

What to look for:

- Intense scratching on the back of the head or neck.
- Tiny white eggs (nits) glued to hair near the scalp.
- Small, rapidly crawling flat insects.

Four steps necessary to manage an infestation of head lice:

1 Use a head louse shampoo if you observe active lice or viable eggs.

- Avoid shampoo products containing lindane, which are available by prescription only. Pyrethrin and permethrin are safer, more effective, and less polluting to wastewater than lindane. Not all eggs will be killed.
- To avoid insecticides entirely, use soap shampoos that contain coconut or olive oils. Most soap shampoos kill all stages of the louse except the egg. Because they are not as effective as products containing pesticides, you must be sure to comb and repeat these shampoos four times at 3-day intervals. Successive shampooing kills newly hatched lice.

2 Remove nits from the head by combing with a specially designed nit comb.

- This step is the key to successful control. Repeat daily as long as you find live lice or nits within 1¦4 inch of the scalp. Use a metal comb specially designed for removing head lice and their eggs. Combs sold with head lice shampoos are not generally effective. Infested hair can also be cut out with small safety scissors.

3 Remove lice and nits from the household.

- Wash clothing and bedding of the infested person in hot water (at least 140°F) and dry in a hot dryer or have them dry cleaned. Place other items (earphones, bike helmets) in plastic and put in a freezer that is 5°F or lower for at least 10 hours. Clean any object that might have come in contact with the infested person's head (stuffed animals, car seats). Vacuum carpets and upholstery. Pesticide sprays are not recommended.

4 Check heads and remove nits daily until infestation is gone. Follow with weekly head checks to detect reinfestation.

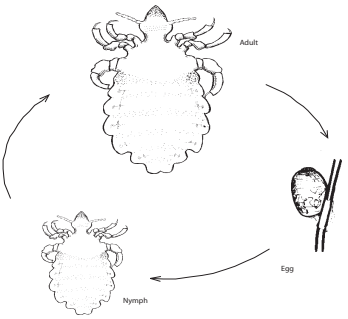

For more information see Pest Notes: Head Lice, available at Cooperative Extension offices and at www.ipm.ucdavis.edu

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Lawn Insects

HEALTHY GARDEN HEALTHY HOME

Contrary to popular belief, insects are not a common cause of residential lawn damage in California. Poor lawn care, especially improper watering and planting inappropriate grass species, are more likely causes of unhealthy or dying lawns. Disease-causing agents, excess orinappropriate use of chemicals such as fertilizer and herbicides, or dog urine also produce lawn damage resembling that of insects. Many insects in the lawn are beneficial. Never apply an insecticide unless a damaging level of a known insect pest is confirmed. Insecticides are only effective if applied at the right time and in the right manner. Some insecticides may kill good bugs too.

How do you know if insects are causing damage?

- Brown spots in lawns can be caused by over- or under-irrigation, plant disease, improper use of chemicals, or dog urine as well as insects.
- Confirm presence of insects before applying an insecticide. For grubs, dig around roots, for other insects perform a drench test. (See reverse.)

Keep your lawn healthy by:

- Planting grass species that do well in your area
- Irrigating deeply and infrequently
- Doing routine maintenance on sprinkler heads
- Applying only 3 to 6 pounds of actual nitrogen per 1000 square feet per year when fertilizing
- Aerating your lawn annually; remove thatch if it exceeds 1/2 inch
- Cutting only one-third to one-half of grass height at each mowing and keeping lawnmower blades sharp

See the UC Guide to Healthy Lawns at www.ipm.ucdavis.edu

If a damaging level of insects is confirmed, do the following:

- Choose an insecticide based on the pest you're targeting.
- Find out which insecticide ingredients target specific lawn insects:
  - *Bacillus thuringiensis* (Bt) kills only caterpillars, including cutworms, lawn moths, and skippers.
  - Insect-attacking nematodes control caterpillars or grubs.
  - Azadirachtin controls cutworms, armyworms, and larvae of lawn moths.
  - Imidacloprid is effective against young lawn grubs.
  - Pyrethroids (e.g., cyfluthrin, bifenthrin) are broadly toxic insecticides that kill chinch bugs, lawn moths, and cutworms, but also kill beneficial insects and should be avoided.
- Get help from UC Cooperative Extension.

HOW TO PERFORM A DRENCH TEST

- Mix 3–4 tablespoons of dishwashing liquid to 2 gallons of water.
- Evenly apply the 2 gallons to 1 square yard of your lawn.
- Monitor the area for 10 minutes and count the number of armyworms, cutworms, or lawn moth larvae that rise to the surface.
- Treat the area only if insect numbers exceed 5 armyworms or cutworms or 15 lawn moths per square yard.

chinch bug

sod webworm larva

cutworm larva

grub larva

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Safe Use & Disposal of Pesticides

HEALTHY GARDEN HEALTHY HOME

Pesticides are designed to be toxic to the pests they target — insects, weeds, and other unwanted home and garden invaders. Always read pesticide product labels carefully and follow all directions on proper use, storage, and disposal of empty pesticide containers. Product labels are your main source of information on how to use a product safely and legally. They include guidelines needed to protect you, your family, and pets. The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For the site nearest you in San Diego County call 1-877-713-2784 .

If you must use pesticides, follow these tips to reduce pesticide effects on your local waterways:

- Identify your pest problem and choose the least toxic pesticide that targets your pest and achieves the results you want. If you need help identifying the least toxic pest control method, contact your University of California Cooperative Extension office.
- Determine the right amount of pesticide to purchase. Purchasing exactly the amount you need for the application eliminates the need for storing unused pesticides.
- Use spot treatments whenever possible.

Outdoors

- Avoid overwatering after applying pesticides. Never let pesticide runoff flow into storm drains.
- Do not apply pesticides outdoors when rain is forecast or when it is windy.
- Avoid applying pesticides on paved areas.

Indoors

- Avoid applying pesticides in or near floor drains or sinks.
- Avoid applying pesticides on areas that will be washed or mopped with water, or where food is prepared or stored.

When using and storing pesticides take these precautions:

- Always wear a long-sleeved shirt, pants, and eye protection, and other equipment suggested on the label.
- Store products tightly capped in a locked cabinet out of reach from children and pets.
- Always keep pesticides in their original container.
- Know where to call for help in an emergency!

Pesticide disposal:

- If you cannot use up your pesticides, fertilizers, and weed killers, give them to a friend who may need them.
- Sewage treatment plants are not designed to treat for certain toxic pesticides like diazinon and chlorpyrifos — dumping pesticides into the stormdrain or down the sink is never an option.
- The only allowable way to dispose of unused pesticides is through a household hazardous waste collection site. For household pesticide disposal information for San Diego County, call 877-713-2784.

Finding active ingredients on a pesticide label:

Pesticide labels are required by law to show the active ingredient and its percentage. Minimize or avoid the use of products that contain diazinon and chlorpyrifos – these materials are polluting our waterways. Always read the label before you buy!

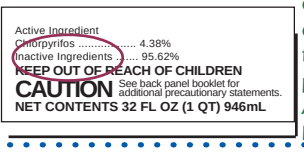
Active Ingredient
Chlorpyrifos 4.38%
Inactive Ingredients 95.62%
KEEP OUT OF REACH OF CHILDREN
CAUTION See back panel booklet for additional precautionary statements.
NET CONTENTS 32 FL OZ (1 QT) 946mL

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Snails & Slugs

HEALTHY GARDEN HEALTHY HOME

Snails and slugs rank among our most despised garden pests. These slimy mollusks emerge from hiding at night and chew holes in leaves and flowers of many succulent garden plants and fruit. Slugs and snails are similar in structure and biology, except slugs lack the snails' external spiral shell. Management requires a vigilant and integrated approach that includes eliminating moisture and hiding spots, trapping, barriers, and handpicking. Baits can be helpful, but by themselves, don't provide adequate control in gardens that contain plenty of shelter, food, and moisture.

How do you know snails and slugs are causing damage?

- You may not observe these pests at first because they feed at night and hide during the day. Go out at night or early morning to view them in action.
- Other pests can cause holes in leaves, flowers, and fruit. Look for the shiny, slimy trails slugs and snails leave behind.

What must be done to reduce snails and slugs?

- Remove daytime hiding places — ivy, weedy areas, debris, or boards.
- Regularly remove snails from shelters you cannot eliminate such as low ledges on fences, undersides of decks, meter boxes.
- Place traps in your garden and dispose of trapped snails and slugs daily.
- Reduce moist surfaces by switching to drip irrigation or sprinkling in the morning rather than later in the day.
- Consider snail-proof plants such as impatiens, geraniums, begonias, lantana, nasturtiums, and many plants with stiff leaves and highly scented foliage like sage, rosemary,and lavender.

How can I manage snails and slugs without using pesticides?

- Make sure the garden is mollusk-free before planting. Then erect a copper barrier around it. Use a 4- to 6-inch-wide band of copper, buried an inch below the soil and bent over at the top or attach it around the edge of a raised bed.
- Place your garden in the sunniest spot possible. Remove garden objects or adjacent plants or ground cover that may serve as shady shelter. Reduce moist surfaces as much as possible.
- Build a trap using a 12"x15" board raised off the ground by 1-inch runners. As the mollusks collect under the board, scrape them off and destroy them daily.

What about baits?

- Baits will not be very effective unless you also remove shelter, food, and moisture.
- Metaldehyde baits are especially poisonous to dogs and birds. Metaldehyde also loses its effectiveness rapidly in sunlight and after rain or irrigation.
- Iron phosphate baits are safe for use around dogs, children, and wildlife.
- Irrigate before applying bait and apply in evening on warm days when mollusks are active.
- Scatter bait around sprinklers and in moist and protected areas where snails and slugs travel.

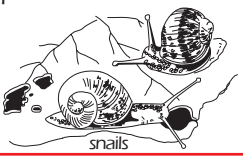

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Spiders

HEALTHY GARDEN HEALTHY HOME

Spiders are mostly beneficial because they feed on pest insects. However, many people think that all spiders are dangerous and aggressive. In California, the main spider capable of causing serious injury is the black widow, which generally remains outdoors and out of sight. Spiders seen out in the open during the day are unlikely to bite people. Focus pest management efforts on removing webs and hiding places. Pesticides are not generally recommended.

What to know about spiders:

- In California, the main spider capable of causing serious injury is the black widow:
  - The poisonous black widow spider is commonly found outdoors, in sheltered, dry, undisturbed areas such as wood piles.
  - Female black widows have shiny black bodies with a red hourglass marking on the underside.
  - Only large female black widows can injure people.

    Anyone bitten by a black widow spider should remain calm and seek medical advice, or call California's Poison Control Center at 1-800-8-POISON (1-800-876-4766).
- The brown recluse spider does not live in California.
- The jaws of most spiders are too small to bite humans.
- Some other spiders bite when trapped in clothing, but the reaction is usually no more severe than itching or a bee sting. See www.ipm.ucdavis.edu for more information about these spiders.

To prevent spiders from entering your house, take these steps:

- Seal home foundation cracks and other access holes.
- Inspect window and door screens for good seals that keep out spiders and the insects they prey on.
- Keep areas around home foundations free of clutter.

Manage spiders using these tips:

- Indoors, regular housecleaning provides adequate spider control.
- Vacuum up the spider and its web.
- Prevent clutter buildup that can provide hiding places.
- Remove spider webs from the exterior of the house with a broom or high pressure hose.
- Indoors, squash spiders or capture them in a jar and release them outdoors.

When removing spiders, don't overlook the fact that spiders eat a large number and variety of nuisance and pest insects. Spiders also have natural enemies — wasps, other spiders, birds, reptiles, and others — that sometimes keep them from becoming too numerous.

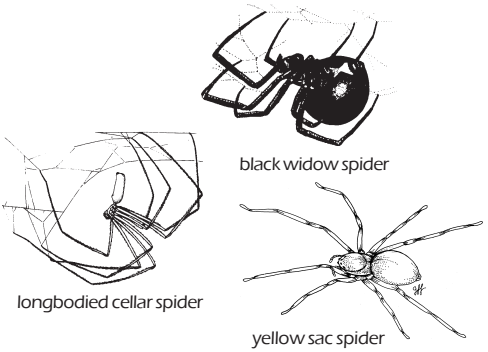

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Termites

Because of the serious damage they can cause to wooden structures, termites are among the pests most feared by homeowners. However, swarms of flying termites do not always mean your building is infested. A careful inspection of the structure is required to confirm an infestation. People also frequently mistake swarms of flying ants for termites. If you suspect that your house is infested, call a professional. Do-it-yourself sprays cannot be relied on to reduce a damaging infestation. Common termites in California are the subterranean termites that build nests in soil, dampwood termites that nest in moist wood and soil, and drywood termites that nest above ground in dry wood. Management of each termite species is different.

Distinguish flying ants from termites:

- Check the antennae, wings and waist to confirm that pest insects are termites. (Please refer to ant vs. termite drawing on back.)

Design your building to keep termites out:

- Keep a 12-inch barrier of smooth concrete, sand, or other material between the soil surface and substructure wood beneath a building.
- Choose termite-resistant wood for fences or other structures that must contact soil.
- Remove wood piles, untreated fence posts, and buried scrap wood near structures.
- Provide adequate ventilation to substructures and keep them dry.
- Immediately repair foundation cracks.

If termites are invading your home:

- Destroy shelter tubes that subterranean termites build between soil and wood structures.
- If dampwood termite nests are accessible, remove infested wood and eliminate excess moisture.
- Drywood termites can be controlled with heat, freezing, electricity, microwaves, fumigation, or spot treatments of chemicals.
- For any infestation, contact a professional for help. Pesticides licensed only for use by a pest control operator are usually necessary to control subterranean and dampwood infestations.

Using pesticides for termite control:

- Pesticides may be injected into the soil by professional applicators through drilling or rodding. Special procedures must be followed to prevent contamination of ground or surface water.
- For soil injections, ask your applicator to use a product other than chlorpyrifos. Newer types of products such as fipronil and chloronicotinyls are safer for your health and the environment.
- Baits can be effective in some cases, but may take several months to control the problem and must be followed up with constant monitoring.

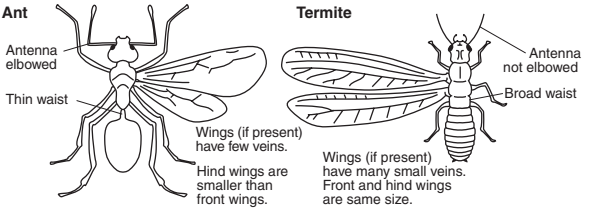

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ATTACHMENT 6.2

"EVERYTHING THAT RUNS INTO THE STORM DRAIN GOES UNTREATED DIRECTLY INTO OUR CREEKS, LAGOONS, AND SAN DIEGO BAY"

City of National City

Office of the Public Works/Engineering Director
1243 National City Blvd. National City, CA 91950-4397
(619) 336-4580, Fax (619) 336-4397 www.ci.national-city.ca.us

Everything that flows down into a storm drain goes *untreated* directly into our creeks, lagoons, and San Diego Bay. When it rains o when water flows out of yards, it flows directly into storm drains. Many people think that everything that flows into a storm drain gets treated at the Point Loma Sewage Treatment Plant, just like wastewater in the sewer system, but these two systems are not connected.

The sources of pollution that must be controlled and eliminated result from urbanization and the choices that are made every day by residents, businesses and industry alike. For example, detergents, oil, grease, and other pollutants have been shown to be toxic to wildlife in local streams and San Diego Bay. **Recycling** of oil, antifreeze, glass, plastic, and other materials can prevent their improper disposal into the stormwater drainage system. **Proper landscaping practices** include minimization of the use of herbicides, pesticides and fertilizers together with conservation of water to minimize runoff of pollutants from landscaped areas, lawns, golf courses, etc.

The City of National City's Stormwater Management & Discharge Control of the National City Municipal Code Chapter 14.22, prohibits non-stormwater discharges, such as car washwater, pesticides, fertilizers, pet waste, litter, oil, and other automobile fluids, to run into the City's storm drain system. This ordinance is based on regulations set forth by the State Regional Water Quality Control Board and the U.S. Environmental Protection Agency in connection with the State and Federal Clean Water Acts.

Your help is needed, and by doing your part, by changing your washwater and trash disposal practices, you will help reduce the pollution problems in the community where you and your family live, work and play. Please call **Storm Drain Hotline** at **(619) 336-4389** if you have **any questions** regarding this matter and **to report any illegal discharges and /or dumping.**

City of National City

Office of the Public Works/Engineering Director
1243 National City Blvd. National City, CA 91950-4397
619) 336-4580, Fax (619) 336-4397 www.ci.national-city.ca.us

Todo lo que desemboca en las alcantarillas no esta tratado y va a parar directamente a nuestras lagunas, esteros y Bahia de San Diego. Cuando llueve o cuando escurre agua de algun patio, desemboca directamente a las alcantarillas. Mucha gente piensa que todo lo que desemboja en una alcantarilla es tratado en la planta de Tratamiento de Agua Negras en Point Loma, como las aguas negras del sistema de drenaje, pero estos dos sistemas **no** estan conectados.

Las causas de contaminacion que tienen que ser controladas y eliminadas resultan de la urbanizacion y las elecciones que hacen todos los dias los residentes, negocios y la industria. Por ejemplo, detergentes, aceite, grasa, ya otros contaminantes se ha visto que son toxicos para la vida silvestre en nuestros arroyos locales y Bahia de San Diego. **Reciclando** el aceite, antifreeze, vidrio, plastico y otros productos que sean desechados de un modo inadecuado llegen a parar al sistema de alcantarillado de la ciudad. **Los metodos de mantener el jardin**, como usar menos los herbicidas, pesticidas y fertilisantes.Tambien como conservar el agua para que esa agua con contaminantes de los jardines, pastos, canchas de golf, etc.

El Codigo Municipal No. 14.22 de las aguas pluviales de la Ciudad de National City, prohibe aguas que no sean pluviales como las aguas negras, pesticidas, fertilisantes, basura, aceite y otros liquidos de carros que sean depositadas en el sistema de alcantarillado de la ciudad. Esta regla esta basada en las regulaciones puesta por "State Regional Water Quality Control Board" y "U.S. Environmental Protection Agency" en conneccion con "State and Federal Clean Water Acts."

Su ayuda es necesaria, y haciendo su parte como cambiar el modo de tirar su basura, usted ayudara a reducir la contaminacion en la comunidad donde usted y su familia viven, trabajan y juegan.

Por favor llame a la linea de **"Storm Drain Hotline"** al **(619) 336-4389**, si tiene **alguna pregunta** si quiere **reportar un desague ilegal**.

ATTACHMENT 8.1

TRAINING SIGN IN SHEETS

Sign-In Sheet

Name (Please PRINT)	Company	Email Ac
1. Sergio R. Rosas	Sweetwater Kiwanis club of N.C.	Sergio.Rosas @
2. Colleen A. Alarcón	Sweetwater Kiwanis Club of NC	colleen@natio
3. Karen Gay	Sweetwater Kiwanis Club of NC	Karen@impri
4. David Allen	Sweetwater Kiwanis	daunbet03
5. Long Le	Aflac	long_le@us.a
6. George Cameron	National School District	george.ca
7. Jess Pineda	J & S Investment	JESS PINE
8. Rosa Dubost	Sweetwater Kiwani	
9. Bill Strasen	Sweetwater Kiwanis / NCPD	WCSTRASEN
10. Lillian Leopold	" " / Sweetwater UHSD	lillian.leopol
11. Robert Richards	Sweet Water Kiwanis	–
12. Paul Laster	P.R. - Home Improvement	PRLAST
13. Don Condon	National City Fire Department	dcondon@
14. Michael Dalla	City of National City	MDALLA@CI.
15. Estela Cordero	National City Police Dept.	Targa3@co
16. Leslie Deese	City of National City	ldeese@
17.		

Sign-in Sheet

Name (Please PRINT)	Company	Email Ad
✓ 1. AMBROSE WANG	~~awang@burkett~~ Burkett & Wang Engineers	awang@burke
✓ 2. Tatiana Friesen	Burkett & Wang Engineer	tFriesen@bur
✓ 3. TOM KOERNER	CREW ENG. & SVYNG.	
✓ 4. Jim Renzi	Village Eng. Corp.	vecjim@
✓ 5. Ron Ashman	Crew B & S	
✓ 6. Kathy CORVIN	Schwerin & Assoc	Kathy@sch
✓ 7. RYAN FITUN	Bill Yen & ASSOC	byai@
✓ 8. Bill Yen	"	
✓ 9. Tracy Beach	Lundstrom & Assoc	tracy@lun
✓ 10. BILL SNIPES	SNIPES-DYE ASSOC.	BILL@SN
✓ 11. BRUNO CALLU	CALLU ENGR. INC.	BRUNOC@
✓ 12. ~~DAVID BABMAN~~	~~Alcorn Engineering~~	~~DAVID@Al~~
13. CHRIS MAKIN	Applied Consultants	cjm.applie
14.		
15.		
16.		
17.		

ATTACHMENT 8.2

2009 CALENDAR ART CONTEST INFORMATION

City of National City

2009 Storm Water Program Calendar Art Contest

Guidelines for Teachers

The City of National City invites all third grade students attending public schools in the City to participate in this fun and educational art contest. We are asking students to provide original art pieces for the upcoming 2009 National City Storm Water Program Calendar. The theme of this year's contest is **"By keeping our community clean, we can keep the ocean clean"**.

The City plans to select 12 original art pieces to feature in the 2009 National City Calendar. The first place winner will also be featured on the cover of the calendar. The goal of the contest is to promote understanding of the local natural environment in National City and to educate students on ways they can help protect local waterways. The contest provides a way for children to share their ideas on ways to protect our creeks and oceans with the entire National City community.

We encourage teachers to relate this contest to various aspects of the third grade curriculum. Some relevant curriculum ties include the following:

History-Social Science, Reflections

- Unit 1, Chapter 2 – People and Their Environment (pages 41-71)
    - Lesson 1 – Many Natural Resources (pages 46-51)
    - Lesson 2 – Using Our Resources (pages 54-59)
    - Lesson 4 – Caring for Our Resources (pages 68-73)
- Unit 4, Chapter 8 – Citizenship (pages 289-317)
    - Lesson 1 – Being a Good Citizen (pages 294-299)
    - Lesson 3 – Citizens Who Serve (pages 308-313)

English Language Development, Rigby On Our Way to English

- Thematic Unit 6: "Our Valuable Earth"
    - Teacher's Edition U137 – Big Book: Diego Saves the Planet! (if this has not yet been read in class, reading this book before handing out flyers for the contest would be ideal).
    - Teacher's Edition U141 – Active Social Studies: Important Rules

Contest Rules

Guidelines:

- **Media:** Paint, color pencils, marker, or crayon.
- **Paper:** White paper, 8 1/2 inches by 11 inches in landscape format.

(Continued on Back)

- **Text:** Drawings can include text and original slogans, however, names will not be allowed on front of the drawing. The artist's first name and school will be printed below the drawing in the calendar. All words must be spelled correctly.

Submittals:

- All participants must submit a release form with their name, school, room number, teacher's name, and parent or guardian signature.
- The student's name, school, and teacher must also be taped to the back of the artwork on a piece of paper or index card.

Deadline:

- Teachers should submit their students' artwork to City Hall no later than **June 6, 2008.** If you cannot submit entries directly to City Hall, you can contact Barby Tipton (see bottom of page) to arrange for a pick up. Note that for teachers with Combination classes (2nd and 3rd grades), we encourage 2nd graders to participate, but only 3rd grade work should be submitted to the City for entry into the contest.

Judging:

- Drawings will be judged by various City officials and representatives involved in the City's Storm Water Pollution Prevention Program. 12 winners will be chosen based on originality and representation of the contest's theme. At least one winner will be chosen from each school.

Prizes:

- Teachers can hand out personalized participation certificates (to be filled out by the teacher) to all participating students when artwork is submitted in class.
- Winning art pieces will be featured in the 2009 National City Storm Water Program Calendar. Winners will be honored at a National City Council Meeting in the fall and will receive a special certificate signed by the Mayor, along with additional prizes sponsored by EDCO.

Contact Information:

- If you have additional questions about how you can integrate this contest into your 3rd grade curriculum, please contact:

  Stephanie Maxin Phone: (619) 336-8306
  Email: stephanieb@national.k12.ca.us

- If you would like to contact a representative at the City, please contact:

  Barbra Tipton, National City Storm Water Compliance Inspector
  Phone: (619) 336-4583 Email: btipton@ci.national-city.ca.us

CALIFORNIA
NATIONAL CITY
1887
INCORPORATED

3rd Grade Art Contest!!

Theme: By keeping our community clean, we can keep the ocean clean!!!

Deadline: June 6, 2008

Winning drawings will be featured in National City's 2009 Storm Water Program Calendar!

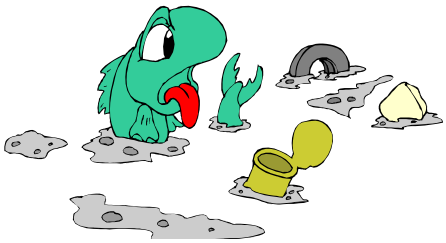

Do you go to the beach when its raining?

Probably not, but pollution does! When it rains, pollutants like litter and oil are carried from our streets and sidewalks to our local creeks and ocean. Pollution can hurt plants and animals and can also make water unhealthy for humans. **By keeping our community clean, we can keep the ocean clean!**

Rules:

- **Drawings should show how you and other members of your community can help prevent pollution in creeks, rivers, and oceans.**
- **Drawings must be on white 8 1/2 inch by 11 inch paper, in landscape format.**
- **Only color drawings made with markers, colored pencils, crayons, or paint will be accepted. Bright colors are best.**
- **Do NOT write your first or last name on the front of your drawing.**
- **Use original artwork only. Slogans and messages are ok, but all words must be spelled correctly.**
- **Drawings must be submitted to your teacher by June 6, 2008 with a completed entry form (on the back of this flyer) signed by a parent or guardian.**
- **Your name, teacher, and school must be on a piece of paper or card taped to the back of the artwork**
- **Winners will be notified in the Fall. All winners will be featured in the 2009 National City Storm Water Program Calendar. Winners will also receive a prize and be honored at a future City Council Meeting!**

YOU CAN BE A CLEAN WATER SUPERSTAR!

☆ Don't litter

☆ Never pour anything into the storm drain

☆ Pick up after your pets

☆ Spread the word! Tell your friends and family why its important to keep National City clean!

2009 Storm Water Calendar Artwork Rights
Parental Approval Form

Any submission becomes the property of the City of National City (City) and the submission may or may not be returned. The City of National City has the right to use any selected artwork for the 2009 Storm Water Calendar and for any other City use, including, but not limited to, display of the original or copies of the artwork at exhibit events and reproduction of copies on such items as T-shirts, postcards and book covers.

Students participating in the 2009 Storm Water Calendar assign to the City and expressly waive and disclaim, any copyright in and the right to reproduce, all artwork submitted to the City for the 2009 Storm Water Calendar project. Participating students also agree to execute any further document(s) necessary to further effectuate this waiver and disclaimer, upon the City's request.

The City may use, reuse, alter, reproduce, modify, assign, transfer, or in any other way, medium or method use the artwork product for the City's purposes, and a participating student expressly waives and disclaims any residual rights granted to him or her by Civil Code Sections 980 through 989 relating to intellectual property and artistic works.

_____ **Yes**, I approve of my child's artwork being featured on the City of National City's Storm Water Calendar and city related uses and agree to the terms, waivers, and disclaimers stated above.

_____ **No**, I do not approve of my child's art work being featured on the City of National City's Storm Water Calendar or any related use.

Student's Name: _____

School: _____ Room :_____

Teacher's Name: _____

Parent/Guardian Signature: _____

Date: _____

CALIFORNIA

NATIONAL CITY

1887

INCORPORATED

Certificate of Participation
2009 Storm Water Calendar Contest

Presented to

_____

Maryam Babaki
City Engineer

Ron Morrison
Mayor

GA75-422

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

12/8/08

Maryam Babaki, P.E.
City Engineer

Date: December 4, 2008

12/4/08

Telephone Number: (619) 336-4380

INTRODUCTION AND CONTENTS

Introduction

The 2007/2008 reporting period as originally written in Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit) was defined as July 1, 2007 through June 30, 2008. Reporting on the City's implementation of all components of its JURMP was originally required to be submitted to the RWQCB by September 30, 2008. However, on September 10, 2008, the RWQCB adopted Addendum No. 2 to the Municipal Permit, which required that the City discuss its 2008 Dry Weather Monitoring Program activities in Section 7 of its 2007/2008 JURMP Annual Report.

Section 7 of the Annual Report discusses the implementation of the illicit discharge detection and elimination (IDDE) component of the City's storm water program. This program component includes both dry weather monitoring activities and other activities to prevent and respond to illicit connection and illicit discharges, such as operating a storm water hotline. The reporting period for the portions of this section that discuss dry weather monitoring activities was changed to extend through September 30, 2008, but the reporting period for other activities described in the section was not changed and thus extends through June 30, 2008, the same reporting period as applies to the rest of the JURMP Annual Report. Because the field work for the dry weather monitoring program is not required to be completed until September 30, 2008, the same day that the JURMP Annual Report is to be submitted, the RWQCB extended the submittal deadline for all of Section 7 of the 2007/2008 JURMP Annual Report until December 15, 2008.

Contents

This submittal includes a certification statement, the text of Section 7 of the 2007/2008 JURMP Annual Report, and the attachments associated with that section. For clarity, the items included in this submittal are listed below.

- Certification statement for Section 7 submittal
- Introduction and Contents
- Section 7 (IDDE component) of the 2007/2008 JURMP Annual Report
- JURMP Annual Report Requirements Checklist (for Section 7 only)
- Attachment 7.1, City of National City Dry Weather Field Screening and Analytical Monitoring Program 2007
- Attachment 7.2, City of National City Dry Weather Field Screening and Analytical Monitoring Program 2008

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

Recognizing that illicit connections and illicit discharges can be significant sources of pollutants to the City's MS4, the City maintains several programs to prevent and to seek out and eliminate IC/IDs. Illicit discharges may result from activities such as vehicle washing or equipment cleaning without the use of proper BMPs. Sewer pipes and drains in car washes connected the MS4 are examples of illicit connections. City storm water personnel work with residents, businesses, and City staff to make them aware of BMPs to prevent IC/IDs and to encourage reporting of IC/IDs. The following activities are the primary components of the City's program to combat IC/IDs:

- Inspecting local businesses, construction sites, and municipal facilities
- Conducting the Dry Weather Monitoring Program
- Operating a Public Complaint Hotline

These mechanisms enable the City to provide a comprehensive system to better the quality of storm water and urban runoff throughout the City.

7.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the illicit discharge detection and elimination component during the 2007/2008 reporting period are presented in the following bulleted list. Please note that the reporting period for the dry weather monitoring program extended through September 30, 2008, but the reporting period for all other components of the City's IDDE program ended on June 30, 2008. The following subsections of this section provide more details on how the City complied with both the previous permit and the new Municipal Permit during the reporting period.

- Two IC/IDs were discovered/reported during the 2007/2008 reporting period. Both were followed up on by City personnel and enforcement measures were applied as necessary.
- The City recorded and investigated 48 Storm Water Hotline complaints.
- The City performed all of the recommended corrective actions proposed in the 2007 Dry Weather Field Screening and Analytical Monitoring Program Report to prevent possible pollutants from entering the storm drain system.
- The City conducted the 2008 Dry Weather Field Screening and Analytical Monitoring Program.

7.2 Public Reporting of Illicit Discharges and Connections

Public and municipal involvements are crucial to preventing and eliminating IC/IDs from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is provided on the City's website and in distributed storm water educational material. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged into a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges.

Complaints received by the City during the 2007/2008 reporting period and the City's response to each are listed in Table 7-7. A total of 48 complaints were documented this year, a decrease from the 143 that were recorded last year. The decrease in documented complaints may indicate that individuals in the City are more aware of the impact of certain activities on the storm drain system and are implementing proper BMPs to ensure that pollutants do not reach the City's MS4.

7.3 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to sanitary sewer overflows. Preventative maintenance is regularly conducted on the City's sanitary sewer system, and video inspections and sewer surveys are regularly conducted to monitor the condition of the public sewer lines and to determine the necessity of maintenance. Private lateral lines do not receive preventative maintenance, but the City assists in the containment and cleanup of sewer spills if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report any SSOs or other spills to the City's Storm Water Hotline. During the 2007/2008 reporting period, eight spills occurred and were reported to the RWQCB within 24 hours. The following list outlines the spills reported and investigated by the City:

- On 7/11/2007 an oil spill was reported to the Storm Water Hotline and an inspector from the City found equipment for oil/hydraulic fluid lying on its side with approximately 5 gallons of oil spilled out onto a concrete slab at 3000 National City Boulevard. Workers had spread absorbent onto the oil and had used additional dirt to form a dam. The inspector spoke with the manager of the dealership, who stated that they would apply more absorbent the next day (as they had run out) and then place all contaminated materials into a drum and have it taken to a hazardous waste site.

- On 7/17/2007 a spill of diesel in the gutter approximately 40 ft (linear) discharged to a storm drain inlet at 4th and Roosevelt. Sewer and street crew were called and the spill was cleaned using sand as an absorbent and was then swept up by the street sweeper. The diesel that entered the inlet was soaked up by the small amount of sediment in the inlet. The sediment and diesel was vacuumed out of the inlet with the vactor truck. The inlet was then power washed and the water was also recovered by the vactor truck.
- On 7/19/2007 a semi-tractor parked on Roosevelt Street (near 3rd Street) was leaking diesel fuel to the gutter. The fire department placed absorbent on the leaked diesel and Public Works crew placed additional sand on the spill. The street sweeper cleaned the sand with the absorbed diesel from the street.
- On 8/16/2007 an employee of Auto Buyers Plus spilled approximately 20 gallons of fuel from a tank that had been removed from a motor home. The employee hosed the fuel to a surface drain in the parking lot that leads to Plaza Boulevard. The nearest inlet is approximately 725 feet west on Plaza Boulevard. The discharge entered the inlet on the south side of the North bound Interstate 5 off ramp to Plaza Boulevard. The business owner was issued a citation, and the fire department contained flow until the Public Works crew arrived to clean the street, gutter, and inlet.
- On 10/3/2007 an overflowing sewer manhole was reported close to E. 30th Street and B Avenue. The sewer crew responded and flushed the line from A Avenue; flushing activities dislodged a grease blockage in the pipe. A dirt dam was placed in front of inlet to prevent additional discharge from entering the MS4 and sewer crew began vacuuming sewage from the ground. About 10,800 gallons of sewage was recovered from the ground and properly disposed of, but an estimated 4,200 gallons could not be recovered and were released to the environment. The discharge occurred in the Sweetwater River Watershed. Public Works notified required agencies and verbal and written notifications were sent to the RWQCB.
- On 10/15/2007 a water main break was reported at 8th and D Streets. The Sweetwater Authority arrived at the site and repaired the line.
- On 11/9/2007 a fire hydrant was reported broken and spilling water on Euclid Avenue and Division Street. Sweetwater Authority repaired the hydrant and collected the water discharged from it.
- On 12/13/2007 an oil spill was reported at 840 W 19th Street. A City inspector went to the site where the fire department and another inspector were already present. The individual that reported the spill and the owner of the neighboring property were also at the site. The inspector saw an oil spill that came from an oil drum that had spilled onto the ground and mixed with standing water. The oil did not reach the storm drain.

7.4 URBAN RUNOFF MONITORING

The City has continued to conduct a Dry Weather Monitoring Program, as required by the Municipal Permit. This program assists the City in detecting and eliminating IC/IDs to the storm drain system. There are three major components to the Dry Weather Monitoring Program:

- Field observations, which include site description and qualitative observations
- Field screening monitoring, which include flow estimation and sample testing using meters and test kits at the site
- Analytical monitoring, which involves submittal of collected samples from selected sites to an analytical laboratory for additional testing

Numeric action levels are used as the primary approach for the interpretation of most constituent concentrations measured in the field and laboratory. The California Toxics Rule (CTR) Criteria Maximum Concentration (CMC) is used as the action level for dissolved trace metals. Temperature and turbidity parameters are evaluated using best professional judgment to determine the necessity of an upstream investigation. The action levels for all other pollutants were adopted in 2003 and were based on statistical analyses of previous Dry Weather Monitoring Program data and existing water quality benchmarks.

The City visited 15 primary monitoring stations in 2007 and in 2008 to collect Dry Weather Monitoring Program data. When a primary monitoring site was found to be dry, the City visited designated alternate monitoring stations. Table 7-3 includes the sites visited and their locations.

7.4.1 2007 DRY WEATHER MONITORING PROGRAM

The City's 2007 Dry Weather Monitoring Program was conducted in September 2007. The 2007 Dry Weather Monitoring Program Report has been included as Attachment 7.1. For further information about how the City addressed issues discovered during the 2007 Dry Weather Monitoring Program and responded to the resulting recommendations, see Section 7.5.1 of this report.

7.4.2 2008 DRY WEATHER MONITORING PROGRAM

The 2008 Dry Weather Monitoring Program was conducted during the 2008 dry season, including routine site visits at the monitoring stations listed in Table 7-4 at the end of this section. Also at the end of this section, Table 7-5 and Table 7-6 provide the field analytical results and laboratory analytical results, respectively, from the 2008 Dry Weather Monitoring Program.

Routine visits and any necessary follow-up investigations were conducted at 15 monitoring locations for the 2008 Dry Weather Monitoring Program. Table 7-1 provides a summary of action level exceedances.

Table 7-1
Summary of Action Level Exceedances

Field Screening (15 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
pH	0	0 %	---
Conductivity	0	0 %	---
Turbidity	0	0 %	---
Surfactants	6	40 %	1A, 6, 38, 45, 47, 48
Ammonia-Nitrogen	0	0 %	---
Nitrate-Nitrogen	0	0 %	---
Orthophosphate-Phosphorus	1	7 %	48
Laboratory Analyses (4 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
Oil & Grease	0	0 %	--
Cadmium	0	0 %	--
Copper	1	25 %	32
Lead	0	0 %	--
Zinc	0	0 %	--
Diazinon	0	0 %	--
Chlorpyrifos	0	0 %	--
Total Coliforms	2	50 %	1A, 32
Fecal Coliforms	1	25 %	1A
Enterococcus	2	50 %	1A, 46

Note: Data is from the initial site visits only; data from follow-up investigations is not included.

Follow-up investigations conducted in response to action level exceedances are summarized in Section 7.5.2 of this report.

A formal trash assessment was performed for the first time in 2008 in accordance with the Municipal Permit requirements. The San Diego Copermittee Dry Weather Monitoring Workgroup developed five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although numbers of trash pieces are also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.

- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g., medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).
- *Threat to Aquatic Health* – Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers fall in this category.

Nineteen sites, including dry sites, were assessed, and nine of the sites were scored as "optimal" or "suboptimal", having little or no trash. Five sites had "marginal" levels of trash. Four sites were considered "submarginal" and one site was considered "poor" due to significant amounts or types of trash consistent with human use and dumping. Two of the sites that were "submarginal" or "poor" also had trash that was considered a threat to aquatic and/or human health. Actions taken by the City in response to the results of the trash assessment are described in Section 7.5.2 of this report.

The 2008 Dry Weather Monitoring Program Report, which includes results of field screening and analytical monitoring, can be found as Attachment 7.2.

7.5 Follow-up and Enforcement

7.5.1 Actions Taken in Response to the 2007 Dry Weather Monitoring Program Findings

Based on the 2007 Dry Weather Monitoring Program results, several recommendations were made. In response to these recommendations, educational materials were distributed, the City's Public Works Department employees performed necessary

maintenance, and inspections as well as follow-up inspections were performed on the South Bay Plaza Shopping Center facilities.

The City's storm water compliance inspector visited the Park Villas Apartments to drop off educational material focusing on minimizing irrigation runoff and to discuss corrective actions and recommendations with the landscapers of the facility. The inspector also visited the South Bay Plaza Shopping Center facilities to distribute educational materials on general housekeeping BMPs and provided verbal instructions during inspections. The property management company was also contacted to resolve housekeeping issues; property management committed to working with tenants to fix housekeeping problems.

Several sites were found to have trash and debris accumulating in the channel. Site 1A, 32, 40 and the channel within Kimball Park had a significant accumulation of trash and debris and were cleaned out by the City's Public Works staff.

In addition to providing educational material to South Bay Plaza Shopping Center facilities, inspections were performed on restaurants and other inventoried businesses in and around the shopping center. Follow-up visits were performed to ensure that BMPs were being implemented for the proper storage of grease bins, containment of trash, and reducing discharges from businesses in the shopping center. Some improvement was noted at these follow-up visits; trash bins had locked lids or covers, and the grease bins and surrounding areas were kept free of major grease spills and leaks.

7.5.2 2008 Dry Weather Monitoring Follow-Up Investigations

If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. Upstream investigations are performed when exceedances are verified during confirmation visits. See the City's JURMP for a complete discussion of upstream investigation procedures.

Table 7-2 presents conclusions based on the results of confirmation visits and, where necessary, upstream investigations conducted at eight sites during the 2008 Dry Weather Monitoring Program.

Table 7-2
Summary of Follow-Up Investigations

Site	Follow-Up Investigation Target Constituent(s)		Results / Probable Sources
	Field	Laboratory	
1A	Surfactants	Total Coliforms, Fecal Coliforms, *Enterococcus*	Surfactants level was below the action level when tested the next day, but washing activities were observed upstream later. Washing activities and trash in the storm drain conveyance were observed upstream of the site.
6	Surfactants		No potential source of surfactants was observed for this ponded water. High conductivity and direct observation indicated a strong tidal influence on the site.
32		Copper, Total Coliforms	No potential source of copper was observed and the concentration (0.00917 mg/L) was lower than the action level (CTR CMC = 0.0305 mg/L, total hardness = 239) during the confirmation visit. It may have been due to a transient flow. Total coliforms were at high levels upstream, but were reduced at the site during confirmation. Potential sources included human feces at the site and trash in stagnant water in an upstream catch basin.
38	Surfactants		No potential source of surfactants was observed for this ponded water in an earthen channel. No runoff noted upstream of the site. Ponded water may have been from a transient flow.
45	Surfactants		Evidence of laundry hand washing in a parking lot at an upstream residential complex at 4616 Delta Street in the City of San Diego.

Site	Follow-Up Investigation Target Constituent(s)		Results / Probable Sources
	Field	Laboratory	
46		*Enterococcus*	Puddle of runoff near site had very high levels of *Enterococcus* and appeared likely to be from adjacent commercial businesses. While grease bins were in better condition than in 2007, food waste was observed in a parking area and may have entered an upstream catch basin. A second confirmation visit indicated *Enterococcus* levels at the site fell to 1607 MPN/100 mL, below the action level of 10,000 MPN/100 mL.
47	Surfactants		High conductivity indicated a strong tidal influence on the site. However, immediate investigation also found a high surfactants concentration in a discharge from Frank Toyota. The City was contacted and stopped the discharge. The business was issued a Notice of Violation and a citation.
48	Surfactants, Orthophosphate-P		Detergent from residential car washing activities was observed upstream as the only source of flow and the likely source of both surfactants and orthophosphate-phosphorus.

The City has begun taking actions in response to the 2008 Dry Weather Monitoring Program findings. As of this writing the City has issued a Notice of Violation and a citation to Frank Toyota, where the surfactants discharge was stopped. A Notice of Violation was also issued to the owner of a property on Melrose Street where recycling container cleaning water had been hosed to the street. Additionally the City has hired a contractor to remove trash twice per month at open channel portions of Paradise Creek, including trash observed near Site 13A. The City has scheduled trash removal at the remaining dry weather sites.

Other actions taken during the remainder of the reporting period will be described in the 2008/2009 JURMP Annual Report.

7.5.3 IC/IDs Identified

During the 2007/2008 reporting period, a number of IC/IDs were discovered based on facility inspections or complaints submitted to the storm water hotline or the City website. During each inspection or complaint investigation, the inspector discussed

proper BMP implementation methods as well as storm water concepts with the person responsible for the spill or discharge.

Two IC/IDs were discovered during routine industrial and commercial inspections. Both IC/IDs were observed at commercial facilities and were discharges from car washing activities. At the time of inspection, the inspector notified the facility personnel that the activities taking place were prohibited by City ordinance and discussed the importance of BMPs for such activities. Site-specific discussions of both IC/IDs discovered during routine industrial and commercial inspections are provided below:

- On 1/30/2008, Meza Auto Body, located at 420 W 12th Street, received a routine inspection, during which the inspector observed vehicle washing in the parking area in front of the shop. Water from the washing activities was mixing with paint dust and discharging to the street. The inspector discussed necessary BMPs with facility personnel and recommended that the City follow-up on the facility to ensure that required BMPs were being implemented.
- On 1/29/2008, National City Car Wash, located at 2550 E Plaza Boulevard, received a routine inspection. During which the inspector observed wash water passing through several filters to be reused for car washing activities; however, the inspector noted a small flow of wash water discharging at the end of the washing tunnel. The wash water flowed out the tunnel and into a nearby catch basin. The inspector discussed the implementation of necessary BMPs and recommended the City perform a follow-up inspection to ensure that required BMPs were being implemented.

7.5.4 ENFORCEMENT

As previously stated, investigated complaints from the storm water hotline and City website are included as Table 7-7. The table also includes relevant Public Works Department complaints and a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, violations, and/or educational material. Table 7-3 summarizes the enforcement actions taken in response to complaints received by the City's Storm Water Hotline.

Table 7-3
Enforcement Actions Resulting from Complaints Received by the Storm Water Hotline

	Notice of Correction	Administrative Citation	NOV
Commercial	0	10	6
Industrial	22	1	3
Mobile	0	0	0
Municipal	0	0	0
Residential	3	3	2
Construction	0	1	0

7.6 Illicit Discharge Detection and Elimination Component Effectiveness Assessment

The assessment of the effectiveness of this program component is provided in Section 11 of this JURMP Annual Report.

7.7 Program Review and Modification

The City's JURMP was recently updated in March 2008. No changes to the City's illicit discharge detection and elimination component have been made since that time.

Table 7-4
2008 Dry Weather Monitoring Locations

Site No	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
1A	Southwest of 43rd Street and Nordica Avenue	Concrete Channel	Residential	Commercial	908.31	32.68575	-117.10166
3	E. 7th Street and R Avenue	Manhole	Residential	Commercial	908.32	32.68183	-117.08894
4	E. 1st Street and U Avenue	Manhole	Parks	Residential	908.31	32.68726	-117.08749
6*	North bank of Sweetwater River ~500 feet east of Highland Ave, access from North 2nd Ave.	Outlet	Industrial	Commercial	909.12	32.65668	-117.08844
13A	Northeast of 16th Street and National City Boulevard, inside Kimball Park	Outlet	Commercial	Residential	908.32	32.66942	-117.10326
31A	North of Sweetwater Road, across from 2nd Avenue at the corner of the golf course	Earthen Channel	Parks	Commercial	909.12	32.66121	-117.08453
32	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River	Outlet	Commercial	Open	909.12	32.65887	-117.08274
38	Dirt road, west of Harbison Avenue, between 20th Street and 24th Street, at the end of fence line	Earthen Channel	Residential	None	909.12	32.67265	-117.07057
40	Southwest corner of Sweetwater Road and Plaza Bonita/Stockman Street, down in channel	Outlet	Commercial	Residential	909.12	32.65961	-117.06677
41	Northeast of San Miguel Court and Valley Road, inside Park Bonita Apartment complex	Earthen Channel	Residential	None	909.12	32.66588	-117.05083
42	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church	Outlet	Residential	Commercial	909.12	32.66785	-117.07691

Table 7-4 (Continued)
2008 Dry Weather Monitoring Locations

Site No	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
43A	F Avenue between East 24th Street and East 28th Street, west of Olivewood Elementary School	Catch Basin	Residential	Commercial	909.12	32.66134	-117.09447
44*	Northeast of 16th Street and National City Boulevard, under the Kimball Park bridge	Concrete Channel	Commercial	Residential	908.32	32.66982	-117.10247
44A	D Avenue behind Boys and Girls Club in Kimball Park	Outlet	Commercial	Residential	908.32	32.67151	-117.10123
45	In front of 1243-1305 Fig Court, in the middle of street	Manhole	Residential	Parks	908.31	32.68739	-117.09690
46	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	Manhole	Commercial	Residential	908.32	32.67584	-117.09539
47	Southeast corner of the Mile of Cars Way and Transportation Avenue	Manhole	Commercial	Residential	908.32	32.66163	-117.10275
48*	Northwest of East 14th Street and Grove Street	Catch Basin	Residential	None	908.32	32.67673	-117.08321
49*	South end of Arcadia Place (through Harbison Avenue and 11th Street)	Concrete Channel	Residential	Commercial	908.32	32.68095	-117.07770

Note:
* Alternate sites 6, 44, 48, and 49 were selected to substitute for dry primary monitoring sites 4, 13A, 31A, and 42.

Table 7-5
2008 Field Analytical Results

Site	Date	Time	Flow (gpm)	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants mg/L MBAS	Ammonia-Nitrogen mg/L NH_3-N	Nitrate-Nitrogen mg/L NO_3-N	Orthophosphate-Phosphorus mg/L PO_4-P
1A	8/27/08	13:15	Ponded	25.9	7.20	41.98	1.41	**>3**	0.16	0.95[1]	0.59
1A (Confirmation)	8/28/08	10:30	3.0	23.1	7.47	17.11	1.45	0.88	na	na	na
3	8/27/08	15:30	1.0	27.5	7.76	4.41	0.57	0.38	0.08	1.45[1]	0.15[1]
4	8/27/08	15:10	Dry	ns	ns	ns	ns	ns	ns	ns	ns
6	8/29/08	15:00	<1	27.3	8.95	2.37	>20.00	**2.50**	0.49	0.82[1]	0.02[1]
6 (Confirmation)	9/2/08	12:25	Tidal	27.8	7.74	5.04	>20.00	**2.50**	na	na	na
31A	8/26/08	14:55	Dry	ns	ns	ns	ns	ns	ns	ns	ns
32	8/27/08	10:00	<1	22.8	7.64	1.78	0.99	0.75	0.15	0.88[1]	0.31
38	8/26/08	15:50	Ponded	24.3	7.44	26.71	1.35	**1.25**	0.40	0.88[1]	1.61
38 (Confirmation)	8/28/08	9:15	Ponded	22.3	7.60	na	1.29	**1.25**	na	na	na
40	8/27/08	11:15	3.0	23.1	7.68	3.43	2.93	0.38	0.36	0.84[1]	0.60
41	8/29/08	13:40	5.0	24.3	8.19	0.82	4.32	0.50	0.29	1.92[1]	0.34
42	8/26/08	15:20	Dry	ns	ns	ns	ns	ns	ns	ns	ns
44	8/26/08	10:15	<1	24.7	8.29	1.97	1.41	0.38	0.07	0.61[1]	0.24[1]
45	8/29/08	11:30	<1	25.8	8.12	36.13	1.37	**3.0**	0.85	1.04[1]	1.46
45 (Confirmation)	9/2/08	11:15	<1	28.1	8.45	101.00	1.93	**3.0**	na	na	na
46	8/27/08	12:25	9.0	25.5	8.25	3.99	0.74	0.25	0.13	1.62[1]	0.34
47	8/26/08	12:20	5.0	25.5	7.45	8.30	>20.00	**1.75**	0.43	0.67[1]	0.27
47 (Confirmation)	8/28/08	10:10	8.0	na	na	na	>20.00	**1.25**	na	na	na
48	8/29/08	10:00	Ponded	23.9	7.41	52.00	2.02	**>3**	0.84	0.80[1]	**4.63**

Table 7-5 (Continued)
2008 Dry Weather Monitoring Locations

Site	Date	Time	Flow (gpm)	Temp. °C	pH	Turbidity NTU	Conductivity mS/cm	Surfactants mg/L MBAS	Ammonia-Nitrogen mg/L NH_3-N	Nitrate-Nitrogen mg/L NO_3-N	Orthophosphate-Phosphorus mg/L PO_4-P
48 (Confirmation)	9/2/08	9:35	Ponded	27.4	6.84	78.00	2.08	**>3**	na	na	**2.01**
49	8/29/08	9:10	<1	23.4	8.34	12.95	2.12	0.75	0.47	0.74[1]	0.93
43A	8/28/08	11:00	2.0	25.0	7.61	5.44	1.03	0.63	0.69	1.70[1]	0.70
44A	8/26/08	11:20	<1	26.3	8.89	1.48	1.15	0.50	0.29	1.03[1]	0.50

Notes:
ns = not samples (dry site)
na = not analyzed
[1] Value reported is below the Practical Detection Limit (PDL)
Red values are at or above the measured constituent's action level
denotes a follow-up visit
denotes a location sampled for laboratory analysis

Table 7-6
2008 Laboratory Analytical Results

Site No.	Date	Time	Oil & Grease	Total Hardness mg/L	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliform MPN/100 mL	Fecal Coliform MPN/100 mL	*Enterococcus* MPN/100 mL
1A	8/27/08	13:15	nd	324	nd	nd	nd	nd	nd	nd	**>1,600,000**	**>160,000**	**50,000**
32	8/27/08	10:00	nd	138	nd	**0.0243**	nd	0.065	nd	nd	**70,000**	11,000	3,000
40	8/27/08	11:15	nd	820	nd	0.00518	nd	0.02	nd	nd	800	40	70
46	8/27/08	12:25	nd	101	nd	0.0131	nd	0.041	nd	nd	17,000	5,000	**30,000**
Reporting Limits			**5.0**	**10**	**0.00200**	**0.00200**	**0.00200**	**0.0100**	**0.02**	**0.02**	**20**	**20**	**20**
Action Levels			**15.0**	*****	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**50,000**	**20,000**	**10,000**

Notes

Red Bold Type = Values that exceed action levels
nd = Not detected
*= Total hardness is not considered a pollutant and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependant on the total hardness value of the water sample. Total hardness measurements are thus required to calculate action levels for dissolved metals.

Table 7-7
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
1	7/9/2007	Residential	Hotline Caller	1345 or 1405 I Avenue	Grey water from washing machine going to street	No discharge was observed at the time of inspection. Case was referred to code enforcement.
2	7/9/2007	Construction	Hotline Caller	Highland Avenue	Fence down, hanging into alley. Litter on site.	Inspector called the property owner on July 10, 2007. Property owner reported he will remove fence and clean lot.
3	7/9/2007	Commercial	Hotline Caller	1320 Highland Avenue	Pipe on west side of building discharging water.	Pipe appears to be A/C from roof. Upon investigation, the following violations were observed: ▪ Evidence of discharge from dumpster area to inlet leading to Paradise Creek ▪ Dumpster overflowing with lid in the open position. ▪ Rotting food on ground. ▪ Landscape debris, litter, tar, waste oil, shopping carts, and clothing on property adjacent to Paradise Creek. ▪ Litter, food, and landscape debris in parking lot. NOV issued for dumpster area, citation was also issued (citation #2623; $200). Re-inspection on or after 7/19/07.
4	7/10/2007	Commercial	Hotline Caller	840 Highland Avenue	Broken irrigation pipe.	Inspector faxed photos to business manager on July 10, 2007 so the landscaper can be shown where problem is located. Business manager will have the landscaper repair the pipe.
5	7/11/2007	Municipal	Hotline Caller	Sweetwater and Grove	Gutter full of water and mud because of irrigation run-off.	Inspector spoke with EPI. He said that the product in the roll off was kelp. The roll off was being dumped/removed on 7/12/07.

Table 7-7 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
6	7/11/2007	Commercial	Hotline Caller	3000 National City Blvd	Oil spill 7/11/07 mid-day	Inspector found equipment for oil/hydraulic fluid lying on its side with approximately 5 gallons of oil spilled out onto a concrete slab. Workers had spread absorbent onto the oil and had used additional dirt to form a dam. Inspector spoke with manager of business, who stated that they would apply more absorbent the next day (as they had run out) and then place all materials into a drum and have it taken to a hazardous waste site.
7	7/11/2007	Commercial	Hotline Caller	1804 A Cleveland	Strong smell of sewer coming from roll off box.	Sewer crew cleaned area. Golf course requested to minimize water time.
8	7/16/2007	Residential	Hotline Caller	431 T Avenue	Sewer being pumped to street	Inspector spoke with the property owner's mother. Inspector told her that the contaminated spill must be cleaned and properly disposed of. Sewer crew came to clean sewage from street. NOV and citation (#2625, $100) were issued. Case was referred case to building department to evaluate unsafe living conditions.
9	7/17/2007	Commercial	Hotline Caller	2829 National City	Strong smell of sewer and water coming out of private storm drain inlet via an under sidewalk drain.	There is a trench drain between two mechanical stalls on the east side of property. There are 2 valves that prevent the fluid (in the trench drain) from discharging to the private inlet on the west side of property. A service department employee opened the valves after/while cleaning the trench drain. This allowed the wastewater (and oil) to discharge to the gutter. The sewer crew used the high pressure hose and vac truck and to clean area and reclaim water. The sewer crew assisted in determining if both valves diverted water to inlet or if one went to sanitary sewer system. It was determined that both valve release fluids to storm drains. Service Manager the business arranged for Safety Kleen to come clean private trench and inlet. Citation (#2701, $100) issued.

Table 7-7 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
10	7/17/2007	Municipal	Hotline Caller	4th and Roosevelt	Diesel fuel spill.	Approximately 40 linear feet of diesel fuel was spilled into a storm drain inlet. Sewer and street crews were called to clean the spill. Sand was used as an absorbent and collected by street sweeper. Diesel fuel that entered the inlet was soaked up by a small amount of sediment in the inlet, which was vacuumed out with the vac truck. The inlet was power washed and the water reclaimed.
11	7/18/2007	Construction	Hotline Caller	3425 Cagle St	No BMP on construction	Fuel tank was observed leaking diesel. Owner was contacted to go to site. Street crew was dispatched to clean gutter. No diesel reached inlet.
12	7/18/2007	Municipal	NCPD	300 Block of Roosevelt	Truck leaking fuel	Conducted full routine inspect. Directed to implement sediment control BMPs within 48 hours, provide secondary containment for toilet and fuel container, clean debris from site, and clean sediment from sidewalk.
13	7/19/2007		Hotline Caller	3rd and Roosevelt	Diesel Spill	A semi-tractor parked on Roosevelt was leaking diesel fuel to the gutter. Fire department placed absorbent on diesel. PW crew placed additional sand on spill. Street sweeper cleaned sand from street.
14	8/6/2007	Residential	Community Services Department	321 E 2nd Street	Leaking vehicle.	The vehicle was not observed to be leaking any fluids. Referred as abandoned vehicle to NCPD.
15	8/9/2007	Construction	City of National City	102/104 E. 2nd Street	No BMPs implemented	Stop work order issued until BMPs are implemented. Instructed contractor to call for re-inspection. Contractor given a verbal warning. BMPs were implemented upon re-inspection.
16	8/15/2007	Residential	Hotline Caller	622 1st Street	Sewage discharging from property	Discharge of gray water from a plugged sink in garage at rear of property was observed. Owner reported that blockage would be repaired today. Verbal warning was issued. Issue was resolved, plumbing issues were repaired.

Table 7-7 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
17	8/16/2007	Commercial	Hotline Caller	110 W. Plaza Boulevard	Hosing fuel down gutter	An employee spilled approximately 20 gallons of fuel from tank that had been removed from a motor home. The employee hosed the fuel to a surface drain in the parking lot that leads to Plaza Boulevard. The nearest inlet is approximately 725 feet west on Plaza Boulevard. The discharge entered the inlet on the south side of the North bound Interstate 5 off ramp to Plaza Boulevard. Citation issued (#2703, $100). NC Fire Dept contained flow until PW crew arrived. Street, gutter, and inlet were cleaned.
18	8/22/2007	Commercial	NCPD	800 Block of W 19th St.	Leaking fuel	A semi-tractor/trailer parked on the south side of the street was observed with a ruptured fuel tank (right). Diesel fuel was leaking out of the tank. Fire Dept personnel contained the spill until Public Works crew arrived on site. Public Works crew cleaned the spill. No fuel entered any inlet. A Courtesy Notice (verbal) was provided to the RWQCB and a verbal warning was given to the vehicle owner.
19	8/27/2007	Construction	Building Department	2707 L Avenue	No BMPs	Contractor was provided a verbal warning and notified to clean sidewalk and implement sediment control BMPs today. BMPs were verified the next day.
20	8/29/2007	Commercial	Engineering	1904 Highland	Power washing building	Business reported being new tenants of the property. They were clearing facility/parking lot in preparation of the "move in." Inspector gave a verbal warning and told facility representative that the filter around property needs additional cleaning, and business would be billed for clean up conducted by Public Works. City cleaned area, business reimbursed City for clean-up.
21	8/29/2007	Commercial	Hotline Caller	1839 Cleveland	Hosing dark fluid to gutter	Spoke with facility representative who reported he was power washing the building. He was provided a verbal warning and he stated that he will implement BMPs to prevent run off in the future.

Table 7-7 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
22	9/5/2007	Commercial	Hotline Caller	24th Street & Wilson Ave.	Doing maintenance in the parking lot, but they washed some portion of parking lot and water went through the SD inlet.	Facility personnel given a verbal warning. Service manager reported that they will not discharge water in the future and that they will clean the inlet.
23	9/27/2007	Municipal	Hotline Caller	16th & J	Sediment in street/gutter	Inspector spoke with contractor regarding tracking and was given a verbal warning. Silt fence being installed to prevent driveway from being used.
24	9/27/2007	Residential	Hotline Caller	1411 J Street	Dumpster open and enclosure has trash and liquid on the ground.	Inspector observed a bin dumped on its side spilling what appeared to be sewage into the gutter. Sewer crew was dispatched to site; the gutter was cleaned.
25	9/27/2007	Construction	Hotline Caller	1620 J. Ave.	Tracking	Called property manager and explained violation. They will have the area cleaned this week. Issued verbal warning and a corrective action letter.
26	10/3/2007	Municipal	Engineering	30th St and B Avenue	Water flowing over vacant lot. 207 E 30th Street	Inspector observed a sewer manhole overflowing with sewage. The sewer crew arrived and flushed the line from A Avenue, breaking loose a grease obstruction. A dirt dam was placed in front of the inlet located on site to prevent additional discharge from entering the MS4. Sewage was vacuumed from the ground; 10,800 gallons of sewage was recovered and properly disposed of. Approximately 4,200 gallons of sewage was discharged to the MS4. Verbal and written notification was sent to the RWQCB. Letter was sent to property owner notifying owner that a city crew was on property.

Table 7-7 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
27	10/9/2007	Residential	Hotline Caller	2201 E 4th St	Open sewer lateral	Sewer maintenance crew called inspector to an open sewer lateral. When inspector arrived the lateral line from the point of connection at the house to the property line had been excavated (including saw cutting and removal of portion of driveway) and lateral had been removed from trench. Appropriate permitting procedures had not been followed, and required BMPs were not implemented. The City ensured that storm water BMPs were installed and that the area was cleaned up. There was no discharge to the City's MS4. The City also followed up with the owner to ensure compliance with all City permit requirements. Note that all work has since been completed.
28	10/10/2007	Commercial	Engineering	14th and Highland	Discharge going to the gutter	Inspector found that the hot water heater was leaking. The water was running through the parking lot to the gutters. Owner was contacted and cleaned water from gutter.
29	10/15/2007	Commercial	Hotline Caller	19th and Harrison	Trash on lot	Street crew went to site and photographed debris. Letter was sent to owner. Issue was resolved by City Code Enforcement.
30	10/15/2007		Hotline Caller	In front of 1705 & 1646 Prospect	Van - Silver, Van - White, Black Jetta, Gold Sedan 2 door- leaking fluids	A total of 4 vehicles were leaking oil. A corrective action letter was sent and the issue was resolved.
31	11/5/2007	Construction	Hotline Caller	3030 Plaza Bonita Road	Concrete washout overflowing into parking lot	Full inspection conducted; improperly disposed of concrete waste was observed leaking from a dumpster in a private parking lot. The responsible contractor was notified. City staff remained onsite until the responsible contractor thoroughly cleaned the dumpster, the surrounding area, and the private inlet by the dumpster. City staff determined that there was no discharge to the public MS4, as it was noted that no evidence of discharge was observed at a downstream CDS unit installed in the private MS4 associated with the parking lot.

Table 7-7 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
32	12/13/2007	Industrial	Hotline Caller	840 W 19th Street	Oil spill and leak	The inspector went to the site; fire dept was already on site. Oil spill appeared to have come from a drum and mixed with standing water on the pavement. There was no discharge to the MS4. Area was cleaned and issue resolved.
33	1/7/2008		Hotline Caller	15th Street and Highland Avenue	Fire hydrant broken	At about 2:00pm the fire hydrant at 15th street and Highland was hit by a SWA vehicle and according to SWA personnel about 86,400 gallons were wasted and flowed along the gutter through the inlet of the storm drain.
34	1/8/2008	Commercial	Hotline Caller	(car wash) 200 Highland Ave	Green water flowing to street.	Facility personal was trying to break blockage in lateral-felled car. He was washing area with garden hose causing wastewater to discharge to Highland Avenue to 3rd (westerly direction). Sewer crew was called to clean wastewater from street. Issued citation (2708, $100).
35	1/22/2008	Municipal	Hotline Caller	220 West 14th Street	Sewer overflow	Sewer crew dispatched to flush lines and drain sewer discharge. Private plumber called to clear lateral blockage.
36	1/22/2008	Commercial	Hotline Caller	11th and Hoover	Lunch truck discharging fluid to gutter.	An NOV and citation issued based on proof from photographs submitted by County employee. City consulted with business owner and there have been no further issues.
37	2/7/2008	Residential	Hotline Caller	726 E. 1st	Sewer discharge	A sewer lateral was blocked and there was no cap on the line, which allowed discharge to the front lawn of the property. The sewage was contained to the property. The property owner hired a plumber to clear the line and someone to clean the sewage from the ground.
38	3/5/2008	Commercial	Hotline Caller	Rachel and Blueridge	Stamp concrete - washing to gutter	Owner had swept most concrete residue up, but was hosing down the remaining residue. Owner was given a verbal warning and cleaned up residue from gutter.
39	3/6/2008	Construction	Hotline Caller	2622 E. 8th St	Discharge of gas and water to gutter	Employee of construction contractor was using gasoline to clean sidewalk and hosing down the area. The gas/water flowed west on E. 8th street to Euclid Ave. Issued citation (#2711, $100). Issue resolved.

Table 7-7 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
40	3/13/2008	Commercial	Hotline Caller	3300 National City Blvd	Dumped 55 gallon drum on ground behind paint booth	At about 10:25 AM went to the site and met John Higgins and showed me the area where the paint booth was and walked around the site and saw nothing except some liquid marks on the ground and took pictures. Complaint could not be substantiated. No drum located.
41	3/24/2008	Residential	Hotline Caller	1614 Gamma Street	Stucco stock in the storm drain	Inspector went to the site at 1614 Gamma Street and found stucco stock in the storm drain. Nobody could tell who was responsible. PW cleaned up the stucco.
42	3/25/2008	Commercial	Fire Dept	511 Highland Avenue	Stock pile of soil without BMPs	Stockpile was observed without BMPs. The stockpile was covered and equipped with gravel bags and directed to stop work until necessary permits were obtained and other BMPs implemented. Problem was resolved.
43	3/25/2008	Construction	Engineering	1506 Highland Avenue	Pesticide in gutter	Approximately 4 oz of pesticide spilled in driveway. Owner hosed to street. Liquid flowed approximately 15 linear feet. Owner mopped up liquid while inspector was on site. No liquid reached any storm drain inlet. Given a verbal warning.
44	4/15/2008	Commercial	Hotline Caller	1126 E 7th St	Carpet cleaners dumping water into storm drain.	There was soapy water in the drain, called sewer department to clean. Will monitor area inlet for discharges.
45	5/19/2008	Commercial	Hotline Caller	Alley way between Palm Ave & R Ave	Eight to ten gallons of cooking oil spill	Approximately 8 to 10 gallons of cooking oil spilled in the alleyway; no one knew who was responsible for the spill. PW cleaned up spill.
46	6/4/2008	Commercial	Hotline Caller	Behind In & Out burger	Misc debris, batteries, waste oil, etc behind warehouse.	Inspector found scattered debris around the dumpster and the boundary fence at 2626 and 2702 Southport Way. Corrective action letter was issued to the business.

Table 7-7 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
47	6/4/2008	Residential	Hotline Caller	399 Civic Center Drive	Washing vehicle leading to discharge of wash water. Appears to be related to maintenance of a racecar.	Party present at site stated that he has a personal racecar that he maintains, but it is not a business. Inspector explained that no discharge of water to the storm drain system is allowed. No discharge or evidence of discharge was noted during the visit. Inspector also explained that any materials used to service the racecar should be kept in covered, contained areas. No discharges have been noted in the vicinity of this address since the complaint investigation.
48	6/20/2008		Hotline Caller	1701 D Ave	Janitors dumping wax/water	Inspector observed a milky white water flowing from the D-25 curb outlet on the east side of D Avenue north of 18th Street. While looking for possible sources of the discharge around the adjacent school, the inspector was approached by the school's principal. The inspector explained the reason why they were there; the principal said that he did not know that dumping mop water outside was not allowed. The inspector explained the requirements for proper disposal of mop water and asked the principal to explain to his crew such disposal methods. The principal stated that he would speak with the crew the following day. No further discharges have been observed in this area.

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	7.4, 7.5; Tables 7-1 through 7-2; Tables 7-4 through 7-6; Attachments 7.1 and 7.2
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	Attachments 7.1 and 7.2
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	7.5, Table 7-7
v. The number and brief description of illicit discharges and connections identified.	7.5, Table 7-7
vi. The number of illicit discharges and connections eliminated.	7.5, Table 7-7
vii. Identification and description of all spills to the MS4 and response to the spills.	7.3, Table 7-7
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2, Table 7-7
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5, Table 7-7
xiii. A description of notable activities conducted to manage illicit discharges and connections.	7.1, 7.5

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Attachments 7.1 and 7.2
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	7.4, Attachments 7.1 and 7.2
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	7.4, Attachments 7.1 and 7.2
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	7.4, Table 7-6, Attachments 7.1 and 7.2
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	(n/a)
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	7.4, Table 7-5, Attachments 7.1 and 7.2
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	7.4, Attachments 7.1 and 7.2
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	7.4, Attachments 7.1 and 7.2
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	7.4, Attachment 7.2

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	7.4, Attachments 7.1 and 7.2
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	7.5, Attachments 7.1 and 7.2
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5, Attachments 7.1 and 7.2
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	7.4, 7.5, Attachments 7.1 and 7.2

ATTACHMENT 7.1

CITY OF NATIONAL CITY DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING 2007

CITY OF NATIONAL CITY
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2007

Submitted to:

City of National City
Engineering Department
1243 National City Boulevard
National City, CA 91950

Prepared by:

D-MAX Engineering, Inc.
7220 Trade Street Suite 119
San Diego, CA 92121
Tel: (858) 586-6600
Fax: (858) 586-6644

December 18, 2007
Project No. 200723W-5

Mr. Din Daneshfar
City of National City
Engineering Department
1243 National City Boulevard
National City, CA 91950

Re: 2007 Dry Weather Field Screening and Analytical Monitoring Program City of National City, California

Dear Mr. Daneshfar:

Per your request D-MAX Engineering, Inc. (D-MAX) conducted the routing phase of the Dry Weather Field Screening and Analytical Monitoring Program for the City of National City during the summer of 2007. Subsequently, we conducted follow-up investigations to identify the sources of pollutants detected during the monitoring program.

This report presents the results of the monitoring program and follow-up investigations. The contents include field screening data and analytical laboratory test results, analysis of the collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations and our recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. It has been our pleasure working with the City of National City on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

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1.0 INTRODUCTION

1.1 Regulatory Requirements

San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (the recently adopted Municipal Permit) requires that the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) in 2007 be conducted in accordance with RWQCB Order 2001-01 (the previous Municipal Permit) requirement. Under Order No. 2001-01, each of the Copermittees, including the City of National City, must annually conduct dry weather field screening of discharges into its storm drain system. This procedure consists of recording field observations, estimating observed flow rates, and conducting field testing at selected locations along the storm drain conveyance system during the dry weather season (May 1st through September 30th). The Permit also requires Copermittees to conduct laboratory analysis for at least 25 percent of the visited sites that have flowing or ponded water. At each sampling location that exhibits no flowing or ponded water, an alternate sampling station must be selected and sampled. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required.

1.2 Hydrologic Setting

The City of National City (the City) lies entirely within the San Diego Bay Watershed. The City makes up only 1.6 of the area of the San Diego Bay Watershed, but is one of the most densely populated areas. The City encompasses parts of two sub-watersheds: Sweetwater and Pueblo San Diego. The major receiving water body in the City is the San Diego Bay, which lies due west of the City (Hydrological Unit 908.00). The Sweetwater River (Hydrological Unit 909.00) initially receives much of the runoff from the southern part of the City, ultimately conveying it into the bay. The Sweetwater River and the Sweetwater Marsh are identified by the City as Environmentally Sensitive Areas (ESA). The river flows along the southern border of the City through the Sweetwater Marsh and into the San Diego Bay. Paradise Creek is a small salt marsh creek that receives runoff from the northern areas of the City and discharges into the Sweetwater River. Paradise Creek and Paradise Marsh have been identified as ESAs. La Paleta Creek traces the northern border of the City, and is 303(d) listed for benthic community effects and sediment toxicity. In the Sweetwater Sub-watershed, sediment was also cited as an additional, lower priority COC. In the Pueblo San Diego Sub-watershed, trash has also been included a lower priority COC. As a whole, the San Diego Bay Watershed Urban Runoff Management Program identified diazinon, bacteria, copper (total and dissolved) and zinc (total) as high priority Constituents of Concern (COC) in its 2005-2006 Annual Report.

1.3 Program Overview

To comply with the San Diego Municipal Storm Water Permit adopted by the RWQCB, the City of National City is required to conduct field screening and analytical monitoring at different sampling locations throughout the City during the dry weather season. The purpose of the Dry Weather Monitoring Program is to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain conveyance system, minimizing the negative impacts of human activities on receiving water bodies.

The Dry Weather Monitoring Program consists of the following three components:

- Field screening observations
- Field analytical testing
- Laboratory analytical testing

Information collected from the dry weather monitoring is also used to characterize dry weather discharges in the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as necessary, to detect and eliminate the sources of these pollutants. This report presents the results of the City of National City 2007 Dry Weather Monitoring Program.

1.4 Previous Work

The City of National City has conducted dry weather field screening programs since 1996 at several locations within the City's storm water conveyance system. A summary of the screening results obtained for each year is discussed below and presented in Table 1-1.

Prior to **1996**, the field screening programs were limited to visual observations. In the summer of 1996, a complete Dry Weather Monitoring Program was conducted. Twenty sites were visited, at which time measurable flow was observed at three sites and ponded water was observed at four sites.

In **1997**, the City staff conducted a preliminary dry weather field observation. This activity was limited to field visual observations and did not include any field tests or sampling. Based on the results of the field observation, seven sites that had flow at the time of the field visit were selected by the City to be further screened. All seven sites were among the sites that had been screened during the 1996 Dry Weather Monitoring Program. During the field screening program, water flowed at four sites that were subsequently sampled, while tidal flow influenced three sites that were subsequently not sampled. Relatively low concentrations of phenols, chlorine, and copper were detected. An ammonia concentration of 1.5 mg/L and a surfactant concentration in excess of 3.0 mg/L were detected at Site 1.

In **1998**, the City performed dry weather monitoring at seven sites. Five of the selected sites had been screened during the 1997 dry weather field screening program. Four sites had either flowing or ponded water. Low concentrations of phenols were detected at three sites. Copper was not detected at any site. The maximum detected ammonia concentration was 0.7 mg/L. Detected surfactant concentrations did not exceed 0.75 mg/L, and maximum detected chlorine was 0.8 mg/L.

In **1999**, the City conducted preliminary dry weather field observations. Based on the results of the field observations, five sites had flowing or ponded water, and two sites were dry at the time of the field visit. Upon testing, a phenol concentration of 0.1 mg/L was detected at one location. Relatively low concentrations of chlorine were found at all locations with flowing or ponded water. Copper at a low concentration was detected at Site 40. An ammonia concentration of 2.5 mg/L was observed at Site 20, and surfactant concentrations of 2.0 mg/L were detected at sites 1 and 20.

In **2000**, the City conducted dry weather monitoring at seven sites. Five sites had either flowing or ponded water, and two sites were dry. Low concentrations of phenols were detected at two sites. Copper and chlorine were not detected at any sites. The maximum detected ammonia concentration was 0.8 mg/L. Surfactants were detected at Site 11 at a concentration of 1.5 mg/L.

In **2001,** the City conducted field screening at 10 sites, six of which were visited during previous screening programs. The field tests showed relatively low concentrations of constituents tested during the site visits. Phenols were not detected at any sites. Copper was detected at only one site at a low concentration of 0.1 mg/L. Surfactants were detected at all locations sampled, with the highest readings observed at sites 11 and 38 at a concentration of 0.75 mg/L. Ammonia was found in relatively low quantities at most locations, with the highest concentration of 0.7 mg/L found at Site 42.

In **2002**, the City conducted field screening at 15 primary monitoring stations and two alternate stations. The City also conducted laboratory analysis at 25 of the sites with flowing or standing water. Ammonia varied from a minimum of 0.3 mg/L to a maximum of 5.0 mg/L, with the highest concentration detected at Site 1A. Nitrate concentrations peaked at 2.0 mg/L, which is well below the action level of 10.0 mg/L. Orthophosphate-P was found in low concentrations ranging from 0.16 mg/L to 1.96 mg/L. Surfactant concentrations ranged from 0.25 mg/L to a maximum of 24 mg/L. The highest surfactant concentration found was at Site 1A. Laboratory analysis found surfactants reaching a concentration of 6.76 mg/L at Site 1A. Oil and grease measurements ranged from 8.0 mg/L to 25.0 mg/L, with the highest concentration noted at Site 41. Zinc was detected at 0.26 mg/L at Site 1A. All of the other dissolved metal measurements were found below the laboratory detection levels. Bacterial analysis found contamination at two of the sites. Laboratory results for pesticides found all concentrations below the method detection limit.

In **2003**, of the 15 primary sites, two sites were found to be dry and thus were replaced by two alternate sites. The flow rates ranged from less than 1.0 gallon per minute (gpm) to 175 gpm. An ammonia concentration of 1.0 mg/L or greater was found at five sites. Nitrate concentrations did not exceed the action level of 10.0 mg/L at any of the selected sites. Orthophosphate-P concentrations were below the action level of 2.0 mg/L for all of the selected sites. Surfactant concentrations were found to exceed the action level of 1.0 mg/L at three of the sites. Two of the sites had conductivity measurements exceeding 20,000 mhos/cm. Laboratory analyses indicated bacterial contamination at all four sampled sites. Dissolved copper was detected at three sites, while dissolved zinc was detected at two sites, but all measured values for copper and zinc were found to be below the action level. None of the sites had laboratory-detectable levels of dissolved cadmium or lead. Surfactants were not detected by laboratory analyses at any of the sampled sites. Oil and grease were detected at only one of the sites. Diazinon and chlorpyrifos levels were all below the laboratory detection limit of 0.05 g/L.

In **2004,** of the 15 dry weather monitoring sites, two sites, sites 20 and 42, were found to be dry and were replaced by two alternate sites, sites 48 and 49. The flow rates ranged from less than one gpm to 230 gpm. An ammonia concentration of 1.0 mg/L or greater was found at four sites. Nitrate concentrations did not exceed the action level of 10.0 mg/L at any of the sites. Orthophosphate-P concentrations were below the action level of 2.0 mg/L for all of the sites, except for Site 44, where the concentration was 3.26 mg/L. The

orthophosphate-P concentration fell below 2.0 mg/L during the follow-up visit. Surfactant concentrations were found to exceed the action level of 1.0 mg/L at eight sites. High conductivity due to residual salt water was measured at three sites. Laboratory analyses indicated bacterial contamination of all four sites sampled. None of the sites had dissolved lead or cadmium above the laboratory detection limit. Dissolved copper concentrations were detected at one site, and dissolved zinc was detected at all four sites. None of the detected values for zinc and copper were above the action levels. Surfactants were not measured above the laboratory detection limit at any of the sites. Oil and grease were detected below the action level at two of the sites. Diazinon and chlorpyrifos levels were below the laboratory detection level of 0.05 g/L.

In **2005**, all 15 primary dry weather monitoring sites were visited. Two of these sites (sites 20 and 42) were dry, and thus replaced by alternate sampling sites 48 and 49. Flow rates ranged from less than one gpm to 187 gpm. A pH of greater than the action level of 9.0 was not detected at any of the sites. Ammonia concentrations exceeding the action level of 1.0 mg/L NH_3-N were measured at two of the sites. Neither nitrate concentrations nor orthophosphate-P concentrations exceeded their respective action levels of 10.0 mg/L NO_3-N and 2.0 mg/L PO_4-P. No site had a conductivity reading above 20,000 mhos/cm, but two sites had conductivity readings above 10,000 mhos/cm. These reading can be attributed to residual tidal salt water. Only two sites were found to have surfactant concentrations measured above the action level of 1.0 mg/L MBAS, an improvement over the eight sites the previous year. Laboratory analyses once again indicated that all four sample sites had bacterial contamination. Dissolved copper was detected at one site, and dissolved zinc was detected at two sites. Neither dissolved cadmium nor lead were detected at any of the sites. No metals were detected at levels above those set by the California Toxics Rule benchmark for the sampled water hardness. Oil and grease were not detected at any of the sites. Laboratory surfactant concentrations did not exceed the action level. Diazinon was detected at one site, but was well below the action level of 0.5 g/L. Chlorpyrifos was below the laboratory detection level of 0.05 g/L.

In **2006**, all 15 primary dry weather monitoring sites were visited. Site 20 was the only site found to be dry and was replaced with alternate monitoring Site 49. Of the 15 sites sampled, 14 had flowing water. Flow rates ranged from less than one gpm to 281 gpm. All pH measurements were within the acceptable range of 6.0 to 9.0. Ammonia nitrogen exceeded the action level of 1.0 mg/L at one site. Nitrate nitrogen and orthophosphate phosphorus concentrations were below their respective action levels for all of the sites sampled. Two of the sites recorded conductivity readings above 20.0 mS/cm. In both circumstances the high conductivity was attributed to tidal influence at the sites. Surfactants were measured above the action level of 1.0 mg/L MBAS at four different sites, during the field screening portion of the Dry Weather Monitoring Program. Laboratory analysis indicated bacterial contamination at three of the four sites sampled. Similar to the previous year, dissolved cadmium and lead were not detected at any of the sites. Dissolved zinc and copper were detected at sites 32, 41 and 46, but not at concentrations exceeding the California Toxics Rule benchmark for a given water hardness. The pesticides diazinon and chlorpyrifos were not detected at any of the laboratory sampling sites. Oil and grease, and surfactants were also not detected at any of the sites.

1.5 Report Outline

This report is presented in the following order:

Section 1 provides a regulatory background, discusses the hydrologic setting of the City of National City, describes the objectives of the Dry Weather Monitoring Program, summarizes historical field screening data and provides an outline to the report.

Section 2 describes the sampling locations and the site selection criteria.

Section 3 describes the field screening and laboratory analytical procedures. This section also discusses quality assurance protocols used during sampling and lists appropriate action levels for initiating follow-up investigations.

Section 4 discusses the results of the field screening analyses.

Section 5 discusses the results of the laboratory analyses.

Section 6 provides a thorough analysis of the collected field and laboratory data and includes descriptions of each site with evidence of physical, chemical or biological pollution.

Section 7 details the results of follow up investigations undertaken to isolate the source(s) of water contamination detected during the field screening program.

Section 8 provides a summary of the program results and recommendations for follow-up actions.

Appendix A contains photographs of each of the investigated sites.

Appendix B contains the laboratory analytical reports.

Appendix C contains original copies of the field data sheets.

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA

Site No.	1	1A	4	9	10	11	13	13A	18	20	22	26	30	31	32	33	38	40	41	42	43
1996																					
Ammonia (mg/l)	nt		nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt	nt
Chlorine (mg/l)	0.3		na	na	nd	na	na	na	na	na	na	na	na	na	0.1	na	nd	0.1	0.2	nd	0.1
Copper (mg/l)	nd		na	na	nd	na	na	na	na	na	na	na	na	na	nd	na	nd	nd	nd	nd	nd
Detergents (mg/l)	0.6		na	na	nd	na	na	na	na	na	na	na	na	na	0.4	na	0.15	0.1	0.1	nd	nd
Phenols (mg/l)	nd		na	na	nd	na	na	na	na	na	na	na	na	na	nd	na	nd	nd	nd	nd	nd
1997																					
Ammonia (mg/l)	0.1				nt	nt									1.5				1	0.4	nt
Chlorine (mg/l)	0.2				nt	nt									0.25				0.5	0.4	nt
Copper (mg/l)	nd				nt	nt									0.4				nd	nd	nt
Detergents (mg/l)	3.0				nt	nt									2.5				0.7	0.4	nt
Phenols (mg/l)	nd				nt	nt									0.1				nd	nd	nt
1998																					
Ammonia (mg/l)	na					0.7				na					0.1			0.2	0.4	na	
Chlorine (mg/l)	na					nd				na					nd			0.8	0.1	na	
Copper (mg/l)	na					nd				na					nd			nd	nd	na	
Detergents (mg/l)	na					0.75				na					0.25			0.5	0.5	na	
Phenols (mg/l)	na					0.1				na					0.1			nd	0.1	na	
1999																					
Ammonia (mg/l)	0.4					1.0				2.5					0.4			0.4	0.8	na	
Chlorine (mg/l)	0.3					0.2				0.7					0.7			0.5	0.1	na	
Copper (mg/l)	nd					nd				nd					nd			0.1	nd	na	
Detergents (mg/l)	2.0					1.0				2.0					0.5			0.75	0.75	na	
Phenols (mg/l)	0.1					nd				nd					nd			nd	nd	na	
2000																					
Ammonia (mg/l)	0.7					0.7				na					0.6			0.8	0.5	na	
Chlorine (mg/l)	nd					nd				na					nd			nd	nd	na	
Copper (mg/l)	nd					nd				na					nd			nd	nd	na	
Detergents (mg/l)	1.0					1.5				na					0.75			0.25	0.75	na	
Phenols (mg/l)	nd					0.1				na					nd			0.1	nd	na	
2001																					
Ammonia (mg/l)		0.5				0.3		0.5		na				0.2	0.5		0.6	0.2	0.3	0.7	
Chlorine (mg/l)		nd				nd		nd		na				nd	nd		nd	nd	nd	nd	
Copper (mg/l)		nd				nd		nd		na				0.1	nd		nd	nd	nd	nd	
Detergents (mg/l)		0.5				0.75		0.5		na				0.5	0.5		0.75	0.25	0.25	0.25	
Phenols (mg/l)		nd				nd		nd		na				nd	nd		nd	nd	nd	nd	

nt not tested
na not applicable (dry)
nd not detected

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (CONTINUED)

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2002																	
Temp.□C	25	21	26	na	24	24.5	22	25	20	na	22	23	24	23	22	24	31.5
pH	9.3	7.7	8.1	na	7.6	8.5	7.7	9.2	8.2	na	8.2	7.7	8.2	7.8	7.7	8.0	9.5
Conductivity, mS/cm	2.00	17.30	0.98	na	11.35	1.10	1.17	1.26	3.46	na	1.25	2.70	0.98	1.46	7.28	2.54	1.35
Turbidity, NTU	95	64	2.71	na	1.88	11.91	4.2	5.49	4.24	na	13.94	4.12	300	9.19	7.79	388	8.96
Ammonia, mg/l	5	4	0.3	na	0.3	0.5	1	0.5	0.7	na	0.30	0.5	2.5	1.5	1.50	2.0	2.0
Nitrate, mg/l	0.3	0	0.15	na	0.1	0.3	0.2	0.7	1	na	2	0	0.8	1.0	0.1	0	0.0
Orthophosphate-P, mg/l	1.96	0.98	1.30	na	0.16	1.30	1.60	0.65	0.49	na	0.49	0.65	0.49	1.30	0.98	1.30	0.32
Detergents, mg/l	24	3	0.5	na	0.5	0.5	0.75	0.25	0.50	na	0.50	0.5	0.75	0.75	6.75	8.00	6.00
Surfactants (mg/L MBAS)	6.76								nd			nd		0.69			
Oil and Grease (mg/L)	8.0								25.0			13.0		18.0			
Total Hardness (mg/L CaCO3)	267.0								631.0			338.0		237.0			
Cadmium (mg/L)	nd								nd			nd		nd			
Copper (mg/L)	nd								nd			nd		nd			
Lead (mg/L)	nd								nd			nd		nd			
Zinc (mg/L)	0.26								nd			nd		nd			
Diazinon (□g/L)																	
Chlorpyrifos (□g/L)																	
Total Coliform Bacteria (MPN/100ml)	160,000								20,000			13,000		160,000			
Fecal Coliform Bacteria (MPN/100ml)	160,000								11,000			8,000		90,000			
Enterococcus Bacteria (MPN/100ml)	5,000								300			2,300		30,000			
2003																	
Temp.□C	21	25	23	na	25.5	20.5	22	23	20.5	na	21	22.5	23.5	22.5	23.5	22.5	23
pH	7.9	7.6	6.8	na	8.1	7.7	8.1	7.7	8.5	na	7.4	8.2	7.4	7.5	8.1	7.5	9
Conductivity, mS/cm	1.36	20.00	1.36	na	9.58	1.43	1.12	1.67	1.70	na	1.39	3.12	1.53	1.72	20.00	2.20	1.37
Turbidity, NTU	7.21	25.01	2.50	na	0.42	6.61	14.47	10.73	3.95	na	36.29	11.94	3.35	6.51	26.82	45.32	12.21
Ammonia, mg/l	0.1	0.1	0.2	na	0.3	1.0	2.0	0.4	0.1	na	1.5	0.8	0.2	0.4	1.5	2.0	0.8
Nitrate, mg/l	0.3	0.1	0.3	na	0.3	0.1	0.1	0.6	0.5	na	0.8	0.1	0.8	0.4	0.3	2.5	nd
Orthophosphate-P, mg/l	0.07	0.65	0.49	na	0.07	1.30	0.49	0.20	0.10	na	0.65	0.82	0.26	0.49	0.65	0.65	0.32
Detergents, mg/l	0.25	1.50	0.25	na	0.25	0.25	0.50	0.50	0.25	na	0.25	0.50	0.25	0.50	1.50	3.0	1.00
Surfactants (mg/L MBAS)	nd					nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					1			
Total Hardness (mg/L CaCO3)	208					180			345					320			
Cadmium (mg/L)	nd					nd			nd					nd			
Copper (mg/L)	0.011					0.006			nd					0.008			
Lead (mg/L)	nd					nd			nd					nd			
Zinc (mg/L)	nd					0.045			nd					0.035			
Diazinon (□g/L)	nd					nd			nd					nd			
Chlorpyrifos (□g/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100ml)	90,000					50,000			160,000					90,000			
Fecal Coliform Bacteria (MPN/100ml)	50,000					24,000			50,000					30,000			
Enterococcus Bacteria (MPN/100ml)	8,000					30,000			300					11,000			

nt □ not tested
na □ not applicable (dry)
nd □ not detected

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (CONTINUED)

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2004																	
Temp.□C	23	20	22	na	24	20	27	22	22	na	24	22	25	24	26	31	30
pH	7.8	7.4	7.9	na	7.7	7.8	8.2	7.4	8.3	na	8.4	8.2	7.9	7.5	7.5	8.4	8.9
Conductivity, mS/cm	1.74	20.00	1.25	na	10.76	1.45	1.38	1.94	1.94	na	1.26	1.89	1.62	1.45	20.00	2.50	2.16
Turbidity, NTU	11.51	6.41	1.64	na	1.88	4.38	24.00	8.88	4.56	na	46.00	29.13	3.21	18.27	5.65	70.00	5.53
Ammonia, mg/l	0.8	0.4	0.1	na	0.1	0.4	2.0	3.0	0.3	na	0.3	0.6	0.7	0.8	0.8	2.0	1.0
Nitrate, mg/l	1.25	1.25	1.25	na	1.25	1.25	1.25	1.25	1.25	na	2.50	1.25	1.25	1.25	1.25	1.25	1.25
Orthophosphate-P, mg/l	0.98	0.82	0.65	na	0.07	1.47	1.47	0.49	0.33	na	1.14	3.26	0.98	1.14	1.30	1.30	0.07
Detergents, mg/l	0.88	3	0.50	na	0.75	0.25	0.75	0.50	0.38	na	2.50	1.00	1.25	1.25	2.50	3.00	2.50
Surfactants (mg/L MBAS)	nd					nd			nd					0.6			
Oil and Grease (mg/L)	1					nd			nd					2			
Total Hardness (mg/L CaCO3)	268					320			404					246			
Cadmium (mg/L)	nd					nd			nd					0.014			
Copper (mg/L)	nd					0.005			nd					nd			
Lead (mg/L)	nd					nd			nd					nd			
Zinc (mg/L)	0.032					0.03			0.022					0.039			
Diazinon (□g/L)	nd					nd			nd					nd			
Chlorpyrifos (□g/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100ml)	900,000					90,000			50,000					1,600,000			
Fecal Coliform Bacteria (MPN/100ml)	30,000					2,200			2,200					160,000			
Enterococcus Bacteria (MPN/100ml)	30,000					5,000			1,300					22,000			
2005																	
Temp.□C	20.5	24.8	22.3	na	25.1	19.8	20.7	20.1	20.6	na	19.4	25	22.4	21.4	24.7	20.1	20.2
pH	7.4	8.8	7.7	na	7.8	6.9	7.5	7.8	8.1	na	7.9	8.3	8.3	7.9	7.5	8.4	8.8
Conductivity, mS/cm	1.09	7.78	1.82	na	13.22	1.42	1.49	1.93	2.20	na	1.01	2.97	1.28	1.32	12.40	1.05	1.68
Turbidity, NTU	8.88	3.44	2.81	na	1.28	7.50	23.84	10.22	3.07	na	11.88	3.54	3.22	7.44	4.52	46.65	8.65
Ammonia, mg/l	0.8	0.3	0.2	na	0.2	0.6	2.0	0.7	1.5	na	0.5	0.2	0.2	0.4	0.3	0.8	0.2
Nitrate, mg/l	1.25	1.25	1.25	na	1.25	1.25	1.25	1.25	1.25	na	1.25	2.50	1.25	1.25	1.25	1.25	1.25
Orthophosphate-P, mg/l	0.33	0.13	0.33	na	0.03	0.26	0.65	0.49	1.00	na	0.65	0.10	0.26	0.33	0.82	0.33	0.26
Detergents, mg/l	1.50	0.75	0.25	na	0.50	0.75	0.75	0.50	0.75	na	0.75	0.50	0.25	0.75	1.00	0.50	0.25
Surfactants (mg/L MBAS)	0.9					nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	279					312			538					351			
Cadmium (mg/L)	nd					nd			nd					nd			
Copper (mg/L)	nd					nd			nd					0.006			
Lead (mg/L)	nd					nd			nd					nd			
Zinc (mg/L)	nd					0.041			nd					0.029			
Diazinon (□g/L)	0.15					nd			nd					nd			
Chlorpyrifos (□g/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100 mL)	1,600,000					500,000			1,600,000					1,600,000			
Fecal Coliform Bacteria (MPN/100 mL)	50,000					22,000			130,000					2,800			
Enterococcus Bacteria (MPN/100ml)	50,000					80,000			7,000					22,000			

nt □ not tested
na □ not applicable (dry)
nd □ not detected

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER MONITORING DATA (CONTINUED)

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2006																	
Temp.□C	24	28	29	ns	28.5	18.4	22	22.8	20.2	ns	23.4	28.5	24.3	24.5	26.2	30.1	19.8
pH	7.7	8.6	8.2	ns	7.7	8.3	8.4	8.0	8.5	ns	8.0	8.8	8.5	8.0	7.8	7.9	8.7
Conductivity, mS/cm	1.27	20.00	3.16	ns	15.04	1.48	1.25	3.44	3.65	ns	1.13	1.92	1.15	1.19	20.00	3.40	1.65
Turbidity, NTU	na	3.28	3.45	ns	1.08	9.54	24.34	4.77	5.83	ns	18.75	10.30	2.08	3.38	13.06	27.95	11.08
Ammonia, mg/l	na	0.1	0.3	ns	0.4	0.4	0.8	0.6	0.2	ns	0.4	0.3	0.2	0.3	0.4	1.5	0.4
Nitrate, mg/l	na	2.50	1.25	ns	1.25	1.25	1.25	1.25	2.50	ns	1.25	2.50	2.50	1.25	2.50	1.25	1.25
Orthophosphate-P, mg/l	1.96	0.65	0.81	ns	0.13	0.65	1.30	0.26	0.26	ns	0.65	0.20	0.82	0.82	0.26	1.63	1.63
Detergents, mg/l	1.00	1.50	0.75	ns	0.75	0.75	0.75	0.50	0.50	ns	0.63	0.37	0.13	0.50	1.50	3.00	0.75
Surfactants (mg/L MBAS)	nd			ns		nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	391					249			774					231			
Cadmium (mg/L)	nd					nd			nd					nd			
Copper (mg/L)	nd					0.009			0.005					0.017			
Lead (mg/L)	nd					nd			nd					nd			
Zinc (mg/L)	nd					0.11			0.021					0.02			
Diazinon (□g/L)	nd					nd			nd					nd			
Chlorpyrifos (□g/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100 mL)	240,000					350,000			13,000					240,000			
Fecal Coliform Bacteria (MPN/100 mL)	50,000					90,000			500					13,000			
Enterococcus Bacteria (MPN/100ml)	30,000					8,000			2,800					50,000			

nt □ not tested
na □ not applicable (dry)
nd □ not detected

2.0 SAMPLING LOCATIONS

In 2007, the City of National City had 15 primary monitoring stations. Additionally, the City acknowledged that alternate stations would be identified and monitored in the event that any of the primary stations did not have ponded or flowing water. All sampling sites are located in San Diego Hydrologic Units 908 and 909.

During the 2007 Dry Weather Monitoring Program, it was noted that Site 38 is located on enclosed private property; therefore the site has been moved to a new location approximately 100 yards downstream.

All 15 primary sampling locations were visited and samples were collected when flowing or ponded water was observed. Primary Site 20 was found to be dry, thus alternate sampling Site 49 was chosen as a replacement.

Table 2-1 provides the site number, location, conveyance configuration, primary and secondary land uses, hydrologic unit, and GPS coordinates of the sampling locations that were visited. Photographs of sampling locations are included as Appendix A. A complete map of the MS4 system, including sampling locations and drainage basins, is included as Figure 1. A map of the watersheds in and around National City, broken down into HSAs, is included as Figure 2.

TABLE 2-1
2007 DRY WEATHER MONITORING STATIONS

Site No	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
1A	Southwest of 43rd Street and Nordica Avenue	Concrete Channel	Residential	Commercial	908	32.68575	-117.10166
11	North of 18th Street, between Roosevelt Avenue and Hoover Avenue	Earthen Channel	Commercial	Commercial	908	32.66695	-117.10516
13A	Northeast of 16th Street and National City Boulevard, inside Kimball Park	Outlet	Commercial	Residential	908	32.66942	-117.10326
20	East of Lanoitan Avenue, across from East 13th Street, south of Palmer Way Middle School	Earthen Channel	Residential	Residential	908	32.67894	-117.07808
31	On the Sweetwater River, west of 2nd Avenue and Edgemere Avenue	Outlet	Commercial	Residential	909	32.65861	-117.08447
32	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River	Outlet	Commercial	Open	909	32.65887	-117.08274
38	Dirt road, west of Harbison Avenue, between 20th Street and 24th Street, at the end of fence line	Earthen Channel	Residential	Residential	909	32.67265	-117.07057
40	Southwest corner of Sweetwater Road and Plaza Bonita/Stockman Street, down in channel	Outlet	Commercial	Residential	909	32.65961	-117.06677
41	Northeast of San Miguel Court and Valley Road, inside Park Bonita Apartment complex	Earthen Channel	Residential	Residential	909	32.66588	-117.05083
42	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church	Outlet	Residential	Commercial	909	32.66785	-117.07691
43	Southeast of National City Boulevard and 30th Street, north of South Bay Volkswagen	Manhole	Commercial	Residential	909	32.65620	-117.09911

TABLE 2-1
2007 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site No	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Unit	Latitude	Longitude
44	Northeast of 16th Street and National City Boulevard, under the Kimball Park bridge	Concrete Channel	Commercial	Residential	908	32.66982	-117.10247
45	In front of 1243-1305 Fig Court, in the middle of street	Manhole	Residential	Parks	908	32.68739	-117.09690
46	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	Manhole	Commercial	Residential	908	32.67584	-117.09539
47	Southeast corner of the Mile of Cars Way and Transportation Avenue	Manhole	Commercial	Residential	908	32.66163	-117.10275
49	South end of Arcadia Place (through Harbison Avenue and 11th Street)	Concrete Channel	Residential	Commercial	908	32.68102	-117.07751

Alternate Site 49 was selected to substitute for dry primary monitoring Site 20.

3.0 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consisted of qualitative field observations, flow measurement, and field analyses of selected water quality parameters. Information relating to weather conditions, the amount of time since last rainfall, and the type of storm water conveyance was recorded. Specific observations and results of the field water quality analyses were documented on field data sheets, which are included in Appendix C. The data sheets also serve as a record of the field visit and were completed for every site visit regardless of whether or not samples were collected.

Field screening and analyses were conducted according to the following procedures and methods.

Qualitative Observations

Qualitative field observations were made during each site visit whether or not ponded or flowing water was observed. These observations were intended to provide a general assessment of the site and include variables like odor, water clarity, the presence of floatables, visible deposits, stains and biological status. Evidence of present or past illicit connections and illegal discharges to the storm drain system may be ascertained by careful field observations. Each field screening location was photographed to provide additional information and documentation of site conditions. Photos are included in Appendix A.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Surfactants (MBAS)
- Nitrate-N
- Ammonia-N
- Orthophosphate Phosphorus (Orthophosphate-P)

Surfactants are also referred to as detergents, specifically with respect to discussion of field test kit results. Due to the importance of surfactants, the City conducted analysis for this parameter in both the field and laboratory. Surfactant concentration was measured as Methylene Blue Active Substances (MBAS).

Flow Measurement

Flow measurements can be used to estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative

of an illegal release upstream. Various field methods can be used to estimate the discharge rate. These include visual estimation, measuring the velocity, depth and width of the flowing water, or recording the amount of time required to fill a bottle of known volume with sample water.

The methods that were used to perform the above field analyses, along with the detection limit, range and accuracy of each method, are listed in Table 3-2 at the end of this section.

3.2 Laboratory Analytical Methods

In accordance with Order 2001-01 requirements, water samples were collected at five sites (greater than 25 percent of the sites) where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc., a California Department of Health Services certified laboratory, for analysis of the following constituents:

- Total Hardness
- Surfactants, measured as MBAS
- Oil and grease
- Diazinon
- Chlorpyrifos
- Cadmium (dissolved)
- Copper (dissolved)
- Lead (dissolved)
- Zinc (dissolved)
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus*

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-3.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project included the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters were calibrated periodically with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube was kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter was calibrated and periodically checked for accuracy using standard solutions. The conductivity meter was checked periodically with standard solutions and calibrated as necessary.

Field sample collection containers were first rinsed with distilled water and then with the sample water before sample collection. Upon completion of sampling at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water.

The accuracy of field analytical techniques was assessed at the beginning of the sampling program by analyzing solutions of known concentrations for ammonia, surfactants, nitrate, and orthophosphate. The results of the assessment are shown below in Table 3-1.

TABLE 3-1
FIELD ANALYSIS QA QC RESULTS

Date	Analyte	Known Concentration	Acceptable Range	Field Test Kit Results
9/17/07	Ammonia Nitrogen	1.0 mg/L	0.8 1.2 mg/L	0.9 mg/L
9/17/07	Surfactants	1.0 mg/L	0.75 1.25 mg/L	1.0 mg/L
9/17/07	Nitrate Nitrogen	10.0 mg/L	7.0 13.0 mg/L	10.4 mg/L
9/17/07	Orthophosphate	3.0 mg/L	2.5 3.5 mg/L	2.8 mg/L

Note
Acceptable range is calculated based on the error associated with the methods as listed in Table 3-2.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis were collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles were obtained from the laboratory and thus did not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples were kept in a cooler on ice until picked up by the laboratory. Strict chain-of-custody procedures were followed and samples were delivered and analyzed within the appropriate holding times, as listed in Table 3-3. Completed chain-of-custody forms are included in Appendix B.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation was necessary, numeric action levels and best professional judgment (described below) were used to interpret the field screening results. If visual and/or analytical evidence of gross contamination was present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation was initiated. For sites that exceeded numeric action levels but were not perceived as an immediate threat to water quality, a re-sampling was conducted within 24 hours. A comprehensive source investigation was conducted thereafter if elevated concentrations persisted. The results of these investigations are included in Section 7 of this report. Recommendations based on these investigations are included in Section 8.

If elevated levels of pollutants were detected after laboratory analyses, a comprehensive follow-up investigation including re-sampling was conducted. The following three methods were employed to determine whether immediate or comprehensive follow-up investigations were necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels were used as the primary approach for interpreting pH, orthophosphate-P, nitrate nitrogen, ammonia nitrogen, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels, which are based on county-wide sampling data and have been used by all Copermittees since the 2003 dry weather season. If pH, orthophosphate-P, nitrate, ammonia, or surfactants were observed above the numeric action level, a follow-up investigation was conducted within 24 hours to investigate the source unless best professional judgment indicated otherwise. If oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, or *Enterococcus* laboratory analytical results exceeded numeric action levels, then source investigations were conducted.

California Toxics Rule

The CTR criterion maximum concentration (CMC) was used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases.

Best Professional Judgment

Best professional judgment was utilized as the primary approach for interpreting turbidity, conductivity, and water temperature. Best professional judgment was also the secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew due to their familiarity with the City of National City's Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters. Best professional judgment may indicate that results which either exceed certain action levels or are statistical outliers may be the result of natural or background factors.

TABLE 3-2
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.01 mS/cm	0 □20 mS/cm	± 2□ of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.1□C	0.0□C □60.0□C	± 0.5□C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.01	0.00 □14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703-11 Portable Turbidity Meter□□□	0.01 NTU	0.01 □50.00 NTU and 50 □1000 NTU	± 0.5 NTU or 5□ of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.0 mg/L □3.0 mg/L□	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer □Nitrate 3 Vacu-vials□ (K-6933) Cadmium reduction[3]□□□	2.26 mg/L□□	2.26 mg/L □13.6 mg/L□□	± 30□
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer □Ammonia 3 Vacu-vials□ (K-1403) Salicylate□□□	0.10 mg/L□□	0.10 mg/L □3.00 mg/L□□	Varies with measured concetration[4,5]
Orthophosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer □Phosphate 2 Vacu-vials□ (K-8513) Stannous chloride chemistry[6]□□□	0.25 mg/L□□	0.25 mg/L □2.61 mg/L□□	Varies with measured concetration[4,5]

Notes:

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20□. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The detection limit for nitrate is 10.0 mg/L; however, the detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30□ at PDL, ±20□ for 25□ of full range, ±10□ for 75□ of full range, ±10□ for 120□ of full range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4□ of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The detection limit for orthophosphate is 0.75 mg/L; however, the detection limit for orthophosphate phosphorus is lowered due to the conversion.

□Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

□□Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

□□□Reporting limit, range, and accuracy information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

TABLE 3-3
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Maximum Holding Time
Surfactants, measured as MBAS	SM 5540 C	0.5 mg/L	48 hours
Oil and Grease	USEPA 1664	5 mg/L	28 days
Total Hardness	USEPA 200.7	10 mg/L	14 days
Cadmium	USEPA 6010, 6020, 200.8	0.005 mg/L	6 months
Copper	USEPA 6010, 6020, 200.8	0.005 mg/L	6 months
Lead	USEPA 6010, 6020, 200.8	0.005 mg/L	6 months
Zinc	USEPA 6010, 6020, 200.8	0.020 mg/L	6 months
Diazinon	USEPA 8141A	0.05 g/L	7 days
Chlorpyrifos	USEPA 8141A	0.05 g/L	7 days
Total Coliforms	SM 9221	20 1,600,000 MPN/100 mL	6 hours
Fecal Coliforms	SM 9221	20 160,000 MPN/100 mL	6 hours
Enterococci	SM 9230	20 160,000 MPN/100 mL	6 hours

Notes:

For D-Max s Dry Weather Monitoring Program, EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100mL). For fecal coliforms and enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA s data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.

Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the QA/QC procedures listed in Section 3.3.2.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source□Notes
pH	□6.5 or 9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Turbidity (NTU)[2]	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Temperature (□C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values □0.75 may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source□Notes**
Surfactants (mg/L MBAS)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (□g/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 □g/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (□g/L)	0.5	
Dissolved Cadmium (□g/L)	California Toxics Rule	Use California Toxics Rule, CMC criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd □ 14 ppb; Cu □ 38 ppb; Pb □ 209 ppb; and Zn □ 297 ppb.
Dissolved Copper (□g/L)	California Toxics Rule	
Dissolved Lead (□g/L)	California Toxics Rule	
Dissolved Zinc (□g/L)	California Toxics Rule	
Total Coliforms (MPN/100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	20,000	
Enterococci (MPN/100 mL)	10,000	

Notes

[1]The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

□C	degrees Celsius
mS/cm	milli Siemens per centimeter
mg/L	milligram per liter
IC/ID	illegal connection/illicit discharge
MBAS	methylene blue active substances
MPN/100 mL	most probable number (of colony forming units) per 100 milliliters
NTU	nephelometric turbidity unit
ppb	parts per billion
USEPA	United States Environment Protection Agency
WQO	Water Quality Objectives
CMC	criterion maximum concentration

4.0 FIELD SCREENING RESULTS

The Dry Weather Monitoring Program was started on September 17, 2007 and completed on September 20, 2007. A total of 15 monitoring stations were visited, and field screening was conducted at the sites where ponded or flowing water was observed. 12 sites had measurable flow, and three sites were ponded. A total of 20 site visits were performed, including one dry site and four follow-up visits to sites where one or more constituents were found to exceed specified action levels.
Primary sampling Site 20 was dry, therefore alternate Site 49 was selected as a replacement.

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the field screening program. Weather conditions were recorded at each site and any evidence of dry weather flows was documented. Observations of the sample water and the vicinity of the sampling location such as odor, color, clarity, floatable materials, vegetation, and biological activity were also recorded. Observations are summarized below and presented in Table 4-1.

Light Conditions
Sunny, partly cloudy and overcast weather were the conditions during the routine field screening visits.

Odor
Site 11, had a fishy odor during the visit to the site. No other visited sites had observable odors during the 2007 field screening program.

Color
Water from nine sites had a yellow tint, while water samples taken from six of the sites were colorless.

Clarity
The majority of the water samples collected from the visited sites were clear, with negligible amounts of suspended particles observed. The water sample taken at Site 11 appeared to be slightly cloudy.

Floatable Materials
During routine field screening visits, nine of the 15 visited sites were observed to have trash in or around the sampling location. A relatively small amount of trash was encountered at most of these sites, however, illegal dumping was more severe at a few sites; Sites 1A, 40, 44 had particularly extensive amounts of trash. The trash observed included materials such as paper, plastics, Styrofoam, aluminum cans, glass bottles, and shopping carts.

Vegetation
Vegetative growth ranged from no growth to naturally vegetated riparian areas. Seven of the 16 visited sites had normal vegetation. No growth was observed at the rest of sites, which included manholes, catch basins, and some outlets that received no sunlight, or concrete channels that had no soil.

Biology
Eight of the sites exposed to sunlight had algal growth, which indicates persistent water flow. A few of the sampling locations had a more extensive array of organisms such as insects, snails, fish, crawfish and cockroaches.

Deposits
Coarse and fine particulate deposition was observed at nearly all of the sites visited, but no other deposits were noted.

TABLE 4-1
SUMMARY OF DRY WEATHER FIELD OBSERVATIONS

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
1A	9/18/07	11:10	Partly Cloudy	None	None	Clear	Trash	Fine Particulates	Normal	Insects, Algae, Snails
1A (follow-up)	9/19/07	14:10	Partly Cloudy	None	None	Clear	Trash	Fine Particulates	Normal	Insects, Algae, Snails
11	9/19/07	8:15	Overcast	Fishy	Yellow	Slightly Cloudy	Trash, Grass clippers	Coarse & Fine Particulates	Normal	Insects, Algae, Fish
13A	9/17/07	11:20	Partly Cloudy	None	Yellow	Clear	Trash	None	None	None
13A (follow-up)	9/18/07	8:15	Overcast	ns	ns	ns	Trash	None	None	None
20	9/17/07	15:00	Sunny	ns	ns	ns	Trash	Coarse & Fine Particulates	Normal	Insects
31	9/17/07	16:30	Sunny	None	None	Clear	None	Fine Particulates	None	Insects, Algae, Fish
32	9/18/07	10:15	Overcast	None	Yellow	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
38	9/17/07	12:00	Partly Cloudy	None	None	Clear	None	Coarse & Fine Particulates	Normal	Insects
40	9/19/07	11:30	Overcast	None	None	Clear	Trash	Coarse & Fine Particulates	Normal	Insects, Algae
41	9/18/07	13:30	Sunny	None	Yellow	Clear	None	Coarse & Fine Particulates	Normal	Insects, Algae, Snails
42	9/17/07	15:35	Sunny	None	Yellow	Clear	None	Fine Particulates	None	Insects, Snails
43	9/19/07	9:10	Sunny	None	Yellow	Clear	None	Fine Particulates	None	None
44	9/17/07	14:10	Sunny	None	Yellow	Clear	Trash	Fine Particulates	Normal	Insects, Algae, Snails
44 (follow-up)	9/18/07	8:40	Overcast	None	Yellow	Clear	Trash	Fine Particulates	Normal	Insects, Algae, Snails

TABLE 4-1
SUMMARY OF DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
45	9/19/07	12:15	Partly Cloudy	None	None	Clear	None	Fine Particulates	None	Cockroach
46	9/18/07	12:20	Sunny	None	Yellow	Clear	Trash	Coarse & Fine Particulates	None	Snails
47	9/19/07	10:20	Overcast	None	None	Clear	None	Fine Particulates	None	None
46 (follow-up)	9/19/07	15:00	Partly Cloudy	None	Yellow	Clear	Trash	Coarse & Fine Particulates	None	Snails
49	9/18/07	9:15	Overcast	None	Yellow	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails

Notes: ns not sampled
alternate sampling site

4.2 Field Analytical Results

Field analyses were conducted at all sites with ponded or flowing water. Chemical analyses were conducted using a CHEMetrics field test kits for surfactants and CHEMetrics V-2000 Multi-Analyte LED Photometer and Vacu-vials for nitrate, ammonia, and orthophosphate. The pH, conductivity, and temperature were measured using a Hanna Instruments Portable pH/EC/TDS/Temperature Meter (HI 991301); turbidity was measured using a Hanna Instruments Portable Turbidity Meter (HI 93203-11). A summary of the field analytical results is presented in Table 4-2. Table 4-3 presents the results of all field analyses conducted at the sampled sites. Graphs of each parameter analyzed and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median
Flow Rate (gpm)	218	1.0	20.2	2.0
Temperature (C)	28.5	19.1	22.0	21.8
pH	10.0	7.3	8.0	8.0
Turbidity (NTU)	18.43	0.1	3.62	2.67
Conductivity (mS/cm)	12.44	1.1	3.26	1.74
Ammonia (mg/L NH_3-N)	0.4	nd	0.2	0.1
Surfactants (mg/L MBAS)	1.25	0.38	0.73	0.75
Nitrate (mg/L NO_3-N)	2.24	0.43	0.87	0.59
Orthophosphate-P (mg/L PO_4-P)	1.17	0.07	0.57	0.46

nd not detected

Flow rates at sites with measurable flow ranged from less than 1.0 gpm to 218 gpm, with an average of 20.2 gpm and a median of 2 gpm, as shown in Table 4-2. The highest flow rate of 218 gpm was measured at Site 31.

Water temperature is an important physical parameter because it is needed to assess the significance of other parameters such as pH, conductivity, and dissolved oxygen. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. Water temperature was measured in the field immediately upon sample collection at each site with ponded or flowing water. Temperature readings ranged from 19.1 to 28.5 degrees Celsius (C), with an average of 22C and a median of 21.8 C. The maximum water temperature of 28.5C was recorded at Site 44 during the afternoon. The minimum water temperature of 19.1C was measured in the morning at Site 32 with ponded water. Graph 4-1 presents the results of temperature readings at all sites.

The **pH** is a measure of whether water is acidic or basic. This is a critical factor in determining water quality, as the pH of an aquatic system will drive a multitude of chemical reactions, including the availability of nutrients and the solubility of chemical substances, especially heavy metals. The pH values ranged from 7.3 to 10, with an average and median of 8. The highest pH reading of 10 was observed at Site 44, while the lowest pH during routine field screening was 7.3, recorded at Site 46. Graph 4-2 presents the results of pH readings at all sites.

Turbidity indicates the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation (thus reducing photosynthetic capacity), but excessive suspended particles can also absorb heat and elevate water temperatures. Turbidity measurements ranged from 0.1 to 18.43 NTU, with an average of 3.62 NTU and a median of 2.67 NTU. The highest turbidity reading of 18.43 NTU was recorded at Site 11, and the lowest measurement of 0.1 NTU was observed at Sites 1A, 31, 40, and 45. Graph 4-3 presents the results of turbidity measurements at all sites.

Conductivity values indicate the total concentration of ions in an aquatic system and the ns ability of water to conduct electricity. This parameter can be used to assess the mineral content of water or to help determine the presence of dissolved pollutants. Conductivity readings ranged from 1.1 to 12.44 mS/cm, with an average of 3.26 mS/cm and a median of 1.74 mS/cm. The highest conductivity measurement of 12.44 mS/cm was recorded at Site 31, while the lowest reading of 1.1 mS/cm was taken at Site 45. Graph 4-4 illustrates the results of conductivity measurements at all sites.

Ammonia Nitrogen (NH_3-N) is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment, however, in higher quantities it can become toxic to fish and other organisms. Ammonia concentrations measured in sampled water ranged from not detected to 0.4 mg/L, with an average of 0.2 mg/L and a median of 0.1 mg/L. The highest ammonia concentration, measured at 0.4 mg/L, was observed at Sites 41, and 47. Ammonia was not detected at Site 45. Graph 4-5 shows the results of the ammonia analyses at all sampling locations.

Surfactants in water samples often indicate illegal discharges from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms. During field analysis, surfactant concentrations ranged from 0.38 mg/L to 1.25 mg/L, with an average of 0.73 mg/L and a median of 0.75 mg/L. The highest concentration of 1.25 mg/L was found at Site 13A. Surfactant concentration of 1.0 mg/L was recorded at Sites 1A and 46 at the first visit to the sites. Graph 4-6 reflects the results of the surfactants analyses at all sampling locations.

Nitrate Nitrogen (NO_3-N) is a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, which can later cause the suffocation of fish and other aquatic organisms by depleting oxygen from the water during decomposition. During the field analysis, nitrate was measured in mg/L NO_3 and converted into mg/L NO_3-N using a conversion factor of 0.226. This process is explained in footnote 3 of Table 3-2. Measured nitrate concentrations ranged from 0.43 to 2.24 mg/L, with an average of 0.87 mg/L and a median of 0.59 mg/L. The highest nitrate concentration of 2.24 mg/L was observed at Site 38, while the lowest concentration of 0.43 mg/L was recorded at alternate Site 49. Graph 4-7 presents the results of the nitrate analyses at all sampling locations

Orthophosphate Phosphorus(PO_4-P), also known as reactive phosphorus, is also a common indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate, phosphate pollution can cause nutrient enrichment (eutrophication), which stimulates algal growth and eventually lowers aquatic dissolved oxygen to levels that are dangerous for aquatic life. Because it is commonly the limiting nutrient in plant growth, even low levels of phosphate can cause significant algal growth. During the field analysis, orthophosphate was measured in mg/L PO_4 and converted into mg/L PO_4-P using a conversion factor of 0.326. This process is explained above in note 6 of Table 3-2. Orthophosphate-P was measured at concentrations ranging from 0.07 to 1.17 mg/L, with an average of 0.57 mg/L and a median of 0.46 mg/L. The highest nitrate concentration of 1.17 mg/L was observed at Site 11, while the lowest concentration of 0.07 mg/L was recorded at Site 31. Graph 4-8 illustrates the results of orthophosphate-P at all sampling locations.

TABLE 4-3
SUMMARY OF FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow (gpm)	Temp. □C	pH	Turbidity NTU	Conductivity mS□cm	Surfactants mg□L MBAS	Ammonia mg□L NH_3-N	Nitrate mg□L NO_3-N	Orthophosphate Phosphorus mg□L PO_4-P
1A	9/18/07	11:10	3.0	20.8	7.3	0.10	1.22	**1.00**	0.1	0.61	0.46
1A(follow-up)	9/19/07	14:10	2.0	21.1	7.4	na	1.21	0.75	na	na	na
11	9/19/07	8:15	5.0	19.9	7.9	18.43	8.91	0.75	0.3	0.43	1.17
13A	9/17/07	11:20	□1	24.1	8.4	0.92	1.27	**1.25**	0.1	0.57	0.85
13A(follow-up)	9/18/07	8:15	Dry	ns	ns	ns	ns	ns	ns	ns	ns
20	9/17/07	15:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns
31	9/17/07	16:30	218.0	24.4	8.0	0.10	12.44	0.75	0.3	0.52	0.07
32	9/18/07	10:15	Ponded	19.1	7.7	1.60	1.74	0.50	0.1	1.15	0.42
38	9/17/07	12:00	1.0	21.8	7.3	2.97	5.04	0.75	0.3	2.24	0.39
40	9/19/07	11:30	2.0	19.2	7.5	0.10	2.68	0.50	0.1	0.88	0.36
41	9/18/07	13:30	5.0	20.8	8.7	5.08	4.27	0.63	0.4	1.76	0.36
42	9/17/07	15:35	1.0	22.2	8.1	3.38	1.41	0.63	0.3	1.06	1.01
43	9/19/07	9:10	Ponded	20.7	7.4	5.46	1.44	0.75	0.1	1.33	0.55
44	9/17/07	14:10	Ponded	28.5	**10.0**	4.77	1.18	0.38	0.1	0.59	0.46
44(follow-up)	9/18/07	8:40	□1	19.6	7.9	na	1.23	na	na	na	na
45	9/19/07	12:15	2.0	22.7	8.3	0.10	1.06	0.75	nd	0.57	0.13
46	9/18/07	12:20	1.0	22.8	7.3	7.98	1.42	**1.0**	0.1	0.45	0.88
46(follow-up)	9/19/07	15:00	1.0	22.3	7.3	na	1.25	0.75	na	na	na
47	9/19/07	10:20	2.0	23.1	8.2	0.67	2.74	0.75	0.4	0.45	0.72
49□	9/18/07	9:15	□1	20.5	8.3	2.67	2.09	0.50	0.1	0.43	0.65

Notes:
na □ not analyzed
ns □ not sampled (dry site)
nd □ not detected

□□ Alternate site
Red values were at or above the measured constituent□s action level
Yellow shaded area denotes follow-up investigations
Light blue shaded area denotes field and laboratory sampling locations

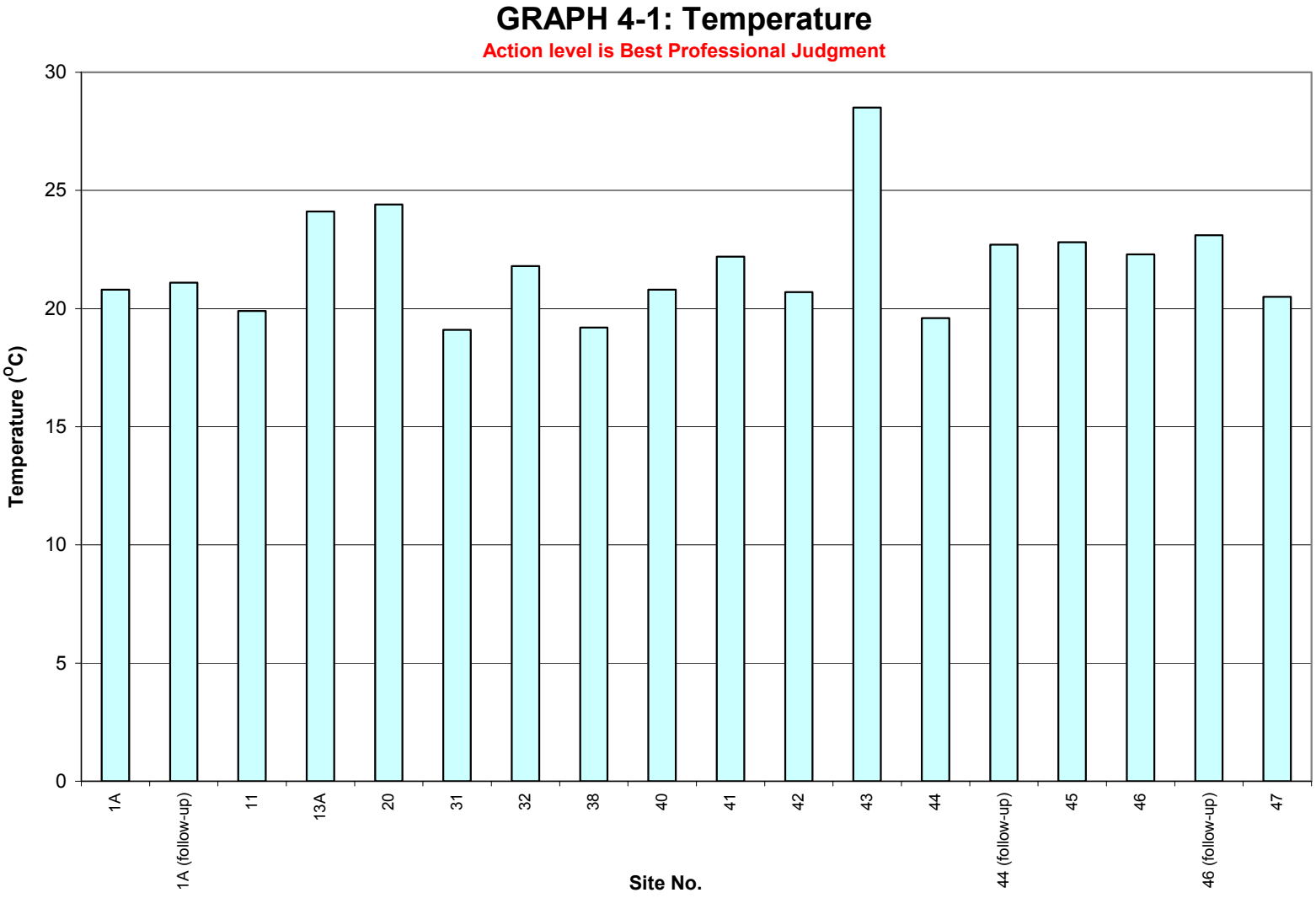
GRAPH 4-1: Temperature
Action level is Best Professional Judgment
Temperature (°C)
30
25
20
15
10
5
0
1A
1A (follow-up)
11
13A
20
31
32
38
40
41
42
43
44
44 (follow-up)
45
46
46 (follow-up)
47
Site No.

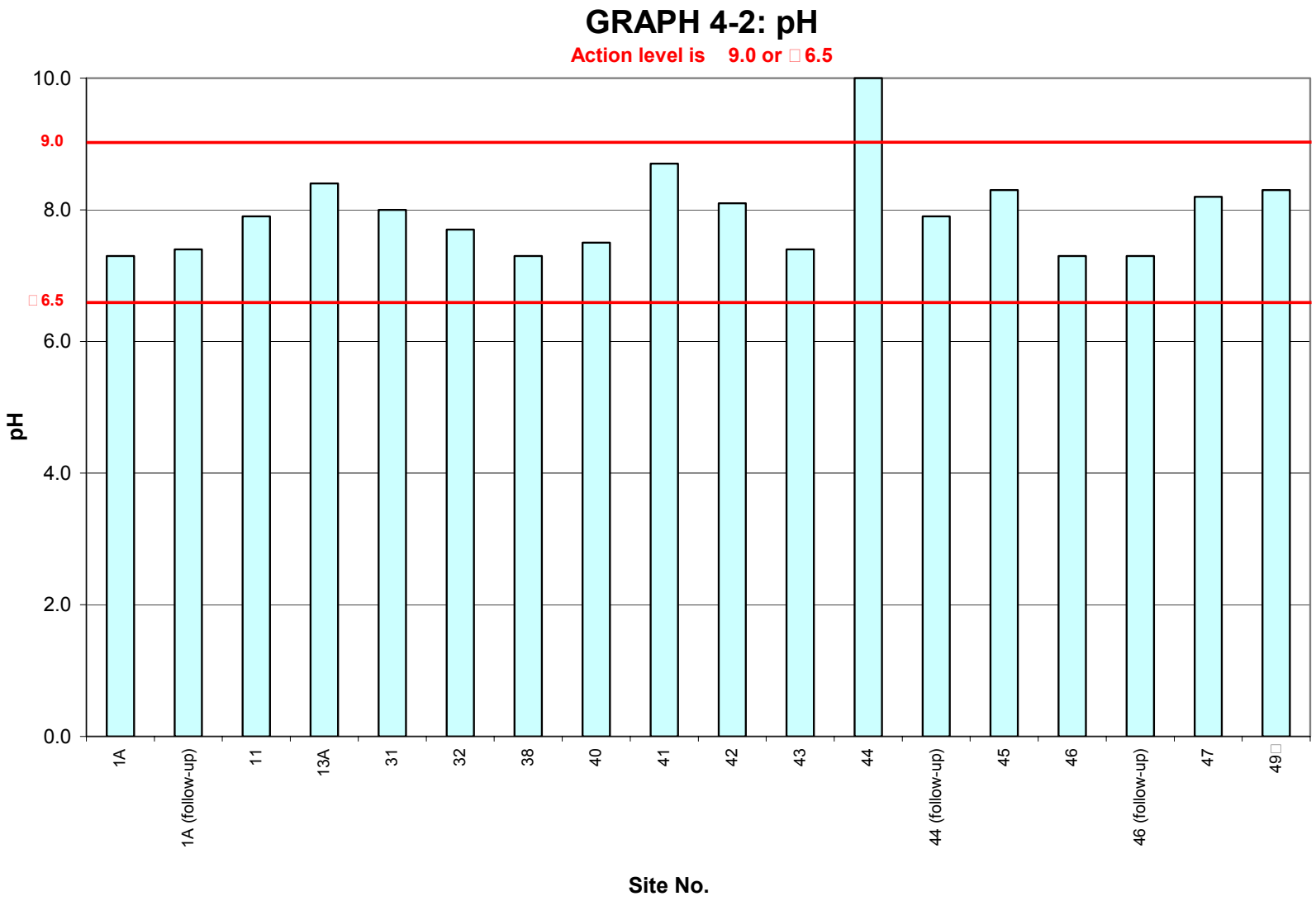
GRAPH 4-2: pH
Action level is 9.0 or □6.5
10.0
9.0
8.0
□6.5
6.0
4.0
2.0
0.0
pH
1A
1A (follow-up)
11
13A
31
32
38
40
41
42
43
44
44 (follow-up)
45
46
46 (follow-up)
47
49□
Site No.

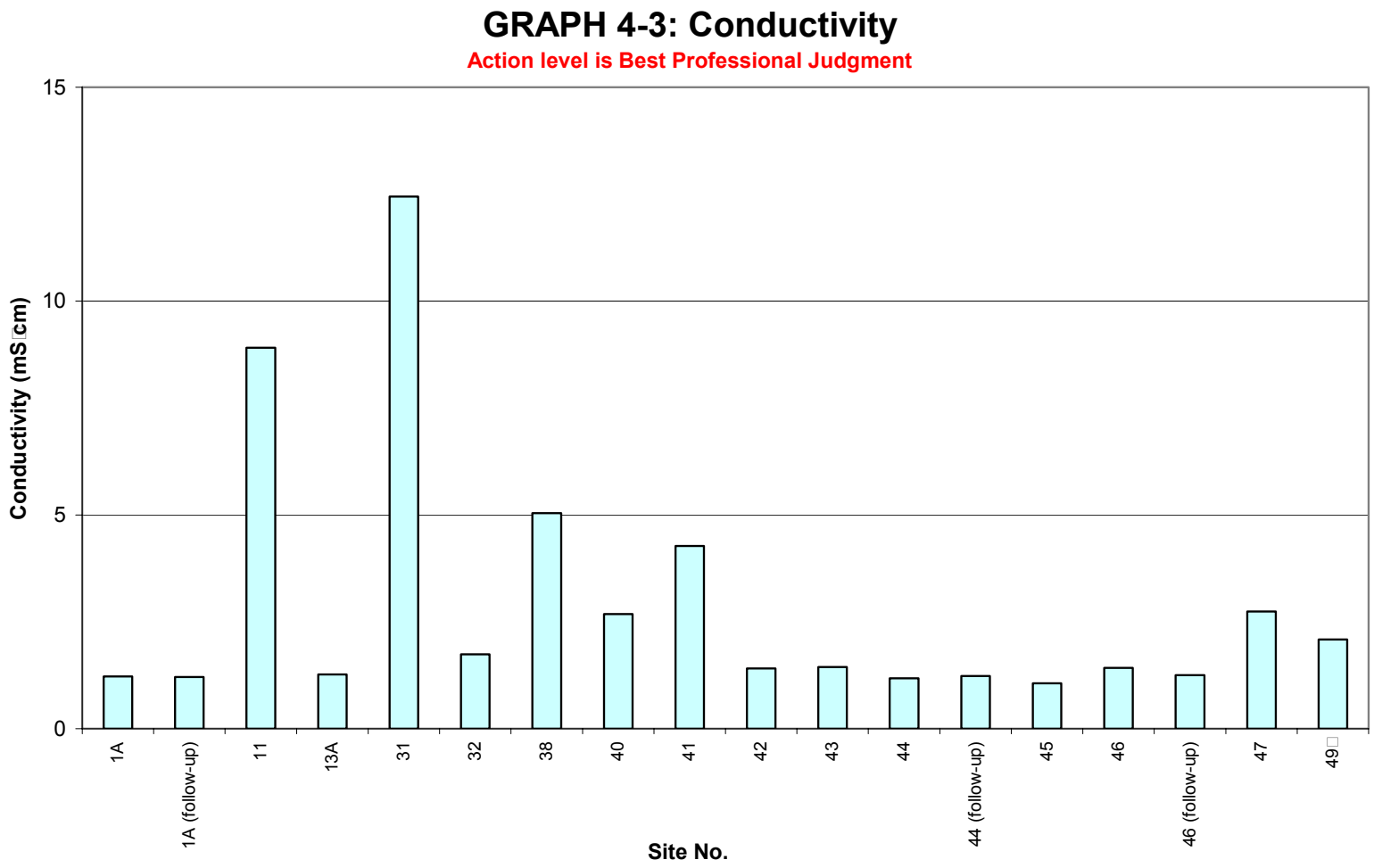
GRAPH 4-3: Conductivity
Action level is Best Professional Judgment
Conductivity (mS/cm)
15
10
5
0
1A
1A (follow-up)
11
13A
31
32
38
40
41
42
43
44
44 (follow-up)
45
46
46 (follow-up)
47
49
Site No.

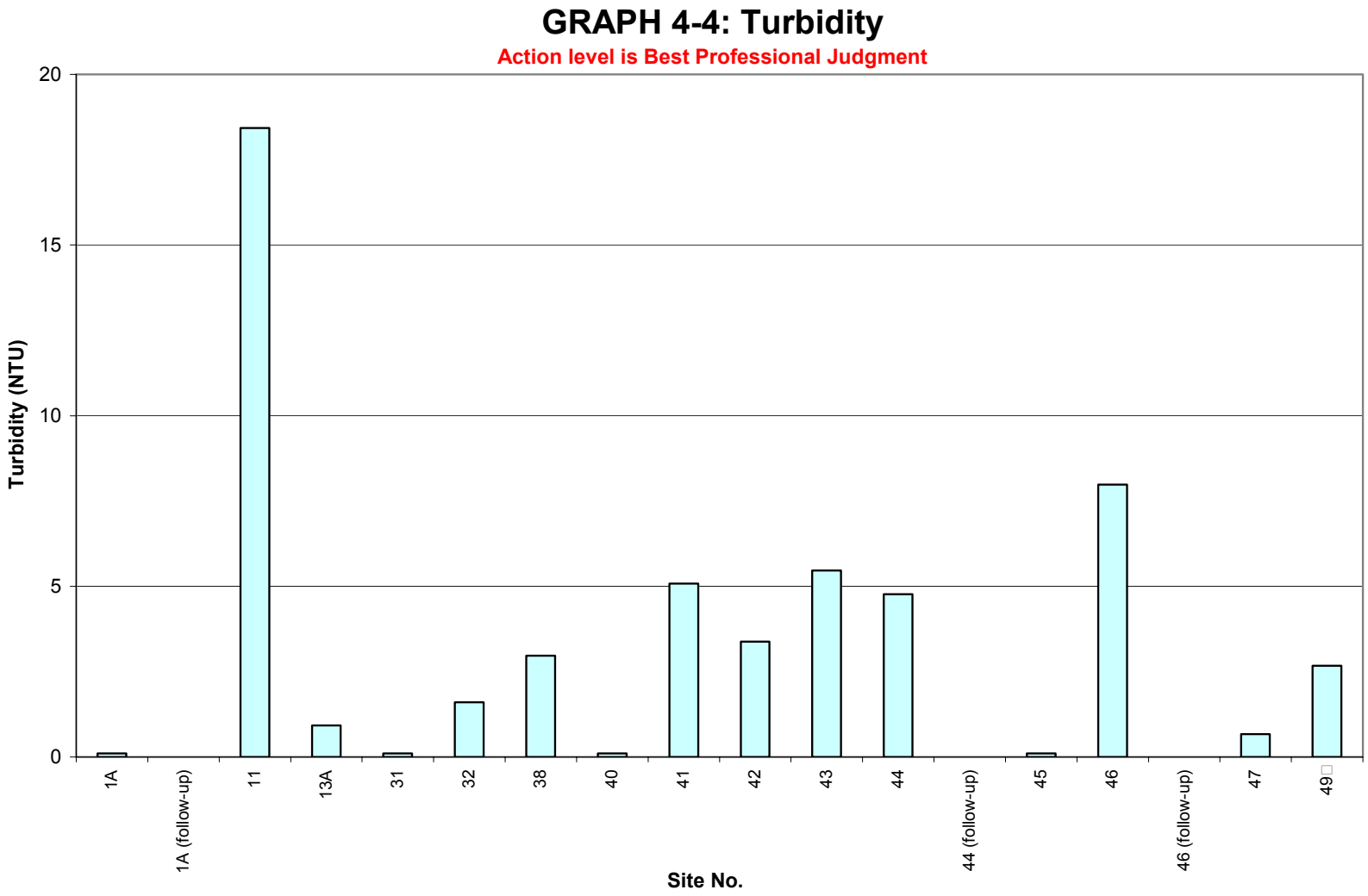
GRAPH 4-4: Turbidity
Action level is Best Professional Judgment
Turbidity (NTU)
20
15
10
5
0
1A
1A (follow-up)
11
13A
31
32
38
40
41
42
43
44
44 (follow-up)
45
46
46 (follow-up)
47
49
Site No.

GRAPH 4-5: Ammonia (NH_3-N)

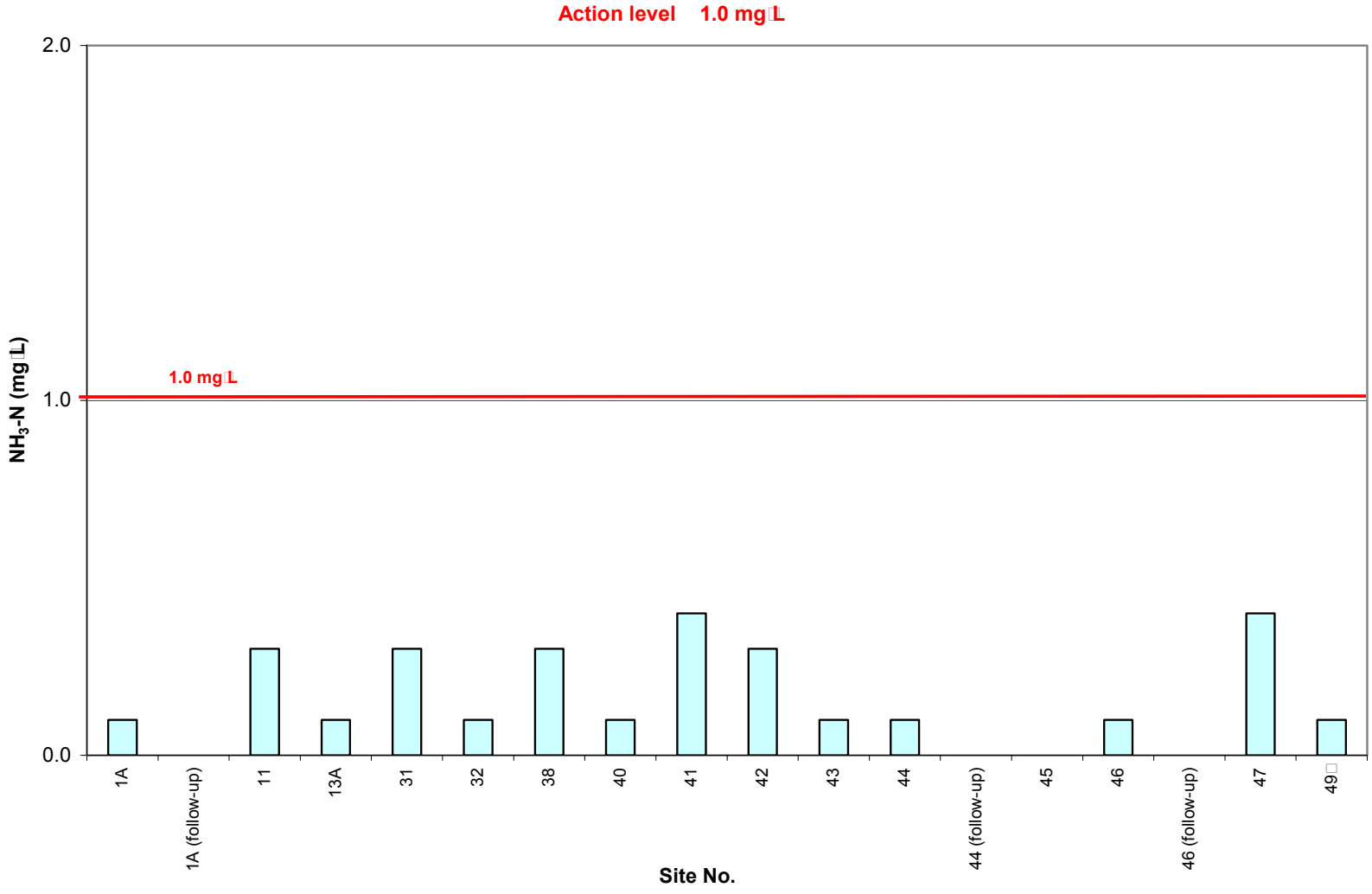

GRAPH 4-6: Nitrate (NO_3-N)

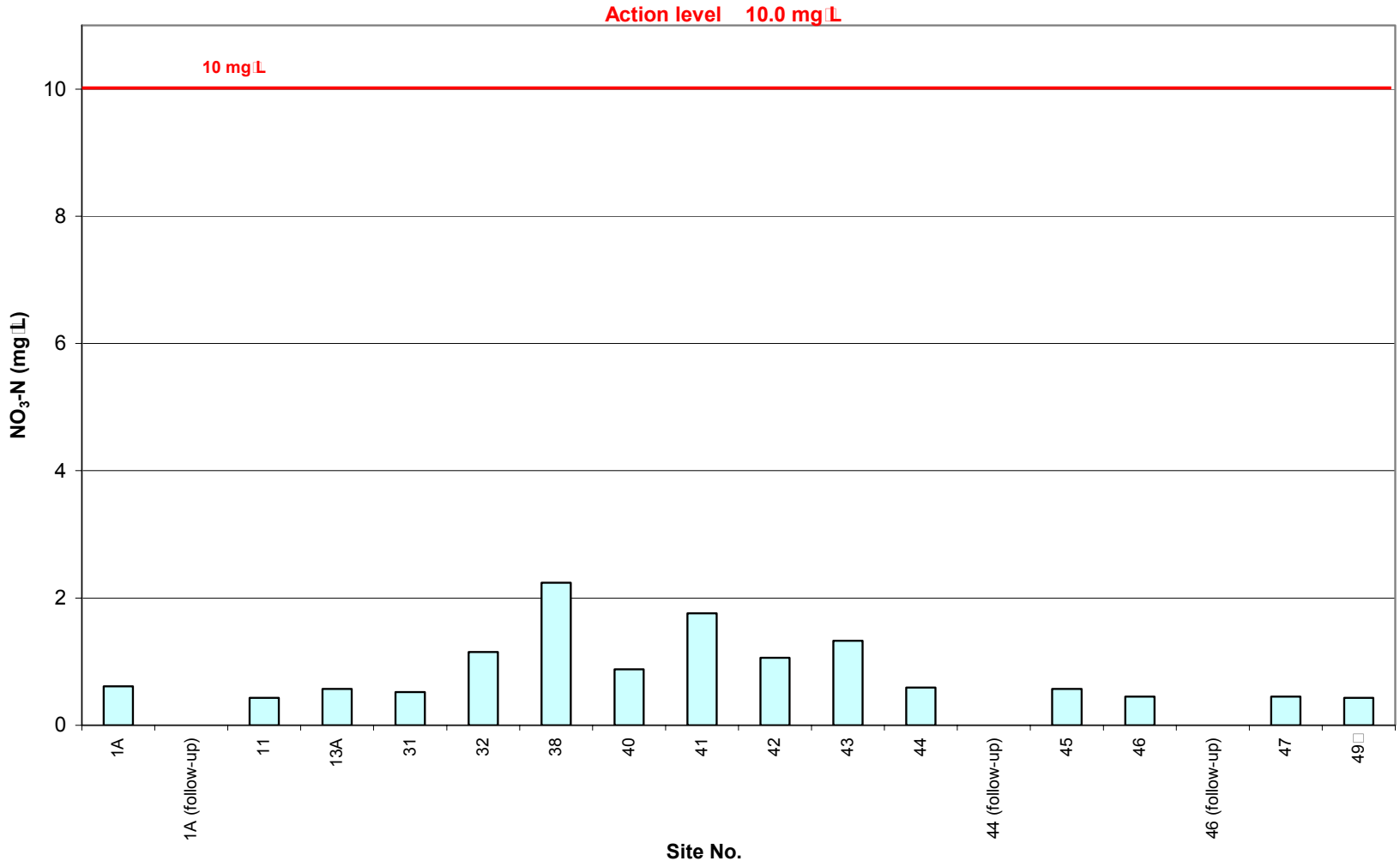

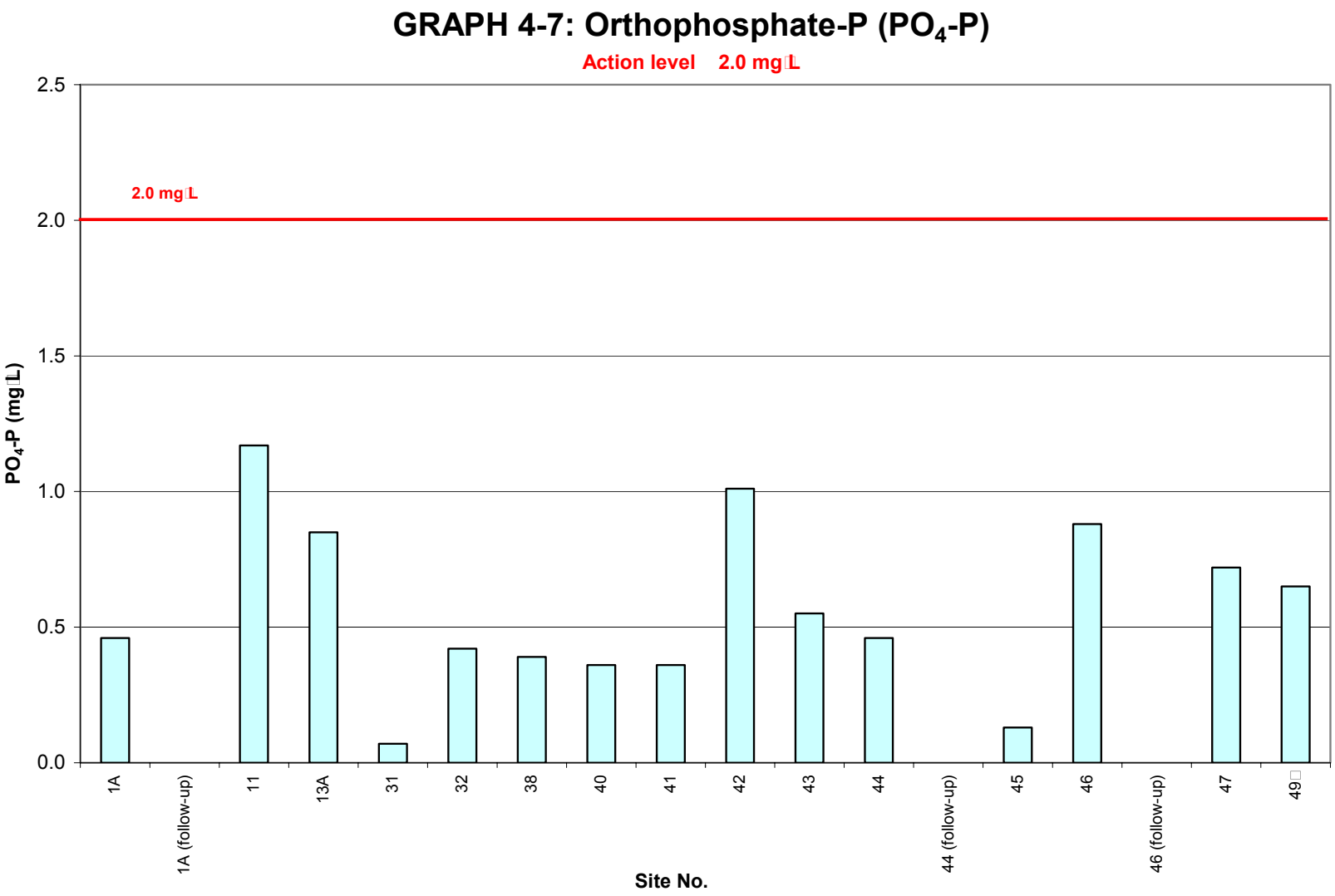
GRAPH 4-7: Orthophosphate-P (PO_4-P)
Action level 2.0 mg/L
2.0 mg/L
2.5
2.0
1.5
1.0
0.5
0.0
PO_4-P (mg/L)
1A
1A (follow-up)
11
13A
31
32
38
40
41
42
43
44
44 (follow-up)
45
46
46 (follow-up)
47
49
Site No.

GRAPH 4-8: Surfactants (Methylene Blue Active Substances)

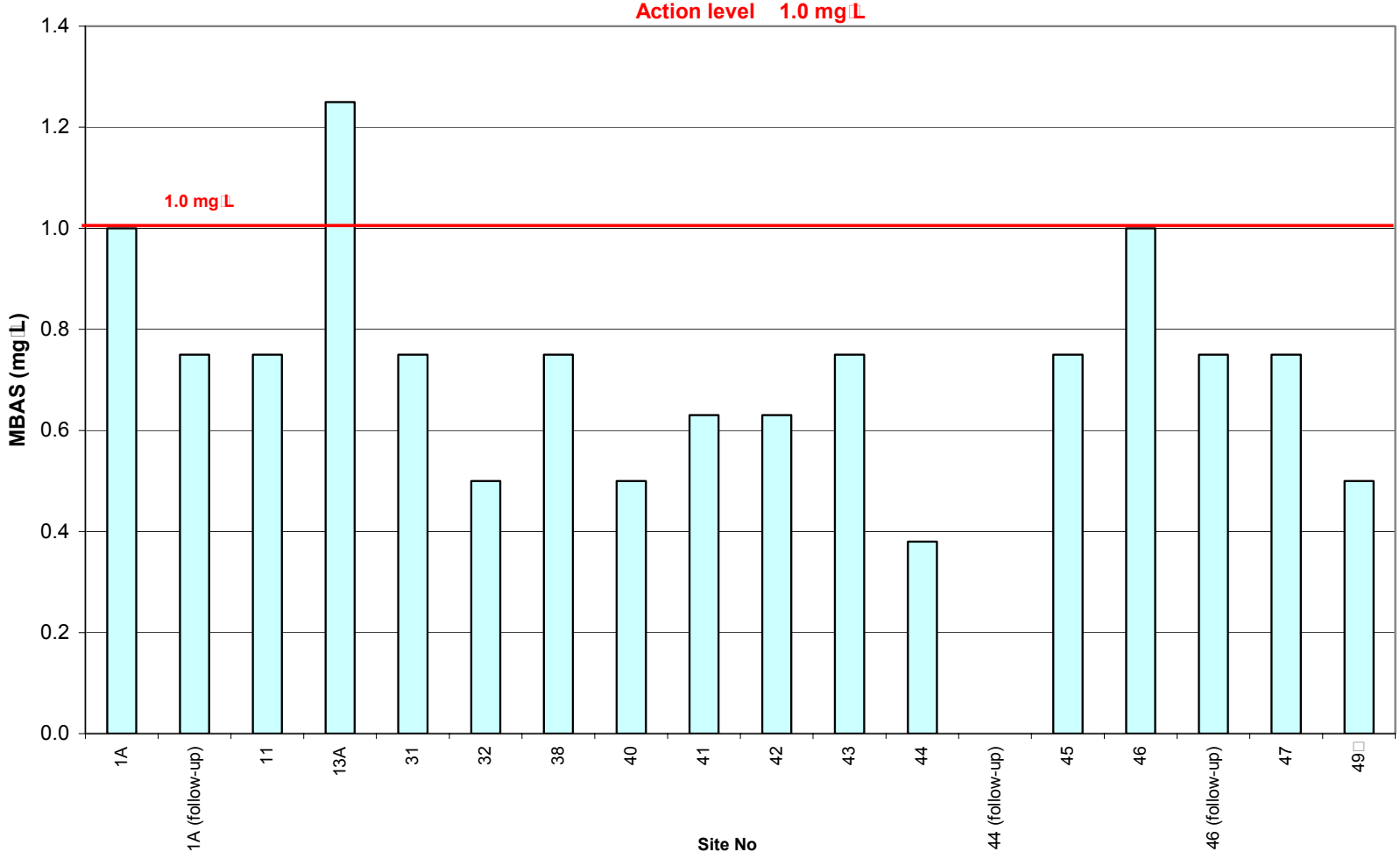

5.0 LABORATORY ANALYTICAL RESULTS

5.1 Summary

Laboratory analyses were conducted at four sites, representing over 25 percent of all sites with ponded or flowing water. A summary of the laboratory analytical results is presented in Table 5-1. Table 5-2 presents the laboratory results from all samples. Laboratory reports are included as Appendix B.

TABLE 5-1
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum
Surfactants (mg/L MBAS)	0.8	nd
Oil and grease (mg/L)	nd	nd
Total Hardness (mg/L $CaCO_3$)	1010	234
Cadmium (dissolved, mg/L)	nd	nd
Copper (dissolved, mg/L)	0.008	nd
Lead (dissolved, mg/L)	0.008	nd
Zinc (dissolved, mg/L)	0.041	nd
Diazinon (□g/L)	nd	nd
Chlorpyrifos (□g/L)	nd	nd
Total Coliform (MPN/100 mL)	1,600,000	23,000
Fecal Coliform (MPN/100 mL)	160,000	2,300
Enterococcus Bacteria (MPN/100 mL)	160,000	13,000

nd not detected

Surfactants (MBAS) are analyzed to detect surfactant pollution from residential, commercial, or industrial washing activities. Surfactants were detected at Sites 1A and 46 with concentrations of 0.7 and 0.8 mg/L respectively.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities. Oil and grease levels were non-detectable for all four tested sites.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Although it is not itself considered a pollutant, total hardness is measured in order to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals, as well as other minerals and ions. Total hardness values ranged from 234 to 1,010 mg/L.

Diazinon and **chlorpyrifos** are organophosphate pesticides that are detrimental to birds, mammals, beneficial insects, freshwater fish, invertebrates, and other aquatic organisms. Neither diazinon nor chlorpyrifos were detected at any of the sampled sites.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the

survival and development of aquatic organisms, including fish and waterfowl. The laboratory samples collected were analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Cadmium was not detected at any of the sampled sites. Dissolved copper was detected with concentration of 0.008 mg/L, at the Site 32. Dissolved lead, with concentration of 0.008 mg/L, was recorded at Site 1A. Dissolved zinc was detected at Sites 1A and 32 with concentrations of 0.041 and 0.034 mg/L, respectively.

The California Toxics Rule (CMC) for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness, with toxicity decreasing as hardness increases. The CTR limit was calculated using the lowest total hardness value from all the sites that has detectable levels of any metal, 234 mg/L, to use the strictest action level. The action levels for dissolved copper, lead and zinc in a water sample corresponding to a hardness value of 234 mg/L $CaCO_3$ are 0.03, 0.161, and 0.24 mg/L respectively. Therefore, since measured copper and zinc concentrations were below the action levels for the lowest measured hardness value, pollutant source investigations were not required.

Coliform bacteria are relatively harmless to humans and are typically present at high levels in mammalian digestive tracts, as well as naturally found in most surface waters and soils. They are also present in soil and decomposing organic matter, so measurements of total coliform bacteria are not typically considered to be very accurate indicators of fecal contamination. Water samples are analyzed for total coliform bacteria because it is a historically accepted public health practice and because the Municipal Permit requires it. During the 2007 Dry Weather Monitoring Program, total coliform count ranged from 23,000 to greater than 1,600,000 MPN/100 mL. The highest level of greater than 1,600,000 MPN/100ml was found at Site 46. Total coliform concentration at Site 1A was 50,000 MPN/100mL. Upstream investigations were conducted at all four sites; the results are detailed in Section 7 of this report.

Fecal coliform, a subset of coliform bacteria, and ***Enterococcus*** are found primarily in the gastro-intestinal (GI) tracts of humans and animals, so they are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material was human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain. Fecal coliform counts ranged from 8,000 to greater than 160,000 MPN/100 mL, and exceeded the action level of 20,000 MPN/100 mL at sites 1A and 46. *Enterococcus* counts ranged from 13,000 to greater than 160,000 MPN/100 mL. Three of the four sampled sites, exceeded the established action level 10,000 MPN/100 mL for *Enterococcus* bacteria. Site 41 was the only site to record all three bacterial indicators below their respective action levels. Sites 1A and 46 exceeded the action levels for all three bacterial indicators, while Site 32 exceeded the action level for *Enterococcus* bacteria only.

TABLE 5-2
SUMMARY OF LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Surfactants mg/L MBAS	Oil & Grease mg/L	Total Hardness mg/L	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliform MPN/100 mL	Fecal Coliform MPN/100 mL	*Enterococcus* MPN/100 mL
32	9/18/07	10:15	nd	nd	279	nd	0.008	nd	0.034	nd	nd	23,000	8,000	**13,000**
41	9/18/07	13:30	nd	nd	1010	nd	nd	nd	nd	nd	nd	30,000	2,300	2,300
46	9/18/07	12:20	0.8	nd	354	nd	nd	nd	nd	nd	nd	**1600000**	**160000**	**160000**
1A	9/18/07	11:10	0.7	nd	234	nd	nd	0.008	0.041	nd	nd	**500,000**	**24,000**	**24,000**
Reporting Limits			**0.5**	**5.0**	**10**	**0.005**	**0.005**	**0.005**	**0.02**	**0.05**	**0.05**	**20**	**20**	**20**

Notes:
Red values were at or above the measured constituent's action level

6.0 DATA ANALYSIS

Based on qualitative observations and field and laboratory analytical testing, the following sites demonstrated physical and chemical evidence of possible illegal discharges and/or illicit connections.

Site 1A

Site 1A is a concrete channel located in the southwest corner of the 43rd Street and Nordica Avenue intersection (see Appendix A for photo). A significant amount of trash and debris accumulation was observed in the vegetation at the site. The trash was composed primarily of plastic bottles, plastic wrappers, paper waste and aluminum cans (see Photo 6-1). A sample was collected from a section of the channel which was flowing at 3 gallons per minute (gpm). The sample appeared clear and colorless with no discernable odor. Field screening tests performed during the initial visit to the site indicated a surfactant concentration equal to the action level of 1.0 mg/L MBAS. Since elevated surfactant levels are often the result of washing activities, areas upstream of the site were searched, but no washing activities were observed at that time. It should also be noted that laboratory analysis of the sample collected indicated a surfactant concentration of 0.7 mg/L MBAS, which is below the established action level. However, these results were not available by the following day, therefore a follow-up visit to the site was performed based on the field screening results.

Photo 6-1 Trash accumulation observed at Site 1A

By the time of the follow-up visit to the site the next day, the surfactant concentration had dropped below the action level to a concentration of 0.75 mg/L MBAS. The field crew believes that the surfactants initially measured at the site were transient, and likely the result of washing activities occurring upstream of the site. In 2005, elevated surfactant levels at Site 1A were traced to an individual washing his car upstream of the site. Last year surfactants were measured above the action level during the initial site visit, but not during the follow-up. The area surrounding Site 1A is comprised primarily of residences and commercial establishments where vehicle washing and other surfactant generating wash activities are likely to occur. As a result, elevated surfactant levels have been intermittently observed at Site 1A.

Sampling for laboratory analyses was also conducted at Site 1A. Results indicated that all three bacterial indicators (total coliform, fecal coliform and *Enterococcus*) were counted at values above their respective action levels. Total coliform was measured to be 500,000 MPN/100 mL, fecal coliform was measured to be 24,000 MPN/100 mL and *Enterococcus* bacteria was measured to be 24,000 MPN/100mL. In order to identify the source(s) contributing to the elevated bacteria levels observed at the site, further upstream investigation was performed by the field crew (see Section 7).

Site 13A

Site 13A is a concrete outlet located northeast of the 16th Street and National City Boulevard intersection, inside Kimball Park (see Appendix A for photo). The outlet discharges into the downstream end of the concrete channel running through the park. A small flow of less than one gallon per minute was sampled. Field screening test indicated a surfactant concentration of 1.25 mg/L, above the action level. The site was visited several times the following two days, but no flow or ponded water was observed. Since no follow-up sample could be collected, the surfactants measured at the site are likely transient. This was the first year on record that surfactants have been measured above the action level for this site.

Site 32

Site 32 is an outlet located along the north bank of the Sweetwater River, just east of 2nd Avenue nearby State Route 54 (see Appendix A for photo). This site drains the commercial area upstream of the outlet to Sweetwater River. Only a relatively small amount of trash was observed at the outlet itself. However, in the vegetated area downstream of the site, evidence indicating human inhabitation was noticed. No individuals were present at the time, but a backpack and a few articles of clothing were observed. Water was not flowing at the site, so a sample of ponded water was collected from the outlet. Field screening tests performed indicated that all constituents tested were within an acceptable range or at concentrations below their respective action levels. Laboratory analysis of the collected sample indicated slightly elevated *Enterococcus* bacteria counts, 13,000 MPN/100 mL. Further upstream investigation was conducted in order to identify the source(s) responsible for the elevated *Enterococcus* bacteria levels identified at Site 32 (see Section 7).

Site 44

Site 44 is a section of concrete channel located northeast of the 16th Street and National City Boulevard intersection, underneath the Kimball Park Bridge (see Appendix A for photo). A significant amount of trash, including plastic bottles, wrappers, glass and aluminum cans, was observed in the channel upstream of the site. Algal growth was also noted throughout the channel. During the initial visit to the site, a sample of ponded water was collected. Field screening tests performed indicated a pH of 10.0, above the established action level of 9.0. It should be noted that the sample was collected during a sunny afternoon, and that the water sampled was relatively warm, 28.5 °C. The follow-up visit to the site was conducted in the early morning on an overcast day. This time a sample was collected from a small trickle of water flowing at less than 1 gpm. The water temperature, 19.6 °C, was much lower than measured during the initial visit to the site. The pH was now within the acceptable range, at a value 7.9. Exposed concrete channels with algal growth often have elevated pH values in the latter part of relatively sunny days for the reasons described below.

Photo 6-2 Trash observed upstream in the concrete channel within Kimball Park

The field crew believes that the high pH reading resulted primarily from algal photosynthesis and increased temperature, which remove carbon dioxide from the water. Because carbon dioxide forms carbonic acid when dissolved in water, removal of carbon dioxide from water makes the water more basic and results in higher pH readings. Typically the pH increases during daylight hours as sunlight stimulates algal photosynthesis and carbon dioxide is removed from water. During the night when algae is not photosynthesizing, the carbon dioxide level in the water increases due to biological respiration and physical diffusion of carbon dioxide from air into water, and the pH decreases. Because the solubility of gas in water is inversely proportional to the water temperature, carbon dioxide is less soluble in warmer water. Sunlight heats the shallow, unshaded water in a concrete channel, resulting in lower solubility for carbon dioxide later in the day when the water is warmer. The effects of temperature and algal photosynthesis lead to lower pH values in the morning and higher values in the afternoon.

Site 46

Site 46 is a manhole located on the southern side of the South Bay Plaza Shopping Center (see Appendix A for photo). The site primarily receives runoff from the commercial area around the shopping center, but also from the residential area further to the south. When the site was first visited, several of the catch basins located behind shopping center smelled of rotting grease. A sample was collected from water flowing at 1 gpm within the manhole. The sample appeared slightly yellow, but was clear with no discernable odor. Surfactants were measured at a concentration of 1.0 mg/L MBAS, equal to the established action level. Since elevated surfactant levels are often the result of washing activities, the field crew immediately searched upstream in an attempt to identify any potential surfactant sources. No washing activities were observed upstream of the site or within the shopping center at that time. It should also be noted that laboratory analysis of the sample collected indicated a surfactant concentration of 0.8 mg/L MBAS, which is below the established action level. However, these results were not available by the following day, and therefore a follow-up visit to the site was performed based on the field screening results.

During the follow-up visit to the site, conditions at the site were similar to the initial visit. The water was still clear, odorless and slightly yellow in tint. A flow of 1 gpm was observed within the manhole. This time, surfactants were measured at a concentration of 0.75 mg/L MBAS, below the action level. Again, no individuals were observed conducting washing activities within the shopping center. The decrease in surfactant concentration between visits, since action level exceedances have not typically been measured at Site 46, likely indicates that the elevated surfactant levels are transient.

The results of the laboratory analysis performed showed that all three bacterial indicators (total coliform, fecal coliform and *Enterococcus*) were counted at levels well above their respective action levels. Total coliform was measured to be greater than 1,600,000 MPN/100 mL, fecal coliform was measured to be greater than 160,000 MPN/100 mL and *Enterococcus* bacteria was measured to be greater than 160,000 MPN/100 mL. Further upstream investigation was conducted in order to identify any source(s) contributing to the elevated bacteria levels observed at Site 46 (see Section 7).

7.0 UPSTREAM INVESTIGATIONS

7.1 Purpose

The purpose of the upstream investigations is to find the source of the pollutants that were identified during initial field screening and laboratory testing.

The field screening program performed in September 2007 found elevated surfactant concentrations at Sites 1A, 13A, and 46. Surfactant concentrations were transient at each of these sites, and therefore no further upstream investigation was required. A high pH reading was recorded at Site 44 during the initial site investigation. The pH dropped within the acceptable range by the time of the follow-up visit, requiring no further upstream investigation. Samples were collected for laboratory analysis at four sites during the initial round of field screening. Complete results of these analyses, showed bacteria levels in excess of their established action levels for three of the four sites. Upstream investigations were undertaken for Sites 1A, 32 and 46 to identify the source(s) of the high bacteria counts.

7.2 Investigation Procedure

Upstream investigations were conducted in two rounds. The first upstream investigations were for the sites at which field tests indicated elevated constituent levels. These investigations were conducted immediately after confirming the elevated concentrations via additional field testing. The second round of upstream investigations was carried out for the sites at which laboratory testing had found elevated constituent levels. These investigations were conducted after receiving the test results from the laboratory.

During the investigations, the D-MAX field crew measured flow rates, performed visual observations, and conducted field testing. Visual observations, such as water color, clarity, odor, floatable materials, vegetation and biology, and physical parameters, such as temperature, pH and conductivity, were recorded on field data sheets at each official sampling site. Observations and data for locations upstream of the official sites were recorded in the field crew's log notebooks. Field data sheets are included in Appendix C.

In order to determine the potential sources of bacteria to sites with high bacteria, the D-MAX field crew used 3M Petrifilm *E. coli* /Coliform Count plates as a rapid method to trace sources of both total coliform bacteria and *E. coli* bacteria in the storm water conveyance system. Because laboratory microbiological analyses take a significant amount of time, relying primarily on laboratory analyses can significantly delay an upstream investigation for bacteria. Also, due to the cost of these tests, often only a few locations can be examined, giving a less comprehensive picture. Using the Petrifilm plates allowed the field crew to quickly sample numerous branches or locations upstream of the sites.

Samples were taken in the field and preserved with Butterfield's phosphate buffer to keep the pH close to 7. Sample containers were kept on ice in a cooler and then plated within 6 hours of collection to ensure proper holding times were observed. The plates were then incubated at 35°C ± 1°C. After 24 hours of incubation, total coliform bacterial concentrations were enumerated, and after an additional 24 hours (48 hours incubation

total) *E. coli* levels could be read from the same plates, helping investigators identify potential bacterial sources over a large area in a timely manner.

This method is an improvement over the technique used in the past because it now also tests for *E. coli* bacteria. *E. coli* bacteria, a subset of fecal coliform bacteria, are better indicators of fecal contamination than total coliform alone. Additionally, since total coliforms and *E. coli* are enumerated on the same plate, a rough ratio of *E. coli* (more likely to be from fecal sources) to total coliforms can be ascertained. While not unequivocally conclusive, this information allows for a better determination as to whether observed high bacteria levels likely came from fecal or non-fecal sources. Note that *E. coli* are only one class of fecal coliform bacteria, and they are not enumerated for upstream analyses as an equivalent replacement for laboratory fecal coliform testing.

It should be noted that although laboratory analyses are done for total coliform, fecal coliform, and *Enterococcus* bacteria, field bacteria analyses using Petrifilm plates are used to test only for total coliform bacteria and *E. coli*. As noted in Section 4, total coliform bacteria themselves are generally harmless to humans but are a commonly-used indicator of harmful, pathogenic organisms, especially those found in fecal matter. Because the total coliform group of bacteria includes many species of bacteria of non-fecal origin, it is not as precise an indicator of fecal contamination as fecal coliforms or enterococci. A high total coliform count does not necessarily indicate fecal contamination of water, as total coliforms can also be found in soil, grain, and water, especially stagnant water. Therefore, a water sample with a high level of total coliform bacteria does not necessarily have a correspondingly high level of pathogens.

Fecal coliforms and enterococci are found mainly (but not solely) in the digestive tracts of humans and warm-blooded animals. With a few notable exceptions, fecal coliforms and enterococci are not themselves hazardous to humans, but their presence is usually a good indication of the presence of animal or human waste. Fecal contamination from animal sources may be less hazardous to humans than fecal contamination from human sources; however, standard tests for fecal coliform and *Enterococcus* bacteria cannot reliably distinguish between human and animal sources.

Field bacteria tests using Petrifilm plates use Colony Forming Units per milliliter (CFU/ml) as the measurement unit, rather than the Most Probable Number (of colony forming units) per 100 milliliters (MPN/100 mL) unit used in laboratory analyses. These units are generally comparable, although the laboratory value is one hundred times greater because the volume is 100 times greater. D-MAX has created a stringent field protocol to control sample development as consistently as possible. Sterile dilution vials containing pre-measured amounts of sterile buffer solutions for dilution are used for sample collection, the diluted samples are kept on ice in a cooler while in the field, and chilled samples are collected from the field crew twice daily to be plated within the proper holding time. Plated samples are then developed in an incubator for a total of 48 hours. While this method is not conducted at a certified laboratory, it is still useful for determining which locations have relatively higher or relatively lower bacteria levels. The action level for total coliform bacteria is 50,000 MPN/100 mL, which roughly corresponds to 500 CFU/mL. However, only about 150 or fewer colony forming units can be accurately enumerated using a Petrifilm plate. This would correspond to 15,000 MPN/100 mL. Therefore, all samples were first diluted 1:10 with sterile buffer solution before Petrifilm analysis, thus adjusting the

detection limits for Petrifilm plates from the standard value of 1-150 CFU/mL to 10-1,500 CFU/mL. This adjusted range corresponds to approximately 10,000 to 150,000 MPN/100 mL, a much more useful range when dealing with total coliform bacteria levels around the action level of 50,000 MPN/mL.

Field investigators began the source identification investigations by testing the water at the site itself; they then gradually worked upstream until potential pollutant sources could be identified. If follow-up field testing at a site resulted in constituent concentrations below specified action levels, it was concluded that the pollution found during the initial field screening and laboratory analysis phase of the 2007 Dry Weather Monitoring Program was due to a transient flow.

7.3 Investigated Sites

Site 1A

Site 1A is a broad concrete channel located southwest of the 43rd Street and Nordica Avenue intersection. A follow-up investigation was conducted at Site 1A due to all three bacterial indicators being measured at levels exceeding their respective action levels. Similar to the initial visit to the site, significant amounts of trash were observed accumulating in the vegetation at the site during the follow-up investigation (see Photo 7-1). The water at the site appeared almost ponded, however the field crew was able to calculate a flow rate 3 gpm downstream where the vegetation is less dense. The sample collected indicated elevated levels of both total coliform and *E. coli* bacteria. The decomposition of trash and debris at the site, along with the slow flow of the water likely is a source of bacteria to the site. Further upstream was investigated in order to identify any more sources potentially contributing bacteria to Site 1A.

Photo 7-1 Trash accumulation at Site 1A.

Photo 7-2 Irrigation water sampled outside of the Park Villas Apartment Complex

Based on the conveyance map provided by the City, it appears that three different conveyance lines connect upstream of the site. The longest of those lines originates from the east. There are also two lateral lines, one from the north and one from the south, which also contribute to the site. The field crew began by investigating the northern line first. Most of the locations investigated along the northern line were dry, but the field crew was able to collect a sample or runoff discharging to Eta Street (1A-1 shown in the following map and table). The runoff appeared to be the result of irrigation coming from the Park Villas Apartments (see photo 7-2). Bacterial counts indicated fairly high levels of total coliform bacteria. The *E. coli* counts were not as significant (see table below).

The upstream investigation continued along the southern lateral lines. Similar to the northern line, most of the locations checked along this line were dry. A sample was collected from some ponded water in a manhole located between 843 and 905 Melrose Street (1A-2). Sizeable accumulations of organic debris (fallen leaves) were observed along the gutters of this residential area. The sample collected appeared brown in color and had a musty odor. Bacterial counts indicated fairly high levels of both total coliform and *E. coli* bacteria.

The first location sampled along the eastern line, was Site 45. Inside the manhole, water was observed coming from two different directions. The first sample collected, was from the water from the north (1A-3). This sample appeared slightly greenish-yellow in color. Upstream of this line, the field crew observed significant amounts of trash and debris along the gutters of Scott Drive (see photo 7-3). Bacteria counts for both total coliform and *E. coli* bacteria were extremely high (see table below).

Photo 7-3 Trash and debris observed along the gutter of Scott Street, upstream of Site 1A

A sample of the water coming into Site 45 from the east was also sampled (1A-4). A flow of 2 gpm was observed and the water appeared brown and turbid. Both *E. coli* and total coliform bacteria counts for this sample were quite high. The field crew followed this line upstream checking several manholes and catch basin for the source of the turbid water. The source of the turbid water was the apartment complex located at 228 to 238 Palm Avenue. An irrigation pipe had broken, and individuals were attempting to repair the pipe. As a result, soil and debris had been washed into the street (see photo 7-4). The individuals conducting the repairs were instructed to block off and contain the little water still discharging from the site and to clean up the remaining sediment and debris. The field crew remained at the site and observed the individuals stop the remaining discharge. The field crew also reported this event to one of the City's storm water officials, Mr. Charles Nissley, during the upstream investigation for another site later in the day. A fifth upstream sample was collected from a manhole on U Avenue further upstream along the eastern line (1A-5). This sample showed moderate levels of both total coliform and *E. coli* bacteria.

Photo 7-4 Turbid water and organic debris entering a catch basin on Palm Avenue.

In conclusion, the field crew believes that the overall conditions of the areas upstream of the site are responsible for the elevated bacteria levels found at Site 1A, rather than a particular point source. Trash and organic debris were observed in several locations throughout the upstream area. The decomposition of all this material, combined with the slow flow of water through the system provides many possible sources of bacteria. Recommendations regarding the particularly problematic areas are provided in Section 8 of this report. A map and a table summarizing the upstream investigation for Site 1A are provided below.

ID	Location	Latitude	Longitude	Flow (gpm)	Total Coliform (CFU / mL)	*E. coli* (CFU / mL)
1A	Southwest of 43rd Street and Nordica Avenue	32.68575	-117.10166	3	680	50
1A-1	Concrete swale near the Park Villas Apartment Complex on Eta Street	32.68705	-117.10111	□1	1,850	20
1A-2	Manhole between 843 and 905 Melrose Street	32.68493	-117.10023	ponded	1,460	280
1A-3	Site 45, in front of Fig Court, in the middle of the street (north)	32.68739	-117.09690	□1	TNTC□	TNTC
1A-4	Site 45, in front of Fig Court, in the middle of the street (east)	32.68739	-117.09690	2	TNTC	380
1A-5	Southwest of the □U□ Avenue and E. 1st Street intersection, on □U□Avenue	32.68725	-117.08752	□1	530	30

□TNTC □ □Too Numerous to Count□

Site 32

Site 32 is an outlet that drains directly to the northern bank of the Sweetwater River. Laboratory analyses of the sample collected during the initial round of field screening indicated *Enterococcus* bacteria levels at the site exceeded the action level of 10,000 MPN/100 mL. *Enterococcus* bacteria were measured at a level of 13,000 MPN/100 mL. Unlike the previous year, both total coliform and fecal coliform bacteria were measured below their respective action levels.

Similar to the initial visit, the water at the site was ponded and appeared slightly yellow in color. Various types of trash including a spray paint can, plastic bags and food wrappers, were observed around the site. Further inside the outlet, evidence likely indicating human inhabitation was observed. The sample collected from the site showed moderate levels of both total coliform bacteria and *E. coli* (see table below).

Just north of Freeway 54 and behind the Sweetwater Crossing Shopping Center is an open concrete channel that drains directly to Site 32. Samples were collected from both the western end (32-1 shown in the following map and table) and eastern end (32-2) of the channel. The flow rate within the channel was less than one gpm. Sediment, algae and organic material were observed within the channel (see photo 7-5). The field crew also observed fecal material along the northern bank of the channel (see photo 7-6). The *E. coli* counts were high for both of the samples collected from the channel (see table below). Similar to *Enterococcus* bacteria, *E. coli* bacteria is a subset of fecal coliform bacteria and can be used as an indicator of fecal contamination. Although the fecal matter (shown below) was not in direct contact with the water, its presence likely indicates that wildlife or humans have defecated in this area.

Photo 7-5 Sediment and organic material within the concrete channel upstream of Site 32.

Photo 7-6 Fecal matter observed along the bank of the concrete channel upstream of Site 32.

The field crew continued upstream collecting a sample from a catch basin located within the Sweetwater Plaza Shopping Center (32-3). The water in the catch basin was ponded and decomposing leaves were observed inside. Several other conveyance lines were checked, but most were either completely dry or slightly damp and could not be sampled. A fourth upstream sample was collected from the outlet at Site 42 (32-4). Both samples 32-3 and 32-4 showed moderate total coliform counts, but *E. coli* counts were substantially lower than those from the concrete channel (32-1 and 32-2).

The results of the upstream investigation seem to show that the concrete channel located behind the Sweetwater Crossing Shopping Center is the most likely source of *Enterococcus* bacteria to Site 32. The two samples collected from the concrete channel had the highest

E. coli counts of any of the upstream samples collected. The presence of fecal matter was also observed in the immediate area around the channel. Humans have been observed living within this channel, and it is possible that they defecate in some areas of the channel. Also, the decomposing organic debris, combined with the slow flowing water within the channel, provide excellent conditions for bacterial growth. A summary of the upstream investigation for Site 32 is provided in the table and map below.

ID	Location	Latitude	Longitude	Flow (gpm)	Total Coliform (CFU / mL)	*E. coli* (CFU / mL)
32	Site 32: Tunnel outlet on the north bank of the Sweetwater River, east of 2nd Avenue	32.65887	-117.08274	Ponded	430	20
32-1	Open concrete channel south of Sweetwater Town and Country Shopping Center, western downstream end	32.65978	-117.08224	□1	260	140
32-2	Open concrete channel south of Sweetwater Town and Country Shopping Center, eastern upstream end	32.66029	-117.08045	□1	270	120

ID	Location	Latitude	Longitude	Flow (gpm)	Total Coliform (CFU / mL)	*E. coli* (CFU / mL)
32-3	Catch basin at the northwest corner of Sweetwater Rd. and Prospect St. intersection, inside the Sweetwater Plaza Shopping Center	32.66183	-117.08070	Ponded	410	□10
32-4	Site 42, southwest of Euclid Avenue and 24th Street, south of Southern Community Church	32.66785	-117.07691	□1	55	30

Site 46

Site 46 is a manhole located at the southern end of the South Bay Plaza Shopping Center. Various commercial businesses, including several restaurants and a grocery store, are located within the shopping center. When the site was initially sampled, the area around the site smelled faintly of rotten grease. Laboratory analyses revealed that all three bacterial indicators were in exceedance of their respective action levels.

Photo 7-7 Trash observed around the catch basin behind Seafood City

During the follow-up visit to the site, sediment deposits along with some trash and fallen leaves were observed in the manhole. The water inside was flowing at approximately one gpm. The sample collected appeared yellow in color and had a musty odor. Bacterial counts from the sampled showed elevated levels of total coliform bacteria but minimal levels of *E. coli* (see table below). A few yards south of Site 46 is a catch basin that collects runoff from behind the commercial shopping center. What appeared to be grease residue was observed on the grate of the catch basin. A sample was collected from the ponded water inside (46-1 shown in the following map and table). *E. coli* counts were moderate, while total coliform counted very high.

Other than the surface runoff from the surrounding commercial area, Site 46 appears to receive flow from two main lines. The first line investigated originates from southeast of the site. The field crew traced this line upstream searching for signs of surface runoff or locations with ponded or flowing water. Damp pavement with a trickle of flow (less than one gpm) was observed behind the Seafood City at 1420 E. Plaza Boulevard. Uncontained trash and debris were observed behind the Seafood City and the area smelled faintly of rotten food and grease (see photo 7-7). The field crew also observed an uncovered grease bin behind the site,

Photo 7-8 Uncovered grease bins located behind Seafood City

with some grease residue on the outer surfaces. Dry absorbent material was noted around the outside of the bin (see photo 7-8). A sample was collected from the water discharging into a catch basin behind the store (46-2). Both total coliform and *E. coli* bacteria counts were significantly high. Employees from the business would not specify as to the origin of the water, but the field crew believes it is possibly the result of washing activities.

The field crew continued to investigate the area around this shopping center. A couple grease bins were observed, including a particularly dirty one located behind the Plaza Terrace section of the shopping center (see photo 7-9). Although no surface runoff or water was observed around this grease bin, it is a potential source of bacteria. The field crew continued upstream, collecting a sample from a manhole located in the driveway to 1539 Plaza Blvd (46-3). Both total coliform and *E. coli* bacteria counts were fairly low.

Photo 7-9 Uncovered grease bin and grease residue located behind the Plaza Terrace Shopping Center, upstream of Site 46

The other main line to Site 46 originates from the northeast of the site. During the upstream investigation, it did not appear that this line was contributing much flow to the site. Almost all of the conveyance lines checked were dry and no significant surface runoffs were observed. The field crew was able to collect a sample of ponded water from a manhole located at E. 8th Street, just east of the M Avenue and 8th Street intersection (46-4). Sediment deposits and some trash and organic debris were observed within the manhole. Both total coliform and *E. coli* counts were significantly high. The elevated bacteria levels are likely the result of decomposition of the materials within the ponded water, as opposed to an illicit connection or illegal discharge. However due to the limited amount of water observed throughout the northeastern line, it seems unlikely that this site is responsible for the elevated bacteria levels at Site 46. The field crew believes that the commercial shopping center located around the site is more likely the source. Both of the catch basins sampled in this area (46-1 and 46-2) showed significantly high levels or bacteria, particularly the catch basin behind Seafood City. Grease residue and trash were the most likely sources of bacteria observed in the shopping centers. Recommendations regarding these sites are provided in Section 8 of this report. A table and map summarizing the upstream investigation for Site 46 are presented below.

ID	Location	Latitude	Longitude	Flow (gpm)	Total Coliform (CFU / mL)	*E. coli* (CFU / mL)
46	Site 46: Manhole in south parking lot of South Bay Plaza shopping center	32.67584	-117.09539	1	680	□10
46-1	Catch basin a few yards south of Site 46	32.67574	-117.09539	ponded	1,470	30
46-2	Catch basin behind the Seafood City located at 1420 E. Plaza Boulevard	32.67448	-117.09132	□1	TNTC	120
46-3	Manhole located in front of the Palm Avenue entrance to 1539 Plaza Boulevard	32.67738	-117.08949	ponded	120	10
46-4	Manhole on E. 8th Street, east of the 8th Street and □M□Avenue intersection	32.67969	-117.09357	ponded	1,550	280

8.0 SUMMARY AND RECOMMENDATIONS

8.1 Summary

8.1.1 Summary of Field Screening and Laboratory Analysis Data

All 15 primary monitoring sites were visited during the 2007 Dry Weather Monitoring Program. Alternate monitoring Site 49 was also visited and used as a replacement for Site 20 which was observed to be dry. Follow-up visits were required at four of the sites, based on results found during the field screening portion of the program. Three sites required further upstream investigation for elevated levels of bacterial indicators.

Of the 15 sites sampled, flowing water was observed at 12 of the sites. Flow rates ranged from less than 1 gpm to 218 gpm. Consistent with the previous year, the highest flow rate was measured at Site 31.

pH was measured outside of the acceptable range of 6.5 to 9.0 at only one site in 2007. A pH of 10.0 was measured at Site 44 during the initial site visit. Site 44 also had the highest recorded pH in 2006 as well. The lowest pH, 7.3, was measured at sites 1A, 38, and 46.

Conductivity readings ranged from 1.1 mS/cm to 12.44 mS/cm, the highest being recorded at Site 31. Turbidity measurements ranged from 0.1 NTU to 18.43 NTU. The average turbidity of all the sites visited was 3.62 NTU, which is an improvement over last year when an the average turbidity was 9.90 NTU.

Ammonia nitrogen concentrations were below the action level of 1.0 mg/L at all 15 sites sampled. The highest ammonia concentration, 0.4 mg/L, was recorded at sites 41 and 47. This is an improvement over the previous year, in which ammonia levels ranged up to 1.5 mg/L, exceeding the action level at one site.

For the fifth straight year, no site had a nitrate nitrogen concentration above the action level. Nitrate concentrations ranged from 0.43 mg/L to 2.24 mg/L, well below the 10.0 mg/L action level.

Orthophosphate phosphorus concentrations were below the action level at all 15 sites sampled. Orthophosphate phosphorus concentrations ranged from 0.07 mg/L to 1.17 mg/L.

Surfactant concentrations were above the action level at three of the sites sampled during field screening. Surfactant concentrations dropped below the action level by the time of the follow-up visits for sites 1A and 46. The highest surfactant concentration, 1.25 mg/L, was measured at Site 13A. However, Site 13A was dry on several follow-up visits.

Laboratory analyses were conducted at four sites. Similar to the previous year, elevated levels of bacteria were found at sites 1A, 32, and 46. All three bacterial indicators were recorded above their action levels at sites 1A and 46. Site 32 exceeded the action level for *Enterococcus* bacteria only. All three bacterial indicators were recorded below their action levels at Site 41.

Dissolved cadmium was not detected at any of the sites sampled in 2007. Dissolved copper, lead, and zinc were detected at some of the sites, but not at concentrations exceeding the California Toxics Rule benchmark, given the water hardness.

Pesticides diazinon and chlorpyrifos were not detected at any of the sites selected for laboratory analysis. Oil and grease were also not detected at any of the sites. Surfactants were detected at sites 1A and 46, but at concentrations below the 1.0 mg/L action level.

Waste materials such as glass bottles, aluminum cans, plastic wrappers, Styrofoam, and even a shopping cart were observed at nine of the 15 sites sampled. This is an improvement over the previous year when trash was observed at 13 of the sites. Three of the sites, 1A, 40, and 44 had significant accumulations of waste requiring clean up.

Vegetative growth ranged from no growth to naturally vegetated riparian areas. The sites lacking vegetation were those with minimal exposure sunlight such as manholes, catch basins or well covered outlets. Sediment deposits ranged from coarse to fine, with all of the sites having some size and shape of deposits.

The amount and variety of biological organisms ranged from site to site. Algae was observed at eight of the sites visited. Other various biological organisms observed included fish, insects, snails, crayfish and cockroaches.

In conclusion, the City of National City continues to show some improvement in overall water quality as monitored by the Dry Weather Monitoring Program. The same number of sites required follow-up visits for field screening parameters in 2007 as in 2006. In 2006, three of the four sites continued to have elevated parameters when sampled during the follow-up visit. In 2007, no action level exceedances were noted during the follow-up site visits. A general improvement in the amount and number of sites with trash was also observed in 2007. Only nine sites had noticeable amounts of trash with three of those sites being recommended for clean up. In 2006, 13 sites had noticeable amounts of trash, five of those sites being recommended for clean up. Further field screening and monitoring is still needed in order to determine the extent that water quality has improved in the City of National City.

8.1.2 Summary of Upstream Investigation Data

Based on the results of the upstream investigations and follow-up actions conducted at three sites for the 2007 Dry Weather Monitoring Program for the City of National City, the following conclusions have been developed:

Similar to 2006, sites 1A, 32, and 46 were investigated to locate potential sources of the elevated bacteria levels found during the 2007 Dry Weather Monitoring Program. Petrifilm plates were used in order to perform a quick and comprehensive analysis of bacterial levels present to each site and upstream. Bacteria were generally not found to be originating from a particular source, but rather from conditions present upstream of the site or at the site itself. Various non-point sources such as trash, decomposing algae, and decomposing leaves contributed to the bacteria levels measured at the sites. These sources combined with the slow flow of water through the conveyances system, provide excellent conditions

for bacterial growth. A brief summary of the upstream investigations for bacteria is listed below:

- The elevated bacteria levels at Site 1A do not appear to be the result of a particular point source, but rather the general conditions at the site and further upstream. Decomposing organic material (leaves, grass, algae, seeds) and trash accumulations were observed to be the most likely sources of bacteria at the site and upstream locations. Samples collected from the site and most of the upstream locations all showed elevated levels of bacteria.

- The elevated bacteria levels at Site 32 are likely the result of conditions within the open concrete channel located behind the Sweetwater Crossing Shopping Center. The slow flow of water through the channel, along with the presence of decomposing trash and organic material, provide excellent conditions for bacterial growth. Fecal matter was observed along the channel, and is a likely the source of Enterococcus bacteria to the site. Human inhabitation of the site is also a likely source of bacteria, and may explain the fecal matter observed.

- The commercial shopping centers (South Bay Plaza and Plaza Terrace) surrounding the site and immediately upstream are likely responsible for the elevated levels of bacteria measured at Site 46. Uncontained trash, exposed grease bins and grease residue were observed behind several businesses, particularly behind the Seafood City. Samples collected from catch basins within the shopping centers confirmed the elevated presence of bacteria.

8.2 Recommendations

Based on the results of the year 2007 Dry Weather Monitoring Program for the City of National City, the following actions are recommended for consideration.

Education

- Send out educational material regarding storm water Best Management Practices (BMPs) to the property manager of the Park Villas Apartments, located on Eta Street. Educational material should focus on minimizing irrigation runoff. Excessive irrigation was observed at this apartment complex during the upstream investigation for Site 1A.
- Send out educational material to the businesses of the South Bay Plaza shopping center regarding general housekeeping BMPs for commercial businesses. BMPs should also focus on the proper storage, containment and maintenance of grease bins. Uncontained trash and exposed grease residue are likely sources of bacteria to Site 46.

Maintenance

- Clean out the significant accumulation of trash observed within the concrete channel at Site 1A. Since the downstream section of channel is located within the San Diego City limits, officials from the City of San Diego should be contacted regarding

the clean up of the channel. In order to prevent trash and debris accumulation from occurring at the site, the City should clean out as many catch basins and curbs upstream of Site 1A as possible. In particular, sizeable accumulations of trash were observed along the gutters of Scott Drive. Trash and debris at the site, and further upstream are likely responsible for the elevated levels of bacteria measured at Site 1A.

- Clean out the open concrete channel located behind the Sweetwater Crossing Shopping Center, upstream of Site 32. Decomposing organic material and trash are likely sources of bacteria to Site 32. This area should also be monitored for the presence of human inhabitation. Cleaning activities and fecal matter from the inhabitants may also influence bacteria levels at the site.
- Provide regular trash removal from Site 40. A large volume of trash was observed in the pond of water located beneath the outlet. Items including plastic bottles, wrappers, aluminum cans and Styrofoam were observed caught in the vegetation downstream of the site.
- Provide regular trash removal from the concrete channel located within Kimball Park. The trash was primarily composed of litter such as plastic bottles, aluminum cans, plastic wrappers and Styrofoam. Bulk items of trash, including shopping carts and the lid to a BBQ were observed in the channel, possibly indicating illegal dumping.
- Continue to inspect and monitor the commercial businesses of the South Bay Plaza Shopping Center. Proper storage of grease bins, containment of trash and reducing discharges from these businesses should reduce bacteria levels at Site 46. In particular, the City should contact the manger of the Seafood City located at 1420 E. Plaza Boulevard, to ensure the dumpster and grease bin area behind the store is cleaned up and that no commercial wash water are allowed to discharge from the site to the storm water conveyance system.
- Continue to inspect and monitor the commercial business of the South Bay Plaza Shopping Center. The communal grease bin located behind this small shopping center was particularly dirty. Grease residue was noted on the outer surfaces of the grease bin and surrounding pavement. The significant amount of grease residue observed is potentially a source of bacteria to Site 46. The City should ensure this area is cleaned up and that the grease bin is stored in a manner minimizing the exposure of grease to storm water.

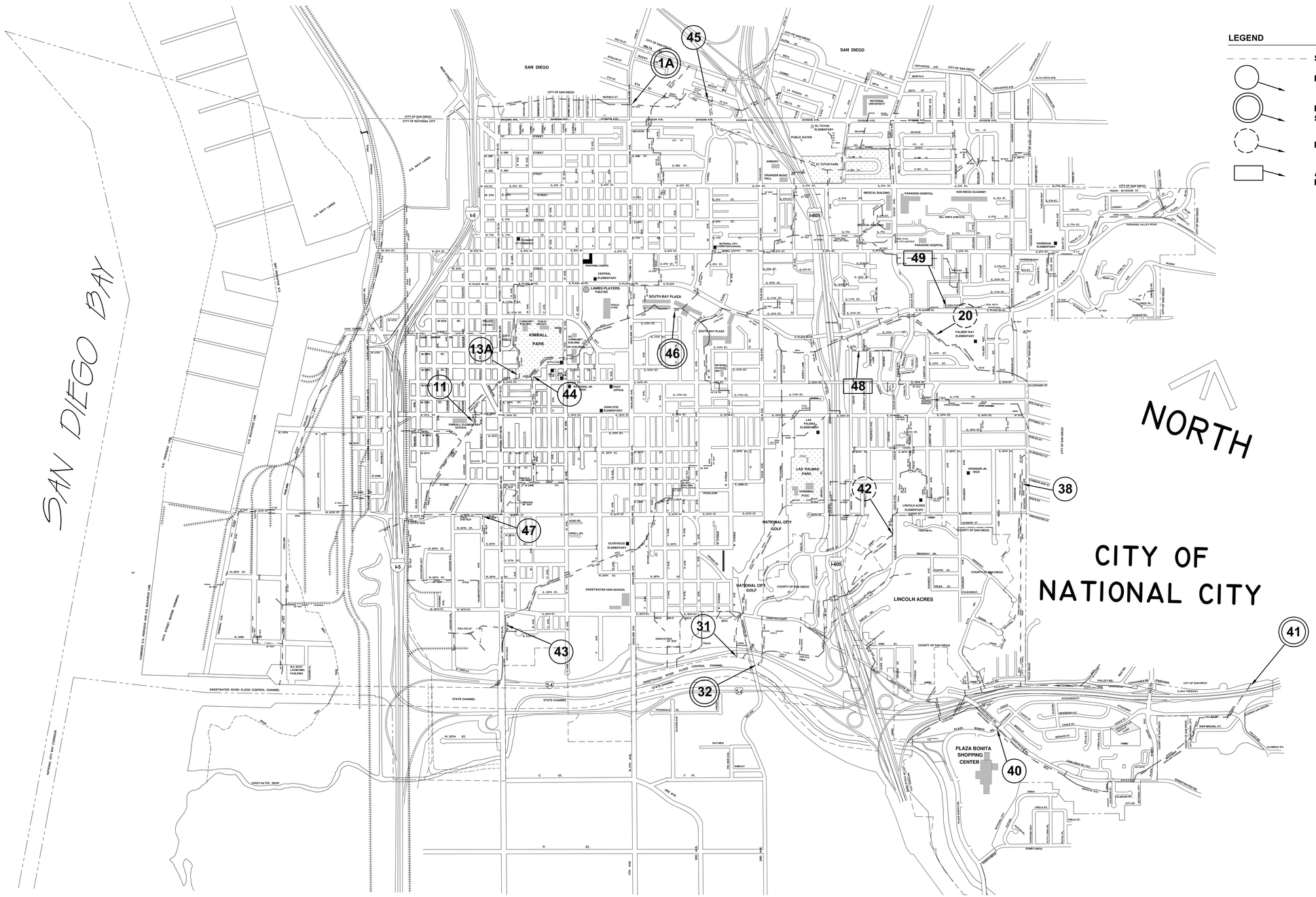

LEGEND

- STORMWATER CONVEYANCE
- FIELD SCREENING SITES
- FIELD SCREENING AND LABORATORY SAMPLING SITES
- PRIMARY SITES OBSERVED DRY
- ALTERNATE SITES SUBSTITUTED FOR DRY PRIMARY SITES

CITY OF NATIONAL CITY

2007 DRY WEATHER MONITORING STATIONS

DRAWN BY: CM	CHECKED BY:	PROJECT NO: 200522W-5	FIGURE NO: 1
FN:NATIONALCITY-DRYWEATHER 2007		DATE: 10-02-07	

D-Max Engineering, Inc.

FIGURE 2
WATERSHED MAP OF THE NATIONAL CITY AREA, BROKEN INTO HYDROLOGIC SUBAREAS

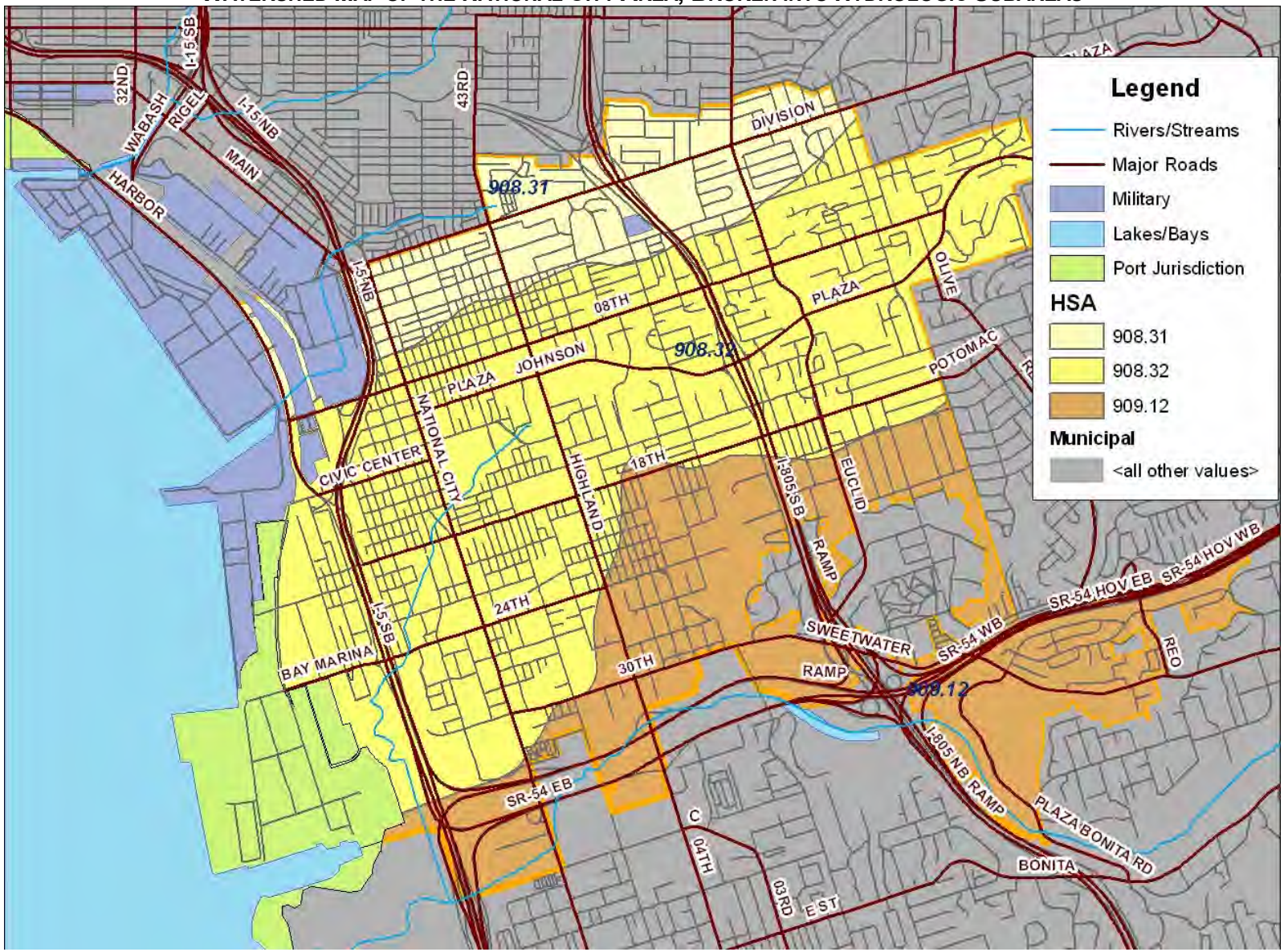

Appendix A

Photographs of Sampling Locations

Site 1A	
Site 11	
Site 13A	

Site 20	
Site 31	
Site 32	

Site 38	
Site 40	
Site 41	

Site 42	
Site 43	
Site 44	

Site 45	
Site 46	
Site 47	

Site 49	

Appendix B

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

25 September 2007

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0709292

Project Name: National City Dry Weather Monitoring
Project Desc./#:200723 W-5

Enclosed are the results of analyses for samples received by the laboratory on 09/18/07 14:47. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0709292

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
32	0709292-01	Water	09/18/07 10:15	09/18/07 14:47
1A	0709292-02	Water	09/18/07 11:10	09/18/07 14:47
46	0709292-03	Water	09/18/07 12:20	09/18/07 14:47
41	0709292-04	Water	09/18/07 13:30	09/18/07 14:47

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0709292

Metals (Dissolved) by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32 (0709292-01) Water Sampled: 09/18/07 10:15 Received: 09/18/07 14:47									
Cadmium	ND	0.005	mg/l	1	7092018	09/20/07	09/20/07	EPA 6020	
Zinc	**0.034**	0.020	"	"	"	"	"	"	
Copper	**0.008**	0.005	"	"	"	"	"	"	
Lead	ND	0.005	"	"	"	"	"	"	
1A (0709292-02) Water Sampled: 09/18/07 11:10 Received: 09/18/07 14:47									
Lead	**0.008**	0.005	mg/l	1	7092018	09/20/07	09/20/07	EPA 6020	
Zinc	**0.041**	0.020	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
46 (0709292-03) Water Sampled: 09/18/07 12:20 Received: 09/18/07 14:47									
Lead	ND	0.005	mg/l	1	7092018	09/20/07	09/20/07	EPA 6020	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	
41 (0709292-04) Water Sampled: 09/18/07 13:30 Received: 09/18/07 14:47									
Zinc	ND	0.020	mg/l	1	7092018	09/20/07	09/20/07	EPA 6020	
Lead	ND	0.005	"	"	"	"	"	"	
Copper	ND	0.005	"	"	"	"	"	"	
Cadmium	ND	0.005	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0709292

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32 (0709292-01) Water Sampled: 09/18/07 10:15 Received: 09/18/07 14:47									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7091920	09/19/07	09/21/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*139 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*120 %*	*60-130*		"	"	"	"	
1A (0709292-02) Water Sampled: 09/18/07 11:10 Received: 09/18/07 14:47									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7091920	09/19/07	09/21/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*408 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*115 %*	*60-130*		"	"	"	"	
46 (0709292-03) Water Sampled: 09/18/07 12:20 Received: 09/18/07 14:47									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7091920	09/19/07	09/21/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*896 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*115 %*	*60-130*		"	"	"	"	
41 (0709292-04) Water Sampled: 09/18/07 13:30 Received: 09/18/07 14:47									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	7091920	09/19/07	09/21/07	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*344 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*112 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0709292

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32 (0709292-01) Water Sampled: 09/18/07 10:15 Received: 09/18/07 14:47									
Hardness (Total)	**279**	10	mg CaCO3/L	1	7092030	09/20/07	09/24/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	"	7091922	09/19/07	09/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7091803	09/19/07	09/19/07	EPA 1664	
1A (0709292-02) Water Sampled: 09/18/07 11:10 Received: 09/18/07 14:47									
Hardness (Total)	**234**	10	mg CaCO3/L	1	7092030	09/20/07	09/24/07	EPA 200.7	
Methylene Blue Active Substances	**0.7**	0.5	mg/l	"	7091922	09/19/07	09/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7091803	09/19/07	09/19/07	EPA 1664	
46 (0709292-03) Water Sampled: 09/18/07 12:20 Received: 09/18/07 14:47									
Hardness (Total)	**354**	10	mg CaCO3/L	1	7092030	09/20/07	09/24/07	EPA 200.7	
Methylene Blue Active Substances	**0.8**	0.5	mg/l	"	7091922	09/19/07	09/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7091803	09/19/07	09/19/07	EPA 1664	
41 (0709292-04) Water Sampled: 09/18/07 13:30 Received: 09/18/07 14:47									
Hardness (Total)	**1010**	100	mg CaCO3/L	10	7092030	09/20/07	09/24/07	EPA 200.7	
Methylene Blue Active Substances	ND	0.5	mg/l	1	7091922	09/19/07	09/19/07	SM5540 C	
Oil & Grease	ND	5	"	"	7091803	09/19/07	09/19/07	EPA 1664	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0709292

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32 (0709292-01) Water Sampled: 09/18/07 10:15 Received: 09/18/07 14:47									
Total Coliforms	**23000**	2000	MPN/100 ml	1000	7092003	09/18/07	09/22/07	SM 9221 B, E	
Fecal Coliforms	**8000**	200	"	100	"	"	09/21/07	"	
Enterococcus	**13000**	200	"	"	7092006	"	09/22/07	SM 9230 A, B	
1A (0709292-02) Water Sampled: 09/18/07 11:10 Received: 09/18/07 14:47									
Total Coliforms	**500000**	2000	MPN/100 ml	1000	7092003	09/18/07	09/22/07	SM 9221 B, E	
Fecal Coliforms	**24000**	200	"	100	"	"	09/21/07	"	
Enterococcus	**24000**	200	"	"	7092006	"	09/22/07	SM 9230 A, B	
46 (0709292-03) Water Sampled: 09/18/07 12:20 Received: 09/18/07 14:47									
Total Coliforms	>1600000	2000	MPN/100 ml	1000	7092003	09/18/07	09/22/07	SM 9221 B, E	
Total Coliforms	**>1600000**	2000	MPN/100 ml	1000	7092003	09/18/07	09/22/07	SM 9221 B, E	
Fecal Coliforms	>160000	200	"	100	"	"	09/21/07	"	
Fecal Coliforms	**>160000**	200	"	100	"	"	09/21/07	"	
Enterococcus	>160000	200	"	"	7092006	"	09/22/07	SM 9230 A, B	
Enterococcus	**>160000**	200	"	"	7092006	"	09/22/07	SM 9230 A, B	
41 (0709292-04) Water Sampled: 09/18/07 13:30 Received: 09/18/07 14:47									
Total Coliforms	**30000**	2000	MPN/100 ml	1000	7092003	09/18/07	09/22/07	SM 9221 B, E	
Fecal Coliforms	**2300**	200	"	100	"	"	09/21/07	"	
Enterococcus	**2300**	200	"	"	7092006	"	09/22/07	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0709292

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7092018										
Blank (7092018-BLK1)				Prepared & Analyzed: 09/20/07						
Cadmium	ND	0.005	mg/l							
Copper	ND	0.005	"							
Lead	ND	0.005	"							
Zinc	ND	0.020	"							
LCS (7092018-BS1)				Prepared & Analyzed: 09/20/07						
Lead	0.103	0.005	mg/l	0.100		103	75-125			
Copper	0.092	0.005	"	0.100		92	75-125			
Zinc	0.095	0.020	"	0.100		95	75-125			
Cadmium	0.099	0.005	"	0.100		99	75-125			
LCS Dup (7092018-BSD1)				Prepared & Analyzed: 09/20/07						
Cadmium	0.095	0.005	mg/l	0.100		95	75-125	4	20	
Lead	0.102	0.005	"	0.100		102	75-125	1	20	
Zinc	0.094	0.020	"	0.100		94	75-125	1	20	
Copper	0.092	0.005	"	0.100		92	75-125	0	20	
Duplicate (7092018-DUP1)		**Source: 0709292-01**		Prepared & Analyzed: 09/20/07						
Lead	ND	0.005	mg/l		ND				20	
Zinc	0.035	0.020	"		0.034			3	20	
Cadmium	ND	0.005	"		ND				20	
Copper	0.007	0.005	"		0.008			13	20	
Matrix Spike (7092018-MS1)		**Source: 0709292-01**		Prepared & Analyzed: 09/20/07						
Lead	0.110	0.005	mg/l	0.100	ND	110	75-125			
Zinc	0.147	0.020	"	0.100	0.034	113	75-125			
Copper	0.097	0.005	"	0.100	0.008	89	75-125			
Cadmium	0.111	0.005	"	0.100	ND	111	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0709292

Metals (Dissolved) by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7092018										
Matrix Spike Dup (7092018-MSD1)		**Source: 0709292-01**		Prepared & Analyzed: 09/20/07						
Lead	0.107	0.005	mg/l	0.100	ND	107	75-125	3	20	
Cadmium	0.107	0.005	"	0.100	ND	107	75-125	4	20	
Zinc	0.130	0.020	"	0.100	0.034	96	75-125	12	20	
Copper	0.096	0.005	"	0.100	0.008	88	75-125	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0709292

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7091920										
Blank (7091920-BLK1)				Prepared: 09/19/07	Analyzed: 09/21/07					
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.234*		*"*	*0.250*		*94*	*60-130*			
Surrogate: Tribuytlphosphate	*0.217*		*"*	*0.250*		*87*	*60-130*			
LCS (7091920-BS1)				Prepared: 09/19/07	Analyzed: 09/21/07					
Bolstar	0.45	0.10	ug/l	0.500		90	60-130			
Diazinon	0.45	0.05	"	0.500		90	60-130			
Ethoprop	0.44	0.05	"	0.500		88	60-130			
Mevinphos	0.36	0.25	"	0.500		72	60-130			
Methyl parathion	0.44	0.10	"	0.500		88	60-130			
Phorate	0.46	0.05	"	0.500		92	60-130			
Ronnel	0.47	0.25	"	0.500		94	60-130			
Trichlorinate	0.49	0.05	"	0.500		98	60-130			
Surrogate: Triphenyl phosphate	*0.247*		*"*	*0.250*		*99*	*60-130*			
Surrogate: Tribuytlphosphate	*0.244*		*"*	*0.250*		*98*	*60-130*			
LCS Dup (7091920-BSD1)				Prepared: 09/19/07	Analyzed: 09/21/07					
Bolstar	0.44	0.10	ug/l	0.500		88	60-130	2	30	
Diazinon	0.46	0.05	"	0.500		92	60-130	2	30	
Ethoprop	0.45	0.05	"	0.500		90	60-130	2	30	
Mevinphos	0.37	0.25	"	0.500		74	60-130	3	30	
Methyl parathion	0.44	0.10	"	0.500		88	60-130	0	30	
Phorate	0.44	0.05	"	0.500		88	60-130	4	30	
Ronnel	0.48	0.25	"	0.500		96	60-130	2	30	
Trichlorinate	0.48	0.05	"	0.500		96	60-130	2	30	
Surrogate: Triphenyl phosphate	*0.246*		*"*	*0.250*		*98*	*60-130*			
Surrogate: Tribuytlphosphate	*0.229*		*"*	*0.250*		*92*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0709292

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7091803										
Blank (7091803-BLK1)				Prepared & Analyzed: 09/18/07						
Oil & Grease	ND	5	mg/l							
LCS (7091803-BS1)				Prepared & Analyzed: 09/18/07						
Oil & Grease	87	5	mg/l	104		84	75-125			
LCS Dup (7091803-BSD1)				Prepared & Analyzed: 09/18/07						
Oil & Grease	87	5	mg/l	98.6		88	75-125	0	20	
Batch 7091922										
Blank (7091922-BLK1)				Prepared: 09/18/07 Analyzed: 09/19/07						
Methylene Blue Active Substances	ND	0.5	mg/l							
LCS (7091922-BS1)				Prepared: 09/18/07 Analyzed: 09/19/07						
Methylene Blue Active Substances	1.0	0.5	mg/l	1.00		100	80-120			
LCS Dup (7091922-BSD1)				Prepared: 09/18/07 Analyzed: 09/19/07						
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00		110	80-120	10	20	
Duplicate (7091922-DUP1)		**Source: 0709292-01**		Prepared: 09/18/07 Analyzed: 09/19/07						
Methylene Blue Active Substances	0.1	0.5	mg/l		0.1			0	20	
Matrix Spike (7091922-MS1)		**Source: 0709292-01**		Prepared: 09/18/07 Analyzed: 09/19/07						
Methylene Blue Active Substances	1.2	0.5	mg/l	1.00	0.1	110	80-120			
Matrix Spike Dup (7091922-MSD1)		**Source: 0709292-01**		Prepared: 09/18/07 Analyzed: 09/19/07						
Methylene Blue Active Substances	1.1	0.5	mg/l	1.00	0.1	100	80-120	9	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0709292

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7092030										
Blank (7092030-BLK1)				Prepared: 09/20/07	Analyzed: 09/24/07					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (7092030-DUP1)		**Source: 0709292-01**		Prepared: 09/20/07	Analyzed: 09/24/07					
Hardness (Total)	286	10	mg CaCO3/L		279			2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
A-07	>1600000
A-06	>160000
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CHAIN-OF-CUSTODY FORM

EnviroMatrix **EMA** *Analytical, Inc.*

4340 Viewridge Ave., Ste. A · San Diego, CA 92123 · Phone (858) 560-7717 · Fax (858) 560-7763

page 1 of 1

EMA LOG #: 0709292

Client: D-Max Engineering, Inc.

Attn: Arsalan Dadkhah

Sampler(s):

Address: 7220 Trade St. Suite 119
San Diego, CA 92129

Phone: (858) 586-6600 Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: National City Dry Weather

Project #: 200723 W-5 PO#:

SAMPLE DETAILS

REQUESTED ANALYSIS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease 413.1 / 413.2 / 664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) Gas Diesel Ext ASTM D2887	624 / 8260 (VOC) Full BTXE MTBE Oxy Nap	625 / 8270 (Semi Volatile Organics) PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Dia/chlro	TBT (Organotin Compounds)	pH Conductivity (EC) TSS TDS	Nitrate Nitrite TKN NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) Metals Organics	Cd Cr Cu Pb Ni Ag Zn Dissolved	Coliform, Total (MTF) Fecal (MTF) Coliform, T+E.Coli	Enterococcus, MTF Idexx	Heterotrophic Plate Count (HPC)	Total Hardness	MBAS					Microbiology No	Sample Comments
01	32	9/18/07 10:15	water	2/4 G/P	X							X							X	X	X		X	X							
02	1A	" 11:10	"	"	X							X							X	X	X		X	X							
03	46	" 12:20	"	"	X							X							X	X	X		X	X							
04	41	" 13:30	"	"	X							X							X	X	X		X	X							
05																															
06																															
07																															
08																															
09																															
10																															

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: Courier UPS FedEx USPS Client drop off Other

[1]**Turnaround Time:** Same day 24 hr 48 hr 3 day 4 day 5 day STD (7 day)

[1]**Reporting Requirements:** Fax PDF Excel Geotracker EDF Other

[1]**Sample Disposal:** By Laboratory [2]Return to client: P/U or Delivery Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A — Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temperature @ Receipt: 13°C

COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY		RECEIVED BY		DATE/TIME STA
Signature	Manouchehr Dadkhah	Signature	Joe Leonard	9/18/07 14:30
Print	Manouchehr Dadkhah	Print		
Company	D-Max Eng.	Company	EMA	
Signature	Joe Leonard	Signature	MIKE LAMBUTH	9/18/07 14:47
Print		Print		
Company	EMA	Company	EMA	
Signature		Signature		
Print		Print		
Company		Company		

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Client (Relinquish Samples)

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

Appendix C

Field Data Sheets

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	1A		**Latitude**	32.68575	**Watershed**	**Hydrologic Unit**	908
Location	Southwest of 43rd Street and Nordica Avenue		**Longitude**	-117.10166		**Hydrologic Area**	908.3
			TB Page	1284-H7		**Hydrologic Subarea** (Optional)	908.31
Date	4/18/07	**Time** 11:10	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☒ > 72 hours ☐ < 72 hours
Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☒ Insects	☒ Algae	☒ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 23, 24, 25

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.8	**NH_3-N** (mg/L)	0.1	**NO_3** (mg/L)	2.7	**Ortho -PO_4** (mg/L)	1.4
pH (pH units)	7.3	**MBAS** (mg/L)	1.0	**NO_3-N** (mg/L)	0.61	**Ortho –PO4-P**(mg/L)	0.46
COND (mS/cm)	1.22	**TURB** (NTU)	0.10	**Other**			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Lots of trash accumulating at the mouth of the outlet

City of National City
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☒ IC/ID Follow-Up For Surfactants

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	1A		**Latitude**	32.68575	**Watershed**	**Hydrologic Unit**	908
Location	Southwest of 43rd Street and Nordica Avenue		**Longitude**	-117.0166		**Hydrologic Area**	908.3
			TB Page	1289-H7		**Hydrologic Subarea** (Optional)	908.31
Date	9/19/07	**Time** 14:10	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☒ > 72 hours ☐ < 72 hours
Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☒ Insects	☒ Algae	☒ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.1	**NH_3-N** (mg/L)	NA	**NO_3** (mg/L)	NA	**Ortho -PO_4** (mg/L)	NA
pH (pH units)	7.4	**MBAS** (mg/L)	0.75	**NO_3-N** (mg/L)	NA	**Ortho –PO4-P**(mg/L)	NA
COND (mS/cm)	1.21	**TURB** (NTU)	NA	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash accumulation at mouth of the outlet.

City of National City
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	1A		**Latitude**	32.68575	**Watershed**	**Hydrologic Unit**	908
Location	Southwest of 43rd Street and Nordica Avenue		**Longitude**	-117.10166		**Hydrologic Area**	908.3
			TB Page	1289-H7		**Hydrologic Subarea** (Optional)	908.31
Date	10/24/07	**Time** 16:05	**Observer**	MDIPS		**Discharge Area** (Optional)	

Land Use (Primary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other ____
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other ____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other ____
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☐ Fine Particulates	☒ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive			☐ Other ____
Biology	☐ None	☐ Insects	☐ Algae	☒ Snails/Fish	☐ Mussels/Barnacles		☐ Other ____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 22, 23, 24, 25

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.9	**NH3-N** (mg/L)	NA	**NO3** (mg/L)	NA	**Ortho -PO4** (mg/L)	NA
pH (pH units)	7.7	**MBAS** (mg/L)	NA	**NO3-N** (mg/L)	NA	**Ortho –PO4-P**(mg/L)	NA
COND (mS/cm)	1.03	**TURB** (NTU)	NA	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Lots and lots of trash accumulating in the vegetation of the site

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	11		Latitude	32.66695	Watershed	Hydrologic Unit	908
Location	North of 18th Street, between Roosevelt Avenue and Hoover Avenue		Longitude	-117.10516		Hydrologic Area	908.3
			TB Page	1309 - H2		Hydrologic Subarea (Optional)	908.32
Date	9/19/07	Time 8:15	Observer	MD/PS		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☐ N/A ☒ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☒ Other fishy
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☒ Other grass clippings
Deposits	☐ None	☐ Coarse Particulate	☐ Fine Particulates	☒ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other _____
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☒ Insects	☒ Algae	☒ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☐ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 30, 31

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	19.9	**NH3-N** (mg/L)	0.3	**NO3** (mg/L)	1.9	**Ortho -PO4** (mg/L)	3.6
pH (pH units)	7.9	**MBAS** (mg/L)	0.75	**NO3-N** (mg/L)	0.43	**Ortho –PO4-P**(mg/L)	1.17
COND (mS/cm)	8.91	**TURB** (NTU)	18.43	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	13A		**Latitude**	32.66942	**Watershed**	**Hydrologic Unit**	908
Location	Northeast of 16th Street and National City Boulevard, inside Kimball Park		**Longitude**	-117.10326		**Hydrologic Area**	908.3
			TB Page	1309-H2		**Hydrologic Subarea** (Optional)	908.32
Date	9/17/07	**Time** 11:20	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☒ > 72 hours ☐ < 72 hours
Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☒ None ☐ Coarse Particulate ☐ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____
Biology ☒ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1, 2

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.1	**NH_3-N** (mg/L)	0.1	**NO_3** (mg/L)	2.5	**Ortho -PO_4** (mg/L)	2.6
pH (pH units)	8.4	**MBAS** (mg/L)	1.25	**NO_3-N** (mg/L)	0.57	**Ortho –PO4-P**(mg/L)	0.85
COND (mS/cm)	1.27	**TURB** (NTU)	0.92	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Small plastic bag, with candy wrappers, was observed in the path of the flow.

City of National City
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☒ IC/ID Follow-Up For Surfactants

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	13A		Latitude	32.66942	Watershed	Hydrologic Unit	908
Location	Northeast of 16th Street and National City Boulevard, inside Kimball Park		Longitude	-117.10326		Hydrologic Area	908.3
			TB Page	1309-H2		Hydrologic Subarea (Optional)	908.32
Date	9/18/07	Time 8:15	Observer	MD/PS		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☒ Other NA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☒ Other NA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque			☒ Other NA
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☒ None	☐ Coarse Particulate	☐ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive			☐ Other
Biology	☒ None	☐ Insects	☐ Algae	☐ Snails/Fish	☐ Mussels/Barnacles		☐ Other

Flow Observed ☐ Yes ☒ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	**NH_3-N** (mg/L)	NA	**NO_3** (mg/L)	NA	**Ortho -PO_4** (mg/L)	NA
pH (pH units)	NA	**MBAS** (mg/L)	NA	**NO_3-N** (mg/L)	NA	**Ortho –PO4-P**(mg/L)	NA
COND (mS/cm)	NA	**TURB** (NTU)	NA	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	20			Latitude	32.67894	Watershed: Hydrologic Unit	908
Location	East of Landitan Avenue, across from E. 13th Street, South of Palmer Way Middle School			Longitude	-117.07808	Hydrologic Area	908.3
				TB Page	1310-B1	Hydrologic Subarea (Optional)	908.32
Date	9/17/07	Time	15:00	Observer	MD/PS	Discharge Area (Optional)	

Land Use (Primary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☒ > 72 hours ☐ < 72 hours
Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☒ Other NA
Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☒ Other NA
Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☒ Other NA
Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Coarse Particulate ☐ Fine Particulates ☒ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other _____
Biology ☐ None ☒ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☐ Yes ☒ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 12,13

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NA	**NH3-N** (mg/L)	NA	**NO3** (mg/L)	NA	**Ortho -PO4** (mg/L)	NA
pH (pH units)	NA	**MBAS** (mg/L)	NA	**NO3-N** (mg/L)	NA	**Ortho –PO4-P**(mg/L)	NA
COND (mS/cm)	NA	**TURB** (NTU)	NA	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Possible human inhabitation of site.

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	31		Latitude	32.65861	Watershed	Hydrologic Unit	909
Location	on the Sweetwater River, west of 2nd Avenue and Edgemere Avenue		Longitude	-117.08447		Hydrologic Area	909.1
			TB Page	1310-B3		Hydrologic Subarea (Optional)	909.12
Date	9/17/07	Time 16:30	Observer	MD/PS		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other _____
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other _____
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains ☐ Oily Deposit	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other _____
Biology	☐ None	☒ Insects	☒ Algae	☒ Snails/Fish	☐ Mussels/Barnacles	☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 15, 16, 17

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.4	**NH3-N** (mg/L)	0.3	**NO3** (mg/L)	2.3	**Ortho -PO4** (mg/L)	0.2
pH (pH units)	8.0	**MBAS** (mg/L)	0.75	**NO3-N** (mg/L)	0.52	**Ortho –PO4-P**(mg/L)	0.07
COND (mS/cm)	12.44	**TURB** (NTU)	0.10	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	70	in
Depth	1.0	in
Velocity	10/10	ft/sec
Flow	218	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	32		**Latitude**	32.65887	**Watershed**	**Hydrologic Unit**	909
Location	East of 2nd Avenue, north of Freeway 54 and Sweetwater River		**Longitude**	-117.08274		**Hydrologic Area**	909.1
			TB Page	1310-B3		**Hydrologic Subarea** (Optional)	909.12
Date	9/18/07	**Time** 10:15	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Conveyance ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog
Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☒ > 72 hours ☐ < 72 hours
Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other _____
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other _____
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains ☐ Oily Deposit	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other _____
Biology	☐ None	☒ Insects	☒ Algae	☒ Snails/Fish	☐ Mussels/Barnacles	☐ Other _____

Flow Observed ☐ Yes ☐ No ☒ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 20, 21, 22

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	19.1	**NH_3-N** (mg/L)	0.1	**NO_3** (mg/L)	5.1	**Ortho -PO_4** (mg/L)	1.3
pH (pH units)	7.7	**MBAS** (mg/L)	0.5	**NO_3-N** (mg/L)	1.15	**Ortho –PO4-P**(mg/L)	0.42
COND (mS/cm)	1.74	**TURB** (NTU)	1.60	**Other**			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: It appears that humans reside furthest upstream within the channel and outlet.

City of National City
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	32		**Latitude**	32.65887	**Watershed**	**Hydrologic Unit**	909
Location	East of 2nd Ave. north of freeway 54 and Sweetwater River		**Longitude**	-117.08274		**Hydrologic Area**	909.1
			TB Page	1310-B3		**Hydrologic Subarea** (Optional)	909.12
Date	10/24/07	**Time** 11:10	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open

Conveyance ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☐ Insects	☒ Algae	☒ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☐ Yes ☐ No ☒ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1,2,3,4,5

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	18.6	**NH3-N** (mg/L)	NA	**NO3** (mg/L)	NA	**Ortho -PO4** (mg/L)	NA
pH (pH units)	7.9	**MBAS** (mg/L)	NA	**NO3-N** (mg/L)	NA	**Ortho –PO4-P**(mg/L)	NA
COND (mS/cm)	1.74	**TURB** (NTU)	NA	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: possible human inhabitation of the site.

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	38		Latitude	32.67265	Watershed	Hydrologic Unit	909
Location	Dirt Road, west of Harbison Avenue, between 20th Street and 24th Street, at end of the fence line		Longitude	-117.07057		Hydrologic Area	909.1
			TB Page	1310-C1		Hydrologic Subarea (Optional)	909.12
Date	9/17/07	Time 12:00	Observer	MD/PS		Discharge Area (Optional)	

Land Use (Primary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☐ Fine Particulates	☒ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☒ Insects	☐ Algae	☐ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 3,4

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.8	**NH_3-N** (mg/L)	0.3	**NO_3** (mg/L)	9.9	**Ortho -PO_4** (mg/L)	1.2
pH (pH units)	7.3	**MBAS** (mg/L)	0.75	**NO_3-N** (mg/L)	2.24	**Ortho –PO4-P**(mg/L)	0.39
COND (mS/cm)	5.04	**TURB** (NTU)	2.97	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	40		**Latitude**	32.65961	**Watershed**	**Hydrologic Unit**	909
Location	Southwest corner of Sweetwater Road and Plaza Bonita/Stockton St., Down in channel		**Longitude**	-117.06677		**Hydrologic Area**	904.1
			TB Page	1310-D3		**Hydrologic Subarea** (Optional)	904.12
Date	9/19/07	**Time** 11:30	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog
Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☒ > 72 hours ☐ < 72 hours
Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Coarse Particulate ☐ Fine Particulates ☒ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other _____
Biology ☐ None ☒ Insects ☒ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 35

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)	19.2	**NH_3-N** (mg/L)	0.1	**NO_3** (mg/L)	3.9	**Ortho -PO_4** (mg/L)	1.1
pH (pH units)	7.5	**MBAS** (mg/L)	0.5	**NO_3-N** (mg/L)	0.88	**Ortho –PO4-P**(mg/L)	0.36
COND (mS/cm)	2.68	**TURB** (NTU)	0.10	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Lots of trash, mostly plastic bottles, plastic wrappers, glass bottles, and some Styrofoam. Also aluminum cans.

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	41		**Latitude**	32.66588	**Watershed**	**Hydrologic Unit**	909
Location	Northeast of San Miguel Court and Valley Road, inside Park Bonita Apartment Complex		**Longitude**	-117.05083		**Hydrologic Area**	909.1
			TB Page	1310-E3		**Hydrologic Subarea** (Optional)	909.12
Date	9/18/07	**Time** 13:30	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☒ > 72 hours ☐ < 72 hours
Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Coarse Particulate ☐ Fine Particulates ☒ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other _____
Biology ☐ None ☒ Insects ☒ Algae ☒ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 28,29

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.8	**NH3-N** (mg/L)	0.4	**NO3** (mg/L)	7.8	**Ortho -PO4** (mg/L)	1.1
pH (pH units)	8.2	**MBAS** (mg/L)	0.63	**NO3-N** (mg/L)	1.76	**Ortho –PO4-P**(mg/L)	0.36
COND (mS/cm)	4.21	**TURB** (NTU)	5.08	**Other**			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	42		**Latitude**	32.66785	**Watershed**	**Hydrologic Unit**	909
Location	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church		**Longitude**	-117.07641		**Hydrologic Area**	909.1
			TB Page	1310-B2		**Hydrologic Subarea** (Optional)	909.12
Date	9/17/07	**Time** 15:35	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☒ Insects	☐ Algae	☒ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 14

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.2	**NH3-N** (mg/L)	0.3	**NO3** (mg/L)	4.7	**Ortho -PO4** (mg/L)	3.1
pH (pH units)	8.1	**MBAS** (mg/L)	0.63	**NO3-N** (mg/L)	1.06	**Ortho –PO4-P**(mg/L)	1.01
COND (mS/cm)	1.41	**TURB** (NTU)	3.38	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	43		**Latitude**	32.65620	**Watershed**	**Hydrologic Unit**	908
Location	South of National City Boulevard and 30th Street intersection, in front of South Bay Volkswagen		**Longitude**	-117.09911		**Hydrologic Area**	908.3
			TB Page	1309-J4		**Hydrologic Subarea** (Optional)	908.32
Date	9/19/07	**Time** 9:10	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog
Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☒ > 72 hours ☐ < 72 hours
Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive			☐ Other _____
Biology	☒ None	☐ Insects	☐ Algae	☐ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☐ Yes ☐ No ☒ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 32

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.7	**NH3-N** (mg/L)	0.1	**NO3** (mg/L)	5.9	**Ortho -PO4** (mg/L)	1.7
pH (pH units)	7.4	**MBAS** (mg/L)	0.75	**NO3-N** (mg/L)	1.33	**Ortho –PO4-P**(mg/L)	0.55
COND (mS/cm)	1.44	**TURB** (NTU)	5.46	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	44		**Latitude**	32.66982	**Watershed**	**Hydrologic Unit**	908
Location	Northeast of 16th Street and National City Boulevard, under the bridge in Kimball Park		**Longitude**	-117.10247		**Hydrologic Area**	908.3
			TB Page	1309-H2		**Hydrologic Subarea** (Optional)	908.32
Date	9/17/07	**Time** 14:10	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☒ Insects	☒ Algae	☒ Snails/	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☐ Yes ☐ No ☒ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 5,6,7,8,9,10,11

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.5	**NH_3-N** (mg/L)	0.1	**NO_3** (mg/L)	2.6	**Ortho -PO_4** (mg/L)	1.4
pH (pH units)	10.00	**MBAS** (mg/L)	0.38	**NO_3-N** (mg/L)	0.59	**Ortho –PO4-P**(mg/L)	0.46
COND (mS/cm)	1.18	**TURB** (NTU)	4.77	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Lots of trash upstream in the channel. Plastic bags, bottles, food wrappers, glass bottles, aluminum cans, and an old BBQ.

City of National City
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☒ IC/ID Follow-Up For pH

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	44		Latitude	32.66982	Watershed	Hydrologic Unit	908
Location	Northeast of 16th Street and National City Boulevard under the bridge in Kimball Park		Longitude	-117.10247		Hydrologic Area	908.3
			TB Page	1309-H2		Hydrologic Subarea (Optional)	908.32
Date	9/18/07	Time 8:40	Observer	MD/PS		Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog
Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☒ > 72 hours ☐ < 72 hours
Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Coarse Particulate ☒ Fine Particulates ☐ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other _____
Biology ☐ None ☒ Insects ☒ Algae ☒ Shells ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	19.6	**NH3-N** (mg/L)	NA	**NO3** (mg/L)	NA	**Ortho -PO4** (mg/L)	NA
pH (pH units)	7.9	**MBAS** (mg/L)	NA	**NO3-N** (mg/L)	NA	**Ortho –PO4-P**(mg/L)	NA
COND (mS/cm)	1.23	**TURB** (NTU)	NA	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	45		Latitude	32.68739	Watershed	Hydrologic Unit	908
Location	In front of 1243-1305 Fig Court, in the middle of the street		Longitude	-117.09690		Hydrologic Area	908.3
			TB Page	1284-J7		Hydrologic Subarea (Optional)	908.31
Date	9/19/07	Time 12:15	Observer	MD / PS		Discharge Area (Optional)	

Land Use (Primary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open

Conveyance ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☐ Insects	☐ Algae	☐ Snails/Fish	☐ Mussels/Barnacles		☒ Other cock roaches

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 36, 37, 38

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)	22.7	**NH_3-N** (mg/L)	Nd	**NO_3** (mg/L)	2.5	**Ortho -PO_4** (mg/L)	0.4
pH (pH units)	8.3	**MBAS** (mg/L)	0.75	**NO_3-N** (mg/L)	0.57	**Ortho –PO4-P**(mg/L)	0.13
COND (mS/cm)	1.06	**TURB** (NTU)	0.10	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Observed construction site nearby the manhole. cock roaches observed inside the manhole.

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	46			Latitude	32.67584	Watershed: Hydrologic Unit	908
Location	South of the South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop			Longitude	-117.09539	Hydrologic Area	908.3
				TB Page	1309-J1	Hydrologic Subarea (Optional)	908.32
Date	9/18/07	Time	12:20	Observer	MD/PS	Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☒ > 72 hours ☐ < 72 hours
Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other
Deposits ☐ None ☐ Coarse Particulate ☐ Fine Particulates ☒ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other
Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____
Biology ☐ None ☐ Insects ☐ Algae ☒ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 26, 27

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.8	**NH3-N** (mg/L)	0.1	**NO3** (mg/L)	2.0	**Ortho -PO4** (mg/L)	2.7
pH (pH units)	7.3	**MBAS** (mg/L)	1.0	**NO3-N** (mg/L)	0.45	**Ortho –PO4-P**(mg/L)	0.88
COND (mS/cm)	1.42	**TURB** (NTU)	7.98	**Other**			

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Nearby the site smelled of rotten grease.

City of National City
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☒ IC/ID Follow-Up For Surfactants

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	46		**Latitude**	32.67584	**Watershed**	**Hydrologic Unit**	908
Location	South of the South Bay Plaza Center, between Fashion Plaza Fiesta Pet Shop		**Longitude**	-117.09539		**Hydrologic Area**	908.3
			TB Page	1309-J1		**Hydrologic Subarea** (Optional)	908.32
Date	9/19/07	**Time** 15:00	**Observer**	MD/PS		**Discharge Area** (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☐ Fine Particulates	☒ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive			☐ Other _____
Biology	☐ None	☐ Insects	☐ Algae	☒ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.3	**NH_3-N** (mg/L)	NA	**NO_3** (mg/L)	NA	**Ortho -PO_4** (mg/L)	NA
pH (pH units)	7.3	**MBAS** (mg/L)	0.75	**NO_3-N** (mg/L)	NA	**Ortho –PO4-P**(mg/L)	NA
COND (mS/cm)	1.25	**TURB** (NTU)	NA	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of National City
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☒ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID	46		**Latitude**	32.67584	**Watershed**	**Hydrologic Unit**	908
Location	South of South Bay Plaza center between Fashion Plaza and Fiesta Pet Shop		**Longitude**	-117.09539		**Hydrologic Area**	908.3
			TB Page	1309-J1		**Hydrologic Subarea** (Optional)	908.32
Date	10/25/07	**Time** 14:15	**Observer**	MD / PS		**Discharge Area** (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☒ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Coarse Particulate ☐ Fine Particulates ☒ Coarse & Fine ☐ Stains ☐ Oily Deposit ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____

Biology ☒ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 36

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	21.4	**NH3-N** (mg/L)		**NO3** (mg/L)		**Ortho -PO4** (mg/L)	
pH (pH units)	7.8	**MBAS** (mg/L)		**NO3-N** (mg/L)		**Ortho –PO4-P**(mg/L)	
COND (mS/cm)	1.39	**TURB** (NTU)		**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Some trash & organic debris. Lots of sediment.

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	47			Latitude	32.66163	Watershed: Hydrologic Unit	908
Location	Southeast corner of the Mile of Cars way and Transportation Avenue			Longitude	-117.10275	Hydrologic Area	908.3
				TB Page	1309-H3	Hydrologic Subarea (Optional)	908.32
Date	9/19/07	Time	10:20	Observer	MD/PS	Discharge Area (Optional)	

Land Use (Primary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage		☐ Other _____
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray		☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque			☐ Other _____
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter		☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains	☐ Oily Deposit	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive			☐ Other _____
Biology	☒ None	☐ Insects	☐ Algae	☐ Snails/Fish	☐ Mussels/Barnacles		☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 33,34

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.1	**NH_3-N** (mg/L)	0.4	**NO_3** (mg/L)	2.0	**Ortho -PO_4** (mg/L)	2.2
pH (pH units)	8.2	**MBAS** (mg/L)	0.75	**NO_3-N** (mg/L)	0.45	**Ortho –PO4-P**(mg/L)	0.72
COND (mS/cm)	2.74	**TURB** (NTU)	0.67	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

City of National City
Dry Weather Monitoring Field Datasheet

☒ Routine Investigation ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place)

Site ID	49			Latitude	32.68102	Watershed: Hydrologic Unit	908
Location	South end of Arcadia Place (through Harbison Avenue and 11th Street).			Longitude	-117.07751	Hydrologic Area	908.3
				TB Page	1290-B7	Hydrologic Subarea (Optional)	908.32
Date	9/18/07	Time	9:15	Observer	MD/PS	Discharge Area (Optional)	

Land Use (Primary) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Conveyance ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other _____
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other _____
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other _____
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Coarse Particulate	☒ Fine Particulates	☐ Coarse & Fine	☐ Stains ☐ Oily Deposit	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other _____
Biology	☐ None	☒ Insects	☒ Algae	☒ Snails/Fish	☐ Mussels/Barnacles	☐ Other _____

Flow Observed ☒ Yes ☐ No ☐ Ponded ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 18, 19

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	20.5	**NH3-N** (mg/L)	0.1	**NO3** (mg/L)	1.9	**Ortho -PO4** (mg/L)	2.0
pH (pH units)	8.3	**MBAS** (mg/L)	0.5	**NO3-N** (mg/L)	0.43	**Ortho –PO4-P**(mg/L)	0.65
COND (mS/cm)	2.09	**TURB** (NTU)	2.67	**Other**			

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

ATTACHMENT 7.2

CITY OF NATIONAL CITY DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING 2008

City of National City
Dry Weather Field Screening and Analytical Monitoring Program
2008

Submitted to:

City of National City
Engineering Department
1243 National City Boulevard
National City, CA 91950

Prepared by:

D-Max Engineering, Inc.
7220 Trade Street Suite 119
San Diego, CA 92121
Tel: (858) 586-6600
Fax: (858) 586-6644

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

December 2, 2008
Project No. 200840W-5

Mr. Din Daneshfar
City of National City
Engineering Department
1243 National City Boulevard
National City, CA 91950

Re: 2008 Dry Weather Field Screening and Analytical Monitoring Program
City of National City, California

Dear Mr. Daneshfar:

Per your request D-MAX Engineering, Inc. (D-MAX) has completed the 2008 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of National City during the 2008 dry weather season. The contents include field screening data and analytical laboratory test results, trash assessment, analyses of the collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. It has been our pleasure working with the City of National City on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

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1 INTRODUCTION

1.1 Regulatory Requirements

In accordance with San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit), each of the Copermittees, including the City of National City (City), is required to annually perform dry weather field screening of discharges into its storm drain system. This procedure is comprised of recording field observations, estimating observed flow rates, and conducting field testing at selected locations along the storm drain conveyance system during the dry weather season, May 1 through September 30. The Municipal Permit also necessitates that Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station should be visited. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. A more detailed trash assessment component has also been required. The Dry Weather Monitoring Program is an integral part of the City's Urban Runoff Monitoring Program.

1.2 Hydrologic Setting

The City lies entirely within the San Diego Bay Watershed Management Area, which includes three watersheds. The City is one of the most densely populated areas of the San Diego Bay Watershed Management Area, but makes up only 1.6% of the total area. The City encompasses hydrologic areas 909.1 and 908.3, of the Sweetwater and Pueblo San Diego Watersheds, respectively. The major receiving water body in the City is the San Diego Bay, which lies due west of the City. Runoff from the southern part of the City initially drains to the Sweetwater River, which ultimately conveys it into the bay. The Sweetwater River and the Sweetwater Marsh are identified by the City as Environmentally Sensitive Areas (ESA). The river flows along the southern border of the City through the Sweetwater Marsh and into the San Diego Bay. Paradise Creek is a small salt marsh creek that receives runoff from the northern areas of the City and discharges into the Sweetwater River. Paradise Creek and Paradise Marsh have also been identified as ESAs. La Paleta Creek traces the northern border of the City, and is 303(d) listed for benthic community effects and sediment toxicity as Seventh Street Channel. The 2008 San Diego Bay Watershed Urban Runoff Management Program (WURMP) Document identified bacteria, sediment, and trash as high priority water quality problems in hydrologic area 908.3 of the Pueblo San Diego Watershed. The San Diego Bay WURMP also identified bacteria as a high priority pollutant category in hydrologic area 909.1 of the Sweetwater Watershed.

1.3 Program Overview

The primary purpose of the Dry Weather Monitoring Program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following three components.

- Field screening observations
- Field analytical testing
- Laboratory analytical testing

Information collected from the dry weather monitoring is used to characterize dry weather discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations were conducted as necessary to detect and eliminate the sources of these pollutants. The results from the 2008 Dry Weather Monitoring Program conducted by D-MAX Engineering, Inc., (D-MAX) are presented herein.

1.4 Previous Work

The City of National City has conducted dry weather field screening programs since 1996 at several locations within the City's storm water conveyance system. A summary of the screening results obtained for each year is presented in Table 1-1.

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER SITES

Year	Number of Sites Screened [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1996	20	Data not available [3]		13	---
1997	7			0	---
1998	7			3	---
1999	7			1	---
2000	7			2	---
2001	10			1	---
2002	15	12	3	2	4
2003	15	13	2	2	4
2004	15	11	4	2	4
2005	15	14	1	2	4
2006	15	14	1	1	4
2007	15	13	2	1	4

Notes:
1 Number of Sites Screened = Number Flowing + Number Ponded. Field screening cannot be conducted at sites found to be dry. Dry sites are replaced by either a flowing or ponded site
2 Laboratory analyses commenced in 2002 as required by RWQCB Order 2001-001
3 Available information does not distinguish between flowing and ponded sites during this period.

1.5 Report Outline

This report is presented in the following order:

Section 1 includes regulatory background, a program overview, a discussion of the City hydrologic setting, a summary of historical field screening data, and the report outline.

Section 2 describes the sampling locations and the site selection criteria.

Section 3 describes the field screening and laboratory analytical procedures. This section also discusses quality assurance protocols used during sampling and lists appropriate action levels for initiating follow-up investigations.

Section 4 discusses the results of the field screening analyses.

Section 5 discusses the results of the trash assessment.

Section 6 discusses the results of the laboratory analyses.

Section 7 provides an analysis of field and laboratory data collected this year, as well as a comparison of past results.

Section 8 details the results of follow-up investigations undertaken to isolate the sources of water contamination detected during the field screening program.

Section 9 provides a summary of the program results and recommendations for follow-up actions.

Appendix A contains historical dry weather monitoring data.

Appendix B contains photographs of each of the investigated sites.

Appendix C contains the laboratory analytical reports.

Appendix D contains original copies of the field data sheets.

2 SAMPLING LOCATIONS

In 2008, the City of National City had 15 designated primary monitoring stations, as well as 6 alternate stations to replace any primary sites that did not have ponded or flowing water. All sampling sites are located in San Diego Hydrologic Units 908 and 909. These sites are also presented in the City's Jurisdictional Urban Runoff Management Program (JURMP), updated in 2007.

Since the previous year of dry weather monitoring, several changes were made to the primary monitoring stations which resulted in the 15 primary sites of the 2008 program. These changes included:

- Moving Site 38 downstream, off private property;
- Removing sites 11, 20, and 31;
- Changing primary sites 43 and 44 to alternate sites;
- Adding new primary sites 3, 4, 43A, and 44A; and
- Adding new alternate sites 6 and 10.

More information about these site changes may be viewed in the City's JURMP (2007). In addition, laboratory sampling was moved from Site 41 to Site 40 in order to more accurately represent runoff that is generated within the City's jurisdictional boundaries.

All 15 primary monitoring stations were visited; the four primary sites found to be dry (4, 13A, 31A, and 42) were replaced by four alternate sites (6, 44, 48, and 49).

Table 2-1 provides the location, conveyance configuration, primary and secondary land uses, hydrologic subarea, and GPS coordinates of the primary and alternate monitoring stations that were visited. Photographs of sampling locations are included as Appendix B. A complete map of the MS4 system, including sampling locations, is included as Figure A. A map of the watersheds in and around National City, broken down into HSAs, is included as Figure B.

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS

Site No	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
1A	Southwest of 43rd Street and Nordica Avenue	Concrete Channel	Residential	Commercial	908.31	32.68575	-117.10166
3	E. 7th Street and R Avenue	Manhole	Residential	Commercial	908.32	32.68183	-117.08894
4	E. 1st Street and U Avenue	Manhole	Parks	Residential	908.31	32.68726	-117.08749
6*	North bank of Sweetwater River ~500 feet east of Highland Ave, access from North 2nd Ave.	Outlet	Industrial	Commercial	909.12	32.65668	-117.08844
13A	Northeast of 16th Street and National City Boulevard, inside Kimball Park	Outlet	Commercial	Residential	908.32	32.66942	-117.10326
31A	North of Sweetwater Road, across from 2nd Avenue at the corner of the golf course	Earthen Channel	Parks	Commercial	909.12	32.66121	-117.08453
32	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River	Outlet	Commercial	Open	909.12	32.65887	-117.08274
38	Dirt road, west of Harbison Avenue, between 20th Street and 24th Street, at the end of fence line	Earthen Channel	Residential	None	909.12	32.67265	-117.07057
40	Southwest corner of Sweetwater Road and Plaza Bonita Road/Stockman Street, down in channel	Outlet	Commercial	Residential	909.12	32.65961	-117.06677
41	Northeast of San Miguel Court and Valley Road, inside Park Bonita Apartment complex	Earthen Channel	Residential	None	909.12	32.66588	-117.05083
42	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church	Outlet	Residential	Commercial	909.12	32.66785	-117.07691
43A	F Avenue between East 24th Street and East 28th Street, west of Olivewood Elementary School	Catch Basin	Residential	Commercial	909.12	32.66134	-117.09447
44*	Northeast of 16th Street and National City Boulevard, under the Kimball Park bridge	Concrete Channel	Commercial	Residential	908.32	32.66982	-117.10247

TABLE 2-1
2008 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site No	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
44A	D Avenue behind Boys and Girls Club in Kimball Park	Outlet	Commercial	Residential	908.32	32.67151	-117.10123
45	In front of 1243-1305 Fig Court, in the middle of street	Manhole	Residential	Parks	908.31	32.68739	-117.09690
46	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	Manhole	Commercial	Residential	908.32	32.67584	-117.09539
47	Southeast corner of the Mile of Cars Way and Transportation Avenue	Manhole	Commercial	Residential	908.32	32.66163	-117.10275
48*	Northwest of East 14th Street and Grove Street	Catch Basin	Residential	None	908.32	32.67673	-117.08321
49*	South end of Arcadia Place (through Harbison Avenue and 11th Street)	Concrete Channel	Residential	Commercial	908.32	32.68095	-117.07770

* Alternate sites 6, 44, 48, and 49 were selected to substitute for dry primary monitoring sites 4, 13A, 31A, and 42.

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of flow measurement, quantitative field analyses of selected water quality parameters, and qualitative field observations. Information relating to weather conditions, the amount of time since last rainfall, and the type of storm water conveyance are recorded. Specific observations and results of the field water quality analyses are documented on field data sheets, which are included in Appendix D. The data sheets also serve as a record of the field visit and are completed for every site visit regardless of whether or not samples were collected.

For 2008, field data sheets were updated to include three categories of visits. Previously they included check boxes for either routine field screening or follow-up visits. This year there are check boxes for routine field screening, confirmation, and IC/ID follow-up visits. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation. For the purposes of this report, confirmation and IC/ID follow-up visits are both referred to as "follow-up" visits.

Field screening and analyses were conducted according to the following procedures and methods.

Qualitative Observations

Irrespective of flow, qualitative field observations are made during each site visit. These observations provide a general site assessment and describe factors like water odor, clarity, the presence of floatables, visible deposits or stains, vegetation and biological organisms. Evidence of present or past illicit connections and illegal discharges to the storm drain system may also be ascertained through careful field observations. Each field screening location is photographed to provide additional information and documentation of site conditions. Photographs are included in Appendix B.

Flow Measurement

Flow measurements can be utilized to estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may indicate an illegal discharge upstream. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, grab samples were collected and analyzed in the field for the following constituents:

- Specific conductance
- Temperature
- pH
- Turbidity
- Surfactants (MBAS)*
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)

- Orthophosphate-Phosphorus (Orthophosphate-P)

* Surfactants are also referred to as detergents, specifically with respect to discussion of field test kit results.

The methods that were used to perform the above field analyses along with each method's detection limit, range and accuracy, are listed in Table 3-1.

3.2 Laboratory Analytical Methods

Grab samples were collected at four sites (over 25 percent of all sites) where ponded or flowing water was observed, to fulfill the requirements of Order R9-2007-0001. These samples were submitted to EnviroMatrix Analytical, Inc., a California Department of Health Services-certified laboratory, for analysis of the following constituents:

- Oil and grease
- Total hardness
- Diazinon
- Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- *Enterococcus* bacteria
- Total Coliform bacteria
- Fecal Coliform bacteria

The methods used to perform each of the above laboratory analyses along with method detection limits and holding times are listed in Table 3-2.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01 mS/cm	0 – 20 mS/cm	± 2% of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.1°C	0.0°C – 60.0°C	± 0.5°C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter***	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703-11 Portable Turbidity Meter***	0.01 NTU	0.01 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) Methylene Blue Active Substances	0.13 mg/L	0.0 mg/L – 3.0 mg/L*	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[3]***	2.26 mg/L**	2.26 mg/L –13.6 mg/L**	± 30%
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate***	0.10 mg/L**	0.10 mg/L – 3.00 mg/L**	Varies with measured concetration[4,5]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[6]***	0.25 mg/L**	0.25 mg/L – 2.61 mg/L**	Varies with measured concetration[4,5]

Notes:

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14 g/mol) to NO_3 (62 g/mol). The detection limit for nitrate is 10.0 mg/L; however, the detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range. "Full range" is equal to the upper limit of the test kit's range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31 g/mol) to PO_4 (95 g/mol). The detection limit for orthophosphate is 0.75 mg/L; however, the detection limit for orthophosphate-P is lowered due to the conversion.

*Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Reporting limit, range, and accuracy information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com. Additional information regarding CHEMetrics accuracy was obtained from the manufacturer via email.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Detection Limit	Maximum Holding Time [1]
Oil and Grease	USEPA 1664	5 mg/L	28 days
Total Hardness	USEPA 200.7	10 mg/L	14 days
Dissolved Cadmium	USEPA 6020	[5] 0.00200 mg/L	24 hours
Dissolved Copper	USEPA 6020	[5] 0.00200 mg/L	24 hours
Dissolved Lead	USEPA 6020	[5] 0.00200 mg/L	24 hours
Dissolved Zinc	USEPA 6020	[5] 0.0100 mg/L	24 hours
Diazinon	USEPA 8141A	0.05 µg/L	7 days
Chlorpyrifos	USEPA 8141A	0.05 µg/L	7 days
Total Coliforms	SM 9221	[2] 20 – 1,600,000 MPN/100 mL	6 hours
Fecal Coliforms	SM 9221	[2] 20 – 160,000 MPN/100 mL	6 hours
Enterococcus	SM 9230	[2] 20 – 160,000 MPN/100 mL	6 hours
Total Coliforms	SM 9223 (IDEXX Colilert) [4]	10 – 2,400,000 MPN/100 mL	6 hours
Escherichia coli (*E. coli*) [3]	SM 9223 (IDEXX Colilert) [4]	10 – 2,400,000 MPN/100 mL	6 hours
Enterococcus	IDEXX Enterolert [4]	10 – 240,000 MPN/100 mL	6 hours

Notes:

µg/L = micrograms per liter

MPN/100 mL = most probable number (of colony-forming units) per 100 milliliters

[1] Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.

[2] For D-MAX's Dry Weather Monitoring Program, EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100mL). For fecal coliforms and *Enterococci*, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.

[3] Number of fecal coliforms is derived from number of *E. coli* through the following formula:
Fecal Coliforms = *E. coli* / 0.85. The converted fecal coliform count, not the number of *E. coli*, is reported in this report's data tables.

[4] IDEXX Colilert and Enterolert tests are performed by EnviroMatrix Analytical. This test is used during upstream investigations only.

[5] I Metals analyses in 2008 were subcontracted to Calscience Environmental Laboratories, Inc.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project included the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters are calibrated periodically with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter is calibrated and periodically checked for accuracy using standard solutions. The conductivity meter is checked periodically with standard solutions and calibrated as necessary.

Field sample collection containers are first rinsed with distilled water and then with the sample water before sample collection. Upon completion of sampling at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water and dried.

The accuracy of field analytical techniques is assessed at the beginning of each sampling week by analyzing solutions of known concentrations for ammonia-nitrogen, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration	Acceptable Range	Field Test Kit Results
8/25/08	Ammonia-Nitrogen	1.0 mg/L	0.8 – 1.2 mg/L	0.930 mg/L
8/25/08	Surfactants	1.0 mg/L	0.75 – 1.25 mg/L	1.0 mg/L
8/25/08	Nitrate**	44.3 mg/L	31.0 – 57.6 mg/L	47.29 mg/L
8/25/8	Orthophosphate**	1.0 mg/L	0.75 – 1.25 mg/L	0.890 mg/L
9/3/08	Ammonia-Nitrogen	1.0 mg/L	0.8 – 1.2 mg/L	0.905 mg/L
9/3/08	Surfactants	1.0 mg/L	0.75 – 1.25 mg/L	1.0 mg/L
9/3/08	Nitrate**	44.3 mg/L	31.0 – 57.6 mg/L	51.32 mg/L
9/3/08	Orthophosphate**	1.0 mg/L	0.75 – 1.25 mg/L	0.814 mg/L

Note

* Acceptable range is calculated based on the error associated with the methods as listed in Table 3-2.

** Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by multiplying the results by 0.226 for nitrate and 0.326 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis were collected concurrently with field samples and utilized the same sampling procedures. Pre-sterilized sample bottles were obtained from the laboratory and thus did not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples were kept in a cooler on ice until picked up by the laboratory. Strict chain-of-custody procedures were followed and samples were delivered

and analyzed within the appropriate holding times, as listed in Table 3-2. Completed chain-of-custody forms are included with the laboratory analytical reports in Appendix C.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation is necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia-nitrogen concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a re-sampling is conducted within one day. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by the laboratory analyses, a comprehensive follow-up pollutant source investigation is conducted within two days of receiving the analytical reports from the lab. The results of these investigations are included in Section 8 of this report. Recommendations based on these investigations are included in Section 9.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (see Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels, which are based on county-wide sampling data and have been used by all Copermittees since the 2003 dry weather season. If pH, orthophosphate-P, nitrate-N, ammonia-N, or surfactants are observed above the numeric action level, a follow-up investigation is conducted within 24 hours to investigate the source unless best professional judgment indicated otherwise. If oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, or *Enterococcus* laboratory analytical results exceeded numeric action levels, then source investigations are conducted within two business days of receiving the test results from the lab.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew due to their familiarity with the City's Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters. Best professional judgment may indicate that results which either exceed certain action levels or statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
pH	<6.5 or >9.0	Basin Plan, w/ allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia-nitrogen.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity), and unusual odors.
Temperature (^{o}C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Values > 5 mS/cm may indicate IC/ID however; EC may be highly elevated in some regions due to high-TDS groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values < 0.75 mS/cm may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	California Toxic Rule	Use California Toxics Rule Table, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)	California Toxic Rule	
Dissolved Lead (µg/L)	California Toxic Rule	
Dissolved Zinc (µg/L)	California Toxic Rule	
Total Coliform (MPN/ 100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliform (MPN/ 100 mL)	20,000	
Enterococcus (MPN/ 100 mL)	10,000	

Notes

[1]The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry Weather Monitoring Program data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.

°C	degrees Celsius
mS/cm	milliSiemens per centimeter
mg/L	milligram per liter
IC/ID	illegal connection/illicit discharge
MBAS	methylene blue active substances
MPN/100 mL	most probable number per 100 milliliters
NTU	nephelometric turbidity unit
ppb	parts per billion
USEPA	United States Environment Protection Agency
WQO	Water Quality Objectives

4 FIELD SCREENING RESULTS

The Dry Weather Monitoring Program field screening was conducted from late August to early September of 2008. Since four primary sites were found to be dry, a total of 19 monitoring stations were visited including alternate sites. Field screening was conducted at the 15 sites where ponded or flowing water was observed. Of the screened sites 12 had measurable flow, and three sites had ponded water. A total of 30 site visits were performed, including the four dry sites and 11 confirmation visits to sites where one or more constituents were found to exceed specified action levels.

4.1 Qualitative Observations

Qualitative observations, which are a routine part of the Dry Weather Monitoring Program, are summarized below and presented in Table 4-1:

Light Conditions
The weather varied from sunny to partly cloudy to overcast during the site visits.

Tide
Two sites visited during dry weather monitoring were observed to be tidally influenced. The tide was relatively low during the initial visits to Site 47 and Site 6, but no tide height data was available near the sites since they were one to two miles east of the San Diego Bay. See Section 8 of this report for the results of initial and confirmation screening visits.

Odor
Samples from Site 1A and Site 48 had an odor similar to that of sewage. Site 40 smelled faintly of chemicals. None of the other visited sites had observable odors during field screening.

Color
Water from one site had a yellow tint, and water samples taken from three of the sites were brown (and slightly cloudy). The rest of the samples collected were colorless.

Clarity
The majority of water samples collected from the visited sites were clear, with negligible amounts of suspended particles observed. The water samples taken at three sites were observed to be slightly cloudy.

Floatable Materials
During routine field screening visits, trash was assessed at each site. Section 5 of this report includes the complete results of Trash Assessment. At fifteen of the nineteen visited sites trash was observed in contact with the water. One site had a slight sheen and two sites had some bubbles on the surface of the water during the site visit.

Deposits
Sediment and fine particulate deposition was observed at nearly all of the visited sites. No other deposits were noted.

Vegetation
Taking into account exposure to sunlight and soil, all sites displayed appropriate vegetation. Manholes lacking soil and sunlight showed no vegetation. Concrete channels had either limited or normal vegetation; earthen channels supported normal vegetative growth. Only one site had what was considered excessive vegetation for a concrete channel, but the vegetation would not likely impair flow significantly.

Biology
The presence of aquatic flora and fauna can indicate healthy water conditions. Algal growth is an indicator of persistent water flow. Some of the sampling locations were also home to insects, snails, and/or fish.

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
1A	8/27/08	13:15	Sunny	Sewage	Brown	Slightly Cloudy	Trash	Sediment/Gravel; Fine Particulates	Excessive	Insects, Snails
1A (Confirmation)	8/28/08	10:30	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel; Fine Particulates	Excessive	Insects, Snails
3	8/27/08	15:30	Sunny	None	None	Clear	None	Sediment/Gravel; Fine Particulates	None	None
4	8/27/08	15:10	Sunny	ns	ns	ns	Trash	Sediment/Gravel; Fine Particulates	None	None
6	8/29/08	15:00	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel; Fine Particulates	None	Algae, Snails
6 (Confirmation)	9/2/08	12:25	Sunny	None	None	Clear	Trash	Sediment/Gravel; Fine Particulates	None	Algae, Fish, Snails
13A	8/26/08	10:00	Partly Cloudy	ns	ns	ns	Trash	None	None	None
32	8/27/08	10:00	Partly Cloudy	None	Yellow	Clear	Trash	Sediment/Gravel; Fine Particulates	Limited	Insects, Algae, Snails
31A	8/26/08	14:55	Partly Cloudy	ns	ns	ns	Trash	Sediment/Gravel; Fine Particulates	Normal	None
38	8/26/08	15:50	Sunny	None	Brown	Slightly Cloudy	Bubbles/Foam; Sheen	Sediment/Gravel; Fine Particulates	Normal	Algae, Snails
38 (Confirmation)	8/28/08	9:15	Overcast	None	Brown	Slightly Cloudy	Bubbles/Foam; Sheen	Fine Particulates	Normal	Algae, Snails
40	8/27/08	11:15	Sunny	Chemical	None	Clear	Trash	Sediment/Gravel; Fine Particulates	Normal	Insects, Algae
41	8/29/08	13:40	Overcast	None	None	Clear	Bubbles/Foam	Sediment/Gravel; Fine Particulates	Limited	Algae, Snails
42	8/26/08	15:20	Sunny	ns	ns	ns	Trash	None	None	None

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site No.	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
43A	8/28/08	11:00	Partly Cloudy	None	None	Clear	Trash	Fine Particulates	None	None
44	8/26/08	10:15	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel; Fine Particulates	Limited	Insects, Algae, Fish, Snails
44A	8/26/08	11:20	Overcast	None	None	Clear	Trash	Sediment/Gravel; Fine Particulates	Normal	Insects, Algae, Snails
45	8/29/08	11:30	Overcast	None	None	Slightly Cloudy	Trash	Sediment/Gravel; Fine Particulates	None	None
45 (Confirmation)	9/2/08	11:15	Sunny	None	Yellow	Slightly Cloudy	Trash	Sediment/Gravel; Fine Particulates	None	None
46	8/27/08	12:25	Sunny	None	None	Clear	Trash	Sediment/Gravel; Fine Particulates	None	Insects, Snails
46 (Confirmation)	9/8/08	16:10	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel; Fine Particulates	None	None
47	8/26/08	12:20	Partly Cloudy	None	None	Clear	None	None	None	None
47 (Confirmation)	8/28/08	10:10	Sunny	None	None	Clear	None	None	None	None
48	8/29/08	10:00	Overcast	Sewage	Brown	Slightly Cloudy	Trash	Sediment/Gravel; Fine Particulates	None	None
48 (Confirmation)	9/2/08	9:35	Sunny	Sewage	Brown	Slightly Cloudy	Trash	Sediment/Gravel; Fine Particulates	None	None
49	8/29/08	9:10	Overcast	None	None	Clear	Trash	Sediment/Gravel; Fine Particulates	None	Algae, Snails

Notes:
Yellow shaded area denotes confirmation visits
Light blue shaded area denotes field and laboratory sampling locations
ns = not sampled (dry site)

4.2 Field Analytical Results

Field analyses are conducted al all sites with flowing or ponded water. The measured constituents are described below.

Flow rates are the measurements of the volume of fluid passing through a given surface per unit time. Flow rate measurements are needed to calculate the load or particular amount of a pollutant discharged.

Water temperature is needed to assess the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. In the field, water temperature is measured immediately upon sample collection at each site with ponded or flowing water.

The **pH** is an expression of acidity or alkalinity of a water sample. The pH of an aquatic system will drive a variety of chemical reactions, including the availability of nutrients or the solubility of chemical substances, particularly heave metals.

Turbidity describes the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation, thus reducing photosynthetic capacity, but excessive suspended particles can also absorb heat and increase water temperatures.

Specific Conductance (Conductivity) values indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water and potentially help indicate the presence of dissolved pollutants.

Surfactant concentrations in water samples often reflect illegal discharge from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms

Ammonia-Nitrogen (ammonia-N) is an indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia-nitrogen occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-Nitrogen (nitrate-N) is a common sign of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, which can deplete oxygen from the water during decomposition and eventually suffocate other aquatic life. During the field analysis, nitrate is measured in milligrams per liter (mg/L) NO_3 and converted into mg/L nitrate-N using a conversion factor of 0.226. This process is explained in Note 3 of Table 3-1.

Orthophosphate-Phosphorus (orthophosphate-P) is also an indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate-N, orthophosphate-P pollution can cause nutrient enrichment (eutrophication), stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient

in plant growth. During the field analysis, orthophosphate is measured in mg/L PO_4 and converted into mg/L orthophosphate-P using a conversion factor of 0.326. This process is explained in Note 6 of Table 3-1.

A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 shows the results of all field analyses conducted at the sampled sites. Graphs of the various parameters and appropriate action levels for follow-up investigations are included at the end of this section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Number of Exceedances	Graph No.
Flow Rate (gpm)	9	<1	2.33	0.75	---	4-1
Temperature (ºC)	27.5	22.8	25.02	25.0	---	4-2
pH	8.95	7.20	7.95	7.76	0	4-3
Turbidity (NTU)	52.0	0.82	13.58	4.41	0	4-4
Conductivity (mS/cm)	>20.0	0.57	4.09	1.41	0	4-5
Ammonia-Nitrogen (mg/L NH_3-N)	0.85	0.07	0.38	0.36	0	4-6
Surfactants (mg/L MBAS)	>3.0	0.25	1.27	0.75	6	4-7
Nitrate-Nitrogen (mg/L NO_3-N)	1.92	0.61	1.06	0.88	0	4-8
Orthophosphate-Phosphorus (mg/L PO_4-P)	4.63	0.02	0.85	0.5	1	4-9

Note: Statistics are calculated from the results of the routine site visits. A total of 15 sites were sampled

TABLE 4-3
FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow (gpm)	Temp. ºC	pH	Turbidity NTU	Conductivity mS/cm	Surfactants mg/L MBAS	Ammonia-Nitrogen mg/L NH_3-N	Nitrate-Nitrogen mg/L NO_3-N	Orthophosphate-Phosphorus mg/L PO_4-P
1A	8/27/08	13:15	Ponded	25.9	7.20	41.98	1.41	**>3**	0.16	0.95[1]	0.59
1A (Confirmation)	8/28/08	10:30	3.0	23.1	7.47	17.11	1.45	0.88	na	na	na
3	8/27/08	15:30	1.0	27.5	7.76	4.41	0.57	0.38	0.08	1.45[1]	0.15[1]
4	8/27/08	15:10	Dry	ns	ns	ns	ns	ns	ns	ns	ns
6	8/29/08	15:00	<1	27.3	8.95	2.37	>20.00	**2.50**	0.49	0.82[1]	0.02[1]
6 (Confirmation)	9/2/08	12:25	Tidal	27.8	7.74	5.04	>20.00	**2.50**	na	na	na
31A	8/26/08	14:55	Dry	ns	ns	ns	ns	ns	ns	ns	ns
32	8/27/08	10:00	<1	22.8	7.64	1.78	0.99	0.75	0.15	0.88[1]	0.31
38	8/26/08	15:50	Ponded	24.3	7.44	26.71	1.35	**1.25**	0.40	0.88[1]	1.61
38 (Confirmation)	8/28/08	9:15	Ponded	22.3	7.60	na	1.29	**1.25**	na	na	na
40	8/27/08	11:15	3.0	23.1	7.68	3.43	2.93	0.38	0.36	0.84[1]	0.60
41	8/29/08	13:40	5.0	24.3	8.19	0.82	4.32	0.50	0.29	1.92[1]	0.34
42	8/26/08	15:20	Dry	ns	ns	ns	ns	ns	ns	ns	ns
44	8/26/08	10:15	<1	24.7	8.29	1.97	1.41	0.38	0.07	0.61[1]	0.24[1]
45	8/29/08	11:30	<1	25.8	8.12	36.13	1.37	**3.0**	0.85	1.04[1]	1.46
45 (Confirmation)	9/2/08	11:15	<1	28.1	8.45	101.00	1.93	**3.0**	na	na	na
46	8/27/08	12:25	9.0	25.5	8.25	3.99	0.74	0.25	0.13	1.62[1]	0.34
47	8/26/08	12:20	5.0	25.5	7.45	8.30	>20.00	**1.75**	0.43	0.67[1]	0.27
47 (Confirmation)	8/28/08	10:10	8.0	na	na	na	>20.00	**1.25**	na	na	na
48	8/29/08	10:00	Ponded	23.9	7.41	52.00	2.02	**>3**	0.84	0.80[1]	**4.63**
48 (Confirmation)	9/2/08	9:35	Ponded	27.4	6.84	78.00	2.08	**>3**	na	na	**2.01**
49	8/29/08	9:10	<1	23.4	8.34	12.95	2.12	0.75	0.47	0.74[1]	0.93

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp. ºC	pH	Turbidity NTU	Conductivity mS/cm	Surfactants mg/L MBAS	Ammonia-Nitrogen mg/L NH_3-N	Nitrate-Nitrogen mg/L NO_3-N	Orthophosphate-Phosphorus mg/L PO_4-P
43A	8/28/08	11:00	2.0	25.0	7.61	5.44	1.03	0.63	0.69	1.70[1]	0.70
44A	8/26/08	11:20	<1	26.3	8.89	1.48	1.15	0.50	0.29	1.03[1]	0.50

Notes:
ns = not samples (dry site)
na = not analyzed
[1] Value reported is below the Practical Detection Limit (PDL)
Red values were at or above the measured constituent's action level
Yellow shaded area denotes confirmation visits
Light blue shaded area denotes field and laboratory sampling locations

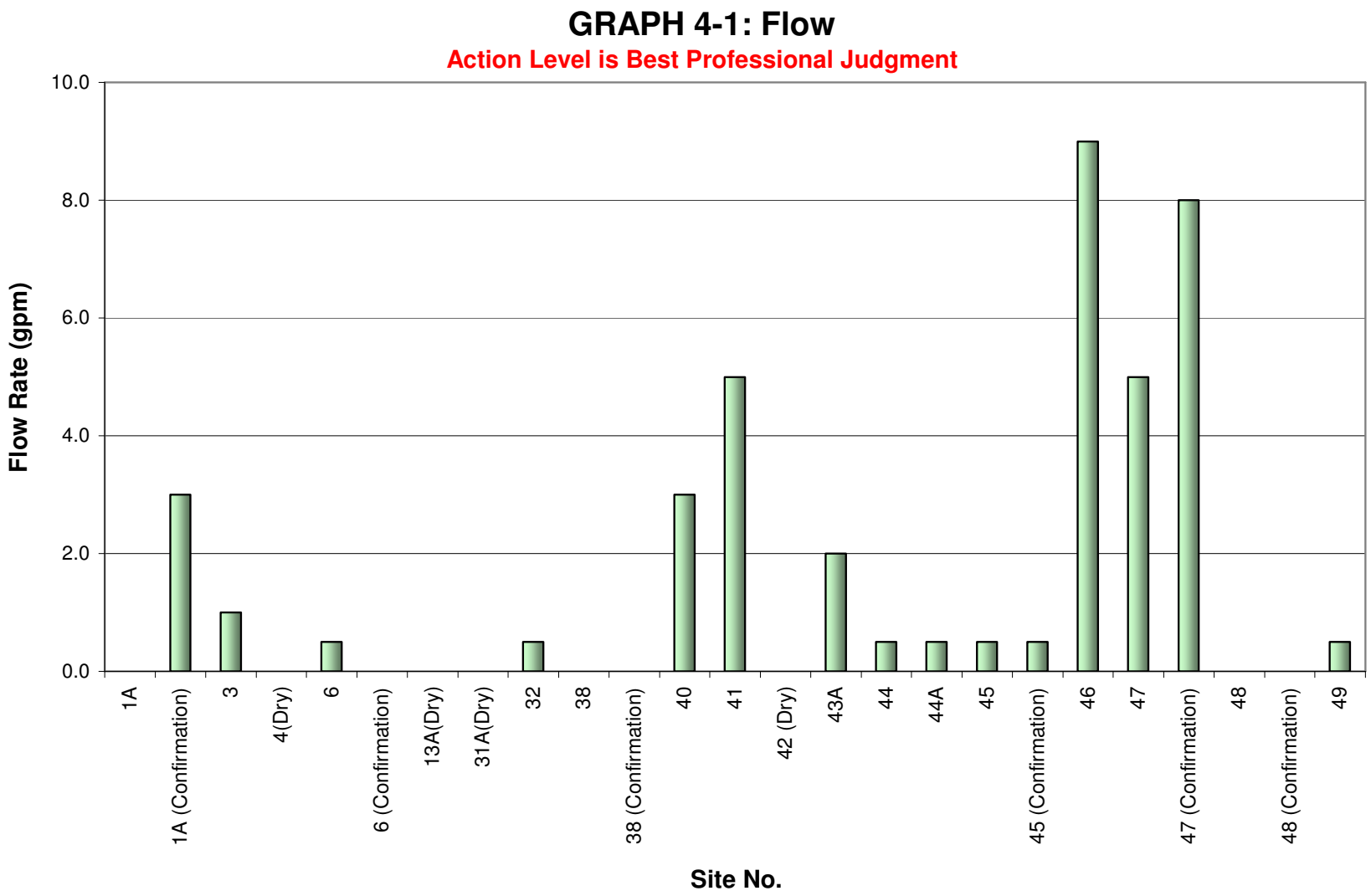
GRAPH 4-1: Flow
Action Level is Best Professional Judgment
Flow Rate (gpm)
10.0
8.0
6.0
4.0
2.0
0.0
1A
1A (Confirmation)
3
4(Dry)
6
6 (Confirmation)
13A(Dry)
31A(Dry)
32
38
38 (Confirmation)
40
41
42 (Dry)
43A
44
44A
45
45 (Confirmation)
46
47
47 (Confirmation)
48
48 (Confirmation)
49
Site No.

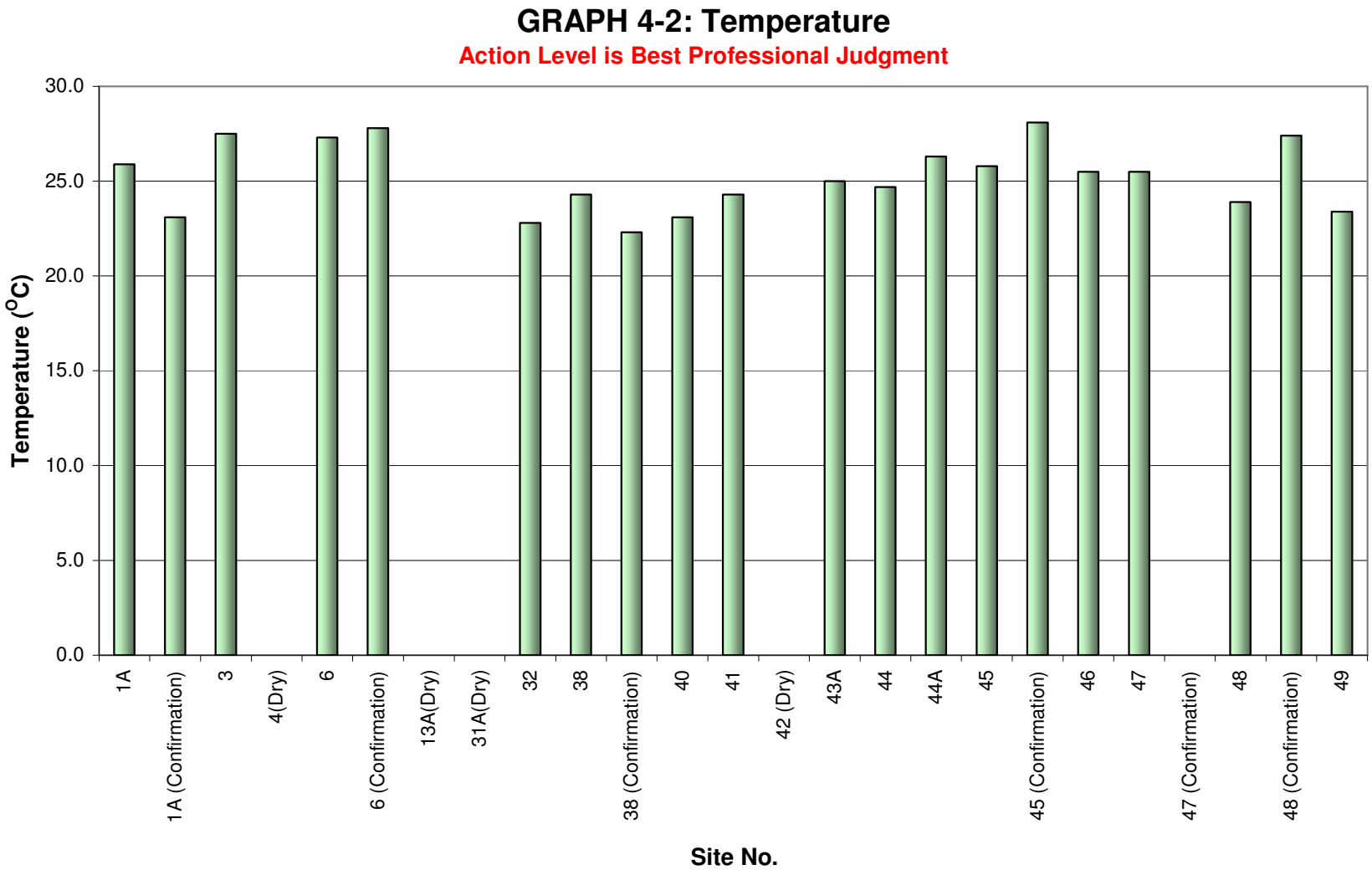
GRAPH 4-2: Temperature
Action Level is Best Professional Judgment
Temperature (°C)
30.0
25.0
20.0
15.0
10.0
5.0
0.0
1A
1 A (Confirmation)
3
4(Dry)
6
6 (Confirmation)
13A(Dry)
31A(Dry)
32
38
38 (Confirmation)
40
41
42 (Dry)
43A
44
44A
45
45 (Confirmation)
46
47
47 (Confirmation)
48
48 (Confirmation)
49
Site No.

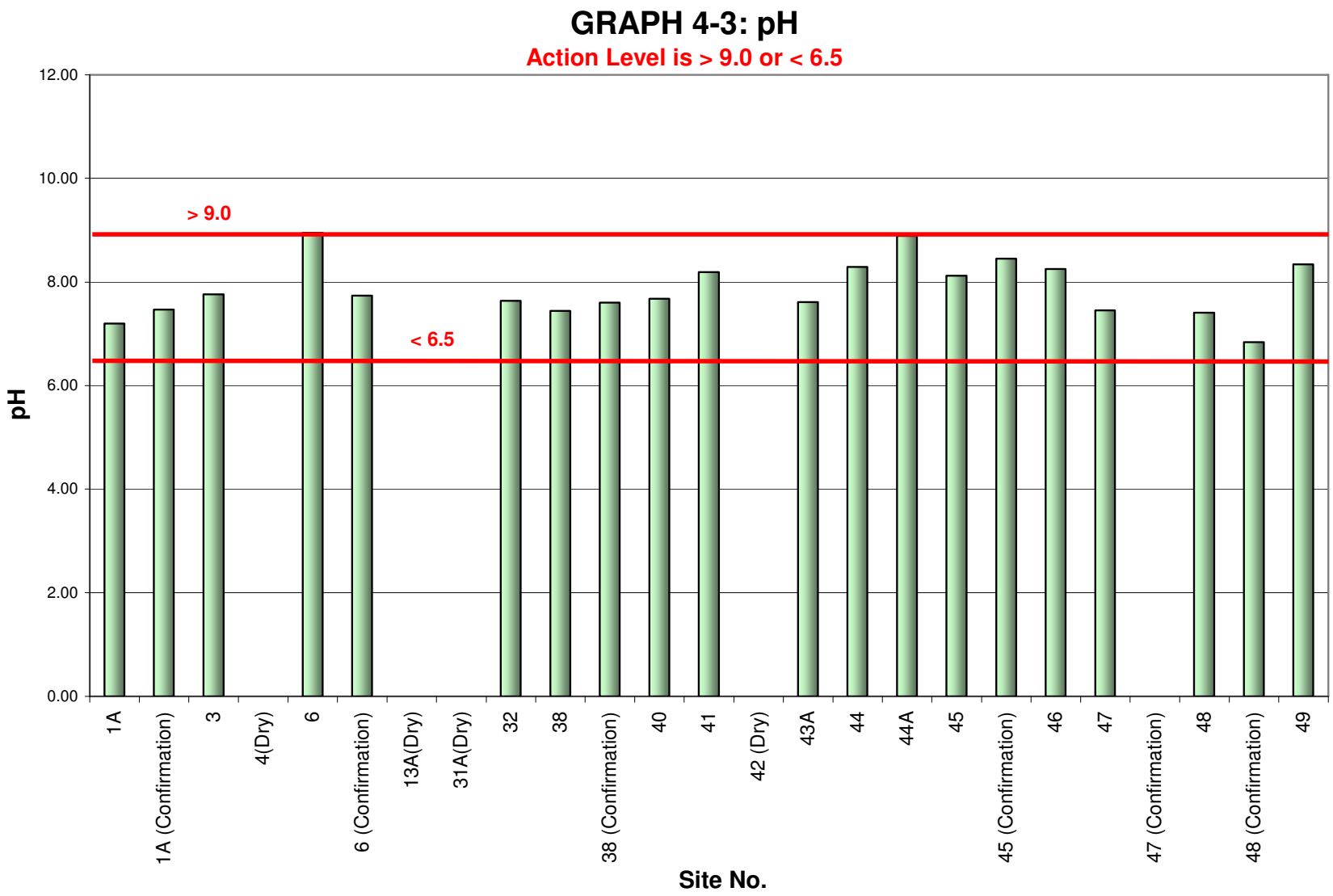
GRAPH 4-3: pH
Action Level is > 9.0 or < 6.5
12.00
10.00
8.00
6.00
4.00
2.00
0.00
pH
> 9.0
< 6.5
1A
1A (Confirmation)
3
4(Dry)
6
6 (Confirmation)
13A(Dry)
31A(Dry)
32
38
38 (Confirmation)
40
41
42 (Dry)
43A
44
44A
45
45 (Confirmation)
46
47
47 (Confirmation)
48
48 (Confirmation)
49
Site No.

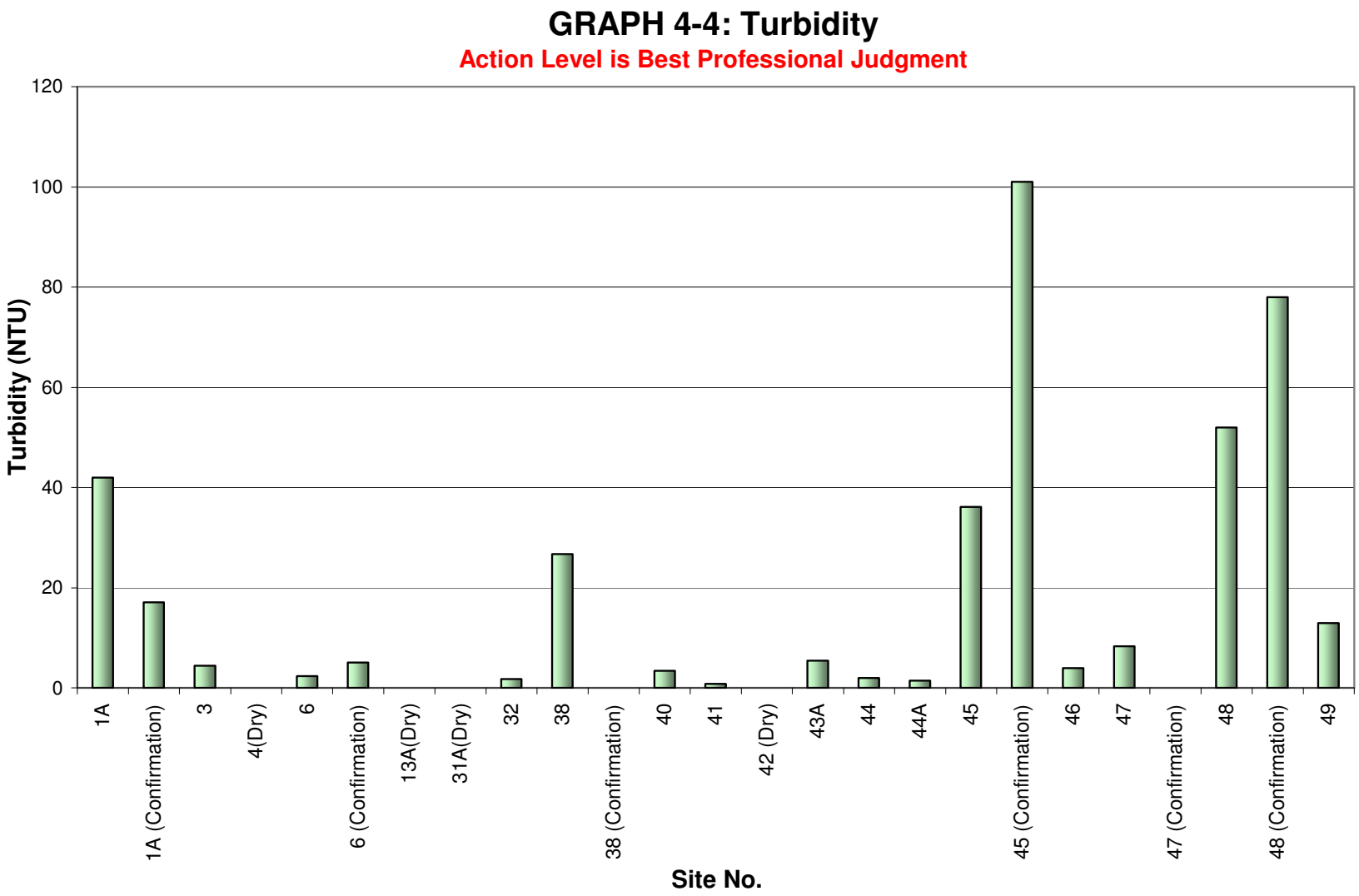
GRAPH 4-4: Turbidity
Action Level is Best Professional Judgment
Turbidity (NTU)
120
100
80
60
40
20
0
1A
1A (Confirmation)
3
4(Dry)
6
6 (Confirmation)
13A(Dry)
31A(Dry)
32
38
38 (Confirmation)
40
41
42 (Dry)
43A
44
44A
45
45 (Confirmation)
46
47
47 (Confirmation)
48
48 (Confirmation)
49
Site No.

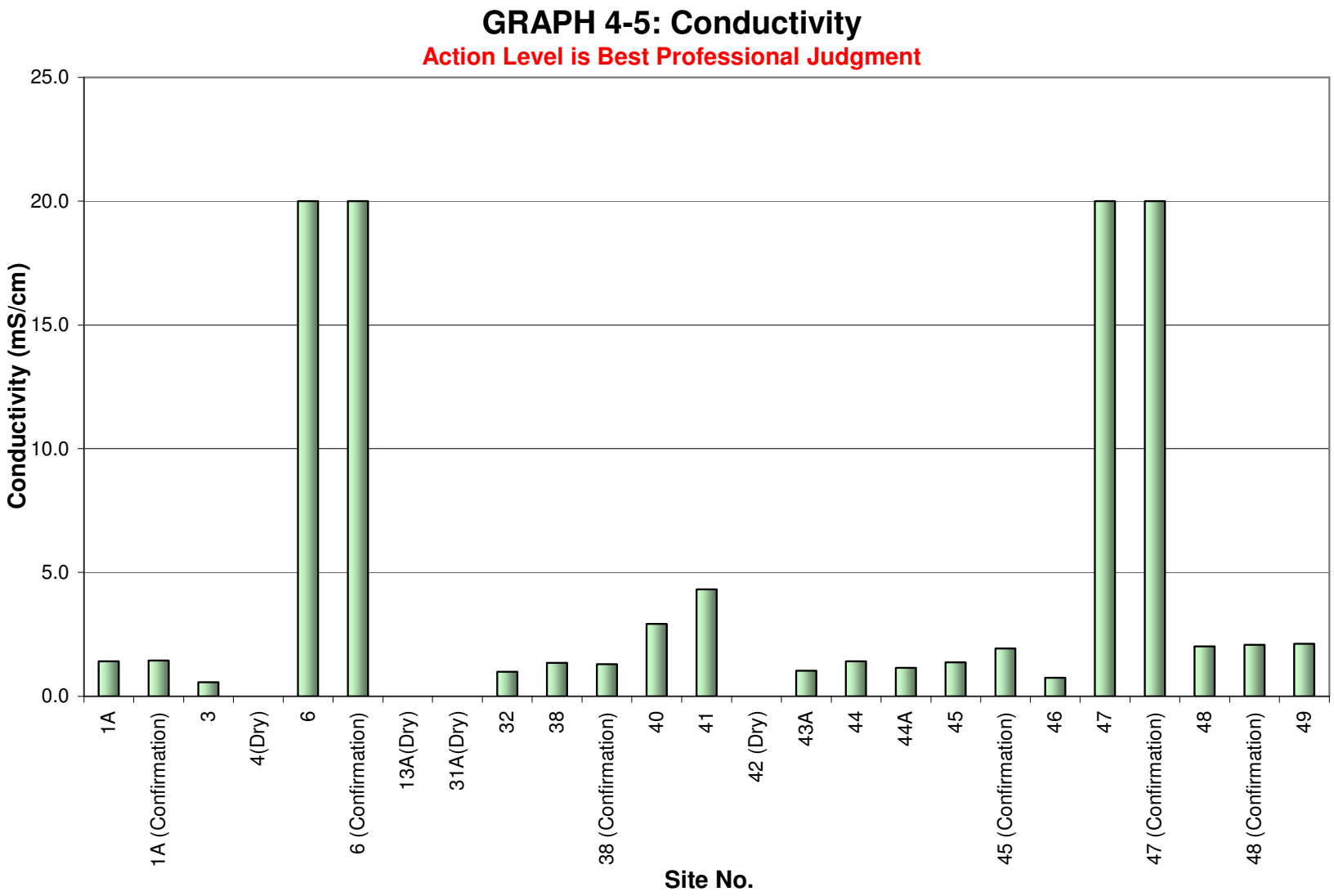
GRAPH 4-5: Conductivity
Action Level is Best Professional Judgment
Conductivity (mS/cm)
25.0
20.0
15.0
10.0
5.0
0.0
1A
1A (Confirmation)
3
4(Dry)
6
6 (Confirmation)
13A(Dry)
31A(Dry)
32
38
38 (Confirmation)
40
41
42 (Dry)
43A
44
44A
45
45 (Confirmation)
46
47
47 (Confirmation)
48
48 (Confirmation)
49
Site No.

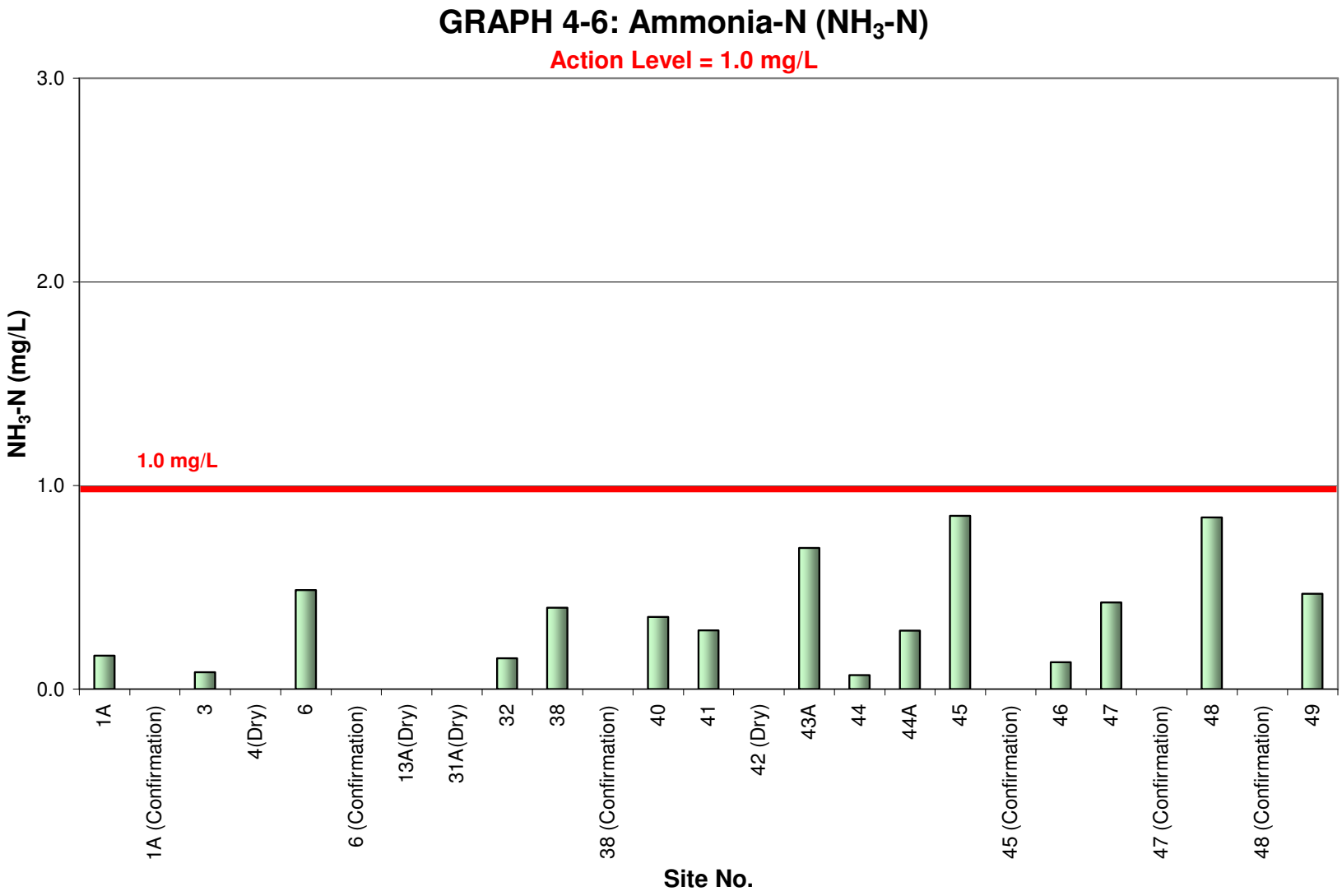
GRAPH 4-6: Ammonia-N (NH_3-N)
Action Level = 1.0 mg/L
3.0
2.0
1.0
0.0
NH_3-N (mg/L)
1.0 mg/L
1A
1A (Confirmation)
3
4(Dry)
6
6 (Confirmation)
13A(Dry)
31A(Dry)
32
38
38 (Confirmation)
40
41
42 (Dry)
43A
44
44A
45
45 (Confirmation)
46
47
47 (Confirmation)
48
48 (Confirmation)
49
Site No.

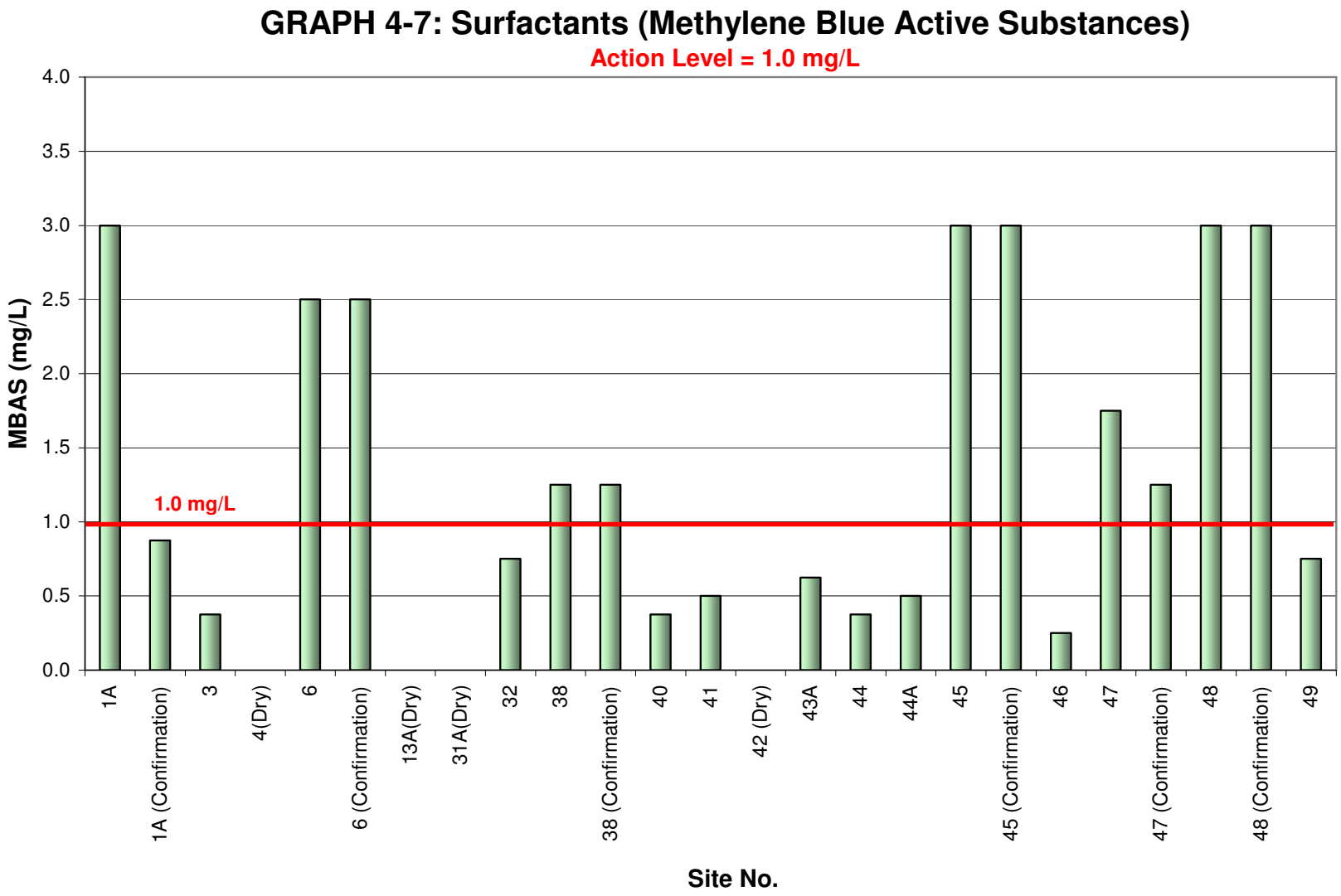
GRAPH 4-7: Surfactants (Methylene Blue Active Substances)
Action Level = 1.0 mg/L
MBAS (mg/L)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.0 mg/L
1A
1A (Confirmation)
3
4(Dry)
6
6 (Confirmation)
13A(Dry)
31A(Dry)
32
38
38 (Confirmation)
40
41
42 (Dry)
43A
44
44A
45
45 (Confirmation)
46
47
47 (Confirmation)
48
48 (Confirmation)
49
Site No.

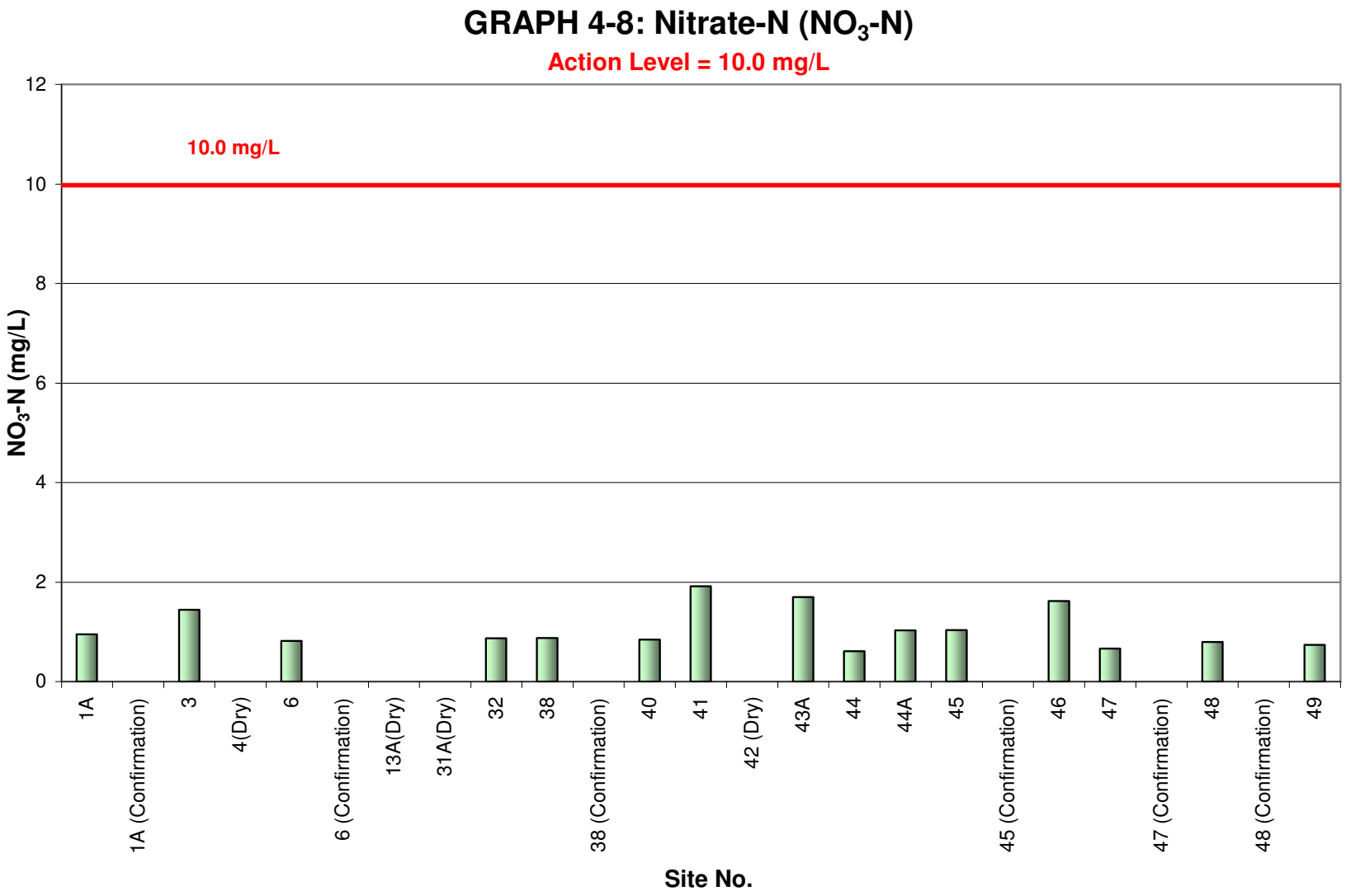
GRAPH 4-8: Nitrate-N (NO_3-N)
Action Level = 10.0 mg/L
10.0 mg/L
NO_3-N (mg/L)
0
2
4
6
8
10
12
1A
1A (Confirmation)
3
4(Dry)
6
6 (Confirmation)
13A(Dry)
31A(Dry)
32
38
38 (Confirmation)
40
41
42 (Dry)
43A
44
44A
45
45 (Confirmation)
46
47
47 (Confirmation)
48
48 (Confirmation)
49
Site No.

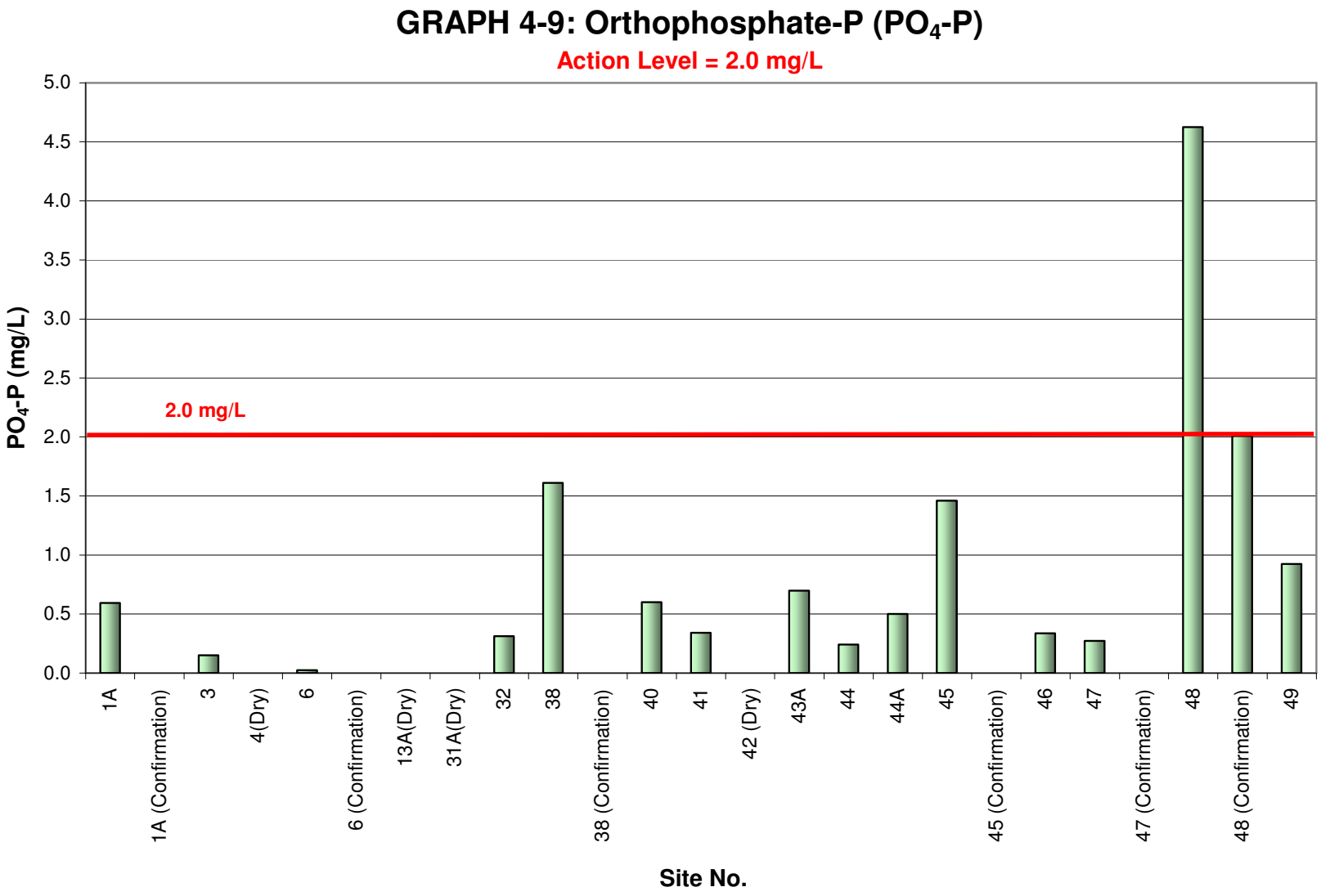
GRAPH 4-9: Orthophosphate-P (PO_4-P)
Action Level = 2.0 mg/L
PO_4-P (mg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.0 mg/L
1A
1A (Confirmation)
3
4(Dry)
6
6 (Confirmation)
13A(Dry)
31A(Dry)
32
38
38 (Confirmation)
40
41
42 (Dry)
43A
44
44A
45
45 (Confirmation)
46
47
47 (Confirmation)
48
48 (Confirmation)
49
Site No.

5 Trash Assessment

5.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather field screening site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form to document the amount and extent of trash and the threat to human and aquatic health. The first page is completed at every site. The second page, which includes information about the types, prevalence, potential routes, and sources of trash, is also completed at sites where a larger amount of trash is observed.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although numbers of trash pieces are also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g., medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).
- *Threat to Aquatic Health* – Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and

debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Forms, included in Appendix D.

If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

Trash assessments were conducted at 19 sites, including four dry sites. Table 5-1 and Graph 5-1 summarize the trash assessment results. Figure 5-1 provides a map of sampling sites and their corresponding trash assessment.

TABLE 5-1
TRASH ASSESSMENT RESULTS

Optimal (1 site)	**Suboptimal** (8 sites)	**Marginal** (5 sites)	**Submarginal** (4 sites)	**Poor** (1 site)
47	3 38 41 43A 45 46 48 49	4 31A 42 44 44A	1A 13A 32 40	6

FIGURE 5-1
TRASH ASSESSMENT SUMMARY

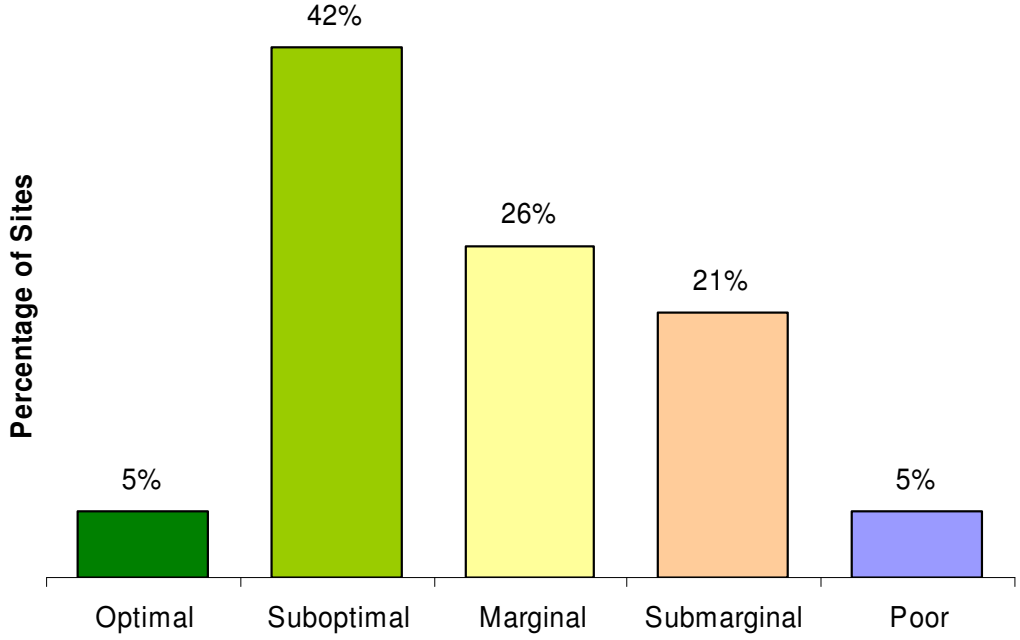

The most frequent trash assessment score in the City of National City for 2008 was a suboptimal trash rating. Only one of the sites was considered to have "poor" trash levels. Only Site 32 was determined to pose a threat to human health, but both Site 6 and Site 32 were a threat to aquatic health.

5.3.1 Threat to Human or Aquatic Health

Site 6 is an outlet on the north bank of the Sweetwater River, approximately 500 feet east of Highland Avenue, near the pedestrian path accessible from 2nd Avenue. This is the only site in the City that was assessed as having "poor" levels of trash. A large pile of trash was observed at the site, backed up against the outlet's metal lid. In addition to a number of other trash items, detailed in the next section, several rusty alkaline batteries were noted in pools of water at the site, which are considered toxic waste. Site 6 was determined to be tidally influenced during dry weather monitoring, which keeps trash at the site continuously damp and increases the risk of trash floating away. The trash at this site was considered a threat to aquatic health.

Site 32 is an outlet to the Sweetwater River, east of Second Avenue, north of Freeway 54. During the site visit food packaging, plastic six-pack rings, newspaper used as toilet paper, and human waste were observed under the nearby road, where the creek was dry. This site also had bacterial indicator exceedances, which may be related to the presence of human waste although it was not in contact with water at that time. The trash at this site was considered a threat to both human and aquatic health.

5.3.2 Submarginal or Poor Sites

TABLE 5-2
BREAKDOWN OF SUBMARGINAL SITES

Site	Types of Trash	Ranking	Potential Route 1	Potential Route 2	Potential Source 1	Potential Source 2
1A	Food Packaging	1	Littering	Upstream	Household	Commercial
	Fabric/Clothing	2	Dumping	Upstream	Transient	---
6	Household	1	Dumping	Upstream	Transient	Unable to determine
	Food Packaging	2	Littering	Upstream	Commercial	Transient
	Yard Waste	3	Dumping	Upstream	Commercial	Unable to determine
	Toxic	4	Littering	Upstream	Transient	Unable to determine
13A	Shopping Carts	1	Dumping	---	Transient	Unable to determine
	Food Packaging	2	Littering	Upstream	Commercial	---
	Household	3	Upstream	---	Household	---
32	Biohazard Waste	1	Dumping	---	Transient	---
	Food Packaging	2	Littering	Upstream	Transient	Commercial
40	Food Packaging	1	Littering	Upstream	Commercial	---
	Fabric/Clothing	2	Dumping	---	Transient	---
	Household	3	Dumping	Upstream	Transient	Household
	Automotive	4	Dumping	Upstream	Unable to determine	---

Site 1A is located in a concrete channel southwest of 43rd Street and Nordica Avenue. Most of the observed trash items were food packaging waste that was likely littered near the site or carried from upstream. The trash was caught in dense cattail vegetation. Some clothes and a clothes hanger were also observed in the vegetation, potentially due to use of the site by transients.

Site 6 is an outlet on the north bank of the Sweetwater River, approximately 500 feet east of Highland Avenue, near the pedestrian path accessible from 2nd Avenue. This is the only site in the City that was assessed as having "poor" levels of trash. A large pile of trash was observed at the site, backed up against the outlet's metal lid. Some of the trash was protruding from the pipe, from under the lid. Observed items of trash included household trash such as a large blanket, bicycles and parts, toys, tarps, plastic clothes hangers, a metal pole, and a five-gallon bucket. Other trash items noted at the site included palm

fronds, bamboo poles, styrofoam packaging, plastic bottles with and without liquids, and alkaline batteries, a type of hazardous waste. Site 6 was determined to be tidally influenced during dry weather monitoring, which keeps trash at the site continuously damp and increases the risk of trash floating away. Some of the items may even have arrived at the site by tidal action. It appears likely that some of the large household items had been brought to the site by transients, while other smaller items could have come from upstream commercial areas. Visual observations of upstream catch basins near the upstream shopping mall found significant amounts of food packaging litter had accumulated. The trash at Site 6 was also considered a threat to aquatic health.

Site 13A is an outlet to the Paradise Creek channel at its furthest downstream point in Kimball Park. While the outlet was observed to be dry, trash assessment included both the MS4 and the receiving water. Four to five dumped shopping carts were observed mostly submerged in the water of the channel, where it goes into a box culvert. Littered bottles, cans, and other food packaging were also visible in the water. A few small household items were also noted, including a game piece and a makeup sponge, which may have been transported from upstream residential areas.

Site 32 is an outlet to the Sweetwater River, east of Second Avenue, north of Freeway 54. During the site visit food packaging, plastic six-pack rings, newspaper used as toilet paper, and human waste were observed under the nearby road, where the creek was dry. The most likely source of waste at this site was use by transients, although food packaging also could come from upstream. The trash at this site was also considered a threat to human and aquatic health.

Site 40 is an outlet at the southwest corner of Sweetwater Road and Plaza Bonita Road, near the shopping mall. A number of trash items were visible in the outlet and caught in nearby piles of vegetation, including plastic bags, food and beverage containers, clothing, toys, plastic molding, a car bumper, and a car tire. Food packaging and plastic bags may have been littered at the site due to the nearby shopping mall, however clothing and automotive trash items were likely dumped at the site. Approximately 100 feet away from the site in the same open area, items were observed that likely belonged to a transient, suggesting another potential source for trash observed at the site.

FIGURE 5-2
TRASH ASSESSMENT GIS MAP

6 LABORATORY ANALYTICAL RESULTS

6.1 Summary

Laboratory analyses were conducted at four sites, representing over 25 percent of all sites with ponded or flowing water. A summary of the laboratory analytical results is presented in Table 6-1. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included as Appendix C.

TABLE 6-1
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Number of Exceedances
Total Hardness (mg/L $CaCO_3$)	820	101	---
Oil and grease (mg/L)	nd	nd	0
Diazinon (µg/L)	nd	nd	0
Chlorpyrifos (µg/L)	nd	nd	0
Cadmium (dissolved, mg/L)	nd	nd	0
Copper (dissolved, mg/L)	0.0243	nd	1
Lead (dissolved, mg/L)	nd	nd	0
Zinc (dissolved, mg/L)	0.0652	nd	0
Total Coliform (MPN/100 mL)	>1,600,000	800	2
Fecal Coliform (MPN/100 mL)	>160,000	40	1
Enterococcus Bacteria (MPN/100 mL)	50,000	70	2

Note:
nd = not detected

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Hardness itself is not considered a pollutant, but is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Diazinon and **chlorpyrifos** are organophosphate pesticides that can be harmful to aquatic organisms if transported in urban runoff. Diazinon and chlorpyrifos are highly toxic to birds, mammals, and insects. They are also highly toxic to freshwater fish and invertebrates following acute exposure.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness, with toxicity decreasing as hardness increases. Therefore,

each dissolved metal has a Criterion Maximum Concentration (CMC) for a specific total hardness. The laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 6-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

TABLE 6-2
CTR – CMC FOR DISSOLVED METALS[1]

Dissolved Copper			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
32	138	0.0182	0.0243
40	820	0.0976	0.00518
46	101	0.0136	0.0131
32 (confirm)	239	0.0305	0.00917
Dissolved Zinc			
Site	**Total Hardness (mg/L)**	**CMC (mg/L)**	**Concentration (mg/L)**
32	138	0.154	0.0652
40	820	0.697	0.0204
46	101	0.118	0.041

Note: Table 6-2 lists only those sites where a particular dissolved metal was detected. Cadmium and Lead were not detected in any of the samples.

Coliform bacteria are relatively harmless to humans and are present in mammalian digestive tracts and are naturally found in most surface waters and soils. Testing water samples for total coliform bacteria is a standard practice in public health since a high level of total coliform bacteria often may indicate the presence of other more harmful, pathogenic organisms, sometimes of fecal origin. Total coliform is measured in lieu of these pathogens since the various pathogens are generally present in much smaller quantities and are difficult to detect.

Fecal coliform, a subset of coliform bacteria, and ***Enterococcus*** are found primarily in the gastro-intestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. A host of human diseases, particularly those of the gastro-intestinal tract, are spread through water contaminated with fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material was human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

A summary of the laboratory analytical results is presented in Table 6-2. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included in Appendix C.

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site No.	Date	Time	Oil & Grease	Total Hardness mg/L	Cadmium mg/L	Copper mg/L	Lead mg/L	Zinc mg/L	Diazinon µg/L	Chlorpyrifos µg/L	Total Coliform MPN/100 mL	Fecal Coliform MPN/100 mL	*Enterococcus* MPN/100 mL
1A	8/27/08	13:15	nd	324	nd	nd	nd	nd	nd	nd	**>1,600,000**	**>160,000**	**50,000**
32	8/27/08	10:00	nd	138	nd	**0.0243**	nd	0.065	nd	nd	**70,000**	11,000	3,000
40	8/27/08	11:15	nd	820	nd	0.00518	nd	0.02	nd	nd	800	40	70
46	8/27/08	12:25	nd	101	nd	0.0131	nd	0.041	nd	nd	17,000	5,000	**30,000**
Reporting Limits			**5.0**	**10**	**0.00200**	**0.00200**	**0.00200**	**0.0100**	**0.02**	**0.02**	**20**	**20**	**20**
Action Levels			**15.0**	*****	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**50,000**	**20,000**	**10,000**

Notes:

Red values were at or above the measured constituent's action level
nd = not detected
* = Total hardness is not considered a pollutant (see section 3.4 for details), and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependent on the total hardness value of the water sample.

7 DATA ANALYSIS

This first part of this section provides an overall evaluation of test results obtained from the 2008 Dry Weather Monitoring Program. The second portion of this section describes historical trends for various constituent exceedances.

7.1 2008 Results

Of the 15 sites sampled, one site had an exceedance for orthophosphate-phosphorus, six sites had exceedances for surfactants concentration, one site had a copper exceedance, and three sites exceeded fecal indicator bacteria action levels. Specifically one site exceeded action levels for total coliforms, fecal coliforms, and *Enterococcus*, but the other two each had an exceedance only for total coliforms or only for *Enterococcus*.

TABLE 7-1
2008 EXCEEDANCES SUMMARY

Site No.	Surfactants	Orthophosphate -Phosphorus	Copper	Total Coliforms	Fecal Coliforms	*Enterococcus*
1A	✔			✔	✔	✔
6	✔					
32			✔	✔		
38	✔					
45	✔					
46						✔
47	✔					
48	✔	✔				

Note: Table reflects exceedances occurring during routine visits only, not confirmation or follow-up visits.

7.2 Previous Results

Historical exceedance results are presented in Table 7-2, Graph 7-1, and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances for field constituents, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

Since 2002, no exceedances were measured in nitrate-nitrogen, lead, diazinon, or chlorpyrifos. Thus, these constituents have not been included in the following graphs.

The historical data for the results of field analyses presented in Graph 7-1 indicate a decreasing trend in ammonia-nitrogen exceedances, with zero ammonia-nitrogen exceedances in the last two years of monitoring. There have been no exceedances in turbidity or conductivity in the last four years, in part because there is no longer a numeric action level for conductivity. No discernable trend is apparent for pH, surfactants, or orthophosphate-phosphorus.

Historical data for laboratory analyses presented in Graph 7-2 indicate that oil and grease and metals exceedances are a rare event. There have been no oil and grease or zinc exceedances since 2002 and no cadmium exceedances since 2003. This year the percentage exceedance for each bacteria constituent is lower than the historical average.

TABLE 7-2
PERCENT OF SITES WITH EXCEEDANCES BY YEAR

Year	Field Screening								Laboratory Analysis										
	Number of Field Screening Sites	Temperature	pH	Conductivity *	Surfactants	Ammonia-N	Nitrate-N	Orthophosphate-P	**Number of Laboratory Sampling Sites**	Oil & Grease	Cadmium	Copper	Lead	Zinc	Diazinon	Chlorpyrifos	Total Coliforms	Fecal Coliforms	*Enterococcus*
2002	15	0	7	0	27	53	0	0	4	50	0	0	0	25	0	0	50	50	25
2003	15	0	7	20	20	27	0	0	4	0	0	0	0	0	0	0	100	100	50
2004	15	0	0	20	53	27	0	7	4	0	25	0	0	0	0	0	100	50	50
2005	15	0	0	0	13	13	0	0	4	0	0	0	0	0	0	0	100	75	75
2006	15	0	0	0	27	7	0	0	4	0	0	0	0	0	0	0	75	50	50
2007	15	0	7	0	20	0	0	0	4	0	0	0	0	0	0	0	50	50	75
2008	15	0	0	0	40	0	0	7	4	0	0	25	0	0	0	0	50	25	50

Results based on complete routine visits only. Confirmation visits, follow-up visits, and dry sites not included.

* By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

FIGURE 7-1
PERCENT OF SITES WITH FIELD CONSTITUENT EXCEEDANCES BY YEAR

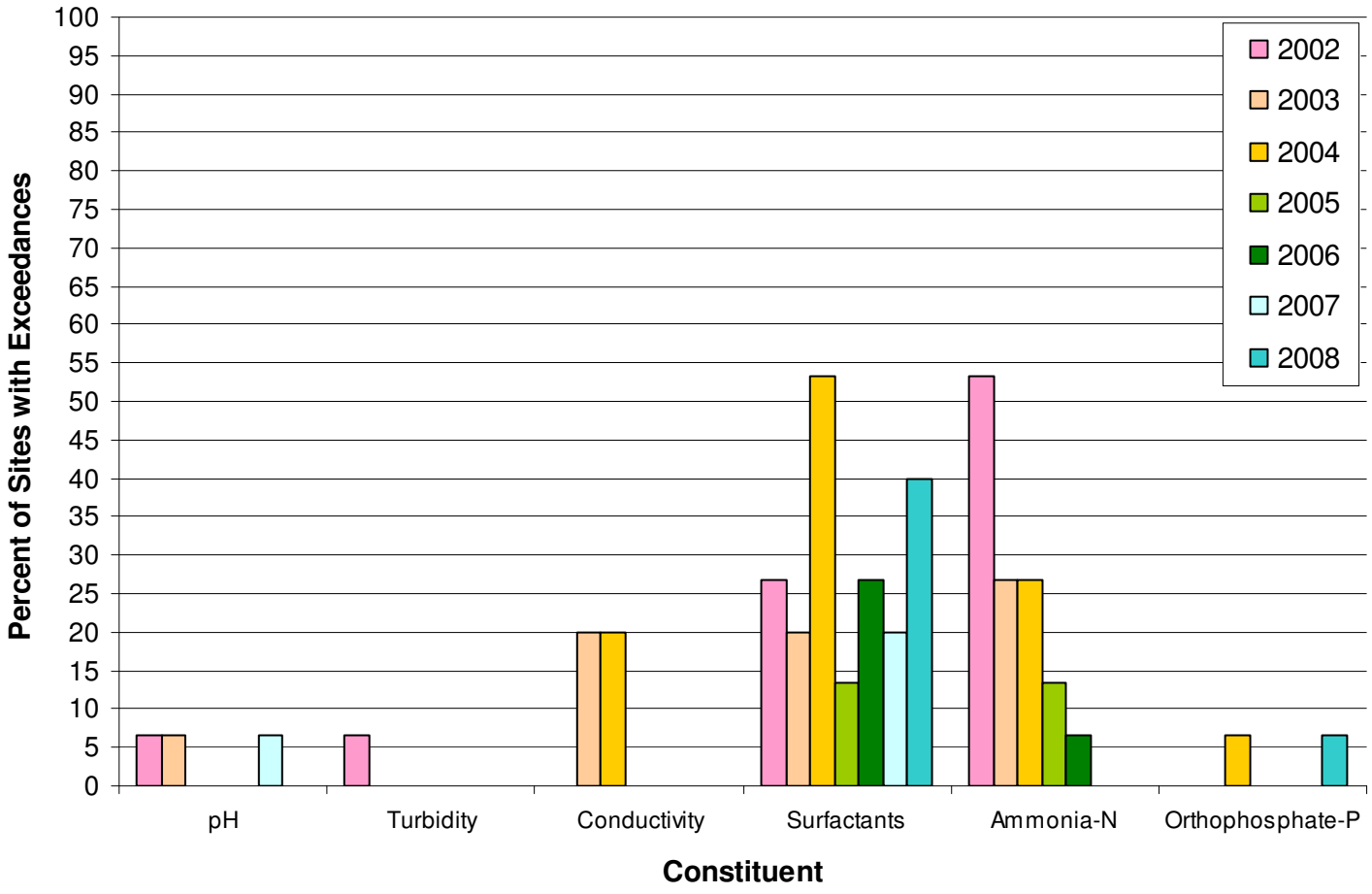

Note: Action level for turbidity is best professional judgment.

FIGURE 7-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

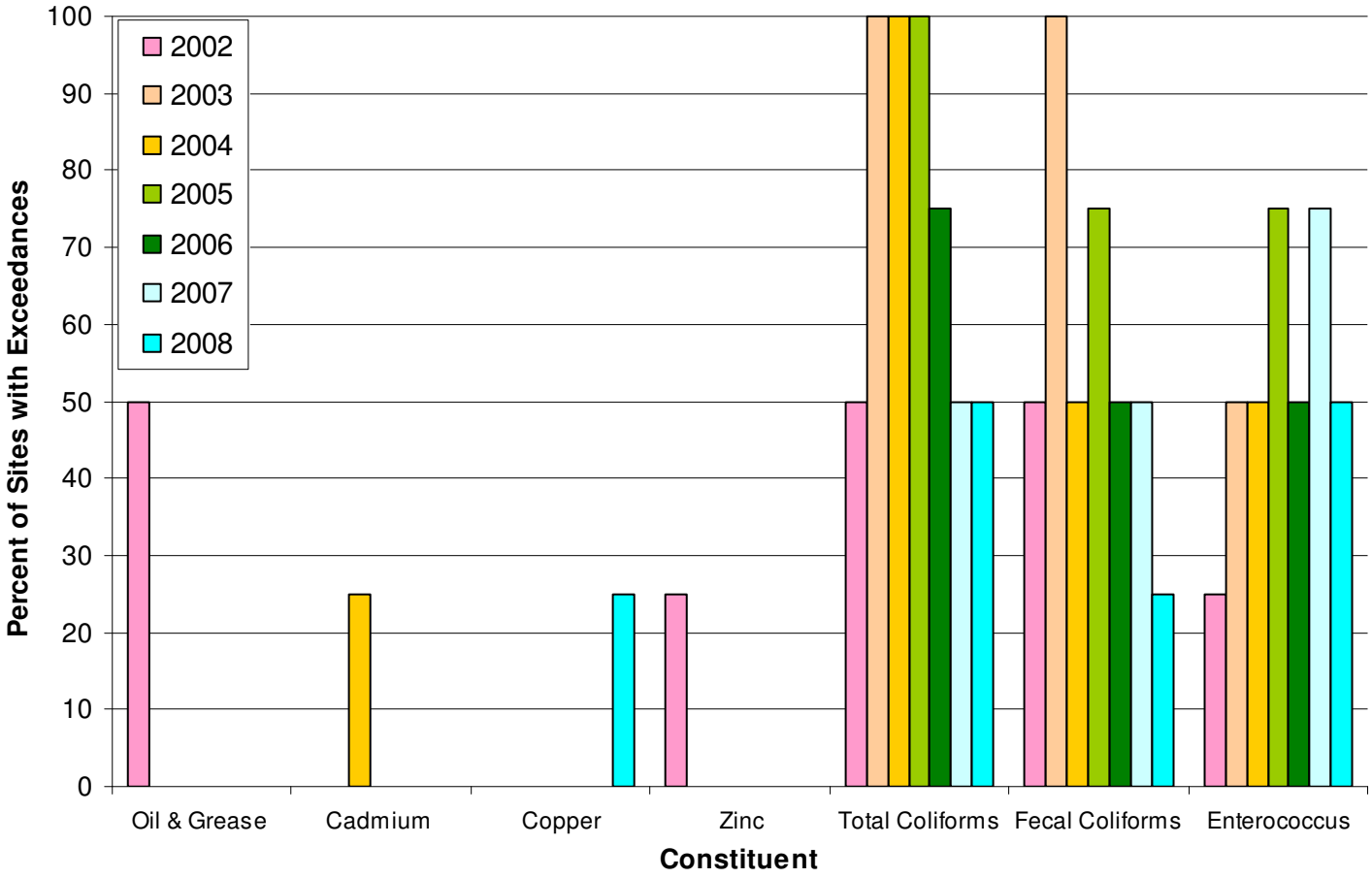

8 UPSTREAM INVESTIGATIONS

One of the main purposes of the Dry Weather Monitoring Program is to identify IC/IDs. Both field screening and laboratory analytical results are compared to regionally developed action levels (Table 3-4). When a parameter is measured at or above its action level, it is possible that an IC/ID is present. To further investigate potential IC/IDs, additional investigation is initiated whenever action levels are exceeded. Procedures for such investigations are described below.

8.1 Investigation Procedures

When Dry Weather Monitoring Program results exceed action levels, the City either conducts an investigation to identify the source of the discharge or provides rationale for why the discharge does not pose a threat to water quality and does not need further investigation. An immediate source identification investigation is initiated if visual and/or analytical evidence of gross contamination is present at a site during a routine investigation. Examples of gross contamination include substantial petroleum sheens, constituent concentrations well above action levels, abnormal colors or odors not attributable to natural site conditions, or evidence of a sewage release; such conditions would typically be considered a threat to human health or the environment. Immediate source identification investigations are also often conducted when surfactants exceedances are noted. Past experience has shown that an immediate investigation is much more likely to identify the source of the exceedance for this particular constituent. This is because such exceedances are often related to washing activities, which are typically intermittent in nature.

When further investigation is needed but an immediate upstream investigation is not necessary, the City initially confirms the results by resampling within two business days of being informed of the exceedance. For field screening, this is within two business days of the initial test. The overall time frame for laboratory analytical results depends on the time that results are received from the lab, but investigations will be conducted within two days of receiving the data, where applicable. These investigations are labeled as “confirmation” visits in this report, and they are used to guide further upstream investigations where necessary.

When confirmation sampling confirms continued exceedance of action levels, then the City conducts further investigation to identify the source of the exceedance. This type of investigation is referred to as “follow-up” in this report. Additional investigation is not conducted when exceedances are not noted during the confirmation visit or when the exceedance is known not to be the result of IC/IDs, as without a high constituent level to track upstream, the investigation is unlikely to identify any sources. As noted earlier, when gross contamination is observed during a routine visit, an immediate upstream source investigation is initiated. Prior to beginning an upstream source investigation, field staff review previous dry weather monitoring reports and consult MS4 maps to plan the investigation.

Dry weather flows are generally traced from the site in an upstream direction along the conveyance system. Photos, narrative descriptions of relevant visual observations made, and GPS coordinates are recorded to aid in documentation and in potential enforcement procedures. Water samples are collected at upstream confluences for analyses of the constituent(s) being tracked. All samples are documented through the completion of field

data sheets, which are provided in Appendix D. If the samples are being submitted for laboratory analysis, they are delivered within the appropriate holding time, and all appropriate chain-of-custody procedures are followed. Sampling and analysis methods are typically the same as those used for the routine portion of the Dry Weather Monitoring Program, with the exception of bacteria analyses. During confirmation and follow-up sampling IDEXX Colilert and Enterolert methods are used instead of the multiple tube fermentation (MTF) methods used for routine visits. The IDEXX methods provide faster turn-around time than the MTF methods: results can be provided within 24 hours instead of several days. Shorter turn-around time allows investigators to conduct further follow-up testing sooner where necessary. The IDEXX methods are also less expensive than MTF methods, which allows field investigators to take samples from a larger number of locations.

If the results of the upstream investigation indicate that an IC/ID may be present, appropriate City personnel will be notified. Where appropriate and feasible, field staff may also contact the party responsible for the discharge directly regarding the IC/IDs and potential BMPs.

8.2 Investigated Sites

During the 2008 Dry Weather Monitoring Program additional investigations to investigate potential IC/IDs were completed at eight sites. Six sites had field surfactants exceedances, one had an orthophosphate-phosphorus exceedance, three sites had exceedances for bacteria, and one site was investigated for a dissolved copper exceedance. A brief description of each site, the field and/or laboratory analytical results, photographs of selected upstream locations, and the results of upstream investigations are included below. Table 9-2 in Section 9 of this report provides a summary of the investigation results.

Site 1A

Site 1A is in a concrete channel that runs west at 43rd Street, south of Nordica Avenue. During the initial site visit the water at the site was ponded and slightly cloudy. A significant amount of trash was observed caught in the dense vegetation. The measured surfactants concentration was greater than 3.0 mg/L, above the action level of 1.0 mg/L. At that time no runoff appeared to be arriving at the site from upstream, and no evidence was found of washing or other source activities. A confirmation visit was conducted the following day, when it was observed that the water had begun to flow at a rate of approximately 3 gpm. The water was clearer and the surfactants concentration dropped below the action level to 0.875 mg/L. No further investigation was required since the high concentration appeared to be transient. However, later in the dry weather monitoring program some washing was observed upstream as described below.

Photo 8-1 Dense vegetation at Site 1A

All three bacterial indicators were measured at levels exceeding their respective action levels, so a confirmation visit and upstream investigation were conducted. Upon returning to the site, the conditions appeared to be similar to the initial visit, with no measurable flow,

Photo 8-2 Recycling container washing at Melrose Street.

but a long ponded and marshy area. A water sample from the site during the confirmation visit also showed high levels of all three indicator bacteria, which exceeded their respective action levels.

Of the northern, eastern, and southern upstream lines investigated for high bacteria levels, it appeared that only the eastern line had existing ponded and flowing water. However, near the southern line a woman was observed washing out her trash and recycling containers with a hose near 907 Melrose Street. This upstream sample was taken at a curb and gutter immediately before an inlet on the southern line (upstream location 1A-1). This water smelled slightly like cleaning agent and appeared soapy. A high concentration of total coliform bacteria (2,420,000 MPN/mL) was found that exceeded the action level, but *E. coli* and *Enterococcus* levels were within acceptable ranges (see table below). The washing activity was immediately reported to the City.

Up the eastern line, a sample was taken at primary site 45, a manhole on Fig Court (upstream location 1A-2). While no runoff was entering the site, it had ponded and was slowly seeping over a damp area to the downstream pipe. This sample had very high levels of total coliform, *E. coli* and *Enterococcus* bacteria (see table below). Note that a portion of the area tributary to upstream location 1A-2 (also Site 45) is outside of the jurisdiction of the City of National City, originating from the City of San Diego. Another branch of this eastern line was sampled further upstream at a catch basin on Palm Avenue, south of the intersection with Division Street (upstream location 1A-3). A small amount of runoff entered the inlet from the nearby school, where a hose and damp ground were noted. The sample from the main pipe below the catch basin had high levels of total coliform and *Enterococcus* bacteria, with relatively low levels of *E. coli* (see table below).

In conclusion, the field crew believes that the high bacteria levels are a combination of conditions at the site itself, runoff from the eastern line, and residential washing activities. The trash and dense vegetation at the site likely promote bacterial growth, particularly when the water is ponded, as it was during these visits. Runoff from the eastern line at upstream location 1A-2 passes through a significant amount of trash in upstream catch basins before the sampling location. Part of this runoff also originates in the adjacent City of San Diego. Recommendations for action corresponding to the problematic areas are provided in Section 9 of this report. A map and a table summarizing the upstream investigation for Site 1A are provided below.

FIGURE 8-1
SITE 1A BACTERIA UPSTREAM INVESTIGATION MAP

TABLE 8-1
SITE 1A BACTERIA UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Total Coliform (MPN/mL)	Fecal Coliform (MPN/mL)	*Enterococcus* (MPN/mL)
1A	Southwest of 43rd Street and Nordica Avenue	ponded	>1,600,000	>1,600,000	50,000
1A (confirm)	Southwest of 43rd Street and Nordica Avenue	ponded	1,120,000	28,471*	14,830
1A-1	Curb and gutter between 843 and 905 Melrose Street	<1	2,420,000	14,118*	1,600
1A-2	Site 45, in front of Fig Court, in the middle of the street (east)	ponded	2,420,000	115,294*	241,960
1A-3	200 feet south of Palm Avenue and Division Street intersection near National City sign	< 1	242,000	14,118*	31,300

* Derived from E. coli results, divided by a factor of 0.85.

Site 6

Photo 8-3 Sweetwater River water overwhelms Site 6 tidally.

Site 6 is an outlet to the north bank of the Sweetwater River about 500 feet east of Highland Avenue. During the initial site visit the Sweetwater River water level was about 1.5 feet below the outlet. Water was ponded on the concrete of the outlet structure but appeared to be trickling down to the river. The water sample had a high specific conductance of over 20.00 mS/cm, which is often indicative of salt water in sites where tidal influence is possible. The surfactants test measured a concentration of 2.50 mg/L MBAS, however sea water is known to interfere with the field test kit for surfactants and cause artificially high measurements. The storm drain inlets upstream of the site were visually inspected for runoff, but no water was observed. During the confirmation visit, the tide was evidently higher than during the initial visit and the bottom of the outlet was submerged in the Sweetwater River water. A sample of the water confirmed that it also had a concentration of 2.50 mg/L MBAS according to the field test kit and a specific conductance over 20.00 mS/cm. Since no evidence of storm water runoff was found, and all water appeared to be sea water, no further investigation was required.

Site 32

Photo 8-4 Litter and human feces in the outlet at Site 32.

Site 32 is an outlet that drains directly to the northern bank of the Sweetwater River. During the initial visit, the water sample appeared yellow in color. Low levels of litter were observed at the site, but human fecal matter and used toilet paper were found within the outlet structure, adjacent to the flowing water. Laboratory analyses of the sample collected during the initial round of field screening measured total coliform bacteria levels at 70,000 MPN/mL, above the action level of 50,000 MPN/mL. Unlike the previous year, *Enterococcus* bacteria were measured below the action level. The dissolved copper analysis also returned a result that, considering the total hardness, was above the acceptable California Toxics Rule (CTR) Criterion Maximum Concentration (CMC), the action level for metals. Two separate confirmation visits were conducted since the metal analyses were received later than the other laboratory analyses.

Photo 8-5 Slow-moving water and litter in catch basin at upstream location 32-3.

The water sample collected during the confirmation visit for the bacteria exceedance revealed reasonably low levels of total coliform bacteria. Despite a much diminished bacteria level at the site, upstream locations 32-1, 32-2, and 32-3 all had total coliform bacteria above the action level (see table below).

While high bacteria levels were noted upstream of Site 32, the most obvious source of bacteria was observed at the site itself, where human feces and used toilet paper were deposited. Another potential source of bacteria noted was a significant amount of litter in the catch basin at the most upstream site (32-3). Between Site 32-3 and the original site a concrete channel has dense vegetation and decomposing organic debris that also could promote bacterial growth (32-2). A summary of the bacteria upstream investigation for Site 32 is provided in the table and map below.

When the site was revisited for the copper exceedance, the total hardness had increased and the dissolved copper concentration had decreased, resulting in a value below the action level (CMC). Since the copper concentration appeared to have been a transient condition with no apparent source, no further investigation was conducted.

FIGURE 8-2
SITE 32 BACTERIA UPSTREAM INVESTIGATION MAP

TABLE 8-2
SITE 32 BACTERIA UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Total Coliform (MPN/mL)
32	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River	<1	70,000
32 (confirm)	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River	<1	6,020
32-1	Open concrete channel south of Sweetwater Town and Country Shopping Center, western downstream end	<1	68,700
32-2	Open concrete channel south of Sweetwater Town and Country Shopping Center, eastern upstream end	<1	120,000
32-3	Catch basin at the northwest corner of Sweetwater Rd. and Prospect St. intersection, inside the Sweetwater Plaza Shopping Center	<1	83,000

Site 38

Photo 8-6 Small area of ponded water at Site 38.

Site 38 is an earthen channel just downstream of an outlet, along Harbinson Avenue. During the initial site visit, the water was ponded with an unidentifiable sheen on the surface. Water sampled had a surfactants concentration of 1.25 mg/L, above the action level of 1.0 mg/L. Upon immediate inspection, it did not appear that any water had recently entered the storm drain conveyance system upstream of the site. During the confirmation visit, the conditions of the site had not changed in any notable way, and the surfactants concentration was the same as the initial visit.

Properties adjacent to the earthen channel consist mainly of pervious ground and no evidence of washing or other runoff was noted. An upstream investigation was conducted at two sequential inlets on Rachael Avenue, upstream of the outlet. Though both on Rachael Avenue, one inlet was within the City of National City and the other was in the City of San Diego. The catch basin below the inlet in the City of National City was dry, but the slightly upstream catch basin in the City of San Diego had a small amount of ponded water (upstream location 38-1). The water at upstream location 38-1 had a lower surfactants concentration of 0.5 mg/L, indicating that it was not a likely recent source of surfactants. No other sources of runoff were observed. Since the water at the site was ponded, and the upstream lines were dry and ponded, it is unclear how long the water had been ponded at the site. The ponded water may have been the result of a transient flow, which later pooled and evaporated, increasing the surfactants concentration in the remaining water at the site. Recommended action is described in Section 9 of this report.

Site 45

Site 45 is a manhole in front of 1243 and 1305 Fig Court, in the middle of the street. At the time of the initial visit, water was coming only from the pipe to the north of the junction. The sample water had a surfactants concentration of 3.0 mg/L. Immediately the upstream investigation began with tracing the pipe upstream to a catch basin on the south side of Scott Drive (upstream location 45-1). Trash and ponded water were observed in the catch basin, and the sample was yellow and smelled like sewage. The surfactants concentration was greater than 3 mg/L, but no recent flow to the storm drain was apparent.

During the confirmation visit, the surfactants concentration at Site 45 was unchanged at 3.0 mg/L. The upstream location 45-1 was inaccessible due to a parked car, but a puddle of water was observed at the northeast corner of Delta Street and Scott Drive (upstream location 45-2). A sample from the puddle had a surfactants concentration of 2.0 mg/L. Up the hill on Delta Street evidence of outdoor laundry washing was observed at the apartment complex at 4616 Delta Street. Several shirts were hung on the fence to dry and an empty bucket and bottle of laundry detergent were noted in front of unit 4 of the complex. Since water stains were evident in the parking lot, it appeared likely that irrigation runoff would transport surfactants generated by outdoor washing. Recommended action is described in Section 9 of this report. A map and a table summarizing the upstream investigation for Site 45 are provided below.

Photo 8-7 Evidence of outdoor laundry washing near upstream location 45-2.

FIGURE 8-3

SITE 45 SURFACTANTS UPSTREAM INVESTIGATION MAP

TABLE 8-3

SITE 45 SURFACTANTS UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Surfactants (mg/L)
45 (routine)	In front of 1243-1305 Fig Court, in the middle of street	< 1	3.0
45-1	In front of 1304 and 1242 Scott Drive, off Palm Ave.	ponded	> 3.0
45 (confirm)	In front of 1243-1305 Fig Court, in the middle of street	2	3.0
45-2	Curb and gutter at northeast corner of the Scott Drive and Delta Street intersection	1	2.0

Site 46

Photo 8-8 Upstream location 46-1, a puddle in the concrete swale by a catch basin.

Photo 8-9 Food waste on the ground near the catch basin.

Site 46 is a manhole located at the southern end of the South Bay Plaza Shopping Center, behind various commercial businesses, including several restaurants. Laboratory analyses measured the *Enterococcus* bacterial indicator at 30,000 MPN/mL, in exceedance of the action level of 20,000 MPN/mL. Unlike last year, both total and fecal coliform bacteria levels were relatively low.

During the confirmation visit to the site, conditions similar to the initial visit were observed in the manhole. The sample collected was clear and odorless. Bacterial counts from the sampled showed even higher levels of *Enterococcus* bacteria than the initial visit (see table below). While at Site 46, a puddle of runoff was observed in a concrete swale by the catch basin a few yards south of the site that collects runoff from behind the commercial shopping center. This puddle consisted of opaque brown water that smelled strongly of decaying food. Analysis of a sample taken from this puddled water (upstream location 46-1) resulted in a very high *Enterococcus* bacteria level. In previous years, high levels of bacteria at this site had been attributed to poor waste disposal and washing activities of businesses near the site and upstream in the shopping centers. This puddled water is an example of a likely source of bacteria, which may have been a result of the same type of business activities in the immediate area. Improper disposal of food waste and litter was also observed at the site, near the shopping center's dumpster enclosure. It was also noted that a small amount of the food waste had fallen into the catch basin upstream of the site.

A second confirmation visit at Site 46 was performed to determine whether *Enterococcus* levels were still high. The sample had an *Enterococcus* count of only 1,607 MPN/100mL, suggesting that the high bacteria levels at the site may have been a temporary condition arising from intermittent discharges in the area. Recommendations regarding this site are provided in Section 9 of this report. A table summarizing the upstream investigation for Site 46 is presented below.

TABLE 8-4
SITE 46 BACTERIA UPSTREAM INVESTIGATION

ID	Location	Flow (gpm)	*Enterococcus* (MPN/mL)
46	South of South Bay Plaza center, between Fashion Plaza and Fiesta Pet Shop	9	30,000
46 (confirmation)	South of South Bay Plaza center, between Fashion Plaza and Fiesta Pet Shop	6	86,640
46-1	Concrete swale by catch basin a few yards south of Site 46	ponded	241,960
46 (confirmation)	South of South Bay Plaza center, between Fashion Plaza and Fiesta Pet Shop	1	1,607

Site 47

Site 47 is the southern of two manholes located on the south side of the intersection of Mile-Of-Cars Way with Transportation Avenue. This part of the storm drain conveyance has an elevation that is lower than the high tide at the nearby San Diego Bay, and has the potential to be tidally influenced. During the initial site visit, the water level in the manhole cleanout was low (0.5 inches deep) and a small flow of 5 gpm was observed. The conductivity of the sample indicated some tidal influence, and the tide height was about 3.22 feet and incoming. The surfactants concentration appeared to be 1.75 mg/L; however this test kit could have been influenced by the salinity of the bay water, which interferes with the test for MBAS. This is likely since the conductivity of the sample exceeded the range of the meter at 20.00 mS/cm. In case a discharge of surfactants was also present, an upstream investigation was conducted the same day.

Photo 8-10 Runoff from car dealership entering drains on lot.

Photo 8-11 Runoff from car dealership at curb/gutter (upstream location 47-1) entering the storm drain inlet.

Immediately the area upstream of the site was investigated for any visible surface runoff. On the west side National City Boulevard, just south of Mile-Of-Cars Way, runoff was observed draining from two catch basins on the property of the Frank Toyota car dealership to the curb via four-inch pipes. This water was beginning to evaporate but still reached a nearby storm drain inlet. A sample of this runoff at the curb gutter had a surfactants concentration of greater than 3 mg/L and was not tidally influenced (Site 47-1). Brief observations of the Frank Toyota dealership indicated that the asphalt beneath each of cars in the lot was wet, with evidence of runoff. An automated carwash in the rear of the property did not drain in the direction of the sample, but was not completely contained. Personnel present reported that no soap was used on the cars in

the parking area and that plain water only was used. The City was notified of the action level exceedance, and illegal discharge and City action stopped the discharge.

A second upstream location with ponded water was sampled at the southern line leading to Site 47 (upstream location 47-2), but the surfactants concentration was below the action level. A confirmation visit to Site 47 at a lower tide height (-0.44 feet, incoming) still resulted in a water sample that appeared tidally influenced. The water level in the manhole was significantly higher than the initial visit, more than one foot deep. The surfactants test indicated a value of 1.25 mg/L, but no surface runoff was visible upstream of the site. The high conductivity level and large amount of water draining from the site seem to indicate that the site was tidally influenced again during the confirmation visit. Recommended action is described in Section 9 of this report. A map and a table summarizing the upstream investigation for Site 47 are provided below.

FIGURE 8-4

SITE 47 SURFACTANTS UPSTREAM INVESTIGATION MAP

TABLE 8-5

SITE 47 SURFACTANTS UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Surfactants (mg/L)
47 (routine)	Southeast corner of the Mile of Cars Way and Transportation Avenue	5.0	1.75
47-1	In front of Frank Toyota on National City Boulevard, south of mile of Cars Way	< 1	> 3.0
47-2	Outside west entrance to Frank Toyota, south of Mile of Cars Way and Transportation Ave.	ponded	0.63
47 (confirm)	Southeast corner of the Mile of Cars Way and Transportation Avenue	8.0	1.25

Site 48

Site 48 is a catch basin at the northwest corner of the western intersection of East 14th Street and Grove Street. In the catch basin, fine sediment, decomposing organic material, and trash were observed in the ponded water, including a tied bag of kitchen vegetable waste. The sample smelled like sewage and was a slightly cloudy brown. The surfactants concentration was greater than 3 mg/L, and the orthophosphate-phosphorus concentration was 4.63 mg/L, both above their respective action levels. An immediate investigation for sources of surfactants was conducted, which found evidence that a resident had recently washed his vehicle at 1414 Stancrest Lane.

Photo 8-12 Evidence of recent residential car washing, including hose and bucket.

During the confirmation visit, additional trash and bagged vegetable waste was noted in the catch basin since the last visit. Both constituents were still above their respective action levels so a more thorough upstream investigation was performed. The main upstream line was traced east of the site to a catch basin on the east side of Euclid Avenue, just south of Seawind Drive. The same sewage odor, brown color, and cloudiness were observed in the sample taken from the gutter by the catch basin. The sample had a surfactants concentration much greater than 3 mg/L and an orthophosphate-phosphorus concentration of 1.956 mg/L, nearly at the action level. In that residential area evidence of recent car washing was also observed at 2436 Seawind Drive. Since the surfactants concentration appeared to be unusually high, the detergents used for car washing may have been a significant source of orthophosphate-phosphorus, depending on the type of detergent used. Since no recent fertilizer use was evident during the investigation, and the high surfactants and orthophosphate-phosphorus concentrations were coincident, the detergent appears likely to be the source of orthophosphate-

phosphorus. From the available evidence, it appeared that washing activities had transported surfactants and orthophosphate-phosphorus from upstream to the site, where it ponded. Recommended actions are described in Section 9 of this report. A map and a table summarizing the upstream investigation for Site 48 are provided below.

FIGURE 8-5

SITE 48 SURFACTANTS AND ORTHOPHOSPHATE-P UPSTREAM INVESTIGATION MAP

TABLE 8-6

SITE 48 SURFACTANTS AND ORTHOPHOSPHATE-P UPSTREAM INVESTIGATION

Site ID	Location	Flow (gpm)	Surfactants (mg/L)	Orthophosphate-P (mg/L)
48 (routine)	Northwest of E. 14th St. and Grove St.	ponded	> 3.0	4.626
48 (confirm)	Northwest of E. 14th St. and Grove St.	ponded	> 3.0	2.009
48-1	Just South of Euclid Ave. and Seawind Drive east side of Euclid Ave.	< 1	> 3.0	1.956

9 SUMMARY AND RECOMMENDATIONS

9.1 Summary

9.1.1 Summary of Field Screening and Laboratory Analysis Data

Fifteen primary monitoring locations were selected and visited for the 2008 Dry Weather Monitoring Program. Four alternate sites were visited and sampled to replace the four primary sites that were dry. Laboratory analyses were performed on water samples from four of the primary sites. Table 9-1 provides a summary of action level exceedances.

TABLE 9-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (15 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
pH	0	0 %	---
Conductivity	0	0 %	---
Turbidity	0	0 %	---
Surfactants	6	40 %	1A, 6, 38, 45, 47, 48
Ammonia-Nitrogen	0	0 %	---
Nitrate-Nitrogen	0	0 %	---
Orthophosphate-Phosphorus	1	7 %	48
Laboratory Analyses (4 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Site(s) Exceeding Action Level**
Oil & Grease	0	0 %	--
Cadmium	0	0 %	--
Copper	1	25 %	32
Lead	0	0 %	--
Zinc	0	0 %	--
Diazinon	0	0 %	--
Chlorpyrifos	0	0 %	--
Total Coliforms	2	50 %	1A, 32
Fecal Coliforms	1	25 %	1A
Enterococcus	2	50 %	1A, 46

Note: Data is from the initial site visits only.

In general, the City of National City's Dry Weather Monitoring Program can be characterized by very low flows and ponded water. Ten of the 15 routine visits to screened sites found flows less than or equal to 1 gpm, excluding the four dry sites. The low level of

dry weather flows in the City can be attributed to a lack of groundwater seepage and a low incidence of irrigation runoff. Therefore concentrations of pollutants may be elevated in the runoff, but in many cases the water will never reach a receiving water body due to evaporation or infiltration, and if runoff does reach a water body, the pollutant load is likely to be relatively small.

A formal trash assessment was performed for the first time in 2008 in accordance with the Municipal Permit. Nineteen sites, including dry sites, were assessed, and nine of the sites were scored as "optimal" or "suboptimal", having little or no trash. Five sites had "marginal" levels of trash. Four sites were considered "submarginal" and one site was considered "poor" due to significant amounts or types of trash consistent with human use and dumping. Two of the sites that were "submarginal" or "poor" also had trash that was considered a threat to aquatic and/or human health.

9.1.2 Summary of Follow-Up Investigation Data

Table 9-2 presents the conclusions based on the results of confirmation visits and upstream investigations conducted at eight sites for the 2008 Dry Weather Monitoring Program.

TABLE 9-2
SUMMARY OF FOLLOW-UP INVESTIGATIONS

Site	Follow-Up Investigation Target Constituent(s)		Results / Probable Sources
	Field	Laboratory	
1A	Surfactants	Total Coliforms, Fecal Coliforms, *Enterococcus*	Surfactants level was below the action level when tested the next day, but washing activities were observed upstream later. Washing activities and trash in the storm drain conveyance were observed upstream of the site.
6	Surfactants		No potential source of surfactants was observed for this ponded water. High conductivity and direct observation indicated a strong tidal influence on the site.
32		Copper, Total Coliforms	No potential source of copper was observed and the concentration was much lower during the confirmation visit. It may have been due to a transient flow. Total coliforms were at high levels upstream, but were reduced at the site during confirmation. Potential sources included human feces at the site and trash in stagnant water in an upstream catch basin.

Site	Follow-Up Investigation Target Constituent(s)		Results / Probable Sources
	Field	Laboratory	
38	Surfactants		No potential source of surfactants was observed for this ponded water in an earthen channel. No runoff noted upstream of the site. Ponded water may have been from a transient flow.
45	Surfactants		Evidence of laundry hand washing in a parking lot at an upstream residential complex at 4616 Delta Street, in the City of San Diego.
46		*Enterococcus*	Puddle of runoff near site had very high levels of *Enterococcus* and appeared likely to be from adjacent commercial businesses. while grease bins were in better condition than in 2007, food waste was observed in a parking area and may have entered an upstream catch basin. A second confirmation visit indicated *Enterococcus* levels at the site fell below the action level.
47	Surfactants		High conductivity indicated a strong tidal influence on the site. However, immediate investigation also found a high surfactants concentration in a discharge from Frank Toyota. The City was contacted and stopped the discharge. The business was issued a Notice of Violation and a citation.
48	Surfactants, Orthophosphate-P		Detergent from residential car washing activities was observed upstream as the only source of flow and the likely source of both surfactants and orthophosphate-phosphorus.

9.2 Recommendations

Based on the results of the 2008 Dry Weather Monitoring Program for the City of National City, these follow-up actions are recommended for consideration.

9.2.1 Education

- Provide educational materials regarding BMPs for outdoor washing activities to the following areas of the City:
    - All residences on Melrose Street,

- All residences on Scott Drive,
- Integrity Charter School on Palm Avenue,
- Rachael Avenue residences between East 20th Street and East 24th Street,
- 1414 Stancrest Lane, and
- 2436 Seawind Drive.

- Work with the City of San Diego to provide educational materials regarding BMPs for outdoor washing activities to the residential complex at 4616 Delta Street, which is outside of the jurisdiction of the City of National City but upstream of Site 45 and Site 1A.

9.2.2 Inspection and Maintenance

- Follow up as necessary with Frank Toyota on National City Boulevard and Mile-of-Cars Way to ensure no future discharge of water containing surfactants to the storm drain.
- While a more recent confirmation visit indicated much lower bacteria levels at Site 46, conduct further source investigation due to the history of high bacterial levels at this site. In particular, investigate whether the activities of nearby businesses could cause bacterial growth in the storm drain. Contact the property management to keep the dumpster enclosure and grease bin areas free of loose trash and food waste.
- Trash and debris at the site, and further upstream are likely responsible for the elevated levels of bacteria measured at Site 1A. In order to discourage bacterial growth, the City should clean out trash and debris accumulation in catch basins and curbs upstream of Site 1A. In particular, significant amounts of trash were observed in the catch basins on Scott Drive. Work with the City of San Diego to prevent discharges and minimize trash generation in areas outside the City of National City but tributary to Site 1A (e.g., portions of Delta Street).
- Decomposing trash and human waste are likely sources of bacteria to Site 32. Schedule cleaning for the inside of the outlet at Site 32 to prevent waste accumulation. This area should also be monitored as feasible to discourage human inhabitation. Also remove trash from the manhole at the northwest corner of the Sweetwater Road and Prospect Street intersection, which is upstream of Site 32.
- Remove trash from all sites in the City where trash was observed (i.e., every site except Site 47). Prioritize regular removal of trash from sites 1A, 6, 13A, 32, and 40, which were scored as submarginal or poor by the trash assessment during routine site visits, and two of which were considered a potential threat to aquatic and/or human health. Additionally, remove trash found at sites 4, 31A, 42, 44, and 44A, which were scored as marginal. Add these sites to the City's existing clean up schedule as appropriate. The remaining sites with a suboptimal trash score should also be cleaned up and added to the City's existing clean up schedule as appropriate, including sites 3, 38, 41, 43A, 45, 46, 48, and 49.

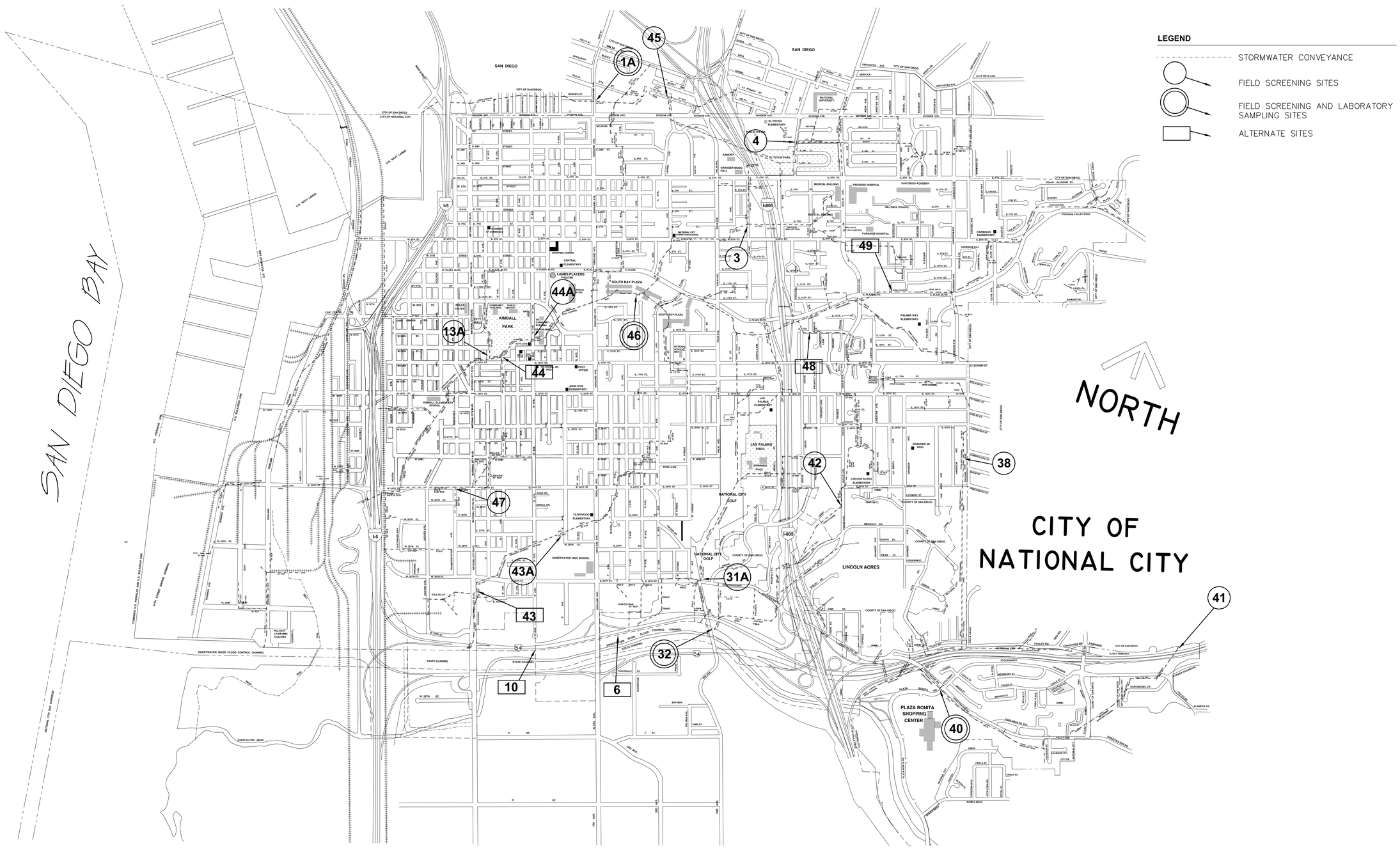

CITY OF NATIONAL CITY

DRY WEATHER SAMPLING LOCATIONS

DRAWN BY: CM	CHECKED BY:	PROJECT NO: 200840W-5	FIGURE A
FN:NATIONALCITY-DRY WEATHER 2008		DATE: 11-03-08	

D-Max Engineering, Inc.

FIGURE B
WATERSHED MAP OF THE NATIONAL CITY AREA, BROKEN INTO HYDROLOGIC SUBAREAS

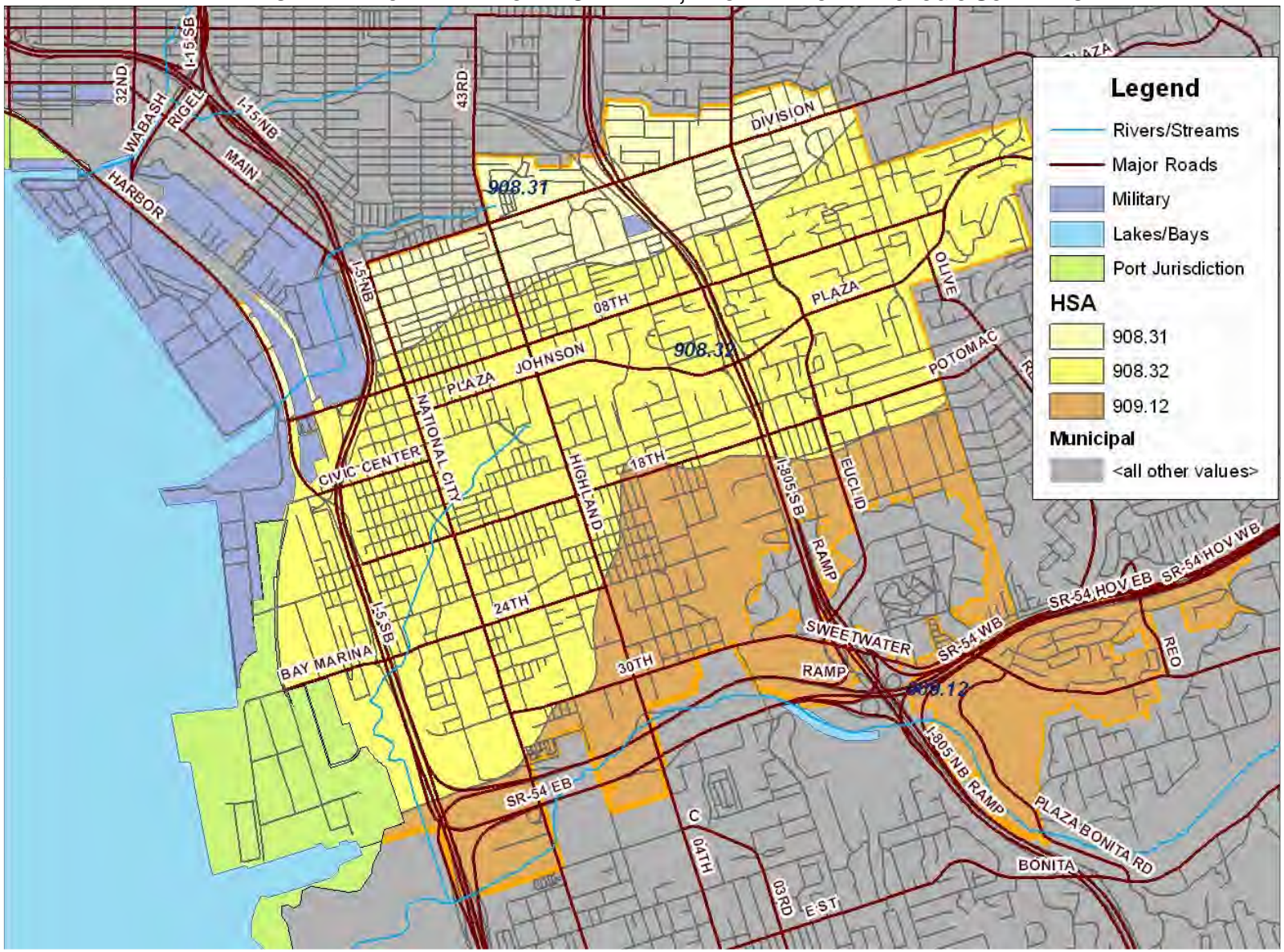

Appendix A

Historical Dry Weather Monitoring Data

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2002																	
Temperature (°C)	25	21	26	ns	24	24.5	22	25	20	ns	22	23	24	23	22	24	31.5
pH	9.3	7.7	8.1	ns	7.6	8.5	7.7	9.2	8.2	ns	8.2	7.7	8.2	7.8	7.7	8.0	9.5
Conductivity (mS/cm)	2.00	17.30	0.98	ns	11.35	1.10	1.17	1.26	3.46	ns	1.25	2.70	0.98	1.46	7.28	2.54	1.35
Turbidity (NTU)	95	64	2.71	ns	1.88	11.91	4.2	5.49	4.24	ns	13.94	4.12	300	9.19	7.79	388	8.96
Ammonia-N (mg/L)	5	4	0.3	ns	0.3	0.5	1	0.5	0.7	ns	0.30	0.5	2.5	1.5	1.50	2.0	2.0
Nitrate-N (mg/L)	0.3	0	0.15	ns	0.1	0.3	0.2	0.7	1	ns	2	0	0.8	1.0	0.1	0	0.0
Orthophosphate-P (mg/L)	1.96	0.98	1.30	ns	0.16	1.30	1.60	0.65	0.49	ns	0.49	0.65	0.49	1.30	0.98	1.30	0.32
Surfactants (mg/L) (Field)	24	3	0.5	ns	0.5	0.5	0.75	0.25	0.50	ns	0.50	0.5	0.75	0.75	6.75	8.00	6.00
Surfactants (mg/L MBAS) (Lab)	6.76								nd			nd		0.69			
Oil and Grease (mg/L)	8.0								25.0			13.0		18.0			
Total Hardness (mg/L CaCO3)	267.0								631.0			338.0		237.0			
Cadmium (mg/L)	nd								nd			nd		nd			
Copper (mg/L)	nd								nd			nd		nd			
Lead (mg/L)	nd								nd			nd		nd			
Zinc (mgL)	0.26								nd			nd		nd			
Diazinon (µg/L)																	
Chlorpyrifos (µg/L)																	
Total Coliform Bacteria (MPN/100mL)	>160,000								20,000			13,000		>160,000			
Fecal Coliform Bacteria (MPN/100mL)	>160,000								11,000			8,000		90,000			
Enterococcus Bacteria (MPN/100mL)	5,000								300			2,300		30,000			
2003																	
Temperature (°C)	21	25	23	ns	25.5	20.5	22	23	20.5	ns	21	22.5	23.5	22.5	23.5	22.5	23
pH	7.9	7.6	6.8	ns	8.1	7.7	8.1	7.7	8.5	ns	7.4	8.2	7.4	7.5	8.1	7.5	9
Conductivity (mS/cm)	1.36	>20.00	1.36	ns	9.58	1.43	1.12	1.67	1.70	ns	1.39	3.12	1.53	1.72	>20.00	2.20	1.37
Turbidity (NTU)	7.21	25.01	2.50	ns	0.42	6.61	14.47	10.73	3.95	ns	36.29	11.94	3.35	6.51	26.82	45.32	12.21
Ammonia-N (mg/L)	0.1	0.1	0.2	ns	0.3	1.0	2.0	0.4	0.1	ns	1.5	0.8	0.2	0.4	1.5	2.0	0.8
Nitrate-N (mg/L)	0.3	0.1	0.3	ns	0.3	0.1	0.1	0.6	0.5	ns	0.8	0.1	0.8	0.4	0.3	2.5	nd
Orthophosphate-P (mg/L)	0.07	0.65	0.49	ns	0.07	1.30	0.49	0.20	0.10	ns	0.65	0.82	0.26	0.49	0.65	0.65	0.32
Surfactants (mg/L) (Field)	0.25	1.50	0.25	ns	0.25	0.25	0.50	0.50	0.25	ns	0.25	0.50	0.25	0.50	1.50	>3.0	1.00
Surfactants (mg/L MBAS) (Lab)	nd					nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					1			
Total Hardness (mg/L CaCO3)	208					180			345					320			
Cadmium (mg/L)	nd					nd			nd					nd			
Copper (mg/L)	0.011					0.006			nd					0.008			
Lead (mg/L)	nd					nd			nd					nd			
Zinc (mgL)	nd					0.045			nd					0.035			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100mL)	90,000					50,000			160,000					90,000			
Fecal Coliform Bacteria (MPN/100mL)	50,000					24,000			50,000					30,000			
Enterococcus Bacteria (MPN/100mL)	8,000					30,000			300					11,000			

ns = not sampled
nd = not detected

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2004																	
Temperature (℃)	23	20	22	ns	24	20	27	22	22	ns	24	22	25	24	26	31	30
pH	7.8	7.4	7.9	ns	7.7	7.8	8.2	7.4	8.3	ns	8.4	8.2	7.9	7.5	7.5	8.4	8.9
Conductivity (mS/cm)	1.74	20.00	1.25	ns	10.76	1.45	1.38	1.94	1.94	ns	1.26	1.89	1.62	1.45	20.00	2.50	2.16
Turbidity (NTU)	11.51	6.41	1.64	ns	1.88	4.38	24.00	8.88	4.56	ns	46.00	29.13	3.21	18.27	5.65	70.00	5.53
Ammonia-N (mg/L)	0.8	0.4	0.1	ns	0.1	0.4	2.0	3.0	0.3	ns	0.3	0.6	0.7	0.8	0.8	2.0	1.0
Nitrate-N (mg/L)	1.25	1.25	1.25	ns	1.25	1.25	1.25	1.25	1.25	ns	2.50	1.25	1.25	1.25	1.25	1.25	1.25
Orthophosphate-P (mg/L)	0.98	0.82	0.65	ns	0.07	1.47	1.47	0.49	0.33	ns	1.14	3.26	0.98	1.14	1.30	1.30	0.07
Surfactants (mg/L) (Field)	0.88	3	0.50	ns	0.75	0.25	0.75	0.50	0.38	ns	2.50	1.00	1.25	1.25	2.50	3.00	2.50
Surfactants (mg/L MBAS) (Lab)	nd					nd			nd					0.6			
Oil and Grease (mg/L)	1					nd			nd					2			
Total Hardness (mg/L CaCO3)	268					320			404					246			
Cadmium (mg/L)	nd					nd			nd					0.014			
Copper (mg/L)	nd					0.005			nd					nd			
Lead (mg/L)	nd					nd			nd					nd			
Zinc (mgL)	0.032					0.03			0.022					0.039			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100mL)	900,000					90,000			50,000					1,600,000			
Fecal Coliform Bacteria (MPN/100mL)	30,000					2,200			2,200					160,000			
Enterococcus Bacteria (MPN/100mL)	30,000					5,000			1,300					22,000			
2005																	
Temperature (℃)	20.5	24.8	22.3	ns	25.1	19.8	20.7	20.1	20.6	ns	19.4	25	22.4	21.4	24.7	20.1	20.2
pH	7.4	8.8	7.7	ns	7.8	6.9	7.5	7.8	8.1	ns	7.9	8.3	8.3	7.9	7.5	8.4	8.8
Conductivity (mS/cm)	1.09	7.78	1.82	ns	13.22	1.42	1.49	1.93	2.20	ns	1.01	2.97	1.28	1.32	12.40	1.05	1.68
Turbidity (NTU)	8.88	3.44	2.81	ns	1.28	7.50	23.84	10.22	3.07	ns	11.88	3.54	3.22	7.44	4.52	46.65	8.65
Ammonia-N (mg/L)	0.8	0.3	0.2	ns	0.2	0.6	2.0	0.7	1.5	ns	0.5	0.2	0.2	0.4	0.3	0.8	0.2
Nitrate-N (mg/L)	1.25	1.25	1.25	ns	1.25	1.25	1.25	1.25	1.25	ns	1.25	2.50	1.25	1.25	1.25	1.25	1.25
Orthophosphate-P (mg/L)	0.33	0.13	0.33	ns	0.03	0.26	0.65	0.49	1.00	ns	0.65	0.10	0.26	0.33	0.82	0.33	0.26
Surfactants (mg/L) (Field)	1.50	0.75	0.25	ns	0.50	0.75	0.75	0.50	0.75	ns	0.75	0.50	0.25	0.75	1.00	0.50	0.25
Surfactants (mg/L MBAS) (Lab)	0.9					nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	279					312			538					351			
Cadmium (mg/L)	nd					nd			nd					nd			
Copper (mg/L)	nd					nd			nd					0.006			
Lead (mg/L)	nd					nd			nd					nd			
Zinc (mgL)	nd					0.041			nd					0.029			
Diazinon (µg/L)	0.15					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100mL)	1,600,000					500,000			1,600,000					1,600,000			
Fecal Coliform Bacteria (MPN/100mL)	50,000					22,000			130,000					2,800			
Enterococcus Bacteria (MPN/100mL)	50,000					80,000			7,000					22,000			

ns = not sampled
nd = not detected

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2006																	
Temperature (°C)	24	28	29	ns	28.5	18.4	22	22.8	20.2	ns	23.4	28.5	24.3	24.5	26.2	30.1	19.8
pH	7.7	8.6	8.2	ns	7.7	8.3	8.4	8.0	8.5	ns	8.0	8.8	8.5	8.0	7.8	7.9	8.7
Conductivity (mS/cm)	1.27	20.00	3.16	ns	15.04	1.48	1.25	3.44	3.65	ns	1.13	1.92	1.15	1.19	20.00	3.40	1.65
Turbidity (NTU)	ns	3.28	3.45	ns	1.08	9.54	24.34	4.77	5.83	ns	18.75	10.30	2.08	3.38	13.06	27.95	11.08
Ammonia-N (mg/L)	ns	0.1	0.3	ns	0.4	0.4	0.8	0.6	0.2	ns	0.4	0.3	0.2	0.3	0.4	1.5	0.4
Nitrate-N (mg/L)	ns	2.50	1.25	ns	1.25	1.25	1.25	1.25	2.50	ns	1.25	2.50	2.50	1.25	2.50	1.25	1.25
Orthophosphate-P (mg/L)	1.96	0.65	0.81	ns	0.13	0.65	1.30	0.26	0.26	ns	0.65	0.20	0.82	0.82	0.26	1.63	1.63
Surfactants (mg/L) (Field)	1.00	1.50	0.75	ns	0.75	0.75	0.75	0.50	0.50	ns	0.63	0.37	0.13	0.50	1.50	3.00	0.75
Surfactants (mg/L MBAS) (Lab)	nd			ns		nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	391					249			774					231			
Cadmium (mg/L)	nd					nd			nd					nd			
Copper (mg/L)	nd					0.009			0.005					0.017			
Lead (mg/L)	nd					nd			nd					nd			
Zinc (mgL)	nd					0.11			0.021					0.02			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100mL)	240,000					350,000			13,000					240,000			
Fecal Coliform Bacteria (MPN/100mL)	50,000					90,000			500					13,000			
Enterococcus Bacteria (MPN/100mL)	30,000					8,000			2,800					50,000			
2007																	
Temperature (°C)	21.1	19.9	24.1	ns	24.4	19.1	21.8	19.2	20.8	22.2	20.7	28.5	22.7	22.8	23.1		20.5
pH	7.4	7.9	8.4	ns	8	7.7	7.3	7.5	8.7	8.1	7.4	10	8.3	7.3	8.2		8.3
Conductivity (mS/cm)	1.22	8.91	1.27	ns	12.44	1.74	5.04	2.68	4.27	1.41	1.44	1.23	1.06	1.42	2.74		2.09
Turbidity (NTU)	0.1	18.43	0.92	ns	0.1	1.6	2.97	0.1	5.08	3.38	5.46	4.77	0.1	7.98	0.67		2.67
Ammonia-N (mg/L)	0.1	0.3	0.1	ns	0.3	0.1	0.3	0.1	0.4	0.3	0.1	0.1	nd	0.1	0.4		0.1
Nitrate-N (mg/L)	0.61	0.43	0.57	ns	0.52	1.15	2.24	0.88	1.76	1.06	1.33	0.59	0.57	0.45	0.45		0.43
Orthophosphate-P (mg/L)	0.46	1.17	0.85	ns	0.07	0.42	0.39	0.36	0.36	1.01	0.55	0.46	0.13	0.88	0.72		0.65
Surfactants (mg/L) (Field)	1	0.75	1.25	ns	0.75	0.5	0.75	0.5	0.63	0.63	0.75	0.38	0.75	1	0.75		0.5
Surfactants (mg/L MBAS) (Lab)	0.7					nd			nd					0.8			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	234					279			1010					354			
Cadmium (mg/L)	nd					nd			nd					nd			
Copper (mg/L)	nd					0.008			nd					nd			
Lead (mg/L)	0.008					nd			nd					nd			
Zinc (mgL)	0.041					0.034			nd					nd			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100mL)	500,000					23,000			30,000					>1,600,000			
Fecal Coliform Bacteria (MPN/100mL)	24,000					8,000			2,300					>160,000			
Enterococcus Bacteria (MPN/100mL)	24,000					13,000			2,300					>160,000			

ns = not sampled
nd = not detected

Appendix B

Photographs of Sampling Locations

Site 1A	
Site 3	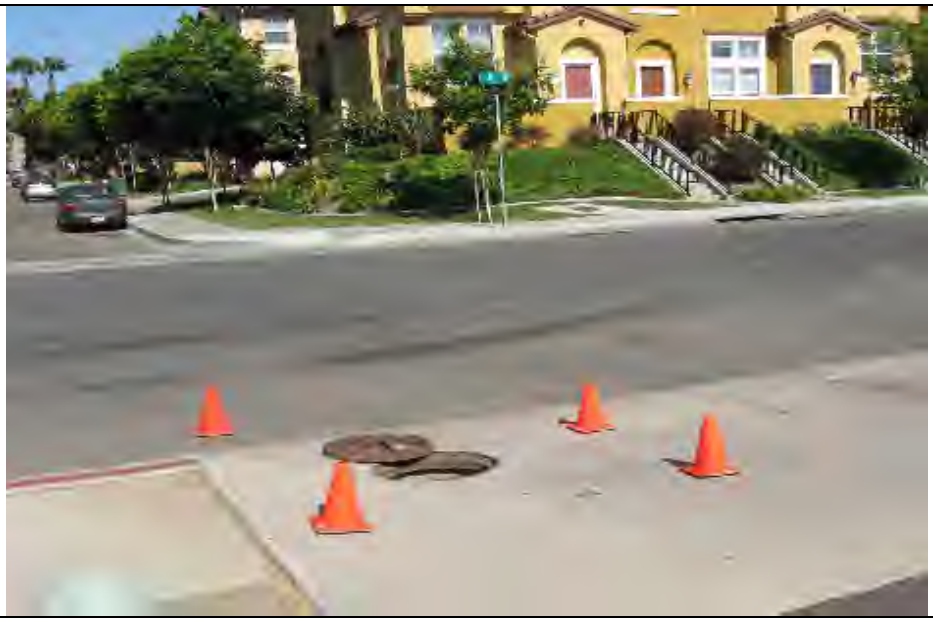
Site 4	

Site 6	
Site 13A	
Site 31A	

Site 32	
Site 38	
Site 40	

Site 41	
Site 42	
Site 43A	

Site 44	
Site 44A	
Site 45	

Site 46	
Site 47	
Site 48	

Site 49	

Appendix C

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

11 September 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0808485

Project Name: National City Dry Weather Monitoring
Project Desc./#:200840W-5

Enclosed are the results of analyses for samples received by the laboratory on 08/27/08 14:29. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0808485

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
32	0808485-01	Water	08/27/08 10:00	08/27/08 14:29
40	0808485-02	Water	08/27/08 11:15	08/27/08 14:29
46	0808485-03	Water	08/27/08 12:25	08/27/08 14:29
1A	0808485-04	Water	08/27/08 13:15	08/27/08 14:29

NOTE: Due to a instrument failure the dissolved metals were performed by a subcontract laboraory, results to follow in a separate report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0808485

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32 (0808485-01) Water Sampled: 08/27/08 10:00 Received: 08/27/08 14:29									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8082717	08/27/08	08/29/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*163 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*95 %*	*60-130*		"	"	"	"	
40 (0808485-02) Water Sampled: 08/27/08 11:15 Received: 08/27/08 14:29									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8082717	08/27/08	08/29/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*137 %*	*60-130*		"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*98 %*	*60-130*		"	"	"	"	
46 (0808485-03) Water Sampled: 08/27/08 12:25 Received: 08/27/08 14:29									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8082717	08/27/08	08/29/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*127 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*96 %*	*60-130*		"	"	"	"	
1A (0808485-04) Water Sampled: 08/27/08 13:15 Received: 08/27/08 14:29									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	8082717	08/27/08	08/29/08	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*125 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*109 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0808485

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32 (0808485-01) Water Sampled: 08/27/08 10:00 Received: 08/27/08 14:29									
Hardness (Total)	**138**	100	mg CaCO3/L	10	8082840	08/28/08	08/29/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8082918	08/29/08	08/29/08	EPA 1664A	
40 (0808485-02) Water Sampled: 08/27/08 11:15 Received: 08/27/08 14:29									
Hardness (Total)	**820**	100	mg CaCO3/L	10	8082840	08/28/08	08/29/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8082918	08/29/08	08/29/08	EPA 1664A	
46 (0808485-03) Water Sampled: 08/27/08 12:25 Received: 08/27/08 14:29									
Hardness (Total)	**101**	100	mg CaCO3/L	10	8082840	08/28/08	08/29/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8082918	08/29/08	08/29/08	EPA 1664A	
1A (0808485-04) Water Sampled: 08/27/08 13:15 Received: 08/27/08 14:29									
Hardness (Total)	**324**	100	mg CaCO3/L	10	8082840	08/28/08	08/29/08	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	8082918	08/29/08	08/29/08	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0808485

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32 (0808485-01) Water Sampled: 08/27/08 10:00 Received: 08/27/08 14:29									
Total Coliforms	**70000**	2000	MPN/100 ml	1000	8082826	08/27/08	08/31/08	SM 9221 B, E	
Fecal Coliforms	**11000**	200	"	100	"	"	08/30/08	"	
Enterococcus	**3000**	200	"	"	8082827	"	08/31/08	SM 9230 A, B	
40 (0808485-02) Water Sampled: 08/27/08 11:15 Received: 08/27/08 14:29									
Total Coliforms	**800**	20	MPN/100 ml	10	8082826	08/27/08	08/31/08	SM 9221 B, E	
Fecal Coliforms	**40**	20	"	"	"	"	08/30/08	"	
Enterococcus	**70**	20	"	"	8082827	"	08/31/08	SM 9230 A, B	
46 (0808485-03) Water Sampled: 08/27/08 12:25 Received: 08/27/08 14:29									
Total Coliforms	**17000**	200	MPN/100 ml	100	8082826	08/27/08	08/31/08	SM 9221 B, E	
Fecal Coliforms	**5000**	200	"	"	"	"	08/30/08	"	
Enterococcus	**30000**	200	"	"	8082827	"	08/31/08	SM 9230 A, B	
1A (0808485-04) Water Sampled: 08/27/08 13:15 Received: 08/27/08 14:29									
Total Coliforms	>1600000	2000	MPN/100 ml	1000	8082826	08/27/08	08/31/08	SM 9221 B, E	
Total Coliforms	**>1600000**	2000	MPN/100 ml	1000	8082826	08/27/08	08/31/08	SM 9221 B, E	
Fecal Coliforms	>160000	200	"	100	"	"	08/30/08	"	
Fecal Coliforms	**>160000**	200	"	100	"	"	08/30/08	"	
Enterococcus	**50000**	200	"	"	8082827	"	08/31/08	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0808485

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8082717										
Blank (8082717-BLK1)				Prepared: 08/27/08 Analyzed: 08/29/08						
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.303*		*"*	*0.250*		*121*	*60-130*			
Surrogate: Tribuytlphosphate	*0.196*		*"*	*0.250*		*78*	*60-130*			
LCS (8082717-BS1)				Prepared: 08/27/08 Analyzed: 08/29/08						
Bolstar	0.53	0.10	ug/l	0.500		105	60-130			
Diazinon	0.46	0.05	"	0.500		92	60-130			
Ethoprop	0.44	0.05	"	0.500		89	60-130			
Mevinphos	0.49	0.25	"	0.500		98	60-130			
Methyl parathion	0.51	0.10	"	0.500		102	60-130			
Phorate	0.41	0.05	"	0.500		83	60-130			
Ronnel	0.45	0.25	"	0.500		90	60-130			
Trichlorinate	0.46	0.05	"	0.500		92	60-130			
Surrogate: Triphenyl phosphate	*0.279*		*"*	*0.250*		*112*	*60-130*			
Surrogate: Tribuytlphosphate	*0.234*		*"*	*0.250*		*94*	*60-130*			
LCS Dup (8082717-BSD1)				Prepared: 08/27/08 Analyzed: 08/29/08						
Bolstar	0.46	0.10	ug/l	0.500		92	60-130	14	30	
Diazinon	0.42	0.05	"	0.500		84	60-130	9	30	
Ethoprop	0.46	0.05	"	0.500		91	60-130	3	30	
Mevinphos	0.43	0.25	"	0.500		86	60-130	14	30	
Methyl parathion	0.48	0.10	"	0.500		96	60-130	6	30	
Phorate	0.38	0.05	"	0.500		76	60-130	8	30	
Ronnel	0.46	0.25	"	0.500		93	60-130	3	30	
Trichlorinate	0.46	0.05	"	0.500		92	60-130	0.7	30	
Surrogate: Triphenyl phosphate	*0.310*		*"*	*0.250*		*124*	*60-130*			
Surrogate: Tribuytlphosphate	*0.215*		*"*	*0.250*		*86*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0808485

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8082840										
Blank (8082840-BLK1)				Prepared: 08/28/08	Analyzed: 08/29/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8082840-DUP1)		**Source: 0808493-08**		Prepared: 08/28/08	Analyzed: 08/29/08					
Hardness (Total)	209	10	mg CaCO3/L		208			0.6	20	
Batch 8082918										
Blank (8082918-BLK1)				Prepared & Analyzed: 08/29/08						
Oil & Grease	ND	5	mg/l							
LCS (8082918-BS1)				Prepared & Analyzed: 08/29/08						
Oil & Grease	32	5	mg/l	40.0		80	75-125			
LCS Dup (8082918-BSD1)				Prepared & Analyzed: 08/29/08						
Oil & Grease	32	5	mg/l	40.0		81	75-125	2	20	
Matrix Spike (8082918-MS1)		**Source: 0808449-04**		Prepared & Analyzed: 08/29/08						
Oil & Grease	32	5	mg/l	40.0	ND	79	0-200			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering	**EMA Log #: 0808485**
Project Name: National City Dry Weather Monitoring	

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
GC-05	Results confirmed by GCMS.
A-07	>1600000
A-06	>160000
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego, CA 92121

Phone: (858) 586-6600 | Fax: (858) 586-6644

Email:

Billing Address: same

Project ID: National City Dry Weather

Project #: 200840W-5 | PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE	625 / 8270 (Semi Volatile Organics) ☐ PAH o	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Diaz	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☒Diss	Coliform, Total (MTF) ☒Fecal (MTF) ☐Co	Enterococcus, ☒MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness		
01	32	8/27/08	10:00	SW	3G/4P	X							X							X	X	X		X		
02	40	"	11:15	"	2G/4P	X							X							X	X	X		X		
03	46	"	12:25	"	"	X							X							X	X	X		X		
04	1A	"	13:15	"	"	X							X							X	X	X		X		
05																										
06																										
07																										
08																										
09																										
10																										

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A | Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A | Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A | Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Crystal Grover	Signature: [illegible]
Print: Crystal Grover	Print: Adam Queen
Company: D-MAX Engineering Inc	Company: EMA Inc
Signature: [illegible]	Signature: Kelly Leyd
Print: Adam Queen	Print: Kelly Ley
Company: EMA Inc	Company: EM
Signature	Signature
Print	Print
Company	Company

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenro

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days fror disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 7°C on ice

17 September 2008

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0808485

Project Name: National City Dry Weather Monitoring
Project Number: 200840W-5

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- Dissolved Metals by EPA 6020

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Calscience Environmental Laboratories, Inc.

September 17, 2008

Jamey Cote
EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Subject: **Calscience Work Order No.: 08-09-0953**
Client Reference: 0808485

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/10/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Amanda Porter

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

EnviroMatrix Analytical, Inc.		Date Received:	09/10/08
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-0953
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020
		Units:	mg/L
Project: 0808485			Page 1 of 1

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
0808485-01	**08-09-0953-1-B**	**08/27/08 10:00**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:37**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.0243	0.00200	2		Zinc	0.0652	0.0100	2	

0808485-02	**08-09-0953-2-B**	**08/27/08 11:15**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:40**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00518	0.00200	2		Zinc	0.0204	0.0100	2	

0808485-03	**08-09-0953-3-B**	**08/27/08 12:25**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:43**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.0131	0.00200	2		Zinc	0.0410	0.0100	2	

0808485-04	**08-09-0953-4-B**	**08/27/08 13:15**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 05:56**	**080910L02F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00200	2		Lead	ND	0.00200	2	
Copper	0.00851	0.00200	2		Zinc	0.0595	0.0100	2	

Method Blank	**096-06-003-1,703**	**N/A**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/10/08 21:06**	**080910L02F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

Method Blank	**096-06-003-1,709**	**N/A**	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08 02:01**	**080910L06F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Cadmium	ND	0.00100	1		Lead	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	09/10/08
Work Order No:	08-09-0953
Preparation:	EPA 3005A Filt.
Method:	EPA 6020

Project 0808485

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-0521-1	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/10/08**	**080910S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	97	97	84-114	0	0-8	
Copper	99	97	72-108	1	0-10	
Lead	105	105	79-121	0	0-10	
Zinc	77	90	43-145	12	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

EnviroMatrix Analytical, Inc.		Date Received	09/10/08
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-0953
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project: 0808485

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
08-09-0521-1	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/10/08**	**080910S02**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	97	101	75-125	4	0-8	
Copper	96	96	75-125	0	0-10	
Lead	104	106	75-125	2	0-10	
Zinc	93	93	75-125	0	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EnviroMatrix Analytical, Inc.		Date Received:	09/10/08
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-0953
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project 0808485

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-0923-1	**Aqueous**	**ICP/MS A**	**09/10/08**	**09/16/08**	**080910S06**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	107	106	84-114	0	0-8	
Copper	105	105	72-108	0	0-10	
Lead	108	107	79-121	1	0-10	
Zinc	92	95	43-145	4	0-39	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	N/A
Work Order No:	08-09-0953
Preparation:	EPA 3005A Filt.
Method:	EPA 6020

Project: 0808485

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,703	Aqueous	ICP/MS A	09/10/08	09/10/08	080910L02F

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Cadmium	104	106	80-120	3	0-20	
Copper	108	114	80-120	6	0-20	
Lead	101	101	80-120	0	0-20	
Zinc	102	103	80-120	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

EnviroMatrix Analytical, Inc.		Date Received:	N/A
4340 Viewridge Avenue, Suite A		Work Order No:	08-09-0953
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project: 0808485

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
096-06-003-1,709	Aqueous	ICP/MS A	09/16/08		080910L06F

Parameter	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Cadmium	0.100	0.109	109	80-120	
Copper	0.100	0.110	110	80-120	
Lead	0.100	0.0973	97	80-120	
Zinc	0.100	0.101	101	80-120	

RPD - Relative Percent Difference , CL - Control Limit

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-09-0953

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0808485

0953

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
1 **Sample ID: 0808485-01**	**Water**	**Sampled:08/27/08 10:00**		
Metals, D-Max-DryWea-diss	~~09/04/08 16:00~~	02/23/09 10:00		
Containers Supplied:				
500 mL Poly Unpres (C) Other (H)				
2 **Sample ID: 0808485-02**	**Water**	**Sampled:08/27/08 11:15**		
Metals, D-Max-DryWea-diss	09~~/04/08 16:00~~	02/23/09 11:15		
Containers Supplied:				
500 mL Poly Unpres (C) Other (G)				
3 **Sample ID: 0808485-03**	**Water**	**Sampled:08/27/08 12:25**		
Metals, D-Max-DryWea-diss	~~09/04/08 16:00~~	02/23/09 12:25		
Containers Supplied:				
500 mL Poly Unpres (C) Other (G)				
4 **Sample ID: 0808485-04**	**Water**	**Sampled:08/27/08 13:15**		
Metals, D-Max-DryWea-diss	~~09/04/08 16:~~00	02/23/09 13:15		
Containers Supplied:				
500 mL Poly Unpres (C) Other (G)				

Analize for Metals (Cd, Cu, Pb, + Zn) 6020 - Dissolved
Detection limits → 0.005 0.02

Send reports to jbeyer@enviromatrixinc.com, llvick@enviromatrixinc.com, and reports@enviromatrixinc.com

* Samples already filtered ; acified. Ready for analysis.
– extra sample sent in case more filtering needed.

Released By	9/10/08	1233	Received By	OEL	9/10/8 1233
Released By	9/10/8	Date	Received By		9/10/8 1650

Page 1 of 1

Calscience Environmental Laboratories, Inc.

19

WORK ORDER #: 08 - 0 9 - 0 9 5 3

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: EMA DATE: 9/18/8

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ____ Chilled, cooler with temperature blank provided.
- ____ Chilled, cooler without temperature blank.
- ✓ Chilled and placed in cooler with wet ice.
- ____ Ambient and placed in cooler with wet ice.
- ____ Ambient temperature (For Air & Filter only).

LABORATORY (Other than Calscience Courier):

- ___.___ °C Temperature blank.
- ___.___ °C IR thermometer.
- ____ Ambient temperature (For Air & Filter only).

3.8 °C Temperature blank. Initial: [signature]

CUSTODY SEAL INTACT:

Sample(s): ____ Cooler: ____ No (Not Intact) : ____ Not Present: ✓

Initial: [signature]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓	✓	
Sampler's name indicated on COC		✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [signature]

COMMENTS:

Address: 7220 Trade Street, Suite 117
San Diego, CA 92121
Phone: (858) 586-6600 Fax: (858) 586-6644
Email:
Billing Address: same

Project ID: National City Dry Weather
Project #: 200840W-5 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☒1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Ox	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides) Dia	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☒Dissolved	Coliform, Total (MTF) ☒Fecal (MTF) ☐Colilert,?	Enterococcus, ☒MTF ☐Idexx	Heterotrophic Plate Count (HPC)	Total Hardness		
01	32	8/27/08	10:00	SW	3G/4P	X							X							X	X	X		X		
02	40	"	11:15	"	2G/4P	X							X							X	X	X		X		
03	46	"	12:25	"	"	X							X							X	X	X		X		
04	1A	"	13:15	"	"	X							X							X	X	X		X		
05																										
06																										
07																										
08																										
09																										
10																										

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water
A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____
[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)
[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other_____
[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A
Containers Properly Preserved: Yes No N/A
Custody Seals Intact: Yes No N/A
Temperature @ Receipt: _____
COC/Labels Agree: Yes No N/A
Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Crystal Grover	Signature: [illegible]
Print: Crystal Grover	Print: Adam Queen
Company: DMAx Engineering Inc	Company: EMA Inc
Signature: [illegible]	Signature: Kelly Leyden
Print: Adam Queen	Print: Kelly Leyden
Company: EMA Inc	Company: EMA
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.
[2]EMA reserves the right to return any samples that do not match our waste profile.
Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the da
disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T= 7°C on ice

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod - Clie

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0808485

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0808485-01	**Water**	**Sampled:08/27/08 10:00**		
Metals, D-Max-DryWea-diss	~~09/04/08 16:00~~	02/23/09 10:00		
Containers Supplied:				
500 mL Poly Unpres (C) Other (H)				
Sample ID: 0808485-02	**Water**	**Sampled:08/27/08 11:15**		
Metals, D-Max-DryWea-diss	~~09/04/08 16:00~~	02/23/09 11:15		
Containers Supplied:				
500 mL Poly Unpres (C) Other (G)				
Sample ID: 0808485-03	**Water**	**Sampled:08/27/08 12:25**		
Metals, D-Max-DryWea-diss	~~09/04/08 16:00~~	02/23/09 12:25		
Containers Supplied:				
500 mL Poly Unpres (C) Other (G)				
Sample ID: 0808485-04	**Water**	**Sampled:08/27/08 13:15**		
Metals, D-Max-DryWea-diss	~~09/04/08 16:00~~	02/23/09 13:15		
Containers Supplied:				
500 mL Poly Unpres (C) Other (G)				

Analize for Metals (Cd, Cu, Pb, + Zn) 6020 - Dissolved
Detection limits → 0.005 0.02

Send reports to jbeyer@enviromatrixinc.com, llwick@enviromatrixinc.com, and reports@enviromatrixinc.com

* Samples already filtered & acified. Ready for analysis.
— extra sample sent in case more filtering needed.

Released By	Date	Received By	Date
	9/10/08 1233	OEL	9/10/8 1233

EnviroMatrix Analytical, Inc.

15 September 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0809160

Project Name: National City Dry Weather Monitoring
Project Desc./#: 200840W-6

Enclosed are the results of analyses for samples received by the laboratory on 09/08/08 14:46. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0809160

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
32	0809160-01	Water	09/08/08 10:45	09/08/08 14:46
32-1	0809160-02	Water	09/08/08 11:10	09/08/08 14:46
32-2	0809160-03	Water	09/08/08 11:35	09/08/08 14:46
32-3	0809160-04	Water	09/08/08 12:05	09/08/08 14:46
1A-1	0809160-05	Water	09/08/08 13:25	09/08/08 14:46
1A	0809160-06	Water	09/08/08 13:45	09/08/08 14:46
1A-2	0809160-07	Water	09/08/08 13:58	09/08/08 14:46

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0809160

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
32 (0809160-01) Water Sampled: 09/08/08 10:45 Received: 09/08/08 14:46								
Total Coliforms	**6020**	10	MPN/100 ml	10	8091106	09/08/08 17:20 09/09/08 17:30	SM9223	
E. Coli	**31**	10	"	"	"	09/08/08 17:20 09/09/08 17:30	"	
32-1 (0809160-02) Water Sampled: 09/08/08 11:10 Received: 09/08/08 14:46								
Total Coliforms	**68700**	100	MPN/100 ml	100	8091106	09/08/08 17:20 09/09/08 17:30	SM9223	
E. Coli	**2010**	10	"	10	"	09/08/08 17:20 09/09/08 17:30	"	
32-2 (0809160-03) Water Sampled: 09/08/08 11:35 Received: 09/08/08 14:46								
Total Coliforms	**120000**	100	MPN/100 ml	100	8091106	09/08/08 17:20 09/09/08 17:30	SM9223	
E. Coli	**3260**	10	"	10	"	09/08/08 17:20 09/09/08 17:30	"	
32-3 (0809160-04) Water Sampled: 09/08/08 12:05 Received: 09/08/08 14:46								
Total Coliforms	**83000**	100	MPN/100 ml	100	8091106	09/08/08 17:20 09/09/08 17:30	SM9223	
E. Coli	**24200**	10	"	10	"	09/08/08 17:20 09/09/08 17:30	"	
1A-1 (0809160-05) Water Sampled: 09/08/08 13:25 Received: 09/08/08 14:46								
Total Coliforms	**2420000**	1000	MPN/100 ml	1000	8091106	09/08/08 17:20 09/09/08 17:30	SM9223	A-01a
E. Coli	**12000**	10	"	10	"	09/08/08 17:20 09/09/08 17:30	"	
Enterococcus	**1600**	100	"	100	8091107	09/08/08 17:20 09/09/08 17:30	Idexx	
1A (0809160-06) Water Sampled: 09/08/08 13:45 Received: 09/08/08 14:46								
Total Coliforms	**1120000**	1000	MPN/100 ml	1000	8091106	09/08/08 17:20 09/09/08 17:30	SM9223	
E. Coli	**24200**	10	"	10	"	09/08/08 17:20 09/09/08 17:30	"	
Enterococcus	**14830**	100	"	100	8091107	09/08/08 17:20 09/09/08 17:30	Idexx	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0809160

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
1A-2 (0809160-07) Water Sampled: 09/08/08 13:58 Received: 09/08/08 14:46								
Total Coliforms	**2420000**	1000	MPN/100 ml	1000	8091106	09/08/08 17:20 09/09/08 17:30	SM9223	A-01a
E. Coli	**98000**	100	"	100	"	09/08/08 17:20 09/09/08 17:30	"	
Enterococcus	**241960**	100	"	"	8091107	09/08/08 17:20 09/09/08 17:30	Idexx	A-01

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0809160

Notes and Definitions

A-01a	MPN >2419600
A-01	MPN >241960
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego CA 92121

Phone: (858) 586-6600 | Fax: (858) 586-6644

Email:

Billing Address: same

Project ID: National City Dry Weather

Project #: 200840W-6 | PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarb	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE	625 / 8270 (Semi Volatile Organics) ☐ PAH o	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Disso	Coliform, Total (MTF) ☐Fecal (MTF) ☐Co	Enterococcus, ☐MTF ☐dexx	Heterotrophic Plate Count (HPC)			
01	32	9/8/08	10:45	water	1p															X					
02	32-1	"	11:10	"	1p															X					
03	32-2	"	11:35	"	1p															X					
04	32-3	"	12:05	"	1p															X					
05	1A-1	"	13:25	"	2p															X	X				
06	1A	"	13:45	"	2p															X	X				
07	1A-2	"	13:58	"	2p															X	X				
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day X 5 day ☐STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A | Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A | Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A | Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Shauna McKellar	Signature: Kelley Leyden
Print: Shauna McKellar	Print: Kelley Leyden
Company: D-Max Engineering Inc.	Company: EMA
Signature: Kelley Leyden	Signature:
Print: Kelley Leyden	Print: Sean Flory
Company: EMA	Company: EMA Inc.
Signature:	Signature:
Print:	Print:
Company:	Company:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenr

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days fro disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T=5°C On Ice

EnviroMatrix Analytical, Inc.

15 September 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0809168

Project Name: National City Dry Weather Monitoring
Project Desc./#: 200840W-6

Enclosed are the results of analyses for samples received by the laboratory on 09/08/08 16:56. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0809168

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1A-3	0809168-01	Water	09/08/08 15:40	09/08/08 16:56
46	0809168-02	Water	09/08/08 16:10	09/08/08 16:56
46-1	0809168-03	Water	09/08/08 16:20	09/08/08 16:56

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0809168

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
1A-3 (0809168-01) Water Sampled: 09/08/08 15:40 Received: 09/08/08 16:56								
Total Coliforms	**242000**	100	MPN/100 ml	100	8091108	09/08/08 17:50 09/09/08 18:30	SM9223	
E. Coli	**12000**	10	"	10	"	09/08/08 17:50 09/09/08 18:30	"	
Enterococcus	**31300**	100	"	100	8091109	09/08/08 17:50 09/09/08 18:30	Idexx	
46 (0809168-02) Water Sampled: 09/08/08 16:10 Received: 09/08/08 16:56								
Enterococcus	**86640**	100	MPN/100 ml	100	8091109	09/08/08 17:50 09/09/08 18:30	Idexx	
46-1 (0809168-03) Water Sampled: 09/08/08 16:20 Received: 09/08/08 16:56								
Enterococcus	**241960**	100	MPN/100 ml	100	8091109	09/08/08 17:50 09/09/08 18:30	Idexx	A-01

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0809168

Notes and Definitions

A-01	MPN >241960
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego CA 92121

Phone: (858) 586-6600 | Fax: (858) 586-6644

Email:

Billing Address: Same

Project ID: National City Dry Weather Follow Up

Project #: 200840W-6 | PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time		Sample Matrix	Container(s) # of / Type	Oil & Grease ☐1664 ☐413.1 ☐413.2	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr Cu Pb Ni Ag Zn ☐Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) X	Enterococcus, ☐MTF X Idexx	Heterotrophic Plate Count (HPC)			
01	1A-3	9/8/08	15:40	water	2p															X	X				
02	46	"	16:10	water	1p																X				
03	46-1	"	16:20	water	1p																X				
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water SW=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day X 5 day ☐STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A | Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A | Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A | Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Crystal Grover	Signature:
Print: Crystal Grover	Print: Sean Flores
Company: D-MAX Engineering Inc	Company: EMA Inc.
Signature	Signature
Print	Print
Company	Company
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenro

T= 3°c on ice

EnviroMatrix Analytical, Inc.

14 October 2008

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0810183

Project Name: National City Dry Weather Monitoring
Project Desc./#:200840W-6

Enclosed are the results of analyses for samples received by the laboratory on 10/08/08 12:01. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0810183

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
46	0810183-01	Water	10/08/08 09:50	10/08/08 12:01
32	0810183-02	Water	10/08/08 11:00	10/08/08 12:01

NOTE: Due to a instrument failure the dissolved metals were performed by a subcontract laboraory, results to follow in a separate report.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0810183

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32 (0810183-02) Water Sampled: 10/08/08 11:00 Received: 10/08/08 12:01									
Hardness (Total)	**239**	100	mg CaCO3/L	10	8101022	10/10/08	10/13/08	EPA 200.7	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0810183

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
46 (0810183-01) Water Sampled: 10/08/08 09:50 Received: 10/08/08 12:01									
Enterococcus	**1607**	10	MPN/100 ml	10	8101012	10/08/08	10/09/08	Idexx	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0810183

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8101022										
Blank (8101022-BLK1)				Prepared: 10/10/08	Analyzed: 10/13/08					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (8101022-DUP1)		**Source: 0810211-36**		Prepared: 10/10/08	Analyzed: 10/13/08					
Hardness (Total)	273	10	mg CaCO3/L		265			3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0810183

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego, CA 92121

Phone: (858) 586-6600 Fax (858) 586-6644

Email:

Billing Address: Same

Project ID: National City Dry Weather

Project #: 200840W-6 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr (Cu) Pb Ni Ag Zn X Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Co	Enterococcus, ☐MTF X Idexx	Heterotrophic Plate Count (HPC)	Total Hardness		
01	46	10/8/08 9:50	Water	1 P																X					
02	32	10/8/08 11:00	Water	2 P														X				X			
03																									
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW)=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other_____

[1]**Turnaround Time:** ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day X 5 day ☐STD (7 day)

[1]**Reporting Requirements:** ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other _____

[1]**Sample Disposal:** ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ____/____/____

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature: Manouchehr Dadkhah	Signature: [illegible]
Print: Manouchehr Dadkhah	Print: Sean Flores
Company: D-Max Eng.	Company: EMA Inc.
Signature	Signature
Print	Print
Company	Company
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T=

16 October 2008

D-Max Engineering, Inc.
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log#: 0810183

Project Name: National City Dry Weather Monitoring
Project Number: 200840W-6

Enclosed with this letter are the test results performed by subcontract laboratory for the following analyses:

- Dissolved Metals by EPA 6020

The samples were received by EnviroMatrix Analytical, Inc. intact and with chain-of-custody documentation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hard copy data report has been authorized by the following signature.

Dan Verdon
Laboratory Director

Calscience Environmental Laboratories, Inc.

October 16, 2008

Jamey Cote
EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Subject: **Calscience Work Order No.: 08-10-0873**
Client Reference: 0810183

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 10/9/2008 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Amanda Porter

Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

EnviroMatrix Analytical, Inc.		Date Received:	10/09/08
4340 Viewridge Avenue, Suite A		Work Order No:	08-10-0873
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project: 0810183

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
0810183-02	**08-10-0873-1-A**	**10/08/08 11:00**	**Aqueous**	**ICP/MS A**	**10/10/08**	**10/11/08 18:02**	**081010L01F**

Parameter	Result	RL	DF	Qual	Units
Copper	0.00917	0.00100	1		mg/L

Method Blank	**096-06-003-1,739**	**N/A**	**Aqueous**	**ICP/MS A**	**10/10/08**	**10/11/08 14:38**	**081010L01F**

Parameter	Result	RL	DF	Qual	Units
Copper	ND	0.00100	1		mg/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received:	10/09/08
Work Order No:	08-10-0873
Preparation:	EPA 3020A Total
Method:	EPA 6020

Project 0810183

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-10-0883-1	**Aqueous**	**ICP/MS A**	**10/10/08**	**10/13/08**	**081010S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Copper	81	76	72-108	6	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

EnviroMatrix Analytical, Inc.
4340 Viewridge Avenue, Suite A
San Diego, CA 92123-1111

Date Received	10/09/08
Work Order No:	08-10-0873
Preparation:	EPA 3020A Total
Method:	EPA 6020

Project: 0810183

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
08-10-0883-1	**Aqueous**	**ICP/MS A**	**10/10/08**	**10/13/08**	**081010S01**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Copper	71	70	75-125	2	0-10	5

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

EnviroMatrix Analytical, Inc.		Date Received:	N/A
4340 Viewridge Avenue, Suite A		Work Order No:	08-10-0873
San Diego, CA 92123-1111		Preparation:	EPA 3005A Filt.
		Method:	EPA 6020

Project: 0810183

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-1,739	**Aqueous**	**ICP/MS A**	**10/10/08**	**10/13/08**	**081010L01F**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Copper	112	112	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 08-10-0873

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0810183

0873

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0810183-02	**Water**	**Sampled:10/08/08 11:00**		
Metals Digestion/Prep-Liq	~~10/15/08 16:00~~	04/06/09 11:00		
Cu Diss EPA-6020	~~10/15/08 16:00~~	04/06/09 11:00		
Containers Supplied:				
500 mL Poly Unpres (B)				

Send report to jbeyer@enviromatrixinc.com, lloick@enviromatrixinc.com, and reports@enviromatrixinc.com

* Sample has not been filtered, please filter before analysis

Released By	Date	Received By	Date
	10/9/08 1201	CEL	10/9/8 1210
	10/9/8 1650		10/9/08 1645

Page 1 of 1

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 08 - 1 0 - 0 8 7 3

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: EMA DATE: 10/9/8

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
✓ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature (For Air & Filter Only).
2.7 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

___.___ °C Temperature blank.
___.___ °C IR Thermometer.
_____ Ambient temperature (For Air & Filter Only).

Initial: [illegible]

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Present: ✓

Initial: [illegible]

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sampler's name indicated on COC	✓	✓	
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers and volume for analyses requested	✓		
Proper preservation noted on sample label(s)			✓
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			✓

Initial: [illegible]

COMMENTS:

SOP T100_081 (09/19/08)

Address: 7220 Trade Street, Suite 119
San Diego, CA 92121

Phone: (858) 586-6600 Fax (858) 586-6644

Email:

Billing Address: Same

Project ID: National City Dry Weather

Project #: 200840W-6 PO#:

SAMPLE DETAILS

#	Client Sample ID	Sample Date/Time	Sample Matrix	Container(s) # of / Type	Oil & Grease ☐413.1 ☐413.2 ☐1664	418.1 (Total Recoverable Petroleum Hydrocarbons)	8015B (TPH) ☐Gas ☐Diesel ☐Ext ☐ASTM	624 / 8260 (VOC) ☐Full ☐BTXE ☐MTBE ☐Oxy	625 / 8270 (Semi Volatile Organics) ☐ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	☐pH ☐Conductivity (EC) ☐TSS ☐TDS	☐Nitrate ☐Nitrite ☐TKN ☐NH3	TTLC Metals (CAC Title 22) / (CAM 17)	STLC Metals (CAC Title 22) / (CAM 17)	TCLP (RCRA) ☐Metals ☐Organics	Cd Cr (Cu) Pb Ni Ag Zn ☒Dissolved	Coliform, ☐Total (MTF) ☐Fecal (MTF) ☐Colilert,T-	Enterococcus, ☐MTF ☒Idexx	Heterotrophic Plate Count (HPC)	Total Hardness		
01	46	10/8/08 9:50	Water	1 P																	X				
02	32	10/8/08 11:00	Water	2 P														X					X		
03																									
04																									
05																									
06																									
07																									
08																									
09																									
10																									

Sample Matrix Codes: GW=ground water WW=waste water DW=drinking water (SW)=storm water

A=air SED=sediment O=oil T=tissue S=solid other (specify) L=liquid other (specify)

Shipped By: ☐Courier ☐UPS ☐FedEx ☐USPS ☐Client drop off ☐Other

[1]Turnaround Time: ☐Same day ☐24 hr ☐48 hr ☐3 day ☐4 day ☒5 day ☐STD (7 day)

[1]Reporting Requirements: ☐Fax ☐PDF ☐Excel ☐Geotracker EDF ☐Other

[1]Sample Disposal: ☐By Laboratory ☐[2]Return to client: P/U or Delivery ☐Archive until ___/___/___

SAMPLE INTEGRITY

Correct Containers: Yes No N/A

Containers Properly Preserved: Yes No N/A

Custody Seals Intact: Yes No N/A

Temperature @ Receipt: _____

COC/Labels Agree: Yes No N/A

Sampled By: ☐Client ☐EMA ☐Autosampler

Project Comments:

CHAIN-OF-CUSTODY RECORD

RELINQUISHED BY	RECEIVED BY
Signature Manouchehr Dadkhah	Signature
Print Manouchehr Dadkhah	Print Sean Flores
Company D-Max Eng.	Company EMA Inc.
Signature	Signature
Print	Print
Company	Company
Signature	Signature
Print	Print
Company	Company

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

White - EMA Canary - Accounting Pink - Client (w/Report) Goldenrod -

Note: By relinquishing samples to EnviroMatrix Analytical, Inc., client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from th disposed of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

T=

SUBCONTRACT ORDER

EnviroMatrix Analytical, Inc.

0810183

SENDING LABORATORY:

EnviroMatrix Analytical, Inc.
4340 Viewridge Ave., Ste. A
San Diego, CA 92123
Phone: (858) 560-7717
Fax: (858) 560-7763
Project Manager: Jamey A. Cote

RECEIVING LABORATORY:

Calscience Environmental Lab
7440 Lincoln Way
Garden Grove, California 92841
Phone :714-895-5494
Fax: 714-894-7501

STANDARD TAT

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 0810183-02	**Water**	**Sampled:10/08/08 11:00**		
Metals Digestion/Prep-Liq	~~10/15/08 16:00~~	04/06/09 11:00		
Cu Diss EPA-6020	~~10/15/08 16:00~~	04/06/09 11:00		
Containers Supplied:				
500 mL Poly Unpres (B)				

Send report to jbeyer@enviromatrixinc.com, llwick@enviromatrixinc.com, and reports@enviromatrixinc.com

* Sample has not been filtered, please filter before analysis

Released By	Date	Received By	Date
	10/9/08 1201	CEL	10/9/8 1210

Appendix D

Field Data Sheets

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☒ Receiving Water

Site ID	1A		Latitude	32.68575	Watershed	Hydrologic Unit	908
Location	Southwest of 43rd Street and Nardin Avenue		Longitude	-117.10166		Hydrologic Area	908.3
			TB Page	1289, H7		Hydrologic Subarea (Optional)	908.31
Date	8/27/08	Time 13:15	Observer	CG, JP		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☒ Excessive		☐ Other
Biology	☐ None	☒ Insects ☐ Algae	☐ Fish ☒ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0862-0867

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.9	NH_3-N (mg/L)	0.164	NO_3 (mg/L)	4.202	Ortho-PO_4 (mg/L)	1.818
pH (pH units)	7.2	TURB (NTU)	41.98	NO_3-N (mg/L)	0.950	Ortho-PO_4-P (mg/L)	0.593
COND (mS/cm)	1.41	MBAS (mg/L)	> 3				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	PONDED	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 1A

DATE: 8/27/08

LOCATION: Southwest of 43rd St. and Nordica Ave.

TIME: 13:15

OBSERVER: CG, JP

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): ——

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☒ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☒ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing	2	✓		✓							✓	
Food Packaging	1		✓	✓		✓		✓				
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Fast food packaging waste, plastic bags, hanger, and some clothes.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☒ Receiving Water

Site ID	1A		Latitude	32.68575	Watershed	Hydrologic Unit	908
Location	Southwest of 43rd Street and Nordica Avenue		Longitude	-117.10166		Hydrologic Area	908.3
			TB Page	1289, H7		Hydrologic Subarea (Optional)	908.31
Date	8/28/08	Time 10:30	Observer	CG, JP		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☒ Excessive ☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.1	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.47	TURB (NTU)	17.11	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	1.45	MBAS (mg/L)	0.875				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	4	in
Depth	0.25	in
Velocity	1	ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For total coliform fecal coliform Enterococcus ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☒ Receiving Water

Site ID	1A		Latitude	32.68575	Watershed	Hydrologic Unit	908
Location	southwest of 43rd street and Nordica Avenue		Longitude	-117.10166		Hydrologic Area	908.3
			TB Page	1289-H7		Hydrologic Subarea (Optional)	908.31
Date	9/8/08	Time 12:40	Observer	SM/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☒ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☒ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1040-1043

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.6	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.15	TURB (NTU)	12.93	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.14	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert		
Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume		
Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe		
Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: lab samples were taken at 13:45

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For total coliform fecal coliform Enterococcus

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	1A-1		Latitude	32.68493	Watershed	Hydrologic Unit	908
Location	curb and gutter ~~manhole~~ between 843 and 905 Melrose Street		Longitude	-117.10023		Hydrologic Area	908.3
			TB Page	1289-H7		Hydrologic Subarea (Optional)	908.31
Date	9/8/08	Time 1325	Observer	SM/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☒ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☒ Chemical chlorine bleach	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☒ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1046-1049

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)					

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	<1	gpm				Flow		gpm

COMMENTS: person at adress 911 Melrose Street was observed washing trash and recycling containers resulting runoff reached catch basin. Runoff appeared soapy and smelled like chlorine bleach

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Total coliform, fecal coliform, Enterococcus

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	1A1-2 1243-1305		Latitude	32.68739	Watershed	Hydrologic Unit	908
Location	Site 45, in front of Fig Court, in the middle of the street (east)		Longitude	-117.09690		Hydrologic Area	908.3
			TB Page	1289-H7		Hydrologic Subarea (Optional)	908.31
Date	9/8/08	Time 13:58	Observer	SM/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1050 - 1052

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)					

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Total Coliform, Fecal Coliform and Enterococcus

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	1A-3		Latitude	32.68658	Watershed	Hydrologic Unit	908
Location	200ft south of Palm Ave and Division street intersection near National City sign.		Longitude	-117.09326		Hydrologic Area	908.3
			TB Page	1289-H7		Hydrologic Subarea (Optional)	908.31
Date	9/8/08	Time 15:40	Observer	SM/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1053-1060

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)					

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume	250	mL
Time to Fill	20	sec
Flow	<1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	3		Latitude	32.68183	Watershed	Hydrologic Unit	908
Location	E. 7th Street and R Avenue		Longitude	-117.08894		Hydrologic Area	908.3
			TB Page	1290-A7		Hydrologic Subarea (Optional)	908.32
Date	8/27/08	Time 15:30	Observer	CG, JP		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0870-0873

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.5	NH_3-N (mg/L)	0.083	NO_3 (mg/L)	6.398	Ortho-PO_4 (mg/L)	0.466
pH (pH units)	7.76	TURB (NTU)	4.41	NO_3-N (mg/L)	1.446	Ortho-PO_4-P (mg/L)	0.152
COND (mS/cm)	0.57	MBAS (mg/L)	0.375				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	5	in
Depth	.125	in
Velocity	0.66	ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 3 DATE: 8/27/08

LOCATION: E. 7th Street and R. Avenue TIME: 15:30

OBSERVER: JP / CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): ——

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	4		Latitude	32.68726	Watershed	Hydrologic Unit	908
Location	E. 1st Street and U Avenue		Longitude	-117.08749		Hydrologic Area	908.3
			TB Page	1290-A7		Hydrologic Subarea (Optional)	908.31
Date	8/27/08	Time 15:10	Observer	CG, JP		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other N/A	
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other N/A	
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☒ Other N/A	
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0868-0869 and 0894, 0895

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns		ns		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	DRY	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Manhole was inaccessible since it appeared to have been sealed over with asphalt/tar. No adjacent other access was found.
8/29/08 - manhole opened - pipe damp

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: 4 DATE: 8/29/08

LOCATION: 4 E. 1st Street and U Avenue TIME: 11:10 a.m.

OBSERVER: JP/MD

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 X 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	6		Latitude	32.65668	Watershed	Hydrologic Unit	909
Location	North bank of Sweetwater River, ~500 ft east of Highland Ave., access from North 2nd Ave.		Longitude	-117.08844		Hydrologic Area	909.1
			TB Page	1310-A4		Hydrologic Subarea (Optional)	909.12
Date	8/29/08	Time 15:00	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☒ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** Unknown ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae ☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0907-0915

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.3	NH_3-N (mg/L)	0.486	NO_3 (mg/L)	3.615	Ortho-PO_4 (mg/L)	0.073
pH (pH units)	8.95	TURB (NTU)	2.37	NO_3-N (mg/L)	0.817	Ortho-PO_4-P (mg/L)	0.024
COND (mS/cm)	>20.00	MBAS (mg/L)	2.5				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sample was collected with a synnge due to shallow ponding. Site may be tidally influenced, but no tide data was available near the sampling location, which is nearly two miles east of the San Diego Bay.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: 6 DATE: 8/29/08

LOCATION: Northbank of Sweetwater River ~500 ft East of Highland Ave, access from North 2nd Ave. TIME: 15:00

OBSERVER: JP/CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☒ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☒ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☒ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging	2		X	X				X			X	
Food Waste												
Household	1	X		X							X	X
Shopping Carts												
Toxic	4		X	X							X	X
Yard Waste	3	X		X				X				X

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Large pile of trash observed backed up to and partly within pipe of outlet. Observed items included at least: large blanket, bicycles and parts, black tarps, bamboo poles, palm fronds, five-gallon bucket, toys, batteries (alkaline), styrofoam packaging, plastic bottles with and without liquid, plastic hangers, metal pole

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	6			Latitude	32.656668	Watershed: Hydrologic Unit	909
Location	North bank of Sweetwater River ~500 ft East of Highland Ave, access from North 2nd Ave.			Longitude	-117.08844	Hydrologic Area	909.1
				TB Page	1310-A4	Hydrologic Subarea (Optional)	909.12
Date	9/2/08	Time	12:25	Observer	JP/CG	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☒ Incoming ☒ High ☐ Outgoing **Tide Height:** Unknown ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☒ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☐ Dry ☒ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0939 - 0941

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.8	NH3-N (mg/L)	na	NO3 (mg/L)	na	Ortho-PO4 (mg/L)	na
pH (pH units)	7.74	TURB (NTU)	5.04	NO3-N (mg/L)	na	Ortho-PO4 -P (mg/L)	na
COND (mS/cm)	>20.00	MBAS (mg/L)	2.5				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Tidal	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sweetwater River water level was above the base level of the outlet. No tide data was available near the sampling location, which is nearly two miles east of the San Diego Bay.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	13A		Latitude	32.66942	Watershed	Hydrologic Unit	908
Location	Northeast of 16th Street and National City Boulevard, inside Kimball Park		Longitude	-117.10326		Hydrologic Area	908.3
			TB Page	1309, H2		Hydrologic Subarea (Optional)	908.32
Date	8/26/08	Time 10:00	Observer	CG, JP		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other NS	
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other NS	
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other NS	
Floatables	☑ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	
Deposits	☑ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 0822, 0821

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Outlet pipe was slightly damp but not ponded.

Trash Assessment Form

SITE ID: 13A

DATE: 8/26/08

LOCATION: Northeast of 16th st and National City Blvd., inside Kimball Park

TIME: 10:00

OBSERVER: CG, JP

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 40 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☑ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☑ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging	2		✓	✓				✓				
Food Waste												
Household	3			✓		✓						
Shopping Carts	1	✓									✓	✓
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Four to five shopping carts in the water under adjacent bridge. Bottles, cans, plastic and other food packaging noted. A few household items such as a game piece and makeup sponge.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☒ Receiving Water

Site ID	31A		Latitude	32.66121	Watershed	Hydrologic Unit	909
Location	North of Sweetwater Road, across from 2nd Avenue at the corner of the golf course.		Longitude	-117.08453		Hydrologic Area	909.1
			TB Page	1310-A3		Hydrologic Subarea (Optional)	909.12
Date	8/26/08	Time 14:55	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other	N/A
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other	N/A
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☒ Other	N/A
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other	

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0845, 0846

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS		NS		

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	DRY	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 31 A

DATE: 8/26/08

LOCATION: North of Sweetwater Rd, across from 2nd Ave., at corner of golf course

TIME: 14:55

OBSERVER: JP/CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 40 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☒ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	32		Latitude	32.65887	Watershed	Hydrologic Unit	909
Location	East of 2nd Ave, north of Freeway 54 and the Sweetwater River		Longitude	117.08274		Hydrologic Area	909.1
			TB Page	1310-B3		Hydrologic Subarea (Optional)	909.12
Date	8/27/08	Time 10:00	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0853 - 0855

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.8	NH3-N (mg/L)	0.151	NO3 (mg/L)	3.872	Ortho-PO4 (mg/L)	0.954
pH (pH units)	7.64	TURB (NTU)	1.78	NO3-N (mg/L)	0.875	Ortho-PO4 -P (mg/L)	0.311
COND (mS/cm)	0.99	MBAS (mg/L)	0.75				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	1	in
Depth	0.125	in
Velocity	0.66	~~ft/sec~~
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Human feces noted within the outlet

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: 32 DATE: 8/27/08

LOCATION: East of 2nd Ave. north of Freeway 54 and the Sweetwater River TIME: 10:12

OBSERVER: JP/CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 40 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☒ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☒ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☒ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste	1	X									X	
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging	2		X	X				X			X	
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Human Feces, plastic 6-pack rings,

San Diego Stormwater Copermittees
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☐ Field Screening ☒ Confirmation For total coliform ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	32		Latitude	32.65887	Watershed	Hydrologic Unit	909
Location	East of 2nd Ave, north of Freeway 54 and the Sweetwater River		Longitude	-117.08274		Hydrologic Area	909.1
			TB Page	1310-B3		Hydrologic Subarea (Optional)	909.12
Date	~~8/31~~ 9/8/08	Time 10:45	Observer	SM/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1027 - 1029

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.4	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.58	TURB (NTU)	1.50	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	1.56	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	4	in
Depth	0.0625	in
Velocity	5/13	ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For total coliform

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	32-1		Latitude	32.65981	Watershed	Hydrologic Unit	909
Location	open concrete channel south of Sweetwater Town and Country Shopping Center, western downstream end		Longitude	-117.08223		Hydrologic Area	909.1
			TB Page	1310-B3		Hydrologic Subarea (Optional)	909.12
Date	9/8/08	Time 11:10	Observer	SM/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other slightly orange
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☒ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1030 - 1032

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)					

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	4	in
Depth	0.250	in
Velocity	5/29	ft/sec
Flow	< 1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: trash consisted of food packaging

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For total coliform

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	32-2		**Latitude**	32.66031	**Watershed**	**Hydrologic Unit**	909
Location	open Concrete channel south of Sweetwater Town and Country Shopping Center, eastern upstream end.		**Longitude**	-117.08045		**Hydrologic Area**	909.1
			TB Page	1310-B3		**Hydrologic Subarea** (Optional)	909.12
Date	9/8/08	**Time** 11:35	**Observer**	SM/CG		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☒ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☒ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1033-1035

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)					

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

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☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For total Coliform

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	32-3			Latitude	32.66171	Watershed: Hydrologic Unit	909
Location	catch basin at the northwest corner of Sweetwater Rd. and Prospect St. intersection, inside the Sweetwater Plaza Shopping Center			Longitude	-117.08054	Hydrologic Area	909.1
				TB Page	1310-B3	Hydrologic Subarea (Optional)	909.12
Date	9/8/08	Time	12:05	Observer	SM/CG	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☒ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☒ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae ☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1037 - 1039

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4-P (mg/L)	
COND (mS/cm)		MBAS (mg/L)					

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Numerous mosquito larve noted

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Copper ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	32		Latitude	33.65887	Watershed	Hydrologic Unit	909
Location	East of 2nd street, north of Freeway 54 and the Sweetwater River		Longitude	-117.08274		Hydrologic Area	909.1
			TB Page	1310-B3		Hydrologic Subarea (Optional)	909.12
Date	10/8/08	Time 11:00	Observer	MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.6	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	8.9	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4 -P (mg/L)	na
COND (mS/cm)	1.45	MBAS (mg/L)	na				

Analytical Lab Samples Collected? ☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	38		Latitude	32.67265	Watershed	Hydrologic Unit	909
Location	Dirt road, west of Harbison Ave., between 20th Street and 24th Street, at the end of fence line		Longitude	-117.07057		Hydrologic Area	909.1
			TB Page	1310 - C1		Hydrologic Subarea (Optional)	909.12
Date	8/26/08	Time 15:50	Observer	JP / CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☒ Bubbles/Foam	☒ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae ☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ~~☒ No~~ ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0850, 0851

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.3	NH_3-N (mg/L)	0.400	NO_3 (mg/L)	3.889	Ortho-PO_4 (mg/L)	4.944
pH (pH units)	7.44	TURB (NTU)	26.71	NO_3-N (mg/L)	0.879	Ortho-PO_4-P (mg/L)	1.612
COND (mS/cm)	1.35	MBAS (mg/L)	1.25				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 38 DATE: 8/26/08

LOCATION: Dirt road, west of Harbison Ave, between 20th St and 24th St., at the end of fence line. TIME: 15:50

OBSERVER: CG, JP

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	38		Latitude	32.67265	Watershed	Hydrologic Unit	909
Location	Dirt Road, West of Harbison Ave, between 20th and 24th St. @ end of fence line		Longitude	117.07057		Hydrologic Area	909.1
			TB Page	1310-C1		Hydrologic Subarea (Optional)	909.12
Date	8/28/08	Time 9:15	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☒ Bubbles/Foam	☒ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☒ Algae ☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.60	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.29	MBAS (mg/L)	1.25				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For MBAS

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	38-01		Latitude	32.67412	Watershed	Hydrologic Unit	909
Location	across from 2020 Rachael Avenue.		Longitude	117.06990		Hydrologic Area	909.1
			TB Page	1310 - C1		Hydrologic Subarea (Optional)	909.12
Date	8/28/08	Time 9:45	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0874-0876

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	0.50				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	40		Latitude	32.65961	Watershed	Hydrologic Unit	909.
Location	Southwest corner of Sweetwater Road and Plaza Bonita/Stockman St. down in channel		Longitude	-117.06677		Hydrologic Area	909.1
			TB Page	1310-D3		Hydrologic Subarea (Optional)	909.12
Date	8/27/08	Time 11:15	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☒ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects ☒ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0856 - 0860

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.1	NH_3-N (mg/L)	0.355	NO_3 (mg/L)	3.726	Ortho-PO_4 (mg/L)	1.843
pH (pH units)	7.68	TURB (NTU)	3.43	NO_3-N (mg/L)	0.842	Ortho-PO_4 -P (mg/L)	0.601
COND (mS/cm)	2.93	MBAS (mg/L)	0.375				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	4	in
Depth	0.25	in
Velocity	3/3	ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Evidence of human inhabitation just south of the site in the vegetation. Mosquito larvae noted in ponded portion of the site.

Trash Assessment Form

SITE ID: 40 DATE: 8/27/08

LOCATION: southwest corner of Sweetwater Road and Plaza Bonita/Stockton down in channel. TIME: 11:15

OBSERVER: JP/CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 40 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☒ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive	4	X		X								X
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing	2	X									X	
Food Packaging	1		X	X				X				
Food Waste												
Household	3	X		X		X					X	
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Plastic bags, Clothing, food & beverage containers, plastic liner for auto, tires

San Diego Stormwater Copermittees
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	41			Latitude	32.600588	Watershed: Hydrologic Unit	909
Location	Northeast of San Miguel Courtand Valley Road, inside Park Bonita Apartment Complex.			Longitude	-117.05083	Hydrologic Area	909.1
				TB Page	1310-E3	Hydrologic Subarea (Optional)	909.12
Date	8/29/08	Time	13:40	Observer	CG, JP	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☒ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☒ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0904-0906

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.3	NH_3-N (mg/L)	0.288	NO_3 (mg/L)	8.473	Ortho-PO_4 (mg/L)	1.048
pH (pH units)	8.19	TURB (NTU)	0.82	NO_3-N (mg/L)	1.915	Ortho-PO_4-P (mg/L)	0.342
COND (mS/cm)	4.32	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	14	in
Depth	1	in
Velocity	1/3	ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 41 DATE: 8/29/08

LOCATION: North east of San Miguel Court and Valley Road, inside park Bonita Apartment complex. TIME: 13:40

OBSERVER: CG, JP

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 40 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ Threat Human Health	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ Threat to Aquatic Health	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	42		Latitude	32.66785	Watershed	Hydrologic Unit	909
Location	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church		Longitude	-117.07691		Hydrologic Area	909.1
			TB Page	1310-B2		Hydrologic Subarea (Optional)	909.12
Date	8/26/08	Time 15:20	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other N/A
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other N/A
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☒ Other N/A
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0847-0849

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	DRY	gpm				Flow		gpm

COMMENTS: trash: food packaging and beverage containers (including hamburgers (raw))

Trash Assessment Form

SITE ID: 42 DATE: 8/26/08

LOCATION: South west of Euclid Ave. and 24th St., South of Southern Community Church TIME: 15:20

OBSERVER: JP / CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 40 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	43A		Latitude	32.66134	Watershed	Hydrologic Unit	909
Location	F Avenue between E. 24th St. and E. 28th St., west of Olivewood Elementary School		Longitude	-117.09447		Hydrologic Area	909.1
			TB Page	1309-J3		Hydrologic Subarea (Optional)	909.12
Date	8/28/08	Time 11:00	Observer	CG, JP		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0877-0878

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.0	NH_3-N (mg/L)	0.693	NO_3 (mg/L)	7.537	Ortho-PO_4 (mg/L)	2.143
pH (pH units)	7.61	TURB (NTU)	5.44	NO_3-N (mg/L)	1.703	Ortho-PO_4-P (mg/L)	0.699
COND (mS/cm)	1.03	MBAS (mg/L)	0.625				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.125	in
Velocity	0.66	ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 43A DATE: 8/28/08

LOCATION: F Avenue between E. 24th St. and E. 28th St., west of Olivewood Elementary TIME: 11:00

OBSERVER: JP/CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☑ Receiving Water

Site ID	44		Latitude	32.66982	Watershed	Hydrologic Unit	908.
Location	Northeast of 16th St. and National City Blvd, under Kimball Park Bridge		Longitude	-117.10247		Hydrologic Area	908.3
			TB Page	1309-H2		Hydrologic Subarea (Optional)	908.32
Date	8/26/08	Time 10:15	Observer	CG, JP		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☑ Algae	☑ Fish ☑ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 0823, 0824

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.7	NH_3-N (mg/L)	0.068	NO_3 (mg/L)	2.713	Ortho-PO_4 (mg/L)	0.744
pH (pH units)	8.29	TURB (NTU)	1.97	NO_3-N (mg/L)	0.613	Ortho-PO_4-P (mg/L)	0.243
COND (mS/cm)	1.41	MBAS (mg/L)	0.375				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	5	in
Depth	0.125	in
Velocity	5/15	ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trash mainly consists of food packaging.

Trash Assessment Form

SITE ID: 44 DATE: 8/26/08

LOCATION: Northeast of 16th St. and National City Blvd., under Kimball Park Bridge TIME: 10:15

OBSERVER: JP/CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☒ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☒ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	44A			Latitude	32.67151	Watershed: Hydrologic Unit	908
Location	D Avenue behind Boys and Girls Club in Kimball Park			Longitude	-117.10123	Hydrologic Area	908.3
				TB Page	1309-H2	Hydrologic Subarea (Optional)	908.32
Date	8/26/08	Time	11:20	Observer	JP/CG	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☒ Normal ☐ Excessive ☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0825, 0826

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.3	NH_3-N (mg/L)	0.287	NO_3 (mg/L)	CG 4.568	Ortho-PO_4 (mg/L)	1.537
pH (pH units)	8.89	TURB (NTU)	1.48	NO_3-N (mg/L)	1.032	Ortho-PO_4 -P (mg/L)	0.501
COND (mS/cm)	1.15	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	7	in
Depth	0.125	in
Velocity	5/18	ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: 44A

DATE: 8/26/08

LOCATION: D Avenue behind Boys and Girls Club in Kimball Park

TIME: 11:20

OBSERVER: CG, JP

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☒ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	45		Latitude	32.68739	Watershed	Hydrologic Unit	908
Location	In front of 1243-1305 Fig Court, in the middle of the street.		Longitude	-117.09690		Hydrologic Area	908.3
			TB Page	1289-J7		Hydrologic Subarea (Optional)	908.31
Date	8/29/08	Time 11:30	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☒ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0896 - 0898

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.8	NH_3-N (mg/L)	0.851	NO_3 (mg/L)	4.598	Ortho-PO_4 (mg/L)	4.479
pH (pH units)	8.12	TURB (NTU)	36.13	NO_3-N (mg/L)	1.039	Ortho-PO_4-P (mg/L)	1.460
COND (mS/cm)	1.37	MBAS (mg/L)	3				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Small amount of food packaging litter

Trash Assessment Form

SITE ID: 45 DATE: 8/29/08

LOCATION: In front of 1243-1305 Fig Court, in the middle of the street TIME: 11:30

OBSERVER: CG, JP

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	45		Latitude	32.68739	Watershed	Hydrologic Unit	908
Location	In front of 1243-1305 Fig court, in the middle of street		Longitude	-117.09690		Hydrologic Area	908.3
			TB Page	1289-J7		Hydrologic Subarea (Optional)	908.31
Date	9/2/08	Time 11:15	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	28.1	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	8.45	TURB (NTU)	101	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.93	MBAS (mg/L)	3				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For MBAS

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	45-1		Latitude	32.68800	Watershed	Hydrologic Unit	908
Location	In front of 1304 and 1242 Scott ~~Street~~ Drive, off Palm Ave.		Longitude	-117.09695		Hydrologic Area	908.3
			TB Page	1289-J7		Hydrologic Subarea (Optional)	908.31
Date	8/29/08	Time 12:20	Observer	CG, JP		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☒ Sewage ☐ Other

Color ☐ None ☒ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☒ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0902 - 0903

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	60	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	>3				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: The MBAS concentration appeared to be higher here than at the site.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For MBAS

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	45-2		**Latitude**	32.68811	**Watershed**	**Hydrologic Unit**	908
Location	Curb/gutter at northeast corner of the Scott Drive and Delta St. intersection		**Longitude**	-117.09653		**Hydrologic Area**	908.3
			TB Page	1289-J7		**Hydrologic Subarea** (Optional)	908.31
Date	9/2/08	**Time** 11:35	**Observer**	CG / JP		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☒ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☒ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0937-0938

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	NA	MBAS (mg/L)	2				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sampling location is downstream of suspected outdoor laundry washing at 4616 Delta Street.

San Diego Stormwater Copermittees
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	46			Latitude	32.67584	Watershed: Hydrologic Unit	908
Location	South of South Bay Plaza Center, between fashion Plaza and Fiesta Pet Shop.			Longitude	-117.09539	Hydrologic Area	908.3
				TB Page	1309-J1	Hydrologic Subarea (Optional)	908.32
Date	8/27/08	Time	12:25	Observer	CG, JP	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0861

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.132	NO_3 (mg/L)	7.161	Ortho-PO_4 (mg/L)	1.033
pH (pH units)	8.25	TURB (NTU)	3.99	NO_3-N (mg/L)	1.618	Ortho-PO_4 -P (mg/L)	0.337
COND (mS/cm)	0.74	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	6	in
Depth	0.5	in
Velocity	1	ft/sec
Flow	9	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Trash Assessment Form

SITE ID: 46 DATE: 8/27/08

LOCATION: South of South Bay Plaza Center, Between Fashion Plaza + Fiesta Pet Shop. TIME: 12:25

OBSERVER: CG, JP

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5 x 5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
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☐ Field Screening ☒ Confirmation For enterococcus ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	46			Latitude	32.67584	Watershed: Hydrologic Unit	908
Location	south of South Bay Plaza center, between fashion plaza and Fiesta Pet Shop			Longitude	-117.09539	Hydrologic Area	908.3
				TB Page	1309-J1	Hydrologic Subarea (Optional)	908.32
Date	9/8/08	Time	16:10	Observer	SM/CG	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1061-1065

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.9	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.98	TURB (NTU)	4.09	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	0.79	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	4	in
Depth	0.5	in
Velocity	1	ft/sec
Flow	6	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

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☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For Enterococcus

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	46-1		Latitude	32.67524	Watershed	Hydrologic Unit	908
Location	Concrete swale by eastern catch basin ~10 feet upstream of Site 46		Longitude	-117.09539		Hydrologic Area	908.3
			TB Page	1309-J1		Hydrologic Subarea (Optional)	908.32
Date	9/8/08	Time 1610:20 pm	Observer	SM/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☒ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other decaying food	
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other	
Clarity	☐ Clear		☐ Slightly Cloudy	☒ Opaque		☐ Other	
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☒ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 1066-1073

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3 (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		NO_3-N (mg/L)		Ortho-PO_4 -P (mg/L)	
COND (mS/cm)		MBAS (mg/L)					

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Water was ponded, but appeared to come from concrete swale behind resturant.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For Enterococcus ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	46		**Latitude**	32.67584	**Watershed**	**Hydrologic Unit**	908
Location	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet shop		**Longitude**	-117.109539		**Hydrologic Area**	908.3
			TB Page	1309-J1		**Hydrologic Subarea** (Optional)	908.32
Date	10/8/08	**Time** 9:50	**Observer**	MD		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	8.4	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.46	MBAS (mg/L)	na				

Analytical Lab Samples Collected? ☒ **Yes** ☒ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	47			Latitude	32.66163	Watershed: Hydrologic Unit	908
Location	Southeast corner of Mile-of-Cars Way and Transportation Ave.			Longitude	-117.10275	Hydrologic Area	908.3
				TB Page	1309-H3	Hydrologic Subarea (Optional)	908.32
Date	8/26/08	Time	12:20	Observer	JP/CG	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☒ Low ☐ Incoming ☐ High ☒ Outgoing **Tide Height:** Unknown ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0827-0830

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.425	NO_3 (mg/L)	2.943	Ortho-PO_4 (mg/L)	0.841
pH (pH units)	7.45	TURB (NTU)	8.30	NO_3-N (mg/L)	0.665	Ortho-PO_4-P (mg/L)	0.274
COND (mS/cm)	>20.00	MBAS (mg/L)	1.75				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	7	in
Depth	0.5	in
Velocity	1/2	ft/sec
Flow	5	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Site may be tidally influenced, but no tide information was available near the sampling location because the site is about one mile upstream of the San Diego Bay in the MS4.

Trash Assessment Form

SITE ID: 47 DATE: 8/26/08

LOCATION: southeast corner of Mile of Cars Way and Transportation Ave TIME: 12:20

OBSERVER: JP / CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): ——

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☒ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
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☐ Field Screening ☒ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	47		Latitude	32.66.163	Watershed	Hydrologic Unit	908
Location	South east corner of Mile-of-Cars Way and Transportation Avenue		Longitude	-117.10275		Hydrologic Area	908.3
			TB Page	1309-H3		Hydrologic Subarea (Optional)	908.32
Date	8/28/08	Time 10:10	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☒ High ☐ Outgoing **Tide Height:** Unknown ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	NA	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	NA	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	>20.00	MBAS (mg/L)	1.25				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	8	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Water was ponded deeply relative to the initial site visit, probably deeper than one foot. Site is likely tidally-influenced, but no nearby tide information was available because the site is about one mile upstream of San Diego Bay in the MS4.

San Diego Stormwater Copermittees
City of National City
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☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For MBAS

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	47-1		Latitude	32.66162	Watershed	Hydrologic Unit	908.
Location	infront of Frank Toyota on Nat. City Blvd - south of mile of Cars Way		Longitude	-117.10152		Hydrologic Area	908.3
			TB Page	1309-H3		Hydrologic Subarea (Optional)	908.32
Date	8/26/08	Time 1:00	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☒ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☒ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0831-0838

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	>3				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Small amount of flowing water proceeding from two 4-inch pipes at the curb which drain runoff from Frank Toyota dealership property.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For MBAS

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	47 - 2		Latitude	32.66070	Watershed	Hydrologic Unit	908
Location	outside west entrance to Frank Toyota - south of Mile of Cars Way and Transportation Ave		Longitude	-117.10233		Hydrologic Area	908.3
			TB Page	1309-H3		Hydrologic Subarea (Optional)	908.32
Date	8/26/08	Time 13:30	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0844

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	na	MBAS (mg/L)	0.625				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
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☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	48			Latitude	32.67673	Watershed: Hydrologic Unit	908
Location	Northwest of E. 14th St. and Grove St.			Longitude	-117.08321	Hydrologic Area	908.3
				TB Page	1310-B1	Hydrologic Subarea (Optional)	908.32
Date	8/29/08	Time	10:00	Observer	JP/CG	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☒ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0883-0885

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	0.843	NO_3 (mg/L)	3.530	Ortho-PO_4 (mg/L)	14.19
pH (pH units)	7.41	TURB (NTU)	52	NO_3-N (mg/L)	0.798	Ortho-PO_4-P (mg/L)	4.626
COND (mS/cm)	2.02	MBAS (mg/L)	> 3				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Orthophosphate was initially tested over the range. A 1:4 dilution was performed with result 2.838 and multiplied by five.

Trash Assessment Form

SITE ID: 48 DATE: 8/29/08

LOCATION: Northwest of E. 14th St. and Grove St. TIME: 10:00 am

OBSERVER: JP/CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☒ Confirmation For MBAS, Orthophosphate ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	48			Latitude	32.67673	Watershed: Hydrologic Unit	908
Location	Northwest of E. 14th Street and Grove Street.			Longitude	-117.08321	Hydrologic Area	908.3
				TB Page	1310-B1	Hydrologic Subarea (Optional)	908.32
Date	9/2/08	Time	9:35	Observer	CG, JP	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0922 & 0923

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	27.4	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	6.163
pH (pH units)	6.84	TURB (NTU)	~~na~~ 78	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	2.009
COND (mS/cm)	2.08	MBAS (mg/L)	>3				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☒ IC/ID Follow-Up For PO4-P and MBAS

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	48-[illegible]1		Latitude	32.67648	Watershed	Hydrologic Unit	908
Location	just south of Euclid Ave and SeaWind Drive east side of ~~Street~~ Euclid Ave		Longitude	-117.07963		Hydrologic Area	908.3
			TB Page	1310-B1		Hydrologic Subarea (Optional)	908.32
Date	9/2/08	Time 10:35	Observer	JP/CG		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☒ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0927-0932

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	na	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	6.001
pH (pH units)	na	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	1.956
COND (mS/cm)	na	MBAS (mg/L)	>3				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	49		Latitude	32.68095	Watershed	Hydrologic Unit	908.
Location	South end of Arcadia Place (through Harbison Avenue and 11th Street)		Longitude	117.07770		Hydrologic Area	908.3
			TB Page	1290-B7		Hydrologic Subarea (Optional)	908.32
Date	8/29/08	Time 9:10	Observer	JP/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☒ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☒ Sediment/Gravel ☒ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☒ Algae ☐ Fish ☒ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 0879 - 0882

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	0.468	NO_3 (mg/L)	3.282	Ortho-PO_4 (mg/L)	2.840
pH (pH units)	8.34	TURB (NTU)	12.95	NO_3-N (mg/L)	0.742	Ortho-PO_4 -P (mg/L)	0.926
COND (mS/cm)	2.12	MBAS (mg/L)	0.750				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	< 1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: only source of water was from ~12 inch outlet on NW wall of channel

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

Trash Assessment Form

SITE ID: 49 DATE: 8/29/08

LOCATION: South end of Arcadia Pl (through Hubison Ave and 11th St.) TIME: 9:10 am

OBSERVER: JP/CG

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): —

ESTIMATED AREA OF ASSESSMENT L x W (FT): 50 x 30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

CITY OF NATIONAL CITY

2008/2009

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

SEPTEMBER 2009

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

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ACRONYMS AND ABBREVIATIONS

Acronym	Abbreviation
℃	Degrees Celsius
303(d) List	2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
BMP Manual	The City of National City Storm Water Best Management Practices Manual
CASQA	California Stormwater Quality Association
CIP	Capital Improvement Project
CIWMB	California Integrated Waste Management Board
CIWQS	California Integrated Water Quality Management System
City	City of National City
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CMC	Criteria Maximum Concentration
CMP	Corrugated Metal Pipe
CTR	California Toxics Rule
CWA	Clean Water Act/Federal Water Pollution Control Act
D-MAX	D-MAX Engineering, Inc.
DEH	County of San Diego Department of Environmental Health
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FOG	Fats, Oils, and Grease
General Construction Permit	State of California Construction General Permit
GIS	Geographic Information System
gpm	Gallons Per Minute
HA	Hydrologic Area
HDPE	High Density Polyethylene
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HOA	Home Owners' Association
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illicit Discharge
IHC	Interim Hydromodification Criteria
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
LID	Low Impact Development
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable
mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) Per 100 Milliliters
MS4	Municipal Separate Storm Sewer System
mS/cm	MilliSiemens Per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
nt	Not Tested
NTC	Notice to Comply
NTU	Nephelometric Turbidity Unit
PDPA	Pollutant Discharge Potential Assessment
Priority Project	Priority Development Project
PW	Public Works
RCP	Reinforced Concrete Pipe
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Government
SIC	Standard Industrial Classification
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 14.22 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TSS	Total Suspended Solids
TTWQ	Threat to Water Quality
WDID	Waste Discharge Identification Number
WQO	Basin Plan Water Quality Objectives
WQTR	Water Quality Technical Report
WURMP	Watershed Urban Runoff Management Program
µg/L	Micrograms Per Liter

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Maryam Babaki, P.E.
City Engineer

Date: September 2009

Telephone Number: (619) 336-4380

EXECUTIVE SUMMARY

The City of National City (City) has been actively developing and implementing storm water pollution prevention measures since 1990. The City's current Jurisdictional Urban Runoff Management Program (JURMP) was prepared in March 2008 in response to San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit). The Municipal Permit was jointly issued to 18 municipalities in San Diego County, including the City, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (collectively referred to as "Copermittees").

The City's JURMP includes Best Management Practice (BMP) standards for businesses, construction and development projects, residents, and the City's own activities. The JURMP also includes programs for water quality monitoring and educational outreach.

This JURMP Annual Report presents the City's activities to implement its JURMP during the 2008/2009 fiscal year, which began on July 1, 2008 and ended on June 30, 2009. The exception to this is the illicit discharge detection and elimination component of the JURMP, which per Addendum No. 2 to the Municipal Permit now has a reporting period that extends to September 30 each year, three months later than all the other components of the JURMP.

The 2008/2009 reporting period is the first complete year under the requirements of the current Municipal Permit. Each section of this JURMP Annual Report discusses how the City's efforts during 2008/2009 met the requirements of the Municipal Permit. Key actions taken for the major components of the City's storm water program are summarized below.

Development Planning Component

During 2008/2009, the City continued to oversee development activities occurring in the City to mitigate potential threats to water quality due to such activities. The City continued to require all development projects to submit applicability checklists to determine subjectivity to the City's Standard Urban Storm Water Mitigation Plan (SUSMP) requirements. Four Priority Projects were identified and required to submit Storm Water Management Plans (SWMP) to comply with the City's SUSMP requirements. The City implemented its treatment control BMP operation and maintenance verification program, which included the utilization of a Microsoft Access treatment control BMP database to track information and prepare the maintenance verification letters distributed to responsible parties. The City also inspected 10 sites with approved treatment control BMPs.

Construction Component

During 2008/2009, a total of 111 construction storm water compliance inspections were completed at 66 sites, not including inspections for building permits, which also include a brief check for storm water BMPs. The City checked all construction projects for

applicability to the maximum disturbed area limitation and guidelines for advanced treatment. The City's plan check process provided construction BMP fact sheets, and the inspection program required projects to comply with the City's minimum BMP requirements.

Municipal Component

The City inspected all high TTWQ municipal fixed facilities and continued its rigorous street sweeping and MS4 maintenance programs. A total of 1,004 tons of trash and debris were removed from street sweeping activities, and 42.2 tons of debris were removed from standard MS4 maintenance. The City also developed and updated the forms used to record the types of debris removed during MS4 maintenance, the inspections conducted at special events, and the inspections conducted at municipal facilities. The City also continued to maintain and repair or replace sanitary sewer lines, as needed, to decrease the potential for a sanitary sewer overflow (SSO). No SSOs were reported in 2008/2009. The City received and appropriately addressed 27 complaints from the Storm Water Hotline, the City website, and other City departments.

Industrial and Commercial Component

During 2008/2009 the City met the Municipal Permit requirement to inspect at least 25 percent of the City's industrial and commercial inventory, including 100 percent of its high threat to water quality (TTWQ) sites. During the inspections conducted during 2008/2009, the City notified industrial and commercial businesses of the City's BMP requirements through the City's inspection program. Inspectors also assessed each facility's compliance with the General Industrial Permit (Industrial Permit) and worked with the RWQCB to resolve compliance issues. The City also continued a special additional data collection program focused on pollutant discharge potential assessment.

Residential Component

The City worked to educate its residents through a variety of means. During 2008/2009 the City completed a special study to assess levels of knowledge and BMP implementation in high TTWQ residential areas. The study included door-to-door surveys, verbal education, distribution of educational materials, and inspection for high priority residential activities. Information gathered from this program allowed the City to update its list of high TTWQ residential areas. The City continued to collaborate with the cities of Chula Vista and Imperial Beach to encourage residents to dispose of household hazardous waste (HHW) appropriately at a facility available to the public. The City also continued to host large item waste disposal events in fall and spring, as well as respond to calls made to the City storm water hotline regarding residential areas.

Illicit Discharge Detection and Elimination Component

As required by RWQCB Addendum No. 2 to the Municipal Permit, adopted on September 10, 2008, the reporting period for this component of the JURMP has been extended to September 30, 2009. The City will submit the details of how it implemented the illicit discharge detection and elimination component of its JURMP to the RWQCB no later than December 15, 2009.

Education Component

As a means to raise storm water awareness in various communities in the City, the City continued to conduct various education and outreach activities throughout 2008/2009. The City's efforts resulted in an estimated 34,339 impressions. The City also initiated a High TTWQ Residential Education Program, which involved door-to-door education and outreach. Through this program, 1,341 households received storm water educational materials. The City developed a bilingual 2009 storm water program calendar, which presented storm water concepts as well as storm water related drawing created by local third grade students. Approximately 5,740 calendars were distributed to municipal staff, industrial and commercial business representatives, school-aged children, and residents. To better serve the City's diverse population, a variety of educational materials were distributed in Spanish as well as English.

Public Participation Component

During 2008/2009, the City provided a variety of opportunities for individuals in the City to participate in the City's storm water program. Activities included cleanup events, which have a direct effect on water quality, and outreach activities, through which the City works to increase general knowledge and awareness regarding storm water issues. The City sponsored a themed art contest for third grade students at public schools in the City. Similar to last year, students submitted drawings with the "By Keeping our Community Clean, We Can Keep the Ocean Clean" theme. Twelve winners will be chosen, and their drawings will be included on the 2010 storm water program calendar. City residents continued to participate in routine large item and HHW waste disposal events. Additionally, 118 volunteers participated in the Creek to Bay Cleanup at three different sites throughout the City.

Fiscal Analysis Component

The City continued to fund its storm water program as discussed in the City's JURMP. Fiscal data for 2008/2009 and 2009/2010 are presented in this section.

Effectiveness Assessment Component

The City continued to evaluate the effectiveness of its storm water program based on the approach presented in the City's March 2008 JURMP update. The City has identified significant activities within each program component and metrics to assess each one. Standard tables to report this information have been created and included in Section 11 of this JURMP Annual Report.

Special Investigations

The City continued its Clean Community Program, which this year included extensive door-to-door surveys and education in residential areas. Residents were provided an in-person opportunity to share ideas about ways to keep the community clean. The City also assessed pollutant discharge potential of industrial and commercial businesses; sediment, trash, and oil and grease had the highest average pollutant discharge potential scores.

Conclusions and Recommendations

The City will continue to implement the new and updated programs in its JURMP during 2009/2010; it is anticipated that some program refinements will be made as implementation progresses. The City will also continue to collaborate with the other Copermittees to improve the efficiency of its program.

1.0 INTRODUCTION

1.1 BACKGROUND

This Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report presents a summary of the activities of the City of National City (City) during the 2008/2009 fiscal year. Preparation and submittal of the JURMP Annual Report is required by San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit).

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act (also known as the Clean Water Act, or CWA) established a framework for regulating Municipal Separate Storm Sewer System (MS4) discharges under the National Pollutant Discharge Elimination System (NPDES). The RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region in 1990, followed by a revised permit in 2001. The current Municipal Permit in turn replaced the 2001 permit, RWQCB Order No. 2001-01, in 2007.

Like all the other regulated municipalities in the San Diego region, collectively referred to as Copermittees, the City developed and submitted a JURMP to the RWQCB in 2002. As required by the Municipal Permit, the City submitted an updated JURMP in March 2008. The JURMP includes management measures for a variety of different sectors and activity types such as municipal, industrial, commercial, construction, and significant development and re-development.

Annual reports on the implementation of the JURMP are required to be submitted to the RWQCB September 30 of each year. This JURMP Annual Report presents information from the 2008/2009 fiscal year, which extended from July 1, 2008 to June 30, 2009.

1.1.2 CITY SETTING

The City of National City is located in southwest San Diego County, and is bordered by San Diego, Chula Vista, and unincorporated portions of San Diego County. The City itself includes approximately nine square miles and an estimated population of approximately 61,000. Land use within the City is mixed, with residential being the predominant land use. Land use categories with the corresponding percentage of the total area are included in Table 1-1, below, and illustrated in Figure 1-1.

Table 1-1
City of National City Land Use Breakdown

Land Use	Total Area (Acres)	Percentage
Single Family Residential	1,216	30%
Transportation	1,149	29%
Commercial	490	12%
Industrial	251	6%
Multi-Family Residential	215	5%
Open	202	5%
Public Facilities and Utilities	174	4%
Vacant	115	3%
Parks	114	3%
Other Residential	41	1%
Office	22	1%
Water	20	<1%
Construction	6	<1%
Recreation	2	<1%
Total	**4,016**	**100%**

Source: 2007 SANDAG land-use data

The City of National City lies entirely within the San Diego Bay Watershed. The City is located within two sub-watersheds: the Sweetwater and Pueblo San Diego sub-watersheds. Overall, the City of National City comprises approximately 1.6 percent of the total area of the San Diego Bay Watershed. Much of the southern portion of the City drains to the Sweetwater River, which ultimately terminates in San Diego Bay. The central portion of the City drains to Paradise Creek, a small salt marsh creek, which eventually discharges into the Sweetwater River. La Paleta Creek (also known as 7th Street Channel) drains the northern portion of the City and discharges directly to San Diego Bay. A very small western portion of the City drains directly to San Diego Bay shoreline. Virtually all of the areas of the City that drain directly to San Diego Bay are within the jurisdiction of the San Diego Unified Port District. Watersheds in the City are shown in Figure 1-2.

San Diego Bay, as a whole, is listed in the 2006 CWA Section 303(d) for polychlorinated biphenyls (PCB) based on fish tissues studies in recent years. The San Diego Bay shoreline at 7th Street Channel and at the 24th Street Marine Terminal are listed in the 2006 CWA Section 303(d) for benthic community effects and sediment toxicity. A TMDL is in progress for the mouth of 7th Street Channel. Because Sweetwater Marsh is part of a national wildlife refuge, it is considered an ESA. Paradise Creek is also considered an ESA by the City.

Figure 1-1
City of National City Land Use

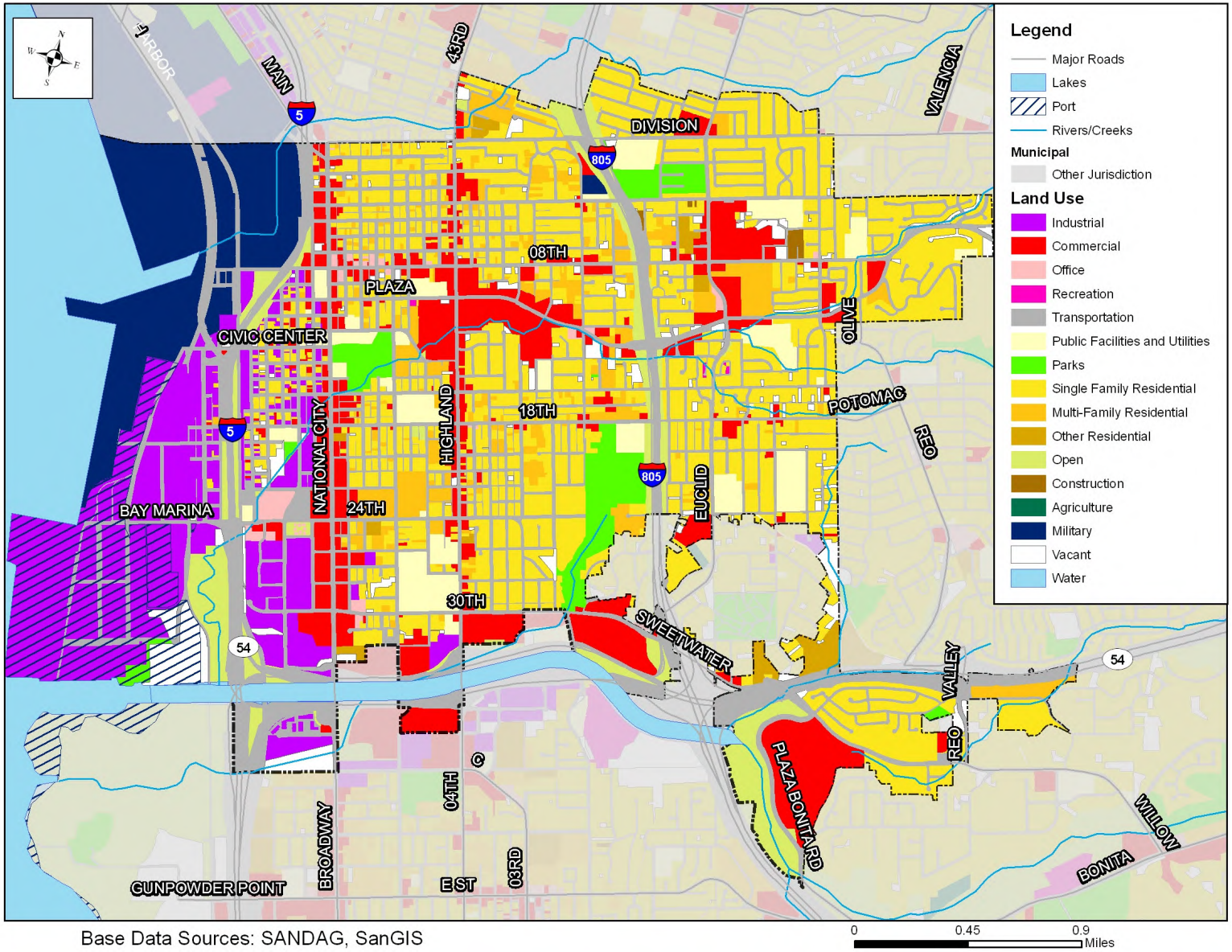

Base Data Sources: SANDAG, SanGIS

Figure 1-2
City of National City Watersheds

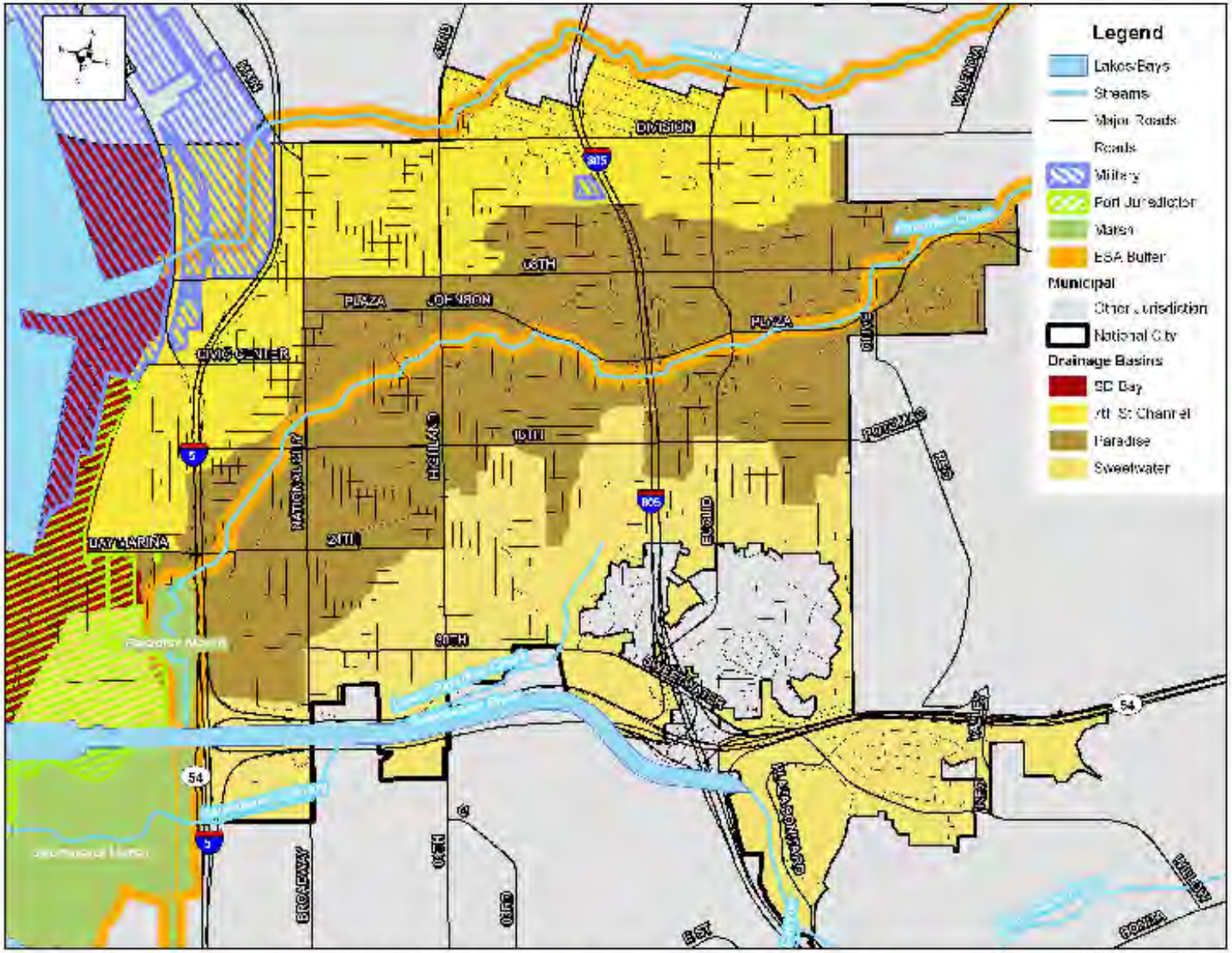

Note: Marsh boundaries based on land use data from SANDAG. The portion of the marsh west of I-5 and south of the Sweetwater River is not in the City's Jurisdiction. Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

1.2 PURPOSE AND OBJECTIVES

The City's JURMP presents a strategy to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The JURMP includes a variety of programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the City's implementation of its JURMP during the 2008/2009 reporting period.

In addition, this JURMP Annual Report addresses the comments of the RWQCB on the previous year's annual report and the City's recently updated JURMP. A response to those review comments is available as Attachment 1.1.

1.3 REPORT ORGANIZATION

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning Component**
Section 3	**Construction Component**
Section 4	**Municipal Component**
Section 5	**Industrial and Commercial Component**
Section 6	**Residential Component**
Section 7	**Illicit Discharge Detection and Elimination Component**
Section 8	**Education Component**
Section 9	**Public Participation Component**
Section 10	**Fiscal Analysis Component**
Section 11	**Effectiveness Assessment Component**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all the sections required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a clearer explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Subsection 1.1, Background, has been divided into subsections 1.1.1, Regulatory Background, and 1.1.2, City Setting, for the sake of clarity.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of pollutants from development projects to the MEP and managing increases in runoff from development projects that have the potential to negatively affect downstream water bodies. During the 2008/2009 fiscal year, the City accomplished these goals through implementation of its JURMP document.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2008/2009 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- Collaborated with the Copermittee Land Development workgroup to discuss key Model SUSMP and Hydromodification Management Plan (HMP) development issues.
- Continued to utilize the City's SUSMP database to track information about site design, source control, and treatment control BMPs within the City's jurisdiction, and the parties responsible for BMP maintenance.
- Used the City's treatment control BMP database to track completed Priority Development Projects.
- Mailed annual maintenance verification forms to completed private Priority Development Projects on the City's treatment control BMP inventory.
- Conducted maintenance inspections of site design, source control, and treatment control BMPs at 10 completed development projects in the City.
- Distributed educational materials for the development community regarding Municipal Permit requirements related to development projects.

A list of development projects subject to SUSMP requirements in 2008/2009 is available in Table 2-1. A comparison of the number of inspections performed and the requirements of the Municipal Permit can be found in Table 2-2. SUSMP projects that were completed after inspection and maintenance verification actions had been performed for the 2008/2009 inventory are listed in Table 2-3. Details of treatment control BMP inspections and related follow-up actions are provided in Table 2-4.

2.2 LAND USE PLANNING

2.2.1 BACKGROUND

The City's General Plan was adopted in 1996 and contains water quality and watershed protection principles in its Natural Settings Element. The comprehensive principles established in 1996 provide an ample framework for implementing the requirements of the current Municipal Permit, and no changes to these policies were necessary during the reporting period.

2.2.2 SOURCE CHARACTERIZATION

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts to the surrounding environment. No changes to development restrictions in the City's General Plan for storm water purposes were implemented during the reporting period.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Please refer to the City's updated JURMP document for a list of the water protection policies included in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 PROGRAM IMPLEMENTATION

The City implemented its water protection-related land use policies during the reporting period mainly through the City's Municipal Code which was last updated during the 2007-2008 reporting period. No changes were made to the City's Municipal Code sections related to storm water during the current reporting period.

Details on how the City implemented its established water protection policies through its environmental review process and its development project approval and verification processes during the reporting period are provided in Sections 2.3 and 2.4 of this JURMP Annual Report document.

2.3 ENVIRONMENTAL REVIEW PROCESS

The City's current environmental review process is detailed in the City's updated JURMP. The overall structure of the review process remains the same as in previous reporting years. No changes to the City's environmental review process have been made since the submittal of the updated JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The approval and verification process implemented during 2008/2009 followed the process described in the City's updated JURMP. Details on the different aspects of the process are described in the sections below.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's SUSMP Ordinance. No changes to the City's SUSMP Ordinance were made during the 2008/2009 reporting period. However, the City will be updating this document to incorporate the recently approved Model SUSMP by the March 2010 deadline.

2.4.3 Best Management Practice Requirements

No changes were made to the development BMP requirements presented in the City's current JURMP during the 2008/2009 reporting period.

2.4.4 Program Implementation

During the 2008/2009 fiscal year, the City required implementation of its BMP requirements for all development projects through education, a comprehensive development project approval process, and a new treatment control BMP inspection and maintenance verification program.

2.4.4.1 Outreach and Staff Training

The City continually trains staff involved in the planning and review of development projects within the City and works closely with the development community to communicate its development requirements throughout the entire approval process. Details on trainings conducted and educational materials developed and distributed related to new development during the reporting period can be found in Section 8 of this JURMP Annual Report document. Also, based on initial results from the first year of the program, distribution of maintenance verification letters to parties responsible for maintenance of treatment control BMPs at completed projects seems to be increasing the level of knowledge of regulated parties.

2.4.4.2 Urban Runoff Approval Process for Development Projects

All development projects that required City permits were required to undergo the City's urban runoff approval process as detailed in the City's JURMP. Forms completed by

project applicants are kept with the project's file at the City for future reference. As discussed in the City's JURMP, the City required all developers applying for construction and building permits to complete a "National Pollutant Discharge Elimination System (NPDES) Project Applicability Form" (SUSMP Checklist) that guides project applicants to submit proper documents to the City for review. The checklist was updated during the 2008/2009 reporting period due to changes in assignments to TTWQ priority during construction, but no changes to the post-construction BMP aspects of the form were made. The updated SUSMP Checklist is included with this report as Attachment 2.1. Additional details on changes to the construction requirements portion of the SUSMP Checklist are included in Section 3 of this JURMP document.

Non-priority development projects were required to complete a Standard Permanent Storm Water BMPs form, which was included as an attachment to the City's updated JURMP document. This form includes a list of all standard permanent storm water BMPs required by the City's SUSMP and requires project proponents to identify which site and source control BMPs will be implemented at the development. If any BMP is not selected, the project proponent must provide an explanation why the BMP is not applicable or feasible for the project. These completed forms are kept with the project's file at the City.

All development projects determined to be Priority Projects after completing the SUSMP Checklist were required to prepare a Storm Water Management Plan (SWMP) to meet the City's SUSMP requirements. As part of the JURMP update, the City also developed a SWMP self checklist to be used by the SWMP preparer, which was included as an attachment to the updated JURMP. In the past, the majority of deficiencies found in document reviews were missing information or sections not having enough detail about proposed BMPs. Table 2-1 lists the development projects subject to the City's SUSMP requirements during the 2008/2009 reporting period, the number of document reviews for each project, and the current approval status of each. Public Priority Projects are marked as Capital Improvement Projects (CIP) in the table.

Table 2-1
Development Projects Subject to SUSMP Requirements During 2008/2009

#	Project Name	Location	Project Type	Number of Reviews during 08/09	Approved during 08/09
1	Paradise Medical Center	7th and 8th Street	Priority	2	No
2	Marina Gateway Streetscape (CIP)	Harrison Avenue and 23rd Street	Priority	2	No
3	Bay Marina Drive Widening (CIP)	Bay Marina Drive and I-5	Priority	1	Yes
4	Carolino Hillside Homes Public Improvements	Portion of "M" Avenue North of 16th Street	Priority	1	Yes

Note that two of the Priority Projects reviewed during the reporting period, both road projects, were approved during their first review. While these projects were relatively simple compared to more complicated residential and commercial developments, the reports included all required components and proposed treatment control BMPs with medium or high pollutant removal efficiencies for the project's most significant pollutants of concern. The Carolino Hillside Homes Public Improvements project is a small project with limited space, therefore a Filterra high rate bio-filtration unit was proposed for the project to provide treatment for metals and oil and grease associated with vehicle traffic.

No Priority Projects were allowed to implement treatment control BMPs with low removal efficiency rankings during the reporting period. The City makes every effort to encourage development projects to select treatment controls with high and medium pollutant removal efficiencies and does not expect to approve many projects with low removal efficiency BMPs. However, if projects proposing a low removal efficiency treatment control BMP with a defensible infeasibility analysis are approved, details of those projects and their feasibility analyses will be reported as required in future JURMP annual reports. No projects were granted waivers from SUSMP requirements, and the City does not anticipate granting waivers in the future.

Model SUSMP and Hydromodification Management Plan

The Copermittee Land Development Workgroup met regularly to discuss key Model SUSMP and HMP development issues and provide updates on the status of consultant work products. The City of National City regularly participated in the Land Development Workgroup during 2008/2009.

During the reporting period, the Copermittees submitted the Model SUSMP and HMP to the Regional Board for approval in January 2009. The Model SUSMP was approved by the Regional Board in March 2009, and the City will update its local SUSMP accordingly by the March 2010 deadline. The Land development Workgroup did not receive approval or comments from the Regional Board regarding the submitted HMP during the reporting period. The City's current SUSMP Ordinance contains detailed Interim Hydromodification Criteria (IHC) which the City will continue to implement until the HMP is finalized. None of the development projects undergoing the City's review process during the reporting period were subject to the IHC since all of these projects are less than 17 acres. Once the HMP is approved, the City will also incorporate these requirements into its local SUSMP.

BMP Installation Verification

During the course of 2008/2009, after maintenance verification letters had been sent out during the summer of 2008, the City identified recently completed Priority Projects within the City's jurisdiction to be added to the treatment control BMP inventory. When a project is completed, the City checks for BMPs prior to occupancy, records the site information, assigns it a TTWQ priority, and then adds it to the inventory of projects subject to the City's inspection and annual maintenance verification program the following fiscal year. This process helps the City focus its inspection resources on sites

more likely to have maintenance deficiencies, as maintenance deficiencies are generally less likely at sites with recently installed BMPs. A table of the projects identified after distribution of verification letters is presented in Table 2-3 at the end of this JURMP Section. These projects will be added to the City's treatment control BMP inventory in 2009/2010.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

2008-2009 Annual Maintenance Verification Program

The Municipal Permit requires annual verification of operation and maintenance of treatment control BMPs installed within the City's jurisdiction. Annual verification must be provided by the party responsible for treatment control BMP maintenance and must be returned to the City prior to the start of the wet season (October 1st). While most of the implementation materials used for this program were developed during the 2007/2008 reporting period, 2008/2009 was the City's first year implementing the program.

Using the property owner names and addresses recorded in the City's BMP database, BMP maintenance verification forms were mailed to all the private projects included in the City's BMP database in early 2008/2009. Maintenance verification forms were also completed for all CIP projects on the City's inventory. The template letter, BMP maintenance verification form, and FAQ sheet were included as an attachment to the 2007/2008 JURMP Annual Report. Through this process, the City found that some of its contact information was no longer accurate due to sales of property or foreclosures, and it also found that some management companies needed additional guidance on how to properly maintain BMPs. The City completed research to update contact information and worked with management companies to educate them on the requirements. Through the City's maintenance verification efforts, responses were received from 15 projects. The City sent out six NOVs during this process and during 2009/2010 will continue to work with the few projects for which it did not receive a response, taking escalating enforcement steps as necessary.

Operation and Maintenance Inspections

During the 2008/2009 fiscal year, the City conducted inspections of projects with treatment control BMPs in accordance with the inspection frequencies outlined in the Municipal Permit. Table 2-2 provides a summary of the number of inspections performed and how these met the requirements of the Municipal Permit.

Table 2-2
2008/2009 Inspection Numbers versus Municipal Permit Requirements

Site Class	Number of Sites	Full BMP Assessments	Percent Inspected	Permit Requirement	Requirement Met
All Inventoried Sites	19	10	53%	20%	**Yes**
Sites with Drainage Inserts	14	7	50%	50%	**Yes**
High TTWQ sites	6	6	100%	100%	**Yes**

Details on the City's site-specific inspection forms and treatment control BMP tracking database were provided in the 2007/2008 JURMP annual report. During the reporting period, GPS coordinates were also collected for the BMPs inspected, and this location information was added to the electronic database. Table 2-4 at the end of this section lists the 10 development projects inspected during the reporting period, a brief description of inspection findings, and, if applicable, any follow-up actions taken. The BMP types proposed at these sites and the sites' TTWQ priorities are included in the City's treatment control BMP inventory, which is included in Appendix A.1 of this JURMP Annual Report.

During the 2008/2009 reporting period no sites were observed to present a significant threat to human health or the environment during inspections, so none were reported to the RWQCB.

2.5 Development Planning Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 Program Review and Modification

The inspection frequency for treatment control BMPs has been revised to match the Municipal Permit language more closely. Table 4-2 of the JURMP has been revised to read as follows:

Table 4-2
Treatment Control BMP Inspection Frequencies

Site Type	Inspection Frequency
High Priority	Annual, Completed Prior to Wet Season
Contains Drainage Inserts	50 Percent of All Sites with Drainage Inserts Per Year
All Other Sites	As Needed

Table 2-3
SUSMP Projects Completed After Establishment of 2008/2009 Inventory

#	Project Name	Project Address	Development Type	BMPs	HSA	Year Completed	TTWQ
1	940 W 19th Street	940 W 19th Street	Industrial	Biofilter	908.32	2008	Low
2	Bay Marina Drive Widening (CIP)	I-5 and Bay Marina Drive	Municipal	Filtration	908.32	2009	Medium
3	Marina Gateway	Marina Way, south of Bay Marina Dr	Commercial	Biofilters, Hydrodynamic Separator	908.32	2009	High
5	West Air Gases	2300 Haffley Avenue	Commercial	Biofilter, Drainage Insert, Bioretention	908.32	2009	Medium

Table 2-4
2008/2009 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
1	Plaza Bonita Mall Expansion	6/18/2009	Some BMPs observed missing, and one hydrodynamic separator was observed in need of maintenance.	Site was sent a maintenance deficiency letter and a request for maintenance verification in September 2009. Site is currently working to install missing BMPs. City will verify proper installation and maintenance in 2009/2010.	In progress
2	Paradise Ridge	6/18/2009	35 swales observed in adequate condition, and two swales observed in need of repair.	Site was sent a maintenance deficiency letter and a request for maintenance verification in September 2009.	In progress
3	Paradise Creek Park (CIP)	9/30/2008	Drainage insert not observed in catch basin.	City is working to purchase drainage insert to install.	In progress
4	National City Library (CIP)	6/18/2009	All drainage inserts observed in adequate condition	NA	NA
5	Advanced Plastics	6/25/2009	All BMPs observed in adequate condition.	NA	NA
6	Penske Truck Leasing	9/30/2008	All BMPs observed in adequate conditions	NA	NA
7	Plaza City Apartments	9/30/2008	Hydrodynamic separator observed in working condition.	NA	NA
8	Sweetwater Town & Country Mall	9/30/2008	All drainage inserts observed in adequate condition	NA	NA

Table 2-4 (Continued)
2008/2009 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
9	Walgreens	9/30/2008	All five drainage inserts were observed in need of maintenance	Site was issued an NOV for improper BMP maintenance and failure to return a maintenance verification form prior to October 1, 2008. Project reported to the City that maintenance would be performed. City will verify proper maintenance during routine inspection in 2009/2010.	In progress
10	Wal-Mart	9/30/2008	Hydrodynamic Separator observed in good condition.	NA	NA

3.0 CONSTRUCTION

3.1 INTRODUCTION

During 2008/2009, the City continued to implement a program to prevent storm water pollution related to construction activities within the City. Modifications to the City's construction program were last made in late March 2008 as part of its JURMP update. All changes made at that time have been implemented for the entire 2008/2009 reporting period.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2008/2009 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- Distributed storm water requirements applicability checklists to all development projects in the City's jurisdiction.
- Conducted plan checks of erosion control plans and SWPPPs to ensure construction projects planned to comply with the City's minimum BMP requirements.
- Distributed copies of the Construction BMP Fact Sheet with all approved grading permits.
- Conducted 111 construction inspections at 66 sites per the frequency in the updated JURMP. During the wet season, high TTWQ sites were inspected bi-weekly, medium TTWQ sites monthly, and as needed for low TTWQ sites.
- Issued two verbal warnings, one administrative citation, and four Notices of Violation to construction sites in response to violations of the City's minimum BMP requirements.
- Conducted pre-construction meetings with all large project developers.

3.2 SOURCE CHARACTERIZATION

An inventory of active construction projects during the reporting period is presented in Appendix A.2 of this JURMP Annual Report document. The City's inventory was maintained throughout the reporting period by entering permit application forms into the City's inventory spreadsheet on a continuous basis. New construction projects were added to the inventory at the start of construction, and projects were removed from the inventory after construction was completed. Since construction projects were continually being added and removed throughout the fiscal year, inventory updates were usually performed more frequently than the minimum once per month.

3.3 Updates to Ordinances and Approval Processes

The City has not updated its Grading Ordinance or its Storm Water Management and Discharge Control Ordinance since the City's JURMP update during the previous reporting period. Details on any changes to the City's approval process during the reporting period are discussed in Section 3.5 of this document.

3.4 Best Management Practice Requirements

The City's construction and grading requirements have not changes since the recent update to the City's JURMP document. A complete list of required construction BMPs is included in the City's BMP Manual, which is an attachment to the City's JURMP. The City continued to assess the implementation and effectiveness of required BMPs at construction sites in 2008/2009.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below.

3.5.1 Education and Staff Training

Education and staff training implemented during the 2008/2009 fiscal year focused on reinforcing the changes made to the City's construction requirements at the time of the City's recent JURMP update to both City staff and the construction community. Construction project proponents were educated in BMP requirements during the approval process described below. Please see Section 8 of this JURMP Annual Report document for details on training and educational materials related to construction and grading activities.

3.5.2 Construction and Grading Approval Process

During the reporting period, City personnel verified that all construction projects planned to implement the City's minimum BMP requirements prior to issuing any building or grading permits. The City conducted its grading approval process as described thoroughly in Section 5 of the City's updated JURMP. The City requires grading construction projects to submit erosion control plans that indicate what BMPs are to be used at the site. These erosion control plans are reviewed by the City to ensure the site plans to meet the City's minimum construction BMP requirements. The City also reviews Storm Water Pollution Prevention Plans (SWPPPs) for sites greater than one acre that are required to obtain coverage under the General Construction Permit. Additionally, the City arranged pre-construction meetings with all developers of large projects to ensure an understanding of construction BMP requirements. Approved

forms and documents completed by project proponents are kept with each project's file at the City for reference. A Construction BMP fact sheet, known as the "Blue Sheet" within the City because the copies distributed are on blue paper, was also distributed with all construction permits issued (Attachment 3.1). Proper implementation of the minimum BMPs listed on the fact sheet was a condition of approval for all permits issued by the City during the 2008/2009 fiscal year.

During the reporting period, none of the City's active construction sites were larger than 17 acres, and the maximum disturbed area limitation did not apply. However, all construction sites were still required to limit exposed cleared or graded areas to the amount of area that could be protected prior to a rain event, as prescribed in the City's seasonal BMP requirements. Note that toward the of the reporting period the City's TTWQ prioritization criteria for high TTWQ sites was modified to change the size threshold from 50 acres to 17 acres. This change was also incorporated in the applicability checklists projects complete when going through the approval process. See subsection 3.7 later in this section for additional details. The City did not have any sites larger than 17 acres during the reporting period, so this change did not affect the TTWQ prioritization of any of the inventoried sites.

Criteria for determining when advanced treatment is required are detailed in the City's JURMP. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites within the City's jurisdiction, and advanced treatment methods were not required at any construction sites.

3.5.3 Inspection of Construction Sites

Appendix A.2 of this JURMP Annual Report contains a list of construction projects that were active during the reporting period, along with their assigned TTWQ priorities, the number of weeks the site was active within the rainy season, the numbers of inspections conducted during the wet and dry seasons, the number of follow-up inspections and complaint investigations, and the total number of inspections for each site. In total, 111 construction inspections were performed for 66 construction sites, not including the building inspections at low priority sites, which also include a storm water component.

Construction inspections conducted during the reporting period were performed as described in the City's updated JURMP. Key components of the inspections include checks for coverage under the General Construction Permit during the initial inspection and assessments of compliance with the City's BMP and discharge requirements during all inspections. Responsible parties at the sites are educated as needed during inspections. Copies of the inspection forms are kept on file at the City. The City conducted inspections at high TTWQ construction sites bi-weekly during the wet season and monthly for medium TTWQ sites. Low TTWQ sites were inspected on an as needed basis. Typically, storm water only inspections were not conducted at low TTWQ sites unless a complaint was called into the City's storm water hotline. Construction inspectors have been trained in the City's minimum construction BMP requirements,

and they check BMP implementation at low TTWQ construction sites during their inspections. Any sites found to have problems with BMP implementation are forwarded to the City's Storm Water Compliance Inspector. During the reporting period, two inspections of low TTWQ construction sites were conducted as complaint investigations. These sites are indicated on the City's inventory in Appendix A.2.

When any violations were noted during routine, follow-up, or complaint investigation inspections, these violations were noted on the project's inspection form, and the sites were given a list of corrective actions necessary to fix the observed violation. During 25 of the inspections a construction site was observed to not be incompliance with the City's BMP requirements. In some cases, these issues were resolved while the inspector was still on site. When necessary, appropriate enforcement actions were taken, and City staff followed up with the site until compliance was achieved. Details on the enforcement actions taken for construction sites during the implementation period are described below.

3.5.4 Enforcement Measures

Table 3-1 includes the number of violations and enforcement actions taken during the reporting period in response to violations of the City's minimum construction BMP requirements. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP.

Table 3-1
Summary of Construction Enforcement Actions Taken

Verbal Warnings	Notices of Violation	Administrative Citations	Stop Work Orders
2	4	1	0

Two low TTWQ construction sites received verbal warnings when they failed to implement the City's minimum construction BMP requirements and the inspector remained onsite until appropriate changes were made. No Stop Work Orders were issued in 2008/2009, but the City's JURMP notes that if a Stop Work Order is issued the Regional Board will be notified within five working days. During the reporting period, two complaints were received regarding construction site activities. Further details regarding complaint investigations and all enforcement actions taken during the reporting period can be found in Section 4 of this document.

None of the violations observed at construction sites during the reporting period were found to endanger human health or the environment. The City was able to address these violations through the City's established enforcement process, and it was not necessary to report any of these sites to the RWQCB.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 Program Review and Modification

The City's JURMP was last updated in March 2008. Since that time, RWQCB staff suggested during a meeting with the City by that the high TTWQ criterion for construction sites be 17 acres, the same as the maximum disturbed area for construction. The City agreed that the change would be feasible and updated the Water Quality Threat Prioritization Flow Chart for Construction Projects in the City's JURMP to consider any project 17 acres or larger to be high priority. The updated flow chart is available as Attachment 3.2 of this JURMP Annual Report and has been updated in the City's JURMP. This change is also visible in the updated NPDES Project Applicability Form or "SUSMP Checklist" in Attachment 2.1.

4.0 MUNICIPAL COMPONENT

4.1 INTRODUCTION

Throughout 2008/2009, the City of National City continued to manage municipal areas and activities to reduce discharges of pollutants to the MS4 to the MEP. As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and activities. Public parks and recreation facilities, administrative buildings, fire stations, and public works facilities make up the bulk of the municipal areas in the City. Municipal activities conducted by the City include but are not limited to graffiti abatement, building maintenance, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. Information about the City's prioritized street sweeping program can be found in Table 4-1, and information about the City's MS4 maintenance program can be found in Table 4-2.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the 2008/2009 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City inspected all high TTWQ fixed municipal facilities.
- The City removed a total of 1,004 tons of sediment and debris from street sweeping activities.
- The City removed a total of 42.2 tons of sediment and debris from standard MS4 cleaning activities, not including drainage insert maintenance.
- The City spent 3,007 man-hours maintaining 442,150 linear feet of sanitary sewer line.
- The City inspected all special events that occurred in the City during 2008/2009 to ensure appropriate BMP implementation and clean up. The City also developed a new special event inspection form to aid in special event inspection documentation.
- The City received and addressed 27 complaints through the Storm Water Hotline, City website, and other City departments. Enforcement actions resulting from complaint investigations are noted in Table 4-3.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities. As mentioned in the City's JURMP, municipal fixed facilities have been grouped under one category, fixed facilities. This is because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar.

4.2.2 SOURCE CHARACTERIZATION

All fixed facilities are included on the City's municipal inventory, which is included as Appendix A.3.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City continues to implement and assess the effectiveness of BMPs at all fixed municipal facilities. As mentioned in the City's JURMP, the City uses the CASQA Municipal BMP Handbook to establish appropriate BMPs for fixed municipal facilities. Table 6-2 in the City's JURMP describes the CASQA fact sheets that are used for specific facility types.

The City continues to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. The BMP requirements have not been changed since the City's JURMP was updated in March 2008.

City public works employees, fire station employees, and employees at other fixed facilities in the City continue to implement BMPs appropriate to the facility type, as described in the City's JURMP. City fire response personnel continue to be trained in implementing BMPs for non-emergency fire fighting activities as described in Section 3 of the City's JURMP. There were no changes in BMP requirements for any fixed facilities during 2008/2009.

4.2.4 PROGRAM IMPLEMENTATION

As mentioned above, the City's BMP requirements for fixed facilities have not changed since the development of the revised JURMP. Some notable examples of implementation of those BMPs are provided below.

Parks and Recreational Facilities

During 2008/2009, the City used a similar amount of granular fertilizer as in the past, but reduced liquid herbicide use from 88 gallons to only one gallon. Included in the fertilizer total is a small amount (5 pounds) of rose fertilizer, which contains a pesticide component and is stored in limited quantities.

Public Works Facilities, Fire Stations, Other Fixed Facilities
As previously mentioned, City personnel continued to implement appropriate BMPs for municipal fixed facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance activities at fixed facilities (i.e., landscaping, building maintenance, etc.) as necessary. Parking facilities associated with fixed municipal facilities were swept quarterly during 2008/2009, and the large paved areas at the City's Public Works Yard were swept weekly. Public Works employees continued to implement a SWPPP at the Public Works Yard. Public Works employees also continued to maintain the BioClean filter inserts on the property as needed.

Municipal Inspections
All 10 high TTWQ fixed municipal facilities received an annual routine inspection in 2008/2009. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2008/2009. The City's municipal inspection form, updated in 2008/2009, is included as Attachment 4.1. All inspections conducted at municipal facilities are tracked using a Microsoft Access database, which was created in 2008/2009. Table 4-4 at the end of this section lists all high TTWQ municipal fixed facilities requiring inspection in 2008/2009, the date the inspection was performed, and recommended corrective actions from the inspection. Since the inspections were conducted near the end of the reporting period, follow up inspections will take place in 2009/2010 to ensure that the corrective actions are implemented.

In addition to one annual inspection by other City personnel, public works personnel self inspect both the Public Works Yard East and Public Works Yard West weekly; street crew personnel inspect the Public Works Yard West and equipment maintenance crew inspect the Public Works Yard East. Inspection forms are completed and submitted to the City's Storm Water Compliance Inspector.

4.3 Roads, Streets, Highways, and Parking Facilities

4.3.1 Background

The City conducts regular maintenance of roads, streets, and parking facilities in the City to control pollutants such as sediment, metals, and litter and debris. Note that there are no highways within the City's jurisdiction.

4.3.2 Source Characterization

Roads and streets are included as one entity on the City's municipal inventory, which is included in Appendix A.3.

4.3.3 Best Management Practices

The City's primary BMP for roads, streets, and parking facilities is street sweeping. Other BMPs are chosen as needed based on the CASQA Municipal Handbook. The

City's sweeping frequency is outlined in the JURMP and described in the following subsection. There were no changes to the BMPs implemented for roads, streets, and parking facilities in 2008/2009.

4.3.4 PROGRAM IMPLEMENTATION

During 2008/2009, the City swept a total of 15,212 curb miles, removing approximately 1,004 tons of debris. High priority streets in the City are swept at least every two weeks, and medium priority streets in the City are swept at least monthly. The City has not designated any streets in the City as low priority. The City does not maintain any stand-alone parking facilities that are not associated with municipal facilities. Seventeen parking facilities that are associated with municipal facilities are maintained and swept during regular maintenance activities at the respective municipal facility, and are considered part of the municipal facility on the inventory. Table 4-1, below, describes the areas assigned high and medium priorities, and the associated sweeping frequency. The table also includes the sweeping frequency for areas of fixed municipal facilities and the associated parking lots.

As a means to address priority pollutants in the San Diego Bay Watershed, the City continued conducting additional sweepings of the all streets in the City. High priority streets were swept daily during 2008/2009; medium priority streets were swept every two weeks during 2008/2009.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
High	8th Street, National City Boulevard, Highland Avenue, Plaza Boulevard	11.8 miles	At least every two weeks
Medium	All other streets in the City	98.2 miles	At least once per month
Fixed Facilities	Parking lots associated with municipal fixed facilities	N/A*	Quarterly
Fixed Facilities – Parks	Parking lots associated with parks	N/A*	Every two weeks
Fixed Facilities – PW Yard	Public Works Operation Center	N/A*	Weekly
Total Amount of Debris Collected from Street Sweeping Activities: 1,004 tons			

* Mileage data is not available for the swept area of 17 parking facilities associated with municipal facilities, and the PW Yard. Mileage accrued while sweeping these facilities is included in the total mileage.

Inspections

Trash, debris, and sediment that has accumulated on City streets is identified and cleaned up via street sweeping, so additional inspections beyond this effort are not necessary.

4.4 MS4

4.4.1 Background

The City's extensive storm water conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during a rain event. The City's MS4 consists of approximately 19 miles of inlets, pipes of varying materials, natural channels, concrete channels, culverts, and 751 catch basins and inlets.

4.4.2 Source Characterization

The City's MS4 as one complete entity is included on the City's high TTWQ municipal inventory (Appendix A.3).

4.4.3 Best Management Practices

The City maintains a strict MS4 maintenance and cleaning schedule. Maintenance and cleaning are conducted to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. As described in the City's JURMP, BMPs for MS4 maintenance activities are chosen based on the CASQA Municipal Handbook and have not changed during 2008/2009.

4.4.4 Program Implementation

The City implemented a rigorous MS4 inspection and cleaning schedule during 2008/2009, requiring 605 man-hours to maintain. The City continues to track municipal activities, such as MS4 channel cleaning, in a Microsoft Access database. During 2008/2009, the MS4 maintenance logs were updated to enable the City to record more detailed information regarding the different types of debris removed; implementation of these new logs is anticipated starting at the beginning of the 2009/2010 reporting period. The updated Storm Drain Box Cleaning Log and Storm Drain Channel Cleaning Log are available in Attachment 4.2 and Attachment 4.3, respectively. The City inspected and cleaned all MS4 cleanout locations and open channel segments in 2008/2009, as described in Table 4-2, below.

Table 4-2
MS4 Maintenance Data

MS4 Structure	Percent inspected and/or cleaned*	Percent of open channels found with anthropogenic litter	Amount of debris removed from cleaning activities
Catch Basins / Self-Cleaning MS4 Facilities	100%	N/A	30,466 pounds
Open Channels	100%	100%	135.01 cubic yards (54,004 pounds)
Drainage Inserts	100%	N/A	10 pounds
Total Debris Removed From MS4 Maintenance Activities: 42.2 tons**			

* No structures were observed at least 33% of capacity during the reporting period. However, the City cleans out any structures, including self-cleaning structures, in which trash and debris is observed at the time of inspection.
** The weight of the material removed during channel maintenance activities was not recorded. Since trash the most common item removed, a conversion factor of 400 pounds per cubic yard was used to estimate the total weight of the material removed.

The City's cleanout locations are access points to various sections in the City's MS4, so no additional pipe beyond the cleanout location is typically cleaned. The City will use the vactor truck to clean the MS4 line in the event of a spill. During 2008/2009, there were three spills for which some additional cleaning of the MS4 had to be conducted. More information about the spills that occurred in the City during 2008/2009 is included in Table 4-5 at the end of this section.

During 2008/2009, the City continued to inspect the open channels in the City and remove trash and debris as necessary by hand. If litter or debris is observed during the routine inspections, it is removed immediately. The total length of the channel segments inspected and cleaned by City staff is approximately 25,950 linear feet. Additionally, as part of WURMP efforts that are beyond minimum required maintenance, the City hired a contractor in 2008/2009 to do biweekly inspections and remove any observed trash from Paradise Creek.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. Routine inspection and maintenance of the sanitary sewer system works to reduce the potential for a spill or SSO and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 SOURCE CHARACTERIZATION

The City maintains a system of public sanitary sewer pipes to convey wastewater from the City to be treated. The sanitary sewer system, as one complete entity, is included on the City's high TTWQ municipal inventory (Appendix A.3).

4.5.3 BEST MANAGEMENT PRACTICES

The City implements BMPs from the CASQA Municipal Handbook, as described in the City's JURMP, during sanitary sewer maintenance. There have been no changes to these BMPs during 2008/2009. The City inspects and maintains the sanitary sewer system as part of regular wastewater activities. The City clears blockages and repairs leaks as needed.

4.5.4 PROGRAM IMPLEMENTATION

The City seeks to eliminate seepage from the sanitary sewer system to the MS4 by routine preventative maintenance of both systems. Routine maintenance of both systems allows the City to find areas that are likely to become problems in the future and make the necessary repairs/replacements before any larger issues arise. The City also continued to conduct flow metering throughout its sanitary sewer system to monitor for evidence of potential problems. A total of 3,007 man-hours were spent maintaining a total of 442,150 linear feet of sanitary sewer line during 2008/2009. Silt and grease were listed as the most common items removed from sanitary sewer lines during maintenance activities. A total of 2,800 linear feet of sanitary sewer line was televised during 2008/2009 to determine if areas of the sanitary sewer were in need of maintenance or repair.

The City has also developed a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs.

The City maintains a Sanitary Sewer Management Plan (SSMP) which establishes procedures for responding to an SSO. Detailed information about the City's SSO spill response plan is included in the City's JURMP. There were no SSOs during 2008/2009.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City conducts a variety of different mobile municipal activities, typically involving infrastructure maintenance, landscape maintenance, and graffiti removal.

4.6.2 SOURCE CHARACTERIZATION

Both power washing and graffiti removal had previously been listed on the City's high TTWQ municipal inventory. However, it was determined that power washing is only used by the Graffiti Removal sector of Neighborhood Services and is therefore only conducted during graffiti removal activities. Since graffiti removal itself is already an inventoried activity, power washing was removed from the inventory (Appendix A.3). Infrastructure maintenance and landscape maintenance are listed on the City's medium TTWQ municipal inventory.

4.6.3 BEST MANAGEMENT PRACTICES

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel are trained to implement BMPs for the specific activity in which they are involved. For example, City personnel conducting graffiti removal are trained to store and handle any chemicals properly and to collect all waste water from power washing. A more detailed discussion of BMPs for specific mobile activities is included in the City's JURMP; there were no updates to the BMPs implemented during mobile activities during 2008/2009.

4.6.4 PROGRAM IMPLEMENTATION

During 2008/2009, City personnel continued to implement BMPs during mobile municipal activities such as graffiti removal and landscape maintenance. Most importantly, City personnel collect any water generated by activities such as power washing during graffiti removal activities and dispose of it properly. City personnel are provided with a handout that gives a summary of appropriate BMPs for power washing activities and reminds personnel that water generated by such activities must always be collected and disposed of properly.

One annual routine inspection of graffiti removal activities was conducted during the 2008/2009 reporting period. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2008/2009, including the inspection of graffiti removal activities. There were no instances of non-compliance relating to mobile municipal activities, and no corrective actions were required based on the inspection of graffiti removal activities during 2008/2009 (see Table 4-4).

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

As detailed in the City's JURMP, a variety of different special events are hosted within the City. Notably, the City's largest special event is an annual July 4th celebration.

4.7.2 SOURCE CHARACTERIZATION

As required by the Municipal Permit, special events are included on the City's high TTWQ municipal inventory (Appendix A.3).

4.7.3 BEST MANAGEMENT PRACTICES

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter/debris from the event, and raise storm water awareness among the vendors and patrons of the event, as applicable. BMPs for special events did not change during 2008/2009.

4.7.4 PROGRAM IMPLEMENTATION

The City hosted several special events during 2008/2009, including various one-time celebrations and recurring events. For each special event, the City inspected the site to ensure the proper implementation of required BMPs, as detailed in the City's JURMP. Special events that had not finished clean up at the time of the inspection were required to resolve remaining housekeeping issues within a timely manner. The special event inspection form, developed in 2008/2009, is available as Attachment 4.4. All inspections conducted at special events are tracked using a Microsoft Access database, which was created in 2008/2009. A full list of special events in the City is below:

Special Events in 2008/2009

- Fourth of July Celebration
- Bayfront Concert & Movie (National City Week)
- Health and Fitness Fair (National City Week)
- Family Entertainment at Plaza Bonita (National City Week)
- El Grito at Kimball Park and Open House at City Hall (National City Week)
- City Birthday Celebration (National City Week)
- State of the City Address and Taste of NC (National City Week)
- National City Fire Department "Tower of Terror"
- Christmas at Morgan Square
- Westfield Plaza Bonita Carnival
- Circus Vargas
- Feria de Salud—Por Tu Familia
- Cinco de Mayo
- Farmer's Market
- Taste of National City
- 23rd Annual Chili & Salsa Cook-off & Literacy Day
- Philippine Fair
- SD Movies in the Park at Las Palmas Park

There were no notable instances of non-compliance requiring enforcement beyond following up to ensure appropriate housekeeping was completed.

4.8 Public Reporting of Illicit Discharges and Connections

Reporting and Response

Public and municipal involvement are crucial to preventing and eliminating illicit connections and illegal discharges (IC/ID) from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is provided on the City's website and in distributed storm water educational material. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged into a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges.

Complaints received by the City during the 2008/2009 reporting period and the City's response to each are listed in Table 4-5 at the end of this section. A total of 27 complaints were documented this year, a decrease from the 48 that were recorded last year. The extensive distribution of educational materials with the hotline number, particularly in residential areas, in 2008/2009 could have resulted in an increase in the number of complaints; however this was not the case. The observed decrease in complaint number may indicate that as individuals in the City become more aware of appropriate BMPs to prevent pollutants from reaching the City's MS4, fewer reportable incidents are observed by the public. For example, in residential areas of the City there were seven recorded complaints, but only three problems were identified during those seven field investigations. Most were related to excessive running water, which is less serious than an observed intentional discharge of pollutants.

Enforcement

As previously stated, complaints received via the Storm Water Hotline or City website, are included in Table 4-5 at the end of this section. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, corrective actions, and/or citations. Table 4-3, below, summarizes the enforcement actions taken in response to complaints received.

Table 4-3
Enforcement Actions Resulting from Complaints Received by the Storm Water Hotline

Type	Verbal Warning	Stop Work Order	Administrative Citation	NOV
Commercial	7	1	1	1
Industrial	0	0	0	0
Mobile	1	0	1	1
Municipal	0	0	0	0
Residential	1	0	0	0
Construction	2	0	0	0

4.9 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to sanitary sewer overflows. As discussed earlier in this section, preventative maintenance is regularly conducted on the City's sanitary sewer system. Additionally video inspections and sewer surveys are regularly conducted to monitor the condition of the public sanitary sewer lines and to determine the necessity of maintenance. Private lateral lines do not receive preventative maintenance, but the City assists in the containment and cleanup of sewer spills if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report any SSOs to the City's Storm Water Hotline. As previously mentioned, there were no SSOs during 2008/2009; however four other spills occurred during the reporting period and were reported to the RWQCB within 24 hours of the spill. All spills have been included in Table 4-5 at the end of this section with the other public complaints, however the following list also outlines the spills reported and investigated by the City:

- On 8/17/2008 a fire hydrant was reported broken, spilling water at 2606 Highland Avenue. Sweetwater Authority repaired the hydrant.
- On 12/10/2008 a fire hydrant was reported broken, spilling water on 21st Street and Highland Avenue. Sweetwater Authority repaired the hydrant.
- On 4/27/2009 a fire hydrant was reported broken, spilling water on Bay Marina Drive and Cleveland Avenue. Sweetwater Authority repaired the hydrant.
- On 6/16/2009 a discharge of sediment to an open channel was discovered at the National City Golf Course. American Golf received a Stop Work Order, a Notice of Violation, and a citation.

4.10 Education and Outreach

During 2008/2009, the City continued to educate municipal personnel regarding proper BMP implementation and other storm water and watershed concepts. The City also posted winning entries from the storm water calendar art contest on a bulletin board in

City Hall, which provided storm water information. A photo of the bulletin board is included as Attachment 4.5. Information regarding the education and outreach conducted for City personnel is described in Section 8 of this Annual Report.

4.11 Municipal Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.12 Program Modification and Review

The following modifications were made to the municipal component of the City's JURMP during 2008/2009:

Municipal Inspections (Section 6.2.4.3 in the City's JURMP)
The City made some minor changes to its municipal inspection form to clarify the meaning of some questions and streamline data management. The updated inspection form is included as Attachment 4.1.

MS4 (Section 6.4 in the City's JURMP)
The City made some minor changes to its MS4 maintenance logs to enable better documentation and tracking of the types and amounts of debris removed from the City's MS4 during routine maintenance activities. The updated storm drain box cleaning log and storm drain channel cleaning log are included as Attachment 4.2 and Attachment 4.3, respectively.

Special Events (Section 6.7 in the City's JURMP)
The City developed a special event storm water inspection form to enable better documentation and tracking of the inspections and enforcement of BMP requirements at special events. The special event inspection form is included as Attachment 4.4.

Table 4-4
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Inspection Date	Corrective Actions Needed
1	Butterfly Park	East 22nd Street and Palm Avenue	High	5/26/2009	• No significant corrective actions
2	El Toyon Park	2005 East 4th Street	High	5/20/2009	• No significant corrective actions
3	Graffiti Removal (Mobile Activity)	Kimball Skate Park, 16th Street	High	6/18/2009	• No corrective actions
4	Kimball Park	12th Street & D Avenue	High	5/20/2009	• Keep drains and discharge locations free of sediment, trash, and debris, especially catch basin on north end of A Street. • Keep parking lot next to skate park and sidewalk along A Street free of sediment. • Provide soil stabilization to minimize erosion, especially along E. 12th Street planters and southeast dirt slope along channel. • Cover stockpile by Boys and Girls Club. • Cover roll-off dumpster by Boys and Girls Club and keep the surrounding area free of trash and debris.
5	Las Palmas Municipal Pool	1800 East 22nd Street	High	5/20/2009	• No significant corrective actions
6	Las Palmas Park	1800 Newell Street	High	5/20/2009	• Keep discharge locations free of sediment and debris, especially inlet on east end of pool below playground. • Provide soil stabilization along slope around inlet on east end of pool below playground. • Keep dumpster lids closed and keep dumpster areas free of trash and debris.
7	National City Municipal Golf Course	1439 Sweetwater Road	High	5/26/2009	• No significant corrective actions
8	Paradise Creek Educational Park	West 19th Street and Coolidge Avenue	High	5/26/2009	• No significant corrective actions

Table 4-4 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Inspection Date	Corrective Actions Needed
9	Public Works East Yard	2100 Hoover Avenue	High	5/27/2009	• Keep discharge points along west fence free of sediment and debris. • Keep street sweeping vehicle storage area free of oil leaks. • Ensure good housekeeping BMPs are in place to eliminate material transport from stockpiles beyond bermed area. • Ensure liquid drums in hazmat storage area behind repair shop are kept in secondary containment, covered, and properly labeled. Keep secondary containment free of spills. • Regularly inspect equipment and vehicles to prevent leaks. • Raise materials stored outdoors (hazmat drums, used tires) off the ground and cover whenever possible.
10	Public Works West Yard	2100 Hoover Avenue	High	5/27/2009	• No significant corrective actions
11	Sweetwater Heights Park	Cagle Street and Stockman Street	High	5/26/2009	• No significant corrective actions

Note: Roads, streets, highways, and parking lots; the MS4; and the sanitary sewer system were inspected via the maintenance effort described earlier in this section.

Table 4-5
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
1	7/7/2008	Commercial	Public Works	3142 Plaza Boulevard	Sewer clog caused overflow from sink to reach the storm drain	A clogged sewer line downstream of a kitchen sink caused an overflow of sewage to flow out of the kitchen to a private storm drain line. Inspector gave a verbal warning and discharge was stopped. The business was required to immediately repair the clog and clean out the private storm drain line. There was no discharge to the City's MS4.
2	7/9/2008	Construction	Development Services	8th Street & Harbison Avenue, by Church's Chicken	Water was discharging to street	Water used for dust control at a vacant lot was flowing off of the property to the gutter. Inspector gave a verbal warning, and the discharge was immediately stopped.
3	8/5/2008	Municipal	Development Services	Grove Street & Sweetwater Rd	Landscape debris in gutter	Grass clippings were observed in the middle of Grove Street and at the cross-gutter, where water had pooled. The street sweeper was notified and cleaned up the debris. The cross-gutter was marked for later public improvements.
4	8/17/2008	Municipal	Police Dept	2606 Highland Avenue	Fire hydrant leak	RWQCB (Dat Quach) was notified by voicemail on 8/17/08 and in writing on 8/19/08. Sweetwater Authority repaired the hydrant.
5	8/19/2008	Construction	Public Works	1502 Highland Ave	Water being used to wash off driveway & sidewalk	Inspector gave a verbal warning to construction site personnel that had washed sidewalk and driveway toward the gutter, where gravel bags had been placed. Site was told to use dry methods and keep all materials and let nothing leave the job site. Worker on site observed to check all BMPs.
6	9/23/2008	Residential	Hotline Caller	9th Street between M Avenue and N Avenue	Liquid dumped in the gutter	Oil appeared to have been washed into the gutter. No source was identified. Public Works was dispatched to clean the area.

Table 4-5 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
7	10/2/2008	Residential	Hotline Caller	300 Block of D Avenue	Discharge from single family residence that smells strongly of urine.	No discharge was observed during the inspection. Field investigation did not identify any threat to storm water quality.
8	12/10/2008	Commercial	County of San Diego	1339 Hoover Avenue	Coolant in the gutter	A coolant spill had reached an outside surface to curb drain. The drain was 80% clogged and a minimal amount of coolant actually reached the gutter. Inspector gave a verbal warning with corrective actions. Business was required to clean the gutter at the curb outlet, clean the surface drain, conduct auto repairs inside if possible and use additional BMPs if working outside. Crown Transmission Center was scheduled for full inspection later in 2008/2009.
9	12/10/2008	Municipal	Police Dept	21st Street & Highland Avenue	Fire hydrant leak	RWQCB (Dat Quach) was notified by voicemail and in writing on 12/11/08. Sweetwater Authority repaired the hydrant.
10	12/17/2008	Municipal	Public Works	Valley Road & Calle Abajo	Sediment and water flooding street during rain event	Public Works crew discovered that an empty barrel and shopping cart (on private property in City of San Diego) was blocking a natural drainage ditch. Property owner gave the crew permission to remove these items.
11	12/17/2008	Commercial	Hotline Caller	3100 E 8th Street	Private property being flooded by water from adjacent business	A stream of water was observed coming from the business property, flowing down the bank and retaining wall, flooding private home property. Water was discovered coming from a broken hose bib, where copper pipe was missing from exterior walls, where the hose bib and water heaters were. A plumber on site shut off the water at the meter. Marbro Construction Company later reported having fixed the pipe.

Table 4-5 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
12	12/29/2008	Commercial	Hotline Caller	1411 Harding Avenue	Private party reported to PW that company was putting hazardous material in dumpster.	Dumpsters were inspected, but no hazardous material was noted. Spoke with manager regarding complaint. Manager will monitor dumpsters.
13	1/5/2009	Mobile	Sweetwater Authority	30th Street & Highland Avenue	Concrete cutting activity discharging to gutter. CA plate 9B59755, contractor license #180853	Contractor crew was removing concrete cap from the top of underground tanks. Inspector observed that concrete residue and water from the site was draining into a storm drain inlet west of I Ave on the north side of 30th St. The crew was stopped and instructed to sweep remaining material in street and gutter and dispose of it. Public Works crew was dispatched with a flusher truck to 30th and J Ave to clean the inlet and finished cleaning by noon.
14	1/5/2009	Mobile	Hotline Caller	1300 Block of A Avenue	Water truck with open valve was discharging water to street and storm drain inlet	Driver parked vehicle up hill from inlet and opened valve releasing water. Driver acknowledged that he knew this practice was against City ordinance and that the water was not de-chlorinated. NOV and citation issued to Miller Paving with copy to RWQCB. Citation #2719 issued on 1/6/09 for the amount of $200. Mobile business was added to the City's inventory and required to obtain a business license.
15	2/12/2009	Commercial	Police Dept	101 N. Highland Avenue	Water discharge	Inspector went to the site and found a wet driveway. The sprinkler box was opened and found to be full of water. The broken irrigation system was shut off by the owner.
16	3/16/2009	Commercial	Hotline Caller	108 B 8th Street	Water from washing the meat department floor reported to run down back alley in the evening	Inspector did not observe a discharge but contacted owner, who stated that it was not the current practice. Owner let staff know this would be a violation and not acceptable.

Table 4-5 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
17	4/6/2009	Commercial	Hotline Caller	2220 Plaza Boulevard, Suite D	Bad, greasy smell coming from BBQ restaurant	Inspector talked to the owner at Hawaiian BBQ and told him to clean up outdoor area. Owner was verbally warned that if not kept clean it would be a violation. A full storm water inspection conducted later in the month found the business in compliance.
18	4/20/2009	Residential	Hotline Caller	1906 E 16th Street	Running water down the sidewalk into the gutter	No discharge was observed during the inspection. Field investigation did not identify any threat to storm water quality.
19	4/27/2009	Municipal	Hotline Caller	Bay Marina Drive & Cleveland Avenue	Fire hydrant leak	RWQCB (Dat Quach) was notified by voicemail and in writing on 4/28/09. Sweetwater Authority repaired the hydrant.
20	4/29/2009	Residential	Hotline Caller	1st Street & Valva Avenue	Car in driveway leaking oil	Inspector noted a Dodge truck parked in a driveway leaking oil to the gutter. Public Works crew found no oil in the nearest storm drain inlet, but cleaned a small amount of debris from inlet and soaked up oil from the gutter with absorbent. City traffic division was notified to mark the vehicle.
21	4/29/2009	Commercial	Hotline Caller	1940 Highland Avenue	Kitchen wash water allowed to discharge to parking lot and surface drains	No discharge was observed during the inspection. Field investigation did not identify any threat to storm water quality. Manager was verbally warned not to allow any discharge of water to the parking lot or surface drains. Manager was to notify other shift managers.
22	4/30/2009	Residential	Hotline Caller	801 National City Blvd	Water was flowing from Bayview Towers along A Avenue	Inspector observed that a pump near the swimming pool had a problem, and water kept pumping until it flowed onto the street. The Bayview Towers staff were notified and stopped the pumping.

Table 4-5 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
23	5/5/2009	Commercial	Hotline Caller	424 Mile of Cars Way	Kitchen floor and mat wash water flowing to parking lot	No discharge was observed. Manager was verbally warned not to allow any discharge of water to the parking lot. Manager was to notify other shift managers.
24	5/6/2009	Residential	Hotline Caller	600 Block of Rachael Avenue	Water running down the sidewalk at Rachael Avenue and creating a consistent puddle.	No discharge was observed during the inspection. Field investigation did not identify any threat to storm water quality.
25	5/20/2009	Commercial	Development Services	524 Highland Avenue	Sewage or grease in the back of a restaurant	A sewer cleanout was observed, but no sewage or grease issues were observed in the back area of the restaurant.
26	6/11/2009	Residential	Hotline Caller	Alley behind K Avenue between 22nd Street & 23rd Street	Water running for over 24 hours	At 12:25 pm an area at the bottom of the hill was damp, but no flowing water was observed in the alley. No further action was needed.
27	6/16/2009	Commercial	Development Services	1439 Sweetwater Rd	Discharge of sediment and debris into a channel of a watercourse	Sediment had been discharged to the open channel running through the golf course. RWQCB (Dat Quach) was notified by voicemail and in writing on 6/17/09. Stop order, NOV, and Citation #2720 were issued to American Golf.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During 2008/2009, the City continued to implement a program to mitigate urban runoff pollution from the areas and activities of industrial and commercial businesses. Through various aspects of the industrial and commercial program, the City aims to reduce the amount of pollutants discharged from these facilities.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the industrial and commercial component during the 2008/2009 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City met the Municipal Permit requirement of inspecting at least 25 percent of its stationary industrial and commercial inventory.
- The City met the Municipal Permit requirement of inspecting 100 percent of its inventoried high TTWQ industrial and commercial facilities.
- The City completed pollutant discharge potential assessment (PDPA) forms at inspections to aid in source identification efforts.
- The City issued 247 notices of correction with inspection results to industrial and commercial business based on inspection results.
- Based on inspection findings and complaints made to the hotline, the City issued seven NOVs and four administrative citations to industrial and commercial businesses.
- The City responded to two complaints regarding potential non-compliance of mobile businesses and resolved each issue of non-compliance appropriately.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 BACKGROUND

The City's industrial and commercial inventories, which can be found in Appendix A, include all stationary and mobile businesses known to be operating in the City that are required to be included on the City's inventories. Stationary facilities in the City include, but are not limited to, manufacturing facilities, auto repair shops, restaurants, wholesalers, and contractors. As discussed in the following subsections, the City requires industrial and commercial businesses to implement pollution prevention

measures and designated minimum BMPs to mitigate the impacts of business' activities on water quality.

5.2.2 Source Characterization

The City's industrial and commercial inventories are included as Appendix A.4 and A.5, respectively. The inventories include both stationary and mobile businesses, as required by the Municipal Permit. The inventories were updated in 2008/2009 using applicable data from the City's business license registry, the 2007/2008 inventory and inspection records, and the State's list of industrial sites covered under the State of California Industrial General Permit (Industrial Permit).

Information on how the City prioritizes the industrial and commercial inventories based on TTWQ is discussed in detail in the City's JURMP. The City considers factors including those listed below when prioritizing the inventories:

- Results from previous inspections and institutional knowledge
- Presence of significant exposed outdoor storage or activities
- Consideration of downstream water body and whether the business is likely to discharge pollutants for which the water body is impaired
- Proximity to the receiving water body
- Facility size
- Industrial Permit subjectivity

The City's updated inventories include a total of 835 stationary industrial and commercial facilities.

5.2.3 Best Management Practice Requirements

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other BMPs to reduce or potentially eliminate the generation of pollutants from business areas/activities. The City has established a set of minimum BMPs based on the CASQA Industrial and Commercial Handbook. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. The City's BMP requirements are described in more detail in the City of National City Best Management Practice Manual, which is an attachment to the City's JURMP. The City's BMP requirements for industrial and commercial businesses did not change during 2008/2009.

5.2.4 Program Implementation

Industrial and Commercial Inspections

During 2008/2009, the City conducted storm water compliance inspections at selected stationary industrial and commercial facilities; Table 5-1 provides a summary of the industrial and commercial site visits. The purpose of the inspections is to confirm that the City's minimum BMPs are being implemented at stationary industrial and commercial facilities.

This was the second year of implementation of the updated JURMP program since requirements of the new Municipal Permit went into effect March 2008. The industrial and commercial component of the City's storm water program was conducted under the new Municipal Permit requirements for the entire 2008/2009 fiscal year. The City inspected 100 percent of the inventoried high TTWQ industrial and commercial facilities, which met the Municipal Permit's requirements for the second year of program implementation.

Table 5-1, below, provides a summary of the industrial and commercial site visits. All of the high TTWQ sites were selected for inspection, and additional medium TTWQ industrial facilities were also selected for routine inspection. Additional medium TTWQ sites selected for inspection were facilities that had not been inspected within the last few years.

Table 5-1
Summary of Industrial and Commercial Inspections

Facility Category	Equivalent Full Inspections Conducted*	Percentage of Total Inventory
High TTWQ Sites	121	14% (100% of high TTWQ sites)
Additional Sites	152	18%
All Stationary Inventoried Sites	**835**	**32%**

* "Equivalent Full Inspections Conducted" includes full inspections and also counts at 50 percent value the site visits where a full inspection could not be conducted but where effort was taken to document the visit and update the inventory. It does not include any businesses that were duplicate listings of other inspected facilities or facilities replaced by other businesses inspected during the reporting period.

Facility inspections were conducted in accordance with the protocol set forth in the City's JURMP. Inspections involved a thorough examination of the facility and all outdoor activities. BMP deficiencies and corrective actions were discussed with facility personnel present during the inspection and recorded on the City's industrial and commercial inspection form, updated in 2008/2009 and included in Attachment 5.1. The City also completed PDPA forms during the inspections as part of an additional data collection effort. The PDPA form is included with the City's inspection form in Attachment 5.1. More information about the results of this process is presented in Section 12 of this JURMP Annual Report.

During the inspection process, the City also checked Industrial Permit compliance status when applicable. Businesses observed to be in violation of the Industrial Permit are included in Table 5-2. Table 5-3, at the end of the section, summarizes the results of the 351 site visits conducted during 2008/2009. A total of 249 full inspections were completed as part of the City's 2008/2009 routine industrial and commercial inspection

program. The remainder of the sites were visited, but during the visit were found to have moved, be duplicates of other businesses, or not to be conducting activities for which inclusion on the City's inventory is necessary.

Facilities that were recommended for follow-up are noted in the table. The City visited some of these sites in 2008/2009, but anticipates conducting follow-up inspections at most of the facilities in 2009/2010, results of which will be reported in the 2009/2010 JURMP Annual Report. The City provided copies of inspection results to each facility that received a full inspection in 2008/2009. The inspection report included the findings of the inspection, including all required corrective actions recorded by the inspector.

The City did not rely on third party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third party inspection program.

General Industrial Permit

Industrial Permit compliance status was evaluated during the industrial and commercial inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector gathered information about the business activities that occur on site and assigned or reassigned the business's standard industrial classification (SIC) code(s). The inspector then determined Industrial Permit subjectivity based on SIC code. Violations of any aspect of Industrial Permit requirements were recorded on the standard industrial and commercial inspection form and are presented in Table 5-2. The table includes businesses directed to file a Notice of Intent (NOI) and develop a Storm Water Pollution Prevention Plan (SWPPP) and monitoring program, as well as businesses that had filed an NOI but had failed to develop a SWPPP and monitoring program. The table also includes facilities that could potentially gain exemption from Industrial Permit requirements by completing notice of non-applicability/no exposure certification (NONA/NEC) paperwork. Each business was notified of any Industrial Permit-related non-compliance by the inspector.

Note that the business "GV Industries" was initially found to be in violation of the General Industrial Permit and was recommended to file a NOI. Based on a later follow-up inspection and correspondence with RWQCB staff, it is our understanding that they have since qualified for exemption by eliminating outdoor exposure and completing NONA/NEC paperwork.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to provide site-specific one-on-one education regarding storm water concepts and BMPs. Educational materials were provided as applicable; nearly all inspected businesses received a copy of the City's 2009 Storm Water Calendar, which can be found in Attachment 5.2.

Enforcement

Several industrial and commercial facilities were observed to be out of compliance with the City's municipal storm water ordinance and/or the Industrial Permit during inspections conducted in 2008/2009. Additionally, the City received a number of complaints through the City's storm water hotline. Details of the industrial and commercial complaint investigations are included in the Summary of Documented Public Complaints in Section 4 of this Annual Report. The City issued the following enforcement actions in response to BMP deficiencies during inspections and other complaints:

- Seven verbal warnings
- 247 Notices of Correction (sent with inspection results)
- Eight NOVs
- Five administrative citations
- One Stop Work Order

There were no instances of noncompliance found to present a significant threat to human health or the environment observed at stationary businesses during 2008/2009, so none were reported to the RWQCB.

5.3 Mobile Sources

5.3.1 Background

Due to the nature of activities of most mobile businesses, a major area of concern tends to be illegal discharges. In general, mobile businesses can be hard to identify, as many may not have City business licenses. Additionally, because the activities of mobile businesses do not occur in one fixed location, inspections of such businesses are impractical.

5.3.2 Source Characterization

The industrial and commercial inventories were updated in 2008/2009 using applicable data from the City's business license registry and the 2007/2008 inventory. Known mobile industrial and commercial businesses, as described in the City's JURMP, are included on the City's inventory and are marked as mobile. Toward the end of the fiscal year, the Regional Industrial and Commercial Workgroup also developed a web-based mobile business database for use by all Copermittees. The goal of developing this database is to allow Copermittees to share information about mobile businesses, which may be active in more than one jurisdiction. The City contributed its mobile business inventory for upload to the regional database.

5.3.3 Best Management Practice Requirements

BMPs for stationary industrial and commercial facilities, as discussed earlier in this section, are required to be implemented for mobile activities, as applicable. BMPs for

mobile businesses, including key principles such as proper collection and disposal of any discharge, are discussed in the City's JURMP.

During 2008/2009, the Regional Industrial and Commercial Workgroup, in which the City was an active participant, developed regional mobile business BMP standards. These standards were devised to create a uniform set of minimum BMPs for mobile businesses operating within the region. The regional mobile business BMP standards were adopted at the end of June 2009.

5.3.4 PROGRAM IMPLEMENTATION

While mobile businesses are not as straightforward to inspect as fixed industrial and commercial facilities, the City has in place a program of education and enforcement to regulate mobile activities.

Education and Outreach

All businesses conducting mobile activities within the City's jurisdiction are required to apply for and maintain a business license with the City of National City, regardless of where the business may be based. The Industrial and Commercial "Preventing Urban Runoff Pollution" Trifold is provided to each person applying for a business license in the City, including mobile businesses. The trifold brochure, included in Attachment 5.3 of this Annual Report, clearly prohibits the discharge of wash water and provides a list of required BMPs applicable to industrial and commercial businesses. Mobile businesses maintaining a City business license are included on the Commercial Inventory in Appendix A.5. No known mobile businesses conduct industrial activities in the City at this point in time. To aid in tracking mobile businesses that may conduct activities within its jurisdiction in the future, the City also collaborates with other jurisdictions in the County of San Diego in maintaining a county-wide list of mobile businesses.

Reporting and Enforcement

In addition to regulation through business licenses, City staff are trained to report inappropriate mobile business activities to the City's storm water hotline. The City responds to all calls to the City's storm water hotline regarding mobile businesses. There were two complaints made to the City's storm water hotline regarding mobile businesses during 2008/2009. In the first complaint a paving contractor had unknowingly allowed concrete slurry to flow away from the work site and upon inspector arrival was made to immediately stop the discharge and clean up the gutter. In the second complaint, a water truck had knowingly been opened to discharge to the street, and the company received an NOV and citation for $200. More details of these complaint investigations are available in the summary of recorded public complaints in Section 4 of this report. In addition to the two complaints addressed, City staff immediately dealt with an observed case of inappropriate pool water discharge by issuing a citation. In all cases the business and/or a Public Works crew was tasked with clean up to prevent discharge to the MS4 and receiving water body.

There were no instances of noncompliance of mobile businesses that were believed to present potential threats to human health or the environment observed during 2008/2009, so none were reported to the RWQCB.

5.4 Industrial and Commercial Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 Program Review and Modification

During 2008/2009, the City made some minor changes to its industrial and commercial inspection form to clarify the meaning of some questions and streamline data management. The updated inspection form is included as Attachment 5.1. No other changes to the City's industrial and commercial component have been made since that time.

Table 5-2
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation			
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC
1	AMEE BAY LLC	2105 CLEVELAND AVE	5/8/2009	Mandatory	3732	Boat repair	✔	✔	✔	
2	BECKY BEEZ BISQUE & CERAMICS	2424 HOOVER AVE, T	4/7/2009	Mandatory	3269	Manufacturing ceramics	✔	✔	✔	
3	BORDER STEEL INTERNATIONAL	1505 CLEVELAND AVE	4/2/2009	Mandatory	3441	Structural steel fabrication	✔	✔	✔	
4	FABRICATION TECHNOLOGIES INDUSTRIES	2200 HAFFLEY AVENUE, A	5/8/2009	Mandatory	3441	Structural steel fabrication	✔	✔	✔	
5	H20 LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	4/1/2009	Conditional	2048, 5149,	Outdoor exposure noted	✔	✔	✔	
6	HYPERBARIC TECHNOLOGIES INC.	3224 HOOVER AVENUE	4/9/2009	Conditional	3499	Outdoor exposure noted	✔	✔	✔	
7	INNOVATIVE CUTTING DESIGNS COR	1805 CLEVELAND AVE	5/8/2009	Conditional	3499	Outdoor exposure noted	✔	✔	✔	
8	MARINE SERVICES AND EQUIPMENT	1804 CLEVELAND AVE, B	5/8/2009	Mandatory	3732	Boat repair	✔	✔	✔	

Table 5-2 (Continued)
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation			
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC
9	NATHAN'S STONE WORLD INC	1014 COOLIDGE AVE	4/1/2009	Mandatory	3281	Stone cutting	✔	✔	✔	
10	NATIONAL IRON WORKS	832 HOOVER AVENUE	4/15/2009	Mandatory	3441	Structural steel fabrication	✔	✔	✔	
11	PRESIDENTIAL LIMOUSINE LLC	1428 MCKINLEY AVE	4/2/2009	Mandatory	4119	Transportation with vehicle maintenance and washing	✔	✔	✔	
12	SURE RIDE INC	1523 WILSON AVE	4/7/2009	Mandatory	4141	Transportation with vehicle washing	✔	✔	✔	
13	BEST WAY PRINTING	2602 TRANS-PORTATION AVE, E	4/8/2009	Conditional	2759	No outdoor exposure				✔
14	CP MANUFACTURING	1440 HARDING AVENUE, B	5/6/2009	Conditional	3679	No outdoor exposure				✔
15	D F DESIGNS	1228 HOOVER AVENUE	5/6/2009	Conditional	2434	No outdoor exposure				✔
16	EL GRANO DE ORO	730 E 7TH STREET	4/14/2009	Conditional	2099, 5441,	No outdoor exposure				✔
17	OOH LA LA	2504 TRANS-PORTATION AVE, D	4/8/2009	Conditional	2339	No outdoor exposure				✔

Table 5-2 (Continued)
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation			
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC
18	SAN DIEGO PRETZEL COMPANY	224 W 12TH STREET	5/14/2009	Conditional	2052	No outdoor exposure				✔
19	SAN DIEGO SEAFOOD*	1842 MCKINLEY AVENUE	5/14/2009	Conditional	5146, 2092,	No outdoor exposure				✔
20	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	5/6/2009	Conditional	3449	No outdoor exposure				✔

*Actions taken after the routine inspection was conducted at San Diego Seafood could affect this facility's eligibility for NONA/NEC.

Table 5-3
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
1	100% NATURALL	20 N EUCLID AVE, D	3/25/2009	Full Inspection		
2	3 D AUTO DETAIL	5 W 18TH ST	5/13/2009	Full Inspection		
3	7 ELEVEN #13564 F	15 N EUCLID AVENUE	3/25/2009	Full Inspection		
4	7 ELEVEN #17265	1601 E 18TH STREET	5/4/2009	Full Inspection		
5	7 ELEVEN #18218C	807 E 8TH STREET	4/14/2009	Full Inspection		
6	7 ELEVEN #18978D	3100 E PLAZA BLVD	3/31/2009	Full Inspection		
7	A & D HAWAIIAN BBQ	2220 E PLAZA BLVD, D	4/29/2009	Full Inspection		
8	A-1 ALLOYS RECYCLING CENTER	724 CIVIC CENTER DRIVE	4/2/2009	Full Inspection		
9	ADEPT PROCESS SERVICES, LLC	1804 CLEVELAND AVE, B	5/14/2009	Full Inspection		
10	ALPIN TACO SHOP	1641 HIGHLAND AVENUE	4/6/2009	Full Inspection		
11	AM PM MINIMARKET #6523	133 W 8TH ST	4/13/2009	Full Inspection		
12	AMEE BAY LLC	2105 CLEVELAND AVE	5/8/2009	Full Inspection	✔	In Progress
13	ANAYA'S NATIONAL AUTOMOTIVE	2125 ROOSEVELT AVENUE	4/7/2009	Full Inspection	✔	In Progress
14	APPLEBEE'S NEIGHBORHOOD	3030 PLAZA BONITA RD	5/13/2009	Full Inspection		
15	ASHTON AWNINGS INC	1200 HARBOR DR	5/19/2009	Full Inspection	✔	In Progress
16	ASIAN MARKET	3400 E 8TH ST, 111-112	3/31/2009	Full Inspection		
17	ASIAN NOODLES	1430 E PLAZA BLVD, E-12	4/28/2009	Full Inspection	✔	In Progress
18	AVIS RENT A CAR	1536 SWEETWATER ROAD, B	5/12/2009	Full Inspection		
19	BAJA'S FISH TACOS	505 HIGHLAND AVE	3/25/2009	Full Inspection	✔	In Progress
20	BALL AUTOMOTIVE GROUP	2001 NATIONAL CITY BLVD	5/19/2009	Full Inspection	✔	In Progress
21	BAMBOO ROTISSERIE, INC	2220 E PLAZA BLVD	5/1/2009	Full Inspection	✔	In Progress
22	BASKIN ROBBINS ICE CREAM	1493 E PLAZA BLVD	4/27/2009	Full Inspection		
23	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	4/3/2009	Full Inspection		
24	BECKY BEEZ BISQUE & CERAMICS	2424 HOOVER AVE, T	4/7/2009	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
25	BEST WAY PRINTING	2602 TRANSPORTATION AVE, E	4/8/2009	Full Inspection		
26	BLIMPIE SUBS	1200 HIGHLAND AVE	5/8/2009	Full Inspection		
27	BOB'S N. CAR & SMOG	49 E 16TH ST, B1	5/4/2009	Full Inspection		
28	BORDER STEEL INTERNATIONAL	1505 CLEVELAND AVE	4/2/2009	Full Inspection		
29	BREAD DELUX BAKERY, ETC.	1420 E PLAZA BLVD, D-1	4/27/2009	Full Inspection		
30	BURRITOS EXPRESS	1539 E 8TH STREET	5/6/2009	Full Inspection		
31	C & W DIVING	1706 HOOVER AVENUE	5/6/2009	Full Inspection		
32	C&M MOTORS INC.	904 ROOSEVELT AVENUE	4/14/2009	Full Inspection	✔	In Progress
33	CAFE ESTELAS	1524 MCKINLEY AV	4/2/2009	Full Inspection		
34	CAFÉ LA MAZE	1441 HIGHLAND AVENUE	4/6/2009	Full Inspection		
35	CAL AM MANUFACTURING	1215 WILSON AVE	5/19/2009	Full Inspection		
36	CALIBER COLLISION CENTERS	2013 HAFFLEY AVE	5/8/2009	Full Inspection	✔	In Progress
37	CALIFORNIA PRODUCE CORPORATION	1736 E PLAZA BL	4/28/2009	Full Inspection		
38	CAR HEALTH PLAN INC.	1531 NATIONAL CITY BLVD	4/3/2009	Full Inspection		
39	CARLS' JR.	1502 SWEETWATER ROAD	5/5/2009	Full Inspection	✔	In Progress
40	CARLS JR. #120	1280 E PLAZA BLVD	4/20/2009	Full Inspection	✔	In Progress
41	CARRERA'S AUTO DETAIL	2130 ROOSEVELT AVENUE	6/26/2009	Full Inspection	✔	In Progress
42	CARROLL METAL WORKS, INC.	740 W 16TH STREET	4/3/2009	Full Inspection		
43	CASA DE ORO RESTAURANT	1510 SWEETWATER ROAD, A	5/6/2009	Full Inspection	✔	In Progress
44	CHILES MEXICAN GRILL	2503 SWEETWATER RD	5/5/2009	Full Inspection	✔	In Progress
45	CHINA SUPER BUFFET	3007 HIGHLAND AVE	5/5/2009	Full Inspection	✔	In Progress
46	CHINESE CANTON BAKERY	1132 E PLAZA BLVD, 204	4/20/2009	Full Inspection		
47	CHOWKING	2220 E PLAZA BLVD, T	4/29/2009	Full Inspection	✔	In Progress
48	CHUCK E CHEESE'S	1143 HIGHLAND AVENUE	4/16/2009	Full Inspection		
49	CIVIC CENTER AUTO BODY	1304 ROOSEVELT AVENUE	4/3/2009	Full Inspection	✔	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
50	CLUB 13	640 CIVIC CENTER DR	5/12/2009	Full Inspection		
51	CONCHING'S CAFÉ	3400 E 8TH STREET, 115	3/31/2009	Full Inspection	✔	In Progress
52	COTIJAS MEXICAN FOOD	740 E 30TH STREET	5/4/2009	Full Inspection	✔	In Progress
53	COZINES GROCERY	402 CIVIC CENTER DRIVE	5/3/2009	Full Inspection		
54	CP MANUFACTURING	1440 HARDING AVENUE, B	5/6/2009	Full Inspection		
55	CROWN TRANSMISSION CENTER	1339 HOOVER AVENUE	5/5/2009	Full Inspection	✔	In Progress
56	D F DESIGNS	1228 HOOVER AVENUE	5/6/2009	Full Inspection		
57	DAKOTA INN	831 E 8TH ST	4/13/2009	Full Inspection		
58	DELA CRUZ AUTO REPAIR INC	36 CIVIC CENTER DR	5/3/2009	Full Inspection		
59	DELI TROPICAL	2808 18TH STREET	5/4/2009	Full Inspection		
60	DENNY'S RESTAURANT	424 MILE OF CARS WAY	4/7/2009	Full Inspection	✔	In Progress
61	DESSERTS PLUS, INC.	2220 E PLAZA BLVD, Q	4/29/2009	Full Inspection		
62	DIESEL POWER TRADE CORP	1636 WILSON AVE	5/13/2009	Full Inspection	✔	In Progress
63	DIXIELINE LUMBER COMPANY	3450 HIGHLAND AVENUE	5/11/2009	Full Inspection		
64	DONG, CHAN, ORIENTAL MARKET	600 E 8TH ST	4/13/2009	Full Inspection		
65	E Z SPRING & STAMPING	231 W 11TH ST	5/15/2009	Full Inspection		
66	EL AGUILA MEXICAN FOOD	640 HIGHLAND AVE, A	4/15/2009	Full Inspection		
67	EL GRANO DE ORO	730 E 7TH STREET	4/14/2009	Full Inspection		
68	EL MANGO MANILA	2303 HIGHLAND AVE	4/8/2009	Full Inspection		
69	EL PARAISO	2708 HIGHLAND AVE	5/5/2009	Full Inspection		
70	EL POLLO LOCO #3430	1710 HIGHLAND AVENUE	4/6/2009	Full Inspection		
71	EL SUPER MARKET	1811 L AVE	5/4/2009	Full Inspection		
72	EPSILON SYSTEMS SOLUTIONS INC	3039 HOOVER AVE	4/13/2009	Full Inspection		
73	FABRICATION TECHNOLOGIES INDUSTRIES	2200 HAFFLEY AVENUE, A	5/8/2009	Full Inspection	✔	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
74	FAMILY HOUSE OF PANCAKES	1900 E PLAZA BLVD	4/29/2009	Full Inspection		
75	FAMILY LOOMPYA SEAFOOD MARKET	2720 E PLAZA BLVD, A	3/30/2009	Full Inspection		
76	FEDERAL EQUIPMENT WEST	2101 WILSON AVENUE	5/14/2009	Full Inspection		
77	FIBER-WORLD PRODUCTS	2440 HIGHLAND AVENUE	4/16/2009	Full Inspection		
78	FIESTA PET SHOP	1145 HIGHLAND AVENUE, A	5/8/2009	Full Inspection		
79	FIVE STARS DIESEL SERVICE	1211 MCKINLEY AVE.	5/15/2009	Full Inspection	✔	In Progress
80	FOODLAND IGA	303 HIGHLAND AVENUE	3/24/2009	Full Inspection	✔	In Progress
81	FOREST PLYWOOD SALES DBA BAKER HARDWOOD LUMBER CO.	3131 HOOVER AVENUE	4/9/2009	Full Inspection		
82	FRANK MOTORS HYUNDAI	3150 NATIONAL CITY BLVD	4/9/2009	Full Inspection		
83	FRESCA DELI	1021 HIGHLAND AVE, P/B	4/15/2009	Full Inspection		
84	G V INDUSTRIES	1346 CLEVELAND AVENUE	9/5/2008	Full Inspection	✔	Resolved
85	GAMA PRODUCE	1605 E 4TH ST	3/25/2009	Full Inspection		
86	GAPO RESTO AND KARAOKE	933 S HARBISON AVE	3/31/2009	Full Inspection		
87	GINZA SUSHI	925 E PLAZA BLVD, G	4/17/2009	Full Inspection	✔	In Progress
88	GOLDEN CHOPSTICKS RESTAURANT	1430 E PLAZA BLVD, E-22-23	4/27/2009	Full Inspection	✔	In Progress
89	GOLDILOCKS BAKERY & RESTAURANT	1420 E PLAZA BLVD, D-7	4/27/2009	Full Inspection		
90	GRAND MOTORS	423 NATIONAL CITY BLVD	5/8/2009	Full Inspection		
91	GREENWALD'S AUTOBODY & FRAMEWORKS, INC	1814 ROOSEVELT AVENUE	4/6/2009	Full Inspection		
92	GUADALAJARA'S BAKERY	2401 HIGHLAND AVE	5/7/2009	Full Inspection		
93	H20 LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	4/1/2009	Full Inspection		
94	HIGHLAND VALERO	804 E 8TH ST	5/11/2009	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
95	HOMETOWN BUFFET #714	1135 HIGHLAND AVENUE	5/8/2009	Full Inspection	✔	In Progress
96	HONEY BANANA	443 HIGHLAND AVENUE	3/24/2009	Full Inspection		
97	HONEY'S FRUIT & SMOOTHIES BAR	835 PALM AVE.	5/7/2009	Full Inspection		
98	HOPSING AUTO	1540 ROOSEVELT AVENUE	4/6/2009	Full Inspection	✔	In Progress
99	HYPERBARIC TECHNOLOGIES INC.	3224 HOOVER AVENUE	4/9/2009	Full Inspection	✔	In Progress
100	IDEAL SMOG	10 OSBORN ST	3/24/2009	Full Inspection	✔	In Progress
101	IMELDA'S BAR	2325 HIGHLAND AVENUE	4/8/2009	Full Inspection		
102	IMPERIAL PALACE	1630 E 8TH STREET	3/30/2009	Full Inspection	✔	In Progress
103	INNOVATIVE CUTTING DESIGNS COR	1805 CLEVELAND AVE	5/8/2009	Full Inspection		
104	INTERNATIONAL HOUSE OF PANCAKES	1430 E PLAZA BLVD, E-1	4/28/2009	Full Inspection	✔	In Progress
105	J. C. ENVIRONMENTAL COMPANY	2504 TRANSPORTATION AVENUE, C	4/8/2009	Full Inspection		
106	JACK IN THE BOX #80	3138 PLAZA BLVD	3/31/2009	Full Inspection	✔	In Progress
107	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	4/14/2009	Full Inspection	✔	In Progress
108	JESTONI MANILA BISTRO	3421 E PLAZA BLVD.	5/15/2009	Full Inspection	✔	In Progress
109	JESUS & CECILIA LOYA CAFÉ DBA PEPITA'S CAFÉ	524 HIGHLAND AVE	4/15/2009	Full Inspection	✔	In Progress
110	JOCSON'S AUTO BODY & PAINT INC.	1320 COOLIDGE AVENUE	4/1/2009	Full Inspection		
111	JOLLIBEE	1401 E PLAZA BLVD	5/6/2009	Full Inspection	✔	In Progress
112	JOSE AUTO ELECTRIC	108 W 18TH STREET	5/3/2009	Full Inspection		
113	KARIHAN FILIPINO FOOD	2220 E PLAZA BLVD, A-1	5/1/2009	Full Inspection		
114	KARINA'S MEXICAN STYLE SEAFOOD	1705 HIGHLAND AVENUE	4/6/2009	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
115	KIM KOREAN BARBEQUE	1141 HIGHLAND AVENUE	5/8/2009	Full Inspection	✔	In Progress
116	KOTIJA TACO SHOP	321 HIGHLAND AVE	3/24/2009	Full Inspection		
117	L-3 SERVICES, INC., UNIDYNE DIVISION	2702 SOUTHPORT WAY , E-F	5/12/2009	Full Inspection		
118	LA MORENA MARKET	1810 PALM AVE	5/1/2009	Full Inspection		
119	LAI THAI RESTAURANT	1430 E PLAZA BLVD, E-10	4/28/2009	Full Inspection		
120	LEFORT'S CONSTRUCCION & LANDSC	34 E 17TH STREET, B	5/13/2009	Full Inspection		
121	LISA'S DESSERTS	2720 E PLAZA BLVD, Q	3/30/2009	Full Inspection		
122	LIVING ROOM CAFE	880 NATIONAL CITY BLVD	4/14/2009	Full Inspection		
123	LOLA HAPPY BAKERY	3142 E PLAZA BLVD, L	4/16/2009	Full Inspection	✔	In Progress
124	LOLLICUP TEAZONE	1105 E PLAZA BLVD, A	4/17/2009	Full Inspection	✔	In Progress
125	LOS BURRITOS MEXICAN GRILL	3460 HIGHLAND AVE	5/5/2009	Full Inspection		
126	LOS TURBOS TRANSMISSION	1411 COOLIDGE AVE	4/1/2009	Full Inspection	✔	In Progress
127	LUEMMA'S KITCHEN SOUTHERN STYLE	36 N EUCLID AVE, F	3/25/2009	Full Inspection		
128	MAC ARTHUR CO	2101 HAFFLEY AVE, B	5/14/2009	Full Inspection		
129	MAHARLIKA CAFÉ & GRILL	1819 E PLAZA BLVD	4/29/2009	Full Inspection	✔	In Progress
130	MANILA SEAFOOD ORIENTAL MARKET	2220 E PLAZA BLVD, K	4/29/2009	Full Inspection	✔	In Progress
131	MANILA SUNSET GRILLE	925 E PLAZA BLVD, I	4/17/2009	Full Inspection		
132	MARATHON CONSTRUCTION COPP.	801 CIVIC CENTER DRIVE	5/19/2009	Full Inspection	✔	In Progress
133	MARINE SERVICES AND EQUIPMENT	1804 CLEVELAND AVE., B	5/8/2009	Full Inspection		
134	MARISCOS CHOY'S	1231 HIGHLAND AVE	4/16/2009	Full Inspection		
135	MARK MOTORS	905 HOOVER AVENUE	5/11/2009	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
136	MARLO'S AUTO SPECIALTIES/FRAME	223 CIVIC CENTER DR	5/5/2009	Full Inspection	✔	In Progress
137	MC DINI'S BAJA	105 E 8TH ST	4/13/2009	Full Inspection		
138	MCDONALDS #6773	2145 E PLAZA BLVD	4/29/2009	Full Inspection		
139	MELHORN CONSTRUCTION	410 W 30TH STREET, B	4/9/2009	Full Inspection	✔	In Progress
140	MENUDERIA DON VICENTE	2637 HIGHLAND AVE	5/4/2009	Full Inspection		
141	MEZA AUTO BODY	420 W 12TH STREET	4/20/2009	Full Inspection		
142	MI COCINA RESTAURANT	543 HIGHLAND AVE	4/15/2009	Full Inspection		
143	MIKE'S GIANT NY PIZZA #5	1635 SWEETWATER ROAD, C-1	5/6/2009	Full Inspection	✔	In Progress
144	MIYAKO RESTAURANT	2424 HOOVER AVE , F	5/13/2009	Full Inspection		
145	MOTHER'S NUTRITIONAL CENTER	924 HIGHLAND AVE	4/15/2009	Full Inspection	✔	In Progress
146	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	5/6/2009	Full Inspection	✔	In Progress
147	NANI MOKU HAWAIIAN BBQ	1635 SWEETWATER RD , H	5/6/2009	Full Inspection	✔	In Progress
148	NATHAN'S STONE WORLD INC	1014 COOLIDGE AVE	4/1/2009	Full Inspection		
149	NATIONAL CITY CAR WASH	2550 E PLAZA BLVD	5/4/2009	Full Inspection	✔	In Progress
150	NATIONAL CITY MARKET	240 E 18TH STREET	5/3/2009	Full Inspection		
151	NATIONAL CITY NUTRITION STORE	925 E PLAZA BLVD	4/17/2009	Full Inspection		
152	NATIONAL CITY SHELL	1601 E 8TH ST	5/11/2009	Full Inspection		
153	NATIONAL CITY SMOG BRAKE & LIGHTS	705 E 8TH ST	4/10/2009	Full Inspection		
154	NATIONAL IRON WORKS	832 HOOVER AVENUE	4/15/2009	Full Inspection		
155	NATIONAL MECHANICAL SERVICES	1640 HOOVER AVENUE, B	5/6/2009	Full Inspection		
156	NATIONAL MOTOR WORKS	1440 HARDING AVE, A	5/5/2009	Full Inspection		
157	NEW YORK PIZZA PLAZA	3108 E PLAZA BLVD	3/31/2009	Full Inspection	✔	Resolved

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
158	NEWTOWN EXPRESS CHINESE FOOD	4 N EUCLID AVE, B	3/25/2009	Full Inspection	✔	In Progress
159	OHANA HAWAIIAN ISLAND BBQ	1430 E PLAZA BLVD, E7A	4/28/2009	Full Inspection	✔	In Progress
160	ONE SOURCE DISTRIBUTOR INC	326 W 30TH STREET	5/12/2009	Full Inspection		
161	OOH LA LA	2504 TRANSPORTATION AVE, D	4/8/2009	Full Inspection		
162	OUTBACK STEAK HOUSE	2980 PLAZA BONITA ROAD	5/13/2009	Full Inspection	✔	In Progress
163	PACIFIC AUTO REPAIRS	315 W 11TH STREET	5/12/2009	Full Inspection	✔	In Progress
164	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	8/8/2008	Full Inspection	✔	Follow-up on 4/10/2009, Resolution in progress
165	PANDA PALACE	1105 E PLAZA BLVD, D & E	4/17/2009	Full Inspection		
166	PAPA GALLO-CAFE	1930 CLEVELAND AVE	5/8/2009	Full Inspection		
167	PAPA JOHN'S PIZZA #1335	1130 E PLAZA BLVD	4/17/2009	Full Inspection		
168	PARADISE MOTORCARS	110 W PLAZA BLVD	4/14/2009	Full Inspection		
169	PARADISE MOTORCARS	110 W PLAZA BLVD	5/11/2009	Full Inspection		
170	PINOY RANCH	3403 E PLAZA BLVD, D	4/16/2009	Full Inspection		
171	PIZZA HUT #315044	2437 E PLAZA BLVD	5/1/2009	Full Inspection	✔	In Progress
172	PIZZA HUT EXPRESS	3060 PLAZA BONITA RD.	5/14/2009	Full Inspection		
173	PIZZA MIA	916 E 8TH ST, 4	4/13/2009	Full Inspection		
174	PLAY BALL	2305 HIGHLAND AVE	4/8/2009	Full Inspection		
175	POPEYES CHICKEN	2210 E PLAZA BLVD	4/29/2009	Full Inspection		
176	POWER TIRE #4	1615 E 8TH STREET	3/30/2009	Full Inspection	✔	In Progress
177	PRECISION BIKE PARTS	421 NATIONAL CITY BLVD	5/8/2009	Full Inspection		
178	PRESIDENTIAL LIMOUSINE LLC	1428 MCKINLEY AVE	4/2/2009	Full Inspection		
179	PRO STREET LIGHTING INC	2145 WILSON AVENUE	5/13/2009	Full Inspection		
180	QUIZNOS SUB	928 HIGHLAND AVE	4/15/2009	Full Inspection	✔	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
181	R G P AUTO BODY & PAINT	2122 ROOSEVELT, B	6/26/2009	Full Inspection	✔	In Progress
182	ROB NORTH FABRICATION	1605 HOOVER AVENUE	5/6/2009	Full Inspection		
183	ROMERO'S ROOFING SERVICE, INC.	1827 CLEVELAND AVENUE	4/2/2009	Full Inspection		
184	ROYAL MANDARIN RESTAURANT	1132 E PLAZA BLVD, 205	4/20/2009	Full Inspection	✔	In Progress
185	ROYCE CONSTRUCTION INC	10 E 1ST STREET, A	3/24/2009	Full Inspection		
186	SAN DIEGO AUTO DETAIL	110 W 11TH STREET	5/11/2009	Full Inspection	✔	In Progress
187	SAN DIEGO AUTO FINANCE	1 W 35TH ST	4/9/2009	Full Inspection		
188	SAN DIEGO CRANE & HOIST	1606 COOLIDGE AVENUE	5/6/2009	Full Inspection		
189	SAN DIEGO DODGE	2829 NATIONAL CITY BLVD	4/9/2009	Full Inspection		
190	SAN DIEGO HYDRAULICS INC	1720 CLEVELAND AVE	5/14/2009	Full Inspection	✔	In Progress
191	SAN DIEGO PRETZEL COMPANY	224 W 12TH STREET	5/14/2009	Full Inspection		
192	SAN DIEGO SEAFOOD	1842 MCKINLEY AVENUE	5/14/2009	Full Inspection		
193	SAVE-A-LOT	1035 S HARBINSON AVENUE	3/31/2009	Full Inspection	✔	In Progress
194	SEACOAST ELECTRIC CO. INC.	2702 SOUTHPORT WAY, C & D	5/12/2009	Full Inspection		
195	SEAFOOD CITY SUPERMARKET	1420 E PLAZA BLVD, C-E	4/27/2009	Full Inspection	✔	In Progress
196	SENOR PANCHO FRESH MEXICAN GRILL	2030 HIGHLAND AVENUE	4/6/2009	Full Inspection		
197	SIZZLER FAMILY STEAK HOUSE #45	1325 E PLAZA BLVD	4/20/2009	Full Inspection		
198	SMART AND FINAL	1220 E PLAZA BLVD	4/20/2009	Full Inspection		
199	SO CAL TRUCK STOP	2250 TIDELANDS AVENUE	4/8/2009	Full Inspection		
200	SOUTH BAY MECHANIC SHOP	1112 COOLIDGE AVE	4/1/2009	Full Inspection	✔	In Progress
201	SOUTH BAY MECHANICAL SERVICES	2137 WILSON AVENUE	5/3/2009	Full Inspection		
202	SOUTHLAND TRANSMISSION CENTER	1400 HOOVER AVENUE	5/6/2009	Full Inspection	✔	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
203	SPECIALTY TIRES AND BRAKES	1 W 35TH ST, D	5/7/2009	Full Inspection		
204	STAR AUTOMOTIVE	438 NATIONAL CITY BLVD	5/8/2009	Full Inspection		
205	STAR EXPRESS	3124 E PLAZA BLVD	3/31/2009	Full Inspection	✔	In Progress
206	STARBUCK'S COFFEE #6783	2230 E PLAZA BLVD	4/27/2009	Full Inspection		
207	STEVE'S WEST COAST AUTOMOTIVE	1732 COOLIDGE AVENUE	5/5/2009	Full Inspection	✔	In Progress
208	STONEY'S BAR & GRILL	108 W 25TH ST, D, E, F, G	4/7/2009	Full Inspection	✔	In Progress
209	STYLER'S AUTO MECHANIC	29 E 17TH ST	5/3/2009	Full Inspection	✔	In Progress
210	SUBMARINA	1210 E PLAZA BLVD	4/20/2009	Full Inspection		
211	SUBWAY SANDWICH & SALAD	925 E PLAZA BLVD, A	4/17/2009	Full Inspection		
212	SUN DIEGO CHARTER CO.	2020 HOOVER AVENUE	4/16/2009	Full Inspection		
213	SUPERIOR METAL WORKS, INC	1703 HOOVER AVE, B	5/19/2009	Full Inspection		
214	SURE RIDE INC	1523 WILSON AVE	4/7/2009	Full Inspection		
215	SWIRLY CUP	1860 SWEETWATER RD, A-2	5/5/2009	Full Inspection		
216	TACO SALSA TACO SHOP	925 E PLAZA BLVD, B	4/17/2009	Full Inspection	✔	In Progress
217	THE BARBEQUE PIT	920 E PLAZA BLVD	4/17/2009	Full Inspection		
218	TINO'S AUTO TECH	1 W 35TH STREET, D	5/7/2009	Full Inspection		
219	TITA'S KITCHENETTE	2720 E PLAZA BLVD, E & F	3/30/2009	Full Inspection	✔	In Progress
220	TOM THUMB WHOLESALE ICE CREAM	1021 COOLIDGE AVENUE	5/5/2009	Full Inspection		
221	TORTAS OASIS	1210 E PLAZA BLVD, 404	4/20/2009	Full Inspection		
222	TROLLEY SIDE DELI AND MINI MART	530 W 21ST ST	4/17/2009	Full Inspection		
223	UNDERGROUND AUTOWORKS INC	106 E 17TH ST	5/3/2009	Full Inspection		
224	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	5/6/2009	Full Inspection		
225	VALENCIA STONE AND TILE	1124 COOLIDGE AVENUE	4/1/2009	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
226	VALERIOS FAMILY BAKE SHOP	2720 E PLAZA BLVD, H	3/30/2009	Full Inspection	✔	In Progress
227	VALUE AUTO REPAIR & TIRES	115 E 17TH ST, A	5/5/2009	Full Inspection		
228	VALUE CARS	13 NATIONAL CITY BLVD	5/6/2009	Full Inspection		
229	VANTAGE MASTER MACHINE CORPORATION	900 CIVIC CENTER DR	4/8/2009	Full Inspection		
230	VICTOR'S MEXICAN FOOD TAQUERIA	1602 E 4TH ST	3/25/2009	Full Inspection		
231	VIKING'S AUTO REPAIR	1503 ROOSEVELT AVENUE, A	4/3/2009	Full Inspection		
232	VILLA MANILA	500 E 8TH STREET	4/16/2009	Full Inspection		
233	WEST COAST CAB	220 W 14TH ST	5/13/2009	Full Inspection		
234	WESTAIR GASES & EQUIP, INC	2300 HAFFLEY AVE	5/15/2009	Full Inspection		
235	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS AT SOUTH END OF MALL	3030 PLAZA BONITA RD, 2075	5/14/2009	Full Inspection		
236	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS IN FOOD COURT	3030 PLAZA BONITA ROAD, 2075	5/14/2009	Full Inspection		
237	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS NORTH OF JC PENNY	3030 PLAZA BONITA ROAD, 2075	5/14/2009	Full Inspection	✔	In Progress
238	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS ON EAST SIDE OF MALL	3030 PLAZA BONITA RD, 2075	5/13/2009	Full Inspection	✔	In Progress
239	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS SOUTH OF JC PENNY	3030 PLAZA BONITA RD, 2075	5/13/2009	Full Inspection		
240	WESTSIDE BUILDING MATERIALS	500 W 16TH STREET	4/6/2009	Full Inspection		
241	WILSON MARKET AND LIQUOR	916 E 8TH STREET, 9	4/14/2009	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
242	WINCHELL'S DONUT HOUSE #9484	2447 E PLAZA BLVD	5/4/2009	Full Inspection		
243	WINGS N THINGS	1499 E PLAZA BLVD	4/27/2009	Full Inspection	✔	In Progress
244	YOBERRY YOGURT	1430 E PLAZA BLVD , E8	4/28/2009	Full Inspection		
245	YOGURLICIOUS	2240 E PLAZA BLVD , F	5/1/2009	Full Inspection		
246	YUM YUM DONUT FRANCHISE #502	3122 E PLAZA BLVD	3/30/2009	Full Inspection	✔	In Progress
247	ZARLITOS FAMILY RESTAURANT	505 E 8TH STREET	4/14/2009	Full Inspection	✔	In Progress
248	A.B.C ICE CREAM TRUCK CO.	1447 PARAISO CT	3/25/2009	*Not Inventoried*		
249	ALOTTAS COCKTAIL LOUNGE	419 PALM AV	3/25/2009	*Not Inventoried*		
250	BIG BEAR AUTO SALES	1635 COOLIDGE AVE	5/15/2009	*Not Inventoried*		
251	BIG DADDY	1922 C AVE	4/6/2009	*Not Inventoried*		
252	CHAE & NAM UNIVERSE, INC	1625 CLEVELAND AVE	5/19/2009	*Not Inventoried*		
253	E P I ENTERPRISES LLC	1434 EUCLID AVE	5/1/2009	*Not Inventoried*		
254	HAPPY WAGON III	2024 LA SIESTA WAY	5/4/2009	*Not Inventoried*		
255	INDIO LEATHER	2525 SOUTHPORT WAY , R	5/12/2009	*Not Inventoried*		
256	M + E LIMOUSINES	438 Q AVE	3/30/2009	*Not Inventoried*		
257	MODENA MOTORS	2626 SOUTHPORT WAY, B	5/12/2009	*Not Inventoried*		
258	MR JOEY'S TACO SHOP	1554 TAFT ST	5/12/2009	*Not Inventoried*		
259	NEW AGE TRANSPORT INC	2120 E 10TH ST	5/6/2009	*Not Inventoried*		
260	ANTHONY'S PIZZA	1526 E 18TH ST	5/1/2009	Could not Contact		
261	BEN'S 1615	1615 SWEETWATER ROAD, A	5/6/2009	Could not Contact		
262	CENTLI	221 W 33RD ST	4/9/2009	Could not Contact		
263	DE-LUX ROOFING	1107 HARDING AVENUE	6/26/2009	Could not Contact		
264	KEN'S VW	1408 MCKINLEY AVENUE	4/2/2009	Could not Contact		
265	LOS TACOS SHOP	2241 HIGHLAND AVE	5/7/2009	Could not Contact		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
266	NC MOTOR SPORTS AUTO REPAIR	E 18TH ST	5/3/2009	Could not Contact		
267	RESEARCH AUTOMOTIVE GROUP, INC	199 E 27TH ST	5/7/2009	Could not Contact		
268	RPM TRANSMISSIONS	1620 HARDING AVE	5/15/2009	Could not Contact		
269	SAN DIEGO AUTOMOTIVE MUSEUM	600 W 12TH ST	5/19/2009	Could not Contact		
270	ABRIL WEAR	2504 TRANSPORTATION AVE , D	4/8/2009	Duplicate		
271	BALL AUTOMOTIVE GROUP	2115/2135 NATIONAL CITY BLVD	5/19/2009	Duplicate		
272	CALIFORNIA ICE CREAM	1021 COOLIDGE AVE	5/5/2009	Duplicate		
273	NATIONAL SUNROOF AUTO SPA	108 W 8TH ST	4/16/2009	Duplicate		
274	NFAROOQUI ENTERPRISES LLC	3138 E PLAZA BLVD	3/31/2009	Duplicate		
275	G AND J AUTO SERVICE	1514 ROOSEVELT AVE	4/6/2009	Mobile		
276	*UNKNOWN NAME*	2130 ROOSEVELT AVENUE	6/26/2009	Moved, Replaced		
277	ADVANCE PRODUCTS INTERNATIONAL	2626 SOUTHPORT WAY, C	5/12/2009	Moved, Replaced		
278	ANAYA'S NATIONAL AUTOMOTIVE	10 E 1ST ST, A	3/24/2009	Moved, Replaced		
279	ASAP HAULING & DEMO	1804 CLEVELAND AVE, B	5/14/2009	Moved, Replaced		
280	AUTOCOMM, INC.	2525 SOUTHPORT WAY, C	4/7/2009	Moved, Replaced		
281	BLUE COAST CONSTRUCTION, INC.	1804 CLEVELAND AVENUE, B	5/8/2009	Moved, Replaced		
282	CAR SOURCE	1 W 35TH STREET	4/9/2009	Moved, Replaced		
283	CITY HALL DELI	1302 NATIONAL CITY BLVD	4/3/2009	Moved, Replaced		
284	CLASSIC AUTO RESTORATION INC	1400 HOOVER AVE	5/6/2009	Moved, Replaced		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
285	COLD STONE CREAMERY #1483	925 E PLAZA BLVD, I	4/17/2009	Moved, Replaced		
286	COSINA DE EMMA	2503 SWEETWATER RD	5/5/2009	Moved, Replaced		
287	DA KINES	1635 SWEETWATER ROAD	5/6/2009	Moved, Replaced		
288	DB CONVERSIONS	436 W 8TH ST , A	4/13/2009	Moved, Replaced		
289	DISCOUNT WATER SUPPLY	3403 E PLAZA BLVD, H	4/16/2009	Moved, Replaced		
290	D'MARCO STORAGE	1211 MCKINLEY AVE	5/15/2009	Moved, Replaced		
291	DULCERIA FIESTA	640 HIGHLAND AVENUE, B	4/15/2009	Moved, Replaced		
292	EL PORTILLO TACO SHOP	321 HIGHLAND AVE	3/24/2009	Moved, Replaced		
293	ESPECIAL TIRES	1 W 35TH ST, C	5/7/2009	Moved, Replaced		
294	HANDI-SCAPES	2137 WILSON AVE	5/14/2009	Moved, Replaced		
295	HEARTLAND MEAT CO., INC.	224 W 12TH STREET	5/14/2009	Moved, Replaced		
296	HIGH 5 TEAM SALE	2835 HIGHLAND AVE, A	5/4/2009	Moved, Replaced		
297	HILBERTOS MEXICAN FOOD	835 PALM AVE	5/7/2009	Moved, Replaced		
298	IHAW IHAW GRILL & RESTAURANT	3421 E PLAZA BLVD	4/16/2009	Moved, Replaced		
299	INDUSTRIAL & ARCHITECTURAL SIGN PRODUCTION, INC	1440 HARDING AVE, B	5/6/2009	Moved, Replaced		
300	J & J AUTO'S	110 W PLAZA BLVD	4/14/2009	Moved, Replaced		
301	LA PLACITA	1860 SWEETWATER RD, A2	5/5/2009	Moved, Replaced		
302	LOS GIRASOLES MEXICAN RESTAURANT	1231 HIGHLAND AVE	4/16/2009	Moved, Replaced		
303	NEVWEST	1636 WILSON AVENUE	5/13/2009	Moved, Replaced		
304	OMNI PHASE RESEARCH LABS INC	3200 HIGHLAND AVE, 308	5/5/2009	Moved, Replaced		
305	PB BISTRO & BAKE SHOP	1302 NATIONAL CITY BLVD, A	5/8/2009	Moved, Replaced		
306	PLANET SMOOTHIE	2220 E PLAZA BLVD, D	4/29/2009	Moved, Replaced		
307	PLATINUM AUTO BODY & PAINT	223 CIVIC CENTER DR	5/5/2009	Moved, Replaced		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
308	RED RIBBON BAKE SHOP, INC.	2220 E PLAZA BLVD, T-1	5/1/2009	Moved, Replaced		
309	RESTAURANT YAKATA	2424 HOOVER AVE, F/P	5/13/2009	Moved, Replaced		
310	RETRED RESTAURANT GROUP, LLC	1200 HIGHLAND AVENUE	4/13/2009	Moved, Replaced		
311	SAN DIEGO CHICKEN ROTISSERIE	2220 E PLAZA BLVD, D	4/29/2009	Moved, Replaced		
312	SOUTH COAST HARLEY-DAVIDSON	1640 HOOVER AVE, A	5/6/2009	Moved, Replaced		
313	SWEET CHEEKS BAKING CO	224 W 12TH ST	5/14/2009	Moved, Replaced		
314	TAB SERVICE	1 W 35TH ST, A	5/7/2009	Moved, Replaced		
315	TACOS Y TIENDITA "EL FLACO"	1539 E 8TH ST	5/6/2009	Moved, Replaced		
316	TIJUANA TACO FACTORY	505 HIGHLAND AVE	3/25/2009	Moved, Replaced		
317	UNITED AUTOSPORT	49 E 16TH ST	5/14/2009	Moved, Replaced		
318	WESTERN MANUFACTURING COMPANY	2200 HAFFLEY AVE	5/8/2009	Moved, Replaced		
319	ACIM, INC	1429 WILSON AVE, A	5/13/2009	Moved, Vacant		
320	ALLGEAR SCREEN PRINTING	914 E 8TH ST, 105	4/13/2009	Moved, Vacant		
321	ASWAN HALL CATERING & BANQUET	401 MILE OF CARS WAY	4/7/2009	Moved, Vacant		
322	BAJA FOOD MARKET	1469 E PLAZA BLVD	3/30/2009	Moved, Vacant		
323	BLITZ TORTE	914 E 8TH ST	4/13/2009	Moved, Vacant		
324	CHRISTIAN TRANSPORTATION SERVICE	616 E 8TH ST	4/13/2009	Moved, Vacant		
325	COPA-CABANA FRUTERIA	831 E 30TH ST , C	5/4/2009	Moved, Vacant		
326	DULCERIA LA PINATA	140 HIGHLAND AVE	3/24/2009	Moved, Vacant		
327	ELBO REST	309 HIGHLAND AVE	3/24/2009	Moved, Vacant		
328	ENYS CAFE	1021 HIGHLAND AVE	4/15/2009	Moved, Vacant		
329	FAMILY LOOMPYA CORP	2525 SOUTHPORT WAY , M	4/7/2009	Moved, Vacant		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
330	GLOBAL KNITTING, MILLS USA,INC	340 W 26TH ST, N	4/8/2009	Moved, Vacant		
331	GREG'S FIBERGLASS AND PAINTING	1804 CLEVELAND AVENUE, A	5/14/2009	Moved, Vacant		
332	HERTZ EQUIPMENT RENTAL	415 W 30TH STREET	4/9/2009	Moved, Vacant		
333	IMPERIAL FISH MARKET RESTAURAN	1903 HIGHLAND AVE	4/6/2009	Moved, Vacant		
334	JETCLEAN USA, INC	1541 ROOSEVELT AVE	4/6/2009	Moved, Vacant		
335	K.D.R. COMPANY	301 W 28TH ST, H	4/9/2009	Moved, Vacant		
336	KER FRESH PRODUCE	1610 E 8TH ST, C-1	3/30/2009	Moved, Vacant		
337	LA HACIENDA	3403 E PLAZA BLVD , A-1	4/16/2009	Moved, Vacant		
338	LOURDES FAMILY RESTAURANT	1125 NATIONAL CITY BLVD.	5/5/2009	Moved, Vacant		
339	MAC'S TRANSFER & STORAGE	1305 WILSON AVENUE	5/13/2009	Moved, Vacant		
340	OCEAN JAVA	916 E 8TH ST, 3	4/13/2009	Moved, Vacant		
341	PANCHO VILLA'S MEXICAN GRILL	3100 8TH STREET	5/11/2009	Moved, Vacant		
342	PRIME MOTOR CENTER	28 E 16TH ST	5/13/2009	Moved, Vacant		
343	SAN DIEGO MEDICAL TRANSPORT	1516 ROOSEVELT AVE	4/6/2009	Moved, Vacant		
344	SCHUFF STEEL COMPANY	3202 HOOVER AVE	4/9/2009	Moved, Vacant		
345	STANDARD CALIBRATIONS INC	1535 TIDELANDS AVE, H	5/15/2009	Moved, Vacant		
346	SWEET SPOT	1021 HIGHLAND AVE	4/15/2009	Moved, Vacant		
347	THE LINE DESIGN	728 E 8TH ST	4/13/2009	Moved, Vacant		
348	TROPICAL ICE CREAM AND JUICE BAR	3104 E PLAZA BLVD	3/31/2009	Moved, Vacant		
349	WILLIAM PAKCHUEN LAU	1918 CLEVELAND AVENUE	5/8/2009	Moved, Vacant		

6.0 RESIDENTIAL

6.1 INTRODUCTION

Land use in the City of National City is largely residential. Due to the large residential area, activities that take place in residential areas have the potential to impact the quality of receiving waters. Residential activities such as vehicle washing, over-irrigation, and home maintenance can potentially contribute pollutants to the City's MS4 if BMPs are not implemented. Additionally, household hazardous waste (HHW) can contribute pollutants to the City's MS4 if not disposed of properly. Pollutants of concern include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has worked to implement a range of programs to address these residential activities with the goal of reducing pollutant loads associated with such activities. The City recognizes the need for educational efforts and opportunities designed specifically for residents and residential activities.

The following sections present activities conducted during this reporting period. These activities are associated with the residential component of the JURMP and include conducting ongoing HHW collection events, distributing educational materials, and participating in community events.

6.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the residential component during the 2008/2009 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City developed a 2009 Calendar through a storm water art contest at local schools. The calendar was printed in both English and Spanish and informed residents about pollutants found in San Diego Bay and neighboring waterways.
- The City developed a new door-to-door High TTWQ Residential Education Program. The goal of the program was to determine potential sources of residential pollution, assess residential knowledge, and educate residents.
- The City collaborated with the cities of Chula Vista and Imperial Beach to make HHW disposal events available to residents. The total amount of HHW collected from residents of all three cities was 252,494 pounds. Door-to-door pick up service was available for the disabled and senior communities.
- The City hosted two large item disposal events. The event allowed residents to dispose of large household items (not including HHW), such as unwanted furniture and large appliances.

6.2 SOURCE CHARACTERIZATION

The City has identified high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities. To reduce pollutant discharges from these high TTWQ areas and activities, the City designated specific BMPs in the 2008 JURMP. These BMPs did not change during 2008/2009.

During 2008/2009, the City conducted a significant door-to-door effort in all designated high TTWQ residential areas to look for evidence of high TTWQ activities and educate residents. The report from the "High TTWQ Residential Education Program" is included as Attachment 6.1. A summary of the program is provided below.

6.2.1 HIGH TTWQ ACTIVITIES

During the 2008/2009 reporting period, as outlined in the City's JURMP, the City continued to identify the following activities as high TTWQ:

- Automobile repair and maintenance, washing, and parking
- Home and garden care activities and product use, including disposal
- Disposal of trash and pet waste

During the door-to-door effort mentioned above, staff members looked for evidence of these high TTWQ activities. A summary of observations made during these visits is in Table 6-1, below.

Table 6-1
High TTWQ Activities Observed During the Door-to-Door Residential Survey

High TTWQ Activities and Materials		Total Observed Incidences
Activities	Auto repair and oil change	5
	Car washing	2
	Other outdoor washing	3
	Fertilizer application	1
	Pesticide application	0
	Poor waste disposal	0
Material and waste storage	Exposed rusty metal	8
	Old tires	6
	Oil leaks or significant stains	8
	Antifreeze and transmission fluid	0
	Loose trash	2
	Pet waste	1
	Exposed fertilizers and pesticides	0
	Cooking oil and grease	0
	Soapy water or residues	1

Note: These observations are from a total of 1,389 residential visits.

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

In addition to these activity-based priorities, the City has noted several residential areas that pose higher threats to water quality. High priority residential areas are designated by considering complaint investigations, institutional knowledge, Dry Weather Monitoring data, and criteria as defined in the Municipal Permit. The list of high priority residential areas is subject to re-evaluation based on new observations and data collected during the reporting period.

The following 10 residential areas were designated high TTWQ in the City's JURMP in 2008.

- Division Avenue Area
- West 18th Street Area
- Paradise Creek Area, between F and L Avenues
- East 8th Street Area
- Grove Avenue Area
- Arcadia Place Area
- Harbison Avenue Area
- A Avenue Area

- B Avenue Area
- 2nd Avenue Area

Visits to these areas during April and May of 2009 provided sufficient information to re-evaluate their TTWQ. For example, the West 18th Street and 2nd Avenue areas were determined to lack significant residential sources; most of these areas consist of commercial and industrial land use. In addition, where no evidence of high TTWQ residential activities was noted in an area, that area was removed from the high TTWQ list. Residential areas where some high TTWQ residential activities were observed will remain listed as high TTWQ. If future residential complaints, Dry Weather Monitoring Program results, or observations made by City staff indicate evidence of high TTWQ activities in these or other areas of the City, they will be designated as high TTWQ. No new residential areas have been added at this time; changes to the previous list of high TTWQ residential areas made in 2008/2009 are summarized in Table 6-2, below.

Table 6-2
High TTWQ Residential Area List Updates

Residential Area	High TTWQ Status in 2008/2009	Explanation
Division Avenue	**Listed**; streets outside of City jurisdiction removed from description.	Some high TTWQ activities were observed in this area.
West 18th Street	Removed from list	No residential sources were noted during site visit.
Paradise Creek, between F and L Avenues	**Listed**	Some high TTWQ activities were observed in this area.
East 8th Street	**Listed**	Oil observed at the 9th Street gutter during complaint investigation. See Section 4 of this Annual Report for details.
Grove Avenue	**Listed**	Some high TTWQ activities were observed in this area.
Arcadia Place	**Listed**	Some high TTWQ activities were observed in this area.
Harbison Avenue	Removed from list	No evidence of high priority activities noted during residential visits.
A Avenue	Removed from list	No evidence of high priority activities noted during residential visits.
B Avenue	Removed from list	Observed instance of loose trash associated with construction activity, not residential source.
2nd Avenue	Removed from list	No residential sources were noted during site visit.

The City's updated list of high TTWQ residential areas is as follows:

Division Avenue Area
The residential area located near Division Street, east of Highland Avenue, including residences located on East 2nd Street, Melrose Street, Eta Street, Fig Court, and Scott Drive. See Figure 6-1.

Paradise Creek Area, between F and L Avenues
The residential area that runs along the Southern side of Paradise Creek between F and L Avenues, including residences located along East 12th Street, East 13th Street, and East 14th Street. See Figure 6-2.

East 8th Street Area
The residential area along East 8th Street, including residences on East 8th Street and East 9th Street, between L Avenue and N Avenue. See Figure 6-3.

Grove Avenue Area
The residential area surrounding Grove Avenue, including residences along East 14th Street, Grove Avenue, Stancrest Lane, and Orange Street. See Figure 6-4.

Arcadia Place Area
The residential area surrounding Arcadia Place, including residences west of Harbison Avenue along East 11th Street, East 10th Street, and East Plaza Boulevard. See Figure 6-4.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City has continued to provide information regarding the implementation of pollution prevention measures, such as good housekeeping practices, for residential areas and activities. Section 5 of the City's BMP Manual includes lists of general residential BMP requirements and BMP requirements for specific residential activities. The manual is included in Appendix C of the City's JURMP. General residential BMPs include erosion control; non-storm water discharge management, including elimination of IC/IDs; and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Specific BMPs for the high priority activities outlined above are also included in the City's BMP Manual Section 5.

6.4 PROGRAM IMPLEMENTATION

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted in residential areas. This ensures that pollutants associated with residential activities and areas are minimized. Additionally, the residential program implements an education component so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities. During 2008/2009 the City also continued to participate in the Regional Residential Education Program.

6.4.1 TRAINING, EDUCATION, AND OUTREACH

The City has continued to conduct training, education, and outreach activities for residents, which are described below. For additional information on the City's educational efforts and the educational materials distributed to its residents please refer to Section 8 of this Annual Report.

2009 Calendar

The City developed a 2009 Storm Water Calendar through a local art contest at elementary schools within the City (Attachment 5.2). The calendar was printed in both English and Spanish and informed residents about pollutants found in San Diego Bay and neighboring waterways. It described that pollutants such as fertilizers, pesticides, metals, paints, oil and grease and other debris can be transported from residential areas to the ocean. A list of BMPs, trash cleanup days, and HHW disposal events were included within the calendar. The theme for the calendar was "By Keeping our Community Clean, We Can Keep the Ocean Clean" and each month displayed a child's winning entry from the art contest.

Distribution of Educational Material

As part of the High TTWQ Residential Education Program, over 1,300 homes were provided with educational materials, including the 2009 Storm Water Calendar, the Storm Water Hotline Card (Attachment 6.2), the "Everything that flows down into a storm drain" brochure (Attachment 6.3), and the "Put Toxic Waste In Its Place" brochure (Attachment 6.4). This door-to-door distribution of educational materials also included the areas recommended to receive education based on the recommendations of the 2008 Dry Weather Report. In taking time to personally distribute the materials to residents at home, the City has tried to emphasize the importance of the educational message.

Website

Additional information regarding the City's storm water program, pollution prevention measures, and BMPs is posted and continually updated on the City of National City's website (http://www.ci.national-city.ca.us/). Storm water-related pages can be found under the Development Services Department tab in the Engineering Division section. The direct link to the City's storm water page is http://www.ci.national-city.ca.us/index.aspx?page=164/.

Household Hazardous Waste Disposal Program

The City continues to work with the City of Chula Vista to allow City residents to drop off HHW at Chula Vista's Household Hazardous Waste Collection Facility. The Household Hazardous Waste Collection Facility is the primary location for hazardous waste collection in the South Bay, receiving HHW from the City of National City, the City of Imperial Beach, and the City of Chula Vista. Curbside pickup was made available to the disabled and elderly communities. The amount of waste collected by City residents of National City alone is not available; however, the total amount of HHW collected from residents of all three cities is 252,494 pounds from 3,151

participants. The availability of a City subsidized HHW collection service was advertised in the 2009 Storm Water Calendar.

Additionally, the High TTWQ Residential Education Program distributed "Put Toxic Waste in Its Place" brochures during door-to-door residential visits to remind residents to dispose of HHW properly.

Other Waste Disposal Programs/Activities

In addition to proper HHW disposal, the City encourages residents to recycle used oil. The City maintains several Certified Used Oil Recycling Centers for residential oil disposal. The volume of used oil dropped off at the collection centers was not immediately available.

The City's Public Works Department held two trash collection events (June and November) during this reporting period in conjunction with EDCO Disposal Company. Information about the trash collection events was sent out to all residents with their trash bills. During these events, residents were encouraged to dispose of any unwanted large items from their homes, such as furniture and appliances.

6.4.2 Compliance and Enforcement

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the Storm Water Hotline, and observations made by the City's municipal personnel. If a potential threat to water quality is present, the City provides a verbal warning, written warning, notice of correction, and/or NOV as applicable. The City received and addressed seven residential-related complaints during this reporting period; however only three problems were identified during those seven field investigations. Complaints were submitted through the Storm Water Hotline or internally through the City's Development Services or Public Works departments.

In the 2008/2009 reporting period, verified complaints included a broken swimming pool pump, a parked vehicle leaking oil, and motor oil found at a gutter. In the case of the swimming pool pump, a verbal warning resulted in immediate shut off and repair. City personnel cleaned oil leaked into the public right of way to resolve the motor oil complaints and marked the parked vehicle for towing. All residential complaints were promptly resolved as noted in the Summary of Documented Public Complaints in Section 4 of this Annual Report.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 Program Review and Modification

The City's JURMP was last updated in March 2008. No changes to the City's residential component have been made since that time.

Figure 6-1
Division Street High TTWQ Residential Area

Figure 6-2
Paradise Creek High TTWQ Residential Area

Figure 6-3
East 8th Street High TTWQ Residential Area

Figure 6-4
Grove Avenue and Arcadia Place High TTWQ Residential Areas

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008 RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the 2008/2009 illicit discharge detection and elimination section and attachments to the RWQCB no later than December 15, 2009.

8.0 EDUCATION COMPONENT

8.1 INTRODUCTION

During 2008/2009, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, residents, and underserved communities. The City aims to reduce storm water pollution by increasing awareness about storm water and promoting the implementation of pollution prevention measures and BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the 2008/2009 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- Verbal education regarding storm water issues and site-specific BMPs was provided to several municipal employees during routine facility inspections.
- The "Construction Site Best Management Practices" handout was distributed with all construction-related permits issued, including building permits, during the 2008/2009 reporting year.
- San Diego County's Negocio Verde Environmental Justice Task Force held an Automotive Body and Repair Free Bilingual Compliance Workshop in the City. All code enforcement personnel, including the storm water compliance inspector, were on hand to explain the City ordinances, including storm water regulations.
- All businesses, including mobile businesses, applying for a new business license during the 2008/2009 reporting year received the "Preventing Urban Runoff Pollution" BMP Trifold.
- The City distributed approximately 5,740 storm water calendars to industrial and commercial businesses, residential households, school-aged children, and municipal staff.
- The City distributed storm water educational materials in both English and Spanish to 1,341 households during door-to-door surveys for the City's High TTWQ Residential Education Program.
- The City made an estimated 34,339 impressions through educational outreach material and activities.

8.2 STAFF TRAINING ELEMENT

During 2008/2009, the City provided training and educational outreach to its municipal personnel. Many municipal personnel are out in the field on a daily basis, so it is important that they understand the importance of implementing BMPs. Additionally, municipal personnel are encouraged to report any IC/IDs observed to the appropriate City staff and to educate other municipal personnel and the general public about storm water pollution prevention.

The City's Storm Water Compliance Inspector previously completed the California Environmental Protection Agency Basic Inspector Training Course, and used those skills to coordinate compliance within the various components of the City's storm water program during 2008/2009. During routine municipal inspections, the City's Consultant provided site-specific verbal education to several Parks Division, Public Works, and Graffiti Abatement staff. The City's municipal pool operator was provided with the 2009 Storm Water Program Calendar, which highlighted various storm water issues in both English and Spanish. Aspects of this calendar were also displayed on the storm water bulletin board located at the City's Engineering Department, a photo of which is included as Attachment 4.5. This display reinforced the importance of storm water pollution prevention to City staff and project proponents that visited the Engineering Department during 2008/2009.

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, residential areas, and underserved audiences. These efforts promote storm water awareness and BMP implementation.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Violations of the City's BMP requirements are corrected through enforcement actions as necessary. Site-specific information relating to the facility's activities was discussed with businesses personnel during inspections. Approximately 237 industrial and commercial businesses received the City's 2009 Storm Water Program Calendar, during routine inspections. This calendar is included as Attachment 5.2. The "Everything that flows down into a storm drain" brochure (Attachment 6.3) was also included with the notices of correction and inspection result reports mailed to each inspected industrial and commercial business.

In addition to industrial and commercial businesses currently on the City's inventory, all businesses that applied for a business license in the City received the Industrial and Commercial "Preventing Urban Runoff Pollution" Trifold, as seen in Attachment 5.3. In

this way, even businesses that are not on the inspection inventory will receive storm water education.

The City of National City worked with the County of San Diego and other members of the Negocio Verde Environmental Justice Task Force to host two Automotive Body and Repair Free Bilingual Compliance Workshops during the 2008/2009 reporting year. At the National City Casa de Salud Recreation Center on November 17, 2008 and the National City Martin Luther King, Jr. Community Center on February 25, 2009, the workshops presented ways to be in compliance with air pollution, hazardous material, and storm water regulations. All code enforcement personnel, including the storm water compliance inspector, were on hand to explain the City ordinances. Bilingual announcement flyers for these workshops are provided as Attachment 8.1.

8.3.1.1 Mobile Businesses

Mobile businesses, specifically mobile car detailers or power washers, are considered a high TTWQ due to the nature of the business activities and the likelihood of prohibited non-storm water discharges. Mobile businesses are not confined to a single area and many do not have City business licenses, making them difficult to identify. The City continues to respond to complaints regarding mobile businesses and provides one-on-one verbal BMP education and literature during the complaint investigation as applicable. All businesses, including mobile businesses, applying for a new business license during the 2008/2009 reporting year received the "Preventing Urban Runoff Pollution" Trifold. This pamphlet includes minimum BMPs for three commonly mobile professions: power washing, car washing, and landscaping services. Information about the storm drain conveyance system and BMPs applicable to mobile business activities were also made available during 2008/2009 on the City's website, http://www.ci.national-city.ca.us/index.aspx?page=164.

8.3.2 Construction Site Owners and Developers

Due to the nature of their activities, construction sites have the potential to discharge many types of pollutants to receiving waters if not managed properly. Many construction site owners, contractors, and developers visit the City's Engineering Division to apply for necessary permits. Through this interaction with City staff, owners and developers are able to gain insight on watershed concepts, potential pollutants, and required BMPs.

The City provided various construction site-specific educational materials targeting storm water concepts during the 2008/2009 reporting year. The distributed educational materials are described below.

- The Construction Site BMP Fact Sheet or "Blue Sheet" (Attachment 3.1) describes specific BMPs for construction activities including soil stabilization and erosion prevention, sediment containment, materials and equipment management, non-storm water discharge control, and drainage control. This sheet was distributed

with all permits issued, including building permits; implementing the BMPs listed on the sheet is a condition of the permits.

- The National Pollutant Discharge Elimination System (NPDES) Project Applicability Form or "SUSMP Checklist" (Attachment 2.1) was completed by all projects applying for construction and building permits. Once submitted, the City reviewed the checklist and prioritized the projects. Requirements to ensure compliance with the Municipal Permit and General Construction Permit were presented to the applicant and further discussed to ensure the applicant was educated on the process.
- A copy of JURMP Appendix C, which contains a list of required construction BMPs, is made available upon request for proponents of construction activities within the City.

8.3.3 Residential Areas

Since the City is mainly composed of residential areas, it is important to reach this particular audience through educational outreach programs. The City continued to make a variety of flyers, brochures, website postings, and other educational material available to its residents.

Storm Water Calendar

The City developed a 2009 Storm Water Calendar (Attachment 5.2) that was distributed to schools and residents within high TTWQ residential areas. The calendar, which presented information in both English and Spanish, informed residents about pollutants found in San Diego Bay and neighboring waterways, and described that pollutants such as trash, HHW, and bacteria from pet waste can be transported from residential areas to the ocean. The calendar also provided the date of the 7th Annual Creek to Bay Cleanup event and informed residents about regular opportunities to properly dispose of HHW and large trash items. See Section 9 of this Annual Report for a more detailed description of these events.

During 2008/2009, the City also began developing the 2010 Storm Water Calendar. Another art contest was arranged for 3rd graders in the City, which will again provide images for the calendar. Contest announcement flyers for teachers (Attachment 8.2) and for 3rd grade students and their families (Attachment 8.3) were distributed to provide information about the contest as well as the City's storm water program. More information about the development of the 2010 calendar is included in the Public Participation Component Section 9 of this Annual Report.

High TTWQ Residential Education

During the 2008/2009 reporting period, the City initiated a High TTWQ Residential Education Program. The program report is included as Attachment 6.1. The purpose of this education and outreach effort was to assess the level of storm water knowledge in high TTWQ areas, provide bilingual education to remedy important gaps in knowledge, and to make observations of the potential presence of high TTWQ activities. City staff

went door-to-door with a five question survey regarding the storm water conveyance system, pet waste disposal methods, car washing activities, and household substances that are potential pollutants. The knowledge assessment survey was concluded by obtaining the residents' opinions about what can be done to keep the City clean. Notably, 50 percent of the 318 residents surveyed had not known that all water going to the storm drain flows to receiving water bodies without treatment, and they were then personally informed of this fact. All results of the knowledge assessment survey are provided in Attachment 6.1.

During door-to-door visits within the City's designated high TTWQ residential areas educational material was distributed to 1,341 households. These bilingual educational materials included the 2009 Storm Water Program Calendar (Attachment 5.2) and the "Everything that flows down into a storm drain" brochure (Attachment 6.3). Approximately 895 residents were provided with a copy of the City's Storm Water Hotline Card (Attachment 6.2); however this hotline number was present on the calendar as well. About 340 households in the Division Street area were also left with the HHW brochure, "Put Toxic Waste In Its Place," included as Attachment 6.4.

School Education and Outreach

The City collaborated with other jurisdictions within the San Diego Bay Watershed during the 2008/2009 reporting year to target school-aged children. One of these collaborations included four watershed presentations by I Love a Clean San Diego (ILACSD) that were co-sponsored by National City and the Port Authority of San Diego (Port). More information about these education and outreach presentations is included in the Public Participation Component Section 9.3 and the 2008/2009 WURMP Annual Report.

City Website

The City's website, http://www.ci.national-city.ca.us/, is another way in which City residents can become familiar with the design and intended use of the storm drain system, HHW, alternatives to hazardous household products, find information regarding volunteer opportunities, applicable City contact information, and IPM cards.

8.3.4 UNDERSERVED COMMUNITIES

The City is a growing community that is diverse in culture. According to the April and May 2009 High TTWQ Residential Education Program data, of the 373 residents encountered, the City's outreach personnel identified about a third who preferred to speak in Spanish. A small fraction spoke Tagalog as their preferred language. To address the unique demographics of the City, the City's Storm Water Hotline accepts all reports of illegal discharges, regardless of language.

The City further provides educational materials both in English and Spanish to better serve Spanish speaking community members. These bilingual brochures may be found at various locations throughout the City, such as the Chamber of Commerce, the public library, public recreational centers, and the storm water display area at the City's

Engineering Department. The bilingual educational handout entitled "Everything that flows down into a storm drains goes untreated directly to our creeks, lagoons, and San Diego Bay" is also included in all mail-based correspondence (i.e. NOV, notice of corrective action, etc.) to residents and industrial and commercial businesses in the City.

8.3.5 Complaint Investigations

To further aid the process of identifying illicit discharges, the City encourages the public and City staff to report IC/IDs. The City's Storm Water Compliance Inspector follows up on all complaints made to the hotline. If a representative for the targeted business, residential area, or construction site is present, the inspector will provide site-specific information regarding storm water issues including applicable educational materials.

8.4 Outreach Component Effectiveness Assessment

The estimated number of impressions made by the City's education and outreach efforts during 2008/2009 is presented and described below. Please refer to Section 11 of this JURMP Annual Report for the remainder the effectiveness assessment for this program component.

Impressions Made

The City has continued to provide residents and businesses with storm water-related education through inspections, distribution, and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees, because it is likely that the attendees will discuss the content with others after the training session. Printed educational materials distributed in mass numbers are assumed to generate three impressions each. Impressions generated by the 2010 calendar contest are likely to generate five impressions because multiple people (teachers, students, and parents) were involved in the contest and were likely to share information about the contest with others. Table 8-1 details the number of impressions made by the City during this reporting year.

Table 8-1
Impressions Made by the City

Impression Type	Estimated Count	Unit	Estimated Impressions Generated
Municipal Inspections	12	Inspection	60
Industrial Inspections	35	Inspection	105
Commercial Inspections	214	Inspection	642
Complaints Investigated	24	Investigation	72
Activity/Event Attendees	221	Events	884
"Preventing Urban Runoff Pollution" Trifold	205	Brochure	615
Residential Door-to-door Knowledge Assessment Surveys and Education	318	Survey	1,272
Everything that flows down the storm drain….	1,588	Handout	4,764
2009 Storm Water Program Calendar	5,740	Calendar	17,220
2010 Storm Water Program Calendar Art Contest Handouts	860	Handout	4,300
Storm Water School Presentation Materials for Classrooms	43	Slideshow	172
Put Toxic Waste in its Place	390	Handout	1,170
Storm Water Hotline Card	995	Card	2,985
NONA/NEC Paperwork	8	Brochure	24
NOI Paperwork	13	Brochure	39
Construction BMP "Blue Sheet"	5	Handout	15
Total			**34,339**

8.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was updated in March 2008. No changes to the City's education component have been made since that time.

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to foster storm water awareness and improve water quality. Public participation includes, but is not limited to, cleanup events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Collaboration between the City and the community helps to encourage a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed in this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the 2008/2009 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City collaborated with ILACSD to host three sites for the Creek to Bay Cleanup event on 4/25/2009. A total of 118 volunteers participated to collect over 4,598 pounds of trash and debris.
- The City held a contest during 2008/2009 for the 2010 storm water calendar. A total of forty-three 3rd grade classrooms participated in this contest and were provided with storm water educational handouts and presentation materials.
- The City continued to collaborate with the cities of Chula Vista and Imperial Beach to provide HHW disposal for residents of the City of National City. Approximately 103 residents of National City participated.
- The City held large-item disposal events during the months of November and June, which allowed residents to dispose of large items (not including HHW).
- The City continued to operate its Storm Water Hotline to receive complaints from businesses and residents in the City.
- A large scale education and outreach effort was made by the City through its High TTWQ Residential Education Program. A total of 1,341 households received storm water educational materials.
- The City co-sponsored four ILACSD watershed presentations for fifth graders within the City.

9.2 PUBLIC PARTICIPATION ACTIVITIES

Cleanup Events and Programs

During 2008/2009, the City hosted cleanup events at various locations in the City. Cleanup events provide a direct benefit to water quality and provide an opportunity for the City to inform event volunteers of storm water issues. The City continued to collaborate with ILACSD for the Creek to Bay Cleanup event on 4/25/2009. Cleanup sites in the City were located at Sweetwater River and Paradise Creek Educational Park. At the Sweetwater River location, 43 volunteers collected 3,473 pounds of trash and three pounds of recyclables. Seventy-five volunteers gathered 1,125 pounds of trash and debris at Paradise Creek Educational Park (Figure 9-1). ILACSD reusable water bottles were distributed to volunteers during the event as a gift and to promote water bottle reuse.

Figure 9-1. Paradise Creek Educational Park Cleanup Event

2010 Calendar Development

As previously mentioned, during 2008/2009, the City began to develop the 2010 storm water program calendar. Similar to last year's calendar, the City worked to involve the public in the development of the 2010 edition. An art contest in June was held for the 3rd grade students of all 10 public elementary schools within the City. The 12 winning images will be included for each month of the upcoming calendar.

The theme of the contest was "By keeping our community clean, we can keep the ocean clean." Each of the 43 participating classrooms were provided with educational presentation material (Attachment 9.1) by the school district representative, and teachers

were given contest guidelines to share with their students (Attachment 8.2). This presentation addressed watershed concepts, the storm water conveyance system, pollutants of concern, and how to eliminate pollutants in urban runoff. The provided presentation also included past examples of submitted student work. An informational flyer was given to about 860 students that outlined the rules of the contest and presented some storm water concepts (Attachment 8.3). All students that submitted an entry received a certificate of participation signed by the mayor (Attachment 9.2). Winners will be selected in the 2009/2010 reporting period. The contest, which was sponsored by EDCO, will provide prizes, such as gift cards, to the contest winners. Unlike last year's contest, the 2008/2009 calendar contest applicants were encouraged to place more of an emphasis on community by including images of known landmarks or elements specific to their neighborhoods.

Hazardous Waste Collection and Used Oil Recycling Program

The City's Hazardous Waste Collection and Used Oil Recycling Program encourage City residents and business owners to properly dispose of HHW. Residents have access to proper disposal facilities for HHW at the Chula Vista Household Hazardous Waste Collection Facility. This facility is open on Saturdays from 9:00 a.m. to 1:00 p.m. and accepts up to 15 gallons or 125 lbs of waste per household for a small co-payment. An informational ad for this program is included as Attachment 9.3. This service is also available to residents in the cities of Chula Vista, Coronado, and Imperial Beach. During the 2008/2009 reporting year, 3,151 participants contributed over 252,494 pounds of waste. Of that total, 103 people were residents of National City. Door-to-door pick up was available for disabled or elderly communities for a small fee. Four certified used oil recycling centers located throughout the City were also advertised in the "2009 Storm Water Program Calendar" (Attachment 5.2).

The "Put Toxic Waste In Its Place" brochure continues to be used by the City to inform residents of how and where to dispose of HHW; the brochure directs people to www.1800cleanup.com, which provides further information about identification and disposal of HHW. As previously mentioned in Section 8 of this Annual Report, this brochure was distributed to approximately 340 households during the High TTWQ Residential Education Program.

Other Waste Disposal

The City also continued to hold household trash collection events for large items such as furniture and appliances at the EDCO Recovery and Transfer Facility from 7a.m. to 2p.m. The City coordinated with EDCO to host both fall and spring collection events. These events are routinely held in November and June of each year. The City encouraged the public to bring their debris (not including HHW) for proper disposal. Door-to-door pick up was provided for disabled or senior residents.

Public Reporting

As discussed in Section 4, complaints are received through the City's Storm Water Hotline and online website reporting system. The residential, industrial and commercial, construction, and municipal communities are encouraged to use the hotline

to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable. Through use of the reporting system, residents of the City participate in holding their neighbors accountable for their actions. The hotline number is available on the Storm Water Hotline Card (Attachment 6.2), which was provided to residents during education and outreach activities. The hotline number is also available on the Storm Water Calendar and other brochures distributed by the City, as well as on the City's website. This reporting period there were 24 complaints received by the City. All complaints reported during 2008/2009 were investigated immediately and resolved appropriately by City staff.

9.3 OUTREACH EVENTS

The City has continued to provide educational outreach programs for variety of different communities in the City.

Public Workshops

Workshops, information, and training sessions are necessary to provide the public with the tools and knowledge to participate effectively in the City's storm water program. This reporting period, San Diego County's Negocio Verde Environmental Justice Task Force, provided an Automotive Body and Repair Free Compliance Workshop in National City, which targeted automotive shop owners and employees of National City and Chula Vista. This workshop discussed environmental and storm water regulation compliance and is discussed in further detail in Section 8 of this Annual Report.

High TTWQ Residential Education Program

As mentioned previously in Section 8, during 2008/2009, the City initiated a High TTWQ Residential Education Program. The report is included as Attachment 6.1. The purpose of this education and outreach effort was to assess the level of storm water knowledge in high TTWQ areas, provide bilingual education to remedy important gaps of knowledge, and to make observations of the potential presence of high TTWQ activities. A total of 1,389 sites were visited and educational material was distributed to 1,341 households. During these door-to-door visits, the bilingual "2009 Storm Water Program Calendar" and "Everything that runs into the storm drain goes untreated directly into our creeks, lagoons, and San Diego Bay" brochures (Attachment 5.2 and 6.3, respectively), were left at each residence along with other HHW and Storm Water Hotline educational materials.

ILACSD Watershed Presentations

The City collaborated with other jurisdictions within the San Diego Bay Watershed during the 2008/2009 reporting year. One of these collaborations included four watershed presentations by ILACSD for the City's elementary schools that were co-sponsored by the City of National City and the Port. These presentations included information about watersheds and ways to eliminate pollution in storm water runoff. Each student was given a post–presentation knowledge survey to assess what the students learned during the presentation. Two of the presentations were held at

Kimball Park Elementary on 5/13/2009 and were attended by more than 50 students in the 5th grade. More information about this event and the results of the post survey are included in the 2008/2009 WURMP Annual Report.

9.4 Public Participation Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

9.5 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's public participation component have been made since that time.

10.0 FISCAL ANALYSIS

The sources of funding for this program listed in the City's update JURMP have not been changed during this reporting period. The budgeted cost of the 2008/2009 program was $1,317,000. The proposed estimated budget for the 2009/2010 program is $1,172,257. Table 10-1, below, presents an itemized breakdown of the program budgets.

Table 10-1
Itemized Budgets For Fiscal Years 2008/2009 and 2009/2010

Storm Water Program Fiscal Analysis	Budget FY 08/09	Budget FY 09/10
Staff		
Public Works	350,000	350,000
City Attorney	10,000	10,000
Development Services (Engineering, Planning, Building)	*	100,000
Planning	40,000	*
Building	20,000	*
Engineering	90,000	*
Fire	10,000	10,000
Community Development Department (CDD)	30,000	30,000
Sub-total	***$550,000***	***$500,000***
Operation Expenditures		
NPDES Fees	40,000	40,000
Consultant Fees for NPDES Program	200,000	200,000
Purchase Equipment	1,000	1,000
Miscellaneous Operations	5,000	5,000
Sub-total	***$246,000***	***$246,000***
CIP Appropriations		
Drainage Improvements (Curb & Gutter, Alley Apron, X-Gutter)	**	426,257
Curb and Gutter	68,500	***
Alley Apron	6,000	***
X-Gutter	46,500	***
Sub-total	***$121,000***	***$426,257***
Special Projects		
Storm Drain Improvements	400,000	--
Grand Total	**$1,317,000**	**$1,172,257**

* The Engineering, Planning, and Building departments were consolidated into one new department in 2008/2009, Development Services.
** Drainage improvement costs are broken out into specific categories for 2008/2009.
*** Included in drainage improvements

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

Based on participation in regional efforts and its experience implementing its JURMP, the City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP.

The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are

discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the CASQA effectiveness assessment guidance document, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

Level 1 outcomes essentially are measures of permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix B of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement.

Levels 2 and 3

See the tables 11-1 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Please note that the number of hotline calls and Dry Weather Monitoring Program results are used in the assessments for other program components besides illicit discharge detection and elimination. Those numbers are taken from the work done within the period from July 1, 2008 through June 30, 2009 to be comparable with previous years' assessments and data. Also note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed.

Level 5

The Dry Weather Monitoring Program is the City's primary mechanism of measuring the quality of discharges. The City began collecting MS4 monitoring data in 2008/2009; however, the data gathered at this time is insufficient to provide substantive information about discharge quality.

Graphs demonstrating historical Dry Weather Monitoring results are provided at the end of this section as figures 11-3 through 11-5. Ammonia, one of the constituents with the longest historical data record, has shown a decreasing trend over time. Also, since they have been analyzed, the exceedance frequencies of oil and grease and fecal indicator bacteria have decreased with time.

Level 6

No Regional Monitoring Program water quality monitoring stations are located within the City of National City. The Sweetwater Mass Loading Station is located just outside

the southeastern border of the City, but only a very minimal portion of the City would drain to that site. Some sediment sampling has been completed in the Sweetwater River flood control channel along southern side of the City as part of the regional Ambient Bay and Lagoon Monitoring Program. The results of that program have been relatively inconclusive to date. The RWQCB contracted Southern California Coastal Waters Research Project (SCCWRP) to conduct some wet weather monitoring in Paleta Creek (Seventh Street Channel) in support of a pending TMDL. At this point, the amount of data collected at these sites is not sufficient to determine any positive or negative trends for water quality at the site. Typically several years of data are needed before any trends become apparent. The City will continue to work with the San Diego Bay WURMP workgroup and TMDL stakeholder workgroups to improve the quality of water bodies in and around the City of National City.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency BMPs. Based on the results of the treatment control inspections and some interaction with responsible parties during the reporting period, it appears that there was a low level of awareness of the need for regular treatment control BMP maintenance at the start of the reporting period. The City worked with the parties responsible for maintenance of treatment control BMPs during the reporting period to address this issue and was able to improve maintenance rates during 2008/2009 compared to the 2007/2008 fiscal year.

Construction

The available data indicate that on the whole the City's construction program effectively requires BMP implementation. The City conducted dry season inspections for all high and medium priority construction sites to require continued implementation of required BMPs in preparation for the wet season. Any BMP deficiencies noted are typically remedied promptly. The City's approval process continues to notify all construction projects that will disturb soil of the City's BMP requirements before a permit is issued. This process has helped bring about better BMP implementation at small projects that otherwise might not be aware of the BMP requirements.

Municipal

The City's municipal staff are regularly trained on storm water issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit frequency requirements. In particular, the City sweeps its streets more often than the permit requirements to aid in WURMP efforts. As another part of WURMP efforts, the City hired a contractor in 2008/2009 to do biweekly inspections and remove any observed trash from Paradise Creek. Additionally, the City has developed new MS4 maintenance logs to facilitate the collection of more detailed information about the types and amounts of debris removed from the MS4 (included in attachments 4.2 and 4.3).

Currently not enough data exists to draw any conclusions for the 2008/2009 reporting period; however the new logs will be used for all of 2009/2010.

Industrial and Commercial

The City has a comprehensive inspection program that utilizes experienced consultant inspectors. Results are tracked using a database. Since a comparatively high number of noncompliant sites were identified in the previous reporting period, the City followed up with these sites in 2008/2009 to ensure that they comply with the City's regulations. Many of the businesses inspected had a low level of knowledge about storm water requirements. Approximately half of all businesses had the lowest possible storm water knowledge assessment score (1). The City worked with the County of San Diego to host two Negocio Verde workshops that addressed storm water regulations for local businesses. The City has also initiated some conversations with property management companies for businesses in multi-suite complexes to see if the landlords can provide some additional assistance in bringing about compliance with storm water requirements. The City is still investigating methods to educate businesses like restaurants that tend to have high staff turnover.

Residential

The City's residential component mainly achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. However, a significant door-to-door effort was made to screen for high priority residential activities in all of the City's high TTWQ residential areas. At least 1,389 homes were visited; observations made during these visits were an important factor in evaluating and updating the list of high TTWQ residential areas in the City. Another important factor was the record of complaints to the Storm Water Hotline. All residential complaints were investigated in the field and resolved promptly.

IDDE

The RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001 has extended the reporting period for the IDDE component of the City's program, so a full assessment of the program's effectiveness cannot be provided at this time. Some initial metrics are presented in Table 11-6.

Education

The City has expanded its education program over each of the last several years. In 2008/2009 the City specifically focused educational efforts on high TTWQ residential areas. At least 1,341 residents in eight different neighborhoods received educational materials. Over 300 residents were also surveyed to gauge their knowledge about storm water concepts and residential BMPs before staff delivered site-specific verbal education about appropriate BMPs. Additionally, through back and forth communication from treatment control BMP maintenance verification, many responsible parties were educated about storm water concepts and their BMP maintenance responsibilities. Educational efforts in 2009/2010 will focus on development of outreach material for staff at food establishments in the City.

Public Participation

For the Creek to Bay clean-up event with ILACSD, more clean-up sites were located within the City this year. Approximately three times as many volunteers participated in clean-up events within the City during 2008/2009, and the City will continue looking for new opportunities for public involvement. The City also held another third grade art contest for the 2010 Storm Water Calendar, involving more classrooms than in the previous year. While public education regarding use of the Storm Water Hotline has increased in this reporting period, the number of hotline calls unexpectedly decreased in 2008/2009. Since the complaints of many hotline calls in this year were made regarding less direct threats to storm water quality, such as over irrigation, it may be that fewer reportable activities took place in the City during 2008/2009. The City will assess data from 2009/2010 to see if current patterns continue or if hotline calls increase again. The City continues to ensure its own staff and the public are aware of the hotline and when to call it.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-1
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Review and approve project plans	External A relatively small number of projects submitted reports during 2008/2009. Based on meetings with applicants and BMPs proposed, it appears that the level of knowledge is increasing. Internal The City's storm water consultant and the City's Storm Water Program Manager worked with engineers in the City to improve their level of understanding of the SUSMP program. City personnel also attended training sessions—see Section 8. The City's consultant reviews SWMPs submitted to the City.	Overall SWMP approval rate during reporting period	33%	Percent of projects proposing BMPs besides filter inserts	100%
		Number of projects requiring three or more reviews prior to SWMP approval	0	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City's NPDES Storm Water Compliance Inspector provided training to the inspector responsible for verifying BMPs prior to occupancy.	Percent of projects implementing all proposed BMPs	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 2		
Verify BMPs are properly maintained	External Annual maintenance verification letters were sent out in 2008/2009 and NOVs were issued to non-responders Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of sites properly maintaining all BMPs	60%	Proper BMP maintenance is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 2		
		Percent of sites responding to verification letters	79%		
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-2
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs, and the City's consultant conducts routine inspections of high and medium TTWQ construction sites.	Percent of projects implementing required BMPs at first inspection of wet season	90%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of projects in compliance with BMP requirements during all inspections	80%	
		Resolution status of enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0	
		It was noted that BMP implementation declined at some sites in June 2009, after the wet season. These sites were considered out of compliance and are receiving dry season inspections to ensure compliance for the coming wet season.		
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff are regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities requiring a follow-up visit	27%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.		Amount of sediment and debris removed (weight or volume)	1,004 tons
				Amount of sediment and debris removed per length of street swept (weight or volume per curb mile)	0.066 tons/ curb mile
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume)	42.2 tons
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons)	0
Maintain municipal treatment control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment control BMPs	10 pounds
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External Knowledge assessment scores indicated approximately half of the personnel present during inspections lacked any understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal The City contracts with a qualified consultant to perform industrial and commercial inspections.	Percent of inspected sites requiring a follow-up visit	33%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	1	Number of IC/IDs eliminated (inspections and complaint investigations)	6
		Consistent with the intentional selection of sites with the highest TTWQ potential, many sites had a lower BMP score. However, the most common score was three. See Figure 11-2 on the following page for a score distribution.			
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Industrial/Commercial Knowledge Assessment Scores

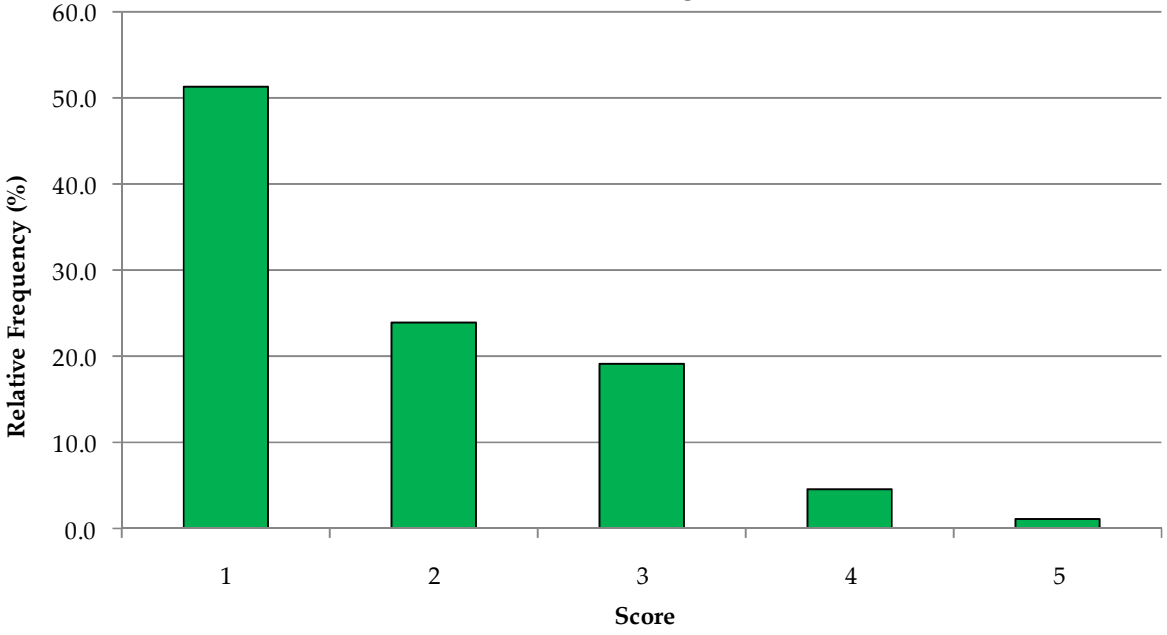

Figure 11-2
Industrial/Commercial BMP Implementation Scores

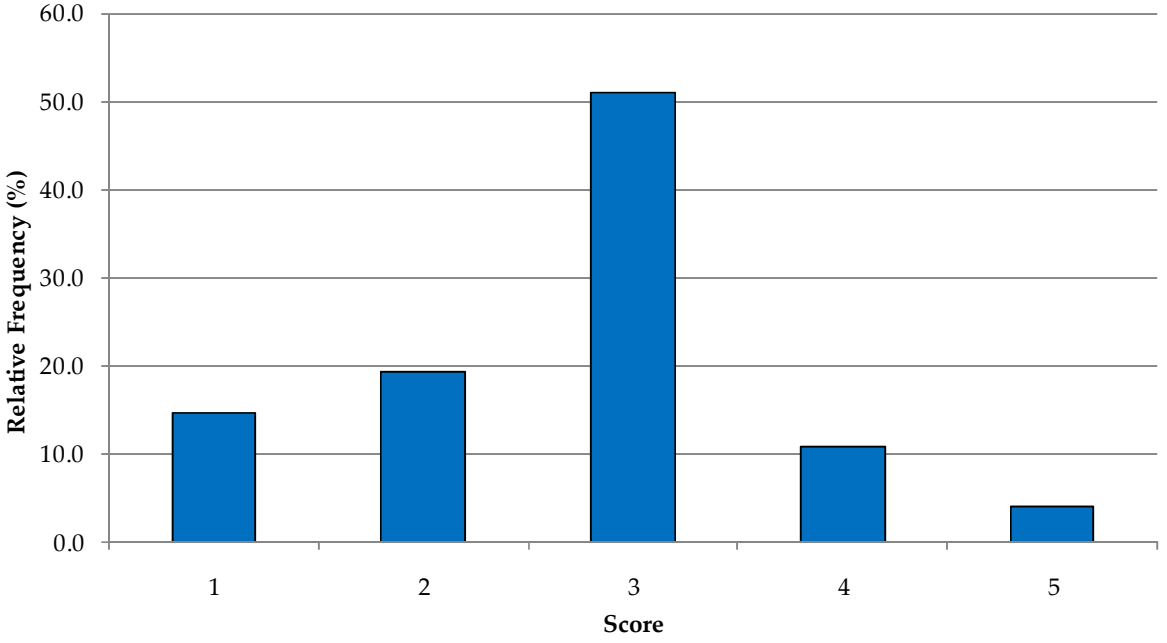

Table 11-5: Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External Door-to door visits to 1,389 homes in high TTWQ areas Residents in 2008/2009 screened for evidence of high priority residential activities and educated residents; see sections 6 and 8 for details of this and other education. Internal The City's Storm Water Program Manager and other City staff involved in the program have a good understanding of the goals of the storm water program.	Number of residential incidents reported to storm water hotline	7 reported*	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution of enforcement actions	See Section 6	
		Number of dry weather monitoring exceedances traced to residential sources	3	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* All seven reported complaints were investigated, but no storm water related issues were found at four of them.

Table 11-6: Illicit Discharge Detection and Elimination Component Assessment Measures*

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were identified for elimination, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to storm water hotline	The City's Storm Water Program Manager trains City staff as needed. See sections 4 and 8. City staff were responsible for many of the reports made to the hotline, as shown in Section 4.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 4 are likely to have resulted in a pollutant loading reduction.
Respond to and clean up SSOs	City staff are thoroughly trained on how to respond to SSOs.	See Section 4 for details.	There were no SSOs during the reporting period, resulting in decrease in pollutant loading.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Although the overall IDDE component is to be submitted in December 2009, a preliminary assessment of the component's effectiveness is provided here.

Table 11-7: Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. In particular, the City made a door-to-door effort to educate all residents living within its high TTWQ residential areas. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for 2008/2009.
	Estimated number of impressions made	34,339		

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8: Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate, including operation of the Storm Water Hotline. See Section 9 for details.	Number of attendees at events (ILACSD clean-up volunteers and HHW disposal participants)	221	Amount of trash and debris collected at cleanup events	4,598 pounds
		Number of calls received to the storm water hotline	27	Amount of HHW collected	252,494 pounds between three cities*

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The cities of National City, Chula Vista, and Imperial Beach share a HHW disposal program located within the City of Chula Vista.

Figure 11-3
Historical Dry Weather Monitoring Data: Action Level Exceedance Rates

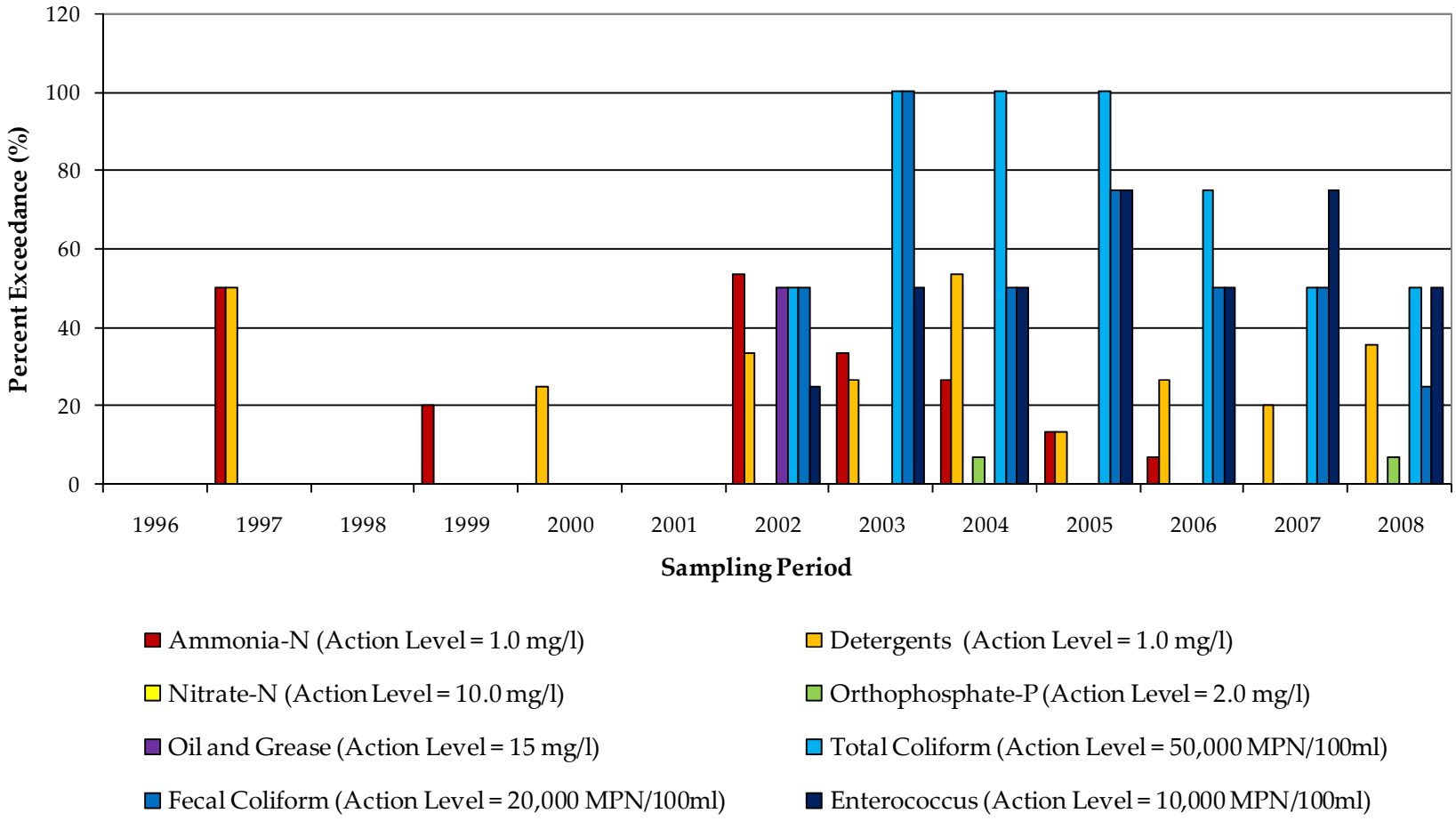

Figure 11-4
City of National City, Ammonia-Nitrogen, 1997-2008

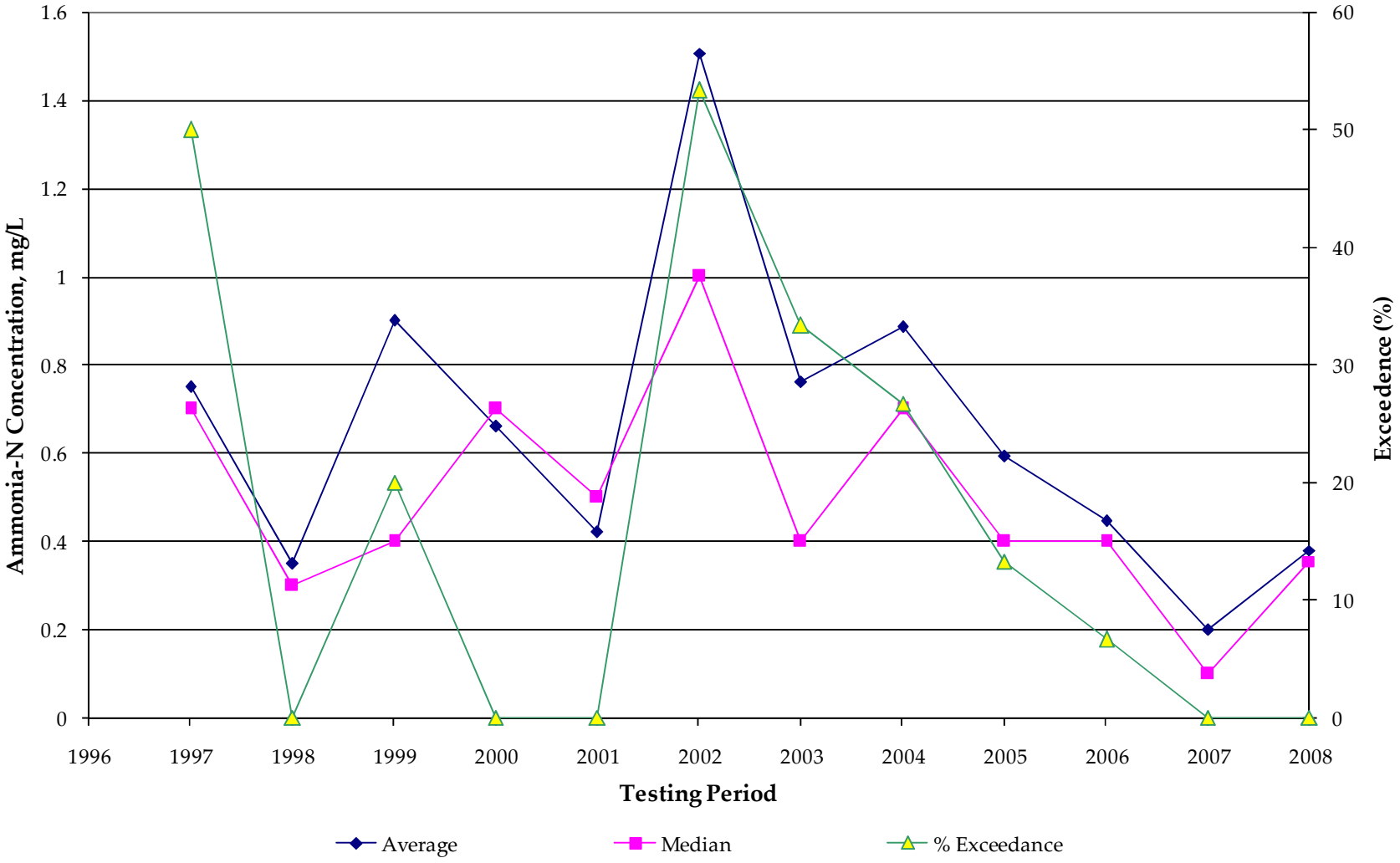

Figure 11-5
City of National City, Detergents, 1996-2008

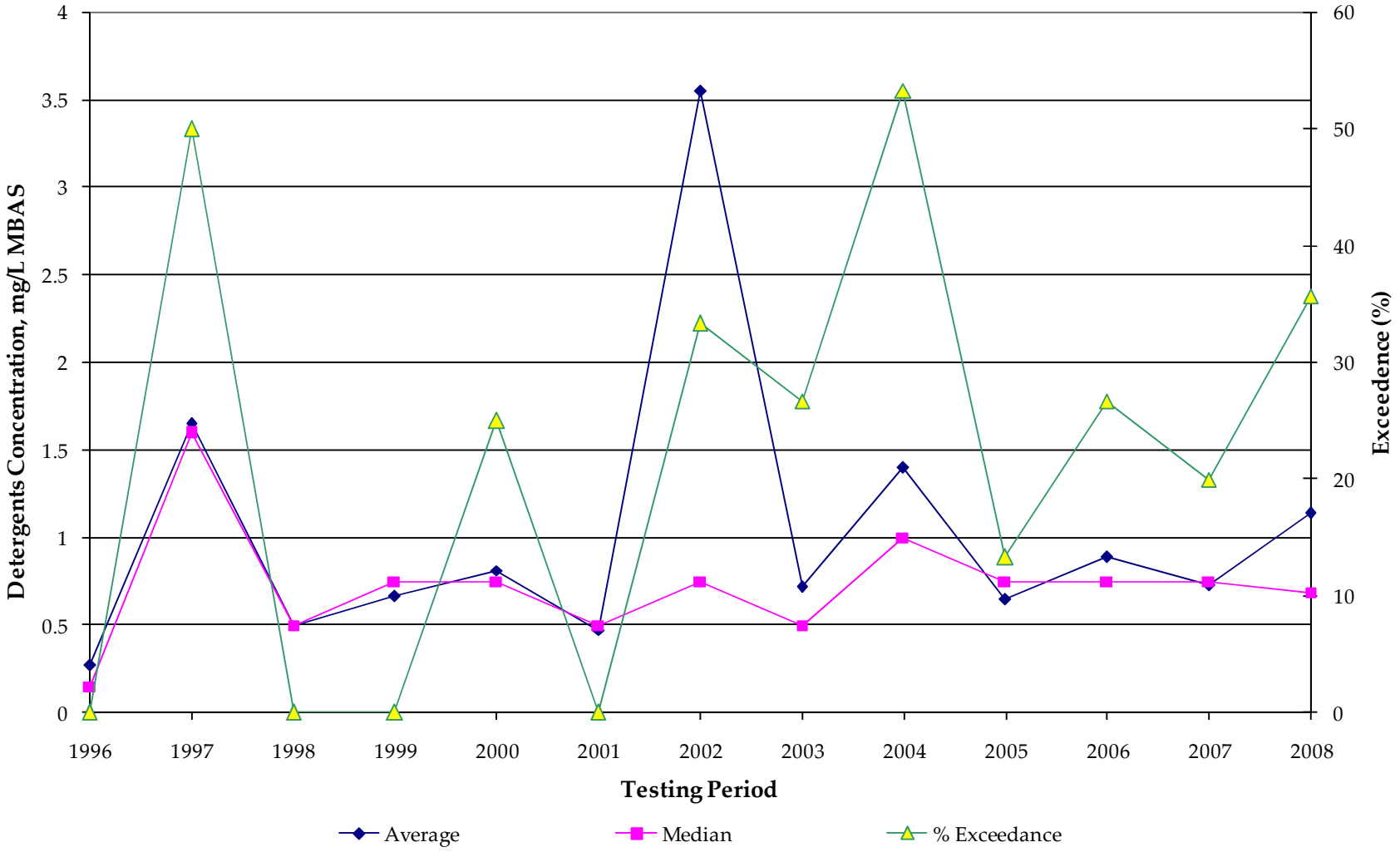

12.0 SPECIAL INVESTIGATIONS

During the reporting period the City undertook two additional programs: the Clean Community Program and a pollutant discharge potential assessment component during industrial and commercial inspections.

12.1 CLEAN COMMUNITY PROGRAM

Results from trash assessments in previous years have indicated that litter and illegally dumped items tend to consist of household trash and large household items, likely from residents in the City. During 2008/2009, the City continued to implement its Clean Community Program. This program is designed to foster a sense of shared responsibility in keeping the community of National City clean and free of pollutants that may otherwise be carried to local receiving water bodies.

The theme of the 2009 Storm Water Calendar (Attachment 5.2) was "By Keeping our Community Clean, We can Keep the Ocean Clean!" This slogan was printed in both English and Spanish on every month of the calendar. Each month of the 2009 calendar featured artwork by local third grade students illustrating the theme. Through integrating public participation into the development of the 2009 calendar, the City increased attention to the "By Keeping our Community Clean, We Can Keep the Ocean Clean" message. Storm water facts were also presented throughout the calendar in both English and Spanish; such facts included "All water that enters National City storm drains flows to San Diego Bay without being treated," "Trash can harbor bacteria and cause beach closures when washed into the storm drain and out to the ocean," and "You can dispose of large items (mattresses, appliances, etc.) twice per year during the National City Clean-Up days. Watch for event details in your trash bill." The back of the calendar provides numerous City resources for residents who choose to take action in the City's program.

As discussed in detail in Section 9 of this Annual Report, during 2008/2009, the City worked to continue implementing part of the Clean Community Program though the development of a 2010 calendar.

Additionally, as part of WURMP efforts that are beyond minimum required MS4 maintenance, the City hired a contractor in 2008/2009 to do biweekly inspections and remove any observed trash from Paradise Creek.

12.2 POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

During 2008/2009, the City conducted pollutant discharge potential assessments (PDPA) at industrial and commercial facilities that received full inspection; the purpose of the assessment is to assist in source identification. The assessment is intended to be a semi-quantitative tool to identify which sites are major sources of the principal pollutants of concern for storm water. For each of several main categories of pollutants, a numeric

pollutant discharge potential (PDP) on a scale from 0 (not present) to 5 (severe) is assigned. A copy of the PDPA form is included with the standard inspection form in Attachment 5.1.

Table 12-1 shows the overall average PDP scores for each pollutant for all of the industrial and commercial facilities visited in 2008/2009. Note that pH indicates substances likely to cause either an abnormally low (acidic) or abnormally high (basic) pH.

Table 12-1
Pollutant Discharge Potential Score Averages, By Category

Pollutant Category	Average PDP Score
Sediment	2.5
Nutrients	1.4
Aluminum	1.1
Iron	1.3
Heavy Metals	1.8
Organics	1.5
Trash	2.4
Oxygen Demanding	1.7
Oil and Grease	2.4
Bacteria	1.7
Pesticides	1.0
Acid/Base	1.1

Sediment, trash, and oil and grease were observed to be the largest issues during the industrial and commercial inspections conducted during 2008/2009. The City uses this information to help target businesses for inspection. Figure 12-1, on the following page, shows the distribution of PDP scores for each pollutant on the PDPA table.

Figure 12-1
PDPA Score Distribution for Facilities Inspected in 2008/2009

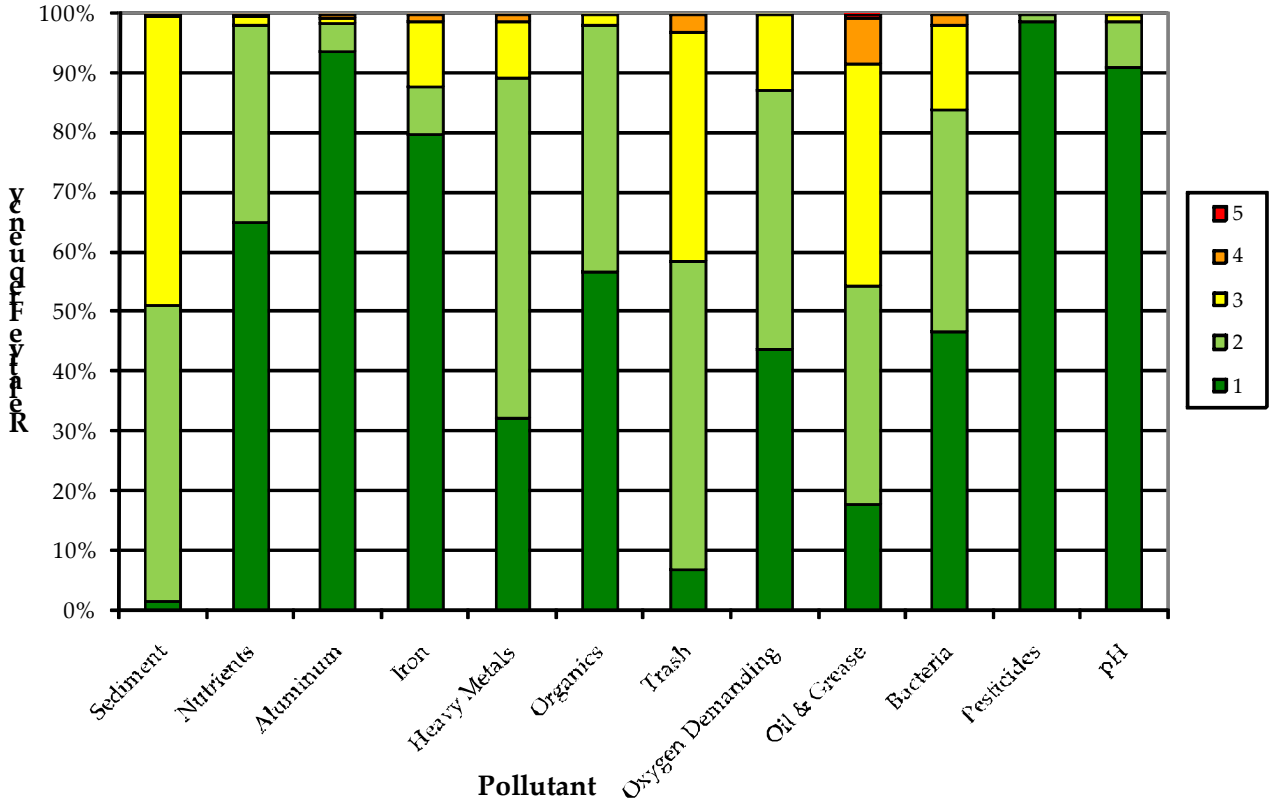

13.0 NON-EMERGENCY FIRE FIGHTING

Please reference Section 3 of the City's most recent JURMP for information about BMPs and procedures associated with non-emergency fire fighting activities.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 in response to new Municipal Permit requirements. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes to the JURMP made since the overall JURMP update in the spring of 2008 are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report, with the below exception.

Updated City organizational charts are provided in Attachment 14.1. These organizational charts have been updated since the Engineering, Planning, and Building departments have now become divisions within the new Development Services Department of the City of National City.

15.0 CONCLUSIONS AND RECOMMENDATIONS

During the 2008/2009 reporting period the City of National City continued to implement the new and revised programs in its JURMP, updated in March 2008. Based on feedback from RWQCB staff regarding the submitted JURMP, the City has improved the documentation of various components of its program and made revisions to the JURMP as necessary. The City continues to work with other Copermittees to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City of National City will work collaboratively as a member of the various regional workgroups in this process and continue to refine its program implementation as needed to improve its ability to reduce or eliminate pollutant discharges and meet regulatory requirements. The City will also continue its efforts related to the pending TMDL for Seventh Street Channel.

16.0 REFERENCES

California Regional Water Quality Control Board, 2007. Order No. R9-2007-0001. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Construction.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Industrial & Commercial.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Municipal.*

California Storm Water Quality Association, 2007. *Municipal Stormwater Program Effectiveness Assessment Guidance.*

Caltrans Storm Water Quality Handbooks, 2003. *Construction Site Best Management Practices Manual.*

City of National City, 2008. *Jurisdictional Urban Runoff Management Program.*

County of San Diego, 2007. *Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Report.*

APPENDIX A.1

Inventory of Completed Development Projects with Approved Treatment Control BMPs

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP								Project Type	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separators	Bioretention			
1	Advanced Plastics	225 W. 30th St					X	X			Industrial	Sweetwater River	Medium
2	Ball Kia	1940 National City Blvd			X						Commercial	Paradise Creek	Medium
3	Bonita Creek	Sweetwater Road	X				X				Residential	Sweetwater River	Medium
4	Estrella Walk	Plaza Blvd. & L Street							X		Residential	Paradise Creek	Medium
5	Jack In The Box	18th & Highland Avenue					X				Commercial	Paradise Creek	Medium
6	Mariposa Walk	E. 7th St and R St					X				Residential	Paradise Creek	Medium
7	National City Batch Plant	12th St & McKinley Ave				X	X				Industrial	La Paleta Creek/ 7th Street Channel	Medium
8	National City Fire Station #34 (CIP)	333 East 16th Street					X		X		Municipal	Paradise Creek	Medium
9	National City Library (CIP)	1401 National City Blvd					X				Municipal	Paradise Creek	Medium
10	Paradise Creek Park (CIP)	Harding Ave, West 19th St, & West 22nd St					X				Municipal	Paradise Creek	High

Inventory of Completed Development Projects with Approved Treatment Control BMPs (Continued)

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP								Project Type	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separators	Bioretention			
11	Paradise Ridge	Hollyhock Lane	X								Residential	Paradise Creek	Medium
12	Penske Truck Leasing	3132 Hoover Avenue					X				Commercial	Paradise Creek	High
13	Plaza Bonita Mall Expansion	3030 Plaza Bonita Road	X				X		X		Commercial	Sweetwater River	Medium
14	Plaza City Apartments	1535 E. Plaza Blvd							X		Residential	Paradise Creek	High
15	Plaza Village	L Avenue and Plaza Blvd					X				Residential	Paradise Creek	Medium
16	Sweetwater Town & Country Mall	Sweetwater Road					X				Commercial	Sweetwater River	High
17	Tremont Court Condominiums	Euclid Ave & Division St	X				X		X		Residential	La Paleta Creek/ 7th Street Channel	Medium
18	Walgreens	885 Euclid Ave					X				Commercial	Paradise Creek	High
19	Wal-Mart	1200 Highland Ave							X		Commercial	Paradise Creek	High

Note: Public Priority Projects are marked as Capital Improvement Projects (CIP) in the table.

APPENDIX A.2

Appendix A.2
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
1	Marina Gateway (Hotel)	2501 Cleveland Avenue	San Diego Bay	High	31	15*	3	0	0	18
2	Pacific View Estates	Division Street and Laurel Avenue	San Diego Bay	High	31	15*	2	0	0	17
3	Canyon Ridge	Rachael Avenue at Blue Ridge Street	San Diego Bay	Medium	31	7	2	0	0	9
4	Centro Condominiums	A Avenue between 11th and 12th Streets	San Diego Bay	Medium	31	8	1	0	0	9
5	H & H Townhomes	3102 E. 16th St (16th and Harbison)	San Diego Bay	Medium	31	7	2	0	0	9
6	Harbor View Condos	D Avenue & 8th Street	San Diego Bay	Medium	31	8	1	0	0	9
7	K Avenue Homes	1209 & 1215 K Avenue	San Diego Bay	Medium	31	7	2	0	0	9
8	Mirabelle (formerly Cypress Glen)	3229 Cypress Street	San Diego Bay	Medium	31	7	1	0	0	8
9	Paradise Village	2700 East 4th Street	San Diego Bay	Medium	31	8	3	0	0	11

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
10	Paradise Walk Townhomes	8th Street and Arcadia Street	San Diego Bay	Medium	31	8	2	0	0	10
11	1605 J Avenue	1605 J Avenue	San Diego Bay	Low	31	**		0	0	**
12	1843 B Avenue	1843 B Avenue	San Diego Bay	Low	31	**		0	0	**
13	2226 J Street	2226 J Street	San Diego Bay	Low	31	**		0	0	**
14	Anderson Piping	4th Street and I Street	San Diego Bay	Low	31	**		0	0	**
15	Bay Marina Drive Widening	Bay Marina Drive	San Diego Bay	Low	7	**		0	0	**
16	Hilltop View Homes	3000 8th Street	San Diego Bay	Low	0	**		0	1	1**
17	Marinelli home	2429 Prospect Street	San Diego Bay	Low	13	**		0	0	**
18	Martinelli	940 E. 16th Street	San Diego Bay	Low	31	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
19	On-site improvements: Grading, retaining wall, other: use of SDRSD & approved plans	1441 Harding Ave	San Diego Bay	Low	0	**		0	0	**
20	On-site Improvements: Grading: 1140 CY, Retaining Wall: aprox 2,800 SF per plan, Others: PCC 6 drivelane top of wall	940 W. 19th Street	San Diego Bay	Low	0	**		0	0	**
21	On-site Improvements: grading: restoing failed slope	3525 Stockman St	San Diego Bay	Low	9	**		0	0	**
22	On-site Improvements: Retaining wall per approved plans	1502 Highland Ave	San Diego Bay	Low	0	**		0	1	1**
23	On-site Improvements: Retaining wall per SDRSD C-1, 98 L.F +-, others per submitted drawing	2110 Euclid Avenue	San Diego Bay	Low	7	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
24	On-site improvements: retaining wall/others: per attached drawings by RCE, pre-construction conference meeting 3/24/09	1011 R Avenue	San Diego Bay	Low	4	**		0	0	**
25	Public Improvements per spec. no. 07-06C, Others: see specification	National City Park (Kimball, El Toyon, Las Palmas)	San Diego Bay	Low	18	**		0	0	**
26	Public Improvements: Construcion: 5 units boring temp. wells	Civic Center, 12th St & 11th St	San Diego Bay	Low	2	**		0	0	**
27	Public Improvements: Construction per approved plans, others; on-site improvements: others: fencing and bulletproof glass	1200 National City Blvd	San Diego Bay	Low	31	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
28	Public Improvements: Construction/Other: Install temp. power poles along E. 11th St & 18' over alley On Site Improvements: Others: Temp power poles	11th St btwn National City Blvd and A Ave	San Diego Bay	Low	0	**		0	0	**
29	Public Improvements: construction/others: open r/r x-ing and rehab all trashks by BNSF	Marina Drive Crossing R/R	San Diego Bay	Low	3	**		0	0	**
30	Public Improvements: Construction: 6" sewer later per SDRSD	1808 F Avenue	San Diego Bay	Low	31	**		0	0	**
31	Public Improvements: Construction: install 2 monitoring wells & remove 3 wells	30th Street & National City Blvd	San Diego Bay	Low	4	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
32	Public Improvements: Construction: Install 6" sewer lateral per SDRSD S-13 & 113-S-B	2409 Granger Ave	San Diego Bay	Low	0	**		0	0	**
33	Public Improvements: Construction: installation of monitoring wells	10 Osborn Street	San Diego Bay	Low	7	**		0	0	**
34	Public Improvements: Construction: Monitoring wells 5 units	1540 E. 8th Street	San Diego Bay	Low	1	**		0	0	**
35	Public Improvements: Construction: per plans of a pedestrian bridge	701 & 801 National City Clvd	San Diego Bay	Low	9	**		0	0	**
36	Public Improvements: Construction: replace cable & TV pedestal, pull fiber (overlashing)	12th St, C Ave & B Ave, Plaza Blvd	San Diego Bay	Low	5	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
37	Public Improvements: construction: replace sewer lateral to main	524 J Ave	San Diego Bay	Low	0	**		0	0	**
38	Public Improvements: Construction: retaining wall per SDRSD C-5 3 ft high & 8 inches	206 E. 5th Street	San Diego Bay	Low	17	**		0	0	**
39	Public Improvements: Construction: sewer connection 6" to dia per city standard	3427 D Avenue	San Diego Bay	Low	8	**		0	0	**
40	Public Improvements: Construction: sewer connection per SDRSD S-13	560 Highland Ave	San Diego Bay	Low	0	**		0	0	**
41	Public Improvements: Construction: Sewer lat (6") connection per SDRSD S-13	3110 E. 16th St	San Diego Bay	Low	4	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
42	Public Improvements: construction: sewer lat. Connection per plan, water lat. Connection per plan	2207 Highland Ave	San Diego Bay	Low	0	**		0	0	**
43	Public Improvements: Construction: Specs 08-04 Others: Road resurfacing	Various Locations	San Diego Bay	Low	13	**		0	0	**
44	Public Improvements: Construction: storm drain per approved plans	Marina Way	San Diego Bay	Low	17	**		0	0	**
45	Public Improvements: Construction: trench for gas lateral; Others: repair per nC drawing #1133B	2501 Cleveland Ave	San Diego Bay	Low	4	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
46	Public Improvements: Construction: Trenching for SDG&E Electric & Gas Connection, per city standard drawing	404 E 8ths St	San Diego Bay	Low	2	**		0	0	**
47	Public Improvements: curb & gutter r&r: SDRSD-G=2 miod; driveway r&r; construction/other: 6" dig sewer lateral connection - SDRSD S-13	2921 Leonard St	San Diego Bay	Low	0	**		0	0	**
48	Public Improvements: Driveway (R&R) per SDRSD G-14	104 N. Clairmont Ave	San Diego Bay	Low	4	**		0	0	**
49	Public Improvements: Driveway R&R per SDRSD G-14, Construction, contractor to R&R sidewalk behind driveway apron	926 E 12th St	San Diego Bay	Low	0	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
50	Public Improvements: driveway residential widening per G-14B, see attached photo	134 E 7th Street	San Diego Bay	Low	1	**		0	0	**
51	Public Improvements: Others: Painting of public building	City Parks	San Diego Bay	Low	0	**		0	0	**
52	Public Improvements: Re-install monitoring well	W. 8th St @ Roosevelt Ave	San Diego Bay	Low	0	**		0	0	**
53	Public Improvements: Sidewalk (New/R&R), Curb & Gutter, Curb (R&R with std Type C & G), Driveway (New/R&R) Residential, Driveway (New/R&R) Commercial, Pedestrian Ramp (New/R&R), Street pavement, Construction: Street medians, Others: Fountain plaza at 9th St	National City Blvd. 1st to 12th streets	San Diego Bay	Low	9	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
54	Public Improvements: sidewalk (r&r): one panel; curb & gutter: coring	141 South Clairmont Ave	San Diego Bay	Low	4	**		0	0	**
55	Public Improvements: Sidewalk (R&R): per G-7 L.F.X. 1-panel L.F. Construction: Trench for elec. Conducit backfill per G-34 mod.	310 National City Blvd (3rd Ave)	San Diego Bay	Low	0	**		0	0	**
56	Public Improvements: sidewalk per SDRSD G-7, driveway per SDRSD G-14 modified	1718 Prospect St	San Diego Bay	Low	0	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
57	Public Improvements: Sidewalk, new; Curb & Gutter, new; Driveway, new, residential; Street Pavement; Construction: grading; others: per approved plans. Public Improvements: Construction: sewer main & storm drain per approved plans	16th @ M Ave	San Diego Bay	Low	26	**		0	0	**
58	Public Improvements: sidewalk: 20 LF +/- G-7, curb & gutter G-2, G-2 mod, street pavement	302 W. 18th Street	San Diego Bay	Low	0	**		0	0	**
59	Public Improvements: Sidewalk: R/R SDRSD G-7 (whole panel); Others: trench for conduit	W. 20th & Cleveland Ave	San Diego Bay	Low	4	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
60	Public Improvements: sidewalk: SDRSD-G-7; curb & gutter: SDRSD G-2 mod; dirveway residential: SDRSD G-14A; construction: removed existing driveway; others: restore sidewalk, c&g, construct a new driveway	1808-1810 E 8th Street	San Diego Bay	Low	4	**		0	0	**
61	Public Improvements: Sidewalk; Curb (R&R with Std Type C & G); Driveway Residential; Pedestrian Ramp; Street pavement; Construction: per spec's #07-03	Various Locations	San Diego Bay	Low	9	**		0	0	**
62	Public Improvements: spec no. 08-08; pre-construction conference meeting 8/7/08	Highland Ave from city limit to 30th	San Diego Bay	Low	18	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
63	Public Improvements: Street pavement, construction: sewer trench repair per National City drawing SD 113	2900 block of East 8th St	San Diego Bay	Low	4	**		0	0	**
64	Russell Home	2221 E. 16th Street	San Diego Bay	Low	0	**		0	0	**
65	SFR	3425 Cagle Street	San Diego Bay	Low	31	**		0	0	**
66	Sylvia Zendejas	1738 L Avenue	San Diego Bay	Low	31	**		0	0	**

* The two high priority construction sites received inspections the last week of the dry season to ensure proper BMP implementation for the wet season. Therefore, biweekly wet season inspections began in the second week of the wet season, which resulted in 15 wet season inspections each.
** Low priority construction sites received at least one inspection from City building inspectors during the 2008/2009 reporting period. These inspections include a check for proper construction BMP implementation and maintenance.

APPENDIX A.3

Appendix A.3
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source
1	Butterfly Park	East 22nd Street and Palm Avenue	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
2	El Toyon Park	2005 East 4th Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
3	Graffiti Removal	Throughout City	High	San Diego Bay	Mobile Municipal Activities, Including Power Washing	
4	Kimball Park	12th Street and D Avenue	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
5	Las Palmas Park	1800 Newell Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
6	Municipal Separate Storm Sewer	19 miles of storm drains, storm drain boxes, and open channel sections throughout the City	High	San Diego Bay	MS4	
7	Municipal Swimming Pool	1800 East 22nd Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
8	National City Municipal Golf Course	1439 Sweetwater Road	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
9	Paradise Creek Educational Park	West 19th Street and Coolidge Avenue	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
10	Public Works East Yard	2100 Hoover Avenue	High	San Diego Bay	Public Works Facilities	
11	Public Works West Yard	2100 Hoover Avenue	High	San Diego Bay	Public Works Facilities	
12	Road and Streets	110 miles of roadways throughout the City	High	San Diego Bay	Road, Streets, and Highways	X
13	Special Events	Throughout City	High	San Diego Bay	Special Events	
14	Sweetwater Heights Park	Cagle Street and Stockman Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
15	Fire Station 31	24th Street and Euclid Avenue	Medium	San Diego Bay	Fire Stations	

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source
16	George H. Waters Nutrition Center	1514 D Avenue	Medium	San Diego Bay	Other Fixed Facilities	
17	Infrastructure Maintenance	Throughout City	Medium	San Diego Bay	Mobile Municipal Activities, Including Power Washing	
18	Landscape Maintenance	Throughout City	Medium	San Diego Bay	Mobile Municipal Activities, Including Power Washing	
19	National City Fire Department Headquarters - Station 34	333 East 16th Street	Medium	San Diego Bay	Fire Stations	
20	Police Station	1200 National City Boulevard	Medium	San Diego Bay	Other Fixed Facilities	
21	Camacho Recreational Gymnasium	1810 East 22nd Street	Low	San Diego Bay	Other Fixed Facilities	
22	Casa De Salud	1408 Harding Avenue	Low	San Diego Bay	Other Fixed Facilities	
23	Civic Center	1243 National City Boulevard	Low	San Diego Bay	Other Fixed Facilities	
24	El Toyon Recreational Center	2005 East 4th Street	Low	San Diego Bay	Other Fixed Facilities	
25	Kimball Recreation Center	148 East 12th Street	Low	San Diego Bay	Other Fixed Facilities	
26	Martin Luther King Community Center	140 East 12th Street	Low	San Diego Bay	Other Fixed Facilities	
27	National City Public Library	1401 National City Boulevard	Low	San Diego Bay	Other Fixed Facilities	
28	Senior Services Center	1221 D Avenue	Low	San Diego Bay	Other Fixed Facilities	

Notes
TTWQ – Threat to Water Quality
Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX A.4

Appendix A.4
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
1	A-1 ALLOYS RECYCLING CENTER	724 CIVIC CENTER DRIVE	High	5093	Recycling	908.31	9 37I020171	X
2	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	High	3731	Boat Repair	908.31	9 37I014819	X
3	CARROLL METAL WORKS, INC.	740 W 16TH STREET	High	3441	Manufacturing, Structural Steel	908.32	9 37I021165	
4	DIXIELINE LUMBER COMPANY	3450 HIGHLAND AVENUE	High	2439	Manufacturing, Wood/Furniture	909.12	9 37I015245	
5	EPSILON SYSTEMS SOLUTIONS INC	3039 HOOVER AVE	High	3731	Boat Repair	908.32	9 37I021665	
6	G V INDUSTRIES	1346 CLEVELAND AVENUE	High	3599	Manufacturing, Equipment	908.31		
7	HYPERBARIC TECHNOLOGIES INC.	3224 HOOVER AVENUE	High	3499	Manufacturing, Fabricated Metal	908.32		
8	J. C. ENVIRONMENTAL COMPANY	2504 TRANSPORTATION AVENUE C	High	4959	Waste Management	908.32		X
9	MELHORN CONSTRUCTION	410 W 30TH STREET B	High	1599	Other Contractor	908.32		
10	NATIONAL IRON WORKS	832 HOOVER AVENUE	High	3441	Manufacturing, Structural Steel	908.31		X
11	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	High	5093	Recycling	908.31	9 37I000615	X
12	PRESIDENTIAL LIMOUSINE LLC	1428 MCKINLEY AVE	High	4119	Ground Transportation	908.31		X
13	SAN DIEGO SEAFOOD	1842 MCKINLEY AVENUE	High	5146	Wholesale Food	908.31		
14	SUN DIEGO CHARTER CO.	2020 HOOVER AVENUE	High	4141	Ground Transportation	908.32	9 37I018361	
15	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	High	3449	Manufacturing, Fabricated Metal	908.31		X
16	VALENCIA STONE AND TILE	1124 COOLIDGE AVENUE	High	3281	Manufacturing, Stone/Glass	908.31	9 37I020515	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
17	A-AMERICAN SELF STORAGE	525 W 20TH STREET	Medium	4225	Wholesale/Storage/ Warehousing	908.32		
18	ACTIVE SIGN CO.	2827 HOOVER AVENUE J	Medium	3993	Printing	908.32		
19	ADVANCE PLASTICS	225 W 30TH STREET	Medium	3089	Manufacturing, Plastic/Rubber	909.12		
20	AMEE BAY LLC	2105 CLEVELAND AVE	Medium	3732	Boat Repair	908.31		X
21	AMSEC LLC	3201 & 3239 HOOVER AVENUE	Medium	4226	Wholesale/Storage/ Warehousing	908.32		
22	ANCON TRANSPORTATION	1800 HARRISON AVENUE	Medium	4226	Wholesale/Storage/ Warehousing	908.31		
23	APPAREL ENTERPRISES CO., INC.	2712 TRANSPORTATION AVENUE H	Medium	2389	Manufacturing, Fabric/Clothes	908.32		
24	ATOMIC INVESTMENTS	3200 HIGHLAND AVENUE	Medium	4225	Wholesale/Storage/ Warehousing	909.12		
25	AZTEC PRINTING COMPANY	710 E 3RD STREET	Medium	2759	Printing	908.31		
26	BECKY BEEZ BISQUE & CERAMICS	2424 HOOVER AVE T	Medium	3269	Manufacturing, Stone/Glass	908.32		
27	BEST WAY PRINTING	2602 TRANSPORTATION AVE E	Medium	2759	Printing	908.32		
28	BORDER STEEL INTERNATIONAL	1505 CLEVELAND AVE	Medium	3441	Manufacturing, Structural Steel	908.31		X
29	CALIFORNIA MOVING & STORAGE	1305 WILSON AVENUE	Medium	4214	Ground Transportation	908.31		X
30	CASA SANCHEZ FOODS	131 W 33RD ST 11	Medium	4225	Wholesale/Storage/ Warehousing	909.12		
31	CENTLI	221 W 33RD ST	Medium	2099	Manufacturing, Food/Drink	909.12		X
32	COASTAL DECKING, INC.	2050 WILSON AVENUE	Medium	4225	Wholesale/Storage/ Warehousing	908.32		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
33	COLLINS MARINE REPAIR, INC	1400 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31		
34	COSTCO WHOLESALE CORP.	1001 W 19TH STREET C & D	Medium	4783	Ground Transportation	908.31		X
35	COSTCO WHOLESALE GROUP	1001 W 19TH STREET B	Medium	3827	Manufacturing, Equipment	908.31		
36	COURRINGTON WOODWORKS	6535 TIDELAND AVENUE A-E	Medium	2541	Manufacturing, Wood/Furniture	908.31		
37	CP MANUFACTURING	1440 HARDING AVENUE B	Medium	3679	Manufacturing, Electronics	908.32		
38	CP MANUFACTURING	1300 WILSON AVENUE	Medium	3559	Manufacturing, Equipment	908.31	9 37I016543	
39	CREATIVE MOBILITY INC	320 CIVIC CENTER DRIVE	Medium	3799	Manufacturing, Equipment	908.31		
40	D F DESIGNS	1228 HOOVER AVENUE	Medium	2434	Manufacturing, Wood/Furniture	908.31		
41	DAN FAB	1110 HARDING AVENUE	Medium	3499	Manufacturing, Fabricated Metal	908.31		X
42	DIMA-TECH	205 W 35TH STREET H	Medium	3612	Manufacturing, Equipment	909.12		
43	DURRA INK	303 W 35TH STREET E	Medium	2752	Printing	909.12		
44	E Z SPRING & STAMPING	231 W 11TH ST	Medium	3499	Manufacturing, Fabricated Metal	908.31		X
45	E.L.A BEDSPREADS ETC.	3200 HIGHLAND AVENUE 408	Medium	2392	Manufacturing, Fabric/Clothes	909.12		
46	EHMCKE SHEET METAL CORP	840 W 19TH STREET	Medium	3444	Manufacturing, Fabricated Metal	908.31		X
47	EL GRANO DE ORO	730 E 7TH STREET	Medium	2099	Manufacturing, Food/Drink	908.31		X
48	EZ SPRING AND STAMPING	231 W 11TH STREET	Medium	3499	Manufacturing, Fabricated Metal	908.31		X
49	FABRICATION TECHNOLOGIES INDUSTRIES	2200 HAFFLEY AVENUE A	Medium	3441	Manufacturing, Structural Steel	908.31		X
50	FAMILY LOOPYA CORP	2525 SOUTHPORT WAY E	Medium	2038	Manufacturing, Food/Drink	908.32		X

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
51	FIESTA PACIFIC PRODUCTS, INC	2855 A AVENUE	Medium	2037	Manufacturing, Food/Drink	908.32		X
52	FTC	1433 ROOSEVELT AVENUE	Medium	3999	Manufacturing, Misc	908.31		
53	FUTURA FIBERGLASS	730 W 19TH STREET	Medium	3732	Boat Repair	908.31	9 37I015572	X
54	GLASSWOOD STUDIO	907 A AVENUE	Medium	3231	Manufacturing, Stone/Glass	908.32		
55	GOULET INDUSTRIES	340 W 26TH STREET J	Medium	3499	Manufacturing, Fabricated Metal	908.32		
56	H20 LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	Medium	2048	Manufacturing, Food/Drink	908.31		X
57	HANSON AGGREGATES NATIONAL CITY BATCH PLANT (2003 NC LLC)	601 W 12TH STREET	Medium	3273	Manufacturing, Concrete	908.31	9 37I020195	
58	HAWTHORNE RENT-IT SERVICE	2000 MCKINLEY AVENUE	Medium	4212	Ground Transportation	908.31	9 37I005920	X
59	IDENTITY PLUS	1120 HOOVER AVENUE	Medium	3069	Manufacturing, Plastic/Rubber	908.31		
60	INNOVATIVE CUTTING DESIGNS COR	1805 CLEVELAND AVE	Medium	3499	Manufacturing, Fabricated Metal	908.31		X
61	JB LITHO	2602 TRANSPORTATION AVENUE EAST	Medium	2752	Printing	908.32		
62	L B C MUNDIAL CORP	1420 E PLAZA BLVD. D-9	Medium	4731	Ground Transportation	908.32		
63	L3 COMMINCATIONS/PACORD SAN DIEGO	240 W 30TH STREET	Medium	3812	Manufacturing, Electronics	909.12	9 37I019840	
64	L3 COMMUNICATIONS PACORD SAN DIEGO	225 W 30TH STREET	Medium	3812	Manufacturing, Electronics	909.12	9 37I015864	
65	LA ESPIGA DE ORO BAKERY	320 HIGHLAND AVENUE	Medium	2051	Manufacturing, Food/Drink	908.31		X

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
66	LEADING CONCEPTS	1535 TIDELAND AVENUE D	Medium	3535	Manufacturing, Equipment	908.31		
67	M & M CONVERTER SHOP	301 W 28TH STREET X	Medium	3568	Manufacturing, Equipment	908.32		
68	M & N FURNITURE	125 W 22ND STREET	Medium	2519	Manufacturing, Wood/Furniture	908.32		
69	MARINE SERVICES AND EQUIPMENT	1804 CLEVELAND AVE. B	Medium	3732	Boat Repair	908.32		
70	MASTER MACHINE CORPORATION (VANTAGE ASSOCIATES)	900 CIVIC CENTER DRIVE	Medium	3499	Manufacturing, Fabricated Metal	908.31	9 37I019349	X
71	MILLER MARINE	1430 HOOVER AVENUE	Medium	3499	Manufacturing, Fabricated Metal	908.31	9 37I018090	X
72	MOTIVATIONAL SYSTEMS INC. (MSI)	2200 CLEVELAND AVENUE	Medium	2599	Manufacturing, Wood/Furniture	908.31		
73	NATALINA ENTERPRISES	1840 HARRISON AVENUE	Medium	4214	Ground Transportation	908.31		X
74	NATIONAL CITY DISCOUNT SELF STORAGE	131 W 33RD STREET	Medium	4225	Wholesale/Storage/ Warehousing	909.12		
75	NATIONAL CITY TRANSFER & STORAGE	2150 MCKINLEY AVENUE	Medium	4214	Ground Transportation	908.31		X
76	NEW LIFE BARRIER (HOA MY INC. DBA)	1616 HOOVER AVENUE	Medium	3449	Manufacturing, Fabricated Metal	908.31		X
77	NIEDERFRANK'S ICE CREAM INC.	726 A AVENUE	Medium	2024	Manufacturing, Food/Drink	908.31		X
78	ON DEMAND TRUCKING	241 NATIONAL CITY BLVD	Medium	4214	Ground Transportation	908.31		X
79	OOH LA LA	2504 TRANSPORTATION AVE D	Medium	2339	Manufacturing, Fabric/Clothes	908.32		
80	PACIFIC DEFENSE SYSTEMS (2)	1411 HARDING AVENUE	Medium	3731	Boat Repair	908.31	9 37I019619	X
81	POSTURE CARE MATTRESS MFG.	34 E 17TH STREET A	Medium	2515	Manufacturing, Wood/Furniture	908.32		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
82	PROTO MACHINING	105 W 35TH STREET L	Medium	3499	Manufacturing, Fabricated Metal	909.12		
83	PUPPET SAFARI	326 W 11TH STREET	Medium	3942	Manufacturing, Plastic/Rubber	908.31		
84	RAS FASHIONS	2605 HOOVER AVENUE B	Medium	2399	Manufacturing, Fabric/Clothes	908.32		
85	RESEARCH AUTOMOTIVE GROUP, INC	199 E 27TH ST	Medium	3462	Manufacturing, Fabricated Metal	908.32		
86	ROYCE CABINETS & GRANITE INC	2120 WILSON AVE	Medium	3281	Manufacturing, Stone/Glass	908.32		
87	RYAN HYDRAULIC SERVICES, INC	1817 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31		
88	SAN DIEGO AUTOMOTIVE MUSEUM	600 W 12TH ST	Medium	4226	Wholesale/Storage/ Warehousing	908.31		
89	SAN DIEGO MINI TOURS, CONTACTO	1726 WILSON AVE	Medium	4141	Ground Transportation	908.31		X
90	SAN DIEGO PRETZEL COMPANY	224 W 12TH STREET	Medium	2052	Manufacturing, Food/Drink	908.31		X
91	SEWING SAAVEDRA	2525 SOUTHPORT WAY R	Medium	2399	Manufacturing, Fabric/Clothes	908.32		
92	SHUTTER BUS LEASING	1726 WILSON AVENUE	Medium	4141	Ground Transportation	908.32		
93	SMARTRUNK SYSTEMS INC.	337 W 35TH STREET R	Medium	3669	Manufacturing, Electronics	909.12		
94	SOUTH BAY BOILER REPAIR, INC..	1224 ROOSEVELT AVENUE	Medium	3498	Manufacturing, Fabricated Metal	908.31	9 37I019728	X
95	SOUTHLAND CLUTCH EXCHANGE	101 E 18TH STREET	Medium	3599	Manufacturing, Equipment	908.32		
96	STARK MFG. CO.	206 W 35TH STREET C & D	Medium	2394	Manufacturing, Fabric/Clothes	909.12		
97	SURE RIDE INC	1523 WILSON AVE	Medium	4141	Ground Transportation	908.31		X

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
98	TITAN MARINE, INC	2236 MCKINLEY AVE	Medium	3732	Boat Repair	908.31		X
99	TOD TOOL INC	2601 HOOVER AVENUE K	Medium	3728	Manufacturing, Equipment	908.32		
100	UPHOLSTERY FABRIC OUTLET (UFO)	1918 ROOSEVELT AVENUE	Medium	2512	Manufacturing, Wood/Furniture	908.32		
101	US-MEX	2500 HOOVER AVENUE G	Medium	3679	Manufacturing, Electronics	908.32		
102	VALMER GRAPHICS INC.	1400 E PLAZA BLVD.	Medium	2759	Printing	908.32		
103	VANARI KNITTING MILLS INC.	340 W 26TH STREET L	Medium	2399	Manufacturing, Fabric/Clothes	908.32		
104	VANTAGE MASTER MACHINE CORPORATION	900 CIVIC CENTER DR	Medium	3499	Manufacturing, Fabricated Metal	908.31	9 37I019349	X
105	WAGGONEERS TRUCKING	1545 TIDELAND AVENUE	Medium	4212	Ground Transportation	908.31		X
106	WESTERN LIFT, INC/WESTERN HOIST, INC	1839 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31		
107	WESTERN LIFT, INC/WESTERN HOIST, INC.	2200 HAFFLEY AVENUE	Medium	3536	Manufacturing, Equipment	908.31	9 37I000699	
108	WINDOW CLASSICS	1921 CLEVELAND AVENUE	Medium	2391	Manufacturing, Fabric/Clothes	908.31		
109	WITHOUSKI CABINET	1535 TIDELAND AVENUE P	Medium	2434	Manufacturing, Wood/Furniture	908.31		
110	ACROPOLIS SPACE CENTER	3200 HIGHLAND AVENUE	Low	4225	Wholesale/Storage/ Warehousing	909.12		
111	AMSEC, LLC	131 W 33RD STREET	Low	4225	Wholesale/Storage/ Warehousing	909.12		
112	AQUA ZONE	131 W 33RD ST	Low	4225	Wholesale/Storage/ Warehousing	909.12		
113	ASSAF SAWAYA FASHION	301 W 28TH STREET P	Low	2311	Manufacturing, Fabric/Clothes	908.32		
114	BAGWIS SALES AND SERVICES	3100 E 8TH ST C	Low	4731	Ground Transportation	908.32		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
115	BEAR'S VM MACHINE	241 W 35TH STREET E	Low	5015	Recycling	909.12		
116	CONNECTION MEDICAL TRANSPORT	2504 TRANSPORTATION AVE E	Low	4789	Ground Transportation	908.32		
117	COPY POST PRINTING	100 W 35TH STREET B	Low	2759	Printing	909.12		
118	CORONADO ISLAND DESIGN & STAMPS	303 W 35TH STREET G	Low	3953	Manufacturing, Chemicals	909.12		
119	CREST OFFSET PRINTING CO,	921 COOLIDGE AVENUE	Low	2759	Printing	908.31		
120	DIVERSIFIED WOOD DESIGNS	124 E 30TH ST	Low	2434	Manufacturing, Wood/Furniture	909.12		
121	DRAPERY MANUFACTURER	2605 HOOVER AVENUE A	Low	2391	Manufacturing, Fabric/Clothes	908.32		
122	EZERA CLOTHING	220 W 25TH STREET E	Low	2331	Manufacturing, Fabric/Clothes	908.32		
123	FILIPINO PRESS (THE)	600 E 8TH ST	Low	2711	Printing	908.31		
124	GREEN EAGLE TRANSPORTS	2424 HOOVER AVE A	Low	4789	Ground Transportation	908.32		
125	H & B BAJA FILTERS, LLC	337 W 35TH STREET G	Low	3559	Manufacturing, Equipment	909.12		
126	HIGHWAY 54/NATIONAL SELF STORAGE LLC	132 W 33RD STREET	Low	4225	Wholesale/Storage/ Warehousing	909.12		
127	HWY 54/NATIONAL SELF STOR. LLC	152 W 33TH STREET	Low	4225	Wholesale/Storage/ Warehousing	909.12		
128	INDUSTRIAL & ARCHITECTURAL SIGN PRODUCTION	1535 TIDELAND AVENUE G	Low	3993	Printing	908.31		
129	JESSICA'S FASHIONS	2605 HOOVER AVENUE	Low	2335	Manufacturing, Fabric/Clothes	908.32		
130	K D R COMPANY PRINTING	301 W 28TH STREET D	Low	2752	Printing	908.32		
131	L B C MUNDIAL CORP	914 E 8TH STREET 201	Low	4731	Ground Transportation	908.32		
132	L-3 SERVICES, INC., UNIDYNE DIVISION	2702 SOUTHPORT WAY E-F	Low	4731	Ground Transportation	908.32		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
133	LUCERO'S DRAPERIES	3200 HIGHLAND AVENUE 408	Low	2391	Manufacturing, Fabric/Clothes	909.12		
134	MICROWAVE SOLUTIONS INC.	3200 HIGHLAND AVENUE	Low	3663	Manufacturing, Electronics	909.12		
135	MYLYN'S FASHION OF SAN DIEGO	901 COOLIDGE AVENUE	Low	2339	Manufacturing, Fabric/Clothes	908.31		
136	NATHAN'S STONE WORLD INC	1014 COOLIDGE AVE	Low	3281	Manufacturing, Stone/Glass	908.31		
137	NATIONAL CITY SELF STORAGE	430 W 30TH STREET	Low	4225	Wholesale/Storage/ Warehousing	908.32		
138	OLSEN-SIMMONS CABINETRY	426 E 30TH STREET	Low	2599	Manufacturing, Wood/Furniture	908.32		
139	OOH LA LA (WEST KID'S GEAR)	2602 TRANSPORTATION AVENUE G	Low	2339	Manufacturing, Fabric/Clothes	908.32		
140	PATRICK SHAW ENGRAVING	1533 TIDELAND AVENUE J	Low	2796	Printing	908.31		
141	PENTAGON CARGO	3200 HIGHLAND AVENUE	Low	4731	Ground Transportation	909.12		
142	PLANNED PARENTHOOD OF SD & RIV	337 W 35TH STREET S	Low	4225	Wholesale/Storage/ Warehousing	909.12		
143	POTTER ELECTRIC, INC. WAREHOUSE	105 W 35TH STREET A	Low	4225	Wholesale/Storage/ Warehousing	909.12		
144	PRECISION BINDERY & PRINTING	301 W 28TH STREET E	Low	2731	Printing	908.32		
145	PROCHEM SPECIALTY PRODUCTS, INC.	115 E 18TH STREET	Low	2841	Manufacturing, Chemicals	908.32		
146	R. HARRIS AND CO.	2605 HOOVER AVENUE E	Low	2599	Manufacturing, Wood/Furniture	908.32		
147	SMART CUTTING SERVICES	220 W 25TH STREET A	Low	2399	Manufacturing, Fabric/Clothes	908.32		
148	SMARTRUNK SYSTEMS INC	401 W 35TH ST B	Low	3669	Manufacturing, Electronics	909.12		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
149	SOUTH BAY MOTORSPORTS WAREHOUSE 1	337 W 35TH STREET H	Low	4225	Wholesale/Storage/ Warehousing	909.12		
150	SOUTH BAY MOTORSPORTS WAREHOUSE 2	105 W 35TH STREET B	Low	4225	Wholesale/Storage/ Warehousing	909.12		
151	STUDIO EUROPA INC	313 W 33TH STREET B	Low	2434	Manufacturing, Wood/Furniture	909.12		
152	SUNCARGO INC	1457 E PLAZA BLVD.	Low	4731	Ground Transportation	908.32		
153	THE MACHINE SHOP & FABRICATORS	1925 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.31		
154	TRANS ENERGY USA	1825 CLEVELAND AVE	Low	4226	Wholesale/Storage/ Warehousing	908.31		
155	UNIFREIGHT CARGO SYSTEMS INC	1610 E 8TH ST	Low	4731	Ground Transportation	908.32		
156	VIMONE'S GARMET CO.	220 W 25TH STREET G	Low	2329	Manufacturing, Fabric/Clothes	908.32		
157	WSI METAL SUPPLY	1839 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.31		
158	ZAGA CUSTOM	1545 TIDELANDS AVE D	Low	2389	Manufacturing, Fabric/Clothes	908.3		

Notes
TTWQ – Threat to Water Quality
SIC –Standard Industrial Classification Code
Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX A.5

Appendix A.5
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1	7 ELEVEN #17265	1601 E 18TH STREET	High	5411	Eating/Drinking Establishments	908.32		X
2	7 ELEVEN #18218C	807 E 8TH STREET	High	5411	Eating/Drinking Establishments	908.31		X
3	7 ELEVEN #18978D	3100 E PLAZA BLVD	High	5411	Eating/Drinking Establishments	908.32		X
4	A & D HAWAIIAN BBQ	2220 E PLAZA BLVD D	High	5812	Eating/Drinking Establishments	908.32		X
5	ALPIN TACO SHOP	1641 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32		X
6	ANAYA'S NATIONAL AUTOMOTIVE	2125 ROOSEVELT AVENUE	High	7538	Auto Repair	908.32		
7	ASHTON AWNINGS INC	1200 HARBOR DR	High	1799	Other Contractor	908.31		
8	ASIAN MARKET	3400 E 8TH ST 111-112	High	5411	Eating/Drinking Establishments	908.32		X
9	ASIAN NOODLES	1430 E PLAZA BLVD E-12	High	5812	Eating/Drinking Establishments	908.32		X
10	BAMBOO ROTISSERIE, INC	2220 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
11	BASKIN ROBBINS ICE CREAM	1493 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
12	BEN'S 1615	1615 SWEETWATER ROAD A	High	5812	Eating/Drinking Establishments	909.12		X
13	BLIMPIE SUBS	1200 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	908.32		X
14	BREAD DELUX BAKERY, ETC.	1420 E PLAZA BLVD D-1	High	5461	Eating/Drinking Establishments	908.32		X
15	C & W DIVING	1706 HOOVER AVENUE	High	1629	Other Contractor	908.32		
16	C&M MOTORS INC.	904 ROOSEVELT AVENUE	High	7538	Auto Repair	908.31		X
17	CAFÉ LA MAZE	1441 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32		X
18	CALIFORNIA PRODUCE CORPORATION	1736 E PLAZA BL	High	5431	Eating/Drinking Establishments	908.32		X
19	CARLS' JR.	1502 SWEETWATER ROAD	High	5812	Eating/Drinking Establishments	909.12		X
20	CARLS JR. #120	1280 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
21	CASA DE ORO RESTAURANT	1510 SWEETWATER ROAD A	High	5812	Eating/Drinking Establishments	909.12		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
22	CHINESE CANTON BAKERY	1132 E PLAZA BLVD 204	High	5461	Eating/Drinking Establishments	908.32		X
23	CHOWKING	2220 E PLAZA BLVD T	High	5812	Eating/Drinking Establishments	908.32		X
24	CHUCK E CHEESE'S	1143 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32		X
25	CIVIC CENTER AUTO BODY	1304 ROOSEVELT AVENUE	High	7532	Auto Paint/Body	908.31		X
26	CONCHING'S CAFÉ	3400 E 8TH STREET 115	High	5812	Eating/Drinking Establishments	908.32		X
27	COTIJAS MEXICAN FOOD	740 E 30TH STREET	High	5812	Eating/Drinking Establishments	909.12		X
28	COZINES GROCERY	402 CIVIC CENTER DRIVE	High	5411	Eating/Drinking Establishments	908.31		X
29	CROWN TRANSMISSION CENTER	1339 HOOVER AVENUE	High	7537	Auto Repair	908.31		X
30	DELI TROPICAL	2808 18TH STREET	High	5812	Eating/Drinking Establishments	908.32		X
31	DE-LUX ROOFING	1107 HARDING AVENUE	High	1761	Other Contractor	908.31		
32	DESSERTS PLUS, INC.	2220 E PLAZA BLVD Q	High	5461	Eating/Drinking Establishments	908.32		X
33	FAMILY HOUSE OF PANCAKES	1900 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
34	FAMILY LOOMPYA SEAFOOD MARKET	2720 E PLAZA BLVD A	High	5411	Eating/Drinking Establishments	908.32		X
35	FOODLAND IGA	303 HIGHLAND AVENUE	High	5411	Eating/Drinking Establishments	908.31		X
36	FOREST PLYWOOD SALES DBA BAKER HARDWOOD LUMBER CO.	3131 HOOVER AVENUE	High	5031	Building Materials	908.32		
37	FRANK MOTORS HYUNDAI	3150 NATIONAL CITY BLVD	High	5511	Vehicle Dealers	909.12		
38	GAPO RESTO AND KARAOKE	933 S HARBISON AVE	High	5812	Eating/Drinking Establishments	908.32		X
39	GINZA SUSHI	925 E PLAZA BLVD G	High	5812	Eating/Drinking Establishments	908.32		X
40	GOLDEN CHOPSTICKS RESTAURANT	1430 E PLAZA BLVD E-22-23	High	5812	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
41	GOLDILOCKS BAKERY & RESTAURANT	1420 E PLAZA BLVD D-7	High	5812	Eating/Drinking Establishments	908.32		X
42	GREENWALD'S AUTOBODY & FRAMEWORKS, INC	1814 ROOSEVELT AVENUE	High	7532	Auto Paint/Body	908.32		
43	HOPSING AUTO	1540 ROOSEVELT AVENUE	High	7538	Auto Repair	908.31		X
44	INTERNATIONAL HOUSE OF PANCAKES	1430 E PLAZA BLVD E-1	High	5812	Eating/Drinking Establishments	908.32		X
45	JACK IN THE BOX #80	3138 PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
46	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	High	7538	Auto Repair	908.31		X
47	JESTONI MANILA BISTRO	3421 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32		X
48	JOCSON'S AUTO BODY & PAINT INC.	1320 COOLIDGE AVENUE	High	7532	Auto Paint/Body	908.31		X
49	JOLLIBEE	1401 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
50	JOSE AUTO ELECTRIC	108 W 18TH STREET	High	7538	Auto Repair	908.32		
51	KARIHAN FILIPINO FOOD	2220 E PLAZA BLVD A-1	High	5812	Eating/Drinking Establishments	908.32		X
52	KARINA'S MEXICAN STYLE SEAFOOD	1705 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32		X
53	KEN'S VW	1408 MCKINLEY AVENUE	High	5013	Auto Supplies	908.31		
54	LAI THAI RESTAURANT	1430 E PLAZA BLVD E-10	High	5812	Eating/Drinking Establishments	908.32		X
55	LOLA HAPPY BAKERY	3142 E PLAZA BLVD L	High	5812	Eating/Drinking Establishments	908.32		X
56	LOLLICUP TEAZONE	1105 E PLAZA BLVD A	High	5812	Eating/Drinking Establishments	908.32		X
57	MAHARLIKA CAFÉ & GRILL	1819 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
58	MANILA SEAFOOD ORIENTAL MARKET	2220 E PLAZA BLVD K	High	5411	Eating/Drinking Establishments	908.32		X
59	MANILA SUNSET GRILLE	925 E PLAZA BLVD I	High	5812	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
60	MARATHON CONSTRUCTION COPP.	801 CIVIC CENTER DRIVE	High	1541	Other Contractor	908.31		
61	MARISCOS CHOY'S	1231 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	908.32		X
62	MCDONALDS #6773	2145 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
63	MEZA AUTO BODY	420 W 12TH STREET	High	7532	Auto Paint/Body	908.31		X
64	MIKE'S GIANT NY PIZZA #5	1635 SWEETWATER ROAD C-1	High	5812	Eating/Drinking Establishments	909.12		X
65	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	High	7538	Auto Repair	908.31		X
66	NATIONAL CITY CAR WASH	2550 E PLAZA BLVD	High	7542	Vehicle Washing	908.32		
67	NATIONAL CITY MARKET	240 E 18TH STREET	High	5411	Eating/Drinking Establishments	908.32		X
68	NEW YORK PIZZA PLAZA	3108 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
69	OHANA HAWAIIAN ISLAND BBQ	1430 E PLAZA BLVD E7A	High	5812	Eating/Drinking Establishments	908.32		X
70	PANDA PALACE	1105 E PLAZA BLVD D & E	High	5812	Eating/Drinking Establishments	908.32		X
71	PAPA JOHN'S PIZZA #1335	1130 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
72	PINOY RANCH	3403 E PLAZA BLVD D	High	5411	Eating/Drinking Establishments	908.32		X
73	POPEYES CHICKEN	2210 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
74	POWER TIRE #4	1615 E 8TH STREET	High	5531	Auto Supplies	908.32		
75	ROB NORTH FABRICATION	1605 HOOVER AVENUE	High	5571	Vehicle Dealers	908.31		
76	ROMERO'S ROOFING SERVICE, INC.	1827 CLEVELAND AVENUE	High	1761	Other Contractor	908.31		
77	ROYAL MANDARIN RESTAURANT	1132 E PLAZA BLVD 205	High	5812	Eating/Drinking Establishments	908.32		X
78	SAN DIEGO AUTO DETAIL	110 W 11TH STREET	High	7549	Vehicle Washing	908.31		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
79	SAN DIEGO CRANE & HOIST	1606 COOLIDGE AVENUE	High	7699	Equipment Repair	908.31		X
80	SAN DIEGO DODGE	2829 NATIONAL CITY BLVD	High	5511	Vehicle Dealers	908.32		
81	SAVE-A-LOT	1035 S HARBINSON AVENUE	High	5411	Eating/Drinking Establishments	908.32		X
82	SEAFOOD CITY SUPERMARKET	1420 E PLAZA BLVD C-E	High	5411	Eating/Drinking Establishments	908.32		X
83	SENOR PANCHO FRESH MEXICAN GRILL	2030 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32		X
84	SIZZLER FAMILY STEAK HOUSE #45	1325 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
85	SMART AND FINAL	1220 E PLAZA BLVD	High	5411	Eating/Drinking Establishments	908.32		X
86	SO CAL TRUCK STOP	2250 TIDELANDS AVENUE	High	5541	Fueling	908.3		
87	SOUTH BAY MECHANICAL SERVICES	2137 WILSON AVENUE	High	1711	Other Contractor	908.32		
88	SPECIALTY TIRES AND BRAKES	1 W 35TH ST D	High	7534	Auto Repair	909.12		
89	STAR EXPRESS	3124 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
90	STEVE'S WEST COAST AUTOMOTIVE	1732 COOLIDGE AVENUE	High	7538	Auto Repair	908.32		
91	SUBMARINA	1210 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
92	TACO SALSA TACO SHOP	925 E PLAZA BLVD B	High	5812	Eating/Drinking Establishments	908.32		X
93	TINO'S AUTO TECH	1 W 35TH STREET D	High	7538	Auto Repair	909.12		
94	TITA'S KITCHENETTE	2720 E PLAZA BLVD E & F	High	5812	Eating/Drinking Establishments	908.32		X
95	TORTAS OASIS	1210 E PLAZA BLVD 404	High	5812	Eating/Drinking Establishments	908.32		X
96	TROLLEY SIDE DELI AND MINI MART	530 W 21ST ST	High	5812	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
97	VALERIOS FAMILY BAKE SHOP	2720 E PLAZA BLVD H	High	5461	Eating/Drinking Establishments	908.32		X
98	VALUE CARS	13 NATIONAL CITY BLVD	High	5521	Vehicle Dealers	909.12		
99	VIKING'S AUTO REPAIR	1503 ROOSEVELT AVENUE A	High	7532	Auto Paint/Body	908.31		X
100	VILLA MANILA	500 E 8TH STREET	High	5812	Eating/Drinking Establishments	908.32		X
101	WESTSIDE BUILDING MATERIALS	500 W 16TH STREET	High	5211	Building Materials	908.32		
102	WINCHELL'S DONUT HOUSE #9484	2447 E PLAZA BLVD	High	5461	Eating/Drinking Establishments	908.32		X
103	WINGS N THINGS	1499 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
104	YOBERRY YOGURT	1430 E PLAZA BLVD E8	High	5812	Eating/Drinking Establishments	908.32		X
105	YOGURLICIOUS	2240 E PLAZA BLVD F	High	5812	Eating/Drinking Establishments	908.32		X
106	YUM YUM DONUT FRANCHISE #502	3122 E PLAZA BLVD	High	5461	Eating/Drinking Establishments	908.32		X
107	ZARLITOS FAMILY RESTAURANT	505 E 8TH STREET	High	5812	Eating/Drinking Establishments	908.31		X
108	100% NATURALL	20 N EUCLID AVE D	Medium	5812	Eating/Drinking Establishments	908.31		X
109	3 D AUTO DETAIL	5 W 18TH ST	Medium	7549	Vehicle Washing	908.32		
110	7 ELEVEN #13564 F	15 N EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X
111	7 ELEVEN #13583 D	2425 SWEETWATER ROAD	Medium	5411	Eating/Drinking Establishments	909.12		X
112	7 ELEVEN #20785-B	2400 HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	909.12		X
113	99 CENT ONLY STORES	1320 HIGHLAND AVENUE	Medium	5999	Eating/Drinking Establishments	908.32		X
114	ABC SUPPLY COMPANY	135 W 30TH STREET	Medium	5033	Building Materials	908.32		
115	ADEPT PROCESS SERVICES, LLC	1804 CLEVELAND AVE B	Medium	7699	Equipment Repair	908.31		X
116	ALL PRO AUTO REPAIR	517 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
117	ALLIED PIPING & WELDING, INC.	1120 HOOVER AVENUE	Medium	7692	Equipment Repair	908.31		X
118	AM PM MINIMARKET #6523	133 W 8TH ST	Medium	5541	Fueling	908.31		X
119	ANTHONY'S PIZZA	1526 E 18TH ST	Medium	5812	Eating/Drinking Establishments	908.32		X
120	APPLEBEE'S NEIGHBORHOOD	3030 PLAZA BONITA RD	Medium	5812	Eating/Drinking Establishments	909.12		X
121	ARCO AM PM #6523	133 W 8TH STREET	Medium	5541	Fueling	908.31		X
122	ARCO AM/PM #9566	1606 E PLAZA BLVD.	Medium	5541	Fueling	908.32		
123	ARCO AM/PM #9570	1139 HARBINSON AVENUE	Medium	5541	Fueling	908.32		
124	ARCTIC SUPPLY	213 CIVIC CENTER DRIVE	Medium	5078	Wholesale/Storage/Warehousing	908.31		
125	ARIDO MARKET	1643 WILSON AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X
126	ARROYO BROTHERS	128 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31		X
127	AUTO ACCESS	1609 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.32		
128	AUTO TECK	1023 COOLIDGE AVENUE	Medium	7532	Auto Paint/Body	908.31		X
129	AUTO ZONE #5659	2500 E PLAZA BLVD.	Medium	5531	Auto Supplies	908.32		
130	AVIS RENT A CAR	1536 SWEETWATER ROAD B	Medium	7514	Vehicle/Equipment Rental	909.12		
131	BAE SYSTEMS LAND & ARMAMENTS	155 W 35TH STREET	Medium	7699	Equipment Repair	909.12		
132	BAJA'S FISH TACOS	505 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.31		X
133	BALL AUTOMOTIVE GROUP	2426 A AVENUE	Medium	7532	Auto Paint/Body	908.32		
134	BALL AUTOMOTIVE GROUP	2729 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.32		
135	BAXTER AUTOMOTIVE & MACHINE	1400 HOOVER AVENUE	Medium	7539	Auto Repair	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
136	BERGENSONS PROPERTY SERVICES	301 W 28TH STREET F	Medium	7349	Power Washing	908.32		
137	BIG B MARKET & DELI	1540 COOLIDGE AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X
138	BIG BEN MARKET	22 E 8TH STREET	Medium	5411	Eating/Drinking Establishments	908.31		X
139	BIRRIAS CHIVOS & CHEVES	2401 HIGHLAND AVE 104	Medium	5812	Eating/Drinking Establishments	909.12		X
140	BJ MOTOR & BODY SHOP	1338 ROOSEVELT AVENUE	Medium	7538	Auto Repair	908.31		X
141	BLUELINX DISTRIBUTION	901 BAY MARINA DRIVE	Medium	5031	Building Materials	908.31		
142	BOAT SELLERS	1730 CLEVELAND AVENUE	Medium	5551	Vehicle Dealers	908.31		
143	BOB'S N. CAR & SMOG	49 E 16TH ST B1	Medium	7539	Auto Repair	908.32		
144	BRAKE DEPOT	910 HIGHLAND AVENUE	Medium	7539	Auto Repair	908.32		
145	BURGER KING	815 HIGHLAND AVENUE 780	Medium	5812	Eating/Drinking Establishments	908.32		X
146	BURRITOS EXPRESS	1539 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
147	BUSTER'S BEACH HOUSE AND LONGBOARD BAR	740 BAY MARINA DRIVE	Medium	5812	Eating/Drinking Establishments	908.32		X
148	CA WELDING IRON WORKS	1630 HARDING AVENUE	Medium	7692	Equipment Repair	908.31		X
149	CAFE ESTELAS	1524 MCKINLEY AV	Medium	5813	Eating/Drinking Establishments	908.31		X
150	CAL AM MANUFACTURING	1215 WILSON AVE	Medium	5612	Wholesale/Storage/Warehousing	908.31		
151	CALIBER COLLISION CENTERS	2013 HAFFLEY AVE	Medium	7532	Auto Paint/Body	908.31		X
152	CALIFORNIA AUTO DETAILING	1509 1/2 NATIONAL CITY BLVD.	Medium	7542	Vehicle Washing	908.32		
153	CALIFORNIA ICE CREAM	1021 COOLIDGE AVENUE	Medium	5963	Eating/Drinking Establishments	908.31		X
154	CALIFORNIA SALES	205 W 35TH ST B	Medium	1799	Other Contractor	909.12		
155	CALIFORNIA'S TACO SHOP	51 N HIGHLAND AVENUE H	Medium	5812	Eating/Drinking Establishments	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
156	CAR HEALTH PLAN INC.	1531 NATIONAL CITY BLVD	Medium	7532	Auto Paint/Body	908.32		
157	CARNIVAL SUPERMARKET	1750 E 8TH STREET	Medium	5411	Eating/Drinking Establishments	908.32		X
158	CARQUEST AUTOPARTS	1300 HIGHLAND AVENUE	Medium	5531	Auto Supplies	908.32		
159	CARRERA'S AUTO DETAIL	2130 ROOSEVELT AVENUE	Medium	7542	Vehicle Washing	908.32		
160	CASA DEL TACO	1635 SWEETWATER ROAD A	Medium	5812	Eating/Drinking Establishments	909.12		X
161	CESAR'S TACO SHOP	3123 D AVENUE	Medium	5812	Eating/Drinking Establishments	909.12		X
162	CHANG DONG SUPERMARKET ORIENTAL SEAFOOD	600 E 8TH STREET 7 & 8	Medium	5411	Eating/Drinking Establishments	908.32		X
163	CHIEF AUTO SALES	5 W 18TH STREET	Medium	5521	Vehicle Dealers	908.32		
164	CHILES MEXICAN GRILL	2503 SWEETWATER RD	Medium	5812	Eating/Drinking Establishments	909.12		X
165	CHINA SUPER BUFFET	3007 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		X
166	CHINESE CITY RESTAURANT #2	1025 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
167	CHING'S FAMOUS HOPIA	1722 E 8TH STREET	Medium	5461	Eating/Drinking Establishments	908.32		X
168	CHRISTIAN DURABLE MEDICAL EQUI	3400 E 8TH STREET	Medium	5047	Wholesale/Storage/Warehousing	908.32		
169	CHURCH'S CHICKEN	3040 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
170	CLUB 13	640 CIVIC CENTER DR	Medium	5813	Eating/Drinking Establishments	908.31		X
171	COMMERCIAL FLEET SERVICE	1521 COOLIDGE AVENUE	Medium	7539	Auto Repair	908.31		X
172	COPA-CABANA FRUTERIA	831 E 30TH ST C	Medium	5812	Eating/Drinking Establishments	909.12		X
173	CRASH AND FIX AUTOBODY	202 & 210 W 11TH STREET	Medium	7532	Auto Paint/Body	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
174	CUADROS MOTORS	1800 NATIONAL CITY BLVD S	Medium	5012	Vehicle Dealers	908.32		
175	DAKOTA INN	831 E 8TH ST	Medium	5813	Eating/Drinking Establishments	908.31		X
176	DE LA CRUZ AUTO REPAIR	36 W CIVIC CENTER DRIVE	Medium	7538	Auto Repair	908.31		X
177	DE LA TORRE	2137 WILSON AVENUE	Medium	782	Landscaping	908.32		
178	DECKER'S SUBS & TORTAS	3030 PLAZA BONITA RD 2185	Medium	5812	Eating/Drinking Establishments	909.12		X
179	DELA CRUZ AUTO REPAIR INC	36 CIVIC CENTER DR	Medium	7538	Auto Repair	908.31		X
180	DENNIS'S BAKERY	832 E 18TH STREET	Medium	5461	Eating/Drinking Establishments	908.31		X
181	DENNY'S RESTAURANT	424 MILE OF CARS WAY	Medium	5812	Eating/Drinking Establishments	908.32		X
182	DENNY'S RESTAURANT	1904 SWEETWATER ROAD 1473	Medium	5812	Eating/Drinking Establishments	909.12		X
183	DIAMANTE MOTORS	10 OSBORN ST	Medium	5521	Vehicle Dealers	908.31		
184	DIAMANTE MOTORS INC	10 E 1ST ST	Medium	5012	Vehicle Dealers	908.31		
185	DIESEL POWER TRADE CORP	1720 CLEVELAND AVENUE	Medium	5084	Wholesale/Storage/Warehousing	908.31		
186	DISCOUNT TIRE CO. (SO. CA.)	1309 E PLAZA BLVD.	Medium	7534	Auto Repair	908.32		
187	DOMINO'S PIZZA	702 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
188	DON JOHN MARKET	431 N HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X
189	DONG, CHAN, ORIENTAL MARKET	600 E 8TH ST	Medium	5411	Eating/Drinking Establishments	908.31		X
190	EAT & GO TROLLEY DELI	530 W 21ST STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
191	EL AGUILA MEXICAN FOOD	640 HIGHLAND AVE A	Medium	5812	Eating/Drinking Establishments	908.31		X
192	EL JAUN CAFE	2316 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
193	EL MANGO MANILA	2303 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		X
194	EL NUEVO MILLENIO MEXICAN FOOD	2323 E DIVISION STREET	Medium	5812	Eating/Drinking Establishments	908.31		X
195	EL PARAISO	2708 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		X
196	EL POLLO LOCO #3430	1710 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
197	EL SUPER MARKET	1811 L AVE	Medium	5411	Eating/Drinking Establishments	909.12		X
198	ETHNIC DELI & CAFE	404 W MILE OF CARS WAY F	Medium	5812	Eating/Drinking Establishments	908.32		X
199	EXLINE, DENNIS L	243 E 16TH ST	Medium	1542	Other Contractor	908.32		
200	EXTREME AUDIO	1509.5 NATIONAL CITY BLVD	Medium	5531	Auto Supplies	908.32		
201	FAIRBANKS MORSE ENGINE	1545 TIDELAND AVENUE J	Medium	7699	Equipment Repair	908.31		X
202	FARMERS DISCOUNT MARKET	1535 E 18TH STREET	Medium	5411	Eating/Drinking Establishments	908.32		X
203	FASTENAL COMPANY	2807 HOOVER AVE G	Medium	5039	Building Materials	908.32		
204	FASTSIGNS	1240 E PLAZA BLVD	Medium	7389	Pool/Fountain Cleaning	908.32		
205	FEDERAL EQUIPMENT WEST	2101 WILSON AVENUE	Medium	5084	Wholesale/Storage/Warehousing	908.32		
206	FIESTA PET SHOP	1145 HIGHLAND AVENUE A	Medium	5999	Animal Facilities	908.32		X
207	FIRESTONE	2531 E PLAZA BLVD.	Medium	5531	Auto Supplies	908.32		
208	FIVE STARS DIESEL SERVICE	1211 MCKINLEY AVE.	Medium	4226	Wholesale/Storage/Warehousing	908.32		
209	FREDDY AUTO REPAIR	923 1/2 COOLIDGE AVENUE	Medium	7538	Auto Repair	908.31		X
210	FRESCA DELI	1021 HIGHLAND AVE P/B	Medium	5812	Eating/Drinking Establishments	908.32		X
211	GALOREN SOUTHWESTERN INC	3200 HIGHLAND AVE 303	Medium	5046	Wholesale/Storage/Warehousing	909.12		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
212	GAMA PRODUCE	1605 E 4TH ST	Medium	5411	Eating/Drinking Establishments	908.31		X
213	GEMMAE BAKESHOP & CAFE	450 E 8TH STREET A & B	Medium	5461	Eating/Drinking Establishments	908.32		X
214	GENGIS KHAN #1	3030 PLAZA BONITA ROAD 2128	Medium	5812	Eating/Drinking Establishments	909.12		X
215	GEORGE'S MARKET	2540 E 18TH STREET	Medium	5411	Eating/Drinking Establishments	908.32		X
216	GEORGE'S WONDERFUL WORLD OF CAKES	1519 HIGHLAND AVENUE	Medium	5461	Eating/Drinking Establishments	908.32		X
217	GIANT NEW YORK PIZZA	8 N EUCLID AVENUE 8-B	Medium	5812	Eating/Drinking Establishments	908.31		X
218	GOLDEN DONUTS	36 N EUCLID AVENUE E	Medium	5812	Eating/Drinking Establishments	908.31		X
219	GORMSEN APPLIANCE	718 E 18TH STREET	Medium	7699	Equipment Repair	908.31		X
220	GRAND MOTORS	423 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.31		
221	GREAT STEAK & POTATOE	3030 PLAZA BONITA RD 2154	Medium	5812	Eating/Drinking Establishments	909.12		X
222	GUADALAJARA'S BAKERY	2401 HIGHLAND AVE	Medium	5461	Eating/Drinking Establishments	909.12		X
223	GULF AUTO SALES	135 CIVIC CENTER DR	Medium	5012	Vehicle Dealers	908.31		
224	HANAOKA RESTAURANT	1528 SWEETWATER ROAD C	Medium	5812	Eating/Drinking Establishments	909.12		X
225	HAWAIIAN EXPRESS BBQ	3030 PLAZA BONITA RD 2122	Medium	5812	Eating/Drinking Establishments	909.12		X
226	HERTZ LOCAL EDITION	1814 ROOSEVELT AVENUE	Medium	7514	Vehicle/Equipment Rental	908.32		
227	HERTZ LOCAL EDITION	2001 SWEETWATER ROAD	Medium	7514	Vehicle/Equipment Rental	909.12		
228	HICKORY FARMS INC	3030 PLAZA BONITA ROAD	Medium	5963	Eating/Drinking Establishments	909.12		X
229	HOMETOWN BUFFET #714	1135 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
230	HONEY BANANA	443 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
231	HONEY'S FRUIT & SMOOTHIES BAR	835 PALM AVE.	Medium	5812	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
232	HORN'S WELDING	1840 WILSON AVENUE A	Medium	7692	Equipment Repair	908.31		X
233	HUB CONSTRUCTION SUPPLY & EQUIPMENT	402 W 35TH STREET A	Medium	5082	Wholesale/Storage/Warehousing	909.12		
234	ICEBERG ENTERPRISES, INC.	1410 CLEVELAND AVENUE	Medium	7359	Vehicle/Equipment Rental	908.31		X
235	IDEAL SMOG	10 OSBORN ST	Medium	7549	Auto Repair	908.31		X
236	IMELDA'S BAR	2325 HIGHLAND AVENUE	Medium	5813	Eating/Drinking Establishments	909.12		X
237	IMPERIAL PALACE	1630 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
238	IN N OUT BURGER	500 MILE OF CARS WAY	Medium	5812	Eating/Drinking Establishments	908.32		X
239	J J & K BUILDERS INC	2050 WILSON AVE C	Medium	1542	Other Contractor	908.32		
240	JACK IN THE BOX	700 ROOSEVELT AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
241	JACK IN THE BOX #3	1745 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
242	JESUS & CECILIA LOYA CAFÉ DBA PEPITA'S CAFÉ	524 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.31		X
243	JT MOTORSPORTS	1531 NATIONAL CITY BLVD	Medium	5531	Auto Supplies	908.32		
244	K SURPLUS SALES, INC.	1403 CLEVELAND AVENUE	Medium	5072	Wholesale/Storage/Warehousing	908.31		
245	KARZ PLUS RV	1605 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.32		
246	KAY AUTOMOTIVE	2121 HOOVER AVE	Medium	5531	Auto Supplies	908.32		
247	KENTUCKY FRIED CHICKEN	840 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
248	KENTUCKY FRIED CHICKEN	3005 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12		X
249	KIM KOREAN BARBEQUE	1141 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
250	KOTIJA TACO SHOP	321 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
251	L & L HAWAIIAN BARBEQUE	1860 SWEETWATER ROAD B	Medium	5812	Eating/Drinking Establishments	909.12		X
252	LA MORENA MARKET	1810 PALM AVE	Medium	5411	Eating/Drinking Establishments	908.32		X
253	LA RUE PLUMBING	1515 WILSON AVENUE	Medium	1711	Other Contractor	908.31		
254	LA SIERRA CAFFE	306 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
255	LAS UVAS DELI	632 NATIONAL CITY BLVD.	Medium	5812	Eating/Drinking Establishments	908.31		X
256	LEFORT'S CONSTRUCCION & LANDSC	34 E 17TH STREET B	Medium	7699	Equipment Repair	908.32		
257	LISA'S DESSERTS	2720 E PLAZA BLVD Q	Medium	5461	Eating/Drinking Establishments	908.32		X
258	LITTLE DRAGON CHINESE	2424 HOOVER AVENUE K	Medium	5812	Eating/Drinking Establishments	908.32		X
259	LIVELY BRAKE SERVICE	115 E 17TH STREET B	Medium	7539	Auto Repair	908.32		
260	LIVING ROOM CAFE	880 NATIONAL CITY BLVD	Medium	5812	Eating/Drinking Establishments	908.31		X
261	LOS BURRITOS MEXICAN GRILL	3460 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		X
262	LOS PANCHOS TACO SHOP	2441 NATIONAL CITY BLVD.	Medium	5812	Eating/Drinking Establishments	908.32		X
263	LOS TACOS SHOP	2241 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		X
264	LOS TURBOS TRANSMISSION	1411 COOLIDGE AVE	Medium	7537	Auto Repair	908.31		X
265	LUEMMA'S KITCHEN SOUTHERN STYLE	36 N EUCLID AVE F	Medium	5812	Eating/Drinking Establishments	908.31		X
266	LUPITAS MEAT MARKET	2239 HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	909.12		X
267	LUTONG BAHAY CAFE & BAKERY	2344 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
268	M & T AUTO	1731 WILSON AVENUE	Medium	7538	Auto Repair	908.31		X
269	M.A. STEVENS CONSTRUCTION, INC	125 E 17TH ST	Medium	1599	Other Contractor	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
270	MAC ARTHUR CO	2101 HAFFLEY AVE B	Medium	5033	Building Materials	908.31		
271	MACIAS ENTERPRISE	3812 CHERRY BLOSSOM ST	Medium	7349	Power Washing	908.32		
272	MADLAIN INC DBA WRIGLEYS SUPER	34 N EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X
273	MAMA FINA'S PIZZA	916 E 8TH STREET 4	Medium	5812	Eating/Drinking Establishments	908.32		X
274	MARISCOS SINALOA #2	2435 NATIONAL CITY BLVD.	Medium	5812	Eating/Drinking Establishments	908.32		X
275	MARK MOTORS	905 HOOVER AVENUE	Medium	5521	Vehicle Dealers	908.31		
276	MARLO'S AUTO SPECIALTIES/FRAME	223 CIVIC CENTER DR	Medium	7532	Auto Paint/Body	908.31		X
277	MARY J'S CAFE	1930 CLEVELAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
278	MC CUNE II	325 MILE OF CARS WAY	Medium	5511	Vehicle Dealers	908.32		
279	MC CUNE MOTORS	3000 NATIONAL CITY BLVD.	Medium	7532	Auto Paint/Body	908.32		
280	MC DINI'S BAJA	105 E 8TH ST	Medium	5813	Eating/Drinking Establishments	908.31		X
281	MCDINI'S BAJA	105 E 8TH STREET	Medium	5813	Eating/Drinking Establishments	908.31		X
282	MCDONALDS	1630 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
283	MCDONALD'S	3400 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12		X
284	MCDONALDS #20311	3030 PLAZA BONITA ROAD 2168	Medium	5812	Eating/Drinking Establishments	909.12		X
285	MENUDERIA DON VICENTE	2637 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		X
286	MI COCINA RESTAURANT	543 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.31		X
287	MI TIERRA SUPER TACO	1835 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
288	MICKEY'S COMPLETE AUTO REPAIR	415 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31		X
289	MIYAKO RESTAURANT	2424 HOOVER AVE F	Medium	5812	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
290	MOTHER'S NUTRITIONAL CENTER	924 HIGHLAND AVE	Medium	5411	Eating/Drinking Establishments	908.32		X
291	MOTOR WORKS	1625 COOLIDGE AVENUE	Medium	7538	Auto Repair	908.31		X
292	NADEL HOUSE OF FILIPINO CAKES	914 E 8TH STREET 202	Medium	5461	Eating/Drinking Establishments	908.32		X
293	NANI MOKU HAWAIIAN BBQ	1635 SWEETWATER RD H	Medium	5812	Eating/Drinking Establishments	909.12		X
294	NATIONAL CITY AUTO BODY	24 E 4TH STREET	Medium	7532	Auto Paint/Body	908.31		X
295	NATIONAL CITY AUTO CENTER INC	1010 NATIONAL CITY BLVD	Medium	5012	Vehicle Dealers	908.31		
296	NATIONAL CITY AUTO TRIM INC	15 E 5TH STREET	Medium	7532	Auto Paint/Body	908.31		X
297	NATIONAL CITY GOLF COURSE	1439 SWEETWATER ROAD	Medium	7992	Golf Courses/Parks	909.12		
298	NATIONAL CITY GROCERY OUTLET	3446 HIGHLAND AVENUE 6	Medium	5411	Eating/Drinking Establishments	909.12		X
299	NATIONAL CITY MOTORCYCLE INC	1504 NATIONAL CITY BLVD. A	Medium	7699	Equipment Repair	908.32		
300	NATIONAL CITY NUTRITION STORE	925 E PLAZA BLVD	Medium	5411	Eating/Drinking Establishments	908.32		X
301	NATIONAL CITY SMOG BRAKE & LIGHTS	705 E 8TH ST	Medium	7539	Auto Repair	908.31		X
302	NATIONAL CITY SMOG, BRAKE & LIGHTS	705 1/2 E 8TH STREET A	Medium	7539	Auto Repair	908.31		X
303	NATIONAL MECHANICAL SERVICES	1640 HOOVER AVENUE B	Medium	1731	Other Contractor	908.31		
304	NATIONAL MOTOR WORKS	1440 HARDING AVE A	Medium	7538	Auto Repair	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
305	NC MOTOR SPORTS AUTO REPAIR	E 18TH ST	Medium	7539	Auto Repair	908.32		
306	NELGEN DISTRIBUTORS	204 S KENTON AVENUE	Medium	5551	Vehicle Dealers	908.31		
307	NEWTOWN EXPRESS CHINESE FOOD	4 N EUCLID AVE B	Medium	5812	Eating/Drinking Establishments	908.31		X
308	NILS HALL DBS THUNDERBIRD	705 E 8TH STREET	Medium	7553	Auto Repair	908.31		X
309	O.K. WHOLESALE	1605 NATIONAL CITY BLVD A	Medium	5012	Vehicle Dealers	908.32		
310	ORIENTAL CAFE	39 E 7TH STREET	Medium	5812	Eating/Drinking Establishments	908.31		X
311	OUCHI'S POWER EQUIPMENT	225 W 9TH STREET	Medium	7699	Equipment Repair	908.31		X
312	OUTBACK STEAK HOUSE	2980 PLAZA BONITA ROAD	Medium	5812	Eating/Drinking Establishments	909.12		X
313	PACIFIC AUTO REPAIRS	315 W 11TH STREET	Medium	7538	Auto Repair	908.31		X
314	PACIFIC COAST DIESEL	100 W 35TH STREET	Medium	5531	Auto Supplies	909.12		
315	PAPA GALLO-CAFE	1930 CLEVELAND AVE	Medium	5812	Eating/Drinking Establishments	908.31		X
316	PARADISE MOTORCARS	110 W PLAZA BLVD	Medium	5521	Vehicle Dealers	908.31		
317	PARADISE MOTORCARX	200 W 8TH ST	Medium	5012	Vehicle Dealers	908.31		
318	PERRY FORD (TRUCK)	1610 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.32		
319	PETER PIPER PIZZA STORE #212	3007 HIGHLAND AVENUE 11	Medium	5812	Eating/Drinking Establishments	909.12		X
320	PHAT CITY AUTO SALES	1741 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.32		
321	PHO EXPRESS	3030 PLAZA BONITA RD 2132	Medium	5812	Eating/Drinking Establishments	909.12		X
322	PICKLE BARREL DELI RESTAURANT	340 W 26TH STREET E	Medium	5812	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
323	PINOY FIESTA	550 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
324	PIZZA HUT #315044	2437 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		X
325	PIZZA HUT EXPRESS	3060 PLAZA BONITA RD.	Medium	5812	Eating/Drinking Establishments	909.12		X
326	PIZZA MIA	916 E 8TH ST 4	Medium	5812	Eating/Drinking Establishments	908.32		X
327	PLAY BALL	2305 HIGHLAND AVE	Medium	5813	Eating/Drinking Establishments	909.12		X
328	PLAZA BOULEVARD PET CLINIC	2415 E PLAZA BLVD.	Medium	742	Animal Facilities	908.32		X
329	PLAZA DONUTS	1548 HIGHLAND AVENUE	Medium	5461	Eating/Drinking Establishments	908.32		X
330	POINT POINT JOINT (TURO-TURO)	916 E 8TH STREET 1 & 2	Medium	5812	Eating/Drinking Establishments	908.32		X
331	POLLO AMIGO #2	1604 E 18TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
332	POPEYES FAMOUS FRIED CHICKEN	2333 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12		X
333	PRECISION BIKE PARTS	421 NATIONAL CITY BLVD	Medium	5571	Vehicle Dealers	908.31		
334	PRIME MOTOR CENTER	1619 NATIONAL CITY BLVD	Medium	5012	Vehicle Dealers	908.32		
335	PRO SMOG TEST ONLY	34 E 17TH ST C	Medium	7538	Auto Repair	908.32		
336	PRO STREET LIGHTING INC	2145 WILSON AVENUE	Medium	5531	Auto Supplies	908.32		
337	QUALITY AUTO SALES & SERVICE	423 NATIONAL CITY BLVD. A	Medium	5521	Vehicle Dealers	908.31		
338	QUIZNOS SUB	928 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.32		X
339	R G P AUTO BODY & PAINT	2122 ROOSEVELT B	Medium	7532	Auto Paint/Body	908.32		
340	RAINBOW FRUITS EXPRESS	3030 PLAZA BONITA RD 2176	Medium	5812	Eating/Drinking Establishments	909.12		X
341	RALPH'S GROCERY STORE NO. 101	901 EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.32		X
342	RANFLO ENTERTAINMENT	3400 E 8TH ST 111-112	Medium	7359	Vehicle/Equipment Rental	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
343	RASPADOS MICHOACAN	115 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.31		X
344	RAY BROCK AUTO SERVICE	25 W 11TH STREET	Medium	7539	Auto Repair	908.31		X
345	RED BIRD MARKET	2035 HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	908.32		X
346	RELIABLE SPRING AND SUSPENSION	225 W 16TH STREET	Medium	7539	Auto Repair	908.32		
347	RENT-A-CENTER #01072	1043 HIGHLAND AVE	Medium	7359	Vehicle/Equipment Rental	908.32		
348	REYNOSO AUTO SALES	438 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.31		
349	ROBERTO'S TACO SHOP	1406 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
350	ROCKY MOUNTAIN CHOCOLATE FACTO	3030 PLAZA BONITA RD 9249	Medium	5441	Eating/Drinking Establishments	909.12		X
351	RODEO'S MEAT MARKET	422 HIGHLAND AVENUE	Medium	5421	Eating/Drinking Establishments	908.31		X
352	RONNIE'S ELECTRONICS - AUTO	1309 HIGHLAND AVENUE	Medium	7549	Auto Repair	908.32		
353	ROYCE CABINETS & GRANITE INC	10 E 1ST STREET	Medium	5211	Building Materials	908.31		
354	ROYCE WINDOWS & DOORS INC	10 E 1ST STREET	Medium	5211	Building Materials	908.31		
355	RPM TRANSMISSIONS	1620 HARDING AVE	Medium	7537	Auto Repair	908.31		X
356	S & S WELDING	1442 MCKINLEY STREET	Medium	7692	Equipment Repair	908.31		X
357	SAM'S ALIGNMENT SERVICE	1028 COOLIDGE AVENUE	Medium	7539	Auto Repair	908.31		X
358	SAN DIEGO HYDRAULICS INC	1720 CLEVELAND AVE	Medium	7699	Equipment Repair	908.31		X
359	SAN JOSE RESTAURANT	213 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
360	SANDOVAL CONCRETE	827 E 13TH ST	Medium	1771	Cement Mixing/Cutting	908.32		
361	SCHEIB, EARL OF CA INC #189	111 NATIONAL CITY BLVD.	Medium	7532	Auto Paint/Body	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
362	SEAWARD MARINE SERVICE INC.	424 W 8TH STREET	Medium	7699	Equipment Repair	908.31		X
363	SEE'S CANDIES	3030 PLAZA BONITA RD 22	Medium	5441	Eating/Drinking Establishments	909.12		X
364	SERVICE MASTER AA ADVANCES RES	100 W 35TH STREET	Medium	7699	Equipment Repair	909.12		
365	SHELL STATION	2401 E DIVISION STREET	Medium	5541	Fueling	908.31		X
366	SIETE DIAS MARKET	151 N HIGHLAND AVENUE A	Medium	5411	Eating/Drinking Establishments	908.31		X
367	SMOG CENTRO	404 HIGHLAND AVENUE	Medium	7539	Auto Repair	908.31		X
368	SMSA INC	10 OSBORN ST	Medium	5541	Fueling	908.31		X
369	SOLAR ECLIPSE PERFORMANCE	507 G AVENUE	Medium	7549	Auto Repair	908.31		X
370	SOUTH BAY AUTO SHOP	1112 COOLIDGE AVENUE	Medium	7538	Auto Repair	908.31		X
371	SOUTH BAY DIESEL & HYDRAULIC, INC	100 W 35TH ST J	Medium	5531	Auto Supplies	909.12		
372	SOUTH BAY MECHANIC SHOP	1112 COOLIDGE AVE	Medium	7538	Auto Repair	908.31		X
373	SOUTH BAY VOLKSWAGON	3131 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	909.12		
374	SOUTHLAND TRANSMISSION CENTER	1400 HOOVER AVENUE	Medium	7537	Auto Repair	908.31		X
375	SOUTHWEST PAINT AND BODY	1616 WEST AVENUE	Medium	7532	Auto Paint/Body	908.32		
376	SOUTHWESTERN AUTO BROKERS, INC.	333 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.31		
377	SOUTHWESTERN AUTOBROKERS INC	1535 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
378	SPORTS AUTO SALES	1040 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.31		
379	STANDARD PARKING	235 E 8TH STREET	Medium	7521	Vehicle Parking/Storage	908.31		X
380	STAR AUTOMOTIVE	423 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.31		
381	STAR AUTOMOTIVE	438 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.31		
382	STARBUCKS COFFEE #6487	1860 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12		X
383	STARBUCK'S COFFEE #6783	2230 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		X
384	STEVENS CONSTRUCTION	125 E 17TH STREET	Medium	1542	Other Contractor	908.32		
385	STONEY'S BAR & GRILL	108 W 25TH ST D, E, F, G	Medium	5813	Eating/Drinking Establishments	908.32		X
386	STREET DREAMS AUTO STYLING	710 E 8TH ST	Medium	5531	Auto Supplies	908.31		
387	STREET DREAMS AUTO STYLING	1509.5 NATIONAL CITY BLVD B	Medium	5531	Auto Supplies	908.32		
388	STYLER'S AUTO BODY	38 E 16TH STREET	Medium	7532	Auto Paint/Body	908.32		
389	STYLER'S AUTO MECHANIC	29 E 17TH ST	Medium	7538	Auto Repair	908.32		
390	SUBWAY SANDWICH & SALAD	925 E PLAZA BLVD A	Medium	5812	Eating/Drinking Establishments	908.32		X
391	SUBWAY SANDWICH & SALAD	1860 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12		X
392	SUNNY DONUTS	724 HIGHLAND AVENUE	Medium	5461	Eating/Drinking Establishments	908.31		X
393	SUPERIOR METAL WORKS, INC	1703 HOOVER AVE B	Medium	1791	Other Contractor	908.32		
394	SWIRLY CUP	1860 SWEETWATER RD A-2	Medium	5812	Eating/Drinking Establishments	909.12		X
395	TACO BELL #106	2425 DIVISION STREET	Medium	5812	Eating/Drinking Establishments	908.31		X
396	TACO BELL #2800	1737 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12		X
397	TACOS EL GORDO DE TIJUANA	1940 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
398	TACOS EL REY	505 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
399	TED'S UPHOLSTERY	115 E 17TH STREET D	Medium	7532	Auto Paint/Body	908.32		
400	THE BARBEQUE PIT	920 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		X
401	THE NEW LOOK	340 W 11TH STREET	Medium	7532	Auto Paint/Body	908.31		X
402	THE ORIGINAL RICHARD'S BAKERY	3400 E 8TH STREET 114	Medium	5461	Eating/Drinking Establishments	908.32		X
403	THUNDERBIRD MUFFLER SHOP	705 E 8TH STREET	Medium	7533	Auto Repair	908.31		X
404	TINO'S IRON WORK	1014 COOLIDGE AVE	Medium	7692	Equipment Repair	908.31		X
405	TONYS DETAIL SHOP	49 E 16TH ST B1	Medium	7542	Vehicle Washing	908.32		
406	TRANS PROS	130 E 17TH STREET	Medium	7537	Auto Repair	908.32		
407	TRICARE MOTORS	5 W 8TH STREET B & C	Medium	5531	Auto Supplies	908.31		
408	TURBO TRANSMISSIONS	1411 COOLIDGE AVENUE	Medium	7537	Auto Repair	908.31		X
409	UNDERGROUND AUTOWORKS INC	106 E 17TH ST	Medium	7538	Auto Repair	908.32		
410	US SAVE AUTO	639 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.31		
411	VACA'S CONCRETE	1826 BETA STREET	Medium	1771	Cement Mixing/Cutting	908.31		
412	VALERIOS CITY BAKERY	1631 E 8TH STREET 182	Medium	5461	Eating/Drinking Establishments	908.32		X
413	VALUE AUTO REPAIR & TIRES	115 E 17TH ST A	Medium	7538	Auto Repair	908.32		
414	VALUE CARS INC	1807 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.32		
415	VICTOR'S MEXICAN FOOD TAQUERIA	1602 E 4TH ST	Medium	5963	Eating/Drinking Establishments	908.32		X
416	VIETNAMESE CHINESE NOODLE HOUSE	600 E 8TH STREET 5	Medium	5812	Eating/Drinking Establishments	908.32		X
417	WEBCO HALE	2202 HAFFLEY AVENUE	Medium	5963	Wholesale/Storage/Warehousing	908.31		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
418	WEST COAST CAB	220 W 14TH ST	Medium	7538	Ground Transportation	908.31		X
419	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS AT SOUTH END OF MALL	3030 PLAZA BONITA RD 2075	Medium	5812	Eating/Drinking Establishments	909.12		X
420	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS IN FOOD COURT	3030 PLAZA BONITA ROAD 2075	Medium	5812	Eating/Drinking Establishments	909.12		X
421	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS NORTH OF JC PENNY	3030 PLAZA BONITA ROAD 2075	Medium	5812	Eating/Drinking Establishments	909.12		X
422	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS ON EAST SIDE OF MALL	3030 PLAZA BONITA RD 2075	Medium	5812	Eating/Drinking Establishments	909.12		X
423	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS SOUTH OF JC PENNY	3030 PLAZA BONITA RD 2075	Medium	5812	Eating/Drinking Establishments	909.12		X
424	WIENERSCHNITZEL	1825 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
425	WILSON MARKET AND LIQUOR	916 E 8TH STREET 9	Medium	5411	Eating/Drinking Establishments	908.32		X
426	WONDER/HOSTESS BAKERY OUTLET	1626 SWEETWATER ROAD E - H	Medium	5411	Eating/Drinking Establishments	909.12		X
427	WRIGLEY'S SUPER	34 N EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
428	XCLUSIVE MOTORSPORTS	1717 NATIONAL CITY BLVD	Medium	5531	Auto Supplies	908.32		
429	XPEDX	1010 W 19TH STREET	Medium	5113	Wholesale/Storage/Warehousing	908.31		
430	ZAVALA'S CONCRETE WORK	2840 N AVE	Medium	1771	Cement Mixing/Cutting	909.12		
431	1-DAY PAINT & BODY CENTERS INC	1146 NATIONAL CITY BLVD.	Low	7532	Auto Paint/Body	908.32		
432	A & F ASPHALT PAVING	215 E 30TH STREET	Low	1611	Cement Mixing/Cutting	909.12		
433	A & T WHOLESALE ELECTRIC & L	205 W 35TH STREET B	Low	5063	Wholesale/Storage/Warehousing	909.12		
434	A B & A CUSTOM WHEELS &	1840 HIGHLAND AVE	Low	5531	Auto Supplies	908.32		
435	A B C AUTOBUYERS	40 W PLAZA BLVD.	Low	5012	Vehicle Dealers	908.32		
436	A MIRROR DÉCOR (AKA NATIONAL GLASS & MIRROR CO.)	821 E 2ND STREET	Low	1793	Other Contractor	908.31		
437	A-1 HYDRAULICS SERVICE	2100 ROOSEVELT AVENUE	Low	7699	Equipment Repair	908.32		
438	AB&A CUSTOM WHEELS & ACCESSORIES	1840 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		
439	ALCEM FENCE CO. INC	1440 COOLIDGE AVENUE	Low	1799	Other Contractor	908.31		
440	ALL AMERICAN PLASTIC BAGS	3020 HOOVER AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.32		
441	ALLSPORTS FLOORING	301 W 28TH STREET K	Low	1752	Other Contractor	908.32		
442	ALM WINDOW & DOOR INC	337 W 35TH ST A	Low	1799	Other Contractor	909.12		
443	AMERMEX	241 W 35TH STREET J	Low	5199	Wholesale/Storage/Warehousing	909.12		
444	ANGELO'S KARS	1040 NATIONAL CITY BLVD A	Low	5521	Vehicle Dealers	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
445	ARKON DRAFTING DESIGN & PRINTS	3200 HIGHLAND AVE	Low	7389	Pool/Fountain Cleaning	909.12		
446	AUDIO CITY	2907 HIGHLAND AVE	Low	7549	Auto Repair	909.12		
447	AUTO BUYERS PLUS	110 W PLAZA BLVD	Low	5521	Vehicle Dealers	908.32		
448	AUTO ZONE #5658	1539 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		
449	AUTOBUYERS PLUS	110 W PLAZA BLVD.	Low	5521	Vehicle Dealers	908.32		
450	BAKER, RON-CHEVROLET	2301 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		
451	BALL AUTOMOTIVE GROUP	1935 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
452	BALL AUTOMOTIVE GROUP	1940 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
453	BALL AUTOMOTIVE GROUP	2001 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		
454	BALL KIA	2729 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		
455	BALL RENEGADE	1935 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		
456	BALL SMOG CHECK ONLY	910 HIGHLAND AVENUE B	Low	7549	Auto Repair	908.32		
457	BALL SUZUKI	1940 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		
458	BANTRY INDUSTRIAL & MARINE CRP	241 W 35TH STREET F	Low	5085	Wholesale/Storage/Warehousing	909.12		
459	BAY SYSTEMS, INC.	303 W 35TH STREET B	Low	7699	Equipment Repair	909.12		
460	BAYVIEW ELECTRIC	2827 HOOVER AVENUE D	Low	1731	Other Contractor	908.32		
461	BECKILEE COUTURE	303 W 35TH ST A	Low	5199	Wholesale/Storage/Warehousing	909.12		
462	BERLIN WALL WHOLESALE	301 W 28TH STREET R	Low	5139	Wholesale/Storage/Warehousing	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
463	BIOPOINTE SCIENTIFIC, LLC	1215 WILSON AVE	Low	5047	Wholesale/Storage/Warehousing	908.31		
464	BJ MOTORS	1705 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
465	BLUE HOUSE KEEPER	3221 NATIONAL CITY BLVD	Low	7349	Power Washing	909.12		
466	BOB'S NATIONAL CITY AUTO	1504 NATIONAL CITY BLVD.	Low	7539	Auto Repair	908.32		
467	BODY SHOP ON THE MILE	2800 NATIONAL CITY BLVD	Low	7532	Auto Paint/Body	908.32		
468	BONITA PIPELINE INC	2209 HIGHLAND AVENUE	Low	1711	Other Contractor	908.32		
469	BOOM ENTERPRISE	3100 E 8TH ST	Low	5064	Wholesale/Storage/Warehousing	908.32		
470	BOSTROM INSTRUMENT COMPANY	208 CIVIC CENTER DRIVE	Low	5084	Wholesale/Storage/Warehousing	908.31		
471	BRAMMER ELECTRIC	1920 MCKINLEY AVENUE	Low	1731	Other Contractor	908.31		
472	BUSH POWER BRAKE, INC.	25 E 17TH STREET A & B	Low	7539	Auto Repair	908.32		
473	C L F WAREHOUSE INC	2702 SOUTHPORT WAY B	Low	5013	Auto Supplies	908.32		
474	CALIBER COLLISION CENTER	3131 NATIONAL CITY BLVD.	Low	7532	Auto Paint/Body	909.12		
475	CALIFORNIA AIR COMPRESSOR	1630, 1635, 1640 COOLIDGE AVE	Low	5084	Wholesale/Storage/Warehousing	908.31		
476	CALIFORNIA COMM'L SECURITY	1727 SWEETWATER RD R	Low	7699	Equipment Repair	909.12		
477	CALIFORNIAS FURNITURE INSTALLATION, INC	2807 HOOVER AVE J-K	Low	1751	Other Contractor	908.32		
478	CAMSAL ENTERPRISES	1705 HOOVER AVENUE C & D	Low	5099	Wholesale/Storage/Warehousing	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
479	CAR AUDIO EXCHANGE	1316 NATIONAL CITY BLVD.	Low	5531	Auto Supplies	908.32		
480	CAR HEALTH PLAN, INC.	1532 NATIONAL CITY BLVD.	Low	7538	Auto Repair	908.32		
481	CARLOS MAINTENANCE AND REPAIR	44 S HARBISON AVE	Low	7349	Power Washing	908.31		
482	CENTURY WHEEL & RIM	2101 HAFFLEY AVENUE B	Low	5013	Auto Supplies	908.31		
483	CIRCUS MAN ICE CREAM	1037 HARDING AVENUE	Low	5142	Wholesale Food	908.31		
484	CLEAN HARBORS ENVIRONMENTAL SE	131 W 33RD ST	Low	1799	Other Contractor	909.12		
485	COASTAL MARINE SERVICE, INC	1533 WILSON AVENUE B	Low	1772	Other Contractor	908.31		
486	COLORINO DISTRIBUTORS	131 W 33RD STREET 4	Low	5182	Wholesale/Storage/Warehousing	909.12		
487	COLUMN ONE, INC.	241 W 35TH STREET K	Low	1721	Painting/Coating	909.12		
488	CONSOLIDATED INTERNATIONAL COR	436 W 8TH STREET A	Low	5085	Wholesale/Storage/Warehousing	908.31		
489	CONSOLIDATED INTERNATIONAL COR	2500 HOOVER AVE A	Low	5085	Wholesale/Storage/Warehousing	908.32		
490	CSI SUPPLY	337 35TH STREET M	Low	5085	Wholesale/Storage/Warehousing	909.12		
491	DANYA B	205 W 35TH STREET E	Low	5023	Wholesale/Storage/Warehousing	909.12		
492	DEALERS DIRECT	45 E 26TH ST	Low	5521	Vehicle Dealers	908.32		
493	DIEGO GARCIA/CARLOS GARCIA	133 N CLAIRMONT AVE	Low	7349	Power Washing	908.31		
494	DIESEL POWER TRADE CORP	1636 WILSON AVE	Low	5013	Auto Supplies	908.31		
495	DISCOUNT FLOORING 2U, INC	829 HOOVER AVE A	Low	5023	Wholesale/Storage/Warehousing	908.31		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
496	DISCOUNT SEWER & DRAIN CLEANIN	1414 ROOSEVELT AVE 40	Low	1711	Other Contractor	908.31		
497	DIXIELINE LUMBER COMPANY	1022 BAY MARINA DR 125	Low	5031	Building Materials	908.31		
498	DON GROSS WAREHOUSE OF SAN DIEGO	301 W 30TH STREET	Low	5013	Auto Supplies	909.12		
499	DONALD W WHELAN	241 W 35TH ST K	Low	5088	Wholesale/Storage/Warehousing	909.12		
500	DOOR-MAN	910 HOOVER AVENUE	Low	1799	Other Contractor	908.31		
501	DOUBLE J AUTO REPAIR SHOP	29 E 17TH STREET	Low	7538	Auto Repair	908.32		
502	EL PARAISO/CHRISTMAS TREES	2708 HIGHLAND AVE	Low	5261	Nurseries/Greenhouses	909.12		
503	EMERGENCY KEYS, LOCKS	1007 NATIONAL CITY BLVD	Low	7699	Equipment Repair	908.32		
504	ENCOMPASS DESIGN	301 W 28TH STREET S	Low	5137	Wholesale/Storage/Warehousing	908.32		
505	ENERGIA NATURAL	443.5 HIGHLAND AVE	Low	5199	Wholesale/Storage/Warehousing	908.31		
506	ENTERPRISE RENT A CAR #32FP	1145 NATIONAL CITY BL	Low	7512	Vehicle/Equipment Rental	908.32		
507	ENTERPRISE RENT-A-CAR	2700 NATIONAL CITY BLVD	Low	7514	Vehicle/Equipment Rental	908.32		
508	ENTERPRISE RENT-A-CAR OF L.A.	3000 NATIONAL CITY BLVD	Low	7514	Vehicle/Equipment Rental	908.32		
509	EQUIPMENT ENGINEERING CO.	2704 TRANSPORTATION AVENUE E	Low	7539	Auto Repair	908.32		
510	ESKAY, G, COMPANY	712 E 18TH ST	Low	5199	Wholesale/Storage/Warehousing	908.31		
511	EUROSYTEMS MONTGOMERY CO.	139 ROOSEVELT AVENUE	Low	5072	Wholesale/Storage/Warehousing	908.31		
512	EVANS TIRES	3009 HIGHLAND AVENUE	Low	7534	Auto Repair	909.12		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
513	EXPO BUILDERS SUPPLY	500 W 16TH ST	Low	5211	Building Materials	908.31		
514	EXPRESS TIRE	1705 SWEETWATER ROAD	Low	7534	Auto Repair	909.12		
515	EXPRESS TIRE	820 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		
516	FAMILY LOOMPYA WHOLESALE	2626 SOUTHPORT WAY F	Low	5199	Wholesale/Storage/Warehousing	908.32		
517	FAMILY RIVAS BUILDING JANITORIAL SERVICE	1459 E 1ST ST	Low	7349	Power Washing	908.31		
518	FIBER-WORLD PRODUCTS	2440 HIGHLAND AVENUE	Low	7539	Auto Repair	909.12		
519	FINE ORNAMENTAL	1010 COOLIDGE AVE	Low	1799	Other Contractor	908.31		
520	FINE ORNAMENTAL	1031 COOLIDGE AVE	Low	1799	Other Contractor	908.31		
521	FIRESTONE TIRE & SERVICE CENTER	943 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		
522	FLEETWASH	1508 HOOVER AVENUE	Low	7542	Vehicle Washing	908.31		
523	FLEETWOOD PLUMBING/ELECTRIC INC	1416 HOOVER AVENUE	Low	1731	Other Contractor	908.31		
524	FRANK TOYOTA	2400 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
525	FREE FORM CLAY AND SUPPLY	1912 CLEVELAND AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.31		
526	G. P. MAY COMPANY	2424 HOOVER AVENUE L	Low	1751	Other Contractor	908.32		
527	GALLEGOS PLASTERING CO. INC.	1524 HARDING AVENUE	Low	1741	Masonry	908.31		
528	GMLS	45 S HARBISON AVE	Low	782	Landscaping	908.31		
529	GRANGER WELLNESS SOCIETY	2700 E 8TH ST	Low	7999	Golf Courses/Parks	908.32		
530	GROOMTECH	225 W 30TH ST	Low	5199	Wholesale/Storage/Warehousing	909.12		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
531	H & R HARDWARE SUPPLY	2602 TRANSPORTATION AVENUE D	Low	5072	Wholesale/Storage/Warehousing	908.32		
532	HARDWOOD DESIGNS PLUS, INC.	105 W 35TH STREET F	Low	1799	Other Contractor	909.12		
533	HERNANDEZ'S ELECTRICAL SUPPLY	2135 E 9TH STREET	Low	5072	Wholesale/Storage/Warehousing	908.32		
534	HIGH END PERFORMANCE	337 W 35TH STREET K	Low	5531	Auto Supplies	909.12		
535	HIGHLAND ARCO	2336 HIGHLAND AVENUE	Low	5541	Fueling	909.12		
536	HIGHLAND MOBILE	2945 HIGHLAND AVENUE	Low	5541	Fueling	909.12		
537	HIGHLAND SERVICE CENTER	1803 HIGHLAND AVENUE	Low	7538	Auto Repair	908.32		
538	HIGHLAND VALERO	804 E 8TH ST	Low	5541	Fueling	908.32		
539	INTERNATIONAL SURF VENTURE INC	301 W 28TH STREET B, C	Low	5091	Wholesale/Storage/Warehousing	908.32		
540	ISLAND EQUIPMENT	303 35TH ST B	Low	5531	Auto Supplies	909.12		
541	ISLAND SALES & LEASING	100 W 8TH STREET	Low	5511	Vehicle Dealers	908.32		
542	ISLAND SALES & LEASING	1900 NATIONAL CITY BLVD B	Low	5511	Vehicle Dealers	908.32		
543	J & L DISTRIBUTION INC	2601 HOOVER AVENUE D	Low	5169	Wholesale/Storage/Warehousing	908.32		
544	J & L JANITORIAL SUPPLY	616 HIGHLAND AVE	Low	5087	Wholesale/Storage/Warehousing	908.31		
545	JACK HARRISON BUICK	2601 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
546	JB CONCRETE CONSTRUCTION	1425 K AVE	Low	1771	Cement Mixing/Cutting	908.32		
547	JD BROTHERS AUTO REPAIRS	41 E 18TH STREET	Low	7538	Auto Repair	908.32		
548	JMB ASPHALT & CONCRETE INC	1818 WILSON AVE	Low	1771	Cement Mixing/Cutting	908.31		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
549	JOSEPH T RYERSON & SON, INC	2300 HAFFLEY AVE	Low	5051	Wholesale/Storage/Warehousing	908.31		
550	JOY AIR	2601 HOOVER AVENUE	Low	5064	Wholesale/Storage/Warehousing	908.32		
551	KOOL FIT AMERICA INC.	1725 HARDING AVENUE	Low	5091	Wholesale/Storage/Warehousing	908.31		
552	KRAGEN AUTO SUPPLY #1722	1202 E PLAZA BLVD.	Low	5531	Auto Supplies	908.32		
553	LEX-TEK	2704 TRANSPORTATION AVE G	Low	7538	Auto Repair	908.32		
554	LOPEZ, PEDRO	1527 E 18TH ST	Low	7699	Equipment Repair	908.32		
555	LOU'S AUTOMOTIVE & PARTS	1509 NATIONAL CITY BLVD. C	Low	7538	Auto Repair	908.32		
556	LUNA CONSTRUCTION INC	1410 COOLIDGE AVENUE	Low	1542	Other Contractor	908.31		
557	MAESTER CARBURATORS	301 W 28TH ST	Low	7539	Auto Repair	908.32		
558	MAIN SQUEEZE JUICES	2712 TRANSPORTATION AVENUE	Low	5149	Wholesale Food	908.32		
559	MASTER SHINE CLEANERS	1842 VIA LAS PALMAS	Low	7349	Power Washing	909.12		
560	MBR CONTRACTORS	148 E 30TH ST C	Low	1599	Other Contractor	909.12		
561	MCCUNE CHRYSLER JEEP	2340 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
562	MCMAHON CONSTRUCTION, INC	605 W 12TH ST	Low	1611	Cement Mixing/Cutting	908.31		
563	MCMILLIAN MANAGEMENT SERV., L.P.	2807 HOOVER AVENUE G-K	Low	7538	Auto Repair	908.32		
564	MIKE'S AUTOMOTIVE	115 E 17TH STREET A	Low	7538	Auto Repair	908.32		
565	MONIN MARBLE AND GRANITE STORE	1105 E 17TH ST	Low	5211	Building Materials	908.32		
566	MORE BRAKES N TUNE	1902 HIGHLAND AVE A	Low	7538	Auto Repair	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
567	MORE GLASS	910 HIGHLAND AVENUE C	Low	7699	Equipment Repair	908.32		
568	MOSSY NISSAN	2700, 2626 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
569	MOYNAHAN TOWING	3200 NATIONAL CITY BLVD.	Low	7549	Auto Repair	909.12		
570	N. GLANTZ & SON	2530 SOUTHPORT WAY C	Low	5099	Wholesale/Storage/Warehousing	908.32		
571	NAPA AUTO PARTS	1810 HIGHLAND AVENUE	Low	5013	Auto Supplies	908.32		
572	NATIONAL CITY DETAIL SHOP	108 W 18TH STREET	Low	7542	Vehicle Washing	908.32		
573	NATIONAL CITY MOTORCARS	1900 NATIONAL CITY BLVD. A	Low	5521	Vehicle Dealers	908.32		
574	NATIONAL CITY SHELL	1601 E 8TH ST	Low	5541	Fueling	908.32		
575	NELLANS CARPET AND DRAPERIES	426 W 15TH STREET	Low	1752	Other Contractor	908.31		
576	NELSON INDUSTRIAL SERVICES INC	2827 HOOVER AVENUE F	Low	1799	Other Contractor	908.32		
577	NICOLLS INC	1535 TIDELAND AVENUE J	Low	5099	Wholesale/Storage/Warehousing	908.31		
578	OLYMPIC AUTO SALES	1800 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.32		
579	ONE SOURCE DISTRIBUTOR INC	326 W 30TH STREET	Low	5063	Wholesale/Storage/Warehousing	909.12		
580	ONE SOURCE DISTRIBUTORS	2530 SOUTHPORT WAY A	Low	5065	Wholesale/Storage/Warehousing	908.32		
581	OROZCO QUALITY XMAS TREES	715 HIGHLAND AVE	Low	811	Agriculture	908.31		
582	P B E WAREHOUSE INC	190 E 26TH STREET	Low	5013	Auto Supplies	908.32		
583	PACIFIC COAST AUTO & CUSTOMIZING	710 E 8TH ST	Low	7549	Auto Repair	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
584	PACIFIC COAST DIESEL PARTS	100 W 35TH STREET H	Low	5531	Auto Supplies	909.12		
585	PACIFIC DESIGN GROUP	1620 HARDING AVE	Low	1751	Other Contractor	908.31		
586	PACIFIC WEST BUILDERS	1248 COOLIDGE AVE	Low	1599	Other Contractor	908.31		
587	PAL'S PUMP CLINIC	1015 NATIONAL CITY BLVD	Low	7699	Equipment Repair	908.32		
588	PAOGA CONSTRUCTION, INC.	148 E 30TH ST A	Low	1521	Other Contractor	909.12		
589	PARK MOTORS	2125 ROOSEVELT AVENUE	Low	5511	Vehicle Dealers	908.32		
590	PARKS MOTORS	2125 ROOSEVELT AVE D	Low	5521	Vehicle Dealers	908.32		
591	PARTYZON	2235 HIGHLAND AVE	Low	7359	Vehicle/Equipment Rental	908.32		
592	PATRIOT AUTO CARE AND BRAKES	910 HIGHLAND AVE A	Low	7539	Auto Repair	908.32		
593	PELL MELL SUPPLY INC	402 W 35TH STREET E	Low	5072	Wholesale/Storage/Warehousing	909.12		
594	PENSKE TRUCK LEASING	3131 HOOVER AVENUE	Low	7513	Vehicle/Equipment Rental	908.32		
595	PERRY FORD - NATIONAL CITY	2050 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
596	PHILIPPINE MABUHAY NEWS	3142 E PLAZA BLVD. N	Low	5192	Wholesale/Storage/Warehousing	908.32		
597	PLAYCARE INC	241 W 35TH ST C	Low	7999	Golf Courses/Parks	909.12		
598	POTTER ELECTRIC, INC.	1343 WILSON AVENUE	Low	5063	Wholesale/Storage/Warehousing	908.31		
599	PRESTIGE AUTO BROKERS	1001 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.32		
600	PRESTIGE AUTO BROKERS	2125 ROOSEVELT AVENUE A	Low	5521	Vehicle Dealers	908.32		
601	PRESTIGE AUTO BROKERS	2225 ROOSEVELT AVE A	Low	5521	Vehicle Dealers	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
602	PRO TIRES	1031 NATIONAL CITY BLVD B	Low	5531	Auto Supplies	908.32		
603	PSE SAN DIEGO COMBAT ACADEMY	902 E 18TH ST	Low	7999	Golf Courses/Parks	908.32		
604	R & H WELDING SHOP	2601 HOOVER AVE F	Low	7692	Equipment Repair	908.32		
605	RAD ELECTRIC SUPPLY INC.	1904 MCKINLEY AVENUE	Low	5065	Wholesale/Storage/Warehousing	908.31		
606	RADIATOR DEPOT	1533 WILSON AVENUE A	Low	5013	Auto Supplies	908.31		
607	RANGER COMMUNICATIONS	401 W 35TH STREET B	Low	5065	Wholesale/Storage/Warehousing	909.12		
608	RELIANCE METAL CENTER	2100 CLEVELAND AVENUE	Low	5051	Wholesale/Storage/Warehousing	908.31		
609	REVELS STRIPING	2602 TRANSPORTATION AVENUE J	Low	7549	Auto Repair	908.32		
610	RIVERSIDE CEMENT CO.	920 BAY MARINA DRIVE	Low	5032	Building Materials	908.32		
611	RODRIGUEZ APPLIANCE	2629 HIGHLAND AVENUE	Low	7699	Equipment Repair	909.12		
612	RON BAKER CHEVROLET	2301 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
613	ROYCE CONSTRUCTION INC	10 E 1ST STREET A	Low	1542	Other Contractor	908.31		
614	RSD TOTAL CONTROL	402 W 35TH STREET G	Low	5075	Wholesale/Storage/Warehousing	909.12		
615	RTM INTERNATIONAL LLC	301 W 28TH STREET V	Low	5099	Wholesale/Storage/Warehousing	908.32		
616	RUBY'S EMBROIDERY	2525 SOUTHPORT WAY S	Low	5131	Wholesale/Storage/Warehousing	908.32		
617	S & K SALES COMPANY	2626 SOUTHPORT WAY C-E	Low	5199	Wholesale/Storage/Warehousing	908.32		
618	S & L OIL INC.	1601 E 8TH STREET	Low	5541	Fueling	908.32		
619	S D D MAINTENANCE	2829 NATIONAL CITY BLVD	Low	7539	Auto Repair	908.32		
620	S L FUSCO INC.	2530 SOUTHPORT WAY	Low	5085	Wholesale/Storage/Warehousing	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
621	SAN DIEGO AUTO FINANCE	1 W 35TH ST	Low	5521	Vehicle Dealers	909.12		
622	SAN DIEGO METRO PUBLISHING LLC	2602 TRANSPORTATION AVE O	Low	5111	Wholesale/Storage/Warehousing	908.32		
623	SAN DIEGO MOTORSPORTS, LLC	301 W 28TH ST D	Low	5521	Vehicle Dealers	908.32		
624	SAN DIEGO ORGANIC SUPPLY INC	100 W 35TH STREET E	Low	5159	Wholesale Food	909.12		
625	SAN DIEGO PLASTICS, INC.	2220 MCKINLEY AVENUE	Low	5099	Wholesale/Storage/Warehousing	908.31		
626	SAN DIEGO PUMP & COMPRESSOR	301 W 28TH STREET A	Low	5085	Wholesale/Storage/Warehousing	908.32		
627	SANDOVAL'S PLUMBING SERVICE	2221 E 18TH ST	Low	7699	Equipment Repair	909.12		
628	SATURN OF NATIONAL CITY	2202 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
629	SCOTT'S GARAGE	101 E 30TH ST A	Low	7538	Auto Repair	909.12		
630	SCOTT'S PORSCHE PARTS	705 CIVIC CENTER DRIVE	Low	5531	Auto Supplies	908.31		
631	SEACOAST ELECTRIC CO. INC.	2702 SOUTHPORT WAY C & D	Low	5063	Wholesale/Storage/Warehousing	908.32		
632	SEVILLA'S PARTY RENTALS	2303 F AVE	Low	7359	Vehicle/Equipment Rental	908.32		
633	SHAFT MASTER	1031 NATIONAL CITY BLVD. C	Low	7539	Auto Repair	908.32		
634	SHOW TIME AUTO INC	710 E 8TH STREET	Low	7539	Auto Repair	908.32		
635	SID'S CARPET BARN	132 W 8TH STREET	Low	1752	Other Contractor	908.31		
636	SOCAL LAUNDRY EQUIPMENT INC	1729 COOLIDGE AVE B1	Low	7699	Equipment Repair	908.32		
637	SOUTH BAY FACILITY SVCS	2631 J AVE	Low	7389	Pool/Fountain Cleaning	909.12		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
638	SOUTH BAY LEATHER CORP	1900 WILSON AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.32		
639	SOUTH BAY PRE-OWNED	2401 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		
640	SOUTH COUNTY VOLVO	2940 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	909.12		
641	SOUTHLAND AUTOBODY & PAINT	141 W 18TH STREET	Low	7532	Auto Paint/Body	908.32		
642	SPORTS AUTO SALES	1112 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
643	STEREO DISCOUNT CENTER INC	2907 HIGHLAND AVENUE	Low	7539	Auto Repair	909.12		
644	STERLING CORP CUSTOM ELEVATOR INTERIORS	340 W 26TH STREET I	Low	1796	Other Contractor	908.32		
645	SUPERIOR FOAM & UPHOLSTERY CORP.	105 W 35TH STREET D	Low	5199	Wholesale/Storage/Warehousing	909.12		
646	SWEETWATER HARLEY-DAVIDSON	3201 HOOVER AVENUE	Low	5571	Vehicle Dealers	908.32		
647	T N H AUTO REPAIR	25 E 17TH STREET	Low	7539	Auto Repair	908.32		
648	TECNICO SYSTEMS CORPORATION	206 W 35TH STREET B	Low	7699	Equipment Repair	909.12		
649	TEYSSIER & TEYSSIER INC.	3200 HIGHLAND AVENUE B4-2	Low	1542	Other Contractor	908.31		
650	TEYSSIER CONSTRUCTION, INC	3200 B-3 HIGHLAND AVENUE	Low	1521	Other Contractor	908.31		
651	THE AUTO SPOT, INC	1017 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
652	THE HANDYMAN PAINTERS	2208 E 8TH ST	Low	1721	Painting/Coating	908.32		
653	THE SPEED SHOP	623 NATIONAL CITY BLVD.	Low	5531	Auto Supplies	908.31		
654	THRIFTY ARCO AM/PM #9569	1734 HIGHLAND AVENUE	Low	5541	Fueling	908.32		
655	TOM MOYNAHAN TOWING	3200 NATIONAL CITY BLVD.	Low	7549	Auto Repair	909.12		
656	TOM THUMB WHOLESALE ICE CREAM	1021 COOLIDGE AVENUE	Low	5963	Eating/Drinking Establishments	908.31		
657	TOPECO PRODUCTS	2525 SOUTHPORT WAY	Low	5013	Auto Supplies	908.32		
658	TORO BRAVO CATERING	2872 CORTE RAYITO	Low	5963	Eating/Drinking Establishments	911.11		
659	TRANSMISSION SUPPLY	338 W 12TH STREET	Low	5531	Auto Supplies	908.32		
660	TRI TECH REPROGRAPHICS	2712 TRANSPORTATION AVE E	Low	7389	Pool/Fountain Cleaning	908.32		
661	TUFF ACOUSTICAL AND THERMAL	1623 CLEVELAND AVENUE	Low	1742	Painting/Coating	908.31		
662	TUNEUP MASTERS INC #408	1902 HIGHLAND AVE	Low	7539	Auto Repair	908.32		
663	UNIDYNE CORPORATION	2702 SOUTHPORT WAY F	Low	1799	Other Contractor	908.32		
664	UNITED BARBER & BEAUTY	2807 HOOVER AVENUE C	Low	5087	Wholesale/Storage/Warehousing	908.32		
665	UNIVAR USA	2100 HAFFLEY AVENUE	Low	5169	Wholesale/Storage/Warehousing	908.31		
666	VEE PARTS & ACCESSORIES	704 A AVENUE	Low	5531	Auto Supplies	908.31		
667	VERNON SHIP SUPPLIES	1705 HOOVER AVENUE B	Low	5199	Wholesale/Storage/Warehousing	908.32		
668	VILLARINO CONSTRUCTION SVC. INC	430 W 12TH STREET	Low	1542	Other Contractor	908.31		
669	WEST COAST TRUCK SERVICE	201 W 18TH STREET	Low	7538	Auto Repair	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
670	WESTAIR GASES & EQUIP, INC	2300 HAFFLEY AVE	Low	5084	Wholesale/Storage/Warehousing	908.31		
671	WESTCOTT MAZDA	2800 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
672	WESTFLEX INDUSTRIAL	325 W 30TH STREET	Low	5085	Wholesale/Storage/Warehousing	909.12		
673	WORLD TERMINAL PARKING INC	200 HIGHLAND AVENUE	Low	7542	Vehicle Washing	908.31		
674	WORLD TERMINAL PARKING INC.	510 HIGHLAND AVENUE	Low	7542	Vehicle Washing	908.31		
675	Y & M WHOLESALER	2626 SOUTHPORT WAY A	Low	5145	Wholesale Food	908.32		
676	Y.Y.K. ENTERPRISES, INC.	726 W 19TH STREET	Low	1721	Painting/Coating	908.31		
677	YOUR YOGA VOYAGE	2345 E 8TH ST	Low	7999	Golf Courses/Parks	908.32		
678	DEWEY PEST CONTROL	324 CIVIC CENTER DRIVE	High	7342	Pest Control	908.31	X	
679	FINISHING TOUCH AUTO DETAILING		High	7542	Vehicle Washing		X	
680	SANTANA MOBILE TRUCK WASH	1741 NATIONAL CITY BLVD.	High	7349	Power Washing	908.32	X	
681	ACTION AIR CONDITIONING &	1328-30 E 16TH STREET	Low	1711	Other Contractor	908.32	X	
682	ALATORRE TELECOM-SUBCONTRACTOR	4126 E PLAZA BLVD.	Low	1731	Other Contractor	908.32	X	
683	ALLSTOP PEST CONTROL	108 W 25TH ST B	Low	7342	Pest Control	908.32	X	
684	ALVAREZ HOME IMPROVEMENTS	1705 L AVENUE	Low	1742	Painting/Coating	908.32	X	
685	AMERICAN PEST CONTROL CO	8100 BROADWAY E	Low	1799	Other Contractor	908.22	X	
686	AMERICAN RES SVC OF CALIF INC	6162 NANCY RIDGE DR 100	Low	1711	Other Contractor	906.1	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
687	ARC ROOFING	537 FRONT ST	Low	1761	Other Contractor	908.21	X	
688	ARTURO'S CONCRETE CARE	1635 E 11TH STREET	Low	1771	Cement Mixing/Cutting	908.32	X	
689	B & B PLUMBING AND ELECTRIC	2425 J AVENUE	Low	1711	Other Contractor	909.12	X	
690	BARRIOS LANDSCAPE	1604 HARTWELL CT	Low	1799	Other Contractor	908.32	X	
691	BURRIS PLUMBING INC	1305 I AVENUE	Low	1711	Other Contractor	908.32	X	
692	CAROLINO CONST & DEV CORP	3035 E 8TH STREET	Low	1521	Other Contractor	908.32	X	
693	CASTILLO'S LANDSCAPING	1503 E 15TH ST	Low	782	Landscaping	908.32	X	
694	CHARLIE PROFESSIONAL GARDNER	108 E 5TH STREET A	Low	782	Landscaping	908.31	X	
695	COLBRESE MATERIAL HANDLING INC	12600 STOWE DR 3	Low	1799	Other Contractor	906.2	X	
696	COLUMBIA PEST CONTROL CO. OF SAN DIEGO	127 W 9TH STREET	Low	7342	Pest Control	908.31	X	
697	CUSTOM PAINTING	530 C AVENUE	Low	1721	Painting/Coating	908.31	X	
698	DEMOLITION MAN	2127 PROSPECT STREET 4	Low	1795	Other Contractor	909.12	X	
699	DESIGN/BUILD TENANT	9770 CARROLL CENTRE RD B	Low	1599	Other Contractor	906.1	X	
700	EDDY'S LANDSCAPING	1945 LANOITAN AVENUE	Low	781	Landscaping	909.12	X	
701	FIERRO CONTRUCTION COMPANY	1815 SWEETWATER RD 131	Low	1599	Other Contractor	909.12	X	
702	FINE LINE STRIPING & PAINTING	2608 MICHELLE CT A	Low	1799	Other Contractor	909.12	X	
703	GALLERY BUILDERS GROUP	2220 E PLAZA BLVD P	Low	1799	Other Contractor	908.32	X	
704	HAGENBACK CONSTRUCTION SERVICE	1915 VIA LAS PALMAS 27	Low	1751	Other Contractor	909.12	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
705	JACKSON & BLANC	7929 ARJONS DR	Low	1711	Other Contractor	906.1	X	
706	JENSEN DRYWALL	3714 LYNDA PLACE	Low	1742	Painting/Coating	909.12	X	
707	JVC CONSTRUCTION INC	415 W 12TH STREET	Low	1599	Other Contractor	908.31	X	
708	KAMPS PROPANE INC	16245 ALPINE BLVD	Low	1799	Other Contractor	907.14	X	
709	L.L. APPLIED RESTORATION SERVICE, INC.	630 NATIONAL CITY BLVD.	Low	1522	Other Contractor	908.31	X	
710	LAMPERT, MURRAY M, COMPANY	3545 CAMINO DEL RIO S C	Low	1599	Other Contractor	907.11	X	
711	LANDSCAPE DEVELOPMENT INC	28447 WITHERSPOON PKWY	Low	782	Landscaping	907.11	X	
712	LARRY'S ELECTRICAL SERVICE INC	1043 WORTHINGTON ST	Low	1731	Other Contractor	909.12	X	
713	LUNA, MAURICIO	1432 E 6TH ST	Low	782	Landscaping	908.32	X	
714	MAS CONSTRUCTION	1808 LA POSADA ST	Low	1599	Other Contractor	908.31	X	
715	MATA ENTERPRISES	328 E 9TH STREET	Low	1731	Other Contractor	908.32	X	
716	MITSUBISHI ELECTRIC &	5665 PLAZA DR	Low	1796	Other Contractor	908.32	X	
717	NATIONAL CITY ELECTRIC	2424 J AVENUE	Low	1731	Other Contractor	909.12	X	
718	OMC CONSTRUCTION	8 VALVA ST	Low	1599	Other Contractor	908.31	X	
719	ORTIZ & ALLDS SANDBLASTING &	1313 BAY MARINA DRIVE	Low	1799	Other Contractor	908.3	X	
720	PATITO CATERING	4582 BOYLSTON ST	Low	5963	Eating/Drinking Establishments	908.22	X	
721	PHONE SHOP, THE	835 D AVENUE	Low	1799	Other Contractor	908.32	X	
722	PHONG TRUONG LAWN SERVICE	2131 ESTELA DR	Low	782	Landscaping	907.13	X	
723	R.A. CONSTRUCTION	1232 EARLE DRIVE	Low	1521	Other Contractor	908.32	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
724	R.E. STAITE ENGINEERING, INC.	2140 TIDELANDS AVE	Low	1629	Other Contractor	908.3	X	
725	RICK VILLARIN AUTOMATIC FIRE	1620 B AVENUE	Low	1799	Other Contractor	908.32	X	
726	RICK'S MOBILE GLASS	507 G AVENUE	Low	7699	Equipment Repair	908.31	X	X
727	RUIZ TREE SERVICE	2016 E AVENUE	Low	783	Landscaping	908.32	X	
728	RUSS' BEE REMOVAL	3421 NEWBERRY STREET	Low	7342	Pest Control	909.12	X	
729	SHELLYS DELI CATERING	835 MORRISON ST	Low	5963	Eating/Drinking Establishments	908.22	X	
730	SHOWCASE SERVICES, INC	13100 KIRKHAM WAY 207	Low	1799	Other Contractor	906.2	X	
731	SWIFT COMMUNICATIONS INC	4365 MEADE AVE	Low	1731	Other Contractor	907.11	X	
732	TACOS Y TAMALES MEXICO	4437 CRAIGIE ST	Low	5963	Eating/Drinking Establishments	908.22	X	
733	TOM REED GENERAL CONTRACTOR	1721 YALE ST	Low	1599	Other Contractor	909.12	X	
734	TRI-COUNTY DRILLING , INC.	9631 CANDIDA ST	Low	1781	Other Contractor	906.1	X	
735	VISTA DEL SOL APARTMENTS	1545 Q AVE	Low	1599	Other Contractor	908.32	X	
736	WEATHERITE CORPORATION	21211 COMMERCE POINTE DR	Low	1711	Other Contractor		X	
737	ANA & MCDANIEL PROFESSIONAL S	214 N R AVENUE	Medium	7349	Power Washing	908.31	X	
738	COCO'S HOUSEKEEPING	2830 PROSPECT ST	Medium	7349	Power Washing	909.12	X	
739	COLONIA F.C. SERVICE	133 N CLAIRMONT AVENUE	Medium	7349	Power Washing	908.31	X	
740	COOL STYLE CARPET CLEANING, GUSTAVO GONZALES	752 MADISON AVENUE	Medium	7217	Carpet/Furniture Cleaning	909.11	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
741	DENT ONE/DENT1	507 E 5TH ST	Medium	7539	Auto Repair	908.31	X	X
742	DJ ANGEL & INFLATABLE JUMPERS	2231 E 12TH STREET	Medium	7359	Vehicle/Equipment Rental	908.32	X	X
743	ECO-DRI	105 W 35TH STREET E	Medium	7217	Carpet/Furniture Cleaning	909.12	X	
744	EMMA'S COMMERCIAL CLEANING	2331 LA SIESTA WAY	Medium	7349	Power Washing	909.12	X	
745	EXCELLENCE MOBIL AUTO DETAIL	999 E DIVISION ST B23	Medium	7542	Vehicle Washing	908.31	X	
746	FLASHY AUTO DETAILING	3601 STOCKMAN STREET	Medium	7542	Vehicle Washing	909.12	X	
747	FUENTES JUMP	924 DELTA STREET	Medium	7359	Vehicle/Equipment Rental	908.31	X	X
748	G AND J AUTO SERVICE	1514 ROOSEVELT AVE	Medium	7538	Auto Repair	908.31	X	X
749	G AUTO BEAUTY DEALER WASH SYSTEMS	3619 CRESTA COURT	Medium	7542	Vehicle Washing	904.31	X	
750	JOSE'S OFFICE CLEANER	41 E 2ND STREET A	Medium	7217	Carpet/Furniture Cleaning	908.31	X	
751	KAREN CLEAN UPS	1722 GAMMA ST	Medium	7349	Power Washing	908.31	X	
752	MANNY'S MOBILE MECHANIC	1900 NATIONAL CITY BLVD B	Medium	7538	Auto Repair	908.32	X	X
753	MAZE AUTOHAUS/MAZE ON 9TH	225 W 9TH STREET	Medium	7542	Vehicle Washing	908.31	X	
754	MC K'S JANITORIAL CLEANING SER	2023 F AVENUE 8	Medium	7349	Power Washing	908.32	X	
755	MERCY JANITORIAL SERVICES	2536 J AVENUE	Medium	7349	Power Washing	909.12	X	
756	MILLER PAVING	9236 OLIVE DRIVE	Medium	1771	Cement Mixing or Cutting	909.12	X	
757	MISSED A SPOT CLEANING SERVICES	630 F AVE	Medium	7349	Power Washing	908.31	X	
758	MOBILE MARINE	1236 E 16TH STREET	Medium	7699	Equipment Repair	908.32	X	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
759	MONTELO'S CLEANING SERVICES	1107 D AVE	Medium	7349	Power Washing	908.32	X	
760	N.G. COMERCL & RSDNTL CLEANING	1705 L AVE	Medium	7349	Power Washing	908.32	X	
761	PORLEX CARPET CARE	2142 N AVENUE (REAR)	Medium	7217	Carpet/Furniture Cleaning	909.12	X	
762	PREMIER CHEM DRY	311 S DREXEL AVE	Medium	7217	Carpet/Furniture Cleaning	908.31	X	
763	R.G. MOBILE AUTOMOTIVE SERV	1135 DELAWARE ST	Medium	7538	Auto Repair	911.11	X	X
764	SUPER CLEAN GENERAL COM	2621 SWEETWATER ROAD 42	Medium	7349	Power Washing	909.12	X	
765	SUPERIOR CLEANING SYSTEMS	1037 A AVENUE	Medium	7349	Power Washing	908.32	X	
766	UNDERWRITERS LABORATORIES INC	333 PFINGSTEN RD	Medium	7389	Pool/Fountain Cleaning		X	
767	VORTEX MAINTENANCE INC	2504 TRANSPORTATION AVE F	Medium	7349	Power Washing	908.32	X	

Notes
TTWQ – Threat to Water Quality
SIC –Standard Industrial Classification Code
Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX B

Appendix B
JURMP Annual Report Requirements Checklist

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location in Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.3, 2.4.4.2
iii. A listing of the development projects to which SUSMP requirements were applied.	Table 2-1
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	Appendix A (inventory)
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-3 and Table 2-4
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2, Table 2-2
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.2

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 17 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.2
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3, Table 2-4
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.1

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A.2 (inventory)
viii. A description of the general results of the inspections.	3.5
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.3, 3.5.4
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix A.3 (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	2.4.4.3, Table 2-4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.1, 4.4.4, Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.1, 4.4.4, Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4, Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	(N/A for 2008/2009)
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3, 4.2.4
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3.4
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4, Table 4-1
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.	4.5.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.6.4, 4.7.4, Table 4-3
xviii. A description of the general results of the inspections.	Table 4-3
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4, 4.6.4, 4.7.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4, 4.6.4, 4.7.4
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.1.1 and throughout Section

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.2 (mobile), appendices A.4 and A.5 (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	5.2.4 (will be N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4 (will be N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4, Table 5-2
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.1.1 and throughout section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.1
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.1
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.2
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.1.1 and throughout section

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	7.4, Table 7-2, 7-3, and 7-4
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	7.4, Attachment 7.1
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	7.5
v. The number and brief description of illicit discharges and connections identified.	7.5, Table 7-5
vi. The number of illicit discharges and connections eliminated.	7.5, Table 7-5
vii. Identification and description of all spills to the MS4 and response to the spills.	7.3, Table 7-5
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2, Table 7-5
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5, Table 7-1 and 7-5

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
xiii. A description of notable activities conducted to manage illicit discharges and connections.	7.5, Table 7-1

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	7.4
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	7.4
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	7.4
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	7.4
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	7.4
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	7.4
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	7.4

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	7.4
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	7.4
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	7.4
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	7.4
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.4
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	7.4

* The IDDE Section of the 2008/2009 JURMP Annual Report will be submitted no later than December 15, 2009.

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.3

Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.2 and 9.3

Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11

Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.	10

Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12

Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	4.2.3, 13

JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14 and each program component section

ATTACHMENTS

ATTACHMENT 1.1

RESPONSE TO RWQCB COMMENTS

To: Mr. David Barker, P.E., CRWQCB - San Diego Region

Date: September 30, 2009

Re: Follow Up to JURMP Annual Report Meeting, City of National City (CIWQS PL ID# 243907; Reg Measure ID# 214417; SWU: DQUACH)

This memo is in response to San Diego Regional Water Quality Control Board (RWQCB) review comments dated February 27, 2009 on the City of National City's (City) 2008 Jurisdictional Urban Runoff Management Plan (JURMP) and JURMP fiscal year 2007/2008 Annual Report (Annual Report) submittal. The comments in the letter were generated based on RWQCB staff review of the City's JURMP and Annual Report and a subsequent meeting with City staff to discuss the comments on January 13, 2009. Note that a response letter was sent on April 13, 2009 to address review comments 4, 5, 7, and 8, which the letter had indicated required an earlier response. This memo addresses the remaining review comments, which were required to be addressed with the submittal of the 2008/2009 JURMP Annual Report. Each RWQCB comment is provided first (*italicized*) followed by the City's response.

1. Include the mechanism to regulate industrial and commercial mobile services in the City into the Annual report.

This comment was made with respect to Section 5 of the City's 2007/2008 Annual Report. While the City does not conduct routine inspections of mobile businesses, regulation of these businesses occurs through the enforcement of business license laws and response to complaint investigations. All mobile businesses are required to maintain a City of National City business license to conduct activities within the City; based on these records mobile businesses are added to the City's inventory and tracked. To aid in tracking mobile businesses that may conduct activities within its jurisdiction in the future, the City also collaborates with other jurisdictions in the County of San Diego in maintaining a county-wide list of mobile businesses. Please see Section 5.3 of the 2008/2009 Annual Report for a full explanation of the City's mechanism to regulate the activities of mobile industrial and commercial businesses.

2. Provide rationale for the selection of 50% High TTWQ industrial sites to be inspected during the first year.

This comment was made with respect to Section 5 of the City's 2007/2008 Annual Report. Section D.3.b.(3)(b) of the Municipal Permit required that 50 percent of all sites determined to pose a high threat to water quality be inspected in the first year of implementation of the updated JURMP. Since the City updated its JURMP in March of 2008, the 2007/2008 reporting period was considered to be the first year of implementation, and at least 50 percent of the high TTWQ sites were chosen for inspection. In the 2008/2009 reporting period, the City inspected 100 percent of the high TTWQ sites, as is required for the second year of JURMP implementation and annually thereafter.

3. Section J.3.c.VII of the Permit requires the City to report the amount of waste and litter removed from catch basins, inlets, the MS4, and open channels, by category. Please provide more detailed categories of debris removed from the City's MS4.

This comment was made with respect to Section 4 of the City's 2007/2008 Annual Report. In the 2007/2008 Annual Report a total of 39.6 tons of debris was reported to have been removed from the City's MS4. The previous field reporting mechanism had recorded qualitative observations of the amounts of categories of debris within the overall quantity of debris removed. In response to this comment from RWQCB staff, Engineering Division Storm Water staff, Public Works Department staff, and the City's consultant engaged in a discussion to develop a more detailed way of recording debris category information in the field. As a result of this process, the City developed new MS4 and open channel maintenance log sheets to help quantify each category of debris. The revised maintenance log sheets are provided with the 2008/2009 JURMP Annual Report as attachments 4.2 and 4.3. These maintenance log sheets have been provided to Public Works Department staff, and data collected using these forms will be reported as part of the 2009/2010 reporting period.

6. Create a data base of municipal facilities to track the inspections and enforcement.

This comment was made with respect to the City's updated 2008 JURMP. The City already uses databases to track large numbers of inspections at industrial and commercial facilities, as well as at construction sites within the City. Since the meeting with RWQCB staff, a similar Microsoft Access database has been created to more easily track inspections and follow up actions for municipal fixed facilities and mobile activities. This database will also be used to track inspections and enforcement conducted at special events within the City.

ATTACHMENT 2.1

NPDES PROJECT APPLICABILITY FORM (SUSMP CHECKLIST)

City Of National City

1243 National City Blvd.
National City, CA 91950
(619) 336-4580

National Pollutant Discharge Elimination System (NPDES) Project Applicability Form

No project will be accepted by the City without this form completed in its entirety

Project Name: _____ Project Area: _____ acres/sq ft

Project Address: _____

APN: _____ Proposed Impervious Area:_____ acres/sq ft

Description of Project: _____

Description of Location: _____

Section 1 – Permanent Storm Water BMP Requirements:

PART A: Determine Subjectivity to SUSMP Requirements

Is the project new development? □ *Yes* □ *No*

Is the project redevelopment that adds/replaces/creates 5,000 ft^2 of impervious surface[1]? □ *Yes* □ *No*

If both of the above answers are "no", go to Part B. If either of the above answers is "yes," answer the questions below (check all that apply).

Is the Project…

1. *Detached or attached residential development of 10 or more units?* □ *Yes* □ *No*
2. *Commercial development greater than one acre?* □ *Yes* □ *No*
3. *Industrial development greater than one acre?* □ *Yes* □ *No*
4. *Automotive repair shop?* □ *Yes* □ *No*
5. *Restaurant?* □ *Yes* □ *No*
6. *Steep (slope of 25% or more) hillside development that will create greater than 5,000 square feet of impervious surface?* □ *Yes* □ *No*
7. *Project located within or directly adjacent to (within 200 feet) or directly discharges to Environmentally Sensitive Area (ESA) and creates at least 2,500 square feet of impervious area or increases impervious area to 10% or more of its naturally occurring condition?* □ *Yes* □ *No*
8. *Parking lot greater than or equal to 5,000 square feet of impervious surface OR with at least 15 parking spaces and potentially exposed to urban runoff?* □ *Yes* □ *No*
9. *Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater?* □ *Yes* □ *No*
10. *Retail gasoline outlets 5,000 square feet or more or with a project Average Daily Traffic (ADT of 100 or more vehicles per day* □ *Yes* □ *No*

[1] See the City's SUSMP Ordinance for more detail on the definition of "significant redevelopment."
[2] Limited exclusion: trenching and resurfacing work associated with utility projects are not considered Priority Projects. Parking lots, buildings and other structures associated with utility projects are Priority Projects if one or more of the criteria in Part A is met.

If any of the answers to Part A is "Yes", your project is a "Priority Project" and must meet the requirements of the City's Standard Urban Storm Water Mitigation Plan (SUSMP) Ordinance.[2]

Is this a PRIORITY PROJECT that requires a SUSMP report? □ **Yes** □ **No**

If all answers to Part A are "No", continue to PART B.
If any of the answers to Part A is "Yes", skip PART B and go to Section 2.

PART B: Determine Non-SUSMP Standard Permanent Storm Water BMP Requirements

Does the project require any of the following permits or approvals? □ ***Yes*** □ ***No***

- *Discretionary: Conditional use permit (including modification or extension); Coastal development permit; Parcel map (and modifications); Reclamation plan; Planned development permits; Planned unit development permits; Planning commission approval of plans; Site plan review; Tentative map (and amendments to conditions of approval or time extension); Tentative parcel map; or Variance OR*
- *Ministerial: Administrative clearing permit; Lot line adjustment; Final map modification; Grading plan (including modification or renewal); Improvement plan (including modification); Landscape plan; Building permit; Construction right-of-way permit; Encroachment permit; Excavation permit; On-site wastewater system permit; Underground tank permit; or Well permit*

Will the project include exterior construction beyond signs, façade work, or other incidental construction to an existing structure? □ ***Yes*** □ ***No***

If all answers to Part A are "No" and any answer to Part B is "Yes", your project is subject to the City's Standard Permanent Storm Water Best Management Practice (BMP) requirements.

If every question in both Parts A and B is answered "No", your project is exempt from permanent storm water requirements.

Is this project subject to the Standard Permanent Storm Water BMP requirements? □ **Yes** □ **No**

Section 2 – Construction Requirements

General Construction Permit
If your project disturbs at least one acre of land, you are subject to the State General Construction Permit. A Notice of Intent (NOI) must be filed with the State Water Resources Control Board (SWRCB) and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared for your project.

Is this project subject to the General Construction Permit? □ **Yes** □ **No**

Construction Threat to Water Quality Prioritization
See the attached flow chart for guidance on determining the construction prioritization.

This project is □ **HIGH** □ **MEDIUM** □ **LOW** **priority threat to water quality.**

Section 3 – Operating Requirements

After your project is complete, certain water quality protection requirements may apply to the facility. The facility owner and operator should be made aware of these requirements.

All municipal, industrial, commercial, and residential sites in the City of National City are required to implement storm water BMPs to reduce the amount of pollution discharged to the Maximum Extent Practicable (MEP). See Appendix C of the City's Jurisdictional Urban Runoff Management Plan (JURMP) for further details.

Some industrial facilities are also subject to the State General Industrial Permit for Storm Water Discharges (Industrial Permit). To find out if your project may be required to obtain coverage under the Industrial Permit after it begins operations, visit the State Water Resources Control Board web sites at http://www.waterboards.ca.gov/stormwtr/industrial.html.

Section 4 – Certification

Name & Title of Person completing form: _____ _____

Telephone number: (_____)_____-_____ Fax number: (_____)_____-_____

Email Address: _____ (optional)

I understand that as a condition of my permit, I am required to prevent construction generated or related pollutants from discharging from the project site. All construction projects within the City of National City are required to implement Best Management Practices (BMPs). I have received a copy of the Construction Site BMP handout.

Signature of responsible party: _____ Date: _____

For City of National City Use Only

Engineering Department
The information provided is consistent with the proposed plans □ **Yes** □ **No**

Information/documentation disseminated for SUSMP
□ Standard Permanent Storm Water BMPs □ Non-SUSMP Standard Permanent Storm Water BMPs
□ General Construction Permit □ Erosion & Sediment Control □ General Industrial Permit
□ N/A (No required documentation) □ Other _____

_____ _____
Signature Date

☐ **Planning Department** **OR** ☐ **Community Development Commission** _____
Initial

Building Department _____ Initial ☐ BMP information distributed

SUSMP REVIEW FLOW CHART

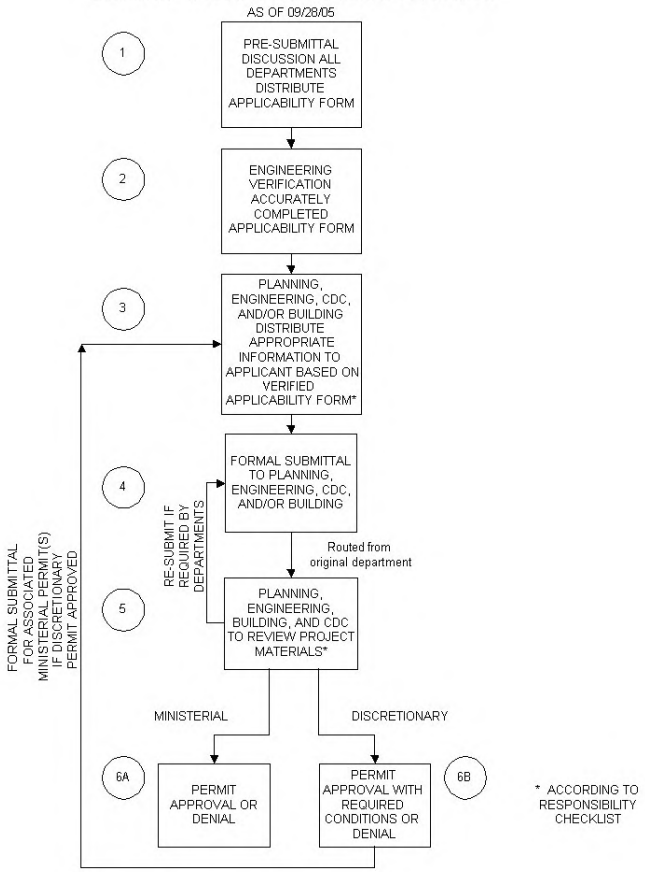

CONSTRUCTION THREAT TO WATER QUALITY PRIORITIZATION FLOW CHART

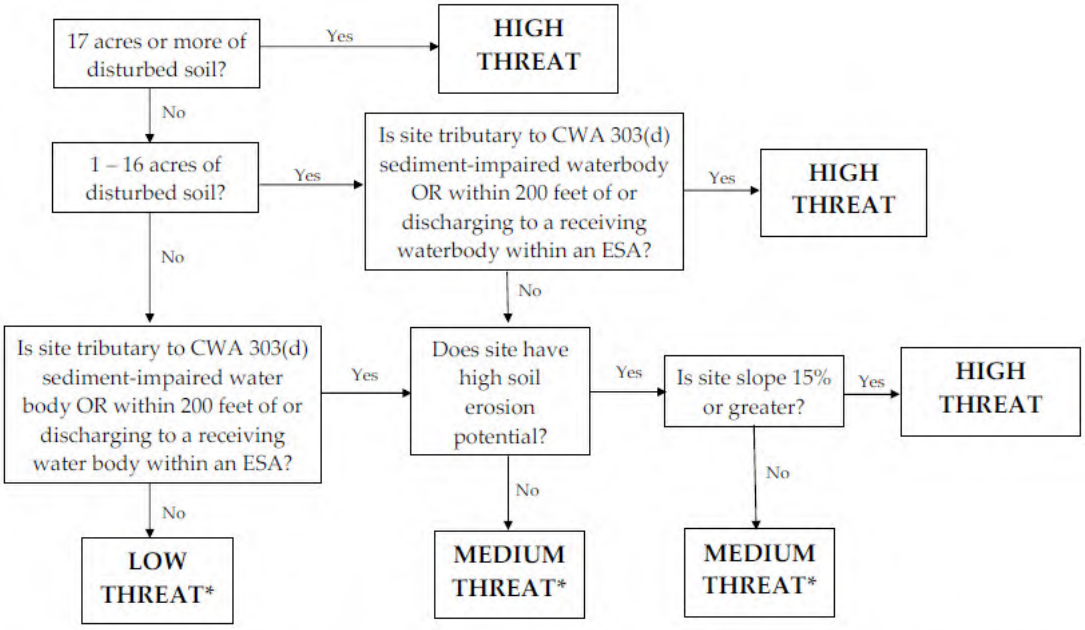

*Sites with a low or medium TTWQ can be given a higher threat prioritization based on additional factors, such as project type, non-storm water discharge potential, or if there is a history of non-compliance with storm water regulations at the site.

303(d) Water bodies - 7th St Channel (La Paleta Creek) and 24th St Marine Terminal
ESA Water bodies - Paradise Marsh & Creek and Sweetwater Marsh National Wildlife Refuge

ATTACHMENT 3.1

CONSTRUCTION BMP FACT SHEET (BLUE SHEET)

Construction Site Best Management Practices

As a condition of your permit, you are required to prevent construction generated or related pollutants from discharging from your project site. All construction projects within the City of National City are required to implement at least one of the Best Management Practices (BMPs) from each category and subcategory listed below, where applicable. Property owners and/or permit holders will be responsible for the selection, installation and maintenance of proper BMPs in accordance with industry recommended standards such as the Caltrans or California Storm Water BMP handbooks or in accordance with the California General Permit for Construction. Depending on site-specific information such as project scope and potential associated discharges. Additional BMPs may be required where appropriate. Project proponents will need approval from the City prior to installation of any alternate BMPs not listed below.

Minimum BMPs for Construction Activities:

1. **Planning and Scheduling**
   Planning and scheduling BMPs such as minimizing grading are required where feasible to help reduce the amount and duration of soil exposure.
   a. Preservation of natural hydrologic features
   b. Preservation of riparian buffers and corridors
   c. Minimization of areas that are cleared and graded to only the portion of the site necessary for construction
   d. Minimization of exposure time of disturbed soil areas
   e. Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods
   f. Temporary stabilization and reseeding of disturbed soil areas as rapidly as feasible
   g. Employee and Subcontractor Training

2. **Soil Stabilization and Erosion Prevention**
   Physical Stabilization BMPs such as vegetation, landscaping or structural methods are required to prevent erosion from exposed slopes.
   a. Planning and Scheduling
   b. Preservation of Existing Vegetation
   c. Physical Stabilization
      - Hydraulic Mulch
      - Hydro-seeding
      - Soil Binders
      - Straw Mulch
      - Geo-textiles, Plastic Covers, and Erosion Control Blankets/Mats
      - Wood Mulching
      - Earth Dikes/Drainage Swales and Lined Ditches
   d. Site Drainage
      - Outlet Protection/Velocity Dissipation
      - Slope Drains
   e. Permanent re-vegetation or landscaping as early as feasible

See reverse side

3. **Sediment Containment**

Sediment containment controls should be used to supplement erosion prevention methods not as a substitute for erosion control. Sediment controls act to contain sediment that has been previously eroded and may get carried on-site and/or discharged from the site in sheet flow or from tracking by equipment and vehicles.

a. Perimeter Protection
   - Silt Fencing
   - Gravel Bag Berm
   - Fiber Rolls

b. Sediment Capture
   - Storm Drain Inlet Protection
   - Sediment Trap
   - De-silting Basins designed in accordance with industry standards such as Caltrans, California Storm Water BMP manual. If the project is five acres or greater the de-silting basin must be designed in accordance with the State General Construction Permit, Order DWQ 99-08.
   - Gravel bag Barrier

c. Sediment Tracking
   - Stabilize Construction Entrances and Exits
   - Construction Road Stabilization
   - Entrance/ Outlet Tire Wash
   - Street Sweeping

4. **Materials and Equipment Management**

Pollution Prevention measures are required were applicable to prevent the contamination of storm water from waste materials, construction materials, vehicles, and equipment stored on-site. Each site must evaluate the potential pollutants on-site, which may be discharged during construction activities.

a. Materials Management
   - Material Delivery and Storage
   - Material Use
   - Stockpile Management
   - Spill Prevention and Control

b. Vehicle and Equipment Operations
   - Vehicle and Equipment Cleaning
   - Vehicle and Equipment Fueling
   - Vehicle and Equipment Maintenance

c. Waste Management
   - Solid
   - Liquid
   - Sanitary
   - Concrete
   - Hazardous
   - Contaminated Soil

5. **Non-Storm Water Discharge and Drainage Control**

Management of non-storm water discharges involves pollution prevention methods as well as drainage control. Project managers must implement appropriate drainage control methods to divert, contain and properly discharge drainage generated by construction activities.

a. General
   - Paving and Grinding Operations

b. Non-storm water discharges
   - Water Conservation Practices
   - Dewatering Operations
   - Potable Water/Irrigation and Flushing

For additional information, call Barbara Tipton, Storm Water Compliance Inspector at (619) 336-4583 or Btipton@ci.national-city.ca.us

ATTACHMENT 3.2

WATER QUALITY THREAT PRIORITIZATION FLOW CHART FOR CONSTRUCTION PROJECTS

FIGURE 5-1: WATER QUALITY THREAT PRIORITIZATION FLOW CHART FOR CONSTRUCTION PROJECTS

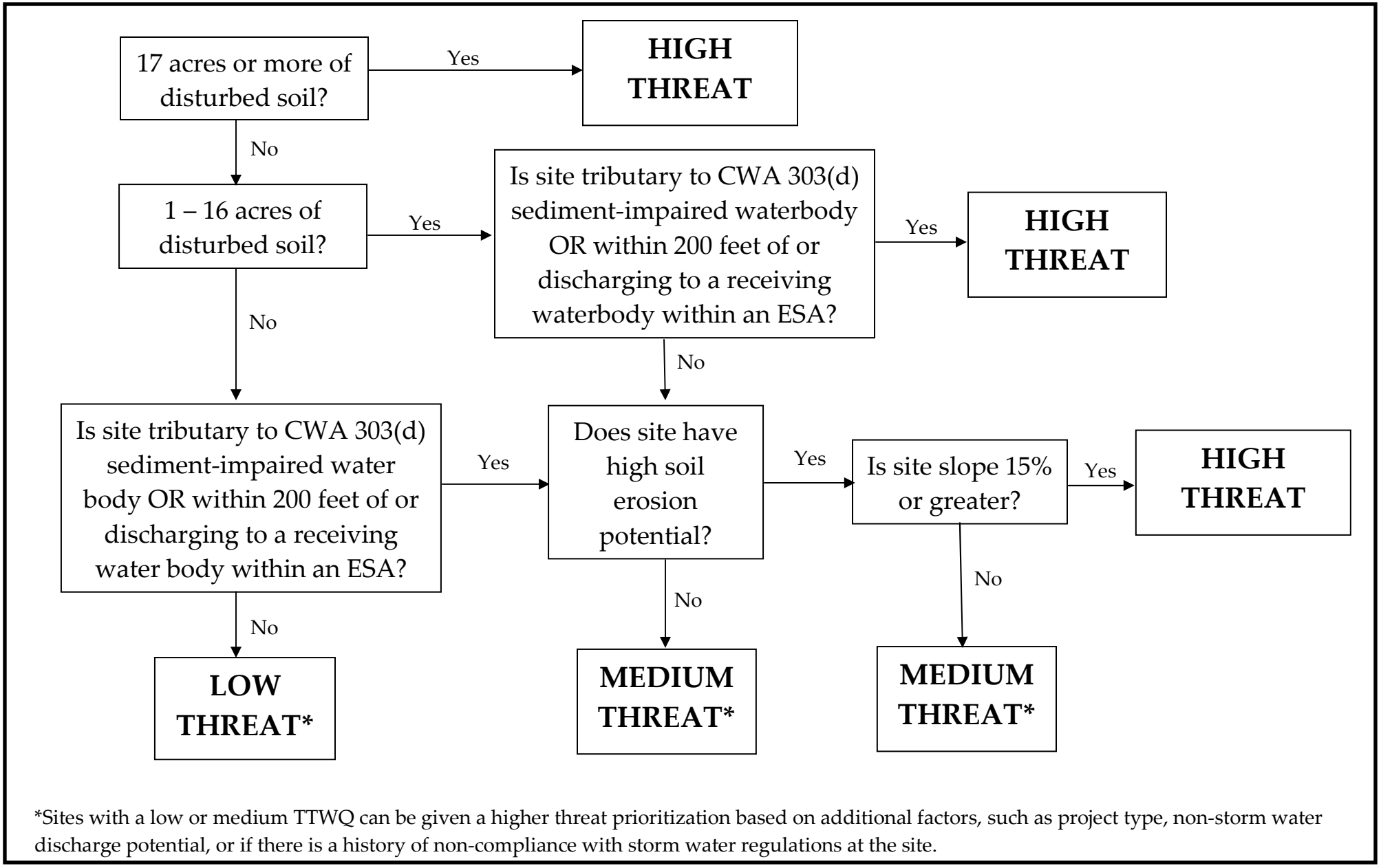

*Sites with a low or medium TTWQ can be given a higher threat prioritization based on additional factors, such as project type, non-storm water discharge potential, or if there is a history of non-compliance with storm water regulations at the site.

ATTACHMENT 4.1

MUNICIPAL INSPECTION FORM

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Facility Name_____

Street Address_____ Mailing Address_____

_____ _____

Manager/Operator(s)_____

Telephone # (_____) _____ - _____ ext._____ Fax # (_____) _____ - _____

Manager/Operator(s) Email:_____

Facility Personnel Present_____

B. FACILITY/SITE INFORMATION

Principal activity:_____

JURMP Classification_____

New JURMP Classification?_____

Does facility maintain SWPPP/BMP Plan? ☐ Yes ☐ No

If yes, what is the date of last SWPPP/BMP Plan revision?_____

If yes, does the SWPPP/BMP Plan include applicable minimum BMPs from the JURMP? (if no, describe in Section E) ☐ Yes ☐ No

If yes, does the SWPPP/BMP Plan include a current list of individuals Responsible for implementing BMPs at the site? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____ Hydrologic Area: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____ square feet

Approximate % impervious surface of this area_____ %

Exposed areas of intensive outdoor activity: _____

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

D. BMP ASSESSMENT

BMPs	N/A	Yes	No	Comments
D.1 General				
Is the site free of excessive litter and debris?				
Are discharge locations free of excessive sediment and debris?				
Are parking lots, sidewalks and streets free of excessive sediment and debris?				
Are roof downspouts directed away from areas of potential pollutants?				
Is wash water from pressure washing / hosing managed appropriately?				
Are employees trained in storm water management?				
Does the facility have a current log of employees who have participated in training?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
If reclaimed water is used for irrigation, is the site free of evidence of irrigation water entering the storm drain?				
Are stockpiles of soil or landscape waste covered when feasible and equipped to prevent runoff transport?				
Are pesticides, herbicides, and fertilizers managed in accordance with the JURMP BMPs?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area adequately covered (closed lids or permanent overhead cover)?				
Is the trash/recycling area free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor materials that pose a threat to water quality stored appropriately (covered or in sealed containers)?				
Are outdoor storage containers properly labeled?				
Is there an accessible, appropriate spill response kit?				
Is there a written spill response plan? If so, please provide to inspector. (NA if no significant materials to spill)				
Are liquid storage containers/tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
Is water from pools and/or fountains disposed of properly?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

BMPs	N/A	Yes	No	Comments
Are vehicle maintenance activities conducted within contained areas when feasible (garage, canopy, work shop)?				
Are equipment and vehicles inspected daily for leaks and repaired as necessary?				
Are storm drain inlets near vehicle-fueling areas protected from spills and leaks?				
Is vehicle washing preformed in a designated area where runoff does not enter the MS4?				
Are biodegradable soaps used when appropriate?				
D.5 Building Repair/Construction				
Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				
Are impervious areas free of debris and spills from painting, scraping, and/or sandblasting activities?				
D.6 Structural BMPs				
Are structural BMPs adequately maintained? (NA if no structural BMPs at facility)				
D.7 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.8 Other				
Are appropriate signs/stenciling present at the facility?				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				

E. ADDITIONAL COMMENTS

(describe any additional deficiencies not represented above and/or notable BMP improvements)

City of National City
Storm Water Quality Inspection for Municipal Facilities
Inspected by D-MAX Engineering, Inc.

F. CORRECTIVE ACTION

Is corrective action needed? ☐ Yes ☐ No (If **BMP-related** corrective action is required, describe below.)

Operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax ☐ E-Mail

G. VIOLATIONS

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described in Section F.

☐ Violation of City Ordinance(s):

- ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
  Description_____
- ☐ Illegal connection(s) to the storm drain system
  Location_____
- ☐ Littering
- ☐ Failure to properly implement required BMPs

☐ Other Violation_____

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

☐ Implement the recommended corrective actions listed in Section F.

Additional actions required:

H. ADDITIONAL RECOMMENDED CITY ACTIONS*

*Recommended City Actions listed at the time of inspection are subject to change based on later review by office staff

Does this facility require a follow-up inspection? ☐ **Yes** ☐ **No**

ASSESSMENT

Level of knowledge regarding storm water issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

"RW 303(d)" = Receiving water impairments, as listed in the most recent 303(d) list
"WS COC" = High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
"PDP" = pollutant discharge potential.
"Emp. Training" = employee training activities focused on storm water pollution prevention
"Housekeeping" = standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
"Minor Struct." = minor structural BMPs that do not require building permits, such as covering with tarps or building berms
"Major Struct." = major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results* are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results* are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results* are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results* above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results* exceed the EPA benchmark by an order of magnitude or more

DMAX

ATTACHMENT 4.2

STORM DRAIN BOX CLEANING LOG

CITY OF NATIONAL CITY

STORM DRAIN BOX CLEANING LOG

Date: _____ Technician: _____ Man Hours: _____

Project Location / Description:

Street name(s): _____

By street / between streets: _____

Other description:

Number of Boxes Cleaned: _____

Check those that apply:			**Estimate amount of debris:**
Trash	☐	(paper, bags, bottles, cigarettes, dumped items, etc.)	Pounds: ☐
Sediment	☐	(silt, soil, sand, gravel, rocks, etc.)	Pounds: ☐
Organic Matter	☐	(leaves, branches, weeds, algae, etc.)	Pounds: ☐
Other Debris	☐	(Please describe below.)	Pounds: ☐
None / Clean	☐		

Total Debris Removed (pounds) : ☐

(Add up weights/amounts from above)

Description of Other Debris Removed: _____

Notes:

(rev. 4/27/09)

ATTACHMENT 4.3

STORM DRAIN CHANNEL CLEANING LOG

CITY OF NATIONAL CITY

STORM DRAIN CHANNEL CLEANING LOG

Date: _____

Technician: _____

Man Hours _____

Type of cleaning project:

Spot Cleaning: ☐

Channel Length (ft): _____

If not applicable, check here: ☐

Project Area / Location:

Channel # _____

Or, *description*: _____

Other location: _____

_____

Check those that apply: **Estimate amount of debris:**

Trash	☐	(paper, bags, bottles, cigarettes, dumped items, etc.)	cubic yards: ☐
Silt / Sediment	☐	(silt, soil, sand, gravel, rocks, etc.)	cubic yards: ☐
Organic Matter	☐	(leaves, branches, weeds, algae, etc.)	cubic yards: ☐
Other Debris	☐	(Please describe below.)	cubic yards: ☐
None / Clean	☐		

Total Debris Removed (cubic yards): ☐

(Add up amounts from above)

Description of Other Debris Removed: _____

Notes:

(rev. 4/27/09)

ATTACHMENT 4.4

SPECIAL EVENT INSPECTION FORM

CITY OF NATIONAL CITY
STORM WATER COMPLIANCE INSPECTION FOR SPECIAL EVENTS

I. INSPECTION INFORMATION

SPECIAL EVENT NAME	LOCATION	
INSPECTOR	DATE	TIME
EVENT CONTACT (IF AVAILABLE)	EVENT CONTACT PHONE (IF AVAILABLE)	

II. SITE CONDITIONS AND CLEAN UP

BMP	N/A	Yes	No	(If "No") Resolution
Site reasonably clean and free of litter and debris				
Non-storm water, including wash water, collected and disposed of properly				
Site free of illegal discharges, spills, and/or leaks				
Storm drains clear of litter, debris, and spills				
Adjacent water bodies and/or MS4 channels free of event-related litter and debris				
Temporary BMPs removed from site				

III. FOLLOW-UP

Additional site clean-up is necessary: ☐ Yes ☐ No

If yes, list date resolved: _____/_____/_____

Action(s) taken (check all that apply):

- ☐ Refer to Public Works for clean up
- ☐ Require immediate onsite clean up
- ☐ Require clean-up by later date Deadline: _____/_____/_____
- ☐ Other (list): _____

Enforcement action(s) taken (check all that apply):

- ☐ Verbal Warning
- ☐ Corrective Action Letter
- ☐ Notice of Violation
- ☐ Administrative Citation Amount: $_____ Number: _____
- ☐ Stop Work Order
- ☐ Other (list): _____

Last Revised: April 2009

ATTACHMENT 4.5

STORM WATER BULLETIN BOARD PHOTO

Stop throwing trash!!!
Emalyn
Ms. Roberts' Class- Lincoln Acres School
If you keep the ocean clean MAGIC will happen
Sinai
Ms. Schaefer's Class- Palmer Way School
KEEP OUR OCEANS CLEAN!!
Andrea
Mrs. Flora's Class- Palmer Way School
Kate
Mrs. Flora's Class- Palmer Way School
Don't Drop Cigarettes Out Of Your Window Because the Rain Will Wash it into the Ocean
Sara
Mrs. Smith's Class- Kimball School
Nereida
Ms. Roberts' Class- Lincoln Acres School
CALIFORNIA
NATIONAL CITY
1887
INCORPORATED
Storm Water Calendar Contest
Sponsored in part by EDCO
German
Ms. Buram's Class- Central School
Keep Our Community CLEAN!
Emily
Ms. Roberts' Class- Lincoln Acres School
Don't pollute our water!!
Keep our community so clean
Alicia
Ms. Jones'- Class- Lincoln Acres School
Marlene
Ms. Roberts' Class- Lincoln Acres School
IF WE DON'T STOP LITTERING THIS IS OUR FUTURE!!!
Save the Ocean
Protect the fish
Alyssa
Ms. Dang's Class- El Toyon
Jacklyn
Mrs. Smith's Class- Kimball School
Please don't litter! Trash on the ground can end up in the sea!

ATTACHMENT 5.1

INDUSTRIAL AND COMMERCIAL INSPECTION FORM

CITY OF NATIONAL CITY

STORM WATER COMPLIANCE INSPECTION FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Inspected by D-MAX Engineering, Inc.

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

Result: ☐ Full Insp. ☐ Could not Contact ☐ Not Inventoried ☐ Moved, Vacant ☐ Refused ☐ Moved, Replaced by_____ ☐ Out of Jurisdiction ☐ Duplicate of: _____ ☐ Mobile

A. CONTACT INFORMATION

Original

Business Name_____

_____

Street Address _____

_____

Responsible Person(s)_____

Title:_____

Business Telephone # (____) _____ -_____ext._____

Business Fax # (_____) _____ - _____

Changes

Business Name_____

_____

Street Address_____

☐ change _____

Responsible Person(s)_____

Business Telephone # (____) _____ -_____ext._____

Business Fax # (_____) _____ - _____

Home Based? ☐ Yes ☐ No Mobile Business? ☐ Yes ☐ No **APN**:_____

Is this facility located in a multi-suite complex? ☐ Yes ☐ No **E-Mail:**_____

Does facility have a current business certificate? ☐ Yes ☐ No #_____ Exp._____

Facility personnel present:_____

B. FACILITY/SITE INFORMATION

Principal activity:_____

Assigned SIC Code(s): _____ _____ _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

Recommended change of SIC Code(s)? _____ _____ _____

Existing SIC Code(s) _____ _____ _____ ☐ Food Attachment ☐ Industrial Attachment

Status Update (if no longer active in City or does not need an inspection): ☐ Moved/Out of Business ☐ Duplicate ☐ Not Inventoried ☐ Out of Jurisdiction

Is facility subject to CA Statewide General Industrial Permit? ☐ Mandatory ☐ Conditional ☐ No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐ Yes ☐ No WDID: 9 37I0_____

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a storm water monitoring program? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Discharge points: _____

_____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate % impervious surface of this area_____%

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP ASSESSMENT

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.1 General					
Keep site free of litter, debris, and sediment using dry methods					
Keep drains on site free of litter and debris					
Keep outdoor areas free of spills and leaks					
Collect water from pressure washing or hosing and dispose of appropriately					☐ Unknown Performed by:
Collect and dispose of cleaning water appropriately					
Direct roof downspouts away from areas of potential pollutants					
D.2 Landscaping					
Properly manage pesticides/fertilizer; use IPM when feasible					☐ Unknown Landscaping Co:
Employ adequate erosion prevention measures (vegetation or physical stabilization)					
Reduce over watering/over-irrigation					
Properly store stockpiles to prevent material transport					
Properly store and dispose of green waste					☐ Unknown
D.3 Materials and Wastes					
Protect trash area from contact with storm water					
Keep trash area free of litter and debris, liquids, powders, sediment					
Adequately cover materials stored outside					
Prevent run-on from contacting materials stored outdoors					
Provide an accessible, functional spill response kit					
Properly label outdoor storage containers					
Equip liquid storage containers with secondary containment					
Keep secondary containment free of spills and rainwater					
Properly store and dispose of hazardous materials					
Keep loading and unloading areas, including drains, free of debris					
Dispose of water generated by processing activities appropriately					
Dispose of pool, spa, fountain, and filter backwash water properly					☐ Unknown Performed by:
Clean floor mats in locations that do not drain to storm drain system					

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.4 Equipment, Vehicles, and Outdoor Activities					
Conduct outdoor activities within contained areas (garage, under canopy, work shop)					
Use drip pans to collect leaks/spills					
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4					
D.5 Other					
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff					
Identify and eliminate illicit connections and illegal discharges					
Provide storm water training for appropriate employees					

D.6 Additional Questions	Comments/Results
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐ Painting ☐ Sandblasting ☐ Fuel Distribution ☐ Dust dispersion or mineral processing ☐ Metal smelting ☐ Metal plating or anodizing ☐ Chemical production or mixing ☐ Large fuel burning device ☐ Incinerator
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/ sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A
What is the approximate percentage of the site that drains to the treatment control BMPs?	☐ N/A
Do major potential pollutant sources drain to treatment BMP(s)?	☐ All ☐ Some ☐ None ☐ N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	NOI NONA/NEC Calendar

D.7 Additional Required Actions

E. STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE*

☐ Non-compliance with the State Industrial Storm Water General Permit noted.

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE*:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit—see Attachment 3 of the Industrial Permit (www.waterboards.ca.gov/stormwtr/industrial.html).

- ☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP)—see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required: _____

_____

_____

F. CORRECTIVE ACTION SUMMARY

☐ **Corrective Actions Required.** Please refer to sections D.1-D.6 and E of this form and, if applicable, the Food Establishment Storm Water BMP Assessment form (if applicable, it is attached).

☐ No Corrective Actions Required at this Time.

G. RECOMMENDED CITY ACTIONS**

_____

_____

_____

_____

☐ poor management of shared waste disposal area(s), but responsible party could not be indentified

ASSESSMENT

Level of knowledge regarding stormwater issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

*Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

**Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

Follow Up Inspection Priority: ☐ **Priority 1** ☐ **Priority 2** ☐ **Priority 3** ☐ **None**

☐ Potential Hazmat issue

Re-inspect on or after: ____/_____/_____
Date

RESOLUTION

☐ NOV Issued: _____/_____/_____
Date

☐ Corrective Action Letter Issued: _____/_____/_____
Date

☐ Citation Issued: _____ _____/_____/_____
Number Date

☐ Verbal Warning

☐ Stop Work Order

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

"RW 303(d)" = Receiving water impairments, as listed in the most recent 303(d) list
"WS COC" = High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
"PDP" = pollutant discharge potential.
"Emp. Training" = employee training activities focused on storm water pollution prevention
"Housekeeping" = standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
"Minor Struct." = minor structural BMPs that do not require building permits, such as covering with tarps or building berms
"Major Struct." = major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results* are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results* are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results* are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results* above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results* exceed the EPA benchmark by an order of magnitude or more

DMAX

CITY OF NATIONAL CITY
FOOD ESTABLISHMENT STORM WATER BMP ASSESSMENT

Inspected by D-MAX Engineering, Inc.

Business Name _____

How long has the manager worked at the business? ☐ < 3 months ☐ 3-6 months ☐ 7-12 months ☐ > 1 year ☐ Unknown

Is the facility manager also the owner? ☐ Yes ☐ No ☐ Unknown

Property management company:_____ Business Telephone # **(____)**____ -_____ext.____

Mailing address:_____

_____

BMPs	No Corrections Required		**Corrections Required**		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
Keep grease bin and area surrounding grease bin free of grease stains/spills					
Keep storm drain inlets free of grease and other food debris					

Additional Questions	**Comments**
How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Dumpster ☐ N/A	
Do oil-recycling/grease bins have overhead coverage?	☐ Overhead structure ☐ External container overhead ☐ No ☐ N/A
Do oil-recycling/grease bins have secondary containment?	☐ External containment ☐ Double-walled ☐ No ☐ N/A
Does facility have a grease trap or grease interceptor?	☐ No ☐ Grease Trap ☐ Grease Interceptor ☐ Unknown
What is the reported maintenance frequency for the grease trap or interceptor?	☐ Annual ☐ Every 6 mn ☐ Quarterly ☐ Monthly ☐ Every 2 wks ☐ Weekly ☐ > Weekly ☐ Unknown ☐ N/A

How are outdoor areas (patio, loading dock, parking lot, dumpster area, etc.) cleaned? (check all that apply)

- ☐ Hose (If yes, see relevant question in Section D.1 of main form)
- ☐ Sweep
- ☐ Mop / deck brush (If yes, see relevant question in Section D.1 of main form)
- ☐ Power wash (If yes, see relevant question in Section D.1 of main form)
- ☐ Pick up trash
- ☐ Outside company/property management
- ☐ Do not clean

CITY OF NATIONAL CITY

SWPPP/BMP PLAN AND/OR STORM WATER MONITORING PLAN ATTACHMENT

Inspected by D-MAX Engineering, Inc.

SWPPP REVIEW* **Does facility maintain a SWPPP/BMP Plan:** ☐ **Yes** ☐ **No** ☐ **Unknown** ☐ **Not Available**

SWPPP Component	Provided		Adequate		Comments
Site Map/Description……	☐ Yes	☐ No	☐ Yes	☐ No	_____
Materials List……..	☐ Yes	☐ No	☐ Yes	☐ No	_____
Significant Spills/Leaks…….	☐ Yes	☐ No	☐ Yes	☐ No	_____
Pollution Prevention Team….. (Identification of current team members.)	☐ Yes	☐ No	☐ Yes	☐ No	_____
Industrial Activities……	☐ Yes	☐ No	☐ Yes	☐ No	_____
Pollutant Sources/Risks……..	☐ Yes	☐ No	☐ Yes	☐ No	_____
Compliance Activity Schedule. (Procedures to conduct annual site compliance evaluation.)	☐ Yes	☐ No	☐ Yes	☐ No	_____
Employee Training……	☐ Yes	☐ No	☐ Yes	☐ No	_____
Accessible to staff…..……..	☐ Yes	☐ No	☐ Yes	☐ No	_____
Storm Water BMPs…..……	☐ Yes	☐ No	☐ Yes	☐ No	_____

*The SWPPP review portion of the inspection focuses mainly on proposed BMPs and monitoring practices. It is not intended to be a comprehensive assessment of compliance with all SWPPP-related requirements of the General Industrial Permit.

STORM WATER MONITORING PROGRAM

Does this facility have a storm water monitoring program? ☐ Yes ☐ No ☐ N/A

Was appropriate monitoring conducted during the most recent wet season? ☐ Yes ☐ No

If not, does the facility have documentation of no qualifying rain events? ☐ Yes ☐ No

If not, is the facility in a GMP and not scheduled for most recent year? ☐ Yes ☐ No

Do monitoring results show that existing BMPs are effective in removing pollutants? ☐ Yes ☐ No ☐ None Available

If not, were potential sources of the identified pollutants observed during the inspection? ☐ Yes ☐ No

If yes, list the potential sources and their associated pollutants: _____

_____

_____

Exceedances Noted (list dates, locations, constituent(s) and numeric value(s)):

☐ Copy of results attached

_____

_____

_____

_____

ATTACHMENT 5.2

2009 STORM WATER CALENDAR

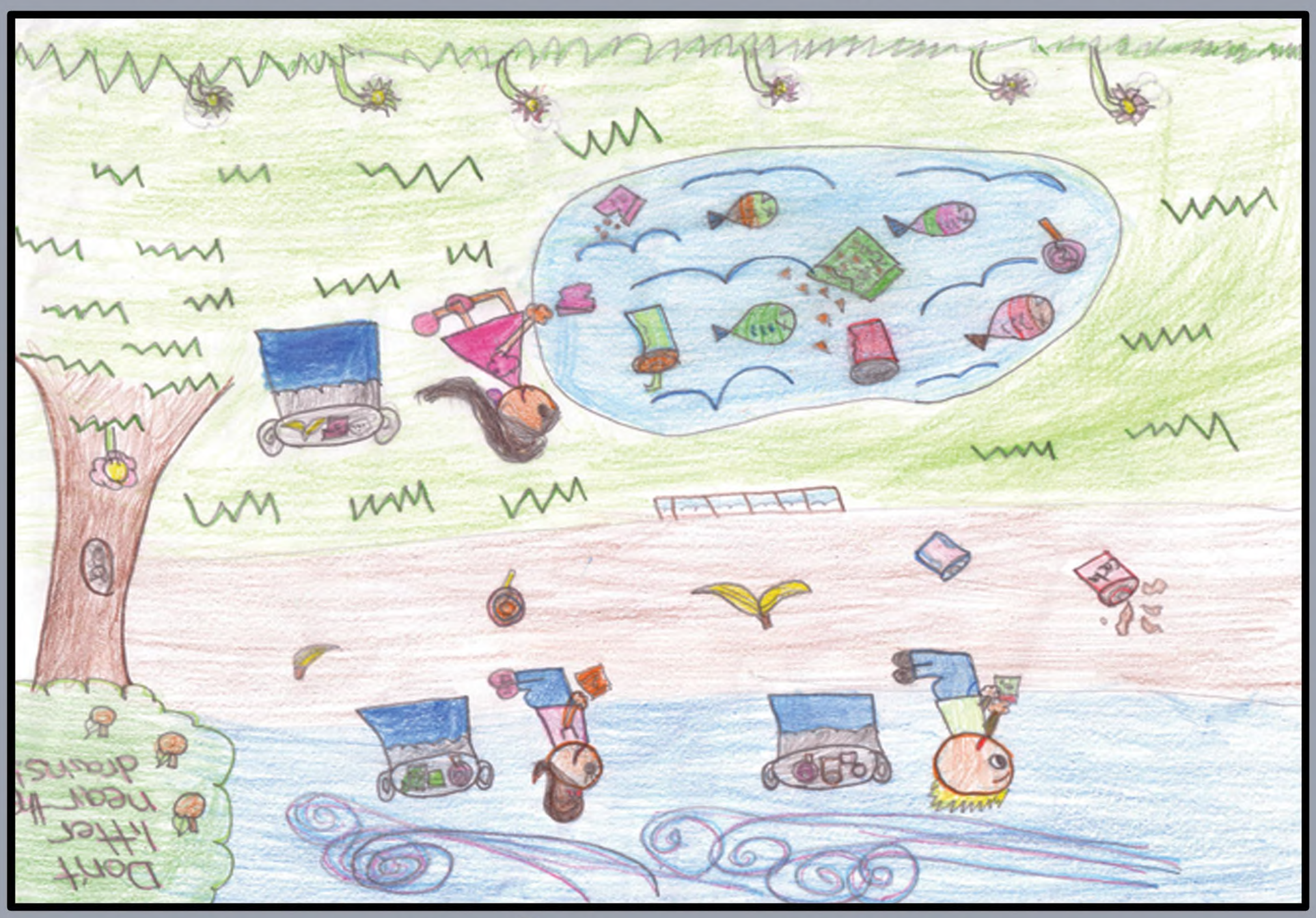

National Pollutant Discharge Elimination System (NPDES)

2009 Storm Water Program Calendar

National City Contacts/Contactos en National City

To report illegal discharges of pollution/Para reportar desechos ilegales de contaminación:
Stormwater Hotline: (619) 336-4589

For information regarding the Storm Water Program/Para información referente al Programa de Aguas Pluviales: Engineering Department: (619) 336-4380

To report trash on public property/Para reportar basura en propiedad pública:
Public Works: (619) 336-4580

To report trash on private property/Para reportar basura en propiedad privada:
Building Department: (619) 336-4210

To get involved in your neighborhood/Para ser parte de tu vecindario:
Community Services - Neighborhood Council: (619) 336-4290

City of National City web site/Sitio de Internet de El Municipio de National City:
www.ci.national-city.ca.us

**By Keeping our Community Clean,
We Can Keep the Ocean Clean!**

**¡Manteniendo a nuestra comunidad limpia
podemos mantener el océano limpio!**

VOL. 5 - Page 1854

Do you go to the beach when it is raining?

Probably not, but pollution does! When it rains, pollutants like litter and oil are carried from our streets and sidewalks through the storm drain system and to our local creeks and ocean. Pollution can hurt plants and animals and can also make water unhealthy for humans.

2009 Storm Water Program Calendar Art Contest

Winner Display at City Hall

The City of National City sponsored an art contest asking local third grade students to create original drawings showing how they and all members of their community can help prevent pollution in local creeks, rivers, and the ocean. This contest was open to third graders, who are taught responsible citizenship and the importance of caring for natural resources as part of the standard third grade curriculum. The theme of this year's contest was "by keeping our community clean, we can keep the ocean clean." The winners of the contest are featured within this calendar. Contest winners were also honored at a National City Council meeting where they received an award certificate signed by the National City Mayor, Ron Morrison. Prizes for the 12 winners were sponsored by Edco, National City's waste disposal service.

Special thanks to the City of National City's Storm Water Program, National City's City Council, National City Mayor Ron Morrison, Stephanie Maxin, Edco Disposal Services, Westfield Plaza Bonita, Central School, El Toyon School, Harbison School, Kimball School, Las Palmas School, Lincoln Acres School, Olivewood School, John A. Otis School, Palmer Way School, Rancho Del La Nacion School, and all of this year's participants for supporting and participating in the 2009 Storm Water Program Calendar Art Contest.

Local Events

You can do your part to keep National City and its local creeks, rivers, and oceans clean by participating in the following community events:

NATIONAL CITY CLEAN UP DAY: The City of National City has National City Clean Up Day, twice a year, once in the spring and again in the fall. Residents can dispose of items such as garbage, appliances, furniture, etc. Hazardous materials are not permitted in the disposal dumpsters at this event. Information regarding this event will be enclosed with your Edco Disposal Service trash bill.

CREEK TO BAY CLEAN UP: The City of National City is a sponsor of the annual Creek to Bay Clean Up. This year's event is on April 25, 2009. Please visit the event's website at www.creektobay.org for more information and to register at a local clean up site.

HAZARDOUS WASTE DISPOSAL: The City of National City contracts with the City of Chula Vista to provide hazardous waste disposal for the residents of National City. The Chula Vista Household Hazardous Waste Collection Facility (1800 Maxwell Road, Chula Vista) is open on Saturdays from 9 a.m. - 1 p.m. For a $5.00 fee, up to 15 gallons or 125 pounds of hazardous waste is accepted. AutoZone, Kragen, Napa, and Firestone accept used oil and other automotive fluids at no charge. Please call the individual stores for details.

¿Va usted a la playa cuando está lloviendo?

Probablemente no, pero la contaminación sí va al mar. Cuando llueve, los contaminantes como la basura y el petróleo se llevan desde nuestras calles y aceras por el sistema de drenaje hasta nuestros arroyos locales y el mar. La contaminación puede dañar a las plantas y a los animales y también puede hacer la agua insalubre para los seres humanos.

Concurso de arte para el calendario 2009 del programa de aguas pluviales

El Municipio de National City patrocinó un concurso de arte local, pidiendo a los estudiantes de tercer grado que creen dibujos originales que muestran cómo ellos y todos los miembros de su comunidad pueden ayudar a prevenir la contaminación en arroyos locales, ríos y el mar. Este concurso estaba abierto a los estudiantes del tercer grado, a quiénes se enseña la ciudadanía responsable y la importancia de cuidar a los recursos naturales como parte del plan de estudios del tercer grado. El tema del concurso de este año fue "manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio." Los ganadores del concurso se presentan dentro de este calendario. Ganadores del concurso también fueron honrados en una reunión del Consejo Municipal de National City donde recibieron como premio una certificación firmado por el alcalde de National City, Ron Morrison. Los premios para los 12 ganadores fueron patrocinados por Edco, el servicio de recolección de basura en National City.

Un agradecimiento especial al Programa de Aguas Pluviales de El Municipio de National City, el Consejo Municipal de National City, Ron Morrison el alcalde de National City, Stephanie Maxin, Edco Disposal Services, Westfield Plaza Bonita, Central School, El Toyon School, Harbison School, Kimball School, Las Palmas School, Lincoln Acres School, Olivewood School, John A. Otis School, Palmer Way School, Rancho Del La Nación School, y todos los participantes de este año por apoyar y participar en el concurso de arte para el calendario 2009 del programa de aguas pluviales.

Eventos Locales

Usted puede hacer su parte en mantener National City y sus arroyos locales, ríos y mar limpios mediante la participación en los eventos de la comunidad siguientes:

DÍA DE LIMPIEZA EN NATIONAL CITY: El Municipio de National City tiene un evento de limpieza dos veces por año en la primavera y en el otoño. Los residentes pueden deshacerse de basura, aparatos de hogar, muebles, etc. Los materiales peligrosos no son aceptados en los contenedores en el día del evento. Para más información sobre este evento, usted la podrá encontrar en su recibo de recolección de basura de Edco.

DÍA DE LIMPIEZA "CREEK TO BAY": El Municipio de National City es un patrocinador del evento anual "Creek to Bay Clean Up." El evento de este año es el 25 de abril, 2009. Por favor, visite el sitio Web del evento en www.creektobay.org para obtener más información y para registrarse para un sitio local de la limpieza.

DESECHOS PELIGROSOS: El Municipio de National City tiene contrato con el Municipio de Chula Vista para poder deshacerse de desechos peligrosos de los residentes de National City. Chula Vista Household Hazardous Waste Collection Facility está localizado en el 1800 Maxwell Road en Chula Vista, CA. Está abierto los sábados de 9:00 AM – 1:00 PM. Con un pago de $5.00 dólares son permitidos 15 galones o 125 libras de desechos peligrosos. AutoZone, Kragen, Napa y Firestone aceptan aceite usado y otros líquidos de coches de forma gratuita. Llame a cada una de estas compañías para más detalles.

Morgan Square

January/Enero 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

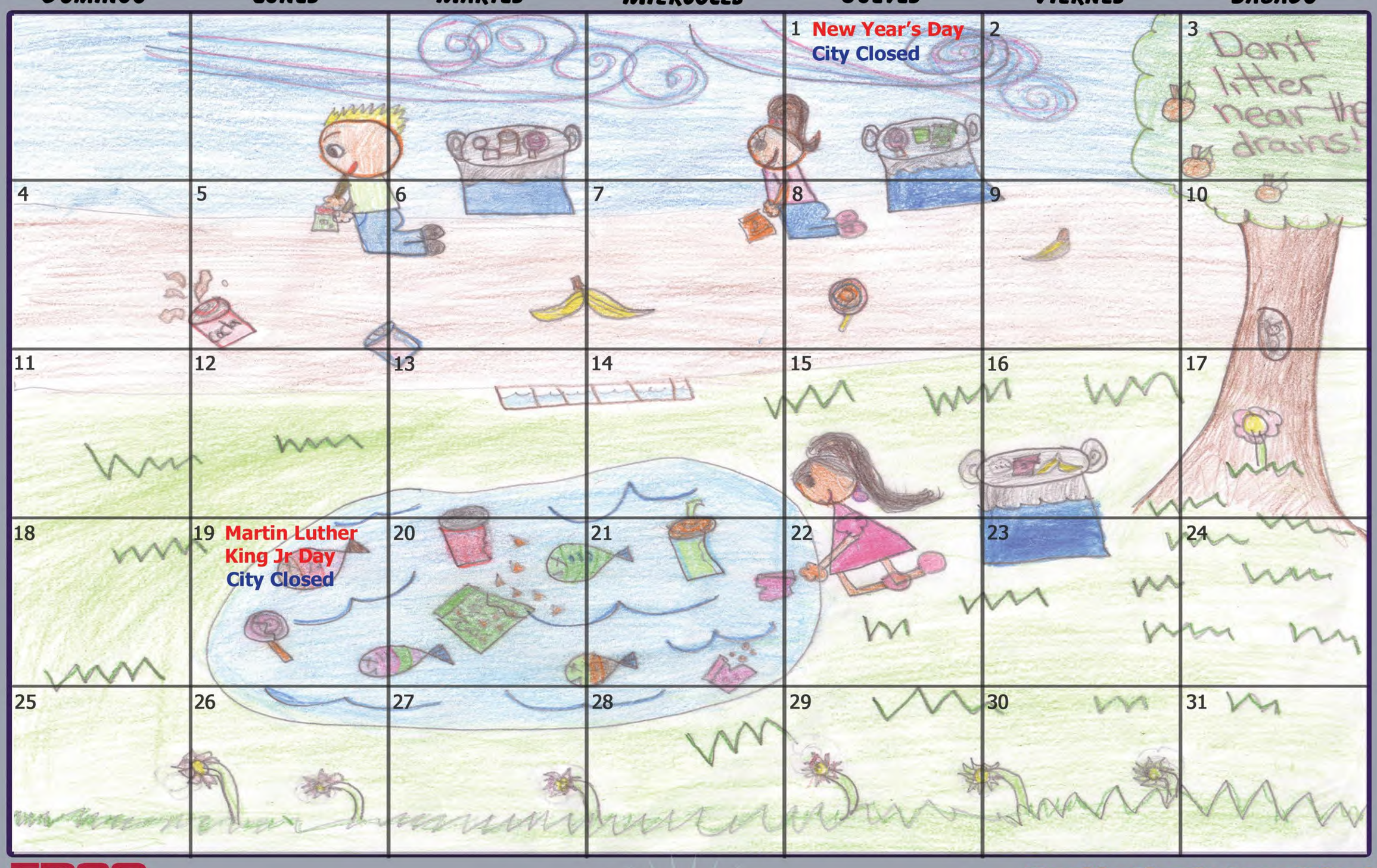

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
				1 New Year's Day City Closed	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19 Martin Luther King Jr Day City Closed	20	21	22	23	24
25	26	27	28	29	30	31

EDCO WASTE & RECYCLING SERVICES

Trash can harbor bacteria and cause beach closures when washed into the storm drain and out to the ocean.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Nereida, Lincoln Acres School

La basura puede apoyar a las bacterias y causar las clausuras de la playa cuando el agua la lleva dentro del drenaje y hasta el mar.

February/Febrero 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

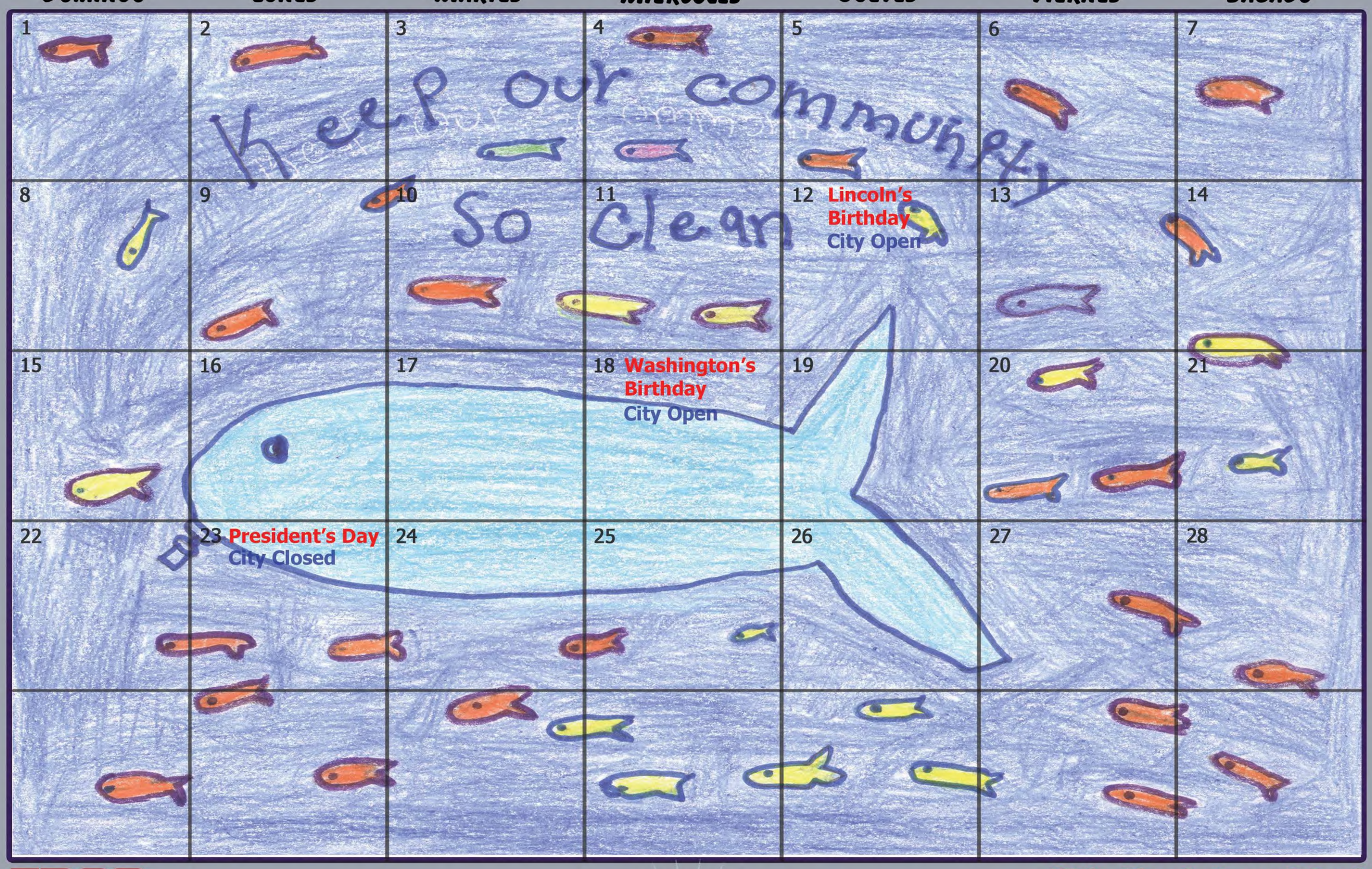

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
1	2	3	4	5	6	7
8	9	10	11	12 Lincoln's Birthday City Open	13	14
15	16	17	18 Washington's Birthday City Open	19	20	21
22	23 President's Day City Closed	24	25	26	27	28

EDCO WASTE & RECYCLING SERVICES

All water that enters National City storm drains flows to San Diego Bay without being treated. Fish and other animals that live in the water rely on us to keep their ocean community clean.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Alicia, Lincoln Acres School

Toda la agua que entra por las alcantarillas de National City van a dar a la Bahía de San Diego sin ser tratadas. Los peces y otros animales que viven en el agua dependen de nosotros para mantener limpia su comunidad oceánica.

March/Marzo 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

SUN *Domingo*	MON *Lunes*	TUE *Martes*	WED *Miércoles*	THU *Jueves*	FRI *Viernes*	SAT *Sábado*
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31 **Cezar Chavez Birthday** **City Closed**				

EDCO WASTE & RECYCLING SERVICES

Dispose of household hazerdous waste, used auto fluids (antifreeze, oil, etc.) and batteries at designated collection or recycling locations.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

German, Central School

Deshágase de desechos peligrosos de los residentes, líquidos usados de coche como: anticongelante, aceite de carro, etc,así como las pilas en lugares designados para recolección y reciclaje.

April/Abril 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

SUN *Domingo*	MON *Lunes*	TUE *Martes*	WED *Miércoles*	THU *Jueves*	FRI *Viernes*	SAT *Sábado*
			1	2	3	4
5	6	7	8	9	10	11
12 **Easter Sunday**	13	14	15	16	17	18
19	20	21	22	23	24	25 **7th Annual Creek to Bay Cleanup**
26	27	28	29	30		

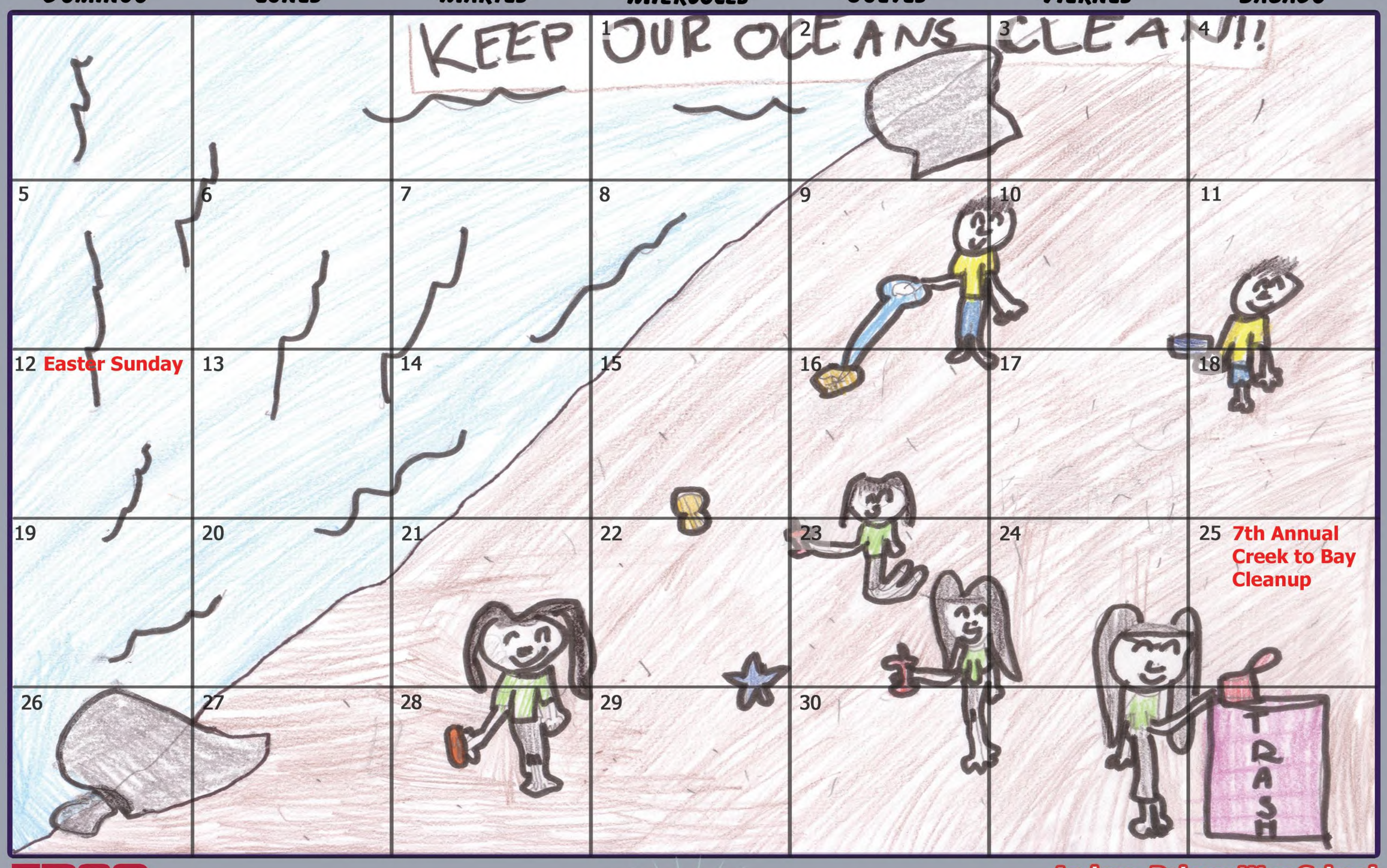

EDCO WASTE & RECYCLING SERVICES

Help keep National City clean by participating in the Creek to Bay Cleanup. Visit www.creektobay.org to register.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Andrea, Palmer Way School

Ayude a mantener limpia National City por medio de participar en el día de limpieza "Creek to Bay". Visita www.creektobay.org para registrarse.

May/Mayo 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25 Memorial Day City Closed	26	27	28	29	30
31						

EDCO WASTE & RECYCLING SERVICES

Water from rain, car washing and sprinklers can carry trash and other pollutants into storm drains and San Diego Bay without being treated.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Jacklyn, Kimball School

Las aguas que viene de la lluvia, del lavado de autos y de los rociadores pueden llevar basura y otros contaminantes dentro del drenaje de aguas pluviales y hasta la Bahía de San Diego sin ser tratadas.

June/Junio 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

SUN Domingo	MON Lunes	TUE Martes	WED Miércoles	THU Jueves	FRI Viernes	SAT Sábado
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

EDCO WASTE & RECYCLING SERVICES

Trash in the ocean can cause damage to boats and fishing equipment. This damage is hazardous and costly in terms of repair and lost fishing time.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Marlene, Lincoln Acres School

Basura en el mar puede hacer daño a barcos y equipo de pesca. Este daño es peligroso y costoso en términos de la reparación y la pérdida de tiempo para pescar.

July/Julio 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

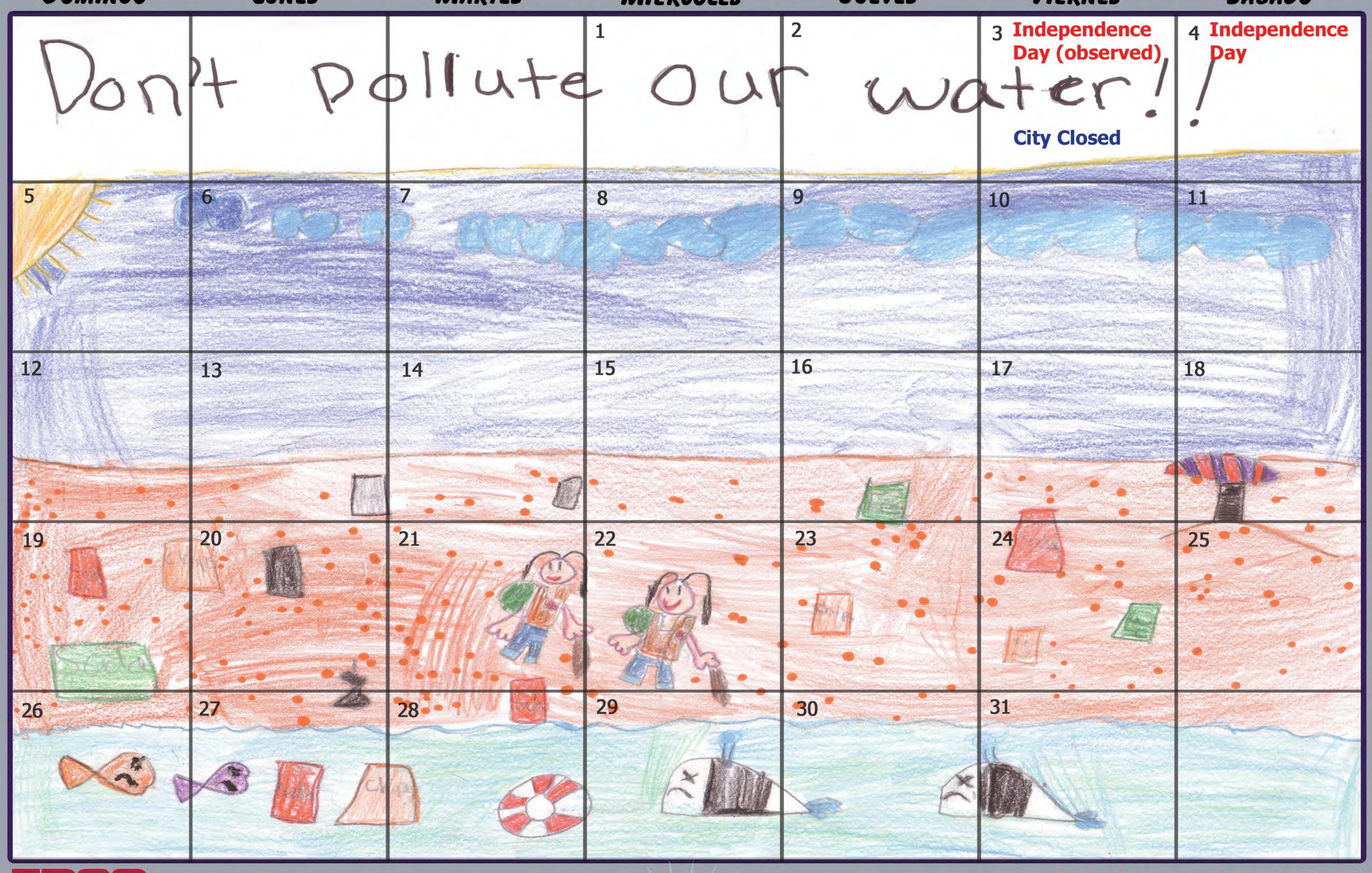

EDCO WASTE & RECYCLING SERVICES

You can report discharges of pollution to the storm drain by calling the storm water hotline at (619) 336-4589.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Emily, Lincoln Acres School

Usted puede reportar escapes de polución/contaminación llamando al (619) 336-4589, línea directa del Centro de Alcantarillado.

August/Agosto 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

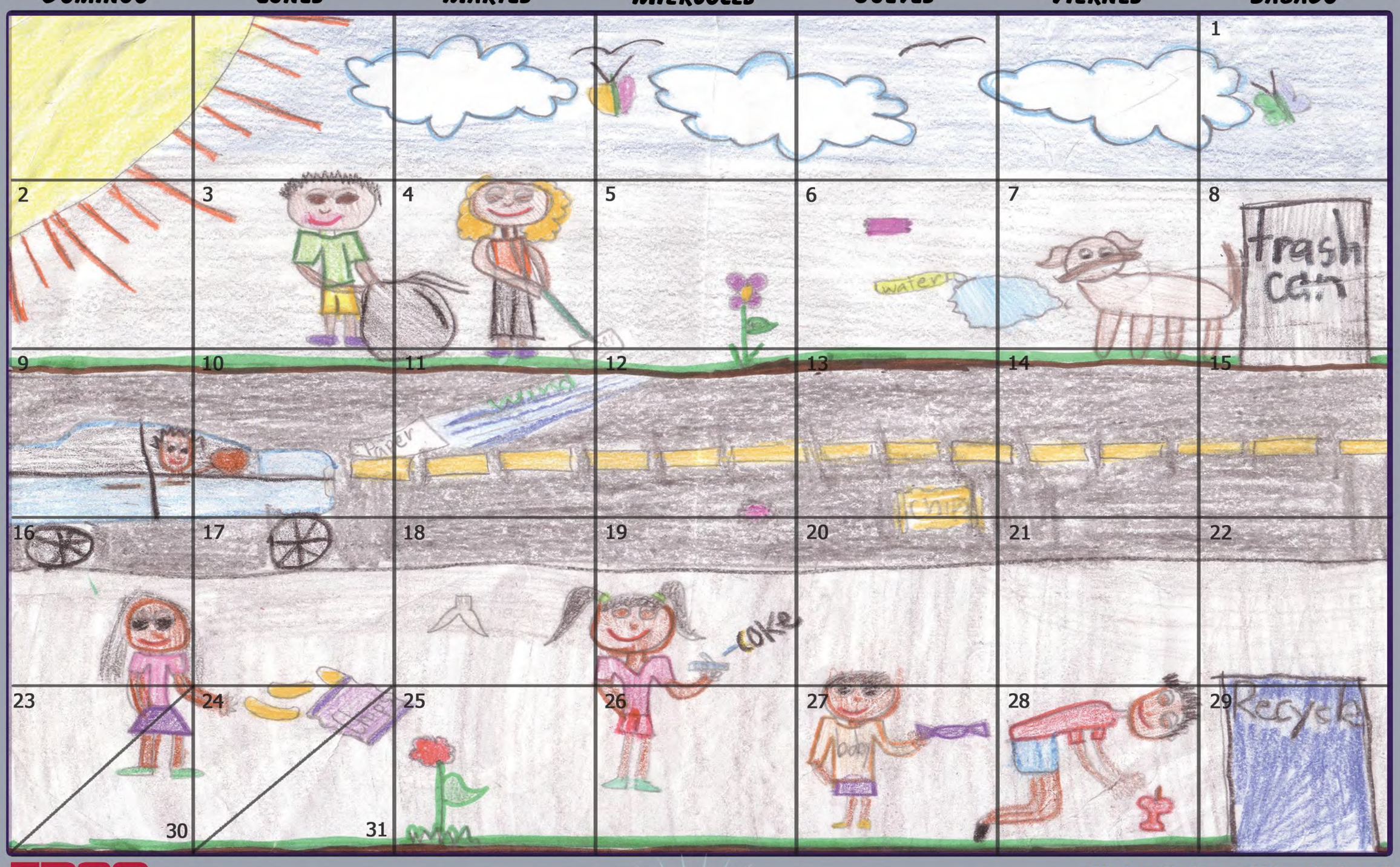

EDCO WASTE & RECYCLING SERVICES

Fixing car leaks, picking up after your pet, properly disposing of trash, and using a commercial car wash can prevent storm water pollution.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Kate, Palmer Way School

Reparar el goteo de su coche, recoger los desechos de su mascota, eliminar la basura correctamente, y llevar su coche a lavar a un "Autolavado" pueden impedir la contaminación de las aguas pluviales.

September/Septiembre 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

SUN *Domingo*	MON *Lunes*	TUE *Martes*	WED *Miércoles*	THU *Jueves*	FRI *Viernes*	SAT *Sábado*
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Labor Day
City Closed

EDCO WASTE & RECYCLING SERVICES

You can dispose of unwanted items such as garbage, appliances, furniture, etc., for free twice a year, once in the spring and again in the fall, during National City Cleanup Days. See your trash bill for details.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Emalyn, Lincoln Acres School

Usted puede deshacerse de cosas no deseadas tales como basura, electrodomésticos, muebles, etc, de forma gratuita dos veces al año, en la primavera y en el otoño, en las Días de Limpieza de National City. Consulte su recibo de recolección de basura para obtener más detalles.

October/Octubre 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

SUN *Domingo*	MON *Lunes*	TUE *Martes*	WED *Miércoles*	THU *Jueves*	FRI *Viernes*	SAT *Sábado*
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
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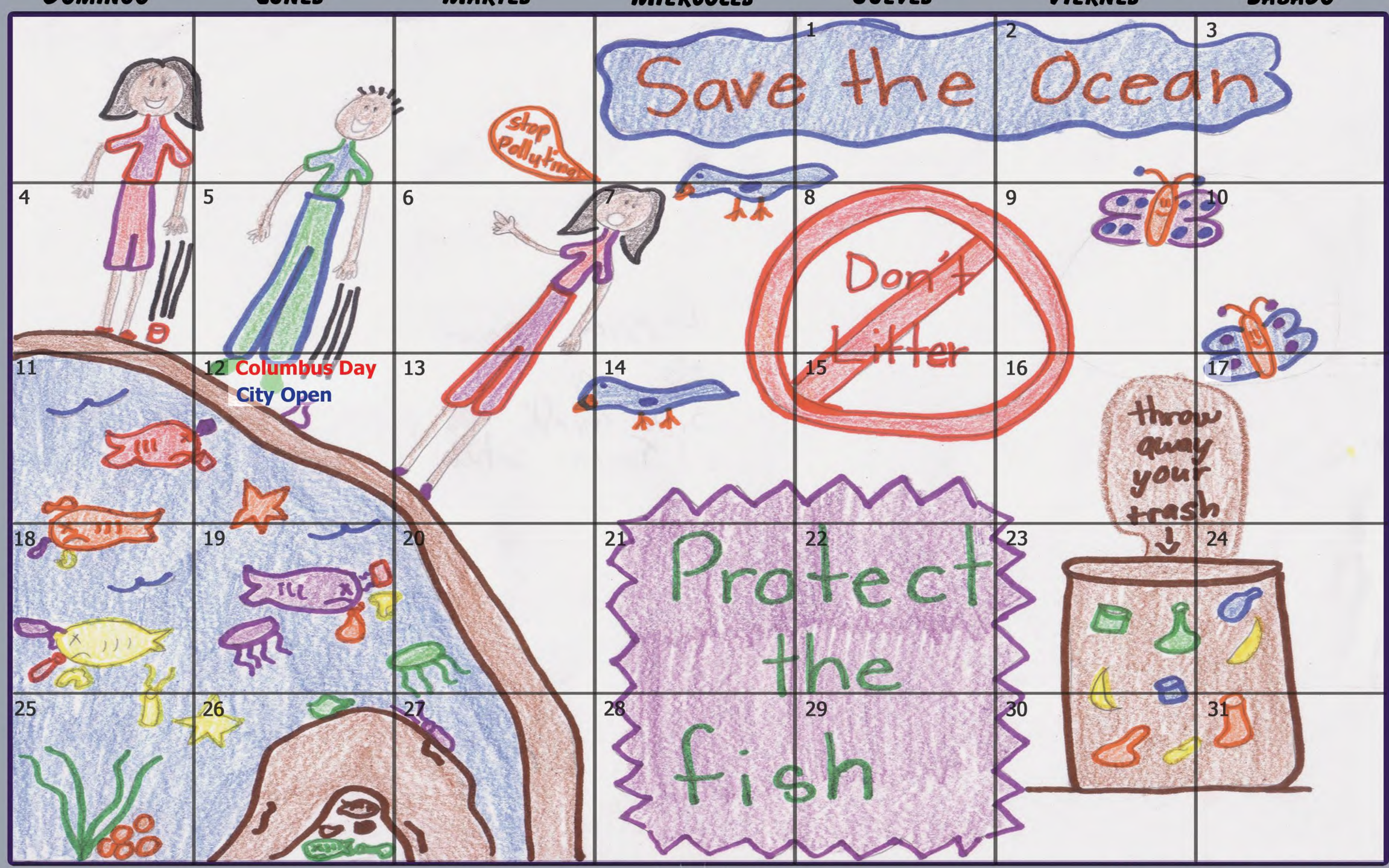

Columbus Day
City Open

EDCO WASTE & RECYCLING SERVICES

Birds, fish and mammals often mistake trash for food. With trash filling their stomachs, animals have a false feeling of being full and may die of starvation.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Alyssa, El Toyon School

Las aves, los peces y los mamíferos pueden equivocar la basura con el alimento. Con los estómagos llenos de basura, los animales tienen una sensación falsa de satisfacción y pueden morir de hambre.

November/Noviembre 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

SUN / Domingo	MON / Lunes	TUE / Martes	WED / Miércoles	THU / Jueves	FRI / Viernes	SAT / Sábado
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16 Veteran's Day City Open	17	18	19	20	21
22	23	24	25	26 Thanksgiving Day City Closed	27 City Closed	28
29	30					

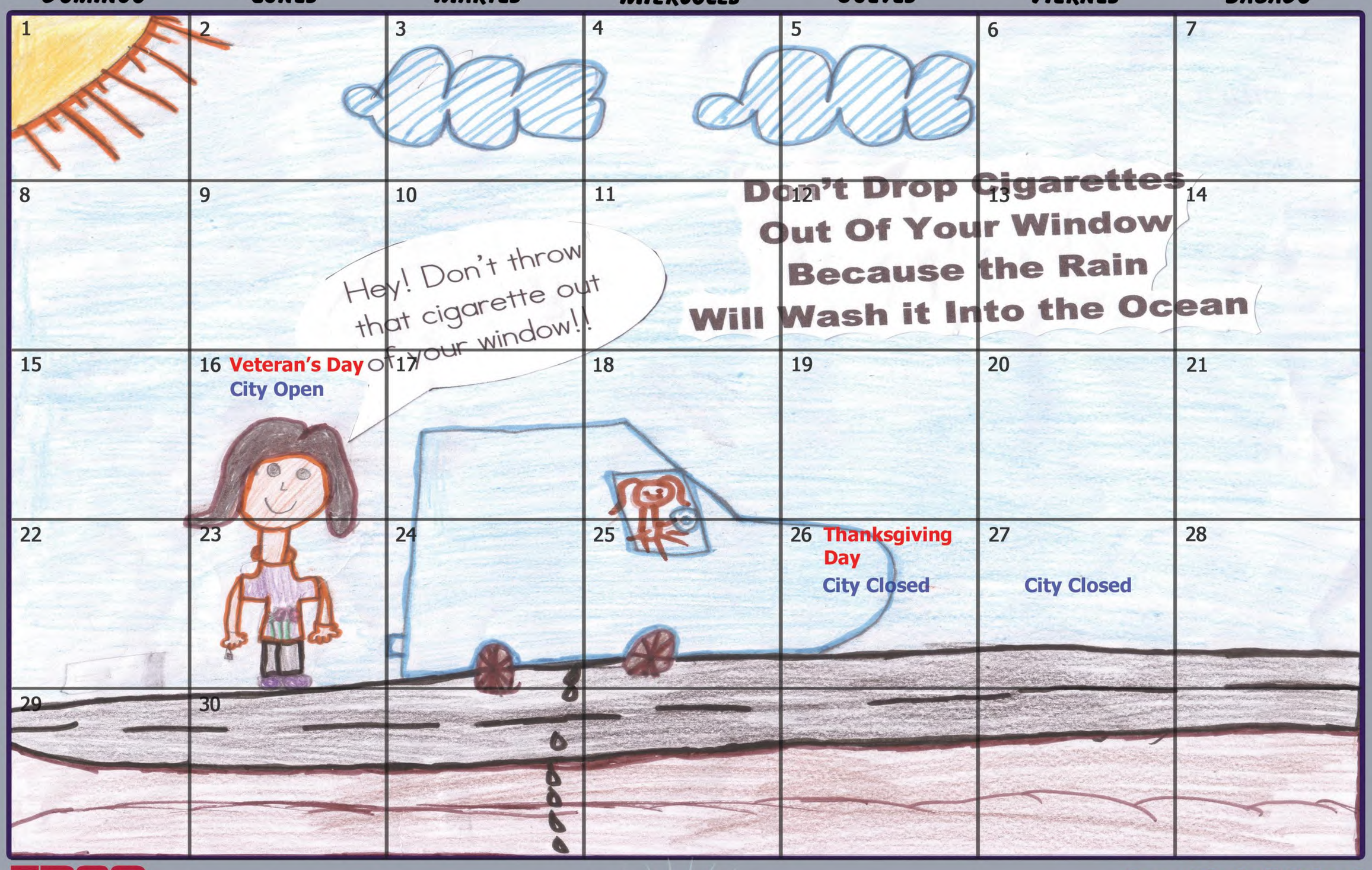

EDCO WASTE & RECYCLING SERVICES

Cigarette butts are one of the most common trash items found in San Diego County beaches. Animals in the ocean can become sick or die from eating cigarettes they mistake for food.

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Sara, Kimball School

Colillas de cigarrillos son uno de los tipos de basura más común en encontrar en la playas del Condado de San Diego. Animales en el mar pueden enfermarse o morir de comer cigarrillos que equivocan con el alimento.

December/Diciembre 2009

By Keeping our Community Clean We Can Keep the Ocean Clean!

¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

SUN / Domingo	MON / Lunes	TUE / Martes	WED / Miércoles	THU / Jueves	FRI / Viernes	SAT / Sábado
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24 Christmas Eve City Closed	25 Christmas Day City Closed	26
27	28	29	30	31		

EDCO WASTE & RECYCLING SERVICES

Your cleaning efforts help make National City enjoyable for everyone now and it the future!

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

Sinai, Palmer Way School

¡Sus esfuerzos de limpieza ayudan que National City sea agradable para todos ahora y en el futuro!

ATTACHMENT 5.3

INDUSTRIAL AND COMMERCIAL "PREVENTING URBAN RUNOFF POLLUTION" TRIFOLD

What's the difference?

Sanitary Sewer vs. Storm Drain System

The water that drains down a sink or toilet in a home or business flows to the sanitary sewer and is treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – and eventually to San Diego Bay!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our water bodies.

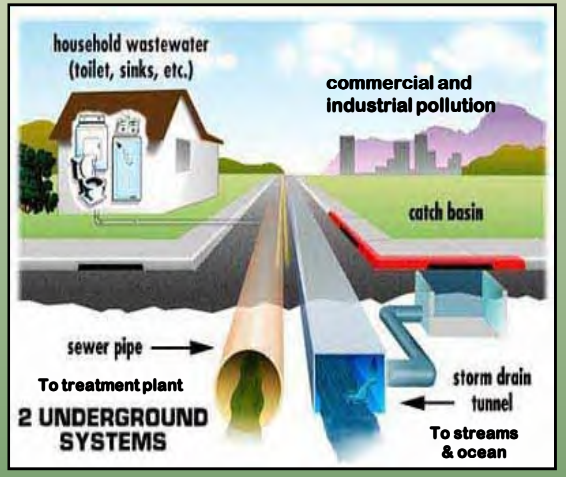

Certain industrial businesses require coverage under the General Industrial Permit. For more information go to the State of California's Stormwater website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml

Who can you contact?

REPORT ILLEGAL DUMPING
City of National City
(619) 336-4389
(Toll Free After Hours Hotline)
County Storm Water Hotline
(888) 846-0800

HOUSEHOLD HAZARDOUS WASTE (HHW) DISPOSAL
South Bay Regional HHW Drop-Off Site
1800 Maxwell Road
Chula Vista, CA
Call (619) 691-5122 for information

RECYCLING
EDCO: (619) 466-8855
http://www.edcodisposal.com/services/nationalcity/index.html

QUESTIONS AND COMMENTS
National City Storm Water Program
(619) 336-4580

Look on the web!

CITY OF NATIONAL CITY
http://www.ci.national-city.ca.us/

USED OIL RECYCLING CENTERS
www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
www.ipm.ucdavis.edu/

PROJECT CLEAN WATER
www.projectcleanwater.org

SAN DIEGO COASTKEEPER
www.sdcoastkeeper.org

STATE OF CALIFORNIA STORM WATER PROGRAM
http://www.waterboards.ca.gov/water_issues/programs/nps/

US ENVIRONMENTAL PROTECTION AGENCY
www.epa.gov/OWOW/NPS/

CITY OF NATIONAL CITY

Preventing Urban Runoff Pollution

A Guide for Commercial and Industrial Businesses

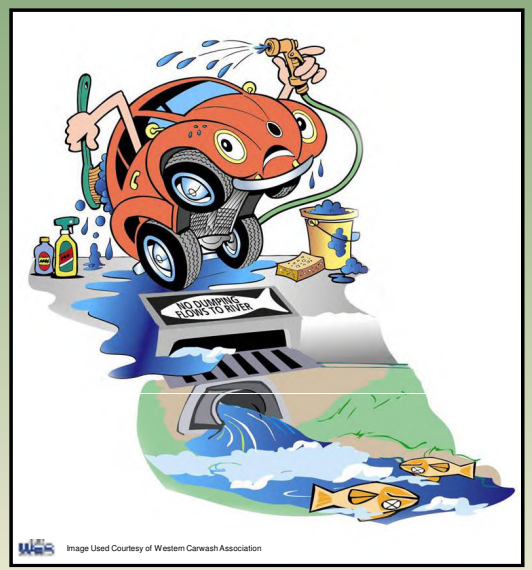

Urban storm water runoff is the largest contributor to water pollution in San Diego County.

Your business is required to prevent urban runoff pollution by implementing Best Management Practices (BMPs).

The City will be conducting inspections to ensure that BMPs are being used and water quality is protected.

CALIFORNIA
NATIONAL CITY
1887
INCORPORATED

Pollutants of Concern

Water that enters the City of National City storm drain system eventually flows into San Diego Bay. The following lists several main pollutants of concern for San Diego Bay.

- Sediments
- Metals (copper, zinc)
- Pesticides (diazinon)
- Bacteria and Viruses

Best **M**anagement **P**ractices (**BMPs**) are required to be used at all industrial and commercial businesses, where applicable, to reduce urban runoff pollution in our streams and waterways.

Maintenance & Good Housekeeping

- Major cleaning of exterior surfaces (such as power washing) must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the street gutter or storm drains.
- Regularly sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- Regularly inspect and maintain storm drain inlets and surface drains on your property.

Landscaping

- Time sprinklers to avoid over watering and aim them to avoid causing runoff.
- Minimize use of pesticides, herbicides, and fertilizers, which are harmful to animals downstream.
- Hand pull weeds instead of using herbicides
- Do not use pesticides that eliminate beneficial insects
- Only irrigate during early morning or late evening to avoid evaporation.

Outdoor Material Storage

- Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid materials.
- Have a spill response kit (dry absorbent, rags, and/or hydrophobic mops are useful) available to clean up potential spills.
- Keep lids closed on all outdoor storage containers and ensure containers are labeled.

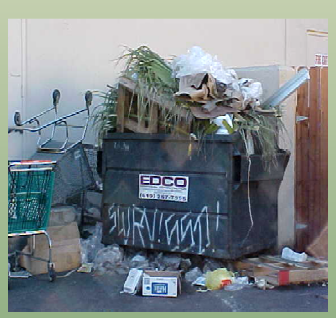

Unacceptable

Acceptable

Waste Management

- Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- Fix any leaks in garbage cans or dumpsters.
- Schedule extra pick-ups when regular waste collection does not meet demand.

Vehicle & Equipment Washing and Maintenance

- Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- Minimize the use of soap and water.
- Car wash water is not allowed to enter storm drains. Wash water must be collected and disposed of to a pervious area (such as landscaping) or to the sanitary sewer system if allowed by local sewer agency.
- Perform all vehicle maintenance indoors when possible.
- Use drip pans to collect fluids from leaky vehicles
- Clean up spills with a spill kit and properly dispose of the used kit contents.

Unacceptable

Acceptable

Loading Areas & Operations

- Load and unload in designated areas.
- Regularly sweep loading and unloading areas; do not hose them down.
- If possible, cover loading areas.
- Divert rain water away from all loading and unloading areas.
- Check shipments and trucks for leaks and spills.
- Clean up spills/leaks immediately and dispose of them properly.

ATTACHMENT 6.1

HIGH TTWQ RESIDENTIAL EDUCATION PROGRAM REPORT

CITY OF NATIONAL CITY
HIGH THREAT TO WATER QUALITY
RESIDENTIAL EDUCATION PROGRAM
2008 - 2009

Submitted to:
City of National City
Engineering Department
1243 National City Boulevard
National City, CA 91950

Prepared by:
D-MAX Engineering, Inc.
7220 Trade Street Suite 119
San Diego, CA 92121
Tel: (858) 586-6600
Fax: (858) 586-6644

D-MAX Engineering, Inc.
Consultants in water & environmental sciences

June 24, 2009
Project No. 200840W-93

Mr. Din Daneshfar

City of National City

Engineering Department

1243 National City Boulevard

National City, CA 91950

Re: City of National City High Threat to Water Quality Residential Education Program

Dear Mr. Daneshfar,

Please find the attached report regarding the City of National City's recently conducted residential storm water knowledge assessment and education efforts. This report includes a summary of the surveys conducted and educational materials distributed, a presentation of collected data, an analysis of findings, and our recommendations for future outreach in high threat to water quality residential areas.

If you have any questions concerning the content of this report, feel free to contact me at (858) 586-6600, ext. 22.

Sincerely,
D-MAX Engineering, Inc.

Arsalan Dadkhah, Ph.D, P.E.
Principal

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

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ATTACHMENTS

Attachment 1. Maps of High TTWQ Residential Areas

Attachment 2. Storm Water Residential Knowledge Assessment Survey

Attachment 3. High TTWQ Activities and Materials

City of National City High Threat to Water Quality (TTWQ) Residential Education Program

INTRODUCTION

In accordance with Section D.3.c.(1) of San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit), each of the Copermittees, including the City of National City (City), is required to identify high threat to water quality residential areas and activities. As part of the City of National City's 2007 Jurisdictional Urban Runoff Management Program (JURMP), the City has identified 10 high TTWQ residential areas and designated high residential TTWQ activities, as specified by the Municipal Permit. These 10 areas were considered high TTWQ due to observed incidences of high TTWQ activities, dry weather field screening and analytical monitoring exceedances, reported storm water violations, or proximity to Environmentally Sensitive Areas (ESA).

PURPOSE AND OBJECTIVE

In order to reduce the threat to water quality in these residential areas, the purpose of this residential education program was two-fold: to assess storm water knowledge through a door-to-door survey and to provide educational materials to remedy important gaps in storm water awareness. Further, a secondary objective of this program was to take note of any high TTWQ activities or significant exposed storage observed within these residential areas.

Below is the report of the residential knowledge assessment survey and education outreach program. This document includes a summary of the City's High TTWQ Residential Education Program and presents the collected data, observation notes, analytical findings, and recommendations for the education and outreach for the high TTWQ residential areas.

METHODS

The following 10 residential areas were designated as high TTWQ residential areas in the City's 2007 JURMP (See Attachment 1 of this report for aerial maps of each location):

- 2nd Avenue Area
- A Avenue Area
- Arcadia Place Area
- B Avenue Area
- Division Street Area
- East 8th Street Area
- Grove Avenue Area
- Paradise Creek Area, between F and L Avenues
- Harbison Avenue Area
- West 18th Street Area

Two of the 10 designated high TTWQ residential areas, West 18th and 2nd Avenue areas, were not included in the assessment surveys and site observations. Upon further field investigation, the sites were determined to lack significant high TTWQ residential activities. Instead, any high TTWQ activities appeared more likely to be due to industrial or commercial sources in these two excluded areas.

D-MAX staff went to the remaining eight high TTWQ residential areas during April and May of 2009 to conduct a survey of storm water knowledge, educate residents within these high threat zones, and visually screen for potential pollutant sources. Staff members went door-to-door within the designated residential areas during working hours (8 am to 5 pm) to conduct the knowledge assessment survey and provide residents with educational materials. When a resident was available, the survey was conducted and storm water concepts were verbally explained. Whether or not residents were home, any evidence of high TTWQ activities was noted from the public right-of-way and educational materials were left at each visited residence unless refused. All survey responses and observations from each residential area were recorded on a datasheet which was later converted into electronic format for data analysis.

The survey was comprised of five questions, aimed to assess awareness of storm water drainage without treatment, potential residential sources of pollutants, and perception of responsibility for the City's cleanliness. The survey is included in Attachment 2 of this report. Question Number 4 was supplemented with visual representations of potential pollutants and allowable discharges, on which the respondents were prompted to indicate which should not be discharged to the storm drain. The survey was concluded by confirming and/or explaining correct answers to the survey respondent. Of the 1389 sites visited, 318 were surveyed and a total of 1343 sites received educational material.

Educational materials provided to each resident consisted of the National City's Storm Water Program Calendar, a storm water fact sheet, brochures on proper hazardous household material (HHM) disposal, and the Storm Water Hotline number. The text of the educational materials was in both English and Spanish

OBSERVATIONS

Language Constraints

During the door-to-door surveys it became apparent that a percentage of residents at home during the day would not be able to participate due to a language barrier. While educational materials were bilingual in English and Spanish, instances where communication was not possible only in English were recorded. The inspections show that about one third of the residents could only communicate in Spanish, and that a small fraction of the surveyed individuals could only communicate in Tagalog. This is reflected in Figure 1 below. While the majority of the respondents spoke English as a first or second language, it is important to note other commonly spoken languages in these residential areas for future educational efforts. In some cases translation was provided by children, other residents, or by staff, but in all cases residents were provided with bilingual educational material.

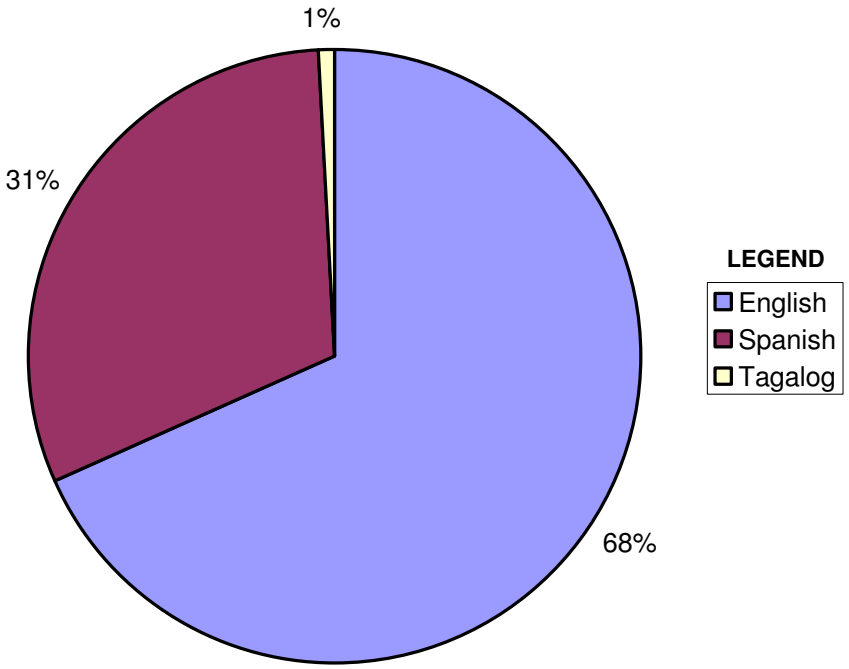

Figure 1. Language constraints noted for each available resident (n = 373)

Residents Surveyed

As seen in Table 1 and Figure 2 below, almost 50 percent of the homes visited were in the Division Street Area. Of the 689 sites, a total of 134 residents were surveyed. B Avenue was the area with the second greatest number of homes visited at 15 percent. A Avenue and B Avenue had the highest percent of residents surveyed at 27 and 28 percent, respectively.

Educational materials were distributed to nearly all residential sites visited. Some households were not left with educational materials, as is indicated in the fourth column of Table 1. For these cases, several residents stated that they had already received the City's Storm Water Program Calendar or the tenant was not home and materials were not left. Notably, many school children were home for Spring Break during the early part of the program and sometimes were more knowledgeable than their parents about storm water topics. In these cases their answers were included for the household.

Table 1. Summary of visits, surveys, and educational material distribution by area.

Residential areas	Number of homes visited	Number of completed surveys (and partial surveys)	Number of homes receiving educational material
A Avenue	22	30 (1)	22
Arcadia Place	85	19 (1)	84
B Avenue	203	14	195
Division Street	689	152 (6)	675
East 8th Street	47	24	47
Grove Avenue	91	18	90
Harbison Avenue	72	14	70
Paradise Creek Area	180	36 (2)	158
TOTAL	1389	307 (10)	1341

Note: The numbers in parenthesis are partial surveys that provided incomplete but useful data.

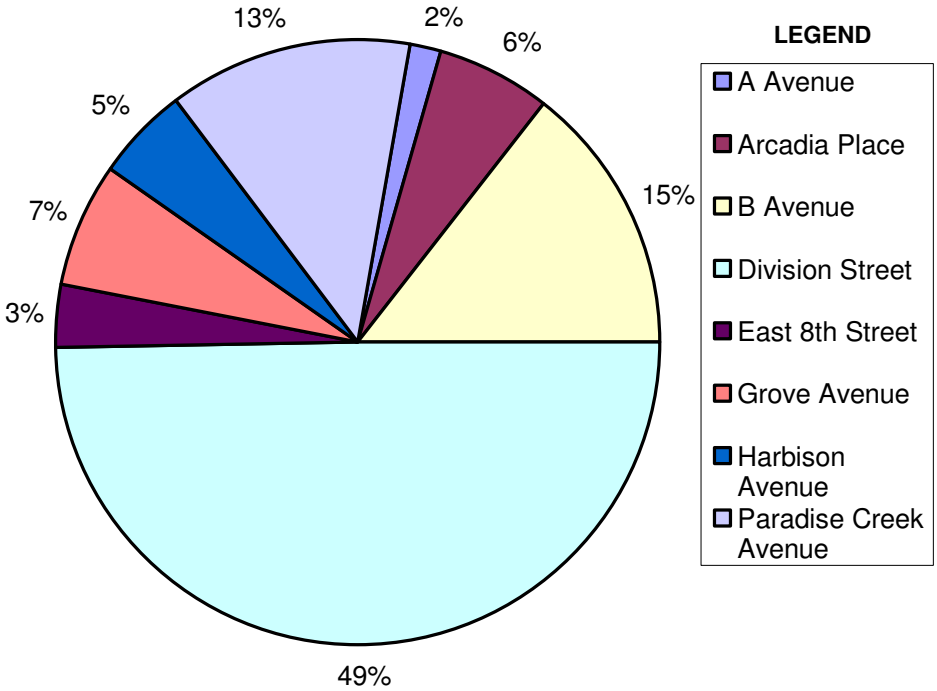

Figure 2. Residential area of the homes visited

Residential Observations

As stated above, observations of any significant activities or material storage were taken in the high TTWQ residential areas. Evidence of high TTWQ activities or storage was linked to individual addresses where possible. There were situations, such as apartment complexes, where no responsible party members could be identified for overall property issues. In these cases, a note about where the activities or materials were observed was made.

The majority of cases where significant exposed materials were noted consisted of rusty metal, used tires, or significant oil stains and leaks, which is expressed in Table 2 and Figure 3 below. Automotive repair and oil changes was the most common type of high TTWQ activity noted, followed by car washing activities. Photographs of some problematic cases are included in Attachment 3.

Table 2. Observed incidences of high TTWQ activities and material storage

	High TTWQ Activities and Materials	Total Observed Incidences
Activities	Auto repair and oil change	5
	Car washing	2
	Other outdoor washing	3
	Fertilizer application	1
	Pesticide application	0
	Poor waste disposal	0
Materials	Exposed rusty metal	8
	Old tires	6
	Oil leaks or significant stains	8
	Antifreeze and transmission fluid	0
	Loose trash	2
	Pet waste	1
	Exposed fertilizers and pesticides	0
	Cooking oil and grease	0
	Soapy water or residues	1

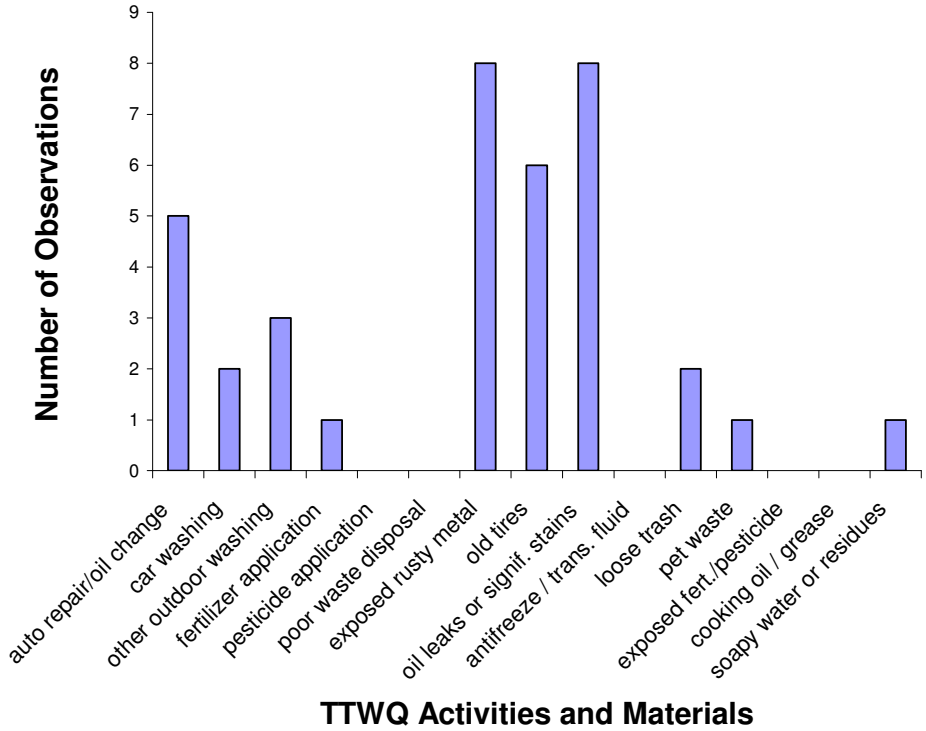

Figure 3. Observed incidences of high TTWQ activities and material storage

Table 3 displays the percentage of homes visited where a potential pollutant source was observed, broken down by residential area. These observations may suggest that some high TTWQ residential areas pose greater potential TTWQ than others, for the purpose of focused education and outreach.

Table 3. Percentage of homes with observed high TTWQ activities and material storage by residential area.

Residential Area	Percent of homes with observed high TTWQ activities or materials
A Avenue	0 %
Arcadia Place	8 %
B Avenue	1 %
Division Street	3 %
East 8th Street	0 %
Grove Avenue	4 %
Harbison Avenue	0 %
Paradise Creek Area	3 %

SURVEY RESULTS

The following section summarizes the questions and corresponding answers for the residential knowledge assessment survey. Each of the five questions is listed below in the order they were presented to residents. The purpose of each question and a summary of common responses are explained below.

Question 1: "Do you know where water goes after it flows off of your property?"

a. Street/drain/sewer
b. Storm drain
c. River/creek/bay/ocean/etc.
d. Treatment plant
e. Don't know (if treated)

This question was designed to determine the number of residents that are aware that water runoff from their property is not treated before it enters receiving water bodies. The question was posed in an open-ended manner, without giving answer choices, to encourage respondents to relay any level of understanding. Any mentioned category was checked. The question did not mention the "storm drain" in order to decrease the number of responses that may be confused due to unfamiliarity with the terminology. If a resident's initial response to the question did not address treatment, they were asked if the water was treated after going to the drain (if mentioned) or before reaching a receiving water body (if mentioned). Staff did not check option "d" or "e" if residents did not think storm water received treatment before flowing to a receiving water body.

About 56 percent of the respondents were aware that water flowing off of their property eventually ends up in local receiving water bodies, however six percent still believed or were unsure whether the water would be treated first. Therefore, about 50 percent of all survey respondents did not know that water running off of their property goes to creeks, the bay, and the ocean without treatment.

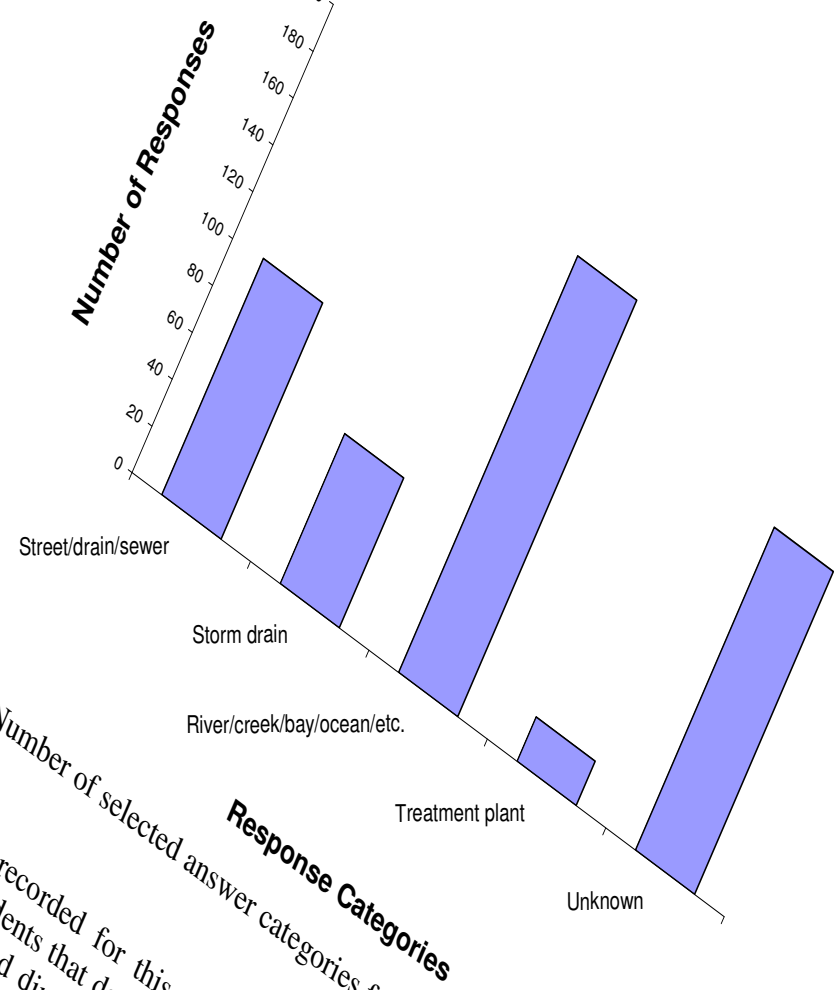

Figure 4. Number of selected answer categories for Question 1 for all areas (n = 317 residents).

The responses recorded for this question serve as an indicator of basic storm water awareness. Residents that do not have a fundamental understanding that the storm drain system is connected directly to receiving water bodies may be less likely to implement BMPs for high TTWQ activities. Note that the percentages of responses in Table 4 below add up to over 100 percent because more than one answer may have been marked to indicate the resident's level of understanding.

Table 4. Percentage of responses for each category for all surveys (n = 317 residents).

Response Categories	Percent of All Surveys
Street, drain or sewer	32 %
Storm drain	20 %
River, creek, bay or ocean	56 %
Treatment plant	6 %
Unknown (if treated)	44 %

Table 5. Percentage of residents aware of storm water in each area.

Residential Area	Percent of residents knowing storm water is not treated before discharge to creeks, bay, and ocean	Number of residents answering in each area
A Avenue	58 %	31
Arcadia Place	80 %	20
B Avenue	43 %	14
Division Street	44 %	158
East 8th Street	33 %	24
Grove Avenue	67 %	18
Harbison Avenue	57 %	14
Paradise Creek Area	57 %	38

Note: Residents "aware of storm water" are those who had response "c" but not "d" or "e" for Question 1.

Question 2: "Where do you wash your car, if you have one?"

a. Here at home, on driveway
b. Here at home, on the street
c. Here at home, on unpaved area
d. At workplace
e. At professional car wash
f. Never wash car or don't have car

The purpose of this question was to obtain data about vehicle washing habits in these high TTWQ residential areas. If the resident did not own a car, or did not wash a vehicle, in some instances a family member or friend was reported to conduct vehicle washing on the property. Residents were encouraged to report what actually takes place with no answer choices provided. Staff members also refrained from telling residents about car washing best management practices (BMPs) until the end of Question 4.

There were 10 reports of friends or family members who washed vehicles in the street; these residents were informed that it is prohibited to wash cars in the street but permitted to wash cars on a private driveway in the City of National City. The low percentage of residents washing vehicles over unpaved areas may be attributed to the City ordinance text prohibiting vehicle parking on lawns. As seen in Figure 5 below, a majority (61 percent) of the residents take their vehicles to be cleaned at a professional car wash, but 15 percent of this 61 percent also wash their vehicles at home in their driveways. For the purposes of analysis, residents reporting that they washed their vehicle at a professional car wash or over an unpaved area were considered to be implementing good car washing BMPs. All other types of washing would likely generate significant wash water runoff. Differences in percent of residents implementing good car washing BMPs between residential areas can be noted in Table 6.

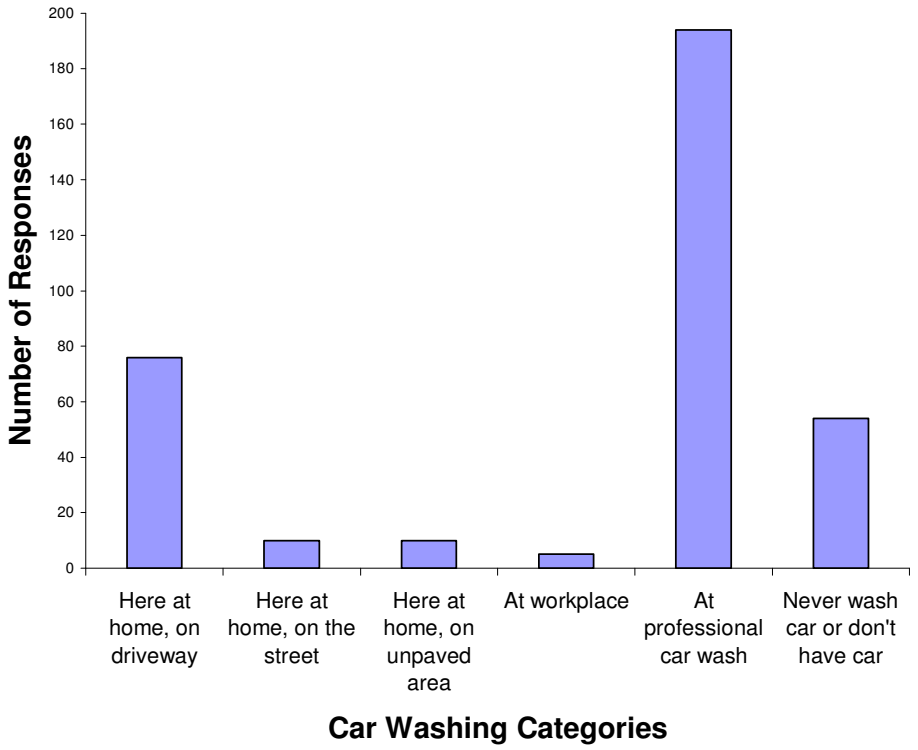

Figure 5. Number of responses for each category of car washing behavior (n = 315 residents).

Table 6. Percentage of residents implementing car washing BMPs in each area (including only residents that do wash a vehicle).

Residential Area	Percent of residents preventing wash water runoff	Number of residents that do wash a vehicle
A Avenue	74 %	27
Arcadia Place	67 %	42
B Avenue	58 %	12
Division Street	71 %	148
East 8th Street	82 %	22
Grove Avenue	58 %	19
Harbison Avenue	57 %	14
Paradise Creek Area	60 %	30

Question 3: "What do people do in this neighborhood to clean up after their dogs?"

a. Leave waste where it is
b. Pick up pet waste and put in landscaping
c. Pick up pet waste and put in trash or toilet
d. Dump waste in drains
e. Other unacceptable disposal method
f. No dogs observed / don't know

This question was intended to assess the residents' perceptions about pet waste disposal in their neighborhood as a whole. In many cases, responses were based on observations of pet waste on the street or the behavior of a few neighbors, but where applicable residents would volunteer their own practices. All applicable responses from each resident were checked on the survey for "a" through "e." If the resident could not provide any observations then "f" only was checked.

Pet waste disposal methods considered to be appropriate included flushing pet waste down the toilet or using a plastic bag to dispose of the waste to the trash. All other observed practices were considered inappropriate. Generally speaking, residents were aware which behaviors would be inappropriate but readily offered information about the improper behaviors of their neighbors. Education about good pet waste disposal practices, where necessary, was provided at the end of Question 4.

The highest reported disposal method (50 percent) was simply leaving dog waste on the ground (Figure 6). Of residents that stated pet waste was not picked up, seven people reported other unacceptable disposal methods including dumping waste in the storm drain. These practices were not observed by staff during the residential surveys but were strongly discouraged at the end of each survey when reported. Forty-two percent of residents reported disposal to the trash or toilet, including many who owned pets themselves. Differences in pet waste disposal reports by residential area are shown below in Table 7. A large number of residents were unable to provide information about disposal practices in their neighborhood. This may indicate that fewer pets are present or owners are more conscientious in these residential areas (Figure 7).

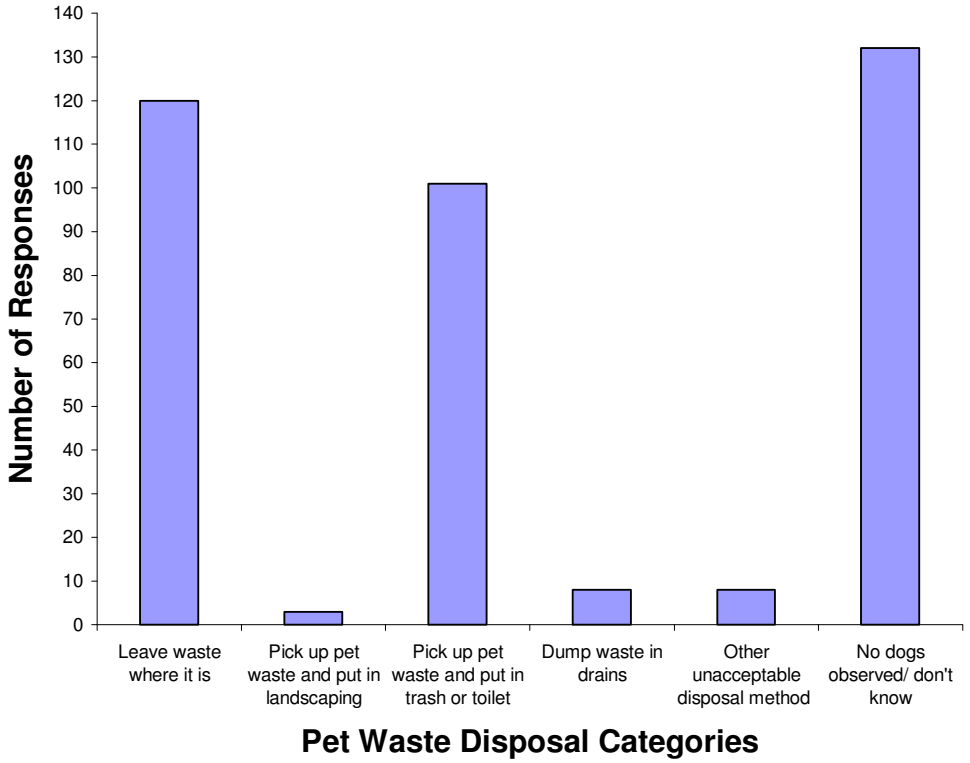

Figure 6. Number responses for each category of pet waste disposal behavior (n = 311 residents).

Table 7. Percentage of reports indicating proper neighborhood pet waste disposal in each area (including only residents who had observed pets).

Residential Area	Percent of residents reporting proper disposal	Number of residents who had observed pets
A Avenue	29 %	7
Arcadia Place	67 %	18
B Avenue	27 %	11
Division Street	45 %	154
East 8th Street	33 %	15
Grove Avenue	57 %	7
Harbison Avenue	20 %	10
Paradise Creek Area	32 %	25

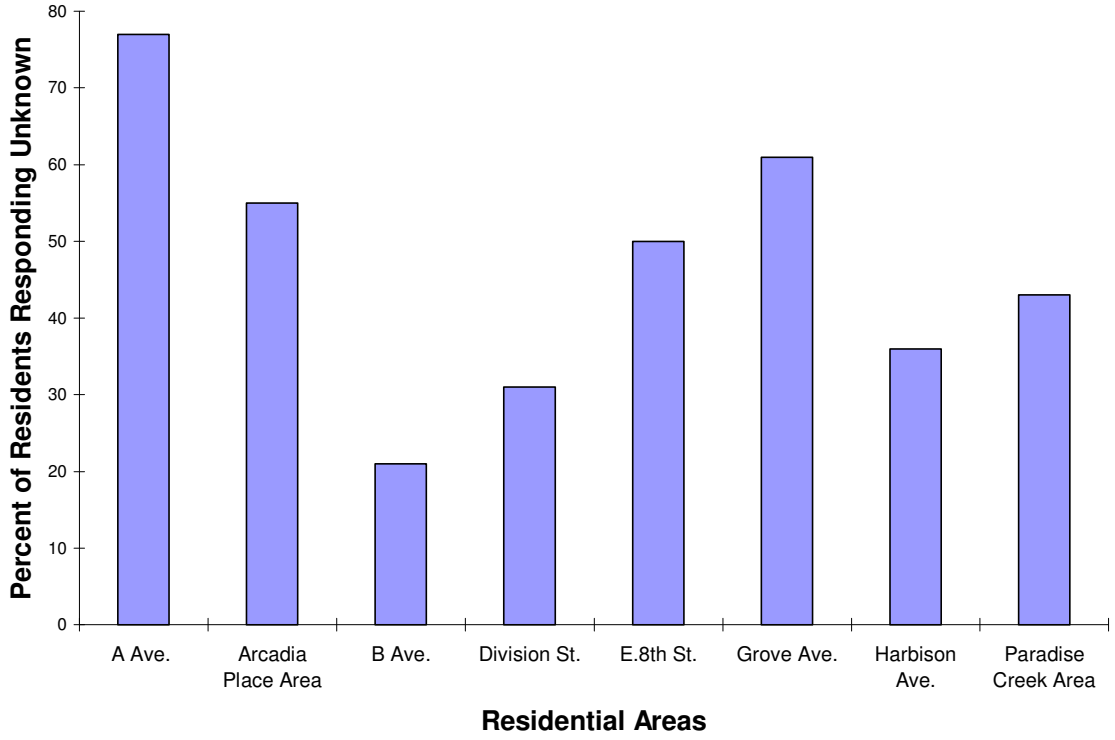

Figure 7. Percentage of residents in each residential area who had not observed pet waste disposal.

Question 4: "Which of these is a problem if it goes into the storm drain system?"

a. trash
b. motor oil
c. pet waste
d. fertilizer or pesticide
e. used cooking oil
f. soapy water from washing
g. sprinkler water from landscaping
h. rainwater

This question was created to determine what materials residents view as harmful to let enter the storm drain and what materials they feel are acceptable to discharge to the storm drain. Residents were provided with eight choices, presented as text in English and Spanish with visual representations (see Attachment 2). Residents were encouraged to consider each item separately, rather than choosing all of the options at once. Once all choices were made, staff members educated each resident regarding illegal discharges and best management practices. Note that trash, motor oil, pet waste, fertilizer and pesticide, and used cooking oil were considered to be unacceptable and illegal discharges in all cases. Car wash water (from private property) is currently an allowed discharge, but was described to residents as a source of pollution and an avoidable discharge. Irrigation runoff was also presented as an allowed discharge, but one that could waste water or potentially convey pollutants such as fertilizers or pesticides.

As is seen in Table 8, most people could identify several items as threats to storm water. Motor oil, at 89 percent, was the most often recognized threat to storm water. Fewer residents indicated that soapy water should not go into the storm drain than all other potential pollutants (Table 8). Some residents stated that soapy water was not hazardous; therefore it would not be harmful to let enter the storm drain. Yet other residents selected irrigation runoff for water conservation reasons. The results are summarized in Table 8 and Figure 8 below.

Table 8. Number and percent of responses for each category (n = 308 residents).

Categories of Materials	Number of Residents Selecting	Percent of Residents Selecting
4a.Trash	265	86 %
4b. Motor oil	275	89 %
4c. Pet waste	254	82 %
4d. Fertilizer or pesticides	258	84 %
4e. Used cooking oil	259	84 %
4f. Soapy water from washing	221	72 %
4g. Sprinkler water from landscaping	82	27 %
4h. Rainwater	46	15 %

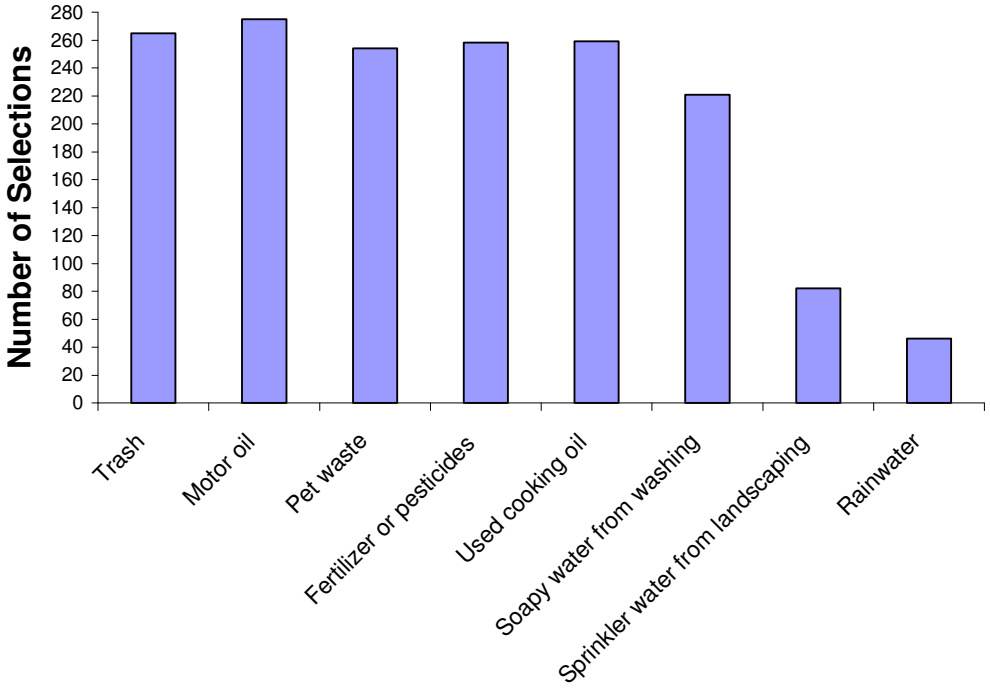

Figure 8. Number of selected item categories for Question 4 for all areas (n = 308 residents).

Question 5: "What can we all do to help make National City a cleaner place?"

At the end of each survey, each resident was asked the above open-ended question. This final question was intended to provide residents an opportunity to share their ideas with the City. Additionally, responses from residents may reveal their attitudes about the cleanliness of the City and where responsibility lies for keeping the City clean.

Trash disposal (including recycling), mentioned in one third of all comments, was by far the largest topic of residential concern (Figure 9). The next most common type of suggestion was education and awareness. Some notable suggestions were as follows:

- Make it easier for people to recycle.
- Provide public trash containers so people don't litter.
- Provide dog waste bags at parks.
- Have residents form neighborhood clean-up crews.
- Educate school children who litter.
- Provide stricter enforcement of littering, excessive water use, and car washing.
- Provide more signs in Spanish.
- Educate residents about pollution.

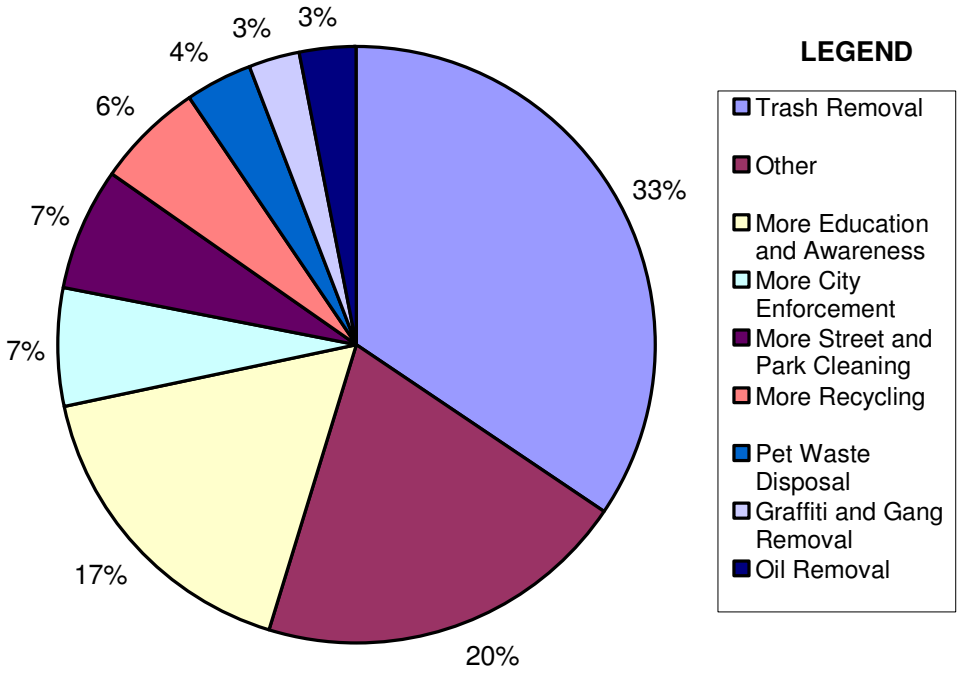

Figure 9. Categories of residential survey comments on what is needed to keep the City clean (n = 137 suggestions from 126 residents).

The responses indicated that some residents considered the City to be responsible, while others pointed to individual responsibility within the neighborhood. A few residents thought that the property manager of the complex had an important role in promoting a clean neighborhood. One resident complained about trash coming from a nearby commercial area. Residents that do not feel that it is their responsibility to keep the

community clean may be less inclined to manage their own waste or be proactive about picking up trash in their neighborhood. These results are expressed in Figure 10 below.

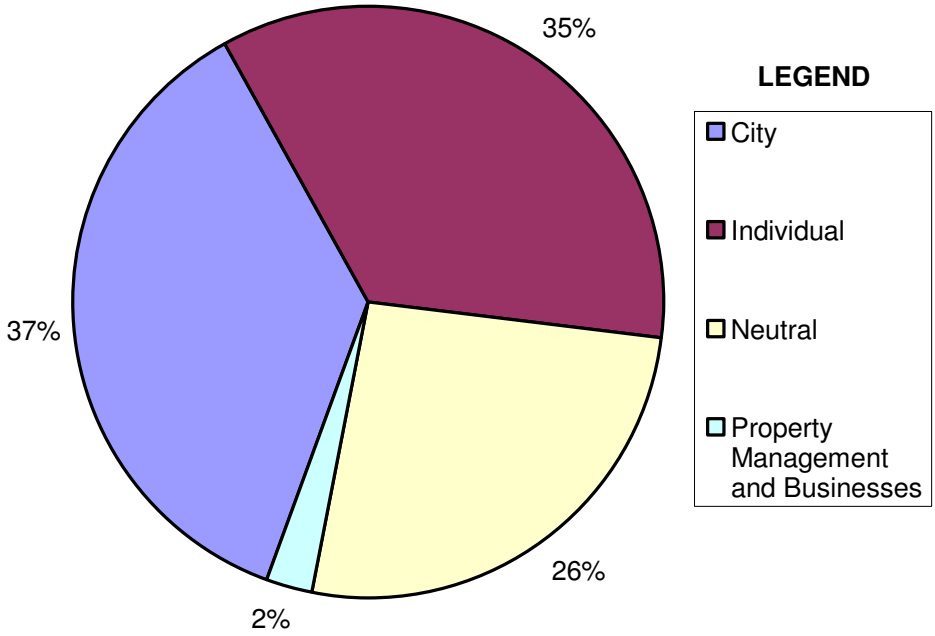

Figure 10. Party most responsible for keeping the City clean (n = 126 residents).

DATA ANALYSIS

Since the residential survey consisted of both knowledge assessment questions and residential behavior questions, comparisons of behavior could be made for residents with different levels of storm water knowledge.

Knowledge vs. BMP Implementation by Residential Area

The first set of comparisons looked for differences in car washing habits and pet waste disposal behavior by residential area as opposed to the percent of residents aware that storm water is not treated. The findings are summarized in Table 9 below.

Notably the Arcadia Place Area had the most residents aware that storm water is not treated and also had the most reports of proper pet waste disposal. Proper pet waste disposal (i.e., to the trash or toilet) seems slightly more common where residents have a higher level of awareness of storm water (Figure 11). Since residents were reporting on the neighborhood as a whole, most residents were less likely to just pick the "correct" answer when they knew it. This would likely counteract a confounding effect of knowledge on the pet waste survey question. Good car washing practices (i.e., washing at a professional car wash or on an unpaved surface), on the other hand, do not seem related to knowledge by residential area.

Table 9. Comparison of knowledge with car washing and pet waste BMP implementation by residential area

Residential Area	Percent of residents knowing storm water is not treated before discharge to creeks, bay, and ocean	Percent of residents preventing wash water runoff	Percent of residents reporting proper disposal of pet waste
A Avenue	58 %	74 %	29 %
Arcadia Place	80 %	67 %	67 %
B Avenue	43 %	58 %	27 %
Division Street	44 %	71 %	45 %
East 8th Street	33 %	82 %	33 %
Grove Avenue	67 %	58 %	57 %
Harbison Avenue	57 %	57 %	20 %
Paradise Creek Area	57 %	60 %	32 %

Note: See also tables 5, 6, and 7 in this report for the initial presentation and explanation of the percentages.

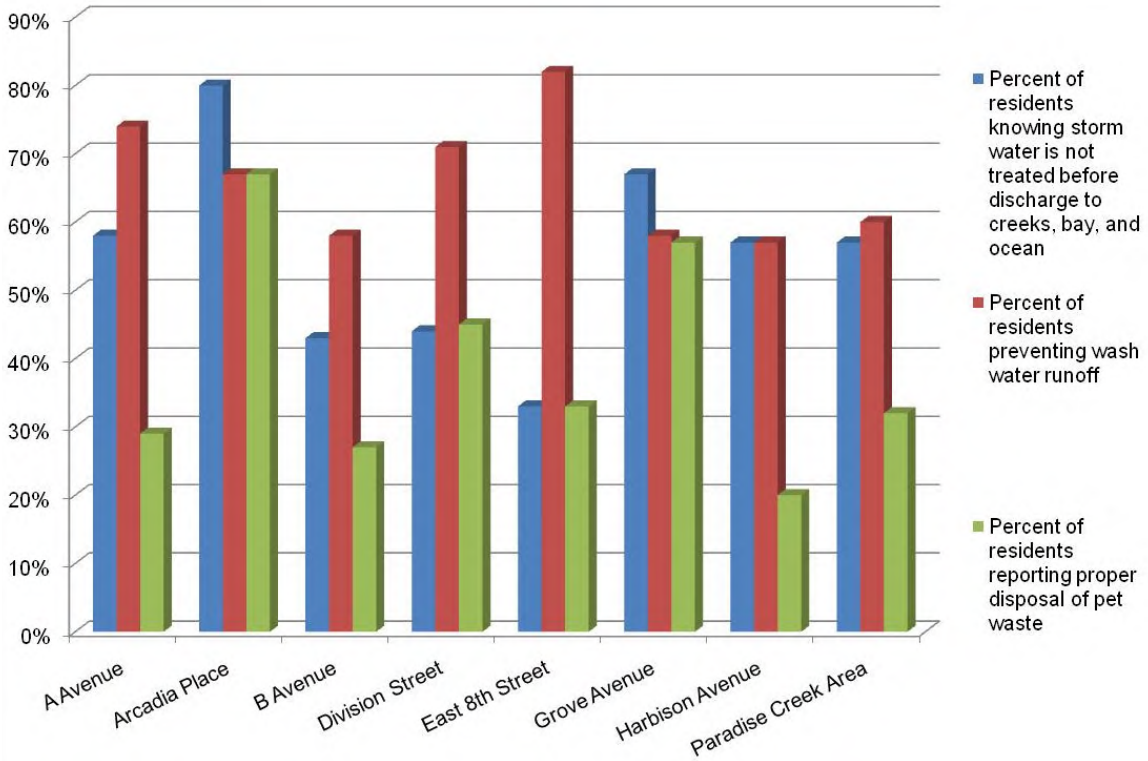

Figure 11. Comparison of knowledge with car washing and pet waste BMP implementation by residential area.

Knowledge vs. Car Washing Habits by Individual Resident

Since the first comparison found no association of car washing behavior and knowledge by residential area, these survey answers were compared within individuals. The second

comparison looked for differences in car washing behavior of individual residents who knew storm water is not treated as opposed to those that were unaware. It seems clear in Figure 12 that individual car washing behavior is not different for residents that are aware of storm water and those that are not aware.

Since car wash practices may be influenced heavily by convenience, cost, habit, and driveway availability, individuals may be unlikely to change their practices regardless of education unless car wash runoff is actually prohibited. It is unknown however, whether education might still influence car washing methods within those that wash vehicles at home.

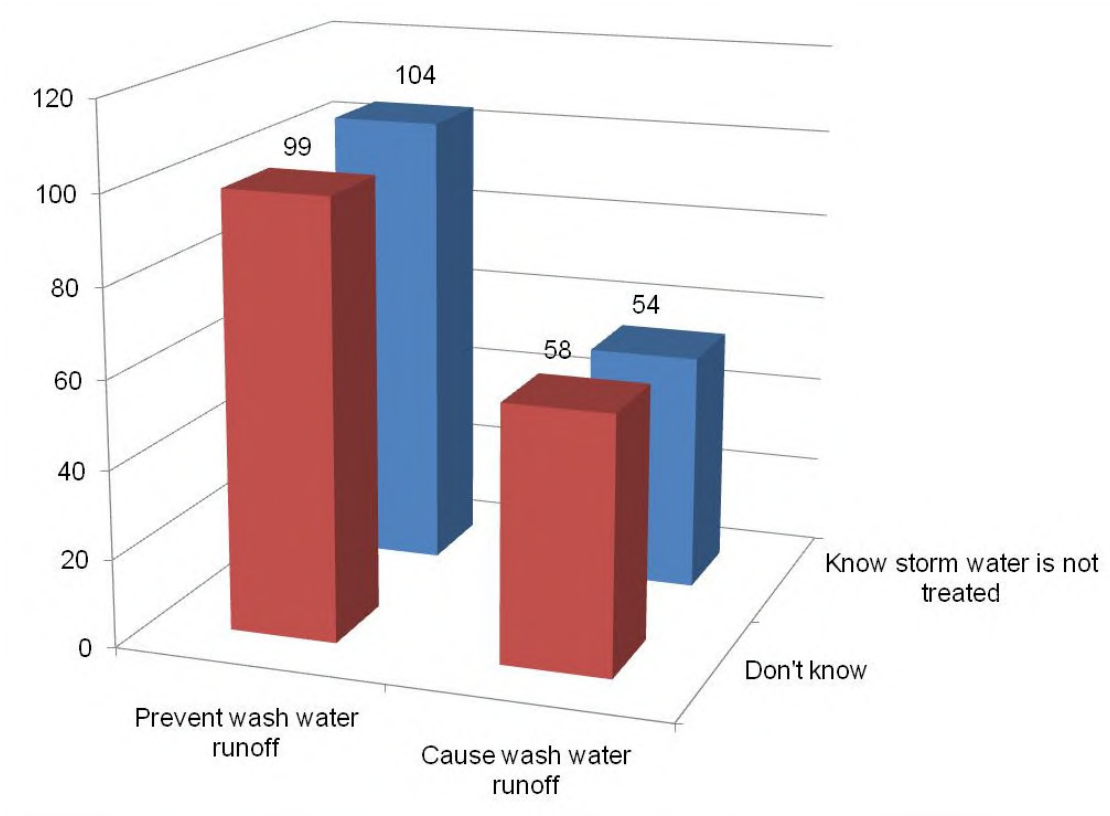

Figure 12. Individual residents aware that storm water is not treated do not wash their cars differently than those who are unaware (n = 315 residents).

SUMMARY AND CONCLUSIONS

- Surveys, education, and observations were conducted in eight high TTWQ residential areas, resulting in a total of 1341 homes receiving educational materials and survey data collected from 317 residents. Nearly half of these were within the Division Street Area.
- The three main languages used by residents within the City's high TTWQ areas are English, Spanish, and Tagalog. While many residents are bilingual, at least thirty-two percent of residents in these areas will have difficulty understanding

future educational efforts in English unless materials and presentations are also available in their language.

- High TTWQ activities were observed at 11 residences, and materials that might pose a TTWQ were noted at 26 residences. Photos of those that may require additional education or enforcement have been provided in Attachment 3.
- Fifty percent of all survey respondents did not know that storm water flows to the creeks, bay, and ocean without treatment. The least knowledgeable neighborhoods were the East 8th Street Area, B Avenue Area, and Division Street Area.
- Sixty-one percent of survey respondents wash their vehicle at a professional car wash most of the time.
- Of residents that had observed pet waste disposal practices in their neighborhood, only 42 percent said that pet owners tend to clean it up appropriately.
- When prompted, most residents identified many of the potential pollutants from Question 4 as not acceptable to be discharged to the storm drain. Soapy water was less frequently identified as a problematic discharge than other potential pollutants.
- Residents made many suggestions regarding what is needed to keep the City clean, the most common concerning encouraging proper trash disposal and increasing public awareness through education. Some residents had already received the storm water calendar or had heard of storm water through their children.
- Most suggestions for City cleanliness indicated attitudes of both City and individual responsibility. A few also indicated the important role of property managers.
- When compared by residential area, a higher percent of people aware that storm water is not treated appeared loosely associated with a higher reporting rate of proper pet waste disposal, but car wash behavior was not associated.
- Individuals who are aware that storm water is not treated are just as likely to wash their vehicles at home as those individuals who are unaware.

RECOMMENDATIONS

- Consider developing some storm water educational materials in Tagalog to better serve and educate the residents of National City. Also ensure that any new materials will always be available in both English and Spanish.
- Address the high TTWQ activities and materials noted at some of the residences (Attachment 3) with education and/or enforcement where not in accordance with City ordinances.

- Compare the level of knowledge revealed through these residential surveys with regional storm water awareness data where it addresses similar topics when available.
- Consider providing or increasing the amount of signage and dog waste bag dispensers in parks and common walkways to encourage owners to properly dispose of pet waste.
- Continue storm water education efforts in local schools, especially encouraging school children to take time to share their new knowledge with their families and neighbors.
- Consider coordinating meetings with property managers in high TTWQ residential areas to discuss storm water quality issues and potential sources of pollutants as a proactive step for addressing observed overall property issues. Discussing storm water BMPs with property managers and landlords is an additional system for keeping residents aware of and accountable for their practices.

Attachment 1
Maps of High TTWQ Residential Areas

High TTWQ Residential Areas in the City of National City

Legend

- Major Roads
- HighTTWQResidential
- Streams
- Roads
- Military
- Port Jurisdiction

Municipal

- Other Jurisdiction
- National City

0 250 500 Feet

Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

High TTWQ Residential Areas in the City of National City

Legend

- Major Roads
- HighTTWQResidential
- Streams
- Roads
- Military
- Port Jurisdiction

Municipal

- Other Jurisdiction
- National City

0 0.0375 0.075 Miles

Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

High TTWQ Residential Areas in the City of National City

Legend

- Major Roads
- HighTTWQResidential
- Lakes/Bays
- Streams
- Roads
- Military
- Port Jurisdiction

Municipal

- Other Jurisdiction
- National City

0 0.0375 0.075 Miles

Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

High TTWQ Residential Areas in the City of National City

Legend

- Major Roads
- HighTTWQResidential
- Lakes/Bays
- Streams
- Roads
- Military
- Port Jurisdiction

Municipal

- Other Jurisdiction
- National City

0 0.02 0.04 Miles

Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

High TTWQ Residential Areas in the City of National City

Legend

- Major Roads
- HighTTWQResidential
- Streams
- Roads
- Military
- Port Jurisdiction

Municipal

- Other Jurisdiction
- National City

0 250 500 Feet

Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

High TTWQ Residential Areas in the City of National City

Legend

- Major Roads
- HighTTWQResidential
- Streams
- Roads
- Military
- Port Jurisdiction

Municipal

- Other Jurisdiction
- National City

0 0.025 0.05 Miles

Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

Attachment 2

Storm Water Residential Knowledge Assessment Survey

Survey Questions:

1. Do you know where water goes after it flows off of your property?
(Don't show list, but mark all mentioned.)

a. Street/drain/sewer — Ask "Where does it go after that?"
b. Storm drain — Ask "Where does it go after that?"
c. River/creek/bay/ocean/etc. — Ask "Does the water get treated or cleaned before it goes there?"
d. Treatment plant
e. Don't know (even after encouraged to guess)

In any case, after they answer remind that all water used outside enters the storm drain and is not treated in any way before it goes to the creeks, bay, and ocean.

2. Where do you wash your car, if you do?
(Don't show list, but mark all mentioned.)

a. Here at home, on driveway
b. Here at home, on the street
c. Here at home, on unpaved area
d. At workplace
e. At professional car wash
f. Never wash car or don't have car

3. Are there many dogs living in this neighborhood? What do people do in this neighborhood to clean up after their dog, if you know?
(Don't show list, but mark all mentioned.)

a. Leave waste where it is
b. Pick up pet waste and put in landscaping
c. Pick up pet waste and put in trash or toilet
d. Dump waste in drains
e. Other unacceptable disposal method
f. No dogs observed / don't know

4. Which of these is a problem if it goes into the storm drain system?
(Provide photos as multiple choice, and mark all mentioned.)

a. trash
b. motor oil
c. pet waste
d. fertilizer or pesticide
e. used cooking oil
f. soapy water from washing
g. sprinkler water from landscaping
h. rainwater

5. What can we all do to help make National City a cleaner place?
(Try to gauge what they think)

- Is there a trash (or other) problem?
- Who is responsible for causing the problem?
- Who should clean it up?
- Any potential suggestions / solutions?

Which of these should NOT go in the storm drain?

¿Quáles NO deben ir a la coladera para aguas pluviales (afuera de la casa)?

TRASH (BASURA)

MOTOR OIL (ACEITE DE CARRO)

PET WASTE (DESECHOS DE MASCOTA)

PESTICIDE/FERTILIZER (PESTICIDA/FERTILIZANTE)

COOKING OIL (ACEITE DE COCINA)

SOAPY WATER (AGUA JABONOSA)

SPRINKLER WATER (AGUA DE ROCIADERA)

RAIN WATER (AGUA PLUVIAL)

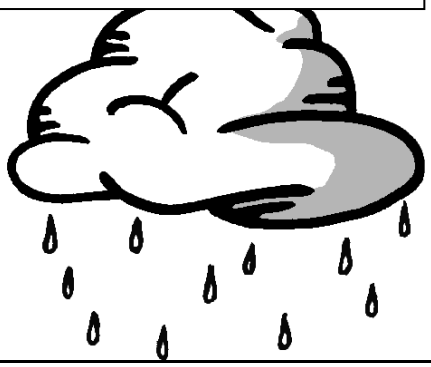

Attachment 3
High TTWQ Activities and Materials

2026 D Street - Miscellaneous trash	
3003 E. 11th Street – Oil stains	

2939 E. 11th Street – Old vehicle on lawn	
2915 E. 11th Street – Used tires	

2907 E. 11th Street – Oil stains	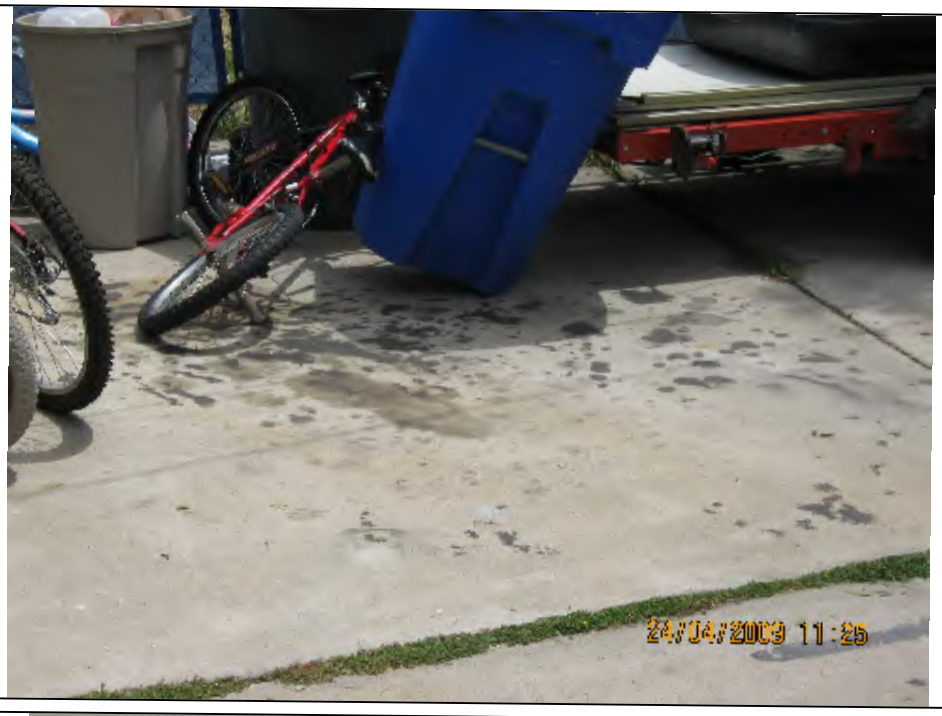
2827 E. 11th Street – Oil stains	

3017 E. 10th Street – Old vehicle	
3023 E. 10th Street – Oil stains	

3034 E. 10th Street – Oil stains	
2204 14th Street – Oil stains	

1503 Orange Avenue – Oil stains	
2316 E. 14th Street – Pavement staining	

2324 E. 14th Street – Oil stains	
2109 Van Ness Avenue – Old vehicle and outdoor storage	

1225 District Street – Trash and food debris	
101 Gilbert Lane – Exposed rusty metal, car battery, pan of oil, oil stains, bags of yard waste	

1204 District Street – Rusty metal and paint	
1212 District Street – Old vehicle	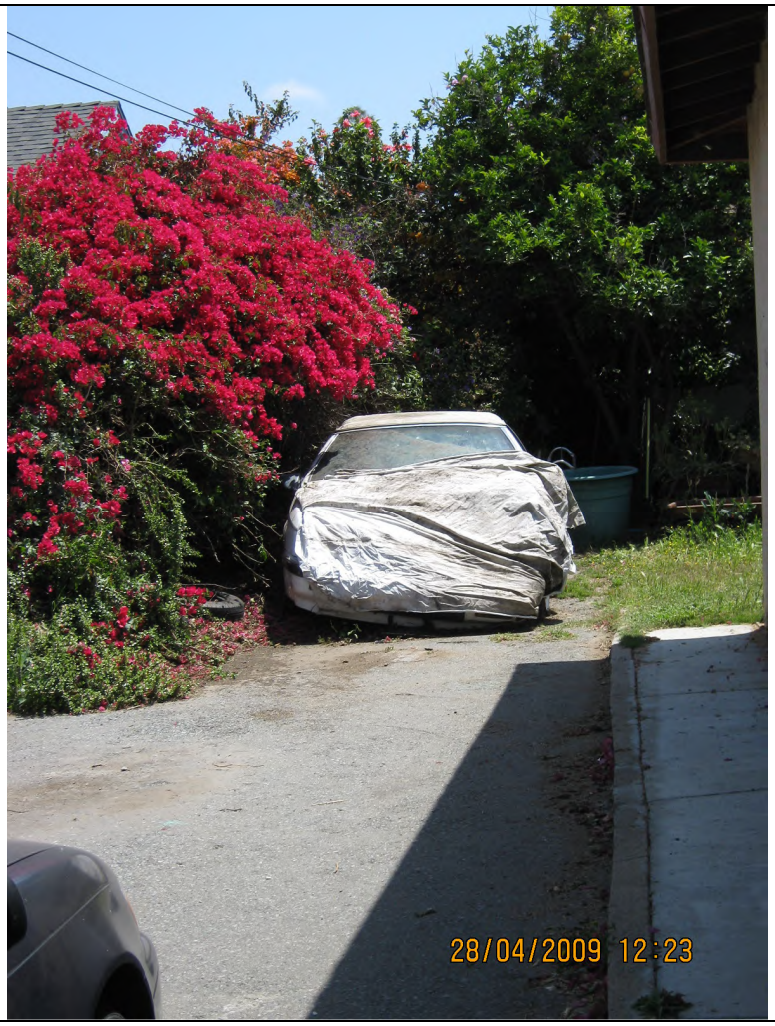

1407 District Street – Rusty metal	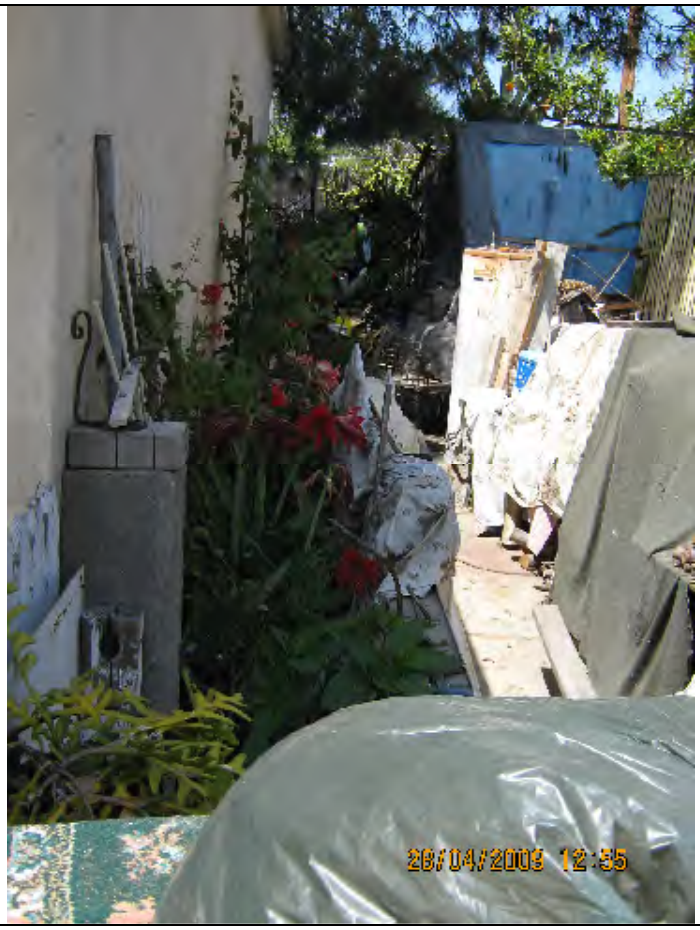
1459 E. 1st Street – Damaged vehicle leaking oil	

1449 E 1st Street – Exposed rusty metal	

1303 and 1305 E. 1st Street – Exposed rusty metal	

40 Laurel Street – Exposed rusty metal	
Side walk on Laurel Street next to Second Street – Loose trash	

1019 E. 2nd Street – Old vehicle	
E 2nd Street – Vacant house with construction waste and paint bucket	

1108 E. 2nd Street – Rusty exposed metal and toilet	
1012 E. 2nd Street – Exposed rusty metal and construction waste	
1311 E 1st Street – Used tires and old appliances	

230 Laurel Avenue – two old cars in yard, paint and oil containers	
911 2nd Street – Complex with old cars and storm drain when residents report vehicle washing activities	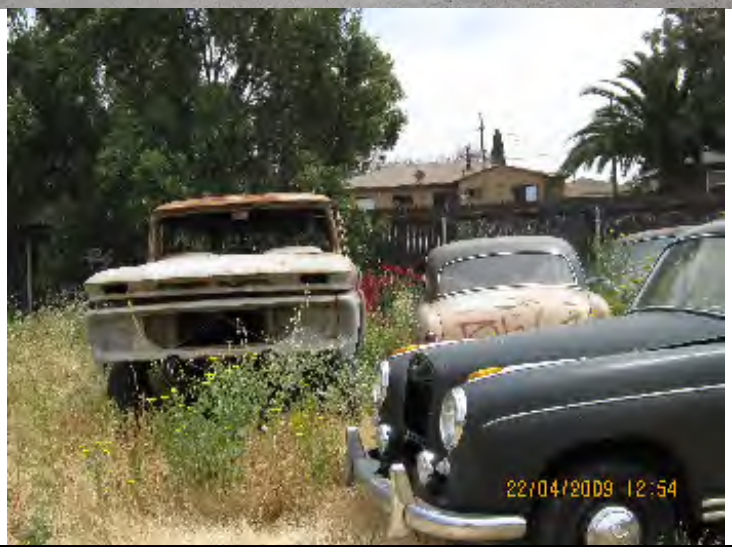

917 2nd Street – Complex with used tire and loose trash	
1121 2nd Street – Used tire	

1203 L Street – Exposed rusty metal	
912 Delta Street – Loose trash	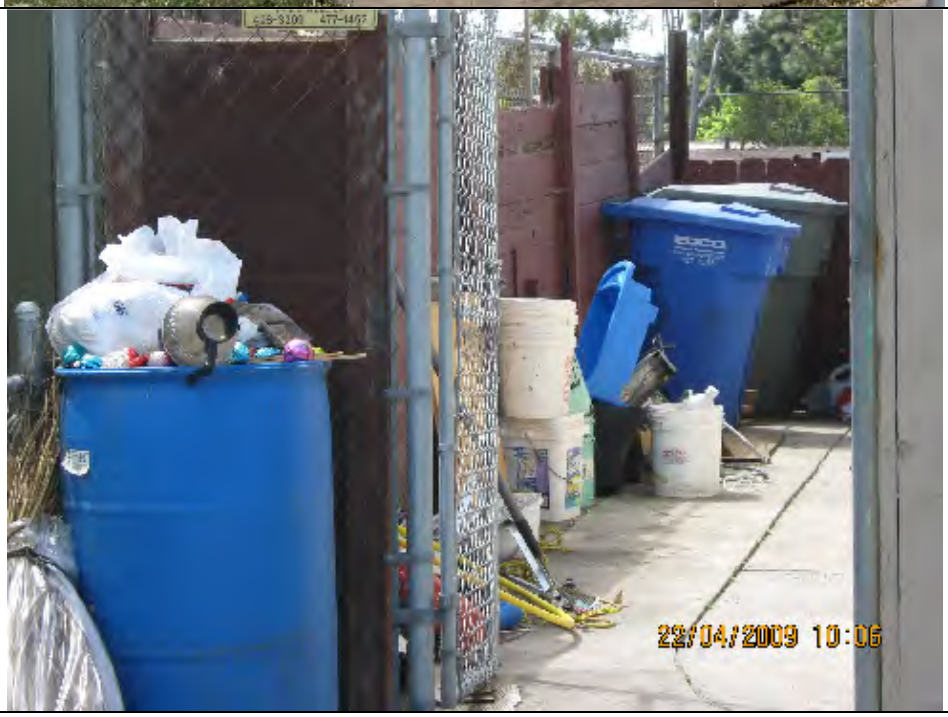

Complex Lot by 1040 Delta Street – Exposed material storage	
1120 E. 1st Street – Used tires	

924 Bucky Street – Resident washing vehicle in driveway	
935 Bucky Street – Reportedly abandoned car and oil stains	

1405 Scott Street – Two old vehicles on grass	
1235 Scott Street – Trash bags outside and rusty table on grass	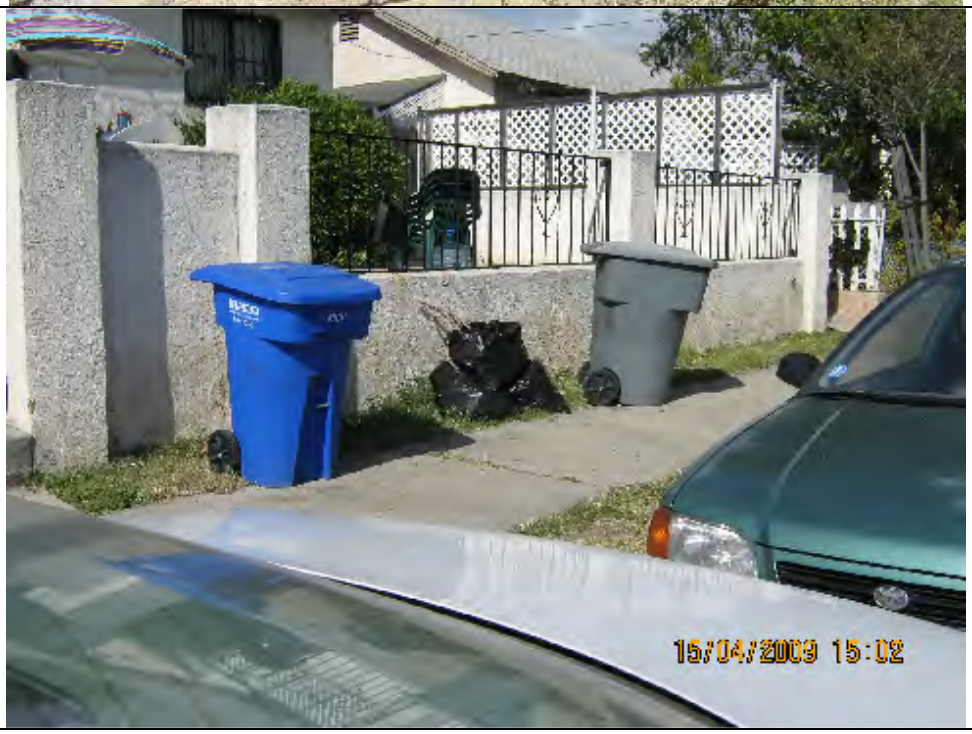

1228 Scott Street – Exposed rusty metal	
910 Melrose Street – Rusty metal, auto repair and used car battery	

Next to 910 Melrose Street – Loose trash	
940 J Street – Exposed rusty metal and debris	

1225 Division Street – Used tires			

ATTACHMENT 6.2

STORM WATER HOTLINE CARD

STORMWATER HOTLINE

(619) 336-4389

CITY OF NATIONAL CITY
ENGINEERING DEPARTMENT
1243 National City Boulevard
National City, CA 91950-4301

www.ci.national-city.ca.us

ATTACHMENT 6.3

"EVERYTHING THAT FLOWS DOWN INTO A STORM DRAIN" BROCHURE

City of National City

Office of the Public Works/Engineering Director
1243 National City Blvd. National City, CA 91950-4397
(619) 336-4580, Fax (619) 336-4397 www.ci.national-city.ca.us

Everything that flows down into a storm drain goes *untreated* directly into our creeks, lagoons, and San Diego Bay. When it rains o when water flows out of yards, it flows directly into storm drains. Many people think that everything that flows into a storm drain gets treated at the Point Loma Sewage Treatment Plant, just like wastewater in the sewer system, but these two systems are not connected.

The sources of pollution that must be controlled and eliminated result from urbanization and the choices that are made every day by residents, businesses and industry alike. For example, detergents, oil, grease, and other pollutants have been shown to be toxic to wildlife in local streams and San Diego Bay. **Recycling** of oil, antifreeze, glass, plastic, and other materials can prevent their improper disposal into the stormwater drainage system. **Proper landscaping practices** include minimization of the use of herbicides, pesticides and fertilizers together with conservation of water to minimize runoff of pollutants from landscaped areas, lawns, golf courses, etc.

The City of National City's Stormwater Management & Discharge Control of the National City Municipal Code Chapter 14.22, prohibits non-stormwater discharges, such as car washwater, pesticides, fertilizers, pet waste, litter, oil, and other automobile fluids, to run into the City's storm drain system. This ordinance is based on regulations set forth by the State Regional Water Quality Control Board and the U.S. Environmental Protection Agency in connection with the State and Federal Clean Water Acts.

Your help is needed, and by doing your part, by changing your washwater and trash disposal practices, you will help reduce the pollution problems in the community where you and your family live, work and play. Please call **Storm Drain Hotline** at **(619) 336-4389** if you have **any questions** regarding this matter and **to report any illegal discharges and /or dumping.**

City of National City

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Todo lo que desemboca en las alcantarillas no esta tratado y va a parar directamente a nuestras lagunas, esteros y Bahia de San Diego. Cuando llueve o cuando escurre agua de algun patio, desemboca directamente a las alcantarillas. Mucha gente piensa que todo lo que desemboja en una alcantarilla es tratado en la planta de Tratamiento de Agua Negras en Point Loma, como las aguas negras del sistema de drenaje, pero estos dos sistemas **no** estan conectados.

Las causas de contaminacion que tienen que ser controladas y eliminadas resultan de la urbanizacion y las elecciones que hacen todos los dias los residentes, negocios y la industria. Por ejemplo, detergentes, aceite, grasa, ya otros contaminantes se ha visto que son toxicos para la vida silvestre en nuestros arroyos locales y Bahia de San Diego. **Reciclando** el aceite, antifreeze, vidrio, plastico y otros productos que sean desechados de un modo inadecuado llegen a parar al sistema de alcantarillado de la ciudad. **Los metodos de mantener el jardin**, como usar menos los herbicidas, pesticidas y fertilisantes.Tambien como conservar el agua para que esa agua con contaminantes de los jardines, pastos, canchas de golf, etc.

El Codigo Municipal No. 14.22 de las aguas pluviales de la Ciudad de National City, prohibe aguas que no sean pluviales como las aguas negras, pesticidas, fertilisantes, basura, aceite y otros liquidos de carros que sean depositadas en el sistema de alcantarillado de la ciudad. Esta regla esta basada en las regulaciones puesta por "State Regional Water Quality Control Board" y "U.S. Environmental Protection Agency" en conneccion con "State and Federal Clean Water Acts."

Su ayuda es necesaria, y haciendo su parte como cambiar el modo de tirar su basura, usted ayudara a reducir la contaminacion en la comunidad donde usted y su familia viven, trabajan y juegan.

Por favor llame a la linea de **"Storm Drain Hotline"** al **(619) 336-4389**, si tiene **alguna pregunta** si quiere **reportar un desague ilegal**.

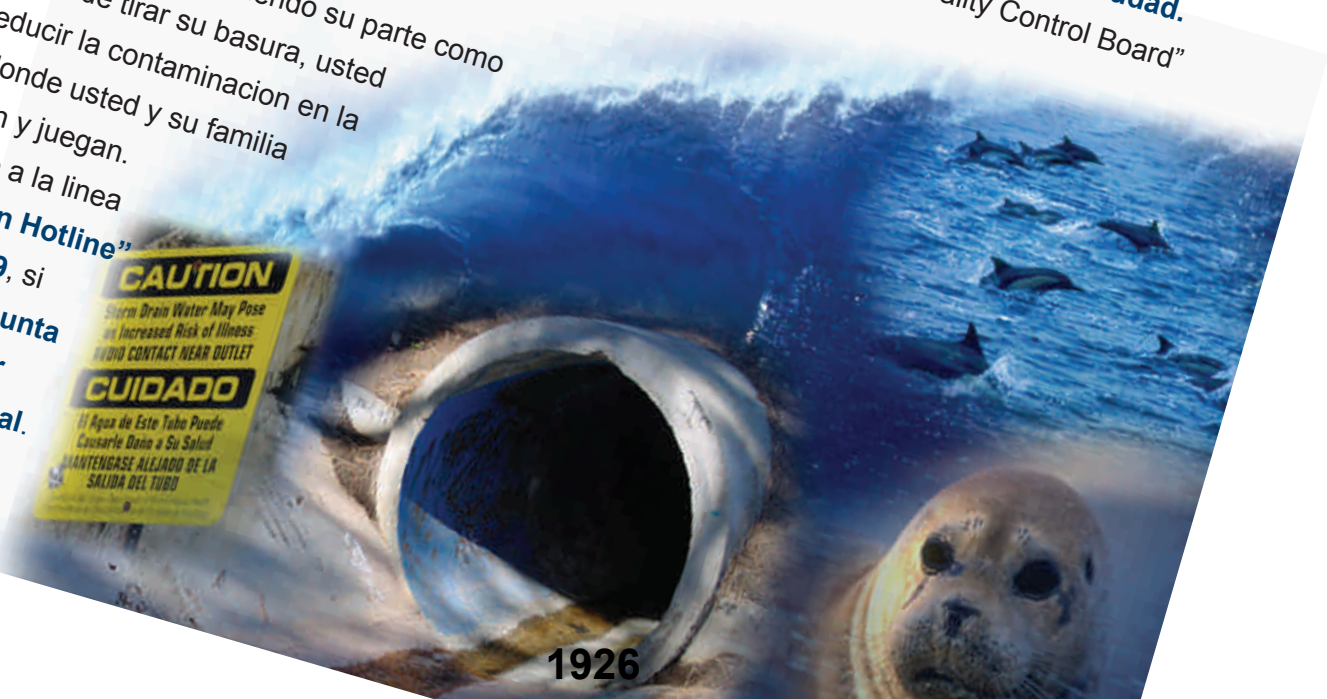

ATTACHMENT 6.4

"PUT TOXIC WASTE IN ITS PLACE" BROCHURE

Put Toxic Waste In Its Place!

A GUIDE FOR...

Household Hazardous Waste Reduction and Disposal in San Diego County.

Para más información sobre como deshacerse de los desperdicios peligrosos del hogar favor de llamar al 1(800) 253-2571

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Put Toxic Waste In Its Place!

Put Toxic Waste In Its Place!

Introduction

Did you know that the average home contains 60 household hazardous products that can harm you, your family, pets and the environment if they are not used, stored or disposed of properly? Hazardous materials are contained in many common household products such as cleaners, paint, automotive products and pesticides. These products can harm trash collection personnel, contribute to fire hazards, enter storm drains and pollute creeks, rivers, lakes and beaches that include some of our most cherished recreational locations. These water sources are also critical to local water supplies and wildlife habitat.

Seventeen cities and the County of San Diego have come together to form the San Diego Regional Household Hazardous Waste Partnership. This guide contains a wide variety of information including identifying what household hazardous waste is; safety when using these materials; alternative products available to you; reducing your waste and much more.

Most importantly, this booklet provides residents with information about how to reuse, recycle and properly dispose of household hazardous waste.

Residents can bring their household hazardous waste, free of charge or for a small co-payment, to a nearby collection facility. There are a variety of programs offered throughout the region. Visit www.1800CLEANUP.org or call 1(800) CLEANUP / 1(800) 253-2687 for information about your community's household hazardous waste collection program.

The San Diego Regional Household Hazardous Waste Partnership is striving to create a cleaner and safer environment. So… read on to learn more about how to… Put Toxic Waste In Its Place!

Defining Household Hazardous Waste

Household Hazardous Waste is any material (gas, liquid or solid) discarded from the home that may, due to its chemical nature, pose a health threat to people, animals and the environment if handled or disposed of improperly. You will know if a product is hazardous if it is labeled with signal words. These include:

Toxic – poisonous or causes long-term illness
Flammable – burns easily
Corrosive – eats through materials (e.g., acid)
Reactive – can explode when exposed to heat, water, air or strong impact

How dangerous is a hazardous product? Here are the signal words, please note they are in order based on how hazardous the product is:

DANGER or POISON means extremely hazardous. The product could poison you, cause serious damage to skin or eyes, or easily cause a fire.
WARNING or CAUTION means moderately hazardous.
NO SIGNAL WORD means least hazardous.

Hazardous product labels may also say: "harmful or fatal if swallowed," "keep out of reach of children," "causes severe burns on contact," "do not use near heat or flame" or "use only in well ventilated area." Avoid household products marked DANGER or POISON. Take care when you use, store or dispose of any hazardous product. Best of all, choose safer, less-toxic and often cheaper products that do not need warnings.

Examples of…
Household Hazardous Waste

The following are examples of household hazardous waste items that may be found around your home.

For explosives or radioactive products, contact your local law enforcement agency.

Kitchen

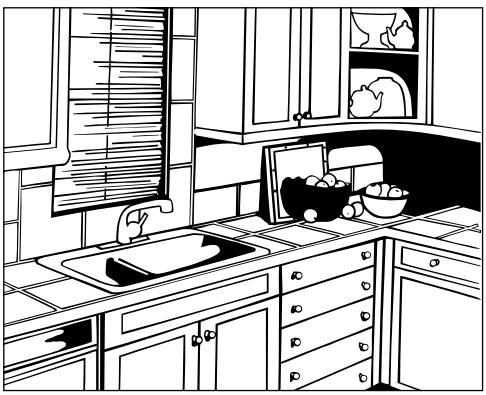

- Bleach
- Bug sprays
- Drain cleaners / openers
- Floor care products
- Furniture polish
- Household cleaners
- Metal polishes
- Spot removers

Bathroom

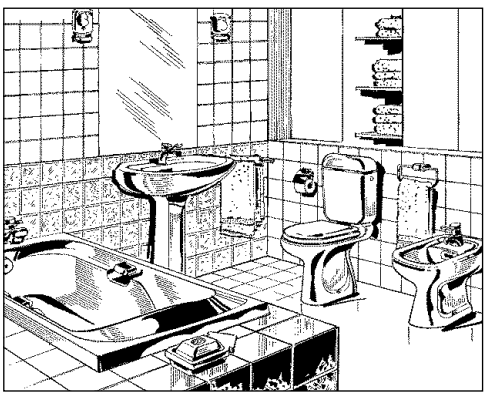

- Bathroom cleaners
- Disinfectant
- Expired medicine
- Hair chemicals
- Hair removers
- Isopropyl alcohol
- Mercury thermometers
- Nail polish & remover

Automotive

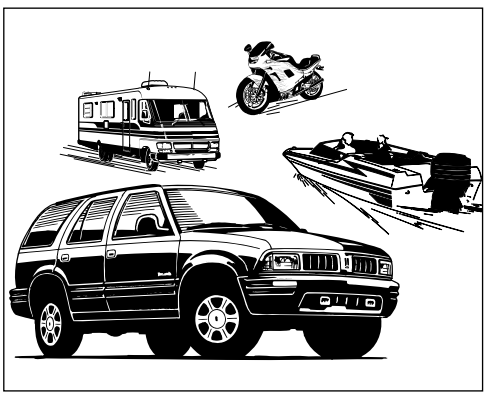

- Antifreeze
- Auto batteries
- Auto body repair products
- Brake fluid
- Car wax
- Gas & Diesel fuel
- Used motor oil / oil filters
- Transmission fluid
- Solvents
- Windshield washer solution

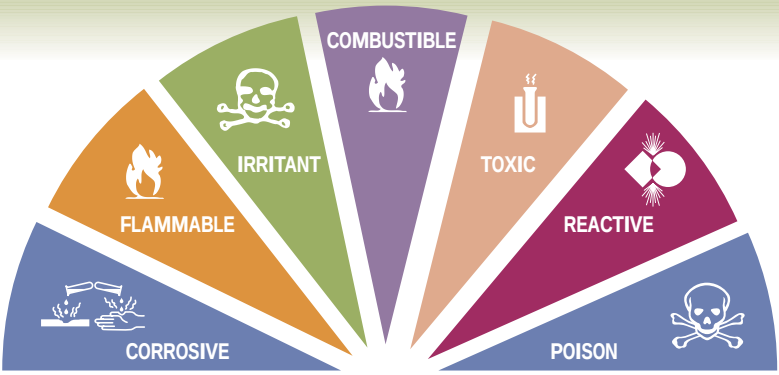

Storage

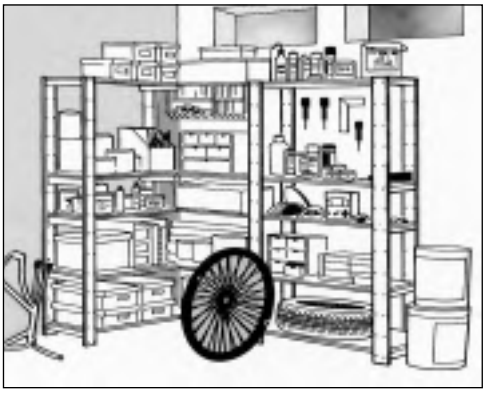

Latex / water-based paint

Oil-based paint

Paint remover / thinner

Rust remover

Solvents

Turpentine

Varnish / stains

Wood preservatives

Kerosene

Yard / Garden

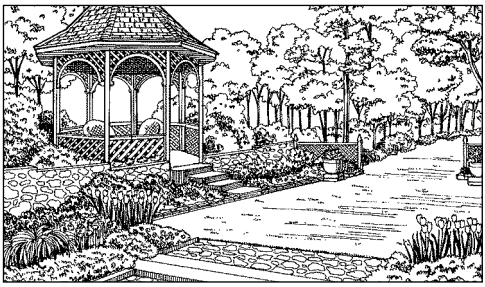

Fertilizers

Fungicides

Insecticides

Pesticides

Rat poison

Weed killer

Misc

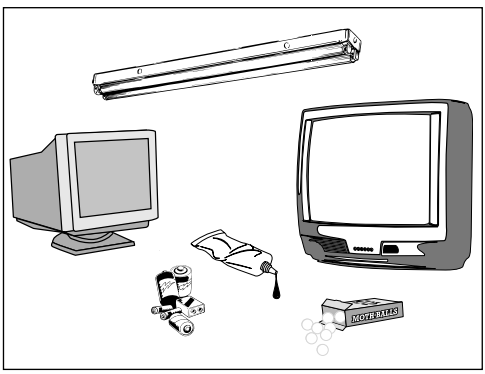

Computer monitors and televisions

Other electronic items

Dry cleaning solvents

Fluorescent lights

Glue / Adhesives / Epoxies

Gun cleaning solvents

Hobby chemicals

Household Batteries

Mercury thermostats

Mothballs

Photographic chemicals

Pool Chemicals

Shoe polish

Protect Your Family!

How chemicals enter your body:

Ingestion

Drinking or swallowing harmful chemicals may lead to poisoning. Contact the California Poison Control Center at 1 (800) 876-4766 as soon as possible when toxic or hazardous materials are ingested. Whenever possible, have the labeled container available for poison control and medical staff.

Absorption

If chemicals get on your skin they may be absorbed into your body and your blood stream. The effects can be as serious as ingestion.

Inhalation

Inhaling vapors or fumes through your mouth or nose may lead to poisoning. Vapors pass directly through the lungs into the blood stream. This is the quickest way that chemicals can affect your brain.

Eye/skin contact

This can cause blindness, irritation, burning and tissue damage.

The effects of exposure to hazardous chemicals may vary depending on the type of chemical, the length and amount of exposure and on your general health. Some of the more common immediate symptoms include: headaches, dizziness, nausea, sweating, difficulty breathing and irritation of the eyes, nose and throat. Long-term effects are more severe. Used motor oil and some pesticides and solvents, for example, can increase your risk of developing cancer. If you feel you may have been exposed to a hazardous chemical or begin to experience unusual symptoms, call your poison control center or doctor immediately.

Did you know that 1 out of 10 children is injured at home from household chemicals?

In the event of a spill or accident:

- Keep children and pets out of the area.
- Wear protective gloves and clothing, if required.
- Extinguish any open flame or heat source.
- Keep the area well ventilated.
- Read the label for safety instructions.
- Contain the spill and cover it with kitty litter, sand or soil. Use rags for very small spills.
- Sweep or scoop the materials up and put into a strong plastic bag. Use double bags to be extra safe.
- Scrub the area with water and be careful not to wash toxic materials into storm drains or sewers.
- Cleanup materials cannot be thrown in the trash. They too must be taken to a household hazardous waste collection facility.

Be Safe, Not Sorry
Remember—Safety First

Purchase:

- Look for products that are less hazardous or nontoxic. This helps to prevent household accidents such as fire or poisoning.
- Read labels prior to purchase. Know what you are buying and what special safety precautions need to be followed when using, storing or disposing of the product.
- Buy only the amount you need for your project. Share leftovers with friends or neighbors.
- Buy recycled products. Ask your retailers for recycled products including paint, motor oil and antifreeze.

Use / Storage:

- Children and expectant mothers should restrict or eliminate their exposure to hazardous products.
- Follow directions when using a hazardous household product.
- Do not smoke, eat or drink when handling hazardous household products.
- Never mix any hazardous household products. Mixing products can produce dangerous reactions and make products unrecyclable.
- Do not allow hazardous products to be washed into the gutter or storm drain in front of your home or business. Storm drains lead directly to creeks, lakes, rivers and the ocean without being treated.
- Keep combustible and flammable products away from pilot lights.
- Keep containers standing upright with lids on tight.
- Make sure containers are not leaking.
- Store hazardous household products in their original containers with the label intact.
- Keep material out of the reach of children and pets.
- Store material in a cool, dry place away from excessive heat or cold.
- Do not store corrosives, flammables, and poisons together. Separate these containers.

Disposal:

- Offer your quality leftover products to neighbors, community groups, family and friends.
- Transport containers to a household hazardous waste facility or event in the trunk or back of vehicle away from passengers and animals.
- Do not transport more than 15 gallons or 125 pounds at any one time.
- Products should not be transported in containers larger than 5 gallons.
- Empty containers may be thrown in your trash or recycling bin.

Reduce household hazardous waste at home!

What can I do to reduce the amount of chemicals and hazardous products in my home?

Reduce:

- Use safer substitutes or alternatives to toxic products *(see household hazardous waste alternative charts, pages 9-12).*
- Buy less hazardous or non-toxic products.
- Buy only as much as you need for your current project. If you have leftovers, you will be responsible for their proper disposal.
- Select water-based products over solvent-based products when available *(e.g. paint, glue, shoe polish).*
- Avoid aerosol sprays. Choose non-aerosol pump sprays or other alternatives.

Reuse:

- Buy only as much as you need for your current project. Ask a friend, relative or neighbor if they can use your quality leftover.
- Certain civic and community groups may accept leftover paint for use at their facilities. Please call first.

Less Toxic Products and Their Uses

Ammonia:

Cleans carpets, copper, dishes, enamel, floors, formica, garbage cans, glass, grout, jewelry, linoleum, ovens, porcelain, refrigerators, showers, stainless steel, stoves, tubs, windows and painted woodwork. Removes stains. Do not mix ammonia with bleach; it produces a toxic gas.

Baking soda:

Cleans and deodorizes carpets, counters, drains, refrigerators, upholstery, and vinyl. Extinguishes grease fires. Freshens fabrics. Removes stains. Scours and polishes aluminum, chrome, grout, jewelry, plastic, porcelain, silver, stainless steel and tin. Softens fabrics.

Cornstarch:

Cleans windows. Polishes furniture. Removes stains. Shampoos carpets and rugs. Starches clothes.

Lemon juice:

Deodorizes. Cleans windows and other glass. Removes stains from aluminum, clothes and porcelain.

Soap and water:

Cleans cars, clothes, dishes, doors, floors, glass, jewelry, people, pets, sporting goods, tools, walls, windows and woodwork.

Steel wool:

Removes rust, rust stains and stubborn film. Scours barbecue grills and broiler pans.

Vinegar:

Cleans bricks, carpets, coffee pots, dishes, fireplaces, glass, grout, paintbrushes, walls and windows. Polishes metal. Removes mildew, spots, stains and wax buildup. Softens fabric. Removes paint.

Washing soda:

Cleans and cuts grease on barbecue grills, broiler pans, concrete, drains, fireplaces, floors, ovens and walls. Improves detergent power. Removes stains. Softens water.

Disclaimer: The San Diego Regional Household Hazardous Waste Partnership, the California Integrated Waste Management Board and all participating jurisdictions, do not warrant and shall have no liability for information provided in this booklet or from the San Diego Regional Household Hazardous Waste Partnership and the California Integrated Waste Management Board. Each individual person, fabric or material may react differently to a particular suggested use. It is recommended that before you begin to use any formula, you read the directions carefully and test it first. Should you have any health care-related questions or concerns, please call or see your physician or other health care provider.

Household Hazardous Waste

Reference and Alternative Product Chart

PEST / GARDEN / YARD PRODUCTS

Product	Alternative
Rodent bait	• Remove food supply and close all entry points. • Some cats and dogs are good at catching rodents. • Use traps (remember humane traps are available.)
Ant pesticides	• Remove all sources of food and water. Locate entry point and seal with caulk. • Pour a line of tartar, red chili powder, paprika or dried peppermint at point of entry. • Kill visible ants with soapy water or vacuum. Baits or traps are preferable over sprays.
Roach pesticides	• Remove all sources of food and water. Remove hiding places such as old newspapers, garbage bags and other clutter. • Place bay leaves around cracks in room. • Set out a dish of equal parts baking soda & powdered sugar. • Carefully apply boric acid powder into cracks where roaches hide (keep away from children and pets.)
Flea collars & sprays	• Add small amounts of brewers yeast or vitamin B in pet's food. • Use an herbal collar or ointment (eucalyptus or rosemary.) • Place eucalyptus leaves near pet's bed. • Give your pet herbal baths. • Wash pet bedding and treat with flea soap or citrus oil product. • Sprinkle carpet with borax, vacuum twice a week & dispose of vacuum bags in the trash.
Plant insecticides	• Remove pests by hand. • Spray affected leaves with strong stream of water. • Mist or spray with soapy water.
Snail/slug killers	• Remove tall grass & debris from vicinity of garden. • Overturn clay pots or lay board between rows of planted vegetables. • Remove pests by hand. • Fill a shallow pan with stale beer and place in infested area.
Chemical fertilizers	• Use compost. Buy or make your own. • Use natural soil enhancers such as greensand, bone meal or fish meal.

Disposal Options:

Use the entire product. Empty containers may be thrown in regular trash or recycled. Where possible, empty containers should be rinsed with water prior to discarding in the trash. If possible, rinse the container in a sink or indoors. If rinsed outdoors, rinse over a large bucket to collect the "dirty" water. The "dirty" water must also be properly disposed of at your local household hazardous waste collection facility. Never dump the dirty water into a storm drain or on the ground.

Household Hazardous Waste

Reference and Alternative Product Chart

PEST / GARDEN / YARD PRODUCTS CONTINUED

Product	Alternative
Fungicides	• Avoid over watering and keep garden growing area clean and dry.
Herbicides and weed killers	• Pull or hoe weeds regularly. • Use mulch as ground cover. • Keep grass short. • Cover garden with opaque plastic to prevent weed germination.

Read and look at all product labels before purchase.

PAINT PRODUCTS

Product	Alternative
Enamel or oil based paint	• Use latex or water-based paint.
Latex or water based paint	• Use limestone-based whitewash. • Use casein-based paint, which is an opaque watercolor in which “casein” or milk glue, is its binder.
Furniture and paint strippers	• Rub with sandpaper or use a power sander. • Use a heat gun. • Scrub surface with steel wool or an emery cloth.
Stains and varnishes	• Look for water-based stains or natural earth-pigment finishes.
Thinners, solvents, turpentine	• Hold used solvent or turpentine in a tightly closed jar until paint settles out. Pour off clear solvent and reuse. • Latex and water-based paint does not require thinners.
Wood preservatives	• Avoid products containing pentachlorophenol. • Use water-based wood preservatives. • Minimize wood contact with soil or high moisture.
Solvent based glue	• Use non-toxic glues.

Household Hazardous Waste

Reference and Alternative Product Chart

HOUSEHOLD PRODUCTS

Product	Alternative
Abrasive cleaners and scouring powders	• Use baking soda or borax. • Use ½ lemon dipped in borax rinse. • Scrub with toothpaste for light stains.
*Ammonia-based cleaners	• Use white vinegar diluted in water. • Scrub with baking soda.
*Bleach-based cleaners and chlorine bleach	• Use either baking soda or borax.
Disinfectant cleaners	• Use white vinegar diluted in water. • Mix one teaspoon of essential oil (lavender, clove or tea tree oil) to 2 cups of water in a spray bottle.
Drain openers or drain cleaners	• Avoid putting grease in the drain. • Use a plunger or “snake”. Follow with boiling water. • Unclogged drains only: 1 cup baking soda followed by ½ cup vinegar. Follow with a kettle of boiling water.
Toilet bowl cleaners	• Mix ½ cup vinegar with ½ cup baking soda. Let stand for a few minutes, and then apply to toilet bowl with a brush. • Soak for 2 hours in apple cider vinegar (drain toilet before adding vinegar.) After soaking, gently rub off any remaining residue.
Glass and window cleaners	• Mix 1 quart warm water with ¼ cup vinegar, add a splash of lemon juice. Apply to glass. Rub dry with newspaper.
Oven cleaners	• Sprinkle baking soda on the bottom of the oven, spray with water. Wipe down. Wipe 2nd time to remove any residue. • Clean your oven as you use it. Use oven liners to catch drips. • When purchasing a new oven, consider buying one that is self-cleaning.
Rug and upholstery cleaners	• Sprinkle baking soda on rug and vacuum. • Mix 1 part borax with 2 parts cornmeal. Sprinkle on liberally. Vacuum after 1 hour.
Pet Odor Remover	• Rinse the area with water. Soak up as much pet urine as possible. Place baking soda on area to absorb. Rinse the "accident zone" thoroughly with clean, cool water. After rinsing, remove as much of the water as possible by blotting or by using a "wet-vac," "shop-vac" or "extractor." • Make the "accident zone" unattractive, the appropriate "bathroom" area attractive, and teach your pet where you want him to eliminate instead. Contact your local humane society for suggestions in positive reinforcement and housetraining techniques.

** Never mix a product containing chlorine bleach with anything containing ammonia.*

Household Hazardous Waste

Reference and Alternative Product Chart

HOUSEHOLD PRODUCTS CONTINUED

Product	Alternative
Spot remover	• (Spot check first) Sprinkle baking soda on stain, spray with vinegar. Apply pressure with clean absorbent cloth. Repeat as needed.
Furniture polish	• Mix mineral oil or vegetable oil with small amount of lemon juice or white vinegar to polish.
Floor cleaner	• Mix 1 cup vinegar with 2 gallons of warm water.
Mothballs	• Place cedar wood chips in dresser drawers or place cedar planks in the back of your closet. • Place dried lavender flowers in your dresser drawers.
Silver and copper polishes	• Soak silver in 1 quart of warm water with 1 tsp. baking soda and 1 tsp. salt mixture and a small piece of aluminum foil. • Pour vinegar and salt over copper and rub. • Mix lemon juice with salt. Scrub and rinse.
Aerosol spray can products *(including hair spray, deodorants, etc.)*	• Buy non-toxic products with non-aerosol propellants. • Use the product so the container is completely empty, with no propellant or product remaining. Recycle the empty container in your curbside recycling program.
Air fresheners	• Prepare an herbal sachet. • Stud an orange with cloves and set in dish. • Simmer cinnamon and cloves. • Use scented candles. • Place open baking soda boxes where needed. • Set out hot vinegar in an open dish. • Ventilate with outside air.
Laundry Whitener	• Add ½ cup borax to each load.

AUTOMOBILE PRODUCTS

Product	Alternative
Gasoline/diesel fuel	• No known alternative; however when purchasing your next car, look for either natural gas, hybrid vehicles, biodiesel, hydrogen fuel cells or electric cars. Consider using public transportation or ride sharing. Reduce or eliminate idling to improve air quality.
Transmission fluid	• No known alternative, but recyclable.
Motor oil	• No known alternative, but recyclable. • Ask your retailer for re-refined motor oil.
Antifreeze	• Use products containing propylene glycol instead of ethylene glycol.
Auto batteries	• No known alternative, but recyclable.
Engine cleaners and degreasers	• No known alternative, however regular maintenance and preventing or eliminating lead can produce great environmental benefits. • Ask your mechanic about steam cleaning.
Car Wash	• Bring your vehicle to a car wash. Car washes are required to catch the detergents, lead, copper, asbestos, oils and dirt that are washed off your car and dispose of it properly. Most also recycle the water they use.

Dispose of Household Hazardous Waste Properly:

- Properly and legally dispose of your household hazardous waste by bringing it to a collection facility or event. For information, visit www.1800CLEANUP.org or call 1(800) CLEANUP / 1(800) 253-2687. Vehicle loads are legally limited to 15 gallons or 125 pounds.
- Recycle used motor oil, oil filters, auto batteries and antifreeze at collection centers such as gas/service stations or auto parts stores.

What happens when household hazardous waste is not disposed of properly?

- When household hazardous waste is illegally dumped into gutters, sewers, storm drains or the ground, it contaminates nearby lakes, streams and the ocean. This is all part of our watershed and provides recreational opportunities, wildlife habitat and drinking water… all of which is so important to our region and quality of life.
- When mixed with the regular trash, household hazardous waste can harm trash collection personnel or spill onto the ground, endangering children and animals. These products eventually end up in our storm drains and in our waterways.
- When flushed down a toilet, sink or drain, household hazardous waste goes through the sewage system to water treatment plants. At water treatment plants, hazardous waste interferes with the biological treatment process by killing helpful bacteria and can contaminate the treated water, which runs into the ocean. Additionally, like other communities throughout Southern California, our communities are looking to reclaim water from these sources for irrigation and other important water uses.

What Happens to the Household Hazardous Waste that is Collected?

- Latex/water-based paint can be recycled and reused.
- Oil-based paint is reused as supplemental fuel in the manufacture of cement.
- Motor oil is recycled as re-refined motor oil, lubricants, marine diesel fuel, supplemental fuel and tar by-products such as asphalt cover.
- Household hazardous waste that cannot be recycled or reused is lab packed into special drums for disposal at specially designed landfills or incineration facilities.
- Electronic components are disassembled and are either recycled or processed according to state and federal specifications.

Paint

The majority of household hazardous waste collected in San Diego County consists of paint and paint-related products. Chances are residents may currently have some paint which is leftover from an old job. A beautiful paint job and helping our environment can be accomplished just by knowing a few important facts about buying and disposing of paint.

Buy Smart

- Look for low Volitale Organic Componds (VOC) which are less harmful to air quality.
- Household paints fall into two categories: latex (water-based) and oil-based. Latex products can be easily cleaned up with soap and water. Oil-based products require cleaning products such as paint thinner. Whenever possible, buy latex products.
- Avoid using spray paint. Aerosols contain chemicals which are flammable under pressure.
- Determine the amount of paint needed and use all that is purchased. Ask the retailer for assistance.

Put Your Leftover Paint to Use

- Return unopened cans. Many retailers will give a refund.
- Use leftover paint as a sealant or undercoat on another project.
- Be a good neighbor! Donate unopened cans to a community group or other local organization. Remember to call first. Ask family and friends if they could use the paint.

Proper Disposal

- Whether you are using latex, oil-based or paint from an aerosol can, any remaining liquid paint must be disposed of properly. These items cannot be thrown in the trash or poured down a storm drain.
- Empty and dried paint cans may be disposed of in your regular trash or recycling bin.

E-Waste: Electronic Waste

Electronic Waste (E-Waste) includes a growing range of electronic devices from cellular phones to computer monitors and televisions. Many electronic devices contain toxic materials such as lead, mercury, and cadmium that can harm human and environmental health. There are an increasing number of safe and legal options for both disposal and recycling of E-waste.

Computer Monitors and Televisions

Computer monitors and televisions are of particular concern. Computer monitors, televisions, and even video cameras may have a cathode ray tube (CRT) or “picture tube”. CRT’s are banned from landfills because each one contains an average of 4 to 8 pounds of lead. Although there are no health hazards associated with handling intact, unbroken CRT’s, it is important to keep them out of our landfills where they can potentially contaminate soil and groundwater.

Less-Toxic Yard & Garden Care

Maintaining a healthy lawn and garden is a high priority and a source of great pride for many residents. However, overuse and misuse of chemicals in yard care is common and can be harmful to your family's health and the environment. Pesticides and fertilizers can be especially harmful to children, pets, birds, fish and beneficial insects such as bees and ladybugs. Pesticides tracked into the house lodge in carpet and pose a special risk to toddlers who play on the floor and put their fingers in their mouth.

In Your Yard & Garden

The most effective pest control starts with prevention. Building healthy soil with compost grows healthier plants. Selecting appropriate plants, watering efficiently and using mulches contributes to an environmentally sensitive garden. An ounce of prevention is better than a pound of pesticide.

- Select native or pest-resistant plants that are suited to the soil and climate. Healthy plants resist harmful insects and weeds.
- Monitor pest populations. Learn how to identify the useful insects that eat other pests, aerate the soil and benefit the garden.
- Look for less-toxic solutions, such as beneficial insects which reduce or eliminate the need for pesticides.
- Utilize nontoxic control methods when pests first become a problem: for example, handpicking, a strong water jet, barriers and traps. Grow plants such as marigolds and "society" garlic to help repel harmful insects.
- Use the least toxic chemicals available when all other methods fail and confine the treatment to affected areas only.
- Attend local workshops on less-toxic pest control and home composting.
- Do not over water the garden. Over watering can transport excess pesticides and fertilizers into the storm drains.

Put Electronic Waste in Its Place!

Safe, proper and legal disposal of E-waste is important.

- Explore reuse options. Consider repairing or selling your working monitors or televisions. If you donate to a community group, please call first.
- Gather obsolete or non-working electronics and make use of your local recycling or disposal options. Fees may apply.
- For information about electronic waste disposal options, visit www.1800CLEANUP.org or call 1(800) CLEANUP / 1(800) 253-2687.

Shop Smart

The next time you purchase electronics, look ahead to tomorrow. Purchase items that will fit your needs well into the future. Research product manufacturers to find out if they have take-back or recycling programs.

Recycle Used Motor Oil and Oil Filters

Only clean, uncontaminated used motor oil can be recycled. Never mix your used oil with antifreeze or any other automotive fluid. Drain used oil into a clean container with a tight fitting cap. Many communities offer free used oil collection containers.

Oil Filters
A single oil filter can hold anywhere from a pint to a quart of residual oil. If thrown in the trash or dumped in a neighborhood, that filter can leak residual oil into our environment, contaminating our storm drains, creeks, lagoons and the beach. Each filter contains approximately 1lb. of steel, which can also be recycled into all sorts of new items including cars, appliances and rebar for construction.

Where can I take used motor oil and oil filters for recycling?

State Certified Oil Collection Centers
Bring clean, uncontaminated used motor oil to an oil-collection center such as an automotive service center or auto parts store. Oil collection centers are located throughout the region. Certified centers will not accept used motor oil brought in containers larger than 5 gallons. However, they may accept up to 20 gallons of used motor oil per individual per day. Many certified centers collect oil filters too; however, some do not. For information on the oil collection centers near you, details regarding the quantities they accept, whether they accept oil filters, location and hours of operation, please visit www.1800cleanup.org or call 1(800) CLEANUP / 1(800) 253-2687.

Curbside Used Oil Collection
Some communities provide curbside used motor oil collection services. Check with your local City or County to see if this service is available in your area.

Household Hazardous Waste Facility or Event
You can also recycle used motor oil and oil filters by bringing it to a household hazardous waste collection facility or event.

How Can I Keep Used Motor Oil Clean?

- When changing your oil, pour the used oil into a clean, empty, plastic container with a tight lid.
- Do not mix the used motor oil with other substances such as gasoline, paint removers or other contaminants.
- Contaminated motor oil cannot be recycled and must be brought to a household hazardous waste collection facility or event for processing.

Auto Batteries And Antifreeze

- Many service stations and auto parts stores accept used auto batteries and antifreeze. Many actually pay for waste auto batteries. Some service stations and auto parts stores may charge a fee for taking automotive waste. For more information, call the service station or auto parts store near you.

Remember ...

Important Telephone Numbers

Your Household Hazardous Waste Disposal Options:

- Earth 911 . . . . . .Visit www.1800cleanup.org or call 1(800) CLEANUP / 1(800) 253-2687

Illegal Dumping:

- Hazardous Materials Management: . . . . . .(619) 338-2284

I Love a Clean San Diego Recycling Hotline: . . . . . .1(800) 237-2583

Composting / Gardening

- *Composting* and *Less Toxic Yard & Garden* Workshops . . . . . .(760) 436-7986
- Master Gardener Hotline . . . . . .(858) 694-2860

Emergency Information

- Emergency 911
- California Poison Control Center . . . . . .1(800) 876-4766

Storm Water Violation Complaints: . . . . . .(888) 846-0800

California Integrated Waste Management Board . . . . . .Visit www.ciwmb.ca.gov or call (916) 341-6000

Explosives or Radioactive Products:
Contact your local law enforcement agency.

Books

- ***Rodale Book of Composting*** **-** Rodale Press.
- ***The Worm Book*** by Loren Nancarrow and Janet Hogan Taylor.
- ***Dead Snails Leave No Trails*** by Loren Nancarrow and Janet Hogan Taylor.
- ***Clean and Green:*** *The complete guide to non-toxic and environmentally safe house cleaning* by Annie Berthold-Bond.

For details about your community's program, please call:

Carlsbad . . . . . .(760) 602-2794

Chula Vista . . . . . .(619) 691-5122

Coronado . . . . . .(619) 522-7380

County of San Diego - Unincorporated . . . . .(877) 713-2784

Del Mar . . . . . .(800) 714-1195

El Cajon . . . . . .(619) 596-5100

Encinitas . . . . . .(800) 714-1195

Escondido . . . . . .(760) 839-4818

Imperial Beach . . . . . .(619) 423-8311

La Mesa . . . .(619) 287-5696 ext. 4270

Lemon Grove . . . . . .(800) 449-7587

National City . . . . . .(800) 237-2583

Oceanside . . . . . .(760) 439-2824

Poway . . . . . .(858) 679-5410

San Diego . . . . . .(858) 694-7000

San Marcos . . . . . .(760) 744-1050

Santee . . . . . .(619) 258-4100 ext. 128

Solana Beach . . . .(858) 720-2400 ext. 2515

Vista . . . . . .(800) 714-1195

www.1800cleanup.org

1-800-CLEANUP / 1-800-253-2687

Brought to you by the
San Diego Regional Household Hazardous Waste Partnership.

This program benefits *Storm Water* management projects throughout the region.

Funded by a Grant from the California Integrated Waste Management Board.

ATTACHMENT 8.1

NEGOCIO VERDE WORKSHOP ANNOUNCEMENT FLYERS

Environmental Justice Achievement Award

State or Local Government

Negocio Verde Environmental Justice Task Force

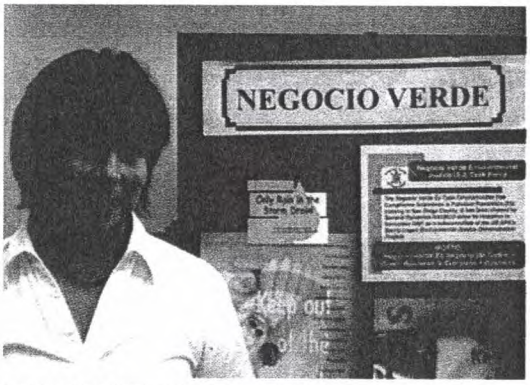

Susan Hahn at the Negocio Verde Environmental Justice Task Force-sponsored UST workshop for owners/operators.

EPA is pleased to present a 2008 Environmental Justice Achievement Award to the County of San Diego, a member of the Negocio Verde Environmental Justice Task Force for its efforts to address environmental justice in the Barrio Logan community of San Diego and the cities of National City and Chula Vista.

The Task Force is composed of members of San Diego County government departments, local businesses, community representatives, and community colleagues. It meets bi-monthly. Since 2003, the Task Force has provided environmental compliance and pollution prevention assistance training to over 6,500 people, the majority in communities with environmental justice concerns. The Task Force has provided 11 bilingual (English/Spanish) training workgroups. Spanish translation of the informational materials and onsite instantaneous translation proved crucial to many of the community members and minority-owned businesses.

The County of San Diego led the Task Force's participation in workshops that were multi-media, multi-cultural, and multi-dimensional. The Task Force's biggest success has been the non-enforcement interaction between regulators, small businesses, and the community. The majority of the small businesses located in communities challenged with environmental justice concerns are fearful of government agencies. The workshops were provided in English and Spanish, via dual PowerPoint presentations projected onto side-by-side screens and audio translation using radio devices. The inclusion of community college students, many of whom live in the affected communities, also proved an asset to the workshops. The success of the Task Force has been shared at several San Diego area and state conferences.

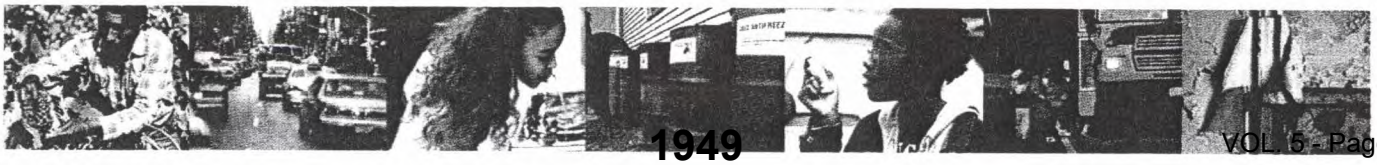

Automotive Body & Repair
FREE Bilingual Compliance Workshop

OWNERS & EMPLOYEES

COME JOIN US FOR A FREE PIZZA DINNER

Learn what to do to be in Compliance with Air Pollution, Hazardous Materials and Storm Water Regulations.

Get tips on how to maintain a Clean & Green Shop using Pollution Prevention (P2) methods that protect the Environment

Wednesday, February 25, 2009
5:00 pm – 7:30pm

The Martin Luther King Community Center

140 E. 12th Street
National City, CA 91950

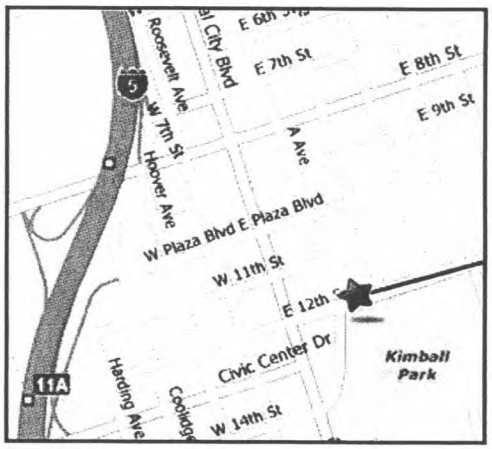

Participation Certificates will be given to all Workshop Attendees

To reserve your space contact the County of San Diego,
Hazardous Materials Division Duty Desk at 619-338-2231 or email:
hmdutyeh@sdcounty.ca.gov

Negocio Verde EJ Task Force

Presented by the Negocio Verde Environmental Justice (EJ) Task Force

The ***Negocio Verde Environmental Justice Task Force*** provides free compliance assistance and Pollution Prevention training in San Diego County. Formed in November 2001 as a subcommittee of the *US EPA's Barrio Logan EJ Demonstration Project, it consists of representatives from the following organizations:*

GKN AEROSPACE

APCD AIR POLLUTION CONTROL DISTRICT COUNTY OF SAN DIEGO

COUNTY OF SAN DIEGO DEPARTMENT OF ENVIRONMENTAL HEALTH

GENERAL DYNAMICS nassco

project clean water

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

environmental TRAINING CENTER

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Green Business Is Everyone's Business - Negocio Verde Es Negocio De Todos

Negocios de Reparación y Pintura de Autos
GRATIS: Curso Bilingüe de Capacitación

PROPIETARIOS Y EMPLEADOS

ACOMPÁÑENOS A CENAR PIZZA GRATIS

Infórmese sobre como cumplir con las leyes y los reglamentos de Materiales Peligrosos, Prevención de la Contaminación del Aire y Aguas Pluviales.

Obtenga consejos sobre como mantener un "Negocio Limpio y Verde" y como proteger el medio ambiente usando métodos para la Prevención de la Contaminación.

Miércoles 25 de Febrero del 2009
5:00 pm – 7:30 pm

Centro Comunitario
Martin Luther King

140 E. 12th Street
National City, CA 91950

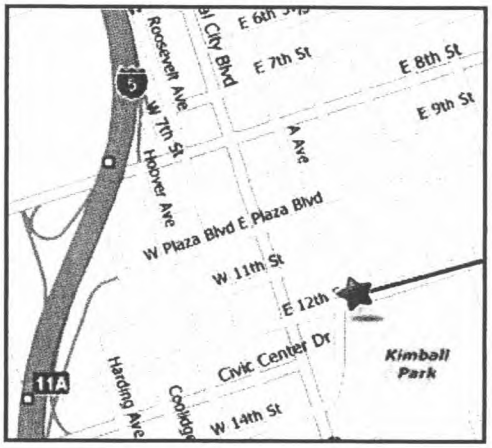

Habrá Certificados de Participación para todos los Asistentes al Curso

¡Reserve su lugar hoy mismo! Llame a la División para Materiales Peligrosos del Condado del San Diego al 619-338-2231 ó mande un correo electrónico a esta dirección: hmdutyeh@sdcounty.ca.gov

Presentado por el *Grupo de Trabajo para la Justicia Ambiental Negocio Verde*

Negocio Verde EJ Task Force

Este grupo proporciona asistencia gratis para que los negocios aprendan a cumplir con las leyes y reglamentos ambientales y las prácticas para la Prevención de la Contaminación al medio ambiente. Formado en Noviembre del 2001, el grupo es un subcomité del Proyecto Barrio Logan de Demostración de Justicia Ambiental y consiste de representantes de las siguientes organizaciones:

GKN AEROSPACE

APCD AIR POLLUTION CONTROL DISTRICT COUNTY OF SAN DIEGO

COUNTY OF SAN DIEGO DEPARTMENT OF ENVIRONMENTAL HEALTH

GENERAL DYNAMICS nassco

project clean water

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

environmental TRAINING CENTER

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Green Business Is Everyone's Business - Negocio Verde Es Negocio De Todos

Negocio Verde (Green Business) Task Force

By Ellen Schulte,
Pollution Prevention Specialist

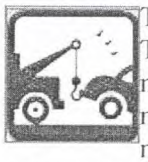

The Negocio Verde Task Force utilizes a multi-organization, multi-faceted, and multi-media approach to promoting pollution prevention in the environmental justice communities of San Diego County. In order to bridge the gap between small business and regulatory agencies, task force members make contact with small businesses outside of the compliance inspection arena. The task force focuses on the needs of the small minority-owned business and provides training materials in Spanish and English. The task force has representatives from a number of local organizations, including large businesses, community colleges, and non-enforcement agency representatives.

Task Force members are: Angela Baranco, USEPA, Region 9; Vivian Bogue, Cuyamaca College; Kacey Christie – Task Force Chair, General Dynamics NASSCO; Kevin Heiss, San Diego County Air Pollution Control District ; James Justus, Inner City Business Association; Alicia Ortiz, BAE Systems, San Diego Ship Repair; Ellen Schulte, County of San Diego, Department of Environmental Health, Hazardous Materials Division; Veronica Serrano, City of National City; and Marie Vicario, Southwestern Community College.

In 2005, through an extensive review, the task force determined that the automotive business sector, including mechanical repair, auto body repair and dismantling businesses, would benefit from assistance, especially those shops where English is spoken as a second language. To meet this need, the task force conducted free bilingual multimedia automotive P2 & compliance assistance workshops. Workshop materials were provided in English & Spanish via dual PowerPoint presentations projected on side-by-side screens. Onsite simultaneous translation was also made available to all in attendance.

The Task Force utilizes the A, B, and C's of Pollution Prevention (P2) to promote P2 in the Environmental Justice (EJ) communities of San Diego County:

A Is for Academia where students from Environmental Technology programs at local junior colleges participate in a "Green Business" outreach to local automotive businesses in concert with non-enforcement personnel and large business representatives.

The Task Force implements the A, B, C's of Pollution Prevention to provide outreach for small automotive businesses.

B Is for Businesses located in EJ communities and pro vides for P2 education by promoting cost savings, economic vitality, and their environmental stewardship role in the community.

C Is for the EJ Community challenged with environmental and public health impacts. This outreach empowers community members to participate in improving conditions within their community.

In 2005, the Task Force provided free pollution prevention & compliance assistance to 229 individuals in the automotive small business sector. On April 28, 2005 the Task Force conducted the First Regional Environmental Symposium in San Diego County at Southwestern Community College. This event had an attendance of more than 400. The Negocio Verde Task Force was awarded the 2005 Environmental Responsibility Award from the Industrial Environmental Association for these successful educational efforts.

In 2006, the Task Force continues its multi-media pollution prevention and compliance assistance workshops for the automotive industry; in the fall, training will be expanded to include Underground Storage Tanks workshops.

"Negocio Verde es Negocio de Todos"

"Green Business is Everybody's Business"

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Automotive Compliance Workshop

Workshop presented by: Neighborhood Services Division

You are invited to attend a workshop to hear and learn about the various regulatory requirements that could affect your business. This is an opportunity for you to have all regulatory agencies in one place and available to answer all your questions or concerns about being compliant with existing laws. Attending Agencies will be providing up to date information and handouts full of vital information. This is an opportunity that no automotive business should miss out on.

Agencies Attending:

- *County of San Diego Dept of Environmental Health*
- *County of San Diego Air Pollution Control District*
- *State of California Dept of Toxic Substance Control*
- *Bureau of Automotive Repair*
- *National City Fire Dept.*
- *National City Police Dept.*
- *Negocio Verde EJ Task Force*
- *National City Storm Water*

Date: November 17, 2008

Time: 6:00 PM — 8:00PM

Location: Casa de Salud
1408 Harding Avenue
National City, Ca 91950

RSVP by *November 10th* at email **neighborhoodservices@ nationalcityca.gov** or by calling the Neighborhood Services Division at (619) 336-4364.

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Taller de Conformidad Automotriz

Taller presentado por: Division de Servicios Comunitarios

Usted esta invitado a asistir en este taller para enterarse y aprender acerca de los varios requisitos de regulaciones que podrian afectar a su negocio. Esta es su oportunidad de encontrar disponibles a todas las agencias regulatorias en un solo lugar para contestar todas sus preguntas o inquietudes acerca de como acatar las leyes existentes. Las agencias en asistencia proporcionaran la informacion mas actual asi como folletos llenos de informacion vital. Esta es una oportunidad que ningun negocio automotriz debe perderse.

Agencias en Asistencia:

- *Departamento de Salud Ambiental del Condado de San Diego*
- *Distrito de Control a la Contaminacion del Aire del Condado de San Diego*
- *Departamento de Control a las Sustancias Toxicas del Estado de California*
- *Agencia de Reparacion Automotriz*
- *Departamento de Bomberos de National City*
- *Departamento de Polcia de National City*
- *Negocio Verde de San Diego*
- *Departamento de Aguas Pluviales de National City*

Fecha: 17 de Noviembre, 2008

Hora: 6:00 PM — 8:00PM

Lugar: Casa de Salud
1408 Harding Avenue
National City, Ca 91950

Se ruega contestacion antes del *10 de Noviembre* por correo electronico a **neighborhoodservices@ nationalcityca.gov** o llamando a la Divicion de Servicios Comunitarios al (619) 336-4364.

ATTACHMENT 8.2

2010 CALENDAR ART CONTEST ANNOUNCEMENT

City of National City

Second Annual Storm Water Program Calendar Art Contest

Guidelines for Teachers

The City of National City invites all third grade students attending public schools in the City to participate in this fun and educational art contest. We are asking students to provide original art pieces for the upcoming 2010 National City Storm Water Program Calendar. The theme of this year's contest is **"By Keeping Our Community Clean, We Can Keep The Ocean Clean"**.

Similar to last year's contest, the City plans to select 12 original art pieces to feature in the 2010 National City Calendar. The first place winner will also be featured on the cover of the calendar. The goal of the contest is to promote understanding of the local natural environment in National City and to educate students on ways they can help protect local waterways. The contest provides a way for children to share their ideas on ways to protect our creeks and oceans with the entire National City community.

We encourage teachers to relate this contest to various aspects of the third grade curriculum. Please encourage students to include National City landmarks in their drawings, such as Paradise Creek, the Sweetwater River, their school, favorite park, etc. Students can also incorporate native plants and animals. Ideally, a contest entry will show how to protect water quality AND how National City benefits from having a clean community.

Contest Rules

Guidelines:

- **Media:** Paint, color pencils, marker, or crayon.
- **Paper:** White paper, 8 1/2 inches by 11 inches in landscape format.
- **Text:** Drawings can include text and original slogans, however, names will not be allowed on front of the drawing. The artist's first name and school will be printed below the drawing in the calendar. All words must be spelled correctly. If preferred, text can be typed on a computer, printed, and then pasted to the drawings.

Submittals:

- All participants must submit a release form with their name, school, room number, teacher's name, and parent or guardian signature.
- The student's name, school, and teacher must also be taped to the back of the artwork on a piece of paper or index card.

(Continued on Back)

Deadline:

- The deadline for students will be **June 5, 2009**. Please note that this is a Friday, and the City offices will not be open. Teachers should submit their students' artwork to City Hall no later than **June 8, 2009.** If you cannot submit entries directly to City Hall, you can contact Barby Tipton (see bottom of page) to arrange for a pick up. Note that for teachers with Combination classes (2nd and 3rd grades), we encourage 2nd graders to participate, but only 3rd grade work should be submitted to the City for entry into the contest.

Judging:

- Drawings will be judged by various City officials and representatives involved in the City's Storm Water Pollution Prevention Program. 12 winners will be chosen based on originality and representation of the contest's theme. At least one winner will be chosen from each participating school.

Prizes:

- Teachers can hand out personalized participation certificates (to be filled out by the teacher) to all participating students when artwork is submitted in class.
- Winning art pieces will be featured in the 2010 National City Storm Water Program Calendar. Winners will be honored at a National City Council Meeting in the fall and will receive additional prizes.

Contact Information:

- If you have additional questions about how you can integrate this contest into your 3rd grade curriculum, please contact:
  Stephanie Maxin Phone: (619) 336-8306
  Email: stephanieb@national.k12.ca.us
- If you would like to contact a representative at the City, please contact:
  Barbra Tipton, National City Storm Water Compliance Inspector
  Phone: (619) 336-4583 Email: btipton@ci.national-city.ca.us

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ATTACHMENT 8.3

2010 CALENDAR ART CONTEST TAKE-HOME FLYER

3rd Grade Art Contest!!

Theme: By Keeping Our Community Clean, We Can keep the ocean clean!!!

Deadline: June 5, 2009

Winning drawings will be featured in National City's 2010 Storm Water Program Calendar!

Do you go to the beach when its raining?

Probably not, but pollution does! When it rains, pollutants like litter and oil are carried from our streets and sidewalks to our local creeks and ocean. Pollution can hurt plants and animals and can also make water unhealthy for humans. **By keeping our community clean, we can keep the ocean clean!**

Rules:

- **Drawings should show how you and your friends, family, and neighbors can help prevent pollution in creeks, rivers, and oceans. We encourage you to include locations within National City in your drawing, such as your school, Paradise Creek, or your favorite park!**
- **Drawings must be on white 8 1/2 inch by 11 inch paper, in landscape format.**
- **Only color drawings made with markers, colored pencils, crayons, or paint will be accepted. Bright colors are best.**
- **Do NOT write your first or last name on the front of your drawing.**
- **Use original artwork only. Slogans and messages are ok, but all words must be spelled correctly. Text can be typed on the computer and pasted onto the drawing.**
- **Drawings must be submitted to your teacher by June 5, 2009 with a completed entry form (on the back of this flyer) signed by a parent or guardian.**
- **Your name, teacher, and school must be on a piece of paper or card taped to the back of the artwork**
- **Winners will be notified in the Fall. All winners will be featured in the 2010 National City Storm Water Program Calendar. Winners will also receive a prize and be honored at a future City Council Meeting!**

YOU CAN BE A CLEAN WATER SUPERSTAR!

☆ Don't litter

☆ Never pour anything into the storm drain

☆ Pick up after your pets

ATTACHMENT 9.1

2010 CALENDAR ART CONTEST PRESENTATION

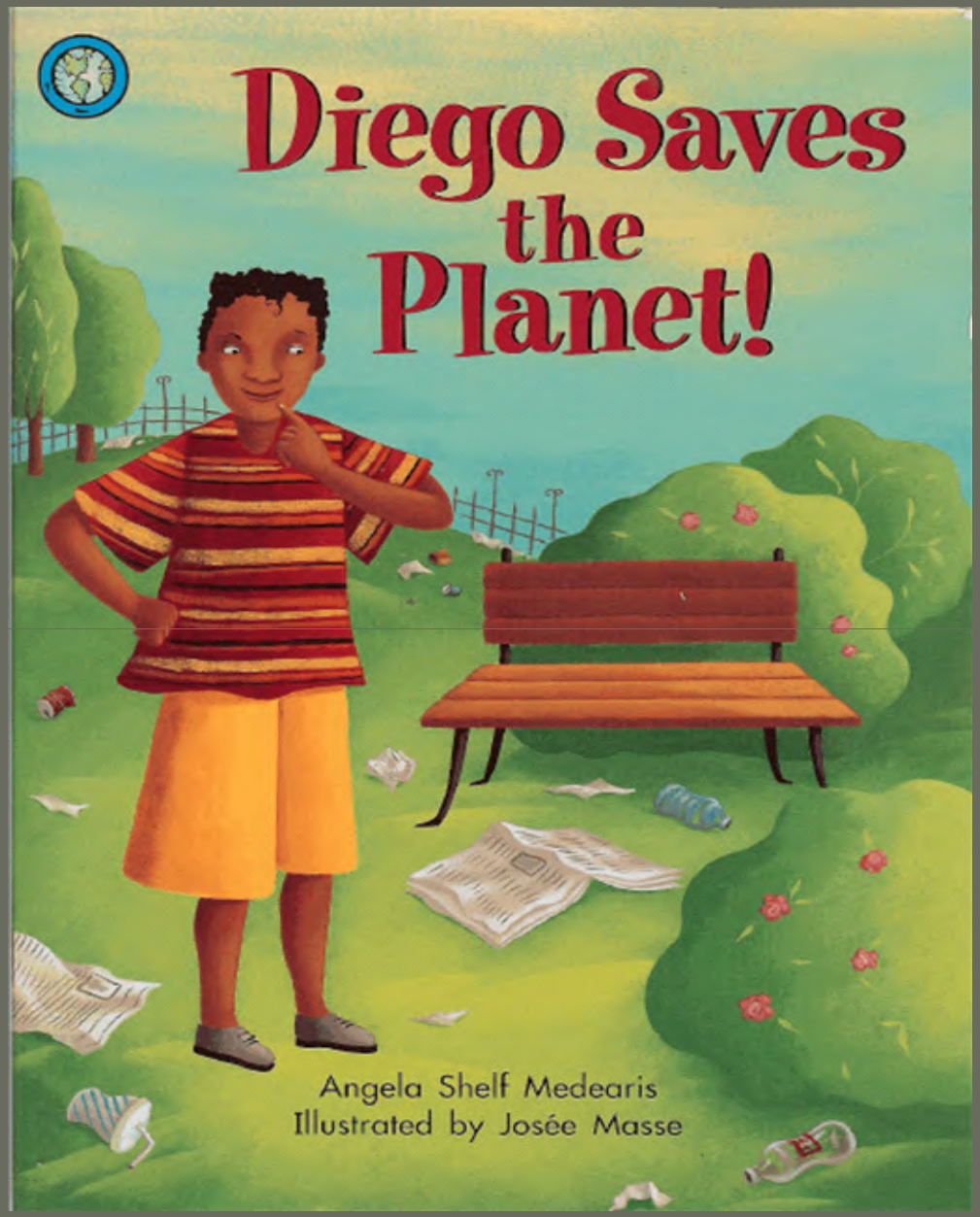

Teachers and students read *Diego Saves the Planet!* to find out different ways they can make a difference in their community.

What do you have in common with Diego?

How can you make a difference?

All water that enters National City storm drains flows to San Diego Bay without being treated.

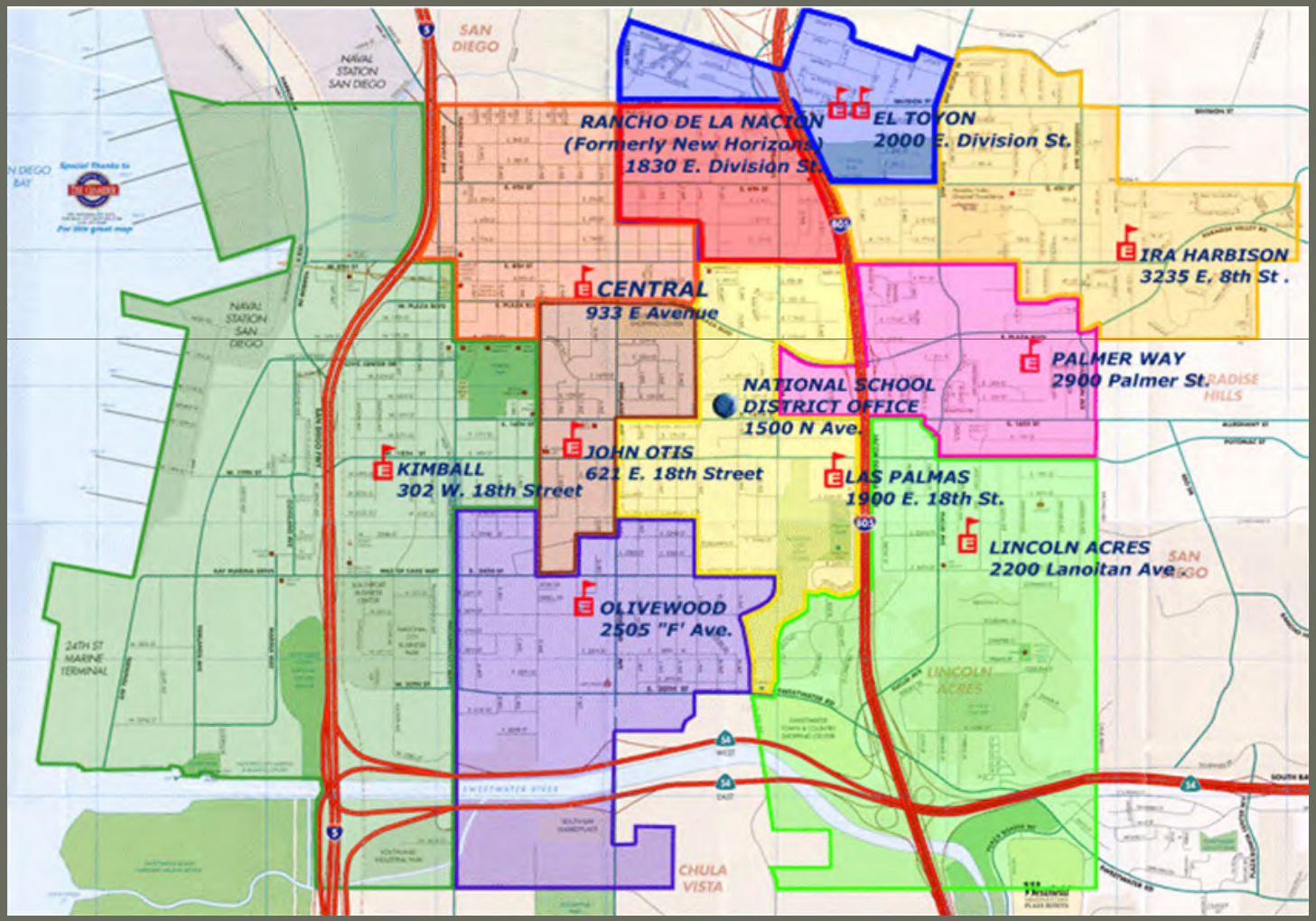

El Toyon Park

Las Palmas Park

Kimball Park

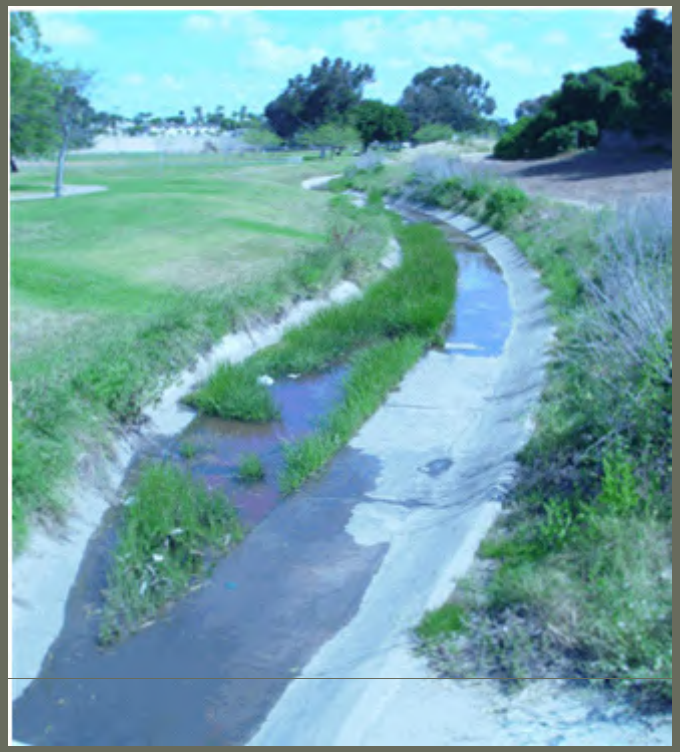

Paradise Creek Educational Park

Pepper Park
BOAT LAUNCHING FACILITY
Unified Port of San Diego
FUNDED BY THE CALIFORNIA DEPARTMENT OF BOATING AND WATERWAYS AND THE UNIFIED PORT OF SAN DIEGO
OPERATED AND MAINTAINED BY THE UNIFIED PORT OF SAN DIEGO

Pepper Park

Sweetwater Outlet to San Diego Bay

Great Egret

Great Blue Heron

Godwit

Duck

Fish and other animals that live in the water rely on us to keep their ocean community clean.

Trash can harbor bacteria and cause beach closures when washed into the storm drain and out to the ocean.

Water from rain, car washing, and sprinklers can carry trash and other pollutants into storm drains and San Diego Bay without being treated.

Trash in the ocean can cause damage to boats and fishing equipment. This damage is hazardous and costly in terms of repair and lost fishing time.

Fixing car leaks, picking up after your pet, properly disposing of trash, and using a commercial car wash can prevent storm water pollution.

Birds, fish and mammals often mistake trash for food.

With trash filling their stomachs, animals have a false feeling of being full and may die of starvation.

Your cleaning efforts help make National City enjoyable for everyone.

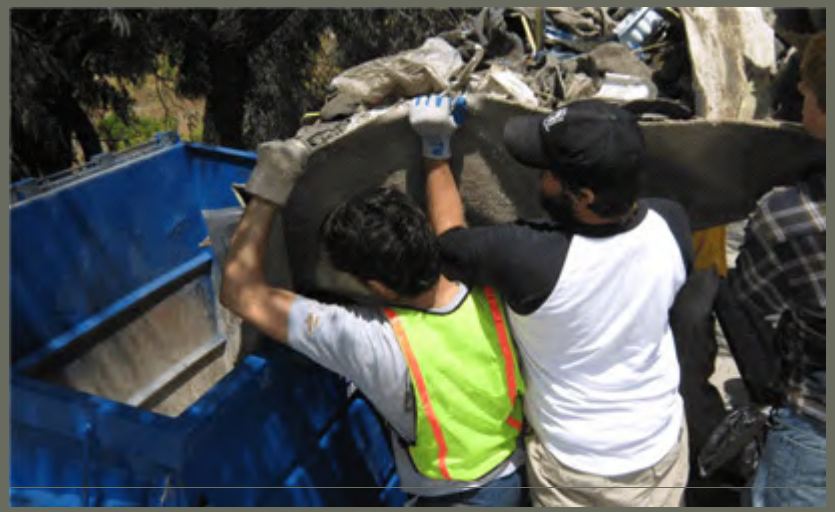

Native Plants

Beavertail Cactus

California Buckwheat

California Encelia

California Poppy

Black Sage

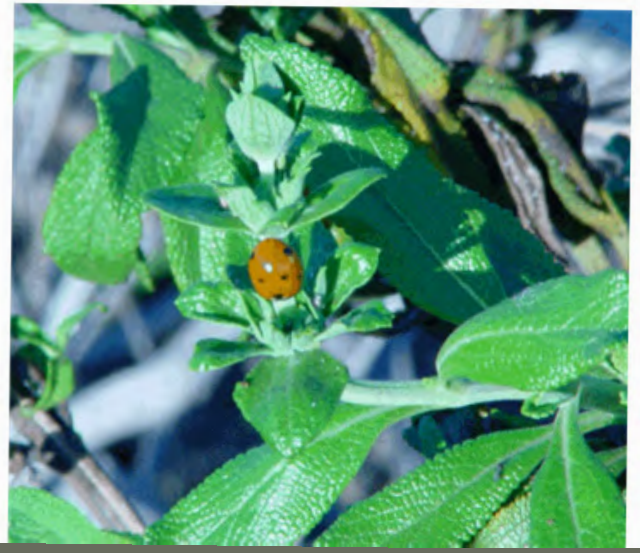

White Sage

Native Animals

Snowy Egret

Black-necked Stilt

Your Neighbors in San Diego Bay
You can help
PORT OF SAN DIEGO
UNIFIED PORT DISTRICT
EARTH DAY
ON THE BAY

Student Examples From Previous Classes

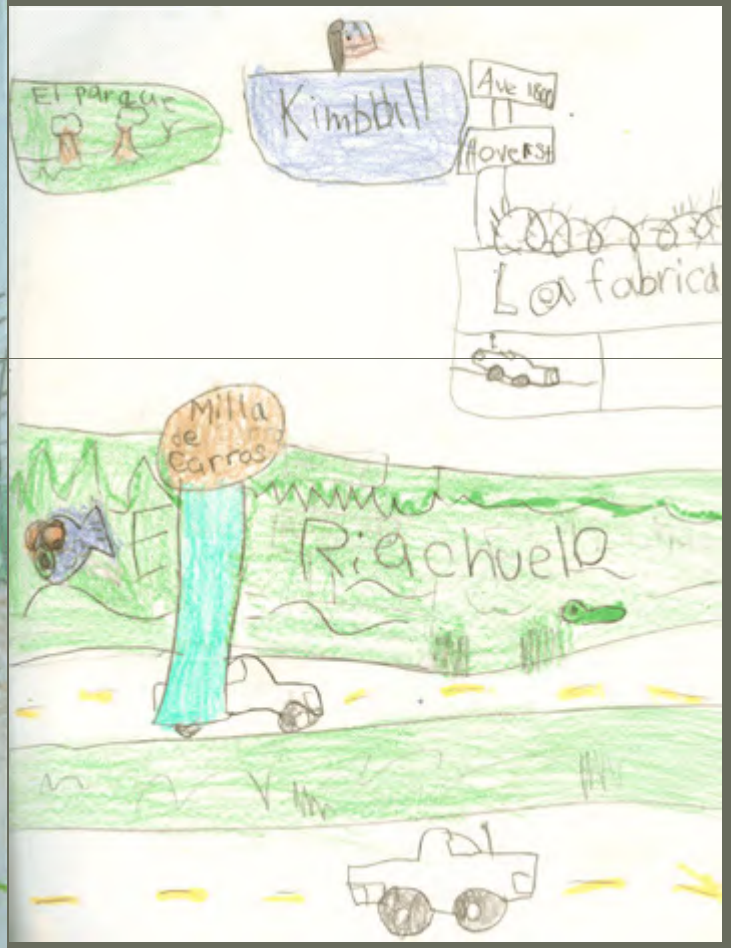

ATTACHMENT 9.2

CALENDAR ART CONTEST CERTIFICATE OF PARTICIPATION

CALIFORNIA

NATIONAL CITY

1887

INCORPORATED

Certificate of Participation
2009 Storm Water Calendar Contest

Presented to

_____

Maryam Babaki
City Engineer

Ron Morrison
Mayor

GA75-422

©WOLCOTTS INC. 1988 LITHO IN U.S.A.

ATTACHMENT 9.3

HHW DISPOSAL INFORMATIONAL ADVERTISEMENT

Chula Vista, Imperial Beach & National City residents:

DISPOSE OF:

PAINTS • POOL CHEMICALS
BATTERIES • PESTICIDES
ANTIFREEZE • ADHESIVES
THINNERS • PHOTO CHEMICALS
FLUORESCENT BULBS
DEGREASERS • FERTILIZERS

Saturdays, 9 AM - 1 PM

(Except for holiday weekends)

1800 Maxwell Road
Chula Vista

$5 co-pay for up to 15 gallons or 125 lbs of waste per household

(Additional loads or visits are subject to higher co-pays)

For more information, call (619) 691-5122

Se habla español.

ATTACHMENT 14.1

CITY ORGANIZATIONAL CHARTS

City of National City

Organizational Chart for Engineering

As of 06/02/2009

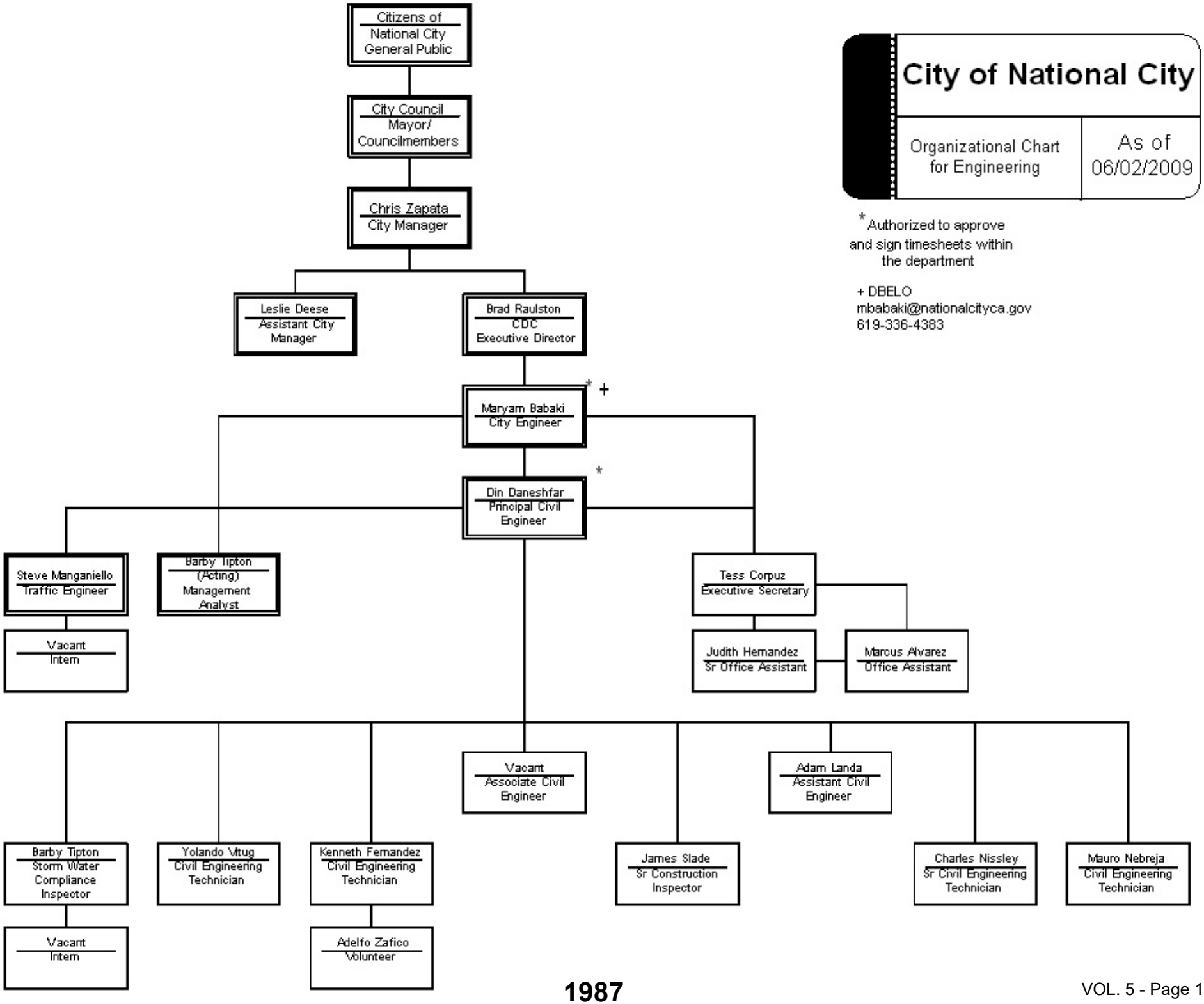

*Authorized to approve and sign timesheets within the department

+ DBELO
mbabaki@nationalcityca.gov
619-336-4383

City of National City

Organizational Chart for Building & Planning Divisions

As of 08/19/2009

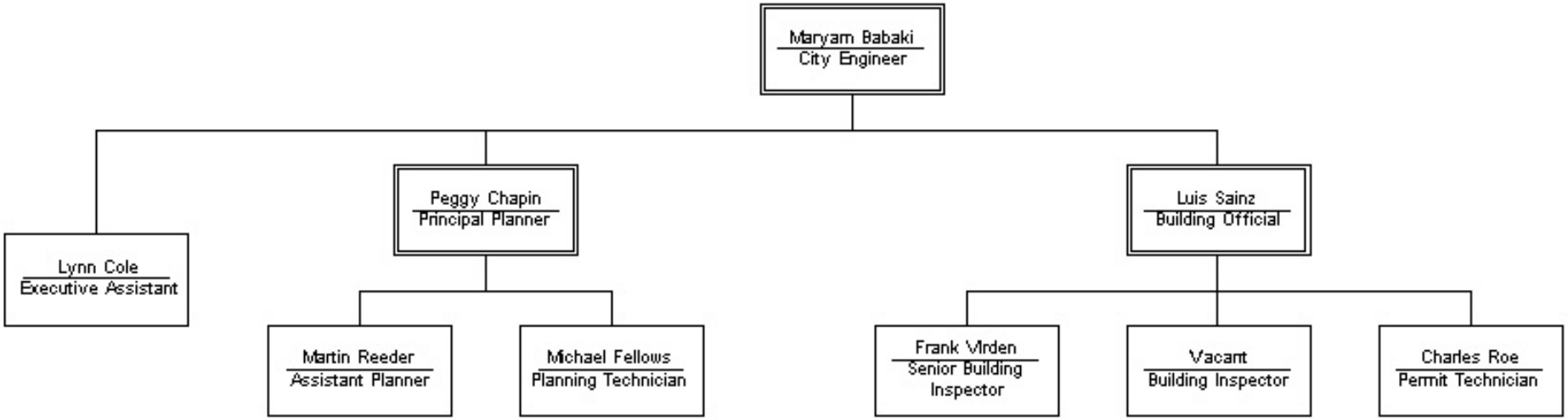

CITY OF NATIONAL CITY

2008/2009

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

IDDE SECTION

DECEMBER 2009

PREPARED BY:
D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

12/9/09

Maryam Babaki, P.E.
Director of Development Services / City Engineer

12/9/09

Date: December 15, 2009

Telephone Number: (619) 336-4380

INTRODUCTION AND CONTENTS

Introduction

Section 7 of the Annual Report discusses the implementation of the illicit discharge detection and elimination (IDDE) component of the City's storm water program. This program consists of dry weather monitoring activities and other activities intended to prevent and respond to illicit connection and illicit discharges, such as operating a storm water hotline. The reporting period for the portions of this section that discuss dry weather monitoring activities have been extended through September 30, 2009, but the reporting period for other activities described in the section was not changed and thus extends through June 30, 2009, consistent with rest of the JURMP Annual Report. Because field work for the dry weather monitoring program is not required to be completed until September 30, the same day that the JURMP Annual Report is to be submitted, the RWQCB extended the submittal deadline for all of Section 7 of the JURMP Annual Report until December 15 of each year.

Contents

This submittal includes a certification statement, the text of Section 7 of the 2008/2009 JURMP Annual Report, and the attachments associated with that section. For clarity, the items included in this submittal are listed below.

- Certification Statement for Section 7 Submittal
- Introduction and Contents
- Section 7 (IDDE Component) of the 2008/2009 JURMP Annual Report
- JURMP Annual Report Requirements Checklist (for Section 7 only)
- Attachment 7.1, City of National City Dry Weather Field Screening and Analytical Monitoring Program 2009

Please note that the complaint log, referenced as Appendix B in Section 7, was already provided with the main JURMP Annual Report submittal in September 2009 and is not included again with this December submittal.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

The City maintains several programs to prevent and to seek out and eliminate illicit connections and illicit discharges (IC/IDs), which can be significant sources of pollutants to the City's MS4. Illicit discharges may result from activities such as vehicle washing or equipment cleaning without the use of proper BMPs. Illicit connections include improper links to the MS4, typically of conveyances that should be plumbed to the sanitary sewer system, such as car wash facility drains. City storm water personnel work with residents, businesses, and staff to make them aware of BMPs to prevent IC/IDs and to encourage reporting of IC/IDs. The following activities are the primary components of the City's program to combat IC/IDs:

- Inspecting local businesses, construction sites, and municipal facilities
- Conducting the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program)
- Operating a public complaint hotline

These activities enable the City to provide a comprehensive system to improve the quality of storm water and urban runoff throughout the City through detection and elimination of IC/IDs.

7.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the illicit discharge detection and elimination component during the 2008/2009 reporting period are presented in the following bulleted list. Please note that per Addendum No. 2 to the Municipal Permit, the reporting period for the Dry Weather Monitoring Program was extended through September 30, 2009. The reporting period for all other components of the City's illicit discharge detection and elimination (IDDE) program ended on June 30, 2009.

- Seven IC/IDs were discovered and reported during the 2008/2009 reporting period. All were followed up on by City personnel, and enforcement measures were applied as necessary.
- The City recorded and investigated 27 Storm Water Hotline complaints.
- The City performed all of the recommended corrective actions proposed in the 2008 Dry Weather Field Screening and Analytical Monitoring Program Report to prevent possible pollutants from entering the storm drain system.
- The City conducted the 2009 Dry Weather Field Screening and Analytical Monitoring Program.

7.2 Public Reporting of Illicit Discharges and Connections

See Section 4.8 of this JURMP Annual Report, which was submitted in September 2009.

7.3 Spill Reporting, Response, and Prevention

See Section 4.9 of this JURMP Annual Report, which was submitted in September 2009.

7.4 Urban Runoff Monitoring

The City has continued to conduct a Dry Weather Monitoring Program, as required by the Municipal Permit. This program assists the City in detecting and eliminating IC/IDs to the storm drain system. There are three major components to the Dry Weather Monitoring Program:

- Field observations, which include site descriptions and qualitative observations
- Field screening, which includes flow estimation and sample testing using meters and test kits at the site
- Analytical monitoring, which involves submittal of collected samples from selected sites, constituting 25 percent of all flowing or ponded sites, to an analytical laboratory for additional testing

The City visits all designated primary monitoring stations each year between May 1 and September 30 to collect dry weather monitoring data. When a primary monitoring station is found to be dry, the City visits designated alternate monitoring stations.

Numeric action levels are used as the primary approach for the interpretation of most constituent concentrations measured in the field and laboratory. Action levels for dissolved metals follow the California Toxics Rule (CTR) Criteria Maximum Concentration (CMC). Temperature, turbidity, and conductivity parameters are evaluated using best professional judgment to determine if further investigation is needed. The action levels for pH, surfactants, ammonia-nitrogen, nitrate-nitrogen, orthophosphate-phosphorus, oil and grease, diazinon, and chlorpyrifos were adopted in 2003 and were based on statistical analyses of previous Dry Weather Monitoring Program data, established water quality benchmarks from the Basin Plan, and the United States Environmental Protection Agency Multi-Sector General Permit.

The Regional Monitoring Workgroup in November 2008 requested the Dry Weather Monitoring Sub-workgroup to evaluate dry weather action levels that were submitted in April 2003 by the County of San Diego on behalf of the Copermittees. The Dry Weather Monitoring Sub-workgroup determined that the bacterial indicators action levels required additional analysis. All other action levels were deemed appropriate and will not change. The Dry Weather Monitoring Sub-workgroup contracted the services of D-Max Engineering (D-Max) to conduct the evaluation of historical bacterial data

collected from dry weather monitoring from 2002 through 2007. Details of their evaluation are posted on the Project Clean Water Website at http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf. The Regional Monitoring Workgroup on May 19, 2009 evaluated the recommendations of the Dry Weather Monitoring Sub-workgroup and selected the 80th percentile values to be proposed as the dry weather action levels for bacterial indicators beginning on May 1, 2010. The current levels and the levels proposed for use beginning May 1, 2010 are presented in Table 7-1.

TABLE 7-1
Bacterial Indicators Action Levels for Dry Weather Monitoring Program

	Total Coliform (MPN/100 mL)	**Fecal Coliform (MPN/100 mL)**	***Enterococcus* (MPN/100 mL)**
2003-2009 Action Levels	50,000	20,000	10,000
Proposed 2010 -2012 Action Levels	130,000	13,000	7,000

7.4.1 2008 Dry Weather Monitoring Program

The City's 2008 Dry Weather Monitoring Program was conducted during the 2008 dry season. For information about how the City addressed issues discovered during the 2008 Dry Weather Monitoring Program and responded to the resulting recommendations, see Section 7.5.1 of this report.

7.4.2 2009 Dry Weather Monitoring Program

The City's 2009 Dry Weather Monitoring Program was conducted during the 2009 dry season. Nineteen routine site visits to the monitoring stations were performed.

If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. Upstream investigations are performed when exceedances are verified during confirmation visits. See the City's JURMP for a complete discussion of upstream investigation procedures.

Table 7-2 presents a summary of the action level exceedances observed in 2009; Table 7-3 presents the follow-up investigations conducted in response to all action level exceedances. All of the monitoring stations visited are listed in Table 7-4. At the end of this section tables 7-5 and 7-6 provide the complete field analytical results and laboratory analytical results, respectively, from the 2009 Dry Weather Monitoring Program.

Table 7-2
Summary of Action Level Exceedances

Field Screening (15 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Sites Exceeding Action Level**
pH	0	0	---
Conductivity	0	0	---
Turbidity	0	0	---
Surfactants	3	20	1A, 48, 49
Ammonia-N	3	20	43A, 48, 49
Nitrate-N	0	0	---
Orthophosphate-P	2	13	48, 49
Laboratory Analyses (4 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Sites Exceeding Action Level**
Oil & Grease	0	0	---
Cadmium	0	0	---
Copper	0	0	---
Lead	0	0	---
Zinc	0	0	---
Diazinon	0	0	---
Chlorpyrifos	0	0	---
Total Coliforms	1	25	1A
Fecal Coliforms	0	0	---
Enterococci	2	50	1A, 46

Note: Table includes data from initial site visits only; confirmation and follow-up investigations are not included.

Follow-up investigations conducted in response to action level exceedances are summarized in Section 7.5.2 of this report.

A formal trash assessment was performed in 2009 in accordance with the Municipal Permit requirements. A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form's five categories are

primarily qualitative descriptions of the amount and extent of trash although a number of trash pieces is also included in each category as a rough guideline. The five categories are defined as follows.

- Optimal: On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
- Suboptimal: On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
- Marginal: Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
- Submarginal: Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (~100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
- Poor: Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is also assessed at each site. Prior to the beginning of the 2009 dry weather season, the Dry Weather Monitoring Sub-workgroup added additional detail to the definitions of these categories to help achieve a greater level or inter-jurisdictional consistency. The definitions are as follows:

- *Threat to Human Health* – Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment.
- *Threat to Aquatic Health* – Large amount (50 pieces or more) of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amounts of settleable, degradable, and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment.

Nineteen sites, including four dry sites, received trash assessments. Twelve were scored as "optimal" or "suboptimal," having little or no trash. Five sites had "marginal" levels of trash. One site was considered "submarginal," and one site was considered "poor" due to significant amounts or types of trash consistent with human inhabitation and illegal dumping.

The 2009 Dry Weather Monitoring Program Report, which includes results of field screening and analytical monitoring, can be found as Attachment 7.1.

7.5 FOLLOW-UP AND ENFORCEMENT

7.5.1 ACTIONS TAKEN IN RESPONSE TO THE 2008 DRY WEATHER MONITORING PROGRAM FINDINGS

EDUCATION

Based on the 2008 Dry Weather Monitoring Program results, several recommendations were made. In response to these recommendations, educational materials were distributed and the City's Public Works Department employees performed all necessary maintenance and inspections listed below.

- Educational materials regarding BMPs for outdoor washing activities were distributed to the following areas of the City:
    - All residences on Melrose Street,
    - All residences on Scott Drive,
    - Integrity Charter School on Palm Avenue,
    - Rachael Avenue residences between East 20th Street and East 24th Street,
    - 1414 Stancrest Lane, and
    - 2436 Seawind Drive.
- The City of San Diego was notified of the importance of providing educational materials regarding BMPs for outdoor washing activities to the residential complex at 4616 Delta Street, which is outside of the jurisdiction of the City of National City but upstream of Site 45 and Site 1A.

INSPECTION AND MAINTENANCE

- Follow up visits were made to Frank Toyota on National City Boulevard and Mile-of-Cars Way, where vehicle washing discharges were found to be fully contained.
- An additional study was performed to investigate the businesses upstream of Site 46 and determine the source of bacteria to the site. As a result of this investigation, business received storm water compliance inspections, educational material, and citations as necessary. The property manager of the business complex was contacted and notified that the dumpster enclosure and grease bin areas must be kept free of loose trash and food waste.

- Trash and debris at Site 1A and in the upstream catch basins on Scott Street were removed in order to discourage bacterial growth. The City of San Diego was notified that discharges and trash generation in areas outside the City of National City but tributary to Site 1A (e.g., portions of Delta Street) were in their jurisdiction and would need to be addressed.
- Decomposing trash and human waste were removed from Site 32. Trash was also removed from the manhole at the northwest corner of the Sweetwater Road and Prospect Street intersection, upstream of Site 32. This area should also be monitored as feasible to discourage human inhabitation.
- Trash was removed from all sites in the City where trash was noted (i.e., every site except Site 47). Sites 1A, 6, 13A, 32, and 40 were scheduled for more frequent cleaning, as they were scored as submarginal or poor by the trash assessment during routine site visits, and two were considered a potential threat to aquatic and/or human health. Additionally, sites 4, 31A, 42, 44, 3, 38, 41, 43A, 45, 46, 48, 49.and 44A, were added to the City's existing clean up schedule as appropriate.

7.5.2 2009 Dry Weather Monitoring Follow-Up Investigations

If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. Upstream investigations are performed when exceedances are verified during confirmation visits. See the City's JURMP for a complete discussion of upstream investigation procedures.

Table 7-3 presents conclusions based on the results of confirmation visits and, where necessary, upstream investigations conducted at three sites during the 2009 Dry Weather Monitoring Program.

Table 7-3
Summary of Follow-Up Investigations

Site	Follow-Up Investigation Target Constituent(s)		Results / Probable Sources
	Field	Laboratory	
1A	Surfactants	Total Coliforms, Enterococci	Surfactants: transient flow Bacteria: decomposing organic matter at the site and in upstream areas
43A	Ammonia-N	---	Transient flow, potentially generated by organic material decomposition at site and increased concentration of pollutants as ponded water evaporated
46	---	Enterococci	Transient flow, possibly caused by food waste in the upstream shopping center
48	Ammonia-N, Orthophosphate-P, Surfactants	---	Transient flow; dog washing by a resident upstream
49	Ammonia-N, Orthophosphate-P, Surfactants	---	Transient flow and an increasing concentration of pollutants as ponded water evaporated

The City is in the process of responding to the 2009 Dry Weather Monitoring Program findings. These actions and any other actions taken with respect to the City's Dry Weather Monitoring Program during the remainder of 2009/2010 will be described in the 2009/2010 JURMP Annual Report.

7.5.3 IC/IDs Identified

Seven IC/IDs were discovered and reported during the 2008/2009 reporting period. All were followed up on by City personnel, and enforcement measures were applied as necessary. The IC/IDs identified in 2008/2009 are discussed in Section 4 of this JURMP Annual Report, which was submitted in September 2009.

7.6 Illicit Discharge Detection and Elimination Component Effectiveness Assessment

The assessment of the effectiveness of this program component is provided in Section 11 of this JURMP Annual Report, which was submitted in September 2009.

7.7 Program Review and Modification

Changes to the definitions of threat to human health and threat to aquatic health used during the trash assessment component of the Dry Weather Monitoring Program and

proposed bacteria action levels to be used in the 2010 dry weather season are discussed earlier in this section. No other changes to the City's illicit discharge detection and elimination component were made during the reporting period.

Table 7-4
2009 Dry Weather Monitoring Locations

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
1A	Southwest of 43rd Street and Nordica Avenue	Concrete Channel	Residential	Commercial	908.31	32.68575	-117.10166
3	East 7th Street and R Avenue	Manhole	Residential	Commercial	908.32	32.68183	-117.08894
4*	East 1st Street and U Avenue	Manhole	Parks	Residential	908.31	32.68726	-117.08749
6*	North bank of Sweetwater River, approximately 500 feet east of Highland Avenue, access from North 2nd Avenue	Outlet	Industrial	Commercial	909.12	32.65668	-117.08844
13A	Northeast of 16th Street and National City Boulevard, inside Kimball Park	Outlet	Commercial	Residential	908.32	32.66942	-117.10326
31A*	North of Sweetwater Road, across from 2nd Avenue at the corner of the golf course	Earthen Channel	Parks	Commercial	909.12	32.66121	-117.08453
32	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River	Outlet	Commercial	Open	909.12	32.65887	-117.08274
38*	Dirt road, west of Harbison Avenue, between 20th Street and 24th Street, at the end of fence line	Earthen Channel	Residential	None	909.12	32.67265	-117.07057
40	Southwest corner of Sweetwater Road and Plaza Bonita/Stockman Street, down in channel	Outlet	Commercial	Residential	909.12	32.65961	-117.06677
41	Northeast of San Miguel Court and Valley Road, inside Park Bonita Apartment complex	Earthen Channel	Residential	None	909.12	32.66588	-117.05083
42*	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church	Outlet	Residential	Commercial	909.12	32.66785	-117.07691

Table 7-4 (Continued)
2009 Dry Weather Monitoring Locations

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
43A	F Avenue between East 24th Street and East 28th Street, west of Olivewood Elementary School	Catch Basin	Residential	Commercial	909.12	32.66134	-117.09447
44*	Northeast of 16th Street and National City Boulevard, under the Kimball Park bridge	Concrete Channel	Commercial	Residential	908.32	32.66982	-117.10247
44A	D Avenue behind Boys and Girls Club in Kimball Park	Outlet	Commercial	Residential	908.32	32.67151	-117.10123
45	In front of 1243-1305 Fig Court, in the middle of street	Manhole	Residential	Parks	908.31	32.68739	-117.09690
46	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	Manhole	Commercial	Residential	908.32	32.67584	-117.09539
47	Southeast corner of the Mile of Cars Way and Transportation Avenue	Manhole	Commercial	Residential	908.32	32.66163	-117.10275
48*	Northwest of East 14th Street and Grove Street	Catch Basin	Residential	None	908.32	32.67673	-117.08321
49*	South end of Arcadia Place (through Harbison Avenue and 11th Street)	Concrete Channel	Residential	Commercial	908.32	32.68095	-117.07770

Note: * Alternate sites 6, 44, 48, and 49 were selected to substitute for dry primary monitoring sites 4, 31A, 38, and 42.

Table 7-5
2009 Field Analytical Results

Site	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-Nitrogen (mg/L)	Nitrate-Nitrogen (mg/L)	Orthophosphate-Phosphorus (mg/L)
1A	7/30/09	14:25	< 1	23.0	7.6	13.48	1.34	**3.00**	0.152	0.308*	0.914
1A (Confirmation)	7/31/09	9:35	< 1	21.3	7.3	na	1.24	0.50	na	na	na
1A (Confirmation)	8/11/09	10:30	< 1	22.6	7.4	1.32	21.51	na	na	na	na
3	7/30/09	11:45	< 1	24.3	8.0	4.05	0.47	0.25	0.051*	0.512*	0.066*
4 (Dry)	8/3/09	11:50	Dry	ns	ns	ns	ns	ns	ns	ns	ns
6	8/3/09	14:40	Ponded	29.5	8.8	9.95	> 20	0.88	0.561	nd	0.047*
13 A	8/3/09	10:20	< 1	27.8	8.2	6.22	1.45	0.75	0.072*	0.343*	0.145*
31A (Dry)	8/3/09	12:20	Dry	ns	ns	ns	ns	ns	ns	ns	ns
32	7/30/09	13:30	< 1	22.0	7.7	4.97	1.25	0.50	0.097*	0.403*	0.339
38 (Dry)	7/30/09	15:30	Dry	ns	ns	ns	ns	ns	ns	ns	ns
40	7/31/09	14:50	1.0	22.1	7.6	3.94	3.20	0.38	0.325	0.628*	0.366
41	8/3/09	13:45	3.0	25.6	8.5	1.00	4.22	0.50	0.247	4.478	0.165*
42 (Dry)	7/31/09	10:10	Dry	ns	ns	ns	ns	ns	ns	ns	ns
43A	8/4/09	11:45	< 1	26.6	7.9	6.37	1.05	0.50	**1.150**	4.152	0.888
43A (Confirmation)	8/4/09	16:15	Dry	ns	ns	ns	ns	ns	ns	ns	ns
44	8/4/09	10:00	Ponded	26.2	7.9	7.49	9.87	0.75	0.256	0.071*	0.582
44A	8/3/09	11:20	< 1	26.3	8.6	1.65	1.48	0.25	0.050*	0.440*	0.377
45	7/30/09	10:15	1.0	24.0	8.2	1.68	1.03	0.25	0.047*	0.234*	0.151*

Table 7-5 (Continued)
2009 Field Analytical Results

Site	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-Nitrogen (mg/L)	Nitrate-Nitrogen (mg/L)	Orthophosphate-Phosphorus (mg/L)
46	7/31/09	13:45	1.0	24.3	8.0	9.59	0.99	0.50	0.124	1.657	1.113
46 (Confirmation)	8/11/09	11:10	3.0	24.7	7.6	15.40	1.05	na	na	na	na
47	7/31/09	12:00	2.0	25.8	7.9	7.48	> 20	0.88	0.463	0.447*	0.313
48	8/3/09	9:30	< 1	28.0	7.5	94.00	1.22	**> 3.00**	**1.517**	1.011*	**3.684**
48 (Confirmation)	8/4/09	9:30	Dry	ns	ns	ns	ns	ns	ns	ns	ns
49	7/31/09	10:40	Ponded	26.6	7.3	33.44	1.37	**3.00**	**1.187**	0.583*	**2.191**
49 (Confirmation)	8/3/09	11:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns

Notes:
na = not analyzed
nd= not detected
ns = not sampled (dry site)
* Value reported is below the Practical Detection Limit (PDL).
Red values are at or above the measured constituent's action level
denotes a confirmation visit
denotes a location sampled for laboratory analysis

Table 7-6
2009 Laboratory Analytical Results

Site	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
1A	7/30/09	14:25	nd	270	nd	0.002	nd	nd	nd	nd	**300,000**	17,000	**160,000**
1A** (Confirmation)	7/31/09	9:35	na	na	na	na	na	na	na	na	**77,000**	2,282*	4,352
32	7/30/09	13:30	nd	196	nd	0.006	nd	0.028	nd	nd	23,000	8,000	2,200
40	7/31/09	14:50	nd	799	nd	0.002	nd	nd	nd	nd	13,000	40	210
46	7/31/09	13:45	nd	202	nd	0.017	nd	0.022	nd	nd	30,000	2,800	**22,000**
46** (Confirmation)	8/11/09	11:10	na	na	na	na	na	na	na	na	na	na	5,172
Reporting Limits			**5**	**10**	**0.001**	**0.001**	**0.001**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**
Action Levels			**15**	***	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**50,000**	**20,000**	**10,000**

Notes:
nd = not detected
na = not analyzed
Red values are at or above the measured constituent's action level
[yellow box] denotes a confirmation visit
* = Number of fecal coliforms for confirmation samples is derived from *E. coli* count. Number of fecal coliforms = (Number of *E. coli*) / 0.85
** = Confirmation samples are analyzed using the Colilert and Enterolert methods, which have a reporting limit of 10 MPN/100 mL.
*** = Total hardness is not considered a pollutant, and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependent on the total hardness value of the water sample.

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	7.4, 7.5; Tables 7-2 through 7-6; Attachment 7.1
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	Attachment 7.1
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	7.5; Appendix B
v. The number and brief description of illicit discharges and connections identified.	7.5; Appendix B
vi. The number of illicit discharges and connections eliminated.	7.5; Appendix B
vii. Identification and description of all spills to the MS4 and response to the spills.	4.9, 7.3; Appendix B
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	4.9, 7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	4.9, 7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	4.8, 7.2, Appendix B
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	4.8, 7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5, Table 7-1, Appendix B
xiii. A description of notable activities conducted to manage illicit discharges and connections.	7.1, 7.5

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Attachment 7.1
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	7.4; Attachment 7.1
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	7.4; Attachment 7.1
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	7.4; Table 7-6; Attachment 7.1
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	(n/a)
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	7.4; Table 7-5, Attachment 7.1
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	7.4; Attachment 7.1
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	7.4; Attachment 7.1
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	7.4; Attachment 7.1

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	7.4; Attachment 7.1
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	7.5; Attachment 7.1
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5; Attachment 7.1
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	7.4, 7.5; Attachment 7.1

ATTACHMENT 7.1

CITY OF NATIONAL CITY DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM 2009

CITY OF NATIONAL CITY
DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM
2009

Submitted to:

City of National City
Engineering Department
1243 National City Boulevard
National City, CA 91950

Prepared by:

D-MAX Engineering, Inc.
7220 Trade Street Suite 119
San Diego, CA 92121
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2010

D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

November 10, 2009
Project No. 200938W-5

Mr. Din Daneshfar
City of National City
Engineering Department
1243 National City Boulevard
National City, CA 91950

Re: 2009 Dry Weather Field Screening and Analytical Monitoring Program City of National City, California

Dear Mr. Daneshfar:

Enclosed please find our final report for the City of National City 2009 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of National City during the 2009 dry weather season. The contents include field screening results, trash assessment data, analytical laboratory test results, analyses of the collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. It has been our pleasure working with the City of National City on this project. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

7220 Trade Street ■ Suite 119 ■ San Diego, CA 92121 ■ (858) 586-6600 ■ Fax (858) 586-6644

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1 INTRODUCTION

1.1 Program Overview

The purpose of the Dry Weather Field Screening and Analytical Monitoring Program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the storm water conveyance system, minimizing the negative impact of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following components:

- Field screening observations
- Field screening analytical monitoring
- Trash assessments
- Laboratory analytical monitoring

The data gathered from dry weather monitoring is used to characterize discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as needed to detect and eliminate the sources of these pollutants. The results from the current year's Dry Weather Monitoring Program conducted by D-MAX Engineering, Inc., (D-MAX) are presented herein.

1.2 Hydrologic Setting

The City of National City (City) lies entirely within the San Diego Bay Watershed Management Area. The City is one of the most densely populated regions of the San Diego Bay Watershed Management Area, but makes up only 1.6% of the total area. The City encompasses hydrologic areas 909.1 and 908.3, of the Lower Sweetwater and Pueblo watersheds, respectively. The major receiving water body in the City is the San Diego Bay. Runoff from the southern part of the City initially drains to the Sweetwater River, which ultimately conveys it into the bay. The Sweetwater River and the Sweetwater Marsh are identified by the City as Environmentally Sensitive Areas (ESA). The Sweetwater River flows along the southern border of the City through the Sweetwater Marsh and into the San Diego Bay. Paradise Creek is a small salt marsh creek that receives runoff from the northern areas of the City and discharges into the Sweetwater River. Paradise Creek and Paradise Marsh have also been identified as ESAs. La Paleta Creek traces the northern border of the City, and is 303(d) listed for benthic community effects and sediment toxicity as Seventh Street Channel. The 2008 San Diego Bay Watershed Urban Runoff Management Program (WURMP) Document identified bacteria, sediment, and trash as high priority water quality problems in hydrologic area 908.3 of the Pueblo San Diego Watershed. The San Diego Bay WURMP also identified bacteria as a high priority pollutant category in hydrologic area 909.1 of the Sweetwater Watershed.

1.3 Regulatory Requirements

In accordance with San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit), each of the Copermittees, including the City of National City, is required to annually perform dry weather monitoring of discharges into its storm water conveyance system. During the dry weather season, May 1 through September 30, selected locations along the storm drain conveyance system are evaluated. This procedure includes recording field observations, estimating observed flow rates, and conducting field testing.

The Municipal Permit also necessitates that Copermittees conduct laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station is selected. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days.

1.4 Previous Work

The City of National City has conducted dry weather field screening programs since 1996 at several locations within the City's storm water conveyance system. A summary of the number of sites sampled for each year is presented in Table 1-1.

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER SITES

Year	Number of Sites Screened [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1996	20	Data not available [3]		13	---
1997	7			0	---
1998	7			3	---
1999	7			1	---
2000	7			2	---
2001	10			1	---
2002	15	12	3	2	4
2003	15	13	2	2	4
2004	15	11	4	2	4
2005	15	14	1	2	4
2006	15	14	1	2	4
2007	15	13	2	1	4
2008	15	12	3	4	4

Notes:
[1] Number of Sites Screened = Number Flowing + Number Ponded. Field screening cannot be conducted at sites found to be dry. Dry sites are replaced by either a flowing or ponded site.
[2] Laboratory analyses commenced in 2002 as required by RWQCB Order 2001-001.
[3] Available information does not distinguish between flowing and ponded sites during this period.

1.5 Report Outline

This report is presented in the following order:

Section 1, Introduction, includes a program overview, a discussion of the City s hydrologic setting, regulatory background, a summary of previous dry weather monitoring, and the report outline.

Section 2, **Sampling Locations,** describes the field screening sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and quantitative results of the field screening analyses.

Section 5, Trash Assessment, discusses the procedure and results of the trash assessment.

Section 6, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 7, Data Analysis, provides an analysis of this year s field and laboratory data, as well as a comparison of past results.

Section 8, Follow-up Investigations, details the results of follow-up investigations undertaken to isolate the sources of action level exceedances measured during the monitoring program.

Section 9, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Historical Dry Weather Monitoring Data

Appendix B Photographs of Sampling Locations

Appendix C Laboratory Analytical Reports

Appendix D Field Data and Trash Assessment Sheets

2 SAMPLING LOCATIONS

In 2009, the City of National City had 15 designated primary monitoring stations, as well as six alternate stations to replace any primary sites that did not have ponded or flowing water. All sampling sites are located in San Diego Hydrologic Units 908 and 909. These sites are also presented in the City's Jurisdictional Urban Runoff Management Program (JURMP), updated in 2007.

All 15 primary monitoring stations were visited in 2009. Primary sites 4, 31A, 38, and 42 were dry and alternate sites 6, 44, 48, and 49 were sampled in their place.

Table 2-1 provides the location, conveyance configuration, primary and secondary land uses, hydrologic subarea (HSA), and GPS coordinates of the primary and alternate monitoring stations that were visited. Photographs of sampling locations are included as Appendix B. A complete map of the MS4 system, including sampling locations, is included as Figure A. A map of the watersheds in and around National City, broken down into HSAs, is included as Figure B.

TABLE 2-1
2009 DRY WEATHER MONITORING STATIONS

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
1A	Southwest of 43rd Street and Nordica Avenue	Concrete Channel	Residential	Commercial	908.31	32.68575	-117.10166
3	East 7th Street and R Avenue	Manhole	Residential	Commercial	908.32	32.68183	-117.08894
4	East 1st Street and U Avenue	Manhole	Parks	Residential	908.31	32.68726	-117.08749
6	North bank of Sweetwater River, approximately 500 feet east of Highland Avenue, access from North 2nd Avenue	Outlet	Industrial	Commercial	909.12	32.65668	-117.08844
13A	Northeast of 16th Street and National City Boulevard, inside Kimball Park	Outlet	Commercial	Residential	908.32	32.66942	-117.10326
31A	North of Sweetwater Road, across from 2nd Avenue at the corner of the golf course	Earthen Channel	Parks	Commercial	909.12	32.66121	-117.08453
32	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River	Outlet	Commercial	Open	909.12	32.65887	-117.08274
38	Dirt road, west of Harbison Avenue, between 20th Street and 24th Street, at the end of fence line	Earthen Channel	Residential	None	909.12	32.67265	-117.07057
40	Southwest corner of Sweetwater Road and Plaza Bonita/Stockman Street, down in channel	Outlet	Commercial	Residential	909.12	32.65961	-117.06677
41	Northeast of San Miguel Court and Valley Road, inside Park Bonita Apartment complex	Earthen Channel	Residential	None	909.12	32.66588	-117.05083
42	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church	Outlet	Residential	Commercial	909.12	32.66785	-117.07691
43A	F Avenue between East 24th Street and East 28th Street, west of Olivewood Elementary School	Catch Basin	Residential	Commercial	909.12	32.66134	-117.09447
44	Northeast of 16th Street and National City Boulevard, under the Kimball Park bridge	Concrete Channel	Commercial	Residential	908.32	32.66982	-117.10247
44A	D Avenue behind Boys and Girls Club in Kimball Park	Outlet	Commercial	Residential	908.32	32.67151	-117.10123
45	In front of 1243-1305 Fig Court, in the middle of street	Manhole	Residential	Parks	908.31	32.68739	-117.09690

TABLE 2-1
2009 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
46	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	Manhole	Commercial	Residential	908.32	32.67584	-117.09539
47	Southeast corner of the Mile of Cars Way and Transportation Avenue	Manhole	Commercial	Residential	908.32	32.66163	-117.10275
48	Northwest of East 14th Street and Grove Street	Catch Basin	Residential	None	908.32	32.67673	-117.08321
49	South end of Arcadia Place (through Harbison Avenue and 11th Street)	Concrete Channel	Residential	Commercial	908.32	32.68095	-117.07770

Note: Alternate sites 6, 44, 48, and 49 were selected to substitute for dry primary monitoring sites 4, 31A, 38, and 42.

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of qualitative field observations, flow measurement, and quantitative field analyses of selected water quality parameters. Weather conditions, time since last rainfall, and the type of storm water conveyance are recorded as well. Specific observations and results of the field water quality analyses are documented on field datasheets, which also serve as a record of the field visit. Datasheets are completed for every site visit regardless of whether or not samples were collected. Check boxes on the datasheets indicate if the visit is for routine field screening, confirmation of an exceedance, or an IC/ID follow-up visit. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation. Datasheets from the 2009 Dry Weather Monitoring Program are included as Appendix D. Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Qualitative field observations are made during each site visit. These observations include a general site assessment and record water odor, clarity, the presence of floatable materials, visible deposits or stains, and organisms. Evidence of present or past illicit connections and illegal discharges to the storm drain system can also be discovered through careful field observations. Each field screening location is photographed to document site conditions. Photographs are included in Appendix B.

Flow Measurement

Flow measurements can help estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative of an illegal discharge. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth, and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Surfactants, measured as methylene blue active substances (MBAS)
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)
- Orthophosphate-Phosphorus (Orthophosphate-P)

Surfactants are also referred to as detergents.

The methods used to perform the above field analyses, along with the reporting limit, range, and accuracy of each method, are listed in Table 3-1.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.01 mS/cm	0 □20 mS/cm	± 2□ of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.1□C	0.0□C □60.0□C	± 0.5□C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter□□□	0.01	0.00 □14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703 Portable Turbidity Meter□□□	0.01 NTU	0.01 □50.00 NTU and 50 □1000 NTU	± 0.5 NTU or 5□ of reading (whichever is greater)
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.00 mg/L □3.00 mg/L□	± 0.13 & ± 0.5 mg/L[2]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer □Nitrate 3 Vacu-vials□ (K-6933) Cadmium reduction[3]□□□	1.13 mg/L□□	1.13 mg/L □ 113 mg/L□□	± 30□ of practical detection limit[4]
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer □Ammonia 3 Vacu-vials□ (K-1403) Salicylate□□□	0.100 mg/L□□	0.100 mg/L □3.000 mg/L□□	Varies with measured concentration[4,5]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer □Phosphate 2 Vacu-vials□ (K-8513) Stannous chloride chemistry[6]□□□	0.098 mg/L□□	0.098 mg/L □2.608 mg/L□□	Varies with measured concentration[4,5]

Notes:

EC □electrical conductivity

mS/cm □millisiemens per centimeter

□C □Degrees Celsius

NTU □nephelometric turbidity unit

mg/L □milligrams per liter

LED □light-emitting diode

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20□. CV is the standard deviation divided by the mean.

[2] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The practical detection limit for nitrate is 5.0 mg/L; however, the practical detection limit for nitrate-nitrogen is lowered due to the conversion.

[4] Practical Detection Limit (PDL) is defined as the lower limit of the stated test range.

[5] Percent error adjusts as follows: ±30□ at PDL, ±20□ for 25□ of full range, ±10□ for 75□ of full range, ±10□ for 120□ of full range.

[6] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4□ of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The practical detection limit for orthophosphate is 0.3 mg/L; however, the practical detection limit for orthophosphate-phosphorus is lower due to the conversion.

□Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

□□Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

□□□Test method information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

3.2 Laboratory Analytical Methods

In accordance with the Municipal Permit, laboratory samples were collected at four sites, representing 25 percent of the sites where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc, a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Total hardness
- Oil and grease
- Diazinon
- Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project includes the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters, turbidity meter and conductivity meter are tested daily before field screening begins. The pH meters are calibrated as needed with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter and conductivity meter are calibrated as needed using standard solutions.

Field sample collection containers are rinsed first with distilled water and then with the sample water prior to sample collection. Upon completion of sampling and testing at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water and dried.

The accuracy of field analytical techniques and equipment is assessed at the beginning of each sampling week by analyzing solutions of known concentrations for ammonia-nitrogen, surfactants, nitrate, and orthophosphate. The results of the assessment are shown in Table 3-3.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Maximum Holding Time [1]
Oil and Grease	USEPA 1664	5 mg/L	28 days
Total Hardness	USEPA 200.7	10 mg/L	14 days
Dissolved Cadmium	USEPA 200.8	0.001 mg/L	24 hours
Dissolved Copper	USEPA 200.8	0.001 mg/L	24 hours
Dissolved Lead	USEPA 200.8	0.001 mg/L	24 hours
Dissolved Zinc	USEPA 200.8	0.020 mg/L	24 hours
Diazinon	USEPA 8141A	0.05 g/L	7 days
Chlorpyrifos	USEPA 8141A	0.05 g/L	7 days
Total Coliforms[2]	SM 9221	20 1,600,000 MPN/100 mL	6 hours
Fecal Coliforms[2]	SM 9221	20 160,000 MPN/100 mL	6 hours
Enterococci[2]	SM 9230	20 160,000 MPN/100 mL	6 hours
Total Coliforms	SM 9223 (IDEXX Colilert)[3]	10 2,419,600 MPN/100 mL	6 hours
Escherichia coli (*E. coli*) [4]	SM 9223 (IDEXX Colilert)[3]	10 2,419,600 MPN/100 mL	6 hours
Enterococci	IDEXX Enterolert[4]	10 241,960 MPN/100 mL	6 hours

Notes:

g/L micrograms per liter

MPN/100 mL most probable number (of colony-forming units) per 100 milliliters

[1] Maximum Holding Time values listed here apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.

[2] For D-MAX's Dry Weather Monitoring Program, EnviroMatrix Analytical, Inc. (EMA) performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100 mL). For fecal coliforms and Enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.

[3] IDEXX Colilert and Enterolert tests are used during upstream investigations only.

[4] Number of fecal coliforms is derived from number of *E. coli* through the following formula:
Fecal Coliforms *E. coli* / 0.85. The converted fecal coliform count, not the number of *E. coli*, is reported in this report's data tables.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Date	Analyte	Known Concentration (mg/L)	Acceptable Range* (mg/L)	Field Test Kit Results (mg/L)
07/29/09	Ammonia-Nitrogen	0.82	0.66 – 0.98	0.749
07/29/09	Surfactants	1.00	0.75 – 1.25	1.00
07/29/09	Nitrate **	44.3	31.0 – 57.6	43.54
07/29/09	Orthophosphate **	3.07	2.45 – 3.68	3.164
08/03/09	Ammonia-Nitrogen	0.82	0.66 – 0.98	0.669
08/03/09	Surfactants	1.00	0.75 – 1.25	1.00
08/03/09	Nitrate **	44.3	31.0 – 57.6	41.60
08/03/09	Orthophosphate **	3.07	2.45 – 3.68	2.713

Notes:
*Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1.
**Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by multiplying the results by 0.226 for nitrate and 0.326 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis are collected concurrently with field samples and utilize the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed, and samples are delivered and analyzed within the appropriate holding times listed in Table 3-2. Completed chain of custody forms are included in Appendix C.

3.4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation is necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a confirmation visit is conducted within two business days. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by the laboratory analyses, a comprehensive follow-up pollutant source investigation is conducted within two business days of receiving the laboratory results. A discussion of follow-up investigations is included in Section 8 of this report. Recommendations based on the results of the investigations are included in Section 9.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment. All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (see Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels based on county-wide sampling data. These action levels have been used by all San Diego County Copermittees since the 2003 dry weather season.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is a short term concentration limit in which aquatic life can be sustained. The CMC is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the D-MAX field crew. Best professional judgment may indicate that results which either exceed certain action levels or are statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source□Notes
pH	□6.5 or 9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Temperature (□C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values □0.75 may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source□Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (□g/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 □g/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (□g/L)	0.5	
Dissolved Cadmium (□g/L)	California Toxics Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd □ 14 ppb; Cu □ 38 ppb; Pb □209 ppb; and Zn □297 ppb.
Dissolved Copper (□g/L)	California Toxics Rule	
Dissolved Lead (□g/L)	California Toxics Rule	
Dissolved Zinc (□g/L)	California Toxics Rule	
Total Coliforms (MPN/100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	20,000	
Enterococci (MPN/100 mL)	10,000	

Notes:
[1] The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.
[2] Basin Plan □ Water Quality Control Plan for the San Diego Basin
WQO □Water Quality Objective
ppb □parts per billion

4 FIELD SCREENING RESULTS

The Dry Weather Monitoring Program field screening was conducted during July and August of 2009. Since four primary sites were found to be dry, four alternate sites were visited. Field screening was conducted at the 15 sites where ponded or flowing water was observed. Of these sites, 12 had a measurable flow, and three had ponded water. Six confirmation visits were performed at sites where one or more constituents were found to exceed specified action levels, and two upstream locations were sampled during follow-up investigations.

4.1 Qualitative Observations

Qualitative observations for all routine field screening visits are summarized below. Routine field screening and confirmation visit observations are presented in Table 4-1:

Light Conditions

Light conditions were primarily sunny, with occasional partly cloudy or overcast weather.

Tide

One site visited during dry weather monitoring was subject to tidal influence. This site was sampled during low tide with a height of approximately 2.8 feet.

Odor

The sample from one site had an odor of sewage. All other samples lacked any discernable odor.

Color

Water from one site was yellow in color, and water from two of the sites appeared brown. All other samples were colorless.

Clarity

The majority of water samples collected were clear, with negligible amounts of suspended particles observed. The water samples at three sites were slightly cloudy.

Floatable Materials

Trash was noted floating on the surface of the water at eight sites. No other types of floating materials were noted. Section 5 of this report includes the complete results of the Trash Assessment.

Deposits

Sediment, gravel, and/or fine particulates were observed at nearly all sites. No other types of deposits were noted.

Vegetation

Most sites supported either normal or no vegetation, appropriate for the availability of sunlight and soil. One site had limited vegetation, and flow was not restricted at any sites as a result of excessive vegetation.

Biology

The presence of organisms can be an indication of healthy waters. The presence of algae often indicates that water flow is persistent. An overabundance of algae often implies high levels of nutrients in the water and can have negative effects on aquatic life. No sites had excessive algal growth this year. Insects and algae were prevalent at most sites that had sun exposure. Two sites were host to snails, and fish were observed at one site.

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
1A	7/30/09	14:25	Sunny	Sewage	Brown	Slightly Cloudy	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
1A (Confirmation)	7/31/09	9:35	Sunny	Musty	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
1A (Confirmation)	8/11/09	10:30	Sunny	None	None	Clear	Trash	Fine Particulates	Normal	Insects, Algae
3	7/30/09	11:45	Overcast	None	None	Clear	None	None	None	None
4 (Dry)	8/3/09	11:50	Sunny	ns	ns	ns	ns	Fine Particulates	None	Insects
6	8/3/09	14:40	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects
13A	8/3/09	10:20	Sunny	None	None	Clear	None	None	None	None
31A (Dry)	8/3/09	12:20	Sunny	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	Normal	Insects
32	7/30/09	13:30	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects, Algae
38 (Dry)	7/30/09	15:30	Sunny	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae
40	7/31/09	14:50	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	Normal	Insects, Algae, Snails
41	8/3/09	13:45	Partly Cloudy	None	None	Clear	None	Sediment/Gravel, Fine Particulates	Limited	Insects, Algae
42 (Dry)	7/31/09	10:10	Sunny	ns	ns	ns	ns	None	None	None
43A	8/4/09	11:45	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae
43A (Confirmation)	8/4/09	16:15	Sunny	ns	ns	ns	ns	Fine Particulates	None	Insects, Algae
44	8/4/09	10:00	Sunny	None	None	Clear	Trash	Fine Particulates	None	Insects, Algae, Snails
44A	8/3/09	11:20	Sunny	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects, Algae, Fish
45	7/30/09	10:15	Overcast	None	None	Clear	Trash	Fine Particulates	None	None
46	7/31/09	13:45	Partly Cloudy	None	None	Clear	None	Fine Particulates	None	None
46 (Confirmation)	8/11/09	11:10	Sunny	None	None	Clear	None	Sediment/Gravel, Fine Particulates	None	None

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
47	7/31/09	12:00	Sunny	None	None	Clear	None	None	None	None
48	8/3/09	9:30	Sunny	None	Yellow	Slightly Cloudy	Trash	Sediment/Gravel, Fine Particulates	None	None
48 (Confirmation)	8/4/09	9:30	Sunny	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	None	None
49	7/31/09	10:40	Sunny	None	Brown	Slightly Cloudy	None	Fine Particulates	None	Insects, Algae
49 (Confirmation)	8/3/09	11:00	Sunny	ns	ns	ns	ns	None	None	None

Notes:
na not analyzed
ns not sampled (dry site)
denotes a confirmation visit
denotes a location sampled for laboratory analysis

4.2 Field Analytical Results

Field analyses are conducted at all sites with flowing or ponded water. The measured constituents are described below.

Flow rate quantifies the volume of fluid passing across a given surface per unit time. Flow rate measurements are needed to calculate the load or particular amount of a pollutant discharged.

Water temperature is needed to assess the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life. In the field, water temperature is measured immediately upon sample collection at each site.

The **pH** is an expression of acidity or alkalinity of a water sample. The pH of an aquatic system will affect a variety of chemical reactions, including the availability of nutrients and the solubility of chemical substances, particularly heavy metals.

Turbidity describes the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation, thus reducing photosynthetic capacity, but excessive suspended particles can also absorb heat and increase water temperatures.

Specific conductance (conductivity) measurements indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water and potentially help indicate the presence of dissolved pollutants.

Surfactant concentrations in water samples often reflect illegal discharges from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms.

Ammonia-nitrogen (ammonia-N) is an indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-nitrogen (nitrate-N) is a common sign of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, resulting in oxygen depletion as algae decomposes and may eventually suffocate other aquatic life. During the field analysis, nitrate is measured and converted into nitrate-N using a conversion factor of 0.226. This process is explained in Note 3 of Table 3-1.

Orthophosphate-phosphorus (orthophosphate-P) is also an indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate-N, orthophosphate-P pollution can cause nutrient enrichment, stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient in plant growth. During the field analysis, orthophosphate is measured and converted into orthophosphate-P using a conversion factor of 0.326. This process is explained in Note 6 of Table 3-1.

A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 shows the results of all field analyses conducted at the sampled sites. Graphs of the

various parameters and appropriate action levels for follow-up investigations are included at the end of this Section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceedances	Graph No.
Flow Rate (gpm)	3	0	0.8	0.5	0.8	---	4-1
Temperature (ºC)	29.5	22.0	25.5	25.8	2.2	0	4-2
pH	8.8	7.3	8.0	7.9	0.4	0	4-3
Conductivity (mS/cm)	20.0	0.47	4.60	1.37	6.67	0	4-4
Turbidity (NTU)	94.00	1.00	13.69	6.37	23.56	0	4-5
Ammonia-N (mg/L)	1.517	0.047	0.420	0.247	0.479	2	4-6
Nitrate-N (mg/L)	4.48	0.07	1.06	0.51	1.38	0	4-7
Orthophosphate-P (mg/L)	3.684	0.047	0.756	0.366	0.984	2	4-8
Surfactants (mg/L MBAS)	3.00	0.25	1.03	0.50	1.04	3	4-9

Note: Statistics are calculated from the results of the routine site visits.

TABLE 4-3
FIELD ANALYTICAL RESULTS

Site	Date	Time	Flow (gpm)	Temp. (□C)	pH	Turbidity (NTU)	Conductivity (mS□cm)	Surfactants (mg□L MBAS)	Ammonia-N (mg□L)	Nitrate-N (mg□L)	Ortho-phosphate-P (mg□L)
1A	7/30/09	14:25	□1	23.0	7.6	13.48	1.34	**3.00**	0.152	0.308□	0.914
1A (Confirmation)	7/31/09	9:35	□1	21.3	7.3	na	1.24	0.50	na	na	na
1A (Confirmation)	8/11/09	10:30	□1	22.6	7.4	1.32	21.51	na	na	na	na
3	7/30/09	11:45	□1	24.3	8.0	4.05	0.47	0.25	0.051□	0.512□	0.066□
4 (Dry)	8/3/09	11:50	Dry	ns	ns	ns	ns	ns	ns	ns	ns
6	8/3/09	14:40	Ponded	29.5	8.8	9.95	20	0.88	0.561	nd	0.047□
13 A	8/3/09	10:20	□1	27.8	8.2	6.22	1.45	0.75	0.072□	0.343□	0.145□
31A (Dry)	8/3/09	12:20	Dry	ns	ns	ns	ns	ns	ns	ns	ns
32	7/30/09	13:30	□1	22.0	7.7	4.97	1.25	0.50	0.097□	0.403□	0.339
38 (Dry)	7/30/09	15:30	Dry	ns	ns	ns	ns	ns	ns	ns	ns
40	7/31/09	14:50	1.0	22.1	7.6	3.94	3.20	0.38	0.325	0.628□	0.366
41	8/3/09	13:45	3.0	25.6	8.5	1.00	4.22	0.50	0.247	4.478	0.165□
42 (Dry)	7/31/09	10:10	Dry	ns	ns	ns	ns	ns	ns	ns	ns
43A	8/4/09	11:45	□1	26.6	7.9	6.37	1.05	0.50	**1.150**	4.152	0.888
43A (Confirmation)	8/4/09	16:15	Dry	ns	ns	ns	ns	ns	ns	ns	ns
44	8/4/09	10:00	Ponded	26.2	7.9	7.49	9.87	0.75	0.256	0.071□	0.582
44A	8/3/09	11:20	□1	26.3	8.6	1.65	1.48	0.25	0.050□	0.440□	0.377
45	7/30/09	10:15	1.0	24.0	8.2	1.68	1.03	0.25	0.047□	0.234□	0.151□

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp. (□C)	pH	Turbidity (NTU)	Conductivity (mS□cm)	Surfactants (mg□L MBAS)	Ammonia-N (mg□L)	Nitrate-N (mg□L)	Ortho-phosphate-P (mg□L)
46	7/31/09	13:45	1.0	24.3	8.0	9.59	0.99	0.50	0.124	1.657	1.113
46 (Confirmation)	8/11/09	11:10	3.0	24.7	7.6	15.40	1.05	na	na	na	na
47	7/31/09	12:00	2.0	25.8	7.9	7.48	20	0.88	0.463	0.447□	0.313
48	8/3/09	9:30	□1	28.0	7.5	94.00	1.22	**3.00**	**1.517**	1.011□	**3.684**
48 (Confirmation)	8/4/2009	9:30	Dry	ns	ns	ns	ns	ns	ns	ns	ns
49	7/31/09	10:40	Ponded	26.6	7.3	33.44	1.37	**3.00**	**1.187**	0.583□	**2.191**
49 (Confirmation)	8/3/2009	11:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns

Notes:
na □ not analyzed
nd□ not detected
ns □ not sampled (dry site)
□Value reported is below the Practical Detection Limit (PDL). Per manufacturer, the value is reported but flagged. See footnotes to Table 3-1 for details.
Red values were at or above the measured constituent□s action level
denotes a confirmation visit
denotes a location sampled for laboratory analysis

GRAPH 4-1: Flow

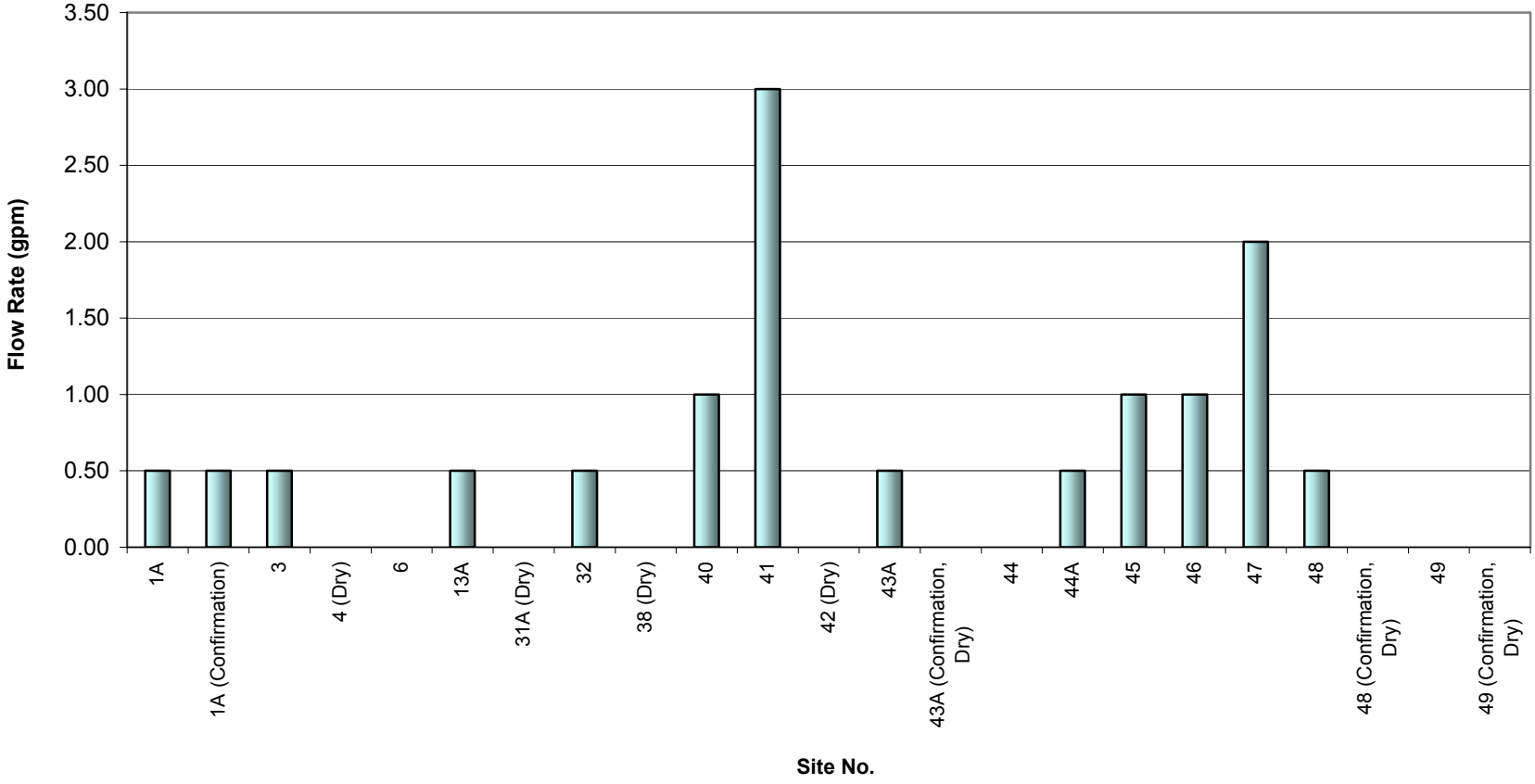

GRAPH 4-2: Temperature

Action Level is Best Professional Judgment

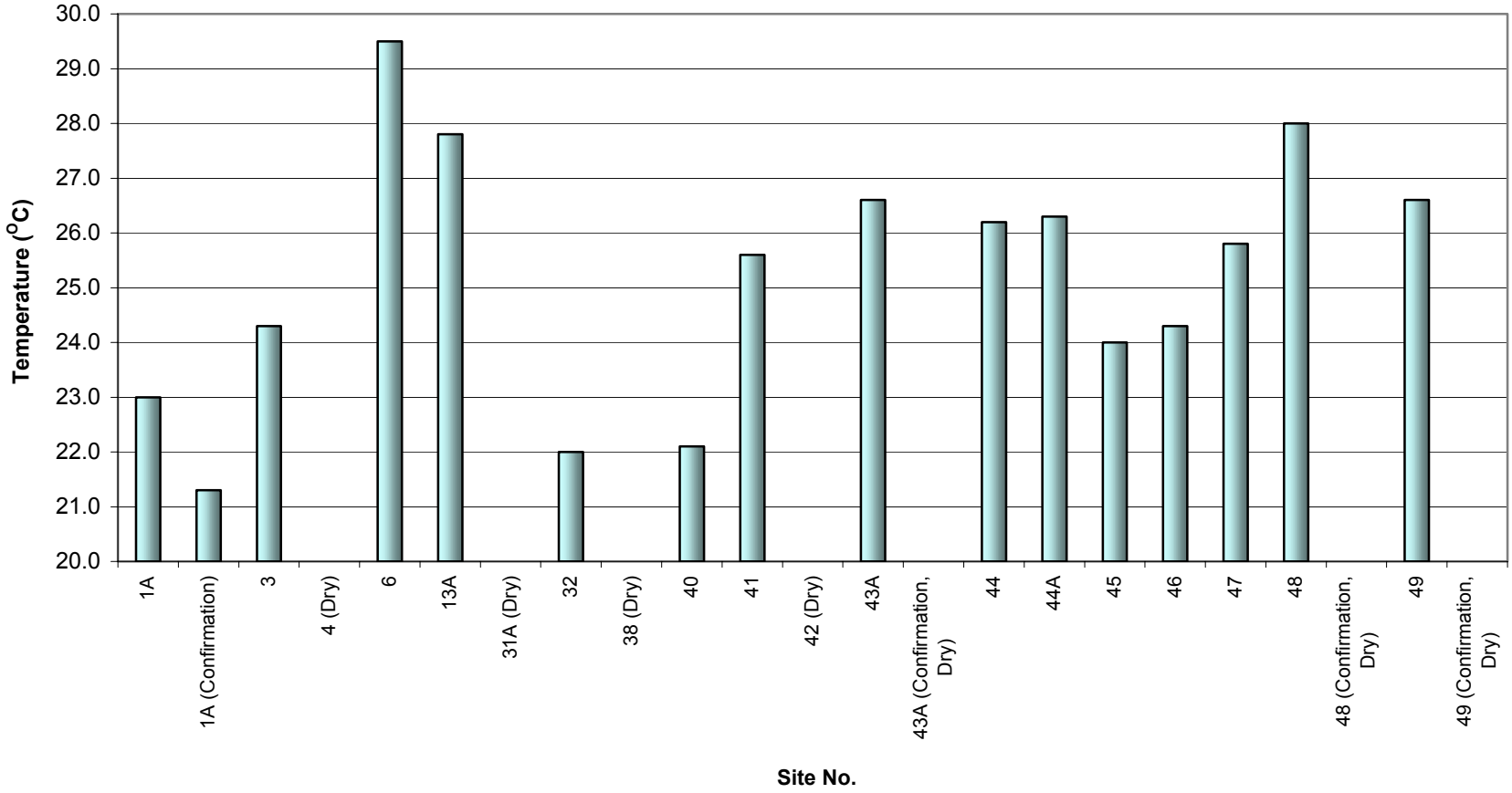

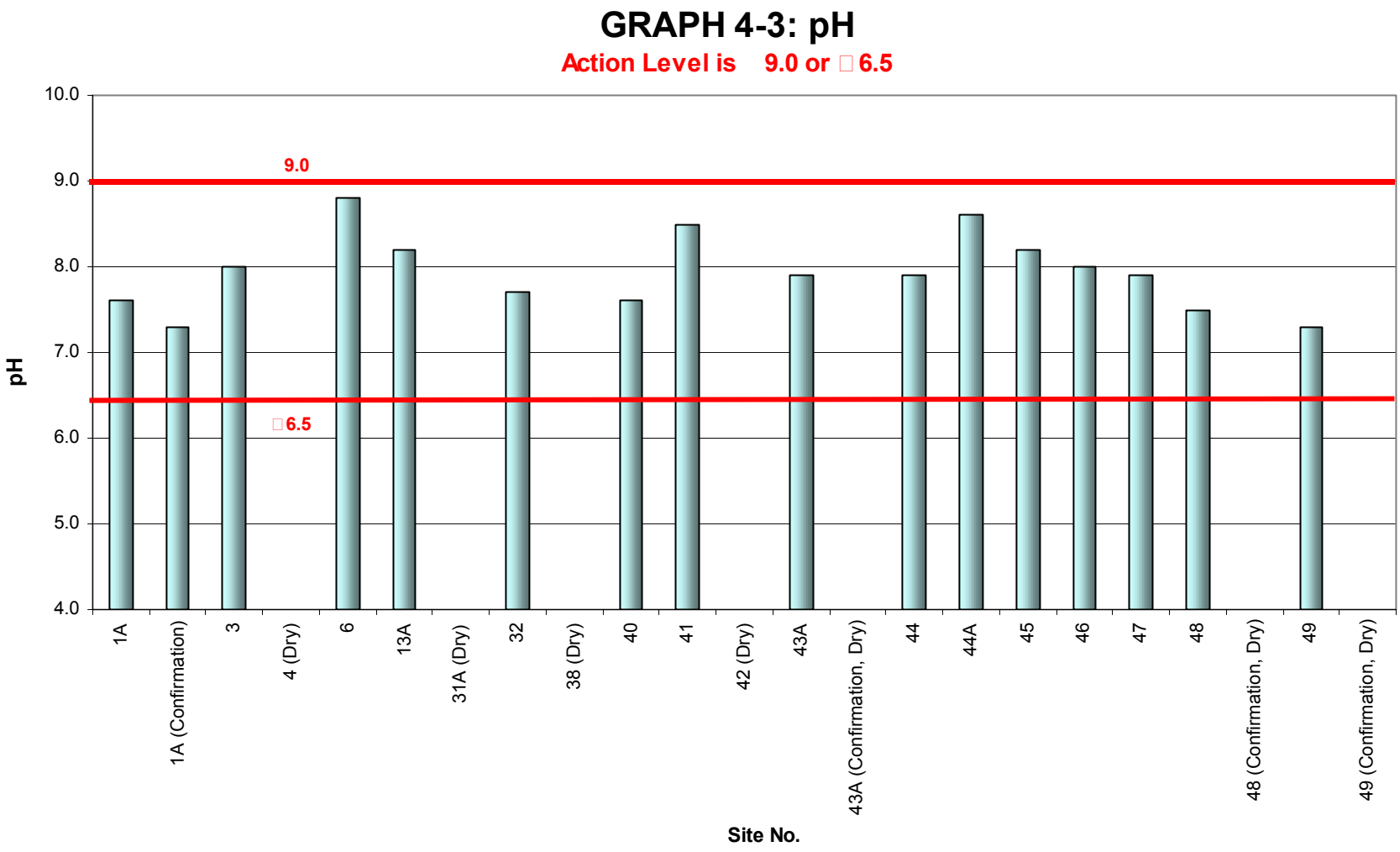
GRAPH 4-3: pH
Action Level is 9.0 or □6.5
10.0
9.0
8.0
7.0
6.0
5.0
4.0
pH
9.0
□6.5
1A
1A (Confirmation)
3
4 (Dry)
6
13A
31A (Dry)
32
38 (Dry)
40
41
42 (Dry)
43A
43A (Confirmation, Dry)
44
44A
45
46
47
48
48 (Confirmation, Dry)
49
49 (Confirmation, Dry)
Site No.

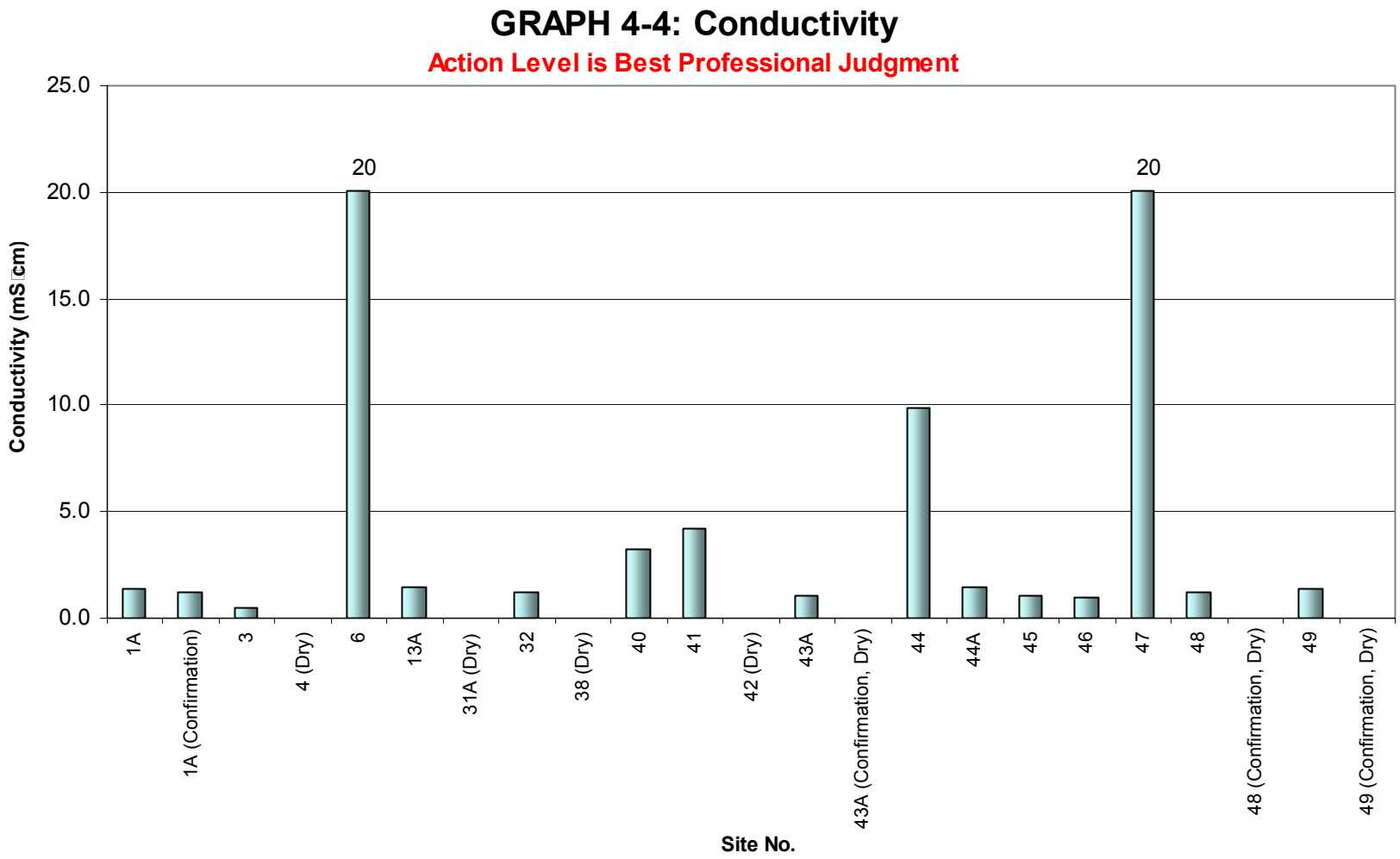
GRAPH 4-4: Conductivity
Action Level is Best Professional Judgment
Conductivity (mS/cm)
25.0
20.0
15.0
10.0
5.0
0.0
20
20
1A
1A (Confirmation)
3
4 (Dry)
6
13A
31A (Dry)
32
38 (Dry)
40
41
42 (Dry)
43A
43A (Confirmation, Dry)
44
44A
45
46
47
48
48 (Confirmation, Dry)
49
49 (Confirmation, Dry)
Site No.

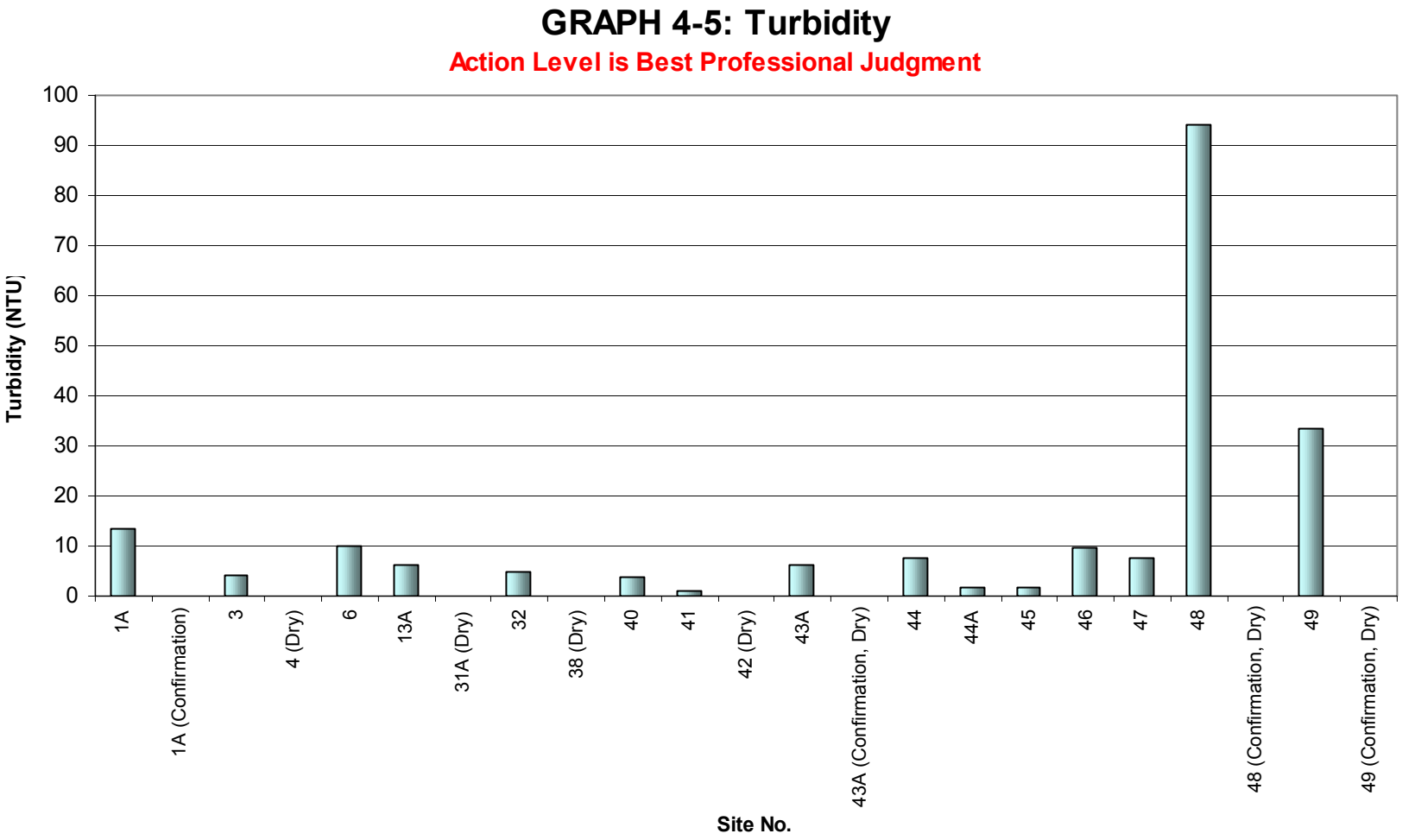
GRAPH 4-5: Turbidity
Action Level is Best Professional Judgment
Turbidity (NTU)
100
90
80
70
60
50
40
30
20
10
0
1A
1A (Confirmation)
3
4 (Dry)
6
13A
31A (Dry)
32
38 (Dry)
40
41
42 (Dry)
43A
43A (Confirmation, Dry)
44
44A
45
46
47
48
48 (Confirmation, Dry)
49
49 (Confirmation, Dry)
Site No.

GRAPH 4-6: Ammonia-N (NH_3-N)

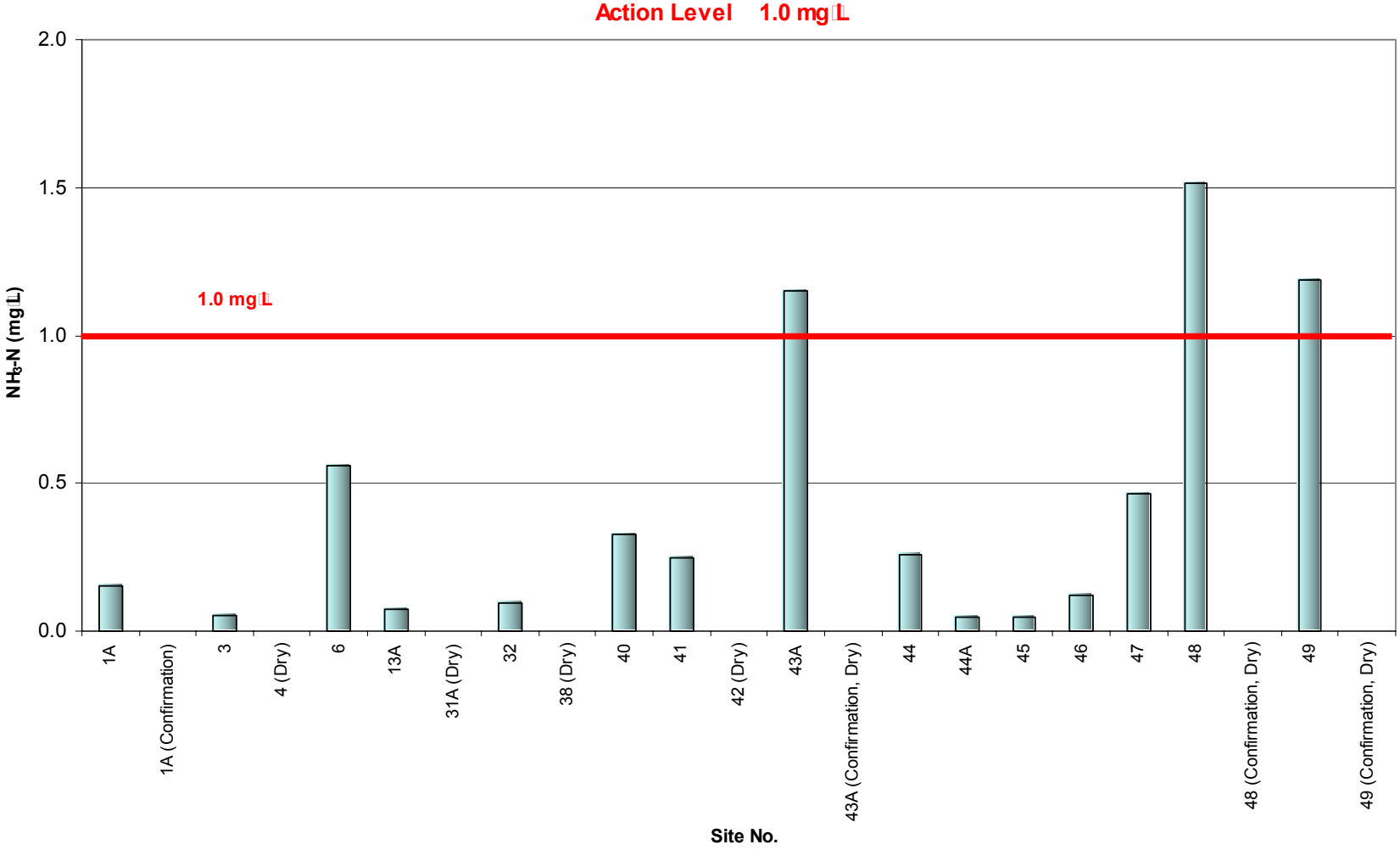

GRAPH 4-7: Nitrate-N (NO_3-N)

Action Level 10.0 mg/L

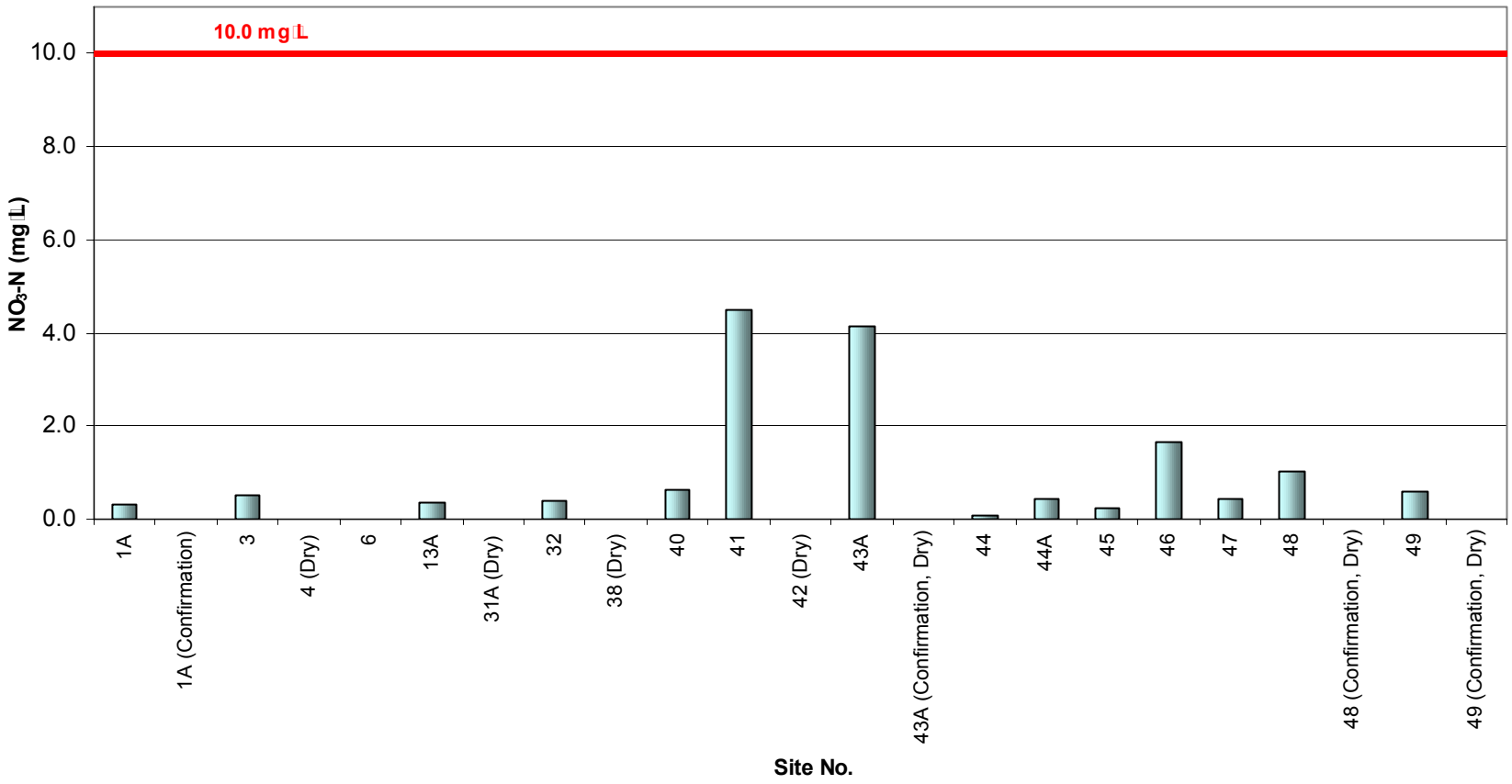

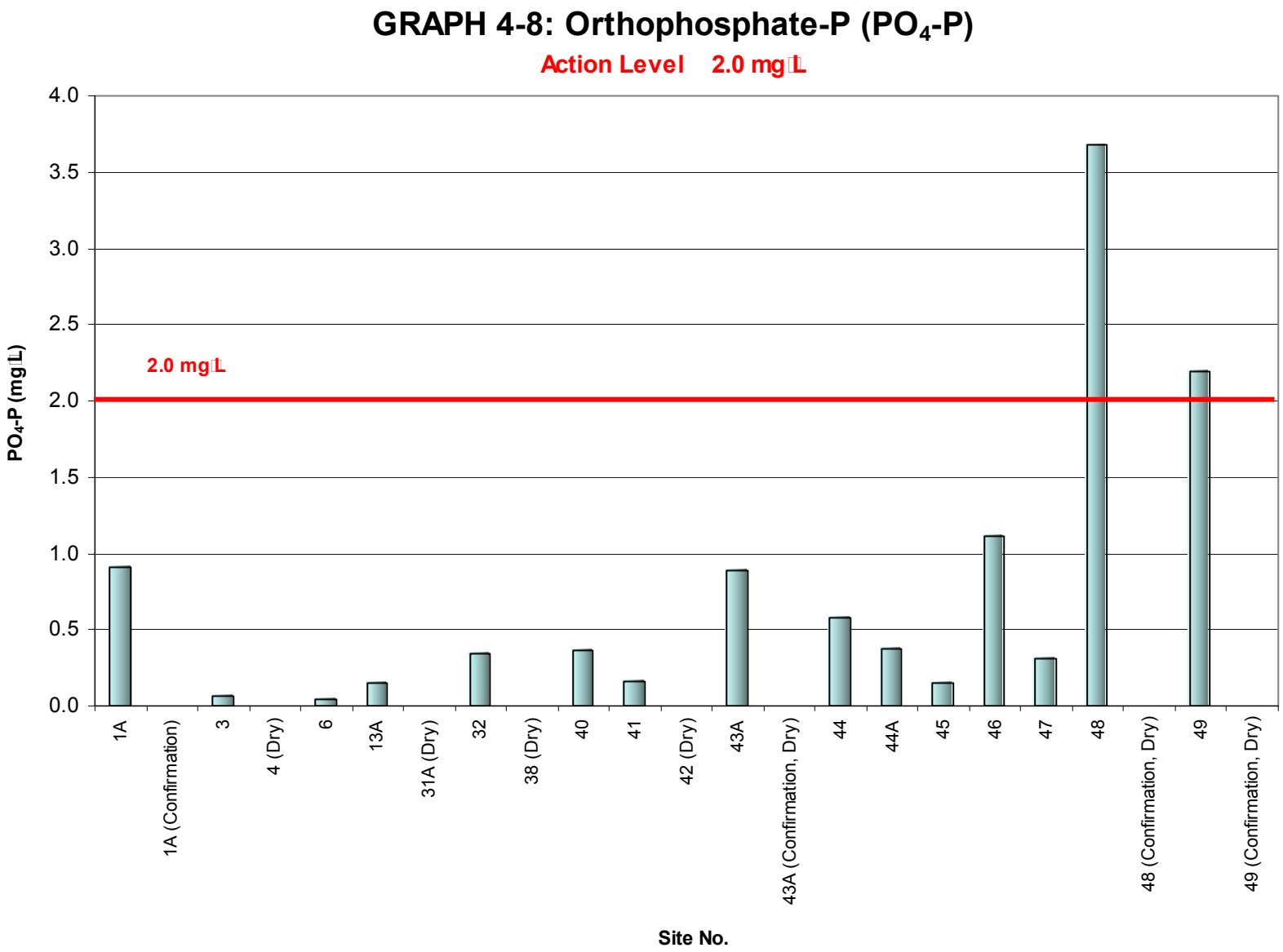
GRAPH 4-8: Orthophosphate-P (PO_4-P)
Action Level 2.0 mg/L
2.0 mg/L
PO_4-P (mg/L)
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1A
1A (Confirmation)
3
4 (Dry)
6
13A
31A (Dry)
32
38 (Dry)
40
41
42 (Dry)
43A
43A (Confirmation, Dry)
44
44A
45
46
47
48
48 (Confirmation, Dry)
49
49 (Confirmation, Dry)
Site No.

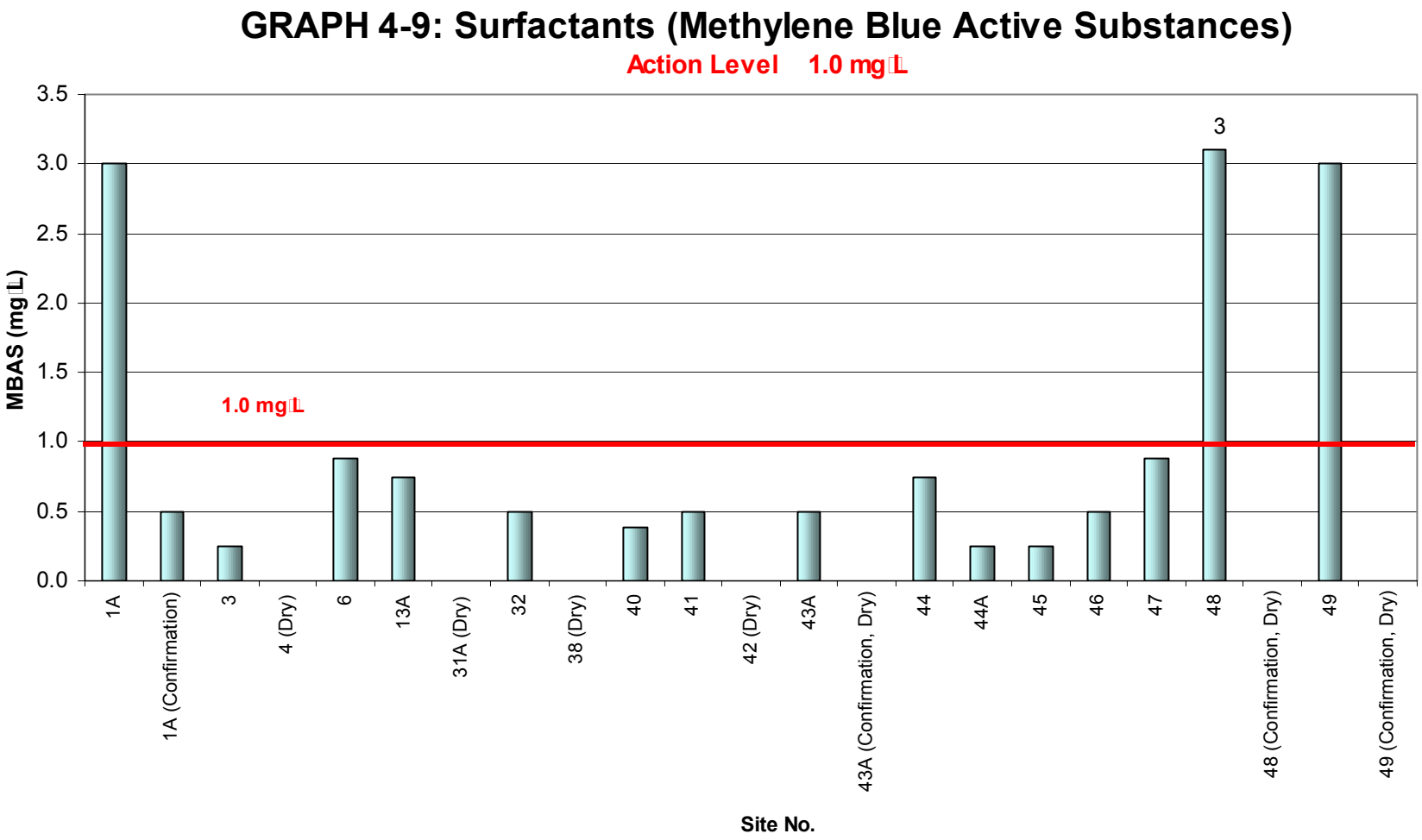
GRAPH 4-9: Surfactants (Methylene Blue Active Substances)
Action Level 1.0 mg/L
MBAS (mg/L)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.0 mg/L
3
1A
1A (Confirmation)
3
4 (Dry)
6
13A
31A (Dry)
32
38 (Dry)
40
41
42 (Dry)
43A
43A (Confirmation, Dry)
44
44A
45
46
47
48
48 (Confirmation, Dry)
49
49 (Confirmation, Dry)
Site No.

5 TRASH ASSESSMENT

5.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather monitoring site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well as the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a Trash Assessment Form to document the amount and extent of trash at each evaluated site. The form categorizes the site into one of five trash categories: optimal, suboptimal, marginal, submarginal, or poor. The form also addresses any potential threats that the trash may pose to human or aquatic health. For sites rating submarginal or poor, the form includes a section to record types, prevalence, potential routes, and sources of trash.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form's five categories are primarily qualitative descriptions of the amount and extent of trash although a number of trash pieces is also included in each category as a rough guideline. The five categories are defined as follows.

- *Optimal:* On first glance, no trash is visible. Little or no trash (10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g., medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).
- *Threat to Aquatic Health* Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long

distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the Comments section of the Trash Assessment Form.

If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

Trash assessments were conducted at 19 sites, including four dry sites. The most frequent trash assessment scores in the City of National City for 2009 were optimal and suboptimal trash ratings, with six sites in each category. Five sites were rated marginal, one site rated submarginal, and one site rated poor. No sites were determined to pose a threat to human or aquatic health. Table 5-1 and Graph 5-1 summarize the trash assessment results. Table 5-2 presents a breakdown of the types and potential sources of trash present at submarginal or poor sites. Figure 5-1 provides a map of sampling sites and their corresponding trash assessment.

TABLE 5-1
TRASH ASSESSMENT RESULTS

Optimal (6 sites)	**Suboptimal** (6 sites)	**Marginal** (5 sites)	**Submarginal** (1 site)	**Poor** (1 site)
13A	3	31A	1A	6
38	4	32		
41	40	44		
42	43A	44A		
46	45	48		
47	49			

GRAPH 5-1
TRASH ASSESSMENT SUMMARY

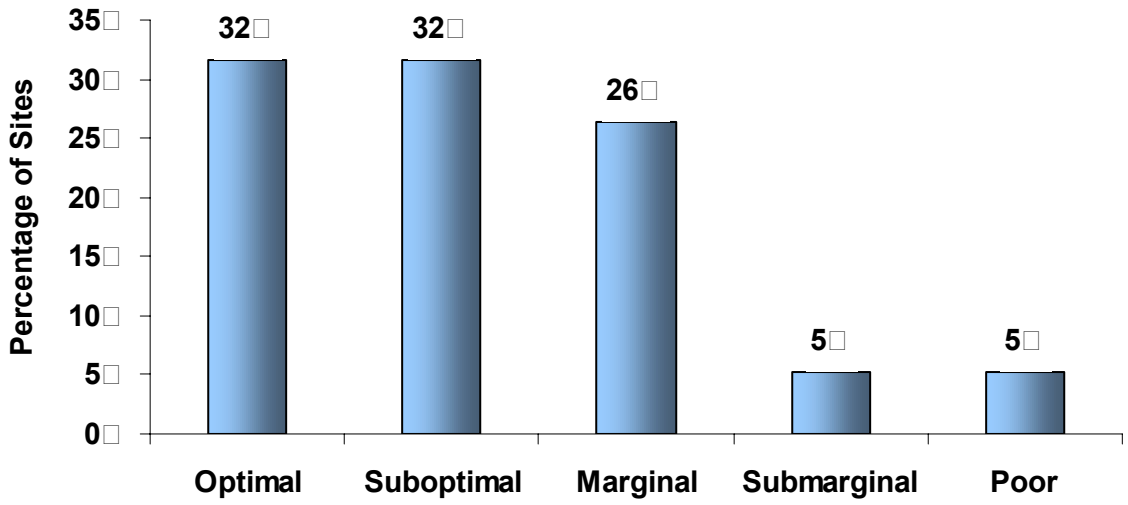

5.3.1 Submarginal or Poor Sites

Site 1A is located in a concrete channel southwest of 43rd Street and Nordica Avenue, and received a submarginal trash rating. Food packaging was the most prevalent type of trash. Most of the trash was likely due to littering and dumping at the site, with some likely to be transported to the site from an upstream source. The surrounding area showed evidence of being used by people.

Site 6 is located at an outlet on the north bank of the Sweetwater River, approximately 500 feet east of Highland Avenue. This site received a poor trash rating. A very large amount of trash was observed protruding from the outlet's flapper gate and piled within the concrete conveyance. This waste included miscellaneous plastic debris, clothing, used tires, a shopping cart, and various household items. Tidal influence at the site may assist in debris deposition, although most debris was likely to have been carried down from upstream sources or left by transients. Upstream commercial areas are a probable source for much of the smaller debris.

TABLE 5-2
BREAKDOWN OF SUBMARGINAL AND POOR SITES

Site	Ranking	Types of Trash	Potential Route 1	Potential Route 2	Potential Source 1	Potential Source 2
1A	1	Food Packaging	Littering	Upstream	Household	Transient
	2	Household	Dumping	Littering	Household	Construction
	3	Food Waste	Littering	Upstream	Household	Transient
	4	Fabric/Clothing	Dumping	Littering	Household	Transient
	5	Cigarette Butts	Littering	---	Household	Transient
6	1	Fabric/Clothing	Upstream	---	Household	Transient
	2	Household	Upstream	---	Household	---
	3	Shopping Carts	Dumping	Upstream	Commercial	Transient
	4	Automotive	Upstream	---	Household	Commercial
	5	Food Packaging	Upstream	---	Household	Commercial
	6	Food Waste	Upstream	---	Household	Commercial

Note: Only the types of trash that are present in the evaluated area are ranked. Ranking order refers to the prevalence of each type of trash, with 1 being most prevalent and 12 being least prevalent.

FIGURE 5-1
TRASH ASSESSMENT GIS MAP

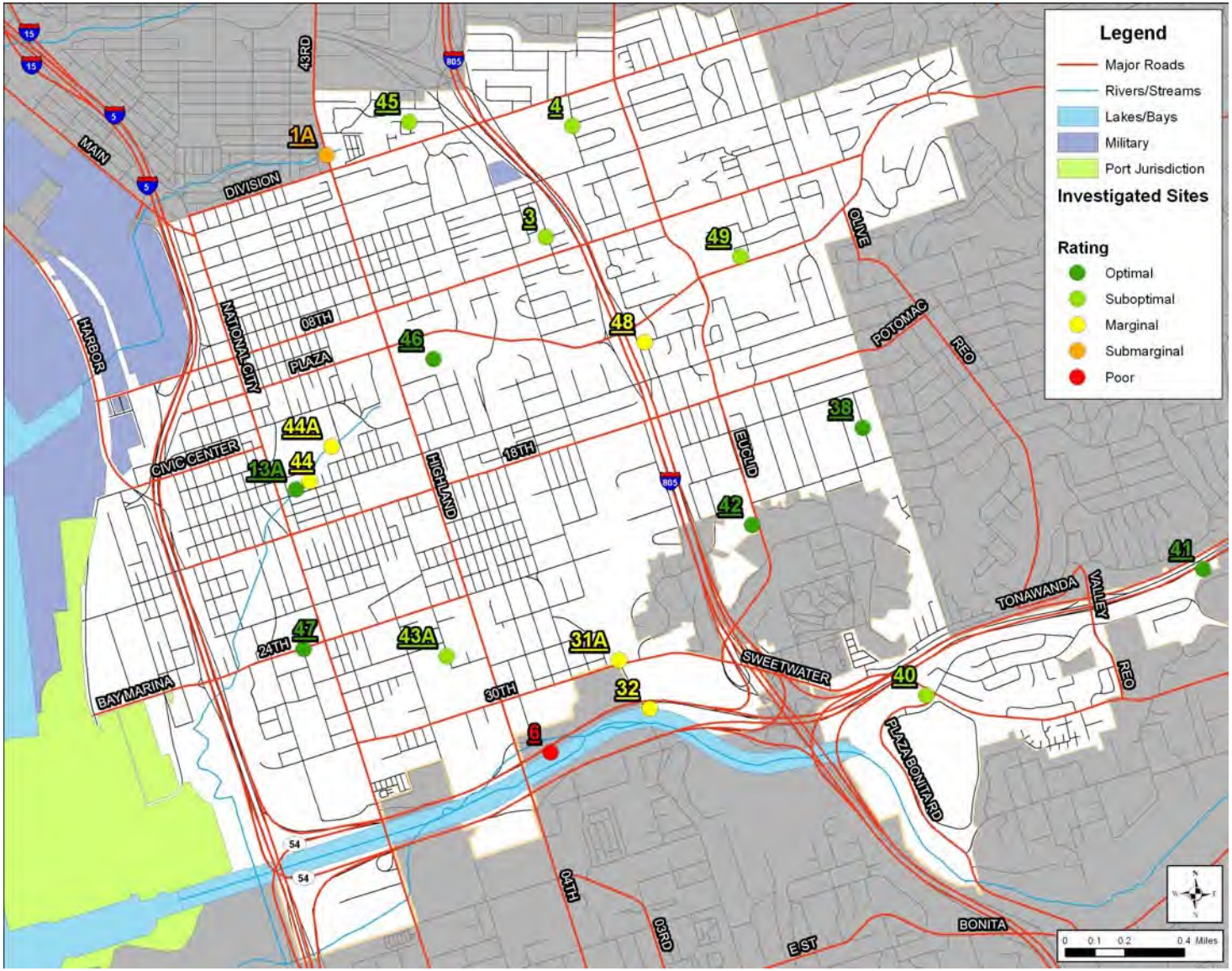

6 LABORATORY ANALYTICAL RESULTS

6.1 Summary

Laboratory analyses were conducted at four sites, representing over 25 percent of all sites with ponded or flowing water. The laboratory constituents measured are defined below.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Hardness itself is not considered a pollutant, but is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Diazinon and **chlorpyrifos** are organophosphate pesticides that are highly toxic to insects, birds, and mammals, freshwater fish, and invertebrates. In 2005, the Environmental Protection Agency banned the sale of diazinon in the United States and tightened restrictions on chlorpyrifos use.

Coliform bacteria are relatively harmless to humans and are present in mammalian digestive tracts, most surface waters, and soils. Testing water samples for total coliform bacteria is a standard practice in public health. Total coliform is measured as an indicator of other more harmful pathogens, since these pathogens are generally present in much smaller quantities and are difficult to detect.

Fecal coliform, a subset of coliform bacteria, and ***Enterococcus*** are found primarily in the gastrointestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material is human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness. As hardness increases, so does the Criterion Maximum Concentration (CMC), a concentration limit in which aquatic life can be sustained. CMC values differ for various metals. Dry weather monitoring laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 6-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

Table 6-2 presents a statistical summary of the laboratory results from all samples. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included in Appendix C.

TABLE 6-1
CTR CMC FOR DISSOLVED METALS[1]

Dissolved Copper			
Site	**Total Hardness (mg L)**	**CMC (mg L)**	**Concentration (mg L)**
1A	270	0.034	0.002
32	196	0.025	0.006
40	799	0.050	0.002
46	202	0.026	0.017
Dissolved Zinc			
Site	**Total Hardness (mg L)**	**CMC (mg L)**	**Concentration (mg L)**
32	196	0.207	0.028
46	202	0.213	0.022

Note: Table 6-2 lists only those sites where a particular dissolved metal was detected. Cadmium and lead were not detected in any of the samples.

TABLE 6-2
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Number of Exceedances
Total Hardness (mg/L $CaCO_3$)	799	196	---
Oil and grease (mg/L)	nd	nd	0
Diazinon (g/L)	nd	nd	0
Chlorpyrifos (g/L)	nd	nd	0
Cadmium (dissolved, mg/L)	nd	nd	0
Copper (dissolved, mg/L)	0.017	0.002	0
Lead (dissolved, mg/L)	nd	nd	0
Zinc (dissolved, mg/L)	0.028	nd	0
Total Coliform (MPN/100 mL)	300,000	13,000	1
Fecal Coliform (MPN/100 mL)	17,000	40	0
Enterococcus Bacteria (MPN/100 mL)	160,000	210	2

Note: nd not detected

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site	Date	Time	Oil Grease (mg L)	Total Hardness (mg L)	Cadmium (mg L)	Copper (mg L)	Lead (mg L)	Zinc (mg L)	Diazinon (g L)	Chlorpyrifos (g L)	Total Coliform (MPN 100 mL)	Fecal Coliform (MPN 100 mL)	*Enterococcus* (MPN 100 mL)
1A	7/30/09	14:25	nd	270	nd	0.002	nd	nd	nd	nd	**300,000**	17,000	**160,000**
1A (Confirmation)	7/31/09	9:35	na	na	na	na	na	na	na	na	**77,000**	2,282	4,352
32	7/30/09	13:30	nd	196	nd	0.006	nd	0.028	nd	nd	23,000	8,000	2,200
40	7/31/09	14:50	nd	799	nd	0.002	nd	nd	nd	nd	13,000	40	210
46	7/31/09	13:45	nd	202	nd	0.017	nd	0.022	nd	nd	30,000	2,800	**22,000**
46 (Confirmation)	8/11/09	11:10	na	na	na	na	na	na	na	na	na	na	5,172
Reporting Limits			**5**	**10**	**0.001**	**0.001**	**0.001**	**0.020**	**0.05**	**0.05**	**20**	**20**	**20**
Action Levels			**15**		**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**50,000**	**20,000**	**10,000**

Notes:

nd not detected

na not analyzed

Red values were at or above the measured constituent s action level

denotes a confirmation visit

Number of fecal coliforms for confirmation samples are derived from *E. coli* count. Number of fecal coliforms (Number of *E. coli*) / 0.85

Confirmation samples are analyzed using the Colilert and Enterolert methods described in Table 3-2, which have a reporting limit of 10 MPN/100 mL.

Total hardness is not considered a pollutant (see Section 3.4), and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependent on the total hardness value of the water sample.

7 DATA ANALYSIS

This section provides an overall evaluation of test results of the 2009 Dry Weather Monitoring Program, as well as a discussion of historical trends for various constituent exceedances. In 2009, only two of the 15 sites sampled had a flow rate greater than 1 gpm during the initial visit. The generally low levels of dry weather flow observed indicate that only a relatively small amount of discharge is being generated within the City. Lower levels of flow reduce the likelihood that pollutants in the water will reach receiving water bodies.

7.1 2009 Results

Of the 15 sites sampled, ammonia-nitrogen exceedances and surfactants exceedances were the most common, occurring at three sites each. All exceedances except those in bacteria at Site 1A were transient, with three of the five investigated sites being dry at the confirmation visit. A summary of 2009 exceedances is presented in Table 7-1.

TABLE 7-1
2009 EXCEEDANCES SUMMARY

Site No.	Surfactants	Ammonia-N	Orthophosphate-P	Total Coliforms	Enterococci
1A	✓			✓	✓
43A		✓			
46					✓
48	✓	✓	✓		
49	✓	✓	✓		

Note: Table reflects exceedances occurring during routine visits only, not confirmation or follow-up visits.

7.2 Previous Results

Historical exceedance results are presented in Table 7-2, Graph 7-1, and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances by year for field screening, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

No exceedances have been measured in nitrate-nitrogen, lead, diazinon, or chlorpyrifos since testing of these constituents began in accordance with Order 2001-01. Thus, these constituents have not been included in the following graphs. Ammonia-nitrogen exceedances appeared to be decreasing throughout the course of the program; however three exceedances were noted this year. The number of orthophosphate-phosphorus exceedences have increased in the past two years, and surfactant exceedences appear to

be persistent. No exceedances have been noted in conductivity since 2004, and pH exceedances have not been observed in the past two years.

As shown in Graph 7-2, the frequency of total and fecal coliform bacteria exceedances appear to be decreasing in recent years. Oil and grease, cadmium, copper, and zinc exceedances have been detected only once in the history of the program. Since only eight years of data are available, trends cannot be drawn with a high degree of certainty.

TABLE 7-2
PERCENT OF SITES WITH EXCEEDANCES BY YEAR

Year	Field Screening								Laboratory Analysis										
	Number of Field Screening Sites	Temperature	pH	Conductivity □	Surfactants	Ammonia-N	Nitrate-N	Orthophosphate-P	**Number of Laboratory Sampling Sites**	Oil & Grease	Cadmium	Copper	Lead	Zinc	Diazinon	Chlorpyrifos	Total Coliforms	Fecal Coliforms	Enterococci
2002	15	0	7	0	27	53	0	0	4	50	0	0	0	25	0	0	50	50	25
2003	15	0	7	20	20	27	0	0	4	0	0	0	0	0	0	0	100	100	50
2004	15	0	0	20	53	27	0	7	4	0	25	0	0	0	0	0	100	50	50
2005	15	0	0	0	13	13	0	0	4	0	0	0	0	0	0	0	100	75	75
2006	15	0	0	0	27	7	0	0	4	0	0	0	0	0	0	0	75	50	50
2007	15	0	7	0	20	0	0	0	4	0	0	0	0	0	0	0	50	50	75
2008	15	0	0	0	40	0	0	7	4	0	0	25	0	0	0	0	50	25	50
2009	15	0	0	0	20	20	0	13	4	0	0	0	0	0	0	0	25	0	50

Results based on complete routine visits only. Confirmation visits, follow-up visits, and dry sites not included.

□By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

GRAPH 7-1
PERCENT OF SITES WITH FIELD SCREENING EXCEEDANCES BY YEAR

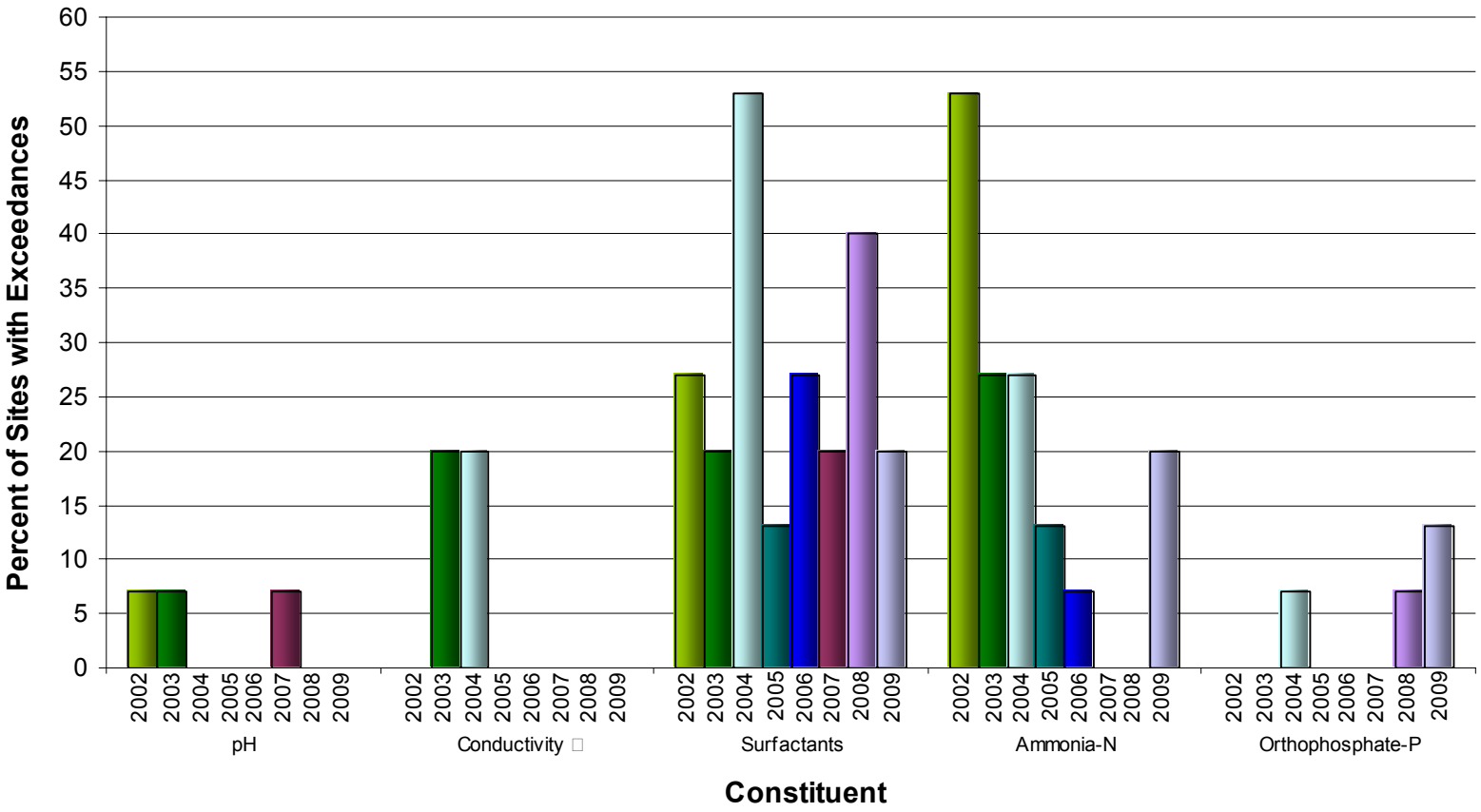

The action level for conductivity was numeric in the past but was later changed to best professional judgment. See footnote in Table 7-2.

GRAPH 7-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

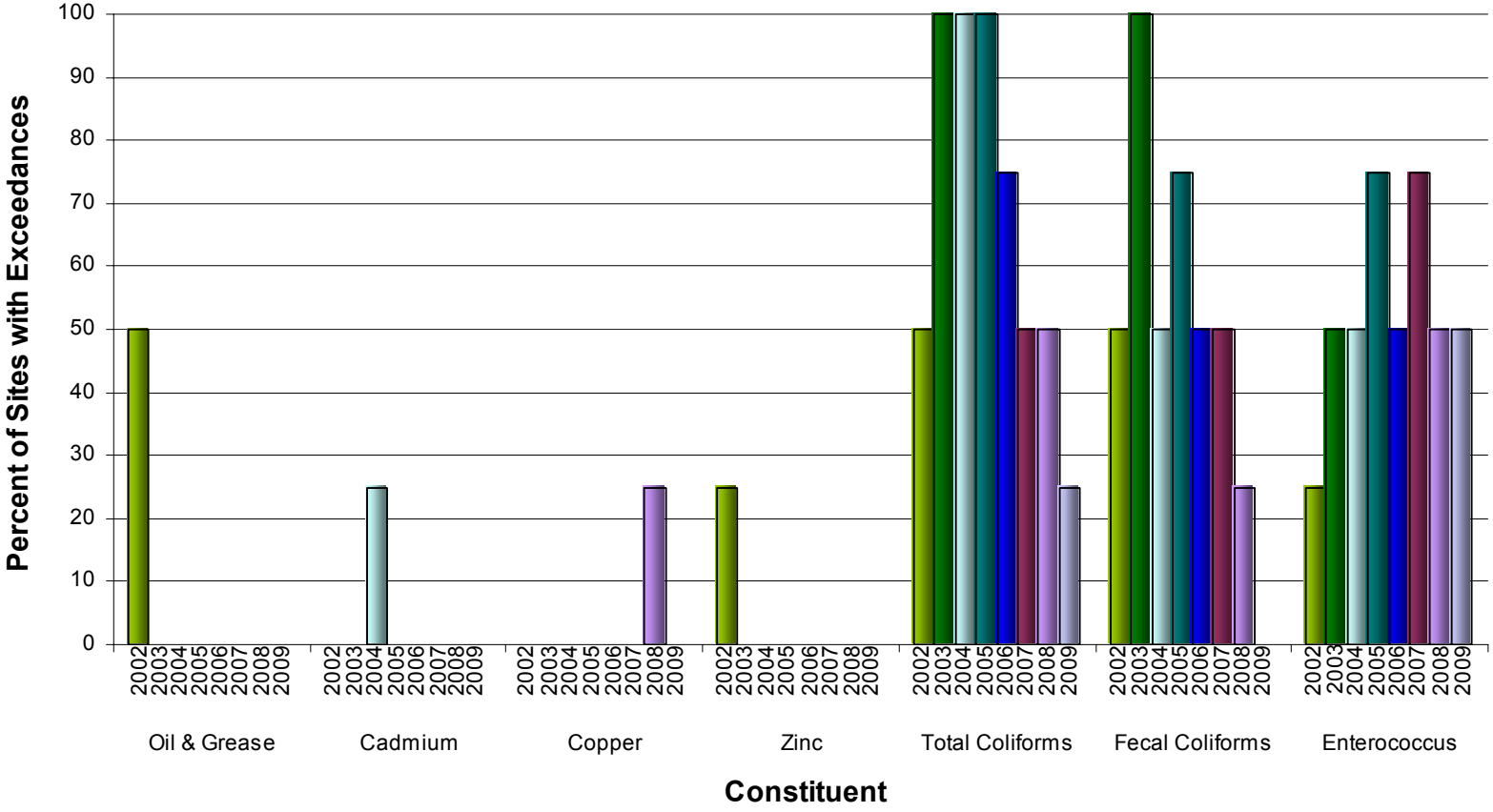

8 FOLLOW-UP INVESTIGATIONS

One of the primary purposes of the Dry Weather Monitoring Program is to identify IC/IDs. Both field screening and laboratory analytical results are compared to regionally developed action levels (Table 3-4). When a parameter is measured at or above its action level, it is possible that an IC/ID is present and further investigation is performed. Procedures for such investigations are described below, followed by a discussion of the 2009 follow-up investigations.

8.1 Investigation Procedures

Follow-up investigations are conducted in two rounds. The first follow-up investigations are for the sites at which action level exceedances are indicated by field testing. These investigations are in the form of additional field testing and are conducted within two business days of the initial findings. The second round of follow-up investigations are carried out for the sites at which laboratory testing shows elevated constituent levels. These investigations are conducted within two business days of receiving the laboratory test results.

During the follow-up investigations, flow rates are measured, visual observations are performed, and field testing is conducted. Visual observations, such as water color, clarity, odor, floatable materials, vegetation, and biology are recorded on field data sheets at each site. Field data sheets are included in Appendix D.

Source identification investigations begin by testing the water at the site again. This is referred to as a confirmation visit, as its purpose is to confirm the initial findings. If follow-up testing at a site results in constituent concentrations below specified action levels, the exceedance found during the initial sampling may have been due to a transient flow. If follow-up testing at a site finds constituent concentrations again above the specified action levels, an upstream investigation will be conducted. The field crew will progress upstream to isolate and identify potential pollutant sources.

Upstream investigations are also referred to as IC/ID follow-up visits, as the purpose is to identify illicit connections and illegal discharges. They are conducted by checking a number of upstream branches for any potential sources of the constituent of concern. The estimated flow rate in each branch and any relevant observations are recorded. Depending upon the constituent under investigation, laboratory samples may be collected for analysis.

The laboratory test for investigating upstream bacteria sources differs from routine bacteria testing by using the IDEXX Colilert and IDEXX Enterolert tests. Information about these methods is provided in Table 3-2. Results for the Colilert and Enterolert tests are typically available within 24 hours, as opposed to the five business days needed for routine testing. The quicker turnaround time allows for additional upstream investigations as needed.

8.2 Investigated Sites

During the 2009 Dry Weather Monitoring Program, five sites required upstream investigations for identifying potential IC/IDs. Amongst the five sites, there were a total of three exceedances in surfactants, three in ammonia-nitrogen, two in orthophosphate-phosphorus, two in *Enterococcus* bacteria, and one in total coliform bacteria. A brief description of each site, analytical results, photographs of selected upstream locations, and the results of the investigations are discussed in this section. Table 9-2 in Section 9 of this report provides a summary of the investigation results.

Site 1A

Site 1A is in a concrete channel that flows westward near 43rd Street, just south of Nordica Avenue. During the initial visit, the water was flowing at a rate of less than 1 gpm and the surrounding area had a significant amount of trash, receiving a submarginal trash rating. There was also a faint odor of sewage during the initial visit, with a notably musty odor during the confirmation visit.

At the initial visit, the surfactant level was measured at 3.00 mg/L, above the action level of 1.00 mg/L. The area upstream of the site was inspected for potential sources, however no active washing was observed. It was reported by a resident that some apartment complexes upstream of the site allow vehicle washing in their parking lots, which is a potential source of surfactants. During the confirmation visit the following day, the surfactant level was measured at 0.50 mg/L, indicating that the initial exceedance was the result of a transient flow.

Site 1A was also sampled for laboratory analyses. At the time of the initial visit, total coliform bacteria were measured at 300,000 MPN/100 mL, above the action level of 50,000 MPN/100 mL, and *Enterococcus* bacteria levels were measured at 160,000 MPN/100 mL, above the action level of 10,000 MPN/100 mL. During the confirmation visit, the concentration of total coliform bacteria at the site was measured above the action level at 77,010 MPN/100 mL, while the level of *Enterococcus* bacteria was measured below the action level at 4,352 MPN/100 mL.

Site 1A is located at the convergence of three lines. The line from the north, which receives water from the City of San Diego, was dry. Areas upstream on this line showed no evidence of recent flow or potential bacteria sources. The line from the south was also dry; however the nearest upstream storm drain inlets contained organic debris and trash and were damp, indicating recent flow through the area. Damp conditions and decomposing material within the conveyance create an environment conducive to bacteria growth. Intermittent increases in flow could carry high levels of bacteria and its sources downstream to Site 1A.

The line from the east flows through several areas that contain probable sources of bacteria to the site. In the rear of a small shopping complex, across 43rd Street from Site 1A, is a small alley with large amounts of trash and a leaking dumpster (Photo 8-1). Leakage from the dumpster may contain bacteria and is likely to flow to the storm drain located several feet away.

Photo 8-1: Evidence of recent flow from beneath a dumpster upstream of Site 1A.

Just east of the shopping center is an apartment complex where a large amount of trash was observed around several dumpsters. As illustrated by Photo 8-2, discarded food and food packaging were present including raw chicken packaging within 10 feet of a storm drain. Further upstream of this area is a trailer park where a storm drain inlet contained evidence of past cooking grease disposal. All of these situations are likely to add bacteria to the storm water conveyance system.

A sample was taken further east of the trailer park at location 1A-1, which is a manhole in the middle of the street in front of 1243-1305 Fig Court. This sample location is also known as primary Site 45. *Enterococcus* bacteria levels measured at this site were below the action level at 3,448 MPN/100 mL, but the total coliform bacteria level was in exceedance at 98,040 MPN/100 mL. Upstream of this area, a residential neighborhood along Scott Drive contained numerous catch basins with a large amount of decomposing organic material.

The high bacteria levels at Site 1A were attributed to several factors. Debris and trash from the southern line may contribute bacteria to Site 1A when there is sufficient flow. The eastern line likely contributes bacteria from the commercial and residential areas containing significant amounts of trash and decomposing organic matter in and around the storm water conveyance. The conditions at the site itself were also a likely source of bacteria; a low flow rate and dense vegetation trapping large amounts of decomposing trash are conducive to bacterial growth. Table 8-1 provides upstream investigation results and Figure 8-1 is a map of sampling locations for Site 1A.

Photo 8-2: Food packaging and waste upstream of Site 1A.

TABLE 8-1
SITE 1A SURFACTANTS AND BACTERIA UPSTREAM INVESTIGATIONS

Site	Location	Flow (gpm)	Surfactants (mg/L)	Total Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
1A	Southwest of 43rd Street and Nordica Avenue	<1	**3.00**	**300,000**	**160,000**
1A (Confirmation)	Southwest of 43rd Street and Nordica Avenue	<1	0.50	na	na
1A (Confirmation)	Southwest of 43rd Street and Nordica Avenue	<1	na	**77,010**	4,352
1A-1	Site 45, in middle of Fig Court	<1	na	**98,040**	3,448

Note: **Red Bold Type** value exceeds action level

FIGURE 8-1
SITE 1A BACTERIA UPSTREAM INVESTIGATION MAP

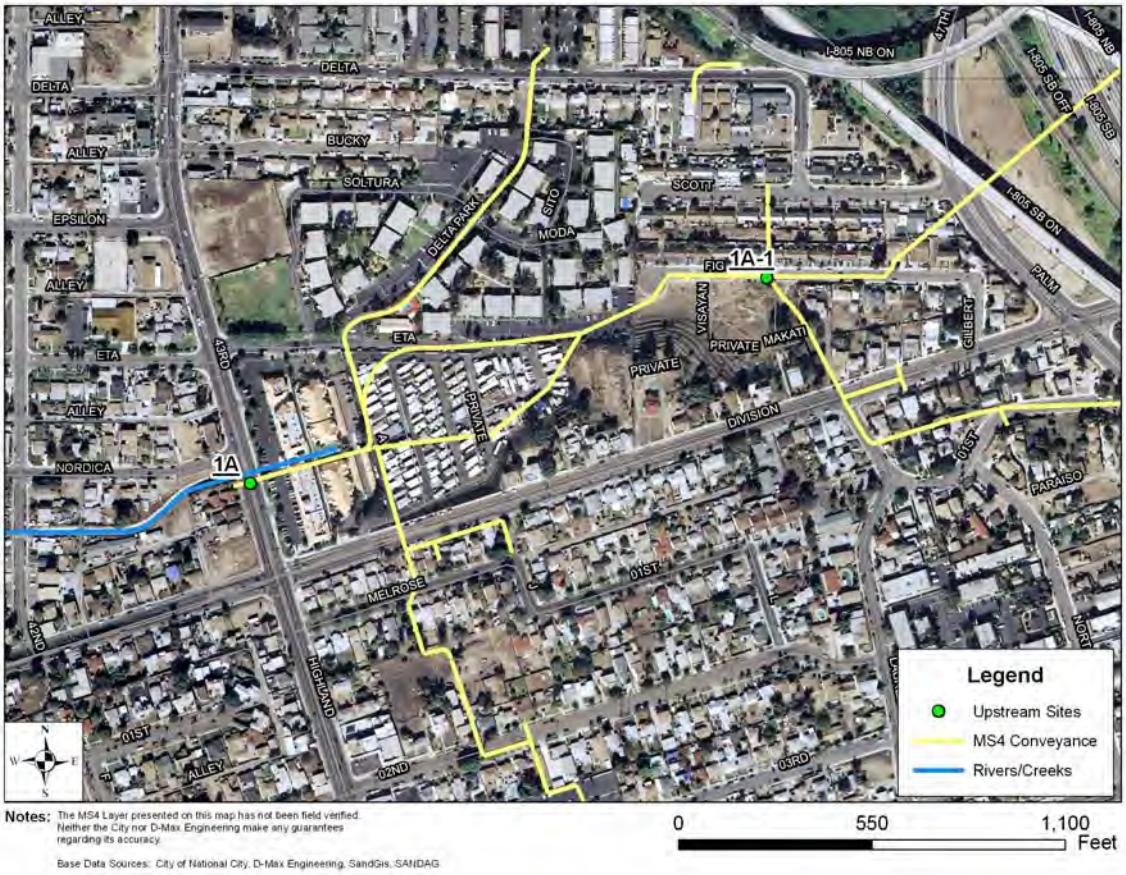

Site 43A

Site 43A is located at a catch basin on F Avenue between East 24th Street and East 28th Street, west of Olivewood Elementary School. During the initial site visit, the flow was less than 1 gpm and the site had accumulated organic debris and trash resulting in the assignment of a submarginal trash rating. The concentration of ammonia-nitrogen for the sample measured 1.150 mg/L, above the action level of 1.00 mg/L. During the confirmation visit, the catch basin was dry and could not be sampled. No evidence of runoff was found in the surrounding area. The initial exceedance of ammonia-nitrogen was concluded to be due to a transient flow, and was potentially the result of a low flow through decomposing organic material and trash in the catch basin. As the ponded water evaporated, it is likely that ammonia-nitrogen levels become more concentrated.

Site 46

Site 46 located at a manhole in the parking lot south of the South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop. During the initial site visit, a flow of 1 gpm was noted. Laboratory analysis indicated that *Enterococcus* bacteria levels were over the action level, measuring 22,000 MPN/100 mL. The sample collected from Site 46 during the confirmation visit had an *Enterococcus* measurement of 5,172 MPN/100 mL.

The site receives flow from two lines, one from the east and one from the north. The eastern line runs behind a shopping center that has several storm drain inlets throughout the parking lot. Food waste was observed throughout the parking lot. The northern line drains primarily residential neighborhoods. The storm drains in these neighborhoods were generally clean. Location 46-1 at the corner of East 7th Street and R Avenue (which is also primary Site 3) was sampled, and the *Enterococcus* count was measured at 246 MPN/100mL.

Enterococcus bacteria measured below the action level in follow-up samples collected at Site 46 and the upstream location 46-1. This suggests that the initial exceedance was the result of a transient flow. Table 8-2 provides upstream investigation results and Figure 8-2 provides a map of sampling locations. Recommendations regarding this site are provided in Section 9 of this report.

TABLE 8-2
SITE 46 BACTERIA UPSTREAM INVESTIGATION

Site	Location	Flow (gpm)	*Enterococcus* (MPN/100 mL)
46	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	1	**22,000**
46 (Confirmation)	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	3	5,172
46-1	East 7th Street and R Avenue. Site 3	1	246

Note: **Red Bold Type** value exceeds action level

FIGURE 8-2
SITE 46 BACTERIA UPSTREAM INVESTIGATION MAP

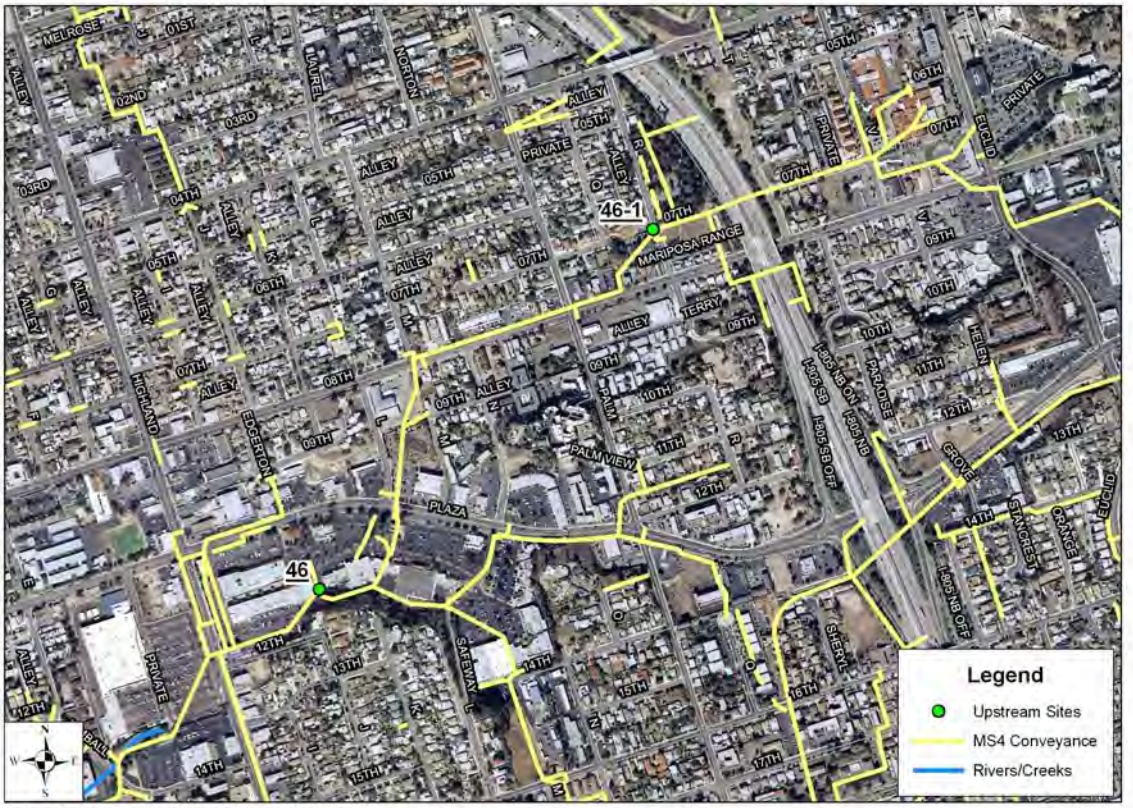

Site 48

Site 48 is located in a catch basin at the northwest corner of the East 14th Street and Grove Street intersection. In the catch basin, trash levels were categorized as marginal and a large amount of organic debris was also noted. The flow was less than 1 gpm during the initial site visit. The ammonia-nitrogen concentration was measured at 1.517 mg/L; orthophosphate-phosphorus was measured at 3.684 mg/L; and the surfactants level was greater than 3.00 mg/L.

Directly upstream, a resident was bathing several dogs in her driveway on East 14th Street. Runoff at a rate of 1 gpm traveled several hundred feet from the driveway along the curbside before entering the storm drain. Pet shampoo and particulates washed off from the pets are likely sources of the exceedances measured downstream at Site 48. The resident was informed that it is illegal to allow polluted water to enter the MS4 system, and the washing activities were discontinued.

At the confirmation visit the following day, the site was dry and no overland flow was observed. The exceedances of ammonia-nitrogen, orthophosphate-phosphorus, and surfactants were transient.

Site 49

Site 49 is located in a concrete channel at the south end of Arcadia Place. During the initial visit, the water was ponded, slightly cloudy, and brown in color. The ammonia-nitrogen concentration of the sample was 1.187 mg/L; the orthophosphate-phosphorus concentration was measured at 2.191 mg/L; and the surfactants concentration was measured at 3.00 mg/L. During the confirmation visit the following day, the site was dry.

On the day of the initial visit, an immediate upstream investigation was performed. The maintenance supervisor of an upstream apartment complex reported that although residents are not allowed to wash cars in the parking lot, washing does take place occasionally. The supervisor also noted that the landscapers had applied fertilizer within the past six weeks. The storm drain inlets within the complex contained trash and small amounts of grass clippings, which are materials that may produce ammonia as they decompose.

The exceedances noted at the initial visit may potentially have been influenced by activities in the apartment complex upstream; however this could not be verified. The pollutants present in the ponded water had likely been concentrated as water evaporated. Since the site was dry at the confirmation visit, the exceedances were attributed to a transient flow.

9 SUMMARY AND RECOMMENDATIONS

9.1 Field Screening & Laboratory Analysis Summary

Fifteen primary monitoring sites and four alternate sites were visited in the 2009 Dry Weather Monitoring Program. Laboratory analyses were performed on water samples from four of the primary sites, representing over 25 of sites with flowing or ponded water. Table 9-1 provides a summary of action level exceedances.

TABLE 9-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (15 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Sites Exceeding Action Level**
pH	0	0	---
Conductivity	0	0	---
Turbidity	0	0	---
Surfactants	3	20	1A, 48, 49
Ammonia-N	3	20	43A, 48, 49
Nitrate-N	0	0	---
Orthophosphate-P	2	13	48, 49
Laboratory Analyses (4 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Sites Exceeding Action Level**
Oil & Grease	0	0	---
Cadmium	0	0	---
Copper	0	0	---
Lead	0	0	---
Zinc	0	0	---
Diazinon	0	0	---
Chlorpyrifos	0	0	---
Total Coliforms	1	25	1A
Fecal Coliforms	0	0	---
Enterococci	2	50	1A, 46

Note: Table includes data from initial site visits only; confirmation and follow-up investigations are not included.

In general, the City of National City s storm water conveyances had low flows this year. Only two of the 19 visited primary sites had a flow greater than 1 gpm during the initial visit. Four of these sites were dry and two were ponded. The low level of dry weather flows in the City

may be a result of less irrigation runoff. These conditions decrease the likelihood that pollutants will reach receiving water bodies.

In the trash assessment, nineteen sites were assessed, including four that were dry. Twelve were assigned optimal or suboptimal trash ratings; five were marginal; one was submarginal; and one site was considered poor.

9.2 Follow-Up Investigation Summary

Table 9-2 presents the conclusions based on the results of confirmation visits and upstream investigations conducted at five sites in the 2009 Dry Weather Monitoring Program.

TABLE 9-2
SUMMARY OF FOLLOW-UP INVESTIGATIONS

Site	Follow-Up Investigation Target Constituent(s)		Results Probable Sources
	Field	Laboratory	
1A	Surfactants	Total Coliforms, Enterococci	Surfactants: transient flow Bacteria: decomposing organic matter at the site and in upstream areas
43A	Ammonia-N	---	Transient flow, potentially generated by organic material decomposition at site and increased concentration of pollutants as ponded water evaporated
46	---	Enterococci	Transient flow, possibly caused by food waste in the upstream shopping center
48	Ammonia-N, Orthophosphate-P, Surfactants	---	Transient flow; dog washing by a resident upstream
49	Ammonia-N, Orthophosphate-P, Surfactants	---	Transient flow and an increasing concentration of pollutants as ponded water evaporated

9.3 Recommendations

Based on the results of the 2009 Dry Weather Monitoring Program for the City of National City, the following actions are recommended for consideration.

9.3.1 Education

- Provide educational materials regarding dumpster area best management practices (BMPs) to the property manager and residents of the Highland View Apartments and to the business owner of the Siete Dias Market, where a leaking dumpster was observed. Provide educational materials to the residents of the Happy Hollow Trailer Park regarding proper oil and grease disposal. These locations are upstream of Site 1A, where bacteria exceedances were noted.

- Provide educational materials regarding outdoor washing activities to the residents of the Summer Crest Living Complex, upstream of Site 49, and to the residents of East 14th Street, upstream of Site 48. Both sites experienced surfactants and orthophosphate-phosphorus exceedances that were likely the result of to washing activities.
- Provide educational materials regarding BMPs for fertilizer application, and landscaping waste disposal to the maintenance department of the Summer Crest Living complex, upstream of Site 49 where an ammonia-nitrogen and orthophosphate-phosphorus exceedance was measured.

9.3.2 Inspection and Maintenance

- Remove trash and debris from submarginal Site 1A to eliminate potential sources of bacteria. Remove organic debris from the catch basins on Scott Drive, upstream of Site 1A. Increase the inspection frequency of these areas to determine if additional maintenance is necessary to prevent debris accumulation.
- Establish and maintain a regular schedule for the removal of trash from Site 6, which received a poor trash rating. Ensure that trash at Site 6 is regularly assessed, and implement preventative measures where possible to decrease the introduction of debris to the storm water conveyance system. This may include the installation or improvement of barriers and signage at the sites to discourage illegal dumping and use of the areas by transients.
- Although the confirmation visit indicated bacteria counts below the action level at Site 46, this site has had a history of high bacteria levels. Contact the property management of the South Bay Plaza Center to ensure the trash areas and storm drains are kept free of trash and food waste.

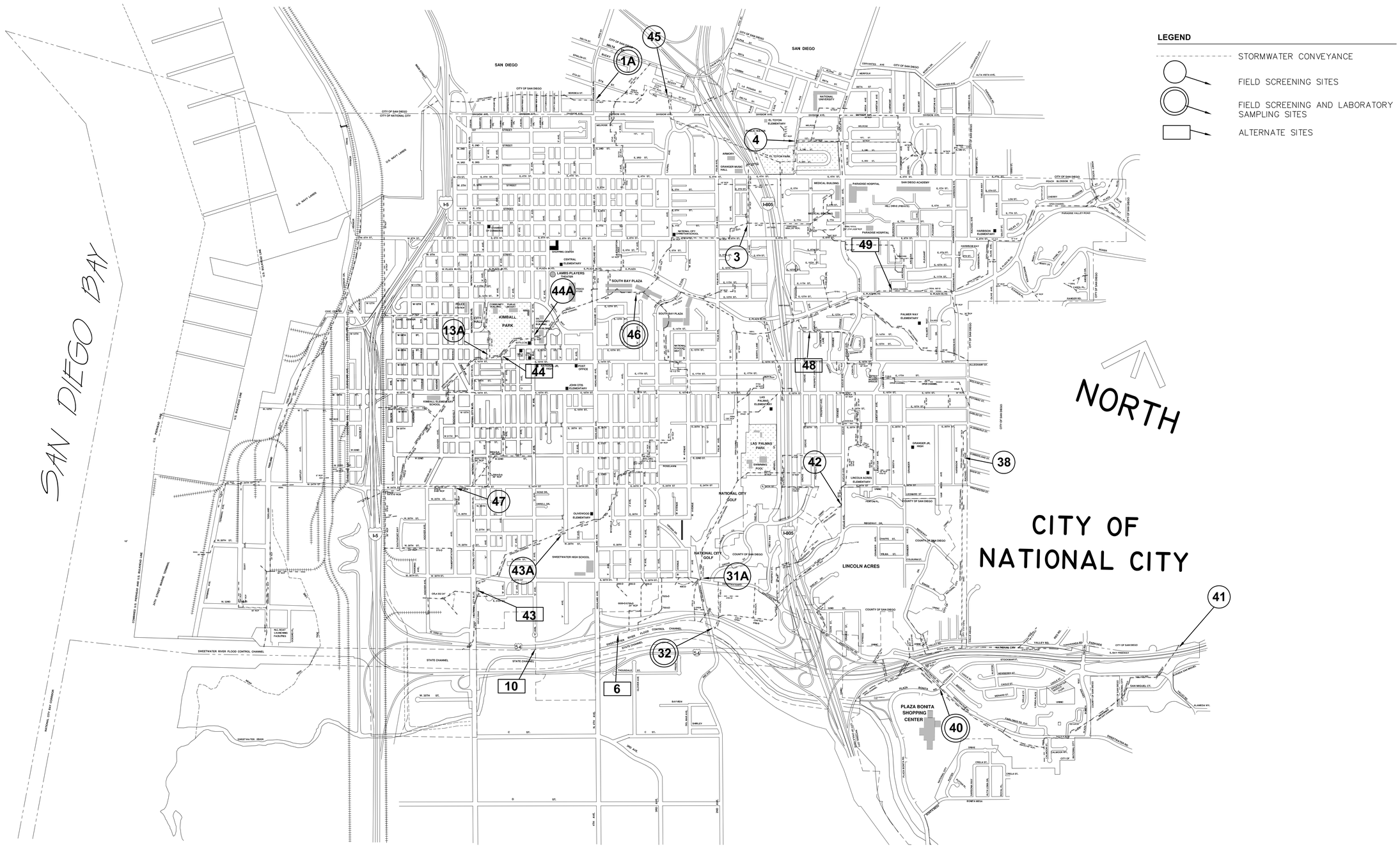

CITY OF NATIONAL CITY

DRY WEATHER SAMPLING LOCATIONS

DRAWN BY: CM	CHECKED BY:	PROJECT NO: 200938W-5	FIGURE A
FN:NATIONALCITY-DRY WEATHER 2009		DATE: 09-03-09	

D-Max Engineering, Inc.

FIGURE B
WATERSHED MAP OF THE NATIONAL CITY AREA, BROKEN INTO HYDROLOGIC SUBAREAS

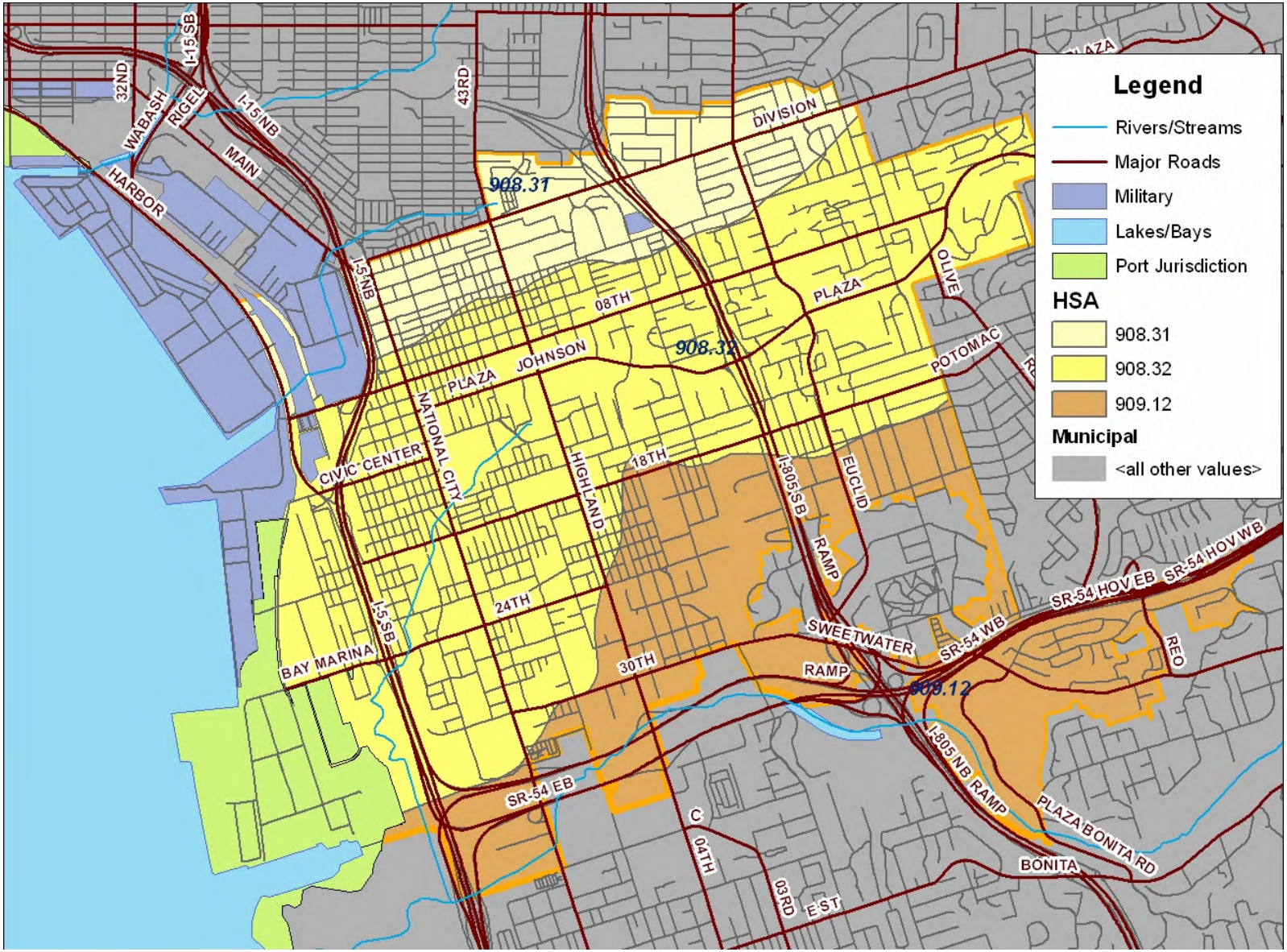

Appendix A

Historical Dry Weather Monitoring Data

City of National City Dry Weather Historical Data

Site No.	1	1A	4	9	10	11	13	13A	18	20	22	26	30	31	32	33	38	40	41	42	43
1996																					
Chlorine (mg/l)	0.3		ns	ns	nd	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.1	ns	nd	0.1	0.2	ns	0.1
Copper (mg/l)	nd		ns	ns	nd	ns	ns	ns	ns	ns	ns	ns	ns	ns	nd	ns	nd	nd	nd	ns	nd
Detergents (mg/l)	0.6		ns	ns	nd	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.4	ns	0.15	0.1	<0.1	ns	nd
Phenols (mg/l)	nd		ns	ns	nd	ns	ns	ns	ns	ns	ns	ns	ns	ns	nd	ns	nd	nd	nd	ns	nd
1997 First Visit																					
Ammonia (mg/l)	0.1				ns	ns									1.5				0.6	0.3	ns
Chlorine (mg/l)	nd				ns	ns									0.25				nd	0.40	ns
Copper (mg/l)	nd				ns	ns									0.4				nd	nd	ns
Detergents (mg/l)	1.5				ns	ns									2.5				0.6	2.0	ns
Phenols (mg/l)	nd				ns	ns									0.1				nd	nd	ns
1997 Second Visit																					
Ammonia (mg/l)	0.1				ns	ns									ns				1.0	0.4	ns
Chlorine (mg/l)	0.2				ns	ns									ns				0.5	0.4	ns
Copper (mg/l)	nd				ns	ns									ns				nd	nd	ns
Detergents (mg/l)	>3.00				ns	ns									ns				0.70	0.25	ns
Phenols (mg/l)	nd				ns	ns									ns				nd	nd	ns
1998 First Visit																					
Ammonia (mg/l)	ns					0.7				ns					0.1			0.1	0.4	ns	
Chlorine (mg/l)	ns					nd				ns					nd			0.8	<0.1	ns	
Copper (mg/l)	ns					nd				ns					nd			nd	nd	ns	
Detergents (mg/l)	ns					0.75				ns					0.25			0.25	0.50	ns	
Phenols (mg/l)	ns					0.1				ns					nd			nd	0.1	ns	
1998 Second Visit																					
Ammonia (mg/l)						0.2									0.1			0.2	0.1		
Chlorine (mg/l)						nd									nd			nd	nd		
Copper (mg/l)						nd									nd			nd	nd		
Detergents (mg/l)						0.75									0.25			0.50	0.50		
Phenols (mg/l)						nd									0.1			nd	nd		

ns = not sampled
nd = not detected

City of National City Dry Weather Historical Data

Site No.	1	1A	4	9	10	11	13	13A	18	20	22	26	30	31	32	33	38	40	41	42	43
1999 First Visit																					
Ammonia (mg/l)	0.4					1.0				0.6					0.4			0.2	0.7	ns	
Chlorine (mg/l)	0.3					<0.1				0.2					0.7			<0.1	0.1	ns	
Copper (mg/l)	nd					nd				nd					nd			nd	nd	ns	
Detergents (mg/l)	2.00					1.00				2.00					0.50			0.25	0.75	ns	
Phenols (mg/l)	0.1					nd				nd					nd			nd	nd	ns	
1999 Second Visit																					
Ammonia (mg/l)	ns					1.0				2.5					0.4			0.4	0.8		
Chlorine (mg/l)	ns					0.2				0.7					0.4			0.5	0.1		
Copper (mg/l)	ns					nd				nd					nd			0.1	nd		
Detergents (mg/l)	ns					1.00				0.75					0.50			0.75	0.50		
Phenols (mg/l)	ns					nd				nd					nd			nd	nd		
2000 First Visit																					
Ammonia (mg/l)	0.6					0.6				ns					0.3			0.7	0.5	ns	
Chlorine (mg/l)	nd					nd				ns					nd			nd	nd	ns	
Copper (mg/l)	nd					nd				ns					nd			nd	nd	ns	
Detergents (mg/l)	1.00					1.50				ns					0.75			0.25	0.50	ns	
Phenols (mg/l)	nd					0.1				ns					nd			nd	nd	ns	
2000 Second Visit																					
Ammonia (mg/l)	0.7					0.7									0.6			0.8	0.5		
Chlorine (mg/l)	nd					nd									nd			nd	nd		
Copper (mg/l)	nd					nd									nd			nd	nd		
Detergents (mg/l)	0.75					1.00									0.50			0.25	0.75		
Phenols (mg/l)	nd					nd									nd			0.1	nd		
2001 First Visit																					
Ammonia (mg/l)		0.5				0.2		0.5		ns				0.1	0.4		0.6	0.1	0.2	0.2	
Chlorine (mg/l)		nd				nd		nd		ns				nd	nd		nd	nd	nd	nd	
Copper (mg/l)		nd				nd		nd		ns				0.1	nd		nd	nd	nd	nd	
Detergents (mg/l)		0.50				0.75		0.50		ns				0.25	0.25		0.75	0.25	0.25	0.25	
Phenols (mg/l)		nd				nd		nd		ns				nd	nd		nd	nd	nd	nd	
2001 Second Visit																					
Ammonia (mg/l)		0.4				0.3		0.5						0.2	0.5		0.6	0.2	0.3	0.7	
Chlorine (mg/l)		nd				nd		nd						nd	nd		nd	nd	nd	nd	
Copper (mg/l)		nd				nd		nd						nd	nd		nd	nd	nd	nd	
Detergents (mg/l)		0.25				0.75		0.50						0.50	0.50		0.75	0.25	0.25	0.25	
Phenols (mg/l)		nd				nd		nd						nd	nd		nd	nd	nd	nd	

ns = not sampled
nd = not detected

City of National City Dry Weather Historical Data

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2002																	
Temp.°C	23.0	20.0	26.0	ns	24.0	24.5	22.0	25.0	20.0	ns	22.0	23.0	23.5	23.0	22.0	24.0	31.5
pH	8.1	7.1	8.1	ns	7.6	8.5	7.7	9.1	8.2	ns	8.2	7.7	8.0	7.8	7.5	7.6	9.5
Conductivity, mS/cm	2.00	10.25	0.98	ns	11.35	1.10	1.17	1.26	3.46	ns	1.25	2.70	0.98	1.46	7.28	1.00	1.13
Turbidity, NTU	95.00	64.00	2.71	ns	1.88	11.91	4.20	5.49	4.24	ns	13.94	4.12	300.00	9.19	7.79	13.66	8.96
Ammonia, mg/l	5.0	2.0	0.3	ns	0.3	0.5	1.0	0.5	0.7	ns	0.3	0.5	2.5	1.5	1.4	2.0	2.0
Nitrate, mg/l	0.30	nd	0.15	ns	0.10	0.30	0.20	0.70	0.60	ns	2.00	nd	0.80	1.00	0.10	0.15	nd
Orthophosphate-P, mg/l	1.96	0.98	1.30	ns	0.16	1.30	1.60	0.65	0.49	ns	0.49	0.65	0.49	1.30	0.98	1.30	0.32
Detergents, mg/l Field	24.00	3.00	0.50	ns	0.50	0.50	0.75	0.25	0.50	ns	0.50	0.50	0.75	0.75	6.75	6.00	6.00
Surfactants (mg/L MBAS) Lab	6.76								nd			nd		0.69			
Oil and Grease (mg/L)	8.0								25.0			13.0		18.0			
Total Hardness (mg/L CaCO3)	267.0								631.0			338.0		237.0			
Cadmium-diss (mg/L)	nd								nd			nd		nd			
Copper-diss (mg/L)	nd								nd			nd		nd			
Lead-diss (mg/L)	nd								nd			nd		nd			
Zinc-diss (mgL)	0.260								nd			nd		nd			
Total Coliform Bacteria (MPN/100ml)	>160,000								20,000			13,000		>160,000			
Fecal Coliform Bacteria (MPN/100ml)	>160,000								11,000			8,000		90,000			
Enterococcus Bacteria (MPN/100ml)	5,000								300			2,300		30,000			
2003																	
Temp.°C	21.0	25.0	23.0	ns	25.5	20.5	22.0	23.0	20.5	ns	21.0	22.5	23.5	22.5	23.5	22.5	23.0
pH	7.9	7.6	6.8	ns	8.1	7.7	8.1	7.7	8.5	ns	7.4	8.2	7.4	7.5	8.1	7.5	9.0
Conductivity, mS/cm	1.36	>20.00	1.36	ns	9.58	1.43	1.12	1.67	1.70	ns	1.39	3.12	1.53	1.72	>20.00	2.20	1.37
Turbidity, NTU	7.21	25.01	2.50	ns	0.42	6.61	14.47	10.73	3.95	ns	36.29	11.94	3.35	6.51	26.82	45.32	12.21
Ammonia, mg/l	0.1	0.1	0.2	ns	0.3	1.0	2.0	0.4	0.1	ns	1.5	0.8	0.2	0.4	1.5	2.0	0.8
Nitrate, mg/l	0.3	0.1	0.3	ns	0.3	0.1	0.1	0.6	0.5	ns	0.8	0.1	0.8	0.4	0.3	2.5	nd
Orthophosphate-P, mg/l	0.07	0.65	0.49	ns	0.07	1.30	0.49	0.20	0.10	ns	0.65	0.82	0.26	0.49	0.65	0.65	0.32
Detergents, mg/l Field	0.25	1.50	0.25	ns	0.25	0.25	0.50	0.50	0.25	ns	0.25	0.50	0.25	0.50	1.50	>3.00	1.00
Surfactants (mg/L MBAS) Lab	nd					nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					1.0			
Total Hardness (mg/L CaCO3)	208					180			345					320			
Cadmium-diss (mg/L)	nd					nd			nd					nd			
Copper-diss (mg/L)	0.011					0.006			nd					0.008			
Lead-diss (mg/L)	nd					nd			nd					nd			
Zinc-diss (mgL)	nd					0.045			nd					0.035			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100ml)	90,000					50,000			160,000					90,000			
Fecal Coliform Bacteria (MPN/100ml)	50,000					24,000			50,000					30,000			
Enterococcus Bacteria (MPN/100ml)	8,000					30,000			300					11,000			

ns = not sampled
nd = not detected

City of National City Dry Weather Historical Data

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2004																	
Temp.℃	23	17	22	ns	24	20	24	21	22	ns	24	20	25	22	24	26	30
pH	7.8	7.4	7.9	ns	7.7	7.8	8.2	7.1	8.3	ns	8.4	8.1	7.9	7.5	7.5	7.9	8.9
Conductivity, mS/cm	1.74	20.00	1.25	ns	10.76	1.45	1.35	1.70	1.94	ns	1.26	1.61	1.42	1.44	20.00	1.88	2.16
Turbidity, NTU	11.51	6.41	1.64	ns	1.88	4.38	24.00	8.88	4.56	ns	46.00	29.13	3.21	18.27	5.65	70.00	5.53
Ammonia, mg/l	0.8	0.4	0.1	ns	0.1	0.4	1.5	3.0	0.3	ns	0.3	0.6	0.7	0.8	0.8	2.0	1.0
Nitrate, mg/l	1.25	1.25	1.25	ns	1.25	1.25	1.25	1.25	1.25	ns	2.50	1.25	1.25	1.25	1.25	1.25	1.25
Orthophosphate-P, mg/l	0.98	0.82	0.65	ns	0.07	1.47	1.47	0.49	0.33	ns	1.14	3.26	0.98	1.14	1.30	1.30	0.07
Detergents, mg/l Field	0.88	2.00	0.50	ns	0.75	0.25	0.75	0.50	0.38	ns	2.50	1.00	1.25	1.25	2.50	3.00	2.50
Surfactants (mg/L MBAS) Lab	nd					nd			nd					0.6			
Oil and Grease (mg/L)	1.0					nd			nd					2.0			
Total Hardness (mg/L CaCO3)	268					320			404					246			
Cadmium-diss (mg/L)	nd					nd			nd					0.014			
Copper-diss (mg/L)	nd					0.005			nd					nd			
Lead-diss (mg/L)	nd					nd			nd					nd			
Zinc-diss (mgL)	0.032					0.030			0.022					0.039			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100ml)	900,000					90,000			50,000					1,600,000			
Fecal Coliform Bacteria (MPN/100ml)	30,000					2,200			2,200					160,000			
Enterococcus Bacteria (MPN/100ml)	30,000					5,000			1,300					22,000			
2005																	
Temp.℃	20.5	24.8	22.3	ns	25.1	19.8	20.7	20.1	20.6	ns	19.4	25.0	22.4	21.4	24.7	20.1	20.2
pH	7.4	8.8	7.7	ns	7.8	6.9	7.5	7.8	8.1	ns	7.9	8.3	8.3	7.9	7.5	8.4	8.8
Conductivity, mS/cm	1.09	7.78	1.82	ns	13.22	1.42	1.49	1.93	2.20	ns	1.01	2.97	1.28	1.32	12.40	1.05	1.68
Turbidity, NTU	8.88	3.44	2.81	ns	1.28	7.50	23.84	10.22	3.07	ns	11.88	3.54	3.22	7.44	4.52	46.65	8.65
Ammonia, mg/l	0.8	0.3	0.2	ns	0.2	0.6	2.0	0.7	1.5	ns	0.5	0.2	0.2	0.4	0.3	0.8	0.2
Nitrate, mg/l	1.25	1.25	1.25	ns	1.25	1.25	1.25	1.25	1.25	ns	1.25	2.50	1.25	1.25	1.25	1.25	1.25
Orthophosphate-P, mg/l	0.33	0.13	0.33	ns	0.03	0.26	0.65	0.49	1.00	ns	0.65	0.10	0.26	0.33	0.82	0.33	0.26
Detergents, mg/l Field	1.50	0.75	0.25	ns	0.50	0.75	0.75	0.50	0.75	ns	0.75	0.50	0.25	0.75	1.00	0.50	0.25
Surfactants (mg/L MBAS) Lab	0.9					nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	279					312			538					351			
Cadmium-diss (mg/L)	nd					nd			nd					nd			
Copper-diss (mg/L)	nd					nd			nd					0.006			
Lead-diss (mg/L)	nd					nd			nd					nd			
Zinc-diss (mgL)	nd					0.041			nd					0.029			
Diazinon (µg/L)	0.15					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100 mL)	1,600,000					500,000			1,600,000					1,600,000			
Fecal Coliform Bacteria (MPN/100 mL)	50,000					22,000			130,000					2,800			
Enterococcus Bacteria (MPN/100ml)	50,000					80,000			7,000					22,000			

ns = not sampled

nd = not detected

City of National City Dry Weather Historical Data

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2006																	
Temp.℃	21.7	28.0	29.0	ns	28.5	18.4	22.0	22.8	20.2	ns	23.4	28.5	24.3	24.5	26.2	30.1	19.8
pH	8.0	8.6	8.2	ns	7.7	8.3	8.4	8.0	8.5	ns	8.0	8.8	8.5	8.0	7.8	7.9	8.7
Conductivity, mS/cm	1.83	20.00	3.16	ns	15.04	1.48	1.25	3.44	3.65	ns	1.13	1.92	1.15	1.19	20.00	3.40	1.65
Turbidity, NTU	10.18	3.28	3.45	ns	1.08	9.54	24.34	4.77	5.83	ns	18.75	10.30	2.08	3.38	13.06	27.95	11.08
Ammonia, mg/l	0.4	0.1	0.3	ns	0.4	0.4	0.8	0.6	0.2	ns	0.4	0.3	0.2	0.3	0.4	1.5	0.4
Nitrate, mg/l	2.50	2.50	1.25	ns	1.25	1.25	1.25	1.25	2.50	ns	1.25	2.50	2.50	1.25	2.50	1.25	1.25
Orthophosphate-P, mg/l	1.96	0.65	0.81	ns	0.13	0.65	1.30	0.26	0.26	ns	0.65	0.20	0.82	0.82	0.26	1.63	1.63
Detergents, mg/l Field	1.00	1.50	0.75	ns	0.75	0.75	0.75	0.50	0.50	ns	0.63	0.37	0.13	0.50	1.50	3.00	0.75
Surfactants (mg/L MBAS) Lab	nd					nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	391					249			774					231			
Cadmium-diss (mg/L)	nd					nd			nd					nd			
Copper-diss (mg/L)	nd					0.009			0.005					0.017			
Lead-diss (mg/L)	nd					nd			nd					nd			
Zinc-diss (mgL)	nd					0.110			0.021					0.020			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100 mL)	240,000					350,000			13,000					240,000			
Fecal Coliform Bacteria (MPN/100 mL)	50,000					90,000			500					13,000			
Enterococcus Bacteria (MPN/100ml)	30,000					8,000			2,800					50,000			
2007																	
Temp.℃	20.8	19.9	24.1	ns	24.4	19.1	21.8	19.2	20.8	22.2	20.7	28.5	22.7	22.8	23.1		20.5
pH	7.3	7.9	8.4	ns	8.0	7.7	7.3	7.5	8.7	8.1	7.4	10.0	8.3	7.3	8.2		8.3
Conductivity, mS/cm	1.22	8.91	1.27	ns	12.44	1.74	5.04	2.68	4.27	1.41	1.44	1.18	1.06	1.42	2.74		2.09
Turbidity, NTU	0.10	18.43	0.92	ns	0.10	1.60	2.97	0.10	5.08	3.38	5.46	4.77	0.10	7.98	0.67		2.67
Ammonia, mg/l	0.1	0.3	0.1	ns	0.3	0.1	0.3	0.1	0.4	0.3	0.1	0.1	nd	0.1	0.4		0.1
Nitrate, mg/l	0.61	0.43	0.57	ns	0.52	1.15	2.24	0.88	1.76	1.06	1.33	0.59	0.57	0.45	0.45		0.43
Orthophosphate-P, mg/l	0.46	1.17	0.85	ns	0.07	0.42	0.39	0.36	0.36	1.01	0.55	0.46	0.13	0.88	0.72		0.65
Surfactants, mg/l (field)	1.00	0.75	1.25	ns	0.75	0.50	0.75	0.50	0.63	0.63	0.75	0.38	0.75	1.00	0.75		0.50
Surfactants (mg/L MBAS)(Lab)	0.7					nd			nd					0.8			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	234					279			1,010					354			
Cadmium-diss (mg/L)	nd					nd			nd					nd			
Copper-diss (mg/L)	nd					0.008			nd					nd			
Lead-diss (mg/L)	0.008					nd			nd					nd			
Zinc-diss (mgL)	0.041					0.034			nd					nd			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100 mL)	500,000					23,000			30,000					>1,600,000			
Fecal Coliform Bacteria (MPN/100 mL)	24,000					8,000			2,300					>160,000			
Enterococcus Bacteria (MPN/100ml)	24,000					13,000			2,300					>160,000			

ns = not sampled

nd = not detected

City of National City Dry Weather Historical Data

Site No	1A	3	4	6	13A	31A	32	38	40	41	42	43A	44A	44	45	46	47	48	49
2008																			
Temp.°C	25.9	27.5	ns	27.3	ns	ns	22.8	24.3	23.1	24.3	ns	25.0	26.3	24.7	25.8	25.5	25.5	23.9	23.4
pH	7.20	7.76	ns	8.95	ns	ns	7.64	7.44	7.68	8.19	ns	7.61	8.89	8.29	8.12	8.25	7.45	7.41	8.34
Conductivity, mS/cm	1.41	0.57	ns	>20.00	ns	ns	0.99	1.35	2.93	4.32	ns	1.03	1.15	1.41	1.37	0.74	>20.00	2.02	2.12
Turbidity, NTU	41.98	4.41	ns	2.37	ns	ns	1.78	26.71	3.43	0.82	ns	5.44	1.48	1.97	36.13	3.99	8.30	52.00	12.95
Ammonia, mg/l	0.164	0.083	ns	0.486	ns	ns	0.151	0.400	0.355	0.288	ns	0.693	0.287	0.068	0.851	0.132	0.425	0.843	0.468
Nitrate, mg/l	0.95	1.45	ns	0.82	ns	ns	0.88	0.88	0.84	1.92	ns	1.70	1.03	0.61	1.04	1.62	0.67	0.80	0.74
Orthophosphate-P, mg/l	0.59	0.15	ns	0.02	ns	ns	0.31	1.61	0.60	0.34	ns	0.70	0.50	0.24	1.46	0.34	0.27	4.63	0.93
Surfactants, mg/l (field)	>3.00	0.38	ns	2.50	ns	ns	0.75	1.25	0.38	0.50	ns	0.63	0.50	0.38	3.00	0.25	1.75	>3.00	0.75
Oil and Grease (mg/L)	nd						nd		nd							nd			
Total Hardness (mg/L CaCO3)	324						138		820							101			
Cadmium-diss (mg/L)	nd						nd		nd							nd			
Copper-diss (mg/L)	nd						0.0243		0.0052							0.0131			
Lead-diss (mg/L)	nd						nd		nd							nd			
Zinc-diss (mgL)	nd						0.0652		0.0204							0.0410			
Diazinon (µg/L)	nd						nd		nd							nd			
Chlorpyrifos (µg/L)	nd						nd		nd							nd			
Total Coliform Bacteria (MPN/100 mL)	>1,600,000						70,000		800							17,000			
Fecal Coliform Bacteria (MPN/100 mL)	>160,000						11,000		40							5,000			
Enterococcus Bacteria (MPN/100ml)	50,000						3,000		70							30,000			

ns = not sampled
nd = not detected

Appendix B

Photographs of Sampling Locations

Site 1A	
Site 3	
Site 4	

Site 6	
Site 13A	
Site 31A	

Site 32	
Site 38	
Site 40	

Site 41	
Site 42	
Site 43A	

Site 44	
Site 44A	
Site 45	

Site 46	
Site 47	
Site 48	

Site 49	

Appendix C

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

07 August 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0907804

Project Name: National City Dry Weather Monitoring
Project Desc./#:200938W-5

Enclosed are the results of analyses for samples received by the laboratory on 07/30/09 16:02. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907804

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site-32	0907804-01	Water	07/30/09 13:30	07/30/09 16:02
Site-1A	0907804-02	Water	07/30/09 14:25	07/30/09 16:02

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907804

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site-32 (0907804-01) Water Sampled: 07/30/09 13:30 Received: 07/30/09 16:02									
Cadmium	ND	0.001	mg/l	1	9080535	08/05/09	08/05/09	EPA 200.8	
Copper	**0.006**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	**0.028**	0.020	"	"	"	"	"	"	
Site-1A (0907804-02) Water Sampled: 07/30/09 14:25 Received: 07/30/09 16:02									
Cadmium	ND	0.001	mg/l	1	9080535	08/05/09	08/05/09	EPA 200.8	
Copper	**0.002**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907804

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site-32 (0907804-01) Water Sampled: 07/30/09 13:30 Received: 07/30/09 16:02									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9080312	08/03/09	08/06/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*96 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*92 %*	*60-130*		"	"	"	"	
Site-1A (0907804-02) Water Sampled: 07/30/09 14:25 Received: 07/30/09 16:02									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9080312	08/03/09	08/06/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*108 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*76 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907804

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site-32 (0907804-01) Water Sampled: 07/30/09 13:30 Received: 07/30/09 16:02									
Hardness (Total)	**196**	10	mg CaCO3/L	1	9080322	08/03/09	08/07/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	"	9080626	08/06/09	08/06/09	EPA 1664A	
Site-1A (0907804-02) Water Sampled: 07/30/09 14:25 Received: 07/30/09 16:02									
Hardness (Total)	**270**	10	mg CaCO3/L	1	9080322	08/03/09	08/07/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	"	9080626	08/06/09	08/06/09	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907804

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site-32 (0907804-01) Water Sampled: 07/30/09 13:30 Received: 07/30/09 16:02									
Total Coliforms	**23000**	2000	MPN/100 ml	1000	9080112	07/30/09	08/03/09	SM 9221 B, E	
Fecal Coliforms	**8000**	200	"	100	"	"	08/02/09	"	
Enterococcus	**2200**	20	"	10	9080113	"	08/03/09	SM 9230 A, B	
Site-1A (0907804-02) Water Sampled: 07/30/09 14:25 Received: 07/30/09 16:02									
Total Coliforms	**300000**	2000	MPN/100 ml	1000	9080112	07/30/09	08/03/09	SM 9221 B, E	
Fecal Coliforms	**17000**	200	"	100	"	"	08/02/09	"	
Enterococcus	**160000**	200	"	"	9080113	"	08/03/09	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907804

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080535										
Blank (9080535-BLK1)				Prepared & Analyzed: 08/05/09						
Cadmium	ND	0.001	mg/l							
Copper	ND	0.001	"							
Lead	ND	0.001	"							
Zinc	ND	0.020	"							
LCS (9080535-BS1)				Prepared & Analyzed: 08/05/09						
Cadmium	0.051	0.001	mg/l	0.0500		101	85-115			
Copper	0.050	0.001	"	0.0500		101	85-115			
Lead	0.050	0.001	"	0.0500		100	75-125			
Zinc	0.049	0.020	"	0.0500		99	85-115			
LCS Dup (9080535-BSD1)				Prepared & Analyzed: 08/05/09						
Cadmium	0.048	0.001	mg/l	0.0500		95	85-115	6	20	
Zinc	0.048	0.020	"	0.0500		96	85-115	3	20	
Copper	0.049	0.001	"	0.0500		97	85-115	4	20	
Lead	0.048	0.001	"	0.0500		96	75-125	4	20	
Duplicate (9080535-DUP1)		**Source: 0907829-02**		Prepared & Analyzed: 08/05/09						
Cadmium	0.0002	0.001	mg/l		0.0002				20	
Copper	0.002	0.001	"		0.002			7	20	
Lead	ND	0.001	"		ND				20	
Zinc	0.008	0.020	"		0.008			3	20	
Matrix Spike (9080535-MS1)		**Source: 0907829-02**		Prepared & Analyzed: 08/05/09						
Copper	0.047	0.001	mg/l	0.0500	0.002	91	70-130			
Lead	0.053	0.001	"	0.0500	ND	107	75-125			
Cadmium	0.048	0.001	"	0.0500	0.0002	95	70-130			
Zinc	0.053	0.020	"	0.0500	0.008	90	70-130			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907804

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080535										
Matrix Spike Dup (9080535-MSD1)		**Source: 0907829-02**		Prepared & Analyzed: 08/05/09						
Zinc	0.054	0.020	mg/l	0.0500	0.008	94	70-130	3	20	
Copper	0.049	0.001	"	0.0500	0.002	94	70-130	3	20	
Cadmium	0.050	0.001	"	0.0500	0.0002	100	70-130	5	20	
Lead	0.043	0.001	"	0.0500	ND	87	75-125	21	20	QM-06

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907804

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080312										
Blank (9080312-BLK1)				Prepared: 08/03/09	Analyzed: 08/06/09					**GC-05**
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.290*		*"*	*0.250*		*116*	*60-130*			
Surrogate: Tribuytlphosphate	*0.210*		*"*	*0.250*		*84*	*60-130*			
LCS (9080312-BS1)				Prepared: 08/03/09	Analyzed: 08/06/09					**GC-05**
Bolstar	0.30	0.10	ug/l	0.500		60	60-130			
Diazinon	0.51	0.05	"	0.500		102	60-130			
Ethoprop	0.46	0.05	"	0.500		92	60-130			
Mevinphos	0.37	0.25	"	0.500		74	60-130			
Methyl parathion	0.47	0.10	"	0.500		94	60-130			
Phorate	0.49	0.05	"	0.500		98	60-130			
Ronnel	0.44	0.25	"	0.500		88	60-130			
Trichlorinate	0.47	0.05	"	0.500		94	60-130			
Surrogate: Triphenyl phosphate	*0.290*		*"*	*0.250*		*116*	*60-130*			
Surrogate: Tribuytlphosphate	*0.160*		*"*	*0.250*		*64*	*60-130*			
LCS Dup (9080312-BSD1)				Prepared: 08/03/09	Analyzed: 08/06/09					**GC-05**
Bolstar	0.33	0.10	ug/l	0.500		66	60-130	10	30	
Diazinon	0.52	0.05	"	0.500		104	60-130	2	30	
Ethoprop	0.44	0.05	"	0.500		88	60-130	4	30	
Mevinphos	0.40	0.25	"	0.500		80	60-130	8	30	
Methyl parathion	0.46	0.10	"	0.500		92	60-130	2	30	
Phorate	0.51	0.05	"	0.500		102	60-130	4	30	
Ronnel	0.48	0.25	"	0.500		96	60-130	9	30	
Trichlorinate	0.42	0.05	"	0.500		84	60-130	11	30	
Surrogate: Triphenyl phosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.190*		*"*	*0.250*		*76*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907804

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080322										
Blank (9080322-BLK1)				Prepared: 08/03/09	Analyzed: 08/04/09					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9080322-DUP1)		**Source: 0907768-01**		Prepared: 08/03/09	Analyzed: 08/04/09					
Hardness (Total)	55	10	mg CaCO3/L		53			3	20	
Batch 9080626										
Blank (9080626-BLK1)				Prepared & Analyzed: 08/06/09						
Oil & Grease	ND	5	mg/l							
LCS (9080626-BS1)				Prepared & Analyzed: 08/06/09						
Oil & Grease	34	5	mg/l	40.0		85	78-114			
LCS Dup (9080626-BSD1)				Prepared & Analyzed: 08/06/09						
Oil & Grease	35	5	mg/l	40.0		87	78-114	2	20	
Matrix Spike (9080626-MS1)		**Source: 0908056-01**		Prepared & Analyzed: 08/06/09						
Oil & Grease	37	5	mg/l	40.0	ND	92	78-114			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QM-06	Due to noted non-homogeneity of the QC sample matrix, the MS/MSD did not provide reliable results for accuracy and precision. Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: 858-586-6600 Fax:

Email:

Billing Address: Same

Project ID: National City Dry Weather 2009

Project #: 200938W-5 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 ☒	8015B (TPH) □ Gas □ Diesel □ Ex	624/8260 (VOC) Full BTXE MTB	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestic	608 / 8082 (Polychlorinated Biphe	8141 (Organophosphorus Pesticide	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TT	TCLP (RCRA) □ Metals □ Orga	Cd Cr Cu Pb Ni Ag Zn	Coliform, ☒Total (MTF) ☒Fecal
1	Site-32	7/30	13:30	W	2G/4P	X						X						X X	X X
2	Site-1A	7/30	14:25	W	2G/4P	X						X						X X	X X
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY		DATE/TIME
Signature	[signature]	7/30/09 16:02
Print	Joe Leonard	
Company:	D-Max	
Signature		
Print		
Company:		
Signature		
Print		
Company:		

Project/Sample Comments:

T=8.1 on ice

[1]Additional costs may apply, consult a project manager for details. White- EMA Canary - Accounting Pink - Client

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 d of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

07 August 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0907829

Project Name: National City Dry Weather Monitoring
Project Desc./#:200938W-5

Enclosed are the results of analyses for samples received by the laboratory on 07/31/09 16:05. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907829

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 46	0907829-01	Water	07/31/09 13:45	07/31/09 16:05
Site 40	0907829-02	Water	07/31/09 14:50	07/31/09 16:05

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907829

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 46 (0907829-01) Water Sampled: 07/31/09 13:45 Received: 07/31/09 16:05									
Cadmium	ND	0.001	mg/l	1	9080535	08/05/09	08/05/09	EPA 200.8	
Copper	**0.017**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	**0.022**	0.020	"	"	"	"	"	"	
Site 40 (0907829-02) Water Sampled: 07/31/09 14:50 Received: 07/31/09 16:05									
Cadmium	ND	0.001	mg/l	1	9080535	08/05/09	08/05/09	EPA 200.8	
Copper	**0.002**	0.001	"	"	"	"	"	"	
Lead	ND	0.001	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907829

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 46 (0907829-01) Water Sampled: 07/31/09 13:45 Received: 07/31/09 16:05									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9080312	08/03/09	08/06/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*60 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*100 %*	*60-130*		"	"	"	"	
Site 40 (0907829-02) Water Sampled: 07/31/09 14:50 Received: 07/31/09 16:05									**GC-05**
Chlorpyrifos	ND	0.05	ug/l	1	9080312	08/03/09	08/06/09	EPA 8141A	
Diazinon	ND	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*84 %*	*60-130*		"	"	"	"	
Surrogate: Tribuytlphosphate		*60 %*	*60-130*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907829

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 46 (0907829-01) Water Sampled: 07/31/09 13:45 Received: 07/31/09 16:05									
Hardness (Total)	**202**	10	mg CaCO3/L	1	9080322	08/03/09	08/07/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	"	9080626	08/06/09	08/06/09	EPA 1664A	
Site 40 (0907829-02) Water Sampled: 07/31/09 14:50 Received: 07/31/09 16:05									
Hardness (Total)	**799**	100	mg CaCO3/L	10	9080322	08/03/09	08/07/09	EPA 200.7	
Oil & Grease	ND	5	mg/l	1	9080626	08/06/09	08/06/09	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907829

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 46 (0907829-01) Water Sampled: 07/31/09 13:45 Received: 07/31/09 16:05									
Total Coliforms	**30000**	2000	MPN/100 ml	1000	9080127	07/31/09	08/04/09	SM 9221 B, E	
Fecal Coliforms	**2800**	20	"	10	"	"	08/03/09	"	
Enterococcus	**22000**	200	"	100	9080128	"	08/04/09	SM 9230 A, B	
Site 40 (0907829-02) Water Sampled: 07/31/09 14:50 Received: 07/31/09 16:05									
Total Coliforms	**13000**	200	MPN/100 ml	100	9080127	07/31/09	08/04/09	SM 9221 B, E	
Fecal Coliforms	**40**	20	"	10	"	"	08/03/09	"	
Enterococcus	**210**	2	"	1	9080128	"	08/04/09	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907829

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080535										
Blank (9080535-BLK1)				Prepared & Analyzed: 08/05/09						
Lead	ND	0.001	mg/l							
Cadmium	ND	0.001	"							
Copper	ND	0.001	"							
Zinc	ND	0.020	"							
LCS (9080535-BS1)				Prepared & Analyzed: 08/05/09						
Cadmium	0.051	0.001	mg/l	0.0500		101	85-115			
Copper	0.050	0.001	"	0.0500		101	85-115			
Lead	0.050	0.001	"	0.0500		100	75-125			
Zinc	0.049	0.020	"	0.0500		99	85-115			
LCS Dup (9080535-BSD1)				Prepared & Analyzed: 08/05/09						
Lead	0.048	0.001	mg/l	0.0500		96	75-125	4	20	
Zinc	0.048	0.020	"	0.0500		96	85-115	3	20	
Cadmium	0.048	0.001	"	0.0500		95	85-115	6	20	
Copper	0.049	0.001	"	0.0500		97	85-115	4	20	
Duplicate (9080535-DUP1)		**Source: 0907829-02**		Prepared & Analyzed: 08/05/09						
Lead	ND	0.001	mg/l		ND				20	
Copper	0.002	0.001	"		0.002			7	20	
Cadmium	0.0002	0.001	"		0.0002				20	
Zinc	0.008	0.020	"		0.008			3	20	
Matrix Spike (9080535-MS1)		**Source: 0907829-02**		Prepared & Analyzed: 08/05/09						
Lead	0.053	0.001	mg/l	0.0500	ND	107	75-125			
Zinc	0.053	0.020	"	0.0500	0.008	90	70-130			
Cadmium	0.048	0.001	"	0.0500	0.0002	95	70-130			
Copper	0.047	0.001	"	0.0500	0.002	91	70-130			

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Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907829

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080535										
Matrix Spike Dup (9080535-MSD1)		**Source: 0907829-02**		Prepared & Analyzed: 08/05/09						
Copper	0.049	0.001	mg/l	0.0500	0.002	94	70-130	3	20	
Lead	0.043	0.001	"	0.0500	ND	87	75-125	21	20	QM-06
Cadmium	0.050	0.001	"	0.0500	0.0002	100	70-130	5	20	
Zinc	0.054	0.020	"	0.0500	0.008	94	70-130	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907829

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080312										
Blank (9080312-BLK1)				Prepared: 08/03/09	Analyzed: 08/06/09					**GC-05**
Chlorpyrifos	ND	0.05	ug/l							
Diazinon	ND	0.05	"							
Malathion	ND	0.05	"							
Surrogate: Triphenyl phosphate	*0.290*		*"*	*0.250*		*116*	*60-130*			
Surrogate: Tribuytlphosphate	*0.210*		*"*	*0.250*		*84*	*60-130*			
LCS (9080312-BS1)				Prepared: 08/03/09	Analyzed: 08/06/09					**GC-05**
Bolstar	0.30	0.10	ug/l	0.500		60	60-130			
Diazinon	0.51	0.05	"	0.500		102	60-130			
Ethoprop	0.46	0.05	"	0.500		92	60-130			
Mevinphos	0.37	0.25	"	0.500		74	60-130			
Methyl parathion	0.47	0.10	"	0.500		94	60-130			
Phorate	0.49	0.05	"	0.500		98	60-130			
Ronnel	0.44	0.25	"	0.500		88	60-130			
Trichlorinate	0.47	0.05	"	0.500		94	60-130			
Surrogate: Triphenyl phosphate	*0.290*		*"*	*0.250*		*116*	*60-130*			
Surrogate: Tribuytlphosphate	*0.160*		*"*	*0.250*		*64*	*60-130*			
LCS Dup (9080312-BSD1)				Prepared: 08/03/09	Analyzed: 08/06/09					**GC-05**
Bolstar	0.33	0.10	ug/l	0.500		66	60-130	10	30	
Diazinon	0.52	0.05	"	0.500		104	60-130	2	30	
Ethoprop	0.44	0.05	"	0.500		88	60-130	4	30	
Mevinphos	0.40	0.25	"	0.500		80	60-130	8	30	
Methyl parathion	0.46	0.10	"	0.500		92	60-130	2	30	
Phorate	0.51	0.05	"	0.500		102	60-130	4	30	
Ronnel	0.48	0.25	"	0.500		96	60-130	9	30	
Trichlorinate	0.42	0.05	"	0.500		84	60-130	11	30	
Surrogate: Triphenyl phosphate	*0.240*		*"*	*0.250*		*96*	*60-130*			
Surrogate: Tribuytlphosphate	*0.190*		*"*	*0.250*		*76*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0907829

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9080322										
Blank (9080322-BLK1)				Prepared: 08/03/09	Analyzed: 08/04/09					
Hardness (Total)	ND	10	mg CaCO3/L							
Duplicate (9080322-DUP1)		**Source: 0907768-01**		Prepared: 08/03/09	Analyzed: 08/04/09					
Hardness (Total)	55	10	mg CaCO3/L		53			3	20	
Batch 9080626										
Blank (9080626-BLK1)				Prepared & Analyzed: 08/06/09						
Oil & Grease	ND	5	mg/l							
LCS (9080626-BS1)				Prepared & Analyzed: 08/06/09						
Oil & Grease	34	5	mg/l	40.0		85	78-114			
LCS Dup (9080626-BSD1)				Prepared & Analyzed: 08/06/09						
Oil & Grease	35	5	mg/l	40.0		87	78-114	2	20	
Matrix Spike (9080626-MS1)		**Source: 0908056-01**		Prepared & Analyzed: 08/06/09						
Oil & Grease	37	5	mg/l	40.0	ND	92	78-114			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QM-06	Due to noted non-homogeneity of the QC sample matrix, the MS/MSD did not provide reliable results for accuracy and precision. Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.
GC-05	Results confirmed by GCMS.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: 858-586-6600 Fax:

Email:

Billing Address: same

Project ID: National City Dry Weather 2009

Project #: 200938W-5 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2	8015B (TPH) □ Gas □ Diesel □ Ex	624/8260 (VOC) Full BTXE MTB	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestici	608 / 8082 (Polychlorinated Biphe	8141 (Organophosphorus Pesticide	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TT	TCLP (RCRA) □ Metals □ Organ	Cd Cr Cu Pb Ni Ag Zn	Coliform, □ Total (MTF) □ Fecal (
1	Site 46	7/31/09	13:45	W	2G/4P	X						X						X X	X
2	Site 40	7/31/09	14:50	W	2G/4P	X						X						X	X
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:_____
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY		DATE/TIME
Signature	[signature]	7/31/09 16:05
Print	Joe Leonard	
Company:	D-Max	
Signature		
Print		
Company:		
Signature		
Print		
Company:		

Project/Sample Comments:

T=4° cooler

[1]Additional costs may apply, consult a project manager for details.

White- EMA Canary - Accounting Pink - Client

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

17 August 2009

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 0908257

Project Name: National City Dry Weather Monitoring
Project Desc./#: 200938W-6 Follow Up

Enclosed are the results of analyses for samples received by the laboratory on 08/11/09 12:38. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A - San Diego, California 92123 - (858) 560-7717 - Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0908257

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 1A-1	0908257-01	Water	08/11/09 10:00	08/11/09 12:38
Site 1A	0908257-02	Water	08/11/09 10:30	08/11/09 12:38
Site 46	0908257-03	Water	08/11/09 11:10	08/11/09 12:38
Site 46-1	0908257-04	Water	08/11/09 12:00	08/11/09 12:38

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0908257

Microbiological Parameters by Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Date Prepared Date Analyzed	Method	Notes
Site 1A-1 (0908257-01) Water Sampled: 08/11/09 10:00 Received: 08/11/09 12:38								
Total Coliforms	**98000**	100	MPN/100 ml	100	9081219	08/11/09 13:30 08/12/09 14:15	SM9223	
E. Coli	**933**	10	"	10	"	08/11/09 13:30 08/12/09 14:15	"	
Enterococcus	**3448**	10	"	"	9081220	08/11/09 13:30 08/12/09 14:15	Idexx	
Site 1A (0908257-02) Water Sampled: 08/11/09 10:30 Received: 08/11/09 12:38								
Total Coliforms	**77000**	100	MPN/100 ml	100	9081219	08/11/09 13:30 08/12/09 14:15	SM9223	
E. Coli	**1940**	10	"	10	"	08/11/09 13:30 08/12/09 14:15	"	
Enterococcus	**4352**	10	"	"	9081220	08/11/09 13:30 08/12/09 14:15	Idexx	
Site 46 (0908257-03) Water Sampled: 08/11/09 11:10 Received: 08/11/09 12:38								
Enterococcus	**5172**	10	MPN/100 ml	10	9081220	08/11/09 13:30 08/12/09 14:15	Idexx	
Site 46-1 (0908257-04) Water Sampled: 08/11/09 12:00 Received: 08/11/09 12:38								
Enterococcus	**246**	10	MPN/100 ml	10	9081220	08/11/09 13:30 08/12/09 14:15	Idexx	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 0908257

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: 858-586-6600 Fax:

Email:

Billing Address: Same

Project ID: National City Dry Weather Follow Up

Project #: 200938W-6 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 16	8015B (TPH) □ Gas □ Diesel □ Ex	624/8260 (VOC) Full BTXE MTB	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pestici	608 / 8082 (Polychlorinated Biphe	8141 (Organophosphorus Pesticide	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH3	CAC Title 22/CAM17 Metals □ TT	TCLP (RCRA) □ Metals □ Organ	Cd Cr Cu Pb Ni Ag Zn	Coliform, □ Total (MTF) □ Fecal (
1	Site 1A-1	8-11-09	10:00	W	2P														
2	Site 1A	↓	10:30	W	2P														
3	Site 46		11:10	W	1P														
4	Site 46-1	↓	12:00	W	1P														
5																			
6																			
7																			
8																			
9																			
10																			

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day ☒ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A	Containers Properly Preseved: Yes No N/A
Custody Seals Intact: Yes No N/A	Temp @ Receipt:
COC/Labels Agree: Yes No N/A	Sampled By: Client EMA Autosampler

RELINQUISHED BY		DATE/TIME
Signature	[signature]	8-11-09 12:38
Print	Joe Leonard	
Company:	D-Max	
Signature		
Print		
Company:		
Signature		
Print		
Company:		

Project/Sample Comments:

T=2° on ice

[1]Additional costs may apply, consult a project manager for details.

White- EMA Canary - Accounting Pink - Client

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 of after 30 days unless otherwise noted. All work is subject to EMA's terms and conditions.

Appendix D

Field Data and Trash Assessment Sheets

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☒ MS4 ☐ Receiving Water

Site ID	1A		Latitude	32.68575	Watershed	Hydrologic Unit	908
Location	Southwest of 43rd Street and Nordica Avenue		Longitude	-117.10166		Hydrologic Area	908.3
			TB Page	1289 H7		Hydrologic Subarea (Optional)	908.31
Date	7/30/09	Time 14:25	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☒ Sewage	☐ Other
Color	☐ None	☐ Yellow	☒ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☒ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 7,8,9

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.152	NO_3 (mg/L)	1.363	Ortho-PO_4 (mg/L)	2.803
pH (pH units)	7.6	TURB (NTU)	13.48	NO_3-N (mg/L)	0.308	Ortho-PO_4 -P (mg/L)	0.914
COND (mS/cm)	1.34	MBAS (mg/L)	JL 7.30 ~~3.0~~ 3.0				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 1A DATE: 7/30/09

OBSERVER: JL/MD TIME: 14:25

LOCATION: Southwest of 43rd Street and Nordica Avenue

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Submarginal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20 x 25

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☑ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

SITE ID: 1A

*** Complete the following section for Submarginal, and Poor Evaluations ONLY ***

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts	5		✓			✓					✓	
Construction												
Fabric/Clothing	4	✓	✓			✓					✓	
Food Packaging	1		✓	✓		✓					✓	
Food Waste	3		✓	✓		✓					✓	
Household	2	✓	✓			✓	✓					
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	1A		Latitude	32.68575	Watershed	Hydrologic Unit	908
Location	Southwest of 43rd Street and Nordica Avenue		Longitude	-117.10166		Hydrologic Area	908.3
			TB Page	1289 H7		Hydrologic Subarea (Optional)	908.31
Date	7/31/09	Time 9:35	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather: ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide: ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height: _____ ft.

Last Rain: ☑ > 72 hours ☐ < 72 hours

Rainfall: ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology: ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow: ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No Photo # _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.3	NH_3-N (mg/L)	nt	NO_3 (mg/L)	nt	Ortho-PO_4 (mg/L)	nt
pH (pH units)	7.3	TURB (NTU)	nt	NO_3-N (mg/L)	nt	Ortho-PO_4-P (mg/L)	nt
COND (mS/cm)	1.24	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Total Coliform / Ent

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	1A-1		Latitude	32.68739	Watershed	Hydrologic Unit	908
Location	Site 45 (In front of 1243-1305 Fig Court, in the middle of the street)		Longitude	-117.09690		Hydrologic Area	908.3
			TB Page	1289-J7		Hydrologic Subarea (Optional)	908.31
Date	8/11/09	Time 10:00	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☒ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☒ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	**Tide Height:** _____ ft.
Last Rain	☒ > 72 hours	☐ < 72 hours				
Rainfall	☒ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004, 4/15/2005, 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	3		Latitude	32.68183	Watershed	Hydrologic Unit	908
Location	East 7th Street and R Avenue		Longitude	-117.08894		Hydrologic Area	908.3
			TB Page	1290 A7		Hydrologic Subarea (Optional)	908.32
Date	7/30/09	Time 11:45	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 3,4

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.3	NH_3-N (mg/L)	0.051	NO_3 (mg/L)	2.266	Ortho-PO_4 (mg/L)	0.202
pH (pH units)	8.0	TURB (NTU)	4.05	NO_3-N (mg/L)	0.512	Ortho-PO_4 -P (mg/L)	0.066
COND (mS/cm)	0.47	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 3 DATE: 7/30/09

OBSERVER: JL/MD TIME: 11:45

LOCATION: East 7th Street and R Avenue

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6x6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☒ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LIV

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	4		Latitude	32.68726	Watershed	Hydrologic Unit	908
Location	East 1st Street and U Avenue		Longitude	-117.08749		Hydrologic Area	908.3
			TB Page	1290 A7		Hydrologic Subarea (Optional)	908.31
Date	8/3/09	Time 11:50	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other	na
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	na
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other	na
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	na
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 34, 35

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 4 DATE: 8/3/09

OBSERVER: JL/MD TIME: 11:50

LOCATION: East 1st Street and UL Avenue

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6x6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	6			Latitude	32.65668	Watershed: Hydrologic Unit	909
Location	North bank of Sweetwater River, 500 ft east of Highland Ave, access from North 2nd Ave			Longitude	-117.08844	Hydrologic Area	909.1
				TB Page	1310 A4	Hydrologic Subarea (Optional)	909.12
Date	8/3/09	Time	14:40	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☒ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather: ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide: ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height: _____ ft.

Last Rain: ☒ > 72 hours ☐ < 72 hours

Rainfall: ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology: ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow: ☐ Flowing ☒ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No Photo # 40, 41

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	29.5	NH_3-N (mg/L)	0.561	NO_3 (mg/L)	0.000 ND	Ortho-PO_4 (mg/L)	0.143
pH (pH units)	8.8	TURB (NTU)	9.95	NO_3-N (mg/L)	0.000 ND	Ortho-PO_4 -P (mg/L)	0.047
COND (mS/cm)	720	MBAS (mg/L)	0.88				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 6 DATE: 8/3/09

OBSERVER: JL/MD TIME: 14:40

LOCATION: Northbank of Sweetwater River, 500 ft east of Highland Ave, access from North 2nd Ave

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Poor

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☑ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☑ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

SITE ID: 6

*** Complete the following section for Submarginal, and Poor Evaluations ONLY ***

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive	4			✓		✓		✓				
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing	1			✓		✓					✓	
Food Packaging	5			✓		✓		✓				
Food Waste	6			✓		✓		✓				
Household	2			✓		✓						
Shopping Carts	3	✓		✓				✓			✓	
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Debris most likely originates upstream. Site does not appear to be used by transients frequently.

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☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	13A		Latitude	32.6694 2	Watershed	Hydrologic Unit	908
Location	Northeast of 16th Street and National City Blvd, inside Kimball Park		Longitude	-117.10326		Hydrologic Area	908.3
			TB Page	1309 H2		Hydrologic Subarea (Optional)	908.32
Date	8/3/09	Time 10:20	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 29, 30

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	27.8	NH_3-N (mg/L)	0.072	NO_3 (mg/L)	1.516	Ortho-PO_4 (mg/L)	0.446
pH (pH units)	8.2	TURB (NTU)	6.22	NO_3-N (mg/L)	0.343	Ortho-PO_4-P (mg/L)	0.145
COND (mS/cm)	~~6.72~~ 1.45	MBAS (mg/L)	0.75				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 13A DATE: 8/3/09

OBSERVER: JL/MD TIME: 10:20

LOCATION: Northeast of 16th Street and National City Blvd, inside Kimball Park

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Submarginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	31A		Latitude	32.66121	Watershed	Hydrologic Unit	909
Location	North of Sweetwater Road, across from 2nd Avenue at the corner of the golf course		Longitude	-117.08453		Hydrologic Area	909.1
			TB Page	130 A3		Hydrologic Subarea (Optional)	909.12
Date	8/3/09	Time 12:20	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other na
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other na
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other na
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 36, 37

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	Dry	gpm				Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 31A DATE: 8/3/09

OBSERVER: JL/MD TIME: 12:20

LOCATION: North of Sweetwater Road, across from 2nd Ave at the corner of golf cou

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
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☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	32		Latitude	32.65887	Watershed	Hydrologic Unit	909
Location	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River		Longitude	-117.08274		Hydrologic Area	909.1
			TB Page	1310 B4		Hydrologic Subarea (Optional)	909.12
Date	7/30/09	Time 13:30	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☒ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☒ Insects ☒ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 5,6

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)	0.097	NO_3 (mg/L)	1.785	Ortho-PO_4 (mg/L)	1.041
pH (pH units)	7.7	TURB (NTU)	4.97	NO_3-N (mg/L)	0.403	Ortho-PO_4-P (mg/L)	0.339
COND (mS/cm)	1.25	MBAS (mg/L)	0.50				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 32 DATE: 7/30/09

OBSERVER: JL/MD TIME: 13:30

LOCATION: East of 2nd Avenue, north of Freeway 54 and Sweetwater Riv

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Submarginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	38		Latitude	32.67265	Watershed	Hydrologic Unit	909
Location	Dirt road, west of Harbison Avenue, between 20th and 24th Streets, at the end of fence line		Longitude	-117.07057		Hydrologic Area	909.1
			TB Page	1310 C2		Hydrologic Subarea (Optional)	909.12
Date	7/30/09	Time 15:30	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☒ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather: ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide: ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height: _____ ft.

Last Rain: ☒ > 72 hours ☐ < 72 hours

Rainfall: ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	NA ~~☒ None~~	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other	na
Color	NA ~~☐ None~~	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other	na
Clarity	NA ~~☐ Clear~~		☐ Slightly Cloudy	☐ Opaque		☒ Other	na
Floatables	~~☒ None~~	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☒ Other	na
Deposits	☐ None	☒ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other	
Biology	☐ None	☒ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow: ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No Photo # 10, 11

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns		ns		ns

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 38 DATE: 7/30/09

OBSERVER: JL/MD TIME: 15:30

LOCATION: Dirt road, west of Harbison Ave, between 20th and 24th, at end of fe

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	40			Latitude	32.65961	Watershed: Hydrologic Unit	909
Location	Southwest corner of Sweetwater Rd and Plaza Bonita / Stockman St Down in channel			Longitude	-117.06677	Hydrologic Area	909.1
				TB Page	1310 D3	Hydrologic Subarea (Optional)	909.12
Date	7/31/09	Time	14:50	Observer	SL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☒ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☒ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	Tide Height: _____ ft.
Last Rain	☒ > 72 hours	☐ < 72 hours				
Rainfall	☒ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☒ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae	☒ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☒ Yes ☐ No Photo # 20, 21, 22

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.1	NH_3-N (mg/L)	0.325	NO_3 (mg/L)	2.779	Ortho-PO_4 (mg/L)	1.124
pH (pH units)	7.6	TURB (NTU)	3.94	NO_3-N (mg/L)	0.628	Ortho-PO_4-P (mg/L)	0.366
COND (mS/cm)	3.20	MBAS (mg/L)	0.38				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 40 DATE: 7/31/09

OBSERVER: JL/MD TIME: 14:50

LOCATION: Southwest corner of Sweetwater Rd and Plaza Bonita/Stockman St inchon

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Submarginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	41			Latitude	32.66588	Watershed: Hydrologic Unit	909
Location	Northeast of San Miguel Court and Valley Road, inside Park Bonita Apt Complex			Longitude	-117.05083	Hydrologic Area	909.1
				TB Page	1310 E2	Hydrologic Subarea (Optional)	909.12
Date	8/3/09	Time	13:45	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 38, 39

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.6	NH_3-N (mg/L)	0.247	NO_3 (mg/L)	4.478	Ortho-PO_4 (mg/L)	0.505
pH (pH units)	8.5	TURB (NTU)	1.00	NO_3-N (mg/L)	1.012	Ortho-PO_4-P (mg/L)	0.165
COND (mS/cm)	4.22	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 41 DATE: 8/3/09

OBSERVER: JL/MD TIME: 13:45

LOCATION: Northeast of San Miguel Court and Valley Road, inside Park Bonita Apt Complex

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☒ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	42		Latitude	32.66785	Watershed	Hydrologic Unit	909
Location	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church		Longitude	-117.07691		Hydrologic Area	909.1
			TB Page	1310 B2		Hydrologic Subarea (Optional)	909.12
Date	7/31/09	Time 10:10	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☒ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☒ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other na

Color ☒ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other na

Clarity ☒ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other na

Floatables ☒ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other na

Deposits ☒ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☒ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☒ Yes ☐ No **Photo #** 12, 13

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns		~~ns~~		~~ns~~

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 42 DATE: 7/31/09

OBSERVER: JL/MD TIME: 10:10

LOCATION: Southwest of Euclid Ave and 24th Street, south of Southern Community Church

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	43A		Latitude	32.66134	Watershed	Hydrologic Unit	909
Location	F Avenue between E. 24th Street and E. 28th Street, west of Olivewood Elementary School		Longitude	-117.09447		Hydrologic Area	909.1
			TB Page	1309 J3		Hydrologic Subarea (Optional)	909.12
Date	8/4/09	Time 11:45	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☒ Yes ☐ No **Photo #** 44, 45, 46,

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	26.6	NH_3-N (mg/L)	1.150	NO_3 (mg/L)	18.37	Ortho-PO_4 (mg/L)	2.723
pH (pH units)	7.9	TURB (NTU)	6.37	NO_3-N (mg/L)	4.152	Ortho-PO_4-P (mg/L)	0.888
COND (mS/cm)	1.05	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	<1	gpm				Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 43A DATE: 8/4/09

OBSERVER: JL/MD TIME: 11:45

LOCATION: F Avenue between E. 24th Street and E. 28th Street, west of Olivewood Elementary

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6x6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Ammonia ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	43 A		Latitude	32.66134	Watershed	Hydrologic Unit	909
Location	F Avenue between E. 24th Street and E. 28th Street, west of Olivewood Elementary School		Longitude	-117.09447		Hydrologic Area	909.1
			TB Page	1309 J3		Hydrologic Subarea (Optional)	909.12
Date	8/4/09	Time 16:15	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☒ Other	na
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☒ Other	na
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☒ Other	na
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☒ Other	na
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☒ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

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San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	14		Latitude	32.66982	Watershed	Hydrologic Unit	908
Location	Northeast of 16th Street and National City Blvd, under the Kimball Park Bridge		Longitude	-117.10247		Hydrologic Area	908.3
			TB Page	1309 H2		Hydrologic Subarea (Optional)	908.32
Date	8/4/09	Time 10:00	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☒ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☒ Insects	☒ Algae	☐ Fish	☒ Snails	☐ Mussels/ Barnacles ☒ Insect/ Algae ☒ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 42, 43

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.2	NH_3-N (mg/L)	0.256	NO_3 (mg/L)	0.314	Ortho-PO_4 (mg/L)	1.784
pH (pH units)	7.9	TURB (NTU)	7.49	NO_3-N (mg/L)	0.071	Ortho-PO_4-P (mg/L)	0.582
COND (mS/cm)	9.87	MBAS (mg/L)	0.75				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 44 DATE: 8/4/09

OBSERVER: JL/MD TIME: 10:00

LOCATION: Northeast of 16th Street and National City Blvd, under the Kimball Park Brid

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	44A		Latitude	32.67157	Watershed	Hydrologic Unit	908
Location	D Avenue behind Boys and Girls club in Kimball Park		Longitude	-117.10123		Hydrologic Area	908.3
			TB Page	1309 H2		Hydrologic Subarea (Optional)	908.32
Date	8/3/09	Time 11:20	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☑ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** 31-33

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.3	NH_3-N (mg/L)	0.050	NO_3 (mg/L)	1.948	Ortho-PO_4 (mg/L)	1.155
pH (pH units)	8.6	TURB (NTU)	1.65	NO_3-N (mg/L)	0.440	Ortho-PO_4-P (mg/L)	0.377
COND (mS/cm)	1.48	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 44A DATE: 8/3/09

OBSERVER: JL/MD TIME: 11:20

LOCATION: D Avenue behind Boys and Girls Club in Kimball Park

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ MS4 ☐ Receiving Water

Site ID	45			Latitude	32.68739	Watershed: Hydrologic Unit	908
Location	In front of 1243-1305 Fig Court, in the middle of street			Longitude	-117.09690	Hydrologic Area	908.3
				TB Page	1289 J7	Hydrologic Subarea (Optional)	908.31
Date	7/30/09	Time	10:15	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☒ Parks ☐ Open ☐ None

Conveyance (Check one only) ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☒ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☒ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 1, 2

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.047	NO_3 (mg/L)	1.037	Ortho-PO_4 (mg/L)	0.463
pH (pH units)	8.2	TURB (NTU)	1.68	NO_3-N (mg/L)	0.234	Ortho-PO_4 -P (mg/L)	0.151
COND (mS/cm)	1.03	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 45 DATE: 7/30/09

OBSERVER: JL/MD TIME: 10:15

LOCATION: In front of 1243-1305 Fig Court, in the middle of the street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6x8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	46			Latitude	32.67584	Watershed: Hydrologic Unit	908
Location	South of South Bay Plaza center, between Fashion plaza and Fiesta Pet Shop			Longitude	-117.09539	Hydrologic Area	908.3
				TB Page	1309 J1	Hydrologic Subarea (Optional)	908.32
Date	7/31/09	Time	13:45	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☒ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☒ Yes ☐ No **Photo #** 18, 19

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.3	NH_3-N (mg/L)	0.124	NO_3 (mg/L)	7.330	Ortho-PO_4 (mg/L)	3.414
pH (pH units)	8.0	TURB (NTU)	9.59	NO_3-N (mg/L)	1.657	Ortho-PO_4-P (mg/L)	1.113
COND (mS/cm)	0.99	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 46 DATE: 7/31/09

OBSERVER: JL/MD TIME: 13:45

LOCATION: South of South Bay Plaza Center, between Fashion Plaza and Fiesta Petsh

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

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San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Enterococ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	46		Latitude	32.67584	Watershed	Hydrologic Unit	908
Location	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop		Longitude	-117.09539		Hydrologic Area	908.3
			TB Page	1309-J1		Hydrologic Subarea (Optional)	908.32
Date	8/11/09	Time 11:10	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☒ Yes ☐ No **Photo #** 57-63

Field Screening Samples Collected? ☒ Yes ☐ No

Water Temp (°C)	24.7	NH_3-N (mg/L)	nt	NO_3 (mg/L)	nt	Ortho-PO_4 (mg/L)	nt
pH (pH units)	7.6	TURB (NTU)	15.36	NO_3-N (mg/L)	nt	Ortho-PO_4-P (mg/L)	nt
COND (mS/cm)	1.05	MBAS (mg/L)	nt				

Analytical Lab Samples Collected? ☒ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		in
Depth		in
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Enterо

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	46-1			Latitude	32.68183	Watershed: Hydrologic Unit	908
Location	East 7th Street and R Avenue, Site 3			Longitude	-117.08894	Hydrologic Area	908.3
				TB Page	1290-A7	Hydrologic Subarea (Optional)	908.32
Date	8/11/09	Time	12:00	Observer	JL/MD	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☑ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	Tide Height: ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☑ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow		gpm				Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	47		Latitude	32.66163	Watershed	Hydrologic Unit	908
Location	Southeast corner of the Mile of Cars Way and Transportation Avenue		Longitude	-117.10275		Hydrologic Area	908.3
			TB Page	1309 H3		Hydrologic Subarea (Optional)	908.32
Date	7/31/09	Time 12:00	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☒ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☒ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☑ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** 2.8 ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☒ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☒ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☒ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☒ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☒ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 16, 17

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.8	NH_3-N (mg/L)	0.463	NO_3 (mg/L)	1.976	Ortho-PO_4 (mg/L)	0.959
pH (pH units)	7.6	TURB (NTU)	7.48	NO_3-N (mg/L)	0.447	Ortho-PO_4-P (mg/L)	0.313
COND (mS/cm)	>20	MBAS (mg/L)	0.88				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 47 DATE: 7/31/09

OBSERVER: JL/MD TIME: 12:00

LOCATION: Southeast corner of the Mile of Cars Way and Transportation Avenue

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

IN

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	48		Latitude	32.67673	Watershed	Hydrologic Unit	908
Location	Northwest of E 14st and Grove St		Longitude	-117.08321		Hydrologic Area	908.3
			TB Page	1310 B1		Hydrologic Subarea (Optional)	908.32
Date	8/3/09	Time 9:30	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only): ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☑ Yes ☐ No ☑ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 23,24,25,26,27,28

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	28.0	NH_3-N (mg/L)	1.517	NO_3 (mg/L)	4.472	Ortho-PO_4 (mg/L)	11.30
pH (pH units)	7.5	TURB (NTU)	94	NO_3-N (mg/L)	1.011	Ortho-PO_4 -P (mg/L)	3.684
COND (mS/cm)	1.22	MBAS (mg/L)	>3				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 48 DATE: 8/3/09

OBSERVER: JL/MD TIME: 9:30

LOCATION: Northwest of E 14 Street and Grove St

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☒ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Ammonia, MBAS, Phos ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	48		Latitude	32.67673	Watershed	Hydrologic Unit	908
Location	Northwest of E 14st and Grove Street		Longitude	-117.08321		Hydrologic Area	908.3
			TB Page	1310 B1		Hydrologic Subarea (Optional)	908.32
Date	8/4/09	Time 9:30	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☒ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☒ None

Conveyance (Check one only) ☐ Manhole ☒ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☒ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☒ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☒ > 72 hours ☐ < 72 hours

Rainfall ☒ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☒ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other	na
Color	☒ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	na
Clarity	☒ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other	na
Floatables	☐ None	☒ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	na
Deposits	☐ None	☒ Sediment/Gravel	☒ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☒ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☒ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☒ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☒ N/A

Evidence of Overland Flow? ☐ Yes ☒ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☒ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☒ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4 -P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)					

Analytical Lab Samples Collected? ☐ Yes ☒ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

1A

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Total Coliform, Enterco ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	1A		Latitude	32.68575	Watershed	Hydrologic Unit	908
Location	Southwest of 43rd Street and Nordica Avenue		Longitude	-117.10166		Hydrologic Area	908.3
			TB Page	1289-H7		Hydrologic Subarea (Optional)	908.31
Date	8/11/09	Time 10:30	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 47-56

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.6	NH_3-N (mg/L)	nt	NO_3 (mg/L)	nt	Ortho-PO_4 (mg/L)	nt
pH (pH units)	7.4	TURB (NTU)	21.51	NO_3-N (mg/L)	nt	Ortho-PO_4-P (mg/L)	nt
COND (mS/cm)	1.32	MBAS (mg/L)	nt				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	<1	gpm				Flow		gpm

COMMENTS: _____

LN

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	49		Latitude	32.68095	Watershed	Hydrologic Unit	908
Location	South end of Arcadia Place (through Harbison Avenue and 11th Street)		Longitude	-117.07770		Hydrologic Area	908.3
			TB Page	1290 B7		Hydrologic Subarea (Optional)	908.32
Date	7/31/09	Time 10:40	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	☑ Sunny	☐ Partly Cloudy	☐ Overcast	☐ Fog		
Tide	☑ N/A	☐ Low	☐ Incoming	☐ High	☐ Outgoing	Tide Height: ____ ft.
Last Rain	☑ > 72 hours	☐ < 72 hours				
Rainfall	☑ None	☐ < 0.1"	☐ > 0.1"			

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No Photo # 14, 15

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.6	NH_3-N (mg/L)	1.187	NO_3 (mg/L)	2.581	Ortho-PO_4 (mg/L)	6.721
pH (pH units)	7.3	TURB (NTU)	33.44	NO_3-N (mg/L)	0.583	Ortho-PO_4-P (mg/L)	2.191
COND (mS/cm)	1.37	MBAS (mg/L)	3				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2009 Trash Assessment Form

SITE ID: 49 DATE: 7/31/09

OBSERVER: JL / MD TIME: 10:40

LOCATION: South end of Arcadia Place (through Harbison Ave and 11th Street)

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

LN

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Ammonia, MBAS, Phosphorus ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	49		Latitude	32.68095	Watershed	Hydrologic Unit	908
Location	South end of Arcadia Place (through Harbison Ave and 11th Street)		Longitude	-117.07770		Hydrologic Area	908.3
			TB Page	1290 B7		Hydrologic Subarea (Optional)	908.32
Date	8/3/09	Time 11:00	Observer	JL/MD		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☑ Other	na
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☑ Other	na
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☑ Other	na
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other	na
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other	
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☑ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	ns	NH_3-N (mg/L)	ns	NO_3 (mg/L)	ns	Ortho-PO_4 (mg/L)	ns
pH (pH units)	ns	TURB (NTU)	ns	NO_3-N (mg/L)	ns	Ortho-PO_4-P (mg/L)	ns
COND (mS/cm)	ns	MBAS (mg/L)	ns				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

CITY OF NATIONAL CITY

2009/2010

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

SEPTEMBER 2010

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

CITY OF NATIONAL CITY

2009/2010

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PREPARED BY:

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SAN DIEGO, CALIFORNIA 92121
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ACRONYMS AND ABBREVIATIONS

Acronym	Abbreviation
℃	Degrees Celsius
303(d) List	2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
BMP Manual	The City of National City Storm Water Best Management Practices Manual
CASQA	California Stormwater Quality Association
CIP	Capital Improvement Project
CIWMB	California Integrated Waste Management Board
CIWQS	California Integrated Water Quality Management System
City	City of National City
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CMC	Criteria Maximum Concentration
CMP	Corrugated Metal Pipe
CTR	California Toxics Rule
CWA	Clean Water Act/Federal Water Pollution Control Act
D-MAX	D-MAX Engineering, Inc.
DEH	County of San Diego Department of Environmental Health
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FOG	Fats, Oils, and Grease
General Construction Permit	State of California Construction General Permit
GIS	Geographic Information System
gpm	Gallons Per Minute
HA	Hydrologic Area
HDPE	High Density Polyethylene
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HOA	Home Owners' Association
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illicit Discharge
IHC	Interim Hydromodification Criteria
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
LID	Low Impact Development
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable
mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) Per 100 Milliliters
MS4	Municipal Separate Storm Sewer System
mS/cm	MilliSiemens Per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
nt	Not Tested
NTC	Notice to Comply
NTU	Nephelometric Turbidity Unit
PDPA	Pollutant Discharge Potential Assessment
Priority Project	Priority Development Project
PW	Public Works
RCP	Reinforced Concrete Pipe
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Government
SIC	Standard Industrial Classification
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 14.22 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TSS	Total Suspended Solids
TTWQ	Threat to Water Quality
WDID	Waste Discharge Identification Number
WQO	Basin Plan Water Quality Objectives
WQTR	Water Quality Technical Report
WURMP	Watershed Urban Runoff Management Program
µg/L	Micrograms Per Liter

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Maryam Babaki, P.E.
Director of Development Services / City Engineer

Date: 9/27/10

Telephone Number: (619) 336-4380

EXECUTIVE SUMMARY

The City of National City (City) has been actively developing and implementing storm water pollution prevention measures since 1990. The City's current Jurisdictional Urban Runoff Management Program (JURMP) was prepared in March 2008 in response to San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit). The Municipal Permit was jointly issued to 18 municipalities in San Diego County, including the City, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (collectively referred to as "Copermittees").

At the end of each fiscal year, the City is required to report a summary of its JURMP implementation activities to the RWQCB. This JURMP Annual Report presents the City's activities during the 2009/2010 fiscal year, which began on July 1, 2009 and ended on June 30, 2010. Each section of this JURMP Annual Report discusses how the City's efforts during 2009/2010 met the requirements of the Municipal Permit. Key actions taken for the major components of the City's storm water program are summarized below.

Development Planning Component

During 2009/2010, the City continued to oversee development activities occurring in the City to mitigate potential threats to water quality due to such activities. The City updated its Standard Urban Storm Water Mitigation Plan (SUSMP) requirements in February 2010. The City continued to require all development projects to submit applicability checklists to determine subjectivity to the City's SUSMP requirements. The City implemented its treatment control BMP operation and maintenance verification program, which included the utilization of a Microsoft Access treatment control BMP database to track information and prepare the maintenance verification letters distributed to responsible parties. The City also conducted inspections at sites with approved treatment control BMPs and exceeded Municipal Permit inspection frequencies.

Construction Component

During 2009/2010, a total of 76 construction storm water compliance inspections were completed at 11 construction sites, not including inspections for building permits, which also include a brief check for storm water BMPs. The City checked all construction projects for applicability to the maximum disturbed area limitation and guidelines for advanced treatment. The City's plan check process provided construction BMP fact sheets, and the inspection program required projects to comply with the City's minimum BMP requirements.

Municipal Component

The City inspected all high TTWQ municipal fixed facilities and continued its rigorous street sweeping and MS4 maintenance programs. A total of 975 tons of trash and debris were removed from street sweeping activities, and 33.7 tons of debris were removed

from standard MS4 maintenance. The City continued to maintain and repair or replace sanitary sewer lines, as needed, to decrease the potential for a sanitary sewer overflow (SSO). One SSO was reported, stopped, and effectively cleaned up in 2009/2010. The City received and appropriately addressed all complaints received by the City's Storm Water Hotline, the City website, and other City departments.

Industrial and Commercial Component

During 2009/2010 the City met the Municipal Permit requirement to inspect at least 25 percent of the City's industrial and commercial inventory, including 100 percent of its high threat to water quality (TTWQ) sites. During the inspections conducted in 2009/2010, the City notified industrial and commercial businesses of the City's BMP requirements through the City's inspection program. Inspectors also assessed each facility's compliance with the General Industrial Permit (Industrial Permit). The City updated the standard industrial and commercial inspection form to improve inspection result notification and also continued to collect additional data to assess the pollutant discharge potential at each site.

Residential Component

The City worked to educate its residents through a variety of means. During 2009/2010, the City continued to collaborate with the cities of Chula Vista and Imperial Beach to encourage residents to dispose of household hazardous waste (HHW) appropriately at a facility available to the public. The City also continued to host large item waste disposal events in fall and spring, as well as respond to calls made to the City storm water hotline regarding residential areas.

Illicit Discharge Detection and Elimination Component

As required by RWQCB Addendum No. 2 to the Municipal Permit, adopted on September 10, 2008, the reporting period for this component of the JURMP has been extended to September 30, 2010. The City will submit the details of how it implemented the illicit discharge detection and elimination component of its JURMP to the RWQCB no later than December 15, 2010.

Education Component

As a means to raise storm water awareness in various communities in the City, the City continued to conduct various education and outreach activities throughout 2009/2010. The City's efforts resulted in an estimated 18,637 impressions. The City developed a bilingual 2010 Storm Water Program Calendar, which presented storm water concepts as well as storm water related artwork created by local third grade students. Approximately 3,800 calendars were distributed to municipal staff, industrial and commercial business representatives, school-aged children, and residents. To better serve the City's diverse population, a variety of educational materials were distributed in Spanish as well as English.

Public Participation Component

During 2009/2010, the City provided a variety of opportunities for individuals in the City to participate in the City's storm water program. Activities included cleanup

events, which have a direct effect on water quality, as well as outreach activities, through which the City works to increase general knowledge and awareness regarding storm water issues. The City selected and honored the 2010 Storm Water Calendar art contest winners. In addition, 255 volunteers participated in the Coastal Cleanup Day and Creek to Bay Cleanup at two different sites in the City. Also, City residents continued to participate in routine large item and HHW waste disposal events.

Fiscal Analysis Component

The City continued to fund its storm water program as discussed in the City's JURMP. As required by the Municipal Permit, the Copermittees collectively developed new fiscal analysis reporting standards, which were implemented for the first time in 2009/2010.

Effectiveness Assessment Component

The City continued to evaluate the effectiveness of its storm water program based on the approach presented in the City's March 2008 JURMP update. The City has identified significant activities within each program component and metrics to assess each one. Standard tables to report this information have been created and included in Section 11 of this JURMP Annual Report.

Special Investigations

The City continued its Clean Community Program which promotes shared responsibility within communities to keep National City and local receiving waterbodies clean and free of pollution. The City also assessed pollutant discharge potential of industrial and commercial businesses; sediment, trash, and oil and grease had the highest average pollutant discharge potential scores.

Conclusions and Recommendations

The City will continue to implement the new and updated programs in its JURMP during 2009/2010; it is anticipated that some program refinements will be made as implementation progresses. The City will also continue to collaborate with the other Copermittees to improve the efficiency of its program.

1.0 INTRODUCTION

1.1 BACKGROUND

This Jurisdictional Urban Runoff Management Program (JURMP) Annual Report presents an activity summary for the City of National City (City) during the 2009/2010 fiscal year. The JURMP Annual Report preparation and submission are required by San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit).

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), established a framework for regulating Municipal Separate Storm Sewer System (MS4) discharges under the National Pollutant Discharge Elimination System (NPDES). In 1990, the RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region, followed by a revised permit in 2001. RWQCB Order No. 2001-01 was replaced by the current Municipal Permit in 2007.

In 2002, the City, like all regulated municipalities in the San Diego region (collectively referred to as Copermittees), developed and submitted a JURMP to the RWQCB. The City then submitted an updated JURMP, as required by the Municipal Permit, in March 2008. The JURMP explains management measures for different sectors, including municipal, industrial, commercial, construction, and significant development and re-development activities.

Annual reports documenting the implementation of the JURMP are required to be submitted to the RWQCB by September 30. This JURMP Annual Report presents data from the 2009/2010 fiscal year, which extended from July 1, 2009, to June 30, 2010.

1.1.2 CITY SETTING

The City of National City is located in southwest San Diego County, surrounded by the City of San Diego, Chula Vista, and unincorporated portions of San Diego County. The City itself covers approximately nine square miles and has an estimated population size of approximately 61,000 residents. Land use within the City is primarily residential, although a large industrial area can be found along the San Diego Bay. Commercial development is restricted to businesses and shopping centers along the main roadways. Land use is broken down by area and percentage of total in Table 1-1 and illustrated in Figure 1-1.

Table 1-1
City of National City Land Use Breakdown

Land Use	Total Area (Acres)	Percentage
Single Family Residential	1,216	30%
Transportation	1,149	29%
Commercial	490	12%
Industrial	251	6%
Multi-Family Residential	215	5%
Open	202	5%
Public Facilities and Utilities	174	4%
Vacant	115	3%
Parks	114	3%
Other Residential	41	1%
Office	22	1%
Water	20	<1%
Construction	6	<1%
Recreation	2	<1%
Total	**4,016**	**100%**

Source: 2007 SANDAG land-use data

The City of National City lies entirely within the San Diego Bay Watershed and constitutes approximately 1.6 percent of its total area. More specifically, the City is located within two sub-watersheds: Sweetwater and Pueblo San Diego. The majority of the southern part of National City drains to the Sweetwater River and ultimately discharges into San Diego Bay. La Paleta Creek (also known as 7th Street Channel) drains the northern part of the City and also discharges into San Diego Bay, while a very small western portion of the City drains directly to the San Diego Bay shoreline. Nearly all areas of the City that drain directly to San Diego Bay are within the San Diego Unified Port District. Lastly, the central portion of the City drains to Paradise Creek, a small salt marsh creek, which then discharges into the Sweetwater River. Watersheds in the City are shown in Figure 1-2.

San Diego Bay is listed in the 2006 CWA Section 303(d) for polychlorinated biphenyls (PCB) based on recent fish tissue analyses. The shorelines at 7th Street Channel and at the 24th Street Marine Terminal are also listed in the 2006 CWA Section 303(d) for benthic community effects and sediment toxicity. Currently, the TMDL for the mouth of 7th Street Channel has not been adopted. Sweetwater Marsh, which is part of a national wildlife refuge, is considered an ESA. In addition, Paradise Creek is considered an ESA by the City.

Figure 1-1
City of National City Land Use

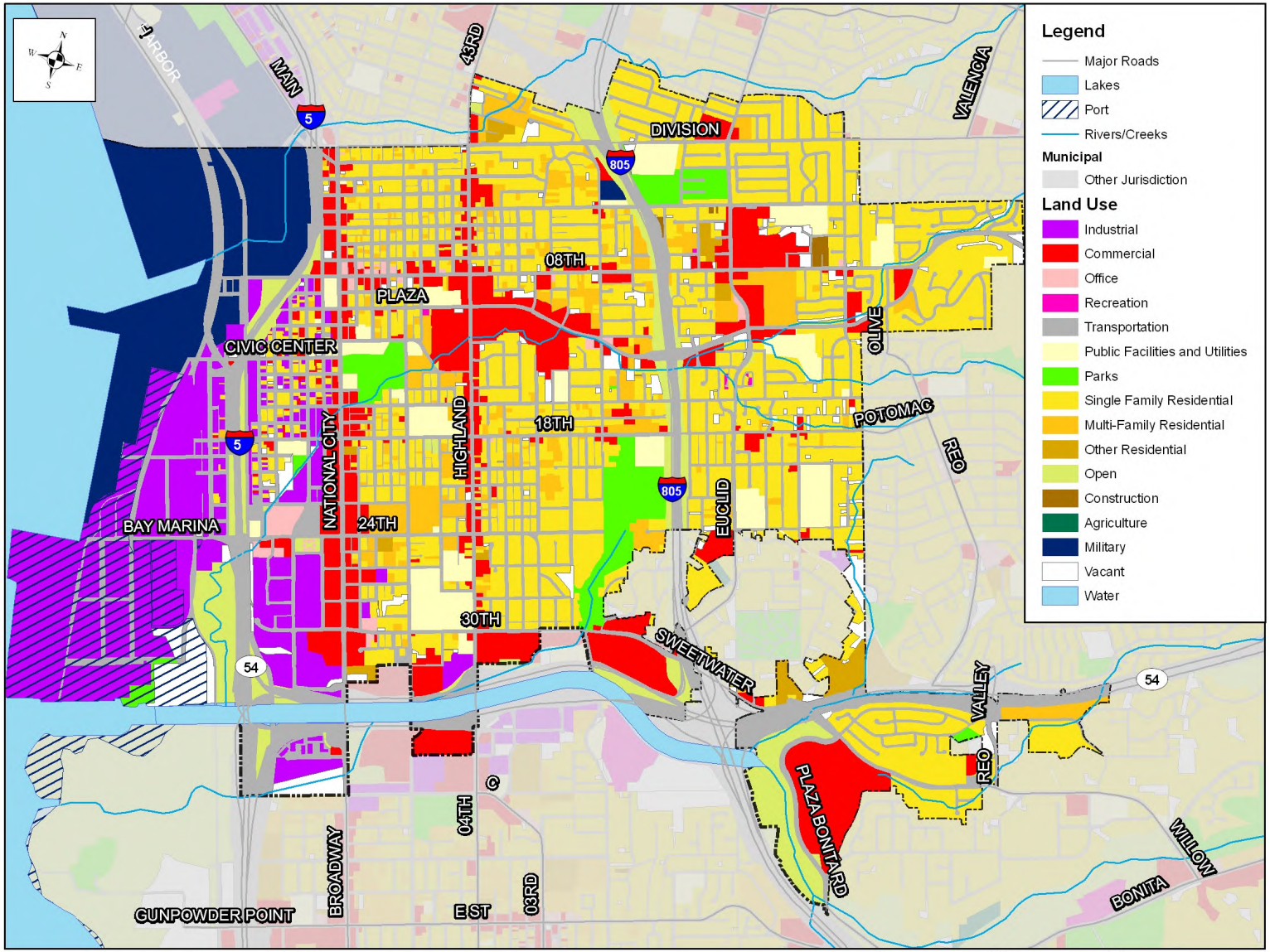

Base Data Sources: SANDAG, SanGIS

Figure 1-2
City of National City Watersheds

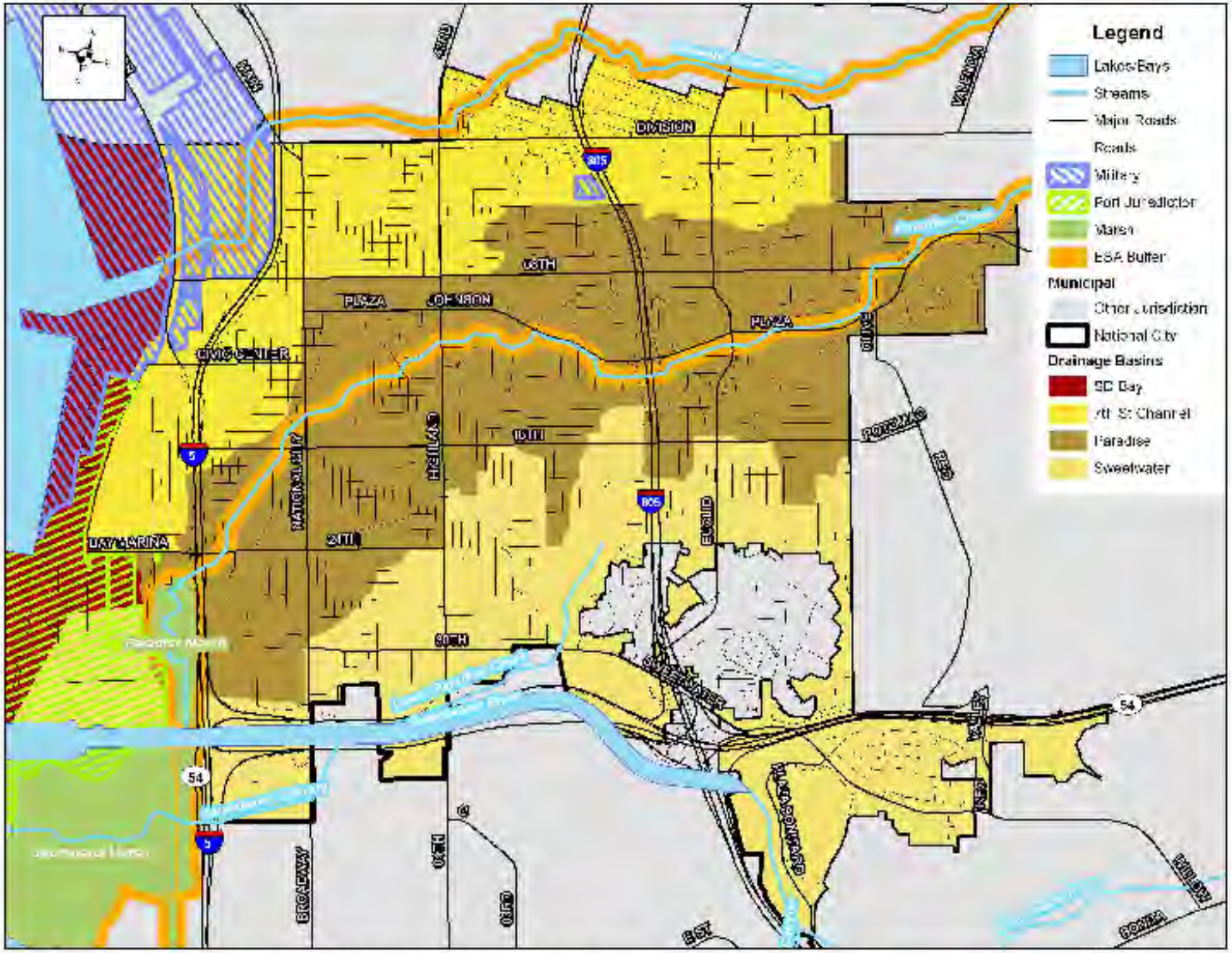

Note: Marsh boundaries based on land use data from SANDAG. The portion of the marsh west of I-5 and south of the Sweetwater River is not in the City's Jurisdiction. Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

1.2 PURPOSE AND OBJECTIVES

The City's JURMP presents strategies to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The JURMP describes various programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the implementation of the City of National City's JURMP during the 2009/2010 reporting period.

1.3 REPORT ORGANIZATION

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning Component**
Section 3	**Construction Component**
Section 4	**Municipal Component**
Section 5	**Industrial and Commercial Component**
Section 6	**Residential Component**
Section 7	**Illicit Discharge Detection and Elimination Component**
Section 8	**Education Component**
Section 9	**Public Participation Component**
Section 10	**Fiscal Analysis Component**
Section 11	**Effectiveness Assessment Component**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all components required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a more detailed explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Background, subsection 1.1, has been divided into Regulatory Background, subsection 1.1.1, and City Setting, subsection 1.1.2, for clarity.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of pollutants from development projects to the MEP and by managing the increases in runoff from development projects that have the potential to negatively affect downstream water bodies. During the 2009/2010 fiscal year, the City accomplished these goals through implementation of its JURMP document.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2009/2010 reporting period are presented in the following bulleted list. The remainder of this section provides more detail about the City's implementation of this component of its storm water program.

- Distributed the City's development requirements checklist to projects applying for permits.
- Worked with other Copermittees to develop a final Hydromodification Management Plan, which was approved by the RWQCB just after the end of the 2009/2010 reporting period.
- Updated the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements in February 2010, in advance of the March 24, 2010 deadline.
- Continued to utilize the City's SUSMP database to track Priority Development Projects within the City's jurisdiction and the parties responsible for BMP maintenance.
- Obtained verification of BMP maintenance from completed Priority Development Projects on the City's treatment control BMP inventory.
- Conducted maintenance inspections of treatment control BMPs at 18 completed development projects in the City.

A list of development projects subjected to SUSMP requirements in 2009/2010 is available in Table 2-1. A comparison of the number of inspections performed and the requirements of the Municipal Permit can be found in Table 2-2. SUSMP projects that were completed after inspection and maintenance verification actions had been performed for the 2009/2010 inventory are listed in Table 2-3. Details of treatment control BMP inspections and related follow-up actions are provided in Table 2-4.

2.2 Land Use Planning

2.2.1 Background

The City's General Plan was adopted in 1996 and contains water quality and watershed protection principles in its Natural Settings Element. The comprehensive principles established in 1996 provide an ample framework for implementing the requirements of the current Municipal Permit, and no changes to these policies were necessary during the reporting period.

2.2.2 Source Characterization

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts to the surrounding environment. No changes to development restrictions in the City's General Plan for storm water purposes were implemented during the reporting period.

2.2.3 Best Management Practice Requirements

Please refer to the City's updated JURMP document for a list of the water protection policies included in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 Program Implementation

The City implemented its water protection-related land use policies during the reporting period mainly through the City's Municipal Code. The City updated its SUSMP requirements by adopting two ordinances regarding storm water management and discharge control. Ordinance 2010-2329 updated the SUSMP requirements in Chapter 14.22 of its Municipal Code on February 16, 2010. Ordinance 2010-2328 adopted the SUSMP Manual, a formatted guidance manual, also updated in February 2010. The updates made at this time were consistent with the regional Model SUSMP document prepared by the Copermittees and adopted by the RWQCB on March 25, 2009. These ordinances that updated the City's SUSMP requirements are included as Attachment 2.1 of this JURMP Annual Report. The updated City of National City's SUSMP Manual is available on the City's website (http://www.ci.national-city.ca.us/) on the Engineering Division webpage, within Development Services.

Details on how the City implemented its established water protection policies through its environmental review process and its development project approval and verification processes during the reporting period are provided in Sections 2.3 and 2.4 of this JURMP Annual Report document.

2.3 Environmental Review Process

The City's current environmental review process is detailed in the City's updated JURMP. The overall structure of the review process remains the same as in previous reporting years. No changes to the City's environmental review process have been made since the submittal of the updated JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The approval and verification process implemented during 2009/2010 followed the process described in the City's updated JURMP. Details on the different aspects of the process are described in the sections below.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's SUSMP Manual, which contains the City's SUSMP regulations. The City's SUSMP regulations are included in Municipal Code Chapter 14.22. Projects subject to SUSMP regulations are identified by completion of applicability checklists. More detail about this process is provided in Section 2.4.4.2.

2.4.3 Best Management Practice Requirements

The City updated its SUSMP requirements for development projects in February 2010, as described in Section 2.2.4 above.

2.4.4 Program Implementation

During the 2009/2010 fiscal year, the City required implementation of its BMP requirements for all development projects through education, a comprehensive development project approval process, and the treatment control BMP inspection and maintenance verification program.

2.4.4.1 Outreach and Staff Training

The City continually trains staff involved in the planning and review of development projects within the City and works closely with the development community to communicate its development requirements throughout the entire approval process. Details on trainings conducted and educational materials developed and distributed related to new development during the reporting period can be found in Section 8 of this JURMP Annual Report document. Also, based on results from the first years of the program, distribution of maintenance verification letters to parties responsible for

maintenance of treatment control BMPs at completed projects seems to be increasing the level of knowledge of regulated parties.

2.4.4.2 URBAN RUNOFF APPROVAL PROCESS FOR DEVELOPMENT PROJECTS

All development projects that required City permits were required to undergo the City's urban runoff approval process as detailed in the City's JURMP. Forms completed by project applicants are kept with the project's file at the City for future reference. As discussed in the City's JURMP, the City required all developers applying for construction and building permits to complete a "National Pollutant Discharge Elimination System (NPDES) Project Applicability Form" (SUSMP Checklist) that guides project applicants to submit proper documents to the City for review. The checklist was updated during the 2009/2010 reporting period at the same time as the BMP Manual. The updated SUSMP Checklist is included with this report as Attachment 2.2.

Non-priority development projects were required to complete a Standard Permanent Storm Water BMPs form, which was included as an attachment to the City's updated JURMP document. This form includes a list of all standard permanent storm water BMPs required by the City's SUSMP and requires project proponents to identify which BMPs will be implemented at the development. If any BMP is not selected, the project proponent must provide an explanation why the BMP is not applicable or feasible for the project. These completed forms are kept with the project's file at the City.

All development projects determined to be Priority Projects after completing the SUSMP Checklist were required to prepare a Storm Water Management Plan (SWMP) or Water Quality Technical Report (WQTR) to meet the City's SUSMP requirements. As part of the JURMP update, the City also developed a SWMP self checklist to be used by the SWMP preparer, which was included as an attachment to the updated JURMP. In the past, the majority of deficiencies found in document reviews were missing information or sections not having enough detail about proposed BMPs. Table 2-1 lists the development projects subject to the City's SUSMP requirements during the 2009/2010 reporting period, the number of document reviews for each project, and the current approval status of each. Public Priority Projects are marked as Capital Improvement Projects (CIP) in the table.

Table 2-1
Development Projects Subject to SUSMP Requirements During 2009/2010

#	Project Name	Location	Project Type	Number of Reviews during 09/10	Approved during 09/10
1	2504-12 Highland Avenue	2504-12 Highland Avenue	Priority	1	No
2	AutoZone	Highland Avenue & East 21st Street	Priority	2	No

#	Project Name	Location	Project Type	Number of Reviews during 09/10	Approved during 09/10
3	Bible Baptist Church	2432 East 18th Street	Priority	2	No
4	Fraser Boiler	3101 Hoover Avenue	Priority	3	Yes
5	Harbor View Condos	8th Street & D Avenue	Priority	4	Yes
6	Marina Gateway Streetscape (CIP)	Harrison Avenue & W. 23rd Street	Priority	2	Yes
7	Paradise Medical Center	Between 7th & 8th Streets, west of South V Street and east of I-805	Priority	3	Yes
8	Riverview Gateway	South of Sweetwater Road & north of Route 54, between N 2nd Avenue & I-805	Priority	1	No
9	The Gateway	National City Boulevard & F Avenue, between 31st Street & Route 54	Priority	2	No

No projects were granted waivers from SUSMP requirements, and the City does not anticipate granting waivers in the future. The City makes every effort to encourage development projects to select treatment controls with high and medium pollutant removal efficiencies and does not expect to approve many projects with low removal efficiency BMPs. However, if projects proposing a low removal efficiency treatment control BMP with a defensible infeasibility analysis are approved, details of those projects and their feasibility analyses will be reported as required in future JURMP annual reports. Only one approved project was allowed to propose a low removal efficiency BMP, as described below.

The Fraser Boiler project is a proposed redevelopment of a 23,000 square-foot property with an existing industrial builidng and parking lot. Due to site size and grading constraints, the project proponent initially did not propose to treat the entire site and proposed only drainage insert BMPs. However, after three review cycles, the City was able to require the project to treat the entire site, primarily using a planter box and a high-rate media filter, which are more effective treatment control BMPs. For a very small portion of the site, approximately 500 square feet, a trench drain filter was considered to be the only feasible BMP. Since it was a very small area, the City allowed that it was not feasible to install any other BMP due to very small elevation differences and due to the need to include a trench drain in the project design.

Hydromodification Management Plan

During the reporting period the Copermittee Land Development Workgroup met regularly to discuss key Hydromodification Management Plan (HMP) development issues and provide updates on the status of consultant work products. The City of

National City regularly participated in the workgroup meetings. The final regional HMP was adopted by the RWQCB just after the end of the 2009/2010 reporting period on July 14, 2010. The City will be incorporating the HMP requirements into its local development requirements prior to the January 14, 2011 deadline.

The City's SUSMP requirements were updated to contain the detailed Interim Hydromodification Criteria (IHC) which the City implemented in 2009/2010 and will continue to implement until the recently adopted regional HMP requirements are incorporated into local requirements. None of the projects approved during 2009/2010 were subject to IHC requirements. Some projects currently under review may be subject to the new hydromodification requirements if they do not have prior lawful approval before the new requirements are incorporated in 2010/2011.

BMP Installation Verification

During the course of 2009/2010, after maintenance verification letters had been sent out during the summer of 2009, the City identified recently completed Priority Projects within the City's jurisdiction to be added to the treatment control BMP inventory. When a project is completed, the City checks for BMPs prior to occupancy, records the site information, assigns it a TTWQ priority, and then adds it to the inventory of projects subject to the City's inspection and annual maintenance verification program the following fiscal year. This process helps the City focus its inspection resources on sites more likely to have maintenance deficiencies, as maintenance deficiencies are generally less likely at sites with recently installed BMPs. A table of the projects identified after distribution of verification letters is presented in Table 2-3 at the end of this JURMP Section. These projects will be added to the City's treatment control BMP inventory in 2010/2011.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

2009/2010 Annual Maintenance Verification Program

The Municipal Permit requires annual verification of operation and maintenance of treatment control BMPs installed within the City's jurisdiction. Annual verification must be provided by the party responsible for treatment control BMP maintenance and must be returned to the City prior to the start of the wet season (October 1st).

Using the property owner names and addresses recorded in the City's BMP database, BMP maintenance verification forms were mailed to all the private projects included in the City's BMP database in early 2009/2010. Maintenance verification forms were also completed for all CIP projects on the City's inventory. Through this process, the City updated contact information was no longer accurate due to property sales or foreclosures and provided additional guidance on how to properly maintain BMPs, as needed. The City completed research to update contact information and worked with management companies to educate them on the requirements. Through the City's maintenance verification efforts, responses were received from all except one project.

This project is being referred to the City Attorney for legal action. The City sent out 11 NOVs and 11 citations during this process and took other escalating enforcement steps as necessary to achieve compliance.

Operation and Maintenance Inspections

During the 2009/2010 fiscal year, the City conducted inspections of projects with treatment control BMPs in accordance with the inspection frequencies outlined in the Municipal Permit. Table 2-2 provides a summary of the number of inspections performed and how these met the requirements of the Municipal Permit.

Table 2-2
2009/2010 Inspection Numbers versus Municipal Permit Requirements

Site Class	Number of Sites	Full BMP Assessments	Percent Inspected	Permit Requirement	Requirement Met
All Inventoried Sites	31	18	58%	20%	**Yes**
Sites with Drainage Inserts	20	14	70%	50%	**Yes**
High TTWQ sites	9	9	100%	100%	**Yes**

The City continued to use site-specific inspection forms and the treatment control BMP tracking database. During the reporting period, GPS coordinates were also collected for the BMPs inspected, and this location information was added to the electronic database. Table 2-4 at the end of this section lists the development projects inspected during the reporting period, a brief description of inspection findings, and, if applicable, any follow-up actions taken. The BMP types proposed at these sites and the sites' TTWQ priorities are included in the City's treatment control BMP inventory, which is included in Appendix A.1 of this JURMP Annual Report.

During the 2009/2010 reporting period no sites were observed to present a significant threat to human health or the environment during inspections, so none were reported to the RWQCB.

2.5 Development Planning Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 Program Review and Modification

The City's SUSMP requirements have been updated as described above in Section 2.2.4.

Table 2-3
SUSMP Projects Completed After Establishment of 2009/2010 Inventory

#	Project Name	Project Address	Development Type	BMPs	HSA	Year Completed	TTWQ
1	Pacific View Estates	E. Division Street between Highland and Laurel Ave	Residential	Hydrodynamic separator	908.31	2009/2010	Medium
2	Mirabelle (Cypress Glen Condos)	3229, 3359, 3391 Cypress St	Residential	Drainage inserts	909.11	2009/2010	Medium
3	Paradise Village	Between 4th & 8th Street, Arcadia Ave & Bowron St.	Residential	Hydrodynamic separator	908.32	2009/2010	Medium
4	Kalesa Walk	1830 - 1884 E. 12th Street	Residential	Drainage inserts	908.32	2009/2010	Medium
5	Harley Davidson	3201 Hoover Ave	Commercial	Drainage inserts	908.32	2009/2010	High
6	Discount Tire	1309 E Plaza Blvd	Commercial	Drainage inserts	908.32	2009/2010	Medium

Table 2-4
2009/2010 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
1	Paradise Creek Park (CIP)	9/23/2009	No drainage insert was observed.	The City installed the drainage insert.	Resolved
2	Walgreens	9/23/2009	Two drainage inserts were missing from catch basins. Additional drainage inserts were observed in need of maintenance.	An NOV and citation were issued. Inspection findings were the same during follow-up inspection on 3/26/10. This project has been referred to the City Attorney for escalating enforcement.	In progress
3	Wal-Mart	9/23/2009	Hydrodynamic separator was observed in adequate condition.	NA	NA
4	Paradise Walk	9/23/2009	No drainage inserts were observed.	Site was issued an NOV for installation deficiencies. City worked with the developer still conducting construction activities, who did install all missing BMPs.	Resolved
5	Penske Truck Leasing	9/24/2009	Drainage inserts were observed in adequate condition.	NA	NA
6	Sweetwater Town & Country Mall	9/24/2009	Drainage inserts were observed in adequate condition.	NA	NA
7	Plaza City Apartments	9/25/2009	Hydrodynamic separator was observed in adequate condition.	NA	NA
8	Marina Gateway (Hotel)	9/25/2009	Hydrodynamic separator was observed in adequate condition. Vegetated swale was missing in one area.	The developer landscaped the vegetated swale.	Resolved

Table 2-4 (Continued)
2009/2010 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
9	Jack In The Box	3/26/2010	Drainage inserts were observed in need of maintenance.	Site was issued an NOV in March 2010. The City subsequently received a maintenance verification form.	Resolved
10	Kalesa Walk	3/26/2010	No flume filter drainage inserts were observed in the concrete conveyances.	Site was issued a notice of correction for installation deficiencies.	In progress
11	West Air Gases	3/26/2010	Bioretention area and vegetated swale were observed in adequate condition. Drainage insert was missing from the catch basin.	Site was issued a notice of correction for installation deficiencies.	In progress
12	Harley Davidson	3/26/2010	Drainage inserts and flume filter were observed in need of maintenance.	Site was issued a notice of correction for maintenance deficiencies. A request for maintenance verification has been sent.	In progress
13	Mirabelle (Cypress Glen Condos)	4/5/2010	Two drainage inserts were observed in need of maintenance. Hydrodynamic separator was also observed in need of maintenance. Vegetated swale was observed in adequate condition.	Site was issued a notice of correction for maintenance deficiencies. Subsequently, a request for maintenance verification was sent.	In progress
14	Discount Tire	4/5/2010	Drainage insert was not observed in the catch basin.	Site was issued a notice of correction for installation deficiencies.	In progress
15	Mariposa Walk	6/28/2010	One of six drainage inserts was missing. The other five were observed both in need of repair and maintenance.	Site was issued a notice of correction for installation deficiencies.	In progress
16	National City Library (CIP)	6/28/2010	Two of the drainage inserts were observed to require minor repair of rubber gaskets.	Repair order was referred to the appropriate City department.	In progress

Table 2-4 (Continued)
2009/2010 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
17	Plaza Village	6/28/2010	One drainage insert was observed in need of repair, and both were in need of maintenance.	Site was issued a notice of correction for maintenance deficiencies. Subsequently, a request for maintenance verification was sent.	In progress
18	Canyon Ridge	6/28/2010	Media filter was observed in adequate condition. The hydrodynamic separator was not accessible at the time of inspection.	Property manager was contacted to ensure future accessibility of the hydrodynamic separator.	Resolved

3.0 CONSTRUCTION

3.1 INTRODUCTION

During 2009/2010, the City continued to implement a program to prevent storm water pollution related to construction activities within the City. Modifications to the City's construction program were last made in late March 2008 as part of its JURMP update. All changes made at that time were implemented for the entire 2009/2010 reporting period.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2009/2010 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- Distributed storm water requirements applicability checklists to all development projects in the City's jurisdiction.
- Conducted plan checks of erosion control plans and SWPPPs to ensure construction projects planned to comply with the City's minimum BMP requirements.
- Distributed copies of the Construction BMP Fact Sheet with all approved grading permits.
- Conducted 76 construction inspections at 11 sites in 2009/2010 per the frequency in the updated JURMP.
- Issued 13 verbal warnings and one NOV to construction sites in response to violations of the City's minimum BMP requirements.
- Conducted pre-construction meetings with all large project developers.

3.2 SOURCE CHARACTERIZATION

An inventory of active construction projects during the reporting period is presented in Appendix A.2 of this JURMP Annual Report document. The City's inventory was maintained throughout the reporting period by entering permit application forms into the City's inventory spreadsheet on a continuous basis. New construction projects were added to the inventory at the start of construction, and projects were removed from the inventory after construction was completed. Since construction projects were continually being added and removed throughout the fiscal year, inventory updates were usually performed more frequently than the minimum once per month.

3.3 Updates to Ordinances and Approval Processes

The City has not updated its Grading Ordinance or its Storm Water Management and Discharge Control Ordinance since the City's JURMP update during the previous reporting period. Details on any changes to the City's approval process during the reporting period are discussed in Section 3.5 of this document.

3.4 Best Management Practice Requirements

The City's construction and grading requirements have not changed since the recent update to the City's JURMP document. A complete list of required construction BMPs is included in the City's BMP Manual, which is an attachment to the City's JURMP. The City continued to assess the implementation and effectiveness of required BMPs at construction sites in 2009/2010.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below.

3.5.1 Education and Staff Training

Education and staff training implemented during the 2009/2010 fiscal year focused on reinforcing the changes made to the City's construction requirements at the time of the City's recent JURMP update to both City staff and to the construction community. In addition, construction site supervisors and City staff were educated on the new General Construction Permit (effective July 1, 2010) and provided a fact sheet for review. Construction project proponents were educated in BMP requirements during the approval process described below. Please see Section 8 of this JURMP Annual Report document for details on training and educational materials related to construction and grading activities.

3.5.2 Construction and Grading Approval Process

During the reporting period, City personnel verified that all construction projects planned to implement the City's minimum BMP requirements prior to issuing any building or grading permits. The City conducted its grading approval process as described thoroughly in Section 5 of the City's updated JURMP. The City requires grading construction projects to submit erosion control plans that indicate what BMPs are to be used at the site. These erosion control plans are reviewed by the City to ensure the site plans to meet the City's minimum construction BMP requirements. The City also reviews Storm Water Pollution Prevention Plans (SWPPPs) for sites greater than one acre that are required to obtain coverage under the General Construction Permit.

Additionally, the City arranged pre-construction meetings with all developers of large projects to ensure an understanding of construction BMP requirements. Approved forms and documents completed by project proponents are kept with each project's file at the City for reference. A Construction BMP fact sheet, known as the "Blue Sheet" within the City because the copies distributed are on blue paper, was also distributed with all construction permits issued (Attachment 3.1). Proper implementation of the minimum BMPs listed on the fact sheet was a condition of approval for all permits issued by the City during the 2009/2010 fiscal year.

During the reporting period, none of the City's active construction sites were larger than 17 acres; therefore the maximum disturbed area limitation did not apply. However, all construction sites were still required to limit exposed cleared or graded areas to the amount of area that could be protected prior to a rain event, as prescribed in the City's seasonal BMP requirements.

Criteria for determining when advanced treatment is required are detailed in the City's JURMP. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites within the City's jurisdiction, and advanced treatment methods were not required at any construction sites.

3.5.3 Inspection of Construction Sites

Appendix A.2 of this JURMP Annual Report contains a list of construction projects that were active during the reporting period, along with their assigned TTWQ priorities, the number of weeks the site was active within the rainy season, the numbers of inspections conducted during the wet and dry seasons, the number of follow-up inspections and complaint investigations, and the total number of inspections for each site. In total, 76 construction inspections were performed at 11 construction sites during 2009/2010.

Construction inspections conducted during the reporting period were performed as described in the City's updated JURMP. Key components of the inspections include checks for coverage under the General Construction Permit during the initial inspection and assessments of compliance with the City's BMP and discharge requirements during all inspections. Responsible parties at the sites are educated as needed during inspections. Copies of the inspection forms are kept on file at the City. The City conducted inspections at high TTWQ construction sites bi-weekly during the wet season and monthly for medium TTWQ sites. Low TTWQ sites were inspected on an as needed basis. Typically, storm water only inspections were not conducted at low TTWQ sites unless a complaint was called into the City's storm water hotline. Construction inspectors have been trained in the City's minimum construction BMP requirements, and they check BMP implementation at low TTWQ construction sites during their inspections. Any sites found to have problems with BMP implementation are forwarded to the City's Storm Water Compliance Inspector. During the reporting period, two inspections of low TTWQ construction sites were conducted at the request of the City. These sites are indicated on the City's inventory in Appendix A.2.

When any violations were noted during routine, follow-up, or complaint investigation inspections, these violations were noted on the project's inspection form, and the sites were given a list of corrective actions necessary to fix the observed violation. During 2009/2010 there were 22 instances of non-compliance observed where enforcement action needed to be taken. In some cases, these issues were resolved while the inspector was still on site. When necessary, appropriate enforcement actions were taken, and City staff followed up with the site until compliance was achieved. Details on the enforcement actions taken for construction sites during the implementation period are described below.

3.5.4 Enforcement Measures

Table 3-1 includes the number of violations and enforcement actions taken during the reporting period in response to violations of the City's minimum construction BMP requirements. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP.

Table 3-1
Summary of Construction Enforcement Actions Taken

Verbal Warnings	Notices of Violation	Administrative Citations	Stop Work Orders
13	1	0	0

No Stop Work Orders were issued in 2009/2010, but the City's JURMP notes that if a Stop Work Order is issued the Regional Board will be notified within five working days. During the reporting period, two complaints were received to the City's storm water hotline regarding construction site activities. Further details regarding complaint investigations and all enforcement actions taken during the reporting period can be found in Section 4 of this document.

None of the violations observed at construction sites during the reporting period were found to endanger human health or the environment. The City was able to address these violations through the City's established enforcement process, and it was not necessary to report any of these sites to the RWQCB.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 Program Review and Modification

No modifications were made to the City's construction component during 2009/2010.

4.0 MUNICIPAL COMPONENT

4.1 INTRODUCTION

Throughout 2009/2010, the City of National City continued to manage municipal areas and activities to reduce discharges of pollutants to the MS4 to the MEP. As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and activities. The majority of municipal areas in the City comprise of administrative buildings, fire stations, public parks, recreation and public works facilities. Municipal activities conducted by the City include but are not limited to graffiti abatement, building maintenance, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. Information about the City's prioritized street sweeping program can be found in Table 4-1, and information about the City's MS4 maintenance program can be found in Table 4-2.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the 2009/2010 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City inspected all high TTWQ fixed municipal facilities.
- The City removed a total of 975 tons of sediment and debris from street sweeping activities.
- The City removed a total of 33.7 tons of trash, sediment, and other debris from standard MS4 cleaning activities, not including drainage insert maintenance.
- The City spent 1,998 man-hours maintaining 442,150 linear feet of sanitary sewer line.
- The City inspected several special events that occurred in the City during 2009/2010 to ensure appropriate BMP implementation and clean up.
- The City received and addressed 13 complaints through the Storm Water Hotline, City website, and other City departments. Enforcement actions resulting from complaint investigations are noted in Table 4-3.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities. As mentioned in the City's JURMP, municipal fixed facilities have been grouped under one category, fixed

facilities. This is because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar.

4.2.2 SOURCE CHARACTERIZATION

All fixed facilities are included on the City's municipal inventory, which is included as Appendix A.3.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City continues to implement and assess the effectiveness of BMPs at all fixed municipal facilities. As mentioned in the City's JURMP, the City uses the CASQA Municipal BMP Handbook to establish appropriate BMPs for fixed municipal facilities. Table 6-2 in the City's JURMP describes the CASQA fact sheets that are used for specific facility types.

The City continues to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. The BMP requirements have not been changed since the City's JURMP was updated in March 2008.

As described in the City's JURMP, City public works employees, fire station employees, and employees at other fixed facilities in the City continue to implement BMPs appropriate to the facility type. City fire response personnel continue to be trained in implementing BMPs for non-emergency fire fighting activities as described in Section 3 of the City's JURMP. There were no changes in BMP requirements for any fixed facilities during 2009/2010.

4.2.4 PROGRAM IMPLEMENTATION

As mentioned above, the City's BMP requirements for fixed facilities have not changed since the development of the revised JURMP. Some notable examples of implementation of those BMPs are provided below.

Parks and Recreational Facilities
During 2009/2010, the City used fertilizers, herbicides, and pesticides sparingly at parks and other City-owned landscaped areas. All chemicals are used and stored in accordance with the City's JURMP BMPs. The City routinely cleans parks each Monday after weekend use.

Public Works Facilities, Fire Stations, Other Fixed Facilities
As previously mentioned, City personnel continued to implement appropriate BMPs for municipal fixed facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance activities at fixed facilities (i.e., landscaping, building maintenance, etc.) as necessary. Parking facilities associated with fixed municipal facilities were swept quarterly during 2009/2010, and the large paved areas at the City's Public Works Yard were swept weekly. Public Works employees continued to

proactively implement a SWPPP at the Public Works Yard, though it is not a requirement. Public Works employees also continued to maintain the BioClean filter inserts on the property as needed.

Municipal Inspections

All high TTWQ fixed municipal facilities received an annual routine inspection in 2009/2010. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2009/2010. The City's municipal inspection form is included as Attachment 4.1. All inspections conducted at municipal facilities are tracked using a Microsoft Access database, which was created in 2008/2009. Table 4-4 at the end of this section lists all high TTWQ municipal fixed facilities requiring inspection in 2009/2010, the date the inspection was performed, and recommended corrective actions from the inspection. For minor corrective actions, resolution is documented by City staff and no follow-up inspection is necessary. Since the inspections were conducted near the end of the reporting period, any necessary follow up inspections will take place in 2010/2011 to ensure that the corrective actions are implemented.

In addition to one annual inspection by other City personnel, public works personnel inspect both the Public Works Yard East and Public Works Yard West weekly; street crew personnel inspect the Public Works Yard West and the equipment maintenance crew inspects the Public Works Yard East. Inspection forms are completed and submitted to the City's Storm Water Compliance Inspector.

4.3 Roads, Streets, Highways, and Parking Facilities

4.3.1 Background

The City conducts regular maintenance of roads, streets, and parking facilities in the City to control pollutants such as sediment, metals, litter, and debris. Note that there are no highways within the City's jurisdiction.

4.3.2 Source Characterization

Roads and streets are included as one entity on the City's municipal inventory, which is included in Appendix A.3.

4.3.3 Best Management Practices

Street sweeping is the City's primary BMP for roads, streets, and parking facilities. Other BMPs are chosen as needed based on the CASQA Municipal Handbook. The City's sweeping frequency is outlined in the JURMP and described in the following subsection. There were no changes to the BMPs implemented for roads, streets, and parking facilities in 2009/2010.

4.3.4 PROGRAM IMPLEMENTATION

During 2009/2010, the City swept a total of 14,855 curb miles, removing approximately 975 tons of debris. High priority streets in the City are swept at least every two weeks, and medium priority streets in the City are swept at least monthly. The City has not designated any streets in the City as low priority. The City does not maintain any stand-alone parking facilities that are not associated with municipal facilities. Seventeen parking facilities that are associated with municipal facilities are maintained and swept during regular maintenance activities at the respective municipal facility, and are considered part of the municipal facility on the inventory. Table 4-1, below, describes the areas assigned high and medium priorities, and the associated sweeping frequency. The table also includes the sweeping frequency for areas of fixed municipal facilities and the associated parking lots.

As a means to address priority pollutants in the San Diego Bay Watershed, the City continued conducting additional sweepings of the all streets in the City. High priority streets were swept daily during 2009/2010; medium priority streets were swept every two weeks during 2009/2010.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
High	8th Street, National City Boulevard, Highland Avenue, Plaza Boulevard	11.8 miles	At least every two weeks
Medium	All other streets in the City	98.2 miles	At least once per month
Fixed Facilities	Parking lots associated with municipal fixed facilities	N/A*	Quarterly
Fixed Facilities – Parks	Parking lots associated with parks	N/A*	Every two weeks
Fixed Facilities – PW Yard	Public Works Operation Center	N/A*	Weekly
Total Amount of Debris Collected from Street Sweeping Activities: 975 tons			

* Mileage data is not available for the swept area of 17 parking facilities associated with municipal facilities, and the PW Yard. Mileage accrued while sweeping these facilities is included in the total mileage.

Inspections

Because trash, debris, and sediment that have accumulated on City streets are identified and cleaned up via street sweeping, additional inspections beyond this effort are not necessary.

4.4 MS4

4.4.1 Background

The City's extensive storm water conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during a rain event. The City's MS4 consists of approximately 19 miles of inlets, pipes of varying materials, natural channels, concrete channels, culverts, and 751 catch basins and inlets.

4.4.2 Source Characterization

The City's MS4 as one complete entity is included on the City's high TTWQ municipal inventory (Appendix A.3).

4.4.3 Best Management Practices

The City maintains a strict MS4 maintenance and cleaning schedule. Maintenance and cleaning are conducted to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. As described in the City's JURMP, BMPs for MS4 maintenance activities are chosen based on the CASQA Municipal Handbook and have not changed during 2009/2010.

4.4.4 Program Implementation

Throughout 2009/2010 the City has implemented a thorough MS4 inspection and cleaning schedule that required 173.5 man-hours to complete. The City continues to follow municipal activities, such as MS4 channel cleaning, in a Microsoft Access database. During 2008/2009, the MS4 maintenance logs were updated to allow for the recording of more detailed information regarding the various types of debris removed. Use of these new logs was implemented during the 2009/2010 reporting period. The City inspected and cleaned all MS4 cleanout locations and open channel segments in 2009/2010, as described in Table 4-2, on the following page.

Table 4-2
MS4 Maintenance Data

MS4 Structure	Percent inspected and/or cleaned*	Percent of open channels found with anthropogenic litter	Amount of debris removed from cleaning activities
Catch Basins / Self-Cleaning MS4 Facilities	100%	N/A	27,474 pounds
Open Channels	100%	100%	99.13 cubic yards (39,652 pounds)
Drainage Inserts	100%	N/A	192 pounds
Total Debris Removed From MS4 Maintenance Activities: 33.7 tons**			

* No structures were observed at least 33% of capacity during the reporting period. However, the City cleans out any structures, including self-cleaning structures, in which trash and debris is observed at the time of inspection.
** The weight of the material removed during channel maintenance activities was not recorded. Since trash was the most common item removed, a conversion factor of 400 pounds per cubic yard was used to estimate the total weight of the material removed.

The City's cleanout locations are access points to various sections in the City's MS4, so no additional pipe beyond the cleanout location is normally cleaned. The City uses a vactor truck to clean the MS4 line in the event of a spill. For example, during 2009/2010, one sewage spill occurred, which was successfully intercepted before reaching the receiving water and entirely cleaned up within the City's MS4.

During 2009/2010, the City continued to inspect the open channels in the City and remove trash and debris as necessary by hand. If litter or debris is observed during the routine inspections, it is removed immediately. Of debris removed from open channels, 78.2 cubic yards of trash, 9 cubic yards of sediment, and 11.9 cubic yards of organic matter were removed over the course of the fiscal year. The only significant sediment removal occurred in the City's concrete channels. The total length of the channel segments inspected and cleaned by City staff is approximately 25,950 linear feet. Additionally, as part of WURMP efforts that are beyond minimum required maintenance, the City continued to hire a contractor to do biweekly inspections and remove any observed trash from Paradise Creek.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. Routine inspection and maintenance of the sanitary sewer system works to reduce the

potential for a spill or sanitary sewer overflows (SSOs) and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 SOURCE CHARACTERIZATION

The City maintains a system of public sanitary sewer pipes to convey wastewater from the City to be treated. The sanitary sewer system, as one complete entity, is included on the City's high TTWQ municipal inventory (Appendix A.3).

4.5.3 BEST MANAGEMENT PRACTICES

The City implements BMPs from the CASQA Municipal Handbook, as described in the City's JURMP, during sanitary sewer maintenance. There have been no changes to these BMPs during 2009/2010. The City inspects and maintains the sanitary sewer system as part of regular wastewater activities. The City clears blockages and repairs leaks as needed.

4.5.4 PROGRAM IMPLEMENTATION

The City seeks to eliminate seepage from the sanitary sewer system to the MS4 by routine preventative maintenance of both systems. Routine maintenance of both systems allows the City to find areas that are likely to become problems in the future and make the necessary repairs/replacements before any larger issues arise. Approximately 300 linear feet of pipe were repaired or replaced during the reporting year. The City also continued to conduct flow metering throughout its sanitary sewer system to monitor for evidence of potential problems. A total of 1,998 man-hours were spent maintaining a total of 442,150 linear feet of sanitary sewer line during 2009/2010. Silt and grease were listed as the most common items removed from sanitary sewer lines during maintenance activities. A total of 2,300 linear feet of sanitary sewer line was televised during 2009/2010 to determine if areas of the sanitary sewer were in need of maintenance or repair.

The City has also developed a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs.

The City maintains a Sanitary Sewer Management Plan (SSMP) which establishes procedures for responding to an SSO. Detailed information about the City's SSO spill response plan is included in the City's JURMP. One SSO was discovered during 2009/2010. The spill was stopped, cleaned up, and reported to the RWQCB. Details on the SSO can be found in Table 4-5.

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City conducts a variety of different mobile municipal activities, typically involving infrastructure maintenance, landscape maintenance, and graffiti removal.

4.6.2 Source Characterization

Power washing is only used by the Graffiti Removal sector of Neighborhood Services during graffiti removal activities. Graffiti removal is the only high priority municipal activity on the inventory (Appendix A.3). Infrastructure maintenance and landscape maintenance are listed on the City's medium TTWQ municipal inventory.

4.6.3 Best Management Practices

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel are trained to implement BMPs for the specific activity in which they are involved. For example, City personnel conducting graffiti removal are trained to store and handle any chemicals properly and to collect all waste water from power washing. A more detailed discussion of BMPs for specific mobile activities is included in the City's JURMP; there were no updates to the BMPs implemented during mobile activities during 2009/2010.

4.6.4 Program Implementation

During 2009/2010, City personnel continued to implement BMPs during mobile municipal activities such as graffiti removal and landscape maintenance. During 2009/2010 the City decided to paint instead of using power washing methods for graffiti removal, reducing the threat to water quality. If power washing is conducted in the future, City personnel will collect any water generated by activities such as power washing during graffiti removal activities and dispose of it properly. City personnel are provided with a handout that gives a summary of appropriate BMPs for power washing activities and reminds personnel that water generated by such activities must always be collected and disposed of properly.

One annual routine inspection of graffiti removal activities was conducted during the 2009/2010 reporting period. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2009/2010, including the inspection of graffiti removal activities. There were no instances of non-compliance relating to mobile municipal activities, and no corrective actions were required based on the inspection of graffiti removal activities during 2009/2010 (see Table 4-4).

4.7 Special Events

4.7.1 Background

As detailed in the City's JURMP, a variety of different special events are hosted within the City. Notably, the City's largest special event is an annual July 4th celebration.

4.7.2 Source Characterization

As required by the Municipal Permit, special events are included on the City's high TTWQ municipal inventory (Appendix A.3).

4.7.3 Best Management Practices

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter/debris from the event, and raise storm water awareness among the vendors and patrons of the event, as applicable. In Kimball Park, for example, the City always requires and charges the event holder for the use of a litter fence to prevent debris from entering the nearby channel. BMPs for special events did not change during 2009/2010.

4.7.4 Program Implementation

The City hosted several special events during 2009/2010, including various one-time celebrations and recurring events. Several special events were inspected the site to ensure the proper implementation of required BMPs, as detailed in the City's JURMP. If any special events had not finished clean up at the time of the inspection, staff would have been required to resolve remaining housekeeping issues within a timely manner. All inspections conducted at special events are tracked using the Microsoft Access database.

There were no notable instances of non-compliance at inspected events that requiring enforcement beyond following up to ensure appropriate housekeeping BMPs were implemented.

4.8 Public Reporting of Illicit Discharges and Connections

Reporting and Response

Public and municipal reporting is crucial to preventing and eliminating illicit connections and illegal discharges (IC/IDs) from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is also listed on the City's website and in distributed storm water educational material. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and

website are logged into a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges.

Complaints received by the City during the 2009/2010 reporting period and the City's response to each are listed in Table 4-5 at the end of this section. A total of 13 complaints were documented this year.

Enforcement

As previously stated, complaints received via the Storm Water Hotline or City website, are included in Table 4-5 at the end of this section. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, corrective actions, and/or citations. Table 4-3, below, summarizes the enforcement actions taken in response to complaints received.

Table 4-3
Enforcement Actions Resulting from Documented Complaints

Type	Verbal Warning	Stop Work Order	Administrative Citation	NOV
Commercial	2	0	2	1
Industrial	0	0	0	0
Mobile	0	0	0	0
Municipal	0	0	0	0
Residential	0	0	2	1
Construction	0	0	1	1

4.9 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to sanitary sewer overflows. As discussed earlier in this section, preventative maintenance is regularly conducted on the City's sanitary sewer system. Additionally, video inspections and sewer surveys are regularly conducted to monitor the condition of the public sanitary sewer lines and to determine the necessity of maintenance. Private lateral lines do not receive preventative maintenance, but the City assists in the containment and cleanup of sewer spills if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report any SSOs to the City's Storm Water Hotline. As previously mentioned, there was one SSO during 2009/2010 that was reported to the RWQCB within 24 hours of the spill, and no other spills occurred during the reporting period.

4.10 EDUCATION AND OUTREACH

During 2009/2010, the City continued to educate municipal personnel regarding proper BMP implementation and other storm water and watershed concepts. For example, a training session regarding SUSMP requirements and the development approval process was conducted in August 2009 for employees in development services. Information regarding the education and outreach conducted for City personnel is described in Section 8 of this Annual Report.

4.11 MUNICIPAL COMPONENT EFFECTIVENESS ASSESSMENT

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.12 PROGRAM MODIFICATION AND REVIEW

The City's JURMP was updated in March 2008. No changes to the City's municipal component were made during 2009/2010.

Table 4-4
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Inspection Date	Corrective Actions Needed
1	Butterfly Park	East 22nd Street and Palm Avenue	High	4/28/2010	• Keep the site free of excessive litter and debris using dry methods, especially along fence bordering golf course. • Keep the trash/recycling area adequately covered.
2	El Toyon Park	2005 East 4th Street	High	4/28/2010	• Keep parking lots, sidewalks, and streets free of excessive sediment and debris. • Employ adequate erosion prevention measures (e.g., vegetation or physical stabilization). • Properly store material and waste stockpiles to prevent transport in runoff. • Keep the trash/recycling area adequately covered. • Keep exposed parking areas free of significant spills and leaks. • Adequately maintain structural BMPs.
3	Graffiti Removal (Mobile Activity)	Kimball Skate Park, 16th Street	High	5/11/2010	• No corrective actions
4	Kimball Park	12th Street & D Avenue	High	4/28/2010	• Keep discharge locations free of excessive sediment and debris. • Keep parking lots, sidewalks, and streets free of excessive sediment and debris. • Employ adequate erosion prevention measures (e.g., vegetation or physical stabilization). • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover). • Keep the trash/recycling area free of litter and debris.
5	Las Palmas Municipal Pool	1800 East 22nd Street	High	4/28/2010	• Keep parking lots, sidewalks, and streets free of excessive sediment and debris. • Provide storm water training for appropriate employees. • Maintain a current log of employees who have participated in storm water training. • Employ adequate erosion prevention measures (e.g., vegetation or physical stabilization). • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover). • Keep the trash/recycling area free of litter and debris. • Keep exposed parking areas free of significant spills and leaks.

Table 4-4 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Inspection Date	Corrective Actions Needed
6	Las Palmas Park	1800 Newell Street	High	4/28/2010	• Keep discharge locations free of excessive sediment and debris. • Employ adequate erosion prevention measures (e.g., vegetation or physical stabilization). • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover). • Provide appropriate signs/stenciling.
7	National City Municipal Golf Course	1439 Sweetwater Road	High	6/28/2010	• Keep discharge locations free of excessive sediment and debris. • Provide storm water training for appropriate employees. • Maintain a current log of employees who have participated in storm water training. • Program and adjust irrigation systems to minimize over-watering and runoff. • Properly store material and waste stockpiles to prevent transport in runoff. • Provide adequate recycling containers. • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover). • Keep the trash/recycling area free of litter and debris. • Store outdoor materials that pose a threat to water quality appropriately (covered and/or in closed containers). • Properly label outdoor storage containers. • Maintain a written spill response plan. • Keep secondary containment free of spills and rainwater especially in maintenance area. • Inspect equipment/vehicles daily for leaks and repair as necessary. • Use biodegradable soaps when appropriate.
8	Paradise Creek Educational Facility	West 19th Street and Coolidge Avenue	High	4/28/2010	• Keep the site free of excessive litter and debris using dry methods? • Keep parking lots, sidewalks, and streets free of excessive sediment and debris. • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover).

Table 4-4 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Inspection Date	Corrective Actions Needed
9	Public Works East Yard	2100 Hoover Ave	High	4/20/2010	• Keep the site free of excessive litter and debris using dry methods. • Store outdoor materials that pose a threat to water quality appropriately (covered and/or in closed containers). • Keep exposed parking areas free of significant spills and leaks.
10	Public Works West Yard	2100 Hoover Ave	High	4/20/2010	• Properly store material and waste stockpiles to prevent transport in runoff. • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover).
11	Sweetwater Heights Park	Cagle Street and Stockman Street	High	4/28/2010	• Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover).

Note: Roads, streets, highways, and parking lots; the MS4; and the sanitary sewer system were inspected via the maintenance effort described earlier in this section.

Table 4-5
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
1	9/16/09	Commercial	Hotline Caller	33rd and Hoover Avenue	Oil spill in street, gutter, bike path and on private property.	Observed dried oil on street and on bike path. Verbal warning issued to responsible party (a contractor of the City of San Diego) who agreed to properly clean up oil
2	9/21/09	Commercial	Hotline Caller	450 E 8th Street and E Avenue	Irrigation sprinkler discharging water at Plaza Josha.	Observed water flowing from E Avenue along 9th Street up to C Avenue. Gemmae Bake Shop will contact owner to report the broken sprinkler.
3	9/24/09	Municipal	Hotline Caller	16 ½ Street and N Avenue	Trash and debris in storm drain. No fence to prevent access to conveyance.	Public Works investigated and observed no trash or debris.
4	9/24/09	Commercial	Hotline Caller	2501 Cleveland Avenue	Cleaning pavement/asphalt with soapy water. Overwatering.	Verbal warning issued to hotel general manager. Manager agreed to explain to all employees that cleaning in such a way is unacceptable. Contacted owner about overwatering. Water valve reportedly stuck in "open" position was repaired.
5	12/21/09	Commercial	Hotline Caller	Seafood City 1420 E Plaza Boulevard	Dumping fish parts in storm drain.	Leaky trash bins in poor condition had been put over storm drain grates behind Seafood City. Instructed manager to move bins away from drains. Public Works contacted and cleaned the drains.
6	1/6/10	Construction	Construction Inspector	Paradise Village 600 block of Arcadia Avenue	Raw sewage seeping from manhole.	Observed seepage from three manholes, but only one reached storm drain conveyance. Passed through vegetation detention basin at Paradise Village, then across pavement behind hospital and entered storm drain inlet at Euclid Avenue. Public Works cleaned and removed blockage. Although an estimated 1500 gallons were discharged, Public Works was able to stop the spill downstream and then vacuum up all of the discharge before it reached a receiving water body. SSO reported to RWQCB.

Table 4-5 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
7	2/2/10	Commercial	Public Works Dept	110 W Plaza Boulevard	Oil running into gutter.	Observed motor oil spill entering on-site drainage inlet and exiting into south gutter on W Plaza Blvd then traveling west up to cross gutter of W Plaza Blvd/Hoover Ave intersection. Public works impeded the flow and absorbed the oil with addition of sand. Owner cleaned oil from gutter and was issued an administrative citation (#2366).
8	2/27/10	Construction	Fire Dept	Harborview Condos 8th and D Avenue	Discharge of white substance from property.	Public Works crew vacuumed white milky runoff while owner cleaned remaining residue from the roof. An administrative citation (#4201) and a NOV were issued.
9	4/5/10	Commercial	Hotline Caller	3039 Hoover Avenue	Water discharge at Restaurant Equipment Warehouse.	Equipment stored outside had filled with rainwater. Grease residue was discharged when equipment was dumped out. Full inspection conducted on site. A NOV and an administrative citation (#4202) were issued.
10	4/15/10	Residential	Building Dept	2318 Prospect Street	Carpet cleaner discharging dirty water.	Public Works called to clean inlet and downstream. Some runoff flowed to sandy channel at golf course and could not be cleaned. An administrative citation (#4233) was issued.
11	5/12/10	Commercial	Engineering Dept	McDinni's 105 E 8th Street	Water flowing in gutter at intersection of E 8th Street and A Avenue.	Contacted owner who called plumber to repair leaky air conditioning unit condenser.
12	6/7/10	Residential	Engineering Dept	Bay View Towers 801 National City Boulevard	Crew power washing parking lot at Bay View Towers.	Observed two men power washing parking area, gutter, and street. Contractor (Brinks Services) stated they were cleaning up an enzyme mixture that had been spilled. Public Works vacuumed water out of drains at Plaza Boulevard and A Avenue. An administrative citation (#4235) and a NOV were issued.
13	6/28/10	Residential	Development Dept	2702 Southport Way	RV disposed of sewage in storm drain grate on west side of building's parking lot.	Eyewitness observed large RV dumping its reservoirs of solid and liquid waste into the storm drain grate. Consistent with site observation. License plate number is currently being used to trace owners and issue a citation.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During 2009/2010, the City continued to implement a program to mitigate urban runoff pollution from the areas and activities of industrial and commercial businesses. Through various aspects of the industrial and commercial program, the City aims to reduce the amount of pollutants discharged from these facilities.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the industrial and commercial component during the 2009/2010 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City met the Municipal Permit requirement of inspecting at least 25 percent of its stationary industrial and commercial inventory.
- The City met the Municipal Permit requirement of inspecting 100 percent of its inventoried high TTWQ industrial and commercial facilities.
- The City completed pollutant discharge potential assessment (PDPA) forms at inspections to aid in source identification efforts.
- The City issued 54 notices of correction with inspection results to industrial and commercial business based on inspection results.
- The City responded to seven complaints regarding potential non-compliance of mobile businesses and resolved each issue of non-compliance appropriately.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 BACKGROUND

The City's industrial and commercial inventories, which can be found in Appendix A, include all stationary and mobile businesses known to be operating in the City that are required to be included on the City's inventories. Stationary facilities in the City include, but are not limited to, manufacturing facilities, auto repair shops, restaurants, wholesalers, and contractors. As discussed in the following subsections, the City requires industrial and commercial businesses to implement pollution prevention measures and designated minimum BMPs to mitigate the impacts of business' activities on water quality.

5.2.2 SOURCE CHARACTERIZATION

The City's industrial and commercial inventories are included as Appendix A.4 and A.5, respectively. The inventories include both stationary and mobile businesses, as required by the Municipal Permit. The inventories were updated in 2009/2010.

Information on how the City prioritizes the industrial and commercial inventories based on TTWQ is discussed in detail in the City's JURMP. The City considers factors including those listed below when prioritizing the inventories:

- Results from previous inspections and institutional knowledge
- Presence of significant exposed outdoor storage or activities
- Consideration of downstream water body and whether the business is likely to discharge pollutants for which the water body is impaired
- Proximity to the receiving water body
- Facility size
- Industrial Permit subjectivity

The City's updated inventories include a total of 752 stationary industrial and commercial facilities.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other BMPs to reduce or potentially eliminate the generation of pollutants from business areas/activities. The City has established a set of minimum BMPs based on the CASQA Industrial and Commercial Handbook. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. The City's BMP requirements are described in more detail in the City of National City Best Management Practice Manual, which is an attachment to the City's JURMP. The City's BMP requirements for industrial and commercial businesses did not change during 2008/2009.

5.2.4 PROGRAM IMPLEMENTATION

Industrial and Commercial Inspections

During 2009/2010, the City conducted storm water compliance inspections at selected stationary industrial and commercial facilities; Table 5-1 provides a summary of the industrial and commercial site visits. The purpose of the inspections is to confirm that the City's minimum BMPs are being implemented at stationary industrial and commercial facilities.

Table 5-1, below, provides a summary of the industrial and commercial site visits. All of the high TTWQ sites were selected for inspection, and additional medium TTWQ industrial facilities were also selected for routine inspection. Additional medium TTWQ sites selected for inspection were facilities that had not been inspected within the last few years.

Table 5-1
Summary of Industrial and Commercial Inspections

Facility Category	Full Inspections Conducted	Percentage of Total Inventory
High TTWQ Sites	126*	17% (100% of high TTWQ sites)
Additional Sites	67	9%
All Stationary Inventoried Sites	**752**	**26%**

* All high TTWQ sites were visited during 2009/2010; however four high TTWQ facilities could not be contacted and did not receive full inspections. One facility was undergoing renovations and was not active during 2009/2010. Multiple attempts were made to contact facility representatives at the three other facilities, but these attempts were unsuccessful. These facilities remain on the high TTWQ inventory and efforts to contact and inspect these businesses will continue in 2010/2011.

Facility inspections were conducted in accordance with the protocol set forth in the City's JURMP. Inspections involved a thorough examination of the facility and all outdoor activities. BMP deficiencies and corrective actions were discussed with facility personnel present during the inspection and recorded on the City's industrial and commercial inspection form (Attachment 5.1).

During 2009/2010, the City updated the standard inspection form and associated inspection reports. Facility personnel at inspected businesses reported that many of the corrective actions on the inspection report were related to shared areas or areas maintained by the property owner or property management company, the inspection form was updated to collect information regarding areas where responsibility for BMP implementation may be shared. Check boxes indicating "shared responsibility" were added to the form for each BMP assessment item on the form. These boxes were checked whenever the facility personnel present during the inspection reported that the BMP was a shared responsibility between the individual business, other tenants in a multi-suite complex, and/or the property management company/property owner. Note that the information collected is whether or not the responsibility is reportedly shared, not a determination of whether or not legally the responsibility is shared. In some cases the business may report that the responsibility is shared, but other parties, such as the property owner, may not agree.

The inspection reports were also updated to group the types of corrective actions listed on the inspection report into the following categories, which were described in a cover letter accompanying the inspection report:

- **Business Corrective Actions**, which included corrective actions specific to business activities.

- **Specific Action(s) Required by the Business to Comply with the Requirements of the General Industrial Permit**, which included corrective actions relating to the State of California General Industrial Permit (State Water Resources Control Board Order No. 97-03-DWQ).
- **Shared or Communal Area Corrective Actions**, which included corrective actions that are related to shared or communal areas and may not be solely the responsibility of the individual business.

When any corrective actions regarding a shared or communal area are included on the inspection report, a copy of the same inspection report was also provided to the property owner. A slightly different cover letter that explains why the property owner or manager is receiving the report is included with these letters. The property owner/manager cover letter explains the different types of corrective actions, described above, and explains that deficiencies listed under the "Shared or Communal Area Corrective Actions" heading are deficiencies that may not be the responsibility of the individual business and are being provided to both the property owner and the business to ensure that action is taken by the appropriate party. This updated method of inspection result notification is more straightforward and easier for the business representatives to understand, which increases the chance that the corrective actions will be implemented in a timely manner. Additionally, notifying property owners of corrective actions observed in communal areas should also contribute to BMPs being implemented in a timely manner.

The City also completed PDPA forms during the inspections as part of an additional data collection effort. The PDPA form is included with the City's inspection form in Attachment 5.1. More information about the results of this process is presented in Section 12 of this JURMP Annual Report.

During the inspection process, the City also checked Industrial Permit compliance status when applicable. Businesses observed to be in violation of the Industrial Permit are included in Table 5-2. Table 5-3, at the end of the section, summarizes the results of the 270 site visits conducted during 2009/2010. A total of 193 full inspections were completed as part of the City's 2008/2009 routine industrial and commercial inspection program. The remainder of the sites were visited, but during the visit were found to have moved, be duplicates of other businesses, or not to be conducting activities for which inclusion on the City's inventory is necessary.

Facilities that were recommended for follow-up are noted in the table. The City conducted follow-up inspections in August 2010, and the resolution status of these follow-ups is included with the routine inspection results in Table 5-3. The City provided copies of inspection results to each facility that received a full inspection in 2008/2009. The inspection report included the findings of the inspection, including all required corrective actions recorded by the inspector.

The City did not rely on third party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third party inspection program.

General Industrial Permit

Industrial Permit compliance status was evaluated during the industrial and commercial inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector gathered information about the business activities that occur on site and assigned or reassigned the business's standard industrial classification (SIC) code(s). The inspector then determined Industrial Permit subjectivity based on SIC code. Violations of any aspect of Industrial Permit requirements were recorded on the standard industrial and commercial inspection form and are presented in Table 5-2. The table includes businesses directed to file a Notice of Intent (NOI) and develop a Storm Water Pollution Prevention Plan (SWPPP) and monitoring program, as well as businesses that had filed an NOI but had failed to develop a SWPPP and monitoring program. The table also includes facilities that could potentially gain exemption from Industrial Permit requirements by completing notice of non-applicability/no exposure certification (NONA/NEC) paperwork. Each business was notified of any Industrial Permit-related non-compliance by the inspector.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to provide site-specific one-on-one education regarding storm water concepts and BMPs. Educational materials were provided as applicable; nearly all inspected businesses received a copy of the City's 2010 Storm Water Calendar, which can be found in Attachment 5.2. During 2009/2010 the City identified a need for a restaurant-focused BMP handout. The City developed a BMP handout for eating establishments, which can be found in Attachment 5.2.

Enforcement

Several industrial and commercial facilities were observed to be out of compliance with the City's municipal storm water ordinance and/or the Industrial Permit during inspections conducted in 2009/2010. Additionally, the City received a number of complaints through the City's storm water hotline. Details of the industrial and commercial complaint investigations are included in the Summary of Documented Public Complaints in Section 4 of this Annual Report. The City issued the following enforcement actions in response to BMP deficiencies during inspections and other complaints:

- 54 Notices of Correction (sent with inspection results)
- 43 NOVs
- 43 administrative citations

There were no instances of noncompliance found to present a significant threat to human health or the environment observed at stationary businesses during 2009/2010, so none were reported to the RWQCB.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Due to the nature of activities of most mobile businesses, a major area of concern tends to be illegal discharges. In general, mobile businesses can be hard to identify, as many may not have City business licenses. Additionally, because the activities of mobile businesses do not occur in one fixed location, inspections of such businesses are impractical.

5.3.2 SOURCE CHARACTERIZATION

Known mobile industrial and commercial businesses, as described in the City's JURMP, are included on the City's inventory and are marked as mobile. During 2008/2009, the Regional Industrial and Commercial Workgroup also developed a web-based mobile business database for use by all Copermittees. The goal of developing this database is to allow Copermittees to share information about mobile businesses, which may be active in more than one jurisdiction. The City contributed its mobile business inventory for upload to the regional database.

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

BMPs for stationary industrial and commercial facilities, as discussed earlier in this section, are required to be implemented for mobile activities, as applicable. BMPs for mobile businesses, including key principles such as proper collection and disposal of any discharge, are discussed in the City's JURMP.

During 2009/2010, the Regional Industrial and Commercial Workgroup, in which the City was an active participant, adopted regional mobile business BMP standards. These standards were devised to create a uniform set of minimum BMPs for mobile businesses operating within the region. The Workgroup is currently developing a mobile business BMP notification template that Copermittees may choose to use to notify mobile businesses operating their jurisdiction.

5.3.4 PROGRAM IMPLEMENTATION

While mobile businesses are not as straightforward to inspect as fixed industrial and commercial facilities, the City has in place a program of education and enforcement to regulate mobile activities.

Education and Outreach

All businesses conducting mobile activities within the City's jurisdiction are required to apply for and maintain a business license with the City of National City, regardless of where the business may be based. The Industrial and Commercial "Preventing Urban

Runoff Pollution" Trifold is provided to each person applying for a business license in the City, including mobile businesses. The trifold brochure, included in Attachment 5.3 of this Annual Report, clearly prohibits the discharge of wash water and provides a list of required BMPs applicable to industrial and commercial businesses. Mobile businesses maintaining a City business license are included on the Commercial Inventory in Appendix A.5. No known mobile businesses conduct industrial activities in the City at this point in time. To aid in tracking mobile businesses that may conduct activities within its jurisdiction in the future, the City also collaborates with other jurisdictions in the County of San Diego in maintaining a county-wide list of mobile businesses.

Reporting and Enforcement

In addition to regulation through business licenses, City staff are trained to report inappropriate mobile business activities to the City's storm water hotline. The City responds to all calls to the City's storm water hotline regarding mobile businesses. There were seven complaints made to the City's storm water hotline regarding mobile businesses during 2009/2010. Details of these complaint investigations are available in the summary of recorded public complaints in Section 4 of this report.

There were no instances of noncompliance of mobile businesses that were believed to present potential threats to human health or the environment observed during 2009/2010, so none were reported to the RWQCB.

5.4 Industrial and Commercial Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 Program Review and Modification

As previously discussed, the City made some changes to its industrial and commercial inspection form to collect information about shared areas and clarify the inspection reports that are mailed to businesses. The updated inspection form is included as Attachment 5.1. No other changes to the City's industrial and commercial component have been made since that time.

Table 5-2
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation			
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC
1	ADEPT PROCESS SERVICES, INC DBA MARINE SERVICES AND EQUIPMENT	1804 CLEVELAND AVE. B	3/18/2010	Mandatory	3732		✔	✔	✔	
2	BECKY BEEZ BISQUE & CERAMICS	2424 HOOVER AVE T	2/18/2010	Mandatory	3269		✔	✔	✔	
3	BEST WAY PRINTING	2602 TRANSPORTATIO N AVE E	2/16/2010	Conditional	2759	No exposure of materials observed				✔
4	CONNECTION MEDICAL TRANSPORT	2504 TRANSPORTATIO N AVE E	2/16/2010	Mandatory	4789	Exposure of materials observed	✔	✔	✔	
5	CP MANUFACTURING	1440 HARDING AVENUE B	3/16/2010	Conditional	3679	No exposure of materials observed				✔
6	D F DESIGNS	1228 HOOVER AVENUE	2/4/2010	Conditional	2434	No exposure of materials observed				✔
7	DAN FAB	1110 HARDING AVENUE	3/17/2010	Conditional	3499	Exposure of materials observed	✔	✔	✔	
8	DIVERSIFIED WOOD DESIGNS	124 E 30TH ST A5	2/16/2010	Conditional	2434	No exposure of materials observed				✔

Table 5-2 (Continued)
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation			
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC
9	FTC	1433 ROOSEVELT AVENUE	2/11/2010	Conditional	3999	No exposure of materials observed				✔
10	GOULET INDUSTRIES	340 W 26TH STREET J	2/12/2010	Conditional	3479	No exposure of materials observed				✔
11	H20 LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	3/22/2010	Conditional	2048	Exposure of materials observed	✔	✔	✔	
12	IDENTITY PLUS	1120 HOOVER AVENUE	2/4/2010	Conditional	3069	No exposure of materials observed				✔
13	INNOVATIVE CUTTING DESIGNS COR	1805 CLEVELAND AVE	3/18/2010	Conditional	3499	Exposure of materials observed	✔	✔	✔	
14	NATHAN'S STONE WORLD INC	1014 COOLIDGE AVE	3/22/2010	Mandatory	3281		✔	✔	✔	
15	NATIONAL CITY TRANSFER & STORAGE	2150 MCKINLEY AVENUE	2/17/2010	Mandatory	4214	Trucking with maintenance	✔	✔	✔	
16	NATIONAL IRON WORKS	832 HOOVER AVENUE	3/22/2010	Mandatory	3441		✔	✔	✔	

Table 5-2 (Continued)
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation			
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC
17	OXYHEAL MEDICAL SYSTEMS, INC.	3224 HOOVER AVENUE	2/15/2010	Conditional	3499	Exposure of materials observed	✔	✔	✔	
18	SAN DIEGO PRETZEL COMPANY	224 W 12TH STREET	2/22/2010	Conditional	2052	No exposure of materials observed				✔
19	SAN DIEGO SEAFOOD	1842 MCKINLEY AVENUE	2/18/2010	Conditional	5146, 2092, 4212	Exposure of materials observed	✔	✔	✔	
20	TOD TOOL INC	2601 HOOVER AVENUE K	2/15/2010	Conditional	3728	No exposure of materials observed				✔
21	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	2/4/2010	Conditional	3449	Exposure of materials observed	✔	✔	✔	
22	US-MEX	2500 HOOVER AVENUE G	2/17/2010	Conditional	3679	No exposure of materials observed				✔
23	ZAGA CUSTOM	1545 TIDELANDS AVE D	2/18/2010	Conditional	2389	No exposure of materials observed				✔

Table 5-3
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
1	A & D HAWAIIAN BBQ	2220 E PLAZA BLVD D	3/2/2010	Full Inspection	✔	In Progress
2	A-1 ALLOYS RECYCLING CENTER	724 CIVIC CENTER DRIVE	2/12/2010	Full Inspection		
3	A-1 HYDRAULICS SERVICE	2100 ROOSEVELT AVENUE	3/11/2010	Full Inspection		
4	AB&A CUSTOM WHEELS & ACCESSORIES	1840 HIGHLAND AVENUE	2/11/2010	Full Inspection		
5	ADEPT PROCESS SERVICES, INC DBA MARINE SERVICES AND EQUIPMENT	1804 CLEVELAND AVE. B	3/18/2010	Full Inspection	✔	Resolved
6	AMEE BAY LLC	2105 CLEVELAND AVE	3/18/2010	Full Inspection		
7	ANAYA'S NATIONAL AUTOMOTIVE	2125 ROOSEVELT AVENUE	2/17/2010	Full Inspection		
8	ASHTON AWNINGS INC	1200 HARBOR DR	3/18/2010	Full Inspection		
9	ASIAN NOODLES	1430 E PLAZA BLVD E-12	3/17/2010	Full Inspection	✔	In Progress
10	BAKER, RON-CHEVROLET	2301 NATIONAL CITY BLVD	2/18/2010	Full Inspection		
11	BALL AUTOMOTIVE GROUP	2729 NATIONAL CITY BLVD.	3/9/2010	Full Inspection	✔	Resolved
12	BALL AUTOMOTIVE GROUP (ACURA)	2001 NATIONAL CITY BLVD	2/18/2010	Full Inspection		
13	BALL AUTOMOTIVE GROUP (KIA)	1940 NATIONAL CITY BLVD.	2/18/2010	Full Inspection		
14	BALL AUTOMOTIVE GROUP (MITSUBISHI)	1935 NATIONAL CITY BLVD.	2/18/2010	Full Inspection		
15	BAMBOO ROTISSERIE, INC	2220 E PLAZA BLVD T-1	3/3/2010	Full Inspection	✔	In Progress
16	BAXTER AUTOMOTIVE & MACHINE	1400 HOOVER AVENUE	2/8/2010	Full Inspection		
17	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	2/16/2010	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
18	BECKY BEEZ BISQUE & CERAMICS	2424 HOOVER AVE T	2/18/2010	Full Inspection		
19	BEIJING ROYAL BUFFET	4 N EUCLID AVE A-C	3/2/2010	Full Inspection		
20	BEN'S 1615	1615 SWEETWATER ROAD A	3/25/2010	Full Inspection	✔	In Progress
21	BEST WAY PRINTING	2602 TRANSPORTATION AVE E	2/16/2010	Full Inspection		
22	BUSTER'S BEACH HOUSE AND LONGBOARD BAR	740 BAY MARINA DRIVE	7/10/2009	Full Inspection		
23	C & W DIVING	1706 HOOVER AVENUE	2/4/2010	Full Inspection		
24	C&M MOTORS INC.	904 ROOSEVELT AVENUE	3/11/2010	Full Inspection	✔	In Progress
25	CALIBER COLLISION CENTERS	2013 HAFFLEY AVE	3/22/2010	Full Inspection		
26	CALIFORNIA AUTO DETAILING	1509.5 NATIONAL CITY BLVD.	2/11/2010	Full Inspection	✔	Resolved
27	CALIFORNIA PRODUCE CORPORATION	1736 E PLAZA BL	3/17/2010	Full Inspection		
28	CAR MAINTENANCE PROVIDERS	1531 NATIONAL CITY BLVD	2/9/2010	Full Inspection		
29	CARLS JR. #120	1280 E PLAZA BLVD	3/15/2010	Full Inspection	✔	Resolved
30	CARLS' JR. #261	1502 SWEETWATER ROAD	3/8/2010	Full Inspection	✔	Resolved
31	CARROLL METAL WORKS, INC.	740 W 16TH STREET	2/10/2010	Full Inspection		
32	CASA DE ORO RESTAURANT	1510 SWEETWATER ROAD A	3/8/2010	Full Inspection		
33	CASA DEL TACO	1635 SWEETWATER ROAD A	3/9/2010	Full Inspection	✔	In Progress
34	CHINA SUPER BUFFET	3007 HIGHLAND AVE	3/8/2010	Full Inspection		
35	CHOWKING	2220 E PLAZA BLVD T-1	3/3/2010	Full Inspection	✔	In Progress
36	CHUCK E CHEESE'S	1143 HIGHLAND AVENUE	3/15/2010	Full Inspection	✔	Resolved

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
37	CIVIC CENTER AUTO BODY	1304 ROOSEVELT AVENUE	2/10/2010	Full Inspection		
38	COASTAL DECKING, INC.	2050 WILSON AVENUE	2/12/2010	Full Inspection		
39	CONCHING'S CAFÉ	3400 E 8TH STREET 115 & 116	2/26/2010	Full Inspection	✔	Resolved
40	CONNECTION MEDICAL TRANSPORT	2504 TRANSPORTATION AVE E	2/16/2010	Full Inspection		
41	CONSOLIDATED INTERNATIONAL COR	2500 HOOVER AVE A	2/18/2010	Full Inspection		
42	COTIJAS MEXICAN FOOD	740 E 30TH STREET	3/8/2010	Full Inspection	✔	In Progress
43	CP MANUFACTURING	1440 HARDING AVENUE B	3/16/2010	Full Inspection		
44	CP MANUFACTURING	1300 WILSON AVENUE	4/9/2010	Full Inspection		
45	CROWN TRANSMISSION CENTER	1339 HOOVER AVENUE	2/8/2010	Full Inspection		
46	D F DESIGNS	1228 HOOVER AVENUE	2/4/2010	Full Inspection		
47	DAN FAB	1110 HARDING AVENUE	3/17/2010	Full Inspection	✔	In Progress
48	DENNY'S RESTAURANT	424 MILE OF CARS WAY	2/17/2010	Full Inspection	✔	In Progress
49	DIESEL POWER TRADE CORP	1636 WILSON AVE	3/15/2010	Full Inspection	✔	In Progress
50	DIVERSIFIED WOOD DESIGNS	124 E 30TH ST A5	2/16/2010	Full Inspection		
51	DIXIELINE LUMBER COMPANY	3450 HIGHLAND AVENUE	3/26/2010	Full Inspection		
52	EL ASADERO GRILL	2503 SWEETWATER ROAD	3/9/2010	Full Inspection		
53	ENTERPRISE RENT A CAR #32FP	1145 NATIONAL CITY BL	2/4/2010	Full Inspection		
54	EPSILON SYSTEMS SOLUTIONS INC	3039 HOOVER AVE	3/26/2010	Full Inspection		
55	FABRICATION TECHNOLOGIES INDUSTRIES	2200 HAFFLEY AVENUE A	2/24/2010	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
56	FAMILY HOUSE OF PANCAKES	1900 E PLAZA BLVD	3/17/2010	Full Inspection	✔	In Progress
57	FAMILY LOOMPYA SEAFOOD MARKET	2720 E PLAZA BLVD A	3/11/2010	Full Inspection	✔	In Progress
58	FAMILY LOOMPYA WHOLESALE	2626 SOUTHPORT WAY F	2/15/2010	Full Inspection		
59	FASTENAL COMPANY	2807 HOOVER AVE G	2/15/2010	Full Inspection		
60	FASTSIGNS	1240 E PLAZA BLVD. 602	3/15/2010	Full Inspection		
61	FOODLAND IGA	303 HIGHLAND AVENUE	3/1/2010	Full Inspection	✔	In Progress
62	FTC	1433 ROOSEVELT AVENUE	2/11/2010	Full Inspection		
63	FUTURA FIBERGLASS	730 W 19TH STREET	3/31/2010	Full Inspection		
64	G V INDUSTRIES	1346 CLEVELAND AVENUE	3/22/2010	Full Inspection		
65	GAPO RESTO AND KARAOKE	933 S HARBISON AVE	3/4/2010	Full Inspection		
66	GINZA SUSHI	925 E PLAZA BLVD G	3/10/2010	Full Inspection	✔	In Progress
67	GLENN'S BODY SHOP ON THE MILE	2800 NATIONAL CITY BLVD B	3/16/2010	Full Inspection		
68	GLOBAL SALES & FINANCE	1731 NATIONAL CITY BLVD	2/9/2010	Full Inspection		
69	GOLDEN CHOPSTICKS RESTAURANT	1430 E PLAZA BLVD E-22-23	3/12/2010	Full Inspection		
70	GOULET INDUSTRIES	340 W 26TH STREET J	2/12/2010	Full Inspection		
71	GREENWALD'S AUTOBODY & FRAMEWORKS, INC	1814 ROOSEVELT AVENUE	2/11/2010	Full Inspection		
72	H20 LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	3/22/2010	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
73	HANSON AGGREGATES NATIONAL CITY BATCH PLANT (2003 NC LLC)	601 W 12TH STREET	3/26/2010	Full Inspection		
74	HIGHLAND ARCO NORTH	1734 HIGHLAND AVENUE	3/3/2010	Full Inspection	✔	Resolved
75	HOMETOWN BUFFET #714	1135 HIGHLAND AVENUE	3/17/2010	Full Inspection	✔	Resolved
76	HOPSING AUTO	1540 ROOSEVELT AVENUE	2/10/2010	Full Inspection	✔	In Progress
77	HYTECH AUTO DETAIL	2130 ROOSEVELT AVE.	2/17/2010	Full Inspection		
78	IDEAL SMOG	10 OSBORN ST A	2/25/2010	Full Inspection		
79	IDENTITY PLUS	1120 HOOVER AVENUE	2/4/2010	Full Inspection		
80	IMPERIAL PALACE	1630 E 8TH STREET	2/26/2010	Full Inspection		
81	INNOVATIVE CUTTING DESIGNS COR	1805 CLEVELAND AVE	3/18/2010	Full Inspection		
82	INTERNATIONAL HOUSE OF PANCAKES	1430 E PLAZA BLVD E-1	3/16/2010	Full Inspection		
83	INTERNATIONAL SURF VENTURE INC	301 W 28TH STREET B, C	2/15/2010	Full Inspection		
84	JACK IN THE BOX #80	3138 E PLAZA BLVD	3/1/2010	Full Inspection	✔	In Progress
85	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	3/4/2010	Full Inspection	✔	In Progress
86	JESUS & CECILIA LOYA CAFÉ DBA PEPITA'S CAFÉ	524 HIGHLAND AVE	3/10/2010	Full Inspection		
87	JOE'S TIRES	1532 NATIONAL CITY BLVD	2/8/2010	Full Inspection		
88	JOLLIBEE	1401 E PLAZA BLVD	3/10/2010	Full Inspection	✔	In Progress
89	JOSE AUTO ELECTRIC	108 W 18TH STREET	2/4/2010	Full Inspection		
90	JRP AUTO SALES	5 W 18TH STREET	3/4/2010	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
91	KARIHAN FILIPINO FOOD	2220 E PLAZA BLVD A-1	3/2/2010	Full Inspection	✔	In Progress
92	KARZ PLUS RV	1605 NATIONAL CITY BLVD.	2/9/2010	Full Inspection		
93	KAY AUTOMOTIVE	2121 HOOVER AVE	2/17/2010	Full Inspection		
94	KEN'S VW	1408 MCKINLEY AVENUE	3/31/2010	Full Inspection		
95	L3 COMMUNICATIONS PACORD SAN DIEGO	225 W 30TH STREET	3/31/2010	Full Inspection		
96	L3 COMMUNICATIONS/PACORD SAN DIEGO	240 W 30TH STREET	3/31/2010	Full Inspection		
97	LAI THAI RESTAURANT	1430 E PLAZA BLVD E-10	3/16/2010	Full Inspection	✔	In Progress
98	LEFORT'S CONSTRUCCION & LANDSC	34 E 17TH STREET B	2/22/2010	Full Inspection		
99	LEX-TEK	2704 TRANSPORTATION AVE G	2/16/2010	Full Inspection		
100	LOLA HAPPY BAKERY	3142 E PLAZA BLVD L	2/26/2010	Full Inspection	✔	In Progress
101	LOLLICUP TEAZONE	1105 E PLAZA BLVD A	3/15/2010	Full Inspection		
102	LOS TURBOS TRANSMISSION	1411 COOLIDGE AVENUE	2/3/2010	Full Inspection		
103	M & M CONVERTER SHOP	301 W 28TH STREET X	2/15/2010	Full Inspection		
104	M & T AUTO	1731 WILSON AVENUE	2/12/2010	Full Inspection	✔	In Progress
105	MANILA SEAFOOD ORIENTAL MARKET	2220 E PLAZA BLVD K	3/2/2010	Full Inspection	✔	In Progress
106	MANILA SUNSET GRILLE	925 E PLAZA BLVD I	3/10/2010	Full Inspection	✔	Resolved
107	MARATHON CONSTRUCTION	801 CIVIC CENTER DRIVE	3/17/2010	Full Inspection		
108	MARLO'S AUTO SPECIALTIES/FRAME	223 CIVIC CENTER DR	2/11/2010	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
109	MASTER MACHINE CORPORATION (VANTAGE ASSOCIATES)	900 CIVIC CENTER DRIVE	2/10/2010	Full Inspection		
110	MCDONALDS	1630 HIGHLAND AVENUE	3/3/2010	Full Inspection	✔	Resolved
111	MCDONALD'S	3400 HIGHLAND AVENUE	3/11/2010	Full Inspection		
112	MCDONALDS #6773	2145 E PLAZA BLVD	3/16/2010	Full Inspection		
113	MELHORN CONSTRUCTION	410 W 30TH STREET B	2/12/2010	Full Inspection		
114	MIKE'S GIANT NY PIZZA #5	1635 SWEETWATER ROAD C-1	3/8/2010	Full Inspection	✔	In Progress
115	MORE BRAKES N TUNE	1902 HIGHLAND AVE A	2/11/2010	Full Inspection		
116	MOTHER'S NUTRITIONAL CENTER	924 HIGHLAND AVE	3/4/2010	Full Inspection		
117	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	2/8/2010	Full Inspection	✔	In Progress
118	NANI MOKU HAWAIIAN BBQ	1635 SWEETWATER RD H	3/9/2010	Full Inspection	✔	In Progress
119	NATHAN'S STONE WORLD INC	1014 COOLIDGE AVE	3/22/2010	Full Inspection		
120	NATIONAL CITY AUTO CENTER INC	1010 NATIONAL CITY BLVD	3/1/2010	Full Inspection	✔	Resolved
121	NATIONAL CITY CAR WASH	2550 E PLAZA BLVD	3/3/2010	Full Inspection	✔	Resolved
122	NATIONAL CITY MOTORCYCLE INC	1504 NATIONAL CITY BLVD. A	2/8/2010	Full Inspection		
123	NATIONAL CITY TRANSFER & STORAGE	2150 MCKINLEY AVENUE	2/17/2010	Full Inspection		
124	NATIONAL IRON WORKS	832 HOOVER AVENUE	3/22/2010	Full Inspection	✔	In Progress
125	OHANA HAWAIIAN ISLAND BBQ	1430 E PLAZA BLVD E7A	3/12/2010	Full Inspection	✔	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
126	OLYMPIC AUTO SALES	1800 NATIONAL CITY BLVD.	2/9/2010	Full Inspection	✔	In Progress
127	OOH LA LA	2504 TRANSPORTATION AVE D	2/17/2010	Full Inspection		
128	OUTBACK STEAK HOUSE	2980 PLAZA BONITA ROAD	3/22/2010	Full Inspection	✔	Resolved
129	OXYHEAL MEDICAL SYSTEMS, INC.	3224 HOOVER AVENUE	2/15/2010	Full Inspection		
130	PACIFIC AUTO REPAIRS	315 W 11TH STREET	2/11/2010	Full Inspection		
131	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	4/12/2010	Full Inspection		
132	PATRIOT AUTO CARE AND BRAKES	910 HIGHLAND AVE A	3/1/2010	Full Inspection		
133	PERRY FORD (TRUCK)	1610 NATIONAL CITY BLVD.	2/9/2010	Full Inspection		
134	PICKLE BARREL DELI RESTAURANT	340 W 26TH STREET E	2/16/2010	Full Inspection	✔	Resolved
135	PINOY RANCH	3403 E PLAZA BLVD D	3/4/2010	Full Inspection		
136	PIZZA HUT #315044	2437 E PLAZA BLVD	3/2/2010	Full Inspection	✔	In Progress
137	PIZZA PLAZA	3108 E PLAZA BLVD.	2/26/2010	Full Inspection		
138	POMPEII ITALIAN RESTAURANT & PIZZA	1231 HIGHLAND AVE.	3/10/2010	Full Inspection		
139	POPEYES CHICKEN	2210 E PLAZA BLVD	3/2/2010	Full Inspection		
140	POWER TIRE #4	1615 E 8TH STREET	2/3/2010	Full Inspection		
141	PRESTIGE AUTO BROKERS	2125 ROOSEVELT AVENUE A	2/17/2010	Full Inspection		
142	PRO STREET LIGHTING INC	2145 WILSON AVENUE	2/12/2010	Full Inspection		
143	PROPULSION CONTROL ENGINEERING	1411 HARDING AVE.	2/9/2010	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
144	QUIZNOS SUB	928 HIGHLAND AVE	3/4/2010	Full Inspection		
145	R & H WELDING SHOP	2601 HOOVER AVE F	2/15/2010	Full Inspection		
146	S L FUSCO INC.	2530 SOUTHPORT WAY	2/22/2010	Full Inspection		
147	SAN DIEGO AUTO DETAIL	110 W 11TH STREET	2/22/2010	Full Inspection		
148	SAN DIEGO CRANE & HOIST	1606 COOLIDGE AVENUE	2/3/2010	Full Inspection		
149	SAN DIEGO HYDRAULICS INC	1720 CLEVELAND AVE	3/15/2010	Full Inspection	✔	In Progress
150	SAN DIEGO PIPE & STEEL	100 W 35TH STREET E	3/8/2010	Full Inspection		
151	SAN DIEGO PRETZEL COMPANY	224 W 12TH STREET	2/22/2010	Full Inspection		
152	SAN DIEGO SEAFOOD	1842 MCKINLEY AVENUE	2/18/2010	Full Inspection		
153	SAVE-A-LOT #949	1035 S HARBISON AVENUE	3/1/2010	Full Inspection		
154	SCHEIB, EARL OF CA INC #189	111 NATIONAL CITY BLVD.	2/3/2010	Full Inspection		
155	SEAFOOD CITY SUPERMARKET	1420 E PLAZA BLVD C-E	3/12/2010	Full Inspection		
156	SIZZLER FAMILY STEAK HOUSE #45	1325 E PLAZA BLVD	3/16/2010	Full Inspection		
157	SOUND SOLUTIONS AUTO STYLING	36 W CIVIC CENTER DR.	2/11/2010	Full Inspection		
158	SOUTH BAY BOILER REPAIR, INC..	1224 ROOSEVELT AVENUE	2/8/2010	Full Inspection		
159	SOUTH BAY DIESEL & HYDRAULIC, INC	100 W 35TH ST J	3/8/2010	Full Inspection		
160	SOUTH BAY MECHANIC SHOP	1112 COOLIDGE AVE	2/4/2010	Full Inspection		
161	SOUTH BAY PRE-OWNED	2401 NATIONAL CITY BLVD	2/18/2010	Full Inspection		
162	SOUTHWESTERN AUTOBROKERS INC	1535 NATIONAL CITY BLVD	2/8/2010	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
163	SPECIALTY TIRES AND BRAKES	1 W 35TH ST D	3/8/2010	Full Inspection	✔	In Progress
164	STAR EXPRESS	3124 E PLAZA BLVD	2/26/2010	Full Inspection		
165	STEVENS CONSTRUCTION	125 E 17TH STREET	2/22/2010	Full Inspection		
166	STEVE'S WEST COAST AUTOMOTIVE	1732 COOLIDGE AVENUE	2/3/2010	Full Inspection		
167	STONEY'S BAR & GRILL	108 W 25TH ST D, E, F, G	3/12/2010	Full Inspection		
168	STREET DREAMS AUTO STYLING	710 E 8TH ST	2/25/2010	Full Inspection		
169	STYLER'S AUTO MECHANIC	29 E 17TH ST	2/22/2010	Full Inspection		
170	SUN DIEGO CHARTER CO.	2020 HOOVER AVENUE	4/12/2010	Full Inspection		
171	SURE RIDE INC	1523 WILSON AVE	3/18/2010	Full Inspection	✔	In Progress
172	TACO SALSA TACO SHOP	925 E PLAZA BLVD B	3/10/2010	Full Inspection	✔	In Progress
173	TAQUERIA EL TIZON	505 HIGHLAND AVENUE	3/2/2010	Full Inspection		
174	TINO'S AUTO TECH	1 W 35TH STREET D	3/9/2010	Full Inspection		
175	TITA'S KITCHENETTE	2720 E PLAZA BLVD E & F	3/11/2010	Full Inspection	✔	Resolved
176	TOD TOOL INC	2601 HOOVER AVENUE K	2/15/2010	Full Inspection		
177	TONYS DETAIL SHOP	49 E 16TH ST B1	3/3/2010	Full Inspection	✔	In Progress
178	TOPECO PRODUCTS	2525 SOUTHPORT WAY	2/22/2010	Full Inspection		
179	TRI TECH REPROGRAPHICS	2712 TRANSPORTATION AVE E	2/15/2010	Full Inspection		
180	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	2/4/2010	Full Inspection		
181	USED KAR STORE	45 E 26TH STREET	2/16/2010	Full Inspection	✔	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
182	US-MEX	2500 HOOVER AVENUE G	2/17/2010	Full Inspection		
183	VALENCIA STONE AND TILE	1124 COOLIDGE AVENUE	2/9/2010	Full Inspection		
184	VALERIOS FAMILY BAKE SHOP	2720 E PLAZA BLVD H	3/11/2010	Full Inspection	✔	In Progress
185	VALERO NATIONAL CITY	10 OSBORN STREET	2/25/2010	Full Inspection	✔	In Progress
186	VALUE CARS	13 NATIONAL CITY BLVD	3/4/2010	Full Inspection		
187	VALUE CARS INC	1807 NATIONAL CITY BLVD	2/10/2010	Full Inspection		
188	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS NORTH OF JC PENNY	3030 PLAZA BONITA ROAD 2075	3/25/2010	Full Inspection		
189	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS ON EAST SIDE OF MALL	3030 PLAZA BONITA RD 2075	3/25/2010	Full Inspection		
190	WINGS N THINGS	1499 E PLAZA BLVD	3/10/2010	Full Inspection		
191	YUM YUM DONUT FRANCHISE #502	3122 E PLAZA BLVD	2/26/2010	Full Inspection		
192	ZAGA CUSTOM	1545 TIDELANDS AVE D	2/18/2010	Full Inspection		
193	ZARLITOS FAMILY RESTAURANT	505 E 8TH STREET	2/25/2010	Full Inspection		
194	AQUA ZONE	131 W 33RD ST	3/9/2010	*Not Inventoried*		
195	COLORINO DISTRIBUTORS	131 W 33RD STREET 4	3/9/2010	*Not Inventoried*		
196	EXLINE, DENNIS L	243 E 16TH ST	2/22/2010	*Not Inventoried*		
197	FILIPINO PRESS (THE)	600 E 8TH ST	2/25/2010	*Not Inventoried*		
198	GREEN EAGLE TRANSPORTS	2424 HOOVER AVE A	2/18/2010	*Not Inventoried*		
199	J J & K BUILDERS INC	2050 WILSON AVE C	2/12/2010	*Not Inventoried*		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
200	NELGEN DISTRIBUTORS	204 S KENTON AVENUE	2/3/2010	*Not Inventoried*		
201	UNIFREIGHT CARGO SYSTEMS INC	1610 E 8TH ST	2/3/2010	*Not Inventoried*		
202	DE-LUX ROOFING	1107 HARDING AVENUE	3/31/2010	Could not Contact		
203	FIVE STARS DIESEL SERVICE	1211 MCKINLEY AVE.	3/15/2010	Could not Contact		
204	JESTONI MANILA BISTRO	3421 E PLAZA BLVD.	3/22/2010	Could not Contact		
205	ROYAL MANDARIN RESTAURANT	1132 E PLAZA BLVD 205	3/15/2010	Could not Contact		
206	M.A. STEVENS CONSTRUCTION, INC	125 E 17TH ST	2/22/2010	Duplicate		
207	NATIONAL CITY DISCOUNT SELF STORAGE	131 W 33RD STREET	3/9/2010	Duplicate		
208	PRESTIGE AUTO BROKERS	2225 ROOSEVELT AVE D	2/17/2010	Duplicate		
209	SOUTHLAND TRANSMISSION CENTER	1400 HOOVER AVENUE	2/9/2010	Duplicate		
210	CARLOS MAINTENANCE AND REPAIR	44 S HARBISON AVE	2/3/2010	Mobile		
211	3 D AUTO DETAIL	5 W 18TH ST	3/4/2010	Moved, Replaced		
212	BAJA'S FISH TACOS	505 HIGHLAND AVE	3/2/2010	Moved, Replaced		
213	BALL SMOG CHECK ONLY	910 HIGHLAND AVENUE B	3/1/2010	Moved, Replaced		
214	BRAKE DEPOT	910 HIGHLAND AVENUE	3/1/2010	Moved, Replaced		
215	CAR HEALTH PLAN, INC.	1532 NATIONAL CITY BLVD.	2/8/2010	Moved, Replaced		
216	CARRERA'S AUTO DETAIL	2130 ROOSEVELT AVENUE	2/17/2010	Moved, Replaced		
217	CHILES MEXICAN GRILL	2503 SWEETWATER RD	3/9/2010	Moved, Replaced		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
218	CUADROS MOTORS	1800 NATIONAL CITY BLVD S	2/9/2010	Moved, Replaced		
219	DE LA CRUZ AUTO REPAIR	36 CIVIC CENTER DRIVE	2/11/2010	Moved, Replaced		
220	DEALERS DIRECT	45 E 26TH ST	2/16/2010	Moved, Replaced		
221	DIESEL POWER TRADE CORP	1720 CLEVELAND AVENUE	3/15/2010	Moved, Replaced		
222	HERTZ LOCAL EDITION	1814 ROOSEVELT AVENUE	2/11/2010	Moved, Replaced		
223	ISLAND EQUIPMENT	303 W 35TH ST B	3/9/2010	Moved, Replaced		
224	JT MOTORSPORTS	1531 NATIONAL CITY BLVD	2/11/2010	Moved, Replaced		
225	MARISCOS CHOY'S	1231 HIGHLAND AVE	3/10/2010	Moved, Replaced		
226	MORE GLASS	910 HIGHLAND AVENUE C	3/1/2010	Moved, Replaced		
227	NEWTOWN EXPRESS CHINESE FOOD	4 N EUCLID AVE B	3/2/2010	Moved, Replaced		
228	O.K. WHOLESALE	1605 NATIONAL CITY BLVD A	2/9/2010	Moved, Replaced		
229	PACIFIC COAST AUTO & CUSTOMIZING	710 E 8TH ST	2/25/2010	Moved, Replaced		
230	PACIFIC DEFENSE SYSTEMS (2)	1411 HARDING AVENUE	2/9/2010	Moved, Replaced		
231	PHAT CITY AUTO SALES	1741 NATIONAL CITY BLVD	2/9/2010	Moved, Replaced		
232	R G P AUTO BODY & PAINT	2122 ROOSEVELT B	3/11/2010	Moved, Replaced		
233	SAN DIEGO ORGANIC SUPPLY INC	100 W 35TH STREET E	3/8/2010	Moved, Replaced		
234	SHOW TIME AUTO INC	710 E 8TH STREET	2/25/2010	Moved, Replaced		
235	SMSA INC	10 OSBORN ST	2/25/2010	Moved, Replaced		
236	TACOS EL REY	505 HIGHLAND AVENUE	3/2/2010	Moved, Replaced		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
237	TRICARE MOTORS	5 W 8TH STREET B & C	3/3/2010	Moved, Replaced		
238	TUNEUP MASTERS INC #408	1902 HIGHLAND AVE	2/11/2010	Moved, Replaced		
239	AMSEC LLC	3239 HOOVER AVENUE	2/12/2010	Moved, Vacant		
240	ANGELO'S KARS	1040 NATIONAL CITY BLVD A	3/1/2010	Moved, Vacant		
241	ARKON DRAFTING DESIGN & PRINTS	3200 HIGHLAND AVE	3/18/2010	Moved, Vacant		
242	BORDER STEEL INTERNATIONAL	1505 CLEVELAND AVE	3/16/2010	Moved, Vacant		
243	CHIEF AUTO SALES	5 W 18TH STREET	3/4/2010	Moved, Vacant		
244	CHRISTIAN DURABLE MEDICAL EQUI	3400 E 8TH STREET	2/3/2010	Moved, Vacant		
245	CLEAN HARBORS ENVIRONMENTAL SE	131 W 33RD ST	2/16/2010	Moved, Vacant		
246	DIAMANTE MOTORS	10 OSBORN ST	2/25/2010	Moved, Vacant		
247	DIAMANTE MOTORS INC	10 E 1ST ST	2/3/2010	Moved, Vacant		
248	DOUBLE J AUTO REPAIR SHOP	29 E 17TH STREET	2/22/2010	Moved, Vacant		
249	EXTREME AUDIO	1509.5 NATIONAL CITY BLVD	2/11/2010	Moved, Vacant		
250	FEDERAL EQUIPMENT WEST	2101 WILSON AVENUE	2/12/2010	Moved, Vacant		
251	HAWTHORNE RENT-IT SERVICE	2000 MCKINLEY AVENUE	3/15/2010	Moved, Vacant		
252	JACK HARRISON BUICK	2601 NATIONAL CITY BLVD.	3/11/2010	Moved, Vacant		
253	LEADING CONCEPTS	1535 TIDELAND AVENUE D	2/18/2010	Moved, Vacant		
254	MAESTER CARBURATORS	301 W 28TH ST	2/12/2010	Moved, Vacant		
255	MAHARLIKA CAFÉ & GRILL	1819 E PLAZA BLVD	3/18/2010	Moved, Vacant		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date	Inspection Result	Follow-up Required?	Correction Status
256	NATIONAL CITY DETAIL SHOP	108 W 18TH STREET	2/4/2010	Moved, Vacant		
257	ON DEMAND TRUCKING	241 NATIONAL CITY BLVD	3/4/2010	Moved, Vacant		
258	PACIFIC DESIGN GROUP	1620 HARDING AVE	2/3/2010	Moved, Vacant		
259	PARKS MOTORS	2125 ROOSEVELT AVE D	2/17/2010	Moved, Vacant		
260	PHILIPPINE MABUHAY NEWS	3142 E PLAZA BLVD. N	2/26/2010	Moved, Vacant		
261	PRESIDENTIAL LIMOUSINE LLC	1428 MCKINLEY AVE	3/15/2010	Moved, Vacant		
262	PRIME MOTOR CENTER	1619 NATIONAL CITY BLVD	2/9/2010	Moved, Vacant		
263	PRO TIRES	1031 NATIONAL CITY BLVD B	3/1/2010	Moved, Vacant		
264	RPM TRANSMISSIONS	1620 HARDING AVE	2/3/2010	Moved, Vacant		
265	SAN DIEGO MOTORSPORTS, LLC	301 W 28TH ST D	2/12/2010	Moved, Vacant		
266	SCOTT'S GARAGE	101 E 30TH ST A	2/16/2010	Moved, Vacant		
267	STREET DREAMS AUTO STYLING	1509.5 NATIONAL CITY BLVD B	2/11/2010	Moved, Vacant		
268	SUPERIOR METAL WORKS, INC	1703 HOOVER AVE B	2/4/2010	Moved, Vacant		
269	VANARI KNITTING MILLS INC.	340 W 26TH STREET L	2/12/2010	Moved, Vacant		
270	XCLUSIVE MOTORSPORTS	1717 NATIONAL CITY BLVD	2/9/2010	Moved, Vacant		

6.0 RESIDENTIAL

6.1 INTRODUCTION

Land use in the City of National City is largely residential. Due to the large residential area, activities that take place, these areas have the potential to impact the quality of receiving waters. Residential activities such as vehicle washing, over-irrigation, and home maintenance can potentially contribute pollutants to the City's MS4 if BMPs are not implemented. Additionally, household hazardous waste (HHW) can contribute pollutants to the City's MS4 if not disposed of properly. Pollutants of concern include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has worked to implement a range of programs to address these residential activities with the goal of reducing pollutant loads associated with such activities. The City recognizes the need for educational efforts and opportunities designed specifically for residents and residential activities.

The following sections present activities conducted during this reporting period. These activities are associated with the residential component of the JURMP and include conducting ongoing HHW collection events, distributing educational materials, and participating in community events.

6.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the residential component during the 2009/2010 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City developed a 2010 Calendar through a storm water art contest at local schools. The calendar was printed in both English and Spanish and informed residents about pollutants found in San Diego Bay and neighboring waterways.
- The City collaborated with the cities of Chula Vista and Imperial Beach to make HHW disposal events available to residents. The total amount of HHW collected from residents of all three cities was 294,217 pounds. Door-to-door pick up service was available for the disabled and senior communities.
- The City hosted three large item disposal events. The event allowed residents to dispose of large household items (not including HHW), such as unwanted furniture and large appliances.
- At least 88 code violations related to storm water quality were noted in residential areas and corrected by the City's Code Enforcement staff.

6.2 SOURCE CHARACTERIZATION

The City has identified high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities. To reduce pollutant discharges from these high TTWQ areas and activities, the City designated specific BMPs in the 2008 JURMP. These BMPs did not change during 2009/2010.

6.2.1 HIGH TTWQ ACTIVITIES

During the 2009/2010 reporting period, as outlined in the City's JURMP, the City continued to identify the following activities as high TTWQ:

- Automobile repair and maintenance
- Automobile washing
- Automobile parking
- Home and garden care activities and product use, including disposal
- Disposal of trash and pet waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

In addition to these activity-based priorities, the City has noted several residential areas that pose higher threats to water quality. High priority residential areas are designated by considering complaint investigations, institutional knowledge, Dry Weather Monitoring data, and criteria as defined in the Municipal Permit. The list of high priority residential areas is subject to re-evaluation based on new observations and data collected during the reporting period.

The following five residential areas have been designated as high TTWQ:

Division Avenue Area
The residential area located near Division Street, east of Highland Avenue, including residences located on East 2nd Street, Melrose Street, Eta Street, Fig Court, and Scott Drive. See Figure 6-1. Past dry weather monitoring programs have detected elevated levels of ammonia and detergents just downstream of these residential areas.

Paradise Creek Area, between F and L Avenues
The residential area that runs along the Southern side of Paradise Creek between F and L Avenues, including residences located along East 12th Street, East 13th Street, and East 14th Street. See Figure 6-2. Past dry weather monitoring programs have detected elevated bacteria, ammonia, and oil and grease levels.

East 8th Street Area
The residential area along East 8th Street, including residences on East 8th Street and East 9th Street, between L Avenue and N Avenue. See Figure 6-3. This area borders Paradise Creek and has been found to have the same elevated constituents as the areas between F and L Avenues.

Grove Avenue Area
The residential area surrounding Grove Avenue, including residences along East 14th Street, Grove Avenue, Stancrest Lane, and Orange Street. See Figure 6-4. This area has been identified during previous dry weather monitoring programs as a source of trash, ammonia, and detergents.

Arcadia Place Area
The residential area surrounding Arcadia Place, including residences west of Harbison Avenue along East 11th Street, East 10th Street, and East Plaza Boulevard. See Figure 6-4. This area has been identified during previous dry weather monitoring programs as a source of ammonia and detergents. No new residential areas were added during 2009/2010. However, if future residential complaints, Dry Weather Monitoring Program results, or observations made by City staff indicate evidence of high TTWQ activities in these or other areas of the City, they will be designated as high TTWQ.

6.3 Best Management Practice Requirements

The City has continued to provide information regarding the implementation of pollution prevention measures, such as good housekeeping practices, for residential areas and activities. Section 5 of the City's BMP Manual includes lists of general residential BMP requirements and BMP requirements for specific residential activities. The manual is included in Appendix C of the City's JURMP. General residential BMPs include erosion control; non-storm water discharge management, including elimination of IC/IDs; and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Specific BMPs for the high priority activities outlined above are also included in the City's BMP Manual Section 5.

6.4 Program Implementation

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted in residential areas. This ensures that pollutants associated with residential activities and areas are minimized. Additionally, the residential program implements an education component so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities. During 2009/2010 the City also continued to participate in the Regional Residential Education Program.

6.4.1 Training, Education, and Outreach

The City has continued to conduct training, education, and outreach activities for residents, which are described below. For additional information on the City's educational efforts and the educational materials distributed to its residents please refer to Section 8 of this Annual Report.

Distribution of Educational Material

The City developed a 2010 Storm Water Calendar after selecting the winners of a local art contest at elementary schools within the City (Attachment 5.2). The calendar was printed in both English and Spanish and informed residents about pollutants found in San Diego Bay and neighboring waterways. It described that pollutants such as fertilizers, pesticides, metals, paints, oil and grease and other debris can be transported from residential areas to the ocean. The theme for the calendar was "By Keeping our Community Clean, We Can Keep the Ocean Clean" and each month displayed a child's winning entry from the art contest.

Website

Additional information regarding the City's storm water program, pollution prevention measures, and BMPs is posted and continually updated on the City of National City's website (http://www.ci.national-city.ca.us/). Storm water-related pages can be found under the Development Services Department tab in the Engineering Division section. The direct link to the City's storm water page is http://www.ci.national-city.ca.us/index.aspx?page=164.

Household Hazardous Waste Disposal Program

The City continues to work with the City of Chula Vista to allow City residents to drop off HHW at Chula Vista's Household Hazardous Waste Collection Facility. The Household Hazardous Waste Collection Facility is the primary location for hazardous waste collection in the South Bay, receiving HHW from the City of National City, the City of Imperial Beach, and the City of Chula Vista. Curbside pickup was made available to the disabled and elderly communities. The amount of waste collected by City residents of National City alone is not available; however, the total amount of HHW collected from residents of all three cities is 294,217 pounds from 2,818 participants. The availability of a City subsidized HHW collection service was advertised in the 2010 Storm Water Calendar.

Other Waste Disposal Programs/Activities

In addition to proper HHW disposal, the City encourages residents to recycle used oil. The City maintains several Certified Used Oil Recycling Centers for residential oil disposal. The volume of used oil dropped off at the collection centers was not immediately available.

The City's Public Works Department held three trash collection events (one in November and two in June) during this reporting period in conjunction with EDCO Disposal Company. Information about the trash collection events was sent out to all residents with their trash bills. During these events, residents were encouraged to dispose of any unwanted large items from their homes, such as furniture and appliances. In total, 1,579 vehicles dropped off over 696 tons of waste during these events.

In addition, Recycle San Diego hosted a free electronics waste event at the Kimball Senior Center on July 19, 2009. Residents were encouraged to bring a variety of electronics waste for proper disposal.

6.4.2 Compliance and Enforcement

Public Complaints

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the Storm Water Hotline, and observations made by the City's municipal personnel. If a potential threat to water quality is present, the City provides a verbal warning, written warning, notice of correction, and/or NOV as applicable. Two residential sites with elevated bacterial levels measured during dry weather monitoring were sent acknowledgement letters which provided simple guidelines to reduce these storm water pollutants. The City received and addressed four residential-related complaints during this reporting period. Complaints were submitted through the Storm Water Hotline or internally through the City's Development Services or Public Works departments. All residential complaints were promptly resolved as detailed in the Summary of Documented Public Complaints in Section 4 of this Annual Report.

Code Enforcement

In addition to complaints to the storm water hotline, the general code enforcement staff spends time in residential areas, checking for compliance with the City's Municipal Code. The correction of at least 88 residential code violations in 2009/2010 had potential direct or indirect benefits for storm water quality. Violations corrected included three cases of abandoned materials, two cases of dumping, 17 cases of trash accumulation deemed a public nuisance, 58 cases of prohibited junk storage, four cases of littering, and four cases of illegal auto repair.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 Program Review and Modification

The City's JURMP was last updated in March 2008. No changes to the City's residential component have been made since that time.

Figure 6-1
Division Street High TTWQ Residential Area

Figure 6-2
Paradise Creek High TTWQ Residential Area

Figure 6-3
East 8th Street High TTWQ Residential Area

Figure 6-4
Grove Avenue and Arcadia Place High TTWQ Residential Areas

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008 RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the 2009/2010 Illicit Discharge Detection and Elimination section and attachments to the RWQCB no later than December 15, 2010.

8.0 EDUCATION COMPONENT

8.1 INTRODUCTION

During 2009/2010, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, residents, and underserved communities. The City aims to reduce storm water pollution by increasing awareness about storm water and promoting the implementation of pollution prevention measures and BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the 2009/2010 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- On-site education regarding storm water issues and site-specific BMPs was provided to several municipal employees during routine facility inspections.
- The "Construction Site Best Management Practices" handout was distributed with all construction-related permits issued, including building permits, during the 2009/2010 reporting year.
- Restaurant and food industry personnel were educated on proper site-specific BMPs and provided a BMP handout on storm water issues common to food-related facilities.
- All businesses, including mobile businesses, applying for a new business license during the 2009/2010 reporting year received the "Preventing Urban Runoff Pollution" BMP Trifold.
- The City distributed approximately 3,800 storm water calendars to industrial and commercial businesses, residential households, school-aged children, and municipal staff.
- The City made an estimated 18,637 impressions through educational outreach material and activities.

8.2 STAFF TRAINING ELEMENT

During 2009/2010, the City provided training and educational outreach to its municipal personnel. Many municipal personnel are out in the field on a daily basis, so it is necessary that they understand the importance of implementing BMPs. In August 2009, a training session was attended by at least five development services employees who

participate in the City's SUSMP program. The training emphasized SUSMP compliance and reviewed the processes to verify proper BMP installation and to follow-up on violations. Additionally, municipal personnel are encouraged to report any IC/IDs observed to the appropriate City staff and to educate other municipal personnel and the general public about storm water pollution prevention.

The City's Storm Water Compliance Inspector previously completed the California Environmental Protection Agency Basic Inspector Training Course and used those skills to coordinate compliance within the various components of the City's storm water program during 2009/2010. During routine municipal inspections, the City's Consultant provided site-specific education to several Parks Division, Public Works, and Graffiti Abatement staff.

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, residential areas, and underserved audiences. These efforts promote storm water awareness and BMP implementation.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Violations of the City's BMP requirements are corrected through enforcement actions as necessary. Site-specific information relating to the facility's activities was discussed with businesses personnel during inspections. Approximately 187 industrial and commercial businesses received the City's 2010 Storm Water Program Calendar, during routine inspections. This calendar is included as Attachment 5.2. The "Everything that flows down into a storm drain" brochure (Attachment 8.1) was also included with the notices of correction and inspection result reports mailed to each inspected industrial and commercial business.

All businesses that applied for a business license in the City received the Industrial and Commercial "Preventing Urban Runoff Pollution" Trifold, as seen in Attachment 5.3. In this way, even businesses that were not slated for inspection during 2009/2010 received storm water education.

This year, the City took measures to educate restaurant and food industry personnel on proper BMPs. A double-sided flyer was distributed to all food-related businesses and highlighted the six most common issues at food-related facilities (Attachment 8.2). In addition, long-term solutions to prevent costly and ineffective cleanup of grease spills was presented. Contact information for the City's compliance inspector and for the Storm Water Hotline was also included.

8.3.1.1 Mobile Businesses

Mobile businesses, specifically mobile car detailers or power washers, are considered a high TTWQ due to the nature of the business activities and the likelihood of prohibited non-storm water discharges. Mobile businesses are not confined to a single area and many do not have City business licenses, making them difficult to identify. The City continues to respond to complaints regarding mobile businesses and provides one-on-one verbal BMP education and literature during the complaint investigation as applicable. All businesses, including mobile businesses, applying for a new business license during the 2009/2010 reporting year received the "Preventing Urban Runoff Pollution" Trifold. This pamphlet includes minimum BMPs for three commonly mobile professions: power washing, car washing, and landscaping services. Information about the storm drain conveyance system and BMPs applicable to mobile business activities were also made available during 2009/2010 on the City's website.

8.3.2 Construction Site Owners and Developers

Due to the nature of their activities, construction sites have the potential to discharge many types of pollutants to receiving waters if not managed properly. Many construction site owners, contractors, and developers visit the City's Engineering Division to apply for necessary permits. Through this interaction with City staff, owners and developers are able to gain insight on watershed concepts, potential pollutants, and required BMPs.

The City provided various construction site-specific educational materials targeting storm water concepts during the 2009/2010 reporting year. The distributed educational materials are described below.

- The Construction Site BMP Fact Sheet or "Blue Sheet" (Attachment 3.1) describes specific BMPs for construction activities including soil stabilization and erosion prevention, sediment containment, materials and equipment management, non-storm water discharge control, and drainage control. This sheet was distributed with all permits issued, including building permits; implementing the BMPs listed on the sheet is a condition of the permits.
- The National Pollutant Discharge Elimination System (NPDES) Project Applicability Form or "SUSMP Checklist" (Attachment 2.2) was completed by all projects applying for construction and building permits. Once submitted, the City reviewed the checklist and prioritized the projects. Requirements to ensure compliance with the Municipal Permit and General Construction Permit were presented to the applicant and further discussed to ensure the applicant was educated on the process.
- A copy of JURMP Appendix C, which contains a list of required construction BMPs, is made available upon request for proponents of construction activities within the City.

8.3.3 RESIDENTIAL AREAS

Since the City is mainly composed of residential areas, it is important to reach this particular audience through educational outreach programs. The City continued to make a variety of flyers, brochures, website postings, and other educational material available to its residents.

Storm Water Calendar

The City developed a 2010 Storm Water Calendar (Attachment 5.2) that was distributed to schools and residents. The calendar, which presented information in both English and Spanish, informed residents about pollutants found in San Diego Bay and neighboring waterways, and described that pollutants such as trash, HHW, and bacteria from pet waste can be transported from residential areas to the ocean. The calendar also provided the date of the 8th Annual Creek to Bay Cleanup event as well as the date of the Coastal Cleanup Day. See Section 9 of this Annual Report for a more detailed description of these events.

During 2009/2010, the City selected the winners of a pollution prevention art contest for display in the 2010 Storm Water Calendar. More information about the development of the 2010 calendar is included in the Public Participation Component Section 9 of this Annual Report.

School Education and Outreach

The 2010 Storm Water Calendar was distributed to elementary school students. The calendar provides year round education on the connection between our communities' activities and the health of the oceans.

City Website

The City's website, http://www.ci.national-city.ca.us/, is another way in which City residents can become familiar with the design and intended use of the storm drain system, HHW, alternatives to hazardous household products, find information regarding volunteer opportunities, applicable City contact information, and IPM cards.

8.3.4 UNDERSERVED COMMUNITIES

The City is a growing community that is diverse in culture. According to the April and May 2009 High TTWQ Residential Education Program data, of the 373 residents encountered, the City's outreach personnel identified about a third who preferred to speak in Spanish. A small fraction spoke Tagalog as their preferred language. To address the unique demographics of the City, the City's Storm Water Hotline accepts all reports of illegal discharges, regardless of language.

The City further provides educational materials both in English and Spanish to better serve Spanish speaking community members. These bilingual brochures may be found at various locations throughout the City, such as the Chamber of Commerce, the public library, public recreational centers, and the storm water display area at the City's Engineering Department. The bilingual educational handout entitled "Everything that

flows down into a storm drains goes untreated directly to our creeks, lagoons, and San Diego Bay" is also included in all mail-based correspondence (i.e. NOV, notice of corrective action, etc.) to residents and industrial and commercial businesses in the City.

8.3.5 Complaint Investigations

To further aid the process of identifying illicit discharges, the City encourages the public and City staff to report IC/IDs. The City's Storm Water Compliance Inspector follows up on all complaints made to the hotline. If a representative for the targeted business, residential area, or construction site is present, the inspector will provide site-specific information regarding storm water issues including applicable educational materials.

8.4 Outreach Component Effectiveness Assessment

The estimated number of impressions made by the City's education and outreach efforts during 2009/2010 is presented and described below. Please refer to Section 11 of this JURMP Annual Report for the remainder the effectiveness assessment for this program component.

Impressions Made

The City continues to provide residents and businesses with storm water-related education through inspections, distribution, and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees, because it is likely that the attendees will discuss the content with others after the training session or cleanup event. Printed educational materials distributed in mass numbers are assumed to generate three impressions each. Table 8-1 details the number of impressions made by the City during this reporting year.

Table 8-1
Impressions Made by the City

Impression Type	Estimated Count	Unit	Estimated Impressions Generated
Municipal Inspections	11	Inspection	55
Industrial/Commercial Inspections	193	Inspection	579
Complaints Investigated	11	Investigation	33
Activity/Event Attendees	366	Events	1,464
"Preventing Urban Runoff Pollution" Trifold	434	Brochure	1,302
Everything that flows down the storm drain….	96	Handout	288
2010 Storm Water Program Calendar	3,800	Calendar	11,400
Put Toxic Waste in its Place	40	Handout	120
NONA/NEC Paperwork	15	Brochure	45
NOI Paperwork	12	Brochure	36
Storm Water Ordinance 14.22	46	Handout	138
Construction BMP "Blue Sheet"	986	Handout	2,958
New Construction Permit Flyer	10	Handout	30
Restaurant/Food Industry BMP Fact Sheet	63	Handout	189
Total			**18,637**

8.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was updated in March 2008. No changes to the City's education component have been made since that time.

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to foster storm water awareness and improve water quality. Public participation includes, but is not limited to, cleanup events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Collaboration between the City and the community helps to encourage a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed in this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the 2009/2010 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City collaborated with the California Coastal commission to host two sites for the Coastal Cleanup Day in September 2009. A total of 210 volunteers collected 3,060 pounds of trash and recyclables at the Paradise Creek Education Park and Sweetwater River sites.
- The City collaborated with ILACSD to sponsor the Paradise Creek Education Park site for the Creek to Bay Cleanup event in April 2010. A total of 45 volunteers participated to collect over 510 pounds of trash and recyclables.
- The City selected and honored the 12 winners of the 2008/2009 art contest for the 2010 Storm Water Calendar.
- The City continued to collaborate with the cities of Chula Vista and Imperial Beach to provide HHW disposal for residents of the City of National City. Approximately 111 residents of National City participated.
- The City held three large-item disposal events during the months of November and June, which allowed residents to dispose of large items (not including HHW). Over 696 tons of large-item waste was collected from 1,596 vehicle loads during these events.
- The City continued to operate its Storm Water Hotline to receive complaints from businesses and residents in the City.

9.2 PUBLIC PARTICIPATION ACTIVITIES

Cleanup Events and Programs

During 2009/2010, the City hosted cleanup events at various locations in the City. These events provide a direct benefit to water quality and provide an opportunity for the City to inform event volunteers of storm water issues. The City participated in the California Coastal Commission sponsored Coastal Cleanup Day on September 19, 2009 (Figure 9-1). Ninety volunteers cleaned two miles of Sweetwater River and collected 2,240 pounds of trash and 20 pounds of recyclables. In addition, 120 volunteers at Paradise Creek Education Park collected 100 pounds of trash and 700 pounds of recyclables during the mile cleanup. In total, Coastal Cleanup Day volunteers collected 3,060 pounds of trash and recyclables and cleaned three miles of park.

Figure 9-1. Coastal Cleanup Day Event

The City continued to collaborate with ILACSD and sponsored the Paradise Creek Education Park site for the Creek to Bay Cleanup event on April 24, 2010. Forty-five volunteers collected 200 pounds of trash and debris and an additional 310 pounds of recycling (Figure 9-2). In total, Creek to Bay Cleanup volunteers collected 510 pounds of trash and recyclables and cleaned over 0.5 mile of park.

Figure 9-2. Creek to Bay Cleanup Event

2010 Calendar Development

During 2008/2009, the City developed the 2010 Storm Water Program Calendar through an art contest sponsored in part by EDCO Recycling and Waste Collection Services at local public elementary schools. In 2009/2010, those 12 contest winners whose submissions were selected for the 2010 Storm Water Calendar were invited to a National City Council meeting. Each winner was honored during the recognition ceremony for their dedication to keeping their neighborhoods and communities clean, and in turn, keeping our oceans clean. They also received an award certificate signed by the National City Mayor, Ron Morrison, and members of the City Council. The presentation shown at the award ceremony is available as Attachment 9.1.

Hazardous Waste Collection and Used Oil Recycling Program

The City's Hazardous Waste Collection and Used Oil Recycling Program encourage City residents and business owners to properly dispose of HHW. Residents have access to proper disposal facilities for HHW at the Chula Vista Household Hazardous Waste Collection Facility. This facility is open on Saturdays from 9:00 a.m. to 1:00 p.m. and accepts up to 15 gallons or 125 lbs of waste per household for a small co-payment. An informational ad for this program is included as Attachment 9.2. This service is also available to residents in the cities of Chula Vista, Coronado, and Imperial Beach. During the 2009/2010 reporting year, 2,818 participants brought over 294,217 pounds of hazardous waste. Of that total, 111 people were residents of National City. Door-to-door pick up was available for disabled or elderly communities for a small fee. Residents were directed to an online resource on how to properly dispose of used motor oil and other automotive fluids in the 2010 Storm Water Program Calendar (Attachment 5.2).

The City's website also informs residents of what is considered HHW and how and where to properly dispose of it.

Other Waste Disposal

The City continued to hold large item trash collection events for bulky items such as furniture and appliances at the EDCO Recovery and Transfer Facility. The City coordinated with EDCO Recycling and Waste Collection Services to host one event in November and two events in June. Over 303 tons of waste was collected from 723 vehicle loads on November 14, 2009. On June 5, 2010, the facility collected 211 tons of waste from 445 vehicles and then an additional 182 tons from 411 vehicles the following Saturday, June 12, 2010. The City encouraged the public to bring their debris (not including HHW) for proper disposal. Door-to-door pick up was provided for disabled or senior residents.

In addition, Recycle San Diego hosted a free electronics waste event at the Kimball Senior Center on July 19, 2009. Residents and businesses were encouraged to bring a variety of electronics waste for proper disposal.

Public Reporting

As discussed in Section 4, complaints are received through the City's Storm Water Hotline and online website reporting system. The residential, industrial and commercial, construction, and municipal communities are encouraged to use the hotline to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable. The hotline number is available on the Storm Water Calendar, on various brochures distributed by the City, on printed Storm Water Hotline business cards, as well as on the City's website. This reporting period there were 11 complaints received by the City. All complaints reported during 2009/2010 were investigated immediately and resolved appropriately by City staff. See Table 4-5 for details on documented public complaints.

9.3 Public Participation Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

9.4 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's public participation component have been made since that time.

10.0 FISCAL ANALYSIS

The sources of funding for this program listed in the City's JURMP have not been changed during this reporting period. During 2009/2010, a fiscal analysis reporting template was developed collectively by the Copermittees. The City has used this template to report the 2009/2010 expenditures in this JURMP Annual Report.

San Diego County Copermittees Fiscal Analysis Report for Urban Runoff Management Programs

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	
Administration	$19,096
Development Planning	$61,306
Construction	$58,705
Municipal	$225,192
Industrial and Commercial	$59,706
Residential	$26,595
IDDE	$35,943
Education	$27,482
Public Participation	$10,786
Special Investigations	$13,327
Non-Emergency Firefighting	$0
Jurisdictional Total	**$538,139**

WATERSHED	
Watershed 1 – San Diego Bay	$468,887
Watershed Total	**$468,887**

REGIONAL	
Annual Permit Fee to Regional Board	$13,499.00
Copermittee Cost Share of Regional Budget	$55,170
Regional Total	**$68,669**

TOTAL COSTS	$1,075,695

Watershed Urban Runoff Management Program (WURMP)

	Watershed 1	Watershed 2	Watershed 3	Watershed 4
Administration (1)	$5,456			
Cost Share Contribution	$0			
Watershed Activities	$463,431			
Other	$0			
TOTAL	**$468,887**			

(1) Administration – includes Watershed strategic planning, management, mapping, assessment, and reporting.

Regional Urban Runoff Management Program (RURMP)

Regional Programs	Jurisdictional Cost Share Amount
Administration (1)	$2,728
Cost Share Contribution	$52,442
Other (2)	$0
TOTAL	**$55,170**

(2) Administration – includes assessment, reporting, management, etc.
(3) Other – examples include regional and special studies.

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

Based on participation in regional efforts and its experience implementing its JURMP, the City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP.

The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are

discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the CASQA effectiveness assessment guidance document, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

Level 1 outcomes essentially are measures of permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix B of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement.

Levels 2 and 3

See the tables 11-1 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Please note that the number of hotline calls and Dry Weather Monitoring Program results are used in the assessments for other program components besides illicit discharge detection and elimination. Those numbers are taken from the work done within the period from July 1, 2009 through June 30, 2010 to be comparable with previous years' assessments and data. Also note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed.

Level 5

The Dry Weather Monitoring Program is the City's primary mechanism of measuring the quality of discharges. The City began collecting MS4 monitoring data in 2008/2009; however, the data gathered at this time is insufficient to provide substantive information about discharge quality.

Graphs demonstrating historical Dry Weather Monitoring results are provided at the end of this section as Figures 11-3 through 11-5. Ammonia, one of the constituents with the longest historical data record, has shown a decreasing trend over time. Also, since they have been analyzed, the exceedance frequencies of oil and grease and fecal indicator bacteria have decreased with time.

Level 6

No Regional Monitoring Program water quality monitoring stations are located within the City of National City. The Sweetwater Mass Loading Station is located just outside

the southeastern border of the City, but only a very minimal portion of the City would drain to that site. Some sediment sampling has been completed in the Sweetwater River flood control channel along southern side of the City as part of the regional Ambient Bay and Lagoon Monitoring Program. The results of that program have been relatively inconclusive to date. The RWQCB contracted Southern California Coastal Waters Research Project (SCCWRP) to conduct some wet weather monitoring in Paleta Creek (Seventh Street Channel) in support of a pending TMDL. At this point, the amount of data collected at these sites is not sufficient to determine any positive or negative trends for water quality at the site. Typically several years of data are needed before any trends become apparent. The City will continue to work with the San Diego Bay WURMP workgroup and TMDL stakeholder workgroups to improve the quality of water bodies in and around the City of National City.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects has effectively required higher removal efficiency BMPs for all projects approved in 2009/2010. The City continued to work with parties responsible for maintenance of treatment control BMPs, achieving compliance through cooperation or using escalating enforcement. City enforcement resulted in the installation of missing BMPs at multiple projects during the reporting period. A slight improvement in maintenance rates from the 2008/2009 to the 2009/2010 reporting period may be attributed to generally increasing awareness of the need for regular treatment control BMP maintenance despite some ongoing changes in project ownership.

Construction

The available data indicate that on the whole the City's construction program effectively requires BMP implementation. The City conducted dry season inspections for all high and medium priority construction sites to require continued implementation of required BMPs in preparation for the wet season. Any BMP deficiencies noted are typically remedied promptly. The City's approval process continues to notify all construction projects that will disturb soil of the City's BMP requirements before a permit is issued. This process has helped bring about better BMP implementation at small projects that otherwise might not be aware of the BMP requirements.

Municipal

The City's municipal staff are regularly trained on storm water issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit frequency requirements. In particular, the City sweeps its streets more often than the permit requirements to aid in WURMP efforts. As another part of WURMP efforts, the City continued to hire a contractor in 2009/2010 to do biweekly inspections and remove any observed trash from Paradise Creek.

Industrial and Commercial

The City continued to implement a comprehensive inspection program. During 2009/2010 the City updated its inspection notification methods to better communicate corrective actions to inspected businesses. The City anticipates that this new method of inspection result notification will yield increased rates of implementation. Additionally, the City worked to educate restaurant and food industry personnel about food-related BMPs by developing industry specific handouts.

Residential

The City's residential component mainly achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. Complaints received about residential areas and/or activities by the Storm Water Hotline are documented, investigated, and appropriate actions are taken to resolve the reported issue.

IDDE

The RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001 has extended the reporting period for the IDDE component of the City's program, so a full assessment of the program's effectiveness cannot be provided at this time. Some initial metrics are presented in Table 11-6.

Education

During 2009/2010, the City provided educational outreach to various communities in the City. Most notably the City identified a need for specific materials for eating establishments and other food-related facilities. The City developed a 2 page handout for food-industry facilities that details proper techniques for waste grease handling and other food-related BMPs. The City also developed a 2010 calendar that presented various storm water concepts. This calendar was distributed during industrial and commercial inspections, and during various public events.

Public Participation

The City continued to host clean-up events in the City. Approximately twice as many volunteers participated in clean-up events within the City during 2009/2010 compared to 2008/2009. While public education regarding use of the Storm Water Hotline has increased in this reporting period, the number of hotline calls decreased in 2009/2010. The City continues to ensure its own staff and the public are aware of the hotline and when to call it.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-1
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Review and approve project plans	External A relatively small number of projects submitted reports during 2009/2010. Based on meetings with applicants and BMPs proposed, it appears that the level of knowledge is increasing. Internal The City's storm water consultant and the City's Storm Water Program Manager worked with engineers in the City to improve their level of understanding of the SUSMP program. City personnel also attended training sessions—see Section 8. The City's consultant reviews SWMPs submitted to the City.	Overall project submittal approval rate during reporting period	44%	Percent of projects proposing BMPs besides filter inserts	100%
		Number of projects requiring three or more reviews prior to SWMP approval	3	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City's NPDES Storm Water Compliance Inspector provided training to the inspector responsible for verifying BMPs prior to occupancy.	Percent of projects completed in 2009/2010 implementing all proposed BMPs	67%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 2		
Verify BMPs are properly maintained	External Annual maintenance verification letters were sent out in 2009/2010 and NOVs were issued to non-responders Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of sites properly maintaining all BMPs	66%	Proper BMP maintenance is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 2		
		Percent of sites responding to verification letters	95.8%		
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-2
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs, and the City's consultant conducts routine inspections of high and medium TTWQ construction sites.	Percent of projects in compliance with BMP requirements during all inspections	71%	Proper BMP implementation is likely to have reduced pollutant loading.
		Resolution status of enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff are regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities requiring a follow-up visit	9%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.		Amount of sediment and debris removed (weight or volume)	975 tons
				Amount of sediment and debris removed per length of street swept (weight or volume per curb mile)	0.066 tons/ curb mile
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume)	33.7 tons
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons)	0
Maintain municipal treatment control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment control BMPs	192 pounds
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External Knowledge assessment scores indicated approximately half of the personnel present during inspections lacked any understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal The City contracts with a qualified consultant to perform industrial and commercial inspections.	Percent of inspected sites requiring a follow-up visit	28%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	1	Number of IC/IDs eliminated (inspections and complaint investigations)	9
		Consistent with the intentional selection of sites with the highest TTWQ potential, many sites had a lower BMP score. However, the most common score was three. See Figure 11-2 on the following page for a score distribution.			
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Industrial/Commercial Knowledge Assessment Scores

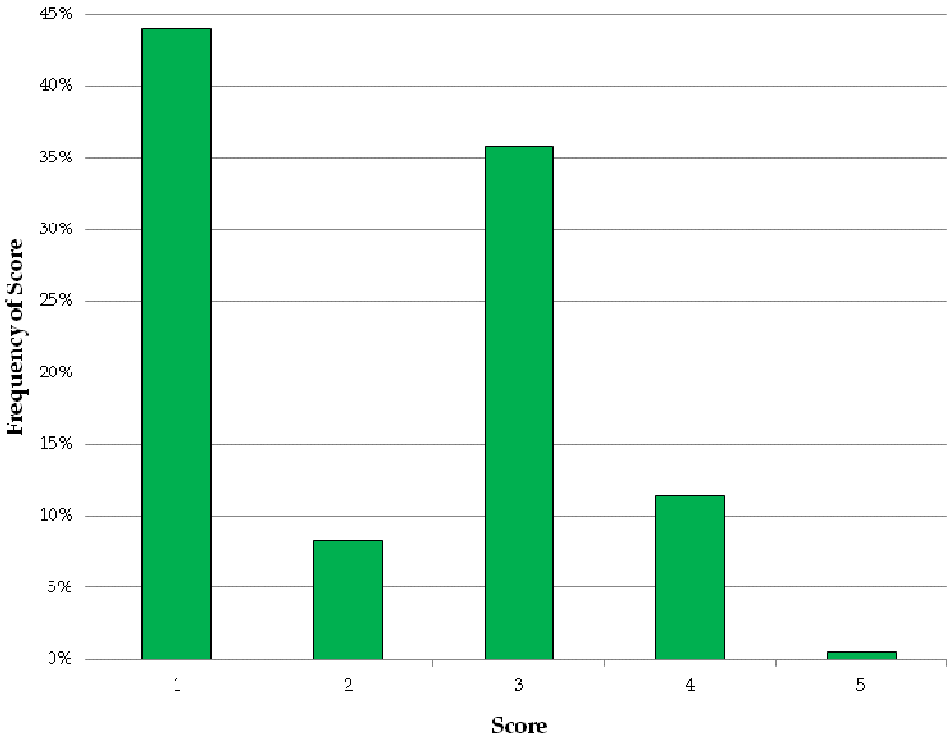

Figure 11-2
Industrial/Commercial BMP Implementation Scores

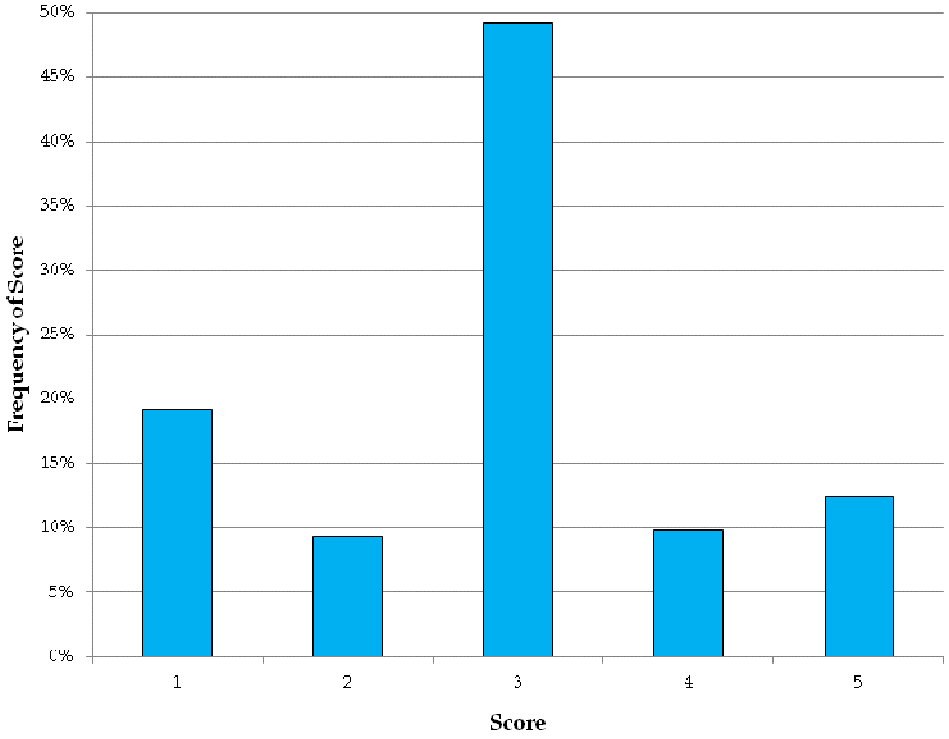

Table 11-5: Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External See sections 6 and 8 for details of this and other education. Internal The City's Storm Water Program Manager and other City staff involved in the program have a good understanding of the goals of the storm water program.	Number of residential incidents reported to storm water hotline	4	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution of enforcement actions	See Sections 4 and 6	
		Number of dry weather monitoring exceedances traced to residential sources	1	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6: Illicit Discharge Detection and Elimination Component Assessment Measures*

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were identified for elimination, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to storm water hotline	The City's Storm Water Program Manager trains City staff as needed. See sections 4 and 8. City staff were responsible for many of the reports made to the hotline, as shown in Section 4.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 4 are likely to have resulted in a pollutant loading reduction.
Respond to and clean up SSOs	City staff are thoroughly trained on how to respond to SSOs.	See Section 4 for details.	There was one SSO during the reporting period but effective clean-up prevented any discharge from reaching receiving waterbody.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Although the overall IDDE component is to be submitted in December 2010, a preliminary assessment of the component's effectiveness is provided here.

Table 11-7: Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for 2009/2010.
	Estimated number of impressions made	18,637		

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8: Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate, including operation of the Storm Water Hotline. See Section 9 for details.	Number of attendees at events (ILACSD clean-up volunteers and HHW disposal participants)	366	Amount of trash, debris, and recyclables collected at cleanup events	3,570 pounds
		Number of calls received to the storm water hotline	13	Amount of HHW collected	294,217 pounds between three cities*

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The cities of National City, Chula Vista, and Imperial Beach share a HHW disposal program located within the City of Chula Vista.

Figure 11-3
Historical Dry Weather Monitoring Data: Action Level Exceedance Rates

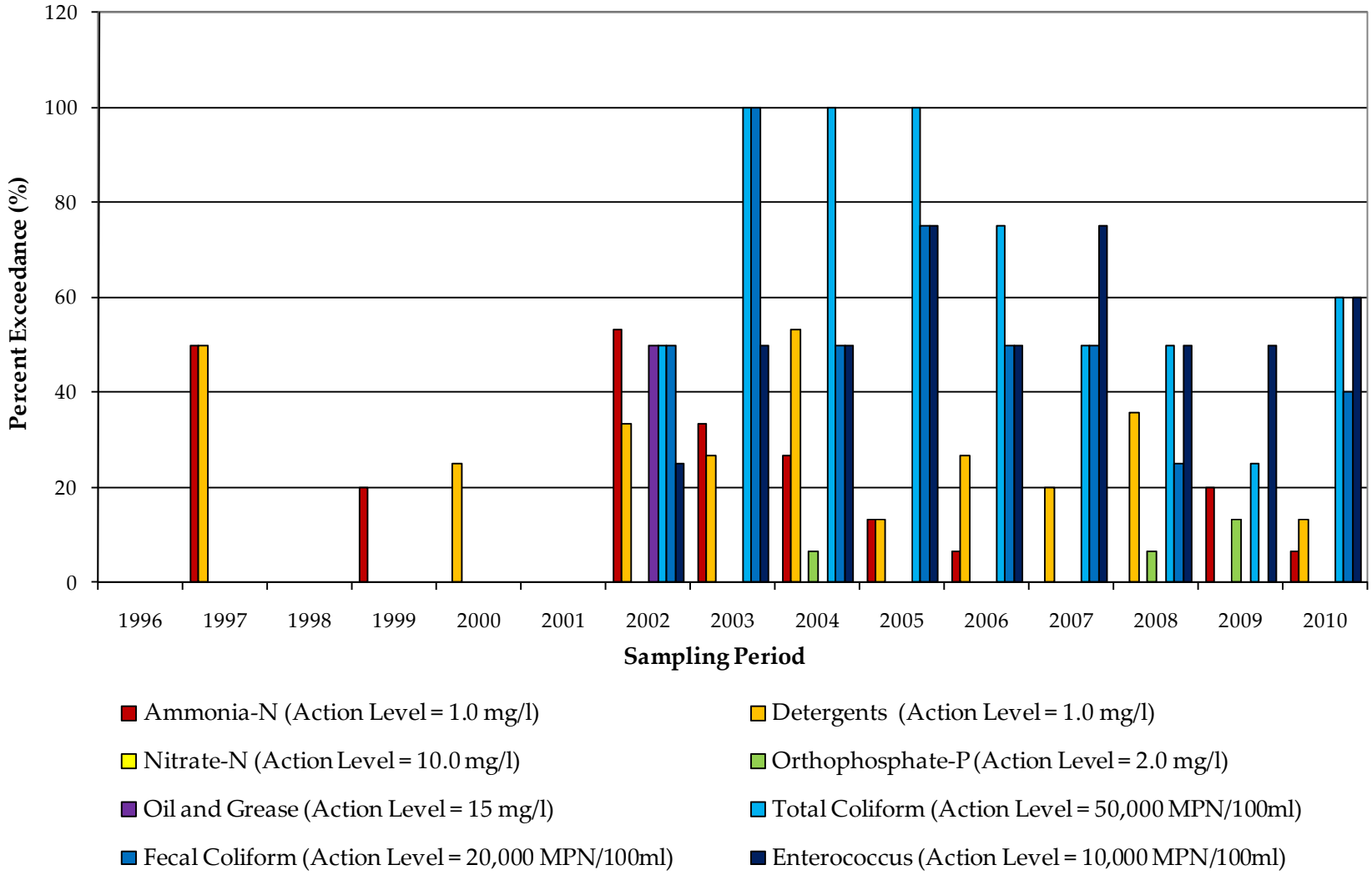

Figure 11-4
City of National City, Ammonia-Nitrogen, 1997-2010

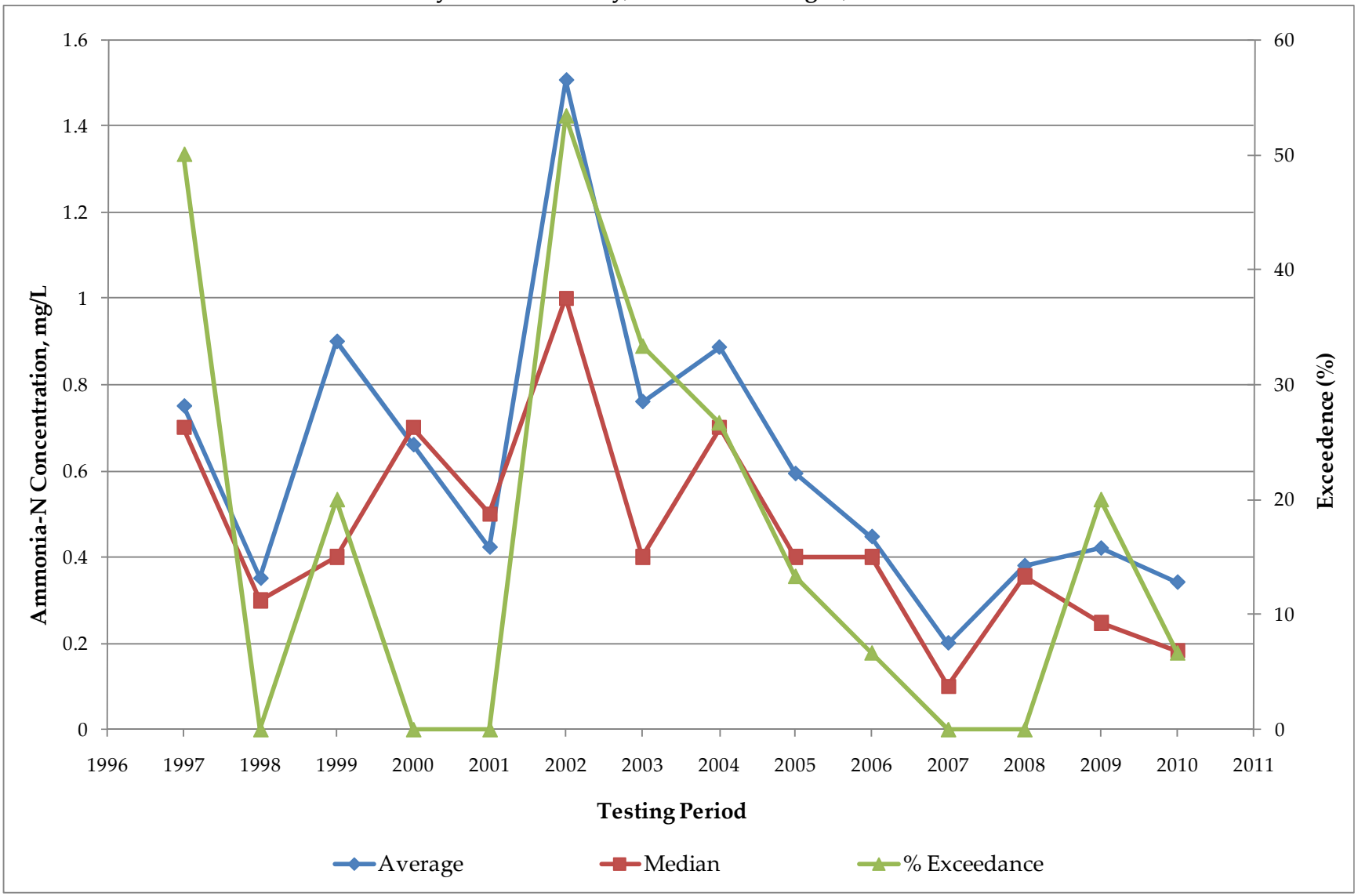

Figure 11-5
City of National City, Detergents, 1996-2010

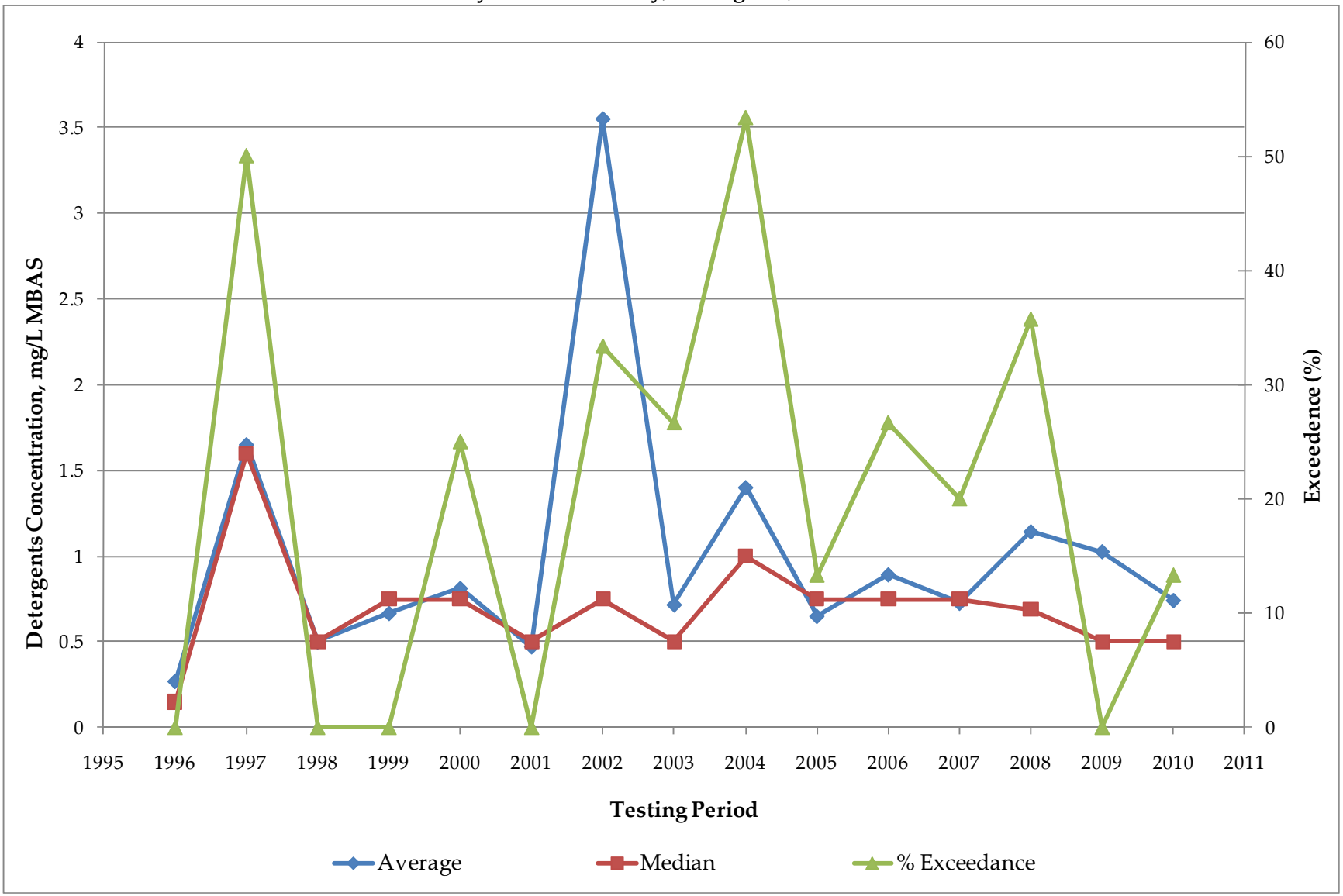

12.0 SPECIAL INVESTIGATIONS

During the reporting period the City undertook two additional programs: the Clean Community Program and a pollutant discharge potential assessment component during industrial and commercial inspections.

12.1 CLEAN COMMUNITY PROGRAM

Results from trash assessments in previous years have indicated that litter and illegally dumped items tend to consist of household trash and large household items, likely from residents in the City. During 2009/2010, the City continued to implement its Clean Community Program. This program is designed to foster a sense of shared responsibility in keeping the community of National City clean and free of pollutants that may otherwise be carried to local receiving water bodies.

The theme of the 2010 Storm Water Calendar (Attachment 5.2) was "By Keeping our Community Clean, We can Keep the Ocean Clean!" This slogan was printed in both English and Spanish on every month of the calendar. Each month of the 2010 calendar featured artwork by local third grade students illustrating the theme. By integrating public participation into the development of the 2010 calendar, the City increased attention to the "By Keeping our Community Clean, We Can Keep the Ocean Clean" message. Storm water facts were also presented throughout the calendar in both English and Spanish; such facts included "All water that enters National City storm drains flows to San Diego Bay without being treated," "High levels of bacteria can be harmful to your health and the environment. One way to keep bacteria from entering storm drains is to be a responsible pet owner" and "The City of National City has National City Clean Up Day, twice a year, once in the spring and again in the fall. Residents can dispose of items such as garbage, appliances, furniture, etc." The back of the calendar provides numerous City resources for residents who choose to take action in the City's program.

Additionally, as part of WURMP efforts that are beyond minimum required MS4 maintenance, the City hired a contractor in 2008/2009 to do biweekly inspections and remove any observed trash from Paradise Creek. These cleanups continued in 2009/2010.

12.2 POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

During 2009/2010, the City conducted pollutant discharge potential assessments (PDPA) at industrial and commercial facilities that received full inspection; the purpose of the assessment is to assist in source identification. The assessment is intended to be a semi-quantitative tool to identify which sites are major sources of the principal pollutants of concern for storm water. For each of several main categories of pollutants, a numeric pollutant discharge potential (PDP) on a scale from 0 (not present) to 5 (severe) is

assigned. A copy of the PDPA form is included with the standard inspection form in Attachment 5.1.

Table 12-1 shows the overall average PDP scores for each pollutant for all of the industrial and commercial facilities visited in 2009/2010. Note that pH indicates substances likely to cause either an abnormally low (acidic) or abnormally high (basic) pH.

Table 12-1
Pollutant Discharge Potential Score Averages, By Category

Pollutant Category	Average PDP Score
Sediment	2.6
Nutrients	1.5
Aluminum	1.1
Iron	1.3
Heavy Metals	2.1
Organics	1.7
Trash	2.1
Oxygen Demanding	1.7
Oil and Grease	2.7
Bacteria	1.7
Pesticides	1.2
Acid/Base	1.0

Sediment, heavy metals, trash, and oil and grease were observed to be the largest issues during the industrial and commercial inspections conducted during 2009/2010. The City uses this information to help target businesses for inspection. Figure 12-1, on the following page, shows the distribution of PDP scores for each pollutant on the PDPA table.

Figure 12-1
PDPA Score Distribution for Facilities Inspected in 2009/2010

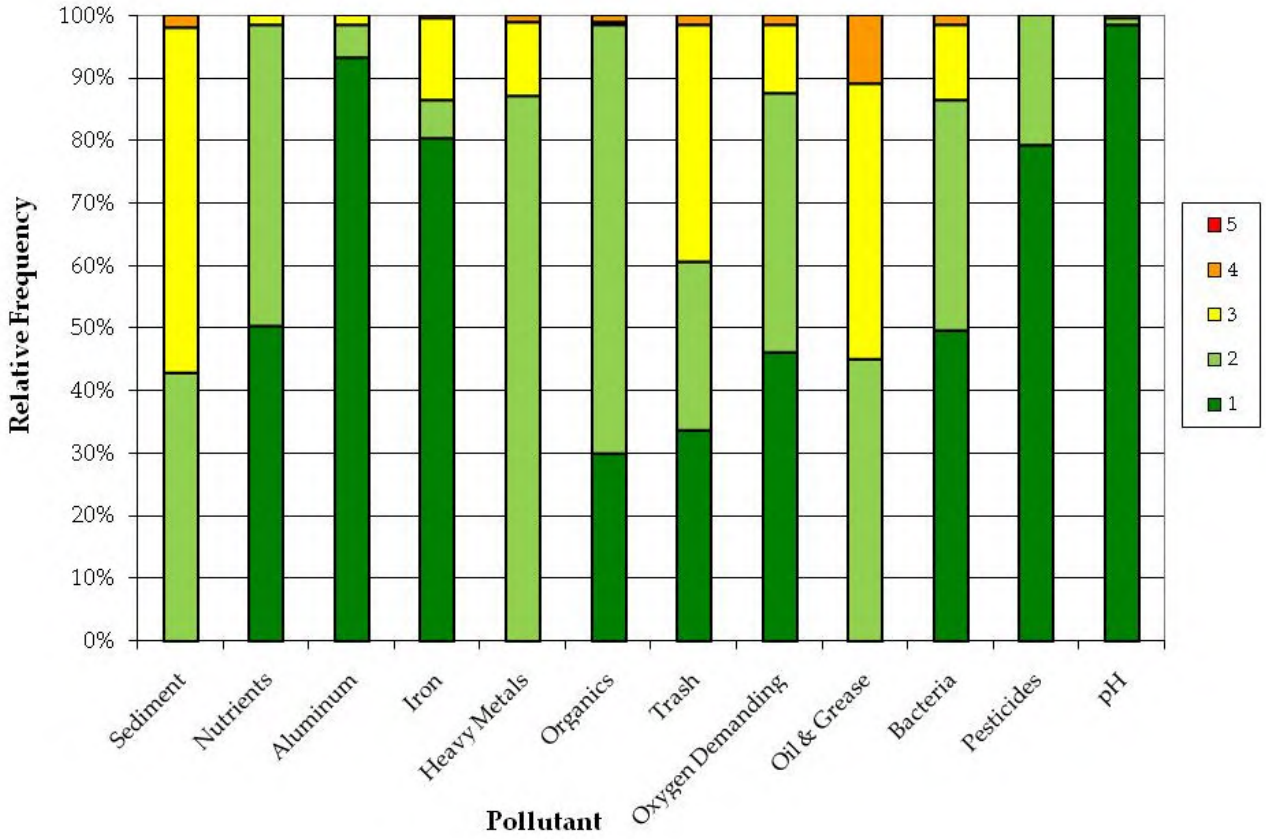

13.0 NON-EMERGENCY FIRE FIGHTING

Please reference Section 3 of the City's most recent JURMP for information about BMPs and procedures associated with non-emergency fire fighting activities.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 in response to new Municipal Permit requirements. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes to the JURMP made since the overall JURMP update in the spring of 2008 are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 CONCLUSIONS AND RECOMMENDATIONS

During the 2009/2010 reporting period the City of National City continued to implement the programs in its JURMP, updated in March 2008. The City continues to work with other Copermittees to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City of National City will work collaboratively as a member of the various regional workgroups in this process and continue to refine its program implementation as needed to improve its ability to reduce or eliminate pollutant discharges and meet regulatory requirements. The City will also continue its efforts related to the pending TMDL for Seventh Street Channel.

16.0 REFERENCES

California Regional Water Quality Control Board, 2007. Order No. R9-2007-0001. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Construction.*

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California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Municipal.*

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Caltrans Storm Water Quality Handbooks, 2003. *Construction Site Best Management Practices Manual.*

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County of San Diego, 2007. *Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Report.*

County of San Diego, 2010. *Countywide Model SUSMP: Standard Urban Stormwater Mitigation Plan Requirements for Development Applications*.

State Water Resources Control Board, 1997. Order No. 97-03-DWQ. *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.*

State Water Resources Control Board, 1999. Order No. 99-08-DWQ. *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity.*

APPENDIX A.1

TREATMENT CONTROL BMP INVENTORY

Inventory of Completed Development Projects with Approved Treatment Control BMPs

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP								Project Type	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds or Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention			
1	Advanced Plastics	225 W. 30th St					X	X			Industrial	Sweetwater River	Medium
2	Ball Kia	1940 National City Blvd			X						Commercial	Paradise Creek	Medium
3	Bonita Creek	Sweetwater Road	X				X				Residential	Sweetwater River	Medium
4	Estrella Walk	Plaza Blvd. & L Street							X		Residential	Paradise Creek	Medium
5	Jack In The Box	18th & Highland Avenue					X				Commercial	Paradise Creek	Medium
6	Mariposa Walk	E. 7th St and R St					X				Residential	Paradise Creek	Medium
7	Hanson's National City Batch Plant	12th St & McKinley Ave				X	X				Industrial	La Paleta Creek/ 7th Street Channel	Medium
8	National City Fire Station #34 (CIP)	333 East 16th Street					X		X		Municipal	Paradise Creek	Medium
9	National City Library (CIP)	1401 National City Blvd					X				Municipal	Paradise Creek	Medium
10	Paradise Creek Park (CIP)	Harding Ave, West 19th St, & West 22nd St					X				Municipal	Paradise Creek	High

Inventory of Completed Development Projects with Approved Treatment Control BMPs (Continued)

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP								Project Type	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds or Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention			
11	Paradise Ridge	Hollyhock Lane	X								Residential	Paradise Creek	Medium
12	Penske Truck Leasing	3132 Hoover Avenue					X				Commercial	Paradise Creek	High
13	Plaza Bonita Mall Expansion	3030 Plaza Bonita Road	X				X		X		Commercial	Sweetwater River	Medium
14	Plaza City Apartments	1535 E. Plaza Blvd							X		Residential	Paradise Creek	High
15	Plaza Village	L Avenue and Plaza Blvd					X				Residential	Paradise Creek	Medium
16	Sweetwater Town & Country Mall	Sweetwater Road					X				Commercial	Sweetwater River	High
17	Tremont Court Condominiums	Euclid Ave & Division St	X				X		X		Residential	La Paleta Creek/ 7th Street Channel	Medium
18	Walgreens	885 Euclid Ave					X				Commercial	Paradise Creek	High
19	Wal-Mart	1200 Highland Ave							X		Commercial	Paradise Creek	High
20	940 W 19th Street	940 W 19th Street	X								Industrial	La Paleta Creek/ 7th Street Channel	Low

Inventory of Completed Development Projects with Approved Treatment Control BMPs (Continued)

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP								Project Type	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds or Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention			
21	Bay Marina Drive Widening (CIP)	I-5 and Bay Marina Drive						X			Municipal	Paradise Creek	Medium
22	Marina Gateway (Hotel)	Marina Way, south of Bay Marina Dr	X						X		Commercial	Paradise Creek	High
23	Paradise Walk	Arcadia Ave and E. 8th St					X				Residential	Paradise Creek	High
24	West Air Gases	2300 Haffley Avenue	X				X			X	Industrial	San Diego Bay	Medium
25	Canyon Ridge	SW of southern end of Rachael Ave						X	X		Residential	Sweetwater River	Medium

Note: Public Priority Projects are marked as Capital Improvement Projects (CIP) in the table.

APPENDIX A.2

CONSTRUCTION INVENTORY

Appendix A.2
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
1	Marina Gateway (Hotel)	2501 Cleveland Avenue	San Diego Bay	High	31	0	1	0	0	1
2	Pacific View Estates	Division Street and Laurel Avenue	San Diego Bay	High	31	16	1	0	0	17
3	Canyon Ridge	Rachael Avenue at Blue Ridge Street	San Diego Bay	Medium	31	8	1	0	0	9
4	Centro Condominiums	A Avenue between 11th and 12th Streets	San Diego Bay	Medium	22	8	1	0	0	9
5	Harbor View Condos	D Avenue & 8th Street	San Diego Bay	Medium	31	8	1	0	1	10
6	K Avenue Homes	1209 & 1215 K Avenue	San Diego Bay	Medium	31	9	1	0	0	10
7	Mirabelle (formerly Cypress Glen)	3229 Cypress Street	San Diego Bay	Medium	0	0	1	0	0	1
8	Paradise Village	2700 East 4th Street	San Diego Bay	Medium	31	8	1	0	1	10
9	Paradise Walk Townhomes	8th Street and Arcadia Street	San Diego Bay	Medium	29	7	1	0	0	8

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
10	1605 J Avenue	1605 J Avenue	San Diego Bay	Low	31	**		0	0	**
11	1843 B Avenue	1843 B Avenue	San Diego Bay	Low	31	**		0	0	**
12	Anderson Piping	4th Street and I Street	San Diego Bay	Low	31	**		0	0	**
13	Habitat for Humanity G Avenue	1820 G Avenue	San Diego Bay	Low	31	1		0	0	1
14	Hilltop View Homes	3000 8th Street	San Diego Bay	Low	8	1		0	0	1
15	Martinelli	940 E. 16th Street	San Diego Bay	Low	14	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
16	On-site Improvements: Grading per plan; retaining wall per plan; others: parking lot; Public Improvements: Sidewalk R R, SDRSD G-7; Curb & Gutter R&R SDRSD G-2-MOD; Alley, new, per SDRSD; Construction: cross-gutter; Other: D-27 underdrains; Public Improvements: Construction: sewer 6" lat w/ manhole per SDRSD & plans; On-site improvements: others: 6' private main & 8 laterals	18th Street & G Avenue	San Diego Bay	Low	17	**		0	0	**
17	On-site improvements: Grading, retaining wall, other: use of SDRSD & approved plans	1441 Harding Ave	San Diego Bay	Low	31	**		0	0	**
18	On-site Improvements: retaining wall as per engineered drawings	3142 Cagle Street	San Diego Bay	Low	0	**		0	0	**
19	On-site Improvements: retaining wall per approved drawings	3143 Cagle Street	San Diego Bay	Low	13	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
20	On-site Improvements: retaining wall: per manufacturers specs, 4ft high	1315 Earle Drive	San Diego Bay	Low	0	**		0	0	**
21	Public Improvement: construction: 6" sewer lat connection per city code	242 E 8th Street	San Diego Bay	Low	4	**		0	0	**
22	Public Improvements: Construction 6" sewer connection per SDRSD S-13	1139 Harbison Avenue	San Diego Bay	Low	0	**		0	0	**
23	Public Improvements: Construction: 1 unit monitoring well	Hoover Avenue btwn Plaza & 11th Street	San Diego Bay	Low	0	**		0	0	**
24	Public Improvements: Construction: destruction of 2 existing monitoring wells in R.O.W.	2401 E Division Street	San Diego Bay	Low	10	**		0	0	**
25	Public Improvements: Construction: resurfacing FY 09-10 specs 09-09	Various Locations	San Diego Bay	Low	31	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
26	Public Improvements: Construction: sewer connection per SDRSD S-13, Construction: 6" trench-sewer lat connection, trench-water x SDGE connection per City DWG standards	560 Highland Avenue	San Diego Bay	Low	0	**		0	0	**
27	Public Improvements: Construction: sewer lateral, 6" per SDRSD SS-01 & 03; On-site Improvements: grading, total of 620 CY; retaining wall SDRSD C-1; others: parking lot & swales	3101 Hoover Avenue	San Diego Bay	Low	0	**		0	0	**
28	Public Improvements: Construction: soil boring 5" cap using hot AC or black slurry	Euclid Avenue beneath 805 freeway	San Diego Bay	Low	3	**		0	0	**
29	Public Improvements: Construction: soil boring 5" cap using hot AC or black slurry	Sweetwater Road beneath 805 freeway	San Diego Bay	Low	3	**		0	0	**
30	Public Improvements: Construction: various concrete works specs #09-05	Various Locations	San Diego Bay	Low	26	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
31	Public Improvements: Curb & gutter R&R 10'; Driveway new 18', Driveway new SDRSD G-14	2704 K Avenue	San Diego Bay	Low	0	**		0	0	**
32	Public Improvements: Driveway	2010 Palm Avenue	San Diego Bay	Low	3	**		0	0	**
33	Public Improvements: driveway (new) G-14A & G-2 MOD	2638 E 15th Street	San Diego Bay	Low	2	**		0	0	**
34	Public Improvements: driveway (R&R) G-14 Mod, construction Mod G-14 narrow 6 ft	1518 E 20th Street	San Diego Bay	Low	4	**		0	0	**
35	Public Improvements: Driveway 1 new, 1 R&R; Construction per San Diego regional standard drawing G-14 location per drawings	2416 K Avenue	San Diego Bay	Low	0	**		0	0	**
36	Public Improvements: driveway per SDRSD G14B; street pavement, construction, others: for curb & gutter use National City modified G-2	306 F Avenue	San Diego Bay	Low	4	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
37	Public Improvements: Driveway R&R per SDRSD G-14, Construction, contractor to R&R sidewalk behind driveway apron	926 E 12th St	San Diego Bay	Low	0	**		0	0	**
38	Public Improvements: Driveway R&R, G-14A; construction: expand dwy	826-828 K Avenue	San Diego Bay	Low	0	**		0	0	**
39	Public Improvements: Driveway SDRSD G-14B	1831 O Avenue	San Diego Bay	Low	0	**		0	0	**
40	Public Improvements: Driveway SDRSD G-14B	1839 O Avenue	San Diego Bay	Low	0	**		0	0	**
41	Public Improvements: Driveway, new G-148, G-2 Mod	1938 O Avenue	San Diego Bay	Low	0	**		0	0	**
42	Public Improvements: Driveway, new R&R SDRSD G-14B	407 E Plaza Blvd	San Diego Bay	Low	3	**		0	0	**
43	Public Improvements: On-site improvements: others: 6' dia. Sewer lat. Connection, dwg #1-13-SB per SDRSD S-13	923 A Avenue	San Diego Bay	Low	0	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
44	Public Improvements: per specs #09-20	1243 National City Blvd (Police Dept)	San Diego Bay	Low	16	**		0	0	**
45	Public Improvements: Sidewalk (New/R&R), Curb & Gutter, Curb (R&R with std Type C & G), Driveway (New/R&R) Residential, Driveway (New/R&R) Commercial, Pedestrian Ramp (New/R&R), Street pavement, Construction: Street medians, Others: Fountain plaza at 9th St	National City Blvd. 1st to 12th streets	San Diego Bay	Low	31	**		0	0	**
46	Public Improvements: Sidewalk R&R per city code; construction ret wall per plan	30th Street southwest of Highland Avenue	San Diego Bay	Low	13	**		0	0	**
47	Public Improvements: Sidewalk R&R per SDRSD	10 E 1st Street	San Diego Bay	Low	4	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
48	Public Improvements: Sidewalk R&R per SDRSD, one-panel; Construction: trench-installing new gas service (per SDRSD)	3007 Highland Avenue	San Diego Bay	Low	3	**		0	0	**
49	Public Improvements: Sidewalk R&R SDRSD 20'x5'; Curb & gutter R&R SDRSD 20'; Driveway R&R SDRSD 20'	604 Highland Avenue	San Diego Bay	Low	3	**		0	0	**
50	Public Improvements: Sidewalk R&R SDRSD G-7 39+- LF	2400 E 8th Street (8th and Euclid)	San Diego Bay	Low	0	**		0	0	**
51	Public Improvements: sidewalk R&R; curb & gutter R&R; driveway, new commercial; street pavement, construction: trenches repair per city standard. Sewer & fire services. 6" lateral for sewer	2900 Highland Avenue	San Diego Bay	Low	19	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
52	Public Improvements: Sidewalk R&R; Curb & gutter R&R; driveway; construction 6" fire service, D-27 under drain	3101 Hoover Avenue	San Diego Bay	Low	0	**		0	0	**
53	Public Improvements: sidewalk, curb gutter	City of National City	San Diego Bay	Low	31	**		0	0	**
54	Public Improvements: Sidewalk, new, per G-7; construction, sewer lateral 6" & PL CO all work per plan & per SDRSD free stand pipe	2505 N Avenue	San Diego Bay	Low	9	**		0	0	**
55	Public Improvements: sidewalk, R7R 10' LFX 4' LF, construction: per San Diego regional standard G-7	2127 Highland Avenue	San Diego Bay	Low	0	**		0	0	**
56	Public Improvements: Sidewalk; Curb (R&R with Std Type C & G); Driveway Residential; Pedestrian Ramp; Street pavement; Construction: per spec's #07-03	Various Locations	San Diego Bay	Low	31	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Facility Name	Facility Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)	Follow Up Insp.	Complaint Invest. Insp.	Total Insp.
57	Public Improvements: Street pavement, constuction: utility trench, others: sewer lat w/ manhole	1701 D Avenue	San Diego Bay	Low	13	**		0	0	**
58	Public Improvements: Street pavement: 500 LFX 25 LF; construction: asphalt pavement resurfacing	4th Street and Hill Street	San Diego Bay	Low	26	**		0	0	**
59	Sylvia Zendejas	1738 L Avenue	San Diego Bay	Low	31	**		0	0	**
60	Utility Trench	2900 1/2 Highland Avenue	San Diego Bay	Low	31	**		0	0	**

* The two high priority construction sites received inspections the last week of the dry season to ensure proper BMP implementation for the wet season. Therefore, biweekly wet season inspections began in the second week of the wet season, which resulted in 15 wet season inspections each.

** Low priority construction sites received at least one inspection from City building inspectors during the 2009/2010 reporting period. These inspections include a check for proper construction BMP implementation and maintenance.

APPENDIX A.3

MUNICIPAL INVENTORY

Appendix A.3
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source
1	Butterfly Park	East 22nd Street and Palm Avenue	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
2	El Toyon Park	2005 East 4th Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
3	Graffiti Removal	Throughout City	High	San Diego Bay	Mobile Municipal Activities, Including Power Washing	
4	Kimball Park	12th Street and D Avenue	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
5	Las Palmas Park	1800 Newell Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
6	Municipal Separate Storm Sewer	19 miles of storm drains, storm drain boxes, and open channel sections throughout the City	High	San Diego Bay	MS4	
7	Municipal Swimming Pool	1800 East 22nd Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
8	National City Municipal Golf Course	1439 Sweetwater Road	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
9	Paradise Creek Educational Park	West 19th Street and Coolidge Avenue	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
10	Public Works East Yard	2100 Hoover Avenue	High	San Diego Bay	Public Works Facilities	
11	Public Works West Yard	2100 Hoover Avenue	High	San Diego Bay	Public Works Facilities	
12	Road and Streets	110 miles of roadways throughout the City	High	San Diego Bay	Road, Streets, and Highways	X
13	Special Events	Throughout City	High	San Diego Bay	Special Events	
14	Sweetwater Heights Park	Cagle Street and Stockman Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	X
15	Fire Station 31	24th Street and Euclid Avenue	Medium	San Diego Bay	Fire Stations	

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Likely Source
16	George H. Waters Nutrition Center	1514 D Avenue	Medium	San Diego Bay	Other Fixed Facilities	
17	Infrastructure Maintenance	Throughout City	Medium	San Diego Bay	Mobile Municipal Activities, Including Power Washing	
18	Landscape Maintenance	Throughout City	Medium	San Diego Bay	Mobile Municipal Activities, Including Power Washing	
19	National City Fire Department Headquarters - Station 34	333 East 16th Street	Medium	San Diego Bay	Fire Stations	
20	Police Station	1200 National City Boulevard	Medium	San Diego Bay	Other Fixed Facilities	
21	Camacho Recreational Gymnasium	1810 East 22nd Street	Low	San Diego Bay	Other Fixed Facilities	
22	Casa De Salud	1408 Harding Avenue	Low	San Diego Bay	Other Fixed Facilities	
23	Civic Center	1243 National City Boulevard	Low	San Diego Bay	Other Fixed Facilities	
24	El Toyon Recreational Center	2005 East 4th Street	Low	San Diego Bay	Other Fixed Facilities	
25	Kimball Recreation Center	148 East 12th Street	Low	San Diego Bay	Other Fixed Facilities	
26	Martin Luther King Community Center	140 East 12th Street	Low	San Diego Bay	Other Fixed Facilities	
27	National City Public Library	1401 National City Boulevard	Low	San Diego Bay	Other Fixed Facilities	
28	Senior Services Center	1221 D Avenue	Low	San Diego Bay	Other Fixed Facilities	

Notes
TTWQ – Threat to Water Quality
Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX A.4

INDUSTRIAL INVENTORY

Appendix A.4
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
1	A-1 ALLOYS RECYCLING CENTER	724 CIVIC CENTER DRIVE	High	5093	Recycling	908.31	9 37I020171	X
2	ADEPT PROCESS SERVICES, INC DBA MARINE SERVICES AND EQUIPMENT	1804 CLEVELAND AVE., B	High	3732	Boat Repair	908.32		
3	AMEE BAY LLC	2105 CLEVELAND AVE	High	1731	Boat Repair	908.31		X
4	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	High	3731	Boat Repair	908.31	9 37I014819	X
5	BECKY BEEZ BISQUE & CERAMICS	2424 HOOVER AVE, T	High	3269	Manufacturing, Stone/Glass	908.32		
6	BEST WAY PRINTING	2602 TRANSPORTATION AVE, E	High	2759	Printing	908.32		
7	CARROLL METAL WORKS, INC.	740 W 16TH STREET	High	3441	Manufacturing, Structural Steel	908.32	9 37I021165	
8	CP MANUFACTURING	1440 HARDING AVENUE, B	High	3679	Manufacturing, Electronics	908.32		
9	CP MANUFACTURING	1300 WILSON AVENUE	High	3559	Manufacturing, Equipment	908.31	9 37I016543	X
10	D F DESIGNS	1228 HOOVER AVENUE	High	2434	Manufacturing, Wood/Furniture	908.31		
11	DIXIELINE LUMBER COMPANY	3450 HIGHLAND AVENUE	High	2439	Manufacturing, Wood/Furniture	909.12	9 37I015245	
12	EPSILON SYSTEMS SOLUTIONS INC	3039 HOOVER AVE	High	3731	Boat Repair	908.32	9 37I021665	
13	FABRICATION TECHNOLOGIES INDUSTRIES	2200 HAFFLEY AVENUE, A	High	3441	Manufacturing, Structural Steel	908.31	9 37I022200	X
14	FUTURA FIBERGLASS	730 W 19TH STREET	High	3732	Boat Repair	908.31	9 37I015572	X
15	G V INDUSTRIES	1346 CLEVELAND AVENUE	High	3599	Manufacturing, Equipment	908.31		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
16	H20 LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	High	2048	Manufacturing, Food/Drink	908.31		
17	HANSON AGGREGATES NATIONAL CITY BATCH PLANT (2003 NC LLC)	601 W 12TH STREET	High	3273	Manufacturing, Concrete	908.31	9 37I020195	
18	INNOVATIVE CUTTING DESIGNS COR	1805 CLEVELAND AVE	High	3499	Manufacturing, Primary Metal	908.31		X
19	L3 COMMUNICATIONS PACORD SAN DIEGO	225 W 30TH STREET	High	3812	Manufacturing, Electronics	909.12	15864	
20	L3 COMMUNICATIONS/PACORD SAN DIEGO	240 W 30TH STREET	High	3812	Manufacturing, Electronics	909.12	15864	
21	MASTER MACHINE CORPORATION (VANTAGE ASSOCIATES)	900 CIVIC CENTER DRIVE	High	3499	Manufacturing, Fabricated Metal	908.31	9 37I019349	X
22	NATHAN'S STONE WORLD INC	1014 COOLIDGE AVE	High	3281	Manufacturing, Stone/Glass	908.31		
23	NATIONAL CITY TRANSFER & STORAGE	2150 MCKINLEY AVENUE	High	4214	Ground Transportation	908.31		X
24	NATIONAL IRON WORKS	832 HOOVER AVENUE	High	3441	Manufacturing, Structural Steel	908.31		X
25	OOH LA LA	2504 TRANSPORTATION AVE, D	High	2339	Manufacturing, Fabric/Clothes	908.32		
26	OXYHEAL MEDICAL SYSTEMS, INC.	3224 HOOVER AVENUE	High	3499	Manufacturing, Fabricated Metal	908.32		
27	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	High	5093	Recycling	908.31	9 37I000615	X
28	SAN DIEGO PRETZEL COMPANY	224 W 12TH STREET	High	2052	Manufacturing, Food/Drink	908.31		X

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
29	SAN DIEGO SEAFOOD	1842 MCKINLEY AVENUE	High	5146	Wholesale Food	908.31		X
30	SOUTH BAY BOILER REPAIR, INC..	1224 ROOSEVELT AVENUE	High	3494	Manufacturing, Fabricated Metal	908.31	9 37I019728	X
31	SUN DIEGO CHARTER CO.	2020 HOOVER AVENUE	High	4141	Ground Transportation	908.32	9 37I018361	
32	SURE RIDE INC	1523 WILSON AVE	High	4141	Ground Transportation	908.31		X
33	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	High	3449	Manufacturing, Fabricated Metal	908.31		X
34	VALENCIA STONE AND TILE	1124 COOLIDGE AVENUE	High	3281	Manufacturing, Stone/Glass	908.31	9 37I020515	
35	A-AMERICAN SELF STORAGE	525 W 20TH STREET	Medium	4225	Wholesale/Storage/ Warehousing	908.32		
36	ACTIVE SIGN CO.	2827 HOOVER AVENUE, J	Medium	3993	Printing	908.32		
37	ADVANCE PLASTICS	225 W 30TH STREET	Medium	3089	Manufacturing, Plastic/Rubber	909.12		
38	ANCON TRANSPORTATION	1800 HARRISON AVENUE	Medium	4226	Wholesale/Storage/ Warehousing	908.31		
39	APPAREL ENTERPRISES CO., INC.	2712 TRANSPORTATION AVENUE, H	Medium	2389	Manufacturing, Fabric/Clothes	908.32		
40	ATOMIC INVESTMENTS	3200 HIGHLAND AVENUE	Medium	4225	Wholesale/Storage/ Warehousing	909.12		
41	AZTEC PRINTING COMPANY	710 E 3RD STREET	Medium	2759	Printing	908.31		
42	CALIFORNIA MOVING & STORAGE	1305 WILSON AVENUE	Medium	4214	Ground Transportation	908.31		X
43	CASA SANCHEZ FOODS	131 W 33RD ST, 11	Medium	4225	Wholesale/Storage/ Warehousing	909.12		
44	CENTLI	221 W 33RD ST	Medium	2099	Manufacturing, Food/Drink	909.12		X

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
45	COLLINS MARINE REPAIR, INC	1400 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31		
46	COSTCO WHOLESALE CORP.	1001 W 19TH STREET, C & D	Medium	4783	Ground Transportation	908.31		X
47	COSTCO WHOLESALE GROUP	1001 W 19TH STREET, B	Medium	3827	Manufacturing, Equipment	908.31		
48	COURRINGTON WOODWORKS	6535 TIDELAND AVENUE, A-E	Medium	2541	Manufacturing, Wood/Furniture	908.31		
49	CREATIVE MOBILITY INC	320 CIVIC CENTER DRIVE	Medium	3799	Manufacturing, Equipment	908.31		
50	DAN FAB	1110 HARDING AVENUE	Medium	3499	Manufacturing, Fabricated Metal	908.31		X
51	DIMA-TECH	205 W 35TH STREET, H	Medium	3612	Manufacturing, Equipment	909.12		
52	DURRA INK	303 W 35TH STREET, E	Medium	2752	Printing	909.12		
53	E.L.A BEDSPREADS ETC.	3200 HIGHLAND AVENUE, 408	Medium	2392	Manufacturing, Fabric/Clothes	909.12		
54	EHMCKE SHEET METAL CORP	840 W 19TH STREET	Medium	3444	Manufacturing, Fabricated Metal	908.31		X
55	EZ SPRING AND STAMPING	231 W 11TH STREET	Medium	3499	Manufacturing, Fabricated Metal	908.31		X
56	FAMILY LOOPYA CORP	2525 SOUTHPORT WAY, E	Medium	2038	Manufacturing, Food/Drink	908.32		X
57	FIESTA PACIFIC PRODUCTS, INC	2855 A AVENUE	Medium	2037	Manufacturing, Food/Drink	908.32		X
58	FTC	1433 ROOSEVELT AVENUE	Medium	3999	Manufacturing, Misc	908.31		
59	GLASSWOOD STUDIO	907 A AVENUE	Medium	3231	Manufacturing, Stone/Glass	908.32		
60	GOULET INDUSTRIES	340 W 26TH STREET, J	Medium	3479	Manufacturing, Fabricated Metal	908.32		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
61	IDENTITY PLUS	1120 HOOVER AVENUE	Medium	3069	Manufacturing, Plastic/Rubber	908.31		
62	J. C. ENVIRONMENTAL COMPANY	2504 TRANSPORTATION AVENUE, C	Medium	4959	Waste Management	908.32		X
63	JB LITHO	2602 TRANSPORTATION AVENUE, E	Medium	2752	Printing	908.32		
64	L B C MUNDIAL CORP	1420 E PLAZA BLVD., D-9	Medium	4731	Ground Transportation	908.32		
65	LA ESPIGA DE ORO BAKERY	320 HIGHLAND AVENUE	Medium	2051	Manufacturing, Food/Drink	908.31		X
66	M & N FURNITURE	125 W 22ND STREET	Medium	2519	Manufacturing, Wood/Furniture	908.32		
67	MILLER MARINE	1430 HOOVER AVENUE	Medium	3499	Manufacturing, Fabricated Metal	908.31	9 37I018090	X
68	MOTIVATIONAL SYSTEMS INC. (MSI)	2200 CLEVELAND AVENUE	Medium	2599	Manufacturing, Wood/Furniture	908.31		
69	NATALINA ENTERPRISES	1840 HARRISON AVENUE	Medium	4214	Ground Transportation	908.31		X
70	NEW LIFE BARRIER (HOA MY INC. DBA)	1616 HOOVER AVENUE	Medium	3449	Manufacturing, Fabricated Metal	908.31		X
71	NIEDERFRANK'S ICE CREAM INC.	726 A AVENUE	Medium	2024	Manufacturing, Food/Drink	908.31		X
72	POSTURE CARE MATTRESS MFG.	34 E 17TH STREET, A	Medium	2515	Manufacturing, Wood/Furniture	908.32		
73	PROTO MACHINING	105 W 35TH STREET, L	Medium	3499	Manufacturing, Fabricated Metal	909.12		
74	PUPPET SAFARI	326 W 11TH STREET	Medium	3942	Manufacturing, Plastic/Rubber	908.31		
75	RAS FASHIONS	2605 HOOVER AVENUE, B	Medium	2399	Manufacturing, Fabric/Clothes	908.32		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
76	RESEARCH AUTOMOTIVE GROUP, INC	199 E 27TH ST	Medium	3462	Manufacturing, Fabricated Metal	908.32		
77	ROYCE CABINETS & GRANITE INC	2120 WILSON AVE	Medium	3281	Manufacturing, Stone/Glass	908.32		
78	RYAN HYDRAULIC SERVICES, INC	1817 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31		
79	SAN DIEGO AUTOMOTIVE MUSEUM	600 W 12TH ST	Medium	4226	Wholesale/Storage/ Warehousing	908.31		
80	SAN DIEGO MINI TOURS, CONTACTO	1726 WILSON AVE	Medium	4141	Ground Transportation	908.31		
81	SEWING SAAVEDRA	2525 SOUTHPORT WAY, R	Medium	2399	Manufacturing, Fabric/Clothes	908.32		
82	SHUTTER BUS LEASING	1726 WILSON AVENUE	Medium	4141	Ground Transportation	908.32		
83	SMARTRUNK SYSTEMS INC.	337 W 35TH STREET, R	Medium	3669	Manufacturing, Electronics	909.12		
84	SOUTHLAND CLUTCH EXCHANGE	101 E 18TH STREET	Medium	3599	Manufacturing, Equipment	908.32		
85	STARK MFG. CO.	206 W 35TH STREET, C & D	Medium	2394	Manufacturing, Fabric/Clothes	909.12		
86	TITAN MARINE, INC	2236 MCKINLEY AVE	Medium	3732	Boat Repair	908.31		X
87	TOD TOOL INC	2601 HOOVER AVENUE, K	Medium	3728	Manufacturing, Equipment	908.32		
88	UPHOLSTERY FABRIC OUTLET (UFO)	1918 ROOSEVELT AVENUE	Medium	2512	Manufacturing, Wood/Furniture	908.32		
89	US-MEX	2500 HOOVER AVENUE, G	Medium	3679	Manufacturing, Electronics	908.32		
90	VALMER GRAPHICS INC.	1400 E PLAZA BLVD.	Medium	2759	Printing	908.32		
91	WAGGONEERS TRUCKING	1545 TIDELAND AVENUE	Medium	4212	Ground Transportation	908.31		X
92	WESTERN LIFT, INC/WESTERN HOIST, INC	1839 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
93	WESTERN LIFT, INC/WESTERN HOIST, INC.	2200 HAFFLEY AVENUE	Medium	3536	Manufacturing, Equipment	908.31	9 37I000699	X
94	WINDOW CLASSICS	1921 CLEVELAND AVENUE	Medium	2391	Manufacturing, Fabric/Clothes	908.31		
95	WITHOUSKI CABINET	1535 TIDELAND AVENUE, P	Medium	2434	Manufacturing, Wood/Furniture	908.31		
96	ACROPOLIS SPACE CENTER	3200 HIGHLAND AVENUE	Low	4225	Wholesale/Storage/ Warehousing	909.12		
97	AMSEC, LLC	131 W 33RD STREET	Low	4225	Wholesale/Storage/ Warehousing	909.12		
98	ASSAF SAWAYA FASHION	301 W 28TH STREET, P	Low	2311	Manufacturing, Fabric/Clothes	908.32		
99	BAGWIS SALES AND SERVICES	3100 E 8TH ST , C	Low	4731	Ground Transportation	908.32		
100	BEAR'S VM MACHINE	241 W 35TH STREET, E	Low	5015	Recycling	909.12		
101	CONNECTION MEDICAL TRANSPORT	2504 TRANSPORTATION AVE, E	Low	4789	Ground Transportation	908.32		
102	COPY POST PRINTING	100 W 35TH STREET, B	Low	2759	Printing	909.12		
103	CORONADO ISLAND DESIGN & STAMPS	303 W 35TH STREET, G	Low	3953	Manufacturing, Chemicals	909.12		
104	CREST OFFSET PRINTING CO,	921 COOLIDGE AVENUE	Low	2759	Printing	908.31		
105	DIVERSIFIED WOOD DESIGNS	124 E 30TH ST , A5	Low	2434	Manufacturing, Wood/Furniture	909.12		
106	DRAPERY MANUFACTURER	2605 HOOVER AVENUE, A	Low	2391	Manufacturing, Fabric/Clothes	908.32		
107	EL GRANO DE ORO	730 E 7TH STREET	Low	2099	Manufacturing, Food/Drink	908.31		X

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
108	EZERA CLOTHING	220 W 25TH STREET, E	Low	2331	Manufacturing, Fabric/Clothes	908.32		
109	H & B BAJA FILTERS, LLC	337 W 35TH STREET, G	Low	3559	Manufacturing, Equipment	909.12		
110	HIGHWAY 54/NATIONAL SELF STORAGE LLC	132 W 33RD STREET	Low	4225	Wholesale/Storage/ Warehousing	909.12		
111	INDUSTRIAL & ARCHITECTURAL SIGN PRODUCTION	1535 TIDELAND AVENUE, G	Low	3993	Printing	908.31		
112	JESSICA'S FASHIONS	2605 HOOVER AVENUE	Low	2335	Manufacturing, Fabric/Clothes	908.32		
113	K D R COMPANY PRINTING	301 W 28TH STREET, D	Low	2752	Printing	908.32		
114	L B C MUNDIAL CORP	914 E 8TH STREET, 201	Low	4731	Ground Transportation	908.32		
115	L-3 SERVICES, INC., UNIDYNE DIVISION	2702 SOUTHPORT WAY , E-F	Low	4731	Ground Transportation	908.32		
116	LUCERO'S DRAPERIES	3200 HIGHLAND AVENUE, 408	Low	2391	Manufacturing, Fabric/Clothes	909.12		
117	MICROWAVE SOLUTIONS INC.	3200 HIGHLAND AVENUE	Low	3663	Manufacturing, Electronics	909.12		
118	MYLYN'S FASHION OF SAN DIEGO	901 COOLIDGE AVENUE	Low	2339	Manufacturing, Fabric/Clothes	908.31		
119	NATIONAL CITY SELF STORAGE	430 W 30TH STREET	Low	4225	Wholesale/Storage/ Warehousing	908.32		
120	OLSEN-SIMMONS CABINETRY	426 E 30TH STREET	Low	2599	Manufacturing, Wood/Furniture	908.32		
121	OOH LA LA (WEST KID'S GEAR)	2602 TRANSPORTATION AVENUE, G	Low	2339	Manufacturing, Fabric/Clothes	908.32		
122	PATRICK SHAW ENGRAVING	1533 TIDELAND AVENUE, J	Low	2796	Printing	908.31		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
123	PENTAGON CARGO	3200 HIGHLAND AVENUE	Low	4731	Ground Transportation	909.12		
124	PLANNED PARENTHOOD OF SD & RIV	337 W 35TH STREET, S	Low	4225	Wholesale/Storage/ Warehousing	909.12		
125	POTTER ELECTRIC, INC. WAREHOUSE	105 W 35TH STREET, A	Low	4225	Wholesale/Storage/ Warehousing	909.12		
126	PRECISION BINDERY & PRINTING	301 W 28TH STREET, E	Low	2731	Printing	908.32		
127	PROCHEM SPECIALTY PRODUCTS, INC.	115 E 18TH STREET	Low	2841	Manufacturing, Chemicals	908.32		
128	R. HARRIS AND CO.	2605 HOOVER AVENUE, E	Low	2599	Manufacturing, Wood/Furniture	908.32		
129	SMART CUTTING SERVICES	220 W 25TH STREET, A	Low	2399	Manufacturing, Fabric/Clothes	908.32		
130	SMARTRUNK SYSTEMS INC	401 W 35TH ST , B	Low	3669	Manufacturing, Electronics	909.12		
131	SOUTH BAY MOTORSPORTS WAREHOUSE 1	337 W 35TH STREET, H	Low	4225	Wholesale/Storage/ Warehousing	909.12		
132	SOUTH BAY MOTORSPORTS WAREHOUSE 2	105 W 35TH STREET, B	Low	4225	Wholesale/Storage/ Warehousing	909.12		
133	STUDIO EUROPA INC	313 W 33TH STREET, B	Low	2434	Manufacturing, Wood/Furniture	909.12		
134	SUNCARGO INC	1457 E PLAZA BLVD.	Low	4731	Ground Transportation	908.32		
135	THE MACHINE SHOP & FABRICATORS	1925 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.31		
136	TRANS ENERGY USA	1825 CLEVELAND AVE	Low	4226	Wholesale/Storage/ Warehousing	908.31		
137	VIMONE'S GARMET CO.	220 W 25TH STREET, G	Low	2329	Manufacturing, Fabric/Clothes	908.32		

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Likely Source
138	WSI METAL SUPPLY	1839 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.31		
139	ZAGA CUSTOM	1545 TIDELANDS AVE , D	Low	2389	Manufacturing, Fabric/Clothes	908.30		

Notes

TTWQ – Threat to Water Quality

SIC –Standard Industrial Classification Code

Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX A.5

COMMERCIAL INVENTORY

Appendix A.5
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1	A & D HAWAIIAN BBQ	2220 E PLAZA BLVD, D	High	5812	Eating/Drinking Establishments	908.32		
2	ANAYA'S NATIONAL AUTOMOTIVE	2125 ROOSEVELT AVENUE	High	7538	Auto Repair	908.32		
3	ASHTON AWNINGS INC	1200 HARBOR DR	High	1799	Other Contractor	908.31		
4	ASIAN NOODLES	1430 E PLAZA BLVD, E-12	High	5812	Eating/Drinking Establishments	908.32		X
5	BALL AUTOMOTIVE GROUP (ACURA)	2001 NATIONAL CITY BLVD	High	5511	Vehicle Dealers	908.32		
6	BAMBOO ROTISSERIE, INC	2220 E PLAZA BLVD, T-1	High	5812	Eating/Drinking Establishments	908.32		
7	BEN'S 1615	1615 SWEETWATER ROAD, A	High	5812	Eating/Drinking Establishments	909.12		X
8	C & W DIVING	1706 HOOVER AVENUE	High	1629	Other Contractor	908.32		X
9	C&M MOTORS INC.	904 ROOSEVELT AVENUE	High	7538	Auto Repair	908.31		X
10	CALIBER COLLISION CENTERS	2013 HAFFLEY AVE	High	7532	Auto Paint/Body	908.31		
11	CALIFORNIA AUTO DETAILING	1509.5 NATIONAL CITY BLVD.	High	7542	Vehicle Washing	908.32		X
12	CALIFORNIA PRODUCE CORPORATION	1736 E PLAZA BL	High	5431	Eating/Drinking Establishments	908.32		X
13	CARLS JR. #120	1280 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
14	CARLS' JR. #261	1502 SWEETWATER ROAD	High	5812	Eating/Drinking Establishments	909.12		X
15	CASA DE ORO RESTAURANT	1510 SWEETWATER ROAD, A	High	5812	Eating/Drinking Establishments	909.12		X
16	CHINA SUPER BUFFET	3007 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	909.12		
17	CHOWKING	2220 E PLAZA BLVD, T-1	High	5812	Eating/Drinking Establishments	908.32		X
18	CHUCK E CHEESE'S	1143 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32		X
19	CIVIC CENTER AUTO BODY	1304 ROOSEVELT AVENUE	High	7532	Auto Paint/Body	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
20	CONCHING'S CAFÉ	3400 E 8TH STREET, 115 & 116	High	5812	Eating/Drinking Establishments	908.32		X
21	COTIJAS MEXICAN FOOD	740 E 30TH STREET	High	5812	Eating/Drinking Establishments	909.12		X
22	CROWN TRANSMISSION CENTER	1339 HOOVER AVENUE	High	7537	Auto Repair	908.31		X
23	DE-LUX ROOFING	1107 HARDING AVENUE	High	1761	Other Contractor	908.31		
24	DENNY'S RESTAURANT	424 MILE OF CARS WAY	High	5812	Eating/Drinking Establishments	908.32		X
25	DIESEL POWER TRADE CORP	1636 WILSON AVE	High	5013	Auto Supplies	908.31		
26	FAMILY HOUSE OF PANCAKES	1900 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
27	FAMILY LOOMPYA SEAFOOD MARKET	2720 E PLAZA BLVD, A	High	5411	Eating/Drinking Establishments	908.32		X
28	FIVE STARS DIESEL SERVICE	1211 MCKINLEY AVE.	High	4226	Wholesale/Storage/Warehousing	908.32		
29	FOODLAND IGA	303 HIGHLAND AVENUE	High	5411	Eating/Drinking Establishments	908.31		X
30	GAPO RESTO AND KARAOKE	933 S HARBISON AVE	High	5812	Eating/Drinking Establishments	908.32		X
31	GINZA SUSHI	925 E PLAZA BLVD, G	High	5812	Eating/Drinking Establishments	908.32		X
32	GOLDEN CHOPSTICKS RESTAURANT	1430 E PLAZA BLVD, E-22-23	High	5812	Eating/Drinking Establishments	908.32		X
33	HOMETOWN BUFFET #714	1135 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32		X
34	HOPSING AUTO	1540 ROOSEVELT AVENUE	High	7538	Auto Repair	908.31		X
35	IDEAL SMOG	10 OSBORN ST, A	High	7549	Auto Repair	908.31		X
36	IMPERIAL PALACE	1630 E 8TH STREET	High	5812	Eating/Drinking Establishments	908.32		X
37	INTERNATIONAL HOUSE OF PANCAKES	1430 E PLAZA BLVD, E-1	High	5812	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
38	JACK IN THE BOX #80	3138 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
39	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	High	7538	Auto Repair	908.31		
40	JESTONI MANILA BISTRO	3421 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32		
41	JESUS & CECILIA LOYA CAFÉ DBA PEPITA'S CAFÉ	524 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	908.31		X
42	JOLLIBEE	1401 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
43	JOSE AUTO ELECTRIC	108 W 18TH STREET	High	7538	Auto Repair	908.32		
44	KARIHAN FILIPINO FOOD	2220 E PLAZA BLVD, A-1	High	5812	Eating/Drinking Establishments	908.32		X
45	KEN'S VW	1408 MCKINLEY AVENUE	High	5013	Auto Supplies	908.31		
46	LAI THAI RESTAURANT	1430 E PLAZA BLVD, E-10	High	5812	Eating/Drinking Establishments	908.32		X
47	LEFORT'S CONSTRUCCION & LANDSC	34 E 17TH STREET, B	High	7699	Equipment Repair	908.32		
48	LOLA HAPPY BAKERY	3142 E PLAZA BLVD, L	High	5812	Eating/Drinking Establishments	908.32		X
49	LOLLICUP TEAZONE	1105 E PLAZA BLVD, A	High	5812	Eating/Drinking Establishments	908.32		X
50	LOS TURBOS TRANSMISSION	1411 COOLIDGE AVENUE	High	7537	Auto Repair	908.31		X
51	MANILA SEAFOOD ORIENTAL MARKET	2220 E PLAZA BLVD, K	High	5411	Eating/Drinking Establishments	908.32		X
52	MARATHON CONSTRUCTION	801 CIVIC CENTER DRIVE	High	1541	Other Contractor	908.31		
53	MARLO'S AUTO SPECIALTIES/FRAME	223 CIVIC CENTER DR	High	7532	Auto Paint/Body	908.31		
54	MCDONALDS #6773	2145 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
55	MELHORN CONSTRUCTION	410 W 30TH STREET, B	High	1542	Other Contractor	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
56	MIKE'S GIANT NY PIZZA #5	1635 SWEETWATER ROAD, C-1	High	5812	Eating/Drinking Establishments	909.12		X
57	MOTHER'S NUTRITIONAL CENTER	924 HIGHLAND AVE	High	5499	Eating/Drinking Establishments	908.32		X
58	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	High	7538	Auto Repair	908.31		X
59	NANI MOKU HAWAIIAN BBQ	1635 SWEETWATER RD , H	High	5812	Eating/Drinking Establishments	909.12		
60	NATIONAL CITY CAR WASH	2550 E PLAZA BLVD	High	7542	Vehicle Washing	908.32		X
61	OHANA HAWAIIAN ISLAND BBQ	1430 E PLAZA BLVD, E7A	High	5812	Eating/Drinking Establishments	908.32		X
62	OUTBACK STEAK HOUSE	2980 PLAZA BONITA ROAD	High	5812	Eating/Drinking Establishments	909.12		X
63	PACIFIC AUTO REPAIRS	315 W 11TH STREET	High	7538	Auto Repair	908.31		X
64	PINOY RANCH	3403 E PLAZA BLVD, D	High	5411	Eating/Drinking Establishments	908.32		X
65	PIZZA HUT #315044	2437 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
66	PIZZA PLAZA	3108 E PLAZA BLVD.	High	5812	Eating/Drinking Establishments	908.32		
67	POPEYES CHICKEN	2210 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
68	POWER TIRE #4	1615 E 8TH STREET	High	7534	Auto Supplies	908.32		
69	PRO STREET LIGHTING INC	2145 WILSON AVENUE	High	5531	Auto Supplies	908.32		
70	QUIZNOS SUB	928 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	908.32		X
71	ROYAL MANDARIN RESTAURANT	1132 E PLAZA BLVD, 205	High	5812	Eating/Drinking Establishments	908.32		X
72	SAN DIEGO AUTO DETAIL	110 W 11TH STREET	High	7549	Vehicle Washing	908.31		
73	SAN DIEGO CRANE & HOIST	1606 COOLIDGE AVENUE	High	7699	Equipment Repair	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
74	SAN DIEGO HYDRAULICS INC	1720 CLEVELAND AVE	High	7699	Equipment Repair	908.31		X
75	SAVE-A-LOT #949	1035 S HARBISON AVENUE	High	5411	Eating/Drinking Establishments	908.32		X
76	SEAFOOD CITY SUPERMARKET	1420 E PLAZA BLVD, C-E	High	5411	Eating/Drinking Establishments	908.32		X
77	SIZZLER FAMILY STEAK HOUSE #45	1325 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
78	SOUTH BAY MECHANIC SHOP	1112 COOLIDGE AVE	High	7538	Auto Repair	908.31		
79	SPECIALTY TIRES AND BRAKES	1 W 35TH ST, D	High	7534	Auto Repair	909.12		X
80	STAR EXPRESS	3124 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
81	STEVE'S WEST COAST AUTOMOTIVE	1732 COOLIDGE AVENUE	High	7538	Auto Repair	908.32		
82	STONEY'S BAR & GRILL	108 W 25TH ST, D, E, F, G	High	5813	Eating/Drinking Establishments	908.32		X
83	STYLER'S AUTO MECHANIC	29 E 17TH ST	High	7538	Auto Repair	908.32		
84	TACO SALSA TACO SHOP	925 E PLAZA BLVD, B	High	5812	Eating/Drinking Establishments	908.32		X
85	TINO'S AUTO TECH	1 W 35TH STREET, D	High	7538	Auto Repair	909.12		X
86	TITA'S KITCHENETTE	2720 E PLAZA BLVD, E & F	High	5812	Eating/Drinking Establishments	908.32		X
87	TONYS DETAIL SHOP	49 E 16TH ST , B1	High	7542	Vehicle Washing	908.32		X
88	USED KAR STORE	45 E 26TH STREET	High	5521	Vehicle Dealers	908.32		X
89	VALERIOS FAMILY BAKE SHOP	2720 E PLAZA BLVD, H	High	5461	Eating/Drinking Establishments	908.32		X
90	VALERO NATIONAL CITY	10 OSBORN STREET	High	5541	Fueling	908.31		
91	VALUE CARS	13 NATIONAL CITY BLVD	High	5521	Vehicle Dealers	909.12		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
92	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS NORTH OF JC PENNY	3030 PLAZA BONITA ROAD, 2075	High	5812	Eating/Drinking Establishments	909.12		
93	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS ON EAST SIDE OF MALL	3030 PLAZA BONITA RD, 2075	High	5812	Eating/Drinking Establishments	909.12		
94	WINGS N THINGS	1499 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		X
95	YUM YUM DONUT FRANCHISE #502	3122 E PLAZA BLVD	High	5461	Eating/Drinking Establishments	908.32		X
96	ZARLITOS FAMILY RESTAURANT	505 E 8TH STREET	High	5812	Eating/Drinking Establishments	908.31		X
97	7 ELEVEN #13583 D	2425 SWEETWATER ROAD	Medium	5411	Eating/Drinking Establishments	909.12		X
98	7 ELEVEN #18978D	3100 E PLAZA BLVD	Medium	5411	Eating/Drinking Establishments	908.32		X
99	7 ELEVEN #20785-B	2400 HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	909.12		X
100	99 CENT ONLY STORES	1320 HIGHLAND AVENUE	Medium	5999	Eating/Drinking Establishments	908.32		
101	ABC SUPPLY COMPANY	135 W 30TH STREET	Medium	5033	Building Materials	908.32		
102	ALL PRO AUTO REPAIR	517 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31		X
103	ALLIED PIPING & WELDING, INC.	1120 HOOVER AVENUE	Medium	7692	Equipment Repair	908.31		X
104	ALPIN TACO SHOP	1641 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
105	ANTHONY'S PIZZA	1526 E 18TH ST	Medium	5812	Eating/Drinking Establishments	908.32		
106	ARCO AM/PM #9566	1606 E PLAZA BLVD.	Medium	5541	Fueling	908.32		
107	ARCO AM/PM #9570	1139 HARBINSON AVENUE	Medium	5541	Fueling	908.32		
108	ARCTIC SUPPLY	213 CIVIC CENTER DRIVE	Medium	5078	Wholesale/Storage/Warehousing	908.31		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
109	ARIDO MARKET	1643 WILSON AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X
110	ARROYO BROTHERS	128 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31		X
111	AUTO ACCESS	1609 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.32		
112	AUTO TECK	1023 COOLIDGE AVENUE	Medium	7532	Auto Paint/Body	908.31		X
113	AUTO ZONE #5659	2500 E PLAZA BLVD.	Medium	5531	Auto Supplies	908.32		
114	AVIS RENT A CAR	1536 SWEETWATER ROAD, B	Medium	7514	Vehicle/Equipment Rental	909.12		
115	BAE SYSTEMS LAND & ARMAMENTS	155 W 35TH STREET	Medium	7699	Equipment Repair	909.12		
116	BASKIN ROBBINS ICE CREAM	1493 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		X
117	BAXTER AUTOMOTIVE & MACHINE	1400 HOOVER AVENUE	Medium	7539	Auto Repair	908.31		X
118	BIG B MARKET & DELI	1540 COOLIDGE AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X
119	BIG BEN MARKET	22 E 8TH STREET	Medium	5411	Eating/Drinking Establishments	908.31		X
120	BIRRIAS CHIVOS & CHEVES	2401 HIGHLAND AVE, 104	Medium	5812	Eating/Drinking Establishments	909.12		X
121	BJ MOTOR & BODY SHOP	1338 ROOSEVELT AVENUE	Medium	7538	Auto Repair	908.31		X
122	BLIMPIE SUBS	1200 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.32		
123	BLUELINX DISTRIBUTION	901 BAY MARINA DRIVE	Medium	5031	Building Materials	908.31		
124	BOAT SELLERS	1730 CLEVELAND AVENUE	Medium	5551	Vehicle Dealers	908.31		X
125	BOB'S N. CAR & SMOG	49 E 16TH ST, B1	Medium	7539	Auto Repair	908.32		
126	BREAD DELUX BAKERY, ETC.	1420 E PLAZA BLVD, D-1	Medium	5461	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
127	BURGER KING	815 HIGHLAND AVENUE, 780	Medium	5812	Eating/Drinking Establishments	908.32		X
128	BURRITOS EXPRESS	1539 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		
129	BUSTER'S BEACH HOUSE AND LONGBOARD BAR	740 BAY MARINA DRIVE	Medium	5812	Eating/Drinking Establishments	908.32		
130	CA WELDING IRON WORKS	1630 HARDING AVENUE	Medium	7692	Equipment Repair	908.31		X
131	CAFÉ LA MAZE	1441 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
132	CALIFORNIA ICE CREAM	1021 COOLIDGE AVENUE	Medium	5963	Eating/Drinking Establishments	908.31		X
133	CALIFORNIA SALES	205 W 35TH ST, B	Medium	1799	Other Contractor	909.12		
134	CALIFORNIA'S TACO SHOP	51 N HIGHLAND AVENUE, H	Medium	5812	Eating/Drinking Establishments	908.31		X
135	CAR MAINTENANCE PROVIDERS	1531 NATIONAL CITY BLVD	Medium	7538	Auto Repair	908.32		
136	CARNIVAL SUPERMARKET	1750 E 8TH STREET	Medium	5411	Eating/Drinking Establishments	908.32		X
137	CARQUEST AUTOPARTS	1300 HIGHLAND AVENUE	Medium	5531	Auto Supplies	908.32		
138	CASA DEL TACO	1635 SWEETWATER ROAD, A	Medium	5812	Eating/Drinking Establishments	909.12		X
139	CESAR'S TACO SHOP	3123 D AVENUE	Medium	5812	Eating/Drinking Establishments	909.12		X
140	CHANG DONG SUPERMARKET ORIENTAL SEAFOOD	600 E 8TH STREET, 7 & 8	Medium	5411	Eating/Drinking Establishments	908.32		X
141	CHINESE CANTON BAKERY	1132 E PLAZA BLVD, 204	Medium	5461	Eating/Drinking Establishments	908.32		X
142	CHINESE CITY RESTAURANT #2	1025 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
143	CHING'S FAMOUS HOPIA	1722 E 8TH STREET	Medium	5461	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
144	CHURCH'S CHICKEN	3040 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
145	COASTAL DECKING, INC.	2050 WILSON AVENUE	Medium	1752	Wholesale/Storage/Warehousing	908.32		
146	COMMERCIAL FLEET SERVICE	1521 COOLIDGE AVENUE	Medium	7539	Auto Repair	908.31		X
147	CRASH AND FIX AUTOBODY	202 W 11TH STREET	Medium	7532	Auto Paint/Body	908.31		X
148	DE LA TORRE	2137 WILSON AVENUE	Medium	0782	Landscaping	908.32		
149	DECKER'S SUBS & TORTAS	3030 PLAZA BONITA RD, 2185	Medium	5812	Eating/Drinking Establishments	909.12		X
150	DELA CRUZ AUTO REPAIR INC	36 CIVIC CENTER DR	Medium	7538	Auto Repair	908.31		
151	DENNIS'S BAKERY	832 E 18TH STREET	Medium	5461	Eating/Drinking Establishments	908.31		X
152	DENNY'S RESTAURANT	1904 SWEETWATER ROAD, 1473	Medium	5812	Eating/Drinking Establishments	909.12		X
153	DISCOUNT TIRE CO. (SO. CA.)	1309 E PLAZA BLVD.	Medium	7534	Auto Repair	908.32		
154	DOMINO'S PIZZA	702 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
155	DON JOHN MARKET	431 N HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X
156	EAT & GO TROLLEY DELI	530 W 21ST STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
157	EL AGUILA MEXICAN FOOD	640 HIGHLAND AVE, A	Medium	5812	Eating/Drinking Establishments	908.31		X
158	EL JAUN CAFE	2316 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12		X
159	EL NUEVO MILLENIO MEXICAN FOOD	2323 E DIVISION STREET	Medium	5812	Eating/Drinking Establishments	908.31		X
160	EL POLLO LOCO #3430	1710 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
161	ETHNIC DELI & CAFE	404 W MILE OF CARS WAY, F	Medium	5812	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
162	FAIRBANKS MORSE ENGINE	1545 TIDELAND AVENUE, J	Medium	7699	Equipment Repair	908.31		X
163	FARMERS DISCOUNT MARKET	1535 E 18TH STREET	Medium	5411	Eating/Drinking Establishments	908.32		X
164	FASTENAL COMPANY	2807 HOOVER AVE , G	Medium	5072	Building Materials	908.32		
165	FIESTA PET SHOP	1145 HIGHLAND AVENUE, A	Medium	5999	Animal Facilities	908.32		
166	FIRESTONE	2531 E PLAZA BLVD.	Medium	5531	Auto Supplies	908.32		
167	FOREST PLYWOOD SALES DBA BAKER HARDWOOD LUMBER CO.	3131 HOOVER AVENUE	Medium	5031	Building Materials	908.32		
168	FRANK MOTORS HYUNDAI	3150 NATIONAL CITY BLVD	Medium	5511	Vehicle Dealers	909.12		
169	FREDDY AUTO REPAIR	923.5 COOLIDGE AVENUE	Medium	7538	Auto Repair	908.31		X
170	GALOREN SOUTHWESTERN INC	3200 HIGHLAND AVE, 303	Medium	5046	Wholesale/Storage/Warehousing	909.12		
171	GEMMAE BAKESHOP & CAFE	450 E 8TH STREET, A & B	Medium	5461	Eating/Drinking Establishments	908.32		X
172	GENGIS KHAN #1	3030 PLAZA BONITA ROAD, 2128	Medium	5812	Eating/Drinking Establishments	909.12		X
173	GEORGE'S MARKET	2540 E 18TH STREET	Medium	5411	Eating/Drinking Establishments	908.32		X
174	GEORGE'S WONDERFUL WORLD OF CAKES	1519 HIGHLAND AVENUE	Medium	5461	Eating/Drinking Establishments	908.32		X
175	GIANT NEW YORK PIZZA	8 N EUCLID AVENUE, 8-B	Medium	5812	Eating/Drinking Establishments	908.31		X
176	GOLDEN DONUTS	36 N EUCLID AVENUE, E	Medium	5812	Eating/Drinking Establishments	908.31		X
177	GOLDILOCKS BAKERY & RESTAURANT	1420 E PLAZA BLVD, D-7	Medium	5812	Eating/Drinking Establishments	908.32		X
178	GORMSEN APPLIANCE	718 E 18TH STREET	Medium	7699	Equipment Repair	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
179	GRAND MOTORS	423 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.31		X
180	GREAT STEAK & POTATOE	3030 PLAZA BONITA RD, 2154	Medium	5812	Eating/Drinking Establishments	909.12		X
181	GREENWALD'S AUTOBODY & FRAMEWORKS, INC	1814 ROOSEVELT AVENUE	Medium	7532	Auto Paint/Body	908.32		
182	GULF AUTO SALES	135 CIVIC CENTER DR	Medium	5012	Vehicle Dealers	908.31		
183	HANAOKA RESTAURANT	1528 SWEETWATER ROAD, C	Medium	5812	Eating/Drinking Establishments	909.12		X
184	HAWAIIAN EXPRESS BBQ	3030 PLAZA BONITA RD, 2122	Medium	5812	Eating/Drinking Establishments	909.12		X
185	HERTZ LOCAL EDITION	2001 SWEETWATER ROAD	Medium	7514	Vehicle/Equipment Rental	909.12		
186	HICKORY FARMS INC	3030 PLAZA BONITA ROAD	Medium	5963	Eating/Drinking Establishments	909.12		X
187	HIGHLAND VALERO	804 E 8TH ST	Medium	5541	Fueling	908.32		
188	HORN'S WELDING	1840 WILSON AVENUE, A	Medium	7692	Equipment Repair	908.31		X
189	HUB CONSTRUCTION SUPPLY & EQUIPMENT	402 W 35TH STREET, A	Medium	5082	Wholesale/Storage/Warehousing	909.12		
190	ICEBERG ENTERPRISES, INC.	1410 CLEVELAND AVENUE	Medium	7359	Vehicle/Equipment Rental	908.31		X
191	IN N OUT BURGER	500 MILE OF CARS WAY	Medium	5812	Eating/Drinking Establishments	908.32		X
192	JACK IN THE BOX	700 ROOSEVELT AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
193	JACK IN THE BOX #3	1745 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
194	JOCSON'S AUTO BODY & PAINT INC.	1320 COOLIDGE AVENUE	Medium	7532	Auto Paint/Body	908.31		X
195	JRP AUTO SALES	5 W 18TH STREET	Medium	5521	*Not Inventoried*	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
196	K SURPLUS SALES, INC.	1403 CLEVELAND AVENUE	Medium	5072	Wholesale/Storage/Warehousing	908.31		
197	KARINA'S MEXICAN STYLE SEAFOOD	1705 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
198	KARZ PLUS RV	1605 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.32		
199	KAY AUTOMOTIVE	2121 HOOVER AVE	Medium	5531	Auto Supplies	908.32		
200	KENTUCKY FRIED CHICKEN	3005 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12		X
201	KENTUCKY FRIED CHICKEN	840 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
202	KOTIJA TACO SHOP	321 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.31		
203	L & L HAWAIIAN BARBEQUE	1860 SWEETWATER ROAD, B	Medium	5812	Eating/Drinking Establishments	909.12		X
204	LA RUE PLUMBING	1515 WILSON AVENUE	Medium	1711	Other Contractor	908.31		
205	LA SIERRA CAFFE	306 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
206	LAS UVAS DELI	632 NATIONAL CITY BLVD.	Medium	5812	Eating/Drinking Establishments	908.31		X
207	LITTLE DRAGON CHINESE	2424 HOOVER AVENUE, K	Medium	5812	Eating/Drinking Establishments	908.32		X
208	LIVELY BRAKE SERVICE	115 E 17TH STREET, B	Medium	7539	Auto Repair	908.32		
209	LOS BURRITOS MEXICAN GRILL	3460 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		
210	LOS PANCHOS TACO SHOP	2441 NATIONAL CITY BLVD.	Medium	5812	Eating/Drinking Establishments	908.32		X
211	LOS TACOS SHOP	2241 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		
212	LUEMMA'S KITCHEN SOUTHERN STYLE	36 N EUCLID AVE, F	Medium	5812	Eating/Drinking Establishments	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
213	LUPITAS MEAT MARKET	2239 HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	909.12		X
214	LUTONG BAHAY CAFE & BAKERY	2344 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
215	M & M CONVERTER SHOP	301 W 28TH STREET, X	Medium	7539	Manufacturing, Equipment	908.32		
216	M & T AUTO	1731 WILSON AVENUE	Medium	7538	Auto Repair	908.31		X
217	MAC ARTHUR CO	2101 HAFFLEY AVE, B	Medium	5033	Building Materials	908.31		X
218	MADLAIN INC DBA WRIGLEYS SUPER	34 N EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X
219	MAMA FINA'S PIZZA	916 E 8TH STREET, 4	Medium	5812	Eating/Drinking Establishments	908.32		X
220	MANILA SUNSET GRILLE	925 E PLAZA BLVD, I	Medium	5812	Eating/Drinking Establishments	908.32		X
221	MARISCOS SINALOA #2	2435 NATIONAL CITY BLVD.	Medium	5812	Eating/Drinking Establishments	908.32		X
222	MARK MOTORS	905 HOOVER AVENUE	Medium	5521	Vehicle Dealers	908.31		X
223	MARY J'S CAFE	1930 CLEVELAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
224	MC CUNE II	325 MILE OF CARS WAY	Medium	5511	Vehicle Dealers	908.32		
225	MC CUNE MOTORS	3000 NATIONAL CITY BLVD.	Medium	7532	Auto Paint/Body	908.32		
226	MC DINI'S BAJA	105 E 8TH ST	Medium	5813	Eating/Drinking Establishments	908.31		X
227	MCDINI'S BAJA	105 E 8TH STREET	Medium	5813	Eating/Drinking Establishments	908.31		X
228	MCDONALDS	1630 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
229	MCDONALD'S	3400 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12		X
230	MCDONALDS #20311	3030 PLAZA BONITA ROAD, 2168	Medium	5812	Eating/Drinking Establishments	909.12		X
231	MENUDERIA DON VICENTE	2637 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		X
232	MEZA AUTO BODY	420 W 12TH STREET	Medium	7532	Auto Paint/Body	908.31		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
233	MI COCINA RESTAURANT	543 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	908.31		
234	MI TIERRA SUPER TACO	1835 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
235	MICKEY'S COMPLETE AUTO REPAIR	415 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31		X
236	MOTOR WORKS	1625 COOLIDGE AVENUE	Medium	7538	Auto Repair	908.31		X
237	NADEL HOUSE OF FILIPINO CAKES	914 E 8TH STREET, 202	Medium	5461	Eating/Drinking Establishments	908.32		X
238	NATIONAL CITY AUTO BODY	24 4TH STREET, E	Medium	7532	Auto Paint/Body	908.31		X
239	NATIONAL CITY AUTO CENTER INC	1010 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.31		X
240	NATIONAL CITY AUTO TRIM INC	15 5TH STREET, E	Medium	7532	Auto Paint/Body	908.31		X
241	NATIONAL CITY GOLF COURSE	1439 SWEETWATER ROAD	Medium	7992	Golf Courses/Parks	909.12		
242	NATIONAL CITY GROCERY OUTLET	3446 HIGHLAND AVENUE, 6	Medium	5411	Eating/Drinking Establishments	909.12		X
243	NATIONAL CITY MOTORCYCLE INC	1504 NATIONAL CITY BLVD., A	Medium	7699	Equipment Repair	908.32		
244	NATIONAL CITY SHELL	1601 E 8TH ST	Medium	5541	Fueling	908.32		
245	NATIONAL CITY SMOG, BRAKE & LIGHTS	705.5 E 8TH STREET, A	Medium	7539	Auto Repair	908.31		X
246	NATIONAL MECHANICAL SERVICES	1640 HOOVER AVENUE, B	Medium	1731	Other Contractor	908.31		X
247	NATIONAL MOTOR WORKS	1440 HARDING AVE, A	Medium	7538	Auto Repair	908.31		X
248	NC MOTOR SPORTS AUTO REPAIR	710 E 18TH ST	Medium	7539	Auto Repair	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
249	NILS HALL DBS THUNDERBIRD	705 E 8TH STREET	Medium	7553	Auto Repair	908.31		X
250	ORIENTAL CAFE	39 E 7TH STREET	Medium	5812	Eating/Drinking Establishments	908.31		X
251	OUCHI'S POWER EQUIPMENT	225 W 9TH STREET	Medium	7699	Equipment Repair	908.31		X
252	PACIFIC COAST DIESEL	100 W 35TH STREET	Medium	5531	Auto Supplies	909.12		
253	PANDA PALACE	1105 E PLAZA BLVD, D & E	Medium	5812	Eating/Drinking Establishments	908.32		X
254	PARADISE MOTORCARS	110 W PLAZA BLVD	Medium	5521	Vehicle Dealers	908.31		
255	PARADISE MOTORCARX	200 W 8TH ST	Medium	5521	Vehicle Dealers	908.31		
256	PERRY FORD (TRUCK)	1610 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.32		
257	PETER PIPER PIZZA STORE #212	3007 HIGHLAND AVENUE, 11	Medium	5812	Eating/Drinking Establishments	909.12		X
258	PHO EXPRESS	3030 PLAZA BONITA RD, 2132	Medium	5812	Eating/Drinking Establishments	909.12		X
259	PICKLE BARREL DELI RESTAURANT	340 W 26TH STREET, E	Medium	5812	Eating/Drinking Establishments	908.32		X
260	PINOY FIESTA	550 E 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
261	PIZZA HUT EXPRESS	3060 PLAZA BONITA RD.	Medium	5812	Eating/Drinking Establishments	909.12		
262	PLAZA BOULEVARD PET CLINIC	2415 E PLAZA BLVD.	Medium	0742	Animal Facilities	908.32		X
263	PLAZA DONUTS	1548 HIGHLAND AVENUE	Medium	5461	Eating/Drinking Establishments	908.32		X
264	POINT POINT JOINT (TURO-TURO)	916 E 8TH STREET, 1 & 2	Medium	5812	Eating/Drinking Establishments	908.32		X
265	POLLO AMIGO #2	1604 E 18TH STREET	Medium	5812	Eating/Drinking Establishments	908.32		X
266	POMPEII ITALIAN RESTAURANT & PIZZA	1231 HIGHLAND AVE.	Medium	5812	Eating/Drinking Establishments	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
267	POPEYES FAMOUS FRIED CHICKEN	2333 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	909.12		X
268	PRO SMOG TEST ONLY	34 E 17TH ST, C	Medium	7538	Auto Repair	908.32		
269	QUALITY AUTO SALES & SERVICE	423 NATIONAL CITY BLVD., A	Medium	5521	Vehicle Dealers	908.31		X
270	RAINBOW FRUITS EXPRESS	3030 PLAZA BONITA RD, 2176	Medium	5812	Eating/Drinking Establishments	909.12		
271	RALPH'S GROCERY STORE NO. 101	901 EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.32		X
272	RANFLO ENTERTAINMENT	3400 E 8TH ST, 111-112	Medium	7359	Vehicle/Equipment Rental	908.32		
273	RASPADOS MICHOACAN	115 8TH STREET	Medium	5812	Eating/Drinking Establishments	908.31		X
274	RAY BROCK AUTO SERVICE	25 W 11TH STREET	Medium	7539	Auto Repair	908.31		X
275	RED BIRD MARKET	2035 HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	908.32		X
276	RELIABLE SPRING AND SUSPENSION	225 W 16TH STREET	Medium	7539	Auto Repair	908.32		
277	RENT-A-CENTER #01072	1043 HIGHLAND AVE	Medium	7359	Vehicle/Equipment Rental	908.32		
278	REYNOSO AUTO SALES	438 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.31		X
279	ROB NORTH FABRICATION	1605 HOOVER AVENUE	Medium	5571	Vehicle Dealers	908.31		X
280	ROBERTO'S TACO SHOP	1406 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
281	ROCKY MOUNTAIN CHOCOLATE FACTO	3030 PLAZA BONITA RD, 9249	Medium	5441	Eating/Drinking Establishments	909.12		
282	RODEO'S MEAT MARKET	422 HIGHLAND AVENUE	Medium	5421	Eating/Drinking Establishments	908.31		X
283	ROMERO'S ROOFING SERVICE, INC.	1827 CLEVELAND AVENUE	Medium	1761	Other Contractor	908.31		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
284	RONNIE'S ELECTRONICS - AUTO	1309 HIGHLAND AVENUE	Medium	7549	Auto Repair	908.32		
285	ROYCE CONSTRUCTION INC	10 E 1ST STREET, A	Medium	1542	Other Contractor	908.31		
286	S & S WELDING	1442 MCKINLEY STREET	Medium	7692	Equipment Repair	908.31		X
287	SAM'S ALIGNMENT SERVICE	1028 COOLIDGE AVENUE	Medium	7539	Auto Repair	908.31		X
288	SAN DIEGO DODGE	2829 NATIONAL CITY BLVD	Medium	5511	Vehicle Dealers	908.32		
289	SAN DIEGO PIPE & STEEL	100 W 35TH STREET, E	Medium	5051	Wholesale/Storage/Warehousing	909.12		
290	SAN JOSE RESTAURANT	213 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.31		X
291	SANDOVAL CONCRETE	827 E 13TH ST	Medium	1771	Cement Mixing/Cutting	908.32		
292	SCHEIB, EARL OF CA INC #189	111 NATIONAL CITY BLVD.	Medium	7532	Auto Paint/Body	908.31		X
293	SEAWARD MARINE SERVICE INC.	424 W 8TH STREET	Medium	7699	Equipment Repair	908.31		X
294	SEE'S CANDIES	3030 PLAZA BONITA RD, 22	Medium	5441	Eating/Drinking Establishments	909.12		
295	SENOR PANCHO FRESH MEXICAN GRILL	2030 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
296	SERVICE MASTER AA ADVANCES RES	100 W 35TH STREET	Medium	7699	Equipment Repair	909.12		
297	SHELL STATION	2401 E DIVISION STREET	Medium	5541	Fueling	908.31		X
298	SIETE DIAS MARKET	151 N HIGHLAND AVENUE, A	Medium	5411	Eating/Drinking Establishments	908.31		X
299	SMART AND FINAL	1220 E PLAZA BLVD	Medium	5411	Eating/Drinking Establishments	908.32		X
300	SMOG CENTRO	404 HIGHLAND AVENUE	Medium	7539	Auto Repair	908.31		X
301	SO CAL TRUCK STOP	2250 TIDELANDS AVENUE	Medium	5541	Fueling	908.30		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
302	SOLAR ECLIPSE PERFORMANCE	507 G AVENUE	Medium	7549	Auto Repair	908.31		X
303	SOUTH BAY AUTO SHOP	1112 COOLIDGE AVENUE	Medium	7538	Auto Repair	908.31		X
304	SOUTH BAY DIESEL & HYDRAULIC, INC	100 W 35TH ST, J	Medium	5531	Auto Supplies	909.12		
305	SOUTH BAY MECHANICAL SERVICES	2137 WILSON AVENUE	Medium	1711	Other Contractor	908.32		
306	SOUTH BAY VOLKSWAGON	3131 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	909.12		
307	SOUTHWEST PAINT AND BODY	1616 WEST AVENUE	Medium	7532	Auto Paint/Body	908.32		
308	SOUTHWESTERN AUTO BROKERS, INC.	333 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.31		X
309	SOUTHWESTERN AUTOBROKERS INC	1535 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.32		
310	SPORTS AUTO SALES	1040 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.31		X
311	STANDARD PARKING	235 E 8TH STREET	Medium	7521	Vehicle Parking/Storage	908.31		X
312	STAR AUTOMOTIVE	438 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.31		
313	STAR AUTOMOTIVE	423 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.31		X
314	STARBUCKS COFFEE #6487	1860 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12		X
315	STARBUCK'S COFFEE #6783	2230 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		
316	STEVENS CONSTRUCTION	125 E 17TH STREET	Medium	1542	Other Contractor	908.32		
317	STREET DREAMS AUTO STYLING	710 E 8TH ST	Medium	5531	Auto Supplies	908.31		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
318	STYLER'S AUTO BODY	38 E 16TH STREET	Medium	7532	Auto Paint/Body	908.32		
319	SUBMARINA	1210 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		X
320	SUBWAY SANDWICH & SALAD	1860 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12		X
321	SUNNY DONUTS	724 HIGHLAND AVENUE	Medium	5461	Eating/Drinking Establishments	908.31		X
322	TACO BELL #106	2425 DIVISION STREET	Medium	5812	Eating/Drinking Establishments	908.31		X
323	TACO BELL #2800	1737 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12		X
324	TACOS EL GORDO DE TIJUANA	1940 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X
325	TED'S UPHOLSTERY	115 E 17TH STREET, D	Medium	7532	Auto Paint/Body	908.32		
326	THE NEW LOOK	340 W 11TH STREET	Medium	7532	Auto Paint/Body	908.31		X
327	THE ORIGINAL RICHARD'S BAKERY	3400 E 8TH STREET, 114	Medium	5461	Eating/Drinking Establishments	908.32		X
328	THUNDERBIRD MUFFLER SHOP	705 E 8TH STREET	Medium	7533	Auto Repair	908.31		X
329	TINO'S IRON WORK	1014 COOLIDGE AVE	Medium	7692	Equipment Repair	908.31		X
330	TOM THUMB WHOLESALE ICE CREAM	1021 COOLIDGE AVENUE	Medium	5963	Eating/Drinking Establishments	908.31		
331	TORTAS OASIS	1210 E PLAZA BLVD, 404	Medium	5812	Eating/Drinking Establishments	908.32		X
332	TRANS PROS	130 E 17TH STREET	Medium	7537	Auto Repair	908.32		
333	TROLLEY SIDE DELI AND MINI MART	530 W 21ST ST	Medium	5812	Eating/Drinking Establishments	908.32		
334	UNDERGROUND AUTOWORKS INC	106 E 17TH ST	Medium	7538	Auto Repair	908.32		
335	US SAVE AUTO	639 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.31		X
336	VALERIOS CITY BAKERY	1631 E 8TH STREET, 182	Medium	5461	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
337	VALUE AUTO REPAIR & TIRES	115 E 17TH ST, A	Medium	7538	Auto Repair	908.32		
338	VALUE CARS INC	1807 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.32		
339	VIETNAMESE CHINESE NOODLE HOUSE	600 E 8TH STREET, 5	Medium	5812	Eating/Drinking Establishments	908.32		X
340	VIKING'S AUTO REPAIR	1503 ROOSEVELT AVENUE, A	Medium	7532	Auto Paint/Body	908.31		X
341	WEBCO HALE	2202 HAFFLEY AVENUE	Medium	5963	Wholesale/Storage/Warehousing	908.31		X
342	WEST COAST CAB	220 W 14TH ST	Medium	7538	Ground Transportation	908.31		
343	WESTAIR GASES & EQUIP, INC	2300 HAFFLEY AVE	Medium	5084	Wholesale/Storage/Warehousing	908.31		
344	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS AT SOUTH END OF MALL	3030 PLAZA BONITA RD, 2075	Medium	5812	Eating/Drinking Establishments	909.12		
345	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS IN FOOD COURT	3030 PLAZA BONITA ROAD, 2075	Medium	5812	Eating/Drinking Establishments	909.12		
346	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS SOUTH OF JC PENNY	3030 PLAZA BONITA RD, 2075	Medium	5812	Eating/Drinking Establishments	909.12		
347	WESTSIDE BUILDING MATERIALS	500 W 16TH STREET	Medium	5211	Building Materials	908.32		
348	WIENERSCHNITZEL	1825 HIGHLAND AVENUE	Medium	5812	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
349	WINCHELL'S DONUT HOUSE #9484	2447 E PLAZA BLVD	Medium	5461	Eating/Drinking Establishments	908.32		X
350	WONDER/HOSTESS BAKERY OUTLET	1626 SWEETWATER ROAD, E - H	Medium	5411	Eating/Drinking Establishments	909.12		
351	WRIGLEY'S SUPER	34 N EUCLID AVENUE	Medium	5411	Eating/Drinking Establishments	908.31		X
352	XPEDX	1010 W 19TH STREET	Medium	5113	Wholesale/Storage/Warehousing	908.31		
353	YOBERRY YOGURT	1430 E PLAZA BLVD , E8	Medium	5812	Eating/Drinking Establishments	908.32		
354	YOGURLICIOUS	2240 E PLAZA BLVD , F	Medium	5812	Eating/Drinking Establishments	908.32		
355	ZAVALA'S CONCRETE WORK	2840 N AVE	Medium	1771	Cement Mixing/Cutting	909.12		
356	100% NATURALL	20 N EUCLID AVE , D	Low	5812	Eating/Drinking Establishments	908.31		
357	1-DAY PAINT & BODY CENTERS INC	1146 NATIONAL CITY BLVD.	Low	7532	Auto Paint/Body	908.32		
358	7 ELEVEN #13564 F	15 N EUCLID AVENUE	Low	5411	Eating/Drinking Establishments	908.31		X
359	7 ELEVEN #17265	1601 E 18TH STREET	Low	5411	Eating/Drinking Establishments	908.32		X
360	7 ELEVEN #18218C	807 E 8TH STREET	Low	5411	Eating/Drinking Establishments	908.31		X
361	A & F ASPHALT PAVING	215 E 30TH STREET	Low	1611	Cement Mixing/Cutting	909.12		
362	A & T WHOLESALE ELECTRIC & L	205 W 35TH STREET, B	Low	5063	Wholesale/Storage/Warehousing	909.12		
363	A B C AUTOBUYERS	40 W PLAZA BLVD.	Low	5012	Vehicle Dealers	908.32		
364	A MIRROR DÉCOR (AKA NATIONAL GLASS & MIRROR CO.)	821 E 2ND STREET	Low	1793	Other Contractor	908.31		
365	A-1 HYDRAULICS SERVICE	2100 ROOSEVELT AVENUE	Low	7699	Equipment Repair	908.32		
366	AB&A CUSTOM WHEELS & ACCESSORIES	1840 HIGHLAND AVENUE	Low	7534	Auto Supplies	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
367	ALCEM FENCE CO. INC	1440 COOLIDGE AVENUE	Low	1799	Other Contractor	908.31		
368	ALL AMERICAN PLASTIC BAGS	3020 HOOVER AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.32		
369	ALLSPORTS FLOORING	301 W 28TH STREET, K	Low	1752	Other Contractor	908.32		
370	ALM WINDOW & DOOR INC	337 W 35TH ST, A	Low	1799	Other Contractor	909.12		
371	AMERMEX	241 W 35TH STREET, J	Low	5199	Wholesale/Storage/Warehousing	909.12		
372	APPLEBEE'S NEIGHBORHOOD	3030 PLAZA BONITA RD	Low	5812	Eating/Drinking Establishments	909.12		X
373	ARCO AM PM #6523	133 W 8TH STREET	Low	5541	Fueling	908.31		X
374	ASIAN MARKET	3400 E 8TH ST, 111-112	Low	5411	Eating/Drinking Establishments	908.32		X
375	AUDIO CITY	2907 HIGHLAND AVE	Low	7549	Auto Repair	909.12		
376	AUTO BUYERS PLUS	110 W PLAZA BLVD	Low	5521	Vehicle Dealers	908.32		
377	AUTO ZONE #5658	1539 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		
378	AUTOBUYERS PLUS	110 W PLAZA BLVD.	Low	5521	Vehicle Dealers	908.32		
379	BAKER, RON-CHEVROLET	2301 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		
380	BALL AUTOMOTIVE GROUP	2729 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.32		
381	BALL AUTOMOTIVE GROUP (KIA)	1940 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
382	BALL AUTOMOTIVE GROUP (MITSUBISHI)	1935 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
383	BANTRY INDUSTRIAL & MARINE CRP	241 W 35TH STREET, F	Low	5085	Wholesale/Storage/Warehousing	909.12		
384	BAY SYSTEMS, INC.	303 W 35TH STREET, B	Low	7699	Equipment Repair	909.12		
385	BAYVIEW ELECTRIC	2827 HOOVER AVENUE, D	Low	1731	Other Contractor	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
386	BECKILEE COUTURE	303 W 35TH ST, A	Low	5199	Wholesale/Storage/Warehousing	909.12		
387	BEIJING ROYAL BUFFET	4 N EUCLID AVE, A-C	Low	5812	Eating/Drinking Establishments	908.31		
388	BERGENSONS PROPERTY SERVICES	301 W 28TH STREET, F	Low	7349	Power Washing	908.32		
389	BERLIN WALL WHOLESALE	301 W 28TH STREET, R	Low	5139	Wholesale/Storage/Warehousing	908.32		
390	BIOPOINTE SCIENTIFIC, LLC	1215 WILSON AVE	Low	5047	Wholesale/Storage/Warehousing	908.31		
391	BJ MOTORS	1705 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
392	BLUE HOUSE KEEPER	3221 NATIONAL CITY BLVD	Low	7349	Power Washing	909.12		
393	BOB'S NATIONAL CITY AUTO	1504 NATIONAL CITY BLVD.	Low	7539	Auto Repair	908.32		
394	BONITA PIPELINE INC	2209 HIGHLAND AVENUE	Low	1711	Other Contractor	908.32		
395	BOOM ENTERPRISE	3100 E 8TH ST	Low	5064	Wholesale/Storage/Warehousing	908.32		
396	BOSTROM INSTRUMENT COMPANY	208 CIVIC CENTER DRIVE	Low	5084	Wholesale/Storage/Warehousing	908.31		
397	BRAMMER ELECTRIC	1920 MCKINLEY AVENUE	Low	1731	Other Contractor	908.31		
398	BUSH POWER BRAKE, INC.	25 E 17TH STREET, A & B	Low	7539	Auto Repair	908.32		
399	C L F WAREHOUSE INC	2702 SOUTHPORT WAY, B	Low	5013	Auto Supplies	908.32		
400	CAFE ESTELAS	1524 MCKINLEY AV	Low	5813	Eating/Drinking Establishments	908.31		X
401	CAL AM MANUFACTURING	1215 WILSON AVE	Low	5083	Wholesale/Storage/Warehousing	908.31		
402	CALIBER COLLISION CENTER	3131 NATIONAL CITY BLVD.	Low	7532	Auto Paint/Body	909.12		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
403	CALIFORNIA AIR COMPRESSOR	1630 COOLIDGE AVE	Low	5084	Wholesale/Storage/Warehousing	908.31		
404	CALIFORNIA COMM'L SECURITY	1727 SWEETWATER RD, R	Low	7699	Equipment Repair	909.12		
405	CALIFORNIAS FURNITURE INSTALLATION, INC	2807 HOOVER AVE , J-K	Low	1751	Other Contractor	908.32		
406	CAMSAL ENTERPRISES	1705 HOOVER AVENUE, C & D	Low	5099	Wholesale/Storage/Warehousing	908.32		
407	CAR AUDIO EXCHANGE	1316 NATIONAL CITY BLVD.	Low	5531	Auto Supplies	908.32		
408	CARLOS MAINTENANCE AND REPAIR	44 S HARBISON AVE	Low	7349	Power Washing	908.31		
409	CENTURY WHEEL & RIM	2101 HAFFLEY AVENUE, B	Low	5013	Auto Supplies	908.31		
410	CIRCUS MAN ICE CREAM	1037 HARDING AVENUE	Low	5142	Wholesale Food	908.31		
411	CLUB 13	640 CIVIC CENTER DR	Low	5813	Eating/Drinking Establishments	908.31		X
412	COASTAL MARINE SERVICE, INC	1533 WILSON AVENUE, B	Low	1772	Other Contractor	908.31		
413	COLUMN ONE, INC.	241 W 35TH STREET, K	Low	1721	Painting/Coating	909.12		
414	CONSOLIDATED INTERNATIONAL COR	436 W 8TH STREET, A	Low	5085	Wholesale/Storage/Warehousing	908.31		
415	CONSOLIDATED INTERNATIONAL COR	2500 HOOVER AVE , A	Low	5085	Wholesale/Storage/Warehousing	908.32		
416	COZINES GROCERY	402 CIVIC CENTER DRIVE	Low	5411	Eating/Drinking Establishments	908.31		X
417	CSI SUPPLY	337 35TH STREET, M	Low	5085	Wholesale/Storage/Warehousing	909.12		
418	DAKOTA INN	831 E 8TH ST	Low	5813	Eating/Drinking Establishments	908.31		X
419	DANYA B	205 W 35TH STREET, E	Low	5023	Wholesale/Storage/Warehousing	909.12		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
420	DELI TROPICAL	2808 18TH STREET	Low	5812	Eating/Drinking Establishments	908.32		X
421	DESSERTS PLUS, INC.	2220 E PLAZA BLVD, Q	Low	5461	Eating/Drinking Establishments	908.32		X
422	DISCOUNT FLOORING 2U, INC	829 HOOVER AVE, A	Low	5023	Wholesale/Storage/Warehousing	908.31		
423	DISCOUNT SEWER & DRAIN CLEANIN	1414 ROOSEVELT AVE, 40	Low	1711	Other Contractor	908.31		
424	DIXIELINE LUMBER COMPANY	1022 BAY MARINA DR, 125	Low	5031	Building Materials	908.31		
425	DON GROSS WAREHOUSE OF SAN DIEGO	301 W 30TH STREET	Low	5013	Auto Supplies	909.12		
426	DONALD W WHELAN	241 W 35TH ST, K	Low	5088	Wholesale/Storage/Warehousing	909.12		
427	DONG, CHAN, ORIENTAL MARKET	600 E 8TH ST	Low	5411	Eating/Drinking Establishments	908.31		
428	DOOR-MAN	910 HOOVER AVENUE	Low	1799	Other Contractor	908.31		
429	EL ASADERO GRILL	2503 SWEETWATER ROAD	Low	5812	Eating/Drinking Establishments	909.12		
430	EL MANGO MANILA	2303 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	909.12		
431	EL PARAISO	2708 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	909.12		X
432	EL PARAISO/CHRISTMAS TREES	2708 HIGHLAND AVE	Low	5261	Nurseries/Greenhouses	909.12		
433	EL SUPER MARKET	1811 L AVE	Low	5411	Eating/Drinking Establishments	909.12		X
434	EMERGENCY KEYS, LOCKS	1007 NATIONAL CITY BLVD	Low	7699	Equipment Repair	908.32		
435	ENCOMPASS DESIGN	301 W 28TH STREET, S	Low	5137	Wholesale/Storage/Warehousing	908.32		
436	ENERGIA NATURAL	443.5 HIGHLAND AVE	Low	5199	Wholesale/Storage/Warehousing	908.31		
437	ENTERPRISE RENT A CAR #32FP	1145 NATIONAL CITY BL	Low	7514	Vehicle/Equipment Rental	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
438	ENTERPRISE RENT-A-CAR	2700 NATIONAL CITY BLVD	Low	7514	Vehicle/Equipment Rental	908.32		
439	ENTERPRISE RENT-A-CAR OF L.A.	3000 NATIONAL CITY BLVD	Low	7514	Vehicle/Equipment Rental	908.32		
440	EQUIPMENT ENGINEERING CO.	2704 TRANSPORTATION AVENUE, E	Low	7539	Auto Repair	908.32		
441	ESKAY, G, COMPANY	712 E 18TH ST	Low	5199	Wholesale/Storage/Warehousing	908.31		
442	EUROSYTEMS MONTGOMERY CO.	139 ROOSEVELT AVENUE	Low	5072	Wholesale/Storage/Warehousing	908.31		
443	EVANS TIRES	3009 HIGHLAND AVENUE	Low	7534	Auto Repair	909.12		
444	EXPO BUILDERS SUPPLY	500 W 16TH ST	Low	5211	Building Materials	908.31		
445	EXPRESS TIRE	1705 SWEETWATER ROAD	Low	7534	Auto Repair	909.12		
446	EXPRESS TIRE	820 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		
447	FAMILY LOOMPYA WHOLESALE	2626 SOUTHPORT WAY, F	Low	5142	Wholesale/Storage/Warehousing	908.32		
448	FASTSIGNS	1240 E PLAZA BLVD., 602	Low	7389	*Not Inventoried*	908.32		
449	FIBER-WORLD PRODUCTS	2440 HIGHLAND AVENUE	Low	7539	Auto Repair	909.12		
450	FINE ORNAMENTAL	1010 COOLIDGE AVE	Low	1799	Other Contractor	908.31		
451	FINE ORNAMENTAL	1031 COOLIDGE AVE	Low	1799	Other Contractor	908.31		
452	FIRESTONE TIRE & SERVICE CENTER	943 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		
453	FLEETWASH	1508 HOOVER AVENUE	Low	7542	Vehicle Washing	908.31		
454	FLEETWOOD PLUMBING/ELECTRIC INC	1416 HOOVER AVENUE	Low	1731	Other Contractor	908.31		
455	FRANK TOYOTA	2400 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
456	FREE FORM CLAY AND SUPPLY	1912 CLEVELAND AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.31		
457	FRESCA DELI	1021 HIGHLAND AVE, P/B	Low	5812	Eating/Drinking Establishments	908.32		X
458	G. P. MAY COMPANY	2424 HOOVER AVENUE, L	Low	1751	Other Contractor	908.32		
459	GALLEGOS PLASTERING CO. INC.	1524 HARDING AVENUE	Low	1741	Masonry	908.31		
460	GAMA PRODUCE	1605 E 4TH ST	Low	5411	Eating/Drinking Establishments	908.31		X
461	GLENN'S BODY SHOP ON THE MILE	2800 NATIONAL CITY BLVD, B	Low	7532	Auto Paint/Body	908.32		
462	GLOBAL SALES & FINANCE	1731 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		
463	GMLS	45 S HARBISON AVE	Low	0782	Landscaping	908.31		
464	GRANGER WELLNESS SOCIETY	2700 E 8TH ST	Low	7999	Golf Courses/Parks	908.32		
465	GROOMTECH	225 W 30TH ST	Low	5199	Wholesale/Storage/Warehousing	909.12		
466	GUADALAJARA'S BAKERY	2401 HIGHLAND AVE	Low	5461	Eating/Drinking Establishments	909.12		
467	H & R HARDWARE SUPPLY	2602 TRANSPORTATION AVENUE, D	Low	5072	Wholesale/Storage/Warehousing	908.32		
468	HARDWOOD DESIGNS PLUS, INC.	105 W 35TH STREET, F	Low	1799	Other Contractor	909.12		
469	HERNANDEZ'S ELECTRICAL SUPPLY	2135 E 9TH STREET	Low	5072	Wholesale/Storage/Warehousing	908.32		
470	HIGH END PERFORMANCE	337 W 35TH STREET, K	Low	5531	Auto Supplies	909.12		
471	HIGHLAND ARCO	2336 HIGHLAND AVENUE	Low	5541	Fueling	909.12		
472	HIGHLAND ARCO NORTH	1734 HIGHLAND AVENUE	Low	5541	Fueling	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
473	HIGHLAND MOBILE	2945 HIGHLAND AVENUE	Low	5541	Fueling	909.12		
474	HIGHLAND SERVICE CENTER	1803 HIGHLAND AVENUE	Low	7538	Auto Repair	908.32		
475	HONEY BANANA	443 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.31		X
476	HONEY'S FRUIT & SMOOTHIES BAR	835 PALM AVE.	Low	5812	Eating/Drinking Establishments	908.32		
477	HYTECH AUTO DETAIL	2130 ROOSEVELT AVE.	Low	7542	Auto Repair	908.32		
478	IMELDA'S BAR	2325 HIGHLAND AVENUE	Low	5813	Eating/Drinking Establishments	909.12		X
479	INTERNATIONAL SURF VENTURE INC	301 W 28TH STREET, B, C	Low	5091	Wholesale/Storage/Warehousing	908.32		
480	ISLAND SALES & LEASING	100 W 8TH STREET	Low	5511	Vehicle Dealers	908.32		
481	ISLAND SALES & LEASING	1900 NATIONAL CITY BLVD, B	Low	5511	Vehicle Dealers	908.32		
482	J & L DISTRIBUTION INC	2601 HOOVER AVENUE, D	Low	5169	Wholesale/Storage/Warehousing	908.32		
483	J & L JANITORIAL SUPPLY	616 HIGHLAND AVE	Low	5087	Wholesale/Storage/Warehousing	908.31		
484	JD BROTHERS AUTO REPAIRS	41 E 18TH STREET	Low	7538	Auto Repair	908.32		
485	JMB ASPHALT & CONCRETE INC	1818 WILSON AVE	Low	1771	Cement Mixing/Cutting	908.31		
486	JOE'S TIRES	1532 NATIONAL CITY BLVD	Low	7534	Auto Repair	908.32		
487	JOSEPH T RYERSON & SON, INC	2300 HAFFLEY AVE	Low	5051	Wholesale/Storage/Warehousing	908.31		
488	JOY AIR	2601 HOOVER AVENUE	Low	5064	Wholesale/Storage/Warehousing	908.32		
489	KOOL FIT AMERICA INC.	1725 HARDING AVENUE	Low	5091	Wholesale/Storage/Warehousing	908.31		
490	KRAGEN AUTO SUPPLY #1722	1202 E PLAZA BLVD.	Low	5531	Auto Supplies	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
491	LA MORENA MARKET	1810 PALM AVE	Low	5411	Eating/Drinking Establishments	908.32		
492	LEX-TEK	2704 TRANSPORTATION AVE, G	Low	7538	Auto Repair	908.32		
493	LISA'S DESSERTS	2720 E PLAZA BLVD, Q	Low	5461	Eating/Drinking Establishments	908.32		X
494	LIVING ROOM CAFE	880 NATIONAL CITY BLVD	Low	5812	Eating/Drinking Establishments	908.31		X
495	LOPEZ, PEDRO	1527 E 18TH ST	Low	7699	Equipment Repair	908.32		
496	LOU'S AUTOMOTIVE & PARTS	1509 NATIONAL CITY BLVD., C	Low	7538	Auto Repair	908.32		
497	LUNA CONSTRUCTION INC	1410 COOLIDGE AVENUE	Low	1542	Other Contractor	908.31		
498	MAIN SQUEEZE JUICES	2712 TRANSPORTATION AVENUE	Low	5149	Wholesale Food	908.32		
499	MBR CONTRACTORS	148 E 30TH ST, C	Low	1599	Other Contractor	909.12		
500	MCCUNE CHRYSLER JEEP	2340 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
501	MCMAHON CONSTRUCTION, INC	605 W 12TH ST	Low	1611	Cement Mixing/Cutting	908.31		
502	MIKE'S AUTOMOTIVE	115 E 17TH STREET, A	Low	7538	Auto Repair	908.32		
503	MIYAKO RESTAURANT	2424 HOOVER AVE , F	Low	5812	Eating/Drinking Establishments	908.32		
504	MONIN MARBLE AND GRANITE STORE	1105 E 17TH ST	Low	5211	Building Materials	908.32		
505	MORE BRAKES N TUNE	1902 HIGHLAND AVE, A	Low	7538	Auto Repair	908.32		
506	MOSSY NISSAN	2700 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
507	MOYNAHAN TOWING	3200 NATIONAL CITY BLVD.	Low	7549	Auto Repair	909.12		
508	N. GLANTZ & SON	2530 SOUTHPORT WAY, C	Low	5099	Wholesale/Storage/Warehousing	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
509	NAPA AUTO PARTS	1810 HIGHLAND AVENUE	Low	5013	Auto Supplies	908.32		
510	NATIONAL CITY MARKET	240 E 18TH STREET	Low	5411	Eating/Drinking Establishments	908.32		X
511	NATIONAL CITY MOTORCARS	1900 NATIONAL CITY BLVD., A	Low	5521	Vehicle Dealers	908.32		
512	NATIONAL CITY NUTRITION STORE	925 E PLAZA BLVD	Low	5411	Eating/Drinking Establishments	908.32		X
513	NATIONAL CITY SMOG BRAKE & LIGHTS	705 E 8TH ST	Low	7539	Auto Repair	908.31		X
514	NELLANS CARPET AND DRAPERIES	426 W 15TH STREET	Low	1752	Other Contractor	908.31		
515	NELSON INDUSTRIAL SERVICES INC	2827 HOOVER AVENUE, F	Low	1799	Other Contractor	908.32		
516	NICOLLS INC	1535 TIDELAND AVENUE, J	Low	5099	Wholesale/Storage/Warehousing	908.31		
517	OLYMPIC AUTO SALES	1800 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.32		
518	ONE SOURCE DISTRIBUTOR INC	326 W 30TH STREET	Low	5063	Wholesale/Storage/Warehousing	909.12		
519	ONE SOURCE DISTRIBUTORS	2530 SOUTHPORT WAY, A	Low	5065	Wholesale/Storage/Warehousing	908.32		
520	OROZCO QUALITY XMAS TREES	715 HIGHLAND AVE	Low	0811	Agriculture	908.31		
521	P B E WAREHOUSE INC	190 E 26TH STREET	Low	5013	Auto Supplies	908.32		
522	PACIFIC COAST DIESEL PARTS	100 W 35TH STREET, H	Low	5531	Auto Supplies	909.12		
523	PACIFIC WEST BUILDERS	1248 COOLIDGE AVE	Low	1599	Other Contractor	908.31		
524	PAL'S PUMP CLINIC	1015 NATIONAL CITY BLVD	Low	7699	Equipment Repair	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
525	PAOGA CONSTRUCTION, INC.	148 E 30TH ST, A	Low	1521	Other Contractor	909.12		
526	PAPA GALLO-CAFE	1930 CLEVELAND AVE	Low	5812	Eating/Drinking Establishments	908.31		
527	PAPA JOHN'S PIZZA #1335	1130 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		X
528	PARK MOTORS	2125 ROOSEVELT AVENUE	Low	5511	Vehicle Dealers	908.32		
529	PARTYZON	2235 HIGHLAND AVE	Low	7359	Vehicle/Equipment Rental	908.32		
530	PATRIOT AUTO CARE AND BRAKES	910 HIGHLAND AVE, A	Low	7538	Auto Repair	908.32		
531	PELL MELL SUPPLY INC	402 W 35TH STREET, E	Low	5072	Wholesale/Storage/Warehousing	909.12		
532	PENSKE TRUCK LEASING	3131 HOOVER AVENUE	Low	7513	Vehicle/Equipment Rental	908.32		
533	PERRY FORD - NATIONAL CITY	2050 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
534	PIZZA MIA	916 E 8TH ST, 4	Low	5812	Eating/Drinking Establishments	908.32		X
535	PLAY BALL	2305 HIGHLAND AVE	Low	5813	Eating/Drinking Establishments	909.12		X
536	PLAYCARE INC	241 W 35TH ST, C	Low	7999	Golf Courses/Parks	909.12		
537	POTTER ELECTRIC, INC.	1343 WILSON AVENUE	Low	5063	Wholesale/Storage/Warehousing	908.31		
538	PRECISION BIKE PARTS	421 NATIONAL CITY BLVD	Low	5571	Vehicle Dealers	908.31		X
539	PRESTIGE AUTO BROKERS	2125 ROOSEVELT AVENUE, A	Low	5521	Vehicle Dealers	908.32		
540	PRESTIGE AUTO BROKERS	1001 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.32		
541	PROPULSION CONTROL ENGINEERING	1411 HARDING AVE.	Low	7694	Equipment Repair	908.31		
542	PSE SAN DIEGO COMBAT ACADEMY	902 E 18TH ST	Low	7999	Golf Courses/Parks	908.32		
543	R & H WELDING SHOP	2601 HOOVER AVE, F	Low	7692	Equipment Repair	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
544	RAD ELECTRIC SUPPLY INC.	1904 MCKINLEY AVENUE	Low	5065	Wholesale/Storage/Warehousing	908.31		
545	RADIATOR DEPOT	1533 WILSON AVENUE, A	Low	5013	Auto Supplies	908.31		
546	RANGER COMMUNICATIONS	401 W 35TH STREET, B	Low	5065	Wholesale/Storage/Warehousing	909.12		
547	RELIANCE METAL CENTER	2100 CLEVELAND AVENUE	Low	5051	Wholesale/Storage/Warehousing	908.31		
548	REVELS STRIPING	2602 TRANSPORTATION AVENUE, J	Low	7549	Auto Repair	908.32		
549	RIVERSIDE CEMENT CO.	920 BAY MARINA DRIVE	Low	5032	Building Materials	908.32		
550	RODRIGUEZ APPLIANCE	2629 HIGHLAND AVENUE	Low	7699	Equipment Repair	909.12		
551	RON BAKER CHEVROLET	2301 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
552	RSD TOTAL CONTROL	402 W 35TH STREET, G	Low	5075	Wholesale/Storage/Warehousing	909.12		
553	RTM INTERNATIONAL LLC	301 W 28TH STREET, V	Low	5099	Wholesale/Storage/Warehousing	908.32		
554	RUBY'S EMBROIDERY	2525 SOUTHPORT WAY, S	Low	5131	Wholesale/Storage/Warehousing	908.32		
555	S & K SALES COMPANY	2626 SOUTHPORT WAY, C-E	Low	5199	Wholesale/Storage/Warehousing	908.32		
556	S & L OIL INC.	1601 E 8TH STREET	Low	5541	Fueling	908.32		
557	S D D MAINTENANCE	2829 NATIONAL CITY BLVD	Low	7539	Auto Repair	908.32		
558	S L FUSCO INC.	2530 SOUTHPORT WAY	Low	5085	Wholesale/Storage/Warehousing	908.32		
559	SAN DIEGO AUTO FINANCE	1 W 35TH ST	Low	5521	Vehicle Dealers	909.12		
560	SAN DIEGO METRO PUBLISHING LLC	2602 TRANSPORTATION AVE, O	Low	5111	Wholesale/Storage/Warehousing	908.32		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
561	SAN DIEGO PLASTICS, INC.	2220 MCKINLEY AVENUE	Low	5099	Wholesale/Storage/Warehousing	908.31		
562	SAN DIEGO PUMP & COMPRESSOR	301 W 28TH STREET, A	Low	5085	Wholesale/Storage/Warehousing	908.32		
563	SANDOVAL'S PLUMBING SERVICE	2221 E 18TH ST	Low	7699	Equipment Repair	909.12		
564	SATURN OF NATIONAL CITY	2202 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
565	SCOTT'S PORSCHE PARTS	705 CIVIC CENTER DRIVE	Low	5531	Auto Supplies	908.31		
566	SEACOAST ELECTRIC CO. INC.	2702 SOUTHPORT WAY, C & D	Low	5063	Wholesale/Storage/Warehousing	908.32		
567	SEVILLA'S PARTY RENTALS	2303 F AVE	Low	7359	Vehicle/Equipment Rental	908.32		
568	SHAFT MASTER	1031 NATIONAL CITY BLVD., C	Low	7539	Auto Repair	908.32		
569	SID'S CARPET BARN	132 W 8TH STREET	Low	1752	Other Contractor	908.31		
570	SOCAL LAUNDRY EQUIPMENT INC	1729 COOLIDGE AVE, B1	Low	7699	Equipment Repair	908.32		
571	SOUND SOLUTIONS AUTO STYLING	36 W CIVIC CENTER DR.	Low	7534	Auto Repair	908.31		
572	SOUTH BAY FACILITY SVCS	2631 J AVE	Low	7389	Pool/Fountain Cleaning	909.12		
573	SOUTH BAY LEATHER CORP	1900 WILSON AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.32		
574	SOUTH BAY PRE-OWNED	2401 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		
575	SOUTH COUNTY VOLVO	2940 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	909.12		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
576	SOUTHLAND AUTOBODY & PAINT	141 W 18TH STREET	Low	7532	Auto Paint/Body	908.32		
577	SPORTS AUTO SALES	1112 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
578	STEREO DISCOUNT CENTER INC	2907 HIGHLAND AVENUE	Low	7539	Auto Repair	909.12		
579	SUBWAY SANDWICH & SALAD	925 E PLAZA BLVD, A	Low	5812	Eating/Drinking Establishments	908.32		X
580	SUPERIOR FOAM & UPHOLSTERY CORP.	105 W 35TH STREET, D	Low	5199	Wholesale/Storage/Warehousing	909.12		
581	SWEETWATER HARLEY-DAVIDSON	3201 HOOVER AVENUE	Low	5571	Vehicle Dealers	908.32		
582	SWIRLY CUP	1860 SWEETWATER RD, A-2	Low	5812	Eating/Drinking Establishments	909.12		X
583	T N H AUTO REPAIR	25 E 17TH STREET	Low	7539	Auto Repair	908.32		
584	TAQUERIA EL TIZON	505 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.31		
585	TECNICO SYSTEMS CORPORATION	206 W 35TH STREET, B	Low	7699	Equipment Repair	909.12		
586	TEYSSIER & TEYSSIER INC.	3200 HIGHLAND AVENUE, B4-2	Low	1542	Other Contractor	908.31		
587	TEYSSIER CONSTRUCTION, INC	3200 HIGHLAND AVENUE, B-3	Low	1521	Other Contractor	908.31		
588	THE AUTO SPOT, INC	1017 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
589	THE BARBEQUE PIT	920 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		X
590	THE HANDYMAN PAINTERS	2208 E 8TH ST	Low	1721	Painting/Coating	908.32		
591	THE SPEED SHOP	623 NATIONAL CITY BLVD.	Low	5531	Auto Supplies	908.31		

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
592	TOM MOYNAHAN TOWING	3200 NATIONAL CITY BLVD.	Low	7549	Auto Repair	909.12		
593	TOPECO PRODUCTS	2525 SOUTHPORT WAY	Low	5072	Auto Supplies	908.32		
594	TRANSMISSION SUPPLY	338 W 12TH STREET	Low	5531	Auto Supplies	908.32		
595	TRI TECH REPROGRAPHICS	2712 TRANSPORTATION AVE , E	Low	7334	Pool/Fountain Cleaning	908.32		
596	TUFF ACOUSTICAL AND THERMAL	1623 CLEVELAND AVENUE	Low	1742	Painting/Coating	908.31		
597	UNIDYNE CORPORATION	2702 SOUTHPORT WAY, F	Low	1799	Other Contractor	908.32		
598	UNITED BARBER & BEAUTY	2807 HOOVER AVENUE, C	Low	5087	Wholesale/Storage/Warehousing	908.32		
599	UNIVAR USA	2100 HAFFLEY AVENUE	Low	5169	Wholesale/Storage/Warehousing	908.31		
600	VEE PARTS & ACCESSORIES	704 A AVENUE	Low	5531	Auto Supplies	908.31		
601	VERNON SHIP SUPPLIES	1705 HOOVER AVENUE, B	Low	5199	Wholesale/Storage/Warehousing	908.32		
602	VICTOR'S MEXICAN FOOD TAQUERIA	1602 E 4TH ST	Low	5963	Eating/Drinking Establishments	908.32		
603	VILLA MANILA	500 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		X
604	VILLARINO CONSTRUCTION SVC. INC	430 W 12TH STREET	Low	1542	Other Contractor	908.31		
605	WEST COAST TRUCK SERVICE	201 W 18TH STREET	Low	7538	Auto Repair	908.32		
606	WESTCOTT MAZDA	2800 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		
607	WESTFLEX INDUSTRIAL	325 W 30TH STREET	Low	5085	Wholesale/Storage/Warehousing	909.12		
608	WILSON MARKET AND LIQUOR	916 E 8TH STREET, 9	Low	5411	Eating/Drinking Establishments	908.32		X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
609	WORLD TERMINAL PARKING INC	200 HIGHLAND AVENUE	Low	7542	Vehicle Washing	908.31		
610	WORLD TERMINAL PARKING INC.	510 HIGHLAND AVENUE	Low	7542	Vehicle Washing	908.31		
611	Y & M WHOLESALER	2626 SOUTHPORT WAY, A	Low	5145	Wholesale Food	908.32		
612	Y.Y.K. ENTERPRISES, INC.	726 W 19TH STREET	Low	1721	Painting/Coating	908.31		
613	YOUR YOGA VOYAGE	2345 E 8TH ST	Low	7999	Golf Courses/Parks	908.32		
614	DEWEY PEST CONTROL	324 CIVIC CENTER DRIVE	High	7342	Pest Control	All	X	
615	FINISHING TOUCH AUTO DETAILING		High	7542	Vehicle Washing	All	X	
616	SANTANA MOBILE TRUCK WASH	1741 NATIONAL CITY BLVD.	High	7349	Power Washing	All	X	
617	A & L BLDG MAINTENANCE	6515 BULLOCK DR	Medium	7349	Power Washing	All	X	
618	A PERSONAL TOUCH JANITORIAL	9844 ARAPAHO ST	Medium	7349	Power Washing	All	X	
619	A TO Z TOWING	3821 CALLE FORTUNADA	Medium	7549	Auto Repair	All	X	
620	AAA CLEANING SERVICES	6782 HIBISCUS DR	Medium	7349	Power Washing	All	X	
621	ABC RECON	4660 CLAIREMONT MESA BLVD	Medium	7542	Vehicle Washing	All	X	
622	ACCURATE UNDERGROUND & GRADING	1315 WALNUT ST	Medium	1611	Cement Mixing/Cutting	All	X	
623	ACE RADIATOR SERVICE	1836 NATIONAL AVE	Medium	7539	Auto Repair	All	X	
624	ADAIR STUPING, INC	BUENA CREEK RD	Medium	1611	Cement Mixing/Cutting	All	X	
625	ADAMS & SONS MOBILE DETAILING	3297 SWEETWATER SPRINGS BLVD	Medium	7542	Vehicle Washing	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
626	AL CARRILLO FIELD SERVICES	284 IMPERIAL BEACH BLVD	Medium	7389	Pool/Fountain Cleaning	All	X	
627	ALL PRO CLEANING & JANITORIAL	770 GOLDEN SANDS PL	Medium	7349	Power Washing	All	X	
628	ALPINE PAVING INC	WILLOWS RD	Medium	1611	Cement Mixing/Cutting	All	X	
629	AL'S FLOOR CARE	1219 11TH ST	Medium	7349	Power Washing	All	X	
630	ALVIN'S TERRY'S CUSTOME MOBILE DETAILING-	4294 LOS PINOS AVE	Medium	7542	Vehicle Washing	All	X	
631	AMERICAN ASPHALT AND CONCRETE	9011 MEMORY LN	Medium	1771	Cement Mixing/Cutting	All	X	
632	AMERICAN ASPHALT SOUTH INC	PO BOX 310036	Medium	1611	Cement Mixing/Cutting	All	X	
633	AMERICAN DEMOLITION/CONCRETE	620 INSETTIA ST	Medium	1771	Cement Mixing/Cutting	All	X	
634	ANA & MCDANIEL PROFESSIONAL S	214 N R AVENUE	Medium	7349	Power Washing	All	X	
635	ANGELS EXPRESS CLEANING SERVICE	4035 NORDICA ST	Medium	7349	Power Washing	All	X	
636	ARTURO'S CONCRETE CARE	1635 E 11TH STREET	Medium	1771	Cement Mixing/Cutting	All	X	
637	ASSOCIATED BUILDING SERVICES	6736 OMEGA DR	Medium	7349	Power Washing	All	X	
638	AYERS CONSTRUCTION COMPANY INC	549 N GRECO CT , B2	Medium	1771	Cement Mixing/Cutting	All	X	
639	BAEZA UPHOLSTERY	6320 MADRONE AVE	Medium	7532	Auto Paint/Body	All	X	
640	BAJA COAST JANITORIAL SERVICE	706 F ST	Medium	7349	Power Washing	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
641	BEST WINDOW TINTING, INC	3045 EDINGER AVE	Medium	7549	Auto Repair	All	X	
642	BETTER THEN CLEAN	PO BOX 758	Medium	7349	Power Washing	All	X	
643	BOB'S FIRE EQUIP CO	9640 MISSION GORGE RD	Medium	7389	Pool/Fountain Cleaning	All	X	
644	BRADY CLEANING & MANTENANCE	17304 HIGHWAY 67	Medium	7349	Power Washing	All	X	
645	BROTHER'S TOWING SERVICE	2739 GRANGER AVE	Medium	7549	Auto Repair	All	X	
646	C & L CONCRETE CUTTING	6353 CLYDE AVE	Medium	1771	Cement Mixing/Cutting	All	X	
647	CASPERS CONCRETE CUTTING	3825 BANCROFT DR	Medium	1771	Cement Mixing/Cutting	All	X	
648	CAYSER CARPENTRY AND SVCS	1489 OLEANDER AVE	Medium	7389	Pool/Fountain Cleaning	All	X	
649	CENTRE CITY TOWING	2826 COMMERCIAL ST	Medium	7549	Auto Repair	All	X	
650	CERTIFIED CONCRETE, INC	120 N ANDREASEN DR	Medium	1771	Cement Mixing/Cutting	All	X	
651	CESAR RENTERIA	PO BOX 211963	Medium	1771	Cement Mixing/Cutting	All	X	
652	CHIVAS CONSTRUCTION	3888 GENESEE AVE	Medium	7389	Pool/Fountain Cleaning	All	X	
653	CHLOR-NATION	2831 ECHO RIDGE CT	Medium	7389	Pool/Fountain Cleaning	All	X	
654	CITY TOWING SERVICES	2826 COMMERCIAL ST	Medium	7549	Auto Repair	All	X	
655	CITYWIDE TOWING INC	4059 COLLEGE AVE	Medium	7549	Auto Repair	All	X	
656	COASTAL CONCRETE INNOVATIONS	13685 HIGHWAY 8 BUSINESS	Medium	1771	Cement Mixing/Cutting	All	X	
657	COCO'S HOUSEKEEPING	2830 PROSPECT ST	Medium	7349	Power Washing	All	X	
658	COLONIA F.C. SERVICE	133 N CLAIRMONT AVENUE	Medium	7349	Power Washing	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
659	CONCRETE CUTTING COMPANY	PO BOX 910503	Medium	1771	Cement Mixing/Cutting	All	X	
660	COOL STYLE CARPET CLEANING, GUSTAVO GONZALES	752 MADISON AVENUE	Medium	7217	Carpet/Furniture Cleaning	All	X	
661	CORTES TOWING ENTERPRISES, INC	919 HOLLISTER ST	Medium	7549	Auto Repair	All	X	
662	CPE CONSTRUCTION, INC	7371 NORTH AVE	Medium	1611	Cement Mixing/Cutting	All	X	
663	DANIELS TIRE SERVICE	575 C ST	Medium	7534	Auto Repair	All	X	
664	DARRCO BUILDING MAINTENANCE	PO BOX 600876	Medium	7349	Power Washing	All	X	
665	DE RIVERA SOLUTIONS CONTRUCTION	9109 AKARD ST	Medium	7389	Pool/Fountain Cleaning	All	X	
666	DEEP SHINE CLEANING SERVICE	5534 POTOMAC ST , A	Medium	7349	Power Washing	All	X	
667	DEMCON CONCRETE CONTRACTORS	12325 KERRAN ST	Medium	1771	Cement Mixing/Cutting	All	X	
668	DENT ONE/DENT1	507 E 5TH ST	Medium	7539	Auto Repair	All	X	
669	DENTWORKS	PO BOX 121539	Medium	7549	Auto Repair	All	X	
670	DISCOUNT TOWING INC	2468 VAN NESS AVE	Medium	7549	Auto Repair	All	X	
671	DISTINCTIVE CONCRETE, INC	9340 HAZARD WAY , A1	Medium	1771	Cement Mixing/Cutting	All	X	
672	DISTINGUISHED FIRE EXTINGUISH	1184 CALIFORNIA ST	Medium	7389	Pool/Fountain Cleaning	All	X	
673	DJ ANGEL & INFLATABLE JUMPERS	2231 E 12TH STREET	Medium	7359	Vehicle/Equipment Rental	All	X	
674	ECO-DRI	105 W 35TH STREET, E	Medium	7217	Carpet/Furniture Cleaning	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
675	EMMA'S COMMERCIAL CLEANING	2331 LA SIESTA WAY	Medium	7349	Power Washing	All	X	
676	ES CLEANING SYSTEMS	1660 WALBOLLEN ST	Medium	7349	Power Washing	All	X	
677	ESTEBAN MUNGUIA UPHOLSTERY	PO BOX 13323	Medium	7532	Auto Paint/Body	All	X	
678	EXCELLENCE MOBIL AUTO DETAIL	999 E DIVISION ST, B23	Medium	7542	Vehicle Washing	All	X	
679	EXPERT BUILDING MAINTENANCE	2645 AEGEAN DR	Medium	7349	Power Washing	All	X	
680	EXTRA HAND SERVICES	1358 CASSIOPEIA LN	Medium	7349	Power Washing	All	X	
681	F. J. BRAWLEY CONCRETE	PO BOX 152070	Medium	1611	Cement Mixing/Cutting	All	X	
682	FLASHY AUTO DETAILING	3601 STOCKMAN STREET	Medium	7542	Vehicle Washing	All	X	
683	FREDDY'S MOBIL CAR WASH	621 WHITNEY ST	Medium	7542	Vehicle Washing	All	X	
684	FRONTIER CONCRETE, INC	PO BOX 3800	Medium	1771	Cement Mixing/Cutting	All	X	
685	FUENTES JUMP	924 DELTA STREET	Medium	7359	Vehicle/Equipment Rental	All	X	
686	G AND J AUTO SERVICE	1514 ROOSEVELT AVE	Medium	7538	Auto Repair	All	X	
687	G AUTO BEAUTY	3619 CRESTA CT	Medium	7542	Vehicle Washing	All	X	
688	G AUTO BEAUTY DEALER WASH SYSTEMS	3619 CRESTA COURT	Medium	7542	Vehicle Washing	All	X	
689	GALVAN'S PLACE AND FINISH INC	12155 MAGNOLIA AVE , 4C	Medium	1771	Cement Mixing/Cutting	All	X	
690	GATEWAY CONCRETE INC	3030 PLAZA BONITA RD	Medium	1771	Cement Mixing/Cutting	All	X	
691	GILBERT PRACTICE MANAGEMENT	10128 CLIFFSIDE PL	Medium	7389	Pool/Fountain Cleaning	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
692	GOMEZ & SONS MOBILE WASH &	3880 DELTA ST	Medium	7542	Vehicle Washing	All	X	
693	H T SERVICES	PO BOX 741683	Medium	7349	Power Washing	All	X	
694	HANDYMAN EXPERTS	4251 ETA ST	Medium	7389	Pool/Fountain Cleaning	All	X	
695	HARRIS AND ASSOCIATES	120 MASON CIR	Medium	7389	Pool/Fountain Cleaning	All	X	
696	HARRIS CONCRETE, INC	8265 COMMERCIAL ST	Medium	1771	Cement Mixing/Cutting	All	X	
697	HI-TECH GYPSUM, INC	501 PARK INDUSTRIAL DR	Medium	1771	Cement Mixing/Cutting	All	X	
698	I M B WINDOW CLEANING CO	2368 HOPKINS ST	Medium	7349	Power Washing	All	X	
699	INTEGRITY CONCRETE INC	540 OPPER ST	Medium	1771	Cement Mixing/Cutting	All	X	
700	ISABEL TOWING CO	PO BOX 436022	Medium	7549	Auto Repair	All	X	
701	J AND L ENTERPRISES	2930 BAKER PL	Medium	7549	Auto Repair	All	X	
702	J C TOWING INC	2501 FAIVRE ST	Medium	7549	Auto Repair	All	X	
703	J D PAVING, INC	1412 E BARHAM DR	Medium	1611	Cement Mixing/Cutting	All	X	
704	JAIC EVENT SYSTEMS	1991 FRIENDSHIP DR, D	Medium	7389	Pool/Fountain Cleaning	All	X	
705	JANI KING	190 ULTRAMARINE RD	Medium	7349	Power Washing	All	X	
706	JANI-KING, SEGURA, EDMUNDO	250 OTAY VALLEY ROAD B	Medium	7349	Power Washing	All	X	
707	JAVIER HERNANDEZ	722 CARDIFF ST	Medium	7389	Pool/Fountain Cleaning	All	X	
708	JB CONCRETE CONSTRUCTION	1425 K AVE	Medium	1771	Cement Mixing/Cutting	All	X	
709	JOSE MORALES	3233 BANCOUVER	Medium	7389	Pool/Fountain Cleaning	All	X	
710	JOSE'S OFFICE CLEANER	41 E 2ND STREET, A	Medium	7217	Carpet/Furniture Cleaning	All	X	
711	JUAN ANTONIO MORENO	2381 MONTCLIFF RD	Medium	7389	Pool/Fountain Cleaning	All	X	
712	KAREN CLEAN UPS	1722 GAMMA ST	Medium	7349	Power Washing	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
713	L K M TOWING	4341 CLAIREMONT DR	Medium	7549	Auto Repair	All	X	
714	L L T HANDYMAN	310 MAPLE CT	Medium	7389	Pool/Fountain Cleaning	All	X	
715	LARRY RAMOS GARCIA	6323 PLAZA CUERNAVACA	Medium	7389	Pool/Fountain Cleaning	All	X	
716	LASER SAVER, INC	MIRALANI DR	Medium	7389	Pool/Fountain Cleaning	All	X	
717	LLT JANITORIAL SERVICE	310 MAPLE CT	Medium	7349	Power Washing	All	X	
718	LOGICAL RESNSE PARKING ENFORCEMENT	24732 RIO VERDE DR	Medium	7389	Pool/Fountain Cleaning	All	X	
719	M & E CLEANING	12710 LAUREL ST	Medium	7349	Power Washing	All	X	
720	MANNY'S MOBILE MECHANIC	1900 NATIONAL CITY BLVD, B	Medium	7538	Auto Repair	All	X	
721	MARIA A JANI KING	5854 VISTA SANTA CATARINA	Medium	7349	Power Washing	All	X	
722	MARTINEZ, JOVENCIO O/ELISIO S FLORES	36093 FRESNO CIR	Medium	7389	Pool/Fountain Cleaning	All	X	
723	MASTERCARE PROTECTION & CLEANI	22421 GILBERTO , B2	Medium	7217	Carpet/Furniture Cleaning	All	X	
724	MATTIA CONCRETE CLEANING	7860 EL PASO ST	Medium	7349	Power Washing	All	X	
725	MAX TOWING	255 3RD AVE	Medium	7549	Auto Repair	All	X	
726	MAZE AUTOHAUS/MAZE ON 9TH	225 W 9TH STREET	Medium	7542	Vehicle Washing	All	X	
727	MC K'S JANITORIAL CLEANING SER	2023 F AVENUE, 8	Medium	7349	Power Washing	All	X	
728	MEMO'S MOBILE DETAIL	1670 MELROSE AVE	Medium	7542	Vehicle Washing	All	X	
729	MERCY JANITORIAL SERVICES	2536 J AVENUE	Medium	7349	Power Washing	All	X	
730	MEZA'S TOWING	725 40TH ST	Medium	7542	Vehicle Washing	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
731	MICHAEL BLACK EQUIPMENT SVCS	5 N VILLAGE CIR	Medium	7538	Auto Repair	All	X	
732	MILLER PAVING	9236 OLIVE DRIVE	Medium	1771	Cement Mixing/Cutting	All	X	
733	MISSED A SPOT CLEANING SERVICES	630 F AVE	Medium	7349	Power Washing	All	X	
734	MJ AUTOMOTIVE SERVICE	8505 WADE ST	Medium	7538	Auto Repair	All	X	
735	MOBILE MARINE	1236 E 16TH STREET	Medium	7699	Equipment Repair	All	X	
736	MONTELO'S CLEANING SERVICES	1107 D AVE	Medium	7349	Power Washing	All	X	
737	MORALS CONCRETE PUMP	110 F ST	Medium	1771	Cement Mixing/Cutting	All	X	
738	MORLEY CONSTRUCTION	2901 28TH ST	Medium	1771	Cement Mixing/Cutting	All	X	
739	N.G. COMERCL & RSDNTL CLEANING	1705 L AVE	Medium	7349	Power Washing	All	X	
740	NASVIL HANDYMAN	4697 GAVIOTA CT	Medium	7389	Pool/Fountain Cleaning	All	X	
741	NEXT BUMPER REPAIR AND DETAIL MOBILE	1855 BAYVIEW HEIGHTS DR	Medium	7539	Auto Repair	All	X	
742	NICOLAS ESPINAL INDPENDENT SVC	5007 OCEAN VIEW BLVD	Medium	7349	Power Washing	All	X	
743	ONE STOP AUTO DETAILING	3005 IRIS AVE , G	Medium	7542	Vehicle Washing	All	X	
744	OPTIONS UNLIMITED INC	2505 CONGRESS ST	Medium	7389	Pool/Fountain Cleaning	All	X	
745	PACIFIC STRUCTURES CONST INC	101 STATE PL , E	Medium	1771	Cement Mixing/Cutting	All	X	
746	PALACIOS JANITORIAL SERVICE	533 KINGSWOOD ST	Medium	7349	Power Washing	All	X	
747	PAXTON TOWING INC	3487 MAIN ST	Medium	7549	Auto Repair	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
748	PBC COMMERCIAL, INC	1560 W LAMBERT RD	Medium	1771	Cement Mixing/Cutting	All	X	
749	PERFECTION AUTO DETAIL	517 OAKLAWN AVE	Medium	7542	Vehicle Washing	All	X	
750	PERFORMANCE MOBIL AUTO DETAIL	790 OAKLAWN AVE APT B	Medium	7542	Vehicle Washing	All	X	
751	PERRY & SHAW INC	475 W BRADLEY AVE	Medium	1611	Cement Mixing/Cutting	All	X	
752	PETERSON BROTHERS CONSTRUCTION	1560 W LAMBERT RD	Medium	1771	Cement Mixing/Cutting	All	X	
753	PIRRY HANDYMAN	303 SANTA ROSALIA DR	Medium	7389	Pool/Fountain Cleaning	All	X	
754	PORLEX CARPET CARE	2142 N AVENUE, (REAR)	Medium	7217	Carpet/Furniture Cleaning	All	X	
755	PPI TOWING	1885 LEON AVE	Medium	7549	Auto Repair	All	X	
756	PRECISION CONCRETE CONSTRUCTIO	465 E CARMEL ST	Medium	1771	Cement Mixing/Cutting	All	X	
757	PREMIER CHEM DRY	311 S DREXEL AVE	Medium	7217	Carpet/Furniture Cleaning	All	X	
758	PRO CLEAN CARPET CARE	1022 DORADO WAY	Medium	7217	Carpet/Furniture Cleaning	All	X	
759	R.G. MOBILE AUTOMOTIVE SERV	1135 DELAWARE ST	Medium	7538	Auto Repair	All	X	
760	RANCHO DEL ORO TOWING	2260 LA MIRADA DR	Medium	7549	Auto Repair	All	X	
761	RAYNE WATER SYSTEMS	4635 RUFFNER ST	Medium	7389	Pool/Fountain Cleaning	All	X	
762	ROBERTSONS READY MIX	PO BOX 3600	Medium	1771	Cement Mixing/Cutting	All	X	
763	ROQUE & SONS CONCRETE	2649 DALISAY ST	Medium	1771	Cement Mixing/Cutting	All	X	
764	ROSE CONSTRUCTION	4225 MOUNT VOSS DR	Medium	1771	Cement Mixing/Cutting	All	X	
765	RPM AUTO DETAILING	325 BLACKSHAW LN	Medium	7542	Vehicle Washing	All	X	
766	S AND T TOWING	BOX 16865	Medium	7549	Auto Repair	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
767	SAFELITE	PO BOX 182000	Medium	7536	Auto Repair	All	X	
768	SALVADOR CORONADO MENDOZA	1424 BROADWAY	Medium	7389	Pool/Fountain Cleaning	All	X	
769	SAN DIEGO CONCRETE PUMPING,INC	8534 HUBBLES LN	Medium	1771	Cement Mixing/Cutting	All	X	
770	SAN DIEGO TOWING PATROL	8836 KELBURN AVE	Medium	7549	Auto Repair	All	X	
771	SAN DIEGO WINDOW CLEANING & BLINDS	8645 HIGHWOOD DR	Medium	7349	Power Washing	All	X	
772	SANTANA'S MOBILE TRUCK WASH	PO BOX 13478	Medium	7542	Vehicle Washing	All	X	
773	SELECTIVE PARKING ENFORCEMENT	PO BOX 121499	Medium	7389	Pool/Fountain Cleaning	All	X	
774	SERG'S/AIR CLEANING SERVICES	825 COLORADO AVE , B	Medium	7349	Power Washing	All	X	
775	SHARIDEN DESIGN ASPHALT INC	PO BOX 285	Medium	1771	Cement Mixing/Cutting	All	X	
776	SIGGE MAKLVIST INC	4540 KEARNY VILLA RD	Medium	1771	Cement Mixing/Cutting	All	X	
777	SIM J HARRIS, INC	4375 JUTLAND DR	Medium	1611	Cement Mixing/Cutting	All	X	
778	SOS WINDSHIELD REPAIR	272 KENNEDY ST	Medium	7536	Auto Repair	All	X	
779	SOUTH BAY AUTO WRECKERS INC	811 ENERGY WAY	Medium	7549	Auto Repair	All	X	
780	STANLEY STEEMER CARPET CLEANER	9655 VIA EXCELENCIA	Medium	7217	Carpet/Furniture Cleaning	All	X	
781	STATEWIDE STRIPES, INC	PO BOX 900287	Medium	1611	Cement Mixing/Cutting	All	X	
782	STEAM 2000	1603 APPLEGATE ST	Medium	7217	Carpet/Furniture Cleaning	All	X	
783	STRUCTURAL INSPECTIONS	1661 VISTA DE MONTEMAR	Medium	7389	Pool/Fountain Cleaning	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
784	SUPER CLEAN GENERAL COM	2621 SWEETWATER ROAD, 42	Medium	7349	Power Washing	All	X	
785	SUPERIOR CLEANING SERVICES	PO BOX 1343	Medium	7349	Power Washing	All	X	
786	SUPERIOR CLEANING SYSTEMS	1037 A AVENUE	Medium	7349	Power Washing	All	X	
787	SUPERIOR PHONE COMPANY	PO BOX 7532	Medium	7389	Pool/Fountain Cleaning	All	X	
788	T & M CLEANING COMPANY	1979 AVENIDA DEL MEXICO	Medium	7349	Power Washing	All	X	
789	TAM LE HIGT PRESSURE CAR WASH	37410 LUMIERE AVE	Medium	7542	Vehicle Washing	All	X	
790	TANIA'S CLEANING	119 E 3RD ST	Medium	7349	Power Washing	All	X	
791	TEAM C CONSTRUCTION INC	1208 N 2ND ST	Medium	1771	Cement Mixing/Cutting	All	X	
792	THE GROUT DOCTOR	PO BOX 190	Medium	7389	Pool/Fountain Cleaning	All	X	
793	THREE D'S JANITORIAL SERVICE	7420 PETER PAN AVE	Medium	7349	Power Washing	All	X	
794	TOWTRUCK AT WORK	764 MANNING WAY	Medium	7549	Auto Repair	All	X	
795	UNDERWRITERS LABORATORIES INC	333 PFINGSTEN RD	Medium	7389	Pool/Fountain Cleaning	All	X	
796	UNIVERSAL TINT SYSTEMS QUICK P	80 WALNUT DR	Medium	7539	Auto Repair	All	X	
797	VACA'S CONCRETE	1826 BETA STREET	Medium	1771	Cement Mixing/Cutting	All	X	
798	VORTEX MAINTENANCE INC	2504 TRANSPORTATION AVE, F	Medium	7349	Power Washing	All	X	
799	W A SEEGER, INC	9966 DOLORES ST	Medium	1611	Cement Mixing/Cutting	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
800	WILFRIDO CONCRETE CONSTRUCTION	303 H ST	Medium	1771	Cement Mixing/Cutting	All	X	
801	XTRA CLEAN MOBILE DETAIL	516 S 45TH ST	Medium	7542	Vehicle Washing	All	X	
802	ZOOM COMERCIAL TRANSRT	516 MITRA CT	Medium	7389	Pool/Fountain Cleaning	All	X	
803	1ST CHOICE SIGNS	610 ROCK SPRINGS RD	Low	1799	Other Contractor	All	X	
804	3-D ENTERPRISES INC	2180 GARNET AVE , 2C	Low	1599	Other Contractor	All	X	
805	5M CONTRACTING	2691 DOW AVE	Low	1599	Other Contractor	All	X	
806	A & A INSULATION	1745 PRIMROSE DR	Low	1599	Other Contractor	All	X	
807	A & B PLUMBING CO	593 PARKSIDE DR	Low	1711	Other Contractor	All	X	
808	A & D FIRE PROTECTION	11465 WOODSIDE AVE	Low	1731	Other Contractor	All	X	
809	A & M REINFORCING SPECIALISTS, INC	10096 SILVA RD	Low	1799	Other Contractor	All	X	
810	A & R TITANS, INC	5339 SHEILA ST	Low	1799	Other Contractor	All	X	
811	A & S FLOORING INC	2461 FENTON ST	Low	1752	Other Contractor	All	X	
812	A C ELECTRIC CORP	PO BOX 520	Low	1731	Other Contractor	All	X	
813	A D & D DRYWALL INC	10685 ROSELLE ST	Low	1799	Other Contractor	All	X	
814	A GARAGE DOOR & GATE STORE INC	PO BOX 787	Low	1799	Other Contractor	All	X	
815	A P D & E	PO BOX 2154	Low	5013	Auto Supplies	All	X	
816	A PARTY RENTALS	620 3RD AVE	Low	7359	Vehicle/Equipment Rental	All	X	
817	A.M. FATHY	8305 VICKERS ST	Low	1542	Other Contractor	All	X	
818	A.M. ORTEGA CONSTRUCTION INC	10125 CHANNEL RD	Low	1623	Other Contractor	All	X	
819	A.O. REED & CO INC	4777 RUFFNER ST	Low	1711	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
820	A-1 ALL AMERICAN ROOFING	7414 TRANG ST , B	Low	1761	Other Contractor	All	X	
821	AA CONSTRUCTION	5703 ALTA VISTA AVE	Low	1599	Other Contractor	All	X	
822	AAA FIRE SPRINKLERS	20942 JAPATUL RD	Low	1799	Other Contractor	All	X	
823	AB KITCHEN & GRANITE	3938 VIA DE LA BANDOLA	Low	1751	Other Contractor	All	X	
824	ABBEY PARTY RENTS	8860 PRODUCTION AVE	Low	7359	Vehicle/Equipment Rental	All	X	
825	ABBOTT INDUSTRIES	2299 S GRAND AVE	Low	1799	Other Contractor	All	X	
826	ABC CONSTRUCTION CO., INC.	3120 NATIONAL AVE	Low	1599	Other Contractor	All	X	
827	ABC PARTY & EVENT RENTALS, INC	1021 BAY BLVD , S	Low	7359	Vehicle/Equipment Rental	All	X	
828	ABC PARTY RENTALS AND SALES	1021 BAY BLVD, S	Low	7359	Vehicle/Equipment Rental	All	X	
829	ABC ROOF COMPANY	PO BOX 67	Low	1761	Other Contractor	All	X	
830	ABC WINDOW CO INC	621 S BON VIEW AVE	Low	1793	Other Contractor	All	X	
831	ABLE GLASS SERVICE	1219 CHERRY AVE	Low	1793	Other Contractor	All	X	
832	ABS ELECTRIC	PO BOX 875	Low	1731	Other Contractor	All	X	
833	ACE ELECTRIC, INC	PO BOX 601071	Low	1731	Other Contractor	All	X	
834	ACOUSTIC WORKS INC	PO BOX 460896	Low	1742	Painting/Coating	All	X	
835	ACS	1103 MAJESTAD LN	Low	1599	Other Contractor	All	X	
836	ACTION AIR CONDITIONING &	16TH ST E	Low	1711	Other Contractor	All	X	
837	ACTION AIR CONDITIONING &	1328-30 E 16TH STREET	Low	1711	Other Contractor	All	X	
838	AD ART SIGN COMPANY	5 THOMAS MELLON CIR	Low	1799	Other Contractor	All	X	
839	ADAN CRUZ ROOFING	3005 LUANA DR	Low	1761	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
840	ADT SECURITY SERVICES INC.	PO BOX 3042	Low	1731	Other Contractor	All	X	
841	ADVANCE FIRE PROTECTION	1451 W LAMBERT RD	Low	1799	Other Contractor	All	X	
842	ADVANCED ELECTRICAL SOLUTIONS	PO BOX 99244	Low	1731	Other Contractor	All	X	
843	ADVANCED PROTECTION SYSTEMS	1830 JOHN TOWERS AVE	Low	1599	Other Contractor	All	X	
844	AFFORDABLE WATER HEATERS PLMBG	24707 SAN FERNANDO RD	Low	1711	Other Contractor	All	X	
845	AGUINAGA'S CATERING	546 FERGUS ST	Low	5963	Eating/Drinking Establishments	All	X	
846	AHLEE BACKFLOW SERVICE, INC	9920 PROSPECT AVE	Low	1799	Other Contractor	All	X	
847	AIR MAKERS HEATING & AIR CONDITIONING	8507 CAPRICORN WAY	Low	1711	Other Contractor	All	X	
848	AIR MANAGEMENT SYSTEMS	9302 BOND AVE	Low	1599	Other Contractor	All	X	
849	AIR MAX HEATING & AIR CONDITIONING	33600 BUCKWHEAT RD	Low	1711	Other Contractor	All	X	
850	AIR PERFORMANCE	38625 E 6TH ST	Low	1711	Other Contractor	All	X	
851	AIRE RITE AIRCONDITIONING & REF	15122 BOLSA CHICA ST	Low	1711	Other Contractor	All	X	
852	AIRFLOW HEATING & COOLING	12433 JULIAN AVE	Low	1711	Other Contractor	All	X	
853	AIR-TEK	9424 CHESAPEAKE DR	Low	1799	Other Contractor	All	X	
854	AIRX UTILITY SURVEYORS, INC	2262 CARMEL VALLEY RD, H	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
855	AITAL CUSTOM GLASS & MIRROR, INC	2617 ROSEMEAD BLVD	Low	1793	Other Contractor	All	X	
856	AJACKSMAINTENANCE SERVICES INC	11956 BERNARDO PLAZA DR	Low	1711	Other Contractor	All	X	
857	AJS ELECTRIC INC	15291 CHAPPAREL ST	Low	1731	Other Contractor	All	X	
858	AKEENA SOLAR, INC	16005 LOS GATOS BLVD	Low	1799	Other Contractor	All	X	
859	AL MEZA ALCOA SIGNAGE	8535 ARJONS DR , E	Low	1799	Other Contractor	All	X	
860	ALARMS UNLIMITED INC	4584 PARK BLVD	Low	1731	Other Contractor	All	X	
861	ALATORRE TELECOM-SUBCONTRACTOR	4126 E PLAZA BLVD.	Low	1731	Other Contractor	All	X	
862	ALCALA CO., INC	3650 HANCOCK ST	Low	1799	Other Contractor	All	X	
863	ALCARAZ, JUAN	774 E NAPLES CT	Low	7699	Equipment Repair	All	X	
864	ALETO CONSTRUCTION CO	11535 WOODSIDE AVE	Low	1542	Other Contractor	All	X	
865	ALEX MARTINEZ OR FROSTEEZ	3713 GATTY ST	Low	5963	Eating/Drinking Establishments	All	X	
866	ALEXANDER ROOFING COMPANY	2155 CALLE TORTUOSA	Low	1799	Other Contractor	All	X	
867	ALIVE ELECTRIC	542 HUNTER ST	Low	1799	Other Contractor	All	X	
868	ALL STAR WATER HEATERS	30300 PUERTA VALLARTA WAY	Low	1799	Other Contractor	All	X	
869	ALL TYPES OF BASEBOARD	3354 VALLEY RD	Low	1799	Other Contractor	All	X	
870	ALLIED GRADING PAVING INC	6914 MISSION GORGE RD, B	Low	1799	Other Contractor	All	X	
871	ALLSTAR WATER SYSTEMS	10360 SORRENTO VALLEY RD , A	Low	1542	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
872	ALLSTATE ROOFING	3115 RANCHO OAKS LN	Low	1761	Other Contractor	All	X	
873	ALLSTOP PEST CONTROL	108 W 25TH ST, B	Low	7342	Pest Control	All	X	
874	ALPHA MECHANICAL HEATING & A/C	4990 GREENCRAIG LN , A	Low	1711	Other Contractor	All	X	
875	ALPHA PROJECT FOR THE HOMELESS	3737 5TH AVE	Low	1542	Other Contractor	All	X	
876	ALTA-DENA DAIRY	17637 VALLEY BLVD	Low	5143	Wholesale Food	All	X	
877	AL-TECH PLUMBING	PO BOX 121869	Low	1711	Other Contractor	All	X	
878	ALTERED AIR INC	830 LEGACY DR	Low	1599	Other Contractor	All	X	
879	ALVAND CONSTRUCTION INC	13103 VIA DEL VALEDOR	Low	1599	Other Contractor	All	X	
880	ALVAREZ HOME IMPROVEMENTS	1705 L AVENUE	Low	1742	Painting/Coating	All	X	
881	ALVIZIA LANDSCAPE INC	2520 CACTUS RD	Low	0782	Landscaping	All	X	
882	ALVIZIA LANDSCAPE INC	2520 CACTUS RD	Low	0782	Landscaping	All	X	
883	AMAYA CONSTRUCTION INC	27610 COMMERCE CENTER DR	Low	1599	Other Contractor	All	X	
884	AMERI MEX PLBG & HTG & AIR	1038 WOODLAWN AVE	Low	1711	Other Contractor	All	X	
885	AMERICAN AUTOMATIC FIRE	9510 PATHWAY ST , B	Low	1799	Other Contractor	All	X	
886	AMERICAN DESIGN COATINGS INC	12225 WORLD TRADE DR , A	Low	1721	Painting/Coating	All	X	
887	AMERICAN FIREPLACES INC	9974 SCRIPPS RANCH BLVD	Low	1799	Other Contractor	All	X	
888	AMERICAN INSULATION, INC	8305 MIRALANI DR	Low	1799	Other Contractor	All	X	
889	AMERICAN IRON	10466 REGINAS CT	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
890	AMERICAN LIGHTING SUPPLY	6861 NANCY RIDGE DR, C	Low	1799	Other Contractor	All	X	
891	AMERICAN MARBLE	1280 N MELROSE DR	Low	1743	Masonry	All	X	
892	AMERICAN MECHANICAL SER. OF	2664 VISTA PACIFIC DR , F	Low	1711	Other Contractor	All	X	
893	AMERICAN PEST CONTROL CO	8100 BROADWAY, E	Low	1799	Other Contractor	All	X	
894	AMERICAN RES SVC OF CALIF INC	6162 NANCY RIDGE DR, 100	Low	1711	Other Contractor	All	X	
895	AMERICAN RESIDENTIAL SERVICES	9895 OLSON DR	Low	1711	Other Contractor	All	X	
896	AMERICAN TECHNOLOGIES INC	8444 MIRALANI DR	Low	1542	Other Contractor	All	X	
897	AMORS CONSTRUCTION CO	1475 NORMANDY DR	Low	1521	Other Contractor	All	X	
898	AMP ELECTRIC	811 GRAND AVE	Low	1731	Other Contractor	All	X	
899	AMPM MECHANICAL	411 WASHINGTON ST	Low	1711	Other Contractor	All	X	
900	ANDERSON DRILLING	10303 CHANNEL RD	Low	1794	Other Contractor	All	X	
901	ANDERSON PLUMBING & REMODELING	PO BOX 2800	Low	1711	Other Contractor	All	X	
902	ANDERSON, WALTER, PLUMBING INC	1150 N MARSHALL AVE	Low	1711	Other Contractor	All	X	
903	ANGELES GENERAL REMODELING	1010 KLAUBER AVE	Low	1521	Other Contractor	All	X	
904	ANHEUSER-BUSCH SALES OF SAN DIE	5959 SANTA FE ST	Low	5181	Wholesale/Storage/Warehousing	All	X	
905	ANNING-JOHNSON COMPANY	13250 TEMPLE AVE	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
906	ANTHONY'S HOME REPAIR	4203 GENESEE AVE	Low	1799	Other Contractor	All	X	
907	APEX ROOFING	1451 5TH ST	Low	1761	Other Contractor	All	X	
908	APPLIED WATERPROOFING TECHNLGY	3562 GROVE ST	Low	1799	Other Contractor	All	X	
909	APPTEK COMMERCIAL, INC	171 SAXONY RD	Low	1742	Painting/Coating	All	X	
910	ARB, INC	26000 COMMERCENTRE DR	Low	1599	Other Contractor	All	X	
911	ARC ROOFING	537 FRONT ST	Low	1761	Other Contractor	All	X	
912	AREA-WEST FENCE CO	12566 VIGILANTE RD	Low	1799	Other Contractor	All	X	
913	ARIAS MECHANICAL CORRATION	34070 SUMMIT VIEW PL	Low	1799	Other Contractor	All	X	
914	ARISE WAW SCAFFOLDING	676 MOSS ST	Low	1799	Other Contractor	All	X	
915	ARNETT CONSTRUCTION	4010 MORENA BLVD	Low	1599	Other Contractor	All	X	
916	ARRIETA CONSTRUCTION, INC	1215 N MARSHALL AVE	Low	1599	Other Contractor	All	X	
917	ARROW AUTOMATIC FIRE SPRINKLER	9520 PATHWAY ST	Low	1799	Other Contractor	All	X	
918	ARROW PIPELINE REPAIR INC	1228 KEYSTONE WAY	Low	1711	Other Contractor	All	X	
919	ART D NIELSEN PAINTING, INC	PO BOX 20795	Low	1721	Painting/Coating	All	X	
920	ART GLASS OF SAN DIEGO	13644 JANETTE LN	Low	1751	Other Contractor	All	X	
921	ART SMITH ELECTRIC	PO BOX 4178	Low	1731	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
922	ARTHUR BRADLEY DESIGN BUILD	5980 FAIRMOUNT AVE	Low	1542	Other Contractor	All	X	
923	ARTS TRENCH PLATE & K-RAIL	PO BOX 600661	Low	7353	Vehicle/Equipment Rental	All	X	
924	ASI HASTINGS	4870 VIEWRIDGE AVE	Low	1711	Other Contractor	All	X	
925	ASIA CONSTRUCTION	227 WOODMAN ST	Low	1599	Other Contractor	All	X	
926	ASK CONSTRUCTION CO	333 MILFORD ST	Low	1599	Other Contractor	All	X	
927	ASSI SECURITY INC	18001 COWAN, A	Low	1799	Other Contractor	All	X	
928	ASTRO MECHANICAL CONTRACTORS	603 S MARSHALL AVE	Low	1711	Other Contractor	All	X	
929	ATLAS CO SYSTEMS, INC	3030 PLAZA BONITA RD	Low	1721	Painting/Coating	All	X	
930	ATLAS FOOTING REPAIR, INC.	1136 GREENFIELD DR	Low	1599	Other Contractor	All	X	
931	AUSTIN DOORS	925 INSETTIA AVE	Low	1751	Other Contractor	All	X	
932	AVALANCHE MECHANICAL	5575 MAGNATRON BLVD , C	Low	1711	Other Contractor	All	X	
933	AZTEC VENDING SERVICES, INC	1300 HILL ST	Low	7359	Vehicle/Equipment Rental	All	X	
934	B & B ACOUSTICS, INC	12115 LAKESIDE AVE	Low	1742	Painting/Coating	All	X	
935	B & B PLUMBING AND ELECTRIC	2425 J AVENUE	Low	1711	Other Contractor	All	X	
936	B & W PRECAST CONSTRUCTION	2511 HARMONY GROVE RD	Low	1799	Other Contractor	All	X	
937	B E MOORE ENGINEERING CONSTRUCTION	2627 BANCROFT DR	Low	1541	Other Contractor	All	X	
938	BAJA EXPLORATION	246 VISTA GRANDE GLN	Low	1781	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
939	BAJO CONSTRUCTION	1545 MONITOR RD	Low	1542	Other Contractor	All	X	
940	BAKER ELECTRIC INC	1298 PACIFIC OAKS PL	Low	1731	Other Contractor	All	X	
941	BALLOW CONSTRUCTION	2863 GATE 7 PL	Low	1599	Other Contractor	All	X	
942	BANKER INSULATION OF CA INC	2357 VINEYARD AVE	Low	1742	Painting/Coating	All	X	
943	BANKS BROTHERS CONST., INC	12869 PENNOCK	Low	1599	Other Contractor	All	X	
944	BANNER BUILDERS INC	1530 JAMACHA RD , P	Low	1542	Other Contractor	All	X	
945	BARKER PLUMBING	394 DELAWARE ST , B	Low	1711	Other Contractor	All	X	
946	BARRETT ENGINEERED PUMPS	PO BOX 13130	Low	7699	Equipment Repair	All	X	
947	BARRIOS LANDSCAPE	1604 HARTWELL CT	Low	1799	Other Contractor	All	X	
948	BARTH BUILDERS, INC	5108 GRATTON ST	Low	1599	Other Contractor	All	X	
949	BARTOCCI DEVELOPMENT INC	2535 KETTNER BLVD , IA5	Low	1599	Other Contractor	All	X	
950	BATH CO SHOWER DOOR	613 W MAIN ST	Low	1799	Other Contractor	All	X	
951	BAY SHEET METAL INC	1263 GREENFIELD DR	Low	1761	Other Contractor	All	X	
952	BDR COMMUNICATIONS, INC	1944 KELLOGG AVE	Low	1599	Other Contractor	All	X	
953	BE KAYLOR RESTORATION INC	4820 MERCURY ST , D	Low	1599	Other Contractor	All	X	
954	BEAR ELECTRIC	4670 50TH ST	Low	1731	Other Contractor	All	X	
955	BECK ELECTRIC AND DATA SERVICES, INC	302 WASHINGTON ST	Low	1731	Other Contractor	All	X	
956	BELSHIRE ENVIRONMENTAL SERVICES, INC	25971 TOWNE CENTRE DR	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
957	BEMUS LANDSCAPE, INC	3120 S CRODDY WAY	Low	1799	Other Contractor	All	X	
958	BENNY PLUMBING	752 ADOBE PL	Low	1711	Other Contractor	All	X	
959	BEN'S ASPHALT INC	2200 S YALE ST	Low	1799	Other Contractor	All	X	
960	BERGELECTRIC CORRATION	650 OPPER ST	Low	1731	Other Contractor	All	X	
961	BEST INTERIORS INC	2100 E VIA BURTON	Low	1742	Painting/Coating	All	X	
962	BEST PART SERVICE	952 HAWAII AVE	Low	5013	Auto Supplies	All	X	
963	BEST VALUE SERVICE, INC	6852 HYDE PARK DR , H	Low	1799	Other Contractor	All	X	
964	BESTWORTH-ROMMEL, INC	19818 74TH AVE NE	Low	1599	Other Contractor	All	X	
965	BETHEL CONSTRUCTION	16060 CAMINITO DE LINDA	Low	1599	Other Contractor	All	X	
966	BEYOND GRAPHICS INC	827 6TH ST	Low	1799	Other Contractor	All	X	
967	BHY DESIGN & CONSTRUCTION COMPANY	530 BELLOWS CT	Low	1599	Other Contractor	All	X	
968	BID CONSTRUCTION, INC	9373 ACTIVITY RD, L	Low	1599	Other Contractor	All	X	
969	BIG TREES NURSERY, INC	12450 HIGHLAND VALLEY RD	Low	5193	Nurseries/Greenhouses	All	X	
970	BILL HOWE PLUMBING INC.	1364 MORENA BLVD , A	Low	1711	Other Contractor	All	X	
971	BILL'S WASHER & DRYER REPAIR	827 PARKBROOK ST	Low	7699	Equipment Repair	All	X	
972	BILLZ ELECTRIC	1382 MISTY RIDGE PL	Low	1731	Other Contractor	All	X	
973	BLACK JACK BARBECUE	10251 CENTINELLA DR	Low	5812	Eating/Drinking Establishments	All	X	
974	BLAKE SIGN CO	11661 SEABOARD CIR	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
975	BLASINGAME CUSTOM BUILDING	81 MITSCHER ST	Low	1522	Other Contractor	All	X	
976	BLAZE FIRE PROTECTION INC	318 STATE PL	Low	1799	Other Contractor	All	X	
977	BLOCK'S LOCKS INC	1184 CALIFORNIA ST	Low	7699	Equipment Repair	All	X	
978	BLUE HAVEN OLS	655 VENTURE ST	Low	1799	Other Contractor	All	X	
979	BLUE HORIZONS ENT	2690 MURRAY RIDGE RD	Low	1799	Other Contractor	All	X	
980	BLUE LINE BUILDERS	316 FRONT ST	Low	1542	Other Contractor	All	X	
981	BLUEWATER ENVIRONMENTAL SERVICES, INC	2075 WILLIAMS ST	Low	1629	Other Contractor	All	X	
982	BOB JENSON A/C & HEATING	1347 BROADWAY	Low	1711	Other Contractor	All	X	
983	BOB LUKEY ELECTRIC	PO BOX 2543	Low	1731	Other Contractor	All	X	
984	BOLT ELECTRIC	PO BOX 82445	Low	1731	Other Contractor	All	X	
985	BOND BLACKTOP INC	2828 FABER ST	Low	1542	Other Contractor	All	X	
986	BONDED CARPET & WINDOW	7831 OSTROW ST	Low	1799	Other Contractor	All	X	
987	BONITA PET HOSPITAL, INC	3438 BONITA RD	Low	0742	Animal Facilities	All	X	
988	BOYCE CONST. CO., INC.	10463 AUSTIN DR , D	Low	1599	Other Contractor	All	X	
989	BP WEST COAST PRODUCTS LLC	PO BOX 941912	Low	5172	Wholesale/Storage/Warehousing	All	X	
990	BRADSHAW ENGINEERING CORP	8645 ARGENT ST	Low	1799	Other Contractor	All	X	
991	BRADY COMPANY/SAN DIEGO INC	8100 CENTER ST	Low	1542	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
992	BREWER CRANE & RIGGING	10125 CHANNEL RD	Low	1799	Other Contractor	All	X	
993	BRIAN COX MECHANICAL INC	12155 KIRKHAM RD	Low	1711	Other Contractor	All	X	
994	BRIDGFORD MARKETING CO	PO BOX 3773	Low	5149	Wholesale Food	All	X	
995	BRINKS HOME SECURITY	540 S ANDREASEN DR , C	Low	1731	Other Contractor	All	X	
996	BRODING'S BATTERY WAREHOUSE	8188 COMMERCIAL ST	Low	5013	Auto Supplies	All	X	
997	BROKEN ARROW COMMUNICATION	5931 SEA LION PL	Low	1542	Other Contractor	All	X	
998	BROYLES LANDSCAPING	6333 RIVERDALE ST	Low	1799	Other Contractor	All	X	
999	BUILDERS TECH HEATING & A/C	1697 SAN PASQUAL ST	Low	1799	Other Contractor	All	X	
1000	BURDY, DUNHAM & ASSOCIATES	3030 PLAZA BONITA RD (MOBILE)	Low	1599	Other Contractor	All	X	
1001	BURDY, DUNHAM & ASSOCIATES	PO BOX 157	Low	1542	Other Contractor	All	X	
1002	BUREAU VERITAS NORTH AMERICA	7895 CONVOY CT	Low	1799	Other Contractor	All	X	
1003	BURRIS PLUMBING INC	1305 I AVENUE	Low	1711	Other Contractor	All	X	
1004	BURTECH PIPELINE INC	102 2ND ST	Low	1623	Other Contractor	All	X	
1005	BUXCON SHEET METAL INC	11222 N WOODSIDE AVE	Low	1761	Other Contractor	All	X	
1006	BYCOR GENERAL CONTRACTORS	6490 MARINDUSTRY DR , A	Low	1599	Other Contractor	All	X	
1007	BYRON EPP INC	26062 MERIT CIR	Low	1751	Other Contractor	All	X	
1008	C & C GLASS	870 CANARIOS CT	Low	1793	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1009	C & L CONSTRUCTION	975 LOMA VW	Low	1599	Other Contractor	All	X	
1010	C B BOVENKAMP, INC.	9002 SW 152ND ST	Low	1599	Other Contractor	All	X	
1011	C E WILSON CORRATION	662 GRAND AVE	Low	1799	Other Contractor	All	X	
1012	C T GEORGIOU PAINTING CO	433 LECOUVREUR AVE	Low	1721	Painting/Coating	All	X	
1013	C&J BUILDERS INC	9400 ACTIVITY RD, G	Low	1522	Other Contractor	All	X	
1014	C.A. SKYHOOK, INC	4149 CARTAGENA DR, B	Low	1799	Other Contractor	All	X	
1015	C.S.I. GENERAL, INC	802 N TWIN OAKS VALLEY RD	Low	1599	Other Contractor	All	X	
1016	C.W. DRIVER, INC	468 N ROSEMEAD BLVD	Low	1599	Other Contractor	All	X	
1017	CA VALLEY FIRESIDE	26401 VIA DE ANZA	Low	1741	Masonry	All	X	
1018	CADILLAC KANDY	508 OCEAN BREEZE WAY	Low	7359	Vehicle/Equipment Rental	All	X	
1019	CALIF DELTA MECHANICAL, INC	6052 E BASELINE RD	Low	1711	Other Contractor	All	X	
1020	CALIFORNIA ACOUSTICS	5663 BALBOA AVE	Low	1742	Painting/Coating	All	X	
1021	CALIFORNIA BORING, INC	770 N ECKHOFF ST	Low	1599	Other Contractor	All	X	
1022	CALIFORNIA COMFORT SYSTEMS USA, INC	9750 DISTRIBUTION AVE	Low	1711	Other Contractor	All	X	
1023	CALIFORNIA COMMERCIAL OLS IN	2255 AUTO CENTRE DR	Low	1799	Other Contractor	All	X	
1024	CALIFORNIA COMM'L SECURITY	4241 NDEROSA AVE , D	Low	7699	Equipment Repair	All	X	
1025	CALIFORNIA CUSTOM BUILDERS INC	645 MARSAT CT, B	Low	1599	Other Contractor	All	X	
1026	CALIFORNIA NEON PRODUCTS	4530 MISSION GORGE PL	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1027	CALIFORNIA SHEET METAL	8616 CUYAMACA ST	Low	1761	Other Contractor	All	X	
1028	CAMP CONSTRUCTION	9938 LOS RANCHITOS RD	Low	1799	Other Contractor	All	X	
1029	CAMS ROOFING	8662 JAMACHA RD	Low	1761	Other Contractor	All	X	
1030	CAN-DO ELECTRIC INC	9411 BOND AVE	Low	1731	Other Contractor	All	X	
1031	CANNON-NOE INC	833 SAN LUIS REY PL	Low	7353	Vehicle/Equipment Rental	All	X	
1032	CANTRELL AIRE, INC	28130 CROCKER AVE	Low	1711	Other Contractor	All	X	
1033	CAPACITY CONSTRUCTION INC	PO BOX 420040	Low	1799	Other Contractor	All	X	
1034	CAPITAL GROWTH PROPERTY	1120 SILVERADO ST	Low	1542	Other Contractor	All	X	
1035	CAROLINO CONST & DEV CORP	3035 E 8TH STREET	Low	1521	Other Contractor	All	X	
1036	CASADY ELECTRIC INC	PO BOX 923	Low	1731	Other Contractor	All	X	
1037	CASCADE DRILLING, INC	555 S HARBOR BLVD	Low	1799	Other Contractor	All	X	
1038	CASS PLUMBING & HEATING, INC	4569 30TH ST, C	Low	1711	Other Contractor	All	X	
1039	CASTEEN CONSTRUCTION, INC	1535 E AVE, B	Low	1599	Other Contractor	All	X	
1040	CASTILLO'S LANDSCAPING	1503 E 15TH ST	Low	0782	Landscaping	All	X	
1041	CATS EXCAVATING INC	1944 54TH ST	Low	1794	Other Contractor	All	X	
1042	CAVALRY SYSTEMS, INC	13135 DANIELSON ST	Low	1799	Other Contractor	All	X	
1043	CB JETTON	2627 NANSEN AVE	Low	1599	Other Contractor	All	X	
1044	CC GENERAL CONTRACTORS, INC	18084 EUCALYPTUS ST	Low	1599	Other Contractor	All	X	
1045	CCM ENTERPRISES	10848 WHEATLANDS AVE	Low	1522	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1046	CEILINGS PLUS	703 LEHNER AVE	Low	1799	Other Contractor	All	X	
1047	CEMENT CUTTING INC	3610 HANCOCK ST	Low	1799	Other Contractor	All	X	
1048	CENTEX GLAZING INC	8260 COMMERCIAL ST	Low	1793	Other Contractor	All	X	
1049	CENTRAL CITY ENTERPRISES	5935 RICKENBACKER AVE	Low	1795	Other Contractor	All	X	
1050	CENTRAL MEAT AND PROVISION CO	1603 NATIONAL AVE	Low	5147	Wholesale Food	All	X	
1051	CENTURY PACIFIC LANDSCAPE	2818 QUADRA AVE	Low	0782	Landscaping	All	X	
1052	CENTURY PACIFIC LANDSCAPE	2818 QUADRA AVE	Low	0782	Landscaping	All	X	
1053	CESAR F. NILLAGA SYSTEMS SPEC	730 SKY MOUNTAIN LN	Low	1731	Other Contractor	All	X	
1054	CESENA LANDSCAPING	7354 HIGHTREE LN	Low	0782	Landscaping	All	X	
1055	CESENA LANDSCAPING	7354 HIGHTREE LN	Low	0782	Landscaping	All	X	
1056	CGE INC	10965 SAN DIEGO MISSION RD	Low	1731	Other Contractor	All	X	
1057	CH BONITA LLC	3655 NOBEL DR	Low	1522	Other Contractor	All	X	
1058	CH TREMONT LLC	3655 NOBEL DR	Low	1522	Other Contractor	All	X	
1059	CHAFFIN CONSTRUCTION	PO BOX 1594	Low	1731	Other Contractor	All	X	
1060	CHALLENGER SHEET METAL, INC	9450 CANDIDA ST	Low	1761	Other Contractor	All	X	
1061	CHARLES E THOMAS CO	13701 ALMA AVE	Low	1629	Other Contractor	All	X	
1062	CHARLES PLUMBING & DRAIN	1808 FELTON ST	Low	1711	Other Contractor	All	X	
1063	CHARLIE PROFESSIONAL GARDNER	108 E 5TH STREET, A	Low	0782	Landscaping	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1064	CHATEAU CONSTRUCTION	958 E J ST	Low	1599	Other Contractor	All	X	
1065	CHECKAL CONSTRUCTION CO. INC.	4483 NEWRT AVE	Low	1599	Other Contractor	All	X	
1066	CHIHUAHUA PLUMBING	3222 ORANGE ST	Low	1711	Other Contractor	All	X	
1067	CHOICE GENERAL CONSTRUCTION	254 E GLAUCUS ST	Low	1599	Other Contractor	All	X	
1068	CHONG SUK HAN	442 MONROE	Low	1599	Other Contractor	All	X	
1069	CHRISTENSEN, LAYNE	11001 ETIWANDA AVE	Low	1781	Other Contractor	All	X	
1070	CHRISTIANSEN AMUSEMENTS	PO BOX 997	Low	7999	Golf Courses/Parks	All	X	
1071	CHULA VISTA ELECTRIC CO	127 PRESS LN	Low	1731	Other Contractor	All	X	
1072	CIBRIAN CONSTRUCTION	2471 MAIN ST	Low	1542	Other Contractor	All	X	
1073	CIRCUS CHIMERA	PO BOX 842	Low	7999	Golf Courses/Parks	All	X	
1074	CIRCUS VARGAS	3030 PLAZA BONITA RD (PARKING LOT)	Low	7999	Golf Courses/Parks	All	X	
1075	CITY ELECTRIC WORKS, INC	9225 CHESAPEAKE DR , K	Low	1731	Other Contractor	All	X	
1076	CITY FIRE EQUIP INC	1816 COUNTRY CLUB DR	Low	1731	Other Contractor	All	X	
1077	CITY SIGNS	7574 TRADE ST , A	Low	1799	Other Contractor	All	X	
1078	CITY WIDE ELECTRONIC SYS INC	440 HIGHLAND AVE	Low	1731	Other Contractor	All	X	
1079	CITYWIDE ELECTRIC	5710 KEARNY VILLA RD	Low	1711	Other Contractor	All	X	
1080	CITYWIDE PLUMB,HEAT,ELECTRICAL	5710 KEARNY VILLA RD	Low	1711	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1081	CJR BUILDERS, INC	2226 E SYCAMORE ST	Low	1599	Other Contractor	All	X	
1082	CJR CONSTRUCTION	5941 ALLEGHANY ST	Low	1599	Other Contractor	All	X	
1083	CLADDAGH PAVING CORP	2246 HUFFSTATLER ST	Low	1799	Other Contractor	All	X	
1084	CLANCY CONTRACTING SERVICES	825 HOLLISTER ST , M	Low	1629	Other Contractor	All	X	
1085	CLARK TELCOM + ELECTRIC	9747 VINE ST	Low	1799	Other Contractor	All	X	
1086	CLASSIC INSTALLS	22475 BAXTER RD	Low	1799	Other Contractor	All	X	
1087	CLASSIC PARTY RENTALS	7069 CONSILDATED WAY	Low	7359	Vehicle/Equipment Rental	All	X	
1088	CLEAR SIGN & DESIGN INC	170 NAVAJO ST	Low	1731	Other Contractor	All	X	
1089	CLEVELAND WRECKING COMPANY	628 E EDNA PL	Low	1795	Other Contractor	All	X	
1090	C-ME TRIM CO., INC	9374 BOND AVE	Low	1521	Other Contractor	All	X	
1091	CMN LAWN SERVICES	1208 SITAS RD	Low	0782	Landscaping	All	X	
1092	CMN LAWN SERVICES	1208 SITAS RD	Low	0782	Landscaping	All	X	
1093	COAST CITIES COAST	41380 LA SIERRA RD	Low	1599	Other Contractor	All	X	
1094	COAST CONTRCTNG & DVLPMNT INC	101 N ACACIA AVE	Low	1599	Other Contractor	All	X	
1095	COAST SIGN INC	1500 W EMBASSY ST	Low	1731	Other Contractor	All	X	
1096	CODA ELECTRIC	13505 BOX	Low	1799	Other Contractor	All	X	
1097	COFFMAN SPECIALTIES INC	4375 JUTLAND DR	Low	1599	Other Contractor	All	X	
1098	COLBRESE MATERIAL HANDLING INC	12600 STOWE DR, 3	Low	1799	Other Contractor	All	X	
1099	COLE HILL SYSTEMS, INC	10756 VALOR PL	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1100	COLEHILL SYSTEMS INC	10756 VALOR PL	Low	1799	Other Contractor	All	X	
1101	COLIMA RENT	421 S 38TH ST	Low	7359	Vehicle/Equipment Rental	All	X	
1102	COLINA INC	7014 CANTABERRA CT	Low	1711	Other Contractor	All	X	
1103	COLLEGE GLASS & MIRROR, INC	1007 W TAFT AVE	Low	1793	Other Contractor	All	X	
1104	COLUMBIA PEST CONTROL CO. OF SAN DIEGO	127 W 9TH STREET	Low	7342	Pest Control	All	X	
1105	COMMERCIAL & INDUSTRIAL	9239 OLIVE DR	Low	1761	Other Contractor	All	X	
1106	COMMUNICATION TECHNOLOGY SVCS	650 CASTRO ST	Low	1623	Other Contractor	All	X	
1107	COMP VIEW, INC	10035 SW ARCTIC DR	Low	1799	Other Contractor	All	X	
1108	COMPETITION BOBCAT INC	9587 MAVIN DR	Low	1799	Other Contractor	All	X	
1109	COMPETITIVE EDGE CONSTRUCTION, INC	1120 SIMPSON WAY	Low	1599	Other Contractor	All	X	
1110	CONCRETE CONCEPTS INC	2317 VINEYARD AVE	Low	1799	Other Contractor	All	X	
1111	CONNELLY CONSTRUCTION	2087 N MARSHALL AVE, A	Low	1711	Other Contractor	All	X	
1112	CONSTELLATION PROPERTY GROUP (A AVENUE) LP	1133 COLUMBIA ST	Low	1531	Other Contractor	All	X	
1113	CONSTRUCTION LOGIC, INC	3005 G ST	Low	1599	Other Contractor	All	X	
1114	CONSTRUCTION SPECIALISTS INC	PO BOX 567	Low	1542	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1115	CONTEMRARY CABINET DESIGNS, INC	1425 30TH ST , A	Low	1799	Other Contractor	All	X	
1116	CONTINENTAL SIGNS	7541 SANTA RITA CIR , D	Low	1799	Other Contractor	All	X	
1117	CONTRACTOR'S TERMITE CONTROL	14870 CENTRAL AVE	Low	7342	Pest Control	All	X	
1118	CONTRERAS, M R, CONSTRUCTION	226 LANDIS AVE	Low	1599	Other Contractor	All	X	
1119	COOLING HEATING + WER	PO BOX 7111	Low	1711	Other Contractor	All	X	
1120	COOPER'S PLBG & HTG	PO BOX 695	Low	1711	Other Contractor	All	X	
1121	CORE-MARK DISTRIBUTORS	PO BOX 2200	Low	5149	Wholesale Food	All	X	
1122	CORNERSTONE BUILDING GROUP	3590 KETTNER BLVD	Low	1599	Other Contractor	All	X	
1123	CORNERSTONE FIRE PROTECTION	9260 ISAAC ST, C	Low	1799	Other Contractor	All	X	
1124	CORREO LANDSCAPING	3453 FLORENCE ST	Low	0781	Landscaping	All	X	
1125	CORY TATZ BATHTUBS & SINKS REF	7742 TOPAZ LAKE AVE	Low	1799	Other Contractor	All	X	
1126	COSCO FIRE PROTECTION	501 W SOUTHERN AVE	Low	1711	Other Contractor	All	X	
1127	COSENZA ROOFING	9260 LAMAR ST	Low	1761	Other Contractor	All	X	
1128	COUNTY MECHANICAL, INC	3454 HARRIS ST	Low	1799	Other Contractor	All	X	
1129	COUNTYWIDE MECHANICAL SYSTEMS	PO BOX 712558	Low	1711	Other Contractor	All	X	
1130	COURT CONCEPTS, INC	PO BOX 710277	Low	1599	Other Contractor	All	X	
1131	COURTESY REFRIGERATION INC	2675 B ST	Low	1711	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1132	CPS FIRE PROTECTION INC	417 VERNON WAY	Low	1711	Other Contractor	All	X	
1133	CRAFTERS FENCE INC	8606 ARGENT ST , A	Low	1799	Other Contractor	All	X	
1134	CRANEVEYOR CORP	1524 TRERO AVE	Low	1799	Other Contractor	All	X	
1135	CREATIVE TOUCH INTERIORS INC	7720 KENAMAR CT , C	Low	1799	Other Contractor	All	X	
1136	CRJ INC	612 ARIZONA ST	Low	1599	Other Contractor	All	X	
1137	CROSS WAY FIRE PROTECTION	4680 73RD ST	Low	1731	Other Contractor	All	X	
1138	CULLIGAN WATER CO OF SD	5997 JOEL LN	Low	5963	Eating/Drinking Establishments	All	X	
1139	CUMMING INC	1495 COLUMBIA AVE	Low	1599	Other Contractor	All	X	
1140	CURRIE GENERAL ENGINEERING	14505 MIGUEL LN	Low	1711	Other Contractor	All	X	
1141	CUSTOM ELECTRICAL	10739 OAK CREEK DR	Low	1731	Other Contractor	All	X	
1142	CUSTOM PAINTING	530 C AVENUE	Low	1721	Painting/Coating	All	X	
1143	CUSTOM SIGNS	205 QUINTARD ST , E37	Low	1799	Other Contractor	All	X	
1144	D & D WILDLIFE HABITAT RESTOR	9143 HARNESS ST	Low	1799	Other Contractor	All	X	
1145	D & L PAVING	32389 DUNLAP BLVD	Low	1799	Other Contractor	All	X	
1146	D & M SHELLEYS INC.	7952 NORTH AVE	Low	1799	Other Contractor	All	X	
1147	D & N SIGN SERVICE	1282 W LAMBERT RD , A	Low	1799	Other Contractor	All	X	
1148	D & R GLASS, INC	8687 UTICA AVE	Low	1793	Other Contractor	All	X	
1149	D.G. PLUMBING	206 GREENFIELD DR , G	Low	1711	Other Contractor	All	X	
1150	DAN LEVY CONSTRUCTION, INC	3435 CAMINO DEL RIO S	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1151	DANIEL DORADO & ASSOCIATES	33741 HOLTZ HILL RD	Low	5013	Auto Supplies	All	X	
1152	DAPPER TIRE CO INC	PO BOX 82047	Low	5014	Auto Supplies	All	X	
1153	DAVEY TREE EXPERT CO, THE	1500 N MANTUA ST	Low	0783	Landscaping	All	X	
1154	DAVIES ELECTRIC CO INC	9085 KENAMAR DR	Low	1599	Other Contractor	All	X	
1155	DAVIS/REED CONSTRUCTION, INC	12250 EL CAMINO REAL	Low	1599	Other Contractor	All	X	
1156	DE LEON CONSTRUCTION	1612 PLOVER ST	Low	1599	Other Contractor	All	X	
1157	DECORUS LAND ENHANCEMENTS, INC	1272 TUTTLE LN	Low	1799	Other Contractor	All	X	
1158	DEHAMER ELECTRIC INC	2775 KURTZ ST	Low	1731	Other Contractor	All	X	
1159	DEHOOG COATINGS, INC	2364 CLEARCREST LN	Low	1799	Other Contractor	All	X	
1160	DEMARCO PLUMBING & DRAIN	PO BOX 1887	Low	1711	Other Contractor	All	X	
1161	DEMOLITION MAN	2127 PROSPECT STREET, 4	Low	1795	Other Contractor	All	X	
1162	DESIGN LINE INTERIORS	4863 SHAWLINE ST , E	Low	1799	Other Contractor	All	X	
1163	DESIGN/BUILD TENANT	9770 CARROLL CENTRE RD, B	Low	1599	Other Contractor	All	X	
1164	DIALCOM SYSTEM SERVICES INC	1541 SIMPSON WAY	Low	1731	Other Contractor	All	X	
1165	DIAMOND LANE CONTRACTORS	PO BOX 630	Low	1599	Other Contractor	All	X	
1166	DIEBOLD INCORRATED	PO BOX 3077	Low	1799	Other Contractor	All	X	
1167	DIEGO KETTLECORN	1200 HIGHLAND AVE	Low	5441	Eating/Drinking Establishments	All	X	
1168	DILS ROOFING	2230 LA MIRADA DR	Low	1761	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1169	DINH'S CONSTRUCTION	9142 RUSSELL AVE	Low	1542	Other Contractor	All	X	
1170	DINYARI INC	3239 HOOVER AVE	Low	1761	Other Contractor	All	X	
1171	DIVERSA GENERAL CONTRACTORS INC	4632 BRIGHTON AVE	Low	1599	Other Contractor	All	X	
1172	DM MECHANICAL	4707 BUTTERNUT HOLLOW LN	Low	1711	Other Contractor	All	X	
1173	DON WALKER ENTERPRISES INC	160 E MONTECITO AVE, E	Low	1799	Other Contractor	All	X	
1174	DONAVEN ELECTRIC	1531 FALDA DEL CERRO CT	Low	1731	Other Contractor	All	X	
1175	DONCO & SONS INC	1410 N DALY ST	Low	1731	Other Contractor	All	X	
1176	DOORWAY MFG CO INC	232 GRANITE ST	Low	1799	Other Contractor	All	X	
1177	DOUGLAS E BARNHART INC	10760 THORNMINT RD	Low	1542	Other Contractor	All	X	
1178	DRAIN MASTERS	8664 ALMOND RD	Low	1711	Other Contractor	All	X	
1179	DRAIN MEDIC INC	7868 LESTER AVE	Low	1711	Other Contractor	All	X	
1180	DRAIN PATROL	PO BOX 81621	Low	1711	Other Contractor	All	X	
1181	DRUM PLUMBING INC	2550 FORTUNE WAY	Low	1711	Other Contractor	All	X	
1182	DS WATERS OF AMERICA INC	5660 NEW NORTHSIDE DR	Low	5499	Eating/Drinking Establishments	All	X	
1183	DYNAMITE CLEANING CORP	4698 ALVARADO CANYON RD , M	Low	1799	Other Contractor	All	X	
1184	E.S.I SERVICES	25197 VIA LAS LOMAS	Low	1731	Other Contractor	All	X	
1185	EBERHARD	15220 RAYMER ST	Low	1761	Other Contractor	All	X	
1186	EBERHARD BENTON ROOFING	3691 HANCOCK ST	Low	1761	Other Contractor	All	X	
1187	ECC DEVELOPMENT INC	PO BOX 2299	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1188	ECS FIRE SECURITY INC	12575 KIRKHAM CT	Low	1731	Other Contractor	All	X	
1189	ED BUTTS GRADING	1788 COLTER LAKE CT	Low	1794	Other Contractor	All	X	
1190	ED MEYER CONSTRUCTION	3606 BONITA GLEN TER	Low	1599	Other Contractor	All	X	
1191	EDDY'S LANDSCAPING	1945 LANOITAN AVENUE	Low	0781	Landscaping	All	X	
1192	EDIFICE ORNAMENTATION	4653 MERCURY ST	Low	1799	Other Contractor	All	X	
1193	EL CAJON ELECTRIC CO	985 GREENFIELD DR	Low	1731	Other Contractor	All	X	
1194	EL CAJON GRADING & ENG CO INC	PO BOX 967	Low	1542	Other Contractor	All	X	
1195	EL COMETA	281 BRANDYWOOD ST	Low	5963	Eating/Drinking Establishments	All	X	
1196	EL TIGER	471 WESTVIEW DR	Low	5963	Eating/Drinking Establishments	All	X	
1197	ELECTRICAL PROFESSIONALS INC	2828 SAVANNAH CT	Low	1731	Other Contractor	All	X	
1198	ELECTRICAL SOLUTIONS	551 GALVESTON WAY	Low	1731	Other Contractor	All	X	
1199	ELECTRICAL SOLUTIONS	551 GALVESTON WAY	Low	1731	Other Contractor	All	X	
1200	ELLIOTT DRILLING SERVICES, INC	3052 INDUSTRY ST	Low	1799	Other Contractor	All	X	
1201	ELLISON AND SPINO CONST CO	3914 MURRAY CANYON RD , A-227	Low	1599	Other Contractor	All	X	
1202	EMCOM ELECTRONIC SYSTEMS INC	256 WITHERSON WAY , H	Low	1731	Other Contractor	All	X	
1203	EMJ CORRATION	2400 DEL PASO RD	Low	1521	Other Contractor	All	X	
1204	ENERCOMM ELECTRIC INC	595 CALLE DE LA SIERRA	Low	1731	Other Contractor	All	X	
1205	ENERGY ELECTRICAL SERVICES	644 WATERTOWN LN	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1206	ENTERPRISE CONSTRUCTION	2400 HISTORIC DECATUR RD	Low	1599	Other Contractor	All	X	
1207	ENVIRONMENTAL REMEDIATION MANAGEMENT	6380 RANCHO PARK DR	Low	1599	Other Contractor	All	X	
1208	EPIC FIRE PROTECTION, INC	765 TURTLE INT WAY	Low	1799	Other Contractor	All	X	
1209	ER QUALITY LAWN MAINTENANCE	982 RUTGERS AVE	Low	0782	Landscaping	All	X	
1210	ER QUALITY LAWN MAINTENANCE	982 RUTGERS AVE	Low	0782	Landscaping	All	X	
1211	ERIC C EPIFANO	14428 WILLOW RD	Low	1599	Other Contractor	All	X	
1212	ETIC ENGINEERING	2285 MORELLO AVE	Low	1599	Other Contractor	All	X	
1213	EVERHART CONSTRUCTION	9986 VALLE CABALLO LN	Low	1599	Other Contractor	All	X	
1214	EVERSTRONG CONTRUCTION, INC	1839 DURFEE AVE	Low	1599	Other Contractor	All	X	
1215	EXCALIBUR ROOFING INC	2447 LA RAMADA LN	Low	1761	Other Contractor	All	X	
1216	EXECUTIVE LANDSCAPE, INC.	2131 HUFFSTATLER ST	Low	1799	Other Contractor	All	X	
1217	EXPERT ROOFING	1003 MARIA AVE	Low	1761	Other Contractor	All	X	
1218	EXPRESS ELECTRIC	5030 WARING RD	Low	1731	Other Contractor	All	X	
1219	F J WILLERT CONTRACTING CO	1869 NIRVANA AVE	Low	1799	Other Contractor	All	X	
1220	F R GHIANNI DRYWALL	1937 FRIENDSHIP DR , A	Low	1742	Painting/Coating	All	X	
1221	F.P. CONSTRUCTION	1220 CALLE SANTIAGO	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1222	FAMANIA CONSTRUCTION, INC.	3241 OLIVE ST	Low	1599	Other Contractor	All	X	
1223	FARMER BROS CO	20333 NORMANDIE AVE	Low	5199	Wholesale/Storage/Warehousing	All	X	
1224	FARMER JOHN MEATS	3049 E VERNON AVE	Low	5147	Wholesale Food	All	X	
1225	FARNUM ELECTRIC	PO BOX 1735	Low	1799	Other Contractor	All	X	
1226	FASTWATER HEATER INC	12601 132ND AVE NE	Low	1799	Other Contractor	All	X	
1227	FCO. GILBERT LANDSCAPING	998 ADIRONDACK PL	Low	1794	Other Contractor	All	X	
1228	FERANDELL TENNIS COURTS, INC	2120 JIMMY DURANTE BLVD	Low	1599	Other Contractor	All	X	
1229	FERGUSON ENTERPRISES INC	PO BOX 2778	Low	1799	Other Contractor	All	X	
1230	FERRE MOVIL "EL JUNIOR"	PO BOX 13236	Low	5074	Wholesale/Storage/Warehousing	All	X	
1231	FIBER CARE BATHS, INC	9832 YUCCA RD	Low	1799	Other Contractor	All	X	
1232	FIERRO CONTRUCTION COMPANY	1815 SWEETWATER RD, 131	Low	1599	Other Contractor	All	X	
1233	FINE LINE STRIPING & PAINTING	2608 MICHELLE CT, A	Low	1799	Other Contractor	All	X	
1234	FINEST CITY HEATING & AIR	1069 VERNON WAY	Low	1711	Other Contractor	All	X	
1235	FIRE & ICE HEATING & AIR COND	9911 MAINE AVE	Low	1711	Other Contractor	All	X	
1236	FIRE PROTECTION PLUS	1835 S CENTRE CITY PKWY , A	Low	1731	Other Contractor	All	X	
1237	FIRE SAFETY CO	273 S RANCHO SANTA FE RD	Low	1731	Other Contractor	All	X	
1238	FIREWATCH	437 EL CAJON BLVD	Low	1711	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1239	FIREWORKS & STAGE FX AMERICA	PO BOX 488	Low	7999	Golf Courses/Parks	All	X	
1240	FIRST CHOICE FIRE PROTECTION	550 PATRICE PL , E	Low	1799	Other Contractor	All	X	
1241	FIRSTLINE SECURITY INC	500 S GENEVA RD	Low	5063	Wholesale/Storage/Warehousing	All	X	
1242	FISHEL COMPANY, THE	1810 ARLINGATE LN	Low	1623	Other Contractor	All	X	
1243	FISHER DEVELOPMENT INC	1485 BAY SHORE BLVD	Low	1599	Other Contractor	All	X	
1244	FIVE STAR FIRE	1040 S CYPRESS ST , J	Low	1799	Other Contractor	All	X	
1245	FLEMING PAINTING	10700 JERSEY BLVD	Low	1721	Painting/Coating	All	X	
1246	FLOORBIZ	703 S ROANNE ST	Low	1752	Other Contractor	All	X	
1247	FLORES SIERRA CONTRACTORS, INC	1547 JAYKEN WAY , B	Low	1799	Other Contractor	All	X	
1248	FLOYD & HOWERTON PLUMBING INC	1269 GREENFIELD DR	Low	1711	Other Contractor	All	X	
1249	FLUORESCO LIGHTING & SIGNS	PO BOX 27042	Low	1799	Other Contractor	All	X	
1250	FM UNITED GRADING INC	10925 IBERIA ST	Low	1799	Other Contractor	All	X	
1251	FORD ROOFING	11406 EUCALYPTUS HILLS DR	Low	1761	Other Contractor	All	X	
1252	FORD SIGNS	1605 ORD WAY	Low	1731	Other Contractor	All	X	
1253	FORTNEY & WEYGANDT, INC	31269 BRADLEY RD	Low	1599	Other Contractor	All	X	
1254	FOSHAY ELECTRIC CO INC	7676 ENGINEER RD	Low	1731	Other Contractor	All	X	
1255	FRAGILE GLASS & MIRRORS	405 ISABEL ST	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1256	FRAHLER ELECTRIC CO	11860 SW GREENBURG RD	Low	1731	Other Contractor	All	X	
1257	FRAKES CONSTRUCTION, INC	15760 CAMINITO ATICO	Low	1599	Other Contractor	All	X	
1258	FRAMING ASSOCIATES, INC	1248 COOLIDGE AVE	Low	1521	Other Contractor	All	X	
1259	FRANK & SON PAVING INC.	1019 3RD AVE	Low	1799	Other Contractor	All	X	
1260	FRED'S TASTEFUL GARDENING	4074 PALM AVE	Low	0782	Landscaping	All	X	
1261	FRED'S TASTEFUL GARDENING	4074 PALM AVE	Low	0782	Landscaping	All	X	
1262	FREEDOM ELECTRIC CO	10744 ROCKVILLE ST	Low	1731	Other Contractor	All	X	
1263	FUELING AND SERVICE TECHNOLOGIES	7050 VILLAGE DR , D	Low	1599	Other Contractor	All	X	
1264	FUGATE ELECTRICAL, INC	3030 PLAZA BONITA RD	Low	1731	Other Contractor	All	X	
1265	FULLER'S PLUMBING SERVICE	1063 3RD AVE	Low	1711	Other Contractor	All	X	
1266	G E CAPITAL MODULAR SPACE	1200 SWEDESFORD RD	Low	7359	Vehicle/Equipment Rental	All	X	
1267	G SCOTT ASPHALT	358 TROUSDALE DR	Low	1794	Other Contractor	All	X	
1268	G.A. RECHT CONSTRUCTION CO	4170 MORENA BLVD , B	Low	1599	Other Contractor	All	X	
1269	GALLERY BUILDERS GROUP	2220 E PLAZA BLVD, P	Low	1799	Other Contractor	All	X	
1270	GALOREN SOUTHWESTERN INC	350 PLAZA PARAISO	Low	5046	Wholesale/Storage/Warehousing	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1271	GARCIA'S PRECISION ACOUSTICS	3162 CARLSBAD BLVD , B	Low	1742	Painting/Coating	All	X	
1272	GATEWAY INSULATION	966 N AMELIA AVE	Low	1742	Painting/Coating	All	X	
1273	GD CONSTRUCTION	766 SUNCREEK DR	Low	1599	Other Contractor	All	X	
1274	GENERAL COATINGS CORRATION	6711 NANCY RIDGE DR	Low	1522	Other Contractor	All	X	
1275	GENERAL ELECTRIC COMPANY	PO BOX 60320	Low	7699	Equipment Repair	All	X	
1276	GENERATION CONTRACTING & EMERGENCY SERVICES INC	13750 DANIELSON ST	Low	1599	Other Contractor	All	X	
1277	GENERATIONS DESIGN & CONSTRUCT	8601 SE CAUSEY AVE	Low	1599	Other Contractor	All	X	
1278	GEOCRETE BROW DITCH INC	1295 DISTRIBUTION WAY	Low	1799	Other Contractor	All	X	
1279	GEOGRID RETAINING WALL STM INC	1295 DISTRIBUTION WAY	Low	1741	Masonry	All	X	
1280	GEOHYDROLOGIC CONSULTANTS INC	5912 BOLSA AVE	Low	1799	Other Contractor	All	X	
1281	GHIANNI LARUSSA GROUP, INC.	13880 STOWE DR, A	Low	1742	Painting/Coating	All	X	
1282	GILBERTO RAMIREZ	3401 ADAMS AVE, A72	Low	0782	Landscaping	All	X	
1283	GILBERTO RAMIREZ	3401 ADAMS AVE, A72	Low	0782	Landscaping	All	X	
1284	GL CONSTRUCTION & DRYWALL	10759 OAK CREEK DR	Low	1742	Painting/Coating	All	X	
1285	GLASSCRAFTERS GLAZING, INC	4030 E LEAVERTON CT	Low	1793	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1286	GLAZING CONCEPTS INC	560 W RINCON ST	Low	1799	Other Contractor	All	X	
1287	GLIDE CORRATION	7888 OSTROW ST , C	Low	1731	Other Contractor	All	X	
1288	GLOBAL LIGHTING & SIGNS	39227 SERAPHINA RD	Low	1731	Other Contractor	All	X	
1289	GLOBAL SIGN SYSTEMS, INC	12819 S MAIN ST	Low	1799	Other Contractor	All	X	
1290	GLS SPRAY SERVICES, INC	13880 STOWE DR, A	Low	1799	Other Contractor	All	X	
1291	GMB PAINTING INC	7969 ENGINEER RD	Low	1799	Other Contractor	All	X	
1292	GODFREY & LANGLOIS CONSTRUCTION SVCS	120 BROADCOMMON RD	Low	1599	Other Contractor	All	X	
1293	GOLDEN STATE FENCE CO	870 MAIN ST	Low	1799	Other Contractor	All	X	
1294	GOLDEN STATE FOODS	PO BOX 8697	Low	5149	Wholesale Food	All	X	
1295	GONZALEZ PLUMBING	PO BOX 1393	Low	1711	Other Contractor	All	X	
1296	GOULD ELECTRIC	12130 DEARBORN PL	Low	1731	Other Contractor	All	X	
1297	GRADYS SUPERIOR, INC	125 N EUCLID ST	Low	1752	Other Contractor	All	X	
1298	GRAHAM DOWNES ARCHITECTURE INC	1600 NATIONAL AVE	Low	1599	Other Contractor	All	X	
1299	GRAHOVAC CONSTRUCTION COMPANY	6162 MISSION GORGE RD , J	Low	1542	Other Contractor	All	X	
1300	GRANI INSTALLATION INC.	930 S ANDREASEN DR , L	Low	1799	Other Contractor	All	X	
1301	GREAT WESTERN DRYWALL	8315 MIRALANI DR	Low	1742	Painting/Coating	All	X	
1302	GREEN MECHANICAL CONTRACTORS	8330 JUNIPER CREEK LN	Low	1711	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1303	GREG NICITA	SAINT ANTHONY CHURCH	Low	7999	Golf Courses/Parks	All	X	
1304	GROSSMONT ELECTRIC CORP	11211 SORRENTO VALLEY RD , K	Low	1731	Other Contractor	All	X	
1305	GS BUILDING WORKS	3235 ORANGE ST	Low	7699	Equipment Repair	All	X	
1306	GUARANTEED POOL PLASTERING	5173 WARING RD, 130	Low	1799	Other Contractor	All	X	
1307	GUK MECHANIC SERVICE	4043 50TH ST	Low	1711	Other Contractor	All	X	
1308	GULF ENGINEERING & CONSTRUCTIO	675 S 2ND ST	Low	1599	Other Contractor	All	X	
1309	GUY EVANS CONTRACTOR SERVICES	2339 BEVILLE RD	Low	1599	Other Contractor	All	X	
1310	H & D CONSTRUCTION COMPANY	PO BOX 12859	Low	1599	Other Contractor	All	X	
1311	H M CONSTRUCTION - HANNA, M	1530 JAMACHA RD , Z	Low	1599	Other Contractor	All	X	
1312	H.C.I. INC	3166 HORSELESS CARRIAGE RD	Low	1623	Other Contractor	All	X	
1313	H.M.S. ELECTRIC INC	696 COLORADO AVE	Low	1731	Other Contractor	All	X	
1314	HAGENBACK CONSTRUCTION SERVICE	1915 VIA LAS PALMAS, 27	Low	1751	Other Contractor	All	X	
1315	HALLMARK OLS	12580 STOWE DR	Low	1799	Other Contractor	All	X	
1316	HAMANN CONSTRUCTION INC	1000 PIONEER WAY	Low	1599	Other Contractor	All	X	
1317	HANDYMAN MATTERS-S.D. EAST	2650 JAMACHA RD	Low	7699	Equipment Repair	All	X	
1318	HANNA CONTRACTING	1415 COKER WAY	Low	1711	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1319	HANSON AGGREGATES PACIFIC S.W.	PO BOX 639069	Low	1599	Other Contractor	All	X	
1320	HANSON STRUCTURAL PRECAST INC	13131 LOS ANGELES ST	Low	1599	Other Contractor	All	X	
1321	HAR CONSTRUCTION, INC	1480 FRONTAGE RD	Low	1599	Other Contractor	All	X	
1322	HARBORSIDE PLUMBING	828 NORSTAD ST	Low	1711	Other Contractor	All	X	
1323	HARBRO CONST & CONSULTING INC	455 54TH ST	Low	1542	Other Contractor	All	X	
1324	HARDESTY & ASSOC	500 E BALBOA BLVD	Low	1599	Other Contractor	All	X	
1325	HARMON CONTRACTING CO	PO BOX 7271	Low	1599	Other Contractor	All	X	
1326	HAYES BOLT & SUPPLY	2950 NATIONAL AVE	Low	5072	Wholesale/Storage/Warehousing	All	X	
1327	HAYWARD BAKER INC	1780 E LEMONWOOD DR	Low	1629	Other Contractor	All	X	
1328	HAZARD CONSTRUCTION COMPANY	PO BOX 229000	Low	1629	Other Contractor	All	X	
1329	HEARTLAND MEAT CO INC	3461 MAIN ST	Low	5147	Wholesale Food	All	X	
1330	HECTOR'S ICE CREAM	2468 VAN NESS AVE	Low	5963	Eating/Drinking Establishments	All	X	
1331	HEIMAN CONSTRUCTION	722 GENEVIEVE ST , I	Low	1599	Other Contractor	All	X	
1332	HERCA TELECOMM	13014 BRENTWOOD LN	Low	1599	Other Contractor	All	X	
1333	HERSUM CONTRUCTION INC	6365 MARINDUSTRY DR, A	Low	1599	Other Contractor	All	X	
1334	HI STEEL PERFORMERS INC	PO BOX 120070	Low	1791	Other Contractor	All	X	
1335	HILLSIDE RETAINING WALLS	002 PMB # 703	Low	1521	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1336	HITT CONTRACTING, INC	2704 DORR AVE	Low	1542	Other Contractor	All	X	
1337	HMS CONSTRUCTION, INC.	1225 LINDA VISTA DR	Low	1731	Other Contractor	All	X	
1338	HMS ELECTRIC	6333 COLLEGE GROVE WAY	Low	1799	Other Contractor	All	X	
1339	HOLIDAY CARPET MULTI-FAMILY DIVISION	16600 SHERMAN WAY	Low	1752	Other Contractor	All	X	
1340	HOME DET #658, THE	1901 BUTTERFIELD RD	Low	5211	Building Materials	All	X	
1341	HOMESTEAD SHEET METAL	9031 MEMORY LN	Low	1761	Other Contractor	All	X	
1342	HOMEXPERTS	7066 LAS SITAS RD , E	Low	1799	Other Contractor	All	X	
1343	HONDO ELECTRIC INC	420 K ST	Low	1731	Other Contractor	All	X	
1344	HORIZON RETAIL CONSTRUCTION	1458 HORIZON BLVD	Low	1599	Other Contractor	All	X	
1345	HOWARD'S RUG COMPANY OF SAN	6110 NANCY RIDGE DR	Low	1752	Other Contractor	All	X	
1346	HP COMMUNICATIONS	13341 TEMESCAL CANYON RD	Low	1731	Other Contractor	All	X	
1347	HR REDONDO INC	PO BOX 2781	Low	1731	Other Contractor	All	X	
1348	HSM ELECTRONIC PROTECTION SERVICES, INC	6000 N NATHAN LN	Low	1799	Other Contractor	All	X	
1349	HUFCOR AIRWALL INC	8739 ARTESIA BLVD	Low	1742	Painting/Coating	All	X	
1350	HUGHES HEATING AND AIR COND.	PO BOX 2965	Low	1711	Other Contractor	All	X	
1351	HUTCH'S LOCK & KEY	715 4TH AVE	Low	7699	Equipment Repair	All	X	
1352	HYDREX PEST CONTROL	PO BOX 261127	Low	7342	Pest Control	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1353	I C I PAINTS	15885 W SPRAGUE RD	Low	5198	Wholesale/Storage/Warehousing	All	X	
1354	I.C.E. BUILDERS, INC	421 E CERRITOS AVE	Low	1599	Other Contractor	All	X	
1355	IDEAL PLUMBING & HEATING INC	5161 WARING RD	Low	1711	Other Contractor	All	X	
1356	IMAGE NATIONAL, INC	16265 STAR RD	Low	1799	Other Contractor	All	X	
1357	INDUSTRIAL COATINGS & RESTORATIONS	2534 OCEANSIDE BLVD	Low	1721	Painting/Coating	All	X	
1358	INFLATABLE WORLD CORP	1139 MANSIONES LN	Low	7996	Golf Courses/Parks	All	X	
1359	INFRASTRUCTURE ENGINEERING CORP	14271 DANIELSON ST	Low	1599	Other Contractor	All	X	
1360	INLAND PLASTER INC	38372 INNOVATION CT	Low	1742	Painting/Coating	All	X	
1361	INNOVATIVE DRYWALL SYSTEMS INC	988 S ANDREASEN DR, A	Low	1742	Painting/Coating	All	X	
1362	INNOVATIVE FIRE PROTECTION INC	405 VERNON WAY	Low	1731	Other Contractor	All	X	
1363	INSULCOM	42950 OSGOOD RD	Low	1742	Painting/Coating	All	X	
1364	INTEGRITY DRYWALL SYSTEMS	1111 LOSTINDA ST	Low	1742	Painting/Coating	All	X	
1365	INTEGRITY HOME IMPROVEMENTS, INC	7343 RONSON RD , D	Low	1521	Other Contractor	All	X	
1366	INTERIOR SPECIALIST INC	1630 FARADAY AVE	Low	1752	Other Contractor	All	X	
1367	INTERSTATE FIRE PROTECTION	36140 JANA LN	Low	1799	Other Contractor	All	X	
1368	INT'L PAVEMENT SOLUTIONS INC	1199 OPAL AVE	Low	1542	Other Contractor	All	X	
1369	IRISH SETTERS INC	674 RANCHEROS DR	Low	1741	Masonry	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1370	IRRISCAPE CONSTRUCTION, INC	20182 CARANCHO RD	Low	1799	Other Contractor	All	X	
1371	J & A LANDSCAPE & MAINTENANCE	1235 PICCARD AVE	Low	0782	Landscaping	All	X	
1372	J & A LANDSCAPE & MAINTENANCE	1235 PICCARD AVE	Low	0782	Landscaping	All	X	
1373	J & J CONSTRUCTION	2511 BEVERLY BLVD	Low	1599	Other Contractor	All	X	
1374	J & M KEYSTONE, INC	2709 VIA ORANGE WAY , A	Low	1599	Other Contractor	All	X	
1375	J & P AIR JUMPS	1692 COPPER PENNY DR	Low	7359	Vehicle/Equipment Rental	All	X	
1376	J & T LANDSCAPING	1273 SEA LILY CT	Low	0781	Landscaping	All	X	
1377	J C ENTERPRISES	1459 VIA LA RANCHITA	Low	1711	Other Contractor	All	X	
1378	J NOBLE BINNS PLUMBING CO., INC	3529 PEGASUS DR	Low	1711	Other Contractor	All	X	
1379	J P WITHEROW ROOFING COMPANY	1001 MORENA BLVD	Low	1761	Other Contractor	All	X	
1380	J. WILLIS CO., INC.	6795 STANTON AVE	Low	1742	Painting/Coating	All	X	
1381	J.S. PLASTERING INC	14579 HIDDEN WOOD RD	Low	1742	Painting/Coating	All	X	
1382	JACKSON DESIGN & REMODELING	4797 MERCURY ST , B	Low	1542	Other Contractor	All	X	
1383	JACKSON DESIGN & REMODELING	4797 MERCURY ST , B	Low	1542	Other Contractor	All	X	
1384	JACOR CONSTRUCTION	10612 PROSPECT AVE	Low	1599	Other Contractor	All	X	
1385	JAMES DEUBIG CONSTRUCTION, INC	125 E LINCOLN AVE	Low	1599	Other Contractor	All	X	
1386	JAMES M BARB CONST INC	10701 RANCHITOS RD NE	Low	1521	Other Contractor	All	X	
1387	JAUREGUI & CULVER INC.	959 W MISSION AVE	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1388	JAYNES CORRATION OF CALIF	111 ELM ST	Low	1542	Other Contractor	All	X	
1389	JC CONSTRUCTION & PAINTING, INC	6910 SIMI PL	Low	1599	Other Contractor	All	X	
1390	JEJJONI SIGN COMPANY	1099 W PALM AVE	Low	1799	Other Contractor	All	X	
1391	JELCON	GRAVES AVE	Low	1711	Other Contractor	All	X	
1392	JENAL ENGINEERING CORRATION	PO BOX 459	Low	1599	Other Contractor	All	X	
1393	JENSEN DRYWALL	3714 LYNDA PLACE	Low	1742	Painting/Coating	All	X	
1394	JERRY'S HEATING + AIR CONDITIO	9717 AIRRT VISTA RD	Low	1711	Other Contractor	All	X	
1395	JG TATE FIRE PROTECTION	1266 STOWE DR	Low	1711	Other Contractor	All	X	
1396	JIMMY COLLINS SPECIALTIES	3030 PLAZA BONITA RD	Low	1599	Other Contractor	All	X	
1397	JJJ ENTERPRISES	PO BOX 463021	Low	1731	Other Contractor	All	X	
1398	JJJ ENTERPRISES	533 S VINEWOOD ST	Low	1799	Other Contractor	All	X	
1399	JLCC	616 W HART PL	Low	1599	Other Contractor	All	X	
1400	JNC PINOY FOODMART INC	943 OTAY LAKES RD, D	Low	5812	Eating/Drinking Establishments	All	X	
1401	JOHN TESSITORE CONCRETE, INC	5574 PRAY ST	Low	1799	Other Contractor	All	X	
1402	JOHNNIE WEST ELECTRIC	1633 DIAMOND ST	Low	1731	Other Contractor	All	X	
1403	JOHNSON & TURNER PAINTING CO	8241 ELECTRIC AVE	Low	1721	Painting/Coating	All	X	
1404	JOHNSON BARNES + FINCH INC	9749 CACTUS ST	Low	1742	Painting/Coating	All	X	
1405	JOHNSON CONTROLS INC	PO BOX 591	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1406	JOHNSON ELECTRIC INC	1650 MAPLE DR	Low	1731	Other Contractor	All	X	
1407	JOSEPH CONSTRUCTION	815 S ARDMORE AVE	Low	1799	Other Contractor	All	X	
1408	JOSE'S ICE CREAM	47 E 2ND ST	Low	5963	Eating/Drinking Establishments	All	X	
1409	JRG ELECTRIC CO	13321 ALONDRA BLVD , K	Low	1731	Other Contractor	All	X	
1410	J'S HANDYMAN SERVICE	5406 IMPERIAL AVE	Low	7699	Equipment Repair	All	X	
1411	JUDD ELECTRIC	523 TAMARACK CT	Low	1731	Other Contractor	All	X	
1412	JUMPING JACK PARTY RENTALS	BOX 21438	Low	7359	Vehicle/Equipment Rental	All	X	
1413	JUST WATER HEATERS, INC	3400 INVESTMENT BLVD	Low	1799	Other Contractor	All	X	
1414	JV BUILDERS AND RESTORATIONS INC	1833 ISLA DEL CARMEN WAY	Low	1599	Other Contractor	All	X	
1415	JVC CONSTRUCTION INC	415 W 12TH STREET	Low	1599	Other Contractor	All	X	
1416	KAHL CONSTRUCTION	7125 EL CAJON BLVD	Low	1599	Other Contractor	All	X	
1417	KALABAT BUILDING COMPANY	980 E CHASE AVE	Low	1599	Other Contractor	All	X	
1418	KAMPS PROPANE INC	16245 ALPINE BLVD	Low	1799	Other Contractor	All	X	
1419	KANE KATERING	28337 PONTEVEDRA DR	Low	5812	Eating/Drinking Establishments	All	X	
1420	KARVON ELECTRICAL CORRATION	2020 HANCOCK ST, C	Low	1731	Other Contractor	All	X	
1421	KAY CONSTRUCTION	1163 BROADWAY	Low	1742	Painting/Coating	All	X	
1422	KEE CONSTRUCTION	24301 WILMINGTON AVE	Low	1599	Other Contractor	All	X	
1423	KEITHS HANDYMAN	PO BOX 4144	Low	1799	Other Contractor	All	X	
1424	KEN HALL PAINTING	1557 INT PACIFIC CT	Low	1799	Other Contractor	All	X	
1425	KENDRICK EXCAVATING	12689 JACKSON HILL DR	Low	1599	Other Contractor	All	X	
1426	KENNEDY ELECTRIC	PO BOX 2368	Low	1731	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1427	KENNEDY MASONRY INC	PO BOX 130340	Low	1741	Masonry	All	X	
1428	KERNS DRYWALL, INC	26895 ALISO CREEK RD , B-580	Low	1742	Painting/Coating	All	X	
1429	KH MINTON PAINTING INC	2518 CAMINO LAGARTO	Low	1721	Painting/Coating	All	X	
1430	KIM THANH MAI	7041 VALENTINE DR	Low	1799	Other Contractor	All	X	
1431	KINDNESS GENERAL CONTRACTORS	12891 NELSON ST	Low	1599	Other Contractor	All	X	
1432	KIRK PAVING, INC	8722 WINTER GARDENS BLVD	Low	1599	Other Contractor	All	X	
1433	KITCHENS PLUS	7943 UNIVERSITY AVE	Low	1542	Other Contractor	All	X	
1434	KLEINFELDER	5015 SHOREHAM PL	Low	1799	Other Contractor	All	X	
1435	KLINE PLUMBING & MECHANICAL	3030 PLAZA BONITA RD	Low	1711	Other Contractor	All	X	
1436	KNUDSEN ROOFING INC	PO BOX 2801	Low	1761	Other Contractor	All	X	
1437	KONE INC.	1 KONE CT	Low	1799	Other Contractor	All	X	
1438	KONSTRUKET DEVELOPMENT INC	9434 CHESAPEAKE DR	Low	1599	Other Contractor	All	X	
1439	KRUZICK PLUMBING, INC	3980 OLD WAVERLY CIR	Low	1711	Other Contractor	All	X	
1440	KYNE CONSTRUCTION INC	PO BOX 1997	Low	1799	Other Contractor	All	X	
1441	L & L PLUMBING	1111 RED MAPLE DR	Low	1711	Other Contractor	All	X	
1442	L N D ELECTRIC	5124 WILTS PL	Low	1731	Other Contractor	All	X	
1443	L R SHRUM HEATING & AIR	1950 CORDELL CT	Low	1711	Other Contractor	All	X	
1444	L T D SHEET METAL, INC	11222 N WOODSIDE AVE	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1445	L. CASTANEDA'S DOG GROOMING	1243 TOBIAS DR	Low	0752	Animal Facilities	All	X	
1446	L.I. METAL SYSTEMS	9041 BERMUDEZ ST	Low	1799	Other Contractor	All	X	
1447	L.L. APPLIED RESTORATION SERVICE, INC.	630 NATIONAL CITY BLVD.	Low	1522	Other Contractor	All	X	
1448	L.S. INTERIOR DESIGN	3550 WILSHIRE BLVD	Low	1599	Other Contractor	All	X	
1449	LACKEY GRADING INC	1122 BOX	Low	1599	Other Contractor	All	X	
1450	LAKESIDE EQUIPMENT SALES & RENTALS INC	11925 WOODSIDE AVE	Low	7359	Vehicle/Equipment Rental	All	X	
1451	LAKEVIEW CONSTRUCTION	10505 CORRATE DR	Low	1799	Other Contractor	All	X	
1452	LAMAR SPACE INC	PO BOX 3940	Low	7359	Vehicle/Equipment Rental	All	X	
1453	LAMPERT, MURRAY M, COMPANY	3545 CAMINO DEL RIO S, C	Low	1599	Other Contractor	All	X	
1454	LANDSCAPE DEVELOPMENT INC	28447 WITHERSPOON PKWY	Low	0782	Landscaping	All	X	
1455	LANE FRAMING SYSTEMS, INC	1038 E BASTANCHURY RD	Low	1599	Other Contractor	All	X	
1456	LARRY METHVIN INSTALLATION, INC	501 KETTERING DR	Low	1799	Other Contractor	All	X	
1457	LARRY'S ELECTRICAL SERVICE INC	5275 MARKET ST , I-X	Low	1731	Other Contractor	All	X	
1458	LARRY'S ELECTRICAL SERVICE INC	1043 WORTHINGTON ST	Low	1731	Other Contractor	All	X	
1459	LARS CONSTRUCTION	4703 SPRING ST	Low	1542	Other Contractor	All	X	
1460	LASCO BATHWARE INC	3255 E MIRALOMA AVE	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1461	LEGACY BUILDING SERVICES	2505 CONGRESS ST	Low	1599	Other Contractor	All	X	
1462	LEGEND FENCE CORP	3551 31ST ST	Low	1799	Other Contractor	All	X	
1463	LEKOS ELECTRIC INC.	1370 PIONEER WAY	Low	1731	Other Contractor	All	X	
1464	LEMESNAGER ENGINEERING INC	8211 N SANTALUZ VILLAGE GRN	Low	1799	Other Contractor	All	X	
1465	LENNY DAME CONSTRUCTION INC	PO BOX 1265	Low	1599	Other Contractor	All	X	
1466	LEONARD'S CARPET SERVICE INC	1121 N RED GUM ST	Low	1752	Other Contractor	All	X	
1467	LIGHTING ELECTRIC	1707 CORONADO AVE	Low	1731	Other Contractor	All	X	
1468	LINCOLN EQUIPMENT	2051 COMMERCE AVE	Low	1799	Other Contractor	All	X	
1469	LINEAR ELECTRIC INC	7676 ENGINEERING RD , L	Low	1731	Other Contractor	All	X	
1470	LINTVEDT, MCCOLL & ASSOCIATES	2810 DEL RIO SO CMNO	Low	1599	Other Contractor	All	X	
1471	LLOYD PEST CONTROL	935 SHERMAN ST	Low	7342	Pest Control	All	X	
1472	LOCSIN CONSTRUCTION	14865 FOLGER ST	Low	1599	Other Contractor	All	X	
1473	LOREN ELECTRIC SIGN CORP	12226 COAST DR	Low	1799	Other Contractor	All	X	
1474	LOW VOLTAGE INTEGRATED SYSTEMS	1930 WATSORY WAY, C	Low	1799	Other Contractor	All	X	
1475	LOYA CONSTRUCTORS	549 WYKES ST	Low	1599	Other Contractor	All	X	
1476	LTS EQUIPMENT INC	14907 MONTANA SERENA	Low	1794	Other Contractor	All	X	
1477	LUCAS & MERCIER CONSTRUCTION	29712 AVENIDA DE LAS BANDERA	Low	1542	Other Contractor	All	X	
1478	LUGO & IBARRA'S LANDSCAPING	4076 DAVES WAY	Low	0781	Landscaping	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1479	LUIS AND SON'S CONSTRUCTION	PO BOX 120460	Low	1599	Other Contractor	All	X	
1480	LUNA, MAURICIO	1432 E 6TH ST	Low	0782	Landscaping	All	X	
1481	LUZAICH STRIPING INC	PO BOX 2426	Low	1799	Other Contractor	All	X	
1482	LYONS MASONRY INC	2254 LA CRESTA RD	Low	1799	Other Contractor	All	X	
1483	M & A CONSTRUCTION	5357 VISTA SANTA MARGARITA	Low	1542	Other Contractor	All	X	
1484	M.C. ROOFING	4343 CORRAL CANYON RD	Low	1761	Other Contractor	All	X	
1485	M.J. RATZLAFF INC	725 LA CRESTA BLVD	Low	1793	Other Contractor	All	X	
1486	MACKENZIE KECK, INC	301 ROUND HILL DR	Low	1599	Other Contractor	All	X	
1487	MACORD CONSTRUCTION CORP	101 COPPERWOOD WAY, H	Low	1742	Painting/Coating	All	X	
1488	MAGIC JUMPS	5151 ROBINWOOD RD	Low	7359	Vehicle/Equipment Rental	All	X	
1489	MAGNA WINDOW CORRATION	PO BOX 745	Low	1799	Other Contractor	All	X	
1490	MAGNUM MECHANICAL INC	4222 E LA PALMA AVE	Low	1711	Other Contractor	All	X	
1491	MAILBOX MEDIC INC	3213 HELIX ST	Low	1799	Other Contractor	All	X	
1492	MAISEL PRESLEY INC	3914 MURPHY CANYON RD , A252	Low	1542	Other Contractor	All	X	
1493	MAJESTIC FIRE PROTECTION	13659 VICTORY BLVD	Low	1799	Other Contractor	All	X	
1494	MANHOLE ADJUSTING CONTRACTORS	9500 BEVERLY RD	Low	1599	Other Contractor	All	X	
1495	MANHOLE ADJUSTING INC	9500 BEVERLY RD	Low	1599	Other Contractor	All	X	
1496	MARATHON GENERAL, INC	130 S HALE AVE	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1497	MARCLAN ELECTRIC	120 CRISTIANITOS RD	Low	1731	Other Contractor	All	X	
1498	MARCOTTE + HEARNE BUILDERS INC	11696 SORRENTO VALLEY RD	Low	1599	Other Contractor	All	X	
1499	MARIO CASACCHIA	26602 CORTINA DR	Low	1599	Other Contractor	All	X	
1500	MARK HARRIS PLUMBING CO INC	1830 GILLESPIE WAY	Low	1711	Other Contractor	All	X	
1501	MARK SNYDER ELECTRIC	12900 BROOKPRINTER PL	Low	1731	Other Contractor	All	X	
1502	MARTIN CORRATION	2340 MEYERS AVE	Low	1742	Painting/Coating	All	X	
1503	MARTIN ROOFING CO, INC	6608 FEDERAL BLVD	Low	1761	Other Contractor	All	X	
1504	MARTZ MASONRY INC	594 CAMINITO A CASA	Low	1743	Masonry	All	X	
1505	MARVISTA CONSTRUCTION	603 E ALTON AVE , G	Low	1599	Other Contractor	All	X	
1506	MAS CONSTRUCTION	1808 LA POSADA ST	Low	1599	Other Contractor	All	X	
1507	MASCO CONTRACTOR SERVICES OF CALIFORNIA, INC	13000 KIRKHAM WAY	Low	1742	Painting/Coating	All	X	
1508	MASTER BUILDERS	4025 CAMINO DEL RIO S	Low	1599	Other Contractor	All	X	
1509	MASTER PLUMBING & LEAK DETECT	PO BOX 928343	Low	1711	Other Contractor	All	X	
1510	MASTER PROTECTION/FIREMASTE R	13050 METRO PKWY	Low	1731	Other Contractor	All	X	
1511	MATA ENTERPRISES	328 E 9TH STREET	Low	1731	Other Contractor	All	X	
1512	MATRIX	8204 CENTER DR	Low	1599	Other Contractor	All	X	
1513	MATTHEWS SIGNS	13351 NEDDICK AVE	Low	1799	Other Contractor	All	X	
1514	MAUI DRINKS INC	PO BOX 721631	Low	5812	Eating/Drinking Establishments	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1515	MAXIM FLOOR SYSTEMS	1189 N GROVE ST , C	Low	1799	Other Contractor	All	X	
1516	MAXIMUM DEMOLITION INC	5575 MAGNATRON BLVD, I	Low	1795	Other Contractor	All	X	
1517	MAXWELL BUILDERS, INC	333 W HAMPDEN AVE	Low	1599	Other Contractor	All	X	
1518	MAYER ROOFING INC	PO BOX 462890	Low	1761	Other Contractor	All	X	
1519	MB BUILDERS INC	403 S LAS SAS RD	Low	1599	Other Contractor	All	X	
1520	MC BRIDE ELECTRIC	9950 SCRIPPS LAKE DR	Low	1731	Other Contractor	All	X	
1521	MC CATERING	4065 WIGHTMAN ST	Low	5963	Eating/Drinking Establishments	All	X	
1522	MC CONNELL CABINETS, INC.	13110 LOUDEN LN	Low	1751	Other Contractor	All	X	
1523	MC PAINTING	2525 RAMONA DR	Low	1721	Painting/Coating	All	X	
1524	MCBRIDE DOOR & HARDWARE INC	13811 DANIELSON ST	Low	1799	Other Contractor	All	X	
1525	MCCARTY CONSTRUCTION	4995 AVALON RIDGE PKWY	Low	1599	Other Contractor	All	X	
1526	MCGUIRE CONSTRUCTION	252 DAHLIA AVE	Low	1542	Other Contractor	All	X	
1527	MCKAY ROOFING CO, INC	10622 KENNEY ST	Low	1761	Other Contractor	All	X	
1528	MCKOWSKI'S MAINTENANCE SYSTEM	12125 PAINE ST	Low	1799	Other Contractor	All	X	
1529	MCMAHON STEEL CO., INC	6795 CALLE DE LINEA	Low	1791	Other Contractor	All	X	
1530	MEGA ENGINEERING CO	12215 HIGHWAY 67	Low	1794	Other Contractor	All	X	
1531	MENATI HANDY MAN SERV	511 E SAN YSIDRO BLVD	Low	7699	Equipment Repair	All	X	
1532	MERINO LANDSCAPE INC	2556 PALM AVE	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1533	MERZ CONSTRUCTION COMPANY	646 GRAND AVE	Low	1599	Other Contractor	All	X	
1534	METAL TECH CONSTRUCTION	14223 IRONBARK AVE	Low	1799	Other Contractor	All	X	
1535	METCOE SKYLIGHTS SPECIALTIES	1715 W 135TH ST	Low	1799	Other Contractor	All	X	
1536	MICHAEL'S PLUMBING-ELECTRICAL BUILDING REPAIRS	8512 PASEO LADERA	Low	1799	Other Contractor	All	X	
1537	MIGUEL SIMPSON ENGINEERING-EQUIP	722 ELM AVE	Low	1599	Other Contractor	All	X	
1538	MIKE'S CATERING	2849 RANCHO RIO CHICO	Low	5963	Eating/Drinking Establishments	All	X	
1539	MILESTONE BUILDER CO	8640 ILDICA ST	Low	1599	Other Contractor	All	X	
1540	MILKS, JOHN	303 GREENVIEW RD	Low	1799	Other Contractor	All	X	
1541	MILLER BROOKS ENVIROMENTAL	2124 MAIN ST	Low	1599	Other Contractor	All	X	
1542	MINSHEW BROTHERS STEEL CONSTRU	PO BOX 1000	Low	1791	Other Contractor	All	X	
1543	MIRSTONE PLASTERING INC	PO BOX 5664	Low	1742	Painting/Coating	All	X	
1544	MISSION BUILDERS HOME IMPROVEM	7364 EL CAJON BLVD	Low	1521	Other Contractor	All	X	
1545	MISSION OLS OF ESCONDIDO	755 W GRAND AVE	Low	1799	Other Contractor	All	X	
1546	MISSION VALLEY ROOFING INC	9908 PROSPECT AVE	Low	1761	Other Contractor	All	X	
1547	MIT ENGINEERING & CONST	3720 OCEANIC WAY	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1548	MITCHELL MECHANICAL	13424 JULIAN AVE	Low	1711	Other Contractor	All	X	
1549	MITSUBISHI ELECTRIC &	5665 PLAZA DR	Low	1796	Other Contractor	All	X	
1550	MJB HEATING & AIR CONDITIONING	LA MIRADA DR	Low	1711	Other Contractor	All	X	
1551	MJC CONSTRUCTION	3015 SYLVIA ST	Low	1599	Other Contractor	All	X	
1552	MOD SPACE	1200 SWEDESFORD RD	Low	1599	Other Contractor	All	X	
1553	MODERN MASONRY	1168 GREENFIELD DR	Low	1741	Masonry	All	X	
1554	MONTGOMERY GENERAL CONTRACTING INC	7084 SPRINGFORD AVE	Low	1599	Other Contractor	All	X	
1555	MONTIJOS BACKHOE INC	405 PALM AVE	Low	1794	Other Contractor	All	X	
1556	MOODY'S LUNCH SERVICE	4637 MARKET ST	Low	5963	Eating/Drinking Establishments	All	X	
1557	MORENO ELECTRIC	3991 RENE DR	Low	1731	Other Contractor	All	X	
1558	MORRISSEY CONSTRUCTION CO	3740 OCEANIC WAY	Low	1599	Other Contractor	All	X	
1559	MORROW-MEADOWS CORRATION	231 BENTON COURT	Low	1731	Other Contractor	All	X	
1560	MOTTA CONCRETE CONSTRUCTION, A CA CORP	429 DAISY LN , B	Low	1799	Other Contractor	All	X	
1561	MR CONSTRUCTION	4941 CRESITA DR	Low	1599	Other Contractor	All	X	
1562	MR ROOTER PLUMBING	5665 KEARNY VILLA RD	Low	1711	Other Contractor	All	X	
1563	MR.NEON INC.	3106 MAIN ST	Low	1799	Other Contractor	All	X	
1564	MSB GENERAL CONTRACTORS	30665 OLD HIGHWAY 395	Low	1599	Other Contractor	All	X	
1565	MTZ CONSTRUCTION	105 W 35TH ST , P	Low	1599	Other Contractor	All	X	
1566	MUNDY ELECTRIC	720 E WALNUT AVE	Low	1731	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1567	MURRAY CONSTRUCTION	PO BOX 900985	Low	1599	Other Contractor	All	X	
1568	MY PLUMBER OF SAN DIEGO LLP	5490 COMPLEX ST	Low	1711	Other Contractor	All	X	
1569	NAKAMURA - BEEMAN, INC.	8520 WELLSFORD PL	Low	1599	Other Contractor	All	X	
1570	NATIONAL AIR INC	2053 KURTZ ST	Low	1711	Other Contractor	All	X	
1571	NATIONAL CITY ELECTRIC	2424 J AVENUE	Low	1731	Other Contractor	All	X	
1572	NATIONAL CONST. RENTALS, INC.	15319 CHATSWORTH ST	Low	1799	Other Contractor	All	X	
1573	NATIONAL ELECTRIC WORKS INC	4440 RAINIER AVE	Low	1731	Other Contractor	All	X	
1574	NATIONAL PETROLEUM INC	2005 MAIN ST	Low	5172	Wholesale/Storage/Warehousing	All	X	
1575	NATIONAL SIGN	13580 5TH ST	Low	1731	Other Contractor	All	X	
1576	NATON ENGINEERING INC	4935 2ND ST	Low	1599	Other Contractor	All	X	
1577	NATON ENGINEERING, INC	4935 2ND ST	Low	1599	Other Contractor	All	X	
1578	NEAL ELECTRIC	13250 KIRKHAM WAY	Low	1799	Other Contractor	All	X	
1579	NEON JUNGLE OF SAN DIEGO	PO BOX 121485	Low	1731	Other Contractor	All	X	
1580	NESTLE WATERS NORTH AMERICA IN	777 W PUTNAM AVE	Low	5963	Eating/Drinking Establishments	All	X	
1581	NETWORK COMMUNICATIONS INSTALL	2478 FENDER AVE	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1582	NEW CASTLE BLINDS CO	2775 NEWCASTLE WAY	Low	1799	Other Contractor	All	X	
1583	NEW DIMENSION MASONRY INC	1018 CUDAHY PL , A	Low	1741	Masonry	All	X	
1584	NEW YORK ANCOR, INC	831 JAMES ST	Low	1542	Other Contractor	All	X	
1585	NEWEST CONSTRUCTION CO	7964 ARJONS DR , A	Low	1599	Other Contractor	All	X	
1586	NISSHO OF CALIFORNIA INC	1902 S SANTA FE AVE	Low	0781	Landscaping	All	X	
1587	NIXTERMITE INC.	5080 BONITA RD , A2	Low	7342	Pest Control	All	X	
1588	NORKO ENTERPRISES	22156 DARDENNE ST	Low	1799	Other Contractor	All	X	
1589	NORTH COUNTY ACOUSTICS	8315 MIRALANI DR	Low	1799	Other Contractor	All	X	
1590	NORTH COUNTY SOLAR	825 RTER ST	Low	1799	Other Contractor	All	X	
1591	NORTHWEST PUMP & EQUIPMENT CO	1785 LOGAN AVE	Low	7699	Equipment Repair	All	X	
1592	NRC ENVIROMENTAL SERVICES INC	3500 ESTUDILLO ST	Low	1799	Other Contractor	All	X	
1593	NU FLOW AMERICA INC	7150 CARROLL RD	Low	1711	Other Contractor	All	X	
1594	O.D.L.D. CONSTRUCTION	2339 MADRONCILLO ST	Low	1542	Other Contractor	All	X	
1595	OAK ISLAND HEATING & A/C	1250 PACIFIC OAKS PL	Low	1711	Other Contractor	All	X	
1596	OCAM CONSTRUCTION	PO BOX 6271	Low	1599	Other Contractor	All	X	
1597	OCEAN WEST BUILDERS INC	12625 DANIELSON CT	Low	1542	Other Contractor	All	X	
1598	OCHOA ELECTRIC	731 EMORY ST	Low	1731	Other Contractor	All	X	
1599	OJ INSULATION CO INC	600 S VINCENT AVE	Low	1742	Painting/Coating	All	X	
1600	OJ INSULATION LP	495 S HIGH ST	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1601	OLSEN, D L, & ASSOCIATES INC	5234 CUSHMAN PL	Low	1799	Other Contractor	All	X	
1602	OLSON URBAN HOUSING LP	610 W ASH ST	Low	1542	Other Contractor	All	X	
1603	OMC CONSTRUCTION	8 VALVA ST	Low	1599	Other Contractor	All	X	
1604	ONTIVEROS CONSTRUCTION CORP	4240 BONITA RD , B	Low	1521	Other Contractor	All	X	
1605	ORCHID CONSTRUCTION	1107 E CHAPMAN AVE	Low	1599	Other Contractor	All	X	
1606	ORKIN EXTERMINATING INC	12710 MAGNOLIA AVE	Low	7342	Pest Control	All	X	
1607	ORTHO MCNEIL-JANSSEN PHARMACEUTICALS INC	1125 TRENTON HARBOURTON RD	Low	5122	Wholesale/Storage/Warehousing	All	X	
1608	ORTIZ & ALLDS SANDBLASTING &	1313 BAY MARINA DRIVE	Low	1799	Other Contractor	All	X	
1609	OSBORN PLUMBING & HEATING	1603 PALM AVE	Low	1711	Other Contractor	All	X	
1610	OSCAR'S STRIPERS	3839 AVENIDA SAN MIGUEL	Low	1721	Painting/Coating	All	X	
1611	OSSO MILLER PACIFIC	1224 10TH ST	Low	1599	Other Contractor	All	X	
1612	OTIS ELEVATOR COMPANY	4619 VIEWRIDGE AVE	Low	1799	Other Contractor	All	X	
1613	OVERLAND CONTRACTING	9820 WILLOW CREEK RD	Low	1599	Other Contractor	All	X	
1614	OZZYS PLUMBING & DRAIN SVCS	BOX 390215	Low	1711	Other Contractor	All	X	
1615	PACIFIC BUILDERS HRDWR & LIGHT	2439 CADES WAY	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1616	PACIFIC BUILDING GROUP	9752 ASPEN CREEK CT	Low	1599	Other Contractor	All	X	
1617	PACIFIC COAST INTERIORS	7915 RUFFNER AVE	Low	1599	Other Contractor	All	X	
1618	PACIFIC COAST STEEL	4805 MURPHY CANYON RD	Low	1799	Other Contractor	All	X	
1619	PACIFIC EROSION CONTROL	5520 WELLESLEY ST	Low	1599	Other Contractor	All	X	
1620	PACIFIC GRADING & EROSION CONTROL, INC	5520 WELLESLEY ST	Low	1799	Other Contractor	All	X	
1621	PACIFIC HOMEWORKS, INC	4898 RONSON CT , G-H	Low	1521	Other Contractor	All	X	
1622	PACIFIC LATH & PLASTER INC	360 S SPRUCE ST	Low	1742	Painting/Coating	All	X	
1623	PACIFIC PRODUCTION PLUMBING	4055 TRAIL CREEK RD	Low	1711	Other Contractor	All	X	
1624	PACIFIC SCENE HOMES	2505 CONGRESS ST	Low	1542	Other Contractor	All	X	
1625	PACIFIC SIGN CONSTRUCTION INC	12339 OAK KNOLL RD	Low	1731	Other Contractor	All	X	
1626	PACIFIC SOILS ENGINEERING INC	PO BOX 2249	Low	1799	Other Contractor	All	X	
1627	PACIFIC STRUCTURES CONSTRUCTION, INC	101 STATE PL , E	Low	1799	Other Contractor	All	X	
1628	PACIFIC SUN OL AND SPA	8550 PRODUCTION AVE	Low	1799	Other Contractor	All	X	
1629	PACIFIC WATERPROOFING & RESTORATION, INC	3429 MONA BLVD, K	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1630	PALACIOS CONSTRUCTION	167 W HALL AVE	Low	1599	Other Contractor	All	X	
1631	PALMER PAINTING CO	8104 CENTER ST	Low	1721	Painting/Coating	All	X	
1632	PALOMAR GRADING & PAVING, INC	2150 N CENTRE CITY PKWY , C	Low	1599	Other Contractor	All	X	
1633	PAN AMERICAN TENTS	1447 VIRGINIA AVE	Low	7359	Vehicle/Equipment Rental	All	X	
1634	PAN WO CONSTRUCTION	4055 WILSHIRE BLVD	Low	1521	Other Contractor	All	X	
1635	PAN WO CONSTRUCTION	2720 E PLAZA BLVD , Y-F	Low	1599	Other Contractor	All	X	
1636	PAR ELECTRICAL CONTRACTORS	4770 N BELLEVIEW AVE	Low	1731	Other Contractor	All	X	
1637	PARACLETE FIRE & SAFETY, INC	2950 SATURN ST , I	Low	1799	Other Contractor	All	X	
1638	PARADIGM ELECTRIC	1859 MANZANA WAY	Low	1731	Other Contractor	All	X	
1639	PARADISE CREEK HOLDING CORP	9948 HIBERT ST	Low	1531	Other Contractor	All	X	
1640	PARADISE ROOFING CO INC	BELL BLUFF AVE	Low	1761	Other Contractor	All	X	
1641	PARAMOUNT FIRE SYSTEM INC	PO BOX 713194	Low	1731	Other Contractor	All	X	
1642	PARAMOUNT LIGHTING	14035 KIRKHAM WAY	Low	5023	Wholesale/Storage/Warehousing	All	X	
1643	PATITO CATERING	2074 NATIONAL AVE	Low	5963	Eating/Drinking Establishments	All	X	
1644	PATITO CATERING	4582 BOYLSTON ST	Low	5963	Eating/Drinking Establishments	All	X	
1645	PAUL HANSEN EQUIPMENT INC.	S MARSHALL AVE	Low	1599	Other Contractor	All	X	
1646	PAULEY CONSTRUCTION	2021 W MELINDA LN	Low	1623	Other Contractor	All	X	
1647	PAULIE'S PIZZA KITCHEN BBQ	10423 SAN DIEGO MISSION RD	Low	5812	Eating/Drinking Establishments	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1648	PAVEMENT RECYCLING SYSTEMS INC	121 N MAIN ST	Low	1599	Other Contractor	All	X	
1649	PAYCO SPECIALTIES	120 N 2ND AVE	Low	1799	Other Contractor	All	X	
1650	PC LIGHTING AND ELECTRIC	5331 EL DORADO DR	Low	1731	Other Contractor	All	X	
1651	PDI COATINGS, INC	PO BOX 682	Low	1799	Other Contractor	All	X	
1652	PEARSON FORD COMPANY	4300 EL CAJON BLVD	Low	5511	Vehicle Dealers	All	X	
1653	PENHALL COMPANY	PO BOX 4609	Low	1799	Other Contractor	All	X	
1654	PENNZOIL-QUAKER STATE CO	3430 E 26TH ST	Low	5013	Auto Supplies	All	X	
1655	PETERS & ASSOC	800 CALLE PLUMA	Low	1599	Other Contractor	All	X	
1656	PHILIP CHODUR	4538 CASS ST	Low	1521	Other Contractor	All	X	
1657	PHONE SHOP, THE	835 D AVENUE	Low	1799	Other Contractor	All	X	
1658	PHONG TRUONG LAWN SERVICE	2131 ESTELA DR	Low	0782	Landscaping	All	X	
1659	PINE TREE LUMBER CO LP	707 N ANDREASEN DR	Low	5211	Building Materials	All	X	
1660	PITELO'S LANDSCAPING	BOX 26958	Low	1799	Other Contractor	All	X	
1661	PLANETBIDS INC	20929 VENTURA BLVD	Low	7699	Equipment Repair	All	X	
1662	PRATT EQUIPMENT CORP	PO BOX 230026	Low	1599	Other Contractor	All	X	
1663	PRC MECHANICAL	3249 CASITAS AVE	Low	1711	Other Contractor	All	X	
1664	PREMIER FIRE PROTECTION	PO BOX 2027	Low	1731	Other Contractor	All	X	
1665	PREMIER PLUMBING COMPANY	2259 HAMNER AVE	Low	1799	Other Contractor	All	X	
1666	PREMIER ROOFING INC	9054 OLIVE DR	Low	1761	Other Contractor	All	X	
1667	PREMIER ROOFING, INC	9054 OLIVE DR	Low	1761	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1668	PREMIER TILE & MARBLE	798 MONTEREY PASS RD	Low	1741	Masonry	All	X	
1669	PREMIUM PLUMBING INC	43085 CORTE SALAMANCA	Low	1711	Other Contractor	All	X	
1670	PREMIUM ROOF SERVICES	864 34TH ST	Low	1761	Other Contractor	All	X	
1671	PREVOST CONSTRUCTION INC	400 S SIERRA AVE	Low	1599	Other Contractor	All	X	
1672	PRIDE FIRE SYSTEMS, INC	1900 W BURBANK BLVD	Low	1799	Other Contractor	All	X	
1673	PRIME CO PAINTING, INC	1107 S CLEVELAND ST	Low	1721	Painting/Coating	All	X	
1674	PRIMETIME CONSTRUCTION INC	15417 OLDE HIGHWAY 80	Low	1623	Other Contractor	All	X	
1675	PRO DRAIN AND PLUMBING SERVICE	PO BOX 917	Low	1711	Other Contractor	All	X	
1676	PROCOM ELECTRIC	7 GLEN IRIS	Low	1731	Other Contractor	All	X	
1677	PROFESSIONAL DOOR SYSTEMS	1552 S ANAHEIM BLVD , C	Low	1799	Other Contractor	All	X	
1678	PROGRESSIVE SERVICES, INC	23 N 35TH AVE	Low	1761	Other Contractor	All	X	
1679	PROMOTIONAL DESIGN GROUP	9872 RUSH ST	Low	7359	Vehicle/Equipment Rental	All	X	
1680	PROMOTIONAL SIGNS	20361 HERMANA CIR	Low	1799	Other Contractor	All	X	
1681	PROSPECTRA CONTRACT FLOORING	PO BOX 2128	Low	1752	Other Contractor	All	X	
1682	PRO-TECH FIRE PROTECTION SYST	8540 YOUNGER CREEK DR	Low	1731	Other Contractor	All	X	
1683	PROWALL LATH & PLASTER INC	360 S SPRUCE ST	Low	1742	Painting/Coating	All	X	
1684	PRP BUILDERS, INC	132 E PAISLEY ST	Low	1521	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1685	PS SERVICES, INC	2820 E GRETTA LN	Low	1799	Other Contractor	All	X	
1686	PYKLES PLUMBING	6127 LAKE MURRAY BLVD	Low	1711	Other Contractor	All	X	
1687	PYRO-COMM SYSTEMS, INC	15531 CONTAINER LN	Low	1731	Other Contractor	All	X	
1688	QUALITY COUNTERTOPS, INC	1739 N CASE ST	Low	1799	Other Contractor	All	X	
1689	QUALITY GENERAL ENGINEERING	209 3RD AVE	Low	1599	Other Contractor	All	X	
1690	QUALITY PAINTING #1	1292 SITAS RD	Low	1799	Other Contractor	All	X	
1691	QUALITY PAINTING & WALLCOVER	8340 CAMINO SANTA FE , F	Low	1721	Painting/Coating	All	X	
1692	R & R SOLUTIONS, INC	22343 LA PALMA AVE	Low	1599	Other Contractor	All	X	
1693	R & T ELECTRIC	1636 MADRONE GLN	Low	1799	Other Contractor	All	X	
1694	R C P BLOCK & BRICK INC	8240 BROADWAY	Low	5211	Building Materials	All	X	
1695	R D ENGINEERING & CONSTRUCTION	1660 N MAGNOLIA AVE	Low	1599	Other Contractor	All	X	
1696	R L MAYS CONSTRUCTION INC	5482 COMPLEX ST	Low	1599	Other Contractor	All	X	
1697	R.A. CONSTRUCTION	1232 EARLE DRIVE	Low	1521	Other Contractor	All	X	
1698	R.A. SCHIREIBER PLUMBING INC	PO BOX 1315	Low	1799	Other Contractor	All	X	
1699	R.A.D. CONSTRUCTION	3479 CITRUS ST , A	Low	1599	Other Contractor	All	X	
1700	R.E. STAITE ENGINEERING, INC.	2140 TIDELANDS AVE	Low	1629	Other Contractor	All	X	
1701	RAMONA PAVING & CONST CORP INC	1303 OLIVE ST	Low	1599	Other Contractor	All	X	
1702	RAMY ELECTRIC	906 12TH ST	Low	1731	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1703	RANDALL BOONE SIGN & LIGHTING	919 D CALLE AMANECOR D	Low	1799	Other Contractor	All	X	
1704	RANERI & LONG ROOFING CO INC	13881 HIGHWAY 8 BUSINESS	Low	1761	Other Contractor	All	X	
1705	RAOZ GENERAL ENGINEERING	PO BOX 3127	Low	1599	Other Contractor	All	X	
1706	RAPHAEL'S PARTY RENTALS, INC	8606 MIRAMAR RD	Low	7359	Vehicle/Equipment Rental	All	X	
1707	RAYMOND-SAN DIEGO	5490 COMPLEX ST	Low	1521	Other Contractor	All	X	
1708	RB EXPRESS ELECTRIC INC	420 WESTBY ST	Low	1731	Other Contractor	All	X	
1709	RCR PLUMBING AND MECHANICAL, INC	12620 MAGNOLIA AVE	Low	1711	Other Contractor	All	X	
1710	RD ENGINEERING & CONST, INC	1660 N MAGNOLIA AVE	Low	1599	Other Contractor	All	X	
1711	RDC ROOFING DISCOUNT CO	16604 ADRIENNE WAY	Low	1761	Other Contractor	All	X	
1712	REAL TIME PLUMBING	180 MACE ST , B7	Low	1711	Other Contractor	All	X	
1713	REBBECA'S ICE CREAM MOBIL	PO BOX 4382	Low	5963	Eating/Drinking Establishments	All	X	
1714	RED TRUCK FIRE & SAFETY CO	10459 ROSELLE ST, A	Low	1799	Other Contractor	All	X	
1715	REFRIGERATION SYSTEMS AND CONSTRUCTION INC	2135 E UNIVERSITY DR	Low	1799	Other Contractor	All	X	
1716	RELY-ON SPRAY BOOTH CO. INC	12123 CLARK ST	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1717	REMEDIATION SYSTEM SERVICES	PO BOX 891120	Low	1599	Other Contractor	All	X	
1718	REMODELING TIME	1530 JAMACHA RD, P	Low	1599	Other Contractor	All	X	
1719	REPUBLIC INTELLIGENT TRANSRTATION SVC, INC	371 BEL MARIN KEYS BLVD	Low	1599	Other Contractor	All	X	
1720	RESIDENTIAL WALL SYSTEMS	1674 RAILROAD ST	Low	1599	Other Contractor	All	X	
1721	RESIDENTIAL WALL SYSTEMS	21778 TEMESCAL CANYON RD	Low	1742	Painting/Coating	All	X	
1722	RESOURCES AMERICA	3088 SUMAC RD	Low	1599	Other Contractor	All	X	
1723	RETAIL CONSTRUCTION SERVICES, INC	11343 N 39TH ST	Low	1599	Other Contractor	All	X	
1724	RETCON	PO BOX 1629	Low	1799	Other Contractor	All	X	
1725	RHULE CONSTRUCTION CO INC	15330 AVENUE OF SCIENCE	Low	1599	Other Contractor	All	X	
1726	RICARDO SANDOVAL FLOOR COVRING	2440 NEWELL ST	Low	1799	Other Contractor	All	X	
1727	RICHARD'S ICE CREAM	445 CUYAMACA AVE	Low	5963	Eating/Drinking Establishments	All	X	
1728	RICHARDSON STEEL INC	9102 HARNESS ST	Low	1791	Other Contractor	All	X	
1729	RICK VILLARIN AUTOMATIC FIRE	1620 B AVENUE	Low	1799	Other Contractor	All	X	
1730	RICK'S MOBILE GLASS	507 G AVENUE	Low	7699	Equipment Repair	All	X	
1731	RIGHT CHOICE PROFESSIONAL SVCS	82 E DONAHOE ST	Low	1799	Other Contractor	All	X	
1732	RIGOBERTO VALENCIA FUENTES	325 54TH ST	Low	0781	Landscaping	All	X	
1733	RITCHIE PLUMBING INC	2501 CLEVELAND AVE	Low	1711	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1734	RITE-WAY FLOORING, INC	13933 OAKS AVE	Low	1752	Other Contractor	All	X	
1735	RITTER, RANDY	470 D ST	Low	0782	Landscaping	All	X	
1736	RITTER, RANDY	470 D ST	Low	0782	Landscaping	All	X	
1737	RIVER FIRE & SECURITY, INC	10639 ROSELLE ST, B	Low	1799	Other Contractor	All	X	
1738	RIVERA'S IRON WORKS INC	2534 S SANTA FE AVE	Low	1791	Other Contractor	All	X	
1739	RJ DAUM CONSTRUCTION	7562 TRADE ST	Low	1599	Other Contractor	All	X	
1740	ROBERT SMITH	26871 CALLE ALCALA	Low	1799	Other Contractor	All	X	
1741	ROBERT THOMAS-GENERAL CONTRACTOR	6657 RIDGE MANOR AVE	Low	1599	Other Contractor	All	X	
1742	ROBERTS ELECTRIC SERVICE, INC	302 WASHINGTON ST	Low	1731	Other Contractor	All	X	
1743	ROCA CONSTRUCTION SERVICES	1617 GRAND AVE	Low	1599	Other Contractor	All	X	
1744	ROCHINY EXHAUST CLEANING CO	2195 LOGAN AVE	Low	7699	Equipment Repair	All	X	
1745	ROCK FIRM CONSTRUCTION	637 J ST	Low	1521	Other Contractor	All	X	
1746	ROCKWALL CONSTRUCTION CO	20530 EARLGATE ST	Low	1542	Other Contractor	All	X	
1747	ROCKY COAST FRAMERS INC	135 SO MARKET PL	Low	1599	Other Contractor	All	X	
1748	ROEJACK ROOFING INC	1107 PETREE ST	Low	1761	Other Contractor	All	X	
1749	ROGERS ELECTRIC	2050 MARCONI DR	Low	1731	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1750	ROLLING FRITO-LAY SALES LP	26672 TOWNE CENTRE DR	Low	5149	Wholesale Food	All	X	
1751	ROMICO INC	2057 BARBADOS CV	Low	5145	Wholesale Food	All	X	
1752	RONALD A FETTER GENERAL CONTRACTOR	2916 WINIFRED ST	Low	1599	Other Contractor	All	X	
1753	ROOF CONSTRUCTION	1563 STERLING CT	Low	1761	Other Contractor	All	X	
1754	ROSE REFRIGERATION & A/C	1320 MESA GRANDE PL	Low	1711	Other Contractor	All	X	
1755	ROTO-ROOTER	23311 MADERO	Low	1711	Other Contractor	All	X	
1756	ROWAN ELECTRIC	2782 LOKER AVE W	Low	1731	Other Contractor	All	X	
1757	ROYAL COMMERCIAL CONSTRUCTION	2843 MAIN ST	Low	1599	Other Contractor	All	X	
1758	ROYAL ROOFING	150 NETTLETON RD	Low	1761	Other Contractor	All	X	
1759	RPM WELDING	2970 MAIN ST	Low	1799	Other Contractor	All	X	
1760	RSI ROOFING	8285 BUCKHORN ST	Low	1761	Other Contractor	All	X	
1761	RTILLO CONCRETE	3528 HARRIS ST	Low	1599	Other Contractor	All	X	
1762	RUDOLPH & SLETTEN, INC	1600 SEART BLVD	Low	1599	Other Contractor	All	X	
1763	RUIZ TREE SERVICE	2016 E AVENUE	Low	0783	Landscaping	All	X	
1764	RUSS' BEE REMOVAL	3421 NEWBERRY STREET	Low	7342	Pest Control	All	X	
1765	RUSSELL COKER INC	9409 ABRAHAM WAY	Low	1799	Other Contractor	All	X	
1766	RUSSELL PLUMBING + SUPPLIES	9030 WINTER GARDENS BLVD	Low	1711	Other Contractor	All	X	
1767	S K S INC	9270 DOWDY DR	Low	5172	Wholesale/Storage/Warehousing	All	X	
1768	S O S ROOTER INC	PO BOX 620100	Low	1711	Other Contractor	All	X	
1769	S&J BUILDERS & RESTORATION SVC	10815 WHEATLANDS AVE , J	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1770	SADDLEBACK STEEL FAB, INC	3636 W 1ST ST	Low	1799	Other Contractor	All	X	
1771	SADDLEBACK WATERPROOFING	22521 EMPRESA AVDA	Low	1799	Other Contractor	All	X	
1772	SAFETY-KLEEN SYSTEMS INC.	CLUSTER II BUILDING 3	Low	7699	Equipment Repair	All	X	
1773	SAJO CONSTRUCTION INC.	1320 GRAHAM BLVD	Low	1599	Other Contractor	All	X	
1774	SALAZAR CONCRETE	1110 S 35TH ST	Low	1799	Other Contractor	All	X	
1775	SAM RAMMAHA PAINTING CO, INC	1655 COMMERCE ST	Low	1721	Painting/Coating	All	X	
1776	SAMMONS CONSTRUCTION INC	17769 JESSIE JAMES RD	Low	1542	Other Contractor	All	X	
1777	SAMONCIK CONSTRUCTION CO	5054 VIA PAPEL	Low	1599	Other Contractor	All	X	
1778	SAN DIEGO AIR BALANCE CO INC	1840 COMMERCIAL ST	Low	1799	Other Contractor	All	X	
1779	SAN DIEGO CENTRAL PLUMBING	6152 MISSION GORGE RD	Low	1711	Other Contractor	All	X	
1780	SAN DIEGO CHEMICAL EXHAUST	35 HENSLEY ST	Low	7699	Equipment Repair	All	X	
1781	SAN DIEGO CHILLER SERVICE, INC	4888 RONSON CT , C	Low	1711	Other Contractor	All	X	
1782	SAN DIEGO ELECTRIC SIGN	PO BOX 103	Low	1799	Other Contractor	All	X	
1783	SAN DIEGO FIRE PROTECTION	5862 BOX CANYON RD	Low	1731	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1784	SAN DIEGO JUMPER RENTALS	506 TELEGRAPH CANYON RD , C	Low	7359	Vehicle/Equipment Rental	All	X	
1785	SAN DIEGO MIRROR & WINDOW	2515 INDUSTRY ST	Low	1751	Other Contractor	All	X	
1786	SAN DIEGO PARTY RENTALS	2222 VERUS ST , D	Low	7359	Vehicle/Equipment Rental	All	X	
1787	SANCHEZ ROOFING	3528 CITRUS ST	Low	1761	Other Contractor	All	X	
1788	SANTA FE PLASTER	620 ALPINE WAY	Low	1742	Painting/Coating	All	X	
1789	SANTEE DAIRIES INC	17851 RAILROAD ST	Low	5143	Wholesale Food	All	X	
1790	SCHAFFNERS HEATING & AIR CONDITIONING	235 QUINTARD ST , E110	Low	1799	Other Contractor	All	X	
1791	SCHILLING CORRATION	697 GREENFIELD DR	Low	1623	Other Contractor	All	X	
1792	SCHILLREFF MECHANICAL	7225 PURDUE AVE	Low	1711	Other Contractor	All	X	
1793	SCHMIDT FIRE PROTECTION CO	4760 MURPHY CANYON RD	Low	1799	Other Contractor	All	X	
1794	SCHROEDER CONSTRUCTION & DEV	2691 STATE ST	Low	1599	Other Contractor	All	X	
1795	SCOTT ELECTRIC	PO BOX 754	Low	1731	Other Contractor	All	X	
1796	SCOTT'S DRILLING SERVICE	271 ROYMAR RD , D	Low	1799	Other Contractor	All	X	
1797	SCS FLOORING SYSTEMS	6330 SAN VICENTE BLVD	Low	1752	Other Contractor	All	X	
1798	SD ALLSTATE ROOFING INC	3115 RANCHO OAKS LN	Low	1761	Other Contractor	All	X	
1799	SD DEACON CORP OF CALIFORNIA	7745 GREENBACK LN	Low	1599	Other Contractor	All	X	
1800	SDS ROOFING	8239 WENATCHEE AVE	Low	1761	Other Contractor	All	X	
1801	SECURE ROOFING	1502 SIMPSON WAY	Low	1761	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1802	SECURITY FENCE CO INC	9014 KENWOOD DR	Low	1799	Other Contractor	All	X	
1803	SECURITY SIGNAL DEVICES, INC	1740 N LEMON ST	Low	1731	Other Contractor	All	X	
1804	SELECT ELECTRIC INC	PO BOX 1457	Low	1799	Other Contractor	All	X	
1805	SEQUOIA ROOFING, INC	1476 GLENCREST DR	Low	1761	Other Contractor	All	X	
1806	SERGIO CONSTRUCTION AND REMOD	1833 VIA CAPRI	Low	7699	Equipment Repair	All	X	
1807	SEVEN UP / RC BOTTLING CO OF	5770 MOREHOUSE DR	Low	5199	Wholesale/Storage/Warehousing	All	X	
1808	SEVILLA PLASTERING	1242 DAWSON DR	Low	1742	Painting/Coating	All	X	
1809	SEXTON FIRE PROTECTION	5044 GLEN ST	Low	1799	Other Contractor	All	X	
1810	SHAKE, SHINGLE & ROLL ROOFING INC	3927 ASHFORD ST	Low	1761	Other Contractor	All	X	
1811	SHARP CONSTRUCTION & REMODEL	PO BOX 26864	Low	1542	Other Contractor	All	X	
1812	SHARP CONTRUCTION & REMODELING INC	PO BOX 26864	Low	1522	Other Contractor	All	X	
1813	SHELDON SITE UTILITIES, INC	12255 KIRKHAM RD	Low	1599	Other Contractor	All	X	
1814	SHELLYS DELI CATERING	835 MORRISON ST	Low	5963	Eating/Drinking Establishments	All	X	
1815	SHELLYS DELI CATERING	835 MORRISON ST	Low	5963	Eating/Drinking Establishments	All	X	
1816	SHERWOOD MECHANICAL INC	6630 TOP GUN ST	Low	1711	Other Contractor	All	X	
1817	SHINE ELECTRIC INC	1984 BROWN AVE	Low	1731	Other Contractor	All	X	
1818	SHORTSTOP	314 GLEN CREEK DR	Low	5963	Eating/Drinking Establishments	All	X	
1819	SHOWCASE SERVICES, INC	13100 KIRKHAM WAY, 207	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1820	SHRADER & MARTINEZ	160 DRY CREEK RD	Low	1599	Other Contractor	All	X	
1821	SIEMENS BUILDING TECHNOLOGIES	9835 CARROLL CENTRE RD	Low	1731	Other Contractor	All	X	
1822	SIEMERS ENGINEERING INC	PO BOX 997	Low	1599	Other Contractor	All	X	
1823	SIERRA LANDSCAPE CO	73771 DINAH SHORE DR	Low	1799	Other Contractor	All	X	
1824	SIGN DEVELOPMENT INC	1366 W 9TH ST	Low	1799	Other Contractor	All	X	
1825	SIGN METHODS, INC	1749 E 28TH ST	Low	1799	Other Contractor	All	X	
1826	SIGNAGE SOLUTIONS	1336 S ALLEC ST	Low	1799	Other Contractor	All	X	
1827	SIGNS & SERVICES CO	10980 BOATMAN AVE	Low	1799	Other Contractor	All	X	
1828	SIGNTECH ELEC ADVERTISING INC	4444 FEDERAL BLVD	Low	1799	Other Contractor	All	X	
1829	SIGNTECH ELECTRICAL ADVERTISING	4444 FEDERAL BLVD	Low	1799	Other Contractor	All	X	
1830	SILVA, RALPH, PLUMBING	PO BOX 5007	Low	1711	Other Contractor	All	X	
1831	SIMAC CONSTRUCTION INC	2067 WINERIDGE PL , A	Low	1599	Other Contractor	All	X	
1832	SIMON & RICHARD CONSTRUCTION	1530 JAMACHA RD, N	Low	1599	Other Contractor	All	X	
1833	SIMPLEXGRINNELL LP	PO BOX 3042	Low	1799	Other Contractor	All	X	
1834	SITE LINE DOOR & GLASS	2417 E RANCHO DEL AMO PL	Low	1796	Other Contractor	All	X	
1835	SKIP DYE CORP	7710 BALBOA AVE	Low	1799	Other Contractor	All	X	
1836	SKY ROOFING	PO BOX 131434	Low	1761	Other Contractor	All	X	
1837	SLAGILL CORRATION	445 W DOUGLAS AVE	Low	1741	Masonry	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1838	SLUNAKER CONSTRUCTION	3672 CHICAGO AVE	Low	1599	Other Contractor	All	X	
1839	SMITH, H G, LUMBER CO INC	6144 FEDERAL BLVD	Low	5031	Building Materials	All	X	
1840	SMITH, R W, & CO	PO BOX 26160	Low	5099	Wholesale/Storage/Warehousing	All	X	
1841	SOCLARIS CONTRACTING	7437 LOWELL CT	Low	1599	Other Contractor	All	X	
1842	SOLEX CONTRACTING INC	42146 REMINGTON AVE , 7A	Low	1599	Other Contractor	All	X	
1843	SONITROL CORRATION	8 CAMPUS CIR	Low	1731	Other Contractor	All	X	
1844	SOURCE REFRIGERATION & HVAC IN	800 E ORANGETHORPE AVE	Low	1711	Other Contractor	All	X	
1845	SOUTH BAY AUTO PARTS INC	908 3RD AVE	Low	5599	Vehicle Dealers	All	X	
1846	SOUTH BAY ROOTER	1356 EL LUGAR ST	Low	1711	Other Contractor	All	X	
1847	SOUTH COAST EROSION CONTROL	7364 EL CAJON BLVD	Low	1799	Other Contractor	All	X	
1848	SOUTH WESTERN SERVICES	2901 SUFFOLK DR	Low	1521	Other Contractor	All	X	
1849	SOUTHERN CA PLUMBING & DRAIN	PO BOX 1953	Low	1711	Other Contractor	All	X	
1850	SOUTHERN CONTRACTING CO	BOX 445	Low	1731	Other Contractor	All	X	
1851	SOUTHLAND ERECTORS	2536 S GROVE AVE	Low	1791	Other Contractor	All	X	
1852	SOUTHLAND FIRE PROTECTION INC	4733 INT LOMA AVE	Low	1731	Other Contractor	All	X	
1853	SOUTHWEST SIGN COMPANY	1696 COMMERCE ST	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1854	SOUTHWESTERN EQUIPMENT LLC	5520 WELLESLEY ST	Low	1599	Other Contractor	All	X	
1855	SPECIFIED PRODUCTS INC	9929 HIBERT ST , D	Low	1799	Other Contractor	All	X	
1856	SPECTRUM RENOVATIONS	7283 ENGINEER RD , E	Low	1599	Other Contractor	All	X	
1857	SPEEDY PLUMBING	9830 DALE AVE	Low	1711	Other Contractor	All	X	
1858	SPREKELMEYER & MUESSIGMAN ELCT	9625 MISSION GORGE RD , B2	Low	1731	Other Contractor	All	X	
1859	SPRING VALLEY INSULATION CONTRACTORS	3151 BANCROFT DR	Low	1599	Other Contractor	All	X	
1860	SPRINT TELEPHONY PCS LP	6391 SPRINT PKWY	Low	1542	Other Contractor	All	X	
1861	SQUIRES-BELT MATERIAL CO INC	PO BOX 152047	Low	5211	Building Materials	All	X	
1862	SSQUARED CUSTOMIZED	PO BOX 369	Low	1599	Other Contractor	All	X	
1863	SSW CONTRUCTION INC	500 GIUSEPPE CT	Low	1599	Other Contractor	All	X	
1864	STANDARD DRYWALL, INC.	PO BOX 730	Low	1599	Other Contractor	All	X	
1865	STANDARD PLUMBING & INDUSTRIAL	3864 40TH ST	Low	5074	Wholesale/Storage/Warehousing	All	X	
1866	STANFORD SIGN INC.	2556 FAIVRE ST	Low	1799	Other Contractor	All	X	
1867	STANLEY ACCESS TECHNOLOGIES	6161 E 75TH ST	Low	1799	Other Contractor	All	X	
1868	STAR ELECTRICAL SIGNS	2132 S GROVE AVE , H	Low	1731	Other Contractor	All	X	
1869	STEEL MOUNTAIN CONSTRUCTION	PO BOX 21209	Low	1599	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1870	STEINY AND COMPANY, INC.	1083 N CUYAMACA ST	Low	1731	Other Contractor	All	X	
1871	STEPHEN SMITH PAINTING	1448 NARANCA AVE	Low	1721	Painting/Coating	All	X	
1872	STONE & NELSON CONSTRUCTION	205 CLAYDELLE AVE	Low	1599	Other Contractor	All	X	
1873	STONE SURGEONS	184 N DEL MAR AVE	Low	1741	Masonry	All	X	
1874	STRAIGHTLINE ENGINEERING, INC	PO BOX 1184	Low	1599	Other Contractor	All	X	
1875	STREMICKS HERITAGE FOODS LLC	4002 WESTMINSTER AVE	Low	5451	Eating/Drinking Establishments	All	X	
1876	STRUCT-ONE INCORRATED	1269 EMORY ST	Low	1522	Other Contractor	All	X	
1877	SUB-TREAT TERMITE CONTROL, INC	60200 JUNIPER RD	Low	7342	Pest Control	All	X	
1878	SUCCESS SIGN GROUP	2812 PECK RD	Low	1799	Other Contractor	All	X	
1879	SULLY JONES CONTRACTORS, INC.	1528 PIONEER WAY	Low	1761	Other Contractor	All	X	
1880	SUMMIT EROSION CONTROL, INC	PO BOX 1595	Low	1599	Other Contractor	All	X	
1881	SUN COAST DRYWALL SYSTEMS INC	4401 TWAIN AVE	Low	1742	Painting/Coating	All	X	
1882	SUNDOWN LIGHTING & ELECTRICAL	6068 CORTE DEL CEDRO	Low	1731	Other Contractor	All	X	
1883	SUNRISE PLUMBING	539 TELEGRAPH CANYON	Low	1711	Other Contractor	All	X	
1884	SUNRIZE STAGING INC	2151 ENTERPRISE ST , C	Low	1799	Other Contractor	All	X	
1885	SUNSTATE TILE CONTRACTORS INC	7579 CONVOY CT	Low	1743	Masonry	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1886	SUPER JUMPERS	1324 VILLA TEMPRA DR	Low	7359	Vehicle/Equipment Rental	All	X	
1887	SUPERIOR OLS	1815 VISTA DE LA MONTANA	Low	1799	Other Contractor	All	X	
1888	SUPERIOR READY MIX CONCRETE LP	1508 MISSION RD	Low	1599	Other Contractor	All	X	
1889	SUPERIOR ROOFING	PO BOX 2635	Low	1761	Other Contractor	All	X	
1890	SUPERIOR ROOFING	1309 DEERBROOK DR	Low	1761	Other Contractor	All	X	
1891	SUPERIOR WALL SYSTEMS, INC	1232 E ORANGETHORPE AVE	Low	1799	Other Contractor	All	X	
1892	SURECOAT, INC	2875 EXECUTIVE PL	Low	1721	Painting/Coating	All	X	
1893	SURECRAFT SUPPLY INC	2875 EXECUTIVE PL	Low	1751	Other Contractor	All	X	
1894	SVL ELECTRIC	2361 GROVE AVE	Low	1731	Other Contractor	All	X	
1895	SWAIN SIGN INC.	1384 E 5TH ST	Low	1799	Other Contractor	All	X	
1896	SWEETWATER PLUMBING & HARDWARE	8300 PARADISE VALLEY RD	Low	1711	Other Contractor	All	X	
1897	SWIFT COMMUNICATIONS INC	4365 MEADE AVE	Low	1731	Other Contractor	All	X	
1898	SWIMFARR SWIMSAFE INC	PO BOX 532355	Low	7999	Golf Courses/Parks	All	X	
1899	SWINERTON BUILDERS	17140 BERNARDO CENTER DR	Low	1599	Other Contractor	All	X	
1900	SWINSON ELECTRIC	4885 RONSON CT, L	Low	1731	Other Contractor	All	X	
1901	SYLVESTER ROOFING CO INC	306 N EL NORTE PKWY 371	Low	1761	Other Contractor	All	X	
1902	SYMONS FIRE PROTECTION, INC.	1050 PIONEER WAY, R	Low	1711	Other Contractor	All	X	
1903	SYSTEMS OPERATION SERVICES	154 ABERDEEN DR	Low	1711	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1904	T & M MANUFACTURED HOUSING	140 E STETSON AVE	Low	1599	Other Contractor	All	X	
1905	T AND D COMMUNICATIONS, INC	500 HARRINGTON ST , C2	Low	1799	Other Contractor	All	X	
1906	T B PENICK & SONS INC	9747 OLSON DR	Low	1599	Other Contractor	All	X	
1907	T C CONSTRUCTION CO INC	10540 PROSPECT AVE	Low	1623	Other Contractor	All	X	
1908	T C P COMPANY	3454 HARRIS ST , C	Low	1711	Other Contractor	All	X	
1909	T.V. CONSTRUCTION	12737 WESTLY LN	Low	1599	Other Contractor	All	X	
1910	TA HUGHES CONST INC	368 ALPINE HEIGHTS RD	Low	1599	Other Contractor	All	X	
1911	TACOS Y TAMALES MEXICO	4437 CRAIGIE ST	Low	5963	Eating/Drinking Establishments	All	X	
1912	TACOS Y TAMALES MEXICO	4437 CRAIGIE ST	Low	5963	Eating/Drinking Establishments	All	X	
1913	TAFOYA & ASSOCIATES	15471 CENTRAL AVE	Low	1599	Other Contractor	All	X	
1914	TAIT ENVIRONMENTAL SYSTEMS	701 PARK CENTER DR	Low	1629	Other Contractor	All	X	
1915	TAK CONSTRUCTION SERVICES	1497 E VALLEY PKWY , D	Low	1599	Other Contractor	All	X	
1916	TAKO & TYKO SIGN CO	2420 TORREY PINES RD , A204	Low	1799	Other Contractor	All	X	
1917	TCB ELECTRIC	6422 EDMONDS ST	Low	1731	Other Contractor	All	X	
1918	TEG/LVI ENVIRONMENTAL, INC	5780 CHESAPEAKE CT	Low	1799	Other Contractor	All	X	
1919	TEMP WER SYSTEMS	625 FEE ANA ST	Low	1799	Other Contractor	All	X	
1920	TERMINIX INTERNATIONAL LP, THE	860 RIDGE LAKE BLVD	Low	7342	Pest Control	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1921	TESCO CONSTRUCTION INC	380 BEINORIS DR	Low	1599	Other Contractor	All	X	
1922	TEST AMERICA DRILLING	7888 OTHELLO AVE	Low	1542	Other Contractor	All	X	
1923	TEX ICE CREAM	4581 WILSON AVE	Low	5963	Eating/Drinking Establishments	All	X	
1924	TFW CONSTRUCTION/DEVELOPMENT	PO BOX 220	Low	1542	Other Contractor	All	X	
1925	THE AUGUSTINE COMPANY	2830 VIA ORANGE WAY , H	Low	1542	Other Contractor	All	X	
1926	THE BRICKMAN GROUP LTD LLC	6218 FAIRMOUNT AVE	Low	1599	Other Contractor	All	X	
1927	THE HOME DET AT HOME SERVICES	13250 GREGG ST , A2	Low	1599	Other Contractor	All	X	
1928	THE HVAC EXCHANGE INC	5874 MADRA AVE	Low	1711	Other Contractor	All	X	
1929	THE LAND STEWARDS	455 N TWIN OAKS VALLEY RD	Low	1799	Other Contractor	All	X	
1930	THE LEONARD CO	6195 ALPINE BLVD	Low	1599	Other Contractor	All	X	
1931	THE PATIO CO	9607 LOS COCHES RD	Low	1599	Other Contractor	All	X	
1932	THE PLUMBING CO INC	9311 DOUGLAS DR	Low	1711	Other Contractor	All	X	
1933	THE SIGN CELLAR INC	4164 S TROPICO DR	Low	1799	Other Contractor	All	X	
1934	THE WATER WAGON, INC	PO BOX 13366	Low	5499	Eating/Drinking Establishments	All	X	
1935	THE WORKS TERMITE CO	119 KEARNEY ST	Low	7342	Pest Control	All	X	
1936	THOMAS ACOUSTICS INC	7605 MONROE ST	Low	1799	Other Contractor	All	X	
1937	THORNTON STEEL & IRON WORKS IN	1323 S STATE COLLEGE PKWY	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1938	THYSSEN KRUPP ELEVATOR CORP	1965 GILLESPIE WAY	Low	1799	Other Contractor	All	X	
1939	TIAGO	1308 DESCANSO AVE	Low	1599	Other Contractor	All	X	
1940	TIDALWAVE ENTERPRISES	1915 PATTIZ AVE	Low	1599	Other Contractor	All	X	
1941	TIERRASANTA HEATING AND AIR	4888 RONSON CT , O	Low	1711	Other Contractor	All	X	
1942	TIKI HUT FOOD CONCEPTS	9450 SCRANTON RD	Low	5812	Eating/Drinking Establishments	All	X	
1943	TIM MOODY CONSTRUCTION INC	PO BOX 20225	Low	1743	Masonry	All	X	
1944	TIMBERWOLFF, CO INC	1659 W ARROW RTE	Low	1599	Other Contractor	All	X	
1945	TJU CONSTRUCTION INC	11864 MORNINGSIDE WAY	Low	1599	Other Contractor	All	X	
1946	TLM PETRO LABOR FORCE, INC	9165 BAYSINGER ST	Low	1599	Other Contractor	All	X	
1947	TM COBB COMPANY	500 PALMYRITA AVE	Low	1799	Other Contractor	All	X	
1948	TNT ELECTRIC SIGN	3080 E 29TH ST	Low	1799	Other Contractor	All	X	
1949	TOM REED GENERAL CONTRACTOR	1721 YALE ST	Low	1599	Other Contractor	All	X	
1950	TOMMY'S QUALITY MEATS	2363 NEWTON AVE , B	Low	5147	Wholesale Food	All	X	
1951	TOP END CONSTRUCTORS, INC	10755 SHERMAN WAY	Low	1799	Other Contractor	All	X	
1952	TORRES GENERAL INC.	10783 JAMACHA BLVD	Low	1751	Other Contractor	All	X	
1953	TOWN & COUNTRY ELECTRIC	1912 SORRENTINO DR	Low	1731	Other Contractor	All	X	
1954	TRAINOR COMMERCIAL CONSTRUCTION, INC	PO BOX 406	Low	1542	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1955	TRC SOLUTIONS, INC	21 TECHNOLOGY DR	Low	1781	Other Contractor	All	X	
1956	TRENCH PLATE RENTAL COMPANY	13217 LAURELDALE AVE	Low	7353	Vehicle/Equipment Rental	All	X	
1957	TRI CITY GLASS OF SAN DIEGO	2555 SWEETWATER SPRINGS BLVD	Low	1799	Other Contractor	All	X	
1958	TRI CITY ROOF COMPANY	41628 EASTMAN DR , A	Low	1799	Other Contractor	All	X	
1959	TRI-CITY FENCE CO, INC	825 W WASHINGTON AVE	Low	1799	Other Contractor	All	X	
1960	TRI-COUNTY DRILLING , INC.	9631 CANDIDA ST	Low	1781	Other Contractor	All	X	
1961	TRIPLE "L" BBQ & CATERING	453 GRAVES AVE	Low	5812	Eating/Drinking Establishments	All	X	
1962	TRI-SIGNAL INTEGRATION, INC	9682 VIA EXCELENCIA	Low	1799	Other Contractor	All	X	
1963	TRI-STAR INTERIORS	20800 DEARBORN ST	Low	1799	Other Contractor	All	X	
1964	TRI-STATE COATINGS INC	161 S MARSHALL AVE	Low	1721	Painting/Coating	All	X	
1965	TROY BEHNEKE	3935 GAYLE ST	Low	1799	Other Contractor	All	X	
1966	TRULY NOLEN OF AMERICA, INC	3636 E SPEEDWAY BLVD	Low	1599	Other Contractor	All	X	
1967	TRUMAN DOOR SYSTEMS, INC.	990 JOSHUA WAY	Low	1751	Other Contractor	All	X	
1968	TSA CONTRACTING, INC	4350 EXECUTIVE DR	Low	1541	Other Contractor	All	X	
1969	TURBO TERMITE & REPAIR	1021 BAY BLVD , A	Low	7342	Pest Control	All	X	
1970	TURNERS RTABLE WELDING INC	573 FLORENCE ST	Low	1799	Other Contractor	All	X	
1971	U.S. FOOD SERVICE	1283 SHERBORN ST	Low	5148	Wholesale Food	All	X	
1972	U.S. FOODSERVICE INC	PO BOX 1749	Low	5199	Wholesale/Storage/Warehousing	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1973	U.S. FOODSERVICE, INC	PO BOX 37155	Low	5149	Wholesale Food	All	X	
1974	ULM PLUMBING & HEATING	7525 MISSION GORGE RD	Low	1711	Other Contractor	All	X	
1975	ULTRASIGNS INC	9025 BALBOA AVE	Low	1799	Other Contractor	All	X	
1976	UNDERGROUND PRECAST SOLUTIONS	10641 PROSPECT AVE	Low	1599	Other Contractor	All	X	
1977	UNIK CUSTOM GLASS & MIRROR	6944 EL CAJON BLVD	Low	1793	Other Contractor	All	X	
1978	UNION PLANING MILL	PO BOX 348	Low	1799	Other Contractor	All	X	
1979	UNISTRUT INTERNATIONAL CORRATION	PLAZA BONITA RD	Low	1799	Other Contractor	All	X	
1980	UNITED FIRE SERVICES, INC	8110 REMMET AVE	Low	1799	Other Contractor	All	X	
1981	UNITED FIRE SERVICES, INC	8110 REMMET AVE	Low	1799	Other Contractor	All	X	
1982	UNIVERSAL AWNING, INC	8656 CREBS AVE	Low	1799	Other Contractor	All	X	
1983	UNIVERSITY AIR & HEATING	7227 UNIVERSITY AVE	Low	1711	Other Contractor	All	X	
1984	UNIVERSITY MECHANICAL & ENG	1168 FESLER ST	Low	1711	Other Contractor	All	X	
1985	USA GAIN 3000 LLC	3870 NIAGARA ST	Low	5143	Wholesale Food	All	X	
1986	USA SHADE & FABRIC STRUCTURES, INC	8505 CHANCELLOR ROW	Low	1599	Other Contractor	All	X	
1987	V A ELECTRIC	750 MY WAY	Low	1731	Other Contractor	All	X	
1988	V FIRE SYSTEMS INC	5051 BROOKS ST	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
1989	VAILSTON COMPANY INC	PO BOX 2504	Low	1599	Other Contractor	All	X	
1990	VALLEY CASEWORK INC	585 VERNON WAY	Low	1751	Other Contractor	All	X	
1991	VAN METER'S ELECTRIC	PO BOX 5396	Low	1731	Other Contractor	All	X	
1992	VANGUARD FIRE PROTECTION, INC	925 INSETTIA AVE	Low	1799	Other Contractor	All	X	
1993	VARSITY CONTRACTORS	7007 FRIARS RD	Low	1599	Other Contractor	All	X	
1994	VELASQUEZ MAINTENANCE	PO BOX 2436	Low	7699	Equipment Repair	All	X	
1995	VERDUGO TESTING CO, INC	PO BOX 211958	Low	1799	Other Contractor	All	X	
1996	VERTEX COATINGS, INC	3030 PLAZA BONITA RD	Low	1721	Painting/Coating	All	X	
1997	VICTOR M CABRERA	350 BROADWAY	Low	1799	Other Contractor	All	X	
1998	VILLA FORD	2550 N TUSTIN ST	Low	5511	Vehicle Dealers	All	X	
1999	VILLA'S LANDSCAPE SERVICES	816 SAN PASQUAL ST	Low	0782	Landscaping	All	X	
2000	VILLA'S LANDSCAPE SERVICES	816 SAN PASQUAL ST	Low	0782	Landscaping	All	X	
2001	VINCI PACIFIC CORRATION	PO BOX 1309	Low	1542	Other Contractor	All	X	
2002	VISTA DEL SOL APARTMENTS	1545 Q AVE	Low	1599	Other Contractor	All	X	
2003	VULCAN MATERIALS CO	2950 BOX	Low	5211	Building Materials	All	X	
2004	W & S ELECTRIC INC	1050 PIONEER WAY , K	Low	1731	Other Contractor	All	X	
2005	W.L. BUTLER CONSTRUCTION	3 MASON	Low	1599	Other Contractor	All	X	
2006	WACHTER NETWORK SERVICES INC	16001 W 99TH ST	Low	1731	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
2007	WALKER WOOD PRODUCTS	43195 BUSINESS PARK DR	Low	1799	Other Contractor	All	X	
2008	WALTER H BARBER & SON INC	PO BOX 2316	Low	1599	Other Contractor	All	X	
2009	WARREN CONSTRUCTION	BOX 720073	Low	1599	Other Contractor	All	X	
2010	WASTE MANAGEMENT OF SAN DIEGO	1001 W BRADLEY AVE	Low	7359	Vehicle/Equipment Rental	All	X	
2011	WAYNE PERRY INC.	8281 COMMONWEALTH AVE	Low	1599	Other Contractor	All	X	
2012	WAYNE SERVICES GROUP	10329 REGIS CT	Low	1599	Other Contractor	All	X	
2013	WCW	1341 TWINING AVE	Low	7997	Golf Courses/Parks	All	X	
2014	WEATHER MACHINES	9858 HAWLEY RD	Low	1711	Other Contractor	All	X	
2015	WEATHERITE CORPORATION	21211 COMMERCE POINTE DR	Low	1711	Other Contractor	All	X	
2016	WEB SERVICE COMPANY INC	3690 REDONDO BEACH AVE	Low	7699	Equipment Repair	All	X	
2017	WER COMMUNICATION SYSTEMS	4643 MISSION GORGE PL, A	Low	1731	Other Contractor	All	X	
2018	WER PLUS	1005 N EDWARD CT	Low	1799	Other Contractor	All	X	
2019	WERMERS CORRATION	5120 SHOREHAM PL	Low	1599	Other Contractor	All	X	
2020	WEST COAST APPLIANCE SVC,INC.	10744 PROSPECT AVE , B	Low	1711	Other Contractor	All	X	
2021	WEST COAST CONSTRUCTION	5761 E LA PALMA AVE	Low	1799	Other Contractor	All	X	
2022	WEST COAST DRYWALL	538 FRONT ST	Low	1742	Painting/Coating	All	X	
2023	WEST COAST SCAFFOLD CORP	9155 BIRCH ST	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
2024	WEST COAST STRIPES	560 SHERIDAN AVE	Low	1799	Other Contractor	All	X	
2025	WEST COAST UNDERGROUND	7929 SILVERTON AVE	Low	1623	Other Contractor	All	X	
2026	WEST COAST UNITED	9849 EVEREST ST	Low	1599	Other Contractor	All	X	
2027	WESTAIR GASES & EQUIPMENT INC	PO BOX 620338	Low	5084	Wholesale/Storage/Warehousing	All	X	
2028	WESTCAL CONSTRUCTION	PO BOX 19998	Low	1599	Other Contractor	All	X	
2029	WESTERN CONCRETE PUMPING, INC	2181 LA MIRADA DR	Low	1799	Other Contractor	All	X	
2030	WESTERN EXTERMINATOR COMPANY	PO BOX 11881	Low	7342	Pest Control	All	X	
2031	WESTERN FIRE CO INC	1401 E OAKLAND AVE	Low	1799	Other Contractor	All	X	
2032	WESTERN FIRE PROTECTION, INC	13630 DANIELSON ST	Low	1711	Other Contractor	All	X	
2033	WESTERN IMAGE PAINTING, INC	PO BOX 2192	Low	1721	Painting/Coating	All	X	
2034	WESTERN INSULATION, LP	260 JIMMY ANN DR	Low	1742	Painting/Coating	All	X	
2035	WESTERN OL REMODELING, INC	8824 WINTER GARDENS BLVD	Low	1799	Other Contractor	All	X	
2036	WESTERN PACIFIC PIPELINE CORP	1122 N 2ND ST	Low	1599	Other Contractor	All	X	
2037	WESTERN PUMP	3235 F ST	Low	1629	Other Contractor	All	X	
2038	WESTERN STATES FIRE PROTECTION	3335 E MIRALOMA AVE	Low	1731	Other Contractor	All	X	
2039	WESTERN STEEL	2292 NATIONAL AVE	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
2040	WESTPRO PLUMBING INC	PO BOX 620249	Low	1711	Other Contractor	All	X	
2041	WESTREND ELECTRIC INC	PO BOX 1701	Low	1731	Other Contractor	All	X	
2042	WESTRN FOUNDATIONS+SHORIN G INC	PO BOX 1939	Low	1799	Other Contractor	All	X	
2043	WESTWIND COMPANY INC	PO BOX 153347	Low	1542	Other Contractor	All	X	
2044	WHEELIHAN CONSTRUCTION	2598 FORTUNE WAY, L	Low	1599	Other Contractor	All	X	
2045	WHILLOCK CONTRACTING, INC	PO BOX 2322	Low	1795	Other Contractor	All	X	
2046	WHITACRE, D A, CONSTRUCTION	1108 GREENFIELD DR	Low	1599	Other Contractor	All	X	
2047	WHITAKER CONSTRUCTION CORP	2340 TAMPA AVE, F	Low	1599	Other Contractor	All	X	
2048	WHITMORE STEEL INC	9075 BIRCH ST	Low	1799	Other Contractor	All	X	
2049	WILLIAMSON GENERAL CONTRACTING	15552 OLIVE BRANCH DR	Low	1599	Other Contractor	All	X	
2050	WIN-DOR, INC	2220 E ORANGEWOOD AVE	Low	1599	Other Contractor	All	X	
2051	WOODDRUFF'S TRENCHING INC	PO BOX 2620	Low	7359	Vehicle/Equipment Rental	All	X	
2052	WRIGHTS HEATING AND AIR	PO BOX 34107	Low	1711	Other Contractor	All	X	
2053	WSC SERVICES INC	10664 PROSPECT AVE , B	Low	1795	Other Contractor	All	X	
2054	WUNCH, MARK A, CONTRACTOR	2303 GALVESTON ST	Low	1599	Other Contractor	All	X	
2055	X OVER GRADING, INC	19333 SILVER CIR	Low	1799	Other Contractor	All	X	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Likely Source
2056	X-TREME JUMPERS	1359 BUCKWHEAT TRL	Low	7359	Vehicle/Equipment Rental	All	X	
2057	YIRA DISTRIBUTIONS	PO BOX 432464	Low	5149	Wholesale Food	All	X	
2058	YOKOZUNA'S SUSHI BAR & ISLANDER GRILL	945 OTAY LAKES RD, M-N	Low	5812	Eating/Drinking Establishments	All	X	
2059	YORK INTERNATIONAL CORPORATION	PO BOX 1592	Low	7623	Equipment Repair	All	X	
2060	YOUNGS MARKET CO LLC	2164 N BATAVIA ST	Low	5182	Wholesale/Storage/Warehousing	All	X	
2061	ZALLAR PLUMBING, INC.	PO BOX 1627	Low	1711	Other Contractor	All	X	
2062	ZIGMAN/SHIELDS GENERAL CONT	3276 ROSECRANS ST	Low	1599	Other Contractor	All	X	
2063	ZOUNDIROS CORRATION	1833 DIAMOND ST	Low	1599	Other Contractor	All	X	

Notes
TTWQ – Threat to Water Quality
SIC –Standard Industrial Classification Code
Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water

APPENDIX B

JURMP ANNUAL REPORT REQUIREMENTS CHECKLIST

Appendix B
JURMP Annual Report Requirements Checklist

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location in Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.3, 2.4.4.2
iii. A listing of the development projects to which SUSMP requirements were applied.	Table 2-1
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	Appendix A.1 (inventory)
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-3 and Table 2-4
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2, Table 2-2
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.2

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.2
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3, Table 2-4
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.1

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A.2 (inventory)
viii. A description of the general results of the inspections.	3.5
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.3, 3.5.4
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.1

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix A.3 (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	2.4.4.3, Table 2-4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.1, 4.4.4, Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.1, 4.4.4, Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4, Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A for 2009/2010
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3, 4.2.4
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3.4
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4, Table 4-1
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.	4.5.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.6.4, 4.7.4, Table 4-3
xviii. A description of the general results of the inspections.	Table 4-3
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4, 4.6.4, 4.7.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4, 4.6.4, 4.7.4
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.1.1 and throughout Section

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.2 (mobile), appendices A.4 and A.5 (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	5.2.4
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4, Table 5-2
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.1.1 and throughout section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.1
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.1
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.2
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.1.1 and throughout section

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2009/2010 Annual Report, will be submitted to the RWQCB no later than December 15, 2010.	

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2009/2010 Annual Report, will be submitted to the RWQCB no later than December 15, 2010.	

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3

Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.2

Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11

Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.	10

Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12

Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	4.2.3, 13

JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14 and each program component section

ATTACHMENTS

ATTACHMENT 2.1

SUSMP ORDINANCE

ORDINANCE NO. 2010 – 2328

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF NATIONAL CITY ADOPTING THE STANDARD URBAN STORMWATER MITIGATION PLAN (SUSMP) MANUAL, AND REPEALING ORDINANCE NO. 2008-2307

WHEREAS, on January 24, 2007, the San Diego Regional Water Quality Control Board issued the National Pollutant Discharge Elimination System (NPDES) permit No. CAS0108758, Order No. R9-2007-001, requiring changes to the City's Standard Urban Stormwater Mitigation Plan (SUSMP) Manual.

NOW, THEREFORE, the City Council of the City of National City does hereby ordain as follows:

Section 1. Introduction of the Standard Urban Stormwater Mitigation Plan (SUSMP) Manual. The City Council of the City of National City introduces the Standard Urban Stormwater Mitigation Plan (SUSMP) Manual, attached hereto as Appendix "A", hereafter abbreviated as "SUSMP Manual", as the City of National City's program for management of stormwater runoff. A copy of Appendix "A" shall be kept on file in the Office of the City Engineer.

Section 2. Implementation and administration. All City departments, under the direction of the City Manager, shall implement, administer, and enforce the provisions of the SUSMP Manual, and shall modify their administrative procedure for permit issuance and plan approval accordingly. In case of a conflict between a provision of the Municipal Code and the SUSMP Manual, the SUSMP Manual, shall take precedence, unless the City Manager determines that compliance is impossible, impractical or is not in the public's best interest. In this event, the City Manager shall immediately advise the City Council and recommend appropriate measures for resolution.

Section 3. Department review. To the extent not already provided for, City department directors, under the direction of the City Manager, will review and propose amendments to the Municipal Code that are or may become necessary for the further implementation of the SUSMP Manual.

Section 4. Criminal and administrative enforcement. The mandatory provisions and prohibitions of the SUSMP Manual shall be enforceable as misdemeanors pursuant to Section 1.20.010 of the National City Municipal Code, and administrative penalties may be imposed in accordance with Chapters 1.44 or 1.48 of the National City Municipal Code, as appropriate.

Section 5. Repeal of previous ordinance. Ordinance No. 2008-2307 is hereby repealed.

PASSED and ADOPTED this 16th day of February, 2010.

Ron Morrison, Mayor

ATTEST:

Michael R. Dalla, City Clerk

APPROVED AS TO FORM:

George H. Eiser, III, City Attorney

Passed and adopted by the Council of the City of National City, California, on February 16, 2010, by the following vote, to-wit:

Ayes: Councilmembers Morrison, Parra, Sotelo-Solis, Van Deventer, Zarate.

Nays: None.

Absent: None.

Abstain: None.

AUTHENTICATED BY: RON MORRISON
Mayor of the City of National City, California

MICHAEL R. DALLA
City Clerk of the City of National City, California

By: _____
Deputy

I HEREBY CERTIFY that the foregoing ordinance was not finally adopted until seven calendar days had elapsed between the day of its introduction and the day of its final passage, to wit, on February 2, 2010 and on February 16, 2010.

I FURTHER CERTIFY THAT said ordinance was read in full prior to its final passage or that the reading of said ordinance in full was dispensed with by a vote of not less than a majority of the members elected to the Council and that there was available for the consideration of each member of the Council and the public prior to the day of its passage a written or printed copy of said ordinance.

I FURTHER CERTIFY that the above and foregoing is a full, true and correct copy of ORDINANCE NO. 2010-2328 of the City Council of the City of National City, passed and adopted by the Council of said City on February 16, 2010.

City Clerk of the City of National City, California

By: _____
Deputy

ORDINANCE NO. 2010 – 2329

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF NATIONAL CITY AMENDING SECTIONS 14.22.020, 14.22.030, 14.22.040, 14.22.090, 14.22.110, 14.22.120, 14.22.130, 14.22.140, 14.22.150, 14.22.160, and14.22.170 OF THE NATIONAL CITY MUNICIPAL CODE REGARDING NATIONAL CITY STORM WATER MANAGEMENT AND DISCHARGE CONTROL

BE IT ORDAINED by the City Council of the City of National City that Title 14, Chapter 14.22, of the National City Municipal Code is hereby amended by amending the Table of Contents to read as follows:

Sections:

14.22.010	Title.
14.22.020	Purpose and intent.
14.22.030	Definitions.
14.22.040	General provisions.
14.22.050	Reduction of pollutants in storm water--Minimum requirements.
14.22.060	Watercourse protection.
14.22.070	Illicit connection and illegal discharge of pollutants--Prohibited.
14.22.080	Exceptions to discharge prohibition.
14.22.090	Best management practice requirements and general requirements applicable to all discharges.
14.22.100	Additional minimum best management practice requirements for residential activities and facilities.
14.22.110	Additional minimum best management practice requirements for commercial activities and facilities.
14.22.120	Additional minimum best management practice requirements for industrial activities and facilities.
14.22.130	Additional minimum best management practice requirements for municipal activities and facilities.
14.22.140	Manuals.
14.22.150	Additional requirements for land disturbance activity.
14.22.160	Additional planning, design, and post-construction requirements for Development Projects.
14.22.170	Maintenance of BMPs.
14.22.180	Inspection and sampling.
14.22.190	Enforcement.
14.22.200	Enforcement authority.
14.22.210	Other acts and omissions that are violations.
14.22.220	Penalties.
14.22.230	Restrictions and conditions on issuance of ministerial and discretionary development permits.

BE IT FURTHER ORDAINED by the City Council of the City of National City that Title 14, Chapter 14.22, of the National City Municipal Code is hereby amended by amending Sections 14.22.020, 14.22.030, 14.22.040, 14.22.090, 14.22.110, 14.22.120, 14.22.130, 14.22.140, 14.22.150, 14.22.160, and 14.22.170 to read as follows:

14.22.020 Purpose and intent.

A. The purpose of this Chapter is to ensure the future health, safety, and general welfare of the citizens; to protect water resources and to improve water quality; to cause the use of management practices by the city and its citizens that will reduce the adverse effects of polluted runoff discharges on waters of the State; to secure benefits from the use of storm water as a resource; and to ensure that the city is compliant with San Diego Regional Water Quality Control Board ("RWQCB") Order No. 2001-01 and renewed by 2007-0001 National Pollutant Discharge Elimination System ("NPDES") Permit Number CAS0108758, and with applicable State and federal law. The city seeks to promote these purposes by:

1. Controlling nonstorm water discharges to the storm water conveyance system;

2. Eliminating discharges to the storm water conveyance system from spills, dumping, or disposal of materials other than storm water or permitted or exempted discharges;

3. Reducing pollutants in storm water discharges, including those pollutants taken up by storm water as it flows over urban areas, to the maximum extent practicable (MEP);

4. Reducing pollutants in storm water discharges in order to achieve applicable water quality objectives for surface waters in San Diego County;

5. Establishing minimum requirements for storm water management, including source control requirements, to prevent and reduce pollution;

6. Establishing requirements for development project site design, to reduce storm water pollution and erosion;

7. Establishing requirements for the management of storm water flows from development projects, both to prevent erosion, and to protect and to enhance existing water-dependent habitats; and

8. Establishing notice procedures and standards for adjusting storm water and nonstorm water management requirements where necessary.

B. The intent of this Chapter is to protect and enhance the water quality of the watercourse, water bodies, and wetlands in a manner pursuant to and consistent with the Clean Water Act and the San Diego RWQCB Order No. 2001-01, and renewed by 2007-0001, NPDES Permit Number CAS0108758, and any subsequent amendments, revisions, or reissuance of the permit and the Standard Urban Storm Water Mitigation Plan (SUSMP) adopted by Ordinance No. 2213 on November 19, 2002, and any subsequent adopted amendments, revisions, or modifications.

14.22.030 Definitions.

When used in this Chapter, the following terms shall have the meanings ascribed to them in this Section:

"Authorized enforcement official" means the city manager of the City of National City or any designee of the city manager of the City of National City who is responsible for enforcing the provisions of this Chapter, including but not limited to, the directors, their management staff, and designees.

"Basin plan" means the comprehensive water quality control plan for the San Diego Basin, adopted by the Regional Water Quality Control Board, San Diego Region (July 1975), and approved by the State Water Resources Control Board, together with subsequent amendments.

"Best management practices (BMPs)" means schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce to the MEP the discharge of pollutants directly or indirectly to waters of the United States. BMPs also include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal or drainage from raw materials storage.

"BMP Manual" means the city's Best Management Practices Manual described in Section 14.22.140 of this Chapter, adopted by resolution and hereinafter referred to as "BMP Manual".

"BMPs" means best management practices.

"California ocean plan" means the California Ocean Plan: Water Quality Control Plan for Ocean Waters of California, adopted by the State Water Resources Control Board, September 1991, and any subsequent amendments.

"Channel" means a natural or improved watercourse with a definite bed and banks that conducts continuously or intermittently flowing water.

"Commercial discharger" means discharger who operates a regulated commercial facility.

"City" means the City of National City.

"Development project" means new development or redevelopment with land disturbing activities, construction, or installation of a structure, the creation of impervious surface or land subdivision.

"Developer" means a person who seeks or receives permits for or who undertakes land development activity.

"Development project proponent" means developer.

"Directors" means the Director of Development Services.

"Discharge" when used as a verb, means to allow pollutants to directly or indirectly enter storm water or to allow storm water or nonstorm water to directly or indirectly enter the storm water conveyance system or receiving waters, from an activity or operations which one owns or operates. When used as a noun, "discharge" means the pollutants, storm water and/or nonstorm water that is discharged.

"Discharger" means any person or entity engaged in activities or operations or owning facilities, which will or may result in pollutants entering storm water, the storm water conveyance system or receiving waters; and the owners of real property on which such activities, operations or facilities are located; provided however that a local government or public authority is not a discharger as to activities conducted by others in public rights-of-way.

"Discharges directly to" means that storm water or nonstorm water enters receiving waters from a facility or activity without mixing with any storm water or nonstorm water from another facility or activity prior to entering such receiving waters.

"Drainage easement" means a legal right granted by a land owner to a grantee allowing the use of private land for storm water management purposes.

"Employee training program" means a documented employee training program for all persons responsible for implementing a storm water pollution prevention plan. The employee training program shall include, but is not limited to, the following topics:

1. Laws, regulations, and local ordinances associated with storm water pollution prevention, and an overview of the potential impacts of polluted storm water on the receiving waters of the San Diego region.
2. Proper handling of all materials and wastes to prevent spillage.
3. Mitigation of spills including spill response, containment, and cleanup procedures.
4. Visual monitoring of all effluent streams to ensure that no illicit discharges enter the storm water conveyance system.
5. Discussion of the difference between the storm water conveyance system and the sanitary sewer system.
6. Identification of all on-site connections to the storm water conveyance system.
7. Preventive maintenance and good housekeeping procedures.

8. Material management practices employed by the facility to reduce or eliminate pollutant contact with storm water discharge.

9. A documented employee training program prepared pursuant to any NPDES storm water permit shall meet the definition of an employee training program for the purposes of this Chapter.

"Enclosed bays and estuaries plan" means the California Enclosed Bays and Estuaries Plan: Water Quality Control Plan for Enclosed Bays and Estuaries of California, adopted by the State Water Resources Control Board, April 11, 1991, and any subsequent amendments.

"Environmentally sensitive area" means impaired water bodies, areas designated as areas of special biological significance or with the RARE beneficial use by the SWRCB in the water quality control plan for the San Diego Basin (1994 and amendments), national wildlife refuges, areas designated as preserves for species protection purposes by the State of California or a local government, and pre-approved mitigation areas identified in agreements between the city and State or federal natural resources agencies.

"ESA" means environmentally sensitive area.

"Household hazardous waste" means a household hazardous material that no longer has a use and is discarded or intended to be discarded. The term includes, but is not limited to paint and paint-related materials; yard and garden products; household cleaners; used oil, motor vehicle fluids, batteries, and oil filters; and household batteries.

"Illegal connection" means a pipe, facility, or other device connected to the storm water conveyance system or receiving waters, which has not been reviewed and authorized by the city; or a permitted/authorized pipe, facility, or other device, which conveys illegal discharges.

"Illegal discharge" means any nonpermitted or nonexempt discharge to the storm water conveyance system that is not composed entirely of storm water or is expressly prohibited by federal, State, or local regulations, laws, codes, or ordinances, or degrades the quality of receiving waters in violation of the basin plan, the enclosed bays and estuaries plan, the inland surface water plan, and the California Ocean Plan Standards.

"Illicit connection" means any nonpermitted or undocumented physical connection to the storm water conveyance system which has not been approved by the city or which drains illegal discharges either directly or indirectly into a storm water conveyance system.

"Impaired water body" means a water body that is listed by the SWRCB as impaired by a particular pollutant or pollutants, pursuant to Section 303(d) of the Federal Clean Water Act. "303(d)-listed water body" has the same meaning.

"Impervious cover or impervious surface" means constructed or modified surfaces that cannot effectively infiltrate rainfall. The term includes, but is not limited to, building rooftops, pavement, sidewalks, and driveways.

"Impervious surface area" means ground area covered or sheltered by an impervious surface measured in plan view (i.e., as if from directly above). For example, the "impervious surface area" for a pitched roof is equal to the ground area it shelters, rather than the surface area of the roof itself.

"Industrial activity" means manufacturing, processing, or raw materials storage at a commercial, industrial, or municipal facility. The term includes, but is not limited to, such manufacturing, processing, or storage in or upon industrial plant yards or immediate access roads used or traveled by carriers of raw materials; manufacture of products, waste material, or by-product creation or storage; material handling; refuse storage or disposal; the application or disposal of processed wastewaters; storage and maintenance of material handling equipment; treatment, storage, or disposal of residuals; outdoor shipping and receiving; activities in manufacturing buildings; storage of raw materials and intermediate and finished products; and the ownership, use, or control of areas where significant industrial activity has taken place in the past and significant materials remain and are exposed to storm water. Material handling

activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product.

"Industrial discharger" means a discharger who operates a regulated industrial facility.

"Industrial storm water permit" means the State general industrial storm water permit.

"Infiltration" means the process of percolating storm water or nonstorm water into the soil.

"Infiltration BMPs or infiltration facility" means any structural treatment BMP designed primarily to percolate water into the subsurface, such as an infiltration trench or infiltration basin. An infiltration facility may include filtering prior to or during infiltration. BMPs that infiltrate some water, but are designed primarily to retain water or to treat water such as retention basins, constructed wetlands, or filtering swales, are not infiltration facilities.

"JURMP" is an acronym for jurisdictional urban runoff management program. This document presents the city's storm water program in compliance with the municipal permit.

"Land development activity" means any activity or proposed activity that requires any of the permits or approvals listed in Section 14.22.040(F) of this Chapter.

"Land disturbance activity" means any activity that moves soils or substantially alters the pre-existing vegetated or man-made cover of any land. This includes, but is not limited to, grading, digging, cutting, scraping, stockpiling, or excavating of soil; placement of fill materials; paving, pavement removal, exterior construction; substantial removal of vegetation where soils are disturbed including, but not limited to, removal by clearing or grubbing; or any activity which bares soil or rock or involves streambed alterations or the diversion or piping of any watercourse. Land disturbance activity does not include routine maintenance to maintain original line and grade, hydraulic capacity or the original purpose of the facility, nor does it include emergency construction activities or maintenance activities required to protect public health and safety.

"Land owner" means the holder of legal title to the land and other persons or entities who exercise control over a land development project pursuant to rights granted in a purchase agreement, joint venture agreement, development agreement, or long-term lease.

"Low impact development (LID)" means a storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic features.

"Maintenance (of a BMP)" means periodic action taken to maintain the as designed performance of a BMP and includes, but is not limited to, repairs to the BMP as necessary and replacement of the BMP by an equally effective or more effective BMP at the end of its useful life.

"Maximum extent practicable" is an acceptability standard for best management practices (BMPs). When BMPs are required to meet this standard, the BMPs must be the most effective set of BMPs that is still practicable. A BMP is effective if it prevents, reduces, or removes the pollutants that would otherwise be present in runoff due to human activity. A BMP is practicable if it complies with other regulations as well as storm water regulations; is compatible with the area's land use, character, facilities, and activities; is technically feasible (considering area soil, geography, water resources, and other resources available); is economically feasible; and provides benefits that are reasonable in relation to costs.

"MEP" means maximum extent practicable.

"Motor vehicle" means any automobile, car, truck, bus, motor home, or other self-propelled vehicle used or suited to use for on-road transportation; and any similar vehicle modified for off-road use.

"Municipal facility" means a facility owned or operated by the City of National City that is used for a governmental purpose. Facilities on municipally-owned land that are leased or rented to others to generate municipal revenues are not municipal facilities. (The commercial or

industrial lessees of such facilities may, however, be subject to this Chapter as commercial dischargers or industrial dischargers).

"National Pollution Discharge Elimination System (NPDES) permit" means a national pollutant discharge elimination system permit issued by the Regional Water Quality Control Board or the State Water Resources Control Board and/or the Regional Water Quality Control Board.

"NPDES Permit No. CAS0108758" means RWQCB Order No. 2007-0001, NPDES Permit No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the incorporated cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.

"Nonstorm water discharge" means any discharge to the storm water conveyance system that is not entirely composed of storm water.

"Plan standard" means any or all applicable requirements of the basin plan, the enclosed bays and estuaries plan, the inland surface water plan, and the California Ocean Plan.

"Pollutant" means and includes, but is not limited to solid waste, sewage, garbage, medical waste, wrecked or discarded equipment, radioactive materials, dredged spoil, rock, sand, sediment, industrial waste, and any organic or inorganic contaminant whose presence degrades the quality of the receiving waters in violation of the basin plan, the enclosed bays and estuaries plan, the inland surface water plan, and the California Ocean Plan standards, such as fecal coliform, fecal streptococcus, enterococcus, volatile organic carbon (VOC), surfactants, oil and grease, petroleum hydrocarbons, total organic carbon (TOC), total suspended and settleable solids, nutrients, metals, cyanides, phenols, and biocides. A pollutant also includes any substance defined as a pollutant under 40 CFR Section 122.2, and any contaminant which degrades the quality of the receiving waters in violation of the basin plan, the enclosed bays and estuaries plan, the inland surface water plan, and the California Ocean Plan standards by altering any of the following parameters: pH, biochemical oxygen demand (BOD), chemical oxygen demand (COD), and temperature.

"Premises" means any building, lot, parcel, real estate, land, or portion of land whether improved or unimproved.

"Priority development projects" are any development projects falling into at least one of the following categories.

1. Housing subdivisions resulting in the disturbance of one acre or more of land, or comprised of 10 or more dwelling units. This category includes single-family homes, multi-family homes, condominiums, and apartments.

2. Commercial developments resulting in the disturbance of one acre or more of land. This category is defined as any development on private land that is not for industrial or residential use where the land area for development is greater than one acre. The category includes, but is not limited to, hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, municipal facilities, commercial nurseries, multi-apartment buildings, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses, automotive dealerships, commercial airfields, and other light industrial facilities.

3. Development of industry resulting in the disturbance of one acre or more of land. This category includes, but is not limited to, manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, trucks, etc.).

4. Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. The SIC codes are available on OSHA's website (http://www.osha.gov/pls/mis/sicsearch.html).

5. Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812), where the land

area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all Standard Urban Storm Water Mitigation Plan (SUSMP) requirements except for structural treatment BMP and numeric sizing criteria requirement and hydromodification requirement.

6. All hillside development greater than 5,000 square feet. This category is defined as any development which creates 5,000 square feet of impervious surface that is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.

7. Environmentally Sensitive Areas: All development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (where discharges from the development or redevelopment will enter receiving waters within the environmentally sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the Environmentally Sensitive Area (ESA). "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

8. Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff. Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

9. Street, roads, highways, and freeways. This category includes any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. Natural BMPs such as constructed wetlands, grassed swales, biofilters, wet ponds, and vegetated filter strips shall be utilized whenever practicable for all new development and significant redevelopment.

10. Retail Gasoline Outlets (RGOs). This category includes RGOs and retail places of business engaged in the sales of motor fuels that meet the following criteria: (a) 5,000 square feet or more, or (b) a projected average daily traffic (ADT) of 100 or more vehicles per day.

11. All other pollutant generating development projects that result in the disturbance of one acre or more of land. Generally all projects which include impervious surfaces and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces.

"Rainy season" means the period from October 1st through April 30th.

"Receiving water" means surface bodies of water, as described in Order No. 90-42 of the Regional Water Quality Control Board, San Diego Region, that serve as discharge points for the storm water conveyance system, including San Diego Bay, Paradise Creek and the Paradise Creek Marsh, the Sweetwater River and the Sweetwater River Flood Control Channel, the 7th Street Channel, and La Paleta Creek.

"Redevelopment" means any construction, alteration, or improvement of an already developed site that will increase the total impervious surface area of that site or that involves activities that could expose pollutants to rainfall. Redevelopment can include, but is not limited to, the expansion of building footprints, the addition or replacement of a structure, exterior construction and remodeling, replacement of existing impervious surfaces that are not part of a routine maintenance activity, and other activities that create additional impervious surfaces.

"Regulated commercial facility" means all nonresidential facilities engaged in business or commerce, whether for profit or not-for-profit or publicly or privately owned, except for regulated industrial facilities and municipal facilities; plus residences used for commercial repair, maintenance, cleaning, manufacturing, food preparation or painting activity if that activity has

the potential to result in the discharge of nonstorm water or the discharge of pollutants to storm water.

"Regulated industrial facility" means any facility subject to the State general industrial storm water permit; any other facility primarily engaged in manufacturing, processing, storage, or handling of raw materials, processed bulk materials or refuse; and any other facility with a total outdoor uncovered area of more than two acres that is used for an industrial activity. Municipal facilities are not regulated industrial facilities, unless they are subject to the State general industrial storm water permit.

"Residential discharger" means, for an occupied residence, the occupants; and for a vacant residence, the owner and the manager of the residence.

"RWQCB" means the Regional Water Quality Control Board for the San Diego region.

"Significant redevelopment" means development in the city that would create, add, or replace at least five thousand square feet of impervious surfaces on an already developed site that falls under one or more priority development project categories. Significant redevelopment includes, but is not limited to: the expansion of a building footprint; addition to or replacement of a structure; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing areas related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and replacement of damaged pavement.

"Standard Urban Storm Water Mitigation Plan (SUSMP)" means the plan designed to reduce pollutants and runoff flows from new development and significant redevelopment, adopted by Ordinance No. 2213 of November 12, 2002, and any subsequently adopted amendments, revisions, or modifications.

"State General Construction Storm Water Permit" means NPDES Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities, and any amendments thereto.

"State General Industrial Storm Water Permit" means NPDES Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities, and any amendments thereto.

"Stop work order" means an order issued which requires that specifically identified activity or all activity on a site be stopped.

"Storm water" means surface runoff and drainage associated with storm events and snow melt.

"Storm water conveyance system" means and includes, but is not limited to those municipal facilities within the city by which storm water may be conveyed to waters of the United States, including any roads with drainage systems, municipal streets, catch basins, natural and artificial channels, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, natural and artificial channels, or storm drains.

"Storm water management" means the use of structural or nonstructural BMPs that are designed to reduce urban run-off pollutant loads, discharge volumes, and/or peak discharge flow rates or velocities. When applied to the city or another municipality, storm water management also includes planning and programmatic measures.

"Storm water management plan" means a plan, submitted on a City form or in a City-specific format in connection with an application for a City permit or other City approval, identifying the measures that will be used for storm water and nonstorm water management during the permitted activity.

"Storm Water Pollution Prevention Plan (SWPPP)" means a document which describes the on-site program activities to eliminate or reduce to the MEP, pollutant discharges to the

storm water conveyance system. This plan shall include, but not be limited to, the following site information:

1. An inventory of all of materials/wastes that are handled on a premise and have a reasonable potential to impact storm water quality;

2. A description of measures taken which will reduce the possibility or likelihood of accidental spillage resulting from equipment failure or employee error;

3. A description of on-site spill control/response equipment and procedures to prevent contaminants from entering the storm water conveyance system;

4. A site map indicating all building structures, materials and waste storage areas, paved areas, areas of existing and potential erosion, storm drain inlets, and point(s) of discharge to a municipal storm water conveyance system or receiving waters. The site map shall include an estimate of the size of the facility and the facility's impervious area;

5. An employee training program, as defined in Subsection D of this Section, including training outlines and training records;

6. A description of any storm water monitoring program that is conducted on the site.

A storm water pollution prevention plan prepared and implemented pursuant to any NPDES storm water permit shall meet the definition of a storm water pollution prevention plan for the purposes of this Chapter.

"Structural BMP" means a BMP that relies on either a physical condition (other than an entirely natural and undisturbed condition) or on a constructed or installed device to reduce or prevent pollutants in storm water discharges and authorized nonstorm water discharges.

"Structural post-construction BMP" means a structural BMP (other than a temporary construction-related BMP) put in place in connection with a land development or redevelopment project to prevent or reduce contamination in storm water or receiving waters or to prevent or reduce erosion downstream from the project. All treatment control BMPs are structural post-construction BMPs.

"SUSMP Manual" means the city's Standard Urban Stormwater Mitigation Plan manual and described in Section 14.22.140 of this Chapter.

"SWRCB" means the State Water Resources Control Board.

"Surface waters plan" means the "California Inland Surface Waters Plan: Water Quality Control Plan for Inland Surface Waters of California" adopted by the State Water Resources Control Board, April 11, 1991, or the most current amendments thereto.

"Treatment control BMP" means any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption, or any other physical, biological, or chemical process. "Treatment control" has the same meaning.

"Tributary to an impaired water body" means a facility or activity is tributary to an impaired water body if urban runoff from that facility or activity enters:

1. The storm water conveyance system at a place and in a manner that will carry pollutants for which that water body is impaired in that discharge to the impaired water;

2. A flowing stream that will carry pollutants for which that water body is impaired in that discharge to the impaired water; or

3. An ephemeral stream that reaches the impaired water during storm events and that will carry pollutants for which that water body is impaired from the facility or activity to the impaired water body during such storm events.

"Urban run-off" means all flows in a storm water conveyance system in the city other than point source discharges in violation of a site-specific NPDES permit. Urban run-off includes, but is not limited to, storm water, exempt nonstorm water discharges, and illicit discharges.

"Water main" means a potable or recycled water delivery line greater than or equal to four inches in diameter.

"Watercourse" means any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, arroyo, or wash in which waters flow in a definite direction or course, either continuously or intermittently, and which has a definite channel and a bed or banks. A channel is not limited to land covered by minimal or ordinary flow but also includes land covered during times of high water. Watercourse does not include any surface drainage prior to its collection in a stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, arroyo, or wash.

"Water quality standards" are defined as the beneficial uses (e.g., swimming, fishing, municipal drinking water supply, etc.) of water and the water quality objectives adopted by the State or United States Environmental Protection Agency to protect those uses.

"Waters of the United States" means water subject to the regulatory jurisdiction of the United States under the Federal Clean Water Act and applicable case law. (In general, this includes "navigable" waters, waters tributary to "navigable" waters, and adjacent wetlands).

14.22.040 General provisions.

A. Responsibility for Administration. This Chapter shall be administered for the City by its authorized enforcement officials.

B. Construction and Application. This Chapter shall be interpreted to assure consistency with the requirements of the Federal Clean Water Act and acts amendatory thereof or supplementary thereto, applicable implementing regulations and NPDES Permit No. CAS108758 and any amendments, revision, or reissuance thereof, and SUSMP. This Chapter is not intended to interfere with, abrogate or annul any other chapter, rule or regulation, statute, or other provision of law. The requirements of this Chapter should be considered minimum requirements, and where any provision of this Chapter imposes restrictions different from those imposed by any other chapter, rule, or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall take precedence. Storm water and nonstorm water discharges regulated under a valid facility-specific NPDES permit or facility-specific RWQCB waste discharge requirements permit are not subject to this Chapter, but shall instead be regulated exclusively by the RWQCB.

C. Recycled Water. This Chapter is not intended to prohibit or prevent the use of recycled water or the discharge of recycled water after use. This Chapter is intended to require the use of BMPs for such uses and discharges as necessary to protect human health and the environment.

D. Severability and Validity. If any section of this Chapter is declared invalid by a court of law, the remaining sections shall remain valid.

E. City Permits and Approvals.

1. An application for any of the following discretionary permits or approvals shall be accompanied by plans demonstrating how the requirements of this Chapter will be met, and the permit or approval shall not be approved unless the decision maker determines that the application complies with the requirements of this Chapter:

a. Conditional use permit (including modification or time extension).
b. Coastal development permit.
c. Parcel map (and modifications).
d. Reclamation plan.
e. Planned development permits.
f. Planned unit development permits.
g. Planning commission approval of plans.
h. Site plan review.

i. Tentative map (and amendments to conditions of approval or time extension).

j. Tentative parcel map.

k. Variance.

2. An application for any of the following ministerial permits or approvals shall be accompanied by plans demonstrating how the specifically applicable requirements, if any, set out in corresponding sections of the SUSMP Manual and the BMP Manual will be met, and the permit or approval shall not be approved unless the decision maker determines that the application complies with those requirements:

a. Administrative clearing permit.

b. Lot line adjustment.

c. Final map modification.

d. Grading plan (including modification or renewal).

e. Improvement plan (including modification).

f. Landscape plan.

g. Building permit.

h. Construction right-of-way permit.

i. Encroachment permit.

j. Excavation permit.

k. On-site wastewater system permit.

l. Underground tank permit.

m. Well permit.

F. Guidance Documents. Any authorized enforcement official may prepare, disseminate, and maintain guidance documents addressing the use of pollution prevention practices and BMPs for specific activities or facilities, illicit connections, and illegal disposal.

These guidance documents may set out additional compliance alternatives that, in specified circumstances, can provide the same environmental protection that is afforded by the BMPs required by this Chapter.

These guidance documents may also identify practices that have been determined by the authorized enforcement official to be additional BMPs that may be implemented for land disturbance activity and land development activity to prevent or control pollution to the MEP.

Authorized enforcement officials may also take these guidance documents into account when determining whether any practices used by a discharger or proposed in a grading plan, a storm water pollution prevention plan (SWPPP), an enforcement settlement offer, or any other submittal to the city, are BMPs that will prevent or control pollution to the MEP. These case-specific discretionary decisions may involve circumstances that were not anticipated when general guidance documents were prepared. Therefore, these guidance documents do not confer rights on dischargers in these circumstances, and do not constrain the discretion of authorized enforcement officials. Where appropriate, and provided the same protection is provided to the environment, authorized enforcement officials may depart from these guidance documents when making case-specific decisions authorized by this Chapter.

14.22.090 Best management practice requirements and general requirements applicable to all discharges.

A. Applicable Requirements. All dischargers in the city must comply with the generally applicable prohibitions and requirements in Sections 14.22.010 through 14.22.080 of this Chapter, and must also comply with any other parts of this Chapter (including relevant parts of the BMP Manual and the SUSMP Manual) that are applicable to the type of facility or activity owned or operated by that discharger.

B. Minimum BMPs for All Dischargers. All dischargers in the city must install, implement, and maintain at least the following minimum BMPs:

1. Eroded Soils. Prior to the rainy season, dischargers must remove or secure any significant accumulations of eroded soils from slopes previously disturbed by clearing or grading, if those eroded soils could otherwise enter the storm water conveyance system or receiving waters during the rainy season.

2. Pollution Prevention. Dischargers employing ten or more persons on a full-time basis shall implement those storm water pollution prevention practices that are generally recognized in that discharger's industry or business as being effective and economically advantageous.

3. Prevention of Illegal Discharges. Illicit connections must be eliminated (even if the connection was established pursuant to a valid permit and was legal at the time it was constructed) and illegal discharge practices eliminated.

4. Slopes. Completed slopes that are more than five feet in height, more than two hundred fifty square feet in total area, and more than a three-to-one run-to-rise ratio in grade that have been disturbed at any time by clearing, grading, or landscaping shall be protected from erosion prior to the first rainy season following completion of the slope and continuously thereafter.

5. Storage of Materials and Wastes. All materials and wastes with the potential to pollute urban runoff shall be stored in a manner that either prevents contact with rainfall and storm water or contains contaminated runoff for treatment and disposal.

6. Use of Materials. All materials with the potential to pollute urban runoff (including, but not limited to, cleaning and maintenance products used outdoors, fertilizers, pesticides, and herbicides, etc.) shall be used in accordance with label directions. No such product may be disposed of or rinsed into receiving waters or the storm water conveyance system.

C. Inspection, Maintenance, Repair, and Upgrading of BMPs. BMPs at manned facilities must be inspected by the discharger before and following predicted rain events. BMPs at unmanned facilities must be inspected by the discharger at least once during the rainy season, and at least once between each rainy season. These BMPs must be maintained so that they continue to function as designed. BMPs that fail must be repaired as soon as it is safe to do so. If the failure of a BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances.

D. Storm Water Pollution Prevention Plan. An authorized enforcement official may require a commercial, industrial, or land disturbance activity discharger to prepare and submit an SWPPP for approval by that official if:

1. The discharger does not come into compliance with this Chapter after one or more warnings (or other enforcement action) that BMPs are inadequate or are not being adequately maintained; or

2. The facility or activity at issue is a significant source of contaminants to receiving waters despite compliance with this Chapter. Any discharger required to submit and to obtain approval of an SWPPP shall install, implement, and maintain the BMPs specified in the approved SWPPP.

The SWPPP shall identify the BMPs that will be used by the discharger to prevent or control pollution of storm water to the MEP. If the facility is an industrial facility, the SWPPP submitted to the city shall at a minimum meet the requirements of the State NPDES general industrial storm water permit. If the activity at issue is a construction or land disturbance activity, the SWPPP submitted to the city shall at a minimum meet the requirements of the State NPDES General Construction Storm Water Permit. If a facility required to submit an SWPPP to the city discharges nonstorm water to groundwater, the facility shall obtain a RWQCB permit as required by the State Water Code and shall describe the requirements of that permit in the SWPPP.

Whenever submission of an SWPPP is required pursuant to this Chapter, an authorized enforcement official may take existing city BMPs into account when determining whether the practices proposed in the SWPPP are BMPs that will prevent or control pollution to the required level of MEP.

E. Notification of Spills, Releases and Illegal Discharges. Spills, releases, and illegal discharges of pollutants to receiving waters or to the storm water conveyance system shall be reported by the discharger as required by all applicable State and federal laws. In addition, any such spills, releases, and illegal discharges with the potential to endanger health, safety, or the environment shall be reported to the directors within twenty-four hours of discovery of the spill, release, or discharge. If safe to do so, necessary actions shall be taken to contain and minimize the spill, release, or illegal discharge.

F. Sampling, Testing, Monitoring, and Reporting. Commercial, industrial, or land disturbance activity dischargers shall perform the sampling, testing, monitoring, and reporting required by this Chapter. In addition, an authorized enforcement official may order a discharger to conduct testing or monitoring, and to report the results to the city if: (1) the authorized enforcement official determines that testing or monitoring is needed to determine whether BMPs are effectively preventing or reducing pollution in storm water to the MEP or to determine whether the facility is a significant source of contaminants to receiving waters; or (2) the authorized enforcement official determines that testing or monitoring is needed to assess the impacts of an illegal discharge on health, safety, or the environment; or (3) an illegal discharge has not been eliminated after written notice by an authorized enforcement official; or (4) repeated violations have been documented by written notices from authorized enforcement officials; or (5) the RWQCB requires the city to provide any information related to the discharger's activities.

Testing and monitoring ordered pursuant to this Subsection may include the following:

1. Visual monitoring of dry weather flows, wet weather erosion, and/or BMPs;
2. Visual monitoring of premises for spills or discharges;
3. Laboratory analyses of storm water or nonstorm water discharges for pollutants;
4. Background or baseline monitoring or analysis; and
5. Monitoring of receiving waters or sediments that may be affected by pollutant discharges by the discharger (or by a group of dischargers including the discharger).

The authorized enforcement official may direct the manner in which the results of required testing and monitoring are reported and may determine when required sampling, testing, or monitoring may be discontinued.

G. Mitigation. All illegal discharges must be mitigated within a reasonable period of time to correct or compensate for all damage to the environment caused by the illegal discharge. The authorized enforcement official shall determine whether mitigation measures proposed or completed by the discharger meet this standard. The authorized enforcement official shall require the discharger to submit a mitigation plan and schedule by a specified date prior to taking action, and to submit a summary of completed mitigation by a specified date.

14.22.110 Additional minimum best management practice requirements for commercial activities and facilities.

A. Application of Requirements. All regulated commercial dischargers must install, implement, and maintain at least the additional minimum BMPs, if any, specified in this Section or in the BMP Manual for the category of activity or facility owned or operated by that discharger, as applicable. All regulated commercial dischargers shall review their facilities, activities, operations, and procedures at least annually to detect and eliminate illicit connections

and illegal discharges. Corrective training shall be provided as needed (and documented in training records) whenever an illegal disposal practice is discovered.

B. Regulated Commercial Dischargers Identified. As required by NPDES Permit No. CAS0108758, facilities in the city having one or more of the following characteristics are regulated commercial facilities:

1. The facility is a regulated commercial discharger if it is engaged in one or more of the following commercial activities:

a. Airplane mechanical repair, maintenance, fueling, or cleaning;
b. Motor vehicle (or other vehicle) parking lots and storage facilities;
c. Motor vehicle and other vehicle body repair or painting;
d. Motor vehicle mechanical repair, maintenance, fueling, or cleaning;
e. Boat mechanical repair, maintenance, fueling, or cleaning;
f. Botanical or zoological gardens and exhibits;
g. Cement mixing or cutting;
h. Cemeteries;
i. Eating or drinking establishments, including food markets;
j. Equipment repair, maintenance, fueling, or cleaning;
k. Golf courses, parks and other recreational areas/facilities;
l. Landscaping;
m. Marinas;
n. Masonry;
o. Mobile motor vehicle or other vehicle washing;
p. Mobile carpet, drape, or furniture cleaning;
q. Nurseries and greenhouses;
r. Painting and coating;
s. Pest control services;
t. Pool and fountain cleaning;
u. Portable sanitary services;
v. Retail or wholesale fueling;
w. Building material retailers and storage;
x. Animal facilities;
y. Power washing services.

2. All other commercial dischargers not mentioned in Section 14.22.110(B)(1), tributary to a CWA Section 303(d) impaired water body segment for which the city has determined the facility or activity generates pollutants for which the water body segment is impaired.

3. Commercial dischargers discharging directly to receiving waters within ESAs.

4. All other commercial dischargers that the city determines may contribute a significant pollutant load to the storm water conveyance system.

C. Additional Minimum BMPs for All Regulated Commercial Dischargers. All regulated commercial dischargers shall install, implement, and maintain the BMPs specified in the BMP Manual the following areas, as applicable:

1. Employee training;
2. Storm drain tileage and signing;
3. Annual review of facilities and activities;
4. Pollution prevention; and
5. Good housekeeping.

D. Additional Minimum BMPs for Specific Activities Conducted by Regulated Commercial Dischargers. Regulated commercial dischargers shall install, implement, and maintain the BMPs specified in the BMP Manual for all locations, if any, where any of the following activities are conducted:

1. Vehicle and equipment operations;
2. Materials and waste management (including tanks); and
3. Outdoor work and storage functions.

E. Additional Minimum BMPs for Specific Types of Regulated Commercial Facilities and Activities. Regulated commercial dischargers, including but not limited to the types of facilities and activities listed below, shall install, implement, and maintain the BMPs specified in the BMP Manual for each such type of facility or activity. BMPs must be installed, implemented, and maintained for all applicable specific facility or activity types regardless of whether that activity is the primary activity of the regulated commercial discharger.

1. Automobile, other vehicle, or equipment repair, maintenance, fueling, or cleaning;
2. Boat repair, maintenance, fueling, or cleaning, including marinas;
3. Automobile or other vehicle body repair or painting;
4. Automobile or other vehicle parking and storage;
5. Painting and coating;
6. Eating and drinking establishments, including food markets;
7. Parking lots and storage facilities;
8. Cement mixing and cutting and masonry;
9. Mobile carpet, drape, and furniture cleaning;
10. Pool and fountain cleaning;
11. Portable sanitary servicing;
12. Mobile vehicle washing;
13. Pest control;
14. Landscaping, including cemeteries, botanical gardens, golf courses, and parks;
15. Nurseries and greenhouses;
16. Building materials retailers and storage;
17. Animal facilities, including zoological gardens; and
18. Power washing.

F. Additional Controls. Where necessary to prevent discharges from causing or contributing to violations of water quality standards, the city may require the implementation of additional controls for commercial dischargers tributary to CWA Section 303(d) listed water body segments where the facility or activity generates pollutants for which the water body segment is impaired or for commercial dischargers within or directly adjacent to or discharging directly to receiving waters within ESAs. Additional controls may include, but are not limited to implementation of BMPs more stringent than the applicable minimum BMPs in this Chapter and preparing an SWPPP or conducting monitoring as provided in Section 14.22.090 of this Code.

14.22.120 Additional minimum best management practice requirements for industrial activities and facilities.

A. Application of Requirements. All regulated industrial dischargers must install, implement, and maintain at least the applicable additional minimum BMPs, if any, specified in this Section or in the BMP Manual for the category of activity or facility owned or operated by that discharger. All regulated industrial dischargers shall review their facilities, activities, operations, and procedures at least annually to detect and eliminate illicit connections and

illegal discharges. Corrective training shall be provided as needed (and documented in training records) whenever an illegal disposal practice is discovered.

B. Regulated Industrial Dischargers Identified. Dischargers that meet one or more of the criteria listed below are regulated industrial dischargers:

1. The facility is an industrial discharger, as defined in 40 CFR Section 122.26(b)(14), including those subject to the State industrial general storm water permit or other individual NPDES permit.

2. The facility is an operating and/or closed landfill.

3. The facility is subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

4. The facility is a hazardous waste treatment, disposal, storage, and/or recovery facility.

5. The facility is an industrial discharger tributary to a CWA Section 303(d) listed water body, and the facility generates a pollutant for which that water body is impaired.

6. The facility is a regulated industrial facility, and is located within or directly adjacent to (i.e., within two hundred feet) or discharges directly to a coastal lagoon or a receiving water body within an ESA.

C. Regulated industrial facilities must meet the applicable requirements set out in Sections 14.22.040 through 14.22.090 for all discharges, the applicable requirements set out in Section 14.22.110 for regulated commercial facilities, any applicable requirements in Section 14.22.140, and the following practices:

1. Pollution Prevention Practices. Regulated industrial facilities shall consider and, where determined to be appropriate by the facility, shall implement the following measures to prevent the pollution of storm water and runoff:

a. The use of smaller quantities of toxic materials or substitution of less toxic materials;

b. Changes to production processes to reduce waste;

c. Decreases in waste water flows;

d. Recycling of wastes as part of the production process;

e. Segregation of wastes; and

f. Treatment of wastes on site to decrease volume and/or toxicity.

2. Nonstructural BMPs. Regulated industrial facilities shall incorporate into the SWPPP, and install, implement and maintain the following nonstructural BMPs. The implementation of these practices shall be consistent with specifications, if any, contained in the BMP Manual.

a. BMPs for material handling and storage of significant materials;

b. BMPs for nonhazardous waste handling and recycling;

c. Preventive maintenance practices;

d. Self-inspection and quality assurance practices; and

e. Spill response planning.

3. BMPs for Specific Activities. Regulated industrial facilities shall install, implement and maintain BMPs as specified in the BMP Manual for any commercial activities conducted at the facility (as identified in Section 14.22.110) and for areas at the facility where industrial activities are conducted. Industrial activities include, but are not limited to the following:

a. Raw or processed materials bulk storage;

b. Mixing, where there is the potential for release of a pollutant;

c. Cutting, trimming, or grinding in connection with a production process;

d Casting, forging, or forming;

e. Hazardous materials storage (including tanks);

f. Pesticide or other chemical products formulation or packaging;
g. Process water pre-treatment;
h. Solid waste storage;
i. Waste water treatment;
j. Welding;
k. Blasting;
l. Chemical treatment; and
m. Loading and unloading significant materials.

4. Additional Structural BMPs. Regulated industrial facilities shall install, implement, and maintain one or more of the additional structural BMPs listed below where practicable, if use of such BMPs would significantly reduce pollution in run-off from the facility. The discharger shall determine in the first instance which of these BMPs to implement. However, an authorized enforcement official can order that additional BMPs be used at a particular facility.

a. Overhead coverage of outdoor work areas or chemical storage;
b. Retention ponds, basins, or other impoundments that confine storm water to the site;
c. Berms and concrete swales or channels that divert run-on and runoff away from contact with pollutant sources; and
d. Treatment controls to reduce pollutants in storm water or authorized nonstorm water discharges. The design of proposed treatment controls must be approved by the city engineer prior to implementation. Maintenance of treatment controls shall be the responsibility of the property owner.

D. Additional Requirements for Regulated Industrial Dischargers Subject to the State Industrial General Storm Water Permit.

1. Notice of Intent. Industrial dischargers required to comply with the State Industrial General Storm Water Permit shall maintain on site, and make available for inspection on request by the city, the state-issued waste discharge identification number (WDID) for the facility, and a copy of the notice of intent (NOI) filed with the SWRCB pursuant to that permit. The discharger shall submit the WDID and a copy of that NOI to the city by mail if directed to do so by an authorized enforcement official. Regulated industrial dischargers which are potentially subject to the State Industrial General Storm Water Permit that have determined they do not require coverage under that permit must prepare and retain on site, and make available for inspection, a written report documenting and explaining that determination.

2. Storm Water Pollution Prevention Plan. Dischargers required to prepare an SWPPP under the State General Industrial Storm Water Permit must prepare the plan, implement the plan, and maintain it at the site readily available for review. Failure to comply with an applicable State-required SWPPP is a violation of this Chapter.

E. Additional Controls. Where necessary to prevent discharges from causing or contributing to violations of water quality standards, the city may require the implementation of additional controls for industrial dischargers tributary to CWA Section 303(d) listed water body segments where the facility or activity generates pollutants for which the water body segment is impaired or for commercial dischargers within or directly adjacent to or discharging directly to receiving waters within ESAs. Additional controls may include, but are not limited to implementation of BMPs more stringent than the applicable minimum BMPs in this Chapter, and preparing an SWPPP or conducting monitoring as provided in Section 14.22.090 of this Code.

<u>14.22.130 Additional minimum best management practice requirements for municipal activities and facilities</u>. Municipal facilities must meet the requirements set out in Sections 14.22.010 through 14.22.090 and, where applicable, Sections 14.22.150 and 14.22.160 of this Chapter. In addition, these facilities and activities must install, implement, and maintain at least

the additional minimum BMPs, if any, specified in Section 14.22.120 or in the BMP Manual, for industrial areas and activities at the municipal facility.

14.22.140 Manuals.

A. Effect of Manuals. All dischargers who are required by this Chapter to install, implement, and maintain BMPs shall ensure that their selection of BMPs is consistent with the applicable specifications, if any, contained in the BMP Manual and the SUSMP Manual, for the category and priority of activity or facility owned or operated by that discharger. All BMPs installed, implemented, or maintained to meet the requirements of this Chapter must conform to the applicable specifications, if any, set out in these manuals.

B. Existing Facilities. The BMP Manual sets out minimum BMPs and other objective specifications for specific types and categories of existing facilities and activities. Where minimum BMPs and objective specification are specified, they are mandatory. Where no minimum BMPs have been specified in the BMP Manual for a type and category of facility or activity, only the requirements set out in this Chapter are applicable.

C. Land Development Projects. The BMP Manual sets out minimum BMPs and other objective specifications for all construction phase activities. The SUSMP Manual sets out minimum BMPs, design criteria, and other objective specifications for project design and planning with respect to the post-development condition of priority development projects.

D. Conflicting or More Detailed Requirements. In case of any conflict between any applicable minimum BMPs specified in this Chapter, and any applicable requirements described in more detail for a particular type of facility or activity in the BMP Manual or the SUSMP Manual, the requirement in the BMP Manual or the SUSMP Manual shall prevail.

14.22.150 Additional requirements for land disturbance activity.

A. Permit Issuance. No land owner or development project proponent shall receive any city grading, clearing, building, or other land development permit required for land disturbance activity without first meeting the requirements of this Chapter with respect to the portion of the development project and the land disturbance activity to which the permit at issue would apply.

B. Owners and Operators Both Responsible and Liable. Persons or entities performing land disturbance activity (including but not limited to construction activities) in the city, and the owners of land on which land disturbance activity is performed, are dischargers for purposes of this Chapter, provided however, that a local government or public authority is not a discharger as to activities conducted by others in public rights-of-way.

C. Storm Water Management Plan. All applications to the city for a permit or approval associated with a land disturbance activity must be accompanied by a storm water management plan on a form or in a format specified by the city. The storm water management plan shall specify the manner in which the discharger/applicant will implement the BMPs required by this Chapter for the activity at issue, including but not limited to the applicable BMPs required by Subsection D below.

D. Additional Minimum BMPs for Land Disturbance Activity. Whether a city permit or approval is required or not, and whether a storm water management plan is required to be submitted or not, all dischargers engaged in land disturbance activity shall implement BMPs as detailed in the BMP Manual in the following additional areas, if applicable to the project:

1. Erosion control on slopes;
2. Erosion control on flat areas; or BMPs to desilt runoff from flat areas;
3. Runoff velocity reduction;
4. Sediment control;
5. Off-site sediment tracking control;
6. Materials management;

7. Waste management;
8 Vehicle and equipment management;
9. Water conservation;
10. Structure construction and painting;
11. Paving operations;
12. Dewatering operations;
13. Planned construction operations;
14. Downstream erosion control;
15. Prevention of nonstorm water discharges;
16. Protection of ground water.

E. Control to the MEP. All dischargers engaged in land disturbance activity must install, implement, and maintain those additional BMPs, if any, that are needed to prevent or reduce pollutant discharges in storm water from land disturbance to the MEP.

F. Notice of Intent. Dischargers required to comply with the State Construction General Storm Water Permit shall maintain on site, and make available for inspection on request by the city, any State-issued waste discharge identification number (WDID) for the site and a copy of the notice of intent (NOI) filed with the SWRCB pursuant to that permit.

G. Storm Water Pollution Prevention Plan. Dischargers required to prepare an SWPPP under the State General Construction Storm Water Permit must prepare the plan, implement the plan, and maintain it at the site readily available for review. Failure to comply with an applicable State-required SWPPP is a violation of this Chapter.

H. Facility Monitoring. Dischargers required to conduct monitoring under the State Construction General Storm Water Permit must conduct such monitoring in conformance with requirements specified by the State, retain records of such monitoring on site, and make such records available for inspection by an authorized enforcement official.

I. Additional Controls. Where necessary to prevent discharges from causing or contributing to violations of water quality standards, the city may require the implementation of additional controls for dischargers engaged in land disturbance activity tributary to CWA Section 303(d) listed water body segments where the land disturbance area or activity generates pollutants for which the water body segment is impaired or for dischargers engaged in land disturbance activity within or directly adjacent to or discharging directly to receiving waters within ESAs. Additional controls may include, but are not limited to implementation of BMPs more stringent than the applicable minimum BMPs listed in this Chapter.

14.22.160 Additional planning, design, and post-construction requirements for Development Projects.

A. Application to Development Projects. No land owner or development project proponent in the city shall receive any city permit or approval listed in Section 14.22.040(F) of this Chapter for land development activity or redevelopment activity unless the project meets or will meet the requirements of this Chapter. Post-construction BMP requirements imposed by this Section and by the SUSMP Manual shall not apply to those physical aspects of the project that have been completed or substantially completed pursuant to and as required by a valid city permit or approval at the time a complete application for a subsequent permit or approval is submitted.

B. Owners and Developers Responsible and Liable. Developers, development project proponents, and land owners for land on which land development activity is performed are dischargers for purposes of this Chapter; provided, however that a local government or public authority is not a discharger as to activities conducted by others in public rights-of-way.

C. Post-Construction BMPs Required. Development projects with the potential to add pollutants to storm water or to affect the flow rate or velocity of storm water runoff after construction is completed, shall be designed to include and shall implement all of the following

post-construction BMPs to ensure that pollutants and runoff from the development will be reduced to the MEP, and will not significantly degrade receiving water quality.

1. Source control BMPs. Source control BMPs include storm drain system stenciling and posting of signs; posting of signs or other form of notification at storm drain inlets and access points to creeks and channels discouraging illegal dumping and stating the receiving water by name; properly designed outdoor material storage areas; properly designed trash storage areas; and implementation of efficient irrigation systems.

2. Low Impact Development (LID) BMPs. LID BMPs shall maximize infiltration, provide retention, slow run-off, minimize impervious footprint and constructed widths, and direct run-off from impervious areas into landscaping.

3. Buffer zones. A project shall be designed to include a buffer zone for natural water bodies. Where buffer zones are not feasible, other equally serving methods may be implemented, such as trees or access restrictions.

4. Construction BMPs. Implement land disturbance BMPs described in this Chapter.

5. Submittal of proof of a mechanism under which ongoing long-term maintenance of all structural post-construction BMPs will be conducted.

6. Additional BMPs as necessary to ensure that pollutants and runoff from the development project do not cause or contribute to an exceedance of a receiving water quality objective.

D. Additional Post-Construction BMP Requirements for Priority Development Projects. Priority development projects are subject to additional requirements as described in SUSMP Manual.

E. Post-Construction Storm Water Management Plan. All applications to the city for a permit or approval associated with a land development or redevelopment activity must be accompanied by a post-construction storm water management plan on a form or in a format specified by the city. The plan shall specify the manner in which the discharger/applicant will implement the post-construction BMPs required by this Chapter. The plan must address those aspects of the project that, at the time a complete application is submitted, are subject to further environmental review pursuant to Section 15162 of the California Environmental Quality Act. Post-construction BMPs for other aspects of the project need not be addressed in this plan.

F. Storm Water Management Plan Review Fee and Deposit. Fees for storm water management plan review and deposit thereof shall be adopted by resolution.

14.22.170 Maintenance of BMPs.

A. Existing Development. Residential, commercial, industrial, agricultural, and municipal dischargers shall maintain the BMPs they rely upon to achieve and maintain compliance with this Chapter.

B. New Development and Redevelopment. The owners and occupants of lands on which structural post-construction BMPs have been installed to meet the requirements of this Chapter shall ensure the maintenance of those BMPs, and shall maintain those BMPs by contract or covenant or pursuant to this Chapter. The owners of lands on which BMPs have been installed to meet the requirements of this Chapter and applicable SUSMP requirements are responsible for maintenance of those BMPs, shall enter into a BMP maintenance agreement contract or equivalent agreement with the city, and shall provide annual verification that appropriate maintenance is conducted for all treatment control BMPs.

C. Maintenance Obligations. Primary responsibility to maintain a BMP may be transferred through a contract or other agreement. If that contract provides that it will be submitted to the city pursuant to this Chapter as part of a development permit application, and if that contract is so submitted, the person or entity accepting a maintenance obligation in such a contract or agreement will also be legally obliged to maintain that BMP pursuant to this Chapter.

D. Obligation to Maintain BMPs Not Avoided by Contracts or Other Agreements. For purposes of city enforcement, no contract or other agreement imposing an obligation to maintain a BMP can relieve a person or entity of any obligation to maintain a BMP imposed by this Chapter.

E. Disclosure of Maintenance Obligations. Any developer who transfers ownership of land on which a BMP is located or will be located or who otherwise transfers ownership of a BMP or responsibility for the maintenance of a BMP to another person or entity, shall provide clear written notice of the maintenance obligations associated with that BMP to the new or additional responsible party prior to that transfer, and shall record that obligation so that the BMP will run with the land.

F. Maintenance Plans for Development Projects. The proponents of any land development project or significant redevelopment project that requires a discretionary city permit shall provide to the city for review and approval prior to issuance of such permit, a plan for maintenance of all post-construction structural BMPs associated with the project. The plan shall specify the persons or entities responsible for maintenance activity, the persons or entities responsible for funding, schedules and procedures for inspection and maintenance of the BMPs, worker training requirements, and any other activities necessary to ensure BMP maintenance. The plan shall provide for servicing of all post-construction structural BMPs at least annually, and for the retention of inspection and maintenance records for at least three years.

G. Access Easement/Agreement. The proponents of any land development project or significant redevelopment project that requires a discretionary city permit shall agree to a condition of approval that provides the city access for inspection and maintenance of BMPs or, at the discretion of the city, shall provide to the city for review and approval prior to issuance of such permit an executed, permanent easement onto the land on which post-construction structural BMPs will be located (and across other lands as necessary for access), to allow inspection and/or maintenance of those BMPs.

H. Security for Maintenance for Land Development Projects. If it is determined by the authorized enforcement official that the public interest requires the posting of bond or other security to assure the maintenance of a BMP, such bond or security may be required by the authorized enforcement official.

PASSED and ADOPTED this 16th day of February, 2010.

Ron Morrison, Mayor

ATTEST:

Michael R. Dalla, City Clerk

APPROVED AS TO FORM:

George H. Eiser, III
City Attorney

Passed and adopted by the Council of the City of National City, California, on February 16, 2010, by the following vote, to-wit:

Ayes: Councilmembers Morrison, Parra, Sotelo-Solis, Van Deventer, Zarate.

Nays: None.

Absent: None.

Abstain: None.

AUTHENTICATED BY: RON MORRISON
Mayor of the City of National City, California

MICHAEL R. DALLA
City Clerk of the City of National City, California

By: _____
Deputy

I HEREBY CERTIFY that the foregoing ordinance was not finally adopted until seven calendar days had elapsed between the day of its introduction and the day of its final passage, to wit, on February 2, 2010 and on February 16, 2010.

I FURTHER CERTIFY THAT said ordinance was read in full prior to its final passage or that the reading of said ordinance in full was dispensed with by a vote of not less than a majority of the members elected to the Council and that there was available for the consideration of each member of the Council and the public prior to the day of its passage a written or printed copy of said ordinance.

I FURTHER CERTIFY that the above and foregoing is a full, true and correct copy of ORDINANCE NO. 2010-2329 of the City Council of the City of National City, passed and adopted by the Council of said City on February 16, 2010.

City Clerk of the City of National City, California

By: _____
Deputy

ATTACHMENT 2.2

NPDES PROJECT APPLICABILITY FORM (SUSMP CHECKLIST)

City Of National City

1243 National City Blvd.
National City, CA 91950
(619) 336-4580

National Pollutant Discharge Elimination System (NPDES) Project Applicability Form

No project will be accepted by the City without this form completed in its entirety

Project Name: _____ Project Area: _____ acres/sq ft

Project Address: _____

APN: _____ Proposed Impervious Area:_____ acres/sq ft

Description of Project: _____

Description of Location: _____

Section 1 – Permanent Storm Water BMP Requirements:

PART A: Determine Subjectivity to SUSMP Requirements

Is the project new development? □ *Yes* □ *No*

Is the project redevelopment that adds/replaces/creates 5,000 ft^2 of impervious surface[1]? □ *Yes* □ *No*

If both of the above answers are "no", go to Part B. If either of the above answers is "yes," answer the questions below (check all that apply).

Is the Project…

1. *Detached or attached residential development of 10 or more units?* □ *Yes* □ *No*
2. *Commercial development greater than one acre?* □ *Yes* □ *No*
3. *Industrial development greater than one acre?* □ *Yes* □ *No*
4. *Automotive repair shop?* □ *Yes* □ *No*
5. *Restaurant?* □ *Yes* □ *No*
6. *Steep (slope of 25% or more) hillside development that will create greater than 5,000 square feet of impervious surface?* □ *Yes* □ *No*
7. *Project located within or directly adjacent to (within 200 feet) or directly discharges to Environmentally Sensitive Area (ESA) and creates at least 2,500 square feet of impervious area or increases impervious area to 10% or more of its naturally occurring condition?* □ *Yes* □ *No*
8. *Parking lot greater than or equal to 5,000 square feet of impervious surface OR with at least 15 parking spaces and potentially exposed to urban runoff?* □ *Yes* □ *No*
9. *Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater?* □ *Yes* □ *No*
10. *Retail gasoline outlets 5,000 square feet or more or with a project Average Daily Traffic (ADT of 100 or more vehicles per day* □ *Yes* □ *No*

[1] See the City's SUSMP Ordinance for more detail on the definition of "significant redevelopment."
[2] Limited exclusion: trenching and resurfacing work associated with utility projects are not considered Priority Projects. Parking lots, buildings and other structures associated with utility projects are Priority Projects if one or more of the criteria in Part A is met.

If any of the answers to Part A is "Yes", your project is a "Priority Project" and must meet the requirements of the City's Standard Urban Storm Water Mitigation Plan (SUSMP) Ordinance.[2]

Is this a PRIORITY PROJECT that requires a SUSMP report? □ **Yes** □ **No**

If all answers to Part A are "No", continue to PART B.
If any of the answers to Part A is "Yes", skip PART B and go to Section 2.

PART B: Determine Non-SUSMP Standard Permanent Storm Water BMP Requirements

Does the project require any of the following permits or approvals? □ ***Yes*** □ ***No***

- *Discretionary: Conditional use permit (including modification or extension); Coastal development permit; Parcel map (and modifications); Reclamation plan; Planned development permits; Planned unit development permits; Planning commission approval of plans; Site plan review; Tentative map (and amendments to conditions of approval or time extension); Tentative parcel map; or Variance OR*
- *Ministerial: Administrative clearing permit; Lot line adjustment; Final map modification; Grading plan (including modification or renewal); Improvement plan (including modification); Landscape plan; Building permit; Construction right-of-way permit; Encroachment permit; Excavation permit; On-site wastewater system permit; Underground tank permit; or Well permit*

Will the project include exterior construction beyond signs, façade work, or other incidental construction to an existing structure? □ ***Yes*** □ ***No***

If all answers to Part A are "No" and any answer to Part B is "Yes", your project is subject to the City's Standard Permanent Storm Water Best Management Practice (BMP) requirements.

If every question in both Parts A and B is answered "No", your project is exempt from permanent storm water requirements.

Is this project subject to the Standard Permanent Storm Water BMP requirements? □ **Yes** □ **No**

Section 2 – Construction Requirements

General Construction Permit
If your project disturbs at least one acre of land, you are subject to the State General Construction Permit. A Notice of Intent (NOI) must be filed with the State Water Resources Control Board (SWRCB) and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared for your project.

Is this project subject to the General Construction Permit? □ **Yes** □ **No**

Construction Threat to Water Quality Prioritization
See the attached flow chart for guidance on determining the construction prioritization.

This project is □ **HIGH** □ **MEDIUM** □ **LOW** **priority threat to water quality.**

Section 3 – Operating Requirements

After your project is complete, certain water quality protection requirements may apply to the facility. The facility owner and operator should be made aware of these requirements.

All municipal, industrial, commercial, and residential sites in the City of National City are required to implement storm water BMPs to reduce the amount of pollution discharged to the Maximum Extent Practicable (MEP). See Appendix C of the City's Jurisdictional Urban Runoff Management Plan (JURMP) for further details.

Some industrial facilities are also subject to the State General Industrial Permit for Storm Water Discharges (Industrial Permit). To find out if your project may be required to obtain coverage under the Industrial Permit after it begins operations, visit the State Water Resources Control Board web sites at http://www.waterboards.ca.gov/stormwtr/industrial.html.

Section 4 – Certification

Name & Title of Person completing form: _____ _____

Telephone number: (_____)_____-_____ Fax number: (_____)_____-_____

Email Address: _____ (optional)

I understand that as a condition of my permit, I am required to prevent construction generated or related pollutants from discharging from the project site. All construction projects within the City of National City are required to implement Best Management Practices (BMPs). I have received a copy of the Construction Site BMP handout.

Signature of responsible party: _____ Date: _____

For City of National City Use Only

Engineering Department
The information provided is consistent with the proposed plans □ **Yes** □ **No**

Information/documentation disseminated for SUSMP
□ Standard Permanent Storm Water BMPs □ Non-SUSMP Standard Permanent Storm Water BMPs
□ General Construction Permit □ Erosion & Sediment Control □ General Industrial Permit
□ N/A (No required documentation) □ Other _____

_____ _____
Signature Date

☐ **Planning Department** **OR** ☐ **Community Development Commission** _____
Initial

Building Department _____ Initial ☐ BMP information distributed

SUSMP REVIEW FLOW CHART

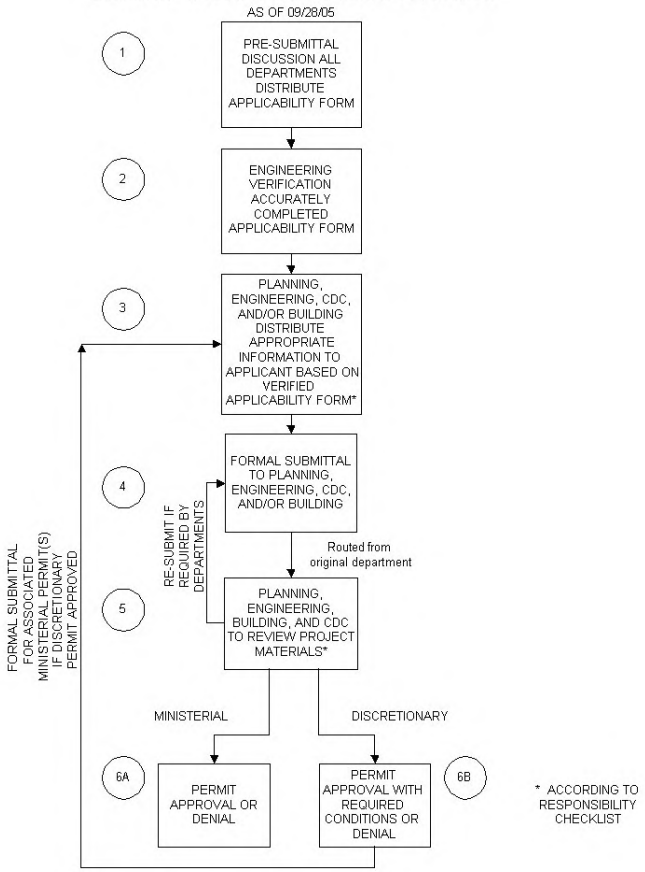

CONSTRUCTION THREAT TO WATER QUALITY PRIORITIZATION FLOW CHART

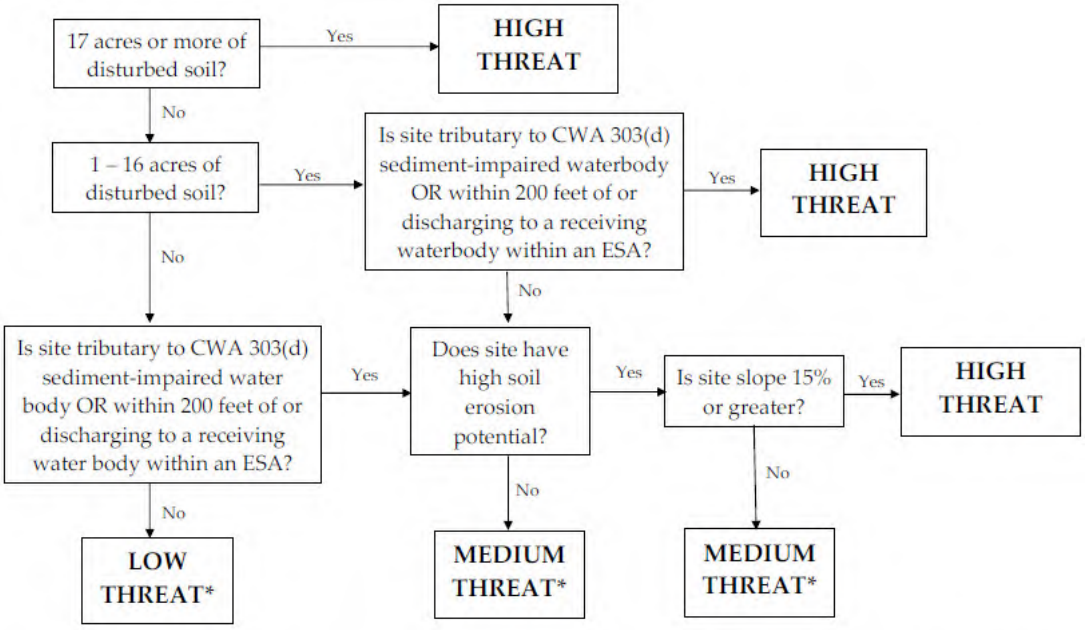

*Sites with a low or medium TTWQ can be given a higher threat prioritization based on additional factors, such as project type, non-storm water discharge potential, or if there is a history of non-compliance with storm water regulations at the site.

303(d) Water bodies - 7th St Channel (La Paleta Creek) and 24th St Marine Terminal
ESA Water bodies - Paradise Marsh & Creek and Sweetwater Marsh National Wildlife Refuge

ATTACHMENT 3.1

CONSTRUCTION BMP FACT SHEET (BLUE SHEET)

Construction Site Best Management Practices

As a condition of your permit, you are required to prevent construction generated or related pollutants from discharging from your project site. All construction projects within the City of National City are required to implement at least one of the Best Management Practices (BMPs) from each category and subcategory listed below, where applicable. Property owners and/or permit holders will be responsible for the selection, installation and maintenance of proper BMPs in accordance with industry recommended standards such as the Caltrans or California Storm Water BMP handbooks or in accordance with the California General Permit for Construction. Depending on site-specific information such as project scope and potential associated discharges. Additional BMPs may be required where appropriate. Project proponents will need approval from the City prior to installation of any alternate BMPs not listed below.

Minimum BMPs for Construction Activities:

1. **Planning and Scheduling**
   Planning and scheduling BMPs such as minimizing grading are required where feasible to help reduce the amount and duration of soil exposure.
   a. Preservation of natural hydrologic features
   b. Preservation of riparian buffers and corridors
   c. Minimization of areas that are cleared and graded to only the portion of the site necessary for construction
   d. Minimization of exposure time of disturbed soil areas
   e. Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods
   f. Temporary stabilization and reseeding of disturbed soil areas as rapidly as feasible
   g. Employee and Subcontractor Training

2. **Soil Stabilization and Erosion Prevention**
   Physical Stabilization BMPs such as vegetation, landscaping or structural methods are required to prevent erosion from exposed slopes.
   a. Planning and Scheduling
   b. Preservation of Existing Vegetation
   c. Physical Stabilization
      - Hydraulic Mulch
      - Hydro-seeding
      - Soil Binders
      - Straw Mulch
      - Geo-textiles, Plastic Covers, and Erosion Control Blankets/Mats
      - Wood Mulching
      - Earth Dikes/Drainage Swales and Lined Ditches
   d. Site Drainage
      - Outlet Protection/Velocity Dissipation
      - Slope Drains
   e. Permanent re-vegetation or landscaping as early as feasible

See reverse side

3. **Sediment Containment**

Sediment containment controls should be used to supplement erosion prevention methods not as a substitute for erosion control. Sediment controls act to contain sediment that has been previously eroded and may get carried on-site and/or discharged from the site in sheet flow or from tracking by equipment and vehicles.

a. Perimeter Protection
   - Silt Fencing
   - Gravel Bag Berm
   - Fiber Rolls

b. Sediment Capture
   - Storm Drain Inlet Protection
   - Sediment Trap
   - De-silting Basins designed in accordance with industry standards such as Caltrans, California Storm Water BMP manual. If the project is five acres or greater the de-silting basin must be designed in accordance with the State General Construction Permit, Order DWQ 99-08.
   - Gravel bag Barrier

c. Sediment Tracking
   - Stabilize Construction Entrances and Exits
   - Construction Road Stabilization
   - Entrance/ Outlet Tire Wash
   - Street Sweeping

4. **Materials and Equipment Management**

Pollution Prevention measures are required were applicable to prevent the contamination of storm water from waste materials, construction materials, vehicles, and equipment stored on-site. Each site must evaluate the potential pollutants on-site, which may be discharged during construction activities.

a. Materials Management
   - Material Delivery and Storage
   - Material Use
   - Stockpile Management
   - Spill Prevention and Control

b. Vehicle and Equipment Operations
   - Vehicle and Equipment Cleaning
   - Vehicle and Equipment Fueling
   - Vehicle and Equipment Maintenance

c. Waste Management
   - Solid
   - Liquid
   - Sanitary
   - Concrete
   - Hazardous
   - Contaminated Soil

5. **Non-Storm Water Discharge and Drainage Control**

Management of non-storm water discharges involves pollution prevention methods as well as drainage control. Project managers must implement appropriate drainage control methods to divert, contain and properly discharge drainage generated by construction activities.

a. General
   - Paving and Grinding Operations

b. Non-storm water discharges
   - Water Conservation Practices
   - Dewatering Operations
   - Potable Water/Irrigation and Flushing

For additional information, call Barbara Tipton, Storm Water Compliance Inspector at (619) 336-4583 or Btipton@ci.national-city.ca.us

ATTACHMENT 4.1

MUNICIPAL INSPECTION FORM

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Facility Name_____

Street Address_____ Mailing Address_____

_____ _____

Manager/Operator(s)_____

Telephone # (_____) _____ - _____ ext._____ Fax # (_____) _____ - _____

Manager/Operator(s) Email:_____

Facility Personnel Present_____

B. FACILITY/SITE INFORMATION

Principal activity:_____

JURMP Classification_____

New JURMP Classification?_____

Does facility maintain SWPPP/BMP Plan? ☐ Yes ☐ No

If yes, what is the date of last SWPPP/BMP Plan revision?_____

If yes, does the SWPPP/BMP Plan include applicable minimum BMPs from the JURMP? (if no, describe in Section E) ☐ Yes ☐ No

If yes, does the SWPPP/BMP Plan include a current list of individuals Responsible for implementing BMPs at the site? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____ Hydrologic Area: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____ square feet

Approximate % impervious surface of this area_____ %

Exposed areas of intensive outdoor activity: _____

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

D. BMP ASSESSMENT

BMPs	N/A	Yes	No	Comments
D.1 General				
Is the site free of excessive litter and debris?				
Are discharge locations free of excessive sediment and debris?				
Are parking lots, sidewalks and streets free of excessive sediment and debris?				
Are roof downspouts directed away from areas of potential pollutants?				
Is wash water from pressure washing / hosing managed appropriately?				
Are employees trained in storm water management?				
Does the facility have a current log of employees who have participated in training?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
If reclaimed water is used for irrigation, is the site free of evidence of irrigation water entering the storm drain?				
Are stockpiles of soil or landscape waste covered when feasible and equipped to prevent runoff transport?				
Are pesticides, herbicides, and fertilizers managed in accordance with the JURMP BMPs?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area adequately covered (closed lids or permanent overhead cover)?				
Is the trash/recycling area free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor materials that pose a threat to water quality stored appropriately (covered or in sealed containers)?				
Are outdoor storage containers properly labeled?				
Is there an accessible, appropriate spill response kit?				
Is there a written spill response plan? If so, please provide to inspector. (NA if no significant materials to spill)				
Are liquid storage containers/tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
Is water from pools and/or fountains disposed of properly?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

BMPs	N/A	Yes	No	Comments
Are vehicle maintenance activities conducted within contained areas when feasible (garage, canopy, work shop)?				
Are equipment and vehicles inspected daily for leaks and repaired as necessary?				
Are storm drain inlets near vehicle-fueling areas protected from spills and leaks?				
Is vehicle washing preformed in a designated area where runoff does not enter the MS4?				
Are biodegradable soaps used when appropriate?				
D.5 Building Repair/Construction				
Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				
Are impervious areas free of debris and spills from painting, scraping, and/or sandblasting activities?				
D.6 Structural BMPs				
Are structural BMPs adequately maintained? (NA if no structural BMPs at facility)				
D.7 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.8 Other				
Are appropriate signs/stenciling present at the facility?				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				

E. ADDITIONAL COMMENTS
(describe any additional deficiencies not represented above and/or notable BMP improvements)

City of National City
Storm Water Quality Inspection for Municipal Facilities
Inspected by D-MAX Engineering, Inc.

F. CORRECTIVE ACTION

Is corrective action needed? ☐ Yes ☐ No (If **BMP-related** corrective action is required, describe below.)

Operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax ☐ E-Mail

G. VIOLATIONS

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described in Section F.

☐ Violation of City Ordinance(s):

- ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
  Description_____
- ☐ Illegal connection(s) to the storm drain system
  Location_____
- ☐ Littering
- ☐ Failure to properly implement required BMPs

☐ Other Violation_____

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

☐ Implement the recommended corrective actions listed in Section F.

Additional actions required:

H. ADDITIONAL RECOMMENDED CITY ACTIONS*

*Recommended City Actions listed at the time of inspection are subject to change based on later review by office staff

Does this facility require a follow-up inspection? ☐ **Yes** ☐ **No**

ASSESSMENT

Level of knowledge regarding storm water issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

"RW 303(d)" = Receiving water impairments, as listed in the most recent 303(d) list
"WS COC" = High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
"PDP" = pollutant discharge potential.
"Emp. Training" = employee training activities focused on storm water pollution prevention
"Housekeeping" = standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
"Minor Struct." = minor structural BMPs that do not require building permits, such as covering with tarps or building berms
"Major Struct." = major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results* are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results* are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results* are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results* above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results* exceed the EPA benchmark by an order of magnitude or more

DMAX

ATTACHMENT 5.1

INDUSTRIAL AND COMMERCIAL INSPECTION FORM

CITY OF NATIONAL CITY

STORM WATER COMPLIANCE INSPECTION FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Inspected by D-MAX Engineering, Inc.

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

Result: ☐ Full Insp. ☐ Could not Contact ☐ Not Inventoried ☐ Moved, Vacant ☐ Refused ☐ Moved, Replaced by_____ ☐ Out of Jurisdiction ☐ Duplicate of: _____ ☐ Mobile

A. CONTACT INFORMATION

Original

Business Name_____

_____

Street Address _____

_____

Responsible Person(s)_____

Title:_____

Business Telephone # (____) _____ -_____ext._____

Business Fax # (_____) _____ - _____

Changes

Business Name_____

_____

Street Address_____

☐ change _____

Responsible Person(s)_____

Business Telephone # (____) _____ -_____ext._____

Business Fax # (_____) _____ - _____

Home Based? ☐ Yes ☐ No Mobile Business? ☐ Yes ☐ No **APN**:_____

Is this facility located in a multi-suite complex? ☐ Yes ☐ No **E-Mail:**_____

Does facility have a current business certificate? ☐ Yes ☐ No #_____ Exp._____

Facility personnel present:_____

B. FACILITY/SITE INFORMATION

Principal activity:_____

Assigned SIC Code(s): _____ _____ _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

Recommended change of SIC Code(s)? _____ _____ _____

Existing SIC Code(s) _____ _____ _____ ☐ Food Attachment ☐ Industrial Attachment

Status Update (if no longer active in City or does not need an inspection): ☐ Moved/Out of Business ☐ Duplicate ☐ Not Inventoried ☐ Out of Jurisdiction

Is facility subject to CA Statewide General Industrial Permit? ☐ Mandatory ☐ Conditional ☐ No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐ Yes ☐ No WDID: 9 37I0_____

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a storm water monitoring program? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Discharge points: _____

_____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate % impervious surface of this area_____%

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP ASSESSMENT

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.1 General					
Keep site free of litter, debris, and sediment using dry methods					
Keep drains on site free of litter and debris					
Keep outdoor areas free of spills and leaks					
Collect water from pressure washing or hosing and dispose of appropriately					☐ Unknown Performed by:
Collect and dispose of cleaning water appropriately					
Direct roof downspouts away from areas of potential pollutants					
D.2 Landscaping					
Properly manage pesticides/fertilizer; use IPM when feasible					☐ Unknown Landscaping Co:
Employ adequate erosion prevention measures (vegetation or physical stabilization)					
Reduce over watering/over-irrigation					
Properly store stockpiles to prevent material transport					
Properly store and dispose of green waste					☐ Unknown
D.3 Materials and Wastes					
Protect trash area from contact with storm water					
Keep trash area free of litter and debris, liquids, powders, sediment					
Adequately cover materials stored outside					
Prevent run-on from contacting materials stored outdoors					
Provide an accessible, functional spill response kit					
Properly label outdoor storage containers					
Equip liquid storage containers with secondary containment					
Keep secondary containment free of spills and rainwater					
Properly store and dispose of hazardous materials					
Keep loading and unloading areas, including drains, free of debris					
Dispose of water generated by processing activities appropriately					
Dispose of pool, spa, fountain, and filter backwash water properly					☐ Unknown Performed by:
Clean floor mats in locations that do not drain to storm drain system					

BMPs	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
D.4 Equipment, Vehicles, and Outdoor Activities					
Conduct outdoor activities within contained areas (garage, under canopy, work shop)					
Use drip pans to collect leaks/spills					
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4					
D.5 Other					
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff					
Identify and eliminate illicit connections and illegal discharges					
Provide storm water training for appropriate employees					

D.6 Additional Questions	Comments/Results
Are there any potential air sources that could contribute to atmospheric deposition of pollutants?	☐ Painting ☐ Sandblasting ☐ Fuel Distribution ☐ Dust dispersion or mineral processing ☐ Metal smelting ☐ Metal plating or anodizing ☐ Chemical production or mixing ☐ Large fuel burning device ☐ Incinerator
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/ sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A
What is the approximate percentage of the site that drains to the treatment control BMPs?	☐ N/A
Do major potential pollutant sources drain to treatment BMP(s)?	☐ All ☐ Some ☐ None ☐ N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	NOI NONA/NEC Calendar

D.7 Additional Required Actions

E. STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE*

☐ Non-compliance with the State Industrial Storm Water General Permit noted.

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE*:

☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) to obtain coverage under the Industrial Permit—see Attachment 3 of the Industrial Permit (www.waterboards.ca.gov/stormwtr/industrial.html).

- ☐ For "Conditional" facilities only: this site presently has outdoor exposure that requires filing for coverage under the Industrial Permit. If you implement all the recommended BMPs and eliminate outdoor exposure, you may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.

☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP)—see Section A of the Industrial Permit.

☐ Develop and implement a storm water monitoring program--see section B of the Industrial Permit for guidelines.

☐ Complete the provided Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required: _____

_____

_____

F. CORRECTIVE ACTION SUMMARY

☐ **Corrective Actions Required.** Please refer to sections D.1-D.6 and E of this form and, if applicable, the Food Establishment Storm Water BMP Assessment form (if applicable, it is attached).

☐ No Corrective Actions Required at this Time.

G. RECOMMENDED CITY ACTIONS**

_____

_____

_____

_____

☐ poor management of shared waste disposal area(s), but responsible party could not be indentified

ASSESSMENT

Level of knowledge regarding stormwater issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

*Please note that the Regional Water Quality Control Board (RWQCB) is the final arbiter of Industrial Permit compliance; please contact the RWQCB at (858) 467-2952 for details of what is necessary to comply with the Industrial Permit.

**Recommended City actions listed at the time of inspection are subject to change based on later review by office staff.

Follow Up Inspection Priority: ☐ **Priority 1** ☐ **Priority 2** ☐ **Priority 3** ☐ **None**

☐ Potential Hazmat issue

Re-inspect on or after: ____/_____/_____
Date

RESOLUTION

☐ NOV Issued: _____/_____/_____
Date

☐ Corrective Action Letter Issued: _____/_____/_____
Date

☐ Citation Issued: _____ _____/_____/_____
Number Date

☐ Verbal Warning

☐ Stop Work Order

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

"RW 303(d)" = Receiving water impairments, as listed in the most recent 303(d) list
"WS COC" = High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
"PDP" = pollutant discharge potential.
"Emp. Training" = employee training activities focused on storm water pollution prevention
"Housekeeping" = standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
"Minor Struct." = minor structural BMPs that do not require building permits, such as covering with tarps or building berms
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Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results* are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results* are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results* are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results* above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results* exceed the EPA benchmark by an order of magnitude or more

DMAX

CITY OF NATIONAL CITY
FOOD ESTABLISHMENT STORM WATER BMP ASSESSMENT

Inspected by D-MAX Engineering, Inc.

Business Name _____

How long has the manager worked at the business? ☐ < 3 months ☐ 3-6 months ☐ 7-12 months ☐ > 1 year ☐ Unknown

Is the facility manager also the owner? ☐ Yes ☐ No ☐ Unknown

Property management company:_____ Business Telephone # **(____)**____ -_____ext.____

Mailing address:_____

_____

BMPs	No Corrections Required		**Corrections Required**		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
Keep grease bin and area surrounding grease bin free of grease stains/spills					
Keep storm drain inlets free of grease and other food debris					

Additional Questions	**Comments**
How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Dumpster ☐ N/A	
Do oil-recycling/grease bins have overhead coverage?	☐ Overhead structure ☐ External container overhead ☐ No ☐ N/A
Do oil-recycling/grease bins have secondary containment?	☐ External containment ☐ Double-walled ☐ No ☐ N/A
Does facility have a grease trap or grease interceptor?	☐ No ☐ Grease Trap ☐ Grease Interceptor ☐ Unknown
What is the reported maintenance frequency for the grease trap or interceptor?	☐ Annual ☐ Every 6 mn ☐ Quarterly ☐ Monthly ☐ Every 2 wks ☐ Weekly ☐ > Weekly ☐ Unknown ☐ N/A

How are outdoor areas (patio, loading dock, parking lot, dumpster area, etc.) cleaned? (check all that apply)

- ☐ Hose (If yes, see relevant question in Section D.1 of main form)
- ☐ Sweep
- ☐ Mop / deck brush (If yes, see relevant question in Section D.1 of main form)
- ☐ Power wash (If yes, see relevant question in Section D.1 of main form)
- ☐ Pick up trash
- ☐ Outside company/property management
- ☐ Do not clean

CITY OF NATIONAL CITY

SWPPP/BMP PLAN AND/OR STORM WATER MONITORING PLAN ATTACHMENT

Inspected by D-MAX Engineering, Inc.

SWPPP REVIEW* **Does facility maintain a SWPPP/BMP Plan:** ☐ **Yes** ☐ **No** ☐ **Unknown** ☐ **Not Available**

SWPPP Component	Provided		Adequate		Comments
Site Map/Description……	☐ Yes	☐ No	☐ Yes	☐ No	_____
Materials List……..	☐ Yes	☐ No	☐ Yes	☐ No	_____
Significant Spills/Leaks…….	☐ Yes	☐ No	☐ Yes	☐ No	_____
Pollution Prevention Team….. (Identification of current team members.)	☐ Yes	☐ No	☐ Yes	☐ No	_____
Industrial Activities……	☐ Yes	☐ No	☐ Yes	☐ No	_____
Pollutant Sources/Risks……..	☐ Yes	☐ No	☐ Yes	☐ No	_____
Compliance Activity Schedule. (Procedures to conduct annual site compliance evaluation.)	☐ Yes	☐ No	☐ Yes	☐ No	_____
Employee Training……	☐ Yes	☐ No	☐ Yes	☐ No	_____
Accessible to staff…..……..	☐ Yes	☐ No	☐ Yes	☐ No	_____
Storm Water BMPs…..……	☐ Yes	☐ No	☐ Yes	☐ No	_____

*The SWPPP review portion of the inspection focuses mainly on proposed BMPs and monitoring practices. It is not intended to be a comprehensive assessment of compliance with all SWPPP-related requirements of the General Industrial Permit.

STORM WATER MONITORING PROGRAM

Does this facility have a storm water monitoring program? ☐ Yes ☐ No ☐ N/A

Was appropriate monitoring conducted during the most recent wet season? ☐ Yes ☐ No

If not, does the facility have documentation of no qualifying rain events? ☐ Yes ☐ No

If not, is the facility in a GMP and not scheduled for most recent year? ☐ Yes ☐ No

Do monitoring results show that existing BMPs are effective in removing pollutants? ☐ Yes ☐ No ☐ None Available

If not, were potential sources of the identified pollutants observed during the inspection? ☐ Yes ☐ No

If yes, list the potential sources and their associated pollutants: _____

_____

_____

Exceedances Noted (list dates, locations, constituent(s) and numeric value(s)):

☐ Copy of results attached

_____

_____

_____

_____

ATTACHMENT 5.2

2010 STORM WATER CALENDAR

2010 Storm Water Program Calendar

National City Contacts/ Contactos en National City

To report illegal discharges of pollution/Para reportar deseechos ilegales de contaminación:
Stormwater Hotline: (619) 336-4389

For information regarding the Storm Water Program/Para información referente al Programa de Aguas Pluviales: Engineering Department: (619) 336-4380

To report trash on public property/Para reportar basura en propiedad pública:
Public Works: (619) 336-4580

To report trash on private property/Para reportar basura en propiedad privada:
Building Department: (619) 336-4210

To get involved in your neighborhood/Para ser parte de tu vecindario:
Community Services - Neighborhood Council: (619) 336-4290

City of National City web site/Sitio de Internet de El Municipio de National City:
www.ci.national-city.ca.us

By Keeping our Community Clean, We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia podemos mantener el océano limpio!

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Iris, Olivewood School

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2010 January/ Enero

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
Notes					1 New Year's Day City Closed	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18 Martin Luther King Jr. Day City Closed	19	20	21	22	23
24 / 31	25	26	27	28	29	30

Meet your native neighbors!

These plants live in your community too! By keeping your community clean, you are keeping their home clean too!

California Encelia

California Poppy

Black Sage

¡Encuentre sus vecinos nativos!

¡Estas plantas viven también en su comunidad! ¡Manteniendo su comunidad limpia, usted mantiene también, una casa limpia para ellos!

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

EDCO

David, Olivewood School

CALIFORNIA NATIONAL CITY 1887

2010 February/Febrero

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
	1	2 Groundhog Day	3	4	5	6
7	8	9	10	11	12	13
14 Valentine's Day	15 President's Day City Open	16	17	18	19	20
21	22	23	24	25	26	27
28	Notes					

Do you Know?

All water that enters National City storm drains flows to San Diego Bay without being treated. Fish and other animals that live in the water rely on us to keep their ocean community clean. Birds, fish, and mammals often mistake trash for food. With trash filling their stomachs, animals have a false feeling of being full and may die of starvation. This is one reason why it is so important to keep our community clean.

NO DUMPING • DRAINS TO OCEAN • NO TIRE DESECHO • CORRE AL MAR

¿Sabe Usted Que?

Toda la agua que entra por las alcantarillas de National City van a dar a la Bahía de San Diego sin ser tratadas. Los peces y otros animales que viven en el agua dependen de nosotros para mantener limpia su comunidad oceánica. Las aves, los peces y los mamíferos pueden equivocar la basura con el alimento. Con los estómagos llenos de basura, los animales tienen una sensación falsa de satisfacción y pueden morir de hambre. Esto es una razón por qué es tan importante mantener las alcantarillas de aguas pluviales limpia.

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

EDCO

Gerardo, John A. Otis School

CALIFORNIA NATIONAL CITY 1887

2010 March/Marzo

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17 St. Patricks Day	18	19	20
21	22	23	24	25	26	27
28	29	30	31 César Chávez Day (City Closed)	Notes		

What's In Your House?
¿Qué está en su casa?

There are a lot of everyday products that are toxic to our health and the environment. Unlike regular waste, these household hazardous waste (HHW) products can not be thrown away with regular trash. For more information about HHW and electronic waste disposal sites view the inside cover of this calendar or visit www.ilacsd.org/recycle/index.php.

Hay muchos productos diarios que son tóxico a nuestra salud y al ambiente. A diferencia de desecho regular, estos productos peligrosos no pueden ser tirados con basura regular. Para mas información sobre sitios de eliminación para los desechos de productos peligrosos y electrónicos ve adentro de la pasta del calendario o visita la pagina de internet www.ilacsd.org/recycle/index.php.

Can you guess which of these are HHW or electronic waste?

¿Puede adivinar usted qual de éstos son productos peligrosos o desechos electrónicos?

1) Oil-based paint/ Pintura de aceite
2)Motor oil/ Aceite de Carro
3)Metal cans/ Latas de metal
4)Batteries/ Baterías
5)Glass bottles/ Botellas de vidrio
6)Pesticides/ Pesticidas

¿Que 'tipo' es esto y para que sirve?

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

EDCO

Jacqueline, Central School

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2010 April/Abril

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
Notes:				1	2	3
4 Easter Sunday	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22 Earth Day	23	24 9th Annual Creek to Bay Cleanup
25	26	27	28	29	30	

Keeping Our Bay Clean!

This month's Creek to Bay Cleanup event is a great way to get involved in keeping San Diego Bay clean. Last year, over 7,401 pounds of trash and debris were collected in National City. Come out, to help keep San Diego Bay clean! Visit www.creektobay.org to register.

Paradise Creek Park

¡Mantener nuestra bahía limpia!

Este mes el evento de limpieza "Creek to Bay" es una gran manera de meterse a mantener la Bahía de San Diego limpia. El año pasado, más de 7,401 libras de basura y escombros fueron reunidas en National City. ¡Salga para ayudar a mantener la Bahía de San Diego limpia! Visite la página de Internet www.creektobay.org para registrar.

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

Gerardo, John A. Otis School

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2010 May/Mayo

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
Notes:						1
2	3	4	5	6	7	8
9 Mother's Day	10	11	12	13	14	15
16	17	18	19	20	21	22
23 / 30	24 / Memorial Day City Closed 31	25	26	27	28	29

Which of these should NOT go in the storm drain?
¿Quáles NO deben ir a la coladera para aguas pluviales (afuera de la casa)?

1) PET WASTE (DESECHOS DE MASCOTA)
2) RAIN WATER (AGUA PLUVIAL)
3) TRASH (BASURA)
4) PESTICIDE/ FERTILIZER (PESTICIDA/ FERTILIZANTE)
5) MOTOR OIL (ACEITE DE CARRO)
6) COOKING OIL (ACEITE DE COCINA)

Answer: Responses 1, 3, 4, 5, and 6

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

Yair, Las Palmas School

CALIFORNIA NATIONAL CITY 1887 INCORPORATED

2010 June/Junio

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20 Father's Day	21	22	23	24	25	26
27	28	29	30	Notes		

National City's Storm Water Hotline

National City is dedicated to keeping you and your environment safe and clean. You can help by reporting discharges of pollution to the storm drain by calling the Storm Water Hotline at (619) 336-4389. For after business hours call the County of San Diego Regional Storm Water Hotline at (888) 846-0800.

Linea directa del Centro de Alcantarillado

National City esta dedicada a mantenerle a usted y su ambiente seguro y limpio. Usted puede ayudar reportando escapes de contaminacion llamando al telefono (619) 336-4389, linea directa del Centro de Alcantarillado. Para hablar con alguien despues que la oficina esta cerrada, llama al Condado de San Diego Centro de Alcantarillado Linea Directa al telefono (888) 846-0800.

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

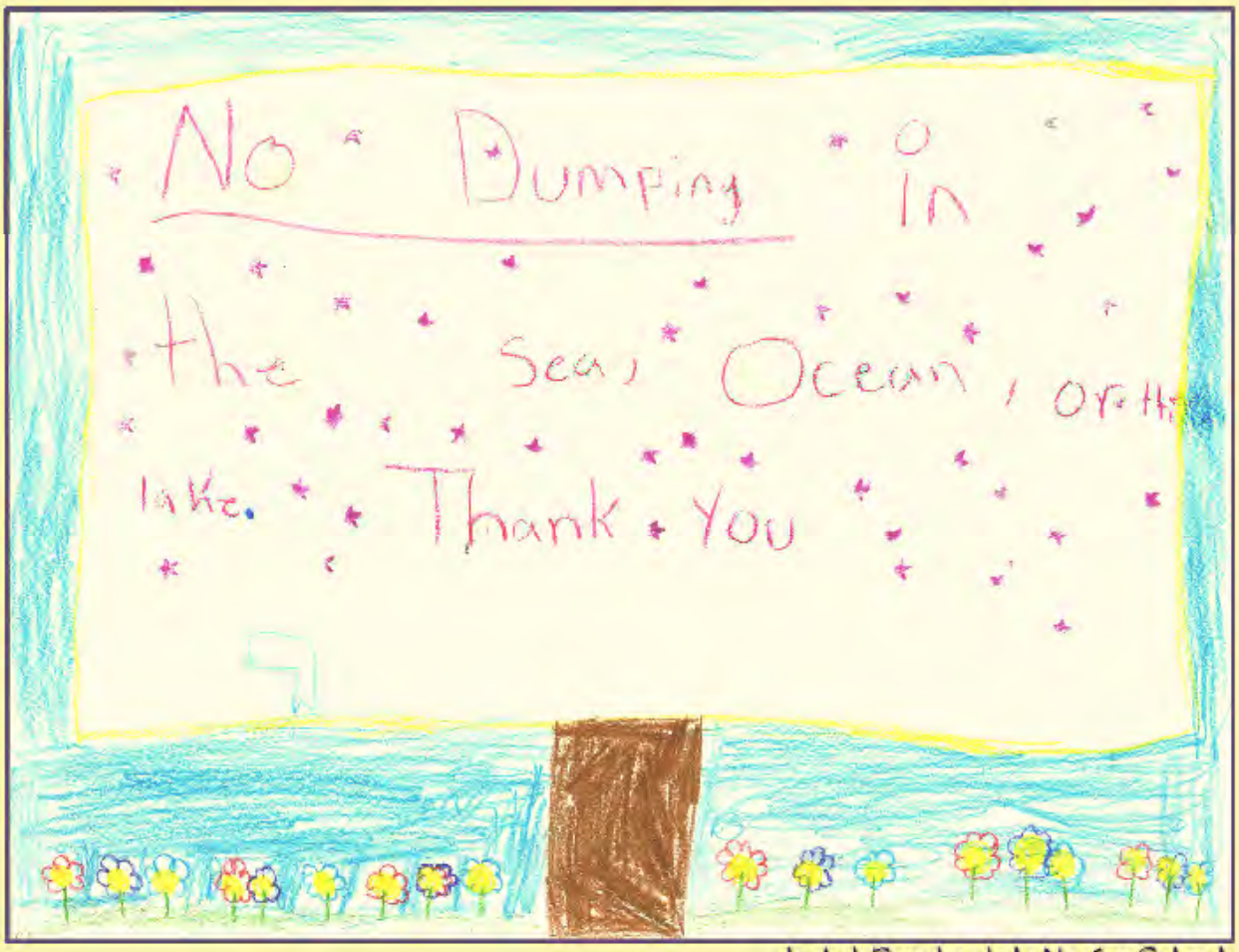

Isabel, Rancho de la Nacion School

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2010 July/Julio

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
Notes				1	2	3
4 Independence Day	5 Independence Day Observed City Closed	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Meet your native neighbors!

These animals live in your community too! By keeping your community clean, you are keeping their home clean too!

Loquin's Admiral Butterfly

California Brown Pelican

California Least Tern

¡Encuentre sus vecinos nativos!

¡Estos animales viven también en su comunidad! ¡Manteniendo a comunidad limpia, usted también mantiene una casa limpia para ellos!

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

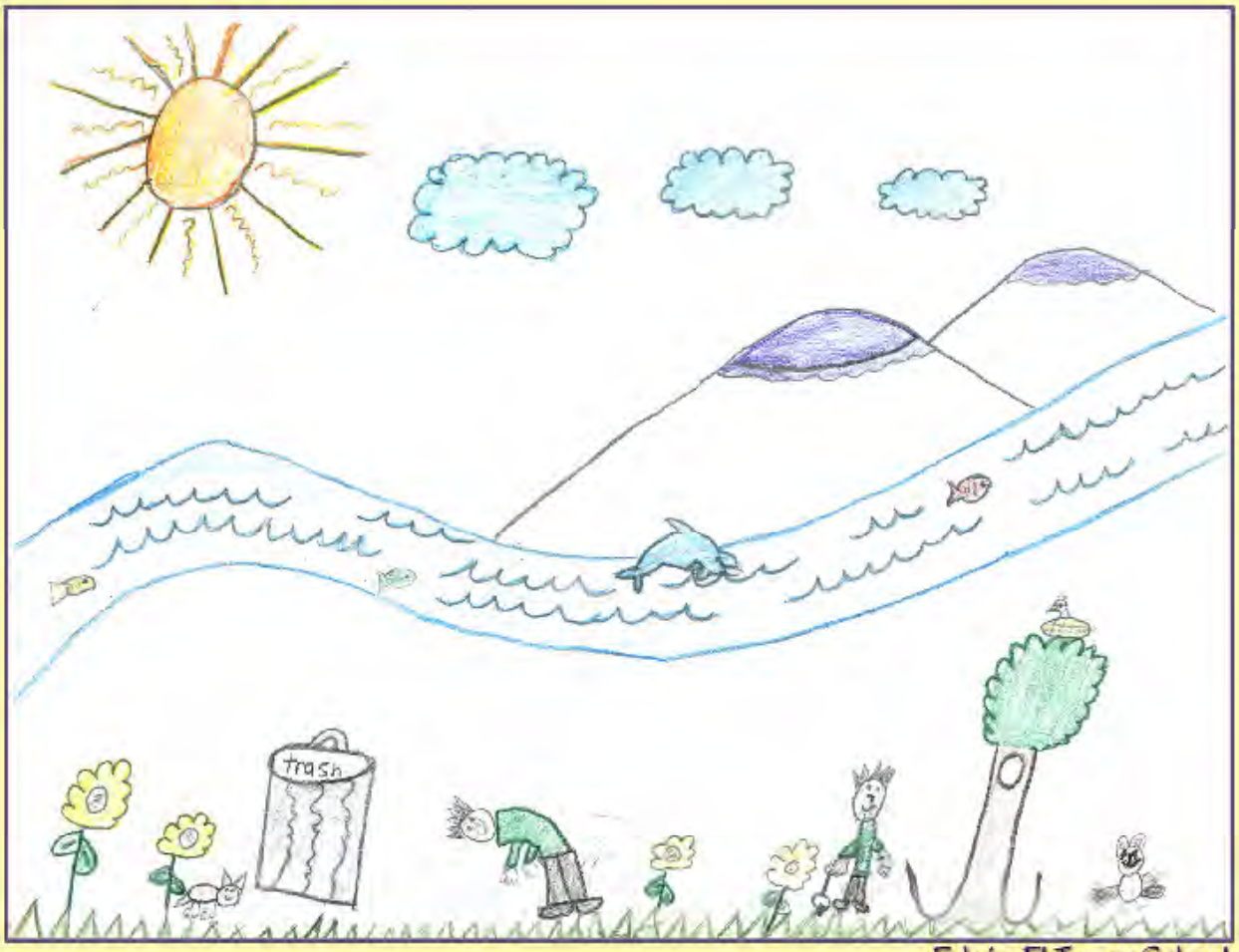

Edwin, El Toyon School

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2010 August/Agosto

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	Notes:			

Proper Pet Waste Disposal

High levels of bacteria can be harmful to your health and the environment. One way to keep bacteria from entering storm drains is to be a responsible pet owner. Cleaning up your animal's waste and flushing it down the toilet or placing it in a bag before throwing it in the trash are two great ways to keep bacteria out of our City's waters.

Eliminación de desechos apropiada de mascotas

Los niveles altos de bacterias pueden ser perjudiciales a su salud así como al ambiente. Una manera de mantener las bacterias que no entren a las alcantarillas es ser un dueño de mascotas responsable. Limpiando el desecho de su mascota y por ende o en la tasa del baño o poniéndolo en una bolsa antes de tirarlo en la basura, estas son dos gran maneras de mantener las bacterias fuera de la Bahía de San Diego.

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

Jennifer, Olivewood School

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2010 September/Septiembre

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
Notes:			1	2	3	4
5	6 Labor Day City Closed	7	8	9	10	11
12	13	14	15	16	17	18 Costal Cleanup Day
19	20	21	22	23	24	25
26	27	28	29	30		

Keeping Our Bay Clean!

This month's Coastal Cleanup Day is a great way to get involved in keeping our community clean. Come out to help keep San Diego Bay clean. Visit www.cleanupday.org to register.

¡Mantener nuestra bahía limpia!

Este mes el evento para el día de limpieza costera de california es una gran manera de meterse y mantener nuestra comunidad limpia. ¡Salga para ayudar a mantener la Bahía de San Diego limpia! Visita la página de Internet www.cleanupday.org para registrar.

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

Mayra, Kimball School

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2010 October/Octubre

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
Notes					1	2
3	4	5	6	7	8	9
10	11 Columbus Day City Open	12	13	14	15	16
17	18	19	20	21	22	23
24 Halloween 31	25	26	27	28	29	30

Good Auto Repair Techniques

- Use drip pans or collect fluids from leaky vehicles
- Quickly contain fluid spills with rags or kitty litter, and dispose of properly
- Dispose of used motor oil, oil filters, and automotive fluids appropriately (visit www.ilaced.org/recycle/index.php for more details)

Técnicas buenas de reparación de automóviles

- Utilice cacerolas para reunir líquidos de vehículos
- Contenga rápidamente los derrames de fluido con trapos o arena para gatos, y deseche debidamente.
- Tire el aceite usado, los filtros de aceite, y de líquidos automotores apropiadamente (visita la página de Internet www.ilaced.org/recycle/index.php para más detalles)

By Keeping our Community Clean We Can Keep the Ocean Clean!
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Pearla, Central School

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2010 November/Noviembre

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
	1	2	3	4	5	6
7	8	9	10	11 Veterans Day City Open	12	13
14	15	16	17	18	19	20
21	22	23	24	25 Thanksgiving Day City Closed	26 City Closed	27
28	29	30	Notes			

National City Clean Up Day

The City of National City has National City Clean Up Day, twice a year, once in the spring and again in the fall. Residents can dispose of items such as garbage, appliances, furniture, etc. Hazardous materials are not permitted in the disposal dumpsters at this event. Information regarding this event will be enclosed with your EDCO Disposal Service trash bill.

Día de limpieza en National City

El Municipio de National City tiene un evento de limpieza dos veces por año en la primavera y en el otoño. Los residentes pueden deshacerse de basura, aparatos de hogar, muebles, etc. Los materiales peligrosos no son aceptados en los contenedores en el día del evento. Para más información sobre este evento, usted la podrá encontrar en su recibo de recolección de basura de EDCO.

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

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Jocely, Palmer Way School

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2010 December/Diciembre

SUNDAY Domingo	MONDAY Lunes	TUESDAY Martes	WEDNESDAY Miércoles	THURSDAY Jueves	FRIDAY Viernes	SATURDAY Sábado
Notes			1 Hanukkah Begins City Open	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24 Christmas Eve City Closed	25 Christmas Day
26	27	28	29	30	31 New Year's Eve City Closed	

Be a storm water superstar!

- Regularly sweep paved areas instead of using a hose.
- Pick up trash and pet waste.
- Keep trash bin lids closed.
- Decrease pesticide use and water sparingly.
- Wash vehicles at the car wash when possible.
- Spread the word about keeping National City clean!

¡Sea una superestrella de aguas pluviales!

- Barre regularmente areas pavimentadas en vez de utilizar una manguera.
- Recoge desechos de basura y de mascotas.
- Mantiene tapados los botes de basura.
- Disminuya el uso de pesticidas y agua de riego.
- Lava los vehículos en el lavado de coches cuando sea posible.
- ¡Corre la voz de como mantener la Ciudad de National City limpia!

By Keeping our Community Clean We Can Keep the Ocean Clean!
¡Manteniendo a nuestra comunidad limpia, podemos mantener el océano limpio!

ATTACHMENT 5.3

INDUSTRIAL AND COMMERCIAL
"PREVENTING URBAN RUNOFF POLLUTION" TRIFOLD

What's the difference?

Sanitary Sewer vs. Storm Drain System

The water that drains down a sink or toilet in a home or business flows to the sanitary sewer and is treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – and eventually to San Diego Bay!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our water bodies.

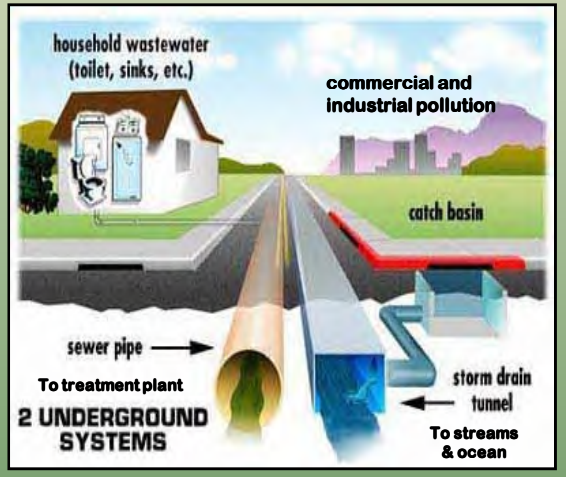

Certain industrial businesses require coverage under the General Industrial Permit. For more information go to the State of California's Stormwater website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml

Who can you contact?

REPORT ILLEGAL DUMPING
City of National City
(619) 336-4389
(Toll Free After Hours Hotline)
County Storm Water Hotline
(888) 846-0800

HOUSEHOLD HAZARDOUS WASTE (HHW) DISPOSAL
South Bay Regional HHW Drop-Off Site
1800 Maxwell Road
Chula Vista, CA
Call (619) 691-5122 for information

RECYCLING
EDCO: (619) 466-8855
http://www.edcodisposal.com/services/nationalcity/index.html

QUESTIONS AND COMMENTS
National City Storm Water Program
(619) 336-4580

Look on the web!

CITY OF NATIONAL CITY
http://www.ci.national-city.ca.us/

USED OIL RECYCLING CENTERS
www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
www.ipm.ucdavis.edu/

PROJECT CLEAN WATER
www.projectcleanwater.org

SAN DIEGO COASTKEEPER
www.sdcoastkeeper.org

STATE OF CALIFORNIA STORM WATER PROGRAM
http://www.waterboards.ca.gov/water_issues/programs/nps/

US ENVIRONMENTAL PROTECTION AGENCY
www.epa.gov/OWOW/NPS/

CITY OF NATIONAL CITY

Preventing Urban Runoff Pollution

A Guide for Commercial and Industrial Businesses

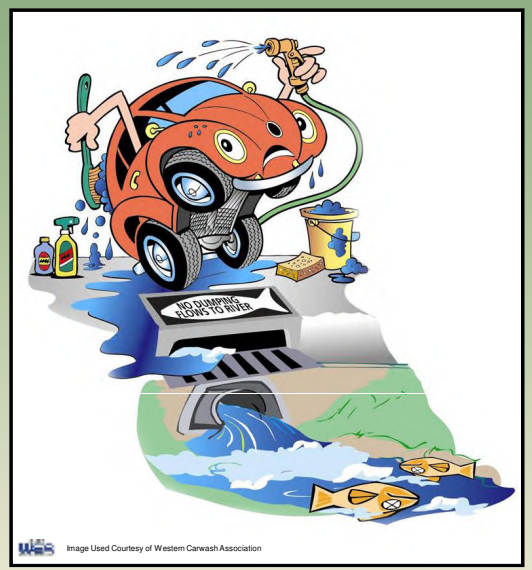

Urban storm water runoff is the largest contributor to water pollution in San Diego County.

Your business is required to prevent urban runoff pollution by implementing Best Management Practices (BMPs).

The City will be conducting inspections to ensure that BMPs are being used and water quality is protected.

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Pollutants of Concern

Water that enters the City of National City storm drain system eventually flows into San Diego Bay. The following lists several main pollutants of concern for San Diego Bay.

- Sediments
- Metals (copper, zinc)
- Pesticides (diazinon)
- Bacteria and Viruses

Best **M**anagement **P**ractices (**BMPs**) are required to be used at all industrial and commercial businesses, where applicable, to reduce urban runoff pollution in our streams and waterways.

Maintenance & Good Housekeeping

- Major cleaning of exterior surfaces (such as power washing) must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the street gutter or storm drains.
- Regularly sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- Regularly inspect and maintain storm drain inlets and surface drains on your property.

Landscaping

- Time sprinklers to avoid over watering and aim them to avoid causing runoff.
- Minimize use of pesticides, herbicides, and fertilizers, which are harmful to animals downstream.
- Hand pull weeds instead of using herbicides
- Do not use pesticides that eliminate beneficial insects
- Only irrigate during early morning or late evening to avoid evaporation.

Outdoor Material Storage

- Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid materials.
- Have a spill response kit (dry absorbent, rags, and/or hydrophobic mops are useful) available to clean up potential spills.
- Keep lids closed on all outdoor storage containers and ensure containers are labeled.

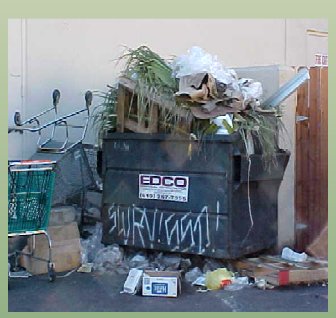

Unacceptable

Acceptable

Waste Management

- Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- Fix any leaks in garbage cans or dumpsters.
- Schedule extra pick-ups when regular waste collection does not meet demand.

Vehicle & Equipment Washing and Maintenance

- Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- Minimize the use of soap and water.
- Car wash water is not allowed to enter storm drains. Wash water must be collected and disposed of to a pervious area (such as landscaping) or to the sanitary sewer system if allowed by local sewer agency.
- Perform all vehicle maintenance indoors when possible.
- Use drip pans to collect fluids from leaky vehicles
- Clean up spills with a spill kit and properly dispose of the used kit contents.

Unacceptable

Acceptable

Loading Areas & Operations

- Load and unload in designated areas.
- Regularly sweep loading and unloading areas; do not hose them down.
- If possible, cover loading areas.
- Divert rain water away from all loading and unloading areas.
- Check shipments and trucks for leaks and spills.
- Clean up spills/leaks immediately and dispose of them properly.

ATTACHMENT 8.1

”EVERYTHING THAT FLOWS DOWN INTO A STORM DRAIN” BROCHURE

City of National City

Office of the Public Works/Engineering Director
1243 National City Blvd. National City, CA 91950-4397
(619) 336-4580, Fax (619) 336-4397 www.ci.national-city.ca.us

Everything that flows down into a storm drain goes *untreated* directly into our creeks, lagoons, and San Diego Bay. When it rains or when water flows out of yards, it flows directly into storm drains. Many people think that everything that flows into a storm drain gets treated at the Point Loma Sewage Treatment Plant, just like wastewater in the sewer system, but these two systems are not connected.

The sources of pollution that must be controlled and eliminated result from urbanization and the choices that are made every day by residents, businesses and industry alike. For example, detergents, oil, grease, and other pollutants have been shown to be toxic to wildlife in local streams and San Diego Bay. **Recycling** of oil, antifreeze, glass, plastic, and other materials can prevent their improper disposal into the stormwater drainage system. **Proper landscaping practices** include minimization of the use of herbicides, pesticides and fertilizers together with conservation of water to minimize runoff of pollutants from landscaped areas, lawns, golf courses, etc.

The City of National City's Stormwater Management & Discharge Control of the National City Municipal Code Chapter 14.22, prohibits non-stormwater discharges, such as car washwater, pesticides, fertilizers, pet waste, litter, oil, and other automobile fluids, to run into the City's storm drain system. This ordinance is based on regulations set forth by the State Regional Water Quality Control Board and the U.S. Environmental Protection Agency in connection with the State and Federal Clean Water Acts.

Your help is needed, and by doing your part, by changing your washwater and trash disposal practices, you will help reduce the pollution problems in the community where you and your family live, work and play. Please call **Storm Drain Hotline** at **(619) 336-4389** if you have **any questions** regarding this matter and **to report any illegal discharges and /or dumping.**

City of National City

Office of the Public Works/Engineering Director
1243 National City Blvd. National City, CA 91950-4397
619) 336-4580, Fax (619) 336-4397 www.ci.national-city.ca.us

Todo lo que desemboca en las alcantarillas no esta tratado y va a parar directamente a nuestras lagunas, esteros y Bahia de San Diego. Cuando llueve o cuando escurre agua de algun patio, desemboca directamente a las alcantarillas. Mucha gente piensa que todo lo que desemboja en una alcantarilla es tratado en la planta de Tratamiento de Agua Negras en Point Loma, como las aguas negras del sistema de drenaje, pero estos dos sistemas **no** estan conectados.

Las causas de contaminacion que tienen que ser controladas y eliminadas resultan de la urbanizacion y las elecciones que hacen todos los dias los residentes, negocios y la industria. Por ejemplo, detergentes, aceite, grasa, ya otros contaminantes se ha visto que son toxicos para la vida silvestre en nuestros arroyos locales y Bahia de San Diego. **Reciclando** el aceite, antifreeze, vidrio, plastico y otros productos que sean desechados de un modo inadecuado llegen a parar al sistema de alcantarillado de la ciudad. **Los metodos de mantener el jardin**, como usar menos los herbicidas, pesticidas y fertilisantes.Tambien como conservar el agua para que esa agua con contaminantes de los jardines, pastos, canchas de golf, etc.

El Codigo Municipal No. 14.22 de las aguas pluviales de la Ciudad de National City, prohibe aguas que no sean pluviales como las aguas negras, pesticidas, fertilisantes, basura, aceite y otros liquidos de carros que sean depositadas en el sistema de alcantarillado de la ciudad. Esta regla esta basada en las regulaciones puesta por "State Regional Water Quality Control Board" y "U.S. Environmental Protection Agency" en conneccion con "State and Federal Clean Water Acts."

Su ayuda es necesaria, y haciendo su parte como cambiar el modo de tirar su basura, usted ayudara a reducir la contaminacion en la comunidad donde usted y su familia viven, trabajan y juegan.

Por favor llame a la linea de **"Storm Drain Hotline"** al **(619) 336-4389**, si tiene **alguna pregunta** si quiere **reportar un desague ilegal**.

ATTACHMENT 8.2

RESTAURANT AND FOOD INDUSTRY BMP FACT SHEET

CITY OF NATIONAL CITY – DEVELOPMENT SERVICES DEPARTMENT
1243 NATIONAL CITY BLVD., NATIONAL CITY, CA 91950

City of National City Storm Water Program

Restaurant and Food Industry

Your facility can help protect our water quality

Long-Term Compliance Solutions

Several properties and businesses in National City have already taken initiative to ensure long-term compliance with the minimum requirements of City's storm water program. In doing so they minimize the need for costly and ineffective cleanup of grease spills by employees. Three proactive solutions[1] include:

1. Storing waste grease in securely sealed indoor containers[2] until pickup

2. Permanent cover and containment of outdoor grease disposal areas[3], such as a roof and berm

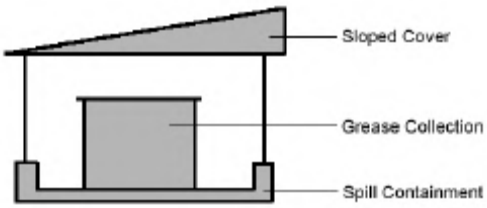

3. Installation of an indoor oil management system[2] that changes oil and collects waste

[1] These solutions are not required by the City of National City, but they would likely facilitate staying in compliance with minimum storm water requirements. See the other side of this sheet for requirements commonly applicable to the restaurant and food industry.
[2] The City of National City does not require or endorse the use of any specific brand or product.
[3] Note that installation of outdoor structures should follow National City building codes and permitting requirements.

For more information about staying in compliance with the City's Storm Water Program requirements, call the City's compliance inspection contractor, D-Max Engineering, Inc.: (858) 586-6600 ext. 23.

Restaurant and Food Industry

Best Management Practices

Your facility can help protect our water quality

The following are six requirements commonly applicable to businesses that produce and/or sell food products, such as bakeries, food producers/distributors, grocery stores, and restaurants.

1. Keep outdoor waste oil containers and surrounding areas free of grease stains and spills.		4. Pour wash water into a indoor janitorial or mop sink. Don't pour it outside into a storm drain or onto a parking lot, alley, sidewalk, or street.	
2. Use dry sweeping or absorbent material for oil and grease spill cleanup instead of hosing. If wet cleanup methods are used, collect all water and take it indoors for disposal.		5. Clean floor mats, filters, and garbage cans in a mop sink, over an indoor floor drain, or on landscaping where water will not run off. Don't wash them in a parking lot, alley, sidewalk, or street.	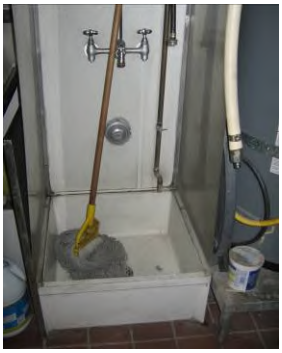
3. Keep dumpster area clean and lid closed. Don't fill it with liquid waste or hose it out. Repair or replace leaky dumpsters.		6. Recycle grease and oil. Don't pour it into sinks, floor drains, or onto a parking lot or street. Pouring grease and food scraps down drains can clog pipes and back up sewers.	

Laws and Enforcement

See National City Municipal Code Section 14.22, Storm Water Management and Discharge Control, for a full list of all storm water requirements applicable to businesses. Direct or indirect discharge of pollutants to the storm water conveyance system, even in rain water, is against the law.

Violations can result in civil penalties up to $10,000 or fines up to $25,000 per violation, per day.

To help report a spill or discharge to the storm drain, call the City of National City Storm Water Hotline: (619) 336-4389

ATTACHMENT 9.1

CALENDAR AWARD CEREMONY PRESENTATION

CALIFORNIA
NATIONAL CITY
1887
INCORPORATED

Storm Water Calendar Contest

Sponsored in part by EDCO

Iris Delgado – Olivewood School

Calendar Cover

Jacqueline Tapia – Central School

Pearla Santiesteban – Central School

Edwin Angulo – El Toyon School

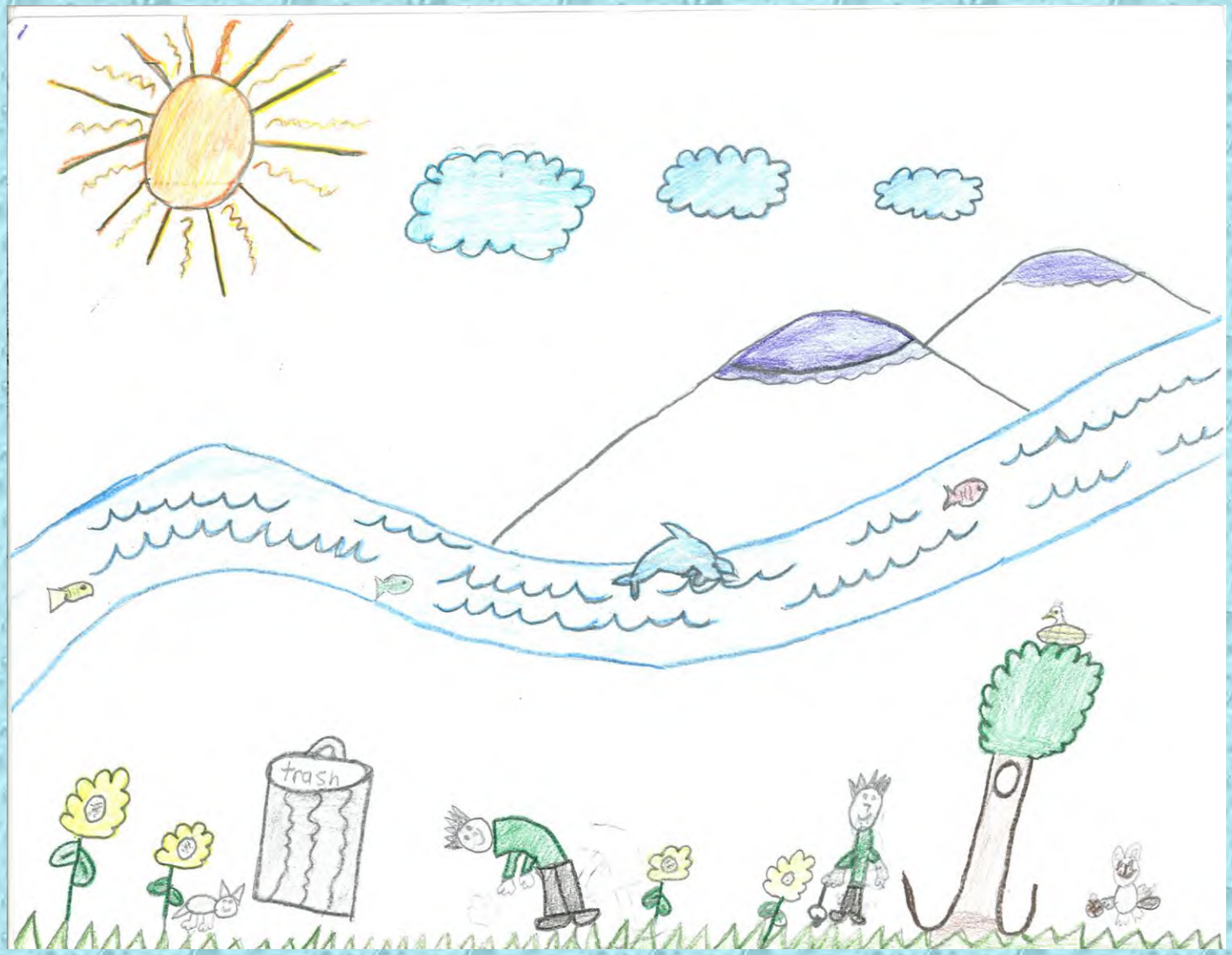

Carla Mae DeVera – Ira Harbison School

Gerardo Delgado – John Otis School

Mayra Flores – Kimball School

Yair Capetillo – Las Palmas School

Jennifer Garcia – Olivewood School

David Dioso – Olivewood School

Jocelyn Palomino – Palmer Way

Isabel Vargas – Rancho de la Nacion

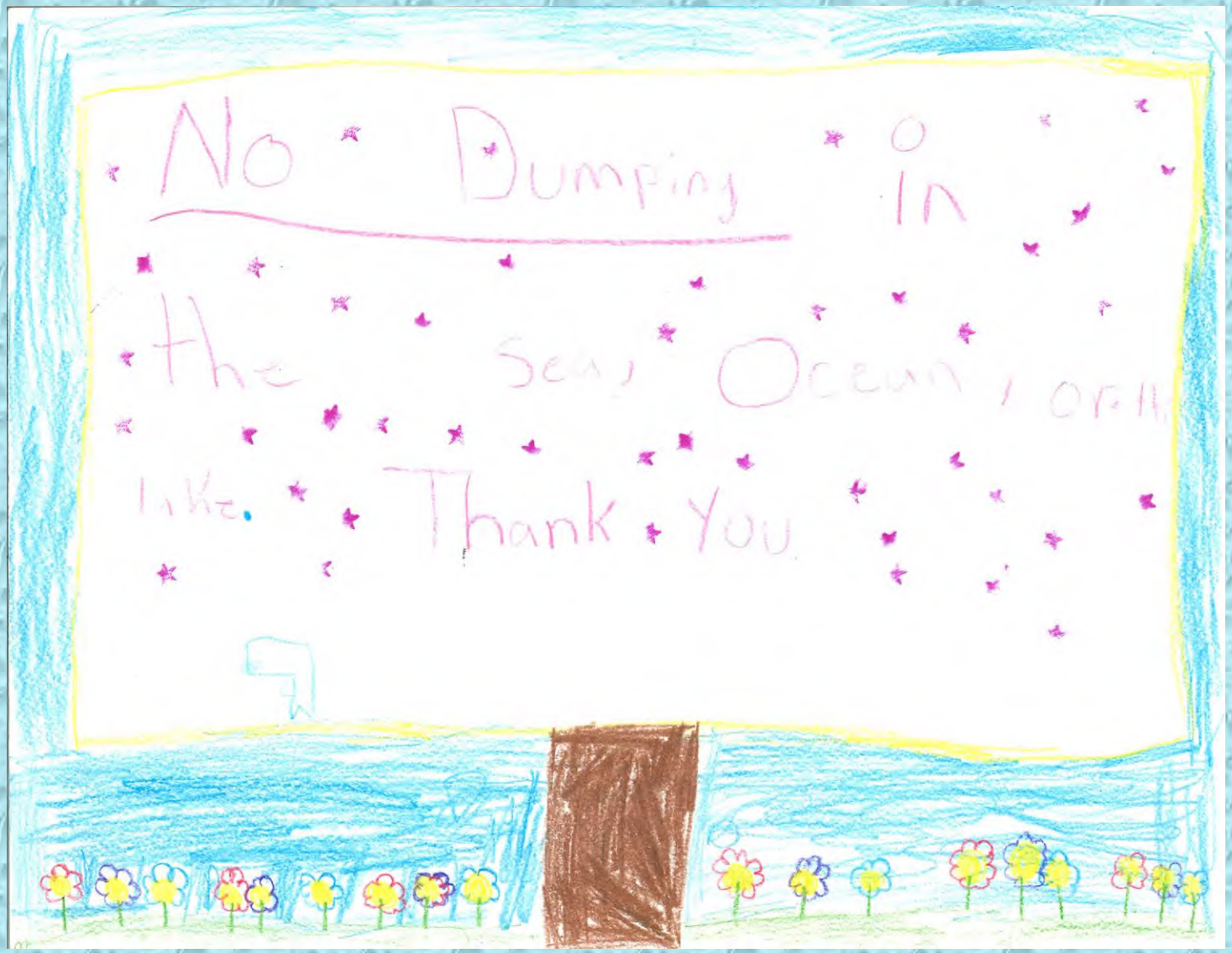

ATTACHMENT 9.2

HHW DISPOSAL INFORMATIONAL ADVERTISEMENT

Chula Vista, Imperial Beach & National City residents:

DISPOSE OF:

PAINTS • POOL CHEMICALS
BATTERIES • PESTICIDES
ANTIFREEZE • ADHESIVES
THINNERS • PHOTO CHEMICALS
FLUORESCENT BULBS
DEGREASERS • FERTILIZERS

Saturdays, 9 AM - 1 PM

(Except for holiday weekends)

1800 Maxwell Road
Chula Vista

$5 co-pay for up to 15 gallons or 125 lbs of waste per household

(Additional loads or visits are subject to higher co-pays)

For more information, call (619) 691-5122

Se habla español.

CITY OF NATIONAL CITY

2009/2010

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

IDDE SECTION

DECEMBER 2010

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

CITY OF NATIONAL CITY

2009/2010

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

IDDE SECTION

DECEMBER 2010

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Maryam Babaki, P.E.
Director of Development Services / City Engineer

Date: 12-2-2010

Telephone Number: (619) 336-4380

INTRODUCTION AND CONTENTS

Introduction

Section 7 of the Annual Report discusses the implementation of the illicit discharge detection and elimination (IDDE) component of the City's storm water program. This program consists of dry weather monitoring activities and other activities intended to prevent and respond to illicit connections and illegal discharges, such as operating a storm water hotline. The reporting period for the portions of this section that discuss dry weather monitoring activities extends through September 30, 2010, but the reporting period for other activities described in the section extends through June 30, 2010, consistent with the rest of the JURMP Annual Report. Because field work for the dry weather monitoring program is not required to be completed until September 30, the same day that the JURMP Annual Report is to be submitted, the RWQCB extended the submittal deadline for all of Section 7 of the JURMP Annual Report until December 15 of each year.

Contents

This submittal includes a certification statement, the text of Section 7 of the 2009/2010 JURMP Annual Report, and the attachments associated with that section. For clarity, the items included in this submittal are listed below.

- Certification Statement for Section 7 Submittal
- Introduction and Contents
- Section 7 (IDDE Component) of the 2009/2010 JURMP Annual Report
- JURMP Annual Report Requirements Checklist (for Section 7 only)
- Attachment 7.1, City of National City Dry Weather Field Screening and Analytical Monitoring Program 2010

Please note that the summary of documented public complaints was already provided with the main JURMP Annual Report submittal in September 2010 and is not included again with this December submittal.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

The City maintains several programs to prevent and to seek out and eliminate illicit connections and illegal discharges (IC/IDs), which can be significant sources of pollutants to the City's MS4. Illicit connections include improper links to the MS4, typically of conveyances that should be plumbed to the sanitary sewer system, such as car wash facility drains. Illegal discharges may result from activities such as vehicle washing or equipment cleaning without the use of proper BMPs. City storm water personnel work with residents, businesses, and staff to make them aware of BMPs to prevent IC/IDs and to encourage reporting of IC/IDs. The following activities are the primary components of the City's program to combat IC/IDs:

- Inspecting local businesses, construction sites, and municipal facilities
- Conducting the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program)
- Operating a public complaint hotline

These activities enable the City to provide a comprehensive system to improve the quality of storm water and urban runoff throughout the City through detection and elimination of IC/IDs.

7.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the illicit discharge detection and elimination component during the 2009/2010 reporting period are presented in the following bulleted list. Please note that per Addendum No. 2 to the Municipal Permit, the reporting period for the Dry Weather Monitoring Program extends through September 30, 2010. The reporting period for all other components of the City's illicit discharge detection and elimination (IDDE) program ended on June 30, 2010.

- Nine IC/IDs were discovered and reported during the 2009/2010 reporting period. All were followed up on by City personnel, and enforcement measures were applied as necessary.
- The City recorded and investigated all Storm Water Hotline complaints.
- The City performed all of the recommended corrective actions proposed in the 2009 Dry Weather Monitoring Program Report to prevent possible pollutants from entering the storm drain system.
- The City conducted the 2010 Dry Weather Monitoring Program.

7.2 Public Reporting of Illicit Discharges and Connections

See Section 4.8 of this JURMP Annual Report, which was submitted in September 2010.

7.3 Spill Reporting, Response, and Prevention

See Section 4.9 of this JURMP Annual Report, which was submitted in September 2010.

7.4 Urban Runoff Monitoring

The City has continued to conduct a Dry Weather Monitoring Program, as required by the Municipal Permit. This program assists the City in detecting and eliminating IC/IDs to the storm drain system. There are three major components to the Dry Weather Monitoring Program:

- Field observations, which include site descriptions and qualitative observations
- Field screening, which includes flow estimation and sample testing using meters and test kits at the site
- Analytical monitoring, which involves submittal of collected samples from selected sites, constituting 25 percent of all flowing or ponded sites, to an analytical laboratory for additional testing

The City visits all designated primary monitoring stations each year between May 1 and September 30 to collect dry weather monitoring data. When a primary monitoring station is found to be dry, the City visits designated alternate monitoring stations.

Numeric action levels are used as the primary approach for the interpretation of most constituent concentrations measured in the field and laboratory. Action levels for dissolved metals follow the California Toxics Rule (CTR) Criteria Maximum Concentration (CMC). Temperature, turbidity, and conductivity parameters are evaluated using best professional judgment to determine if further investigation is needed. The action levels for pH, surfactants, ammonia-nitrogen, nitrate-nitrogen, orthophosphate-phosphorus, oil and grease, diazinon, and chlorpyrifos were adopted in 2003 and were based on statistical analyses of previous Dry Weather Monitoring Program data, established water quality benchmarks from the Basin Plan, and the United States Environmental Protection Agency Multi-Sector General Permit.

The Regional Monitoring Workgroup in November 2008 requested the Dry Weather Monitoring Sub-workgroup to evaluate dry weather action levels that were submitted in April 2003 by the County of San Diego on behalf of the Copermittees. The Dry Weather Monitoring Sub-workgroup determined that the bacterial indicators action levels required additional analysis. The Dry Weather Monitoring Sub-workgroup contracted D-MAX Engineering (D-MAX) to evaluate historical bacterial data collected from dry weather monitoring from 2002 through 2007. Details of their evaluation are posted on the Project Clean Water Website at

http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf. The Regional Monitoring Workgroup on May 19, 2009 evaluated the recommendations of the Dry Weather Monitoring Sub-workgroup and selected the 80th percentile values to be the dry weather action levels for bacterial indicators beginning on May 1, 2010. The previous and current action levels (effective May 1, 2010) are presented in Table 7-1.

Table 7-1
Bacterial Indicators Action Levels for Dry Weather Monitoring Program

	Total Coliform (MPN/100 mL)	**Fecal Coliform (MPN/100 mL)**	***Enterococcus* (MPN/100 mL)**
2003-2009 Action Levels	50,000	20,000	10,000
2010 -2012 Action Levels	130,000	13,000	7,000

7.4.1 2009 Dry Weather Monitoring Program

The City's 2009 Dry Weather Monitoring Program was conducted during the 2009 dry season. For information about how the City addressed issues discovered during the 2009 Dry Weather Monitoring Program and responded to the resulting recommendations, see Section 7.5.1 of this report.

7.4.2 2010 Dry Weather Monitoring Program

The City's 2010 Dry Weather Monitoring Program was conducted during the 2010 dry season. Nineteen routine site visits to the monitoring stations were performed.

If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. Upstream investigations are performed when exceedances are verified during confirmation visits. See the City's JURMP for a complete discussion of upstream investigation procedures.

Table 7-2 presents a summary of the action level exceedances observed in 2010; Table 7-3 presents the follow-up investigations conducted in response to all action level exceedances. All of the monitoring stations visited are listed in Table 7-4. At the end of this section, tables 7-5 and 7-6 provide the complete field analytical results and laboratory analytical results, respectively, from the 2010 Dry Weather Monitoring Program.

Table 7-2
Summary of Action Level Exceedances

Field Screening (15 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Sites Exceeding Action Level**
pH	0	0	---
Conductivity	0	0	---
Turbidity	1	7	45
Surfactants	2	13	45, 47
Ammonia-N	1	7	38
Nitrate-N	0	0	---
Orthophosphate-P	0	0	---
Laboratory Analyses (4 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Sites Exceeding Action Level**
Oil & Grease	0	0	---
Cadmium	0	0	---
Copper	1	25	32
Lead	0	0	---
Zinc	0	0	---
Diazinon	0	0	---
Chlorpyrifos	0	0	---
Total Coliforms	2	50	32, 46
Fecal Coliforms	1	25	46
Enterococci	2	50	32, 46

Note: Table includes data from initial site visits only; confirmation and follow-up investigations are not included.

Follow-up investigations conducted in response to action level exceedances are summarized in Section 7.5.2 of this report.

A formal trash assessment was performed in 2010 in accordance with the Municipal Permit requirements. A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form's five categories are

primarily qualitative descriptions of the amount and extent of trash although a number of trash pieces is also included in each category as a rough guideline. The five categories are defined as follows.

- Optimal: On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
- Suboptimal: On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
- Marginal: Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
- Submarginal: Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (~100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
- Poor: Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is also assessed at each site using the following definitions:

- *Threat to Human Health* – Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment.
- *Threat to Aquatic Health* – Large amount (50 pieces or more) of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amounts of settleable, degradable, and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment.

Nineteen sites, including four dry sites, received trash assessments. Ten were ranked as "optimal" or "suboptimal," having little or no trash. Seven sites were ranked as "marginal". One site was ranked "submarginal," and one site was ranked "poor" due to significant amounts or types of trash consistent with human inhabitation and illegal dumping. Following this "poor" observation, the trash was removed from the site by the responsible public agency.

The 2010 Dry Weather Monitoring Program Report, which includes results of field screening and analytical monitoring, can be found as Attachment 7.1.

7.5 FOLLOW-UP AND ENFORCEMENT

7.5.1 ACTIONS TAKEN IN RESPONSE TO THE 2009 DRY WEATHER MONITORING PROGRAM FINDINGS

Based on the 2009 Dry Weather Monitoring Program results, several recommendations were made. In response to these recommendations, educational materials were distributed and the City's Public Works Department employees performed all necessary maintenance and inspections listed below.

Education

- In response to bacteria exceedances downstream at Site 1A, educational materials regarding dumpster area best management practices (BMPs) were provided to the property manager and residents of the Highland View Apartments and to the business owner of the Siete Dias Market, where a leaking dumpster was observed. Educational materials were also provided to the residents of the Happy Hollow Trailer Park regarding proper oil and grease disposal.
- In response to exceedances of surfactants and orthophosphate-phosphorus action levels, educational materials were provided regarding outdoor washing activities to the residents of the Summer Crest Living Complex, upstream of Site 49, and to the residents of East 14th Street, upstream of Site 48.
- Educational materials regarding BMPs for fertilizer application, and landscaping waste disposal were provided to the maintenance department of the Summer Crest Living complex, upstream of Site 49 where an ammonia-nitrogen and orthophosphate-phosphorus exceedance was measured.

Inspection and Maintenance

- Trash and debris was removed from Site 1A to eliminate potential sources of bacteria. Organic debris was removed from the catch basins on Scott Drive, upstream of Site 1A. Inspection frequency of these areas has increased to determine if additional maintenance is necessary to prevent debris accumulation.
- A regular schedule for the removal of trash from Site 6, which received a poor trash rating, has been established and maintained. Trash at Site 6 is regularly assessed, and preventative measures have been implemented where possible to decrease the introduction of debris to the storm water conveyance system.

- Although the confirmation visit indicated bacteria counts below the action level at Site 46, this site has had a history of high bacteria levels. The property management of the South Bay Plaza Center has been contacted to ensure the trash areas and storm drains are kept free of trash and food waste.

7.5.2 2010 Dry Weather Monitoring Follow-Up Investigations

If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days. Upstream investigations are performed when exceedances are verified during confirmation visits. See the City's JURMP for a complete discussion of upstream investigation procedures.

Table 7-3 presents conclusions based on the results of confirmation visits and, where necessary, upstream investigations conducted during the 2010 Dry Weather Monitoring Program.

Table 7-3
Summary of Follow-Up Investigations

Site	Follow-Up Investigation Target Constituent(s)		Results / Probable Sources
	Field	Laboratory	
32	---	Total Coliforms, Enterococci, Dissolved Copper	Bacteria: decomposing leaves, grease spills upstream, and trash located at site. Dissolved copper: automobile brake pad dust and emissions, from vehicle traffic or vehicle wash water.
38	Ammonia-N	---	Exceedance not confirmed
45*	Surfactants, Turbidity	Total Coliforms, Fecal Coliforms, Enterococci	Surfactants and turbidity exceedances not confirmed. Bacteria possibly caused by decomposing trash inside manhole; decomposing leaves, food, and trash in storm water conveyance upstream.
46	---	Total Coliforms, Fecal Coliforms, Enterococci	Low flow at site and decomposing trash upstream
47	Surfactants	---	Possibly due to car washing from multiple car dealerships around site

Notes: Table includes data from initial site visits only; confirmation and follow-up investigations are not included.
*Exceedances in bacterial indicators at Site 45 were part of the MS4 sampling program and not part of the Dry Weather Monitoring Program.

The City is in the process of responding to the 2010 Dry Weather Monitoring Program findings. These actions and any other actions taken with respect to the City's Dry Weather Monitoring Program during the remainder of 2010/2011 will be described in the 2010/2011 JURMP Annual Report.

7.5.3 IC/IDs Identified

Nine IC/IDs were discovered and reported during the 2009/2010 reporting period. All were followed up on by City personnel, and enforcement measures were applied as necessary. The IC/IDs identified in 2009/2010 are discussed in Section 4 of this JURMP Annual Report, which was submitted in September 2010.

7.6 Illicit Discharge Detection and Elimination Component Effectiveness Assessment

The assessment of the effectiveness of this program component is provided in Section 11 of this JURMP Annual Report, which was submitted in September 2010.

7.7 Program Review and Modification

No changes to the City's illicit discharge detection and elimination component were made during the reporting period.

Table 7-4
2010 Dry Weather Monitoring Locations

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
1A	Southwest of 43rd Street and Nordica Avenue	Concrete Channel	Residential	Commercial	908.31	32.68575	-117.10166
3	East 7th Street and R Avenue	Manhole	Residential	Commercial	908.32	32.68183	-117.08894
4	East 1st Street and U Avenue	Manhole	Parks	Residential	908.31	32.68726	-117.08749
6*	North bank of Sweetwater River ~500 ft. East of Highland Ave, access from North 2nd Avenue	Outlet	Industrial	Commercial	909.12	32.65668	-117.08844
13A	Northeast of 16th Street and National City Boulevard, inside Kimball Park	Outlet	Commercial	Residential	908.32	32.66942	-117.10326
31A	North of Sweetwater Road, across from 2nd Avenue at the corner of the golf course	Earthen Channel	Parks	Commercial	909.12	32.66121	-117.08453
32	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River	Outlet	Commercial	Open	909.12	32.65887	-117.08274
38	Dirt road, west of Harbison Avenue, between 20th Street and 24th Street, at the end of fence line	Earthen Channel	Residential	None	909.12	32.67265	-117.07057
40	Southwest corner of Sweetwater Road and Plaza Bonita/Stockman Street. Down in channel	Outlet	Commercial	Residential	909.12	32.65961	-117.06677
41	Northeast of San Miguel Court and Valley Road, inside Park Bonita Apartment complex	Earthen Channel	Residential	None	909.12	32.66588	-117.05083

Table 7-4 (Continued)
2010 Dry Weather Monitoring Locations

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
42	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church	Outlet	Residential	Commercial	909.12	32.66785	-117.07691
43A	F Avenue between E. 24th Street and E. 28th Street, west of Olivewood Elementary School	Catch Basin	Residential	Commercial	909.12	32.66134	-117.09447
44*	Northeast of 16th Street and National City Boulevard, under the Kimball Park bridge	Concrete Channel	Commercial	Residential	908.32	32.66982	-117.10247
44A	D Avenue behind Boys and Girls Club in Kimball Park	Outlet	Commercial	Residential	908.32	32.67151	-117.10123
45	In front of 1243-1305 Fig Court, in the middle of street	Manhole	Residential	Parks	908.31	32.68739	-117.09690
46	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	Manhole	Commercial	Residential	908.32	32.67584	-117.09539
47	Southeast corner of the Mile of Cars Way and Transportation Avenue	Manhole	Commercial	Residential	908.32	32.66163	-117.10275
48	Northwest of E. 14th Street and Grove Street	Catch Basin	Residential	None	908.32	32.67673	-117.08321
49*	South end of Arcadia Place (through Harbison Avenue and 11th Street)	Concrete Channel	Residential	Commercial	908.32	32.68095	-117.07770

Note: * Alternate sites 6, 44, and 49 were selected to substitute for dry primary monitoring sites 4, 42, and 43A.

Table 7-5
2010 Field Analytical Results

Site	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-Nitrogen (mg/L)	Nitrate-Nitrogen (mg/L)	Orthophosphate-Phosphorus (mg/L)
1A	7/8/10	15:50	<1	19.2	7.5	9.51	1.08	0.25	0.70	0.42 J	0.21
3	7/9/10	13:30	1	23.0	8.5	1.84	1.02	0.25	0.055 J	0.66 J	0.15
4	7/21/10	11:40	Dry	ns	ns	ns	ns	ns	ns	ns	ns
6	7/21/10	14:10	Tidal	22.7	8.9	6.91	>20	0.75	0.16	nd	nd
13A	7/22/10	9:10	<1	21.1	7.2	5.83	2.77	0.50	0.18	0.74 J	0.95
31A	7/22/10	11:40	Ponded	21.5	7.2	6.49	1.87	0.63	0.27	0.40 J	0.06 J
32	7/8/10	11:00	Ponded	18	7.2	1.60	1.30	0.50	0.16	0.42 J	0.18
32	7/26/10	9:45	<1	18.3	7.1	2.11	1.00	na	na	na	na
32	8/12/10	15:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns
32	9/14/10	9:45	<1	22.8	8.1	na	2.16	ns	**1.97**	0.43 J	0.85
38	7/21/10	9:50	Ponded	20.6	6.8	5.37	1.36	0.75	**1.97**	0.43 J	0.85
38	7/22/10	11:15	Dry	ns	ns	ns	ns	ns	ns	ns	ns
40	7/8/10	15:00	2	18.9	7.9	3.74	2.95	0.25	0.34	0.87 J	0.38
41	7/21/10	11:00	4	18.8	7.9	0.75	3.69	0.50	0.18	1.17	0.17
42	7/21/10	15:40	Dry	ns	ns	ns	ns	ns	ns	ns	ns
43A	7/22/10	9:50	Dry	ns	ns	ns	ns	ns	ns	ns	ns
44	7/22/10	13:40	Tidal	23.9	8.5	4.66	>20	0.75	0.18	0.05 J	0.20
44A	7/21/10	12:05	<1	22.2	8.6	4.51	1.25	0.50	0.18	0.01 J	0.20

Table 7-5 (Continued)
2010 Field Analytical Results

Site	Date	Time	Flow (gpm)	Temp. (°C)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L MBAS)	Ammonia-Nitrogen (mg/L)	Nitrate-Nitrogen (mg/L)	Orthophosphate-Phosphorus (mg/L)
45	7/8/10	9:45	1	19.9	7.9	**262**	1.77	**>3.00**	0.26	0.53 J	1.29
45	7/9/10	11:30	<1	21.4	8.0	4.81	1.48	0.75	na	na	na
45	8/12/10	14:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns
46	7/8/10	11:50	1	20.5	7.1	8	1.17	0.50	0.08 J	0.69 J	0.32
46	7/26/10	11:20	<1	21.6	7.6	na	1.26	na	na	na	na
47	7/8/10	13:50	1	22.4	7.4	10.38	>20	**1.50**	0.25	0.27 J	0.18
47	7/9/10	13:00	1	23.7	7.6	na	>20	**1.00**	na	na	na
48	7/22/10	10:15	Dry	ns	ns	ns	ns	ns	ns	ns	ns
49	7/22/10	10:40	Ponded	20.4	7.8	6.70	1.81	0.50	0.17	0.35 J	0.97
REPORTING LIMIT				**0.1**	**0.01**	**0.00**	**0.01**	**0.13**	**0.20**	**1.13**	**0.10**
ACTION LEVEL				**BPJ**	**<6.5 >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.0**	**2.0**

Notes:
na = not analyzed
nd= not detected
ns = not sampled (dry site)
J = Detected but below the reporting limit; therefore, result is an estimated concentration.
Red values are at or above the measured constituent's action level.
denotes a confirmation visit
denotes a location sampled for laboratory analysis

Table 7-6
2010 Laboratory Analytical Results

Site	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
1A	7/8/10	15:50	nd	235	nd	nd	nd	9 J	nd	nd	80,000	1,300	1,700
32	7/8/10	11:00	nd	195	1	**28**	2 J	112	nd	nd	**1,600,000**	5,000	**8,000**
32	7/26/10	9:45	na	na	na	na	na	na	na	na	**173,000**	na	**26,130**
32	9/14/10	9:45	na	384	na	23	na	na	na	na	na	na	na
40	7/8/10	15:00	2.5	680	nd	4 J	nd	8 J	nd	nd	23,000	500	800
46	7/8/10	11:50	nd	178	nd	5 J	nd	34	nd	nd	**500,000**	**17,000**	**11,000**
46	7/26/10	11:20	na	na	na	na	na	na	na	na	**1,200,000**	7,700*	676
Reporting Limits			**5**	**10**	**1**	**10**	**5**	**20**	**0.05**	**0.05**	**20****	**20****	**20****
Action Levels			**15**	*******	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**130,000**	**13,000**	**7,000**

Notes:
nd = not detected; na = not analyzed
J = Detected but below the reporting limit; therefore, result is an estimated concentration.
Red values are at or above the measured constituent's action level.
[yellow box] denotes a confirmation visit
* = Number of fecal coliforms for confirmation samples is derived from *E. coli* count. Number of fecal coliforms = (Number of *E. coli*) / 0.85
** = Confirmation samples are analyzed using the Colilert and Enterolert methods, which have a reporting limit of 10 MPN/100 mL.
*** = Total hardness is not considered a pollutant, and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependent on the total hardness value of the water sample.

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	Attachment 7.1
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	7.4, 7.5; Tables 7-2 through 7-6; Attachment 7.1
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	Attachment 7.1
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	7.5; Table 4-5
v. The number and brief description of illicit discharges and connections identified.	7.5; Table 4-5
vi. The number of illicit discharges and connections eliminated.	7.5; Table 4-5
vii. Identification and description of all spills to the MS4 and response to the spills.	4.9, 7.3; Table 4-5
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	4.9, 7.3
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	4.9, 7.3
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	4.8, 7.2, Table 4-5
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	4.8, 7.2
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5, Table 7-1, Table 4-5
xiii. A description of notable activities conducted to manage illicit discharges and connections.	7.1, 7.5

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Attachment 7.1
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	7.4; Attachment 7.1
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	7.4; Attachment 7.1
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	7.4; Table 7-6; Attachment 7.1
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	See following
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	7.4; Table 7-5, Attachment 7.1
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	7.4; Attachment 7.1
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	7.4; Attachment 7.1
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	7.4; Attachment 7.1

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	7.4; Attachment 7.1
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	7.5; Attachment 7.1
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5; Attachment 7.1
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	7.4, 7.5; Attachment 7.1

ATTACHMENT 7.1

CITY OF NATIONAL CITY DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING PROGRAM 2010

City of National City
Dry Weather Field Screening and Analytical Monitoring Program
2010

Submitted to:

City of National City
Engineering Department
1243 National City Boulevard
National City, CA 91950

Prepared by:

D-Max Engineering, Inc.
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D-MAX Engineering, Inc.
Consultants in Water & Environmental Sciences

November 30, 2010
Project No. 201029W-051

Mr. Din Daneshfar
City of National City
Engineering Department
1243 National City Boulevard
National City, CA 91950

Re: 2010 Dry Weather Field Screening and Analytical Monitoring Program
City of National City, California

Dear Mr. Daneshfar:

Enclosed please find our final report for the City of National City 2010 Dry Weather Field Screening and Analytical Monitoring Program. This report presents the results of the monitoring program conducted in the City of National City during the 2010 dry weather season. The contents include field screening results, trash assessment data, analytical laboratory test results, analyses of the collected data, and photographs of sampling locations. The report also presents the results of follow-up investigations conducted to identify the sources of pollutants detected during the field screening program and our recommendations for additional actions.

Review comments from the draft report submitted to the City have been incorporated into this final report. If you have any questions regarding this report, please call me at (858) 586-6600 ext. 22.

Sincerely,
D-MAX Engineering Inc.

Arsalan Dadkhah, Ph.D., P.E.
Project Manager

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ACRONYMS AND ABBREVIATIONS

°C	Degrees Celsius
µg/L	Micrograms per Liter
Basin Plan	Water Quality Control Plan for the San Diego Basin
CFR	Code of Federal Regulations
City	City of National City
CMC	Criterion Maximum Concentration
Copermittees	The 18 cities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CTR	California Toxics Rule
CV	Coefficient of Variance
D-MAX	D-MAX Engineering, Inc.
E. coli	*Escherichia coli*
EC	Electrical Conductivity
EMA	EnviroMatrix Analytical, Inc.
FS	Functional Sensitivity
gpm	Gallons per Minute
GPS	Global Positioning System
HSA	Hydrologic Subarea
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illegal Discharge
JURMP	Jurisdictional Urban Runoff Management Program
LED	Light-Emitting Diode
MBAS	Methylene Blue Active Substances
mg/L	Milligrams per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) per 100 Milliliters
mS/cm	Millisiemens per Centimeter
MS4	Municipal Separate Storm Sewer System
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
na	Not Analyzed
nd	Not Detected
ns	Not Sampled (dry site)
NTU	Nephelometric Turbidity Unit
PDL	Practical Detection Limit
ppb	Parts per Billion
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board
TDS	Total Dissolved Solids
USEPA	United States Environmental Protection Agency
WQO	Water Quality Objective
WURMP	Watershed Urban Runoff Management Program

1 INTRODUCTION

1.1 Regulatory Requirements

In accordance with the San Diego County Municipal Storm Water Permit Order R9-2007-01 (Municipal Permit), each of the Copermittees is required to annually perform dry weather monitoring of discharges into its storm water conveyance system. During the dry weather season, May 1 through September 30, selected locations along the storm drain conveyance system are evaluated. This procedure includes recording field observations, estimating observed flow rates, and conducting field testing. The Municipal Permit also requires laboratory analyses for at least 25 percent of the visited sites with flowing or ponded water. If a sampling location is dry, meaning there is no flowing or ponded water, an alternate sampling station is selected. If the results of the field or laboratory analyses exceed specific action levels, follow-up investigations are required within two business days.

1.2 Program Overview

The purpose of the Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the storm water conveyance system, minimizing the negative impact of human activities on receiving water bodies. The Dry Weather Monitoring Program consists of the following components:

- Field screening visual observations
- Field screening analytical monitoring
- Trash assessments
- Laboratory analytical monitoring

The data gathered from dry weather monitoring is used to characterize discharges to the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as needed to detect and eliminate the sources of these pollutants.

1.3 Hydrologic Setting

The City of National City (City) is located entirely within the San Diego Bay Watershed Management Area. The City is one of the most densely populated regions of the San Diego Bay Watershed Management Area, but makes up only 1.6% of the watershed's total area. The City includes portions of hydrologic areas 909.1 and 908.3, of the Lower Sweetwater and Pueblo watersheds, respectively. The major receiving water body in the City is the San Diego Bay. Runoff from the southern part of the City initially drains to the Sweetwater River, which ultimately conveys flow to the bay. The Sweetwater River and the Sweetwater Marsh are identified as Environmentally Sensitive Areas (ESA). The Sweetwater River flows along the southern border of the City through the Sweetwater Marsh and into the San Diego Bay. Paradise Creek is a small salt marsh creek that receives runoff from the northern areas of the City and discharges into the Sweetwater River. Paradise Creek and Paradise Marsh have also been identified as ESAs. La Paleta Creek traces the northern border of the City, and is 303(d) listed for benthic community effects and sediment toxicity as Seventh Street Channel. The 2008/2009 San Diego Bay Watershed Urban Runoff Management Program (WURMP) Annual Report identified bacteria, sediment, and trash as high priority water quality problems in

hydrologic area 908.3 of the Pueblo San Diego Watershed. The San Diego Bay WURMP also identified bacteria as a high priority pollutant category in hydrologic area 909.1 of the Sweetwater Watershed.

1.4 Previous Work

The City of National City has conducted dry weather field screening programs since 1996 at several locations within the City's storm water conveyance system. A summary of the number of sites sampled for each year is presented in Table 1-1.

TABLE 1-1
SUMMARY OF HISTORICAL DRY WEATHER SITES

Year	Number of Sites Screened [1]	Number of Flowing Sites	Number of Ponded Sites	Number of Dry Sites	Number of Lab Analysis Sites [2]
1996	20	Data not available [3]		13	---
1997	7			0	---
1998	7			3	---
1999	7			1	---
2000	7			2	---
2001	10			1	---
2002	15	12	3	2	4
2003	15	13	2	2	4
2004	15	11	4	2	4
2005	15	14	1	2	4
2006	15	14	1	2	4
2007	15	13	2	1	4
2008	15	12	3	4	4
2009	15	12	3	4	4

Notes:
[1] Number of Sites Screened = Number Flowing + Number Ponded. Field screening cannot be conducted at sites found to be dry. Dry sites are replaced by either a flowing or ponded site.
[2] Laboratory analyses commenced in 2002 as required by RWQCB Order 2001-001.
[3] Available information does not distinguish between flowing and ponded sites during this period.

1.5 Report Outline

This report is presented in the following order:

Section 1, Introduction, includes a regulatory background, a program overview, a discussion of the City's hydrologic setting, a summary of previous dry weather monitoring, and the report outline.

Section 2, **Sampling Locations,** describes sampling locations and site selection criteria.

Section 3, Field and Laboratory Analytical Methods, includes field screening and laboratory analytical procedures, quality assurance protocols, and follow-up action levels.

Section 4, Field Screening Results, presents qualitative observations of the sampling locations and quantitative results of the field screening analyses.

Section 5, Trash Assessment, discusses the procedure and results of the trash assessment.

Section 6, Laboratory Analytical Results, presents results of the laboratory analyses.

Section 7, Data Analysis, provides an analysis of this year's field and laboratory data, as well as a comparison of past results.

Section 8, Follow-up Investigations, details the results of follow-up investigations undertaken to identify the sources of action level exceedances measured during the monitoring program.

Section 9, Summary and Recommendations, provides a summary of the program results and recommendations for follow-up actions.

Appendix A Historical Dry Weather Monitoring Data

Appendix B Photographs of Sampling Locations

Appendix C Laboratory Analytical Reports

Appendix D Field Data and Trash Assessment Forms

2 SAMPLING LOCATIONS

The City of National City's most recent Jurisdictional Urban Runoff Management Plan identified 15 primary monitoring stations, as well as three alternate stations to replace any primary sites that did not have ponded or flowing water. All sampling sites are located in hydrologic units 908 and 909.

Fifteen primary monitoring stations were visited in 2010. Primary sites 4, 42, and 43A were dry and alternate sites 6, 44, and 49 were sampled in their place.

Table 2-1 provides the location, conveyance configuration, primary and secondary land uses, Hydrologic Subarea (HSA), and Global Positioning System (GPS) coordinates of the primary and alternate monitoring stations that were visited. Photographs of sampling locations are included as Appendix B. A complete map of the Municipal Separate Storm Sewer System (MS4) including sampling location is included as Figure A. A map of the watersheds in and around National City, broken down into HSAs, is included as Figure B.

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
1A	Southwest of 43rd Street and Nordica Avenue	Concrete Channel	Residential	Commercial	908.31	32.68575	-117.10166
3	East 7th Street and R Avenue	Manhole	Residential	Commercial	908.32	32.68183	-117.08894
4	East 1st Street and U Avenue	Manhole	Parks	Residential	908.31	32.68726	-117.08749
6*	North bank of Sweetwater River ~500 ft. East of Highland Ave, access from North 2nd Avenue	Outlet	Industrial	Commercial	909.12	32.65668	-117.08844
13A	Northeast of 16th Street and National City Boulevard, inside Kimball Park	Outlet	Commercial	Residential	908.32	32.66942	-117.10326
31A	North of Sweetwater Road, across from 2nd Avenue at the corner of the golf course	Earthen Channel	Parks	Commercial	909.12	32.66121	-117.08453
32	East of 2nd Avenue, north of Freeway 54 and the Sweetwater River	Outlet	Commercial	Open	909.12	32.65887	-117.08274
38	Dirt road, west of Harbison Avenue, between 20th Street and 24th Street, at the end of fence line	Earthen Channel	Residential	None	909.12	32.67265	-117.07057
40	Southwest corner of Sweetwater Road and Plaza Bonita/Stockman Street. Down in channel	Outlet	Commercial	Residential	909.12	32.65961	-117.06677
41	Northeast of San Miguel Court and Valley Road, inside Park Bonita Apartment complex	Earthen Channel	Residential	None	909.12	32.66588	-117.05083
42	Southwest of Euclid Avenue and 24th Street, south of Southern Community Church	Outlet	Residential	Commercial	909.12	32.66785	-117.07691

TABLE 2-1
2010 DRY WEATHER MONITORING STATIONS (CONTINUED)

Site	Location	Conveyance	Primary Land Use	Secondary Land Use	Hydrologic Subarea	Latitude	Longitude
43A	F Avenue between E. 24th Street and E. 28th Street, west of Olivewood Elementary School	Catch Basin	Residential	Commercial	909.12	32.66134	-117.09447
44*	Northeast of 16th Street and National City Boulevard, under the Kimball Park bridge	Concrete Channel	Commercial	Residential	908.32	32.66982	-117.10247
44A	D Avenue behind Boys and Girls Club in Kimball Park	Outlet	Commercial	Residential	908.32	32.67151	-117.10123
45	In front of 1243-1305 Fig Court, in the middle of street	Manhole	Residential	Parks	908.31	32.68739	-117.09690
46	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	Manhole	Commercial	Residential	908.32	32.67584	-117.09539
47	Southeast corner of the Mile of Cars Way and Transportation Avenue	Manhole	Commercial	Residential	908.32	32.66163	-117.10275
48	Northwest of E. 14th Street and Grove Street	Catch Basin	Residential	None	908.32	32.67673	-117.08321
49*	South end of Arcadia Place (through Harbison Avenue and 11th Street)	Concrete Channel	Residential	Commercial	908.32	32.68095	-117.07770

Note: * Alternate sites 6, 44, and 49 were selected to substitute for dry primary monitoring sites 4, 42, and 43A.

3 FIELD AND LABORATORY ANALYTICAL METHODS

3.1 Field Screening Procedures and Methods

Field screening techniques consist of flow measurements, qualitative field observations, and quantitative field analyses of selected water quality parameters. Weather conditions, time since last rainfall, and the type of storm water conveyance are recorded as well. Specific observations and results of the field water quality analyses are documented on field data sheets, which also serve as a record of the field visit. Data sheets are completed for every site visit regardless of whether or not samples were collected. Check boxes on the data sheets indicate if the visit is for routine field screening, confirmation of an exceedance, or an IC/ID follow-up visit. A confirmation visit is a revisit of the original site, whereas an IC/ID follow-up is an upstream investigation. Data sheets from the 2010 Dry Weather Monitoring Program are included as Appendix D.

Field screening and analyses were conducted according to the following procedures and methods:

Qualitative Observations

Qualitative field observations are made during each site visit. These observations include a general site assessment and description of water odor, clarity, the presence of floatable materials, visible deposits or stains, and organisms. Evidence of present or past illicit connections and illegal discharges to the storm drain system can also be discovered through careful field observations. Each field screening location is photographed to document site conditions. Photographs of each site visited are included in Appendix B.

Flow Measurement

Flow measurements can help estimate pollutant mass loading, prioritize storm drains for future investigation, and identify significant changes in discharge that may be indicative of an illegal discharge. Various field methods are used in formulas to estimate the flow rate. These include measuring the velocity, depth, and width of the flowing water; recording the amount of time required to fill a bottle of known volume with sample water; or, if measuring flow within a cylindrical pipe, measuring the pipe diameter as well as the depth and velocity of the flow. Low levels of flow may also be assessed visually.

Field Water Quality Analyses

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Specific Conductance
- Temperature
- pH
- Turbidity
- Nitrate-Nitrogen (Nitrate-N)
- Ammonia-Nitrogen (Ammonia-N)
- Orthophosphate-Phosphorus (Orthophosphate-P)
- Surfactants, measured as methylene blue active substances (MBAS)

The methods used to perform the above field analyses, along with the reporting limit, range, and accuracy of each method, are listed in Table 3-1.

TABLE 3-1
FIELD ANALYTICAL METHODS

Parameter	Method	Method Reporting Limit	Range	Accuracy
Specific Conductance	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.01 mS/cm	0 – 20 mS/cm	± 2% of functional sensitivity[1]
Temperature	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.1 °C	0.0 °C – 60.0 °C	± 0.5 °C
pH	Hanna Instruments HI 991301 Portable pH/EC/TDS/Temperature Meter*	0.01	0.00 – 14.00	± 0.01 pH
Turbidity	Hanna Instruments HI 93703 Portable Turbidity Meter*	0.00 NTU	0.00 – 50.00 NTU and 50 – 1000 NTU	± 0.5 NTU or 5% of reading (whichever is greater)
Ammonia-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Ammonia 3 Vacu-vials® (K-1403) Salicylate*	0.20 mg/L**	0.20 mg/L – 3.00 mg/L**	Varies with measured concentration[2,3]
Nitrate-N	CHEMetrics V-2000 Multi-Analyte LED Photometer – Nitrate 3 Vacu-vials® (K-6933) Cadmium reduction[4]*	1.13 mg/L**	1.13 mg/L – 113 mg/L**	± 30%of practical detection limit[2]
Ortho-phosphate-P	CHEMetrics V-2000 Multi-Analyte LED Photometer – Phosphate 2 Vacu-vials® (K-8513) Stannous chloride chemistry[4]*	0.098 mg/L**	0.10 mg/L – 2.61 mg/L**	Varies with measured concentration[2,3]
Surfactants	CHEMetrics CHEMets Kit (K-9400) methylene blue active substances	0.13 mg/L	0.00 mg/L – 3.00 mg/L***	± 0.13 & ± 0.5 mg/L[5]

Notes:

EC = electrical conductivity
mS/cm = millisiemens per centimeter
°C = degrees Celsius
NTU = nephelometric turbidity unit
mg/L = milligrams per liter
LED = light-emitting diode

[1] Functional sensitivity (FS) represents the lowest limit at which quantitative information is reliable. FS is estimated as the mean concentration for a spiked sample whose coefficient of variance (CV) is 20%. CV is the standard deviation divided by the mean.

[2] PDL is defined as the lower limit of the stated test range.
Percent error adjusts as follows: ±30% at PDL, ±20% for 25% of full range, ±10% for 75% of full range, ±10% for 120% of full range.

[3] This method determines the concentration of nitrate in mg/L NO_3. To determine the amount of nitrate-nitrogen, the concentration of nitrogen must be adjusted for the presence of oxygen in the NO_3 molecule. Therefore, the result is multiplied by a conversion factor of 0.226, the ratio of the molecular weight of N (14g/mol) to NO_3 (62 g/mol). The practical detection limit (PDL) for nitrate is 5.0 mg/L; however, the PDL for nitrate-nitrogen is lower due to the conversion.

[4] This method determines the concentration of orthophosphate in mg/L PO_4. To determine the amount of orthophosphate-P, the concentration of phosphate must be adjusted for the presence of oxygen in the PO_4 molecule. Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the result is multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31g/mol) to PO_4 (95 g/mol). The practical detection limit for orthophosphate is 0.3 mg/L; however, the practical detection limit for orthophosphate-phosphorus is lower due to the conversion.

[5] ± 0.13 for the range of 0.0 to 1.0 mg/L, ± 0.25 mg/L for the range of 1.0 to 2.0 mg/L and 0.5 mg/L for the range of 2.0 to 3.0 mg/L.

*Test method information taken from Hanna Instruments and CHEMetrics manuals, available online at www.hannainst.com and www.chemetrics.com.

** Readings below the PDL have increased percent error; measurements are reported, but are flagged as being below the PDL.

***Extended ranges in chemical analyses can be achieved through dilutions. Accuracies decrease proportionally with further dilutions.

3.2 Laboratory Analytical Methods

In accordance with the Municipal Permit, laboratory samples were collected at four sites, representing 25 percent of the sites where ponded or flowing water was observed. Samples were submitted to EnviroMatrix Analytical, Inc, a laboratory certified by the California Department of Health Services, for analysis of the following constituents:

- Total hardness
- Oil and grease
- Diazinon
- Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Total Coliform bacteria
- Fecal Coliform bacteria
- *Enterococcus* bacteria

The methods used to perform each of the above analyses along with method reporting limits and holding times are listed in Table 3-2.

3.3 Quality Assurance and Quality Control (QA/QC)

The QA/QC Plan utilized for this project includes the United States Environmental Protection Agency (USEPA) approved test methods for the field and laboratory analysis of water samples, calibration of test equipment, and pre- and post-rinsing of sample collection containers and test vials. Key components of the QA/QC Plan are described below.

3.3.1 Field Sampling and Analysis QA/QC

The pH meters, turbidity meter and conductivity meter are tested daily before field screening begins. The pH meters are calibrated as needed with sodium/potassium phosphate, monobasic buffer solutions with pH values equal to 4.00 ± 0.01, 7.00 ± 0.01, and 10.00 ± 0.01 units. The glass electrode tube is kept moist to preserve the meter's accuracy during fieldwork. The turbidity meter and conductivity meter are calibrated as needed using standard solutions.

Field sample collection containers are rinsed first with distilled water and then with the sample water prior to sample collection. Upon completion of sampling and testing at each site, sample collection containers, test vials, and ion-sensitive electrodes were rinsed twice with distilled water and dried.

Field test kit accuracy is assessed prior to commencing sampling. Each lot, or batch, of Chemetrics ampoules is analyzed against standard solutions of known concentrations of ammonia-N, nitrate, orthophosphate, and surfactants. The results of these tests are shown in Table 3-3.

TABLE 3-2
LABORATORY ANALYTICAL METHODS

Analyte	Analytical Method	Method Reporting Limit	Method Detection Limit	Maximum Holding Time [1]
Oil and Grease	EPA 1664	5 mg/L	5 mg/L	28 days
Total Hardness	EPA 200.7	10 mg/L	10 mg/L	14 days
Dissolved Cadmium	EPA 200.8	1 µg/L	0.2 µg/L	24 hours
Dissolved Copper	EPA 200.8	10 µg/L	1 µg/L	24 hours
Dissolved Lead	EPA 200.8	5 µg/L	1 µg/L	24 hours
Dissolved Zinc	EPA 200.8	20 µg/L	0.3 µg/L	24 hours
Diazinon	EPA 8141A	0.05 µg/L	0.04 µg/L	7 days
Chlorpyrifos	EPA 8141A	0.05 µg/L	0.04 µg/L	7 days
Total Coliforms[2]	SM 9221	20 – 1,600,000 MPN/100 mL	20 MPN/100 mL	6 hours
Fecal Coliforms[2]	SM 9221	20 – 160,000 MPN/100 mL	20 MPN/100 mL	6 hours
Enterococci[2]	SM 9230	20 – 160,000 MPN/100 mL	20 MPN/100 mL	6 hours
Total Coliforms	SM 9223 (IDEXX Colilert)[3]	10 – 2,419,600 MPN/100 mL	10 MPN/100 mL	6 hours
Escherichia coli (E. coli) [4]	SM 9223 (IDEXX Colilert)[3]	10 – 2,419,600 MPN/100 mL	10 MPN/100 mL	6 hours
Enterococci	IDEXX Enterolert[3]	10 – 241,960 MPN/100 mL	10 MPN/100 mL	6 hours

Notes:
µg/L = micrograms per liter
MPN/100 mL = most probable number (of colony-forming units) per 100 milliliters
[1] Maximum Holding Time values listed apply to samples collected and preserved in accordance with the quality assurance and quality control procedures listed in Section 3.3.2.
[2] For D-MAX's Dry Weather Monitoring Program, EMA performs standard dilutions for total coliforms to quantify from 20-1,600,000 most probable number per 100 milliliters (MPN/100 mL). For fecal coliforms and Enterococci, EMA performs standard dilutions to quantify from 20-160,000 MPN/100 mL. During the analysis and interpretation of the results, the number of tubes used to quantify the sample must fit the MPN index table from Standard Method 9221. The dilution set used will determine the detection limit. A standard dilution analysis is set up with 15 tubes at different concentrations. The reporting limit will always be adjusted depending on the dilution factor used for quantifying the actual results based on the MPN table. If the result for the analysis was less than 16,000 MPN/100 mL, the reporting limit will always be 20, and the dilution factor will be 10. As the dilution factor goes up, the reporting limit listed in the results from EMA will also go up based on the calculation made with EMA's data system. However, the lowest quantifiable number or reporting limit would still be 20 based on how the standard tubes for the sample is set up.
[3] IDEXX Colilert and Enterolert tests are performed by EMA. This test is used during upstream investigations only.
[4] Number of fecal coliforms is derived from number of *E. coli* through the following formula:
Fecal Coliforms = *E. coli* / 0.85. The converted fecal coliform count, not the number of *E. coli*, is reported in this report's data tables.

TABLE 3-3
FIELD ANALYSIS QA/QC RESULTS

Analyte	Known Concentration (mg/L)	Acceptable Range* (mg/L)	Lot Number	Date	Field Test Kit Results (mg/L)
Ammonia-N	0.85	0.68 - 1.02	73707/2	5/17/2010	0.811
			74559/8	5/27/2010	0.821
			75425/13	6/30/2010	0.811
			75608/7	8/27/2010	0.691
Nitrate*	44.3	31.0 - 57.6	75362/2	5/17/2010	42.77
			73960/4	5/17/2010	41.02
			75655/6	6/30/2010	38.56
			75655/8	6/30/2010	36.49
			75998/8	8/6/2010	46.63
Orthophosphate*	6.13	4.29 - 7.97	75263/4	5/17/2010	6.023
			73677/4	5/17/2010	5.265
			75756/4	6/30/2010	5.015
Surfactants	1.0	0.75 - 1.25	75440/75293/12	5/17/2010	1.0
			74268/74253/2	5/17/2010	1.0
			75638/75460/12	6/30/2010	1.0
			75638/75631/2	6/30/2010	1.0
			75928/75791/6	7/28/2010	1.0
			75928/75937/2	8/27/2010	1.0

Notes:
Acceptable range is calculated based on the error associated with the methods as listed in Table 3-1.
* Nitrate and orthophosphate are converted to nitrate-nitrogen and orthophosphate-phosphorus, respectively, when conducting standard field screening. This is accomplished by multiplying the results by 0.226 for nitrate and 0.326 for orthophosphate. To simplify the calibration process, the unconverted numbers are used when calibrating the instruments.

3.3.2 Laboratory Sampling and Analysis QA/QC

Samples for laboratory analysis are collected concurrently with field samples and utilize the same sampling procedures. Pre-sterilized sample bottles are obtained from the laboratory and thus do not require rinsing with sample water prior to sample collection. After sample collection, all laboratory samples are kept in a cooler on ice until picked up by the lab. Strict chain of custody procedures are followed, and samples are delivered and analyzed within the appropriate holding times listed in Table 3-2. Completed chain of custody forms are included in Appendix C.

3. 4 Follow-up Action Levels

Based on dry weather field screening results, immediate follow-up investigations are sometimes necessary to identify and eliminate pollutant sources. In order to determine whether an immediate source investigation is necessary, numeric action levels and best professional judgment are used to interpret the field screening results. If visual and/or analytical evidence of

gross contamination are present at a site (e.g., substantial petroleum sheen, extremely high ammonia-N concentration, evidence of a sewage release, etc.), then an immediate source identification investigation is initiated. For sites that exceed numeric action levels but are not perceived as an immediate threat to water quality, a confirmation visit is conducted within two business days. An upstream pollutant source investigation is conducted thereafter if elevated concentrations persist and no sources can be identified in the immediate vicinity of the monitoring station. If elevated levels of pollutants are detected by the laboratory analyses, a comprehensive follow-up pollutant source investigation is conducted within two business days of receiving the laboratory results. A discussion of follow-up investigations is included in Section 8 of this report. Recommendations based on the results of the investigations are included in Section 9.

The following three methods are employed to determine whether immediate or comprehensive follow-up investigations are necessary: (1) Numeric Action Levels; (2) California Toxics Rule (CTR); and (3) Best Professional Judgment (BPJ). All three approaches are described in detail below and presented in Table 3-4.

Numeric Action Levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-P, nitrate-N, ammonia-N, surfactants, oil and grease, diazinon, chlorpyrifos, total coliforms, fecal coliforms, and *Enterococcus* analytical results (see Table 3-4). Prior to the 2003 dry weather season, no standard action levels had been adopted for use throughout San Diego County. D-MAX calculated the current set of numeric action levels based on county-wide sampling data. These action levels have been used by all San Diego County Copermittees since the 2003 dry weather season.

California Toxics Rule

The CTR criterion maximum concentration (CMC) is a short term concentration limit in which aquatic life can be sustained. The CMC is used to determine appropriate action levels for dissolved trace metals, including cadmium, copper, lead, and zinc. The CTR equations, as provided in USEPA Federal Register Doc. 40 Code of Federal Regulations (CFR) Part 131, are used to calculate benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases. More information on the CTR is available at http://www.epa.gov/region09/water/ctr.

Best Professional Judgment

Best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under BPJ, the need for a follow-up investigation is left to the discretion of the D-MAX field crew. Best professional judgment may indicate that results which either exceed certain action levels or are statistical outliers may be the result of natural or background factors.

TABLE 3-4
ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS

Field Screening Analytes	Action Levels[1]	Source/ Notes
Conductivity (mS/cm)	BPJ	Conductivity may be highly elevated in some regions due to high TDS, groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values <0.75 may indicate excessive potable water discharge or flushing.
Temperature (°C)	BPJ	Base judgment on season, air temperature, channel type, shading, etc.
pH	<6.5 or >9.0	Basin Plan[2], with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia.
Turbidity (NTU)	BPJ	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity) and unusual odors.
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Orthophosphate-P (mg/L)	2.0	EPA Multi-sector General Permit
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
Laboratory Analytes	**Action Levels**	**Source/ Notes**
Oil and Grease (mg/L)	15	EPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	CTR	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)		
Dissolved Lead (µg/L)		
Dissolved Zinc (µg/L)		
Total Coliforms (MPN/100 mL)	130,000	Bacteria action levels were updated for implementation in 2010 by the Dry Weather Monitoring Sub-workgroup. Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliforms (MPN/100 mL)	13,000	
Enterococci (MPN/100 mL)	7,000	

Notes:
[1] The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information, including within-site and between-site sample variability.
[2] Basin Plan = Water Quality Control Plan for the San Diego Basin
BPJ=Best Professional Judgment
WQO = Water Quality Objective
ppb = parts per billion

4 FIELD SCREENING RESULTS

Dry Weather field screening was conducted at the 15 sites where ponded or flowing water was observed. Of these sites, 11 had a measurable flow, and four had ponded water. Eight confirmation visits were performed at sites where one or more constituents were found to exceed specified action levels, and three upstream locations were sampled during follow-up investigations.

4.1 Qualitative Observations

Qualitative observations for all routine field screening visits are summarized below. Routine field screening and confirmation visit observations are presented in Table 4-1:

Light Conditions
Light conditions were primarily overcast, with occasional sunny or partly cloudy weather.

Tide
Two sites visited during dry weather monitoring were subject to tidal influence. Both sites were sampled during an incoming tide.

Odor
One site smelled musty and one site had a combination of a musty and sewage smell. All other samples lacked any discernable odor.

Color
Water from four sites was yellow in color, and water from two of the sites appeared brown. All other samples were colorless.

Clarity
The majority of water samples collected was clear, with negligible amounts of suspended particles observed. One water sample was slightly cloudy.

Floatable Materials
Trash was noted floating on the surface of the water at eight sites. Bubbles and foam were on the surface of one site. No other types of floating materials were noted. Section 5 of this report includes the complete results of the Trash Assessment.

Deposits
Sediment, gravel, and/or fine particulates were observed at nearly all sites. No other types of deposits were noted.

Vegetation
Most sites supported either normal or no vegetation, appropriate for the availability of sunlight and soil. Two sites had limited vegetation, and flow was restricted at one site as a result of excessive vegetation due to thick reed growth.

Biology
The presence of organisms can be an indication of healthy waters. The presence of algae often indicates that water flow is persistent. An overabundance of algae often implies high levels of nutrients in the water and can have negative effects on aquatic life. No sites had excessive algal growth this year. Insects and algae were prevalent at most sites that had sun exposure. One site was host to snails.

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
1A	7/8/10	15:50	Overcast	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	Excessive	Insects, Snails, Larvae, Worms, Slugs
3	7/9/10	13:30	Partly Cloudy	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	None
4 (Dry)	7/21/10	11:40	Overcast	ns	ns	ns	ns	Fine Particulates	None	Insects
6	7/21/10	14:10	Overcast	None	None	Clear	None	Sediment/Gravel, Fine Particulates	None	Algae
13A	7/22/10	9:10	Overcast	None	None	Clear	None	Sediment/Gravel, Fine Particulates	None	Algae
31A	7/22/10	11:40	Overcast	None	None	Clear	None	Sediment/Gravel, Fine Particulates	None	Insects
32	7/8/10	11:00	Overcast	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects, Algae
32 (Confirmation)	7/26/10	9:45	Overcast	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	None	None
32 (Confirmation)	8/12/10	15:00	Sunny	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	None	Algae
32 (Confirmation)	9/14/10	9:45	Sunny	None	Yellow	Clear	Bubbles, Foam	Sediment/Gravel, Fine Particulates	None	Insects, Algae, Snails
38	7/21/10	9:50	Overcast	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Insects
38 (Confirmation)	7/22/10	11:15	Overcast	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	Normal	Insects
40	7/8/10	15:00	Overcast	None	Yellow	Clear	Trash	Sediment/Gravel, Fine Particulates	Normal	Algae
41	7/21/10	11:00	Overcast	None	None	Clear	None	Sediment/Gravel	Limited	Algae

TABLE 4-1
DRY WEATHER FIELD OBSERVATIONS (CONTINUED)

Site	Date	Time	Light Conditions	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology
42 (Dry)	7/21/10	15:40	Overcast	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	Limited	None
43A (Dry)	7/22/10	9:50	Overcast	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	None	None
44	7/22/10	13:40	Overcast	None	Brown	Clear	Bubbles, Foam	Sediment/Gravel, Fine Particulates	None	Insects, Algae
44A	7/21/10	12:05	Overcast	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	Insects, Algae
45	7/8/10	9:45	Overcast	Musty	Brown	Slightly Cloudy	Trash	Sediment/Gravel, Fine Particulates	None	None
45 (Confirmation)	7/9/10	11:30	Overcast	None	None	Clear	Trash	Sediment/Gravel, Fine Particulates	None	None
45 (Confirmation)	8/12/10	14:00	Sunny	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	None	Insects
46	7/8/10	11:50	Overcast	Musty, Sewage	None	Clear	None	Sediment/Gravel, Fine Particulates	None	None
46 (Confirmation)	7/26/10	11:20	Overcast	None	None	Clear	None	Sediment/Gravel, Fine Particulates	None	None
47	7/8/10	13:50	Overcast	None	None	Clear	None	None	None	None
47 (Confirmation)	7/9/10	13:00	Overcast	None	None	Clear	None	None	None	None
48 (Dry)	7/22/10	10:15	Overcast	ns	ns	ns	ns	Sediment/Gravel, Fine Particulates	None	None
49	7/22/10	10:40	Overcast	None	Yellow	Clear	None	Sediment/Gravel, Fine Particulates	None	Algae

Notes:
na = not analyzed
ns = not sampled (dry site)
denotes a confirmation visit
denotes a location sampled for laboratory analysis

4.2 Field Analytical Results

Field analyses are conducted at all sites with flowing or ponded water. The measured constituents are described below.

Flow rate quantifies the volume of fluid passing across a given surface per unit time. Flow rate measurements are needed to calculate the load or particular amount of a pollutant discharged.

Water temperature is needed to assess the significance of other parameters, such as pH and conductivity. Also, the aquatic habitat must remain within a certain temperature range in order to sustain sensitive aquatic life.

The **pH** is an expression of acidity or alkalinity of a water sample. The pH of an aquatic system will affect a variety of chemical reactions, including the availability of nutrients and the solubility of chemical substances, particularly heavy metals.

Turbidity describes the clarity or cloudiness of a water sample, or the degree to which light is blocked by suspended material in the water. Turbid waters not only limit the amount of light that reaches submerged vegetation, thus reducing photosynthetic capacity, but excessive suspended particles can also absorb heat and increase water temperatures.

Specific conductance (conductivity) measurements indicate the total concentration of ions in an aquatic system and the ability of the water to conduct electricity. This parameter can be used to assess the mineral content of water and potentially help indicate the presence of dissolved pollutants.

Surfactant concentrations in water samples often reflect illegal discharges from industrial, commercial, or residential sources. Pollution resulting from surfactants alters the surface tension of water and disrupts the breathing mechanisms of fish gills and other aquatic organisms.

Ammonia-N is an indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment; however, in higher quantities it can become toxic to fish and other organisms.

Nitrate-N is a common sign of nutrient pollution from agricultural or household fertilizer runoff. Nitrate pollution can cause excessive algal growth, resulting in oxygen depletion as algae decomposes and may eventually suffocate other aquatic life. During the field analysis, nitrate is measured and converted into nitrate-N using a conversion factor of 0.226. This process is explained in Note 3 of Table 3-1.

Orthophosphate-P is also an indicator of nutrient pollution from agricultural or household fertilizer runoff. Similar to nitrate-N, orthophosphate-P pollution can cause nutrient enrichment, stimulate algal growth, and thus deplete oxygen in the water to levels that are dangerous for aquatic life. Even low levels of orthophosphate-P can cause significant algal growth, as it is commonly the limiting nutrient in plant growth. During the field analysis, orthophosphate is measured and converted into orthophosphate-P using a conversion factor of 0.326. This process is explained in Note 4 of Table 3-1.

A statistical summary of the routine field analytical results is presented in Table 4-2. Table 4-3 shows the results of all field analyses conducted at the sampled sites. Graphs of the various parameters and appropriate action levels for follow-up investigations are included at the end of this Section.

TABLE 4-2
FIELD ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Average	Median	Standard Deviation	Number of Exceedances	Graph No.
Flow (gpm)	4	0 (ponded)	0.8	0.5	1.1	0	4-1
pH	8.9	6.8	7.8	7.8	0.6	0	4-2
Temperature (°C)	23.9	18.0	20.9	20.6	1.7	0	4-3
Conductivity (mS/cm)	> 20	1.02	5.47	1.81	7.56	0	4-4
Turbidity (NTU)	262	0.75	22.55	5.83	66.30	1	4-5
Ammonia-N (mg/L)	1.97	0.06 J	0.34	0.18	0.47	1	4-6
Nitrate-N (mg/L)	1.17	nd	0.47	0.42	0.33	0	4-7
Orthophosphate-P (mg/L)	1.29	nd	0.41	0.20	0.40	0	4-8
Surfactants (mg/L)	> 3.00	nd	0.74	0.50	0.70	2	4-9

Statistics are calculated from the results of the routine site visits.
J = Detected but below the reporting limit; therefore, result is an estimated concentration.

TABLE 4-3
Field Analytical Results

Site	Date	Time	Flow (gpm)	Temp (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate-P (mg/L)
1A	7/8/10	15:50	<1	19.2	7.5	9.51	1.08	0.25	0.70	0.42 J	0.21
3	7/9/10	13:30	1	23.0	8.5	1.84	1.02	0.25	0.055 J	0.66 J	0.15
4	7/21/10	11:40	Dry	ns	ns	ns	ns	ns	ns	ns	ns
6	7/21/10	14:10	Tidal	22.7	8.9	6.91	>20	0.75	0.16	nd	nd
13A	7/22/10	9:10	<1	21.1	7.2	5.83	2.77	0.50	0.18	0.74 J	0.95
31A	7/22/10	11:40	Ponded	21.5	7.2	6.49	1.87	0.63	0.27	0.40 J	0.06 J
32	7/8/10	11:00	Ponded	18	7.2	1.60	1.30	0.50	0.16	0.42 J	0.18
32 (Confirmation)	7/26/10	9:45	<1	18.3	7.1	2.11	1.00	na	na	na	na
32 (Confirmation)	8/12/10	15:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns
32 (Confirmation)	9/14/10	9:45	<1	22.8	8.1	na	2.16	ns	**1.97**	0.43 J	0.85
38	7/21/10	9:50	Ponded	20.6	6.8	5.37	1.36	0.75	**1.97**	0.43 J	0.85
38 (Confirmation)	7/22/10	11:15	Dry	ns	ns	ns	ns	ns	ns	ns	ns
40	7/8/10	15:00	2	18.9	7.9	3.74	2.95	0.25	0.34	0.87 J	0.38
41	7/21/10	11:00	4	18.8	7.9	0.75	3.69	0.50	0.18	1.17	0.17
42	7/21/10	15:40	Dry	ns	ns	ns	ns	ns	ns	ns	ns
43A	7/22/10	9:50	Dry	ns	ns	ns	ns	ns	ns	ns	ns

TABLE 4-3
FIELD ANALYTICAL RESULTS (CONTINUED)

Site	Date	Time	Flow (gpm)	Temp (ºC)	pH	Turbidity (NTU)	Conductivity (mS/cm)	Surfactants (mg/L)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	Ortho-phosphate-P (mg/L)
44	7/22/10	13:40	Tidal	23.9	8.5	4.66	>20	0.75	0.18	0.05 J	0.20
44A	7/21/10	12:05	<1	22.2	8.6	4.51	1.25	0.50	0.18	0.01 J	0.20
45	7/8/10	9:45	1	19.9	7.9	**262**	1.77	**>3.00**	0.26	0.53 J	1.29
45 (Confirmation)	7/9/10	11:30	<1	21.4	8.0	4.81	1.48	0.75	na	na	na
45 (Confirmation)	8/12/10	14:00	Dry	ns	ns	ns	ns	ns	ns	ns	ns
46	7/8/10	11:50	1	20.5	7.1	8	1.17	0.50	0.08 J	0.69 J	0.32
46 (Confirmation)	7/26/10	11:20	<1	21.6	7.6	na	1.26	na	na	na	na
47	7/8/10	13:50	1	22.4	7.4	10.38	>20	**1.50**	0.25	0.27 J	0.18
47 (Confirmation)	7/9/10	13:00	1	23.7	7.6	na	>20	**1.00**	na	na	na
48	7/22/10	10:15	Dry	ns	ns	ns	ns	ns	ns	ns	ns
49	7/22/10	10:40	Ponded	20.4	7.8	6.70	1.81	0.50	0.17	0.35 J	0.97
REPORTING LIMIT				**0.1**	**0.01**	**0.00**	**0.01**	**0.13**	**0.20**	**1.13**	**0.10**
ACTION LEVEL				**BPJ**	**<6.5 >9.0**	**BPJ**	**BPJ**	**1.0**	**1.0**	**10.0**	**2.0**

Notes:
na = not analyzed
nd= not detected
ns = not sampled (dry site)
Red values are at or above the measured constituent's action level.
J = Detected but below the reporting limit; therefore, result is an estimated concentration.
denotes a confirmation visit
denotes a location sampled for laboratory analysis

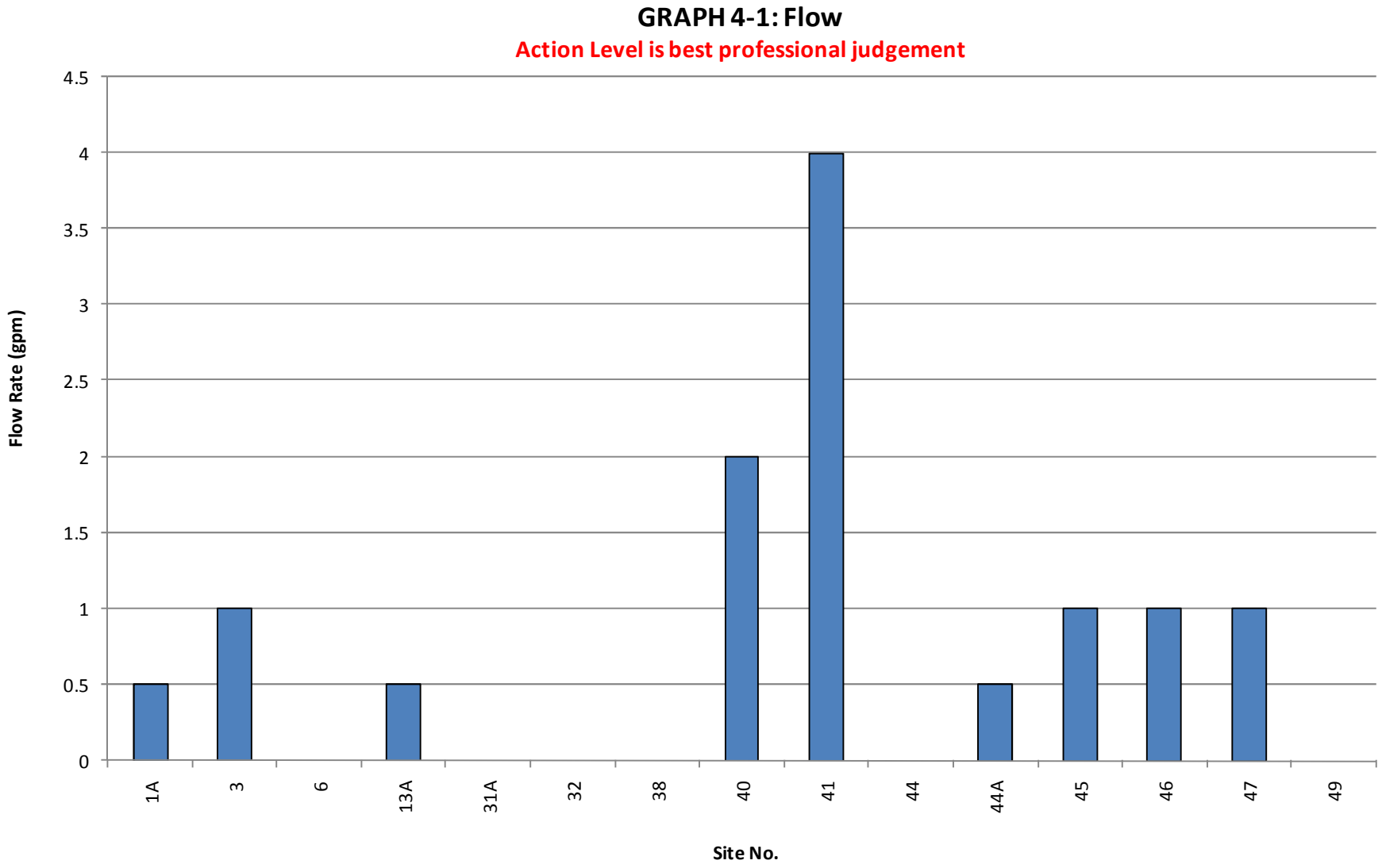
GRAPH 4-1: Flow
Action Level is best professional judgement
Flow Rate (gpm)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
1A
3
6
13A
31A
32
38
40
41
44
44A
45
46
47
49
Site No.

GRAPH 4-2: pH

Action Level is > 9.0 or < 6.5

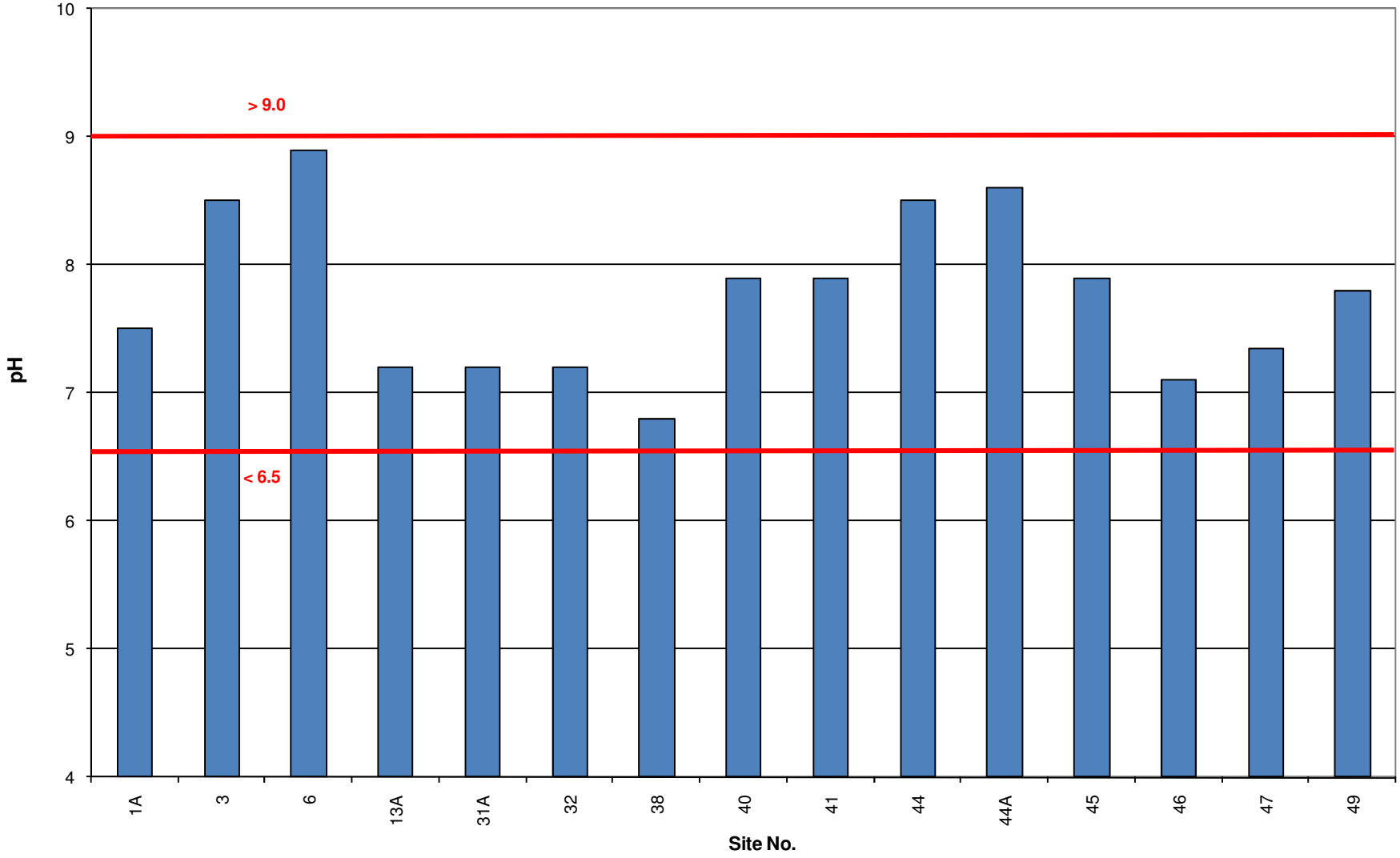

GRAPH: 4-3: Temperature

Action Level is Best Professional Judgement

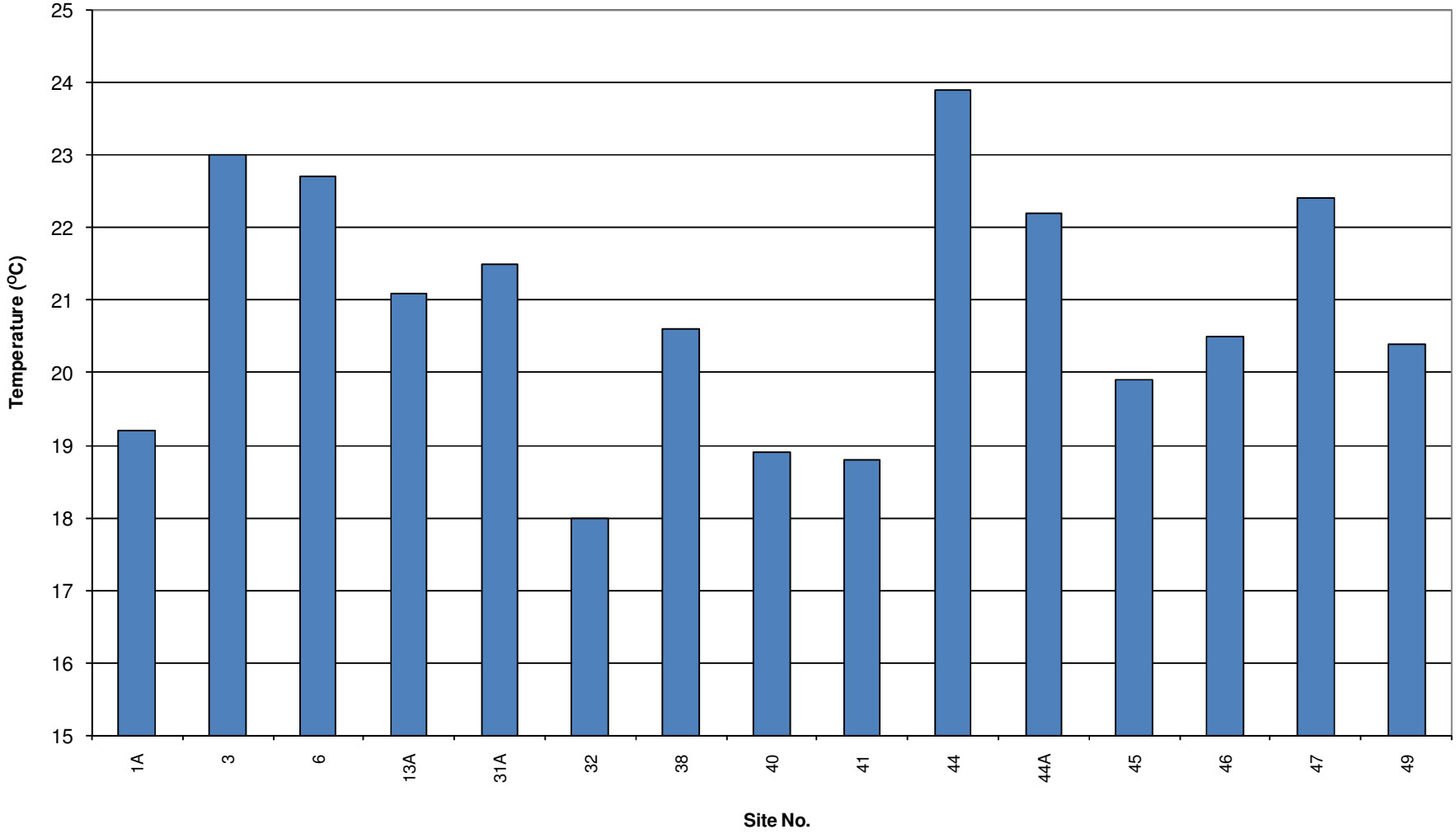

GRAPH 4-4: Conductivity

Action Level is Best Professional Judgment

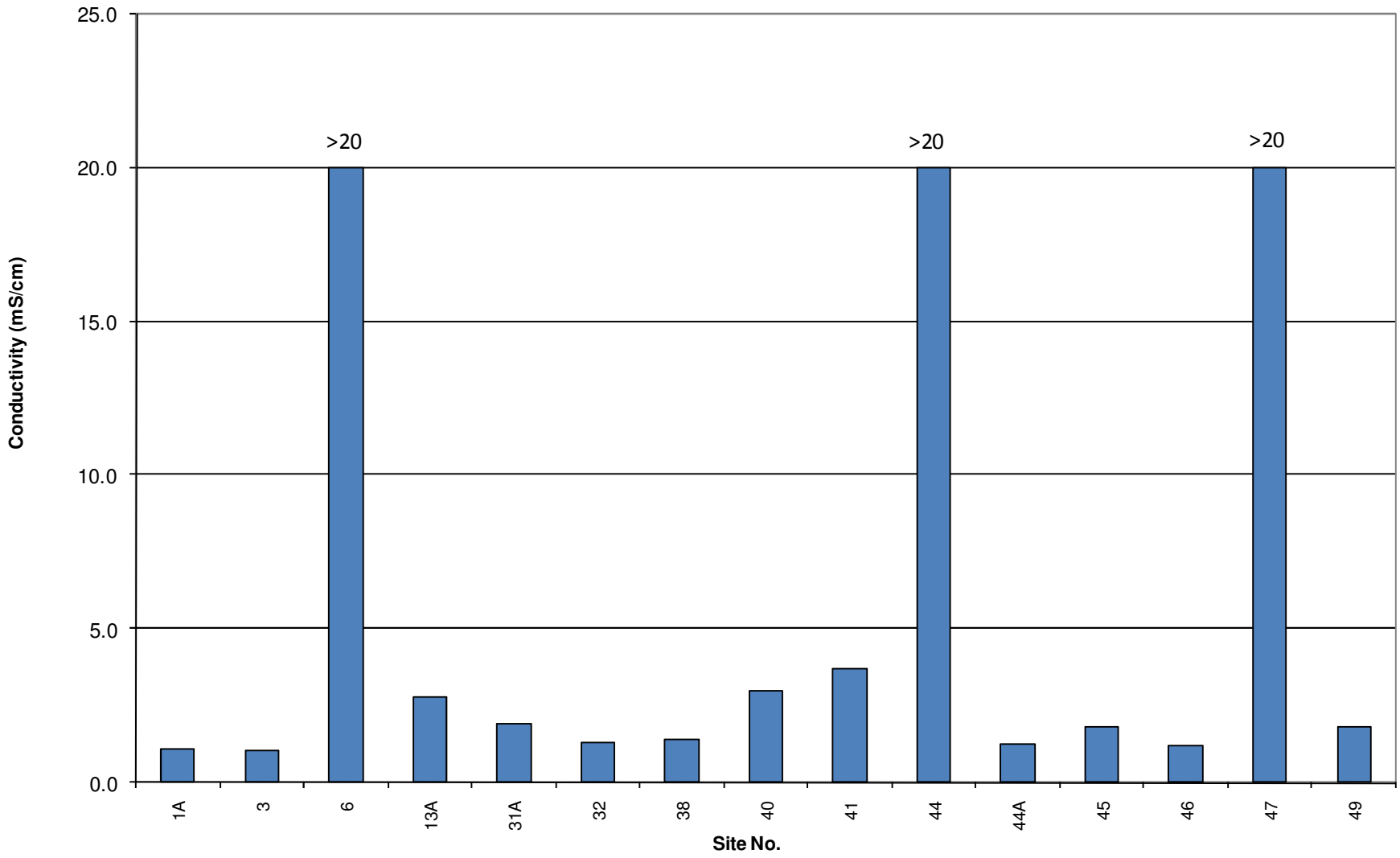

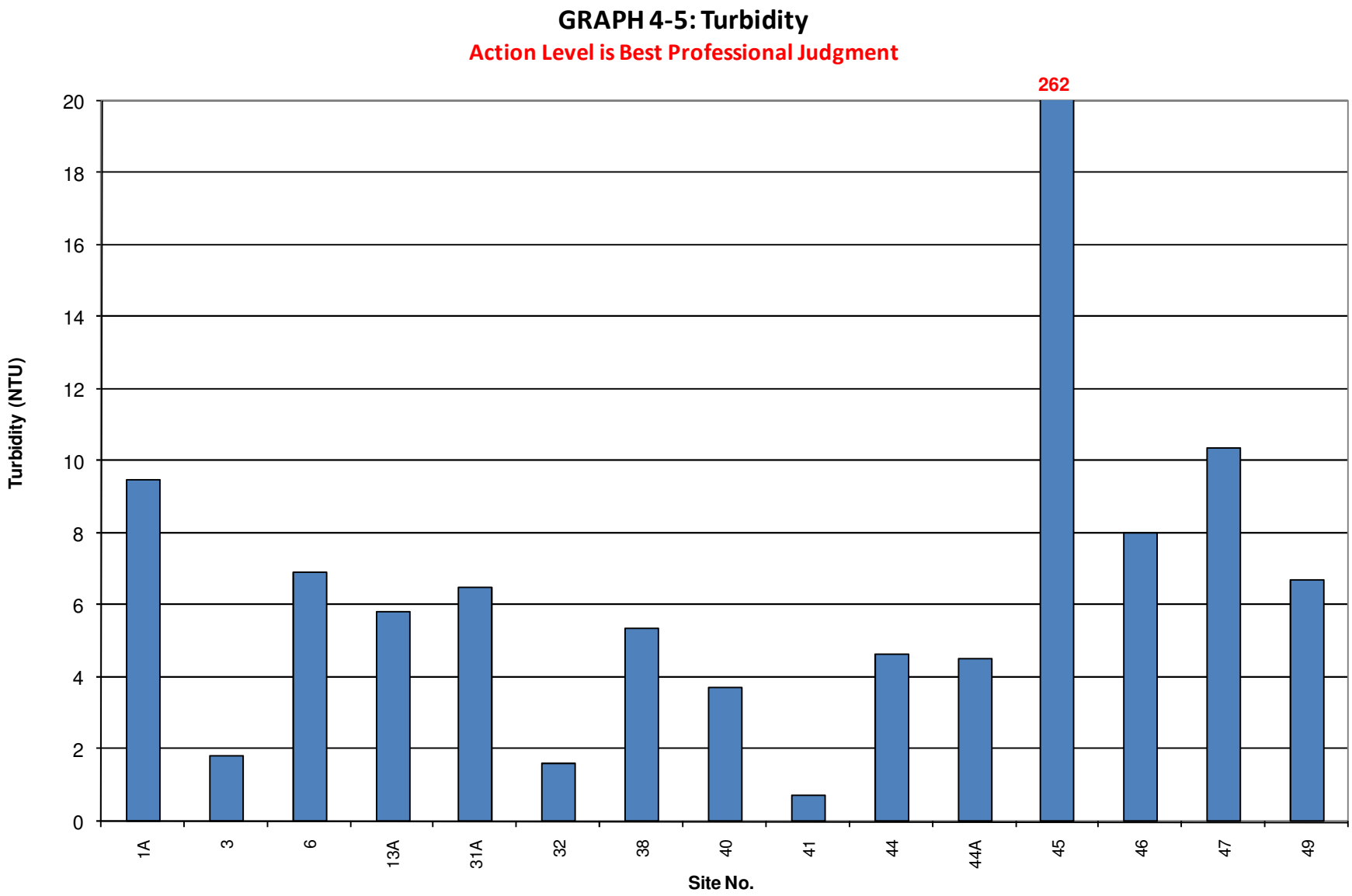
GRAPH 4-5: Turbidity
Action Level is Best Professional Judgment
262
Turbidity (NTU)
20
18
16
14
12
10
8
6
4
2
0
1A
3
6
13A
31A
32
38
40
41
44
44A
45
46
47
49
Site No.

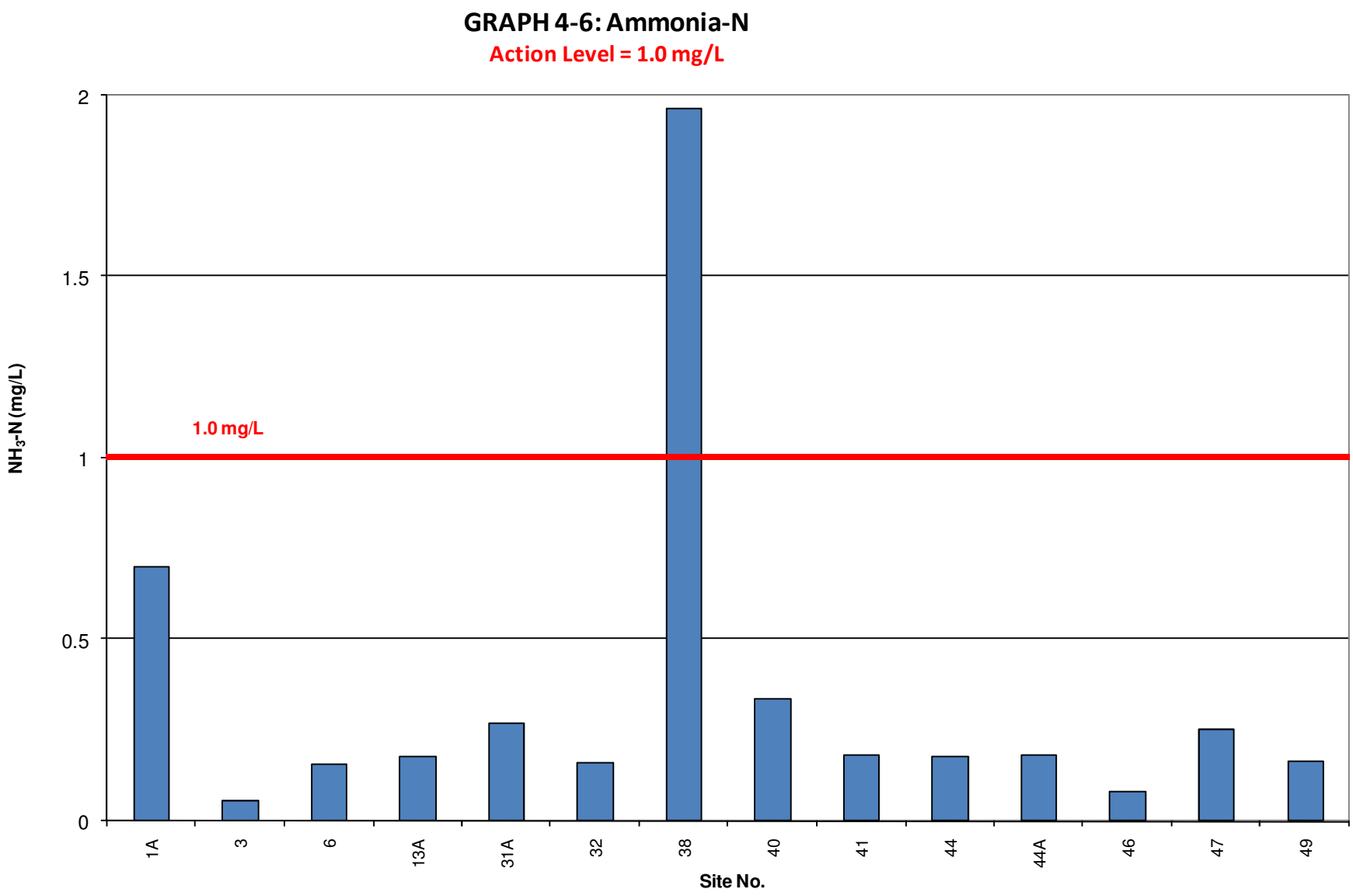
GRAPH 4-6: Ammonia-N
Action Level = 1.0 mg/L
2
1.5
1
0.5
0
NH3-N (mg/L)
1.0 mg/L
1A
3
6
13A
31A
32
38
40
41
44
44A
46
47
49
Site No.

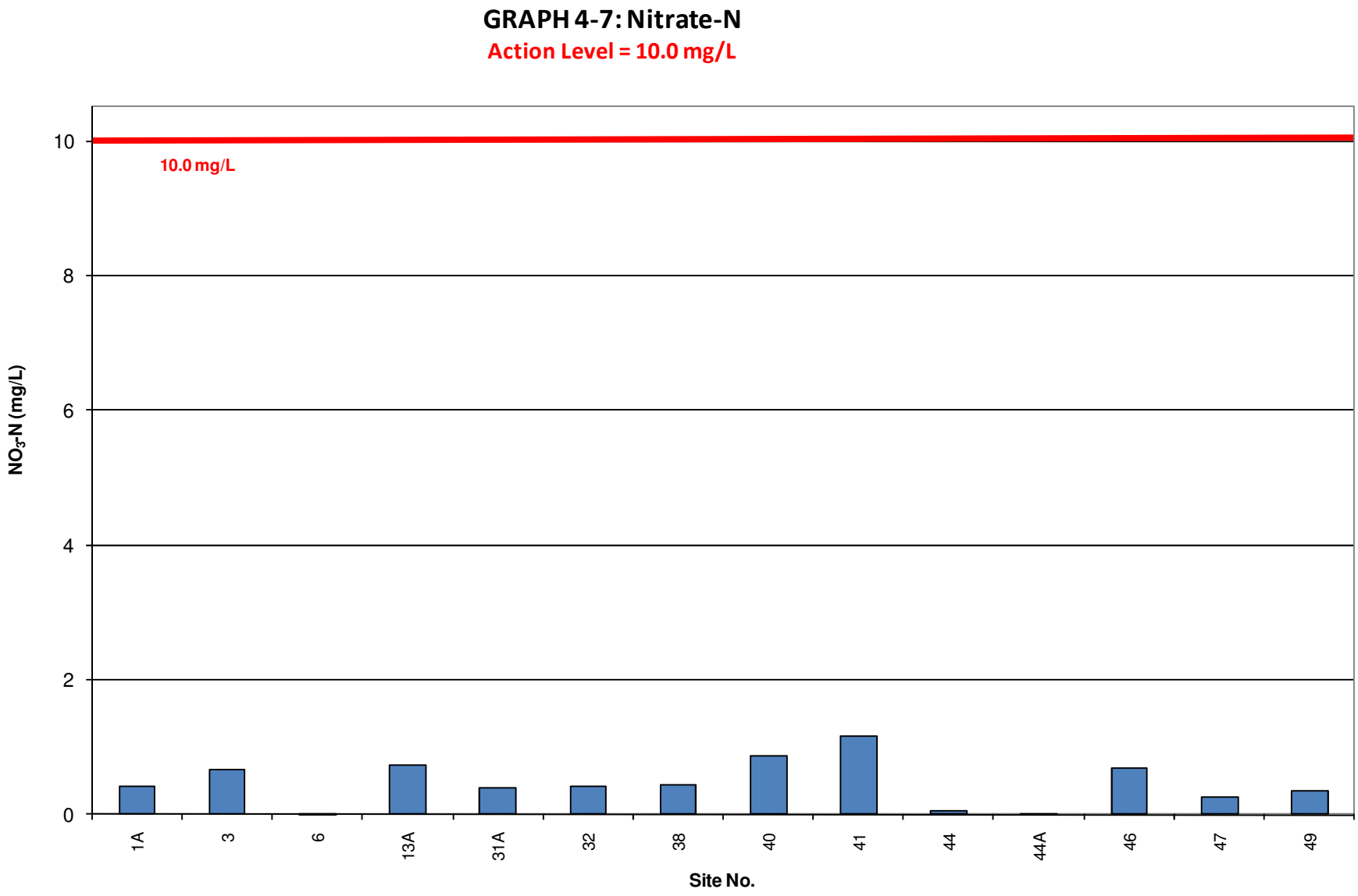
GRAPH 4-7: Nitrate-N
Action Level = 10.0 mg/L
10.0 mg/L
NO3-N (mg/L)
10
8
6
4
2
0
1A
3
6
13A
31A
32
38
40
41
44
44A
46
47
49
Site No.

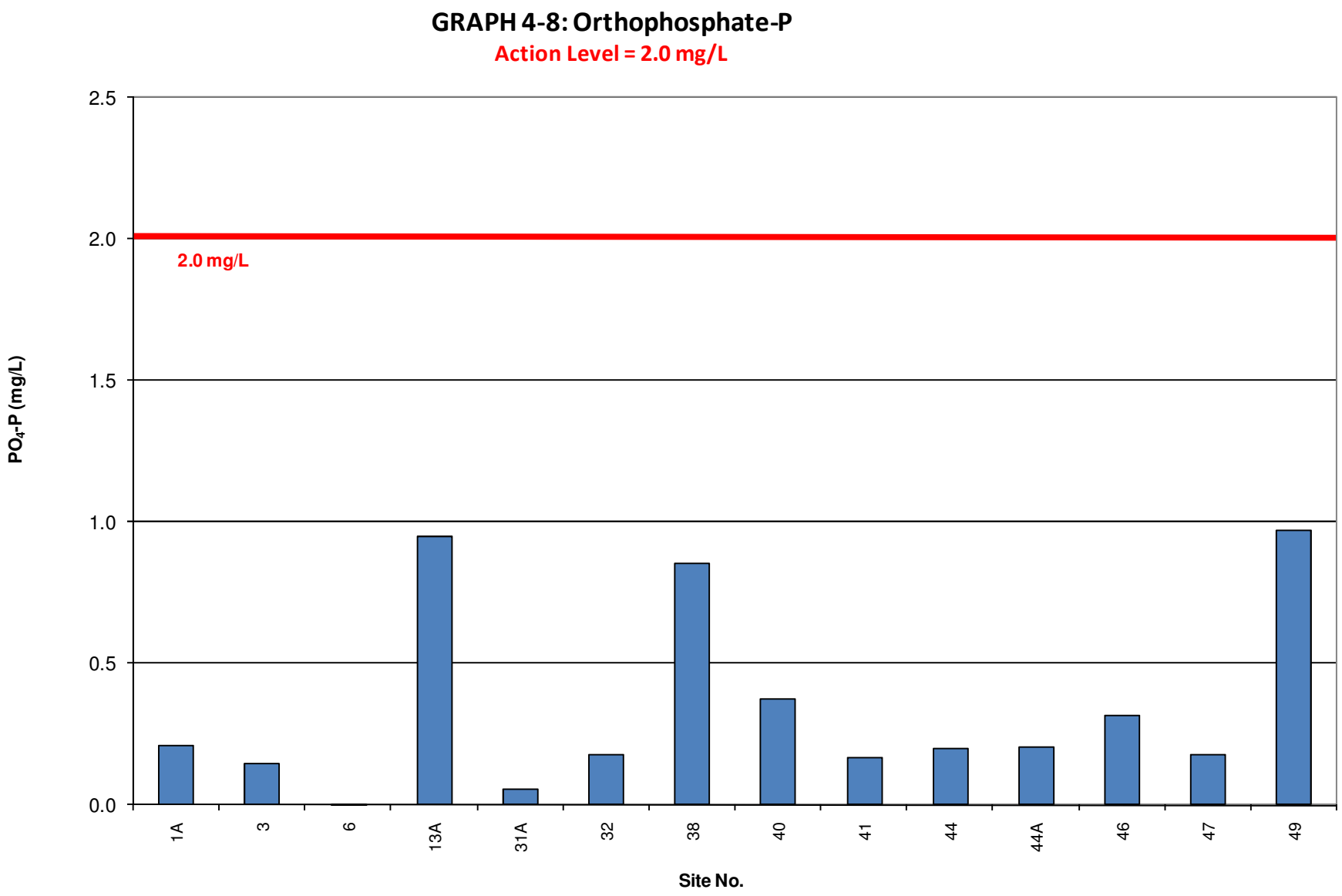
GRAPH 4-8: Orthophosphate-P
Action Level = 2.0 mg/L
2.0 mg/L
PO4-P (mg/L)
2.5
2.0
1.5
1.0
0.5
0.0
1A
3
6
13A
31A
32
38
40
41
44
44A
46
47
49
Site No.

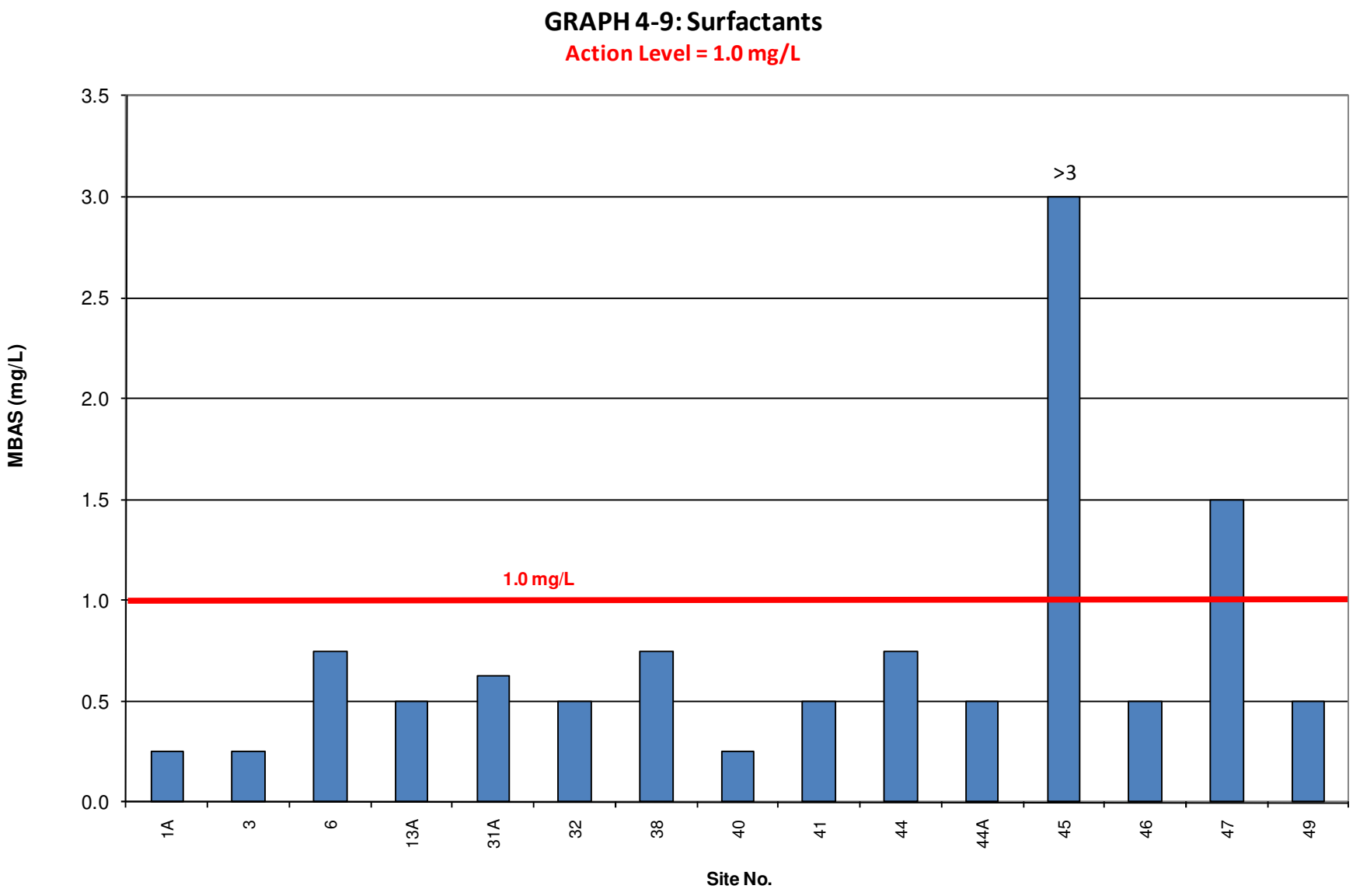
GRAPH 4-9: Surfactants
Action Level = 1.0 mg/L
MBAS (mg/L)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
>3
1.0 mg/L
1A
3
6
13A
31A
32
38
40
41
44
44A
45
46
47
49
Site No.

5 TRASH ASSESSMENT

5.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather monitoring site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well as the nature and origin of the trash at the site.

5.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a Trash Assessment Form to document the amount and extent of trash at each evaluated site. The form categorizes the site into one of five trash categories: optimal, suboptimal, marginal, submarginal, or poor. The form also addresses any potential threats that the trash may pose to human or aquatic health. For sites rating submarginal or poor, the form includes a section to record types, prevalence, potential routes, and sources of trash.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form's five categories are primarily qualitative descriptions of the amount and extent of trash although a number of trash pieces is also included in each category as a rough guideline. The five categories are defined as follows.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g., medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).
- *Threat to Aquatic Health* – Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other

material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Form.

If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

5.3 Trash Assessment Results

Trash assessments were conducted at 19 sites, including four dry sites. The most frequent trash assessment scores in the City of National City for 2010 were optimal and marginal trash ratings, with eight sites receiving an optimal score and seven sites receiving marginal scores. Two sites were rated suboptimal, one site rated submarginal, and one site rated poor. Site 31A was noted as potentially posing a threat to aquatic health because of spray paint cans in the area. Site 32 was considered a potential threat to human health because a diaper was observed near the flow of water at the site. Table 5-1 and Graph 5-1 summarize the trash assessment results. Table 5-2 shows a breakdown of the types and potential sources of trash present at submarginal or poor sites. Figure 5-1 provides a map of sampling sites and their corresponding trash assessment.

TABLE 5-1
TRASH ASSESSMENT RESULTS

Optimal (8 sites)	**Suboptimal** (2 sites)	**Marginal** (7 sites)	**Submarginal** (1 site)	**Poor** (1 site)
1A 3 13A 38 41 43A 46 47	4 45	31A 40 42 44 44A 48 49	6	32

GRAPH 5-1
TRASH ASSESSMENT SUMMARY

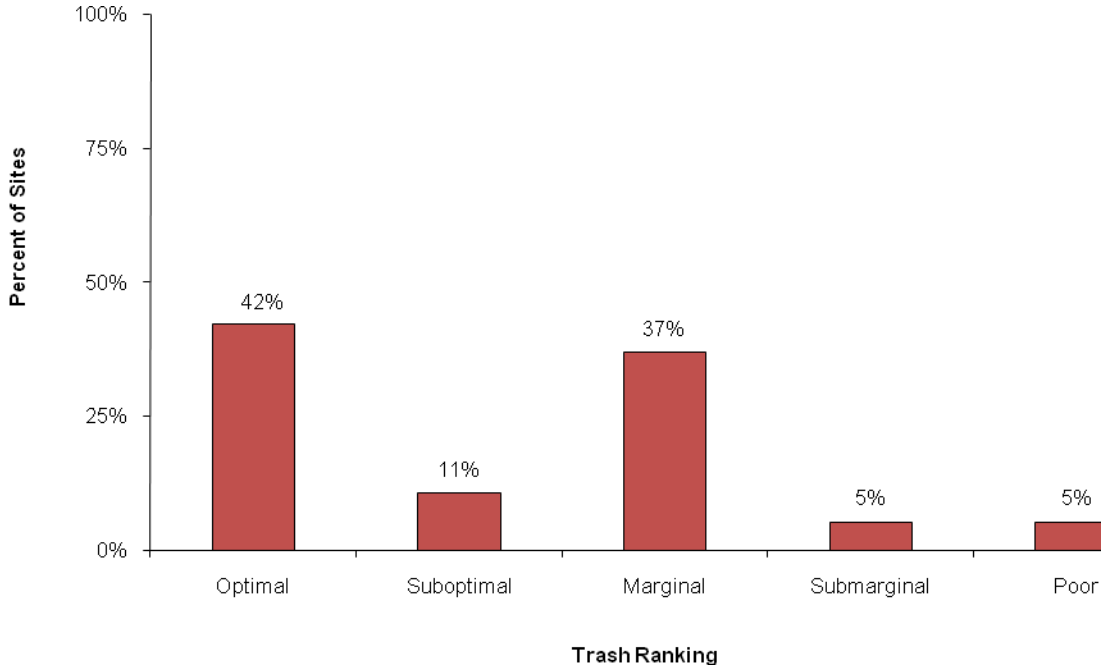

5.3.1 Submarginal or Poor Sites

Site 6, located at an outlet at the north bank of the Sweetwater River, received a submarginal trash rating. A large amount of trash was observed protruding from the outlet's flap gate and piled within the concrete conveyance. This waste included clothing, household items, construction debris, and used tires. Most debris was likely to have been carried down from upstream sources or left by transients. Upstream commercial and residential areas are a probable source for much of the smaller debris.

Site 32 is located at an outlet east of 2nd Ave and north of Freeway 54 and Sweetwater River. This site received a poor trash rating. Trash was within and around the concrete conveyance. This waste included clothing, food packaging, and household waste. A diaper was found next to water on side of channel. Most debris was likely to have been left by transients.

TABLE 5-2
BREAKDOWN OF SUBMARGINAL AND POOR SITES

Site	Ranking	Types of Trash	Potential Route 1	Potential Route 2	Potential Source 1	Potential Source 2
6	1	Fabric/Clothing	Littering	Upstream	Household	Transient
	2	Household	Littering	Upstream	Household	Commercial
	3	Construction	Littering	Upstream	Household	Construction
	4	Automotive	Dumping	---	Household	Commercial
32	1	Fabric/Clothing	Dumping	Littering	Transient	---
	2	Food Packaging	Dumping	Littering	Transient	---
	3	Household	Dumping	Upstream	Transient	---

Note: Only the types of trash that are present in the evaluated area are ranked. Ranking order refers to the prevalence of each type of trash, with 1 being most prevalent and 12 being least prevalent.

FIGURE 5-1
TRASH ASSESSMENT GIS MAP

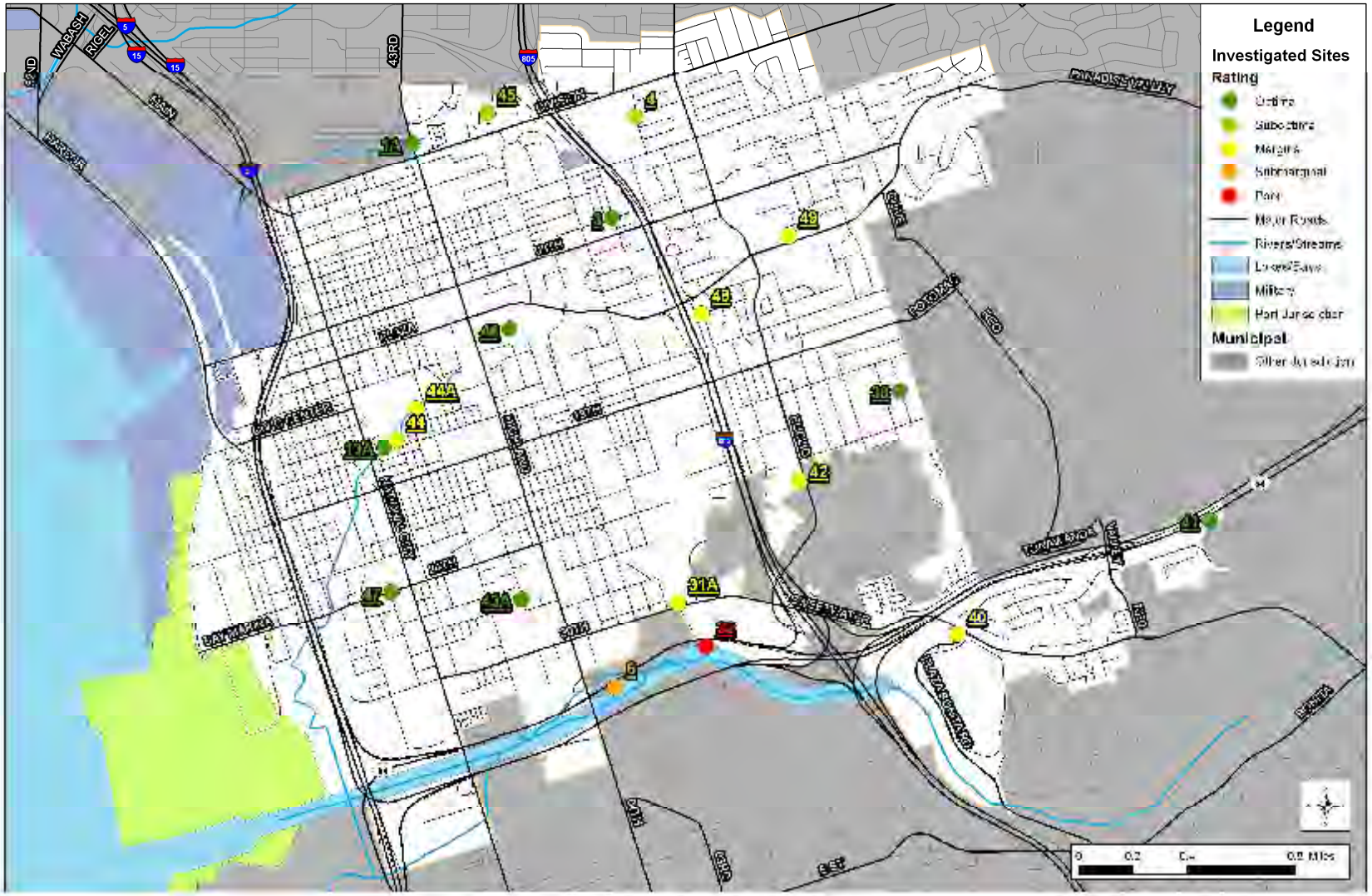

6 LABORATORY ANALYTICAL RESULTS

6.1 Summary

Laboratory analyses were conducted at four sites, representing over 25 percent of all sites with ponded or flowing water. The laboratory constituents measured are defined below.

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources, including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities.

Total hardness measures the amount of calcium and magnesium ions in a water sample, with the result expressed in mg/L of $CaCO_3$. Hardness itself is not considered a pollutant, but is measured to calculate CTR limits for dissolved metals. Hardness affects the solubility of dissolved metals as well as other minerals and ions.

Diazinon and **chlorpyrifos** are organophosphate pesticides that are highly toxic to insects, birds, and mammals, freshwater fish, and invertebrates. In 2005, the Environmental Protection Agency banned the sale of diazinon in the United States and tightened restrictions on chlorpyrifos use.

Coliform bacteria are relatively harmless to humans and are present in mammalian digestive tracts, most surface waters, and soils. Testing water samples for total coliform bacteria is a standard practice in public health. Total coliform is measured as an indicator of other more harmful pathogens, since these pathogens are generally present in much smaller quantities and are difficult to detect.

Fecal coliform, a subset of coliform bacteria, and ***Enterococcus*** are found primarily in the gastrointestinal tracts of humans and animals and are commonly used as indicators of water contamination by fecal matter. Without the use of significantly more expensive methods, such as ribotyping, it is not possible to determine whether the source of fecal material is human or animal. Human fecal material is known to contain pathogens dangerous to humans, but the relationship between animal waste and threat to human health is less certain.

Metal contamination of water can arise from a variety of sources, including automobile operation, automobile repair, vehicle washing, galvanizing of metal, and electronics manufacturing. Certain dissolved metals are toxic pollutants that are hazardous to the survival and development of aquatic organisms.

The California Toxics Rule for Dissolved Metals in Fresh Waters defines metal toxicity as a function of water hardness. As hardness increases, so does the CMC, a concentration limit in which aquatic life can be sustained. CMC values differ for various metals. Dry weather monitoring laboratory samples are analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Table 6-1 shows the sites with detectable metal concentrations, the measured total hardness of the sample, and the associated CMC.

Table 6-2 presents a statistical summary of the laboratory results from all samples. Table 6-3 presents the laboratory results from all samples. Laboratory reports are included in Appendix C.

TABLE 6-1
CTR – CMC FOR DISSOLVED METALS*

Site	Total Hardness (mg/L)	CMC (µg/L)	Concentration (µg/L)
Dissolved Copper			
32	195	25	**28**
32 *(Confirmation)*	384	48	23
40	680	50	4 J
46	178	23	5 J
Dissolved Zinc			
1A	235	242	9 J
32	195	206	112
40	680	379	8 J
46	178	191	34
Dissolved Cadmium			
32	195	9	1
Dissolved Lead			
32	195	133	2 J
32 *(Confirmation)*	384	48	23

Note: *Only routine and confirmation visits in Table 6-1; follow-up visits are mentioned in Section 8.2.
Red values were at or above the measured constituent's action level.
J = Detected but below the reporting limit; therefore, result is an estimated concentration.

TABLE 6-2
LABORATORY ANALYSIS STATISTICAL SUMMARY

Parameter (units)	Maximum	Minimum	Number of Exceedances
Oil and Grease (mg/L)	nd	nd	0
Total Hardness (mg/L CaCo3)	680	178	*
Dissolved Cadmium (µg/L)	1	nd	0
Dissolved Copper (µg/L)	28	nd	1
Dissolved Lead (µg/L)	2	nd	0
Dissolved Zinc (µg/L)	112	8	0
Diazinon (µg/L)	nd	nd	0
Chlorpyrifos (µg/L)	nd	nd	0
Total Coliform (MPN/100 mL)	>1,600,000	23,000	2
Fecal Coliform (MPN/100 mL)	17,000	500	1
Enterococcus (MPN/100 mL)	11,000	800	2

Note: nd = not detected

TABLE 6-3
LABORATORY ANALYTICAL RESULTS

Site	Date	Time	Oil & Grease (mg/L)	Total Hardness (mg/L)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Diazinon (µg/L)	Chlorpyrifos (µg/L)	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
1A	7/8/10	15:50	nd	235	nd	nd	nd	9 J	nd	nd	80,000	1,300	1,700
32	7/8/10	11:00	nd	195	1	**28**	2 J	112	nd	nd	**1,600,000**	5,000	**8,000**
32	7/26/10	9:45	na	na	na	na	na	na	na	na	**173,000**	na	**26,130**
32	9/14/10	9:45	na	384	na	23	na	na	na	na	na	na	na
40	7/8/10	15:00	2.5	680	nd	4 J	nd	8 J	nd	nd	23,000	500	800
45*	7/8/10	9:45	na	na	na	na	na	na	na	na	**1,600,000**	**160,000**	**160,000**
46	7/8/10	11:50	nd	178	nd	5 J	nd	34	nd	nd	**500,000**	**17,000**	**11,000**
46	7/26/10	11:20	na	na	na	na	na	na	na	na	**1,200,000**	**9,059****	676
Reporting Limits			**5**	**10**	**1**	**10**	**5**	**20**	**0.05**	**0.05**	**20*****	**20*****	**20*****
Action Levels			**15**	********	**CTR**	**CTR**	**CTR**	**CTR**	**0.50**	**0.50**	**130,000**	**13,000**	**7,000**

Notes: nd = not detected; na = not analyzed
J = Detected but below the reporting limit; therefore, result is an estimated concentration.
Red values were at or above the measured constituent's action level
[yellow box] denotes a confirmation visit
*Bacterial indicators were in exceedance at Site 45 during the MS4 sampling program and not as part of the Dry Weather Monitoring Program. These exceedances were investigated per the City's request.
**Number of fecal coliforms for confirmation samples are derived from *E. coli* count. Number of fecal coliforms = (Number of *E. coli*) / 0.85. Confirmation samples are analyzed using the Colilert and Enterolert methods described in Table 3-2, which have a reporting limit of 10 MPN/100 mL.
***Reporting limit is 10 MPN/100 mL for IDEXX tests used during confirmation and upstream testing.
****Total hardness is not considered a pollutant (see Section 3.4), and thus has no established action level for the purposes of dry weather monitoring. Total hardness is measured because the CTR action levels for metals are dependent on the total hardness value of the water sample.

7 DATA ANALYSIS

This section provides an overall evaluation of test results of the 2010 Dry Weather Monitoring Program, as well as a discussion of historical trends for various constituent exceedances. In 2010, only two of the 15 sites sampled had a flow rate greater than 1 gpm during the initial visit. The generally low levels of dry weather flow observed indicate that only a relatively small amount of discharge is being generated within the City. Lower levels of flow reduce the likelihood that pollutants in the water will reach receiving water bodies.

7.1 2010 Results

Of the 15 field screening visits performed in 2010, 10 exceedances were measured. A summary of 2010 exceedances in presented in Table 7-1.

TABLE 7-1
2010 EXCEEDANCES SUMMARY

Site No.	Turbidity	Surfactants	Ammonia-N	Dissolved Copper	Total Coliforms	Fecal Coliforms	Enterococci
32				✓	✓		✓
38			✓				
45*	✓	✓					
46					✓	✓	✓
47		✓					

Note: Table reflects exceedances occurring during routine visits only, not confirmation or follow-up visits.
*Total Coliforms, Enterococci, and Fecal Coliforms bacteria were in exceedance during MS4 sampling but not as part of the Dry Weather Monitoring Program.

7.2 Previous Results

Historical exceedance results are presented in Table 7-2, Graph 7-1, and Graph 7-2. Table 7-2 shows the percentage of sampled sites that have had exceedances each year of the Dry Weather Monitoring Program. Graph 7-1 illustrates the percentage of exceedances by year for field screening, and Graph 7-2 presents the percentage exceedances by year for laboratory analyses.

No exceedances have been measured in nitrate-N, dissolved lead, diazinon, or chlorpyrifos since testing of these constituents began in accordance with Order 2001-01. Thus, these constituents have not been included in the following graphs.

This was the first year a turbidity exceedance was noted. Surfactant and ammonia-N exceedances appear to be decreasing throughout the course of the program. No exceedances

have been noted in conductivity since 2004, and pH exceedances have not been observed in the past three years.

As shown in Graph 7-2, the percent of total coliform and fecal coliform bacteria exceedances shows a slight downward trend over time. Note that dry weather action levels for bacterial indicators were revised in 2010. Constituents have been compared to action levels in effect at the time of sampling to identify exceedances. Oil and grease, dissolved cadmium, and dissolved zinc exceedances have been detected only once in the history of the program.

TABLE 7-2
PERCENT OF SITES WITH EXCEEDANCES BY YEAR

Year	Field Screening									Laboratory Analysis										
	Number of Field Screening Sites	Temperature	pH	Conductivity *	Turbidity	Surfactants	Ammonia-N	Nitrate-N	Orthophosphate-P	**Number of Laboratory Sampling Sites**	Oil & Grease	Dissolved Cadmium	Dissolved Copper	Dissolved Lead	Dissolved Zinc	Diazinon	Chlorpyrifos	Total Coliforms **	Fecal Coliforms **	Enterococci **
2002	15	0	7	0	0	27	53	0	0	4	50	0	0	0	25	0	0	50	50	25
2003	15	0	7	20	0	20	27	0	0	4	0	0	0	0	0	0	0	100	100	50
2004	15	0	0	20	0	53	27	0	7	4	0	25	0	0	0	0	0	100	50	50
2005	15	0	0	0	0	13	13	0	0	4	0	0	0	0	0	0	0	100	75	75
2006	15	0	0	0	0	27	7	0	0	4	0	0	0	0	0	0	0	75	50	50
2007	15	0	7	0	0	20	0	0	0	4	0	0	0	0	0	0	0	50	50	75
2008	15	0	0	0	0	40	0	0	7	4	0	0	25	0	0	0	0	50	25	50
2009	15	0	0	0	0	20	20	0	13	4	0	0	0	0	0	0	0	25	0	50
2010	15	0	0	0	7	13	7	0	0	4	0	0	25	0	0	0	0	50	25	50

Notes: Results based on complete routine visits only. Confirmation visits, follow-up visits, and dry sites not included.

* By regional consensus, the action level for conductivity has been changed during past years from numeric values to best professional judgment in order to account for sites in which salt water and groundwater increase conductivity. High conductivity levels at these sites are not necessarily exceedances or considered to be a water quality concern.

** Note that dry weather action levels for bacterial indicators were revised in 2010. Constituents have been compared to action levels in effect at the time of sampling to identify exceedances.

GRAPH 7-1
PERCENT OF SITES WITH FIELD SCREENING EXCEEDANCES BY YEAR

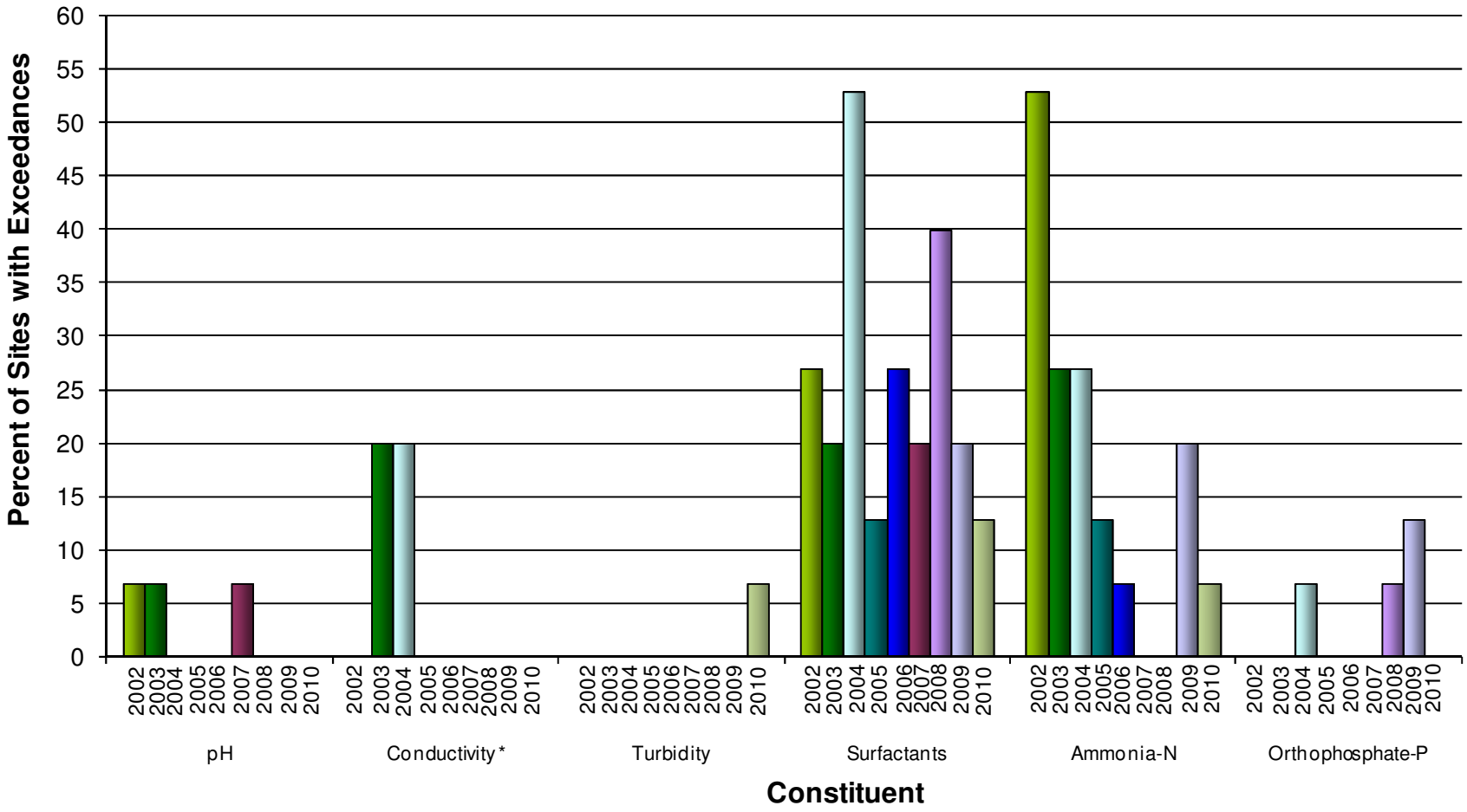

Note: * The action level for conductivity was numeric in the past but was later changed to best professional judgment. See footnote in Table 7-2.

GRAPH 7-2
PERCENT OF SITES WITH LABORATORY ANALYSIS EXCEEDANCES BY YEAR

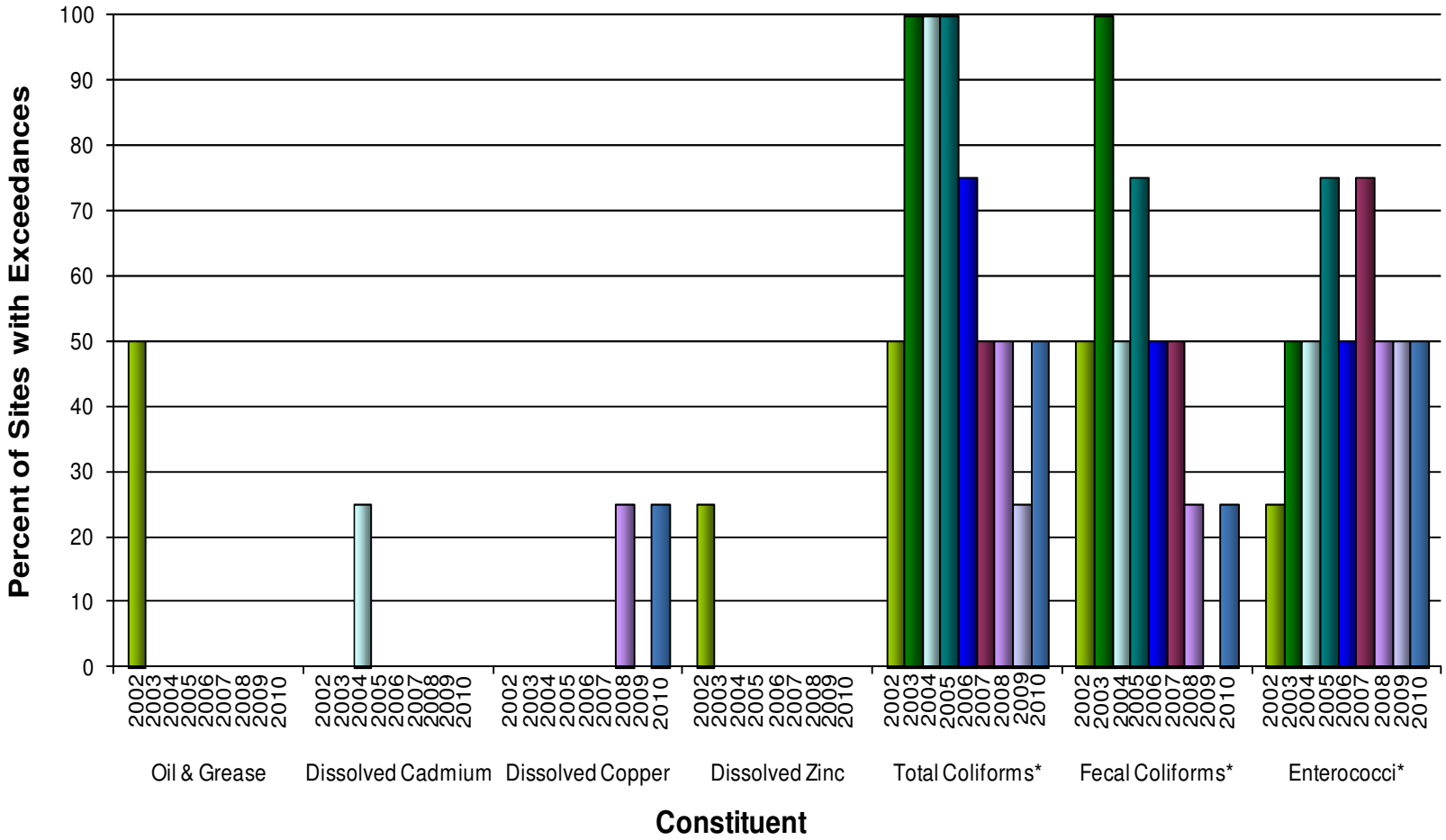

Note: * Dry weather action levels for bacterial indicators were revised in 2010. Constituents have been compared to action levels in effect at the time of sampling to identify exceedances.

8 FOLLOW-UP INVESTIGATIONS

One of the primary purposes of the Dry Weather Monitoring Program is to identify IC/IDs. When a parameter is measured at or above the regionally accepted action level, it is possible that an IC/ID is present and further investigation is performed. Procedures for such investigations are described below, followed by a discussion of the 2010 investigations.

8.1 Investigation Procedures

Follow-up investigations are conducted in two rounds. The first follow-up investigations are for the sites at which field tests indicate action level exceedances. These investigations are in the form of additional field testing and are conducted within one business day of the initial findings. The second round of follow-up investigations are carried out for the sites at which laboratory testing shows elevated constituent levels. These investigations are conducted within two business days of receiving the laboratory test results.

During the follow-up investigations, flow rates are measured, visual observations are performed, and field testing is conducted. Visual observations, such as water color, clarity, odor, floatable materials, deposits, vegetation, and biology are recorded on field data sheets at each site. Field data sheets are included in Appendix D.

Source identification investigations begin by testing the water at the site again. This is referred to as a “confirmation” visit, as its purpose is to confirm the initial findings. If confirmation testing results in constituent concentrations below specified action levels, the exceedance found during the initial sampling may have been due to a transient flow. If confirmation testing at a site finds constituent concentrations again above the specified action levels, an upstream investigation will be conducted. The field crew will progress upstream to isolate and identify potential pollutant sources.

Upstream investigations are also referred to as “IC/ID follow-up” visits, as the purpose is to identify illicit connections and illegal discharges. They are conducted by examining a number of upstream branches for any potential sources of the constituent of concern. The estimated flow rate in each branch and any relevant observations are recorded. Depending upon the constituent(s) under investigation, laboratory samples may be collected for analysis.

The laboratory test for investigating upstream bacteria sources differs from routine bacteria testing by using the IDEXX Colilert and IDEXX Enterolert tests. Information about these methods is provided in Table 3-2. Results for the Colilert and Enterolert tests are typically available within 24 hours, as opposed to the five business days needed for routine testing. The quicker turnaround time allows for additional upstream investigations as needed.

8.2 Investigated Sites

During the 2010 Dry Weather Monitoring Program, five sites required upstream investigations. Among the five sites, there were a total of two exceedances in surfactants, one in turbidity, one in ammonia-N, three in *Enterococcus* bacteria, two in fecal coliform bacteria, one in total coliform bacteria, and one dissolved copper. Each investigation is discussed in this section. Table 9-2 in Section 9 of this report provides a summary of the investigation results.

Site 32

Site 32 is located at an outlet east of 2nd Ave, north of the 54 freeway and the Sweetwater River. The site received a poor trash assessment rating, and was flagged as a potential threat to human health due to the presence of human waste. Substantial amounts of litter surrounded the site. The items present, such as clothing, indicated frequent use of the area by people. Levels of *Enterococcus* and total coliform bacteria were measured above their respective action levels at both the routine and confirmation visits to the site. Water at the site was ponded during both visits.

PHOTO 8-1: Evidence of litter and human inhabitants at Site 32

Site 32 is located at the confluence of two main lines. During the confirmation visit, the line from the east was dry, and a small amount of water was observed coming from the northern line. This conveyance receives flow from within the Sweetwater Plaza Shopping Center and the western half of Sweetwater Town and Country Shopping Center. Poor waste disposal practices in this area, as well as conditions at the site are the most likely causes of the bacteria exceedances at Site 32 based on the following:

- Decomposing leaves, human waste, food packaging and other trash were observed in contact with the water in upstream conveyances and at Site 32 (Photo 8-1). These materials are likely to introduce bacteria as they decompose.
- A catch basin was located just downstream of the shopping areas, had a flow of less than 1 gpm, and contained high *Enterococcus* and total coliform bacteria levels.
- Used cooking oil creates conditions favorable to bacteria growth. Used cooking oil spills observed in the upstream shopping area, and an upstream inlet smelled of used cooking oil (Photo 8-2).
- Low flows upstream and ponded water at Site 32 provide conditions for bacteria to proliferate.

Upon the second confirmation visit to Site 32 a city crew was observed cleaning the area. The results of this investigation are presented in Table 8-1, and a map of sampling locations is provided in Figure 8-1.

PHOTO 8-2: Evidence of grease stains and spills upstream of site

TABLE 8-1
SITE 32 BACTERIA UPSTREAM INVESTIGATION

Site	Date	Location	Flow (gpm)	Total Coliforms (MPN/100 mL)	*Enterococcus* (MPN/100 mL)
32	7/8/10	East of 2nd Ave, North of the 54 freeway and Sweetwater River	Ponded	**1,600,000**	**8,000**
32 *(Confirmation)*	7/26/10	*Same as above*	Ponded	**173,000**	**26,130**
32-2	7/26/10	Catch basin at end of northern line at the southwest corner of Sweetwater Town and Country Shopping Center	<1	**285,000**	**19,863**

Note: **Red Bold Type** = value exceeds action level

FIGURE 8-1
SITE 32 BACTERIA UPSTREAM INVESTIGATION

In addition, the concentration of dissolved copper in a water sample from Site 32 exceeded the CMC-based action level during the routine visit. Although the exceedance was not confirmed during the follow-up visit, an upstream investigation to determine the potential sources of copper to Site 32 was done. Three water samples and eight sediment samples were collected from upstream locations and analyzed for copper concentrations. Dissolved copper in a water sample exceeded the CMC-based action level at upstream location 32-2 at the first visit but not at the second visit. None of the sediment samples exceeded the Environmental Health screening level of 225 mg/kg for residential and industrial soils.[1]

PHOTO 8-3: Inlet at location 32-9

The highest concentrations of total copper were measured at locations 32-9 (Photo 8-3) and 32-10 (Photo 8-4). These locations are along Sweetwater Road and at the entrance to the parking lot for the Sweetwater Crossing shopping center. The majority of runoff from the road and from the large parking lot is carried to locations 32-9 and 32-10.

Higher copper concentrations measured in sediment samples from locations 32-9 and 32-10 are likely due to automobile brake pad wear dust and emissions. Copper dust from vehicles tends to attach to particulates, which settle out on roadways and on parking lots and then may be transported with runoff into storm drains. Locations sampled along the channel to the south of the Sweetwater Crossing shopping center had much lower copper concentrations, which may have resulted from being located farther from heavy vehicle traffic. Conversation with City staff also indicated a potential source of vehicle wash water, which could also contain brake pad wear dust, east of the City's jurisdictional boundary immediately upstream of this area.

PHOTO 8-4: Culvert at location 32-10

The results of this investigation are presented in Table 8-2, and a map of sampling locations is provided in Figure 8-2.

[1] Environmental screening levels as listed *in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* (February 2005).

TABLE 8-2
SITE 32 COPPER UPSTREAM INVESTIGATION

Site	Date	Location	CMC (µg/L)	Dissolved Copper (µg/L)	Total Copper (mg/kg)
32	7/8/10	East of 2nd Ave, north of the 54 freeway and Sweetwater River	25	**28**	na
32 *(Confirmation)*	9/14/10	*Same as above*	48	23	na
32-1	9/14/10	Southwest corner of Sweetwater Crossing shopping center, east side of Staples store	19	6	na
32-2	9/14/10	West end of concrete channel in Sweetwater Crossing shopping center	21	**22**	na
32-2 *(Second visit)*	10/1/10	*Same as above*	35	18	na
32-2 *(Second visit)*	10/1/10	*Same as above*	35	27 J*	na
32-3	10/1/10	West end of channel, east of location 32-2	--	na	31.8
32-4	10/1/10	Middle of channel	--	na	7.98
32-5	10/1/10	East end of channel	--	na	30.4
32-6	10/1/10	East channel, south of Denny's restaurant	--	na	11.4
32-7	10/1/10	East end of channel (south side) in parking lot, north of vacant building	--	na	68.1
32-8	10/1/10	West end of channel (south side) parking lot	--	na	54.8
32-9	10/1/10	Inlet at southeast corner of Sweetwater Road and Town and Country Road intersection	--	na	151
32-10	10/1/10	Inlet at northeast corner of Sweetwater Crossing parking lot	--	na	175

Note:
Red Bold Type = value exceeds action level (based on CMC value)
J = Detected but below the reporting limit; therefore, result is an estimated concentration.
na = not analyzed for this constituent
* EPA method 200.7 was used. All other dissolved copper measurements were generated using EPA method 200.8.

FIGURE 8-2
SITE 32 COPPER UPSTREAM INVESTIGATION

Site 38

Site 38 is located within an earthen channel west of Harbison Avenue, between 20th and 24th Street. During the initial site visit, the water was ponded, and the ammonia-N concentration was measured at 1.97 mg/L, above the action level of 1 mg/L. During the confirmation visit, the earthen channel was dry and could not be sampled. The initial exceedance of ammonia-N was concluded to be due to a transient flow. This may have been the result of decomposing leaves and trash observed in storm drain inlets upstream of the sampling site. As organic material decomposes, ammonia is produced as a byproduct.

Site 45

Site 45 is located in a manhole in front of 1243-1305 Fig Court, near the middle of the street. During the initial visit to the site, water was flowing at a rate of 1 gpm, had a musty odor, and was brown in color. Surfactants were measured above 3.0 mg/L, above the action level of 1 mg/L, and turbidity was also considered an exceedance by best professional judgment, at 262 NTU.

During the confirmation visit, all constituents were measured below their respective action levels and turbidity was measured at 4.81 NTU. Site 45 was also sampled for MS4 laboratory analyses. At the time of the initial visit, *Enterococcus*, total coliform, and fecal coliform bacteria

all measured above their respective action levels. Total coliform was measured at 1,600,000 MPN/100 mL, over the action level of 130,000 MPN/100 mL. Fecal coliform and *Enterococcus* bacteria were both measured at 160,000 MPN/100 mL, above action levels of 13,000 MPN/100 mL and 7,000 MPN/100 mL, respectively.

Decomposing trash and leaves were observed in contact with the flow at the site, and in the gutters of the upstream residential area (Photo 8-5). These conditions are likely to introduce bacteria into the storm drain system, which may be transported downstream to Site 45 during intermittent flows.

During the confirmation visit, the manhole was dry and could not be sampled. Bacteria are likely to be transported through the site during intermittent transient flows. The bacterial exceedances at Site 45 were part of MS4 sampling and not part of the Dry Weather Monitoring Program, but a follow up was conducted per the City's request.

PHOTO 8-5: Decomposing leaves and trash in a curb gutter upstream of Site 45

Site 46

Site 46 is located within a manhole in the parking lot south of the South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop. During the initial visit, a flow of 1 gpm and a musty/sewage odor was noted. Laboratory analysis indicated that total coliform, fecal coliform, and *Enterococcus* bacteria measured above the action levels, at 500,000 MPN/100 mL, 17,000 MPN/100 mL, and 11,000 MPN/100 mL, respectively.

At the time of the confirmation visit, *Enterococcus* and fecal coliform bacteria were measured below their respective action levels. Total coliform was above the action level at 1,200,000 MPN/100 mL. These factors likely contribute elevated bacteria levels at Site 46:

- Significant amounts of decomposing trash in the northern storm water conveyance
- Consistent level of low flow at the site is conducive to bacterial growth

The results of this investigation are presented in Table 8-3, and a map of sampling locations is provided in Figure 8-3.

TABLE 8-3
SITE 46 BACTERIA UPSTREAM INVESTIGATION RESULTS

Site	Date	Location	Flow (gpm)	*Enterococcus* (MPN/100 mL)	Total Coliforms (MPN/100 mL)	Fecal Coliforms (MPN/100 mL)
46	7/8/10	South of South Bay Plaza Center, between Fashion Plaza and Fiesta Pet Shop	1	**11,000**	**500,000**	**17,000**
46 *(Confirmation)*	7/26/10	*Same as above*	<1	676	**1,200,000**	9,059*
46-1	7/26/10	Primary Site 3, East 7th Street and R Avenue	3	882	5,480	74*

Note: **Red Bold Type** = value exceeds action level
* Number of fecal coliforms is derived from number of *E. coli* through the formula: Fecal Coliforms = *E. coli* / 0.85.

FIGURE 8-3
SITE 46 BACTERIA UPSTREAM INVESTIGATION

Site 47

Site 47 is located in a manhole at the southeast corner of Mile of Cars Way and Transportation Avenue. At the routine site visit, the measurement for surfactants was 1.50 mg/L. At the confirmation site visit, the value for surfactants had decreased to 1.00 mg/L, measuring at the action level. A sample was collected upstream from a ponded source at the corner of 2441 National City Boulevard and 25th Street (Photo 8-6). The water appeared to be left over from car washing activities from multiple car dealerships on National City Boulevard. The reported value for surfactants at this location was 2.50 mg/L.

PHOTO 8-6: Runoff at upstream location 47-1

TABLE 8-4
SITE 47 SURFACTANTS UPSTREAM INVESTIGATION

Site	Date	Location	Flow (gpm)	Surfactants (mg/L)
47	7/8/10	Southeast corner of the Mile of Cars Way and Transportation Avenue	Ponded	**1.50**
47 *(Confirmation)*	7/26/10	*Same as above*	Ponded	**1.00**
47-1	7/26/10	Corner of 25th St and National City Boulevard	<1	**2.50**

Note: **Red Bold Type** = value meets or exceeds action level

FIGURE 8-4
SITE 47 SURFACTANTS UPSTREAM INVESTIGATION

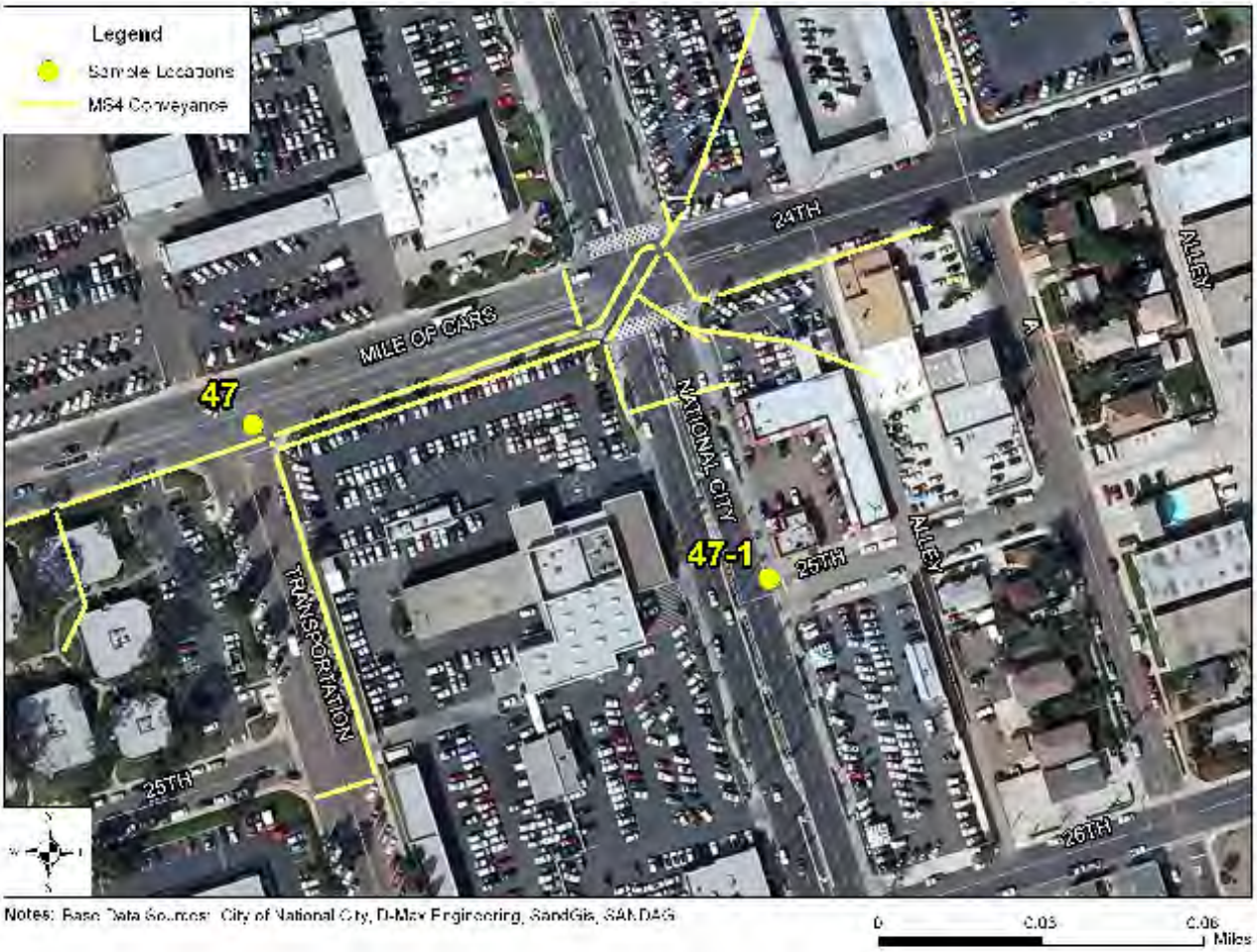

9 SUMMARY AND RECOMMENDATIONS

9.1 Field Screening & Laboratory Analysis Summary

Fifteen primary monitoring sites and four alternate sites were visited in the 2010 Dry Weather Monitoring Program. Laboratory analyses were performed on water samples from four of the primary sites, representing over 25% of sites with flowing or ponded water. Table 9-1 provides a summary of action level exceedances.

TABLE 9-1
SUMMARY OF ACTION LEVEL EXCEEDANCES

Field Screening (15 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Sites Exceeding Action Level**
pH	0	0	---
Conductivity	0	0	---
Turbidity	1	7	45
Surfactants	2	13	45, 47
Ammonia-N	1	7	38
Nitrate-N	0	0	---
Orthophosphate-P	0	0	---
Laboratory Analyses (4 samples)			
Analyte	**Number of Exceedances**	**Percentage of Sites with Exceedance**	**Sites Exceeding Action Level**
Oil & Grease	0	0	---
Dissolved Cadmium	0	0	---
Dissolved Copper	1	25	32
Dissolved Lead	0	0	---
Dissolved Zinc	0	0	---
Diazinon	0	0	---
Chlorpyrifos	0	0	---
Total Coliforms	3*	50*	32, 45*, 46
Fecal Coliforms	2*-	25*	45*, 46
Enterococci	3*	50*	32, 45*, 46

Note: Table includes data from initial site visits only; confirmation and follow-up investigations are not included.
*Exceedances in bacterial indicators at Site 45 were part of the MS4 sampling program and not part of the Dry Weather Monitoring Program. The exceedances are not included in percentage of sites with exceedances.

Like the previous year, the City of National City's storm water conveyances had low flows this year; two of the 19 primary sites visited had a flow greater than 1 gpm during the routine visit. The low level of dry weather flows in the City may be a result of less irrigation runoff and drought conditions. Associated water conservation activities and the mandatory water restrictions implemented in San Diego County during 2009 and 2010, likely reduced flow and

indicate relatively small discharges in the City. These conditions decrease the likelihood that pollutants will reach receiving water bodies.

In the trash assessment, eight sites were assigned optimal trash ratings; two were suboptimal; seven were marginal; one was submarginal; and one site was rated poor.

9.2 Follow-Up Investigation Summary

Table 9-2 presents the conclusions based on the results of confirmation visits and upstream investigations conducted at five sites in the 2010 Dry Weather Monitoring Program.

TABLE 9-2
SUMMARY OF FOLLOW-UP INVESTIGATIONS

Site	Follow-Up Investigation Target Constituent(s)		Results / Probable Sources
	Field	Laboratory	
32	---	Total Coliforms, Enterococci, Dissolved Copper	Bacteria: decomposing leaves, grease spills upstream, and trash located at site. Dissolved copper: automobile brake pad dust and emissions, from vehicle traffic or vehicle wash water.
38	Ammonia-N	---	Exceedance not confirmed
45*	Surfactants, Turbidity	Total Coliforms, Fecal Coliforms, Enterococci*	Surfactants and turbidity exceedances not confirmed. Bacteria possibly caused by decomposing trash inside manhole; decomposing leaves, food, and trash in storm water conveyance upstream.*
46	---	Total Coliforms, Fecal Coliforms, Enterococci,	Low flow at site and decomposing trash upstream
47	Surfactants	---	Possibly due to car washing from multiple car dealerships around site

*These exceedances for total coliform, fecal coliform, and *Enterococcus* bacteria were observed during MS4 sampling; proactive follow up was conducted per the City's request.

9.3 Recommendations

Based on the results of the 2010 Dry Weather Monitoring Program for the City of National City, the following actions have been recommended. Follow-up actions already taken by the City are also described.

9.3.1 Education, Inspection, and Maintenance

- Visit the Sweetwater Plaza Shopping Center, upstream of Site 32, where a leaking dumpster and grease spills were observed, and conduct inspections of businesses with deficiencies in their trash grease disposal practices.
    - The City has conducted eight follow-up inspections and distributed educational materials at restaurants in this shopping center since the Dry

Weather Monitoring Program, resolving issues at all except one site, which faces ongoing enforcement.

- Conduct storm water compliance inspections at 2115 National City Boulevard and at 2601 National City Boulevard, upstream of Site 47. Ponded water outside each property had elevated levels surfactants that were likely the result of runoff from vehicle washing activities.
- Maintain a regular schedule for the removal of trash at the following sites that received marginal trash ratings. Ensure that trash at these sites is regularly assessed, and implement preventative measures where possible to decrease the introduction of debris to the storm water conveyance system.
    - Site 31A
    - Site 40
    - Site 42
    - Site 44
    - Site 44A
    - Site 48
    - Site 49
- Maintain a regular schedule for the removal of trash from Site 6 and 32, which received a submarginal and poor trash rating, respectively. Implement preventative measures where possible to decrease the introduction of debris to the storm water conveyance system. This may include the installation or improvement of barriers and signage at the site to discourage illegal dumping and use of the areas by transients.
    - Note that during a confirmation visit to Site 32 County of San Diego staff were observed cleaning the area. Staff also posted a notice to vacate the illegal encampment at the site.
- Contact the property management for the shopping centers near the intersection of Sweetwater Road and Town and Country Road to maintain their parking lots and remove particulates associated with elevated levels of copper.
- Contact the County of San Diego regarding the Sweetwater Chevron commercial car wash at Sweetwater Road as a potential source of copper particulate upstream of the City's dry weather Site 32.
- Remove trash and debris from storm drains along the 2200 block of Rachael Avenue, which may have contributed to the ammonia-N exceedance at Site 38.
- Remove trash from manhole at 1243 Fig Court, near the middle of the street at Site 45. Also consider cleaning MS4 conveyance along East 1st St and Laurel Avenue, upstream of Site 45, to prevent bacteria growth.
- Remove trash from MS4 conveyance along East 8th Street between R and M Avenue, upstream of Site 46, to prevent the growth of bacteria.

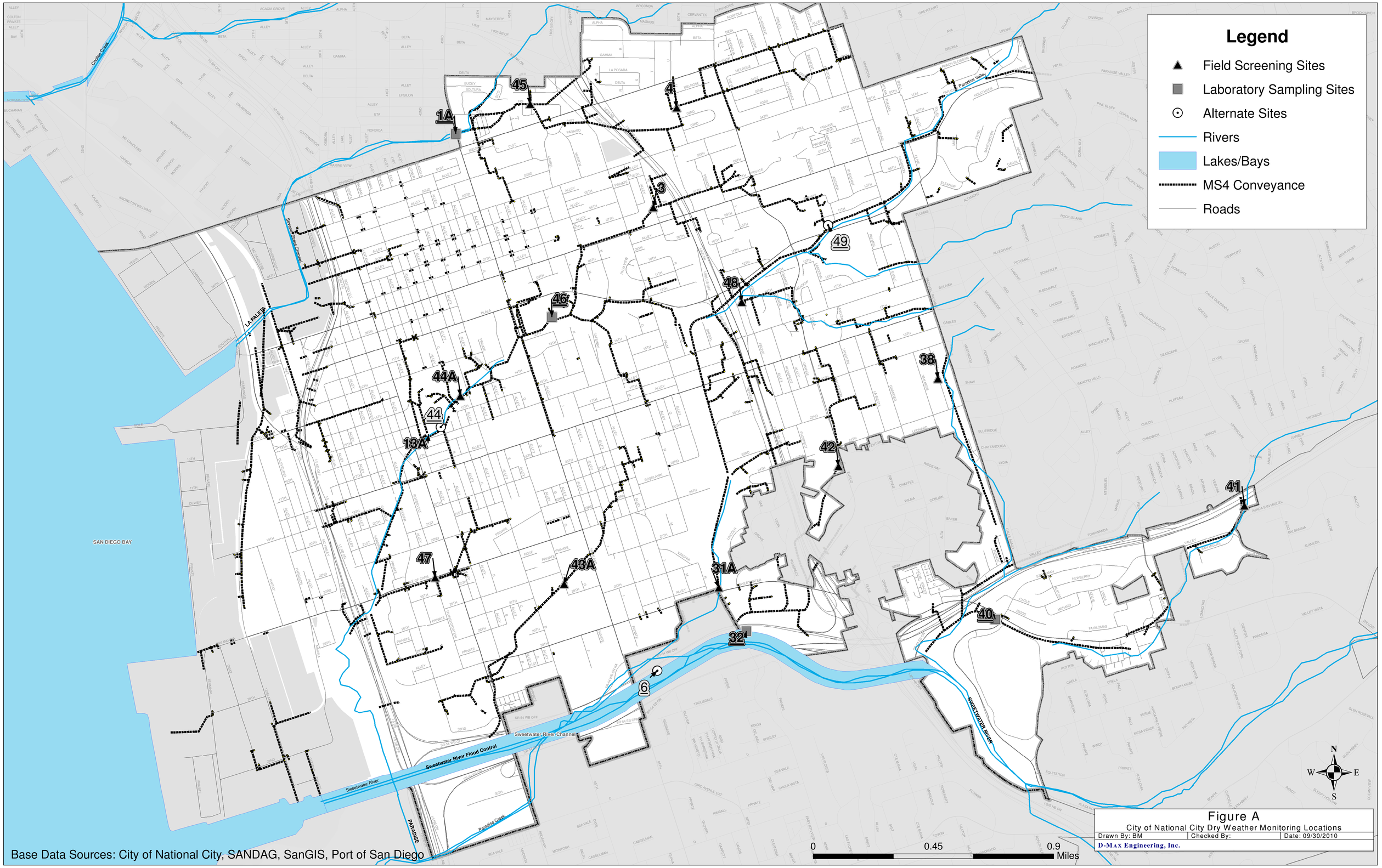
Legend
Field Screening Sites
Laboratory Sampling Sites
Alternate Sites
Rivers
Lakes/Bays
MS4 Conveyance
Roads
1A
45
4
3
49
48
46
38
44A
44
13A
42
41
47
43A
31A
40
32
6
Chollas Creek
Paradise Valley
Switch Stress Channel
LA PALETA
SAN DIEGO BAY
Sweetwater River Channel
Sweetwater River Flood Control
Sweetwater River
Paradise Creek
SWEETWATER RIVER
PARADISE
0
0.45
0.9
Miles
N
S
E
W
Figure A
City of National City Dry Weather Monitoring Locations
Drawn By: BM
Checked By:
Date: 09/30/2010
D-MAX Engineering, Inc.
Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

FIGURE B
WATERSHED MAP OF THE NATIONAL CITY AREA, BROKEN INTO HYDROLOGIC SUBAREAS

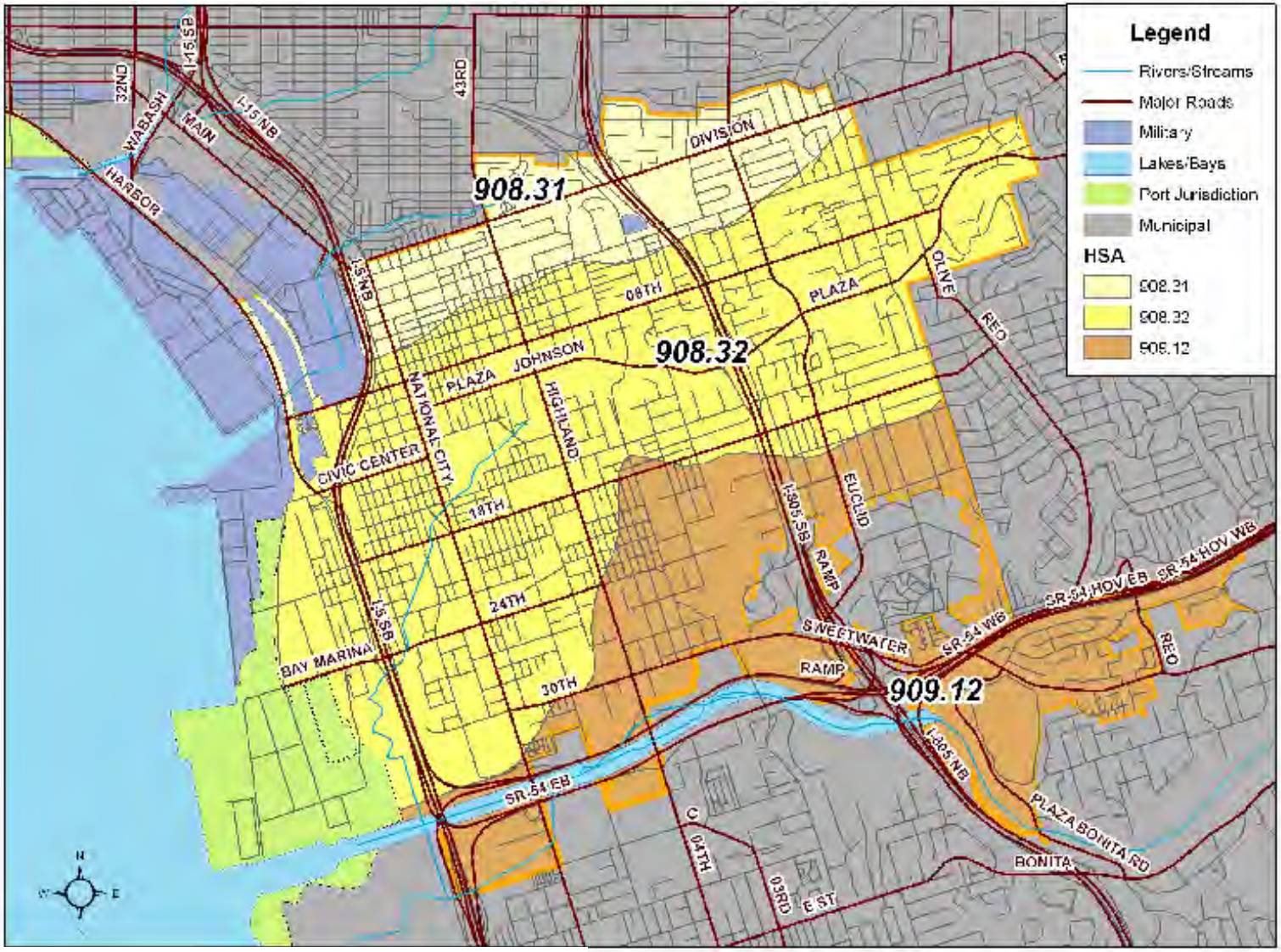

Base Data Source: USGS, SanGIS, SANDAG

Appendix A

Historical Dry Weather Monitoring Data

City of National City Dry Weather Historical Data

Site No.	1	1A	4	9	10	11	13	13A	18	20	22	26	30	31	32	33	38	40	41	42	43
1996																					
Chlorine (mg/l)	0.3		ns	ns	nd	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.1	ns	nd	0.1	0.2	ns	0.1
Copper (mg/l)	nd		ns	ns	nd	ns	ns	ns	ns	ns	ns	ns	ns	ns	nd	ns	nd	nd	nd	ns	nd
Detergents (mg/l)	0.6		ns	ns	nd	ns	ns	ns	ns	ns	ns	ns	ns	ns	0.4	ns	0.15	0.1	<0.1	ns	nd
Phenols (mg/l)	nd		ns	ns	nd	ns	ns	ns	ns	ns	ns	ns	ns	ns	nd	ns	nd	nd	nd	ns	nd
1997 First Visit																					
Ammonia (mg/l)	0.1				ns	ns									1.5				0.6	0.3	ns
Chlorine (mg/l)	nd				ns	ns									0.25				nd	0.40	ns
Copper (mg/l)	nd				ns	ns									0.4				nd	nd	ns
Detergents (mg/l)	1.5				ns	ns									2.5				0.6	2.0	ns
Phenols (mg/l)	nd				ns	ns									0.1				nd	nd	ns
1997 Second Visit																					
Ammonia (mg/l)	0.1				ns	ns									ns				1.0	0.4	ns
Chlorine (mg/l)	0.2				ns	ns									ns				0.5	0.4	ns
Copper (mg/l)	nd				ns	ns									ns				nd	nd	ns
Detergents (mg/l)	>3.00				ns	ns									ns				0.70	0.25	ns
Phenols (mg/l)	nd				ns	ns									ns				nd	nd	ns
1998 First Visit																					
Ammonia (mg/l)	ns					0.7				ns					0.1			0.1	0.4	ns	
Chlorine (mg/l)	ns					nd				ns					nd			0.8	<0.1	ns	
Copper (mg/l)	ns					nd				ns					nd			nd	nd	ns	
Detergents (mg/l)	ns					0.75				ns					0.25			0.25	0.50	ns	
Phenols (mg/l)	ns					0.1				ns					nd			nd	0.1	ns	
1998 Second Visit																					
Ammonia (mg/l)						0.2									0.1			0.2	0.1		
Chlorine (mg/l)						nd									nd			nd	nd		
Copper (mg/l)						nd									nd			nd	nd		
Detergents (mg/l)						0.75									0.25			0.50	0.50		
Phenols (mg/l)						nd									0.1			nd	nd		

ns = not sampled
nd = not detected

City of National City Dry Weather Historical Data

Site No.	1	1A	4	9	10	11	13	13A	18	20	22	26	30	31	32	33	38	40	41	42	43
1999 First Visit																					
Ammonia (mg/l)	0.4					1.0				0.6					0.4			0.2	0.7	ns	
Chlorine (mg/l)	0.3					<0.1				0.2					0.7			<0.1	0.1	ns	
Copper (mg/l)	nd					nd				nd					nd			nd	nd	ns	
Detergents (mg/l)	2.00					1.00				2.00					0.50			0.25	0.75	ns	
Phenols (mg/l)	0.1					nd				nd					nd			nd	nd	ns	
1999 Second Visit																					
Ammonia (mg/l)	ns					1.0				2.5					0.4			0.4	0.8		
Chlorine (mg/l)	ns					0.2				0.7					0.4			0.5	0.1		
Copper (mg/l)	ns					nd				nd					nd			0.1	nd		
Detergents (mg/l)	ns					1.00				0.75					0.50			0.75	0.50		
Phenols (mg/l)	ns					nd				nd					nd			nd	nd		
2000 First Visit																					
Ammonia (mg/l)	0.6					0.6				ns					0.3			0.7	0.5	ns	
Chlorine (mg/l)	nd					nd				ns					nd			nd	nd	ns	
Copper (mg/l)	nd					nd				ns					nd			nd	nd	ns	
Detergents (mg/l)	1.00					1.50				ns					0.75			0.25	0.50	ns	
Phenols (mg/l)	nd					0.1				ns					nd			nd	nd	ns	
2000 Second Visit																					
Ammonia (mg/l)	0.7					0.7									0.6			0.8	0.5		
Chlorine (mg/l)	nd					nd									nd			nd	nd		
Copper (mg/l)	nd					nd									nd			nd	nd		
Detergents (mg/l)	0.75					1.00									0.50			0.25	0.75		
Phenols (mg/l)	nd					nd									nd			0.1	nd		
2001 First Visit																					
Ammonia (mg/l)		0.5				0.2		0.5		ns				0.1	0.4		0.6	0.1	0.2	0.2	
Chlorine (mg/l)		nd				nd		nd		ns				nd	nd		nd	nd	nd	nd	
Copper (mg/l)		nd				nd		nd		ns				0.1	nd		nd	nd	nd	nd	
Detergents (mg/l)		0.50				0.75		0.50		ns				0.25	0.25		0.75	0.25	0.25	0.25	
Phenols (mg/l)		nd				nd		nd		ns				nd	nd		nd	nd	nd	nd	
2001 Second Visit																					
Ammonia (mg/l)		0.4				0.3		0.5						0.2	0.5		0.6	0.2	0.3	0.7	
Chlorine (mg/l)		nd				nd		nd						nd	nd		nd	nd	nd	nd	
Copper (mg/l)		nd				nd		nd						nd	nd		nd	nd	nd	nd	
Detergents (mg/l)		0.25				0.75		0.50						0.50	0.50		0.75	0.25	0.25	0.25	
Phenols (mg/l)		nd				nd		nd						nd	nd		nd	nd	nd	nd	

ns = not sampled
nd = not detected

City of National City Dry Weather Historical Data

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2002																	
Temp.°C	23.0	20.0	26.0	ns	24.0	24.5	22.0	25.0	20.0	ns	22.0	23.0	23.5	23.0	22.0	24.0	31.5
pH	8.1	7.1	8.1	ns	7.6	8.5	7.7	9.1	8.2	ns	8.2	7.7	8.0	7.8	7.5	7.6	9.5
Conductivity, mS/cm	2.00	10.25	0.98	ns	11.35	1.10	1.17	1.26	3.46	ns	1.25	2.70	0.98	1.46	7.28	1.00	1.13
Turbidity, NTU	95.00	64.00	2.71	ns	1.88	11.91	4.20	5.49	4.24	ns	13.94	4.12	300.00	9.19	7.79	13.66	8.96
Ammonia, mg/l	5.0	2.0	0.3	ns	0.3	0.5	1.0	0.5	0.7	ns	0.3	0.5	2.5	1.5	1.4	2.0	2.0
Nitrate, mg/l	0.30	nd	0.15	ns	0.10	0.30	0.20	0.70	0.60	ns	2.00	nd	0.80	1.00	0.10	0.15	nd
Orthophosphate-P, mg/l	1.96	0.98	1.30	ns	0.16	1.30	1.60	0.65	0.49	ns	0.49	0.65	0.49	1.30	0.98	1.30	0.32
Detergents, mg/l Field	24.00	3.00	0.50	ns	0.50	0.50	0.75	0.25	0.50	ns	0.50	0.50	0.75	0.75	6.75	6.00	6.00
Surfactants (mg/L MBAS) Lab	6.76								nd			nd		0.69			
Oil and Grease (mg/L)	8.0								25.0			13.0		18.0			
Total Hardness (mg/L CaCO3)	267.0								631.0			338.0		237.0			
Cadmium-diss (mg/L)	nd								nd			nd		nd			
Copper-diss (mg/L)	nd								nd			nd		nd			
Lead-diss (mg/L)	nd								nd			nd		nd			
Zinc-diss (mgL)	0.260								nd			nd		nd			
Total Coliform Bacteria (MPN/100ml)	>160,000								20,000			13,000		>160,000			
Fecal Coliform Bacteria (MPN/100ml)	>160,000								11,000			8,000		90,000			
Enterococcus Bacteria (MPN/100ml)	5,000								300			2,300		30,000			
2003																	
Temp.°C	21.0	25.0	23.0	ns	25.5	20.5	22.0	23.0	20.5	ns	21.0	22.5	23.5	22.5	23.5	22.5	23.0
pH	7.9	7.6	6.8	ns	8.1	7.7	8.1	7.7	8.5	ns	7.4	8.2	7.4	7.5	8.1	7.5	9.0
Conductivity, mS/cm	1.36	>20.00	1.36	ns	9.58	1.43	1.12	1.67	1.70	ns	1.39	3.12	1.53	1.72	>20.00	2.20	1.37
Turbidity, NTU	7.21	25.01	2.50	ns	0.42	6.61	14.47	10.73	3.95	ns	36.29	11.94	3.35	6.51	26.82	45.32	12.21
Ammonia, mg/l	0.1	0.1	0.2	ns	0.3	1.0	2.0	0.4	0.1	ns	1.5	0.8	0.2	0.4	1.5	2.0	0.8
Nitrate, mg/l	0.3	0.1	0.3	ns	0.3	0.1	0.1	0.6	0.5	ns	0.8	0.1	0.8	0.4	0.3	2.5	nd
Orthophosphate-P, mg/l	0.07	0.65	0.49	ns	0.07	1.30	0.49	0.20	0.10	ns	0.65	0.82	0.26	0.49	0.65	0.65	0.32
Detergents, mg/l Field	0.25	1.50	0.25	ns	0.25	0.25	0.50	0.50	0.25	ns	0.25	0.50	0.25	0.50	1.50	>3.00	1.00
Surfactants (mg/L MBAS) Lab	nd					nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					1.0			
Total Hardness (mg/L CaCO3)	208					180			345					320			
Cadmium-diss (mg/L)	nd					nd			nd					nd			
Copper-diss (mg/L)	0.011					0.006			nd					0.008			
Lead-diss (mg/L)	nd					nd			nd					nd			
Zinc-diss (mgL)	nd					0.045			nd					0.035			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100ml)	90,000					50,000			160,000					90,000			
Fecal Coliform Bacteria (MPN/100ml)	50,000					24,000			50,000					30,000			
Enterococcus Bacteria (MPN/100ml)	8,000					30,000			300					11,000			

ns = not sampled
nd = not detected

City of National City Dry Weather Historical Data

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2004																	
Temp.℃	23	17	22	ns	24	20	24	21	22	ns	24	20	25	22	24	26	30
pH	7.8	7.4	7.9	ns	7.7	7.8	8.2	7.1	8.3	ns	8.4	8.1	7.9	7.5	7.5	7.9	8.9
Conductivity, mS/cm	1.74	20.00	1.25	ns	10.76	1.45	1.35	1.70	1.94	ns	1.26	1.61	1.42	1.44	20.00	1.88	2.16
Turbidity, NTU	11.51	6.41	1.64	ns	1.88	4.38	24.00	8.88	4.56	ns	46.00	29.13	3.21	18.27	5.65	70.00	5.53
Ammonia, mg/l	0.8	0.4	0.1	ns	0.1	0.4	1.5	3.0	0.3	ns	0.3	0.6	0.7	0.8	0.8	2.0	1.0
Nitrate, mg/l	1.25	1.25	1.25	ns	1.25	1.25	1.25	1.25	1.25	ns	2.50	1.25	1.25	1.25	1.25	1.25	
Orthophosphate-P, mg/l	0.98	0.82	0.65	ns	0.07	1.47	1.47	0.49	0.33	ns	1.14	3.26	0.98	1.14	1.30	1.30	0.07
Detergents, mg/l Field	0.88	2.00	0.50	ns	0.75	0.25	0.75	0.50	0.38	ns	2.50	1.00	1.25	1.25	2.50	3.00	2.50
Surfactants (mg/L MBAS) Lab	nd					nd			nd					0.6			
Oil and Grease (mg/L)	1.0					nd			nd					2.0			
Total Hardness (mg/L CaCO3)	268					320			404					246			
Cadmium-diss (mg/L)	nd					nd			nd					0.014			
Copper-diss (mg/L)	nd					0.005			nd					nd			
Lead-diss (mg/L)	nd					nd			nd					nd			
Zinc-diss (mgL)	0.032					0.030			0.022					0.039			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100ml)	900,000					90,000			50,000					1,600,000			
Fecal Coliform Bacteria (MPN/100ml)	30,000					2,200			2,200					160,000			
Enterococcus Bacteria (MPN/100ml)	30,000					5,000			1,300					22,000			
2005																	
Temp.℃	20.5	24.8	22.3	ns	25.1	19.8	20.7	20.1	20.6	ns	19.4	25.0	22.4	21.4	24.7	20.1	20.2
pH	7.4	8.8	7.7	ns	7.8	6.9	7.5	7.8	8.1	ns	7.9	8.3	8.3	7.9	7.5	8.4	8.8
Conductivity, mS/cm	1.09	7.78	1.82	ns	13.22	1.42	1.49	1.93	2.20	ns	1.01	2.97	1.28	1.32	12.40	1.05	1.68
Turbidity, NTU	8.88	3.44	2.81	ns	1.28	7.50	23.84	10.22	3.07	ns	11.88	3.54	3.22	7.44	4.52	46.65	8.65
Ammonia, mg/l	0.8	0.3	0.2	ns	0.2	0.6	2.0	0.7	1.5	ns	0.5	0.2	0.2	0.4	0.3	0.8	0.2
Nitrate, mg/l	1.25	1.25	1.25	ns	1.25	1.25	1.25	1.25	1.25	ns	1.25	2.50	1.25	1.25	1.25	1.25	1.25
Orthophosphate-P, mg/l	0.33	0.13	0.33	ns	0.03	0.26	0.65	0.49	1.00	ns	0.65	0.10	0.26	0.33	0.82	0.33	0.26
Detergents, mg/l Field	1.50	0.75	0.25	ns	0.50	0.75	0.75	0.50	0.75	ns	0.75	0.50	0.25	0.75	1.00	0.50	0.25
Surfactants (mg/L MBAS) Lab	0.9					nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	279					312			538					351			
Cadmium-diss (mg/L)	nd					nd			nd					nd			
Copper-diss (mg/L)	nd					nd			nd					0.006			
Lead-diss (mg/L)	nd					nd			nd					nd			
Zinc-diss (mgL)	nd					0.041			nd					0.029			
Diazinon (µg/L)	0.15					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100 mL)	1,600,000					500,000			1,600,000					1,600,000			
Fecal Coliform Bacteria (MPN/100 mL)	50,000					22,000			130,000					2,800			
Enterococcus Bacteria (MPN/100ml)	50,000					80,000			7,000					22,000			

ns = not sampled
nd = not detected

City of National City Dry Weather Historical Data

Site No.	1A	11	13A	20	31	32	38	40	41	42	43	44	45	46	47	48	49
2006																	
Temp.°C	21.7	28.0	29.0	ns	28.5	18.4	22.0	22.8	20.2	ns	23.4	28.5	24.3	24.5	26.2	30.1	19.8
pH	8.0	8.6	8.2	ns	7.7	8.3	8.4	8.0	8.5	ns	8.0	8.8	8.5	8.0	7.8	7.9	8.7
Conductivity, mS/cm	1.83	20.00	3.16	ns	15.04	1.48	1.25	3.44	3.65	ns	1.13	1.92	1.15	1.19	20.00	3.40	1.65
Turbidity, NTU	10.18	3.28	3.45	ns	1.08	9.54	24.34	4.77	5.83	ns	18.75	10.30	2.08	3.38	13.06	27.95	11.08
Ammonia, mg/l	0.4	0.1	0.3	ns	0.4	0.4	0.8	0.6	0.2	ns	0.4	0.3	0.2	0.3	0.4	1.5	0.4
Nitrate, mg/l	2.50	2.50	1.25	ns	1.25	1.25	1.25	1.25	2.50	ns	1.25	2.50	2.50	1.25	2.50	1.25	1.25
Orthophosphate-P, mg/l	1.96	0.65	0.81	ns	0.13	0.65	1.30	0.26	0.26	ns	0.65	0.20	0.82	0.82	0.26	1.63	1.63
Detergents, mg/l Field	1.00	1.50	0.75	ns	0.75	0.75	0.75	0.50	0.50	ns	0.63	0.37	0.13	0.50	1.50	3.00	0.75
Surfactants (mg/L MBAS) Lab	nd					nd			nd					nd			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	391					249			774					231			
Cadmium-diss (mg/L)	nd					nd			nd					nd			
Copper-diss (mg/L)	nd					0.009			0.005					0.017			
Lead-diss (mg/L)	nd					nd			nd					nd			
Zinc-diss (mgL)	nd					0.110			0.021					0.020			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100 mL)	240,000					350,000			13,000					240,000			
Fecal Coliform Bacteria (MPN/100 mL)	50,000					90,000			500					13,000			
Enterococcus Bacteria (MPN/100ml)	30,000					8,000			2,800					50,000			
2007																	
Temp.°C	20.8	19.9	24.1	ns	24.4	19.1	21.8	19.2	20.8	22.2	20.7	28.5	22.7	22.8	23.1		20.5
pH	7.3	7.9	8.4	ns	8.0	7.7	7.3	7.5	8.7	8.1	7.4	10.0	8.3	7.3	8.2		8.3
Conductivity, mS/cm	1.22	8.91	1.27	ns	12.44	1.74	5.04	2.68	4.27	1.41	1.44	1.18	1.06	1.42	2.74		2.09
Turbidity, NTU	0.10	18.43	0.92	ns	0.10	1.60	2.97	0.10	5.08	3.38	5.46	4.77	0.10	7.98	0.67		2.67
Ammonia, mg/l	0.1	0.3	0.1	ns	0.3	0.1	0.3	0.1	0.4	0.3	0.1	0.1	nd	0.1	0.4		0.1
Nitrate, mg/l	0.61	0.43	0.57	ns	0.52	1.15	2.24	0.88	1.76	1.06	1.33	0.59	0.57	0.45	0.45		0.43
Orthophosphate-P, mg/l	0.46	1.17	0.85	ns	0.07	0.42	0.39	0.36	0.36	1.01	0.55	0.46	0.13	0.88	0.72		0.65
Surfactants, mg/l (field)	1.00	0.75	1.25	ns	0.75	0.50	0.75	0.50	0.63	0.63	0.75	0.38	0.75	1.00	0.75		0.50
Surfactants (mg/L MBAS)(Lab)	0.7					nd			nd					0.8			
Oil and Grease (mg/L)	nd					nd			nd					nd			
Total Hardness (mg/L CaCO3)	234					279			1,010					354			
Cadmium-diss (mg/L)	nd					nd			nd					nd			
Copper-diss (mg/L)	nd					0.008			nd					nd			
Lead-diss (mg/L)	0.008					nd			nd					nd			
Zinc-diss (mgL)	0.041					0.034			nd					nd			
Diazinon (µg/L)	nd					nd			nd					nd			
Chlorpyrifos (µg/L)	nd					nd			nd					nd			
Total Coliform Bacteria (MPN/100 mL)	500,000					23,000			30,000					>1,600,000			
Fecal Coliform Bacteria (MPN/100 mL)	24,000					8,000			2,300					>160,000			
Enterococcus Bacteria (MPN/100ml)	24,000					13,000			2,300					>160,000			

ns = not sampled
nd = not detected

City of National City Dry Weather Historical Data

Site No	1A	3	4	6	13A	31A	32	38	40	41	42	43A	44A	44	45	46	47	48	49
2008																			
Temp. ℃	25.9	27.5	ns	27.3	ns	ns	22.8	24.3	23.1	24.3	ns	25.0	26.3	24.7	25.8	25.5	25.5	23.9	23.4
pH	7.20	7.76	ns	8.95	ns	ns	7.64	7.44	7.68	8.19	ns	7.61	8.89	8.29	8.12	8.25	7.45	7.41	8.34
Conductivity, mS/cm	1.41	0.57	ns	>20.00	ns	ns	0.99	1.35	2.93	4.32	ns	1.03	1.15	1.41	1.37	0.74	>20.00	2.02	2.12
Turbidity, NTU	41.98	4.41	ns	2.37	ns	ns	1.78	26.71	3.43	0.82	ns	5.44	1.48	1.97	36.13	3.99	8.30	52.00	12.95
Ammonia, mg/l	0.164	0.083	ns	0.486	ns	ns	0.151	0.400	0.355	0.288	ns	0.693	0.287	0.068	0.851	0.132	0.425	0.843	0.468
Nitrate, mg/l	0.95	1.45	ns	0.82	ns	ns	0.88	0.88	0.84	1.92	ns	1.70	1.03	0.61	1.04	1.62	0.67	0.80	0.74
Orthophosphate-P, mg/l	0.59	0.15	ns	0.02	ns	ns	0.31	1.61	0.60	0.34	ns	0.70	0.50	0.24	1.46	0.34	0.27	4.63	0.93
Surfactants, mg/l (field)	>3.00	0.38	ns	2.50	ns	ns	0.75	1.25	0.38	0.50	ns	0.63	0.50	0.38	3.00	0.25	1.75	>3.00	0.75
Oil and Grease (mg/L)	nd						nd		nd							nd			
Total Hardness (mg/L CaCO3)	324						138		820							101			
Cadmium-diss (mg/L)	nd						nd		nd							nd			
Copper-diss (mg/L)	nd						0.0243		0.0052							0.0131			
Lead-diss (mg/L)	nd						nd		nd							nd			
Zinc-diss (mgL)	nd						0.0652		0.0204							0.0410			
Diazinon (µg/L)	nd						nd		nd							nd			
Chlorpyrifos (µg/L)	nd						nd		nd							nd			
Total Coliform Bacteria (MPN/100 mL)	>1,600,000						70,000		800							17,000			
Fecal Coliform Bacteria (MPN/100 mL)	>160,000						11,000		40							5,000			
Enterococcus Bacteria (MPN/100ml)	50,000						3,000		70							30,000			
2009																			
Temp. ℃	23.0	24.3	ns	29.5	27.8	ns	22.0	ns	22.1	25.6	ns	26.6	26.3	26.2	24.0	24.3	25.8	28.0	26.6
pH	7.60	8.00	ns	8.80	8.2	ns	7.70	ns	7.60	8.50	ns	7.90	8.60	7.90	8.20	8.00	7.90	7.50	7.30
Conductivity, mS/cm	1.34	0.47	ns	>20	1.5	ns	1.25	ns	3.20	4.22	ns	1.05	1.48	9.87	1.03	0.99	> 20	1.22	1.37
Turbidity, NTU	13.48	4.05	ns	9.95	6.2	ns	4.97	ns	3.94	1.00	ns	6.37	1.65	7.49	1.68	9.59	7.48	94.00	33.44
Ammonia, mg/l	0.152	0.051	ns	0.561	0.1	ns	0.097	ns	0.325	0.247	ns	1.150	0.050	0.256	0.047	0.124	0.463	1.517	1.187
Nitrate, mg/l	0.31	0.51	ns	nd	0.3	ns	0.40	ns	0.63	4.48	ns	4.15	0.44	0.07	0.23	1.66	0.45	1.01	0.58
Orthophosphate-P, mg/l	0.91	0.07	ns	0.05	0.1	ns	0.34	ns	0.37	0.17	ns	0.89	0.38	0.58	0.15	1.11	0.31	3.68	2.19
Surfactants, mg/l (field)	3.00	0.25	ns	0.88	0.8	ns	0.50	ns	0.38	0.50	ns	0.50	0.25	0.75	0.25	0.50	0.88	>3	3.00
Oil and Grease (mg/L)	nd						nd		nd							nd			
Total Hardness (mg/L CaCO3)	270						196		799							202			
Cadmium-diss (mg/L)	nd						nd		nd							nd			
Copper-diss (mg/L)	0.002						0.006		0.0020							0.017			
Lead-diss (mg/L)	nd						nd		nd							nd			
Zinc-diss (mgL)	nd						0.028		nd							0.0220			
Diazinon (µg/L)	nd						nd		nd							nd			
Chlorpyrifos (µg/L)	nd						nd		nd							nd			
Total Coliform Bacteria (MPN/100 mL)	300,000						23,000		13,000							30,000			
Fecal Coliform Bacteria (MPN/100 mL)	17,000						8,000		40							2,800			
Enterococcus Bacteria (MPN/100ml)	160,000						2,200		210							22,000			

ns = not sampled

nd = not detected

Appendix B

Photographs of Sampling Locations

Site 1A	
Site 3	
Site 4	

Site 6	
Site 13A	
Site 31A	

Site 32	
Site 38	
Site 40	

Site 41	
Site 42	
Site 43A	

Site 44	
Site 44A	
Site 45	

Site 46	
Site 47	
Site 48	

Site 49	

Appendix C

Laboratory Analytical Reports

EnviroMatrix Analytical, Inc.

27 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0179

Project Name: National City Dry Weather Monitoring
Project Desc./#: 201029W-07

Enclosed are the results of analyses for samples received by the laboratory on 07/08/10 13:26. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0179

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 32	10G0179-02	Stormwater	07/08/10 11:00	07/08/10 13:26
Site 46	10G0179-03	Stormwater	07/08/10 11:50	07/08/10 13:26

NOTE: The TOC analyses were cancelled by the client.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0179

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 32 (10G0179-02) Stormwater Sampled: 07/08/10 11:00 Received: 07/08/10 13:26										
Zinc	**0.112**	0.0003	0.020	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	
Cadmium	**0.001**	0.0002	0.001	"	"	"	"	"	"	
Copper	**0.028**	0.001	0.010	"	"	"	"	"	"	
Lead	**0.002**	0.001	0.005	"	"	"	"	"	"	J
Site 46 (10G0179-03) Stormwater Sampled: 07/08/10 11:50 Received: 07/08/10 13:26										
Zinc	**0.034**	0.0003	0.020	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	**0.005**	0.001	0.010	"	"	"	"	"	"	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0179

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 32 (10G0179-02) Stormwater Sampled: 07/08/10 11:00 Received: 07/08/10 13:26										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071214	07/12/10	07/14/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*116 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*116 %*	*60-130*			"	"	"	"	
Site 46 (10G0179-03) Stormwater Sampled: 07/08/10 11:50 Received: 07/08/10 13:26										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071214	07/12/10	07/14/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*128 %*	*60-130*			"	"	"	"	
Surrogate: Tribuytlphosphate		*112 %*	*60-130*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0179

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 32 (10G0179-02) Stormwater Sampled: 07/08/10 11:00 Received: 07/08/10 13:26										
Hardness (Total)	**195**	10	10	mg CaCO3/L	1	0071402	07/13/10	07/26/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	"	0071634	07/16/10	07/16/10	EPA 1664A	
Site 46 (10G0179-03) Stormwater Sampled: 07/08/10 11:50 Received: 07/08/10 13:26										
Hardness (Total)	**178**	10	10	mg CaCO3/L	1	0071402	07/13/10	07/26/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	"	0071634	07/16/10	07/16/10	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0179

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 32 (10G0179-02) Stormwater	**Sampled: 07/08/10 11:00**	**Received: 07/08/10 13:26**								
Total Coliforms	**1600000**	2000	2000	MPN/100 ml	1000	0070904	07/08/10	07/12/10	SM 9221 B, E	A-01
Fecal Coliforms	**5000**	200	200	"	100	"	"	07/11/10	"	
Enterococcus	**8000**	200	200	"	"	0070905	"	07/12/10	SM 9230 A, B	
Site 46 (10G0179-03) Stormwater	**Sampled: 07/08/10 11:50**	**Received: 07/08/10 13:26**								
Total Coliforms	**500000**	2000	2000	MPN/100 ml	1000	0070904	07/08/10	07/12/10	SM 9221 B, E	
Fecal Coliforms	**17000**	200	200	"	100	"	"	07/11/10	"	
Enterococcus	**11000**	200	200	"	"	0070905	"	07/12/10	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0179

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071341											
Blank (0071341-BLK1)					Prepared & Analyzed: 07/13/10						
Zinc	ND	0.0003	0.020	mg/l							
Cadmium	ND	0.0002	0.001	"							
Lead	ND	0.001	0.005	"							
Copper	ND	0.001	0.010	"							
LCS (0071341-BS1)					Prepared & Analyzed: 07/13/10						
Lead	0.049	0.001	0.005	mg/l	0.0500		98	75-125			
Copper	0.051	0.001	0.010	"	0.0500		101	75-125			
Cadmium	0.051	0.0002	0.001	"	0.0500		102	75-125			
Zinc	0.051	0.0003	0.020	"	0.0500		101	75-125			
LCS Dup (0071341-BSD1)					Prepared & Analyzed: 07/13/10						
Zinc	0.051	0.0003	0.020	mg/l	0.0500		103	75-125	2	20	
Cadmium	0.052	0.0002	0.001	"	0.0500		105	75-125	2	20	
Copper	0.052	0.001	0.010	"	0.0500		103	75-125	2	20	
Lead	0.049	0.001	0.005	"	0.0500		98	75-125	0.4	20	
Duplicate (0071341-DUP1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Cadmium	ND	0.0002	0.001	mg/l		ND				20	
Copper	0.001	0.001	0.010	"		0.001			2	20	J
Lead	ND	0.001	0.005	"		ND				20	
Zinc	0.0009	0.0003	0.020	"		0.0009			3	20	J
Matrix Spike (0071341-MS1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Lead	0.050	0.001	0.005	mg/l	0.0500	ND	100	75-125			
Copper	0.044	0.001	0.010	"	0.0500	0.001	86	75-125			
Zinc	0.045	0.0003	0.020	"	0.0500	0.0009	88	75-125			
Cadmium	0.045	0.0002	0.001	"	0.0500	ND	90	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0179

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071341											
Matrix Spike Dup (0071341-MSD1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Zinc	0.045	0.0003	0.020	mg/l	0.0500	0.0009	88	75-125	0.8	20	
Lead	0.050	0.001	0.005	"	0.0500	ND	101	75-125	1	20	
Copper	0.044	0.001	0.010	"	0.0500	0.001	86	75-125	0.4	20	
Cadmium	0.046	0.0002	0.001	"	0.0500	ND	92	75-125	2	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0179

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071214											
Blank (0071214-BLK1)					Prepared: 07/12/10 Analyzed: 07/14/10						
Chlorpyrifos	ND	0.04	0.05	ug/l							
Diazinon	ND	0.04	0.05	"							
Malathion	ND	0.05	0.05	"							
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
LCS (0071214-BS1)					Prepared: 07/12/10 Analyzed: 07/14/10						
Bolstar	0.41	0.09	0.10	ug/l	0.500		82	60-130			
Diazinon	0.44	0.04	0.05	"	0.500		88	60-130			
Ethoprop	0.46	0.05	0.05	"	0.500		92	60-130			
Mevinphos	0.43	0.21	0.25	"	0.500		86	60-130			
Methyl parathion	0.49	0.07	0.10	"	0.500		98	60-130			
Phorate	0.40	0.03	0.05	"	0.500		80	60-130			
Ronnel	0.40	0.16	0.25	"	0.500		80	60-130			
Trichlorinate	0.44	0.05	0.05	"	0.500		88	60-130			
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.280*			*"*	*0.250*		*112*	*60-130*			
LCS Dup (0071214-BSD1)					Prepared: 07/12/10 Analyzed: 07/14/10						
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	2	30	
Diazinon	0.42	0.04	0.05	"	0.500		84	60-130	5	30	
Ethoprop	0.39	0.05	0.05	"	0.500		78	60-130	16	30	
Mevinphos	0.44	0.21	0.25	"	0.500		88	60-130	2	30	
Methyl parathion	0.42	0.07	0.10	"	0.500		84	60-130	15	30	
Phorate	0.40	0.03	0.05	"	0.500		80	60-130	0	30	
Ronnel	0.40	0.16	0.25	"	0.500		80	60-130	0	30	
Trichlorinate	0.41	0.05	0.05	"	0.500		82	60-130	7	30	
Surrogate: Triphenyl phosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			
Surrogate: Tribuytlphosphate	*0.270*			*"*	*0.250*		*108*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0179

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071402											
Blank (0071402-BLK1)					Prepared: 07/13/10	Analyzed: 07/24/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0071402-DUP1)			**Source: 10G0092-01**		Prepared: 07/13/10	Analyzed: 07/26/10					
Hardness (Total)	301	10	10	mg CaCO3/L		273			10	20	
Batch 0071634											
Blank (0071634-BLK1)					Prepared & Analyzed: 07/16/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0071634-BS1)					Prepared & Analyzed: 07/16/10						
Oil & Grease	33	5	5	mg/l	40.0		82	78-114			
LCS Dup (0071634-BSD1)					Prepared & Analyzed: 07/16/10						
Oil & Grease	34	5	5	mg/l	40.0		84	78-114	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
A-01	MPN > 1,600,000
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-0900 Fax: (858) 586-0409

Email:

Billing Address: same

Project ID: National City DW MS4

Project #: 201029W-07 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease ☐ 413.1 ☐ 413.2	8015B (TPH) ☐ Gas ☐ Diesel ☐ E	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) ☐ PAH only	608 / 8081 (Organochlorine Pesti	608 / 8082 (Polychlorinated Biph	(814) (Organophosphorus Pesticid	TBT (Organotin Compounds)	☐ pH ☐ EC TSS ☐ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ NH	CAC Title 22/CAM17 Metals ☐ T	TCLP (RCRA) ☐ Metals ☐ Orga	(Cd) Cr (Cu) (Pb) Ni Ag (Zn)	Coliform. Total (MTF) Feca	Colilert, T+E.Coli ☐ P/A ☐ Enum	Enterococcus, MTF ☐ Entero	Heterotrophic Plate Count (HPC)
1	Site 45	7/8/10	9:45	SW	3P									X					X		X	
2	Site 32	"	11:00	"	2G/1P	X						X		X				X	X		X	
3	Site 46	"	11:50	"	2G/1P	X						X		X				X	X		X	
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: ☐ Courier ☐ UPS ☐ FedEx ☐ USPS ☐ Client Drop Off ☐ Other

[1]**Turn-Around-Time:** ☐ Same Day ☐ 24 hr ☐ 48 hr ☐ 3 day ☐ 4 day ☒ 5 day ☐ STD (7 day)

[1]**Reporting Requirements:** ☐ Fax ☐ PDF ☐ Excel ☐ Geotracker/EDF ☐ Hard Copy ☐ EDT

[1]**Sample Disposal:** ☐ By Laboratory ☐ [2]Return to Client: P/U or Delivery ☐ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temp @ Receipt: _____

COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	R
Signature Bom C	7/8/10 13:00	Signature Ke
Print Brianna Martin		Print Kel
Company: DMAX Engineering		Company:
Signature Kelly Lyn	7/8/10 13:26	Signature
Print Kelly Lyn		Print Mat
Company: EMA		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date o disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=5 °C on ice

2010 National City Dry Weather and MS4 Monitoring Laboratory Reports

Date	Site	Dry Weather Report	MS4 Monitoring Report
	☐ Site 1A ☐ Site 40 ☐ _____	Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	(none)
7/8/10	☒ Site 32	Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform* Fecal Coliform* Enterococcus*	Total Dissolved Solids (TDS) Total Coliform* Fecal Coliform* Enterococcus*
7/8/10	☒ Site 46	Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform* Fecal Coliform* Enterococcus*	Total Suspended Solids (TSS) Total Coliform* Fecal Coliform* Enterococcus*
7/8/10	☐ Site ~~13A~~ ~~5~~ ☒ Site 45	(none)	Total Suspended Solids (TSS) Total Coliform Fecal Coliform Enterococcus

** denotes a test that is performed once but reported in both MS4 and Dry Weather reports.*

EnviroMatrix Analytical, Inc.

28 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0193

Project Name: National City Dry Weather Monitoring
Project Desc./#: 201029W-051

Enclosed are the results of analyses for samples received by the laboratory on 07/08/10 16:34. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0193

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 40	10G0193-01	Stormwater	07/08/10 15:00	07/08/10 16:34
Site 1A	10G0193-02	Stormwater	07/08/10 15:50	07/08/10 16:34

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0193

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 40 (10G0193-01) Stormwater Sampled: 07/08/10 15:00 Received: 07/08/10 16:34										
Zinc	**0.008**	0.0003	0.020	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	J
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	
Copper	**0.004**	0.001	0.010	"	"	"	"	"	"	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Site 1A (10G0193-02) Stormwater Sampled: 07/08/10 15:50 Received: 07/08/10 16:34										
Zinc	**0.009**	0.0003	0.020	mg/l	1	0071341	07/13/10	07/13/10	EPA 200.8	J
Lead	ND	0.001	0.005	"	"	"	"	"	"	
Copper	ND	0.001	0.010	"	"	"	"	"	"	
Cadmium	ND	0.0002	0.001	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0193

Organophosphorus Pesticides by EPA Method 8141A

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 40 (10G0193-01) Stormwater Sampled: 07/08/10 15:00 Received: 07/08/10 16:34										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071528	07/15/10	07/19/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*132 %*	*60-130*			"	"	"	"	*S-04*
Surrogate: Tribuytlphosphate		*120 %*	*60-130*			"	"	"	"	
Site 1A (10G0193-02) Stormwater Sampled: 07/08/10 15:50 Received: 07/08/10 16:34										
Chlorpyrifos	ND	0.04	0.05	ug/l	1	0071528	07/15/10	07/19/10	EPA 8141A	
Diazinon	ND	0.04	0.05	"	"	"	"	"	"	
Malathion	ND	0.05	0.05	"	"	"	"	"	"	
Surrogate: Triphenyl phosphate		*228 %*	*60-130*			"	"	"	"	*S-02, S-04*
Surrogate: Tribuytlphosphate		*128 %*	*60-130*			"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0193

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 40 (10G0193-01) Stormwater Sampled: 07/08/10 15:00 Received: 07/08/10 16:34										
Hardness (Total)	**680**	100	100	mg CaCO3/L	10	0071402	07/13/10	07/26/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0071634	07/16/10	07/16/10	EPA 1664A	
Site 1A (10G0193-02) Stormwater Sampled: 07/08/10 15:50 Received: 07/08/10 16:34										
Hardness (Total)	**235**	100	100	mg CaCO3/L	10	0071402	07/13/10	07/26/10	EPA 200.7	
Oil & Grease	ND	5	5	mg/l	1	0071634	07/16/10	07/16/10	EPA 1664A	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0193

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 40 (10G0193-01) Stormwater Sampled: 07/08/10 15:00 Received: 07/08/10 16:34										
Total Coliforms	**23000**	2000	2000	MPN/100 ml	1000	0070912	07/08/10	07/12/10	SM 9221 B, E	
Fecal Coliforms	**500**	20	20	"	10	"	"	07/11/10	"	
Enterococcus	**800**	20	20	"	"	0070913	"	07/12/10	SM 9230 A, B	
Site 1A (10G0193-02) Stormwater Sampled: 07/08/10 15:50 Received: 07/08/10 16:34										
Total Coliforms	**80000**	2000	2000	MPN/100 ml	1000	0070912	07/08/10	07/12/10	SM 9221 B, E	
Fecal Coliforms	**1300**	20	20	"	10	"	"	07/11/10	"	
Enterococcus	**1700**	20	20	"	"	0070913	"	07/12/10	SM 9230 A, B	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0193

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071341											
Blank (0071341-BLK1)					Prepared & Analyzed: 07/13/10						
Copper	ND	0.001	0.010	mg/l							
Lead	ND	0.001	0.005	"							
Zinc	ND	0.0003	0.020	"							
Cadmium	ND	0.0002	0.001	"							
LCS (0071341-BS1)					Prepared & Analyzed: 07/13/10						
Cadmium	0.051	0.0002	0.001	mg/l	0.0500		102	75-125			
Copper	0.051	0.001	0.010	"	0.0500		101	75-125			
Lead	0.049	0.001	0.005	"	0.0500		98	75-125			
Zinc	0.051	0.0003	0.020	"	0.0500		101	75-125			
LCS Dup (0071341-BSD1)					Prepared & Analyzed: 07/13/10						
Cadmium	0.052	0.0002	0.001	mg/l	0.0500		105	75-125	2	20	
Copper	0.052	0.001	0.010	"	0.0500		103	75-125	2	20	
Lead	0.049	0.001	0.005	"	0.0500		98	75-125	0.4	20	
Zinc	0.051	0.0003	0.020	"	0.0500		103	75-125	2	20	
Duplicate (0071341-DUP1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Cadmium	ND	0.0002	0.001	mg/l		ND				20	
Zinc	0.0009	0.0003	0.020	"		0.0009			3	20	J
Copper	0.001	0.001	0.010	"		0.001			2	20	J
Lead	ND	0.001	0.005	"		ND				20	
Matrix Spike (0071341-MS1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Cadmium	0.045	0.0002	0.001	mg/l	0.0500	ND	90	75-125			
Copper	0.044	0.001	0.010	"	0.0500	0.001	86	75-125			
Lead	0.050	0.001	0.005	"	0.0500	ND	100	75-125			
Zinc	0.045	0.0003	0.020	"	0.0500	0.0009	88	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0193

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071341											
Matrix Spike Dup (0071341-MSD1)			**Source: 10G0149-01**		Prepared & Analyzed: 07/13/10						
Cadmium	0.046	0.0002	0.001	mg/l	0.0500	ND	92	75-125	2	20	
Copper	0.044	0.001	0.010	"	0.0500	0.001	86	75-125	0.4	20	
Lead	0.050	0.001	0.005	"	0.0500	ND	101	75-125	1	20	
Zinc	0.045	0.0003	0.020	"	0.0500	0.0009	88	75-125	0.8	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0193

Organophosphorus Pesticides by EPA Method 8141A - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071528											
Blank (0071528-BLK1)					Prepared: 07/15/10	Analyzed: 07/19/10					
Chlorpyrifos	ND	0.04	0.05	ug/l							
Diazinon	ND	0.04	0.05	"							
Malathion	ND	0.05	0.05	"							
Surrogate: Triphenyl phosphate	*0.290*			*"*	*0.250*		*116*	*60-130*			
Surrogate: Tribuytlphosphate	*0.310*			*"*	*0.250*		*124*	*60-130*			
LCS (0071528-BS1)					Prepared: 07/15/10	Analyzed: 07/19/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130			
Diazinon	0.48	0.04	0.05	"	0.500		96	60-130			
Ethoprop	0.44	0.05	0.05	"	0.500		88	60-130			
Mevinphos	0.43	0.21	0.25	"	0.500		86	60-130			
Methyl parathion	0.41	0.07	0.10	"	0.500		82	60-130			
Phorate	0.41	0.03	0.05	"	0.500		82	60-130			
Ronnel	0.46	0.16	0.25	"	0.500		92	60-130			
Trichlorinate	0.44	0.05	0.05	"	0.500		88	60-130			
Surrogate: Triphenyl phosphate	*0.310*			*"*	*0.250*		*124*	*60-130*			
Surrogate: Tribuytlphosphate	*0.320*			*"*	*0.250*		*128*	*60-130*			
LCS Dup (0071528-BSD1)					Prepared: 07/15/10	Analyzed: 07/19/10					
Bolstar	0.42	0.09	0.10	ug/l	0.500		84	60-130	0	30	
Diazinon	0.45	0.04	0.05	"	0.500		90	60-130	6	30	
Ethoprop	0.43	0.05	0.05	"	0.500		86	60-130	2	30	
Mevinphos	0.43	0.21	0.25	"	0.500		86	60-130	0	30	
Methyl parathion	0.40	0.07	0.10	"	0.500		80	60-130	2	30	
Phorate	0.43	0.03	0.05	"	0.500		86	60-130	5	30	
Ronnel	0.44	0.16	0.25	"	0.500		88	60-130	4	30	
Trichlorinate	0.44	0.05	0.05	"	0.500		88	60-130	0	30	
Surrogate: Triphenyl phosphate	*0.300*			*"*	*0.250*		*120*	*60-130*			
Surrogate: Tribuytlphosphate	*0.310*			*"*	*0.250*		*124*	*60-130*			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0193

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0071402											
Blank (0071402-BLK1)					Prepared: 07/13/10	Analyzed: 07/24/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0071402-DUP1)		**Source: 10G0092-01**			Prepared: 07/13/10	Analyzed: 07/26/10					
Hardness (Total)	301	10	10	mg CaCO3/L		273			10	20	
Batch 0071634											
Blank (0071634-BLK1)					Prepared & Analyzed: 07/16/10						
Oil & Grease	ND	5	5	mg/l							
LCS (0071634-BS1)					Prepared & Analyzed: 07/16/10						
Oil & Grease	33	5	5	mg/l	40.0		82	78-114			
LCS Dup (0071634-BSD1)					Prepared & Analyzed: 07/16/10						
Oil & Grease	34	5	5	mg/l	40.0		84	78-114	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: (858) 586-6600 Fax: (858) 586-6604

Email:

Billing Address: Same

Project ID: National City Dry Weather Routine

Project #: 201029WL-051 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease ☐ 413.1 ☐ 413.2 ☒	8015B (TPH) ☐ Gas ☐ Diesel ☐	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) ☐ PAH only	608 / 8081 (Organochlorine Pesti	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	☐ pH ☐ EC ☐ TSS ☐ TDS	☐ Nitrate ☐ Nitrite ☐ TKN ☐ NH	CAC Title 22/CAM17 Metals ☐ T	TCLP (RCRA) ☐ Metals ☐ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. ☒ Total (MTF) ☒ Feca	Colilert, T+E.Coli ☐ P/A ☐ Enum	Enterococcus, ☒ MTF ☐ Enteroc	Heterotrophic Plate Count (HPC)
1	Site 40	7/8/10	1500	SW	2G/4P	X						X						X	X		X	
2	Site 1A	"	15:50	SW	2G/4P	X						X						X	X		X	
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: ☐ Courier ☐ UPS ☐ FedEx ☐ USPS ☐ Client Drop Off ☐ Other

[1]**Turn-Around-Time:** ☐ Same Day ☐ 24 hr ☐ 48 hr ☐ 3 day ☐ 4 day ☒ 5 day ☐ STD (7 day)

[1]**Reporting Requirements:** ☐ Fax ☐ PDF ☐ Excel ☐ Geotracker/EDF ☐ Hard Copy ☐ EDT

[1]**Sample Disposal:** ☐ By Laboratory ☐ [2]Return to Client: P/U or Delivery ☐ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temp @ Receipt: _____

COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	
Signature BCM	7/8/10	Signature
Print Brianna Martin		Print
Company: D-Max Engineering	1634	Company:
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

2010 National City Dry Weather and MS4 Monitoring Laboratory Reports

Date	Site	Dry Weather Report	MS4 Monitoring Report
7/8/10	☑ Site 1A ☑ Site 40 ☐ _____	Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform Fecal Coliform Enterococcus	(none)
	☐ Site 32	Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform* Fecal Coliform* Enterococcus*	Total Dissolved Solids (TDS) Total Coliform* Fecal Coliform* Enterococcus*
	☐ Site 46	Oil and Grease Diazinon and Chlorpyrifos Total Hardness Cadmium (Dissolved) Copper (Dissolved) Lead (Dissolved) Zinc (Dissolved) Total Coliform* Fecal Coliform* Enterococcus*	Total Suspended Solids (TSS) Total Coliform* Fecal Coliform* Enterococcus*
	☐ Site 13A ☐ Site 45	(none)	Total Suspended Solids (TSS) Total Coliform Fecal Coliform Enterococcus

** denotes a test that is performed once but reported in both MS4 and Dry Weather reports.*

EnviroMatrix Analytical, Inc.

30 July 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10G0647

Project Name: National City Dry Weather Monitoring
Project Desc./#: 201029W-06

Enclosed are the results of analyses for samples received by the laboratory on 07/26/10 13:13. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0647

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 32	10G0647-01	Stormwater	07/26/10 09:45	07/26/10 13:13
Site 32-1	10G0647-02	Stormwater	07/26/10 10:45	07/26/10 13:13
Site 46	10G0647-03	Stormwater	07/26/10 11:20	07/26/10 13:13
Site 46-1	10G0647-04	Stormwater	07/26/10 12:15	07/26/10 13:13

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0647

Microbiological Parameters by Standard Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 32 (10G0647-01) Stormwater Sampled: 07/26/10 09:45 Received: 07/26/10 13:13										
Total Coliforms	**173000**	100	100	MPN/100 ml	100	0072716	07/26/10	07/27/10	SM9223	
E. Coli	**43500**	100	100	"	"	"	"	"	"	
Enterococcus	**26130**	100	100	"	"	0072717	07/26/10	07/27/10	Idexx	
Site 32-1 (10G0647-02) Stormwater Sampled: 07/26/10 10:45 Received: 07/26/10 13:13										
Total Coliforms	**285000**	1000	1000	MPN/100 ml	1000	0072716	07/26/10	07/27/10	SM9223	
E. Coli	**141000**	100	100	"	100	"	"	"	"	
Enterococcus	**19863**	10	10	"	10	0072717	07/26/10	07/27/10	Idexx	
Site 46 (10G0647-03) Stormwater Sampled: 07/26/10 11:20 Received: 07/26/10 13:13										
Total Coliforms	**1200000**	1000	1000	MPN/100 ml	1000	0072716	07/26/10	07/27/10	SM9223	
E. Coli	**7700**	10	10	"	10	"	"	"	"	
Enterococcus	**676**	10	10	"	"	0072717	07/26/10	07/27/10	Idexx	
Site 46-1 (10G0647-04) Stormwater Sampled: 07/26/10 12:15 Received: 07/26/10 13:13										
Total Coliforms	**5480**	10	10	MPN/100 ml	10	0072716	07/26/10	07/27/10	SM9223	
E. Coli	**63**	10	10	"	"	"	"	"	"	
Enterococcus	**882**	10	10	"	"	0072717	07/26/10	07/27/10	Idexx	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10G0647

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: 858-586-6600 Fax: 858-586-6644

Email:

Billing Address: Same

Project ID: National City Dry Weather Monitoring

Project #: 201029W-06 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □	8015B (TPH) □ Gas □ Diesel □	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesti	608 / 8082 (Polychlorinated Biph	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □NH	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. □ Total (MTF) □ Feca	Colilert, T+E.Coli □ P/A X Enum	Enterococcus, □ MTF X Entero	Heterotrophic Plate Count (HPC)
1	site 32	7/26/10	9:45	SW	2P															X	X	
2	site 32-1	~	10:45	~	"															X	X	
3	site 46	~	11:20	~	"															X	X	
4	site 46-1	~	12:15	~	"															X	X	
5																						
6																						
7																						
8																						
9																						
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day X 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temp @ Receipt:

COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	
Signature: Manouchehr Dadkhah	7/26/10 1313	Signature
Print: Manouchehr Dadkhah		Print Ma
Company: D-Max Eng.		Company:
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

3 Conca

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

23 September 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10I0326

Project Name: National City Dry Weather Monitoring
Project Desc./#: 201029W-06

Enclosed are the results of analyses for samples received by the laboratory on 09/14/10 12:17. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10I0326

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Site 32	10I0326-01	Stormwater	09/14/10 09:45	09/14/10 12:17
Site 32-2	10I0326-02	Stormwater	09/14/10 11:00	09/14/10 12:17
Site 32-1	10I0326-03	Stormwater	09/14/10 11:30	09/14/10 12:17

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10I0326

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 32 (10I0326-01) Stormwater Sampled: 09/14/10 09:45 Received: 09/14/10 12:17										
Copper	**0.023**	0.001	0.010	mg/l	1	0092119	09/21/10	09/21/10	EPA 200.8	
Site 32-2 (10I0326-02) Stormwater Sampled: 09/14/10 11:00 Received: 09/14/10 12:17										
Copper	**0.022**	0.001	0.010	mg/l	1	0092119	09/21/10	09/21/10	EPA 200.8	
Site 32-1 (10I0326-03) Stormwater Sampled: 09/14/10 11:30 Received: 09/14/10 12:17										
Copper	**0.006**	0.001	0.010	mg/l	1	0092119	09/21/10	09/21/10	EPA 200.8	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10I0326

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site 32 (10I0326-01) Stormwater Sampled: 09/14/10 09:45 Received: 09/14/10 12:17										
Hardness (Total)	**384**	100	100	mg CaCO3/L	10	0091529	09/15/10	09/17/10	EPA 200.7	
Site 32-2 (10I0326-02) Stormwater Sampled: 09/14/10 11:00 Received: 09/14/10 12:17										
Hardness (Total)	**161**	100	100	mg CaCO3/L	10	0091529	09/15/10	09/17/10	EPA 200.7	
Site 32-1 (10I0326-03) Stormwater Sampled: 09/14/10 11:30 Received: 09/14/10 12:17										
Hardness (Total)	**141**	100	100	mg CaCO3/L	10	0091529	09/15/10	09/17/10	EPA 200.7	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10I0326

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0092119											
Blank (0092119-BLK1)					Prepared & Analyzed: 09/21/10						
Copper	ND	0.001	0.010	mg/l							
LCS (0092119-BS1)					Prepared & Analyzed: 09/21/10						
Copper	0.050	0.001	0.010	mg/l	0.0500		101	85-115			
LCS Dup (0092119-BSD1)					Prepared & Analyzed: 09/21/10						
Copper	0.051	0.001	0.010	mg/l	0.0500		101	85-115	0.4	20	
Duplicate (0092119-DUP1)			**Source: 10I0326-01**		Prepared & Analyzed: 09/21/10						
Copper	0.023	0.001	0.010	mg/l		0.023			2	20	
Matrix Spike (0092119-MS1)			**Source: 10I0326-01**		Prepared & Analyzed: 09/21/10						
Copper	0.067	0.001	0.010	mg/l	0.0500	0.023	87	70-130			
Matrix Spike Dup (0092119-MSD1)			**Source: 10I0326-01**		Prepared & Analyzed: 09/21/10						
Copper	0.066	0.001	0.010	mg/l	0.0500	0.023	85	70-130	1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10I0326

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0091529											
Blank (0091529-BLK1)					Prepared: 09/15/10	Analyzed: 09/17/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0091529-DUP1)		**Source: 10I0240-01**			Prepared: 09/15/10	Analyzed: 09/17/10					
Hardness (Total)	260	10	10	mg CaCO3/L		125			70	20	QR-02

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QR-02	The RPD result exceeded the QC limits due to non-homogeneity of sample.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

San Diego, CA 92121

Phone: 858-586-6600 Fax: 858-586-6644

Email: –

Billing Address: Same

Project ID: National City Dry Weather F.up

Project #: 201029W-06 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □ 1664	8015B (TPH) □ Gas □ Diesel □ Ext	624/8260 (VOC) Full BTXE MTBE	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesticides)	608 / 8082 (Polychlorinated Biphenyls)	8141 (Organophosphorus Pesticides)	TBT (Organotin Compounds)	□ pH □ EC □ TSS □ TDS	□ Nitrate □ Nitrite □ TKN □ NH3	CAC Title 22/CAM17 Metals □ TTLC	TCLP (RCRA)	□ Metals □ Organic	Cd Cr Cu Pb Ni Ag Zn	Coliform. □ Total (MTF) □ Fecal (MTF)	Colilert, T+E.Coli □ P/A □ Enumerat	Enterococcus, □ MTF □ Enterolert	Heterotrophic Plate Count (HPC)
1	Site 32	9/14/10	9:45	SW	2 P														X				
2	~~Site 32-1~~ Site 32-2	~	11:00	SW	2 P														X				
3	~~Site 32-2~~ Site 32-1	~	11:30	SW	2 P														X				
4	Per Sara D-Max 9/23/10																						
5																							
6																							
7																							
8																							
9																							
10																							

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[2]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day ☒ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temp @ Receipt: _____

COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	RE
Signature: Manouchehr Dadkhah	9/14/10	Signature: Tu
Print: Manouchehr Dadkhah	1217	Print: Tu
Company: D-Max Eng.		Company:
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date of
disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

EnviroMatrix Analytical, Inc.

12 October 2010

D-Max Engineering
Attn: Arsalan Dadkhah
7220 Trade Street, Suite 119
San Diego, California 92121

EMA Log #: 10J0020

Project Name: National City Dry Weather Monitoring
Project Desc./#: 201029W-06

Enclosed are the results of analyses for samples received by the laboratory on 10/01/10 13:44. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that this data is in compliance both technically and for completeness.

Dan Verdon
Laboratory Director

CA ELAP Certification #: 2564

4340 Viewridge Avenue, Suite A • San Diego, California 92123 • (858) 560-7717 • Fax (858) 560-7763
Analytical Chemistry Laboratory

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10J0020

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
32-2	10J0020-01	Water	10/01/10 09:50	10/01/10 13:44
32-3	10J0020-02	Soil	10/01/10 10:30	10/01/10 13:44
32-4	10J0020-03	Soil	10/01/10 10:45	10/01/10 13:44
32-5	10J0020-04	Soil	10/01/10 10:55	10/01/10 13:44
32-6	10J0020-05	Soil	10/01/10 11:20	10/01/10 13:44
32-7	10J0020-06	Soil	10/01/10 11:35	10/01/10 13:44
32-8	10J0020-07	Soil	10/01/10 11:50	10/01/10 13:44
32-9	10J0020-08	Soil	10/01/10 12:15	10/01/10 13:44
32-10	10J0020-09	Soil	10/01/10 12:30	10/01/10 13:44

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10J0020

Total Metals by EPA 6000/7000 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32-3 (10J0020-02) Soil Sampled: 10/01/10 10:30 Received: 10/01/10 13:44										
Copper	**31.8**	0.09	1.00	mg/kg	1	0100426	10/04/10	10/05/10	EPA 6010	
32-4 (10J0020-03) Soil Sampled: 10/01/10 10:45 Received: 10/01/10 13:44										
Copper	**7.98**	0.09	1.00	mg/kg	1	0100426	10/04/10	10/05/10	EPA 6010	
32-5 (10J0020-04) Soil Sampled: 10/01/10 10:55 Received: 10/01/10 13:44										
Copper	**30.4**	0.09	1.00	mg/kg	1	0100426	10/04/10	10/05/10	EPA 6010	
32-6 (10J0020-05) Soil Sampled: 10/01/10 11:20 Received: 10/01/10 13:44										
Copper	**11.4**	0.09	1.00	mg/kg	1	0100426	10/04/10	10/05/10	EPA 6010	
32-7 (10J0020-06) Soil Sampled: 10/01/10 11:35 Received: 10/01/10 13:44										
Copper	**68.1**	0.09	1.00	mg/kg	1	0100426	10/04/10	10/05/10	EPA 6010	
32-8 (10J0020-07) Soil Sampled: 10/01/10 11:50 Received: 10/01/10 13:44										
Copper	**54.8**	0.09	1.00	mg/kg	1	0100426	10/04/10	10/05/10	EPA 6010	
32-9 (10J0020-08) Soil Sampled: 10/01/10 12:15 Received: 10/01/10 13:44										
Copper	**151**	0.09	1.00	mg/kg	1	0100426	10/04/10	10/05/10	EPA 6010	
32-10 (10J0020-09) Soil Sampled: 10/01/10 12:30 Received: 10/01/10 13:44										
Copper	**175**	0.09	1.00	mg/kg	1	0100426	10/04/10	10/05/10	EPA 6010	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10J0020

Total Metals by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32-2 (10J0020-01) Water Sampled: 10/01/10 09:50 Received: 10/01/10 13:44										
Copper	**0.027**	0.009	0.050	mg/l	1	0100617	10/05/10	10/07/10	EPA 200.7	J

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10J0020

Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32-2 (10J0020-01) Water Sampled: 10/01/10 09:50 Received: 10/01/10 13:44										
Copper	**0.018**	0.001	0.010	mg/l	1	0101118	10/11/10	10/11/10	EPA 200.8	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10J0020

Conventional Chemistry Parameters by Standard/EPA Methods

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
32-2 (10J0020-01) Water Sampled: 10/01/10 09:50 Received: 10/01/10 13:44										
Hardness (Total)	**272**	10	10	mg CaCO3/L	1	0100617	10/05/10	10/08/10	EPA 200.7	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10J0020

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0100426											
Blank (0100426-BLK1)					Prepared & Analyzed: 10/04/10						
Copper	ND	0.09	1.00	mg/kg							
LCS (0100426-BS1)					Prepared & Analyzed: 10/04/10						
Copper	96.2	0.09	1.00	mg/kg	100		96	75-125			
LCS Dup (0100426-BSD1)					Prepared & Analyzed: 10/04/10						
Copper	95.2	0.09	1.00	mg/kg	100		95	75-125	1	20	
Duplicate (0100426-DUP1)			**Source: 10J0026-01**		Prepared & Analyzed: 10/04/10						
Copper	5.87	0.09	1.00	mg/kg		7.24			21	20	QR-02
Matrix Spike (0100426-MS1)			**Source: 10J0026-01**		Prepared & Analyzed: 10/04/10						
Copper	103	0.09	1.00	mg/kg	96.2	7.24	100	75-125			
Matrix Spike Dup (0100426-MSD1)			**Source: 10J0026-01**		Prepared & Analyzed: 10/04/10						
Copper	97.3	0.09	1.00	mg/kg	96.2	7.24	94	75-125	6	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10J0020

Total Metals by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0100617											
Blank (0100617-BLK1)					Prepared: 10/05/10		Analyzed: 10/06/10				
Copper	ND	0.009	0.050	mg/l							
LCS (0100617-BS1)					Prepared: 10/05/10		Analyzed: 10/06/10				
Copper	0.996	0.009	0.050	mg/l	1.00		100	75-125			
LCS Dup (0100617-BSD1)					Prepared: 10/05/10		Analyzed: 10/06/10				
Copper	1.07	0.009	0.050	mg/l	1.00		107	75-125	7	20	
Duplicate (0100617-DUP1)			**Source: 10J0079-02**		Prepared: 10/05/10		Analyzed: 10/06/10				
Copper	0.011	0.009	0.050	mg/l		0.011			0.9	20	J
Matrix Spike (0100617-MS1)			**Source: 10J0079-02**		Prepared: 10/05/10		Analyzed: 10/06/10				
Copper	1.00	0.009	0.050	mg/l	1.00	0.011	99	75-125			
Matrix Spike (0100617-MS2)			**Source: 10J0053-02**		Prepared: 10/05/10		Analyzed: 10/06/10				
Copper	1.08	0.009	0.050	mg/l	1.00	ND	108	75-125			
Matrix Spike Dup (0100617-MSD1)			**Source: 10J0079-02**		Prepared: 10/05/10		Analyzed: 10/06/10				
Copper	0.973	0.009	0.050	mg/l	1.00	0.011	96	75-125	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10J0020

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0101118											
Blank (0101118-BLK1)					Prepared & Analyzed: 10/11/10						
Copper	ND	0.001	0.010	mg/l							
LCS (0101118-BS1)					Prepared & Analyzed: 10/11/10						
Copper	0.054	0.001	0.010	mg/l	0.0500		108	85-115			
LCS Dup (0101118-BSD1)					Prepared & Analyzed: 10/11/10						
Copper	0.052	0.001	0.010	mg/l	0.0500		105	85-115	3	20	
Duplicate (0101118-DUP1)			**Source: 10I0706-01**		Prepared & Analyzed: 10/11/10						
Copper	0.001	0.001	0.010	mg/l		0.001			8	20	J
Matrix Spike (0101118-MS1)			**Source: 10I0706-01**		Prepared & Analyzed: 10/11/10						
Copper	0.046	0.001	0.010	mg/l	0.0500	0.001	90	70-130			
Matrix Spike Dup (0101118-MSD1)			**Source: 10I0706-01**		Prepared & Analyzed: 10/11/10						
Copper	0.045	0.001	0.010	mg/l	0.0500	0.001	86	70-130	3	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Client Name: D-Max Engineering
Project Name: National City Dry Weather Monitoring

EMA Log #: 10J0020

Conventional Chemistry Parameters by Standard/EPA Methods - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0100617											
Blank (0100617-BLK1)					Prepared: 10/05/10	Analyzed: 10/08/10					
Hardness (Total)	ND	10	10	mg CaCO3/L							
Duplicate (0100617-DUP1)		**Source: 10J0079-02**			Prepared: 10/05/10	Analyzed: 10/08/10					
Hardness (Total)	1330	10	10	mg CaCO3/L		1310			1	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Notes and Definitions

QR-02	The RPD result exceeded the QC limits due to non-homogeneity of sample.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ND	Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
NR	Not Reported
dry	Sample results reported on a dry weight basis (if indicated in units column)
RPD	Relative Percent Difference
MDL	Method detection limit (indicated per client's request)

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Phone: 858-586-6600 Fax: 858-586-6600

Email:

Billing Address: Same

Project ID: National City Dry Weather F.up

Project #: 201029W-06 PO #:

ID #	Client Sample ID	Sample Date	Sample Time	Sample Matrix	Container # / Type	Oil & Grease □ 413.1 □ 413.2 □	8015B (TPH) □ Gas □ Diesel □	624/8260 (VOC) Full BTXE MT	625 / 8270 (SVOC) □ PAH only	608 / 8081 (Organochlorine Pesti	608 / 8082 (Polychlorinated Bipl	8141 (Organophosphorus Pesticid	TBT (Organotin Compounds)	□ pH □ EC □ TSS □TDS	□ Nitrate □ Nitrite □ TKN □N	CAC Title 22/CAM17 Metals □ T	TCLP (RCRA) □ Metals □ Org	Cd Cr Cu Pb Ni Ag Zn	Coliform. □ Total (MTF) □ Feca	Colilert, T+E.Coli □ P/A □ Enum	Enterococcus, □ MTF □ Enterc	Heterotrophic Plate Count (HPC)
1	32-2	10/1/10	9:50	Water	1P													X				
2	32-3	"	10:30	Soil	1G																	
3	32-4	"	10:45	"	"																	
4	32-5	"	10:55	"	"																	
5	32-6	"	11:20	"	"																	
6	32-7	"	11:35	"	"																	
7	32-8	"	11:50	"	"																	
8	32-9	"	12:15	"	"																	
9	32-10		12:30	"	"																	
10																						

Matrix Codes: A = Air, DW = Drinking Water, GW = Groundwater, SW = Storm Water
WW = Wastewater, S = Soil, SED = Sediment, SD = Solid, T = Tissue, O = Oil, L = Liquid

Shipped By: □ Courier □ UPS □ FedEx □ USPS □ Client Drop Off □ Other

[1]**Turn-Around-Time:** □ Same Day □ 24 hr □ 48 hr □ 3 day □ 4 day □ 5 day □ STD (7 day)

[1]**Reporting Requirements:** □ Fax □ PDF □ Excel □ Geotracker/EDF □ Hard Copy □ EDT

[1]**Sample Disposal:** □ By Laboratory □ [2]Return to Client: P/U or Delivery □ Archive

Sample Integrity

Correct Containers: Yes No N/A — Containers Properly Preseved: Yes No N/A

Custody Seals Intact: Yes No N/A — Temp @ Receipt:

COC/Labels Agree: Yes No N/A — Sampled By: Client EMA Autosampler

RELINQUISHED BY	DATE/TIME	
Signature: Manouchehr Dadkhah	10/1/10 13:44	Signature: K
Print: Manouchehr Dadkhah		Print: Ke
Company: D-Max Eng.		Company:
Signature		Signature
Print		Print
Company:		Company:
Signature		Signature
Print		Print
Company:		Company:

Project/Sample Comments:

[1]Additional costs may apply, consult a project manager for details.

[2]EMA reserves the right to return any samples that do not match our waste profile.

NOTE: By relinquishing samples to EMA, Inc., client agrees to pay for the services requested on this COC form and any additional analyses performed on this project. Payment for services is due within 30 days from date disposed of 7 days after report has been finalized unless otherwise noted. All work is subject to EMA's terms and conditions.

T=3.2 Onice

Appendix D

Field Data and Trash Assessment Sheets

MRM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 1A			Latitude	32.68575	Watershed: Hydrologic Unit	908
Location	SW of 43rd and Nordica Ave.			Longitude	-117.10166	Hydrologic Area	908.3
				TB Page	1209, H7	Hydrologic Subarea (Optional)	908.31
Date	7/8/10	Time	15:50	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ~~☑ None~~ ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ~~☑ Normal~~ ☑ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other larval, worms, slugs

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ~~☐ N/A~~

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~205 - 208~~ 317 - 320

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.2	NH_3-N (mg/L)	0.699	NO_3 (mg/L)	1.878	Ortho-PO_4 (mg/L)	0.640
pH (pH units)	7.5	TURB (NTU)	9.51	NO_3-N (mg/L)	0.424	Ortho-PO_4 -P (mg/L)	0.209
COND (mS/cm)	1.00	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: mosquito larval in sample water; presence not due to trash!

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 1A DATE: 7/8/10

OBSERVER: MD/BM TIME: 15:50

LOCATION: SW of 43rd and Nordica Ave.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Submarginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15x15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ Potential Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 3			Latitude	32.68183	Watershed: Hydrologic Unit	908
Location	E. 7th St and R Ave.			Longitude	-117.08894	Hydrologic Area	908.3
				TB Page	1290, A7	Hydrologic Subarea (Optional)	908.32
Date	7/9/10	Time	13:30	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** ~~258 – 259~~ 326 - 327

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH3-N (mg/L)	0.055	NO3 (mg/L)	2.916	Ortho-PO4 (mg/L)	0.418
pH (pH units)	8.5	TURB (NTU)	1.84	NO3-N (mg/L)	0.659	Ortho-PO4 -P (mg/L)	0.146
COND (mS/cm)	1.02	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 3 DATE: 7/9/10

OBSERVER: MD/BM TIME: 13:30

LOCATION: E. 7th and R Avenue

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 6 x 6

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MPM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	4		Latitude	32.68726	Watershed	Hydrologic Unit	908
Location	E of 1st St. & U Ave.		Longitude	-117.08749		Hydrologic Area	908.3
			TB Page	1290-A7		Hydrologic Subarea (Optional)	908.31
Date	7/21/10	Time 11:40	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other NA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other NA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other NA
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other NA
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 64-65

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 4 DATE: 7/21/10

OBSERVER: MD/IT TIME: 11:40

LOCATION: E of 1st St. & U Ave.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 8x8

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

NRM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	6		Latitude	32.65668	Watershed	Hydrologic Unit	909
Location	Northbank of Sweetwater River, 500ft E of Highland Ave. Access from North 2nd Ave.		Longitude	-117.08844		Hydrologic Area	909.1
			TB Page	1310-A4		Hydrologic Subarea (Optional)	909.12
Date	7/21/10	Time 14:10	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential Commercial ✓ Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓ Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin ✓ Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather: Sunny Partly Cloudy ✓ Overcast Fog

Tide: N/A Low ✓ Incoming High Outgoing **Tide Height:** 3 ft.

Last Rain: ✓ > 72 hours < 72 hours

Rainfall: ✓ None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor: ✓ None Musty Rotten Eggs Chemical Sewage Other

Color: ✓ None Yellow Brown White Gray Other

Clarity: ✓ Clear Slightly Cloudy Opaque Other

Floatables: ✓ None Trash Bubbles/Foam Sheen Fecal Matter Other

Deposits: None ✓ Sediment/Gravel ✓ Fine Particulates Stains Oily Deposits Other

Vegetation: ✓ None Limited Normal Excessive Other

Biology: None Insects ✓ Algae Fish Snails Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow: Flowing Ponded Dry ✓ Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken ✓ Yes No **Photo #** 70-73

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	22.7	NH_3-N (mg/L)	0.157	NO_3 (mg/L)	ND	Ortho-PO_4 (mg/L)	ND
pH (pH units)	8.9	TURB (NTU)	6.91	NO_3-N (mg/L)		Ortho-PO_4-P (mg/L)	
COND (mS/cm)	>20	MBAS (mg/L)	0.75				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Tidal	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 6 DATE: 7/21/10

OBSERVER: MD/IT TIME: 14:10

LOCATION: Northbank of Sweetwater River, 500ft east of Highland Ave, accers from North 2nd Ave.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Poor

ESTIMATED AREA OF ASSESSMENT L X W (FT): 20x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☑ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

SITE ID: 6

*** Complete the following section for Submarginal, and Poor Evaluations ONLY ***

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive	4				✓	✓		✓				
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction	3		✓	✓		✓	✓					
Fabric/Clothing	1		✓	✓		✓					✓	
Food Packaging												
Food Waste												
Household	2		✓	✓		✓		✓				
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Trash likely originates from littering upstream.

MS4-only (not DW)

MRM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) MS4 Receiving Water

Site ID	Site 13A		Latitude	32.66942	Watershed	Hydrologic Unit	908
Location	NE of 16th St. & National City Blvd. inside Kimball Park		Longitude	-117.10326		Hydrologic Area	908.3
			TB Page	1309, H2		Hydrologic Subarea (Optional)	908.32
Date	7/8/10	Time 9:20	Observer	MD / BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential, (Commercial), Industrial, Agricultural, Parks, Open

Land Use (Secondary) (Optional, greater than 10%): (Residential), Commercial, Industrial, Agricultural, Parks, Open, None

Conveyance (Check one only): Manhole, Catch Basin, (Outlet), Concrete Channel, Natural Creek, Earthen Channel, Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather: Sunny, Partly Cloudy, (Overcast), Fog

Tide: (N/A), Low, Incoming, High, Outgoing **Tide Height:** _____ ft.

Last Rain: (> 72 hours), < 72 hours

Rainfall: (None), < 0.1", > 0.1"

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage	(Other) N/A
Color	None	Yellow	Brown	White	Gray	(Other) N/A
Clarity	Clear		Slightly Cloudy	Opaque		(Other) N/A
Floatables	(None)	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	(None)	Sediment/Gravel	Fine Particulates	Stains	Oily Deposits	Other
Vegetation	(None)	Limited	Normal	Excessive		Other
Biology	(None)	Insects, Algae	Fish, Snails	Mussels/ Barnacles	Insect/ Algae, Insect/ Snail	Other

Water Flow: Flowing, Ponded, (Dry), Tidal

Does the storm drain flow reach the Receiving Water? Yes, No, (N/A)

Evidence of Overland Flow? Yes, (No), Irrigation Runoff, Other: _____

Photo Taken (Yes), No **Photo #** 58-59 (added later)

Field Screening Samples Collected? Yes, (No)

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	DRY	gpm				Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MYAR

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	13A		**Latitude**	32.66942	**Watershed**	**Hydrologic Unit**	908
Location	NE of 16th St. & National City Blvd., inside Kimball Park		**Longitude**	-117.10326		**Hydrologic Area**	908.3
			TB Page	1309-H2		**Hydrologic Subarea** (Optional)	908.32
Date	7/22/10	**Time** 9:10	**Observer**	MD/IT	**Discharge Area** (Optional)		

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 76-77

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.1	NH_3-N (mg/L)	0.178	NO_3 (mg/L)	3.284	Ortho-PO_4 (mg/L)	2.905
pH (pH units)	7.2	TURB (NTU)	5.83	NO_3-N (mg/L)	0.742	Ortho-PO_4-P (mg/L)	0.947
COND (mS/cm)	2.77	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 13 A DATE: 7/22/10

OBSERVER: MD/TT TIME: 9:10

LOCATION: NE of 16th St & National City Blvd, inside Kimball Park

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☐ RECEIVING WATER ☑ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	31A		Latitude	32.66121	Watershed	Hydrologic Unit	909
Location	N of Sweetwater Rd, across from 2nd Ave at the corner of the golf course, S of the bridge		Longitude	-117.08453		Hydrologic Area	909.1
			TB Page	1310-A3		Hydrologic Subarea (Optional)	909.12
Date	7/22/10	Time 11:40	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential Commercial Industrial Agricultural ✓ Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓ Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet Concrete Channel Natural Creek ✓ Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather: Sunny Partly Cloudy ✓ Overcast Fog

Tide: ✓ N/A Low Incoming High Outgoing **Tide Height:** _____ ft.

Last Rain: ✓ > 72 hours < 72 hours

Rainfall: ✓ None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor: ✓ None Musty Rotten Eggs Chemical Sewage Other

Color: ✓ None Yellow Brown White Gray Other

Clarity: ✓ Clear Slightly Cloudy Opaque Other

Floatables: ✓ None Trash Bubbles/Foam Sheen Fecal Matter Other

Deposits: None ✓ Sediment/Gravel ✓ Fine Particulates Stains Oily Deposits Other

Vegetation: ✓ None Limited Normal Excessive Other

Biology: None ✓ Insects Algae Fish Snails Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow: Flowing ✓ Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken ✓ Yes No **Photo #** 82-86

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	21.5	NH_3-N (mg/L)	0.269	NO_3 (mg/L)	1.751	Ortho-PO_4 (mg/L)	0.178
pH (pH units)	7.2	TURB (NTU)	6.49	NO_3-N (mg/L)	0.396	Ortho-PO_4-P (mg/L)	0.058
COND (mS/cm)	21.87	MBAS (mg/L)	0.63				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Large amount of spraypaint cans

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 31A DATE: 7/22/10

OBSERVER: MD/IT TIME: 11:40

LOCATION: N of Sweetwater Rd, across from 2nd ave. at the corner of the golf course, S of the bridge

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 30x30

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☑ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MPM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 32			Latitude	32.65807	Watershed: Hydrologic Unit	909
Location	E. of 2nd Ave., N. of Hwy 54 and Sweetwater ~~Author~~ River			Longitude	-117.08274	Hydrologic Area	909.1
				TB Page	1310, B4	Hydrologic Subarea (Optional)	909.12
Date	7/8/10	Time	11:00	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~247-252~~ 299 – 305

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.0	NH_3-N (mg/L)	0.159	NO_3 (mg/L)	1.848	Ortho-PO_4 (mg/L)	0.539
pH (pH units)	7.2	TURB (NTU)	1.60	NO_3-N (mg/L)	0.418	Ortho-PO_4-P (mg/L)	0.176
COND (mS/cm)	1.30	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 32 DATE: 7/8/10

OBSERVER: MD/BM TIME: 11:00

LOCATION: E. of 2nd Ave., N. of Hwy 54 and Sweetwater River

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☑ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☑ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

SITE ID: Site 32

*** Complete the following section for Submarginal, and Poor Evaluations ONLY ***

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing	1	✓	✓								✓	
Food Packaging	2	✓	✓								✓	
Food Waste												
Household	3	✓	✓								✓	
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: diaper found next to water on side of channel most likely traun from road above;

MRH

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

Field Screening ✓Confirmation For Bacteria IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site 32		Latitude	32.65887	Watershed	Hydrologic Unit	909
Location	E. of 2nd Ave, N of Fwy 54 & Sweetwater River		Longitude	-117.08274		Hydrologic Area	909.1
			TB Page	1310-B4		Hydrologic Subarea (Optional)	909.12
Date	7/26/10	Time 9:45	Observer	MO/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial Industrial Agricultural Parks ✓Open None

Conveyance (Check one only): Manhole Catch Basin ✓Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather Sunny Partly Cloudy ✓Overcast Fog

Tide ✓N/A Low Incoming High Outgoing **Tide Height:** _____ ft.

Last Rain ✓> 72 hours < 72 hours

Rainfall ✓None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor ✓None Musty Rotten Eggs Chemical Sewage Other

Color None ✓Yellow Brown White Gray Other

Clarity ✓Clear Slightly Cloudy Opaque Other

Floatables None ✓Trash Bubbles/Foam Sheen Fecal Matter Other

Deposits None ✓Sediment/Gravel ✓Fine Particulates Stains Oily Deposits Other

Vegetation ✓None Limited Normal Excessive Other

Biology ✓None Insects Algae Fish Snails Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No **Photo #** ~~299~~ - ~~305~~ 103-118

Field Screening Samples Collected? ✓Yes No

Water Temp (°C)	18.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.1	TURB (NTU)	2.11	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NA
COND (mS/cm)	1.00	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

Field Screening ✓Confirmation For Bacteria IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site 32		Latitude	32.65887	Watershed	Hydrologic Unit	909
Location	E of 2nd Ave., N of Fwy 54 & Sweetwater River		Longitude	-117.08274		Hydrologic Area	909.1
			TB Page	1310-B4		Hydrologic Subarea (Optional)	909.12
Date	8/12/10	Time 15:00	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial Industrial Agricultural Parks ✓Open None

Conveyance (Check one only): Manhole Catch Basin ✓Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ✓Sunny Partly Cloudy Overcast Fog

Tide ✓N/A Low Incoming High Outgoing **Tide Height:** ____ ft.

Last Rain ✓> 72 hours < 72 hours

Rainfall ✓None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage	Other NA
Color	None	Yellow	Brown	White	Gray	Other NA
Clarity	Clear		Slightly Cloudy	Opaque		Other NA
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other NA
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other
Vegetation	✓None	Limited	Normal	Excessive		Other

Biology None Insects ✓Algae Fish Snails Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow Flowing Ponded ✓Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No **Photo #** 132-158

Field Screening Samples Collected? Yes ✓No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☐ Yes ✓☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MPN

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

Field Screening Confirmation For _____ ✓ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	Site 32-1		Latitude	32.65975	Watershed	Hydrologic Unit	909
Location	E side Staples, SW corner of Sweetwater Crossing Shopping Center		Longitude	-117.08253		Hydrologic Area	909.1
			TB Page	1310-B4		Hydrologic Subarea (Optional)	909.12
Date	7/26/10	Time 10:45	Observer	MD/TT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial Industrial Agricultural Parks ✓Open None

Conveyance (Check one only): Manhole ✓Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather Sunny Partly Cloudy ✓Overcast Fog

Tide ✓N/A Low Incoming High Outgoing **Tide Height:**_____ft.

Last Rain ✓> 72 hours < 72 hours

Rainfall ✓None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other
Color	✓None	Yellow	Brown	White	Gray	Other
Clarity	✓Clear		Slightly Cloudy	Opaque		Other
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other
Vegetation	✓None	Limited	Normal	Excessive		Other

Biology ✓None Insects Algae Fish Snails Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No **Photo #** 119-121

Field Screening Samples Collected? ✓Yes No

Water Temp (°C)	20.8	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.1	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	0.99	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ✓☐ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For Copper ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 33		Latitude	32.65887	Watershed	Hydrologic Unit	909
Location	E of 2nd Ave, N of Fmy 54 & Sweetwater River		Longitude	-117.08274		Hydrologic Area	909.1
			TB Page	1310-B4		Hydrologic Subarea (Optional)	909.12
Date	2/14/10	Time 9:45	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☑ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 1-9

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	8.1	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	2.16	MBAS (mg/L)	na				

Analytical Lab Samples Collected? ☑ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MPH

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Cu

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 32-1		**Latitude**	32.65978	**Watershed**	**Hydrologic Unit**	909
Location	w end of concrete channel in Sweetwater Crossing Shopping Center		**Longitude**	-117.08231		**Hydrologic Area**	909.1
			TB Page	1310-B4		**Hydrologic Subarea** (Optional)	909.12
Date	3/14/10	**Time** 11:00	**Observer**	MP/CT	**Discharge Area** (Optional)		

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 13-17

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	29.1	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	9.2	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4 -P (mg/L)	na
COND (mS/cm)	1.35	MBAS (mg/L)	na				

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☐ Confirmation For _____ ☑ IC/ID Follow-Up For Cn

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 32-2		**Latitude**	32.65977	**Watershed**	**Hydrologic Unit**	909
Location	Catch basin in SW corner of Sweetwater Crossing Shopping Center, next to Staples		**Longitude**	-117.08266		**Hydrologic Area**	909.1
			TB Page	1310-B4		**Hydrologic Subarea** (Optional)	909.12
Date	7/14/10	**Time** 11:30	**Observer**	MD/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 18-19

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.8	NH_3-N (mg/L)	na	NO_3 (mg/L)	na	Ortho-PO_4 (mg/L)	na
pH (pH units)	7.3	TURB (NTU)	na	NO_3-N (mg/L)	na	Ortho-PO_4-P (mg/L)	na
COND (mS/cm)	1.07	MBAS (mg/L)	na				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

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San Diego Stormwater Copermittees

City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	38			Latitude	32.67265	Watershed: Hydrologic Unit	909
Location	Dirt road, W of Harbison Ave., between 20th St & 24th St., at the end of fence line			Longitude	-117.07057	Hydrologic Area	909.1
				TB Page	1310-C2	Hydrologic Subarea (Optional)	909.12
Date	7/21/10	Time	9:50	Observer	MB/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 60-61

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)	20.1	NH_3-N (mg/L)	1.965	NO_3 (mg/L)	1.919	Ortho-PO_4 (mg/L)	2.615
pH (pH units)	6.8	TURB (NTU)	5.37	NO_3-N (mg/L)	0.434	Ortho-PO_4 -P (mg/L)	0.852
COND (mS/cm)	1.36	MBAS (mg/L)	0.75				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 38 DATE: 7/21/10

OBSERVER: MD/IT TIME: 9:50

LOCATION: Dirt road, W of Harbison Ave., between 20th & 24th St., at end of fence line

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 10x10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

Field Screening ✓Confirmation For Ammonia IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	38			Latitude	32.67265	Watershed: Hydrologic Unit	909
Location	Dirt road, W of Harbison Ave., between 20th & 24th Streets, at the end of fence line.			Longitude	-117.07057	Hydrologic Area	909.1
				TB Page	1310-C2	Hydrologic Subarea (Optional)	909.12
Date	7/22/10	Time	11:15	Observer	MD/CT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial Industrial Agricultural Parks Open ✓None

Conveyance (Check one only): Manhole Catch Basin Outlet Concrete Channel Natural Creek ✓Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	✓Overcast	Fog		
Tide	✓N/A	Low	Incoming	High	Outgoing	**Tide Height:** ____ ft.
Last Rain	✓> 72 hours	< 72 hours				
Rainfall	✓None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage	Other NS
Color	None	Yellow	Brown	White	Gray	Other NS
Clarity	Clear		Slightly Cloudy	Opaque		Other NS
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other NS
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other
Vegetation	None	Limited	✓Normal	Excessive		Other

Biology: None ✓Insects Algae Fish Snails Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow: Flowing Ponded ✓Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken Yes ✓No **Photo #** _____

Field Screening Samples Collected? Yes ✓No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☐ Yes ✓☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

HRH

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 40			Latitude	32.65961	Watershed: Hydrologic Unit	909
Location	SW corner of Sweetwater Rd and Plaza Bonita/Stockman St. dam channel			Longitude	-117.06677	Hydrologic Area	909.1
				TB Page	1310, D3	Hydrologic Subarea (Optional)	909.12
Date	7/8/10	Time	15:00	Observer	MD/BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other algae
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~200 – 204~~ 312 – 316

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.9	NH_3-N (mg/L)	0.335	NO_3 (mg/L)	3.269	Ortho-PO_4 (mg/L)	1.150
pH (pH units)	7.9	TURB (NTU)	3.74	NO_3-N (mg/L)	0.869	Ortho-PO_4-P (mg/L)	0.375
COND (mS/cm)	2.95	MBAS (mg/L)	0.25				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	2	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004, 4/15/2005, 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 40 DATE: 7/8/10

OBSERVER: MD/BM TIME: 15:00

LOCATION: SW corner of Sweetwater Rd. & Plaza Bonita/ Stockman St. downchannel

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20 x 20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	41			Latitude	32.66588	Watershed: Hydrologic Unit	909
Location	NE of San Miguel Ct. & Valley Rd, inside Park Bonita Apt. Complex			Longitude	-117.05083	Hydrologic Area	909.1
				TB Page	1310 E2	Hydrologic Subarea (Optional)	909.12
Date	7/21/10	Time	11:00	Observer	MD/IT	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 62-63

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.8	NH_3-N (mg/L)	0.182	NO_3 (mg/L)	5.154	Ortho-PO_4 (mg/L)	0.517
pH (pH units)	7.9	TURB (NTU)	0.75	NO_3-N (mg/L)	1.165	Ortho-PO_4 -P (mg/L)	0.169
COND (mS/cm)	3.69	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width	5	in
Depth	0.5	in
Velocity	5/10	ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 41 DATE: 7/21/10

OBSERVER: MD/TT TIME: 11:00

LOCATION: NE of San Miguel Ct. & Valley Rd, inside Park Bonita Apt complex

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x20

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

NP

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	42		Latitude	32.66785	Watershed	Hydrologic Unit	909
Location	SW of Euclid Ave. & 24th St., S of Southern Community Church		Longitude	-117.07691		Hydrologic Area	909.1
			TB Page	1310-B2		Hydrologic Subarea (Optional)	909.12
Date	7/21/10	Time 15:40	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other NA
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other NA
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other NA
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other NA
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 68-69

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 42 DATE: 7/21/10

OBSERVER: MD/TT TIME: 13:40

LOCATION: SW of Euclid Ave. & 24th St., S of Southern Community Church

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	43A		Latitude	32.66134	Watershed	Hydrologic Unit	909
Location	F Ave. between E. 24th St. & E. 28th St., W of Olivewood Elementary School		Longitude	-117.09447		Hydrologic Area	909.1
			TB Page	1309-J3		Hydrologic Subarea (Optional)	909.12
Date	7/22/10	Time 9:50	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓ Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓ Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole ✓ Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	✓ Overcast	Fog		
Tide	✓ N/A	Low	Incoming	High	Outgoing	**Tide Height:** ____ ft.
Last Rain	✓ 72 hours	< 72 hours				
Rainfall	✓ None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage	Other NS
Color	None	Yellow	Brown	White	Gray	Other NS
Clarity	Clear		Slightly Cloudy	Opaque		Other NS
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other NS
Deposits	None	✓ Sediment/Gravel	✓ Fine Particulates	Stains	Oily Deposits	Other ~~NS~~
Vegetation	✓ None	Limited	Normal	Excessive		Other
Biology	✓ None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow Flowing Ponded ✓ Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken ✓ Yes No **Photo #** 74-75

Field Screening Samples Collected? Yes ✓ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4 -P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☐ Yes ✓ ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 13A DATE: 7/22/10

OBSERVER: MD/CT TIME: 9:50

LOCATION: F Ave. between E. 24th St. & E. 28th St., W of Olivewood Elementary School

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MEM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) MS4 ✓ Receiving Water

Site ID	44		Latitude	32.66982	Watershed	Hydrologic Unit	908
Location	NE of 16th St. & National City Blvd, under the Kimball Park Bridge		Longitude	-117.10247		Hydrologic Area	908.3
			TB Page	1309-H2		Hydrologic Subarea (Optional)	908.32
Date	7/22/16	Time 13:40	Observer	MD/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): ✓Residential Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather Sunny Partly Cloudy ✓Overcast Fog

Tide ✓N/A Low ✓Incoming High Outgoing **Tide Height:** 2.5 ft.

Last Rain ✓> 72 hours < 72 hours

Rainfall ✓None < 0.1" > 0.1"

RUNOFF CHARACTERISTICS

Odor ✓None Musty Rotten Eggs Chemical Sewage Other

Color ✓None Yellow Brown White Gray Other

Clarity ✓Clear Slightly Cloudy Opaque Other

Floatables None Trash ✓Bubbles/Foam Sheen Fecal Matter Other

Deposits None ✓Sediment/Gravel ✓Fine Particulates Stains Oily Deposits Other

Vegetation ✓None Limited Normal Excessive Other

Biology None ✓Insects ✓Algae Fish Snails Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow Flowing ✓Ponded Dry ✓Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No **Photo #** 87-88

Field Screening Samples Collected? ✓Yes No

Water Temp (°C)	23.9	NH3-N (mg/L)	0.178	NO3 (mg/L)	0.208	Ortho-PO4 (mg/L)	0.603
pH (pH units)	8.5	TURB (NTU)	4.66	NO3-N (mg/L)	0.047	Ortho-PO4 -P (mg/L)	0.197
COND (mS/cm)	72.6	MBAS (mg/L)	0.75				

Analytical Lab Samples Collected? ☐ Yes ✓☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Tidal	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

2010 Trash Assessment Form

SITE ID: 44 DATE: 7/22/10

OBSERVER: MP/IT TIME: 13:40

LOCATION: NE of 16th St. & National City Blvd, under the Kimball Park Bridge

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 30x15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ MS4 ☑ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	11A		**Latitude**	32.67151	**Watershed**	**Hydrologic Unit**	908
Location	D Ave. behind Boys & Girls Club in Kimball Park		**Longitude**	-117.10123		**Hydrologic Area**	908.3
			TB Page	1309-H2		**Hydrologic Subarea** (Optional)	908.32
Date	7/21/10	**Time** 12:05	**Observer**	MD/IT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☑ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** 66-67

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.182	NO_3 (mg/L)	0.055	Ortho-PO_4 (mg/L)	0.624
pH (pH units)	8.6	TURB (NTU)	4.51	NO_3-N (mg/L)	0.012	Ortho-PO_4 -P (mg/L)	0.203
COND (mS/cm)	1.25	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	<1	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 44A DATE: 7/21/10

OBSERVER: MD/IT TIME: 12:05

LOCATION: D Ave. behind Boys & Girls Club in Kimball Park

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Marginal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 20x15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 45		Latitude	32.68739	Watershed	Hydrologic Unit	908
Location	In front of 1243-1305 Fig Ct. in middle of street		Longitude	-117.09690		Hydrologic Area	908.3
			TB Page	1310, D3		Hydrologic Subarea (Optional)	908.31
Date	7/8/10	Time 9:45	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other:

Photo Taken ☑ Yes ☐ No **Photo #** ~~241 - 244~~ ~~241 - 244~~ 293 - 296

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	19.9	NH3-N (mg/L)	0.260	NO3 (mg/L)	2.359	Ortho-PO4 (mg/L)	3.968
pH (pH units)	7.9	TURB (NTU)	262	NO3-N (mg/L)	0.533	Ortho-PO4 -P (mg/L)	1.294
COND (mS/cm)	1.77	MBAS (mg/L)	3.0				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	/	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: width, depth, and velocity unable to be determined because of manhole accessibility

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 45 DATE: 7/8/10

OBSERVER: MD/BM TIME: 9:45

LOCATION: In front of 1243-1305 Fig Court in middle of Street

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 15 x 10

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees

City of National City

Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For MBAS, TURB ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION

(NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 45			Latitude	32.68739	Watershed: Hydrologic Unit	908
Location	In front of 1243-1305 Fig Cir. in middle of street			Longitude	-117.09690	Hydrologic Area	908.3
				TB Page	1310, D3	Hydrologic Subarea (Optional)	908.31
Date	7/9/10	Time	11:30	Observer	MD / BM	Discharge Area (Optional)	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only): ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** _____ ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae ☐ Fish ☐ Snails		☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.4	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	8.00	TURB (NTU)	4.81	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.48	MBAS (mg/L)	0.75				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	4	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

LM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

Field Screening ✓ Confirmation For Bacteria IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	Site 45		Latitude	32.68739	Watershed	Hydrologic Unit	908
Location	In front of 1243-1305 Fig Court in middle of street		Longitude	-117.09690		Hydrologic Area	908.3
			TB Page	1310-D		Hydrologic Subarea (Optional)	908.31
Date	8/12/10	Time 14:00	Observer	MP/HT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial Industrial Agricultural ✓Parks Open None

Conveyance (Check one only): ✓Manhole Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	✓Sunny	Partly Cloudy	Overcast	Fog		
Tide	✓N/A	Low	Incoming	High	Outgoing	**Tide Height:** ____ ft.
Last Rain	✓> 72 hours	< 72 hours				
Rainfall	✓None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage	Other NA
Color	None	Yellow	Brown	White	Gray	Other NA
Clarity	Clear		Slightly Cloudy	Opaque		Other NA
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other NA
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other
Vegetation	✓None	Limited	Normal	Excessive		Other

Biology: None ✓Insects Algae Fish Snails Mussels/Barnacles Insect/Algae Insect/Snail Other

Water Flow: Flowing Ponded ✓Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken ✓Yes No **Photo #** 124-131

Field Screening Samples Collected? Yes ✓No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☐ Yes ✓☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	Dry	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 416		**Latitude**	32.67584	**Watershed**	**Hydrologic Unit**	908.
Location	S. of South Bay Plaza Center btwn Fashion Plaza and Fiesta Pet Shop		**Longitude**	-117.09539		**Hydrologic Area**	908.3
			TB Page	1309, J1		**Hydrologic Subarea** (Optional)	908.32
Date	7/8/10	**Time** 11:50	**Observer**	MD/BM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☑ Other between musty and sewage
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~254-255~~ 306-307

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.5	NH_3-N (mg/L)	0.080	NO_3 (mg/L)	3.058	Ortho-PO_4 (mg/L)	0.967
pH (pH units)	7.1	TURB (NTU)	8.00	NO_3-N (mg/L)	0.691	Ortho-PO_4-P (mg/L)	0.315
COND (mS/cm)	1.17	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 46 DATE: 7/8/10

OBSERVER: MD/BM TIME: 11:50

LOCATION: S. of Sunny Bay Plaza Center between Fashion Plaza & Fiesta Pet Shop

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Optimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

Field Screening ✓Confirmation For Bacteria IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓MS4 Receiving Water

Site ID	Site 46		Latitude	32.67584	Watershed	Hydrologic Unit	908
Location	S. of South Bay Plaza center between Fashion Plaza & Fiesta Pet Shop		Longitude	-117.09539		Hydrologic Area	908.3
			TB Page	1309-J1		Hydrologic Subarea (Optional)	908.32
Date	7/26/10	Time 11:20	Observer	MO/KT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): Residential ✓Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): ✓Residential Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): ✓Manhole Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	✓Overcast	Fog		
Tide	✓N/A	Low	Incoming	High	Outgoing	**Tide Height:** ____ ft.
Last Rain	✓> 72 hours	< 72 hours				
Rainfall	✓None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	✓None	Musty	Rotten Eggs	Chemical	Sewage	Other			
Color	✓None	Yellow	Brown	White	Gray	Other			
Clarity	✓Clear		Slightly Cloudy	Opaque	Other				
Floatables	✓None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other			
Deposits	None	✓Sediment/Gravel	✓Fine Particulates	Stains	Oily Deposits	Other			
Vegetation	✓None	Limited	Normal	Excessive	Other				
Biology	✓None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow ✓Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓N/A

Evidence of Overland Flow? Yes ✓No Irrigation Runoff Other: _____

Photo Taken Yes ✓No **Photo #** ~~124-05~~

Field Screening Samples Collected? ✓Yes No

Water Temp (°C)	21.6	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.2	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4 -P (mg/L)	NB
COND (mS/cm)	1.26	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ☑Yes ☐No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	<1	gpm				Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

Field Screening Confirmation For _____ ✓ IC/ID Follow-Up For Bacteria

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	Site 46-1		Latitude	32.68183	Watershed	Hydrologic Unit	908
Location	East 7th St. & Rue.		Longitude	-117.08894		Hydrologic Area	908.3
			TB Page	1290-A7		Hydrologic Subarea (Optional)	908.32
Date	7/26/10	Time 12:15	Observer	MO/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓ Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓ Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): ✓ Manhole Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	✓ Overcast	Fog		
Tide	✓ N/A	Low	Incoming	High	Outgoing	**Tide Height:** ____ ft.
Last Rain	✓ > 72 hours	< 72 hours				
Rainfall	✓ None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	✓ None	Musty	Rotten Eggs	Chemical	Sewage	Other			
Color	✓ None	Yellow	Brown	White	Gray	Other			
Clarity	✓ Clear		Slightly Cloudy	Opaque	Other				
Floatables	✓ None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other			
Deposits	None	✓ Sediment/Gravel	✓ Fine Particulates	Stains	Oily Deposits	Other			
Vegetation	✓ None	Limited	Normal	Excessive	Other				
Biology	✓ None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow ✓ Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken Yes ✓ No **Photo #** _____

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	22.3	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.6	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	1.02	MBAS (mg/L)	NA				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	3	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Width, Depth, Velocity unable to be determined because ~~[illegible]~~ site is deep manhole.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

MRM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☑ Field Screening ☐ Confirmation For _____ ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 47		**Latitude**	32.66163	**Watershed**	**Hydrologic Unit**	908
Location	E corner of Mile of Cars Way and Transportation Ave.		**Longitude**	-117.10275		**Hydrologic Area**	908.3
			TB Page	1309, H3		**Hydrologic Subarea** (Optional)	908.32
Date	7/8/10	**Time** 13:50	**Observer**	MD/BM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☐ N/A ☑ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** 2.5 ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☑ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** ~~250 – 250~~ 308 – 310

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.4	NH_3-N (mg/L)	0.252	NO_3 (mg/L)	1.177	Ortho-PO_4 (mg/L)	0.547
pH (pH units)	7.35	TURB (NTU)	10.38	NO_3-N (mg/L)	0.266	Ortho-PO_4-P (mg/L)	0.178
COND (mS/cm)	> 20.00	MBAS (mg/L)	1.5				

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow		gpm				Flow		gpm

COMMENTS: tide at minimum elevation; width, depth & velocity unable to be determined due to inaccessibility.

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: Site 97 DATE: 7/8/10

OBSERVER: MD / BM TIME: 13:50

LOCATION: SE corner of Mile of Cars Way & Transportation Ave.

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): optimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 4x4

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☑ Optimal	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ Suboptimal	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ Marginal	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ Submarginal	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ Poor	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☑ ~~Potential~~ Threat to Human Health	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ Potential Threat to Aquatic Health	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

MRM

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

☐ Field Screening ☑ Confirmation For MBAS ☐ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ MS4 ☐ Receiving Water

Site ID	Site 47		Latitude	32.6681163	Watershed	Hydrologic Unit	908
Location	SE corner of Mile of cars way and Transportation Arc.		Longitude	-117.10275		Hydrologic Area	908.3
			TB Page	1309, H3		Hydrologic Subarea (Optional)	908.32
Date	7/9/10	Time 13:00	Observer	MD/BM		Discharge Area (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** 2.5 ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☑ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.7	NH_3-N (mg/L)	NA	NO_3 (mg/L)	NA	Ortho-PO_4 (mg/L)	NA
pH (pH units)	7.55	TURB (NTU)	NA	NO_3-N (mg/L)	NA	Ortho-PO_4-P (mg/L)	NA
COND (mS/cm)	>20.00	MBAS (mg/L)	1.0				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	48		Latitude	32.67673	Watershed	Hydrologic Unit	908
Location	NW of E 14th St. & Grove St.		Longitude	-117.08321		Hydrologic Area	908.3
			TB Page	1310-B1		Hydrologic Subarea (Optional)	908.32
Date	7/22/10	Time 10:15	Observer	MO/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓ Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential Commercial Industrial Agricultural Parks Open ✓ None

Conveyance (Check one only): Manhole ✓ Catch Basin Outlet Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	✓ Overcast	Fog		
Tide	✓ N/A	Low	Incoming	High	Outgoing	**Tide Height:** ____ ft.
Last Rain	✓ > 72 hours	< 72 hours				
Rainfall	✓ None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage	Other NS
Color	None	Yellow	Brown	White	Gray	Other NS
Clarity	Clear		Slightly Cloudy	Opaque		Other NS
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other NS
Deposits	None	✓ Sediment/Gravel	✓ Fine Particulates	Stains	Oily Deposits	Other
Vegetation	✓ None	Limited	Normal	Excessive		Other

Biology: ✓ None Insects Algae Fish Snails Mussels/ Barnacles Insect/ Algae Insect/ Snail Other

Water Flow: Flowing Ponded ✓ Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken ✓ Yes No **Photo #** 78-79

Field Screening Samples Collected? Yes ✓ No

Water Temp (°C)	NS	NH_3-N (mg/L)	NS	NO_3 (mg/L)	NS	Ortho-PO_4 (mg/L)	NS
pH (pH units)	NS	TURB (NTU)	NS	NO_3-N (mg/L)	NS	Ortho-PO_4-P (mg/L)	NS
COND (mS/cm)	NS	MBAS (mg/L)	NS				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert			Filling a Bottle or Known Volume			Flowing Pipe		
Width		in	Volume		mL	Diameter		ft
Depth		in	Time to Fill		sec	Depth		ft
Velocity		ft/sec	Flow		gpm	Velocity		ft/sec
Flow	Dry	gpm				Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 18 DATE: 7/22/10

OBSERVER: MD/IT TIME: 10:15

LOCATION: NW of E. 14th St. & Grove St

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L x W (FT): 5x5

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

San Diego Stormwater Copermittees
City of National City
Dry Weather Monitoring Field Datasheet

✓ Field Screening Confirmation For _____ IC/ID Follow-Up For _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ✓ MS4 Receiving Water

Site ID	19		Latitude	32.68102	Watershed	Hydrologic Unit	908
Location	S end Arcadia Pl (through Harbison Ave & 14th St.)		Longitude	-117.07751		Hydrologic Area	908.3
			TB Page	1290-D7		Hydrologic Subarea (Optional)	908.32
Date	7/22/10	Time 10:40	Observer	MO/IT		Discharge Area (Optional)	

Land Use (Primary) (Check one only): ✓ Residential Commercial Industrial Agricultural Parks Open

Land Use (Secondary) (Optional, greater than 10%): Residential ✓ Commercial Industrial Agricultural Parks Open None

Conveyance (Check one only): Manhole Catch Basin Outlet ✓ Concrete Channel Natural Creek Earthen Channel Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	✓ Overcast	Fog		
Tide	✓ N/A	Low	Incoming	High	Outgoing	**Tide Height:** _____ ft.
Last Rain	✓ 72 hours	< 72 hours				
Rainfall	✓ None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	✓ None	Musty	Rotten Eggs	Chemical	Sewage			Other
Color	None	✓ Yellow	Brown	White	Gray			Other
Clarity	✓ Clear		Slightly Cloudy	Opaque				Other
Floatables	✓ None	Trash	Bubbles/Foam	Sheen	Fecal Matter			Other
Deposits	None	✓ Sediment/Gravel	✓ Fine Particulates	Stains	Oily Deposits			Other
Vegetation	✓ None	Limited	Normal	Excessive				Other
Biology	None	Insects	✓ Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow Flowing ✓ Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No ✓ N/A

Evidence of Overland Flow? Yes ✓ No Irrigation Runoff Other: _____

Photo Taken ✓ Yes No **Photo #** ~~81-82~~ 80-81

Field Screening Samples Collected? ✓ Yes No

Water Temp (°C)	20.4	NH_3-N (mg/L)	0.167	NO_3 (mg/L)	1.568	Ortho-PO_4 (mg/L)	2.985
pH (pH units)	7.8	TURB (NTU)	6.70	NO_3-N (mg/L)	0.354	Ortho-PO_4-P (mg/L)	0.973
COND (mS/cm)	1.81	MBAS (mg/L)	0.5				

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		in
Depth		in
Velocity		ft/sec
Flow	ponded	gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Revised 4/20/2004. 4/15/2005. 4/19/2006, 3/13/2008

2010 Trash Assessment Form

SITE ID: 49 DATE: 7/22/10

OBSERVER: MD/TT TIME: 10:40

LOCATION: S end of Arcadia Pl (through Harbison Ave. & 11th St.)

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): Suboptimal

ESTIMATED AREA OF ASSESSMENT L X W (FT): 15x15

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ MS4 ☐ RECEIVING WATER ☐ BOTH	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

CITY OF NATIONAL CITY

2010/2011

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

SEPTEMBER 2011

PREPARED BY:

D-MAX ENGINEERING, INC.
7220 TRADE STREET, SUITE 119
SAN DIEGO, CALIFORNIA 92121
858.586.6600

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ACRONYMS AND ABBREVIATIONS

Acronym	Abbreviation
°C	Degrees Celsius
303(d) List	2006 Clean Water Act Section 303(d) List of Water Quality Limited Segments
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
BMP Manual	The City of National City Storm Water Best Management Practices Manual
CASQA	California Stormwater Quality Association
CIP	Capital Improvement Project
CIWMB	California Integrated Waste Management Board
CIWQS	California Integrated Water Quality Management System
City	City of National City
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CMC	Criteria Maximum Concentration
CMP	Corrugated Metal Pipe
CTR	California Toxics Rule
CWA	Clean Water Act/Federal Water Pollution Control Act
D-MAX	D-MAX Engineering, Inc.
DEH	County of San Diego Department of Environmental Health
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FOG	Fats, Oils, and Grease
General Construction Permit	State of California Construction General Permit
GIS	Geographic Information System
gpm	Gallons Per Minute
HA	Hydrologic Area
HDPE	High Density Polyethylene
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HOA	Home Owners' Association
HU	Hydrologic Unit
IC/ID	Illicit Connection/Illicit Discharge
IHC	Interim Hydromodification Criteria
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
IMP	Integrated Management Practice
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
LID	Low Impact Development
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable
mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) per 100 milliliters
MS4	Municipal Separate Storm Sewer System
mS/cm	MilliSiemens Per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
nt	Not Tested
NTC	Notice to Comply
NTU	Nephelometric Turbidity Unit
PDPA	Pollutant Discharge Potential Assessment
Priority Project	Priority Development Project
PW	Public Works
RCP	Reinforced Concrete Pipe
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Government
SIC	Standard Industrial Classification
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 14.22 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TSS	Total Suspended Solids
TTWQ	Threat to Water Quality
WDID	Waste Discharge Identification Number
WQO	Basin Plan Water Quality Objectives
WQTR	Water Quality Technical Report
WURMP	Watershed Urban Runoff Management Program
µg/L	Micrograms Per Liter

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Maryam Babaki, P.E.
Director of Development Services / City Engineer

Date: 9-28-2011

Telephone Number: (619) 336-4380

EXECUTIVE SUMMARY

The City of National City (City) has been actively developing and implementing storm water pollution prevention measures since 1990. The City's current Jurisdictional Urban Runoff Management Program (JURMP) was prepared in March 2008 in response to San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit). The Municipal Permit was jointly issued to 18 municipalities in San Diego County, including the City, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (collectively referred to as "Copermittees").

At the end of each fiscal year, the City is required to report a summary of its JURMP implementation activities to the RWQCB. This JURMP Annual Report presents the City's activities during the 2010/2011 fiscal year, which began on July 1, 2010 and ended on June 30, 2011. Each section of this JURMP Annual Report discusses how the City's efforts during 2010/2011 met the requirements of the Municipal Permit. Key actions taken for the major components of the City's storm water program are summarized below.

Development Planning Component

During 2010/2011, the City continued to oversee development activities occurring in the City to mitigate potential threats to water quality due to such activities. The City's development requirements were updated to incorporate the requirements of the regionally developed final Hydromodification Management Plan in January 2011, as required by the Municipal Permit. City staff attended a training session on the new requirements and worked with project applicants to ensure appropriate requirements were applied to submitted designs. The City continued to require all development projects to submit applicability checklists to determine subjectivity to the City's SUSMP requirements. The City implemented its treatment control BMP operation and maintenance verification program, which included the utilization of a Microsoft Access treatment control BMP database to track information and prepare the maintenance verification letters distributed to responsible parties. The City also conducted 18 inspections at sites with approved treatment control BMPs and exceeded Municipal Permit inspection frequencies.

Construction Component

During 2010/2011, a total of 71 construction storm water compliance inspections were completed at 10 construction sites, not including inspections for building permits, which also include a brief check for storm water BMPs. The City checked all construction projects for applicability to the maximum disturbed area limitation and guidelines for advanced treatment. The City's plan check process provided construction BMP fact sheets, and the inspection program required projects to comply with the City's minimum BMP requirements.

Municipal Component

The City inspected all high TTWQ municipal fixed facilities and continued its rigorous street sweeping and MS4 maintenance programs. A total of 980 tons of sediment and debris were removed from street sweeping activities, and 21.5 tons of debris were removed from standard MS4 maintenance. The City continued to maintain and repair or replace sanitary sewer lines, as needed, to decrease the potential for a sanitary sewer overflow (SSO). No public SSOs occurred during 2010/2011. The City received and appropriately addressed all complaints received by the City's Storm Water Hotline, the City website, and other City departments.

Industrial and Commercial Component

During 2010/2011 the City met the Municipal Permit requirement to inspect at least 25 percent of the City's industrial and commercial inventory, including 100 percent of its high threat to water quality (TTWQ) sites. During the inspections conducted in 2010/2011, the City notified industrial and commercial businesses of the City's BMP requirements through the City's inspection program. Additionally, the City notified businesses not recently inspected of the City's JURMP BMP requirements in March 2011. Inspectors also assessed each facility's compliance with the General Industrial Permit (Industrial Permit). The City also continued to collect additional data to assess the pollutant discharge potential at each site.

Residential Component

The City used various methods to provide storm water education to its residents. During 2010/2011, the City continued to collaborate with the cities of Chula Vista and Imperial Beach to encourage residents to dispose of household hazardous waste (HHW) appropriately at a facility available to the public. The City also continued to host large item waste disposal events in fall and spring, as well as respond to calls made to the City storm water hotline regarding residential areas.

Illicit Discharge Detection and Elimination Component

On September 10, 2008, the RWQCB adopted Addendum No. 2 to the Municipal Permit. This addendum requires the City to wait to submit the illicit discharge detection and elimination (IDDE) section of its JURMP Annual Report until the report for the 2011 Dry Weather Field Screening and Analytical Monitoring Program is finalized. The 2010/2011 section must be submitted to the RWQCB no later than December 15, 2011.

Education Component

As a means to raise storm water awareness in various communities in the City, the City continued to conduct various education and outreach activities throughout 2010/2011. The City's efforts resulted in an estimated 10,370 impressions. The City also began development of a bilingual 2012 Storm Water Program Calendar, which will present storm water concepts as well as storm water related artwork created by local third grade students in June 2011. To better serve the City's diverse population, a variety of its educational materials are distributed in Spanish as well as English.

Public Participation Component

During 2010/2011, the City provided a variety of opportunities for individuals in the City to participate in the City's storm water program. Activities included cleanup events, which have a direct effect on water quality, as well as outreach activities, through which the City works to increase general knowledge and awareness regarding storm water issues. The City organized the Storm Water Calendar Third Grade Art Contest with help from the local school district, which will provide art for a 2012 calendar in development. In addition, 361 volunteers participated in the Coastal Cleanup Day and Creek to Bay cleanups at two different sites in the City. Also, City residents continued to participate in routine large item and HHW waste disposal events.

Fiscal Analysis Component

The City continued to fund its storm water program as discussed in the City's JURMP. During 2009/2010, a fiscal analysis reporting template was developed collectively by the Copermittees. The City used this template to report the 2010/2011 program budget in this JURMP Annual Report.

Effectiveness Assessment Component

The City continued to evaluate the effectiveness of its storm water program based on the approach presented in the City's JURMP. The City has identified significant activities within each program component and metrics to assess each one. Standard tables to report this information have been created and included in Section 11 of this JURMP Annual Report. The City has seen some encouraging signs of the effect of its program, such as decreasing median concentrations of pollutants in runoff during its Dry Weather Monitoring Program in recent years.

Special Investigations

The City continued its Clean Community Program which promotes shared responsibility within communities to keep National City and local receiving water bodies clean and free of pollution. The City also assessed pollutant discharge potential of industrial and commercial businesses; sediment, trash, and oil and grease had the highest average pollutant discharge potential scores.

Conclusions and Recommendations

The City will continue to implement the new and updated programs in its JURMP during 2010/2011; it is anticipated that some program refinements will be made as implementation progresses. The City will also continue to collaborate with the other Copermittees to improve the efficiency of its program.

1.0 INTRODUCTION

1.1 BACKGROUND

This Jurisdictional Urban Runoff Management Program (JURMP) Annual Report presents an activity summary for the City of National City (City) during the 2010/2011 fiscal year. The JURMP Annual Report preparation and submission are required by San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit).

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), established a framework for regulating Municipal Separate Storm Sewer System (MS4) discharges under the National Pollutant Discharge Elimination System (NPDES). In 1990, the RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region, followed by a revised permit in 2001. RWQCB Order No. 2001-01 was replaced by the current Municipal Permit in 2007.

In 2002, the City, like all regulated municipalities in the San Diego region (collectively referred to as Copermittees), developed and submitted a JURMP to the RWQCB. The City then submitted an updated JURMP, as required by the Municipal Permit, in March 2008. The JURMP explains management measures for different sectors, including municipal, industrial, commercial, construction, and significant development and re-development activities.

Annual reports documenting the implementation of the JURMP are required to be submitted to the RWQCB by September 30. This JURMP Annual Report presents data from the 2010/2011 fiscal year, which extended from July 1, 2010, to June 30, 2011.

No TMDLs have been adopted for water bodies within or downstream of the City of National City at this time.

1.1.2 CITY SETTING

The City of National City is located in southwest San Diego County, surrounded by the City of San Diego, Chula Vista, and unincorporated portions of San Diego County. The City itself covers approximately nine square miles and has an estimated population size of approximately 61,000 residents. Land use within the City is primarily residential, although a large industrial area can be found along the San Diego Bay. Commercial development is restricted to businesses and shopping centers along the main roadways. Land use is broken down by area and percentage of total in Table 1-1 and illustrated in Figure 1-1.

Table 1-1
City of National City Land Use Breakdown

Land Use	Total Area (Acres)	Percentage
Single Family Residential	1,216	30%
Transportation	1,149	29%
Commercial	490	12%
Industrial	251	6%
Multi-Family Residential	215	5%
Open	202	5%
Public Facilities and Utilities	174	4%
Vacant	115	3%
Parks	114	3%
Other Residential	41	1%
Office	22	1%
Water	20	<1%
Construction	6	<1%
Recreation	2	<1%
Total	**4,016**	**100%**

Source: 2007 SANDAG land-use data

The City of National City lies entirely within the San Diego Bay Watershed and constitutes approximately 1.6 percent of its total area. More specifically, the City is located within two sub-watersheds: Sweetwater and Pueblo San Diego. The majority of the southern part of National City drains to the Sweetwater River and ultimately discharges into San Diego Bay. La Paleta Creek (also known as 7th Street Channel) drains the northern part of the City and also discharges into San Diego Bay, while a very small western portion of the City drains directly to the San Diego Bay shoreline. Nearly all areas of the City that drain directly to San Diego Bay are within the San Diego Unified Port District. Lastly, the central portion of the City drains to Paradise Creek, a small salt marsh creek, which then discharges into the Sweetwater River. Watersheds in the City are shown in Figure 1-2.

San Diego Bay is listed in the 2008 CWA Section 303(d) for polychlorinated biphenyls (PCB) based on fish tissue analyses. The shorelines at 7th Street Channel and at the 24th Street Marine Terminal are listed in the 2008 CWA Section 303(d) for benthic community effects and sediment toxicity. La Paleta Creek is listed in the 2008 CWA Section 303(d) for copper and lead. Finally, Sweetwater River is listed in the 2008 CWA Section 303(d) for *Enterococcus,* fecal coliform, phosphorus, selenium, total dissolved solids, total nitrogen as N, and toxicity. Sweetwater Marsh, which is part of a national wildlife refuge, and Paradise Creek are considered to be ESAs by the City.

Figure 1-1
City of National City Land Use

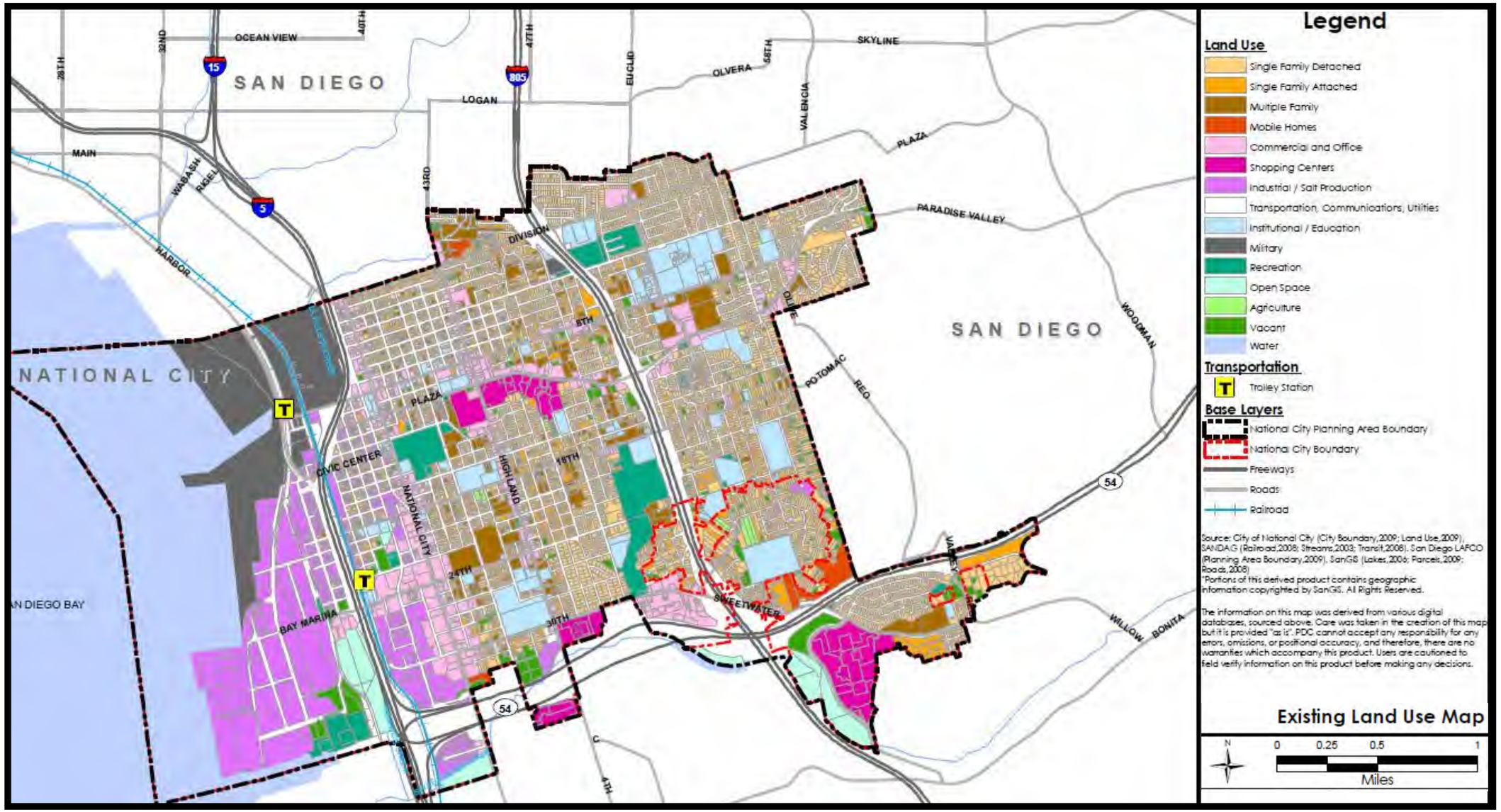

Source: City of National City General Plan, 2011

Figure 1-2
City of National City Watersheds

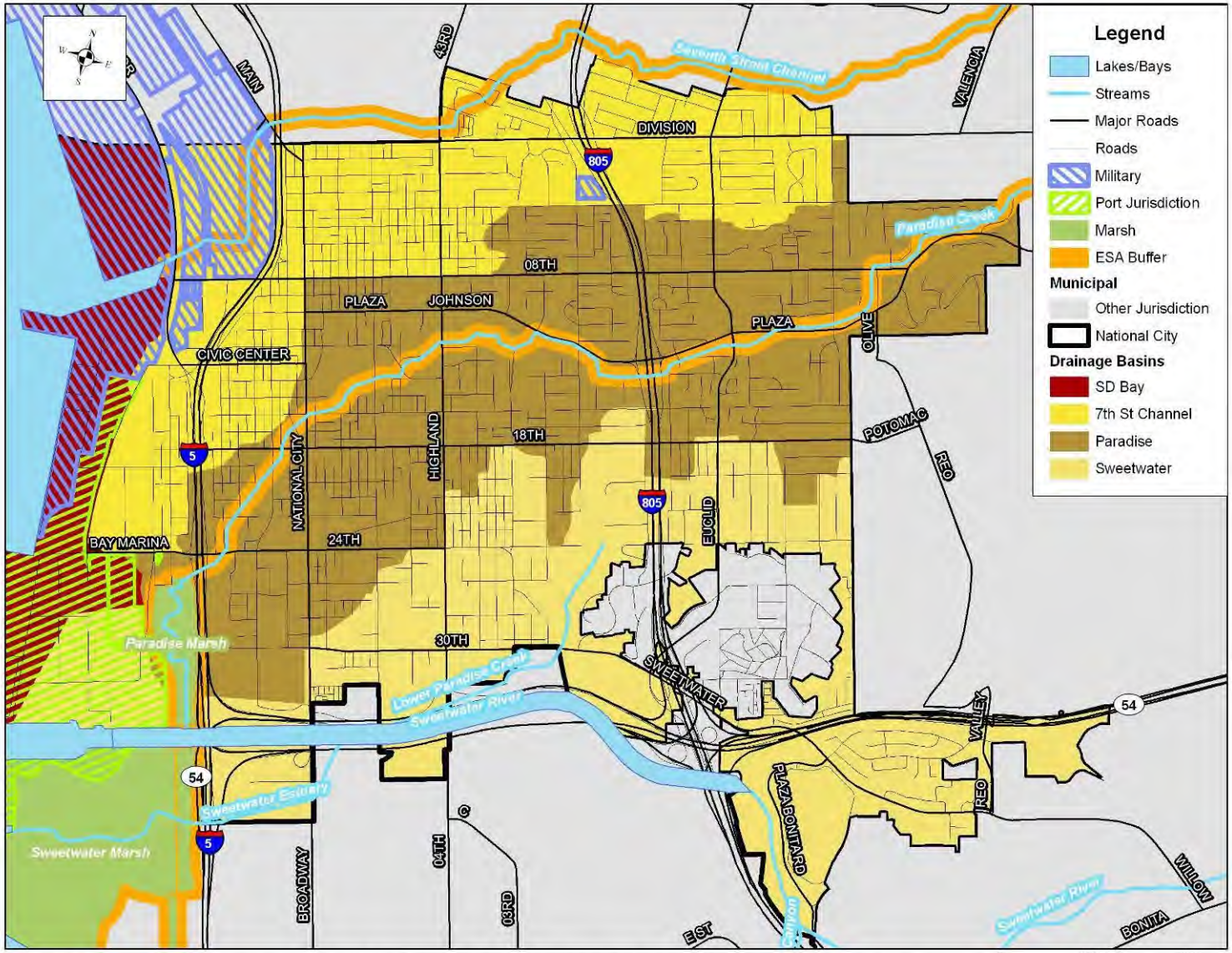

Note: Marsh boundaries based on land use data from SANDAG. The portion of the marsh west of I-5 and south of the Sweetwater River is not in the City's Jurisdiction. Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

1.2 PURPOSE AND OBJECTIVES

The City's JURMP presents strategies to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The JURMP describes various programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the implementation of the City of National City's JURMP during the 2010/2011 reporting period.

1.3 REPORT ORGANIZATION

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning Component**
Section 3	**Construction Component**
Section 4	**Municipal Component**
Section 5	**Industrial and Commercial Component**
Section 6	**Residential Component**
Section 7	**Illicit Discharge Detection and Elimination Component**
Section 8	**Education Component**
Section 9	**Public Participation Component**
Section 10	**Fiscal Analysis Component**
Section 11	**Effectiveness Assessment Component**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all components required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a more detailed explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Background, subsection 1.1, has been divided into Regulatory Background, subsection 1.1.1, and City Setting, subsection 1.1.2, for clarity.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of pollutants from development projects to the MEP and by managing the increases in runoff from development projects that have the potential to negatively affect downstream water bodies. During the 2010/2011 fiscal year, the City accomplished these goals through implementation of its JURMP document.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2010/2011 reporting period are presented in the following bulleted list. The remainder of this section provides more detail about the City's implementation of this component of its storm water program.

- Distributed the City's development requirements checklist to projects applying for permits.
- Updated the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements to include the final Hydromodification Management Plan (HMP) requirements in advance of the January 2011 deadline.
- Continued to utilize the City's SUSMP database to track Priority Development Projects within the City's jurisdiction and the parties responsible for BMP maintenance.
- Obtained verification of BMP maintenance from completed Priority Development Projects on the City's treatment control BMP inventory.
- Conducted maintenance inspections of treatment control BMPs at 18 completed development projects in the City.

A list of development projects subjected to SUSMP requirements in 2010/2011 is available in Table 2-1. A comparison of the number of inspections performed and the requirements of the Municipal Permit can be found in Table 2-2. SUSMP projects that were completed after inspection and maintenance verification actions had been performed for the 2010/2011 inventory are listed in Table 2-3. Details of treatment control BMP inspections and related follow-up actions are provided in Table 2-4.

2.2 LAND USE PLANNING

2.2.1 BACKGROUND

The City's General Plan was adopted in 1996 and contains water quality and watershed protection principles in its Natural Settings Element. The comprehensive principles established in 1996 provide an ample framework for implementing the requirements of the current Municipal Permit, and no changes to these policies were necessary during the reporting period.

A new General Plan, which will take effect in the 2011/2012 reporting period, was adopted in June 2011 and contains water quality and watershed protection principles in its Conservation and Sustainability Element. The comprehensive principles established in the new General Plan will also provide a good framework for implementing the requirements of the current Municipal Permit.

2.2.2 SOURCE CHARACTERIZATION

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts to the surrounding environment. No changes to development restrictions in the City's General Plan for storm water purposes were implemented during the reporting period.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Please refer to the City's updated JURMP document for a list of the water protection policies included in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 PROGRAM IMPLEMENTATION

The City implemented its water protection-related land use policies during the reporting period mainly through the City's Municipal Code. The City updated its SUSMP Manual, a formatted guidance manual based on the regional Model SUSMP document, in January 2011. The City's SUSMP Manual is an uncodified appendix to Chapter 14.22 of its Municipal Code. The updates made at this time were consistent with the regional HMP document, prepared by the Copermittees and adopted by the RWQCB in July 2010, and the updated Model SUSMP. The regional HMP document was also added as an appendix to the City's SUSMP Manual. The updated City of National City SUSMP Manual is available on the City's website (http://www.nationalcityca.gov/) on the Storm Water section of the Engineering Division webpage.

Details on how the City implemented its established water protection policies through its environmental review process and its development project approval and verification

processes during the reporting period are provided in Sections 2.3 and 2.4 of this JURMP Annual Report document.

2.3 Environmental Review Process

The City's current environmental review process is detailed in the City's updated JURMP. The overall structure of the review process remains the same as in previous reporting years. No changes to the City's environmental review process have been made since the submittal of the updated JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The approval and verification process implemented during 2010/2011 followed the process described in the City's updated JURMP. Details on the different aspects of the process are described in the sections below.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's SUSMP Manual, which contains the City's SUSMP regulations. The City's SUSMP Manual derives its authority from Municipal Code Chapter 14.22. Projects subject to SUSMP regulations are identified by completion of applicability checklists. More detail about this process is provided in Section 2.4.4.2.

2.4.3 Best Management Practice Requirements

The City updated its SUSMP requirements for development projects in January 2011, as described in Section 2.2.4 above.

2.4.4 Program Implementation

During the 2010/2011 fiscal year, the City required implementation of its BMP requirements for all development projects through education, a comprehensive development project approval process, and the treatment control BMP inspection and maintenance verification program.

2.4.4.1 Outreach and Staff Training

The City trains staff involved in the planning and review of development projects within the City and works closely with the development community to communicate its development requirements throughout the entire approval process. Details on trainings conducted and educational materials developed and distributed related to new

development during the reporting period can be found in Section 8 of this JURMP Annual Report document. Also, based on results from the first years of the program, distribution of maintenance verification letters to parties responsible for maintenance of treatment control BMPs at completed projects seems to be increasing the level of knowledge of regulated parties.

2.4.4.2 Urban Runoff Approval Process for Development Projects

All development projects that required City permits were required to undergo the City's urban runoff approval process as detailed in the City's JURMP. Forms completed by project applicants are kept with the project's file at the City for future reference. As discussed in the City's JURMP, the City required all developers applying for construction and building permits to complete a "National Pollutant Discharge Elimination System (NPDES) Project Applicability Form" (NPDES Checklist) that guides project applicants to submit proper documents to the City for review. The checklist was updated during the 2010/2011 reporting period at the same time as the BMP Manual. The updated NPDES Checklist is included with this report as Attachment 2.1.

All development projects determined to be Priority Projects after completing the SUSMP Checklist were required to prepare a Storm Water Management Plan (SWMP) or Water Quality Technical Report (WQTR) to meet the City's SUSMP requirements. As part of the JURMP update, the City also developed a SWMP self checklist to be used by the SWMP preparer, which was included as an attachment to the updated JURMP. In the past, the majority of deficiencies found in document reviews were missing information or sections not having enough detail about proposed BMPs. Table 2-1 lists the development projects subject to the City's SUSMP requirements during the 2010/2011 reporting period, the number of document reviews for each project, and the current approval status of each. Public Priority Projects are marked as Capital Improvement Projects (CIP) in the table.

Table 2-1
Development Projects Subject to SUSMP Requirements During 2010/2011

#	Project Name	Location	Project Type	Number of Reviews during 10/11	Approved during 10/11
1	8th Street Smart Growth Revitalization Project (CIP)	8th Street, between Harbor Drive and Highland Avenue	Priority	1	No
2	AutoZone	Highland Avenue & East 21st Street	Priority	2	Yes
3	Bible Baptist Church	2432 East 18th Street	Priority	2	Yes
4	Blendstar Renewable Fuel	Between Bay Marina Drive and 19th Street, east of Haffley Avenue (APN 559-040-54)	Priority	1	No
5	Plaza Boulevard Center	Intersection of Plaza Boulevard and Palm Avenue	Priority	3	No
6	SANDAG Blue Line Trolley Stations	8th Street Trolley Station and 24th Street Trolley Station	Priority	1	No
7	The Gateway	National City Boulevard & F Avenue, between 31st Street & Route 54	Priority	2	No

No projects were granted waivers from SUSMP requirements, and the City does not anticipate granting waivers in the future. The City makes every effort to encourage development projects to select treatment controls with high and medium pollutant removal efficiencies and does not expect to approve many projects with low removal efficiency BMPs. However, if projects proposing a low removal efficiency treatment control BMP with a defensible infeasibility analysis are approved, details of those projects and their feasibility analyses will be reported as required in future JURMP annual reports. None of the approved projects were allowed to propose a low removal efficiency BMP.

The Multi-Purpose Building at Bible Baptist Church is one example of a priority development project that was conditioned to meet SUSMP requirements in 2010/2011. The project proponent had originally proposed a high-rate media filter for one discharge point and had otherwise failed to delineate drainage management areas and identify other discharge points. Through the City's rigorous review process, and over the course of four submittals, the project finally proposed infiltration facilities, bioretention areas, and pervious block pavers to prevent pollution in runoff from five discharge points.

Hydromodification Management Plan

During the reporting period the Copermittee Land Development Workgroup met regularly to discuss key Hydromodification Management Plan (HMP) implementation issues and provide updates on the status of consultant work products. The City of National City regularly participated in the workgroup meetings. The final regional HMP was adopted by the RWQCB at the beginning of the 2010/2011 reporting period on July 14, 2010. The City incorporated the HMP requirements into its local development requirements in January 2011. The City has posted information about the new HMP requirements on its website to educate project proponents.

The City's SUSMP Manual was updated to contain the regional HMP requirements in January 2011, but also implemented the detailed Interim Hydromodification Criteria (IHC) prior to that time in 2010/2011. Both of the projects approved during 2010/2011 were approved in 2010 and were smaller than 50 acres; therefore they were not subject to IHC or HMP requirements. All projects currently under review will be subject to the new hydromodification requirements unless they qualify for one of the exemption categories. This will be evaluated during review and reported in the applicable reporting period.

BMP Installation Verification

During the course of 2010/2011, after maintenance verification letters had been sent out during the summer of 2010, the City identified recently completed Priority Projects within the City's jurisdiction to be added to the treatment control BMP inventory. When a project is completed, the City checks for BMPs prior to occupancy using the site's plans and a BMP inspection form generated after the WQTR is approved, assigns the project a TTWQ priority, and then adds it to the inventory of projects subject to the City's inspection and annual maintenance verification program the following fiscal year. This process helps the City focus its inspection resources on sites more likely to have maintenance deficiencies, as maintenance deficiencies are generally less likely at sites with recently installed BMPs. A table of the projects identified after distribution of verification letters is presented in Table 2-3 at the end of this JURMP Section. These projects will be added to the City's treatment control BMP inventory in 2011/2012.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

2010/2011 Annual Maintenance Verification Program

The Municipal Permit requires annual verification of operation and maintenance of treatment control BMPs installed within the City's jurisdiction.

Using the property owner names and addresses recorded in the City's BMP database, BMP maintenance verification forms were mailed to all the private projects included in the City's BMP database in early 2010/2011, prior to the start of the wet season. Maintenance verification forms were also completed for all municipal treatment controls at CIP projects on the City's inventory. Through this process, the City updated contact

information that was no longer accurate due to transfer of ownership and provided additional guidance on how to properly maintain BMPs, as needed. The City completed research to update contact information and worked with management companies to educate them on the requirements. Because not all project responsible parties responded promptly, the City sent out 10 NOVs and nine citations during this process and took other escalating enforcement steps as necessary to achieve compliance. Through the City's maintenance verification efforts, responses were received from all projects.

Operation and Maintenance Inspections

During the 2010/2011 fiscal year, the City conducted inspections of projects with treatment control BMPs in accordance with the inspection frequencies outlined in the Municipal Permit. Table 2-2 provides a summary of the number of inspections performed and how these met the requirements of the Municipal Permit; also note that all high TTWQ sites were inspected prior to October 1, 2010.

Table 2-2
2010/2011 Inspection Numbers versus Municipal Permit Requirements

Site Class	Number of Sites	Full BMP Assessments	Percent Inspected	Permit Requirement	Requirement Met
All Inventoried Sites	34	18	53%	20%	**Yes**
Sites with Drainage Inserts	21	12	57%	50%	**Yes**
High TTWQ sites	9	9	100%	100%	**Yes**

The City continued to use site-specific inspection forms and the treatment control BMP tracking database. During the reporting period, GPS coordinates were also collected for the BMPs inspected, and this location information was added to the electronic database. Table 2-4 at the end of this section lists the development projects inspected during the reporting period, a brief description of inspection findings, and, if applicable, any follow-up actions taken. During 2010/2011, the City issued 10 NOVs and nine administrative citations to development projects and worked with responsible parties as necessary to achieve compliance. The BMP types proposed at these sites and the sites' TTWQ priorities are included in the City's treatment control BMP inventory, which is included in Appendix A.1 of this JURMP Annual Report.

During the 2010/2011 reporting period no sites were observed to present a significant threat to human health or the environment during inspections, so none were reported to the RWQCB.

2.5 Development Planning Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 Program Review and Modification

The City's SUSMP requirements have been updated as described above in Section 2.2.4.

Table 2-3
SUSMP Projects Completed After Establishment of 2010/2011 Inventory

#	Project Name	Project Address	Development Type	BMPs	HSA	Year Completed	TTWQ
1	AutoZone	Highland Ave and East 21st Street	Commercial	Infiltration facilities and high-rate media filter	909.12	2010/2011	Medium
2	Harbor View Condominiums	8th Street and D Avenue	Residential & Commercial	Media filters, infiltration facility, filter insert	908.32	2010/2011	Medium
3	Marina Gateway Streetscape (Harrison and 23rd St) (CIP)	Harrison Ave. between Bay Marina Dr. and 23rd St.	Public Roads	Infiltration facilities	908.32	2010/2011	Low

Table 2-4
2010/2011 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
1	Jack In The Box	9/23/2010	Drainage inserts were observed to need maintenance.	NOVs were sent to the responsible party in November 2010 and July 2011. Subsequently a letter reporting maintenance was received by the City, but a re-inspection is scheduled to be completed in 2011/2012 before the wet season.	In Progress
2	Pacific View Estates	9/23/2010	The condition of the hydrodynamic separator was adequate.	NA	NA
3	Paradise Village	9/23/2010	Hydrodynamic separator was observed to need maintenance.	The responsible party reported maintenance, but a re-inspection is scheduled to be completed in 2011/2012 before the wet season.	In Progress
4	Paradise Walk Townhomes	9/23/2010	Some drainage inserts were observed to need maintenance.	NOV was sent in November 2010. Subsequently a letter was received indicating that maintenance was performed.	Resolved
5	Walgreens	9/23/2010	Two drainage inserts were missing and one was observed to need maintenance.	NOV was sent in November 2010. Enforcement through the City Attorney achieved installation and maintenance of all BMPs.	Resolved
6	WalMart	9/23/2010	The condition of the hydrodynamic separator was adequate.	NA	NA
7	Harley Davidson	9/24/2010	The condition of the drainage inserts was adequate.	NA	NA
8	Penske Truck Leasing	9/24/2010	The condition of the drainage inserts was adequate.	NA	NA

Table 2-4 (Continued)
2009/2010 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
9	Plaza Bonita Mall Expansion	9/24/2010	One drainage insert and one hydrodynamic separator were observed to need maintenance.	The responsible party reported maintenance. A re-inspection is scheduled to be completed in 2011/2012 before the wet season.	In Progress
10	Sweetwater Town & Country Mall	9/24/2010	Two drainage inserts were observed to need maintenance.	NOV was sent in November 2010. Subsequently, the City received verification of maintenance.	Resolved
11	Bonita Creek	9/27/2010	Eight drainage inserts were observed to need maintenance.	City received verification of maintenance.	Resolved
12	Mirabelle (Cypress Glen Condos)	9/27/2010	Four drainage inserts were observed to need maintenance.	NOV was sent in November 2010. Subsequently, the City received verification of maintenance.	Resolved
13	Paradise Creek Park (CIP)	9/27/2010	The condition of the drainage insert was adequate.	NA	NA
14	Tremont Court Condominiums	9/27/2010	Drainage inserts were of a different type than originally proposed. Hydrodynamic separator was in need of maintenance.	NOV was sent in November 2010. The responsible party reported maintenance, but, escalating enforcement is in progress through the City Attorney.	In Progress
15	Plaza City Apartments	9/27/2010	The condition of the hydrodynamic separator was adequate.	NA	NA
16	940 W 19th Street	9/28/2010	Vegetated swale was observed to need maintenance.	The responsible party reported maintenance, but a re-inspection is scheduled to be completed in 2011/2012 before the wet season.	In Progress

Table 2-4 (Continued)
2009/2010 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
17	Bay Marina Drive Widening (Marina Gateway) (CIP)	9/28/2010	The condition of the high-rate media filters was adequate.	NA	NA
18	Marina Gateway (Hotel)	9/28/2010	Hydrodynamic separator was observed to need maintenance.	NOV was sent in November 2010. The responsible party reported maintenance, but a re-inspection is scheduled to be completed in 2011/2012 before the wet season.	In Progress

3.0 CONSTRUCTION

3.1 INTRODUCTION

During 2010/2011, the City continued to implement a program to prevent storm water pollution related to construction activities within the City. Modifications to the City's construction program were last made in late March 2008 as part of its JURMP update. All changes made at that time were implemented for the entire 2010/2011 reporting period.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2010/2011 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- Distributed storm water requirements applicability checklists to all development projects in the City's jurisdiction.
- Conducted plan checks of erosion control plans and SWPPPs to ensure construction projects planned to comply with the City's minimum BMP requirements.
- Distributed copies of the Construction BMP Fact Sheet with all approved grading permits.
- Conducted 71 construction inspections at 10 sites in 2010/2011 per the frequency in the updated JURMP.
- Issued 21 written warnings, two NOVs, and two citations to construction sites in response to BMP deficiencies with respect to the City's minimum BMP requirements.
- Conducted pre-construction meetings with all large project developers.

3.2 SOURCE CHARACTERIZATION

An inventory of active construction projects during the reporting period is presented in Appendix A.2 of this JURMP Annual Report document. The City's inventory was maintained throughout the reporting period by entering permit application forms into the City's inventory spreadsheet on a continuous basis. New construction projects were added to the inventory at the start of construction, and projects were removed from the inventory after construction was completed. Since construction projects were continually being added and removed throughout the fiscal year, inventory updates were usually performed more frequently than the minimum once per month.

3.3 Updates to Ordinances and Approval Processes

Minor changes were made to the City's Grading Ordinance during the reporting period, but no changes were made to storm water requirements. Details on any changes to the City's approval process during the reporting period are discussed in Section 3.5 of this document.

3.4 Best Management Practice Requirements

The City's construction and grading requirements have not changed since the recent update to the City's JURMP document. A complete list of required construction BMPs is included in the City's BMP Manual, which is an attachment to the City's JURMP. The City continued to assess the implementation and effectiveness of required BMPs at construction sites in 2010/2011.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below.

3.5.1 Education and Staff Training

Education and staff training implemented during the 2010/2011 fiscal year focused on reinforcing the changes made to the City's construction requirements at the time of the City's JURMP update to both City staff and to the construction community. In addition, construction site supervisors and City staff were educated on the new General Construction Permit (effective July 1, 2010) and provided a fact sheet for review. Construction project proponents were educated in BMP requirements during the approval process described below. Please see Section 8 of this JURMP Annual Report document for details on training and educational materials related to construction and grading activities.

3.5.2 Construction and Grading Approval Process

During the reporting period, City personnel verified that all construction projects planned to implement the City's minimum BMP requirements prior to issuing any building or grading permits. The City conducted its grading approval process as described thoroughly in Section 5 of the City's updated JURMP. The City requires grading construction projects to submit erosion control plans that indicate what BMPs are to be used at the site. These erosion control plans are reviewed by the City to ensure the site plans to meet the City's minimum construction BMP requirements. The City also reviews Storm Water Pollution Prevention Plans (SWPPPs) for sites greater than one acre that are required to obtain coverage under the General Construction Permit.

Additionally, the City arranged pre-construction meetings with all developers of large projects to ensure an understanding of construction BMP requirements. Approved forms and documents completed by project proponents are kept with each project's file at the City for reference. A Construction BMP fact sheet, known as the "Blue Sheet" within the City because the copies distributed are on blue paper, was also distributed with all construction permits issued (Attachment 3.1). Proper implementation of the minimum BMPs listed on the fact sheet was a condition of approval for all permits issued by the City during the 2010/2011 fiscal year.

During the reporting period, none of the City's active construction sites were larger than 17 acres; therefore the maximum disturbed area limitation did not apply. However, all construction sites were still required to limit exposed cleared or graded areas to the amount of area that could be protected prior to a rain event, as prescribed in the City's seasonal BMP requirements.

Criteria for determining when advanced treatment is required are detailed in the City's JURMP. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites within the City's jurisdiction, and advanced treatment methods were not required at any construction sites.

3.5.3 Inspection of Construction Sites

Appendix A.2 of this JURMP Annual Report contains a list of construction projects that were active during the reporting period, along with their assigned TTWQ priorities, the number of weeks the site was active within the rainy season, the numbers of inspections conducted during the wet and dry seasons, the number of follow-up inspections and complaint investigations, and the total number of inspections for each site. In total, 71 construction inspections were performed at 10 construction sites during 2010/2011.

Construction inspections conducted during the reporting period were performed as described in the City's updated JURMP. Key components of the inspections include checks for coverage under the General Construction Permit during the initial inspection and assessments of compliance with the City's BMP and discharge requirements during all inspections. Responsible parties at the sites are educated as needed during inspections. Copies of the inspection forms are kept on file at the City. A copy of the City's construction site information and inspection form is available as Attachment 3.2.

The City conducted inspections at high TTWQ construction sites bi-weekly during the wet season and monthly for medium TTWQ sites. Low TTWQ sites were inspected on an as needed basis. Typically, storm water only inspections were not conducted at low TTWQ sites unless a complaint was called into the City's storm water hotline. Construction inspectors have been trained in the City's minimum construction BMP requirements, and they check BMP implementation at low TTWQ construction sites during their inspections. Any sites found to have problems with BMP implementation are forwarded to the City's Storm Water Compliance Inspector. During the reporting

period, one low TTWQ construction site, AutoZone, was inspected at a higher frequency due to BMP deficiencies. These sites are indicated on the City's inventory in Appendix A.2.

When any violations were noted during routine, follow-up, or complaint investigation inspections, these violations were noted on the project's inspection form, and the sites were given a list of corrective actions necessary to fix the observed violation. During 2010/2011 there were 21 instances of non-compliance observed where enforcement action needed to be taken. In some cases, these issues were resolved while the inspector was still on site. When necessary, appropriate enforcement actions were taken, and City staff followed up with the site until compliance was achieved. Details on the enforcement actions taken for construction sites during the implementation period are described below.

3.5.4 Enforcement Measures

Table 3-1 includes the number of violations and enforcement actions taken during the reporting period in response to violations of the City's minimum construction BMP requirements. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP. This year, the City sent inspection results by email to the responsible party with attached photos of improper BMP implementation. This provided clearer communication between the inspector and construction site manager and allowed for quicker resolution of observed deficiencies.

Table 3-1
Summary of Construction Enforcement Actions Taken

Written Warnings	Notices of Violation	Administrative Citations	Stop Work Orders
21	2	2	0

No Stop Work Orders were issued in 2010/2011, but the City's JURMP notes that if a Stop Work Order is issued the Regional Board will be notified within five working days. During the reporting period, three complaints were received to the City's storm water hotline regarding construction site activities. A December 2010 complaint regarding construction at AutoZone resulted in the site being inspected at a monthly frequency, although originally designated as a low TTWQ, to ensure proper implementation of required BMPs. Further details regarding complaint investigations and all enforcement actions taken during the reporting period can be found in Section 4 of this document.

None of the violations observed at construction sites during the reporting period were found to endanger human health or the environment. The City was able to address these violations through the City's established enforcement process, and it was not necessary to report any of these sites to the RWQCB.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 Program Review and Modification

No modifications were made to the City's construction component during 2010/2011.

4.0 MUNICIPAL COMPONENT

4.1 INTRODUCTION

Throughout 2010/2011, the City of National City continued to manage municipal areas and activities to reduce discharges of pollutants to the MS4 to the MEP. As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and activities. The majority of municipal areas in the City comprise of administrative buildings, fire stations, public parks, recreation and public works facilities. Municipal activities conducted by the City include but are not limited to graffiti abatement, building maintenance, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. Information about the City's prioritized street sweeping program can be found in Table 4-1, and information about the City's MS4 maintenance program can be found in Table 4-2.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the 2010/2011 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City inspected all high TTWQ fixed municipal facilities.
- The City removed a total of 980 tons of sediment and debris from street sweeping activities.
- The City removed a total of 21.5 tons of trash, sediment, and other debris from standard MS4 cleaning activities.
- The City spent 2,050 man-hours maintaining 442,150 linear feet of sanitary sewer line.
- The City inspected several special events that occurred in the City during 2010/2011 to ensure appropriate BMP implementation and clean up.
- The City received and addressed 14 complaints through the Storm Water Hotline, City website, and other City departments. Enforcement actions resulting from complaint investigations are noted in Table 4-3.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities. As mentioned in the City's JURMP, municipal fixed facilities have been grouped under one category, fixed

facilities. This is because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar.

4.2.2 SOURCE CHARACTERIZATION

All fixed facilities are included on the City's municipal inventory, which is included as Appendix A.3. The designations of pollutants potentially generated by municipal facilities on the inventory are based on the pollutant loading potentials shown in Table 6-1 of the City's JURMP. TTWQ prioritizations are assigned via the process laid out in the flow chart shown in Figure 6-1 of the City's JURMP.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City continues to implement and assess the effectiveness of BMPs at all fixed municipal facilities. As mentioned in the City's JURMP, the City uses the CASQA Municipal BMP Handbook to establish appropriate BMPs for fixed municipal facilities. Table 6-2 in the City's JURMP describes the CASQA fact sheets that are used for specific facility types.

The City continues to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. The BMP requirements have not been changed since the City's JURMP was updated in March 2008.

As described in the City's JURMP, City public works employees, fire station employees, and employees at other fixed facilities in the City continue to implement BMPs appropriate to the facility type. City fire response personnel continue to be trained in implementing BMPs for non-emergency fire fighting activities as described in Section 3 of the City's JURMP. There were no changes in BMP requirements for any fixed facilities during 2010/2011.

4.2.4 PROGRAM IMPLEMENTATION

As mentioned above, the City's BMP requirements for fixed facilities have not changed since the development of the revised JURMP. Some notable examples of implementation of those BMPs are provided below.

Parks and Recreational Facilities
During 2010/2011, the City used fertilizers, herbicides, and pesticides sparingly at parks and other City-owned landscaped areas. All chemicals are used and stored in accordance with the City's JURMP BMPs. The City routinely cleans parks each Monday after weekend use.

Public Works Facilities, Fire Stations, Other Fixed Facilities
As previously mentioned, City personnel continued to implement appropriate BMPs for municipal fixed facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance activities at fixed facilities (i.e., landscaping, building

maintenance, etc.) as necessary. Parking facilities associated with fixed municipal facilities were swept quarterly during 2010/2011, and the large paved areas at the City's Public Works Yard were swept weekly. Public Works employees continued to proactively implement a SWPPP at the Public Works Yard, though it is not a requirement. Public Works employees also continued to maintain the BioClean filter inserts on the property as needed.

Municipal Inspections

All high TTWQ fixed municipal facilities received an annual routine inspection in 2010/2011. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2010/2011. The City's municipal inspection form is included as Attachment 4.1. All inspections conducted at municipal facilities are tracked using a Microsoft Access database. Table 4-4 at the end of this section lists all high TTWQ municipal fixed facilities requiring inspection in 2010/2011, the date the inspection was performed, and recommended corrective actions from the inspection. Only minor corrective actions were noted, and no follow-up inspections were necessary. Resolutions were documented by all facilities.

In addition to one annual inspection by other City personnel, public works personnel inspect both the Public Works Yard East and Public Works Yard West weekly; street crew personnel inspect the Public Works Yard West and the equipment maintenance crew inspects the Public Works Yard East. Inspection forms are completed and submitted to the City's Storm Water Compliance Inspector.

4.3 Roads, Streets, Highways, and Parking Facilities

4.3.1 Background

The City conducts regular maintenance of roads, streets, and parking facilities in the City to control pollutants such as sediment, metals, litter, and debris. Note that there are no highways within the City's jurisdiction.

4.3.2 Source Characterization

Roads and streets are included as one entity on the City's municipal inventory, which is included in Appendix A.3.

4.3.3 Best Management Practices

Street sweeping is the City's primary BMP for roads, streets, and parking facilities. Other BMPs are chosen as needed based on the CASQA Municipal Handbook. The City's sweeping frequency is outlined in the JURMP and described in the following subsection. There were no changes to the BMPs implemented for roads, streets, and parking facilities in 2010/2011.

4.3.4 PROGRAM IMPLEMENTATION

During 2010/2011, the City swept a total of 16,253 curb miles, removing approximately 980 tons of debris. High priority streets in the City are swept at least every two weeks, and medium priority streets in the City are swept at least monthly. The City has not designated any streets in the City as low priority. The City does not maintain any stand-alone parking facilities that are not associated with municipal facilities. Seventeen parking facilities that are associated with municipal facilities are maintained and swept during regular maintenance activities at the respective municipal facility, and are considered part of the municipal facility on the inventory. Table 4-1, below, describes the areas assigned high and medium priorities, and the associated sweeping frequency. The table also includes the sweeping frequency for areas of fixed municipal facilities and the associated parking lots.

As a means to address priority pollutants in the San Diego Bay Watershed, the City continued conducting additional sweepings of the all streets in the City. High priority streets were swept between daily and weekly during 2010/2011; medium priority streets were swept every two weeks during 2010/2011.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
High	8th Street, National City Boulevard, Highland Avenue, Plaza Boulevard	11.8 miles	At least every two weeks
Medium	All other streets in the City	98.2 miles	At least once per month
Fixed Facilities	17 Parking lots associated with municipal fixed facilities	N/A*	Quarterly
Fixed Facilities – Parks	Parking lots associated with parks	N/A*	Every two weeks
Fixed Facilities – PW Yard	Public Works Operation Center	N/A*	Weekly
Total Amount of Debris Collected from Street Sweeping Activities: 980 tons			

* Mileage data is not available for the swept area of parking facilities associated with municipal facilities, and the PW Yard. Mileage accrued while sweeping these facilities is included in the total mileage.

Inspections

Because trash, debris, and sediment that have accumulated on City streets are identified and cleaned up via street sweeping, additional inspections beyond this effort are not necessary.

4.4 MS4

4.4.1 Background

The City's extensive storm water conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during a rain event. The City's MS4 consists of approximately 19 miles of inlets, pipes of varying materials, natural channels, concrete channels, culverts, and 751 catch basins and inlets.

4.4.2 Source Characterization

The City's MS4 as one complete entity is included on the City's high TTWQ municipal inventory (Appendix A.3).

4.4.3 Best Management Practices

The City maintains a strict MS4 maintenance and cleaning schedule. Maintenance and cleaning are conducted to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. As described in the City's JURMP, BMPs for MS4 maintenance activities are chosen based on the CASQA Municipal Handbook and have not changed during 2010/2011.

4.4.4 Program Implementation

Throughout 2010/2011 the City has implemented a thorough MS4 inspection and cleaning schedule. The City continues to track municipal activities, such as MS4 channel cleaning, in a Microsoft Access database. During 2008/2009, the MS4 maintenance logs were updated to allow for the recording of more detailed information regarding the various types of debris removed. Use of these logs was continued during the 2010/2011 reporting period. The City inspected and cleaned all MS4 cleanout locations and open channel segments in 2010/2011, as described in Table 4-2, on the following page.

Table 4-2
MS4 Maintenance Data

MS4 Structure	Percent inspected and/or cleaned*	Percent of open channels found with anthropogenic litter	Amount of debris removed from cleaning activities
Catch Basins / Self-Cleaning MS4 Facilities	100%	N/A	29,364 pounds
Open Channels	100%	100%	33.54 cubic yards (13,416 pounds)
Drainage Inserts	100%	N/A	194 pounds
Total Debris Removed From MS4 Maintenance Activities: 21.5 tons**			

* No structures were observed at least 33% of capacity during the reporting period. However, the City cleans out any structures, including self-cleaning structures, in which trash and debris is observed at the time of inspection.
** The weight of the material removed during channel maintenance activities was not recorded. Since trash was the most common item removed, a conversion factor of 400 pounds per cubic yard was used to estimate the total weight of the material removed.

The City's cleanout locations are access points to various sections in the City's MS4, so no additional pipe beyond the cleanout location is normally cleaned. The City uses a vactor truck to clean the MS4 line in the event of a spill. For example, during 2010/2011, one sewage spill occurred, which was successfully intercepted before reaching the receiving water and entirely cleaned up within the City's MS4.

During 2010/2011, the City continued to inspect the open channels in the City and remove trash and debris as necessary by hand. If litter or debris is observed during the routine inspections, it is removed immediately. Of debris removed from open channels, 22.17 cubic yards of trash, 4.13 cubic yards of sediment, and 7.25 cubic yards of organic matter were removed over the course of the fiscal year. The only significant sediment removal occurred in the City's concrete channels. The total length of the channel segments inspected and cleaned by City staff is approximately 25,950 linear feet. Additionally, as part of WURMP efforts that are beyond minimum required maintenance, the City continued to hire a contractor to do biweekly inspections and remove any observed trash from Paradise Creek by hand.

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. Routine inspection and maintenance of the sanitary sewer system works to reduce the

potential for a spill or sanitary sewer overflows (SSOs) and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 Source Characterization

The City maintains a system of public sanitary sewer pipes to convey wastewater from the City to be treated. The sanitary sewer system, as one complete entity, is included on the City's high TTWQ municipal inventory (Appendix A.3).

4.5.3 Best Management Practices

The City implements BMPs from the CASQA Municipal Handbook, as described in the City's JURMP, during sanitary sewer maintenance. There have been no changes to these BMPs during 2010/2011. The City inspects and maintains the sanitary sewer system as part of regular wastewater activities. The City clears blockages and repairs leaks as needed.

4.5.4 Program Implementation

The City seeks to eliminate seepage from the sanitary sewer system to the MS4 by routine preventative maintenance of both systems. Routine maintenance of both systems allows the City to find areas that are likely to become problems in the future and make the necessary repairs/replacements before any larger issues arise. Approximately 400 linear feet of pipe were repaired or replaced during the reporting year. The City also continued to conduct flow metering throughout its sanitary sewer system to monitor for evidence of potential problems. A total of 2,050 man-hours were spent maintaining a total of 442,150 linear feet of sanitary sewer line during 2010/2011. Silt and grease were listed as the most common items removed from sanitary sewer lines during maintenance activities. A total of 2,400 linear feet of sanitary sewer line was televised during 2010/2011 to determine if areas of the sanitary sewer were in need of maintenance or repair.

The City has also developed a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs.

The City maintains a Sanitary Sewer Management Plan (SSMP) which establishes procedures for responding to an SSO. Detailed information about the City's SSO spill response plan is included in the City's JURMP. No SSOs or other significant spills occurred during 2010/2011.

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City conducts a variety of different mobile municipal activities, typically involving infrastructure maintenance, landscape maintenance, and graffiti removal.

4.6.2 Source Characterization

Power washing is no longer used by the Graffiti Removal sector of Neighborhood Services during graffiti removal activities. Therefore, graffiti removal was changed from the only high priority municipal activity on the inventory to a medium TTWQ in 2010/2011 (Appendix A.3). Infrastructure maintenance and landscape maintenance are also listed on the City's medium TTWQ municipal inventory.

4.6.3 Best Management Practices

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel are trained to implement BMPs for the specific activity in which they are involved. A more detailed discussion of BMPs for specific mobile activities is included in the City's JURMP; there were no updates to the BMPs implemented during mobile activities during 2010/2011.

4.6.4 Program Implementation

During 2010/2011, City personnel continued to implement BMPs during mobile municipal activities such as graffiti removal and landscape maintenance. This year the City continued to paint for graffiti removal instead of using power washing methods, reducing the threat to water quality. Since this change from power washing to painting for graffiti removal is a permanent one, the TTWQ status for graffiti removal has been changed from high to medium. However, if power washing is conducted in the future, City personnel will collect any water generated and dispose of it properly, and the inventory will be updated to reflect the high TTWQ of power washing activities.

One annual routine inspection of graffiti removal activities was conducted during the 2010/2011 reporting period. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2010/2011, including the inspection of graffiti removal activities. There were no instances of non-compliance relating to mobile municipal activities, and no corrective actions were required based on the inspection of graffiti removal activities during 2010/2011 (see Table 4-4).

4.7 Special Events

4.7.1 Background

As detailed in the City's JURMP, a variety of different special events are hosted within the City. Notably, the City's largest special event is an annual July 4th celebration.

4.7.2 Source Characterization

As required by the Municipal Permit, special events are included on the City's high TTWQ municipal inventory (Appendix A.3).

4.7.3 Best Management Practices

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter/debris from the event, and raise storm water awareness among the vendors and patrons of the event, as applicable. In Kimball Park, for example, the City always requires and charges the event holder for the use of a litter fence to prevent debris from entering the nearby channel. BMPs for special events did not change during 2010/2011.

4.7.4 Program Implementation

The City hosted several special events during 2010/2011, including various one-time celebrations and recurring events. Several special events were inspected to ensure the proper implementation of required BMPs, as detailed in the City's JURMP. If any special events do not finish clean up at the time of the inspection, staff requires the remaining housekeeping issues to be resolved within a timely manner. Inspections conducted at special events are tracked using the Microsoft Access database.

There were no notable instances of non-compliance at inspected events that required enforcement. Follow up was conducted as necessary to ensure appropriate housekeeping BMPs were implemented.

4.8 Public Reporting of Illicit Discharges and Connections

Reporting and Response

Public and municipal reporting is crucial to preventing and eliminating illicit connections and illegal discharges (IC/IDs) from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is also listed on the City's website and in distributed storm water educational material. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged into a spreadsheet for documentation and tracking. Each logged

complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges.

Complaints received by the City during the 2010/2011 reporting period and the City's response to each are listed in Table 4-5 at the end of this section. A total of 14 complaints were documented this year.

Enforcement

As previously stated, complaints received via the Storm Water Hotline or City website, are included in Table 4-5 at the end of this section. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, corrective actions, and/or citations. Table 4-3, below, summarizes the enforcement actions taken in response to complaints received.

Table 4-3
Enforcement Actions Resulting from Documented Complaints

Type	Verbal/Written Warning	Stop Work Order	Administrative Citation	NOV
Commercial	2	0	2	1
Industrial	1	0	1	1
Mobile	0	0	0	0
Municipal	0	0	0	0
Residential	0	0	0	0
Construction	1	0	0	0

4.9 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to sanitary sewer overflows. As discussed earlier in this section, preventative maintenance is regularly conducted on the City's sanitary sewer system. Additionally, video inspections and sewer surveys are regularly conducted to monitor the condition of the public sanitary sewer lines and to determine the necessity of maintenance. Private lateral lines do not receive preventative maintenance, but the City assists in the containment and cleanup of sewer spills if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report any SSOs to the City's Storm Water Hotline. No SSOs or other significant spills occurred during 2010/2011.

4.10 Education and Outreach

During 2010/2011, the City continued to educate municipal personnel regarding proper BMP implementation and other storm water and watershed concepts. For example, in June 2011 a training packet that covered general storm water BMPs and emergency procedures for City staff was distributed. Also, a training session regarding the new

Hydromodification requirements for development projects (adopted in January 2011) was conducted in February 2011 for employees in development services. Information regarding the education and outreach conducted for City personnel is described in Section 8 of this Annual Report.

4.11 Municipal Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.12 Program Modification and Review

The City's JURMP was updated in March 2008. No changes to the City's municipal component were made during 2010/2011.

Table 4-4
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Inspection Date	Corrective Actions Needed
1	Butterfly Park	East 22nd Street and Palm Avenue	High	3/24/2011	• Keep parking lots, sidewalks and streets free of excessive sediment and debris.
2	El Toyon Park	2005 East 4th Street	High	3/29/2011	• Employ adequate erosion prevention measures (e.g., vegetation or physical stabilization).
3	Graffiti Removal (Mobile Activity)	Kimball Skate Park, 16th Street	High	3/23/2011	• No corrective actions
4	Kimball Park	12th Street & D Avenue	High	3/24/2011	• Keep discharge locations free of excessive sediment and debris. • Keep the trash/recycling area free of litter and debris.
5	Las Palmas Municipal Pool	1800 East 22nd Street	High	3/23/2011	• Provide storm water training for appropriate employees. • Maintain a current log of employees who have participated in storm water training. • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover). • Keep the trash/recycling area free of litter and debris.
6	Las Palmas Park	1800 Newell Street	High	3/23/2011	• Keep parking lots, sidewalks and streets free of excessive sediment and debris. • Employ adequate erosion prevention measures (e.g., vegetation or physical stabilization). • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover). • Keep the trash/recycling area free of litter and debris.
7	National City Municipal Golf Course	1439 Sweetwater Road	High	3/24/2011	• Keep discharge locations free of excessive sediment and debris. • Provide storm water training for appropriate employees. • Maintain a current log of employees who have participated in storm water training. • Properly store material and waste stockpiles to prevent transport in runoff. • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover). • Keep the trash/recycling area free of litter and debris. • Store outdoor materials that pose a threat to water quality appropriately (covered and/or in closed containers). • Maintain a written spill response plan.

Table 4-4 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Inspection Date	Corrective Actions Needed
8	Paradise Creek Educational Facility	West 19th Street and Coolidge Avenue	High	3/24/2011	• Keep the site free of excessive litter and debris using dry methods. • Keep discharge locations free of excessive sediment and debris.
9	Public Works East Yard	2100 Hoover Ave	High	3/23/2011	• Keep the site free of excessive litter and debris using dry methods. • Store outdoor materials that pose a threat to water quality appropriately (covered and/or in closed containers). • Equip liquid storage containers/tanks with secondary containment.
10	Public Works West Yard	2100 Hoover Ave	High	3/23/2011	• Keep the site free of excessive litter and debris using dry methods. • Keep the trash/recycling area free of litter and debris.
11	Sweetwater Heights Park	Cagle Street and Stockman Street	High	3/24/2011	• Keep exposed parking areas free of significant spills and leaks.

Note: Roads, streets, highways, and parking lots; the MS4; and the sanitary sewer system were inspected via the maintenance effort described earlier in this section.

Table 4-5
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
1	7/1/2010	Commercial	Fire Dept	Bush Power Brakes 25 E 17th St	Water running in gutter.	Owner was washing parking lot and water discharged to gutter. Discharge was stopped during inspection.
2	8/18/2010	Residential	Police Dept	Division St & Harbinson Ave	Large truck dumping into storm drain.	Investigation could not confirm complaint.
3	9/20/2010	Commercial	Citizen	1900 E Plaza Blvd	Trash along banks of channel behind the Old Jimmy's restaurant.	Public Works cleaned the channel.
4	9/24/2010	Commercial	Citizen	M & N Furniture 125 W 22nd St	Small discharge of cleaning water from property.	Discharge was stopped. Business was educated about proper disposal of wash water. The business was added to the schedule for routine inspections and had no violations when visited in October 2010.
5	10/5/2010	Commercial	Public Works Dept	Laundromat 1206 E 18th St	Sewer lateral leak due to a lint clog	Public Works deployed staff, flusher, and crew trucks to capture the leaked material and unclog the lateral. Tenant was billed.
6	10/19/2010	Residential	Public Works Dept	2421 1st St	Oil flowing off driveway with rain water.	Public Works inspected the site and observed minimal flow to grassy area. No significant source noted. No further actions necessary.
7	11/10/2010	Commercial	Engineering Division	McDonalds 1630 Highland Ave	Employees washing out the property's drive-through with a hose & soap in the morning.	Discharge was stopped prior to inspection. Manager on site reported that new employee was unaware of storm water regulations and would be properly trained. Educational materials were distributed and a verbal warning was issued.
8	12/15/2010	Residential/ Construction	Building Division	2127 O Ave	Accumulation of materials in yard.	Materials outside were stored in a manner that did not pose a significant threat to storm water quality. Tenant was instructed to contain a small oil bucket underneath car.

Table 4-5 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
9	12/22/2010	Construction	Sweetwater Authority	2100 Highland Ave	Mud running off of property.	Inspector indicated the proper BMPs to be implemented on site to control sediment transport. Follow-up inspections were conducted and additional monthly inspections continued during the wet season while construction was active to ensure compliance.
10	2/3/2011	Municipal	Citizen	CalTrans District 11 - Inside fenceline under W-54/S I-5 interchange	Excessive sprinkler water draining into Sweetwater River.	CalTrans was contacted since the sprinklers are in their jurisdiction.
11	3/17/2011	Construction	Citizen	901 Euclid Ave	Uncovered excavated soil in parking lot trenching site.	Inspector verified no discharge of sediment occurred. Contractor implemented effective BMPs to contain sediment while inspector was on site.
12	5/16/2011	Commercial	Citizen	2525 Southport Way, Suite 7	Sewage going into storm drain.	Discharge was stopped and sewage contained within the inlet. Public Works used vac truck to remove and dispose of sewage (approximately 25 gallons). An administrative citation (#4284) and a NOV were issued on 5/17/2011. Business was also held responsible for Public Works cost recovery.
13	6/1/2011	Commercial	Public Works Dept	3400 East 8th St	Grease backflow from clean-out on site parking lot.	Discharge was stopped. Rescue Rooter plumber removed blockage due to grease and Public Works vacuumed and disposed of all loose grease and sewage. An administrative citation (#4285) and a NOV were issued on 6/8/2011. Business was also held responsible for Public Works cost recovery.
14	6/8/2011	Construction	Building Division	1540 E Plaza Blvd	BMPs not properly implemented.	Inspector indicated the proper BMPs to be implemented to prevent any potential sediment transport. BMPs were implemented and additional inspections will be conducted while the site is active to ensure compliance.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During 2010/2011, the City continued to implement a program to mitigate urban runoff pollution from the areas and activities of industrial and commercial businesses. Through various aspects of the industrial and commercial program, the City aims to reduce the amount of pollutants discharged from these facilities.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the industrial and commercial component during the 2010/2011 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City met the Municipal Permit requirement of inspecting at least 25 percent of its stationary industrial and commercial inventory.
- The City met the Municipal Permit requirement of inspecting 100 percent of its inventoried high TTWQ industrial and commercial facilities.
- The City sent 328 inspection report mailings to both businesses and property owners detailing corrective actions.
- The City conducted 81 follow-ups at industrial and commercial businesses to verify corrective actions had been taken and ensure compliance.
- The City conducted pollutant discharge potential assessment (PDPA) scoring at inspections to aid in source identification efforts.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 BACKGROUND

The City's industrial and commercial inventories, which can be found in Appendix A.4 and A.5, respectively, include all stationary and mobile businesses known to be operating in the City that are required to be included on the City's inventories. Stationary facilities in the City include, but are not limited to, manufacturing facilities, auto repair shops, restaurants, wholesalers, and contractors. As discussed in the following subsections, the City requires industrial and commercial businesses to implement pollution prevention measures and designated minimum BMPs to mitigate the impacts of business' activities on water quality.

5.2.2 SOURCE CHARACTERIZATION

The City's industrial and commercial inventories are included as Appendix A.4 and A.5, respectively. The inventories include both stationary and mobile businesses, as required by the Municipal Permit. The inventories were updated in 2010/2011.

Information on how the City prioritizes the industrial and commercial inventories based on TTWQ is discussed in detail in the City's JURMP. The City considers factors including those listed below when prioritizing the inventories:

- Results from previous inspections and institutional knowledge
- Presence of significant exposed outdoor storage or activities
- Consideration of downstream water body and whether the business is likely to discharge pollutants for which the water body is impaired
- Proximity to the receiving water body
- Facility size
- Industrial Permit subjectivity

The City's updated inventories include a total of 863 stationary industrial and commercial facilities.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other BMPs to reduce or potentially eliminate the generation of pollutants from business areas/activities. The City has established a set of minimum BMPs based on the CASQA Industrial and Commercial Handbook. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. The City's BMP requirements are described in more detail in the City of National City Best Management Practice Manual, which is an attachment to the City's JURMP. The City's BMP requirements for industrial and commercial businesses did not change during 2010/2011.

5.2.4 PROGRAM IMPLEMENTATION

Industrial and Commercial Inspections

During 2010/2011, the City conducted storm water compliance inspections at selected stationary industrial and commercial facilities; Table 5-1 provides a summary of the industrial and commercial site visits. The purpose of the inspections is to confirm that the City's minimum BMPs are being implemented at stationary industrial and commercial facilities.

Table 5-1, below, provides a summary of the industrial and commercial site visits. All of the high TTWQ sites were selected for inspection, and additional facilities were also selected for routine inspection based on compliance history, TTWQ, and the length of time since the last inspection visit.

Table 5-1
Summary of Industrial and Commercial Inspections

Facility Category	Full Inspections Conducted	Percentage of Total Inventory
High TTWQ Sites*	77	9% (100% of high TTWQ sites)
Additional Sites	139	16%
All Stationary Inventoried Sites	**863**	**25%**

* All high TTWQ sites were visited during 2010/2011; if the business had moved out a full inspection was not necessary and the inventory was updated for future inspection efforts.

Facility inspections were conducted in accordance with the protocol set forth in the City's JURMP. Inspections involved a thorough examination of the facility and all outdoor activities. BMP deficiencies and corrective actions were discussed with facility personnel present during the inspection and recorded on the City's industrial and commercial inspection form (Attachment 5.1).

During 2010/2011, the City continued to use the standard inspection form and associated inspection reports that were updated in 2009/2010. Facility personnel at inspected businesses had reported that many of the corrective actions on the inspection report were related to shared areas or areas maintained by the property owner or property management company, the inspection form was updated to collect information regarding areas where responsibility for BMP implementation may be shared. Check boxes indicating "shared responsibility" were added to the form for each BMP assessment item on the form. These boxes were checked whenever the facility personnel present during the inspection reported that the BMP was a shared responsibility between the individual business, other tenants in a multi-suite complex, and/or the property management company/property owner. Note that the information collected is whether or not the responsibility is reportedly shared, not a determination of whether or not legally the responsibility is shared. In some cases the business may report that the responsibility is shared, but other parties, such as the property owner, may not agree.

The inspection reports were also updated to group the types of corrective actions listed on the inspection report into the following categories, which were described in a cover letter accompanying the inspection report:

- **Business Corrective Actions**, which included corrective actions specific to business activities.
- **Specific Action(s) Required by the Business to Comply with the Requirements of the General Industrial Permit**, which included corrective actions relating to

the State of California General Industrial Permit (State Water Resources Control Board Order No. 97-03-DWQ).

- **Shared or Communal Area Corrective Actions**, which included corrective actions that are related to shared or communal areas and may not be solely the responsibility of the individual business.

When any corrective actions regarding a shared or communal area are included on the inspection report, a copy of the same inspection report was also provided to the property owner. A slightly different cover letter that explains why the property owner or manager is receiving the report is included with these letters. The property owner/manager cover letter explains the different types of corrective actions, described above, and explains that deficiencies listed under the "Shared or Communal Area Corrective Actions" heading are deficiencies that may not be the responsibility of the individual business and are being provided to both the property owner and the business to ensure that action is taken by the appropriate party. This updated method of inspection result notification is more straightforward and easier for the business representatives to understand, which increases the chance that the corrective actions will be implemented in a timely manner. Additionally, notifying property owners of corrective actions observed in communal areas should also contribute to BMPs being implemented in a timely manner.

The City also assesses PDPA scores during the inspections as part of an additional data collection effort. The PDPA scores are marked on the City's inspection form in Attachment 5.1. More information about the results of this process is presented in Section 12 of this JURMP Annual Report.

During the inspection process, the City also checked Industrial Permit compliance status when applicable. Businesses observed to be in violation of the Industrial Permit are included in Table 5-2. Table 5-3, at the end of the section, summarizes the results of the 321 site visits conducted during 2010/2011. A total of 216 full inspections were completed as part of the City's 2010/2011 routine industrial and commercial inspection program. The remainder of the sites were visited, but during the visit were found to have moved, be duplicates of other businesses, be mobile businesses, be out of the City's jurisdiction, be inactive and difficult to contact, or not to be conducting activities for which inclusion on the City's inventory is necessary.

Facilities indicated to have an "in progress" resolution status in the 2009/2010 JURMP Annual Report were inspected and all issues were resolved before the end of 2010. Facilities that were recommended for follow-up this year are noted in the table. The City conducted 81 follow-up inspections in 2010/2011, and the resolution status of these follow-ups is included with the routine inspection results in Table 5-3. The City provided copies of inspection results to each facility that received a full inspection in 2010/2011. The inspection report included the findings of the inspection and all required corrective actions recorded by the inspector.

The City did not rely on third party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third party inspection program.

General Industrial Permit

Industrial Permit compliance status was evaluated during the industrial and commercial inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector gathered information about the business activities that occur on site and assigned or reassigned the business's standard industrial classification (SIC) code(s). The inspector then determined Industrial Permit subjectivity based on SIC code. Violations of any aspect of Industrial Permit requirements were recorded on the standard industrial and commercial inspection form and are presented in Table 5-2. The table includes businesses directed to file a Notice of Intent (NOI) and develop a Storm Water Pollution Prevention Plan (SWPPP) and monitoring program, as well as businesses that had filed an NOI but had failed to develop a SWPPP and monitoring program. The table also includes facilities that could potentially gain exemption from Industrial Permit requirements by completing notice of non-applicability/no exposure certification (NONA/NEC) paperwork. Each business was notified of any Industrial Permit-related non-compliance by the inspector.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to provide site-specific one-on-one education regarding storm water concepts and BMPs. Educational materials were provided as applicable to businesses, including the City's Restaurant/Food Industry BMP Fact Sheet (Attachment 5.2) and the Industrial and Commercial "Preventing Urban Runoff Pollution" Trifold (Attachment 5.3).

Additionally, the City sent 362 notifications of the City's JURMP BMPs for industrial and commercial businesses by March 7, 2011, to ensure that all businesses that had not been inspected since the JURMP Update in March of 2008 would be notified of the updated requirements.

Enforcement

Several industrial and commercial facilities were observed to be out of compliance with the City's municipal storm water ordinance and/or the Industrial Permit during inspections conducted in 2010/2011. Additionally, the City received complaints through the City's storm water hotline. Details of the industrial and commercial complaint investigations are included in the Summary of Documented Public Complaints in Section 4 of this Annual Report. The City issued the following enforcement actions in response to BMP deficiencies during inspections and other complaints:

- 328 inspection report mailings sent to businesses and property owners
- 22 NOVs

- 16 Administrative citations
- 3 Verbal warnings

There were no instances of noncompliance found to present a significant threat to human health or the environment observed at stationary businesses during 2010/2011, so none were reported to the RWQCB.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Due to the nature of activities of most mobile businesses, a major area of concern tends to be illegal discharges. In general, mobile businesses can be hard to identify, as many may not have City business licenses. Additionally, because the activities of mobile businesses do not occur in one fixed location, inspections of such businesses are impractical.

5.3.2 SOURCE CHARACTERIZATION

Known mobile industrial and commercial businesses, as described in the City's JURMP, are included on the City's inventory and are marked as mobile. During 2008/2009, the Regional Industrial and Commercial Workgroup also developed a web-based mobile business database for use by all Copermittees. The goal of developing this database is to allow Copermittees to share information about mobile businesses, which may be active in more than one jurisdiction. The City contributed its mobile business inventory for upload to the regional database in 2009/2010.

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

BMPs for stationary industrial and commercial facilities, as discussed earlier in this section, are required to be implemented for mobile activities, as applicable. BMPs for mobile businesses, including key principles such as proper collection and disposal of any discharge, are discussed in the City's JURMP.

During 2009/2010, the Regional Industrial and Commercial Workgroup, in which the City was an active participant, adopted regional mobile business BMP standards. These standards were devised to create a uniform set of minimum BMPs for mobile businesses operating within the region. The Workgroup is still developing a mobile business BMP notification template that Copermittees may choose to use to notify mobile businesses operating their jurisdiction.

5.3.4 PROGRAM IMPLEMENTATION

While mobile businesses are not as straightforward to inspect as fixed industrial and commercial facilities, the City has in place a program of education and enforcement to regulate mobile activities.

Education and Outreach

All businesses conducting mobile activities within the City's jurisdiction are required to apply for and maintain a business license with the City of National City, regardless of where the business may be based. The Industrial and Commercial "Preventing Urban Runoff Pollution" Trifold is provided to each person applying for a business license in the City, including mobile businesses. The trifold brochure, included in Attachment 5.3 of this Annual Report, clearly prohibits the discharge of wash water and provides a list of required BMPs applicable to industrial and commercial businesses. Mobile businesses maintaining a City business license are included on the Commercial Inventory in Appendix A.5. No known mobile businesses conduct industrial activities in the City at this point in time. To aid in tracking mobile businesses that may conduct activities within its jurisdiction in the future, the City also collaborates with other jurisdictions in the County of San Diego in maintaining a county-wide list of mobile businesses.

Additionally, the City sent 362 notifications of the City's JURMP BMPs for industrial and commercial businesses by March 7, 2011, to ensure that all businesses that had not been inspected since the JURMP Update in March of 2008 would be notified of the updated requirements. In many cases, those businesses that had not been visited were mobile businesses.

Reporting and Enforcement

In addition to regulation through business licenses, City staff are trained to report inappropriate mobile business activities to the City's storm water hotline. The City responds to all calls to the City's storm water hotline regarding mobile businesses. Notably, there were no complaints made to the City's storm water hotline regarding mobile businesses during 2010/2011.

There were no instances of noncompliance of mobile businesses that were believed to present potential threats to human health or the environment observed during 2010/2011, so none were reported to the RWQCB.

5.4 Industrial and Commercial Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 Program Review and Modification

No modifications were made to the City's industrial and commercial component during 2010/2011.

Table 5-2
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation			
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC
1	ADEPT PROCESS SERVICES, INC DBA MARINE SERVICES AND EQUIPMENT	1804 CLEVELAND AVE B	8/30/2010	Mandatory	3732		✔	✔	✔	
2	AZAP CAPS AND TEES	220 W 25TH ST E	3/8/2011	Conditional	2759	No exposure of materials observed				✔
3	COLLINS MARINE REPAIR, INC	1400 CLEVELAND AVENUE	3/7/2011	Conditional	3441	Exposure of materials observed	✔	✔	✔	
4	DAN FAB	1110 HARDING AVENUE	12/1/2010	Conditional	3499	Exposure of materials observed	✔	✔	✔	
5	DTI SOLAR POWER	205 W 35TH ST	2/14/2011	Conditional	3677	No exposure of materials observed				✔
6	FUTURA FIBERGLASS	1921 CLEVELAND AVE	1/12/2011	Conditional	3089	Exposure of materials observed	✔	✔	✔	
7	GULF COPPER SHIP REPAIR	2702 SOUTHPORT WAY B	2/21/2011	Mandatory	3731		✔	✔	✔	
8	H2O LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	2/18/2011	Conditional	2048	Exposure of materials observed	✔	✔	✔	
9	INDU FASHIONS	220 W 25TH ST B	3/2/2011	Conditional	2329 2339	No exposure of materials observed				✔

Table 5-2 (Continued)
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation			
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC
10	J B BRADFORD METALS	221 W 16TH ST	2/22/2011	Conditional	3446	Exposure of materials observed	✔	✔	✔	
11	JAANN	2602 TRANSPORTATIO N AVE F	2/21/2011	Conditional	3999	No exposure of materials observed				✔
12	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	8/27/2010	Conditional	3714 7538	Exposure of materials observed	✔	✔	✔	
13	KDR/DPG	301 W 28TH ST G	2/21/2011	Conditional	2759	No exposure of materials observed				✔
14	M & N FURNITURE	125 W 22ND STREET	10/26/2010	Conditional	2512	No exposure of materials observed				✔
15	MOTIVATIONAL SYSTEMS INC. (MSI)	2200 CLEVELAND AVENUE	3/21/2011	Conditional	2599 3993	No exposure of materials observed				✔
16	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	8/25/2010	Conditional	3714 7538	Exposure of materials observed	✔	✔	✔	
17	NATIONAL IRON WORKS	832 HOOVER AVENUE	9/9/2010	Mandatory	3441		✔	✔	✔	
18	QUALITY PRINTING INC	1535 TIDELANDS AVE H	1/14/2011	Conditional	2759	No exposure of materials observed				✔
19	RELIANCE METAL CENTER	2100 CLEVELAND AVENUE	3/18/2011	Mandatory	5051 4212		✔	✔	✔	

Table 5-2 (Continued)
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation			
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC
20	SOUTHLAND CLUTCH EXCHANGE	101 E 18TH STREET	3/17/2011	Conditional	3568 5013	No exposure of materials observed				✔
21	SURE RIDE INC	1523 WILSON AVE	8/30/2010	Mandatory	4141		✔	✔	✔	
22	TITAN MARINE, INC	2236 MCKINLEY AVE	3/7/2011	Mandatory	3732		✔	✔	✔	
23	TS COMPANY	1616 HOOVER AVE	3/9/2011	Conditional	3446	Exposure of materials observed	✔	✔	✔	
24	UPHOLSTERY FABRIC OUTLET (UFO)	1918 ROOSEVELT AVENUE	2/15/2011	Conditional	2512 5714 7641	No exposure of materials observed				✔
25	VALMAR GRAPHICS INC	1400 E PLAZA BLVD	3/7/2011	Conditional	2759	No exposure of materials observed				✔

Table 5-3
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
1	705 CIVIC CENTER DRIVE	705 CIVIC CENTER DRIVE	3/18/2011, 5/16/2011	Full Inspection	✔	Resolved
2	A & D HAWAIIAN BBQ	2220 E PLAZA BLVD D	8/27/2010, 10/21/2010	Full Inspection	✔	Resolved
3	A NEW LOOK AUTO BODY & PAINT	340 W 11TH ST	1/13/2011	Full Inspection		
4	A-1 ALLOYS RECYCLING CENTER	724 CIVIC CENTER DRIVE	1/11/2011	Full Inspection		
5	ADEPT PROCESS SERVICES, INC DBA MARINE SERVICES AND EQUIPMENT	1804 CLEVELAND AVE B	8/30/2010	Full Inspection		
6	ALL PRO AUTO REPAIR	517 NATIONAL CITY BLVD	3/11/2011	Full Inspection		
7	ALM WINDOW & DOOR INC	337 W 35TH ST A	2/14/2011	Full Inspection		
8	ARCO AM PM #6523	133 W 8TH STREET	2/17/2011, 3/16/2011, 5/16/2011	Full Inspection	✔	Resolved
9	ARCO AM/PM #9566	1606 E PLAZA BLVD	3/7/2011	Full Inspection		
10	ARIANA'S MEXICAN BAKERY	1604 E 18TH ST	1/17/2011	Full Inspection		
11	ARROYO BROTHERS	128 NATIONAL CITY BLVD	3/18/2011	Full Inspection		
12	ASIAN NOODLES	1430 E PLAZA BLVD E-12	8/30/2010, 10/21/2010	Full Inspection	✔	Resolved
13	AUDIO MOTION	2907 HIGHLAND AVE	1/17/2011	Full Inspection		
14	AUNT EMMA'S	214 NATIONAL CITY BLVD	2/22/2011	Full Inspection		
15	AUTO SOUND & IMAGE	1316 NATIONAL CITY BLVD	3/9/2011	Full Inspection		
16	AUTO ZONE #5659	2500 E PLAZA BLVD	3/8/2011	Full Inspection		
17	AZAP CAPS AND TEES	220 W 25TH ST E	3/8/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
18	BALL AUTOMOTIVE GROUP	2729 NATIONAL CITY BLVD	8/26/2010	Full Inspection		
19	BALL AUTOMOTIVE GROUP (KIA)	1940 NATIONAL CITY BLVD	2/15/2011	Full Inspection		
20	BAMBOO ROTISSERIE, INC	2220 E PLAZA BLVD T-1	8/27/2010, 10/21/2010, 12/1/2010	Full Inspection	✔	Resolved
21	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	1/10/2011, 2/21/2011, 4/8/2011	Full Inspection	✔	Resolved
22	BELY'S PRODUCE & MARKET	525 HIGHLAND AVE	2/17/2011	Full Inspection		
23	BEN'S 1615	1615 SWEETWATER ROAD A	8/20/2010, 10/25/2010, 12/1/2010	Full Inspection	✔	Resolved
24	BLUE OCEAN TACKLE INC	1545 TIDELANDS AVE E	3/21/2011	Full Inspection		
25	BURGER KING	815 HIGHLAND AVENUE 780	3/10/2011	Full Inspection		
26	C&M MOTORS INC.	904 ROOSEVELT AVENUE	8/27/2010, 10/25/2010	Full Inspection	✔	Resolved
27	CALIFORNIA AUTO DETAIL	1 W 35TH ST	10/27/2010, 2/14/2011	Full Inspection	✔	Resolved
28	CALIFORNIA AUTO DETAILING	1509.5 NATIONAL CITY BLVD	8/27/2010	Full Inspection		
29	CALIFORNIA SALES	205 W 35TH ST B	2/14/2011	Full Inspection		
30	CALIFORNIAS FURNITURE INSTALLATION, INC	2807 HOOVER AVE J-K	2/14/2011	Full Inspection		
31	CARLS JR. #120	1280 E PLAZA BLVD	8/26/2010	Full Inspection		
32	CARLS' JR. #261	1502 SWEETWATER ROAD	8/27/2010	Full Inspection		
33	CAROLINO TRAFFIC CONTROL, INC	3035 E 8TH ST	2/9/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
34	CARROLL METAL WORKS, INC.	740 W 16TH STREET	1/11/2011	Full Inspection		
35	CASA DEL TACO	1635 SWEETWATER ROAD A	8/27/2010, 10/25/2010	Full Inspection	✔	Resolved
36	CESAR'S TACO SHOP	3123 D AVENUE	3/17/2011	Full Inspection		
37	CHINA SUPER BUFFET	3007 HIGHLAND AVE 9	2/11/2011, 3/15/2011	Full Inspection	✔	Resolved
38	CHINESE CITY RESTAURANT #2	1025 HIGHLAND AVENUE	3/10/2011, 4/5/2011	Full Inspection	✔	Resolved
39	CHOWKING	2220 E PLAZA BLVD T-1	8/25/2010, 10/21/2010	Full Inspection	✔	Resolved
40	CHUCK E CHEESE'S	1143 HIGHLAND AVENUE	8/26/2010	Full Inspection		
41	CHURCH'S CHICKEN	3040 E 8TH STREET	2/9/2011	Full Inspection		
42	COLLINS MARINE REPAIR, INC	1400 CLEVELAND AVENUE	3/7/2011	Full Inspection		
43	COLOR VIE	1545 TIDELANDS AVE P	1/14/2011	Full Inspection		
44	COMMERCIAL FLEET SERVICE	1521 COOLIDGE AVENUE	3/9/2011	Full Inspection		
45	CONCHING'S CAFÉ	3400 E 8TH STREET 115 & 116	8/26/2010	Full Inspection		
46	COSTCO WHOLESALE CORPORATION	1001 W 19TH STREET C & D	3/2/2011	Full Inspection		
47	COSTCO WHOLESALE GROUP	1001 W 19TH STREET B	3/2/2011, 4/6/2011	Full Inspection	✔	Resolved
48	COTIJAS MEXICAN FOOD	740 E 30TH STREET	8/30/2010, 10/25/2010	Full Inspection	✔	Resolved
49	CP MANUFACTURING	1300 WILSON AVENUE	1/18/2011	Full Inspection		
50	CUBILETE CO	2315 HIGHLAND AVE	2/10/2011	Full Inspection		
51	DAN FAB	1110 HARDING AVENUE	12/1/2010	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
52	DE-LUX ROOFING	1107 HARDING AVENUE	2/17/2011, 4/8/2011, 5/16/2011	Full Inspection	✔	Resolved
53	DENNY'S RESTAURANT	424 MILE OF CARS WAY	8/26/2010, 10/26/2010	Full Inspection	✔	Resolved
54	DENNY'S RESTAURANT	1904 SWEETWATER ROAD 1473	3/8/2011, 4/6/2011	Full Inspection	✔	Resolved
55	DEWEY PEST CONTROL	324 CIVIC CENTER DRIVE	3/18/2011	Full Inspection		
56	DIAMANTE MOTORS INC	1112 NATIONAL CITY BLVD D	2/22/2011	Full Inspection		
57	DIXIELINE LUMBER COMPANY	3450 HIGHLAND AVENUE	1/12/2011	Full Inspection		
58	DOMINO'S PIZZA	702 HIGHLAND AVENUE	2/16/2011	Full Inspection		
59	DTI SOLAR POWER	205 W 35TH ST	2/14/2011	Full Inspection		
60	EL JUAN CAFÉ	2316 HIGHLAND AVENUE	2/10/2011	Full Inspection		
61	EL NUEVO MILLENIO MEXICAN FOOD	2323 E DIVISION STREET	3/10/2011, 4/8/2011	Full Inspection	✔	Resolved
62	EL PALENQUE TACO SHOP	3100 E 8TH ST A	2/9/2011, 3/16/2011	Full Inspection	✔	Resolved
63	ENTORS MOTORS	301 W 28TH STREET M	2/21/2011	Full Inspection		
64	EPSILON SYSTEMS SOLUTIONS INC	2101 HAFFLEY AVE	1/10/2011	Full Inspection		
65	ETHNIC DELI & CAFE	404 W MILE OF CARS WAY F	2/21/2011	Full Inspection		
66	EVANS TIRES	3009 HIGHLAND AVENUE	3/8/2011, 4/5/2011	Full Inspection	✔	Resolved
67	EVOLUTION TEAM	1001 NATIONAL CITY BLVD	1/13/2011	Full Inspection		
68	EXPRESS TIRE	820 HIGHLAND AVENUE	3/10/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
69	FABRICATION TECHNOLOGIES INDUSTRIES	2200 HAFFLEY AVENUE A	1/18/2011	Full Inspection		
70	FAMILY HOUSE OF PANCAKES	1900 E PLAZA BLVD	8/30/2010, 10/26/2010	Full Inspection	✔	Resolved
71	FAMILY LOOMPYA SEAFOOD MARKET	2720 E PLAZA BLVD A	8/26/2010, 10/22/2010	Full Inspection	✔	Resolved
72	FARMERS DISCOUNT MARKET	1535 E 18TH STREET	2/11/2011	Full Inspection		
73	FLEETWOOD PLUMBING/ELECTRIC INC	1416 HOOVER AVENUE	3/9/2011	Full Inspection		
74	FOODLAND IGA	303 HIGHLAND AVENUE	8/27/2010, 10/26/2010, 12/1/2010	Full Inspection	✔	Resolved
75	FRANK'S SUBARU	2940 NATIONAL CITY BLVD	2/10/2011	Full Inspection		
76	FRUTERIA COPA CABANA	1528 HIGHLAND AVE B	1/13/2011	Full Inspection		
77	FUTURA FIBERGLASS	1921 CLEVELAND AVE	1/12/2011	Full Inspection		
78	GEORGE'S MARKET	2540 E 18TH STREET	2/16/2011	Full Inspection		
79	GIANT NEW YORK PIZZA	8 N EUCLID AVENUE B	2/9/2011	Full Inspection		
80	GINZA SUSHI	925 E PLAZA BLVD G	8/26/2010, 10/21/2010	Full Inspection	✔	Resolved
81	GOLDEN DONUTS	36 N EUCLID AVENUE E	2/9/2011	Full Inspection		
82	GOLDEN STATE LAUNDRY SYSTEMS	1729 COOLIDGE AVE B	2/22/2011	Full Inspection		
83	GOODY'S	340 W 26TH STREET E	8/26/2010, 10/27/2010	Full Inspection	✔	Resolved
84	GULF COPPER SHIP REPAIR	2702 SOUTHPORT WAY B	2/21/2011	Full Inspection		
85	H & P	415 NATIONAL CITY BLVD	3/11/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
86	H2O LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	2/18/2011, 3/16/2011	Full Inspection	✔	Resolved
87	HANSON AGGREGATES NATIONAL CITY BATCH PLANT (2003 NC LLC)	601 W 12TH STREET	1/12/2011	Full Inspection		
88	HARKEN WEST	241 W 35TH ST K	2/14/2011	Full Inspection		
89	HIGHLAND ARCO	2336 HIGHLAND AVENUE	3/17/2011	Full Inspection		
90	HIGHLAND ARCO NORTH	1734 HIGHLAND AVENUE	8/27/2010	Full Inspection		
91	HOMETOWN BUFFET #714	1135 HIGHLAND AVENUE	8/26/2010	Full Inspection		
92	HOPSING AUTO	1540 ROOSEVELT AVENUE	8/27/2010, 10/26/2010	Full Inspection	✔	Resolved
93	HOT TASTY PIZZA #2	2401 HIGHLAND AVE 105	2/10/2011	Full Inspection		
94	HP CLUTCH & BRAKE	1620 HARDING AVE	1/13/2011, 2/18/2011	Full Inspection	✔	Resolved
95	HYTECH AUTO DETAIL	2130 ROOSEVELT AVE	9/24/2010	Full Inspection		
96	ICEBERG ENTERPRISES, INC.	1410 CLEVELAND AVENUE	3/21/2011	Full Inspection		
97	IDEAL SMOG	1112 NATIONAL CITY BLVD B	2/22/2011	Full Inspection		
98	IN N OUT BURGER	500 MILE OF CARS WAY	3/8/2011	Full Inspection		
99	INDU FASHIONS	220 W 25TH ST B	3/2/2011	Full Inspection		
100	J B BRADFORD METALS	221 W 16TH ST	2/22/2011	Full Inspection		
101	JAANN	2602 TRANSPORTATION AVE F	2/21/2011	Full Inspection		
102	JACK IN THE BOX	700 ROOSEVELT AVENUE	2/22/2011	Full Inspection		
103	JACK IN THE BOX #3	1745 HIGHLAND AVENUE	2/16/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
104	JACK IN THE BOX #80	3138 E PLAZA BLVD	8/25/2010, 10/22/2010	Full Inspection	✔	Resolved
105	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	8/27/2010, 10/25/2010	Full Inspection	✔	Resolved
106	JERAULDS CAR CARE CENTER	2020 NATIONAL CITY BLVD	3/2/2011	Full Inspection		
107	JOLLIBEE	1401 E PLAZA BLVD	8/27/2010, 10/21/2010	Full Inspection	✔	Resolved
108	K SURPLUS SALES INC	1403 CLEVELAND AVENUE	2/17/2011	Full Inspection		
109	KARIHAN FILIPINO FOOD	2220 E PLAZA BLVD A-1	8/25/2010, 10/22/2010	Full Inspection	✔	Resolved
110	KARZ PLUS	1605 NATIONAL CITY BLVD	3/9/2011, 4/5/2011, 5/16/2011	Full Inspection	✔	Resolved
111	KDR/DPG	301 W 28TH ST G	2/21/2011	Full Inspection		
112	KENTUCKY FRIED CHICKEN	840 HIGHLAND AVENUE	3/10/2011, 4/5/2011	Full Inspection	✔	Resolved
113	KENTUCKY FRIED CHICKEN	3005 HIGHLAND AVENUE	3/15/2011	Full Inspection		
114	L & L HAWAIIAN BARBEQUE	1860 SWEETWATER ROAD B	2/11/2011, 3/21/2011	Full Inspection	✔	Resolved
115	L B C MUNDIAL CORP	1420 E PLAZA BLVD D-9	3/7/2011	Full Inspection		
116	L3 COMMUNICATIONS PACORD SAN DIEGO	225 W 30TH STREET	1/18/2011	Full Inspection		
117	L3 COMMUNICATIONS/PACORD SAN DIEGO	240 W 30TH STREET	1/18/2011	Full Inspection		
118	LA COASTA NOSTRA	902 E 18TH ST	2/16/2011	Full Inspection		
119	LA SIERRA CAFÉ	306 HIGHLAND AVENUE	2/18/2011, 3/18/2011	Full Inspection	✔	Resolved

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
120	LAI THAI RESTAURANT	1430 E PLAZA BLVD E-10	8/25/2010, 10/21/2010, 12/1/2010	Full Inspection	✔	Resolved
121	LAS PALMAS MEXICAN CAFÉ	640 HIGHLAND AVE A	2/17/2011	Full Inspection		
122	LINE-X SAN DIEGO	2704 TRANSPORTATION AVE A	3/2/2011	Full Inspection		
123	LISA'S FILIPINO CUISINE 2	1210 E PLAZA BLVD 410	1/13/2011, 2/16/2011	Full Inspection	✔	Resolved
124	LITTLE DRAGON CHINESE	2424 HOOVER AVENUE K	3/2/2011	Full Inspection		
125	LOLA HAPPY BAKERY	3142 E PLAZA BLVD L	8/25/2010, 10/22/2010, 12/2/2010	Full Inspection	✔	Resolved
126	LOS PANCHOS TACO SHOP	2441 NATIONAL CITY BLVD	2/10/2011, 3/17/2011	Full Inspection	✔	Resolved
127	LOS RANCHERITOS	835 PALM AVE	1/17/2011	Full Inspection		
128	M & N FURNITURE	125 W 22ND STREET	10/26/2010	Full Inspection		
129	M & T AUTO	1731 WILSON AVENUE	8/26/2010, 10/26/2010, 12/1/2010	Full Inspection	✔	Resolved
130	MANILA SEAFOOD ORIENTAL MARKET	2220 E PLAZA BLVD K	8/25/2010, 10/21/2010, 12/1/2010	Full Inspection	✔	Resolved
131	MANILA SUNSET GRILLE	925 E PLAZA BLVD I	8/26/2010	Full Inspection		
132	MARISCOS SINALOA #2	2435 NATIONAL CITY BLVD	2/10/2011	Full Inspection		
133	MASTER MACHINE CORPORATION (VANTAGE ASSOCIATES)	900 CIVIC CENTER DRIVE	1/11/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
134	MCDONALDS	1630 HIGHLAND AVENUE	8/22/2010	Full Inspection		
135	MCMILLIN RACING, LLC	101 E 30TH ST	3/15/2011	Full Inspection		
136	METROPOLITAN AUTOMOTIVE	206 W 35TH ST C	2/14/2011	Full Inspection		
137	MIKE'S GIANT NY PIZZA #5	1635 SWEETWATER ROAD C-1	8/27/2010, 10/25/2010	Full Inspection	✔	Resolved
138	MILLER MARINE	1430 HOOVER AVENUE	1/18/2011	Full Inspection		
139	MOSSY NISSAN	2700 NATIONAL CITY BLVD	2/10/2011	Full Inspection		
140	MOTIVATIONAL SYSTEMS INC. (MSI)	2200 CLEVELAND AVENUE	3/21/2011	Full Inspection		
141	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	8/25/2010, 10/25/2010	Full Inspection	✔	Resolved
142	NANI MOKU HAWAIIAN BBQ	1635 SWEETWATER RD H	8/27/2010, 10/25/2010	Full Inspection	✔	Resolved
143	NATIONAL CITY AUTO CENTER INC	1010 NATIONAL CITY BLVD	8/27/2010	Full Inspection		
144	NATIONAL CITY CAR WASH	2550 E PLAZA BLVD	8/25/2010	Full Inspection		
145	NATIONAL CITY GROCERY OUTLET	3446 HIGHLAND AVENUE 6	2/11/2011	Full Inspection		
146	NATIONAL CITY SMOG BRAKE & LIGHTS	705 E 8TH ST	3/17/2011	Full Inspection		
147	NATIONAL CITY SMOG CHECK	105 W 18TH ST	2/22/2011	Full Inspection		
148	NATIONAL IRON WORKS	832 HOOVER AVENUE	9/9/2010	Full Inspection		
149	NILS HALL DBS THUNDERBIRD	705 E 8TH STREET	2/17/2011	Full Inspection		
150	OCHOA FAMILY CHORIZO	2708 HIGHLAND AVE	1/17/2011	Full Inspection		
151	OHANA HAWAIIAN ISLAND BBQ	430 E PLAZA BLVD E7A	8/25/2010, 10/21/2010	Full Inspection	✔	Resolved

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
152	OLYMPIC AUTO SALES	1800 NATIONAL CITY BLVD	2/15/2011	Full Inspection		
153	ON HIT BAR BE QUE PIT	3403 E PLAZA BLVD A1	2/9/2011, 3/15/2011	Full Inspection	✔	Resolved
154	ORIENTAL CAFE	39 E 7TH STREET	2/22/2011	Full Inspection		
155	OUTBACK STEAK HOUSE	2980 PLAZA BONITA RD	8/30/2010	Full Inspection		
156	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	1/10/2011	Full Inspection	✔	In progress
157	PETER PIPER PIZZA STORE #212	3007 HIGHLAND AVENUE 11	2/11/2011, 3/15/2011	Full Inspection	✔	Resolved
158	PHO GINGER & GRILL	1420 E PLAZA BLVD D5	1/17/2011	Full Inspection		
159	PHO NAM CALI	2344 E 8TH ST	2/9/2011, 3/15/2011	Full Inspection	✔	Resolved
160	PINOY FIESTA	550 E 8TH STREET 8 & 9	2/17/2011	Full Inspection		
161	PIZZA HUT #315044	2437 E PLAZA BLVD	8/25/2010, 10/22/2010	Full Inspection	✔	Resolved
162	PLAZA BOULEVARD PET CLINIC	2415 E PLAZA BLVD	3/7/2011	Full Inspection		
163	POPEYES FAMOUS FRIED CHICKEN	2333 HIGHLAND AVENUE	2/10/2011	Full Inspection		
164	QUALITY PRINTING INC	1535 TIDELANDS AVE H	1/14/2011	Full Inspection		
165	QWIK KORNER	3009 HIGHLAND AVE	2/11/2011, 3/15/2011	Full Inspection	✔	Resolved
166	R W LITTLE, CO	415 W 30TH ST	2/21/2011, 3/16/2011	Full Inspection	✔	Resolved
167	RELENTLESS AUTO SPORTS LLC	25 E 17TH ST A	3/11/2011, 4/5/2011	Full Inspection	✔	Resolved
168	RELIANCE METAL CENTER	2100 CLEVELAND AVENUE	3/18/2011	Full Inspection		
169	RENT-A-CENTER #01072	1043 HIGHLAND AVE	1/13/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
170	RESTAURANT EQUIPMENT WAREHOUSE	3039 HOOVER AVE	2/23/2011	Full Inspection		
171	RN AUTO DETAIL	1784 ROOSEVELT AVE	2/15/2011, 3/16/2011	Full Inspection	✔	Resolved
172	ROBERTO'S TACO SHOP	1406 HIGHLAND AVENUE	2/16/2011, 3/16/2011	Full Inspection	✔	Resolved
173	RODEO'S MEAT MARKET	422 HIGHLAND AVENUE	3/17/2011	Full Inspection		
174	ROYAL MANDARIN RESTAURANT	1132 E PLAZA BLVD 205	4/5/2011	Full Inspection		
175	SAN DIEGO HYDRAULICS INC	1720 CLEVELAND AVE	8/26/2010, 10/26/2010	Full Inspection	✔	Resolved
176	SAN JOSE RESTAURANT	213 HIGHLAND AVENUE	2/18/2011	Full Inspection		
177	SANTI CHINESE HERBS SHOP	2605 HOOVER AVE G	1/14/2011	Full Inspection		
178	SHAFT MASTER	1031 NATIONAL CITY BLVD C	3/18/2011, 4/13/2011	Full Inspection	✔	Resolved
179	SHELL STATION	2401 E DIVISION STREET	3/10/2011, 4/13/2011	Full Inspection	✔	Resolved
180	SHUTTER BUS LEASING	1726 WILSON AVENUE	1/12/2011, 2/15/2011	Full Inspection	✔	Resolved
181	SID'S CARPET BARN	132 W 8TH STREET	3/21/2011	Full Inspection		
182	SO CAL CUSTOM & COLLISION	3000 NATIONAL CITY BLVD	2/14/2011, 4/8/2011	Full Inspection	✔	Resolved
183	SOUTH BAY BOILER REPAIR, INC..	1224 ROOSEVELT AVENUE	1/10/2011	Full Inspection		
184	SOUTH BAY LEATHER CORP	1900 WILSON AVENUE	2/18/2011	Full Inspection		
185	SOUTH BAY MECHANICAL SERVICES	2137 WILSON AVENUE	2/18/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
186	SOUTH BAY VOLKSWAGON	3131 NATIONAL CITY BLVD	2/14/2011	Full Inspection		
187	SOUTHLAND CLUTCH EXCHANGE	101 E 18TH STREET	3/17/2011	Full Inspection		
188	SPECIALTY TIRES AND BRAKES	1 W 35TH ST D	8/26/2010, 10/27/2010	Full Inspection	✔	Resolved
189	SUBWAY SANDWICHES & SALADS #44272	2220 E PLAZA BLVD A-1	1/17/2011	Full Inspection		
190	SUN DIEGO CHARTER CO.	2020 HOOVER AVENUE	1/10/2011, 2/15/2011	Full Inspection	✔	Resolved
191	SUN DIEGO PRE OWNED	45 E 26TH STREET	3/8/2011	Full Inspection		
192	SUNCARGO INC	1457 E PLAZA BLVD	3/7/2011	Full Inspection		
193	SURE RIDE INC	1523 WILSON AVE	8/30/2010	Full Inspection		
194	TACO BELL #2800	1737 SWEETWATER ROAD	2/11/2011	Full Inspection		
195	TACO SALSA TACO SHOP	925 E PLAZA BLVD B	8/26/2010, 10/21/2010	Full Inspection	✔	Resolved
196	THE SPEED SHOP	623 NATIONAL CITY BLVD	3/11/2011	Full Inspection		
197	TITAN MARINE, INC	2236 MCKINLEY AVE	3/7/2011	Full Inspection		
198	TITA'S KITCHENETTE	2720 E PLAZA BLVD E & F	8/25/2010	Full Inspection		
199	TOM MOYNAHAN TOWING	3200 NATIONAL CITY BLVD	3/9/2011	Full Inspection		
200	TOM THUMB WHOLESALE ICE CREAM	1021 COOLIDGE AVENUE	3/2/2011	Full Inspection		
201	TONY'S DETAIL SHOP	49 E 16TH ST B1	8/30/2010, 10/25/2010	Full Inspection	✔	Resolved
202	TRANSMISSION SUPPLY	338 W 12TH STREET	3/18/2011, 4/5/2011	Full Inspection	✔	Resolved
203	TS COMPANY	1616 HOOVER AVE	3/9/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
204	TUTTI FRUTTI OF NATIONAL CITY	1031 HIGHLAND AVE	2/16/2011	Full Inspection		
205	UPHOLSTERY FABRIC OUTLET (UFO)	1918 ROOSEVELT AVENUE	2/15/2011	Full Inspection		
206	VALENCIA STONE AND TILE	1124 COOLIDGE AVENUE	1/12/2011	Full Inspection		
207	VALERIOS FAMILY BAKE SHOP	2720 E PLAZA BLVD H	8/30/2010, 10/22/2010	Full Inspection	✔	Resolved
208	VALERO NATIONAL CITY	10 OSBORN STREET	2/18/2011, 3/16/2011, 4/13/2011	Full Inspection	✔	Resolved
209	VALMAR GRAPHICS INC	1400 E PLAZA BLVD	3/7/2011	Full Inspection		
210	VALUE CARS INC	2401 NATIONAL CITY BLVD	3/2/2011	Full Inspection		
211	VEE PARTS & ACCESSORIES	704 A AVENUE	3/21/2011	Full Inspection		
212	VIETNAMESE CHINESE NOODLE HOUSE	600 E 8TH STREET 5	2/17/2011	Full Inspection		
213	VIGOR MARINE LLC	1636 WILSON AVE	8/30/2010	Full Inspection		
214	VP # 9570	1139 S HARBISON AVE	2/9/2011, 3/15/2011	Full Inspection	✔	Resolved
215	WESTERN LIFT, INC/WESTERN HOIST, INC	1839 CLEVELAND AVENUE	1/10/2011	Full Inspection		
216	XPEDX	1010 W 19TH STREET	1/14/2011	Full Inspection		
217	BAGWIS SALES AND SERVICES	3100 E 8TH ST C	2/9/2011	*Not Inventoried*		
218	BONITA PIPELINE INC	2209 HIGHLAND AVENUE	3/17/2011	*Not Inventoried*		
219	DC OPTICAL	2720 E PLAZA BLVD O	3/10/2011	*Not Inventoried*		
220	DISCOUNT FLOORING 2U, INC	829 HOOVER AVE A	3/21/2011	*Not Inventoried*		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
221	DISCOUNT SEWER & DRAIN CLEANIN	1414 ROOSEVELT AVE 40	3/9/2011	*Not Inventoried*		
222	EVERLASTING AIR-CON, HEATING & REFRIGERATION	519 E AVE	3/21/2011	*Not Inventoried*		
223	GALLEGOS PLASTERING CO. INC.	1524 HARDING AVENUE	1/14/2011	*Not Inventoried*		
224	GRANGER WELLNESS SOCIETY	2700 E 8TH ST	2/9/2011	*Not Inventoried*		
225	HANDISMITH	522 HIGHLAND AVE A	2/17/2011	*Not Inventoried*		
226	HERNANDEZ'S ELECTRICAL SUPPLY	2135 E 9TH STREET	2/9/2011	*Not Inventoried*		
227	INTERNATIONAL MANUFACTURING SOLUTIONS, INC	225 W 30TH ST	1/14/2011	*Not Inventoried*		
228	JAG & ASSOCIATES	337 W 35TH ST M	2/14/2011	*Not Inventoried*		
229	LOPEZ, PEDRO	1527 E 18TH ST	1/17/2011	*Not Inventoried*		
230	MANILA FORWARDER	3104 E PLAZA BLVD	2/9/2011	*Not Inventoried*		
231	MBR CONTRACTORS	148 E 30TH ST C	2/10/2011	*Not Inventoried*		
232	MONIN MARBLE AND GRANITE STORE	1105 E 17TH ST	1/13/2011	*Not Inventoried*		
233	NATIONAL CITY PAYMENT CENTER	1247 HIGHLAND AVE	2/16/2011	*Not Inventoried*		
234	PACIFIC WEST BUILDERS	1248 COOLIDGE AVE	2/22/2011	*Not Inventoried*		
235	PR HOME IMPROVEMENT	715 E 2ND ST	2/18/2011	*Not Inventoried*		
236	QUALITY GENERAL ENGINEERING	22 W 35TH ST	2/14/2011	*Not Inventoried*		
237	R & B CONTRACTORS	148 E 30TH ST E	3/15/2011	*Not Inventoried*		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
238	SAN DIEGO DOOR SERVICES	1941 K AVE	1/17/2011	*Not Inventoried*		
239	SANDOVAL'S PLUMBING SERVICE	2221 E 18TH ST	1/17/2011	*Not Inventoried*		
240	SIMEC USA, CORP	1700 CLEVELAND AVE B	1/14/2011	*Not Inventoried*		
241	THE HANDYMAN PAINTERS	2208 E 8TH ST	2/9/2011	*Not Inventoried*		
242	TORTAJADA AUTO GROUP	1800 NATIONAL CITY BLVD T	2/15/2011	*Not Inventoried*		
243	PETRO AUTO CARE	10 E 1ST ST	2/18/2011	Could not Contact		
244	PLAYCARE INC	241 W 35TH ST C	2/14/2011	Could not Contact		
245	REMEDY-TECH INC	2602 TRANSPORTATION AVE	3/9/2011	Could not Contact		
246	TRANS ENERGY USA	1825 CLEVELAND AVE	1/14/2011	Could not Contact		
247	CALIFORNIA ICE CREAM	1021 COOLIDGE AVENUE	3/2/2011	Duplicate		
248	GROOMTECH	225 W 30TH ST	2/10/2011	Duplicate		
249	MOYNAHAN TOWING	3200 NATIONAL CITY BLVD	3/9/2011	Duplicate		
250	THUNDERBIRD MUFFLER SHOP	705 E 8TH STREET	3/21/2011	Duplicate		
251	A & F ASPHALT PAVING	215 E 30TH STREET	2/14/2011	Mobile		
252	BLUE HOUSE KEEPER	3221 NATIONAL CITY BLVD	2/14/2011	Mobile		
253	CHRIS AUDIA	1112 24TH ST	2/11/2011	Mobile		
254	GMLS	45 S HARBISON AVE	3/10/2011	Mobile		
255	JMB ASPHALT & CONCRETE INC	1818 WILSON AVE	2/18/2011	Mobile		
256	OAK TREE LANSCAPING	416.5 E 30TH ST	2/14/2011	Mobile		
257	SANDOVAL CONCRETE	827 E 13TH ST	2/17/2011	Mobile		
258	SOUTH BAY FACILITY SVCS	2631 J AVE	2/11/2011	Mobile		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
259	ZAVALA'S CONCRETE WORK	2840 N AVE	2/11/2011	Mobile		
260	ARCO AM/PM #9570	1139 HARBINSON AVENUE	3/8/2011	Moved, Replaced		
261	AUTO ACCESS	1609 NATIONAL CITY BLVD	3/9/2011	Moved, Replaced		
262	BGB ENTERTAINMENT	630 NATIONAL CITY BLVD	2/22/2011	Moved, Replaced		
263	CAR AUDIO EXCHANGE	1316 NATIONAL CITY BLVD	3/9/2011	Moved, Replaced		
264	DE LA TORRE	2137 WILSON AVENUE	2/18/2011	Moved, Replaced		
265	DELICIAS DEL SUR	1604 E 18TH ST	1/17/2011	Moved, Replaced		
266	DIESEL POWER TRADE CORP	1636 WILSON AVE	8/31/2010	Moved, Replaced		
267	EL PARAISO/CHRISTMAS TREES	2708 HIGHLAND AVE	1/17/2011	Moved, Replaced		
268	ENERGIA NATURAL	443.5 HIGHLAND AVE	2/18/2011	Moved, Replaced		
269	ENTERPRISE RENT-A-CAR	2700 NATIONAL CITY BLVD	2/10/2011	Moved, Replaced		
270	ENTERPRISE RENT-A-CAR OF L.A.	3000 NATIONAL CITY BLVD	2/14/2011	Moved, Replaced		
271	FINE ORNAMENTAL	1010 COOLIDGE AVE	2/18/2011	Moved, Replaced		
272	GALOREN SOUTHWESTERN INC	3200 HIGHLAND AVE 303	2/11/2011	Moved, Replaced		
273	ISLAND SALES & LEASING	1900 NATIONAL CITY BLVD B	2/15/2011	Moved, Replaced		
274	J & L JANITORIAL SUPPLY	616 HIGHLAND AVE	2/17/2011	Moved, Replaced		
275	LUTONG BAHAY CAFE & BAKERY	2344 E 8TH STREET	2/9/2011	Moved, Replaced		
276	M & L HANDYMAN	1021 HIGHLAND AVE	3/10/2011	Moved, Replaced		
277	MCCUNE MOTORS	3000 NATIONAL CITY BLVD	2/14/2011	Moved, Replaced		
278	NEW LIFE BARRIER (HOA MY INC. DBA)	1616 HOOVER AVENUE	3/9/2011	Moved, Replaced		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
279	PAOGA CONSTRUCTION, INC.	148 E 30TH ST A	2/10/2011	Moved, Replaced		
280	PICKLE BARREL DELI RESTAURANT	340 W 26TH STREET E	8/26/2010	Moved, Replaced		
281	POLLO AMIGO #2	1604 E 18TH STREET	2/11/2011	Moved, Replaced		
282	PSE SAN DIEGO COMBAT ACADEMY	902 E 18TH ST	2/16/2011	Moved, Replaced		
283	SOCAL LAUNDRY EQUIPMENT INC	1729 COOLIDGE AVE B1	2/22/2011	Moved, Replaced		
284	STEVE'S CLASSIC SEATCOVERS	616 HIGHLAND AVE	2/17/2011	Moved, Replaced		
285	TACO BELL #106	2425 DIVISION STREET	2/9/2011	Moved, Replaced		
286	TEAM CARE MEDICAL TRANSPORTATION	301 W 28TH ST M	2/21/2011	Moved, Replaced		
287	USED KAR STORE	45 E 26TH ST	5/16/2011	Moved, Replaced		
288	WESTERN LIFT, INC/WESTERN HOIST, INC.	2200 HAFFLEY AVENUE	1/10/2011	Moved, Replaced		
289	AGILA CARGO	2720 E PLAZA BLVD W-N	3/10/2011	Moved, Vacant		
290	ALL AMERICAN BUICK GMC	2601 NATIONAL CITY BLVD	2/10/2011	Moved, Vacant		
291	BECKILEE COUTURE	303 W 35TH ST A	3/10/2011	Moved, Vacant		
292	BERGENSONS PROPERTY SERVICES	301 W 28TH STREET F	2/21/2011	Moved, Vacant		
293	BOOM ENTERPRISE	3100 E 8TH ST	2/9/2011	Moved, Vacant		
294	CALIFORNIA COMM'L SECURITY	1727 SWEETWATER RD R	1/17/2011	Moved, Vacant		
295	DEYSI VARGAS ANTONIO	917 E 8TH ST 105	2/17/2011	Moved, Vacant		
296	EVEREST MARINE	1925 WILSON AVE	2/18/2011	Moved, Vacant		
297	HIGH END PERFORMANCE	337 W 35TH STREET K	2/14/2011	Moved, Vacant		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
298	IL CAFFE SOSPESO, INC	2712 TRANSPORTATION AVE B	3/2/2011	Moved, Vacant		
299	INNOVATION KITCHEN & BATH	1400 E PLAZA BLVD C	1/17/2011	Moved, Vacant		
300	J.A.G'S AUTO BROKERS	2125 ROOSEVELT AVE B	3/2/2011	Moved, Vacant		
301	JUNE COMPANY INDUSTRIAL SERVICES	301 W 28TH ST K	2/21/2011	Moved, Vacant		
302	LOS CHIPOTLES	1302 NATIONAL CITY BLVD B	3/9/2011	Moved, Vacant		
303	LUNA CONSTRUCTION INC	1410 COOLIDGE AVENUE	3/9/2011	Moved, Vacant		
304	MARIA TACO SHOP	1641 HIGHLAND AVE	1/13/2011	Moved, Vacant		
305	NAM AUTO REPAIR	10 OSBORN ST	2/18/2011	Moved, Vacant		
306	OROZCO QUALITY XMAS TREES	715 HIGHLAND AVENUE	2/17/2011	Moved, Vacant		
307	PAL'S PUMP CLINIC	1015 NATIONAL CITY BLVD	1/14/2011	Moved, Vacant		
308	RANFLO ENTERTAINMENT	3400 E 8TH ST 111-112	2/9/2011	Moved, Vacant		
309	RICKYS REGISTRATION SERVICE	5 W 18TH ST	3/16/2011	Moved, Vacant		
310	SAN DIEGO AUTO OUTLET	1 W 35TH ST C	2/14/2011	Moved, Vacant		
311	SAN DIEGO MINI TOURS, CONTACTO	1726 WILSON AVE	1/12/2011	Moved, Vacant		
312	SAN DIEGO WOOD PRESERVING	2010 HAFFLEY AVENUE	1/12/2011	Moved, Vacant		
313	SOUTHWEST PAINT AND BODY	1616 WEST AVENUE	3/7/2011	Moved, Vacant		
314	SUNSET CAR RENTAL LLC	2626 SOUTHPORT WAY B	2/21/2011	Moved, Vacant		
315	VIGOR MARINE LLC	1428 MCKINLEY AVE	2/17/2011	Moved, Vacant		
316	WELFORD TRADING & BOOKKEEPING SVCS	2220 E PLAZA BLVD J	3/10/2011	Moved, Vacant		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required?	Correction Status
317	WESTCLIFF MEDICAL LABORATIES INC	2400 E 8TH ST	2/9/2011	Moved, Vacant		
318	YOUR YOGA VOYAGE	2345 E 8TH ST	2/9/2011	Moved, Vacant		
319	DIXIELINE LUMBER COMPANY	1022 BAY MARINA DR 125	1/14/2011	Out of Jurisdiction		
320	THE WATERFRONT GRILL	3201 MARINA WAY 102	1/18/2011	Out of Jurisdiction		
321	TORK MOTORSPORTS	3655 CAMINO DEL RIO WEST	2/10/2011	Out of Jurisdiction		

6.0 RESIDENTIAL

6.1 INTRODUCTION

Land use in the City of National City is largely residential. Due to the large residential area, activities that take place, these areas have the potential to impact the quality of receiving waters. Residential activities such as vehicle washing, over-irrigation, and home maintenance can potentially contribute pollutants to the City's MS4 if BMPs are not implemented. Additionally, household hazardous waste (HHW) can contribute pollutants to the City's MS4 if not disposed of properly. Pollutants of concern include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has worked to implement a range of programs to address these residential activities with the goal of reducing pollutant loads associated with such activities. The City recognizes the need for educational efforts and opportunities designed specifically for residents and residential activities.

The following sections present activities conducted during this reporting period. These activities are associated with the residential component of the JURMP and include conducting ongoing HHW collection events, distributing educational materials, and participating in community events.

6.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the residential component during the 2010/2011 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City began to develop a 2012 Calendar through a storm water art contest at local schools. The calendar will be distributed in both English and Spanish in 2011/2012 and informs residents about preventing pollution in San Diego Bay and neighboring waterways.
- The City collaborated with the cities of Chula Vista and Imperial Beach to make HHW disposal events available to residents. The total amount of HHW collected from residents of all three cities was 315,470 pounds. Door-to-door pick up service was available for the disabled and senior communities.
- The City hosted three large item disposal events. The event allowed residents to dispose of large household items (not including HHW), such as unwanted furniture and large appliances.
- At least 146 code violations related to storm water quality were addressed in residential areas and corrected by the City's Code Enforcement staff.

6.2 SOURCE CHARACTERIZATION

The City has identified high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities. To reduce pollutant discharges from these high TTWQ areas and activities, the City designated specific BMPs in the 2008 JURMP. These BMPs did not change during 2010/2011.

6.2.1 HIGH TTWQ ACTIVITIES

During the 2010/2011 reporting period, as outlined in the City's JURMP, the City continued to identify the following activities as high TTWQ:

- Automobile repair and maintenance
- Automobile washing
- Automobile parking
- Home and garden care activities and product use, including disposal
- Disposal of trash and pet waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

In addition to these activity-based priorities, the City has noted several residential areas that pose higher threats to water quality. High priority residential areas are designated by considering complaint investigations, institutional knowledge, Dry Weather Monitoring data, and criteria as defined in the Municipal Permit. The list of high priority residential areas is subject to re-evaluation based on new observations and data collected during the reporting period.

The following five residential areas have been designated as high TTWQ:

Division Avenue Area
The residential area located near Division Street, east of Highland Avenue, including residences located on East 2nd Street, Melrose Street, Eta Street, Fig Court, and Scott Drive. See Figure 6-1. Past dry weather monitoring programs have detected elevated levels of ammonia and detergents just downstream of these residential areas.

Paradise Creek Area, between F and L Avenues
The residential area that runs along the Southern side of Paradise Creek between F and L Avenues, including residences located along East 12th Street, East 13th Street, and East 14th Street. See Figure 6-2. Past dry weather monitoring programs have detected elevated bacteria, ammonia, and oil and grease levels.

East 8th Street Area
The residential area along East 8th Street, including residences on East 8th Street and East 9th Street, between L Avenue and N Avenue. See Figure 6-3. This area borders Paradise Creek and has been found to have the same elevated constituents as the areas between F and L Avenues.

Grove Avenue Area
The residential area surrounding Grove Avenue, including residences along East 14th Street, Grove Avenue, Stancrest Lane, and Orange Street. See Figure 6-4. This area has been identified during previous dry weather monitoring programs as a source of trash, ammonia, and detergents.

Arcadia Place Area
The residential area surrounding Arcadia Place, including residences west of Harbison Avenue along East 11th Street, East 10th Street, and East Plaza Boulevard. See Figure 6-4. This area has been identified during previous dry weather monitoring programs as a source of ammonia and detergents.

No new residential areas were added during 2010/2011. However, if future residential complaints, Dry Weather Monitoring Program results, or observations made by City staff indicate evidence of significant high TTWQ activities in these or other areas of the City, they will be designated as high TTWQ.

6.3 Best Management Practice Requirements

The City has continued to provide information regarding the implementation of pollution prevention measures, such as good housekeeping practices, for residential areas and activities. Section 5 of the City's BMP Manual includes lists of general residential BMP requirements and BMP requirements for specific residential activities. The manual is included in Appendix C of the City's JURMP. General residential BMPs include erosion control; non-storm water discharge management, including elimination of IC/IDs; and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Specific BMPs for the high priority activities outlined above are also included in the City's BMP Manual Section 5.

6.4 Program Implementation

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted in residential areas. This ensures that pollutants associated with residential activities and areas are minimized. Additionally, the residential program implements an education component so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities. During 2010/2011 the City also continued to participate in the Regional Residential Education Program.

6.4.1 Training, Education, and Outreach

The City has continued to conduct training, education, and outreach activities for residents, which are described below. For additional information on the City's educational efforts and the educational materials distributed to its residents please refer to Section 8 of this Annual Report.

Distribution of Educational Material

The City began to develop a 2012 Storm Water Calendar after selecting the winners of a local art contest at elementary schools within the City. The calendar will be distributed in 2011/2012 in both English and Spanish and informs residents about pollutants found in San Diego Bay and neighboring waterways. It describes that pollutants such as fertilizers, pesticides, metals, paints, oil and grease and other debris can be transported from residential areas to the ocean. The theme for the calendar is "By Keeping Our Community Clean, We Can Keep The Ocean Clean" and each month will highlight a child's winning entry from the art contest.

Website

Additional information regarding the City's storm water program, pollution prevention measures, and BMPs is posted and continually updated on the City of National City's website (http://www.nationalcityca.gov/). Storm water-related information can be found under the Development Services Department tab in the Engineering Division section. The direct link to the City's storm water page is http://www.nationalcityca.gov/index.aspx?page=164.

Household Hazardous Waste Disposal Program

The City continues to work with the City of Chula Vista to allow City residents to drop off HHW at Chula Vista's Household Hazardous Waste Collection Facility. The Household Hazardous Waste Collection Facility is the primary location for hazardous waste collection in the South Bay, receiving HHW from the City of National City, the City of Imperial Beach, and the City of Chula Vista. Curbside pickup was made available to the disabled and elderly communities. The amount of waste collected only from the 123 participating residents of National City is not available; however, the total amount of HHW collected from residents of all three cities is 315,470 pounds from 2,834 participants.

Other Waste Disposal Programs/Activities

In addition to proper HHW disposal, the City encourages residents to recycle used oil. The City maintains several Certified Used Oil Recycling Centers for residential oil disposal. The volume of used oil dropped off at the collection centers is not available.

The City's Public Works Department held three trash collection events (one in November and two in June) during this reporting period in conjunction with EDCO Disposal Company. Information about the trash collection events was sent out to all residents with their trash bills. During these events, residents were encouraged to dispose of any unwanted large items from their homes, such as furniture and appliances. In total, 1,916 vehicles dropped off over 826 tons of waste during these events.

In addition, the National City Chamber of Commerce hosted a free electronics waste collection event at Westfield Plaza Bonita Mall on April 9 and 10, 2011. Residents and businesses were encouraged to bring a variety of electronics waste for proper disposal.

6.4.2 Compliance and Enforcement

Public Complaints

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the Storm Water Hotline, and observations made by the City's municipal personnel. If a potential threat to water quality is present, the City provides a verbal warning, written warning, notice of correction, and/or NOV as applicable. The City received and addressed three residential-related complaints during this reporting period. Complaints were submitted through the Storm Water Hotline or internally through the City's Development Services or Public Works departments. All residential complaints were promptly resolved as detailed in the Summary of Documented Public Complaints in Section 4 of this Annual Report.

Code Enforcement

In addition to complaints to the storm water hotline, City code enforcement staff spend time in residential areas, checking for compliance with the City's Municipal Code. The correction of at least 146 residential code violations relating to potential threats to water quality in 2010/2011 had potential direct or indirect benefits for receiving waters. Violations corrected included seven cases of abandoned materials, 12 cases of dumping, 44 cases of trash accumulation deemed a public nuisance, 73 cases of prohibited junk storage, nine cases of littering, and one case of illegal auto repair. Enforcement is used as necessary to correct the violation. For example, one NOV was issued to a resident with a leaky vehicle.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 Program Review and Modification

The City's JURMP was last updated in March 2008. No changes to the City's residential component have been made since that time.

Figure 6-1
Division Street High TTWQ Residential Area

Figure 6-2
Paradise Creek High TTWQ Residential Area

Figure 6-3
East 8th Street High TTWQ Residential Area

Figure 6-4
Grove Avenue and Arcadia Place High TTWQ Residential Areas

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008 RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the 2010/2011 Illicit Discharge Detection and Elimination section and attachments to the RWQCB no later than December 15, 2011.

8.0 EDUCATION COMPONENT

8.1 INTRODUCTION

During 2010/2011, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, residents, and underserved communities. The City aims to reduce storm water pollution by increasing awareness about storm water and promoting the implementation of pollution prevention measures and BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the 2010/2011 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- On-site education regarding storm water issues and site-specific BMPs was provided to several municipal employees during routine facility inspections.
- The "Construction Site Best Management Practices" handout was distributed with all construction-related permits issued, including building permits, during the 2010/2011 reporting year.
- Restaurant and food industry personnel were educated on proper site-specific BMPs and provided a BMP handout on storm water issues common to food-related facilities.
- All businesses, including mobile businesses, applying for a new business license during the 2010/2011 reporting year received the "Preventing Urban Runoff Pollution" BMP Trifold.
- San Diego County's Negocio Verde Environmental Justice Task Force held an Automotive Body and Repair Free Bilingual Compliance Workshop in the City.
- The City made an estimated 10,370 impressions through educational outreach material and activities.

8.2 STAFF TRAINING ELEMENT

During 2010/2011, the City provided training and educational outreach to its municipal personnel. In February 2011, a training session on the Hydromodification requirements adopted in January 2011 was attended by seven development services employees. The training reviewed hydromodification concepts and discussed the new requirements along with implementation and applicability concerns. In April 2011, a training session

was given on general SUSMP requirements for all priority and non-priority development projects. This general SUSMP training was provided to several Development Services staff members in the Engineering, Building, and Planning Divisions. Additionally, in June 2011 a training packet that covered general storm water BMPs and emergency procedures for City staff was distributed. Municipal personnel were encouraged to report any IC/IDs observed to the appropriate City staff and to educate other municipal personnel and the general public about storm water pollution prevention.

The City's Storm Water Compliance Inspector previously completed the California Environmental Protection Agency Basic Inspector Training Course and used those skills to coordinate compliance within the various components of the City's storm water program during 2010/2011. During routine municipal inspections, the City's Consultant provided site-specific education to several Parks Division, Public Works, and Graffiti Abatement staff.

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, residential areas, and underserved audiences. These efforts promote storm water awareness and BMP implementation.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Violations of the City's BMP requirements are corrected through enforcement actions as necessary. Site-specific information relating to the facility's activities was discussed with businesses personnel during inspections. The "Everything that flows down into a storm drain" brochure (Attachment 8.1) was also provided during most inspections of industrial and commercial businesses.

All businesses that applied for a business license in the City received the Industrial and Commercial "Preventing Urban Runoff Pollution" Trifold, as seen in Attachment 5.3. In this way, even businesses that were not slated for inspection during 2010/2011 received storm water education.

Again this year, the City made an additional effort to educate restaurant and food industry personnel on proper BMPs. A double-sided fact sheet was distributed to all food-related businesses and highlighted the six most common issues at food-related facilities (Attachment 5.2). In addition, long-term solutions to prevent costly and ineffective cleanup of grease spills was presented. Contact information for the City's compliance inspector and for the Storm Water Hotline was also included.

The City of National City worked with the County of San Diego and other members of the Negocio Verde Environmental Justice Task Force to host an Automotive Body and Repair Free Bilingual Compliance Workshop on September 22, 2010. The workshop presented ways to be in compliance with air pollution, hazardous material, and storm water regulations. City code enforcement staff made a presentation and was on hand to explain the City ordinances.

8.3.1.1 Mobile Businesses

Mobile businesses, specifically mobile car detailers or power washers, are considered a high TTWQ due to the nature of the business activities and the likelihood of prohibited non-storm water discharges. Mobile businesses are not confined to a single area and many do not have City business licenses, making them difficult to identify. The City will continue to respond to complaints regarding mobile businesses and provides one-on-one verbal BMP education and literature during the complaint investigation as applicable. All businesses, including mobile businesses, applying for a new business license during the 2010/2011 reporting year received the "Preventing Urban Runoff Pollution" Trifold. This pamphlet includes minimum BMPs for three commonly mobile professions: power washing, car washing, and landscaping services. Information about the storm drain conveyance system and BMPs applicable to mobile business activities were also made available during 2010/2011 on the City's website. Additionally, the City sent 362 notifications of the City's JURMP BMPs for industrial and commercial businesses by March 7, 2011, to ensure that all businesses that had not been inspected since the JURMP Update in March of 2008 would be notified of the updated requirements.

8.3.2 Construction Site Owners and Developers

Due to the nature of their activities, construction sites have the potential to discharge many types of pollutants to receiving waters if not managed properly. Many construction site owners, contractors, and developers visit the City's Engineering Division to apply for necessary permits. Through this interaction with City staff, owners and developers are able to gain insight on watershed concepts, potential pollutants, and required BMPs. Information about the storm drain conveyance system and BMPs applicable to construction activities were also made available during 2010/2011 on the City's website.

The City provided various construction site-specific educational materials targeting storm water concepts during the 2010/2011 reporting year. The distributed educational materials are described below.

- The Construction Site BMP Fact Sheet or "Blue Sheet" (Attachment 3.1) describes specific BMPs for construction activities including soil stabilization and erosion prevention, sediment containment, materials and equipment management, non-storm water discharge control, and drainage control. This sheet was distributed

with all permits issued, including building permits; implementing the BMPs listed on the sheet is a condition of the permits.

- The National Pollutant Discharge Elimination System (NPDES) Project Applicability Form or "SUSMP Checklist" (Attachment 2.1) was completed by all projects applying for construction and building permits. Once submitted, the City reviewed the checklist and prioritized the projects. Requirements to ensure compliance with the Municipal Permit and General Construction Permit were presented to the applicant and further discussed to ensure the applicant was educated on the process.
- A copy of JURMP Appendix C, which contains a list of required construction BMPs, is made available upon request for proponents of construction activities within the City. All JURMP BMPs are also posted on the City's website.

8.3.3 Residential Areas

Since the City is mainly composed of residential areas, it is important to reach this particular audience through educational outreach programs. The City continued to make a variety of flyers, brochures, website postings, and other educational material available to its residents.

Storm Water Calendar

The City began to develop a 2012 Storm Water Calendar that will be distributed to schools and residents in 2011/2012. The calendar will present information in both English and Spanish and informs residents about pollutants found in San Diego Bay and neighboring waterways, and describes that pollutants such as trash, HHW, and bacteria from pet waste can be transported from residential areas to the ocean. The calendar will also provide the dates of the 9th Annual Creek to Bay Cleanup event and the Coastal Cleanup Day. See Section 9 of this Annual Report for a more detailed description of these events.

During 2010/2011, an art contest was arranged for 3rd graders in the City, which will again provide images for the calendar. Contest announcement flyers for teachers (Attachment 8.2) and for 3rd grade students and their families (Attachment 8.3) were distributed to provide information about the contest as well as the City's storm water program. More information about the development of the 2012 calendar is included in the Public Participation Component Section 9 of this Annual Report.

School Education and Outreach

The 2012 Storm Water Calendar art contest was held in conjunction with a lesson about storm water concepts for third grade elementary school students throughout the City. The resulting 2012 calendar will provide year round education on the connection between our communities' activities and the health of the oceans.

City Website
The City's website (http://www.nationalcityca.gov/) is another way in which City residents can become familiar with the design and intended use of the storm drain system, HHW, alternatives to hazardous household products, find information regarding volunteer opportunities, and applicable City contact information.

8.3.4 UNDERSERVED COMMUNITIES

The City is a growing community that is diverse in culture. According to a door-to-door storm water survey held in April and May of 2009, one third of the 373 residents encountered in the high TTWQ residential areas preferred to speak in Spanish. A small fraction spoke Tagalog as their preferred language. To address the unique demographics of the City, the City's Storm Water Hotline accepts all reports of illegal discharges, regardless of language.

The City further provides educational materials both in English and Spanish to better serve Spanish speaking community members. These bilingual brochures may be found at various locations throughout the City, such as the Chamber of Commerce, the public library, public recreational centers, and the storm water display area at the City's Engineering Department. The bilingual educational handout entitled "Everything that flows down into a storm drains goes untreated directly to our creeks, lagoons, and San Diego Bay" is also included in mail-based correspondence (i.e. NOV, notice of corrective action, etc.) to residents and industrial and commercial businesses in the City.

8.3.5 COMPLAINT INVESTIGATIONS

To further aid the process of identifying illicit discharges, the City encourages the public and City staff to report IC/IDs. The City's Storm Water Compliance Inspector follows up on all complaints made to the hotline. If a representative for the targeted business, residential area, or construction site is present, the inspector will provide site-specific information regarding storm water issues including applicable educational materials.

8.4 OUTREACH COMPONENT EFFECTIVENESS ASSESSMENT

The estimated number of impressions made by the City's education and outreach efforts during 2010/2011 is presented and described below. Please refer to Section 11 of this JURMP Annual Report for the remainder the effectiveness assessment for this program component.

Impressions Made
The City continues to provide residents and businesses with storm water-related education through inspections, distribution, and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees, because it is likely that the attendees will discuss the content with others after the training session or cleanup event. Printed educational materials distributed in mass numbers are assumed to generate three impressions each. Table 8-1 details the number of impressions made by the City during this reporting year.

Table 8-1
Impressions Made by the City

Impression Type	Estimated Count	Unit	Estimated Impressions Generated
Municipal Inspections	11	Inspection	55
Construction Inspections	71	Inspection	213
Construction Inspection Reports	21	Notice	63
Industrial/Commercial Inspections	297	Inspection	891
Industrial/Commercial Inspection Reports for Business and Property owners	328	Letter	984
Notification of JURMP BMP Requirements	362	Letter	1086
Complaints Investigated	14	Investigation	42
Activity/Event Attendees	484	Attendee	1936
"Preventing Urban Runoff Pollution" Trifold	360	Brochure	1080
Everything that flows down the storm drain….	217	Brochure	651
2012 Storm Water Program Calendar Art Contest Information Flyers	890	Flyer	2670
NONA/NEC Paperwork	17	Flyer	51
NOI Paperwork	11	Flyer	33
Storm Water Ordinance 14.22	35	Document	105
Construction BMP "Blue Sheet"	39	Flyer	117
Restaurant/Food Industry BMP Fact Sheet	83	Flyer	249
Green Wrench Guide booklet, English or Spanish	6	Brochure	18
What's Cookin' booklet, English or Spanish	42	Brochure	126
Municipal Inspections	11	Inspection	55
Construction Inspections	71	Inspection	213
Total			***10,370***

8.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was updated in March 2008. No changes to the City's education component have been made since that time.

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to foster storm water awareness and improve water quality. Public participation includes, but is not limited to, cleanup events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Collaboration between the City and the community helps to encourage a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed in this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the 2010/2011 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City collaborated with the California Coastal commission to host two sites for the Coastal Cleanup Day in September 2010. A total of 251 volunteers collected 10,827 pounds of trash and recyclables at the Paradise Creek Education Park and Sweetwater River sites.
- The City collaborated with ILACSD to host the Paradise Creek Education Park and Sweetwater River sites for the Creek to Bay Cleanup event in April 2011. A total of 110 volunteers participated to collect over 1,915 pounds of trash and recyclables.
- The City held an art contest during 2010/2011 for the 2012 storm water calendar. A total of forty five 3rd grade classrooms participated in the contest and were provided with storm water educational handouts.
- The City continued to collaborate with the cities of Chula Vista and Imperial Beach to provide HHW disposal for residents of the City of National City. Approximately 123 residents of National City participated.
- The City held three large-item disposal events during the months of November and June, which allowed residents to dispose of large items (not including HHW). Over 826 tons of large-item waste was collected from 1,916 vehicle loads during these events.
- The City continued to operate its Storm Water Hotline to receive complaints from businesses and residents in the City.

9.2 PUBLIC PARTICIPATION ACTIVITIES

Cleanup Events and Programs

During 2010/2011, the City hosted cleanup events at various locations in the City. These events provide a direct benefit to water quality and provide an opportunity for the City to inform event volunteers of storm water issues. The City participated in the California Coastal Commission sponsored Coastal Cleanup Day on September 25, 2010 (Figure 9-1). Fifty-one volunteers cleaned one mile of Sweetwater River and collected 6,200 pounds of trash and 127 pounds of recyclables. In addition, 200 volunteers at Paradise Creek Education Park collected 4,500 pounds of trash during the half-mile cleanup. In total, Coastal Cleanup Day volunteers collected 10,827 pounds of trash and recyclables and cleaned a mile and a half of park.

Figure 9-1. Coastal Cleanup Day Event

The City continued to collaborate with ILACSD and sponsored the Paradise Creek Education Park and Sweetwater River sites for the Creek to Bay Cleanup event on April 30, 2011. Eighty volunteers collected 450 pounds of trash and debris (Figure 9-2) from Paradise Creek. An additional 30 volunteers cleaned three miles of Sweetwater River and collected 1,440 pounds of trash and 25 pounds of recyclables. In total, 110 volunteers collected over 1,915 pounds of trash and recyclables and cleaned 3.5 miles of park in National City.

Figure 9-2. Creek to Bay Cleanup Event

2012 Calendar Development

As previously mentioned, during 2010/2011, the City began to develop the 2012 storm water program calendar. Similar to previous calendars, the City worked to involve the public in the development of the 2012 edition. An art contest was held in June for the 3rd grade students of all 10 public elementary schools within the City. The 12 winning images will be included for each month of the upcoming calendar.

The theme of the contest was "By Keeping Our Community Clean, We Can Keep The Ocean Clean." Each of the 45 participating classrooms were provided with educational presentation material by the school district representative, and teachers were given contest guidelines to share with their students (Attachment 8.2). This presentation addressed watershed concepts, the storm water conveyance system, pollutants of concern, and how to eliminate pollutants in urban runoff. The provided presentation also included past examples of submitted student work. An informational flyer that outlined the rules of the contest and presented some storm water concepts was given to about 845 students to take home (Attachment 8.3). Winners were selected in 2010/2011 and will be honored in the 2011/2012 reporting period. The contest, which was sponsored by EDCO, will provide prizes, such as gift cards, to the contest winners. As in previous contests, applicants were encouraged to place more of an emphasis on community by including images of known landmarks or elements specific to their neighborhoods.

Hazardous Waste Collection and Used Oil Recycling Program

The City's Hazardous Waste Collection and Used Oil Recycling Program encourage City residents and business owners to properly dispose of HHW. Residents have access to proper disposal facilities for HHW at the Chula Vista Household Hazardous Waste Collection Facility. This facility is open on Wednesdays and Saturdays from 9:00 a.m. to

1:00 p.m. and accepts up to 15 gallons or 125 lbs of waste per household for a small co-payment. An example informational ad for this program is included as Attachment 9.1. This service is also available to residents in the cities of Chula Vista, Coronado, and Imperial Beach. During the 2010/2011 reporting year, 2,834 participants brought over 315,470 pounds of hazardous waste. Of that total, 123 people were residents of National City. Door-to-door pick up was available for disabled or elderly communities for a small fee.

The City's website also informs residents of what is considered HHW and how and where to properly dispose of it.

Other Waste Disposal

The City continued to hold large item trash collection events for bulky items such as furniture and appliances at the EDCO Recovery and Transfer Facility. The City coordinated with EDCO Recycling and Waste Collection Services to host one event in November and two events in June. Almost 295 tons of waste was collected from 762 vehicle loads on November 13, 2010. On June 11, 2011, the facility collected 251 tons of waste from 547 vehicles and then an additional 280 tons from 607 vehicles the following Saturday, June 18, 2011. The City encouraged the public to bring their debris (not including HHW) for proper disposal. Door-to-door pick up was provided for disabled or senior residents.

In addition, the National City Chamber of Commerce hosted a free electronics waste collection event at Westfield Plaza Bonita Mall on April 9 and 10, 2011. Residents and businesses were encouraged to bring a variety of electronics waste for proper disposal.

Public Reporting

As discussed in Section 4, complaints are received through the City's Storm Water Hotline and online website reporting system. The residential, industrial and commercial, construction, and municipal communities are encouraged to use the hotline to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable. The hotline number is available on various brochures distributed by the City, on printed Storm Water Hotline business cards, as well as on the City's website. This reporting period there were 14 complaints received by the City. All complaints reported during 2010/2011 were investigated immediately and resolved appropriately by City staff. See Table 4-5 for details on documented public complaints.

Public Workshops

Workshops, information, and training sessions are necessary to provide the public with the tools and knowledge to participate effectively in the City's storm water program. In September 2010, San Diego County's Negocio Verde Environmental Justice Task Force, provided an Automotive Body and Repair Free Bilingual Compliance Workshop in National City, which targeted automotive shop owners and employees of National City and Chula Vista. This workshop discussed environmental and storm water regulation compliance and is discussed in further detail in Section 8 of this Annual Report.

Figure 9-3 – A participant at the Automotive Body and Repair Compliance Workshop

9.3 Public Participation Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

9.4 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's public participation component have been made since that time.

10.0 FISCAL ANALYSIS

The sources of funding for this program listed in the City's JURMP have not been changed during this reporting period. During 2009/2010, a fiscal analysis reporting template was developed collectively by the Copermittees. The City has used this template to report the 2010/2011 expenditures in this JURMP Annual Report.

San Diego County Copermittees Fiscal Analysis Report for Urban Runoff Management Programs

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	
Administration	$26,631
Development Planning	$45,782
Construction	$34,036
Municipal	$431,089
Industrial and Commercial	$69,623
Residential	$11,149
IDDE	$36,033
Education	$16,359
Public Participation	$6,363
Special Investigations	$12,089
Non-Emergency Firefighting	$0
Jurisdictional Total	**$689,154**

WATERSHED	
Watershed 1 – San Diego Bay	$165,002
Watershed Total	**$165,002**

REGIONAL	
Annual Permit Fee to Regional Board	$13,499
Copermittee Cost Share of Regional Budget	$48,428
Regional Total	**$61,927**

TOTAL COSTS	$916,083

Watershed Urban Runoff Management Program (WURMP)

	Watershed 1 – San Diego Bay
Administration (1)	$11,011
Cost Share Contribution	$0
Watershed Activities	$153,991
Other	$0
TOTAL	**$165,002**

(1) Administration – includes Watershed strategic planning, management, mapping, assessment, and reporting.

Regional Urban Runoff Management Program (RURMP)

Regional Programs	Jurisdictional Cost Share Amount
Administration (1)	$387
Cost Share Contribution	$48,041
Other (2)	$0
TOTAL	**$48,428**

(2) Administration – includes assessment, reporting, management, etc.
(3) Other – examples include regional and special studies.

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

Based on participation in regional efforts and its experience implementing its JURMP, the City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP.

The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are

discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the CASQA effectiveness assessment guidance document, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

Level 1 outcomes essentially are measures of permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix B of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement.

Levels 2 and 3

See the tables 11-1 through 11-8 at the end of this section for discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Please note that the number of hotline calls and Dry Weather Monitoring Program results are used in the assessments for other program components besides illicit discharge detection and elimination. Those numbers are taken from the work done within the period from July 1, 2009 through June 30, 2010 to be comparable with previous years' assessments and data. Also note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed.

Level 5

The Dry Weather Monitoring Program is the City's primary mechanism of measuring the quality of discharges. The City began collecting MS4 monitoring data in 2008/2009; however, the data gathered at this time is insufficient to provide substantive information about discharge quality.

Graphs demonstrating historical Dry Weather Monitoring results are provided at the end of this section as Figures 11-3 through 11-5. Ammonia, one of the constituents with the longest historical data record, has shown a decreasing trend over time. Also, since they have been analyzed, the exceedance frequencies of oil and grease and fecal indicator bacteria have decreased with time.

Level 6

No Regional Monitoring Program water quality monitoring stations are located within the City of National City. The Sweetwater Mass Loading Station is located just outside

the southeastern border of the City, but only a very minimal portion of the City would drain to that site. Some sediment sampling has been completed in the Sweetwater River flood control channel along southern side of the City as part of the regional Ambient Bay and Lagoon Monitoring Program. The results of that program have been relatively inconclusive to date. The RWQCB contracted Southern California Coastal Waters Research Project (SCCWRP) to conduct some wet weather monitoring in Paleta Creek (Seventh Street Channel) in support of a pending TMDL. At this point, the amount of data collected at these sites is not sufficient to determine any positive or negative trends for water quality at the site. Typically several years of data are needed before any trends become apparent. The City will continue to work with the San Diego Bay WURMP workgroup and TMDL stakeholder workgroups to improve the quality of water bodies in and around the City of National City.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects has effectively required higher removal efficiency BMPs for all projects approved in 2010/2011. The City continued to work with parties responsible for maintenance of treatment control BMPs, achieving compliance through cooperation or escalating enforcement. City enforcement resulted in the installation of missing BMPs and a 100 percent installation rate for projects completed during the reporting period. Fluctuations in maintenance rates from the 2008/2009 to the 2010/2011 reporting period may be attributed on one hand to generally increasing awareness of the need for regular treatment control BMP maintenance and on the other hand various ongoing changes in project ownership.

Construction

The available data indicate that on the whole the City's construction program effectively requires BMP implementation. The City conducted dry season inspections for high and medium priority construction sites to require continued implementation of required BMPs in preparation for the wet season. Any BMP deficiencies noted are remedied promptly. The City's approval process continues to notify all construction projects that will disturb soil of the City's BMP requirements before a permit is issued. This process has helped bring about better BMP implementation at small projects that otherwise might not be aware of the BMP requirements.

Municipal

The City's municipal staff are regularly trained on storm water issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit frequency requirements. In particular, the City sweeps its streets more often than the permit requirements to aid in WURMP efforts. As another part of WURMP efforts, the City continued to hire a contractor in 2010/2011 to do biweekly inspections and remove any observed trash from Paradise Creek.

Industrial and Commercial

The City continued to implement a comprehensive inspection program. During 2010/2011 the City used recently updated inspection notification methods to better communicate corrective actions to both property owners and inspected businesses, as needed. The City has found that this method of inspection result notification plus a significant decrease in follow-up inspection turnaround time yields increased rates of implementation.

Residential

The City's residential component mainly achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. Complaints received about residential areas and/or activities by the Storm Water Hotline are documented, investigated, and appropriate actions are taken to resolve the reported issue.

IDDE

The RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001 has extended the reporting period for the IDDE component of the City's program, so a full assessment of the program's effectiveness cannot be provided at this time. Some initial metrics are presented in Table 11-6.

Education

During 2010/2011, the City provided educational outreach to various communities in the City. Most notably the City sent a mailing to notify all inventoried businesses that had not been inspected recently, including mobile businesses, of the City's JURMP BMP requirements. The City also started development of a 2012 calendar that presents various storm water concepts. This calendar will be distributed to school children and during various public events.

Public Participation

The City continued to host clean-up events in the City, including the California Coastal Cleanup and the Creek to Bay Cleanup. There was a 40 percent increase in volunteers participating in clean-up events within the City during 2010/2011 compared to 2009/2010, and more than twice as many as in 2008/2009. The City also continued to ensure its own staff and the public are aware of the hotline and when to call it.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-1
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Review and approve project plans	External A relatively small number of projects submitted reports during 2010/2011. Based on meetings with applicants and BMPs proposed, it appears that the level of knowledge is increasing. Internal The City's storm water consultant and the City's Storm Water Program Manager worked with engineers in the City to improve their level of understanding of the SUSMP program. City personnel also attended training sessions—see Section 8. The City's consultant reviews SWMPs submitted to the City.	Overall project submittal approval rate during reporting period	17%	Percent of projects proposing BMPs besides filter inserts	100%
		Number of projects requiring three or more reviews prior to SWMP approval	2 (of 2)	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City's NPDES Storm Water Compliance Inspector provided training to the inspector responsible for verifying BMPs prior to occupancy.	Percent of projects completed in 2010/2011 implementing all proposed BMPs	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 2		
Verify BMPs are properly maintained	External Annual maintenance verification letters were sent out in 2010/2011 and NOVs were issued to non-responders Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of inspected sites properly maintaining all BMPs	39%	Proper BMP maintenance is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 2		
		Percent of sites responding to verification letters	100%		
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-2
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs, and the City's consultant conducts routine inspections of high and medium TTWQ construction sites.	Percent of BMP deficiencies resolved by City follow-up within the reporting period	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Resolution status of enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0 (2010 dry weather season)	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff are regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities requiring a follow-up visit	0%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	N/A	Number of pet waste bags distributed	5200 bags
		Number of dry weather monitoring exceedances traced to municipal sites	0 (2010 dry weather season)	Amount of pet waste removed through pet waste bag use*	1,040 pounds
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.		Amount of sediment and debris removed (weight or volume)	980 tons
				Amount of sediment and debris removed per length of street swept (weight or volume per curb mile)	120 lbs/ curb mile
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume)	21.5 tons
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons)	0
Maintain municipal treatment control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment control BMPs	194 pounds
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Based on studies conducted by the County of San Diego, approximately 0.2 pounds of pet waste is collected per bag used. A separate literature search performed by the San Diego County Regional Airport Authority found a figure of 0.25 pounds per bag (San Diego Bay Copermittees, 2010). To be conservative, the estimate in this table is based the smaller of the two numbers.

Table 11-4
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External Knowledge assessment scores indicated approximately half of the personnel present during inspections lacked any understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal The City contracts with a qualified consultant to perform industrial and commercial inspections.	Percent of inspected sites requiring a follow-up visit	32%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	1 (2010 dry weather season)	Number of IC/IDs eliminated (inspections and complaint investigations)	19
		Consistent with the intentional selection of sites with the highest TTWQ potential, many sites had a lower BMP score. However, the most common score was three. See Figure 11-2 on the following page for a score distribution.			
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Industrial/Commercial Knowledge Assessment Scores

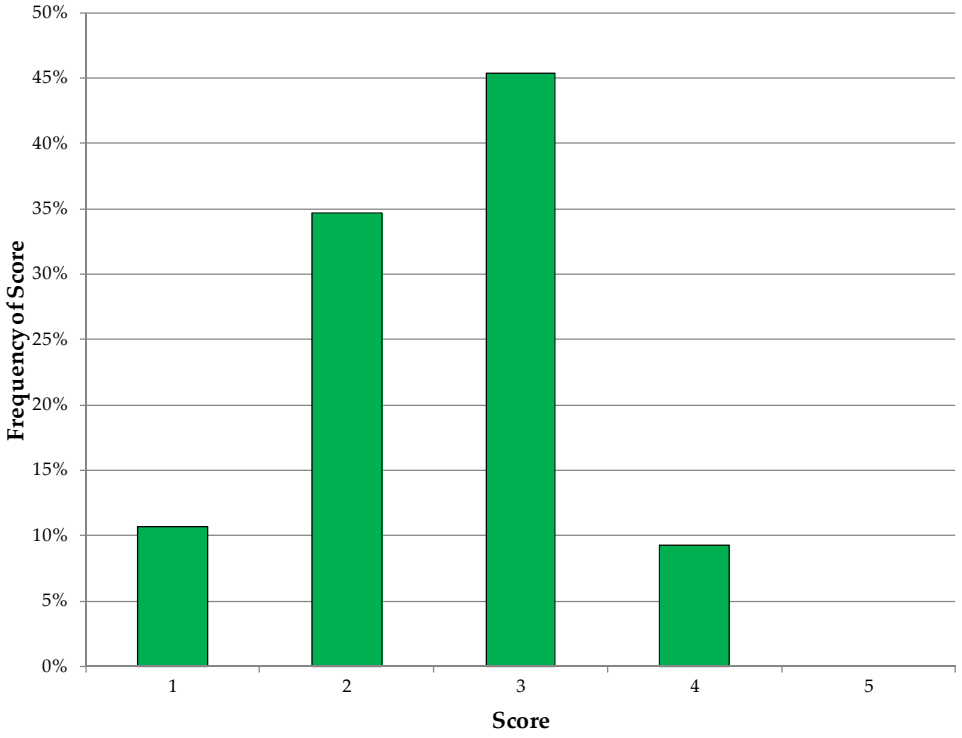

Figure 11-2
Industrial/Commercial BMP Implementation Scores

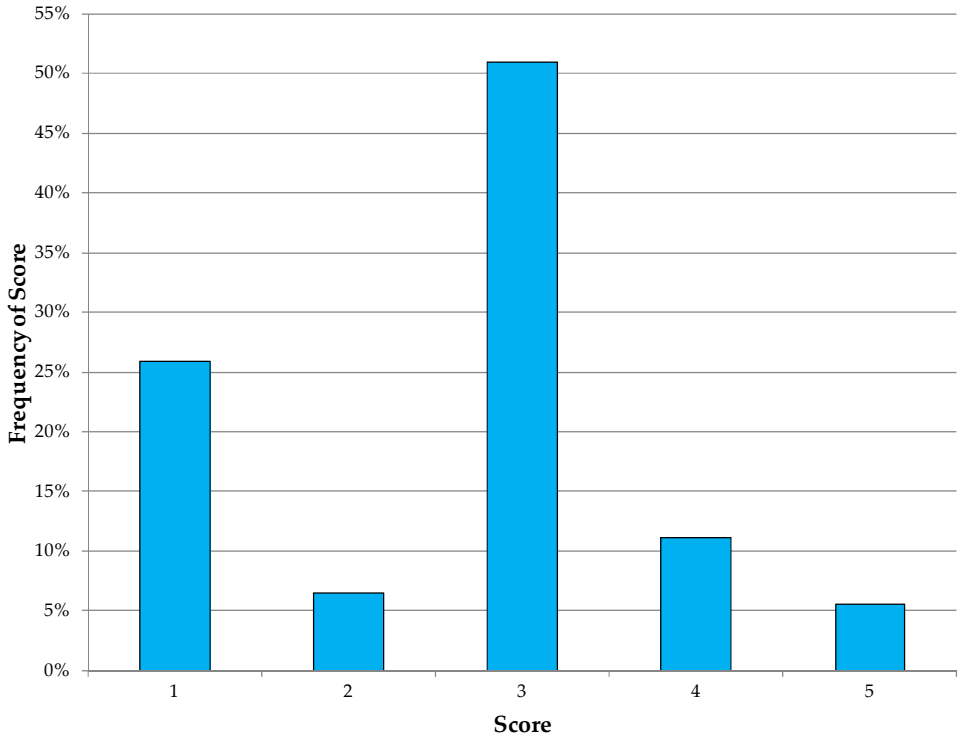

Table 11-5
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External See sections 6 and 8 for details of this and other education. Internal The City's Storm Water Program Manager and other City staff involved in the program have a good understanding of the goals of the storm water program.	Number of residential incidents reported to storm water hotline	3	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution of enforcement actions	See Sections 4 and 6	
		Number of dry weather monitoring exceedances traced to residential sources	0 (2010 dry weather season)	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Illicit Discharge Detection and Elimination Component Assessment Measures*

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were identified for elimination, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to storm water hotline	The City's Storm Water Program Manager trains City staff as needed. See sections 4 and 8. City staff were responsible for many of the reports made to the hotline, as shown in Section 4.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 4 are likely to have resulted in a pollutant loading reduction.
Respond to and clean up SSOs	City staff are thoroughly trained on how to respond to SSOs.	See Section 4 for details.	There were no SSOs during the reporting period.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Although the overall IDDE component is to be submitted in December 2011, a preliminary assessment of the component's effectiveness is provided here.

Table 11-7
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for 2010/2011.
	Estimated number of impressions made	10,370		

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate, including operation of the Storm Water Hotline. See Section 9 for details.	Number of attendees at events (Cleanup event volunteers and disposal event participants)	2,400	Amount of trash, debris, and recyclables collected at cleanup events	12,742 pounds
		Number of calls received to the storm water hotline	14	Amount of large item waste collected at disposal events	826 tons

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-3
Historical Dry Weather Monitoring Data: Action Level Exceedance Rates

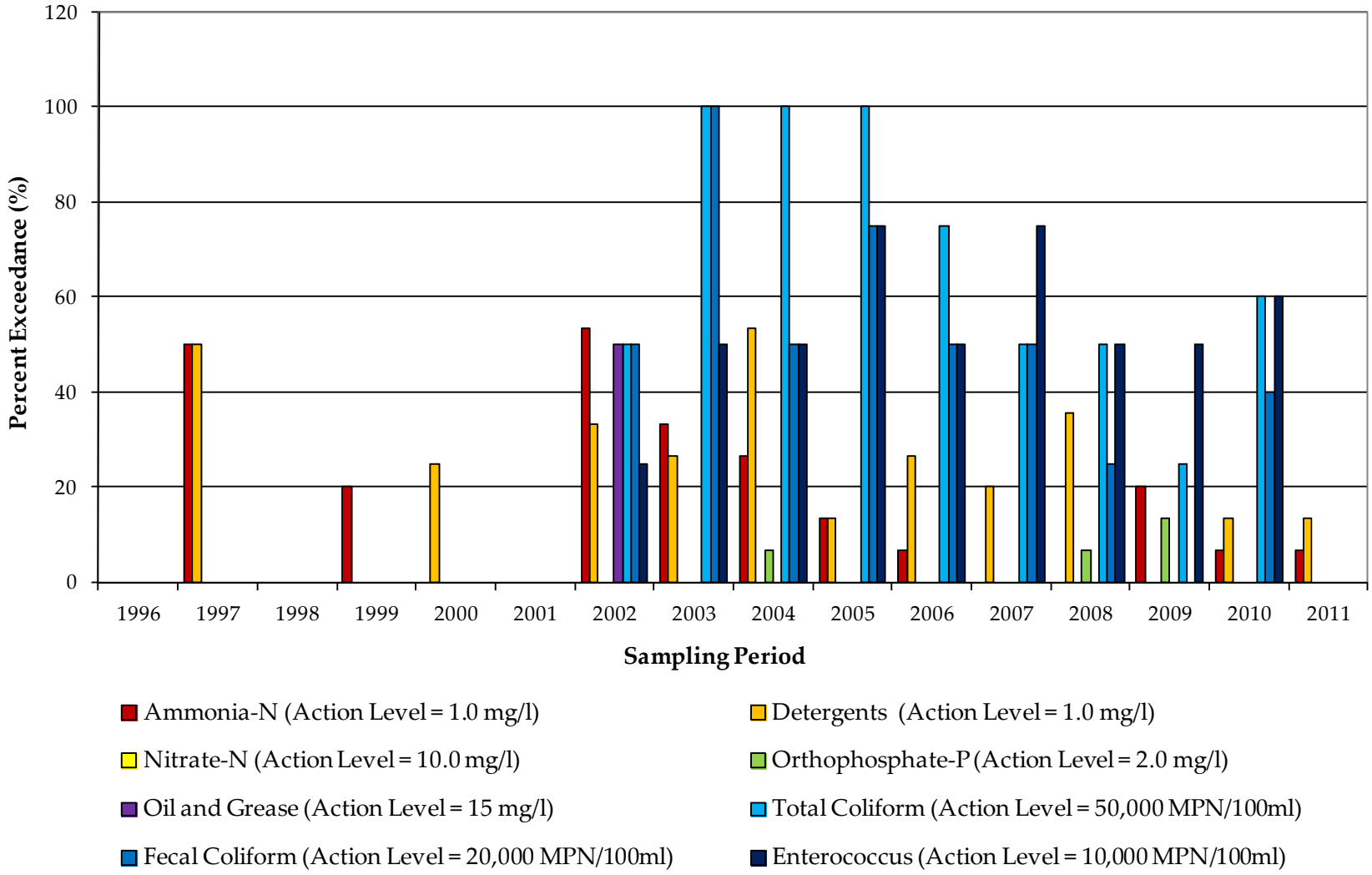

Figure 11-4
City of National City, Ammonia-Nitrogen, 1997-2011

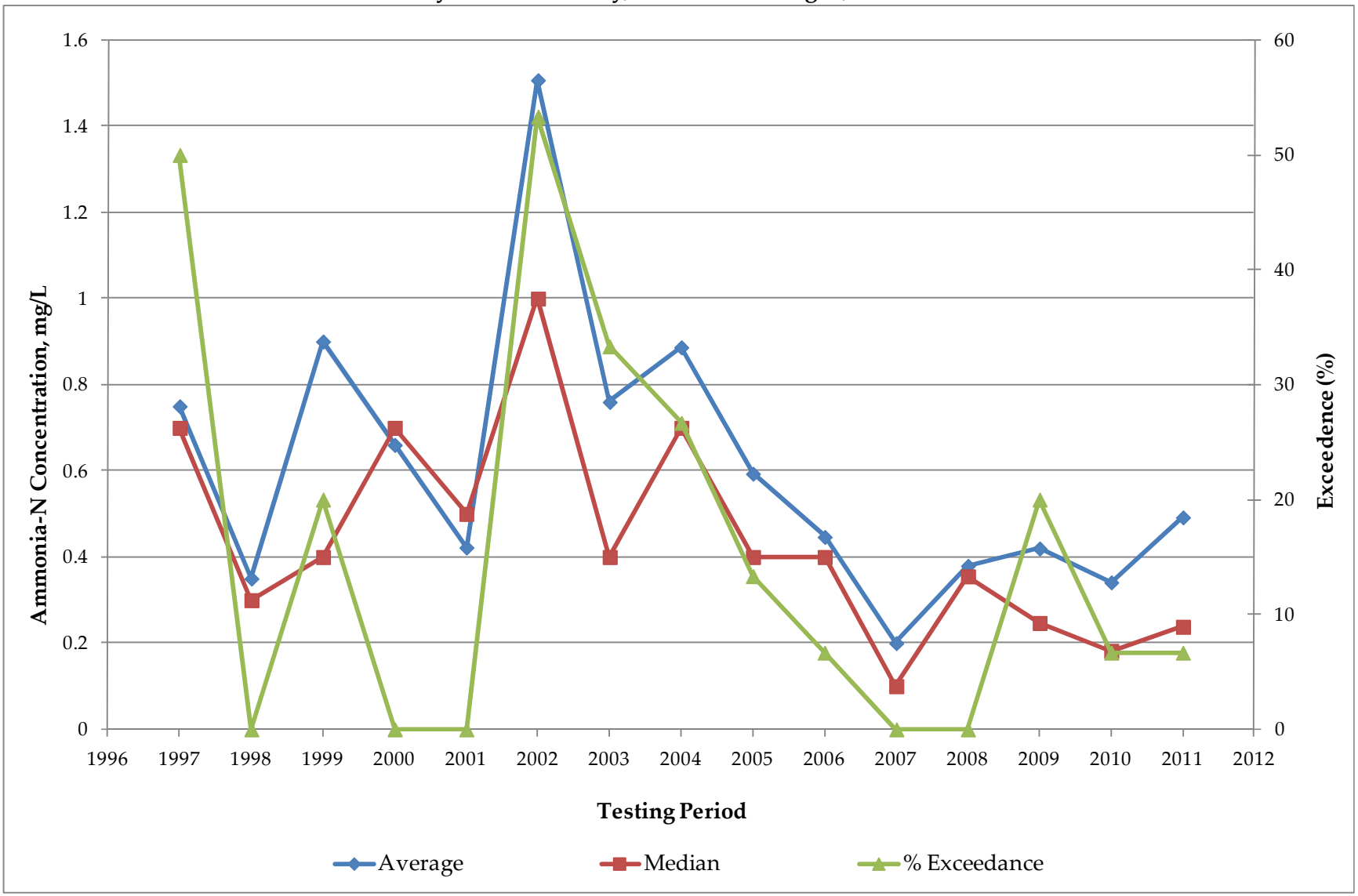

Figure 11-5
City of National City, Detergents, 1996-2011

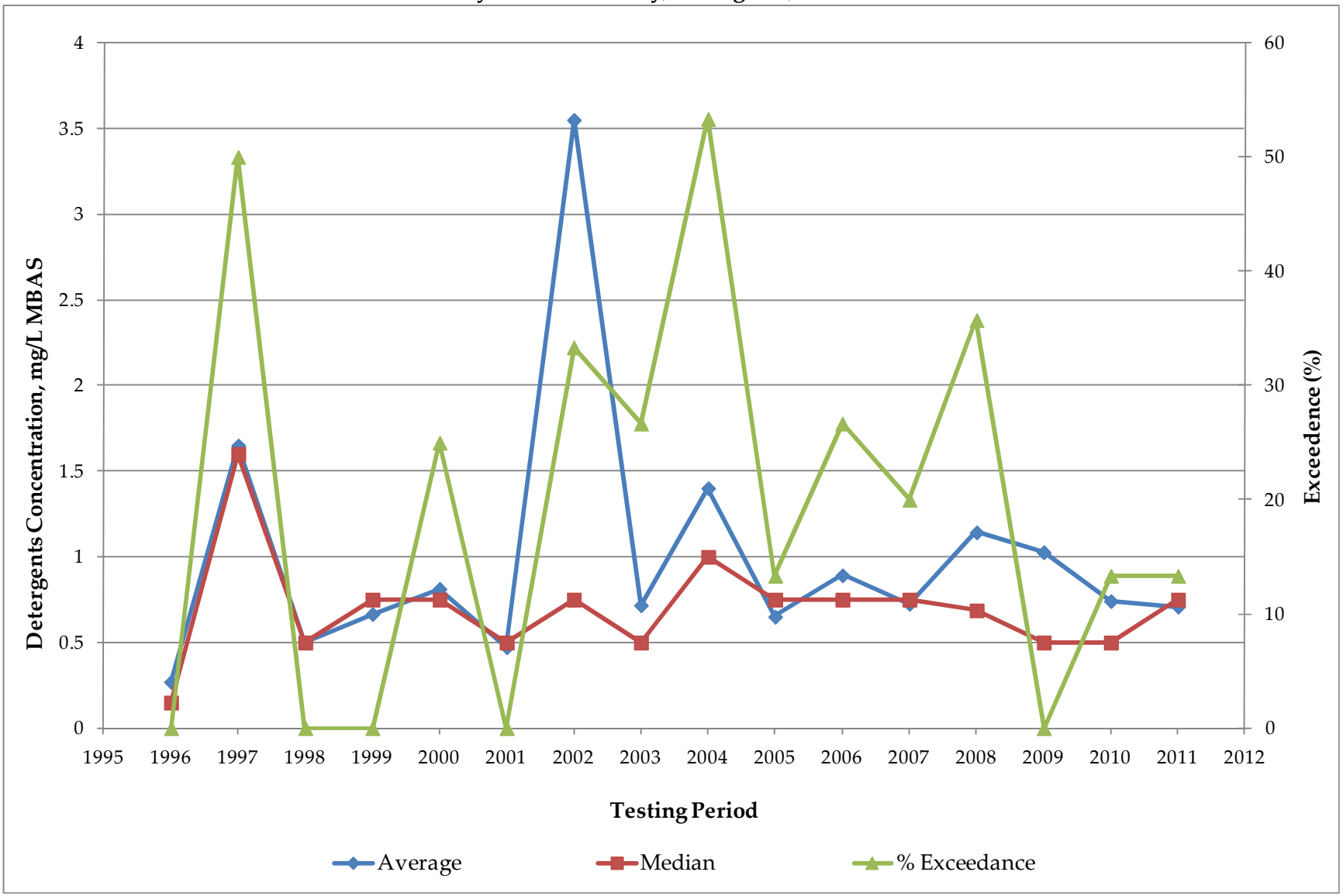

12.0 SPECIAL INVESTIGATIONS

During the reporting period the City undertook two additional programs: the Clean Community Program and a pollutant discharge potential assessment component during industrial and commercial inspections.

12.1 CLEAN COMMUNITY PROGRAM

Results from trash assessments in previous years have indicated that litter and illegally dumped items tend to consist of household trash and large household items, likely from residents in the City. During 2010/2011, the City continued to implement its Clean Community Program. This program is designed to foster a sense of shared responsibility in keeping the community of National City clean and free of pollutants that may otherwise be carried to local receiving water bodies.

The theme of the 2012 Storm Water Calendar Art Contest was "By Keeping our Community Clean, We can Keep the Ocean Clean!" Each month of the 2012 calendar will feature artwork by local third grade students illustrating the theme. By integrating public participation into the development of the 2012 calendar, the City increased attention to the "By Keeping our Community Clean, We Can Keep the Ocean Clean" message. This 2012 calendar will be distributed to schools, municipal staff and other City residents.

As part of WURMP efforts that are beyond minimum required MS4 maintenance, the City hired a contractor in 2008/2009 to do biweekly inspections and remove any observed trash from Paradise Creek. These cleanups continued in 2010/2011.

Also in 2010/2011, ILACSD independently organized a Neighborhood Clean Watch program that combined frequent community cleanups, four large item disposal events, and elementary school presentations. Through their efforts there were 99,315 pounds of debris removed or collected, 375 volunteers performing Paradise Creek cleanup activities, and 2,300 students educated. Information about this program is available on the ILACSD website (http://www.ilacsd.org/).

12.2 POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

During 2010/2011, the City conducted pollutant discharge potential assessments (PDPA) at industrial and commercial facilities that received a full inspection; the purpose of the assessment is to assist in source identification. The assessment is intended to be a semi-quantitative tool to identify which sites are major sources of the principal pollutants of concern for storm water. For each of several main categories of pollutants, a numeric pollutant discharge potential (PDP) on a scale from 0 (not present) to 5 (severe) is assigned. PDPA scores are recorded on the standard inspection form in Attachment 5.1.

Table 12-1 shows the overall average PDP scores assigned for each pollutant during routine inspections at all of the industrial and commercial facilities visited in 2010/2011.

Note that pH indicates substances likely to cause either an abnormally low (acidic) or abnormally high (basic) pH.

Table 12-1
Pollutant Discharge Potential Score Averages, By Category

Pollutant Category	Average PDP Score
Sediment	2.4
Nutrients	1.4
Aluminum	1.1
Iron	1.4
Heavy Metals	2.2
Organics	1.3
Trash	2.4
Oxygen Demanding	2.1
Oil & Grease	2.7
Bacteria	2.1
Pesticides	1.0
pH	1.6

Sediment, heavy metals, trash, and oil and grease were observed to be the largest issues during the industrial and commercial inspections conducted during 2010/2011. The City uses this information to help target businesses for inspection. Figure 12-1, on the following page, shows the distribution of PDP scores for each pollutant on the PDPA table.

Figure 12-1
PDPA Score Distribution for Facilities Inspected in 2010/2011

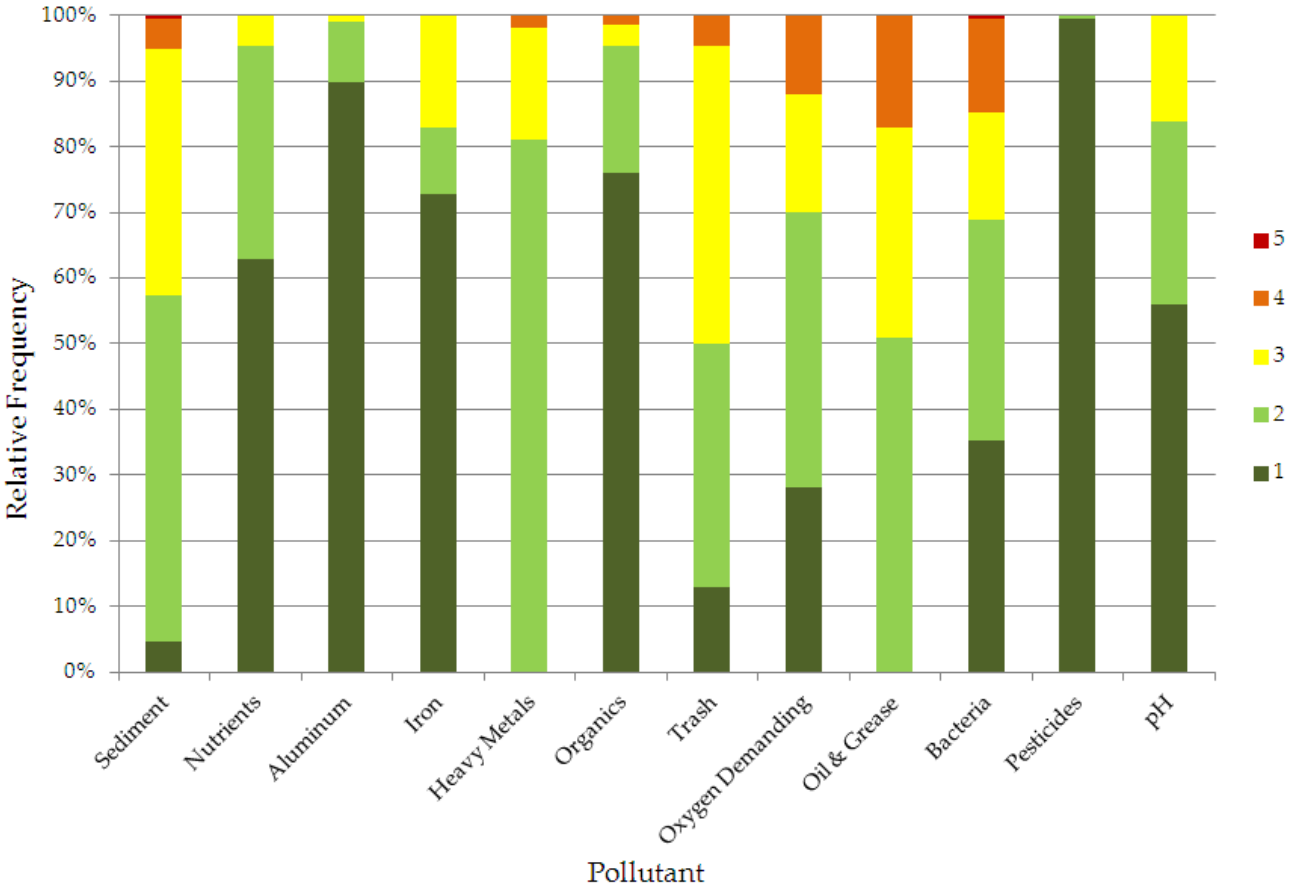

13.0 NON-EMERGENCY FIRE FIGHTING

Please reference Section 3 of the City's most recent JURMP for information about BMPs and procedures associated with non-emergency fire fighting activities.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 in response to new Municipal Permit requirements. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes to the JURMP made since the overall JURMP update in the spring of 2008 are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 CONCLUSIONS AND RECOMMENDATIONS

During the 2010/2011 reporting period the City of National City continued to implement the programs in its JURMP, updated in March 2008. The City continues to work with other Copermittees to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City of National City will work collaboratively as a member of the various regional workgroups in this process and continue to refine its program implementation as needed to improve its ability to reduce or eliminate pollutant discharges and meet regulatory requirements. The City will also continue its efforts related to the pending TMDL for Seventh Street Channel.

16.0 REFERENCES

California Regional Water Quality Control Board, 2007. Order No. R9-2007-0001. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Construction.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Industrial & Commercial.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Municipal.*

California Storm Water Quality Association, 2007. *Municipal Stormwater Program Effectiveness Assessment Guidance.*

Caltrans Storm Water Quality Handbooks, 2003. *Construction Site Best Management Practices Manual.*

City of National City, 2008. *Jurisdictional Urban Runoff Management Program.*

County of San Diego, 2007. *Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Report.*

State Water Resources Control Board, 1997. Order No. 97-03-DWQ. *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.*

State Water Resources Control Board, 2009. Order No. 2009-0009-DWQ. *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.*

County of San Diego, 2011. *Countywide Model SUSMP: Standard Urban Stormwater Mitigation Plan Requirements for Development Applications*.

County of San Diego, 2011. *Final Hydromodification Management Plan.*

APPENDICES

APPENDIX A.1

TREATMENT CONTROL BMP INVENTORY

Inventory of Completed Development Projects with Approved Treatment Control BMPs

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP								Project Type	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds/Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention			
1	940 W 19th Street	940 W 19th Street	X								Industrial	La Paleta Creek/ 7th Street Channel	Low
2	Advanced Plastics	225 W. 30th St					X	X			Industrial	Sweetwater River	Medium
3	Ball Kia	1940 National City Blvd			X						Commercial	Paradise Creek	Medium
4	Bay Marina Drive Widening (CIP)	I-5 and Bay Marina Drive						X			Municipal	Paradise Creek	Medium
5	Bonita Creek	Sweetwater Road	X				X				Residential	Sweetwater River	Medium
6	Canyon Ridge	SW of southern end of Rachael Ave						X	X		Residential	Sweetwater River	Medium
7	Discount Tire	1309 E Plaza Blvd					X				Commercial	Paradise Creek	Medium
8	Estrella Walk	Plaza Blvd. & L Street							X		Residential	Paradise Creek	Medium
9	Hanson's National City Batch Plant	12th St & McKinley Ave				X	X				Industrial	La Paleta Creek/ 7th Street Channel	Medium
10	Harley Davidson	3201 Hoover Ave					X				Commercial	Paradise Creek	High
11	Jack In The Box	18th & Highland Avenue					X				Commercial	Paradise Creek	Medium

Inventory of Completed Development Projects with Approved Treatment Control BMPs (Continued)

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP								Project Type	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds/Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention			
12	Kalesa Walk	1830 - 1884 E. 12th Street					X				Residential	Paradise Creek	Medium
13	Marina Gateway (Hotel)	Marina Way, south of Bay Marina Dr	X						X		Commercial	Paradise Creek	High
14	Mariposa Walk	E. 7th St and R St					X				Residential	Paradise Creek	Medium
15	Mirabelle (Cypress Glen Condos)	3229, 3359, 3391 Cypress St					X				Residential	Sweetwater River	Medium
16	National City Fire Station #34 (CIP)	333 East 16th Street					X		X		Municipal	Paradise Creek	Medium
17	National City Library (CIP)	1401 National City Blvd					X				Municipal	Paradise Creek	Medium
18	Pacific View Estates	E. Division Street between Highland and Laurel Ave							X		Residential	La Paleta Creek/ 7th Street Channel	Medium
19	Paradise Creek Park (CIP)	Harding Ave, West 19th St, & West 22nd St					X				Municipal	Paradise Creek	High
20	Paradise Ridge	Hollyhock Lane	X								Residential	Paradise Creek	Medium
21	Paradise Village	Between 4th & 8th Street, Arcadia Ave & Bowron St.							X		Residential	Paradise Creek	Medium
22	Paradise Walk	Arcadia Ave and E. 8th St					X				Residential	Paradise Creek	High

Inventory of Completed Development Projects with Approved Treatment Control BMPs (Continued)

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP								Project Type	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds/Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention			
23	Penske Truck Leasing	3132 Hoover Avenue					X				Commercial	Paradise Creek	High
24	Plaza Bonita Mall Expansion	3030 Plaza Bonita Road	X				X		X		Commercial	Sweetwater River	Medium
25	Plaza City Apartments	1535 E. Plaza Blvd							X		Residential	Paradise Creek	High
26	Plaza Village	L Avenue and Plaza Blvd					X				Residential	Paradise Creek	Medium
27	Sweetwater Town & Country Mall	Sweetwater Road					X				Commercial	Sweetwater River	High
28	Tremont Court Condominiums	Euclid Ave & Division St	X				X		X		Residential	La Paleta Creek/ 7th Street Channel	Medium
29	Walgreens	885 Euclid Ave					X				Commercial	Paradise Creek	High
30	Wal-Mart	1200 Highland Ave							X		Commercial	Paradise Creek	High
31	West Air Gases	2300 Haffley Avenue	X				X			X	Industrial	San Diego Bay	Medium

Note: Public Priority Projects are marked as Capital Improvement Projects (CIP) in the table.

APPENDIX A.2

CONSTRUCTION INVENTORY

Appendix A.2
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
1	Pacific View Estates	Division Street and Laurel Avenue	San Diego Bay	High	31	16	1	0	0	17
2	Bible Baptist Church	2432 E 18th Street	San Diego Bay	Medium	31	7	1	0	0	8
3	Canyon Ridge	Rachael Avenue at Blue Ridge Street	San Diego Bay	Medium	31	7	1	0	0	8
4	El Toyon Park Soccer Field	El Toyon Park, 2500 E. 4th Street	San Diego Bay	Medium	26	7	0	2	0	7
5	Harbor View Condos	D Avenue & 8th Street	San Diego Bay	Medium	0	0	0	0	0	0
6	K Avenue Homes	1209 & 1215 K Avenue	San Diego Bay	Medium	31	8	1	1	0	9
7	Marina Gateway Streetscape	Harrison Ave & 23rd St	San Diego Bay	Medium	0	2	0	0	0	2
8	Paradise Village	2700 East 4th Street	San Diego Bay	Medium	31	7	1	0	0	8
9	Plaza Boulevard Center	1540 E Plaza Blvd	San Diego Bay	Medium	9	3	1	1	1	4

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
10	Auto Zone	2100 Highland Ave	San Diego Bay	Low	21	7	0	2	1	7
11	Habitat for Humanity - Harding Ave	1441 Harding Ave	San Diego Bay	Low	7	**		0	0	0
12	Habitat for Humanity G Avenue	1820 G Avenue	San Diego Bay	Low	31	**		0	0	0
13	Hilltop View Homes	3000 8th Street	San Diego Bay	Low	31	**		0	0	0
14	Permit No: 10023. Public Improvements: Sidewalk SDRSD G-11; Construction: trench for gasline tap per city code	950 L Ave	San Diego Bay	Low	0	**		0	0	0
15	Permit No: 10024. Public Improvements: Street pavement: street boring; Construction: per attached drawing; Others: smart growth project	8th Street Corridor Smart Growth	San Diego Bay	Low	0	**		0	0	0
16	Permit No: 10025. On-site improvements: Grading: 140 CY; Retaining wall per plans; Others: building pad	2240 Rachael Ave	San Diego Bay	Low	31	**		0	0	0

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
17	Permit No: 10027. Public improvements: Construction: concrete demo & forms; others: resurfacing FY 10-11	Various Locations @ 30th St	San Diego Bay	Low	31	**		0	0	0
18	Permit No: 10028. Public improvements: Sidewalk new with driveway aprons; Curb & gutter R&R with drive aprons; Driveway new 2 each; Street pavement per 119-SB (hotmix @ pumts); On-site improvements: Grading 100 yd +- landscaping of slopes; Retaining wall C-2 & C-4; Others: drainage private driveway w/ transitions	1506 E 1st Street	San Diego Bay	Low	0	**		0	0	0
19	Permit No: 10029. On-site improvements: Others: landscaping per spec 09-17; plan no 10205D-10213D	200 E 12th Street	San Diego Bay	Low	31	**		0	0	0

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
20	Permit No: 10030. Public Improvements: Others: utility potholes	Plaza Blvd (Highland to Euclid)	San Diego Bay	Low	31	**		0	0	0
21	Permit No: 10031. On-site improvements: retaining wall per SDRSD C-5	1305 Carol Pl	San Diego Bay	Low	4	**		0	0	0
22	Permit No: 10033. Public Improvements: construction: drainage imp project spec 10-103	various locations	San Diego Bay	Low	28	**		0	0	0
23	Permit No: 10034. Public Improvements: sidewalk, curb & gutter, curb, driveway R&R residential, driveway R&R commercial, pedestrian ramp, per SDRSD, greenbook & approved specs & plans	various locations in city	San Diego Bay	Low	24	**		0	0	0
24	Permit No: 10038. Public Improvements: construction: boring for electrical conduit per approved plan	142 E 16th St	San Diego Bay	Low	3	**		0	0	0

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
25	Permit No: 10040. Public Improvements: construction: install 2 groundwater monitoring wells	1625-1635 Coolidge Ave	San Diego Bay	Low	1	**		0	0	0
26	Permit No: 10042. Public Improvements: curb & gutter G-2 mod, alley new per approved plan, construction 6" sewer lat connection per approved plan; on-site improvements: grading per approved plan	924 E 17th St	San Diego Bay	Low	14	**		0	0	0
27	Permit No: 10043. Public Improvements: construction: monitoring wells 2 units	105 W 8th St	San Diego Bay	Low	17	**		0	0	0
28	Permit No: 11001. Public Improvement: sidewalk, pedestrian ramp, construction: fence	various parks	San Diego Bay	Low	15	**		0	0	0
29	Permit No: 11003. Public Improvement: sidewalk	151 N Highland	San Diego Bay	Low	2	**		0	0	0

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
30	Permit No: 11004. On-site improvements: grading: cut 42 cy, fill 66 cy, import 24 cy, BMP installation	2200 block Grove St	San Diego Bay	Low	9	**		0	0	0
31	Permit No: 11005. Public Improvements: street pavement, construction: street boring per attached drawing smart growth proj	8th St Corridor Smart Growth	San Diego Bay	Low	2	**		0	0	0
32	Permit No: 11007. Public Improvements: construction: street trench for utility company, new gas service	901 Euclid Ave	San Diego Bay	Low	4	**		0	0	1
33	Permit No: 11008. Grading 200 CX, retaining wall per plans, sewer main-5 lats, storm drains	520 V Avenue	San Diego Bay	Low	6	**		0	0	0

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
34	Permit No: 11009. Public Improvements: sidewalk R&R 100' +/-; curb & gutter R&R 20' +/-; driveway new; pedestrian ramp R&R; alley new; construction: all items above per approved plans	560 Highland Ave	San Diego Bay	Low	4	**		0	0	0
35	Permit No: 11010. Public Improvements: sidewalk R&R per plan; curb & gutter R&R per plan	3421 E Plaza Blvd (Tita's Restaurant)	San Diego Bay	Low	0	**		0	0	0
36	Permit No: 11011. Public Improvements: sidewalk R&R per plan; driveway R&R inst per plan; construction: D-25 per plan; sewer 6" lateral	E 28th St & F Ave	San Diego Bay	Low	3	**		0	0	0
37	Permit No: 11012. Public Improvements: sidewalk R&R SDRSD/per City code	2605 Highland	San Diego Bay	Low	0	**		0	0	0

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
38	Permit No: 11013. Public Improvements: construction: utility trenching for gas service per SDG&E work order	926 E 7th St	San Diego Bay	Low	3	**		0	0	0
39	Permit No: 11015. Public Improvements: construction: utility potholing	8th St Smart Growth	San Diego Bay	Low	0	**		0	0	0
40	Permit No: 11016. Public Improvements: R&R sidewalk and driveway	NC Middle School	San Diego Bay	Low	1	**		0	0	0
41	Permit No: 1102. Public Improvements: Sidewalk G-14B	734 G Avenue	San Diego Bay	Low	2	**		0	0	0
42	Permit No: 68634. Public Improvements: Driveway R&R per SDRSD	704 E 3rd St	San Diego Bay	Low	0	**		0	0	0
43	Permit No: 68638. Public Improvements: Construction: install 4 mon wells per approved Encroachment Agreement	Various - Tolas, Salot, 8th & Plaza Blvd	San Diego Bay	Low	0	**		0	0	0

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
44	Permit No: 68663. On-site improvements: retaining wall SDRSD C-4	1220 Earle Dr	San Diego Bay	Low	0	**		0	0	0

* Several construction sites received inspections the last week of the dry season to ensure proper BMP implementation for the wet season.

** Low priority construction sites received at least one inspection from City building inspectors during the 2010/2011 reporting period. These inspections include a check for proper construction BMP implementation and maintenance.

APPENDIX A.3

MUNICIPAL INVENTORY

Appendix A.3
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source[1]
1	Butterfly Park	East 22nd Street and Palm Avenue	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
2	El Toyon Park	2005 East 4th Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
3	Kimball Park	12th Street and D Avenue	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
4	Las Palmas Park	1800 Newell Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
5	Municipal Separate Storm Sewer	19 miles of storm drains, storm drain boxes, and open channel sections throughout the City	High	San Diego Bay	MS4	UL	UL	UL	PO**	UL	UL	PO**	PO**	UL	
6	Municipal Swimming Pool	1800 East 22nd Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
7	National City Municipal Golf Course	1439 Sweetwater Road	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
8	Paradise Creek Educational Park	West 19th Street and Coolidge Avenue	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
9	Public Works East Yard	2100 Hoover Avenue	High	San Diego Bay	Public Works Facilities	L	PO	L	L	PO	PO	PO	PO	PO	X
10	Public Works West Yard	2100 Hoover Avenue	High	San Diego Bay	Public Works Facilities	L	PO	L	L	PO	PO	PO	PO	PO	X
11	Road and Streets	110 miles of roadways throughout the City	High	San Diego Bay	Road, Streets, and Highways	L	L	L	L	UL	UL	UL	PO	L	X
12	Sanitary Sewer System		High	San Diego Bay	Sanitary Sewer System	PO***	UL	PO***	UL	UL	PO***	PO***	PO***	UL	
13	Special Events	Throughout City	High	San Diego Bay	Special Events	UL	UL	UL	UL	UL	UL	PO	PO	L	
14	Sweetwater Heights Park	Cagle Street and Stockman Street	High	San Diego Bay	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
15	Fire Station 31	24th Street and Euclid Avenue	Medium	San Diego Bay	Fire Stations	PO	PO	PO	PO	UL	UL	UL	PO	PO	
16	George H. Waters Nutrition Center	1514 D Avenue	Medium	San Diego Bay	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
17	Graffiti Removal	Throughout City	Medium	San Diego Bay	Mobile Municipal Activities, Including Power Washing	PO	PO	PO	PO	UL	UL	UL	PO	UL	
18	Infrastructure Maintenance	Throughout City	Medium	San Diego Bay	Mobile Municipal Activities, Including Power Washing	PO	PO	PO	PO	UL	UL	UL	PO	UL	
19	Landscape Maintenance	Throughout City	Medium	San Diego Bay	Mobile Municipal Activities, Including Power Washing	PO	PO	PO	PO	UL	UL	UL	PO	UL	

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	Watershed	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source[1]
20	National City Fire Department Headquarters - Station 34	333 East 16th Street	Medium	San Diego Bay	Fire Stations	PO	PO	PO	PO	UL	UL	UL	PO	PO	
21	Police Station	1200 National City Boulevard	Medium	San Diego Bay	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
22	Camacho Recreational Gymnasium	1810 East 22nd Street	Low	San Diego Bay	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
23	Casa De Salud	1408 Harding Avenue	Low	San Diego Bay	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
24	Civic Center	1243 National City Boulevard	Low	San Diego Bay	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
25	El Toyon Recreational Center	2005 East 4th Street	Low	San Diego Bay	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
26	Kimball Recreation Center	148 East 12th Street	Low	San Diego Bay	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
27	Martin Luther King Community Center	140 East 12th Street	Low	San Diego Bay	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
28	National City Public Library	1401 National City Boulevard	Low	San Diego Bay	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
29	Senior Services Center	1221 D Avenue	Low	San Diego Bay	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	

Notes

TTWQ – Threat to Water Quality

L = Likely, PO = Possible, UL= Unlikely

[1]Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water.

* Discharge of heavy metals and oil and grease is possible if the facility has on-site parking

** Sediment and oxygen demanding substances are possible pollutants for earthen or natural conveyances. Bacteria, but generally not viruses and other pathogens, may regrow in MS4s under certain conditions. While other pollutants may be discharged from the MS4, the MS4 itself is not a direct source of those pollutants.

***The sanitary sewer system is only a potential source of pollutants in the event of sewer line breaks or SSOs.

APPENDIX A.4

INDUSTRIAL INVENTORY

Appendix A.4
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
1	A-1 ALLOYS RECYCLING CENTER	724 CIVIC CENTER DRIVE	High	5093	Recycling	908.32	9 37I020171	Yes	No	No	No	No	No	Yes	No	No	X
2	ADEPT PROCESS SERVICES, INC DBA MARINE SERVICES AND EQUIPMENT	1804 CLEVELAND AVE. B	High	3732	Boat Repair	908.32		No	No	No	No	No	No	No	No	No	
3	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	High	3731	Boat Repair	908.32	9 37I014819	No	No	No	Yes	No	No	No	No	Yes	
4	CARROLL METAL WORKS, INC.	740 W 16TH STREET	High	3441	Manufacturing, Structural Steel	908.32	9 37I021165	No	No	No	No	No	No	No	No	No	
5	COSTCO WHOLESALE GROUP	1001 W 19TH STREET B	High	3827	Manufacturing, Equipment	908.32		No	No	No	No	No	No	No	No	No	
6	CP MANUFACTURING	1300 WILSON AVENUE	High	3559	Manufacturing, Equipment	908.32	9 37I016543	No	No	No	No	No	No	No	No	No	
7	DAN FAB	1110 HARDING AVENUE	High	3499	Manufacturing, Fabricated Metal	908.32		Yes	No	No	No	No	No	No	No	No	X
8	DIXIELINE LUMBER COMPANY	3450 HIGHLAND AVENUE	High	2439	Manufacturing, Wood/Furniture	909.12	9 37I015245	No	No	No	No	No	No	Yes	No	Yes	
9	EPSILON SYSTEMS SOLUTIONS INC	3039 HOOVER AVE	High	3731	Boat Repair	908.32	9 37I021665	No	No	No	No	No	No	No	No	No	
10	FABRICATION TECHNOLOGIES INDUSTRIES	2200 HAFFLEY AVENUE A	High	3441	Manufacturing, Structural Steel	908.32	9 37I022200	No	No	No	No	No	No	No	No	No	
11	FUTURA FIBERGLASS	730 W 19TH STREET	High	3732	Boat Repair	908.32	9 37I015572	No	No	No	No	No	No	No	No	No	
12	HANSON AGGREGATES NATIONAL CITY BATCH PLANT (2003 NC LLC)	601 W 12TH STREET	High	3273	Manufacturing, Concrete	908.32	9 37I020195	No	No	No	Yes	No	No	No	No	No	
13	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	High	3714	Manufacturing, Equipment	908.32		No	No	Yes	Yes	No	No	No	No	No	
14	L3 COMMUNICATIONS PACORD SAN DIEGO	225 W 30TH STREET	High	3812	Manufacturing, Electronics	908.32	9 37I015864	No	No	No	No	No	No	No	No	No	
15	L3 COMMUNICATIONS/PACORD SAN DIEGO	240 W 30TH STREET	High	3812	Manufacturing, Electronics	908.32	9 37I015864	No	No	No	No	No	No	No	No	No	
16	MASTER MACHINE CORPORATION (VANTAGE ASSOCIATES)	900 CIVIC CENTER DRIVE	High	3499	Manufacturing, Fabricated Metal	908.32	9 37I019349	No	No	No	No	No	No	No	No	No	
17	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	High	3714	Manufacturing, Equipment	908.32		Yes	No	Yes	No	No	No	No	No	No	X
18	NATIONAL IRON WORKS	832 HOOVER AVENUE	High	3441	Manufacturing, Structural Steel	908.32		Yes	No	No	Yes	No	No	No	No	No	X
19	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	High	5093	Recycling	908.32	9 37I000615	Yes	No	No	No	No	No	No	No	No	X
20	SAN DIEGO MINI TOURS, CONTACTO	1726 WILSON AVE	High	4141	Ground Transportation	908.32	9 37I001275	Yes	No	Yes	No	No	No	No	No	No	X
21	SAN DIEGO WOOD PRESERVING	2010 HAFFLEY AVENUE	High	2491	Manufacturing, Wood/Furniture	908.31	9 37I000684	No	No	No	No	No	No	No	No	No	
22	SOUTH BAY BOILER REPAIR, INC..	1224 ROOSEVELT AVENUE	High	3494	Manufacturing, Fabricated Metal	908.32	9 37I019728	Yes	No	No	No	No	No	No	No	No	X
23	SUN DIEGO CHARTER CO.	2020 HOOVER AVENUE	High	4141	Ground Transportation	908.32	9 37I018361	No	No	No	No	No	No	No	No	No	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
24	SURE RIDE INC	1523 WILSON AVE	High	4141	Ground Transportation	908.32		No	Yes	No	Yes	No	No	No	No	No	X
25	UPHOLSTERY FABRIC OUTLET (UFO)	1918 ROOSEVELT AVENUE	High	2512	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
26	VALENCIA STONE AND TILE	1124 COOLIDGE AVENUE	High	3281	Manufacturing, Stone/Glass	908.32	9 37I020515	No	No	No	No	No	No	No	No	No	
27	WESTERN LIFT, INC/WESTERN HOIST, INC.	2200 HAFFLEY AVENUE	High	3536	Manufacturing, Equipment	908.32	9 37I000699	Yes	No	No	Yes	No	No	No	No	No	X
28	CALIFORNIA MOVING & STORAGE	1305 WILSON AVENUE	Medium	4214	Ground Transportation	908.32		Yes	No	Yes	No	No	No	No	No	No	X
29	COLLINS MARINE REPAIR, INC	1400 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.32		No	No	Yes	No	No	No	No	No	No	
30	G V INDUSTRIES	1346 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.32		No	No	Yes	No	No	No	No	No	No	
31	L B C MUNDIAL CORP	1420 E PLAZA BLVD. D-9	Medium	4731	Ground Transportation	908.32		No	No	No	No	No	No	No	No	No	
32	M & N FURNITURE	125 W 22ND STREET	Medium	2512	Manufacturing, Wood/Furniture	908.32		No	No	No	Yes	No	No	No	No	Yes	
33	NEW LIFE BARRIER (HOA MY INC. DBA)	1616 HOOVER AVENUE	Medium	3449	Manufacturing, Fabricated Metal	908.32		Yes	No	No	No	No	No	No	No	No	X
34	SUNCARGO INC	1457 E PLAZA BLVD.	Medium	4731	Ground Transportation	908.32		No	No	No	No	No	No	No	No	No	
35	TITAN MARINE, INC	2236 MCKINLEY AVE	Medium	3732	Boat Repair	908.32		No	No	No	Yes	No	No	No	No	Yes	
36	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	Medium	3449	Manufacturing, Fabricated Metal	908.32		No	No	No	No	No	No	No	No	No	
37	VALMER GRAPHICS INC.	1400 E PLAZA BLVD.	Medium	2759	Printing	908.32		No	No	No	No	No	No	No	No	No	
38	VIGOR MARINE LLC	1428 MCKINLEY AVE	Medium	3731	Boat Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
39	A-AMERICAN SELF STORAGE	525 W 20TH STREET	Low	4225	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
40	ACROPOLIS SPACE CENTER	3200 HIGHLAND AVENUE	Low	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
41	ACTIVE SIGN CO.	2827 HOOVER AVENUE J	Low	3993	Printing	908.32		No	No	No	No	No	No	No	No	No	
42	ADVANCE PLASTICS	225 W 30TH STREET	Low	3089	Manufacturing, Plastic/Rubber	908.32		No	No	No	No	No	No	No	No	No	
43	AMSEC, LLC	131 W 33RD STREET	Low	4225	Wholesale/Storage/Warehousing	908.32		No	No	No	Yes	No	No	No	No	No	
44	ANCON TRANSPORTATION	1800 HARRISON AVENUE	Low	4226	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
45	APPAREL ENTERPRISES CO., INC.	2712 TRANSPORTATION AVENUE H	Low	2389	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
46	ASSAF SAWAYA FASHION	301 W 28TH STREET P	Low	2311	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
47	ATOMIC INVESTMENTS	3200 HIGHLAND AVENUE	Low	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
48	AZTEC PRINTING COMPANY	710 E 3RD STREET	Low	2759	Printing	908.31		No	No	No	No	No	No	No	No	No	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
49	BAGWIS SALES AND SERVICES	3100 E 8TH ST C	Low	4731	Ground Transportation	908.32		Yes	No	Yes	No	No	No	No	No	No	
50	BEAR'S VM MACHINE	241 W 35TH STREET E	Low	5015	Recycling	909.12		Yes	No	No	Yes	No	No	No	No	No	
51	BECKY BEEZ BISQUE & CERAMICS	2424 HOOVER AVE T	Low	3269	Manufacturing, Stone/Glass	908.32		No	No	No	Yes	No	No	No	No	No	
52	BEST WAY PRINTING	2602 TRANSPORTATION AVE E	Low	2759	Printing	908.32		No	No	No	No	No	No	No	No	No	
53	CASA SANCHEZ FOODS	131 W 33RD ST 11	Low	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
54	CENTLI	221 W 33RD ST	Low	2099	Manufacturing, Food/Drink	908.32		No	No	No	No	No	No	No	Yes	No	
55	CONNECTION MEDICAL TRANSPORT	2504 TRANSPORTATION AVE E	Low	4789	Ground Transportation	908.32		No	No	No	No	No	No	No	No	No	
56	COPY POST PRINTING	100 W 35TH STREET B	Low	2759	Printing	909.12		No	No	No	No	No	No	No	No	No	
57	CORONADO ISLAND DESIGN & STAMPS	303 W 35TH STREET G	Low	3953	Manufacturing, Chemicals	909.12		No	No	No	No	No	No	No	No	No	
58	COSTCO WHOLESALE CORP.	1001 W 19TH STREET C & D	Low	4783	Ground Transportation	908.32		No	No	No	No	No	No	No	No	No	
59	COURRINGTON WOODWORKS	6535 TIDELAND AVENUE A-E	Low	2541	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
60	CP MANUFACTURING	1440 HARDING AVENUE B	Low	3679	Manufacturing, Electronics	908.32		No	No	Yes	Yes	No	No	No	No	No	
61	CREATIVE MOBILITY INC	320 CIVIC CENTER DRIVE	Low	3799	Manufacturing, Equipment	908.32		No	No	No	No	No	No	No	No	No	
62	CREST OFFSET PRINTING CO,	921 COOLIDGE AVENUE	Low	2759	Printing	908.32		No	No	No	No	No	No	No	No	No	
63	D F DESIGNS	1228 HOOVER AVENUE	Low	2434	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	Yes	
64	DEYSI VARGAS ANTONIO	917 E 8TH ST 105	Low	4226	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
65	DIMA-TECH	205 W 35TH STREET H	Low	3612	Manufacturing, Equipment	909.12		No	No	No	No	No	No	No	No	No	
66	DIVERSIFIED WOOD DESIGNS	124 E 30TH ST A5	Low	2434	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
67	DRAPERY MANUFACTURER	2605 HOOVER AVENUE A	Low	2391	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
68	DURRA INK	303 W 35TH STREET E	Low	2752	Printing	909.12		No	No	No	No	No	No	No	No	No	
69	E.L.A BEDSPREADS ETC.	3200 HIGHLAND AVENUE 408	Low	2392	Manufacturing, Fabric/Clothes	909.12		No	No	No	No	No	No	No	No	No	
70	EHMCKE SHEET METAL CORP	840 W 19TH STREET	Low	3444	Manufacturing, Fabricated Metal	908.32		No	No	No	No	No	No	No	No	No	
71	EL GRANO DE ORO	730 E 7TH STREET	Low	2099	Manufacturing, Food/Drink	908.32		No	No	No	No	No	No	No	No	No	
72	EVEREST MARINE	1925 WILSON AVE	Low	3732	Boat Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
73	EZ SPRING AND STAMPING	231 W 11TH STREET	Low	3499	Manufacturing, Fabricated Metal	908.32		No	No	No	Yes	No	No	No	No	Yes	
74	EZERA CLOTHING	220 W 25TH STREET E	Low	2331	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
75	FAMILY LOOPYA CORP	2525 SOUTHPORT WAY E	Low	2038	Manufacturing, Food/Drink	908.32		No	No	No	No	No	No	No	No	No	
76	FIESTA PACIFIC PRODUCTS, INC	2855 A AVENUE	Low	2037	Manufacturing, Food/Drink	908.32		No	No	No	No	No	No	No	No	No	
77	FTC	1433 ROOSEVELT AVENUE	Low	3999	Manufacturing, Misc	908.32		No	No	No	No	No	No	No	No	No	
78	GLASSWOOD STUDIO	907 A AVENUE	Low	3231	Manufacturing, Stone/Glass	908.32		No	No	No	Yes	No	No	No	No	No	
79	GOULET INDUSTRIES	340 W 26TH STREET J	Low	3479	Manufacturing, Fabricated Metal	908.32		No	No	No	No	No	No	No	No	No	
80	GULF COPPER SHIP REPAIR, INC	2702 SOUTHPORT WAY B	Low	3731	Boat Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
81	H & B BAJA FILTERS, LLC	337 W 35TH STREET G	Low	3559	Manufacturing, Equipment	909.12		No	No	No	No	No	No	No	No	No	
82	H20 LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	Low	2048	Manufacturing, Food/Drink	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
83	HIGHWAY 54/NATIONAL SELF STORAGE LLC	132 W 33RD STREET	Low	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
84	IDENTITY PLUS	1120 HOOVER AVENUE	Low	3069	Manufacturing, Plastic/Rubber	908.32		No	No	No	No	No	No	No	No	Yes	
85	IN STITCHES	34 E 17TH ST B	Low	2211	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
86	INDU FASHIONS	220 W 25TH ST B	Low	2329	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
87	INDUSTRIAL & ARCHITECTURAL SIGN PRODUCTION	1535 TIDELAND AVENUE G	Low	3993	Printing	908.32		No	No	No	No	No	No	No	No	No	
88	INNOVATIVE CUTTING DESIGNS COR	1805 CLEVELAND AVE	Low	3499	Manufacturing, Fabricated Metal	908.32		No	No	No	Yes	No	No	No	No	Yes	
89	J. C. ENVIRONMENTAL COMPANY	2504 TRANSPORTATION AVENUE C	Low	4959	Waste Management	908.32		No	No	No	No	No	No	No	No	Yes	
90	JAANN	2602 TRANSPORTATION AVE F	Low	3312	Manufacturing, Primary Metal	908.32		Yes	No	No	No	No	No	No	No	No	
91	JB LITHO	2602 TRANSPORTATION AVENUE E	Low	2752	Printing	908.32		No	No	No	No	No	No	No	No	No	
92	JESSICA'S FASHIONS	2605 HOOVER AVENUE	Low	2335	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
93	JUNE COMPANY INDUSTRIAL SERVICES	301 W 28TH ST K	Low	3535	Manufacturing, Equipment	908.32		No	No	No	No	No	No	No	No	No	
94	K D R COMPANY PRINTING	301 W 28TH STREET D	Low	2752	Printing	908.32		No	No	No	No	No	No	No	No	No	
95	KDR/DPG	301 W 28TH ST G	Low	2759	Printing	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
96	L B C MUNDIAL CORP	914 E 8TH STREET 201	Low	4731	Ground Transportation	908.32		No	No	No	No	No	No	No	No	No	
97	L-3 SERVICES, INC., UNIDYNE DIVISION	2702 SOUTHPORT WAY E-F	Low	4731	Ground Transportation	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
98	LA ESPIGA DE ORO BAKERY	320 HIGHLAND AVENUE	Low	2051	Manufacturing, Food/Drink	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
99	LUCERO'S DRAPERIES	3200 HIGHLAND AVENUE 408	Low	2391	Manufacturing, Fabric/Clothes	909.12		No	No	No	No	No	No	No	No	No	
100	MICROWAVE SOLUTIONS INC.	3200 HIGHLAND AVENUE	Low	3663	Manufacturing, Electronics	909.12		No	No	No	No	No	No	No	No	No	
101	MILLER MARINE	1430 HOOVER AVENUE	Low	3499	Manufacturing, Fabricated Metal	908.32	9 37I018090	No	No	No	Yes	No	No	No	No	No	
102	MOTIVATIONAL SYSTEMS INC. (MSI)	2200 CLEVELAND AVENUE	Low	2599	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
103	MYLYN'S FASHION OF SAN DIEGO	901 COOLIDGE AVENUE	Low	2339	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
104	NATALINA ENTERPRISES	1840 HARRISON AVENUE	Low	4214	Ground Transportation	908.32		No	No	No	No	No	No	No	No	No	
105	NATHAN'S STONE WORLD INC	1014 COOLIDGE AVE	Low	3281	Manufacturing, Stone/Glass	908.32		No	No	No	Yes	No	No	No	No	Yes	
106	NATIONAL CITY SELF STORAGE	430 W 30TH STREET	Low	4225	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
107	NATIONAL CITY TRANSFER & STORAGE	2150 MCKINLEY AVENUE	Low	4214	Ground Transportation	908.32		No	No	Yes	Yes	No	No	No	No	No	
108	NIEDERFRANK'S ICE CREAM INC.	726 A AVENUE	Low	2024	Manufacturing, Food/Drink	908.32		No	No	No	No	No	No	No	Yes	No	
109	OLSEN-SIMMONS CABINETRY	426 E 30TH STREET	Low	2599	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
110	OOH LA LA	2504 TRANSPORTATION AVE D	Low	2339	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
111	OOH LA LA (WEST KID'S GEAR)	2602 TRANSPORTATION AVENUE G	Low	2339	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
112	OXYHEAL MEDICAL SYSTEMS, INC.	3224 HOOVER AVENUE	Low	3499	Manufacturing, Fabricated Metal	908.32		No	No	No	No	No	No	No	No	No	
113	PATRICK SHAW ENGRAVING	1533 TIDELAND AVENUE J	Low	2796	Printing	908.32		No	No	No	No	No	No	No	No	No	
114	PENTAGON CARGO	3200 HIGHLAND AVENUE	Low	4731	Ground Transportation	909.12		Yes	No	Yes	No	No	No	No	No	No	
115	PLANNED PARENTHOOD OF SD & RIV	337 W 35TH STREET S	Low	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
116	POSTURE CARE MATTRESS MFG.	34 E 17TH STREET A	Low	2515	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
117	POTTER ELECTRIC, INC. WAREHOUSE	105 W 35TH STREET A	Low	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
118	PRECISION BINDERY & PRINTING	301 W 28TH STREET E	Low	2731	Printing	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
119	PROCHEM SPECIALTY PRODUCTS, INC.	115 E 18TH STREET	Low	2841	Manufacturing, Chemicals	908.32		No	No	No	No	No	No	No	No	No	
120	PROTO MACHINING	105 W 35TH STREET L	Low	3499	Manufacturing, Fabricated Metal	909.12		Yes	No	No	No	No	No	No	No	No	
121	PUPPET SAFARI	326 W 11TH STREET	Low	3942	Manufacturing, Plastic/Rubber	908.32		No	No	No	No	No	No	No	No	No	
122	QUALITY PRINTING INC	1545 TIDELANDS AVE P	Low	2759	Printing	908.32		No	No	No	No	No	No	No	No	No	
123	R W LITTLE, CO	415 W 30TH ST	Low	4226	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
124	R. HARRIS AND CO.	2605 HOOVER AVENUE E	Low	2599	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
125	RAS FASHIONS	2605 HOOVER AVENUE B	Low	2399	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
126	RESEARCH AUTOMOTIVE GROUP, INC	199 E 27TH ST	Low	3462	Manufacturing, Fabricated Metal	908.32		Yes	No	No	No	No	No	No	No	No	
127	ROYCE CABINETS & GRANITE INC	2120 WILSON AVE	Low	3281	Manufacturing, Stone/Glass	908.32		No	No	No	No	No	No	No	No	No	
128	RYAN HYDRAULIC SERVICES, INC	1817 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.32		No	No	No	No	No	No	No	No	No	
129	SAN DIEGO AUTOMOTIVE MUSEUM	600 W 12TH ST	Low	4226	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
130	SAN DIEGO PRETZEL COMPANY	224 W 12TH STREET	Low	2052	Manufacturing, Food/Drink	908.32		No	No	No	No	No	No	No	No	No	
131	SAN DIEGO SEAFOOD	1842 MCKINLEY AVENUE	Low	2092	Manufacturing, Food/Drink	908.32		No	No	No	No	No	No	No	No	No	
132	SEWING SAAVEDRA	2525 SOUTHPORT WAY R	Low	2399	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
133	SHUTTER BUS LEASING	1726 WILSON AVENUE	Low	4141	Ground Transportation	908.32		No	No	Yes	Yes	No	No	No	No	No	
134	SMART CUTTING SERVICES	220 W 25TH STREET A	Low	2399	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
135	SMARTRUNK SYSTEMS INC	401 W 35TH ST B	Low	3669	Manufacturing, Electronics	909.12		No	No	No	No	No	No	No	No	No	
136	SMARTRUNK SYSTEMS INC.	337 W 35TH STREET R	Low	3669	Manufacturing, Electronics	909.12		No	No	No	No	No	No	No	No	No	
137	SOUTH BAY MOTORSPORTS WAREHOUSE 1	337 W 35TH STREET H	Low	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
138	SOUTH BAY MOTORSPORTS WAREHOUSE 2	105 W 35TH STREET B	Low	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
139	SOUTHLAND CLUTCH EXCHANGE	101 E 18TH STREET	Low	3599	Manufacturing, Equipment	908.32		No	No	No	No	No	No	No	No	No	
140	STARK MFG. CO.	206 W 35TH STREET C & D	Low	2394	Manufacturing, Fabric/Clothes	909.12		No	No	No	No	No	No	No	No	No	
141	STUDIO EUROPA INC	313 W 33TH STREET B	Low	2434	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
142	TEAM CARE MEDICAL TRANSPORTATION	301 W 28TH ST M	Low	4119	Ground Transportation	908.32		Yes	No	Yes	No	No	No	No	No	No	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
143	THE MACHINE SHOP & FABRICATORS	1925 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.32		No	No	No	No	No	No	No	No	No	
144	TOD TOOL INC	2601 HOOVER AVENUE K	Low	3728	Manufacturing, Equipment	908.32		No	No	No	No	No	No	No	No	No	
145	TRANS ENERGY USA	1825 CLEVELAND AVE	Low	4226	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
146	TRI TECH REPROGRAPHICS	2712 TRANSPORTATION AVE E	Low	2759	Printing	908.32		No	No	No	Yes	No	No	No	No	Yes	
147	US-MEX	2500 HOOVER AVENUE G	Low	3679	Manufacturing, Electronics	908.32		No	No	No	No	No	No	No	No	No	
148	VIMONE'S GARMET CO.	220 W 25TH STREET G	Low	2329	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
149	WAGGONEERS TRUCKING	1545 TIDELAND AVENUE	Low	4212	Ground Transportation	908.32		Yes	No	Yes	No	No	No	No	No	No	
150	WESTERN LIFT, INC/WESTERN HOIST, INC	1839 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.32		No	No	No	Yes	No	No	No	No	No	
151	WINDOW CLASSICS	1921 CLEVELAND AVENUE	Low	2391	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
152	WITHOUSKI CABINET	1535 TIDELAND AVENUE P	Low	2434	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
153	WSI METAL SUPPLY	1839 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.32		No	No	No	No	No	No	No	No	No	
154	ZAGA CUSTOM	1545 TIDELANDS AVE D	Low	2389	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	Yes	

Notes

TTWQ – Threat to Water Quality

SIC – Standard Industrial Classification Code

Pollutants Potentially Generated – Where a facility has a "Likely" pollutant discharge potential for a specific pollutant, a "Yes" is placed in the appropriate column.

Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water. A pollutant of concern is one for which the receiving water is impaired according to the Clean Water Act section 303(d) list. At the beginning of 2010/2011, the Clean Water Act section 303(d) list indicated that pollutants of concern for Seventh Street Channel (HSA 908.31) included heavy metals and organics due to an impairment for "sediment toxicity" and "benthic community effects".

APPENDIX A.5

COMMERCIAL INVENTORY

Appendix A.5
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
1	A & D HAWAIIAN BBQ	2220 E PLAZA BLVD D	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	Yes	Yes	
2	BALL AUTOMOTIVE GROUP	2729 NATIONAL CITY BLVD.	High	5521	Vehicle Dealers	908.32		No	No	Yes	Yes	No	No	No	No	No	
3	BAMBOO ROTISSERIE, INC	2220 E PLAZA BLVD T-1	High	5812	Eating/Drinking Establishments	908.32		No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	
4	BEN'S 1615	1615 SWEETWATER ROAD A	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	Yes	Yes	
5	C&M MOTORS INC.	904 ROOSEVELT AVENUE	High	7699	Equipment Repair	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
6	CALIFORNIA AUTO DETAIL	1 W 35TH ST	High	7542	Vehicle Washing	909.12		No	Yes	Yes	Yes	No	No	No	No	No	
7	CALIFORNIA AUTO DETAILING	1509.5 NATIONAL CITY BLVD.	High	7542	Vehicle Washing	908.32		No	No	No	No	No	No	No	No	No	
8	CARLS JR. #120	1280 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
9	CARLS' JR. #261	1502 SWEETWATER ROAD	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	No	
10	CASA DEL TACO	1635 SWEETWATER ROAD A	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	Yes	Yes	
11	CHOWKING	2220 E PLAZA BLVD T-1	High	5812	Eating/Drinking Establishments	908.32		No	Yes	No	Yes	No	No	No	Yes	Yes	
12	CHUCK E CHEESE'S	1143 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	Yes	No	Yes	
13	CONCHING'S CAFÉ	3400 E 8TH STREET 115 & 116	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	Yes	Yes	Yes	Yes	
14	COTIJAS MEXICAN FOOD	740 E 30TH STREET	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	Yes	
15	DE LA TORRE	2137 WILSON AVENUE	High	0782	Landscaping	908.32		No	No	No	No	Yes	Yes	No	No	No	
16	DE-LUX ROOFING	1107 HARDING AVENUE	High	1761	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
17	DENNY'S RESTAURANT	424 MILE OF CARS WAY	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	No	No	Yes	
18	DIESEL POWER TRADE CORP	1636 WILSON AVE	High	5013	Auto Supplies	908.32		Yes	No	Yes	Yes	No	No	No	No	Yes	X
19	FAMILY HOUSE OF PANCAKES	1900 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
20	FAMILY LOOMPYA SEAFOOD MARKET	2720 E PLAZA BLVD A	High	5421	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
21	FOODLAND IGA	303 HIGHLAND AVENUE	High	5411	Eating/Drinking Establishments	908.31		No	No	Yes	Yes	No	No	No	Yes	Yes	
22	GINZA SUSHI	925 E PLAZA BLVD G	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
23	GOODY'S	340 W 26TH STREET E	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
24	HIGHLAND ARCO NORTH	1734 HIGHLAND AVENUE	High	5541	Fueling	908.32		Yes	No	No	No	No	No	No	No	No	
25	HOMETOWN BUFFET #714	1135 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	Yes	Yes	Yes	
26	HOPSING AUTO	1540 ROOSEVELT AVENUE	High	7538	Auto Repair	908.32		No	No	Yes	Yes	No	No	No	No	No	
27	JACK IN THE BOX #80	3138 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	No	No	No	
28	JOLLIBEE	1401 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	No	No	Yes	
29	K SURPLUS SALES, INC.	1403 CLEVELAND AVENUE	High	5072	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
30	KARIHAN FILIPINO FOOD	2220 E PLAZA BLVD A-1	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	No	Yes	Yes	
31	LAI THAI RESTAURANT	1430 E PLAZA BLVD E-10	High	5812	Eating/Drinking Establishments	908.32		No	Yes	Yes	Yes	No	Yes	No	Yes	No	
32	LOLA HAPPY BAKERY	3142 E PLAZA BLVD L	High	5461	Eating/Drinking Establishments	908.32		No	Yes	Yes	Yes	No	No	No	Yes	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
33	M & T AUTO	1731 WILSON AVENUE	High	7538	Auto Repair	908.32		Yes	Yes	Yes	Yes	No	No	No	No	Yes	X
34	MANILA SEAFOOD ORIENTAL MARKET	2220 E PLAZA BLVD K	High	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
35	MANILA SUNSET GRILLE	925 E PLAZA BLVD I	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
36	MC CUNE MOTORS	3000 NATIONAL CITY BLVD.	High	7532	Auto Paint/Body	908.32		No	No	No	No	No	No	No	No	No	
37	MCDONALDS	1630 HIGHLAND AVENUE	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
38	MIKE'S GIANT NY PIZZA #5	1635 SWEETWATER ROAD C-1	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	Yes	Yes	
39	NANI MOKU HAWAIIAN BBQ	1635 SWEETWATER RD H	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	Yes	Yes	
40	NATIONAL CITY AUTO CENTER INC	1010 NATIONAL CITY BLVD	High	5521	Vehicle Dealers	908.32		Yes	No	No	No	No	No	No	No	No	X
41	NATIONAL CITY CAR WASH	2550 E PLAZA BLVD	High	7542	Vehicle Washing	908.32		No	Yes	Yes	No	No	No	Yes	No	No	
42	NATIONAL CITY GROCERY OUTLET	3446 HIGHLAND AVENUE 6	High	5411	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
43	OHANA HAWAIIAN ISLAND BBQ	430 E PLAZA BLVD E7A	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	Yes	No	
44	OLYMPIC AUTO SALES	1800 NATIONAL CITY BLVD.	High	5521	Vehicle Dealers	908.32		Yes	No	No	Yes	No	No	No	No	No	
45	OUTBACK STEAK HOUSE	2980 PLAZA BONITA ROAD	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	Yes	No	
46	PINOY FIESTA	550 E 8TH STREET	High	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
47	PIZZA HUT #315044	2437 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
48	RESTAURANT EQUIPMENT WAREHOUSE	3039 HOOVER AVE	High	5046	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
49	SAN DIEGO HYDRAULICS INC	1720 CLEVELAND AVE	High	7699	Equipment Repair	908.32		Yes	No	Yes	Yes	No	No	No	No	No	X
50	SPECIALTY TIRES AND BRAKES	1 W 35TH ST D	High	7534	Auto Repair	909.12		Yes	No	Yes	Yes	No	No	No	No	No	
51	TACO SALSA TACO SHOP	925 E PLAZA BLVD B	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
52	TITA'S KITCHENETTE	2720 E PLAZA BLVD E & F	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	
53	TONY'S DETAIL SHOP	49 E 16TH ST B1	High	7542	Vehicle Washing	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
54	USED KAR STORE	45 E 26TH STREET	High	5521	Vehicle Dealers	908.32		Yes	No	Yes	Yes	No	No	No	No	No	
55	VALERIOS FAMILY BAKE SHOP	2720 E PLAZA BLVD H	High	5461	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	Yes	Yes	
56	VALERO NATIONAL CITY	10 OSBORN STREET	High	5541	Fueling	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
57	XPEDX	1010 W 19TH STREET	High	5113	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
58	A NEW LOOK AUTO BODY & PAINT	340 W 11TH ST	Medium	7532	Auto Paint/Body	908.32		Yes	Yes	No	No	No	No	No	No	No	X
59	ALL PRO AUTO REPAIR	517 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
60	AMEE BAY LLC	2105 CLEVELAND AVE	Medium	1731	Other Contractor	908.32		No	No	No	Yes	No	No	No	No	No	
61	ARCO AM/PM #9566	1606 E PLAZA BLVD.	Medium	5541	Fueling	908.32		Yes	Yes	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
62	ARCO AM/PM #9570	1139 HARBINSON AVENUE	Medium	5541	Fueling	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
63	ARCO AMPM 83117	133 W 8TH ST	Medium	5541	Fueling	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
64	ARROYO BROTHERS	128 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
65	AUTO ACCESS	1609 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
66	AVIS RENT A CAR	1536 SWEETWATER ROAD B	Medium	7514	Vehicle/Equipment Rental	909.12		No	No	Yes	Yes	No	No	No	No	No	
67	BASKIN ROBBINS ICE CREAM	1493 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
68	BAXTER AUTOMOTIVE & MACHINE	1400 HOOVER AVENUE	Medium	7539	Auto Repair	908.32		Yes	No	Yes	No	No	No	No	No	No	X
69	BJ MOTOR & BODY SHOP	1338 ROOSEVELT AVENUE	Medium	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
70	BOAT SELLERS	1730 CLEVELAND AVENUE	Medium	5551	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	X
71	BOB'S N. CAR & SMOG	49 E 16TH ST B1	Medium	7539	Auto Repair	908.32		No	No	No	Yes	No	No	No	No	No	
72	BREAD DELUX BAKERY, ETC.	1420 E PLAZA BLVD D-1	Medium	5461	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
73	C & W DIVING	1706 HOOVER AVENUE	Medium	1629	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
74	CALIFORNIA PRODUCE CORPORATION	1736 E PLAZA BL	Medium	5431	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
75	CAR MAINTENANCE PROVIDERS	1531 NATIONAL CITY BLVD	Medium	7538	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
76	CHINESE CANTON BAKERY	1132 E PLAZA BLVD 204	Medium	5461	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	Yes	Yes	Yes	
77	COMMERCIAL FLEET SERVICE	1521 COOLIDGE AVENUE	Medium	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
78	CROWN TRANSMISSION CENTER	1339 HOOVER AVENUE	Medium	7537	Auto Repair	908.32		No	No	Yes	No	No	No	No	No	No	
79	DELA CRUZ AUTO REPAIR INC	36 CIVIC CENTER DR	Medium	7538	Auto Repair	908.32		Yes	No	No	No	No	No	No	No	No	X
80	DESSERTS PLUS, INC.	2220 E PLAZA BLVD Q	Medium	5461	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
81	ETHNIC DELI & CAFE	404 W MILE OF CARS WAY F	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
82	EXOTIC MOTORS	135 CIVIC CENTER DR 203	Medium	5012	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	X
83	FASTSIGNS	1240 E PLAZA BLVD. 602	Medium	7389	Pool/Fountain Cleaning	908.32		No	No	Yes	Yes	No	No	No	No	No	
84	FIESTA PET SHOP	1145 HIGHLAND AVENUE A	Medium	5999	Animal Facilities	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
85	GAMA PRODUCE	1605 E 4TH ST	Medium	5411	Eating/Drinking Establishments	908.31		Yes	No	No	No	No	No	No	No	No	X
86	GOLDEN CHOPSTICKS RESTAURANT	1430 E PLAZA BLVD E-22-23	Medium	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	No	
87	GOLDILOCKS BAKERY & RESTAURANT	1420 E PLAZA BLVD D-7	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
88	GREENWALD'S AUTOBODY & FRAMEWORKS, INC	1814 ROOSEVELT AVENUE	Medium	7532	Auto Paint/Body	908.32		No	No	Yes	No	No	No	No	No	No	
89	GULF AUTO SALES	135 CIVIC CENTER DR	Medium	5012	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	X

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
90	ICEBERG ENTERPRISES, INC.	1410 CLEVELAND AVENUE	Medium	7359	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	X
91	IN N OUT BURGER	500 MILE OF CARS WAY	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
92	INTERNATIONAL HOUSE OF PANCAKES	1430 E PLAZA BLVD E-1	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
93	JOCSON'S AUTO BODY & PAINT INC.	1320 COOLIDGE AVENUE	Medium	7532	Auto Paint/Body	908.32		No	No	No	Yes	No	No	No	No	Yes	
94	JOE'S TIRES	1532 NATIONAL CITY BLVD	Medium	7534	Auto Repair	908.32		Yes	No	No	Yes	No	No	No	No	No	
95	JOSE AUTO ELECTRIC	108 W 18TH STREET	Medium	7538	Auto Repair	908.32		No	No	Yes	Yes	No	No	No	No	No	
96	KARZ PLUS RV	1605 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
97	LISA'S DESSERTS	2720 E PLAZA BLVD Q	Medium	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
98	LOS BURRITOS MEXICAN GRILL	3460 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
99	MARATHON CONSTRUCTION	801 CIVIC CENTER DRIVE	Medium	1541	Other Contractor	908.32		No	No	Yes	Yes	No	No	No	No	No	
100	MCDONALDS #6773	2145 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
101	MICKEY'S COMPLETE AUTO REPAIR	415 NATIONAL CITY BLVD.	Medium	7538	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
102	MYKIES LAWN AND POWER EQUIPMENT	225 W 9TH ST	Medium	7699	Equipment Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
103	NAM AUTO REPAIR	10 OSBORN ST	Medium	7538	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
104	NATIONAL CITY GOLF COURSE	1439 SWEETWATER ROAD	Medium	7992	Golf Courses/Parks	909.12		No	No	No	No	Yes	Yes	No	No	No	
105	NATIONAL CITY SMOG, BRAKE & LIGHTS	705.5 E 8TH STREET A	Medium	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
106	NATIONAL MECHANICAL SERVICES	1640 HOOVER AVENUE B	Medium	1731	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
107	PERRY FORD (TRUCK)	1610 NATIONAL CITY BLVD.	Medium	5521	Vehicle Dealers	908.32		No	No	No	Yes	No	No	No	No	No	
108	PETRO AUTO CARE	10 E 1ST ST	Medium	7538	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
109	PLAZA BOULEVARD PET CLINIC	2415 E PLAZA BLVD.	Medium	0742	Animal Facilities	908.32		No	No	No	No	No	No	No	No	No	
110	POPEYES CHICKEN	2210 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
111	PRO STREET LIGHTING INC	2145 WILSON AVENUE	Medium	5531	Auto Supplies	908.32		No	No	No	No	No	No	No	No	Yes	
112	PROPULSION CONTROL ENGINEERING	1411 HARDING AVE.	Medium	7699	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
113	RAY BROCK AUTO SERVICE	25 W 11TH STREET	Medium	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
114	ROYAL MANDARIN RESTAURANT	1132 E PLAZA BLVD 205	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
115	ROYCE CONSTRUCTION INC	10 E 1ST STREET A	Medium	1542	Other Contractor	908.31		No	No	No	Yes	No	No	No	No	No	
116	SAM'S ALIGNMENT SERVICE	1028 COOLIDGE AVENUE	Medium	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
117	SAN DIEGO AUTO DETAIL	110 W 11TH STREET	Medium	7549	Auto Repair	908.32		Yes	No	Yes	No	No	No	No	No	Yes	X

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
118	SAN DIEGO CRANE & HOIST	1606 COOLIDGE AVENUE	Medium	7699	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
119	SHELL STATION	2401 E DIVISION STREET	Medium	5541	Fueling	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
120	SIZZLER FAMILY STEAK HOUSE #45	1325 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
121	SMART AND FINAL	1220 E PLAZA BLVD	Medium	5411	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
122	SMOG CENTRO	404 HIGHLAND AVENUE	Medium	7539	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
123	SOLAR ECLIPSE PERFORMANCE	507 G AVENUE	Medium	7549	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
124	SOUND SOLUTIONS AUTO STYLING	36 W CIVIC CENTER DR.	Medium	7534	Auto Repair	908.32		Yes	No	Yes	Yes	No	No	No	No	No	X
125	SOUTH BAY MECHANICAL SERVICES	2137 WILSON AVENUE	Medium	1711	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
126	SOUTHBAY DENT REPAIR CENTER	1429 WILSON AVE	Medium	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
127	SOUTHWEST PAINT AND BODY	1616 WEST AVENUE	Medium	7532	Auto Paint/Body	908.32		Yes	Yes	No	No	No	No	No	No	No	
128	SOUTHWESTERN AUTOBROKERS INC	1535 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.32		No	No	Yes	No	No	No	No	No	No	
129	SPORTS AUTO SALES	1112 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	X
130	SPORTS AUTO SALES	1040 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	X
131	STAR AUTOMOTIVE	423 NATIONAL CITY BLVD.	Medium	5511	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
132	STARBUCK'S COFFEE #6783	2230 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
133	STEVE'S CLASSIC SEATCOVERS	616 HIGHLAND AVE	Medium	7532	Auto Paint/Body	908.32		Yes	Yes	No	No	No	No	No	No	No	X
134	SUBMARINA	1210 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
135	THUNDERBIRD MUFFLER SHOP	705 E 8TH STREET	Medium	7533	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
136	TINO'S IRON WORK	1014 COOLIDGE AVE	Medium	7692	Equipment Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	X
137	TORTAS OASIS	1210 E PLAZA BLVD 404	Medium	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
138	WEST COAST CAB	220 W 14TH ST	Medium	7538	Auto Repair	908.32		No	No	Yes	Yes	No	No	No	No	No	
139	WINCHELL'S DONUT HOUSE #9484	2447 E PLAZA BLVD	Medium	5461	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
140	WINGS N THINGS	1499 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
141	WORLD TERMINAL PARKING INC.	510 HIGHLAND AVENUE	Medium	7542	Vehicle Washing	908.32		No	Yes	No	No	No	No	No	No	No	X
142	YOBERRY YOGURT	1430 E PLAZA BLVD E8	Medium	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
143	YOGURLICIOUS	2240 E PLAZA BLVD F	Medium	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
144	100% NATURALL	20 N EUCLID AVE D	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	Yes	No	No	No	No	No	
145	1-DAY PAINT & BODY CENTERS INC	1146 NATIONAL CITY BLVD.	Low	7532	Auto Paint/Body	908.32		No	No	No	No	No	No	No	No	No	
146	7 ELEVEN #13564 F	15 N EUCLID AVENUE	Low	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	Yes	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
147	7 ELEVEN #13583 D	2425 SWEETWATER ROAD	Low	5411	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
148	7 ELEVEN #17265	1601 E 18TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
149	7 ELEVEN #18218C	807 E 8TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	Yes	No	Yes	
150	7 ELEVEN #18978D	3100 E PLAZA BLVD	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	No	
151	7 ELEVEN #20785-B	2400 HIGHLAND AVENUE	Low	5411	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
152	99 CENT ONLY STORES	1320 HIGHLAND AVENUE	Low	5499	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
153	A & F ASPHALT PAVING	215 E 30TH STREET	Low	1611	Cement Mixing/Cutting	908.32		No	No	No	Yes	No	No	No	No	No	
154	A & T WHOLESALE ELECTRIC & L	205 W 35TH STREET B	Low	5063	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
155	A B C AUTOBUYERS	40 W PLAZA BLVD.	Low	5012	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
156	A MIRROR DÉCOR (AKA NATIONAL GLASS & MIRROR CO.)	821 E 2ND STREET	Low	1793	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
157	A-1 HYDRAULICS SERVICE	2100 ROOSEVELT AVENUE	Low	7699	Equipment Repair	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
158	AB&A CUSTOM WHEELS & ACCESSORIES	1840 HIGHLAND AVENUE	Low	7534	Auto Repair	908.32		Yes	No	No	No	No	No	No	No	No	
159	ABC SUPPLY COMPANY	135 W 30TH STREET	Low	5033	Building Materials	908.32		No	No	No	No	No	No	No	No	No	
160	AGILA CARGO	2720 E PLAZA BLVD W-N	Low	7389	Pool/Fountain Cleaning	908.32		No	No	No	No	No	No	No	No	No	
161	ALCEM FENCE CO. INC	1440 COOLIDGE AVENUE	Low	1799	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
162	ALL AMERICAN BUICK GMC	2601 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
163	ALL AMERICAN PLASTIC BAGS	3020 HOOVER AVENUE	Low	5199	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
164	ALLIED PIPING & WELDING, INC.	1120 HOOVER AVENUE	Low	7692	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
165	ALLSPORTS FLOORING	301 W 28TH STREET K	Low	1752	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
166	ALM WINDOW & DOOR INC	337 W 35TH ST A	Low	1799	Other Contractor	909.12		No	No	No	No	No	No	No	No	No	
167	ALPIN TACO SHOP	1641 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
168	AMERMEX	241 W 35TH STREET J	Low	5199	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
169	ANAYA'S NATIONAL AUTOMOTIVE	2125 ROOSEVELT AVENUE	Low	7538	Auto Repair	908.32		No	No	Yes	Yes	No	No	No	No	No	
170	ANTHONY'S PIZZA	1526 E 18TH ST	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
171	APPLEBEE'S NEIGHBORHOOD	3030 PLAZA BONITA RD	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	Yes	
172	ARCO AM PM #6523	133 W 8TH STREET	Low	5541	Fueling	908.32		No	No	No	No	No	No	No	No	No	
173	ARCTIC SUPPLY	213 CIVIC CENTER DRIVE	Low	5078	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
174	ARIDO MARKET	1643 WILSON AVENUE	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
175	ASHTON AWNINGS INC	1200 HARBOR DR	Low	1799	Other Contractor	908.32		No	No	No	Yes	No	No	No	No	Yes	
176	ASIAN MARKET	3400 E 8TH ST 111-112	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
177	AUDIO CITY	2907 HIGHLAND AVE	Low	7549	Auto Repair	909.12		Yes	Yes	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
178	AUNT EMMA'S	214 NATIONAL CITY BLVD	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
179	AUTO BUYERS PLUS	110 W PLAZA BLVD	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
180	AUTO TECK	1023 COOLIDGE AVENUE	Low	7532	Auto Paint/Body	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
181	AUTO ZONE #5658	1539 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
182	AUTO ZONE #5659	2500 E PLAZA BLVD.	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
183	AUTOBUYERS PLUS	110 W PLAZA BLVD.	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
184	AZAP CAPS AND TEES	220 W 25TH ST E	Low	7389	Pool/Fountain Cleaning	908.32		No	No	No	No	No	No	No	No	No	
185	B N B KETTLE CORN	3030 PLAZA BONITA RD 9242	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
186	BAE SYSTEMS LAND & ARMAMENTS	155 W 35TH STREET	Low	7699	Equipment Repair	909.12		No	No	No	No	No	No	No	No	No	
187	BAKER, RON-CHEVROLET	2301 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
188	BALL AUTOMOTIVE GROUP (ACURA)	2001 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
189	BALL AUTOMOTIVE GROUP (KIA)	1940 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
190	BALL AUTOMOTIVE GROUP (MITSUBISHI)	1935 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
191	BANTRY INDUSTRIAL & MARINE CRP	241 W 35TH STREET F	Low	5085	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
192	BAY SYSTEMS, INC.	303 W 35TH STREET B	Low	7699	Equipment Repair	909.12		No	No	No	No	No	No	No	No	No	
193	BAYVIEW ELECTRIC	2827 HOOVER AVENUE D	Low	1731	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
194	BECKILEE COUTURE	303 W 35TH ST A	Low	5199	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
195	BEIJING ROYAL BUFFET	4 N EUCLID AVE A-C	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
196	BELIZE PARTY RENTAL	427 PALM AVE	Low	7359	Vehicle/Equipment Rental	908.31		Yes	No	Yes	No	No	No	No	No	No	
197	BELY'S PRODUCE & MARKET	525 HIGHLAND AVE	Low	5431	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
198	BERGENSONS PROPERTY SERVICES	301 W 28TH STREET F	Low	7349	Power Washing	908.32		No	No	No	No	No	No	No	No	No	
199	BERLIN WALL WHOLESALE	301 W 28TH STREET R	Low	5139	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
200	BGB ENTERTAINMENT	630 NATIONAL CITY BLVD	Low	7389	Pool/Fountain Cleaning	908.32		No	No	No	No	No	No	No	No	No	
201	BIG B MARKET & DELI	1540 COOLIDGE AVENUE	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
202	BIG BEN MARKET	22 E 8TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
203	BIOPOINTE SCIENTIFIC, LLC	1215 WILSON AVE	Low	5047	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
204	BIRRIAS CHIVOS & CHEVES	2401 HIGHLAND AVE 104	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	Yes	
205	BJ MOTORS	1705 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
206	BLIMPIE SUBS	1200 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
207	BLUE HOUSE KEEPER	3221 NATIONAL CITY BLVD	Low	7349	Power Washing	909.12		No	No	No	No	No	No	No	No	No	
208	BLUE OCEAN TACKLE INC	1545 TIDELANDS AVE E	Low	5551	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
209	BLUELINX DISTRIBUTION	901 BAY MARINA DRIVE	Low	5031	Building Materials	908.32		No	No	No	No	No	No	No	No	No	
210	BOB'S NATIONAL CITY AUTO	1504 NATIONAL CITY BLVD.	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
211	BONITA PIPELINE INC	2209 HIGHLAND AVENUE	Low	1711	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
212	BOOM ENTERPRISE	3100 E 8TH ST	Low	5064	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
213	BOSTROM INSTRUMENT COMPANY	208 CIVIC CENTER DRIVE	Low	5084	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
214	BRAMMER ELECTRIC	1920 MCKINLEY AVENUE	Low	1731	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
215	BURGER KING	815 HIGHLAND AVENUE 780	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
216	BURRITOS EXPRESS	1539 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
217	BUSH POWER BRAKE, INC.	25 E 17TH STREET A & B	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
218	BUSTER'S BEACH HOUSE AND LONGBOARD BAR	740 BAY MARINA DRIVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	Yes	Yes	Yes	
219	C L F WAREHOUSE INC	2702 SOUTHPORT WAY B	Low	5013	Auto Supplies	908.32		No	No	No	No	No	No	No	No	No	
220	CA WELDING IRON WORKS	1630 HARDING AVENUE	Low	7692	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
221	CAFE ESTELAS	1524 MCKINLEY AV	Low	5813	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
222	CAFÉ LA MAZE	1441 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
223	CAL AM MANUFACTURING	1215 WILSON AVE	Low	5083	Wholesale/Storage/ Warehousing	908.32		No	No	Yes	Yes	No	No	Yes	No	Yes	
224	CALIBER COLLISION CENTER	3131 NATIONAL CITY BLVD.	Low	7532	Auto Paint/Body	908.32		Yes	Yes	No	No	No	No	No	No	No	
225	CALIBER COLLISION CENTERS	2013 HAFFLEY AVE	Low	7532	Auto Paint/Body	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
226	CALIFORNIA AIR COMPRESSOR	1630 COOLIDGE AVE	Low	5084	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
227	CALIFORNIA COMM'L SECURITY	1727 SWEETWATER RD R	Low	7699	Equipment Repair	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
228	CALIFORNIA ICE CREAM	1021 COOLIDGE AVENUE	Low	5963	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
229	CALIFORNIA SALES	205 W 35TH ST B	Low	1799	Other Contractor	909.12		No	No	No	No	No	No	No	No	No	
230	CALIFORNIAS FURNITURE INSTALLATION, INC	2807 HOOVER AVE J-K	Low	1751	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
231	CALIFORNIA'S TACO SHOP	51 N HIGHLAND AVENUE H	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
232	CAMSAL ENTERPRISES	1705 HOOVER AVENUE C & D	Low	5099	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
233	CAR AUDIO EXCHANGE	1316 NATIONAL CITY BLVD.	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
234	CARLOS MAINTENANCE AND REPAIR	44 S HARBISON AVE	Low	7349	Power Washing	908.31		No	No	No	No	No	No	No	No	No	
235	CARNIVAL SUPERMARKET	1750 E 8TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
236	CAROLINO TRAFFIC CONTROL, INC	3035 E 8TH ST	Low	1799	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
237	CARQUEST AUTOPARTS	1300 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		No	No	No	No	No	No	No	No	No	
238	CASA DE ORO RESTAURANT	1510 SWEETWATER ROAD A	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	No	No	Yes	
239	CENTURY WHEEL & RIM	2101 HAFFLEY AVENUE B	Low	5013	Auto Supplies	908.32		No	No	No	No	No	No	No	No	No	
240	CESAR'S TACO SHOP	3123 D AVENUE	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
241	CHANG DONG SUPERMARKET ORIENTAL SEAFOOD	600 E 8TH STREET 7 & 8	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
242	CHINA SUPER BUFFET	3007 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	No	
243	CHINESE CITY RESTAURANT #2	1025 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
244	CHING'S FAMOUS HOPIA	1722 E 8TH STREET	Low	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
245	CHRIS AUDIA	1112 24TH ST	Low	7349	Power Washing	909.12		No	No	No	No	No	No	No	No	No	
246	CHURCH'S CHICKEN	3040 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
247	CIRCUS MAN ICE CREAM	1037 HARDING AVENUE	Low	5142	Wholesale Food	908.32		No	No	No	No	No	No	No	No	No	
248	CIVIC CENTER AUTO BODY	1304 ROOSEVELT AVENUE	Low	7532	Auto Paint/Body	908.32		No	No	No	No	No	No	No	No	No	
249	CLUB 13	640 CIVIC CENTER DR	Low	5813	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	No	No	No	
250	COASTAL DECKING, INC.	2050 WILSON AVENUE	Low	1752	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
251	COASTAL MARINE SERVICE, INC	1533 WILSON AVENUE B	Low	1772	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
252	COLOR VIE	1545 TIDELANDS AVE P	Low	5087	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
253	COLUMN ONE, INC.	241 W 35TH STREET K	Low	1721	Painting/Coating	909.12		No	No	No	No	No	No	No	No	No	
254	CONSOLIDATED INTERNATIONAL COR	2500 HOOVER AVE A	Low	5085	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
255	CONSOLIDATED INTERNATIONAL COR	436 W 8TH STREET A	Low	5085	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
256	CORONADO CAFE	801 NATIONAL CITY BLVD D	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
257	COZINES GROCERY	402 CIVIC CENTER DRIVE	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
258	CRASH AND FIX AUTOBODY	202 W 11TH STREET	Low	7532	Auto Paint/Body	908.32		No	No	No	No	No	No	No	No	No	
259	CSI SUPPLY	337 35TH STREET M	Low	5085	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
260	CUBILETE CO	2315 HIGHLAND AVE	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
261	DAKOTA INN	831 E 8TH ST	Low	5813	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
262	DANYA B	205 W 35TH STREET E	Low	5023	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
263	DC OPTICAL	2720 E PLAZA BLVD O	Low	7699	Equipment Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
264	DECKER'S SUBS & TORTAS	3030 PLAZA BONITA RD 2185	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
265	DELI TROPICAL	2808 18TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
266	DELICIAS DEL SUR	1604 E 18TH ST	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
267	DENNIS'S BAKERY	832 E 18TH STREET	Low	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
268	DENNY'S RESTAURANT	1904 SWEETWATER ROAD 1473	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
269	DIAMANTE MOTORS INC	1112 NATIONAL CITY BLVD	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
270	DISCOUNT FLOORING 2U, INC	829 HOOVER AVE A	Low	5023	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
271	DISCOUNT SEWER & DRAIN CLEANIN	1414 ROOSEVELT AVE 40	Low	1711	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
272	DISCOUNT TIRE CO. (SO. CA.)	1309 E PLAZA BLVD.	Low	7534	Auto Repair	908.32		No	No	No	No	No	No	No	No	Yes	
273	DIXIELINE LUMBER COMPANY	1022 BAY MARINA DR 125	Low	5031	Building Materials	908.32		No	No	No	Yes	No	No	No	No	Yes	
274	DOMINO'S PIZZA	702 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
275	DON GROSS WAREHOUSE OF SAN DIEGO	301 W 30TH STREET	Low	5013	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
276	DON JOHN MARKET	431 N HIGHLAND AVENUE	Low	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
277	DONALD W WHELAN	241 W 35TH ST K	Low	5088	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
278	DONG, CHAN, ORIENTAL MARKET	600 E 8TH ST	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
279	DOOR-MAN	910 HOOVER AVENUE	Low	1799	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
280	DTI SOLAR POWER	205 W 35TH ST H	Low	1799	Other Contractor	909.12		No	No	No	No	No	No	No	No	No	
281	EAT & GO TROLLEY DELI	530 W 21ST STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
282	EL AGUILA MEXICAN FOOD	640 HIGHLAND AVE A	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
283	EL ASADERO GRILL	2503 SWEETWATER ROAD	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	Yes	
284	EL JAUN CAFE	2316 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
285	EL MANGO MANILA	2303 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
286	EL NUEVO MILLENIO MEXICAN FOOD	2323 E DIVISION STREET	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
287	EL PALENQUE TACO SHOP	3100 E 8TH ST A	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
288	EL PARAISO	2708 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	No	
289	EL PARAISO/CHRISTMAS TREES	2708 HIGHLAND AVE	Low	5261	Nurseries/Greenhouses	909.12		No	No	No	Yes	Yes	Yes	No	No	No	
290	EL POLLO LOCO #3430	1710 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
291	EL SUPER MARKET	1811 L AVE	Low	5411	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	No	
292	EMERGENCY KEYS, LOCKS	1007 NATIONAL CITY BLVD	Low	7699	Equipment Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
293	ENCOMPASS DESIGN	301 W 28TH STREET S	Low	5137	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
294	ENERGIA NATURAL	443.5 HIGHLAND AVE	Low	5199	Wholesale/Storage/ Warehousing	908.31		No	No	No	No	No	No	No	No	No	
295	ENTERPRISE RENT A CAR #32FP	1145 NATIONAL CITY BL	Low	7514	Vehicle/Equipment Rental	908.32		No	No	No	Yes	No	No	No	No	No	
296	ENTERPRISE RENT-A-CAR	2700 NATIONAL CITY BLVD	Low	7514	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
297	ENTERPRISE RENT-A-CAR OF L.A.	3000 NATIONAL CITY BLVD	Low	7514	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
298	EQUIPMENT ENGINEERING CO.	2704 TRANSPORTATION AVENUE E	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
299	ESKAY, G, COMPANY	712 E 18TH ST	Low	5199	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
300	EUROSYTEMS MONTGOMERY CO.	139 ROOSEVELT AVENUE	Low	5072	Wholesale/Storage/ Warehousing	908.31		No	No	No	No	No	No	No	No	No	
301	EVANS TIRES	3009 HIGHLAND AVENUE	Low	7534	Auto Repair	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
302	EVERLASTING AIR-CON, HEATING & REFRIGERATION	519 E AVE	Low	1711	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
303	EVOLUTION TEAM	1001 NATIONAL CITY BLVD	Low	7549	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
304	EXPO BUILDERS SUPPLY	500 W 16TH ST	Low	5211	Building Materials	908.32		No	No	No	Yes	No	No	No	No	Yes	
305	EXPRESS TIRE	1705 SWEETWATER ROAD	Low	7534	Auto Repair	909.12		No	No	No	No	No	No	No	No	No	
306	EXPRESS TIRE	820 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
307	FAIRBANKS MORSE ENGINE	1545 TIDELAND AVENUE J	Low	7699	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
308	FAMILY LOOMPYA WHOLESALE	2626 SOUTHPORT WAY F	Low	5142	Wholesale Food	908.32		No	No	No	No	No	No	No	No	Yes	
309	FARMERS DISCOUNT MARKET	1535 E 18TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
310	FASTENAL COMPANY	2807 HOOVER AVE G	Low	5072	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
311	FIBER-WORLD PRODUCTS	2440 HIGHLAND AVENUE	Low	7539	Auto Repair	909.12		No	No	No	Yes	No	No	No	No	No	
312	FINE ORNAMENTAL	1010 COOLIDGE AVE	Low	1799	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
313	FINE ORNAMENTAL	1031 COOLIDGE AVE	Low	1799	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
314	FIRESTONE	2531 E PLAZA BLVD.	Low	5531	Auto Supplies	908.32		No	Yes	No	No	No	No	No	No	No	
315	FIRESTONE TIRE & SERVICE CENTER	943 HIGHLAND AVENUE	Low	5531	Auto Supplies	908.32		Yes	No	No	No	No	No	No	No	No	
316	FLEETWASH	1508 HOOVER AVENUE	Low	7542	Vehicle Washing	908.32		No	No	No	Yes	No	No	No	No	No	
317	FLEETWOOD PLUMBING/ELECTRIC INC	1416 HOOVER AVENUE	Low	1731	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
318	FOREST PLYWOOD SALES DBA BAKER HARDWOOD LUMBER CO.	3131 HOOVER AVENUE	Low	5031	Building Materials	908.32		No	No	No	No	No	No	No	No	Yes	
319	FRANK MOTORS HYUNDAI	3150 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
320	FRANK TOYOTA	2400 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
321	FRANKS AUTO PRO'S	2940 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
322	FRB MAINTENANCE SERVICES	4033 CHERRY BLOSSOM ST	Low	7349	Power Washing	908.32		No	No	No	No	No	No	No	No	No	
323	FREDDY AUTO REPAIR	923.5 COOLIDGE AVENUE	Low	7538	Auto Repair	908.32		No	No	Yes	No	No	No	No	No	No	
324	FREE FORM CLAY AND SUPPLY	1912 CLEVELAND AVENUE	Low	5199	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
325	FRESCA DELI	1021 HIGHLAND AVE P/B	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
326	FRUTERIA COPA CABANA	1528 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
327	G. P. MAY COMPANY	2424 HOOVER AVENUE L	Low	1751	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
328	GALLEGOS PLASTERING CO. INC.	1524 HARDING AVENUE	Low	1741	Masonry	908.32		No	No	No	Yes	No	No	No	No	No	
329	GALOREN SOUTHWESTERN INC	3200 HIGHLAND AVE 303	Low	5046	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
330	GAPO RESTO AND KARAOKE	933 S HARBISON AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
331	GEMMAE BAKESHOP & CAFE	450 E 8TH STREET A & B	Low	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
332	GENGIS KHAN #1	3030 PLAZA BONITA ROAD 2128	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
333	GEORGE'S MARKET	2540 E 18TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
334	GEORGE'S WONDERFUL WORLD OF CAKES	1519 HIGHLAND AVENUE	Low	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
335	GIANT NEW YORK PIZZA	8 N EUCLID AVENUE 8-B	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
336	GLENN'S BODY SHOP ON THE MILE	2800 NATIONAL CITY BLVD B	Low	7532	Auto Paint/Body	908.32		No	No	No	Yes	No	No	No	No	Yes	
337	GLOBAL SALES & FINANCE	1731 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
338	GMLS	45 S HARBISON AVE	Low	0782	Landscaping	908.31		No	No	No	No	Yes	Yes	No	No	No	
339	GOLDEN DONUTS	36 N EUCLID AVENUE E	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
340	GORMSEN APPLIANCE	718 E 18TH STREET	Low	7699	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
341	GRAND MOTORS	423 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.31		No	No	Yes	Yes	No	No	No	No	No	
342	GRANGER WELLNESS SOCIETY	2700 E 8TH ST	Low	7999	Golf Courses/Parks	908.32		No	No	No	No	Yes	Yes	No	No	No	
343	GREAT STEAK & POTATOE	3030 PLAZA BONITA RD 2154	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
344	GROOMTECH	225 W 30TH ST	Low	5199	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
345	GUADALAJARA'S BAKERY	2401 HIGHLAND AVE	Low	5461	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	Yes	
346	H & R HARDWARE SUPPLY	2602 TRANSPORTATION AVENUE D	Low	5072	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
347	HANAOKA RESTAURANT	1528 SWEETWATER ROAD C	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
348	HANDISMITH	522 HIGHLAND AVE A	Low	7389	Pool/Fountain Cleaning	908.32		No	No	No	No	No	No	No	No	No	
349	HARDWOOD DESIGNS PLUS, INC.	105 W 35TH STREET F	Low	1799	Other Contractor	909.12		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
350	HAWAIIAN EXPRESS BBQ	3030 PLAZA BONITA RD 2122	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
351	HERNANDEZ'S ELECTRICAL SUPPLY	2135 E 9TH STREET	Low	5072	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
352	HERTZ LOCAL EDITION	2001 SWEETWATER ROAD	Low	7514	Vehicle/Equipment Rental	909.12		No	No	No	No	No	No	No	No	No	
353	HICKORY FARMS INC	3030 PLAZA BONITA ROAD	Low	5963	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
354	HIGH END PERFORMANCE	337 W 35TH STREET K	Low	5531	Auto Supplies	909.12		No	No	Yes	No	No	No	No	No	No	
355	HIGHLAND ARCO	2336 HIGHLAND AVENUE	Low	5541	Fueling	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
356	HIGHLAND MOBILE	2945 HIGHLAND AVENUE	Low	5541	Fueling	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
357	HIGHLAND SERVICE CENTER	1803 HIGHLAND AVENUE	Low	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
358	HIGHLAND VALERO	804 E 8TH ST	Low	5541	Fueling	908.32		No	No	Yes	No	No	No	No	No	No	
359	HONEY BANANA	443 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
360	HONEY'S FRUIT & SMOOTHIES BAR	835 PALM AVE.	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
361	HORN'S WELDING	1840 WILSON AVENUE A	Low	7692	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
362	HOT TASTY PIZZA #2	2401 HIGHLAND AVE 105	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
363	HP CLUTCH & BRAKE	1620 HARDING AVE	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
364	HUB CONSTRUCTION SUPPLY & EQUIPMENT	402 W 35TH STREET A	Low	5082	Wholesale/Storage/ Warehousing	909.12		No	No	No	Yes	No	No	No	No	No	
365	HYTECH AUTO DETAIL	2130 ROOSEVELT AVE	Low	7542	Vehicle Washing	908.32		Yes	No	No	Yes	No	No	No	No	No	
366	IDEAL SMOG	10 OSBORN ST A	Low	7549	Auto Repair	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
367	IDEAL SMOG	1112 NATIONAL CITY BLVD B	Low	7549	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
368	IL CAFFE SOSPESO, INC	2712 TRANSPORTATION AVE B	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
369	IMELDA'S BAR	2325 HIGHLAND AVENUE	Low	5813	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
370	IMPERIAL PALACE	1630 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
371	INNOVATION KITCHEN & BATH	1400 E PLAZA BLVD C	Low	7389	Pool/Fountain Cleaning	908.32		No	No	No	No	No	No	No	No	No	
372	INTERNATIONAL MANUFACTURING SOLUTIONS, INC	225 W 30TH ST	Low	5199	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
373	INTERNATIONAL SURF VENTURE INC	301 W 28TH STREET B, C	Low	5091	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
374	ISLAND SALES & LEASING	1900 NATIONAL CITY BLVD B	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
375	ISLAND SALES & LEASING	100 W 8TH STREET	Low	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
376	J & L DISTRIBUTION INC	2601 HOOVER AVENUE D	Low	5169	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
377	J & L JANITORIAL SUPPLY	616 HIGHLAND AVE	Low	5087	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
378	J B BRADFORD METALS	221 W 16TH ST	Low	5051	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
379	J.A.G'S AUTO BROKERS	2125 ROOSEVELT AVE B	Low	5521	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
380	JACK IN THE BOX	700 ROOSEVELT AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
381	JACK IN THE BOX #3	1745 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
382	JAG & ASSOCIATES	337 W 35TH ST M	Low	5084	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
383	JALAPEÑO FUIT BAR & GRILL	3030 PLAZA BONITA RD 1108	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
384	JD BROTHERS AUTO REPAIRS	41 E 18TH STREET	Low	7538	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
385	JERAULDS CAR CARE CENTER	2020 NATIONAL CITY BLVD	Low	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
386	JESUS & CECILIA LOYA CAFÉ DBA PEPITA'S CAFÉ	524 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	No	
387	JMB ASPHALT & CONCRETE INC	1818 WILSON AVE	Low	1771	Cement Mixing/Cutting	908.32		No	No	No	Yes	No	No	No	No	No	
388	JOHN'S INCREDIBLE PIZZA CO	3030 PLAZA BONITA RD 1025	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
389	JON DAVID KATZIN	3030 PLAZA BONITA RD	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
390	JOSEPH T RYERSON & SON, INC	2300 HAFFLEY AVE	Low	5051	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
391	JOY AIR	2601 HOOVER AVENUE	Low	5064	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
392	JRP AUTO SALES	5 W 18TH STREET	Low	5521	Vehicle Dealers	908.32		No	No	Yes	Yes	No	No	No	No	No	
393	KARINA'S MEXICAN STYLE SEAFOOD	1705 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
394	KAY AUTOMOTIVE	2121 HOOVER AVE	Low	5531	Auto Supplies	908.32		No	No	No	No	No	No	No	No	Yes	
395	KEN'S VW	1408 MCKINLEY AVENUE	Low	5013	Auto Supplies	908.32		No	No	No	No	No	No	No	No	No	
396	KENTUCKY FRIED CHICKEN	3005 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
397	KENTUCKY FRIED CHICKEN	840 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
398	KOOL FIT AMERICA INC.	1725 HARDING AVENUE	Low	5091	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
399	KOTIJA TACO SHOP	321 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	Yes	
400	KRAGEN AUTO SUPPLY #1722	1202 E PLAZA BLVD.	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
401	L & L HAWAIIAN BARBEQUE	1860 SWEETWATER ROAD B	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
402	LA COASTA NOSTRA	902 E 18TH ST	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
403	LA HACIENDA RESTAURANT	2752 E 18TH ST	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
404	LA MORENA MARKET	1810 PALM AVE	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
405	LA RUE PLUMBING	1515 WILSON AVENUE	Low	1711	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
406	LA SIERRA CAFFE	306 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
407	LAS GORDITAS/LOS PINGUINOS	1903 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
408	LAS UVAS DELI	632 NATIONAL CITY BLVD.	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
409	LEFORT'S CONSTRUCCION & LANDSC	34 E 17TH STREET B	Low	7699	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
410	LEX-TEK	2704 TRANSPORTATION AVE G	Low	7538	Auto Repair	908.32		No	No	No	Yes	No	No	No	No	Yes	
411	LINE-X SAN DIEGO	2704 TRANSPORTATION AVE A	Low	7549	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
412	LISA'S FILIPINO CUISINE 2	1212 E PLAZA BLVD 410	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
413	LITTLE DRAGON CHINESE	2424 HOOVER AVENUE K	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
414	LIVELY BRAKE SERVICE	115 E 17TH STREET B	Low	7539	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
415	LIVING ROOM CAFE	880 NATIONAL CITY BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
416	LOLLICUP TEAZONE	1105 E PLAZA BLVD A	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
417	LOPEZ, PEDRO	1527 E 18TH ST	Low	7699	Equipment Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
418	LOS CHIPOTLES	1302 NATIONAL CITY BLVD B	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
419	LOS PANCHOS TACO SHOP	2441 NATIONAL CITY BLVD.	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
420	LOS RANCHERITOS	835 PALM AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
421	LOS TACOS SHOP	2241 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
422	LOS TURBOS TRANSMISSION	1411 COOLIDGE AVENUE	Low	7537	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
423	LOU'S AUTOMOTIVE & PARTS	1509 NATIONAL CITY BLVD. C	Low	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
424	LUEMMA'S KITCHEN SOUTHERN STYLE	36 N EUCLID AVE F	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	No	No	No	
425	LUNA CONSTRUCTION INC	1410 COOLIDGE AVENUE	Low	1542	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
426	LUPITAS MEAT MARKET	2239 HIGHLAND AVENUE	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
427	LUTONG BAHAY CAFE & BAKERY	2344 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
428	M & L HANDYMAN	1021 HIGHLAND AVE	Low	7389	Pool/Fountain Cleaning	908.32		No	No	No	No	No	No	No	No	No	
429	M & M CONVERTER SHOP	301 W 28TH STREET X	Low	7539	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
430	MAC ARTHUR CO	2101 HAFFLEY AVE B	Low	5033	Building Materials	908.32		No	No	No	Yes	No	No	No	No	Yes	
431	MADLAIN INC DBA WRIGLEYS SUPER	34 N EUCLID AVENUE	Low	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
432	MAGIC BRITE JANITORIAL	303 N 35TH ST A	Low	7349	Power Washing	909.12		No	No	No	No	No	No	No	No	No	
433	MAIN SQUEEZE JUICES	2712 TRANSPORTATION AVENUE	Low	5149	Wholesale Food	908.32		No	No	No	No	No	No	No	No	No	
434	MAMA FINA'S PIZZA	916 E 8TH STREET 4	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
435	MANILA FORWARDER	3104 E PLAZA BLVD	Low	7389	Pool/Fountain Cleaning	908.32		No	No	No	No	No	No	No	No	No	
436	MARIA TACO SHOP	1641 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
437	MARISCOS SINALOA #2	2435 NATIONAL CITY BLVD.	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
438	MARK MOTORS	905 HOOVER AVENUE	Low	5521	Vehicle Dealers	908.32		No	No	Yes	Yes	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
439	MARLO'S AUTO SPECIALTIES/FRAME	223 CIVIC CENTER DR	Low	7532	Auto Paint/Body	908.32		No	No	No	No	No	No	No	No	No	
440	MARLYN PARTY RENTAL	1515 HIGHLAND AVE	Low	7359	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
441	MARY J'S CAFE	1930 CLEVELAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
442	MBR CONTRACTORS	148 E 30TH ST C	Low	1599	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
443	MC CUNE II	325 MILE OF CARS WAY	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
444	MC DINI'S BAJA	105 E 8TH ST	Low	5813	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
445	MCCUNE CHRYSLER JEEP	2340 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
446	MCDINI'S BAJA	105 E 8TH STREET	Low	5813	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
447	MCDONALD'S	3400 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	No	
448	MCDONALDS #20311	3030 PLAZA BONITA ROAD 2168	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
449	MCMAHON CONSTRUCTION, INC	605 W 12TH ST	Low	1611	Cement Mixing/Cutting	908.32		No	No	No	Yes	No	No	No	No	No	
450	MCMILLIN RACING, LLC	101 E 30TH ST	Low	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
451	MELHORN CONSTRUCTION	410 W 30TH STREET B	Low	1542	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
452	MENUDERIA DON VICENTE	2637 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	No	
453	METROPOLITAN AUTOMOTIVE	206 W 35TH ST C	Low	5012	Vehicle Dealers	909.12		Yes	No	Yes	No	No	No	No	No	No	
454	MEXICAN Y SALVADORIAN	640 HIGHLAND AVE	Low	5813	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
455	MEZA AUTO BODY	420 W 12TH STREET	Low	7532	Auto Paint/Body	908.32		No	No	No	No	No	No	No	No	No	
456	MI COCINA RESTAURANT	543 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
457	MI TIERRA SUPER TACO	1835 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
458	MIKE'S AUTOMOTIVE	115 E 17TH STREET A	Low	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
459	MIYAKO RESTAURANT	2424 HOOVER AVE F	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
460	MONIN MARBLE AND GRANITE STORE	1105 E 17TH ST	Low	5211	Building Materials	908.32		No	No	No	Yes	No	No	No	No	Yes	
461	MORE BRAKES N TUNE	1902 HIGHLAND AVE A	Low	7538	Auto Repair	908.32		No	No	Yes	Yes	No	No	No	No	No	
462	MOSSY NISSAN	2700 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
463	MOTHER'S NUTRITIONAL CENTER	924 HIGHLAND AVE	Low	5499	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
464	MOTOR WORKS	1625 COOLIDGE AVENUE	Low	7538	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
465	MOYNAHAN TOWING	3200 NATIONAL CITY BLVD.	Low	7549	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
466	N. GLANTZ & SON	2530 SOUTHPORT WAY C	Low	5099	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
467	NADEL HOUSE OF FILIPINO CAKES	914 E 8TH STREET 202	Low	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
468	NAPA AUTO PARTS	1810 HIGHLAND AVENUE	Low	5013	Auto Supplies	908.32		No	No	No	No	No	No	No	No	No	
469	NATIONAL CITY AUTO BODY	24 4TH STREET E	Low	7532	Auto Paint/Body	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
470	NATIONAL CITY AUTO TRIM INC	15 5TH STREET E	Low	7532	Auto Paint/Body	908.31		No	No	No	No	No	No	No	No	No	
471	NATIONAL CITY MARKET	240 E 18TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
472	NATIONAL CITY MOTORCARS	1900 NATIONAL CITY BLVD. A	Low	5521	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
473	NATIONAL CITY MOTORCYCLE INC	1504 NATIONAL CITY BLVD. A	Low	7699	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
474	NATIONAL CITY NUTRITION STORE	925 E PLAZA BLVD	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
475	NATIONAL CITY PAYMENT CENTER	1247 HIGHLAND AVE	Low	7389	Pool/Fountain Cleaning	908.32		No	No	No	No	No	No	No	No	No	
476	NATIONAL CITY SHELL	1601 E 8TH ST	Low	5541	Fueling	908.32		No	No	Yes	Yes	No	No	No	No	No	
477	NATIONAL CITY SMOG BRAKE & LIGHTS	705 E 8TH ST	Low	7539	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
478	NATIONAL CITY SMOG CHECK	105 W 18TH ST	Low	7549	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
479	NATIONAL MOTOR WORKS	1440 HARDING AVE A	Low	7538	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
480	NC MOTOR SPORTS AUTO REPAIR	710 E 18TH ST	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
481	NELLANS CARPET AND DRAPERIES	426 W 15TH STREET	Low	1752	Other Contractor	908.32		No	No	No	Yes	No	No	No	No	Yes	
482	NELSON INDUSTRIAL SERVICES INC	2827 HOOVER AVENUE F	Low	1799	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
483	NICOLLS INC	1535 TIDELAND AVENUE J	Low	5099	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
484	NILS HALL DBS THUNDERBIRD	705 E 8TH STREET	Low	7553	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
485	OAK TREE LANSCAPING	416.5 E 30TH ST	Low	0782	Landscaping	908.32		No	No	No	No	Yes	Yes	No	No	No	
486	ON HIT BAR BE QUE PIT	3403 E PLAZA BLVD A1	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
487	ONE SOURCE DISTRIBUTOR INC	326 W 30TH STREET	Low	5063	Wholesale/Storage/ Warehousing	908.32		No	No	Yes	Yes	No	No	No	No	No	
488	ONE SOURCE DISTRIBUTORS	2530 SOUTHPORT WAY A	Low	5065	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
489	ORIENTAL CAFE	39 E 7TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
490	OROZCO QUALITY XMAS TREES	715 HIGHLAND AVE	Low	0811	Agriculture	908.32		No	No	No	No	No	No	No	No	No	
491	ORTIZ CORP GENERAL ENGINEERING	2000 MCKINLEY AVE	Low	1599	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
492	OUCHI'S POWER EQUIPMENT	225 W 9TH STREET	Low	7699	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
493	OZONE GLASS	2602 TRANSPORTATION AVE B	Low	7536	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
494	P B E WAREHOUSE INC	190 E 26TH STREET	Low	5013	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
495	PACIFIC AUTO REPAIRS	315 W 11TH STREET	Low	7538	Auto Repair	908.32		No	No	No	Yes	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
496	PACIFIC COAST DIESEL	100 W 35TH STREET	Low	5531	Auto Supplies	909.12		No	No	Yes	No	No	No	No	No	No	
497	PACIFIC COAST DIESEL PARTS	100 W 35TH STREET H	Low	5531	Auto Supplies	909.12		No	No	Yes	No	No	No	No	No	No	
498	PACIFIC WEST BUILDERS	1248 COOLIDGE AVE	Low	1599	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
499	PAL'S PUMP CLINIC	1015 NATIONAL CITY BLVD	Low	7699	Equipment Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
500	PANDA PALACE	1105 E PLAZA BLVD D & E	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
501	PAOGA CONSTRUCTION, INC.	148 E 30TH ST A	Low	1521	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
502	PAPA GALLO-CAFE	1930 CLEVELAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	No	
503	PAPA JOHN'S PIZZA #1335	1130 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
504	PARADISE MOTORCARS	110 W PLAZA BLVD	Low	5521	Vehicle Dealers	908.32		No	No	No	Yes	No	No	No	No	No	
505	PARADISE MOTORCARX	200 W 8TH ST	Low	5521	Vehicle Dealers	908.32		No	No	Yes	Yes	No	No	No	No	No	
506	PARK MOTORS	2125 ROOSEVELT AVENUE	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
507	PARTYZON	2235 HIGHLAND AVE	Low	7359	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
508	PATRIOT AUTO CARE AND BRAKES	910 HIGHLAND AVE A	Low	7538	Auto Repair	908.32		No	No	Yes	No	No	No	No	No	Yes	
509	PELL MELL SUPPLY INC	402 W 35TH STREET E	Low	5072	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
510	PENSKE TRUCK LEASING	3131 HOOVER AVENUE	Low	7513	Vehicle/Equipment Rental	908.32		No	No	No	No	No	No	No	No	No	
511	PERRY FORD - NATIONAL CITY	2050 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
512	PETER PIPER PIZZA STORE #212	3007 HIGHLAND AVENUE 11	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
513	PHO EXPRESS	3030 PLAZA BONITA RD 2132	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
514	PHO GINGER & GRILL	1420 E PLAZA BLVD D5	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
515	PHO NAM CALI	2344 E 8TH ST	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
516	PINOY RANCH	3403 E PLAZA BLVD D	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
517	PIZZA HUT EXPRESS	3060 PLAZA BONITA RD.	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
518	PIZZA MIA	916 E 8TH ST 4	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
519	PIZZA PLAZA	3108 E PLAZA BLVD.	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
520	PLAY BALL	2305 HIGHLAND AVE	Low	5813	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
521	PLAYCARE INC	241 W 35TH ST C	Low	7999	Golf Courses/Parks	909.12		No	No	No	No	Yes	Yes	No	No	No	
522	PLAZA DONUTS	1548 HIGHLAND AVENUE	Low	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
523	POINT POINT JOINT (TURO-TURO)	916 E 8TH STREET 1 & 2	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	Yes	Yes	
524	POLLO AMIGO #2	1604 E 18TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
525	POMPEII ITALIAN RESTAURANT & PIZZA	1231 HIGHLAND AVE.	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
526	POPEYES FAMOUS FRIED CHICKEN	2333 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
527	POTTER ELECTRIC, INC.	1343 WILSON AVENUE	Low	5063	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
528	POWER TIRE #4	1615 E 8TH STREET	Low	7534	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
529	PR HOME IMPROVEMENT	715 E 2ND ST	Low	7389	Pool/Fountain Cleaning	908.31		No	No	No	No	No	No	No	No	No	
530	PRECISION BIKE PARTS	421 NATIONAL CITY BLVD	Low	5571	Vehicle Dealers	908.31		No	No	No	Yes	No	No	No	No	Yes	
531	PRESTIGE AUTO BROKERS	2125 ROOSEVELT AVENUE A	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
532	PRESTIGE AUTO BROKERS	1001 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
533	PRO SMOG TEST ONLY	34 E 17TH ST C	Low	7538	Auto Repair	908.32		Yes	No	Yes	No	No	No	No	No	No	
534	PSE SAN DIEGO COMBAT ACADEMY	902 E 18TH ST	Low	7999	Golf Courses/Parks	908.32		No	No	No	No	Yes	Yes	No	No	No	
535	QUALITY AUTO SALES & SERVICE	423 NATIONAL CITY BLVD. A	Low	5521	Vehicle Dealers	908.31		No	No	No	No	No	No	No	No	No	
536	QUALITY GENERAL ENGINEERING	22 W 35TH ST	Low	1599	Other Contractor	909.12		No	No	No	No	No	No	No	No	No	
537	QUIZNOS SUB	928 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
538	QWIK KORNER	3009 HIGHLAND AVE	Low	5541	Fueling	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
539	R & B CONTRACTORS	148 E 30TH ST E	Low	1599	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
540	R & H WELDING SHOP	2601 HOOVER AVE F	Low	7692	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
541	RAD ELECTRIC SUPPLY INC.	1904 MCKINLEY AVENUE	Low	5065	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
542	RADIATOR DEPOT	1533 WILSON AVENUE A	Low	5013	Auto Supplies	908.32		No	No	No	No	No	No	No	No	No	
543	RAINBOW FRUITS EXPRESS	3030 PLAZA BONITA RD 2176	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
544	RALPH'S GROCERY STORE NO. 101	901 EUCLID AVENUE	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
545	RANFLO ENTERTAINMENT	3400 E 8TH ST 111-112	Low	7359	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
546	RANGER COMMUNICATIONS	401 W 35TH STREET B	Low	5065	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
547	RASPADOS MICHOACAN	115 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
548	RED BIRD MARKET	2035 HIGHLAND AVENUE	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
549	RED RIBBON BAKESHOP	3030 PLAZA BONITA RD	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
550	RED ROBIN AMERICA'S GOURMET BURGERS & SPIRITS	3030 PLAZA BONITA RD 2520	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
551	RELENTLESS AUTO SPORTS LLC	25 E 17TH ST STEA	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
552	RELIABLE SPRING AND SUSPENSION	225 W 16TH STREET	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
553	RELIANCE METAL CENTER	2100 CLEVELAND AVENUE	Low	5051	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
554	REMEDY-TECH INC	2602 TRANSPORTATION AVE	Low	1599	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
555	RENT-A-CENTER #01072	1043 HIGHLAND AVE	Low	7359	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
556	REVELS STRIPING	2602 TRANSPORTATION AVENUE J	Low	7549	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
557	REYNOSO AUTO SALES	438 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.31		No	No	No	No	No	No	No	No	No	
558	RICKYS REGISTRATION SERVICE	5 W 18TH ST	Low	7389	Pool/Fountain Cleaning	908.32		No	No	No	No	No	No	No	No	No	
559	RIVERSIDE CEMENT CO.	920 BAY MARINA DRIVE	Low	5032	Building Materials	908.32		No	No	No	No	No	No	No	No	No	
560	ROB NORTH FABRICATION	1605 HOOVER AVENUE	Low	5571	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
561	ROBERTO'S TACO SHOP	1406 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
562	ROCKY MOUNTAIN CHOCOLATE FACTO	3030 PLAZA BONITA RD 9249	Low	5441	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
563	RODEO'S MEAT MARKET	422 HIGHLAND AVENUE	Low	5421	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
564	RODRIGUEZ APPLIANCE	2629 HIGHLAND AVENUE	Low	7699	Equipment Repair	909.12		No	No	No	No	No	No	No	No	No	
565	ROMERO'S ROOFING SERVICE, INC.	1827 CLEVELAND AVENUE	Low	1761	Other Contractor	908.32		No	No	No	Yes	No	No	No	No	Yes	
566	RON BAKER CHEVROLET	2301 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
567	RONNIE'S ELECTRONICS - AUTO	1309 HIGHLAND AVENUE	Low	7549	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
568	RSD TOTAL CONTROL	402 W 35TH STREET G	Low	5075	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
569	RTM INTERNATIONAL LLC	301 W 28TH STREET V	Low	5099	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
570	RUBY'S EMBROIDERY	2525 SOUTHPORT WAY S	Low	5131	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
571	S & K SALES COMPANY	2626 SOUTHPORT WAY C-E	Low	5199	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
572	S & L OIL INC.	1601 E 8TH STREET	Low	5541	Fueling	908.32		No	No	No	No	No	No	No	No	No	
573	S & S WELDING	1442 MCKINLEY STREET	Low	7692	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
574	S D D MAINTENANCE	2829 NATIONAL CITY BLVD	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
575	S L FUSCO INC.	2530 SOUTHPORT WAY	Low	5085	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	Yes	
576	SAN DIEGO AUTO FINANCE	1 W 35TH ST	Low	5521	Vehicle Dealers	909.12		No	No	No	No	No	No	No	No	No	
577	SAN DIEGO AUTO OUTLET	1 W 35TH ST C	Low	5012	Vehicle Dealers	909.12		Yes	No	Yes	No	No	No	No	No	No	
578	SAN DIEGO DODGE	2829 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	No	Yes	No	No	No	No	No	
579	SAN DIEGO DOOR SERVICES	1941 K AVE	Low	1751	Other Contractor	909.12		No	No	No	No	No	No	No	No	No	
580	SAN DIEGO METRO PUBLISHING LLC	2602 TRANSPORTATION AVE O	Low	5111	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
581	SAN DIEGO PIPE & STEEL	100 W 35TH STREET E	Low	5051	Wholesale/Storage/ Warehousing	909.12		No	No	Yes	Yes	No	No	No	No	No	
582	SAN DIEGO PLASTICS, INC.	2220 MCKINLEY AVENUE	Low	5099	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
583	SAN DIEGO PUMP & COMPRESSOR	301 W 28TH STREET A	Low	5085	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
584	SAN JOSE RESTAURANT	213 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
585	SANDOVAL CONCRETE	827 E 13TH ST	Low	1771	Cement Mixing/Cutting	908.32		No	No	No	Yes	No	No	No	No	No	
586	SANDOVAL'S PLUMBING SERVICE	2221 E 18TH ST	Low	7699	Equipment Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
587	SANTI CHINESE HERBS SHOP	2605 HOOVER AVE	Low	7999	Golf Courses/Parks	908.32		No	No	No	No	Yes	Yes	No	No	No	
588	SATURN OF NATIONAL CITY	2202 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
589	SAVE-A-LOT #949	1035 S HARBISON AVENUE	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
590	SCHEIB, EARL OF CA INC #189	111 NATIONAL CITY BLVD.	Low	7532	Auto Paint/Body	908.31		No	No	No	Yes	No	No	No	No	No	
591	SCOTT'S PORSCHE PARTS	705 CIVIC CENTER DRIVE	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
592	SEACOAST ELECTRIC CO. INC.	2702 SOUTHPORT WAY C & D	Low	5063	Wholesale/Storage/ Warehousing	908.32		No	No	No	Yes	No	No	No	No	Yes	
593	SEAFOOD CITY SUPERMARKET	1420 E PLAZA BLVD C-E	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
594	SEAWARD MARINE SERVICE INC.	424 W 8TH STREET	Low	7699	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
595	SEE'S CANDIES	3030 PLAZA BONITA RD 22	Low	5441	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
596	SENOR PANCHO FRESH MEXICAN GRILL	2030 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
597	SERVICE MASTER AA ADVANCES RES	100 W 35TH STREET	Low	7699	Equipment Repair	909.12		No	No	No	No	No	No	No	No	No	
598	SEVILLA'S PARTY RENTALS	2303 F AVE	Low	7359	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
599	SHAFT MASTER	1031 NATIONAL CITY BLVD. C	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
600	SHOE MGK	3030 PLAZA BONITA RD	Low	7389	Pool/Fountain Cleaning	909.12		No	No	No	No	No	No	No	No	No	
601	SHRIMP ON WHEELS	225 W 9TH ST	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
602	SID'S CARPET BARN	132 W 8TH STREET	Low	1752	Other Contractor	908.32		No	No	No	Yes	No	No	No	No	Yes	
603	SIETE DIAS MARKET	151 N HIGHLAND AVENUE A	Low	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
604	SIMEC USA, CORP	1700 CLEVELAND AVE B	Low	5051	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
605	SO CAL TRUCK STOP	2250 TIDELANDS AVENUE	Low	5541	Fueling	908.32		No	No	No	No	No	No	No	No	No	
606	SOCAL LAUNDRY EQUIPMENT INC	1729 COOLIDGE AVE B1	Low	7699	Equipment Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
607	SOUTH BAY AUTO SHOP	1112 COOLIDGE AVENUE	Low	7538	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
608	SOUTH BAY DIESEL & HYDRAULIC, INC	100 W 35TH ST J	Low	5531	Auto Supplies	909.12		No	No	Yes	Yes	No	No	No	No	Yes	
609	SOUTH BAY FACILITY SVCS	2631 J AVE	Low	7389	Pool/Fountain Cleaning	909.12		No	No	No	No	No	No	No	No	No	
610	SOUTH BAY LEATHER CORP	1900 WILSON AVENUE	Low	5199	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
611	SOUTH BAY MECHANIC SHOP	1112 COOLIDGE AVE	Low	7538	Auto Repair	908.32		No	No	No	No	No	No	No	No	Yes	
612	SOUTH BAY PRE-OWNED	2401 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	Yes	No	No	No	No	No	No	
613	SOUTH BAY VOLKSWAGON	3131 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
614	SOUTH COUNTY VOLVO	2940 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
615	SOUTHLAND AUTOBODY & PAINT	141 W 18TH STREET	Low	7532	Auto Paint/Body	908.32		Yes	Yes	No	No	No	No	No	No	No	
616	SOUTHWESTERN AUTO BROKERS, INC.	333 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.31		No	No	No	No	No	No	No	No	No	
617	STANDARD PARKING	235 E 8TH STREET	Low	7521	Vehicle Parking/Storage	908.32		No	No	No	No	No	No	No	No	No	
618	STAR AUTOMOTIVE	438 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.31		No	No	Yes	Yes	No	No	No	No	No	
619	STAR EXPRESS	3124 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
620	STARBUCKS COFFEE #6487	1860 SWEETWATER ROAD	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
621	STATEWIDE FUMIGATION SAN DIEGO COUNTY	1630 COOLIDGE AVE	Low	7342	Pest Control	908.32		No	No	No	No	Yes	No	No	No	No	
622	STEREO DISCOUNT CENTER INC	2907 HIGHLAND AVENUE	Low	7539	Auto Repair	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
623	STEVENS CONSTRUCTION	125 E 17TH STREET	Low	1542	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
624	STEVE'S WEST COAST AUTOMOTIVE	1732 COOLIDGE AVENUE	Low	7538	Auto Repair	908.32		No	No	Yes	No	No	No	No	No	No	
625	STONEY'S BAR & GRILL	108 W 25TH ST D, E, F, G	Low	5813	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
626	STREET DREAMS AUTO STYLING	710 E 8TH ST	Low	5531	Auto Supplies	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
627	STYLER'S AUTO BODY	38 E 16TH STREET	Low	7532	Auto Paint/Body	908.32		No	No	No	No	No	No	No	No	No	
628	STYLER'S AUTO MECHANIC	29 E 17TH ST	Low	7538	Auto Repair	908.32		Yes	No	Yes	No	No	No	No	No	No	
629	SUBWAY #44272	2220 E PLAZA BLVD A2	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
630	SUBWAY SANDWICH & SALAD	925 E PLAZA BLVD A	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
631	SUBWAY SANDWICH & SALAD	1860 SWEETWATER ROAD	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
632	SUBWAY SANDWICHES & SALADS #44272	2220 E PLAZA BLVD A-1	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
633	SUNNY DONUTS	724 HIGHLAND AVENUE	Low	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
634	SUNSET CAR RENTAL LLC	2626 SOUTHPORT WAY B	Low	7514	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
635	SUPERIOR FOAM & UPHOLSTERY CORP.	105 W 35TH STREET D	Low	5199	Wholesale/Storage/ Warehousing	909.12		No	No	No	No	No	No	No	No	No	
636	SWEETWATER HARLEY-DAVIDSON	3201 HOOVER AVENUE	Low	5571	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
637	SWIRLY CUP	1860 SWEETWATER RD A-2	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	No	No	No	
638	T N H AUTO REPAIR	25 E 17TH STREET	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
639	TACO BELL #106	2425 DIVISION STREET	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
640	TACO BELL #2800	1737 SWEETWATER ROAD	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
641	TACOS EL GORDO DE TIJUANA	1940 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
642	TAQUERIA EL TIZON	505 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
643	TECNICO SYSTEMS CORPORATION	206 W 35TH STREET B	Low	7699	Equipment Repair	909.12		No	No	No	No	No	No	No	No	No	
644	TED'S UPHOLSTERY	115 E 17TH STREET D	Low	7532	Auto Paint/Body	908.32		No	No	No	No	No	No	No	No	No	
645	TEYSSIER & TEYSSIER INC.	3200 HIGHLAND AVENUE B4-2	Low	1542	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
646	TEYSSIER CONSTRUCTION, INC	3200 HIGHLAND AVENUE B-3	Low	1521	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
647	THE AUTO SPOT, INC	1017 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
648	THE BARBEQUE PIT	920 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
649	THE HANDYMAN PAINTERS	2208 E 8TH ST	Low	1721	Painting/Coating	908.32		No	No	No	No	No	No	No	No	No	
650	THE NEW LOOK	340 W 11TH STREET	Low	7532	Auto Paint/Body	908.32		No	No	No	No	No	No	No	No	No	
651	THE ORIGINAL RICHARD'S BAKERY	3400 E 8TH STREET 114	Low	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
652	THE SPEED SHOP	623 NATIONAL CITY BLVD.	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
653	THE WATERFRONT GRILL	3201 MARINA WAY 102	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
654	TINO'S AUTO TECH	1 W 35TH STREET D	Low	7538	Auto Repair	909.12		No	No	Yes	Yes	No	No	No	No	No	
655	TOM MOYNAHAN TOWING	3200 NATIONAL CITY BLVD.	Low	7549	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
656	TOM THUMB WHOLESALE ICE CREAM	1021 COOLIDGE AVENUE	Low	5963	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
657	TOPECO PRODUCTS	2525 SOUTHPORT WAY	Low	5072	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	Yes	
658	TORK MOTORSPORTS	131 W 33RD ST 9	Low	5571	Vehicle Dealers	909.12		Yes	No	Yes	No	No	No	No	No	No	
659	TORTAJADA AUTO GROUP	1800 NATIONAL CITY BLVD T	Low	5012	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
660	TRACKLESS TRAINS OF SAN DIEGO	3030 PLAZA BONITA RD	Low	7999	Golf Courses/Parks	909.12		No	No	No	No	Yes	Yes	No	No	No	
661	TRANS PROS	130 E 17TH STREET	Low	7537	Auto Repair	908.32		No	No	Yes	No	No	No	No	No	No	
662	TRANSMISSION SUPPLY	338 W 12TH STREET	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
663	TROLLEY SIDE DELI AND MINI MART	530 W 21ST ST	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
664	TUFF ACOUSTICAL AND THERMAL	1623 CLEVELAND AVENUE	Low	1742	Painting/Coating	908.32		No	No	No	No	No	No	No	No	No	
665	TUTTI FRUTTI OF NATIONAL CITY	1031 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
666	TUTTI FRUTTI OF PLAZA BONITA	3030 PLAZA BONITA RD FC11	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	
667	UNDERGROUND AUTOWORKS INC	106 E 17TH ST	Low	7538	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
668	UNIDYNE CORPORATION	2702 SOUTHPORT WAY F	Low	1799	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
669	UNITED BARBER & BEAUTY	2807 HOOVER AVENUE C	Low	5087	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
670	UNIVAR USA	2100 HAFFLEY AVENUE	Low	5169	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
671	US SAVE AUTO	639 NATIONAL CITY BLVD.	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
672	VALERIOS CITY BAKERY	1631 E 8TH STREET 182	Low	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
673	VALUE AUTO REPAIR & TIRES	115 E 17TH ST A	Low	7538	Auto Repair	908.32		Yes	Yes	No	No	No	No	No	No	No	
674	VALUE CARS	13 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
675	VALUE CARS INC	1807 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	Yes	
676	VALUE CARS INC	2401 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
677	VEE PARTS & ACCESSORIES	704 A AVENUE	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
678	VERNON SHIP SUPPLIES	1705 HOOVER AVENUE B	Low	5199	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
679	VICTOR'S MEXICAN FOOD TAQUERIA	1602 E 4TH ST	Low	5963	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
680	VIETNAMESE CHINESE NOODLE HOUSE	600 E 8TH STREET 5	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
681	VIGOR MARINE LLC	1636 WILSON AVE	Low	1731	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
682	VIKING'S AUTO REPAIR	1503 ROOSEVELT AVENUE A	Low	7532	Auto Paint/Body	908.32		Yes	No	Yes	No	No	No	No	No	No	
683	VILLA MANILA	500 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
684	VILLARINO CONSTRUCTION SVC. INC	430 W 12TH STREET	Low	1542	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
685	VP # 9570	1139 S HARBISON AVE	Low	5541	Fueling	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
686	WEBCO HALE	2202 HAFFLEY AVENUE	Low	5963	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
687	WELFORD TRADING & BOOKKEEPING SVCS	2220 E PLAZA BLVD J	Low	5199	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
688	WEST COAST TRUCK SERVICE	201 W 18TH STREET	Low	7538	Auto Repair	908.32		No	No	Yes	Yes	No	No	No	No	No	
689	WESTAIR GASES & EQUIP, INC	2300 HAFFLEY AVE	Low	5084	Wholesale/Storage/ Warehousing	908.32		No	No	Yes	Yes	No	No	No	No	No	
690	WESTCLIFF MEDICAL LABORATIES INC	2400 E 8TH ST	Low	7389	Pool/Fountain Cleaning	908.32		No	No	No	No	No	No	No	No	No	
691	WESTCOTT MAZDA	2800 NATIONAL CITY BLVD.	Low	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
692	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS AT SOUTH END OF MALL	3030 PLAZA BONITA RD 2075	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
693	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS IN FOOD COURT	3030 PLAZA BONITA ROAD 2075	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
694	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS NORTH OF JC PENNY	3030 PLAZA BONITA ROAD 2075	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	No	No	Yes	
695	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS ON EAST SIDE OF MALL	3030 PLAZA BONITA RD 2075	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	Yes	
696	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS SOUTH OF JC PENNY	3030 PLAZA BONITA RD 2075	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
697	WESTFLEX INDUSTRIAL	325 W 30TH STREET	Low	5085	Wholesale/Storage/ Warehousing	908.32		No	No	No	No	No	No	No	No	No	
698	WESTSIDE BUILDING MATERIALS	500 W 16TH STREET	Low	5211	Building Materials	908.32		No	No	No	Yes	No	No	No	No	No	
699	WIENERSCHNITZEL	1825 HIGHLAND AVENUE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
700	WILSON MARKET AND LIQUOR	916 E 8TH STREET 9	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
701	WONDER/HOSTESS BAKERY OUTLET	1626 SWEETWATER ROAD E - H	Low	5411	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
702	WORLD TERMINAL PARKING INC	200 HIGHLAND AVENUE	Low	7542	Vehicle Washing	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
703	WRIGLEY'S SUPER	34 N EUCLID AVENUE	Low	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
704	Y & M WHOLESALER	2626 SOUTHPORT WAY A	Low	5145	Wholesale Food	908.32		No	No	No	No	No	No	No	No	No	
705	Y.Y.K. ENTERPRISES, INC.	726 W 19TH STREET	Low	1721	Painting/Coating	908.32		No	No	No	No	No	No	No	No	No	
706	YOUR YOGA VOYAGE	2345 E 8TH ST	Low	7999	Golf Courses/Parks	908.32		No	No	No	No	Yes	Yes	No	No	No	
707	YUM YUM DONUT FRANCHISE #502	3122 E PLAZA BLVD	Low	5461	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
708	ZARLITOS FAMILY RESTAURANT	505 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
709	ZAVALA'S CONCRETE WORK	2840 N AVE	Low	1771	Cement Mixing/Cutting	909.12		No	No	No	Yes	No	No	No	No	No	
710	DENT ONE/DENT1	507 E 5TH ST	High	7539	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
711	DEWEY PEST CONTROL	324 CIVIC CENTER DRIVE	High	7342	Pest Control	Throughout City	X	No	No	No	No	No	No	No	No	No	
712	DJ ANGEL & INFLATABLE JUMPERS	2231 E 12TH STREET	High	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
713	EXCELLENCE MOBIL AUTO DETAIL	999 E DIVISION ST B23	High	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
714	FINISHING TOUCH AUTO DETAILING		High	7542	Vehicle Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
715	FLASHY AUTO DETAILING	3601 STOCKMAN STREET	High	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
716	FUENTES JUMP	924 DELTA STREET	High	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
717	G AND J AUTO SERVICE	1514 ROOSEVELT AVE	High	7538	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
718	G AUTO BEAUTY DEALER WASH SYSTEMS	3619 CRESTA COURT	High	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
719	MANNY'S MOBILE MECHANIC	1900 NATIONAL CITY BLVD B	High	7538	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
720	MAZE AUTOHAUS/MAZE ON 9TH	225 W 9TH STREET	High	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
721	MOBILE MARINE	1236 E 16TH STREET	High	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
722	R.G. MOBILE AUTOMOTIVE SERV	1135 DELAWARE ST	High	7538	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
723	SANTANA MOBILE TRUCK WASH	1741 NATIONAL CITY BLVD.	High	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
724	ANA & MCDANIEL PROFESSIONAL S	214 N R AVENUE	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
725	COCO'S HOUSEKEEPING	2830 PROSPECT ST	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
726	COLONIA F.C. SERVICE	133 N CLAIRMONT AVENUE	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
727	COOL STYLE CARPET CLEANING, GUSTAVO GONZALES	752 MADISON AVENUE	Medium	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
728	ECO-DRI	105 W 35TH STREET E	Medium	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
729	EMMA'S COMMERCIAL CLEANING	2331 LA SIESTA WAY	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
730	JOSE'S OFFICE CLEANER	41 E 2ND STREET A	Medium	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
731	KAREN CLEAN UPS	1722 GAMMA ST	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
732	MC K'S JANITORIAL CLEANING SER	2023 F AVENUE 8	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
733	MERCY JANITORIAL SERVICES	2536 J AVENUE	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
734	MILLER PAVING	9236 OLIVE DRIVE	Medium	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
735	MISSED A SPOT CLEANING SERVICES	630 F AVE	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
736	MONTELO'S CLEANING SERVICES	1107 D AVE	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
737	N.G. COMERCL & RSDNTL CLEANING	1705 L AVE	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
738	PORLEX CARPET CARE	2142 N AVENUE (REAR)	Medium	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
739	PREMIER CHEM DRY	311 S DREXEL AVE	Medium	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
740	SUPER CLEAN GENERAL COM	2621 SWEETWATER ROAD 42	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
741	SUPERIOR CLEANING SYSTEMS	1037 A AVENUE	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
742	UNDERWRITERS LABORATORIES INC	333 PFINGSTEN RD	Medium	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
743	VACA'S CONCRETE	1826 BETA STREET	Medium	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
744	VORTEX MAINTENANCE INC	2504 TRANSPORTATION AVE F	Medium	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
745	ACTION AIR CONDITIONING &	1328-30 E 16TH STREET	Low	1711	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
746	ALATORRE TELECOM-SUBCONTRACTOR	4126 E PLAZA BLVD.	Low	1731	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
747	ALLSTOP PEST CONTROL	108 W 25TH ST B	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
748	ALVAREZ HOME IMPROVEMENTS	1705 L AVENUE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
749	AMERICAN PEST CONTROL CO	8100 BROADWAY E	Low	1799	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
750	AMERICAN RES SVC OF CALIF INC	6162 NANCY RIDGE DR 100	Low	1711	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
751	ARC ROOFING	537 FRONT ST	Low	1761	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
752	ARTURO'S CONCRETE CARE	1635 E 11TH STREET	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
753	B & B PLUMBING AND ELECTRIC	2425 J AVENUE	Low	1711	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
754	BARRIOS LANDSCAPE	1604 HARTWELL CT	Low	1799	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
755	BURRIS PLUMBING INC	1305 I AVENUE	Low	1711	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
756	CAROLINO CONST & DEV CORP	3035 E 8TH STREET	Low	1521	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
757	CASTILLO'S LANDSCAPING	1503 E 15TH ST	Low	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	
758	CHARLIE PROFESSIONAL GARDNER	108 E 5TH STREET A	Low	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	
759	COLBRESE MATERIAL HANDLING INC	12600 STOWE DR 3	Low	1799	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
760	COLUMBIA PEST CONTROL CO. OF SAN DIEGO	127 W 9TH STREET	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
761	CUSTOM PAINTING	530 C AVENUE	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
762	DEMOLITION MAN	2127 PROSPECT STREET 4	Low	1795	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
763	DESIGN/BUILD TENANT	9770 CARROLL CENTRE RD B	Low	1599	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
764	EDDY'S LANDSCAPING	1945 LANOITAN AVENUE	Low	0781	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	
765	FIERRO CONTRUCTION COMPANY	1815 SWEETWATER RD 131	Low	1599	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
766	FINE LINE STRIPING & PAINTING	2608 MICHELLE CT A	Low	1799	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
767	GALLERY BUILDERS GROUP	2220 E PLAZA BLVD P	Low	1799	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
768	HAGENBACK CONSTRUCTION SERVICE	1915 VIA LAS PALMAS 27	Low	1751	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
769	JB CONCRETE CONSTRUCTION	1425 K AVE	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
770	JENSEN DRYWALL	3714 LYNDA PLACE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
771	JVC CONSTRUCTION INC	415 W 12TH STREET	Low	1599	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
772	KAMPS PROPANE INC	16245 ALPINE BLVD	Low	1799	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
773	L.L. APPLIED RESTORATION SERVICE, INC.	630 NATIONAL CITY BLVD.	Low	1522	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
774	LAMPERT, MURRAY M, COMPANY	3545 CAMINO DEL RIO S C	Low	1599	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
775	LANDSCAPE DEVELOPMENT INC	28447 WITHERSPOON PKWY	Low	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	
776	LARRY'S ELECTRICAL SERVICE INC	1043 WORTHINGTON ST	Low	1731	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
777	LUNA, MAURICIO	1432 E 6TH ST	Low	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	
778	MAS CONSTRUCTION	1808 LA POSADA ST	Low	1599	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
779	MATA ENTERPRISES	328 E 9TH STREET	Low	1731	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
780	MITSUBISHI ELECTRIC &	5665 PLAZA DR	Low	1796	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
781	NATIONAL CITY ELECTRIC	2424 J AVENUE	Low	1731	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
782	OMC CONSTRUCTION	8 VALVA ST	Low	1599	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
783	ORTIZ & ALLDS SANDBLASTING &	1313 BAY MARINA DRIVE	Low	1799	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
784	PATITO CATERING	4582 BOYLSTON ST	Low	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	
785	PHONE SHOP, THE	835 D AVENUE	Low	1799	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
786	PHONG TRUONG LAWN SERVICE	2131 ESTELA DR	Low	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	
787	R.A. CONSTRUCTION	1232 EARLE DRIVE	Low	1521	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
788	R.E. STAITE ENGINEERING, INC.	2140 TIDELANDS AVE	Low	1629	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
789	RICK VILLARIN AUTOMATIC FIRE	1620 B AVENUE	Low	1799	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
790	RICK'S MOBILE GLASS	507 G AVENUE	Low	7699	Equipment Repair	Throughout City	X	No	No	No	No	No	No	No	No	No	
791	RUIZ TREE SERVICE	2016 E AVENUE	Low	0783	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	
792	RUSS' BEE REMOVAL	3421 NEWBERRY STREET	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
793	SHELLYS DELI CATERING	835 MORRISON ST	Low	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	
794	SHOWCASE SERVICES, INC	13100 KIRKHAM WAY 207	Low	1799	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	BUSINESS NAME	BUSINESS ADDRESS	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
795	SWIFT COMMUNICATIONS INC	4365 MEADE AVE	Low	1731	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
796	TACOS Y TAMALES MEXICO	4437 CRAIGIE ST	Low	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	
797	TOM REED GENERAL CONTRACTOR	1721 YALE ST	Low	1599	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
798	TRI-COUNTY DRILLING , INC.	9631 CANDIDA ST	Low	1781	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
799	VISTA DEL SOL APARTMENTS	1545 Q AVE	Low	1599	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	
800	WEATHERITE CORPORATION	21211 COMMERCE POINTE DR	Low	1711	Other Contractor	Throughout City	X	No	No	No	No	No	No	No	No	No	

Notes

TTWQ – Threat to Water Quality

SIC – Standard Industrial Classification Code

Pollutants Potentially Generated – Where a facility has a "Likely" pollutant discharge potential for a specific pollutant, a "Yes" is placed in the appropriate column.

Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water. A pollutant of concern is one for which the receiving water is impaired according to the Clean Water Act section 303(d) list. At the beginning of 2010/2011, the Clean Water Act section 303(d) list indicated that pollutants of concern for Seventh Street Channel (HSA 908.31) included heavy metals and organics due to an impairment for "sediment toxicity" and "benthic community effects". Due to the nature of mobile businesses, it is possible that work may be performed in any portion of the City. Therefore, if a business has a pollutant discharge potential of "Likely" for one or more pollutants of concern associated with any receiving water within the City of National City, they will be marked as a Likely Source.

APPENDIX B

JURMP ANNUAL REPORT REQUIREMENTS CHECKLIST

Appendix B
JURMP Annual Report Requirements Checklist

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Location in Report
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2
iii. A listing of the development projects to which SUSMP requirements were applied.	Table 2-1
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	Appendix A.1 (inventory)
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-2 and Table 2-4
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2, Table 2-3
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.2

Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.2
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3, Table 2-4
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.1 and throughout section

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A.2 (inventory)
viii. A description of the general results of the inspections.	3.5
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.3, 3.5.4
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.1 and throughout section

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	Location in Report
i. Any updates to the municipal inventory and prioritization.	Appendix A.3 (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	2.4.4.3, Table 2-4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.1, 4.4.4, Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.1, 4.4.4, Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4, Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A for 2010/2011
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3, 4.2.4
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3.4
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4, Table 4-1
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.	4.5.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.6.4, 4.7.4, Table 4-4
xviii. A description of the general results of the inspections.	Table 4-4
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4, 4.6.4, 4.7.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4, 4.6.4, 4.7.4
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.1 and throughout section

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.2 (mobile), appendices A.4 and A.5 (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	N/A, 5.2.4
viii. Identification of efforts conducted to verify third party inspection effectiveness.	N/A, 5.2.4
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4, Table 5-2
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.1 and throughout section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.1
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.1
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.2
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.1 and throughout section

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2010/2011 Annual Report, will be submitted to the RWQCB no later than December 15, 2011.	

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2010/2011 Annual Report, will be submitted to the RWQCB no later than December 15, 2011.	

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3

Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.2

Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11

Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.	10

Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12

Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	4.2.3, 13

JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14 and each program component section

ATTACHMENTS

ATTACHMENT 2.1

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROJECT APPLICABILITY FORM (NPDES CHECKLIST)

City of National City
1243 National City Blvd.
National City, CA 91950
(619) 336-4580

National Pollutant Discharge Elimination System (NPDES) Project Applicability Form

No project will be accepted by the City without this form completed in its entirety

Project Name: _____ Project Area: _____ acres/sq ft

Project Address: _____

APN: _____ Proposed Impervious Area:_____ acres/sq ft

Description of Project: _____

Description of Location: _____

Section 1 – Permanent Storm Water BMP Requirements:

Part A: Determine Subjectivity to SUSMP Requirements

Is the project new development? ☐ *Yes* ☐ *No*

Is the project redevelopment that adds/replaces/creates 5,000 ft^2 of impervious surface[1]? ☐ *Yes* ☐ *No*

If both of the above answers are "no", go to Part B. If either of the above answers is "yes," answer the questions below (check all that apply).

Is the project…

1. Residential development resulting in the disturbance of one acre or more of land or comprised of 10 or more attached or detached dwelling units? ☐ *Yes* ☐ *No*

2. Commercial development resulting in the disturbance of one acre or more of land? ☐ *Yes* ☐ *No*

3. Industrial development resulting in the disturbance of one acre or more of land? ☐ *Yes* ☐ *No*

4. Automotive repair shop? ☐ *Yes* ☐ *No*

5. Restaurant greater than 5,000 square feet? ☐ *Yes* ☐ *No*

6. Steep (slope of 25% or more) hillside development that will create greater than 5,000 square feet of impervious surface? ☐ *Yes* ☐ *No*

7. Located such that it is within or directly adjacent to (within 200 feet) or directly discharges to an Environmentally Sensitive Area (ESA) and creates at least 2,500 square feet of impervious area or increases impervious area to 10% or more of its naturally occurring condition? ☐ *Yes* ☐ *No*

8. Parking lot greater than or equal to 5,000 square feet of impervious surface OR with at least 15 parking spaces and potentially exposed to urban runoff? ☐ *Yes* ☐ *No*

9. Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater? ☐ *Yes* ☐ *No*

10. Retail gasoline outlets 5,000 square feet or more or with a project Average Daily Traffic (ADT of 100 or more vehicles per day ☐ *Yes* ☐ *No*

11. All other pollutant generating development projects that result in the disturbance of one acre or more of land.[2] ☐ *Yes* ☐ *No*

1 See the City's SUSMP Manual for more detail on the definition of "significant redevelopment."

2 Generally all projects which include impervious surfaces and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels.

Limited exclusion: trenching and resurfacing work associated with utility projects are not considered Priority Development Projects. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces. Parking lots, buildings and other structures associated with utility projects are Priority Development Projects if one or more of the criteria in Part A is met.

If any of the answers to Part A is "Yes", your project is a "Priority Development Project" and must meet the requirements of the City's Standard Urban Storm Water Mitigation Plan (SUSMP) Manual.

Is this a Priority Development Project that requires a SUSMP submittal? ☐ **Yes** ☐ **No**

If the answer is "Yes," see also the flow chart at the end of this checklist to determine applicability of Hydromodification Management Plan (HMP) requirements. HMP applicability must be discussed in the SUSMP report and all requirements must be met as part of the SUSMP Report approval process.

If all answers to Part A are "No", continue to PART B.

If any of the answers to Part A is "Yes", skip PART B and go to Section 2.

Part B: Determine Non-SUSMP Standard Permanent Storm Water BMP Requirements

Does the project require any of the following permits or approvals? ☐ *Yes* ☐ *No*

- *Discretionary: Conditional use permit (including modification or extension); Coastal development permit; Parcel map (and modifications); Reclamation plan; Planned development permits; Planned unit development permits; Planning commission approval of plans; Site plan review; Tentative map (and amendments to conditions of approval or time extension); Tentative parcel map; or Variance OR*
- *Ministerial: Administrative clearing permit; Lot line adjustment; Final map modification; Grading plan (including modification or renewal); Improvement plan (including modification); Landscape plan; Building permit; Construction right-of-way permit; Encroachment permit; Excavation permit; On-site wastewater system permit; Underground tank permit; or Well permit*

Will the project include exterior construction beyond signs, façade work, or other incidental construction to an existing structure? ☐ *Yes* ☐ *No*

If all answers to Part A are "No" and any answer to Part B is "Yes", your project is subject to the City's Standard Permanent Storm Water Best Management Practice (BMP) requirements as listed in Municipal Code Chapter 14.22.

Is this project subject to the Standard Permanent Storm Water BMP requirements? ☐ **Yes** ☐ **No**

If every question in both Parts A and B is answered "No", your project is exempt from non-SUSMP Standard Permanent Storm Water requirements.

☐ **This project is for interior improvements only and is not subject to non-SUSMP Standard Permanent Storm Water BMP requirements.**

Verified by: _____ Division: _____ Date: _____

Section 2 – Construction Requirements:

General Construction Permit

If your project disturbs at least one acre of land, you are subject to the State General Construction Permit. A Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and other documents must be prepared for your project and filed electronically with the State Water Resources Control Board (SWRCB).

Is this project subject to the General Construction Permit? ☐ **Yes** ☐ **No**

If your project disturbs less than one acre of land, you are subject to the City's minimum construction BMPs, included in the City's BMP Manual.

Construction Threat to Water Quality Prioritization

See the attached flow chart for guidance in determining the construction prioritization.

This project is prioritized as a ☐ **HIGH** ☐ **MEDIUM** ☐ **LOW** **threat to water quality.**

Section 3 – Operating Requirements:

After your project is complete, certain water quality protection requirements may apply to the facility. The facility owner and operator should be made aware of these requirements.

All municipal, industrial, commercial, and residential sites in the City of National City are required to implement storm water BMPs to reduce the amount of pollution discharged to the Maximum Extent Practicable (MEP). See Appendix C of the City's Jurisdictional Urban Runoff Management Plan (JURMP) for further details.

Some industrial facilities are also subject to the State General Industrial Permit for Storm Water Discharges (Industrial Permit). To find out if your project may be required to obtain coverage under the Industrial Permit after it begins operations, visit the State Water Resources Control Board web site at http://www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml.

Section 4 – Certification:

Name and Title of person completing form: _____ _____

Telephone number: (_____) _____–_____ Fax number: (_____) _____–_____

E-mail Address: _____ (optional)

I understand that as a condition of my permit, I am required to prevent construction-generated and related pollutants from discharging from the project site. All construction projects within the City of National City are required to implement Best Management Practices (BMPs). I have received a copy of the Construction Site BMP handout.

Signature of responsible party: _____ Date: _____

For City of National City Use Only

Engineering Division

The information provided is consistent with the proposed plans ☐ **Yes** ☐ **No**

Information/documentation disseminated for SUSMP
☐ Standard Permanent Storm Water BMPs ☐ Non-SUSMP Standard Permanent Storm Water BMPs
☐ General Construction Permit ☐ Erosion & Sediment Control ☐ General Industrial Permit
☐ N/A (No required documentation) ☐ Other _____

Signature: _____ *Date:* _____

☐ **Planning Division** **OR** ☐ **Community Development Commission** *Initial:* _____

☐ **Building Division** *Initial:* _____ ☐ BMP information distributed

SUSMP REVIEW FLOW CHART

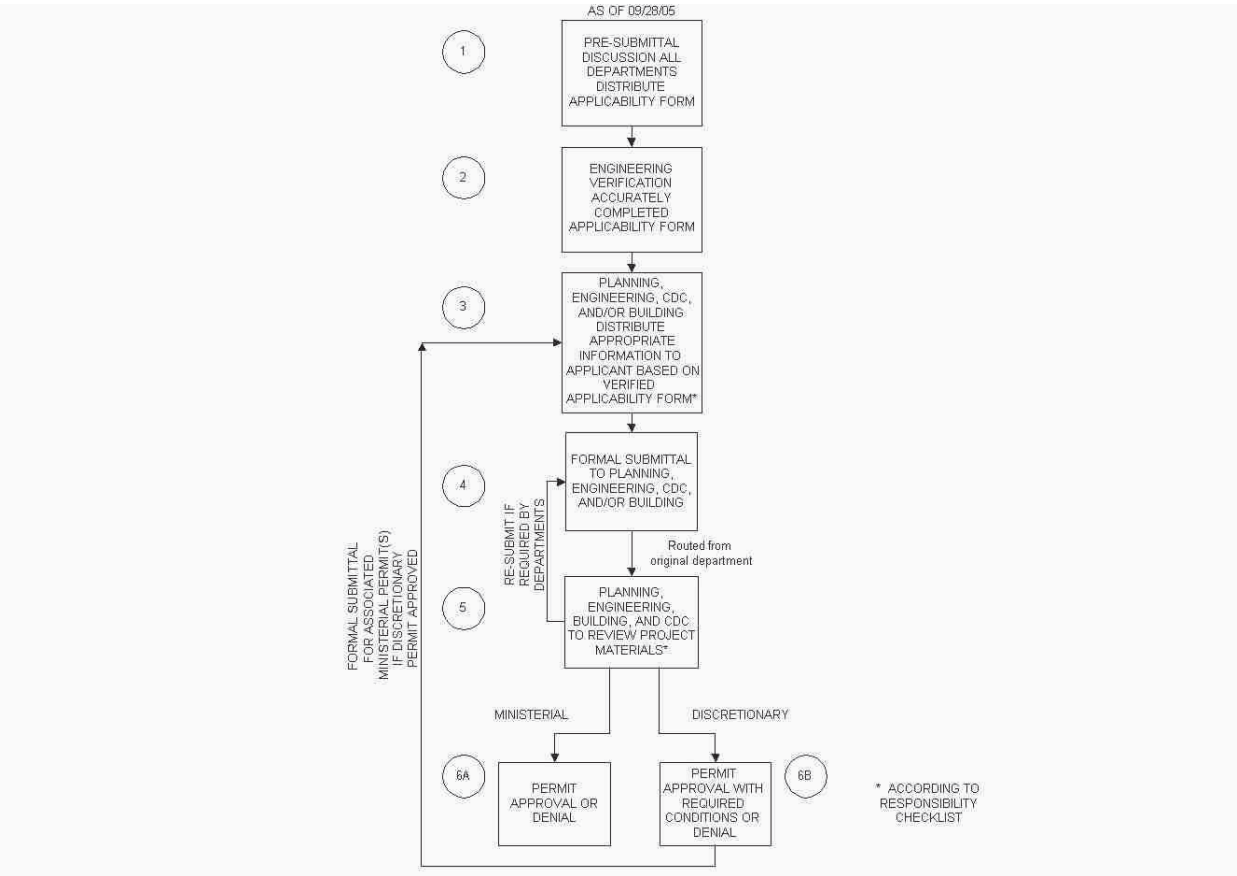

CONSTRUCTION THREAT TO WATER QUALITY PRIORITIZATION FLOW CHART

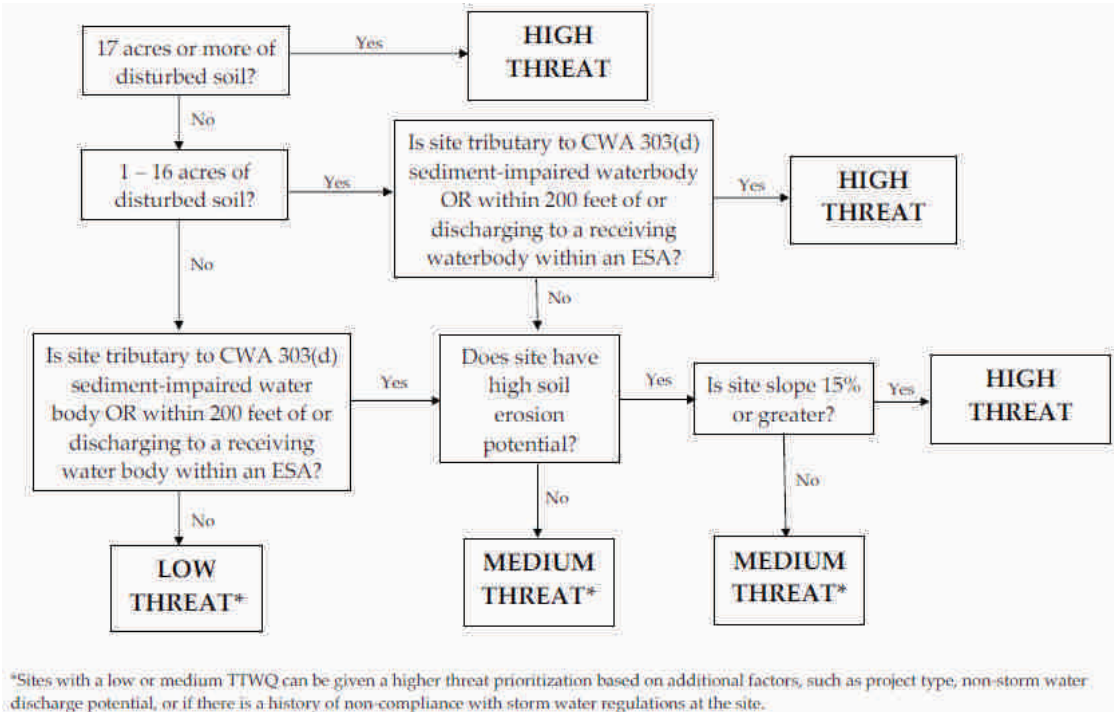

*Sites with a low or medium TTWQ can be given a higher threat prioritization based on additional factors, such as project type, non-storm water discharge potential, or if there is a history of non-compliance with storm water regulations at the site.

CWA 303(d) waterbodies: Seventh Street Channel, La Paleta Creek, San Diego Bay, and Sweetwater River
ESA waterbodies: Paradise Marsh, Paradise Creek, and Sweetwater Marsh National Wildlife Refuge

HYDROMODIFICATION MANAGEMENT PLAN (HMP) APPLICABILITY FLOW CHART

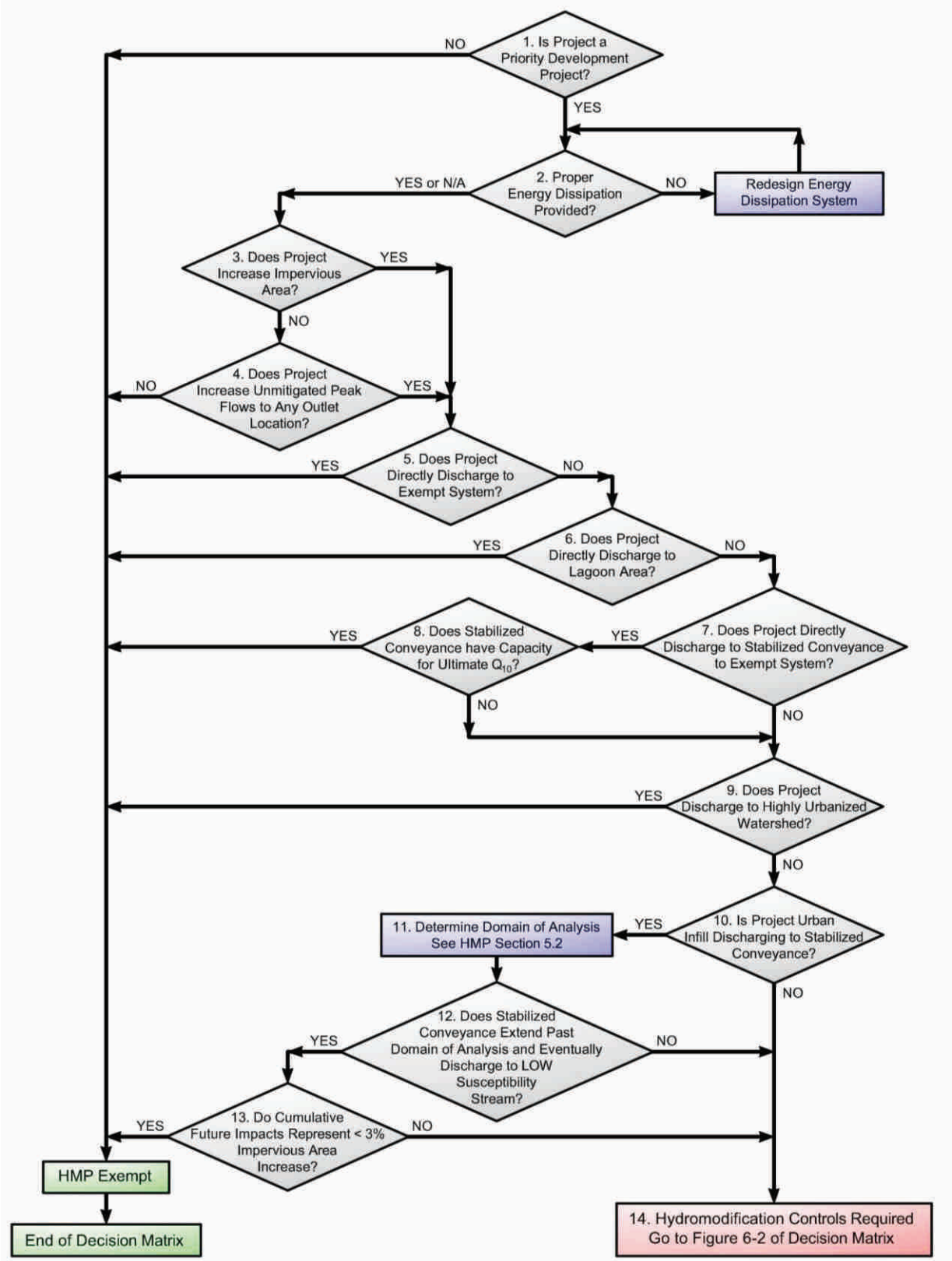

See the Regional Final Hydromodification Management Plan (HMP) for specific requirements, definitions, and details. The Final HMP is available in Appendix E of the City's SUSMP Manual or online at http://www.projectcleanwater.org/html/wg_susmp.html

ATTACHMENT 3.1

CONSTRUCTION BMP FACT SHEET (BLUE SHEET)

Construction Site Best Management Practices

As a condition of your permit, you are required to prevent construction generated or related pollutants from discharging from your project site. All construction projects within the City of National City are required to implement at least one of the Best Management Practices (BMPs) from each category and subcategory listed below, where applicable. Property owners and/or permit holders will be responsible for the selection, installation and maintenance of proper BMPs in accordance with industry recommended standards such as the Caltrans or California Storm Water BMP handbooks or in accordance with the California General Permit for Construction. Depending on site-specific information such as project scope and potential associated discharges. Additional BMPs may be required where appropriate. Project proponents will need approval from the City prior to installation of any alternate BMPs not listed below.

Minimum BMPs for Construction Activities:

1. **Planning and Scheduling**
   Planning and scheduling BMPs such as minimizing grading are required where feasible to help reduce the amount and duration of soil exposure.
   a. Preservation of natural hydrologic features
   b. Preservation of riparian buffers and corridors
   c. Minimization of areas that are cleared and graded to only the portion of the site necessary for construction
   d. Minimization of exposure time of disturbed soil areas
   e. Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods
   f. Temporary stabilization and reseeding of disturbed soil areas as rapidly as feasible
   g. Employee and Subcontractor Training

2. **Soil Stabilization and Erosion Prevention**
   Physical Stabilization BMPs such as vegetation, landscaping or structural methods are required to prevent erosion from exposed slopes.
   a. Planning and Scheduling
   b. Preservation of Existing Vegetation
   c. Physical Stabilization
      - Hydraulic Mulch
      - Hydro-seeding
      - Soil Binders
      - Straw Mulch
      - Geo-textiles, Plastic Covers, and Erosion Control Blankets/Mats
      - Wood Mulching
      - Earth Dikes/Drainage Swales and Lined Ditches
   d. Site Drainage
      - Outlet Protection/Velocity Dissipation
      - Slope Drains
   e. Permanent re-vegetation or landscaping as early as feasible

See reverse side

3. **Sediment Containment**

Sediment containment controls should be used to supplement erosion prevention methods not as a substitute for erosion control. Sediment controls act to contain sediment that has been previously eroded and may get carried on-site and/or discharged from the site in sheet flow or from tracking by equipment and vehicles.

a. Perimeter Protection
   - Silt Fencing
   - Gravel Bag Berm
   - Fiber Rolls

b. Sediment Capture
   - Storm Drain Inlet Protection
   - Sediment Trap
   - De-silting Basins designed in accordance with industry standards such as Caltrans, California Storm Water BMP manual. If the project is five acres or greater the de-silting basin must be designed in accordance with the State General Construction Permit, Order DWQ 99-08.
   - Gravel bag Barrier

c. Sediment Tracking
   - Stabilize Construction Entrances and Exits
   - Construction Road Stabilization
   - Entrance/ Outlet Tire Wash
   - Street Sweeping

4. **Materials and Equipment Management**

Pollution Prevention measures are required were applicable to prevent the contamination of storm water from waste materials, construction materials, vehicles, and equipment stored on-site. Each site must evaluate the potential pollutants on-site, which may be discharged during construction activities.

a. Materials Management
   - Material Delivery and Storage
   - Material Use
   - Stockpile Management
   - Spill Prevention and Control

b. Vehicle and Equipment Operations
   - Vehicle and Equipment Cleaning
   - Vehicle and Equipment Fueling
   - Vehicle and Equipment Maintenance

c. Waste Management
   - Solid
   - Liquid
   - Sanitary
   - Concrete
   - Hazardous
   - Contaminated Soil

5. **Non-Storm Water Discharge and Drainage Control**

Management of non-storm water discharges involves pollution prevention methods as well as drainage control. Project managers must implement appropriate drainage control methods to divert, contain and properly discharge drainage generated by construction activities.

a. General
   - Paving and Grinding Operations

b. Non-storm water discharges
   - Water Conservation Practices
   - Dewatering Operations
   - Potable Water/Irrigation and Flushing

For additional information, call Barbara Tipton, Storm Water Compliance Inspector at (619) 336-4583 or Btipton@ci.national-city.ca.us

ATTACHMENT 3.2

CONSTRUCTION INSPECTION FORM

CITY OF NATIONAL CITY
CONSTRUCTION SITE INFO FOR STORM WATER COMPLIANCE INSPECTIONS

Information gathered by: _____ Date: ____/____/_____

I. PROJECT INFORMATION

Site Prioritization: ☐ High ☐ Medium ☐ Low

Project Name: _____

Project Location: _____

Project Activity: _____

Project Area: _____ square feet Construction start date: ____/____/_____

Discharge points: _____

Receiving water bodies: _____ ESA: ☐ Yes ☐ No

Approximate distance from site: ☐ < 200 ft ☐ 200 – 1000 ft ☐ > 1000 ft

Tributary to CWA 303(d) List sediment-impaired water body: ☐ Yes ☐ No

High soil erosion potential: ☐ Yes ☐ No Site slope is 15% or greater: ☐ Yes ☐ No

Is this project subject to the General Construction Permit: ☐ Yes ☐ No

If yes, Waste Discharge Identification Number (WDID#): 9 37C_____

Does this Project maintain

Construction Grading Permit: ☐ Yes ☐ No ☐ N/A

Other Permits: ☐ Yes ☐ No

If yes, permit number(s): _____

Storm Water Pollution Prevention Plan (SWPPP): ☐ Yes ☐ No ☐ N/A (If yes, see review.)

II. CONTACT INFORMATION

On-site Responsible Person(s): _____

General Contractor Company: _____ (if applicable)

Mailing Address: _____

_____

Business Telephone #: (_____) _____- _____ ext._____

After hours Telephone #: (_____) _____- _____ ext._____

Fax #: (_____) _____- _____

Off-site owner (if applicable): _____

Mailing Address: _____

_____

Telephone #: (_____) _____- _____ ext._____

III. SWPPP REVIEW (if applicable)

SWPPP Component	Provided	Adequate	Notes
Site Map/Description……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Materials List……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Significant Spills/Leaks……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Pollution Prevention……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Construction Activities……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Pollutant Sources/Risks……..	☐ Yes ☐ No	☐ Yes ☐ No	_____
Compliance Activity Schedule……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Employee Training……..	☐ Yes ☐ No	☐ Yes ☐ No	_____
Accessible to staff……...	☐ Yes ☐ No	☐ Yes ☐ No	_____
Existing BMPs……..	☐ Yes ☐ No	☐ Yes ☐ No	_____

Additional Notes:

_____

_____

_____

_____

FIGURE 5-1: WATER QUALITY THREAT PRIORITIZATION FLOW CHART FOR CONSTRUCTION PROJECTS

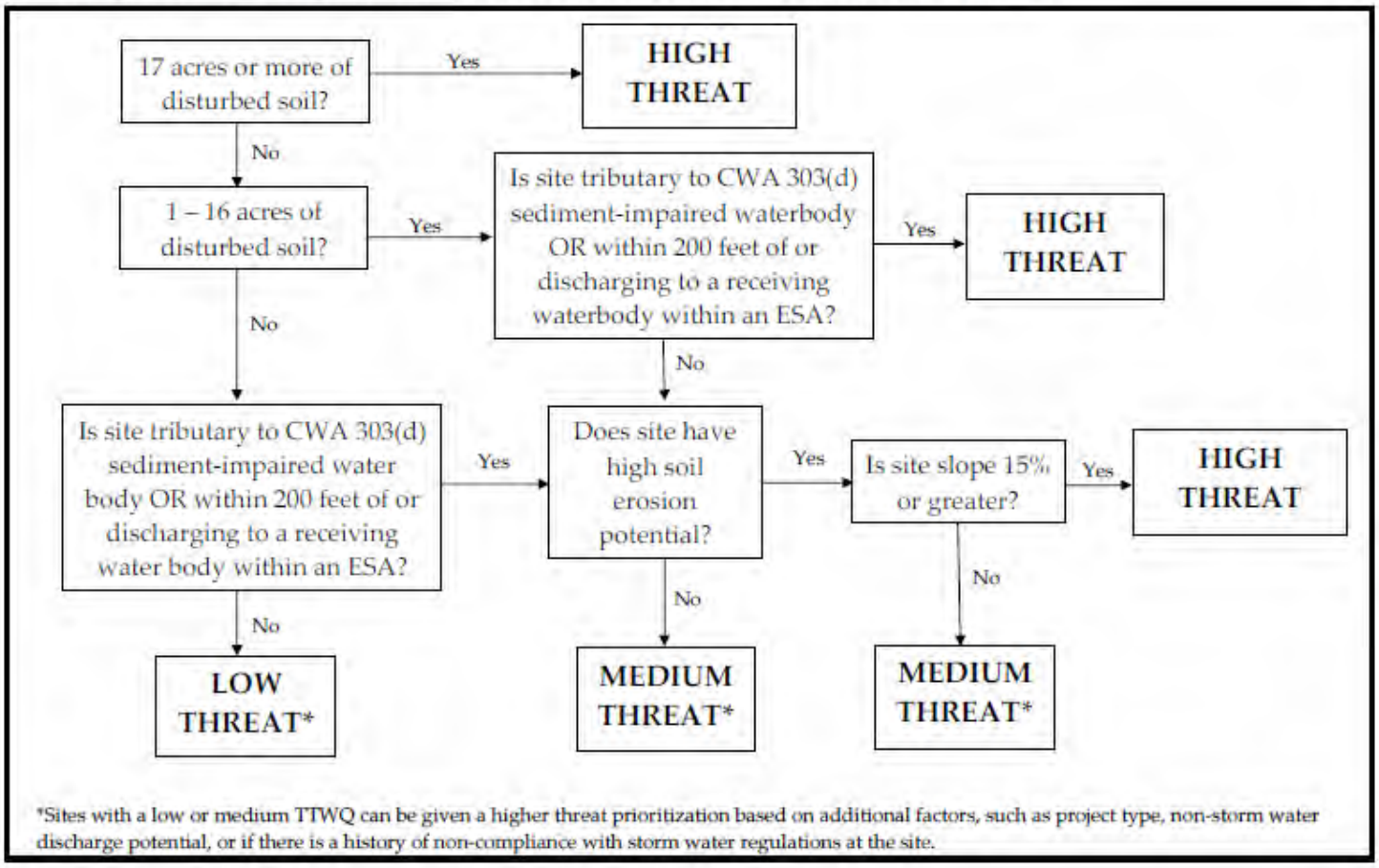

CITY OF NATIONAL CITY JURISDICTIONAL URMP PAGE 5-13

CITY OF NATIONAL CITY
STORM WATER COMPLIANCE INSPECTION FOR CONSTRUCTION ACTIVITIES

Inspector Name/ Title_____

Signature_____ Date____/_____/____ Time_____am/pm

Reason for Inspection: ☐ Routine Inspection ☐ Follow-up Inspection ☐ Complaint Investigation

Weather Information:

Storm Start Date and Time:_____ Storm Duration:_____hours

Time Since Last Storm: ☐ < 24 hrs ☐ 24 – 72 hrs ☐ > 72 hrs Rainfall:_____inches

I. GENERAL INFORMATION

Site Prioritization: ☐ High ☐ Medium ☐ Low

Project Name:_____

Project Location:_____

II. INITIAL OBSERVATIONS

Approximate % of site covered by construction activities: _____%

Approximate % impervious surface of this area: _____%

Types of outdoor construction activity:

☐ grading ☐ concrete/asphalt work

☐ building construction ☐ landscaping

☐ excavation ☐ demolition

☐ drainage infrastructure work ☐ none

III. BMP ASSESSMENT

BMP	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
Soil Stabilization and Erosion Prevention					
Prevent erosion from exposed graded areas.					
Prevent erosion from exposed areas of soil not relating to grading activities.					
Keep discharge locations (drainage swales, ditches, etc.) free of sediment and debris.					
Sediment Control/Containment					
Adequately contain the perimeter of site to prevent sediment transport.					
Prevent sediment discharge to inlets on site (using filter inserts, gravel bags, fiber rolls, etc.).					
Equip entrance/exit with adequate tracking controls.					

BMP	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
Materials and Equipment Management					
Store materials and wastes in a manner that minimizes or eliminates the potential to discharge these materials to the storm drain system.					
Store liquid materials in a contained area.					
Cover and contain material stockpiles.					
Park heavy equipment and vehicles in areas with permeable surface.					
Keep appropriate spill response and containment measures on site.					
Provide secondary containment for portable toilets.					
Provide timely service and removal to prevent waste containers and sanitary facilities from over flowing.					
Non-Storm Water Management					
Keep site free of evidence of illegal connections and illicit discharges.					
Other					
Ensure the SWPPP is kept on site, accessible to site personnel.					
Are there any other potential storm water pollution issues or concerns? If yes, explain below.					

Additional Corrective Actions:

_____

_____

_____

IV. RESULTS

Violation observed, immediate corrective action required

- ☐ Illegal discharge(s) of pollutants into the MS4 or receiving waters
  Description: _____
- ☐ Illegal connection(s) to the MS4
  Description: _____
- ☐ Improper implementation of BMPs
- ☐ Littering

No violation noted at time of inspection/investigation

- ☐ However, corrective actions recommended
- ☐ No corrective actions at this time

Implement corrective actions within _____ consecutive days of the date of this report.

ATTACHMENT 4.1

MUNICIPAL INSPECTION FORM

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Facility Name_____

Street Address_____ Mailing Address_____

_____ _____

Manager/Operator(s)_____

Telephone # (_____) _____ - _____ ext._____ Fax # (_____) _____ - _____

Manager/Operator(s) Email:_____

Facility Personnel Present_____

B. FACILITY/SITE INFORMATION

Principal activity:_____

JURMP Classification_____

New JURMP Classification?_____

Does facility maintain SWPPP/BMP Plan? ☐ Yes ☐ No

If yes, what is the date of last SWPPP/BMP Plan revision?_____

If yes, does the SWPPP/BMP Plan include applicable minimum BMPs from the JURMP? (if no, describe in Section E) ☐ Yes ☐ No

If yes, does the SWPPP/BMP Plan include a current list of individuals Responsible for implementing BMPs at the site? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____ Hydrologic Area: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____ square feet

Approximate % impervious surface of this area_____ %

Exposed areas of intensive outdoor activity: _____

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

D. BMP ASSESSMENT

BMPs	N/A	Yes	No	Comments
D.1 General				
Is the site free of excessive litter and debris?				
Are discharge locations free of excessive sediment and debris?				
Are parking lots, sidewalks and streets free of excessive sediment and debris?				
Are roof downspouts directed away from areas of potential pollutants?				
Is wash water from pressure washing / hosing managed appropriately?				
Are employees trained in storm water management?				
Does the facility have a current log of employees who have participated in training?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
If reclaimed water is used for irrigation, is the site free of evidence of irrigation water entering the storm drain?				
Are stockpiles of soil or landscape waste covered when feasible and equipped to prevent runoff transport?				
Are pesticides, herbicides, and fertilizers managed in accordance with the JURMP BMPs?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area adequately covered (closed lids or permanent overhead cover)?				
Is the trash/recycling area free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor materials that pose a threat to water quality stored appropriately (covered or in sealed containers)?				
Are outdoor storage containers properly labeled?				
Is there an accessible, appropriate spill response kit?				
Is there a written spill response plan? If so, please provide to inspector. (NA if no significant materials to spill)				
Are liquid storage containers/tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
Is water from pools and/or fountains disposed of properly?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

BMPs	N/A	Yes	No	Comments
Are vehicle maintenance activities conducted within contained areas when feasible (garage, canopy, work shop)?				
Are equipment and vehicles inspected daily for leaks and repaired as necessary?				
Are storm drain inlets near vehicle-fueling areas protected from spills and leaks?				
Is vehicle washing preformed in a designated area where runoff does not enter the MS4?				
Are biodegradable soaps used when appropriate?				
D.5 Building Repair/Construction				
Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				
Are impervious areas free of debris and spills from painting, scraping, and/or sandblasting activities?				
D.6 Structural BMPs				
Are structural BMPs adequately maintained? (NA if no structural BMPs at facility)				
D.7 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.8 Other				
Are appropriate signs/stenciling present at the facility?				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				

E. ADDITIONAL COMMENTS
(describe any additional deficiencies not represented above and/or notable BMP improvements)

City of National City
Storm Water Quality Inspection for Municipal Facilities
Inspected by D-MAX Engineering, Inc.

F. CORRECTIVE ACTION

Is corrective action needed? ☐ Yes ☐ No (If **BMP-related** corrective action is required, describe below.)

Operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax ☐ E-Mail

G. VIOLATIONS

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described in Section F.

☐ Violation of City Ordinance(s):

- ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
  Description_____
- ☐ Illegal connection(s) to the storm drain system
  Location_____
- ☐ Littering
- ☐ Failure to properly implement required BMPs

☐ Other Violation_____

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

☐ Implement the recommended corrective actions listed in Section F.

Additional actions required:

H. ADDITIONAL RECOMMENDED CITY ACTIONS*

*Recommended City Actions listed at the time of inspection are subject to change based on later review by office staff

Does this facility require a follow-up inspection? ☐ **Yes** ☐ **No**

ASSESSMENT

Level of knowledge regarding storm water issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

"RW 303(d)" = Receiving water impairments, as listed in the most recent 303(d) list
"WS COC" = High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
"PDP" = pollutant discharge potential.
"Emp. Training" = employee training activities focused on storm water pollution prevention
"Housekeeping" = standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
"Minor Struct." = minor structural BMPs that do not require building permits, such as covering with tarps or building berms
"Major Struct." = major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results* are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results* are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results* are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results* above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results* exceed the EPA benchmark by an order of magnitude or more

DMAX

ATTACHMENT 5.1

INDUSTRIAL AND COMMERCIAL INSPECTION FORM

CITY OF NATIONAL CITY

STORM WATER COMPLIANCE INSPECTION FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Inspected by D-MAX Engineering, Inc.

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

Result: ☐ Full Insp. ☐ Could not Contact ☐ Not Inventoried ☐ Refused
☐ Moved, Replaced by_____ ☐ Moved, Vacant
☐ Duplicate of: _____ ☐ Out of Jurisdiction ☐ Mobile

A. CONTACT INFORMATION

Original

Business Name _____
_____

Street Address _____
_____

Responsible Person(s) _____

Title: _____

Business Telephone # (_____) _____ - _____ ext. ____

Business Fax # (_____) _____ - _____

Home Based? ☐ Yes ☐ No

Changes and/or Mailing Address

Business Name _____
_____

Street Address _____
☐ change _____

Responsible Person(s) _____

Business Telephone # (_____) _____ - _____ ext. ____

Business Fax # (_____) _____ - _____

APN: _____

E-Mail: _____

Potentially Shared Areas: ☐ w/ Other Tenants ☐ w/ Property Mgmt/Owner ☐ None

Was current business license provided during inspection? ☐ Yes ☐ No #_____ Exp._____

Facility personnel present: _____

B. FACILITY/SITE INFORMATION

Principal activity: _____

Assigned SIC Code(s): _____ _____ _____

Does assigned SIC Code best represent principal activity: ☐ Yes ☐ No

Existing SIC Code(s): _____ _____ _____ ☐ Food Attachment ☐ Industrial Attachment

Status Update (if no longer active in City or does not need an inspection): ☐ Moved/Out of Business ☐ Duplicate
☐ Not Inventoried ☐ Out of Jurisdiction

Is facility subject to CA Statewide General Industrial Permit? ☐ Mandatory ☐ Conditional ☐ No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐ Yes ☐ No WDID: 9 37I0_____

Has facility filed a Notice of Termination (NOT) for the above WDID#? ☐ Yes ☐ No Approval date: _____

C. INITIAL OBSERVATIONS

Discharge points: _____
_____

Approximate area covered by industrial or commercial activities: _____ square feet

Approximate % impervious surface of this area: _____%

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP ASSESSMENT

BMPs	N/A	Fully Implemented	Partially Implemented	Not Implemented	Comments	Shared Resp
D.1 General						
Keep site free of litter, debris, and sediment using dry methods						
Keep drains on site free of litter and debris						
Keep loading and unloading areas, including drains, free of debris						
Keep outdoor areas free of spills and leaks						
Collect water from pressure washing or hosing and dispose of appropriately					☐ Unknown	
Collect and dispose of cleaning water appropriately						
Clean floor mats in locations that do not drain to storm drain system						
D.2 Landscaping						
Employ adequate erosion prevention measures (vegetation, physical stabilizer)						
Eliminate over watering/over-irrigation						
Properly store and dispose of green waste					☐ Unknown	
Properly manage pesticides/fertilizer; use IPM when feasible					☐ Unknown	
D.3 Materials and Wastes						
Protect trash area from contact with storm water						
Keep trash area free of litter and debris, liquids, powders, sediment						
Adequately cover materials stored outside						
Prevent run-on from contacting materials stored outdoors						
Properly label outdoor storage containers						
Equip liquid storage containers with secondary containment						
Keep secondary containment free of spills and rainwater						
Properly store and dispose of hazardous materials						
Provide an accessible, functional spill response kit						
Dispose of water generated by processing activities appropriately						
Dispose of pool, spa, fountain, and filter backwash water properly					☐ Unknown	
D.4 Equipment, Vehicles, and Outdoor Activities						
Conduct outdoor activities within contained areas (under canopy, bermed)						
Use drip pans to collect leaks/spills						
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4						

BMPs	N/A	Fully Implemented	Partially Implemented	Not Implemented	Comments	Shared Resp
D.5 Other						
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff						
Identify and eliminate illicit connections and illegal discharges						
Provide storm water training for appropriate employees						

D.6 Additional Questions	Comments/Results
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/ sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	NOI NONA/NEC Calendar Food BMPs

D.7 Additional Required Actions	

E. Summary

Follow Up Inspection Priority: ☐ **Priority 1** ☐ **Priority 2** ☐ **Priority 3** ☐ **None**

☐ Potential Hazmat issue

Re-inspect on or after: ____/_____/_____
Date

Assessment

Level of knowledge regarding stormwater issues: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Level of cleanliness, BMP implementation, orderliness of site: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

F. Pollutant Discharge Potential Assessment

Sediment	Nutrients	Aluminum	Iron	Heavy Metals	Organic Cmpds	Trash/ Debris	Oxygen Demand	Oil & Grease	Bacteria & Viruses	Pesticides	Acid/ Base

G. Resolution

☐ NOV Issued: _____/_____/_____
Date

☐ Corrective Action Letter Issued: _____/_____/_____
Date

☐ Citation Issued: _____ _____/_____/_____
Number Date

☐ Verbal Warning

☐ Stop Work Order

CITY OF NATIONAL CITY
FOOD ESTABLISHMENT STORM WATER BMP ASSESSMENT

Inspected by D-MAX Engineering, Inc.

Business Name _____

How long has the manager worked at the business? ☐ < 3 months ☐ 3-6 months ☐ 7-12 months ☐ > 1 year ☐ Unknown

Is the facility manager also the owner? ☐ Yes ☐ No ☐ Unknown

Property management company:_____ Business Telephone # (____) ____ - _____ext.____

Mailing address:_____

_____

BMPs	N/A	Fully Implemented	Partially Implemented	Not Implemented	Comments	Shared Resp
Keep grease bin and area surrounding grease bin free of grease stains/spills						
Keep storm drain inlets free of grease and other food debris						

Additional Questions	Comments
How is used oil disposed of?	☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Dumpster ☐ N/A
Do oil-recycling/grease bins have overhead coverage?	☐ Overhead structure ☐ External container overhead ☐ No ☐ N/A
Do oil-recycling/grease bins have secondary containment?	☐ External containment ☐ Double-walled ☐ No ☐ N/A
Does facility have a grease trap or grease interceptor?	☐ No ☐ Grease Trap ☐ Grease Interceptor ☐ Unknown
What is the reported maintenance frequency for the grease trap or interceptor?	☐ Annual ☐ Every 6 mn ☐ Quarterly ☐ Monthly ☐ Every 2 wks ☐ Weekly ☐ > Weekly ☐ Unknown ☐ N/A

How are outdoor areas (patio, loading dock, parking lot, dumpster area, grease bin, etc.) cleaned? (check all that apply)

- ☐ Hose (If yes, see relevant question in Section D.1 of main form)
- ☐ Sweep
- ☐ Mop / deck brush (If yes, see relevant question in Section D.1 of main form)
- ☐ Power wash (If yes, see relevant question in Section D.1 of main form)
- ☐ Pick up trash
- ☐ Outside company/property management
- ☐ Do not clean

CITY OF NATIONAL CITY
INDUSTRIAL FACILITY ATTACHMENT

Inspected by D-MAX Engineering, Inc.

STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE

SPECIFIC ACTION(S) REQUIRED TO CORRECT AN OBSERVED VIOLATION

- ☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB)
  - ☐ For "Conditional" facilities only: this site may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.
- ☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP)
- ☐ Develop and implement a storm water monitoring program
- ☐ Complete Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required:

SWPPP REVIEW

Does facility maintain a SWPPP/BMP Plan: ☐ Yes ☐ No ☐ Unknown ☐ Not Available

Was SWPPP Reviewed? ☐ Yes ☐ No

SWPPP Components:

- ☐ Site Map/Description
- ☐ Materials List
- ☐ Significant Spills/Leaks
- ☐ Pollution Prevention Team (identification of current team members)
- ☐ Industrial Activities
- ☐ Pollutant Sources/Risks
- ☐ Compliance Activity Schedule (procedures to conduct annual site compliance evaluation)
- ☐ Employee Training
- ☐ Accessible to staff
- ☐ Storm Water BMPs

SWPPP Review Comments:

STORM WATER MONITORING PROGRAM

Does this facility have a storm water monitoring program? ☐ Yes ☐ No

Was appropriate monitoring conducted during the most recent wet season? ☐ Yes ☐ No

Monitoring Result Review Comments: ☐ Copy of results attached

ATTACHMENT 5.2

RESTAURANT AND FOOD INDUSTRY BMP FACT SHEET

CITY OF NATIONAL CITY – DEVELOPMENT SERVICES DEPARTMENT
1243 NATIONAL CITY BLVD., NATIONAL CITY, CA 91950

City of National City Storm Water Program

Restaurant and Food Industry

Your facility can help protect our water quality

Long-Term Compliance Solutions

Several properties and businesses in National City have already taken initiative to ensure long-term compliance with the minimum requirements of City's storm water program. In doing so they minimize the need for costly and ineffective cleanup of grease spills by employees. Three proactive solutions[1] include:

1. Storing waste grease in securely sealed indoor containers[2] until pickup

2. Permanent cover and containment of outdoor grease disposal areas[3], such as a roof and berm

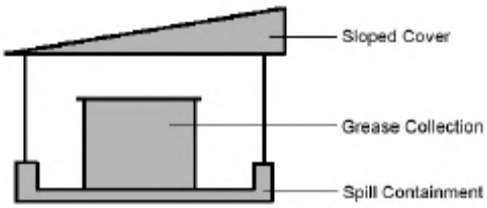

3. Installation of an indoor oil management system[2] that changes oil and collects waste

[1] These solutions are not required by the City of National City, but they would likely facilitate staying in compliance with minimum storm water requirements. See the other side of this sheet for requirements commonly applicable to the restaurant and food industry.
[2] The City of National City does not require or endorse the use of any specific brand or product.
[3] Note that installation of outdoor structures should follow National City building codes and permitting requirements.

For more information about staying in compliance with the City's Storm Water Program requirements, call the City's compliance inspection contractor, D-Max Engineering, Inc.: (858) 586-6600 ext. 23.

Restaurant and Food Industry

Best Management Practices

Your facility can help protect our water quality

The following are six requirements commonly applicable to businesses that produce and/or sell food products, such as bakeries, food producers/distributors, grocery stores, and restaurants.

1. Keep outdoor waste oil containers and surrounding areas free of grease stains and spills.		4. Pour wash water into a indoor janitorial or mop sink. Don't pour it outside into a storm drain or onto a parking lot, alley, sidewalk, or street.	
2. Use dry sweeping or absorbent material for oil and grease spill cleanup instead of hosing. If wet cleanup methods are used, collect all water and take it indoors for disposal.		5. Clean floor mats, filters, and garbage cans in a mop sink, over an indoor floor drain, or on landscaping where water will not run off. Don't wash them in a parking lot, alley, sidewalk, or street.	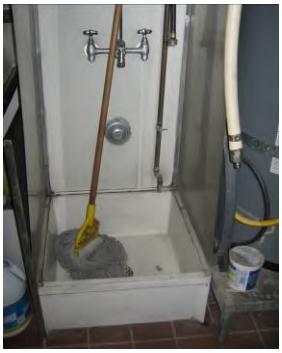
3. Keep dumpster area clean and lid closed. Don't fill it with liquid waste or hose it out. Repair or replace leaky dumpsters.		6. Recycle grease and oil. Don't pour it into sinks, floor drains, or onto a parking lot or street. Pouring grease and food scraps down drains can clog pipes and back up sewers.	

Laws and Enforcement

See National City Municipal Code Section 14.22, Storm Water Management and Discharge Control, for a full list of all storm water requirements applicable to businesses. Direct or indirect discharge of pollutants to the storm water conveyance system, even in rain water, is against the law.

Violations can result in civil penalties up to $10,000 or fines up to $25,000 per violation, per day.

To help report a spill or discharge to the storm drain, call the City of National City Storm Water Hotline: (619) 336-4389

ATTACHMENT 5.3

INDUSTRIAL AND COMMERCIAL
"PREVENTING URBAN RUNOFF POLLUTION" TRIFOLD

What's the difference?

Sanitary Sewer vs. Storm Drain System

The water that drains down a sink or toilet in a home or business flows to the sanitary sewer and is treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – and eventually to San Diego Bay!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our water bodies.

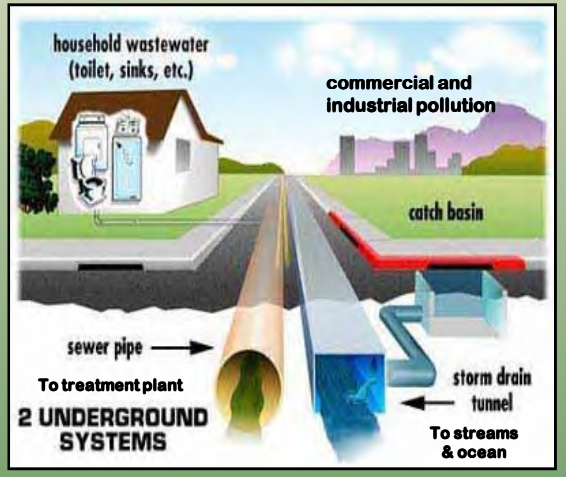

Certain industrial businesses require coverage under the General Industrial Permit. For more information go to the State of California's Stormwater website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml

Who can you contact?

REPORT ILLEGAL DUMPING
City of National City
(619) 336-4389
(Toll Free After Hours Hotline)
County Storm Water Hotline
(888) 846-0800

HOUSEHOLD HAZARDOUS WASTE (HHW) DISPOSAL
South Bay Regional HHW Drop-Off Site
1800 Maxwell Road
Chula Vista, CA
Call (619) 691-5122 for information

RECYCLING
EDCO: (619) 466-8855
http://www.edcodisposal.com/services/nationalcity/index.html

QUESTIONS AND COMMENTS
National City Storm Water Program
(619) 336-4580

Look on the web!

CITY OF NATIONAL CITY
http://www.ci.national-city.ca.us/

USED OIL RECYCLING CENTERS
www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
www.ipm.ucdavis.edu/

PROJECT CLEAN WATER
www.projectcleanwater.org

SAN DIEGO COASTKEEPER
www.sdcoastkeeper.org

STATE OF CALIFORNIA STORM WATER PROGRAM
http://www.waterboards.ca.gov/water_issues/programs/nps/

US ENVIRONMENTAL PROTECTION AGENCY
www.epa.gov/OWOW/NPS/

CITY OF NATIONAL CITY

Preventing Urban Runoff Pollution

A Guide for Commercial and Industrial Businesses

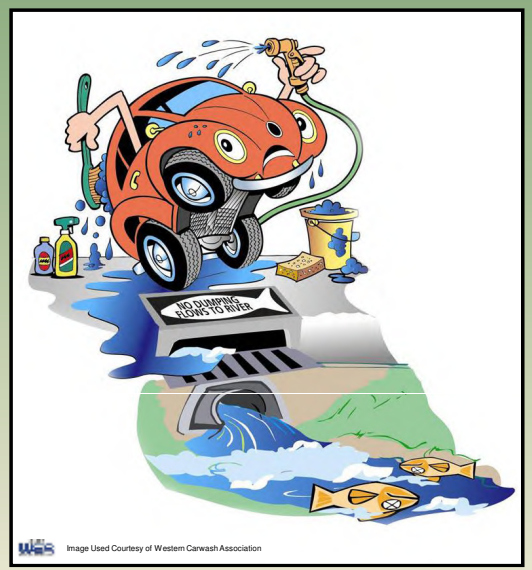

Urban storm water runoff is the largest contributor to water pollution in San Diego County.

Your business is required to prevent urban runoff pollution by implementing Best Management Practices (BMPs).

The City will be conducting inspections to ensure that BMPs are being used and water quality is protected.

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Pollutants of Concern

Water that enters the City of National City storm drain system eventually flows into San Diego Bay. The following lists several main pollutants of concern for San Diego Bay.

- Sediments
- Metals (copper, zinc)
- Pesticides (diazinon)
- Bacteria and Viruses

Best **M**anagement **P**ractices (**BMPs**) are required to be used at all industrial and commercial businesses, where applicable, to reduce urban runoff pollution in our streams and waterways.

Maintenance & Good Housekeeping

- Major cleaning of exterior surfaces (such as power washing) must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the street gutter or storm drains.
- Regularly sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- Regularly inspect and maintain storm drain inlets and surface drains on your property.

Landscaping

- Time sprinklers to avoid over watering and aim them to avoid causing runoff.
- Minimize use of pesticides, herbicides, and fertilizers, which are harmful to animals downstream.
- Hand pull weeds instead of using herbicides
- Do not use pesticides that eliminate beneficial insects
- Only irrigate during early morning or late evening to avoid evaporation.

Outdoor Material Storage

- Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid materials.
- Have a spill response kit (dry absorbent, rags, and/or hydrophobic mops are useful) available to clean up potential spills.
- Keep lids closed on all outdoor storage containers and ensure containers are labeled.

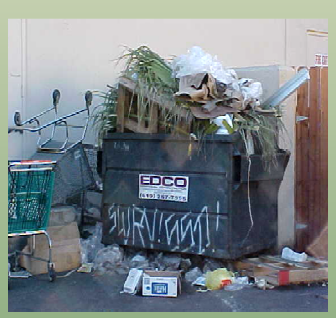

Unacceptable

Acceptable

Waste Management

- Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- Fix any leaks in garbage cans or dumpsters.
- Schedule extra pick-ups when regular waste collection does not meet demand.

Vehicle & Equipment Washing and Maintenance

- Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- Minimize the use of soap and water.
- Car wash water is not allowed to enter storm drains. Wash water must be collected and disposed of to a pervious area (such as landscaping) or to the sanitary sewer system if allowed by local sewer agency.
- Perform all vehicle maintenance indoors when possible.
- Use drip pans to collect fluids from leaky vehicles
- Clean up spills with a spill kit and properly dispose of the used kit contents.

Unacceptable

Acceptable

Loading Areas & Operations

- Load and unload in designated areas.
- Regularly sweep loading and unloading areas; do not hose them down.
- If possible, cover loading areas.
- Divert rain water away from all loading and unloading areas.
- Check shipments and trucks for leaks and spills.
- Clean up spills/leaks immediately and dispose of them properly.

ATTACHMENT 8.1

”EVERYTHING THAT FLOWS DOWN INTO A STORM DRAIN” BROCHURE

City of National City

Office of the Public Works/Engineering Director
1243 National City Blvd. National City, CA 91950-4397
(619) 336-4580, Fax (619) 336-4397 www.ci.national-city.ca.us

Everything that flows down into a storm drain goes *untreated* directly into our creeks, lagoons, and San Diego Bay. When it rains o when water flows out of yards, it flows directly into storm drains. Many people think that everything that flows into a storm drain gets treated at the Point Loma Sewage Treatment Plant, just like wastewater in the sewer system, but these two systems are not connected.

The sources of pollution that must be controlled and eliminated result from urbanization and the choices that are made every day by residents, businesses and industry alike. For example, detergents, oil, grease, and other pollutants have been shown to be toxic to wildlife in local streams and San Diego Bay. **Recycling** of oil, antifreeze, glass, plastic, and other materials can prevent their improper disposal into the stormwater drainage system. **Proper landscaping practices** include minimization of the use of herbicides, pesticides and fertilizers together with conservation of water to minimize runoff of pollutants from landscaped areas, lawns, golf courses, etc.

The City of National City's Stormwater Management & Discharge Control of the National City Municipal Code Chapter 14.22, prohibits non-stormwater discharges, such as car washwater, pesticides, fertilizers, pet waste, litter, oil, and other automobile fluids, to run into the City's storm drain system. This ordinance is based on regulations set forth by the State Regional Water Quality Control Board and the U.S. Environmental Protection Agency in connection with the State and Federal Clean Water Acts.

Your help is needed, and by doing your part, by changing your washwater and trash disposal practices, you will help reduce the pollution problems in the community where you and your family live, work and play. Please call **Storm Drain Hotline** at **(619) 336-4389** if you have **any questions** regarding this matter and **to report any illegal discharges and /or dumping.**

City of National City

Office of the Public Works/Engineering Director
1243 National City Blvd. National City, CA 91950-4397
619) 336-4580, Fax (619) 336-4397 www.ci.national-city.ca.us

Todo lo que desemboca en las alcantarillas no esta tratado y va a parar directamente a nuestras lagunas, esteros y Bahia de San Diego. Cuando llueve o cuando escurre agua de algun patio, desemboca directamente a las alcantarillas. Mucha gente piensa que todo lo que desemboja en una alcantarilla es tratado en la planta de Tratamiento de Agua Negras en Point Loma, como las aguas negras del sistema de drenaje, pero estos dos sistemas **no** estan conectados.

Las causas de contaminacion que tienen que ser controladas y eliminadas resultan de la urbanizacion y las elecciones que hacen todos los dias los residentes, negocios y la industria. Por ejemplo, detergentes, aceite, grasa, ya otros contaminantes se ha visto que son toxicos para la vida silvestre en nuestros arroyos locales y Bahia de San Diego. **Reciclando** el aceite, antifreeze, vidrio, plastico y otros productos que sean desechados de un modo inadecuado llegen a parar al sistema de alcantarillado de la ciudad. **Los metodos de mantener el jardin**, como usar menos los herbicidas, pesticidas y fertilisantes.Tambien como conservar el agua para que esa agua con contaminantes de los jardines, pastos, canchas de golf, etc.

El Codigo Municipal No. 14.22 de las aguas pluviales de la Ciudad de National City, prohibe aguas que no sean pluviales como las aguas negras, pesticidas, fertilisantes, basura, aceite y otros liquidos de carros que sean depositadas en el sistema de alcantarillado de la ciudad. Esta regla esta basada en las regulaciones puesta por "State Regional Water Quality Control Board" y "U.S. Environmental Protection Agency" en conneccion con "State and Federal Clean Water Acts."

Su ayuda es necesaria, y haciendo su parte como cambiar el modo de tirar su basura, usted ayudara a reducir la contaminacion en la comunidad donde usted y su familia viven, trabajan y juegan.

Por favor llame a la linea de **"Storm Drain Hotline"** al **(619) 336-4389**, si tiene **alguna pregunta** si quiere **reportar un desague ilegal**.

ATTACHMENT 8.2

CALENDAR ART CONTEST INFORMATION FOR TEACHERS

City of National City

Storm Water Program
Third Annual Calendar Art Contest

Guidelines for Teachers

The City of National City invites all third grade students attending public schools in the City to participate in this fun and educational art contest. We are asking students to provide original art pieces for the upcoming 2012 National City Storm Water Program Calendar. The theme of this year's contest is **"By Keeping Our Community Clean, We Can Keep the Ocean Clean"**.

Similar to previous years, the City plans to select 12 original art pieces to feature in the 2012 National City Calendar. The goal of the contest is to promote understanding of the local natural environment in National City and to educate students on ways they can help protect local waterways. The contest provides a way for children to share their ideas on ways to protect our creeks and oceans with the entire National City community.

We encourage teachers to relate this contest to various aspects of the third grade curriculum. Please encourage students to include National City landmarks in their drawings, such as Paradise Creek, the Sweetwater River, their school, favorite park, etc. Students can also incorporate native plants and animals. Ideally, a contest entry will show how to protect water quality AND how National City benefits from having a clean community.

Contest Rules

Guidelines:

- **Media:** Paint, color pencils, marker, or crayon.
- **Paper:** White paper, 8 1/2 inches by 11 inches in landscape format.
- **Text:** Drawings can include text and original slogans, however, names will not be allowed on front of the drawing. The artist's first name and school will be printed below the drawing in the calendar. All words must be spelled correctly. If preferred, text can be typed on a computer, printed, and then pasted to the drawings.

Submittals:

- All participants must submit a release form with their name, school, room number, teacher's name, and parent or guardian signature.
- The student's name, school, and teacher must also be taped to the back of the artwork on a piece of paper or index card.

(Continued on Back)

Deadline:

- The deadline for students will be **June 3, 2011**. Please note that this is a Friday, and the City offices will not be open. Teachers should submit their students' artwork to City Hall no later than **June 13, 2011.** If you cannot submit entries directly to City Hall, you can contact Barby Tipton (see bottom of page) to arrange for a pick up. Note that for teachers with Combination classes (2nd and 3rd grades), we encourage 2nd graders to participate, but only 3rd grade work should be submitted to the City for entry into the contest.

Judging:

- Drawings will be judged by various City officials and representatives involved in the City's Storm Water Pollution Prevention Program. 12 winners will be chosen based on originality and representation of the contest's theme. At least one winner will be chosen from each participating school.

Prizes:

- Teachers can hand out personalized participation certificates (to be filled out by the teacher) to all participating students when artwork is submitted in class.
- Winning art pieces will be featured in the 2012 National City Storm Water Program Calendar. Winners will be honored at a National City Council Meeting in the fall and will receive additional prizes.

Contact Information:

- If you have additional questions about how you can integrate this contest into your 3rd grade curriculum, please contact:
  Stephanie Maxin Phone: (619) 336-8306
  Email: stephanieb@national.k12.ca.us
- If you would like to contact a representative at the City, please contact:
  Barbara Tipton, National City Storm Water Compliance Inspector
  Phone: (619) 336-4583 Email: btipton@nationalcityca.gov

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ATTACHMENT 8.3

CALENDAR ART CONTEST INFORMATION FOR STUDENTS AND FAMILIES

Storm Water Program

3rd Grade Art Contest

THEME: BY KEEPING OUR COMMUNITY CLEAN, WE CAN KEEP THE OCEAN CLEAN!

Deadline: June 3, 2011

Winning drawings will be featured in National City's 2012 Storm Water Program Calendar!

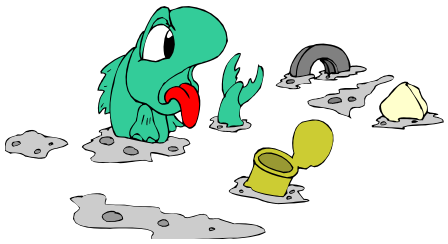

DO YOU GO TO THE BEACH WHEN IT'S RAINING?

Probably not, but pollution does! When it rains, pollutants like litter and oil are carried from our streets and sidewalks to our local creeks and ocean. Pollution can hurt plants and animals and can also make water unhealthy for humans.

BY KEEPING OUR COMMUNITY CLEAN, WE CAN KEEP THE OCEAN CLEAN!

Rules:

- Drawings should show how you and your friends, family, and neighbors can help prevent pollution in creeks, rivers, and oceans. We encourage you to include locations within National City in your drawing, such as your school, Paradise Creek, Sweetwater River, or your favorite park!
- Drawings must be on white 8 1/2 inch by 11 inch paper, in landscape format.
- Only color drawings made with markers, colored pencils, crayons, or paint will be accepted. Bright colors are best.
- Do NOT write your first or last name on the front of your drawing.
- Use original artwork only. Slogans and messages are OK, but all words must be spelled correctly. Text can also be typed on the computer, printed, and pasted onto the drawing.
- Drawings must be submitted to your teacher by June 3, 2011 with a completed entry form (on the back of this flyer) signed by a parent or guardian.
- Your name, teacher, and school must be on a piece of paper or card taped to the back of the artwork.
- Winners will be notified in the fall. All winners will be featured in the 2012 National City Storm Water Program Calendar. Winners will also receive a prize and be honored at a future City Council Meeting!

YOU CAN BE A CLEAN WATER SUPERSTAR!

- ☆ Don't litter
- ☆ Never put anything into the storm drain
- ☆ Pick up after your pets

Programa de Aguas Pluviales

Concurso de Arte de Estudiantes de Tercer Grado

TEMA: ¡AL MANTENER NUESTRA COMUNIDAD LIMPIA, PODEMOS MANTENER LIMPIO EL OCÉANO!

Fecha límite: 3 de junio del 2011

¡Las ilustraciones ganadoras aparecerán en el Calendario del Programa de Aguas Pluviales del 2012 de National City!

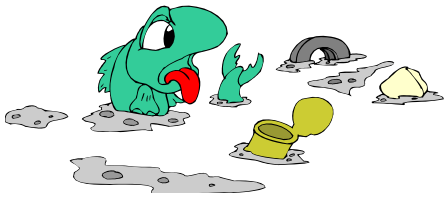

¿VAS A LA PLAYA CUANDO LLUEVE?

Probablemente no, ¡pero la contaminación sí! Cuando llueve, nuestras calles y aceras transportan contaminantes como basura y aceite al océano y a nuestros arroyos locales. La contaminación puede dañar plantas y animales y hacer que el agua sea mala para la salud de los seres humanos.

¡AL MANTENER NUESTRA COMUNIDAD LIMPIA, PODEMOS MANTENER LIMPIO EL OCÉANO!

Reglas del concurso:

- Las ilustraciones deben mostrar cómo tú y tus familiares, vecinos y amigos pueden ayudar a evitar la contaminación de arroyos, ríos y océanos. ¡En tu dibujo puedes incluir lugares de National City como tu escuela, el arroyo "Paradise Creek", el Río Sweetwater o tu parque favorito!
- Debes hacer tu ilustración en una hoja de papel blanco de 8 ½ x 11 pulgadas, en formato horizontal.
- Sólo se aceptarán dibujos hechos con plumones, lápices de colores, crayones o pintura. Los colores brillantes son más atractivos.
- NO escribas tu nombre ni tu apellido en el lado del dibujo.
- Tu ilustración debe ser original. Se acepta que le pongas un lema o mensaje, pero todas las palabras deben estar bien escritas. También puedes escribir el texto en la computadora e imprimirlo y pegarlo al dibujo.
- Debes entregar tu dibujo a tu maestro(a) para el 3 de junio de 2011, y el reverso de esta hoja debe estar llenado y haber sido firmado por uno de tus padres o tutores.
- Debes escribir tu nombre, el de tu maestro o maestra y el de tu escuela en un trozo de papel o en una tarjeta y pegarlo atrás del dibujo.
- En el otoño se notificará a los ganadores. ¡Todos los ganadores aparecerán en el Calendario del Programa de Aguas Pluviales de National City, recibirán un premio y se les hará un reconocimiento en una futura junta del cabildo del Ayuntamiento Municipal!

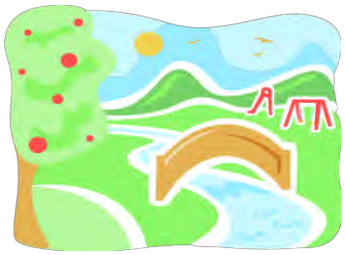

¡TÚ PUEDES SER UN SUPERESTRELLA DEL AGUA LIMPIA!

- ☆ No tires basura.
- ☆ No eches cosas al drenaje pluvial.
- ☆ Recoge los desechos de tus mascotas.

ATTACHMENT 9.1

HHW DISPOSAL INFORMATIONAL ADVERTISEMENT

Chula Vista, Imperial Beach & National City residents:

DISPOSE OF:

PAINTS • POOL CHEMICALS
BATTERIES • PESTICIDES
ANTIFREEZE • ADHESIVES
THINNERS • PHOTO CHEMICALS
FLUORESCENT BULBS
DEGREASERS • FERTILIZERS

Saturdays, 9 AM - 1 PM

(Except for holiday weekends)

1800 Maxwell Road
Chula Vista

$5 co-pay for up to 15 gallons or 125 lbs of waste per household

(Additional loads or visits are subject to higher co-pays)

For more information, call (619) 691-5122

Se habla español.

CITY OF NATIONAL CITY

2011/2012
JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT

SEPTEMBER 2012

PREPARED BY:

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ACRONYMS AND ABBREVIATIONS

Acronym	Abbreviation
°C	Degrees Celsius
303(d) List	2008 Clean Water Act Section 303(d) List of Water Quality Limited Segments from the 2010 Integrated Report
Basin Plan	Water Quality Control Plan for the San Diego Basin
BMP	Best Management Practice
BMP Manual	The City of National City Storm Water Best Management Practices Manual
CASQA	California Stormwater Quality Association
CIP	Capital Improvement Project
CIWQS	California Integrated Water Quality Management System
City	City of National City
Construction General Permit	State of California Construction General Permit, 2009-0009-DWQ
Copermittees	Eighteen municipalities within San Diego County, the County of San Diego, the Port of San Diego, and the San Diego County Regional Airport Authority
CMC	Criteria Maximum Concentration
CMP	Corrugated Metal Pipe
CTR	California Toxics Rule
CWA	Clean Water Act/Federal Water Pollution Control Act
D-MAX	D-MAX Engineering, Inc.
Dry Weather Monitoring Program	Dry Weather Field Screening and Analytical Monitoring Program
ESA	Environmentally Sensitive Area
FOG	Fats, Oils, and Grease
GIS	Geographic Information System
gpm	Gallons Per Minute
HSA	Hydrologic Sub-Area
HDPE	High Density Polyethylene
HHW	Household Hazardous Waste
HMP	Hydromodification Management Plan
HOA	Home Owners' Association
IC/ID	Illicit Connection/Illicit Discharge
IHC	Interim Hydromodification Criteria
ILACSD	I Love a Clean San Diego
Industrial Permit	State of California Industrial General Permit, Order No. 97-03-DWQ
IMP	Integrated Management Practice
IPM	Integrated Pest Management
JURMP	Jurisdictional Urban Runoff Management Program
LID	Low Impact Development

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Acronym	Abbreviation
MBAS	Methylene Blue Active Substances
MEP	Maximum Extent Practicable
mg/L	Milligrams Per Liter
MPN/100 mL	Most Probable Number (of colony-forming units) per 100 milliliters
MS4	Municipal Separate Storm Sewer System
mS/cm	MilliSiemens Per Centimeter
Municipal Permit	San Diego Regional Water Quality Control Board Order No. R9-2007-0001
nd	Not Detected
NOI	Notice of Intent
NONA/NEC	Notice of Non-Applicability/No Exposure Certification
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
nt	Not Tested
NTC	Notice to Comply
NTU	Nephelometric Turbidity Unit
PDP	Pollutant Discharge Potential
PDPA	Pollutant Discharge Potential Assessment
Priority Project	Priority Development Project
PW	Public Works
RCP	Reinforced Concrete Pipe
RWQCB	San Diego Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SIC	Standard Industrial Classification
SSO	Sanitary Sewer Overflow
Storm Water Ordinance	Chapter 14.22 of the Municipal Code, Storm Water Management and Discharge Control
SUSMP	Standard Urban Storm Water Mitigation Plan
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
TTWQ	Threat to Water Quality
WDID	Waste Discharge Identification Number
WQO	Basin Plan Water Quality Objectives
WQTR	Water Quality Technical Report
WURMP	Watershed Urban Runoff Management Program
µg/L	Micrograms Per Liter

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Stephen Manganiello
City Engineer

Date: 9/26/12

Telephone Number: (619) 336-4380

EXECUTIVE SUMMARY

The City of National City (City) has been actively developing and implementing storm water pollution prevention measures since 1990. The City's current Jurisdictional Urban Runoff Management Program (JURMP) was prepared in March 2008 in response to San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit). The Municipal Permit was jointly issued to 18 municipalities in San Diego County, including the City, the County of San Diego, the San Diego County Regional Airport Authority, and the San Diego Unified Port District (collectively referred to as "Copermittees").

At the end of each fiscal year, the City is required to report a summary of its JURMP implementation activities to the RWQCB. This JURMP Annual Report presents the City's activities during the 2011/2012 fiscal year, which began on July 1, 2011 and ended on June 30, 2012. Each section of this JURMP Annual Report discusses how the City's efforts during 2011/2012 met the requirements of the Municipal Permit. Key actions taken for the major components of the City's storm water program are summarized below.

Development Planning Component

During 2011/2012, the City continued to oversee development activities occurring in the City in order to mitigate potential threats to water quality due to such activities. The City continued to require all development projects to submit applicability checklists to determine subjectivity to the City's Standard Urban Storm Water Mitigation Plan (SUSMP) requirements. All SUSMP submittals were also reviewed with respect to Hydromodification Management Plan applicability and requirements. The City implemented its treatment control BMP operation and maintenance verification program, which included the utilization of a Microsoft Access treatment control BMP database to track information and prepare the maintenance verification letters distributed to responsible parties. The City also conducted BMP inspections at 18 sites with approved treatment control BMPs and exceeded Municipal Permit inspection frequencies.

Construction Component

During 2011/2012, a total of 66 construction storm water compliance inspections were completed at inventoried construction sites, not including inspections for building permits, which also include a brief check for storm water BMPs. The City checked all construction projects for applicability to the maximum disturbed area limitation and guidelines for advanced treatment. The City's plan check process provided permit applicants with construction BMP fact sheets, and the inspection program required projects to comply with the City's minimum BMP requirements.

Municipal Component

The City inspected all high TTWQ municipal fixed facilities and continued its rigorous street sweeping and MS4 maintenance programs. A total of 985 tons of sediment and

debris were removed from street sweeping activities, and 15.1 tons of debris were removed from standard MS4 maintenance. The City continued to maintain and repair or replace sanitary sewer lines, as needed, to decrease the potential for a sanitary sewer overflow (SSO). No public SSOs occurred during 2011/2012. The City received and appropriately addressed all complaints received by the City's Storm Water Hotline, the City website, and other City departments.

Industrial and Commercial Component

During 2011/2012 the City met the Municipal Permit requirement to inspect at least 25 percent of the City's industrial and commercial inventory, including 100 percent of its high threat to water quality (TTWQ) sites. During the inspections conducted in 2011/2012, the City reminded industrial and commercial businesses of the City's BMP requirements through the City's inspection program. Inspectors also assessed each facility's compliance with the General Industrial Permit (Industrial Permit). The City also continued to collect additional data to assess the pollutant discharge potential at each site.

Residential Component

The City uses various methods to provide storm water education to its residents. Third grade students in local schools participated in the Storm Water Art Contest to provide art for the 2013 Storm Water Calendar. During 2011/2012, a special evaluation of multi-family residential complexes assessed pollutant discharge potential and BMP implementation, while providing educational materials to property managers. The City continued to collaborate with the cities of Chula Vista and Imperial Beach to encourage residents to dispose of household hazardous waste (HHW) appropriately at a facility available to the public. The City also continued to host large item waste disposal events in fall and spring, as well as respond to calls made to the City storm water hotline regarding residential areas.

Illicit Discharge Detection and Elimination Component

On September 10, 2008, the RWQCB adopted Addendum No. 2 to the Municipal Permit. This addendum requires the City to wait to submit the illicit discharge detection and elimination (IDDE) section of its JURMP Annual Report until the report for the 2012 Dry Weather Field Screening and Analytical Monitoring Program is finalized. The 2011/2012 section must be submitted to the RWQCB no later than December 15, 2012.

Education Component

As a means to raise storm water awareness in various communities in the City, the City continued to conduct education and outreach activities throughout 2011/2012. The City's efforts resulted in an estimated 29,539 impressions. The City distributed the 2012 Storm Water Program Calendar and also began development of the 2013 calendar. To better serve the City's diverse population the calendars present storm water concepts in English as well as Spanish, similar the City's many other bilingual educational materials.

Public Participation Component

During 2011/2012, the City provided a variety of opportunities for individuals to participate in the City's storm water program. Activities included cleanup events, which have a direct effect on water quality, as well as outreach activities, through which the City works to increase general knowledge and awareness regarding storm water issues. Third grade students in local schools participated in the Storm Water Art Contest in May 2012 to provide art for the 2013 Storm Water Calendar. In addition, 592 volunteers participated in the Coastal Cleanup Day and Creek to Bay cleanups at two different sites in the City. Also, City residents continued to participate in routine large item and HHW waste disposal events.

Fiscal Analysis Component

The City continued to fund its storm water program as discussed in the City's JURMP. During 2009/2010, a fiscal analysis reporting template was developed collectively by the Copermittees. The City used this template to report the 2011/2012 program budget in this JURMP Annual Report.

Effectiveness Assessment Component

The City continued to evaluate the effectiveness of its storm water program based on the approach presented in the City's JURMP. The City has identified significant activities within each program component and metrics to assess each one. Standard tables to report this information have been created and included in Section 11 of this JURMP Annual Report. The City has seen some encouraging signs of the effect of its program, such as decreasing median concentrations of pollutants in runoff during its Dry Weather Field Screening and Analytical Monitoring Program (Dry Weather Monitoring Program) in recent years.

Special Investigations

The City continued its Clean Community Program which promotes shared responsibility within communities to keep National City and local receiving water bodies clean and free of pollution. The City also assessed pollutant discharge potential of industrial and commercial businesses; oil and grease, trash, oxygen-demanding substances, and bacteria had the highest average pollutant discharge potential scores.

Conclusions and Recommendations

The City will continue to implement the new and updated programs in its JURMP during 2012/2013; it is anticipated that some program refinements will be made as implementation progresses. The City will also continue to collaborate with the other Copermittees to improve the efficiency of its program.

1.0 INTRODUCTION

1.1 BACKGROUND

This Jurisdictional Urban Runoff Management Program (JURMP) Annual Report presents an activity summary for the City of National City (City) during the 2011/2012 fiscal year. The JURMP Annual Report preparation and submission are required by San Diego Regional Water Quality Control Board (RWQCB) Order No. R9-2007-0001 (Municipal Permit).

1.1.1 REGULATORY BACKGROUND

The 1987 amendments to the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), established a framework for regulating Municipal Separate Storm Sewer System (MS4) discharges under the National Pollutant Discharge Elimination System (NPDES). In 1990, the RWQCB issued the first regional NPDES permit for municipalities in the San Diego Region, followed by a revised permit in 2001. RWQCB Order No. 2001-01 was replaced by the current Municipal Permit in 2007.

In 2002, the City, like all regulated municipalities in the San Diego region (collectively referred to as Copermittees), developed and submitted a JURMP to the RWQCB. The City then submitted an updated JURMP, as required by the Municipal Permit, in March 2008. The JURMP explains management measures for different sectors, including municipal, industrial, commercial, construction, and significant development and re-development activities.

Annual reports documenting the implementation of the JURMP are required to be submitted to the RWQCB by September 30. This JURMP Annual Report presents data from the 2011/2012 fiscal year, which extended from July 1, 2011, to June 30, 2012.

No Total Maximum Daily Loads (TMDLs) have been adopted for water bodies within or downstream of the City of National City at this time.

1.1.2 CITY SETTING

The City of National City is located in southwest San Diego County, surrounded by the City of San Diego, Chula Vista, and unincorporated portions of San Diego County. The City itself covers approximately nine square miles and has an estimated population size of approximately 61,000 residents. Land use within the City is primarily residential, although a large industrial area can be found along San Diego Bay. Commercial development is restricted to businesses and shopping centers along the main roadways. Land use is broken down by area and percentage of total in Table 1-1 and illustrated in Figure 1-1.

Table 1-1
City of National City Land Use Breakdown

Land Use	Total Area (Acres)	Percentage
Single Family Residential	1,216	30%
Transportation	1,149	29%
Commercial	490	12%
Industrial	251	6%
Multi-Family Residential	215	5%
Open	202	5%
Public Facilities and Utilities	174	4%
Vacant	115	3%
Parks	114	3%
Other Residential	41	1%
Office	22	1%
Water	20	<1%
Construction	6	<1%
Recreation	2	<1%
Total	**4,016**	**100%**

Source: 2007 San Diego Association of Governments (SANDAG) land-use data

The City of National City lies entirely within the San Diego Bay Watershed and constitutes approximately 1.6 percent of its total area. More specifically, the City is located within two sub-watersheds: Sweetwater and Pueblo San Diego. The majority of the southern part of National City drains to the Sweetwater River and ultimately discharges into San Diego Bay. La Paleta Creek (also known as 7th Street Channel) drains the northern part of the City and also discharges into San Diego Bay, while a very small western portion of the City drains directly to the San Diego Bay shoreline. Nearly all areas of the City that drain directly to San Diego Bay are within the San Diego Unified Port District. Lastly, the central portion of the City drains to Paradise Creek, a small salt marsh creek, which then discharges into the Sweetwater River. Watersheds in the City are shown in Figure 1-2.

San Diego Bay is listed in the 2008 CWA Section 303(d) for polychlorinated biphenyls (PCBs) based on fish tissue analyses. The shorelines at 7th Street Channel and at the 24th Street Marine Terminal are listed as impaired for benthic community effects and sediment toxicity. La Paleta Creek is listed as impaired for copper and lead. Paradise Creek is listed as impaired for selenium. Finally, Sweetwater River is listed as impaired for *Enterococcus,* fecal coliform, phosphorus, selenium, total dissolved solids, total nitrogen as N, and toxicity. Environmentally Sensitive Areas (ESAs) are also shown on Figure 1-2.

Figure 1-1
City of National City Land Use

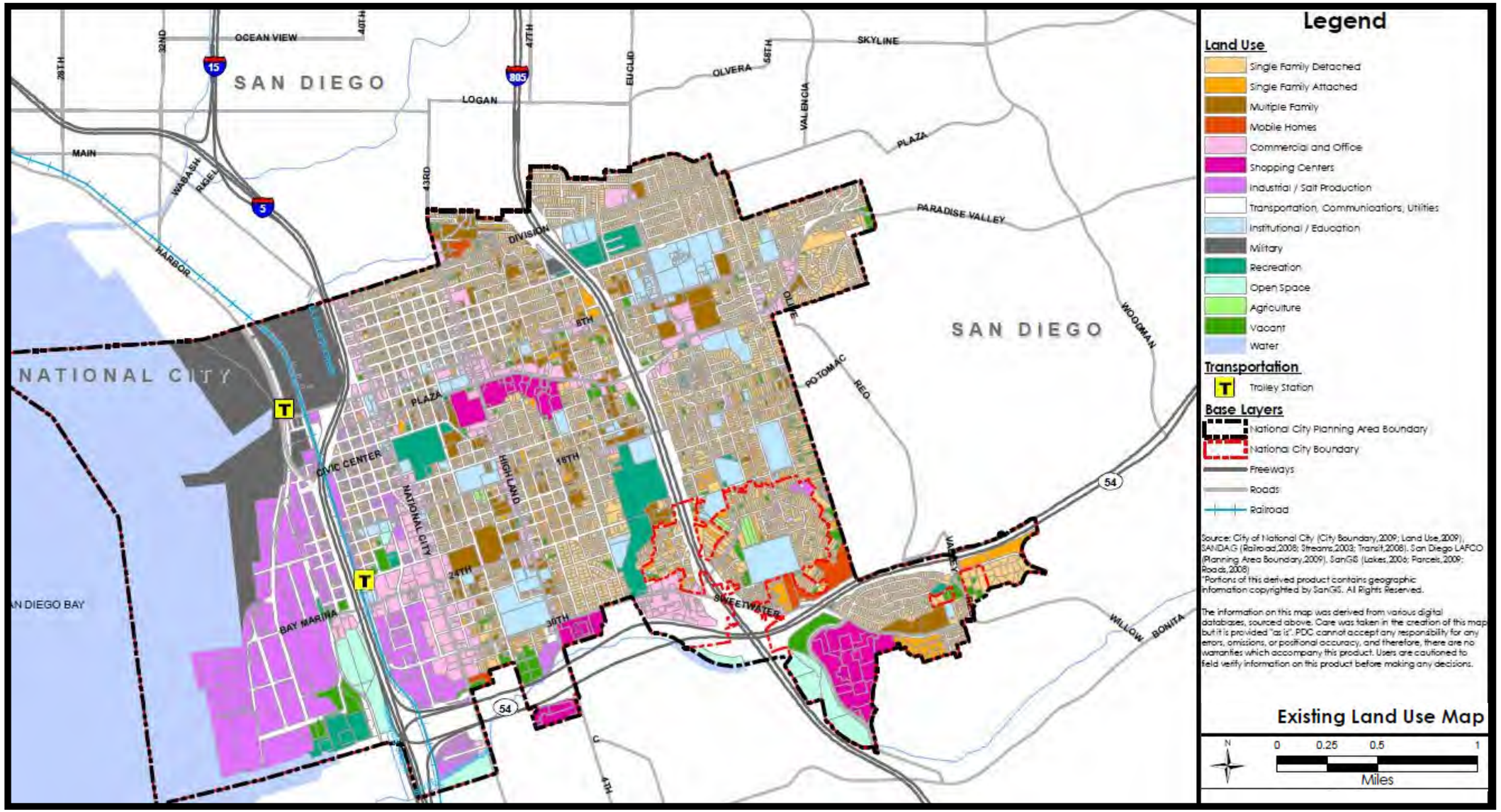

Source: City of National City General Plan, 2011

Figure 1-2
City of National City Watersheds

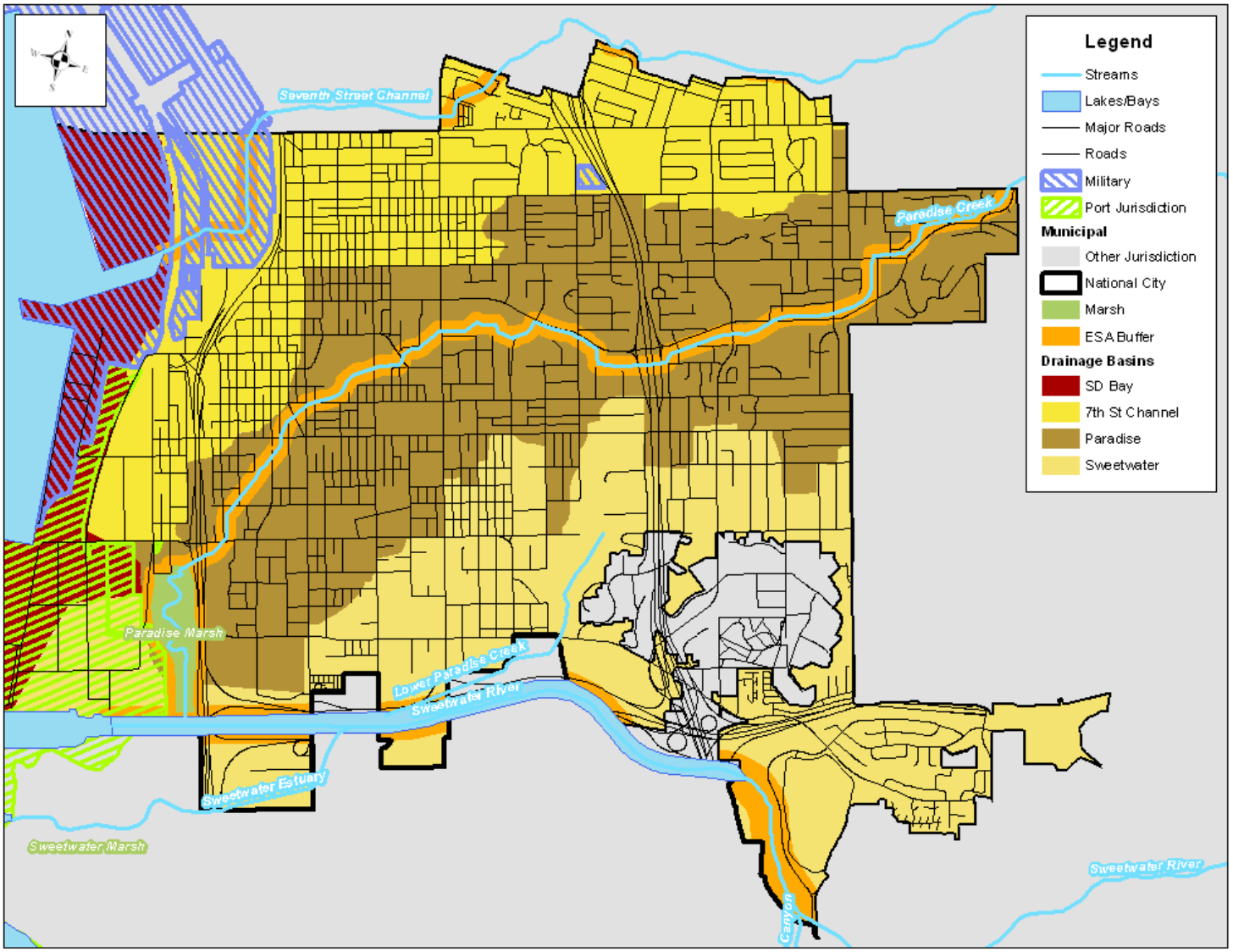

Note: Marsh boundaries based on land use data from SANDAG. The portion of the marsh west of I-5 and south of the Sweetwater River is not in the City's Jurisdiction. Base Data Sources: City of National City, SANDAG, SanGIS, Port of San Diego

0 0.5 1 Miles

1.2 Purpose and Objectives

The City's JURMP presents strategies to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The JURMP describes various programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. This JURMP Annual Report has been prepared to document the implementation of the City of National City's JURMP during the 2011/2012 reporting period.

1.3 Report Organization

This report follows the standard reporting outline jointly developed by the Copermittees and submitted to the RWQCB in July 2007. The following sections are included in the JURMP Annual Report.

Section 1	**Introduction**
Section 2	**Development Planning Component**
Section 3	**Construction Component**
Section 4	**Municipal Component**
Section 5	**Industrial and Commercial Component**
Section 6	**Residential Component**
Section 7	**Illicit Discharge Detection and Elimination Component**
Section 8	**Education Component**
Section 9	**Public Participation Component**
Section 10	**Fiscal Analysis Component**
Section 11	**Effectiveness Assessment Component**
Section 12	**Special Investigations**
Section 13	**Non-Emergency Fire Fighting**
Section 14	**JURMP Revisions**
Section 15	**Conclusions and Recommendations**
Section 16	**References**

Each section includes all components required by the standard JURMP Annual Report format. In some cases, additional subsections within the standardized sections have been added to provide a more detailed explanation of the City's activities during the reporting period. For example, in this introduction section, the standard reporting format only includes subsections 1.1 and 1.2. Background, subsection 1.1, has been divided into Regulatory Background, subsection 1.1.1, and City Setting, subsection 1.1.2, for clarity.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

The development planning component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of pollutants from development projects to the MEP and by managing the increases in runoff from development projects that have the potential to negatively affect downstream water bodies. During the 2011/2012 fiscal year, the City accomplished these goals through implementation of its JURMP document.

2.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2011/2012 reporting period are presented in the following bulleted list. The remainder of this section provides more detail about the City's implementation of this component of its storm water program.

- Distributed the City's development requirements checklist to projects applying for permits.
- Continued to utilize the City's SUSMP database to track Priority Development Projects within the City's jurisdiction and the parties responsible for BMP maintenance.
- Obtained verification of BMP maintenance from completed Priority Development Projects on the City's treatment control BMP inventory.
- Conducted maintenance inspections of treatment control BMPs at 18 completed development projects in the City.

A list of development projects subjected to SUSMP requirements in 2011/2012 is available in Table 2-1. A comparison of the number of inspections performed and the requirements of the Municipal Permit can be found in Table 2-2. SUSMP projects that were completed after inspection and maintenance verification actions had been performed for the 2011/2012 inventory are listed in Table 2-3. Details of treatment control BMP inspections and related follow-up actions are provided in Table 2-4.

2.2 LAND USE PLANNING

2.2.1 BACKGROUND

The City's General Plan was last updated in 2011 and contains water quality and watershed protection principles in its Conservation and Sustainability Element. The comprehensive principles established in 1996 and updated in 2011 provide an ample

framework for implementing the requirements of the current Municipal Permit, and no changes to these policies were necessary during the reporting period.

2.2.2 Source Characterization

The City's General Plan contains established restrictions on the types of new development projects based on their planned land uses to ensure public safety and limit negative impacts to the surrounding environment. No changes to development restrictions in the City's General Plan for storm water purposes were implemented during the reporting period.

2.2.3 Best Management Practice Requirements

Please refer to the City's updated JURMP document for a list of the water protection policies included in the City's General Plan. These policies remained the same throughout the reporting period.

2.2.4 Program Implementation

The City implemented its water protection-related land use policies during the reporting period mainly through the City's Municipal Code. The City last updated its SUSMP Manual, a formatted guidance manual based on the regional Model SUSMP document, in January 2011. The City's SUSMP Manual is an uncodified appendix to Chapter 14.22 of its Municipal Code. The updates made at that time were consistent with the regional Hydromodification Management Plan (HMP) document, prepared by the Copermittees and adopted by the RWQCB in July 2010, and the updated Model SUSMP. The regional HMP document was also added as an appendix to the City's SUSMP Manual. The updated City of National City SUSMP Manual is available on the City's website (http://www.nationalcityca.gov/) on the Storm Water section of the Engineering Division webpage.

Details on how the City implemented its established water protection policies through its environmental review process and its development project approval and verification processes during the reporting period are provided in Sections 2.3 and 2.4 of this JURMP Annual Report document.

2.3 Environmental Review Process

The City's current environmental review process is detailed in the City's updated JURMP. The overall structure of the review process remains the same as in previous reporting years. No changes to the City's environmental review process have been made since the submittal of the updated JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The approval and verification process implemented during 2011/2012 followed the process described in the City's updated JURMP. Details on the different aspects of the process are described in the sections below.

2.4.2 Source Characterization

The different priority pollutants, sources, and activities associated with development projects within the City are addressed through the implementation of the City's SUSMP Manual, which contains the City's SUSMP regulations. The City's SUSMP Manual derives its authority from Municipal Code Chapter 14.22. Projects subject to SUSMP regulations are identified by completion of applicability checklists. More detail about this process is provided in Section 2.4.4.2.

2.4.3 Best Management Practice Requirements

The City last updated its SUSMP requirements for development projects in January 2011, as described in Section 2.2.4 above. The BMP requirements for development projects did not change during 2011/2012.

2.4.4 Program Implementation

During the 2011/2012 fiscal year, the City required implementation of its BMP requirements for all development projects through education, a comprehensive development project approval process, and the treatment control BMP inspection and maintenance verification program.

2.4.4.1 Outreach and Staff Training

The City trains staff involved in the planning and review of development projects within the City and works closely with the development community to communicate its development requirements throughout the entire approval process. Details on trainings conducted and educational materials developed and distributed related to new development during the reporting period can be found in Section 8 of this JURMP Annual Report document. In addition, based on results from the first years of the program, distribution of maintenance verification letters to parties responsible for maintenance of treatment control BMPs at completed projects seems to be increasing the level of knowledge of regulated parties.

2.4.4.2 URBAN RUNOFF APPROVAL PROCESS FOR DEVELOPMENT PROJECTS

All development projects that required City permits were subject to the City's urban runoff approval process as detailed in the City's JURMP. Forms completed by project applicants are kept with the project's file at the City for future reference. As discussed in the City's JURMP, the City required all developers applying for construction and building permits to complete a "National Pollutant Discharge Elimination System (NPDES) Project Applicability Form" (NPDES Checklist) that guides project applicants to submit proper documents to the City for review. The checklist was last updated during the 2010/2011 reporting period at the same time as the BMP Manual. The current NPDES Checklist is included with this report as Attachment 2.1.

All development projects determined to be Priority Development Projects after completing the SUSMP Checklist were required to prepare a Storm Water Management Plan (SWMP) or Water Quality Technical Report (WQTR) to meet the City's SUSMP requirements. As part of the JURMP update, the City also developed a SWMP self checklist to be used by the SWMP preparer, which was included as an attachment to the updated JURMP. In the past, the majority of deficiencies found in document reviews were missing information or sections not having enough detail about proposed BMPs. Table 2-1 lists the development projects subject to the City's SUSMP requirements during the 2011/2012 reporting period, the number of document reviews for each project, and the current approval status of each. Public Priority Development Projects are marked as Capital Improvement Projects (CIP) in the table.

Table 2-1
Development Projects Subject to SUSMP Requirements During 2011/2012

#	Project Name	Location	Project Type	Number of Reviews during 11/12	Approved during 11/12
1	8th Street Smart Growth Revitalization Project (CIP)	8th Street, between Harbor Drive and Highland Avenue	Priority	1	Yes
2	Addisyn Park Apartments	844-846 Palm Avenue	Priority	2	No
3	Coolidge Avenue Pedestrian Improvements (CIP)	Coolidge Avenue from Plaza Boulevard to 18th Street and along 18th Street from Harding Avenue to Hoover Avenue	Priority	2	Yes
4	Costco CWI	1001 West 19th Street	Priority	2	Yes
5	D Ave and East 12th St Roundabout	D Ave and East 12th St Roundabout	Priority	1	No
6	Fresh and Easy	Plaza Boulevard and N Avenue	Priority	2	No
7	Park Lofts	East 16th Street and National City Boulevard	Priority	1	No
8	Plaza Boulevard Center	Intersection of Plaza Boulevard and Palm Avenue	Priority	2	Yes

Note: After the initial review, some subsequent reviews were quicker informal checks to verify that the required corrections were made.

No projects were granted waivers from SUSMP requirements, and the City does not anticipate granting waivers in the future. The City makes every effort to encourage development projects to select treatment controls with high and medium pollutant removal efficiencies and does not expect to approve any projects with low removal efficiency BMPs. However, if projects proposing a low removal efficiency treatment control BMP with a defensible infeasibility analysis are approved, details of those projects and their feasibility analyses will be reported as required in future JURMP annual reports. None of the approved projects were allowed to propose low removal efficiency BMPs.

The Plaza Boulevard Center development is one example of a Priority Development Project that was conditioned to meet SUSMP requirements in 2011/2012. The project proponent had originally proposed vegetated swales as treatment measures and had failed to account for some areas of the site. Through the City's rigorous review process, and over the course of at least five submittals spanning multiple fiscal years, the project proposed bioretention facilities and directed all onsite runoff to the BMPs.

Hydromodification Management Plan

During the reporting period the Copermittee Land Development Workgroup met to discuss HMP implementation issues and provide updates on the status of consultant work products. The City of National City continued participation in the workgroup meetings. The City incorporated the final regional HMP requirements into its local development requirements in January 2011, as mentioned in subsection 2.2.4 above. The City posted information about the new HMP requirements on its website to educate project proponents.

All of the projects approved during 2011/2012 were redevelopment projects that reduced impervious area and did not increase flow rates to any discharge point; therefore they were not subject to HMP requirements. All projects currently under review are subject to the existing hydromodification requirements unless they qualify for one of the exemption categories. This will be evaluated during review and reported in the applicable reporting period.

BMP Installation Verification

During the course of the 2011/2012 reporting period, after maintenance verification letters had been sent out during the summer of 2011, the City identified recently completed Priority Development Projects within the City's jurisdiction to be added to the treatment control BMP inventory. When a project is completed, the City checks for BMPs prior to occupancy using the site's plans and a BMP inspection form generated after the WQTR is approved, assigns the project a Threat to Water Quality (TTWQ) priority, and then adds it to the inventory of projects subject to the City's inspection and annual maintenance verification program the following fiscal year. This process helps the City focus its inspection resources on sites more likely to have maintenance deficiencies, as maintenance deficiencies are generally less likely at sites with recently installed BMPs. A table of the projects identified after distribution of verification letters is presented in Table 2-3 at the end of this JURMP Section. These projects will be added to the City's treatment control BMP inventory in 2012/2013.

2.4.4.3 Treatment Control BMP Inspection and Maintenance Verification Program

2011/2012 Annual Maintenance Verification Program

The Municipal Permit requires annual verification of operation and maintenance of treatment control BMPs installed within the City's jurisdiction.

Using the property owner names and addresses recorded in the City's BMP database, BMP maintenance verification forms were mailed to all the private projects included in the City's BMP database in early 2011/2012, prior to the start of the wet season. Maintenance verification forms were also completed for all municipal treatment controls at CIP projects on the City's inventory. Through this process, the City updated contact information that was no longer accurate due to transfer of ownership and provided additional guidance on how to properly maintain BMPs, as needed. The City completed

research to update contact information and worked with management companies to educate them on the requirements. Because not all of the projects' responsible parties responded promptly, the City sent out follow-up correspondences, two Notices of Violation (NOV) and one citations during this process as necessary to achieve compliance. Through the City's maintenance verification efforts, responses were received from all projects.

Operation and Maintenance Inspections

During the 2011/2012 fiscal year, the City conducted inspections of projects with treatment control BMPs in accordance with the inspection frequencies outlined in the Municipal Permit. Table 2-2 provides a summary of the number of inspections performed and how these met the requirements of the Municipal Permit; also note that all high TTWQ sites were inspected prior to October 1, 2011.

Table 2-2
2011/2012 Inspection Numbers versus Municipal Permit Requirements

Site Class	Number of Sites	Full BMP Assessments	Percent Inspected	Permit Requirement	Requirement Met
All Inventoried Sites	33	18	55%	20%	**Yes**
Sites with Drainage Inserts	22	12	55%	50%	**Yes**
High TTWQ sites	8	8	100%	100%	**Yes**

The City continued to use BMP inspection forms and the treatment control BMP tracking database. During the reporting period, location coordinates were also collected for the BMPs inspected, and this location information was added to the electronic database. Table 2-4 at the end of this section lists the development projects inspected during the reporting period, a brief description of inspection findings, and, if applicable, any follow-up actions taken. During 2011/2012, the City issued a total of eight NOVs and two administrative citations to development projects and worked with responsible parties as necessary to achieve compliance. The BMP types proposed at these sites and the sites' TTWQ priorities are included in the City's treatment control BMP inventory, which is included in Appendix A.1 of this JURMP Annual Report.

During the 2011/2012 reporting period no sites were observed to present a significant threat to human health or the environment during inspections, so none were reported to the RWQCB.

2.5 Development Planning Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

2.6 Program Review and Modification

After the development of the 2011/2012 treatment control BMP inventory, the prioritization process was re-evaluated and revised. The revised process was used to prioritize the recently completed projects shown in Table 2-3. The entire inventory will be reprioritized during the next reporting period. Figure 2-1, on the next page, shows a flow chart used for water quality threat prioritization of sites with treatment control BMPs. Page 4-15 of the City's JURMP was revised accordingly.

Figure 2-1
Water Quality Threat Prioritization of Sites with Permanent Treatment Control BMPs

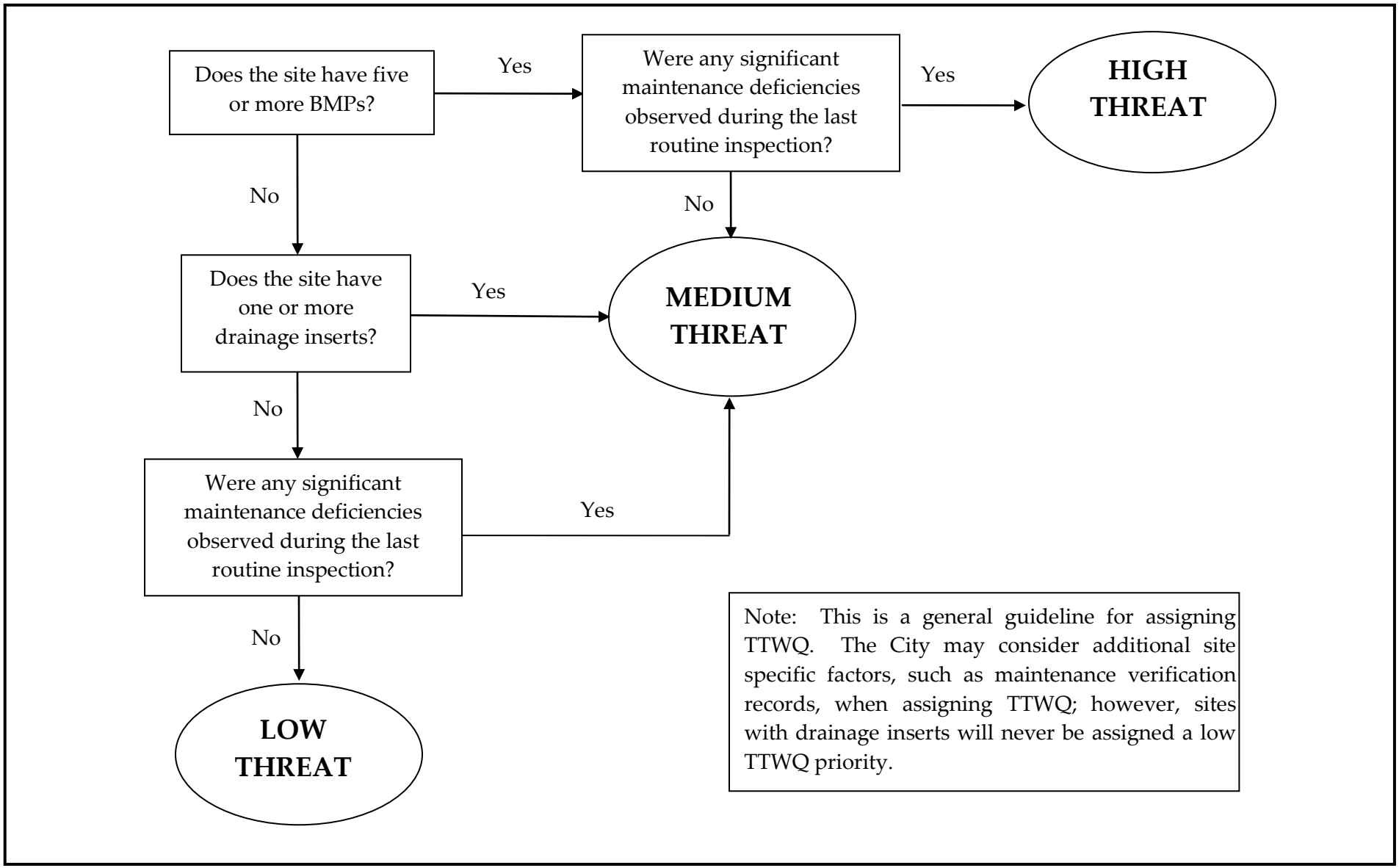

Table 2-3
SUSMP Projects Completed After Establishment of 2011/2012 Inventory

#	Project Name	Project Address	Development Type	BMPs	Receiving Water body	Year Completed	TTWQ
1	Bible Baptist Church	2432 E 18th Street	Commercial	Bioretention facilities and infiltration facilities	Lower Sweetwater River	2011/2012	Medium
2	Centro Condominiums	45 East 12th Street	Residential	Hydrodynamic separator	Paradise Creek	2011/2012	Low
3	Centro Condominiums Public Street (CIP)	A Avenue at 12th Street	Residential	Filter insert	Paradise Creek	2011/2012	Medium
4	Costco CWI	1001 W 19th Street, Suite B	Commercial	Media filter	La Paleta Creek/ 7th Street Channel	2011/2012	Low
5	Plaza Boulevard Center	1540 E Plaza Blvd	Commercial	Bioretention facilities	Paradise Creek	2011/2012	Low

Table 2-4
2011/2012 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
1	940 W 19th Street	8/22/2011	Vegetated swale was observed to need maintenance.	Communicated issues to responsible party, who submitted photographs to verify maintenance.	Resolved
2	Jack In The Box	10/18/2011	One insert was missing rubber gasket on one side; other side of insert missing half of rubber gasket, creating a gap between catch basin wall and insert.	A NOV was sent to the responsible party with a description of deficiencies, and a follow-up visit was conducted in 12/2011 where corrections were verified.	Resolved
3	Marina Gateway (Hotel)	8/22/2011	Hydrodynamic separator was observed to need maintenance. The condition of the vegetated swales was adequate.	Communicated issues to responsible party, who hired contractor to conduct appropriate maintenance. Maintenance report provided.	Resolved
4	Paradise Village	8/22/2011	Hydrodynamic separator was observed to need maintenance.	Communicated issues to responsible party, who hired contractor to conduct appropriate maintenance. Maintenance report provided.	Resolved
5	Plaza Bonita Mall Expansion	8/22/2011	One hydrodynamic separator was observed to need maintenance. Two filter inserts were observed to need maintenance and one filter insert was missing. The condition of the bioretention facility was adequate.	A NOV was sent to the responsible party with a description of deficiencies. The responsible party hired a contractor to conduct appropriate maintenance and the filter insert was replaced. Maintenance report provided.	Resolved
6	Hanson's National City Batch Plant	9/12/2011	One filter insert was missing. The condition of the retention ponds was adequate.	Communicated issue to responsible party, who submitted photos to verify installation of the insert.	Resolved

Table 2-4 (Continued)
2011/2012 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
7	Paradise Creek Park	9/12/2011	The condition of the filter insert was adequate.	NA	NA
8	Penske Truck Leasing	9/12/2011	The condition of all filter inserts was adequate.	NA	NA
9	WalMart	9/12/2011	The condition of the hydrodynamic separator was adequate.	NA	NA
10	AutoZone	9/13/2011	The condition of the filter inserts and media filters was adequate.	NA	NA
11	Pacific View Estates	9/13/2011	Hydrodynamic separator was observed to need maintenance.	Communicated issues to responsible party, who hired contractor to conduct appropriate maintenance. Maintenance report provided.	Resolved
12	Plaza City Apartments	9/13/2011	The condition of the hydrodynamic separator was adequate.	NA	NA
13	Walgreens	9/13/2011	Two drainage inserts were observed in need of maintenance.	Communicated issues to responsible party and conducted a follow-up inspection in 11/2011 where corrections were verified.	Resolved
14	WestAir Gases	9/13/2011	All BMPs (i.e. filter insert, bioretention facility, and vegetated swale) were observed in need of maintenance.	Communicated issues to responsible party, who provided photographs to verify maintenance. The most recent follow-up inspection (6/29/2012) and maintenance records indicated issues were resolved.	Resolved

Table 2-4 (Continued)
2011/2012 Treatment Control BMP Inspections and Follow-Up Actions

#	Project	Inspection Date	Inspection Findings	Follow Up	Resolution Status
15	Harbor View Condominiums	9/15/2011	Filter insert was observed in need of maintenance. The condition of the media filters and infiltration facility was adequate.	Communicated issues to responsible party, who submitted maintenance verification certifying BMP replacement.	Resolved
16	Mariposa Walk	9/15/2011	One filter insert was missing and some were observed in need of maintenance.	Based on the most recent inspection (August 2012) one BMP was replaced. City is reviewing options for replacing existing BMPs with a more effective BMP.	In Progress
17	Paradise Walk Townhomes	9/15/2011	Eight filter inserts were observed in need of maintenance.	Communicated issues to responsible party. The most recent follow-up inspection (6/29/2012) and maintenance records indicated that issues were resolved.	Resolved
18	Sweetwater Town & Country Mall	9/15/2011	Three filter inserts were observed in need of maintenance.	Communicated issues to responsible party, who demonstrated that the ongoing cleaning program would conduct appropriate maintenance. Maintenance report provided.	Resolved

3.0 CONSTRUCTION

3.1 INTRODUCTION

The construction component of the City's JURMP aims to improve overall storm water quality by reducing the discharge of sediment and other pollutants from construction activities to the MEP. During the 2011/2012 fiscal year, the City accomplished these goals through implementation of its JURMP document.

3.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the development planning component during the 2011/2012 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- Distributed storm water requirements applicability checklists to all development projects in the City's jurisdiction.
- Conducted plan checks of erosion control plans and Storm Water Pollution Prevention Plans (SWPPPs) to ensure construction projects planned to comply with the City's minimum BMP requirements.
- Distributed copies of the Construction BMP Fact Sheet with all approved grading permits.
- Conducted 66 construction inspections in 2011/2012 per the frequency in the updated JURMP.
- Issued 28 written warnings, two NOVs, and two citations to construction sites in response to BMP deficiencies with respect to the City's minimum BMP requirements.
- Conducted pre-construction meetings with all large project developers.

3.2 SOURCE CHARACTERIZATION

An inventory of active construction projects during the reporting period is presented in Appendix A.2 of this JURMP Annual Report document. The City's inventory was maintained throughout the reporting period by entering permit data into the City's online database and updating the inventory table on a continuous basis. New construction projects were added to the inventory at the start of construction, and projects were removed from the inventory after construction was completed. Since construction projects were continually being added and removed throughout the fiscal year, inventory updates were usually performed more frequently than the minimum once per month.

3.3 Updates to Ordinances and Approval Processes

No changes were made to the City's Grading Ordinance during the reporting period that would affect storm water requirements. Details on any changes to the City's approval process during the reporting period are discussed in Section 3.5 of this document.

3.4 Best Management Practice Requirements

The City's construction and grading requirements have not changed since the recent update to the City's JURMP document. A complete list of required construction BMPs is included in the City's BMP Manual, which is an attachment to the City's JURMP. The City continued to assess the implementation and effectiveness of required BMPs at construction sites in 2011/2012.

3.5 Program Implementation

The City implemented the construction component of its JURMP throughout the reporting period through education and staff training, its comprehensive construction and grading approval process, and its construction inspection program, as detailed below.

3.5.1 Education and Staff Training

Education and staff training implemented during the 2011/2012 fiscal year focused on reinforcing the changes made to the City's construction requirements at the time of the City's JURMP update to both City staff and to the construction community. Construction site supervisors and City staff are familiar with the current General Construction Permit (effective July 1, 2010). Construction project proponents were educated in BMP requirements during the approval process described below. Please see Section 8 of this JURMP Annual Report document for details on training and educational materials related to construction and grading activities.

3.5.2 Construction and Grading Approval Process

During the reporting period, City personnel verified that all construction projects planned to implement the City's minimum BMP requirements prior to issuing any building or grading permits. The City conducted its grading approval process as described thoroughly in Section 5 of the City's updated JURMP. The City requires grading construction projects to submit erosion control plans that indicate what BMPs are to be used at the site. These erosion control plans are reviewed by the City to ensure the site plans meet the City's minimum construction BMP requirements. The City also reviews SWPPPs for sites greater than one acre that are required to obtain coverage under the State of California Construction General Permit, 2009-0009-DWQ (Construction General Permit). Additionally, the City arranged pre-construction

meetings with all developers of large projects to ensure an understanding of construction BMP requirements. Approved forms and documents completed by project proponents are kept with each project's file at the City for reference. A Construction BMP fact sheet, known as the "Blue Sheet" within the City because the copies printed are on blue paper, was also distributed with all construction permits issued (Attachment 3.1). Proper implementation of the minimum BMPs listed on the fact sheet was a condition of approval for all permits issued by the City during the 2011/2012 fiscal year.

During the reporting period, none of the City's active construction sites were larger than 17 acres; therefore the maximum disturbed area limitation did not apply. However, all construction sites were still required to limit exposed cleared or graded areas to a size that could be protected prior to a rain event, as prescribed in the City's seasonal BMP requirements.

Criteria for determining when advanced treatment is required are detailed in the City's JURMP. During the reporting period, the City's minimum BMP requirements were adequate at controlling sediment discharges at all of the active construction sites within the City's jurisdiction, and advanced treatment methods were not required at any construction sites.

3.5.3 Inspection of Construction Sites

Appendix A.2 of this JURMP Annual Report contains a list of construction projects that were active during the reporting period, along with their assigned TTWQ priorities, the number of weeks the site was active within the rainy season, the numbers of inspections conducted during the wet and dry seasons, the number of follow-up inspections and complaint investigations, and the total number of inspections for each site. In total, 66 construction inspections were performed at 12 construction sites during 2011/2012.

Construction inspections conducted during the reporting period were performed as described in the City's updated JURMP. Key components of the inspections include checks for coverage under the General Construction Permit during the initial inspection and assessments of compliance with the City's BMP and discharge requirements during all inspections. Responsible parties at the sites are educated as needed during inspections. Copies of the inspection forms are kept on file at the City. A copy of the City's construction site information and inspection form is available as Attachment 3.2.

During the wet season, the City conducted bi-weekly inspections at high TTWQ construction sites and at least monthly inspections at medium TTWQ sites. Low TTWQ sites were inspected on an as needed basis. Typically, storm water only inspections are not conducted at low TTWQ sites unless City staff note compliance problems or a complaint is called into the City's storm water hotline. Construction inspectors have been trained in the City's minimum construction BMP requirements, and they check BMP implementation at low TTWQ construction sites during their inspections. Any sites found to have problems with BMP implementation are forwarded to the City's Storm Water Compliance Inspector. During the reporting period, two low TTWQ

construction sites, Costco Optical Lab and Hilltop View Homes, were inspected as needed to verify changes in activity. These sites are indicated on the City's inventory in Appendix A.2.

When any violations were noted during routine, follow-up, or complaint investigation inspections, these violations were noted on the project's inspection form, and the sites were given a list of corrective actions necessary to fix the observed violation. During 2011/2012 there were 28 instances of non-compliance observed where enforcement action needed to be taken. In many cases, these issues were resolved while the inspector was still on site. When necessary, appropriate enforcement actions were taken, and City staff followed up with the site until compliance was achieved. Details on the enforcement actions taken for construction sites during the implementation period are described below.

3.5.4 Enforcement Measures

Table 3-1 includes the number of violations and enforcement actions taken during the reporting period in response to violations of the City's minimum construction BMP requirements. Enforcement actions are administered in an escalating manner as described in the City's updated JURMP. Again this year, the City sent inspection results by email to the responsible party with attached photos of improper BMP implementation. This provided clearer and quicker communication between the inspector and offsite construction site managers or owners and allowed for quicker resolution of observed deficiencies.

Table 3-1
Summary of Construction Enforcement Actions Taken

Written Warnings	Notices of Violation	Administrative Citations	Stop Work Orders
28	2	2	0

No Stop Work Orders were issued in 2011/2012, but the City's JURMP notes that if a Stop Work Order is issued, the Regional Board will be notified within five working days. During the reporting period, only one complaint was received by the City's storm water hotline regarding construction site activities. Further details regarding complaint investigations and all enforcement actions taken during the reporting period can be found in Section 4 of this document.

None of the violations observed at construction sites during the reporting period were found to endanger human health or the environment. The City was able to address these violations through the City's established enforcement process, and it was not necessary to report any of these sites to the RWQCB.

3.6 Construction Activities Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

3.7 Program Review and Modification

No modifications were made to the City's construction component during 2011/2012.

4.0 MUNICIPAL COMPONENT

4.1 INTRODUCTION

Throughout 2011/2012, the City of National City continued to manage municipal areas and activities to reduce discharges of pollutants to the MS4 to the MEP. As discussed in detail in the City's JURMP, the City owns and operates a variety of municipal facilities and activities. The majority of municipal areas in the City are comprised of administrative buildings, fire stations, public parks, and recreation and public works facilities. Municipal activities conducted by the City include, but are not limited to, graffiti abatement, building maintenance, landscaping activities, street sweeping, street and sidewalk repair, and MS4 and sanitary sewer system maintenance. Information about the City's prioritized street sweeping program can be found in Table 4-1, and information about the City's MS4 maintenance program can be found in Table 4-2.

4.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the municipal component during the 2011/2012 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City inspected all high TTWQ fixed municipal facilities.
- The City removed a total of 985 tons of sediment and debris from street sweeping activities.
- The City removed a total of 12.6 tons of trash, sediment, and other debris from standard MS4 cleaning activities.
- The City spent 1,931 man-hours maintaining sanitary sewer lines.
- The City inspected several special events that occurred in the City during 2011/2012 to ensure appropriate BMP implementation and clean up.
- The City continued operating a Storm Water Hotline to receive and address complaints. Enforcement actions resulting from complaint investigations received through the Storm Water Hotline, City website, and other City departments are noted in Table 4-3.

4.2 FIXED FACILITIES

4.2.1 BACKGROUND

The City owns and operates a variety of fixed municipal facilities. As mentioned in the City's JURMP, fixed municipal facilities have been grouped under one category, fixed

facilities. This is because these facilities receive routine inspections as part of the City's municipal program, making program implementation generally similar.

4.2.2 Source Characterization

All fixed facilities are included on the City's municipal inventory, which is included as Appendix A.3. The designations of pollutants potentially generated by municipal facilities on the inventory are based on the pollutant loading potentials shown in Table 6-1 of the City's JURMP. TTWQ prioritizations are assigned via the process laid out in the flow chart shown in Figure 6-1 of the City's JURMP.

4.2.3 Best Management Practice Requirements

The City continues to implement and assess the effectiveness of BMPs at all fixed municipal facilities. As mentioned in the City's JURMP, the City uses the California Stormwater Quality Association (CASQA) Municipal BMP Handbook to establish appropriate BMPs for fixed municipal facilities. Table 6-2 in the City's JURMP describes the CASQA fact sheets that are used for specific facility types.

The City continues to implement strict minimum BMP requirements for the use and management of pesticides, herbicides, and fertilizers, as described in the City's JURMP. The BMP requirements have not been changed since the City's JURMP was updated in March 2008.

As described in the City's JURMP, City public works employees, fire station employees, and employees at other fixed facilities in the City continue to implement BMPs appropriate to the facility type. City fire response personnel continue to be trained in implementing BMPs for non-emergency fire fighting activities as described in Section 3 of the City's JURMP. There were no changes in BMP requirements for any fixed facilities during 2011/2012.

4.2.4 Program Implementation

As mentioned above, the City's BMP requirements for fixed facilities have not changed since the development of the revised JURMP. Some notable examples of implementation of those BMPs are provided below.

Parks and Recreational Facilities
During 2011/2012, the City used fertilizers, herbicides, and pesticides sparingly at parks and other City-owned landscaped areas. All chemicals are used and stored in accordance with the City's JURMP BMPs. The City routinely cleans parks each Monday after weekend use.

Public Works Facilities, Fire Stations, Other Fixed Facilities
As previously mentioned, City personnel continued to implement appropriate BMPs for municipal fixed facilities as described in the City's JURMP. BMPs are also implemented during regular maintenance activities at fixed facilities (i.e., landscaping, building

maintenance, etc.) as necessary. Parking facilities associated with fixed municipal facilities were swept quarterly during 2011/2012, and the large paved areas at the City's Public Works Yard were swept weekly. Public Works employees continued to proactively implement a SWPPP at the Public Works Yard, though it is not a requirement. Public Works employees also continued to maintain the BioClean filter inserts on the property as needed.

Municipal Inspections

All high TTWQ fixed municipal facilities received an annual routine inspection in 2011/2012. The City's inspection approach, as described in the JURMP, was implemented for all municipal inspections conducted in 2011/2012. The City's municipal inspection form is included as Attachment 4.1. All inspections conducted at municipal facilities are tracked using a Microsoft Access database. Table 4-4 at the end of this section lists all high TTWQ municipal fixed facilities requiring inspection in 2011/2012, the date the inspection was performed, and recommended corrective actions from the inspection. Only minor corrective actions were noted, and no follow-up inspections were necessary to make corrections.

In addition to one annual inspection by other City personnel, public works personnel inspect both the Public Works Yard East and Public Works Yard West weekly; street crew personnel inspect the Public Works Yard West and the equipment maintenance crew inspects the Public Works Yard East. Inspection forms are completed and submitted to the City's Storm Water Compliance Inspector.

4.3 Roads, Streets, Highways, and Parking Facilities

4.3.1 Background

The City conducts regular maintenance of roads, streets, and parking facilities in the City to control pollutants such as sediment, metals, litter, and debris. Note that there are no highways within the City's jurisdiction.

4.3.2 Source Characterization

Roads and streets are included as one entity on the City's municipal inventory, which is included in Appendix A.3.

4.3.3 Best Management Practices

Street sweeping is the City's primary BMP for roads, streets, and parking facilities. Other BMPs are chosen as needed based on the CASQA Municipal Handbook. The City's sweeping frequency is outlined in the JURMP and described in the following subsection. There were no changes to the BMPs implemented for roads, streets, and parking facilities in 2011/2012.

4.3.4 PROGRAM IMPLEMENTATION

During 2011/2012, the City swept a total of 15,124 curb miles, removing approximately 985 tons of debris. Per the requirements of the Municipal Permit, high priority streets in the City are swept at least every two weeks, and medium priority streets in the City are swept at least monthly. The City has not designated any streets in the City as low priority. The City does not maintain any stand-alone parking facilities that are not associated with municipal facilities. Seventeen parking facilities that are associated with municipal facilities are maintained and swept during regular maintenance activities at the respective municipal facility, and are considered part of the municipal facility on the inventory. Table 4-1, below, describes the areas assigned high and medium priorities, and the associated sweeping frequency. The table also includes the sweeping frequency for areas of fixed municipal facilities and the associated parking lots.

As a means to address priority pollutants in the San Diego Bay Watershed, the City continued to conduct additional sweepings of all streets in the City. High priority streets were actually swept between daily and weekly during 2011/2012; medium priority streets were actually swept every two weeks during 2011/2012.

Table 4-1
Street Sweeping Prioritization and Frequency

Category	Description	Approximate Mileage of Route	Sweeping Frequency
High	8th Street, National City Boulevard, Highland Avenue, Plaza Boulevard	11.8 miles	At least every two weeks
Medium	All other streets in the City	98.2 miles	At least once per month
Fixed Facilities	17 Parking lots associated with municipal fixed facilities	N/A*	Quarterly
Fixed Facilities – Parks	Parking lots associated with parks	N/A*	Every two weeks
Fixed Facilities – PW Yard	Public Works Operation Center	N/A*	Weekly
Total Amount of Debris Collected from Street Sweeping Activities: 985 tons			

* Mileage data is not available for the swept area of parking facilities associated with municipal facilities, and the PW Yard. Mileage accrued while sweeping these facilities is included in the total mileage.

Inspections

Because trash, debris, and sediment that have accumulated on City streets are identified and cleaned up via street sweeping, additional inspections beyond this effort are not necessary.

4.4 MS4

4.4.1 Background

The City's extensive storm water conveyance system is designed to collect and convey surface runoff to receiving waters to prevent flooding during a rain event. The City's MS4 consists of approximately 19 miles of inlets, pipes of varying materials, natural channels, concrete channels, culverts, and 751 catch basins and inlets.

4.4.2 Source Characterization

The City's MS4 as one complete entity is included on the City's high TTWQ municipal inventory (Appendix A.3).

4.4.3 Best Management Practices

The City maintains a strict MS4 maintenance and cleaning schedule. Maintenance and cleaning are conducted to keep the MS4 in good operating condition and remove any trash or debris that may otherwise be carried to receiving waters. As described in the City's JURMP, BMPs for MS4 maintenance activities are chosen based on the CASQA Municipal Handbook and did not change during 2011/2012.

4.4.4 Program Implementation

Throughout 2011/2012 the City has implemented a thorough MS4 inspection and cleaning schedule. The City continues to track municipal activities, such as MS4 channel cleaning, in a Microsoft Access database. MS4 maintenance logs are used to allow for the recording of detailed information regarding the various types of debris removed. The City inspected and cleaned all MS4 cleanout locations and open channel segments in 2011/2012, as described in Table 4-2, on the following page.

Table 4-2
MS4 Maintenance Data

MS4 Structure	Percent inspected and/or cleaned*	Percent of open channels found with anthropogenic litter	Amount of debris removed from cleaning activities
Catch Basins / Self-Cleaning MS4 Facilities	100%	N/A	16,582 pounds
Open Channels	100%	100%	20.92 cubic yards (8,368 pounds)
Drainage Inserts	100%	N/A	186 pounds
Total Debris Removed From MS4 Maintenance Activities: 12.6 tons			

* No structures were observed at least 33% of capacity during the reporting period. However, the City cleans out any structures, including self-cleaning structures, in which trash and debris is observed at the time of inspection.
** The weight of the material removed during channel maintenance activities was not recorded. Since trash was the most common item removed, a conversion factor of 400 pounds per cubic yard was used to estimate the total weight of the material removed.

The City's cleanout locations are access points to various sections in the City's MS4, so no additional pipe beyond the cleanout location is typically cleaned. The City uses a vactor truck to clean the MS4 line in the event of a spill. For example, during 2011/2012, a spill of paint and wash water was reported and successfully intercepted at the curb and gutter before reaching inlets to the City's MS4. See Table 4-5 for details.

During 2011/2012, the City continued to inspect the open channels in the City and remove trash and debris as necessary by hand. If litter or debris is observed during the routine inspections, it is removed immediately. Of debris removed from open channels, approximately 9,371 pounds of trash, 1,339 pounds of sediment, and 2,677 pounds of organic matter were removed over the course of the fiscal year. The total length of the channel segments inspected and cleaned by City staff is approximately 25,950 linear feet. Additionally, as part of Watershed Urban Runoff Management Program (WURMP) efforts that are beyond minimum required maintenance, the City continued to hire a contractor to do biweekly inspections and remove any observed trash from Paradise Creek by hand.

4.5 Sanitary Sewer System

4.5.1 Background

To reduce the possibility of a spill or leak caused by a malfunction of a component of the City's sanitary sewer system, the City conducts routine maintenance of the system. Routine inspection and maintenance of the sanitary sewer system works to reduce the

potential for a spill or sanitary sewer overflows (SSOs) and also helps prevent the infiltration of seepage from the sanitary sewer system to the City's MS4.

4.5.2 Source Characterization

The City maintains a system of public sanitary sewer pipes to convey wastewater from the City to be treated. The sanitary sewer system, as one complete entity, is included on the City's high TTWQ municipal inventory (Appendix A.3).

4.5.3 Best Management Practices

The City implements BMPs from the CASQA Municipal Handbook, as described in the City's JURMP, during sanitary sewer maintenance. There have been no changes to these BMPs during 2011/2012. The City inspects and maintains the sanitary sewer system as part of regular wastewater activities. The City clears blockages and repairs leaks as needed.

4.5.4 Program Implementation

The City seeks to eliminate seepage from the sanitary sewer system to the MS4 by routine preventative maintenance of both systems. Routine maintenance of both systems allows the City to find areas that are likely to become problems in the future and to make the necessary repairs/replacements before any larger issues arise. Approximately 70 linear feet of pipe were repaired or replaced during the reporting year. The City also continued to conduct flow metering throughout its sanitary sewer system to monitor for evidence of potential problems. A total of 1,931 man-hours were spent maintaining sanitary sewer lines during 2011/2012. Silt, grease, roots, and debris were the most common items removed from sanitary sewer lines during maintenance activities. A total of 19,803 pounds of such waste were removed from the sewer during 2011/2012. A total of 2,100 linear feet of sanitary sewer line was televised during 2011/2012 to determine if areas of the sanitary sewer were in need of maintenance or repair.

The City has also developed a Fats, Oils, and Grease (FOG) program that targets grease-producing facilities, such as eating establishments. The goal of the program is to reduce grease buildup in the sanitary sewer system, which can cause or contribute to SSOs.

The City maintains a Sanitary Sewer Management Plan which establishes procedures for responding to an SSO. At the end of 2011/2012 and into 2012/2013, the City's Public Works Department updated its SSO spill response procedures as part of an overall Sanitary Sewer Management Plan update process. During 2011/2012, three private lateral sewage discharges were reported to the State Water Resources Control Board (SWRCB); no sewage reached storm drain inlets.

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City conducts a variety of different mobile municipal activities, typically involving infrastructure maintenance, landscape maintenance, and graffiti removal.

4.6.2 Source Characterization

Power washing is no longer used by the Graffiti Removal sector of Neighborhood Services during graffiti removal activities. Therefore, graffiti removal was changed from the only high priority municipal activity on the inventory to a medium TTWQ in 2010/2011 (Appendix A.3). Infrastructure maintenance and landscape maintenance are also listed on the City's medium TTWQ municipal inventory.

4.6.3 Best Management Practices

The City implements BMPs for mobile activities as described in the City's JURMP and as applicable to the activity. City personnel are trained to implement BMPs for the specific activity in which they are involved. A more detailed discussion of BMPs for specific mobile activities is included in the City's JURMP; there were no updates to the BMPs implemented during mobile activities in 2011/2012.

4.6.4 Program Implementation

During 2011/2012, City personnel continued to implement BMPs during mobile municipal activities such as graffiti removal and landscape maintenance. In 2010/2011, the City continued to paint for graffiti removal instead of using power washing methods, reducing the threat to water quality. Since painting for graffiti removal is now the standard practice, the TTWQ status for graffiti removal was changed from high to medium last year. However, if power washing is conducted in the future, City personnel will collect any water generated and dispose of it properly, and the inventory will be updated to reflect the high TTWQ of power washing activities.

4.7 Special Events

4.7.1 Background

As detailed in the City's JURMP, a variety of different special events are hosted within the City. Notably, the City's largest special event is an annual July 4th celebration.

4.7.2 Source Characterization

As required by the Municipal Permit, special events are included on the City's high TTWQ municipal inventory (Appendix A.3).

4.7.3 BEST MANAGEMENT PRACTICES

As detailed in the City's JURMP, the City has selected BMPs for special events hosted in the City. In general, the goal of the City's special event BMPs are to properly manage trash and litter generated by the event, keep catch basins and other nearby MS4 facilities free of litter/debris from the event, and raise storm water awareness among the vendors and patrons of the event, as applicable. In Kimball Park, for example, the City always requires and charges the event holder for the use of a litter fence to prevent debris from entering the nearby channel. BMPs for special events did not change during 2011/2012.

4.7.4 PROGRAM IMPLEMENTATION

The City hosted several special events during 2011/2012, including various one-time celebrations and recurring events. Several special events, including the July 4th celebration, Cinco de Mayo, and Taste of National City, were inspected to ensure the proper implementation of required BMPs, as detailed in the City's JURMP. If any special events do not finish clean up at the time of the inspection, staff requires the remaining housekeeping issues to be resolved within a timely manner. Inspections conducted at special events are tracked using the Microsoft Access database.

There were no notable instances of non-compliance at inspected events that required enforcement. Follow up was conducted as necessary to ensure appropriate housekeeping BMPs were implemented.

4.8 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

Reporting and Response

Public and municipal reporting is crucial to preventing and eliminating illicit connections and illegal discharges (IC/IDs) from the storm water conveyance system. The Storm Water Hotline provides an effective means for individuals in the City to report suspected IC/IDs. The hotline number is also listed on the City's website and in distributed storm water educational material. Storm water complaints may also be reported through the City's website. All complaints received through the hotline and website are logged into a spreadsheet for documentation and tracking. Each logged complaint is investigated by City personnel to determine if an IC/ID is present. Responsible parties for any confirmed IC/ID are sought out and educated and/or cited as necessary and required to stop any and all illegal discharges.

Complaints received by the City during the 2011/2012 reporting period and the City's response to each are listed in Table 4-5 at the end of this section. A total of 9 hotline complaints were documented this year, as compared to 14 complaints last year. In addition to public complaints, the City's Neighborhood Services Division employs Code Enforcement staff who address property complaints that are frequently overlap with storm water concerns. Attachment 4.2 lists municipal code violations observed during

2011/2012, approximately 100 of which may have posed a potential threat to water quality, such as accumulation of trash, junk, and debris.

Enforcement

As previously stated, complaints received via the Storm Water Hotline or City website, are included in Table 4-5 at the end of this section. The table also includes a description of how each complaint was resolved during the reporting period. Resolutions to investigated complaints included issuing warnings, corrective actions, and/or citations. Table 4-3, below, summarizes the enforcement actions taken in response to complaints received.

Table 4-3
Enforcement Actions Resulting from Documented Complaints

Type	Verbal/Written Warning	Stop Work Order	Administrative Citation / Cost Recovery	NOV
Commercial	1	0	1	1
Industrial	0	0	0	0
Mobile	0	0	0	0
Municipal	0	0	0	0
Residential	3	0	2	0
Construction	1	0	0	0

4.9 Spill Reporting, Response, and Prevention

The City has documented procedures for preventing and responding to sanitary sewer overflows. As discussed earlier in this section, preventative maintenance is regularly conducted on the City's sanitary sewer system. Additionally, video inspections and sewer surveys are regularly conducted to monitor the condition of the public sanitary sewer lines and to determine the necessity of maintenance. Private lateral lines do not receive preventative maintenance, but the City assists in the containment and cleanup of sewer spills if the spill could potentially reach the City's MS4.

Individuals in the City are encouraged to report any SSOs to the City's Storm Water Hotline. No significant spills occurred during 2011/2012, but three private lateral sewage discharges were reported to the SWRCB where no sewage reached storm drain inlets.

4.10 Education and Outreach

During 2011/2012, the City continued to educate municipal personnel regarding proper BMP implementation and other storm water and watershed concepts. For example, in November 2011 City staff watched the instructional video "What We Can Do As Municipal Employees" and answered follow up questions regarding storm water pollution, emergency procedures, and the importance of implementing BMPs to prevent

its impacts on our waterways. Information regarding the education and outreach conducted for City personnel is described in Section 8 of this Annual Report.

4.11 Municipal Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

4.12 Program Modification and Review

The City's JURMP was updated in March 2008. No changes to the City's municipal component were made during 2011/2012.

Table 4-4
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Inspection Date	Corrective Actions Needed
1	Butterfly Park	East 22nd Street and Palm Avenue	High	4/11/2012	• Keep the site free of excessive litter and debris using dry methods. • Ensure timely service and removal to prevent waste containers and sanitary facilities from overflowing.
2	El Toyon Park	2005 East 4th Street	High	4/11/2012	• No corrective actions.
3	Kimball Park	12th Street & D Avenue	High	4/11/2012	• Keep discharge locations free of excessive sediment and debris. • Employ adequate erosion prevention measures (e.g., vegetation or physical stabilization).
4	Las Palmas Municipal Pool	1800 East 22nd Street	High	4/12/2012	• No corrective actions.
5	Las Palmas Park	1800 Newell Street	High	4/12/2012	• Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover). • Keep the trash/recycling area free of litter and debris. • Keep exposed parking areas free of significant spills and leaks.
6	National City Municipal Golf Course	1439 Sweetwater Road	High	4/11/2012	• Properly store material and waste stockpiles to prevent transport in runoff. • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover). • Store outdoor materials that pose a threat to water quality appropriately (covered and/or in closed containers).
7	Paradise Creek Educational Facility	West 19th Street and Coolidge Avenue	High	4/11/2012	• Keep the site free of excessive litter and debris using dry methods. • Keep discharge locations free of excessive sediment and debris. • Keep parking lots, sidewalks and streets free of excessive sediment and debris. • Keep the trash/recycling area adequately covered (closed lids or permanent overhead cover).
8	Public Works East Yard	2100 Hoover Ave	High	4/11/2012	• Keep discharge locations free of excessive sediment and debris. • Store outdoor materials that pose a threat to water quality appropriately (covered and/or in closed containers).
9	Public Works West Yard	2100 Hoover Ave	High	4/11/2012	• Keep the trash/recycling area free of litter and debris.

Table 4-4 (Continued)
Municipal Inspection Results

#	Facility Name	Facility Address	TTWQ	Inspection Date	Corrective Actions Needed
10	Sweetwater Heights Park	Cagle Street and Stockman Street	High	4/11/2012	• Keep the site free of excessive litter and debris using dry methods.

Note: Roads, streets, highways, and parking lots; the MS4; and the sanitary sewer system were inspected via the maintenance effort described earlier in this section.

Table 4-5
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
1	9/14/2011	Construction	Citizen	1540 E Plaza Blvd	Sediment tracking into the street.	Inspector indicated the proper BMPs to be implemented to prevent any potential sediment transport. BMPs were implemented and additional inspections were conducted while the site was active to ensure compliance.
2	10/3/2011	Residential	Public Works	1023 E 7th Street	Paint discarded into street and hosed down into curb and gutter.	Paint was observed on the sidewalk, driveway, and in the curb and gutter. No paint or water reached a storm drain. Public Works cleaned up the area and the tenant was billed for cost recovery.
3	10/7/2011	Residential	Engineering Division	Plaza Boulevard and D Avenue (northeast corner)	Vehicle leaking transmission fluid.	Vehicle left scene prior to investigation. Approximately one quart of transmission fluid was observed in the curb and gutter. No transmission fluid reached a storm drain. Public Works cleaned up the area.
4	10/19/2011	Residential	Citizen	Kimball Avenue at 14th Street	Trash accumulation.	Trash was observed on site, likely due to a homeless encampment and neighboring businesses. Public Works cleaned up the area.
5	11/14/2011	Residential	Citizen	1916 Harding Avenue	Vehicle leaking oil.	Motor oil was observed in the curb and gutter and as a trail along the street. No oil reached a storm drain. The vehicle was parked at this location for repairs. Public Works cleaned up the area. Code enforcement issued an administrative citation to the vehicle owner.
6	2/8/2012	Commercial	Code Compliance	3007 Highland Avenue	Dumping soapy water	Code compliance officer observed that containers of soapy water had been dumped, causing an illegal discharge to the storm drain. A NOV and administrative citation were issued to the property.
7	4/10/2012	Residential	Citizen	Hoover Avenue between 8th and 9th Streets	Waste oil in curb and gutter.	Approximately two quarts of waste oil was observed in the curb and gutter. No oil reached a storm drain. Public Works cleaned up the area.
8	4/24/2012	Residential	Citizen	Eta Street dead end	Trash accumulation.	Trash was observed in the curb and gutter. Public Works cleaned up the area.

Table 4-5 (Continued)
Summary of Documented Public Complaints

#	Date	Complaint Type	Origin of Complaint	Location	Nature of Complaint	Investigation Results
9	5/8/2012	Commercial	Citizen	1508 Hoover Avenue	Illegal discharge.	Investigation could not confirm complaint. No evidence of illegal discharge.

Note: See also Attachment 4.2 which shows municipal code violations relating to storm water that were addressed by Code Enforcement staff.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

During 2011/2012, the City continued to implement a program to mitigate urban runoff pollution from the areas and activities of industrial and commercial businesses, including those subject to the State of California Industrial General Permit, Order No. 97-03-DWQ (Industrial Permit). Through various aspects of the industrial and commercial program, the City aims to reduce the amount of pollutants discharged from these facilities.

5.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the industrial and commercial component during the 2011/2012 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City met the Municipal Permit requirement of inspecting at least 25 percent of its stationary industrial and commercial inventory.
- The City met the Municipal Permit requirement of inspecting 100 percent of its inventoried high TTWQ industrial and commercial facilities.
- The City sent 415 inspection report mailings to both businesses and property owners detailing corrective actions.
- The City conducted 55 follow-ups at industrial and commercial businesses to verify corrective actions had been taken and ensure compliance.
- The City conducted pollutant discharge potential assessment (PDPA) scoring at inspections to aid in source identification efforts.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 BACKGROUND

The City's industrial and commercial inventories, which can be found in Appendix A.4 and A.5, respectively, include all stationary and mobile businesses known to be operating in the City that are required to be included on the City's inventories. Stationary facilities in the City include, but are not limited to, manufacturing facilities, auto repair shops, restaurants, wholesalers, and contractors. As discussed in the following subsections, the City requires industrial and commercial businesses to implement pollution prevention measures and designated minimum BMPs to mitigate the impacts of business' activities on water quality.

5.2.2 SOURCE CHARACTERIZATION

The City's industrial and commercial inventories are included as Appendix A.4 and A.5, respectively. The inventories include both stationary and mobile businesses, as required by the Municipal Permit. The inventories were updated in 2011/2012.

Information on how the City prioritizes the industrial and commercial inventories based on TTWQ is discussed in detail in the City's JURMP. The City considers factors including those listed below when prioritizing the inventories:

- Results from previous inspections and institutional knowledge
- Presence of significant exposed outdoor storage or activities
- Consideration of downstream water body and whether the business is likely to discharge pollutants for which the water body is impaired
- Proximity to the receiving water body
- Facility size
- Industrial Permit subjectivity

The City's updated inventories include a total of 782 stationary industrial and commercial facilities.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Industrial and commercial businesses in the City are required to implement pollution prevention methods and other BMPs to reduce or potentially eliminate the generation of pollutants from business areas and activities. The City has established a set of minimum BMPs based on the CASQA Industrial and Commercial Handbook. The requirements include BMPs applicable to all facilities as well as activity-specific BMPs. The City's BMP requirements are described in more detail in the City of National City Best Management Practice Manual, which is an attachment to the City's JURMP. The City's BMP requirements for industrial and commercial businesses did not change during 2011/2012.

5.2.4 PROGRAM IMPLEMENTATION

Industrial and Commercial Inspections

During 2011/2012, the City conducted storm water compliance inspections at selected stationary industrial and commercial facilities; Table 5-1 provides a summary of the industrial and commercial site visits. The purpose of the inspections is to confirm that the City's minimum BMPs are being implemented at stationary industrial and commercial facilities.

Table 5-1, below, provides a summary of the industrial and commercial site visits. All of the high TTWQ sites were selected for inspection, and additional facilities were also selected for routine inspection based on compliance history, TTWQ, and the length of time since the last inspection visit.

Table 5-1
Summary of Industrial and Commercial Inspections

Facility Category	Full Inspections Conducted	Percentage of Total Inventory
High TTWQ Sites*	81	10% (100% of high TTWQ sites)
Additional Sites	117	15%
All Stationary Inventoried Sites	**782**	**25%**

* All high TTWQ sites were visited during 2011/2012; if the business had moved out a full inspection was not necessary and the inventory was updated for future inspection efforts.

Facility inspections were conducted in accordance with the protocol set forth in the City's JURMP. Inspections involved a thorough examination of the facility and all outdoor activities. BMP deficiencies and corrective actions were discussed with facility personnel present during the inspection and recorded on the City's industrial and commercial inspection form (Attachment 5.1).

During 2011/2012, the City continued to use the standard inspection form and associated inspection reports that were updated in 2009/2010. Since facility personnel at inspected businesses had reported that many of the corrective actions on the inspection report were related to shared areas or areas maintained by the property owner or property management company, the inspection form was updated to collect information regarding areas where responsibility for BMP implementation may be shared. Check boxes indicating "shared responsibility" were added to the form for each BMP assessment item on the form. These boxes were checked whenever the facility personnel present during the inspection reported that the BMP was a shared responsibility between the individual business, other tenants in a multi-suite complex, and/or the property management company/property owner. Note that the information collected is whether or not the responsibility is reportedly shared, not a determination of whether or not legally the responsibility is shared. In some cases the business may report that the responsibility is shared, but other parties, such as the property owner, may not agree.

The inspection reports were also updated to group the types of corrective actions listed on the inspection report into the following categories, which were described in a cover letter accompanying the inspection report:

- **Business Corrective Actions**, which included corrective actions specific to business activities.
- **Specific Action(s) Required by the Business to Comply with the Requirements of the General Industrial Permit**, which included corrective actions relating to

the State of California General Industrial Permit (State Water Resources Control Board Order No. 97-03-DWQ).

- **Shared or Communal Area Corrective Actions**, which included corrective actions that are related to shared or communal areas and may not be solely the responsibility of the individual business.

When any corrective actions regarding a shared or communal area are included on the inspection report, a copy of the same inspection report was also provided to the property owner. A slightly different cover letter that explains why the property owner or manager is receiving the report is included. The property owner/manager cover letter explains the different types of corrective actions, described above, and explains that deficiencies listed under the "Shared or Communal Area Corrective Actions" heading are deficiencies that may not be the responsibility of the individual business and are being provided to both the property owner and the business to ensure that action is taken by the appropriate party. This updated method of inspection result notification is more straightforward and easier for the business representatives to understand, which increases the chance that the corrective actions will be implemented in a timely manner. Additionally, notifying property owners of corrective actions observed in communal areas should also contribute to BMPs being implemented in a timely manner.

The City also assesses PDPA scores during the inspections as part of an additional data collection effort. The PDPA scores are marked on the City's inspection form in Attachment 5.1. More information about the results of this process is presented in Section 12 of this JURMP Annual Report.

During the inspection process, the City also checked Industrial Permit compliance status when applicable. Businesses observed to be in violation of the Industrial Permit are included in Table 5-2. Table 5-3, at the end of the section, summarizes the results of the 309 site visits conducted during 2011/2012. A total of 198 full inspections were completed as part of the City's 2011/2012 routine industrial and commercial inspection program. The remainder of the sites were visited, but during the visit were found to have moved, be duplicates of other businesses, be mobile businesses, be out of the City's jurisdiction, be inactive and difficult to contact, or not to be conducting activities for which inclusion on the City's inventory is necessary.

Facilities indicated to have an "in progress" resolution status in the 2010/2011 JURMP Annual Report were inspected and all issues were resolved before the end of 2011. Facilities that were recommended for follow-up this year are noted in the table. The City conducted 55 follow-up inspections in 2011/2012, and the resolution status of these follow-ups is included with the routine inspection results in Table 5-3. The City provided copies of inspection results to each facility that received a full inspection in 2011/2012. The inspection report included the findings of the inspection and all required corrective actions recorded by the inspector.

The City did not rely on third party inspections to satisfy its industrial and commercial inspection requirements during the reporting period. The City does not presently maintain a third party inspection program.

General Industrial Permit

Industrial Permit compliance status was evaluated during the industrial and commercial inspection process. If the business was new and had not previously been inspected, or if the business had recently changed activities, the inspector recorded information about the business activities that occur on site and assigned or reassigned the business's standard industrial classification (SIC) code(s). The inspector then determined Industrial Permit subjectivity based on SIC code. Violations of any aspect of Industrial Permit requirements were recorded on the standard industrial and commercial inspection form and are presented in Table 5-2. The table includes businesses directed to file a Notice of Intent (NOI) and develop a SWPPP and monitoring program, as well as businesses that had filed an NOI but had failed to develop a SWPPP and monitoring program. The table also includes facilities that could potentially gain exemption from Industrial Permit requirements by completing notice of non-applicability/no exposure certification (NONA/NEC) paperwork. Each business was notified of any Industrial Permit-related non-compliance by the inspector.

Education and Outreach

In addition to checking for compliance with the City's requirements and the Industrial Permit, inspections provide a venue to provide site-specific one-on-one education regarding storm water concepts and BMPs. Educational materials were provided as applicable to businesses, including the City's Restaurant/Food Industry BMP Fact Sheet (Attachment 5.2) and the Industrial and Commercial "Preventing Urban Runoff Pollution" Trifold (Attachment 5.3).

Enforcement

Several industrial and commercial facilities were observed to be out of compliance with the City's municipal storm water ordinance and/or the Industrial Permit during inspections conducted in 2011/2012. Additionally, the City received complaints through the City's storm water hotline. Details of the industrial and commercial complaint investigations are included in the Summary of Documented Public Complaints in Section 4 of this Annual Report. The City issued the following enforcement actions in response to BMP deficiencies during inspections and other complaints:

- 415 inspection report mailings sent to businesses and property owners
- 9 NOVs
- 8 Administrative citations

There were no instances of noncompliance found to present a significant threat to human health or the environment observed at stationary businesses during 2011/2012, so none were reported to the RWQCB.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Due to the nature of activities of most mobile businesses, a major area of concern tends to be illegal discharges. In general, mobile businesses can be hard to identify, as many may not have City business licenses. Additionally, because the activities of mobile businesses do not occur in one fixed location, inspections of such businesses are impractical.

5.3.2 SOURCE CHARACTERIZATION

Known mobile industrial and commercial businesses, as described in the City's JURMP, are included on the City's inventory and are marked as mobile. During 2008/2009, the Regional Industrial and Commercial Workgroup also developed a web-based mobile business database for use by all Copermittees. The goal of developing this database is to allow Copermittees to share information about mobile businesses, which may be active in more than one jurisdiction. The City has contributed its mobile business inventory for upload to the regional database.

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

BMPs for stationary industrial and commercial facilities, as discussed earlier in this section, are required to be implemented for mobile activities, as applicable. BMPs for mobile businesses, including key principles such as proper collection and disposal of any discharge, are discussed in the City's JURMP.

During 2009/2010, the Regional Industrial and Commercial Workgroup, in which the City was an active participant, adopted regional mobile business BMP standards. These standards were devised to create a uniform set of minimum BMPs for mobile businesses operating within the region. The Workgroup is still developing a mobile business BMP notification template that Copermittees may choose to use to notify mobile businesses operating their jurisdiction.

5.3.4 PROGRAM IMPLEMENTATION

While mobile businesses are not as straightforward to inspect as fixed industrial and commercial facilities, the City has in place a program of education and enforcement to regulate mobile activities.

Education and Outreach

All businesses conducting mobile activities within the City's jurisdiction are required to apply for and maintain a business license with the City of National City, regardless of where the business may be based. The Industrial and Commercial "Preventing Urban Runoff Pollution" Trifold is provided to each person applying for a business license in the City, including mobile businesses. The trifold brochure, included in Attachment 5.3 of this Annual Report, clearly prohibits the discharge of wash water and provides a list

of required BMPs applicable to industrial and commercial businesses. Mobile businesses maintaining a City business license are included on the Commercial Inventory in Appendix A.5. No known mobile businesses conduct industrial activities in the City at this point in time. To aid in tracking mobile businesses that may conduct activities within its jurisdiction in the future, the City also collaborates with other jurisdictions in the County of San Diego in maintaining a county-wide list of mobile businesses.

Reporting and Enforcement

In addition to regulation through business licenses, City staff are trained to report inappropriate mobile business activities to the City's storm water hotline. The City responds to all calls to the City's storm water hotline regarding mobile businesses. Notably, there were no complaints made to the City's storm water hotline regarding mobile businesses during 2011/2012.

There were no instances of noncompliance of mobile businesses that were believed to present potential threats to human health or the environment observed during 2011/2012, so none were reported to the RWQCB.

5.4 Industrial and Commercial Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

5.5 Program Review and Modification

No modifications were made to the City's industrial and commercial component during 2011/2012.

Table 5-2
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation				
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC	Other
1	NATHAN'S STONE WORLD INC	1014 COOLIDGE AVE	5/10/2012	Mandatory	3281	Marble and Granite Cutting and Mfg with significant outdoor exposure, NOI distributed in 2009, 2010, 2012	✔	✔	✔		
2	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	8/16/2011	Mandatory	5093	Recycling Scrap Metal with significant outdoor exposure, WDID # 9 37I000615		✔	✔		Ensure that appropriate monitoring is conducted.
3	H2O LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	4/24/2012	Conditional	2092	Seafood Products Manufacturing with significant outdoor exposure, NOI distributed in 2009, 2010, and 2011	✔	✔	✔		

Table 5-2 (Continued)
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation				
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC	Other
4	JACOBS ENGINE REBUILDING	938 COOLIDGE AVE	4/24/2012	Conditional	3714 7538	Engine Rebuilding and Auto Repair with significant outdoor exposure, NOI distributed in 2010 and 2012	✔	✔	✔		
5	MOTOR MACHINE AND SUPPLY	1602 HOOVER AVE	1/30/2012	Conditional	3714 7538	Engine Rebuilding and Auto Repair with significant outdoor exposure, NOI distributed in 2010 and 2012	✔	✔	✔		
6	ADVANCED MRF	1533 WILSON AVE	5/21/2012	Conditional	3613	Control Panel Manufacturing without significant exposure				✔	
7	FAMILY LOOMPYA CORP	2525 SOUTHPORT WAY L	9/16/2011	Conditional	2038	Frozen Lumpia Manufacturing without significant exposure				✔	
8	FASTSIGNS	1240 E PLAZA BLVD 602	7/7/2011	Conditional	3993	Sign Manufacturing without significant exposure				✔	

Table 5-2 (Continued)
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation				
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC	Other
9	KDR/DPG	301 W 28TH ST G	12/2/2011	Conditional	2759	Digital Printing and Graphic Design Services without significant exposure				✔	
10	MITEJECT, INC	1705 HOOVER AVE B	1/27/2012	Conditional	3089	Plastic Injection Molding without significant exposure				✔	Ensure area in front of roll-up door remains free of plastic debris in order to maintain compliance with NONA/NEC .
11	PHAN GRAPHICS AND PRINTING	301 W 28TH ST E	12/2/2011	Conditional	2731 2759	Binding and Bindery without significant exposure				✔	

Table 5-2 (Continued)
Violations of the Industrial Permit

#	Business Name	Street Address	Inspection Date	Industrial Permit Subjectivity	SIC Code(s)	Notes	Action to Correct Violation				
							File NOI	Develop SWPPP	Develop / Implement Storm Water Monitoring	Complete NONA/ NEC	Other
12	SEWING SAAVEDRA	2525 SOUTHPORT WAY R	5/16/2012	Conditional	2399	Pillow case manufacturing without significant exposure				✔	
13	TS COMPANY	1616 HOOVER AVE	1/27/2012	Conditional	3446	Custom Iron Work Manufacturing without significant exposure				✔	
14	G V INDUSTRIES	1346 CLEVELAND AVE	7/6/2011	Conditional	3599	Machine Shop without significant exposure, NONA/NEC filed					Prevent metal debris from leaving shop area to remain in compliance with NONA/NEC

Table 5-3
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
1	100% NATURALL	20 N EUCLID AVE D	4/26/2012	Full Inspection		
2	1-800-RADIATOR	401 W 35TH ST B	5/23/2012	Full Inspection		
3	7 ELEVEN #13564 F	15 N EUCLID AVE	4/10/2012	Full Inspection		
4	705 CIVIC CENTER DRIVE	705 CIVIC CENTER DRIVE	4/30/2012	Full Inspection		
5	99 CENT STORE PLUS	1604 E 18TH ST	5/11/2012	Full Inspection		
6	A & D HAWAIIAN BBQ	2220 E PLAZA BLVD D	11/30/2011, 5/24/2012	Full Inspection	X	In Progress
7	ADVANCED MRF	1533 WILSON AVE	5/21/2012	Full Inspection		
8	AMEE BAY LLC	2105 CLEVELAND AVE	7/6/2011	Full Inspection		
9	AMSEC, LLC	131 W 33RD STREET	1/27/2012	Full Inspection		
10	ARCO AM PM #6523	133 W 8TH STREET	1/31/2012	Full Inspection		
11	AV SAN DIEGO	340 W 26TH STREET B	12/2/2011	Full Inspection		
12	AVIS RENT A CAR	1536 SWEETWATER ROAD B	7/12/2011	Full Inspection		
13	BAMBOO ROTISSERIE, INC	2220 E PLAZA BLVD T-1	11/29/2011, 4/11/2012	Full Inspection	X	Resolved
14	BASKIN ROBBINS ICE CREAM	1493 E PLAZA BLVD	7/11/2011	Full Inspection		
15	BAXTER AUTOMOTIVE & MACHINE	1400 HOOVER AVENUE	7/6/2011, 9/16/2011	Full Inspection	X	Resolved
16	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	1/30/2012	Full Inspection		
17	BEIJING ROYAL BUFFET	4 N EUCLID AVE A-C	4/26/2012, 5/22/2012	Full Inspection	X	Resolved
18	BEN'S 1615	1615 SWEETWATER ROAD A	4/17/2012	Full Inspection		
19	BIRRIERIA "DON RAFA" RES Y CHIVO	2241 HIGHLAND AVE	5/15/2012	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
20	BISTRO CITY	1819 E PLAZA BLVD	7/12/2011	Full Inspection		
21	BOB'S N. CAR & SMOG	49 E 16TH STREET B1	7/5/2011	Full Inspection		
22	BREAD DELUX BAKERY, ETC.	1420 E PLAZA BLVD D-1	7/11/2011	Full Inspection		
23	BUSH POWER BRAKE, INC.	25 E 17TH STREET A & B	1/30/2012	Full Inspection		
24	C & W DIVING	1706 HOOVER AVENUE	7/6/2011, 9/19/2011	Full Inspection	X	Resolved
25	C&M MOTORS INC.	904 ROOSEVELT AVENUE	1/31/2012	Full Inspection	X	In Progress
26	CALIFORNIA PRODUCE CORPORATION	1736 E PLAZA BLVD	7/11/2011	Full Inspection		
27	CAR MAINTENANCE PROVIDERS	1531 NATIONAL CITY BLVD	7/7/2011	Full Inspection		
28	CARL'S JR. #120	1280 E PLAZA BLVD	7/11/2011	Full Inspection		
29	CASA DEL TACO	1635 SWEETWATER ROAD A	12/5/2011	Full Inspection		
30	CHEVRON	3009 HIGHLAND AVE	1/27/2012	Full Inspection		
31	CHINA SUPER BUFFET	3007 HIGHLAND AVE 9	4/18/2012, 5/22/2012	Full Inspection	X	Resolved
32	CHINESE CANTON BAKERY	1132 E PLAZA BLVD 204	7/5/2011	Full Inspection		
33	CHINESE CITY RESTAURANT #2	1025 HIGHLAND AVE	11/30/2011	Full Inspection		
34	CHOWKING	2220 E PLAZA BLVD T-1	11/29/2011, 4/11/2012	Full Inspection	X	Resolved
35	CHUCK E CHEESE'S	1143 HIGHLAND AVE	7/7/2011	Full Inspection		
36	CORONADO CAFE	801 NATIONAL CITY BLVD D	5/14/2012	Full Inspection		
37	CORONADO DISTRIBUTION COMPANY INC	34 E 17TH ST B	5/11/2012	Full Inspection		
38	COSTCO WHOLESALE CORPORATION	1001 W 19TH STREET C & D	1/31/2012	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
39	COSTCO WHOLESALE GROUP	1001 W 19TH STREET B	1/31/2012	Full Inspection		
40	COTIJAS MEXICAN FOOD	740 E 30TH STREET	4/17/2012	Full Inspection	X	Resolved
41	CVS PHARMACY	1730 SWEETWATER RD	5/16/2012	Full Inspection		
42	CVS/PHARMACY #9138	1201 E PLAZA BLVD	5/17/2012	Full Inspection		
43	DE-LUX ROOFING	1107 HARDING AVENUE	5/10/2012	Full Inspection	X	In Progress
44	DENNY'S RESTAURANT	424 MILE OF CARS WAY	12/2/2011	Full Inspection		
45	DENNY'S RESTAURANT	1904 SWEETWATER ROAD 1473	4/17/2012	Full Inspection		
46	DESSERTS PLUS, INC.	2220 E PLAZA BLVD Q	11/29/2011, 4/13/2012	Full Inspection	X	Resolved
47	DISCOUNT TIRE CO. (SO. CA.)	1309 E PLAZA BLVD	7/5/2011	Full Inspection		
48	DLP ENTERPRISES, INC	1031 COOLIDGE AVE	1/30/2012	Full Inspection		
49	DOLLAR TREE STORES INC	6 N EUCLID AVE	5/22/2012	Full Inspection		
50	EL NUEVO MILLENIO MEXICAN FOOD	2323 E DIVISION STREET	4/26/2012	Full Inspection	X	In Progress
51	EL PALENQUE TACO SHOP	3100 E 8TH STREET A	4/27/2012	Full Inspection	X	Resolved
52	EL SUPER	3007 HIGHLAND AVE	4/18/2012	Full Inspection		
53	ENTORS MOTORS	301 W 28TH STREET M	12/6/2011	Full Inspection		
54	ESKAY, G, COMPANY	712 E 18TH STREET	5/11/2012	Full Inspection		
55	EVANS TIRES	3009 HIGHLAND AVE	1/27/2012	Full Inspection		
56	EXPRESS TIRE	1705 SWEETWATER ROAD	12/5/2011	Full Inspection		
57	FAMILY HOUSE OF PANCAKES	1900 E PLAZA BLVD	11/28/2011, 4/16/2012, 5/18/2012	Full Inspection	X	Resolved

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
58	FAMILY LOOMPYA CORP	2525 SOUTHPORT WAY L	9/16/2011, 12/6/2011, 6/8/2012	Full Inspection	X	Resolved
59	FAMILY LOOMPYA SEAFOOD MARKET	2720 E PLAZA BLVD A	7/12/2011	Full Inspection		
60	FASTSIGNS	1240 E PLAZA BLVD 602	7/7/2011	Full Inspection		
61	FIESTA PET SHOP	1145 HIGHLAND AVE A	7/5/2011, 12/1/2011	Full Inspection		
62	FIRESTONE	2531 E PLAZA BLVD	11/28/2011	Full Inspection		
63	FLEETWASH	1508 HOOVER AVENUE	5/9/2012	Full Inspection		
64	FOODLAND IGA	303 HIGHLAND AVE	4/19/2012	Full Inspection		
65	FRANK'S SUBARU	2940 NATIONAL CITY BLVD	1/27/2012	Full Inspection		
66	FRESCA DELI	1021 HIGHLAND AVE P/B	12/1/2011	Full Inspection		
67	G V INDUSTRIES	1346 CLEVELAND AVENUE	7/6/2011	Full Inspection		
68	GAMA PRODUCE	1605 E 4TH STREET	7/6/2011, 9/19/2011, 12/6/2011	Full Inspection	X	Resolved
69	GAPO ORIENTAL MART & VIDEOS	3403 E PLAZA BLVD D & E	4/13/2012	Full Inspection		
70	GEORGE'S LIQUOR	2605 E 18TH STREET	5/11/2012	Full Inspection		
71	GIANT NEW YORK PIZZA	8 N EUCLID AVE B	4/26/2012	Full Inspection		
72	GINZA SUSHI	925 E PLAZA BLVD G	11/30/2011	Full Inspection		
73	GOLDEN CHOPSTICKS RESTAURANT	1430 E PLAZA BLVD E-22-23	7/8/2011, 9/15/2011	Full Inspection	X	Resolved
74	GOLDEN DONUTS	36 N EUCLID AVE E	4/27/2012	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
75	GOLDILOCKS BAKERY & RESTAURANT	1420 E PLAZA BLVD D-7	7/8/2011	Full Inspection		
76	GOODY'S	340 W 26TH STREET E	12/1/2011	Full Inspection		
77	GOULET INDUSTRIES	340 W 26TH STREET J	12/2/2011	Full Inspection		
78	GUANATOS MEXICAN GRILL	1526 E 18TH STREET	5/11/2012	Full Inspection		
79	H2O LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	4/24/2012	Full Inspection		
80	HI-BEV LIQUOR	2111 HIGHLAND AVE	5/15/2012	Full Inspection		
81	HIGHLAND LIQUOR MARKET	2335 HIGHLAND AVE	5/15/2012	Full Inspection		
82	HOMETOWN BUFFET #714	1135 HIGHLAND AVE	7/11/2011, 9/19/2011	Full Inspection	X	Resolved
83	HOPSING AUTO	1540 ROOSEVELT AVENUE	1/30/2012	Full Inspection		
84	HP CLUTCH & BRAKE	1620 HARDING AVE	1/30/2012	Full Inspection		
85	IMPERIAL LIQUOR	3106 E 16TH ST	5/11/2012	Full Inspection		
86	INTERNATIONAL HOUSE OF PANCAKES	1430 E PLAZA BLVD E-1	7/8/2011, 9/15/2011	Full Inspection	X	Resolved
87	ISLE SURFBOARDS	340 W 26TH STREET G	12/2/2011	Full Inspection		
88	JACK IN THE BOX	700 ROOSEVELT AVENUE	4/25/2012	Full Inspection		
89	JACK IN THE BOX #80	3138 E PLAZA BLVD	7/12/2011	Full Inspection		
90	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	4/24/2012, 6/8/2012	Full Inspection	X	In Progress
91	JOCSON'S AUTO BODY & PAINT INC.	1320 COOLIDGE AVENUE	7/6/2011	Full Inspection		
92	JOE'S TIRES	1532 NATIONAL CITY BLVD	7/7/2011, 9/19/2011	Full Inspection	X	Resolved

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
93	JOLLIBEE	1401 E PLAZA BLVD	12/3/2011	Full Inspection		
94	JONATHAN'S RESTAURANT	36 N EUCLID AVE F	4/27/2012	Full Inspection		
95	JOSE AUTO ELECTRIC	108 W 18TH STREET	7/5/2011, 9/19/2011, 12/6/2011	Full Inspection	X	Resolved
96	KARIHAN FILIPINO FOOD	2220 E PLAZA BLVD A-2	11/30/2011	Full Inspection		
97	KARZ PLUS	1605 NATIONAL CITY BLVD	1/27/2012	Full Inspection		
98	KDR/DPG	301 W 28TH STREET G	12/2/2011	Full Inspection		
99	KENTUCKY FRIED CHICKEN	840 HIGHLAND AVE	2/17/2012	Full Inspection		
100	KINGS LIQUOR	1626 E 8TH ST	5/23/2012	Full Inspection		
101	KYOTO GIFT AND FOOD	1727 SWEETWATER RD A	5/16/2012	Full Inspection		
102	L & L HAWAIIAN BARBEQUE	1860 SWEETWATER ROAD B	12/7/2011, 4/17/2012, 5/16/2012	Full Inspection	X	In Progress
103	LA CASA LIQUOR	228 HIGHLAND AVE	5/24/2012	Full Inspection		
104	LA SIERRA CAFÉ	306 HIGHLAND AVE	4/18/2012	Full Inspection	X	Resolved
105	LAI THAI RESTAURANT	1430 E PLAZA BLVD E-10	11/28/2011	Full Inspection		
106	LAS GORDITAS/LOS PINGUINOS	1903 HIGHLAND AVE	5/15/2012	Full Inspection		
107	LISA'S FILIPINO CUISINE 2	1210 E PLAZA BLVD 410	2/17/2012, 4/24/2012, 5/17/2012	Full Inspection	X	Resolved
108	LITTLE CAESAR'S PIZZA	1495 E PLAZA BLVD	9/15/2011	Full Inspection		
109	LOLA HAPPY BAKERY	3142 E PLAZA BLVD L	4/16/2012	Full Inspection	X	In Progress
110	LOLLICUP TEAZONE	1105 E PLAZA BLVD A	7/8/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
111	LOS PANCHOS TACO SHOP	2441 NATIONAL CITY BLVD	4/24/2012	Full Inspection		
112	M & T AUTO	1731 WILSON AVENUE	4/20/2012	Full Inspection	X	In Progress
113	MANILA SEAFOOD ORIENTAL MARKET	2220 E PLAZA BLVD K	11/29/2011, 5/24/2012	Full Inspection		
114	MARISCOS SINALOA #2	2435 NATIONAL CITY BLVD	4/12/2012	Full Inspection		
115	MCMILLIN COMPANY STORAGE	2530 SOUTHPORT WAY B	12/6/2011	Full Inspection		
116	MIKE'S GIANT NY PIZZA #5	1635 SWEETWATER ROAD C-1	12/5/2011	Full Inspection		
117	MITEJECT, INC	1705 HOOVER AVE B	1/27/2012, 4/20/2012	Full Inspection	X	Resolved
118	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	1/30/2012, 4/20/2012, 6/8/2012	Full Inspection	X	Resolved
119	N. GLANTZ & SON	2530 SOUTHPORT WAY C	12/6/2011	Full Inspection		
120	NATHAN'S STONE WORLD INC	1014 COOLIDGE AVE	5/10/2012	Full Inspection		
121	NATIONAL CITY LIQUOR & DELI	2421 NATIONAL CITY BLVD	4/12/2012	Full Inspection		
122	NATIONAL CITY MUNICIPAL GOLF COURSE	1439 SWEETWATER ROAD	4/11/2012	Full Inspection		
123	NATIONAL CITY NUTRITION STORE	925 E PLAZA BLVD	7/8/2011	Full Inspection		
124	NATIONAL MECHANICAL SERVICES	1640 HOOVER AVENUE B	7/6/2011, 9/19/2011	Full Inspection	X	Resolved
125	OHANA HAWAIIAN ISLAND BBQ	1430 E PLAZA BLVD E7A	11/28/2011	Full Inspection		
126	OMEGA INDUSTRIAL MARINE	605 W 12TH ST	5/9/2012	Full Inspection		
127	ON HIT BAR BE QUE PIT	3403 E PLAZA BLVD A1	4/13/2012	Full Inspection	X	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
128	ONE TEN LIQUOR STORE	110 NATIONAL CITY BLVD	5/14/2012	Full Inspection		
129	ORTIZ CORP GENERAL ENGINEERING	2000 MCKINLEY AVE	5/23/2012	Full Inspection		
130	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	8/16/2011, 9/15/2011	Full Inspection	X	Resolved
131	PANDA PALACE	1105 E PLAZA BLVD D & E	7/11/2011, 9/15/2011	Full Inspection	X	Resolved
132	PAPA JOHN'S PIZZA #1335	1130 E PLAZA BLVD	7/5/2011	Full Inspection		
133	PARADISE VALLEY MANOR AND HEALTH CARE CTR	2575 E 8TH STREET	2/14/2012	Full Inspection		
134	PARTYZON	2235 HIGHLAND AVE	5/15/2012	Full Inspection		
135	PERRY FORD (TRUCK)	1610 NATIONAL CITY BLVD	7/7/2011	Full Inspection		
136	PET MARKET	1536 SWEETWATER RD	5/16/2012	Full Inspection		
137	PETER PIPER PIZZA STORE #212	3007 HIGHLAND AVE 11	4/18/2012, 5/22/2012	Full Inspection	X	Resolved
138	PHAN GRAPHICS & PRINTING	301 W 28TH STREET E	12/2/2011	Full Inspection		
139	PHO MAI CALI & GRILL	1635 SWEETWATER RD H	12/5/2011	Full Inspection		
140	PHO NAM CALI	2344 E 8TH STREET	4/27/2012	Full Inspection		
141	PIZZA HUT	1838 SWEETWATER ROAD	12/7/2011	Full Inspection		
142	PIZZA HUT #315044	2437 E PLAZA BLVD	4/13/2012, 5/17/2012	Full Inspection	X	Resolved
143	PIZZA HUT EXPRESS	3060 PLAZA BONITA RD	12/7/2011	Full Inspection		
144	PORKY'S LECHON AND BARBEQUE	1430 E PLAZA BLVD	11/28/2011	Full Inspection		
145	R W LITTLE, CO	415 W 30TH STREET	4/27/2012	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
146	RANCH HOUSE LIQUOR	404 PALM AVE	5/17/2012	Full Inspection		
147	RENT-A-CENTER #01072	1043 HIGHLAND AVE	12/1/2011	Full Inspection		
148	REPLANET RECYCLE CENTER (TOMRA PACIFIC)	901 S EUCLID AVE	7/12/2011, 9/19/2011	Full Inspection	X	Resolved
149	ROBERTO'S TACO SHOP	1406 HIGHLAND AVE	4/19/2012	Full Inspection	X	In Progress
150	S L FUSCO INC.	2530 SOUTHPORT WAY D	5/16/2012	Full Inspection		
151	SAN DIEGO AUTO DETAIL	110 W 11TH STREET	7/5/2011, 9/16/2011	Full Inspection	X	Resolved
152	SAN DIEGO AUTOMOTIVE MUSEUM	600 W 12TH STREET	5/9/2012	Full Inspection		
153	SAN DIEGO CRANE & HOIST	1606 COOLIDGE AVENUE	7/6/2011	Full Inspection		
154	SAN DIEGO HYDRAULICS INC	1720 CLEVELAND AVE	1/30/2012, 4/30/2012	Full Inspection	X	Resolved
155	SAN DIEGO PUMP & COMPRESSOR	301 W 28TH STREET A	12/2/2011	Full Inspection		
156	SEAFOOD CITY SUPERMARKET	1420 E PLAZA BLVD C-E	7/8/2011, 9/15/2011	Full Inspection	X	Resolved
157	SEWING SAAVEDRA	2525 SOUTHPORT WAY R	5/16/2012	Full Inspection		
158	SHELL STATION	2401 E DIVISION STREET	4/10/2012	Full Inspection		
159	SHUTTER BUS LEASING	1726 WILSON AVENUE	4/20/2012	Full Inspection		
160	SIZZLER FAMILY STEAK HOUSE #45	1325 E PLAZA BLVD	7/5/2011, 9/15/2011, 12/1/2011	Full Inspection	X	Resolved
161	SMART AND FINAL	1220 E PLAZA BLVD	7/5/2011	Full Inspection		
162	SOUTHLAND TRANSMISSION CENTER	1400 HOOVER AVENUE	9/16/2011, 4/20/2012	Full Inspection	X	Resolved

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
163	SPECIALTY TIRES AND BRAKES	1 W 35TH ST D	4/27/2012	Full Inspection	X	In Progress
164	STARBUCKS COFFEE #6487	1860 SWEETWATER ROAD A	12/7/2011	Full Inspection		
165	STARBUCK'S COFFEE #6783	2230 E PLAZA BLVD	11/29/2011, 4/11/2012, 5/18/2012	Full Inspection	X	In Progress
166	STATEWIDE FUMIGATION SAN DIEGO COUNTY	1630 COOLIDGE AVE	5/10/2012	Full Inspection		
167	SUBWAY SANDWICH & SALAD	925 E PLAZA BLVD A	7/8/2011	Full Inspection		
168	SUBWAY SANDWICH & SALAD	1860 SWEETWATER ROAD C	12/7/2011	Full Inspection		
169	SUBWAY SANDWICHES & SALADS #44272	2220 E PLAZA BLVD A-1	4/13/2012	Full Inspection		
170	SUNCARGO INC	1457 E PLAZA BLVD	12/1/2011	Full Inspection		
171	SUPER SERGIOS MEXICAN FOOD	1631 SWEETWATER ROAD	12/5/2011	Full Inspection		
172	T N H AUTO REPAIR	25 E 17TH STREET	1/30/2012	Full Inspection		
173	TACO SALSA TACO SHOP	925 E PLAZA BLVD B	11/30/2011	Full Inspection		
174	TAPIOCA EXPRESS	2220 E PLAZA BLVD S	11/29/2011	Full Inspection		
175	TARGET	3060 PLAZA BONITA RD	12/7/2011	Full Inspection		
176	TEXAS LIQUOR	1039 HARBISON AVE	5/24/2012	Full Inspection	X	In Progress
177	THE BARBEQUE PIT	920 E PLAZA BLVD	7/8/2011	Full Inspection		
178	TITA'S KITCHENETTE	2720 E PLAZA BLVD E & F	11/28/2011, 4/11/2012, 5/18/2012	Full Inspection	X	In Progress
179	TOPECO PRODUCTS	2525 SOUTHPORT WAY H	12/6/2011	Full Inspection		
180	TORTAS OASIS	1210 E PLAZA BLVD 404	7/5/2011	Full Inspection		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
181	TRANSMISSION SUPPLY	338 W 12TH STREET	1/31/2012, 6/8/2012	Full Inspection	X	Resolved
182	TS COMPANY	1616 HOOVER AVE	1/27/2012	Full Inspection		
183	TUTTI FRUTTI OF NATIONAL CITY	1031 HIGHLAND AVE	11/30/2011	Full Inspection		
184	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	7/7/2011	Full Inspection		
185	VALERIOS FAMILY BAKE SHOP	2720 E PLAZA BLVD H	11/28/2011, 4/11/2012, 5/18/2012	Full Inspection	X	In Progress
186	VALERO NATIONAL CITY	10 OSBORN STREET	2/17/2012	Full Inspection		
187	VALLARTA SUPERMARKETS #36	901 S EUCLID AVE	7/12/2011, 9/16/2011	Full Inspection	X	Resolved
188	VP # 9570	1139 S HARBISON AVE	4/30/2012	Full Inspection		
189	WALGREENS #07869	885 EUCLID AVENUE	9/16/2011, 11/30/2011	Full Inspection	X	Resolved
190	WAL-MART STORES, INC #5023	1200 HIGHLAND AVENUE	5/10/2012, 5/22/2012	Full Inspection	X	Resolved
191	WEST COAST CAB	220 W 14TH ST	7/5/2011, 9/19/2011	Full Inspection	X	Resolved
192	WESTSIDE BUILDING MATERIAL	500 W 16TH STREET	5/11/2012	Full Inspection		
193	WINGS N THINGS	1499 E PLAZA BLVD	7/11/2011	Full Inspection		
194	WORLD TERMINAL PARKING INC	200 HIGHLAND AVE	2/17/2012	Full Inspection		
195	WORLD TERMINAL PARKING INC.	510 HIGHLAND AVE	2/17/2012	Full Inspection		
196	WRIGLEY'S SUPER	34 N EUCLID AVE	4/10/2012	Full Inspection	X	In Progress

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
197	XTREME AUTO DETAIL SUPPLY	2120 WILSON AVE	5/21/2012	Full Inspection		
198	YEN'S DESSERT	2720 E PLAZA BLVD Q	11/28/2011, 4/11/2012, 5/18/2012	Full Inspection	X	In Progress
199	RUBY'S EMBROIDERY	2525 SOUTHPORT WAY S	12/6/2011	*Not Inventoried*		
200	FLEETWASH	1508 HOOVER AVENUE	5/8/2012	Could not Contact		
201	PORLEX CARPET CARE	2142 N AVENUE (REAR)	7/12/2011	Mobile		
202	ANTHONY'S PIZZA	1526 E 18TH STREET	5/11/2012	Moved, Replaced		
203	CONSOLIDATED INTERNATIONAL COR	436 W 8TH STREET A	5/24/2012	Moved, Replaced		
204	CROWN TRANSMISSION CENTER	1339 HOOVER AVENUE	7/7/2011	Moved, Replaced		
205	FINE ORNAMENTAL	1031 COOLIDGE AVE	1/30/2012	Moved, Replaced		
206	IN STITCHES	34 E 17TH STREET B	5/11/2012	Moved, Replaced		
207	LISA'S DESSERTS	2720 E PLAZA BLVD Q	11/28/2011	Moved, Replaced		
208	LONGS DRUGS #074	1730 SWEETWATER RD	5/16/2012	Moved, Replaced		
209	LOS TACOS SHOP	2241 HIGHLAND AVE	5/15/2012	Moved, Replaced		
210	LUEMMA'S KITCHEN SOUTHERN STYLE	36 N EUCLID AVE F	4/27/2012	Moved, Replaced		
211	MCMAHON CONSTRUCTION, INC	605 W 12TH STREET	5/9/2012	Moved, Replaced		
212	NANI MOKU HAWAIIAN BBQ	1635 SWEETWATER RD H	12/5/2011	Moved, Replaced		
213	PINOY RANCH	3403 E PLAZA BLVD D	4/13/2012	Moved, Replaced		
214	PLAYCARE INC	241 W 35TH ST C	5/23/2012	Moved, Replaced		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
215	RADIATOR DEPOT	1533 WILSON AVENUE A	5/21/2012	Moved, Replaced		
216	ROYCE CABINETS & GRANITE INC	2120 WILSON AVE	5/21/2012	Moved, Replaced		
217	SMARTRUNK SYSTEMS INC	401 W 35TH ST B	5/23/2012	Moved, Replaced		
218	SOUTH COUNTY VOLVO	2940 NATIONAL CITY BLVD	1/27/2012	Moved, Replaced		
219	SOUTHBAY DENT REPAIR CENTER	1429 WILSON AVE	5/21/2012	Moved, Replaced		
220	SUBMARINA	1210 E PLAZA BLVD	2/17/2012	Moved, Replaced		
221	TINO'S IRON WORK	1014 COOLIDGE AVE	5/10/2012	Moved, Replaced		
222	VERNON SHIP SUPPLIES	1705 HOOVER AVENUE B	1/27/2012	Moved, Replaced		
223	WONDER/HOSTESS BAKERY OUTLET	1626 SWEETWATER ROAD E - H	4/17/2012	Moved, Replaced		
224	YOBERRY YOGURT	1430 E PLAZA BLVD E8	11/28/2011	Moved, Replaced		
225	A B C AUTOBUYERS	40 W PLAZA BLVD	1/31/2012	Moved, Vacant		
226	AMERMEX	241 W 35TH STREET J	1/27/2012	Moved, Vacant		
227	ANCON TRANSPORTATION	1800 HARRISON AVENUE	1/30/2012	Moved, Vacant		
228	BEAR'S VM MACHINE	241 W 35TH STREET E	1/27/2012	Moved, Vacant		
229	BELIZE PARTY RENTAL	427 PALM AVE	5/17/2012	Moved, Vacant		
230	BIOPOINTE SCIENTIFIC, LLC	1215 WILSON AVE	5/21/2012	Moved, Vacant		
231	CASA SANCHEZ FOODS	131 W 33RD STREET 11	1/27/2012	Moved, Vacant		
232	CENTLI	221 W 33RD STREET	5/23/2012	Moved, Vacant		
233	COURRINGTON WOODWORKS	1535 TIDELANDS AVENUE A-E	1/30/2012	Moved, Vacant		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
234	CREATIVE MOBILITY INC	320 CIVIC CENTER DRIVE	1/30/2012	Moved, Vacant		
235	DURRA INK	303 W 35TH STREET E	1/27/2012	Moved, Vacant		
236	EMERGENCY KEYS, LOCKS	1007 NATIONAL CITY BLVD	5/15/2012	Moved, Vacant		
237	EXOTIC MOTORS	135 CIVIC CENTER DR 203	1/30/2012	Moved, Vacant		
238	FIESTA PACIFIC PRODUCTS, INC	2855 A AVENUE	1/27/2012	Moved, Vacant		
239	GEORGE'S WONDERFUL WORLD OF CAKES	1519 HIGHLAND AVE	4/19/2012	Moved, Vacant		
240	GULF AUTO SALES	135 CIVIC CENTER DR	1/30/2012	Moved, Vacant		
241	H & B BAJA FILTERS, LLC	337 W 35TH STREET G	1/27/2012	Moved, Vacant		
242	IDEAL SMOG	10 OSBORN ST A	2/17/2012	Moved, Vacant		
243	INTERNATIONAL SURF VENTURE INC	301 W 28TH STREET B, C	12/6/2011	Moved, Vacant		
244	LA HACIENDA RESTAURANT	2752 E 18TH STREET	4/16/2012	Moved, Vacant		
245	MAGIC BRITE JANITORIAL	303 N 35TH ST A	1/27/2012	Moved, Vacant		
246	MARLYN PARTY RENTAL	1515 HIGHLAND AVE	5/15/2012	Moved, Vacant		
247	MYKIES LAWN AND POWER EQUIPMENT	225 W 9TH STREET	1/31/2012	Moved, Vacant		
248	NC MOTOR SPORTS AUTO REPAIR	710 E 18TH STREET	5/11/2012	Moved, Vacant		
249	OUCHI'S POWER EQUIPMENT	225 W 9TH STREET	1/31/2012	Moved, Vacant		
250	OZONE GLASS	2602 TRANSPORTATION AVE B	5/21/2012	Moved, Vacant		
251	PETRO AUTO CARE	10 E 1ST ST	5/21/2012	Moved, Vacant		
252	POTTER ELECTRIC, INC. WAREHOUSE	105 W 35TH STREET A	1/27/2012	Moved, Vacant		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
253	PROPULSION CONTROL ENGINEERING	1411 HARDING AVE	7/7/2011	Moved, Vacant		
254	RASPADOS MICHOACAN	115 8TH STREET	5/24/2012	Moved, Vacant		
255	RELENTLESS AUTO SPORTS LLC	25 E 17TH STREET A	1/30/2012	Moved, Vacant		
256	REMEDY-TECH INC	2602 TRANSPORTATION AVE	5/21/2012	Moved, Vacant		
257	RESEARCH AUTOMOTIVE GROUP, INC	199 E 27TH ST	5/21/2012	Moved, Vacant		
258	S D D MAINTENANCE	2829 NATIONAL CITY BLVD	1/27/2012	Moved, Vacant		
259	SAN DIEGO AUTO FINANCE	1 W 35TH ST	1/27/2012	Moved, Vacant		
260	SAN DIEGO METRO PUBLISHING LLC	2602 TRANSPORTATION AVE O	5/21/2012	Moved, Vacant		
261	SATURN OF NATIONAL CITY	2202 NATIONAL CITY BLVD	5/15/2012	Moved, Vacant		
262	SERVICE MASTER AA ADVANCES RES	100 W 35TH STREET	1/27/2012	Moved, Vacant		
263	SEVILLA'S PARTY RENTALS	2303 F AVE	5/24/2012	Moved, Vacant		
264	SHAFT MASTER	1031 NATIONAL CITY BLVD C	1/31/2012	Moved, Vacant		
265	SHRIMP ON WHEELS	225 W 9TH STREET	1/31/2012	Moved, Vacant		
266	SIETE DIAS MARKET	151 N HIGHLAND AVE A	4/19/2012	Moved, Vacant		
267	SO CAL CUSTOM & COLLISION	3000 NATIONAL CITY BLVD	1/27/2012	Moved, Vacant		
268	SOUTHWESTERN AUTOBROKERS INC	1535 NATIONAL CITY BLVD	7/7/2011	Moved, Vacant		
269	STUDIO EUROPA INC	313 W 33TH STREET B	1/27/2012	Moved, Vacant		
270	SUN DIEGO CHARTER CO.	2020 HOOVER AVENUE	4/30/2012	Moved, Vacant		
271	SWIRLY CUP	1860 SWEETWATER RD A-2	4/17/2012	Moved, Vacant		

Table 5-3 (Continued)
Industrial and Commercial Inspection Results

#	Business Name	Address	Inspection Date(s)	Inspection Result	Follow-up Required	Correction Status
272	TINO'S AUTO TECH	1 W 35TH ST D	1/27/2012	Moved, Vacant		
273	TONY'S DETAIL SHOP	49 E 16TH STREET B1	1/30/2012	Moved, Vacant		
274	TRANS ENERGY USA	1825 CLEVELAND AVE	5/24/2012	Moved, Vacant		
275	TUFF ACOUSTICAL AND THERMAL	1623 CLEVELAND AVENUE	1/30/2012	Moved, Vacant		
276	WAGGONEERS TRUCKING	1545 TIDELANDS AVENUE	1/30/2012	Moved, Vacant		
277	WINDOW CLASSICS	1921 CLEVELAND AVENUE	1/30/2012	Moved, Vacant		

6.0 RESIDENTIAL

6.1 INTRODUCTION

Land use in the City of National City is largely residential. Therefore, residential activities that take place in these areas have the potential to impact the quality of receiving waters. Residential activities like vehicle washing, over-irrigation, and home maintenance can potentially contribute pollutants to the City's MS4 if BMPs are not implemented. Additionally, household hazardous waste (HHW) can contribute pollutants to the City's MS4 if not disposed of properly. Pollutants of concern typically include sediment, pesticides, herbicides, fertilizers, surfactants, oil and grease, and metals. The City has worked to implement a range of programs to address these residential activities with the goal of reducing pollutant loads associated with such activities. The City recognizes the need for educational efforts and opportunities designed specifically for residents and residential activities.

The following sections present activities conducted during this reporting period. These activities are associated with the residential component of the JURMP and include conducting ongoing HHW collection events, distributing educational materials, and participating in community events.

6.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the residential component during the 2011/2012 reporting period are presented in the following bulleted list. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- A multi-family residential property evaluation was conducted throughout National City to assess the discharge potential of pollutants of concern, to educate property managers and residences, and to bring about BMP improvements at multi-family residences.
- The City began to develop the 2013 Storm Water Calendar through a storm water art contest at local schools. The calendar will be distributed in both English and Spanish in 2012/2013 and informs residents about preventing pollution in San Diego Bay and neighboring waterways.
- The City collaborated with the cities of Chula Vista and Imperial Beach to make HHW disposal events available to residents. The total amount of HHW collected from residents of all three cities was 341,868 pounds. Door-to-door pick up service was available for the disabled and senior communities.
- The City hosted three large item disposal events. The event allowed residents to dispose of large household items (not including HHW), such as unwanted furniture and large appliances.

- At least 80 code violations related to storm water quality were addressed at 58 properties in residential areas and corrected by the enforcement of the City's Code.

6.2 SOURCE CHARACTERIZATION

The City has identified high TTWQ residential areas within its jurisdiction and has designated various high TTWQ residential activities. To reduce pollutant discharges from these high TTWQ areas and activities, the City designated specific BMPs in the 2008 JURMP. These BMPs did not change during 2011/2012.

6.2.1 HIGH TTWQ ACTIVITIES

During the 2011/2012 reporting period, as outlined in the City's JURMP, the City continued to identify the following activities as high TTWQ:

- Automobile repair and maintenance
- Automobile washing
- Automobile parking
- Home and garden care activities and product use, including disposal
- Disposal of trash and pet waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

In addition to these activity-based priorities, the City has noted several residential areas that pose relatively higher threats to water quality. High priority residential areas are designated by considering complaint investigations, institutional knowledge, Dry Weather Monitoring data, and criteria as defined in the Municipal Permit. The list of high priority residential areas is subject to re-evaluation based on new observations and data collected during the reporting period.

During 2011/2012, a reassessment of the high priority residential areas was conducted. Based on the reassessment some previously designated high TTWQ residential areas were removed since high TTWQ activities were not observed. High TTWQ residential areas removed include Paradise Creek Area between F and L Avenues, East 8th Street Area, Grove Avenue Area, and Arcadia Place Area. Also, as a result of field evaluation, twelve residential complexes have been added to the list of high TTWQ residential areas.

The following residential areas have been designated as high TTWQ:

Division Avenue Area
The residential area located near Division Street, east of Highland Avenue, including residences located on East 2nd Street, Melrose Street, Eta Street, Fig Court, and Scott

Drive. See Figure 6-1. Past dry weather monitoring programs have detected elevated levels of ammonia and detergents just downstream of these residential areas.

Residential Complexes

The following 12 residential complexes have been identified as a priority for education and further evaluation since high priority activities and/or pollutants were noted. Figure 6-2, at the end of this section, displays their locations.

- 1205-1343 Fig Court
- 1545 Q Avenue
- 1802 E 12th Street
- 1810-1832 J Avenue
- 2111-2125 E 7th Street
- 2111-2125 E 7th Street
- 2215 Lanoitan Avenue
- 2700 E 8th Street
- 630 R Avenue
- 932 E 18th Street
- 999 Division Street
- E 8th Street & Arcadia Avenue

6.3 Best Management Practice Requirements

The City has continued to provide information regarding the implementation of pollution prevention measures, like good housekeeping practices, for residential areas and activities. Section 5 of the City's BMP Manual includes lists of general residential BMP requirements and BMP requirements for specific residential activities. The manual is included in Appendix C of the City's JURMP. General residential BMPs include erosion control; non-storm water discharge management, including elimination of IC/IDs; and good housekeeping measures, such as sweeping rather than hosing off driveways and sidewalks. Specific BMPs for the high priority activities outlined above are also included in the City's BMP Manual Section 5.

6.4 Program Implementation

The City's residential program has been designed to ensure that adequate City enforcement, complaint investigation, and complaint reporting is conducted in residential areas. This ensures that pollutants associated with residential activities and areas are minimized. Additionally, the residential program implements an educational component so that residents are made aware of appropriate BMPs, including pollution prevention methods that should be used during certain activities. During 2011/2012 the City also continued to participate in the Regional Residential Education Program.

Multi-Family Residential Property Evaluation Program

The City initiated the Multi-Family Residential Property Evaluation Program as a 2011/2012 watershed activity to assess the discharge potential of high priority watershed

constituents, to educate property managers, and to bring about BMP improvements at multi-family residences. These areas were chosen as the focus of a watershed activity because shared areas at multi-tenant commercial developments, which have a similar dynamic of a property manager responsible for maintaining common areas, have been found to be sources of watershed pollutants of concern like bacteria, sediment, and trash due to poor BMP implementation. Occasionally, past Dry Weather Monitoring Program results have also linked constituent exceedances to multi-family housing complexes.

The evaluation program confirmed that multi-family residences are potential sources of pollutants of concern, and provided some education materials to property managers/owners. Development of more effective educational materials and outreach programs for property managers/owners is planned for future reporting periods.

6.4.1 Training, Education, and Outreach

The City has continued to conduct training, education, and outreach activities for residents, which are described below. For additional information on the City's educational efforts and the educational materials distributed to its residents please refer to Section 8 of this Annual Report.

Distribution of Educational Material

The City began to develop the 2013 Storm Water Calendar after selecting the winners of a local art contest at elementary schools within the City. The calendar will be distributed in 2012/2013 in both English and Spanish and informs residents about pollutants found in San Diego Bay and neighboring waterways. It describes how pollutants such as fertilizers, pesticides, metals, paints, oil and grease and other debris can be transported from residential areas to the ocean. The theme for the calendar is "By Keeping Our Community Clean, We Can Keep The Ocean Clean" and each month will highlight a child's winning entry from the art contest.

Website

Additional information regarding the City's storm water program, pollution prevention measures, and BMPs is posted and continually updated on the City of National City's website (http://www.nationalcityca.gov/). The website calendar informs residents of upcoming events. Storm water-related information can be found under the Development Services Department tab in the Engineering Division section. The direct link to the City's storm water page is:
http://www.nationalcityca.gov/index.aspx?page=164.

Household Hazardous Waste Disposal Program

The City continues to collaborate with other cities to allow City residents to drop off HHW at the South Bay Regional Household Hazardous Waste Collection facility in Chula Vista. The Household Hazardous Waste Collection Facility is the primary location for hazardous waste collection in the South Bay, receiving HHW from the cities of National City, Imperial Beach, Coronado, and Chula Vista. Curbside pickup was made available to the disabled and elderly communities. The amount of waste collected

only from residents of National City is not available; however, the total amount of HHW collected from residents of all cities was 341,868 pounds from 3,430 participants.

Other Waste Disposal Programs/Activities

In addition to proper HHW disposal, the City encourages residents to recycle used oil. National City cooperates with the South Bay Regional Used Oil Program, and several Certified Used Oil Collection Centers are available for residential oil disposal within the City. The volume of used oil dropped off at the collection centers is not available.

The City's Public Works Department held three trash collection events (one in November and two in June) during this reporting period in conjunction with EDCO Disposal Company. Information about the trash collection events was sent out to all residents with their trash bills. During these events, residents were encouraged to dispose of any unwanted large items from their homes, such as furniture and appliances. In total, 1,756 vehicles dropped off almost 623 tons of waste during these events.

6.4.2 Compliance and Enforcement

Public Complaints

The City continues to implement compliance and enforcement measures by identifying potential sources of pollutants in residential areas from Dry Weather Monitoring Program data, complaints received by the Storm Water Hotline, and observations made by the City's municipal personnel. If a potential threat to water quality is present, the City provides a verbal warning, written warning, notice of correction, and/or NOV as applicable. The City received and addressed six residential-related complaints during this reporting period. Complaints were submitted through the Storm Water Hotline or internally through the City's Development Services or Public Works departments. All residential complaints were promptly resolved as detailed in the Summary of Documented Public Complaints in Section 4 of this Annual Report.

Code Enforcement

In addition to complaints to the storm water hotline, City code enforcement staff spend time in residential areas, checking for compliance with the City's Municipal Code. The correction of at least 80 residential code violations relating to potential threats to water quality in 2011/2012 had potential direct or indirect benefits for receiving waters. Violations corrected included 33 cases of prohibited junk or vehicle storage, 39 cases of dumping or trash accumulation, and seven cases of illegal auto repair. Enforcement is used as necessary to correct the violation. For example, citations were issued to three residents with accumulation of junk materials on their property that posed a potential threat to water quality.

6.5 Residential Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

6.6 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was last updated in March 2008. No changes to the City's residential component have been made since that time.

Figure 6-1
Division Street High TTWQ Residential Area

Figure 6-2
High TTWQ Residential Properties

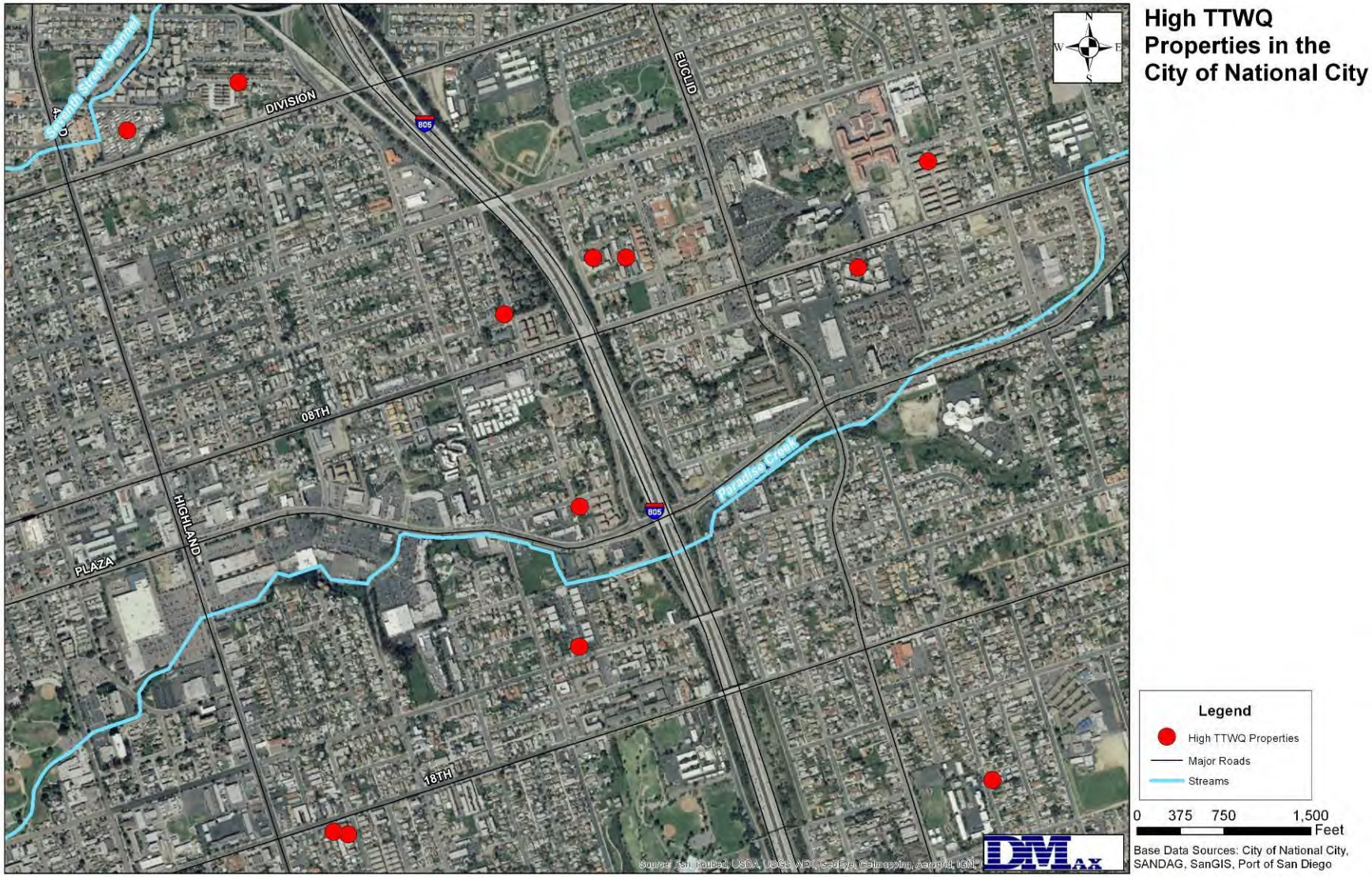

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

In accordance with the September 10, 2008 RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the 2011/2012 Illicit Discharge Detection and Elimination section and attachments to the RWQCB no later than December 15, 2012.

8.0 EDUCATION COMPONENT

8.1 INTRODUCTION

During 2011/2012, the City continued to provide education and outreach to a variety of audiences within the City. The City's education program targets municipal personnel, industrial and commercial businesses, construction site owners and operators, residents, and underserved communities. The City aims to reduce storm water pollution by increasing awareness about storm water and promoting the implementation of pollution prevention measures and BMPs. Through education and outreach, the City works to foster change in both the attitude and behaviors of the regulated community.

8.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the education component during the 2011/2012 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- On-site education regarding storm water issues and site-specific BMPs was provided to several municipal employees during routine facility inspections.
- Twenty municipal employees watched a storm water BMP training video and took a written test.
- The "Construction Site Best Management Practices" handout was distributed with all construction-related permits issued, including building permits, during the 2011/2012 reporting year.
- Restaurant and food industry personnel were educated on proper site-specific BMPs and provided a BMP handout on storm water issues common to food-related facilities.
- All businesses, including mobile businesses, applying for a new business license during the 2011/2012 reporting year received the "Preventing Urban Runoff Pollution" BMP Trifold.
- The City made an estimated 29,539 impressions through educational outreach material and activities.

8.2 STAFF TRAINING ELEMENT

During 2011/2012, the City provided training and educational outreach to its municipal personnel. In November 2011, a training packet that included the storm water instructional video "What We Can Do As Municipal Employees" along with follow up questions was distributed to City staff. Staff watched the video and submitted their answers to test questions by February 2012 to verify that training had occurred. The

video reviewed sources of storm water pollution and why it is important to prevent such pollution. It also discussed how to manage storm water complaints and addressed BMP implementation as it related to particular municipal positions. Municipal personnel were trained to report any IC/IDs observed to the appropriate City staff and to educate other municipal personnel and the general public about storm water pollution prevention.

The City's Storm Water Compliance Inspector has completed the California Environmental Protection Agency Basic Inspector Training Course and uses those skills to coordinate compliance within the various components of the City's storm water program. During routine municipal inspections, the City's storm water consultant provided site-specific education to several Parks Division and Public Works staff.

8.3 EDUCATIONAL OUTREACH ELEMENT

In addition to municipal staff, the City has continued to provide education and outreach to industrial and commercial businesses, construction site owners and developers, residents, and underserved audiences. These efforts promote storm water awareness and BMP implementation.

8.3.1 INDUSTRIAL AND COMMERCIAL BUSINESSES

As required by the Municipal Permit, the City inspects its inventoried businesses to evaluate compliance with the City's BMP requirements and provides site-specific education outreach to business owners and operators. Violations of the City's BMP requirements are corrected through enforcement actions as necessary. Site-specific information relating to the facility's activities was discussed with businesses personnel during inspections. The "Everything that flows down into a storm drain" brochure (Attachment 8.1) was also provided as necessary during inspections of industrial and commercial businesses.

All businesses that applied for a business license in the City received the Industrial and Commercial "Preventing Urban Runoff Pollution" Trifold, as seen in Attachment 5.3. In this way, even businesses that were not slated for inspection during 2011/2012 received storm water education.

Again this year, the City made an additional effort to educate restaurant and food industry personnel on proper BMPs. A double-sided fact sheet was distributed to all food-related businesses as necessary and highlighted the six most common issues at food-related facilities (Attachment 5.2). In addition, long-term solutions to costly and ineffective cleanup of grease spills were presented. Contact information for the City's compliance inspector and for the Storm Water Hotline was also included.

8.3.1.1 MOBILE BUSINESSES

Mobile businesses, specifically mobile car detailers or power washers, are considered a high TTWQ due to the nature of the business activities and the likelihood of prohibited

non-storm water discharges. Mobile businesses are not confined to a single area and many do not have City business licenses, making them difficult to identify. The City will continue to respond to complaints regarding mobile businesses and provides one-on-one verbal BMP education and literature during the complaint investigation as applicable. All businesses, including mobile businesses, applying for a new business license during the 2011/2012 reporting year received the "Preventing Urban Runoff Pollution" Trifold. This pamphlet includes minimum BMPs for three commonly mobile professions: power washing, car washing, and landscaping services. Information about the storm drain conveyance system and BMPs applicable to mobile business activities were also made available during 2011/2012 on the City's website.

8.3.2 Construction Site Owners and Developers

Due to the nature of their activities, construction sites have the potential to discharge many types of pollutants to receiving waters if not managed properly. Many construction site owners, contractors, and developers visit the City's Engineering Division to apply for necessary permits. Through this interaction with City staff, owners and developers are able to better understand watershed concepts, potential pollutants, and required BMPs. Information about the storm drain conveyance system and BMPs applicable to construction activities were also made available during 2011/2012 on the City's website.

The City provided various construction site-specific educational materials targeting storm water concepts during the 2011/2012 reporting year. The distributed educational materials are described below.

- The Construction Site BMP Fact Sheet or "Blue Sheet" (Attachment 3.1) describes specific BMPs for construction activities including soil stabilization and erosion prevention, sediment containment, materials and equipment management, non-storm water discharge control, and drainage control. Approximately 147 sheets were distributed with permits issued, including building permits; implementing the BMPs listed on the sheet is a condition of the permits.
- The National Pollutant Discharge Elimination System (NPDES) Project Applicability Form or "SUSMP Checklist" (Attachment 2.1) was completed by all projects applying for construction and building permits. Once submitted, the City reviewed the checklist and prioritized the projects. Requirements to ensure compliance with the Municipal Permit and General Construction Permit were presented to the applicant and further discussed to ensure the applicant was educated on the process.
- A copy of JURMP Appendix C, which contains a list of required construction BMPs, is made available upon request for proponents of construction activities within the City. All JURMP BMPs are also posted on the City's website.

8.3.3 Residential Areas

Since the City is mainly composed of residential areas, it is important to reach this particular audience through educational outreach programs. The City continued to make a variety of flyers, brochures, website postings, and other educational material available to its residents.

Storm Water Calendar

The City began to develop a 2013 Storm Water Calendar that will be distributed to schools and residents in 2012/2013. The calendar will present information in both English and Spanish and informs residents about pollutants found in San Diego Bay and neighboring waterways, and describes that pollutants such as trash, HHW, and bacteria from pet waste can be transported from residential areas to the ocean. The calendar will also provide the dates of the 10th Annual Creek to Bay Cleanup event and the Coastal Cleanup Day. See Section 9 of this Annual Report for a more detailed description of these events.

During 2011/2012, the third annual Storm Water Art Contest was arranged for 3rd graders in the City, which will provide images for the calendar. Contest announcement flyers for teachers (Attachment 8.2) and for 3rd grade students and their families (Attachment 8.3) were distributed to provide information about the contest as well as the City's storm water program. More information about the development of the 2013 calendar is included in the Public Participation Component Section 9 of this Annual Report.

School Education and Outreach

The 2013 Storm Water Calendar art contest was held in conjunction with a lesson about storm water concepts for third grade elementary school students throughout the City. The resulting 2013 calendar will provide year round education on the connection between our communities' activities and the health of the oceans.

City Website

The City's website (http://www.nationalcityca.gov/) is another way in which City residents can become familiar with the design and intended use of the storm drain system, HHW, alternatives to hazardous household products, find information regarding volunteer opportunities, and applicable City contact information.

8.3.4 Underserved Communities

The City is a growing community that is diverse in culture. According to a door-to-door storm water survey held in April and May of 2009, one third of the 373 residents encountered in the high TTWQ residential areas preferred to speak in Spanish. A small fraction spoke Tagalog as their preferred language. To address the unique demographics of the City, the City's Storm Water Hotline accepts all reports of illegal discharges, regardless of language.

The City also provides educational materials both in English and Spanish to better serve Spanish speaking community members. These bilingual brochures may be found at various locations throughout the City, such as the Chamber of Commerce, the public library, public recreational centers, and the storm water display area at the City's Engineering Department. The bilingual educational handout entitled "Everything that flows down into a storm drains goes untreated directly to our creeks, lagoons, and San Diego Bay" is also included in mail-based correspondence (i.e. NOV, notice of corrective action, etc.) to residents and industrial and commercial businesses in the City.

8.3.5 Complaint Investigations

To further aid the process of identifying illicit discharges, the City encourages the public and City staff to report IC/IDs. The City's Storm Water Compliance Inspector follows up on all complaints made to the hotline. If a representative for the targeted business, residential area, or construction site is present, the inspector will provide site-specific information regarding storm water issues including applicable educational materials.

8.4 Outreach Component Effectiveness Assessment

The estimated number of impressions made by the City's education and outreach efforts during 2011/2012 is presented and described below. Please refer to Section 11 of this JURMP Annual Report for the remainder the effectiveness assessment for this program component.

Impressions Made

The City continues to provide residents and businesses with storm water-related education through inspections, distribution and mailing of educational materials, and various events throughout the year. The City calculates an estimate of impressions based on the number and type of educational materials distributed. Estimates of the numbers of impressions generated by the City's efforts allow for a more realistic evaluation of the effectiveness of the NPDES storm water program.

The estimated number of impressions was generated by multiplying each effort by the number of impressions thought to be generated by that particular effort. For example, inspections have been presumed to generate three impressions, with the exception of municipal inspections. Municipal inspections generally involve more people and are assumed to generate five impressions. Training sessions and cleanup events have been assumed to generate a number of impressions equal to four times the number of attendees, because it is likely that the attendees will discuss the content with others after the training session or cleanup event. Printed educational materials distributed in mass numbers are assumed to generate three impressions each. Table 8-1 details the number of impressions made by the City during this reporting year.

Table 8-1
Impressions Made by the City

Impression Type	Estimated Count	Unit	Estimated Impressions Generated
Treatment Control BMP Inspections	11	Inspection	33
Treatment Control BMP Inspection Reports	11	Letter	33
Construction Inspections	66	Inspection	198
Construction Inspection Reports	66	Letter	198
Construction BMP "Blue Sheet"	147	Flyer	441
Municipal Inspections	10	Inspection	50
Municipal Storm Water Training Video and Quiz	20	Session	80
Complaints Investigated	9	Investigation	27
Industrial/Commercial Inspections	252	Inspection	756
Industrial/Commercial Inspection Reports for Business and Property owners	422	Letter	1266
NONA/NEC Paperwork	15	Flyer	45
NOI Paperwork	6	Flyer	18
Everything that flows down the storm drain….	905	Brochure	2715
"Preventing Urban Runoff Pollution" Trifold	545	Brochure	1635
Restaurant/Food Industry BMP Fact Sheet	90	Flyer	270
FOG Inspections	92	Inspection	276
FOG Letter	11	Flyer	33
FOG Fact Sheet	18	Flyer	54
FOG Templates	27	Flyer	81
Activity/Event Attendees	1692	Attendee	6768
Storm Water Ordinance 14.22	20	Document	60
2012 Storm Water Program Calendar Art Contest Information Flyers	770	Flyer	2310
National City Storm Water Calendar (2012)	3925	Calendar	11775
Regional Storm Water Calendar (2012)	31	Calendar	93
Regional Storm Water Coloring Book	108	Book	324
Total			**29,539**

8.5 PROGRAM REVIEW AND MODIFICATION

The City's JURMP was updated in March 2008. No changes to the City's education component have been made since that time.

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

The City encourages public participation in the City's JURMP as a means to foster storm water awareness and improve water quality. Public participation includes, but is not limited to, cleanup events, special community projects, reporting observed IC/IDs, and participating in City-hosted waste disposal events. Collaboration between the City and the community helps to encourage a sense of shared responsibility in protecting water quality both locally and regionally. The City has encouraged public participation through the programs discussed in this section.

9.1.1 SUMMARY OF NOTABLE ACCOMPLISHMENTS

Some notable achievements for the public participation component during the 2011/2012 reporting period are presented below. The following subsections of this section provide more details on how the City complied with the Municipal Permit during the reporting period.

- The City collaborated with the California Coastal commission to host two sites for the Coastal Cleanup Day in September 2011. A total of 459 volunteers collected 1,900 pounds of trash and recyclables at the Paradise Creek Education Park and Sweetwater River sites.
- The City collaborated with I Love A Clean San Diego (ILACSD) to host the Paradise Creek Education Park and Sweetwater River sites for the Creek to Bay Cleanup event in April 2012. A total of 133 volunteers participated to collect approximately 3,000 pounds of trash.
- The City held the third annual art contest during 2011/2012 for the 2013 Storm Water Calendar. A total of forty-four 3rd grade classrooms provided with storm water educational handouts to participate in the contest.
- The City continued to collaborate with other cities to provide HHW disposal for residents of the City of National City. Residents of National City properly disposed of HHW at the South Bay Regional Household Hazardous Waste Collection facility in Chula Vista.
- The City held three large-item disposal events during the months of November and June, which allowed residents to dispose of large items (not including HHW). Nearly 623 tons of large-item waste was collected from 1,756 vehicle loads during these events.
- The City continued to operate its Storm Water Hotline to receive complaints from businesses and residents in the City.

9.2 PUBLIC PARTICIPATION ACTIVITIES

Cleanup Events and Programs

During 2011/2012, the City hosted cleanup events at various locations in the City. These events provide a direct benefit to water quality and provide an opportunity for the City to inform event volunteers of storm water issues.

The City participated in the California Coastal Commission sponsored Coastal Cleanup Day on September 17, 2011 (Figure 9-1). Two hundred volunteers cleaned a 1.5 miles of Sweetwater River and collected 1,200 pounds of trash and 150 pounds of recyclables. In addition, 259 volunteers at Paradise Creek Education Park collected 550 pounds of trash in the two-mile cleanup area. In total, Coastal Cleanup Day volunteers collected 1,900 pounds of trash and recyclables and cleaned 3.5 miles along receiving water bodies.

Figure 9-1. Coastal Cleanup Day Event

The City continued to collaborate with ILACSD and sponsored the Paradise Creek Education Park and Sweetwater River sites for the Creek to Bay Cleanup event on April 28, 2012. Sixty-eight volunteers collected 700 pounds of trash and debris (Figure 9-2) from Paradise Creek. An additional 65 volunteers cleaned three miles of Sweetwater River and collected 2,300 pounds of trash.

In total, 133 volunteers collected approximately 3,000 pounds of trash and cleaned 3.5 miles of park in National City.

Figure 9-2. Creek to Bay Cleanup Event

2013 Calendar Development

As previously mentioned, during 2011/2012, the City began to develop the 2013 Storm Water Calendar. Similar to previous calendars, the City worked to involve the public in the development of the 2013 edition. The third annual art contest was held in May 2012 for the 3rd grade students of all 10 public elementary schools within the City. The 12 winning images will be included for each month of the upcoming calendar.

The theme of the contest was "By Keeping Our Community Clean, We Can Keep The Ocean Clean." Forty-four classrooms were provided with educational presentation material by the school district representative, and teachers were given contest guidelines to share with their students (Attachment 8.2). The presentation addressed watershed concepts, the storm water conveyance system, pollutants of concern, and how to eliminate pollutants in urban runoff. The provided presentation also included past examples of submitted student work. An informational flyer that outlined the rules of the contest and presented some storm water concepts was given to about 871 students to take home (Attachment 8.3). Winners were selected in 2011/2012 and will be honored at a National City Council Meeting in the 2012/2013 reporting period. Children were encouraged to depict keeping their community clean and include images of known landmarks or elements specific to their neighborhoods.

Hazardous Waste Collection and Used Oil Recycling Program

The City's Hazardous Waste Collection and Used Oil Recycling Program encourage City residents and business owners to properly dispose of HHW. Residents have access to proper disposal facilities for HHW at the South Bay Regional Household Hazardous Waste Collection facility in Chula Vista. This facility is open on Wednesdays and

Saturdays from 9:00 a.m. to 1:00 p.m. and accepts up to 15 gallons or 125 lbs of waste per household for a small co-payment. An example informational ad for this program is included as Attachment 9.1. This service is also available to residents in the cities of Chula Vista, Coronado, and Imperial Beach. During the 2011/2012 reporting year, 3,430 participants brought over 341,868 pounds of hazardous waste. Door-to-door pick up was available for disabled or elderly communities for a small fee.

The City's website also informs residents of what is considered HHW and how and where to properly dispose of it.

Other Waste Disposal

The City continued to hold large item trash collection events for bulky items like furniture and appliances at the EDCO Recovery and Transfer Facility. The City coordinated with EDCO Recycling and Waste Collection Services to host one event in November and two events in June. Almost 267 tons of waste was collected from 801 vehicle loads on November 5, 2011. On June 9, 2012, the facility collected over 160 tons of waste from 551 vehicles and then an additional 196 tons from 404 vehicles the following Saturday, June 16, 2012. The City encouraged the public to bring their debris (not including HHW) for proper disposal. Door-to-door pick up was provided for disabled or senior residents.

Public Reporting

As discussed in Section 4, complaints are received through the City's Storm Water Hotline and online website reporting system. The residential, industrial and commercial, construction, and municipal communities are encouraged to use the hotline to report IC/IDs. The City investigates each complaint and tracks the complaint and follow-up actions, as applicable. The hotline number is available on various brochures distributed by the City as well as on the City's website. This reporting period there were 9 complaints received by the City. All complaints reported during 2011/2012 were investigated immediately and resolved appropriately by City staff. See Table 4-5 for details on documented public complaints.

9.3 Public Participation Component Effectiveness Assessment

Please refer to Section 11 of this JURMP Annual Report for the assessment of program effectiveness.

9.4 Program Review and Modification

The City's JURMP was updated in March 2008. No changes to the City's public participation component have been made since that time.

10.0 FISCAL ANALYSIS

The sources of funding for this program listed in the City's JURMP have not been changed during this reporting period. During 2009/2010, a fiscal analysis reporting template was developed collectively by the Copermittees. The City has used this template to report the 2011/2012 expenditures in this JURMP Annual Report.

San Diego County Copermittees Fiscal Analysis Report for Urban Runoff Management Programs

EXPENDITURE SUMMARY

JURISDICTIONAL COMPONENTS	
Administration	$25,478
Development Planning	$63,174
Construction	$40,492
Municipal	$318,856
Industrial and Commercial	$61,566
Residential	$26,379
IDDE	$36,470
Education	$34,005
Public Participation	$13,504
Special Investigations	$17,890
Non-Emergency Firefighting	$0
Jurisdictional Total	**$637,814**

WATERSHED	
Watershed 1 – San Diego Bay	$31,201
Watershed Total	**$31,201**

REGIONAL	
Annual Permit Fee to Regional Board	$18,196
Copermittee Cost Share of Regional Budget	$44,617
Regional Total	**$62,813**

TOTAL COSTS	$731,828

Watershed Urban Runoff Management Program (WURMP)

	Watershed 1 – San Diego Bay
Administration (1)	$8,443
Cost Share Contribution	$0
Watershed Activities	$22,758
Other	$0
TOTAL	**$31,201**

(1) Administration – includes Watershed strategic planning, management, mapping, assessment, and reporting.

Regional Urban Runoff Management Program (RURMP)

Regional Programs	Jurisdictional Cost Share Amount
Administration (1)	$474
Cost Share Contribution	$44,143
Other (2)	$0
TOTAL	**$44,617**

(1) Administration – includes assessment, reporting, management, etc.
(2) Other – examples include regional and special studies.

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next, the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

Based on participation in regional efforts and its experience implementing its JURMP, the City has identified a variety of metrics to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP.

The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The Municipal Permit requires the City to assess the effectiveness of each program component, the significant activities for each within each component, and the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the

text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the CASQA effectiveness assessment guidance document, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

Level 1 outcomes essentially are measures of permit compliance. The component-specific sections in this JURMP Annual Report provide details of programmatic actions taken to comply with the applicable Municipal Permit requirements. Appendix B of this JURMP Annual Report also includes a checklist that matches the Municipal Permit's annual reporting requirements with the section(s) or appendix of this report that addresses each requirement.

Levels 2 and 3

Tables 11-1 through 11-8 at the end of this section provide discussions of Level 2 and Level 3 outcomes for significant activities within each program component. Please note that Dry Weather Monitoring Program results are used in the assessments for other program components besides illicit discharge detection and elimination. Data is from the 2011 Dry Weather Monitoring Program conducted within the period from July 1, 2011 through June 30, 2012, which is comparable with previous years' assessments and data. Also note that only a Level 1 assessment applies to fiscal analysis, so no table for fiscal analysis is included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs reliable load estimation methods have not yet been developed.

Level 5

The Dry Weather Monitoring Program is the City's primary mechanism of measuring the quality of discharges. The City began collecting MS4 monitoring data in 2008/2009; however, the data gathered at this time is insufficient to provide substantive information about discharge quality.

Graphs displaying historical Dry Weather Monitoring results are provided at the end of this section as Figures 11-3 through 11-5. Ammonia-nitrogen, one of the constituents with the longest historical data record, has shown a decreasing trend in concentration over time. Median and average fecal coliform indicator bacteria counts have also decreased over time. No nitrate-nitrogen exceedances have been measured since 1996; no oil and grease exceedances have been recorded since 2002.

Level 6

No Regional Monitoring Program water quality monitoring stations are located within the City of National City. The Sweetwater Mass Loading Station is located just outside the southeastern border of the City, but only a very small portion of the City would drain to that site. Some sediment sampling has been completed in the Sweetwater River flood control channel along southern side of the City as part of the regional Ambient Bay and Lagoon Monitoring Program. The results of that program have been relatively inconclusive to date. The RWQCB contracted Southern California Coastal Waters Research Project (SCCWRP) to conduct some wet weather monitoring in Paleta Creek (Seventh Street Channel) in support of a pending Total Maximum Daily Load (TMDL) in response to 303(d) listings for Sediment Toxicity and Benthic Community Degradation. Recently the RWQCB has indicated that it desires to move forward and adopt this TMDL sometime before the end of 2012. At this point, the amount of data collected at these sites is not sufficient to determine any positive or negative trends for water quality at the site. Typically several years of data are needed before any trends become apparent. The City will continue to work with the San Diego Bay WURMP workgroup and TMDL stakeholder workgroups to improve the quality of water bodies in and around the City of National City.

11.2.2 Overall Component Assessments

Development Planning

The City's review process for development projects has effectively required higher removal efficiency BMPs for all projects approved in 2011/2012. The City continued to work with parties responsible for maintenance of treatment control BMPs, achieving compliance through cooperation or escalating enforcement. City permitting procedures resulted in a 100 percent installation rate for projects completed during the reporting period. Fluctuations in maintenance rates from the 2008/2009 to the 2011/2012 reporting period may be attributed on one hand to generally increasing awareness of the need for regular treatment control BMP maintenance and on the other hand various ongoing changes in project ownership.

Construction

The available data indicate that on the whole the City's construction program effectively requires BMP implementation. The City conducted dry season inspections for high and medium priority construction sites to require continued implementation of required BMPs in preparation for the wet season. Any BMP deficiencies noted were remedied promptly. The City's approval process continues to notify all construction projects that will disturb soil of the City's BMP requirements before a permit is issued. This process has helped bring about better BMP implementation at small projects that otherwise might not be aware of the BMP requirements.

Municipal

The City's municipal staff are regularly trained on storm water issues, and the City's MS4 cleaning and street sweeping programs meet or exceed minimum Municipal Permit

frequency requirements. In particular, the City sweeps its streets more often than the permit requirements to aid in WURMP efforts. As another part of WURMP efforts, the City continued to hire a contractor in 2011/2012 to do biweekly inspections and remove any observed trash from Paradise Creek.

Industrial and Commercial

The City continued to implement a comprehensive inspection program. During 2011/2012 the City used continued to communicate corrective actions to both property owners and inspected businesses, as needed. The City has continued to decrease follow-up inspection turnaround time, including allowing business representatives to e-mail photographs of corrections, leading to quicker improvements in BMP implementation.

Residential

The City's residential component mainly achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. Complaints received about residential areas and/or activities by the Storm Water Hotline are documented, investigated, and appropriate actions are taken to resolve the reported issue. In addition, multi-family residential complexes with shared areas were evaluated for pollutant discharge potential, and educational outreach specific to property managers was initiated.

IDDE

The RWQCB adoption of Addendum No. 2 to Order No. R9-2007-0001 has extended the reporting period for the IDDE component of the City's program, so a full assessment of the program's effectiveness cannot be provided at this time. Some initial metrics are presented in Table 11-6.

Education

During 2011/2012, the City provided educational outreach to various communities in the City. Most notably the City met with property managers of multi-family residential complexes to discuss BMP requirements and implementation, as discussed above. The City also started development of a 2013 calendar that presents various storm water concepts. This calendar will be distributed to school children and during various public events.

Public Participation

The City continued to host clean-up events in the City, including the California Coastal Cleanup and the Creek to Bay Cleanup. There was a 60 percent increase in volunteers participating in clean-up events within the City during 2011/2012 compared to 2010/2011, and more than five times many as in 2008/2009. The City also continued to ensure its own staff and the public are aware of the hotline and when to call it.

11.3 Program Review and Modification

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-1
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Review and approve project plans	External A relatively small number of projects submitted reports during 2011/2012. Based on meetings with applicants and BMPs proposed, it appears that the level of knowledge is increasing. Internal The City's storm water consultant and the City's Storm Water Program Manager worked with engineers in the City to improve their level of understanding of the SUSMP program. City personnel also attended training sessions—see Section 8. The City's consultant reviews SWMPs submitted to the City.	Overall project submittal approval rate during reporting period	31%	Percent of projects proposing BMPs besides filter inserts	100%
		Number of projects requiring three or more reviews prior to SWMP approval	1 (of 4)	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%
Verify proposed BMPs are implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City's NPDES Storm Water Compliance Inspector provided training to the inspector responsible for verifying BMPs prior to occupancy.	Percent of projects completed in 2011/2012 implementing all proposed BMPs	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 2		
Verify BMPs are properly maintained	External Annual maintenance verification letters were sent out in 2011/2012 and NOVs were issued to non-responders Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of inspected sites properly maintaining all BMPs	28%	Proper BMP maintenance is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 2		
		Percent of sites responding to verification letters	100%		
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-2
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Review proposed plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects generally meet requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify proposed BMPs are implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs, and the City's consultant conducts routine inspections of high and medium TTWQ construction sites.	Percent of BMP deficiencies resolved by City follow-up within the reporting period	93%	Proper BMP implementation is likely to have reduced pollutant loading.
		Resolution status of enforcement actions	See Section 3	
		Number of dry weather monitoring exceedances traced to construction sources	0 (2011 dry weather season)	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-3
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify proposed BMPs are implemented at facilities	City staff are regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities requiring a follow-up visit	0%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	N/A	Number of pet waste bags distributed	12,000 bags
		Number of dry weather monitoring exceedances traced to municipal sites	0 (2011 dry weather season)	Amount of pet waste removed through pet waste bag use*	2,400 pounds
Sweep streets and parking facilities		N/A, streets and parking facilities are swept as often as directed by management.		Amount of sediment and debris removed (weight or volume)	985 tons
				Amount of sediment and debris removed per length of street swept (weight or volume per curb mile)	130 lbs/ curb mile
Maintain and clean out MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume)	12.6 tons
Maintain sanitary sewer system		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons)	0
Maintain municipal treatment control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment control BMPs	186 pounds
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Based on studies conducted by the County of San Diego, approximately 0.2 pounds of pet waste is collected per bag used. A separate literature search performed by the San Diego County Regional Airport Authority found a figure of 0.25 pounds per bag (San Diego Bay Copermittees, 2010). To be conservative, the estimate in this table is based the smaller of the two numbers.

Table 11-4
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP implementation	External Knowledge assessment scores indicated approximately half of the personnel present during inspections lacked any understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal The City contracts with a qualified consultant to perform industrial and commercial inspections.	Percent of inspected sites requiring a follow-up visit	27%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of enforcement actions	See Section 5		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	1 (2011 dry weather season)	Number of IC/IDs eliminated (inspections and complaint investigations)	5
		Consistent with the intentional selection of sites with the highest TTWQ potential, many sites had a lower BMP score. However, the most common score was three. See Figure 11-2 on the following page for a score distribution.			
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Industrial/Commercial Knowledge Assessment Scores

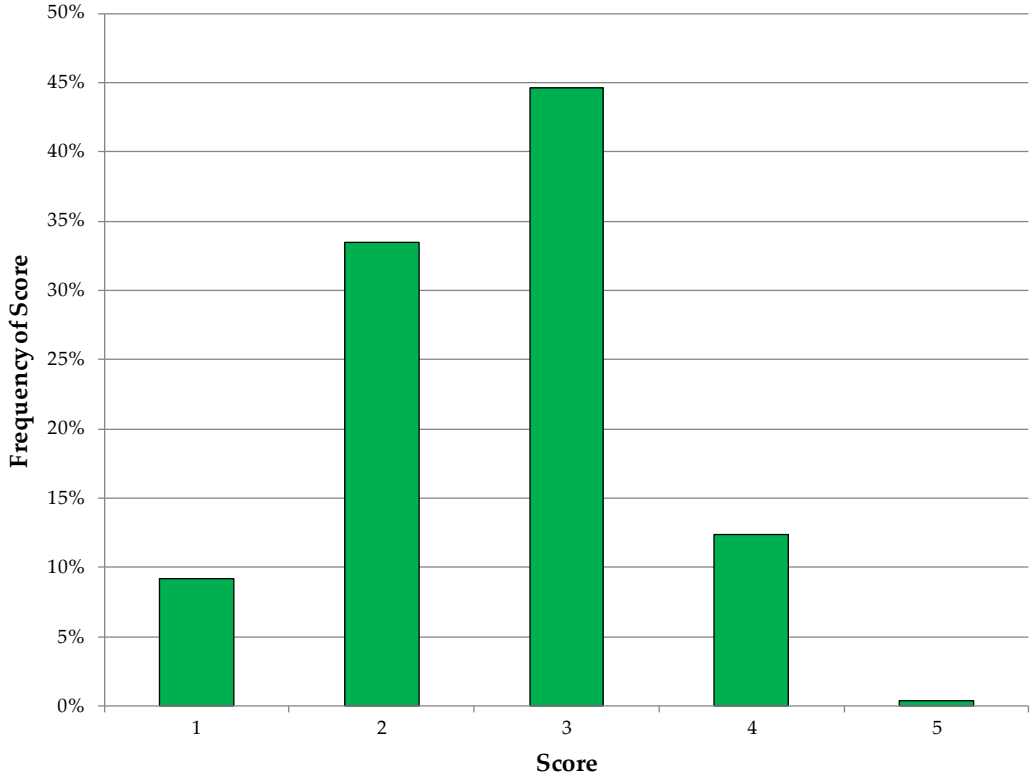

Figure 11-2
Industrial/Commercial BMP Implementation Scores

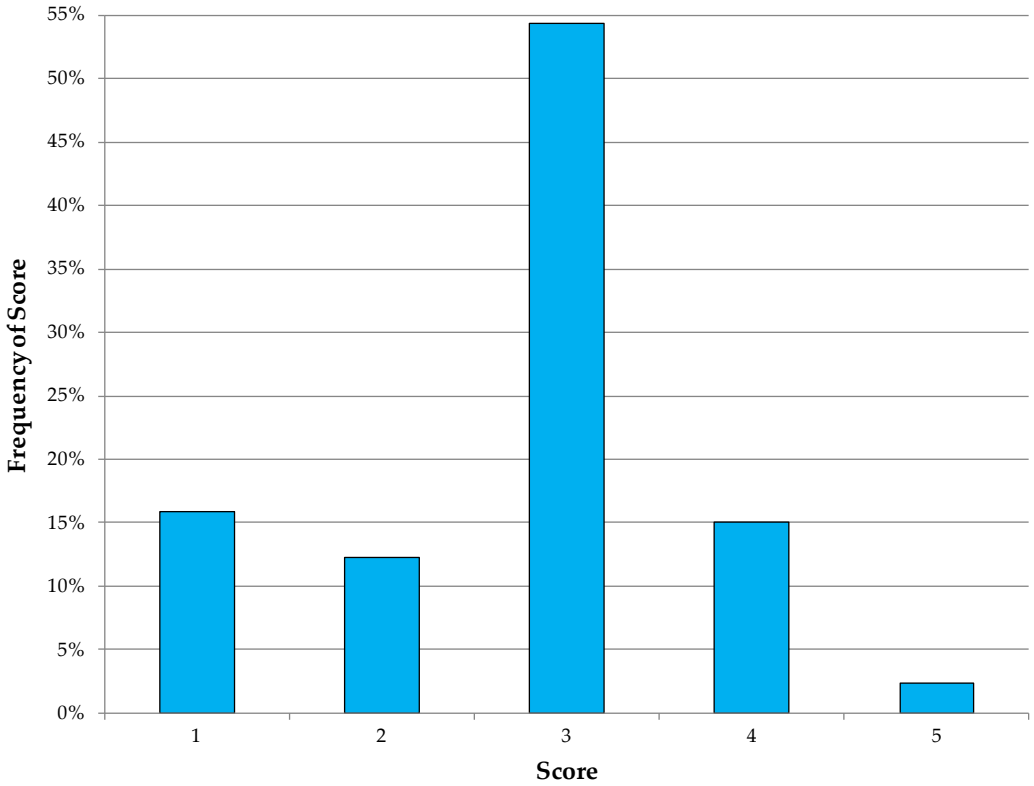

Table 11-5
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP implementation	External See sections 6 and 8 for details of this and other education. Internal The City's Storm Water Program Manager and other City staff involved in the program have a good understanding of the goals of the storm water program.	Number of residential incidents reported to storm water hotline	9	Resolution of residential incidents reported to the hotline and other code violations likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Number of storm water-related code violations resolved	80	
		Resolution of enforcement actions	See Sections 4 and 6	
		Number of dry weather monitoring exceedances traced to residential sources	4 (2011 dry weather season)	
Maintain an accurate inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Illicit Discharge Detection and Elimination Component Assessment Measures*

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	The City contracts with a qualified consultant to perform its Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were identified for elimination, so a reliable estimate of load reduction cannot be made.
Respond to incidents reported to storm water hotline	The City's Storm Water Program Manager trains City staff as needed. See sections 4 and 8. City staff were responsible for many of the reports made to the hotline, as shown in Section 4.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 4 are likely to have resulted in a pollutant loading reduction.
Respond to and clean up SSOs	City staff are thoroughly trained on how to respond to SSOs.	See Section 4 for details.	There were no SSOs during the reporting period.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Although the overall IDDE component is to be submitted in December 2012, a preliminary assessment of the component's effectiveness is provided here.

Table 11-7
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Section 8 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for 2011/2012.
	Estimated number of impressions made	29,539		

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate, including operation of the Storm Water Hotline. See Section 9 for details.	Number of attendees at events (Cleanup event volunteers and disposal event participants)	2,348	Amount of trash, debris, and recyclables collected at cleanup events	4,900 pounds
		Number of calls received to the storm water hotline	9	Amount of large item waste collected at disposal events	826 tons
				Amount of HHW collected at the South Bay Regional Household Hazardous Waste Collection facility	341,868

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-3
Historical Dry Weather Monitoring Data: Action Level Exceedance Rates

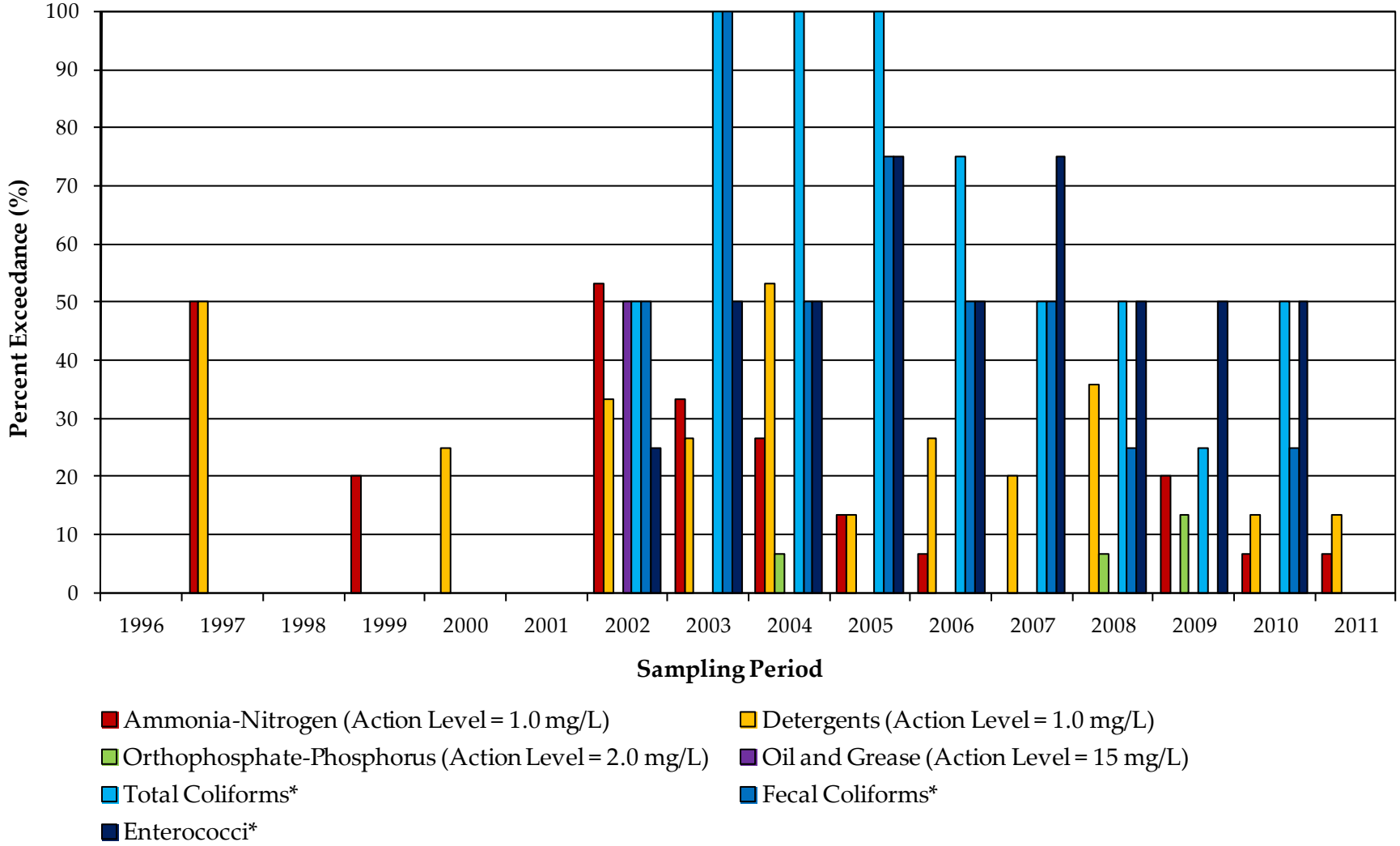

* Dry weather action levels for bacterial indicators were revised in 2010. Exceedances were counted with respect to action levels in effect at the time of sampling. During 1996-2009, the action level was 50,000 MPN/100 mL for total coliforms, 20,000 MPN/100 mL for fecal coliforms, and 10,000 MPN/100 mL for Enterococci. During 2010-2011, the action level was 130,000 MPN/100 mL for total coliforms, 13,000 MPN/100 mL for fecal coliforms, and 7,000 MPN/100 mL for Enterococci.

Figure 11-4
Historical Dry Weather Monitoring Data: Ammonia-Nitrogen, 1997-2011

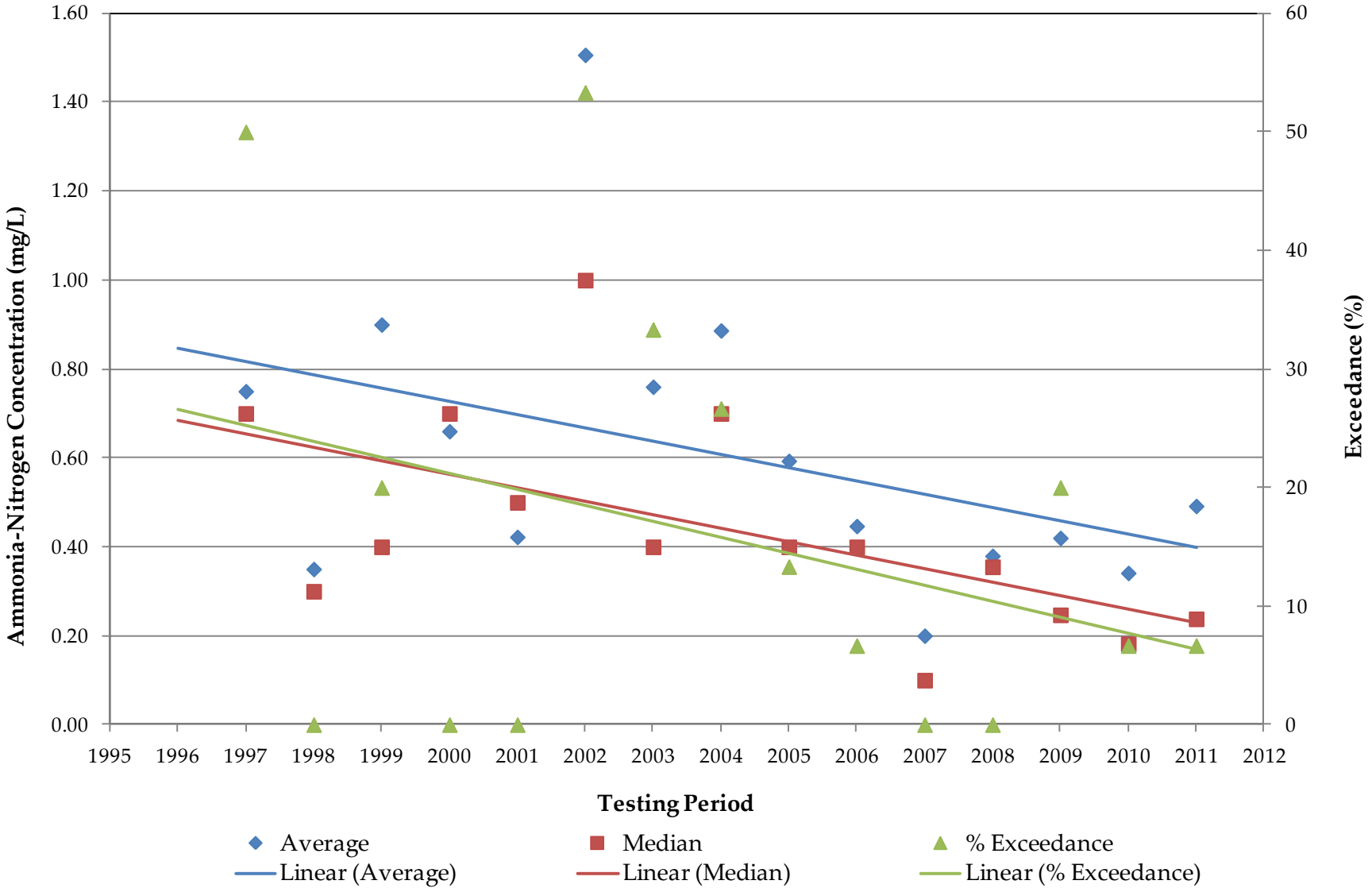

Figure 11-5
Historical Dry Weather Monitoring Data: Fecal Coliform Bacteria, 2002-2011

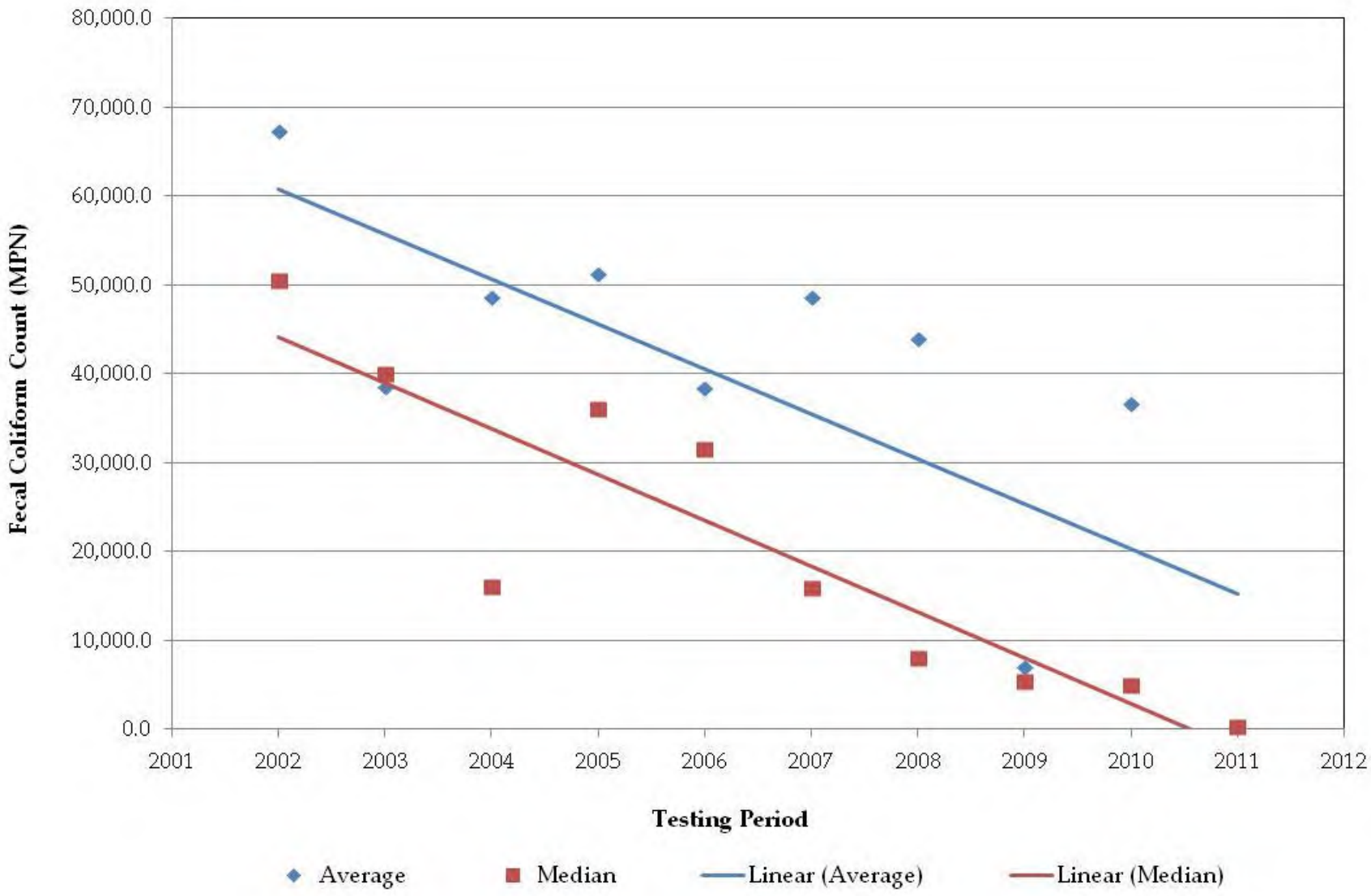

12.0 SPECIAL INVESTIGATIONS

During the reporting period the City undertook two additional programs: the Clean Community Program and a pollutant discharge potential assessment component during industrial and commercial inspections.

12.1 CLEAN COMMUNITY PROGRAM

Results from trash assessments in previous years have indicated that litter and illegally dumped items tend to consist of household trash and large household items, likely from residents in or around the City. During 2011/2012, the City continued to implement its Clean Community Program. This program is designed to foster a sense of shared responsibility in keeping the community of National City clean and free of pollutants that may otherwise be carried to local receiving water bodies.

The theme of the 2013 Storm Water Calendar Art Contest was "By Keeping our Community Clean, We can Keep the Ocean Clean!" Each month of the 2013 calendar will feature artwork by local third grade students illustrating the theme. By integrating public participation into the development of the 2013 calendar, the City increased attention to the "By Keeping our Community Clean, We Can Keep the Ocean Clean" message. This 2013 calendar will be distributed to schools, municipal staff and other City residents.

As part of WURMP efforts that are beyond minimum required MS4 maintenance, the City hired a contractor in 2008/2009 to do biweekly inspections and remove any observed trash from Paradise Creek. These cleanups continued in 2011/2012.

12.2 POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

During 2011/2012, the City conducted pollutant discharge potential assessments (PDPA) at industrial and commercial facilities that received full inspections; the purpose of the assessment is to assist in source identification. The assessment is intended to be a semi-quantitative tool to identify which sites are major sources of the principal pollutants of concern for storm water. For each of several main categories of pollutants, a numeric pollutant discharge potential (PDP) on a scale from 0 (not present) to 5 (severe) is assigned. PDPA scores are recorded on the standard inspection form in Attachment 5.1.

Table 12-1 shows the overall average PDP scores assigned for each pollutant during routine inspections at all of the industrial and commercial facilities visited in 2011/2012. Note that pH indicates substances likely to cause either an abnormally low (acidic) or abnormally high (basic) pH.

Table 12-1
Pollutant Discharge Potential Score Averages, By Category

Pollutant Category	Average PDP Score
Sediment	2.4
Nutrients	1.0
Aluminum	1.0
Iron	1.3
Heavy Metals	2.2
Organics	1.2
Trash	2.8
Oxygen Demanding	2.7
Oil & Grease	2.9
Bacteria	2.5
Pesticides	1.0
pH	1.9

Oil and grease, trash, oxygen demanding substances, and bacteria were observed to be the pollutants with relatively higher discharge potential during the industrial and commercial inspections conducted during 2011/2012. The City uses this information to help target businesses for inspection. Figure 12-1, on the following page, displays the distribution of PDP scores that make up the averages for each pollutant in the above table.

Figure 12-1
PDPA Score Distribution for Facilities Inspected in 2011/2012

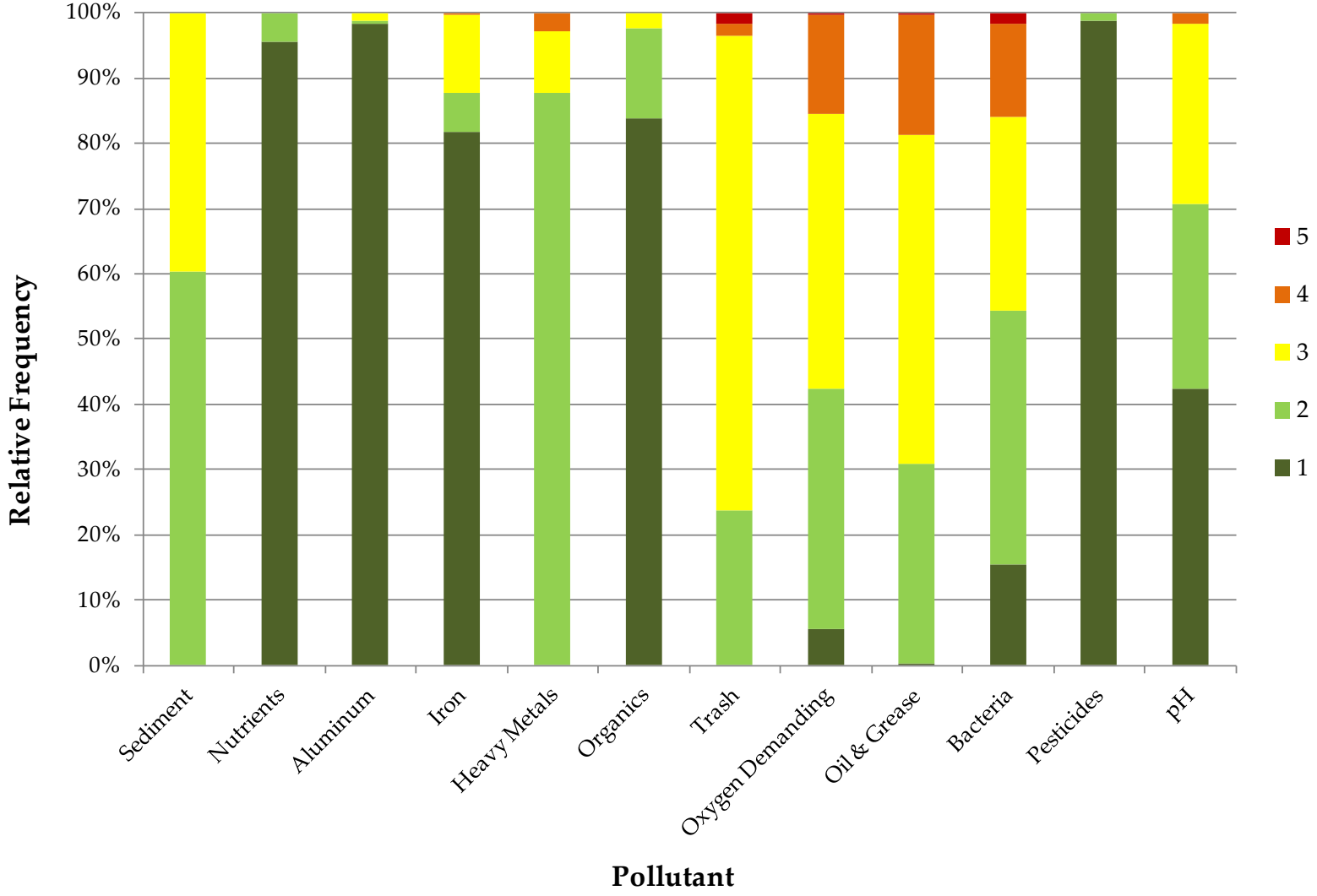

13.0 NON-EMERGENCY FIRE FIGHTING

No procedural changes were made during 2011/2012. Please reference Section 3 of the City's most recent JURMP for information about BMPs and procedures associated with non-emergency fire fighting activities.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 in response to new Municipal Permit requirements. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes to the JURMP made since the overall JURMP update in the spring of 2008 are discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 CONCLUSIONS AND RECOMMENDATIONS

During the 2011/2012 reporting period the City of National City continued to implement the programs in its JURMP, updated in March 2008. The City continues to work with other Copermittees to facilitate sharing of information about how best to run these programs and to provide regional guidance on standardized implementation where applicable. The City of National City will work collaboratively as a member of the various regional workgroups in this process and continue to refine its program implementation as needed to improve its ability to reduce or eliminate pollutant discharges and meet regulatory requirements. Also, the RWQCB has recently indicated that it desires to move forward and adopt the Seventh Street Channel TMDL before the end of 2012. The City will continue its efforts related to the pending TMDL for Seventh Street Channel.

16.0 REFERENCES

California Regional Water Quality Control Board, 2007. Order No. R9-2007-0001. *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Construction.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Industrial & Commercial.*

California Storm Water Quality Association, 2003. *California Storm Water BMP Handbook – Municipal.*

California Storm Water Quality Association, 2007. *Municipal Stormwater Program Effectiveness Assessment Guidance.*

City of National City, 2008. *Jurisdictional Urban Runoff Management Program.*

County of San Diego, 2007. *Standardized Format for Jurisdictional Urban Runoff Management Plan Annual Report.*

State Water Resources Control Board, 1997. Order No. 97-03-DWQ. *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.*

State Water Resources Control Board, 2009. Order No. 2009-0009-DWQ. *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.*

State Water Resources Control Board, 2010. *Clean Water Act Sections 305(b) and 303(d) Integrated Report on Evaluation of Surface Water Quality and Listing of Impaired Water Body Segments for the San Diego Region (2010 Integrated Report).*

County of San Diego, 2011. *Countywide Model SUSMP: Standard Urban Stormwater Mitigation Plan Requirements for Development Applications*.

County of San Diego, 2011. *Final Hydromodification Management Plan.*

APPENDIX A.1

TREATMENT CONTROL BMP INVENTORY

Inventory of Completed Development Projects with Approved Treatment Control BMPs

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP									Project Type	Year Finalized	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds/Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention	Infiltration Facility				
1	940 W 19th Street	940 W 19th Street	X									Industrial	2009/2010	La Paleta Creek/ 7th Street Channel	Low
2	Advanced Plastics	225 W. 30th St					X	X				Industrial	2006/2007	Sweetwater River	Medium
3	AutoZone	Highland Ave and East 21st Street					X	X				Commercial	2010/2011	Sweetwater River	Medium
4	Bay Marina Drive Widening (CIP)	I-5 and Bay Marina Drive						X				Municipal	2009/2010	Paradise Creek	Medium
5	Bonita Creek	Sweetwater Road	X				X					Residential	2006/2007	Sweetwater River	Medium
6	Canyon Ridge	SW of southern end of Rachael Ave						X	X			Residential	2009/2010	Sweetwater River	Medium
7	Discount Tire	1309 E Plaza Blvd					X					Commercial	2009/2010	Paradise Creek	Medium
8	Estrella Walk	Plaza Blvd. & L Street							X			Residential	2006/2007	Paradise Creek	Medium
9	Hanson's National City Batch Plant	12th St & McKinley Ave				X	X					Industrial	2006/2007	La Paleta Creek/ 7th Street Channel	Medium
10	Harbor View Condominiums	8th Street and D Avenue					X	X			X	Residential/ Commercial	2010/2011	La Paleta Creek/ 7th Street Channel	Medium
11	Harley Davidson	3201 Hoover Ave			X		X					Commercial	2009/2010	Paradise Creek	Medium

Inventory of Completed Development Projects with Approved Treatment Control BMPs (Continued)

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP									Project Type	Year Finalized	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds/Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention	Infiltration Facility				
12	Jack In The Box	18th & Highland Avenue					X					Commercial	2006/2007	Paradise Creek	Medium
13	Kalesa Walk	1830 - 1884 E. 12th Street					X					Residential	2009/2010	Paradise Creek	Medium
14	Marina Gateway (Hotel)	Marina Way, south of Bay Marina Dr	X						X			Commercial	2009/2010	Paradise Creek	High
15	Marina Gateway Streetscape (Harrison and 23rd St) (CIP)	Harrison Ave. between Bay Marina Dr. and 23rd St.									X	Public Roads	2010/2011	La Paleta Creek/ 7th Street Channel	Low
16	Mariposa Walk	E. 7th St and R St					X					Residential	2006/2007	Paradise Creek	Medium
17	Mirabelle (Cypress Glen Condos)	3229, 3359, 3391 Cypress St					X					Residential	2009/2010	Sweetwater River	Medium
18	National City Fire Station #34 (CIP)	333 East 16th Street					X		X			Municipal	2006/2007	Paradise Creek	Medium
19	National City Library (CIP)	1401 National City Blvd					X					Municipal	2006/2007	Paradise Creek	Medium
20	Pacific View Estates	E. Division Street between Highland and Laurel Ave							X			Residential	2009/2010	La Paleta Creek/ 7th Street Channel	Medium
21	Paradise Creek Park (CIP)	Harding Ave, West 19th St, & West 22nd St					X					Municipal	2006/2007	Paradise Creek	High

Inventory of Completed Development Projects with Approved Treatment Control BMPs (Continued)

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP									Project Type	Year Finalized	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds/Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention	Infiltration Facility				
22	Paradise Ridge	Hollyhock Lane	X									Residential	2006/2007	Paradise Creek	Medium
23	Paradise Village	Between 4th & 8th Street, Arcadia Ave & Bowron St.							X			Residential	2009/2010	Paradise Creek	Medium
24	Paradise Walk	Arcadia Ave and E. 8th St					X					Residential	2009/2010	Paradise Creek	High
25	Penske Truck Leasing	3132 Hoover Avenue					X					Commercial	2006/2007	Paradise Creek	High
26	Plaza Bonita Mall Expansion	3030 Plaza Bonita Road	X				X		X			Commercial	2007/2008	Sweetwater River	Medium
27	Plaza City Apartments	1535 E. Plaza Blvd							X			Residential	2007/2008	Paradise Creek	High
28	Plaza Village	L Avenue and Plaza Blvd					X					Residential	2006/2007	Paradise Creek	Medium
29	Sweetwater Town & Country Mall	Sweetwater Road					X					Commercial	2006/2007	Sweetwater River	High
30	Tremont Court Condominiums	Euclid Ave & Division St	X				X		X			Residential	2006/2007	La Paleta Creek/ 7th Street Channel	Medium
31	Walgreens	885 Euclid Ave					X					Commercial	2006/2007	Paradise Creek	High
32	Wal-Mart	1200 Highland Ave							X			Commercial	2006/2007	Paradise Creek	High

Inventory of Completed Development Projects with Approved Treatment Control BMPs (Continued)

All Projects are Located in the San Diego Bay Watershed

#	Project Name	Project Location	Treatment Control BMP									Project Type	Year Finalized	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds/Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention	Infiltration Facility				
33	WestAir Gases	2300 Haffley Avenue	X				X			X		Industrial	2009/2010	San Diego Bay	Medium

Note: Public Priority Projects are marked as Capital Improvement Projects (CIP) in the table.

Non-Priority Projects with Approval Conditional on Treatment Control BMPs

#	Project Name	Project Location	Treatment Control BMP									Project Type	Year Finalized	Receiving Water Body	Priority
			Biofilters	Detention Basins	Porous Pavement	Wet Ponds/Wetlands	Drainage Inserts	Media Filtration	Hydrodynamic Separators	Bioretention	Infiltration Facility				
1	Ball Kia	1940 National City Blvd			X							Commercial	2006/2007	Paradise Creek	N/A

Note: Non-Priority Projects are not an official part of the Inventory, but maintenance is tracked and verified annually per maintenance agreement.

APPENDIX A.2

CONSTRUCTION INVENTORY

Appendix A.2
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
1	Pacific View Estates	Division Street and Laurel Avenue	San Diego Bay	High	31	16	3	1	0	19
2	1209 K Avenue	1209 K Avenue	San Diego Bay	Medium	13	4	2	1	0	6
3	1215 K Avenue	1215 K Avenue	San Diego Bay	Medium	13	4	1	0	0	5
4	8th Street Smart Growth (Phase I)	8th Street, from trolley tracks to K Ave.	San Diego Bay	Medium	0	0	1	0	0	1
5	Bible Baptist Church	2432 E 18th Street	San Diego Bay	Medium	11	4	1	0	0	5
6	Canyon Ridge	Rachael Avenue at Blue Ridge Street	San Diego Bay	Medium	14	4	1	0	0	5
7	El Toyon Park Soccer Field	2005 E 4th Street	San Diego Bay	Medium	0	0	1	0	0	1
8	K Avenue Homes	1209 & 1215 K Avenue	San Diego Bay	Medium	18	6	0	0	0	6
9	Paradise Village	E 8th St and Arcadia Ave	San Diego Bay	Medium	31	9	0	0	0	9
10	Plaza Boulevard Center	1540 E Plaza Blvd	San Diego Bay	Medium	9	2	1	0	1	3

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
11	Hilltop View Homes	3000 8th Street	San Diego Bay	Low	31	3	1	0	0	4
12	Costco Optical Lab (Costco CWI)	1001 W 19th Street Suite B	San Diego Bay	Low	15	2	0	0	0	2
13	520 V Ave On-site Improvements	520 V Ave	San Diego Bay	Low	31	**		0	0	**
14	Curb & Gutter (New R & R): 2849 National City Blvd	2849 National City Blvd	San Diego Bay	Low	0	**		0	0	**
15	Curb (R & R w/standard type C & G): 2131 E 18th St	2131 E 18th St	San Diego Bay	Low	0	**		0	0	**
16	Curb (R & R w/standard type C & G): 304 E 5th Ave	304 E 5th Ave	San Diego Bay	Low	4	**		0	0	**
17	Driveway (R & R new - Commercial), Sidewalk (New R & R): 6 Highland Ave - Dino Day Care	6 Highland Ave - Dino Day Care	San Diego Bay	Low	4	**		0	0	**
18	Driveway (R & R new - Commercial): 1645 E Plaza Blvd (Holiday Inn)	1645 E Plaza Blvd (Holiday Inn)	San Diego Bay	Low	0	**		0	0	**
19	Driveway (R & R new - Residential): 2840 M Ave	2840 M Ave	San Diego Bay	Low	0	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
20	Grading: 1418 E 7th St (Grading Plan)	1418 E 7th St (Grading Plan)	San Diego Bay	Low	14	**		0	0	**
21	Grading: 1903 E 16th St	1903 E 16th St	San Diego Bay	Low	2	**		0	0	**
22	Grading: 2101 Tidelands Ave	2101 Tidelands Ave	San Diego Bay	Low	4	**		0	0	**
23	Grading: National City Golf Course	National City Golf Course	San Diego Bay	Low	0	**		0	0	**
24	Grading: Plaza Bonita West of Westfield shopping mall	Plaza Bonita West of Westfield shopping mall	San Diego Bay	Low	3	**		0	0	**
25	Habitat for Humanity G Avenue	1820 G Avenue	San Diego Bay	Low	30	**		0	0	**
26	Monitoring Wells: 10 Osborne Street	10 Osborne Street	San Diego Bay	Low	31	**		0	0	**
27	Monitoring Wells: 110 National City Blvd	110 National City Blvd	San Diego Bay	Low	5	**		0	0	**
28	Monitoring Wells: 133 E 8th St	133 E 8th St	San Diego Bay	Low	0	**		0	0	**
29	Palm Avenue Homes	1933-1941 Palm Ave	San Diego Bay	Low	22	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
30	Permit No: 10027. Public improvements: Construction: concrete demo & forms; others: resurfacing FY 10-11	Various Locations @ 30th St	San Diego Bay	Low	31	**		0	0	**
31	Permit No: 10029. On-site improvements: Others: landscaping per spec 09-17; plan no 10205D-10213D	200 E 12th Street	San Diego Bay	Low	31	**		0	0	**
32	Permit No: 10030. Public Improvements: Others: utility potholes	Plaza Blvd (Highland to Euclid)	San Diego Bay	Low	31	**		0	0	**
33	Permit No: 10033. Public Improvements: construction: drainage imp project spec 10-103	various locations	San Diego Bay	Low	31	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
34	Permit No: 10034. Public Improvements: sidewalk, curb & gutter, curb, driveway R&R residential, driveway R&R commercial, pedestrial ramp, per SDRSD, greenbook & approved specs & plans	various locations in city	San Diego Bay	Low	31	**		0	0	**
35	Permit No: 10043. Public Improvements: construction: monitoring wells 2 units	105 W 8th St	San Diego Bay	Low	31	**		0	0	**
36	Permit No: 11001. Public Improvement: sidewalk, pedestrian ramp, construction: fence	various parks	San Diego Bay	Low	31	**		0	0	**
37	Permit No: 11004. On-site improvements: grading: cut 42 cy, fill 66 cy, import 24 cy, BMP installation	2200 block Grove St	San Diego Bay	Low	31	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
38	Permit No: 11011. Public Improvements: sidewalk R&R per plan; driveway R&R inst per plan; construction: D-25 per plan; sewer 6" lateral	E 28th St & F Ave	San Diego Bay	Low	0	**		0	0	**
39	Permit No: 11016. Public Improvements: R&R sidewalk and driveway	NC Middle School	San Diego Bay	Low	0	**		0	0	**
40	Permit No: 68638. Public Improvements: Construction: install 4 mon wells per approved Encroachment Agreement	Various - Tolas, Salot, 8th & Plaza Blvd	San Diego Bay	Low	31	**		0	0	**
41	Permit No: 68663. On-site improvements: retaining wall SDRSD C-4	1220 Earle Dr	San Diego Bay	Low	31	**		0	0	**
42	Retaining Wall: 1135 Mary Lane	1135 Mary Lane	San Diego Bay	Low	0	**		0	0	**
43	Retaining Wall: 2140 L Avenue	2140 L Avenue	San Diego Bay	Low	0	**		0	0	**
44	Retaining Wall: 2651 Fenton Pl	2651 Fenton Pl	San Diego Bay	Low	0	**		0	0	**
45	Retaining Wall: 332-338 E 5th St	332-338 E 5th St	San Diego Bay	Low	0	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
46	Retaining Wall: 8th St near Burden St & Paradise Valley Hospital	8th St near Burden St & Paradise Valley Hospital	San Diego Bay	Low	0	**		0	0	**
47	Retaining Wall: Prospect St adjacent to Sweetwater Road	Prospect St adjacent to Sweetwater Road	San Diego Bay	Low	31	**		0	0	**
48	Retaining Wall: Retaining Wall	Retaining Wall	San Diego Bay	Low	2	**		0	0	**
49	Sewer Lateral: 1039 D Ave	1039 D Ave	San Diego Bay	Low	1	**		0	0	**
50	Sewer Lateral: 1304 O Ave	1304 O Ave	San Diego Bay	Low	1	**		0	0	**
51	Sidewalk (New R & R): 1006 E. 7TH Street	1006 E. 7TH Street	San Diego Bay	Low	0	**		0	0	**
52	Sidewalk (New R & R): 1139 Harbison Ave	1139 Harbison Ave	San Diego Bay	Low	3	**		0	0	**
53	Sidewalk (New R & R): 605 E 16th St	605 E 16th St	San Diego Bay	Low	0	**		0	0	**
54	Sidewalk (New R & R): Various Locations -Specs #11-06	Various Locations -Specs #11-06	San Diego Bay	Low	31	**		0	0	**
55	Street Pavement (Asphalt): 45 E 12th Street - Centro	45 E 12th Street - Centro	San Diego Bay	Low	1	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
56	Utility, Sidewalk (New R & R): 217 Highland Ave	217 Highland Ave	San Diego Bay	Low	13	**		0	0	**
57	Utility: 100 W 30th St	100 W 30th St	San Diego Bay	Low	7	**		0	0	**
58	Utility: 1015 National City Blvd	1015 National City Blvd	San Diego Bay	Low	12	**		0	0	**
59	Utility: 1117 Manchester St	1117 Manchester St	San Diego Bay	Low	5	**		0	0	**
60	Utility: 1140 Coolidge Ave	1140 Coolidge Ave	San Diego Bay	Low	1	**		0	0	**
61	Utility: 1202 E 6th St	1202 E 6th St	San Diego Bay	Low	1	**		0	0	**
62	Utility: 1231 Harding Ave	1231 Harding Ave	San Diego Bay	Low	0	**		0	0	**
63	Utility: 1231 Hoover Ave	1231 Hoover Ave	San Diego Bay	Low	4	**		0	0	**
64	Utility: 1240 Hoover Ave	1240 Hoover Ave	San Diego Bay	Low	1	**		0	0	**
65	Utility: 128 S Kenton Ave	128 S Kenton Ave	San Diego Bay	Low	1	**		0	0	**
66	Utility: 136 E 4th St	136 E 4th St	San Diego Bay	Low	1	**		0	0	**
67	Utility: 139 E 7th St	139 E 7th St	San Diego Bay	Low	1	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
68	Utility: 1410 Orange St	1410 Orange St	San Diego Bay	Low	1	**		0	0	**
69	Utility: 1411 E 17th St	1411 E 17th St	San Diego Bay	Low	0	**		0	0	**
70	Utility: 1439 E Ave	1439 E Ave	San Diego Bay	Low	5	**		0	0	**
71	Utility: 1600 Block Mckinley Ave	1600 Block Mckinley Ave	San Diego Bay	Low	14	**		0	0	**
72	Utility: 1610 D Ave (SDGE)	1610 D Ave (SDGE)	San Diego Bay	Low	12	**		0	0	**
73	Utility: 1610 National City Blvd	1610 National City Blvd	San Diego Bay	Low	9	**		0	0	**
74	Utility: 1724 Hoover Ave	1724 Hoover Ave	San Diego Bay	Low	0	**		0	0	**
75	Utility: 1732 Coolidge Ave	1732 Coolidge Ave	San Diego Bay	Low	1	**		0	0	**
76	Utility: 1735 E Plaza Blvd (Cox)	1735 E Plaza Blvd (Cox)	San Diego Bay	Low	10	**		0	0	**
77	Utility: 1814 Roosevelt Ave (s/o E 18th St)	1814 Roosevelt Ave (s/o E 18th St)	San Diego Bay	Low	5	**		0	0	**
78	Utility: 1815 & 1821 Grove St (SE/O 18th St)	1815 & 1821 Grove St (SE/O 18th St)	San Diego Bay	Low	4	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
79	Utility: 2100 Haffly Ave	2100 Haffly Ave	San Diego Bay	Low	0	**		0	0	**
80	Utility: 2136 E 8th St (SWA)	2136 E 8th St (SWA)	San Diego Bay	Low	0	**		0	0	**
81	Utility: 2300 Haffley Ave	2300 Haffley Ave	San Diego Bay	Low	6	**		0	0	**
82	Utility: 235 E 30th St	235 E 30th St	San Diego Bay	Low	1	**		0	0	**
83	Utility: 23rd St & McKinley Ave	23rd St & McKinley Ave	San Diego Bay	Low	13	**		0	0	**
84	Utility: 2435 Sweetwater Rd along Shelby Ave	2435 Sweetwater Rd along Shelby Ave	San Diego Bay	Low	0	**		0	0	**
85	Utility: 2436 E 18th St (w/o Lanotian Ave) (SDGE)	2436 E 18th St (w/o Lanotian Ave) (SDGE)	San Diego Bay	Low	12	**		0	0	**
86	Utility: 24th St, I Ave - N Ave	24th St, I Ave - N Ave	San Diego Bay	Low	1	**		0	0	**
87	Utility: 2505/2505A/2505B E 18th Street	2505/2505A/2505B E 18th Street	San Diego Bay	Low	1	**		0	0	**
88	Utility: 2575 E 8th St (actual work on Burden St)	2575 E 8th St (actual work on Burden St)	San Diego Bay	Low	9	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
89	Utility: 2900 Blk Prospect St	2900 Blk Prospect St	San Diego Bay	Low	13	**		0	0	**
90	Utility: 3003-07 Highland Ave	3003-07 Highland Ave	San Diego Bay	Low	14	**		0	0	**
91	Utility: 3007 Highland Ave	3007 Highland Ave	San Diego Bay	Low	6	**		0	0	**
92	Utility: 3131 National City Blvd (along 31st St)	3131 National City Blvd (along 31st St)	San Diego Bay	Low	14	**		0	0	**
93	Utility: 3746 Cherry Blossom St	3746 Cherry Blossom St	San Diego Bay	Low	0	**		0	0	**
94	Utility: 409 L Ave	409 L Ave	San Diego Bay	Low	0	**		0	0	**
95	Utility: 416 E 30th St	416 E 30th St	San Diego Bay	Low	1	**		0	0	**
96	Utility: 416 E 30th St	416 E 30th St	San Diego Bay	Low	1	**		0	0	**
97	Utility: 432 E 30th St	432 E 30th St	San Diego Bay	Low	1	**		0	0	**
98	Utility: 4360 Cummings Rd San Diego (inside Port District)	4360 Cummings Rd San Diego (inside Port District)	San Diego Bay	Low	14	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
99	Utility: 612 M Ave (SWA)	612 M Ave (SWA)	San Diego Bay	Low	0	**		0	0	**
100	Utility: 621 J Ave	621 J Ave	San Diego Bay	Low	9	**		0	0	**
101	Utility: 630' N/o CL intersec. McKinley Ave & W 18th St	630' N/o CL intersec. McKinley Ave & W 18th St	San Diego Bay	Low	11	**		0	0	**
102	Utility: 680 E 30th St	680 E 30th St	San Diego Bay	Low	1	**		0	0	**
103	Utility: 680 E 30th St	680 E 30th St	San Diego Bay	Low	1	**		0	0	**
104	Utility: 802 Olive Ave	802 Olive Ave	San Diego Bay	Low	1	**		0	0	**
105	Utility: 817 Eta Street	817 Eta Street	San Diego Bay	Low	1	**		0	0	**
106	Utility: 902 E 18th St	902 E 18th St	San Diego Bay	Low	1	**		0	0	**
107	Utility: 98 E 3rd St	98 E 3rd St	San Diego Bay	Low	0	**		0	0	**
108	Utility: Bay Marina Dr & Tidelands Ave	Bay Marina Dr & Tidelands Ave	San Diego Bay	Low	1	**		0	0	**
109	Utility: Beta St Lanoitan to Euclid Ave,	Beta St Lanoitan to Euclid Ave,	San Diego Bay	Low	1	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
110	Utility: Beta St Lanoitan-Euclid Ave	Beta St Lanoitan-Euclid Ave	San Diego Bay	Low	1	**		0	0	**
111	Utility: D Ave & 5th St	D Ave & 5th St	San Diego Bay	Low	1	**		0	0	**
112	Utility: Drexel Ave S/O Division St	Drexel Ave S/O Division St	San Diego Bay	Low	1	**		0	0	**
113	Utility: E 12th St, B Ave to D Ave	E 12th St, B Ave to D Ave	San Diego Bay	Low	0	**		0	0	**
114	Utility: E. 30th St @ D Ave.	E. 30th St @ D Ave.	San Diego Bay	Low	12	**		0	0	**
115	Utility: F Ave n/o E 28th St (SDGE)	F Ave n/o E 28th St (SDGE)	San Diego Bay	Low	11	**		0	0	**
116	Utility: Granger Ave from 18th ST to 20th St	Granger Ave from 18th ST to 20th St	San Diego Bay	Low	31	**		0	0	**
117	Utility: Harbison Ave, 8th st, 16th St & Plaza Blvd	Harbison Ave, 8th st, 16th St & Plaza Blvd	San Diego Bay	Low	1	**		0	0	**
118	Utility: Highland Ave & 13th St (NextG)	Highland Ave & 13th St (NextG)	San Diego Bay	Low	11	**		0	0	**
119	Utility: Highland Ave & E 28th Street	Highland Ave & E 28th Street	San Diego Bay	Low	0	**		0	0	**
120	Utility: Highland Ave & E 6th St (NextG)	Highland Ave & E 6th St (NextG)	San Diego Bay	Low	11	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
121	Utility: Highland Ave 100' s/o E 3rd St	Highland Ave 100' s/o E 3rd St	San Diego Bay	Low	1	**		0	0	**
122	Utility: Highland Ave bet Division & E 2nd (NextG)	Highland Ave bet Division & E 2nd (NextG)	San Diego Bay	Low	11	**		0	0	**
123	Utility: Highland Ave bet. 24th & 28th	Highland Ave bet. 24th & 28th	San Diego Bay	Low	0	**		0	0	**
124	Utility: n/e cor 4th St & harbison Ave (SWA)	n/e cor 4th St & harbison Ave (SWA)	San Diego Bay	Low	1	**		0	0	**
125	Utility: n/e corner E Plaza Blvd & Manchester (SWA)	n/e corner E Plaza Blvd & Manchester (SWA)	San Diego Bay	Low	1	**		0	0	**
126	Utility: NE cor 4th St & Harbison Ave	NE cor 4th St & Harbison Ave	San Diego Bay	Low	1	**		0	0	**
127	Utility: NE corner 26th St & National City Blvd	NE corner 26th St & National City Blvd	San Diego Bay	Low	1	**		0	0	**
128	Utility: Palm Ave, 16th to 20th Street	Palm Ave, 16th to 20th Street	San Diego Bay	Low	9	**		0	0	**
129	Utility: Plaza Blvd, 125' E/O "N" Ave	Plaza Blvd, 125' E/O "N" Ave	San Diego Bay	Low	1	**		0	0	**

Appendix A.2 (Continued)
Construction Inventory and Inspection Summary

#	Site Name	Site Address	Watershed	TTWQ	Weeks Active (Wet Season)	# of Insp. (Wet Season)	# of Insp. (Dry Season)*	Follow-Up Insp.	Complaint Investig. Insp.	Total Insp.
130	Utility: SANDAG Blueline electrical and conduit	SANDAG Blueline electrical and conduit	San Diego Bay	Low	0	**		0	0	**
131	Utility: Shell Ave - 100' s/o Lou Street (SWA)	Shell Ave - 100' s/o Lou Street (SWA)	San Diego Bay	Low	1	**		0	0	**
132	Utility: Sweetwater Rd w/o Euclid Ave	Sweetwater Rd w/o Euclid Ave	San Diego Bay	Low	27	**		0	0	**
133	Utility: Various Locations Utility Potholing	Various Locations Utility Potholing	San Diego Bay	Low	14	**		0	0	**
134	Utility: West 19th Street (Tidelands thru Harrison Ave)	West 19th Street (Tidelands thru Harrison Ave)	San Diego Bay	Low	24	**		0	0	**
135	Utility: West 22nd St & McKinley Ave	West 22nd St & McKinley Ave	San Diego Bay	Low	14	**		0	0	**

* Several construction sites received inspections the last week of the dry season to ensure proper BMP implementation for the wet season.

** Low priority construction sites received at least one inspection from City building inspectors during the 2011/2012 reporting period. These inspections include a check for proper construction BMP implementation and maintenance.

APPENDIX A.3

MUNICIPAL INVENTORY

Appendix A.3
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	HSA	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source[1]
1	Butterfly Park	East 22nd Street and Palm Avenue	High	909.12	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	X
2	El Toyon Park	2005 East 4th Street	High	908.31	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
3	Kimball Park	12th Street and D Avenue	High	908.32	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
4	Las Palmas Park	1800 Newell Street	High	909.12	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	X
5	Municipal Separate Storm Sewer	19 miles of storm drains, storm drain boxes, and open channel sections throughout the City	High	Throughout City	MS4	UL	UL	UL	PO**	UL	UL	PO**	PO**	UL	
6	Municipal Swimming Pool	1800 East 22nd Street	High	909.12	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	X
7	National City Municipal Golf Course	1439 Sweetwater Road	High	909.12	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	X
8	Paradise Creek Educational Park	West 19th Street and Coolidge Avenue	High	908.32	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	
9	Public Works East Yard	2100 Hoover Avenue	High	908.32	Public Works Facilities	L	PO	L	L	PO	PO	PO	PO	PO	
10	Public Works West Yard	2100 Hoover Avenue	High	908.32	Public Works Facilities	L	PO	L	L	PO	PO	PO	PO	PO	
11	Road and Streets	110 miles of roadways throughout the City	High	Throughout City	Road, Streets, and Highways	L	L	L	L	UL	UL	UL	PO	L	X
12	Sanitary Sewer System		High	Throughout City	Sanitary Sewer System	PO***	UL	PO***	UL	UL	PO***	PO***	PO***	UL	
13	Special Events	Throughout City	High	Throughout City	Special Events	UL	UL	UL	UL	UL	UL	PO	PO	L	
14	Sweetwater Heights Park	Cagle Street and Stockman Street	High	909.12	Parks, Recreational Facilities, and other Landscaped Areas	PO*	UL	PO*	L	L	L	L	L	PO	X
15	Fire Station 31	24th Street and Euclid Avenue	Medium	909.12	Fire Stations	PO	PO	PO	PO	UL	UL	UL	PO	PO	
16	George H. Waters Nutrition Center	1514 D Avenue	Medium	908.32	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
17	Graffiti Removal	Throughout City	Medium	Throughout City	Mobile Municipal Activities, Including Power Washing	PO	PO	PO	PO	UL	UL	UL	PO	UL	
18	Infrastructure Maintenance	Throughout City	Medium	Throughout City	Mobile Municipal Activities, Including Power Washing	PO	PO	PO	PO	UL	UL	UL	PO	UL	
19	Landscape Maintenance	Throughout City	Medium	Throughout City	Mobile Municipal Activities, Including Power Washing	PO	PO	PO	PO	UL	UL	UL	PO	UL	

Appendix A.3 (Continued)
Municipal Inventory

#	Facility Name	Facility Address	TTWQ	HSA	Facility Category	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source[1]
20	National City Fire Department Headquarters - Station 34	333 East 16th Street	Medium	908.32	Fire Stations	PO	PO	PO	PO	UL	UL	UL	PO	PO	
21	Police Station	1200 National City Boulevard	Medium	908.31	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
22	Camacho Recreational Gymnasium	1810 East 22nd Street	Low	909.12	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
23	Casa De Salud	1408 Harding Avenue	Low	908.31	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
24	Civic Center	1243 National City Boulevard	Low	908.32	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
25	El Toyon Recreational Center	2005 East 4th Street	Low	908.31	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
26	Kimball Recreation Center	148 East 12th Street	Low	908.32	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
27	Martin Luther King Community Center	140 East 12th Street	Low	908.32	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
28	National City Public Library	1401 National City Boulevard	Low	908.32	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	
29	Senior Services Center	1221 D Avenue	Low	908.32	Other Fixed Facilities	PO*	PO	PO*	PO	PO	PO	PO	PO	PO	

Notes

TTWQ – Threat to Water Quality

L = Likely, PO = Possible, UL= Unlikely

[1]Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water. A pollutant of concern is one for which the receiving water is impaired according to the Clean Water Act section 303(d) list. During 2011/2012, San Diego Bay was listed in the 2008 CWA Section 303(d) for polychlorinated biphenyls (PCB) based on fish tissue analyses. The shorelines at 7th Street Channel and at the 24th Street Marine Terminal were listed in the 2008 CWA Section 303(d) for benthic community effects and sediment toxicity. La Paleta Creek is listed as impaired for copper and lead. Paradise Creek is listed as impaired for selenium. Finally, Sweetwater River is listed as impaired for *Enterococcus*, fecal coliform, phosphorus, selenium, total dissolved solids, total nitrogen as N, and toxicity.

* Discharge of heavy metals and oil and grease is possible if the facility has on-site parking

** Sediment and oxygen demanding substances are possible pollutants for earthen or natural conveyances. Bacteria, but generally not viruses and other pathogens, may regrow in MS4s under certain conditions. While other pollutants may be discharged from the MS4, the MS4 itself is not a direct source of those pollutants.

***The sanitary sewer system is only a potential source of pollutants in the event of sewer line breaks or SSOs.

APPENDIX A.4

INDUSTRIAL INVENTORY

Appendix A.4
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
1	A-1 ALLOYS RECYCLING CENTER	724 CIVIC CENTER DRIVE	Medium	5093	Recycling	908.31	9 37I020171	Yes	No	No	Yes	No	No	Yes	No	Yes	X
2	A-AMERICAN SELF STORAGE	525 W 20TH STREET	Low	4225	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
3	ACROPOLIS SPACE CENTER	3200 HIGHLAND AVE	Medium	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
4	ACTIVE SIGN CO.	2827 HOOVER AVENUE J	Low	3993	Printing	908.32		No	No	No	No	No	No	No	No	No	
5	ADEPT PROCESS SERVICES, INC DBA MARINE SERVICES AND EQUIPMENT	1804 CLEVELAND AVE B	Low	3732	Boat Repair	908.31		No	No	No	No	No	No	No	No	No	
6	ADVANCE PLASTICS	225 W 30TH STREET	Low	3089	Manufacturing, Plastic/Rubber	908.32		No	No	No	No	No	No	No	No	No	
7	AMSEC, LLC	131 W 33RD STREET	High	4225	Wholesale/Storage/Warehousing	908.32		No	No	No	Yes	No	No	No	No	No	
8	ANCON TRANSPORTATION	1800 HARRISON AVENUE	Low	4226	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
9	APPAREL ENTERPRISES CO., INC.	2712 TRANSPORTATION AVENUE H	Low	2389	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
10	ASSAF SAWAYA FASHION	301 W 28TH STREET P	Low	2311	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
11	ATOMIC INVESTMENTS	3200 HIGHLAND AVE	Medium	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
12	AZAP CAPS AND TEES	220 W 25TH STREET E	Low	2759	Printing	908.32		No	No	No	No	No	No	No	No	Yes	
13	AZTEC PRINTING COMPANY	710 E 3RD STREET	Medium	2759	Printing	908.31		No	No	No	No	No	No	No	No	No	
14	BAY CITY MARINE INC.	1625 CLEVELAND AVENUE	High	3731	Boat Repair	908.31	9 37I014819	Yes	No	No	Yes	No	No	No	No	No	X
15	BEAR'S VM MACHINE	241 W 35TH STREET E	Medium	5015	Recycling	909.12		Yes	No	No	Yes	No	No	No	No	No	
16	BECKY BEEZ BISQUE & CERAMICS	2424 HOOVER AVE T	Low	3269	Manufacturing, Stone/Glass	908.32		No	No	No	Yes	No	No	No	No	No	
17	BEST WAY PRINTING	2602 TRANSPORTATION AVE E	Low	2759	Printing	908.32		No	No	No	No	No	No	No	No	No	
18	CALIFORNIA MOVING & STORAGE	1305 WILSON AVENUE	Medium	4214	Ground Transportation	908.31		Yes	No	Yes	No	No	No	No	No	No	X
19	CARROLL METAL WORKS, INC.	740 W 16TH STREET	Low	3441	Manufacturing, Structural Steel	908.31	9 37I021165	No	No	No	Yes	No	No	No	No	No	
20	CASA SANCHEZ FOODS	131 W 33RD STREET 11	Medium	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
21	CENTLI	221 W 33RD STREET	Medium	2099	Manufacturing, Food/Drink	909.12		No	No	No	No	No	No	No	Yes	No	X
22	COLLINS MARINE REPAIR, INC	1400 CLEVELAND AVENUE	Low	3441	Manufacturing, Structural Steel	908.31		No	No	No	No	No	No	No	No	No	
23	CONNECTION MEDICAL TRANSPORT	2504 TRANSPORTATION AVE E	Low	4789	Ground Transportation	908.32		No	No	No	No	No	No	No	No	No	
24	COPY POST PRINTING	100 W 35TH STREET B	Medium	2759	Printing	909.12		No	No	No	No	No	No	No	No	No	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
25	CORONADO ISLAND DESIGN & STAMPS	303 W 35TH STREET G	Low	3953	Manufacturing, Chemicals	909.12		No	No	No	No	No	No	No	No	No	
26	COSTCO WHOLESALE GROUP	1001 W 19TH STREET B	High	3827	Manufacturing, Equipment	908.31	9 37I022776	No	No	Yes	Yes	No	No	No	No	No	
27	COURRINGTON WOODWORKS	1535 TIDELANDS AVENUE A-E	Low	2541	Manufacturing, Wood/Furniture	908.31		No	No	No	No	No	No	No	No	No	
28	CP MANUFACTURING	1300 WILSON AVENUE	Low	3559	Manufacturing, Equipment	908.31	9 37I016543	No	No	No	Yes	No	No	No	No	No	
29	CP MANUFACTURING	1440 HARDING AVENUE B	Low	3679	Manufacturing, Electronics	908.31		No	No	Yes	Yes	No	No	No	No	No	
30	CREATIVE MOBILITY INC	320 CIVIC CENTER DRIVE	Medium	3799	Manufacturing, Equipment	908.31		No	No	No	No	No	No	No	No	No	
31	CREST OFFSET PRINTING CO,	921 COOLIDGE AVENUE	Medium	2759	Printing	908.31		No	No	No	No	No	No	No	No	No	
32	D F DESIGNS	1228 HOOVER AVENUE	Low	2434	Manufacturing, Wood/Furniture	908.31		No	No	No	No	No	No	No	No	Yes	
33	DAN FAB	1110 HARDING AVENUE	Medium	3499	Manufacturing, Fabricated Metal	908.31		Yes	No	No	Yes	No	No	No	Yes	Yes	X
34	DIMA-TECH	205 W 35TH STREET H	Low	3612	Manufacturing, Equipment	909.12		No	No	No	No	No	No	No	No	No	
35	DIVERSIFIED WOOD DESIGNS	124 E 30TH STREET A5	Low	2434	Manufacturing, Wood/Furniture	909.12		No	No	No	No	No	No	No	No	No	
36	DIXIELINE LUMBER COMPANY	3450 HIGHLAND AVE	Low	2439	Manufacturing, Wood/Furniture	909.12	9 37I015245	No	No	Yes	No	No	No	No	No	Yes	
37	DRAPERY MANUFACTURER	2605 HOOVER AVENUE A	Low	2391	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
38	DTI SOLAR POWER	205 W 35TH ST	Low	3677	Manufacturing, Electronics	909.12		No	No	Yes	Yes	No	No	No	No	No	
39	DURRA INK	303 W 35TH STREET E	Medium	2752	Printing	909.12		No	No	No	No	No	No	No	No	No	
40	E.L.A BEDSPREADS ETC.	3200 HIGHLAND AVE 408	Medium	2392	Manufacturing, Fabric/Clothes	909.12		No	No	No	No	No	No	No	No	No	
41	EHMCKE SHEET METAL CORP	840 W 19TH STREET	Medium	3444	Manufacturing, Fabricated Metal	908.31		Yes	No	No	No	No	No	No	No	No	X
42	EL GRANO DE ORO	730 E 7TH STREET	Low	2099	Manufacturing, Food/Drink	908.31		No	No	No	No	No	No	No	No	No	
43	EPSILON SYSTEMS SOLUTIONS INC	2101 HAFFLEY AVE	Low	3731	Boat Repair	908.31	9 37I021665	No	No	No	Yes	No	No	No	No	Yes	
44	EZ SPRING AND STAMPING	231 W 11TH STREET	Low	3499	Manufacturing, Fabricated Metal	908.31		No	No	No	Yes	No	No	No	No	Yes	
45	EZERA CLOTHING	220 W 25TH STREET E	Low	2331	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
46	FABRICATION TECHNOLOGIES INDUSTRIES	2200 HAFFLEY AVENUE A	Low	3441	Manufacturing, Structural Steel	908.31	9 37I022200	No	No	Yes	No	No	No	No	No	No	
47	FAMILY LOOMPYA CORP	2626 SOUTHPORT WAY L	High	2038	Manufacturing, Food/Drink	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
48	FASTSIGNS	1240 E PLAZA BLVD 602	Medium	3993	Printing	908.32		No	No	No	Yes	No	No	No	No	Yes	
49	FIESTA PACIFIC PRODUCTS, INC	2855 A AVENUE	Low	2037	Manufacturing, Food/Drink	908.32		No	No	No	No	No	No	No	Yes	No	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
50	FTC	1433 ROOSEVELT AVENUE	Low	3999	Manufacturing, Misc	908.32		No	No	No	No	No	No	No	No	No	
51	FUTURA FIBERGLASS	1921 CLEVELAND AVE	Low	3089	Manufacturing, Plastic/Rubber	908.31	9 37I015572	No	No	No	Yes	No	No	No	No	Yes	
52	G V INDUSTRIES	1346 CLEVELAND AVENUE	Low	3599	Manufacturing, Equipment	908.31		No	No	No	No	No	No	No	No	Yes	
53	GLASSWOOD STUDIO	907 A AVENUE	Low	3231	Manufacturing, Stone/Glass	908.32		No	No	No	Yes	No	No	No	No	No	
54	GOULET INDUSTRIES	340 W 26TH STREET J	Low	3479	Manufacturing, Fabricated Metal	908.32		No	No	No	No	No	No	No	No	No	
55	GULF COPPER SHIP REPAIR	2702 SOUTHPORT WAY B	Low	3731	Boat Repair	908.32		No	No	No	No	No	No	No	No	No	
56	H & B BAJA FILTERS, LLC	337 W 35TH STREET G	Low	3559	Manufacturing, Equipment	909.12		No	No	No	No	No	No	No	No	No	
57	H2O LIFE AQUARIUM FOODS, INC	1010 COOLIDGE AVE	High	2048	Manufacturing, Food/Drink	908.31		No	No	No	Yes	No	No	Yes	Yes	Yes	
58	HANSON AGGREGATES NATIONAL CITY BATCH PLANT (2003 NC LLC)	601 W 12TH STREET	Low	3273	Manufacturing, Concrete	908.31	9 37I020195	No	No	No	Yes	No	No	No	No	No	
59	HIGHWAY 54/NATIONAL SELF STORAGE LLC	132 W 33RD STREET	Medium	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
60	IDENTITY PLUS	1120 HOOVER AVENUE	Low	3069	Manufacturing, Plastic/Rubber	908.31		No	No	No	No	No	No	No	No	Yes	
61	IN STITCHES	34 E 17TH STREET B	Low	2211	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
62	INDU FASHIONS	220 W 25TH STREET B	Low	2329	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
63	INDUSTRIAL & ARCHITECTURAL SIGN PRODUCTION	1535 TIDELANDS AVENUE G	Low	3993	Printing	908.31		No	No	No	No	No	No	No	No	No	
64	INNOVATIVE CUTTING DESIGNS COR	1805 CLEVELAND AVE	Low	3499	Manufacturing, Fabricated Metal	908.31		No	No	No	Yes	No	No	No	No	Yes	
65	J B BRADFORD METALS	221 W 16TH STREET	Low	3446	Manufacturing, Fabricated Metal	908.31		No	No	No	No	No	No	No	No	No	
66	J. C. ENVIRONMENTAL COMPANY	2504 TRANSPORTATION AVENUE C	Low	4959	Waste Management	908.32		No	No	No	No	No	No	No	No	Yes	
67	JAANN	2602 TRANSPORTATION AVE F	Low	3999	Manufacturing, Misc	908.32		No	No	No	No	No	No	No	No	Yes	
68	JACOBS ENGINE REBUILDING	938 COOLIDGE AVENUE	High	3714	Manufacturing, Equipment	908.31		Yes	No	Yes	Yes	No	No	No	No	Yes	X
69	JB LITHO	2602 TRANSPORTATION AVENUE E	Low	2752	Printing	908.32		No	No	No	No	No	No	No	No	No	
70	JESSICA'S FASHIONS	2605 HOOVER AVENUE	Low	2335	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
71	K D R COMPANY PRINTING	301 W 28TH STREET D	Low	2752	Printing	908.32		No	No	No	No	No	No	No	No	No	
72	KDR/DPG	301 W 28TH STREET G	Low	2759	Printing	908.32		No	No	Yes	No	No	No	No	No	Yes	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
73	L B C MUNDIAL CORP	914 E 8TH STREET 201	Low	4731	Ground Transportation	908.32		Yes	No	Yes	No	No	No	No	No	No	
74	L3 COMMUNICATIONS PACORD SAN DIEGO	225 W 30TH STREET	Low	3812	Manufacturing, Electronics	908.32	9 37I015864	No	No	No	Yes	No	No	No	No	Yes	
75	L3 COMMUNICATIONS/PACORD SAN DIEGO	240 W 30TH STREET	Low	3812	Manufacturing, Electronics	908.32	9 37I015864	No	No	No	No	No	No	No	No	No	
76	L-3 SERVICES, INC., UNIDYNE DIVISION	2702 SOUTHPORT WAY E-F	Low	4731	Ground Transportation	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
77	LA ESPIGA DE ORO BAKERY	320 HIGHLAND AVE	Low	2051	Manufacturing, Food/Drink	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
78	LUCERO'S DRAPERIES	3200 HIGHLAND AVE 408	Medium	2391	Manufacturing, Fabric/Clothes	909.12		No	No	No	No	No	No	No	No	No	
79	M & N FURNITURE	125 W 22ND STREET	Low	2512	Manufacturing, Wood/Furniture	908.32		No	No	No	Yes	No	No	No	No	Yes	
80	MASTER MACHINE CORPORATION (VANTAGE ASSOCIATES)	900 CIVIC CENTER DRIVE	Medium	3499	Manufacturing, Fabricated Metal	908.31	9 37I019349	Yes	No	No	No	No	No	No	No	No	X
81	MICROWAVE SOLUTIONS INC.	3200 HIGHLAND AVE	Low	3663	Manufacturing, Electronics	909.12		No	No	No	No	No	No	No	No	No	
82	MILLER MARINE	1430 HOOVER AVENUE	Low	3499	Manufacturing, Fabricated Metal	908.31	9 37I018090	No	No	No	No	No	No	No	No	No	
83	MOTIVATIONAL SYSTEMS INC. (MSI)	2200 CLEVELAND AVENUE	Low	2599	Manufacturing, Wood/Furniture	908.31		No	No	No	No	No	No	No	No	Yes	
84	MOTOR MACHINE & SUPPLY	1602 HOOVER AVENUE	High	3714	Manufacturing, Equipment	908.31		Yes	No	Yes	Yes	No	No	Yes	Yes	No	X
85	MYLYN'S FASHION OF SAN DIEGO	901 COOLIDGE AVENUE	Low	2339	Manufacturing, Fabric/Clothes	908.31		No	No	No	No	No	No	No	No	No	
86	NATALINA ENTERPRISES	1840 HARRISON AVENUE	Medium	4214	Ground Transportation	908.31		Yes	No	Yes	No	No	No	No	No	No	X
87	NATHAN'S STONE WORLD INC	1014 COOLIDGE AVE	Low	3281	Manufacturing, Stone/Glass	908.31		No	No	No	Yes	No	No	No	No	Yes	
88	NATIONAL CITY SELF STORAGE	430 W 30TH STREET	Low	4225	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
89	NATIONAL CITY TRANSFER & STORAGE	2150 MCKINLEY AVENUE	Low	4214	Ground Transportation	908.31		No	No	Yes	Yes	No	No	No	No	No	
90	NATIONAL IRON WORKS	832 HOOVER AVENUE	Medium	3441	Manufacturing, Structural Steel	908.31	9 37I022987	Yes	No	No	Yes	No	No	No	No	No	X
91	NIEDERFRANK'S ICE CREAM INC.	726 A AVENUE	Low	2024	Manufacturing, Food/Drink	908.31		No	No	No	No	No	No	No	Yes	No	
92	OLSEN-SIMMONS CABINETRY	426 E 30TH STREET	Low	2599	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
93	OOH LA LA	2504 TRANSPORTATION AVE D	Low	2339	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
94	OOH LA LA (WEST KID'S GEAR)	2602 TRANSPORTATION AVENUE G	Low	2339	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
95	OXYHEAL MEDICAL SYSTEMS, INC.	3224 HOOVER AVENUE	Low	3499	Manufacturing, Fabricated Metal	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
96	PACIFIC STEEL, INC.	1700 CLEVELAND AVENUE	High	5093	Recycling	908.31	9 37I000615	Yes	No	Yes	Yes	No	No	No	No	Yes	X
97	PATRICK SHAW ENGRAVING	1533 TIDELANDS AVENUE J	Low	2796	Printing	908.31		No	No	No	No	No	No	No	No	No	
98	PENTAGON CARGO	3200 HIGHLAND AVE	Low	4731	Ground Transportation	909.12		Yes	No	Yes	No	No	No	No	No	No	
99	PLANNED PARENTHOOD OF SD & RIV	337 W 35TH STREET S	Medium	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
100	POSTURE CARE MATTRESS MFG.	34 E 17TH STREET A	Low	2515	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
101	POTTER ELECTRIC, INC. WAREHOUSE	105 W 35TH STREET A	Medium	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
102	PRECISION BINDERY & PRINTING	301 W 28TH STREET E	Low	2731	Printing	908.32		No	No	No	No	No	No	No	No	No	
103	PROCHEM SPECIALTY PRODUCTS, INC.	115 E 18TH STREET	Low	2841	Manufacturing, Chemicals	908.32		No	No	No	No	No	No	No	No	No	
104	PROTO MACHINING	105 W 35TH STREET L	Low	3499	Manufacturing, Fabricated Metal	909.12		Yes	No	No	No	No	No	No	No	No	
105	PUPPET SAFARI	326 W 11TH STREET	Medium	3942	Manufacturing, Plastic/Rubber	908.31		No	No	No	No	No	No	No	No	No	
106	QUALITY PRINTING INC	1535 TIDELANDS AVE H	Low	2759	Printing	908.31		No	No	No	Yes	No	No	No	No	Yes	
107	R. HARRIS AND CO.	2605 HOOVER AVENUE E	Low	2599	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
108	RAS FASHIONS	2605 HOOVER AVENUE B	Low	2399	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
109	RESEARCH AUTOMOTIVE GROUP, INC	199 E 27TH ST	Low	3462	Manufacturing, Fabricated Metal	908.32		Yes	No	No	No	No	No	No	No	No	
110	ROYCE CABINETS & GRANITE INC	2120 WILSON AVE	Low	3281	Manufacturing, Stone/Glass	908.32		No	No	No	No	No	No	No	No	No	
111	RYAN HYDRAULIC SERVICES, INC	1817 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31		No	No	No	No	No	No	No	No	No	
112	SAN DIEGO AUTOMOTIVE MUSEUM	600 W 12TH STREET	Low	4226	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
113	SAN DIEGO PRETZEL COMPANY	224 W 12TH STREET	Low	2052	Manufacturing, Food/Drink	908.31		No	No	No	No	No	No	No	No	No	
114	SAN DIEGO SEAFOOD	1842 MCKINLEY AVENUE	Low	2092	Manufacturing, Food/Drink	908.31		No	No	No	No	No	No	No	No	No	
115	SEWING SAAVEDRA	2525 SOUTHPORT WAY R	Low	2399	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
116	SMART CUTTING SERVICES	220 W 25TH STREET A	Low	2399	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
117	SMARTRUNK SYSTEMS INC	401 W 35TH ST B	Low	3669	Manufacturing, Electronics	909.12		No	No	No	No	No	No	No	No	No	
118	SMARTRUNK SYSTEMS INC.	337 W 35TH STREET R	Low	3669	Manufacturing, Electronics	909.12		No	No	No	No	No	No	No	No	No	
119	SOUTH BAY BOILER REPAIR, INC..	1224 ROOSEVELT AVENUE	Medium	3494	Manufacturing, Fabricated Metal	908.31	9 37I019728	Yes	No	Yes	Yes	No	No	No	No	No	X

Appendix A.4 (Continued)
Industrial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	WDID#	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
120	SOUTH BAY MOTORSPORTS WAREHOUSE 1	337 W 35TH STREET H	Medium	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
121	SOUTH BAY MOTORSPORTS WAREHOUSE 2	105 W 35TH STREET B	Medium	4225	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
122	SOUTHLAND CLUTCH EXCHANGE	101 E 18TH STREET	Low	3568	Manufacturing, Equipment	908.32		No	No	No	No	No	No	No	No	No	
123	STARK MFG. CO.	206 W 35TH STREET C & D	Medium	2394	Manufacturing, Fabric/Clothes	909.12		No	No	No	No	No	No	No	No	No	
124	STUDIO EUROPA INC	313 W 33TH STREET B	Medium	2434	Manufacturing, Wood/Furniture	909.12		No	No	No	No	No	No	No	No	No	
125	SUN DIEGO CHARTER CO.	2020 HOOVER AVENUE	High	4141	Ground Transportation	908.32	9 37I018361	Yes	No	Yes	No	No	No	No	No	No	
126	SURE RIDE INC	1523 WILSON AVE	Medium	4141	Ground Transportation	908.31		No	Yes	No	Yes	No	No	No	No	No	X
127	THE MACHINE SHOP & FABRICATORS	1925 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31		No	No	No	No	No	No	No	No	No	
128	TITAN MARINE, INC	2236 MCKINLEY AVE	Low	3732	Boat Repair	908.31		No	No	No	Yes	No	No	No	No	No	
129	TOD TOOL INC	2601 HOOVER AVENUE K	Low	3728	Manufacturing, Equipment	908.32		No	No	No	No	No	No	No	No	No	
130	TRANS ENERGY USA	1825 CLEVELAND AVE	Low	4226	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
131	TRI TECH REPROGRAPHICS	2712 TRANSPORTATION AVE E	Low	2759	Printing	908.32		No	No	No	Yes	No	No	No	No	Yes	
132	TS COMPANY	1616 HOOVER AVE	Low	3446	Manufacturing, Structural Steel	908.32		No	No	No	No	No	No	No	No	Yes	
133	UNIVERSAL STEEL FABRICATION	1702 HARDING AVENUE	Low	7692	Equipment Repair	908.31		No	No	No	Yes	No	No	No	No	Yes	
134	UPHOLSTERY FABRIC OUTLET (UFO)	1918 ROOSEVELT AVENUE	Low	2512	Manufacturing, Wood/Furniture	908.32		No	No	No	No	No	No	No	No	No	
135	US-MEX	2500 HOOVER AVENUE G	Low	3679	Manufacturing, Electronics	908.32		No	No	No	No	No	No	No	No	No	
136	VALENCIA STONE AND TILE	1124 COOLIDGE AVENUE	Low	3281	Manufacturing, Stone/Glass	908.31	9 37I020515	No	No	No	Yes	No	No	Yes	No	Yes	
137	VALMAR GRAPHICS INC	1400 E PLAZA BLVD	Medium	2759	Printing	908.32		No	No	No	No	No	No	No	No	Yes	
138	VIMONE'S GARMET CO.	220 W 25TH STREET G	Low	2329	Manufacturing, Fabric/Clothes	908.32		No	No	No	No	No	No	No	No	No	
139	WAGGONEERS TRUCKING	1545 TIDELANDS AVENUE	Medium	4212	Ground Transportation	908.31		Yes	No	Yes	No	No	No	No	No	No	X
140	WINDOW CLASSICS	1921 CLEVELAND AVENUE	Low	2391	Manufacturing, Fabric/Clothes	908.31		No	No	No	No	No	No	No	No	No	
141	WITHOUSKI CABINET	1535 TIDELANDS AVENUE P	Low	2434	Manufacturing, Wood/Furniture	908.31		No	No	No	No	No	No	No	No	No	
142	WSI METAL SUPPLY	1839 CLEVELAND AVENUE	Medium	3599	Manufacturing, Equipment	908.31		No	No	No	No	No	No	No	No	No	
143	ZAGA CUSTOM	1545 TIDELANDS AVE D	Low	2389	Manufacturing, Fabric/Clothes	908.31		No	No	No	No	No	No	No	No	Yes	

Appendix A.4 (Continued)
Industrial Inventory

Notes

TTWQ – Threat to Water Quality

SIC – Standard Industrial Classification Code

Pollutants Potentially Generated – Where a facility has a "Likely" pollutant discharge potential for a specific pollutant, a "Yes" is placed in the appropriate column.

Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water. A pollutant of concern is one for which the receiving water is impaired according to the Clean Water Act section 303(d) list. During 2011/2012, San Diego Bay was listed in the 2008 CWA Section 303(d) for polychlorinated biphenyls (PCB) based on fish tissue analyses. The shorelines at 7th Street Channel and at the 24th Street Marine Terminal were listed in the 2008 CWA Section 303(d) for benthic community effects and sediment toxicity. La Paleta Creek is listed as impaired for copper and lead. Paradise Creek is listed as impaired for selenium. Finally, Sweetwater River is listed as impaired for *Enterococcus*, fecal coliform, phosphorus, selenium, total dissolved solids, total nitrogen as N, and toxicity.

APPENDIX A.5

COMMERCIAL INVENTORY

Appendix A.5
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
1	100% NATURALL	20 N EUCLID AVE D	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	Yes	No	No	No	No	No	
2	1-DAY PAINT & BODY CENTERS INC	1146 NATIONAL CITY BLVD	Medium	7532	Auto Paint/Body	908.31		Yes	Yes	No	No	No	No	No	No	No	X
3	7 ELEVEN #13564 F	15 N EUCLID AVE	Low	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	Yes	Yes	
4	7 ELEVEN #13583 D	2425 SWEETWATER ROAD	Medium	5411	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
5	7 ELEVEN #17265	1601 E 18TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
6	7 ELEVEN #18218C	807 E 8TH STREET	Low	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	Yes	No	Yes	
7	7 ELEVEN #18978D	3100 E PLAZA BLVD	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	No	
8	7 ELEVEN #20785-B	2400 HIGHLAND AVE	Medium	5411	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
9	705 CIVIC CENTER DRIVE	705 CIVIC CENTER DRIVE	High	5531	Auto Supplies	908.31		Yes	No	No	Yes	No	No	No	No	Yes	X
10	99 CENT ONLY STORES	1320 HIGHLAND AVE	Low	5499	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
11	99 CENT STORE PLUS	1604 E 18TH ST	Low	5999	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
12	A & D HAWAIIAN BBQ	2220 E PLAZA BLVD D	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	No	Yes	No	
13	A & T WHOLESALE ELECTRIC & L	205 W 35TH STREET B	Medium	5063	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
14	A B C AUTOBUYERS	40 W PLAZA BLVD	Low	5012	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
15	A MIRROR DÉCOR (AKA NATIONAL GLASS & MIRROR CO.)	821 E 2ND STREET	Medium	1793	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
16	A NEW LOOK AUTO BODY & PAINT	340 W 11TH STREET	Low	7532	Auto Paint/Body	908.31		No	No	No	Yes	No	No	No	No	Yes	
17	A-1 HYDRAULICS SERVICE	2100 ROOSEVELT AVENUE	Low	7699	Equipment Repair	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
18	AB&A CUSTOM WHEELS & ACCESSORIES	1840 HIGHLAND AVE	Low	7534	Auto Repair	908.32		Yes	No	No	No	No	No	No	No	No	
19	ABC SUPPLY COMPANY	135 W 30TH STREET	Low	5033	Building Materials	908.32		No	No	No	Yes	No	No	No	No	Yes	
20	ALCEM FENCE CO. INC	1440 COOLIDGE AVENUE	Medium	1799	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
21	ALL AMERICAN PLASTIC BAGS	3020 HOOVER AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
22	ALL PRO AUTO REPAIR	517 NATIONAL CITY BLVD	Medium	7538	Auto Repair	908.31		Yes	No	No	No	No	No	No	No	Yes	X
23	ALLIED PIPING & WELDING, INC.	1120 HOOVER AVENUE	Medium	7692	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
24	ALLSPORTS FLOORING	301 W 28TH STREET K	Low	1752	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
25	ALM WINDOW & DOOR INC	337 W 35TH ST A	Low	5031	Building Materials	909.12		No	No	No	No	No	No	No	No	No	
26	ALPIN TACO SHOP	1641 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
27	AMEE BAY LLC	2105 CLEVELAND AVE	Low	1731	Other Contractor	908.31		No	No	Yes	Yes	No	No	No	No	No	
28	AMERMEX	241 W 35TH STREET J	Medium	5199	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
29	ANAYA'S NATIONAL AUTOMOTIVE	2125 ROOSEVELT AVENUE	Low	7538	Auto Repair	908.32		No	No	Yes	Yes	No	No	No	No	No	
30	ANTHONY'S PIZZA	1526 E 18TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
31	APPLEBEE'S NEIGHBORHOOD	3030 PLAZA BONITA RD	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	Yes	
32	ARCO AM PM #6523	133 W 8TH STREET	High	5541	Fueling	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
33	ARCO AM/PM #9566	1606 E PLAZA BLVD	Medium	5541	Fueling	908.32		No	No	No	Yes	No	No	No	No	Yes	
34	ARCTIC SUPPLY	213 CIVIC CENTER DRIVE	Low	5078	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
35	ARIANA'S MEXICAN BAKERY	1604 E 18TH STREET	Low	5461	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	Yes	
36	ARIDO MARKET	1643 WILSON AVENUE	Low	5411	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
37	ARROYO BROTHERS	128 NATIONAL CITY BLVD	Low	7532	Auto Paint/Body	908.31		No	No	No	No	No	No	No	No	Yes	
38	ASHTON AWNINGS INC	1200 HARBOR DR	Low	1799	Other Contractor	908.31		No	No	No	Yes	No	No	No	No	Yes	
39	ASIAN MARKET	3400 E 8TH STREET 111-112	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
40	AUDIO MOTION	2907 HIGHLAND AVE	Low	7549	Auto Repair	909.12		No	No	No	Yes	No	No	No	No	Yes	
41	AUNT EMMA'S	214 NATIONAL CITY BLVD	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
42	AUTO BUYERS PLUS	110 W PLAZA BLVD	Low	5521	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
43	AUTO SOUND & IMAGE	1316 NATIONAL CITY BLVD	Low	5531	Auto Supplies	908.32		No	No	No	No	No	No	No	No	No	
44	AUTO TECK	1023 COOLIDGE AVENUE	Low	7532	Auto Paint/Body	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
45	AUTO ZONE #5658	1539 HIGHLAND AVE	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
46	AUTO ZONE #5659	2500 E PLAZA BLVD	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	Yes	
47	AUTOBUYERS PLUS	110 W PLAZA BLVD	Medium	5521	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
48	AVIS RENT A CAR	1536 SWEETWATER ROAD B	Medium	7514	Vehicle/Equipment Rental	909.12		No	No	No	No	No	No	No	No	Yes	
49	B N B KETTLE CORN	3030 PLAZA BONITA RD 9242	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
50	BAE SYSTEMS LAND & ARMAMENTS	155 W 35TH STREET	Low	7699	Equipment Repair	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
51	BAKER, RON-CHEVROLET	2301 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
52	BALL AUTOMOTIVE GROUP	2729 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		No	No	Yes	Yes	No	No	No	No	No	
53	BALL AUTOMOTIVE GROUP (ACURA)	2001 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
54	BALL AUTOMOTIVE GROUP (KIA)	1940 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	Yes	Yes	No	No	No	No	No	
55	BALL AUTOMOTIVE GROUP (MITSUBISHI)	1935 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
56	BAMBOO ROTISSERIE, INC	2220 E PLAZA BLVD T-1	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	No	
57	BANTRY INDUSTRIAL & MARINE CRP	241 W 35TH STREET F	Medium	5085	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
58	BASKIN ROBBINS ICE CREAM	1493 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
59	BAXTER AUTOMOTIVE & MACHINE	1400 HOOVER AVENUE	High	7539	Auto Repair	908.31		Yes	No	Yes	No	No	No	No	No	No	X
60	BAY SYSTEMS, INC.	303 W 35TH STREET B	Low	7699	Equipment Repair	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
61	BAYVIEW ELECTRIC	2827 HOOVER AVENUE D	Low	1731	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
62	BEIJING ROYAL BUFFET	4 N EUCLID AVE A-C	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
63	BELIZE PARTY RENTAL	427 PALM AVE	Low	7359	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
64	BELY'S PRODUCE & MARKET	525 HIGHLAND AVE	Low	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
65	BEN'S 1615	1615 SWEETWATER ROAD A	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
66	BERLIN WALL WHOLESALE	301 W 28TH STREET R	Low	5139	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
67	BIG B MARKET & DELI	1540 COOLIDGE AVENUE	Low	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
68	BIG BEN MARKET	22 E 8TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
69	BIOPOINTE SCIENTIFIC, LLC	1215 WILSON AVE	Low	5047	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
70	BIRRIAS CHIVOS & CHEVES	2401 HIGHLAND AVE 104	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	Yes	
71	BISTRO CITY	1819 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
72	BJ MOTOR & BODY SHOP	1338 ROOSEVELT AVENUE	Medium	7538	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
73	BJ MOTORS	1705 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
74	BLIMPIE SUBS	1200 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
75	BLUE OCEAN TACKLE INC	1545 TIDELANDS AVE E	Low	5551	Vehicle Dealers	908.31		No	No	No	No	No	No	No	No	Yes	
76	BLUELINX DISTRIBUTION	901 BAY MARINA DRIVE	Medium	5031	Building Materials	908.31		No	No	No	Yes	No	No	No	No	Yes	
77	BOAT SELLERS	1730 CLEVELAND AVENUE	Medium	5551	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
78	BOB'S N. CAR & SMOG	49 E 16TH STREET B1	Medium	7549	Auto Repair	908.32		Yes	No	Yes	No	No	No	No	No	No	
79	BOB'S NATIONAL CITY AUTO	1504 NATIONAL CITY BLVD	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
80	BOSTROM INSTRUMENT COMPANY	208 CIVIC CENTER DRIVE	Low	5084	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
81	BRAMMER ELECTRIC	1920 MCKINLEY AVENUE	Medium	1731	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
82	BREAD DELUX BAKERY, ETC.	1420 E PLAZA BLVD D-1	Medium	5461	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
83	BURGER KING	815 HIGHLAND AVE 780	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	Yes	No	No	
84	BURRITOS EXPRESS	1539 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
85	BUSH POWER BRAKE, INC.	25 E 17TH STREET A & B	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
86	BUSTER'S BEACH HOUSE AND LONGBOARD BAR	740 BAY MARINA DRIVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	Yes	Yes	Yes	
87	C & W DIVING	1706 HOOVER AVENUE	High	1629	Other Contractor	908.31		Yes	Yes	No	Yes	No	No	Yes	No	Yes	X
88	C L F WAREHOUSE INC	2702 SOUTHPORT WAY B	Low	5013	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
89	C&M MOTORS INC.	904 ROOSEVELT AVENUE	High	7699	Equipment Repair	908.31		Yes	No	Yes	Yes	No	No	Yes	No	Yes	X
90	CA WELDING IRON WORKS	1630 HARDING AVENUE	Medium	7692	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
91	CAFE ESTELAS	1524 MCKINLEY AV	Low	5813	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
92	CAFÉ LA MAZE	1441 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
93	CAL AM MANUFACTURING	1215 WILSON AVE	Low	5083	Wholesale/Storage/Warehousing	908.31		No	No	Yes	Yes	No	No	Yes	No	Yes	
94	CALIBER COLLISION CENTER	3131 NATIONAL CITY BLVD	Low	7532	Auto Paint/Body	909.12		Yes	Yes	No	No	No	No	No	No	No	
95	CALIBER COLLISION CENTERS	2013 HAFFLEY AVE	Low	7532	Auto Paint/Body	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
96	CALIFORNIA AIR COMPRESSOR	1630 COOLIDGE AVE	Low	5084	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
97	CALIFORNIA AUTO DETAILING	1509.5 NATIONAL CITY BLVD	Low	7542	Vehicle Washing	908.32		No	No	No	No	No	No	No	No	No	
98	CALIFORNIA PRODUCE CORPORATION	1736 E PLAZA BLVD	Medium	5431	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	Yes	Yes	Yes	
99	CALIFORNIA SALES	205 W 35TH ST B	Medium	4731	Ground Transportation	909.12		No	No	No	No	No	No	Yes	Yes	No	X
100	CALIFORNIAS FURNITURE INSTALLATION, INC	2807 HOOVER AVE J-K	Low	1751	Other Contractor	908.32		No	No	Yes	No	No	No	No	No	Yes	
101	CALIFORNIA'S TACO SHOP	51 N HIGHLAND AVE H	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
102	CAMSAL ENTERPRISES	1705 HOOVER AVENUE C & D	Low	5099	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
103	CAR MAINTENANCE PROVIDERS	1531 NATIONAL CITY BLVD	Medium	7538	Auto Repair	908.32		Yes	No	Yes	No	No	No	No	No	No	
104	CARL'S JR. #120	1280 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	No	Yes	
105	CARLS' JR. #261	1502 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	No	X
106	CARNIVAL SUPERMARKET	1750 E 8TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
107	CAROLINO TRAFFIC CONTROL, INC	3035 E 8TH STREET	Low	1521	Other Contractor	908.32		No	No	No	No	No	No	No	No	Yes	
108	CARQUEST AUTOPARTS	1300 HIGHLAND AVE	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
109	CASA DE ORO RESTAURANT	1510 SWEETWATER ROAD A	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	No	No	Yes	
110	CASA DEL TACO	1635 SWEETWATER ROAD A	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	Yes	Yes	Yes	X
111	CESAR'S TACO SHOP	3123 D AVENUE	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	Yes	
112	CHANG DONG SUPERMARKET ORIENTAL SEAFOOD	600 E 8TH STREET 7 & 8	Low	5411	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
113	CHINA SUPER BUFFET	3007 HIGHLAND AVE 9	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
114	CHINESE CANTON BAKERY	1132 E PLAZA BLVD 204	Medium	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
115	CHINESE CITY RESTAURANT #2	1025 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
116	CHING'S FAMOUS HOPIA	1722 E 8TH STREET	Low	5461	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
117	CHOWKING	2220 E PLAZA BLVD T-1	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	Yes	Yes	Yes	Yes	
118	CHUCK E CHEESE'S	1143 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	Yes	Yes	Yes	
119	CHURCH'S CHICKEN	3040 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
120	CIRCUS MAN ICE CREAM	1037 HARDING AVENUE	Low	5142	Wholesale Food	908.31		No	No	No	No	No	No	Yes	No	No	
121	CIVIC CENTER AUTO BODY	1304 ROOSEVELT AVENUE	Low	7532	Auto Paint/Body	908.31		No	No	No	No	No	No	No	No	No	
122	CLUB 13	640 CIVIC CENTER DR	Low	5813	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	No	No	No	
123	COASTAL DECKING, INC.	2050 WILSON AVENUE	Low	1752	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
124	COASTAL MARINE SERVICE, INC	1533 WILSON AVENUE B	Medium	1772	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
125	COLOR VIE	1545 TIDELANDS AVE P	Low	5122	Wholesale/Storage/Warehousing	908.31		No	No	No	Yes	No	No	No	No	Yes	
126	COLUMN ONE, INC.	241 W 35TH STREET K	Low	1721	Painting/Coating	909.12		No	No	No	No	No	No	No	No	No	
127	COMMERCIAL FLEET SERVICE	1521 COOLIDGE AVENUE	Medium	7539	Auto Repair	908.31		Yes	No	No	No	No	No	No	No	No	X
128	CONCHING'S CAFÉ	3400 E 8TH STREET 115 & 116	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	Yes	Yes	Yes	Yes	
129	CONSOLIDATED INTERNATIONAL COR	436 W 8TH STREET A	Low	5085	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
130	CONSOLIDATED INTERNATIONAL COR	2500 HOOVER AVE A	Low	5085	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
131	CORONADO CAFE	801 NATIONAL CITY BLVD D	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
132	COSTCO WHOLESALE CORPORATION	1001 W 19TH STREET C & D	Low	4783	Ground Transportation	908.31		No	No	No	No	No	No	No	No	No	
133	COTIJAS MEXICAN FOOD	740 E 30TH STREET	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	Yes	Yes	No	X
134	COZINES GROCERY	402 CIVIC CENTER DRIVE	Low	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	Yes	
135	CRASH AND FIX AUTOBODY	202 W 11TH STREET	Low	7532	Auto Paint/Body	908.31		No	No	No	No	No	No	No	No	No	
136	CSI SUPPLY	337 35TH STREET M	Medium	5085	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
137	CUBILETE CO	2315 HIGHLAND AVE	Low	5531	Auto Supplies	909.12		No	No	Yes	No	No	No	No	No	No	
138	CVS/PHARMACY #9138	1201 E PLAZA BLVD	Low	5912	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
139	DAKOTA INN	831 E 8TH STREET	Low	5813	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
140	DANYA B	205 W 35TH STREET E	Medium	5023	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
141	DECKER'S SUBS & TORTAS	3030 PLAZA BONITA RD 2185	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
142	DELA CRUZ AUTO REPAIR INC	36 CIVIC CENTER DR	Medium	7538	Auto Repair	908.31		Yes	No	No	No	No	No	No	No	No	X
143	DELI TROPICAL	2808 18TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
144	DE-LUX ROOFING	1107 HARDING AVENUE	High	1761	Other Contractor	908.31		Yes	Yes	No	Yes	No	No	No	No	No	X
145	DENNIS'S BAKERY	832 E 18TH STREET	Low	5461	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
146	DENNY'S RESTAURANT	424 MILE OF CARS WAY	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	
147	DENNY'S RESTAURANT	1904 SWEETWATER ROAD 1473	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
148	DESSERTS PLUS, INC.	2220 E PLAZA BLVD Q	Medium	5461	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
149	DIAMANTE MOTORS INC	1112 NATIONAL CITY BLVD D	Low	7538	Auto Repair	908.32		Yes	Yes	No	No	No	No	No	No	No	
150	DISCOUNT TIRE CO. (SO. CA.)	1309 E PLAZA BLVD	Low	7534	Auto Repair	908.32		No	No	No	Yes	No	No	Yes	Yes	Yes	
151	DOLLAR TREE STORES INC	6 N EUCLID AVE	Low	5331	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
152	DOMINO'S PIZZA	702 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	No	No	Yes	
153	DON GROSS WAREHOUSE OF SAN DIEGO	301 W 30TH STREET	Low	5013	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
154	DON JOHN MARKET	431 N HIGHLAND AVE	Low	5411	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
155	DONG, CHAN, ORIENTAL MARKET	600 E 8TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
156	DOOR-MAN	910 HOOVER AVENUE	Medium	1799	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
157	EL AGUILA MEXICAN FOOD	640 HIGHLAND AVE A	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
158	EL ASADERO GRILL	2503 SWEETWATER ROAD	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	Yes	
159	EL JUAN CAFÉ	2316 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	No	
160	EL MANGO MANILA	2303 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	Yes	No	No	No	No	Yes	
161	EL NUEVO MILLENIO MEXICAN FOOD	2323 E DIVISION STREET	High	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
162	EL PALENQUE TACO SHOP	3100 E 8TH STREET A	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
163	EL PARAISO	2708 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	No	
164	EL POLLO LOCO #3430	1710 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
165	EL SUPER	3007 HIGHLAND AVE	Medium	5411	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
166	EL SUPER MARKET	1811 L AVE	Low	5411	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	No	
167	EMERGENCY KEYS, LOCKS	1007 NATIONAL CITY BLVD	Low	7699	Equipment Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
168	ENCOMPASS DESIGN	301 W 28TH STREET S	Low	5137	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
169	ENTERPRISE RENT A CAR #32FP	1145 NATIONAL CITY BLVD	Low	7514	Vehicle/Equipment Rental	908.32		No	No	No	Yes	No	No	No	No	No	
170	ENTORS MOTORS	301 W 28TH STREET M	Medium	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	Yes	
171	EQUIPMENT ENGINEERING CO.	2704 TRANSPORTATION AVENUE E	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
172	ESKAY, G, COMPANY	712 E 18TH STREET	Low	5199	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
173	ETHNIC DELI & CAFE	404 W MILE OF CARS WAY F	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
174	EUROSYTEMS MONTGOMERY CO.	139 ROOSEVELT AVENUE	Low	5072	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
175	EVANS TIRES	3009 HIGHLAND AVE	High	7534	Auto Repair	909.12		Yes	No	No	No	No	No	No	No	Yes	
176	EVOLUTION TEAM	1001 NATIONAL CITY BLVD	Low	7549	Auto Repair	908.32		No	No	No	Yes	No	No	No	No	Yes	
177	EXOTIC MOTORS	135 CIVIC CENTER DR 203	Medium	5012	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
178	EXPO BUILDERS SUPPLY	500 W 16TH STREET	Medium	5211	Building Materials	908.31		No	No	No	Yes	No	No	No	No	Yes	
179	EXPRESS TIRE	1705 SWEETWATER ROAD	Low	7534	Auto Repair	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
180	EXPRESS TIRE	820 HIGHLAND AVE	Low	5531	Auto Supplies	908.32		Yes	No	No	Yes	No	No	No	No	Yes	
181	FAIRBANKS MORSE ENGINE	1545 TIDELANDS AVENUE J	Medium	7699	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
182	FAMILY HOUSE OF PANCAKES	1900 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	Yes	No	
183	FAMILY LOOMPYA SEAFOOD MARKET	2720 E PLAZA BLVD A	Medium	5421	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
184	FAMILY LOOMPYA WHOLESALE	2626 SOUTHPORT WAY F	Low	5142	Wholesale Food	908.32		No	No	No	No	No	No	No	No	Yes	
185	FARMERS DISCOUNT MARKET	1535 E 18TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	No	
186	FASTENAL COMPANY	2807 HOOVER AVE G	Low	5072	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
187	FIBER-WORLD PRODUCTS	2440 HIGHLAND AVE	Low	7539	Auto Repair	909.12		No	No	No	Yes	No	No	No	No	No	
188	FIESTA PET SHOP	1145 HIGHLAND AVE A	Medium	5999	Animal Facilities	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
189	FINE ORNAMENTAL	1031 COOLIDGE AVE	Medium	1799	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
190	FIRESTONE	2531 E PLAZA BLVD	High	5531	Auto Supplies	908.32		No	Yes	No	No	No	No	No	No	No	
191	FIRESTONE TIRE & SERVICE CENTER	943 HIGHLAND AVE	Low	5531	Auto Supplies	908.32		Yes	No	No	No	No	No	No	No	No	
192	FLEETWASH	1508 HOOVER AVENUE	Low	7542	Vehicle Washing	908.31		No	No	No	Yes	No	No	No	No	No	
193	FLEETWOOD PLUMBING/ELECTRIC INC	1416 HOOVER AVENUE	Low	1731	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
194	FOODLAND IGA	303 HIGHLAND AVE	High	5411	Eating/Drinking Establishments	908.31		No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	
195	FOREST PLYWOOD SALES DBA BAKER HARDWOOD LUMBER CO.	3131 HOOVER AVENUE	Low	5031	Building Materials	908.32		No	No	No	No	No	No	No	No	Yes	
196	FRANK MOTORS HYUNDAI	3150 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
197	FRANK TOYOTA	2400 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
198	FRANK'S SUBARU	2940 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
199	FREDDY AUTO REPAIR	923.5 COOLIDGE AVENUE	Low	7538	Auto Repair	908.31		No	No	Yes	No	No	No	No	No	No	
200	FREE FORM CLAY AND SUPPLY	1912 CLEVELAND AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
201	FRESCA DELI	1021 HIGHLAND AVE P/B	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
202	FRUTERIA COPA CABANA	1528 HIGHLAND AVE B	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	No	No	No	
203	G. P. MAY COMPANY	2424 HOOVER AVENUE L	Low	1751	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
204	GAMA PRODUCE	1605 E 4TH STREET	High	5411	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	Yes	Yes	Yes	
205	GAPO RESTO AND KARAOKE	933 S HARBISON AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
206	GEMMAE BAKESHOP & CAFE	450 E 8TH STREET A & B	Low	5461	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
207	GENGIS KHAN #1	3030 PLAZA BONITA ROAD 2128	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
208	GEORGE'S LIQUOR	2605 E 18TH STREET	Low	5921	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
209	GEORGE'S MARKET	2540 E 18TH STREET	Low	5411	Eating/Drinking Establishments	909.12		No	No	No	Yes	No	No	No	No	No	
210	GEORGE'S WONDERFUL WORLD OF CAKES	1519 HIGHLAND AVE	Low	5461	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
211	GIANT NEW YORK PIZZA	8 N EUCLID AVE B	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	No	Yes	
212	GINZA SUSHI	925 E PLAZA BLVD G	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
213	GLENN'S BODY SHOP ON THE MILE	2800 NATIONAL CITY BLVD B	Low	7532	Auto Paint/Body	908.32		No	No	No	Yes	No	No	No	No	Yes	
214	GLOBAL SALES & FINANCE	1731 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
215	GOLDEN CHOPSTICKS RESTAURANT	1430 E PLAZA BLVD E-22-23	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
216	GOLDEN DONUTS	36 N EUCLID AVE E	Low	5461	Eating/Drinking Establishments	908.31		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
217	GOLDEN STATE LAUNDRY SYSTEMS	1729 COOLIDGE AVE B	Low	5087	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
218	GOLDILOCKS BAKERY & RESTAURANT	1420 E PLAZA BLVD D-7	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
219	GOODY'S	340 W 26TH STREET E	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	No	
220	GORMSEN APPLIANCE	718 E 18TH STREET	Medium	7699	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
221	GRAND MOTORS	423 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.31		No	No	Yes	Yes	No	No	No	No	No	
222	GREAT STEAK & POTATOE	3030 PLAZA BONITA RD 2154	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
223	GREENWALD'S AUTOBODY & FRAMEWORKS, INC	1814 ROOSEVELT AVENUE	Medium	7532	Auto Paint/Body	908.32		No	No	Yes	No	No	No	No	No	No	
224	GUADALAJARA'S BAKERY	2401 HIGHLAND AVE	Low	5461	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	Yes	
225	GULF AUTO SALES	135 CIVIC CENTER DR	Medium	5012	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
226	H & P	415 NATIONAL CITY BLVD	Low	7538	Auto Repair	908.31		No	No	No	No	No	No	No	No	No	
227	H & R HARDWARE SUPPLY	2602 TRANSPORTATION AVENUE D	Low	5072	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
228	HANAOKA RESTAURANT	1528 SWEETWATER ROAD C	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
229	HARDWOOD DESIGNS PLUS, INC.	105 W 35TH STREET F	Low	1799	Other Contractor	909.12		No	No	No	No	No	No	No	No	No	
230	HARKEN WEST	241 W 35TH ST K	Low	5088	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
231	HAWAIIAN EXPRESS BBQ	3030 PLAZA BONITA RD 2122	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
232	HERTZ LOCAL EDITION	2001 SWEETWATER ROAD	Low	7514	Vehicle/Equipment Rental	909.12		Yes	No	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
233	HI-BEV LIQUOR	2111 HIGHLAND AVE	Low	5921	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
234	HICKORY FARMS INC	3030 PLAZA BONITA ROAD	Medium	5963	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
235	HIGHLAND ARCO	2336 HIGHLAND AVE	Low	5541	Fueling	908.32		No	No	Yes	No	No	No	No	No	No	
236	HIGHLAND ARCO NORTH	1734 HIGHLAND AVE	Low	5541	Fueling	908.32		Yes	No	No	No	No	No	No	No	No	
237	HIGHLAND LIQUOR MARKET	2335 HIGHLAND AVE	Medium	5921	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
238	HIGHLAND MOBILE	2945 HIGHLAND AVE	Low	5541	Fueling	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
239	HIGHLAND SERVICE CENTER	1803 HIGHLAND AVE	Low	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
240	HIGHLAND VALERO	804 E 8TH STREET	Low	5541	Fueling	908.31		No	No	Yes	No	No	No	No	No	No	
241	HOMETOWN BUFFET #714	1135 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
242	HONEY BANANA	443 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
243	HONEY'S FRUIT & SMOOTHIES BAR	835 PALM AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
244	HOPSING AUTO	1540 ROOSEVELT AVENUE	High	7538	Auto Repair	908.31		Yes	No	Yes	Yes	No	No	No	No	No	X
245	HORN'S WELDING	1840 WILSON AVENUE A	Medium	7692	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
246	HOT TASTY PIZZA #2	2401 HIGHLAND AVE 105	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
247	HP CLUTCH & BRAKE	1620 HARDING AVE	High	5531	Auto Supplies	908.31		Yes	No	Yes	No	No	No	No	No	No	X
248	HUB CONSTRUCTION SUPPLY & EQUIPMENT	402 W 35TH STREET A	Low	5082	Wholesale/Storage/Warehousing	909.12		No	No	No	Yes	No	No	No	No	No	
249	HYTECH AUTO DETAIL	2130 ROOSEVELT AVE	Low	7542	Vehicle Washing	908.32		Yes	No	Yes	Yes	No	No	No	No	No	
250	ICEBERG ENTERPRISES, INC.	1410 CLEVELAND AVENUE	Medium	7519	Vehicle/Equipment Rental	908.31		Yes	No	No	Yes	No	No	No	No	No	X
251	IDEAL SMOG	10 OSBORN ST A	Low	7549	Auto Repair	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
252	IDEAL SMOG	1112 NATIONAL CITY BLVD B	Low	7549	Auto Repair	908.32		No	Yes	No	No	No	No	No	No	No	
253	IMELDA'S BAR	2325 HIGHLAND AVE	Low	5813	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
254	IMPERIAL LIQUOR	3106 E 16TH ST	Low	5921	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
255	IMPERIAL PALACE	1630 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
256	IN N OUT BURGER	500 MILE OF CARS WAY	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	No	Yes	
257	INTERNATIONAL HOUSE OF PANCAKES	1430 E PLAZA BLVD E-1	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	No	
258	INTERNATIONAL SURF VENTURE INC	301 W 28TH STREET B, C	Low	5091	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
259	ISLAND SALES & LEASING	100 W 8TH STREET	Medium	5511	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
260	J & L DISTRIBUTION INC	2601 HOOVER AVENUE D	Low	5169	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
261	JACK IN THE BOX	700 ROOSEVELT AVENUE	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
262	JACK IN THE BOX #3	1745 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
263	JACK IN THE BOX #80	3138 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
264	JALAPEÑO FUIT BAR & GRILL	3030 PLAZA BONITA RD 1108	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
265	JD BROTHERS AUTO REPAIRS	41 E 18TH STREET	Low	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
266	JERAULDS CAR CARE CENTER	2020 NATIONAL CITY BLVD	Low	7538	Auto Repair	908.32		Yes	No	No	Yes	No	No	No	No	Yes	
267	JESUS & CECILIA LOYA CAFÉ DBA PEPITA'S CAFÉ	524 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	Yes	No	No	No	No	No	
268	JOCSON'S AUTO BODY & PAINT INC.	1320 COOLIDGE AVENUE	Low	7532	Auto Paint/Body	908.31		No	No	No	No	No	No	Yes	Yes	Yes	
269	JOE'S TIRES	1532 NATIONAL CITY BLVD	High	7534	Auto Repair	908.32		Yes	No	No	No	No	No	No	No	Yes	
270	JOHN'S INCREDIBLE PIZZA CO	3030 PLAZA BONITA RD 1025	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
271	JOLLIBEE	1401 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		Yes	Yes	Yes	No	No	No	Yes	Yes	No	
272	JON DAVID KATZIN	3030 PLAZA BONITA RD	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
273	JOSE AUTO ELECTRIC	108 W 18TH STREET	High	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	
274	JOSEPH T RYERSON & SON, INC	2300 HAFFLEY AVE	Low	5051	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
275	JOY AIR	2601 HOOVER AVENUE	Low	5064	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
276	JRP AUTO SALES	5 W 18TH STREET	Low	5521	Vehicle Dealers	908.32		No	No	Yes	Yes	No	No	No	No	No	
277	K SURPLUS SALES INC	1403 CLEVELAND AVENUE	Low	5072	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	Yes	No	Yes	
278	KARIHAN FILIPINO FOOD	2220 E PLAZA BLVD A-1	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	
279	KARINA'S MEXICAN STYLE SEAFOOD	1705 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
280	KARZ PLUS	1605 NATIONAL CITY BLVD	High	5511	Vehicle Dealers	908.32		No	No	No	Yes	No	No	No	No	No	
281	KAY AUTOMOTIVE	2121 HOOVER AVE	Low	5531	Auto Supplies	908.32		No	No	No	No	No	No	No	No	Yes	
282	KEN'S VW	1408 MCKINLEY AVENUE	Low	5013	Auto Supplies	908.31		No	No	No	No	No	No	No	No	No	
283	KENTUCKY FRIED CHICKEN	840 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	No	
284	KENTUCKY FRIED CHICKEN	3005 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
285	KINGS LIQUOR	1626 E 8TH ST	Low	5921	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
286	KOOL FIT AMERICA INC.	1725 HARDING AVENUE	Low	5091	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
287	KOTIJA TACO SHOP	321 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	Yes	
288	KRAGEN AUTO SUPPLY #1722	1202 E PLAZA BLVD	Low	5531	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
289	KYOTO GIFT AND FOOD	1727 SWEETWATER RD A	Medium	5999	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
290	L & L HAWAIIAN BARBEQUE	1860 SWEETWATER ROAD B	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
291	L B C MUNDIAL CORP	1420 E PLAZA BLVD D-9	Medium	4731	Ground Transportation	908.32		No	No	No	No	No	No	No	No	Yes	
292	LA CASA LIQUOR	228 HIGHLAND AVE	Low	5921	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
293	LA COASTA NOSTRA	902 E 18TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
294	LA HACIENDA RESTAURANT	2752 E 18TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
295	LA MORENA MARKET	1810 PALM AVE	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
296	LA RUE PLUMBING	1515 WILSON AVENUE	Medium	1711	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
297	LA SIERRA CAFÉ	306 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
298	LAI THAI RESTAURANT	1430 E PLAZA BLVD E-10	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	No	
299	LAS GORDITAS/LOS PINGUINOS	1903 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
300	LAS PALMAS MEXICAN CAFÉ	640 HIGHLAND AVE A	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	Yes	Yes	Yes	
301	LAS UVAS DELI	632 NATIONAL CITY BLVD	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
302	LEFORT'S CONSTRUCCION & LANDSC	34 E 17TH STREET B	Low	7699	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
303	LEX-TEK	2704 TRANSPORTATION AVE G	Low	7538	Auto Repair	908.32		No	No	No	Yes	No	No	No	No	Yes	
304	LINE-X SAN DIEGO	2704 TRANSPORTATION AVE A	Low	7549	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
305	LISA'S DESSERTS	2720 E PLAZA BLVD Q	Medium	5461	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
306	LISA'S FILIPINO CUISINE 2	1210 E PLAZA BLVD 410	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	Yes	Yes	
307	LITTLE CAESAR'S PIZZA	1495 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
308	LITTLE DRAGON CHINESE	2424 HOOVER AVENUE K	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	Yes	No	No	
309	LIVELY BRAKE SERVICE	115 E 17TH STREET B	Low	7539	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
310	LIVING ROOM CAFE	880 NATIONAL CITY BLVD	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	Yes	
311	LOLA HAPPY BAKERY	3142 E PLAZA BLVD L	High	5461	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	
312	LOLLICUP TEAZONE	1105 E PLAZA BLVD A	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
313	LONGS DRUGS #074	1730 SWEETWATER RD	Medium	5912	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
314	LOS BURRITOS MEXICAN GRILL	3460 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
315	LOS PANCHOS TACO SHOP	2441 NATIONAL CITY BLVD	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
316	LOS RANCHERITOS	835 PALM AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
317	LOS TACOS SHOP	2241 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
318	LOS TURBOS TRANSMISSION	1411 COOLIDGE AVENUE	Low	7537	Auto Repair	908.31		No	No	No	No	No	No	No	No	No	
319	LOU'S AUTOMOTIVE & PARTS	1509 NATIONAL CITY BLVD C	Low	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
320	LUEMMA'S KITCHEN SOUTHERN STYLE	36 N EUCLID AVE F	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	No	No	No	
321	LUPITAS MEAT MARKET	2239 HIGHLAND AVE	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
322	M & M CONVERTER SHOP	301 W 28TH STREET X	Low	7539	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
323	M & T AUTO	1731 WILSON AVENUE	High	7538	Auto Repair	908.31		Yes	No	Yes	Yes	No	No	No	No	No	X
324	MAC ARTHUR CO	2101 HAFFLEY AVE B	Low	5033	Building Materials	908.31		No	No	No	Yes	No	No	No	No	Yes	
325	MAGIC BRITE JANITORIAL	303 N 35TH ST A	Low	7349	Power Washing	909.12		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
326	MAIN SQUEEZE JUICES	2712 TRANSPORTATION AVENUE	Low	5149	Wholesale Food	908.32		No	No	No	No	No	No	Yes	No	No	
327	MAMA FINA'S PIZZA	916 E 8TH STREET 4	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
328	MANILA SEAFOOD ORIENTAL MARKET	2220 E PLAZA BLVD K	High	5411	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	Yes	Yes	Yes	Yes	
329	MANILA SUNSET GRILLE	925 E PLAZA BLVD I	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
330	MARATHON CONSTRUCTION	801 CIVIC CENTER DRIVE	Low	1541	Other Contractor	908.31		No	No	Yes	Yes	No	No	No	No	No	
331	MARISCOS SINALOA #2	2435 NATIONAL CITY BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
332	MARK MOTORS	905 HOOVER AVENUE	Low	5521	Vehicle Dealers	908.31		No	No	Yes	Yes	No	No	No	No	No	
333	MARLO'S AUTO SPECIALTIES/FRAME	223 CIVIC CENTER DR	Low	7532	Auto Paint/Body	908.31		No	No	No	No	No	No	No	No	No	
334	MARLYN PARTY RENTAL	1515 HIGHLAND AVE	Low	7359	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
335	MC CUNE II	325 MILE OF CARS WAY	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
336	MCCUNE CHRYSLER JEEP	2340 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
337	MCDINI'S BAJA	105 E 8TH STREET	Low	5813	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	Yes	
338	MCDONALDS	1630 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
339	MCDONALD'S	3400 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	No	
340	MCDONALDS #20311	3030 PLAZA BONITA ROAD 2168	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
341	MCDONALDS #6773	2145 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
342	MCMAHON CONSTRUCTION, INC	605 W 12TH STREET	Low	1611	Cement Mixing/Cutting	908.31		No	No	No	Yes	No	No	No	No	No	
343	MCMILLIN RACING, LLC	101 E 30TH STREET	Low	7538	Auto Repair	909.12		No	No	No	Yes	No	No	No	No	No	
344	MELHORN CONSTRUCTION	410 W 30TH STREET B	Low	1542	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
345	MENUDERIA DON VICENTE	2637 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	No	No	
346	METROPOLITAN AUTOMOTIVE	206 W 35TH ST C	Low	5013	Auto Supplies	909.12		No	No	Yes	No	No	No	No	No	Yes	
347	MEZA AUTO BODY	420 W 12TH STREET	Low	7532	Auto Paint/Body	908.31		No	No	No	No	No	No	No	No	No	
348	MI COCINA RESTAURANT	543 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
349	MI TIERRA SUPER TACO	1835 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
350	MIKE'S AUTOMOTIVE	115 E 17TH STREET A	Low	7538	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
351	MIKE'S GIANT NY PIZZA #5	1635 SWEETWATER ROAD C-1	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	Yes	Yes	Yes	X
352	MIYAKO RESTAURANT	2424 HOOVER AVE F	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
353	MORE BRAKES N TUNE	1902 HIGHLAND AVE A	Low	7538	Auto Repair	908.32		No	No	Yes	Yes	No	No	No	No	No	
354	MOSSY NISSAN	2700 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	No	No	No	No	Yes	No	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
355	MOTHER'S NUTRITIONAL CENTER	924 HIGHLAND AVE	Low	5499	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
356	MOTOR WORKS	1625 COOLIDGE AVENUE	Low	7538	Auto Repair	908.31		No	No	No	No	No	No	No	No	No	
357	MYKIES LAWN AND POWER EQUIPMENT	225 W 9TH STREET	Medium	7699	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
358	N. GLANTZ & SON	2530 SOUTHPORT WAY C	Low	5099	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
359	NADEL HOUSE OF FILIPINO CAKES	914 E 8TH STREET 202	Low	5461	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
360	NANI MOKU HAWAIIAN BBQ	1635 SWEETWATER RD H	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	Yes	Yes	Yes	X
361	NAPA AUTO PARTS	1810 HIGHLAND AVE	Low	5013	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
362	NATIONAL CITY AUTO BODY	24 4TH STREET E	Low	7532	Auto Paint/Body	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
363	NATIONAL CITY AUTO CENTER INC	1010 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.31		Yes	No	No	No	No	No	No	No	No	X
364	NATIONAL CITY AUTO TRIM INC	15 5TH STREET E	Medium	7532	Auto Paint/Body	908.31		Yes	Yes	No	No	No	No	No	No	No	X
365	NATIONAL CITY CAR WASH	2550 E PLAZA BLVD	Medium	7542	Vehicle Washing	908.32		No	Yes	Yes	No	No	No	Yes	No	No	
366	NATIONAL CITY GOLF COURSE	1439 SWEETWATER ROAD	High	7992	Golf Courses/Parks	909.12		No	No	No	No	Yes	Yes	No	No	No	X
367	NATIONAL CITY GROCERY OUTLET	3446 HIGHLAND AVE 6	Medium	5411	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	Yes	
368	NATIONAL CITY LIQUOR & DELI	2421 NATIONAL CITY BLVD	Low	5921	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
369	NATIONAL CITY MARKET	240 E 18TH STREET	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
370	NATIONAL CITY MOTORCARS	1900 NATIONAL CITY BLVD A	Low	5521	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
371	NATIONAL CITY MOTORCYCLE INC	1504 NATIONAL CITY BLVD A	Low	7699	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
372	NATIONAL CITY NUTRITION STORE	925 E PLAZA BLVD	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
373	NATIONAL CITY SHELL	1601 E 8TH STREET	Low	5541	Fueling	908.32		No	No	Yes	Yes	No	No	No	No	No	
374	NATIONAL CITY SMOG BRAKE & LIGHTS	705 E 8TH STREET	Medium	7539	Auto Repair	908.31		No	Yes	Yes	No	No	No	No	No	No	X
375	NATIONAL CITY SMOG CHECK	105 W 18TH STREET	Medium	7549	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
376	NATIONAL CITY SMOG, BRAKE & LIGHTS	705 E 8TH STREET A	Medium	7539	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
377	NATIONAL MECHANICAL SERVICES	1640 HOOVER AVENUE B	High	1731	Other Contractor	908.31		Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	X
378	NATIONAL MOTOR WORKS	1440 HARDING AVE A	Low	7538	Auto Repair	908.31		No	No	No	No	No	No	No	No	No	
379	NC MOTOR SPORTS AUTO REPAIR	710 E 18TH STREET	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
380	NELLANS CARPET AND DRAPERIES	426 W 15TH STREET	Low	1752	Other Contractor	908.31		No	No	No	Yes	No	No	No	No	Yes	
381	NELSON INDUSTRIAL SERVICES INC	2827 HOOVER AVENUE F	Low	1799	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
382	NICOLLS INC	1535 TIDELANDS AVENUE J	Low	5099	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
383	NILS HALL DBS THUNDERBIRD	705 E 8TH STREET	Low	7533	Auto Repair	908.31		No	No	No	No	No	No	No	No	No	
384	OCHOA FAMILY CHORIZO	2708 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	Yes	No	No	No	No	Yes	
385	OHANA HAWAIIAN ISLAND BBQ	430 E PLAZA BLVD E7A	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	No	
386	OLYMPIC AUTO SALES	1800 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		No	No	No	Yes	No	No	No	No	Yes	
387	ON HIT BAR BE QUE PIT	3403 E PLAZA BLVD A1	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
388	ONE SOURCE DISTRIBUTOR INC	326 W 30TH STREET	Low	5063	Wholesale/Storage/Warehousing	908.32		No	No	Yes	Yes	No	No	No	No	No	
389	ONE SOURCE DISTRIBUTORS	2530 SOUTHPORT WAY A	Low	5065	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
390	ONE TEN LIQUOR STORE	110 NATIONAL CITY BLVD	Low	5921	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
391	ORIENTAL CAFE	39 E 7TH STREET	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	Yes	Yes	Yes	
392	ORTIZ CORP GENERAL ENGINEERING	2000 MCKINLEY AVE	Low	1599	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
393	OUCHI'S POWER EQUIPMENT	225 W 9TH STREET	Medium	7699	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
394	OUCHI'S POWER EQUIPMENT	225 W 9TH STREET	Medium	7699	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
395	OUTBACK STEAK HOUSE	2980 PLAZA BONITA RD	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	Yes	No	No	No	Yes	No	X
396	OZONE GLASS	2602 TRANSPORTATION AVE B	Low	7536	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
397	P B E WAREHOUSE INC	190 E 26TH STREET	Low	5013	Auto Supplies	908.32		No	No	Yes	No	No	No	No	No	No	
398	PACIFIC AUTO REPAIRS	315 W 11TH STREET	Low	7538	Auto Repair	908.31		No	No	No	Yes	No	No	No	No	No	
399	PACIFIC COAST DIESEL PARTS	100 W 35TH STREET H	Low	5531	Auto Supplies	909.12		No	No	Yes	No	No	No	No	No	No	
400	PANDA PALACE	1105 E PLAZA BLVD D & E	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
401	PAPA GALLO-CAFE	1930 CLEVELAND AVE	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	Yes	No	No	No	No	No	
402	PAPA JOHN'S PIZZA #1335	1130 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	Yes	Yes	Yes	
403	PARADISE MOTORCARS	110 W PLAZA BLVD	Low	5521	Vehicle Dealers	908.31		No	No	No	Yes	No	No	No	No	No	
404	PARADISE MOTORCARX	200 W 8TH STREET	Low	5521	Vehicle Dealers	908.31		No	No	Yes	Yes	No	No	No	No	No	
405	PARK MOTORS	2125 ROOSEVELT AVENUE	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
406	PARTYZON	2235 HIGHLAND AVE	Low	7359	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
407	PATRIOT AUTO CARE AND BRAKES	910 HIGHLAND AVE A	Low	7538	Auto Repair	908.32		No	No	Yes	No	No	No	No	No	Yes	
408	PELL MELL SUPPLY INC	402 W 35TH STREET E	Low	5072	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
409	PENSKE TRUCK LEASING	3131 HOOVER AVENUE	Low	7513	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
410	PERRY FORD - NATIONAL CITY	2050 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
411	PERRY FORD (TRUCK)	1610 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.32		No	No	No	Yes	No	No	No	No	Yes	
412	PET MARKET	1536 SWEETWATER RD	Medium	5999	Animal Facilities	909.12		No	No	No	No	No	Yes	Yes	Yes	No	X
413	PET PLAZA	911 E PLAZA BLVD	Low	5999	Animal Facilities	908.32		No	No	No	No	No	Yes	Yes	Yes	No	
414	PETER PIPER PIZZA STORE #212	3007 HIGHLAND AVE 11	High	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	No	X
415	PETRO AUTO CARE	10 E 1ST ST	Medium	7538	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
416	PHO EXPRESS	3030 PLAZA BONITA RD 2132	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
417	PHO GINGER & GRILL	1420 E PLAZA BLVD D5	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	No	
418	PHO NAM CALI	2344 E 8TH STREET	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
419	PINOY FIESTA	550 E 8TH STREET 8 & 9	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	Yes	No	No	No	No	No	
420	PINOY RANCH	3403 E PLAZA BLVD D	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
421	PIZZA HUT #315044	2437 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	No	
422	PIZZA HUT EXPRESS	3060 PLAZA BONITA RD.	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
423	PIZZA MIA	916 E 8TH STREET 4	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
424	PIZZA PLAZA	3108 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
425	PLAY BALL	2305 HIGHLAND AVE	Low	5813	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
426	PLAYCARE INC	241 W 35TH ST C	Medium	7999	Golf Courses/Parks	909.12		No	No	No	No	Yes	Yes	No	No	No	X
427	PLAZA BOULEVARD PET CLINIC	2415 E PLAZA BLVD	Medium	0742	Animal Facilities	908.32		No	No	No	No	No	No	No	No	No	
428	PLAZA DONUTS	1548 HIGHLAND AVE	Low	5461	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
429	POINT POINT JOINT (TURO-TURO)	916 E 8TH STREET 1 & 2	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	Yes	Yes	
430	POMPEII ITALIAN RESTAURANT & PIZZA	1231 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	No	
431	POPEYES CHICKEN	2210 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
432	POPEYES FAMOUS FRIED CHICKEN	2333 HIGHLAND AVE	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
433	POTTER ELECTRIC, INC.	1343 WILSON AVENUE	Low	5063	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
434	POWER TIRE #4	1615 E 8TH STREET	Low	7534	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
435	PRECISION BIKE PARTS	421 NATIONAL CITY BLVD	Low	5571	Vehicle Dealers	908.31		No	No	No	Yes	No	No	No	No	Yes	
436	PRESTIGE AUTO BROKERS	1001 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
437	PRESTIGE AUTO BROKERS	2125 ROOSEVELT AVENUE A	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
438	PRO SMOG TEST ONLY	34 E 17TH STREET C	Low	7538	Auto Repair	908.32		Yes	No	Yes	No	No	No	No	No	No	
439	PRO STREET LIGHTING INC	2145 WILSON AVENUE	Medium	5531	Auto Supplies	908.32		No	No	No	No	No	No	No	No	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
440	QUALITY AUTO SALES & SERVICE	423 NATIONAL CITY BLVD A	Medium	5521	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
441	QUIZNOS SUB	928 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
442	QWIK KORNER	3009 HIGHLAND AVE	High	5541	Fueling	909.12		No	No	Yes	No	No	No	Yes	No	Yes	
443	R & H WELDING SHOP	2601 HOOVER AVE F	Low	7692	Equipment Repair	908.32		No	No	No	No	No	No	No	No	No	
444	R W LITTLE, CO	415 W 30TH STREET	High	1721	Painting/Coating	908.32		Yes	No	No	No	No	No	No	No	No	
445	RAD ELECTRIC SUPPLY INC.	1904 MCKINLEY AVENUE	Low	5065	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
446	RADIATOR DEPOT	1533 WILSON AVENUE A	Medium	5013	Auto Supplies	908.31		No	No	Yes	No	No	No	No	No	No	
447	RAINBOW FRUITS EXPRESS	3030 PLAZA BONITA RD 2176	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
448	RANCH HOUSE LIQUOR	404 PALM AVE	Low	5921	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
449	RANGER COMMUNICATIONS	401 W 35TH STREET B	Medium	5065	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
450	RASPADOS MICHOACAN	115 8TH STREET	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
451	RAY BROCK AUTO SERVICE	25 W 11TH STREET	Medium	7539	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
452	RED BIRD MARKET	2035 HIGHLAND AVE	Medium	5411	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
453	RED RIBBON BAKESHOP	3030 PLAZA BONITA RD	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
454	RED ROBIN AMERICA'S GOURMET BURGERS & SPIRITS	3030 PLAZA BONITA RD 2520	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
455	RELENTLESS AUTO SPORTS LLC	25 E 17TH STREET A	High	7538	Auto Repair	908.32		Yes	No	Yes	No	No	No	No	No	No	
456	RELIABLE SPRING AND SUSPENSION	225 W 16TH STREET	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
457	RELIANCE METAL CENTER	2100 CLEVELAND AVENUE	Medium	5051	Wholesale/Storage/Warehousing	908.31		Yes	No	No	Yes	No	No	No	No	No	X
458	REMEDY-TECH INC	2602 TRANSPORTATION AVE	Low	1599	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
459	RENT-A-CENTER #01072	1043 HIGHLAND AVE	Low	7359	Vehicle/Equipment Rental	908.32		No	No	Yes	No	No	No	No	No	Yes	
460	REPLANET RECYCLE CENTER (TOMRA PACIFIC)	901 S EUCLID AVE	High	5093	Recycling	908.32		No	No	No	No	No	No	Yes	Yes	No	
461	RESTAURANT EQUIPMENT WAREHOUSE	3039 HOOVER AVE	Low	5046	Wholesale/Storage/Warehousing	908.32		No	No	No	Yes	No	No	No	No	Yes	
462	REVELS STRIPING	2602 TRANSPORTATION AVENUE J	Low	7549	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
463	REYNOSO AUTO SALES	438 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
464	RIVERSIDE CEMENT CO.	920 BAY MARINA DRIVE	Medium	5032	Building Materials	908.31		No	No	No	Yes	No	No	No	No	Yes	
465	ROB NORTH FABRICATION	1605 HOOVER AVENUE	Low	5571	Vehicle Dealers	908.31		No	No	No	No	No	No	No	No	No	
466	ROBERTO'S TACO SHOP	1406 HIGHLAND AVE	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
467	ROCKY MOUNTAIN CHOCOLATE FACTO	3030 PLAZA BONITA RD 9249	Medium	5441	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
468	RODEO'S MEAT MARKET	422 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	Yes	No	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
469	RODRIGUEZ APPLIANCE	2629 HIGHLAND AVE	Low	7699	Equipment Repair	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
470	ROMERO'S ROOFING SERVICE, INC.	1827 CLEVELAND AVENUE	Low	1761	Other Contractor	908.31		No	No	No	Yes	No	No	No	No	Yes	
471	RON BAKER CHEVROLET	2301 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
472	RONNIE'S ELECTRONICS - AUTO	1309 HIGHLAND AVE	Low	7549	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
473	ROYAL MANDARIN RESTAURANT	1132 E PLAZA BLVD 205	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
474	ROYCE CONSTRUCTION INC	10 E 1ST ST A	Low	1542	Other Contractor	908.31		No	No	No	Yes	No	No	No	No	No	
475	RSD TOTAL CONTROL	402 W 35TH STREET G	Low	5075	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
476	RTM INTERNATIONAL LLC	301 W 28TH STREET V	Low	5099	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
477	RUBY'S EMBROIDERY	2525 SOUTHPORT WAY S	Low	5131	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
478	S & K SALES COMPANY	2626 SOUTHPORT WAY C-E	Low	5199	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
479	S & L OIL INC.	1601 E 8TH STREET	Low	5541	Fueling	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
480	S & S WELDING	1442 MCKINLEY STREET	Medium	7692	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
481	S D D MAINTENANCE	2829 NATIONAL CITY BLVD	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
482	S L FUSCO INC.	2530 SOUTHPORT WAY D	Low	5085	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	Yes	
483	SAM'S ALIGNMENT SERVICE	1028 COOLIDGE AVENUE	Medium	7539	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
484	SAN DIEGO AUTO DETAIL	110 W 11TH STREET	High	7549	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	Yes	X
485	SAN DIEGO AUTO FINANCE	1 W 35TH ST	Low	5521	Vehicle Dealers	909.12		No	No	No	No	No	No	No	No	No	
486	SAN DIEGO CRANE & HOIST	1606 COOLIDGE AVENUE	Low	7699	Equipment Repair	908.31		No	No	No	No	No	No	No	No	No	
487	SAN DIEGO DODGE	2829 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	No	Yes	No	No	No	No	No	
488	SAN DIEGO HYDRAULICS INC	1720 CLEVELAND AVE	High	7699	Equipment Repair	908.31		Yes	No	Yes	Yes	No	No	Yes	No	No	X
489	SAN DIEGO METRO PUBLISHING LLC	2602 TRANSPORTATION AVE O	Low	5111	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
490	SAN DIEGO PIPE & STEEL	100 W 35TH STREET E	Low	5051	Wholesale/Storage/Warehousing	909.12		No	No	Yes	Yes	No	No	No	No	No	
491	SAN DIEGO PLASTICS, INC.	2220 MCKINLEY AVENUE	Low	5099	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
492	SAN DIEGO PUMP & COMPRESSOR	301 W 28TH STREET A	Low	5085	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
493	SAN JOSE RESTAURANT	213 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	Yes	No	No	No	No	No	
494	SANTI CHINESE HERBS SHOP	2605 HOOVER AVE G	Low	7999	Golf Courses/Parks	908.32		No	No	Yes	No	No	No	No	Yes	No	
495	SATURN OF NATIONAL CITY	2202 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
496	SAVE-A-LOT #949	1035 S HARBISON AVENUE	Low	5411	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
497	SCHEIB, EARL OF CA INC #189	111 NATIONAL CITY BLVD	Low	7532	Auto Paint/Body	908.31		No	No	No	Yes	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
498	SEACOAST ELECTRIC CO. INC.	2702 SOUTHPORT WAY C & D	Low	5063	Wholesale/Storage/Warehousing	908.32		No	No	No	Yes	No	No	No	No	Yes	
499	SEAFOOD CITY SUPERMARKET	1420 E PLAZA BLVD C-E	High	5411	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
500	SEAWARD MARINE SERVICE INC.	424 W 8TH STREET	Medium	7699	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
501	SEE'S CANDIES	3030 PLAZA BONITA RD 22	Medium	5441	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
502	SENOR PANCHO FRESH MEXICAN GRILL	2030 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
503	SERVICE MASTER AA ADVANCES RES	100 W 35TH STREET	Low	7699	Equipment Repair	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
504	SEVILLA'S PARTY RENTALS	2303 F AVE	Low	7359	Vehicle/Equipment Rental	908.32		Yes	No	Yes	No	No	No	No	No	No	
505	SHAFT MASTER	1031 NATIONAL CITY BLVD C	High	7539	Auto Repair	908.32		No	No	Yes	No	No	No	No	No	No	
506	SHELL STATION	2401 E DIVISION STREET	High	5541	Fueling	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
507	SHRIMP ON WHEELS	225 W 9TH STREET	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
508	SHUTTER BUS LEASING	1726 WILSON AVENUE	High	7519	Vehicle/Equipment Rental	908.31		Yes	No	Yes	No	No	No	No	No	No	X
509	SID'S CARPET BARN	132 W 8TH STREET	Low	5023	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	Yes	
510	SIETE DIAS MARKET	151 N HIGHLAND AVE A	Low	5411	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
511	SIZZLER FAMILY STEAK HOUSE #45	1325 E PLAZA BLVD	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	No	
512	SMART AND FINAL	1220 E PLAZA BLVD	Medium	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
513	SMOG CENTRO	404 HIGHLAND AVE	Medium	7539	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
514	SO CAL CUSTOM & COLLISION	3000 NATIONAL CITY BLVD	High	7532	Auto Paint/Body	908.32		Yes	No	Yes	Yes	No	No	No	No	Yes	
515	SO CAL TRUCK STOP	2250 TIDELANDS AVENUE	Low	5541	Fueling	908.31		No	No	No	No	No	No	No	No	No	
516	SOLAR ECLIPSE PERFORMANCE	507 G AVENUE	Medium	7549	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
517	SOUND SOLUTIONS AUTO STYLING	36 W CIVIC CENTER DR	Medium	7534	Auto Repair	908.31		Yes	No	Yes	Yes	No	No	No	No	No	X
518	SOUTH BAY AUTO SHOP	1112 COOLIDGE AVENUE	Medium	7538	Auto Repair	908.31		No	Yes	No	No	No	No	No	No	No	X
519	SOUTH BAY DIESEL & HYDRAULIC, INC	100 W 35TH ST J	Low	5531	Auto Supplies	909.12		No	No	Yes	Yes	No	No	No	No	Yes	
520	SOUTH BAY LEATHER CORP	1900 WILSON AVENUE	Low	5199	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	Yes	
521	SOUTH BAY MECHANIC SHOP	1112 COOLIDGE AVE	Low	7538	Auto Repair	908.31		No	No	No	No	No	No	No	No	Yes	
522	SOUTH BAY MECHANICAL SERVICES	2137 WILSON AVENUE	Medium	1711	Other Contractor	908.32		Yes	No	No	No	No	No	No	No	No	
523	SOUTH BAY PRE-OWNED	2401 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		No	No	Yes	No	No	No	No	No	No	
524	SOUTH BAY VOLKSWAGON	3131 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	909.12		Yes	No	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
525	SOUTH COUNTY VOLVO	2940 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
526	SOUTHBAY DENT REPAIR CENTER	1429 WILSON AVE	Medium	7539	Auto Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
527	SOUTHLAND AUTOBODY & PAINT	141 W 18TH STREET	Low	7532	Auto Paint/Body	908.32		Yes	Yes	No	No	No	No	No	No	No	
528	SOUTHLAND TRANSMISSION CENTER	1400 HOOVER AVENUE	High	7537	Auto Repair	908.31		Yes	No	Yes	No	No	No	No	No	No	X
529	SOUTHWESTERN AUTO BROKERS, INC.	333 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
530	SPECIALTY TIRES AND BRAKES	1 W 35TH ST D	High	7534	Auto Repair	909.12		Yes	No	Yes	Yes	No	No	Yes	No	No	
531	SPORTS AUTO SALES	1112 NATIONAL CITY BLVD	Medium	5511	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
532	SPORTS AUTO SALES	1040 NATIONAL CITY BLVD	Medium	5511	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
533	STANDARD PARKING	235 E 8TH STREET	Medium	7521	Vehicle Parking/Storage	908.31		Yes	No	Yes	Yes	No	No	No	No	No	X
534	STAR AUTOMOTIVE	438 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.31		No	No	Yes	Yes	No	No	No	No	No	
535	STAR AUTOMOTIVE	423 NATIONAL CITY BLVD	Medium	5511	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
536	STAR EXPRESS	3124 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
537	STARBUCKS COFFEE #6487	1860 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
538	STARBUCK'S COFFEE #6783	2230 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
539	STATEWIDE FUMIGATION SAN DIEGO COUNTY	1630 COOLIDGE AVE	Medium	7342	Pest Control	908.31		No	No	No	No	Yes	No	No	No	No	
540	STEREO DISCOUNT CENTER INC	2907 HIGHLAND AVE	Low	7539	Auto Repair	909.12		Yes	Yes	Yes	No	No	No	No	No	No	
541	STEVENS CONSTRUCTION	125 E 17TH STREET	Low	1542	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
542	STEVE'S WEST COAST AUTOMOTIVE	1732 COOLIDGE AVENUE	Low	7538	Auto Repair	908.32		No	No	Yes	No	No	No	No	No	No	
543	STONEY'S BAR & GRILL	108 W 25TH STREET D, E, F, G	Low	5813	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
544	STREET DREAMS AUTO STYLING	710 E 8TH STREET	Low	5531	Auto Supplies	908.32		No	No	Yes	Yes	No	No	No	No	Yes	
545	STYLER'S AUTO BODY	38 E 16TH STREET	Low	7532	Auto Paint/Body	908.32		No	No	No	No	No	No	No	No	No	
546	STYLER'S AUTO MECHANIC	29 E 17TH STREET	Low	7538	Auto Repair	908.32		Yes	No	Yes	No	No	No	No	No	No	
547	SUBMARINA	1210 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
548	SUBWAY SANDWICH & SALAD	925 E PLAZA BLVD A	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
549	SUBWAY SANDWICH & SALAD	1860 SWEETWATER ROAD	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
550	SUBWAY SANDWICHES & SALADS #44272	2220 E PLAZA BLVD A-1	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
551	SUN DIEGO PRE OWNED	45 E 26TH STREET	Low	5521	Vehicle Dealers	908.32		No	No	No	Yes	No	No	No	No	No	
552	SUNCARGO INC	1457 E PLAZA BLVD	Medium	4731	Ground Transportation	908.32		No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
553	SUNNY DONUTS	724 HIGHLAND AVE	Low	5461	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
554	SUPERIOR FOAM & UPHOLSTERY CORP.	105 W 35TH STREET D	Medium	5199	Wholesale/Storage/Warehousing	909.12		No	No	No	No	No	No	No	No	No	
555	SWEETWATER HARLEY-DAVIDSON	3201 HOOVER AVENUE	Low	5571	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
556	SWIRLY CUP	1860 SWEETWATER RD A-2	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	No	No	No	
557	T N H AUTO REPAIR	25 E 17TH STREET	Low	7539	Auto Repair	908.32		Yes	Yes	Yes	No	No	No	No	No	No	
558	TACO BELL #2800	1737 SWEETWATER ROAD	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	No	No	No	
559	TACO SALSA TACO SHOP	925 E PLAZA BLVD B	High	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
560	TACOS EL GORDO DE TIJUANA	1940 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
561	TAQUERIA EL TIZON	505 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	Yes	No	No	No	No	No	
562	TARGET	3060 PLAZA BONITA RD	High	5411	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
563	TECNICO SYSTEMS CORPORATION	206 W 35TH STREET B	Low	7699	Equipment Repair	909.12		No	No	No	No	No	No	No	No	No	
564	TED'S UPHOLSTERY	115 E 17TH STREET D	Low	7532	Auto Paint/Body	908.32		Yes	Yes	No	No	No	No	No	No	No	
565	TEXAS LIQUOR	1039 HARBISON AVE	Medium	5921	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
566	TEYSSIER & TEYSSIER INC.	3200 HIGHLAND AVE B4-2	Medium	1542	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
567	TEYSSIER CONSTRUCTION, INC	3200 HIGHLAND AVE B-3	Medium	1521	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
568	THE AUTO SPOT, INC	1017 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
569	THE BARBEQUE PIT	920 E PLAZA BLVD	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
570	THE NEW LOOK	340 W 11TH STREET	Low	7532	Auto Paint/Body	908.31		No	No	No	No	No	No	No	No	No	
571	THE ORIGINAL RICHARD'S BAKERY	3400 E 8TH STREET 114	Low	5461	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
572	THE SPEED SHOP	623 NATIONAL CITY BLVD	Low	5531	Auto Supplies	908.31		No	No	No	No	No	No	No	No	Yes	
573	TINO'S AUTO TECH	1 W 35TH ST D	Low	7538	Auto Repair	909.12		No	No	Yes	Yes	No	No	No	No	No	
574	TINO'S IRON WORK	1014 COOLIDGE AVE	Medium	7692	Equipment Repair	908.31		Yes	Yes	Yes	No	No	No	No	No	No	X
575	TITA'S KITCHENETTE	2720 E PLAZA BLVD E & F	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	
576	TOM MOYNAHAN TOWING	3200 NATIONAL CITY BLVD	Low	7549	Auto Repair	908.32		No	No	No	Yes	No	No	No	No	No	
577	TOM THUMB WHOLESALE ICE CREAM	1021 COOLIDGE AVENUE	Medium	5143	Wholesale Food	908.31		Yes	No	Yes	Yes	No	No	No	No	No	X
578	TONY'S DETAIL SHOP	49 E 16TH STREET B1	High	7542	Vehicle Washing	908.32		Yes	Yes	Yes	Yes	No	No	No	No	No	
579	TOPECO PRODUCTS	2525 SOUTHPORT WAY H	Low	5072	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	Yes	
580	TORTAS OASIS	1210 E PLAZA BLVD 404	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
581	TRACKLESS TRAINS OF SAN DIEGO	3030 PLAZA BONITA RD	Medium	7999	Golf Courses/Parks	909.12		No	No	No	No	Yes	Yes	No	No	No	X
582	TRANS PROS	130 E 17TH STREET	Low	7537	Auto Repair	908.32		No	No	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
583	TRANSMISSION SUPPLY	338 W 12TH STREET	High	5013	Auto Supplies	908.31		Yes	No	No	No	No	No	No	No	No	X
584	TROLLEY SIDE DELI AND MINI MART	530 W 21ST STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	Yes	No	No	No	No	Yes	
585	TUFF ACOUSTICAL AND THERMAL	1623 CLEVELAND AVENUE	Medium	1742	Painting/Coating	908.31		No	No	No	No	No	No	No	No	No	
586	TUTTI FRUTTI OF NATIONAL CITY	1031 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	Yes	Yes	Yes	
587	TUTTI FRUTTI OF PLAZA BONITA	3030 PLAZA BONITA RD FC11	Medium	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
588	UNDERGROUND AUTOWORKS INC	106 E 17TH STREET	Low	7538	Auto Repair	908.32		No	No	No	No	No	No	No	No	No	
589	UNIDYNE CORPORATION	2702 SOUTHPORT WAY F	Low	1799	Other Contractor	908.32		No	No	No	No	No	No	No	No	No	
590	UNITED BARBER & BEAUTY	2807 HOOVER AVENUE C	Low	5087	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
591	UNIVAR USA	2100 HAFFLEY AVENUE	Low	5169	Wholesale/Storage/Warehousing	908.31		No	No	No	No	No	No	No	No	No	
592	US SAVE AUTO	639 NATIONAL CITY BLVD	Medium	5521	Vehicle Dealers	908.31		Yes	No	Yes	No	No	No	No	No	No	X
593	VALERIOS CITY BAKERY	1631 E 8TH STREET 182	Low	5461	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
594	VALERIOS FAMILY BAKE SHOP	2720 E PLAZA BLVD H	High	5461	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	Yes	Yes	Yes	
595	VALERO NATIONAL CITY	10 OSBORN STREET	High	5541	Fueling	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
596	VALLARTA SUPERMARKETS #36	901 S EUCLID AVE	High	5411	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
597	VALUE AUTO REPAIR & TIRES	115 E 17TH STREET A	Low	7538	Auto Repair	908.32		Yes	Yes	No	No	No	No	No	No	No	
598	VALUE CARS	13 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
599	VALUE CARS INC	2401 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	No	
600	VALUE CARS INC	1807 NATIONAL CITY BLVD	Low	5521	Vehicle Dealers	908.32		No	No	No	No	No	No	No	No	Yes	
601	VEE PARTS & ACCESSORIES	704 A AVENUE	Low	5531	Auto Supplies	908.31		No	No	No	No	No	No	No	No	No	
602	VERNON SHIP SUPPLIES	1705 HOOVER AVENUE B	Low	5199	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
603	VICTOR'S MEXICAN FOOD TAQUERIA	1602 E 4TH STREET	Low	5963	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
604	VIETNAMESE CHINESE NOODLE HOUSE	600 E 8TH STREET 5	Low	5812	Eating/Drinking Establishments	908.31		No	No	No	No	No	No	No	No	No	
605	VIGOR MARINE LLC	1636 WILSON AVE	Low	1731	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
606	VIKING'S AUTO REPAIR	1503 ROOSEVELT AVENUE A	Low	7532	Auto Paint/Body	908.32		Yes	No	Yes	No	No	No	No	No	No	
607	VILLA MANILA	500 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
608	VILLARINO CONSTRUCTION SVC. INC	430 W 12TH STREET	Medium	1542	Other Contractor	908.31		No	No	No	No	No	No	No	No	No	
609	VP # 9570	1139 S HARBISON AVE	High	5541	Fueling	908.32		No	No	Yes	No	No	No	No	No	Yes	
610	WALGREENS #07869	885 EUCLID AVENUE	High	5912	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	Yes	Yes	Yes	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
611	WAL-MART STORES, INC #5023	1200 HIGHLAND AVENUE	Medium	5411	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
612	WEBCO HALE	2202 HAFFLEY AVENUE	Low	5963	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
613	WEST COAST CAB	220 W 14TH ST	High	7538	Auto Repair	908.31		Yes	No	Yes	Yes	No	No	No	No	Yes	X
614	WEST COAST TRUCK SERVICE	201 W 18TH STREET	Low	7538	Auto Repair	908.32		No	No	Yes	Yes	No	No	No	No	No	
615	WESTAIR GASES & EQUIP, INC	2300 HAFFLEY AVE	Low	5084	Wholesale/Storage/Warehousing	908.31		No	No	Yes	Yes	No	No	No	No	No	
616	WESTCOTT MAZDA	2800 NATIONAL CITY BLVD	Low	5511	Vehicle Dealers	908.32		Yes	No	Yes	No	No	No	No	No	No	
617	WESTERN LIFT, INC/WESTERN HOIST, INC	1839 CLEVELAND AVENUE	Low	5013	Auto Supplies	908.31		No	No	No	No	No	No	No	No	Yes	
618	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS AT SOUTH END OF MALL	3030 PLAZA BONITA RD 2075	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
619	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS IN FOOD COURT	3030 PLAZA BONITA RD 2075	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
620	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS NORTH OF JC PENNY	3030 PLAZA BONITA RD 2075	Low	5812	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	No	No	Yes	
621	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS ON EAST SIDE OF MALL	3030 PLAZA BONITA RD 2075	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	Yes	
622	WESTFIELD PLAZA BONITA, EATING ESTABLISHMENTS SOUTH OF JC PENNY	3030 PLAZA BONITA RD 2075	Low	5812	Eating/Drinking Establishments	909.12		No	No	No	No	No	No	No	No	No	
623	WESTFLEX INDUSTRIAL	325 W 30TH STREET	Low	5085	Wholesale/Storage/Warehousing	908.32		No	No	No	No	No	No	No	No	No	
624	WESTSIDE BUILDING MATERIALS	500 W 16TH STREET	Low	5211	Building Materials	908.31		No	No	No	Yes	No	No	No	No	No	
625	WIENERSCHNITZEL	1825 HIGHLAND AVE	Low	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
626	WILSON MARKET AND LIQUOR	916 E 8TH STREET 9	Low	5411	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
627	WINCHELL'S DONUT HOUSE #9484	2447 E PLAZA BLVD	Medium	5461	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
628	WINGS N THINGS	1499 E PLAZA BLVD	Medium	5812	Eating/Drinking Establishments	908.32		No	No	Yes	No	No	No	Yes	Yes	Yes	
629	WONDER/HOSTESS BAKERY OUTLET	1626 SWEETWATER ROAD E - H	Medium	5411	Eating/Drinking Establishments	909.12		No	No	Yes	No	No	No	Yes	Yes	Yes	X
630	WORLD TERMINAL PARKING INC	200 HIGHLAND AVE	Low	7542	Vehicle Washing	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
631	WORLD TERMINAL PARKING INC.	510 HIGHLAND AVE	Medium	7542	Vehicle Washing	908.31		No	Yes	No	No	No	No	No	No	No	X
632	WRIGLEY'S SUPER	34 N EUCLID AVE	Low	5411	Eating/Drinking Establishments	908.31		No	No	Yes	No	No	No	Yes	Yes	Yes	
633	XPEDX	1010 W 19TH STREET	Medium	5113	Wholesale/Storage/Warehousing	908.31		Yes	No	No	Yes	No	No	No	No	Yes	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
634	Y & M WHOLESALER	2626 SOUTHPORT WAY A	Low	5145	Wholesale Food	908.32		No	No	No	No	No	No	Yes	No	No	
635	Y.Y.K. ENTERPRISES, INC.	726 W 19TH STREET	Medium	1721	Painting/Coating	908.31		No	No	No	No	No	No	No	No	No	
636	YOBERRY YOGURT	1430 E PLAZA BLVD E8	Medium	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	Yes	
637	YOGURLICIOUS	2240 E PLAZA BLVD F	Medium	5812	Eating/Drinking Establishments	908.32		No	No	No	No	No	No	No	No	No	
638	YUM YUM DONUT FRANCHISE #502	3122 E PLAZA BLVD	Low	5461	Eating/Drinking Establishments	908.32		No	No	Yes	Yes	No	No	No	No	No	
639	ZARLITOS FAMILY RESTAURANT	505 E 8TH STREET	Low	5812	Eating/Drinking Establishments	908.31		No	No	Yes	Yes	No	No	No	No	Yes	
640	A & F ASPHALT PAVING	215 E 30TH STREET	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
641	A & L BLDG MAINTENANCE	6515 BULLOCK DR	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
642	A P D & E	PO BOX 2154	Low	5013	Auto Supplies	Throughout City	X	No	No	Yes	No	No	No	No	No	No	
643	A PARTY RENTALS	620 3RD AVE	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
644	A PERSONAL TOUCH JANITORIAL	9844 ARAPAHO ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
645	A TO Z TOWING	3821 CALLE FORTUNADA	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
646	AAA CLEANING SERVICES	6782 HIBISCUS DR	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
647	ABBEY PARTY RENTS	8860 PRODUCTION AVE	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
648	ABC PARTY RENTALS AND SALES	1021 BAY BLVD S	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
649	ABC RECON	4660 CLAIREMONT MESA BLVD	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
650	ACCURATE UNDERGROUND & GRADING	1315 WALNUT ST	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
651	ACE RADIATOR SERVICE	1836 NATIONAL AVE	Medium	7539	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
652	ACOUSTIC WORKS INC	PO BOX 460896	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
653	ADAIR STUPING, INC	BUENA CREEK RD	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
654	ADAMS & SONS MOBILE DETAILING	3297 SWEETWATER SPRINGS BLVD	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
655	AGUINAGA'S CATERING	546 FERGUS ST	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
656	AL CARRILLO FIELD SERVICES	284 IMPERIAL BEACH BLVD	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
657	ALCARAZ, JUAN	774 E NAPLES CT	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
658	ALEX MARTINEZ OR FROSTEEZ	3713 GATTY ST	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
659	ALL PRO CLEANING & JANITORIAL	770 GOLDEN SANDS PL	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
660	ALLSTOP PEST CONTROL	108 W 25TH ST B	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
661	ALPINE PAVING INC	WILLOWS RD	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
662	AL'S FLOOR CARE	1219 11TH ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
663	ALTA-DENA DAIRY	17637 VALLEY BLVD	Low	5143	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
664	ALVAREZ HOME IMPROVEMENTS	1705 L AVENUE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
665	ALVIN'S TERRY'S CUSTOME MOBILE DETAILING-	4294 LOS PINOS AVE	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
666	ALVIZIA LANDSCAPE INC	2520 CACTUS RD	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
667	AMERICAN ASPHALT AND CONCRETE	9011 MEMORY LN	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
668	AMERICAN ASPHALT SOUTH INC	PO BOX 310036	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
669	AMERICAN DEMOLITION/CONCRETE	620 INSETTIA ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
670	AMERICAN DESIGN COATINGS INC	12225 WORLD TRADE DR A	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
671	AMERICAN MARBLE	1280 N MELROSE DR	Low	1743	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
672	ANA & MCDANIEL PROFESSIONAL S	214 N R AVENUE	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
673	ANGELS EXPRESS CLEANING SERVICE	4035 NORDICA ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
674	ANHEUSER-BUSCH SALES OF SAN DIE	5959 SANTA FE ST	Low	5181	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
675	APPTEK COMMERCIAL, INC	171 SAXONY RD	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
676	ART D NIELSEN PAINTING, INC	PO BOX 20795	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
677	ARTS TRENCH PLATE & K-RAIL	PO BOX 600661	Medium	7353	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
678	ARTURO'S CONCRETE CARE	1635 E 11TH STREET	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
679	ASSOCIATED BUILDING SERVICES	6736 OMEGA DR	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
680	ATLAS CO SYSTEMS, INC	3030 PLAZA BONITA RD	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
681	AYERS CONSTRUCTION COMPANY INC	549 N GRECO CT B2	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
682	AZTEC VENDING SERVICES, INC	1300 HILL ST	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
683	B & B ACOUSTICS, INC	12115 LAKESIDE AVE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
684	BAEZA UPHOLSTERY	6320 MADRONE AVE	Medium	7532	Auto Paint/Body	Throughout City	X	Yes	Yes	No	No	No	No	No	No	No	X
685	BAJA COAST JANITORIAL SERVICE	706 F ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
686	BANKER INSULATION OF CA INC	2357 VINEYARD AVE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
687	BARRETT ENGINEERED PUMPS	PO BOX 13130	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
688	BEST INTERIORS INC	2100 E VIA BURTON	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
689	BEST PART SERVICE	952 HAWAII AVE	Low	5013	Auto Supplies	Throughout City	X	No	No	Yes	No	No	No	No	No	No	
690	BEST WINDOW TINTING, INC	3045 EDINGER AVE	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
691	BETTER THEN CLEAN	PO BOX 758	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
692	BIG TREES NURSERY, INC	12450 HIGHLAND VALLEY RD	Medium	5193	Nurseries/Greenhouses	Throughout City	X	No	No	No	Yes	Yes	Yes	No	No	No	X
693	BILL'S WASHER & DRYER REPAIR	827 PARKBROOK ST	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
694	BLACK JACK BARBECUE	10251 CENTINELLA DR	Medium	5812	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
695	BLOCK'S LOCKS INC	1184 CALIFORNIA ST	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
696	BLUE HOUSE KEEPER	3221 NATIONAL CITY BLVD	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
697	BOB'S FIRE EQUIP CO	9640 MISSION GORGE RD	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
698	BONITA PET HOSPITAL, INC	3438 BONITA RD	Medium	0742	Animal Facilities	Throughout City	X	No	No	No	No	No	Yes	Yes	Yes	No	X
699	BP WEST COAST PRODUCTS LLC	PO BOX 941912	Low	5172	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
700	BRADY CLEANING & MANTENANCE	17304 HIGHWAY 67	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
701	BRIDGFORD MARKETING CO	PO BOX 3773	Low	5149	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
702	BRODING'S BATTERY WAREHOUSE	8188 COMMERCIAL ST	Low	5013	Auto Supplies	Throughout City	X	No	No	Yes	No	No	No	No	No	No	
703	BROTHER'S TOWING SERVICE	2739 GRANGER AVE	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
704	C & L CONCRETE CUTTING	6353 CLYDE AVE	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
705	C T GEORGIOU PAINTING CO	433 LECOUVREUR AVE	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
706	CA VALLEY FIRESIDE	26401 VIA DE ANZA	Low	1741	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
707	CADILLAC KANDY	508 OCEAN BREEZE WAY	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
708	CALIFORNIA ACOUSTICS	5663 BALBOA AVE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
709	CALIFORNIA COMM'L SECURITY	4241 NDEROSA AVE D	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
710	CANNON-NOE INC	833 SAN LUIS REY PL	Medium	7353	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
711	CARLOS MAINTENANCE AND REPAIR	44 S HARBISON AVE	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
712	CASPERS CONCRETE CUTTING	3825 BANCROFT DR	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
713	CASTILLO'S LANDSCAPING	1503 E 15TH ST	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
714	CAYSER CARPENTRY AND SVCS	1489 OLEANDER AVE	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
715	CENTRAL MEAT AND PROVISION CO	1603 NATIONAL AVE	Low	5147	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
716	CENTRE CITY TOWING	2826 COMMERCIAL ST	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
717	CENTURY PACIFIC LANDSCAPE	2818 QUADRA AVE	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
718	CERTIFIED CONCRETE, INC	120 N ANDREASEN DR	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
719	CESAR RENTERIA	PO BOX 211963	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
720	CESENA LANDSCAPING	7354 HIGHTREE LN	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
721	CHARLIE PROFESSIONAL GARDNER	108 E 5TH STREET A	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
722	CHIVAS CONSTRUCTION	3888 GENESEE AVE	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
723	CHLOR-NATION	2831 ECHO RIDGE CT	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
724	CHRIS AUDIA	1112 24TH ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
725	CHRISTIANSEN AMUSEMENTS	PO BOX 997	Medium	7999	Golf Courses/Parks	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
726	CIRCUS CHIMERA	PO BOX 842	Medium	7999	Golf Courses/Parks	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
727	CIRCUS VARGAS	3030 PLAZA BONITA RD (PARKING LOT)	Medium	7999	Golf Courses/Parks	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
728	CITY TOWING SERVICES	2826 COMMERCIAL ST	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
729	CITYWIDE TOWING INC	4059 COLLEGE AVE	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
730	CLASSIC PARTY RENTALS	7069 CONSILDATED WAY	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
731	CMN LAWN SERVICES	1208 SITAS RD	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
732	COASTAL CONCRETE INNOVATIONS	13685 HIGHWAY 8 BUSINESS	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
733	COCO'S HOUSEKEEPING	2830 PROSPECT ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
734	COLIMA RENT	421 S 38TH ST	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
735	COLONIA F.C. SERVICE	133 N CLAIRMONT AVENUE	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
736	COLUMBIA PEST CONTROL CO. OF SAN DIEGO	127 W 9TH STREET	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
737	CONCRETE CUTTING COMPANY	PO BOX 910503	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
738	CONTRACTOR'S TERMITE CONTROL	14870 CENTRAL AVE	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
739	COOL STYLE CARPET CLEANING, GUSTAVO GONZALES	752 MADISON AVENUE	Low	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
740	CORE-MARK DISTRIBUTORS	PO BOX 2200	Low	5149	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
741	CORREO LANDSCAPING	3453 FLORENCE ST	Medium	0781	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
742	CORTES TOWING ENTERPRISES, INC	919 HOLLISTER ST	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
743	CPE CONSTRUCTION, INC	7371 NORTH AVE	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
744	CULLIGAN WATER CO OF SD	5997 JOEL LN	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
745	CUSTOM PAINTING	530 C AVENUE	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
746	DANIEL DORADO & ASSOCIATES	33741 HOLTZ HILL RD	Low	5013	Auto Supplies	Throughout City	X	No	No	Yes	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
747	DANIELS TIRE SERVICE	575 C ST	Medium	7534	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
748	DAPPER TIRE CO INC	PO BOX 82047	Low	5014	Auto Supplies	Throughout City	X	No	No	Yes	No	No	No	No	No	No	
749	DARRCO BUILDING MAINTENANCE	PO BOX 600876	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
750	DAVEY TREE EXPERT CO, THE	1500 N MANTUA ST	Medium	0783	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
751	DE RIVERA SOLUTIONS CONTRUCTION	9109 AKARD ST	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
752	DEEP SHINE CLEANING SERVICE	5534 POTOMAC ST A	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
753	DEMCON CONCRETE CONTRACTORS	12325 KERRAN ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
754	DENT ONE/DENT1	507 E 5TH STREET	Medium	7539	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
755	DENTWORKS	PO BOX 121539	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
756	DEWEY PEST CONTROL	324 CIVIC CENTER DRIVE	Low	7342	Pest Control	Throughout City	X	No	No	No	No	No	No	No	No	No	
757	DIEGO KETTLECORN	1200 HIGHLAND AVE	Medium	5441	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
758	DISCOUNT TOWING INC	2468 VAN NESS AVE	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
759	DISTINCTIVE CONCRETE, INC	9340 HAZARD WAY A1	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
760	DISTINGUISHED FIRE EXTINGUISH	1184 CALIFORNIA ST	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
761	DJ ANGEL & INFLATABLE JUMPERS	2231 E 12TH STREET	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
762	DS WATERS OF AMERICA INC	5660 NEW NORTHSIDE DR	Medium	5499	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
763	ECO-DRI	105 W 35TH STREET E	Low	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
764	EDDY'S LANDSCAPING	1945 LANOITAN AVENUE	Medium	0781	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
765	EL COMETA	281 BRANDYWOOD ST	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
766	EL TIGER	471 WESTVIEW DR	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
767	EMMA'S COMMERCIAL CLEANING	2331 LA SIESTA WAY	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
768	ER QUALITY LAWN MAINTENANCE	982 RUTGERS AVE	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
769	ES CLEANING SYSTEMS	1660 WALBOLLEN ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
770	ESTEBAN MUNGUIA UPHOLSTERY	PO BOX 13323	Medium	7532	Auto Paint/Body	Throughout City	X	Yes	Yes	No	No	No	No	No	No	No	X
771	EXCELLENCE MOBIL AUTO DETAIL	999 E DIVISION ST B23	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
772	EXPERT BUILDING MAINTENANCE	2645 AEGEAN DR	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
773	EXTRA HAND SERVICES	1358 CASSIOPEIA LN	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
774	F R GHIANNI DRYWALL	1937 FRIENDSHIP DR A	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

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775	F. J. BRAWLEY CONCRETE	PO BOX 152070	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
776	FARMER BROS CO	20333 NORMANDIE AVE	Low	5199	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
777	FARMER JOHN MEATS	3049 E VERNON AVE	Low	5147	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
778	FERRE MOVIL "EL JUNIOR"	PO BOX 13236	Low	5074	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
779	FINISHING TOUCH AUTO DETAILING		High	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
780	FIREWORKS & STAGE FX AMERICA	PO BOX 488	Medium	7999	Golf Courses/Parks	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
781	FIRSTLINE SECURITY INC	500 S GENEVA RD	Low	5063	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
782	FLASHY AUTO DETAILING	3601 STOCKMAN STREET	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
783	FLEMING PAINTING	10700 JERSEY BLVD	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
784	FRB MAINTENANCE SERVICES	4033 CHERRY BLOSSOM ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
785	FREDDY'S MOBIL CAR WASH	621 WHITNEY ST	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
786	FRED'S TASTEFUL GARDENING	4074 PALM AVE	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
787	FRONTIER CONCRETE, INC	PO BOX 3800	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
788	FUENTES JUMP	924 DELTA STREET	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
789	G AND J AUTO SERVICE	1514 ROOSEVELT AVE	Medium	7538	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
790	G AUTO BEAUTY	3619 CRESTA CT	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
791	G AUTO BEAUTY DEALER WASH SYSTEMS	3619 CRESTA COURT	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
792	G E CAPITAL MODULAR SPACE	1200 SWEDESFORD RD	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
793	GALOREN SOUTHWESTERN INC	350 PLAZA PARAISO	Low	5046	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
794	GALVAN'S PLACE AND FINISH INC	12155 MAGNOLIA AVE 4C	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
795	GARCIA'S PRECISION ACOUSTICS	3162 CARLSBAD BLVD B	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
796	GATEWAY CONCRETE INC	3030 PLAZA BONITA RD	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
797	GATEWAY INSULATION	966 N AMELIA AVE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
798	GENERAL ELECTRIC COMPANY	PO BOX 60320	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
799	GEOGRID RETAINING WALL STM INC	1295 DISTRIBUTION WAY	Low	1741	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
800	GHIANNI LARUSSA GROUP, INC.	13880 STOWE DR A	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
801	GILBERT PRACTICE MANAGEMENT	10128 CLIFFSIDE PL	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
802	GILBERTO RAMIREZ	3401 ADAMS AVE A72	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
803	GL CONSTRUCTION & DRYWALL	10759 OAK CREEK DR	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

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804	GMLS	45 S HARBISON AVE	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
805	GOLDEN STATE FOODS	PO BOX 8697	Low	5149	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
806	GOMEZ & SONS MOBILE WASH &	3880 DELTA ST	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
807	GREAT WESTERN DRYWALL	8315 MIRALANI DR	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
808	GREG NICITA	SAINT ANTHONY CHURCH	Medium	7999	Golf Courses/Parks	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
809	GS BUILDING WORKS	3235 ORANGE ST	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
810	H T SERVICES	PO BOX 741683	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
811	HANDYMAN EXPERTS	4251 ETA ST	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
812	HANDYMAN MATTERS-S.D. EAST	2650 JAMACHA RD	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
813	HARRIS AND ASSOCIATES	120 MASON CIR	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
814	HARRIS CONCRETE, INC	8265 COMMERCIAL ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
815	HAYES BOLT & SUPPLY	2950 NATIONAL AVE	Low	5072	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
816	HEARTLAND MEAT CO INC	3461 MAIN ST	Low	5147	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
817	HECTOR'S ICE CREAM	2468 VAN NESS AVE	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
818	HI-TECH GYPSUM, INC	501 PARK INDUSTRIAL DR	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
819	HOME DET #658, THE	1901 BUTTERFIELD RD	Low	5211	Building Materials	Throughout City	X	No	No	No	Yes	No	No	No	No	Yes	
820	HUFCOR AIRWALL INC	8739 ARTESIA BLVD	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
821	HUTCH'S LOCK & KEY	715 4TH AVE	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
822	HYDREX PEST CONTROL	PO BOX 261127	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
823	I C I PAINTS	15885 W SPRAGUE RD	Low	5198	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
824	I M B WINDOW CLEANING CO	2368 HOPKINS ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
825	INDUSTRIAL COATINGS & RESTORATIONS	2534 OCEANSIDE BLVD	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
826	INFLATABLE WORLD CORP	1139 MANSIONES LN	Medium	7996	Golf Courses/Parks	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
827	INLAND PLASTER INC	38372 INNOVATION CT	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
828	INNOVATIVE DRYWALL SYSTEMS INC	988 S ANDREASEN DR A	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
829	INSULCOM	42950 OSGOOD RD	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
830	INTEGRITY CONCRETE INC	540 OPPER ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
831	INTEGRITY DRYWALL SYSTEMS	1111 LOSTINDA ST	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
832	IRISH SETTERS INC	674 RANCHEROS DR	Low	1741	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
833	ISABEL TOWING CO	PO BOX 436022	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
834	J & A LANDSCAPE & MAINTENANCE	1235 PICCARD AVE	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
835	J & P AIR JUMPS	1692 COPPER PENNY DR	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
836	J & T LANDSCAPING	1273 SEA LILY CT	Medium	0781	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
837	J AND L ENTERPRISES	2930 BAKER PL	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
838	J C TOWING INC	2501 FAIVRE ST	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
839	J D PAVING, INC	1412 E BARHAM DR	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
840	J. WILLIS CO., INC.	6795 STANTON AVE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
841	J.S. PLASTERING INC	14579 HIDDEN WOOD RD	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
842	JAIC EVENT SYSTEMS	1991 FRIENDSHIP DR D	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
843	JANI KING	190 ULTRAMARINE RD	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
844	JANI-KING, SEGURA, EDMUNDO	250 OTAY VALLEY ROAD B	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
845	JAVIER HERNANDEZ	722 CARDIFF ST	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
846	JB CONCRETE CONSTRUCTION	1425 K AVE	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
847	JENSEN DRYWALL	3714 LYNDA PLACE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
848	JMB ASPHALT & CONCRETE INC	1818 WILSON AVE	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
849	JNC PINOY FOODMART INC	943 OTAY LAKES RD D	Medium	5812	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
850	JOHNSON & TURNER PAINTING CO	8241 ELECTRIC AVE	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
851	JOHNSON BARNES + FINCH INC	9749 CACTUS ST	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
852	JOSE MORALES	3233 BANCOUVER	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
853	JOSE'S ICE CREAM	47 E 2ND ST	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
854	JOSE'S OFFICE CLEANER	41 E 2ND STREET A	Low	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
855	J'S HANDYMAN SERVICE	5406 IMPERIAL AVE	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
856	JUAN ANTONIO MORENO	2381 MONTCLIFF RD	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
857	JUMPING JACK PARTY RENTALS	PO BOX 21438	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
858	KANE KATERING	28337 PONTEVEDRA DR	Medium	5812	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
859	KAREN CLEAN UPS	1722 GAMMA ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
860	KAY CONSTRUCTION	1163 BROADWAY	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
861	KENNEDY MASONRY INC	PO BOX 130340	Low	1741	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
862	KERNS DRYWALL, INC	26895 ALISO CREEK RD B-580	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
863	KH MINTON PAINTING INC	2518 CAMINO LAGARTO	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
864	L K M TOWING	4341 CLAIREMONT DR	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
865	L L T HANDYMAN	310 MAPLE CT	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
866	L. CASTANEDA'S DOG GROOMING	1243 TOBIAS DR	Medium	0752	Animal Facilities	Throughout City	X	No	No	No	No	No	Yes	Yes	Yes	No	X
867	LAKESIDE EQUIPMENT SALES & RENTALS INC	11925 WOODSIDE AVE	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
868	LAMAR SPACE INC	PO BOX 3940	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
869	LANDSCAPE DEVELOPMENT INC	28447 WITHERSPOON PKWY	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
870	LARRY RAMOS GARCIA	6323 PLAZA CUERNAVACA	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
871	LASER SAVER, INC	MIRALANI DR	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
872	LLOYD PEST CONTROL	935 SHERMAN ST	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
873	LLT JANITORIAL SERVICE	310 MAPLE CT	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
874	LUGO & IBARRA'S LANDSCAPING	4076 DAVES WAY	Medium	0781	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
875	LUNA, MAURICIO	1432 E 6TH ST	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
876	M & E CLEANING	12710 LAUREL ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
877	MACORD CONSTRUCTION CORP	101 COPPERWOOD WAY H	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
878	MAGIC JUMPS	5151 ROBINWOOD RD	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
879	MANNY'S MOBILE MECHANIC	1900 NATIONAL CITY BLVD B	Medium	7538	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
880	MARIA A JANI KING	5854 VISTA SANTA CATARINA	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
881	MARTIN CORRATION	2340 MEYERS AVE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
882	MARTINEZ, JOVENCIO O/ELISIO S FLORES	36093 FRESNO CIR	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
883	MARTZ MASONRY INC	594 CAMINITO A CASA	Low	1743	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
884	MASCO CONTRACTOR SERVICES OF CALIFORNIA, INC	13000 KIRKHAM WAY	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
885	MASTERCARE PROTECTION & CLEANI	22421 GILBERTO B2	Low	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
886	MATTIA CONCRETE CLEANING	7860 EL PASO ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
887	MAUI DRINKS INC	PO BOX 721631	Medium	5812	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
888	MAX TOWING	255 3RD AVE	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
889	MAZE AUTOHAUS/MAZE ON 9TH	225 W 9TH STREET	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
890	MC CATERING	4065 WIGHTMAN ST	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
891	MC K'S JANITORIAL CLEANING SER	2023 F AVENUE 8	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
892	MC PAINTING	2525 RAMONA DR	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
893	MEMO'S MOBILE DETAIL	1670 MELROSE AVE	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
894	MENATI HANDY MAN SERV	511 E SAN YSIDRO BLVD	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
895	MERCY JANITORIAL SERVICES	2536 J AVENUE	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
896	MEZA'S TOWING	725 40TH ST	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
897	MICHAEL BLACK EQUIPMENT SVCS	5 N VILLAGE CIR	Medium	7538	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
898	MIKE'S CATERING	2849 RANCHO RIO CHICO	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
899	MILLER PAVING	9236 OLIVE DRIVE	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
900	MIRSTONE PLASTERING INC	PO BOX 5664	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
901	MISSED A SPOT CLEANING SERVICES	630 F AVE	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
902	MJ AUTOMOTIVE SERVICE	8505 WADE ST	Medium	7538	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
903	MOBILE MARINE	1236 E 16TH STREET	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
904	MODERN MASONRY	1168 GREENFIELD DR	Low	1741	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
905	MONTELO'S CLEANING SERVICES	1107 D AVE	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
906	MOODY'S LUNCH SERVICE	4637 MARKET ST	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
907	MORALS CONCRETE PUMP	110 F ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
908	MORLEY CONSTRUCTION	2901 28TH ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
909	N.G. COMERCL & RSDNTL CLEANING	1705 L AVE	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
910	NASVIL HANDYMAN	4697 GAVIOTA CT	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
911	NATIONAL PETROLEUM INC	2005 MAIN ST	Low	5172	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
912	NESTLE WATERS NORTH AMERICA IN	777 W PUTNAM AVE	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
913	NEW DIMENSION MASONRY INC	1018 CUDAHY PL A	Low	1741	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
914	NEXT BUMPER REPAIR AND DETAIL MOBILE	1855 BAYVIEW HEIGHTS DR	Medium	7539	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
915	NICOLAS ESPINAL INDPENDENT SVC	5007 OCEAN VIEW BLVD	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
916	NISSHO OF CALIFORNIA INC	1902 S SANTA FE AVE	Medium	0781	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
917	NIXTERMITE INC.	5080 BONITA RD A2	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
918	NORTHWEST PUMP & EQUIPMENT CO	1785 LOGAN AVE	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
919	OAK TREE LANSCAPING	416.5 E 30TH ST	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
920	OJ INSULATION CO INC	600 S VINCENT AVE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
921	ONE STOP AUTO DETAILING	3005 IRIS AVE G	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
922	OPTIONS UNLIMITED INC	2505 CONGRESS ST	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
923	ORKIN EXTERMINATING INC	12710 MAGNOLIA AVE	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
924	ORTHO MCNEIL-JANSSEN PHARMACEUTICALS INC	1125 TRENTON HARBOURTON RD	Low	5122	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

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925	OSCAR'S STRIPERS	3839 AVENIDA SAN MIGUEL	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
926	PACIFIC LATH & PLASTER INC	360 S SPRUCE ST	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
927	PALACIOS JANITORIAL SERVICE	533 KINGSWOOD ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
928	PALMER PAINTING CO	8104 CENTER ST	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
929	PAN AMERICAN TENTS	1447 VIRGINIA AVE	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
930	PARAMOUNT LIGHTING	14035 KIRKHAM WAY	Low	5023	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
931	PATITO CATERING	4582 BOYLSTON ST	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
932	PATITO CATERING	2074 NATIONAL AVE	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
933	PAULIE'S PIZZA KITCHEN BBQ	10423 SAN DIEGO MISSION RD	Medium	5812	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
934	PAXTON TOWING INC	3487 MAIN ST	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
935	PBC COMMERCIAL, INC	1560 W LAMBERT RD	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
936	PEARSON FORD COMPANY	4300 EL CAJON BLVD	Medium	5511	Vehicle Dealers	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
937	PENNZOIL-QUAKER STATE CO	3430 E 26TH ST	Low	5013	Auto Supplies	Throughout City	X	No	No	Yes	No	No	No	No	No	No	
938	PERFECTION AUTO DETAIL	517 OAKLAWN AVE	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
939	PERFORMANCE MOBIL AUTO DETAIL	790 OAKLAWN AVE APT B	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
940	PERRY & SHAW INC	475 W BRADLEY AVE	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
941	PETERSON BROTHERS CONSTRUCTION	1560 W LAMBERT RD	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
942	PHONG TRUONG LAWN SERVICE	2131 ESTELA DR	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
943	PINE TREE LUMBER CO LP	707 N ANDREASEN DR	Low	5211	Building Materials	Throughout City	X	No	No	No	Yes	No	No	No	No	Yes	
944	PIRRY HANDYMAN	303 SANTA ROSALIA DR	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
945	PLANETBIDS INC	20929 VENTURA BLVD	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
946	PORLEX CARPET CARE	2142 N AVENUE (REAR)	Low	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
947	PPI TOWING	1885 LEON AVE	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
948	PRECISION CONCRETE CONSTRUCTIO	465 E CARMEL ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
949	PREMIER CHEM DRY	311 S DREXEL AVE	Low	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
950	PREMIER TILE & MARBLE	798 MONTEREY PASS RD	Low	1741	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
951	PRIME CO PAINTING, INC	1107 S CLEVELAND ST	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
952	PRO CLEAN CARPET CARE	1022 DORADO WAY	Low	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
953	PROMOTIONAL DESIGN GROUP	9872 RUSH ST	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
954	PROWALL LATH & PLASTER INC	360 S SPRUCE ST	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
955	QUALITY PAINTING & WALLCOVER	8340 CAMINO SANTA FE F	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
956	R C P BLOCK & BRICK INC	8240 BROADWAY	Low	5211	Building Materials	Throughout City	X	No	No	No	Yes	No	No	No	No	Yes	
957	R.G. MOBILE AUTOMOTIVE SERV	1135 DELAWARE ST	Medium	7538	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
958	RANCHO DEL ORO TOWING	2260 LA MIRADA DR	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
959	RAPHAEL'S PARTY RENTALS, INC	8606 MIRAMAR RD	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
960	RAYNE WATER SYSTEMS	4635 RUFFNER ST	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
961	REBBECA'S ICE CREAM MOBIL	PO BOX 4382	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
962	RESIDENTIAL WALL SYSTEMS	21778 TEMESCAL CANYON RD	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
963	RICHARD'S ICE CREAM	445 CUYAMACA AVE	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
964	RICK'S MOBILE GLASS	507 G AVENUE	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
965	RIGOBERTO VALENCIA FUENTES	325 54TH ST	Medium	0781	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
966	RITTER, RANDY	470 D ST	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
967	ROBERTSONS READY MIX	PO BOX 3600	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
968	ROCHINY EXHAUST CLEANING CO	2195 LOGAN AVE	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
969	ROLLING FRITO-LAY SALES LP	26672 TOWNE CENTRE DR	Low	5149	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
970	ROMICO INC	2057 BARBADOS CV	Low	5145	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
971	ROQUE & SONS CONCRETE	2649 DALISAY ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
972	ROSE CONSTRUCTION	4225 MOUNT VOSS DR	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
973	RPM AUTO DETAILING	325 BLACKSHAW LN	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
974	RUIZ TREE SERVICE	2016 E AVENUE	Medium	0783	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
975	RUSS' BEE REMOVAL	3421 NEWBERRY STREET	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
976	S AND T TOWING	PO BOX 16865	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
977	S K S INC	9270 DOWDY DR	Low	5172	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
978	SAFELITE	PO BOX 182000	Medium	7536	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
979	SAFETY-KLEEN SYSTEMS INC.	CLUSTER II BUILDING 3	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
980	SALVADOR CORONADO MENDOZA	1424 BROADWAY	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
981	SAM RAMMAHA PAINTING CO, INC	1655 COMMERCE ST	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
982	SAN DIEGO CHEMICAL EXHAUST	35 HENSLEY ST	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
983	SAN DIEGO CONCRETE PUMPING,INC	8534 HUBBLES LN	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
984	SAN DIEGO JUMPER RENTALS	506 TELEGRAPH CANYON RD C	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
985	SAN DIEGO PARTY RENTALS	2222 VERUS ST D	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
986	SAN DIEGO TOWING PATROL	8836 KELBURN AVE	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
987	SAN DIEGO WINDOW CLEANING & BLINDS	8645 HIGHWOOD DR	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
988	SANDOVAL CONCRETE	827 E 13TH ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
989	SANTA FE PLASTER	620 ALPINE WAY	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
990	SANTANA MOBILE TRUCK WASH	1741 NATIONAL CITY BLVD	High	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
991	SANTEE DAIRIES INC	17851 RAILROAD ST	Low	5143	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
992	SERGIO CONSTRUCTION AND REMOD	1833 VIA CAPRI	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
993	SERG'S/AIR CLEANING SERVICES	825 COLORADO AVE B	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
994	SEVEN UP / RC BOTTLING CO OF	5770 MOREHOUSE DR	Low	5199	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
995	SEVILLA PLASTERING	1242 DAWSON DR	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
996	SHARIDEN DESIGN ASPHALT INC	PO BOX 285	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
997	SHELLYS DELI CATERING	835 MORRISON ST	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
998	SHORTSTOP	314 GLEN CREEK DR	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
999	SIGGE MAKLVIST INC	4540 KEARNY VILLA RD	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1000	SIM J HARRIS, INC	4375 JUTLAND DR	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1001	SLAGILL CORRATION	445 W DOUGLAS AVE	Low	1741	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1002	SMITH, H G, LUMBER CO INC	6144 FEDERAL BLVD	Low	5031	Building Materials	Throughout City	X	No	No	No	Yes	No	No	No	No	Yes	
1003	SMITH, R W, & CO	PO BOX 26160	Low	5099	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1004	SOS WINDSHIELD REPAIR	272 KENNEDY ST	Medium	7536	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
1005	SOUTH BAY AUTO PARTS INC	908 3RD AVE	Medium	5599	Vehicle Dealers	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
1006	SOUTH BAY AUTO WRECKERS INC	811 ENERGY WAY	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
1007	SOUTH BAY FACILITY SVCS	2631 J AVE	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
1008	SQUIRES-BELT MATERIAL CO INC	PO BOX 152047	Low	5211	Building Materials	Throughout City	X	No	No	No	Yes	No	No	No	No	Yes	
1009	STANDARD PLUMBING & INDUSTRIAL	3864 40TH ST	Low	5074	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1010	STANLEY STEEMER CARPET CLEANER	9655 VIA EXCELENCIA	Low	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
1011	STATEWIDE STRIPES, INC	PO BOX 900287	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1012	STEAM 2000	1603 APPLEGATE ST	Low	7217	Carpet/Furniture Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
1013	STEPHEN SMITH PAINTING	1448 NARANCA AVE	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
1014	STONE SURGEONS	184 N DEL MAR AVE	Low	1741	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1015	STREMICKS HERITAGE FOODS LLC	4002 WESTMINSTER AVE	Medium	5451	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
1016	STRUCTURAL INSPECTIONS	1661 VISTA DE MONTEMAR	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
1017	SUB-TREAT TERMITE CONTROL, INC	60200 JUNIPER RD	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
1018	SUN COAST DRYWALL SYSTEMS INC	4401 TWAIN AVE	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
1019	SUNSTATE TILE CONTRACTORS INC	7579 CONVOY CT	Low	1743	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1020	SUPER CLEAN GENERAL COM	2621 SWEETWATER ROAD 42	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1021	SUPER JUMPERS	1324 VILLA TEMPRA DR	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
1022	SUPERIOR CLEANING SERVICES	PO BOX 1343	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1023	SUPERIOR CLEANING SYSTEMS	1037 A AVENUE	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1024	SUPERIOR PHONE COMPANY	PO BOX 7532	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
1025	SURECOAT, INC	2875 EXECUTIVE PL	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
1026	SWIMFARR SWIMSAFE INC	PO BOX 532355	Medium	7999	Golf Courses/Parks	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
1027	T & M CLEANING COMPANY	1979 AVENIDA DEL MEXICO	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1028	TACOS Y TAMALES MEXICO	4437 CRAIGIE ST	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
1029	TACOS Y TAMALES MEXICO	4437 CRAIGIE ST	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
1030	TAM LE HIGT PRESSURE CAR WASH	37410 LUMIERE AVE	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X
1031	TANIA'S CLEANING	119 E 3RD ST	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1032	TEAM C CONSTRUCTION INC	1208 N 2ND ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1033	TERMINIX INTERNATIONAL LP, THE	860 RIDGE LAKE BLVD	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
1034	TEX ICE CREAM	4581 WILSON AVE	Medium	5963	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
1035	THE GROUT DOCTOR	PO BOX 190	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
1036	THE WATER WAGON, INC	PO BOX 13366	Medium	5499	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
1037	THE WORKS TERMITE CO	119 KEARNEY ST	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
1038	THREE D'S JANITORIAL SERVICE	7420 PETER PAN AVE	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1039	TIKI HUT FOOD CONCEPTS	9450 SCRANTON RD	Medium	5812	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
1040	TIM MOODY CONSTRUCTION INC	PO BOX 20225	Low	1743	Masonry	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1041	TOMMY'S QUALITY MEATS	2363 NEWTON AVE B	Low	5147	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
1042	TOWTRUCK AT WORK	764 MANNING WAY	Medium	7549	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
1043	TRENCH PLATE RENTAL COMPANY	13217 LAURELDALE AVE	Medium	7353	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
1044	TRIPLE "L" BBQ & CATERING	453 GRAVES AVE	Medium	5812	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
1045	TRI-STATE COATINGS INC	161 S MARSHALL AVE	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
1046	TURBO TERMITE & REPAIR	1021 BAY BLVD A	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
1047	U.S. FOOD SERVICE	1283 SHERBORN ST	Low	5148	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
1048	U.S. FOODSERVICE INC	PO BOX 1749	Low	5199	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1049	U.S. FOODSERVICE, INC	PO BOX 37155	Low	5149	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
1050	UNDERWRITERS LABORATORIES INC	333 PFINGSTEN RD	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	
1051	UNIVERSAL TINT SYSTEMS QUICK P	80 WALNUT DR	Medium	7539	Auto Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
1052	USA GAIN 3000 LLC	3870 NIAGARA ST	Low	5143	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
1053	VACA'S CONCRETE	1826 BETA STREET	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1054	VELASQUEZ MAINTENANCE	PO BOX 2436	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
1055	VERTEX COATINGS, INC	3030 PLAZA BONITA RD	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
1056	VILLA FORD	2550 N TUSTIN ST	Medium	5511	Vehicle Dealers	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
1057	VILLA'S LANDSCAPE SERVICES	816 SAN PASQUAL ST	Medium	0782	Landscaping	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
1058	VORTEX MAINTENANCE INC	2504 TRANSPORTATION AVE F	Low	7349	Power Washing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1059	VULCAN MATERIALS CO	PO BOX 2950	Low	5211	Building Materials	Throughout City	X	No	No	No	Yes	No	No	No	No	Yes	
1060	W A SEEGER, INC	9966 DOLORES ST	Low	1611	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1061	WASTE MANAGEMENT OF SAN DIEGO	1001 W BRADLEY AVE	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
1062	WCW	1341 TWINING AVE	Medium	7997	Golf Courses/Parks	Throughout City	X	No	No	No	No	Yes	Yes	No	No	No	X
1063	WEB SERVICE COMPANY INC	3690 REDONDO BEACH AVE	Medium	7699	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
1064	WEST COAST DRYWALL	538 FRONT ST	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
1065	WESTAIR GASES & EQUIPMENT INC	PO BOX 620338	Low	5084	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1066	WESTERN EXTERMINATOR COMPANY	PO BOX 11881	Low	7342	Pest Control	Throughout City	X	No	No	No	No	Yes	No	No	No	No	
1067	WESTERN IMAGE PAINTING, INC	PO BOX 2192	Low	1721	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
1068	WESTERN INSULATION, LP	260 JIMMY ANN DR	Low	1742	Painting/Coating	Throughout City	X	No	No	No	No	No	No	No	No	No	
1069	WILFRIDO CONCRETE CONSTRUCTION	303 H ST	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1070	WOODDRUFF'S TRENCHING INC	PO BOX 2620	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
1071	XTRA CLEAN MOBILE DETAIL	516 S 45TH ST	Medium	7542	Vehicle Washing	Throughout City	X	No	Yes	No	No	No	No	No	No	No	X

Appendix A.5 (Continued)
Commercial Inventory

#	Business Name	Business Address	TTWQ	SIC	Category	HSA	Mobile	Heavy Metals	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash	Likely Source
1072	X-TREME JUMPERS	1359 BUCKWHEAT TRL	Medium	7359	Vehicle/Equipment Rental	Throughout City	X	Yes	No	Yes	No	No	No	No	No	No	X
1073	YIRA DISTRIBUTIONS	PO BOX 432464	Low	5149	Wholesale Food	Throughout City	X	No	No	No	No	No	No	Yes	No	No	
1074	YOKOZUNA'S SUSHI BAR & ISLANDER GRILL	945 OTAY LAKES RD M-N	Medium	5812	Eating/Drinking Establishments	Throughout City	X	No	No	Yes	No	No	No	Yes	Yes	Yes	X
1075	YORK INTERNATIONAL CORPORATION	PO BOX 1592	Medium	7623	Equipment Repair	Throughout City	X	Yes	Yes	Yes	No	No	No	No	No	No	X
1076	YOUNGS MARKET CO LLC	2164 N BATAVIA ST	Low	5182	Wholesale/Storage/Warehousing	Throughout City	X	No	No	No	No	No	No	No	No	No	
1077	ZAVALA'S CONCRETE WORK	2840 N AVE	Low	1771	Cement Mixing/Cutting	Throughout City	X	No	No	No	Yes	No	No	No	No	No	
1078	ZOOM COMERCIAL TRANSRT	516 MITRA CT	Low	7389	Pool/Fountain Cleaning	Throughout City	X	No	No	No	No	No	No	No	No	No	

Notes

TTWQ – Threat to Water Quality

SIC – Standard Industrial Classification Code

Pollutants Potentially Generated – Where a facility has a "Likely" pollutant discharge potential for a specific pollutant, a "Yes" is placed in the appropriate column.

Likely Source – Has a pollutant discharge potential of "Likely" for one or more of the pollutants of concern associated with the receiving water. A pollutant of concern is one for which the receiving water is impaired according to the Clean Water Act section 303(d) list. During 2011/2012, San Diego Bay was listed in the 2008 CWA Section 303(d) for polychlorinated biphenyls (PCB) based on fish tissue analyses. The shorelines at 7th Street Channel and at the 24th Street Marine Terminal were listed in the 2008 CWA Section 303(d) for benthic community effects and sediment toxicity. La Paleta Creek is listed as impaired for copper and lead. Paradise Creek is listed as impaired for selenium. Finally, Sweetwater River is listed as impaired for *Enterococcus*, fecal coliform, phosphorus, selenium, total dissolved solids, total nitrogen as N, and toxicity. Due to the nature of mobile businesses, it is possible that work may be performed in any portion of the City. Therefore, if a business has a pollutant discharge potential of "Likely" for one or more pollutants of concern associated with any receiving water within the City of National City, they will be marked as a Likely Source.

APPENDIX B

JURMP ANNUAL REPORT REQUIREMENTS CHECKLIST

Appendix B
JURMP Annual Report Requirements Checklist

Development Planning

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2, 2.3
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2
iii. A listing of the development projects to which SUSMP requirements were applied.	Table 2-1
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.2
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.2
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.2
vii. An updated treatment control BMP inventory.	Appendix A.1 (inventory)
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.3, Table 2-2 and Table 2-4
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.3
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.2, Table 2-3
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.2
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.2
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.4.2
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.2

Development Planning

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location in Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	N/A in 2011/2012
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.3, Table 2-4
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.1 and throughout section

Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.5
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	3.5, Appendix A.2 (inventory)
viii. A description of the general results of the inspections.	3.5
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.3, 3.5.4
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.1 and throughout section

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix A.3 (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.7.4
iii. A description of inspections and maintenance conducted for municipal treatment controls.	2.4.4.3, Table 2-4
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4 Table 4-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	4.4.1, 4.4.4, Table 4-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.1, 4.4.4, Table 4-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4, Table 4-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A for 2011/2012
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.2.3, 4.2.4
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4, Table 4-1
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	4.3.4

Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.3.4
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.3.4, Table 4-1
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.3.4, Table 4-1
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4.	4.5.4
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.2.4, 4.6.4, 4.7.4, Table 4-4
xviii. A description of the general results of the inspections.	Table 4-4
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.2.4, 4.6.4, 4.7.4
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.2.4, 4.6.4, 4.7.4
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.1 and throughout section

Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2 (stationary), 5.3.2 (mobile), appendices A.4 and A.5 (inventory)
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4, 5.3.4
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4, 5.3.4
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.2, 5.3.2; 5.2.4, 5.3.4; Table 5-1
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4
vii. Identification of the number of third party inspections conducted.	N/A, 5.2.4
viii. Identification of efforts conducted to verify third party inspection effectiveness.	N/A, 5.2.4
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4, 5.3.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4, Table 5-2
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.1 and throughout section

Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.4
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.1
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.1
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.4 (see discussion in JURMP)
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.2
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.1 and throughout section

IDDE*

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2011/2012 Annual Report, will be submitted to the RWQCB no later than December 15, 2012.	

IDDE—Additional Dry Weather Monitoring Program Requirements*

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	Location in Report
* Section 7, the Illicit Discharge Detection and Elimination component, of the 2011/2012 Annual Report, will be submitted to the RWQCB no later than December 15, 2012.	

Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3

Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.2

Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11

Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.	10

Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12

Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	**Location in Report**
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	4.2.3, 13

JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	**Location in Report**
i. A description of any proposed revisions to the JURMP.	14 and each program component section

ATTACHMENTS

ATTACHMENT 2.1

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROJECT APPLICABILITY FORM (NPDES CHECKLIST)

City of National City
1243 National City Blvd.
National City, CA 91950
(619) 336-4580

National Pollutant Discharge Elimination System (NPDES) Project Applicability Form

No project will be accepted by the City without this form completed in its entirety

Project Name: _____ Project Area: _____ acres/sq ft

Project Address: _____

APN: _____ Proposed Impervious Area:_____ acres/sq ft

Description of Project: _____

Description of Location: _____

Section 1 – Permanent Storm Water BMP Requirements:

Part A: Determine Subjectivity to SUSMP Requirements

Is the project new development? ☐ *Yes* ☐ *No*

Is the project redevelopment that adds/replaces/creates 5,000 ft^2 of impervious surface[1]? ☐ *Yes* ☐ *No*

If both of the above answers are "no", go to Part B. If either of the above answers is "yes," answer the questions below (check all that apply).

Is the project…

1. Residential development resulting in the disturbance of one acre or more of land or comprised of 10 or more attached or detached dwelling units? ☐ *Yes* ☐ *No*

2. Commercial development resulting in the disturbance of one acre or more of land? ☐ *Yes* ☐ *No*

3. Industrial development resulting in the disturbance of one acre or more of land? ☐ *Yes* ☐ *No*

4. Automotive repair shop? ☐ *Yes* ☐ *No*

5. Restaurant greater than 5,000 square feet? ☐ *Yes* ☐ *No*

6. Steep (slope of 25% or more) hillside development that will create greater than 5,000 square feet of impervious surface? ☐ *Yes* ☐ *No*

7. Located such that it is within or directly adjacent to (within 200 feet) or directly discharges to an Environmentally Sensitive Area (ESA) and creates at least 2,500 square feet of impervious area or increases impervious area to 10% or more of its naturally occurring condition? ☐ *Yes* ☐ *No*

8. Parking lot greater than or equal to 5,000 square feet of impervious surface OR with at least 15 parking spaces and potentially exposed to urban runoff? ☐ *Yes* ☐ *No*

9. Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater? ☐ *Yes* ☐ *No*

10. Retail gasoline outlets 5,000 square feet or more or with a project Average Daily Traffic (ADT of 100 or more vehicles per day ☐ *Yes* ☐ *No*

11. All other pollutant generating development projects that result in the disturbance of one acre or more of land.[2] ☐ *Yes* ☐ *No*

1 See the City's SUSMP Manual for more detail on the definition of "significant redevelopment."

2 Generally all projects which include impervious surfaces and/or introduce landscaping that requires routine use of fertilizers and pesticides are considered pollutant generating above background levels.

Limited exclusion: trenching and resurfacing work associated with utility projects are not considered Priority Development Projects. Linear pathway projects that are for infrequent vehicle use, such as emergency or maintenance access, or for pedestrian or bicycle use, are not considered pollutant generating above background levels if they are built with pervious surfaces or if they sheet flow to surrounding pervious surfaces. Parking lots, buildings and other structures associated with utility projects are Priority Development Projects if one or more of the criteria in Part A is met.

If any of the answers to Part A is "Yes", your project is a "Priority Development Project" and must meet the requirements of the City's Standard Urban Storm Water Mitigation Plan (SUSMP) Manual.

Is this a Priority Development Project that requires a SUSMP submittal? ☐ **Yes** ☐ **No**

If the answer is "Yes," see also the flow chart at the end of this checklist to determine applicability of Hydromodification Management Plan (HMP) requirements. HMP applicability must be discussed in the SUSMP report and all requirements must be met as part of the SUSMP Report approval process.

If all answers to Part A are "No", continue to PART B.

If any of the answers to Part A is "Yes", skip PART B and go to Section 2.

Part B: Determine Non-SUSMP Standard Permanent Storm Water BMP Requirements

Does the project require any of the following permits or approvals? ☐ *Yes* ☐ *No*

- *Discretionary: Conditional use permit (including modification or extension); Coastal development permit; Parcel map (and modifications); Reclamation plan; Planned development permits; Planned unit development permits; Planning commission approval of plans; Site plan review; Tentative map (and amendments to conditions of approval or time extension); Tentative parcel map; or Variance OR*
- *Ministerial: Administrative clearing permit; Lot line adjustment; Final map modification; Grading plan (including modification or renewal); Improvement plan (including modification); Landscape plan; Building permit; Construction right-of-way permit; Encroachment permit; Excavation permit; On-site wastewater system permit; Underground tank permit; or Well permit*

Will the project include exterior construction beyond signs, façade work, or other incidental construction to an existing structure? ☐ *Yes* ☐ *No*

If all answers to Part A are "No" and any answer to Part B is "Yes", your project is subject to the City's Standard Permanent Storm Water Best Management Practice (BMP) requirements as listed in Municipal Code Chapter 14.22.

Is this project subject to the Standard Permanent Storm Water BMP requirements? ☐ **Yes** ☐ **No**

If every question in both Parts A and B is answered "No", your project is exempt from non-SUSMP Standard Permanent Storm Water requirements.

☐ **This project is for interior improvements only and is not subject to non-SUSMP Standard Permanent Storm Water BMP requirements.**

Verified by: _____ Division: _____ Date: _____

Section 2 – Construction Requirements:

General Construction Permit

If your project disturbs at least one acre of land, you are subject to the State General Construction Permit. A Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and other documents must be prepared for your project and filed electronically with the State Water Resources Control Board (SWRCB).

Is this project subject to the General Construction Permit? ☐ **Yes** ☐ **No**

If your project disturbs less than one acre of land, you are subject to the City's minimum construction BMPs, included in the City's BMP Manual.

Construction Threat to Water Quality Prioritization

See the attached flow chart for guidance in determining the construction prioritization.

This project is prioritized as a ☐ **HIGH** ☐ **MEDIUM** ☐ **LOW** **threat to water quality.**

Section 3 – Operating Requirements:

After your project is complete, certain water quality protection requirements may apply to the facility. The facility owner and operator should be made aware of these requirements.

All municipal, industrial, commercial, and residential sites in the City of National City are required to implement storm water BMPs to reduce the amount of pollution discharged to the Maximum Extent Practicable (MEP). See Appendix C of the City's Jurisdictional Urban Runoff Management Plan (JURMP) for further details.

Some industrial facilities are also subject to the State General Industrial Permit for Storm Water Discharges (Industrial Permit). To find out if your project may be required to obtain coverage under the Industrial Permit after it begins operations, visit the State Water Resources Control Board web site at http://www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml.

Section 4 – Certification:

Name and Title of person completing form: _____ _____

Telephone number: (_____) _____–_____ Fax number: (_____) _____–_____

E-mail Address: _____ (optional)

I understand that as a condition of my permit, I am required to prevent construction-generated and related pollutants from discharging from the project site. All construction projects within the City of National City are required to implement Best Management Practices (BMPs). I have received a copy of the Construction Site BMP handout.

Signature of responsible party: _____ Date: _____

For City of National City Use Only

Engineering Division

The information provided is consistent with the proposed plans ☐ **Yes** ☐ **No**

Information/documentation disseminated for SUSMP
☐ Standard Permanent Storm Water BMPs ☐ Non-SUSMP Standard Permanent Storm Water BMPs
☐ General Construction Permit ☐ Erosion & Sediment Control ☐ General Industrial Permit
☐ N/A (No required documentation) ☐ Other _____

Signature: _____ *Date:* _____

☐ **Planning Division** **OR** ☐ **Community Development Commission** *Initial:* _____

☐ **Building Division** *Initial:* _____ ☐ BMP information distributed

SUSMP REVIEW FLOW CHART

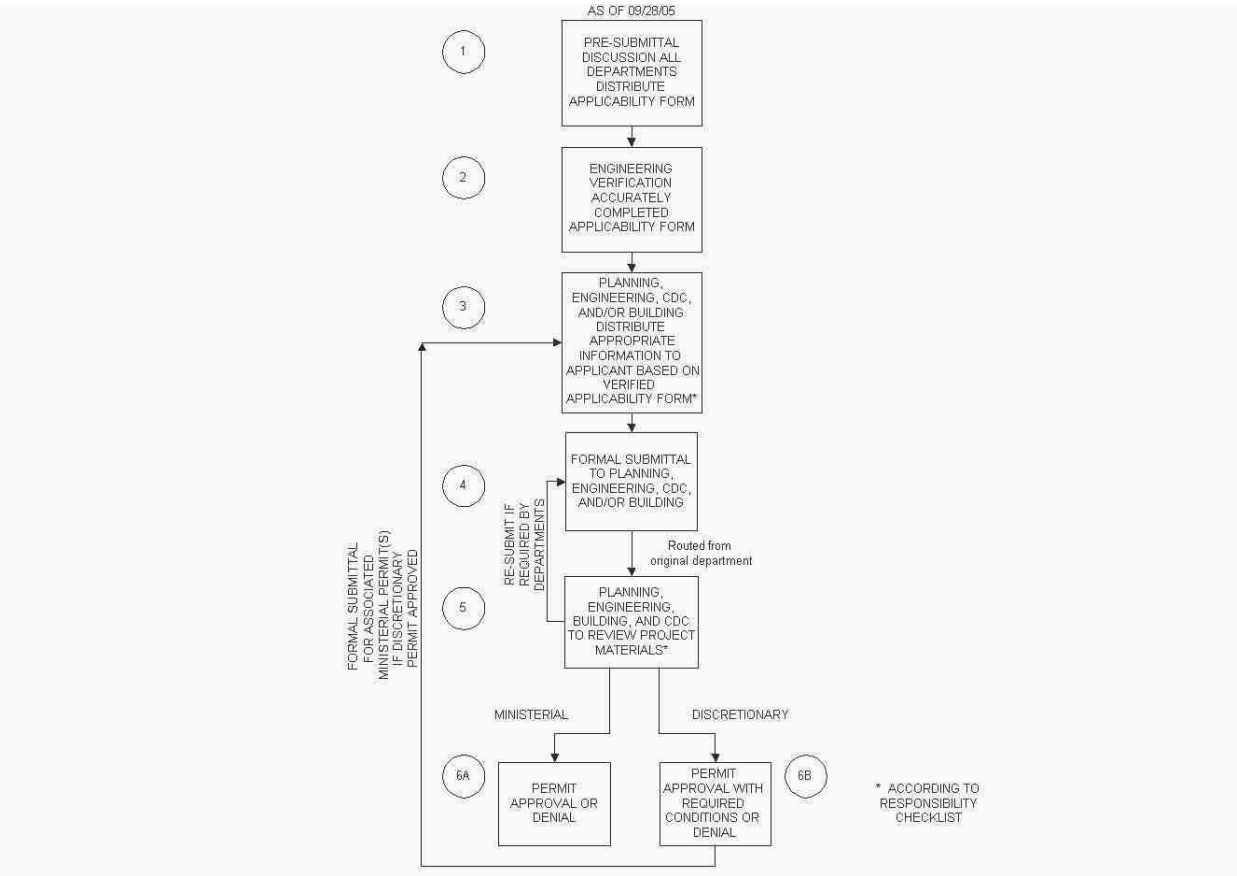

CONSTRUCTION THREAT TO WATER QUALITY PRIORITIZATION FLOW CHART

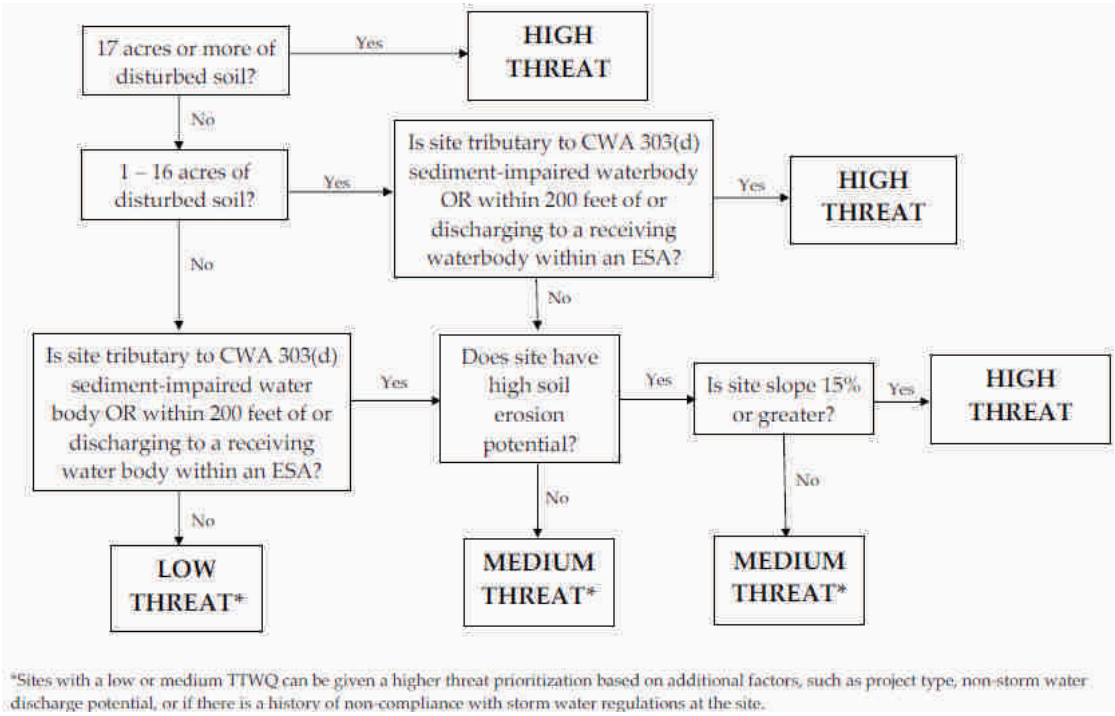

*Sites with a low or medium TTWQ can be given a higher threat prioritization based on additional factors, such as project type, non-storm water discharge potential, or if there is a history of non-compliance with storm water regulations at the site.

CWA 303(d) waterbodies: Seventh Street Channel, La Paleta Creek, San Diego Bay, and Sweetwater River
ESA waterbodies: Paradise Marsh, Paradise Creek, and Sweetwater Marsh National Wildlife Refuge

HYDROMODIFICATION MANAGEMENT PLAN (HMP) APPLICABILITY FLOW CHART

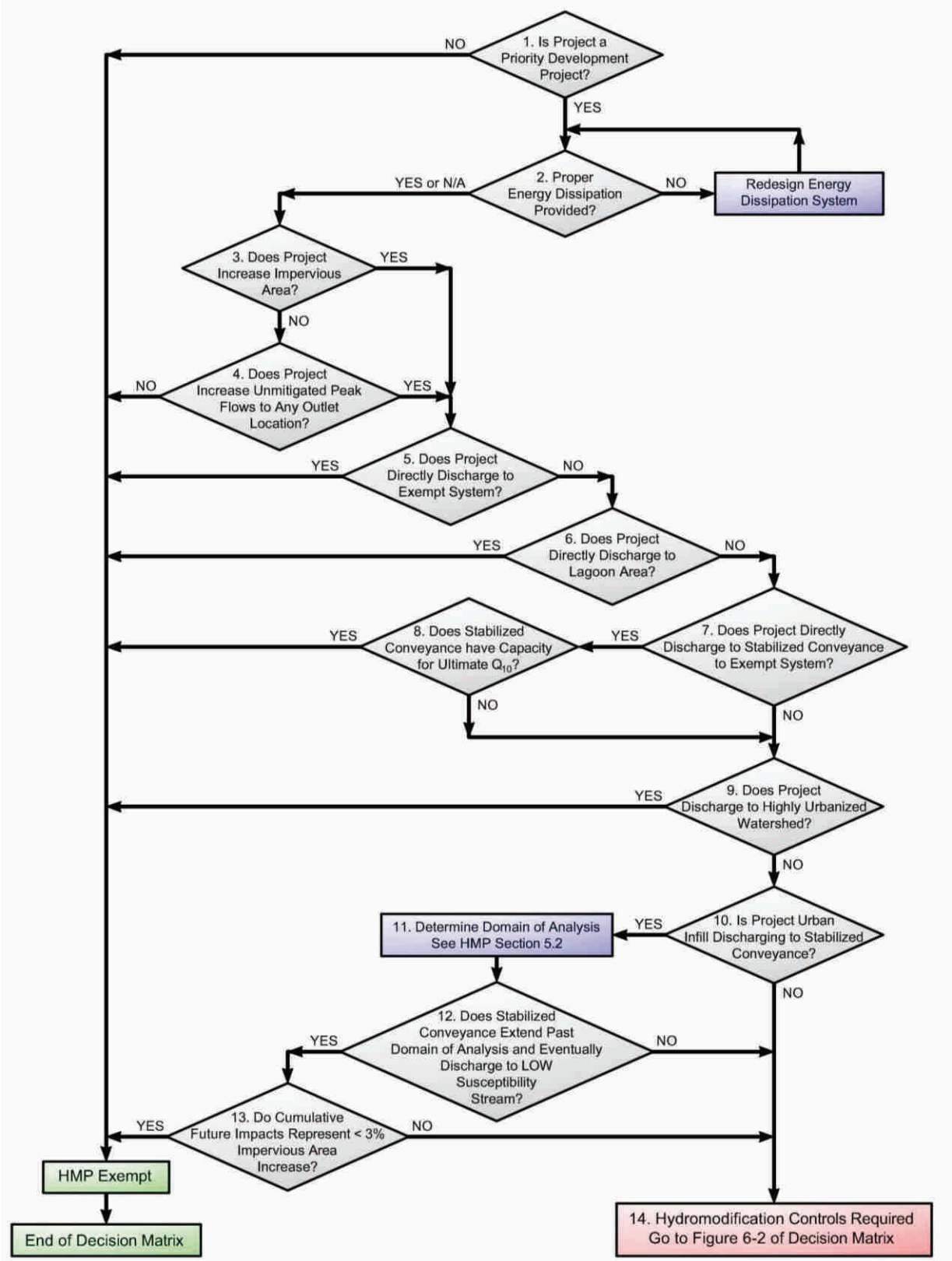

See the Regional Final Hydromodification Management Plan (HMP) for specific requirements, definitions, and details. The Final HMP is available in Appendix E of the City's SUSMP Manual or online at http://www.projectcleanwater.org/html/wg_susmp.html

ATTACHMENT 3.1

CONSTRUCTION BMP FACT SHEET (BLUE SHEET)

Construction Site Best Management Practices

As a condition of your permit, you are required to prevent construction generated or related pollutants from discharging from your project site. All construction projects within the City of National City are required to implement at least one of the Best Management Practices (BMPs) from each category and subcategory listed below, where applicable. Property owners and/or permit holders will be responsible for the selection, installation and maintenance of proper BMPs in accordance with industry recommended standards such as the Caltrans or California Storm Water BMP handbooks or in accordance with the California General Permit for Construction. Depending on site-specific information such as project scope and potential associated discharges. Additional BMPs may be required where appropriate. Project proponents will need approval from the City prior to installation of any alternate BMPs not listed below.

Minimum BMPs for Construction Activities:

1. **Planning and Scheduling**
   Planning and scheduling BMPs such as minimizing grading are required where feasible to help reduce the amount and duration of soil exposure.
   a. Preservation of natural hydrologic features
   b. Preservation of riparian buffers and corridors
   c. Minimization of areas that are cleared and graded to only the portion of the site necessary for construction
   d. Minimization of exposure time of disturbed soil areas
   e. Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods
   f. Temporary stabilization and reseeding of disturbed soil areas as rapidly as feasible
   g. Employee and Subcontractor Training

2. **Soil Stabilization and Erosion Prevention**
   Physical Stabilization BMPs such as vegetation, landscaping or structural methods are required to prevent erosion from exposed slopes.
   a. Planning and Scheduling
   b. Preservation of Existing Vegetation
   c. Physical Stabilization
      - Hydraulic Mulch
      - Hydro-seeding
      - Soil Binders
      - Straw Mulch
      - Geo-textiles, Plastic Covers, and Erosion Control Blankets/Mats
      - Wood Mulching
      - Earth Dikes/Drainage Swales and Lined Ditches
   d. Site Drainage
      - Outlet Protection/Velocity Dissipation
      - Slope Drains
   e. Permanent re-vegetation or landscaping as early as feasible

See reverse side

3. **Sediment Containment**

Sediment containment controls should be used to supplement erosion prevention methods not as a substitute for erosion control. Sediment controls act to contain sediment that has been previously eroded and may get carried on-site and/or discharged from the site in sheet flow or from tracking by equipment and vehicles.

a. Perimeter Protection
   - Silt Fencing
   - Gravel Bag Berm
   - Fiber Rolls

b. Sediment Capture
   - Storm Drain Inlet Protection
   - Sediment Trap
   - De-silting Basins designed in accordance with industry standards such as Caltrans, California Storm Water BMP manual. If the project is five acres or greater the de-silting basin must be designed in accordance with the State General Construction Permit, Order DWQ 99-08.
   - Gravel bag Barrier

c. Sediment Tracking
   - Stabilize Construction Entrances and Exits
   - Construction Road Stabilization
   - Entrance/ Outlet Tire Wash
   - Street Sweeping

4. **Materials and Equipment Management**

Pollution Prevention measures are required were applicable to prevent the contamination of storm water from waste materials, construction materials, vehicles, and equipment stored on-site. Each site must evaluate the potential pollutants on-site, which may be discharged during construction activities.

a. Materials Management
   - Material Delivery and Storage
   - Material Use
   - Stockpile Management
   - Spill Prevention and Control

b. Vehicle and Equipment Operations
   - Vehicle and Equipment Cleaning
   - Vehicle and Equipment Fueling
   - Vehicle and Equipment Maintenance

c. Waste Management
   - Solid
   - Liquid
   - Sanitary
   - Concrete
   - Hazardous
   - Contaminated Soil

5. **Non-Storm Water Discharge and Drainage Control**

Management of non-storm water discharges involves pollution prevention methods as well as drainage control. Project managers must implement appropriate drainage control methods to divert, contain and properly discharge drainage generated by construction activities.

a. General
   - Paving and Grinding Operations

b. Non-storm water discharges
   - Water Conservation Practices
   - Dewatering Operations
   - Potable Water/Irrigation and Flushing

For additional information, call Barbara Tipton, Storm Water Compliance Inspector at (619) 336-4583 or Btipton@ci.national-city.ca.us

ATTACHMENT 3.2

CONSTRUCTION INSPECTION FORM

CITY OF NATIONAL CITY
CONSTRUCTION SITE INFO FOR STORM WATER COMPLIANCE INSPECTIONS

Information gathered by: _____ Date: ____/____/_____

I. PROJECT INFORMATION

Site Prioritization: ☐ High ☐ Medium ☐ Low

Project Name: _____

Project Location: _____

Project Activity: _____

Project Area: _____ square feet Construction start date: ____/____/_____

Discharge points: _____

Receiving water bodies: _____ ESA: ☐ Yes ☐ No

Approximate distance from site: ☐ < 200 ft ☐ 200 – 1000 ft ☐ > 1000 ft

Tributary to CWA 303(d) List sediment-impaired water body: ☐ Yes ☐ No

High soil erosion potential: ☐ Yes ☐ No Site slope is 15% or greater: ☐ Yes ☐ No

Is this project subject to the General Construction Permit: ☐ Yes ☐ No

If yes, Waste Discharge Identification Number (WDID#): 9 37C_____

Does this Project maintain

Construction Grading Permit: ☐ Yes ☐ No ☐ N/A

Other Permits: ☐ Yes ☐ No

If yes, permit number(s): _____

Storm Water Pollution Prevention Plan (SWPPP): ☐ Yes ☐ No ☐ N/A (If yes, see review.)

II. CONTACT INFORMATION

On-site Responsible Person(s): _____

General Contractor Company: _____ (if applicable)

Mailing Address: _____

_____

Business Telephone #: (_____) _____- _____ ext._____

After hours Telephone #: (_____) _____- _____ ext._____

Fax #: (_____) _____- _____

Off-site owner (if applicable): _____

Mailing Address: _____

_____

Telephone #: (_____) _____- _____ ext._____

III. SWPPP REVIEW (if applicable)

SWPPP Component	Provided	Adequate	Notes
Site Map/Description……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Materials List……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Significant Spills/Leaks……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Pollution Prevention……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Construction Activities……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Pollutant Sources/Risks……..	☐ Yes ☐ No	☐ Yes ☐ No	_____
Compliance Activity Schedule……	☐ Yes ☐ No	☐ Yes ☐ No	_____
Employee Training……..	☐ Yes ☐ No	☐ Yes ☐ No	_____
Accessible to staff……...	☐ Yes ☐ No	☐ Yes ☐ No	_____
Existing BMPs……..	☐ Yes ☐ No	☐ Yes ☐ No	_____

Additional Notes:

_____

_____

_____

_____

FIGURE 5-1: WATER QUALITY THREAT PRIORITIZATION FLOW CHART FOR CONSTRUCTION PROJECTS

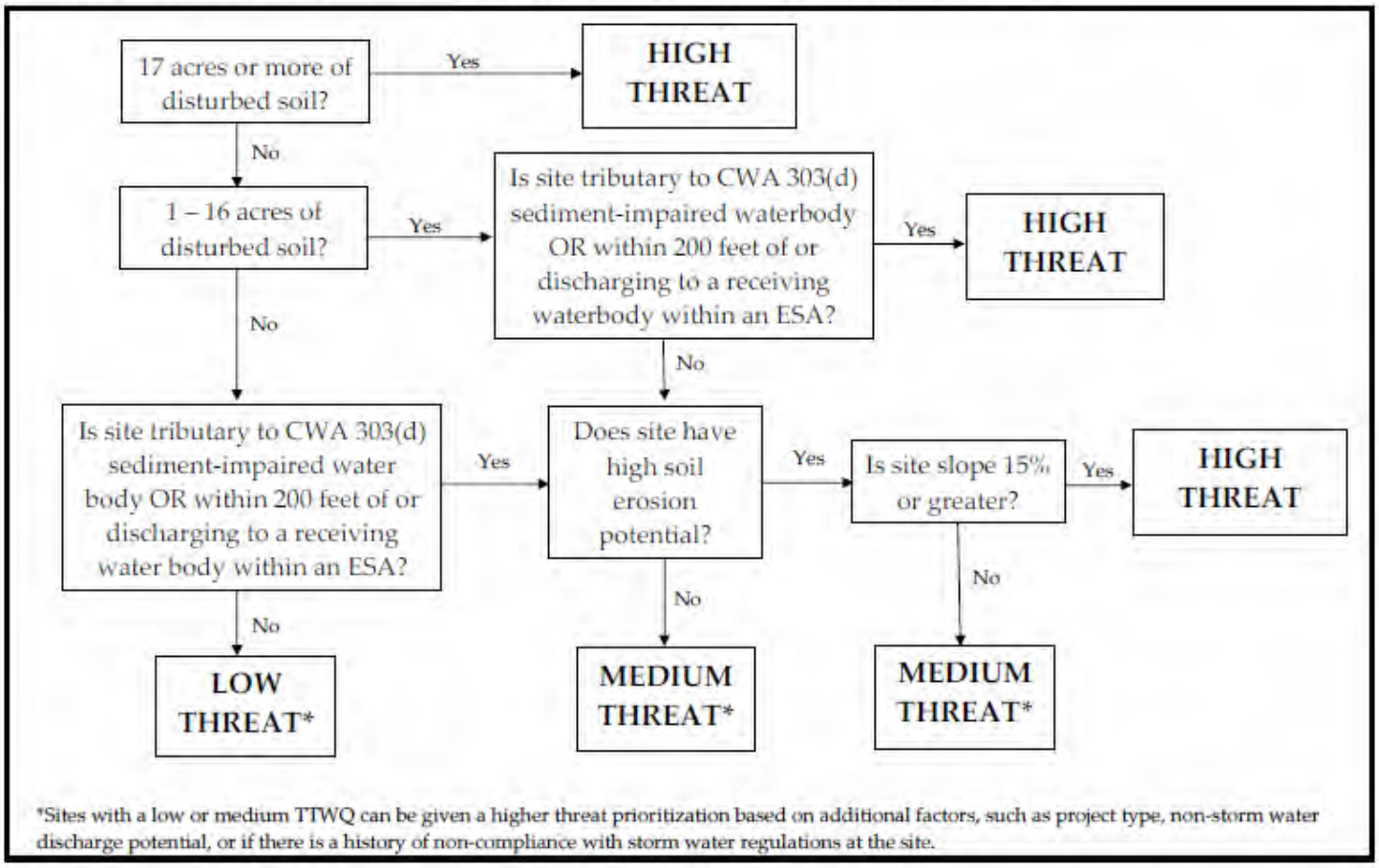

CITY OF NATIONAL CITY JURISDICTIONAL URMP PAGE 5-13

CITY OF NATIONAL CITY
STORM WATER COMPLIANCE INSPECTION FOR CONSTRUCTION ACTIVITIES

Inspector Name/ Title_____

Signature_____ Date____/_____/____ Time_____am/pm

Reason for Inspection: ☐ Routine Inspection ☐ Follow-up Inspection ☐ Complaint Investigation

Weather Information:

Storm Start Date and Time:_____ Storm Duration:_____hours

Time Since Last Storm: ☐ < 24 hrs ☐ 24 – 72 hrs ☐ > 72 hrs Rainfall:_____inches

I. GENERAL INFORMATION

Site Prioritization: ☐ High ☐ Medium ☐ Low

Project Name:_____

Project Location:_____

II. INITIAL OBSERVATIONS

Approximate % of site covered by construction activities: _____%

Approximate % impervious surface of this area: _____%

Types of outdoor construction activity:

☐ grading ☐ concrete/asphalt work

☐ building construction ☐ landscaping

☐ excavation ☐ demolition

☐ drainage infrastructure work ☐ none

III. BMP ASSESSMENT

BMP	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
Soil Stabilization and Erosion Prevention					
Prevent erosion from exposed graded areas.					
Prevent erosion from exposed areas of soil not relating to grading activities.					
Keep discharge locations (drainage swales, ditches, etc.) free of sediment and debris.					
Sediment Control/Containment					
Adequately contain the perimeter of site to prevent sediment transport.					
Prevent sediment discharge to inlets on site (using filter inserts, gravel bags, fiber rolls, etc.).					
Equip entrance/exit with adequate tracking controls.					

BMP	No Corrections Required		Corrections Required		Comments
	N/A	Fully Implemented	Partially Implemented	Not Implemented	
Materials and Equipment Management					
Store materials and wastes in a manner that minimizes or eliminates the potential to discharge these materials to the storm drain system.					
Store liquid materials in a contained area.					
Cover and contain material stockpiles.					
Park heavy equipment and vehicles in areas with permeable surface.					
Keep appropriate spill response and containment measures on site.					
Provide secondary containment for portable toilets.					
Provide timely service and removal to prevent waste containers and sanitary facilities from over flowing.					
Non-Storm Water Management					
Keep site free of evidence of illegal connections and illicit discharges.					
Other					
Ensure the SWPPP is kept on site, accessible to site personnel.					
Are there any other potential storm water pollution issues or concerns? If yes, explain below.					

Additional Corrective Actions:

_____

_____

_____

IV. RESULTS

Violation observed, immediate corrective action required

- ☐ Illegal discharge(s) of pollutants into the MS4 or receiving waters
  Description: _____
- ☐ Illegal connection(s) to the MS4
  Description: _____
- ☐ Improper implementation of BMPs
- ☐ Littering

No violation noted at time of inspection/investigation

- ☐ However, corrective actions recommended
- ☐ No corrective actions at this time

Implement corrective actions within _____ consecutive days of the date of this report.

ATTACHMENT 4.1

MUNICIPAL INSPECTION FORM

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Facility Name_____

Street Address_____ Mailing Address_____

_____ _____

Manager/Operator(s)_____

Telephone # (_____) _____ - _____ ext._____ Fax # (_____) _____ - _____

Manager/Operator(s) Email:_____

Facility Personnel Present_____

B. FACILITY/SITE INFORMATION

Principal activity:_____

JURMP Classification_____

New JURMP Classification?_____

Does facility maintain SWPPP/BMP Plan? ☐ Yes ☐ No

If yes, what is the date of last SWPPP/BMP Plan revision?_____

If yes, does the SWPPP/BMP Plan include applicable minimum BMPs from the JURMP? (if no, describe in Section E) ☐ Yes ☐ No

If yes, does the SWPPP/BMP Plan include a current list of individuals Responsible for implementing BMPs at the site? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____ Hydrologic Area: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____ square feet

Approximate % impervious surface of this area_____ %

Exposed areas of intensive outdoor activity: _____

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

D. BMP ASSESSMENT

BMPs	N/A	Yes	No	Comments
D.1 General				
Is the site free of excessive litter and debris?				
Are discharge locations free of excessive sediment and debris?				
Are parking lots, sidewalks and streets free of excessive sediment and debris?				
Are roof downspouts directed away from areas of potential pollutants?				
Is wash water from pressure washing / hosing managed appropriately?				
Are employees trained in storm water management?				
Does the facility have a current log of employees who have participated in training?				
D.2 Landscaping				
Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
Are irrigation systems programmed to minimize over-watering and runoff?				
If reclaimed water is used for irrigation, is the site free of evidence of irrigation water entering the storm drain?				
Are stockpiles of soil or landscape waste covered when feasible and equipped to prevent runoff transport?				
Are pesticides, herbicides, and fertilizers managed in accordance with the JURMP BMPs?				
D.3 Materials and Wastes				
Are adequate trash containers provided?				
Are adequate recycling containers provided?				
Is the trash/recycling area adequately covered (closed lids or permanent overhead cover)?				
Is the trash/recycling area free of litter and debris?				
Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
Are outdoor materials that pose a threat to water quality stored appropriately (covered or in sealed containers)?				
Are outdoor storage containers properly labeled?				
Is there an accessible, appropriate spill response kit?				
Is there a written spill response plan? If so, please provide to inspector. (NA if no significant materials to spill)				
Are liquid storage containers/tanks equipped with secondary containment?				
Is secondary containment free of spills and rainwater?				
Are loading and unloading areas free of spills and debris?				
Is water from pools and/or fountains disposed of properly?				
D.4 Equipment and Vehicles				
Are exposed parking areas free of significant spills and leaks?				

City of National City

Storm Water Quality Inspection for Municipal Facilities

Inspected by D-MAX Engineering, Inc.

BMPs	N/A	Yes	No	Comments
Are vehicle maintenance activities conducted within contained areas when feasible (garage, canopy, work shop)?				
Are equipment and vehicles inspected daily for leaks and repaired as necessary?				
Are storm drain inlets near vehicle-fueling areas protected from spills and leaks?				
Is vehicle washing preformed in a designated area where runoff does not enter the MS4?				
Are biodegradable soaps used when appropriate?				
D.5 Building Repair/Construction				
Are adequate erosion prevention measures employed throughout the site? (vegetation or physical stabilization)				
Are adequate sediment control BMPs employed throughout the site? (sandbags, gravel bags, inlet filters)				
Are impervious areas free of debris and spills from painting, scraping, and/or sandblasting activities?				
D.6 Structural BMPs				
Are structural BMPs adequately maintained? (NA if no structural BMPs at facility)				
D.7 Non-Storm Water Management				
Is the site free of evidence of illicit connections and illegal discharges?				
Is the site free of evidence of unauthorized releases to storm drains?				
If not, have the appropriate authorities been notified?				
D.8 Other				
Are appropriate signs/stenciling present at the facility?				
Are there any other potential storm water pollution issues or concerns? If yes, explain below.				

E. ADDITIONAL COMMENTS

(describe any additional deficiencies not represented above and/or notable BMP improvements)

City of National City
Storm Water Quality Inspection for Municipal Facilities
Inspected by D-MAX Engineering, Inc.

F. CORRECTIVE ACTION

Is corrective action needed? ☐ Yes ☐ No (If **BMP-related** corrective action is required, describe below.)

Operator has been notified of recommended corrective actions both verbally and by: ☐ Hand ☐ Mail ☐ Fax ☐ E-Mail

G. VIOLATIONS

☐ No violations have been noted at this time

☐ No violations have been noted, but recommend taking corrective action described in Section F.

☐ Violation of City Ordinance(s):

- ☐ Illegal discharge(s) of pollutants to the storm drain system or to receiving waters
  Description_____
- ☐ Illegal connection(s) to the storm drain system
  Location_____
- ☐ Littering
- ☐ Failure to properly implement required BMPs

☐ Other Violation_____

SPECIFIC ACTION(S) REQUIRED TO CORRECT THE VIOLATION DESCRIBED ABOVE:

☐ Implement the recommended corrective actions listed in Section F.

Additional actions required:

H. ADDITIONAL RECOMMENDED CITY ACTIONS*

*Recommended City Actions listed at the time of inspection are subject to change based on later review by office staff

Does this facility require a follow-up inspection? ☐ **Yes** ☐ **No**

ASSESSMENT

Level of knowledge regarding storm water issues:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5
Level of cleanliness, BMP implementation, orderliness of site:	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

POLLUTANT DISCHARGE POTENTIAL ASSESSMENT

Site Name:_____

Pollutant	PDP	Sources Needing More BMPs							Recommended BMPs (check if applicable)			
		Trash Area	Material Storage	Prkng Lot	Load/ Unload	Land-scape	Veh/Eqp Maint	Exposed Work Area	Emp. Training	House-keeping	Minor Struct.	Major Struct.
Sediments												
Nutrients												
Aluminum												
Iron												
Heavy Metals												
Check if evidence indicates specific metals may have significant PDPs: ☐ Copper ☐ Cadmium ☐ Lead ☐ Zinc ☐ Mercury												
Organic Compounds												
Check if evidence indicates there may be historical soil contamination associated with any of the following: ☐ PCBs ☐ PAHs ☐ Chlordane ☐ DDT												
Trash & Debris												
Oxygen Demanding												
Oil & Grease												
Bacteria & Viruses												
Pesticides												
Check if evidence indicates the following are used on site: ☐ Diazinon ☐ Chlorpyrifos												
Acid/Base (pH effects)												
Others (list):												

"RW 303(d)" = Receiving water impairments, as listed in the most recent 303(d) list
"WS COC" = High priority watershed constituents of concern (COC), as listed in the most recent WURMP Annual Report
"PDP" = pollutant discharge potential.
"Emp. Training" = employee training activities focused on storm water pollution prevention
"Housekeeping" = standard good housekeeping BMPs, such as sweeping, regular trash pickup, etc.
"Minor Struct." = minor structural BMPs that do not require building permits, such as covering with tarps or building berms
"Major Struct." = major structural BMPs that require a building permit or are especially expensive, such as detention basins, oil/water separators, grease interceptors, overhead coverage for storage areas, etc.

Criteria

0 - no appreciable quantity observed on site
1 - very small potential for pollutant discharge; monitoring results* are well below the EPA benchmark
2 - Small potential for pollutant discharge; monitoring results* are close to the EPA benchmark but still below it
3 - Moderate potential for pollutant discharge; monitoring results* are at or slightly above the EPA benchmark
4 - Large potential for pollutant discharge; monitoring results* above the EPA benchmark but are within an order of magnitude
5 - Severe potential for pollutant discharge; monitoring results* exceed the EPA benchmark by an order of magnitude or more

DMAX

ATTACHMENT 4.2

CORRECTED CODE VIOLATIONS RELATING TO STORM WATER

Count of Specific Violation Codes With Drill Down

Reporting Period 7/1/2011 to 6/30/2012

Code	Account Number	Start Date	Name	Address	
06.04.260	625	7/6/11	Trash/Debris Commerci	2235-2241 Highland Ave	Completed
06.04.260	626	7/7/11	Former Auto Zone loc	1539 HIGHLAND AVE	Completed
06.04.260	687	1/11/12	Unlicensed outdoor stor	9th St	Completed
06.04.260	731	5/2/12	Unlicensed Day Care	318 LAUREL AVE	Completed
06.04.260	644	8/16/11	Auto Repair/Blight/Tras	104 W 15TH ST	Completed
06.04.260	647	9/15/11	Unlicensed business	1840 HIGHLAND AVE	Completed
06.04.260	656	10/11/11	Unlicensed business N	1840 WILSON AVE	Completed
06.04.260	689	1/18/12	Residential Auto repair f	1330 NATIONAL CITY BLVD	Completed
06.04.260	632	7/26/11	Non-approved storage i	2638 E 15TH ST	Completed
06.04.260	643	8/16/11	Auto Repair/Trash/Blig	1514 ROOSEVELT AVE	Completed
06.04.260	631	7/21/11	No Business License	1215 WILSON AVE	Completed
06.04.260	659	10/12/11	Non-licensed auto repa	1516 ROOSEVELT AVE	Completed
06.04.260	640	8/10/11	Unlicensed business/ga	321 HIGHLAND AVE	Completed
06.04.260	688	1/12/12	Unlicensed business/bu	122 CIVIC CENTER DR	Completed
06.04.260	673	1/30/12	Empty lot used as car p	1238 ROOSEVELT AVE	Completed
Business tax payment--Required.					15

Code	Account Number	Start Date	Name	Address	
06.20.020	670	10/26/11	Doggy Doo Doo	420-422 E. 9th St	Completed
06.20.020	680	12/6/11	Cars on unpaved/trash	141 E 18TH ST	Completed
06.20.020	627	7/19/11	Debris on property	1628 J AVE	Completed
Minimum license fee					3

Code	Account Number	Start Date	Name	Address	
07.06.030	722	4/11/12	Abandoned distressed h	1107 E 30TH ST	Completed
07.06.030	678	11/30/11	Abandoned Home	1935 GRANGER AVE	Completed
07.06.030	742	6/7/12	Vacant abandoned hom	923 COOLIDGE AVE	Completed
07.06.030	726	4/25/12	Abandoned Foreclosed	2922 E PLAZA BLVD	Completed
07.06.030	616	4/9/12	Trashed property	241 F AVE	Completed
07.06.030	699	2/22/12	Trashed Vacant Proper	218 W 9TH ST	Completed
07.06.030	715	3/22/12	Unrented former bike s	1205 HIGHLAND AVE	Completed
07.06.030	707	3/5/12	Vacant Abandoned Hom	1513 ROOSEVELT AVE	Completed
07.06.030	682	12/8/11	Abandoned home Bank	1912 E AVE	Completed
07.06.030	690	1/18/12	Blighted property/forced	441 E 7TH ST	Completed
07.06.030	640	8/10/11	Unlicensed business/ga	321 HIGHLAND AVE	Completed
07.06.030	712	3/13/12	Vacant Abandoned Pro	2026 D AVE	Completed
07.06.030	713	3/13/12	Abandoned Houses 11	38 W 11TH ST	Completed
07.06.030	720	4/9/12	Abandoned home	1413 CALLE DELGADO	Completed
Abandoned buildings--Maintenance and barricading.					14

Code	Account Number	Start Date	Name	Address	
07.06.070	699	2/22/12	Trashed Vacant Proper	218 W 9TH ST	Completed
07.06.070	678	11/30/11	Abandoned Home	1935 GRANGER AVE	Completed
07.06.070	682	12/8/11	Abandoned home Bank	1912 E AVE	Completed
Abandoned furniture and other materials.					3

Code	Account Number	Start Date	Name	Address	
07.10.020	685	1/5/12	Trash Service/Debris	1443 G AVE	Completed
07.10.020	658	10/12/11	Trash on lawn	2341 GROVE ST	Completed
07.10.020	737	5/30/12	Blighted house no trash	817 EDGERTON WAY	Completed
07.10.020	738	5/30/12	Distressed property no t	942 E 9TH ST	Completed
07.10.020	702	2/27/12	Trashed 2nd unit	726 E 1ST ST	Completed
07.10.020	644	8/16/11	Auto Repair/Blight/Tras	104 W 15TH ST	Completed
07.10.020	662	10/17/11	No trash service/trashe	204 N DREXEL AVE	Completed
07.10.020	730	5/2/12	Trash/debris	1703 C AVE	Completed

Collection required--Violations. **8**

Code	Account Number	Start Date	Name	Address	
07.10.090	669	10/25/11	Dumping at church pa	615-635 E. 7th St.	Completed

Garbage & refuse container storage enclosure/area mantenance **1**

Code	Account Number	Start Date	Name	Address	
07.10.130	639	8/8/11	Trash Enclosure	2111 HIGHLAND AVE	Completed
07.10.130	643	8/16/11	Auto Repair/Trash/Blig	1514 ROOSEVELT AVE	Completed
07.10.130	625	7/6/11	Trash/Debris Commerci:	2235-2241 Highland Ave	Completed

Clean-up after collection **3**

Code	Account Number	Start Date	Name	Address	
07.12.020	626	7/7/11	Former Auto Zone loc	1539 HIGHLAND AVE	Completed
07.12.020	639	8/8/11	Trash Enclosure	2111 HIGHLAND AVE	Completed
07.12.020	648	9/15/11	Trash in back yard	2739 MELROSE ST	Completed
07.12.020	678	11/30/11	Abandoned Home	1935 GRANGER AVE	Completed
07.12.020	669	10/25/11	Dumping at church pa	615-635 E. 7th St.	Completed
07.12.020	616	4/9/12	Trashed property	241 F AVE	Completed
07.12.020	738	5/30/12	Distressed property no t	942 E 9TH ST	Completed
07.12.020	662	10/17/11	No trash service/trashe	204 N DREXEL AVE	Completed
07.12.020	640	8/10/11	Unlicensed business/ga	321 HIGHLAND AVE	Completed
07.12.020	625	7/6/11	Trash/Debris Commerci:	2235-2241 Highland Ave	Completed
07.12.020	643	8/16/11	Auto Repair/Trash/Blig	1514 ROOSEVELT AVE	Completed
07.12.020	644	8/16/11	Auto Repair/Blight/Tras	104 W 15TH ST	Completed
07.12.020	636	8/3/11	Clothing Debris on prop	1909 L AVE	Completed
07.12.020	637	8/4/11	Debris on drive/lawn	2741 A AVE	Completed
07.12.020	642	8/10/11	Trashed back yard	1343 E 6TH ST	Completed
07.12.020	653	10/26/11	Trash, working on trai	1309 E 9TH ST	Completed
07.12.020	730	5/2/12	Trash/debris	1703 C AVE	Completed
07.12.020	740	6/5/12	Trashed vacant proper	1127 PARADISE DR	Completed
07.12.020	737	5/30/12	Blighted house no trash	817 EDGERTON WAY	Completed
07.12.020	682	12/8/11	Abandoned home Bank	1912 E AVE	Completed
07.12.020	670	10/26/11	Doggy Doo Doo	420-422 E. 9th St	Completed
07.12.020	699	2/22/12	Trashed Vacant Proper	218 W 9TH ST	Completed
07.12.020	712	3/13/12	Vacant Abandoned Pro	2026 D AVE	Completed
07.12.020	686	1/10/12	Trashed Out Property	2837 E 18TH ST	Completed
07.12.020	726	4/25/12	Abandoned Foreclosed	2922 E PLAZA BLVD	Completed
07.12.020	722	4/11/12	Abandoned distressed h	1107 E 30TH ST	Completed

Accumulation deemed public nuisance. **26**

Code	Account Number	Start Date	Name	Address	
07.12.030	705	3/1/12	Vacant delapidated pro	1040 C AVE	Completed
07.12.030	706	3/5/12	Residential blight	1518 ROOSEVELT AVE	Completed
07.12.030	702	2/27/12	Trashed 2nd unit	726 E 1ST ST	Completed
07.12.030	717	3/29/12	Admin Cite	204 E 30TH ST	Completed
07.12.030	667	10/20/11	Trashed drive	3727 STOCKMAN ST	Completed
07.12.030	685	1/5/12	Trash Service/Debris	1443 G AVE	Completed
07.12.030	686	1/10/12	Trashed Out Property	2837 E 18TH ST	Completed
07.12.030	642	8/10/11	Trashed back yard	1343 E 6TH ST	Completed
07.12.030	643	8/16/11	Auto Repair/Trash/Blig	1514 ROOSEVELT AVE	Completed
07.12.030	742	6/7/12	Vacant abandoned hom	923 COOLIDGE AVE	Completed
07.12.030	720	4/9/12	Abandoned home	1413 CALLE DELGADO	Completed
07.12.030	690	1/18/12	Blighted property/forced	441 E 7TH ST	Completed
07.12.030	635	8/3/11	26th and L repeat viola	1139 E 26TH ST	Completed
07.12.030	658	10/12/11	Trash on lawn	2341 GROVE ST	Completed
07.12.030	644	8/16/11	Auto Repair/Blight/Tras	104 W 15TH ST	Completed
07.12.030	654	10/5/11	Furniture in apt comple	2710 LINCOLN CT	Completed

07.12.030	695	2/2/12	Former Sizzler trash ev	1325 E PLAZA BLVD	Completed
07.12.030	630	7/21/11	Matresses and Furnitu	3117 F AVE	Completed
Accumulation prohibited.					18

Code	Account Number	Start Date	Name	Address	
07.12.040	627	7/19/11	Debris on property	1628 J AVE	Completed
07.12.040	624	7/6/11	Trashed yard, tree bran	1320 E 4TH ST	Completed
07.12.040	662	10/17/11	No trash service/trashe	204 N DREXEL AVE	Completed
07.12.040	663	10/17/11	vehicles & trash	727 S HARBISON AVE	Completed
07.12.040	680	12/6/11	Cars on unpaved/trash	141 E 18TH ST	Completed
07.12.040	640	8/10/11	Unlicensed business/ga	321 HIGHLAND AVE	Completed
07.12.040	641	8/10/11	Working on cars/debris	1302-1306 E 16th St	Completed
07.12.040	738	5/30/12	Distressed property no t	942 E 9TH ST	Completed
07.12.040	737	5/30/12	Blighted house no trash	817 EDGERTON WAY	Completed
07.12.040	726	4/25/12	Abandoned Foreclosed	2922 E PLAZA BLVD	Completed
07.12.040	722	4/11/12	Abandoned distressed h	1107 E 30TH ST	Completed
07.12.040	661	10/13/11	Debris/Cars on unpave	1366 CORONA VIS	Completed
07.12.040	642	8/10/11	Trashed back yard	1343 E 6TH ST	Completed
07.12.040	637	8/4/11	Debris on drive/lawn	2741 A AVE	Completed
07.12.040	635	8/3/11	26th and L repeat viola	1139 E 26TH ST	Completed
07.12.040	636	8/3/11	Clothing Debris on prop	1909 L AVE	Completed
07.12.040	644	8/16/11	Auto Repair/Blight/Tras	104 W 15TH ST	Completed
07.12.040	643	8/16/11	Auto Repair/Trash/Blig	1514 ROOSEVELT AVE	Completed
07.12.040	651	9/27/11	Vehicle repair on unappi	1526 E 18TH ST	Completed
07.12.040	632	7/26/11	Non-approved storage i	2638 E 15TH ST	Completed
07.12.040	653	10/26/11	Trash, working on trai	1309 E 9TH ST	Completed
07.12.040	730	5/2/12	Trash/debris	1703 C AVE	Completed
07.12.040	667	10/20/11	Trashed drive	3727 STOCKMAN ST	Completed
07.12.040	688	1/12/12	Unlicensed business/bu	122 CIVIC CENTER DR	Completed
07.12.040	686	1/10/12	Trashed Out Property	2837 E 18TH ST	Completed
07.12.040	684	1/5/12	Vehicle Repair on Resid	2112 RACHAEL AVE	Completed
07.12.040	683	12/14/11	Admin Cite Camacho b	1839 E 24TH ST	Completed
07.12.040	718	3/29/12	Admin Cite	141 E 18TH ST	Completed
07.12.040	702	2/27/12	Trashed 2nd unit	726 E 1ST ST	Completed
07.12.040	712	3/13/12	Vacant Abandoned Pro	2026 D AVE	Completed
07.12.040	742	6/7/12	Vacant abandoned hom	923 COOLIDGE AVE	Completed
07.12.040	616	4/9/12	Trashed property	241 F AVE	Completed
Storage of junk prohibited					32

Code	Account Number	Start Date	Name	Address	
07.14.050	713	3/13/12	Abandoned Houses 11	38 W 11TH ST	Completed
07.14.050	695	2/2/12	Former Sizzler trash ev	1325 E PLAZA BLVD	Completed
Required removal of litter from sidewalks					2

Code	Account Number	Start Date	Name	Address	
07.18.060	746	6/28/12	Dirt Driveway/Grading	2120 GRANGER AVE	Completed
Tracking litter or mud onto streets or alleys prohibited.					1

Code	Account Number	Start Date	Name	Address	
07.18.130	724	4/18/12	Occupied RV/Parking o	1220 MANCHESTER ST	Completed
07.18.130	660	10/13/11	Unlicensed cars on unpa	341 W 16TH ST	Completed
Climbing or jumping curbs prohibited.					2

Code	Account Number	Start Date	Name	Address	
07.20.080	714	3/21/12	Occupied RV (2nd vio	1710 J AVE	Completed
07.20.080	716	3/27/12	Non-ops/Occupied RV	1909 C AVE	Completed
07.20.080	709	3/7/12	Occupied RV Trailer	3008 E 16TH ST	Completed
07.20.080	696	2/8/12	Occupied RV on unpave	2741 E 18TH ST	Completed

07.20.080	724	4/18/12	Occupied RV/Parking o	1220 MANCHESTER ST	Completed
07.20.080	746	6/28/12	Dirt Driveway/Grading	2120 GRANGER AVE	Completed
07.20.080	733	5/24/12	Occupied RV on multif	630 R AVE	Completed
07.20.080	643	8/16/11	Auto Repair/Trash/Blig	1514 ROOSEVELT AVE	Completed
07.20.080	628	7/20/11	Occupied RV on drivew	3035 F AVE	Completed
07.20.080	629	7/20/11	Occupied RV on drivew	3039 F AVE	Completed

Residing or camping in recreational vehicle--Prohibited. **10**

Code	Account Number	Start Date	Name	Address	
07.20.130	659	10/12/11	Non-licensed auto repa	1516 ROOSEVELT AVE	Completed
07.20.130	689	1/18/12	Residential Auto repair f	1330 NATIONAL CITY BLVD	Completed
07.20.130	697	2/14/12	Vehicle repair residenti	101 S CLAIRMONT AVE	Completed
07.20.130	643	8/16/11	Auto Repair/Trash/Blig	1514 ROOSEVELT AVE	Completed
07.20.130	644	8/16/11	Auto Repair/Blight/Tras	104 W 15TH ST	Completed
07.20.130	645	8/16/11	Residential Auto Repair	1934 B AVE	Completed
07.20.130	680	12/6/11	Cars on unpaved/trash	141 E 18TH ST	Completed

Repairing and washing of vehicles on residential property--Restricted. **7**

Code	Account Number	Start Date	Name	Address	
07.20.140	687	1/11/12	Unlicensed outdoor stor	9th St	Completed
07.20.140	688	1/12/12	Unlicensed business/bu	122 CIVIC CENTER DR	Completed
07.20.140	691	1/18/12	Non-op cars in drive	2837 J AVE	Completed
07.20.140	671	11/8/11	Vehicles unpaved	1501 G AVE	Completed
07.20.140	672	11/9/11	Vehicles on grass	1325 E 9TH ST	Completed
07.20.140	684	1/5/12	Vehicle Repair on Resid	2112 RACHAEL AVE	Completed
07.20.140	686	1/10/12	Trashed Out Property	2837 E 18TH ST	Completed
07.20.140	683	12/14/11	Admin Cite Camacho b	1839 E 24TH ST	Completed
07.20.140	653	10/26/11	Trash, working on trai	1309 E 9TH ST	Completed
07.20.140	676	11/21/11	Vehicles on lawn	1410 E 4TH ST	Completed
07.20.140	680	12/6/11	Cars on unpaved/trash	141 E 18TH ST	Completed
07.20.140	706	3/5/12	Residential blight	1518 ROOSEVELT AVE	Completed
07.20.140	715	3/22/12	Unrented former bike s	1205 HIGHLAND AVE	Completed
07.20.140	717	3/29/12	Admin Cite	204 E 30TH ST	Completed
07.20.140	734	5/29/12	Cars all over yard	619-625 Palm Ave	Completed
07.20.140	733	5/24/12	Occupied RV on multif	630 R AVE	Completed
07.20.140	697	2/14/12	Vehicle repair residenti	101 S CLAIRMONT AVE	Completed
07.20.140	727	4/30/12	non-ops on lawn/overgr	3207 E 8TH ST	Completed
07.20.140	724	4/18/12	Occupied RV/Parking o	1220 MANCHESTER ST	Completed
07.20.140	732	5/10/12	Commercial vehicle/	527 Q AVE	Completed
07.20.140	645	8/16/11	Residential Auto Repair	1934 B AVE	Completed
07.20.140	643	8/16/11	Auto Repair/Trash/Blig	1514 ROOSEVELT AVE	Completed
07.20.140	632	7/26/11	Non-approved storage i	2638 E 15TH ST	Completed
07.20.140	640	8/10/11	Unlicensed business/ga	321 HIGHLAND AVE	Completed
07.20.140	641	8/10/11	Working on cars/debris	1302-1306 E 16th St	Completed
07.20.140	661	10/13/11	Debris/Cars on unpave	1366 CORONA VIS	Completed
07.20.140	660	10/13/11	Unlicensed cars on unpa	341 W 16TH ST	Completed
07.20.140	746	6/28/12	Dirt Driveway/Grading	2120 GRANGER AVE	Completed
07.20.140	664	10/17/11	Vehicles all over lawn	1509 G AVE	Completed
07.20.140	696	2/8/12	Occupied RV on unpave	2741 E 18TH ST	Completed
07.20.140	739	6/4/12	Over-height fence	305 E 29TH ST	Completed
07.20.140	716	3/27/12	Non-ops/Occupied RV	1909 C AVE	Completed
07.20.140	718	3/29/12	Admin Cite	141 E 18TH ST	Completed
07.20.140	663	10/17/11	vehicles & trash	727 S HARBISON AVE	Completed
07.20.140	709	3/7/12	Occupied RV Trailer	3008 E 16TH ST	Completed
07.20.140	712	3/13/12	Vacant Abandoned Pro	2026 D AVE	Completed
07.20.140	714	3/21/12	Occupied RV (2nd vio	1710 J AVE	Completed
07.20.140	689	1/18/12	Residential Auto repair f	1330 NATIONAL CITY BLVD	Completed
07.20.140	652	9/28/11	Occupied sheds backya	2112 N AVE	Completed
07.20.140	685	1/5/12	Trash Service/Debris	1443 G AVE	Completed
07.20.140	674	11/16/11	RV's renting spots on r	1205 E 8TH ST	Completed

07.20.140	635	8/3/11	26th and L repeat viola	1139 E 26TH ST	Completed

Storage of inoperative or unlicensed vehicles, recreational vehicles and bo **42**

Code	Account Number	Start Date	Name	Address	
09.12.020	625	7/6/11	Trash/Debris Commerci	2235-2241 Highland Ave	Completed
09.12.020	626	7/7/11	Former Auto Zone loc	1539 HIGHLAND AVE	Completed
09.12.020	663	10/17/11	vehicles & trash	727 S HARBISON AVE	Completed
09.12.020	699	2/22/12	Trashed Vacant Proper	218 W 9TH ST	Completed
09.12.020	726	4/25/12	Abandoned Foreclosed	2922 E PLAZA BLVD	Completed
09.12.020	727	4/30/12	non-ops on lawn/overgr	3207 E 8TH ST	Completed
09.12.020	627	7/19/11	Debris on property	1628 J AVE	Completed
09.12.020	657	10/12/11	Graffiti and blight unocc	1207 E 7TH ST	Completed
09.12.020	732	5/10/12	Commercial vehicle/	527 Q AVE	Completed
09.12.020	712	3/13/12	Vacant Abandoned Pro	2026 D AVE	Completed
09.12.020	706	3/5/12	Residential blight	1518 ROOSEVELT AVE	Completed
09.12.020	705	3/1/12	Vacant delapidated pro	1040 C AVE	Completed
09.12.020	743	6/13/12	Empty lot storage	1628 ORANGE ST	Completed
09.12.020	661	10/13/11	Debris/Cars on unpave	1366 CORONA VIS	Completed
09.12.020	642	8/10/11	Trashed back yard	1343 E 6TH ST	Completed
09.12.020	738	5/30/12	Distressed property no t	942 E 9TH ST	Completed
09.12.020	742	6/7/12	Vacant abandoned hom	923 COOLIDGE AVE	Completed
09.12.020	722	4/11/12	Abandoned distressed h	1107 E 30TH ST	Completed
09.12.020	710	3/8/12	Graffiti/Debris/Weeds	225 W 9TH ST	Completed
09.12.020	685	1/5/12	Trash Service/Debris	1443 G AVE	Completed
09.12.020	740	6/5/12	Trashed vacant proper	1127 PARADISE DR	Completed
09.12.020	720	4/9/12	Abandoned home	1413 CALLE DELGADO	Completed
09.12.020	713	3/13/12	Abandoned Houses 11	38 W 11TH ST	Completed
09.12.020	682	12/8/11	Abandoned home Bank	1912 E AVE	Completed
09.12.020	686	1/10/12	Trashed Out Property	2837 E 18TH ST	Completed

Public nuisance declared--Weeds and other flammable materials. **25**

Code	Account Number	Start Date	Name	Address	
10.54.050	715	3/22/12	Unrented former bike s	1205 HIGHLAND AVE	Completed
10.54.050	657	10/12/11	Graffiti and blight unocc	1207 E 7TH ST	Completed
10.54.050	712	3/13/12	Vacant Abandoned Pro	2026 D AVE	Completed
10.54.050	710	3/8/12	Graffiti/Debris/Weeds	225 W 9TH ST	Completed
10.54.050	644	8/16/11	Auto Repair/Blight/Tras	104 W 15TH ST	Completed

Graffiti --Unlaful to permit property to remain defaced **5**

Code	Account Number	Start Date	Name	Address	
18.14.160	628	7/20/11	Occupied RV on drivew	3035 F AVE	Completed
18.14.160	642	8/10/11	Trashed back yard	1343 E 6TH ST	Completed
18.14.160	644	8/16/11	Auto Repair/Blight/Tras	104 W 15TH ST	Completed
18.14.160	629	7/20/11	Occupied RV on drivew	3039 F AVE	Completed
18.14.160	643	8/16/11	Auto Repair/Trash/Blig	1514 ROOSEVELT AVE	Completed
18.14.160	652	9/28/11	Occupied sheds backya	2112 N AVE	Completed
18.14.160	659	10/12/11	Non-licensed auto repa	1516 ROOSEVELT AVE	Completed
18.14.160	645	8/16/11	Residential Auto Repair	1934 B AVE	Completed
18.14.160	632	7/26/11	Non-approved storage i	2638 E 15TH ST	Completed

Residential Zone--Prohibited uses and structures. **9**

Code	Account Number	Start Date	Name	Address	
18.14.170	632	7/26/11	Non-approved storage i	2638 E 15TH ST	Completed
18.14.170	630	7/21/11	Matresses and Furnitu	3117 F AVE	Completed

Residential Zone--Use of yards **2**

Code	Account Number	Start Date	Name	Address	
18.50.020	646	9/12/11	Fence Height	1129 E 16TH ST	Completed

18.50.020	739	6/4/12	Over-height fence	305 E 29TH ST	Completed
Fences-- Max height					**2**

Code	Account Number	Start Date	Name	Address	
18.50.050	702	2/27/12	Trashed 2nd unit	726 E 1ST ST	Completed
18.50.050	661	10/13/11	Debris/Cars on unpave	1366 CORONA VIS	Completed
18.50.050	690	1/18/12	Blighted property/forced	441 E 7TH ST	Completed
18.50.050	625	7/7/11	Trash/Debris Commerci:	2235-2241 Highland Ave	Completed
18.50.050	624	7/6/11	Trashed yard, tree bran	1320 E 4TH ST	Completed
18.50.050	663	10/17/11	vehicles & trash	727 S HARBISON AVE	Completed
18.50.050	646	9/12/11	Fence Height	1129 E 16TH ST	Completed
18.50.050	692	1/19/12	Broken fence	2240 E PLAZA BLVD	Completed
18.50.050	701	2/23/12	Highland Baptist Churc	2605 HIGHLAND AVE	Completed
Fences--Construction and maintenance.					**9**

Total Violations in Period: **239**

ATTACHMENT 5.1

INDUSTRIAL AND COMMERCIAL INSPECTION FORM

CITY OF NATIONAL CITY

STORM WATER COMPLIANCE INSPECTION FOR INDUSTRIAL AND COMMERCIAL FACILITIES

Inspected by D-MAX Engineering, Inc.

Inspector Name _____ Date____/____/_____Time_____AM / PM

Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

Result: ☐ Full Insp. ☐ Could not Contact ☐ Not Inventoried ☐ Refused ☐ Moved, Replaced by_____ ☐ Moved, Vacant ☐ Duplicate of: _____ ☐ Out of Jurisdiction ☐ Mobile

A. CONTACT INFORMATION

Original

Business Name _____

_____

Street Address _____

_____

Responsible Person(s) _____

Title: _____

Business Telephone # (_____) _____ - _____ ext. ____

Business Fax # (_____) _____ - _____

Home Based? ☐ Yes ☐ No

Changes and/or Mailing Address

Business Name _____

_____

Street Address _____

☐ change _____

Responsible Person(s) _____

Business Telephone # (_____) _____ - _____ ext. ____

Business Fax # (_____) _____ - _____

APN: _____

E-Mail: _____

Potentially Shared Areas: ☐ w/ Other Tenants ☐ w/ Property Mgmt/Owner ☐ None

Was current business license provided during inspection? ☐ Yes ☐ No #_____ Exp._____

Facility personnel present: _____

B. FACILITY/SITE INFORMATION

Principal activity: _____

Assigned SIC Code(s): _____ _____ _____

Does assigned SIC Code best represent principal activity: ☐ Yes ☐ No

Existing SIC Code(s): _____ _____ _____ ☐ Food Attachment ☐ Industrial Attachment

Status Update (if no longer active in City or does not need an inspection): ☐ Moved/Out of Business ☐ Duplicate ☐ Not Inventoried ☐ Out of Jurisdiction

Is facility subject to CA Statewide General Industrial Permit? ☐ Mandatory ☐ Conditional ☐ No

Does facility have a Notice of Non-Applicability (NONA/NEC)? ☐ Yes ☐ No

Has facility filed a Notice of Intent (NOI) to obtain coverage? ☐ Yes ☐ No WDID: 9 37I0_____

Has facility filed a Notice of Termination (NOT) for the above WDID#? ☐ Yes ☐ No Approval date: _____

C. INITIAL OBSERVATIONS

Discharge points: _____

_____

Approximate area covered by industrial or commercial activities: _____ square feet

Approximate % impervious surface of this area: _____%

Exposed areas of significant outdoor activity or storage? ☐ Permanent ☐ Occasional ☐ No

D. BMP ASSESSMENT

BMPs	N/A	Fully Implemented	Partially Implemented	Not Implemented	Comments	Shared Resp
D.1 General						
Keep site free of litter, debris, and sediment using dry methods						
Keep drains on site free of litter and debris						
Keep loading and unloading areas, including drains, free of debris						
Keep outdoor areas free of spills and leaks						
Collect water from pressure washing or hosing and dispose of appropriately					☐ Unknown	
Collect and dispose of cleaning water appropriately						
Clean floor mats in locations that do not drain to storm drain system						
D.2 Landscaping						
Employ adequate erosion prevention measures (vegetation, physical stabilizer)						
Eliminate over watering/over-irrigation						
Properly store and dispose of green waste					☐ Unknown	
Properly manage pesticides/fertilizer; use IPM when feasible					☐ Unknown	
D.3 Materials and Wastes						
Protect trash area from contact with storm water						
Keep trash area free of litter and debris, liquids, powders, sediment						
Adequately cover materials stored outside						
Prevent run-on from contacting materials stored outdoors						
Properly label outdoor storage containers						
Equip liquid storage containers with secondary containment						
Keep secondary containment free of spills and rainwater						
Properly store and dispose of hazardous materials						
Provide an accessible, functional spill response kit						
Dispose of water generated by processing activities appropriately						
Dispose of pool, spa, fountain, and filter backwash water properly					☐ Unknown	
D.4 Equipment, Vehicles, and Outdoor Activities						
Conduct outdoor activities within contained areas (under canopy, bermed)						
Use drip pans to collect leaks/spills						
Perform vehicle/equipment washing in a contained area where runoff does not enter the MS4						

BMPs	N/A	Fully Implemented	Partially Implemented	Not Implemented	Comments	Shared Resp
D.5 Other						
Manage animals and animal waste in a manner that prevents animal waste from being transported in runoff						
Identify and eliminate illicit connections and illegal discharges						
Provide storm water training for appropriate employees						

D.6 Additional Questions	Comments/Results
Are there any treatment control BMPs on site?	☐ Filter insert ☐ Hydrodynamic separator ☐ Debris screen ☐ Sewer diversion ☐ Vegetated swale ☐ Vegetated filter strip ☐ Biofiltration ☐ Detention/ sedimentation basin ☐ Containment and evaporation or reuse ☐ Filtration
Are treatment control BMPs regularly maintained?	☐ Yes ☐ No ☐ Unknown ☐ N/A
If any illicit connections and/or illegal discharges were identified have the appropriate authorities been notified?	☐ Yes ☐ No ☐ N/A
If any illicit connections and/or illegal discharges were identified, were they eliminated during the site visit?	☐ Yes ☐ No ☐ N/A
Were any non IC/ID related corrective actions implemented during the site visit?	☐ Yes ☐ No ☐ N/A
Were any educational materials distributed?	NOI NONA/NEC Calendar Food BMPs

D.7 Additional Required Actions	

E. Summary

Follow Up Inspection Priority: ☐ **Priority 1** ☐ **Priority 2** ☐ **Priority 3** ☐ **None**

☐ Potential Hazmat issue

Re-inspect on or after: ____/_____/_____
Date

Assessment

Level of knowledge regarding stormwater issues: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Level of cleanliness, BMP implementation, orderliness of site: ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

F. Pollutant Discharge Potential Assessment

Sediment	Nutrients	Aluminum	Iron	Heavy Metals	Organic Cmpds	Trash/ Debris	Oxygen Demand	Oil & Grease	Bacteria & Viruses	Pesticides	Acid/ Base

G. Resolution

☐ NOV Issued: _____/_____/_____
Date

☐ Corrective Action Letter Issued: _____/_____/_____
Date

☐ Citation Issued: _____ _____/_____/_____
Number Date

☐ Verbal Warning

☐ Stop Work Order

CITY OF NATIONAL CITY
FOOD FACILITY STORM WATER AND FOG BMP ASSESSMENT

☐ NOT FOG

Inspected by D-MAX Engineering, Inc.

How long has the manager worked at the business? ☐ < 3 months ☐ 3-6 months ☐ 7-12 months ☐ > 1 year ☐ Unknown

Is the facility manager also the owner? ☐ Yes ☐ No ☐ Unknown

Property management co./contact name:_____ Telephone # (____) ____ - _____ext.___

Mailing address:_____

STORM WATER BMP ASSESSMENT

BMP	N/A	Fully Implemented	Partially Implemented	Not Implemented	Comments	Shared Resp
Keep grease bin and surrounding area free of grease stains/spills						
Keep storm drain inlets free of grease and food debris						

Additional Questions

Oil-recycling/grease bins coverage?	☐ Overhead structure ☐ External container overhead ☐ No ☐ N/A
Oil-recycling/grease bins secondary containment?	☐ Indoors/External containment ☐ Double-walled ☐ No ☐ N/A

How are outdoor areas (patio, loading dock, parking lot, dumpster area, etc.) cleaned? (check all that apply)

☐ Sweep ☐ Pick up trash ☐ Mop/Deck brush ☐ Hose ☐ Power wash

☐ Outside company/property management ☐ Do not clean

FOG BMP ASSESSMENT

GCD 1	☐ None ☐ Trap ☐ Interceptor	Location:_____	%FOG + solids:_____%
GCD 2	☐ None ☐ Trap ☐ Interceptor	Location:_____	%FOG + solids:_____%
GCD 3	☐ None ☐ Trap ☐ Interceptor	Location:_____	%FOG + solids:_____%

BMP	N/A	Fully Implemented	Partially Implemented	Not Implemented	Comments
Dispose of waste grease properly (not to sanitary sewer or storm drain)					Hauler:
Store waste cooking grease in designated container					
Maintain accessible grease spill response materials					
Minimize food waste disposal to sewer					
Practice dry wiping and food scraping techniques					
Ensure drain screens are functional and maintained					
Eliminate use of grease-emulsifying drain additives					

Record Keeping

GCD maintenance frequency	☐ _____ times per (circle one) year/month/week ☐ No/unclear records ☐ None ☐ N/A
Waste oil/GCD waste hauling	☐ _____ times per (circle one) year/month/week ☐ No/unclear records ☐ None ☐ N/A
Sewer lateral maintenance	☐ _____ times per (circle one) year/month/week ☐ No/unclear records ☐ None
Employee FOG training frequency	☐ _____ times per (circle one) year/month/week ☐ No/unclear records ☐ None
Employee FOG training content (check all that apply)	☐ Dry wiping/food scraping ☐ Food disposal ☐ Grease spill response ☐ Oil disposal, avoiding spills in grease transfer ☐ No/unclear records ☐ None

Additional Questions

Food Grinder/Disposal Unit	Present? ☐ Yes ☐ No
Automatic Dishwasher	Present? ☐ Yes ☐ No

Other FOG Inspection Notes	FOG follow-up inspection needed: ☐ Yes ☐ No

CITY OF NATIONAL CITY
INDUSTRIAL FACILITY ATTACHMENT

Inspected by D-MAX Engineering, Inc.

STATE GENERAL INDUSTRIAL PERMIT COMPLIANCE

SPECIFIC ACTION(S) REQUIRED TO CORRECT AN OBSERVED VIOLATION

- ☐ File a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB)
  - ☐ For "Conditional" facilities only: this site may be able to qualify for exemption from obtaining Industrial Permit coverage. Please contact the RWQCB for details.
- ☐ Develop and implement a Storm Water Pollution Prevention Plan (SWPPP)
- ☐ Develop and implement a storm water monitoring program
- ☐ Complete Notice of Non-Applicability (NONA) and accompanying No Exposure Certification (NEC).

Additional notes and/or actions required:

SWPPP REVIEW

Does facility maintain a SWPPP/BMP Plan: ☐ Yes ☐ No ☐ Unknown ☐ Not Available

Was SWPPP Reviewed? ☐ Yes ☐ No

SWPPP Components:

- ☐ Site Map/Description
- ☐ Materials List
- ☐ Significant Spills/Leaks
- ☐ Pollution Prevention Team (identification of current team members)
- ☐ Industrial Activities
- ☐ Pollutant Sources/Risks
- ☐ Compliance Activity Schedule (procedures to conduct annual site compliance evaluation)
- ☐ Employee Training
- ☐ Accessible to staff
- ☐ Storm Water BMPs

SWPPP Review Comments:

STORM WATER MONITORING PROGRAM

Does this facility have a storm water monitoring program? ☐ Yes ☐ No

Was appropriate monitoring conducted during the most recent wet season? ☐ Yes ☐ No

Monitoring Result Review Comments: ☐ Copy of results attached

ATTACHMENT 5.2

RESTAURANT AND FOOD INDUSTRY BMP FACT SHEET

CITY OF NATIONAL CITY – DEVELOPMENT SERVICES DEPARTMENT
1243 NATIONAL CITY BLVD., NATIONAL CITY, CA 91950

City of National City Storm Water Program

Restaurant and Food Industry

Your facility can help protect our water quality

Long-Term Compliance Solutions

Several properties and businesses in National City have already taken initiative to ensure long-term compliance with the minimum requirements of City's storm water program. In doing so they minimize the need for costly and ineffective cleanup of grease spills by employees. Three proactive solutions[1] include:

1. Storing waste grease in securely sealed indoor containers[2] until pickup

2. Permanent cover and containment of outdoor grease disposal areas[3], such as a roof and berm

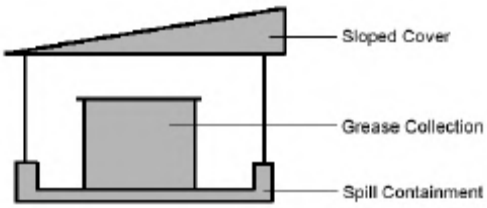

3. Installation of an indoor oil management system[2] that changes oil and collects waste

[1] These solutions are not required by the City of National City, but they would likely facilitate staying in compliance with minimum storm water requirements. See the other side of this sheet for requirements commonly applicable to the restaurant and food industry.
[2] The City of National City does not require or endorse the use of any specific brand or product.
[3] Note that installation of outdoor structures should follow National City building codes and permitting requirements.

For more information about staying in compliance with the City's Storm Water Program requirements, call the City's compliance inspection contractor, D-Max Engineering, Inc.: (858) 586-6600 ext. 23.

Restaurant and Food Industry

Best Management Practices

Your facility can help protect our water quality

The following are six requirements commonly applicable to businesses that produce and/or sell food products, such as bakeries, food producers/distributors, grocery stores, and restaurants.

1. Keep outdoor waste oil containers and surrounding areas free of grease stains and spills.		4. Pour wash water into a indoor janitorial or mop sink. Don't pour it outside into a storm drain or onto a parking lot, alley, sidewalk, or street.	
2. Use dry sweeping or absorbent material for oil and grease spill cleanup instead of hosing. If wet cleanup methods are used, collect all water and take it indoors for disposal.		5. Clean floor mats, filters, and garbage cans in a mop sink, over an indoor floor drain, or on landscaping where water will not run off. Don't wash them in a parking lot, alley, sidewalk, or street.	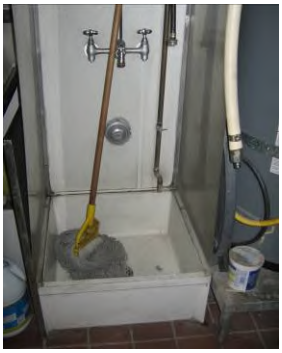
3. Keep dumpster area clean and lid closed. Don't fill it with liquid waste or hose it out. Repair or replace leaky dumpsters.		6. Recycle grease and oil. Don't pour it into sinks, floor drains, or onto a parking lot or street. Pouring grease and food scraps down drains can clog pipes and back up sewers.	

Laws and Enforcement

See National City Municipal Code Section 14.22, Storm Water Management and Discharge Control, for a full list of all storm water requirements applicable to businesses. Direct or indirect discharge of pollutants to the storm water conveyance system, even in rain water, is against the law.

Violations can result in civil penalties up to $10,000 or fines up to $25,000 per violation, per day.

To help report a spill or discharge to the storm drain, call the City of National City Storm Water Hotline: (619) 336-4389

ATTACHMENT 5.3

INDUSTRIAL AND COMMERCIAL
"PREVENTING URBAN RUNOFF POLLUTION" TRIFOLD

What's the difference?

Sanitary Sewer vs. Storm Drain System

The water that drains down a sink or toilet in a home or business flows to the sanitary sewer and is treated by the City of San Diego at a wastewater treatment plant.

The storm drain system, on the other hand, is designed to carry rainwater from City streets and driveways to prevent flooding. This water does not receive any treatment. It flows directly to creeks and rivers – and eventually to San Diego Bay!

Unfortunately, as rainfall flows over the ground it picks up debris and pollutants and deposits them into our water bodies.

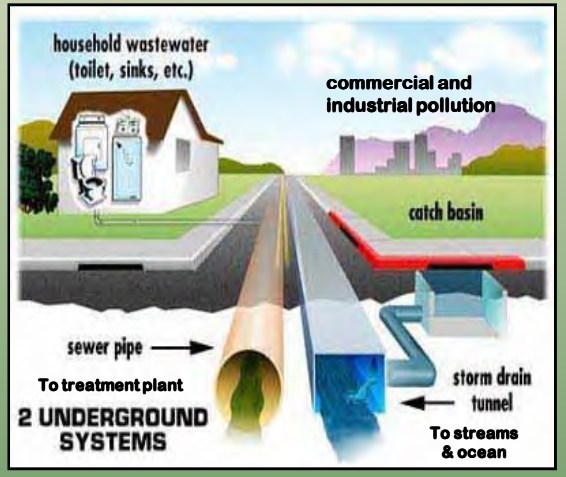

Certain industrial businesses require coverage under the General Industrial Permit. For more information go to the State of California's Stormwater website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/industrial.shtml

Who can you contact?

REPORT ILLEGAL DUMPING
City of National City
(619) 336-4389
(Toll Free After Hours Hotline)
County Storm Water Hotline
(888) 846-0800

HOUSEHOLD HAZARDOUS WASTE (HHW) DISPOSAL
South Bay Regional HHW Drop-Off Site
1800 Maxwell Road
Chula Vista, CA
Call (619) 691-5122 for information

RECYCLING
EDCO: (619) 466-8855
http://www.edcodisposal.com/services/nationalcity/index.html

QUESTIONS AND COMMENTS
National City Storm Water Program
(619) 336-4580

Look on the web!

CITY OF NATIONAL CITY
http://www.ci.national-city.ca.us/

USED OIL RECYCLING CENTERS
www.ciwmb.ca.gov/UsedOil/

INTEGRATED PEST MANAGEMENT
www.ipm.ucdavis.edu/

PROJECT CLEAN WATER
www.projectcleanwater.org

SAN DIEGO COASTKEEPER
www.sdcoastkeeper.org

STATE OF CALIFORNIA STORM WATER PROGRAM
http://www.waterboards.ca.gov/water_issues/programs/nps/

US ENVIRONMENTAL PROTECTION AGENCY
www.epa.gov/OWOW/NPS/

CITY OF NATIONAL CITY

Preventing Urban Runoff Pollution

A Guide for Commercial and Industrial Businesses

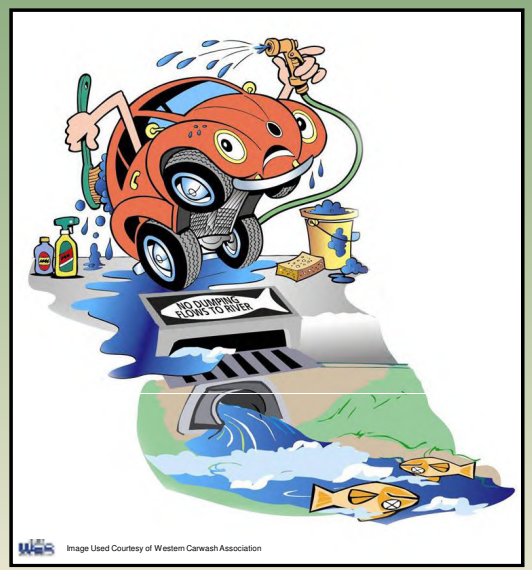

Urban storm water runoff is the largest contributor to water pollution in San Diego County.

Your business is required to prevent urban runoff pollution by implementing Best Management Practices (BMPs).

The City will be conducting inspections to ensure that BMPs are being used and water quality is protected.

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Pollutants of Concern

Water that enters the City of National City storm drain system eventually flows into San Diego Bay. The following lists several main pollutants of concern for San Diego Bay.

- Sediments
- Metals (copper, zinc)
- Pesticides (diazinon)
- Bacteria and Viruses

Best **M**anagement **P**ractices (**BMPs**) are required to be used at all industrial and commercial businesses, where applicable, to reduce urban runoff pollution in our streams and waterways.

Maintenance & Good Housekeeping

- Major cleaning of exterior surfaces (such as power washing) must include capturing all wash water and disposing of it into the sanitary sewer in compliance with local regulations. Wash water is not allowed to enter the street gutter or storm drains.
- Regularly sweep exterior paved areas. **Do Not use a hose!** Place debris in the dumpsters.
- If you must use water for cleaning, use a mop and bucket. Dispose of wash water into the sanitary sewer (sink or toilet).
- Regularly inspect and maintain storm drain inlets and surface drains on your property.

Landscaping

- Time sprinklers to avoid over watering and aim them to avoid causing runoff.
- Minimize use of pesticides, herbicides, and fertilizers, which are harmful to animals downstream.
- Hand pull weeds instead of using herbicides
- Do not use pesticides that eliminate beneficial insects
- Only irrigate during early morning or late evening to avoid evaporation.

Outdoor Material Storage

- Store all material indoors or under a covered area not exposed to rain. Include secondary containment for liquid materials.
- Have a spill response kit (dry absorbent, rags, and/or hydrophobic mops are useful) available to clean up potential spills.
- Keep lids closed on all outdoor storage containers and ensure containers are labeled.

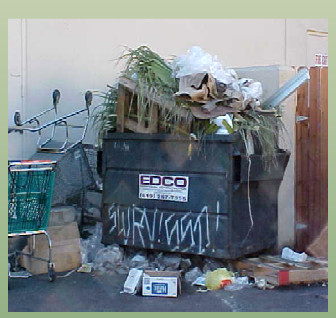

Unacceptable

Acceptable

Waste Management

- Keep all outdoor garbage and dumpster areas free of trash, sediment and debris.
- Keep lids closed on dumpsters and trash cans and never wash down dumpsters.
- Fix any leaks in garbage cans or dumpsters.
- Schedule extra pick-ups when regular waste collection does not meet demand.

Vehicle & Equipment Washing and Maintenance

- Wash vehicles at a commercial car wash when possible. (Commercial car washes drain to the sanitary sewer and not to the storm drain).
- Wash vehicles over a pervious (absorbent) surface such as dirt, gravel or grass to prevent runoff.
- Minimize the use of soap and water.
- Car wash water is not allowed to enter storm drains. Wash water must be collected and disposed of to a pervious area (such as landscaping) or to the sanitary sewer system if allowed by local sewer agency.
- Perform all vehicle maintenance indoors when possible.
- Use drip pans to collect fluids from leaky vehicles
- Clean up spills with a spill kit and properly dispose of the used kit contents.

Unacceptable

Acceptable

Loading Areas & Operations

- Load and unload in designated areas.
- Regularly sweep loading and unloading areas; do not hose them down.
- If possible, cover loading areas.
- Divert rain water away from all loading and unloading areas.
- Check shipments and trucks for leaks and spills.
- Clean up spills/leaks immediately and dispose of them properly.

ATTACHMENT 8.1

"EVERYTHING THAT FLOWS DOWN INTO A STORM DRAIN" BROCHURE

City of National City

Office of the Public Works/Engineering Director
1243 National City Blvd. National City, CA 91950-4397
(619) 336-4580, Fax (619) 336-4397 www.ci.national-city.ca.us

Everything that flows down into a storm drain goes *untreated* directly into our creeks, lagoons, and San Diego Bay. When it rains or when water flows out of yards, it flows directly into storm drains. Many people think that everything that flows into a storm drain gets treated at the Point Loma Sewage Treatment Plant, just like wastewater in the sewer system, but these two systems are not connected.

The sources of pollution that must be controlled and eliminated result from urbanization and the choices that are made every day by residents, businesses and industry alike. For example, detergents, oil, grease, and other pollutants have been shown to be toxic to wildlife in local streams and San Diego Bay. **Recycling** of oil, antifreeze, glass, plastic, and other materials can prevent their improper disposal into the stormwater drainage system. **Proper landscaping practices** include minimization of the use of herbicides, pesticides and fertilizers together with conservation of water to minimize runoff of pollutants from landscaped areas, lawns, golf courses, etc.

The City of National City's Stormwater Management & Discharge Control of the National City Municipal Code Chapter 14.22, prohibits non-stormwater discharges, such as car washwater, pesticides, fertilizers, pet waste, litter, oil, and other automobile fluids, to run into the City's storm drain system. This ordinance is based on regulations set forth by the State Regional Water Quality Control Board and the U.S. Environmental Protection Agency in connection with the State and Federal Clean Water Acts.

Your help is needed, and by doing your part, by changing your washwater and trash disposal practices, you will help reduce the pollution problems in the community where you and your family live, work and play. Please call **Storm Drain Hotline** at **(619) 336-4389** if you have **any questions** regarding this matter and **to report any illegal discharges and /or dumping.**

City of National City

Office of the Public Works/Engineering Director
1243 National City Blvd. National City, CA 91950-4397
619) 336-4580, Fax (619) 336-4397 www.ci.national-city.ca.us

Todo lo que desemboca en las alcantarillas no esta tratado y va a parar directamente a nuestras lagunas, esteros y Bahia de San Diego. Cuando llueve o cuando escurre agua de algun patio, desemboca directamente a las alcantarillas. Mucha gente piensa que todo lo que desemboja en una alcantarilla es tratado en la planta de Tratamiento de Agua Negras en Point Loma, como las aguas negras del sistema de drenaje, pero estos dos sistemas **no** estan conectados.

Las causas de contaminacion que tienen que ser controladas y eliminadas resultan de la urbanizacion y las elecciones que hacen todos los dias los residentes, negocios y la industria. Por ejemplo, detergentes, aceite, grasa, ya otros contaminantes se ha visto que son toxicos para la vida silvestre en nuestros arroyos locales y Bahia de San Diego. **Reciclando** el aceite, antifreeze, vidrio, plastico y otros productos que sean desechados de un modo inadecuado llegen a parar al sistema de alcantarillado de la ciudad. **Los metodos de mantener el jardin**, como usar menos los herbicidas, pesticidas y fertilisantes.Tambien como conservar el agua para que esa agua con contaminantes de los jardines, pastos, canchas de golf, etc.

El Codigo Municipal No. 14.22 de las aguas pluviales de la Ciudad de National City, prohibe aguas que no sean pluviales como las aguas negras, pesticidas, fertilisantes, basura, aceite y otros liquidos de carros que sean depositadas en el sistema de alcantarillado de la ciudad. Esta regla esta basada en las regulaciones puesta por "State Regional Water Quality Control Board" y "U.S. Environmental Protection Agency" en conneccion con "State and Federal Clean Water Acts."

Su ayuda es necesaria, y haciendo su parte como cambiar el modo de tirar su basura, usted ayudara a reducir la contaminacion en la comunidad donde usted y su familia viven, trabajan y juegan.

Por favor llame a la linea de **"Storm Drain Hotline"** al **(619) 336-4389**, si tiene **alguna pregunta** si quiere **reportar un desague ilegal**.

ATTACHMENT 8.2

CALENDAR ART CONTEST INFORMATION FOR TEACHERS

City of National City

Storm Water Program
Third Annual Calendar Art Contest

Guidelines for Teachers

The City of National City invites all third grade students attending public schools in the City to participate in this fun and educational art contest. We are asking students to provide original art pieces for the upcoming 2013 National City Storm Water Program Calendar. The theme of this year's contest is **"By Keeping Our Community Clean, We Can Keep the Ocean Clean"**.

Similar to previous years, the City plans to select 12 original art pieces to feature in the 2013 National City Calendar. The goal of the contest is to promote understanding of the local natural environment in National City and to educate students on ways they can help protect local waterways. The contest provides a way for children to share their ideas on ways to protect our creeks and oceans with the entire National City community.

We encourage teachers to relate this contest to various aspects of the third grade curriculum. Please encourage students to include National City landmarks in their drawings, such as Paradise Creek, the Sweetwater River, their school, favorite park, etc. Students can also incorporate native plants and animals. Ideally, a contest entry will show how to protect water quality AND how National City benefits from having a clean community.

Contest Rules

Guidelines:

- **Media:** Paint, color pencils, marker, or crayon.
- **Paper:** White paper, 8 1/2 inches by 11 inches in landscape format.
- **Text:** Drawings can include text and original slogans, however, names will not be allowed on front of the drawing. The artist's first name and school will be printed below the drawing in the calendar. All words must be spelled correctly. If preferred, text can be typed on a computer, printed, and then pasted to the drawings.

Submittals:

- All participants must submit a release form with their name, school, room number, teacher's name, and parent or guardian signature.
- The student's name, school, and teacher must also be taped to the back of the artwork on a piece of paper or index card.

(Continued on Back)

Deadline:

- The deadline for students will be **Monday May 21, 2012**. Teachers should submit their students' artwork to City Hall no later than **Thursday May 24, 2012.** Please note that on Fridays the City offices will not be open. If you cannot submit entries directly to City Hall, you can contact Barby Tipton or Crystal Kaplan (see bottom of page) to arrange for a pick up. Note that for teachers with Combination classes (2nd and 3rd grades), we encourage 2nd graders to participate, but only 3rd grade work should be submitted to the City for entry into the contest.

Judging:

- Drawings will be judged by various City officials and representatives involved in the City's Storm Water Pollution Prevention Program. 12 winners will be chosen based on originality and representation of the contest's theme. At least one winner will be chosen from each participating school.

Prizes:

- Teachers can hand out personalized participation certificates (to be filled out by the teacher) to all participating students when artwork is submitted in class.
- Winning art pieces will be featured in the 2013 National City Storm Water Program Calendar. Winners will be honored at a National City Council Meeting in the fall and will receive additional prizes.

Contact Information:

- If you have additional questions about how you can integrate this contest into your 3rd grade curriculum, please contact:

  Stephanie Maxin Phone: (619) 336-8306
  E-mail: stephanieb@national.k12.ca.us

- If you would like to contact a representative at the City, please contact:

  Barbara Tipton
  National City Storm Water Compliance Inspector
  Engineering Division, City Hall, 1243 National City Blvd
  Phone: (619) 336-4583 E-mail: btipton@nationalcityca.gov

  -- or --

  Crystal Kaplan
  Storm Water Consultant to the City (D-MAX Engineering, Inc.)
  Phone: (858) 586-6600 ext 23 E-mail: ckaplan@dmaxinc.com

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ATTACHMENT 8.3

CALENDAR ART CONTEST INFORMATION FOR STUDENTS AND FAMILIES

Storm Water Program

3rd Grade Art Contest

THEME: BY KEEPING OUR COMMUNITY CLEAN, WE CAN KEEP THE OCEAN CLEAN!

Deadline: Monday, May 21, 2012

Winning drawings will be featured in National City's 2013 Storm Water Program Calendar!

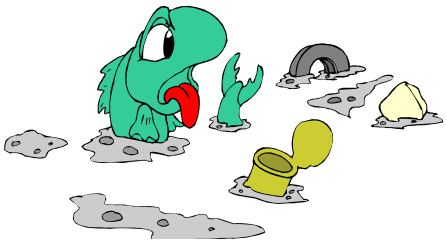

DO YOU GO TO THE BEACH WHEN IT'S RAINING?

Probably not, but pollution does! When it rains, pollutants like litter and oil are carried from our streets and sidewalks to our local creeks and ocean. Pollution can hurt plants and animals and can also make water unhealthy for humans.

BY KEEPING OUR COMMUNITY CLEAN, WE CAN KEEP THE OCEAN CLEAN!

Rules:

- Drawings should show how you and your friends, family, and neighbors can help prevent pollution in creeks, rivers, and oceans. We encourage you to include locations within National City in your drawing, such as your school, Paradise Creek, Sweetwater River, or your favorite park!
- Drawings must be on white 8 1/2 inch by 11 inch paper, in landscape format.
- Only color drawings made with markers, colored pencils, crayons, or paint will be accepted. Bright colors are best.
- Do NOT write your first or last name on the front of your drawing.
- Use original artwork only. Slogans and messages are OK, but all words must be spelled correctly. Text can also be typed on the computer, printed, and pasted onto the drawing.
- Drawings must be submitted to your teacher by Monday, May21, 2012 with a completed entry form (on the back of this flyer) signed by a parent or guardian.
- Your name, teacher, and school must be on a piece of paper or card taped to the back of the artwork.
- Winners will be notified in the fall. All winners will be featured in the 2013 National City Storm Water Program Calendar. Winners will also receive a prize and be honored at a future City Council Meeting!

YOU CAN BE A CLEAN WATER SUPERSTAR!

- ☆ Don't litter
- ☆ Never put anything into the storm drain
- ☆ Pick up after your pets

Programa de Aguas Pluviales

Concurso de Arte de Estudiantes de Tercer Grado

TEMA: ¡AL MANTENER NUESTRA COMUNIDAD LIMPIA, PODEMOS MANTENER LIMPIO EL OCÉANO!

Fecha límite: lunes, 21 de mayo del 2012

¡Las ilustraciones ganadoras aparecerán en el Calendario del Programa de Aguas Pluviales del 2013 de National City!

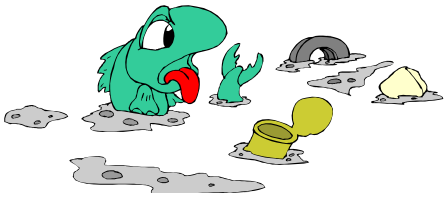

¿VAS A LA PLAYA CUANDO LLUEVE?

Probablemente no, ¡pero la contaminación sí! Cuando llueve, nuestras calles y aceras transportan contaminantes como basura y aceite al océano y a nuestros arroyos locales. La contaminación puede dañar plantas y animales y hacer que el agua sea mala para la salud de los seres humanos.

¡AL MANTENER NUESTRA COMUNIDAD LIMPIA, PODEMOS MANTENER LIMPIO EL OCÉANO!

Reglas del concurso:

- Las ilustraciones deben mostrar cómo tú y tus familiares, vecinos y amigos pueden ayudar a evitar la contaminación de arroyos, ríos y océanos. ¡En tu dibujo puedes incluir lugares de National City como tu escuela, el arroyo "Paradise Creek", el Río Sweetwater o tu parque favorito!
- Debes hacer tu ilustración en una hoja de papel blanco de 8 ½ x 11 pulgadas, en formato horizontal.
- Sólo se aceptarán dibujos hechos con plumones, lápices de colores, crayones o pintura. Los colores brillantes son más atractivos.
- NO escribas tu nombre ni tu apellido en el lado del dibujo.
- Tu ilustración debe ser original. Se acepta que le pongas un lema o mensaje, pero todas las palabras deben estar bien escritas. También puedes escribir el texto en la computadora e imprimirlo y pegarlo al dibujo.
- Debes entregar tu dibujo a tu maestro(a) para el lunes, 21 de mayo de 2012, y el reverso de esta hoja debe estar llenado y haber sido firmado por uno de tus padres o tutores.
- Debes escribir tu nombre, el de tu maestro o maestra y el de tu escuela en un trozo de papel o en una tarjeta y pegarlo atrás del dibujo.
- En el otoño se notificará a los ganadores. ¡Todos los ganadores aparecerán en el Calendario del Programa de Aguas Pluviales de National City, recibirán un premio y se les hará un reconocimiento en una futura junta del cabildo del Ayuntamiento Municipal!

¡TÚ PUEDES SER UN SUPERESTRELLA DEL AGUA LIMPIA!

- ☆ No tires basura.
- ☆ No eches cosas al drenaje pluvial.
- ☆ Recoge los desechos de tus mascotas.

ATTACHMENT 9.1

HHW DISPOSAL INFORMATIONAL ADVERTISEMENT

Chula Vista, Imperial Beach & National City residents:

DISPOSE OF:

PAINTS • POOL CHEMICALS
BATTERIES • PESTICIDES
ANTIFREEZE • ADHESIVES
THINNERS • PHOTO CHEMICALS
FLUORESCENT BULBS
DEGREASERS • FERTILIZERS

Saturdays, 9 AM - 1 PM

(Except for holiday weekends)

1800 Maxwell Road
Chula Vista

$5 co-pay for up to 15 gallons or 125 lbs of waste per household

(Additional loads or visits are subject to higher co-pays)

For more information, call (619) 691-5122

Se habla español.

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EXECUTIVE SUMMARY

ES.1 Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2001-01, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District, referred to in this document as the Municipal Permit. Pursuant to Part I.1.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (Jurisdictional URMP) Annual Report describes the activities relating to the Municipal Permit that the City conducted during the 2006-2007 annual reporting period (July 1, 2006 – June 30, 2007).

ES.2 Report Organization

Section I of the Municipal Permit defines the requirements for the Jurisdictional URMP Annual Report and states that each Jurisdictional URMP Annual Report shall, at a minimum, contain the following:

		Annual Report Section
1.	A comprehensive description of all activities conducted by the Copermittee in order to meet all of the requirements detailed in each component of the Municipal Permit's Jurisdictional URMP section.	See Below
	Existing Development Component (Including Municipal, Industrial, Commercial, Residential, and Education)	Sections 2-5 and Section 9
	Land-Use Planning for New Development and Redevelopment Component	Section 6
	Construction Component	Section 7
	Illicit Discharge Detection and Elimination Component	Section 8
	Education Component	Section 9
	Public Participation Component	Section 10
	Assessment of Jurisdictional URMP Effectiveness Component	Section 11
	Fiscal Analysis Component	Section 12
2.	An accounting of all:	
	Reports of illicit discharges (i.e. complaints) and how each was resolved (indication referral source);	Section 8

		Annual Report Section
	Enforcement actions taken; and	Section 8
	Education efforts conducted.	Section 9
3.	Public participation mechanisms utilized during the Jurisdictional URMP Implementation process.	Section 10
4.	Proposed revisions to the Jurisdictional URMP.	Section 11
5.	A summary of all urban runoff related data not included in the annual monitoring report (e.g. special investigations).	See San Luis Rey Watershed URMP and Carlsbad Watershed URMP
6.	Budget for the upcoming year.	Section 12
7.	Identification of management measures proven to be ineffective in reducing urban runoff pollutants and flow.	Section 11
8.	Identification of water quality improvements or degradation.	Section 11

Pursuant with the Municipal Permit this document contains all of the required information with the exception of number 5, which is included in the San Luis Rey and Carlsbad Watershed Urban Runoff Management Programs (Watershed URMP).

ES.3 Program Highlights

Below is a summary of each section which describes the Clean Water Program activities appearing in this annual report. Please refer to the individual section for more detailed information.

ES.3.1 Municipal Component

The City of Oceanside Clean Water Program utilized its 2005-06 municipally owned inventory and inspected 141 municipal areas to ensure these facilities are in compliance with City Code. A total of 65.5 tons of waste was removed from the storm drain system, and 2,480 tons of waste, by street sweeping operations, was prevented from entering the City's storm drain system. City-sponsored volunteer cleanup events removed approximately 28 tons of waste from creeks, rivers, and beaches.

ES.3.2 Industrial Component

The City of Oceanside Clean Water Program utilized its 2005-06 industrial business inventory during this reporting period, and inspected 234 industrial businesses to ensure these facilities are in compliance with City Code.

ES.3.3 Commercial Component

The City of Oceanside Clean Water Program utilized its 2005-06 commercial business inventory during this reporting period, and inspected 127 commercial businesses to ensure these facilities are in compliance with City Code. In addition, a total of 5 hotline complaints and 28 Code Enforcement calls from residents were made regarding a potential urban runoff violation from a commercial business.

ES.3.4 Residential Component

The City of Oceanside Clean Water Program received 14 complaints on the hotline and the Code Enforcement Program received 229 phone complaints from residents regarding potential urban runoff violations from residential areas and activities. Extensive educational efforts were made to help Oceanside residents understand watersheds, water quality and urban runoff impacts. Details of education efforts are provided in Section 9 Education Component.

ES.3.5 Land-Use Planning for New Development and Significant Redevelopment

The City of Oceanside Clean Water Program continued to implement SUSMP and Runoff Assessment Report requirements for particular development and redevelopment projects. No revisions to the Engineering SUSMP standard conditions or the Storm Water Mitigation Plan and the Operations and Maintenance Plan requirements were made during this reporting period.

ES.3.6 Construction Component

The City of Oceanside Clean Water Program updated the Jurisdictional URMP to include a new inventory of construction sites operating in Oceanside. During the reporting period, the Clean Water Program inspected all construction sites to ensure these sites are in compliance with City Code.

ES.3.7 Illicit Discharges Detection and Elimination Component

The City of Oceanside Clean Water Program conducted the Dry Weather Monitoring Program and initiated several illicit discharge/illicit connection investigations.

ES.3.8 Education Component

The City of Oceanside Clean Water Program continues to host and update a comprehensive and interactive website at www.oceansidecleanwaterprogram.org. The website features information from the following menu: Commercial, Development, Events, Industrial Businesses, Just For Kids, Water Quality Laws, Other Websites, Clean Water Projects, Report Violations, Residential/General, Just for Educators, and

Waterbodies. Specific presentations were given to numerous audiences on the impacts and sources of urban runoff, source control, and implementation of Best Management Practices. In addition, the Clean Water Program continues to disseminate and develop numerous informational materials for various audiences either on the impacts and sources of urban runoff, appropriate pollution prevention Best Management Practices, and/or hotline information.

- ✓ BMP posters for restaurants and automotive repair facilities
- ✓ Residential informational Doorhanger
- ✓ Click-Message Pens
- ✓ Storm Drains Lead to Ocean Poster
- ✓ Urban Runoff Guidelines for Residents Brochure
- ✓ Pollution Prevention Tips for Gardening Activities Brochure
- ✓ Urban Runoff Guidelines for Commercial Business Brochure
- ✓ Urban Runoff Guidelines for Construction Projects Handout
- ✓ Clean Water Program Newsletter
- ✓ Urban Runoff Guidelines for Powerwashers
- ✓ "Speak Water-ese" Pollutant Fact Sheets for High School students
- ✓ Guide to Oceanside Waterbodies Booklet
- ✓ Adventures of Oceanside Creek Friends coloring book
- ✓ Clean Water Program Hotline and website magnets

ES.3.9 Public Participation Component

The Clean Water Program hosted a total of four cleanup events: one at Loma Alta Creek, one at Buena Vista Creek, one at the San Luis Rey River, and three Oceanside beach cleanups. An approximate cumulative total of 657 volunteers participated in the events, removing a more than 28 tons of trash, debris, appliances, household items, furniture, construction materials, and other unwanted items.

ES.3.10 Assessment of Jurisdictional URMP Component

The San Diego Copermittes developed a new framework assessment program which focuses on the development of Assessment Levels 1-6. The Clean Water Program continued to utilize this approach to programmatic assessment in the annual report. Due to inadequate long-term information available at this time, the Clean Water Program was unable to assess the Program's effectiveness on all levels, but an attempt was made to assess the information available.

ES.3.11 Fiscal Component

The City of Oceanside Clean Water Program continues to receive funding from various sources. The Projected 2006-2007 budget will increase from the2005-2006 budget, which results from the necessary growth in the program.

SECTION 1: INTRODUCTION

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2001-01, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District, referred to in this document as the Municipal Permit. Pursuant to Part I.1.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (Jurisdictional URMP) Annual Report describes the activities relating to the Municipal Permit that the City conducted during the 2006-2007 annual reporting period (July 1, 2006 – June 30, 2007).

In the interests of communicating consistent messages to the community regarding the most efficient and effective means of reducing storm water and urban runoff pollution, and as directed under Part N of the Municipal Permit, this document was developed following the standardized format developed and agreed upon by the Copermittees. For the most part, compliance with the Municipal Permit was undertaken by the Copermittees through the development and implementation of the Jurisdictional URMP, therefore this Annual Report is organized similar to the Jurisdictional URMP.

1.1 Background Information

History of Urban Runoff Regulation

The Federal Clean Water Act was amended in 1987 to address urban runoff. Municipalities throughout the United States were directed to obtain National Pollutant Discharge Elimination System (NPDES) permits for discharges of urban runoff from their MS4s by specified dates. In response to the Clean Water Act amendment (and the pending federal NPDES regulations which would implement the amendment), the SDRWQCB issued an “early” municipal storm water permit, Order No. 90-42, in July 1990 to various jurisdictions for their urban runoff discharges.

As the name implies, this “early” permit was issued prior to the November 1990 promulgation of the final federal storm water regulations. Although Order No. 90-42 contained the “essentials” of the then-proposed 1990 regulations, the requirements were written in very broad terms. Municipal Storm Water Permit Order No. 2001-01 (Municipal Permit) is the re-issuance of Order No. 90-42. The Municipal Permit address the basic requirement in federal law for a program that reduces pollutants discharged from municipal storm sewers to the maximum extent practicable, and also includes the specific program elements required by federal regulations. The Municipal Permit exceeds federal specification by also directing municipal storm water dischargers to meet water quality standards; by directing structural post-construction treatment best management practices (BMPs) of a specified size for new development and significant redevelopment without limitation by the MEP standard; and by directing the San Diego Copermittees to develop and implement watershed-based programs.

The Municipal Permit was issued to the following jurisdictions:

City of Carlsbad	*City of Imperial Beach*	*City of San Marcos*
City of Chula Vista	*City of La Mesa*	*City of Santee*
City of Coronado	*City of Lemon Grove*	*City of Solana Beach*
City of Del Mar	*City of National City*	*City of Vista*
City of El Cajon	*City of Oceanside*	*County of San Diego*
City of Encinitas	*City of Poway*	*Unified Port District*
City of Escondido	*City of San Diego*	

Under the Municipal Permit, each Copermittee is required to address the following principal elements (SDRWQCB, 2001):

Establish and maintain adequate legal authority to control pollutant discharges into and from its municipal separate storm sewer systems.

Develop and implement a Jurisdictional Urban Runoff Management Program, which will reduce discharges of pollutants and runoff flow during each major phase of urban development (i.e., planning, construction, and use or operation phases) within its jurisdiction.

Collaborate with other San Diego Copermittees within its watershed(s) to develop and implement a Watershed Urban Runoff Management Program, which will identify and address the highest priority water quality issues/pollutants in their respective watershed(s).

Collaborate with all other San Diego Copermittees to address common issues, promote consistency, and plan and coordinate urban runoff activities.

Develop and implement a Receiving Waters Monitoring Program, which shall focus on the collection of monitoring data to be used for the achievement of water quality policies and the protection of beneficial uses.

Submit various reports describing the measures it is undertaking to meet the requirements of the Municipal Permit.

This Annual Report responds to the last of these elements, which is detailed in Section I of the Municipal Permit.

1.2 Jurisdictional URMP Annual Report Requirements

Section I of the Municipal Permit defines the requirements for the Jurisdictional URMP Annual Report and states that each Jurisdictional URMP Annual Report shall, at a minimum, contain the following:

	Annual Report Section
1. A comprehensive description of all activities conducted by the Copermittee in order to meet all of the requirements in each component of the Municipal Permit's JURMP section.	See Below
Existing Development Component (Including Municipal, Industrial, Commercial, Residential, and Education)	Sections 2-5 and Section 9
Land-Use Planning for New Development and Redevelopment Component	Section 6
Construction Component	Section 7
Illicit Discharge Detection and Elimination Component	Section 8
Education Component	Section 9
Public Participation Component	Section 10
Assessment of Jurisdictional URMP Effectiveness Component	Section 11
Fiscal Analysis Component	Section 12
2. Each Copermittee's accounting of all:	
Inspections Conducted	Section 2-5
Reports of illicit discharges (i.e. complaints) and how each was resolved (indication of referral source)	Sections 8
Enforcement actions taken	Section 8
Education efforts conducted	Section 9
3. Public participation mechanisms utilized during the Jurisdictional URMP Implementation process.	Section 10
4. Proposed revisions to the Jurisdictional URMP.	Section 11
5. A summary of all urban runoff related data not included in the annual monitoring report (e.g. special investigations).	See San Luis Rey WURMP
6. Budget for the upcoming year.	Section 12
7. Identification of management measures proven to be ineffective in reducing urban runoff pollutants and flow.	Section 11
8. Identification of water quality improvements or degradation.	Section 11

1.3 Prohibitions

Section B.3 of the Municipal Permit requires Copermittees, within 365 days of adoption of the Municipal Permit, to identify non-storm water discharges not to be prohibited and Best Management Practices (BMPs) required for treatment of discharges not prohibited.

The City of Oceanside developed this information and submitted it to the SDRWQCB in February 2002, within the City's Jurisdictional URMP Document. As detailed in the Jurisdictional URMP, the City updated the urban runoff regulations in their Municipal Code in order to comply with the Municipal Permit. Pursuant to City Code Section 40.2.2, the following seventeen categories of non-storm water discharges are allowable as long as pollutants in the discharges are reduced to the MEP:

Diverted stream flows.

Rising groundwaters.

Uncontaminated groundwater infiltration [as defined in 40 CFR 35.2005(20)] to MS4.

Uncontaminated pumped groundwater.

Foundation drains.

Springs.

Water from crawl space pumps.

Footing drains.

Air conditioning condensation.

Flows from riparian habitats and wetlands.

Water line flushing.

Landscape irrigation.

Discharges from potable water sources other than main breaks.

Irrigation water.

Lawn watering.

Individual residential vehicle washing.

Dechlorinated swimming pool discharges.

1.4 Legal Authority

Section D.1 of the Municipal Permit requires Copermittees, within 180 days of adoption of the Municipal Permit, to provide the SDRWQCB a statement certified by its chief legal counsel that the Copermittee has adequate legal authority to implement and enforce the requirements of the Municipal Permit. The City of Oceanside provided this statement to the SDRWQCB on August 15, 2001. Pursuant with the Municipal Permit, the statement included:

1. Identification of all departments within the jurisdiction that conduct urban runoff related activities, and their roles and responsibilities under the Municipal Permit.

Include an up to date organizational chart specifying these departments and key personnel.

2. Citation of urban runoff related ordinances and the reasons they are enforceable.
3. Identification of the local administrative and legal procedures available to mandate compliance with urban runoff related ordinances and therefore with the conditions of the Municipal Permit.
4. Description of how these ordinances are implemented and appealed.
5. Description of whether the municipality can issue administrative orders and injunctions or if it must go through the court system for enforcement actions.

SECTION 2: MUNICIPAL (EXISTING DEVELOPMENT) COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2006-2007 reporting period to meet the requirements of Section F.3.a of the Municipal Permit. The foremost activity conducted by the City of Oceanside during the reporting period that responds to the requirements of this section of the Municipal Permit was the implementation and fine-tuning of the Municipal (Existing Development) Component within the City's Jurisdictional Urban Runoff Management Program (Jurisdictional URMP), which includes continued development and implementation of a comprehensive Storm Water Pollution Prevention Plan (SWPPP) for the City Operations Center (COC).

The City continues to use the Municipal Urban Runoff Procedures Manual, prepared as part of the Jurisdictional URMP. The Municipal Manual contains BMP requirements and related guidance for City facilities and employees. This manual was circulated to relevant City staff and has been a useful reference document for training and educational programs.

Order 2001-01 Compliance Summary

F.3.a Municipal (Existing Development)

F.3.a(1) Pollution Prevention	See Section 2.1 of this Annual Report
F.3.a(2) Source Identification	See Section 2.2 of this Annual Report
F.3.a(3) Threat to Water Quality Prioritization	See Section 2.3 of this Annual Report
F.3.a(4) BMP Implementation	See Section 2.4 of this Annual Report
F.3.a(5) Maintenance of MS4	See Section 2.5 of this Annual Report
F.3.a(6) Management of Pesticides, Herbicides, and Fertilizers	See Section 2.6 of this Annual Report
F.3.a(7) Inspection of Municipal Areas and Activities	See Section 2.8 of this Annual Report

2.1 Pollution Prevention

The City's Municipal Component includes specifications for pollution-prevention methods for Municipal Areas and Activities that occur within the City. These methods are activity and site-specific and are described in the Municipal Manual. Municipal facilities and activities are required to meet BMP requirement A.2.1 (BMP A.2.1), which states that all "Dischargers shall implement those Urban Runoff pollution prevention practices that are generally recognized in that Discharger's industry or business, or for that Discharger's activity, as being effective and economically advantageous." Examples of pollution-prevention practices are provided throughout the Municipal Manual, to provide guidance for personnel responsible for the identification and implementation of those practices.

Implementation of pollution prevention was facilitated during the reporting period through continuing educational activities for municipal employees discussed in Section 9. Pollution

prevention is also implemented through other activities, such as municipal inspections, SWPPPs, implementation of the Municipal Manual, and storm drain maintenance.

City employees are encouraged to recycle a variety of products used every day. Municipal offices provide easily accessible bins throughout for recycling paper, aluminum, glass and plastic. The City also recycles inkjet and toner cartridges through a charity program administered by the Police Department and household batteries are collected for proper disposal. Recycled paper is purchased. The City also promotes recycling by providing eye-catching recycling containers throughout their facilities. Photos of two of the fun recycling containers are shown in the previous annual report.

The COC implements an aggressive pollution prevention/recycling program, including: purchasing re-refined oils, and recycling used oils, fuel filters, antifreeze, used tires, batteries and oil filters. The City also owns and operates a System I solvent tank where solvents are distilled on site. Scrap metals are contained and covered until they are picked up by a commercial metal recycling company.

Over 3,688 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 130.7 tons of hazardous materials (including universal waste) during the reporting period. An additional 153 Oceanside households recycled 115.2 tons of E-waste in the same reporting year.

800 gallons of used oil and three barrels of used oil filters were collected at the Harbor for proper disposal from boaters that are harbor slip renters.

2.2 Source Identification

The Municipal Permit requires the City to develop, and update annually, a watershed-based inventory containing the name, address (if applicable), and description of all municipal land use areas and activities that may generate pollutants. During the 2006-2007 reporting period the 2005-06 municipal inventory was used. An updated inventory will be provided with the Updated JURMP, due to the Regional Water Quality Control Board in March 2008. See Table 2-1 at the end of this section for a copy of this inventory.

2.3 Threat to Water Quality Prioritization

Part F.3.a.(3) of the Municipal Permit requires the City to prioritize its inventory of areas and activities by threat to water quality. The Municipal Permit also requires that the prioritization be updated annually. During the 2006-2007 reporting period the 2005-06 municipal inventory was used. An updated inventory will be provided with the Updated JURMP, due to the Regional Water Quality Control Board in March 2008. See Table 2-1 at the end of this section for a copy of the inventory.

During the 2002-2003 reporting period, the City revised the priority of some of the areas and activities previously identified in the Municipal Inventory during JURMP development. During the subsequent reporting periods, the City confirmed during inspections that the revised prioritizations are appropriate. None of the prioritizations were changed during the 2006-2007 reporting period.

2.4 BMP Implementation

As required by the Municipal Permit, the City designated a minimum set of BMPs for High, Medium, and Low Priority Municipal Areas and Activities. These BMPs were described in the Municipal Manual, which was distributed to municipal employees through educational activities described in Section 9 of this report. Each municipal area and facility is required to implement BMPs in compliance with the applicable BMP requirements, according to the priority designation of the area or facility.

The City currently has 425 storm drain inlet markers in place throughout its jurisdiction. During this reporting period additional markers were ordered for installation on all remaining storm drain inlets. These markers will be installed during the next fiscal year in conjunction with the annual cleaning of City maintained storm drain inlets. Labeling is a mandatory BMP for new and existing private developments, and is detailed in the Construction, Commercial, and Industrial Manuals. See below for a photo of the storm drain inlet marker.

The City conducted a feasibility analysis of retrofitting structural flood control devices pursuant to Part F.3.a.(4).i of the Municipal Permit. The feasibility analysis was included as Attachment 2-A of the Jurisdictional URMP in 2003-2004. Based on the analysis, the City did not identify any areas of the City's MS4 where retrofitting was necessary. However, the City does recognize the long-term benefits of retrofitting, both as a backup to source-control strategies and as an alternative to extensive cleaning programs.

As implementation of the Jurisdictional URMP continues, the City further evaluated retrofitting opportunities which resulted in the application for funding to install CDS units in its MS4 at 7 different coastal outfall drainage systems. The City did not receive grant funding for this project. The city will continue with the annual cleaning of all city-maintained storm drain inlets.

The City evaluated retrofitting the San Luis Rey WWTP to capture the first flush from the parking lot and directing it back to the plant. After extensive evaluation it was determined that this project was cost prohibitive. The SLR WWTP does have several BMPs in place to reduce polluted runoff including gravel bags at each storm drain inlet, covered slopes with straw mats and straw waddles, and chemical containers are stored indoors and/or on secondary containment structures. Also, the storm drain inlets are cleaned annually and before the start of the rainy season.

Bacterial Reduction Pilot Program – Oceanside Harbor Boat Wash Outfall Study

Oceanside Harbor has over 40 storm drains that carry flows a short distance to the harbor. From 2003 to present, 14 drains have been fitted with storm drain filters and 7 have been fitted with separator vaults. The vaults are designed to remove debris, sediment and hydrocarbons from the stormwater, with some secondary bacterial removal due to some bacteria being removed in the sediment and debris. The one drain with historical bacterial exceedance receives flows from the harbor boat wash and a sewage dump for recreational vehicles (RV) via a separator vault. Refer to Attachment 2-A for an aerial photograph of the location of the vaults, the boat wash, and the RV dump.

The Bacterial Reduction Pilot Program at Oceanside Harbor is considered an important activity in the San Luis Rey Watershed because it will reduce bacteria loads into the Oceanside Harbor. The objectives of the program are to:

Reduce bacterial concentrations that are discharged into the Oceanside Harbor.

Determine the effectiveness of the BMPs in the pilot studies to evaluate their use in other storm drain vault locations that experience high concentrations of bacteria.

The City of Oceanside conducted a pilot study in FY 2005/06 with Attitude Technologies to fit the vault at the Harbor boat wash with XTEX AM antimicrobial fabric to reduce bacterial levels. The end result of the study, which lasted from October 2005 to September 2006, was that the product did not display long-term effectiveness, possibly the result of added hydrocarbons and sediment load in the runoff.

In FY 2006/07, another pilot project was instated at the Harbor boat wash outfall. Storm drain cleaning had been conducted periodically at this outfall, and reductions in bacterial counts had been observed after each cleaning, indicating that re-growth in the pipe may be a contributing factor to the exceedances. The Clean Water Program staff worked with Harbor Maintenance to increase the cleaning of the conveyance at the boat washes and RV sewage dump to once per month. This pilot study began in February 2007, continued through the end of the fiscal year and is currently ongoing.

The previous pilot project assessing the effectiveness of an antimicrobial fabric installed in the separator vault of the boat wash/RV sewage dump outfall was ongoing through the end of the fiscal year 2005/06 into September 2006. The outfall was cleaned, as part of the previous schedule, on 8/30/06. Monthly cleaning of the conveyance began in February 2007: 2/7/07, 3/3/07, 5/10/07, and 6/8/07.

Point source contributions from the RV dump have been identified as a major culprit in water quality exceedances. In an effort to reduce bacterial load contributions before they reach the outfall, the Clean Water Program implemented two tasks during 2006-2007. These include the development of a spill response plan in conjunction with Harbor Maintenance Staff for future spills into the Boat Wash drain system and installing additional educational signage at the Boat Wash and RV dump locations. The installation of paved berms around the RV dump area to prevent cross contamination into the Boat Wash Drain was determined to be potentially ineffective and would create other drainage problems. The installation of a video surveillance system to assist in identifying future violations was considered to be too cost prohibitive at this time. Being considered for the 2007-08 reporting period is the installation of a Modular Wetlands Vault to utilize plants to uptake pollutants prior to reaching the harbor receiving water.

For more information on this special study, please refer to Attachment 2-A.

Loma Alta Creek Ultraviolet Treatment Facility

The City submitted a proposal to the State Water Resources Control Board Prop. 40 Clean Beaches Initiative for the Loma Alta Creek Ultraviolet Treatment Facility and was awarded $5,000,000 in December 2006. The project involves the construction of a filtration and ultraviolet radiation (UV) stormwater treatment facility to be located adjacent to the Loma Alta Creek outlet at Buccaneer Beach in the City of Oceanside, at the existing La Salina Wastewater Treatment Facility. One hundred percent of the dry weather creek flows (averaging 1,000 gallons per minute) will be intercepted at the outlet and diverted to the UV storm water treatment facility, located on the northern bank of the creek. The treatment facility will be housed within a reinforced masonry building.

The overall project, once completed, will capture up to1,000 gallons per minute of urban runoff, treat it, and discharge it through a pipe that will extend along the existing section of rip-rap that runs along the north side of the Loma Alta creek outlet at Buccaneer Beach. During wet weather months (December through April), the lagoon would be opened to allow free flow to the ocean and the UV system would be bypassed. The project will not only protect the beach water quality, but eliminate the added flow into the Ocean Outfall.

The project is based on the following design elements:

Minor streambed modifications needed to improve the inlet conditions to the screening facility.
A new screening and inlet pump structure.
Filtration.
Chemical storage and pumps (if needed to meet filtration goals).
Ultraviolet (UV) irradiation disinfection.
A discharge pipeline across Pacific Avenue to a beach discharge.
A building to house the electrical controls and UV reactors.
A screen wall at the south end of the plant.
A connection to the sewer or other point for filter backwash disposal.
Electrical service.
Connection to the La Salina Wastewater Treatment Plant Supervisory Control and Data Acquisition system.

The City hired Carollo Engineers to undertake design and permitting for the project in the 2005-2006 reporting period. Request for Professional Services was disseminated and a contract was executed with Carollo Engineering during the 2006-07. Construction is scheduled to begin during the 2007-2008 reporting period. The facility is expected to be in operation in 2008. Additional information on the project will be included in future annual reports.

Lower San Luis Rey River Bacterial Source Tracking Study

The City of Oceanside continued to seek funding to implement a study to identify sources of bacterial contamination in the Lower San Luis Rey River (LSLR) and San Luis Rey River (SLR) mouth and recommend appropriate actions and activities to eliminate the input of those bacterial sources. A proposal submitted to the State Water Resource Control Board (SWRCB) Proposition 50 Clean Beaches Initiative awarded funding to conduct this study. Titled the Lower San Luis Rey Bacteria Source Tracking Project, the City was awarded $554,375 with an executed grant agreement expected in fall 2007. Grant applicants were required to provide

matching and in-kind dollars to the project. The San Luis Rey River Joint monitoring program between the City of Oceanside and the County of San Diego will be used as match for the project in addition to in-kind matches from representatives serving on the Technical Advisory Committee (TAC), including an additional stakeholder, the City of Vista.

The goals of this project are to:

- Identify point and non-point sources of bacteria contamination in the lower San Luis Rey River and at the River mouth during dry and wet weather.
- Estimate the dry, wet, and annual bacterial loading in the lower San Luis Rey River and at the River mouth.
- Recommend Best Management Practices (BMP) to reduce and eliminate bacterial sources.

Multi-tiered genetic microbial testing methods will be used to identify bacteria sources in the Lower San Luis Rey River. This multi-tiered approach includes bacterial concentration assessment using traditional measurements of fecal indicator bacteria to determine the flux of bacteria in the river and river mouth, and genetic microbial source tracking methods which will be approved by the Technical Advisory Committee.

The sampling and analysis study will include, at a minimum:

- A comprehensive visual observation program will be conducted to identify point and non-point source runoff.
- Collection and analysis of flow data to be utilized in bacteria loading estimates from the sources identified.
- Dry and wet weather sampling events will be conducted to identify sources and quantify wet, dry, and annual bacterial loading estimates.
- Multi-tiered genetic microbial testing in the Lower San Luis Rey River and the river mouth at the Pacific Ocean outlet. The sample site selection process will include appropriate sites for tracking TMDL implementation progress.
- Recommendations for potential Best Management Practices to reduce and eliminate bacterial sources in the Lower San Luis Rey River and at the river mouth will be developed.

For more information on this special study, please refer to Attachment 2-B.

The City has continued to implement projects in Loma Alta Creek as part of the Loma Alta Creek Watershed Management Plan. The City has a number of projects identified as actions items in process. Some of the projects and status updates are highlighted below:

Loma Alta Creek Flood Control Detention Basins – This project was designed to improve the level of flood control and water quality in the Loma Alta Watershed by constructing detention basins. The project was completing construction toward the end of this reporting period. Updates will be provided in future annual reports.

Myers Property Restoration and Erosion Control Project - The City of Oceanside (City), in coordination with the Carlsbad Watershed Network (CWN) and the San Diego Regional Water Quality Control Board (RWQCB), was awarded Proposition 13 grant funding to create a locally led, community-based habitat restoration and erosion control project on the Myers property in the City of Oceanside. The City's Loma Alta Creek Watershed Management Plan (WMP) (MEC 2003) and its umbrella document, the Carlsbad Hydrological Unit WMP (Carlsbad WMP) (City of Carlsbad et al. 2003), identified the Myers property as a source of

sedimentation posing a threat to Loma Alta Creek's water quality and, ultimately, to the water quality of Loma Alta Slough, which is a Section 303(d) impaired coastal water body (RWQCB 2006). The desired outcome of this project is to improve water quality in the Loma Alta Creek watershed by removing sediment-laden discharges at the source utilizing soil and erosion control BMPs.

Technology Associates International Corporation (TAIC) was awarded the contract to mange the restoration project. Restoration and erosion control on the Myers Property was achieved by implementing temporary bio-engineered erosion control methods in and along the tributary and revegetation with coastal sage scrub on the unauthorized trails and barren areas on the property. Water quality and Bioassessment baselines were established through pre-restoration samples in Loma Alta Creek. Based on these data, a restoration and erosion control plan was prepared, accompanied by construction documents (plans and specifications). Installation of restoration and erosion control measures commenced in the fall of 2006 and was completed in January 2007.

Following restoration, water quality monitoring was completed in Loma Alta Creek in addition to bioassessment and habitat monitoring. Throughout the project, a public awareness campaign was conducted, including several publications by the City of Oceanside (website, newsletter, and Oceanside Magazine), stakeholder education through the Carlsbad Watershed Network, two workshops and one public site visit. Long-term monitoring and maintenance of the site are essential to maintain the native coastal sage scrub vegetation community, control invasive species, monitor sediment load in the creek, and control site access. The City of Oceanside has committed $17,000 annually to monitor and maintain the site.

A copy of the complete final report is available upon request and will be made available on the Clean Water Program Webpage.

Other City Projects with Water Quality Benefits

Below is an overview of other restoration projects in the City that can provide water quality benefits. All of these projects have been completed and five-year monitoring and maintenance plans will be implemented on all of these projects.

Collins Property Wetlands Revegetation – This project removed many of the exotic (non-native) plant species that have naturalized themselves along the Collins property wetlands, located on the north side of Oceanside Boulevard and west of Corporate Center Drive. Exotic and invasive plants were removed and replaced with native plants.

San Luis Rey Recreation Trail Revegetation - This project, located between I-5 and the north/south Amtrak rail line, removed many of the exotic (non-native) plant species that had naturalized themselves along the San Luis Rey River, and adjacent recreation trail. Exotic and invasive plants were removed and replaced with native plants.

Foss Lake Revegetation - This project removed many of the exotic (non-native) plant species that had naturalized themselves along the Foss Lake wetlands, near Douglas Drive and west of Vandegrift Avenue. Exotic and invasive plants were removed and replaced with native plants.

Storm Water Pollution Prevention Plan for City Operations Center

The City has developed a Storm Water Pollution Prevention Plan (SWPPP) for the City Operations Center (COC) which was implemented in the fall of 2002. The COC includes the following areas: employee parking lot, COC main building (offices, storage and fleet maintenance), traffic control lot, back lot, city vehicle parking lot, large vehicle equipment lot, fueling area, waste disposal area, wash facilities, general use yard, west corner lot and temporary housing of Fire Station #8. The SWPPP has the following objectives: identify and evaluate sources of pollutants from the facility that may affect the quality of urban runoff discharge and identify and implement site-specific best management practices to reduce or prevent pollutants in urban runoff discharges. The SWPPP outlines BMPs to be implemented at each of the respective areas. A comprehensive training program was also developed and implemented in concert with the COC SWPPP.

A number of the BMPs discussed in the SWPPP were being implemented prior to the SWPPP development. Since implementation of the SWPPPS began, one of the improvements that required changes in procedures was the implementation of proper erosion and sedimentation control measures, including regular sweeping. Through the training, which emphasized the importance of the program, transition to SWPPP BMPs was effective and the BMPs are being implemented properly.

The new main wash facility at the COC, constructed in 2002-2003, continues to be utilized by all City Departments. The main wash facility is a completely contained area, surrounded on all sides by berms and curbs. The entire area drains to the eastern corner of the pad where it enters a grated inlet that leads to a clarifier and then the sewer. An overflow is available if the drain to the sewer is clogged or the volume of water exceeds its capacity, however, this is not anticipated to happen frequently because the drain is maintained daily. The main wash facility is used for washing large vehicles and equipment, and collection of street sweeper and vactor truck contents.

The Public Works Department installed two BioClean filters at the only two outlets which drain runoff from the City Operations Center in the last reporting year: one on the south side of the COC where a 36” box outlet discharges directly into Loma Alta Creek, and one at the 12” pipe which discharges onto Oceanside Blvd. These filters are regularly inspected and maintained.

In response to issues that were recognized during the inspections, structural BMPs that were added in 2005-2006 include a garage cover built to cover drums in storage area, an area was designated to hold all wrecked vehicles from police department and secondary containment installed, and all slopes on property were stabilized with mulch, straw blankets, and fiber rolls.

The City uses a combination of education, inspection, coordination with City departments and “open eyes and ears”, (Oceanside Eyes) to ensure that BMPs are implemented for municipal areas and activities.

2.5 Maintenance of MS4s

As required by Section F.3.a.(5) of the Municipal Permit, the City has implemented a schedule of maintenance activities for the City’s entire MS4, including any structural controls designed to reduce pollutant discharges to or from its MS4s and related drainage structures. As defined by the Municipal Permit, the City’s MS4 consists of streets, curbs, catch basins, inlets, natural creeks and streams, pipes (varying materials), rock lined channels, concrete channels, culverts, desilting basins, and detention basins.

2.5.1 Inspection and Maintenance Activities

The City's schedule of inspection and maintenance activities are described below. There have been no significant changes to the existing programs during the reporting period.

Public Streets and Curbs

Every Monday, Wednesday, and Friday, the downtown commercial areas and other high uses areas are swept using regenerative air vacuum street sweepers. These areas include the medians on Mission Avenue, Canyon Drive, and the Civic Center Drive Bridge, Wisconsin Avenue to Pacific Street to Ditmar Street, the Strand, and all downtown parking lots. In addition the downtown core and beach areas, and Coast Highway Highway 101) are swept five times per week, Monday through Friday.

The majority of all other public streets, not included in the areas listed above, are swept every other week. In some low use residential and commercial areas, the streets may be swept monthly.

As necessary, sweepers or other clean up crews will respond to public or municipal staff reports to collect debris and/or sweep.

Inspection of streets and curbs for cleaning is continuous. City employees are encouraged to identify areas that should be cleaned and to call the municipal employee reporting line, Oceanside Eyes. Residents are encouraged to call the Public Works Maintenance Hotline.

Creeks, Catch Basins, Channels, Drainages, and Basins

The City has determined, through historical knowledge and records, the locations within the MS4 that require regular waste removal and those areas that are less likely to require any waste removal. The City has developed a comprehensive Flood Control Annual Maintenance Program which includes a list of the high priority areas, divided into zones, which are to be inspected annually using an inspection checklist. Approximately 110 sites are inspected and maintained annually.

May 1 through September 30 programs:

All catch basins and curb inlets in the following locations will be cleaned of trash, sediment, and other debris:

- All of the City west of Interstate 5
- The Crown Heights neighborhood
- The East Side neighborhood

All catch basins and curb inlets will be inspected and cleaned as necessary

All channels, basins, creeks, and other drainage facilities will be inspected and cleaned as necessary

Year round programs are as follows:

At least one public clean-up event will be held at the San Luis Rey River, Loma Alta Creek, and Buena Vista Creek.

Clean catch basins and curb inlets annually.

Removal of trash and debris from channels, basins and other storm drain facilities annually.

Removal of silt accumulation from creeks, desilting basins, detention basins and rock and concrete lined channels annually.

Flow line vegetation maintenance, as allowed to avoid habitat destruction, of creeks, desilting basins, detention basins and concrete and rock lined channels.

2.5.2 Inspection and Maintenance Results

Inspections and maintenance activities were conducted throughout the reporting period as described in the previous section. Street sweeping activities resulted in the collection of 2,480 tons of waste during the reporting period. These results are comparable with the 2,283 tons collected in 2005-06, the 2,538 collected in 2004-2005 and the 2,604 tons collected during 2003-2004 reporting. In order to inspect and clean storm drains as described above during the May through September period, the City contracted with United Storm Water Inc. A total of 3,252 structures (catch basins, manholes, inlets, outlets, etc.) were inspected and cleaned during the reporting period. A total of 65.5 tons of waste was removed. The waste generally consisted of trash, green waste, dirt, sand, roots, solids, rocks, and silt. During the inspections, it is also noted whether or not the drain is labeled. Approximately 45% of the structures that were inspected were labeled. No inlets were labeled during this reporting period.

The Public Works, Street Division, performs ongoing inspection and cleaning of storm drains and flood control facilities, as well as annual maintenance of all major facilities such as creeks, desilting basins, detention basins and rock and concrete lined channels. In response to inspections, the City cleaned approximately 10,000 feet of storm drain during the reporting period. In addition, City crews addressed and cleaned approximately 50 privately owned catch basins and also cleared approximately 100 concrete and earthen channels. The total linear footage of storm drains, catch basins, and concrete and earthen channels that were cleaned was approximately 49,395. The storm drain maintenance activities are recorded on monthly logs and in a Work Order database at the City Operations Center. In addition, the Street Division performs annual maintenance/cleaning in September, October, and November for all major MS4 facilities. The results of this work are recorded on an Annual Maintenance List that is also available at the City Operations Center.

During this reporting period the City inspected and cleaned, as necessary, 313.6 miles (1,655,818 feet) of sanitary sewer. None of the sewer lines were slip-lined during this time, though there are 5,352 feet of sewer line scheduled to be slip-lined during the next reporting period. Since the beginning of the 2005-06 reporting period the City has slip-lined a total of 5,979 linear feet of sewer.

The City hosts a number of cleanup events throughout the year. Such events assist the Street Division in the maintenance and removal of debris along Oceanside's waterways. During the reporting period, the cleanup events had 657 volunteers that removed over 28 tons (57,200

pounds) of trash, debris, furniture, appliances, shopping carts and other unwanted materials river and creek beds and adjacent areas. For more information about the Community Cleanups Events, please refer to Section 9: Education Component or Section 10 Public Participation Component in this annual report. Table 2-2 shows a summary of the cleanup events hosted during the reporting period:

Table 2-2 2006-2007 City of Oceanside Clean-Up Events

Date	Event	Number of Participants	Pounds/Tonnage of Waste Removed
7/5/2006	Morning After Mess	141	1,200 pounds
9/16/2006	Buena Vista Creek & Oceanside Beach Cleanup	247	Not Tracked
11/11/2006	Oceanside Beach Cleanup	122	Not Tracked
4/28/2007	Loma Alta Creek & Buccaneer Beach Cleanup	147	56,000 pounds

2.6 Management of Pesticides, Herbicides, and Fertilizers

As required by Section F.3.a.(6) of the Municipal Permit, the City has selected BMPs to implement at Municipal Areas and Activities to reduce the contribution of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers. Areas and activities of concern are municipal facilities, public rights-of-way, parks, recreational facilities, golf courses, landscaped areas, etc. The BMPs are detailed in the Municipal Manual.

Pesticides, herbicides and fertilizers are seldom used directly by the City, as it contracts out the majority of work involving these substances. To facilitate compliance with this Section of the Municipal Permit, the City has reviewed its landscaping contract and has integrated BMP requirements into the conditions of the contract.

2.7 Fire Fighting

The City has identified the locations of the fire department facilities and has included them in the municipal facilities inventory. As a part of the fire-fighting program, the City has designated a minimum set of BMPs for fire fighting facilities and activities. The BMPs are detailed in the SWPPP for the COC and the City's Municipal Manual and are required to be implemented at all fire fighting facilities and activities with the exception of emergency fire fighting activities. The inspection procedures and frequencies that are described in Section 13.4 of the Jurisdictional URMP were not altered during the 2006-2007 reporting year. The City is currently adhering to the Jurisdictional URMP and inspecting the Fire Station facilities in accordance with the SWPPP. The City utilizes the enforcement procedures described in Section 13.5 of the Jurisdictional URMP and action is taken when deemed necessary. During the reporting period no enforcement actions were necessary. The City implemented an aggressive education program coincident with the development and implementation of the SWPPP and believes that the strong focus on education contributed to the low number of enforcement actions required.

In December 2002, the Fire Chief authorized all fire personnel the option of using the new COC car wash facility for all Oceanside Fire Department vehicles. The memo also reiterated that the washing of all vehicles must comply with runoff standards. Details of the COC wash area are in Section 2.4 of this report. However, the long-term plan for the Fire Department is the relocation of Fire Station 7 and construction of an exclusive wash facility for fire vehicles and hoses. Construction of this new facility commenced during this reporting period.

The Oceanside Fire Department implemented a pilot project and replaced impervious pavement with pervious pavement at Fire Station 5 at the vehicle washing area during reporting period 2005-06. The product is called Drivable Grass by Soil Retention Products. If the project is deemed successful, in future years other fire station vehicle washing areas will be converted to pervious pavement.

2.8 Inspections

The municipal inspection program implemented by the City in accordance with part F.3.a.(7) of the Municipal Permit is described in Section 2.7 of the Jurisdictional URMP and is also detailed in the Municipal Manual. Pursuant to the Municipal Permit, the City's program requires annual inspection of high priority municipal areas and activities. The City is committed to conducting proper inspections of municipal facilities as required by the permit. A summary of some of the municipal inspections follows. Documentation of all of the inspections is included in the Municipal Inventory and Prioritization database, in Table 2.1, found at the end of this section. A copy of the inspection reports is available upon request.

Parking Lots

The City's parking lots were clean and showed no significant concerns in regards to urban runoff pollution during the inspections. From the results of the inspections, it appears that the City's street sweeping schedule is effective. In cases where additional maintenance/cleaning were needed, the parking lot maintenance schedule was increased to three times weekly and daily Monday through Friday, in some cases.

Parks

During the park inspections, there were very few potential violations noted. The only issue in the parks was the need to clean leaves and trash from gutters and ditches. Park supervisors were notified of the recommendations and follow-up actions were taken.

Fire Stations:

All fire stations were inspected during the reporting period with minor potential violations noted. The recommendations included: keeping storm drain inlets free of debris, proper storage, containment and labeling of containers filled with liquid, and the need to have fiber rolls placed around wrecked vehicles that are temporarily stored on site. Vehicles continue to be washed at the washing facility at the COC or the pervious pavement washing area at Fire Station 5. Fire Station 7, currently under construction, will have a state-of-the-art vehicle washing facility available for use by all fire stations.

Closed Landfills:

The City of Oceanside owns and operates two closed landfills (Maxson Street Landfill, WDID 9375005695 and Mission Avenue Landfill, WDID 9375005696). Both facilities are inspected quarterly per permit requirements and an annual report is prepared each for submittal to the Regional Water Quality Control Board. If potential storm water discharges are identified, appropriate BMPs are implemented to prevent pollutants from entering MS4.

City Operations Center

During the COC Inspection potential violations were identified. Recommendations included:

Large 40-yard roll-off disposal bins not covered when not in use.
Cover scrap metal and place materials on pallets or off ground.
Check fiber rolls on slopes and replace where needed.
Add gravel bags around inlet areas for additional containment.
Store all 55 gallon drums and buckets on secondary containment and under cover.

Through a second follow-up inspection and discussions with COC staff, it was verified that the issues above had been corrected.

Inspection Follow up Activities

Table 2-1 includes all inspections of municipal sites with recommendations where storm water BMPs needed maintenance or improvement. In cases where recommendations were made, (33 of 141 sites) inspectors followed up the recommendations with further contact with the facilities to ensure that the improvements were completed as requested. All sites where recommendations were made complied with the recommendations under the guidance of the City of Oceanside.

Follow-up activities by the Clean Water Program staff included:
13 post-inspection follow-up contacts with facility's supervisors.
2 follow-up site visits.

Follow-up activities by Code Enforcement Officers included:
No site visit follow-ups were needed during this reporting period.

2.9 Enforcement

Pursuant to Section F.3.a(8) of the Municipal Permit, the City enforces its ordinances at all Municipal Areas and Activities following the program discussed in Section 2.8 of the Jurisdictional URMP. An enforcement action typically occurs as a result of an inspection or in response to a report by the public or a municipal staff member. The City employs several enforcement mechanisms and penalties to ensure compliance with its ordinances, as discussed in the Jurisdictional URMP. No municipal enforcement actions were necessary during the reporting period.

SECTION 3: INDUSTRIAL (EXISITING DEVELOPMENT) COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2006-2007 reporting period to meet the requirements of Section F.3.b of the Municipal Permit. The foremost activity conducted by the City of Oceanside during the reporting period that responds to the requirements of this section of the Municipal Permit was the continued implementation of an industrial inspection program that not only served to educate industrial business owners and operators about their obligations under federal, state and local regulations, but to detect and eliminate polluting and potential activities and/or discharges to the MS4.

As part of the Jurisdictional URMP, the City distributed an Industrial Urban Runoff Requirements Manual (Industrial Manual). The Industrial Manual contains BMP requirements and related guidance for industrial businesses located in the City. This manual has been distributed to businesses through mail, workshops, inspections, the Clean Water Program website, and copies are also available at City Hall. This document will be reviewed and revised where needed during the upcoming reporting period and will be included with the new JURMP, which is due to the Regional Water Quality Control Board in March 2008.

Order 2001-01 Compliance Summary

F.3.b.(1) Pollution Prevention	See Section 3.1 of this Annual Report
F.3.b.(2) Source Identification	See Section 3.2 of this Annual Report
F.3.b.(3) Threat to Water Quality Prioritization	See Section 3.3 of this Annual Report
F.3.b.(4) BMP Implementation	See Section 3.4 of this Annual Report
F.3.b.(5) Monitoring of Industrial Sites	See Section 3.5 of this Annual Report
F.3.b.(6) Inspection of Industrial Sites	See Section 3.6 of this Annual Report
F.3.b.(7) Enforcement Measures for Industrial Sites	See Section 3.7 of this Annual Report
F.3.b.(8) Reporting of Non-Compliant Sites	See Section 3.8 of this Annual Report

3.1 Pollution Prevention

The City's Jurisdictional URMP Industrial Component requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by industrial owners and/or operators pursuant to City Code. In order to ensure industrial owners and operators are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for industrial areas and activities, located within the City, are specified in the Industrial Manual.

The City has conducted notable efforts to ensure industrial business owners and/or operators have received a copy of the Industrial Manual either through an annual inspection, at the City Hall Business License counter, a response to a complaint or concern reported through the Urban Runoff Hotline number (Hotline), or through a direct mailing. In addition, copies of the

Industrial Manual are available on the Clean Water Program website. Extensive education for industrial businesses has been conducted during the reporting period and can be reviewed in Section 9: Education Component of this annual report.

Code Enforcement officers ensure the applicable pollution prevention activities are implemented by industrial owners and/or operators through an annual inspection or through calls received from the Hotline. All industrial businesses visited, through the annual inspection program or by complaint call acknowledged on the Hotline, receive follow-up visits until the industrial business is deemed in-compliance with City Code. All documentation pertaining to site visits are available from the Code Enforcement division.

3.2 Source Identification

The Municipal Permit requires the City to develop, and update annually, a watershed-based inventory containing the name, address, and description of all industrial sites within its jurisdiction, regardless of site ownership. The original inventory was prepared in February 2002 and was provided in the Jurisdictional URMP document. The inventory was updated during the 2005-2006 reporting period and was used again during this reporting period.

The City has implemented a system that will ensure accurate information is recorded on all industrial and commercial inventories and threat prioritizations. Since January 2002, all business license applicants have been requested to complete an urban runoff information form to provide additional information about the business and its specific activities that have the potential to contribute to polluted runoff. The City will use this information to supplement the information in its business license database and will refer to it when needed.

Based on the current inventory, the City contains approximately 388 businesses that are classified as industrial. Table 3-2 provides a summary of the number of industrial businesses inventoried in the City according to the watershed in which the business is located.

Table 3-2 Industrial Businesses in the City by Watershed

Watershed	Number of Industrial Business
San Luis Rey	130
Loma Alta	232
Buena Vista	26
Agua Hedionda	0
Total	**388**

3.3 Threat to Water Quality Prioritization

Part F.3.b.(3) of the Municipal Permit requires the City to prioritize inventoried industrial sites with regard for the potential threat that the site may have on the water quality from urban runoff. The Municipal Permit also requires that the prioritization be updated annually. The original prioritization of inventoried areas and activities was prepared in February 2002 and was provided in the Jurisdictional URMP document with the inventory. An updated prioritization of inventoried areas and activities is included provided in Table 3.1 and will replace the original

prioritization in the Jurisdictional URMP document. A summary of the prioritizations is provided in Table 3.3.

Table 3.3 Industrial Businesses in the City by Priority

Priority	Number of Industrial Business
High[a]	82
Medium[a]	170
Low	136

a. All industrial businesses that are conditionally subject to the General Industrial Storm Water Permit are included as Medium Priority Industrial Businesses since a determination has not been made as to their applicability to the permit. Therefore, the number of High Priority Industrial Businesses shown in this table may increase, and the number of Medium Priority may decrease, as additional information becomes available, or the revised General State Industrial Permit goes into effect.

This reporting period represents the fourth full year of implementation of this program and has helped the City to develop an accurate inventory to prioritize the facilities. The program has also increased awareness of the City's Clean Water Program to the business owners and operators.

3.4 BMP Implementation

The City's Jurisdictional URMP Industrial Component requires the implementation and maintenance of applicable Best Management Practices (BMPs) by industrial owners and/or operators pursuant to City Code. In order to ensure industrial owners and operators are informed and understand the applicable BMPs to be implemented and/or maintained for their business' priority status, site-specific BMPs are outlined in the Industrial Manual disseminated in various ways as previously noted.

Code Enforcement officers ensure the applicable BMPs are implemented by industrial owners and/or operators through an annual inspection or through calls received on the Hotline. Every industrial business visited, through the annual inspection program or by complaint call acknowledged on the Hotline, received follow-up visits until the industrial business was deemed in-compliance with City Code. All documentation pertaining to these site visits are available from the Code Enforcement division.

3.5 Monitoring

Pursuant to Section F.3.b(5) of the Municipal Permit, monitoring is required by the City for each High Priority Industrial Business. Monitoring requirements are detailed in the Industrial Manual which is made available to industrial owners and operators through the annual inspection process, at the City Hall Business License counter, through a direct mailing, attendance of a workshop, or on the Clean Water Program website.

Many of the City's industrial facilities determined to be High Priority are subject to the Statewide General Storm Water Permit for Industrial Activities (Industrial Permit) and monitoring

requirements are required under the jurisdiction of the Regional Water Quality Control Board. Per the Jurisdictional URMP, businesses that conduct monitoring in accordance with the requirements of the Statewide General Storm Water Permit for Industrial Activities meet the City's monitoring requirements. Those High Priority facilities not subject to the Industrial Permit were required to demonstrate "no exposure" during annual inspections, or be required to file for coverage under the Industrial Permit. Copies of the annual inspection reports are available from the Code Enforcement Division.

3.6 Inspection

Section 3.6 of the Jurisdictional URMP document describes the City's program for conducting inspections of industrial businesses. This program was developed and implemented in accordance with part F.3.b.(6) of the Order. The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

Completion of 234 site inspections of industrial businesses during the reporting period.

Completion of 82 required annual inspections of high priority industrial businesses during the reporting period.

Completion of 152 required annual inspections of medium priority industrial businesses during the reporting period.

Completion of 0 inspections of low priority industrial businesses during the reporting period.

Completion of 20 follow-up visits either in response to the initial inspection or response to a complaint.

Dissemination of the Industrial Manual to help industrial owners and/or operators become aware of the City Code requirements for BMP implementation, and information on applicable BMPs for specific industrial businesses and activities.

Ensuring proper and continuing training of the Code Enforcement officers dedicated to the Clean Water Program.

Responding to 5 concerns/complaints reported through the Hotline number in response to an Industrial Business.

The Clean Water Program started a new approach to inspecting businesses during the 2005-06 reporting period. When Code Enforcement officers conduct inspections, they often target a whole commercial and/or industrial complex, rather than individual businesses located sporadically throughout a complex. By inspecting all the businesses in an area, owners and/or operators are made aware of their BMP requirements and can work with their neighbors to implement BMPs or solve drainage problems as a team, rather than as individuals. As a result of these mixed inspections, medium and low priority businesses are also inspected in the mix. Copies of inspection reports are available from the Code Enforcement Division.

3.7 Enforcement

Section 3.7 of the Jurisdictional URMP document describes the City's program for enforcement of ordinances at an industrial site. This program was developed in accordance with part F.3.b.(7) of the Order. An accounting of all enforcement actions, taken by Code Enforcement Officers, is shown in the Table 3-7.

Table 3-7 Accounting of Industrial Code Enforcement Actions for 2006-2007 Reporting Year

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Inspection Report	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept.	Stop Work Notice
# of Actions	18	234	2	4	61	1	8	2	1	0

3.8 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of noncompliant sites located in the City that are determined to pose a threat to human or environmental health. Verbal notification is required within 24 hours of the discovery of noncompliance and a written report should be submitted to the RWQCB within five days of the incident. A site is considered to be noncompliant if one or more violations of local ordinances, permits, plans, or the Order exist at the site.

Events of noncompliance are evaluated according to the following criteria to determine whether the events pose a threat to human or environmental health:

The event of noncompliance resulted in a spill or discharge of hazardous materials, pollutants, or pollutant laden runoff that affected a receiving water.

The quantity and/or concentration of the pollutants in the spill or discharge affecting the Receiving Water was such that it may cause or contribute to an exceedance in water quality objectives as specified in the San Diego Basin Plan.

Other events that require reporting include the following:

Any unanticipated bypass that exceeds any effluent limitation in the Order.

Any discharge of treated or untreated wastewater, including reclaimed or recycled wastewater, resulting from pipeline breaks, obstruction, surcharge or any other circumstance.

Any discharge or spill of raw or potable water not authorized by the Order or resulting from pipeline breaks, obstruction, surcharge or any other circumstance.

Any upset which exceeds any effluent limitation in the Order.

Any spill or discharge of non-storm water not authorized by the Order. Non-storm water discharges not prohibited by the City do not need to be reported under the reporting requirements of this section.

Any violation of the Order.

In addition to the above criteria, City personnel evaluating the case of noncompliance may make a conclusion based on other specific circumstances.

No notifications to the RWQCB were made by the City during the reporting period concerning a commercial business.

SECTION 4: COMMERCIAL (EXISTING DEVELOPMENT) COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2006-2007 reporting period to meet the requirements of Section F.3.c of the Municipal Permit. The foremost activities conducted by the City of Oceanside during the reporting period, that responds to the requirements of this section of the Municipal Permit, was the continued implementation of an inspection and education program geared towards commercial businesses on urban runoff impacts and appropriate BMPs to be implemented.

As part of the Jurisdictional URMP, the City also distributed the Urban Runoff Requirements Manual for Commercial Businesses (Commercial Manual). The Commercial Manual contains BMP requirements and related guidance for Commercial businesses located in the City. This manual has been distributed to businesses during inspections and/or visits by Code Enforcement officers, via the City's web page, and copies made available at City Hall. This document will be reviewed and revised where needed during the upcoming reporting period and will be included with the new JURMP, which is due to the Regional Water Quality Control Board in March 2008.

Order 2001-01 Compliance Summary

F.3.c.(1) Pollution Prevention	See Section 4.1 of this Annual Report
F.3.c.(2) Source Identification	See Section 4.2 of this Annual Report
F.3.c.(3) BMP Implementation	See Section 4.4 of this Annual Report
F.3.c.(4) Inspection of Commercial Sites and Sources	See Section 4.5 of this Annual Report
F.3.c.(5) Enforcement of Commercial Sites and Sources	See Section 4.6 of this Annual Report

4.1 Pollution Prevention

The City's Jurisdictional URMP Commercial Component requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by commercial business owners and/or operators pursuant to City Code. In order to ensure commercial business owners and operators are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for commercial areas and activities, located within the City, are specified in the Commercial Manual.

The City has conducted notable efforts to ensure commercial business owners and/or operators have received a copy of the Commercial Manual, either through an inspection by Code Enforcement, at the City Hall Business License counter, or a response to a complaint or concern reported through the Urban Runoff Hotline (Hotline) number. In addition, copies of the Commercial Manual are available on the Clean Water Program website. Extensive education for commercial businesses has been conducted during

the reporting period and can be reviewed in Section 9: Education Component of this annual report.

Code Enforcement officers ensure the applicable pollution prevention activities are implemented by commercial owners and/or operators through calls received on the Hotline and outside observations. All calls received on the Hotline generate a case file in which Code Enforcement officers visit the facility and conduct follow-up visits until the commercial business is deemed in-compliance with City Code. All documentation pertaining to site visits are available from the Code Enforcement division.

During the reporting period, the City of Oceanside continued to assist commercial and industrial businesses by distributing stencils for storm drain and dumpster area labeling. Stencils were distributed to businesses through regular inspection or through the Water Utilities Department counter.

4.2 Source Identification

The Municipal Permit requires the City to develop, and update annually, a watershed-based inventory containing the name, address (if applicable), and description of all commercial businesses within its jurisdiction, regardless of site ownership. The original inventory was prepared in February 2002 and was provided in the Jurisdictional URMP document. The inventory was updated during the 2005-2006 reporting period and was used during this reporting period.

The City has implemented a system that will ensure accurate information is recorded on all industrial and commercial inventories and threat prioritizations. Since January 2002, all business license applicants have been requested to complete an urban runoff information form to provide additional information about the business and its specific activities that have the potential to contribute to polluted runoff. The City will use this information to supplement the information in their business license database and refer to when needed. The requirement of the urban runoff forms has also helped to increase awareness of the City's Clean Water Program to business owners.

Based on the current inventory, the City contains approximately 629 businesses that are classified as High Priority Commercial Businesses. Table 4-2 provides a watershed-based summary of the number of commercial businesses and High Priority Commercial Businesses inventoried in the City.

Table 4-2 Commercial Businesses and High Priority Commercial Businesses in the City by Watershed

Watershed	High Priority Commercial Businesses
San Luis Rey	244
Loma Alta	255
Buena Vista	114
Agua Hedionda	16
Total	**629**

4.3 Threat Prioritization

Part F.3.c.(2) of the Municipal Permit requires the City to prioritize inventoried commercial businesses with regard for the potential threat that the site may have on the water quality of urban runoff. The Municipal Permit also requires that the prioritization be updated annually. The original prioritization of inventoried areas and activities was prepared in February 2002 and was provided in the Jurisdictional URMP document with the inventory. An updated prioritization of inventoried areas and activities is provided in Table 4.1 and will replace the original prioritization in the Jurisdictional URMP document.

The City has implemented a system that will ensure accurate information is recorded on all industrial and commercial inventories and threat prioritizations. Since January 2002, all business license applicants have been requested to complete an urban runoff information form to provide additional information for the business. The City will use this information to supplement the information in their business license database when conducting the inventories and threat prioritizations.

4.4 BMP Implementation

The City's Jurisdictional URMP Commercial Component requires the implementation and maintenance of applicable Best Management Practices (BMPs) by commercial business owners and/or operators pursuant to City Code. In order to ensure commercial business owners and operators are informed and understand the applicable BMPs to be implemented and/or maintained, site-specific BMPs for commercial areas and activities, located within the City, are specified in the Commercial Manual. As stated previously the Commercial Manual is distributed to businesses during inspections and/or visits by Code Enforcement officers, via the City's web page, and copies made available at City Hall

Code Enforcement officers ensure the applicable BMPs are implemented by commercial owners and/or operators through calls received on the Hotline and outside observations. All commercial business related calls received on the Hotline generated a case file in which Code Enforcement officers visited the facility and conducted follow-up visits until the commercial business was deemed in-compliance with City Code. All documentation pertaining to these site visits are available from the Code Enforcement division.

During the reporting period, the City of Oceanside continued to assist commercial and industrial businesses by distributing stencils for storm drain and dumpster area labeling. Stencils were distributed to businesses through regular inspection or through the Water Utilities Department counter.

4.5 Inspections

Section 4.5 of the Jurisdictional URMP document describes the City's program for conducting inspections of commercial businesses. This program was developed and implemented in accordance with part F.3.b.(6) of the Order. As detailed in the Jurisdictional URMP, inspections of High and Low Priority Commercial Businesses are conducted as deemed necessary by the Code Enforcement personnel. Some inspections are initiated in response to a public or municipal staff report, an illicit discharge source investigation, or as a follow up to a previous inspection.

The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

343 eating and drinking establishments were inspected at least once for the proper implementation and maintenance of grease control devices. The inspector forwarded all facilities that were not in compliance with stormwater regulations to Code Enforcement Officers.

One inspection of each of the twenty-two agricultural operations within the City of Oceanside was conducted for compliance to urban runoff regulation City Code Chapter 40.

One Hundred Twenty Seven (127) inspections of high priority commercial businesses within the City of Oceanside, excluding restaurants and agricultural operations, were inspected.

Ensuring proper and continuing training of the Code Enforcement Officers dedicated to the Clean Water Program.

During the 2003-2004, 2004-2005, and 2006-07 reporting periods, all eating and drinking establishments were inspected for compliance to the City's urban runoff regulations and adequate implementation and maintenance of BMPs. The initial inspection served to educate eating and drinking establishment owners and/or operators of their storm water and grease control BMP responsibilities by inspection of current BMPs, distribution of the Commercial Manual, and distribution of a BMP poster, booklet, and video to educate employees. During the 2006-07 reporting period all restaurants were raised to high priority and were inspected at least one time during the reporting period. If any restaurants were not in compliance follow-up inspections were conducted until they were in compliance per City Code.

Clean Water Program staff inspected 22 agricultural operations. A quick site inspection of the facilities revealed few had illegal discharges and/or inadequate BMPs. Staff informed the owners and/or managers of the any corrective actions which needed to be taken to be in-compliance with City Code. Follow-up inspections were conducted to ensure BMP implementation and elimination of illegal discharges. All operations were deemed in-compliance after follow-up inspections.

In addition, 127 commercial businesses were inspected. When Code Enforcement Officers conduct inspections, they often target whole commercial and industrial complexes. Often these business areas contain a mix of industrial and commercial operations. Rather than simply inspect the High Priority industrial businesses located in these parks, Code Enforcement officers inspect all businesses in the area to ensure owners and/or operators understand their BMP requirements and can work with their

neighbors to implement BMPs or solve drainage problems. Therefore, some commercial businesses are inspected in the process.

Code Enforcement officers received calls on the Hotline concerning potential violations at a commercial business, including the third follow-up inspection conducted at non-compliant restaurants. All calls on the Hotline generated a case file in which Code Enforcement officers visited the facility and conducted follow-up visits until the commercial business was deemed in-compliance with City Code. Copies of inspection reports are available from the Code Enforcement Division.

4.6 Enforcement

Section 4.5 of the Jurisdictional URMP describes the City's program for enforcement of ordinances at commercial sites. This program was developed in accordance with part F.3.b.(7) of the Order. The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

One Hundred Twenty Seven (127) commercial businesses were inspected within the City of Oceanside, excluding agricultural operations and eating/drinking establishments.

One inspection of each of the twenty-two agricultural operations within the City of Oceanside was conducted for compliance to urban runoff regulation City Code Chapter 40.

Enforcement actions by Code Enforcement Officers for commercial facilities begin with a referral from another department, a site visit, or by a complaint lodged by phone. Depending on the severity of the violation, follow up activities may include phone calls, site visits, written correction notices with specified timeframes, or administrative warnings. If these actions do not produce the required improvements, administrative citations (starting at $100, with a $1,000 maximum fine) are given. An accounting of all enforcement actions, taken by Code Enforcement Officers, is shown in the following table.

Table 4-4 Accounting of Commercial Code Enforcement Actions for 2005-2006 Reporting Year

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Inspection Report	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept	Stop Work Notice
# of Actions	15	127	1	0	9	*1*	31	5	0	0

Copies of inspection reports and notices are available on request for further information

4.7 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of noncompliant sites in the City that are determined to pose a threat to human or environmental health. Oral notification is required within 24 hours of the discovery of noncompliance and a written report should be submitted to the RWQCB within 5 days of the incident. The criteria established for determining when a site is noncompliant and poses a threat to human or environmental health is described in Section 3.8 of this report.

The Regional Water Quality Control Board received complaints from private citizens regarding the following two projects:

Eternal Hills Cemetery Expansion

North County Transit District sprint Rail project.

The Regional Water Quality Control Board conducted their own site visits of these two operations during this reporting period.

SECTION 5: RESIDENTIAL (EXISTING DEVELOPMENT) COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2006-2007 reporting period to meet the requirements of Section F.3.d of the Municipal Permit. The foremost activity conducted by the City of Oceanside during the reporting period that responds to the requirements of this section of the Municipal Permit was the continued implementation of an enforcement program that responded to and monitored potential violation calls received on the Oceanside Urban Runoff Hotline (Hotline).

As part of the Jurisdictional URMP, the City also developed an Urban Runoff Requirements Manual for Residents (Residential Manual). The Residential Manual contains BMP requirements and related guidance for residents of the City. This manual has been distributed to residents through the City's web page and City Hall counters.

Order 2001-01 Compliance Summary

F.3.d.(1) Pollution Prevention	See Section 5.1 of this Annual Report
F.3.d.(2) Threat to Water Quality Prioritization	See Section 5.2 of this Annual Report
F.3.d.(3) BMP Implementation	See Section 5.3 of this Annual Report
F.3.d.(4) Enforcement of Residential Areas and Activities	See Section 5.4 of this Annual Report

5.1 Pollution Prevention

The City's Jurisdictional URMP Residential Component requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by residents pursuant to City Code. In order to ensure residents are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for residential areas and activities, located within the City, are specified in the Residential Manual.

The City has conducted notable efforts to ensure residents have either received a copy of the Residential Manual or pollution prevention BMP information, either through an inspection by Code Enforcement, information distributed at City Hall counters, through a direct mailing, or through a homeowners association or apartment complex management company. In addition, information pertaining to residential BMPs and copies of the Residential Manual are available on the Clean Water Program website. Extensive residential education has been conducted during the reporting period and can be reviewed in Section 9: Education Component of this annual report.

Code Enforcement officers ensure the applicable pollution prevention activities are implemented by residents through calls received on the Hotline and outside observations. All calls received on the Hotline generated a case file in which Code Enforcement officers visited the area of the complaint and conducted follow-up visits until the situation was deemed in-compliance with City Code. All documentation pertaining to site visits are available from the Code Enforcement division.

5.2 Threat to Water Quality Prioritization

Pursuant to Section F.3.d.(2) of the Order, the City identified High Priority Residential Areas and Activities in the Jurisdictional URMP. The following residential activities have been identified by the City to be High Priority Activities:

Automobile or boat repair and maintenance.

Automobile washing.

Automobile parking.

Home and garden care activities and product use.

Disposal of household hazardous waste.

Disposal of pet waste.

Disposal of green waste.

Any other residential activity that contributes a significant pollutant load to the MS4.

The City has also identified residential areas of High Priority. These areas include the following:

Residential areas located within 200 feet of an Environmentally Sensitive Area (ESA).

Residential areas where the discharges, storm water or non-storm water, are conveyed to an ESA without commingling with any other discharges or flows.

Residential areas tributary to a 303(d) listed water body and that involve (uses, generates, disposes, etc.) the pollutant for which the water body is listed

Without consideration of any BMPs, the area or activity involves pollutants in a quantity, manner, and location that results in or may result in a violation of water quality objectives in a receiving water.

5.3 BMP Implementation

The City's Jurisdictional URMP Residential Component requires the implementation and maintenance of applicable Best Management Practices (BMPs) by residents pursuant to City Code. In order to ensure residents are informed and understand the applicable BMPs to be implemented and/or maintained, BMPs for residential areas and activities, located within the City, are specified in the Residential Manual.

The City has conducted notable efforts to ensure residents have either received a copy of the Residential Manual or BMP information, either through an inspection by Code Enforcement, information distributed at City Hall counters, through a direct mailing, or through a homeowners association or apartment complex management company. In addition, information pertaining to residential BMPs and copies of the Residential Manual are available on the Clean Water Program website. Code Enforcement officers ensure applicable BMPs are implemented by residents through calls received on the Hotline and outside observations. All calls received on the Hotline generate a case file in which Code Enforcement officers visit the area of complaint and conduct follow-up visits until the situation is deemed in-compliance with City Code. All documentation pertaining to site visits are available from the Code Enforcement division.

5.4 Enforcement

Section 5.4 of the Jurisdictional URMP describes the City's program for enforcement of ordinances in residential areas. This program was developed in accordance with part F.3.d.(4) of the Order. The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

Code Enforcement response to 150 urban runoff related cases, related to residential areas and activities, during the reporting period.

An accounting of all residential enforcement actions, taken by Code Enforcement Officers, is shown in the following table.

Table 5-4 Accounting of Residential Code Enforcement Actions for 2006-2007 Reporting Year

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Inspection Report	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept.	Stop Work Notice
# of Actions	157	229	6	39	34	0	28	5	2	0

SECTION 6: LAND-USE PLANNING FOR NEW DEVELOPMENT AND SIGNIFICANT REDEVELOPMENT COMPONENT

This section documents the land use planning for new development and redevelopment activities performed by the City of Oceanside during the reporting period of July 1, 2006 to June 30, 2007. In order to satisfy the requirements set forth by Section F.1 of the SDRWQCB Order 2001-01 (Municipal Permit), the City continued implementation and refinement - of the comprehensive Land-Use Planning for the New Development and Redevelopment Component within the City's Jurisdictional Urban Runoff Management Program (JURMP). A directory of the subsections within the Order's Section F.1 and corresponding Annual Report compliance sections are listed in Table 6.1, below.

Table 6.1: Order 2001-01 Compliance Summary

F.1.a Assess General Plan	See Section 6.1 of this Annual Report
F.1.b Modify Development Project Approval Processes	See Section 6.2 of this Annual Report
F.1.c Revise Environmental Review Processes	See Section 6.3 of this Annual Report
F.1.d Conduct Education Efforts Focused on New Development and Redevelopment	See Sections 6.4 and 9.1 of this Annual Report

6.1 General Plan

During the development and implementation of the JURMP, the City performed an assessment of the General Plan with respect to water quality. It was determined that policies exist in the General Plan which direct decisions for the protection of the natural environment and require implementation measures to protect the environment during land development stages as well as post-development. In an effort to bolster these policies, the City considered amendments to the General Plan which would establish specific water quality and watershed land use policies for the community.

Pursuant to the Municipal Permit, City Council adopted water quality and watershed protection concepts into the City's General Plan as amendments in June of the 2002-2003 reporting period. The revised General Plan continued to be implemented during the reporting period. There were no additional changes to the General Plan during 2006-2007, besides project specific land use amendments made in regards to North County Transit District rail projects.

6.2 Development Project Approval Processes

To address water quality issues, the City's development project approval process was modified during previous reporting periods, specifically to address the development project requirements and conditions of approval. During this reporting period, the City made no revisions to the Engineering SUSMP standard conditions to address the Storm Water Mitigation Plan (SWMP), Runoff Assessment Report (RAR), and Operation and Maintenance (O&M) Plan requirements.

The City strictly enforces its stormwater development requirements as part of the development plan process for discretionary projects and prior to issuing permits for ministerial projects. As applicable, a project is not considered for approval at the Planning stage without approval of a SWMP or RAR and grading plans are not approved at the Engineering stage until an O&M Plan has been approved and until the grading plans identify the precise locations and extent of any BMPs required by the SWMP/RAR. Additionally, all projects conditioned for the submission of a SWMP and O&M Plan must have an approved Storm Water Facilities Maintenance Agreement (SWFMA) and security posted (amount determined in the approved O&M Plan cost estimate) prior to obtaining approval for the grading plans. The City requires that the SWFMA be recorded along with the project property at the County Recorder in order to ensure long-term implementation of the stormwater plans, even beyond any change of ownership in the property.

The City implemented the requirement of submission of a RAR in December of 2002 in order to address water quality impacts from certain new development and redevelopment projects requiring discretional approval but which were slightly smaller than those which trigger the SUSMP requirements. As part of this program, a RAR guidance document was prepared to assist document preparers. During the 2006-2007 reporting period, 11 development projects triggered the RAR submittal requirements; these 9 initial project submittals collectively resulted in 5 additional re-submittals and subsequent reviews with 7 of the 11 project RARs being approved during the period. As well, 77 applicable development projects triggered the SWMP submittal requirements and these 77 initial project submittals collectively resulted in 61 additional re-submittals for review; 17 of these documents were approved. See Table 6-1 for more detail on project submittals and review results.

Table 6-1: 2006-2007 SUSMP Document Submittal and Review Summary

File Number(s)	Project Name	Type of Development	Number of Reviews in FY 06-07	Approved in FY 06-07 (Y/N)
SWMPs				
T-8-02, RC-8-02	Boardwalk	Commercial/Residential	2	Y
T-5-06	Libby Lake Village	Residential	3	Y
D-29-05	Mission and Douglas Center	Commercial	2	Y
D-6-04	El Corazon Senior Center	Municipal	1	
T-15-05	Thunderbird Road Subdivision	Residential	3	Y
T-6-05	Guajome Crest Homes	Residential	2	
D-6-03 Rev05	Oceanside Gateway Business Park, Parcel 1	Industrial	2	Y
T-13-04	Breanna Estates II	Residential	1	Y
D-8-05	Robertson's Concrete Batch Plant	Industrial	2	Y
D-6-03	Oceanside Gateway Business park, Parcels 2-4	Industrial	1	Y
T-203-05	314 South The Strand	Residential	1	
T-6-06	Vista Pacific	Residential	2	
T-1-06	Loma Alta Village	Commercial	2	Y
RC-13-01	Jones Residence	Residential	3	Y
ADP-2-06	Loma Alta Creekside/Elliot Drilling Building	Industrial	2	
T-9-05	Del Oro Heights	Commercial	2	
D-1-06	Oceanview Plaza – Lot 3	Commercial	1	Y
File Number(s)	Project Name	Type of Development	Number of Reviews	Approved in FY 06-07

			in FY 06-07	(Y/N)
P-2-06	Fenway @ Platino Court	Commercial	2	Y
D-6-06, P-7-06	Oceanside Pavilion	Commercial	2	
P-8-06	3-lot Split @ Stallion	Residential	1	
D-3-79 Rev05	Target Center Revision	Commercial	2	
T-200-04	Belvedere Mixed Use Project	Commercial/Residential	1	
D-11-06	Community Lutheran Church	Residential	2	
ADP-3-06	Roundtable Pizza @ Quarry Creek	Commercial	2	Y
D-12-06	Fire Station No. 1	Municipal	1	
RC-28-06	Laguna Pacifica	Residential	3	Y
T-7-06	Emerald @ Oceanside	Residential	1	
T-203-05	314 South The Strand	Residential	2	Y
D-22-06	1522 Mission Square	Commercial	1	
T-10-04	Red Point-Dixie	Residential	3	Y
T-11-04	Lusardi Capistrano	Residential	2	
P-19-05	Pacific Tide	Residential	2	Y
D-23-06	El Camino Executive Center	Commercial	2	
P-14-02	Eternal Hills Memorial Park Expansion	Commercial	2	
T-3-05	Mesa Ridge	Residential	2	Y
--	San Luis Rey Crossing	Commercial	1	
D-25-06	Pacific View Medical Center	Commercial	2	
D-24-99	Jeffries Ranch	Residential	4	Y
D-26-06	Lil Jackson Senior Center	Municipal	2	
T-200-06	Oceanside Beachfront Resort	Commercial	1	
ACP-13-05	Hamilton Residence	Residential	3	Y
D-25-05	Buddy Todd Park	Municipal	2	Y
RC-207-04	Chevron @ 1601 Coast Highway	Commercial	3	
D-29-06	Pacific Coast Business Park A	Industrial	3	
D-30-06	Pacific Coast Business Park B	Industrial	3	
D-31-06	Pacific Coast Business Park C	Industrial	3	
T-2-06	Avocado Highlands	Residential	2	
RC-206-04	Holiday Inn	Commercial	3	Y
D-32-06	Vista Del Oro Medical	Commercial	2	
D-35-06	Melrose Commercial Center	Commercial	2	
RC-30-05	1925 South Myers St	Residential	1	
--	Mission San Luis Rey Cemetery Expansion	Commercial	1	
D-1-06	Oceanview Plaza – Lot 3	Commercial	1	Y
D-5-07	The Villas @ San Luis Rey	Residential	2	
D-200-07	412 The Strand Condos	Residential	2	
T-16-02	Rancho Vista Revision	Residential	2	Y
D-25-05	San Luis Rey Crossing	Commercial	2	Y
T-7-05	Club Life Senior Center	Commercial/Residential	1	
RC-23-06	Firtel Residence	Residential	2	Y
T-11-05	Liberty Walk Lot 1	Commercial	2	
T-11-05	Liberty Walk Lot 2	Commercial	2	
D-19-03	Union 76 “Oceansider”	Commercial	2	Y
T-3-03	1st San Diego Properties	Commercial	1	
T-200-07	Hyatt Place Oceanside	Commercial	1	
D-1-07	El Camino Medical Condo	Commercial	2	
D-6-07	Oceanside Recovery Center	Commercial	1	
T-12-04	Oceanpointe	Residential	2	Y
D-11-03	Mohsen Fuel	Commercial	1	
T-6-04, D-22-04	Oceanside Vista	Commercial	1	
D-8-07	La Pacifica II	Residential	1	

T-203-06	City Mark Block 18	Commercial/Residential	1	
T-203-06	City Mark Block 19	Commercial/Residential	1	
T-203-06	City Mark Block 20	Commercial/Residential	1	
T-203-06	City Mark Block 21	Commercial/Residential	1	
T-203-06	City Mark Block 5	Commercial/Residential	1	
T-201-05	Montego Condos	Residential	1	Y
Total SWMP Project Submittals: 77 Total SWMP Reviews: 138 Total SWMPs Approved: 17				
SWMP Amendments/Addendums				
D-19-04	Oceanside Market Place and Business Center	Commercial	1	Y
T-2-04	Dixie Village	Residential	2	Y
T-13-02	Ocean Heights	Residential	1	Y
D-6-03 Rev05	Oceanside Gateway Business park, Parcels 2-4	Industrial	2	Y
D-9-05	La Mision Village	Residential	1	Y
T-16-02	Rancho Vista Revision	Residential	1	
T-4-05	Old Grove Medical	Commercial	1	
T-200-06	400 South The Strand	Residential	1	Y
T-203-02	Oceanside Terraces	Residential	1	
D-20-05	Casa de Amparo	Commercial	1	Y
T-10-04	Redpoint-Dixie	Residential	1	Y
T-4-05	Mission 76 Office Building	Commercial	1	Y
D-31-05	Ocean Ranch – Lot 15	Industrial	1	
Total SWMP Project Amendments: 13 Total SWMP Amendment Reviews: 15 Total SWMPAmendments Approved: 9				
O&M Plans				
D-19-04	Oceanside Market Place and Business Center	Commercial	1	Y
ADP-5-04	Airport Road Automotive	Commercial	2	Y
D-9-05	La Mision Village	Residential	3	Y
RC-15-05	800 South Pacific St – Lot 8	Residential	1	Y
RC-16-05	800 South Pacific St – Lot 9	Residential	1	Y
RC-17-05	800 South Pacific St – Lot 10	Residential	1	Y
D-20-05	Casa de Amparo	Commercial	1	
D-28-05	Essex Ranch Del Oro	Commercial	1	
T-200-06	400 South The Strand	Residential	3	Y
RC-8-05	Brezza di Pacifica	Residentail	1	Y
D-19-90 Rev05	Walgreen's & Shops "C"	Commercial	1	Y
D-12-01	Jack-in-the-Box	Commercial	2	
ADP-3-06	Round Table Pizza	Commercial	2	Y
T-200-04	Belvedere Mixed Use Project	Commercial/Residential	1	
T-2-04	Dixie Village	Residential	3	Y
P-16-05	Palazzi de Pacifica	Residential	1	Y
D-31-05	Ocean Ranch – Lot 15	Industrial	2	
D-20-05	Casa de Amparo	Commercial	2	
P-4-06	Ocean Terrace Professional Center	Commercial	2	Y
RC-207-04	Chevron @ 1601 Coast Highway	Commercial	3	Y
T-13-06	Oceanside Gateway Business Park, Parcel 1	Industrial	2	Y
T-2-03	Hi Hope Ranch Revision	Commercial	1	
T-4-05	Mission 76 Office Building	Commercial	2	
P-8-04	Pacific Coast Business Park – Common Areas	Industrial	3	Y
RC-206-04	Holiday Inn	Commercial	2	
T-3-04	North River Village	Commercial/Residential	1	
T-5-04	2137 Willowbrook Drive	Residential	1	

Total O&M Plan Projects Submitted: 27	Total O&M Plan Reviews: 46	Total O&M Plans Approved: 16		
RARs				
D-210-04	Junio Residence	Residential	1	
T-202-06	Crystal Sands	Residential	3	Y
P-202-03	North Tremont Condos	Residential	2	Y
P-15-04	Robertson Lot Split	Residential	1	Y
P-2-05	Fraser TPM	Residential	3	Y
D-210-04	502 South The Strand	Residential	1	Y
T-1-07	Las Brisas Condos	Residential	1	
C-4-07	Worm Residence	Residential	1	
D-1-06	Oceanview Plaza – Lots2 & 3	Residential	1	Y
RC-211-04	Jubela Residence	Residential	1	
Total RAR Projects Submitted: 11	**Total RAR Reviews: 16**	**Total RARs Approved: 5**		
SWFMAs				
D-19-04	Oceanside Market Place and Business Center	Commercial	1	Y
D-20-05	Casa de Amparo	Commercial	2	
RC-8-05	Brezza Di Pacifica	Residential	2	Y
D-9-05	La Mision Village	Residential	2	Y
RC-207-04	Chevron @ 1601 Coast Highway	Commercial	3	Y
RC-14-05	931 S. Pacific St	Residential	1	
T-200-06	400 South The Strand	Residential	2	Y
P-14-05	1443 S. Pacific St	Residential	1	Y
D-200-03	Oceanside Pier Resort	Commercial/Residential	1	Y
T-4-05	Mission 76 Office Building	Commercial	2	
P-8-04	Pacific Coast Business Park – Common Areas	Industrial	1	Y
RC-206-04	Holiday Inn	Commercial	1	
Total SWFMAs Submitted: 12	**Total SWFMA Reviews: 19**	**Total SWFMAs Approved: 8**		

RARs were approved once comprehensive Site Design BMPs and Source Control BMPs were proposed at the project site while SWMPs required the same approach but with additional Treatment Control BMPs incorporated into the plan; review comments are sent to the document preparer for plans that are not approved. Examples of types of approved Treatment Control BMPs include vegetated swales, extended detention basins, infiltration trenches/basins, sand filters, and select proprietary devices and all of these proposed BMPs are required to meet specific design standards to ensure proper function and performance.

Once the SWMP is approved, an O&M Plan, a SWFMA and a security deposit (security) for the long term operation and maintenance of the BMPs are required to be submitted and approved prior to issuance of grading permits. The O&M Plan is reviewed with the grading plans to make sure that the grading plans incorporate all the BMPs, as identified in the SWMP and O&M Plan. During this reporting period a total of 39 O&M Plans and Agreements were submitted initially; 26 documents were re-submitted for review and 24 were approved.

The City maintains a philosophy of requiring a combination of treatment control BMPs to obtain acceptable pollutant removal efficiencies. Additionally, the City calls for implementation of treatment control BMPs above the Maximum Extent Practicable (MEP) standard if the receiving water is listed on the CWA 303-d List as impaired for pollutants which are also anticipated to be generated from the project ("primary pollutants of concern").

The SWMP submittal and review process continues to be tracked in a database. The City's electronic database for SWMP/O&M Plan and RAR tracking has been enhanced and includes: file number, name of the project, APN, type of development, site size, watershed, project owner, O&M approval status, amount of security required, maintenance agreement and contact information for the fiscally responsible party, and types of BMPs implemented on the site.

The City is in the process of updating its SUSMP guidance documents, including a SWMP template to address the requirements of the new Municipal Permit (Order R9-2007-0001). These updates should streamline document preparation and subsequent review process. Once in place, these documents will enhance the existing guidance manual. The City is also cataloguing its structural BMP locations by project APN to meet the new Municipal Permit requirements; the City is considering the incorporation of this data in its GIS mapping database for tracking accuracy. Any of these updates will be included in future Annual Reports as they are developed and implemented. Additionally, the City continues to participate in San Diego County Copermittee workgroups focused on improving and sharing effective resources in the implementation of the SUSMP requirements.

6.3 Environmental Review Processes

Pursuant to Municipal Permit Section F.1.c, the City has modified the Standard Environmental Checklist that is used to determine the environmental impacts of a project. The City continues to use the updated Environmental Checklist to evaluate the environmental impacts of proposed projects.

6.4 Education Efforts Focused on New Development and Redevelopment

The City has developed internal and external education programs to educate the municipal staff, planning boards, project applicants, developers, contractors, property owners and community planning groups of water quality issues. The City plans to provide a training seminar for the City Planning Commission in regards to adaptive watershed management and local government opportunities. The City's education programs are described further in the Section 9 Education Component of this document.

6.5 SUSMP Post Construction BMP Maintenance

The City of Oceanside has implemented a program to track and inspect projects that are subject to SUSMP requirements after construction to verify the correct implementation and maintenance of the approved BMPs for that project. During the 2006-2007 reporting year, 31 completed construction projects were inspected for post-construction BMP maintenance. This program will be continued in future reporting years and will include an improved tracking mechanism as part of WURMP activities.

SECTION 7: CONSTRUCTION COMPONENT

The program described in this section was developed pursuant to Section F.2 Order 2001-01 (Municipal Permit) and contains the information required, as specified in Section H.1.a.(1) of the Order.

A large portion of the Construction Component of the City's JURMP is described in Chapter 40 of the City Code, the City's Grading and Erosion Control Ordinances, and the City's *Construction Urban Runoff Requirements Manual* (Construction Manual). This section primarily discusses those portions of the Construction Component that are not contained within these documents and references these documents for additional information where appropriate. The Construction Manual was developed by the City to provide construction projects with guidance in order to comply with the City Code and its ordinances. The Construction Manual is a living document and will change with time to ensure an effectively implemented program. Updated versions of the manual will be made available whenever modifications have been proposed and approved by the City.

Table 7. 1: Order 2001-01 Compliance Summary

F.2.a Pollution Prevention	See Section 7.1 of this Annual Report
F.2.b Grading Ordinance Update	See Section 7.2 of this Annual Report
F.2.c Modify Construction and Grading Approval Process	See Section 7.3 of this Annual Report
F.2.d Source Identification	See Section 7.4 of this Annual Report
F.2.e Threat to Water Quality Prioritization	See Section 7.5 of this Annual Report
F.2.f BMP Implementation	See Section 7.6 of this Annual Report
F.2.g Inspection of Construction Sites	See Section 7.7 of this Annual Report
F.2.h Enforcement of Construction Sites	See Section 7.8 of this Annual Report
F.2.i Reporting of non-compliant sites	See Section 7.9 of this Annual Report
F.2.j Education focused on construction activities	See Section 7.10 of this Annual Report

7.1 Pollution Prevention

The City's Construction Component includes specifications for pollution-prevention methods that must be used by construction site owners, developers, contractors, and other responsible parties. These methods are described in the Construction Manual. Construction site owners, developers, contractors, and other responsible parties are subject to BMP requirement A.2.1 (BMP A.2.1), which states that all "Dischargers shall implement those Urban Runoff pollution-prevention practices that are generally recognized in that Discharger's industry or business, or for that Discharger's activity, as being effective and economically advantageous." Examples of pollution-prevention practices are provided throughout the Construction Manual to provide

guidance for responsible parties conducting construction activities that must identify and implement those practices. Implementation of pollution-prevention methods by responsible parties for construction sites is verified by the City through an inspection program summarized in Section 7.7 and also described in the Construction Manual. Inspectors use a checklist for their inspections that includes an item for pollution prevention methods. All pollution prevention BMPs listed in the JURMP were implemented or required to be implemented in the 2005-2006 reporting year. In the City of Oceanside, the majority of the construction projects are large-scale and all BMPs listed in the JURMP are needed and required by the City on each site. The City enforces the implementation of these methods pursuant to the City Code, as described in Section 7.8 and the Construction Manual. In some cases, the City may require the project proponent to implement advanced construction BMPs beyond those listed in the construction manual if a threat to runoff water quality is perceived and the current minimum BMPs seem insufficient. One such example is the Morro Hills Master Plan Development off Vandergrift Boulevard, where the City required the developer of this project to cover all barren slopes with straw blankets during the rainy season until groundcover plants could be established.

7.2 Grading Ordinance Update

The City is required by the Order to review and update its grading ordinances as necessary for compliance with the Order. On February 6, 2002 the City Council adopted an ordinance revising its grading and erosion control ordinances. The adopted ordinance made the necessary amendments to comply with the Order.

Significant amendments to the grading and erosion control ordinances are summarized below:

An erosion control plan must be developed for all grading projects

Necessary BMPs must be implemented on all grading projects to prevent erosion and sediment travel

Grading must be minimized during the wet season

The specific BMPs presented in Section F.2.b of the Order are required on all grading projects

Erosion control must be utilized as the primary method of preventing sediment from leaving the site

The areas to be cleared and graded must be limited to only those areas necessary for construction

Exposure time of cleared soils must be minimized, and areas must be re-vegetated as early as feasible

All slopes must be stabilized

Sites covered by the General Construction Storm Water Permit must provide proof of coverage prior to issuance of a grading permit

Discharges of sediment or other construction pollutants are prohibited

The City reserves the right to implement necessary BMPs to stop any prohibited discharge from a site at the permittee's expense

The City reserves the right to issue a Stop Work Order if the erosion control plan has not been implemented

The City reserves the right to revoke the grading permit until such time as the erosion control plan is properly installed and implemented.

7.3 Modification of the Construction and Grading Approval Process

The City is required by the Municipal Permit to make modifications to the City's construction and grading approval process as necessary to ensure that pollutants from the site will be reduced to the maximum extent practicable, to ensure that pollutants from the site will not cause or contribute to an exceedance of water quality objectives, and to ensure that all grading and construction activities (referred to by the City as projects) are in compliance with applicable ordinances, regulations, and the Municipal Permit.

Modifications to the City's approval process for construction and grading projects are supported by four actions taken by the City:

Amendments to the City's Grading and Erosion Control Ordinances (described in Section 6.2)

Revisions to the City's Planning Commission Standard Conditions of Approval

Amendments to Chapter 40 of the City Code

Implementation of a Construction Manual.

These actions, except for the amendments to the City's Grading and Erosion Control Ordinances that are described in Section 7.2, are described in the following sections. The approval process last underwent comprehensive updates and amendments in 2002 and has continued to be implemented successfully since then without further updates. The process will again be reviewed and amended, as necessary, in the following year in response to the implementation of the new Municipal Permit; any future changes will be provided in the revised JURMP or reported in the Annual Report, as appropriate.

7.3.1 Revisions to the City's Planning Commission Standard Conditions of Approval

Conditions attached to resolutions approved by the Planning Commission for proposed projects include measures that must be met and demonstrated by project proponents prior to the approval of grading and building permits. The standard conditions of approval for proposed projects have been revised to include more specific requirements related to protection of Urban Runoff. Prior to issuance of grading and building permits, the project applicant must demonstrate that they have complied with these requirements. Measures taken to comply with the requirements will be reviewed and approved by the Engineering and Building Departments as appropriate. The standard conditions of approval are listed in Attachment 6-A.

7.3.2 Amendments to Chapter 40 of the City Code

Chapter 40 of the City Municipal Code has been amended to include submittal requirements for those project requiring discretionary or ministerial approvals by the City. All such projects must demonstrate compliance with the general Urban Runoff requirements of the City Code through submittal of appropriate plans and other applicable information. Submitted information will be

reviewed by appropriate City staff to determine compliance of the project prior to issuance of grading and building permits.

The amendments to the City Code also incorporate the Construction Manual, which is provided to assist project proponents in complying with the requirements of the City Code. As described in the following section, the Construction Manual provides guidance to project proponents as to the appropriate level of information required for submittal when applying for grading and building permits. It also assists project proponents in selecting the appropriate BMPs to demonstrate that pollution prevention of Urban Runoff will be implemented on the project.

7.3.3 Implementation of a Construction Urban Runoff Requirements Manual

As described in the Construction Manual all construction projects that involve the disturbance of soil or pose a significant threat to Urban Runoff water quality must prepare an Urban Runoff Control Plan (URCP) and implement minimum BMPs. The City's standard submittal requirements for construction projects have been modified to require the proponent to assess the threat that the project poses to the quality of Urban Runoff, assign a threat to runoff water quality of High, Medium, or Low to the project, and prepare an applicable URCP. The threat prioritization process is summarized in Section 7.5 below and is presented to the project proponent through the issuance of the Construction Manual. Based on the assigned threat, the proponent must prepare one of two types of erosion control plans incorporating minimum BMPs. Low Priority Construction Projects will be required to submit a Low Priority URCP. The Low Priority URCP is described in the Construction Manual. Projects with a Medium or High Priority are required to submit a SWPPP prepared in accordance with the Caltrans *SWPPP and Water Pollution Control Program Preparation Manual,* the *California Stormwater Quality Association SWPPP* (available online at www.cabmphandbooks.com), or other approved format. In addition to the SWPPP, projects subject to the General Construction Storm Water Permit must provide proof of coverage under that permit and are required to comply with the regulations of that permit. Construction projects that do not involve the disturbance of soil or pose little or no threat to discharge pollutants can be relieved of these requirements through the submittal of a Statement of Understanding for Exempt Projects form. An example of the form is included in the Construction Manual.

The applicable URCP and the assigned threat category will be reviewed through the standard plan check process. If the plan is determined inadequate or should municipal staff performing the check determine that additional BMPs are necessary to ensure compliance with applicable codes and ordinances, the proponent will be required to modify and resubmit the plan. Pursuant to the grading ordinance and the City Code, the applicable permit will only be issued following a satisfactory review and approval of the project URCP.

7.4 Source Identification

The Order requires the City to develop, and update annually, a watershed-based inventory of all construction sites within the City's jurisdiction. The process described below has been developed by the City to develop this inventory and update it annually.

7.4.1 Inventory Process

The City's inventory process for construction sites is based on information collected from construction projects when they are applying for a grading or building permit. When the permit is approved, this information is then entered into a database developed by the City. If a permit was previously issued for a project, then the database is updated to reflect the most up-to-date

information. Capital improvement projects (CIPs) are also included in this database. CIPs are entered into the database by the City upon initiation of a project and the CIP project manager is responsible for providing all relevant information pertaining to the project. Completed construction projects are removed from the database when the City closes the permit or a CIP project is complete. The database is intended to facilitate with updates or additions to the inventory of construction projects and to track other Urban Runoff information related to those projects, such as inspections and enforcement actions. Although the City's inventory process is an ongoing one, prior to the rainy season, the database is reviewed to ensure that it is up-to-date and cross-referenced with any other applicable databases to ensure completeness.

7.4.2 Existing Inventory

The City has developed an existing watershed based inventory of all the construction projects in the City. The current inventory of construction projects is provided as Table 7-1, at the end of this section.

7.5 Threat to Water Quality Prioritization

The City is required under the Order to prioritize its inventory of construction sites with regard to the potential threat that each site may have on the water quality of Urban Runoff. The following section describes a process consistent with the Order to conduct the threat prioritization. The next section summarizes the results of the prioritization of the existing construction site prioritization

7.5.1 Threat Prioritization Process

As required by the Order, inventoried construction sites must be classified as High, Medium, or Low Threat to water quality with the consideration of many factors including: soil erosion potential, site slope, project size and type, sensitivity of Receiving Water bodies, proximity to Receiving Water bodies, non-storm water discharges, and any other relevant factors. The information for determining the project priority will be provided by the individual project proponents as described below.

Prior to submitting a project for a grading or building permit the project proponent should obtain a Construction Manual along with other submittal requirements for the appropriate project. The manual will provide information outlining discharge prohibitions under the City's storm water and grading ordinances, and provide the necessary information for the proponent to develop and implement an erosion control plan that complies with the City's requirements. CIP projects will be evaluated by the project manager prior to project initiation in accordance with the guidance provided in the Construction Manual.

As part of the development of the erosion control plan, the manual requires the proponent to prioritize the project with regard to the potential threat that the site may have on the water quality. The manual includes a worksheet titled the Project Storm Water Threat Assessment Form, and a matrix to assist the proponent with prioritizing the proposed project as a High, Medium, or Low Threat to water quality. The Project Storm Water Threat Assessment Form, with the proposed prioritization, will be submitted with the application for a building or grading permit. The information on the worksheet and the proposed prioritization is reviewed and evaluated for accuracy through the standard plan check process. A final prioritization is then recorded on the form.

The project prioritization process presented in the Construction Manual is based on the project size, the presence of significant erodible slopes, project type, proximity to sensitive water bodies, and potential to produce harmful non-storm water discharges. Project proponents are prompted to identify the size of the proposed project and then to respond to the following questions on the Urban Runoff Threat Assessment Form:

Item 1: Are you grading or otherwise disturbing soil over more than 1 acre?

Item 2: Will the project involve grading or soil disturbance?

Item 3: Is the project tributary or adjacent to environmentally sensitive water bodies within the City?

Item 4: Does the project include significant erodible slopes?

Item 5: Does the project have the potential to produce non-storm water discharges or pollutants?

Item 6: With the project will more than 5,000 sq. ft. of impervious surface area?

The project proponent is then directed to reference a prioritization matrix to determine the priority of the project. An example of the matrix is provided in Table 7.2. The matrix is used by first locating the appropriate row in the matrix according to the size of the project, then moving across the row; the proponent should refer to the answers given to the five questions above. If "Yes" was responded to a question, the corresponding box in the matrix provides the priority for the project.

The use of this matrix was developed consistent with the requirements of the Order. Under this process, construction sites that meet either of the following conditions must be classified as High Priority:

The construction site is greater than 50 acres and grading will occur during the wet season (October 1 through April 30)

The construction site is five acres or more and tributary to a CWA section 303(d) water body impaired for sediment or is within or directly adjacent to or discharging directly to a coastal lagoon or other Receiving Water within an ESA.

Should the project proponent find that the proposed site does not meet the mandatory High Priority criteria listed above, then the project is evaluated on additional characteristics such as significant erodible slopes, project type, proximity to sensitive water bodies, and potential to produce harmful non-storm water discharges to determine if it is High Priority.

In general, Medium Priority Construction Sites are those that are between one and five acres, and are not tributary to a CWA Section 303(d) water body impaired for sediment or within or directly adjacent to or discharging directly to a coastal lagoon or other Receiving Water within an ESA. In addition, Medium Priority Sites include sites less than one acre that have additional features that may adversely effect urban storm water quality or contribute to degradation of a sensitive water body. These features would include such items as the presence of significant erodible slopes, project type, proximity to sensitive water bodies, and potential to produce non-storm water discharges.

Low priority Sites are limited to sites of less than one acre. In addition, the sites must not be tributary to a CWA Section 303(d) water body impaired for sediment or within or directly

adjacent to or discharging directly to a coastal lagoon or other Receiving Water within an ESA and do not have a significant potential to adversely affect urban storm water quality.

7.5.2 Existing Threat Prioritization

Each of the construction sites subject to drainage control and inspection is prioritized through the process presented above. The results of the threat prioritization of existing construction sites subject to drainage control and inspection are provided in the inventory in Table 7-1, provided at the end of this section. The threat prioritization is updated annually and included in the Annual Report.

7.6 BMP Implementation

The Order requires the City to designate minimum BMPs for each of the three threat categories. For each of the threat categories, the Construction Manual presents the minimum BMPs that must be incorporated into the project's URCP or SWPPP and implemented on the site. The manual references the Caltrans *Storm Water Quality Handbooks Construction Site BMP Manual* and the City will use this manual as the standard by which BMPs are implemented and maintained. Another accepted BMP Reference for Construction is the California Stormwater Quality Association (CASQA) Construction BMP Handbook, which can be downloaded and printed from the website, www.cabmphandbooks.com. Through the City Code and the Construction Manual, each project proponent is required to implement the minimum BMPs outlined in the project's URCP or SWPPP.

In addition to the standard minimum BMPs specified in the Construction Manual for each threat category, the City will reserve the right to require any additional BMPs that it determines necessary to adequately comply with the Order. If a standard minimum BMP is infeasible at a specific site, the project proponent will be required to implement an alternative BMP that is the equivalent, or more stringent than the BMP for which it is being substituted. The particular BMPs for each threat category are included in the Construction Manual in Table 5-1.

7.7 Inspection of Construction Sites

The Order requires that the City develop and implement an inspection program to ensure that each construction site properly complies with the City's relevant ordinances, permits, and the Order. This section describes the City's program for inspections of construction sites developed in accordance with Part F.2.g of the Order.

Each project will be assigned a storm water inspector who is tasked with conducting inspections at the site throughout the construction phase of the project. All storm water inspectors have been educated in the requirements of the Order and through in-house training and seminars, and/or construction-specific certificate training seminars offered by the Building Industry Association on the proper items to inspect. Furthermore, the City is in the process of improving inspection forms in anticipation of the upcoming Order renewal.

7.7.1 Inspection Frequency

Initial inspection of High Priority Construction Sites are conducted immediately following the commencement of work, daily during the wet season, and as deemed applicable by the inspector during the dry season. Low and Medium Priority Construction Sites are initially inspected immediately following commencement of work, at least twice during the wet season, and as deemed applicable during the dry season.

7.7.2 Inspection Procedures

Inspections of construction sites are conducted by a designated storm water/erosion control engineering inspector and inspections are tracked using the construction projects database. This section describes the procedures that inspectors follow to conduct inspections.

Step 1: Pre-inspection Preparation

Each inspector becomes familiarized with the project's URCP or SWPPP. During the review of the plan, the inspector reviews the proper installation and maintenance procedures for each of the site BMPs. The inspector also prepares an Urban Runoff inspection package for the site. The inspection package includes an inspection record and an erosion control site plan depicting the location of each required physical BMP.

Step 2: Initial Site Inspection

Immediately following the commencement of work, the assigned inspector visits the project site and meets with the designated water pollution control manager. The inspector reviews the URCP or SWPPP with the designated water pollution control manager, and verifies that the manager has a complete and thorough knowledge of the requirements and procedures outlined in the plan. The inspector and manager then perform an inspection of the site to confirm that the required BMPs have been properly installed and review the maintenance schedule and procedures for each BMP. At the conclusion of the inspection, the inspector will note the condition and installation of each BMP on the inspection record.

Step 3: Follow-Up Inspections

Follow-up inspections are conducted per the frequencies presented in Section 7.7.1. During each follow-up inspection the inspector reviews the URCP or SWPPP with the water pollution control manager and verifies that the scheduled installation and/or maintenance of the required BMPs are being adhered to. The inspector also evaluates the effectiveness of the BMPs, and verifies if additional BMPs are necessary to ensure pollutants have been reduced to the MEP. The inspector then reviews the inspection record with the storm water quality manager and informs the manager of any discrepancies or deficiencies found during the inspection.

7.8 Enforcement of Construction Sites

The City is required to enforce its ordinances at all construction sites. Currently, if an inspector determines that a construction site is out of compliance with applicable ordinances, a "Stop Work" order may be issued. If further enforcement actions are warranted, the inspector contacts the Code Enforcement Department and a Code Enforcement officer visits the site and issues the proper enforcement action. An enforcement action would typically occur as a result of an inspection or in response to a public or municipal staff reporting. The City employs several enforcement actions and penalties to ensure compliance with its ordinances. The levels of enforcement and associated penalties are typically issued at the discretion of the Code Enforcement officer with consideration of relevant circumstances regarding the violation.

The general process for applying enforcement to construction sites for Urban Runoff related violations is as follows:

The initial phase (pre-code enforcement officer involvement) of construction site enforcement actions includes inspections, meetings, and correction or stop-work notices. Initial enforcement actions proceed as follows: The inspector will initially verbally tell the site supervisor the issues that need improvement at the time of the site inspection, as well as give a copy of the inspection

report describing the problems to the supervisor. If a follow-up inspection shows that site is still not in compliance, a correction notice is given to the site supervisor. The correction notice specifies the deficiencies as well as the required actions, which have to be done in 24 hours. The inspector returns within 24 hours. If the site has not been brought into compliance, a stop work notice is given and Code Enforcement is notified to move forward with administrative notices.

A summary of the initial phase of enforcement actions is shown in Table 7.2, below. Copies of inspection forms and notices are on file at the City.

Table 7.2: Accounting of Initial Phase of Construction Inspection and Enforcement Actions for the 2005-2006 Reporting Period

	Construction Sites Requiring Inspections	Routine and Follow-up Site Inspections	Meetings or Calls w/ Site Contact	Correction Notices	Stop-Work Notices	Cases Forwarded to Code Enforcement for Further Action
High Priority Sites	27	1300	777	56	4	7
Medium Priority Sites	19	780	255	22	0	10
Low Priority Sites	31	604	350	35	0	3
Total	77	2684	1382	113	4	20

Enforcement actions by Code Enforcement Officers for construction sites begin with a referral from another department, a site visit, or by a complaint lodged via phone. Depending on the severity of the violation, follow up activities may include phone calls, site visits, written correction notices with specified compliance timeframes, or administrative warnings. If these actions do not produce the required improvements, administrative citations (starting at $100, with a $1,000 maximum fine) and/or stop-work notices are given.

7.9 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of non-compliant sites in the City that are determined to pose a threat to human or environmental health. Verbal notification is required within 24 hours of the discovery of non-compliance and a written report should be submitted to the RWQCB within 5 days of the incident. The criteria established for determining when a site is not compliant and poses a threat to human or environmental health is described in Section 3.8 of the Industrial Component. No such sites were identified this reporting period and thus no relevant notifications were sent to the RWQCB.

7.10 Education on Construction Activities

The City is required by the Order to implement education programs in order to inform the construction community, as well as municipal staff as to the effects that sediment and other construction discharges have on the quality of receiving waters. The City has developed various education programs to meet the objectives of the Order and hosted and/or participated in several workshops to educate the construction community this reporting period. Summaries of these programs and events are presented in Section 9: Education Component of this document.

SECTION 8: ILLICIT DISCHARGES DETECTION AND ELIMINATION COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2006-2007 reporting period to meet the requirements of Section F.5 of the Municipal Permit. The foremost activity conducted by the City of Oceanside during the reporting period that responds to the requirements of this section of the Municipal Permit was the continued implementation of a comprehensive Illicit Discharge Detection and Elimination Component within the City's Jurisdictional Urban Runoff Management Program (Jurisdictional URMP).

Order 2001-01 Compliance Summary

F.5.a Illicit Discharges and Connections	See Section 8.1 of this Annual Report
F.5.b. Dry Weather Analytical Monitoring	See Section 8.2 of this Annual Report
F.5.c Investigation/Inspection and follow-up	See Section 8.3 of this Annual Report
F.5.d Elimination of Illicit Discharges and Connections	See Section 8.4 of this Annual Report
F.5.e Enforce Ordinance	See Section 8.5 of this Annual Report
F.5.f Prevent and Respond to Sewage Spills and Other Spills	See Section 8.6 of this Annual Report
F.5.g Facilitate Public Reporting of Illicit Discharges and Connections – Public Hotline	See Section 8.7 of this Annual Report
F.5.h Facilitate Disposal of Used Oil and Toxic Materials	See Section 8.8 of this Annual Report
F.5.i Limit infiltration from Sanitary Sewer to MS4	See Section 8.9 of this Annual Report

8.1 Illicit Discharges and Connections

The City has several programs that actively seek and eliminate illicit discharges to the MS4 including inspection, enforcement, monitoring, and community outreach activities. Inspection and enforcement of municipal, industrial, commercial, residential, and construction activities contribute to the identification of illicit discharges and the elimination of those detected by focusing on the source of illicit discharges. Often, when an illicit discharge is detected during one of these programs, it can be eliminated before it affects the receiving waters.

The City participates in and conducts regional and jurisdictional monitoring programs to detect illicit discharges within the MS4 and their receiving waters. The City contributes to the regional urban runoff monitoring program required by the Order and reviewed in detail in the San Diego County Copermittees' Urban Runoff Monitoring Report. This program monitors the receiving waters within the City. The City also participates in the Coastal Storm Drain Monitoring Program which is part of the regional monitoring requirements, but implemented by City staff. Discharges to the ocean can be identified

immediately and eliminated. The jurisdictional Dry Weather Field Screening and Analytical Monitoring Program is the main monitoring program that identifies illicit connections and illicit discharges (IC/IDs) to the MS4 during the summer, dry months. This program is discussed in more detail in Section 8.2.

Community support is an important resource for identifying illegal discharges. Residents and city staff are the best source for timely detection and identification of potential threats to the MS4 and its receiving waters. Residents of the City are encouraged to call the Urban Runoff Hotline to report any possible violations or problems.

Monitoring programs and community reports often detect the illegal discharges, however the source of the discharge is not always immediately evident and, therefore, elimination can be difficult. The City implements investigational source identification procedures within these programs to track down the sources and eliminate the discharge.

Elimination of an illegal discharge often requires some level of enforcement and/or abatement action. The Oceanside City Code grants the City power to enforce its regulations pertaining to illicit discharges. In addition, the Code provides the City the ability to require a responsible party to conduct abatement activities to eliminate an illicit discharge, or for the City to conduct those activities itself, at the cost of the responsible party.

The activities conducted by the City during the reporting period that fall under the illicit discharge detection and elimination effort are described in various locations within this document. The following sections discuss some of those activities that are not described within the other sections of this document. Specific IC/ID incident sheets are included in Attachment 8-A

8.2 Dry Weather Analytical Monitoring

In February 2001, the San Diego Regional Water Quality Control Board issued Order No. 2001-01 to the communities of San Diego County. As part of Order 2001-01, the City of Oceanside was required to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program. The purpose of the program was to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. Information collected from the dry weather monitoring is also used to characterize dry weather discharges in the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as necessary, to detect and eliminate the sources of these pollutants. A summary of the 2007 Dry Weather Field Screening and Analytical Monitoring Program results are included in this section. The full report is included in Attachment 8-B.

Of the 100 sites in the historical dry weather monitoring program, 93 sites were accessible and visited in 2007. Thirty six sites had measurable flowing water and 25 sites were ponded with enough water to sample, combining for a total of 61 sites where initial field screening was conducted. Eighteen of these sites were chosen for laboratory testing for chemistry and microbiology parameters.

The field screening techniques consisted of qualitative field observations, flow measurement, and field analyses of selected water quality parameters. Field screening

was conducted at all sites with flowing or ponded water. Additional laboratory analysis was conducted on 30% of the field screening sites.

At each site with ponded or flowing water, water samples were collected and analyzed in the field for the following constituents:

- Temperature
- pH
- Nitrate-N
- Ammonia-N
- Reactive Phosphorus (orthophosphate-P)
- Specific Conductance
- Turbidity
- Dissolved Oxygen
- Salinity

Additional water samples were collected at eighteen sites for laboratory analysis of the following constituents:

- Total Hardness
- Surfactants (MBAS)
- Oil and Grease
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Enterococcus Bacteria
- Total Coliform Bacteria
- Fecal Coliform Bacteria
- Chlorpyrifos
- Diazinon

Each station was visited at least once during the dry weather season (May 1st to September 30th). When field measurements and/or laboratory analysis showed an exceedance of established action levels, the site was revisited to confirm the initial results. The action levels used for the 2007 dry weather monitoring period are presented in Table 8-1. If the initial results were confirmed and an exceedance continued, an upstream investigation was initiated. In addition, any potential illicit connections/illicit discharges (IC/IDs) found visually or with any other evidence of gross contamination, an IC/ID investigation was pursued immediately (e.g., substantial petroleum sheen, excessive turbidity, extremely high ammonia concentration, evidence of sewage release, etc.).

Table 8-1. 2007 Dry Weather Monitoring Action Levels

Analyte	Action Level
Field Measurements	
pH	6.5-9.0 pH units
Conductivity	N/A
Turbidity	N/A
Dissolved Oxygen	N/A
Temperature	N/A

Salinity	N/A
Ammonia Nitrogen	1.0 mg/L
Nitrate as N	10.0 mg/L
Orthophosphate	2.0 mg/L
Laboratory Measurements	
Surfactants (MBAS)	N/A
Oil and Grease	15 mg/L
Total Hardness	N/A
Cadmium (Dissolved)	California Toxics Rule (CTR)
Copper (Dissolved)	California Toxics Rule (CTR)
Lead (Dissolved)	California Toxics Rule (CTR)
Zinc (Dissolved)	California Toxics Rule (CTR)
Total Coliform Bacteria	50,000 MPN/100mL
Fecal Coliform Bacteria	20,000 MPN/100mL
Enterococcus	10,000 MPN/100mL
Chlorpyrifos	0.5 µg/L
Diazinon	0.5 µg/L

Table 8-2 lists the monitoring sites visited during the 2007 Dry Weather Monitoring Program, their conveyance type, land use, and any action levels that were initially exceeded.

Table 8-2 2007 Dry Weather Monitoring Site IDs, Descriptions, and Action Level Exceedances.

Station ID	Primary Land Use	Secondary Land Use	Conveyance Type	2007 Action Level Exceedances
San Luis Rey				
S006	Residential	Open	Outlet	Orthophosphate
S013	Industrial	None	Outlet	N/S
S025	Industrial	None	Outlet	N/S
S032	Residential	Commercial	Outlet	Ammonia; Orthophosphate
S035	Residential	None	Outlet	N/S
S041	Residential	Parks	Outlet	N/S
S043	Residential	None	Outlet	N/S
S044	Residential	Commercial	Concrete Channel	None
S045	Residential	None	Outlet	None
S047	Commercial	None	Outlet	N/S
S048	Commercial	None	Outlet	N/S
S052	Parks	Residential	Outlet	N/S
S065	Residential	Parks	Natural Creek	N/S
S072	Residential	Parks	Outlet	Ammonia; Orthophosphate
S075	Residential	None	Outlet	None
S077	Residential	Commercial	Concrete Channel	None
S078	Residential	None	Outlet	N/S
S085	Residential	None	Outlet	None
S088	Residential	None	Outlet	None

Station ID	Primary Land Use	Secondary Land Use	Conveyance Type	2007 Action Level Exceedances
S102	Residential	None	Outlet	None
S103	Residential	None	Outlet	Ammonia; Orthophosphate
S104	Residential	None	Outlet	None
S105	Agricultural	None	Outlet	N/S
S106	Agricultural	Residential	Outlet	Nitrate
S107	Agricultural	None	Earthen Channel	None
S108	Agricultural	Residential	Earthen Channel	None
S109	Residential	None	Outlet	Ammonia; Orthophosphate
S110	Residential	None	Outlet	pH
S111	Residential	Commercial	Concrete Channel	pH
S113	Residential	None	Outlet	N/S
S114	Commercial	None	Outlet	N/S
Loma Alta				
L001	Industrial	None	Outlet	None
L002	Industrial	None	Catch Basin	None
L003	Residential	None	Outlet	None
L004	Residential	None	Outlet	N/S
L005	Residential	None	Outlet	N/S
L006	Residential	None	Outlet	None
L007	Residential	None	Outlet	Ammonia
L008	Residential	None	Outlet	None
L009	Commercial	Residential	Concrete Channel	None
L010	Residential	None	Outlet	None
L013	Commercial	Residential	Manhole	Orthophosphate
L019	Industrial	None	Outlet	Ammonia; Total Coliforms
L020	Industrial	None	Outlet	None
L024	Commercial	Open Space	Outlet	None
L025	Open Space	None	Outlet	N/S
L027	Residential	Park	Natural Creek	None
L029	Industrial	None	Manhole	Ammonia
L031	Industrial	None	Concrete Channel	N/S
L033	Residential	Industrial	Outlet	N/S
L034	Residential	Industrial	Outlet	N/S
L036	Residential	None	Manhole	N/S
L037	Commercial	Residential	Earthen Channel	None
L040	Commercial	Residential	Concrete Channel	pH; Total Coliforms
L043	Commercial	None	Outlet	N/S

Station ID	Primary Land Use	Secondary Land Use	Conveyance Type	2007 Action Level Exceedances
L045	Residential	None	Outlet	N/S
L046	Commercial	None	Outlet	None
L050	Residential	None	Outlet	N/S
L051	Residential	None	Outlet	N/S
L052	Residential	None	Outlet	N/S
L054	Residential	Park	Outlet	Nitrate
L101	Commercial	Open Space	Outlet	N/S
L102	Residential	None	Manhole	N/S
L103	Industrial	None	Catch Basin	Orthophosphate
L104	Industrial	None	Outlet	N/S
L105	Residential	Commercial	Manhole	Ammonia; Orthophosphate
L107	Commercial	Industrial	Manhole	N/S
Buena Vista				
B001	Residential	Commercial	Outlet	Ammonia; Total Coliforms; Fecal Coliforms
B002	Commercial	Residential	Outlet	None; Total Coliforms
B003	Commercial	None	Outlet	N/S
B022	Residential	None	Outlet	Total Coliforms; Fecal Coliforms; Enterococcus
B023	Residential	None	Outlet	None
B024	Commercial	Residential	Outlet	Ammonia; Orthophosphate
B026	Commercial	None	Outlet	None
B027	Residential	Commercial	Outlet	Ammonia
B029	Residential	None	Outlet	None
B030	Residential	Commercial	Outlet	N/S
B031	Commercial	Parks	Outlet	None
B032	Commercial	Parks	Outlet	None
B033	Commercial	None	Outlet	None
B034	Commercial	None	Outlet	None
B101	Residential	None	Outlet	N/S
B102	Residential	None	Outlet	None
B103	Commercial	None	Outlet	Nitrate
Agua Hedionda				
A002	Residential	None	Outlet	None
A004a	Residential	None	Outlet	Ammonia; Orthophosphate; Total Coliforms; Enterococcus
A004b	Residential	None	Concrete Channel	None

Station ID	Primary Land Use	Secondary Land Use	Conveyance Type	2007 Action Level Exceedances
A013	Residential	None	Outlet	Ammonia; Total Coliforms; Fecal Coliforms
A014	Residential	None	Outlet	None
A015	Residential	Parks	Outlet	Total Coliforms
A016	Residential	None	Outlet	Total Coliforms; Fecal Coliforms
A019	Residential	Parks	Outlet	Ammonia; Orthophosphate
A021	Residential	None	Outlet	Ammonia; Orthophosphate

Sites that exceeded one or more action level were revisited and resampled to confirm the initial result. If the confirmation result also exceeded an action level, an IC/ID investigation was initiated. Twenty eight sites had one or more action level exceedances that required confirmation and/or an IC/ID investigation.

The most common exceedance was for ammonia; 15 sites had an initial exceedance. This was common in ponded water where organic matter breakdown would cause higher levels of ammonia. Where upstream investigations were possible and flowing water was sampled, the ammonia concentration would often decrease below the action level. The action level for orthophosphate-P was exceeded at 12 sites during the initial screening. The majority of these sites were also ponded. Nine of the 18 sites that were initially sampled for laboratory analysis exceeded one or more of the fecal indicator bacteria action levels. The prevailing source for ponded and flowing water was from residential and park over-irrigation. Over 1500 letters targeting areas in the City where the various exceedances occurred were sent out to residents. Meetings were also held with Park maintenance staff and contractors to work together on reducing runoff from the City's parks. Section 8.10 contains a detailed description of the confirmation and IC/ID investigations at each site and the actions that were taken to reduce contaminants.

The 2007 monitoring season also brought about a review of the past six years of dry weather monitoring data. Exceedance trends and basic analysis was completed. In addition, variation in monitoring locations were identified and incorrectly reported nitrate results from previous years were identified.

The first review was of the monitoring sites and possible variation from year to year. Eighteen sites of the 100 listed to visit in 2007, have had some type of variation between the past six years of sampling. During one or more monitoring seasons, a different storm drain was visited than the previous years, but labeled the same drain. For example, at Site L033, the picture of the site visited in 2006 appears to be different than the pictures taken the other five years, but it was still labeled and results recorded as L033. The majority of these sites with variation have been dry and so do not affect historical data. However, the sites have been identified in the Site Descriptions Section and Sampling History sheets have been created.

The second major review was of nitrate results from the previous monitoring reports. It has been identified that for monitoring years 2005 and 2006, the nitrate results were reported as NO_3 as opposed to NO_3-N. This resulted in values that were erroneously high and some were falsely reported as exceedances. The 2002 and 2003 monitoring years appear to have followed the same procedure; however no notes or discussions have been found to verify this. The historical data may be updated and re-submitted for the Regional Urban Runoff Program to use.

After these corrections were made, it appears that nitrate exceedances are consistent through the past six years, with only two or three sites exceeding the action levels. However, ammonia and orthophosphate exceedances were up in 2007, likely due to a higher number of ponded sites being sampled. Indicator bacteria exceedances have been decreasing since 2005. In the 2005 monitoring year 100% of lab sites exceeded the action level for one or more indicator bacteria; in 2006, 63% of lab sites exceeded the action level for one or more indicator; in 2007, 50% of lab sites exceeded the action level for one or more indicator.

Follow-ups continue to be conducted and ongoing monitoring and BMP selection are being analyzed at sites that have continued exceedances.

8.3 Investigation/Inspection and Follow-up

Source investigations are conducted by the City when an illicit discharge is detected or suspected, and the source of the illicit discharge is not readily identifiable. The purpose of source investigations is to locate the source of an illicit discharge so that all necessary measures required to eliminate the illicit discharge can be implemented.

Jurisdictional URMP source investigations are initiated when appropriate information suggests a reasonable potential for the existence of an illicit discharge. Such instances may include the following:

- Dry weather monitoring field screening produces constituent measurements which meet or exceed action criteria
- Dry weather monitoring laboratory analysis produces constituent measurements which meet or exceed action criteria
- Professional judgment of monitoring personnel determines that there is a reasonable potential for an illicit discharge to exist due to observations and measurements
- A public or City staff report indicates the possibility of an illicit discharge with an unknown source
- Results from the Receiving Waters Monitoring programs indicate the possibility of an illicit discharge

Investigations during the 2006-2007 reporting period are summarized in Section in 8.10.

8.4 Elimination of Illicit Discharges and Connections

Depending on the type of illicit discharge detected, the City implements various procedures to immediately eliminate the discharge. Illicit discharges that are the City's responsibility are immediately eliminated by contacting the appropriate supervisor who

oversees the activities resulting in a discharge. If the party responsible for the illicit discharge is one other than the City, the Code Enforcement personnel will ensure that the discharge is immediately eliminated. However, sometimes, due to the source and nature of the report, the fire department or the streets department may respond to an illicit discharge. Both of these departments are trained to immediately eliminate the discharge, however, documentation of these activities may not always be recorded. During the reporting period, Code Enforcement responded to 279 urban runoff related cases.

8.5 Enforce Ordinance

The City employs several enforcement mechanisms and penalties to ensure the compliance with its ordinances. The levels of enforcement and associated penalties are typically issued at the discretion of the Code Enforcement officer with consideration of relevant circumstances regarding the violation.

During the reporting period, Code Enforcement responded to 279 urban runoff related cases.

8.6 Prevent and Respond to Sewage Spills and Other Spills

8.6.1 Spill Prevention

City Sanitary Sewers

The City's preventive and corrective sewer maintenance programs consist of a variety of components provided for the operation, maintenance, repair and replacement of sewer mains, manholes, and pump stations. The programs provide for the routine monitoring, inspection, cleaning, and related maintenance of all components of the collection system in order to reduce the potential of sanitary sewer overflows (SSO) and other structural failures. Potential problems are noted and maintenance schedules adjusted accordingly. If necessary, repairs are initiated by City maintenance crews. Larger more complex projects are referred for inclusion in the CIP process for planning, design and construction.

When system malfunctions do occur, such as SSO main stoppages, electrical outages, and mechanical breakdowns, the cause of the problem is investigated and analyzed. Maintenance schedules are then adjusted accordingly. If appropriate, the infrastructure component is referred for repair or replacement by maintenance crews.

A revised main cleaning strategy has been implemented during the past years. Cleaning schedules are analyzed and adjusted for proper scheduling. The remaining portions of the system are being assigned to routine inspection and cleaning schedules.

Private Sewer Laterals and Septic Systems

The City requires that private sewer laterals and septic systems be designed and operated in accordance to industry standards. The City also requires the proper maintenance of these facilities in order to avoid spills, breakages, and failures.

Other Spills

The City prevents spills of other pollutants through the implementation of BMPs, secondary containment, and other mechanisms to prevent and avoid spills.

Spills from private businesses and residents are reduced through required BMPs, education, and enforcement of relevant regulations for the storage and usage of hazardous materials.

8.6.2 Spill Notification

The City operates a notification hotline under its Public Works Department to receive notification of spills during business hours. After hours, holidays and on weekends, these calls are answered through the Oceanside Police Department.

8.6.3 Spill Response

Responses to sewer spills are conducted in accordance to the City's Sewer Overflow Response Plan. During the 2006-2007 reporting period, the City responded to 14 sewer spills, only one spill reached receiving water. Of the 11 sewer spills, three were from private spills, and six were listed with grease as the primary cause. In response to the number of grease related SSO, the Clean Water Program has published educational material in Oceanside Magazine, distributed flyers inserted in utility bill mailings, and is developing bilingual educational materials regarding grease contributions to SSO for additional residential distribution. Notifications of these spills are submitted to the RWQCB through quarterly reports. A summary of SSO overflows during 2006-2007 is included in Table 8-3.

Responses to other spills are conducted by the Fire Department or qualified personnel in the Public Works Department, as appropriate to the situation. Both small and large spills are handled following HAZMAT Incident Response Team (HIRT) Policies and Procedures as issued by the Unified San Diego County Emergency Services Organization.

8.7 Public Reporting of Illicit Discharges and Connections

The City maintains the public Clean Water Program Hotline for urban runoff related reports and complaints through its Water Utilities Department. The hotline is answered during business hours by City staff. Bilingual staff is available to handle calls by Spanish speakers. After hours, the hotline is forwarded to Police Dispatch.

The hotline is publicized in the *Oceanside Community Magazine*, the *North County Times* newspaper, the City's website, the Clean Water Program website, informational literature for public distribution, and at local community events and meetings. In addition, education to the public stresses the importance of reporting discharges and describes the critical role that the public plays in the identification and elimination of Urban Runoff pollution related problems.

City staff is also encouraged to report urban runoff related violations and problems through an incentive program implemented by the City. Staff is provided with their own incentive based reporting hotline called Oceanside Eyes, which allows them to earn credit towards certain awards for each report that they phone in.

During the 2006-2007 reporting year, the city received 14 calls to the Clean Water Program Hotline, and 279 calls to the Code Enforcement Hotline. Detailed information concerning responses may be obtained from the different responding departments, primarily the Streets Division and Code Enforcement.

8.8 Disposal of Used Oil and Toxic Materials

The City received funds from the California Integrated Waste Management Board to establish a permanent household hazardous waste (HHW) collection facility for its residents. The City's objective was to make the collection of HHW materials easy for residents. This facility is currently open Monday through Friday for used oil, paint, and antifreeze disposal and every Saturday for HHW collection of the following materials:

Aerosols	Drain opener	Rubber cement
All purpose cleaners	Furniture polish	Rug/upholstery cleaner
Ammonia	Gasoline	Scouring powder
Antifreeze	Glass cleaner	Silver polish
Automobile cleaners	Herbicides	Toilet bowl cleaner
Barbecue lighter fluid	Mothballs	Transmission fluid
Batteries	Motor oil	Tube and tile cleaner
Brake fluid	Oven cleaner	Turpentine varnish
Chlorine bleach	Paint	Water sealant
Detergents	Paint thinner	Wood finish
Disinfectants	Pesticides	

The HHW collection facility is periodically promoted by the City through the *Oceanside Community Magazine*, the *North County Times* newspaper, on the Clean Water Program website and at local community events and meetings where literature is distributed. There is also literature available to the public at the City offices.

The City also provides information to the public on used motor oil recycling and identifies the local state certified collection centers in the City. Furthermore, as part of the City's collection program, a 1,500-gallon used oil collection receptacle is provided at the City's harbor.

During the 2006-2007 reporting period, over 3,668 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 130.7 tons of hazardous materials (including universal waste) during the reporting period. An additional 153 Oceanside households recycled 115.2 tons of E-waste in the same reporting year.

8.9 Limiting Infiltration from Sanitary Sewer to MS4

The City's program for the routine maintenance and surveys of the sanitary sewer system is described in Section 8.6.1. These procedures will limit the amount of leakage that may occur from the sewer. Routine maintenance and surveys of the City's MS4 is described in Section 2.5.

For the most part, infiltration from the sanitary sewer to the MS4 is not viewed as a substantial problem because of the comprehensive surveying and maintenance programs implemented by the City for both systems. In addition, the Dry Weather Monitoring Program implemented by the City will readily identify leaks from the sanitary sewer system to Receiving Waters.

SECTION 9: EDUCATION COMPONENT

This section documents the education activities conducted by the City of Oceanside during the 2006-2007 reporting period to meet the requirements of Section F.4 of the Municipal Permit. The foremost activity conducted by the City of Oceanside during the reporting period that responds to the requirements of this section of the Municipal Permit was the continued implementation of a comprehensive Education Component within the City's Jurisdictional Urban Runoff Management Program (Jurisdictional URMP).

One of the most powerful tools for improving water quality is education. An informed public is the key behind acceptance of activity behavior changes, in regards to urban runoff pollution prevention. As reflected in the projects and programs developed and implemented thus far, the City of Oceanside is committed to continuing a strong education program for all target audiences listed in the Municipal Permit.

Order 2001-01 Compliance Summary

F.4.a Education for All Target Communities	See Entire Section 9 of this Annual Report
F.4.b Education for Municipal, Construction, Industrial, Commercial, and Quasi-Governmental Communities	See Sections 9.1, 9.2, 9.3, 9.4, and 9.6
F.4.c Residential, General Public, School Children Communities	See Section 9.5 of this Annual Report

9.1 Municipal Departments and Personnel

Education of municipal staff is a priority of the City of Oceanside, ensuring compliance to Jurisdictional URMP and Municipal Permit requirements. Departments with direct involvement in the Clean Water Program have received overall urban runoff education and job specific recommendations/guidelines for compliance to Jurisdictional URMP requirements. Job related Best Management Practices are discussed and the Municipal Manual distributed.

Table 9-1, beginning on the following page, lists the municipal education efforts conducted between July 2006 - June 2007.

Table 9-1 Municipal Education Activities

Date	Training/Department	Focus
03/06	Water Utilities Department – Weese Filtration Plant	Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities
3/06/2006	Parks and Recreation Department Administration	Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities
3/7/2006	Parks and Recreation	Urban Runoff impacts; Jurisdictional

Date	Training/Department	Focus
	Contracted Landscaping – TruGreen Landcare	URMP requirements; BMPs for specific activities
3/16/2006	Engineering Department – Construction Inspectors	Construction site BMPs; Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities; SWPPP implementation
03/29/2006	Building Department – Building Inspectors	Construction site BMPs; Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities; SWPPP implementation
3/29/2006	Public Works Department – Parking Enforcement	Municipal Permit requirements; Inspection procedures; BMP implementation and maintenance
3/29/2006	Water Utilities Administration	Stormwater Ordinances, BMPs, pollutants of concern
3/29/2006	La Salina Wastewater Treatment Plant Operators	Stormwater Ordinances, treatment plant/industrial BMPs, SWPPP
4/18/2006, 5/04/2006	San Luis Rey Wastewater Treatment Plant Operators	Stormwater Ordinances, treatment plant/industrial BMPs, SWPPP
4/28/2006	Public Works Department - Fleet Maintenance - City Operations Center	Municipal Permit requirements; Inspection procedures; BMP implementation and maintenance
5/9/2006	Public Works Department – Traffic Control - City Operations Center	Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities
5/09/2006	Parks and Recreation Department – Park Maintenance	Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities
5/09/2006	Public Works Department – Streets and Storm drain Maintenance - City Operations Center	Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities
5/16/2006	Police Department – Dispatch	Urban Runoff impacts; Jurisdictional URMP requirements
5/16/2006	Finance Department – Business License	Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities
5/18/2006 5/23/2006 5/25/2006	Police Department – Dispatch	Urban Runoff impacts; Jurisdictional URMP requirements
5/18/2006	Harbor and Beaches Department – Harbor Police	Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities
6/2006	Fire Department – Fire Personnel	Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities
6/15/2006	Waste Management, Inc.	Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities

Date	Training/Department	Focus
6/23/2006	Engineering – Capital Improvement Project	Land Use Planning; Municipal Permit requirements; Jurisdictional URMP; Development Requirements
6/28/2006	Harbor and Beaches Department – Lifeguards	Urban Runoff impacts; Jurisdictional URMP requirements; BMPs for specific activities
6/28/2006	Engineering, Building and Planning Departments	Land Use Planning; Municipal Permit requirements; Jurisdictional URMP; Development Requirements

9.2 Construction Site Owners and Developers

As a rapidly growing city, the multitude of construction projects within the City of Oceanside can have an adverse effect on the sedimentation and siltation of local waterways if developers are not properly educated about erosion and sediment control. Therefore, the City of Oceanside has initiated a program to educate developers about current urban runoff regulations. For years, the City of Oceanside Engineering Department has educated developers, with projects in process for approval, about erosion control and wet-weather urban runoff regulations through pre-construction conferences. The pre-construction conferences provide the developer with the information that will be required from various city departments to get the project built. In regards to urban runoff regulations developers and contractors are informed of the threat priority for their project, inspection frequency, potential BMPs to incorporate into the project, and Clean Water Program requirements in hopes that less enforcement actions will be necessary.

Construction Education Activities

The Clean Water Program regularly meets with engineering inspectors and developers for pre-construction meetings. During the meeting, storm water regulations are explained and the project is discussed with reference to specific areas and activities on the construction site that need to be addressed.

During regular construction site inspections, engineering inspectors distribute construction BMP brochures. Engineering inspectors conduct inspections while underground infrastructure is being installed. This is a time when a significant amount of soil can be exposed and a lot of waste is generated by various development activities. The brochure provides a simple graphic of a construction site describing various BMPs that can be implemented to reduce or eliminate polluted runoff: Some BMPs listed and described in this brochure include tracking controls, washout areas and perimeter controls.

In addition, the Clean Water Program continued to distribute a booklet via the Building Department, which provides a detailed look of BMPs for different construction activities. The booklet, titled Urban Runoff Requirements for Building Projects, is available in both English and Spanish and is given to all building permit applicants. Approximately 100 were distributed during the reporting period.

9.3 Industrial Owners and Operators

Many of the activities conducted by Industrial businesses can have an affect on the health of receiving waters if business owners, managers and staff are not properly educated about current urban runoff regulations and BMP implementation/maintenance. The City of Oceanside recognizes the need to provide specialized education for industrial businesses. Many owners, managers, and/or operators were educated about current storm water regulations, the Statewide General Industrial Storm Water Permit, and necessary BMPs.

Table 9-2 lists education efforts conducted for industrial businesses between July 2006 and June 2007:

Table 9-2 Industrial Education Activities

Date	Event or Activity	Materials Distributed
Ongoing	Industrial inspections	Brochures, handouts, materials with hotline numbers, City of Oceanside Industrial Manual
Ongoing	Business License Application	Business License Urban Runoff Information Form

In order to assist commercial and industrial businesses comply with the requirement for mandatory employee education, the City of Oceanside developed and distributed stencils for storm drain and dumpster area labeling. Stencils were distributed to businesses through regular inspection or through the Water Utilities Department counter.

The City of Oceanside, additionally, has been active on the Regional level assisting in the development of programs and materials targeted toward industrial businesses. Through the Copermittee regional education workgroup and the North County Storm Water Program, the City of Oceanside continues to be an active participant in the development/implementation of literature and programs to assist industrial and commercial businesses in environmental compliance efforts.

9.4 Commercial Owners and Operators

A significant target audience, in terms of size, is the commercial sector. With 629 high priority commercial businesses in Oceanside, broad based education is an important component to ensuring compliance to urban runoff regulations.

Table 9-3 lists education efforts conducted between July 2006 and June 2007:

Table 9-3 Commercial Business Education Activities

Date	Event or activity	Materials Distributed
ongoing	Grease and storm water requirements for Oceanside Eating and Drinking Establishments	Brochures; City of Oceanside Commercial Manual; restaurant requirements handbook, training video, posters
ongoing	Business License Urban Runoff Information Form. Used as education and awareness of City regulations.	

In order to assist commercial and industrial businesses comply with the requirement for mandatory employee education, the City of Oceanside developed and distributed stencils for storm drain and dumpster area labeling. Stencils were distributed to businesses through regular inspections.

Additionally, the Clean Water Program, in conjunction with the Collections Division, created and co-sponsored a Grease and Urban Runoff Requirements Program for all Oceanside Eating and Drinking Establishments. The Program, accompanied by a new City ordinance, requires Oceanside restaurants to not only prevent grease from entering the sewer system, but mandates employee training on both grease and storm water BMPs. During inspections all restaurants were given a BMP booklet, two posters (one for grease and one for storm water), and an English/Spanish training video. Approximately 300 copies of the videos, posters, and booklets were distributed during the reporting period.

9.5 Residential Community, General Public and School Children

General public awareness has been the focal point of the City of Oceanside's education program, as all target audiences are reached through broad-based general education. A multitude of education programs have been developed and implemented for residents, students and the general public. General public awareness and education has been an ongoing program in Oceanside since the issuance of Municipal Permit 90-14. However, in the past few years, education efforts have increased and expanded with the development of the Oceanside Clean Water Program. To date, the Oceanside Clean Water Program has one of the most recognizable education campaigns in the State of California having won a Helen Putnam Award for Excellence in Public Service for the Environmental Quality and Planning Category. The City of Oceanside's education program is constantly growing and expanding to meet the needs of Oceanside residents and Municipal Permit requirements.

Table 9-4 lists community events and schools that Oceanside Clean Water Program representatives attended and distributed information about urban runoff issues:

Table 9-4 Community Events and Schools Attended

Date	Event		Materials Distributed	#'s Reached
4/15/2007	Pepper Tree Day		Brochures; materials/promo items with hotline numbers; pet waste surveys & bags on board dispensers	250 est.
4/26/2007	Genentech Earth Day	Adults & Children	Brochures; materials/promo items with hotline numbers	150 est.
5/14/2007	King Middle School	6th	Brochures; materials/promo items with hotline numbers, teaching materials	105

To increase Oceanside residents' stewardship toward our local waterways, the Clean Water Program hosts annual cleanup events at the following major waterways in Oceanside: Buena Vista Creek, Loma Alta Creek, San Luis Rey River. Oceanside also hosts several beach cleanup events throughout the year. Each cleanup averages anywhere between 100 to 300 participants. During the 2006-2007 reporting period, approximately 657 volunteers removed over 28 tons of trash, debris, appliances, furniture, and other unwanted material from Oceanside waterways. All volunteers are placed on a mailing list and periodically receive Clean Water Program updates, allowing them a sense of ownership and responsibility toward the Program.

Table 9-5 lists cleanup events held during the reporting period:

Table 9-5 Cleanup Events Held

Date	Event	Estimated Number in Attendance	Materials Distributed
7/5/2006	Morning After Mess	141	Brochures; materials/promo items with hotline numbers, T-shirts
9/16/2006	Oceanside Beach and Buena Vista Creek Cleanup	247	Brochures; materials/promo items with hotline numbers, T-shirts
11/11/2006	San Luis Rey River Cleanup	122	Brochures; materials/promo items with hotline numbers, T-shirts
4/28/2007	Loma Alta Creek Cleanup	147	Brochures; materials/promo items with hotline numbers, T-shirts

The City of Oceanside has additionally developed and implemented many campaigns and resources to increase water quality and urban runoff pollution awareness.

Clean Water Program Website

Clean Water Program has a dedicated Webpage on the City Website for all target audiences to receive general urban runoff and compliance information:

www.oceansidecleanwaterprogram.org. The website features the following menu of information:

*Commercial Businesses
*Development
*Events
*Industrial Businesses
*Just for Kids
*Water Quality Laws
*Other Websites
*Clean Water Projects
*Report Violations
*Residential/General
*Just for Educators
*Waterbodies

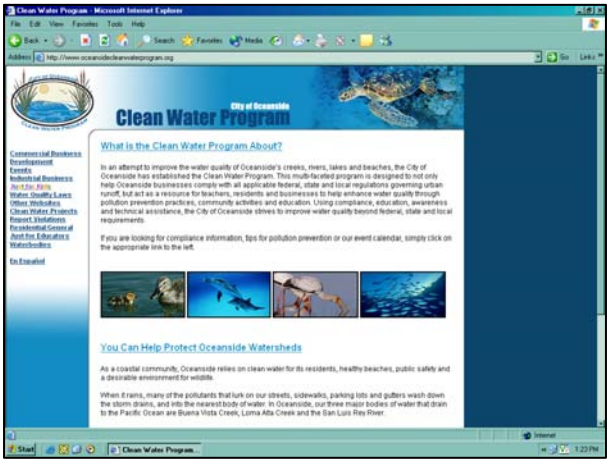

The website contains all informational literature developed by the Clean Water Program, as well as all compliance manuals, state and local requirements, links to important websites, interactive games, a calendar of events, and information about water quality and Oceanside watersheds. During the 2006-2007 reporting period, the hit counter recorded 45,627 unique hits to the site.

Newsletter

A bi-annual Clean Water Program Newsletter is developed for distribution to the public. Each newsletter highlights information about the connection between urban runoff and water quality, BMPs to reduce urban runoff pollution, cleanup opportunities, and other Clean Water Program projects. During the reporting period, the Clean Water Program distributed two newsletters, one in August 2006 and one in March 2007. Approximately 45,000 copies of each newsletter are distributed to Oceanside businesses and households, 42,000 of which are mailed with water utility bills. Additionally newsletters are distributed at City Hall counters, community events and to groups participating in cleanup events. A copy of each newsletter is provided in Attachment 9-A.

Magazine Advertisements

The City of Oceanside implemented two components of the “Erase the Waste” campaign developed by the State Water Resources Control Board: “Pick up after your pet” and “Improve you home without harming your community”.

An article was placed in the City of Oceanside Clean Water Program newsletter titled “Improve your home without harming your community”. This article provided homeowners with tips on how to properly store, handle and dispose of materials generated from home improvement projects. This newsletter was distributed to 42,000 Oceanside households with the water utility bills. In the same newsletter, a, article was included addressing the topic of pet waste. The article encouraged homeowners to cleanup after their dog to keep neighborhoods and waters clean, healthy and pollution free. See Attachment 9-A for a copy of the newsletter.

A pet waste advertisement was placed on the inside back cover of the winter issue of the Oceanside Magazine. The advertisement asks people to cleanup after their dog to keep

neighborhoods and waters clean, healthy and pollution free. 87,000 issues are printed and distributed to every household in Oceanside (42,000), every licensed business in Oceanside, and thousands of copies are distributed on Camp Pendleton, at City and school district facilities, and at hundreds of local businesses including all major hotels and the California Welcome Center in Oceanside. A copy of the advertisement is provided in Attachment 9-B.

Educational Signs

A variety of educational signs were created and installed during previous reporting periods. Anti-litter signs were created to highlight the name of each watershed the sign was located near. Each watershed had three signs placed along areas of high pedestrian foot traffic. In addition, 52 pet waste signs were created and placed in each park and along the San Luis Rey River bike path. During this reporting period three additional pet waste signs were installed along the San Luis Rey River bike path during this reporting period.

Materials Distributed

Materials are regularly developed and updated to provide residents, students and the general public about urban runoff, water quality, BMPs, Clean Water Program projects, and the urban runoff hotline number. A copy of these materials was provided in the 2005-06 annual report.

Table 9-7 lists the educational materials distributed during the 2006-2007 reporting period.

Table 9-7 Educational Materials Developed and/or Distributed

Education Material	Description
Urban Runoff Guidelines for Residents Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from residential activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information. Distributed approximately 250 during the reporting period, not including downloads from the website.
Pollution Prevention Tips for Gardening Activities Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from gardening activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information. Distributed approximately 150, not including downloads from the website.
Urban Runoff Guidelines for Commercial Businesses Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from commercial and industrial business activities, BMPs to prevent urban runoff pollution,

	hotline for potential violations, and website address for more information. Distributed approximately 200, not including downloads from the website.
Urban Runoff Guidelines for Construction Projects handout	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from home-improvement activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information. Distributed approximately 250, not including downloads from the website.
Urban Runoff Guidelines for Powerwashers	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from powerwashing activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information. Distributed approximately 25, not including downloads from the website.
"Speak Water-ese" Fact Sheets for High School students	A suite of fact sheets informing high school students about water quality impairment situations and/or pollutants, and sources. Fact sheets explain the science behind the impairment situations/pollutant and are intended to supplement Chemistry and Earth/Environmental Science curriculum. Pollutants fact sheets include: Turbidity/Total Suspended Solids, Biochemical Oxygen Demand, Eutrophication, pH Levels, Total Dissolved Solids, and Bacteria. Distributed approximately 50 sets.
Guide to Oceanside Waterbodies Booklet	A colorful introduction to the waterbodies in Oceanside. The Guide is intended to help residents develop a sense of stewardship, as well as provide information about local creeks, rivers, lakes, wetlands, and lagoons, the history behind each waterbody, and stakeholder information. In addition, the Guide includes a description of a watershed and current monitoring programs implemented to test recreational water quality. Distributed approximately 250, not including downloads from the website. 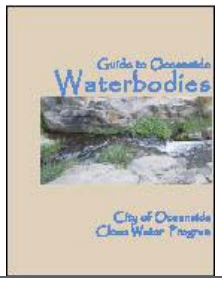
Adventures of Oceanside Creek Friends coloring book	Clean Water Program mascots, Surfing Sam, Marina, and Simon appear in a coloring/story book about Marina's mysterious illness and their adventure in discovering the source: urban runoff pollution. The book features information for children about the effect of urban runoff on water quality, why it is important to protect our waterbodies, and activities they can do to prevent urban runoff pollution. Distributed five (5), not including downloads from the website. 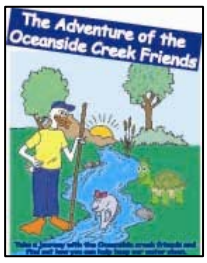
Clean Water Program Hotline and website magnets	Magnets were developed with the Clean Water Program logo, hotline, and website address. Distributed approximately 500.
Poop Pollutes magnets	Magnets were developed to remind residents to pick up their pet's waste. Distributed approximately 500.
Poop Pollutes Pet Waste Bag Dispensers	Pet waste bag dispensers were purchased. The Poop Pollutes education message was attached as a sticker. Distributed

	approximately 150.
Protect Our Water bags	These 14 inch x 12 inch bags display a list of residential BMPs, Clean Water Program address and hotline number, and the Program tagline "You are the solution to water pollution." Distributed approximately 150.
Click Message Pen	Each pen has the 1-800-CLEANUP.org website listed, as well as the following text, "Protect our Waterways, Improve water quality: sweep sidewalks, reduce pesticide use, recycle motor oil and filters, eliminate water runoff, pickup pet waste, and pickup litter and cigarette butts." Distributed approximately 500.

Oceanside Update Show

Clean Water Program staff appear regularly on the Oceanside Update Show broadcast through Oceanside Channel KOCT. Each spot allows staff to spend three to five minutes discussing specific storm water pollution programs, pollution prevention, and BMPs to reduce impacts. The show is broadcast twice daily at 7:00 a.m. and 7:00 p.m. Topics are varied with every taping of Oceanside Update, therefore the viewing audience learns about a multitude of BMPs. While KOCT is unable to determine the actual number of residents who watch Channels 17 and 18 regularly or for any length of time, both channels broadcast to approximately 50,000 Oceanside households. Table 9-8 summarizes topics discussed each month in which the Clean Water Program aired a spot:

Table 9-8 Summary of Oceanside Update Topics by Month

Date	Topic Discussed
August 2006	Beach pollution and storm drains
September 2006	Storm Drain Maintenance
November 2006	Residential BMPs for wet weather
December 2005	Landslide prevention – slope erosion control, drainage maintenance and water conservation
January 2007	Oceanside's watersheds
May 2007	Home Improvement without harming waterways

9.6 Quasi-Governmental Agencies

The City of Oceanside works closely with a multitude of quasi-governmental agencies. Education for these entities is an on-going, often informal, process. Clean Water Program staff met with representatives of Oceanside Unified School District and Vista Unified School District on separate occasions to communicate the City's stormwater regulations, pollutants of concern, and to promote the proper use of BMPs on school property.

SECTION 10: PUBLIC PARTICIPATION COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2006-2007 reporting period to meet the requirements of Section F.6 of the Municipal Permit. The foremost activity conducted by the City of Oceanside during the reporting period that responds to the requirements of this section of the Municipal Permit was the continued implementation of a comprehensive Public Participation Component within the City's Jurisdictional Urban Runoff Management Program (Jurisdictional URMP).

In order to ensure success with any City-wide program, the public must be involved. Stewardship and participation by the general public will increase the acceptance and willingness to comply with new regulations. The City of Oceanside has actively pursued public involvement in the Clean Water Program through the implementation of various programs and feedback mechanisms.

Order 2001-01 Compliance Summary

F.6 Public Participation Component	See Entire Section 10 of this Annual Report

10.1 Local Public Participation Opportunities

City of Oceanside encourages its residents to become involved in the Clean Water Program. Through the establishment of the Urban Runoff Hotline (Hotline), (760) 435-5800, the public can report violations related to pollution of the City's receiving waters. The Hotline is promoted through a variety of media, including announcement on local television stations, placement on brochures, magnets, pencils and other program promotional "give-aways," publication in local newspapers, and advertisement on the City's website and the Clean Water Program website. During the reporting period, 14 calls were received by residents concerning potential urban runoff violations. In addition, Code Enforcement Officers received over 279 calls from residents regarding potential urban runoff violations.

City Staff is encouraged to participate in the Clean Water Program through the use of a special City Enhancement Hotline specifically for Oceanside employees called "Oceanside Eyes." This hotline is call incentive driven and promoted internally.

To increase Oceanside residents' stewardship toward our local waterways, the Clean Water Program hosts annual cleanup events at every major waterway in Oceanside including Buena Vista Creek, Loma Alta Creek, and the San Luis Rey River, and also hosts several beach cleanup events throughout the year. Each cleanup averages anywhere between 100 to 300 participants. During the 2006-2007 reporting period, approximately 657 volunteers remove over 28 tons of trash, debris, appliances, furniture, and other unwanted material from Oceanside waterways. All volunteers are placed on a mailing list and periodically receive Clean Water Program updates, allowing them a sense of ownership and responsibility toward the Program.

Table 10-1 lists cleanup events held between July 2006 and June 2007 to encourage community participation and education of the effects of urban runoff:

Table 10-1 Cleanup Events Held

Date	Event	Number of Participants	Pounds/Tonnage of Waste Removed
Date	**Event**	**Estimated Number in Attendance**	**Materials Distributed**
7/5/2006	Morning After Mess	141	Brochures; materials/promo items with hotline numbers, T-shirts
9/16/2006	Oceanside Beach and Buena Vista Creek Cleanup	247	Brochures; materials/promo items with hotline numbers, T-shirts
11/11/2006	San Luis Rey River Cleanup	122	Brochures; materials/promo items with hotline numbers, T-shirts
4/28/2007	Loma Alta Creek Cleanup	147	Brochures; materials/promo items with hotline numbers, T-shirts

In addition, the Clean Water Program Staff participated independently and in conjunction with other cities in the North County Storm Water Program in participating in several community events in Oceanside and north San Diego County. The Clean Water Program staff talked to residents, handed out educational materials, and responded to questions and concerns.

Table 10-2 lists community events attended between July 2006 and June 2007 to encourage community participation and education of the effects of urban runoff:

Table 10-2 Community Events

Date	Event	Participants (estimated)	
4/15/2007	Pepper Tree Day	Brochures; materials/promo items with hotline numbers; pet waste surveys & bags on board dispensers	250 est.
4/26/2007	Genentech Earth Day	Brochures; materials/promo items with hotline numbers	150 est.

Other opportunities for local public participation during the reporting period included:

Daily Activities. The daily activities of the public, at home, work, and within the City, have a substantial impact on the success of implementation of the Jurisdictional URMP. The Jurisdictional URMP provides guidance in reducing pollutants discharging to the surrounding community by recycling, carpooling, reducing vehicular trips, reducing use of pesticides and other chemicals, eliminating off-site drainage, reducing pollution within the City right-of-way, and through implementation

of numerous additional BMPs outlined in the Residential Manual. Implementation of appropriate BMPs by the public will reduce pollutants that are generated throughout the City and are the best way for the general public to participate in the implementation of the Jurisdictional URMP.

Interpublic Education. The City has developed programs to educate the public and various target communities of the Jurisdictional URMP and the numerous ways the public can contribute to reducing pollution of the City's waterways and Receiving Waters. However, the City recognizes that no matter how many educational programs it implements, there will always be additional information to distribute and additional people that it needs to be distributed to. Therefore, "spreading the word" is another significant effort that the public will be encouraged to participate in that will substantially contribute to the success of the Jurisdictional URMP.

The Public Watchdog. The public is encouraged to become involved in the Jurisdictional URMP, take ownership of the City's MS4, and report violations. The City's Clean Water Program Hotline has been established specifically to receive reports of violations related to the pollution to the City's Receiving Waters. All appropriate reports submitted by the public through the hotline will be responded to. During the 2005-2006 reporting period, the hotline received 68 calls from residents regarding potential violations.

Public Feedback. The City encourages the public to provide comments on the implementation of the various Jurisdictional URMP components. Comments can be provided to the City through the Clean Water Program Hotline and through other forums such as informational meetings, City Council hearings, Clean Water Program website and Code Enforcement officers.

City Staff Activities. City staff is the public at work. Staff is encouraged to report violations and provide feedback on the implementation of the Jurisdictional URMP. City staff is the eyes and ears of the City, and can provide valuable information on which components and programs are working and provide suggestions or recommendations on improving the programs. The City staff is provided an incentive based hotline called Oceanside Eyes. The hotline is for reporting violations and other problems that require remediation. In addition, City staff will be provided ongoing opportunities to provide feedback through training sessions, information meetings, and by direct contact with the Jurisdictional URMP Manager.

10.2 Regional Public Participation Opportunities

This section describes those mechanisms available, at the regional level, for the public to participate in to assist in the implementation of regional Jurisdictional URMP related programs and to provide feedback to the Copermittees and contribute to the continuing development of the numerous Jurisdictional URMPs in effect around the County:

Project Clean Water. The City actively participates in the County's Project Clean Water subcommittees. Participants to date represent a wide variety of experts, including representatives of federal, state and local agencies, industry representatives, environmental groups, consulting firms, and academic and research institutions.

Copermittee Meetings. Similar to Project Clean Water, the Copermittees meetings provide opportunities for public participation. Attendees include a wide variety of experts, including representatives of federal, state and local agencies, industry

representatives, environmental groups, consulting firms, product vendors, general public, and academic and research institutions. Throughout the meeting, local municipality representatives are provided the opportunity to share recent water quality events. The meeting provides a venue to discuss the latest issues facing the various Copermittees and provides valuable insight into the current regional Urban Runoff issues. Public participation helps promote conversation and education on evolving industry standards.

Regional Hotlines. The regional hotlines provide a direct connection for public participation. Historically, the hotlines have worked well and should continue to increase in use as more people are educated of the hotline and the types of issues to report. The City will encourage reporting through its local hotlines, however, the regional hotlines will serve as an alternative to the local hotlines and also provide an opportunity for reporting by visitors to the City, from other areas in the County, who are not familiar with the local hotlines.

San Diego Association of Governments (SANDAG). SANDAG meetings regularly address items which impact the City's MS4 and ultimately the Receiving Waters. Often, meetings include public hearings, which encourage public participation on the related item. The City is an active participant with SANDAG and continually works with elected officials and SANDAG staff. The communication and associated policy and programs include significant public participation.

Media. Outreach to the public through the media serves as a widespread public education BMP. These messages also promote public participation and further stewardship of the City's MS4. Numerous articles and news briefs include information and details on how citizens can get involved. Additionally, editorials provide a venue for residents to present their views on water quality issues. Media is an important element of public participation and keeps communication open between government staff and the public.

SECTION 11: ASSESSMENT OF JURISDICTIONAL URMP EFFECTIVENESS COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2006-2007 reporting period to meet the requirements of Section F.7 of the Municipal Permit. The foremost activity conducted by the City of Oceanside during the reporting period that responds to the requirements of this section of the Municipal Permit was the implementation of an Assessment of the Jurisdictional URMP Effectiveness Component within the City's Jurisdictional Urban Runoff Management Program (Jurisdictional URMP).

Order 2001-01 Compliance Summary

F.7.a Develop Long-Term JURMP Effectiveness Strategy	See Section 11.1 of this Annual Report
F.7.b Assess JURMP Effectiveness	See Sections 11.2, 11.3, 11.4, and 11.5 of this Annual Report

11.1 Overview

This component assesses the progress of the City's program towards the overall goal of reducing pollutants associated with urban runoff. The objectives of the assessment component are to evaluate the performance of the Clean Water Program, review the programs effectiveness at improving receiving water quality, and identify changes that will increase the effectiveness of the program.

The City has begun adopting an assessment strategy, based on a guidance document prepared by the Copermittees entitled *"A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. This guideline presents a comprehensive assessment strategy that initially focuses on programmatic assessments and moves toward water quality-based assessments to determine program effectiveness. More specifically, it addresses six levels of assessment:

1. Compliance with Activity-based Permit Requirements.
2. Changes in Knowledge/Awareness.
3. Behavioral Changes.
4. Load Reductions.
5. Changes in Discharge Quality.
6. Changes in Receiving Water Quality.

In this year's assessment, the levels of assessment have been combined into three rather than six because of the programs early stage of development. Level 1, Compliance with Activity-based Permit Requirements, includes modified assessment tables from the Jurisdictional URMP. Level 2 and 3 are combined and discuss the program strengths (accomplishment and outcomes) for each component. Level 4: Load Reductions, is not addressed this year. Level 5 and 6 are combined to attempt presenting a water quality assessment.

The strategy uses both quantitative and qualitative measures of program effectiveness. Assessment Forms presented in the Jurisdictional URMP have been modified in the Level 1 assessment to more closely reflect the appropriate activities performed for each activity and the

data from the forms is presented below. This approach provides a means to track the program performance and effectiveness.

11.2 Level 1: Compliance with Activity-Based Permit Requirements

Table 11.1 summarizes the activities tracked by the Clean Water Program to demonstrate compliance with the requirements of Order No. 2001-01. Narratives explaining each of these activities can be found in the individual sections of this annual report.

11.3 Levels 2&3: Changes in Knowledge/Awareness and Behavioral Changes

This section is broken into each component of the Jurisdictional URMP and presents a summary of the changes in knowledge/awareness and behavior changes. Each section discusses the accomplishments for the component and discusses future improvements.

Municipal Component

Program Strengths: Clean Water Program staff conducted 29 presentations reaching 349 municipal employees focusing on urban runoff sources and impacts, as well as job-related Best Management Practices (BMPs). Pollution prevention measures are taken City-wide, such as commingled, paper, inkjet, toner cartridges, used oil, tires, batteries, and scrap metal recycling programs, and purchasing of recycled paper and re-refined oils. A total of 141 municipal facilities were inspected for potential violations. The inspections resulted in two outcomes: first, municipal facilities with inadequate BMPs were identified, notified, and the violation was corrected; and second specific departments began conducting the required storm water inspections on their facilities, thus holding them accountable for their own compliance. The SWPPP for the City Operations Center continued to be implemented in order to ensure compliance and pollution prevention. Street sweeping operations were able to remove 2,480 tons of waste from the MS4, and storm drain cleaning activities removed 65.5 tons of waste. City-sponsored volunteer cleanup events removed over 28 tons of waste from creeks, rivers, and beaches.

Improvement Areas: Clean Water Program strived to increase the number of municipal employees educated during this annual reporting period. Thirty-three municipal employee presentations were conducted reaching 141 employees. The City feels that these presentations are important in educating all employees, no matter there daily job task, because they are the eyes and ear sof the City. Presentations are tailored to the type of tasks for the targeted department such as administrative, industrial, or planning and development. each annual reporting period, The Clean Water Program will strive to increase the number of employees reached in subsequent years through these presentations with the eventual goal of reaching employees in each department. In addition, staff will improve the education process for sub-contractors working for the City. Clean Water Program staff's goal is having each department conduct the necessary inspection of their facility without the presence of a Clean Water Program staff member.

Industrial Component

Program Strengths: A total of 234 industrial businesses were inspected during the reporting period, with subsequent follow-up inspections. During the inspections, each business was provided a copy of the industrial manual and given an explanation of the state and local BMP requirements. In order to thoroughly inspect businesses that impact Oceanside receiving

waters, 2003-2004's new inspection strategy was employed. Rather than targeting simply high priority facilities, which are often times isolated from other businesses, inspections of entire industrial areas were conducted. By using this strategy, all businesses within an area were held accountable to understand and implement their responsibilities. This allowed property management companies greater understanding of their roles in compliance, and gave businesses an opportunity to work together in the implementation of group BMPs.

Improvement Areas: For the next reporting period, Clean Water Program staff will continue to inspect as many industrial businesses as possible using the strategy described above. During these next inspections, staff will increase the dissemination of education materials for business employees and evaluate each inspected businesses SIC Code to ensure the proper listing.

Commercial Component

Program Strengths: Of the 127 commercial inspections were conducted during the reporting period, with subsequent follow-up inspections. This was in addition to 343 eating and drinking establishment inspections of the grease control devices. The grease control inspector forwarded all cases not found to be in compliance with stormwater regulations to Code Enforcement Officers. Throughout the City there has been a notable increase in the number of BMPs implemented by commercial businesses. During the inspections, each business was provided a copy of the commercial manual and given an explanation of the state and local BMP requirements. In order to thoroughly inspect businesses that impact Oceanside receiving waters, the inspection strategy introduced in 2003-2004 was employed. Rather than targeting simply high priority industrial facilities, which are often times isolated from other businesses, inspections of entire industrial/commercial areas were conducted. By using this strategy, all businesses, regardless of industrial or commercial status, within an area were held accountable to understand and implement their responsibilities. This allowed property management companies greater understanding of their roles in compliance, and gave businesses an opportunity to work together in the implementation of group BMPs.

Improvement Areas: For the next reporting period, Clean Water Program staff will continue to inspect as many commercial businesses as possible using the strategy described above. As reported in the 2005-06 annual report, the City paid particular attention to eating and drinking establishments and greenhouses and nurseries by inspecting all of these businesses during this reporting period. During these next inspections, staff disseminated education materials for business employees and evaluated each inspected businesses SIC Code to ensure the proper listing.

Residential Component

Program Strengths: The City of Oceanside provides a wide-range of programs for its residents to allow for convenient implementation of pollution prevention activities. These programs consist of aggressive curbside recycling programs, greenwaste collection, oil recycling, and household hazardous waste collection. Education of the public is a priority for the Clean Water Program, so the development of many outreach materials and interactive tools (e.g. website) were developed, disseminated, and advertised to the public through television, bill inserts, internet, direct mailing, and newspaper articles. A total of 14 calls concerning potential residential violations were received on the Clean Water Program hotline and 237 calls were received by Code Enforcement during the reporting period

Improvement Areas: For the next reporting period, the Clean Water Program will continue to educate Oceanside residents as much as possible through local media, and respond to received complaints on the Hotline.

Land-Use Planning for New Development Component

Program Strengths: During the 2003-2004 reporting period, the City adopted a local Standard Urban Storm Water Mitigation Plan (SUSMP) program based on the regional model SUSMP. The City of Oceanside's local SUSMP was incorporated into City Code and adopted December 4, 2002. The City reviewed its General Plan and amended language in the Land Use Element to include BMP implementation and water quality protection. The revision was passed by City Council on June 4, 2003. In addition, a Runoff Assessment Report (RAR) was developed requiring identified smaller scale projects submit a report detailing BMP implementation. The Building Department was educated about their role and responsibilities in the program and has developed materials and educated staff about SUSMP and RAR submittals from developers.

Improvement Areas: Greater streamlining between the Planning, Engineering, and Building Departments will be a key area of focus for the Clean Water Program, in the implementation of development requirements, during the next reporting period.

Construction Component

Program Strengths: All construction sites were inspected for BMP implementation, at the frequency described in the Jurisdictional URMP during the reporting period. During the 2005-06 reporting period, , the Public Works Department realigned the inspector's duties and made all inspectors responsible for BMP implementation and inspection of their assigned construction sites. This realignment meant each site was visited frequently and developers educated about their responsibilities. In addition, City staff completed the SUSMP Operational and Maintenance Plan for distribution to developers. In addition, Clean Water Program staff met with developers during two on-site meetings to educate developers about BMPs implementation.

Improvement Areas: Clean Water Program staff streamlined the inspection process with the Building Department, thereby eliminating the need for current staff to also visit building sites. By creating department specific training programs, the building department inspection staff was provided with specific details allowing teach staff person in the department to conduct effective BMP inspections while conducting traditional building inspections. This program proved successful during the 2006-07 reporting period with inspectors providing constructive feedback to developers on BMP maintenance during their routine inspections.

Illicit Discharge Detection and Elimination Component

Program Strength: The Clean Water Program continued efforts to maintain and respond to complaints and referrals in the IC/ID program. The dry weather monitoring program was conducted by City Staff, with samples taken from 61 sites in which ponded or flowing water was observed. Dry weather monitoring locations that exceeded action levels were assessed and investigated when possible. Additionally, during the reporting period, City staff organized all monitoring data according to watershed. This organization will help staff to begin spatial and temporal analysis of water quality data.

Improvement Areas: Dry weather monitoring locations that exceeded action levels were further investigated. In addition, over 700 exceedance letters were mailed to residential

households detailing the type of pollutant detected in discharge water and the appropriate BMPs to be implemented by residents to eliminate the polluted runoff.

Education Component

Program Strength: The Clean Water Program has developed a strong education component that has reached a wide variety of target audiences through a broad range of educational tools. The Clean Water Program targeted specific audiences including municipal employees, commercial/industrial businesses, developers, and residential/general public with brochures, posters, newsletters, television PSAs, a website, water utility bill inserts, magazine and newspaper articles, booklets, magnets, t-shirts, pens, and community cleanup events.

Improvement Areas: Due to the overwhelming efforts conducted to educate each target audience, the Clean Water Program does not have any recommendations for future improvement, other than to continue expanding education efforts to the Oceanside community.

Public Participation

Program Strength: The public is given an opportunity to interact with the Clean Water Program on a daily basis through the Hotline and website. During the reporting period the Clean Water Program hosted four cleanup events, which attracted over 650 volunteers from the community. Staff participated in two community-based education events.

Improvement Areas: Due to the overwhelming efforts conducted to solicit participation in the Clean Water Program efforts, the Clean Water Program does not have any recommendations for future improvement, other than to continue expanding public participation opportunities for Oceanside's general public.

11.4 Level 4: Load Reductions

Load reductions have not been calculated by the program.

11.5 Levels 5&6: Changes in Discharge and Receiving Water Quality

The Clean Water Program will begin to look at monitoring data to better understand the priority problems and assess the program's effectiveness at improving receiving water quality. Data available for this type of analysis includes dry weather monitoring data and coastal storm drain data. Wet weather monitoring is performed for the region as part of the Core Monitoring Program. This monitoring program includes one mass loading station in the City on the San Luis Rey River. This data is evaluated in the regional program and in the watershed program.

11.5.1 Dry Weather Monitoring Data

2007 Summary

Of the 100 sites included in the 2007 dry weather monitoring program, 93 sites were accessible and visited. Thirty six sites had measurable flowing water and 25 sites were ponded with enough water to sample, combining for a total of 61 sites where initial field screening was conducted. Eighteen of these sites were chosen for laboratory testing for chemistry and microbiology parameters.

Twenty eight of the 61 sites initially screened had one or more field or laboratory parameter exceedance. The most common exceedance was for ammonia; 15 sites had an initial exceedance. This was common in ponded water where organic matter breakdown would cause higher levels of ammonia. Where upstream investigations were possible and flowing water was sampled, the ammonia concentration would often decrease below the action level. The action level for orthophosphate-P was exceeded at 12 sites during the initial screening. The majority of these sites were also ponded.

Nine of the 18 sites that were initially sampled for laboratory analysis exceeded one or more of the fecal indicator bacteria action levels. The total coliform action level was exceeded at nine sites; the fecal coliform action level was exceeded at four sites; and the enterococcus action level was exceeded at two sites. Bacterial indicators were the only laboratory parameter that exceeded action levels within the City of Oceanside. There were no exceedances for MBAS, dissolved metals, oil and grease, or pesticides.

2006 Summary

Of the 99 sites included in the 2006 dry weather monitoring period, 61 sites had measurable flowing water or were ponded. Due to safety or access constraints only 54 of the 61 sites were sampled.

Out of the 54 sampled sites ammonia, reactive phosphorus, and nitrate were detected at each site. Ammonia exceeded the action level at eight sites, reactive phosphorus exceeded the action level at six sites, and exceeded the action level at nine sites.

Nineteen sites were chosen for laboratory analysis and twelve sites exceeded one or more of the action levels established for bacteria. Each of the twelve sites exceeded the action level for total coliform. Five sites exceeded two action levels for bacteria, and one site exceeded all three action levels for bacteria.

2005 Summary

Of the 100 sites included in the 2005 dry weather monitoring period, 64 sites had measurable flowing water or were ponded. Due to safety or access constraints only 44 of the 64 sites were sampled.

Out of the 44 sampled sites ammonia was detected at each site and exceeded the action level at four sites. Reactive phosphorus was detected at 43 sites and exceeded the action level at eight sites. Nitrate was detected at all 44 sites and exceeded the action level at eight sites.

Seventeen sites were chosen for laboratory analysis and all seventeen sites exceeded one or more of the action levels established for bacteria. Each of the seventeen sites exceeded the action level for total coliform. Three sites exceeded all three action levels and two sites exceeded two action levels for bacteria.

2004 Summary

Of the sixty-eight sites included in the 2004 dry weather monitoring program, 46 had measurable flowing water or were ponded and a field sample was taken from only the 18 sites which had flowing water.

Out of the 18 sampled sites ammonia was detected at seventeen sites and exceeded the threshold at seventeen sites. Reactive phosphorus was detected at 17 sites and exceeded the threshold at two sites.

Nineteen lab tests were taken and eleven sites exceeded one or more of the action levels established for bacteria. Two sites had exceedance above all three action levels, one site had exceedance of two action levels and the remaining sites exceeded the action level for total coliform.

2003 Summary

Of the 99 sites included in the 2003 dry weather monitoring program, 56 sites had measurable flowing water or were ponded and a field sample was taken.

Out of the 56 sampled sites ammonia was detected at fifty-five sites and exceeded the threshold at forty-nine sites. Nitrate was detected at fifty-six sites and exceeded the threshold at twelve sites. Reactive Phosphorus was detected at fifty-five sites and exceeded the threshold at fourteen sites. Chlorine was detected at 56 sites and all sites tested below the threshold.

Sixteen lab tests were taken and two sites exceeded the action level for enterococcus. The lab test also identified one site that exceeded in cadmium and four that exceeded the maximum concentration for lead.

2002 Summary

Of the 290 sites included in the 2002 dry weather monitoring program, 56 sites had measurable flowing water or were ponded and a field sample was taken.

Out of the 56 sampled sites ammonia was detected at 54 sites and exceeded the threshold at 50 sites. Nitrate was detected at 56 sites and exceeded the threshold at eleven sites. Reactive Phosphorus was detected at 47 sites and exceeded the threshold at eleven sites. Chlorine was detected at 55 sites and all sites tested below the threshold.

Eleven lab tests were taken and four sites exceeded the action level for total coliform and one site exceeded for fecal coliform. Lead was tested at twenty seven sites and exceeded the maximum concentration for lead at twenty-two sites.

Result Comparison

The majority of exceedances from the 2001 Permit Cycle are nutrients (nitrate, orthophosphate, and ammonia) and bacterial indicators (total coliform, fecal coliform, and Enterococcus). Table 8 provides a summary of the previous six years of dry weather monitoring including the number of sites monitored and the number of exceedances of these specific field and laboratory analytes.

Table 1. 2002-2007 Dry Weather Monitoring Report Data Comparison.

Monitoring Year	2007	2006	2005	2004	2003	2002
No. of Sites with Flowing or Ponded Water	61	61	64	46	56	56
No. of Sites Sampled for Initial Field Screening	61	54	44	18	56	56
No. of Sites Exceeding Nitrate Action Level*	3	9	8	NS	12	11
No. of Sites Exceeding Orthophosphate Action Level	12	6	8	2	14	11
No. of Sites Exceeding Ammonia Action Level	15	8	4	17	49	50
No. of Sites Sampled for Laboratory Analysis	18	19	17	19	16	11
No. of Sites Exceeding Total Coliform Action Level	9	12	17	11	0	4
No. of Sites Exceeding Fecal Coliform Action Level	4	5	4	2	0	1
No. of Sites Exceeding Enterococcus Action Level	2	2	4	3	2	0

*Number of exceedances taken from previous reports. Nitrate reported in monitoring years 2002, 2003, 2005 and 2006 may have been reported as NO_3, as opposed to NO_3-N. Without converting to the appropriate form of nitrate to compare to the set action levels, the number of exceedances may be erroneously high. See discussion below.

During the 2001 Permit Cycle, the number of sites visited with flowing or ponded water has not changed dramatically, even with an impending drought. The number of sites sampled over the years has fluctuated. In 2004, only the flowing sites were sampled, therefore reducing the number to 18. Due to safety and accessibility constraints, a reduced number of the flowing and/or ponded sites were screened in 2005 and 2006. In 2007, the inaccessible sites were not visited and therefore it could not be determined if they were flowing and/or ponded.

Nitrate exceedances were reduced in 2007. This brought a review of the previous years' nitrate results. Based on the test kits used and discussion with previous samplers, in 2004 and 2005, the nitrate results were reported as NO_3, but compared to action levels for nitrate as N (NO_3-N). The field results should have been divided by 4.43 to convert from NO_3 to NO_3-N. Because this was not done, nitrate as N results for those two years are erroneously high and some falsely reported as exceedances. For monitoring years 2002 and 2003, it is assumed the same procedure occurred, however, no notes or discussions have been found to verify this. In correcting these reported formats, the following would stand as the correct number of nitrate (NO_3-N) exceedances:

Monitoring Year	2007	2006	2005	2004	2003	2002
No. of Sites Exceeding Nitrate Action Levels	3	3	2	NS	3	11*

*Could not be determined.

The number of sites with orthophosphate and ammonia exceedances was higher in 2007. This could be due to a greater number of ponded sites sampled. It should also be noted that in

2005, the City of Oceanside implemented a new method for ammonia analysis which gives more accurate results as well as minimizes the chance for false positives.

The sites sampled for laboratory analysis have had consistent exceedances for bacterial indicators. However, there has been a decrease from 2005 to 2006 to 2007. In the 2005 monitoring year 100% of lab sites exceeded the action level for one or more indicator bacteria; in 2006, 63% of lab sites exceeded the action level for one or more indicator; in 2007, 50% of lab sites exceeded the action level for one or more indicator.

11.5.2 Coastal Water Quality

The Pacific Ocean and the Oceanside Harbor are considered to be the ultimate receiving water for the City although there are other intermediate receiving waters, such as San Luis Rey River, Loma Alta Creek, Buena Vista Creek, and Calavera Creek. To measure the quality of the coastal waters and assess the Jurisdictional URMP effectiveness, the City has monitored coastal and lagoon storm drain outfalls as part of the Coastal Storm Drain Monitoring (CSDM) Program. Another measure of water quality in the City is the number of beach postings due to elevated bacteria from storm drains or waterbodies discharging to the ocean.

Coastal Storm Drain Monitoring (CSDM) Program

The CSDM Program was designed to meet the 2001 Municipal Storm Water Permit by monitoring bacteria levels in urban runoff from coastal and lagoon outfalls, and evaluating the relationship between storm drain discharges and exceedances of bacteriological water quality standards in the coastal receiving waters. This program included sampling of both storm drains and adjacent receiving waters at coastal beaches and in lagoons.

In monitoring year 2006-07, of the 20 coastal sites routinely monitored by Oceanside, only six sites were observed to have intermittent flow during the reporting period. Of these six sites, a total of 16 paired samples were collected, including six during the wet season and ten during the dry season. Four unpaired samples were collected. Three of the storm drains were observed to be flowing to the receiving water during sampling events, and the remaining three storm drains were not observed flowing to the receiving water.

There were no coastal receiving water exceedances during the 2006-07 monitoring year. Four storm drains over the year did exceed the 95th percentile storm drain criteria calculated annually for the CSDM program. The receiving water sampling point in Buena Vista Lagoon did have three exceedances of AB411 criteria over the course of the year. One of the two storm drains monitored, BV Lagoon 1, exceeded the total coliform action level eight times, the fecal coliform action level five times, and the Enterococcus action level once.

Two sites have been under investigation for several years. Coast 8 at the Harbor Boat Wash outfall and Coast 20-1 at the Buena Vista Lagoon outfall have had increased sampling during the monitoring year. Exceedances at Coast 8 have been linked to improper practices observed at the Recreational Vehicle sewage dump adjacent to the Harbor Boat Wash. Increased educational material as well as increased outfall cleaning were put in place in monitoring year 2006-07 and have reduced the number of exceedances. In monitoring year 2005-06, Coast 8 had 13 exceedances for total coliforms, seven for fecal coliforms, and 3 for Enterococcus. In 2006-07, Coast had only four exceedances for total coliforms, four for fecal coliforms and none for Enterococcus. All monitoring was performed by Clean Water Program staff, and the data is

presented in the Coastal Storm Drain and Lagoon Monitoring 2006-2007 Annual Report, Appendix A to the Regional Monitoring Report.

Beach Posting Data

The County Department of Environmental Health has monitored beach water quality for bacteria since the 1950's. This sampling is used to assess the health of the beaches. When bacteria levels exceed State standards, the County posts the beaches with signs warning and advises the public not to enter the water. In 2000, there was a significant change in protocol as a result of the passage of AB411, which required additional testing, incorporating testing for enterococcus, and required the beach be posted when only one sample exceeded the standard.

During the reporting period, four beaches were posted and/or closed. An advisory sign was posted at the San Luis Rey River outlet for a total of 24 days. The Oceanside Pier area had an advisory posted for four days at the end of October 2006. A portion of the beach at the end of Wisconsin Street had a precautionary posting for the flushing of the storm drain outlet for a total of five days. The beach at the mouth of Loma Alta Creek had advisory postings for six days beginning on October 19, 2006 and nineteen days beginning on November 2, 2006. The outlet was closed due to a sanitary sewer overflow event of untreated sewage for three days beginning December 11, 2006. The status was then changed to an advisory posting for the following six days. On December 31, 2006, there was a sanitary sewer line break with secondary treated sewage overflow which caused a closure of the beach for four days. The total of beach advisory/closure days for the 2006-07 monitoring period was 71, down from 106 the previous year.

SECTION 12: FISCAL ANALYSIS COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2006-2007 reporting period to meet the requirements of Section F.8 of the Municipal Permit. The foremost activity conducted by the City of Oceanside during the reporting period that responds to the requirements of this section of the Municipal Permit was the implementation of a comprehensive Fiscal Analysis Component within the City's Jurisdictional Urban Runoff Management Program (Jurisdictional URMP).

Order 2001-01 Compliance Summary

F.8 Fiscal Analysis Component	See Entire Section 12 of this Annual Report

12.1 Introduction

Effective programs require adequate funding to implement planned activities. The first step in securing adequate funding for the Jurisdictional URMP is to provide a strategy for effectively conducting a fiscal analysis of the Jurisdictional URMP in its entirety. The fiscal analysis will include an evaluation of the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities described in the Jurisdictional URMP. The Water Utilities Department and the Public Works Department have completed analyses. Other departments have not yet needed to conduct such analyses and will operate within their existing budgets for the time being.

12.2 Municipal Departments Budgets

The City has numerous departments within its organization. As a part of the budgeting process, each department manager is required to submit a draft budget to the City Manager to be included in a comprehensive City-wide budget for City Council review and approval. The departments include, but are not limited to, City Manager's Office, Parks and Recreation, Public Works, Water Utilities, Planning, Economic Development and Redevelopment, Business License, Police, and Fire.

As previously mentioned, only the Water Utilities and Public Works Departments have completed analyses and secured funding for Jurisdictional URMP implementation. This is primarily because these departments have the greatest responsibilities under the Jurisdictional URMP. It is anticipated that the other departments can operate within their existing budgets to implement the Jurisdictional URMP and they will do so unless future assessments indicate that there is a problem.

The Jurisdictional URMP budgeting for the Water Utilities and Public Works Departments is described in the following sections and are summarized in the following table. The table includes six full-time positions for Jurisdictional URMP implementation:

One full-time Clean Water Program/Jurisdictional URMP Coordinator.

Two full-time Environmental Specialists (focusing on administration, water quality monitoring, and education programs).

Two full-time Code Enforcement Officers.

One full-time Assistant Engineer (for Construction Component Implementation).

One full-time Engineering Inspector.

Table 12-1 JURMP Budgeting for Water Utilities and Development-Related Programs in Public Works Department

Department	Item	Fiscal Year 2006-2007	Projected 2007-2008
Water Utilities	Personnel (including Code Enforcement)	$305,045	$410,830
	Miscellaneous Expenses (including consultant fees)	$226,634	$726,576
Engineering	Personnel	$260,000	$260,000
	Miscellaneous Expenses (including consultant fees)	$120,000	$120,000
	Total	**$911,679**	**$1,517,406**

12.2.1 Water Utilities Department

To comply with the Municipal Permit and as an incentive to reduce pollutants entering the storm drain system through water conservation, Water Utilities staff proposed that costs for implementation and maintenance be financed through a surcharge collected specifically for a new Clean Water Program to be established in the Water Utilities Fund. In 2002, a new storm/clean water rate based on customers' water consumption was implemented to fund the annual estimated costs for the Clean Water Program. This amount is equal to an additional 0.7% of the average water/wastewater rate and equates to $.02 per unit of water used.

The rate is listed as a separate line item on Oceanside customers' utilities bills to clearly delineate the additional items for the Clean Water Program in the Water Utilities section of the bill. Any extra revenues collected above the cost of the program are placed in a separate rate stabilization reserve account to offset possible future increases to manage the program. The rate increase provided four new positions including one full-time Environmental Specialist to handle education and program administration, two full-time Code Enforcement Officers, and 75% of a Storm/Clean Water Program Coordinator position. Public Works (reorganized into Transportation/Development Engineering) is responsible for the remaining 25%. This revenue also pays for the required regional wet-weather monitoring program and laboratory testing.

12.2.2 Public Works Department

The Municipal Permit requires an increased focus and effort in development-related review and inspection. The estimated costs to implement the program were $300,000 for one-time start up costs and $550,000 on an annual basis. The positions funded include one full-time additional plan check engineer, two additional field inspectors, one full-time administrative support person and 25% of the program coordinator position. The development community requiring the service will pay the costs for the increased

services. The City collected approximately $1.7 million in 2005 in grading plan check and inspection fees, however, these fees are expected to decrease in 2006 due to development patterns. The $550,000 includes the on-going costs of $500,000 and $50,000 per year for six years to offset the $300,000 one-time general fund costs. In addition to the personnel listed above, the City is also planning to add one full time Environmental Specialist with focus on water quality monitoring and inspections.

In addition to the money budgeted, above, for the development-related aspect of the City's stormwater efforts, Table 12-2 documents the budget for other Public Works programs.

Table 12-2 JURMP Budgeting for Non-Development Programs in Public Works Department

Title	Fiscal Year 2006-07	Projected 2007-08
Street & Median Maintenance: Storm Drain Cleaning Contract	$191,200	$300,000
Flood Control Supported by Water Utilities on a cost-share basis	$834,116	$861,524
Solid Waste Street Sweeping Program, Public Property Cleanup and Landfill Maintenance and Operations.	$2,550,000	$2,557,624
Storm Drain Improvements	$1,506,965	$834,214
CIP Drainage Programs/Storm Water Pollution Compliance Programs	$12,771	$89,318
Total	**$5,095,052**	**$4,342,680**

SECTION 13: CONCLUSIONS AND RECOMMENDATIONS

This document was prepared consistent with the Municipal Permit, specifically Part I.1, by the City of Oceanside to provide a written account to the RWQCB of the City's Jurisdictional URMP activities that it has conducted during the 2006-2007 reporting period. The document is complete and contains information for all of the required components.

All revisions to the Jurisdictional URMP document have been provided in the appropriate component section of this annual report. Areas for improvement are included in Section 11 Assessment of Jurisdictional URMP Effectiveness Component.

ATTACHMENT 2-A

Bacterial Reduction Pilot Program
Oceanside Harbor Boat Wash Outfall Study

Bacterial Reduction Pilot Program – Oceanside Harbor Boat Wash Outfall Study

Oceanside Harbor has over 40 storm drains that carry flows a short distance to the harbor. From 2003 to present, 14 drains have been fitted with storm drain filters and 7 have been fitted with separator vaults. The vaults are designed to remove debris, sediment and hydrocarbons from the stormwater, with some secondary bacterial removal due to bacteria being removed in the sediment and debris. The one drain with historical bacterial exceedance receives flows from the harbor boat wash and a sewage dump for recreational vehicles (RV) via a separator vault. Figure 1 presents an aerial photograph displaying the location of the vaults, the boat wash and the RV sewage dump.

Figure 1. Oceanside Harbor Boat Wash and RV Sewage Dump.

The Bacterial Reduction Pilot Program at Oceanside Harbor is an important activity in the San Luis Rey Watershed because it will reduce bacteria loads into the Oceanside Harbor.
The objectives of the program are to:

> Reduce bacterial concentrations that are discharged into Oceanside Harbor.
> Determine the effectiveness of the BMPs in the pilot studies and assess their potential for storm drain vault locations that experience high concentrations of bacteria.

The City of Oceanside conducted a pilot study in FY 2005/06 with Attitude Technologies to fit the vault at the Harbor boat wash with XTEX AM antimicrobial fabric to reduce bacterial levels.

While initial results were promising, the product did not display long-term effectiveness, possibly the result of added hydrocarbons and sediment in the runoff.

In FY 2006/07, another pilot project was instated at the Harbor boat wash outfall. Storm drain cleaning had been conducted periodically at this outfall, and reductions in bacterial counts had been observed after each cleaning, indicating that re-growth in the pipe may be a contributing factor to the exceedances. The Clean Water Program staff worked with Harbor Maintenance to increase the cleaning of the conveyance at the boat washes and RV sewage dump to once per month. This pilot study began in February 2007, continued through the end of the fiscal year and is currently ongoing.

The previous pilot project assessing the effectiveness of an antimicrobial fabric installed in the separator vault of the boat wash/RV sewage dump outfall was ongoing through the end of the fiscal year 2005/06 into September 2006. The outfall was cleaned, as part of the previous schedule on 8/30/06. Monthly cleaning of the conveyance began in February 2007: 2/7/07, 3/3/07, 5/10/07, and 6/8/07. Table 1 provides the bacteria results from the Coastal Storm Drain Monitoring (CSDM) Program taken from the harbor boat wash/RV sewage pump outfall.

Table 1. Bacteria Results from Harbor Boat Wash Outfall in FY 2006/07.

Date Sampled	Total Coliforms	Fecal Coliforms	Enterococcus
07/10/06	**500000**	**30000**	2970
07/24/06	**1600000**	**80000**	**54800**
08/07/06	**900000**	**30000**	1750
08/21/06	23000	500	990
09/05/06	**500000**	2800	1400
09/18/06	**1600000**	**>160000**	**50000**
09/18/06	**900000**	**160000**	11000
10/02/06	**900000**	**28000**	1590
11/20/06	50000	3000	580
12/20/06	110000	2800	2190
02/26/07	11000	110	107
03/20/07	110000	1700	<10
05/07/07	80000	1400	120
05/21/07	23000	40	<10
06/11/07	130000	3000	100
06/25/07	**900000**	**50000**	1782

Bold/red results indicate an exceedance of CSDM action levels.

There were fewer exceedances in the wet weather months and following the end of the previous pilot study. Because of the variability in summer and winter use and wet and dry weather, the results are inconclusive. Monthly cleaning will be continued through the summer of 2007 and

reevaluated for its effectiveness. Point source contributions from the RV dump have been identified as a major culprit in water quality exceedances. Additional educational signage at the RV dump station is being planned and will be installed in FY 2007/08.

CITY OF OCEANSIDE
CLEAN WATER PROGRAM

LOWER SAN LUIS REY RIVER AND RIVER MOUTH BACTERIA SOURCE IDENTIFICATION STUDY PROSPECTUS

CITY OF OCEANSIDE, CLEAN WATER PROGRAM

August 9, 2007

Executive Summary

The City of Oceanside has been awarded a Clean Beaches Initiative (CBI) Proposition 50 grant to identify sources of bacterial contamination in the Lower San Luis Rey River (LSLR) and San Luis Rey River (SLR) mouth. The project will also assess bacterial loading and recommend potential Best Management Practices (BMPs) and Management Measures (MMs) to effectively target sources of bacteria in the River.

The study will answer the following key management questions:

- What is the bacterial loading in the LSLR River during dry and wet weather?
- What are the contributing sources of bacteria in the LSLR and at the SLR River mouth during dry and wet weather?
- What potential BMPs and/or MMs would eliminate the anthropogenic sources of bacteria into the LSLR River?

Introduction

The shoreline at the outlet of the SLR River mouth, located in the City of Oceanside, California is visited by thousands of people each year for a number of recreational activities. The river mouth discharges into the Pacific Ocean adjacent to the South Harbor Jetty, at a stretch of coastline with ample parking and attractive sand beaches, making it one of the City's most popular places for aquatic recreation.

However, elevated levels of indicator bacteria (total coliform, fecal coliform, and enterococcus) have affected water quality in the river mouth and the adjacent shoreline. For a number of years, the beach has had significantly more beach postings and closures as a result of elevated bacterial levels than other beaches in the City. In 2005, this beach was posted due to bacterial exceedances for 218 days; 185 days were during one consecutive stretch. As a result of exceedances, the river mouth and one-half mile of shoreline is listed as an impaired water body under Section 303(d) of the CWA for exceedances of indicator bacterial standards.

A major objective of the SLR Watershed Urban Runoff Management Program (WURMP) lead by the City of Oceanside is to identify sources of the bacterial exceedances at the river mouth. As directed by the WURMP, the City of Oceanside and the County of San Diego have jointly sampled the San Luis Rey River since March 2004 to determine if the river is the source of the bacterial exceedances. Thus

300 NORTH COAST HIGHWAY, OCEANSIDE, CA 92054 TELEPHONE 760-435-5800 FAX 760-435-5814

far, the results are inconclusive and recommend focused sampling in the lower river and at the river mouth.

Bacterial Identification Study

To address this issue, the City of Oceanside proposes to conduct the LSLR River and River Mouth Bacteria Source Identification Study. The objective of this study is to identify the sources and quantify the loading of bacterial contamination in the LSLR River and River Mouth. Multi-tiered genetic microbial testing methods will be used to identify bacteria sources in the Lower San Luis Rey River. This multi-tiered approach includes bacterial concentrations assessment using traditional measurements of fecal indicator bacteria to determine the flux of bacteria in the river and river mouth, and genetic microbial source tracking methods which will be determined by the Technical Advisory Committee.

The sampling and analysis study will include, at a minimum:

Multi-tiered genetic microbial testing in the Lower San Luis Rey River and the river mouth at the Pacific Ocean outlet. The sample site selection process will include appropriate sites for tracking TMDL implementation progress.

A comprehensive visual observation program will be conducted to identify point and non-point source runoff.

Collection and analysis of flow data to be utilized in bacteria loading estimates from the sources identified.

Dry and wet weather sampling events will be conducted to identify sources and quantify wet, dry, and annual bacterial loading estimates.

Recommendations for potential Best Management Practices to reduce and eliminate bacterial sources in the Lower San Luis Rey River and at the river mouth will be developed.

A Technical Advisory Committee (TAC) will be established for the purpose of offering oversight and guidance in the development of the approach, in addition to the implementation and reporting of the project study. The TAC will meet at a minimum of three times:

1) During the project development. The TAC will identify a framework to answer the key management questions. A more detailed Scope of Work will be created to guide the consultant(s) in developing and implementing the study.
2) Implementation. The TAC will be available to oversee the implementation of the project and discuss any issues that may arise.
3) Post-Implementation. The TAC will have input in the reporting of the final data to the State Water Board.

Conclusion

Identifying the sources of elevated bacterial levels in the Lower San Luis Rey River and river mouth is a high priority for the City and the primary focus of this study. The potential to identify sources of bacterial contamination and to determine potential BMPs and MMs to eliminate the input of those sources can greatly benefit the water quality of the river and shoreline. This can result in the decrease of beach

Surfer at Shoreline of San Luis Rey River Mouth

closures, as well as enhance the public enjoyment of our coastline.

Camp Pendleton	IC/ID 2006/07	7/11/2006

Site Summary:

Outfall off of Harbor Drive under the I-5 overpass. Drain maintained by Camp Pendleton.

Investigatory Actions:

Date	Action	Staff
7/7/2006	Leak initially reported to the main gate at Camp Pendleton	Steve Plyler
7/11/2006	Site revisited; leak continued. Chlorine was analyzed and flow calculated: Chlorine: 1.4 to 1.5 ppm Flow: 200 to 250 gpm Area of detection was near the mitigated site south of the main gate. The facility maintenance supervisor was called and the crew shut off the main valve within the hour.	Lahsaie, Sabelis, Plyler

Buena Vista Foam	IC/ID 2006/07	11/28/2006

Site Summary:
This site is west of College Boulevard and north of Marron Road in Buena Vista Creek behind the Kohls.

Investigatory Actions:

Date	Action	Staff
11/28/2006	Resident complaint of foam behind Kohl's in Buena Vista Creek and at falls upstream. Resident concerned homeless encampments may be a source.	Lahsaie
11/29/2006	Site visited by Code Enforcement. Two transients arrested, one cited for illegal camping. Associated trash removed as follow-up.	Tinant, Ericson

Investigatory Status:

As reported last year, foam is common in Buena Vista Creek after the first major storm event. The foam seems to originate form east of the Oceanside City Limits. Previous analytical tests taken from the flow and from the foam have resulted in high microorganism counts, but no true source has been identified. It is suspected that the source is something in the geology of the area, including the portion of Agua Hedionda Watershed. Ongoing investigations are being conducted to pinpoint the cause of the foam.

Fire Station Runoff	IC/ID 2006/07	3/21/2007

Site Summary:
Fire Station #3 at the intersection of El Camino Real and Oceanside Boulevard.

Investigatory Actions:

Date	Action	Staff
3/22/2007	Resident reported discharge of soapy water from the Fire Station.	Lahsaie
3/23/2007	Follow-up with shift supervisor. Firefighters were draining a charged hose and washing apparatus. Clean Water Program staff reminded them of the IC/ID regulations and the Fire Station will get gravel/sand bags to berm the curb.	Lahsaie

Investigatory Status:

Discharge was identified and activity corrected.

S006	Dry Weather 2007	5/29/2007

Site Summary:

Site S006 is a 36-inch corrugated metal pipe (CMP) located under I-5. S006 drains the interstate and the residential community to the northeast of the San Luis Rey River and I-5.

Investigatory Actions

Date	Action	Staff
5/29/2007	Initial investigation conducted. Field and laboratory screening showed the following exceedance for orthophosphate: Orthophosphate-P: 2.30 mg/L	Witheridge
5/31/2007	Follow-up investigation conducted. Field screening was conducted and orthophosphate results were below the action level: Orthophosphate-P: 1.40 mg/L	Witheridge

Investigatory Status

Initial screening of L040 resulted in an action level exceedance of orthophosphate. The follow-up visit found decreased orthophosphate results below the action level.

S072	Dry Weather 2007	7/19/2007

Site Summary:

Site S072 is a 60-inch RCP with a flap gate installed. It is located on the north side of the San Luis Rey River off of River Tree Drive. S072 conveys flows from the residential community, including a City park to the north of the outlet.

Investigatory Actions

Date	Action	Staff
7/19/2007	Initial investigation conducted. Field and laboratory screening of the ponded water showed the following exceedances: Ammonia-N: 1.0 mg/L Orthophosphate-P: 2.75 mg/L	Witheridge
7/20/2007	Follow-up investigation conducted. Field screening was conducted and the ammonia and orthophosphate results continued to be below the action levels: Ammonia-N: 2.0 mg/L Orthophosphate-P: 2.85 mg/L	Witheridge
7/20/2007	Upstream investigation was initiated. Next upstream inlet is a grate south of Marlado Park. There was evidence of runoff, but no flow. The next manhole was part of a curb inlet structure. It had ponded water with anaerobic black mud at the bottom. A sampling pole was used and the water sampled was turbid. Ammonia-N: 4.5 mg/L Orthophosphate-P: 4.65 mg/L The other connecting MS4 inlets and structures were dry. There was also overland flow coming from park just upstream of the curb inlet. While there was no flow during sampling, there was also evidence of overland flow coming from the residential community up River Tree to the north.	Witheridge

Investigatory Status

Initial screening of ponded water at site S072 resulted in action level exceedances of ammonia and orthophosphate. The follow-up visit found continued exceedances of ammonia and orthophosphate. The upstream investigation found ponded water in the curb inlet on River Tree. The remaining MS4 system was dry. Overland flow was

coming from a sprinkler in the park, just upstream of the inlet. Overland flow has also since been seen coming from the residential area to the north. Due to quick evaporation, no one source was identified.

To reduce and/or eliminate the residential flow, educational material about dry weather runoff and pollution prevention was distributed to the residences on October 25, 2007. The City of Oceanside's water conservation program also reached this area through the local public television station's service announcements in August and October on smart irrigation. The Clean Water Program also teamed up with the Water Utilities' Meter Readers in August and began a residential door hanger program. The Meter Readers will be placing door hangers on residences that they find to have water flowing from their property. The door hangers have tips for good irrigation practices and a link to the City's website for more information.

To reduce and/or eliminate the runoff from the City's parks, several meetings by phone and in person were held in September and October with Clean Water Program staff and Parks' Department staff and their contractors. The Parks' maintenance staff visually inspects the City's parks weekly. Any irrigation problems are prioritized and fixed. Fertilizer is applied depending on the use of the park and the season. A slow-release fertilizer is used in the summer and best management practices are always used to keep fertilizer and grass clippings in the park and out of the storm drains and water ways. De-thatching is completed annually and aeration bi-annually to improve drainage in all of the parks. The Clean Water Program is working continuously with the Park's Department to keep BMPs in place and up-to-date in addition to seeking out funding for smart irrigation controls to improve water conservation efforts.

Attachments

Overland flow from Marlado Park

S103	Dry Weather 2007	6/22/2007

Site Summary:

Site S103 is a concrete outfall located south of the San Luis Rey River. Access to the site is from Gooseberry Way. The outlet drains a residential areas south of the site outlet drains a residential areas south of the site

Investigatory Actions

Date	Action	Staff
6/22/2007	Initial investigation conducted. Field Screening of the flowing water showed the following exceedances: Ammonia: 6.0 ppm Orthophosphate-P: 4.15 ppm	Witheridge
6/27/2007	Follow-up investigation conducted. Field Screening was conducted and showed ammonia levels within acceptable limits and Orthophsphate-P levels lower, but exceeding the acceptable limits: Ammonia: 0.3 ppm Orthophosphate-P: 2.0 ppm	Witheridge
6/27/2007	An up-stream investigation was conducted. The catch basins upstream did not contain enough water to sample, but there was ponded water on the curb that was sampled. The results for ammonia and Orthophoste-P were within the acceptable limits: Ammonia: 0.8 ppm Orthophosphate-P: 1.15 ppm The runoff was followed further upstream and the majority was coming from a residence at 5381 Gooseberry Drive.	Witheridge

Investigatory Status

Follow-up investigations showed a continued exceedance of Orthophosphate-P levels. The contributing drainage area consists of residential land-use; one point contribution was identified during neighborhood observation. Educational materials were distributed to the contributing residential area to inform residents of their potential impact on local water quality issues.

S106	Dry Weather 2007	5/29/2007

Site Summary:

Site S106 includes four 36-inch plastic pipes at the intersection of North River Road and Sleeping Indian Road on the north side of the San Luis Rey River. The outlet drains an agricultural area immediately north of the site. Access to the site is from North River Road.

Investigatory Actions

Date	Action	Staff
5/29/2007	Initial investigation conducted. Field Screening and laboratory results showed an exceedance for nitrate: Nitrate-N: 35.6 mg/L	Witheridge
6/6/2007	Follow-up investigation conducted. Results show continued exceedance for nitrate: Nitrate-N: 68.8 mg/L	Witheridge
7/2/2007	Follow-up investigation continued. Results show continued exceedance for nitrate: Nitrate-N: 44.0 mg/L Upstream investigation conducted. The drainage ditch was sampled upstream of the outfall, but downstream of the intersection of Sleeping Indian Road and Las Tunas road where the drainage crosses under Sleeping Indian Road. Nitrate results were below the action levels: Nitrate-N: 7.9 mg/L	Witheridge

Investigation Status

Nitrate loading from the agricultural area around Sleeping Indian has been an on-going issue. Clean Water Program staff began a special investigation in the summer of 2006 to assess agricultural contribution to nitrate exceedance. Several agricultural outfalls were identified that consistently contribute egregious nitrate water quality exceedances to the Sleeping Indian Outlet. The City of Oceanside is currently working with contributing agricultural parties to voluntarily implement appropriate BMP's to effectively manage agricultural runoff. In addition, due to possible drought conditions, agriculture facilities are coming under a mandatory 30% decrease in water usage. The Clean Water Program continues to maintain a good working relationship with these facilities and will be conducting more site visits and monitoring during the wet weather season in effort to show the facilities what their contribution is and providing ways they can eliminate and/or reduce their runoff and nitrate contribution.

S109	Dry Weather 2007	6/14/2007

Site Summary:

Site S109 is an 18-inch RCP located on the south side of the San Luis Rey River. The site conveys the runoff from the residential area immediately south of the outlet.

Investigatory Actions

Date	Action	Staff
6/14/2007	Initial investigation conducted. Field Screening results showed exceedances for the following parameters: Ammonia-N: 1.5 mg/L Orthophosphate-P: 3.70 mg/L Dissolved Oxygen: 1.05 mg/L Turbidity: 95 NTU	Witheridge
6/19/2007	Follow-up investigation conducted. Results show continued exceedances for ammonia and orthophosphate: Ammonia-N: 1.5 mg/L Orthophosphate-P: 5.45 mg/L Dissolved Oxygen: 5.46 mg/L Turbidity: 41 NTU	Witheridge
6/19/2007	An upstream investigation was initiated. The next upstream sampling point is from a manhole at a curb inlet in the residential area at the intersection of Harding and Andrew Jackson. Evidence of irrigation was present, but no ponded water the sample. Leaf debris was found in the catch basin.	Witheridge

Investigation Status

To reduce and/or eliminate the residential flow, educational material about dry weather runoff and pollution prevention was distributed to the residences on October 25, 2007. The City of Oceanside's water conservation program also reached this area through the local public television station's service announcements in August and October on smart irrigation. The Clean Water Program also teamed up with the Water Utilities' Meter Readers in August and began a residential door hanger program. The Meter Readers will be placing door hangers on residences that they find to have water flowing from their property. The door hangers have tips for good irrigation practices and a link to the City's website for more information. In addition, Public Works cleans all the catch basins in the City annually prior to the wet weather season.

S110	Dry Weather 2007	6/14/2007

Site Summary:

Site S110 is located on the north side of the San Luis Rey River. S110 is a 30-inch RCP with a flap gate installed. Access to Site S110 is from Douglas Drive to the access road on the north side of the River

Investigatory Actions

Date	Action	Staff
6/14/2007	Initial investigation conducted. Field Screening results showed exceedances for the following parameters: pH: 9.93 Dissolved Oxygen: 19.31 mg/L The sample was taken at 10:50am on a very hot day (water temperature = 28.1 C)	Witheridge
6/19/2007	Follow up investigation conducted; field screening results showed ph and DO within acceptable parameters. pH: 8.20 Dissolved Oxygen: 8.66 mg/L	Witheridge

Investigatory Status

The initial visit of S110 was on a hot day in the middle of June. The very small amount of ponded water had elevated pH, DO, and temperature results. The follow-up was conducted in the morning and pH and DO results were within acceptable parameters.

S111	Dry Weather 2007	6/8/2007

Site Summary:

Site S111 is a concrete channel adjacent to Fireside Park, east of the San Luis Rey River. The channel drains the residential area east of the site.

Investigatory Actions

Date	Action	Staff
6/8/2007	Initial investigation conducted. Field Screening results showed an exceedance for pH: pH 9.68	Witheridge
6/11/2007	Follow-up investigation conducted. Results show continued exceedance for pH: pH 9.62 Less water present.	Witheridge
6/19/2007	Another follow-up and upstream investigation was planned; however the ponded water had dried up. No flow upstream.	Witheridge

Investigation Status

Site S111 had an exceedance for pH, most likely due to leaching from the concrete channel. The summer created drier conditions and the ponded water evaporated.

S111 on June 19, 2007

L002	Dry Weather 2007	9/12/2007

Site Summary:

Site L002 is a 66-inch RCP located near North Avenue and Vista Pacific Drive, north of Loma Alta. It drains the industrial and commercial area to the north of the creek and east of North Avenue.

Follow-up Actions

Date	Action	Staff
9/12/2007	Initial investigation conducted. Field screening of the ponded water showed exceedances for the following parameters: Dissolved Oxygen: -1.5 mg/L Because of the high ponded water, access to the actual outfall was not possible. While there was not direct flow to Loma Alta, there was some seepage downstream. Dissolved oxygen readings were collected at this point to see what the levels were as the water entered the channel: Dissolved Oxygen: 5.0 mg/L	Witheridge

Investigatory Status

The low DO was most likely due to the ponded nature of the water where the site was sampled. Four feet closer to the receiving water, the dissolved oxygen levels were within acceptable levels.

L007	Dry Weather 2007	9/7/2007

Site Summary:

Site L007 is a 48-inch RCP located off of North Avenue and Seasons Road, south of Loma Alta Creek. It drains the residential area to the south of North Avenue.

Follow-up Actions

Date	Action	Staff
9/7/2007	Initial investigation conducted. Field screening of the ponded water showed exceedances for the following parameters: Ammonia-N: 1.0 mg/L Dissolved Oxygen: 0.99 mg/L	Witheridge/ Mallett
9/12/2007	Follow-up investigation conducted. Field screening results continued to exceed action levels for the following parameters. Ammonia-N: 1.0 mg/L Dissolved Oxygen: -1.88 mg/L The next upstream manhole on the south side of North Avenue was visited and the ammonia results were under action levels: Ammonia-N: 0.8 mg/L	Witheridge
9/14/2007	Follow-up investigation continued. The upstream manhole visited on 9/12/2007 was sampled for dissolved oxygen: Dissolved Oxygen: -1.30 mg/L This catch basin had approximately 3 feet of standing water in it. The next access point is a manhole on Bliss Circle. There was not enough water to sample. Some overland flow was observed and tracked to area drains from private residences.	Witheridge

Investigatory Status

The ammonia exceedances and low DO results are likely from the ponded nature of the outfall. Leaf debris and algae were present and the decay of both can contribute to these levels. Public Works was contacted and made aware of the ponded water in the upstream portion of the system. In addition, education materials regarding dry weather runoff and water conservation were distributed to the residential community.

L013	Dry Weather 2007	9/12/2007

Site Summary:

Site L013 is a manhole upstream of a 42-inch RCP located behind ReMax in the southwest corner of the shopping center at the intersection of Oceanside Boulevard and College Boulevard. The outlet is surrounded by dense vegetation and a fence and is therefore not accessible. This outlet drains the commercial and residential area to the north of Oceanside Boulevard.

Follow-up Actions

Date	Action	Staff
9/12/2007	Initial investigation conducted. Field screening showed an exceedance for the following parameter: Orthophosphate-P: 2.10 mg/L	Witheridge
9/14/2007	Follow-up investigation conducted. Field screening result for orthophosphorous were under the action level: Orthophosphate-P: 0.95 mg/L	Witheridge

Investigatory Status

The orthophosphate result from the follow-up investigation was under the action level.

L019	Dry Weather 2007	8/30/2007

Site Summary:
Site L19 is a 48-inch RCP, located south of the Corporate Centre and Oceanside Boulevard intersection, north of Loma Alta Creek. The outlet drains the commercial and open space areas located on the hill north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard

Investigatory Actions

Date	Action	Staff
8/30/2007	Initial investigation conducted. Field and laboratory results of the ponded water showed exceedances for the following parameters: Ammonia-N: 1.0 mg/L Total Coliforms: 50,000 MPN/100mL	Witheridge
8/31/2007	Follow-up investigation conducted. Field screening result for ammonia were under the action level: Ammonia-N: 0.8 mg/L	Witheridge
10/1/2007	Follow-up investigation for bacteria was conducted. Laboratory results were below the bacteria action levels: Total Coliforms: 3,000 MPN/100mL Fecal Coliforms: 80 MPN/100mL Enterococcus: 96 MPN/100mL An upstream sample was also collected on the northeast corner at the intersection of Corporate Center and Oceanside Blvd. The bacteria levels here were also below the bacteria action levels: Total Coliforms: 8,386 MPN/100mL Fecal Coliforms: 1,100 MPN/100mL Enterococcus: 85 MPN/100mL	Witheridge

ICID

10/1/2007	While investigating the upstream area at the corner of Corporate Center and Oceanside Blvd, discharge from landscaping and/or construction at the corner was observed. A hose was attached to the irrigation system, but was leaking water at the connection, picking up sediment, and heading directly into the storm drain. The crew was made aware of the problem and immediately turned off the water and repaired the connection.	Witheridge

Investigation Status
The ponded water at this site was collected and sampled. Generally, the water has a slight trickle over the banks to the receiving water of Loma Alta. Ammonia and bacteria levels decreased to levels below the action limits upon follow-up visits.

An ICID was observed on October 1, 2007 and was remedied immediately. A landscaping contractor had a poor connection with a water pipe. Water from the bad connection was spraying onto the dirt, picking up fine sediments and washing them directly into the storm drain. The contractor immediately turned off the water and fixed the connection on the hose.

Poor hose connection next to the storm drain inlet.

L029	3060 Industry Way	8/23/2007

Site Summary:

Site L029 is a manhole on the north side of Loma Alta Creek. Access to the outfall is not available. The first accessible sampling point is at a curb inlet that begins the storm drain system in front of 3060 Industry Way. The outlet drains the commercial and industrial area south of Oceanside Boulevard.

Investigatory Actions

Date	Action	Staff
8/23/2007	Initial investigation conducted. Field screening of the ponded water showed the following exceedances: Ammonia: 7.0 ppm	Witheridge
8/31/2007	Follow-up investigation conducted. Field screening was conducted and showed ammonia levels continued to exceed the acceptable limits: Ammonia: 4.0 ppm Public Works was contacted. There is a tree growing in the outlet which is currently inaccessible.	Witheridge

Investigatory Status

Follow-up investigations showed the ammonia exceedance to most likely be caused by leaf debris in the ponded water in the manhole. The sources of water are most likely irrigation and storm runoff. The cause of the blockage is from tree roots growing at the end of the pipe which is inaccessible to the Public Works department. Public Works has been made aware of the exceedance and are working on gaining access to the outlet to correct the problem.

L040	Dry Weather 2007	8/30/2007

Site Summary:

Site L040 is an open concrete channel north of Loma Alta Creek just east of I-5. Access to the outfall is not available. Theoutlet drains the commercial and residential areas east of I-5 and north and south of Oceanside Blvd.

Investigatory Actions

Date	Action	Staff
8/30/2007	Initial investigation conducted. Laboratory screening of showed the following exceedance for total coliforms: Total Coliforms: 50,000 MPN/100mL	Witheridge
10/1/2007	Follow-up investigation conducted. Laboratory screening was conducted and showed total coliform levels to be under the action level: Total Coliforms: 30,000 MPN/100mL A sample was also collected upstream in the channel, above the vegetation. The results upstream were also below action levels: Total Coliforms: 8,000 MPN/100mL	Witheridge

Investigatory Status

Initial screening of L040 resulted in an action level exceedance of total coliforms. Upon a follow-up visit, the total coliform levels were below the action levels. An upstream investigation was initiated on the follow-up day and bacteria levels upstream of the vegetated portion of the channel were a log lower.

Upstream sampling point.

L052	Dry Weather 2007	8/16/2007

Site Summary:

Site L052 is a 36-inch RCP outlet on the south side of Loma Alta Creek just west of I-5. Access to the outfall is from Cavalier Mobile Estates through the channel. The outlet drains the residential area on the east side Cavalier Estates.

ICID

Date	Action	Staff
8/16/2007	Deposit of wet, fine sediment at the outfall. Not enough flow to sample, but appeared something had been washed down. Went upstream to a construction site in Cavalier Mobile Park. No flow or activities on going, but the ground was wet and a hose was uncoiled. Referred to Code Enforcement.	Witheridge
8/17/2007	Code Enforcement visited the site. Construction activities from a fire inside a shed had been completed. Management was made aware of the findings.	Witheridge

Investigatory Status

An area to the east of the Cavalier Mobile Estates office was being cleared from a fire that had started in a shed near the pool. The sediment deposit found in the outfall was likely a one-time incident on the final day of construction. Park management was made aware of the regulations and it is not expected that this will occur again.

Sediment in outfall.

L054	Dry Weather 2007	8/30/2007

Site Summary:

Site L054 is a 16-inch RCP outlet on the south side of Loma Alta Creek west of I-5. Access to the outfall is from Cavalier Mobile Estates through the channel. The outlet drains the residential area to the south and Marshall Park.

Investigatory Actions

Date	Action	Staff
8/30/2007	Initial investigation conducted. Field screening of the flowing water showed the following exceedances: Nitrate-N: 10.5 ppm	Witheridge
8/31/2007	Follow-up investigation conducted. Field screening was conducted and showed nitrate levels continued to exceed the acceptable limits: Nitrate-N: 10.6 ppm An upstream investigation was conducted and the flow tracked to an upstream inlet at the northwest corner of Port Marshall Park. Two main flows were found; one from the MS4 system upstream (Flow #1) and the other from a small PVC pipe coming from the east (Flow #2). Field screening for nitrate was conducted: Flow #1: Nitrate-N = 6.1 ppm Flow #2: Nitrate-N = 11.85 ppm Flow #2 was tracked upstream to a small PVC pipe from a gated area in Cavalier Mobile Estates that drains overland to a grate and then flows to the second PVC pipe that flows to the storm drain inlet. A neighbor said that this flow is from continuous groundwater pump to avoid flooding in the trailer park.	Witheridge
9/12/2007	Field screening was conducted directly from the PVC groundwater pump pipe: Nitrate-N: 10.6 ppm	Witheridge
9/14/2007	The manager of Cavalier Mobile Estates was contacted and options about recycling and/or diverting the water was discussed.	Witheridge/ Lahsaie

Investigatory Status
Flow was tracked upstream from Loma Alta Creek to an inlet in the northwestern corner of Marshall Park. Flow from a sump pump in Cavalier Mobile Estate was found to the main source of flow and nitrate. Cavalier Mobile Estates constructed a set of three sump pumps to continuously pump groundwater to the storm drain system eight years ago to avoid flooding. Most likely a combination of natural seepage (from being built on a wetland) and over-irrigation from the residential area and park to the south caused continuous flooding of the mobile home park. Nitrate exceedances are likely from natural sources and/or fertilizers used in the park and residential areas to the south.

View from the trailer park to Marshall Park

Sump pump pipe flowing into storm drain.

Initial discussions of ways to reduce and eliminate this source of water included the possibility of reusing it as irrigation for the mobile home park or diverting it to sewer. Discussion with mobile home park management showed that the park doesn't have enough landscaping to reuse the amount of water that is being pumped. In addition, the amount combined with the nitrate levels are too much for the local sewer plant to handle.

Oceanside's Parks Department was contacted and agreed to stop watering Marshall Park for over a week while flow and nitrate tests were conducted. While flow remained approximately the same, nitrate levels did seem to decrease. The water was turned back on. It was discovered that the park was fertilized with a 39-0-0 sulfur based slow-release fertilizer the day before the irrigation system was turned back on. However, the Parks Department agreed to halt further fertilization for four months while field test are conducted bi-weekly.

Results of the initial field testing are shown below:

Directly from sump pump outfall:

Date	Time	Nitrate-N (mg/L)	Flow (gpm)	pH	Water Temp (C)	Turb (NTU)	Cond (mS/cm)	DO (mg/L)	Total Chlorine (ppm)*
9/12/2007	14:00	10.6	N/S	6.96	23.6	0	2.72	5.84	
9/17/2007	14:00	11.5	6						
9/25/2007		Water shut off in Marshall Park							
10/1/2007	7:00	10.6	5.7	6.74	20.4	0	2.76	6.19	
10/4/2007	13:00	8.9	5.9						
10/4/2007		Fertilizer used on Park							
10/5/2007		Water turned back on							
10/12/2007	11:15	10.8	5.5	6.89	21.1	0	2.74	5.99	1

*Total Chlorine approximated by field test strip.

Monitoring will continue at the outfall of the sump pump and discussions of ways to reduce and/or eliminate this source are ongoing. It is a priority for the City of Oceanside to find a solution that will halt exceedance levels of nitrate from going into the storm drain, while also protecting the residents and their homes in the trailer park from flooding.

L103	Dry Weather 2007	8/23/2007

Site Summary:

Site L103 is a 72-inch RCP located west of Corporate Center, north of Loma Alma Creek. The outlet drains the commercial and open space areas located north of Oceanside Boulevard off of Corporate Center Drive.

Investigatory Actions

Date	Action	Staff
8/23/2007	Initial investigation conducted. Field screening of the flowing water showed the following exceedances: Orthophosphate-P: 2.55 mg/L	Witheridge
8/31/2007	Follow-up investigation conducted. Immediate follow-up was not possible due to rain and the 72-hour waiting period. Field screening was conducted and showed orthophosphate levels to be below the acceptable limits: Orthophosphate-P: 1.75 mg/L	Witheridge

Investigatory Status

Orthophosphate levels at L103 were above the action level during the initial visit. There was measurable rain over 0.10-inch in Oceanside over the weekend so the follow-up for the site was conducted the following Friday. Results for orthophosphate were below the action levels.

L105	Dry Weather 2007	8/14/2007

Site Summary:
Site L105 is a manhole located on Industry Way, north of Loma Alta Creek. The outlet within the manhole drains the residential and commercial area located north of Industry Way.

Investigatory Actions

Date	Action	Staff
8/14/2007	Initial investigation conducted. Field screening of the flowing water showed the following exceedances: Ammonia-N: 1.0 mg/L Orthophosphate-P: 2.35 mg/L	Witheridge
8/15/2007	Follow-up investigation conducted. Field screening was conducted and ammonia and orthophosphate results continued to exceed the action levels: Ammonia-N: 1.0 mg/L Orthophosphate-P: 4.65 mg/L	Witheridge
8/15/2007	Upstream investigation was conducted. The next upstream manhole on Oceanside Blvd across from Edgehill Lane was sampled using a pole. There was low flow and the water was turbid. Results for phosphate continued to be above action levels: Orthophosphate-P: 5.10 mg/L Although the MS4 system begins in two places: the bottom of Edgehill Lane and at the intersection of Foussat and Oceanside Blvd, there was overland flow going into both curb inlets. Overland flow was tracked upstream on Foussat. A sample was taken from a storm drain that was on Foussat, south of Mesa coming from Island Drive. Investigations of the residential area lead to a car being washed. Field screening showed results below action levels: Ammonia-N: 0.4 mg/L Orthophosphate-P: 1.85 mg/L The upstream investigation of Edgehill Lane lead to what seemed to be a groundwater seep at the entrance to Arbor Hills gated condo complex. Field screening was conducted	Witheridge

	using a syringe and results for orthophosphate were overrange of the meter: Ammonia-N: 0.6 mg/L Orthophosphate-P: OR	
9/12/2007	Upstream site at Arbor Hills was revisited. Less water was seeping from cracks in the asphalt and a sample could not be collected even using a syringe.	Witheridge

Investigatory Status

Ammonia and orthophosphate levels at L105 were above the action level during the initial visit. An upstream investigation the following day indicated that ammonia exceedances were likely caused by leaf debris and occasional ponding in the MS4 system. The upstream investigation lead to two sources of overland flow; the first up Foussat, the second up Edgehill Lane. The flow from Foussat did not have orthophosphate exceedances. The flow on Edgehill was tracked to the entrance of Arbor Hills gated residential community. Groundwater was seeping from the asphalt with orthophosphate levels above the range of the field meter. On a return visit, the groundwater seep had lessened and sampling was not feasible. The flow was not making it to the storm drain down Edgehill Lane. This site will continue to be monitored. If flow increases, sampling will be conducted to verify the orthophosphate results.

8/15/2007 Arbor Hills Entrance

8/15/2007 Groudwater Seepage at Arbor Hills

9/12/2007 Groundwater Seepage at Arbor Hills

B001	Dry Weather 2007	8/30/2007

Site Summary:

Site B001 is a 48”-RCP located east of the Pacific Coast Highway at the Buena Vista Nature Center. The outlet drains the commercial and residential areas northeast of the Nature Center.

Investigatory Actions

Date	Action	Staff
8/30/2007	Initial investigation conducted. Field and laboratory screening showed exceedances for the following parameters: Ammonia-N: 2.0 mg/L Total Coliforms: ≥1,600,000 MPN/100mL Fecal Coliforms: ≥1,600,000 MPN/100mL	Witheridge/ Mallett
8/31/2007	Follow-up investigation conducted. Field screening results continued to show an exceedance for the following parameter: Ammonia-N: 3.0 mg/L	Witheridge
9/10/2007	The mouth of Buena Vista Lagoon was opened.	Public Works
9/17/2007	Follow-up investigation continued. Laboratory screening results were below the bacteria action levels: Total Coliforms: 23,000 MPN/100mL Fecal Coliforms: 5,000 MPN/100mL	Witheridge
10/1/2007	Because initial bacteria values were extremely high, an additional confirmation event was completed. Field and laboratory screening showed an exceedance for ammonia, total coliforms, and fecal coliforms: Ammonia-N: 3.0 mg/L Total Coliforms: 70,000 MPN/100mL Fecal Coliforms: 22,000 MPN/100mL	Witheridge
10/1/2007	An upstream investigation was conducted. The three manholes upstream of B001, but south of Eaton Street were visited. The downstream two manholes had ponded water. The third catch basin had ponded water with a trickle going downstream, but the upstream pipe was dry. The ponded water in the third catch basin was sampled. Results for total and fecal coliforms were below the	Witheridge

<table>
<tr><td></td><td>action levels:
<table>
<tr><td>Ammonia-N</td><td>2.0 mg/L</td></tr>
<tr><td>Total Coliforms</td><td>17,000 MPN/100mL</td></tr>
<tr><td>Fecal Coliforms</td><td>220 MPN/100mL</td></tr>
</table>
A passerby did mention that he has seen raccoons going in and out of storm drains in the drainage area.</td><td></td></tr>
</table>

Investigatory Status:
During the initial visit, the outfall was completely submerged. The mouth was scheduled to be opened by Public Works because of rising lagoon levels. The bacteria results were received the day after the lagoon was opened and flushing was assumed to have occurred. Follow-up bacteria sampling showed the coliform levels to have decreased below action limits. Exceedances in ammonia levels are likely due to decay in the ponded water. Additional follow-up sampling was conducted and total and fecal coliform levels were once again exceeding action levels. Upstream of the outfall, the water was ponded up to the third catch basin, but no water was flowing into it. This ponded water was sampled and results for bacteria were below all action levels. It does not appear that bacteria exceedances are caused by upstream actions or runoff. It is still unclear why the initial bacteria levels were so high.

B001 on August 30, 2007

B001 on September 17, 2007 after the opening of Buena Vista Lagoon.

B002	Dry Weather 2007	8/30/2007

Site Summary:

Site B002 is a 72-inch RCP located on Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial and residential areas north of SR-78. Access to the site is via Lagoon View Drive.

Investigatory Actions

Date	Action	Staff
8/30/2007	Initial investigation conducted. Field Screening and laboratory results showed an exceedance for the following parameter: Total Coliforms — 130,000 MPN/100mL	Witheridge
9/17/2007	Follow-up investigation conducted in conjunction with Coastal Storm Drain sampling. Total coliform results were under the action level. Total Coliforms — 8,000 MPN/100mL	Witheridge

IC/ID

Date	Action	Staff
7/3/2007	In response to exceedances for Coastal Storm Drain Monitoring, an upstream investigation was conducted. The results for the outfall are shown below: Total Coliforms — 23,000 MPN/100mL Fecal Coliforms — 1,700 MPN/100mL Enterococcus — 640 MPN/100mL Results for the upstream investigation at the manhole above commercial activity, but below the residential area are shown below: Total Coliforms — 2,300 MPN/100mL Fecal Coliforms — 130 MPN/100mL Enterococcus — 30 MPN/100mL	Witheridge
7/30/2007	Again upstream sampling was conducted in an attempt to determine if the bacterial exceedances were coming from upstream of the commercial area, or in the portion of storm drain that runs below Interstate 78. The results for the outfall are shown below: Total Coliforms — 50,000 MPN/100mL Fecal Coliforms — 11,000 MPN/100mL Enterococcus — 346 MPN/100mL	Witheridge

	Results for the upstream investigation at the manhole above commercial activity, but below the residential area are shown below: Total Coliforms: 3,000 MPN/100mL Fecal Coliforms: 20 MPN/100mL Enterococcus: 30 MPN/100mL	

Investigatory Status

This site has historically been monitored under the Coastal Storm Drain Monitoring Program, in addition to the Dry Weather Program. With inconsistent exceedances, monitoring has been increased and this site is now sampled bi-monthly. Previous investigations have shown bat populations living in the storm drain under Interstate-78. An upstream investigation in July showed that bacteria levels were roughly a log lower in the manhole upstream of the commercial area and above the bat population.

There is also a suspicion that septic systems still in use in some residences on Fire Mountain, upstream in the MS4 system, may be having an affect on bacteria levels. Optical brighteners assays conducted during the dry weather season in 2006 were positive at the outfall and inconclusive in the upstream manhole. Optical brighteners are used in many households and indicate an anthropogenic source in runoff. These assays will be re-run in October as part of the ongoing investigation into random exceedances throughout the year.

B022	Dry Weather 2007	8/1/2007

Site Summary:

Site B022 is a 48-inch RCP built into the Buena Vista Creek channel wall east of the Thunder Drive Bridge. The outlet drains the residential areas north of Buena Vista Creek. Access to the site is from within Buena Vista Creek channel.

Investigatory Actions

Date	Action	Staff
8/1/2007	Initial investigation conducted. Field Screening and laboratory results showed exceedances for the following parameters: Total Coliforms: 300,000 MPN/100mL Fecal Coliforms: 110,000 MPN/100mL Enterococcus: >24,196 MPN/100mL To note, a diaper was found at the outfall during sampling.	Witheridge
8/20/2007	Follow-up investigation conducted. Total coliform results were under the action level, however fecal coliform and enterococcus results continued to exceed the action levels: Total Coliforms: 50,000 MPN/100mL Fecal Coliforms: 50,000 MPN/100mL Enterococcus: 27,551 MPN/100mL An upstream investigation was conducted. Two upstream manholes were found in the apartment complex north of the outfall, but were unable to be opened. An inlet north of the apartment complex was found in a commercial area, but the inlet was not flowing, although the concrete was wet. No overland flow was found. Cut grass was found in the outfall.	Witheridge

Investigatory Status

Follow-up investigations did not find any point sources for bacterial exceedances. Residential behavior may be the source of runoff and bacterial contamination as a diaper and cut grass were observed in and near the outfall. Educational material was distributed to the residences regarding dry weather runoff and pollution prevention on October 25, 2007.

B023	Dry Weather 2007	7/20/2007

Site Summary:

Site B023 is a 36-inch RCP located west of the intersection of Lake Boulevard and Thunder Drive south at 3524 Lake Blvd. The outlet drains the residential areas south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
7/20/2007	Initial investigation conducted. Field screening results showed conductivity levels to be high: Conductivity: 7.10 mS/cm	Witheridge
7/23/2007	Follow-up investigation conducted. Field screening showed conductivity levels to be higher than other parts of the City: Conductivity: 7.85 mS/cm	Witheridge
7/23/2007	An upstream investigation was conducted. The results from the next upstream manhole were similar: Conductivity: 7.22 mS/cm Across Lake Boulevard, the flow was tracked and tested and results were higher: Conductivity: 10.1 mS/cm The outfall off Mira Monte was tested and conductivity levels continued to climb: Conductivity: 12.5 mS/cm The inlet to the east of Mira Monte was dry. It seemed the runoff was groundwater seepage.	Witheridge
7/26/2007	Clean Water Program staff and Public Works staff revisited the upstream site off Mira Monte to confirm groundwater seepage. A closer inspection of the joints in the storm drain showed mineral growth. In addition, the pavement at the low point of the street was wet with seepage.	Witheridge/ Sabelis

Investigatory Status

Follow-up investigation showed that this runoff is from groundwater seepage. Also to note, the upstream site off of Mira Monte had several shopping carts in the drainage area. This seems to be a historical problem. These carts were removed during the Buena Vista Creek Clean-Up in conjunction with California Coastal Clean-Up Day on September 15, 2007.

B024	Dry Weather 2007	7/20/2007

Site Summary:

Site B024 is a 36-inch RCP located on the southwest corner of College Boulevard Bridge over Buena Vista Creek. The outlet drains the commercial and residential areas south on College Boulevard. Access to the site is from College Boulevard.

Investigatory Actions

Date	Action	Staff
7/20/2007	Initial investigation conducted. Field showed exceedances for the following parameters: Ammonia-N: 2.0 mg/L Orthophosphate-P: 2.95 mg/L	Witheridge
7/23/2007	Follow-up investigation showed that the field screening results continued to exceed action levels for the following parameters: Ammonia-N: 1.0 mg/L Orthophosphate-P: 2.95 mg/L An upstream investigation began, however all of the manholes for this branch of the MS4 system were in the middle of College Blvd.	Witheridge
7/26/2007	The follow-up investigation was continued with multiple field screening samples taken. The following is a record of sample locations and results: Upstream #1: North of Lake Blvd intersection Ammonia-N: 0.4 mg/L Orthophosphate-P: 2.80 mg/L Upstream #2: North of Oceanside/Carlsbad City line Orthophosphate-P: 2.20 mg/L Upstream #3: Manhole south of Oceanside/Carlsbad line. This manhole had two flows. This sample was taken from flow coming from the east. Orthophosphate-P: 2.75 mg/L Upstream #4: Manhole south of Oceanside/Carlsbad line. This manhole had two flows. This sample was taken from flow coming from the west. Orthophosphate-P: 2.05 mg/L The City of Carlsbad was notified.	Witheridge/ Sabelis

<table>
<tr>
<td>8/3/2007</td>
<td>Follow-up investigation continued with City of Carlsbad. Field screening at the outfall showed continued exceedances for the following parameters:
<table>
<tr><td>Ammonia-N</td><td>4.0 mg/L</td></tr>
<tr><td>Orthophosphate-P</td><td>4.35 mg/L</td></tr>
</table>
Less flow was observed. The only flow that was able to be sampled was upstream of Upstream #3 in a brow ditch below the private residences. The results for ammonia and orthophosphate were below action levels:
<table>
<tr><td>Ammonia-N</td><td>0.4 mg/L</td></tr>
<tr><td>Orthophosphate-P</td><td>1.75 mg/L</td></tr>
</table>
</td>
<td>Witheridge/ Hartman</td>
</tr>
</table>

Investigatory Status

Follow-up investigations showed ammonia levels to decrease below action levels when sampled upstream of the ponded water. The ammonia exceedances were likely due to decay in the ponded water. Although the orthophosphate results upstream in the City of Carlsbad were below action levels during the final investigation, Carlsbad distributed education material pertaining to dry weather runoff to the residential areas east and west of College Blvd that are part of the drainage area for sampling sites Upstream #3 and #4.

B027	Dry Weather 2007	8/8/2007

Site Summary:

Site B027 is a 54-inch box outlet located off of Haymar on Hanson Aggregate property. It drains the commercial and residential areas to the north of Interstate 78.

Follow-up Actions

Date	Action		Staff
8/8/2007	Initial investigation conducted. Field screening showed an exceedance for ammonia:		Witheridge
	Ammonia-N	3.0 mg/L	
8/14/2007	Follow-up investigation conducted. Field screening results within acceptable parameters.		Witheridge
	Ammonia-N	0.4 mg/L	

Investigatory Status

The follow-up investigation of B027 found ammonia results to be under the action levels. This flow is trickling, but there are also pools of stagnant water. The original exceedance is likely due to decay of leaf debris in ponded water.

B103	Dry Weather 2007	8/14/2007

Site Summary:

Site B103 is located at the end of Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains commercial areas north of SR-78.

Investigatory Actions

Date	Action		Staff
8/14/2007	Initial investigation conducted. Field Screening showed an exceedance for the following parameters:		Witheridge
	Nitrate-N	10.8 mg/L	
8/15/2007	Follow up investigation conducted. Field screening results were below action levels:		Witheridge
	Nitrate-N	7.45 mg/L	

Investigatory Status

The follow-up investigation resulted in lower nitrate levels.

A004a	Dry Weather 2007	8/1/2007

Site Summary:

Site A004a is 48-inch RCP located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The outlet drains the residential areas north and south of the outlet.

Investigatory Actions

Date	Action	Staff
8/1/2007	Initial investigation conducted. Field Screening showed exceedances for the following parameters: Ammonia-N: 5.0 mg/L Orthophosphate-P: 3.55 mg/L Total Coliforms: 300,000 MPN/100mL Enterococcus: 14,136 MPN/100mL	Witheridge
8/3/2007	Follow-up investigation conducted. Field screening results within acceptable parameters. Ammonia-N: 0.8 mg/L Orthophosphate-P: 1.45 mg/L	Witheridge
8/20/2007	Follow-up laboratory samples collected and field screening samples were collected at the outfall. Results showed exceedances for the following parameters: Ammonia-N: 3.0 mg/L Orthophosphate-N: 4.30 mg/L Total Coliforms: ≥1,600,000 MPN/100mL Fecal Coliforms: 110,000 MPN/100mL Enterococcus: 26,996 MPN/100mL	Witheridge
8/20/2007	Went upstream on the south fork of the line. The next manhole that was accessible upstream was at the end of Milissi Road. There was not enough flow to sample from the manhole, but there was overland flow which was sampled. Results are shown below: Ammonia-N: 0.4 mg/L Orthophosphate-N: 3.10 mg/L Total Coliforms: 300,000 MPN/100mL Fecal Coliforms: 30,000 MPN/100mL Enterococcus: 6,473 MPN/100mL	Witheridge

<table>
<tr><td></td><td>The overland flow was tracked upstream to area drains from private residences. Field test kits were used at two drains at the end of Tolo Road:<table><tr><td>Orthophosphate-P Drain #1</td><td>3.10 mg/L</td></tr><tr><td>Orthophosphate-P Drain #2</td><td>2.95 mg/L</td></tr></table></td><td></td></tr>
<tr><td>8/20/2007</td><td>Went upstream on the north fork of the line. The next accessible manhole upstream was in a brow ditch southwest of the residences on Nighthawk Lane. A sampling pole was used and it was difficult to get a clean sample. The sample was turbid with debris and sediment.<table><tr><td>Ammonia-N</td><td>1.0 mg/L</td></tr><tr><td>Orthophosphate-P</td><td>3.70 mg/L</td></tr><tr><td>Total Coliforms</td><td>900,000 MPN/100mL</td></tr><tr><td>Fecal Coliforms</td><td>17,000 MPN/100mL</td></tr><tr><td>Enterococcus</td><td>6,815 MPN/100mL</td></tr></table>The next two manholes upstream are on Nighthawk. All of these manhole covers are bolted. Overland flow was observed and sampled using field test kits:<table><tr><td>Orthophosphate-P</td><td>2.00 mg/L</td></tr></table>Again, the overland flow was tracked back to private residence area drains.</td><td>Witheridge</td></tr>
</table>

Investigatory Status

Investigations into the two forks of this MS4 line both continued to show exceedances for orthophosphate and fecal indicator bacteria. In both instances, the source of the flowing water seemed to be from residential over-irrigation and/or natural groundwater flow. Fertilizer or decaying leaf debris on the curbs and in curb inlets may be the cause for orthophosphate exceedances. Birds were observed bathing in the overland flow in addition to decaying leaf debris and other possible wildlife sources of bacteria in the storm drain.

To stop the overland flow and reduce the runoff, an educational letter about storm drain pollution was distributed to both neighborhoods, with approximately 150 homes targeted, on October 25, 2007. In addition, on the local public television station, the Water Utilities Oceanside Update service announcement for August and October concentrated on water conservation and smart irrigation practices. The Clean Water Program also teamed up with the Water Utilities' Meter Readers in August and began a residential door hanger program. The Meter Readers will be placing door hangers on residences that they find to have water flowing from their property. The door hangers have tips for good irrigation practices and a link to the City's website for more information.

Attachments

North Upstream Sampling Points

North upstream sampling point #1

North upstream sampling point #2

South Upstream Sampling Points

South fork upstream sampling point #

Example of runoff coming from area drainage in South sampling area

A013	Dry Weather 2007	8/1/2007

Site Summary:

Site A013 is a 36-inch RCP located at the intersection of Lake Boulevard and Alameda Drive, south of Agua Hedionda Creek. The outlet drains the residential areas immediately south of the site.

Follow-up Actions

Date	Action	Staff
8/1/2007	Initial investigation conducted. Field and Laboratory screening showed exceedances for the following parameters: Ammonia-N: 1.0 mg/L Total Coliforms: 220,000 MPN/100mL Fecal Coliforms: 22,000 MPN/100mL	Witheridge
8/3/2007	Follow-up investigation conducted. Field screening results within acceptable parameters. Ammonia-N: 0.6 mg/L	Witheridge
8/20/2007	Follow-up investigation showed an exceedances for total coliforms, but fecal coliforms and ammonia were within acceptable parameters: Ammonia-N: 0.8 mg/L Total Coliforms: 170,000 MPN/100mL Fecal Coliforms: 13,000 MPN/100mL	Witheridge
8/20/2007	Followed flow upstream. Next accessible upstream manhole did not have enough flow to sample. Some overland flow from private residence area drains was observed.	Witheridge

Investigatory Status

This site was investigated in 2006 for the same tan foam, low pH, and total coliform exceedances. The same characteristic foam and lower pH were noted at neighboring Dry Weather site A015, as well. An investigation in the MS4 system and reports of similar foam and unique geologic crystalline formations were noted in a natural channel along Shadow Ridge Road, as well as an open space area near Calaveras Lake.

At this time all investigations indicate that natural geologic and ground water phenomena in the Agua Hedionda region are responsible for the low pH and foam deposition seen at A013. More information on the possible presence of iron bacteria will be researched, as well.

In addition, because overland flow was observed, educational material about dry weather runoff and pollution prevention will be distributed to the residences. The City of Oceanside's water conservation program will also reach this area through the local public television station's service announcements in August and October on smart irrigation. The Clean Water Program also teamed up with the Water Utilities' Meter Readers in August and began a residential door hanger program. The Meter Readers will be placing door hangers on residences that they find to have water flowing from their property. The door hangers have tips for good irrigation practices and a link to the City's website for more information.

A015	Dry Weather 2007	8/1/2007

Site Summary:
Site A015 is a 48-inch RCP located south of Lake Park, off of Lake Boulevard, south of Agua Hedionda Creek. The outlet drains the residential areas east along Lake Boulevard Drive. Access to the site is from Lake Boulevard Drive.

Investigatory Actions

Date	Action	Staff
8/1/2007	Initial investigation conducted. Field and laboratory screening showed exceedances for the following parameters: Total Coliforms — 80,000 MPN/100mL	Witheridge
10/1/2007	Follow up investigation showed total coliform levels to continue to exceed the action levels: Total Coliforms — 80,000 MPN/100mL	Witheridge
10/1/2007	An upstream investigation was initiated, but there were no accessible upstream manholes on Lake to sample. However, at the intersection of Canon and Lake, evidence of groundwater seepage was found in the asphalt. A white color and what appeared to be work done to the street was evident along with moist asphalt as well as discolored brinks in the median.	Witheridge

Investigatory Status
A015 has been subject to an ongoing investigation to locate the source of persistent white foam in runoff since 2004. Total coliform exceedances and low pH also seem to be a common characteristic in this area. In 2006, the white foam was traced back through the MS4 system to a french drain from a hillside in a residential development. Other investigations show similar depositions of foam as well as unique geologic crystalline formations in the watershed. The visual upstream investigation in 2007 found groundwater seepage in the intersection of Lake and Canon with a similar white color which supports the hypothesis that the discharge and exceedances may be naturally occurring.

This area will continue to be monitored and investigated. An optical brightener study will be conducted here in October to determine if anthropogenic detergents are a possible cause.

Revisit on Oct. 1, 2007

Intersection of Canon and Lake.
Groundwater seepage with white stains

A016	Dry Weather 2007	8/1/2007

Site Summary:

Site A016 is a 36-inch RCP located east of Amigos Court, south of Lake Boulevard, and north of Calavera Creek at the border of Oceanside and Carlsbad. The outlet drains the residential areas to the north and south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
8/1/2007	Initial investigation conducted. Field Screening and laboratory results showed the exceedances for the following parameters: Total Coliforms: 900,000 MPN/100mL Fecal Coliforms: 22,000 MPN/100mL	Witheridge/ Mallett
8/20/2007	Follow-up investigation conducted. Laboratory results found fecal coliforms to be within acceptable parameters, but total coliform action levels were exceeded: Total Coliforms: 900,000 MPN/100mL Fecal Coliforms: 5,000 MPN/100mL During this investigation, the small flow was tracked upstream. Four manholes were visited and none had enough water to sample.	Witheridge

IC/ID

Date	Action	Staff
8/8/2007	A resident contacted the City of Carlsbad about "soapy water" flowing from a pipe at Serena Avenue and Amigos Court. City of Carlsbad forwarded this onto the City of Oceanside. Code Enforcement and Clean Water Program staff visited the site. Heavy flow was coming out of this storm drain, A016, and then stopped while staff was present. It was tracked upstream to Rancho Calevera Mobile Home Park. The Park had drained their manmade lake using pumps and discharging into the storm drains. By the time staff arrived at the Park, the work was complete.	Witheridge/ Erickson
8/15/2007	Clean Water Program Coordinator, Mo Lahsaie, visited the office manager of Rancho Calevera Mobile Home Park. She stated this was the first time they have completely drained the pond after 35 years to construct a concrete-lined bottom. The pond had not been	Lahsaie

	chlorinated. It appeared that they did not now that these kinds of discharges are prohibited under the stormwater municipal permit. The manager was educated about possible pollutants, including bacteria, and the impacts to surface waters. She was given options for future discharges including possible use of the pond water to irrigate their landscaped area.	

Investigatory Status:
Follow-up investigations showed continued exceedance in Total Coliform levels. Because the flow is very small (0.2 gpm), sampling for bacteria levels upstream is not possible from the manholes. The drainage area is residential, and the flow is likely from private residences. The total coliform exceedances may be associated with historical pond maintenance activities. Rancho Calevera Mobile Home Park has been made aware that they may not discharge any of their pond water to the municipal storm drains. Periodic inspections may be made to ensure their compliance. Previous reports also link possible bacteria exceedances with leaf debris in the outfall. Although minimal amounts of debris were seen at the outfall, the inspection upstream found leaf debris in two of the inlets. These inlets are cleaned annually prior to the wet weather season.

Attachments

August 8, 2007 ICID flow at the outlet

Hose connecting the pump and storm drain

Pump at the lake

A019	Dry Weather 2007	7/9/2007

Site Summary:

Site A019 is a 24 inch RCP located in Oak Riparian Park off of Lake Boulevard, north of Agua Hedionda Creek. The outlet drains the residential and park areas north and south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
7/9/2007	Initial investigation conducted. Field Screening from the ponded water showed exceedances for the following parameters: Ammonia-N: 2.0 mg/L Orthophoshate-P: 3.9 mg/L	Witheridge
7/17/2007	Follow up investigations from the ponded water continued to show exceedances for the following parameters: Ammonia-N: 5.0 mg/L Orthophoshate-P: 2.75 mg/L	Witheridge
7/17/2007	An upstream investigation was conducted. The next two upstream manholes were inaccessible. The following two manholes were curb inlets for the residential area north of Lake Blvd. These two inlets did not have running water, but the concrete was wet. An investigation of the park showed ponded water near sprinkler heads and wet grass during mid-day.	Witheridge

Investigatory Status

Initial screening of ponded water at site A019 resulted in action level exceedances of ammonia and orthophosphate. The follow-up visit found continued exceedances of ammonia and orthophosphate Ammonia exceedances are likely due to leaf debris breakdown in stagnant water. The source of the water may be from both residential runoff and park irrigation.

To reduce and/or eliminate the residential flow, educational material about dry weather runoff and pollution prevention was distributed to the residences on October 25, 2007. The City of Oceanside's water conservation program also reached this area through the local public television station's service announcements in August and October on smart irrigation. The Clean Water Program also teamed up with the Water Utilities' Meter

Readers in August and began a residential door hanger program. The Meter Readers will be placing door hangers on residences that they find to have water flowing from their property. The door hangers have tips for good irrigation practices and a link to the City's website for more information.

To reduce and/or eliminate the runoff from the City's parks, several meetings by phone and in person were held in September and October with Clean Water Program staff and Parks' Department staff and their contractors. The Parks' maintenance staff visually inspects the City's parks weekly. Any irrigation problems are prioritized and fixed. Fertilizer is applied depending on the use of the park and the season. A slow-release fertilizer is used in the summer and best management practices are always used to keep fertilizer and grass clippings in the park and out of the storm drains and water ways. De-thatching is completed annually and aeration bi-annually to improve drainage in all of the parks. The Clean Water Program is working continuously with the Park's Department to keep BMPs in place and up-to-date in addition to seeking out funding for smart irrigation controls to improve water conservation efforts.

Attachment

Oak Riparian Park irrigation runoff

A021	Dry Weather 2007	7/23/2007

Site Summary:

Site A021 is a RCP located east of Sky Haven Lane, south of Lake Boulevard, and north of Lake Calavera at the border of Oceanside and Carlsbad. The outlet drains the residential areas surrounding Sky Haven Lane south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
7/23/2007	Initial investigation conducted. Field Screening showed exceedances for the following parameters: Ammonia-N: 2.0 mg/L Orthophosphate-P: 2.45 mg/L	Witheridge
7/26/2007	Follow-up investigation conducted. Field screening results continued to show an exceedances for the following parameters: Ammonia-N: 2.5 mg/L Orthophosphate-P: 3.25 mg/L An upstream investigation was initiated. The next upstream manhole had small flow with both ammonia and orthphoshate levels over the range of the test kit. However, a clean sample was not collected due to low flow and minerals and particulates from the vault contaminating the sample. The next accessible manhole on Serena Lane was sampled. The results also exceeded screening levels: Ammonia-N: 2.0 mg/L Orthophosphate-P: 2.50 mg/L	Witheridge
7/30/2007	The follow-up investigation was continued. Field screening results from the outfall continued to show an exceedances for the following parameters: Ammonia-N: 1.5 mg/L Orthophosphate-P: 3.00 mg/L Upstream manholes were opened. Flow was too small to sample, but animal scat was found in one. The flow was tracked up water on the curb in front of two private residences on Serena Lane. Visual evidence pointed to groundwater seepage.	Witheridge/ Sabelis

	This water was sampled and the results also exceed action levels: Ammonia-N: 2.5 mg/L Orthophosphate-P: 3.10 mg/L The Water Utilites Department was called and no water line was being done in that area. Water Utilities followed-up a few days later and the pavement was dry.	

IC/ID

Investigatory Status:
Follow-up investigations indicated that the runoff is likely due to groundwater seepage upstream on Serena Lane in addition to period residential run-off from car washing, over-irrigation, etc. In addition, ammonia exceedances are common in ponded water with leaf debris breakdown.

Pooled water in curb on Serena Lane

Pavement of Serena Lane with water seeping out of the pavement.

CITY OF OCEANSIDE
clean water program

Volume 5, Issue 1

WELCOME TO THE OCEANSIDE CLEAN WATER PROGRAM NEWSLETTER!

Due to the expanding programs and service opportunities our Oceanside Clean Water Program offers, we have designed a bi-yearly newsletter to keep you informed of the latest activities and water quality information. As an Oceanside resident, you will continue to receive fliers in your water utility bill about upcoming community cleanup events, as well as this newsletter. If you wish to be a part of the Oceanside Clean Water Program mailing list, or know others interested, please contact us and we will add the name(s) promptly. We hope you find this newsletter valuable.

Improve your home...

When completing a painting project, many residents wash off paintbrushes under an outdoor faucet. Toxic paint products rinsed or dumped outside can result in a health threat to your neighborhood and waters. These products can run off into storm drains, leading to pollution of your community and local waterways. When cleaning up after a painting project, prevent pollution by following the steps listed at right.

- **Never dump paint or related products into the street, gutter or storm drain.**
- **Clean water-based paint from brushes in any sink, never outside with a hose.**
- **Clean oil-based paint from brushes with paint thinner, which can be filtered and reused.**
- **Donate used paint to local anti-graffiti organizations or reuse it for touch-ups.**
- **Empty paint cans can be recycled in curbside recycling bins if lid is off and all paint is dried up.**
- **Take unwanted paint or related products to a Household Hazardous Waste (HHW) collection site.**
- **Oceanside residents can call 760-439-2824 to schedule a HHW drop-off appointment.**

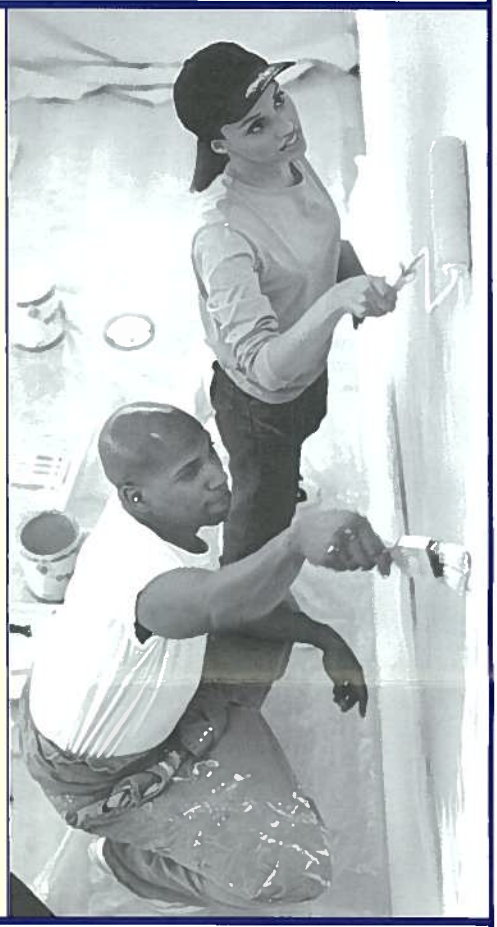

...without harming your community.

Oceanside residents can visit the following website for more information about proper household hazardous waste disposal:

www.ci.oceanside.ca.us

City Departments/Public Works/Solid Waste Recycling Services and HHW

To learn more ways to keep your neighborhood and waters healthy and clean visit

Erase the waste

www.waterboards.ca.gov/education

Loma Alta Creek Cleanup
April 28, 2007
10 am - Noon

Celebrate Earth Day by participating in the fifth annual Creek to Bay Cleanup event on April 28, 2007. The City of Oceanside, together with I Love a Clean San Diego, and 1-800-GOT-JUNK, will be hosting a cleanup along the banks of Loma Alta Creek, as well as at Buccaneer Park, where the creek enters the Pacific Ocean.

Volunteers can choose from four sites:

- Buccaneer Park at Pacific and Morse Streets (1500 South Pacific Street)
- Behind VONS on Oceanside Boulevard and I-5 (1737 Oceanside Boulevard)
- Mesa Drive between El Camino Real and Rancho Del Oro Drive
- Behind commercial buildings at 1629 Ord Way (Off Oceanside Boulevard between College Boulevard and Temple Heights Drive

Join us while we remove unwanted materials from the creek and beach and help to improve Oceanside water quality. Volunteers will receive free parking, refreshments, community service hours, and a free T-shirt.

The Clean Water Program hosts a variety of cleanups every year along every major watershed in Oceanside. For more information call 760-435-5807.

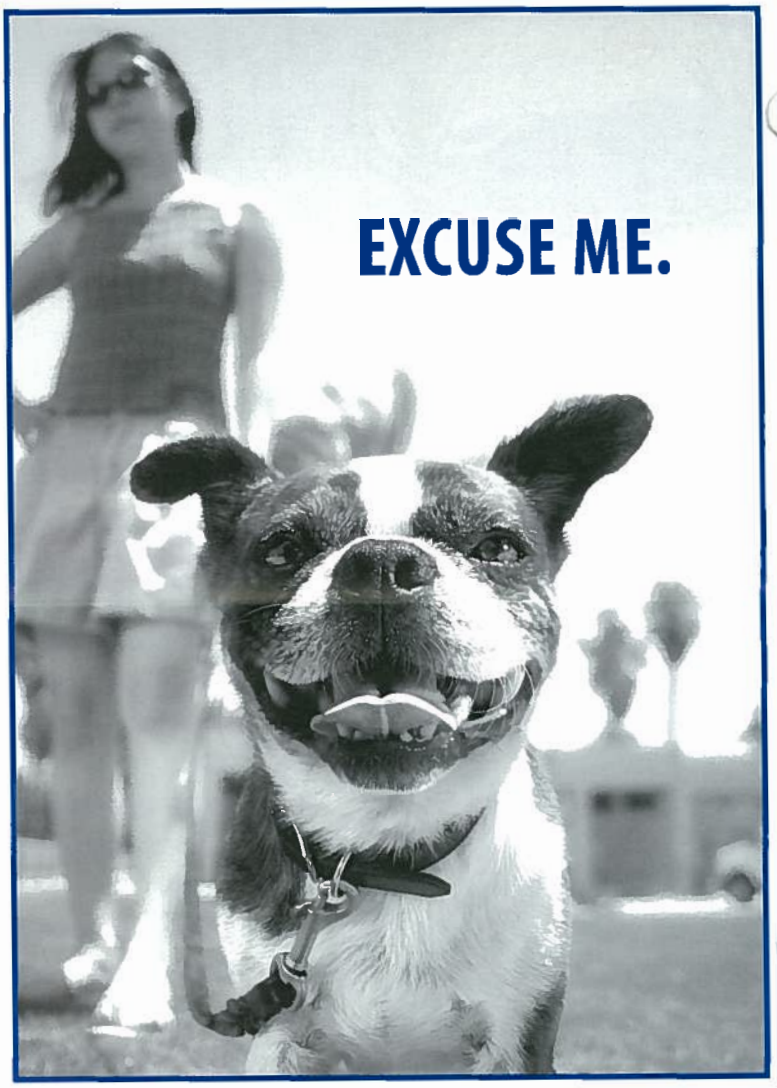

DID YOU DROP SOMETHING?

Dog waste left on the ground can wash into storm drains, polluting your local waterways and the ocean. Dog owners can help prevent pollution by taking these simple steps:

- Pick up after your pet - *every single time*.
- Throw away pet waste in the garbage; never wash it into the gutter or storm drain.
- Carry extra bags in your car, so you are prepared when you travel with your pet.

Report a Violation

The Oceanside Clean Water Program has a hotline for residents to call if they see a violaton or potential violation of urban runoff pollution occurring in the City of Oceanside. Help protect our local waterways and call the Clean Water Program hotline.

760-435-5800

City of Oceanside

Clean Water Program
300 North Coast Highway
Oceanside, California 92054
760-435-5800
www.oceansidecleanwaterprogram.org

Erase the waste

Clean up after your dog every single time. Do your part to keep your neighborhood and waters clean, healthy and pollution free. For more tips, visit www.waterboards.ca.gov/education or **www.oceansidecleanwaterprogram.org.**

CITY OF OCEANSIDE
CLEAN WATER PROGRAM

Brought to you by the California Water Boards

Table 2.1
2006-2007 Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities, Prioritization and Inspections

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Roads, Streets, and Highways						
Refer to City map	Refer to City map	Refer to City map	All	High		
Parking Facilities						
Lot B	Pier Amphitheater	Not public (Pier Amphitheater)	San Luis Rey	High	05/24/2007	
Lot C	Lifeguard Headquarters	Not public (Lifeguard Headquarters)	San Luis Rey	High	05/24/2007	.
Lot D	Beach Com Center	Not public (Beach Com Center)	San Luis Rey	High	05/24/2007	
Lot E	Civic Center	Not public (Civic Center)	San Luis Rey	High		
Lot 1	1304 Riverside Dr/&Harbor Dr S	Free Harbor Parking, 3.32 acres	San Luis Rey	High	06/21/2007	
Lot 2	1900 Harbor Dr N/North side of harbor	Free & Permit Harbor Parking, 142 spaces	San Luis Rey	High	06/21/2007	
Lot 3	1800 Harbor Dr N/North side of harbor	Free & Permit Harbor Parking, 201 spaces	San Luis Rey	High	06/21/2007	
Lot 4	1300 Harbor Dr N/North side of harbor	Free & Permit Harbor Parking	San Luis Rey	High	06/21/2007	
Lot 5	1300 Harbor Dr N/North side of harbor	Free & Permit Harbor Parking, 170 spaces	San Luis Rey	High	06/21/2007	
Lot 6	200 Harbor Dr S/South side of harbor	Free & Permit Harbor Parking, 104 spaces	San Luis Rey	High	06/21/2007	
Lot 7	200 Harbor Dr S/South side of harbor	Self-pay & Permit Harbor Parking, 104 spaces	San Luis Rey	High	06/04/2007	Berms needed around temporary construction trash dumpsters. Completed by follow-up inspection on 6/21/07
Lot 8 & 8a	300 Harbor Dr S/East side of harbor	Free Harbor Parking, 54 spaces	San Luis Rey	High	06/21/2007	
Lot 9	300 Harbor Dr S/East side of harbor	Free Harbor Parking, 35 spaces	San Luis Rey	High	06/21/2007	

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Lot 10	1200 North Pacific St/West side of harbor	Self-pay Harbor Parking, 44 spaces	San Luis Rey	High	06/21/2007	
Lot 11	1300 North Pacific St/West side of harbor	Overnight Self-pay Harbor Parking, 158 spaces	San Luis Rey	High	06/21/2007	
Lot 12	1400 North Pacific St/West side of harbor	Overnight Self-pay Harbor Parking, 97 spaces	San Luis Rey	High	06/21/2007	
Lot 20	Myers, N of Neptune	Self-pay Parking, 117 spaces	San Luis Rey	High	06/07/2007	Construction material being stored on-site for bridge project.
Lot 21	Myers, N of Windward	Self-pay Parking, 154 spaces	San Luis Rey	High	06/07/2007	
Lot 22	Cleveland, S of Windward	Self-pay Parking, 24 spaces	San Luis Rey	High	06/07/2007	
Lot 23	Cleveland, N of Pier View Way	Self-pay Parking, 183 spaces	San Luis Rey	High	06/25/2007	Small amount of litter. Called street sweeping to remove the debris.
Lot 24	Myers, N of Mission	Self-pay Parking, 74 spaces	San Luis Rey	High	06/25/2007	Temporary portable toilets in place for special event. Request secondary containment underneath.
Lot 25	Myers, N of Seagaze	Self-pay Parking, 61 spaces	San Luis Rey	High	06/05/2007	
Lot 26	Myers, N of Tyson	Self-pay Parking, 268 spaces	Loma Alta	High	06/07/2007	
Lot 27	Myers, S of Minnesota	Self-pay Parking, 46 spaces	Loma Alta	High	06/07/2007	
Lot 28	The Strand, N of Pier View Way	Self-pay Parking, 12 spaces	San Luis Rey	High	06/05/2007	Excessive sand in corners. Request street sweeper to clean – swept 2x/month.
Lot 29	The Strand at the Pier	Self-pay Parking, 20 spaces	San Luis Rey	High	06/05/2007	Parking lot being upgraded on initial inspection. All BMPs in place. Re-inspection on 06/25/07 – lot clean.
Lot 30	The Strand, N of Seagaze	Self-pay Beach Parking, 102 spaces	San Luis Rey	High	06/07/2007	
Lot 31	The Strand, N of Wisconsin Ave	Self-pay Parking, 32 spaces	Loma Alta	High	06/12/2007	
Lot 32	Unknown	Free 4 hour	N/A	High	06/05/2007	

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Lot 34	Pier View Way, E of Tremont St	Free 2 hour, 0.34 acres	San Luis Rey	High	06/12/2007	
Lot 35	Civic Center Dr, E of Tremont St	Free 2 hour, 0.34 acres	San Luis Rey	High	06/12/2007	
Unknown	Ditmar St, N of Seagaze Dr	Parking Lot	San Luis Rey	High	06/12/2007	
Alamosa Park	Mesa Drive & Alamosa Drive	Free Park Parking	San Luis Rey	High	05/22/2007	Some leaves and trash in lot. Requested street sweeper.
Americanization School	Division St. & Center Ave.	Parking Lot	Loma Alta	High	05/23/2007	
Balderrama Park	709 San Diego Street	Free Park Parking	San Luis Rey	High	06/21/2007	
Buccaneer Park	1506 South Pacific Street	Free Park Parking	Buena Vista	High	05/22/2007	
Buddy Todd Park	Mesa Drive & Parnassus Circle	Free Park Parking	San Luis Rey	High	05/23/2007	
Capistrano Park	770 Capistrano Drive	Free Park Parking	San Luis Rey	High	05/22/2007	
Heritage Park & Museum	500 Peyri Road	Free Park Parking	San Luis Rey	High	05/22/2007	
Ivey Ranch Park	4101 Mission Avenue	Free Park Parking	San Luis Rey	High	05/22/2007	
John Landes Park	2855 Cedar Road	Free Park Parking	San Luis Rey	High	05/22/2007	
Lake Boulevard Park	4970 Lake Boulevard	Free Park Parking	Agua Hedionda	High	05/22/2007	
Libby Lake Park	424 Calle Montecito	Free Park Parking	San Luis Rey	High	05/23/2007	
Luiseno Park	Teal Way & Douglas Dr.	Free Park Parking	San Luis Rey	High	05/23/2007	
Marlado Highlands Park	Rivertree & Southwood Dr.	Parking Area	San Luis Rey	High	05/22/2007	
Martin Luther King, Jr. Park	4500 Mesa Drive	Free Park Parking	Loma Alta	High	05/23/2007	
Marshall Park	Marshall St.	Parking Lot	Loma Alta	High	05/23/2007	
Melba Bishop Park	5306 North River Road	East & West Parking Lots	San Luis Rey	High	05/23/2007	
Oak Riparian Park	4625 Lake Boulevard	Free Park Parking	Agua Hedionda	High	05/22/2007	
Palisades Park	Rancho Del Oro & Vista Del Oro	Free Park Parking	Loma Alta	High	05/22/2007	
Rancho Del Oro Park	College and Empressa	Free Park Parking	San Luis Rey	High	05/22/2007	
Recreation Park	Brooks and Maxson Street	Free Park Parking	Loma Alta	High	05/22/2007	
Flood Control Facilities						

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Refer to City MS4 Map	Refer to City MS4 Map	Refer to City MS4 Map	All	High		
Parks and Recreational Facilities						
Alamosa Park	Mesa Drive S of Alamosa Prk Dr	Picnic, Restrooms, Parking, Play area, Fields	San Luis Rey	Medium	05/22/2007	
Americanization School Park	Division St. & Center Ave.	Park	Loma Alta	Medium	05/23/2007	
Balderrama Park	San Diego St Btn Bush & Lemon	Picnic, Restrooms, Parking, Play area, Fields, Courts	San Luis Rey	Medium	06/21/2007	
Buccaneer Beach	Pacific St N of Morse St	Restrooms, Food, Parking, Fields, Courts, Picnic	Buena Vista	Medium	05/22/2007	
Buddy Todd Park	Mesa Dr N of Barnwell Dr	Picnic, Restrooms, Parking, Play area, Fields, Courts	San Luis Rey	Medium	05/22/2007	
Buena Vista Lagoon Nature Center		Parking, outside areas	Buena Vista	Meduim	06/20/2007	Dumpster lid open; replace missing lids on trash cans at center. Manager will keep dumpster lids closed at all times and replace missing trash can lids.
Capistrano Park	Capistrano Drive E of Sunset Drive	Picnic, Restrooms, Parking, Play area, Fields, Courts	San Luis Rey	Medium	05/22/2007	
Carrasco Park	Skylark Dr W of Partridge Ln	Picnic Area	Loma Alta	Medium	05/22/2007	Leaves in gutter/ditch; request cleanup; 6/25/07 follow-up inspection OK.
Ceaser Chavez	Division St W of Garfield	Park		Medium	05/23/2007	
Center City Golf Course	2323 GreenBrier Dr	Golf Course	Loma Alta	Medium		
Fireside Park	Fireside Dr & Parkside Dr	Picnic, Play area, Fields, Courts	San Luis Rey	Medium	05/22/2007	
Heritage Park	Peyri Dr N of Old SLR Mission	Picnic, Restrooms, Parking, Gazebo, Historic Areas	San Luis Rey	Medium	05/22/2007	
Ivey Ranch Park	Mission Ave E of Rancho Del Oro	Picnic, Restrooms, Parking, Play area, Fields	San Luis Rey	Medium	06/21/2007	

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
John Landis Park	Lewis St W of Cedar Road	Picnic, Restrooms, Parking, Play area, Fields, Courts	Loma Alta	Medium	05/22/2007	Adjacent homeowner in Vista storing wood outside, adjacent to fence. Referred to code.
Lake Park	Lake Blvd E of Windsor Road	Picnic, Restrooms, Parking, Play area, Fields, Food	Agua Hedionda	Medium	05/22/2007	
Libby Lake Park	Libby Lake E of Marblehead Bay	Picnic, Parking, Play area	San Luis Rey	Medium	05/23/2007	
Lion's Club (Frenzel)	Cassidy St and Broadway	Picnic	Buena Vista	Medium	05/22/2007	
Luisiano	Teal Way and Douglas	Park, Picnic, Restrooms, Fields, Parking	San Luis Rey	Medium	05/23/2007	
Marlado Park	W of Rivertree Dr N of Southwood Dr	Picnic, Play area	San Luis Rey	Medium	05/22/2007	
Marshall St. Pool	Lucky St and W of Marshall		Loma Alta	Medium	05/15/2007	
Martin Luther King Jr Park	Mesa Dr E of Ivey Ranch Rd	Picnic, Restrooms, Parking, Play area, Fields, Courts	Loma Alta	Medium	05/23/2007	
Melba Bishop Park	5306 North River Road	Park	San Luis Rey	Medium	05/23/2007	
North River Rd Park	North River Rd W of Leon St	Picnic, Restrooms, Parking, Play area, Fields, Courts	San Luis Rey	Medium		
Oak Riparian Park	Lake Blvd at Ridge Road	Picnic, Restrooms, Parking, Play area, Fields	Agua Hedionda	Medium	05/22/2007	
Palisades Park	Rancho Del Oro N of Vsta Dl Oro	Play area, Fields	Loma Alta	Medium	05/22/2007	Straw waddles and leaves in ditch. Replace sections of waddle and clean out ditch. Follow-up inspection on 6/25/07 OK.
Rancho Del Oro Park	College Blvd S of Mesa Dr	Restrooms, Parking, Play area, Fields, Courts	San Luis Rey	Medium	05/22/2007	
Recreation Park	Brooks St W of Barnes St	Restrooms, Parking, Fields, Food	Loma Alta	Medium	06/21/2007	
Sherbourne Park (Sepulveda)	Marvin St E of Oxford Pl	Picnic, Play area, Fields	Loma Alta	Medium	05/22/2007	
Sienna Park				Medium		

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
South Oceanside	South Oceanside School	Tennis Court	Buena Vista	Medium	05/22/2007	
Spring Creek Park	Old Ranch Rd W of Melrose	No amenities on site	San Luis Rey	Medium	05/22/2007	
Strand Beach (Seagaze) Park	200 The Strand S of Seagaze Drive		Loma Alta	Medium	06/26/2007	
Tyson St Park	500 The Strand N of Tyson St		Loma Alta	Medium	06/26/2007	
Upper Ivey Ranch Park	Rancho Del Oro Dr N of Via Rnch		Buena Vista	Medium		
Women's Club Park	Mission Btn San Diego & Brooks	No amenities on site	Loma Alta	Medium	06/19/2007	
Beach Community Center, Stadium & Bandshell	The Strand N of Pier	17,000-square-foot facility including gymnasium, game/activities room, meeting room, kitchen, stage, and locker/shower rooms; and City of Oceanside Sports Office	San Luis Rey	Medium	05/24/2007	
Senior Center	Interstate 5 W of Greenbrier	14,000-square-foot facility includiung auditorium, meeting rooms, game/activities room and library	Loma Alta	Low		
Brooks Swim Center	Brooks St W of Barnes St	100-foot outdoor pool surrounded by walls and buildings, parking at adjacent park	Loma Alta	Medium	06/20/2007	Car Battery & tire outside of fence. Called Public works to remove. Chemical storage adjacent to pool area – place all chemical inside storage building.
Marshall St Pool	Marshall St N End	75-foot outdoor pool surrounded by walls and buildings, parking at adjacent park	Loma Alta	Medium	05/15/2007	
Municipal Golf Course	Douglas Dr W of Foxwood Dr	Golf Course	Buena Vista	Medium	06/25/2007	Sediment in concrete channel; trash in planters around parking lot; Conducted bi-annual cleaning of channel and removed wind blown trash.

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Police and Fire						
Fire Station No. 1	714 Pier View Way		San Luis Rey	Medium	05/15/2007	
Fire Station No. 2	1640 South Ditmar		San Luis Rey	Medium	05/15/2007	
Fire Station No. 3	3101 Oceanside Boulevard		Loma Alta	Medium	05/15/2007	Storm drain inlet sealed preventing water entering drain. Remove seal and clean grate.
Fire Station No. 5	4841 North River Road		San Luis Rey	Medium	05/15/2007	15 gallon container and two others in trash enclosure contain unknown liquid; Contain in a secured area before proper disposal; keep dumpster lids closed.
Fire Station No. 6	895 North Santa Fe Avenue		San Luis Rey	Medium	05/15/2007	
Fire Station No. 7 (Training Center)	110 Jones Road		San Luis Rey	Medium	05/15/2007	Surround wrecked vehicles with gravel bags or straw waddles until removal; replace damaged fiber rolls and gravel bags; Keep trash dumpsters closed when not in use; Clean storm drain inlet filters by apparatus bays
Fire Station No. 7 (New – under construction)	Mission Ave E of Foussat Rd		San Luis Rey	High	05/15/2007	During construction, inspected by city engineering inspection division.
Fire Sta. No. 4	3990 Lake Boulevard		Agua Hedionda	Medium		
Old Fire Sta. No. 4	College Blvd S of Thunder Dr		Buena Vista	Medium	05/15/2007	This site is no longer used as a fire station. Used by City administrative staff.
Police Station	Mission Ave W of Barnes St	Offices	Loma Alta	Low	05/29/2007	Place fiber rolls around soil that drains to parking area. Follow-up on 06/27/07 – waddles installed.
Police Department	3855 Mission Ave	Offices and parking lot	San Luis Rey	Low	05/29/2007	

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Beach Lock-Up	122 North Strand	Offices	San Luis Rey	Low	05/25/2007	Keep dumpster lids closed when not in use.
Police Shooting Range	3950 N. River Road	Outdoor shooting range for small arms	San Luis Rey	Low	05/21/2007	
Code Enforcement 602 Civic Center Drive (for fire station, acquired 5-4-04)	602 Civic Center Drive	Future fire station site	San Luis Rey	Medium	05/15/2007	
Wastewater Facilities						
La Salina Treatment Plant	1330 S. Tait ST	Wastewater Treatment Plant	Loma Alta	High	05/15/2007	1) Pier poles made of treated wood have partial cover. Cover poles completely 2) Remove rusted 35 gallon drum 3) Keep dumpster lids closed when not in use. 4) Clean inside all storm drain inlets. Follow-up on 06/27/2007 – All items addressed.

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
San Luis Rey Treatment Plant	3950 N. River Rd.	Wastewater Treatment Plant	San Luis Rey	High	05/21/2007	1) Strom drain inlet @ SE corner of maintenance Bldg – double up with gravel bags around inlet 2) Replace damaged gravel bags where needed. 3) Roll-off bin placed adjacent to storm drain @ NE corner of plan. Protect storm drain inlet from any potential runoff from bin. 4) Temporary 55 gallon plastic blue drum on pallet with lid open; Cover and secure on pallet. 5) Need secondary containment under above ground diesel tank if currently in use. 6) Dumpster lid open near shooting range - Keep lid closed when not in use. 7) White foam on ground near injector area; clean area. 8) Ten gallon buckets near clarifiers – cover and store properly when not in use. 9) Over-irrigation on SW corner of administrative building; adjust sprinkler system 10) Repair silt fence and along Pilgrim Creek near entrance Follow-up on 06/27/2007 – All items addressed.

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Mission Sewer Lift Station	3476 Mission Ave E of Frontier Dr	Sewer lift station	San Luis Rey	Low	05/15/2007	
Leisure Village #2 Sewer Lift Station	4933 Leisure Village Dr S of Arcadia Way	Sewer lift station	Agua Hedionda	Low		
Oceanside Blvd. Sewer Lift Station	1664 Oceanside Blvd E of Vine St	Sewer lift station	Loma Alta	Low		
Lake Blvd. Sewer Lift Station	4700 1/2 Lake Blvd E of Waverly Rd	Sewer lift station	Buena Vista	Low	05/15/2007	
Sewer Lift Station	Nighthawk Wy (So Rdg Trls 11)	Sewer lift station	Agua Hedionda	Low		
Southridge Trails Sewer Lift Station	4900 Cannon Rd S of Leisure Village Dr	Sewer lift station	Agua Hedionda	Low		
Pilgrim Creek Sewer Lift Station	855 Douglas Dr E off Golf Course	Sewer lift station	San Luis Rey	Low		
Sewer Lift Station	Hwy 78 W of South Vista Way	Sewer lift station	Buena Vista	Low		
Leisure Village #1 Sewer Lift Station	4706 Cannon Rd.	Sewer lift station	Agua Hedionda	Low		
Roja Sewer Lift Station	703 Roja St.	Sewer lift station	San Luis Rey	Low		
Pacifica Sewer Lift Station	4991 Macario Rd	Sewer lift station	San Luis Rey	Low		
North Valley Sewer Lift Station	3930 N. River Rd.	Sewer lift station	San Luis Rey	Low		
Man Lado Sewer Lift Station	401 N. Fousatt	Sewer lift station	San Luis Rey	Low		
Roymar Sewer Lift Station	110 Jones Road	Sewer lift station	San Luis Rey	Low		
Loretta Sewer Lift Station	1261 Loretta St.	Sewer lift station	San Luis Rey	Low		
North Bridge Sewer Lift Station	401 Riverside Dr.	Sewer lift station	San Luis Rey	High	05/24/2007	Dumpsters overflowing with trash; Keep dumpster lids closed when not in use; Ensure sufficient trash disposal service for dumpsters; Place address numbers on building
Harbor #1 Sewer Lift Station	2000 North Harbor Dr.	Sewer lift station	San Luis Rey	Medium	06/22/2007	

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Harbor #2 Sewer Lift Station	1830 North Harbor Dr.	Sewer lift station	San Luis Rey	Medium	06/22/2007	
Harbor #3 Sewer Lift Station	1325 North Harbor Dr.	Sewer lift station	San Luis Rey	Medium	06/22/2007	
Harbor #4 Sewer Lift Station	283 South Harbor Dr.	Sewer lift station	San Luis Rey	Medium	05/24/2007	
Harbor #5 Sewer Lift Station	1200 North Pacific Street	Sewer lift station	San Luis Rey	Medium	06/22/2007	
Harbor #6 Sewer Lift Station	1384 North Pacific Street	Sewer lift station	San Luis Rey	Medium	06/22/2007	
Ninth St. Sewer Lift Station	997 Breakwater Way	Sewer lift station	San Luis Rey	Low		
Bandstand Sewer Lift Station	200 N Strand	Sewer lift station	San Luis Rey	Medium	05/24/2007	
Old Roymar Sewer Lift Station	110 Jones Road	Sewer lift station 9 (emergency use only)	San Luis Rey	Low		
Pier Baitshop Sewer Lift Station	1 Oceanside Pier	Sewer lift station	San Luis Rey	High	05/29/2007	
Pier Restroom Sewer Lift Station	1 Oceanside Pier	Sewer lift station	San Luis Rey	High	05/29/2007	
Ruby's Sewer Lift Station	1 Oceanside Pier	Sewer lift station	San Luis Rey	High	05/29/2007	Liquid spots noted near lift pump; Follow-up with public works on 06/27/2007 – pump OK.
Wisconsin Sewer Lift Station	715 South the Strand	Sewer lift station	Loma Alta	Medium	06/25/2007	
South Pacific Sewer Lift Station	1330 S. Tait St.	Sewer lift station	Loma Alta	Low		
St. Malo Sewer Lift Station	52 St. Malo Beach	Sewer lift station	Buena Vista	High	05/15/2007	
Buena Vista (New) Sewer Lift Station	2501 Haymar Rd.	Sewer lift station	Buena Vista	Medium	05/15/2007	Two 5-gallon drums in construction area near heavy equipment with no lids; cover and store inside when not is use.
Skyhaven Sewer Lift Station	3521 Skyhaven Lane	Sewer lift station	Agua Hedionda	Low		
Calaveras Sewer Lift Station	3636 Skyhaven Lane	Sewer lift station	Agua Hedionda	Low		

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Water Facilities						
Weese Water Treatment Plant	Twin Oaks Valley Road	Water Treatment Plant	San Luis Rey	High	05/30/2007	1) Outside parts storage west of electrical building not covered; recycle all metal parts not in use and place usable parts under cover 2) Place unused gas cans in covered storage area when not in use. 3) Place 55 gallon drums under cover and on secondary containment structure. Follow-up on 06/27/2007 – cleanup under way.
Water Facility & Fire Training	Jones Road N of San Luis Rey Road	Offices, Storage	San Luis Rey	High	05/15/2007	1) Storm drain inlet by main gate contains debris; Clean and protect with gravel bags. 2) Properly dispose of tires, damaged fiber rolls, open sand bags and trash near water storage area. 3) Tracking of cold mix asphalt outside storage are and DG storage area 4) Trash dumpster lids open; keep closed when not in use Replace dumpsters with corroded bottoms, contact waste hauler. Follow-up on 06/272007 – All items addressed.

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Reverse Osmosis Facility	Fireside Dr S of Parkside Dr	Wastewater Treatment Plant	San Luis Rey	High	05/15/2007	1) Storm drain inlet by the north fence has ongoing flow and contains debris 2) 2) Remove waste concrete material at storage area; 3) Metal storage area partially cover Follow-up on 06/20/2007: Inlet cleaned and no more flowing water; concrete disposed; metal storage area completely covered.
Fire Mtn Reservoir	Fire Mountian Dr & E of Yucca	Reservoir	Loma Alta	Low		
Guajome Reservoir	Peacock Blvd NE of Temple Hts	Reservoir	Loma Alta	Low		
Henie Hills Reservoir	Mira Costa College	Reservoir	Buena Vista	Low	05/15/2007	
Heritage Reservoir	Via Rancho E of Rancho Del Oro Drive	Reservoir	San Luis Rey	Low		
Morro Hills Reservoir	Wilshire Rd SE of Sleeping Ind	Reservoir	San Luis Rey	Low		
Pilgrim Reservoir	Vandegrift Blvd. S of Cmp Pend	Reservoir	San Luis Rey	Low		
SF Peak Reservoir	Nighthawk Ct W of Nighthawk Wy	Reservoir	Agua Hedionda	Low		
Talone Reservoir	Paseo Hermosa N of Panarma Rdg	Reservoir	San Luis Rey	Low		
Water Pressure Station	Wilshire Rd	Pump Station	San Luis Rey	Low		
Wire Mt Reservoir & Vacant	Tulley Canyon	Reservoir		Low		
Other Municipal Facilities						

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Oceanside Airport		Airport	San Luis Rey	High	05/24/2007	1) Rusted rebar exposed – cover, move inside or remove. 2) Request that two portable sanitary toilets have a secondary containment underneath. 3) Replace damaged gravel bags. Follow-up on 06/11/2007 – Rebar removed and gravel bags replaced. One portable toilet replaced with a secondary containment; other toilet cannot have secondary containment due to physical constraints.
Americanization School	Division St and Center St	Building	Loma Alta	Low		
Beach Amphitheater	200 North the Strand	Amphitheater, stage, seating, restroom	San Luis Rey	Medium	05/24/2007	Loose trash observed. Contacted harbor maintenance to address.
Civic Center	North Coast Highway 300	Civic Center	San Luis Rey	Medium	05/15/2007	

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
City Operations Center	Oceanside Blvd W of Melrose	City Yard	Loma Alta	High	05/11/2007	Front parking lot: Fire Station No. 8 is operating at this location. 1) Update HazMat designation sign on storage cage outside of fleet maintenance 2) Wrecked vehicles from Police Department must have temporary BMPs/ secondary containment to prevent runoff of hazardous waste when on-site. 3) Check fiber rolls on slopes for repair/replacement. 4) Cover roll-off trash bins when not in use (at night and when rain is expected). 5) Near water department storage area, place gravel on soil to reduce erosion and tracking from vehicles

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
						6) Water Utilities Storage Area – cover all scrap metal and raise above ground; Reberm areas around soil stock pile bins to prevent erosion; remove or cover soil stock piles. 7) Add fiber rolls on west and north edges of new parking area 8) Add more gravel bags around storm drain inlets near the paint storage area and trailered equipment storage area. 9) 55 gallon drums and buckets to be stored inside or under cover on top of secondary containment structure 10) Request secondary containment for all portable toilets.
Community Garden	Civic Center Dr and Weitzel St	Community Garden	San Luis Rey	Medium	05/26/2007	
F Lot	1300 North Pacific St.	Outdoor maintenance storage for dumpsters, tractors, etc	San Luis Rey	High	05/26/2006	1) Two spray paint cans and scrub pad not stored properly; staff disposed of materials 2) 2) Stockpiled soil not covered; cover piles 3) Engines from boasts not covered; cover or remove Follow-up on 06/272007 – all items addressed

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Harbor Marina & Admn	Oceanside Small Craft Harbor	Area around harbor contains several parking lots, administration buildings and storage areas, a boat ramp and wash areas, sewage pump out facilities, restrooms and other associated amenities	San Luis Rey	High	06/21/2007	
Junior Lifeguard Facility	1311 North Pacific St.	Headquarters/locker room/meeting room/offices (225 sf) storage (800 sf)	San Luis Rey	Medium	06/21/2007	
Lifeguard Headquarters	301 North the Strand	Meeting/lockers/offices/rescue equipment	San Luis Rey	Medium	05/24/2007	
Lot 1 Storage	1304 Riverside Drive	Maintenance and police storage	San Luis Rey	High		
Maxson Landfill	BROOKS ST AND MAXSON ST	Closed Landfill	Loma Alta	High		Annual report provided to RWQCB and available upon request.
Mission Avenue Landfill	2070 MISSION AVE	Closed Landfill	San Luis Rey	High		Annual report provided to RWQCB and available upon request.
Oceanside Pier	1 Oceanside Pier	Pier	San Luis Rey	High	05/29/2007	
Pier Lifeguard Tower	1 Oceanside Pier	Lifeguard tower	San Luis Rey	High	05/29/2007	
Project Oz	Barnes St N of Maxson St	Building	Loma Alta	Low		
Resource Center	Calle Montecito at North River Road	Building	San Luis Rey	Low		
Skate Park - Closed	Pier View Way, btwn Pier & tracks	Skate Park	San Luis Rey	Low		
Shelter	San Diego St S of Laurel St	Building	San Luis Rey	Low		
Transient Housing Shelter	Apple St and Greenbrier Drive	Building	Loma Alta	Low		

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Vista Little League	Lee Drive S of COC	Sports Field	Loma Alta	Medium	05/24/2007	Site closed due to pending investigation of hazardous substances related to historical county landfill. Landfill closed. Vegetation is overgrown and covers all exposed areas. Closure sign directs inquiries to Dept. of Toxic Substance Control (714) 484-5300.
900 Block North Coast Highway	North Coast Highway	Future Redevelopment	San Luis Rey			
Crown Heights Community Garden	Division at Garfield	Community Garden				
Libby Lake Community Center	4700 North River Rd	Building	San Luis Rey			
312-314 Pier View Way	Pier View Way	Future Development	San Luis Rey			
City Leased Areas						
Harbor Marina & Lease	Oceanside Small Craft Harbor	Leased Land	San Luis Rey	Medium		
Leased Farm	Mission Avenue W of Saddle Ridge Road	Leased Land	San Luis Rey	Medium		
Leased Farm	SLR River N of Guajome Park	Leased Land	San Luis Rey	Medium		
Leased Farm	Mission Avenue E of Saddle Ridge Road	Leased Land	San Luis Rey	Medium		
Leased Marina Suites (formerly Marina Inn)	Harbor Dr. Northerly Terminus	Leased Land	San Luis Rey	Medium	06/21/2007	
Leased Marina Del Mar	1202 N. Pacific St	Leased Land	San Luis Rey	Medium		
Leased to Nature Center	Coast Hwy N of Buena Vista Lagoon	Leased Land	San Luis Rey	Medium		
Leased/Marina Towers	Harbor Dr @ Body of Santa Marg.	Leased Land	San Luis Rey	Medium	06/21/2007	

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
San Diego Auto Auction	4691 Calle Joven	Leased Land	San Luis Rey	High	05/24/2007	1) Storm drain inlet #7 and inlet at east end of wall filled with liquid 2) Wrecked vehicles with no surrounding containment. 3) All grid storm drain inlets should have filters with absorbent socks Sediment and leaf debris in curbs Clean all storm drains. Forwarded to private storm drain installation and maintenance company to update and retrofit, where needed, all storm drain inlets; Auto auction did contract with company to update.
Leased Visitor Information Center	928 North Coast Highway	Leased Land	San Luis Rey			
Leased Theater and Museums	217-221 North Coast Highway	Leased Building	San Luis Rey			
Leased Residential	100 Blk North Pacific	Residential				
Leased La Mission	3200 Mission Ave	Leased Land/Housing	San Luis Rey			
Leased Jolly Roger						
Leased Monterey Bay Cannery						
Leased Joes Crab Shack						
Leased Helgrens Sportfishing				High	06/21/2007	
Leased Harbor Village				Medium		
Leased Harbor Fuel Dock				High	06/21/2007	Fuel spill kit on-site.
Leased Nautical Bean						

Table 2-1
Watershed-Based Inventory of City of Oceanside Municipal Areas and Activities (Cont.)

Name	Address/Location	Description	Watershed	Threat Priority	Date of Inspection	Violations or Recommendations Noted?
Leased Yacht Club				Medium		
Municipal Activities						
Fire Training	110 Jones Road	Training Facility	San Luis Rey	High		
Flood Control Maintenance	Various	Involves collection and disposal of debris, application of herbicides, clearing of vegetation, cleaning	Various	High		
Hazardous Waste Program	Various	Waste Management holds events to collect hazardous wastes	Various	High		
Landscaping	Various		Various	High		
Park Maintenance	Various – See list of Parks		Various	High		
Right of Way Maintenance	Various	Involves collection and disposal of debris, application of herbicides, clearing of vegetation, cleaning	Various	High		
Street Maintenance and Repair	Various		Various	High		
Street Sweeping	Various	All city streets swept once every two weeks, downtown weekly. Records maintained of quantity removed. Average 70 to 100 tons a month.	Various	Medium		
Vehicle Maintenance	City Operations Center		Loma Alta	High		
Vehicle Washing	Various		Various	High		

Table 7-1 Public Works Engineering Inspection Projects

PROJECT NAME	FILE NUMBER	APN	DEVELOPER	ENGINEER OF WORK	PROJECT TYPE	SITE ACREAGE	NO. OF UNITS	NO. OF BLDGS	TOTAL SQ. FT.	CONST. START DATE	INITIAL CONSTRUCTION ACTIVITIES	1ST OCCUPANCY OR DATE OF COMPLETION	DATE GRADING PERMIT ISSUED	CITY PLAN NUMBER	DATE EROSION CONTROL APP'D	ADDITIONAL REQUIRED PERMITS	SWPPP	WDID	THREAT PRIORITY	WATERSHED	LOCATION	PROJECT STATUS
1209 Holly Street	E-15-03	145-131-38	N.T.I. Prop.	Robert Chan	Residential	0.46	1		3,000	12/15/04	Grading	12/15/05	12/08/04	2486	11/17/04	Traffic Control Plan, Construction Cert.	N/A	N/A	Low	San Luis Rey	Holly Street & Laurel	
1210 Holly Street	E-16-03	145-132-12	Top Construction	Allied Engineering	Residential	0.07	1		3,000	05/17/04	Grading	04/04/04	05/14/04	2487	04/23/04	Traffic Control	No	N/A	Low	San Luis Rey	Holly Street & Laurel	
1217 S. Nevada Street	D-10-03	152-123-04	Joe Cefalia	Robin Hammers & Associates	Reisdential	0.98	2	1	5,500	08/15/06	Grading	09/01/07	08/14/06	2634	08/14/06	Traffic Control Plan Haul Route Construction Certificate	No	N/A	Low	Loma Alta	1217 S. Nevada Street	Grading
1225 Holly Street	E-26-04	145-131-23-00	Reach, Inc.	Vince & Middleton	Residential	0.07	1	1	1,850	11/01/05	Grading	02/01/05	10/27/04	2559	10/27/04	Traffic control plan, Haul route, Const. Cert.	No	N/A	Low	San Luis Rey	1225 Holly Street	
1621 and 1623 S. Pacific Street	RC-14-06 RC-15-06	153-091-49 153-091-50	South Pacific LLC	Taylor Group	Residential	.164 .164	1 1	2 2	5103 5103	11/30/06	Demolition, Shoring, Grading	12/01/07	11/22/06	2761 2762	11/22/06	Traffic Control Construction Certificate Haul Route	N/a	N/A	Medium	Coastal Outlet	1621 and 1623 S. Pacific Street	Demolition, Shoring, Grading
1735 Avocado (Hamilton Residence)	P-6-99		Owner Unknown	Allied Engineering	Residential												No	N/A	Medium	Buena Vista	1735 Avocado	Grading / Building
1794 Avocado Road	E-01-02	165-202-35	Rick Trettin	Kristin L. Borer	Residential	0.25	1	1	11,000	06/14/04	Grading	06/14/05	06/09/04	2172	05/14/04		No	N/A	Low	Buena Vista	Fuerte & Avocado Road	
216 S. Pacific Moss Residence	RC-202-2002	150-074-23-00	Steve Moss	RCE Inc.	Residential	0.08	1	1	3,208	12/16/04	Grading/ Compacting	12/05/05	12/14/04	2569	12/08/04	Traffic Control Plan		N/A	Low	San Luis Rey	216 So. Pacific Street	
542 Crouch (Lot D of Map 1856)	E-9-05	149-350-27	Mike Kish	David Lowen Acal	Residential	N/A	0	N/A	500	09/14/05	Export Only	N/A	09/12/05	2600	07/06/05	Haul Route	N/A	N/A	Low	Loma Alta	Crouch/Canyon	
720-722 N. Cleveland, Oceanside	P-202-04	143-241-11	Atvantage Group	Excell-Doug Denteno	Residential	5,000.00	2			9/23/05l	Minor Grading	05/06/05	09/21/05	2577	08/31/05	Traffic Control Plan	N/A	N/A	Low	San Luis Rey	720-722 N. Cleveland Street/Neptune Street	
800 Blk of S. Pacific Street	R-15-05	150-356-14	Revx Pacial North LLC	Taylor Group Inc.	Residential	0.08	1	1	4,501	09/19/06	Grading	03/01/07	09/18/06	2740	09/18/06	Traffic Control Plan Coonstruction Certficates	No	N/A	Medium	Loma Alta	815 S. Pacific Street	Grading
801 Blk of S. Pacific Street	R-16-05	150-356-15	Security FSE Thirty Two Inc.	Taylor Group Inc.	Residential	0.08	1	1	4,501	09/19/06	Grading	03/01/07	09/18/06	2741	09/19/06	Traffic Control Plan Coonstruction Certficates	No	N/A	Medium	Loma Alta	815 S. Pacific Street	Grading
802 Blk of S. Pacific Street	R-17-05	150-356-16	Revx Pacial South LLC	Taylor Group Inc.	Residential	0.08	1	1	4,501	09/19/06	Grading	03/01/07	09/18/06	2742	09/20/06	Traffic Control Plan Coonstruction Certficates	No	N/A	Medium	Loma Alta	815 S. Pacific Street	Grading
909 Wisconsin Ave	E-28-05	150-410-03	One Time Construction	Todd Pitner	Residential	0.26	1	1	11,464	02/15/06	Grading	11/01/06	02/15/06	2647	02/15/06	Traffaic Control Construction Certificate	N/A	N/A	Low	Loma Alta	909 Wisconsin Ave.	Building
Airport Auto Center	ADP-5-04	146-050-80-00	Capella	Anthony Taylor	Commercial	2.10		2	26,000	10/14/06	Demolition	02/01/07	10/13/06	2633	10/13/06	Traffic Control Construction Certificate	Yes	937C330757	Low	San Luis Rey	311 and 315 Airport Road	Demolition
Alanis Residence	RC-3-2000		Paul Alanis	Randy R. Brown	Residential		1	1		06/20/01	Grading	03/01/03	06/20/01	2018	06/20/01		No	N/A	Low	Buena Vista	# 59 St. Malo	Building / Improvements
All State Moving Systems	ADP6-04	161-660-03	Hamann Const.	Spear & Assoc.	Commercial				50,000	06/14/05	Grading	02/01/06	06/13/05	2567	05/11/05		Yes	2001-15	Medium	Loma Alta	4670 North Avenue	
AM/PM Mini Market & Carwash	D-23-01	158-030-43	San Luis Rey Service	Coast Engineering	Commercial	0.90		1		09/06/05	Grading		09/01/05	2603	08/05/05		N/A	N/A		San Luis Rey	607 North Douglas Drive/N. River and Douglas Drive	
Ambassador Family Church	D-8-2000		C&S Construction	Christian Wheeler	Commercial			1		01/31/03	Mass grading, key way for buttress fill			2198			Yes		High	Loma Alta	El Camino Real/Oceanside Blvd.	Grading
Ann Adanms Residence	E-10-02	155-130-38	Ann Adams	Skyline Engineering	Residential	14,553.00	1	1	1,825	05/12/05	Grading	05/12/05	05/12/05	2253	04/26/05		N/A	N/A	Low	Buena Vista	Eaton/Vista Way	
Arrowood J	T-12-99 (11)	122-521-07	Richmond American Homes	Rick Engineering	Residential	21.00	84			09/19/05		11/30/05	08/31/05	2612	08/31/05		Onsite Construction Trailer		Medium	San Luis Rey	Vandegrift Blvd and Granite Place	
Arrowood M	F-12-99	122-522-01	Richmond American Homes	Rick Engineering	Residential	19.00	80			09/19/05		11/30/05	09/14/05	2613	09/14/05				Medium	San Luis Rey	Vandegrift Blvd and Granite Place	
Barnwell Street Project	P-1-01 D-4-01	149-152-06	Loren & Nancy Ritter	Tait Consulting, Inc.	Residential	1.06	4	4		03/31/05	Clearing & Grading	07/01/06	03/30/05	2542	03/17/05	Traffic Control, Haul Route, Construction Certificate	Yes	937C332964	High	Loma Alta	303 S. Barnwell Street	
Benet Industrial Center	D-01-03	145-030-37	Josepho Group	Tait Consulting, Inc.	Commercial	4.98		2		04/05/04	Grading	01/01/05	N/A	2446-2448	03/30/04	Haul route	Yes	937C326967	High	San Luis Rey	Benet & Highway 76	
Bentley Residence	ADP-9-02		Steve Bentley	John Hacker	Residential	0.23	1	1	3,060 SF	05/15/03	Grading	03/01/04	05/09/03	2289	05/09/03		No	N/A	Low	Buena Vista	Laurel Rd & Fire Mtn Rd	Grading/underground utilities
Breanna Estates	T-7-2000		Kenneth Norton	Lundstrom & Assoc.	Residential												Yes	9375317643	High	San Luis Rey	Willowbrook Drive	
Brezza di Pacifica	P-14-05	153-012-48	1443 S. Pacific Street LLC	Taylor Group, Inc.	Residential	0.09	2	1	5,775	08/18/06	Demolition, Shoring, Grading	09/01/07	08/16/06	2733	08/16/06	Traffic Control Plan, Construction Certificate	No	N/A	Medium	Coastal Outlet	1433 S. Pacific Street	Demolition, Shoring, Grading
Buena Hills Drive	E-21-00		Hermosa Homes	Reynolds Civil Engineering	Residential	0.25	1	1	3,700	05/06/03	Clear and grub, and pre-grade	12/31/03	04/28/03	2068	04/28/03	Haul route, traffic control	No	N/A	Medium	Buena Vista	3303 Buena Hills Dr.	
Calvary Chapel	D-23-02		Hamann Const.	Alpha & Omega	Church	16.20		1	42,564	04/05/04	Grading	Dec. 2004	03/23/04	2451	03/23/04		Yes	937C424566	Medium	Loma Alta	Oceanic Drive & Corporate Center Drive	Building
Campbell Residence (SFD)	ADP-10-03	122-090-33	Fred Campbell	David H. Lowen	Residential	0.48	1	1	3,193 / 1,352	04/14/05	Grading	12/01/05	04/06/05	2575	03/14/05	Haul Route	Yes	N/A	Medium	San Luis Rey	5951 Las Tunas Drive, 92057	
Can'tar by the Sea	D-3-04	147-282-15	Joseph Garne	Vince Campo	Residential	1.00/1.00	2	2	3,636	09/07/05	Grade Lot	08/01/06	09/02/05	2598	08/19/05	Traffic Control Plan & Construction Certificate	N/A	N/A	Low	San Luis Rey	105 & 109 S. Ditmar St.	
Car Wash	T-2-97		Mark Conger	Lang Engineering	Commercial			1					10/01/02		10/01/02		No	N/A	High	Loma Alta	Oceanside Blvd and Ave Del Oro	On Going Work all stages from trenching to maintenance throughout city
Carsound Exhaust Systems	D-5-03	160-680-04	Paolone Brothers	Karish Architects	Commercial	11.76	1	1	253,496	06/27/05	Grading	04/01/06	06/24/05	2526	06/21/05	Traffic Control Plan, Construction Cert.	Yes	937C332154	High	Loma Alta	1901 Corporate Center	
Casitas	T-4-03	157-411-14	Ord & Rodgers Construction	Buccola Engineering	Residential	11.90	53	17		04/15/05	Clear & Grub / Grading	09/01/05	03/02/05	2583	03/02/05		Yes	937C328055	High	San Luis Rey	Wiy Terminus of Old Grove Road	On Going Work all stages from trenching to maintenance throughout city
Chevron Gas Station/Carwash	D-28-99		S&L Oil JV		Commercial	1.20		1	4,975	04/09/04	Grading, Underground	07/30/04	04/08/04	2468	03/25/04		Yes	937C322496		Buena Vista	College & Marron	On Going Work all stages from trenching to maintenance throughout city
Claire Villas	D-204-04	143-205-01 143-205-02 143-205-03	Premier Properties	Buccola Engineering	Reisdential	0.23	4	4	10,108	09/02/06	Grading	05/01/07	09/01/06	2623	09/01/06	Traffic Control Plan Haul Route Construction Certificate	N/A	N/A	low	Coastal Outlet	719-721 N. Cleveland street	Grading
Construction Certificates - Cox Communications	-	-	-	-	-							-		-			-	-	-	-	Work throughout city	On Going Work all stages from trenching to maintenance throughout city
Construction Certificates - Miscellaneous	-	-	-	-	-							-		-			-	-	-	-	Work throughout city	
Construction Certificates - SBC	-	-	-	-	-							-		-			-	-	-	-	Work throughout city	
Construction Certificates - SDG&E	-	-	-	-	-																	
Construction Certificates - SDG&E	-	-	-	-	-							-		-			-	-	-	-	Work throughout city	
Crawley Residence	E-2-04	148-272-33	Daniel Crawley	Erin Rist	Residential	0.22	1	2	9-10,000	09/13/04	Grading / Retaining Wall	05/05/05	09/08/04	2495	08/18/04	Traffic control plan, Haul route, Const. Cert.	No	N/A	Medium	Loma Alta	1890 Maxon Street Intercection: Mission/Barnes	Building/ Improvements
Cross/Matlach Residence	RC-2-04	153-091-48-00	Dan Matlach / Candace Cross	Larry Taylor	Residential	0.16	1	1	4,574	11/15/04	Shoring/Grading	11/01/05	11/16/04	2541	10/04/04	Traffic control plan, Haul route, Const. Cert.	No	N/A	Medium	Buena Vista	1709 So. Pacific Street	
Cypress Estates	D-7-02(1)	158-630-01 to 17	Meridian Group	BHA	Residential	5.25	17	17		04/19/04	Grading	10/01/04	04/16/04	2455	04/09/04	Construction Certificate	Yes	937C327113	High	San Luis Rey	3600 Block of Cypress Road	Most of the offsite improvements are complete and most of the work is being done on site.
Darwin Glen	T-11-2002	159-060-12	Heritage Pacific Homes	Phil Buccola	Residential	11.60	25	25		12/01/05	Grading	01/01/07	11/30/05	2473	11/30/05	Traffic control plan, Haul route, Const. Cert.	Yes	937C325609	High	San Luis Rey	Darwin and Sagewood Drive	Grading
Darwin Knolls	T-11-2002	159-060-14,15	Heritage Pacific Homes	Phil Buccola	Residential	5.70	15	15	2,400	12/02/05	Grading	01/02/07	12/01/05	2474	12/01/05	Traffic control plan, Haul route, Const. Cert.	Yes	937C325610	High	San Luis Rey	Darwin and Ocean Ridge Court	Grading
Davis Residence	E-01-01		Dewey Davis	Aquaterra	Residential		1	1		11/27/01	Grading/Building	06/01/03	11/27/01		11/27/01		No	N/A	Low	Buena Vista	1809 Ivey Road	

Table 7-1 Public Works Engineering Inspection Projects

PROJECT NAME	FILE NUMBER	APN	DEVELOPER	ENGINEER OF WORK	PROJECT TYPE	SITE ACREAGE	NO. OF UNITS	NO. OF BLDGS	TOTAL SQ. FT.	CONST. START DATE	INITIAL CONSTRUCTION ACTIVITIES	1ST OCCUPANCY OR DATE OF COMPLETION	DATE GRADING PERMIT ISSUED	CITY PLAN NUMBER	DATE EROSION CONTROL APP'D	ADDITIONAL REQUIRED PERMITS	SWPPP	WDID	THREAT PRIORITY	WATERSHED	LOCATION	PROJECT STATUS
Deutsch Industrial Plant	ADP-7-04	145-021-30	Deutsch Co.	Buccola Engineering	Commercial	3.00		1	37,000	10/17/04	Clear and Grub	06/01/05	10/10/04	2553	10/06/04	traffic control plan	Yes	9-37C329289	Medium	San Luis Rey	2508 Eddie Jones Way	Grading
Douglas Drive / N. River Road	P-11-01	157-020-82	Mike Borchard	KHR Associates	Commercial	0.34	1	1	15,000	02/23/05	Grading	05/23/05	04/24/03	2235			N/A	N/A	Low	San Luis Rey	Douglas Drive & North River Road	
Douglas Drive Condominiums	T-9-01		Western Pacific Homes	Lundstrom & Assoc.	Residential	10.20	189	33		10/31/02	Gradings, Improvements to subject property, construction of model complex	06/30/03	10/24/02	2291	10/24/02		Yes	9375318940	High	San Luis Rey	North River Road	building,maintaining
Duvic Residence - 1329 Dubuque	E-4-04	148-015-01	Diversified Construction, Inc.	Engineering Design Group	Residential		1		986	07/19/04	Grading/Grubbing	12/01/04	06/28/04	2504	06/28/04		N/A	N/A	Low	San Luis Rey	1329 Dubuque	
Enright Residence	D-15-03	152-141-05-00	Bob Enright	Timothy Graves	Residential	0.08	1	1	5,400	03/03/06	Grading	05/01/07	03/03/06	2630	03/03/06	Haul Route	N/A	N/A	Medium	Loma Alta	1213 S. Paicifc	Grading, Building
Ernest A. Taylor Estates	T-2-01	158-140-08	Oceanstar LLC/Lighthouse	Buccola Engineering	Residential	30.00	28	28		04/05/04	Grading	Feb. 2005	03/22/04	2452	03/10/04		Yes	937C323697	High	San Luis Rey	Darwin Drive & Sunridge Drive	The site is graded
Garden Homes	T-1-03	152-015-06, 07,11,12,13	Pierre Andre	Brian Donald	Residential	0.57	9	9	20,997	11/03/04	Grading	06/01/05	11/03/04	2502	10/16/04		No	N/A	Medium	Loma Alta	Oceanside Boulevard	
Gilligan Groves	E-13-01	121-209-29 121-209-30	G-Three LLC	Hadley Johnson	Commrecial	1.80	0	0	31,000	09/19/06	Grading	09/01/07	09/18/06	2165	09/18/06		No	937C324590	Low	San Luis Rey	Puerta de Lomas e/o Sleeping Indian Road	Grading
Gonzalez Residence	ADP-2-04	154-030-20	Jose Gonzalez	Cornerstone Engineering	Residential	0.23	1	1	4,500	02/07/05	Grubbing, grading	02/01/06	01/27/05	2573	01/24/05		No	N/A	Low	Buena Vista	1522 Hunsaker Street/ California	
Greg Elmore Guest House and Carport	E-16-2004	165-091-23	Greg Elmore	Robert Sukup	Residential	0.58	1	1	1,400	12/01/05	Grading	06/30/06	11/30/05	2545	11/30/05	Haul Route	No	N/A	Low	Buena Vista	2145 Oceanview Road	Grading
Hackmore Road	E-5-01		W.S. Development	Wynn Engineering	Residential		4			12/20/01	Build & sell 1 at a time	01/00/03		2124	12/12/01		No	N/A	Medium	San Luis Rey	Hackmore Rd. Between Jefferies Ranch Rd./Spur Ave.	Grading, building, improvements
Harbor View	D-17-02 T-10-02	144-210-16	Greystone Homes, Inc.	Buccola Engineering	Residential	16.00	220	20		05/20/04	Rough grading, export, storm drains	11/01/04	05/07/04	2454	05/07/04	Haul route	Yes	937C323779	Medium	San Luis Rey	Neptune Way #1116	Grading
Harmon Residence Improvement	E-20-05	154-230-22	Harmon, J.C	A. J. Hranek	Residential	0.50	1	1	760	11/01/05	Grading	05/01/06	10/28/05	2631 ERO	10/06/05		N/A	N/A	Low	Buena Vista	1796 Troy Lane nearest cross st. Ivy Road	
Hibiscus Condominiums	D-206-04	147-262-07	Tanina Wachsberger	G&G Engineering, Inc.	Residential	6,300 SF	2	2		06/06/05	Grading	12/31/05	05/01/05	2601	04/26/05	Haul route, Construction Certificate	N/A	N/A	Medium	Loma Alta	130-132 Pacific Street	
Hluchan Residence	ADP-1-02		Hluchan Family	Alta Vista Engineering	Residential	3.00	1			07/24/02	Grading	Not yet completed	07/23/02	2190			No	N/A	Medium	San Luis Rey	1420 Wilshire Rd.	Haven't started grading yet
Hollister Residence	ADP-5-03	122-350-09-00	Ken Hollister	GUP Consultants	Residential	2.57	1	2	5,012	06/01/04			05/28/04	2331	05/10/04		No	N/A	Medium	San Luis Rey	839 Grove View	Building / Improvements
Hopkins Residence	ADP-15-02		Fred McNeal	Karn Surveying	Residential	2.50	1		3,900	04/04/03	Grading	12/03/03	03/25/03	2265	03/25/03		No	N/A	Low	San Luis Rey	Wilshire & Hidden Valley	
Hyta Residence	E-40-05	149-360-19--00	Phil Hyta	CTE	Residential	0.25	2	2	15,428	10/10/06	Grading/Drilling	04/01/07	10/09/06	2675	10/09/06	Traffic Control Plan Construction Certificate	no	N/A	Low	Loma Alta	567 Hoover Street	Grading
IDEC (NIMO)	T-1-99		IDEC	RBF Engineering	Commercial								05/01/02		05/01/02		Yes	9375317815	High	Loma Alta	Corporate Center and Ave de La Plata	Building/Improvements
Jiffy Lube	D-02-86	162-502-28	Commercere Automotive Realty of Texas	John Hacker Associates	Commercial	0.42		1	2,400	04/26/06	Grading	09/01/06	04/12/06	2674	04/12/06	Traffic Control Haul Route Construction Certificate	N/A	937C3400056	Medium	Loma Alta Creek	4106 Oceanside Blvd.	Grading
Kapitanski Residence	E-11-03	165-092-39	Ed Kapitanski	Cornerstone Engineering	Residential	0.50				02/04/03	Grading	N/A	02/04/03	2467	02/04/03		No	N/A	Medium	Buena Vista	3338 Terrace Lane	
Kemp Grading Plan	E-14-01		Kemp	Bruce Tait	Residential	3.80	1	1	3,600	02/15/03	BMPs	12/15/03	01/24/03	2166	01/24/03		No	N/A	High	San Luis Rey	Albright & Guajome Lake Road	
Kramer Residence	E-10-99		Al & Ruth Kramer	Lamda Engineering	Residential		1	1		05/08/01	Grading, building, & improvements	03/01/03	05/08/01		05/08/01		No	N/A	Low	Buena Vista	1525 Hunsaker	Grading / Building / Improvements
Kreissig Residence	P-7-00		Deiter Kreissig	Caleb Rios	Residential	0.44	1	1	2,500 SF	03/26/03	Grading	01/01/04	03/26/03		03/26/03		No	N/A	Medium	Loma Alta	2327 Maxon Street	
Kyle Duplex	P-4-00		Marion Kyle	Jerry Appleget	Residential		2	2		10/02/02	Grading, building & Landscape		10/02/02		10/02/02		No	N/A	Medium	San Luis Rey	Tremont & Kewy	Building/Improvements
La Pacifica Business Park	D-23-04	160-572-01-00 160-572-02-00	Al De Berardinis	KSS Engineering	Commercial	14.71	1	3	210,915	12/19/05	Grading	06/23/05	12/19/05	2602	12/12/05	Traffic Control Plan	Yes	937C332528	High	Loma Alta	Ocean Ranch & Corporate Center	Grading
Ladwig Residence	ADP-6-03(1)	165-520-51	John Hacker	John Hacker	Residential	0.27	1	1	10,000	05/17/05		01/01/05	05/14/04	2475	05/12/04		No	N/A	Low	Buena Vista	Fire Mountain Drive and Laurel	
Landers Residence	RC-205-2002	150-262-24	Gilholm Const.	Wayne Stutzman	Residential	.067 Acre	1	1	2,936	11/25/04	Grading	08/01/05	12/07/04	2332	08/27/04	Traffic Control Plan	No	N/A	Low	Loma Alta	718 S. Pacific Street	Mass Grading
Libby Lake Child Care Center	D-2-05	157-56-7	QCS	BDS Engineering	Commercial		0	2			Grading & Demolition	01/01/06	10/03/05	2552	10/03/05		Less than one	N/A	Medium	San Luis Rey	River Road	
Lindholm Residence	E-6-02		Craig Lindholm	Conway & Assoc.	Residential		1	1		06/03/02	Grading, building	03/01/03	06/03/02		06/03/02		No	N/A	Low	Buena Vista	1705 Ridgeway	Grading
Lot 14 Ocean Ranch	D-24-04	160-571-09	Venture Corp.	Kier & Wright	Commercial	8.46	34	7	100,689	06/06/05	Grading	01/01/06	05/27/05	2587	05/27/05	Traffic Control Plan, Construction Cert.	Yes	937C33360	High	Loma Alta	Rancho Del Oro & Ocean Ranch	
Lot 27 Parcel 2 6147 Indian View Drive	Adp-01-2004	121-151-27	Bellon Construction	RP Engineering	Residential	3.97	0	1	2,898	07/19/06	Grading	05/25/07	07/18/06	2636	07/07/06	Haul Route Construction Certificate	N/A	937L341136	Medium	San Luis Rey	6147 Indian View Drive	Grading
Macadamia Grove Lots 5-6	ADP-17-02	151-310-52-00 Lot 5 & 151-310-51-00 Lot 6	Garth Packard	Allied Earth Technology	Residential	0.75	2	2	30,000	10/21/04	Grading	04/20/05	10/20/04	2498	10/12/04		No	N/A	Low	Loma Alta	Grandview East of Hunsaker	Grading
Mahlum Residence	ADP-5-02		David Mahlum	Spear & Assoc.	Residential		2	2		09/16/02	Grading, improvements, building & landscape	12/01/03	09/16/02		06/16/02		No	N/A	Medium	Buena Vista	South Tremont Street and Vista Way	
Martin Residence	ADP-12-04	122-170-11	Ulrich & Raili Martin	Terra Data	Residential	2.40	1	1	5,400	08/30/05	Aug. 30, 2005	April 2006	08/29/05	2609	08/19/05	Haul Route	Owner Has It On site	None	Low	San Luis Rey	6638 Morro Heights Rd.)	
Meek (Old Grove)	T-10-99		Old Grove Road LLC	Tait Consulting, Inc.	Residential	6.40	23	23	6,800	05/01/03		10/30/03	04/23/03	2230	04/23/03		Yes		High	San Luis Rey	Old Grove/Frazee	
Melsh Residence	E-7-01		Gene Melsh	Hadley Johnson	Residential	2.00	1			05/00/02	Grading	Not yet completed	05/00/02	2138			No	N/A	Medium	San Luis Rey	La Paloma and Sleeping Indian	Grading/Building/Improvements
Mission Wells	T-4-01		Standard Pacific	Buccola Engineering	Residential	16.60	105	106	133,000	10/01/02	Mass grading/import	09/00/03	10/01/02	2245	10/01/02		Yes	937S319046	High	San Luis Rey	Douglas & Pala	
MJK Oceanside Project	ADP-14-04	148-143-17	Arnett Construction	Andrew Kann	Residential	0.17	1	1	1,815	07/06/06	Grading	11/20/06	07/05/06	2715	07/05/06	Traffic Control Construction Certificate	No	N/A	Low	San Luis Rey	1444 Mission Avenue	Grading
Monarch At Rancho del Oro	T-8-2004	169-362-05	K Hounanian	Hunsaker Engineering	Residential	15.00	221	36	403,200	01/26/06	Grading	12/30/06	01/25/06	2614	01/25/06	Traffic Control Haul Route	Yes	937C333976	High	Buena Vista	Vista Way and Rancho del Oro	Grading
Morro Hills	T-12-99		Fieldstone	Rick Engineering	Residential	52.00	110			05/05/03	Removal near Vandegrift & Douglas	03/01/04	04/30/03	2084	04/30/03		Yes	937S317198	High	San Luis Rey	NW and SW corner of Douglas Dr./ Vandegrift	
Morro Hills Village & Golf Course Phase 3	T-12-99(3)	122-020-52 122-080-71	Fieldstone	Rick Engineering		1.30	89	89	N/A	05/07/04	Grading	Early 2005	05/07/04	2098	05/05/04	Traffic Control, Haul Route	Yes	9375317198	High	San Luis Rey	Douglas & Vandegrift	Improvements/Building/Grading
Morse & Myers Condos	D-17-2003	193-092-50	Paul Zocco	Taylor Group, Inc.	Residential	0.16	3	1	6,183	08/15/05	Grading	08/15/06	08/10/05	2561	08/04/05	Traffic control plan, Haul route, Const. Cert.	N/A	N/A	Medium	Buena Vista	Southwest Corner of Morse and Myers Street	
Morse Street Condos	D-7-99		Pierre Andre	Resource Development Corp.	Residential	0.17	3	1	6,960	04/14/03	grading, building and public improvements	04/01/04	04/07/03	2111	04/07/03		No	N/A	Low	Loma Alta	Morse St & S. Pacific St.	Demo / Improvements
Moss Residence	D-16-04	153-092-06	Steve Moss	RCE	Residential	0.11	1	1	5,200	07/10/06	Grading	07/01/07	7/72006	2594	7/72006	Traffic Control Construction Certificate	N/A	N/A	Low	Coastal Outlet	1632 S. Pacific Street	Grading
Muhlum Duplex			David Mahlum	Spear & Assoc.	Residential												No	N/A	Low	Buena Vista	1941 S. Tremont Street	Grading
Native Floral Group	ADP-11-03		Oceanic Enterprises	Spear & Assoc.	Commercial	5.00		1	50,000	04/26/04	Grading, Underground, Building, Surface Improvements	Sept. 2004	03/17/04	2441	03/17/04		Yes	937C313419	Medium	Loma Alta	Oceanic Drive & Corporate Center Drive	
Neptune Village II	T-200-02		TIC Corporation	Daniel C. Groth	Residential	0.68	12	12	2,145/ea.	04/14/03	Grading, building & public improvements	05/01/04	04/08/03	2272	04/08/03	Const. Cert, traffic control, & haul route	No	N/A	Low	San Luis Rey	Neptune & Tremont	Grading Completed/Building/Improvements
Nevada Manor	T-201-02	147-108-02	Lev Amusin	Toal Engineering	Residential	0.34	15	1	24,000	07/06/05	Grading		06/29/05	2501	06/10/05	Traffic control plan, Haul route, Const. Cert.	No	N/A	Medium	San Luis Rey	312 -318 North Nevada Street	

Table 7-1 Public Works Engineering Inspection Projects

PROJECT NAME	FILE NUMBER	APN	DEVELOPER	ENGINEER OF WORK	PROJECT TYPE	SITE ACREAGE	NO. OF UNITS	NO. OF BLDGS	TOTAL SQ. FT.	CONST. START DATE	INITIAL CONSTRUCTION ACTIVITIES	1ST OCCUPANCY OR DATE OF COMPLETION	DATE GRADING PERMIT ISSUED	CITY PLAN NUMBER	DATE EROSION CONTROL APP'D	ADDITIONAL REQUIRED PERMITS	SWPPP	WDID	THREAT PRIORITY	WATERSHED	LOCATION	PROJECT STATUS
Nguyen Residence	E-04-98		Than Hai Nguyen	Sea Bright Engineering	Residential		1	1		08/20/02	Grading, improvements, building and landscape	09/01/03	08/20/02		08/20/02		No	N/A	Low	San Luis Rey	2524 Pahvant Street	
Nguyen Residence II	E-20-04	146-121-44	N/A	Spear & Assoc.	Residential	0.24	1	1	3,388	09/05/05	Grading	01/31/06	08/24/05	2557	08/05/05	Traffic Control Plan, Haul Route & Construction Certificate	N/A	N/A	Low	San Luis Rey	2528 Pahvant St. (Mesa/Lotus)	
Nitto Denko	ADP-07-03		Shimizu America Corp	EGL Associates, Inc	Commercial	14.00	1	1	30,000	03/26/04	Parking Lot Modification	12/01/04	03/12/04	2445	03/02/04		No	N/A	Medium	San Luis Rey	401 Jones Road	
North Oceanside Batch Plant	D-12-02	145-020-33 145-030-29	Hanson Aggregates	Chang Consultants	Commercial	4.35		1		03/01/04	Grading	Dec. 2004	02/24/04	2488	02/18/04		Yes	937C326056	High	San Luis Rey	West end of Airport Road	Grading/Improvements
North Tremont Village	T-200-93	143-245-20,21,19	North Tremonth, LLC	Wootten Land Surveyer	Residential	12,500.00	5	5	13,090	09/21/04	Grading	04/05/04	09/14/04	2537	09/07/04	Traffic control plan, Haul route, Const. Cert.	No	N/A	Medium	San Luis Rey	602,610,618,626,& 634 N. Tremont St. Intersection N. Tremont and Surfrider	
Nugent Residence	E-07-02		Ted Nugent	Foad Consulting	Residential	0.32	1	1	2200 Sq. Ft.	10/17/02	Grading, building and landscaping	07/02/03	10/16/02		10/02/02		No	N/A	Low	Buena Vista	Laurel Street (2398 Ivy Road)	
Ocean Heights	T-13-022565	158-260-02,03,04,08	Shoreline Communities	Tait Consulting, Inc.	Residential	11.6A 4c	29	29		12/13/04	Interim earhtwork - Colluvium removal		11/30/04	2565	10/06/04	haul route	Yes	937C330740	Low	San Luis Rey	Mission Avenue & Valley Heights Drive	
Ocean Heights	T-13-02	158-260-02,03,04,08	Ocean Heights Development Co., LLC	Tait Consulting, Inc.	Residential	11.64	29	29	75,000	03/10/05	Clearing & Grading	08/01/05	03/09/05	2499	03/03/05	Haul Route	Yes	973C330740	High	San Luis Rey	Valley Heights @ Twins Haven	
Ocean Ranch	ADP-10-04	160-571-13-00	Hamann Const.	Pioneer Engineering	Commercial	5.00		2	83,000	06/06/05	Grading	01/02/06	05/03/05	2576	05/03/05	Traffic Control Plan, Construction Cert.	Yes	937C331191	High	Loma Alta	Ocean Ranch & Corporate Center	
Ocean Ranch 2-B	T-1-99 (2B)		Ivey Ranch Development Co	RBF Consulting	Commercial	45.00				06/05/03	Grading	01/01/05	05/28/03	2292	05/29/03	N/A	Yes	937S316051	High	Loma Alta	Old Grove/Mesa	
Ocean Ranch Corporate Center	ADP-3-04	160-680-16	Innovative Development Enterprises	Pioneer Engineering	Commercial	5+		5		02/09/05	Grading, Stormdrain	11/01/05	01/19/05	2543	01/19/05		Yes	937C324566	High	Loma Alta	Corporate Center and Oceanic Drive	
Ocean Ranch Lot 12	D-11-05	16-572-03	K&G Ocean Ranch LLC	RBf Consulting	Commercial	10.60		4	105,000	08/21/06	Grading	04/01/04	08/16/06	2699	08/10/06	Traffic Control, Construction Certificate	Yes	937C340306	High	Loma Alta	Rancho Del Oro & Ocean Ranch	Grading
Ocean Ranch Phase 1, 1A, 2B	T-1-99		Stirling	RBF Consulting	Residential	393.00				10/04/00			12/26/00, 06/20/01, 08/02/02		12/26/00, 06/22/01		Yes	937S313419	High	Loma Alta	Northeast corner of Rancho Del Oro / Oceanside Blvd.	Occupancy
Ocean Village Complex	T-203-00		ASB Construction	Bender & Assoc.	Residential		2	2	5,000		Grading	01/15/04	01/29/03	2215	01/29/03		No	N/A		San Luis Rey	Civic Center Drive & Tremont St.	
Oceanic Business Park South	ADP-12-03	160-680-09	Hamann Const.	Spear & Assoc.	Commercial	6.80	20	6	76,000	06/29/04	Grading	01/15/04	06/23/04	2465	06/23/04	Construction Certificate	Yes	937B313419	High	Loma Alta	Oceanic Drive E. of Corporate Center Drive	Improvements/Building
Oceanic Business Park South	ADP-11-04	160-680-20	Hamann Const.	Spear & Assoc.	Commercial	4.83		2		05/31/05	Grading	12/23/05	05/03/05	2580	05/03/05	Traffic control plan, Haul route, Const. Cert.	Yes	937B313419	High	Loma Alta	3801 & 3803 Oceanic Drive	
Oceanic Enterprises	D-2-02		Hamann Const.	Spear & Assoc.	Commercial	14.00		11	180,000	03/10/03	Grading (export)	11/01/03	03/05/03	2259	02/18/03		Yes	9378313419	High	Loma Alta	Oceanic and Corporate Center	
Oceanside Gateway Business Park	D-6-2003	162-120-45 162-120-16 162-120-51	BKM Development	DRC, Inc	Commercial	38.00	0	0		04/05/04	Mass Grading	Jan. 2005	03/25/04	2506	03/19/04		Yes	937C323499	High	Loma Alta	Oceaside Blvd, S. of Peacock Blvd	Building/Improvements
Oceanside Lot 1-2-3-4 Map 12977	ADP-1-03 ADP-2-03	151-310-47	J&S Builders, Inc.	Walsh Engineerin & Surveying, Inc.	Residential	1.32	4	4		2/29/05	Clear Grub Grading	02/01/06	02/28/05	GP2516 & GP2517	01/03/05	Haul Route	Yes	937C328151	Medium	Loma Alta	Las Granjaf Way, / Grandview Street	Mass Grading
Oceanside Museum of Art	D-206-03	147-109-01	Oceanside Museum of Art	BHA	Commercial	0.20		1	15,937	10/19/06	Relocate Utilities	11/01/07	10/18/06	2739	11/18/06	N/A	No	N/A	Low	Coastal Outlet	704 Pier View Way	Demolition
Oceanside Pier Resort	D-200-03	147-075-01,02,03,04,05,06 & 07	Centdant/Fairfield	Pountney Psomas	Residential Commercial	60,000 sf	136	2	50,000	10/17/05	Piling, Excav/Export	07/01/07	10/12/05	2593	10/06/05	Traffic Control Plan, Haul Route, Construction Certificate	Construction Trailer	937C333559	High	San Luis Rey	Pier View/ Myers	
Oceanside Terraces	T-203-00	147-271-15	Oceanside Pier View L.P.	Westcon Engineering	Residential	0.87	38	1		04/18/05	Excavation and Shoring	10/06/05	04/15/05	2555	04/15/05	Traffic control plan, Haul route, Const. Cert.	Yes	937C324166	Medium	San Luis Rey	301 Mission Ave, Oceanside, CA 92054	
Old Grove Market Place - Phase II	D-11-00(1)	158-101-13-37-39	Sea Breeze Properties	Adams Engineering	Commercial	8.40		4	80,716	06/07/04	Final Grading	Dec. 2004	06/02/04	2478	05/28/04	Trafic Control Plan, Haul Route	Yes	9375S315761	High	San Luis Rey	Old Grove Road/Mission Avenue	
Old Grove Road	T-1-99	161-511-16	Sterling Enterprise	RBF	Public Road	6.90				12/01/04		Feb-05	06/11/04	R-13294 - 13309C	13309C	Traffic Control Plan, Construction Cert.		937C331255	High	Loma Alta Creek	4200 Ocean Ranch Blvd.	
One Source	ADP-7-02		One Source	Spear & Assoc.	Commercial												Yes	9378313479	Medium	Loma Alta	Oceanic	
Osknee Residence	D-7-03	122-100-45	Scott Osknee	Toal Engineering	Residential	9.23		2	8,683	06/25/05	Grading	08/01/06	06/15/05	2558	06/02/05	Traffic Control Plan, Construction Cert.	No	N/A	Medium	San Luis Rey	475 Sleeping Indian	
Pace Residence	ADP-8-03	122-080-22	Bill Pace	Bruce McFarlane	Residential	2.50	1	1	2,450		Grading	04/01/05	03/31/04	2302	01/15/04		No	N/A	Medium	San Luis Rey	1116 Sleeping Indian Road	Building
Pacific Coast Business Park	D-17-04(1)	161-511-16	Headland Realty Corporation	BHA	Commrcial	116.00	N/A	N/A	N/A	06/27/06	Grading	N/A	6/37/2006	2597	06/27/06	Traffic Control Haul Route Construction Certificate	Yes	937C341845	High	Loma Alta Creek	College Blvd. and College Blvd.	Grading
Pacific Condos/Sterner's	P-2-93		Wanda Sterner	Joseph Lukoski	Residential									1699			No	N/A	Medium	Loma Alta	809 S. Pacific Street	
Pacific Street Condominiums	RC-9-02	152-143-01	No. County Custom Builders	Pasco Engineering	Residential	0.18	3	1	5,888	04/26/05	Grading	04/26/05	04/23/04	2319	03/19/04	Construction Certificate	No	N/A	Low	Loma Alta	1302 Pacific Street	Improvements / Building
Pacific Village #5	T-205-00		Cleveland Street Housing	Thielmann	Residential		7	7		10/15/01	Grading, building, improvements and landscaping	03/01/03	10/15/01		10/15/01		No	N/A	Low	San Luis Rey	Cleveland St./Civic Center	Project built out
Panorama Ridge	T-6-00		Heritage Pacific Homes	Project Design Consultants	Residential	9+	25	25	69,568	10/22/02		06/01/03	10/10/02	2184, 2275	10/15/02		Yes	937S318524	High	Loma Alta	Temple Heights/Panorama Ridge	Bond Release Process
Pelican Cove	T-3-02	158-051-13, 158-051-14, 158-061-01	Dr. Horton- Western Pacific Series	Lundstrom & Assoc.	Residential	5.65	81	15		TBD	Grading	09/01/05		2525			Yes	937C325738	High	San Luis Rey	285 Douglas Dr. , 380 N. El Camino Real	Bond Release Process
Perry Residence	E-6-03	149-360-04	Jim Perry	Ron Holloway	Residential	0.40	1		3,310	03/15/04	Grading	Oct. 2004	03/15/04	2312	10/15/03		No	N/A	Medium	Loma Alta	Oceanside Blvd & Hoover	Project built out
Ratkowski Residence	RC-4-05	150-355-09	Don Ratkowski	Larry Taylor	Residential	0.08	1	1	3,500	05/12/06	Grading, Sea Wall	04/15/07	05/12/06	2684	05/12/06	Traffic Control Haul Route Construction Certificate	No	N/A	High	Coastal Outlet	933 S. Pacific Street	Building
Rayo Oceanside	ADP-12-02		Hamann Const.	Spear & Assoc.	Commercial	2.00		1		01/21/03	One phase only		01/08/03	2241	12/31/02		Yes	9378313419		Loma Alta	Oceanic and Corporate Center	Project built out
Renaissance Terrace	T-200-01	143-040-21 143-040-23 143-040-43 143-010-23	D. R. Horton	PD&C	Residential	4.14	96	2	51,095	04/11/06	Grading	08/01/07	04/06/06	2668	04/10/06	Traffic Control Haul Route Construction Certificate	Yes	937C339535	High	San Luis Rey	North Coast Highway north of Highway 76	Grading
Robert Mann Packaging	ADP-13-02		Hamann Const.	Spear & Assoc.	Commercial	3.00		1	30,000	12/13/02	One phase only	05/01/03	12/09/02	2242	10/20/02		Yes	9378313419		Loma Alta	Oceanic and Corporate Center	Project built out
Rodriguez Residence	E-05-97		Avocado LLC	Pacific SW Engineering	Residential		1	1		06/01/01	Grading, building, improvements & landscaping	01/15/03	06/01/01		06/01/01		No	N/A	Medium	Buena Vista	Fire Mountain Drive and Avocado Road	Project built out
RZK - Laurel / Ivy	T-3-03	165-630-08, 10	Nobel Homes	Bruce Tait	Residential	3.72	11	9	21,930	05/23/05	Preliminary Grading	05/11/05	05/23/05	2551	05/11/05	Traffic Control Plan, Haul route	Yes	937C334041	Medium	Buena Vista	Corner of Laurel Road and Ivy Road	Building, Public Improvements
Saint Malo Lot 77	RC-13-04	155-102-44	Wilson	CTE	Residential	0.25	1	1	4,881	03/18/06	Graing, Building	06/01/07	03/17/06	2664	03/17/06	Haul Route	N/A	N/A	Medium	Buena Vista	St. Malo Lot 77	Building
San Luis Rey United Methodist Church II	D-7-90	157-412-18	SLR UMC	Cherry Engineering	Commercial	4.68		2		07/01/05	Grading		06/18/05	2581	06/15/05	Haul Route	No	N/A	Medium	San Luis Rey	Old Ranch Road & Seattle Slew Way	Project built out
Schnell	ADP-14-03	160-680-09	Hamann Const.	Spear & Assoc.	Commercial	3.00	1	1	40,000	06/29/04	Grading	01/15/05	06/25/04	2476	06/25/04	Construction Certificate	Yes	937B313419	High	Loma Alta	3923 Oceanic Drive, Corporate Center Drive & Oceanic Drive	Grading/Building/Improvements
Schueller Residence	E-26-05	150-410-07	One Time Construction	Engineering Design Group	Residential	0.15	1	1	2,500	07/19/06	Grading	05/01/07	07/19/06	2648	07/19/06	Traffic Control Haul Route Construction Certificate	N/A	N/A	Low	Loma Alta	1016 Alberta Avenue	Grading
Seagate Corporate Center	D-21-04	162-082-34	Segate Corporate Center Lp	RBF Consulting	Commercial	24.00		13	200,100	02/06/06	Grading	12/01/06	01/12/06	2608	01/12/06	Traffic Control Plan & Construction Certificate	Yes	937C334863	High	Loma alta Creek	Corporate Center and Avenida de la Plata	Grading, Building

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Table 7-1 Public Works Engineering Inspection Projects

PROJECT NAME	FILE NUMBER	APN	DEVELOPER	ENGINEER OF WORK	PROJECT TYPE	SITE ACREAGE	NO. OF UNITS	NO. OF BLDGS	TOTAL SQ. FT.	CONST. START DATE	INITIAL CONSTRUCTION ACTIVITIES	1ST OCCUPANCY OR DATE OF COMPLETION	DATE GRADING PERMIT ISSUED	CITY PLAN NUMBER	DATE EROSION CONTROL APP'D	ADDITIONAL REQUIRED PERMITS	SWPPP	WDID	THREAT PRIORITY	WATERSHED	LOCATION	PROJECT STATUS
Seaside Condos	T-202-00		Zocco Development	Larry Taylor	Residential		6	6		04/27/01	Grading		04/27/01	2082	04/27/01		No	N/A	Low	San Luis Rey	Surfrider and Cleveland	Project built out
Second Mission Baptist Church	C-16-1996	122-220-10	Tony Wanket Construction	CTE	Commercial	N/A	N/A	N/A	N/A	02/23/06	Survey, Public Improvements	04/30/06	02/16/06	1780 & R12675	02/16/06	Traffic Control	N/A	N.A	Low	San Luis Rey	5301 Mare Road	Project built out
Simba International	D-21-07	161-660-11	MW Construction Inc	Masson & Associates	Commercial	1.10		1	20,087	05/06/04	Grading	12/31/04	05/05/04	2479	05/03/04	Haul route	Yes	937C326216	Medium	Loma Alta	2654 Vista Pacific Drive	Project built out
Sombrilla Condos	P-200-04	150-074-09	313 Myers street LLC	Buccola Engineering	Residential	0.11	4	1	5,000	04/18/06	Grading	04/18/07	04/17/06	2628	04/17/06	Traffic Control Haul Route Construction Certificate	No	N/A	Low	Coastal Outlet	313 s. Myers Stret	Grading
Speck Residence	E-37-04	148-312-37	Douglas L. Speck	Cornerstone Engineering	Residential	0.21	1	1		01/10/05	Rough grade lot	01/10/06	11/23/04	2574	11/23/04	Haul route, Construction Certificate	N/A	N/A	Low	Loma Alta	2226 Greenbrier Drive	Project built out
Sprint PCS			Big Sky	Frasier Engineering	Commercial												No	N/A	Low	Buena Vista	Kelly St & Soto St	Project built out
St. Cloud	T-05-05	160-571-29	John Laing Homes	Hunsaker & Associates	Residential	3.00				02/03/06	Grading Surcharge			2637	02/03/06		Yes	937C16051	High	Loma Alta Creek Garrison Creek	Mesa and Old Grove Road	Grading
St. Margaret Church	D-02-04	162-120-50	Saint Matgaret Church	Cherry Engineering	Commercial	9.20		1	18,500	06/06/06	Grading	08/01/07	06/05/06	2677	06/05/06		Yes	937C341071	High	Loma Alta	4300 Oceanside Blvd.	Grading
Stoner/Kumari Residence	RC-11-98		Stoner/Kumari	Anthony Taylor	Residential	0.07	1	1	3,800 SF	03/31/03	Grading	03/31/04	03/28/03		03/28/03		No	N/A	Low	San Luis Rey	1305 S. Pacific	Building / Grading /Improvement
Sunwest Village II	T-6-99		Pinnacle Communities	Ludwig Engineering	Residential	50.00	104			06/22/05		Unknown	11/06/00	2016, 2078, 2108			Yes		High	San Luis Rey	Westside of Vandegrift Blvd @ Castellano Way	Project built out
The Parksite	T-3-1998		Centex/Richland	Rick Engineering	Residential									2103			Yes	937S317198	Medium	San Luis Rey	At the corner of Vandegrift and Douglas.	Project built out
Theis Residence			Bo Theis	City Plans	Residential												No	N/A	Medium	Buena Vista	Ridgeway and California	Project built out
Tomko Duplex	ADP-6-01	152-123-3	Mr. & Mrs. Tomko	Joe Wilkins	Residential	0.13	2	1	4,351	11/01/04	Grading	11/01/05	11/02/04	2294	07/01/04	Traffic control plan, Haul route, Const. Cert.	No	N/A	Low	Loma Alta	1213 So. Nevada So. Of O'side Blvd	Building
Tremont Condos	P-202-03	147-081-12	Robert Morris	Toal Engineering	Residential	0.14	2	1	6,380	07/14/06	Grading	07/01/07	07/13/06	2621	07/13/06	Traffic Control Plan Construction Certificate	No	N/A	Low	Coastal Outlet	534 Tremont Street	Building
Ulmer Residence	E-8-06	146-121-47	Janice Ulmer	Spears and Associates	Residential	0.30	1	1	11,000	07/10/06	Grading	04/01/07	7/72006	2721	7/72006	Traffic Control Construction Certificate	No	N/A	Low	San Luis Rey	2548 Pahvant Street	Building
Union Plaza Parking	2328	151-310-33	Cornerstone Property Manage	Bruce Tait	Commercial	0.44	N/A	N/A	N/A	09/27/05	9/27/2005	04/02/06	09/30/05	2328	08/19/05	Traffic Control, Haul Route, Construction Certificate	N/A	N/A		Loma Alta	Northeast corner of State Tree Street and Oceanside Blvd. South	No activity, work has not commemced
Villelli Rus	ADP-4-03	121-280-07	Owner Unknown	Salm Eng.	Residential	3.00	1	1	3,500	02/10/05	Clearing, grading		02/09/05	2547	02/04/05	Haul Certificates	TBD	TBD	Medium	San Luis Rey	1564 Camino Corte	Building
Vintage Point II	D-08-02		USA Properties Fund	May Group	Residential	5.50	186	8	125,226	03/28/03	Grading	03/01/04	03/27/03		03/27/03		Yes	937S319987	Medium	San Luis Rey	Bush & Canyon	Building
Volk Residence (1740 Laurel Rd.)	E-10-01		Volk	Sea Bright Company	Residential		1	1		03/08/02	Grading, building and landscaping	03/15/03	03/08/02		03/08/02		No	N/A	Low	Buena Vista	1740 Laurel Road	Project built out
Wanis View Estates	T-4-00		KB Homes	Buccola Engineering	Residential		300	300		05/29/02	Grading, building, improvements & landscaping	01/15/04	05/29/02	2118, 2252	05/29/02		Yes	937S317929	High	San Luis Rey	Northwest Corner of North River Rd/Crestwood Dr	Project built out
Wetland Mitigation Villages C, D, E, F & Golf Course	T-12-99 (5)		Richland Ventures	Rick Engineering	Residential	17.00				10/29/02	Three temporary detention basins, two wetland habitat areas	N/A	10/18/02	2084	10/18/02		Yes	937S317198	High	San Luis Rey	Vandegrift & Douglas	Project built out
Wilmont Ranch, Unit 4	T-4-91(4)	122-020-54	KB Homes	Buccola Engineering	Residential	75.00	94	94		08/01/04		03/01/05	07/12/04	2145	07/01/04	Haul Route	Yes	9-37S302152	High	San Luis Rey	Papagallo & Vandegrift	Building
Wilmount Ranch	T-4-91		KB Homes	Buccola Engineering	Residential	100.00	104			12/01/00	Grading	12/01/01	11/00/00	2034			Yes	937S302152	Low	San Luis Rey	Eastside of Vandegrift Blvd. Just North of Douglas Dr.	Building
Windward Residences	D-201-03	143-224-07 143-224-08	Zocco Development	Taylor Group, Inc.	Residential	0.23	4	4	10,000	05/24/05	Grading	05/01/06	05/18/05	2568	01/11/05	Traffic Control Plan, Construction Cert.	N/A	N/A	Medium	San Luis Rey	Pacific / Windward	Building
Windward Villas	D-203-02	143-242-01,02,08,09 & 10	Red Point Homes	Buccola Engineering	Residential	0.80	14	14	35,000	09/28/04	Grading	04/01/05	09/27/04	2519	09/24/04	Traffic control plan, Haul route, Const. Cert.	No	N/A	Medium	San Luis Rey	Windward & Tremont	Project built out
Young Residence	P-200-03	143-202-06-00	Betty Lam-Young & Fang Luan Wu	John Coffey	Residential	0.11	2	2	6,762	03/21/05	Over x Grading	10/31/05	03/18/05	2507	01/25/05	Traffic Control Plan	N/A	N/A	Medium	San Luis Rey	802 N. Cleveland Avenue/ Neptune Street	Building
Z-Market	D-08-04	160-271-43-00	RDC Developer	Buccola Engineering	Commercial	0.52	1	1	6000	6/22/2006	Grading, Public Improvements	02/01/07	6/21/2006	2586	6/21/2006	N/A	N/A	N/A	Low	San Luis Rey	Bush & Canyon	Building
Ocean Ranch Corporate Center, Lot 15	P-04-05	160-572-05	Hamann Constr.	Spear & Assoc.	Commercial	10.50	N/A	6.00	150,000.00	5/15/2007	Grading	N/A	4/10/2007	2744	2/5	Traffic Control, Haul Route & Construction Certificate	Yes	937C340879	High	Loma Alta	RDO/Ocean Ranch Blvd.	
Ocean Ranch, Lot 12	D-11-05	160-572-03	K&G/Ocean Ranch, LLC	RBF Consulting	Commercial	N/A	N/A	4	105,000	8/21/2006	Grading	04/07/08	8/10/2006	2699	8/10/2006	Traffic Control Plan & Construction Certificate	Yes	9370340306	High	Loma Alta Creek	RDO/Ocean Ranch Blvd.	
Residence Inn by Marriott	D-16-05	160-572-03	RD Olson Development	RBF	Commercial	3	N/A	1	24,300	9/5/2006	Grading	09/01/07	8/29/2006	2732	8/29/2006	N/A	Yes	937C341958	Medium	Loma Alta Creek	RDO/Ocean Ranch Blvd.	
Plaza 76 Medical Office Bldg	T-4-05	158-101-42	Sa Breeze LLC	Mark E. Stevens	Commercial	2.91	1	1	34,171	5/4/2007	?	Jan. 2008	4/27/2007	2756	4/27/2007	Traffic Control Plan & Haul Roue	Yes	937C315761	Medium	?	4300 Mission Ave.	
Pacific Coast Business Park	D-17-04(1)	161-511-16	Headlands Realty Corporation	BHA, Inc.	Commercial	116	N/A	N/A	N/A	7/12/2006	Grading	N/A	6/27/2006	2597	6/27/2006	Traffic Control Plan, Haul Route & Construction Certificate	Yes	937C341845	High	Loma Alta Creek	College Blvd & Old Grove Road	
Schuller Residence	E-16-05	150-410-07-00	One Time Construction	Erin Rist	Residential	0.15	1	1	N/A	7/35/06	Grading	05/01/07	7/19/2006	2648	6/29/2006	Traffic Control Plan, Haul Route & Construction Certificate	N/A	N/A	Low	Loma Alta	1016 Alberta Ave.	
MJK Oceanside Project	ADP-14-04	148-143-17	Arnett Construction	Andrew Kann	Commercial	0.179	N/A	1	1,815	7/6/2006	Clean & Grub, Over Ex & Recompact Bldg. Pad	11/20/06	7/5/2006	2715	6/15/2006	Traffic Controll Plan & Construction Certificate	N/A	N/A	Low	Coastal Outlet	1444 Mission Ave. & San Diego Street	
Moss Residence	D-16-04	153-092-06	Steve Moss	RCE - Charles Reynolds	Residential	0.11	2	1	5200	7/10/2006	Grading	07/01/07	7/7/2006	2594	6/27/2006	Traffic Control Plan & Construction Certificate	N/A	N/A	Low	Coastal Outlet	1632 S. Pacific Street	
Tremont Condos	P-202-03	147-081-12	Robert Morris	Toal Engineering	Residential	1/10	2	1	6380	7/14/2006	Precise Grading	07/01/07	7/13/2006	2621	5/4/2006	Traffic Control Plan & Construction Certificate	N/A	N/A	Low	Coastal Outlet	SE Corner of N. Tremont & Surfrider	
Ocean Market Place & Business Center	D-19-04	162-244-20 & 21	Abdul H. Sheikh	Ali Rezai	Commercial	3.8	3	3	35,000	12/26/2006	Illegible	Dec. 2007	12/18/2006	2640	9/27/2006	Traffic Control Plan & Haul Roue	Yes	??	High	Loma Alta	SE Corner of Oceanside Blvd. & Arroyo	
Libby Lake Village	T-5-06	157-060-50, 51 & 52	S.D. Habitat for Humanity	Buccola Engineering	Residential	2	20	20	??	June 2008	Grading/Retaining Wall	June 2008	1/7/2008	2801	12/21/2007	Haul Route	Yes	937C348915	Medium	San Luis Rey	Libby Village Way (N. River Road) & Calle Monecito	

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Table 7-1 Public Works Engineering Inspection Projects

PROJECT NAME	FILE NUMBER	APN	DEVELOPER	ENGINEER OF WORK	PROJECT TYPE	SITE ACREAGE	NO. OF UNITS	NO. OF BLDGS	TOTAL SQ. FT.	CONST. START DATE	INITIAL CONSTRUCTION ACTIVITIES	1ST OCCUPANCY OR DATE OF COMPLETION	DATE GRADING PERMIT ISSUED	CITY PLAN NUMBER	DATE EROSION CONTROL APP'D	ADDITIONAL REQUIRED PERMITS	SWPPP	WDID	THREAT PRIORITY	WATERSHED	LOCATION	PROJECT STATUS
North River Village	T-3-04	157-040-42	Taylor Woodrwow Homes, Inc	Phil Buccola	Residential /Commercial	9.9	105	32	49,180	11/12/07	Grading	8/31/2009	10/26/2007	2799	10/26/2007	Traffic Control Plan, Haul Route & Construction Certificate	Yes	937C348354	High	San Luis Rey	North River Road at Vandergrift	
Hi Hope Ranch	T-2-03	157-100-72 & 122-100-54	Hillcrest Homes	Phil Buccola	Resideneti al	76	93	N/A	N/A	4/30/2007	Set Bio-fence, Clear & Grub, Over-ex	11/1/2007	4/25/2007	2556	4/24/2007	Traffic Control Plan	Yes	9o-37C322214	High	San Luis Rey River	Melrose Drive & Hwy 76	
Crystal Sands	T-101-06	147-071-11	502 N. Myers, LLC	Phil Buccola	Residential	0.31	9	1	13,566	01/03/08	Garding/Export	Jan. 2009	1/3/2008	2778	6/13/2007	Traffic Control Plan, Haul Route & Construction Certificate	No	N/A	Medium	O'side Master Drainage Plan Facilities Designation "EA", Calwater Watershed 9031100	512 N. Myers Street	
210 S. Nevads St.	P-13-06	150-062-03	Brian Moore	Alied	Residential	0.11	2	2	4,600	11/19/2007	Grading	Sept. 2008	11/18/2007	27776	9/14/2007	Traffic Control Plan, Haul Route & Construction Certificate	No	N/A	Low	Loma Alta	210 S. Nevada St.	
1925 S. Myers St.	RC-3-06	153-251-36	Mary Spite	Massood Gaskoiri	Residential	0.07	1	1	6,000 SF	09/12/07	Over X, Re-compact	June. 2008	09/12/07	2772	08/23/07	Traffic Control Plan & Construction Certificate	No	N/A	Low	Coastal Outlet	1925 S. Myers	
1003 So. Tremont	P-12-06	152-012-15-00	All American Homes & Estates, LLC	Taylor Group, Inc.	Residential	0.20	4	4	10,000	07/24/07	Demolition/Grading	03/25/08	07/25/07	2777	07/13/07	Traffic Control Plan, Haul Route & Construction Certificate	No	N/A	Medium	Coastal Outlet	1003 S. Tremont	
Oceansisde Upscale Hotel	RC-206-04	143-060-38	CJK International Investments, LLC	Spear & Associates	Commercia l	1.24	101	1	68,000 w/o Under Parking Garage	07/08/07	Grading/Export	07/08/07	07/09/07	2771	07/27/07	Traffic Control Plan, Haul Route, Construction Certificate	Yes	937C347352	Medium	San Lus Rey/Coastal Outlet	1401 Carmelo	
Chevron Service Station	RC-207-04	143-090-1700	Chevron	KRH Associates	Commercia l	0.42	1	1	1,999	03/14/07	Demo/Grading	July. 2007	03/05/07	2759	03/02/07	Traffic Control Plan, Haul Route & Construction Certificate	No	N/A	Low	Coastal Outlet	N. Coat Hwy/Harbor Dr.	
400 S. The Strand	T-200-06	150-072-18, 29, 20	Residencia, LLC	Taylor Group	Commercia l	0.30	8	1	26,792	02/08/07	Shoring/Demo	May. 2008	02/07/07	2752	02/06/07	Traffic Control Plan, Haul Route & Construction Certificate	No	N/A	Medium	Coastal Outlet	400 South The Strand	
La Mision Village	D-9-05	160-270-39 thru 42	So Cal Housing	DC:	Residential	3.03	80	5	??	Already Begun	Grading Shoring/Impvs	05/01/08	12/04/06	2738	11/29/06	Traffic Control Plan, Haul Route & Construction Certificate	Yes	937C342832	Medium	San Luis Rey	3232 Mission Ave.	
1621 S. Pacific St., Residence One	RC-15-2006	153-091-49	1621 So. Pacific, LLC	Taylor Group, Inc.	Residential	0.16	1	1	5,103	11/30/06	Demolition, Shoring, Grading	12/01/07	11/22/06	276	11/14/06	Traffic Control Plan, Haul Route & Construction Certificate	No	N/A	Medium	Coastal Outlet	1621. S. Pacific St.	
Airport Auto Center	ADP-5-04	146-505-80-00 through 146 050-83-00	Capella	Anthony Taylor	Comm'l	2.10	?	2	2,600±	11/01/06	Demo	July. 2007	10/13/06	2633	09/27/06	Traffic Control Plan & Construction Certificate	Yes	WDID937C3 30757	Low	San Luis Rey	311 & 315 Airport Road	
Hyta Residence	E-4-05	149-360-19-00	Phil & Ashei Hyta	CTE	Residential	0.25	2	2	15,428	10/12/06	Grading/Drilling	April. 2006	10/09/06	2675	10/09/06	Trraffic Control Plan & Construction Certificates	No	N/A	Low	Loma Alta Watershed	267 Hoover St.	
Lot 8 of 800 Block S. Pacific Street-815 S. Pacific St.	RC-15-05	150-356-14	Rev x Pacific North, LLC	Taylor Group, Inc.	Residential	0.08	1	1	4,501	09/19/06	Removal of Demolition Spoils	March. 2007	09/12/06	2740	09/07/06	Traffic Control Plan & Construction Certificate	No	N/A	Medium	Loma Alta Hydrologic	811 S. Pacific St.	
Claire Village	D-204-04	143-205-01, 02, 03	Premier Proerties, Geroge Piner	Buccola Engineering	Residential	0.23	4	4	10,018	09/05/06	Demo/Grading	May. 2007	09/01/06	2623	8/22/2006	Traffic Control Plan, Haul Route & Construction Certificate	No	N/A	Low	Coastal Outlet	Freeman/Neptune	
1217 Nevada St.	D-10-03	152-123-04	Joe Cefalia	Robin Hamers & Assoc.	Residential	0.98	2	1	5,500	08/28/06	Grading	Sept. 2007	08/14/06	2634	07/19/06	Traffic Control Plan, Haul Route & Construction Certificate	No	N/A	Low	Loma Alta	Oceanside Blvd.	
Brezza di Pacifica	P-14-05	153-012-48-00	1443 So. Pacific, LLC	Taylor Group, Inc.	Residential	0.09	2	1	5,775	08/18/06	Demolition, Shoring, Grading	09/01/07	08/16/06	2733	08/03/06	Traffic Contol & Construction Certificates	No	N/A	Medium	Coastal Outlet	1443 S. Pacific St.	

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Table 8-3. City of Oceanside 2006-2007 MS4 Spill Summary

Tracking No.	Date & Time Reported	Start Date & Time	End Date & Time	Total Overflow Volume (Gallons)	Overflow Volume Recovered (Gallons)	Overflow Volume Released to Environment (Gallons)	SSO Location -- Street Address	SSO Structure I.D.	SSO Cause (Short Description)	SSO Cause (Detailed Description)	SSO Correction and Prevention	Entered Storm Drain? (Y or N)	Reached surface waters other than storm drain? (Y or N)	Initial Receiving Waters	Secondary Receiving Waters	Final Sewage Destination
067001	07/25/06 1208	07/25/06 0906	07/25/06 1000	1350	1,350	0	4347 Avenida Soledad	Manhole	Grease	HEAVY GREASE BLOCKING THE CITY MAIN	NEED TO TELEVISE THE CITY LINE UNDER THE 76 FREEWAY (POSSIBLE SAG) AND PLACE THE 325FT RUN ON A SEMI-ANNUAL VACTOR CLEANING PROGRAM.	Y	N	NONE	NONE	FULL RECOVERY
067002	09/14/06 1350	UNKNOWN	09/14/06 1040	700	0	700	1400 BLK DOWNS ST	PRIVATE CLEAN OUT	OTHER	SDGE POWER POLE WAS DRIVEN STRAIGHT THROUGH CUSTOMERS LATERAL AT 2165 GRANDVIEW	TOOK SAMPLES AND DYED CUSTOMERS LATERAL TO VERIFY SDGE RESPONSIBILITY BEFORE DIGGING AROUND POWER POLE. VACTOR RECOVERING ON SITE UNTIL REPAIR IS MADE.	N	Y	OPEN FLOOD CHANNEL	LOMA ALTA CREEK	
067003	10/09/06 1421	10/07/06 2150	10/07/06 2220	80	0	80	1325 N HARBOR DRIVE	PRIVATE CLEAN OUT AND GREASE TRAP STRUCTURE	GREASE	Grease trap overflowed and caused a blockage in the private lateral of the restaurant.	Private lateral was cleared by Flow Master Plumbing using a snake at 10:20 pm on October 7, 2006. The line was jetted out at 9:00 am on October 8, 2006 by Flow Master Plumbing to clear the line. Restaurant said they have established a contract for Minute Man Plumbing to jet out the lateral every other month and for Darling Delaware to service the grease trap every week on Thursdays. On October 10, 2006 Darling Delaware cleaned the grease trap and cleaned the storm drain filter installed in the parking lot down gradient from the grease trap structure. On October 10, 2006, our Stormwater Code Enforcement Officer issued a $100 citation to the restaurant for discharge into the harbor and required the restaurant to prevent any further spills, clean the storm drains and parking lot (full recovery), and replace the filter system in the storm drain. The City will inspect the restaurant as part of our grease trap program. Corrective actions will be issued as required.	Y	Y	STORM DRAIN	OCEANSIDE HARBOR	
067004	12/11/06 0725	12/10/06 0920	12/10/06 1030	700	0	700	562 HOOVER ST	MANHOLE	OTHER	CONTRACTOR WORKING ON CITY LINE LEFT SANDBAGS IN CHANNEL OVER THE WEEKEND CAUSING CITY LINE TO BACK-UP AND SPILL.	WHILE IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE DOWNSTREAM PROTECTIVE DEVICES LIKE SANDBAGS, THE CITY INSPECTORS HAVE BEEN TOLD TO MAKE SURE THE CONTRACTOR REMOVES THESE IN THE FUTURE.	Y	Y	LOMA ALTA CREEK	PACIFIC OCEAN	
067005	12/18/06 14:05	12/18/06 11:15	12/18/07 11:30	70	70	0	3528 College Blvd	Manhole	roots	A LARGE ROOT MASS LET LOOSE AND WEDGED ITSELF IN A MANHOLE CHANNEL WITH A 60 DEGREE TURN WHICH BEGAN TO COLLECT RAGS AND DEBRIS BEHIND IT CAUSING A PARTIAL STOPPAGE.	WE ARE TVING A NEARBY LATERAL THAT MAYBE ABANDONED, WHICH WE BELIEVE IS WHERE THE ROOTS ARE AFFECTING THE CITY LINE. IF SO, WE ARE PLANNING TO DYNAMITE OFF THE LATERAL IN QUESTION.	Y	N	NONE	NONE	THERE IS NO STORM DRAIN BOX. THE STORM DRAIN EMPTYS DIRECTLY UNDER A BRIDGE THAT CROSSES COLLEGE BLVD WHICH IS BUENA VISTA CREEK. THERE ARE THREE LARGE CHANNELS THAT FORM THE BRIDGE. TWO OF WHICH BUENA VISTA CREEK IS FLOWING THROUGH. THE THIRD IS WHERE THE STORM DRAIN OPENS AND HAS A HEAVY AMOUNT OF SAND THAT HAD DAMMED THE 70 GALLON SPILL THAT WAS ABLE TO BE RECOVED BY THE VACTOR.
067006	12/31/06 15:20	12/31/06 12:20	12/31/06 16:18	369000	137,050	231,950	Oceanside Blvd & Greenbrier	SLR WWTP treated effluent land outfall	line break	Failure of 24" San Luis Rey WWTP treated effluent land outfall from what appears to be corrosion. Two 2" holes were found on the bottom side of the pipe.	Sections of the 24" ductile iron land outfall will be potholed to determine if additional sections have corrosion. Excavation will be necessary to inspect sections.	Y	Y	LOMA ALTA CREEK	PACIFIC OCEAN	

Table 8-3. City of Oceanside 2006-2007 MS4 Spill Summary

Tracking No.	Date & Time Reported	Start Date & Time	End Date & Time	Total Overflow Volume (Gallons)	Overflow Volume Recovered (Gallons)	Overflow Volume Released to Environment (Gallons)	SSO Location -- Street Address	SSO Structure I.D.	SSO Cause (Short Description)	SSO Cause (Detailed Description)	SSO Correction and Prevention	Entered Storm Drain? (Y or N)	Reached surface waters other than storm drain? (Y or N)	Initial Receiving Waters	Secondary Receiving Waters	Final Sewage Destination
067007	1/8/07 14:55	1/7/07 22:00	1/7/07 23:20	28000	28,000	0	El Camino Real & Industry St	Trench (broken pipe)	CONSTRUCTION	CONTRACTOR WORKING TO INSTALL NEW SEWER FORCE MAIN, RUPTURED ACTIVE SEWER FORCE MAIN.	CITY CREWS RESPONDED IMMEDIATELY. FORCE MAIN WAS SHUT DOWN AND FLOW WAS BYPASSED TO CARLSBAD UNTIL REPAIRS COULD BE MADE.	Y	N	NONE	NONE	FLOOD CHANNEL/BERMED CONTAINMENT AREA NEAR RAILROAD TRACKS
067008	3/4/07 7:49	3/3/07 20:40	3/3/07 21:20	600	400	200	288 AVENIDA DESCANSO	Manhole	Grease	HEAVY GREASE BACKED-UP THE CITY MAIN ON AN EASEMENT LINE.	DROPPED 200 LBS OF CHLORINE TABLETS IN AREA TO HELP WITH HEAVY GREASE.	Y	N	NONE	NONE	CONCRETE FLOOD CHANNEL (COULD NOT REACH THE REST DUE TO CARS BLOCKING GATES FOR EASEMENT)
067009	3/31/07 17:35	3/31/07 10:05	3/31/07 10:30	290	175	125	4907 GLENHAVEN DR	Manhole	roots	ROOTS INFILTRATING THE EASEMENT MANHOLE IN OCCUPANTS BACKYARD CAUSED THE CITY LINE TO BACK-UP.	LINE WILL BE TELEVISED AND PLACED ON A QUARTERLY MAINTENANCE PROGRAM. LOOKING TO REMOVE LARGE TREE NEXT TO MANHOLE.	Y	N	NONE	NONE	STORM DRAINS – RECOVERED AS MUCH AS POSSIBLE. ALL STORM DRAIN BOXES WERE DRY DOWNSTREAM.
067010	4/15/07 14:15	4/15/07 10:30	4/15/07 11:02	480	480	0	1939 IVY ST	Manhole	Other	SEWAGE DISCHARGE HOSE FROM RV UNIT STUCK IN CITY SEWER MANHOLE CHANNEL CAUSED BACK-UP.	AREA HAD JUST BEEN CLEANED RECENTLY. NO EVIDENCE OF WHERE HOSE CAME FROM. ALL AREA MANHOLES SECURED.	y	n	NONE	NONE	SPILL WAS FULLY RECOVERED FROM STORM DRAIN SYSTEM AND WHERE STORM DRAIN DAYLIGHTED BEFORE SURFACE WATERS.
067011	4/22/07 11:53	4/22/07 9:08	4/22/07 0948	800	800	0	1939 IVY RD.	Manhole	OTHER	SEWAGE DISCHARGE HOSE FROM RV VEHICLE WAS IN THE LINE WITH ROOTS AND RAGS GATHERED AROUND THE HOSE CAUSING THE BLOCKAGE.	LINE WAS INSPECTED THOROUGHLY TO VERIFY ALL OF FOREIGN DEBRIS WAS FREE AND CLEAR. SENT CREW OUT TO INSPECT ALL BRANCH LINES UPSTREAM OF SPILL TO TRY TO FIND IF THERE WAS ANY EVIDENCE OF ILLEGAL DUMPING FROM HOME OWNERS (HOMES WITH RV'S).	y	n	NONE	NONE	SPILL WAS FULLY RECOVERED FROM STORM DRAIN SYSTEM AND WHERE STORM DRAIN DAYLIGHTED BEFORE SURFACE WATERS.
067012	6/7/07 3:50	6/6/07 22:10	6/6/07 22:50	33500	32,900	600	EL CAMINO REAL & INDUSTRY ST	Broken pipe	line break	CONTRACTOR WORKING TO INSTALL NEW SEWER FORCE MAIN, HIT ACTIVE 14" SEWER FORCE MAIN.	CITY CREWS RESPONDED IMMEDIATELY. FORCE MAIN WAS SHUT DOWN AND FLOW WAS BYPASSED TO CARLSBAD UNTIL REPAIRS COULD BE MADE.	N	Y	LOMA ALTA CREEK	NONE	LOMA ALTA CREEK IS DAMMED OFF AT THE BEACH. FLOW IS THEN PUMPED INTO THE CITY OUTFALL LINE OUT INTO THE OCEAN.
067013	6/21/07 1:42	6/20/07 21:05	6/20/07 21:25	17000	16,000	1,000	El Camino Real & Industry	14" PIPE	CONSTRUCTION	Contractor working for the city to install a new sewer force main, Hit the old active 14" line as he was pot holing to find its location.	Station was shut down immediately by city staff and flows ware bypassed to the city of Carlsbad until repairs could be made.	Y	Y	LOMA ALTA CREEK	NONE	The Loma Alta Creek is dammed off at the beach. Flow is then pumped into the city's outfall line into the ocean.
067014	6/23/07 0:00	6/22/07 20:50	6/22/07 21:50	2100	1,500	600	2800 BLK COLLEGE BLVD	Manhole	Grease	GREASE AND RAGS BACKED UP THE CITY MAIN CAUSING SPILL	CONTRACTOR JUST COMPLETED STREET AND DIVIDER IMPROVEMENTS ALL ALONG COLLEGE BLVD. COLLECTIONS CREW IS SCHEDULED TO CLEAN ALL OF CITY SEWER ON COLLEGE IN JULY (NIGHT TIME WORK DUE TO HEAVY TRAFFIC).	Y	N	NONE	NONE	STORM DRAIN SYSTEM RUNS WEST A GOOD 5,000 FT TO A GOLF COURSE. RECOVERED SPILL FROM ALL STORM DRAIN BOXES UNTIL BOXES WERE DRY.

City of Oceanside

2007

Dry Weather Monitoring Report

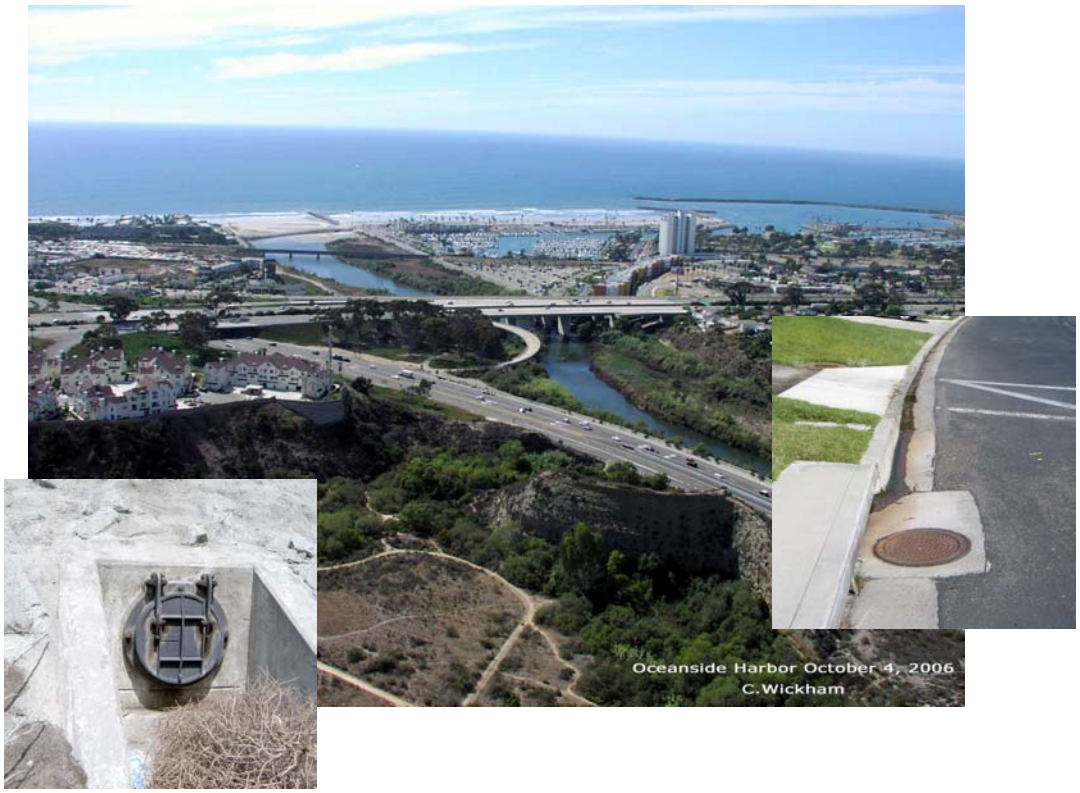

Prepared by:
City of Oceanside
Clean Water Program

January 31, 2008

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1 INTRODUCTION

1.1 Program Summary

In February 2001, the San Diego Regional Water Quality Control Board issued Order No. 2001-01 to the communities of San Diego County. As part of Order 2001-01, the City of Oceanside was required to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program. The purpose of the program was to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. Information collected from dry weather monitoring is used to characterize dry weather discharges in the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as necessary to detect and eliminate the sources of these pollutants. This report presents the results of the City of Oceanside's 2007 Dry Weather Field Screening and Analytical Monitoring Program.

In 2007 the San Diego Regional Water Quality Control Board issued a new five-year permit for Receiving Waters and Urban Runoff Monitoring and Reporting, Order No. 2007-0001. The Copermittees in San Diego County are required, as part of their Jurisdictional Urban Runoff Management Program (JURMP), to update their Dry Weather Program to meet or exceed the requirements of Order No. 2007-0001. The City of Oceanside's Dry Weather Program was reviewed and updated and the details of the new program are including in the City of Oceanside JURMP Update. The new program will be implemented during the 2008 dry weather season.

1.2 City of Oceanside Drainage Summary

The City of Oceanside lies on the northern coast of San Diego County, 35 miles north of the City of San Diego and 83 miles south of the City of Los Angeles. The City is bounded to the west by the Pacific Ocean, the north by Camp Pendleton Marine Corps Base, the east by unincorporated areas of the County of San Diego and the City of Vista, and the south by the City of Carlsbad. The City covers approximately 42 square miles with a population of just over 173,000 people. California's main highway, Interstate 5, runs through the City, as does Highway 78, which provides southeast access to Interstate 15. Highway 76, which runs northeast, also provides access to Interstate 15.

The City's boundaries include two major watersheds; the San Luis Rey Watershed, which includes the San Luis Rey River and the Carlsbad Hydrologic Unit, which includes Loma Alta Creek, Buena Vista Creek, and Agua Hedionda Creek.

1.2.1 San Luis Rey Watershed

1.2.1.1 San Luis Rey River

The San Luis Rey Watershed is the northernmost watershed within the City of Oceanside. It is approximately 558 square miles and extends inland to encompass a large portion of the northern unincorporated areas of the County of San Diego. The San Luis Rey River

is the primary watercourse of the watershed and discharges to the Pacific Ocean near the northern border of the City of Oceanside. While the San Luis Rey Watershed is the largest hydrologic unit in the San Diego region, 92.5% of the watershed lies within the unincorporated part of the County, and not within the City of Oceanside. However, a wide floodplain is prominent through the City, including levees on either side of the river, to protect the surrounding developments, adjacent to or within the historical floodplain, from future storm events. In 2007, the Pacific Street Bridge Project broke ground to restore the river mouth to its natural open state. The current "Arizona crossing," a land berm and large culvert intended to wash out during large storm events, will be removed after completion of the new bridge which is being constructed just west of Highway 101 and the railroad tracks.

The one named tributary within the City's boundaries is Pilgrim Creek, which drains a relatively undeveloped portion of the City with some residential areas and a municipal golf course in addition to an undeveloped area of Camp Pendleton. The remaining drainage areas within the City include areas of agricultural, residential, and some industrial land uses.

1.2.2 Carlsbad Watershed

1.2.2.1 Loma Alta Creek

Loma Alta Creek is the northernmost watershed in the Carlsbad Hydrologic Unit. It flows alongside Oceanside Boulevard, beginning as a rising spring just west of Melrose Drive in the City of Vista and ending at Buccaneer Beach Park where it enters the Pacific Ocean. Approximately 5 percent of the Loma Alta Creek Watershed is in the City of Vista, and the remaining portion is entirely in the City of Oceanside. Loma Alta Creek is over seven miles long and encompasses nearly 6,300 acres of land, 70 percent of which is developed. Almost 90% of the land within the watershed is privately owned.

Several tributaries drain into Loma Alta Creek, however, the only named tributary is Garrison Creek, located along Garrison Street west of El Camino Real. Much of the creek has been modified throughout the years, with the use of fully or partially concrete-lined channels to stabilize the creek-bed slopes. Loma Alta winds through a highly industrial area towards the western portion of the creek. Other land uses include residential and commercial.

1.2.2.2 Buena Vista Creek

The Buena Vista Watershed extends approximately 10.6 miles inland from the coast, totaling 14,437 acres and draining 21 square miles. The Watershed begins on the western slopes of the San Marcos Mountains, flows through areas of the County of San Diego and the Cities of Vista, Carlsbad, and Oceanside, turns into a lagoon and then ends at the Pacific Ocean. A weir was built in 1940 to stop tidal flow at the mouth and the lagoon now functions as a freshwater lake.

In the City of Oceanside, Buena Vista Creek parallels Highway 78. The Lagoon is located south of Highway 78 and west of Jefferson Street. The upper and western basins of the Buena Vista Watershed are primarily in the City of Vista, the southeastern portions

are primarily in the San Diego County jurisdiction, and the lower basin is straddled between the Cities of Carlsbad and Oceanside as the Creek weaves its way between the two cities. Approximately 80% of the Buena Vista Watershed is developed, primarily with commercial and residential land uses. Because of the intense development in the watershed, large sections of Buena Vista Creek have been concrete-channelized to reduce the chance of flooding private property. Some agricultural activities also exist in the watershed.

1.2.2.3 Agua Hedionda Creek

A small portion of the City of Oceanside lies within the watershed of a tributary of Agua Hedionda Creek, called Calavera Creek. Beginning in an undeveloped portion of land just west of Highway 78, Calavera Creek's headwaters start in Vista, proceed through a pocket of San Diego County unincorporated area, head into Oceanside, and then eventually drain to Lake Calavera. Lake Calavera was created with the building of a dam in the 1940s. While the creekbed downstream of the lake is typically dry, the creek reforms in wet weather to wind its way through Carlsbad and joins the major artery of Agua Hedionda Creek. A project to restore dam pumps and controls will begin in 2007/2008, according to the City of Carlsbad. Near the Pacific Ocean, Agua Hedionda Creek opens up into a lagoon. The entire Calavera Creek Basin is approximately 3,770 acres. The primary land use in the portion of the Agua Hedionda Watershed that lies within the City of Oceanside's boundaries is residential.

2 SAMPLING LOCATIONS

2.1 Site Selection

Storm drain outfalls throughout the City of Oceanside were identified on a map of the City's municipal separate storm sewer system (MS4). The City selected 100 monitoring sites from the approximately two hundred potential sites that it had previously inventoried. The sites were selected based on numerous factors, including the following:

Accessibility (physical access and safety)
Results of previous monitoring
Results of recent visual observations
Presence of permanent flow
Size of drainage area and land uses within that area
Quality of receiving waters or other downstream issues (i.e. degraded habitat, scour, etc.)
Contribution to WURMP monitoring efforts

Due to Sprinter Railway Construction in the Loma Alta Watershed, Pacific Street Bridge construction in the San Luis Rey Watershed, and a few other accessibility and safety concerns, 93 monitoring sites were visited during the 2007 Dry Weather Program in the City's watersheds: San Luis Rey (31 of 33 sites), Loma Alta (36 of 41 sites), Buena Vista (17 sites), and Agua Hedionda (9 sites).

2.2 Site Descriptions

Site visits were conducted at 93 locations within the City in 2007. In addition to construction activity and safety issues at some of the sites, others were found to have some misinformation and variation from previous years. This section will include a description of the historical monitoring site and explain any variation in the past five years. The sampling history of sites with storm drain variation over the past five years is included in Appendix A.

The site identification numbers are not arranged by location (for example, from east to west) because over the course of the Dry Weather Program, sites have been eliminated and added to best represent the City's MS4. The site identification numbers do either start with an S, B, L or A which corresponds with the San Luis Rey River (S), Buena Vista Creek (B), Loma Alta Creek (L) or Agua Hedionda Creek (A). For example, Site S112 would have been sampled from San Luis Rey River at location 112. The site locations are shown in Figure 1 and described below. The site identification numbers, descriptions, GPS coordinates, and conveyance structure types are listed in Table 1. Photos of each site visited are included as Appendix B.

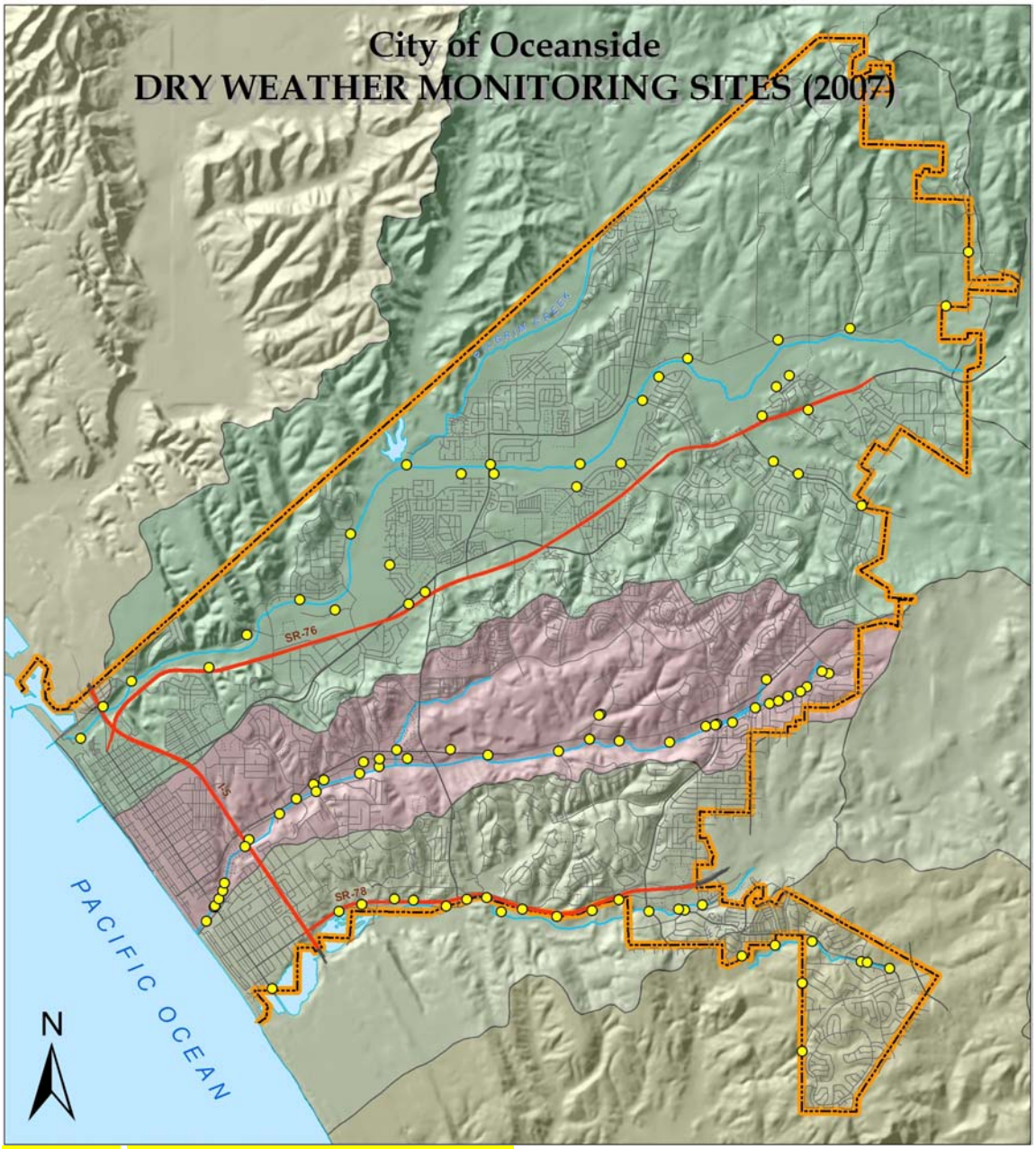

UPDATE with larger map with site labels

Figure 1. Overview of 2007 Dry Weather Monitoring Sites.

Table 1. 2007 Dry Weather Monitoring Site Locations.

Station ID	Location	Latitude	Longitude	Primary Land Use	Secondary Land Use	Conveyance Type
San Luis Rey						
S006	36" CMP under I-5N, off Carmelo	33.20747	-117.38482	Residential	Open	Outlet
S013	North side of SR76 @ North Canyon Road	33.21295	-117.36767	Industrial	None	Outlet
S018*	Southside of SLR River at the "lower pond" area					
S025	North side of SLR River on W. Airport Road	33.21746	-117.36155	Industrial	None	Outlet
S032	36" RCP on south side of SLR-near Foussat Rd	33.22088	-117.27835	Residential	Commercial	Outlet
S035	42" RCP on south side of SLR River	33.23981	-117.32706	Residential	None	Outlet
S041	Southside of SLR near Douglas Rd	33.23988	-117.32173	Residential	Parks	Outlet
S043	Southside of SLR River under the College Ave Bridge	33.25012	-117.29770	Residential	None	Outlet
S044	2 - 8'x8' Concrete Boxes @ Frazee/Oleander	33.24142	-117.30112	Residential	Commercial	Concrete Channel
S045	Southside of SLR River near Frazee Rd	33.23822	-117.30830	Residential	None	Outlet
S047	24" RCP off of Mission Ave behind KFC	33.22358	-117.33272	Commercial	None	Outlet
S048	Open channel adj to SR78 near Mission Ave	33.22192	-117.33538	Commercial	None	Outlet
S052	42" RCP north side of river @ NRR & Leon	33.25591	-117.29048	Parks	Residential	Outlet
S065	Pilgrim Creek and San Luis Rey River	33.24099	-117.33596	Residential	Parks	Natural Creek
S072	60" RCP north side SLR, off River Tree at the park	33.23142	-117.34488	Residential	Parks	Outlet
S075	24" RCP north side SLR, off Benet	33.22234	-117.35305	Residential	None	Outlet
S077	Hitching Post south of SR76	33.24904	-117.27079	Residential	Commercial	Concrete Channel
S078	NW of int. of Melrose and North Santa Fe Ave	33.23599	-117.26199	Residential	None	Outlet
S085	SE of Guajome Lake Park on N side of N. Santa Fe	33.24026	-117.27226	Residential	None	Outlet
S088	36" RCP @ Mesa & North Santa Fe	33.24196	-117.27633	Residential	None	Outlet
S102	NE of int. of N. Santa Fe and Hwy 76	33.24813	-117.27823	Residential	None	Outlet
S103	South of SLR River off of Gooseberry Way	33.25218	-117.27600	Residential	None	Outlet
S104	24" RCP at NE end of Gooseberry Drive	33.25371	-117.27390	Residential	None	Outlet
S105	North side of SLR River off of N. River Road	33.25856	-117.27576	Agricultural	None	Outlet
S106	Three - 36" pipes @ NRR & Sleeping Ind.	33.26023	-117.26414	Agricultural	Residential	Outlet
S107	Under North River Road north of SLR River	33.26346	-117.24859	Agricultural	None	Earthen Channel
S108	Via Puerta Del Sol @ Big View Road	33.27085	-117.24501	Agricultural	Residential	Earthen Channel
S109	18" RCP NE of College and SLR River on S side	33.25338	-117.29511	Residential	None	Outlet

Station ID	Location	Latitude	Longitude	Primary Land Use	Secondary Land Use	Conveyance Type
S110	North side of SLR River near Douglas Dr	33.24116	-117.32228	Residential	None	Outlet
S111	Concrete channel @ Fireside Park E of Fireside	33.22722	-117.33851	Residential	Commercial	Concrete Channel
S112*	24" RCP between Pacific St and Metrolink tracks	33.20307	-117.38835	Residential	None	Outlet
S113	Off of Capistrano Drive	33.21095	-117.38024	Residential	None	Outlet
S114	North side of SLR River near College Blvd	33.24133	-117.30778	Commercial	None	Outlet
Loma Alta						
L001	48" RCP North Avenue & Vista Pacific	33.21298	-117.26702	Industrial	None	Outlet
L002	66" RCP North Avenue & Vista Pacific	33.21325	-117.26810	Industrial	None	Catch Basin
L003	South of Loma Alta off of North Ave, east of Autumn	33.21112	-117.27053	Residential	None	Outlet
L004	3 - 24" RCP on North Avenue east of Autumn	33.21051	-117.27157	Residential	None	Outlet
L005	2 - 24" and 1 - 36" RCP North Avenue & Autumn	33.20983	-117.27358	Residential	None	Outlet
L006	Int of North Ave & Season Rd-south of LA Creek	33.20882	-117.27664	Residential	None	Outlet
L007	48" RCP off of North Avenue, west of Seasons	33.20817	-117.27888	Residential	None	Outlet
L008	40" RCP - corner of Westridge & Quailridge	33.21210	-117.27714	Residential	None	Outlet
L009	8'x3' concrete box under College Boulevard	33.20590	-117.28512	Commercial	Residential	Concrete Channel
L010	Two 36" RCPs north of tracks west of College	33.20580	-117.28535	Residential	None	Outlet
L013	42" RCP via manhole behind ReMax in shopping center	33.20559	-117.28692	Commercial	Residential	Manhole
L014*	South of Golden Gate Fence at 4051 Oceanside Blvd	33.20337	-117.29275			
L016*	36" RCP inside M/H on Rancho Del Oro	33.20200	-117.31077	Residential	None	Manhole
L019	48" RCP south of Corporate Centre Drive	33.20367	-117.30575	Industrial	None	Outlet
L020	South of Oceanside Blvd, East of Corporate Centre Drive	33.20350	-117.30091	Industrial	None	Outlet
L024	South of Oceanside Blvd at west end of nursery	33.20137	-117.32225	Commercial	Open Space	Outlet
L025	North of Oceanside Blvd, east of El Corozon entrance	33.20207	-117.32832	Open Space	None	Outlet
L027	NE corner of Oceanside Blvd and Garrison	33.20192	-117.33708	Residential	Park	Natural Creek
L029	42" RCP inside M/H at 3060 Industry Way	33.20078	-117.33532	Industrial	None	Manhole
L030*	North of Loma Alta West of Sprinter station at El Camino Real			Industrial	Commercial	Outlet

Station ID	Location	Latitude	Longitude	Primary Land Use	Secondary Land Use	Conveyance Type
L031	North of Loma Alta, east of Camelot off of Industry Way	33.20024	-117.34242	Industrial	None	Concrete Channel
L032*	Intersection of Camelot and Industry Way	33.19865	-117.34302	Industrial	Residential	Outlet
L033	Industry Way @ Industry Way; E of Waste Mgt	33.19770	-117.34882	Residential	Industrial	Outlet
L034	South of Oceanside Blvd b/w Waste Mgt and Self-Storage	33.19709	-117.35051	Residential	Industrial	Outlet
L036	Manhole adjacent to int of Skylark Dr and Downs St	33.19613	-117.35007	Residential	None	Manhole
L037	South side of Loma Alta Cr; East of end of South Oceanside Blvd	33.19300	-117.35595	Commercial	Residential	Earthen Channel
L039*	Under I-5 overpass at Loma Alta Cr	33.18908	-117.36054	Residential	None	Catch Basin
L040	Concrete channel in back of Vons	33.18947	-117.36091	Commercial	Residential	Concrete Channel
L043	Abutment of Coast Hwy bridge over Loma Alta Creek	33.18016	-117.36642	Commercial	None	Outlet
L045	Coast Highway east of Metrolink	33.17823	-117.36765	Residential	None	Outlet
L046	Abutment of Coast Hwy bridge over Loma Alta Creek, north side	33.18037	-117.36630	Commercial	None	Outlet
L050	Casitas Trailer Park north of Loma Alta Creek	33.18131	-117.36567	Residential	None	Outlet
L051	South side of Loma Alta Creek near trailer park	33.18241	-117.36507	Residential	None	Outlet
L052	West of I-5 overpass on south side of Loma Alta	33.18848	-117.36146	Residential	None	Outlet
L054	16" RCP in front of 242 Evergreen	33.18350	-117.36476	Residential	Park	Outlet
L101	North side of Loma Alta off North Ave east of Season Rd	33.20917	-117.27517	Commercial	Open Space	Outlet
L102	36" RCP inside M/H on Esperanza	33.20618	-117.28260	Residential	None	Manhole
L103	72" RCP west of Corporate Centre Dr	33.20707	-117.30399	Industrial	None	Catch Basin
L104	West of Corporate Center north of LA Creek	33.20698	-117.30425	Industrial	None	Outlet
L105	MH near 2847 Industry Way, north of Loma Alta	33.20066	-117.33981	Residential	Commercial	Manhole
L107	MH on SW corner of Crouch and Oceanside Blvd	33.19510	117.35329	Commercial	Industrial	Manhole
Buena Vista						
B001	48" RCP @ 2202 South Coast Highway	33.16910	-117.35681	Residential	Commercial	Outlet
B002	72" RCP on Lagoon View Drive	33.18073	-117.34243	Commercial	Residential	Outlet
B003	East of Haymar Bridge over Buena Vista Creek	33.18061	-117.32878	Commercial	None	Outlet

Station ID	Location	Latitude	Longitude	Primary Land Use	Secondary Land Use	Conveyance Type
B022	48" RCP in BV Creek wall Upstream of Thunder Dr. Bridge	33.18117	-117.28720	Residential	None	Outlet
B023	36" RCP west of 3524 Lake Blvd	33.18039	-117.29005	Residential	None	Outlet
B024	36" RCP S/W corner College Bridge	33.18020	-117.29586	Commercial	Residential	Outlet
B026	48" RCP couth TCxRoads Plaza	33.18053	-117.29100	Commercial	None	Outlet
B027	54" Box @ South Coast Material	33.18175	-117.30074	Residential	Commercial	Outlet
B029	south of SR78-north of BV Creek	33.17994	-117.31980	Residential	None	Outlet
B030	36" RCP - easement south SR78, no. BV	33.18030	-117.31637	Residential	Commercial	Outlet
B031	Between Haymar Dr & SR78 across from Country Club westernmost pipe	33.18185	-117.32221	Commercial	Parks	Outlet
B032	2 - 60" RCPs between Haymar & SR78	33.18160	-117.32544	Commercial	Parks	Outlet
B033	42" RCP rear of Black Angus @ SR78	33.18138	-117.33409	Commercial	None	Outlet
B034	North of SR78 behind Burger King @ Jefferson St	33.18154	-117.33712	Commercial	None	Outlet
B101	South of SR78 north of BV Creek	33.18023	-117.30506	Residential	None	Outlet
B102	South of SR78 north of BV Creek	33.17934	-117.31077	Residential	None	Outlet
B103	Outlet @ west end of Lagoon View Drive	33.17975	-117.34615	Commercial	None	Outlet
Agua Hedionda						
A002	South end Cannon Road	33.16125	-117.27073	Residential	None	Outlet
A004a	N/W Cannon Road	33.17054	-117.27088	Residential	None	Outlet
A004b	Concrete Drainage	33.17057	-117.27087	Residential	None	Concrete Channel
A013	36" RCP @ Lake & Alameda Drive	33.17358	-117.26132	Residential	None	Outlet
A014	36" RCP east of Lake & Alameda Drive	33.17349	-117.26030	Residential	None	Outlet
A015	Lake Boulevard @ Lake Elementary	33.17269	-117.25671	Residential	Parks	Outlet
A016	36" RCP east of Amigos Court	33.17575	-117.27534	Residential	None	Outlet
A019	24" RCP in Oak Riparian Park	33.17628	-117.26932	Residential	Parks	Outlet
A021	36" RCP @ Sky Haven Lane	33.17418	-117.28068	Residential	None	Outlet
*Not sampled in 2007. See site description for more information.						

2.2.1 San Luis Rey Site Descriptions

S006
Site S006 is a 36-inch corrugated metal pipe (CMP) located under Interstate 5. Access to Site S006 is from Carmelo Drive. Site S006 conveys flows from the residential area south of Camp Pendleton and east of Interstate 5 to the north side of the trail under I-5. Field screening samples and analytical lab samples were collected from the flowing water.

S013
Site S013 is located on the north side of State Route (SR) 76 where North Canyon Road intersects SR-76. The site is located adjacent to the bike path on the south side of the San Luis Rey River. Site S013 is a 48-inch reinforced concrete pipe (RCP) that appears to be a Caltrans drain for SR-76. No dry weather flows were observed.

S018
Previous site descriptions for Site S018 stated its location to be on the south side of the San Luis Rey River at the "lower pond" area pictures from the past years have shown different drains each year. It was an outlet with a 24-inch RCP with a flapper gate installed. Public Works states that the 24-inch flapper gate outfall has been abandoned and removed and was never connected to the lower pond. No other outfalls were found, therefore, this site was not visited.

S025
Site S025 is located on the north side of the San Luis Rey River on West Airport Road across from a junkyard. S025 is a 24-inch RCP in a headwall that drains the junkyard located just north of the outlet. No dry weather flows were observed.

S032
Site S032 is a 36-inch RCP with a flap gate installed and is located on the south side of the San Luis Rey River. The S032 outlet conveys flows from the residential, commercial, and open space areas located on the south side of SR-76. Access to the site is from Foussat Road to the access road that runs parallel to the River on the south side. There was a small amount of ponded water with no flow or source upstream. Field screening samples were collected.

S035
Site S035 is located on the south side of the San Luis Rey River. Site S035 is a 42-inch RCP with a flap gate installed. Access to the site is from Douglas Drive to the access road south of the San Luis Rey River. No dry weather flows were observed.

S041
Site S041 includes two 100-inch RCPs with flap gates installed and is located on the south side of the San Luis Rey River. Access to Site S041 is from Douglas Drive to the access road on the south side of the San Luis Rey River. No dry weather flows were observed.

S043
Site S043 is a 30-inch RCP with a flap gate installed and is located on the south side of the San Luis Rey River under the College Boulevard Bridge. The site collects dry weather flows from the residential area immediately south of the outlet. Access to the site is via College Boulevard to the access road on the south side of the River. No dry weather flows were observed.

S044
Site S044 is an open channel located on the south side of the San Luis Rey River. It conveys flows from residential and commercial areas. Access to the site is at Frazee Road and Oleander Drive. Construction on the northwest side of Oleander necessitated sampling upstream of the historical sampling point. A steep bank required sampling using a pole and flow could not be measured. Field screening samples were collected.

S045
Site S045 is at the outfall of three 4-foot by 6-foot boxes on the south side of the San Luis Rey River. S045 conveys flows from the residential areas south of Frazee Road to the River. Access to the site is via Frazee Road. Field screening samples were collected from the flowing water.

S047
Site S047 is a 24-inch RCP located in a commercial park off of Mission Avenue. The pipe conveys flows from surrounding residential and commercial areas to an open channel that runs parallel to SR-76 and ultimately to the San Luis Rey River. Dry weather flows were not observed.

S048
Site S048 is located within an open channel adjacent to SR-76. S048 is a CMP that collects dry weather flows from commercial developments on the south side of SR-76. Access to S048 is from Mission Avenue. Dry weather flows were not observed.

S052
Site S052 is a 42-inch RCP located on the north side of the San Luis Rey River at the intersection of North River Road and Leon Street. Site S052 conveys flows from the residential area and park located immediately north of the outlet. Access to the site is from North River Road. Dry weather flows were not observed.

S065
Site S065 is located within the open channel of Pilgrim Creek prior to confluence with the San Luis Rey River. Access to the site is from the San Luis Rey Wastewater Treatment Plant via North River Road to the access road located on the north side of San Luis Rey River. Site S065 conveys dry weather flows from a municipal golf course, residential, agricultural, parks, and open areas located to the north to the San Luis Rey River. Dry weather flows were not observed.

S072
Site S072 is a 60-inch RCP with a flap gate installed and is located on the north side of the San Luis Rey River. Access to the site is from River Tree Drive at Marlado Park. Site S072 conveys dry weather flows to the River from the park and residential community located north of the outlet. Field screening samples from the ponded water were collected.

S075
Site S075 is a 24-inch RCP in a headwall located on the north side of the San Luis Rey River. Access to the site is from the access road that runs parallel to the River between Benet and Foussat Roads. Site S075 conveys dry weather flows from the new residential developments north of the San Luis Rey River. Field screening samples from the flowing water were collected.

S077
Site S077 is an open channel south of SR-76 and upstream of Guajome Lake. Access to the site is from Hitching Post Drive. The runoff consists primarily of residential and commercial flows from east of the outlet. Samples are collected where the channel is concrete. Downstream of the sampling point, the channel is a natural swale that leads to Guajome Regional Park. Field screening samples were collected from the flowing water.

Variation: In 2003, the site is pictured as a storm drain and not an open channel. The storm drain location was not identified. From 2004 to 2007, the same channel has been sampled.

S078
Site S078 is a 24-inch RCP located at the intersection of Melrose Drive and North Santa Fe Avenue. S078 conveys residential flows, in a northwesterly direction, to Guajome Regional Park. No dry weather flows were observed.

Variation: Four different storm drains have been photographed for this site, but it has never been sampled and therefore has not field or analytical data associated with it.

S085
Site S085 includes two 24-inch RCPs located at North Santa Fe Avenue and Champlain Street. The outlet drains into a concrete channel south of the San Luis Rey River. S085 conveys the dry weather flows from the residential area to the south of North Santa Fe Avenue. Access to the site is from North Santa Fe Avenue. Field screening samples were collected from the ponded water.

S088
Site S088 is a 36-inch RCP located at the intersection of Mesa Drive and North Santa Fe Avenue. The site is located west of the Guajome Regional Park and south of the San Luis Rey River. Site S088 conveys dry weather flows from the residential area to the west into Guajome Regional Park. Access to the site is via North Santa Fe Avenue. Field screening samples were collected of the ponded water.

S102
Site S102 is located north of SR-76 between North Santa Fe Road and Guajome Lake Road, south of the San Luis Rey River. It is a 24-inch RCP that drains a residential area immediately east. Access to the site is from SR-76 and requires entering private property; therefore, access is limited. Field screening samples were collected of the ponded water.

Variation: A different site was visited in 2006, but no field screening was conducted. 2007 was the first year field samples have been collected for this site.

S103
Site S103 is located south of the San Luis Rey River. Access to the site is from the park east of 5396 Gooseberry Way. The outlet drains the residential and park areas in the neighborhood to the south. Field screening samples were collected of the flowing water..

S104
Site S104 in a 24-inch RCP located south of the San Luis Rey River. Access to the site is from park east of 5476 Gooseberry Way. The outlet drains the residential area south of the site. Field screening samples were collected of the ponded water.

Variation: This site has had three storm drains associated with it and it was sampled in 2003, 2006 and 2007. The 2003 and 2007 sites are the same. The drain sampled in 2006 appears to be S102.

S105
Site S105 includes two 36-inch corrugated metal pipes located on the north side of the San Luis Rey River. The outlet drains an agricultural area immediately north of the site. Access to the site is from North River Road. Dry weather flows were not observed.

S106
Site S106 includes four 36-inch plastic pipes at the intersection of North River Road and Sleeping Indian Road on the north side of the San Luis Rey River. The outlet drains the agricultural and residential area immediately north of the site. Access to the site is from North River Road. Field screening samples and analytical lab samples were collected from the flowing water.

S107
Site S107 is a natural channel that crosses under North River Road on the north side of the San Luis Rey River. The channel drains the agricultural area immediately north of the site. Access to the site is from North River Road. Field screening samples were collected.

S108
Site S108 is a natural channel that crosses under Via Puerta del Sol on the north side of the San Luis Rey River. The channel drains residential areas and agricultural areas in the

immediate vicinity. Access to the site is at the intersection of Via Puerta del Sol and Big View Road. Field screening samples and analytical lab samples were collected from the flowing water.

S109
Site S109 is an 18-inch RCP located on the south side of the San Luis Rey River. The site conveys the runoff from the residential area immediately south of the outlet. Access to the site is from the access road to the east of College Boulevard. Field screening samples were collected from the ponded water.

S110
Site S110 is located on the north side of the San Luis Rey River. S110 is a 30-inch RCP with a flap gate installed. Access to Site 110 is from Rainier Way east of Douglas Drive. Field screening samples were collected from the ponded water.

S111
Site S111 is a concrete channel adjacent to Fireside Park, east of San Luis Rey River. The channel drains residential and commercial areas east of the site. Access to the site is from Fireside Street. Field screening samples were taken from the ponded water.

S112
Site S112 is a 24-inch RCP outlet located between Pacific Street and the Metro Link tracks. The outlet collects runoff flows from the residential community on the west side of the railroad tracks and south of the San Luis Rey River. This area was not accessible in 2007 due to construction of the new Pacific Street Bridge. The area and storm drain line were located within the construction area and therefore this site was not sampled.

S113
Site S113 is located off of Capistrano Drive across from Capistrano Park. The site conveys flows from Camp Pendleton and from Capistrano Park south to the San Luis Rey River. Dry weather flows were not observed.

S114
Site S114 is a 24-inch RCP south of the auto auction parking lot and north of the San Luis Rey. The site is a flap gate between a retention basin and the river. Access to the site is from the bike path from College Boulevard. Dry weather flows were not observed.

2.2.2 Loma Alta Creek Site Descriptions

L001
Site L001 is a 48-inch RCP located at the intersection of North Avenue and Vista Pacific Drive, north of Loma Alta Creek. The outlet drains the industrial areas south of North Avenue. Access to the site is via North Avenue. Field screening samples and analytical lab samples were collected from the flowing water.

L002

Site L002 is a 66-inch RCP located northwest of the intersection of North Avenue and Vista Pacific Drive, north of Loma Alta Creek. The outlet drains the industrial areas east of the outlet. Access to the site is from a walking path off of North Avenue. Field screening samples were collected from the ponded water.

L003
Site L003 is a 48-inch RCP located off of North Avenue and east of Autumn Drive, south of Loma Alta Creek. The outlet drains the residential area southeast of North Avenue. Access to the site is via North Avenue. Field screening samples were collected from the flowing water.

L004
Site L004 includes three 24-inch RCPs located east of the intersection of North Avenue and Autumn Drive. Two of the outlets are located on the south side and one outlet is located on the north side of Loma Alta Creek. The outlets drain the residential areas on the south side of North Avenue and the areas under construction on the north side of Loma Alta. Access to the site is from North Avenue. Two of the three outlets were dry. One had a small amount of ponded water, but not enough to sample.

L005
Site L005 includes two 24-inch RCPs and one 36-inch RCP located at the intersection of North Avenue and Autumn Drive. Two of the outlets are located on the south side and one outlet is located on the north side of Loma Alta Creek. The outlets drain the construction areas on the north and the residential area to the south side of North Avenue. Access to the site is from North Avenue. Dry weather flows were not observed.

L006
Site L006 is a 36-inch RCP located at the intersection of North Avenue and Season Road, south of Loma Alta Creek. The outlet drains the residential areas on the hillside south of North Avenue. Access to the site is from North Avenue. Field screening samples were collected from the ponded water.

L007
Site L007 is 48-inch RCP located north of North Avenue west of Seasons Road, south of Loma Alta Creek. The outlet drains the residential areas on the hillside south of North Avenue. The outlet is partially submerged with ponded water. Access to the site is from North Avenue. Field screening samples were collected from the ponded water.

L008
Site L008 is a 40-inch RCP located on the corner of Westridge Drive and Quailridge Drive, north of Loma Alta Creek. The outlet drains the residential areas on the hillside north of Oceanside Boulevard. Access to the site is from Westridge Drive. Field screening samples were collected from the ponded water.

L009

Site L009 is under College Boulevard at the Loma Alta Creek crossing. Three box culverts are present and drain the residential and commercial areas east of College Boulevard. Access to the site is via College Boulevard. Field screening samples and analytical lab samples were collected from the flowing water.

L010
Site L010 are two 36-inch RCP located west of College Boulevard near the railroad tracks. This site historically has been located south of the tracks, but is no longer accessible there. The storm drain now runs under the tracks and disharges to Loma Alta Creek. The outlet drains the residential areas on the hillside south of Loma Alta Creek adjacent to College Boulevard. Access to the site is from College Boulevard. Field screening samples were collected from the flowing water.

L013
Site L13 is a 42-inch RCP located south of the shopping center on the corner of Oceanside Boulevard and College Boulevard, north of Loma Alta Creek. The outlet is no longer accessible due to overgrown vegetation, but the manhole upstream of the outlet was sampled. Access to the site is from parking lot behind ReMax. Field screening samples were collected from the flowing water.

L014
Site L014 has historically been described as a 36-inch CMP located south of the Golden State Fence Company at 4051 Oceanside Boulevard, north of the Loma Alta Creek. However, this site has not been accessible for the last five years, including 2007.

L016
Site L016 is a 36-inch RCP within a manhole located on Rancho del Oro south of Loma Alta Creek. The outlet within the manhole drains the residential area located on the hill south of Rancho del Oro. Access to the site is from Rancho del Oro. Due to Sprinter line construction, this site was not accessible in 2007.

L019
Site L019 is a 48-inch RCP, located south of the intersection of Corporate Centre Drive and Oceanside Boulevard, north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. Field screening and lab samples were collected from the ponded water.

L020
Site L020 is a 36-inch RCP located east of the intersection of Corporate Centre and Oceanside Boulevard, north of Loma Alta Creek. The outlet drains the commercial areas located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. Field screening samples were collected from the flowing water.

L024

Site L024 is a 36-inch RCP located south of Oceanside Boulevard at the west end of the Evergreen Nursery. The outlet drains the commercial and open space area located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. Field screening samples were collected from the flowing water.

Variation: In 2006, a different site was visited. However, 2007 was the first year field screening was conducted.

L025
Site L025 is a 24-inch RCP with a headwall located north of Oceanside Boulevard and north of Loma Alta Creek. The outlet drains the open space area located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. Dry weather flows were not observed.

Variation: In 2005, a different site was visited. However, the site has always been dry and never been sampled.

L027
Site L027 has historically been sampled at the intersection of Garrison Street and Industry Way, north of Loma Alta Creek, where Garrison Creek flows in a concrete channel. That location was not accessible and L027 was sampled upstream at the intersection of Garrison Street and Oceanside Boulevard where the creek is flows through an earthen channel. The channel drains the residential and commercial areas located northeast of Oceanside Boulevard. Access to the site is from Garrison Street. Field screening and laboratory samples were collected from the flowing water.

L029
Site L029 is a catch basin within a manhole located near 3060 Industry Way, north of Loma Alta Creek. All manholes and the outlet downstream are inaccessible. This manhole is the beginning of this storm drain line. The line drains the industrial and commercial area near the site. Field screening samples were collected from the ponded water.

L030
Site L030 was originally located west of El Camino Real, north of Loma Alta Creek off of Industry Way. While the 2005 and 2006 descriptions were different from this, the site was not sampled due to inaccessibility. The original outfall was visited in 2007, but was inaccessible due to Sprinter rail construction. Upstream manholes were catch basins with small lines appearing to empty into this main line and were dry.

L031
Site L031 is an open trapezoidal concrete channel located south of Industry Way, north of the Loma Alta Creek. The channel drains the residential and commercial area located north of Industry Way. Access to the site is from Industry Way. Dry weather flows were not observed at this site.

L032
Site L032 is a 64-inch RCP located south of the intersection of Camelot Drive and Industry Way, north of Loma Alta Creek. The outlet drains the industrial and commercial area north of Industry Way. Access to the site is through a private business from Industry Way. The City's gate was blocked by the business and the outlet was inaccessible. Public Works was still working with this company to clear the area. Access should be available during the next dry weather season.

L033
Site L033 is a 36-inch RCP located at the left turn of Industry Way east of Waste Management, north of the Loma Alta Creek. The outlet drains the residential and commercial areas located north of Industry Way. Access to the site is from Industry Way. There was not enough ponded water to sample.

Variation: Different site visited in 2006. Has been dry every year and not sampled.

L034
Site L034 is a 24-inch RCP located between Waste Management and a self storage lot south of Oceanside Boulevard. Dry weather flows were not observed.

Variation: Appears to be a different site every year, but has always been dry and never sampled.

L036
Site L036 is located adjacent to the intersection of Skylark Drive and Downs Street, south of the Loma Alta Creek. The outlet is now in the Sprinter rail right of way, so the manhole upstream of the outlet was visited. The outlet drains the residential area north of Loma Alta Creek. Access to the site is via Skylark Drive. There was not enough ponded water to conduct field screening.

L037
Site L037 is an earthen channel south of Loma Alta Creek. The channel drains the commercial area south of Loma Alta Creek. The site is at the east end of South Oceanside Boulevard. Field screening samples were collected from the ponded water.

Variation: Different site sampled in 2005. Field and/or laboratory samples were collected in 2005, 2006, and 2007. Samples collected in 2006 and 2007 were from the same monitoring location. The site sampled in 2005 appears to be of the main channel of Loma Alta Creek.

L039
Site L039 is a 42-inch RCP located south of Loma Alta Creek under the I-5 overpass. The outlet was originally thought to drain the residential areas to the south, but is a Caltrans outlet for I-5. This site also has a large homeless population in the area and was unsafe for the sampler. For these reasons, this site was not visited.

L040
Site L40 is an open concrete trapezoidal channel north of Loma Alta Creek. The outlet drains the commercial and residential areas located adjacent and to the north of Oceanside Boulevard. Access to the site is through the Vons parking lot off of Oceanside Boulevard. Field screening and laboratory samples were collected from the channel.

L043
Site L043 is a 48-inch RCP constructed in the abutment that supports the Coast Highway Bridge over Loma Alta Creek. L043 conveys run off flows from Coast Highway south of Loma Alta Creek. Dry weather flows were not observed at this site.

L045
Site L045 is a 16-inch RCP located adjacent to the Metro Link railroad bridge. The outlet drains the runoff from the trailer park to the north. Access to the site is from Coast Highway to a pedestrian path that runs parallel with Loma Alta Creek. Dry weather flows were not observed at this site.

L046
Site L046 is a 24-inch RCP constructed in the north wall of the Loma Alta Creek channel just east of the Coast Highway Bridge. This outfall conveys flow from commercial and residential area north of Loma Alta Creek. Access to the site is from Coast Highway. Field screening samples were collected from the ponded water.

L050
Site L050 is a 24-inch RCP constructed in the north wall of the Loma Alta Creek channel. The outlet drains the Casitas Trailer Park located north of the Loma Alta Creek. Access to the site requires going into Loma Alta Creek channel. Dry weather flows were not observed at this site.

Variation: Different site visited in 2006. No field or laboratory samples have been collected at this site over the past five years.

L051
Site L051 is a 24-inch RCP constructed in the south wall of Loma Alta Creek. The outlet drains the trailer park located south of the creek. Access to the site requires going into Loma Alta Creek channel. Dry weather flows were not observed at this site.

Variation: Different site visited in 2006. No field or laboratory samples have been collected at this site over the past five years.

L052
Site L052 is a 36-inch RCP located just west of the I-5 overpass on the south side of Loma Alta. The outlet drains Cavalier Trailer Park. Access to the site requires going into Loma Alta Creek channel. There was a small flow, but an insufficient amount to sample.

L054
Site L054 is a 24-inch RCP constructed in the south wall of Loma Alta Creek. The outlet is located southwest of the intersection of Hillside and Evergreen Lane. Site L054 drains the trailer park, Marshall Park, and the residential area to the south. Access to the site requires entering the Loma Alta Creek channel. Field screening and laboratory samples were collected from the channel.

L101
Site L101 is a 30-inch RCP located east of the intersection of North Avenue and Seasons Road, north of Loma Alta Creek. The outlet drains the areas on the north side of Loma Alta Creek that are currently under construction. Access to the site is from North Avenue. Dry weather flows were not observed.

L102
Site L102 is a 36-inch RCP within a manhole located on Esperanza Way, south of Loma Alta Creek. The outlet within the manhole drains the residential area located within the immediate area of Esperanza Way. Access to the site is from Esperanza Way. Ponded water was observed however there was insufficient volume to conduct field screening.

L103
Site L103 is a 72-inch RCP located west of Corporate Centre, north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Boulevard off of Corporate Centre. Access to the site is from Corporate Centre. Field screening samples were collected from the flowing water.

L104
Site L104 is a 24-inch RCP located west of Corporate Centre, north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Boulevard. Access to the site is from Corporate Centre. Ponded water was observed however there was insufficient volume to conduct field screening.

L105
Site L105 is a manhole located on Industry Way, north of Loma Alta Creek. The outlet within the manhole drains the residential and commercial area located north of Industry Way. Access to the site is from Industry Way. Field screening samples were collected from the flowing water.

Variation: It is possible that some variation has occurred at this site. However, the pictures from the previous reports are of the inside of the manhole and it cannot be determined if they are the same from year to year. 2007 was the first year this site has been sampled for field screening.

L107
Site L107 has historically been a 36-inch RCP outlet located on the north side of Loma Alta Creek near the intersection of Crouch Street and Oceanside Boulevard. Due to Sprinter rail construction and other changes to the channel walls, the site was moved

upstream to a manhole at the corner of Crouch and Oceanside Boulevard. The storm system drains the commercial and residential areas located north of Oceanside Boulevard. Ponded water was observed however there was insufficient volume to conduct field screening.

2.2.3 Buena Vista Creek Site Descriptions

B001
Site B001 is a 48-inch RCP located at the Buena Vista Nature Center at 2202 Coast Highway, west of Buena Vista Lagoon. The outlet drains the residential and commercial areas along Coast Highway. Access to the site is from Coast Highway. Field screening and laboratory samples were collected from the ponded, submerged outlet.

B002
Site B002 is a 72-inch RCP located on Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial and residential areas north of SR-78. Access to the site is via Lagoon View Drive. Field screening and laboratory samples were collected from the flowing water.

B003
Site B003 includes two 36-inch RCPs located east of Haymar Bridge which crosses over Buena Vista Creek. The outlets drain the commercial areas north of SR-78. Access to the site is from Haymar Drive. Dry weather flows were not observed at this site.

B022
Site B022 is a 48-inch RCP constructed in the north side of the Buena Vista Creek channel wall, east of the Thunder Drive Bridge. The outlet drains the residential area north of Buena Vista Creek. Access to the site is from within the Buena Vista Creek channel. Field screening and laboratory samples were collected from the flowing water.

B023
Site B023 is a 36-inch RCP located west of 3524 Lake Boulevard south of Buena Vista Creek. The outlet drains the residential areas southeast of Lake Boulevard. Access to the site is from Lake Boulevard. Field screening samples were collected from the flowing water.

Variation: In 2005 and 2006, this site was sampled upstream of the original monitoring location. This site was sampled for field screening in 2003, 2006, and 2007.

B024
Site B024 is a 36-inch RCP located on the southwest corner of College Boulevard Bridge on the south side of Buena Vista Creek. The outlet drains the residential areas east and west of College Boulevard south of the creek. Access to the site is from College Boulevard. Field screening samples were collected from the ponded water.

B026

Site B026 is a 48-inch RCP located south of the Tri-City Crossroads Plaza off of Plaza Drive on the north of Buena Vista Creek. The outlet drains the commercial areas around Plaza Drive. Access to the site is from Tri-City Crossroads Plaza or the open lot to the east of the plaza. Field screening samples were collected from the flowing water.

B027
Site B027 is a 54-inch box located off of Haymar Drive at South Coast Material yard north of Buena Vista Creek. The outlet drains the residential and commercial areas north of SR-78. Access to the site is from Haymar Drive. Field screening samples were collected from the flowing water.

B029
Site B029 is located within a sewer easement south of SR-78 and north of Buena Vista Creek. Site is located across from AAA and Rancho Del Oro Drive. Field screening samples were collected from the ponded water.

B030
Site B030 is a 36-inch RCP located within a sewer easement south of SR-78, west of AAA and north of Buena Vista Creek. The outlet drains the residential areas north of SR-78. Access to the site is from the sewer easement road. Dry weather flows were not observed at this site.

Variation: This site was sampled for initial field screening in 2003, 2005 and 2006. The outlet in 2003, 2004, and 2005 appears different than the one visited in 2006 and 2007, however, it may have been improved and a concrete outlet replaced the metal pipe.

B031
Site B031 includes four 54-inch RCPs located between Haymar Drive and SR-78, across from Camino Real County Club, and north of Buena Vista Creek. The western-most outfall is sampled. This outlet drains the golf course, commercial, and residential areas north of SR-78. Access to the site is via Haymar Drive. Field screening samples were collected from the flowing water.

Variation: This site was sampled in 2003 and 2007. In 2005 and 2006 the site was not accessible due to excessive vegetation, or the sampler was at the wrong site. In 2007, the sample was collected from the western-most flowing pipe. In 2003, the ponded water was most likely sampled, which is the main channel of Buena Vista Creek.

B032
Site B032 includes two 60-inch RCPs located between Haymar Drive and SR-78, across from Carlsbad Plaza, north of Buena Vista Creek. Both pipes are from the same source. The outlet drains the golf course and commercial areas north of SR-78. Access to the site is from Haymar Drive. Field screening samples were collected from the flowing water.

B033

Site B033 is a 42-inch RCP located north of SR-78 behind the Black Angus restaurant, north of Buena Vista Creek. The outlet drains the commercial areas north of SR-78. Access to the site is from SR-78. Field screening samples were collected from the flowing water.

Variation: This site was sampled for initial field screening in 2003, 2005, 2006 and 2007. There are two main drainages that flow into the catch basin, which holds ponded water. It is not clear what was sampled each year. In 2007, the largest drainage area outfall was sampled.

B034
Site B034 is a 36-inch RCP located north of SR-78 behind Burger King at the Jefferson Street exit. The outlet drains the commercial areas north of SR-78. Access to the site is from SR-78. Field screening samples were collected from the flowing water.

B101
Site B101 is a catch basin with a 36-inch RCP located within a sewer easement south of SR-78 and north of Buena Vista Creek. The outlet is a Caltrans drain for SR-78. Dry weather flows were not observed during 2007.

Variation: There has been some variation for this site. There are three different drains associated with this site ID. This site was sampled in 2003 and 2005 at two different storm drains for initial field screening. The site sampled in 2005 appears to be what the storm drain labeled B029 in 2007.

B102
Site B102 is a 36-inch CMP located within a sewer easement south of SR-78 and north of Buena Vista Creek. The outlet drains the residential and commercial areas north of SR-78. Access to the site is from the sewer easement road. Field screening samples were collected from the flowing water.

B103
Site B103 is located at the end of Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial areas north of SR-78. Access to the site is via Lagoon View Drive. Field screening samples were collected from the ponded water.

2.2.4 Agua Hedionda Site Descriptions

A002
Site A002 is a 74-inch RCP located at the end of Cannon Road. The outlet drains the residential areas along Cannon Road. Access to the site is from Cannon Road. Field screening and laboratory samples were collected from the flowing water.

A004a
Site A004a is a 48-inch RCP located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The outlet drains the residential areas south and east of the outlet.

Access to the site is from Cannon Road to the pump station access road. Field screening and laboratory samples were collected from the flowing water.

A004b
Site A004b is a brow ditch located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The concrete drainage ditch drains the irrigated areas on the slope behind the residences on Spinnaker Ridge. Access to the site is via Cannon Road to the pump station access road. Field screening and laboratory samples were collected from the flowing water.

A013
Site A013 is a 36-inch RCP located at the intersection of Lake Boulevard and Alameda Drive, south of Agua Hedionda Creek. The outlet drains the residential areas south of the site. Access to the site is from Lake Boulevard. Field screening samples were collected from the flowing water.

A014
Site A014 is a 36-inch RCP located east of the intersection of Lake Boulevard and Alameda Drive, north of Agua Hedionda Creek. The outlet drains the school and residential areas north of Lake Boulevard. Access to the site is from Lake Boulevard. Field screening samples were collected from the ponded water.

A015
Site A015 is a 48-inch RCP located south of Lake Boulevard and south of the creek. The outlet drains the residential areas south and east along Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A016
Site A016 is a 36-inch RCP located southeast of the intersection of Amigos Court and Serena Lane, south of Lake Boulevard. The outlet drains the residential areas north across Lake Boulevard. Access to the site is through open space off of Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A019
Site A019 is a 36-RCP located in Oak Riparian Park off of Lake Boulevard, north of Agua Hedionda Creek. The outlet drains the residential and park areas north and south of Lake Boulevard. Access to the site is from the parking lot off of Lake Boulevard. Field screening samples were collected from the ponded water.

A021
Site A021 is a 36-inch RCP located off of Sky Haven Lane, north of Agua Hedionda Creek. The outlet drains the residential areas to the north of the outfall. Access to the site is from a residential driveway and down a steep embankment in the middle of a densely vegetated area. Field screening samples were collected from the ponded water.

3 METHODS

The Urban Runoff Permit requires that each Copermittee conduct analytical and field screening monitoring between May 1st and September 30th of each year. The Copermittees are required to perform field screening at each identified site at least once during the monitoring season. Each Copermittee is also required to collect a grab sample for laboratory analysis at a minimum of 25% of the sites where ponded or flowing water is observed.

The following describes the City of Oceanside's Dry Weather Program components including field site visits, laboratory analysis of water samples, and IC/ID investigations. The general site description and atmospheric conditions were recorded on a field data sheet for each site visit whether or not runoff was observed (Appendix C). A photograph was also taken at each site (Appendix B). Monitoring was not conducted during any rain event or within 72 hours of the end of any rain event greater than one tenth of an inch.

3.1 Qualitative Observations

Qualitative field observations were made during each site visit where ponded or flowing water was observed and sampled. These observations were intended to provide a general assessment of the runoff and include parameters such as odor, water clarity, and the presence of floatables, visible deposits, stains and aquatic life. These descriptions were recorded on the field data sheet.

3.2 Flow Measurement

Flow measurements can be used to estimate pollutant mass loading, prioritize storm drains for future investigations, or to identify significant changes in flow that may be indicative of an illegal release upstream. Since a majority of sample locations lack a permanent flow measurement installation, several field methods were employed to estimate flow rates for different flow types such as an open channel, outfall, or drainage pipe. These methods have been adapted from the County of San Diego's Dry Weather Monitoring Program Quality Assurance Project Plan[1].

Velocity-area method - This method requires the physical measurement of the velocity (V), depth (D), and width (W) of flowing water. Discharge is determined as follows:

$$\text{Discharge} = V \times D \times W \qquad \text{Eq. (1)}$$

Where the water depth was adequate, a Global Flow Probe was used to get the average velocity in feet per second. Stream depth and width were recorded on the field data sheet and the discharge in cubic feet per second (cfs) was calculated using Eq. (1).

Where the flow was too slow or the water too shallow to measure the velocity using the probe, the velocity was estimated by timing the travel of a piece of floating debris (e.g., a

[1] County of San Diego. 2004. Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program. April 2004.

leaf). The velocity was calculated by dividing the travel distance (feet) by the recorded travel time (second).

Fill a bottle method - If the flowing water was able to be captured, such as from a raised pipe, the fill-a-bottle method was used. The time it took to fill a known volume was recorded. Discharge was calculated by dividing the volume by the time and converting that value into cubic feet per second.

3.3 Field Screening

Water physicochemical properties (e.g., pH, conductivity, turbidity, dissolved oxygen (DO), and temperature) are important indicators of water quality. The Horiba U-10 6-parameter probe was used to measure:

- pH.
- Conductivity.
- Turbidity.
- Dissolved oxygen (DO).
- Water temperature.
- Salinity.

If the water was deep enough, the probe was placed horizontally in the water column, facing upstream. If water was shallow, a syringe or cup was used to collect water and transfer into a container and then the properties were measured. Due to the sampling process involved, DO measurements in a beaker may be different from *in situ* measurements. The Horiba U-10 was calibrated daily prior to use in the field using the standard calibration solution as well as a three-point pH calibration.

At each site with ponded or flowing water, water samples were collected and analyzed in the field for:

- Ammonia (NH_3).
- Nitrate as N (NO_3-N).
- Orthophosphate (PO_4-P).

Ammonia, nitrate, and orthophosphate were measured in the field using CHEMetrics field test kits. Each test kit contained a sample mixing container, necessary reagent-filled ampoules, the appropriate color standards for colorimetric analysis, filters for photometric analysis, and instructions for each kit. The procedures instructed by CHEMetrics were followed.

3.4 Laboratory Water Quality Analyses

Laboratory samples were collected at a minimum of 25% of the sites with flowing or ponded water. Samples were submitted to the San Luis Rey Wastewater Treatment Plant Laboratory (City of Oceanside) and EnviroMatrix Analytical, Inc. for analysis of the following constituents:

- Surfactants (MBAS)
- Oil and Grease
- Total Hardness
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Enterococcus Bacteria
- Total Coliform Bacteria
- Fecal Coliform Bacteria
- Chlorpyrifos
- Diazinon

All samples were analyzed using Standard Methods or EPA Methods by the laboratories.

3.5 IC/ID Investigations

Each station is visited at least once per dry weather season, if accessible and safe. When field measurements and/or laboratory analysis showed an exceedance of established action levels, the site was revisited to confirm the initial results. The action levels used for the 2007 dry weather monitoring period are presented in Table 2. If the initial results were confirmed and an exceedance continued, an upstream investigation was initiated. In addition, any potential IC/IDs found visually or with any other evidence of gross contamination, an IC/ID investigation was pursued immediately (e.g., substantial petroleum sheen, excessive turbidity, extremely high ammonia concentration, evidence of sewage release, etc.).

In general, IC/ID investigations include identifying pollution sources and correcting or eliminating them. Various methods can be used for source identification, for example, observation by following flows or discharges upstream, field measurements or laboratory analysis of water samples. The correction and elimination of identified sources may be achieved by outreach/education, best management practices (BMPs) implementation, and enforcement when necessary.

Table 2. 2007 Dry Weather Monitoring Action Levels

Analyte	Action Level
Field Measurements	
pH	6.5-9.0 pH units
Conductivity	N/A
Turbidity	N/A
Dissolved Oxygen	N/A
Temperature	N/A
Salinity	N/A
Ammonia Nitrogen	1.0 mg/L
Nitrate as N	10.0 mg/L
Orthophosphate	2.0 mg/L
Laboratory Measurements	
Surfactants (MBAS)	N/A
Oil and Grease	15 mg/L
Total Hardness	N/A
Cadmium (Dissolved)	California Toxics Rule (CTR)
Copper (Dissolved)	California Toxics Rule (CTR)
Lead (Dissolved)	California Toxics Rule (CTR)
Zinc (Dissolved)	California Toxics Rule (CTR)
Total Coliform Bacteria	50,000 MPN/100mL
Fecal Coliform Bacteria	20,000 MPN/100mL
Enterococcus	10,000 MPN/100mL
Chlorpyrifos	0.5 µg/L
Diazinon	0.5 µg/L

4 RESULTS

The dry weather monitoring program was conducted from May 1, 2007 through September 30, 2007. Of the 100 sites that were attempted, 93 monitoring stations were visited in 2007. Seven sites were not visited due to Sprinter Railway construction, the Pacific Street Bridge construction, or a few other accessibility and safety concerns. These limitations are detailed by site in Section 2. Sixty one of the sites were either flowing or ponded with enough runoff to sample. Eighteen of the 61 sites were also sampled for laboratory analysis.

The results of the qualitative observations, flow measurements, field measurements and laboratory measurements are presented in the following sections.

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the field screening program. Weather conditions were recorded at each site and any evidence of dry weather flows were documented. Visual observations of the sample water and the vicinity of the sampling location such as odor, color, clarity, floatable materials, vegetation and biological organisms were also recorded. Observations are summarized below and presented in Table 3.

Light Conditions
Sixty six of the 93 sites visited had sunny conditions during site visits. Seven sites had overcast conditions, and 20 sites had partly cloudy conditions. No sites were visited during foggy conditions.

Odor
Thirty three of the sites with water had no distinguishable odor associated with the storm drain outlets. Twenty three sites had a musty odor, one site had a sewage odor, one site had a chemical odor, and four sites smelled of rotten eggs.

Color
Thirty nine of the sites with water had no observed color. Twenty sites had a yellow color and three sites had a brown color.

Clarity
Forty six of the sites with water were clear with negligible suspended particles observed. Thirteen of the sites sampled were slightly cloudy and three of the samples were opaque.

Table 3. 2007 Visual Observation Results.

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
San Luis Rey									
S006	5/29/2007	Sunny	None	None	Clear	Trash	None	Excessive	Algae
S013	5/25/2007	Sunny	NS	NS	NS	NS	NS	None	None
S025	6/8/2007	Sunny	NS	NS	NS	NS	None	None	None
S032	5/25/2007	Sunny	Musty	Yellow	Slightly Cloudy	Trash & Other	None	None	Insects
S035	6/8/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
S041	6/8/2007	Sunny	NS	NS	NS	NS	Coarse particulate	None	None
S043	6/14/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
S044	6/14/2007	Sunny	None	None	Clear	Trash	None	Excessive	Algae
S045	6/14/2007	Sunny	Musty	Yellow	Slightly Cloudy	Trash & Bubbles/Foam	None	Excessive	Insects & Algae & Fish & Other
S047	6/8/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
S048	6/8/2007	Sunny	NS	NS	NS	NS	Coarse particulate	None	None
S052	6/19/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
S065	5/29/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
S072	7/19/2007	Sunny	None	Yellow	Slightly Cloudy	Trash	None	None	Insect & Snail
S075	5/25/2007	Overcast	Musty	Yellow	Slightly Cloudy	Trash	Fine particulate	Normal	Insects & Algae & Snails
S077	6/19/2007	Sunny	None	None	Clear	None	Coarse particulate	Normal	Algae & Snails & Fish
S078	6/22/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
S085	6/27/2007	Sunny	Musty	Yellow	Slightly Cloudy	Trash	None	Normal	Algae & Snails
S088	6/22/2007	Sunny	Musty	None	Clear	Trash	None	Excessive	Insects & Other
S102	7/2/2007	Sunny	None	None	Clear	Trash	None	Normal	Insect & Snail
S103	6/22/2007	Sunny	Musty	Yellow	Slightly Cloudy	Trash	Coarse particulate	Normal	Insects & Algae & Snails
S104	7/2/2007	Sunny	None	None	Clear	Trash	None	Normal	Insect & Algae
S105	7/2/2007	Sunny	NS	NS	NS	NS	NS	NS	NS

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
S106	5/29/2007	Partly Cloudy	None	None	Clear	Trash & Bubbles/Foam	None	Excessive	Other
S107	7/2/2007	Sunny	None	None	Clear	Trash	None	Normal	Insects & Algae & Snails
S108	5/29/2007	Overcast	Musty	Yellow	Slightly Cloudy	Trash	None	Limited	Insects
S109	6/14/2007	Sunny	Musty	Brown	Opaque	Trash	None	Normal	None
S110	6/14/2007	Sunny	Musty	Yellow	Slightly Cloudy	Other	None	None	Insect & Algae
S111	6/8/2007	Sunny	None	None	Clear	Trash	Fine particulate	None	Insect & Algae
S113	6/8/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
S114	6/14/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
Loma Alta									
L001	8/30/2007	Sunny	None	Brown	Clear	Trash & Bubbles/Foam	None	Normal	None
L002	9/12/2007	Sunny	None	None	Clear	Trash	None	None	Snails & Other
L003	9/7/2007	Sunny	None	None	Clear	Trash	None	None	Algae & Snails
L004	9/7/2007	Sunny	NS	NS	NS	Trash	Coarse particulate	Excessive	Insects & Algae & Snails
L005	9/7/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
L006	9/7/2007	Sunny	None	None	Clear	Bubbles/Foam & Sheen	Coarse particulate	None	Fish
L007	9/7/2007	Sunny	Rotten Eggs	None	Clear	Trash & Bubbles/Foam & Sheen	None	None	Algae
L008	9/12/2007	Sunny	None	None	Clear	Trash & Bubbles/Foam & Sheen	None	Normal	Insects & Algae & Snails & Other
L009	8/30/2007	Sunny	None	None	Clear	Trash & Bubbles/Foam	None	Normal	Other
L010	9/7/2007	Sunny	None	None	Clear	Trash & Bubbles/Foam	Coarse particulate	Limited	Snails & Fish
L013	9/12/2007	Sunny	Musty	None	Clear	None	None	None	None
L019	8/30/2007	Sunny	Musty	Yellow	Clear	Trash	None	Normal	Algae & Fish & Other

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
L020	8/23/2007	Sunny	None	None	Clear	Trash	None	Normal	Snails
L024	8/23/2007	Sunny	None	None	Clear	Trash	None	Normal	Algae & Other
L025	8/14/2007	Partly Cloudy	NS	NS	NS	NS	NS	NS	NS
L027	8/30/2007	Sunny	Musty	None	Clear	Trash	None	None	Other
L029	8/23/2007	Sunny	Chemical	Yellow	Clear	Trash	None	None	None
L031	8/14/2007	Partly Cloudy	NS	NS	NS	NS	NS	NS	NS
L033	8/17/2007	Sunny	NS	NS	NS	Trash	None	None	None
L034	8/23/2007	Sunny	NS	NS	NS	Trash	None	Normal	Algae & Snails
L036	8/14/2007	Partly Cloudy	NS	NS	NS	NS	NS	NS	NS
L037	8/16/2007	Sunny	Musty	Brown	Opaque	Trash	None	Normal	Insects & Algae & Other
L040	8/30/2007	Sunny	Musty	Yellow	Clear	Trash	Coarse particulate & Oily deposit	Normal	Fish
L043	8/16/2007	Partly Cloudy	NS	NS	NS	NS	NS	NS	NS
L045	8/16/2007	Partly Cloudy	NS	NS	NS	NS	NS	NS	NS
L046	8/16/2007	Partly Cloudy	Musty	None	Clear	None	Fine particulate & Stain	None	Insect & Snail
L050	8/16/2007	Partly Cloudy	NS	NS	NS	NS	NS	NS	NS
L051	8/16/2007	Partly Cloudy	NS	NS	NS	NS	NS	NS	NS
L052	8/16/2007	Sunny	None	None	Clear	None	Coarse particulate	None	None
L054	8/30/2007	Sunny	None	None	Clear	None	Coarse particulate	None	None
L101	9/7/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
L102	9/7/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
L103	8/23/2007	Sunny	Musty	Yellow	Slightly Cloudy	Trash & Bubbles/Foam & Sheen	None	None	Algae & Snails
L104	8/23/2007	Sunny	NS	NS	NS	Trash	Stain	Normal	Algae
L105	8/14/2007	Partly Cloudy	Musty	Yellow	Clear	Trash	Coarse particulate	None	None

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
L107	8/23/2007	Partly Cloudy	NS	NS	NS	Trash	None	None	None
Buena Vista									
B001	8/30/2007	Sunny	Sewage	Yellow	Slightly Cloudy	Trash & Sheen	None	Normal	Insect & Algae & Fish
B002	8/30/2007	Sunny	Musty	None	Clear	Other	None	None	Algae & Snails & Other
B003	8/14/2007	Partly Cloudy	NS	NS	NS	NS	NS	NS	NS
B022	8/1/2007	Sunny	None	None	Clear	Trash	None	None	Algae & Snails
B023	7/20/2007	Overcast	None	Yellow	Clear	Trash	None	Normal	Insects & Algae & Snails
B024	7/20/2007	Sunny	None	Yellow	Slightly Cloudy	Trash	None	None	Snails
B026	7/20/2007	Partly Cloudy	None	None	Clear	Trash	None	Normal	Insects & Algae & Snails
B027	8/8/2007	Sunny	Musty	None	Clear	Trash	None	Normal	Algae & Snails & Other
B029	8/8/2007	Sunny	Musty	None	Clear	Trash	None	Normal	Algae & Snails
B030	8/8/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
B031	8/8/2007	Sunny	None	None	Clear	None	None	None	Other
B032	8/8/2007	Partly Cloudy	None	None	Clear	Other	None	None	Algae
B033	8/15/2007	Sunny	None	None	Clear	Other	None	None	None
B034	8/15/2007	Sunny	None	None	Clear	Other	None	Excessive	Snails
B101	8/8/2007	Sunny	NS	NS	NS	NS	NS	NS	NS
B102	8/8/2007	Sunny	None	None	Clear	Trash	None	Limited	Algae
B103	8/14/2007	Partly Cloudy	None	None	Clear	Bubbles/Foam & Sheen	None	Normal	Algae
Agua Hedionda									
A002	8/1/2007	Overcast	None	Yellow	Clear	Trash & Bubbles/Foam	None	Normal	None
A004a	8/1/2007	Overcast	None	Yellow	Clear	Trash & Bubbles/Foam	None	Normal	Algae & Snails & Other
A004b	8/1/2007	Overcast	None	None	Clear	Other	None	Normal	Algae

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
A013	8/1/2007	Partly Cloudy	Musty	None	Clear	Trash & Bubbles/Foam & Sheen	Stain	Normal	Algae & Snails & Other
A014	7/5/2007	Overcast	Rotten Eggs	None	Clear	Trash	None	None	Insect & Snail
A015	8/1/2007	Partly Cloudy	Musty	None	Opaque	Trash & Bubbles/Foam	None	Normal	Algae
A016	8/1/2007	Partly Cloudy	Musty	None	Clear	Trash	None	Normal	Insects & Algae & Snails
A019	7/9/2007	Partly Cloudy	Rotten Eggs	Yellow	Slightly Cloudy	Trash	None	Normal	Insects
A021	7/23/2007	Partly Cloudy	Rotten Eggs	Yellow	Slightly Cloudy	Trash	None	Normal	Insects & Algae & Snails & Other

Floatable Materials
The categories of floatable materials were trash, bubbles/foam, sheen, fecal matter, and other and each site had the potential to have multiple categories of floatable materials listed. Six sites were observed to have no floatable materials. Fifty two sites were observed to have trash in or near the sampling location. Fourteen sites were observed to have bubbles and/or foam. Seven sites had a visible sheen. Seven sites observed had floatable materials outside of the categories listed; those materials, for the most part, were leaf debris.

Deposits
The categories of deposits were coarse particulates (sediment/gravel), fine particulates, stains, oily deposits, and other. Multiple types of deposits could have been identified at each site. Fifty four sites did not have any deposits at the sampling site. Eleven sites had course particulate deposits of sediment and/or gravel. Three sites had fine particulate deposits. Three sites had some type of stain at the sampling point. One site had an oily deposit.

Vegetation
The categories for amount of vegetation present at and around the sampling area were none, limited, normal, and excessive. Twenty nine sites and no vegetation present. Three sites had limited vegetation growth, usually signifying some type of eradication program. Thirty two sites observed had normal vegetation growth. Seven sites had excessive vegetation growth around the sampling area.

Biology
The categories for types of life present at the sites were insects, algae, fish, snails, and mussels/barnacles. Multiple types of life could have been identified at each site. Thirty seven of the sites had algae present; 28 of those sites also having some other type of life present. Twenty nine sites had snails present. Twenty three sites had insects present. Seven sites had fish present. Eleven sites had some "other" type of life present; usually crawfish. Fourteen sites did not have any visible life present at the sampling site.

4.2 Field Water Quality Results

Field analyses were conducted at all sites with flowing or ponded water. The field analyses were conducted using a Horiba U-10 and CHEMetrics field test kits. A summary of the initial screening results from field analysis is presented in Table 4. If action levels were exceeded, the site was revisited to confirm the initial results and an IC/ID investigation was initiated. Follow-up investigations are presented in Section 4.4.

Flow Rate
Twenty five of the 61 sites that were sampled were ponded. The flow rates at sites with measurable flow ranged from 0.2 gpm at A016 to 403 gpm at L027 (Loma Alta Creek).

Table 4. 2007 Initial Screening Field Measurement Results.

Station ID	Date	Time	Flow Rate (gpm)	pH (Units)	EC (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temperature (˚C)	Salinity (%)	NH3-N (mg/L)	NO3-N (mg/L)	PO4-P (mg/L)
San Luis Rey												
S006	5/29/2007	12:15	1.66	8.4	1.42	5	9.49	18.1	0.06	0.1	1.13	**2.3**
S032	5/25/2007	13:30	Ponded	8	1.91	23	6.28	22.6	0.09	**1.5**	0.9	**3.8**
S044	6/14/2007	12:30	NS	8.1	3.79	1	10.31	28.2	0.19	0.3	1.02	0.5
S045	6/14/2007	13:30	1.33	8.2	5.26	8	8.85	20.1	0.27	0.2	1.13	0.2
S072	7/19/2007	10:40	Ponded	7.6	1.44	12	4.69	19.9	0.06	**1**	1.5	**2.75**
S075	5/25/2007	9:00	3.69	8.2	1.23	21	7.6	19.9	0.05	0.8	1.24	1.4
S077	6/19/2007	14:10	9.45	7	4.58	1	9.28	25.6	0.23	0.2	2.26	0.25
S085	6/27/2007	9:00	Ponded	8.1	1.37	22	7.74	20.1	0.06	0.5	0.79	1.4
S088	6/22/2007	10:30	Ponded	7.6	2.48	6	3.8	21.1	0.12	0.6	1.35	0.65
S102	7/2/2007	10:44	Ponded	7.9	1.07	5	6.35	21.3	0.04	0.8	1	1.1
S103	6/22/2007	11:45	0.87	7.4	1.18	43	6.16	21.3	0.05	**6**	1.24	**4.15**
S104	7/2/2007	10:00	Ponded	7.2	1.08	12	6.87	19.4	0.04	0.4	0.79	0.7
S106	5/29/2007	10:00	96	8.6	3.56	1	10.88	20.6	0.18	0.2	**35.6**	1
S107	7/2/2007	11:42	5.7	7.1	2.77	6	5.33	21.9	0.13	0.2	1.47	0.45
S108	5/29/2007	8:40	9.37	8.3	2.59	13	9.05	17.2	0.12	0.2	0.9	1.25
S109	6/14/2007	15:00	Ponded	7.2	1.83	95	1.05	23.8	0.08	**1.5**	1.24	**3.7**
S110	6/14/2007	10:50	Ponded	**9.9**	1.01	16	19.31	28.1	0.04	0.2	0.9	0.55
S111	6/8/2007	8:10	Ponded	**9.6**	1.63	6	11.04	21.7	0.07	0.02	1.13	0.05
Loma Alta												
L001	8/30/2007	8:10	57	8.1	2.89	16	7.46	20.8	0.14	0.6	0.68	1.55
L002	9/12/2007	10:30	Ponded	7.7	6.3	3	-1.5	18.6	0.33	0.3	1.1	0.4
L003	9/7/2007	10:45	6.7	8.1	3.7	2	6.53	22.6	0.18	0.6	1.7	0.7
L006	9/7/2007	13:10	Ponded	7.4	3.66	1	13.77	25.3	0.18	0.3	0.8	0.05
L007	9/7/2007	13:30	Ponded	6.6	6.17	5	0.99	25.6	0.32	**1**	0.8	1.8
L008	9/12/2007	9:30	Ponded	6.8	4.03	3	4.4	20.6	0.2	0.6	1.4	1.15
L009	8/30/2007	7:05	132	7.3	3.98	2	7.41	21.9	0.19	0.3	1.13	0.55
L010	9/7/2007	9:15	0.9	7.7	4.19	2	4.1	22.2	0.21	0.8	0.79	1.65
L013	9/12/2007	12:15	2	7.8	2.88	2	7.01	24.2	0.14	0.8	1.5	**2.1**
L019	8/30/2007	8:55	Ponded	7.6	1.91	11	2.70	25.6	0.09	**1**	1.13	1.5
L020	8/23/2007	13:20	3	8.4	2.85	10	7.42	24.4	0.14	0.4	2.03	1.4

Station ID	Date	Time	Flow Rate (gpm)	pH (Units)	EC (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temperature (˚C)	Salinity (%)	NH3-N (mg/L)	NO3-N (mg/L)	PO4-P (mg/L)
L024	8/23/2007	10:35	4.5	7	4.69	5	5.27	25	0.24	0.2	5.87	0.25
L027	8/30/2007	9:40	403	8	3.53	7	12.44	20.7	0.17	0.3	0.9	1.05
L029	8/23/2007	9:45	Ponded	7.2	1.81	22	1.09	23.2	0.08	**7**	0.79	1.95
L037	8/16/2007	11:30	Ponded	7.6	1.26	83	5.18	28.3	0.05	0.8	1	1.1
L040	8/30/2007	10:30	9	**9.1**	1.23	5	15.4	30.5	0.05	0.2	0.9	0.85
L046	8/16/2007	9:40	Ponded	7.6	6.31	3	8.5	25.3	0.33	0.4	1.24	0.45
L054	8/30/2007	11:20	12.9	8	2.68	1	8.57	24.6	0.13	0.1	**10.5**	0.15
L103	8/23/2007	11:55	1.7	8.4	2.29	114	7.19	21.5	0.11	0.8	1.02	**2.55**
L105	8/14/2007	14:30	2	7.9	2.91	19	4.7	24.7	0.14	**1**	1.13	**2.35**
Buena Vista												
B001	8/30/2007	12:25	Ponded	7.2	4.17	45	0.03	23.8	0.21	**2**	3.5	1
B002	8/30/2007	13:00	16.8	8.4	2.55	6	7.65	23.4	0.12	0.2	4.74	0.2
B022	8/1/2007	14:21	1.6	8.3	4.16	7	6.8	24.1	0.21	0.6	1.5	1.85
B023	7/20/2007	11:00	1.57	8.1	7.1	11	6.48	21.4	0.38	0.4	1.6	0.55
B024	7/20/2007	13:05	Ponded	8	1.88	32	7.35	27.4	0.08	**2**	1.6	**2.95**
B026	7/20/2007	11:45	11.3	8.3	3.63	4	7.74	21.7	0.18	0.1	1.8	0.25
B027	8/8/2007	12:10	1	8.1	3.98	17	12.35	22.4	0.2	**3**	1.69	0.4
B029	8/8/2007	14:15	Ponded	8	1.9	11	6.8	21.2	0.08	0.3	0.79	0.75
B031	8/8/2007	15:05	5.7	7.6	4.65	2	7.67	22.2	0.24	0.6	2.14	0.9
B032	8/8/2007	15:45	27	7.5	4.19	2	6.96	22.9	0.21	0.4	2.82	0.8
B033	8/15/2007	8:10	2.6	8.2	1.56	4	6.75	23.3	0.07	0.8	1.24	1.45
B034	8/15/2007	8:15	1	7.4	1.81	15	6.25	23.3	0.08	0.4	1	1.45
B102	8/8/2007	13:30	0.3	8.5	1.26	2	8.35	21.6	0.05	0.1	1.13	0.4
B103	8/14/2007	11:20	Ponded	7.5	4.51	1	5.12	23.6	0.23	0.4	**10.8**	0.15
Agua Hedionda												
A002	8/1/2007	7:45	71	7.9	2.52	6	7.8	20	0.12	0.6	1.13	0.8
A004a	8/1/2007	8:35	9	7.7	1.53	33	7.31	21.9	0.07	**5**	1.7	**3.55**
A004b	8/1/2007	8:56	1.7	7.6	4.69	1	8	21.9	0.24	0.3	0.79	0.1
A013	8/1/2007	10:15	12	6.6	5.47	12	5.35	23.7	0.28	**1**	1.24	0.45
A014	7/5/2007	12:55	Ponded	7	6.04	9	4.03	21.1	0.32	0.4	1.02	0.3
A015	8/1/2007	9:45	25	7	4.69	53	6.77	21.8	0.24	0.8	1.7	0.655
A016	8/1/2007	12:50	0.2	8.1	5.35	10	6.66	21.2	0.28	0.6	1.47	1.15

Station ID	Date	Time	Flow Rate (gpm)	pH (Units)	EC (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temperature (˚C)	Salinity (%)	NH3-N (mg/L)	NO3-N (mg/L)	PO4-P (mg/L)
A019	7/9/2007	11:30	Ponded	6.9	2.11	18	5.03	19	0.09	**2**	0.79	**3.9**
A021	7/23/2007	14:15	Ponded	7.7	1.52	45	0.79	24.6	0.07	**2**	1.13	**2.45**
NS – Not sampled/collected.												

Water Temperature
Water temperature was measured in the field immediately upon sample collection at each site with flowing or ponded water. Temperature readings ranged from 17.2˚C at S106 on May 29, 2007 to 30.5˚C at L040 on August 30, 2007. The average temperature during field screening was 22.7˚C degrees Celsius with a standard deviation of 2.62˚C.

pH
pH is a term used to indicate the alkalinity or acidity of a substance as ranked on a scale from 1.0 to 14.0. Acidity increases as the pH gets lower. Figure 2 presents the pH of some common liquids.

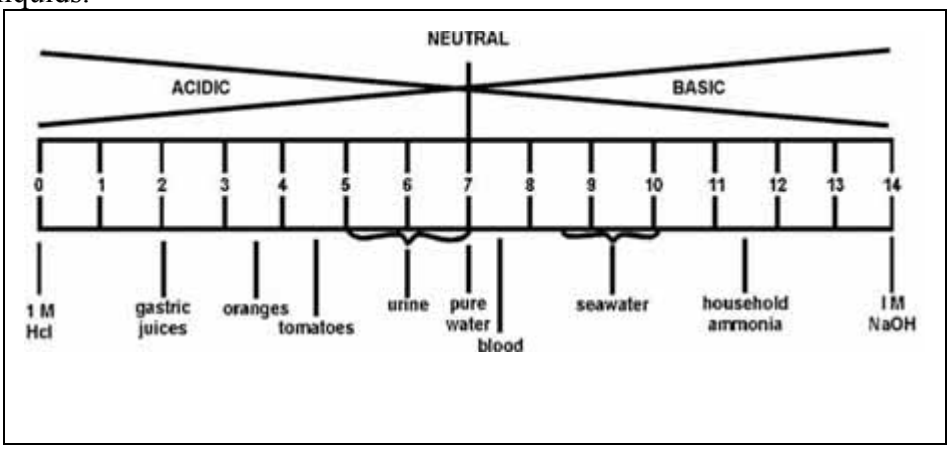

Figure 2. pH of Selected Liquids.

pH affects many chemical and biological processes in the water. For example, different organisms flourish within different ranges of pH. The largest varieties of aquatic animals prefer a range of 6.5-8.0. pH outside this range reduces the diversity in the stream because it stresses the physiological systems of most organisms and can reduce reproduction. Low pH can also allow toxic elements and compounds to become mobile and "available" for uptake by aquatic plants and animals. This can produce conditions that are toxic to aquatic life. Changes in acidity can be caused by atmospheric deposition (acid rain), surrounding rock, and certain wastewater discharges. An unusually high pH reading could be an indicator of an industrial discharge in the sample area; therefore, pH is used as an indicator of illicit discharges.

The pH values taken from the ponded or flowing water ranged from 6.6 at A013 to 9.2 at S110. The average pH value observed during the field screening was 7.81 with a standard deviation of 0.64. The three sites that were outside of the acceptable range were S111, S110, and L040. All are associated with concrete channels or pipes and both S111 and S110 were ponded. Concrete is known to be basic and have high pH values associated with the cement components. This may be a cause of the high pH values.

Conductivity
Conductivity is a measure of the ability of water to pass an electrical current. Conductivity in water is affected by the presence of inorganic dissolved solids such as chloride, nitrate, sulfate, and phosphate anions (ions that carry a negative charge) or sodium, magnesium, calcium, iron, and aluminum cations (ions that carry a positive charge). Organic compounds

like oil, phenol, alcohol, and sugar do not conduct electrical current very well and therefore have a low conductivity when in water. Conductivity is also affected by temperature: the warmer the water, the higher the conductivity. In addition, discharges to streams can also change the conductivity depending on their make-up. A failing sewage system would raise the conductivity because of the presence of chloride, phosphate, and nitrate; an oil spill would lower the conductivity. The conductivity values ranged from 1.01mS/cm at S110 to 7.1 mS/cm at B023. The average conductivity value observed during field screening was 3.13 mS/cm.

Salinity

Salinity is the measure of dissolved salts in water and is therefore linked to conductivity. Salinity is expressed in percent or parts per trillion (ppt). The ocean, on average, has a salinity of 35 ppt or is made up of about 3.5% salt. Freshwater streams usually have salinity between 0 and 3 ppt or 0 and 0.3%. The salinity values during the 2007 dry weather monitoring season ranged from 0.04% and 0.38%. The average salinity observed was 0.15%.

Turbidity

Turbidity is a measure of water clarity, how much the material suspended in water decreases the passage of light through the water. Suspended materials include soil particles (clay, silt, and sand), algae, microbes and other substances. Turbidity can affect the color of the water.

Higher turbidity increases water temperatures because suspended particles absorb more heat. This, in turn, reduces the concentration of dissolved oxygen because warm water holds less dissolved oxygen than cold. Higher turbidity also reduces the amount of light penetrating the water, which reduces photosynthesis and the production of dissolved oxygen. Suspended materials can clog fish gills, reducing resistance to disease in fish, lowering growth rates, and affecting egg and larval development. As the particles settle, they can blanket the stream bottom, especially in slower waters, and smother fish eggs.

Turbidity can be useful as an indicator of the effects of runoff from construction, agricultural practices, logging activity, discharges, and other sources. Turbidity often increases sharply during a rainfall, especially in developed watersheds, which typically have relatively high percentages of impervious surfaces. The flow of storm water runoff from impervious surfaces rapidly increases stream velocity, which increases the erosion rates of stream banks and channels. Turbidity can also rise sharply during dry weather if earth-disturbing activities are occurring in or near a stream without erosion control practices in place. The turbidity values ranged from 1 to 114 NTU. The average turbidity value observed during field screening was 16 NTU.

Dissolved Oxygen

Dissolved oxygen analysis measures the amount of gaseous oxygen dissolved in an aqueous solution. Oxygen gets into water by diffusion from the surrounding air, by aeration, and as a waste product of photosynthesis.

Adequate dissolved oxygen is necessary for good water quality. Oxygen is a necessary element to all forms of life. Natural stream purification processes require adequate oxygen

levels in order to provide for aerobic life forms. As dissolved oxygen levels in the water drop below 5.0 mg/L, aquatic life is put under stress. The lower the concentration, the greater the stress is on aquatic life. Oxygen levels that remain below 1-2 mg/L for a few hours can result in large fish kills. The dissolved oxygen values ranged from -1.5 mg/L at L002 to 19.31 mg/L at S110. The average dissolved oxygen value observed during field screening was 6.85 mg/L. All of the sites that had DO levels less than 4.0 mg/L were ponded and frequently had high turbidity and ammonia levels, indicating nutrient breakdown.

Ammonia

Ammonia is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment, however, in higher quantities it can become toxic to fish and other organisms. The ammonia values range from 0.1 to 7.0 mg/L. The average ammonia value observed during the field screening was 0.92 mg/L with a standard deviation of 1.3 mg/L. Ten of the 15 sites that exceeded the action level for ammonia were ponded and were likely caused by decaying organic matter in the ponded water.

Orthophosphate-P

Both phosphorus and nitrogen are essential nutrients for the plants and animals that make up the aquatic food web. Since phosphorus is the nutrient in short supply in most fresh waters, even a modest increase in phosphorus can, under the right conditions, set off a whole chain of undesirable events in a stream including accelerated plant growth, algae blooms, low dissolved oxygen, and the death of certain fish, invertebrates, and other aquatic animals.

There are many sources of phosphorus, both natural and human. These include soil and rocks, wastewater treatment plants, runoff from fertilized lawns and cropland, failing septic systems, runoff from animal manure storage areas, disturbed land areas, drained wetlands, water treatment, and commercial cleaning preparations. The Orthophosphate-P values ranged from 0.05 mg/L to 4.15 mg/L. The average orthophosphate-P value observed during field screening was 1.25 mg/L.

Nitrate-N

Nitrate is the most readily available form of nitrogen for plant uptake and is a limiting factor in plant growth. Nitrates are naturally occurring in soil and rocks, but are also added to watersheds from anthropogenic sources such as fertilizers, failing septic systems, and animal waste. The nitrate-N values from the 2007 dry weather monitoring season ranged from 0.68 mg/L at L001 to 35.6 mg/L at S106. The average nitrate-N value was 2.28 mg/L with a standard deviation of 4.7 mg/L. The nitrate levels at S106 were three times greater than the next highest levels of just over 10 mg/L at L054 and B103.

4.3 Laboratory Water Quality Results

Laboratory analysis was conducted at 18 sites, representing 30% of the sites with ponded or flowing water. Laboratory chemistry results are summarized and presented in Table 5 and microbiology results in Table 6. If action levels were exceeded, the site was revisited to confirm the initial results and an IC/ID investigation was initiated. Follow-up investigations are presented in Section 4.4.

Table 5. 2007 Dry Weather Chemistry Results.

Station ID	Date	MBAS (mg/L)	Oil & Grease (mg/L)	Hardness Total as CaCO3 (mg/L)	Dissolved Cadmium (mg/L)	Dissolved Copper (mg/L)	Dissolved Lead (mg/L)	Dissolved Zinc (mg/L)	Chlorpyrifos (µg/L)	Diazinon (µg/L)
San Luis Rey										
S006	5/29/2007	<0.5	<4	452	<0.0009	<0.002	<0.004	<0.008	<0.05	<0.05
S106	5/29/2007	<0.5	<3	1100	<0.0009	<0.002	<0.004	<0.008	<0.05	<0.05
S108	5/29/2007	<0.5	<3	723	<0.0009	<0.002	<0.004	<0.008	<0.05	<0.05
Loma Alta										
L001	8/30/2007	<0.5	<5	745	<0.0018	0.005	<0.008	0.01	<0.05	<0.05
L009	8/30/2007	<0.5	<3	1139	<0.0018	0.007	<0.008	0.01	<0.05	<0.05
L019	8/30/2007	<0.5	<3	488	<0.0018	<0.004	<0.008	0.01	<0.05	<0.05
L027	8/30/2007	<0.5	<3	985	<0.0018	<0.004	<0.008	<0.008	<0.05	<0.05
L040	8/30/2007	<0.5	<3	289	<0.0018	0.007	<0.008	0.01	<0.05	<0.05
L054	8/30/2007	<0.5	<3	529	<0.0018	<0.004	<0.008	<0.008	<0.05	<0.05
Buena Vista										
B001	8/30/2007	<0.5	<5	773	<0.0018	0.009	<0.008	0.075	<0.05	<0.05
B002	8/30/2007	<0.5	<3	614	<0.0018	0.005	<0.008	<0.008	<0.05	<0.05
B022	8/1/2007	<0.5	<4	904	<0.10	<0.05	<0.05	<0.05	<0.05	<0.05
Agua Hedionda										
A002	8/1/2007	<0.5	<5	792	<0.10	<0.05	<0.05	<0.05	<0.05	<0.05
A004a	8/1/2007	<0.5	<5	471	<0.10	<0.05	<0.05	<0.05	<0.05	<0.05
A004b	8/1/2007	<0.5	<5	1310	<0.10	<0.05	<0.05	<0.05	<0.05	<0.05
A013	8/1/2007	<0.5	<5	1830	<0.10	<0.05	<0.05	0.14	<0.05	<0.05
A015	8/1/2007	<0.5	<5	1830	<0.10	<0.05	<0.05	0.24	<0.05	<0.05
A016	8/1/2007	<0.5	<5	1910	<0.10	<0.05	<0.05	<0.05	<0.05	<0.05

Table 6. 2007 Dry Weather Microbiology Results.

Station ID	Date	Total Coliform (MPN/100mL)	Fecal Coliform (MPN/100mL)	Enterococcus (MPN/100mL)
San Luis Rey				
S006	5/29/2007	1300	<20	130
S106	5/29/2007	28000	20	860
S108	5/29/2007	7000	1800	3630
Loma Alta				
L001	8/30/2007	14000	1700	84
L009	8/30/2007	22000	2200	51
L019	8/30/2007	**50000**	8000	10
L027	8/30/2007	8000	700	155
L040	8/30/2007	**50000**	8000	216
L054	8/30/2007	8000	1300	213
Buena Vista				
B001	8/30/2007	**≥1600000**	**≥1600000**	1116
B002	8/30/2007	**130000**	13000	118
B022	8/1/2007	**300000**	**110000**	**>24196**
Agua Hedionda				
A002	8/1/2007	17000	1700	52
A004a	8/1/2007	**300000**	5000	**14136**
A004b	8/1/2007	17000	40	52
A013	8/1/2007	**220000**	**22000**	74
A015	8/1/2007	**80000**	5000	41
A016	8/1/2007	**900000**	**22000**	1133

Surfactants (MBAS)

Surfactants are analyzed to detect detergent pollution from residential, commercial, or industrial washing activities. Surfactants were not detected at any of the dry weather sites.

Oil and Grease

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities. Oil and grease was not detected at any of the dry weather sites.

Total Hardness

Total hardness measures the amount of polyvalent cations in water. It generally represents calcium and magnesium ions in a water sample because they are the most common cations. Results are expressed in mg/L of $CaCO_3$. The California Toxics Rule (CTR) applies hardness-based water quality objectives to dissolved metals. Increasing hardness has the effect of decreasing the toxicity of metals[2]. The hardness values ranged from 289 mg/L of $CaCO_3$ at L040 to 1910 mg/L of $CaCO_3$ at A016 with an average of 940 mg/L of $CaCO_3$ and a standard deviation of 514 mg/L of Ca CO_3.

[2] US Environmental Protection Agency. 2002. National Recommended Water Quality Criteria. November 2002. EPA-822-R-02-047

Dissolved Metals
Metal concentrations in the environment can originate from a variety of sources including automobiles, automobile repair facilities, car washing, and industrial activities, as well as natural geologic processes. The laboratory samples collected during the 2007 Dry Weather Monitoring Program were analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Results were compared to the hardness-based CTR CMC (1-hour) criterion. Dissolved cadmium results were all below laboratory detection limits. Dissolved copper was detected at five sites, but they were all below the CTR criterion. Dissolved lead results were below the laboratory detection limits at all sites. Dissolved zinc was detected at seven of the sites, but they were all below the CTR criterion.

Chlorpyrifos and Diazinon
Chlorpyrifos and diazinon are organophosphate pesticides used to control insects, fleas and ticks. As of December 31, 2004, it became unlawful to sell diazinon outdoor, non-agricultural products. Chlorpyrifos can now only be used for nursery production, golf courses and road medians. Neither chlorpyrifos nor diazinon was detected at any of the laboratory sampling sites.

Total Coliform Bacteria
Total coliform bacteria are mostly harmless bacteria that are ubiquitous in the environment living in soil, water, and mammalian digestive tracts. Water samples are analyzed for total coliform bacteria to indicate the presence of other more harmful pathogenic (disease causing) organisms that are associated with coliform but are difficult to test for because they are present in much smaller quantities. During the dry weather monitoring period total coliform results ranged from 1300 MPN/100mL at S006 to ≥1,600,000 MPN/100 ml at B001.

Fecal Coliform and Enterococcus
Members of two bacteria sub-groups, fecal coliforms and enterococcus, are used as indicators of possible sewage contamination because they are specifically found in human and animal digestive tracks. Although they are generally not harmful themselves, they indicate the possible presence of pathogenic bacteria, viruses, and protozoans that also live in human and animal digestive systems. Since it is difficult, time-consuming, and expensive to test directly for the presence of a large variety of pathogens, these fecal indicator bacteria are used. Sources of fecal contamination to surface waters include wastewater treatment plants, on-site septic systems, domestic and wild animal manure, and storm water runoff.

In addition to the possible health risk associated with the presence of elevated levels of fecal bacteria, they can also cause cloudy water, unpleasant odors, and an increased oxygen demand. Fecal coliform results ranged from <20 MPN/100mL at S006 to ≥1,600,000 MPN/100 ml at B001. Enterococcus results ranged from 10 MPN/100mL at L019 to >24,196 MPN/100mL at B022.

4.4 IC/ID Investigations

Sites that exceeded one or more action level were revisited and resampled to confirm the initial result. If the confirmation result also exceeded an action level, an IC/ID investigation was initiated. Twenty eight sites had one or more action level exceedances that required confirmation. Eighteen of those sites, upon confirmation, required an IC/ID investigation

The most common exceedance was for ammonia; 15 sites had an initial exceedance. This was common in ponded water where organic matter breakdown would cause higher levels of ammonia. Where upstream investigations were possible and flowing water was sampled, the ammonia concentration would often decrease below the action level. The action level for orthophosphate-P was exceeded at 12 sites during the initial screening. The majority of these sites were also ponded. Nine of the 18 sites that were initially sampled for laboratory analysis exceeded one or more of the fecal indicator bacteria action levels. Appendix D contains a detailed description of the confirmation and IC/ID investigations at each site and the actions that were taken to reduce contaminants.

The prevailing source for ponded and flowing water was from residential and park over-irrigation. To reduce and/or eliminate the residential flow, educational material was distributed to the residences on October 25, 2007. Over 700 letters where sent out across the City, each identifying the pollutant of concern in their area and what they could do to help eliminate it. The City of Oceanside's water conservation program also reached this area through the local public television station's service announcements in August and October on smart irrigation. The Clean Water Program also teamed up with the Water Utilities' Meter Readers in August and began a residential door hanger program. The Meter Readers will continue to place door hangers on residences that they find to have water flowing from their property either from over-irrigation or an IC/ID. The door hangers have tips for good irrigation practices and a link to the City's website for more information.

To reduce and/or eliminate the runoff from the City's parks, several meetings by phone and in person were held in September and October with Clean Water Program staff and Parks' Department staff and their contractors. The Parks' maintenance staff visually inspects the City's parks weekly. Any irrigation problems are prioritized and fixed. Fertilizer is applied depending on the use of the park and the season. A slow-release fertilizer is used in the summer and best management practices are always used to keep fertilizer and grass clippings in the park and out of the storm drains and water ways. De-thatching is completed annually and aeration bi-annually to improve drainage in all of the parks. The Clean Water Program is working continuously with the Park's Department to keep BMPs in place and up-to-date in addition to seeking out funding for smart irrigation controls to improve water conservation efforts.

5 DISSCUSION

5.1 2007 Dry Weather Summary

Of the 100 sites in the historical dry weather monitoring program, 93 sites were accessible and visited in 2007. Sprinter Railway construction in the Loma Alta Watershed and Pacific Street Bridge construction in the San Luis Rey Watershed, in addition to a few other safety concerns, limited access to the remaining seven sites. Thirty six sites had measurable flowing water and 25 sites were ponded with enough water to sample, combining for a total of 61 sites where initial field screening was conducted. Eighteen of these sites were chosen for laboratory testing for chemistry and microbiology parameters.

Twenty eight of the 61 sites initially screened had one or more field or laboratory parameter exceedance. The most common exceedances for field screening were ammonia and orthophosphate. The majority of these were from ponded water where organic matter was breaking down. This causes a rise in ammonia as nitrogen fixation occurs. The prevailing source for ponded and flowing water with ammonia and/or orthophosphate exceedances was from residential and park over-irrigation. The irrigation water is also likely to carry fertilizer and may be a source of the orthophosphate exceedances. Nitrate action levels were exceeded at three sites. One of these exceedances was below the action level upon confirmation. The other two sites are part of on-going BMP selection and monitoring detailed in Appendix D. There were three pH exceedances all associated with concrete channels. Components of concrete are known to be basic and may be having an affect on ponded water in concrete channels.

Bacterial indicators were the only laboratory parameter that exceeded action levels within the City of Oceanside. There were no exceedances for MBAS, dissolved metals, oil and grease, or pesticides. The total coliform action level was exceeded at nine sites; the fecal coliform action level was exceeded at four sites; and the enterococcus action level was exceeded at two sites. There were no bacterial exceedances in the San Luis Rey watershed and confirmation of the two exceedances in the Loma Alta watershed resulted in bacteria quantities below the action levels. Possible sources in the Buena Vista and Agua Hedionda watersheds were either over-irrigation or an unknown source. One exceedance in Agua Hedionda may have been related to an illegal discharge that was identified and resolved.

Over 700 letters targeting areas in the City where the various exceedances occurred were mailed to residents. These letters focus on educating residents on the path of the storm drain system, what common pollutants come from residential areas, and suggestions and alternatives to reduce the flow of water and pollutants entering the City's water bodies.

In 2007, there were no action levels for the qualitative observations of floatable materials, biology, deposits, or vegetation. Trash and algae were the most commonly observed materials at the monitoring sites. Fifty two of the sites monitored identified trash in or near the monitoring location. Under Permit Order 2007-0001 trash will be monitored and assessed in more detail beginning with the 2008 Dry Weather Monitoring season. Type and possible sources of the trash will be recorded. Algae, an indication of nutrients in the runoff, was identified at 37 of the sites monitored.

5.2 Historical Data Comparison

In February 2001, the San Diego Regional Water Quality Control Board issued Order No. 2001-01 to the communities of San Diego County. As part of Order 2001-01, the City of Oceanside was required to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program. The Dry Weather Program under this order was implemented in the 2002 Dry Weather season. This section provides a comparison of the last six years of dry weather data.

The majority of exceedances from the 2001 Permit Cycle are nutrients (nitrate, orthophosphate, and ammonia) and bacterial indicators (total coliform, fecal coliform, and Enterococcus). Table 8 provides a summary of the previous six years of dry weather monitoring including the number of sites monitored and the number of exceedances of these specific field and laboratory analytes.

Table 7. 2002-2007 Dry Weather Monitoring Report Data Comparison.

Monitoring Year	2007	2006	2005	2004	2003	2002
No. of Sites with Flowing or Ponded Water	61	61	64	46	56	56
No. of Sites Sampled for Initial Field Screening	61	54	44	18	56	56
No. of Sites Exceeding Nitrate Action Level*	3	9	8	NS	12	11
No. of Sites Exceeding Orthophosphate Action Level	12	6	8	2	14	11
No. of Sites Exceeding Ammonia Action Level	15	8	4	17	49	50
No. of Sites Sampled for Laboratory Analysis	18	19	17	19	16	11
No. of Sites Exceeding Total Coliform Action Level	9	12	17	11	0	4
No. of Sites Exceeding Fecal Coliform Action Level	4	5	4	2	0	1
No. of Sites Exceeding Enterococcus Action Level	2	2	4	3	2	0

*Number of exceedances taken from previous reports. Nitrate reported in monitoring years 2002, 2003, 2005 and 2006 may have been reported as NO_3, as opposed to NO_3-N. Without converting to the appropriate form of nitrate to compare to the set action levels, the number of exceedances may be erroneously high. See discussion below.

During the 2001 Permit Cycle, the number of sites visited with flowing or ponded water has not changed dramatically, even with an impending drought. The number of sites sampled over the years has fluctuated. In 2004, only the flowing sites were sampled, therefore reducing the number to 18. Due to safety and accessibility constraints, a reduced number of the flowing and/or ponded sites were screened in 2005 and 2006. In 2007, the inaccessible

sites were not visited and therefore it could not be determined if they were flowing and/or ponded.

Nitrate exceedances were reduced in 2007. This brought a review of the previous years' nitrate results. Based on the test kits used and discussion with previous samplers, in 2004 and 2005, the nitrate results were reported as NO_3, but compared to action levels for nitrate as N (NO_3-N). The field results should have been divided by 4.43 to convert from NO_3 to NO_3-N. Because this was not done, nitrate as N results for those two years are erroneously high and some falsely reported as exceedances. For monitoring years 2002 and 2003, it is assumed the same procedure occurred, however, no notes or discussions have been found to verify this. In correcting these reported formats, the following would stand as the correct number of nitrate (NO_3-N) exceedances:

Monitoring Year	2007	2006	2005	2004	2003	2002
No. of Sites Exceeding Nitrate Action Levels	3	3	2	NS	3	11*

*Could not be determined.

The number of sites with orthophosphate and ammonia exceedances was higher in 2007. This could be due to a greater number of ponded sites sampled. It should also be noted that in 2005, the City of Oceanside implemented a new method for ammonia analysis which gives more accurate results as well as minimizes the chance for false positives.

The sites sampled for laboratory analysis have had consistent exceedances for bacterial indicators. However, there has been a decrease from 2005 to 2006 to 2007. In the 2005 monitoring year 100% of lab sites exceeded the action level for one or more indicator bacteria; in 2006, 63% of lab sites exceeded the action level for one or more indicator; in 2007, 50% of lab sites exceeded the action level for one or more indicator.

6 CONCLUSIONS

The City of Oceanside's boundaries include two major watersheds; the San Luis Rey Watershed, which includes the San Luis Rey River, and the Carlsbad Hydrologic Unit, which consists of Loma Alta Creek, Buena Vista Creek, and Agua Hedionda Creek. As part of Order 2001-01, the San Diego Regional Water Quality Control Board required all Copermittees to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program. The purpose of the program was to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain system, minimizing the negative impacts of human activities on these water bodies. This report summarizes the results of the 2007 dry weather monitoring season in detail and reviews the historical data and trends from the 2001 Permit Cycle.

Of the 100 sites in the historical dry weather monitoring program, 93 sites were accessible and visited in 2007. Thirty six sites had measurable flowing water and 25 sites were ponded with enough water to sample, combining for a total of 61 sites where initial field screening was conducted. Eighteen of these sites were chosen for laboratory testing for chemistry and microbiology parameters.

Twenty eight of the 61 sites initially screened had one or more field or laboratory parameter exceedance. The most common exceedances for field screening were ammonia and orthophosphate. The majority of these samples were from ponded water where organic matter breakdown may be causing the nutrient exceedances. Bacterial indicators were the only laboratory parameter that exceeded action levels. The prevailing source for ponded and flowing water was from residential and park over-irrigation. Over 700 letters targeting areas in the City where the various exceedances occurred were mailed to residents. Meetings were also held with Park maintenance staff and contractors to work together on reducing runoff from the City's parks.

Because the 2007 monitoring season concludes the 2001 permit cycle, a brief review of the past six years of dry weather monitoring data was conducted, including exceedance trends. In addition, variations in monitoring locations were found and incorrectly reported nitrate results from previous years were identified.

Eighteen sites of the 100 listed to visit in 2007, have had some type of variation between the past six years of sampling. During one or more monitoring seasons, a different storm drain was visited from the previous years, but labeled the same drain. For example, at Site L033, the picture of the site visited in 2006 appears to be different than the pictures taken the other five years, but it was still labeled and results recorded as L033. The majority of these sites has been dry and so do not affect historical data.

It has also been identified that for monitoring years 2005 and 2006, the nitrate results were reported as NO_3 as opposed to NO_3-N. This resulted in values that were erroneously high and some were falsely reported as exceedances. The 2002 and 2003 monitoring years appear to have followed the same procedure; however no notes or discussions have been found to

verify this. The historical data may be updated and re-submitted for Regional Urban Runoff Program use.

After these corrections were made, it appears that nitrate exceedances are consistent through the past six years. However, ammonia and orthophosphate exceedances were up in 2007, likely due to a higher number of ponded sites being sampled. Indicator bacteria exceedances have been decreasing since 2005. In the 2005 monitoring year 100% of lab sites exceeded the action level for one or more indicator bacteria; in 2006, 63% of lab sites exceeded the action level for one or more indicator; in 2007, 50% of lab sites exceeded the action level for one or more indicator.

Follow-ups continue to be conducted and ongoing monitoring and BMP selection are being analyzed at sites that have continued exceedances.

APPENDIX A

SAMPLE HISTORY OF SITES WITH STORM DRAIN VARIATION

S078 Sampling History

2003 – No field screening conducted.

2004 – Not visited.

2005 – No field screening conducted.

2006 – No field screening conducted.

2007 – Dry; no field screening conducted.

S102 Sampling History

2003 – No field screening conducted.

2004 - Not visited.

2005 – No field screening conducted.

2006 – No field screening conducted.

2007 – Ponded; field screening was conducted.

S104 Sampling History

2003 – Ponded; field screening was conducted.

2004 – Ponded; no field screening conducted.

2005 - Ponded; no field screening conducted.

2006 (appears to be S102) – field screening was conducted.

2007 – Ponded; field screening was conducted.

L024 Sampling History

2003 – No field screening.

2004 – Not visited.

2005 – No field screening

2006 – Different site; no field screening.

2007 – Field screening conducted on flowing water.

L033 Sampling History

2003 – No field screening conducted.

2004 – Not visited.

2005 – No field screening conducted.

2006 – Different site; no field screening conducted.

2007 - No field screening conducted.

L034 Sampling History

2003 – Dry; no field screening conducted.

2004 – Not visited.

2005 – Dry; no field screening conducted.

2006 – Inaccessible.

2007 – Dry; no field screening conducted.

L037 Sampling History

2003 – No picture. No field screening conducted.

2004 – No picture. No field screening conducted.

2005 – Field and laboratory screening conducted.

2006 – Field screening conducted.

2007 – Ponded; field screening conducted.

L050 Sampling History

2003 - Dry; no field screening conducted.

2006 - Dry; no field screening conducted.

2004 - Dry; no field screening conducted.

2007 - Dry; no field screening conducted.

2005 - Dry; no field screening conducted.

L051 Sampling History

2003 - Dry; no field screening conducted.

2004 - Dry; no field screening conducted.

2005 - Dry; no field screening conducted.

2006 - Dry; no field screening conducted.

2007 - Dry; no field screening conducted.

B023 Sampling History

2003 – Ponded; sampled for initial field screening.

2004 – Ponded; NOT sampled.

2005 – Small flow; NOT sampled.

2006 – Flowing; sampled for initial field screening.

2007 – Flowing; sampled for initial screening.

B030 Sampling History

2003 - Ponded; sampled for initial field screening.

2004 – Not Visited.

2005 - Ponded; sampled for initial field screening.

2006 - Ponded; sampled for initial field screening.

2007 – Dry; no field screening conducted.

B031 Sampling History

2003 - Ponded; sampled for initial field screening.

2004 - Not visited

2005 – Not accessible.

2006 – Not accessible.

2007 - Flowing; sampled for initial field screening.

B033 Sampling History

2003 – Field screening conducted (not specified where).

2004 – Visited, no screening.

2005 – Field Screening from ponded water.

2006 – Field screening of ponded water.

2007 – Field screening of flowing water from outfall

B101 Sampling History

2003 - Flowing; initial field screening conducted.

2004 – Dry; no field screening conducted.

2005 (appears to be B029 in 2007) – Ponded; sampled for initial field screening.

2006 - Dry; no field screening conducted.

2007 - Dry; no field screening conducted.

APPENDIX B

2007 SITE PHOTOS

SAN LUIS REY

S006

S013

S025

S032

S035

S041

S043

S044

S045

S047

S048

S052

S065

S072

S075

S077

S078

S085

S088

S102

S103

S104

S105

S106

S107

S108

S109

S110

S111

S113

S114

LOMA ALTA

L001

L002

L003

L004

L005

L006

L007

L008

Loma Alta Site Locations

L009

L010

L013

L019

L020

L024

L025

L027

L029

L031

L033

L034

L036

L037

L040

L043

L045

L046

L050

L051

L052

L054

L101

L102

L103

L105

L107

BUENA VISTA CREEK

B001

B002

B003

B022

B023

B024

B026

B027

B029

B030

B031

B032

B033

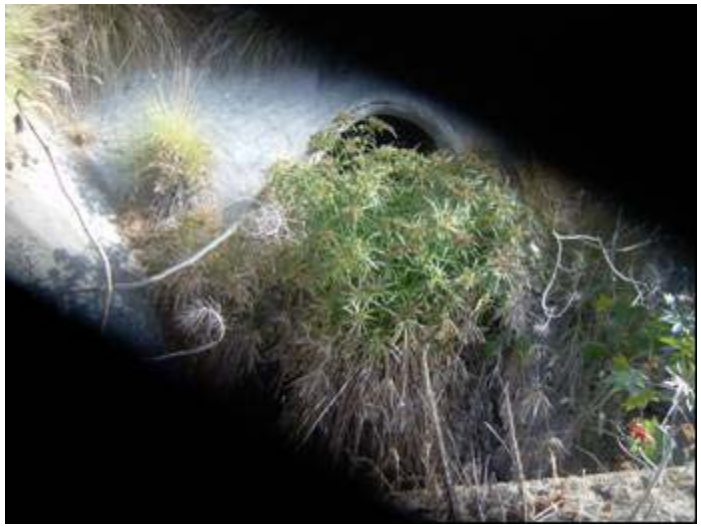

B034

B101

B102

B103

AGUA HEDIONDA

A002

A004a

A004b

A013

A014

A015

A016

A019

Agua Hedionda Site Locations

A021

APPENDIX C

2007 FIELD DATA SHEET

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

Routine Investigation **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID		**Latitude**	(e.g., 33.41174)	**Watershed**	**Hydrologic Unit**	(e.g., 7.00)
Location		**Longitude**	(e.g., -117.35213)		**Hydrologic Area**	(e.g., 7.10)
Date		**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time		**Observer**			**Discharge Area** (Optional)	

Land Use (Primary) (Check one only)	Residential	Commercial	Industrial	Agricultural	Parks	Open	
Land Use (Secondary) (Optional, greater than 10%)	Residential	Commercial	Industrial	Agricultural	Parks	Open	None
Conveyance (Check one only)	Manhole	Catch Basin	Outlet	Concrete Channel	Natural Creek	Earthen Channel	Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	Overcast	Fog		
Tide	N/A	Low	Incoming	High	Outgoing	**Tide Height:**_____ft.
Last Rain	> 72 hours	< 72 hours				
Rainfall	None	< 0.1”	> 0.1”			

RUNOFF CHARACTERISTICS

Odor	None	Musty		Rotten Eggs	Chemical		Sewage	Other
Color	None	Yellow		Brown	White		Gray	Other
Clarity	Clear			Slightly Cloudy	Opaque			Other
Floatables	None	Trash		Bubbles/Foam	Sheen		Fecal Matter	Other
Deposits	None	Sediment/Gravel		Fine Particulates	Stains		Oily Deposits	Other
Vegetation	None	Limited		Normal	Excessive			Other
Biology	None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No N/A

Evidence of Overland Flow? Yes No Irrigation Runoff Other: _____

Photo Taken Yes No **Photo #** _____

Field Screening Samples Collected? Yes No

Water Temp (C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)			

Analytical Lab Samples Collected? **Yes** **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

City of Oceanside

Jurisdictional Urban Runoff Management Program

2007-08 Annual Report

Prepared for:
San Diego Regional Water Quality Control Board

September 30, 2008

CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT

DATE: **September 29, 2008**

RE: **STATEMENT OF CERTIFICATION**
CITY OF OCEANSIDE JURISDICTIONAL URMP

I certify under penalty of law that the Jurisdictional Urban Runoff Management Program Annual Report for 2007-2008 was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

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SIGNATURE:

NAME: Mo Lahsaiezadeh
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ES EXECUTIVE SUMMARY

Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the San Diego Copermittees. Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2007-2008 annual reporting period (July 1, 2007 – June 30, 2008).

Report Organization

Section J of Municipal Permit 2007-0001 defines the requirements for the Jurisdictional Urban Runoff Management Program (JURMP) Annual Report and states that each JURMP Annual Report shall, at a minimum, contain a comprehensive description of all activities conducted by the Copermittee for each required component. The table below presents these components and the section in which they are discussed.

Municipal Permit 2007-0001 Components	Annual Report Section
Development Planning Component	Section 2.0
Land-Use Planning	Section 2.2
Environmental Review Process	Section 2.3
Development Project Approval and Verification Process	Section 2.4
Construction Component	Section 3.0
Municipal Component	Section 4.0
Industrial and Commercial Component	Section 5.0
Residential Component	Section 6.0
Illicit Discharge Detection and Elimination Component	Section 7.0
Education Component	Section 8.0
Public Participation	Sections 9.0
Fiscal Analysis Component	Section 10.0
Effectiveness Assessment Component	Section 11.0
Special Investigations	Section 12.0
Non-Emergency Fire Fighting	Section 13.0
JURMP Revisions	Section 14.0
Conclusions and Recommendations	Section 15.0

Pursuant with the Municipal Permit this document contains all of the required information.

Program Highlights

Below is a summary of each section which describes the Clean Water Program activities appearing in this Annual Report. Please refer to the individual section for more detailed information.

Section 2.0 Development Planning Component

All new development and redevelopment projects are subject to the priority project or standard project provisions in the City's Interim SUSMP. During this reporting period the City adopted an Interim SUSMP which includes revisions that conform to the requirements of the Municipal Permit. Minimum storm water BMP requirements are part of the City's standard conditions of approval and are required of all projects receiving discretionary permits. The City will not support the entitlement of a project or issue development permits until the appropriate documents are reviewed by City staff and approved by the City Engineer. Information of the SUSMP document reviews were performed during the 2007-2008 reporting period. The City evaluated its established environmental review process for all development projects to determine compliance with the new Municipal Permit and determined that the current environmental review process adequately addresses the requirements of the Municipal Permit.

Section 3.0 Construction Component

The City of Oceanside Clean Water Program provided an updated inventory of construction sites with the 2008 JURMP. During the reporting period, the Clean Water Program inspected the 50 construction sites to ensure they were in compliance with City Code.

Section 4.0 Municipal Component

The City of Oceanside Clean Water Program utilized its 2007-08 municipally owned inventory and inspected 230 municipal areas to ensure these facilities are in compliance with City Code. A total of 2,358 tons of waste was removed as a result of street sweeping and a total of 65.5 tons of waste was removed from the storm drain system (MS4) as part of the annual cleaning. Seven thousand two hundred and fifty two (7,252) feet of City sewer lines were slip lined and manholes pressure grouted and sealed in the Loma Alta watershed.

Section 5.0 Industrial and Commercial Component

The City of Oceanside Clean Water Program utilized its industrial and commercial business inventory submitted with the 2008 JURMP. Two hundred forty one (241) industrial businesses and 846 commercial businesses were inspected during this reporting period, to ensure these facilities are in compliance with City Code.

Section 6.0 Residential Component

The City of Oceanside has developed an extensive program that aims to reduce pollutant runoff from residential areas and activities to the maximum extent practical (MEP). The City of Oceanside Clean Water Program received 55 complaints on the Urban Runoff Hotline and Code Enforcement Program received 190 complaints from residents regarding potential urban runoff violations from residential areas and activities. Extensive educational efforts were made to help Oceanside residents understand watersheds, water quality and urban runoff impacts through presentations on a local television channel, Clean Water Program newsletters mailed to each household, and through information available on the Clean Water Program Website.

Section 7.0 Illicit Discharges Detection and Elimination Component

This section is intended to document the activities conducted by the City of Oceanside during the 2007-2008 reporting period to manage illicit discharges. In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2007-08 Illicit Discharge Detection and Elimination Component, including the 2008 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2008.

Section 8.0 Education Component

The City of Oceanside Clean Water Program continued to use a variety of avenues to educate various audiences about the Clean Water Program and the requirements of Municipal Permit Order 2007-0001. These outreach activities included municipal staff training, CWP newsletters, staffing community booths, conducted watershed education presentations, implementation of a 5th grade curriculum titled Project SWELL and targeting under-served audiences with educational materials.

Section 9.0 Public Participation Component

The Clean Water Program continued to sponsor beach and creek cleanup events and supported private groups who wanted to coordinate their own cleanup events. During this reporting period a total of 1,904 volunteers participated in these events, removing more than seven tons of trash, and debris, from the local waterways. In addition the City participated in regional education events including staffing a stormwater booth at the San Diego County.

Section 10.0 Fiscal Component

The City of Oceanside Clean Water Program continued to acquire funding from various sources to implement programs to meet Municipal Permit Order 2007-08. To secure adequate funding, the Water Utilities Department collects a Clean Water Program surcharge that is delineated on the utility bills for each household and is based on the customer's water consumption. During this reporting period an increase in surcharge was secured in order to cover significant increases in costs due to additional requirements under Municipal Permit Order 2007-001, Investigation Orders, and TMDLs. Approximate expenditures for the 2007-08 fiscal year are provided as well as the budget for the 2008-09 reporting period.

Section 11.0 Effectiveness Component

The City implemented an effectiveness assessment program to assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The City gathered and evaluated data for some of the program components for assessment during this reporting period. This data will be valuable for incorporation into long-term effectiveness evaluation on a jurisdictional level.

Section 12.0 Special Investigations

The City of Oceanside received funding from two sources to implement two water quality related projects: the San Luis Rey Bacteria Source Tracking Study and the Loma Alta Creek Ultraviolet Treatment Facility.

Lower San Luis Rey Bacteria Source Tracking

As part of the Proposition 50 Clean Beaches Initiative, the City of Oceanside was awarded $554,375 to track the sources of bacteria in the Lower San Luis Rey River. This study project has a goal to identify the sources and quantify the loading of bacterial contamination in the lower San Luis Rey River using a tiered approach. This approach will permit prioritization for mitigation of microbial contaminants and appropriate actions will be recommended to eliminate sources of bacterial contamination.

The Loma Alta Creek Ultraviolet Treatment Facility
The City was awarded a $5,000,000 Proposition 40 Clean Beaches Initiative (CBI) grant by the State Water Resources Control Board to construct an ultraviolet (UV) light treatment facility at the existing La Salina Wastewater Treatment Facility. The anticipated project goal is to eliminate beach closures during the dry months at Buccaneer Beach in Oceanside, California. This will be achieved by diverting the flow from the Loma Alta Lagoon through a UV treatment facility prior to discharging the flow onto the shoreline.

Section 13.0 Non-Emergency Fire Fighting

Non-emergency fire fighting BMPs and educational methods for reducing the discharge of pollutants from non-emergency flows to the MEP are described in Section 113.

Section 14.0 JURMP Revisions

Since the submittal of the City's 2008 JURMP in March 2008 there have been no changes or revisions to the document. It is anticipated that there will be changes during the next reporting period, fiscal year 2008-09.

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1.0 INTRODUCTION

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority (Copermittees) referred to in this document as the Municipal Permit (Municipal Permit). Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2007-2008 annual reporting period (July 1, 2007 – June 30, 2008).

This Municipal Permit is based on the Federal Clean Water Act (CWA), the Porter–Cologne Water Quality Control Act, applicable state and federal regulations, all applicable provision of statewide Water Quality control Plans and Polices adopted by the State Water Resources Control Board (SWRCB), the Water Quality control Plan for the San Diego Basin adopted by the Regional Water Quality Control Board (RWCQB), the California Toxics Rule, and the California Toxics Rule Implementation Plan. This Annual Report addresses the renewed NPDES Permit No. CAS0108758, which was first issued on July 16, 1990 (Order No. 90-42), and then renewed on February 21, 2001 (Order No. 2001-01).

In the interests of communicating consistent messages to the community regarding the most efficient and effective means of reducing storm water and urban runoff pollution, and as directed under Part J.5 of the Municipal Permit, this document was developed following the standardized format developed and agreed upon by the Copermittees. For the most part, compliance with the Municipal Permit was undertaken by the Copermittees through the development and implementation of the JURMP; therefore this Annual Report is organized in a similar format as the 2008 JURMP.

1.1 Background

Urban development typically involves conversion of natural space to developed areas that includes impervious surfaces such as streets, buildings, and parking lots. With the increase in human population and impervious surfaces associated with developed areas there tends to be higher runoff volume and velocity due to the impervious area's incapacity to absorb and hold rainwater. Also, human use of developed areas is associated with a number of pollutants that can be conveyed to the municipal separate storm sewer system (MS4) by a rain event or non-storm water discharges. This is called non-point source pollution. Non-point source pollution, such as urban runoff discharges to the MS4, is a large source of pollutants to receiving water bodies in the San Diego region and throughout the United States. Pollutants commonly associated with urban runoff include sediments, pesticides, fertilizers, herbicides, trash, oil and grease, and heavy metals. Such pollutants are generated by everyday activities such as construction, landscaping and vehicle use and maintenance.

Pollutants that reach receiving water bodies, such as streams, lakes, bays, lagoons, and the ocean, have the potential to significantly impact human and environmental health as well as wildlife that utilize these water bodies and surrounding habitat for survival. Notably, environmentally sensitive areas (ESA) are especially threatened by urban development because such areas tend to have lower capacities to withstand pollutants entering the area.

1.2 Purpose and Objectives

The purpose of this annual report is to present the activities the City conducted during the Fiscal reporting period of July 1, 2007 through June 30, 2008 to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The activities involved implementing, and improving where needed, existing programs and developing new programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. Improving the quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

Table 1-1 presents the organization of the City's JURMP Annual Report and a summary of the corresponding permit requirement in Order No. 2007-0001. Some Report sections and permit requirements overlap and will therefore found in multiple locations throughout the document.

Table 1-1. City of Oceanside 2007-08 Annual Report Compliance Summary.

2007-08 Annual Report	Description	Order No. 2007-0001
Section 1.0	Introduction	-
Section 2.0	Development Planning	D.1 J.3.a(3)(c)
Section 3.0	Construction	D.2 J.3.a(3)(d)
Section 4.0	Municipal Development	D.3.a J.3.a(3)(e)
Section 5.0	Industrial and Commercial Development	D.3.b J.3.a(3)(f)
Section 6.0	Residential	D.3.c J.3.a(3)(g)
Section 7.0	Illicit Discharge Detection and Elimination	D.4 J.3.a(3)(h)
Section 8.0	Education	D.5 J.3.a(3)(i)
Section 9.0	Public Participation	D.6 J.3.a(3)(j)
Section 10.0	Fiscal Analysis	J.3.a(3)(k)
Section 11.0	Effectiveness Assessment	J.3.a(3)(l)
Section 12.0	Special Investigations	-
Section 13.0	Non-Emergency Fire Fighting	J.3.a(3)(a)iv
Section 14.0	JURMP Revision	J.3.a(3)(m)
Section 15.0	Conclusions and Recommendations	-

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The development of urban areas has the potential to negatively impact the surrounding environment. The addition of impervious surfaces can alter the natural drainage patterns of the area, and development can facilitate the introduction of pollutants to the environment resulting from human activities. Accordingly, the City has developed measures to limit the potential for urban development to negatively impact the environment through careful land use planning and thoughtful design of development projects. Development projects are defined by the Municipal Permit as new development or redevelopment with land disturbing activities, structural development including construction or installation of a building or structure, the creation of impervious surfaces, public agency projects, and land subdivision. Through the implementation of the City's development planning component the City will reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP), protect receiving water bodies while managing increases in runoff that have the potential to increase erosion in streams or rivers.

This section documents the City Jurisdictional Urban Runoff Management Program (JURMP) Development Planning activities performed by the City of Oceanside during the reporting period of July 1, 2007 to June 30, 2008. The City has continued to implement the comprehensive Land-Use Planning component of the JURMP in order to satisfy the provisions of Section D.1 of the San Diego RWQCB Order No. R9-2007-0001, which is also referred to as the Municipal Permit. A directory of the subsections within the Municipal Permit Section J.3.a and corresponding Annual Report compliance sections are listed in Table 2.1, below.

Order R9-2007-0001 Compliance Summary

D.1.a Assess General Plan	See Section 2.2.1 of this Annual Report
D.1.b Revise Environmental Review Processes	See Section 2.3 of this Annual Report
D.1.c Modify Development Project Approval Processes	See Section 2.4 of this Annual Report
D.1.d Update SUSMP and Approval Process	See Section 2.4.4 of this Annual Report
D.5.b (1) Conduct Education Efforts Focused on New Development and Redevelopment	See Section 2.4.4 of this Annual Report

2.2 Land Use Planning

2.2.1 Background

The development planning component focuses on efforts to mitigate erosion and reduce pollutant discharges in urban runoff resulting from new development and redevelopment projects to the MEP through land use planning and development process that includes project review, approval, and verification.

The Land Use Element of the General Plan was amended in 2003 to include a number of water quality and watershed protection measures. The primary focus of the measures was to provide a more balanced relationship between the needs of the community and development interests, while managing finite natural resources. There were no water quality related amendments adopted into the General plan during this 2008 reporting period. The specific policies are detailed in Section 4.2.3 of the 2008 Jurisdictional Urban Runoff Management Program.

2.2.2 Source Characterization

Source characterization is an important component of any urban runoff program. Various land use types and activities are known to generate different combinations of pollutants that have the potential to negatively affect the surrounding environment, including the receiving waters.

The Interim SUSMP identifies ten (10) separate "Project Categories", which are cited as anticipated or potential sources of storm water pollution based upon a particular land use and specific site conditions. By identifying pollutant sources and the impairments to the receiving waters; a project may effectively mitigate storm water impacts, to the Maximum Extent Practicable (MEP) through the implementation of Low Impact Development (LID) practices and the appropriate application of a combination of Source Control, Site Design, and Treatment Control BMPs. Project Categories and General Pollutant Categories appear in Table 3 of the Interim SUSMP.

2.2.3 Best Management Practice Requirements

There are established minimum design requirements for all development projects, which are discussed in Section 4.4.3 of the 2008 JURMP. In addition, the Land Use Planning Element of the General Plan contains policies to protect water quality that are reflected in Section 4.2.3 of the 2008 JURMP. During the latter part of this reporting period (i.e. March 2008), the City adopted an Interim SUSMP which contains several new storm water requirements. The BMP requirements were influenced by the inclusion of the LID practices and the phased introduction of the Hydromodification Plan (HMP) as part of the Municipal Permit.

LID practices are included in the Site Design BMP discussion of the Interim SUSMP. The addition of LID practices lends direct support to the HMP component by providing a broad spectrum of design concepts aimed at minimizing the introduction of pollutants and offsetting the conditions of concern associated with impacts to the hydrologic regime.

The Interim SUSMP also includes Treatment Control BMP discussion which provides a direct correlation to pollutant types and physical characteristics that enable transport. This information assists the design professional in developing an effective BMP "treatment train" and facilitates the pursuit of the MEP standard. The Interim SUSMP is available at the City of Oceanside – Engineering Division counter or may be downloaded from the City website at http://www.oceansidecleanwaterprogram.org/pdf/OceansideSUSMP.pdf

2.2.4 Program Implementation

The General Plan has been adopted by the City Council and is a legally binding document; the City of Oceanside is required to abide by its policies. In addition to the General Plan, the City addresses water pollution through implementation of its Municipal Code. Chapter 40 of the

Municipal Code is the Urban Runoff Management and Discharge Control Ordinance and is commonly referred to as the Storm Water Ordinance. The Ordinance contains multiple references to the SUSMP. The City first adopted the SUSMP in 2002 as a condition of the governing Municipal Permit. The document was based on a regionally developed Model SUSMP. More recently, the SUSMP was revised to conform to the 2007 Municipal Permit and was adopted in March 2008 as the Interim SUSMP.

All new development and redevelopment projects will be subject to the priority project or standard project provisions in this Interim Local SUSMP, subject to the lawful prior approval provisions of the Municipal Permit. Development projects deemed not to be a threat to storm water quality, per the City's Urban Runoff Assessment form and on a case-by-case basis, may be exempt from SUSMP requirements. The Interim SUSMP was developed to address post-construction urban runoff pollution from various types of development projects. Certain categories of development projects were deemed more likely to discharge pollutants and are defined as Priority Development Projects (Priority Project) and are subject to additional storm water requirements. As part of the design process, Priority Projects must submit post-construction BMP plans, known as Storm Water Mitigation Plans (SWMPs). These SWMPs must list the BMPs proposed to address the potential pollutants likely to be generated by the development and conditions of concern typically associated with the type of development.

Details on the completed and planned SUSMP updates may be found in Section 4.4.4.4 of the 2008 JURMP. In addition, information pertaining to the legal authority to implement a storm water program is located in Section 2 of the 2008 JURMP.

2.3 Environmental Review Process

The City has evaluated its established environmental review process for all development projects to determine compliance with the new Municipal Permit. The City guides the developers through the filing necessary documents and identifies which reports are required to be submitted and approved before development may begin. The current environmental review process places emphasis on the evaluation of water quality impacts and related issues that may result from the project development.

The Planning Division and Engineering Division of the Development Services Department are responsible for reviewing development projects for conformance with storm water requirements. The City will continue to assess all development and redevelopment projects for compliance with the California Environmental Quality Act (CEQA) by reviewing the Environmental Initial Study checklist completed by each project applicant. A copy of this checklist is included in Appendix D of the 2008 JURMP. The checklist contains questions to evaluate potential negative impacts on receiving water bodies. Projects which are determined to have "potentially significant impacts" to the surrounding environment and receiving waters are required to prepare Environmental Impact Reports (EIRs) for City review. Development projects that do not need to prepare EIRs are allowed to proceed to the next phase of the approval process.

During the development of the 2008 JURMP the City evaluated its current established environmental review process for all new development and redevelopment projects to determine compliance with the new Municipal Permit. The City determined that the current environmental

review process adequately addresses the requirements of the Municipal Permit. While the specific requirements evaluated during the environmental review process are expected to change periodically, the basic review structure did not require revision during this reporting period. Details of the current environmental review process are provided in Section 4.3 of the City's 2008 JURMP update.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City has an established administrative and discretionary approval processes that provide multiple reviews by the Planning and Engineering Divisions. The Planning Division is responsible for determining acceptable land uses, development constraints, and identifying environmental issues. The Engineering Division is composed of various disciplines (i.e., Engineering Improvements, Grading and Drainage, Water and Sewer Utilities, Hydrology, Geotechnical, Storm Water, Traffic, and Landscape), which perform a coordinated review of all project applications. In addition, the Building Division coordinates with Storm Water Document Review to ensure that new development, remodeling projects, additions, or demolitions are reviewed for compliance with storm water regulations. The Fire Department also performs multiple reviews and notifies the appropriate division in the event of a discrepancy or nonconformance. The coordinated involvement of all Divisions and disciplines provides an elevated degree of assurance that all projects are subjected to thorough scrutiny as part of the normal review process. Particulars surrounding the project approval and process verification are discussed in the following sections.

2.4.2 Source Characterization

Understanding and identifying pollutant sources is a basic component in developing a comprehensive storm water mitigation program. Sufficient data exists to support the claim that a particular land use will generate, or potentially generate, certain types of pollutants.

Table 3 of the Interim SUSMP identifies ten (10) individual "Project Categories" that are known to contribute pollutants based upon land use type. The pollutants associated with various land uses are categorized as being anticipated or potential; depending on site specific conditions. All projects, i.e. Priority Development and Standard Development Projects, are required to identify "Pollutants of Concern from the Project Area" as part of the SWMP or Runoff Assessment Report (RAR). Once identified, the project shall implement appropriate BMPs to mitigate the pollutants generated by the project area. The Project Categories and General Pollutant Categories appear in Table 3 of the Interim SUSMP.

2.4.3 Best Management Practice Requirements

The Municipal Permit dictates minimum BMP requirements for all new development and redevelopment projects. The requirements are included in the City Storm Water Ordinance and Interim SUSMP and shall include, but not be limited to, the implementation of the following BMPs and LID practices by the project proponent:

- Source control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed outdoor material storage

areas, properly designed trash storage areas, and implementation of efficient irrigation systems;

- Low Impact Development (LID) BMPs where feasible to maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary;

- Buffer zones for natural water bodies, where feasible. Require the project proponent to implement other types of buffers such as trees or access restrictions where conventional setbacks are not feasible;

- Measures to mitigate discharges of pollutants that result during grading or construction activities as specified in the Section D.2 of the Municipal Permit; and

- Submittal of a mechanism under which ongoing long-term maintenance of all structural post-construction BMPs will be conducted.

These minimum storm water BMP requirements are an integral part of the City standard conditions of approval and are required of all projects receiving discretionary permits. The City will not support the entitlement of a project or issue development permits until the appropriate Interim SUSMP documents are reviewed by City staff and approved by the City Engineer. Any subsequent changes that affect the approved BMPs will be subject to an amendment process that includes review by City staff and approval by the City Engineer.

2.4.4 Program Implementation

2.4.4.1 SUSMP Revision

During this reporting period the City adopted an Interim SUSMP which includes revisions that conform to the requirements of the Municipal Permit. In addition, a permanent full-time staff member was added to the Engineering Division; assigned with the task of reviewing SUSMP documents for conformance with the Interim SUSMP and for ensuring that related engineering plans are consistent with the approved SUSMP documents.

The most significant changes to the SUSMP are related to LID practices and the Hydromodification Plan (HMP). At present, the City is collaborating with the other Copermittees to adopt a detailed Hydromodification Plan (HMP) by participating in shareholder meetings and sessions of the HMP TAC. The final HMP is not expected to be complete until the middle of 2009; however, the City has established and will continue to implement Interim Hydromodification Criteria until the final HMP is approved.

There are provisions in the Interim SUSMP that require the project to evaluate the conditions of concern as determined in a drainage study report. The drainage study report considers the project location with respect to the entire watershed, topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, and other relevant hydrologic and environmental factors. The drainage study report is also required to discuss watershed conditions based upon field observations and provide an evaluation of future impacts based upon the findings and the proposed development.

The drainage study report shall compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rate, velocity, time of concentration, and total runoff volume or detention volume. These characteristics shall be developed for the 2- year, 10-year, and 100-year frequency, six-hour or 24-hour, Type I storm for the coastal areas of San Diego County (as described in the San Diego County Hydrology Manual, September 2002). The largest peak flow shall be included in the drainage study report.

There are existing provisions in the SUSMP which parallel the HMP requirements for demonstrating that no adverse impacts to the downstream habitats or channels will occur as a result of development. These SUSMP provisions remain in effect for all projects during this interim period. Currently, all Priority Projects disturbing 50 or more acres are required to comply with the Interim Hydromodification Criteria, except for those sites that are considered exempt as described in Section D.1(6) of the Municipal Permit. There are no active projects in the City of Oceanside that are disturbing more than 50 acres during this reporting period. The City Interim Hydromodification Criteria and a time table for development of the HMP are located in Sections 4.4.3.1 and Section 4.4.4.4, respectively, of the 2008 JURMP.

The Municipal Permit includes LID practices. The addition of LID practices lends direct support to the HMP component by providing a broad spectrum of design concepts aimed at minimizing the introduction of pollutants and offsetting the conditions of concern associated with impacts to the hydrologic regime. LID practices are included in the Site Design BMP discussion of the Interim SUSMP.

Another inclusion from the Municipal Permit to the Interim SUSMP is a Treatment Control BMP discussion which provides a direct correlation to pollutant types and physical characteristics that enable transport. This information assists the design professional in developing an effective BMP "treatment train" and facilitates the pursuit of the MEP standard. The Interim SUSMP is available at the City of Oceanside – Engineering Division counter or may be downloaded from the City website at http://www.oceansidecleanwaterprogram.org/pdf/OceansideSUSMP.pdf

2.4.4.2 SUSMP Document Review

Each new development and redevelopment project is required to complete the Urban Runoff Threat Assessment Form – Attachment D of the Interim SUSMP. The form and associated development plans provide staff with information to perform a SUSMP determination. SUSMP determinations are performed on a case-by-case basis. A SUSMP determination typically places the vast majority of projects into a Priority Development or Standard Development category.

A very limited number of projects are not required to submit a SUSMP document and are noted as SUSMP exemptions. A SUSMP exemption differs from a SUSMP wavier of infeasibility. The City has never granted a waiver of infeasibility to a Priority Project and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may elect to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the project watershed.

A project with a SUSMP exemption is not categorized as a Priority or Standard Project; is not subject to permanent storm water requirements, and does not have a greater than "low" threat to water quality construction prioritization, pursuant to Section 1, Part A and Part B of the Urban Runoff Threat Assessment Form. Projects which are granted a SUSMP exemption typically involve incidental construction with negligible ground disturbance. Examples include the addition of an antenna to an existing cellular tower or interior tenant improvements to an existing building.

The overwhelming majority of new development and redevelopment projects are subject to the provisions of the Interim SUSMP. Projects are identified as Priority Development or Standard Development projects based upon land use categories and applicability of permanent storm water BMPs pursuant to Section 1 of the Urban Runoff Threat Assessment Form.

2.4.4.3 Priority Projects

Priority Projects are required to obtain an approved Storm Water Mitigation Plan (SWMP) as part of the entitlement process. The items required in a SWMP are described in Section 2.2.2 of the Interim SUSMP. In summary, Priority Projects must determine the Primary Pollutants of Concern based upon source characterization and impacts to the 303(d) impaired receiving waters. This category of development is required to provide Source Control BMPs while implementing LID practices and Site Design BMPs. The project must incorporate Structural Treatment Control BMPs into the site development. The selected Treatment Control BMPs must have a medium to high removal efficiency for the identified Primary Pollutants of Concern. The Treatment Control BMPs with low pollutant removal efficiencies are not permissible in the City of Oceanside.

Priority Projects must also have an approved Operation and Maintenance Plan (O&M Plan) and enter into a Storm Water Facilities Maintenance Agreement (SWFMA) to ensure the long-term maintenance and operation of the Treatment Control BMPs. The City Engineer will not consider Priority Project structural Treatment Control BMPs "effective," and therefore will not accept storm water BMPs as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. This mechanism shall be proposed by the project proponent as part of the SWMP and will be refined though the City's review process until satisfactory verification of maintenance is provided to the City Engineer. Such verification may include but is limited to covenants, legal agreements, maintenance agreements, and/or conditional use permits. A security may be required.

2.4.4.4 Priority Project Example

An example of a Priority Project is the Camino Town & Country Shopping Center (South) (Discretionary Permit No. P-4-07 and D-3-70REV.05). The project represents a commercial redevelopment site and encompasses a 4.4 acre watershed. The site is divided into two distinct drainage basins based upon restaurant and parking lot land uses. The project Site Design BMPs include minimizing impervious area, maximizing rainfall interception, and minimizing directly connected impervious areas.

The project incorporates a number of Source Control BMPs which include prohibitive dumping signage and stenciling, outdoor and trash storage areas designed to reduce pollutant introduction. The Center also incorporates an efficient irrigation system and landscape design.

The Treatment Control BMPs are designed to mitigate the nutrients and bacteria indicators. The restaurant component is isolated from the surrounding watershed by a trench drain. Low-flows are captured in the drain and conveyed to a proprietary underground detention facility. The detained flows represent the 85th percentile volume for the restaurant watershed. Runoff contained in the detention facility is conveyed to a proprietary self-contained wetland Treatment Control BMP marketed under the trade name "StormTreat™". The treated flows are directed by underground private storm drain to an existing grated curb inlet. The grated curb inlet captures flows from the upstream parking lot. The combined parking lot and treated restaurant flows are conveyed by private storm drain to a "Nutrient Separating Baffle Box™"; a proprietary linear hydrodynamic separator. The treated flows form a confluence with an MS4 which conveys runoff from the larger area-wide watershed to a stable, established outfall location on the northern bank of the Buena Vista Creek.

2.4.4.5 Standard Projects

Standard Projects are required to obtain an approved Runoff Assessment Report (RAR). The items required in a RAR are listed in Section 2.2.2 of the Interim SUSMP. Standard Projects must also identify the anticipated and potential pollutants based upon land use. The projects are required to implement Source Control and Site Design BMPs, and LID practices. Standard Projects are not required include Treatment Control BMPs. As such, the projects are not required to provide an O&M Plan or enter into a SWFMA.

2.4.4.6 Adequacy of Proposed Plans

The City Engineer will review submitted SUSMP documents and other relevant plans for compliance with the applicable SUSMP requirements. The City Engineer may approve proposed alternatives to the BMP requirements in the City's SUSMP if they are determined to be applicable and equally or more effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs and will be requested as part of a staff review cycle. The SWMP or RAR will be deemed complete when the City Engineer determines that the project complies with the Interim SUSMP. Project status is tracked by database and confirmed by hardcopy records.

2.4.4.7 Inspection

The City has compiled Treatment Control BMP information for all approved Priority Projects. All installed Treatment Control BMPs are regularly inspected by City inspectors to ensure intended function and proper maintenance. Inspection frequencies are based on the project's assigned Threat to Water Quality (TTWQ) as determined by Interim SUSMP Attachment D, the Urban Runoff Threat Assessment form. The Municipal Permit dictates that high priority sites shall be inspected annually and medium priority sites are to be inspected every two-years. Low priority site are inspected as needed. In addition, the Municipal Permit requires a minimum of 20% of the total number of projects with approved Treatment Controls and a maximum of twice the average number of projects with Treatment Control BMPs approved per year will be inspected annually. The Municipal Permit dictates 50% of all medium priority sites with

drainage inserts will be inspected annually. City Inspection staff performed a total of 41 SUSMP inspections during this reporting period.

It is the responsibility of the inspection staff to ensure that all BMPs proposed for the project have been built according to the construction plans before signing off on each stage of construction. The inspectors will use the project's plans to identify any missing or incorrectly installed structural BMPs and deny approval for sites with observed problems. City Staff inspected all Priority Projects subject to SUSMP requirements prior to occupancy to ensure that all LID, Source Control, and Treatment Control BMPs proposed for the project have been constructed in compliance with all approved plans and City permits and ordinances. Inspections of Priority Project sites prior to occupancy allows the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied use of the site are generated.

Since installation of structural BMPs will be closely inspected and signed off during regular grading and building inspections, the City does not expect major deficiencies in BMP installation to be found once construction is completed. However, some Treatment Control BMPs, such as filter inserts, are usually installed post-construction and thus may not be checked during grading and building inspections. To address this, correct BMP installation is also examined during the final project inspection, and building inspectors sign off on the final "red line" drawings that include any approved changes that were made to the plans during the course of construction. This provides City personnel with the ability to check the constructed project against the approved storm water documents. If any BMP, including filter inserts, is noted to be missing or incorrectly installed by City inspectors during or upon completion of construction, the City will require project to correct BMP deficiencies.

Inspections will include examination of all Treatment Control BMPs at the site to verify that each Treatment Control BMP is in working order, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings will be documented by the inspector using the City of Oceanside Treatment Control BMP Inspection form in Appendix D of the 2008 JURMP. Deficiencies in Treatment Control operation and maintenance are noted during the inspection, the responsible party is notified and appropriate enforcement actions take place as described in Section 4.4.4.9 of the 2008 JURMP, in order to achieve compliance. Inspection findings and follow-up actions for Treatment Control inspections are included in the City Treatment Control BMP tracking database.

The City will require annual verification of proper maintenance of all treatment control BMPs by the responsible party for maintenance prior to the start of the rainy season. The City requires all Priority Projects to include Operation and Maintenance checklists and a self-inspection log for the site's Treatment Control BMPs found in the project SWMP. The City will require these forms to be completed by the site's responsible party and be submitted to the City annually. The annual maintenance verification of Treatment Controls by the party responsible for maintenance is unlike any current program within the City. Due to this circumstance, the City anticipates re-evaluation its annual maintenance verification procedure to conform to current Municipal Permit requirements.

The City will use a variety of enforcement methods to ensure storm water requirements for all development projects within the City's jurisdiction are implemented. Enforcement measures will escalate with continued violations as necessary. A detailed description of the different enforcement measures used by the City of Oceanside to enforce its storm water regulations can be found in Section 2 of the 2008 JURMP.

The current plan check process includes steps to enforce the implementation of development requirements during construction. Since all Treatment Control BMPs are required to be shown on the project's plans, inspectors check to make sure these BMPs have been correctly installed during their routine inspections. Errors in BMP installation are noted during plan checks. Projects are required to promptly correct errors until BMP installation is consistent with the approved plan.

Enforcement of post-construction BMP maintenance after occupancy will include verbal and written warnings and monetary penalties. All enforcement actions will be documented appropriately in the development project's database file. If a development site receives frequent citations or is not responsive to previously issued enforcement actions, more severe actions, such as court actions, will be used as necessary. Details surrounding the City Treatment Control BMP inspection program may be found in Section 4.4.4.7 of the 2008 JURMP.

2.4.4.8 2007-2008 SUSMP Document Submittal and Review Summary

Numerous SUSMP document reviews were performed during the 2007-2008 reporting period. There were 184 Priority Project SWMP submittals which prompted 374 reviews with a total 36 projects receiving approval. Projects which Amended previously approved SWMPs from this reporting period and others; totaled 26 project Amendment submittals resulting in 53 reviews and yielding 22 approved SWMP Amendments.

There were a total of 12 Standard Projects which submitted RARs during the reporting period. The project submittals generated a total of 19 reviews; resulting in 4 projects receiving an approved RAR.

During the reporting period there were 27 Priority Projects that submitted O&M plans as part of the final engineering component. There were a total of 67 reviews performed with a total of 18 O&M Plans receiving approval. The SWMFA is typically submitted with O&M Plan. Some projects elect to "trail" the SWFMA submittal. During this reporting period 16 SWFMAs were submitted, prompting 30 reviews, resulting in 9 approved agreements.

All projects are subject to a SUSMP Determination. The determination process places the majority of developments into Priority Projects or Standard Projects. A small number of projects were found to be exempt from SUSMP requirements. Projects which are granted a SUSMP exemption typically involve incidental construction with negligible ground disturbance. Examples of projects that are eligible to receive an exemption include interior tenant improvements to an existing structure or the addition of an antenna to an existing cellular tower.

A SUSMP exemption differs from a SUSMP wavier of infeasibility. The City has never granted a waiver of infeasibility to a Priority Project and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may elect to develop a waiver mitigation

program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the project watershed. There were no SUSMP waivers of infeasibility granted during this reporting period. See Table 2-1 for more detail on project submittals and review results.

Table 2-1. 2007-2008 SUSMP Document Submittal and Review Summary

File Number(s)	Project Name	Type of Development	Number of Reviews in FY 07-08	Approved in FY 07-08 (Y N)
SWMPs				
D-10-07	Walk Residence	Residential	1	N
T-9-05	Del Oro Heights	Residential	4	N
D-7-07	Roberson's Batch Plant	Commercial	1	N
D-23-06	El Camino Executive Centre	Commercial	3	N
P-4-07	Target Center Revision	Commercial	3	N
ACP-11-06	610 S. Cleveland Street	Residential	2	N
P-14-06	Bayberry Drive	Residential	2	N
T-11-04	Lusardi Capistrano	Commercial	5	N
T-6-06	Vista Pacific	Residential	3	N
RC-28-06	Laguna Pacifica Revision	Residential	1	N
D-12-01 Rev07	Canyon Plaza	Commercial	2	N
P-7-06	Oceanside Pavilion	Commercial	4	N
P-1-07	El Camino Medical Condo	Commercial	5	Y
D-29-06	Pacific Coast Business Park A	Commercial	4	Y
D-30-06	Pacific Coast Business Park B	Commercial	4	Y
D-31-06	Pacific Coast Business Park C	Commercial	4	Y
C-30-07	Von Dutch Kustom Cycles	Commercial	1	N
D-11-03	Mohsen Fuel	Commercial	3	N
T-3-05	Mesa Ridge	Residential	1	N
D-6-07	The Fellowship Center	Commercial	1	N
D-25-06	Pacific View Medical Office	Commercial	3	N
T-11-05	Liberty Walk Phase1	Commercial	4	Y
T-11-05	Maxson Country Club	Commercial	4	Y
RC-19-07	1611 S. Pacific St	Residential	2	Y
RC-21-07	Walker Chapel Revision	Commercial	1	N
T-3-06	3003 Guajome Road		2	N
ACP-7-07	South Coast Scooters	Commercial	1	N
D-3-93rev07	King of Kings	Commercial	1	N
D-24-06	Eternal Hills	Commercial	3	N
RC-20-07	Caufield Addition	Residential	1	N
P-13-99	Mizukami / Kerkoff Residence	Residential	1	N
ACUP-13-07	Sprint 420 N. El Camino	Commercial	1	N
D-24-04rev07	Pacific View Charter School	Commercial	1	N
P-8-07	Palm Tree Plaza PM	Commercial	1	N
C-33-07	Jump and Co., Inc	Commercial	1	N
ADP-4-07	McCloskey Residence	Residential	2	N
ACUP-12-07	Sprint/Nextel Mesa Dr	Commercial	1	N
P-7-07	Seagate Parcel 10	Commercial	1	N
E-1-06	Coates Property	Residential	1	N
D-2-85Rev.08	Presidio Condos	Residential	2	N
P-1-03	Oceanside Gateway Business Park	Commercial	1	N
D-3-79 Rev05	Town & Country Center	Commercial	2	Y
ACP-9-07	Kong Residence	Residential	1	N

RC-23-07	1801 S. Pacific Street	Residential	1	N
P-2-05	Avocado Road PM	Residential	1	N
C-35-07	Ben's Recycling	Commercial	1	N
C-38-01REV07	24-Hr CVS	Commercial	1	N
P-4-06	Oceanside Pavilion	Commercial	5	N
D-2-93	New Venture Christian Fellowship	Commercial	4	Y
ADP-2-06	Loma Alta Creekside	Commercial	4	Y
D-30-05	Smith/Spitz Revision	Residential	1	N
T-6-05	Guajome Crest Homes	Residential	5	Y
T-201-07	Tradewinds	Residential	2	Y
D-6-03Rev08	Oceanside Gateway Parcel 1	Commercial	1	N
E-1-08	Regottie Residence	Residential	1	N
ACUP-1-08	SIFT Workout	Commercial	1	N
T-200-07	Hyatt	Commercial	2	N
ADP-1-08	McKay Residence	Residential	1	N
P-204-07	516 S. The Strand	Residential	1	Y
RC-12-03Rev08	Enright Extension	Residential	1	N
D-8-07	La Pacifica 2	Residential	4	Y
ADP-3-05	4000 Vista Way, LLC	Commercial	1	N
C-7-97 Rev07	Ocean's 11	Commercial	1	N
C-24-04 Rev08	Coastline Baptist Church	Commercial	1	N
D-32-06	VDO Medical	Commercial	4	N
T-12-04	Oceanpointe	Residential	6	Y
D-11-06	Community Lutheran Church	Commercial	4	Y
T-203-06	City Mark Block 5	Commercial	3	Y
T-203-06	City Mark Block 18	Commercial	3	Y
T-203-06	City Mark Block 19	Commercial	3	Y
T-203-06	City Mark Block 20	Commercial	3	Y
T-203-06	City Mark Block 21	Commercial	3	Y
AAP-1-08	Balma Residence	Residential	1	N
P-3-07	Bahama Garden	Residential	1	N
RC-4-08	500 Motors	Commercial	1	N
ACUP-3-08	Omnipoint communication	Commercial	1	N
ACUP-9-08	Sprint Mission Center	Commercial	1	N
ACUP-11-08	Sprint King of Kings	Commercial	1	N
ADP-6-06	Elfens Children's School	Commercial	1	N
D-8-08	Oceanside Airport Park Development	Commercial	1	N
ACUP-6-08	Payless Shoes	Commercial	1	N
D-9-08	VA Clinic Seagate	Commercial	1	N
C-14-08	Susie's Place	Commercial	1	N
RC-2-06	MacDonald Residence	Residential	1	N
D-12-01	Jack in the Box	Commercial	1	N
D-29-05	Mission & Douglas	Commercial	3	N
ACUP-11-07	Ominpoint Comm, DBA T-Mobile	Commercial	1	N
P-11-05	Essex Rcho Del Oro Time Extension	Commercial	1	N
RC-17-07	829 S. Pacific St, Lot 16	Residential	1	N
D-5-08	Windstar Ocean Ranch 19	Commercial	2	N
ACUP-08-05	2605 Temple Heights - Sprint Renewal	Commercial	2	N
ACP-1-08	2049 S. Nevada Street	Residential	2	N
RC-6-08	1618 S. Pacific Street	Residential	1	N
T-2-06	Avocado Highlands	Residential	4	N
V-2-08	Northrop Variance	Residential	1	N
RC-2-04REV08	1709 S. Pacific Street	Residential	1	N

D-3-07	Cassidy Plaza	Commercial	1	N
V-12-07	825 S. Pacific	Residential	1	N
P-18-04TE08	Taylor Subdivision Time Extension	Residential	1	N
D-28-06	Amazon Bikes	Commercial	2	N
D-3-08	Melrose Station Commercial Center	Commercial	2	N
D-22-06	1552 Mission Square	Commercial	3	N
ACUP-4-08	Best Western - Sprint renewal	Commercial	3	N
T-7-04TE08	Bella Terra Townhomes Time Extension	Commercial	2	N
C-16-08	Treescapes Sprint Renewal	Commercial	1	N
RC-12-07	823 S. Pacific Street	Commercial	3	Y
C-21-08	Ocean Health Clinic	Commercial	1	N
D-4-08	Pacific Coast Medical Center	Commercial	2	N
C-34-07	Walker Chapel	Commercial	3	N
P-7-08	Hahn PM	Residential	1	N
D-5-07	Villa at Mission SLR	Commercial	3	N
ACP-4-08	Cavalier Mobile Estates Storage	Commercial	1	N
D-15-07	MSLR Parking Lot Improvement	Commercial	2	N
ADP-2-07	Downs Residence	Residential	2	N
C-25-08	Euro Institute of Skin Care	Commercial	1	N
ADP-6-07	Elfens Children's School	Commercial	2	N
P-1-86	Rancho del Oro, Parcel 9 GP2831	Commercial	1	N
ACUP-12-08	ATT Cingular 6534 Indian Trails	Commercial	1	N
P-202-08	Hughes Residence	Residential	3	Y
P-201-08	Lauer Residence	Residential	2	Y
P-203-08	Pacific View Villas	Residential	1	N
T-202-07	Pacific Blue Residences	Residential	2	N
City Project	Seawater Desal Pilot	Commercial	1	N
P-4-08	Windstar Lot 19 (Ocean Ranch 19)	Commercial	3	N
T-7-05	Clublife	Commercial	4	Y
ADP-3-08	202 S. El Camino Real	Residential	1	N
D-1-08	Mission Animal & Bird Hospital	Commercial	3	N
ACUP-14-08	Oceanside CrossFit	Commercial	1	N
D-13-07	Fawcett Residence	Residential	3	Y
P-12-01	Hensel Parcel Map	Residential	1	N
T-16-02	Rancho Vista	Residential	4	N
RC-205-08	Mobile Service Station	Commercial	1	N
P-3-08	Pacific Coast Med Center	Commercial	4	Y
P-15-04TE08	Robertson Time Extension	Residential	1	N
D-27-02REV08	1302 S. Pacific St REV	Residential	1	N
D-17-04REV08	Pacific Coast Business Park Revision	Commercial	1	N
RC-11-07	825 S. Pacific Street	Residential	1	N
P-19-06	Lil' Jackson Senior Community	Commercial	3	N
D-26-05	Adobe Estates	Residential	2	N
D-10-07	Walk Residence	Residential	1	N
T-9-05	Del Oro Heights	Residential	4	N
D-7-07REV08	Roberson's Batch Plant	Commercial	1	N
D-23-06	El Camino Executive Centre	Commercial	3	N
P-4-07	Target Center Revision	Commercial	3	N
ACP-11-06	610 S. Cleveland Street	Residential	2	N
T-11-04	Lusardi Capistrano	Commercial	5	N
T-6-06	Vista Pacific	Residential	3	N

RC-28-06	Laguna Pacifica Revision	Residential	1	N
D-12-01 Rev07	Canyon Plaza	Commercial	2	N
P-7-06	Oceanside Pavilion	Commercial	4	N
P-1-07	El Camino Medical Condo	Commercial	5	Y
D-29-06	Pacific Coast Business Park A	Commercial	4	Y
D-30-06	Pacific Coast Business Park B	Commercial	4	Y
D-31-06	Pacific Coast Business Park C	Commercial	4	Y
ACUP-10-07	AT&T Tri-City	Commercial	1	N
D-11-03	Mohsen Fuel	Commercial	3	N
T-3-05	Mesa Ridge	Residential	1	N
D-6-07	The Fellowship Center	Commercial	1	N
D-25-06	Pacific View Medical Office	Commercial	3	N
T-11-05	Liberty Walk Phase1	Commercial	4	Y
T-11-05	Maxson Country Club	Commercial	4	Y
RC-19-07	1611 S. Pacific St	Residential	2	Y
C-57-05	Sprint 4700 Mesa Dr	Commercial	1	N
RC-21-07	Walker Chapel Revision	Commercial	1	N
ACP-7-07	South Coast Scooters	Commercial	1	N
C-32-07	The Wine Cellar	Commercial	1	N
D-3-93rev07	King of Kings	Commercial	1	N
D-24-06	Eternal Hills	Commercial	3	N
RC-20-07	Caufield Addition	Residential	1	N
P-13-99	Mizukami / Kerkoff Residence	Residential	1	N
D-24-04rev07	Pacific View Charter School	Commercial	1	N
P-8-07	Palm Tree Plaza PM	Commercial	1	N
ADP-4-07	McCloskey Residence	Residential	2	N
P-7-07	Seagate Parcel 10	Commercial	1	N
V-11-07	Sandifer Variance	Residential	1	N
RC-8-07	Bahama Garden	Residential	1	N
D-9-07	Cleveland Street Five	Residential	1	N
D-35-06	Melrose Commercial Center	Commercial	4	Y
P-2-92	Wal-Mart Expansion	Commercial	3	Y
D-10-1980	North County Place	Commercial	1	N
E-1-06	Coates Property	Residential	1	N
D-2-1985	Presidio Condos	Residential	2	N
P-1-03	Oceanside Gateway Business Park	Commercial	1	N
D-3-79 Rev05	Town & Country Center	Commercial	2	Y
Total SWMP Project Submittals: 184 Total SWMP Reviews: 374 Total SWMPs Approved: 36				
SWMP Amendments Addendums				
RC-16-03	Stroud Residence	Residential	2	Y
T-13-02	Ocean Heights Estates	Residential	2	Y
T-7-04	Bella Terra	Residential	2	N
D-16-02	Union Plaza Parking	Commercial	2	Y
T-203-04	Portola Mixed Use Project	Mixed-use	2	Y
T-201-02	Nevada Manor	Residential	2	Y
RC-16-03	1507 S. Pacific Street	Residential	2	Y
T-203-05	314 S. The Strand	Residential	2	N
RC-206-04	Holiday Inn / Hotel	Commercial	2	Y
D-6-03	Oceanside Gateway Business Park Par 2 - 4	Commercial	2	Y
D-6-03	Oceanside Gateway Business Park	Commercial	2	Y

D-31-05	Ocean Ranch Lot 15	Commercial	2	Y
P-12-02	Schnell	Commercial	2	Y
T-201-05	Montego Condos	Residential	2	Y
D-1-06	Oceanview Plaza Lot 3	Commercial	3	Y
RC-28-06	Laguna Pacifica	Residential	1	Y
P-4-07	Camino Town & Country (South)	Commercial	1	N
D-24-06	Eternal Hills	Commercial	2	Y
D-4-01	Barnwell Road-Hyta	Residential	3	Y
RC-14-06	1623 S. Pacific	Residential	2	Y
P-21-06	Pac Coast Business Park - Park B	Commercial	2	Y
P-22-06	Pac Coast Business Park - Park C	Commercial	2	Y
Total SWMP Project Amendments: 26 Total SWMP Amendment Reviews: 53 **Total SWMP Amendments Approved: 22**				
D-3-05	Tri-City Towers Parking	Commercial	1	N
D-15-07	MSLR Parking Lot Improvement	Commercial	1	N
P-202-07	702 N. The Strand	Residential	1	N
D-2-08	3361 Mission Ave	Residential	1	N
P-202-07	702 N. The Strand	Residential	2	Y
RC-201-08	Fraser Covell	Residential	2	Y
D-1-06	Oceanview Plaza Lots 1 & 2	Commercial	3	Y
GPA-2-07	Mission View Manor Lot	Residential	1	N
P-208-06	807 N. Pacific Street	Residential	1	Y
D-8-99REV07	Singh Farms	Commercial	3	N
E-2-08	Jackson Residence	Residential	1	N
P-3-07	Bahama Gardens	Residential	2	N
Total RAR Projects Submitted: 12 Total RAR Reviews: 19 Total RARs Approved: 4				
O M Plans				
RC-23-06	Firtel Residence	Residential	3	N
D-16-02	Union Plaza Parking	Commercial	2	Y
T-203-04	Portola Mixed Use Project	Mixed-use	2	Y
P-2-92	Wal-Mart Expansion	Commercial	1	Y
RC-16-03	1507 S. Pacific Street	Residential	2	Y
T-203-05	314 S. The Strand	Residential	1	N
D-2-93	New Venture Christian Fellowship	Commercial	4	Y
D-28-05	Essex Rancho Del Oro	Commercial	3	Y
D-19-03	Union 76 Oceansider	Commercial	2	Y
T-201-05	Montego Condos	Residential	3	Y
RC-206-04	Holiday Inn	Commercial	2	Y
T-5-06	Libby Lake Village	Residential	3	Y
P-19-05	Pacific Tides Condos	Residential	4	Y
T-3-04	North River Village	Mixed-use	3	Y
D-4-01	Barnwell	Residential	2	Y
D-3-79 Rev05	Town and Country	Commercial	2	N
D-29-05	Mission & Douglas	Commercial	3	N
P-2-08	1213 S. Pacific Street	Residential	1	N
P-22-06	Pacific Coast Business Park C	Commercial	3	Y
P-21-06	Pacific Coast Business Park B	Commercial	3	Y
P-200-07	412 S. The Strand	Residential	1	N
D-88-99Rev07	Singh Property	Commercial	3	N
P-20-06	Pac Coast Business Park Park B	Commercial	1	N
RC-19-07	1611 S Pacific Street	Residential	2	N

D-8-07	OR La Pacifica PH2, Lot 11	Commercial	3	Y
T-5-04	2137 Willowbrook Drive	Residential	4	Y
D-12-01	Jack in the Box	Commercial	4	Y
Total O M Plan Projects Submitted: 27 Total O M Plan Reviews: 67 Total O M Plans Approved: 18				
SWFMAs				
T-203-04	Portola Mixed Use	Mixed-use	2	N
D-28-05	Essex Rancho del Oro	Commercial	2	N
P-1-03	Oceanside Gateway Business Park	Commercial	2	Y
D-29-06	Pacific Coast Business Park A	Commercial	1	N
D-30-06	Pacific Coast Business Park B	Commercial	2	Y
D-31-06	Pacific Coast Business Park C	Commercial	2	Y
T-15-05	Thunderbird	Residential	1	N
RC-19-07	1611 S. Pacific	Residential	2	N
D-31-05	Ocean Ranch Corp Ctr. II Lot 15	Commercial	2	Y
D-8-07	Ocean Ranch La Pacifica Lot 11	Commercial	2	N
T-5-04	2137 Willowbrook Drive	Residential	2	Y
D-19-03	Union 76, Oceansider	Commercial	2	Y
T-5-06	Libby Lake Village	Residential	2	N
P-19-05	Pacific Tides	Residential	2	Y
RC-207-04	Chevron	Commercial	2	Y
T-1-06	Loma Alta Village	Commercial	2	Y
Total SWFMAs Submitted: 16 Total SWFMA Reviews: 30 Total SWFMAs Approved: 9				
SUSMP Exemptions				
ACUP-8-07	Cricket 4755 Oceanside Blvd	Commercial	1	Y
ACUP-10-07	AT&T Tri-City	Commercial	1	Y
C-57-05	Sprint 4700 Mesa Drive	Commercial	1	Y
C-29-82	Bubble Bath	Commercial	1	Y
C-33-07	Jump and Co., Inc	Commercial	1	Y
C-31-07	American Tower	Commercial	1	Y
C-32-07	The Wine Cellar	Commercial	1	Y
C-15-07	Sprint renewal Sleeping Indian	Commercial	1	Y
C-36-07	Sprint 3156 Vista Way	Commercial	1	Y
C-7-08	Sprint 4705 N. River Rd	Commercial	1	Y
C-33-06	Cingular 3000 Guajome Lake Road	Commercial	1	Y
C-9-08	Oceanside Wings,Spirits CUP	Commercial	1	Y
C-20-08	Verizon at 2182 El Camino	Commercial	1	Y
C-23-08	Verizon at 1501 Kelly Street	Residential	1	Y
C-25-08	Euro Institute of Skin Care	Commercial	1	Y
C-15-08	N. Coast Methodist Church - Sprint renewal	Commercial	1	Y
C-56-05	Sprint SDGE Substation	Commercial	1	Y
ACUP-8-07	Cricket 4755 Oceanside Blvd	Commercial	1	Y
C-30-07	Von Dutch Kustom Cycles	Commercial	1	Y
C-31-07	American Tower	Commercial	1	Y
ACUP-13-07	Sprint 420 N. El Camino	Commercial	1	Y
ACUP-12-07	Sprint/Nextel Mesa Dr	Commercial	1	Y
C-15-07	Sprint renewal Sleeping Indian	Commercial	1	Y
Total SUSMP Exempt Submitted: 23 Total Exempt Reviews: 23 Total Exempt Approved: 23				

2.4.4.9 Outreach and Staff Training

City officials involved in planning and review of development projects received a comprehensive training on storm water requirements during this reporting period. See Table 2-2 for the departments and city officials that were provided training. Training topics during this reporting period focused on general water quality concepts, specific SUMSP requirements, LID components that can be recommended for specific projects, implementation procedures and minimal information about future HMP components.

Table 2-2. Staff Training during the 2007-2008 Reporting Period.

Department/Commission	Training Date	Number in Attendance
Planning Commission	April 7, 2008	7
Planning Department Staff	June 10, 2008	10
Engineering Inspectors	June 12, 2008	10
Building Division	July 30, 2008	12

2.5 Development Planning Component Effectiveness Assessment

See Section 11.0 for an assessment of the development planning component of the City's JURMP.

2.6 Program Review and Modification

The Development Planning components of this Report, the City JURMP, and the SUSMP will be revised as necessary to conform to the future requirements of the Municipal Permit. Major revisions to the Development Planning component will be cited in Section 14 of the City JURMP.

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

Construction and grading activities have the potential to impact neighboring water bodies due to the presence of disturbed soils and building materials. It is important that construction sites take appropriate measures to prevent potential pollutants from entering the storm drain system.

The purpose of the construction component section of the City's JURMP is to provide guidance in order to limit the negative impact that construction and grading activities can have on receiving water bodies. The information in this section of the annual report describes how the City of Oceanside met the minimum requirements outlined in Section D.2 of the Municipal Permit Order 2007-0001 to reduce the release of pollutants into the storm drain system to the Maximum Extent Practicable (MEP) (Table 3-1).

Table 3-1: Order 2007-0001 Compliance Summary

D.2.a Ordinance Update and Approval Process	See Section 3.3 of this Annual Report
D.2.b Source Identification	See Section 3.2 of this Annual Report
D.2.c BMP Implementation	See Section 3.4 and 3.5 of this Annual Report
D.2.d Inspection of Construction Sites	See Section 3.5.2 of this Annual Report
D.2.e Enforcement of Construction Sites	See Section 3.5.3 of this Annual Report
D.2.f Reporting of non-compliant sites	See Section 3.5.3 of this Annual Report

A large portion of the Construction Component of the City's JURMP is described in three documents:

- Chapter 40 of the City Code or Ordinances
- City's Grading Regulations Manual
- City's *Construction Urban Runoff Requirements Manual* (Construction Manual).

All of these documents are available on-line via the City's website.

This section of this annual report primarily discusses those portions of the Construction Component that are not contained within these documents and references these documents for additional information where appropriate. The information presented in this section was developed pursuant to Section D.2 of the Municipal Permit.

The Construction Manual was developed by the City to provide construction projects with guidance in order to comply with the City Code and its ordinances. The Construction Manual is a living document and will change with time to ensure an effectively implemented program. Updated versions of the manual will be made available whenever modifications have been proposed and approved by the City. During this reporting period some changes were made to the Construction Manual which are detailed below.

- Exempt projects and low priority SWPPP forms are no longer used since specific criteria are now referenced to determine if a project is required to develop a SWPPP. For updated language that complies with Permit Order 2007-0001 refer to Section 3.1 of the Construction Manual submitted as Appendix C.1 with the City's 2008 JURMP.
- Added requirement that all employees working at the construction site should be aware of the BMPs for the site.
- New BMPs have been added to meet Municipal Permit requirements. The BMP table has been altered to include a single set of BMPs required for all Regulated Construction Sites. The Manual states that these BMPs will be implemented "as applicable", which provides enough flexibility for sites of all priorities to implement only those BMPs necessary to meet the City's MEP standard.
- Updated construction site inspection frequencies in Chapter 6 to meet requirements for Permit Order 2007-0001.
- Maximum Disturbed Area limit and the Advance Treatment Methods have been added.
- Added a definition for the new Municipal Permit in the Definitions section.

3.2 Source Characterization

3.2.1 Site Inventory

The City has compiled a watershed-based inventory of all active construction sites within its jurisdiction. The inventory includes details on each construction site, including project name, location, and threat to water quality (TTWQ) as determined by the process described in Section 5.2.1.1 of the 2008 JURMP

The City's inventory process for construction sites is based on information collected from construction projects when they are applying for a grading or building permit. When the permit is approved, this information is then entered into a database developed by the City. If a permit was previously issued for a project, then the database is updated to reflect the most up-to-date information. Although the City's inventory process is an ongoing one, prior to the rainy season, the database is reviewed to ensure that it is up-to-date and cross-referenced with any other applicable databases to ensure completeness. A spreadsheet of active construction projects in the City's jurisdiction as of June 30, 2008 can be found at the end of this section as Table 3-2.

3.2.2 Construction Site Prioritization

All construction sites within the City's jurisdiction are assigned a priority of high, medium, or low TTWQ. Following are criteria used to determine the level of TTWQ.

Construction sites that meet any of the following criteria are considered a **High** TTWQ:

- A site 50 acres or more in size where grading will occur during the wet season.
- A site one acre or more and tributary to a CWA section 303(d) water body segment impaired for sediment or within, directly adjacent to, or discharging directly to a receiving water within an ESA.
- A site that has been determined by the City or the RWQCB to pose a significant threat to water quality.

Sites that are greater than one acre but do not meet any of the above criteria are considered a **Medium** TTWQ.

Sites less than one acre and are not determined to be a significant threat to water quality are considered a **Low** TTWQ. See Table 3-2 at the end of this section for a list of active construction sites and their assigned TTWQ.

Construction projects determine their TTWQ priority by completing the City's Urban Runoff Threat Assessment Form (Appendix D of the 2008 JURMP Update). This form contains information from the City's Construction Urban Runoff Requirements Manual (Construction Manual) on how to evaluate a construction site's TTWQ. The City's full Construction Manual can be found in Appendix C of the 2008 JURMP Update. The Urban Runoff Threat Assessment form requires all construction sites to respond to the following questions when assigning priority:

- Item 1: Are you grading or otherwise disturbing soil over more than one acre?
- Item 2: Will the project involve grading or soil disturbance?
- Item 3: Is the project tributary or adjacent to environmentally sensitive water bodies within the City?
- Item 4: Does the project include significant erodible slopes?
- Item 5: Does the project have the potential to produce non-storm water discharges or pollutants?
- Item 6: Will the project result in more than 5,000 square feet of impervious surface area?

All project proponents are directed to reference a prioritization matrix to determine the priority of the project. An example of the matrix is provided as Table 3-3 below. The matrix is used by first locating the appropriate row in the matrix according to the size of the project, then moving across the row. The proponent should refer to the answers given to the five questions above. If "Yes" was responded to a question, the corresponding box in the matrix provides the priority for the project. The use of this matrix was developed consistent with the requirements of the Permit Order 2007-0001. Under this process, construction sites that meet either of the following conditions must be classified as High Priority. An inventory of Development Projects with approved Treatment Control BMPs and its associated TTWQ are included as Table 3-2 at the end of this section.

Table 3-3. Construction Project TTWQ Prioritization Matrix.

Project Size	Item 2	Item 3	Item 4	Item 5	Item 6	Default Priority
Greater than 50 acres	High	High	High	High	High	Medium
5□50 acres	□	High	High	High	High	Medium
1□5 acres	□	High	Medium	Medium	Medium	Medium
Less than 1 acre	□	Medium	Medium	Medium	Medium	Low

3.3 Updates to Ordinances and Approval Processes

During this reporting period there were no updates to the City's ordinances or approval process. Storm water compliance requirements for construction activities are included in the City's Construction Manual found in Appendix C of its 2008 JURMP.

Once the City revises its SUSMP, the Construction Manual will again be reviewed and changes will be made appropriately. In addition, ordinances will be reviewed to make sure they reflect the information in the SUSMP and allow for LID components to be implemented into development projects.

3.4 Best Management Practice Requirements

The City has a set of minimum Best Management Practices (BMPs) that must be implemented at all construction sites regardless of TTWQ priority including implementing and maintaining general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the MEP. Table 5-2 of the City's 2008 JURMP (pp. 5-4 and 5-5) outlines the minimum construction BMPs required by the City along with the reference to corresponding current fact sheets obtained from the Caltrans Storm Water Quality BMP Handbook and California Stormwater Quality Association (CASQA) for Construction Sites.

A Construction BMP brochure titled "A Pollution Prevention Guide for the Construction Industry" is provided to the developer during pre-development meetings. This brochure provides a sample drawing that illustrates the minimum BMPs that must be used at all construction sites to protect storm drains and minimize pollution. See Attachment 3-A for a copy of this brochure. This brochure is also available at both the Engineering and Building Department counters of the City. During this reporting period this brochure was reviewed, revised and reprinted.

3.5 Program Implementation

All construction sites are required to select, install, and maintain BMPs that meet or exceed the City's minimum BMP requirements listed in Section 5.4.1 of the 2008 JURMP and in the City's Construction Manual. Additionally, a construction site over one acre where grading will occur is subject to the National Pollutant Discharge Elimination System (NPDES) General Construction Permit and is required to file a Notice Of Intent (NOI) and develop a Storm Water Pollution Prevention Plan (SWPPP). SWPPPs are required to include a list of BMPs that will be implemented during each phase of construction to reduce pollution discharges to the MEP.

3.5.1 Education and Staff Training

Site owner/developer education and training

The City provides all appropriate parties involved with construction activities with training and informational materials regarding storm water quality, as applicable. These parties include but are not limited to City employees and project proponents, which can include contractors, subcontractors, developers, property owners, and superintendents. Education and training of the development community in Oceanside is typically done on a project-by-project basis during a mandatory pre-construction meeting with the City and during construction site inspections.

Prior to the issuance of permits, construction site owners and developers meet during a –pre-construction meeting with City staff and developer staff and or contractors, subcontractors and superintendents. During these meetings City staff from various departments review what is expected of the project proponent in order to develop the project. At least one engineering inspector and Code Enforcement officer trained in conducting storm water inspections are present at these meetings. Topics covered during these meetings specific to storm water pollution prevention include:

- Grading - Reference to the City of Oceanside Grading Regulations manual and the BMP Construction manual (both available on the City's website).
- Site Plan review for storm water inlets and associated BMPs
- Review of site-specific BMPs more applicable to the site and associated with the potential pollutants that could be generated from the proposed business operations
- Inspection Requirements and Frequency – Unannounced and upon call-outs from the public
- Expectations of BMPs during dry and wet seasons
- Construction BMP Brochure is provided

Prior to wet season, all currently permitted construction sites will be contacted to remind site owners and developers to assess, repair and update their sites BMPs to reduce erosion potential and prevent storm water pollution. Site owners and developers are also advised to update their erosion control plans and SWPPPs that are applicable to the site.

Municipal Staff Training

City staff directly involved with development and construction sites are provided training on a departmental basis. For further details on topics covered during the City's construction educational program, please refer to Sections 10.2.2 and 10.3.1 of the City's 2008 JURMP. During this reporting period four groups were provided training in regards to erosion control and BMP installation and maintenance for construction sites. See Table 3-4 below for those who received training.

Table 3-4. Municipal Staff Training.

Department Commission	Training Date	Number in Attendance
Planning Commission	April 7, 2008	7
Planning Department Staff	June 10, 2008	10
Engineering Inspectors	June 12, 2008	10
Building Division	July 30, 2008	12

3.5.2 Inspection of Construction Sites

Permit Order2007-0001 requires that the City develop and implement an inspection program to ensure that each construction site properly complies with the City's relevant ordinances, permits, and the Permit Order2007-0001. This section describes the City's inspection program for 2007-08 of construction sites developed in accordance with Part F.2.g of the Permit Order2007-0001.

Each project was assigned a storm water inspector who was tasked with conducting inspections at the site throughout the construction phase of the project. All storm water inspectors have been

educated in the requirements of the Permit Order2007-0001 and through in-house training and seminars, and/or construction-specific certificate training seminars.

During this reporting period the Urban Runoff Construction Site Inspection Report form for construction sited used by inspectors was revised and reprinted. A copy of this revised form is provided as Attachment 3-B.

3.5.2.1 Initial Site Inspections

Upon commencement of work at a construction site, a City inspector will visit the site and perform the following:

- Where applicable, a check for proof of coverage under the General Construction Permit.
- A review of the SWPPP (where applicable) and erosion control plans with the appropriate project proponent on site.
- A check for proper implementation of the BMPs outlined in the projects plans.
- A review of the maintenance schedule and procedures for each BMP.

All construction sites in the City's construction site inventory receive initial site inspections regardless of TTWQ priority. If any required documents or BMPs are found to be missing or deficient, the City may issue a stop work notice until the deficiencies are corrected.

3.5.2.2 Routine and Follow-Up Inspections

Once an initial site inspection is performed, additional routine inspections will be performed. The frequency of these routine inspections depends on the site's assigned TTWQ. The criteria used to determine a construction site's TTWQ presented in Section 5.2.1.1 were developed to correspond to the routine inspection frequencies required by the new Municipal Permit. Table 3-5 presents the different TTWQ categories and their corresponding minimum inspection frequencies for the wet (October 1 through April 30) and dry (May 1 through September 30) seasons.

Table 3-5. Construction Site Inspection Frequency

Construction Site TTWQ	Wet Season Inspection Frequency	Dry Season Inspection Frequency
High	Every two weeks	As needed
Medium	Monthly	
Low	As Needed	

3.5.3 Enforcement Measures for Construction Sites

The City will be responsible for enforcement of applicable local ordinances and permits at all construction sites in its jurisdiction. When violations are observed and documented during a site inspection, the City will implement appropriate enforcement measures based on the severity of the violation. Enforcement can range from written warnings to more severe enforcement such as stop work notices. Stronger enforcement measures will be used as necessary if proper corrective actions are not implemented during the allotted time frame or if the severity of the violation warrants stricter enforcement.

The typical progressive enforcement steps that the City will implement include the following:

- Written warnings
- Enforcement of contracts (Municipal projects)
- Stop work notices
- Administrative citations
- Denial or revocation of permits
- Civil and/or criminal court actions

A summary of the initial phase of enforcement actions is shown in Table 3-6 below. Copies of inspection forms and notices are on file at the City.

Table 3-6. Accounting of Initial Phase of Construction Inspection and Enforcement Actions for the 2007-2008 Reporting Period.

	Construction Sites Requiring Inspections	Routine and Follow-up Site Inspections	Meetings or Calls w Site Contact	Correction Notices	Stop-Work Notices	Cases Forwarded to Code Enforcement for Further Action
High Priority Sites	23	1,416	420	57	6	9
Medium Priority Sites	18	1,110	726	39	8	8
Low Priority Sites	9	561	210	21	15	8
Total	50	3,087	1,356	117	29	25

Enforcement actions by Code Enforcement Officers for construction sites begin with a referral from another department, a site visit, or by a complaint lodged via phone. Depending on the severity of the violation, follow up activities may include phone calls, site visits, written correction notices with specified compliance timeframes, or administrative warnings. If these actions do not produce the required improvements, administrative citations (starting at $100 with a $1,000 maximum fine) and/or stop-work notices are given.

A summary of enforcement actions conducted for construction sites by Code Enforcement Officers is included in Table 3-7. More details about enforcement actions during this reporting period are available on file at the City.

The City is required to provide notification to the RWQCB of non-compliant sites in the City that are determined to pose a threat to human or environmental health. Verbal notification is required within 24 hours of the discovery of non-compliance and a written report should be submitted to the RWQCB within 5 days of the incident. The criteria established for determining when a site is not compliant and poses a threat to human or environmental health is described in Section 3.8 of the Industrial Component. No such sites were identified this reporting period and thus no relevant notifications were sent to the RWQCB.

Table 3-7. Summary of Construction Site Code Enforcement Actions for 2007-2008 Reporting Period.

	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Inspection Report	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept	Stop Work Notice
Number of Actions	16	53	1	0	0	0	5	6	0	0

3.6 Construction Activities Effectiveness Assessment (Optional)

See Section 11.0 for an assessment of the Construction Component of the City's JURMP.

3.7 Program Review and Modification (Optional)

The Clean Water Program will continue to review and modify the construction component as needed. Staff will work with other City departments and their data tracking systems to ensure that the details of inspections, complaints, and follow-ups will be tracked appropriately to be included in future annual reports as discussed further in Section 15.

4.0 MUNICIPAL COMPONENT

4.1 Introduction

This section documents the activities conducted by the City of Oceanside at its municipally owned, leased and/or managed facilities during the 2007-2008 reporting period to meet the requirements of Section D.3 of Municipal Permit Order 2007-0001. The City of Oceanside owns and/or maintains a variety of municipal facilities including public parks, administration buildings, fire stations, a fire training facility, industrial facilities, potable reservoirs, sewage pump stations, wastewater treatment facilities, public roads, streets and parking facilities and other miscellaneous facilities. Additionally, the City conducts activities that have a high threat to water quality such as power washing, street and sidewalk repair, painting, graffiti removal, parking meter maintenance, MS4 maintenance, and regular upkeep of the sanitary sewer system to prevent overflows and leaking.

Order 2007-0001 Compliance Summary

D.3.a Municipal (Existing Development)	Section 4 of this Annual Report
D.3.a(1) Source Identification	See Section 4.1.1 of this Annual Report
D.3.a(2) BMP Implementation	See Section 4.2.3, 4.3.3, 4.4.3,4.5.3, 4.6.3, and 4.8.3 of this Annual Report
D.3.a(3) Maintenance of MS4	See Section 4.4 of this Annual Report
D.3.a(4) Management of Pesticides, Herbicides and Fertilizers	See Section 4.3.3 of this Annual Report
D.3.a(5) Sweeping of Municipal Areas	See Section 4.2 of this Annual Report
D.3.a(6) Sanitary Sewer	See Section 4.5 of this Annual Report
D.3.a(7) & (8) Inspection and Enforcement of Municipal Areas and Activities	See Sections 4.2.5,4.3.3, 4.4.2, 4.5.3, 4.6.4, and 4.7.3 of this Annual Report

To comply with the Municipal Permit, the City of Oceanside has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas and municipal activities. Some of the prominent activities include street sweeping, inspections of municipal facilities, installation of BMPs at the City Operations Centers and educational efforts geared toward municipal personnel.

The City continues to use its Municipal Urban Runoff Procedures Manual (Municipal) as a useful reference document for training staff and developing and implementing educational programs. The Municipal Manual contains BMP requirements and related guidance for City facilities and employees and was circulated to relevant City staff directly involved with the Municipal NPDES Permit. This manual was first prepared as part of the JURMP in 2002 and updated and provided with the 2008 JURMP. See Appendix C.3 of the 2008 JURMP for this manual. Changes made to this manual during this reporting period are detailed below.

- General Changes
  - References to BMPs for specific priorities of municipal facilities were removed or changed – BMPs should be based on activity or facility type and not priority.
  - Background information was updated to include new Municipal Permit information (See Comment 1)
- Chapter 3, formerly "General Requirements for High Priority Municipal Areas and Activities" was removed entirely. All information from this section was moved to Chapter 2, "Requirements of All Municipal Areas and Activities". Information from Chapter 3 was moved because BMPs detailed in that section should be implemented by all municipal areas and activities, when applicable.
- Chapter 3 now includes activity-specific BMPs. The areas and activities discussed in this chapter are the high threat to water quality areas and activities designated by the Municipal Permit. BMPs for those that were the same in the last Municipal Permit are the same, but some areas and activities have been added. See Comments throughout Chapter 3 as some things were re-arranged. Typically, nothing was added to this section except where comments note and addition was made.
- Besides chapter numbers the Inspections, Enforcement, and Reporting and the Definitions have not been changed.

During this reporting period the Municipal Inspection Form was revised to add the municipal Permit Order Number 2007-0001. See Attachment 4-A for a copy of this form.

4.1.1 Source Identification

As required in Section D.3.a(1) of Permit Order 2007-0001, the City of Oceanside has developed a prioritized, watershed-based inventory of municipal properties and activities. The City of Oceanside maintains a number of municipal facilities, including parks, administrative buildings, fire stations, and public works yards. The inventory of municipal facilities, including areas and activities, will be updated annually. The inventory used for this fiscal year was submitted in the 2008 JURMP as Attachment B.3. An updated inventory will be submitted with subsequent annual reports. Table 4-1 provides a summary of the facility categories within the City's inventory.

Table 4-1. Summary of Municipal Facilities by Category.

Facility Category	Number of Facilities
Park and Recreation Facilities	45
Public Works Operations Facilities	3
Municipal Landfills	2
Marinas	3
Municipal Airport	1
Potable Water Facilities	13
Wastewater Facilities	37
Police and Fire Facilities	14
Other Fixed and Leased Facilities	34
Roads, Streets, Highways and Parking Facilities	33
Parks and Recreation Facilities	45
Total Facilities	**230**

4.2 First Municipal Element - Roads, Streets, Highways, and Parking Facilities

4.2.1 Background

Roads, streets, highways, and parking facilities are an integral part of any functional City. These facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control the level of pollutants, such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities. Other City activities include building new roads, resurfacing existing roads, and similar construction-related activities. All construction-related activities conducted by the City will continue to be conducted under the requirements of the construction component, which is described in detail in Section 3 of this document.

4.2.2 Source Characterization

The City of Oceanside maintains approximately 571 miles of public roads and streets throughout the City. The length of public roads was calculated in 2008 for inclusion in this annual report. A parking facility is defined as a stand-alone parking facility, which is a parking facility that is not associated and/or adjacent to other inventoried municipal facilities. Parking facilities that are associated and/or adjacent to municipal facilities will continue to be included in regular maintenance activities of the associated municipal facility. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included as Appendix B.3 on the City's 2008 JURMP.

4.2.3 Best Management Practice Requirements

Similar to municipal fixed facilities, the City will continue to utilize the City-developed Municipal BMP Manual to choose applicable BMPs to implement for public roads, streets, parking facilities and operational facilities within the City.

Street sweeping and cleaning continues to be the main BMP that is implemented for roads, streets, and parking facilities. The frequency of cleaning takes into account the following: variations in climate conditions, surrounding land use, design of existing structures, traffic volume, frequency and quantity of accidental spills and leaks, and areas with historical trash and/or debris problems. Treatment control BMPs will be used for road sections subject to SUSMP.

The City will continue to implement an aggressive street sweeping program to reduce the amount of pollutants discharged from roads, streets, and parking facilities in the City with a particular focus on facilities that drain to environmentally sensitive areas (ESAs). If in the future negative impacts to ESAs associated with runoff from roads, streets, highways, or parking facilities are noted, the City will take the measures necessary to mitigate the negative impacts.

4.2.4 Program Implementation

As an effort to reduce the pollutant load entering local receiving water bodies, the City continued to implement a sweeping schedule for roads, streets, highways, and parking facilities to meet the

requirements of the Municipal Permit. There have been no significant changes to the existing programs during the reporting period.

Roads, streets, and highways that have been observed as generating relatively high volumes of trash, sediment, and debris are included as high priority and will continue to be swept at least twice per month; medium priority streets are streets in the City that generate moderate volumes of trash, sediment, and debris and will continue to be swept at least monthly. Low priority streets have been observed as generating relatively low volumes of trash, sediment, and debris and will continue to be swept as needed, but not less than once per year. In the event of a National Holiday, sweeping is made up in a timely manner, usually by the next working day. Due to the City's proximity to the Pacific Ocean and as a means to target watershed constituents of concern, the City typically sweeps all streets within the City above baseline jurisdictional activity standards. Additional program details can be found in Section 6.3 of the 2008 JURMP.

All public streets in the City of Oceanside are swept at least monthly. There is a total of 571 miles of public streets that are swept regularly per the frequency outlined below. Double this length to accommodate for both east/west and north/south directions giving a total of 1,142 curb miles. Some streets are swept more frequently than others. During upcoming reporting periods these additional, curb length miles that are swept more than monthly will be calculated for a total curb mile length.

- Every Monday, Wednesday, and Friday, the downtown commercial areas and other high use areas are swept using regenerative air vacuum street sweepers. These areas include the medians on Mission Avenue, Canyon Drive, and the Civic Center Drive Bridge, Wisconsin Avenue to Pacific Street to Ditmar Street, the Strand, and all downtown parking lots.
- The majority of all other public streets, not included in the areas listed above, are swept every other week. In some low use residential areas, the streets may be swept monthly.
- As necessary, sweepers or other clean up crews will respond to public or municipal staff reports to collect debris and/or sweep.
- Inspection of streets and curbs for cleaning is continuous. City employees are encouraged to identify areas that should be cleaned and to call the municipal employee reporting line, Oceanside Eyes. Residents are encouraged to call the Public Works Maintenance Hotline.

4.2.5 Inspection and Maintenance Results

4.2.5.1 Inspections

Inspections and maintenance activities were conducted throughout the reporting period as described in the previous section. Following is a review of the results form inspection and maintenance.

There are 33 facilities in the Roads, Streets, highway and Parking Facilities categories. During this reporting period all 33 of these facilities were inspected by CWP staff. No violations were noted din these facilities during annual inspections. There was note of some debris and sediment near storm drain inlets that were taken care of immediately. Due to the fact that many of these parking facilities are swept very regularly, debris and sediment are removed on a very frequent basis.

4.2.5.2 Maintenance

Street sweeping activities resulted in the collection of over 2,358 tons of waste during the reporting period. These results are comparable with the 2,283 tons collected during the 2006-07 reporting period, the 2,538 collected during the 2004-2005 and the 2,604 tons collected during 2003-2004 reporting period. This data shows a promising trend in the reduction of street waste in the City.

4.2.6 Roads, Streets, Highways, and Parking Facilities Element Effectiveness Assessment

See Section 11.0 for an assessment of the Municipal component of the City's JURMP.

4.3 Second Municipal Element - Parks and Recreational Facilities

4.3.1 Background

The City of Oceanside is committed to providing the highest quality of service to its residents by providing the opportunity for them to enjoy a variety of recreational activities at both outdoor parks and indoor recreational facilities. Operating and maintaining 45 community attractions from public pools, beaches, parks and community centers, the City of Oceanside works hard every day to maintain the high level of service. The inspection and maintenance of these facilities in regards to storm water is important because of the number of facilities throughout the city and the public exposure that these facilities receive.

4.3.2 Source Characterization

The City regularly inspects, cleans and maintains 45 Parks and Recreational Facilities. Because of high public use these facilities have the potential to generate a variety of pollutants including trash and debris, organic material and sediment. See Table B.3-1 of the City's 2008 JURMP for the Parks and Recreational Facilities inventory.

4.3.3 Program Implementation

The City has selected BMPs to implement at Parks and Recreational Facilities to reduce the contribution of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers. These BMPs are detailed in the Municipal Manual. All 45 facilities were inspected during this reporting period with no violations noted.

Pesticides, herbicides and fertilizers are seldom used directly by the City, as it contracts out the majority of work involving these substances. To facilitate compliance with this Section of the Municipal Permit, the City has reviewed its landscaping contract and has integrated BMP requirements into the conditions of the contract.

4.4 Third Municipal Element Municipal Separate Storm Sewer System

4.4.1 Background

As required by Section D.3.a.(3) of the Municipal Permit, the City has implemented a schedule of maintenance activities for the City's entire Municipal Separate Storm Sewer System (MS4),

including any structural controls designed to reduce pollutant discharges to or from its MS4s and related drainage structures. The City has determined, through historical knowledge and records, the locations within the MS4 that require regular waste removal and those areas that are less likely to require any waste removal. The City has developed a comprehensive Flood Control Annual Maintenance Program which includes a list of the high priority areas, divided into zones, which are to be inspected annually using an inspection checklist. Approximately 110 sites are inspected and maintained annually.

4.4.2 Source Characterization

The Public Works, Street Division, performs ongoing inspection and cleaning of storm drains and flood control facilities, as well as annual maintenance of all major facilities such as creeks, desilting basins, detention basins and rock and concrete lined channels. There is approximately 10,000 feet of storm drain and 104 feet of concrete and earthen channels that are inspected and maintained throughout the city. Over 49,000 linear feet of storm drains, catch basins, and concrete and earthen channels are maintained on at least an annual basis. In addition, the Street Division performs annual maintenance/cleaning in September, October, and November for all major MS4 facilities. The results of this work are recorded on an Annual Maintenance List that is also available at the City Operations Center.

4.4.3 Best Management Practices

In order to inspect and clean storm drains as described above, during the May through September period, the City contracted with United Storm Water Inc. A total of 3252 structures (catch basins, manholes, inlets, outlets, etc.) were inspected and cleaned during the reporting period. 2,972 by United Storm Water and 280 were cleaned by City maintenance crews. A total of 65.5 tons of waste was removed. The waste generally consisted of trash, green waste, dirt, sand, roots, solids, rocks, and silt. During the inspections, it is also noted whether or not the drain is labeled. Out of the 2972 catch basins that were cleaned, 1,399 were labeled with a placard stating: “No Dumping – Drains to Creek” in both English and Spanish. During this reporting period 1,000 new drain markers were ordered for installation during Fiscal year 2008-09. See the photo below for a copy of the storm drain placard installed.

4.5 Fourth Municipal Element - Sanitary Sewer

4.5.1 Background

The City of Oceanside Sewer Division maintains the sanitary sewer system within the jurisdictional boundaries which includes sewer lines, lift stations, sewage treatment plants. This sanitary sewer system uses pipes to remove human waste from homes and businesses and

transport that waste to one of two waste water treatment plants in the City. The two treatment plants are operated by city crews.

4.5.2 Source Characterization

The City regularly inspects, cleans and maintains thousands of feet of sanitary sewer pipe, 31 sewer lift stations and two sewage treatment plants. See Table B.3-1 of the City's 2008 JURMP for the Wastewater Facilities inventory.

4.5.3 Best Management Practices

Since the City owns and operates the sewage system, these facilities are regularly inspected and maintained for proper operation and maintenance, and to ensure that BMPs are in place for the protection of receiving waters that may be impacted from the system. The City's preventive and corrective sewer maintenance programs consist of a variety of components provided for the operation, maintenance, repair and replacement of sewer mains, manholes, and pump stations.

In order to ensure that the sanitary sewer lines do not leak, the city has a long term plan to slip line the sewer pipes throughout the City. In June and July of 2008 (crossing two reporting periods), 7,252 feet of City sewer lines were slip lined and manholes pressure grouted and sealed in the Loma Alta watershed. The slip lining project was estimated to cost approximately $700,000.Since the 2005-06 reporting period the City has slip-lined a total of 13,231 feet of sewer. The City also inspected and cleaned 312 miles (1,649,702 feet) of sanitary sewer.

4.6 Fifth Municipal Element - City Operations Center

4.6.1 Background

The City Operations Center (COC) is a municipally owned and operated facility that houses several departments or divisions for the City including Public Works, fleet maintenance, road maintenance, parks and recreation maintenance and others. Because of the diverse activities of these departments and divisions, the City developed a Storm Water Pollution Prevention Plan (SWPPP) for the COC in the fall of 2002.

The COC includes the following areas: employee parking lot, COC main building (offices, storage and fleet maintenance), traffic control lot, back lot, city vehicle parking lot, large vehicle equipment lot, fueling area, waste disposal area, wash facilities, general use yard and west corner lot. The SWPPP has the following objectives:

- Identify and evaluate sources of pollutants from the facility that may affect the quality of urban runoff discharge and to identify and
- Implement site-specific best management practices to reduce or prevent pollutants in urban runoff discharges.

The SWPPP outlines BMPs to be implemented at each of the respective areas. A comprehensive training program was also developed and has been implemented in concert with the COC SWPPP.

4.6.2 Source Characterization

Due to the nature of the various activities form the departments and divisions it was determined that there are various activities that generate pollutants and have the potential to reach storm

water conveyance systems. Some of these activities include vehicle washing, disposal of street sweeping debris, temporary storage of wrecked vehicles, and storage of various materials, including paints, solvents, metal piping and infrastructure materials. In addition steep hillside landscaped areas can be a potential pollutant source if BMPs are not managed properly.

4.6.3 Best Management Practices

Since the implementation of the SWPPP at the COC some permanent BMPs have been installed and continue to be used for protection of receiving waters. Following is a brief description of the BMPs in place at the COC and any new BMPs installed during this reporting period.

4.6.3.1 Wash Facility

The main wash facility is used for washing large vehicles and equipment, and collection of street sweeper and vactor truck contents. The main wash facility is a completely contained area, surrounded on all sides by berms and curbs. The entire area drains to the eastern corner of the pad where it enters a grated inlet that leads to a clarifier and then the sewer. An overflow is available if the drain to the sewer is clogged or the volume of water exceeds its capacity, however, this is not anticipated to happen frequently because the drain is maintained daily.

4.6.3.2 Storm Drain Filters and other inlet BMPs

BMPs in place before reporting period

During previous reporting periods the Public Works Department installed two BioClean filters at the only two outlets which drain runoff from the City Operations Center: one on the south side of the COC where a 36” box outlet discharges directly into Loma Alta Creek, and one at the 12” pipe which discharges onto Oceanside Blvd. These filters were inspected and repaired as necessary during the late summer/early fall, spring and prior to forecast storms. Also a brushless filter was added to the 36” box outlet during prior reporting periods.

BMPs installed or changed during Fiscal Year 2007-08

During fiscal year 2007-08 three broom gate were installed at the COC. The outlets where these broom gates were installed at the COC are located at the southern property line next to the SDGE easement, Loma Alta Creek and Sprinter RXR. See the photo below for an example of the broom gate installed. During the next reporting period the effectiveness of the debris removal and the maintenance of these broom gates will be assessed.

During fiscal year 2007-08 the BioClean filter that was installed on the 12" pipe that discharges to Oceanside Blvd was removed due to constant clogging and replaced with fiber rolls around the inlet. This drainage area will be checked regularly to remove debris collected around the fiber rolls and to ensure that the fiber rolls in proper working order.

4.6.3.3 Structural BMPs

BMPs in place before reporting period
BMPs installed in FY 2005-2006 included a garage cover built to cover drums in the storage area, and an area was designated to hold all wrecked vehicles from police department with secondary containment installed around wrecked vehicles contain any fluid runoff from the vehicles.

BMPs installed or changed during Fiscal Year 2007-08
The water utilities department installed two structural covers to prevent rain from reaching these metal materials and causing rusting and deterioration. Metal materials that are subject to rusting and deterioration when exposed to the elements, including scrap metal are contained and covered until used or disposed of through a licensed commercial metal recycling company.

4.6.3.4 Pollution Prevention and Recycling

BMPs in place before reporting period
The COC continues to implement an aggressive pollution prevention/recycling program including: purchasing re-refined oils, recycling used oils, oil filters, fuel filters, antifreeze, used tires, and batteries. In addition solid waste recycling bins are located throughout the facility for collection of bottles, cans, glass and mixed paper. During

BMPs installed or changed during Fiscal Year 2007-08
Additional solid waste recycling bins were installed throughout the COC including ones outside of the facility so field crews can easily deposit their recyclable when cleaning the interior of their vehicles. Also, each vehicle driver was provided with a convenient recycling basket to sue in their vehicle for easy collection of their recyclables.

4.6.4 Program Implementation

4.6.4.1 Facility Inspection

A thorough walk through inspection of the COC Facility was conducted by the operation manager of the facility and staff form the Clean Water Program. Table 4-2 presents the inspection results and recommended solutions. Through a second follow-up inspection and discussions with COC staff, it was verified that the issues below had been corrected. Also, the facility operation manager was provided with an annual inspection list for his staff to regularly monitor and inspect the COC facility. This will provide for more regular maintenance of BMPs. Annual storm water inspections will continue to be done by CWP staff in addition to the more frequent inspections by the facility operation manager.

Table 4-2. City Operations Center Facility Inspection Results.

COC Area	Corrections Required	Solutions
Police Evidence Area	Gasoline container in fenced storage area	Remove container
	55 gallon drums on ground	Place secondary containment underneath all drums or hazardous materials
East Gate	Pile of sand without perimeter control	Place fiber rolls around base of pile; when rain is predicted cover with tarp and secure with gravel bags
Wrecked Vehicles	Absorbent socks around vehicles are not connected	Place absorbent socks completely around all wrecked vehicles to ensure vehicle fluids to not pass the perimeter controls; these should be in place at all times while vehicles are in storage at COC
Roll-off bin disposal area	Broken fiber rolls in landscape area	Replace old/damaged fiber rolls
	Pile of sawdust without perimeter control	Sweep and remove sawdust; or store in area with fiber rolls placed around base of pile
	Broken asphalt curb pieces	Dispose of broken pieces
Water Utilities Training Area	Rill/soil erosion occurring in dirt area with fiver rolls in place	Replace broken/damaged fiber rolls; Add more fiber rolls in middle of slope for additional erosion control
Water Utilities Storage Area	Old parts behind covered sheds	Recycle old parts or store under cover
	Diesel generator behind sheds	Dispose/recycle generator or store under cover
	Creosote poles stored outside	Remove or cover by storing indoors or under tarp.
Back lot □ Soil storage area	Containers with liquid used by street maintenance division	Secondary containment good, replace absorbent socks for per miter control
	Concrete wash out area not properly designed to avoid potential runoff	Use visquin on bottom of cleanout area; dispose of all waste material regularly
	Soil storage bins have damaged berms in front of bins	Repair asphalt berms to provide complete perimeter control
Electrical Storage Area	Street poles exposed and debris on ground	Any metal material that can rust should be covered; Dispose of debris on ground
Sewer Department Storage Area	5 gallon drums on ground □ some full some empty	Place all filled drums on pallets; dispose of empty ones

	Metal parts on ground	All metal parts that can rust should be placed on pallets/off ground and covered
Fire Hydrant	Evidence of concrete wash out with no containment	Only use the designated concrete wash out area.
Lower Lot	Dumpster lids open	Keep dumpster lids closed at all times when not in use
	Random drums on ground throughout area and behind storage bins	All drums and containers should be on secondary containment and stored indoors and under cover; check behind all storage bins for buckets and drums not stored properly
	Paint trays on ground near eyewash area	Remove all paint trays and store indoors
	Metal poles/stakes exposed outside (Parks Dept.)	Keep under cover at all times
	Buckets on ground (Sewer division area)	Store indoors or under cover
	Fast food trash and debris throughout area (Water division area, streets area)	All employees to properly dispose of trash **at all times**. Do not throw trash on the ground. Place trash containers around site if necessary.
	Buckets on ground (Water division area)	Store indoors or under cover
	Storm drain gravel bags not providing protection; filer insert is full of debris; leaf litter on top of grate	Surround storm drain with gravel bags; replace filter insert with a new one; Clean or vactor storm drain
	Large Tractor/vehicles some evidence of fluid leaking from vehicles	Place drip pans under leaking vehicles; repair leaking vehicles ASAP
	Drums and buckets in SE corner area some not stored properly	All drums and buckets should be stored off ground on secondary containment and under cover
Solid Waste/Parks Area (near gas pumps)	Metal parts and pumps exposed	Cover all metal parts or store indoors
	Miscellaneous parts strewn about	Recycle, dispose or store parts properly (under cover)
	Trash debris and leaf litter	Sweep up leaf liter and dispose of trash

4.7 Sixth Municipal Element - Other Facilities

4.7.1 Background

The City of Oceanside owns and operates two closed landfills (Maxson Street Landfill, WDID 9375005695 and Mission Avenue Landfill, WDID 9375005696). The City also operates and maintains eight fire fighting facilities including one fire fighting training facility.

4.7.2 Source Characterization

The two closed landfills maintained by the City have the potential to generate pollutants that can negatively impact receiving waters. If potential storm water discharges are identified, appropriate BMPs are implemented to prevent pollutants from entering MS4.

Also fire fighting stations have the potential to generate pollutants such as trash and debris, organic materials and fluids and wash water from fire fighting vehicles. The two closed landfills and the fire fighting facilities are included in the City's municipal inventory, which is included as Appendix B.3 of the City's 2008 JURMP.

4.7.3 Program Implementation

Closed Landfills

Both closed landfills are inspected quarterly per permit requirements and an annual report is prepared each for submittal to the Regional Water Quality Control Board. See Attachment 4-B for copies of the 2007-08 Annual Report for Storm Water Discharges Associated with Industrial Activities for these two landfills.

Fire Stations:

All fire stations were inspected during the reporting period. During the station inspections no violations or potential violations were noted.

4.8 Seventh Municipal Element - Power Washing

4.8.1 Background

The City conducts a number of activities which are not designated and/or confined to a specific location. Because such activities are not confined to a fixed facility, where BMPs may be permanently implemented, BMPs must actively be implemented during all mobile municipal activities.

4.8.2 Source Characterization

Mobile activities include:

- Power Washing

Infrastructure Maintenance

- Street and sidewalk repair
- Street striping
- Waste removal
- Traffic light maintenance
- Parking meter maintenance

Landscape/Right-of-Way Maintenance

4.8.3 Best Management Practice Requirements

As previously mentioned, the City will continue to implement good housekeeping and general pollution prevention measures during municipal activities including the mobile activities listed above. City personnel will continue to be trained to collect all water generated by power washing activities. City personnel continue to use the City's Municipal BMP Manual to choose applicable BMPs to implement for municipal areas and activities. Pesticide, herbicide, and fertilizer management BMPs similar to those discussed in Section 6.2 will continue to be implemented during landscaping of City right of way such as medians.

4.8.4 Program Implementation

City field crews will continue to be actively trained to implement BMPs during all mobile activities including how to properly contain, control, and capture any discharge generated by power washing (or any other discharge-generating activities). The City uses fiber rolls, geo logs, silt fencing, check dams, gravel bags, and filter inserts during mobile activities, where applicable. City personnel involved in mobile activities are trained to be aware of Illicit Connections/Illicit Discharges and report them to the appropriate City staff promptly. More information about the City's education program, including municipal training activities, is included in Section 10 of this document.

4.9 Municipal Component Effectiveness Assessment

See Section 11.0 for an assessment of the municipal component of the City's JURMP.

4.10 Program Modification and Review

The Clean Water Program will continue to implement its SWPPP at the City Operations Center and continue its ongoing inspection and maintenance program for the facilities listed in the Municipal Inventory. Any changes to the program will be reported in the next annual report.

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

Industrial and commercial operations have the potential to contribute pollutants to the MS4. The City of Oceanside continues to implement a comprehensive program that aims to reduce and prevent industrial and commercial pollution discharges to and from the MS4 to the maximum extent practicable (MEP) to protect local receiving water bodies and to comply with the Municipal Permit. This section documents the activities conducted by the City of Oceanside during the 2007-2008 reporting period to meet the requirements of Section D.3.b of the Municipal Permit.

Order 2007-0001 Compliance Summary

D.3.b Implement Industrial and commercial program	See Section 5.2.1 of this Annual Report
D.3.b (1) Source Characterization	See Section 5.2.2 of this Annual Report
D.3.b (2) BMP Implementation	See Section 5.2.3 of this Annual Report
D.3.b (3) Inspections	See Section 5.2.4 of this Annual Report
D.3.b (4) Regulation of Mobile Businesses	See Sections 5.3

The City has compiled a list of industrial and commercial sources and developed BMP requirements, including pollution prevention measures, for each source and activity. Implementation of these requirements will be accomplished through education, inspection, and enforcement.

During this reporting period the City of Oceanside increased its number of employees in the Clean Water Program to ensure compliance with the inspection frequency requirements specific to the new Municipal Permit. Thus, in addition to Code Enforcement conducting industrial/commercial inspections, two Clean Water Program (CWP) staff conducted inspections and disseminated educational outreach materials where needed.

5.2 Stationary Industrial and Commercial Sites Sources Element

5.2.1 Background

Section 7 of the City's 2008 JURMP, titled Industrial and Commercial Component, requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by industrial owners and/or operators pursuant to City Code to minimize or eliminate the impacts of industrial and commercial activities on receiving waters and other sensitive environmental resources. The City uses a variety of ways to educate and ensure that BMPs are implemented at industrial and commercial facilities including dissemination of the City's industrial and commercial BMP manuals, site inspections and enforcement.

5.2.2 Source Characterization

The City annually updates its watershed-based industrial/commercial inventory which contains the name, address, and description of all industrial sites within its jurisdiction, regardless of site ownership. The original inventory was prepared in February 2002 and was provided in the 2002 JURMP document. The commercial and industrial inventories used for this reporting period were updated during this reporting period and can be referenced in Appendix B of the 2008 JURMP

All of the inventoried industrial and commercial businesses were categorized according to the watershed in which the business is located. This table does not include mobile businesses that have City of Oceanside business licenses. See section 5.3 of this report for mobile business information. See Tables 5-1 and 5-2 below for a summary of the number of industrial and commercial businesses inventoried in the City according to watershed location.

Table 5-1. Industrial Businesses in the City by Watershed.

Watershed	Number of Industrial Business
San Luis Rey	95
Loma Alta	141
Buena Vista	5
Agua Hedionda	0
Total	**241**

Table 5-2. Commercial Businesses in the City by Watershed.

Watershed	Number of Commercial Businesses
San Luis Rey & Harbor	331
Loma Alta	338
Buena Vista	151
Agua Hedionda	6
Not Verified	10
Total	**836**

Based on the 2008 inventory, the City contains approximately 241 industrial businesses. Each of these businesses was prioritized on their threat to water quality. Table 5-3 provides a summary of the prioritization for industrial businesses.

Table 5-3. Industrial Businesses in the City by Priority.

Priority	Number of Industrial Business
High	52
Medium	45
Low	144
Total	**241**

Based on the 2008 inventory, the City contains approximately 836 commercial businesses. Each of these businesses was prioritized on their threat to water quality. Table 5-4 provides a summary of the prioritization for industrial businesses.

Table 5-4. Commercial Businesses in the City by Priority.

Priority	Number of Commercial Business
High	94
Medium	449
Low	293
Total	**836**

5.2.3 Best Management Practice Requirements

BMP Manuals

Two manuals originally developed in 2001, *Industrial Urban Runoff Requirements Manual* and *Commercial Urban Runoff Requirements Manual,* detail requirements of industrial and commercial businesses to comply with the City's Urban Runoff Management and Discharge Control Regulations. In order to ensure industrial and commercial owners and operators are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for industrial and commercial areas and activities located within the City, are specified in these two manuals.

The manuals were first produced in FY 2001-02 as a result of requirements under Municipal Permit Order No. 2001-01 and were revised in 2004 to include additional state requirements. These manuals were again reviewed and revised during this reporting period to ensure compliance with the new Municipal Permit Order No. R9-2007-0001. The main changes were the additional of categories and a list of specific BMPs for those industrial and commercial activities. Inspections, enforcement, and reporting and the definitions have not been changed.

Industrial Manual changes

Three BMP Categories were added to Table 1 of the Industrial Manual, Summary of Industrial Facility and Activity BMP Requirements, and provides specific BMPs applicable to that category:

- Building Materials Retail and Storage
- Animal Facilities
- Power Washing

Section 3.2 was added to the Industrial manual. This section was added to target High Priority Industrial Businesses and it provides the minimum BMP requirements for industrial businesses

Commercial Manual Changes

One category was updated in the Commercial Manual to include additional businesses activities. The Eating or Drinking Establishments category now includes Food Markets.

Three BMP Categories were added to the Commercial Manual and provides specific BMPs applicable to that category:

- Building Materials Retail and Storage

- Animal Facilities
- Power Washing

An additional section was added to the Commercial Manual titled "Additional Controls." Following is the text for this new section.

> There are a number of Environmentally Sensitive Areas (ESAs) within the City. These areas are sensitive to impacts from Urban Runoff that may degrade water quality and harm aquatic life.
>
> In addition to the general requirements required for Regulated Commercial Facilities and Activities, the City may require that additional BMPs beyond the minimum BMPs for a specific area, such as ESAs, and/or activity be implemented.

The City conducted efforts to ensure industrial and commercial business owners and/or operators have received a copy of the Industrial Manual either through an annual inspection or a response to a complaint or concern reported through the Urban Runoff Hotline. In addition, copies of the Industrial Manual are available on the Clean Water Program website.

5.2.4 Program Implementation

Annual inspections of commercial and industrial businesses are conducted by Clean Water Program inspectors, Code Enforcement officers and a private contractor to ensure that applicable pollution prevention activities are implemented by industrial and commercial business owners and/or operators. In addition, inspections are conducted based on calls received on the Urban Runoff Hotline. All industrial and commercial businesses visited, through the annual inspection program or by complaint call acknowledged on the Hotline, receive follow-up visits until the industrial business is deemed in-compliance with City Code. All documentation pertaining to site visits are on file at the City. City staff conducted a total of 596 inspections during the 2007-2008 reporting year of industrial and commercial businesses.

5.2.4.1 Inspections of Industrial Businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for conducting inspections of industrial businesses. This program was developed and implemented in accordance with part D.3.b.(3) of Permit Order 2007-0001. The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

- Completion of 127 site inspections of industrial businesses during the reporting period.
- Completion of 52 required annual inspections of high priority industrial businesses during the reporting period.
- Completion of 75 required annual inspections of medium and low priority industrial businesses during the reporting period.
- Completion of eight follow-up visits either in response to the initial inspection or response to a complaint.

- Dissemination of the Industrial Manual to help industrial owners and/or operators become aware of the City Code requirements for BMP implementation, and information on applicable BMPs for specific industrial businesses and activities.
- Ensuring proper and continued training of the Code Enforcement officers and Clean Water Program compliance inspectors dedicated to the Clean Water Program.

5.2.4.2 Enforcement of Industrial Businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for enforcement of ordinances at an industrial site. This program was designed in accordance with part D.3.b.(3) of Municipal Permit Order 2007-0001. Table 5-5 presents the actions taken by Code Enforcement officers on industrial businesses within the City for this reporting year. The major activities and accomplishments undertaken by the City for this requirement during the reporting period included 86 inspections by Code Enforcement officers and 41 inspections by Clean Water Program inspectors. Therefore, the City conducted a total of 127 industrial business inspections during this reporting period.

Table 5-5. Accounting of Industrial Code Enforcement Actions for the 2007-2008 Reporting Year.

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Inspection Report	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept.	Stop Work Notice
of Actions	8	131	0	4	15	86	1	3	1	0

5.2.4.3 Inspections of Commercial businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for conducting inspections of commercial businesses. This program was developed and implemented in accordance with part D.3.b.(3) of the Municipal Permit Order 2007-0001. As detailed in the JURMP, inspections of High and Low Priority Commercial Businesses are conducted as deemed necessary by the Code Enforcement personnel. Some inspections are initiated in response to a public or municipal staff report, an illicit discharge source investigation, or as a follow up to a previous inspection.

The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

- Three hundred seventy one (371) eating and drinking establishments were inspected at least once for the proper implementation and maintenance of storm water BMPs and grease control devices. The inspector forwarded all facilities that were not in-compliance with storm water regulations to Code Enforcement Officers.
- Ninety four (94) inspections of high priority commercial businesses were inspected, excluding restaurants and agricultural operations

- One hundred three (103) inspections of medium and low priority commercial businesses were inspected, excluding restaurants and agricultural operations
- One inspection of each of the 28 nursery and greenhouse operations within the City of Oceanside was conducted for compliance to urban runoff regulation City Code Chapter 40.
- Ensuring proper and continuing training of the Code Enforcement Officers and Clean Water Program inspectors dedicated to the Clean Water Program.

During the 2007-08 reporting periods, all eating and drinking establishments were inspected for compliance with the City's urban runoff regulations and adequate implementation and maintenance of BMPs. The initial inspection served to educate eating and drinking establishment owners and/or operators of their storm water and grease control BMP responsibilities by inspection of current BMPs, distribution of the Commercial Manual and BMP poster, when needed, to educate employees. During the 2006-07 reporting period all restaurants were raised to high priority and will continue to be high priority throughout the duration of Municipal Order Permit No. 2007-0001. If any restaurants were not in compliance during initial inspections, follow-up inspections were conducted to determine compliance per City Code.

When CWP Inspectors and Code Enforcement Officers conduct inspections at high priority areas, they target the entire commercial/industrial complex, because these areas often contain a mix of industrial and commercial operations. Rather than just focus on the High Priority businesses located in these areas, CWP Inspectors and Code Enforcement officers inspect all businesses in the complex to ensure owners and/or operators understand their BMP requirements and can work collaboratively with their neighbors to implement BMPs or solve drainage problems.

Code Enforcement officers inspected 28 nursery and greenhouse operations according to the City's Business Licensing Department. However, only sixteen of the sites were in operation and were determined to be a priority under storm water regulations. These sites, along with the larger agricultural facilities that are annually inspected by the County Weights and Measures Department, are visited several times a year by City staff due to the evolving nature of their business. With constant plowing and crop rotation, CWP staff not only complete annual inspections, but also complete a pre-rain event inspection and visit the agricultural areas frequently during the rainy season as well as during rain events. The City has also maintained its cooperative relationship with the U.S. Department of Agriculture NRCS for assisting the agricultural community in Oceanside in design and implementation of BMPs.

In addition to calls received from the Urban Runoff Hotline concerning potential violations at a commercial business, Code Enforcement Officers also conducted the third follow-up inspection for non-compliant restaurants. All calls received from the Urban Runoff Hotline generated a case file in which Code Enforcement officers visited the facility and conducted follow-up visits and/or used enforcement mechanisms until the commercial business was deemed in-compliance with City Code. Copies of inspection reports are available from the Code Enforcement Division.

If enforcement actions did not produce the required improvements, administrative citations (starting at $100, with a $1,000 maximum fine) are given. An accounting of all enforcement actions, taken by Code Enforcement Officers, is shown in Table 5-6.

Table 5-6. Accounting of Commercial Code Enforcement Actions for the 2007-2008 Reporting Year.

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Inspection Report	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept	Stop Work Notice
of Actions	40	167	4	2	10	52	18	5	0	0

5.2.4.4 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of noncompliant sites in the City that are determined to pose a threat to human or environmental health. Oral notification is required within 24 hours of the discovery of noncompliance and a written report should be submitted to the RWQCB within five days of the incident.

The Regional Water Quality Control Board was notified of businesses or operations that were not compliant after follow-up visits from CWP staff or code enforcement officers, or for operations that were not enforceable by City staff (Camp Pendleton). Following is a list of these businesses and operations.

- Eternal Hills Cemetery Expansion Project
- North County Transit District's Sprinter Rail project.
- Evergreen Nursery nutrient discharge into Loma Alta Creek.
- Camp Pendleton housing development sediment discharge to Oceanside Harbor.

5.2.5 Stationary Industrial and Commercial Sites Sources Effectiveness Assessment

See Section 11.0 for an assessment of the Industrial and Commercial Component of the City's JURMP.

5.3 Mobile Sources Element

5.3.1 Background

Due to the lack of a stationary location for proper disposal of potentially hazardous liquids and materials, there is a major area of concern about where mobile businesses discharge water used in their line of work. Due to the nature of their activities, mobile businesses will continue to be regulated differently than other businesses. Mobile businesses can be difficult to identify because they may not have a City business license, they go out of business on a relatively regular basis and, though they may have a home base, they can cross jurisdictional lines to operate their

business. For the reasons regular inspections of mobile businesses will be challenging and tiem consuming in the future.

5.3.2 Source Characterization

The mobile businesses known to operate within the City's jurisdiction are noted on the City's commercial inventory. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Pest control services
- Mobile carpet, drape or furniture cleaning
- Mobile construction trades
  - Painting and coating
  - Cement mixing or cutting
  - Masonry
  - Other contractors
- Landscaping
- Pool and fountain cleaning
- Power washing services

Because not all mobile businesses have obtained business licenses in the City or have a base of operations in the City, the City expects that a continual process of refining and updating its inventory will be needed. Sources for such inventory updates will include reported incidents, general observations by City staff, and available business licenses. The City intends to participate if and when a regional inventory and/or tracking system for mobile businesses is developed. The inventory of Mobile Commercial Businesses is available in Appendix B.5 of the City's 2008 JURMP as part of the Commercial Inventory.

5.3.3 Best Management Practice Requirements

The City updated its Commercial Urban Runoff Requirements Manual during this reporting period, and now contains information on the required BMPs for both mobile and stationary sources. This updated manual can be referenced in Appendix C of the City's 2008 JURMP. One example of a BMP included in the updated manual is for outside vehicle washing and the BMP explains how to capture and contain the rinse water so that it does not enter the storm drain system. Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses.

5.3.4 Program Implementation

5.3.4.1 Education Outreach

Because a specific element of the industrial and commercial program for mobile businesses is being newly developed, it is anticipated that some mobile businesses are not aware of storm water requirements and that education will need to be a significant portion of the program. The City of Oceanside will notify the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three years of implementation of the City's 2008 JURMP.

5.3.4.2 Inter-Jurisdictional Cooperation

An inter-jurisdictional program for the regulation of mobile businesses will be developed amongst the co-permittees during future years of this permit cycle, of which the City will be involved. The program may include creation of a regional inventory of mobile businesses, standardization of BMP requirements across jurisdictions, sharing of enforcement action information, and/or the development and distribution of standardized educational materials.

5.3.4.3 Staff Training

Code Enforcement Division Officers and Clean Water Program Compliance Inspectors are responsible for conducting storm water compliance inspections and enforcement of mobile sources. Officers and inspectors are trained annually on inspection and enforcement procedures and BMP implementation as they relate to mobile businesses. City staff is encouraged to report potential illegal discharges from mobile businesses when working in the City to the storm water hotline.

5.3.4.4 Inspections

During this reporting period, inspection of mobile businesses was conducted on an as needed basis. The most common triggers for these inspections were from incident reports received over the Urban Runoff Hotline and direct visual observations by City staff.

5.3.4.5 Enforcement

During this reporting period Code Enforcement officers responded to complaint calls regarding mobile businesses that were allowing water to enter the storm drain system. During the site visit, depending on the nature of the complaint, Code Enforcement officers issued notices to comply and/or educated the operator on the proper BMPs that should be in place during their operation and provided them with the power washing brochure.

5.4 Industrial and Commercial Component Effectiveness Assessment

See Section 11.0 for an assessment of the Industrial and Commercial Component of the City's JURMP.

5.5 Program Review and Modification

The Clean Water Program will continue to review and modify the Industrial and Commercial component as needed. Staff will work with other City departments and their data tracking systems to ensure that the details of inspections, complaints, and follow-ups will be tracked appropriately to be included in future annual reports as discussed further in Section 15.

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

A total of 35 percent of the City's 26,983 acres is designated as either multi- or single-family residential. Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the quality of receiving waters in and around the City. The City of Oceanside has developed an extensive program that aims to reduce pollutant runoff from residential areas and activities to the MEP.

This section documents the activities conducted by the City of Oceanside during the 2007-2008 reporting period to meet the requirements of Section D.3.c of the Municipal Permit. The City continued the implementation of an enforcement program that responds to and monitors potential violation calls received on the Oceanside Urban Runoff Hotline (Hotline).

Order 2007-0001 Compliance Summary

D.3.c Residential Program	See Section 6 of this Annual Report

The City also utilizes its revised Urban Runoff Requirements Manual for Residents (Residential Manual) that contains BMP requirements and related guidance information for residents of the City. This manual has been made available to residents through the City's Clean Water Program Website. Changes to the Residential Manual during this reporting period were as follows:

- Pool water disposal BMPs
- Reference to new Municipal Permit Order 2007-0001
- Rearrangement of some chapter numbers and names

A copy of this manual can be found in Appendix C of the City's 2008 JURMP.

6.2 Source Characterization

Residential neighborhoods can be the source of a variety of pollutants depending on the activities conducted in residentially developed areas. Pursuant to Section D.3.c.(1) of the Permit Order 2007-0001, the City identified High Priority Residential Areas and Activities in the JURMP. The following residential activities have been identified by the City to be High Priority Activities:

- Automobile or boat repair and maintenance.
- Automobile washing.
- Automobile parking.
- Home and garden care activities and product use.
- Disposal of household hazardous waste.
- Disposal of pet waste.
- Disposal of green waste.
- Any other residential activity that contributes a significant pollutant load to the MS4.

The City has also identified residential areas of High Priority. These areas include the following:

- Any residential area tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired

- Any residential area within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA

6.3 Best Management Practice Requirements

The City's JURMP Residential Component requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by residents pursuant to City Code. In order to ensure residents are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for residential areas and activities, located within the City, are specified in the Residential Manual. This manual is found in Appendix C of the City's 2008 JURMP.

Education and outreach aimed at residents helps facilitate the implementation of BMPs, including pollution prevention methods. A detailed discussion of the City's education program can be found later in Section 10 of the 2008 JURMP. Details on education outreach to the residential community can be found in Sections 8 and 9 of this annual report.

6.4 Program Implementation

6.4.1 Outreach

The most efficient way to encourage pollution prevention and BMP implementation and to restrict polluting practices is to educate residents on how to carry out their daily activities in ways that have the smallest potentials to discharge pollutants to the MS4. During this reporting period the Clean Water Program provided educational information and training to residents, in the following ways:

- Residential BMP Manual
- Cleanup events
- Booths at public events
- Public television notices
- Mailers
- Presentations
- Website

Further outreach program details for this reporting period can be found in the Education and Public Participation, section 8 and Section 9, of this document.

6.4.2 Household Hazardous Waste

The City continued to facilitate the proper management and disposal of used oil, toxic materials, and all other HHW to the residential audience. Residents have the opportunity to take used oil to approximately 12 private auto parts stores within the jurisdiction. In addition Waste Management, Inc., the City's franchise trash hauler, accepts HHW at its Oceanside facility. Residents may bring up to five gallons per day of used motor oil, used oil filters, and anti-freeze, Tuesday through Saturday from 8 a.m. to 4 p.m. without an appointment. HHW may be brought on Saturdays by appointment only. Details of the locations mentioned above can be found in Section 8.4.2 of the City's 2008 JURMP.

During the 2007-2008 reporting period, 3,430 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 142.8 tons of hazardous materials (including universal waste) during the reporting period. An additional 119.9 tons of E-waste was recycled in the same reporting year.

Furthermore, as part of the City's collection program, a 1,500-gallon used oil collection receptacle is provided at the City's harbor. This receptacle is available for residents who live on the boats in the Marina as well as for those boat owners and operators who rent a harbor slip to conveniently recycle the used motor oil and oil filters generated from the boats.

6.4.3 Clean Water Program Newsletters

Twice per year, educational newsletters are mailed to all homes in the City that receive water utility bills. Topics in the newsletters explain storm water pollution, effects on water quality, pollutants of concern, illegal discharges, BMP implementation, and special events.

During this reporting period two Clean Water Program Newsletters were distributed to over 42,000 households. An overview of topics in these two are listed below. A copy of these two newsletters is included in Attachment 6-A this annual report.

Fall 2007

- Water conservation and urban runoff (20 Gallon Challenge campaign promoted by the San Diego County Water Authority)
- Buena Vista Creek and Oceanside Beach Cleanup

Spring 2008

- Grease and sewer blockages
- Pool water draining tips
- Proper disposal of landscape trimmings
- Loma Alta Creek cleanup event
- Cleanup events calendar for 2008

6.4.4 Oceanside Update

In addition to printed media, the City's community television station, KOCT, airs thirty-minute public service announcements with three-minute presentations from various City departments. Those households in the City who have access to the KOCT local channel are able to view this show. During this reporting period the Clean Water Program provided seven three-minute presentations. Table 6-1 provides an overview of the topics covered during each taping.

Table 6-1. Summary of 2007-08 Oceanside Update Topics by Month

Date	Topic Discussed
August 2007	Water conservation & irrigation runoff
September 2007	Proper hookup for RV sewage dumping at RV dump station in Oceanside harbor
November 2007	Water conservation & irrigation runoff
December 2007	Irrigation runoff & its connection to polluted runoff
February 2008	BMPs for residents during rainy season

Date	Topic Discussed
April 2008	Loma Alta Creek Cleanup
June 2008	Storm drains are different than sewer systems

6.4.5 Website

The Clean Water Program maintains its own Website providing convenient electronic access to program information for residents and the general public. The address for this website is www.oceansidecleanwaterprogram.org. This Website provides the opportunity to learn about storm water pollution, the sources of this pollution, and what can be done to eliminate these pollutants from entering the storm drain system, thereby improving water quality in receiving waters. During this reporting period there were 38,146 hits to the Clean Water Program website. This number does not account for traffic from within the Oceanside network.

Specific web pages available on the Clean Water Program Website are as follows:

- Commercial Business
- Development
- Events
- Industrial Business
- Just for Kids
- Water Quality Laws
- Other Websites
- Landslide Prevention
- Clean Water Projects
- Report Violations
- Residential/General
- Just for Educators
- Waterbodies

The residential web page offers the following information:

- An overview of pollutants in receiving waters and how those pollutants get there
- The difference between the storm drain system and the sewer system
- Links to pollutant factsheets in PDF format
- Links to brochures in PDF format, including the Storm Water Pollution prevention Tips for Residents
- Links to past Clean Water Program Newsletters in PDF format
- Link to the Residential Urban Runoff Requirements Manual

The Website address is disseminated to the public in a variety of ways:

- Listed in all Clean Water Program Newsletters
- Mentioned during each Oceanside Update Taping and shown at the bottom of the screen
- Listed on promotional items
- Listed on Clean Water Program staff business cards

6.4.6 Hotline

The City will continue to encourage public reporting of illicit discharges and illegal dumping through the City's Urban Runoff Hotline, which is run by the Water Utilities Department. The Hotline phone number is (760) 435-5800. All calls related to potential urban runoff violations were documented and forwarded to Code Enforcement.

The Urban Runoff Hotline was promoted through a variety of media during this reporting period, including announcements on local television stations, placement on brochures, click-message pens, pencils, and other promotional "give-aways", advertisement on the City's Clean Water Program webpage and in Clean Water Program newsletters. During the reporting period, fifty-five (55) calls were received on the Urban Runoff Hotline by residents concerning potential urban runoff violations. This is a significant increase from the 14 calls received during the 2006-07 reporting period (a 392% increase in call volume).

6.4.7 Enforcement

Section 8.4.4 of the JURMP describes the City's program for enforcement of ordinances in residential areas. The major activities and accomplishments undertaken by the City during this reporting period included:

- Code Enforcement response to 190 urban runoff related cases, related to residential areas and activities, during the reporting period.
- An accounting of all residential enforcement actions, taken by Code Enforcement Officers, is shown in the following table.

See Table 6-2 for an accounting of Code Enforcement Actions during 2007-08.

Table 6-2. Accounting of Residential Code Enforcement Actions for the 2007-2008 Reporting Year.

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Inspection Report	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept	Stop Work Notice
of Actions	140	219	7	26	32	10	28	4	1	0

6.5 Residential Component Effectiveness Assessment

See Section 11.0 for an assessment of the education component of the City's JURMP.

6.6 Program Review and Modification

During this reporting period it was noted that improvements in information tracking is needed to more easily gather and assess data. The City will investigate opportunities to better track data collected from Hotline calls.

Also, with the increase in phone calls to the Urban Runoff Hotline reporting parties will be asked where they learned of the Hotline phone number. Gathering this information can allow better assessment of the residential outreach programs by determining which specific program components are reaching residents more than others.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

This section is intended to document the activities conducted by the City of Oceanside during the 2007-2008 reporting period to manage illicit discharges and meet the requirements of Sections D.4 and J.3.a.(3)(f) of the 2007 Municipal Permit.

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2007-08 Illicit Discharge Detection and Elimination Component, including the 2008 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2008.

8.0 EDUCATION COMPONENT

8.1 Introduction

Education is an important step in working towards improving receiving water quality both locally and regionally. By increasing public awareness and encouraging a change in both the attitude and the behavior of the general public and the regulated community, the City may reduce or eliminate storm water pollution caused by common daily activities.

The City of Oceanside will continue to provide a comprehensive storm water education program to achieve the following objectives:

- Measurably increase the knowledge of target communities regarding MS4s, impacts of urban runoff on receiving waters, and BMP solutions for the target audience.
- Measurably change the behavior of target communities, and thereby reduce pollutant releases to MS4s and the environment.

Educational programs and activities are tailored to meet the needs of the following target audiences:

- Municipal departments and personnel.
- Construction site owners and developers.
- Industrial and commercial owners and operators.
- Residential community, general public, and school children.
- "Underserved" target audiences, where applicable.

Many education outreach efforts are conducted on an ongoing basis, such as direct interaction during inspections, pre-construction meetings, or when taking calls from the City's Urban Runoff Hotline. Educational materials are also available throughout the year at special events and at the City's Water Utilities Department counter. Targeted mailings, focused training sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of complaints, and other similar factors.

8.2 Staff Training Element

City personnel are the eyes and ears of the City, and can provide valuable information on storm water related discharges and potential violations that may be occurring within the City. The City presents general storm water educational content, which is described in Section 10.3 of the 2008 JURMP, to all City departments. The City primarily educates its municipal personnel through classroom training, on-the-job training sessions, and the Municipal BMP Manual (Appendix C of the 2008 JURMP). Customized training programs are designed for personnel targeting fieldwork-related departments such as storm water compliance inspectors, building/engineering inspectors, public works, planning department staff, and park and recreation personnel. General informational storm water training sessions are provided for municipal personnel in other departments to review storm water regulations in the City, impacts of urban runoff and BMPs to be implemented to reduce or eliminate runoff.

During this reporting period twenty-one (21) departments or divisions were provided a training on storm water related issues. In addition one division from the solid waste and recycling trash

hauler for the City was provided with storm water training. A total of 298 City staff and 70 staff from the trash hauler attended storm water trainings.

During this reporting period one of two Storm Water Pollution Prevention Education Programs developed by a private company, EXCAL Visual, were used for municipal staff trainings. These programs include a 15-20 minute video and a quiz specific to the video.

Prior to the start of these training sessions using the programs mentioned above a multiple choice quiz was given to each participant to complete to establish a baseline of knowledge for that individual. The quiz was used as the sign-in sheet for each training session. After the completion of the video additional storm water related details were provided depending on the department or division being trained. Time is allotted for questions and answers toward the end of the training session. Prior to the end of the training session the same multiple choice quiz was given to each participant. 293 municipal employees took both a pre and post-quiz during a municipal training session. For more information on the effectiveness of these training programs based on the pre- and post-quiz scores see Section 11.0 of this report.

One program titled "Storm Water Pollution Prevention - Strom Warnings" covers Everyday Best Management Practices for Industrial Facilities. Specific BMPs are covered to address the following issues related to industrial facilities:

- Good Housekeeping
- Materials Management
- Spill Response
- Equipment Fueling & Repair
- Outdoor Manufacturing
- Preventive Maintenance
- Waste Management
- Dust Producing Processes

Departments or Divisions that received this training were:

- Water Distribution - Reverse Osmosis Plant
- Water Distribution – Operations
- Water Distribution – Maintenance
- Sewer Collections – La Salina Waste Water Treatment Plant
- Sewer Collections – San Luis Rey Waste Water Treatment Plant
- Sewer Collections – Field Staff
- Water Distribution – Weese Plant (Drinking Water Treatment Plant)

The other program titled "Municipal Storm Water Pollution Prevention – Storm Watch" covers everyday BMPs for other municipal staff activities such as Parks and Recreation and fleet maintenance. Specific BMPs covered in this course are as follows:

- Good Housekeeping and Spill Prevention
- Vehicle and Equipment Washing
- Vehicle and Equipment maintenance
- Spill Reporting and Response

- Street Maintenance
- Outdoor Storage of Materials and Wastes
- Landscaping and Lawn Care

Departments or Divisions that received this training were:

- Streets Division – Street Repair and Maintenance
- Streets Division – Street Sweepers
- Streets Division – Parking Enforcement
- Parks and Recreation Maintenance
- Fleet Maintenance
- Water Utilities Administration
- Water Meter Services
- Harbor Division – Maintenance Staff
- Harbor Division - Harbor Police
- Police Department – Police Dispatch

Other Departmental staff received customized training because of their need for specific education that was not covered in these two programs or information covered in these programs was not needed to convey to these groups due to the nature of their work as municipal employees. The following departments were trained using a customized Power Point Presentation and an interactive format to allow for questions and answers throughout the training program:

- Planning Department
- Engineering Department – Engineering Inspectors
- Building Department – Building Inspectors
- Business Licensing, Revenue and Utility Billing

Waste Management is the solid waste and recycling company that services residential and commercial/industrial businesses in the City of Oceanside. Though they are not a department division of the City, they are an important entity to target with storm water related education programs due to the nature of their business. During this reporting period one department of Waste Management was targeted with storm water education. A customized power point presentation was used to emphasize the importance of proper handling of solid waste during servicing of trash cans and dumpsters and how to report potential storm water violations to Oceanside's Clean water Program staff..

- Waste Management – Trash, Recycling and Green Waste Truck Drivers

During the training sessions two departments requested additional information to reference during their daily work activities. The Harbor Police Department requested a quick reference guide for officers to use while in the field. This reference guide provides the storm water related City code and a brief description of the violation related to that code number. Also, the Police Dispatch operators requested a Clean Water Program Phone and Code Reference List to be placed in their "Call-out" binder. This binder is used by police dispatch operators to more easily reference codes and violations. See Attachment 8-A at the end of this section for a copy of the guide provided to Harbor Police and Police Dispatch operators.

8.3 Educational Outreach Element

Residential areas make up a large portion of the land use in the City, and therefore even small pollutant discharges can be magnified significantly and have the potential to affect the quality of the receiving waters. Activities such as residential car washing and over irrigation are harmful to receiving water bodies by contributing pollutants such as heavy metals, detergents, and nutrients. Providing residents with appropriate educational materials may help to increase overall awareness, and encourage residents to change harmful behaviors and subsequently reduce the potential for pollutants to enter the storm drain system and reach receiving water bodies.

Media

Twice per year, educational newsletters are mailed to all homes in the City with water utility bills. Topics in the newsletters explain storm water pollution, effects on water quality, pollutants of concern, illegal discharges, BMP implementation, and special events.

During this reporting period two Clean Water Program Newsletters were distributed to over 42,000 households. An overview of topics in these two newsletters are as follows:

- Fall 2007: Water conservation and urban runoff (20 gallon challenge)
  Buena Vista Creek and Oceanside Beach Cleanup

- Spring 2008: Grease and sewer blockages
  Pool water draining tips
  Proper disposal of landscape trimmings
  Loma Alta Creek cleanup event
  Cleanup events calendar for 2008

A copy of these two newsletters is included in Attachment 6-A this annual report.

Website

The City's Clean Water Program website also offers electronic copies of a variety of storm water fact sheets covering topics such as proper pesticide and fertilizer use, trash disposal, pet waste and lawn waste disposal, proper chlorine and other swimming pool chemical disposal, sedimentation, effects of soaps and detergents on receiving waters, and other storm water-related topics. During this reporting period there were 38,146 hits to the Clean Water Program website. This number does not account for traffic from within the Oceanside network.

Oceanside Update

In addition to printed media, the City's community television station, KOCT, airs thirty-minute public service announcements with three-minute presentations from various City departments. During this reporting period the Clean Water Program will provided seven three-minute presentations. Table 8-1 provides an overview of the topics covered during each taping.

Table 8-1. Summary of 2007-08 Oceanside Update Topics by Month

Date	Topic Discussed
August 2007	Water conservation & irrigation runoff
September 2007	Proper hookup for RV sewage dumping at RV dump station
November 2007	Water conservation & irrigation runoff
December 2007	Irrigation runoff & its connection to polluted runoff

Date	Topic Discussed
February 2008	BMPs for residents during rainy season
April 2008	Loma Alta Creek Cleanup
June 2008	Storm drains are different than sewers

Community Events – Booths and Outreach Activities

The Clean Water Program Staff participated independently and in conjunction with other cities in the North County Storm Water Program by staffing booths at several community events in Oceanside and north San Diego County. The Clean Water Program staff talked to residents, handed out educational materials, and responded to questions and concerns.

Table 8-2 lists community events attended between July 2007 and June 2008 to encourage community participation and education of the effects of urban runoff:

Table 8-2. 2007-08 Community Events.

Date	Event	Participants (estimated)
03/30/2008	North County Earth Day at the Mission	3,000
04/20/2008	Fallbrook Avocado Festival	50,000
6/19/2008	Sunset Market - Oceanside	1,000

School Education

Educating the City's youngest residents is important in two ways: ideally the good habits/behaviors learned will be carried into adulthood, and secondly, children may educate their families and friends around them with the information they have learned. Children are impressionable at a young age, and are therefore more likely to act upon the knowledge given to them now and throughout their life.

The City continued its outreach to school age children through the use of the watershed model during presentations. A total of ten presentations were conducted reaching 165 school-age children and 36 adults. Table 8-3 provides a list of groups and classrooms who were educated about storm water pollution via these presentations.

Table 8-3. 2007-08 School Age Children Watershed Presentations.

Date	Group	Children	Adults
03/10/2008	Cub Scouts	10	7
03/26/2008	Girl Scout Troop 1215	7	2
5/07/2008	Girl Scout Troop 1370	8	3
5/14/2008	Garrison Elementary (2nd Grade)	17	2
5/14/2008	Garrison Elementary (2nd Grade)	18	2
5/14/2008	Garrison Elementary (5th Grade)	25	3
5/14/2008	Garrison Elementary (4th Grade)	33	2
5/14/2008	Garrison Elementary (Kinder.)	15	1
5/15/2008	Girl Scout Troop 4099	12	4
5/15/2008	Boy Scout Pack 756	20	10
	Totals	**165**	**36**

Project SWELL (SWELL = Stewardship: Water Education for Lifelong Leadership)

The City is collaborating with the City of San Diego, the San Diego Unified School District, and San Diego CoastKeeper to customize and implement grade level specific curricula that integrates environmental topics into the science curriculum in the Oceanside Unified School District (OUSD). This curriculum provides students with knowledge of water resources in San Diego County, watershed functions, water conservation, the effects of polluted urban runoff, and how students can help prevent water pollution. Project SWELL, a water-based science curriculum, has been customized and implemented in fifth grade classes of the OUSD. The City will work with its collaborators to move forward in customizing and implementing the 6th grade curriculum, as well as additional grade level curricula in future years.

During this reporting period details specific to the northern watersheds of San Diego County were compiled and submitted in a table format for use in the 6th grade curriculum. See the Table 8-4 below for the watershed information gathered for the curriculum. The curriculum writer and editor will continue to develop the 6th grade curriculum during the 2008-09 reporting period with anticipation of implementing the curriculum in fall 2009.

Table 8-4. SWELL Oceanside 6th Grade Curriculum Watershed Information Tables

San Luis Rey Watershed	
Major Water Bodies:	San Luis Rey River, Guajome Lake, Lake Henshaw
CWA 303(d) List:	Indicator Bacteria (Pacific Ocean Shoreline at river mouth), Chloride and Total Dissolved Solids (San Luis Rey River) and Eutrophic (Guajome Lake)
Areas of Concern:	Indicator Bacteria cause beach postings and closures during winter months at the shoreline; A landfill is proposed to be sited adjacent to he river just east of Interstate 15; Significant development projects, including residential, commercial and industrial land uses, are being proposed at the I-15 and Highway 76 interchange; An approved quarry began operation in 2008 and is permitted for operation for 30 more years;
Sources of Problems:	Urban Runoff/Storm Sewers, nonpoint and point source (Chlorides) Nonpoint/Point Source (Guajome Lake)
Human Population:	115, 371 (1990); 146,383 (2000); 178,341 (2010 Forecast); 219,353 (2020 Forecast); 249,673 (2030 Forecast)
Cities in Watershed:	Oceanside (4.4□), County of San Diego (95.2 □), Vista (0.2□) Escondido (0.00014□ □52 acres), Riverside County (0.2□)
Important hydrologic resources:	Lake Henshaw at the eastern end of the watershed is a reservoir managed by Vista Irrigation District that provides drinking water to Vista and parts of Escondido and San Marcos. Water is diverted downstream of the dam from the San Luis Rey River to reservoirs in the San Dieguito Watershed;
Major Issues/Problems:	The shoreline at the mouth of the San Luis Rey River has elevated levels of indicator bacteria during winter months causing beach postings discouraging body contact with water. A bacteria source identification project began in 2008 to identify source of the bacteria.
Land Use:	The predominant land uses in the watershed are undeveloped (50□), Agriculture (37□), Residential and Parks/Recreation (10□)

Other Facts:	This is a 558 square mile watershed with San Luis Rey River serving as the major tributary that begins 50 miles inland at Lake Henshaw. Prior to the 1960□s the SLR River only flowed on rare occasions when there was above normal precipitation. During this time groundwater withdrawals from the San Luis Rey Basin exceeded recharge to the basin which resulted in lowering of groundwater levels with these levels decreasing to 43 feet below sea level by 1953. This allowed a trough of seawater to extend for a distance of two to six miles inland from the coast.
Carlsbad Watershed Entire Watershed Management Area (WMA) See below for details on specific Hydrologic Areas (HAs) within the Carlsbad WMA	
Major Water Bodies:	Buena Vista Lagoon; Agua Hedionda Lagoon, Batiquitos Lagoon, San Elijo Lagoon; Loma Alta Creek, Buena Vista Creek, Agua Hedionda Creek, Encinas Creek, San Marcos Creek, Escondido Creek
CWA 303(d) List:	Ammonia as Nitrogen, Bacterial Indicators, DDE , DDT , Eutrophic, Manganese, Nutrients, Nitrate, Nitrite, Sedimentation/Siltation, Sediment Toxicity, Selenium, Sulfates, Total Dissolved Solids, Phosphate, Phosphorous
Sources of Problems:	Animal Facilities, Botanical/Zoological Gardens, Eating and Drinking Establishments, Landscaping
Human Population:	511,306 (2000 Census), 596,738 (2010 Forecast), 651,840 (2020 Forecast), 700,119 (2030 Forecast)
Cities in Watershed:	Carlsbad (18□), Encinitas (9□), Escondido (13□), Oceanside (8□), San Marcos (11□), Solana Beach (1□), County of San Diego (32□)
Important hydrologic resources:	The Loma Alta Slough and creek is an important wildlife corridor and supports several threatened and endangered species.
Major Issues/Problems:	Surface water quality degradation, beach closures, sedimentation, habitat degradation and loss, invasive species, eutrophication, benthic alterations
Land Use:	Residential (32□), Freeways and Roads (10□), Agricultural (6□), Commercial/Industrial (13□), Open Space (11□), Vacant/undeveloped (18□), Other (10□). (2006 data)
Other Facts:	211 square miles; Formed by six individual watersheds; Reaches inland nearly 24 miles with a maximum elevation of 2,400 feet..
Carlsbad Watershed - Loma Alta HA (904.1)	
Major Water Bodies:	Loma Alta Creek, Loma Alta Slough
CWA 303(d) List:	Indicator Bacteria (Pacific Ocean Shoreline and Loma Alta Slough) and Eutrophic (Loma Alta Slough)
Areas of Concern:	Benthic community degradation
Sources of Problems:	Nonpoint sources (Loma Alta Slough)
Cities in Watershed:	Oceanside (95□); Vista (5□)
Important hydrologic resources:	The Loma Alta Slough and creek is an important wildlife corridor and supports several threatened and endangered species.
Major Issues/Problems:	Eutrophication in Loma Alta Slough, Indicator bacteria at Pacific

	Ocean Shoreline (Buccaneer Beach)
Land Use:	6,300 acres comprising 5□ of Carlsbad Hydrologic unit. The predominant land uses in the watershed are residential, industrial/commercial and vacant undeveloped land
Other Facts:	Vacant undeveloped land occurs in the middle of the watershed most of which is planned for future development.
Carlsbad Watershed -Buena Vista Creek HA (904.2)	
Major Water Bodies:	Buena Vista Creek, Buena Vista Lagoon
CWA 303(d) List:	Sediment Toxicity (BV Creek), Indicator Bacteria, Nutrients, Sedimentation/Siltation
Areas of Concern:	Sedimentation
Sources of Problems:	Unknown sources (BV Creek), Nonpoint/point sources (BV Lagoon)
Cities in Watershed:	Oceanside (26□), Carlsbad (19□), Vista (45□), County of San Diego (11□)
Important hydrologic resources:	The Buena Vista Lagoon is a fresh water lagoon that provides important habitat and fishing opportunities; El Salto Falls is located just west of the College Boulevard crossing; The Native American Heritage Commission recently registered the El Salto Falls as a sacred site - testimony to the long term use of this area by Native Americans.
Major Issues/Problems:	Surface water quality degradation and sedimentation of the Buena Vista Lagoon; There have been discussions to return Buena Vista Lagoon into a tidally flushed lagoon. A weir located west of Interstate 5 does not allow ocean water to tidally flush the lagoon providing fresh water areas for fishing.
Land Use:	The predominant land uses in the watershed are urban/residential and commercial.
Other Facts:	As sediment reaches the Buena Vista Lagoon it falls out and provides more shallow area for tulles to expand, thereby covering the surface water. Neighbors want the tulles to be controlled to keep the surface water viewable from surrounding properties.
Carlsbad Watershed - Agua Hedionda HA (904.3)	
Major Water Bodies:	Agua Hedionda Creek, Buena Creek, Letterbox Canyon, Agua Hedionda Lagoon
CWA 303(d) List:	Manganese, Selenium, Sulfates, Total Dissolved Solids (Calavera Creek), Indicator Bacteria and Sedimentation/Siltation (Agua Hedionda Lagoon)
Areas of Concern:	Urban growth and the resulting loss of permeable soil has led to the degradation of the Agua Hedionda Watershed. Recent growth and anticipated future development mean that a watershed that is already impaired could get even worse. Already, notable bank undercutting, and bank erosion characterize creeks in the Agua Hedionda Watershed.
Sources of Problems:	Calavera Creek: Unknown sources for manganese, selenium and sulfates; Urban runoff/storm sewers for Total Dissolved Solids. Agua Hedionda Lagoon: Nonpoint/Point sources for indicator bacteria and sedimentations/siltation
Cities in Watershed:	Carlsbad (41□), Vista (24□), County of San Diego (24□);

	Oceanside (6□), San Marcos (5□)
Important hydrologic resources:	
Major Issues/Problems:	The Development of a Watershed Management Plan for this HA is scheduled for completion in 2008. The goal of the plan is to have
Land Use:	
Other Facts:	Third largest Hydrologic Area in the Carlsbad Hydrologic Unit (CHU); Extends approximately 10.6 miles inland from the coast; 18,800 acres in area; comprises 14□ of the CHU;
Carlsbad Watershed □Encinas (904.4)	
Major Water Bodies:	Encinas Creek
CWA 303(d) List:	N/A
Areas of Concern:	Invasive Plants
Sources of Problems:	Animal Facilities; Eating and Drinking Establishments; Landscaping
Cities in Watershed:	Carlsbad (100□)
Important hydrologic resources:	Encinas Creek
Major Issues/Problems:	Invasive plants along Encinas Creek
Land Use:	3,400 acres in size; Industrial and commercial
Other Facts:	Extends 2.4 miles inland from coast with the highest elevation at 430 feet above mean sea level (MSL); Second smallest within the Watershed Management Area (WMA); The HA begins behind a small industrial area where it is immediately channelized. I continues through industrial and office parks associated with Palomar Airport; Drains directly to the Pacific Ocean.
Carlsbad Watershed - San Marcos HA (904.5)	
Major Water Bodies:	San Marcos Creek; Encinitas Creek (tributary of San Marcos Creek); Batiquitos Lagoon; Cottonwood Creek (sub-basin drains a portion of Encinitas directly into pacific Ocean at Moonlight Beach)
CWA 303(d) List:	San Marcos Creek: DDE, Phosphorous, Sediment Toxicity; San Marcos Lake: Ammonia as Nitrogen, Nutrients, Phosphorous
Areas of Concern:	Lake San Marcos is
Sources of Problems:	Animal Facilities; Eating and Drinking Establishments; Landscaping
Cities in Watershed:	Carlsbad (29□), Encinitas (15□), Escondido (5□), San Marcos (33□), County of San Diego (19□)
Important hydrologic resources:	Batiquitos Lagoon is 610 acres with a drainage basin of about 55,000 acres with its primary freshwater tributaries being San Marcos Creek from the east and Encinitas Creek which flows north along Green Valley, entering the lagoon under El Camino Real and La Costa Avenue, respectively.
Major Issues/Problems:	Accumulated silt has been filling up Batiquitos Lagoon, and the lagoon was expected to fill up. A large dredging and enhancement project was begun in 1994 to open the lagoon to the ocean's tidal changes and flows, thus slowing down the filling of the lagoon with silt. This project, completed in 1997, was funded by the Port of Los Angeles.
Land Use:	36,000 acres in size (28□ of WMA).
Other Facts:	Second largest within the Hydrologic Area (HA); Extends 14.1 miles inland from the costs originates on the western slopes of Merriam

	Mountains in discharges to the ocean via Batiquitos Lagoon; Highest elevation is approximately 1,540 feet above mean sea level;
Carlsbad Watershed - Escondido Creek (904.6)	
Major Water Bodies:	Escondido Creek; Reidy Canyon; San Elijo lagoon; Lake Wohlford (reservoir); Dixon Lake (reservoir)
CWA 303(d) List:	DDT, Bacteria, Manganese, Phosphate, Selenium, Sulfates, Total Dissolved Solids, Turbidity
Areas of Concern:	Bacteria, Nutrients,
Sources of Problems:	Animal Facilities; Eating and Drinking Establishments; Landscaping
Cities in Watershed:	County of San Diego (55□); Escondido (29□), Encinitas (11□); San Marcos (4□), Solana Beach (1□)
Important hydrologic resources:	The San Elijo Lagoon is part of the San Elijo Lagoon Ecological Reserve, a county and state regional park of nearly 1,000 acres of diverse habitat including six plant communities: coastal strand, salt marsh, brackish/freshwater marsh, riparian scrub, coastal sage scrub and mixed chaparral which can accessed over seven miles of trails via eight trailheads.
Major Issues/Problems:	Four pollutants occur at high frequencies including TDS, turbidity, total coliform, and fecal coliform; invasive plants within the lagoon and upstream riparian areas;
Land Use:	54,100 acres in area (40□ of WMA).
Other Facts:	Largest and most complex system in the WMA; Extends 24.6 miles inland from the coast; Escondido Creek originates in Bear Valley in north central San Diego county and discharges to the Pacific Ocean via San Elijo Lagoon.; Elevations on the ridges above Bear Valley are 2,420 feet above MSL
San Dieguito Watershed	
Major Water Bodies:	San Dieguito River, San Dieguito Lagoon, Lake Hodges (Reservoir)
CWA 303(d) List:	Pacific Ocean Shoreline □Indicator Bacteria
Areas of Concern:	Surface water quality degradation, habitat degradation and loss, invasive species, and increased imperviousness
Sources of Problems:	Urban runoff, agricultural runoff, and domestic animals
Human Population:	129,776 (2000); 181,698 (2010 Forecast); 224,491 (2020 Forecast); 241,357 (2030 Forecast)
Cities in Watershed:	Del Mar, Escondido, Poway, San Diego, Solana Beach
Important hydrologic resources:	55-mile long, 80,000 acre San Dieguito River Park; 150 acre San Dieguito Lagoon; Five (5) water storage reservoirs including Lake Hodges, Lake Sutherland, and Lake Poway.
Major Issues/Problems:	The Pacific Ocean at the mouth of the San Dieguito River is listed as a 303(d)-impaired water body for elevated coliform bacteria. In the absence of a comprehensive watershed planning effort, large-scale future development may exasperate current water quality problems and create additional beneficial use impairments. The San Dieguito Lagoon is especially sensitive to the effects of pollutants and oxygen depletion due to restricted or intermittent tidal flushing.
Land Use:	Vacant/ undeveloped (54□), parks/ open space (29 □), and urban (18□). Nearly half of the vacant land area is open to future

	development, most of which is zoned for residential usage.
Other Facts:	

Other Education Outreach opportunities

Communities Alive in Nature, a local non-profit organization, implements education outreach programs to local school districts in San Diego County. One component of their education outreach program is to educate high school age students about water quality and how to assess water quality based on water chemistry and the biological community of benthic macroinvertebrates living within the streams. The Clean Water Program was invited to participate in a hands-on field training for these students to demonstrate how to properly use field test kits for water quality analysis and the proper protocols for collection of benthic macroinvertebrates. Clean Water Program staff participated in two training sessions for 9th grade students who attend Pacific Ridge School, a local private school. These two events were held on March 6 and March 13, 2008 at Dawson Reserve and Green Oaks Ranch respectively, both located in Vista along Agua Hedionda Creek. 42 students and ten adults participated in the training.

8.3.1 Targeting Underserved Communities

Underserved communities are communities the City has determined may require increased educational efforts. The City targeted the following underserved communities and high-risk behaviors.

Mobile Businesses

Due to their nature, mobile businesses are typically not inspected during the routine industrial and commercial inspection program; therefore they may not be receiving the same educational material as other industrial and commercial businesses. The City plans to identify mobile businesses and develop educational outreach materials and information dissemination procedures appropriate for these businesses. Code Enforcement did respond to complaint calls related to mobile businesses.

Spanish-speaking population

The City will continue to target the large Spanish-speaking population in the City by offering a number of educational brochures and handouts, including the Green Wrench Guide and Integrated Pest Management tip cards in both English and Spanish. Additional Spanish language education outreach materials will be developed in future years.

Agricultural/Nursery/Greenhouse Operations

Due to the amount of agricultural land use in the City, the City distributed a number of printed educational materials to agricultural/nursery/greenhouse site owners and operators. The City also worked closely with the Natural Resources Conservation Service to provide technical assistance to these businesses with installing and maintaining BMPs specific to their operation. City staff promoted and distributed information on two regional workshops during the reporting period that targeted the agricultural community. On September 27, 2007, the San Diego County Farm Bureau sponsored the Ag Water Outlook for 2008 were attendees learned from water experts what to expect in 2008 to plan for water cuts while managing production. On March 27, 2008, the City of Oceanside sponsored the Water Quality Runoff Management & Agricultural

Waiver Workshop for Nurseries & Agricultural Businesses. This workshop was designed to help attendees better understand water quality runoff management and how the irrigated agricultural waiver would affect their operations.

Over-Irrigation

Water meter reader personnel are trained to document and respond to IC/IDs and over-irrigation issues as they come across such activities during their normal activities. Informational door hangers about storm water runoff, including over irrigation, were left at residences and/or businesses noted to have runoff due to over-irrigation. These colorful door hangers also provide specific information about storm water runoff, how pollutants can reach local waterways, the affects of these pollutants on the waterways and what types of activities and materials can pollute waterways. Addresses of such residences and/or businesses were documented and may be used later to target problematic areas of the City. In addition, dry weather exceedance letters were sent to areas of the City determined to be a source for exceedances of nitrate, ammonia, phosphorus, and bacteria which, when found in elevated levels, are typically attributed to over-irrigation.

Residential Car Washing

Residents continued to be encouraged to use professional car washes or to implement BMPs at their homes to prevent water produced by residential car washing from entering the storm water conveyance system. Dry weather exceedance letters were sent to areas of the City determined to be a significant source of detergents. In the future, the City may target areas that continue to be a problem with additional educational materials.

Educational Signs – Pet Waste

During this reporting period it was determined that there was a need for informational signs regarding the proper removal and disposal of pet waste. The Clean Water Program received complaint calls from the public stating that in common areas and trails there are people who walk dogs and do not pickup the waste left behind. Past signs installed stated “Please pick up your pet’s waste – Poop pollutes our parks, rivers, and beaches. The City Code was also listed on the sign.

It was determined this year to install signs that were more direct about how poop pollutes our rivers creeks and streams. Signs installed during this reporting period state, “Pet waste transmits disease. Leash and clean up after your pet. Let’s keep this area clean. Up to $1,000 fine.” See the photo below for a picture of one of the signs installed.

During this reporting period five (5) signs were installed in two areas of the City. Since installation of these signs complaints regarding pet waste not picked up in these two areas have not occurred. See Table 8-5 for locations and numbers of signs installed.

Table 8-5. Pet Waste Signs Installed in the City during the 2007-08 Reporting Year.

Date Installed	Sign Location	Number of Signs	Brief Description
12/24/2007	3903 Waring Road	2	Grass area between sidewalk and curb where people walk their dogs
6/24/2008	Peacock Blvd.	3	Median area in neighborhood where people walk their dogs.
	Total Signs Installed	**5**	

In previous reporting periods, 52 pet waste signs were installed in each City park and along the San Luis Rey River bike path. A photo of these signs is shown.

Education Materials Distributed

Materials are regularly developed and updated to provide residents, the general public, and students with information about urban runoff, water quality, BMPs, Clean Water Program projects, and the Urban Runoff Hotline number. These materials include brochures and promotional items that are distributed upon request and during community events where the Clean Water Program staff a booth. No significant changes were made to any of the brochures during this reporting period. Copies of these brochures were submitted with previous annual reports. Table 8-6 lists the educational materials distributed during the 2007-2008 reporting period.

Table 8-6. Educational Brochures and Promotional Items Developed and/or Distributed.

Education Material	Description	Number Distributed
Educational Brochures		
Urban Runoff Guidelines for Residents Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from residential activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	250
Pollution Prevention Tips for Gardening Activities Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from gardening activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	150
Urban Runoff Guidelines for Commercial Businesses Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from commercial and industrial business activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	150
Urban Runoff BMPs for Construction Projects handout	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from home-improvement activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	350
Urban Runoff Guidelines for Powerwashers	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from powerwashing activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	100
Guide to Oceanside Waterbodies Booklet	A colorful introduction to the waterbodies in Oceanside. The Guide is intended to help residents develop a sense of stewardship, as well as provide information about local creeks, rivers, lakes, wetlands, and lagoons, the history behind each waterbody, and stakeholder information. In addition, the Guide includes a description of a watershed and current monitoring programs implemented to test recreational water quality.	300
	Total number of educational brochures distributed during this reporting period.	**1,300**
Promotional Items		
Urban Runoff Hotline and Website magnets	Magnets were distributed with the Clean Water Program logo, website address and Urban Runoff Hotline.	500
Poop Pollutes magnets	Magnets were developed to remind residents to pick up their pet's waste.	500

Poop Pollutes Pet Waste Bag Dispensers	Pet waste bag dispensers were distributed at community events. The Poop Pollutes education message was attached as a sticker.	50
Protect Our Water bags	These 14 inch x 12 inch bags display a list of residential BMPs, Clean Water Program address and hotline number, and the Program tagline "You are the solution to water pollution." Distributed approximately 500.	500
Click Message Pen	Each pen has Oceanside's Urban Runoff Hotline phone number as well as the following text, "Protect our Waterways: sweep sidewalks, reduce pesticide use, recycle motor oil and filters, eliminate irrigation runoff, pickup pet waste, and pickup litter and cigarette filters."	1,042
Pencils made from recycled money and denim	Each pencil has Oceanside's Urban Runoff Hotline phone number.	2,500
Decals	These static cling decals have Oceanside's Urban Runoff Hotline phone number and can be placed on the windshield for quick reference to report potential storm water violations.	250
Letter opener	These letter openers have Oceanside's Urban Runoff Hotline phone number and were distributed to City employees only during municipal training sessions.	250
Stress Earth Ball	These squeezable earth balls have Oceanside's Urban Runoff Hotline phone number and were distributed to City employees during municipal training sessions as well as at community events.	500
Gel Pen	These gel pens have Oceanside's Urban Runoff Hotline phone number and were distributed to City employees only during municipal training sessions.	300
Goodie Bags	These vinyl bags have ten ways to protect our water and Oceanside's Urban Runoff Hotline and were distributed to school and scout troops (filled with other promotional items) and handed out at community event booths.	1,000
Tote Bags	These reusable tote bags are made from recycled plastic and have Oceanside's Urban Runoff Hotline phone number and Oceanside's Recycling Hotline phone number. They were distributed to employees during municipal storm water training sessions and as give-away option for beach and creek cleanup volunteers.	500
Bracelets	These translucent blue bracelets state "I Love Clean Water City of Oceanside Clean Water Program" and were distributed to children during community events and in goodie bags for classroom presentations.	500
Flashlights	These flashlights have the Clean Water Program name on them and were provided as a raffle item during municipal training sessions.	25
	Total number of promotional items distributed during this reporting period.	**8,417**

Figure 8-1. Promotional Items Distributed During Reporting Year 2007-08.

8.4 Outreach Component Effectiveness Assessment (Optional)

See Section 11.0 for an assessment of the education component of the City's JURMP.

8.5 Program Review and Modification (Optional)

Staff Training

The Clean Water Program will continue to implement its comprehensive municipal staff training program, including the implementation of pre- and post-test quizzes. The scores from the pre- and post-quizzes will continue to be assessed to determine the effectiveness of the training programs. If specific divisions or departments are in need of educational materials or reference materials related to storm water, the Clean Water Program staff will assist in the development of these materials to provide to those departments or divisions for dissemination or reference.

During the next reporting period all brochures will be reviewed for content and updated and reprinted with revised information, where needed.

9.0 PUBLIC PARTICIPATION COMPONENT

In order to ensure success with any City-wide program, the public must be involved. Stewardship and participation by the general public will increase the acceptance and willingness to comply with new regulations. The City of Oceanside has actively pursued public involvement in the Clean Water Program through the implementation of various programs and feedback mechanisms. This section documents the activities conducted by the City of Oceanside during the 2007-2008 reporting period to meet the requirements of Section D.6 of the Municipal Permit.

Order 2007-0001 Compliance Summary

D.6 - Public Participation Component	See Entire Section 9 of this Annual Report

9.1 Local Public Participation Opportunities

The City of Oceanside encourages its residents to become involved in the Clean Water Program in various ways. The variety of ways the public can participate in the Clean Water Program include reporting potential violations to the Urban Runoff Hotline, beach and creek cleanup events, and community events.

9.1.1 Urban Runoff Hotline

With the establishment of the Urban Runoff Hotline, (760) 435-5800, the public can report potential violations that could pollute the City's receiving waters. The Urban Runoff Hotline was promoted through a variety of media during this reporting period, including announcements on local television stations, placement on brochures, click-message pens, pencils, and other promotional "give-aways", and advertisement on the City's Clean Water Program webpage.
During the reporting period, fifty-five (55) calls were received on the Urban Runoff Hotline by residents concerning potential urban runoff violations. This is a significant increase from the 14 calls received during the 2006-07 reporting period (a 392% increase in call volume). In addition, Code Enforcement Officers received over 190 calls from residents regarding potential urban runoff violations.

9.1.2 Oceanside Eyes

In addition to the Urban Runoff Hotline City Staff is encouraged to participate in the Clean Water Program through the use of a special City Enhancement Hotline specifically for Oceanside employees called "Oceanside Eyes." This hotline is call incentive driven and promoted internally. During storm water classes for municipal staff, this hotline is mentioned as an alternative for calling the Urban Runoff Hotline.

9.1.3 Cleanup Events

City Sponsored events
To increase Oceanside residents' stewardship toward our local waterways, the Clean Water Program hosts annual cleanup events at every major waterway in Oceanside including Buena Vista Creek, Loma Alta Creek, San Luis Rey River and also hosts several beach cleanup events throughout the year. Each cleanup averages anywhere between 100 to 300 participants. During the 2007-08 reporting period, approximately 1,039 volunteers removed approximately 11.11 tons

of trash, debris, appliances, furniture, shopping carts and other unwanted material from Oceanside waterways.

Private group sponsored events
Also, private groups regularly approach the city to coordinate their own beach cleanup. The city of Oceanside including the Clean Water Program, Lifeguard division and the harbor maintenance staff support these groups by providing them guidance on what areas to target for cleanup, supplies for their event (bags and gloves) and safety instructions for the group. During this reporting period six private groups coordinated their own beach cleanup event in Oceanside. A total of 865 volunteers removed 485 pounds form Oceanside beaches.

One event coordinated by I Love A Clean San Diego included an aerial art photograph opportunity. This event titled Kids Ocean Day Cleanup was held on June 6, 2008 at the Oceanside City Beach, just south of the pier. This event alone had 800 participants who removed 100 pounds of trash from the beach and then arranged themselves for an aerial photograph taken by a hovering helicopter. See Figure 9-1 below for a picture of the aerial photo.

Figure 9-1. June 6, 2008 Kids Ocean Day Cleanup and Aerial Photo.

Between the City sponsored and private group sponsored events, 1,904 volunteers removed 15,705 pounds of trash and debris from Oceanside City beaches and the three waterways that traverse the City of Oceanside including, the San Luis Rey River, Loma Alta Creek and Buena Vista Creek. Table 9-1 lists cleanup events held between July 2007 and June 2008 to encourage community participation and education of the effects of urban runoff:

Table 9-1. Cleanup Events Held during the 2007-08 Reporting Year.

Date	Event	Number of Participants	Pounds Tonnage of Waste Removed
City Sponsored Cleanup Events			
7/5/2007	Morning After Mess	60	463 pounds
9/15/2007	Buena Vista Creek Cleanup	130	5,500 pounds
9/15/2007	Oceanside Beach Cleanup	300	257 pounds

Date	Event	Number of Participants	Pounds Tonnage of Waste Removed
11/10/2007	San Luis Rey River Cleanup	136	1,000 pounds
4/26/2008	Loma Alta Creek Cleanup	413	8,000 pounds
	Total City Sponsored Events	**1,039**	**15,220 pounds**
Private Group Sponsored Events			
01/10/2008	Oceanside High School Environmental Club	10	10 pounds
02/23/2008	Oceanside High School Baseball Players	52	260 pounds
4/05/2008	Pacific Kiwanis High School Students	25	50 pounds
4/07/2008	Vista High School Key Club	5	10 pounds
4/19/2008	Black Student Union Cal State San Marcos	33	55 pounds
6/06/2008	Kid's Oceanside Beach Cleanup	800	100 pounds
	Total Private Group Events	**865**	**485 pounds**
	Grand Totals	**1,904**	**15,705 pounds**

Cleanup event mailing lists

During this reporting period and in previous years all volunteers were placed on a mailing list and were periodically mailed fliers with event information allowing them a sense of ownership and responsibility toward the Program. See Attachment 9-A for 2007-08 reporting year fliers mailed to past participants. In order to become more environmentally conscious and use less paper, during the next reporting period, the Clean Water Program will create an email distribution list as a way to inform interested parties about upcoming cleanup events. This will save time for staff to update mailing labels and eliminate the postage and printing costs for mailing these fliers.

9.1.4 Oceanside Update Show

Clean Water Program staff appear regularly on the Oceanside Update Show broadcast through Oceanside Channel KOCT. Each spot allows staff to spend three to five minutes discussing specific storm water pollution programs, pollution prevention, and BMPs to reduce impacts. The show is broadcast twice daily at 7:00 a.m. and 7:00 p.m. Topics are varied with every taping of Oceanside Update, therefore the viewing audience learns about a multitude of BMPs. While KOCT is unable to determine the actual number of residents who watch Channels 17 and 18 regularly or for any length of time, both channels broadcast to approximately 50,000 Oceanside households. Table 9-2 summarizes topics discussed each month in which the Clean Water Program aired a spot:

Table 9-2. Summary of Oceanside Update Topics by Month.

Date	Topic Discussed
August 2007	Water conservation & irrigation runoff
September 2007	Proper hookup for RV sewage dumping at the Oceanside Harbor RV dump station
November 2007	Water conservation & irrigation runoff
December 2007	Irrigation runoff & its connection to polluted runoff
February 2008	BMPs for residents during rainy season
April 2008	Loma Alta Creek Cleanup
June 2008	Strom drains are different that sewers

9.1.5 Additional Public Participation Opportunities

Other opportunities for local public participation during this reporting period are discussed below.

Interpublic Education. The City has developed programs to educate the public and various target communities of the JURMP and the numerous ways the public can contribute to reducing pollution of the City's waterways and Receiving Waters. However, the City recognizes that no matter how many educational programs it implements, there will always be a need for ongoing outreach to various audiences. Therefore, "spreading the word" is another significant effort that the public will be encouraged to participate in that will substantially contribute to the success of the JURMP. When speaking with the public about urban runoff issues, they are encouraged to speak with neighbors about how everyday activities can potentially pollute local waterways.

During this reporting period the Clean Water Program was contacted by a city resident living in a neighborhood with a Homeowners Association. This resident requested informational brochures that could be distributed to households in the neighborhood that address urban runoff and water conservation information. Brochures and information provided to the resident for distribution were as follows:

- Urban Runoff Guidelines for Residents – 125 each
- Pollution Prevention Tips for Gardening Activities - 125
- Pollution Prevention Tips for Landscape Contractors – 5
- Miscellaneous promotional items

The City will continue to provide homeowners associations with informational brochures for distribution throughout their communities.

City Staff Activities. City staff is the public at work. Staff is encouraged to report violations and provide feedback on the implementation of the JURMP. City staff is the eyes and ears of the City, and can provide valuable information on which components and programs are working and provide suggestions or recommendations on improving the programs. The City staff is provided an incentive based hotline called Oceanside Eyes for reporting potential runoff violations as well as other problems that require remediation, such as road repair or infrastructure maintenance needs. In addition, City staff provides feedback during municipal training sessions, information meetings, and by direct contact with the Clean Water Program Manager and staff. Comments are discussed and if changes can be made to better improve the program, then they are planned and implemented.

9.2 Regional Public Participation Opportunities

This section describes those mechanisms available, at the regional level, for the public to participate in to assist in the implementation of regional JURMP related programs and to provide feedback to the Copermittees and contribute to the continuing development of the numerous JURMPs in effect around the County:

9.2.1 Media

Outreach to the public through the media serves as a widespread public education BMP. These messages also promote public participation and further stewardship of the City's MS4 and receiving waters. Press releases for cleanup events were sent to local media outlets to request placing information in the publications. Media is an important element of public participation and keeps communication open between government staff and the public.

During Fiscal year 2007-08 three events were covered in the following publications:

- September 15, 2007 Coastal Cleanup Day – Article in The Coast News providing an overview of the event.
- November 10, 2007 San Luis Rey River Cleanup Event – Article in North County Times; front page of local section
- April 26, 2008 Loma Alta Creek Cleanup Event – Advertisement in local publication titled *Kids Stuff*.

Copies of the media coverage are located in Attachment 9-B.

9.2.2 Regional Events

San Diego County Fair The San Diego Regional Storm Water Copermittees sponsored the San Diego County Fair (Fair) in 2008 as an education and outreach activity. The sponsorship was a joint effort between the City of San Diego's Think Blue program and the regional Copermittees with each entity contributing approximately half towards the overall cost. The Fair was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental message. The Residential Sources and Outreach Workgroup (Outreach Workgroup) was responsible for overseeing sponsorship activities with the City of San Diego leading the coordination and implementation efforts.

The 2008 Fair was held June 14th through July 6th, spanning two fiscal years and will be included in both the FY 07/08 and FY 08/09 annual reports. The attendance for the fair was estimated at 1,235,698 persons for the 21 days the event occurred. Sponsorship for the Fair included staffing an outreach booth for 11 days, in which the majority of the jurisdictions provided staffing support. Two staff people from the City of Oceanside's Clean Water Program staffed the booth on June 21, 2008.

The outreach booth served as the primary method for educating the public about watershed protection and pollution prevention. The Outreach Workgroup elected to promote Integrated Pest Management (IPM) as the primary theme and collaborated on the distribution of IPM materials in both English and Spanish. Individual jurisdictions were invited to distribute their own materials in addition to the IPM materials. The Copermittees received credit as both a Flower & Garden Show sponsor and an Enviro-Fair sponsor.

Think Blue was designated as the brand for the Copermittees' during the event and signage demarking the symbol included banners, planter box displays and recycle bin stickers, which were visible at over 500 locations throughout the Fair. Media exposure included TV, radio and press releases. The sponsorship was printed in both the Fair program and included on the Fair map. Other promotions included newspaper advertisements, electronic messaging over the Jumbo Tron, website logos and links, and PA system announcements in both English and Spanish.

Think Blue, City of San Diego developed an event survey for the purposes of assessment. Over 1,200 survey cards were completed during the 11 days the booth was staffed. The questions focused on general storm water knowledge and awareness. The results are being tabulated and will be reported in FY 08/09.

Copermittee Meetings. Similar to Project Clean Water, the Copermittees meetings provide opportunities for public participation. Attendees include a wide variety of experts, including representatives of federal, state and local agencies, industry representatives, environmental groups, consulting firms, product vendors, general public, and academic and research institutions. Throughout the meeting, local municipality representatives are provided the opportunity to share recent water quality events. The meeting provides a venue to discuss the latest issues facing the various Copermittees and provides valuable insight into the current regional Urban Runoff issues. Public participation helps promote conversation and education on evolving industry standards.

Regional Hotlines. The regional hotlines provide a direct connection for public participation. Historically, the hotlines have worked well and should continue to increase in use as more people are educated of the hotline and the types of issues to report. The City will encourage reporting through its local hotlines, however, the regional hotlines will serve as an alternative to the local hotlines and also provide an opportunity for reporting by visitors to the City, from other areas in the County, who are not familiar with the local hotlines.

10.0 FISCAL ANALYSIS COMPONENT

The City of Oceanside acquires the funds necessary to facilitate the City's storm water program through four departments or divisions in the City: Water Utilities, Public Works, Engineering and Code Enforcement. Much of City's storm water program falls under the responsibility of these four departments/divisions. Funds obtained for use in implementing the City's storm water program are utilized for a number of different programs, including jurisdictional, watershed, and regional programs. This section documents the activities conducted by the City of Oceanside during the 2007-2008 reporting period to meet the requirements of Section G of the Municipal Permit Order 2007-0001.

Order 2007-0001 Compliance Summary

G: Fiscal Analysis Component	See Entire Section 10 of this Annual Report

Effective programs require adequate funding to implement planned activities. The first step in securing adequate funding for the JURMP is to provide a strategy for effectively conducting a fiscal analysis of the JURMP in its entirety. This year's fiscal analysis included an evaluation of the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities described in the JURMP and required under investigation orders and Total Maximum Daily Loads (TMDLs).

10.1 Fiscal Analysis Methods

10.1.1 Program Funding

As previously mentioned, the City secures funding for the implementation of the storm water program through the Water Utilities, Public Works, Engineering and Code Enforcement departments/divisions in the City. To secure adequate funding, the Water Utilities Department collects a Clean Water Program surcharge. The surcharge is based on the customer's water consumption, so the surcharge is also designed as an incentive for individuals to conserve water. During this reporting period an increase in the surcharge was secured in order to cover significant increases in costs due to additional requirements under Permit Order 2007-001, Investigation Orders, and TMDLs. This amount is equal to $.07 per unit of water used.

The Land Use Planning and Development department secures funding from development-related programs. The Engineering Division receives funding through fees assessed on developers for grading plan checks and inspections. Funding for Public Works departments is obtained through general allocations to the department.

10.1.2 Urban Runoff Management Programs

The City's storm water budget is used to support the following expenditure categories:

- Administration of the City's Clean Water Program
- Development Programs
- Capital Improvement Projects/Storm Water Pollution Compliance Programs
- Storm Drain Improvements

- Solid Waste
- Flood Control
- Street and Median Maintenance

Personnel from various City divisions/departments are involved in the implementation of the City's storm water program. Refer to Section 2 and the City's certification letter in Appendix A of the City's 2008 JURMP for further detail regarding the responsibilities of various departments. Other program expenditures include watershed and regional storm water activities.

10.1.3 Expenditure and Budget Reporting

Following are the expenditures for fiscal year 2007-08 as well as a proposed budget for the next fiscal year. The fiscal year expenditures are presented in tabular format with separate rows for different expenditure categories and the associated budget. The budget for the next fiscal year is presented in the same table.

The JURMP budgeting for the Water Clean Water Program which includes various departments is described in the following sections and summarized in Table 10-1 at the end of this section. During this reporting year two full-time positions were added under the Clean Water Program. These two positions were added to address the significant increase of inspection requirements for the industrial/commercial component. Currently there are eight staff people dedicated to the City's Clean Water Program.

- One full-time Clean Water Program/JURMP Coordinator
- Two full-time Environmental Specialists (focusing on water quality monitoring, education outreach, and program administration)
- Two full-time Code Enforcement Officers
- Two full-time CWP inspectors (new staff additions this year)
- One full-time Engineering Assistant (focusing on SUSMP and future HMP)

10.1.3.1 Water Utilities Department

The surcharge rate described above under Program Funding is listed as a separate line item on Oceanside customers' utility bills. This allows for the clear delineation of the revenue being secured for the Clean Water Program in the Water Utilities section of the utility bill. The costs to administer the Clean Water Program during Fiscal Year 2007-08 totaled $1,367,346. It is anticipated that the Water Utilities Department will expend $1,124,987 during Fiscal year 2008-09.

10.1.3.2 Public Works

The overall cost of the City's street sweeping program is estimated at $907,000 during this reporting period. This includes $442,000 for equipment costs and $465,000 for staff costs. With a total of 1,142 miles of public streets maintained in the City at a cost of $907,000, this averages out to $794.22 per mile. This cost does not account for the additional curb miles swept more frequently than others within the City and does not account for the parking lots swept. During future reporting periods, the city will develop a more refined length of curb miles to accommodate for the streets that are swept more than once monthly.

The cost for inspection and maintenance of the MS4 was $351,910 during this reporting period. These costs are expected to increase to $360,580 during fiscal year 2008-09. During Fiscal year 2007-08 the Public Works Department spent approximately $1,323,910. It is anticipated that the Public Works Department will expend $1,369,580 during Fiscal year 2008-09.

10.1.3.3 Engineering

Municipal Permit Order 2007-001 requires an increased focus and effort in development-related review and inspection, development of a Hydromodification Plan and revisions to the Standard Urban Storm Water Mitigation Plan. The approximate costs to implement this program during Fiscal year 2007-08 totaled $272,510. It is anticipated that Engineering Department will expend $275,006 during Fiscal year 2008-09.

10.1.3.4 Overall Clean Water Program Costs

During Fiscal Year 2007-08 approximately $2,963,766 was expended amongst four departments (including Code Enforcement) for the implementation of the Clean Water Program. It is anticipated that the total program costs for Fiscal Year 2008-09 will total $2,769,573. This reduction is due to the fact that the majority of the costs for the Lagoon TMDL Investigation Order was appropriated during the first year of the two year program.

Figure 10-1. JURMP Budgeting for Water Utilities, Public Works and Engineering Departments/Divisions.

Department	Item	Fiscal Year 2007-2008	Projected Fiscal Year 2008-2009
Water Utilities	Personnel (including Code Enforcement)	410,330	588,767
	Misc. office supplies, postage, uniforms	2,000	3,200
	Print Materials	0	30,000
	Monitoring Programs including lab materials, supplies and services	17,191	103,000
	Other Misc Cleanups and booths	73,000	34,500
	Consultant Fees Investigation Order, TMDL and Regional Monitoring Programs	730,440	151,678
	Independent Contractors	0	39,000
	Permits	135,000	25,000
	Dues, Travel, Advertising	9,400	16,450
	Equipment	2,000	20,000
	Regional URMP Activities	16,815	51,615
	Watershed URMP Activities	41,521	47,180
	Regional Education	10,656	11,082
	Effectiveness Assessment	3,256	3,515
Water Utilities	**Total**	**1,367,346**	**1,124,987**
Public Works	Street Sweeping (Equipment)	442,000	460,000
	Street Sweeping (staffing and /or contract costs)	465,000	484,000
	Conveyance System Cleaning (Contracted Work and City Staff	351,910	360,580
	Personnel for CWP Monitoring	65,000	65,000
Public Works	**Total**	**1,323,910**	**1,369,580**
Engineering	Personnel	250,000	260,000
	Hydromodificaiton Plan	22,510	15,006
Engineering	**Total**	**272,510**	**275,006**
	Grand Total	**2,963,766**	**2,769,573**

11.0 EFFECTIVENESS ASSESSMENT COMPONENT

11.1 Introduction

Effectiveness assessment is an important component of the JURMP because it can assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The San Diego County Copermittees developed two guidance documents to assist in the assessment of the JURMP components as well as the jurisdictions overall JURMP program. These two documents are titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* and the *Baseline Long-term Effectiveness Assessment* (BLTEA). The City participated in regional efforts to develop these documents in anticipation of the requirement to assess their JURMP programs.

The City gathered and evaluated data for some of the program components for assessment during this reporting period. This data will be valuable for incorporation into long-term effectiveness evaluation on a jurisdictional level. In future reporting years the issue of standardized assessment metrics and procedures will be addressed by the Copermittees. The City anticipates participation in the further development of these work products.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes.

Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique. The effectiveness assessment approach developed by the Copermittees during the 2005-06 permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

- Level 1: Compliance with Activity-Based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation

- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

The establishment of measurable outcomes is necessary for both incremental program component improvements and as a basis for future establishment of relationships between implementation and water quality improvement outcomes.

11.2 Effectiveness Assessment Results

The Municipal Permit Order 2007-0001 requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Levels 1, 2, 3, 4, 5, and 6 outcomes are discussed in the text below. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome level assessments

Level 1 – Compliance with Activity-Based Permit Requirements: Documenting Activities

Compliance with Activity-based permit requirements is intended to provide a quantitative assessment that reflects the regional long-term effectiveness assessment framework through targeted outcomes for the City based on various components of the Municipal Permit. Level 1 outcomes take the form of a simple yes or no answer basically answering "Was the control measure completed?" or it may provide feedback that may be quantified, counted, or tracked over time to demonstrate effort or progress. This may take the look of the number of tasks completed

Level 2 – Changes in Knowledge/Awareness: Raising Awareness

An important goal of stormwater programs is to increase the level of knowledge and awareness among target audiences such as residents, businesses, and municipal employees. Level 2 outcomes provide program managers feedback on how effective the various control measures have been in raising awareness and changing attitudes of the target audience.

Level 3 – Behavioral Change/BMP Implementation: Changing Behavior

A key focus of the stormwater management program is to effect changes in behavior. By building increases in knowledge and awareness (Level 2), level 3 outcomes provide program managers with feedback on how effective the program elements and control measures have been in motivating target audiences to change their behaviors and implement appropriate BMPs.

Level 4 – Load Reductions: Reducing Loads from Sources

Many control measures are intended to reduce the loading of pollutants from targeted sources. Load reductions should, in turn, result in improvements to discharge and

receiving water quality. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning.

Level 5 – Changes in Discharge Quality: Improving Runoff Quality
A primary focus of stormwater management programs is to reduce pollutants in stormwater to the maximum extent practicable, and to ensure that these discharges do not cause or contribute to violations of water quality standards in receiving waters. At this level baseline measurements of runoff quality are measured to allow comparison. Measurable changes requirements frames of a year or greater. And, multi-year data sets are needed in order to have any confidence in the measured change.

Level 6 – Changes in Receiving Water Quality: Protecting Receiving Water Quality
The ultimate objective of stormwater management programs is the protection of water bodies. At level 6, program mangers will focus on outcomes such as compliance with water quality standards, protection of biological integrity, and beneficial use attainment.

Summary
Program elements and control measures will typically have outcomes at more than one of the levels described above and not all outcome levels will necessarily be applicable to all activities. The information submitted with this report will address levels 1, 2, 3 and 4. Section 7 of this report, IDDE, will be submitted prior to December 15 and will address level 5.

11.2.2 Overall Component Assessments

11.2.2.1 Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency BMPs. Based on some interaction with responsible parties after the end of the reporting period and the results of the treatment control inspections, it appears that there is a consistent desire by developers to include just structural BMPs instead of a combination of structural and treatment controls BMPs. The City will work with the parties responsible for maintenance of treatment control BMPs to address this issue during 2008/2009. The following information highlights the Development Component of the City's JURMP. Table 11-1 presents the level 1 effectiveness assessment.

Revised SUSMP Manual
The City of Oceanside Interim Local SUSMP is based on the Interim Model SUSMP developed collectively by the Copermittees to address post-construction urban runoff pollution from new development and redevelopment projects that fall under both "priority project" and "standard project" categories. The general goal of the SUSMP is to develop and implement practicable policies to ensure to the maximum extent practicable that development does not increase pollutant loads from a project site and urban runoff flow rates, volumes, velocities, and durations. This goal may be achieved through site-specific controls and/or drainage area-based structural treatment controls. The City's Interim Local SUSMP identifies appropriate BMPs for certain designated project types to achieve this goal. Projects that fall identified as priority projects are required to prepare a Stormwater Mitigation Plan (SWMP). Development projects not qualifying as priority projects will be required to prepare a Runoff Assessment Report (RAR) as specified in

this SUSMP. The RAR will require the applicant to incorporate LID concepts, site design BMPs, and source control BMPs in the project design, but no structural treatment control BMPs will be required. The manual is available on the Clean Water Program website.

Interdepartmental Coordination
The City's SUSMP and development review process includes multiple departments and divisions throughout the City. The City has taken necessary steps to maintain compliance with SUSMP requirements through the coordination of these multiple departments and divisions.

Dedicated Storm Water Management Program
The City established the Clean Water Program (CWP) in 2001 under the Water Utilities Department. The CWP program in conjunction with the Engineering Department provides the necessary oversight for all management components of the SUSMP. During this reporting period the Engineering Department hired a full time storm water plan check reviewer.

Table 11-1. Development Planning – Level 1: Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Development Planning D.1.e	Development Projects	Projects needing SWMP	Projects completing SWMP	Actual/Target	Percent ( ) Completion
	Priority Projects (Required SWMP)	36	36	36/36	100
		Sites needing RAR	Sites completing RAR	Actual/Target	
	Standard Projects (Require RAR)	4	4	4/4	100
	SUSMP Inspections	Sites targeted for Inspection	Sites Inspected	Actual/Target	
	High, Medium and Low Priority Sites (Total 41)	41	41	41/41	100

As the City continues to grow and evolve, challenges associated with data management emerges such as tracking of post-construction BMPs, maintenances agreements, and associated documents. It is important to update available tools with up-to-date information. This will be an issue to address during the next reporting period.

11.2.2.2 Construction

The construction component of the City's JURMP continues to be effectively implemented through inspection and enforcement, education and training and BMP

maintenance (Table 11-2). As construction activities continue, the City will maintain the level of performance established from past years, and continue to meet the regulatory standards mandated in the Municipal permit.

Table 11-2. Construction – Level 1: Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Development Planning D.2.d	Construction Projects	sites targeted for Inspection	sites inspected	Actual/Target	Percent ( ) Completion
	High Priority Sites	20	20	20/20	100
	Medium Priority	29	29	29/29	100
	Low Priority Sites	26	26	26/26	100

11.2.2.3 Municipal

The municipal component of the City's JURMP continues to provide a well-rounded approach and will continue to implement a comprehensive education program along with inspections of municipal facilities, MS4 maintenance, sanitary sewer slip-lining and street sweeping (Table 11-3).

Table 11-3. Municipal – Level 1: Compliance with Activity-Based Requirements; Level 4 - Load Reductions: Reducing Loads from Sources.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.a	Municipal Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	(High, Medium and Low priority facilities)	230	230	230/230	100
	MS4	of catch Basins to be cleaned	of catch Basins actually cleaned	Actual/Target	Percent ( ) Completion
	Catch basins cleaned	3,252	3,252	3,252/3,000	100
	Sanitary Sewer	of feet to be slip-lined	of feet actually slip-lined	Actual/Target	Percent ( ) Completion
	Feet of sewer slip-lined	5,352	7,252	7,252/5,352	135
	Street Sweeping	of miles of streets to be swept	of miles of streets actually swept	Actual/Target	Percent ( ) Completion
	Miles of street swept	571	571	571/571	100

In addition the City implemented a training program that provided pre- and post-quizzes to assess the effectiveness of the training course specific to each department or division. During the 2007-08 reporting year, 298 City staff was trained on the City's storm water program requirements. Pre- and post- tests were given to assess the level of knowledge before and after each training session. Depending on the nature of the employee's department, the employee's were given a 15 or a 20 questions test. One training program and its associated quiz targeted staff who work at and maintain industrial facilities. The other training programs targeted City staff that worked in various departments including fleet maintenance, parks and recreation and street maintenance. The average City pre-test score was 64% percent of the questions correct. The average City post-test score was 98% percent of the questions correct. Figure 11-1 presents the pre- and post-test scores by City department.

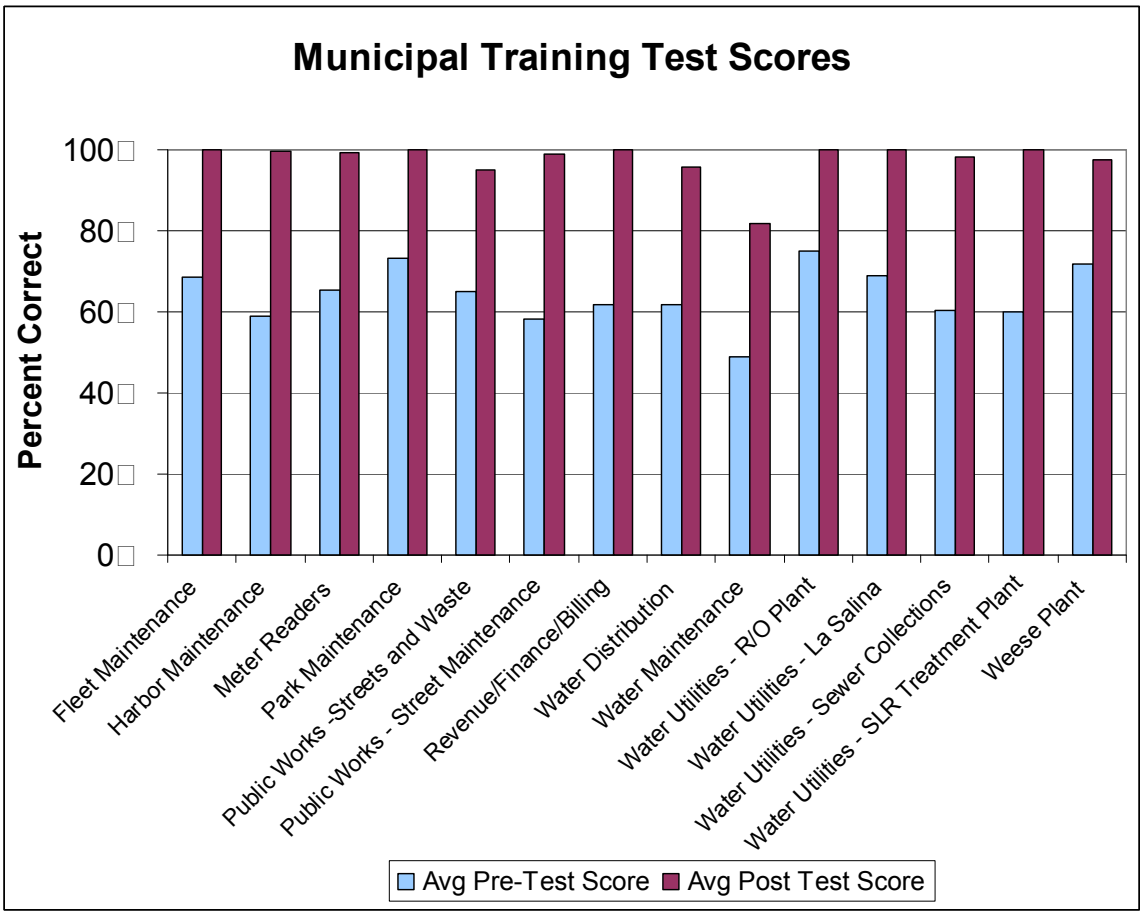

Figure 11-1. Municipal – Level 2: Changes in Knowledge/Awareness: Raising Awareness.

11.2.2.4 Industrial and Commercial

The City implements a comprehensive inspection program for industrial and commercial facilities including all restaurants and nursery and greenhouse operations. Table 11-4 provides an assessment for the inspections.

Table 11-4. Industrial and Commercial Component - Level 1: Compliance with Activity-Based Requirements.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.b	Industrial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	High, priority facilities)	52	52	52/52	100
	Industrial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	Medium and Low priority facilities	As Needed	75	N/A	N/A
	Commercial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	High priority facilities - Restaurants	371	371	371/371	100
	Commercial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	High priority facilities Other than restaurants	94	94	94/94	100
	Commercial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	Medium and Low priority facilities	As needed	104	N/A	N/A
	Nursery and Greenhouses	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	All High Priority	28	28	28/28	100

During inspections of industrial, commercial, and nursery and greenhouse operations, City staff and contractors rated the overall level of storm water knowledge and the level of BMP implementation while completing the inspection. The knowledge assessment ratings were designed to gauge awareness of storm water pollution prevention and implementation of effective BMPs. Table 11-5 presents the basis for the ratings.

Table 11-5. Description of Effectiveness Assessment Levels for Inspections.

Overall Level of Knowledge	
Level	**Description**
5	Individual demonstrated an in depth knowledge of the storm water program and BMPs consistent with the facility's activities and operations.
4	Individual has a clear understanding of BMPs but may not have a clear awareness of the connection between pollution prevention and water quality.
3	Individual has a general understanding of storm water issues ("*I've heard something about that*"), but not specific storm water requirements or BMPs required for the facility.
2	Individual has a general awareness of water quality issues, but does not understand the requirements of the storm water program, BMPs, or pollution prevention.
1	Individual has never heard of the storm water program, requirements, or BMPs. This individual does know what BMPs are or understand how to implement them.
Overall BMP Assessment	
5	All BMPs implemented effectively. No violations noted during the inspection.
4	BMPs implemented effectively, however minor violations associated with communal areas or good housekeeping practices (i.e., dumpsters open, leaves in the parking lot, etc.) were noted during the inspection.
3	BMPs have been implemented throughout the site, but not properly or adequately maintained. Violations were noted during the inspection and a verbal notice was issued. A detailed inspection report or written Warning Notice may follow.
2	BMPs have not been implemented. Several violations were noted during the inspection, however an illegal discharge was not observed. A detailed inspection report and/or written warning was issued.
1	**An illegal discharge was noted during the inspection**. Enforcement actions (NOV, citation, etc.) required.

During the 2007-08 reporting year, the majority of ratings for overall level of storm water knowledge was a Level 3 based on Table 11-5 above. This indicates that the facility manager or responsible party had a general understanding of storm water issues, but not specific storm water requirements of BMPs required for the facility. Figure 11-2 presents the overall level of knowledge assessment for 2007-08 industrial and commercial inspections with the levels shown by facility type.

The majority of ratings for overall BMP assessment were also a Level 3 based on Table 11-5 above (Figure 11-3). This indicates that BMPs have been implemented throughout the site, but not properly or adequately maintained. However, there were more Level 4 and Level 5 ratings indicating a high level of effective BMP implementation in all types of facilities.

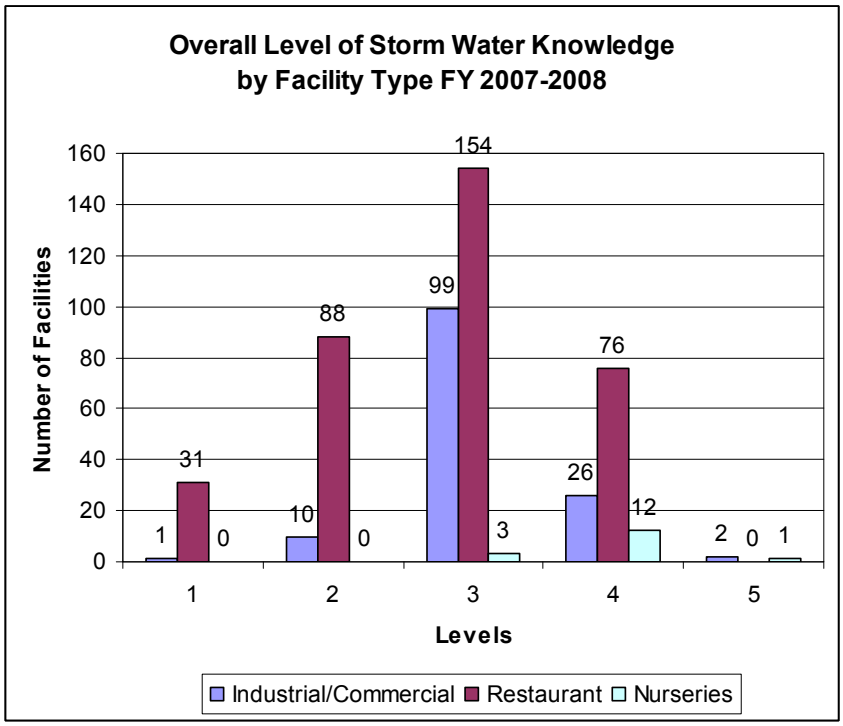

Figure 11-2. Industrial and Commercial – Level 2: Changes in Knowledge/Awareness: Raising Awareness.

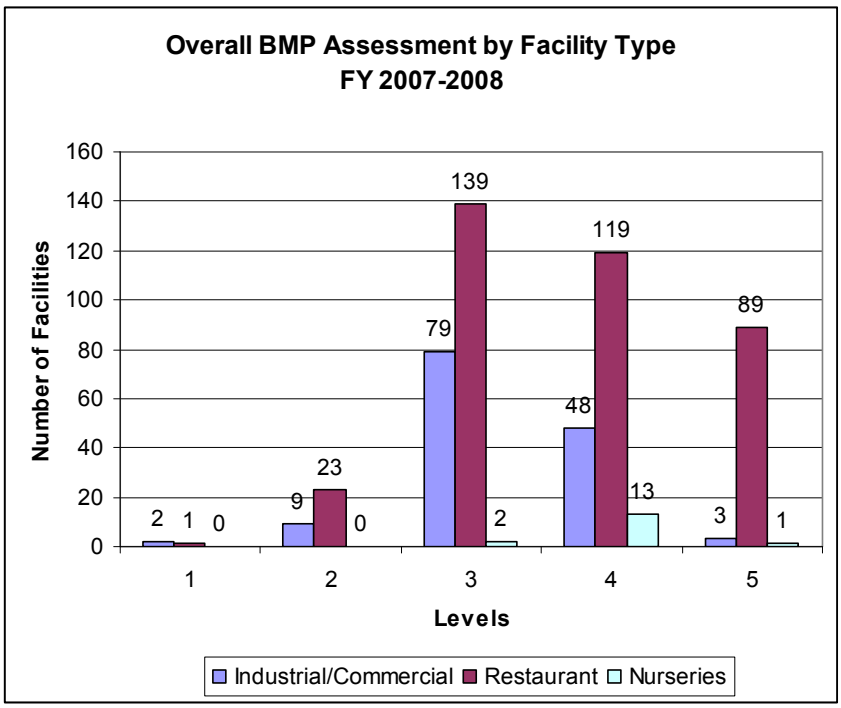

Figure 11-3. Industrial and Commercial – Level 2: Changes in Knowledge/Awareness: Raising Awareness.

Comparison between the two questions shows that the inspected facilities of all types show a higher rating of BMP implementation than overall storm water knowledge, except for the nurseries and greenhouses. These facilities have a higher knowledge of general storm water pollution prevention practices than the industrial, commercial, and restaurant facilities.

11.2.2.5 Residential

The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. The City is also conducting additional monitoring studies to help identify and mitigate residential sources of pollution more effectively. Although fewer households participated in dropping off household hazardous waste during this reporting period, more quantity of household hazardous waste was collected for proper disposal (Table 11-6).

Table 11-6. Residential Component - Behavioral Change/BMP Implementation Changing Behavior.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Residential D.3.e	Household Hazardous Material	Quantity of waste targeted	Quantity of waste collected	Actual/Target	Percent ( ) Completion
		130.7 tons	142.8 tons	142.8/130.7	109
	Households Participating in Program	of households targeted	of households participating	Actual/Target	Percent ( ) Completion
		3,688	3,430	3,430/3,688	93

11.2.2.6 IDDE

An assessment of this component will be provided in Section 7 when the City submits the entire FY 2007-08 Illicit Discharge Detection and Elimination Component, including the 2008 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2008.

11.2.2.7 Education and Public Participation

The City implements a comprehensive education outreach program for both municipal staff and the public as well as a comprehensive public participation program (Table 11-7). See 11.2.2.3 above for an assessment of the Municipal training program. The City prides itself on educating children within its jurisdiction through the use of a watershed model.

Table 11-7. Education and Public Participation Component - Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.g	Student Presentations	of presentations targeted	of presentations completed	Actual/Target	Percent ( ) Completion
		10	10	10/10	100
	CWP Newsletters	of newsletters targeted for completion	of newsletters completed	Actual/Target	Percent ( ) Completion
		2	2	2/2	100
	Oceanside Update Tapings	of tapings planned	of tapings completed	Actual/Target	Percent ( ) Completion
		6	7	7/6	116
	Pet Waste Signs	of signs targeted for installation	of signs installed	Actual/Target	Percent ( ) Completion
		5	5	5/5	100
	CWP Website	of targeted hits	of actual hits	Actual/Target	Percent ( ) Completion
		45,000	38,146	38,146/45,000	84.7

11.3 Program Review and Modification

No changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

12.0 SPECIAL INVESTIGATIONS

12.1 Lower San Luis Rey Bacteria Source Identification Project

12.1.1 Overview

As part of the Proposition 50 Clean Beaches Initiative, the City of Oceanside has been awarded a grant to track the sources of bacteria in the Lower San Luis Rey River. The shoreline at the outlet of the San Luis Rey (SLR) River mouth in Oceanside, California is visited by thousands of people each year. Elevated levels of fecal indicator bacteria (FIB) have affected water quality in the river mouth and the adjacent shoreline. In 2007, this beach was posted due to bacterial exceedances for 54 days; in 2006, it was posted for 71 days; in 2005, this beach was posted for 209 days and 186 of those days were during one consecutive stretch. As a result of the exceedances, the river mouth and one-half mile of shoreline is listed as an impaired water body under section 303(d) of the Clean Water Act for exceedances of indicator bacterial standards. The beach is also listed as a Clean Beach Task Force priority beach.

A major objective of the San Luis Rey Watershed Urban Runoff Management Program (WURMP) lead by the City of Oceanside is to identify sources of the FIB at the river mouth. As directed by the WURMP, the City of Oceanside and the County of San Diego have jointly sampled the San Luis Rey River since March of 2004 to determine if the river is the source of the high concentrations of FIB at the river mouth. Thus far, the results are inconclusive and indicate the need for focused sampling in the lower river and at the river mouth.

To address this issue, the City received $554,375 from the SWQCB and, with the assistance of other stakeholders, will match $141,750 to implement the source identification project in the lower river and river mouth. The City awarded MACTEC Engineering and Consulting, Inc. (MACTEC) and their team of leading scientist in the field the lead contract for the organization and completion of the two-year study.

The overall goal of the proposed study is to identify the sources and quantify the loading of bacterial contamination using a tiered approach. The project will analyze for FIB to identify "hot spots" and to assess bacterial flux. Based on these results, genetic microbial and viral analyses on selected samples will be conducted to pinpoint potential sources and identify potential public health risks. The suite of analyses include *Bacteroides spp,* ESP gene quantification, enterovirus analyses using quantitative PCR (QPCR), sequencing of the enterovirus from the field samples, community based bacterial analyses, and *Enterococcus* speciation. In addition, the joint monthly monitoring program between the City of Oceanside and the County of San Diego will continue and the bacteria monitoring data will be collected and utilized throughout the duration of the project.

This approach will permit prioritization for mitigation of microbial contaminants and appropriate actions will be recommended to eliminate sources of fecal contamination. The three following objectives will be accomplished to achieve the overall goal set forward above:

- Identify point and non-point sources of bacteria contamination in the Lower San Luis Rey River and at the river mouth during the dry and wet season,
- Estimate the bacterial loading from tributaries and along the main stem of the San Luis Rey River during the dry and wet season, and
- Recommend Best Management Practices (BMPs) to reduce and/or eliminate bacterial sources.

12.1.2 Activities completed during this reporting period

Establishment of a TAC

The first TAC meeting was held on November 1, 2007 from 9:30 to noon. Members included six representatives from the Regional Water Quality Control Board, County of San Diego, City of Vista, and San Diego CoastKeeper in addition to three representatives from the City of Oceanside. An overview of the project and historical data was presented for the benefit of the stakeholders. The role of the TAC was discussed. The TAC will be involved in all aspects of the project, including final approval of the project approach and oversight of the monitoring and reporting. The meeting was concluded with a tour of the mouth of the San Luis Rey to orient members with the complexity of the river. A final list of the TAC was submitted to the SWRCB on January 10, 2008.

A second TAC meeting was held on February 4, 2008 with six representatives from the Regional Water Quality Control Board, County of San Diego, City of Vista, and San Diego CoastKeeper in addition to two representatives from the City of Oceanside. The MACTEC project team presented the proposed project approach to the TAC. The approach was discussed and the TAC made recommendations to be included in the Monitoring Plan and QAPP.

Consultant Selection

A Request for Proposals (RFP) was sent out on November 8, 2007 to solicit proposals from interested and experienced consultants to perform a bacteria source tracking project on the San Luis Rey River. Proposals were due to the City of Oceanside by December 4, 2007 and a subcommittee of the TAC reviewed the proposals on December 7, 2007. MACTEC Engineering and Consulting, Inc. was officially awarded and given a notice to proceed by City Council on February 20, 2008.

Monitoring Plan and Quality Assurance Project Plan Approval

Other important work included the development and approval by the SWRCB of the Monitoring Plan and Quality Assurance Project Plan (QAPP) by the MACTEC project team with input from the TAC. The consultants and members of the TAC and City staff participated in a conference call to discuss the draft Monitoring Plan and QAPP on March 28, 2008. These documents were reviewed by the SWRCB and revised based upon their comments. The SWRCB approved the Monitoring Plan and QAPP on June 19, 2008.

First Monitoring Event

The first dry season monitoring event took place on June 18 and 19, 2008. Dr. Rachel Noble traveled to San Diego to prepare for the first event with the project team and participate both days of monitoring. The project team collected bacteria samples and flow measurements at six

monitoring locations in the Lower San Luis Rey River. The bacteria samples were analyzed for fecal indicator bacteria and the remaining sample volume was filtered and frozen for molecular analysis. The river mouth was not sampled, as planned, due to construction of the new Pacific Street Bridge but will be sampling in the wet season and the dry 2009 season.

The City of Oceanside and the County of San Diego implemented the changes to the joint monthly monitoring program during the June 2008 monitoring event. The program will continue using SWAMP protocols throughout the remainder of the source identification project allowing the bacteria data from monthly monitoring to supplement the dry and wet weather event data.

12.2 Loma Alta Creek Ultraviolet Light Treatment Facility

12.2.1 Overview

Loma Alta Creek Lagoon and Buccaneer Beach, located in the City of Oceanside, are currently impacted by high levels of bacteria. This is a family beach adjacent to a park with a large parking area, showers and an eating establishment that sees large crowds during the dry months. The City has determined that a key source of bacteria and nutrients in Loma Alta Creek is urban runoff that discharges into the creek. The source of water for Loma Alta Creek is from storm drain flows and hillside seepage from the Loma Alta watershed, which drains approximately 6,400 acres, and flows through densely developed residential, commercial, and industrial land uses.

Just over eight acres of the Loma Alta Slough are included on Section 303(d) of the federal Clean Water Act list of impaired water bodies for bacterial indicators and eutrophication within the and for 1.1 miles of coastline at the opening. The increased presence of bacteria and pathogens in the watershed poses a threat to REC-1 and REC-2 beneficial uses and directly impacts the ocean water quality at Buccaneer Beach. The bacteria that are present in Loma Alta Creek have resulted in numerous beach closures and postings at Buccaneer Beach. Historically, Buccaneer Beach was subject to closures that last the entire summer season. To reduce the bacterial loading on Buccaneer Beach, the City will allow the lagoon opening to sand closed as the south swell arrives in May and divert 100% of the dry weather flow through an ultraviolet light treatment facility then discharge the treated water at the high tide line into the ocean. The project, once completed, will capture up to 1,000,000 gallons per day of urban runoff

12.2.2 Project Scope

The City was awarded a $5,000,000 Proposition 40 Clean Beaches Initiative (CBI) grant by the State Water Resources Control Board to construct an ultraviolet (UV) light treatment facility at the existing La Salina Wastewater Treatment Facility. One hundred percent of the dry weather creek flows (averaging 300 to 700 gallons per minute) will be intercepted in the lagoon and diverted to the UV treatment facility, located on the northern bank of the creek. The treatment

facility consists of piping flows from an exiting diversion structure by gravity from the lagoon through a 2 micron fine screen to a wet well where the flow is pumped into two large sand filters followed by two UV disinfection units housed in a reinforced concrete building. The treated water is discharged through a pipe extended along the existing section of rip-rap that runs along the north side of the Loma Alta creek outlet at Buccaneer Beach. During wet weather months (November through April), the lagoon would be opened to allow free flow to the ocean and the UV system would be bypassed.

12.2.3 Progress Milestones Achieved Schedule

The California Coastal Commission approved Permit No. 6-06-152 for construction of the outfall pipe associated with the UV treatment facility on June 14, 2007. Loma Alta Creek UV Treatment Facility project entered into the construction phase on August 13, 2007 when the official Notice to Proceed was issued to Orion Construction Corporation. The project is expected to be completed in August 2008.

12.2.4 Project Outcomes Effectiveness Benefits

The anticipated project goal is to eliminate beach closures during the dry months at Buccaneer Beach in Oceanside, California. This will be achieved by diverting the flow from the Loma Alta Lagoon through a UV treatment facility prior to discharging the flow onto the shoreline. The City will monitor the UV treated storm drain outlet and the surf zone for bacteria for the 2008 AB411 period. The approved Monitoring Plan and Quality Assurance Project Plan developed for this project will be implemented.

13.0 NON-EMERGENCY FIRE FIGHTING

Emergency fire fighting flows (flows necessary for the protection of life or property) are allowed by the Municipal Permit and do not require implementation of BMPs. Non-emergency fire fighting BMPs and educational methods for reducing the discharge of pollutants from non-emergency flows to the MEP are described below.

Order 2007-0001 Compliance Summary

J.3.a(3)(1)iv Non-Emergency Fire Fighting	See Entire Section 13 of this Annual Report

13.1 Best Management Practices

The City developed and implemented a program to reduce pollutants from non-emergency fire fighting flows, in accordance with Section B.3 of Permit Order 2007-0001. BMPs were implemented when the following activities were conducted:

- Regular Maintenance of Fire and Emergency Vehicles and Equipment
- Training Exercises
- Facilities Maintenance
- Post-Emergency Rehabilitation of Response Equipment

These activities were conducted in a way to either minimize or eliminate the discharge of pollutants to the MS4. Detailed descriptions of BMPs are given for each activity below:

Regular Maintenance of Fire and Emergency Vehicles and Equipment

- Vehicles and equipment were cleaned where runoff was directed to either the sanitary sewer system or to a drain with an oil/water separator system.
- Vehicles and equipment were cleaned where runoff would pond and evaporate and/or where runoff would filter through landscaped areas.
- Sewer drains in a vehicle cleaning area were outfitted with a hydro screen fabric barrier to collect debris.
- Spill kits were available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents were minimized, and general cleaning solutions were disposed of into the sanitary sewer system.

Training Exercises

- Water used in training exercises was directed to landscaped areas whenever possible, and runoff from the training exercises was not allowed to discharge to the MS4.
- Live fire training activities were pre-planned to allow integration of barriers to off-site runoff that could contribute to non-storm water discharges.

Facilities Maintenance

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways were swept to remove debris. Debris was placed in the trash.
- Landscaped areas were maintained as required to reduce the introduction of leaves and other landscape waste into the MS4.
- Irrigation systems were monitored and maintained as required to reduce irrigation water from going off-site.

- Spills were cleaned up using spill kits provided at the work site, and disposal of spilled material was in accordance with applicable regulations.
- Spills that required a cleanup beyond the ability of the on-site employees were reported to the City's Public Works Department for assistance with appropriate resources.
- Maintenance and repair of structures were conducted using methods that do not contribute pollutants to the MS4.

Post-Emergency Rehabilitation of Response Equipment
Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency were restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. The use of water that could contribute to storm water discharges was used unless another practical and immediately available method was identified, and was performed in a manner that minimized discharges to the MEP.

13.2 Educational Methods

During live fire fighting training exercises all fire fighters were educated about the requirement to not allow water flows to enter the MS4. Fire fighters in attendance for training sessions about how to use high pressure fire fighting hoses were educated on how to direct the water to percolation basins that are permanently in place at the training grounds. Water that is directed to these basins was allowed to infiltrate into the soil.

Prior to building structures at the training grounds being set on fire, perimeter controls were put in place to ensure that water from the non-emergency training session did not reach the MS4. Fire fighters in attendance were educated on the proper type and installation protocol of perimeter controls. These perimeter controls were also used for training sessions related to vehicle fires.

14.0 JURMP REVISIONS

Since the submittal of the City's 2008 JURMP in March 2008 there have been no changes or revisions to the document. It is anticipated that there will be changes during the next reporting period, fiscal year 2008-09.

15.0 CONCLUSIONS AND RECOMMENDATIONS

15.1 Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the San Diego Copermittees. Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2007-2008 annual reporting period (July 1, 2007 – June 30, 2008).

15.2 Conclusions

This annual report presents the activities the City conducted from July 1, 2007 through June 30, 2008 to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The activities involved implementing, and improving where needed, existing programs and developing new programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. Improving the quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

As detailed in the Program Effectiveness Assessment Component, the City met all of the development planning targets and met or exceeded the municipal targets. While the City fell slightly short on the targeted number of households to utilize the Household Hazardous Waste Program in the residential component, the target for the amount of household hazardous waste collected was exceeded. Long-term effectiveness assessment is an ongoing and iterative process and the City will continue to use this process to further improve its storm water program.

15.3 Recommendations

15.3.1 Database Tracking System for various departments and divisions

Many components of the new 2007 Municipal Permit require detailed information from across departmental boundaries and, therefore, across various data collection systems within the City. As part of the March 2008 Integrated Water Utilities Master Plan, the Information Technology component provided several key strategies which will focus on integrating reporting requirements and, therefore, collection systems across businesses and operations. As the Urban Runoff Hotline is utilized more, the Clean Water Program will be integrating information from Hotline calls into the main Water Utilities database. This will ensure complaints and inquires are tracked as they are distributed through Water and Sewer Maintenance Divisions, Code Enforcement Division and the Clean Water Program and will provide more detailed information for reporting purposes.

As land use development continues in the City, challenges associated with data management, such as tracking of post-construction BMPs, maintenances agreements, and associated documents, as emerged. It is important to update available tools with up-to-date information. This will be an issue to address during the next reporting period. The Clean Water Program will

also be working with other City departments to ensure that the details of inspections, complaints, and follow-ups will be tracked appropriately to be included in future annual reports.

15.3.2 Assessment of Educational Outreach Materials

The Clean Water Program has developed several educational materials in the past that will be assessed, revised and re-printed where needed. The City will consider using Community Social Based Marketing tool to determine the effectiveness of disseminating these brochures or if another educational outreach toll may be more effective. Table 15-1 provides a list of brochures already produced, its description and whether the document is planned for revision and/or reprinting.

Table 15-1. Educational Materials Planned for Revision and Reprinting.

Education Material	Description
Urban Runoff Guidelines for Residents Brochure	This brochure will be reviewed and revised where necessary to address pollutants of concern and topics.
Pollution Prevention Tips for Gardening Activities Brochure	This brochure will be reviewed and revised, if necessary and re-ordered.
Urban Runoff Guidelines for Commercial Businesses Brochure	This brochure will be revised to better reflect the requirements of Permit Order 2007-0001.
Urban Runoff Guidelines for Powerwashers	The San Diego county co-permittees will be working on the development of education outreach materials for this target audience. While in development, the City of Oceanside will seriously consider revising this brochure to educate this target audience about the BMP requirements for power washing business operations.
Guide to Oceanside Water bodies Booklet	This brochure was reprinted during this reporting period. It will be revised and updated with current information, updated GIS maps and additional details.
Poop Pollutes Pet Waste Bag Dispensers	Pet waste bag dispensers will be re-ordered for an anticipated Pick up your Pet Waste Campaign to be impelemtend during Fiscal year 2008-09 along the San Luis Rey River Trail.
Click Message Pen	These click message pens will be re-ordered in Fiscal Year 2008-09. The six messages on the pens will be reviewed and possibly revised based on pollutants of concern relative to Oceanside watersheds.

15.3.3 Underserved Target Audience Outreach - Including Mobile Businesses and Spanish Speaking Population

Underserved target audiences will be targeted with revised information during reporting period 2008-09. The two main audiences in this category are mobile businesses and the Spanish speaking population.

ATTACHMENT 3-A

A Pollution Prevention Guide for the Construction Industry

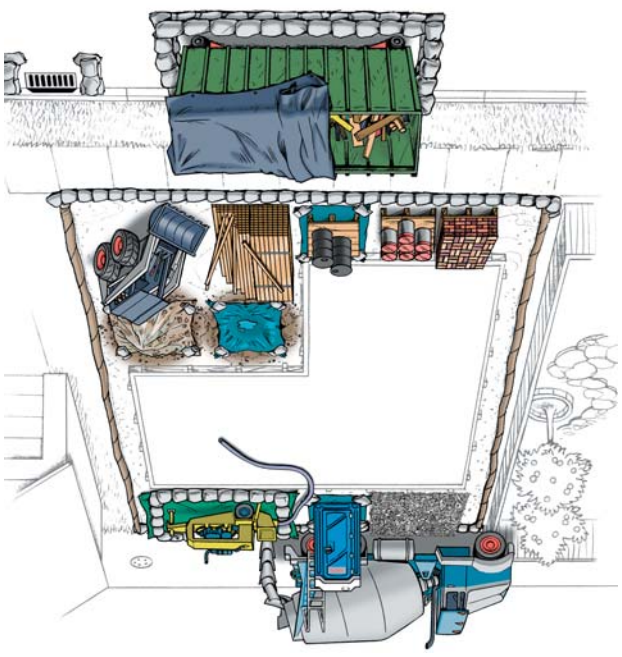

Water Quality Regulations for Construction Sites

In 1972, the Environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jursidiction.

Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.

Best Management Practices

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.

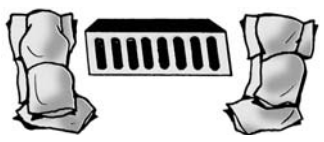

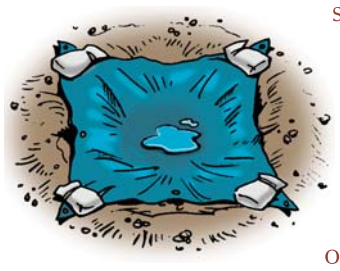

The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad 760-602-2719
City of San Marcos 760-744-1050
City of Encinitas 760-633-2787
City of Del Mar 858-755-9313
City of Oceanside 760-435-5800
City of Solana Beach 858-720-2470
City of Vista 760-726-1340

North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Perimeter controls

Gravel bags, silt fences, and straw wattles are acceptable perimeter controls, and must be used to surround the entire site to control run-on and run-off. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Keep extra absorbent materials and/or a wet/dry vacuum on site to quickly pick up unintended spills. Sites must also be checked and maintained daily.

Building materials/staging areas

Construction materials must be stored on site at all times unless a right-of-way permit has been obtained. Building materials should always be covered when not in use to prevent run-off caused by wind or rain. To apply for a right-of-way permit, contact the appropriate department of your local jurisdiction.

Dumpsters/Port-a-Potty

Always cover dumpsters with a rollback tarp. Areas around dumpsters should be swept daily. Perimeter controls should also surround dumpsters and all Port-a-Potties. If dumpsters or Port-a-Potties are kept on the street, right-of-way permits are needed.

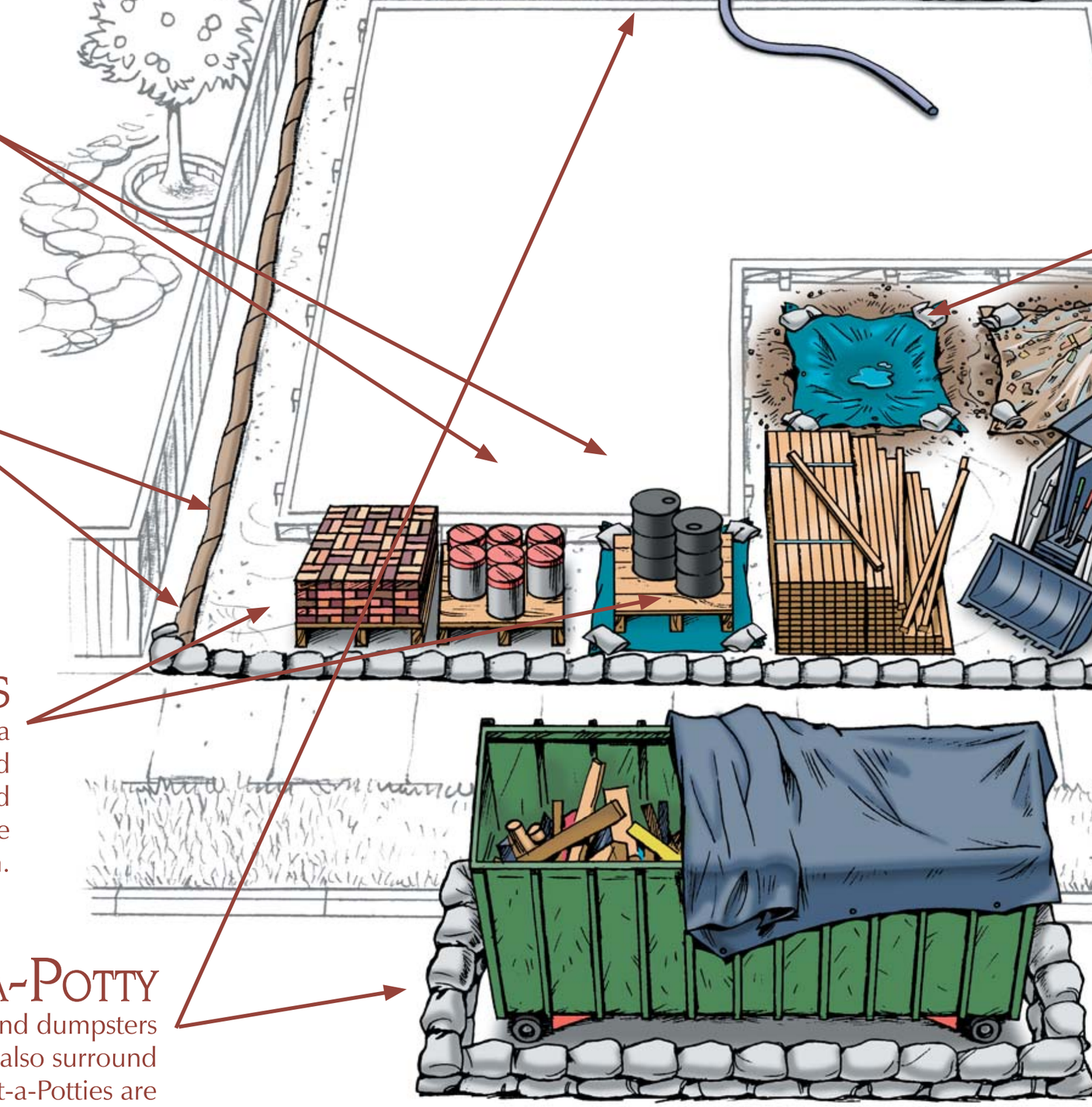

These guidelines are generalized. Please check specific requiren

ATTACHMENT 3-B

CITY OF OCEANSIDE BUILDING DIVISION
URBAN RUNOFF CONSTRUCTION SITE INSPECTION REPORT

Project: _____ Inspector: _____
Project Address: _____ WDID #: _____
Permit Holder: _____ Site Contact: _____

Season: (check one): ☐ Wet (October 1-May 31) ☐ Dry (June 1-September 30)
Construction Phase: (check one): ☐ Engineering ☐ Building
Weather: (check one): ☐ Clear ☐ Cloudy ☐ Rain
Date/Time of Inspection: _____

SECTION 1	BUILDING PHASE BMP REVIEW	Yes	No	N/A
SWPPP: Does the SWPPP (including Wall Map Exhibit) accurately reflect current site conditions?				
Tracking Control: Entrances/exits properly stabilized				
Concrete Trucks/Pumpers/Equipment:				
Pumpers have perimeter controls and on plastic sheets				
Spills from fueling and maintenance properly contained and cleaned up				
Concrete Washouts: Facilities provided – Adequate size/design – Being used properly				
Dirt and Grading: Stock piles covered when not in use				
Materials Storage:				
Building materials and fuel properly contained				
Secondary containment and under cover where needed and when not in use				
Trash/Debris: Dumpster/receptacles provided - covered when not in use - site free of litter/trash/debris				
Portable Toilets: Placed appropriately on site - Secondary containment for portable toilets				
Perimeter Controls for entire site: Installed and maintained properly				
Storm Drains: Properly protected and free of sediment accumulation				
General: Any other potential water pollution control concerns at the site? Describe in Section 2.				
Code Enforcement: Has code enforcement been notified? Date:				

SECTION 2	INSPECTION OBSERVATIONS (Use back of sheet if additional space is needed)

SECTION 3	REQUIRED CORRECTIVE ACTIONS (Use back of sheet if additional space is needed)

SECTION 4	ENFORCEMENT ACTIONS TAKEN (Use back of sheet if additional space is needed)

SECTION 5	CERTIFICATION

Inspected by (print) _____ Signature _____

Site Superintendent or
Water Pollution
Control Manager (print): _____ Signature _____

Date: _____

ATTACHMENT 4-A

City of Oceanside Clean Water Program

Municipal Inspection Form

Municipal Permit Order No. R9-2007-0001

FACILITY INSPECTION FORM

INSPECTION DATE:_____ TIME:_____ WDID:_____

FACILITY NAME:_____

STREET:_____ SQ FT._____

FACILITY REPRESENTATIVE PRESENT DURING INSPECTION: _____

POTENTIAL POLLUTANTS ON SITE:_____

INSPECTION TYPE

_____ Annual Inspection

_____ Noncompliance follow-up – Inspection made to verify conditions of a previously identified violation.

_____Enforcement follow-up – Inspection made to verify that conditions of an enforcement action are being met.

_____Complaint – Inspection made in response to a complaint

_____ Monitoring Program (Yes/No)

INSPECTION FINDINGS

_____ Were violations noted during this inspection ? (Yes/No/Pending Sample Results)

_____ Were samples taken? (N=no) If YES then, G=grab or C=Composite and attach a copy of the sample results/chain of custody form

I. FINDINGS

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Facility Name Date

II. RECOMMENDATIONS AND ADDITIONAL COMMENTS, ITEMS TO FOLLOW-UP FOR FUTURE INSPECTIONS, NOTES, ETC.

==========

III. SIGNATURE SECTION

Inspection Report received by :_____ Date:_____

Staff Inspector:_____ Date:_____

Reviewed by Supervisor:_____ Date:_____

ATTACHMENT 4-B

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
2007-2008 ANNUAL REPORT
FOR STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2007 through June 30, 2008

An Annual Report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers, and e-mail addresses of the Regional Board contacts, as well as the Regional Board Offices addresses are indicated below.

REGIONAL BOARD INFORMATION:

San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Contact: Tony Felix
Tel: (858) 636-3134
Email: Tfelix@waterboards.ca.gov

GENERAL INFORMATION

A. Facility Information:

Oceanside City Maxson Landfill
Brooks St And Maxson St
Oceanside, CA 92054
WDID No: 9 37I005695

Facility Contact: Forward, Bryan
Email:
Phone: 760-435-519~~3~~4

SIC Code(s):
4953 Refuse Systems

B. Facility Operator Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Operator Contact: Bryan Forward
Email:
Phone: 760-435-~~5111~~ 5194

C. Facility Billing Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Billing Contact: Bryan Forward
Email:
Phone: 760-435-~~5111~~ 5194

Additional Table D Parameters: Fe
(Hazardous Waste Facilities, see Table D, Sector K of the Permit for Additional Parameters)

2007-2008

ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

   ☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

   i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

   ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

   iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

   iv. ☐ Received Regional Board Certification Certification Date: _____

   v. ☐ Received Local Agency Certification Cetification Date: _____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

   ☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 0 If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

   ☐ **YES** ☒ **NO, attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? 1

4. For each storm event sampled, did you collect and analyze a sample from each of the facilitys' storm water discharge locations? ☐ YES, go to Item E.6 ☒ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☒ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated _____

6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☐ YES ☒ NO, **attach explanation**

8. Were there any discharges of stormwater that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☐ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

       _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

       _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

       _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler.
- Parameters tested.
- Name of analytical testing laboratory.
- Discharge location identification.
- Testing results.
- Test methods used.
- Test detection limits.
- Date of testing.
- Copies of the laboratory analytical results.

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**
Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

☒ **YES** ☐ **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers.** Indicate "N/A" for quarters without any authorized non-storm water discharges.

July -September	☒ **YES**	☐ **NO**	☐ **N/A**	October-December	☒ **YES**	☐ **NO**	☐ **N/A**
January-March	☒ **YES**	☐ **NO**	☐ **N/A**	April-June	☒ **YES**	☐ **NO**	☐ **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information.

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**
Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July -September	☒ **YES**	☐ **NO**	October-December	☒ **YES**	☐ **NO**
January-March	☒ **YES**	☐ **NO**	April-June	☒ **YES**	☐ **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

☒ **YES** ☐ **NO** Go to item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

☐ **YES** ☒ **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information.

i. name of each unauthorized non-storm water discharge.
ii. date and time of observation.
iii. source and location of each unauthorized non-storm water discharge.
iv. characteristics of the discharge at its source and impacted drainage area/discharge location.
v. name, title, and signature of observer.
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers.** Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information.

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed.
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occured during the last year.
   - outdoor wash and rinse areas.
   - process/manufacturing areas.
   - loading, unloading, and transfer areas.
   - waste storage/disposal areas.
   - dust/particulate generating areas.
   - erosion areas.
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map, is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- Sampling and Analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken.

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

STATE WATER RESOURCES CONTROL BOARD

E-2. SAMPLING AND ANALYSIS

FIRST STORM EVENT OF THE SEASON THAT PRODUCED A DISCHARGE OCCURRED DURING NON WORKING HOURS.

STATE WATER RESOURCES CONTROL BOARD

E-6. SAMPLING AND ANALYSIS

NO SAMPLES WERE COLLECTED DURING THE REPORTING PERIOD OF 07 – 08. ALL STORM WATER DISCHARGES OCCURRED BEFORE OR AFTER WORKING HOURS, AND WERE NOT PRECEEDED BY 3 WORKING DAYS.

STATE WATER RESOURCES CONTROL BOARD

E-7. SAMPLING AND ANALYSIS

NO SAMPLES WERE COLLECTED DURING THE REPORTING PERIOD OF 07 – 08. ALL STORM WATER DISCHARGES OCCURIED BEFORE OR AFTER WORKING HOURS, AND WERE NOT PROCEDED BY 3 WORKING DAYS.

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☒ YES	☐ NO	☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☒ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: BRYAN FORWARD

Signature: [illegible] Date: 6·26·08

Title: ORDINANCE ENFORCEMENT SUPERVISOR

DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

The Industrial Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least four parameters. These are pH, Total Suspended Solids (TSS), Specific Conductance (SC),and Total Organic Carbon (TOC). Oil and Grease (O&G) may be substituted for TOC. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge as a result of industrial activity and analytical parameters listed in Table D of the General Permit. There are no numeric limitations for the parameters you test for.

The four parameters which the General Permit requires to be tested are considered *indicator* parameters. In other words, regardless of what type of facility you operate, these parameters are nonspecific and general enough to usually provide some indication whether pollutants are present in your storm water discharge. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and a alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or industrial activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure of the undissolved solids that are present in your storm water discharge. Sources of TSS include sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Specific Conductance (SC) is a numerical expression of the ability of the water to carry an electric current. SC can be used to assess the degree of mineralization, salinity, or estimate the total dissolved solids concentration of a water sample. Because of air pollution, most rain water has a SC a little above zero. A high SC could affect the usability of waters for drinking, irrigation, and other commercial or industrial use.

Total Organic Carbon (TOC) is a measure of the total organic matter present in water. (All organic matter contains carbon) This test is sensitive and able to detect small concentrations of organic matter. Organic matter is naturally occurring in animals, plants, and man. Organic matter may also be man made (so called synthetic organics). Synthetic organics include pesticides, fuels, solvents, and paints. Natural organic matter utilizes the oxygen in a receiving water to biodegrade. Too much organic matter could place a significant oxygen demand on the water, and possibly impact its quality. Synthetic organics either do not biodegrade or biodegrade very slowly. Synthetic organics are a source of toxic chemicals that can have adverse affects at very low concentrations. Some of these chemicals bioaccumulate in aquatic life. If your levels of TOC are high, you should evaluate all sources of natural or synthetic organics you may use at your site.

Oil and Grease (O&G) is a measure of the amount of oil and grease present in your storm water discharge. At very low concentrations, O&G can cause a sheen (that floating "rainbow") on the surface of water (1 qt. of oil can pollute 250,000 gallons of water). O&G can adversely affect aquatic life and create unsightly floating material and film on water, thus making it undrinkable. Sources of O&G include maintenance shops, vehicles, machines and roadways.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at http://www.swrcb.ca.gov. It is contained in the Sampling and Analysis Reduction Certification.

See Storm Water Contacts at

http://www.waterboards.ca.gov/stormwtr/contact.html

the numerical value of the detection limit (example: <.05)

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

meters, etc.), indicate "PA" in the appropriate test me

- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): C Brust TITLE: Maint. specialist SIGNATURE: CoC

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHER PA		
			pH	TSS	SC	O&G	TOC			
	____ ☐ AM ____ ☐ PM	____ ☐ AM ____ ☐ PM								
	____ ☐ AM ____ ☐ PM	____ ☐ AM ____ ☐ PM			N/A					
	____ ☐ AM ____ ☐ PM	____ ☐ AM ____ ☐ PM			no sample collected. Rain and D during non working hours					
	____ ☐ AM ____ ☐ PM	____ ☐ AM ____ ☐ PM								
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): C Brust TITLE: Maint. specialist SIGNATURE: CB

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHER PA		
			pH	TSS	SC	O&G	TOC			
	☐ AM ☐ PM	☐ AM ☐ PM			No Sample Collected. Rain and disch during non working hours					
	☐ AM ☐ PM	☐ AM ☐ PM			N/A					
	☐ AM ☐ PM	☐ AM ☐ PM								
	☐ AM ☐ PM	☐ AM ☐ PM								
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

- Observe each authorized NSWD source, impacted drainage area, and discharge location.
- of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** DATE: 7-27-08	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ Y ☐ N
QUARTER: **OCT.-DEC.** DATE: 10-31-07	Observers Name: C Brust Title: maint. specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ Y ☐ N
QUARTER: **JAN.-MARCH** DATE: 1-30-08	Observers Name: C Brust Title: maint. specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ Y ☐ N
QUARTER: **APRIL-JUNE** DATE: 4-28-08	Observers Name: C Brust Title: maint. specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ Y ☐ N

DATE /TIME OF OBSERVATION	SOURCE AND LOCATION OF AUTHORIZED NSWD EXAMPLE: Air conditioner Units on Building C	NAME OF AUTHORIZED NSWD EXAMPLE: Air conditioner condensate	DESCRIBE AUTHORIZED NSWD CHARACTERISTICS Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		DESCRIBE A BMPs AN IMPLEM
			At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
7-27-08 9 ☒ AM ☐ PM	Brook St. Swim Center	Swim Complex back washing of pool filter	water is clear in Color, no odor, sheen floatables	Discharge is clear	Place straw storm drain Contaminants S.D.
10-31-07 9:30 ☒ AM ☐ PM	"	"	"	"	Street swe public stree 2nd, 4th month.
1-30-08 8 ☒ AM ☐ PM	"	"	"	"	
4-28-08 10 ☒ AM ☐ PM	"	"	"	"	
_____ ____ ☐ AM ☐ PM					

Section D (pages 5-6) of the General Permit.

- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accordanc with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** **DATE/TIME OF OBSERVATIONS** 7-27-07 9 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** maint. specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** 10-31-07 9 30 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** maint. specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** 1-30-08 8 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** maint. specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** 4-28-08 10 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** maint. specialist. **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES

(FROM REVERSE SIDE)	NSWD EXAMPLE: Vehicle Wash Water	OF UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.		UNAU TO D PRO NSW
			AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION	
_____ ____ ☐ AM ☐ PM					
_____ ____ ☐ AM ☐ PM					
_____ ____ ☐ AM ☐ PM					
_____ ____ ☐ AM ☐ PM					

at all discharge locations.

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

discharge and note the date, time, name, and title of who observed there

Observation Date: October 31 2007	Drainage Location Description	#1 S. outfall @ Division ST.	#2	#3
Observers Name: C Brust	Observation Time	9:30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
Title: maint. specialist	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
Signature: C Brust	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: November 30 2007	Drainage Location Description	#1 S. outfall @ Division st.	#2	#3
Observers Name: C Brust	Observation Time	10:30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
Title: maint. specialist	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
Signature: C Brust	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: December 7 2007	Drainage Location Description	#1 S. outfall @ Division st.	#2	#3
Observers Name: C Brust	Observation Time	8:30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
Title: maint. specialist	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
Signature: C Brust	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: January 4 2008	Drainage Location Description	#1 S. outfall @ Division st.	#2	#3
Observers Name: C Brust	Observation Time	9 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
Title: maint. specialist	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
Signature: C Brust	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐

(From Reverse Side)	EXAMPLE: Discharge from material storage Area #2	Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.	
_____ ____ ☐ AM ☐ PM				
_____ ____ ☐ AM ☐ PM		N/A		
_____ ____ ☐ AM ☐ PM				
_____ ____ ☐ AM ☐ PM				
_____ ____ ☐ AM ☐ PM				

at all discharge locations.

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

discharge and note the date, time, name, and title of who observed the

Observation Date: February 20 2008 Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	Drainage Location Description	#1 S. outfall @ Division ST.	#2	#3
	Observation Time	10 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: March 31 2008 Observers Name: C Brust Title: maint. specialist Signature: C Brust	Drainage Location Description	#1 S. outfall @ Division ST	#2	#3
	Observation Time	10:30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: April 28 2008 Observers Name: C Brust Title: maint. specialist Signature: C Brust	Drainage Location Description	#1 S. outfall @ Division st.	#2	#3
	Observation Time	9:15 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: May 25 2008 Observers Name: C Brust Title: maint. specialist Signature: C Brust	Drainage Location Description	#1 S. outfall @ Division st.	#2	#3
	Observation Time	11 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐

	EXAMPLE: Discharge from material storage Area #2	Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.	
_____ ☐ AM ☐ PM				
_____ ☐ AM ☐ PM		N/A		
_____ ☐ AM ☐ PM				
_____ ☐ AM ☐ PM				
_____ ☐ AM ☐ PM				

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Desc corre
Landfill Run-off	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☑ NO	If yes, to either question, complete the next two columns of this form	Contin Surface. Sheet Straw
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Desc corre
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Desc corre
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Desc corre
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO		

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Desc corre
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Desc corre
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Desc corre
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Desc corre
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐YES ☐NO			

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
2007-2008 ANNUAL REPORT
FOR STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2007 through June 30, 2008

An Annual Report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers, and e-mail addresses of the Regional Board contacts, as well as the Regional Board Offices addresses are indicated below.

REGIONAL BOARD INFORMATION:

San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Contact: Tony Felix
Tel: (858) 636-3134
Email: Tfelix@waterboards.ca.gov

GENERAL INFORMATION

A. Facility Information:

Oceanside City Mission Avenue
2070 Mission Ave
Oceanside, CA 92054
WDID No: 9 37I005696

Facility Contact: ~~Forward Bryan~~ Bryan Forward
Email:
Phone: 760-435-519~~3~~4

SIC Code(s):
4953 Refuse Systems

B. Facility Operator Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Operator Contact: Bryan Forward
Email:
Phone: 760-435-~~5111~~ 5194

C. Facility Billing Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Billing Contact: Bryan Forward
Email:
Phone: 760-435-~~5111~~ 5194

Additional Table D Parameters: Fe
(Hazardous Waste Facilities, see Table D, Sector K of the Permit for Additional Parameters)

2007-2008

ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

   ☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

   i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

   ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

   iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

   iv. ☐ Received Regional Board Certification Certification Date: _____

   v. ☐ Received Local Agency Certification Cetification Date: _____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

   ☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 0 If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

   ☐ **YES** ☒ **NO, attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? 1

4. For each storm event sampled, did you collect and analyze a sample from each of the facilitys' storm water discharge locations? ☐ YES, go to Item E.6 ☒ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☐ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated _____

6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☐ YES ☒ NO, **attach explanation**

8. Were there any discharges of stormwater that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☐ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

    _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

    _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

    _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler.
- Parameters tested.
- Name of analytical testing laboratory.
- Discharge location identification.
- Testing results.
- Test methods used.
- Test detection limits.
- Date of testing.
- Copies of the laboratory analytical results.

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**
Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

☒ **YES** ☐ **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers.** Indicate "N/A" for quarters without any authorized non-storm water discharges.

July -September	☒ **YES**	☐ **NO**	☐ **N/A**	October-December	☒ **YES**	☐ **NO**	☐ **N/A**
January-March	☒ **YES**	☐ **NO**	☐ **N/A**	April-June	☒ **YES**	☐ **NO**	☐ **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information.

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**
Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July -September	☒ **YES**	☐ **NO**	October-December	☒ **YES**	☐ **NO**
January-March	☒ **YES**	☐ **NO**	April-June	☒ **YES**	☐ **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

☐ **YES** ☒ **NO** Go to item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

☐ **YES** ☐ **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information.

i. name of each unauthorized non-storm water discharge.
ii. date and time of observation.
iii. source and location of each unauthorized non-storm water discharge.
iv. characteristics of the discharge at its source and impacted drainage area/discharge location.
v. name, title, and signature of observer.
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers**. Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information.

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed.
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occured during the last year.
   - outdoor wash and rinse areas.
   - process/manufacturing areas.
   - loading, unloading, and transfer areas.
   - waste storage/disposal areas.
   - dust/particulate generating areas.
   - erosion areas.
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map, is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- Sampling and Analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken.

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

STATE WATER RESOURCES CONTROL BOARD

E-2. SAMPLING AND ANALYSIS

FIRST STORM EVENT OF THE SEASON THAT PRODUCED A DISCHARGE OCCURRED DURING NON WORKING HOURS.

STATE WATER RESOURCES CONTROL BOARD

E-6. SAMPLING AND ANALYSIS

NO SAMPLES WERE COLLECTED DURING THE REPORTING PERIOD OF 07 – 08. ALL STORM WATER DISCHARGES OCCURRED BEFORE OR AFTER WORKING HOURS, AND WERE NOT PRECEEDED BY 3 WORKING DAYS.

STATE WATER RESOURCES CONTROL BOARD

E-7. SAMPLING AND ANALYSIS

NO SAMPLES WERE COLLECTED DURING THE REPORTING PERIOD OF 07 – 08. ALL STORM WATER DISCHARGES OCCURIED BEFORE OR AFTER WORKING HOURS, AND WERE NOT PROCEDED BY 3 WORKING DAYS.

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☒ YES	☐ NO	☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☒ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: BRYAN FORWARD

Signature: [signature] Date: 6·26·08

Title: ORDINANCE ENFORCEMENT SUPERVISOR

DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

The Industrial Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least four parameters. These are pH, Total Suspended Solids (TSS), Specific Conductance (SC),and Total Organic Carbon (TOC). Oil and Grease (O&G) may be substituted for TOC. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge as a result of industrial activity and analytical parameters listed in Table D of the General Permit. There are no numeric limitations for the parameters you test for.

The four parameters which the General Permit requires to be tested are considered *indicator* parameters. In other words, regardless of what type of facility you operate, these parameters are nonspecific and general enough to usually provide some indication whether pollutants are present in your storm water discharge. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and a alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or industrial activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure of the undissolved solids that are present in your storm water discharge. Sources of TSS include sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Specific Conductance (SC) is a numerical expression of the ability of the water to carry an electric current. SC can be used to assess the degree of mineralization, salinity, or estimate the total dissolved solids concentration of a water sample. Because of air pollution, most rain water has a SC a little above zero. A high SC could affect the usability of waters for drinking, irrigation, and other commercial or industrial use.

Total Organic Carbon (TOC) is a measure of the total organic matter present in water. (All organic matter contains carbon) This test is sensitive and able to detect small concentrations of organic matter. Organic matter is naturally occurring in animals, plants, and man. Organic matter may also be man made (so called synthetic organics). Synthetic organics include pesticides, fuels, solvents, and paints. Natural organic matter utilizes the oxygen in a receiving water to biodegrade. Too much organic matter could place a significant oxygen demand on the water, and possibly impact its quality. Synthetic organics either do not biodegrade or biodegrade very slowly. Synthetic organics are a source of toxic chemicals that can have adverse affects at very low concentrations. Some of these chemicals bioaccumulate in aquatic life. If your levels of TOC are high, you should evaluate all sources of natural or synthetic organics you may use at your site.

Oil and Grease (O&G) is a measure of the amount of oil and grease present in your storm water discharge. At very low concentrations, O&G can cause a sheen (that floating "rainbow") on the surface of water (1 qt. of oil can pollute 250,000 gallons of water). O&G can adversely affect aquatic life and create unsightly floating material and film on water, thus making it undrinkable. Sources of O&G include maintenance shops, vehicles, machines and roadways.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at http://www.swrcb.ca.gov. It is contained in the Sampling and Analysis Reduction Certification.

See Storm Water Contacts at

http://www.waterboards.ca.gov/stormwtr/contact.html

the numerical value of the detection limit (example: <.05)

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

meters, etc.), indicate "PA" in the appropriate test m

- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): C Brust TITLE: maint. specialist SIGNATURE: C

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHER PA		
			pH	TSS	SC	O&G	TOC			
	____ ☐ AM ____ ☐ PM	____ ☐ AM ____ ☐ PM			no sample collected. Rain occured during non-working hours					
	____ ☐ AM ____ ☐ PM	____ ☐ AM ____ ☐ PM								
	____ ☐ AM ____ ☐ PM	____ ☐ AM ____ ☐ PM				N/A				
	____ ☐ AM ____ ☐ PM	____ ☐ AM ____ ☐ PM								
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): C Drust TITLE: Maint. Specialist SIGNATURE: C

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHER PA		
			pH	TSS	SC	O&G	TOC			
	_____ ☐ AM ☐ PM	☐ AM ☐ PM			NO Sample Collected. Rain o					
	_____ ☐ AM ☐ PM	☐ AM ☐ PM			occured during non working hour					
	_____ ☐ AM ☐ PM	☐ AM ☐ PM				N/A				
	_____ ☐ AM ☐ PM	☐ AM ☐ PM								
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

- Observe each authorized NSWD source, impacted drainage area, and discharge location.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** DATE: 7-27-07	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ Y ☐ N
QUARTER: **OCT.-DEC.** DATE: 10-31-07	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ Y ☐ N
QUARTER: **JAN.-MARCH** DATE: 1-30-08	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ Y ☐ N
QUARTER: **APRIL-JUNE** DATE: 4-28-08	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ Y ☐ N

DATE/TIME OF OBSERVATION	SOURCE AND LOCATION OF AUTHORIZED NSWD	NAME OF AUTHORIZED NSWD	DESCRIBE AUTHORIZED NSWD CHARACTERISTICS Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		DESCRIBE BMPs AN IMPLEM
	EXAMPLE: Air conditioner Units on Building C	EXAMPLE: Air conditioner condensate	At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
7-27-07 9:15 ☒ AM ☐ PM	O'side School Maint. Yard Irrigation from public easement	School Maint. yard private irrigation	water is clear in color, no odor sheen or floatables	Discharge clear	Place eco around S.
10-31-07 9 ☒ AM ☐ PM	↓	↓	↓	↓	
1-30-08 9 ☒ AM ☐ PM	↓	↓	↓	↓	
4-28-08 10:30 ☒ AM ☐ PM	↓	↓	↓	↓	
____ ____ ☐ AM ☐ PM	↓	↓	↓	↓	↓

Section D (pages 5-6) of the General Permit.

- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accordanc with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** **DATE/TIME OF OBSERVATIONS** 7-27-07 9 15 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** 10-5-07 9 15 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** 1-30-08 9 __ ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** 4-28-08 10 30 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES

(FROM REVERSE SIDE)	NSWD EXAMPLE: Vehicle Wash Water	OF UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.		UNAU TO PRO NSW
			AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION	
_____ _____ ☐ AM ☐ PM					
_____ _____ ☐ AM ☐ PM					
_____ _____ ☐ AM ☐ PM					
_____ _____ ☐ AM ☐ PM					

at all discharge locations.

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

discharge and note the date, time, name, and title of who observed there

Observation Date: October 31 2007 Observers Name: C Brust Title: Maint. specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon @ 76	#2	#3
	Observation Time	9 ☐ P.M. ☑ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☑	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: November 30 2007 Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon @ 76	#2	#3
	Observation Time	10 ☐ P.M. ☑ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☑	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: December 7 2007 Observers Name: C Brust Title: maint specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon @ 76	#2	#3
	Observation Time	8 ☐ P.M. ☑ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☑	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: January 4 2008 Observers Name: C Brust Title: Maint. specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon @ 76	#2	#3
	Observation Time	10 ☐ P.M. ☑ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☑	YES ☐ NO ☐	YES ☐ NO ☐

(From Reverse Side)	EXAMPLE: Discharge from material storage Area #2	Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.	
_____ ____ ☐ AM ☐ PM				
_____ ____ ☐ AM ☐ PM		N/A		
_____ ____ ☐ AM ☐ PM				
_____ ____ ☐ AM ☐ PM				
_____ ____ ☐ AM ☐ PM				

at all discharge locations.

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

discharge and note the date, time, name, and title of who observed the

Observation Date: February 20 2008 Observers Name: C Brust Title: Maint. specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon @ 76	#2	#3
	Observation Time	10:15 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: March 31 2008 Observers Name: C Brust Title: Maint. specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon @ 76	#2	#3
	Observation Time	10 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: April 28 2008 Observers Name: C Brust Title: Maint. specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon @ 76	#2	#3
	Observation Time	9:30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: May 23 2008 Observers Name: C Brust Title: Maint. specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon @ 76	#2	#3
	Observation Time	10:30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ ☐
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐

	EXAMPLE: Discharge from material storage Area #2	indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.	
_____ ☐ AM ☐ PM				
_____ ☐ AM ☐ PM		N/A		
_____ ☐ AM ☐ PM				
_____ ☐ AM ☐ PM				
_____ ☐ AM ☐ PM				

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Desc corre
Landfill Run-off	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐YES ☑NO	If yes, to either question, complete the next two columns of this form	Place geo l on-trav
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐YES ☐NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Desc corre
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐YES ☐NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Desc corre
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐YES ☐NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Desc corre
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐YES ☐NO		

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐YES ☐NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Des corr**
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐YES ☐NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Des corr**
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐YES ☐NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Des corr**
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐YES ☐NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Des corr**

WATER UTILITIES COMPLAINT FORM

TO: Teresa, Glenn, Robert, Tom

FROM: Judy

SUBJECT: water running down street

DATE/TIME: 1-ish 2/21/08

REPORTING PARTY NAME: Clark

REPORTING PARTY ADDRESS: None given

REPORTING PARTY PHONE NUMBER: 760-685-2615

REPORTING PARTY PHONE NUMBER 2:

SITE OF COMPLAINT ADDRESS: Cranberry St between Pacesetter & Edgewater

REFERRED TO: above

CONCERN/COMPLAINT: complaint was made once before and Water responded by turning off water. Landscapers turned water back on and said the problem would be too expensive to fix, so they are letting the water run down the street. HOA involved is Guajome Meadows. Caller contacted Board of HOA but doen't think anything was done with landscapers.

DISPATCHED VIA: this record only
(NEXTEL, 800MGH, PHONE)

ATTACHMENT 6-A

CITY OF OCEANSIDE clean water program

Volume 5, Issue 2

WELCOME TO THE OCEANSIDE CLEAN WATER PROGRAM NEWSLETTER!

Due to the expanding programs and service opportunities our Oceanside Clean Water Program offers, we have designed a bi-yearly newsletter to keep you informed of the latest activities and water quality information. As an Oceanside resident, you will continue to receive fliers in your water utility bill about upcoming community cleanup events, as well as this newsletter. If you wish to be a part of the Oceanside Clean Water Program mailing list, or know others interested, please contact us and we will add the name(s) promptly. We hope you find this newsletter valuable.

The 20 Gallon challenge
Save Water Now

The City of Oceanside and the San Diego County Water Authority have a challenge for you - the 20 Gallon Challenge. Historic dry conditions in California, coupled with legal and regulatory constraints on water imported from northern California, make it essential for residents and businesses to increase water conservation immediately. It is more important than ever to conserve water during hot, dry summer months. If every person can save 20 gallons of water a day, that will significantly help the region by allowing more water to stay in storage to meet future demands.

Saving water is easier than you think. A few simple changes can make a big difference in your water usage. For ideas on how to meet the 20 Gallon Challenge look at the table on the 2nd page of this newsletter.

Keep in mind that 60 percent of urban water use in San Diego County is used for outside of the home. Outdoor landscaping alone in San Diego County takes up about half of all residential water use. That's more than 58 billion gallons of water every year. Unfortunately a lot of that water use is from overwatering landscaping, and much of it ends up running down the gutter and into our creeks to the ocean. Overwatering not only damages the vegetation that you are trying to keep healthy, but also allows pollutants, like fertilizers and pesticides, to enter storm drains which leads to our creeks, rivers, and coastline.

By practicing good water conservation strategies, you will not only ensure that there's enough water for everyone, but also help protect the quality of our creeks, rivers, lakes and beaches.

For more water conservation information visit these Web sites:

SD County Water Authority	Clean Water Program
• www.sdcwa.org • www.bewaterwise.com • www.h2ouse.org	• www.oceansidecleanwaterprogram.org • www.ci.oceanside.ca.us - Click on Water Conservation Tips in the What's New list

Buena Vista Creek and Oceanside Beach Cleanup

September 15, 2007
9:00 - Noon

Celebrate California Coastal Cleanup Day by participating in the seventh annual Buena Vista Creek Cleanup and Oceanside Pier Beach Cleanup. The City of Oceanside, together with I Love a Clean San Diego, Coastkeeper, and 1-800-GOT-JUNK will be hosting a cleanup along the banks of Buena Vista Creek, as well as a beach cleanup south of Oceanside Pier on September 15th, from 9 a.m. to 12:00 p.m. Volunteers will receive free refreshments, community service hours, and a free T-shirt. Call the Clean Water Program Event Information Line for more details at 760-435-5536.

Cleanup sites

- Behind Chicks Sporting Goods at Plaza Drive and College Boulevard (3514 College Boulevard)
- North of fire station #4 located at Thunder Drive and Lake Boulevard.
- Behind Kohl's store at College Boulevard and Marron Rd.
- South side of Oceanside Pier

howers and replace old shower heads with low flow	2.5 gallons per minute
oilet as a waste basket.	1.6 gallons per flush
s and faucets.	15-50 gallons per day, per toilet, per leak
inefficient clothes washers.	20-30 gallons per load
with flow restrictors on indoor faucets.	4.7 gallons per day
Outdoor Conservation Tips	**Estimated Savings**
ping before 6 a.m. and after 8 p.m. to reduce evapora-	20-25 gallons per day
s the biggest problem from landscaped areas. Reduce cycle by 1-3 minutes, or eliminate one irrigation cycle	15-25 gallons per minute; up to 250 gallons per cycle
ers to prevent overspray and runoff.	15-25 gallons per day per leak
roken sprinklers heads and leaking hose bibs.	20 gallons per day per leak
hes of mulch or compost around trees and plants to ation.	20-30 gallons per day, per 1,000 sq. ft.
nstead of a hose to clean driveways and sidewalks.	20 gallons per minute
your car use a hose with a self-closing nozzle and a y water. Make sure water is not running when scrub- e.	20 gallons per minute
ks around pool and spa pumps.	20 gallons per day, per leak
not used for recreational purposes with beautiful native -friendly plants.	33-60 gallons per day, per 1,000 sq. ft.

3689

port a Violation

d to help protect our local waterways.
noff pollution or a potential violation
de Clean Water Program hotline.

60-435-5800

City of Oceanside

Clean Water Program
300 North Coast Highway
Oceanside, California 92054
760-435-5800
www.oceansidecleanwaterprogram.org

CITY OF OCEANSIDE
clean water program

Volume 6, Issue 1

Loma Alta Creek Cleanup
April 26, 2008
9 am - 12 pm

Celebrate Earth Day by participating in the Sixth Annual Creek to Bay Cleanup event on April 26, 2008. The City of Oceanside, together with I Love a Clean San Diego and 1-800-GOT-JUNK, will be hosting a cleanup along the banks of Loma Alta Creek and at two sites on the Pacific Ocean.

Volunteers can choose from five sites:

- Buccaneer Park at Pacific and Morse Streets (1500 South Pacific Street)
- Behind VONS on Oceanside Boulevard and I-5 (1737 Oceanside Boulevard)
- Mesa Drive between El Camino Real and Rancho Del Oro Drive
- Behind commercial buildings at 1629 Ord Way (Off Oceanside Boulevard between College Boulevard and Temple Heights Drive)
- South side of the Oceanside Pier

Join us while we remove unwanted materials from the creek and beach and help to improve Oceanside water quality. Volunteers will receive free parking, refreshments, community service hours, and a free T-shirt.

For more information about cleanup events call 760-435-5536 or 760-435-5807.

In This Issue

- 2008 river and creek cleanup events
- Grease down your drain causes sewer blockages
- Pool water draining tips to protect the environment
- Sweeping landscape trimmings into street causes pollution

2008 River and Creek Cleanup Events

Please join the Clean Water Program staff and citizen volunteers to assist in removing trash and debris from our local beaches, rivers, and creeks.

Event Times: 9:00 a.m. - 12:00 p.m.
Event Details: 760-435-5536

- April 26, 2008: Loma Alta Creek Cleanup
- July 5, 2008: Morning After Mess - City Beaches
- September 20, 2008: California Coastal Cleanup Day - Buena Vista Creek Cleanup
- November 8, 2008: San Luis Rey River Cleanup

Grease Down the Drain Causes Sewer Blockages

Your help is needed!

It is very difficult to remove grease and oil from sewer pipes. The use of sewer clean-out snakes will only create a small hole through the grease that has built up on the inside of the pipe.

Remember these simple grease disposal tips:

- Never pour grease down sink drains or toilets.
- Pour grease into a non-flammable container, let harden, and place in trash.
- Wipe excess grease from pots and pans with a paper towel.
- Washing grease down the drain with warm water won't prevent clogs; grease will still harden in pipes.

Pool Water Draining Tips
to protect the environment

As the summer rapidly approaches, many Oceanside residents will turn to their swimming pools to beat the heat. Pool owners are preparing to remove the old pool water that has been sitting all winter. Draining pool water to the street is a common practice but it can be detrimental to the environment.

To most people, pool water does not seem environnmentally damaging. When pool water is drained into the street it picks up other pollutants and carries them down the storm drain to the nearest creek, river, lake or to the ocean. And, if not properly treated first, pool water can contain harmful additives and chemicals.

Follow these steps for proper pool water disposal and environmental protection:

- De-chlorinate your pool before emptying:
  - Allow water to sit for a few days in the sun to naturally de-chlorinate.
  - Purchase and use a de-chlorination kit.
- Drain pool water into your landscape or sanitary sewer.
- Rinse cartridge filters or diatomaceous earth (DE) filters onto a dirt, grassy or other pervious area. With DE, simply scoop up the residue and throw it in the trash.

With your help you can enjoy your pool and still protect the environment.

Urban Runoff Hotline

Help protect our local waterways

Call the Clean Water Program Urban Runoff Hotline if you see anyone dumping anything down a storm drain or anything other than rain water entering the storm drain. Remember...

"Only Rain in the Storm Drain".

760-435-5800

Did You Know That...

the City of Oceanside provides each residential home with a convenient wheeled cart for collection and disposal of green waste. When placed in this container, the green waste will be composted at the local composting facility in Oceanside.

Sweeping and blowing grass clippings, leaves and other landscape trimmings into the street causes water pollution

If residents sweep grass and leaves into the street the green waste can go down the storm drain and reach our local waterways. You might think, "What's wrong with that?" When the green waste starts to decompose in the water, it can cause the following problems:

- Ammonia levels increase, creating a hostile environment for the animals and creatures that use the waterways.
- If picked up by the street sweeper, the green waste goes to the landfill instead of to the composting facility.

Follow these tips to make sure your green waste is composted and doesn't go to the landfill or pollute our local waterways:

- Place only grass clippings, leaves, weeds, and other prunings out for collection.
- Prunings and branches must be tied into 4-foot sections and tied into bundles not to exceed 18 inches in diameter.
- Please do not use wire for bundles.
- Place green waste cart on the curb by 6 a.m. the same day as your regular trash collection.
- Do not place green waste in plastic bags. Green waste in plastic bags will not be collected.

For more information call the Solid Waste and Recycling Hotline at 760-435-5015.

City of Oceanside
Clean Water Program
300 North Coast Highway
Oceanside, California 92054
760-435-5800
www.oceansidecleanwaterprogram.org

ATTACHMENT 8-A

Clean Water Program
Phone and Code Reference List

Regarding calls for dumping materials down storm drains, irrigation runoff, and other potential storm water violations

Urban Runoff Hotline (Working Hours) This is the Water Utilities Department	**760-435-5800**
Off Fridays/weekends - Emergencies only (water running into yard; hazardous material seen being dumped into storm drain, etc.)	**Reference emergency call out list:** Contact the person on duty for public works/water utilities/sewer/fire, etc.

There are some activities that generate runoff water into the storm drain. Some of these activities are legal for residents but illegal for commercial businesses.

Activity		Commercial	Residential
Power washing		Required to capture water and vacuum up or and./or drain it to landscape	Legal for residents to power wash or hose off driveways and sidewalks without hiring a commercial contractor.
Car Washing		Mobile car detailers are required to capture water and dispose of in landscape or sewer - not the gutter or storm drain.	Legal for residents to wash on their driveways; illegal to wash in the street; Ask if they will wash on the grass or at car wash.
Charity Car Washes		Required to capture water and dispose into sewer or landscape	Code: One charity car wash allowed per parcel per month.
Irrigation Runoff It is illegal to allow water other than rain to run off your property onto another.		Homeowners associations managing common areas are required to adjust system to avoid any runoff.	Homeowners can allow runoff but are educated about the problems associated with over irrigation runoff.

Oceanside City Codes Related to Storm Water/Urban Runoff

Animal Waste Removal

4.16.2 Animal waste removal – fail, refuse or neglect to clean up feces

Chapter 40: City of Oceanside Urban Runoff Management, and Discharge Ordinance

40.2.1 – Discharge Prohibitions (Illegal Discharges)

40.2.1 (a) *Illegal discharges* - Discharge of pollutants or non-storm water into storm water conveyance system or receiving water; see exemptions under 40.2.2.

40.2.1 (b) *Illegal connection* - Illegal connection to storm water conveyance system even if connection was pursuant to a city permit at time of construction.

Updated July 2008

40.2.1 – Discharge Prohibitions (Illegal Discharges), continued

40.2.1 (c) *Liability for illegal discharge* – liability is responsibility of person causing, contributing, or responsible for illegal discharge.

40.2.1 (c) *Litter, dumps, or stockpiles* – Deposition of materials on public or private lands that may result in illegal discharge.

40.2.1 (e) Violation of NPDES permit – Any discharge that would violate NPDES permit for Oceanside is prohibited.

40.2.2 – Discharges exempted from discharge prohibitions (Legal Discharges)

40.2.2 (a) Separately permitted discharges – Discharges permitted under a valid-specific NPDES permit or facility are exempt from discharge prohibitions.

40.2.2 (b) Categorically allowed discharges subject to section 40.2.3 – The following categories of non-storm water discharges are exempt from discharge prohibitions and are subject to Section 40.2.3.:

- Discharges from potable water sources other than water main breaks
- Diverted stream flows (with required permits)
- Flows from riparian habitats and wetlands
- Foundation drains
- Individual residential washing of vehicles in driveway (prohibited in street)
- Irrigation water including recycled water used for irrigation
- Landscape irrigation
- Lawn watering
- Rising ground water
- Swimming pool discharges (if dechlorinated to less than one PPM chlorine)
- Uncontaminated ground water infiltration to storm drains
- Uncontaminated pumped ground water
- Water from crawl space pumps
- Water from footing drains

40.2.2 (c) Categorically allowed discharges not subject to section 40.2.3 – The following categories of non-storm water discharges are exempt from discharge prohibitions and are not subject to Section 40.2.3.

- Air conditioning condensation
- Flows from emergency fire fighting activities
- Springs
- Water line flushing

40.2.3 – Best management practice requirements and general requirements applicable to all dischargers

40.2.3 (a) Applicable requirements – All dischargers must comply with applicable prohibitions in sections 40.1 through 40.2 and must comply with other pars oft his Chapter.

40.2.3 (b) Minimum best management practices for all dischargers – All dischargers in the city must install, implement and maintain the following minimum BMPs:

40.2.3 (b)(1) Eroded soils - Prior to rainy season, dischargers must remove or secure significant accumulations of eroded soils from slopes previously disturbed by clearing or grading, if those eroded soils could otherwise enter the storm water conveyance system or receiving waters during the rainy season.

40.2.3 (b)(2) Pollution prevention - Dischargers employing ten or more persons on a full-time basis shall implement those storm water pollution prevention practices that are generally recognized in that discharger's industry or business as being effective and economically advantageous.

40.2.3 (b (3) Prevention of illegal discharges - Illicit connections must be eliminated and illegal discharge practices eliminated.

40.2.3 (b)(4) Slopes - Completed slopes that are more than five (5) feet in height, more than two hundred fifty (250) square feet in total area, and steeper than 3:1 (run-to-rise) that have been disturbed, shall be protected from erosion prior to the first rainy season, and continuously thereafter.

40.2.3 (b)(5) Storage of materials and wastes. All materials and wastes with the potential to pollute urban runoff shall be stored in a manner that either prevents contact with rainfall and storm water, or contains contaminated runoff for treatment and disposal.

40.2.3 (b)(6) Use of materials - All materials with the potential to pollute urban runoff (including but not limited to cleaning and maintenance products used outdoors, fertilizers, pesticides and herbicides, etc.) shall be used in accordance with label directions. No such product may be disposed of or rinsed into receiving waters or the storm water conveyance system.

ATTACHMENT 9-A

SUN DIEGO PRESENTS

THE MORNING AFTER MESS

BEACH CLEAN UP DAY

JULY 5TH, 2007

Surfrider Foundation® San Diego Chapter

7 BEACHES!

VOLCOM
DEL MAR POWERHOUSE

LOST
OCEANSIDE SOUTH JETTY

Quiksilver
PACIFIC BEACH PB DRIVE

EZEKIEL
OCEAN BEACH PIER

Hurley
TOURMALINE IN PACIFIC BEACH

Billabong
PONTO BEACH IN S. CARLSBAD

O'NEILL
MISSION BEACH BELMONT PARK

8AM - 11AM AT EACH LOCATION!

★ EARN YOUR COMMUNITY SERVICE CREDITS!
★ FREE T-SHIRT TO THE FIRST 50 PARTICIPANTS AT EACH LOCATION!
★ PRIZE PACKAGES FROM EACH VENDOR AT EACH LOCATION!

FOR MORE INFO AND PRE-REGISTRATION VISIT SURFRIDERSD.ORG OR SUNDIEGO.COM

BROUGHT TO YOU BY THE SURFRIDER FOUNDATION, SAN DIEGO CHAPTER (858) 792-9940 AND SUN DIEGO BOARDSHOPS

Surfrider Foundation® San Diego Chapter SUN DIEGO WWW.SUNDIEGO.COM

City of Oceanside
San Luis Rey River Cleanup

Saturday, November 10, 2007

9:00 a.m. to 12:00 p.m.

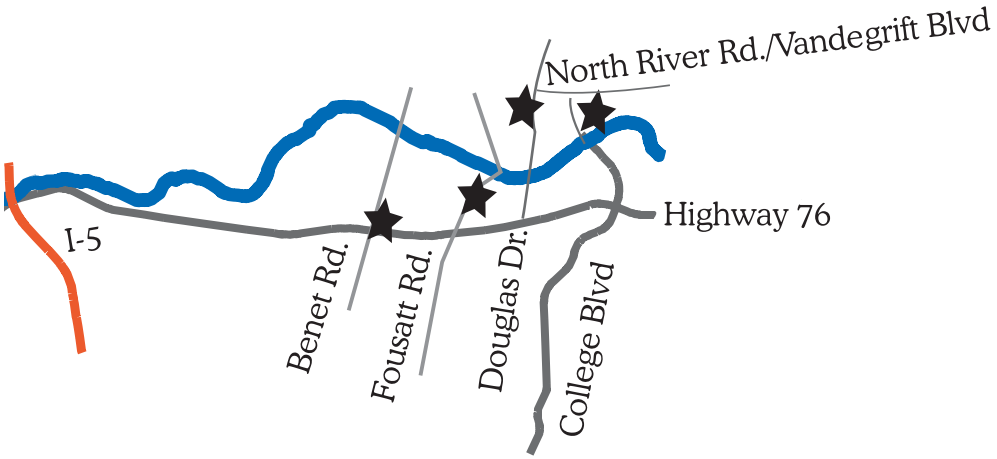

Volunteers will receive refreshments and community service hours.
For more information and site details, call 760-435-5536 or log onto www.oceansidecleanwaterprogram.org.

Sponsored By:

City of Oceanside Clean Water Program

1-800-GOT-JUNK?® North America's Largest Junk Removal Service

Join us at any of the following sites:

- ★ Benet Rd. and Highway 76
- ★ Foussat Rd. and Highway 76, at bike path
- ★ Douglas Dr. and North River Road, at bike path
- ★ College Blvd and Vandegrift Blvd, on north side of the Bridge

ATTACHMENT 9-B

Volunteers pitch in for Coastal Cleanup Day

By Promise Yee

OCEANSIDE — In a countywide effort, more than 5,000 volunteers hit San Diego beaches and inland areas Sept. 15 for the 23rd annual Coastal Cleanup Day organized by I Love a Clean San Diego and San Diego Coast Keeper. Oceanside City Beach and Buccaneer Beach were two of the 60 sites that received a cleanup.

Volunteers came to Oceanside City Beach from as far away as Simi Valley to participate and families, high school students and Boy Scouts armed with trash bags and gloves pitched in during the cleanup. "Our pack does it twice a year," said Oceanside resident Michael Walls, who picked up trash with Cub Scouts and his 3-year-old son Benjamin Walls.

Michael Walls said the cleanup provides valuable lessons for scouts. "It's teaching them keep the environment clean."

Young volunteer Hailey Haynes of Oceanside knows some of the dangers of pollution. "The sea creatures could eat something and die and it could pollute the ocean," Hailey said.

According to Cynthia Mallott of the city of Oceanside Clean Water Program, a data card used to record trash pickup during the event helped volunteers realize that a lot of trash travels from shipping barges and sewer systems to the beach. "Our goal is to educate people on where the pollution comes from," she said.

For information on trash pickup and volunteer opportunities log on to www.cleanupday.org.

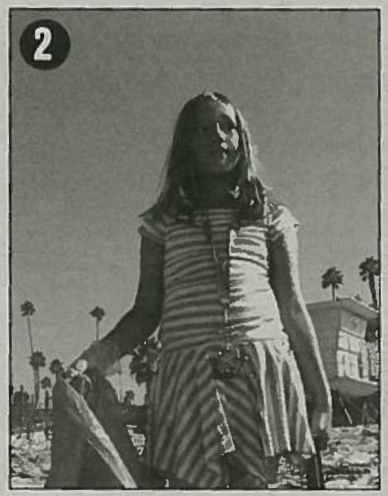

1. Kimberly Aguilar, her father Mike Martin and daughter Hailey Haynes carry their trash bags up the beach.
2. Hailey said she picks up trash to beautify our beaches and protect marine animals.
3. Oceanside City Beach was one of 60 sites in San Diego County for trash pickup on Coastal Cleanup Day. Benjamin Walls of Oceanside, 3, is learning early to do his part to keep beaches clean.

Photos by Promise Yee

Council agrees to organize December parade

By Wehtahnah Tucker

ENCINITAS — The sights and sounds of the holidays, complete with marching bands and dance troupes, will once again fill downtown Encinitas this December [illegible]

the Council never officially took a vote to hand off responsibility for the parade, it approved a city budget in May that did not include funds for the event. "We thou[illegible]

indicated that would be the appropriate time to discuss the parade's name.

In 2005, then-Mayor Dan Dalager set off a firestorm within the community by [illegible]

city's flower-growing reputation and to depoliticize the event.

Public speakers at the Sept.12 meeting took the opportunity to debate the issue [illegible]

ODD FILES

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AROUND NORTH COUNTY

Saturday will be busy day in O'side

The San Luis Rey River flows through Oceanside, when it has enough water to flow.

J. STRYKER MEYER

Regardless of whether the water is flowing or not, hundreds of pounds of rubbish and trash get dumped in the riverbed throughout the year. On Saturday, the city of Oceanside is teaming with 1-800-GOT-JUNK to host the seventh annual cleanup from 9 a.m. until noon.

City officials said previous efforts have taken hundreds of pounds of trash and garbage from the river and they are hoping to exceed previous years collection totals.

"With the rainy season approaching, it is important to remove accumulated debris from the river bed which can be washed downstream to the ocean, creating possible public health risks and an awful mess," said **Cynthia Mallett**, an environmental specialist for the city.

The San Luis Rey River begins east of Palomar Mountain and collects water for more than 550 square miles of North County tributaries during its 50-mile travel to the ocean near Oceanside Harbor.

There will be four locations for litter removal on Saturday:

- Benet Road on the north side of Highway 76 and Airport Road;
- Fousatt Road on the north side of Highway 76 near the bike path;
- Douglas Drive and North River Road, near the bike path; and
- College and Vandegrift boulevards on the north side of the Maj. Gen. Ray Murray Bridge.

Mallett said the Fousatt Road site will need additional people this year because of the amount of debris in dumped in the area, including old barbecues and household trash. Call (760) 435-5536.

BUSY SATURDAY — At 7 a.m. Saturday, registration will begin for the postponed

Man pleads not guilty to pipe bomb

Discovery of explosives along I-5 led to road closures Frida

TERI FIGUEROA
STAFF WRITER

VISTA — An Oceanside ex-convict who police say left two pipe bombs near Interstate 5 pleaded not guilty Tuesday to nine felony counts tied mostly to homemade bombs.

The incident caused authorities to shut down the freeway for more than two hours Friday during the afternoon commute.

Michael Peter Buffalo, 46, sat silently in the Vista courthouse Tuesday afternoon during his short arraignment on charges linking him to the freeway bombs as well as a bomb found days earlier at an Oceanside home in the city's downtown area.

Oceanside police said they learned of the freeway bombs when they questioned Buffalo about a tip tha up the the sa which senten times s

In c Diego

UNCERTAIN HOMESTEAD

Dixie Bernard, 83, says he is worried about his future after a new owner takes over the Country Club R The ranch has been his home and livelihood for more than 20 years. (JAMIE SCOTT LYTLE / STAFF PHOTOGRAP

Ownership change bad ne for longtime Escondido ran

Renovation plans will mean end

DAVID GARRICK
STAFF WRITER

ESCONDIDO — After a quarter-century running one of the few old-fashioned horse ranches in Escondido, Dixie Bernard is facing the prospect of becoming homeless and jobless at the age of 83.

Country Club Ranch, on the western outskirts of the city in Eden Valley, has been Bernard's home and livelihood since shortly after he moved from Kentucky to San Diego County 24 years ago.

But a new owner is slated to take over the 10-acre ranch this month, and she said Tuesday that she was planning some dramatic renovations and upgrades that don't include Bernard.

"I'm scared and worried," Bernard said during a Tuesday morning interview at the ranch. "I've been trying to make a living out of this place, but I won't be able to do that any more. I'll have nothing when I walk away from here."

Longtime custo lied around Bernar came aware of the about two weeks owner, Michell Kin open to the possibi continuing to live a Kimball explained no longer capable ranch or living alon

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Find the words that go with Spring

ANIMAL BABIES
APRIL
BEGINNING
BIRDS
BUNNIES
DAFFODILS
DAISIES
FLOWERS
GARDENING
RAIN
SHOWERS
SPRING
SUN
TULIPS
UMBRELLA

Volunteers Wanted!!!

The City of Oceanside Clean Water Program

wants to make our waters clean for all residents and visitors. We need your help in order to improve water quality. There are several cleanup events throughout the year that get people outdoors and in touch with our environment. A big Thank You goes out to all volunteers who take the time out of their busy schedules to help with these important cleanup events. The 2008 there are currently four events scheduled.

2008 Oceanside Cleanup Event Schedule

All events are held from 9:00 a.m. – Noon

April 26, 2008

Creek to Bay Cleanup Event along Loma Alta Creek

July 5, 2008 – Morning After Mess; Oceanside Harbor and beaches

September 20, 2008 – California Coastal Cleanup Day along Buena Vista Creek and Oceanside beaches

November 8, 2008 – San Luis Rey River Clean Up Event

All volunteers receive cleanup supplies, including bags and gloves, refreshments and a T-shirt. For more information on staging sites and event details call **760-435-3695.**

CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT

DATE: December 11, 2008

RE: STATEMENT OF CERTIFICATION
CITY OF OCEANSIDE JURISDICTIONAL URMP

I certify under penalty of law that the Illicit Discharge, Detection, and Elimination Section (Section 7) of the Jurisdictional Urban Runoff Management Program Annual Report for 2007-2008 was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

M.A. Lahsaiezadeh

SIGNATURE:

NAME: Mo Lahsaiezadeh
TITLE: Clean Water Program Coordinator
JURISDICTION: City of Oceanside

300 NORTH COAST HIGHWAY • OCEANSIDE, CA 92054 • TELEPHONE 760-435-5800 • FAX 760-435-5814

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2007-2008 reporting period to manage illicit discharges and meet the requirements of Sections D.4 and J.3.a.(3)(f) of the 2007 Municipal Permit.

7.1 Introduction

Illicit connections and illicit discharges (IC/IDs) can result in unauthorized discharges of pollutants to MS4s. IC/IDs can be defined as the following:

- An ***illicit connection*** is a connection that conveys an illicit discharge to the MS4 (pipe, drain, channel, catch basin, grated inlet, junction box, etc.).
- An ***illicit discharge*** is the act of disposing of any pollutant that is prohibited by the City either intentionally or unintentionally to the MS4. This does not include non-storm water exemptions and discharges resulting from emergency fire fighting activities. A list of non-prohibited, non-storm water discharges is provided in Chapter 3 of the City's JURMP Update (2007).

The main objective of the illicit discharge, detection, and elimination (IDDE) component of the City's storm water program is to seek and eliminate IC/IDs into the MS4. Eliminating IC/IDs helps minimize potentially negative impacts of human activities on receiving water bodies.

The City uses its municipal personnel to assist in actively seeking, identifying, and reporting IC/IDs during their daily activities. Detection and prevention of IC/IDs is achieved by:

- Operating a public complaint hotline,
- Inspecting local businesses and municipal facilities,
- Conducting dry weather field screening and analytical monitoring,
- Maintaining municipal MS4 and sewer systems, and
- Educating the local community.

The City investigates, inspects, and follows-up on every IC/ID that is reported or detected, to identify the source or sources of the discharge. Voluntary compliance and escalating enforcement mechanisms are implemented to immediately eliminate the IC/ID once the source has been identified when appropriate. Educational materials are distributed to help prevent future IC/ID occurrences. In addition, the City is in the process of developing MS4 outfall and source identification monitoring programs as part of a regional and jurisdictional effort to aid in identifying IC/IDs.

7.2 Public Reporting of Illicit Discharges and Connections

To aid the process of identifying illicit discharges, the City encourages the public and City staff to report illicit discharges and connections. A public complaint hotline specifically for urban runoff has been developed, and is currently operated by the Water Utilities Department:

Oceanside Urban Runoff Hotline
(760) 435-5800

The hotline is answered during business hours by City staff. Bilingual staff is available to handle calls by Spanish speakers. For after hours, holidays and weekend calls, callers needing immediate assistance are referred to the Oceanside Police and/or Fire Departments and the remaining are prompted to leave a message. Maintenance and operations staff are also trained to promptly refer potential storm water violations observed in the field to the Hotline (details of municipal staff training are in Section 10.2). City staff is provided with their own incentive based reporting hotline called *Oceanside Eyes*, which allows them to earn credit towards certain awards for each report that they phone in.

In addition to the Urban Runoff Hotline, IDDE related public complaints are also reported to Code Enforcement:

Code Enforcement
(760) 435-3944

Once a complaint is received, it is logged into a database for documentation and tracking purposes. The complaint is then forwarded to either a Clean Water Program Inspector or a Code Enforcement Officer. City personnel investigate every complaint logged through the hotline to determine if pollutants are in fact being discharged to the MS4. If investigators find evidence of a violation or other IC/ID, every effort is made to find the responsible party and inform them of the complaint or issue a violation.

A total of 54 public complaints were received through the Urban Runoff Hotline during the 2007-2008 reporting period compared to 14 calls in the previous reporting period. Figure 7-1 is a summary of the nature of calls made to the Urban Runoff Hotline. The Code Enforcement Hotline reported 190 calls for storm water/Clean Water Program complaints compared to 279 calls in the previous reporting period. However, due to tracking procedures, the 279 reported complaints may have included additional code enforcement inspections related to urban runoff issues. A revised tracking policy is planned for upcoming years to glean detailed information from each call.

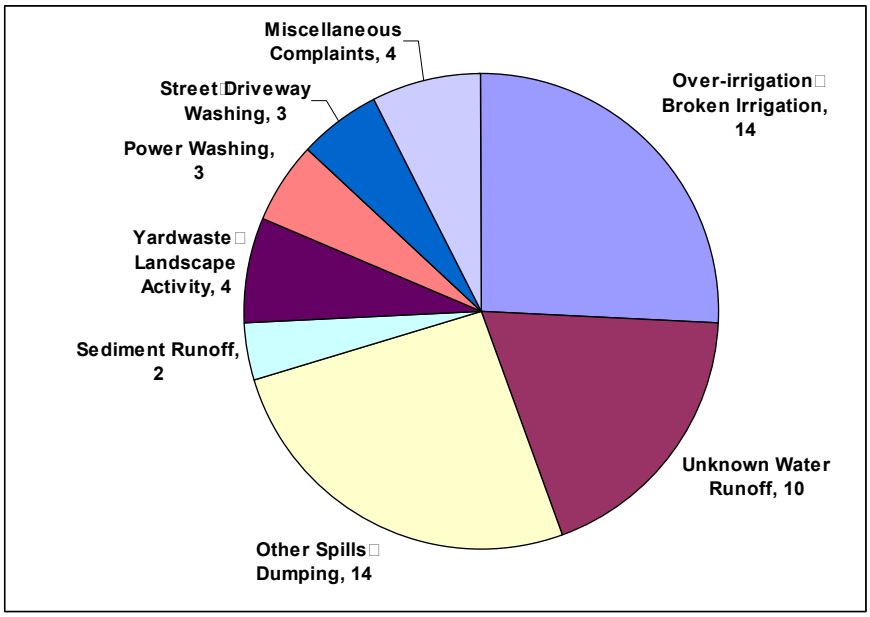

Figure 7-1. Summary of Urban Runoff Hotline Calls during the 2007-2008 Reporting Year.

The Urban Runoff Hotline is publicized in the *Oceanside Community Magazine*, the *North County Times* newspaper, the City's website, the Clean Water Program website, on a monthly locat TV program called KOCT Oceanside Update, informational literature for public distribution, and at local community events and meetings. In addition, education to the public stresses the importance of reporting discharges and describes the critical role that the public plays in the identification and elimination of Urban Runoff pollution related problems.

7.3 Spill Reporting, Response, and Prevention

The City implements spill reporting, spill response, and spill prevention mechanisms to prevent, respond to, contain, and clean up all sewage and other spills that discharge to its MS4 from any source.

7.3.1 Spill Prevention

7.3.1.1 Sanitary Sewers

The City's preventive and corrective sewer maintenance programs consist of a variety of components provided for the operation, maintenance, repair and replacement of sewer mains, manholes, and pump stations. The programs provide for the routine monitoring, inspection, cleaning, and related maintenance of all components of the collection system in order to reduce the potential of sanitary sewer overflows (SSO) and other structural failures. Potential problems are noted and maintenance schedules adjusted accordingly. If necessary, repairs are initiated by City maintenance crews. Larger more complex projects are referred for inclusion in the capitol improvement projects (CIP) process for planning, design, and construction.

When system malfunctions do occur, such as SSO main stoppages, electrical outages, and mechanical breakdowns, the cause of the problem is investigated and analyzed. Maintenance schedules are then adjusted accordingly. If appropriate, the infrastructure component is referred for repair or replacement by maintenance crews.

Cleaning schedules are analyzed and adjusted for proper scheduling. During the 2007-08 reporting year, 312 miles (1,649,702 feet) of sanitary sewer were cleaned.

Additionally, in June and July of 2008 (crossing two reporting periods), 7,252 feet of City sewer lines were slip lined and manholes pressure grouted and sealed in the Loma Alta watershed. The slip lining project cost approximately $700,000.

A large CIP in the planning stage during the 2007-08 reporting year, is the land outfall replacement project replacing 6,200 feet of sewer lines in the Loma Alta watershed. The existing land outfall was constructed in 1972 and consists of approximately 34,000 linear feet of 24-inch ductile iron pipe. Currently the land outfall transports around 10 MGD (million gallons per day) of flow. Several failures of the existing land outfall have occurred recently along Oceanside Boulevard, therefore a 6,200 linear foot segment is currently being replaced. This segment is parallel to the centerline of Oceanside Boulevard and the limits of the pipeline replacement are from approximately 1200 feet west of Vine Street to approximately 200 feet west of Hoover Street. This project should be completed in the spring of 2009 and is estimated to cost over $4,000,000.

Private Sewer Laterals and Septic Systems

The City requires that private sewer laterals and septic systems be designed and operated in accordance to industry standards. The City also requires the proper maintenance of these facilities in order to avoid spills, breakages, and failures.

7.3.1.2 Other Spills

The City prevents spills from private businesses and residents through required BMPs, education, and enforcement of relevant regulations for the storage and usage of hazardous materials.

The City also received funds from the California Integrated Waste Management Board to establish a permanent household hazardous waste (HHW) collection facility for its residents. The City's objective was to encourage a convenient, proper disposal and collection of HHW materials for its residents. This facility is currently open Monday through Friday for used oil, paint, and antifreeze disposal and every Saturday for collection of the following materials:

- Aerosols
- All purpose cleaners
- Ammonia
- Antifreeze
- Automobile cleaners
- Barbecue lighter fluid
- Batteries
- Brake fluid
- Chlorine bleach
- Detergents
- Disinfectants
- Drain opener
- Furniture polish
- Gasoline
- Glass cleaner
- Herbicides
- Mothballs
- Motor oil
- Oven cleaner
- Paint
- Paint thinner
- Pesticides
- Rubber cement
- Rug/upholstery cleaner
- Scouring powder
- Silver polish
- Toilet bowl cleaner
- Transmission fluid
- Tube and tile cleaner
- Turpentine varnish
- Water sealant
- Wood finish

The HHW collection facility is periodically promoted by the City through the *Oceanside Community Magazine*, the *North County Times* newspaper, on the Clean Water Program website and at local community events and meetings where literature is distributed. There is also literature available to the public at the City offices.

During the 2007-2008 reporting period, 3,430 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 142.8 tons of hazardous materials (including universal waste) during the reporting period. An additional 119.9 tons of E-waste was recycled in the same reporting year. Compared to the 2006-07 reporting period, the number of households utilizing the program is down from 3,668, but more waste is being disposed of; up from 130.7 tons. The amount of E-waste dropped off for recycling has also increased from 115.2 tons.

The City provides information to the public on used motor oil recycling and identifies the local state certified collection centers in the City. Furthermore, as part of the City's collection program, a 1,500-gallon used oil collection receptacle is provided at the City's harbor for use by

harbor slip renters. During FY 2007-08, 600 gallons of oil were recycled along with one barrel of oil filters.

7.3.1.3 Prevention of Fugitive Trash

In addition to spills from sewer overflows or hazardous waste dumping activities, the City is also addressing the prevention of trash getting into our receiving waters.

As discussed in detail in Section 4 of the 2007-2008 Annual Report, 571 miles of public streets in the City of Oceanside are swept at least monthly. Double this length to accommodate for both east/west and north/south directions giving a total of 1,142 curb miles. In addition, a total of 3,252 structures (catch basins, manholes, inlets, outlets, etc.) were inspected and cleaned during the reporting period. A total of 2,972 structures were cleaned by United Storm Water and 280 structures were cleaned by City maintenance crews. A total of 65.5 tons of waste was removed. The waste generally consisted of trash, green waste, sediment, roots, solids, and rocks.

In addition, because cigarettes and their associated trash, including wrappers and cartons, are the most littered item in America and the world, during FY 2007-08 the Oceanside Harbor Maintenance Department purchased and began installation of cigarette butt collection boxes. Cigarette Pollution Solutions, a private company with its own special cigarette filter receptacle, called the Butts Only Box, was determined to be an ideal design for placement in the harbor and near the beach areas. The Box is designed to accept cigarette and cigar butts and keep them from being exposed to rain and irrigation water until they are collected for proper disposal. It features a stainless steel construction that resists the salt weather environment at the coast and has a removable inner basket for easy servicing.

During Fiscal Year 2007-08 the Department of Harbors and Beaches purchased 23 Butts Only Boxes at a cost of $375 each and installed 20 of them throughout the Harbor and along Oceanside beaches. Thirteen of these boxes were installed in the harbor area near restaurants, docks, and bathrooms. Seven Boxes were installed along the heavily walked road that parallels the beach called The Strand and at the top of the municipal pier (Figure 7-2).

Figure 7-2. Butts Only Boxes in Oceanside Harbor and along the Strand.

Cigarette Pollution Solutions also provides a disposal and tracking service with a monthly statement of the amount of cigarette filters collected from all of the Boxes. The boxes were phased in throughout the spring and summer of 2008. Table 7-1 provides a summary of the amount of cigarette butts collected from March through July of 2008.

Table 7-1. Number and Weight of Cigarette Butts Collected in FY 2007-08.

Date	Time period covered	Number of butts collected
3/14/2008	2/11-3/13/08	435
4/16/2008	3/14-4/16/08	577
5/17/2008	4/17-5/17/08	539
6/17/2008	5/18-6/17/08	1,753
7/26/2008	6/18-7/22/08	3,715
	Total butts collected	**7,019**
	Weight	**2.78 pounds**

Future instillations may include the sport fishing industry out of Oceanside Harbor. The sport fishing boats that launch from Oceanside Harbor have been approached about installing a version of the Butts Only Boxes on their boats. Two have expressed interest and the City will be receiving statements summarizing the installation and use of those boxes.

7.3.2 Spill Reporting

7.3.2.1 Public Reporting of Spills

Spills entering the MS4 may be discovered during routine maintenance activities, scheduled monitoring, or observed and reported to the City by citizens. Citizens may use the Urban Runoff Hotline, Code Enforcement, or Oceanside Police Department phone numbers to report spills. Any reports by the public or City staff are referred to the Wastewater Division of the Water Utilities Department.

7.3.2.2 City Spill Reporting

The City complies with the sewage spill reporting requirements outlined in Table 7-2 and detailed in Section 9 of the JURMP Update:

Table 7-2. Summary of Sewage Spill Reporting Requirements

Spill Volume	Criteria	Agency Receiving Report	Reporting Period
Any	Spills to waters of the State	SWRCB online RWQCB DEH	3 days (initial) 24 hours Immediate
Any	Municipal Permit non-compliance threatening human or environmental health	RWQCB SWRCB online	24 hours verbal and 5 days written 3 days (initial)
Any	Mitigated spills (absorbed, cleaned up, or captured)	DEH	24 hours

Spill Volume	Criteria	Agency Receiving Report	Reporting Period
Any	Unmitigated spills to areas with potential public contact	DEH	Immediate
Any	Unmitigated spills to areas without potential public contact	DEH	24 hours
>1000 gallons	Anywhere	OES RWQCB DEH SWRCB online	Immediate 24 hours Immediate 3 days (initial)

County of San Diego Department of Environmental Health (DEH)
State Office of Emergency Services (OES)
Regional Water Quality Control Board (RWQCB)
State Water Resources Control Board (SWRCB)

7.3.3 Spill Response

Responses to sewer spills are conducted in accordance to the City's Sewer Overflow Response Plan and the responsible agencies are summarized in Table 7-3.

Table 7-3. Responsible Agency for Sewage Spills

Source	Responsible Agency
Leaks and spills from publicly owned collection system	City of Oceanside
Private residence (failing septic systems)	County DEH
Any spill reaching MS4	City of Oceanside

During the 2007-2008 reporting period, the City responded to 15 sewer spills, four of which were privately owned. Only three spills reached the receiving water and only 20% of the total amount of total overflow volume for the year was released to the environment. Quick response times and the use of City vactor trucks and inlet protection devices assisted in the decrease in spill volume for the reporting year. Grease and roots were the most common causes of the blockages. The Clean Water Program and the Wastewater Division of the Water Utilities Department continued the public outreach effort initiated in the last reporting year for residential contribution of grease in the sanitary sewer. As a result, there were fewer spills this year with grease as the primary cause. Notifications of these spills are submitted to the RWQCB through quarterly reports. A summary of SSO overflows during 2007-2008 is presented in Table 7-4.

Responses to other spills are conducted by the Fire Department or qualified personnel in the Public Works Department, as appropriate to the situation. Both small and large spills are handled following HAZMAT Incident Response Team (HIRT) Policies and Procedures as issued by the Unified San Diego County Emergency Services Organization. The Oceanside Fire Department responded to all of the non-sewer related spills during the 2007-2008 permit year. A summary of the 21 spills is presented in Table 7-5. The majority of the spills were small fuel spills from leaking vehicles.

Table 7-4. Summary of SSO Overflows during the 2007-2008 Fiscal Year.

Overflow Start Date Time	Overflow End Date Time	Total Overflow Volume (gal)	Overflow Volume Released to Environment (gal)	Overflow Cause	Did the SSO Enter a Storm Drain?	Did the SSO Reach Other Surface Waters?	Initial Secondary Receiving Waters	Prevention Corrective Measures
7/18/07 10:20	7/18/07 10:40	100	100	Grease	No	No	N/A	Routine cleaning the following month.
8/21/07 7:50	8/21/07 8:11	420	420	Grease	Yes	Yes	Buena Vista Creek/Buena Vista Lagoon	Rodder broke stoppage and rodded the line.
8/28/07 19:59	8/28/07 21:00	61	61	Roots	Yes	No	N/A	Next day removal of roots.
9/23/07 12:40	9/23/07 13:40	30	30	Roots	Yes	No	N/A	TV to inspect root issue.
10/18/07 10:10	10/18/07 10:30	100	0	Roots	Yes	No	N/A	TV to inspect root issue.
10/23/07 11:37	10/23/07 11:48	550	0	Other - Dog hair/toys	No	No	N/A	TV to inspect. Talk with Humane Society about traps/screens for dog hair
11/4/07 11:40	11/4/07 12:47	335	230	Grease	Yes	Yes	San Luis Rey River	Rodder broke stoppage. Jet area and drop chlorine.
12/3/07 12:10	12/3/07 12:35	500	150	Grease, Roots, Rags	Yes	No	N/A	Extend maintenance schedule to include this line.
1/1/2008 Unknown	1/1/08 8:40	600	0	Unknown - Private	No	No	N/A	Code Enforcement citation.
1/8/08 11:45	1/8/08 13:15	720	160	Roots, Rags	Yes	No	N/A	TV line. Increase to monthly cleaning schedule.
2/2/08 7:00	2/2/08 9:20	105,000	21,000	Line Break	Yes	Yes	Loma Alta Creek/Pacific Ocean	City accelerated replacement of 6,200 feet of 36in PVC pipeline with emergency funds.
3/5/08 9:40	3/5/08 10:20	200	50	Unknown - Private	Yes	No	N/A	City crews remained onsite until stoppage was cleared by plumber.
3/26/08 19:10	3/26/08 20:00	450	0	Blockage - RV Dump hose	Yes	No	N/A	Entry to free hose from pipe.
5/9/08 10:40	5/9/08 10:50	100	100	Unknown - Private	Yes	No	N/A	City crews remained onsite until stoppage was cleared by plumber and grease trap cleaned.
6/12/08 8:00	6/12/08 8:20	300	50	Debris, Rags, Roots	Yes	No	N/A	TV line to identify source of rags.

Table 7-5. Summary of Non-SSO Spills during the 2007-2008 Fiscal Year.

Fire Dept. Arrival Date Time	Last Unit Cleared Date Time	Incident Number	Substance reported spilled	Amount of spilled substance	Primary Action Taken	Secondary Action Taken	Description
8/2/2007 12:20	8/2/2007 12:25	0009250	Gasoline	1 gallon	Hazardous materials leak control & containment	N/A	Interstate-5 SB gasoline or other flammable liquid spill. Plugged fuel line and contained spill.
9/21/2007 11:34	9/21/2007 12:00	0011449	Fuel	1/2 gallon	Hazardous materials spill control and confinement	Hazardous materials leak control & containment	Fuel leak on pavement below parked vehicle. Fuel leaked plugged.
9/25/2007 21:16	9/25/2007 21:35	0011661	Fuel	N/A	Investigate	Hazardous materials leak control & containment	Contain fuel leak from vehicle in parking area.
10/2/2007 15:18	10/2/2007 15:20	0011953	Fuel	N/A	Investigate	N/A	Possible fuel running down alley where subjects were working; liquid in alley was water.
10/6/2007 10:30	10/6/2007 10:40	0012119	Natural Gas	N/A	Investigate	N/A	Odor of natural gas. Referred to SDG&E. Lines being purged; utility investigated.
10/17/2007 15:20	10/17/2007 16:45	0012589	Gasoline	1 gallon	Hazardous materials leak control & containment	Remove hazard	Report of a strong gasoline odor from neighboring apartment. Gained entry found van leaking gas from rotten fuel line. Once the line was repaired, the gas dried on its own.
10/24/2007 20:22	10/24/2007 20:59	0012960	Fuel	0	Investigate	Establish safe area	Abandoned 5 gallon bucket of racing fuel approximately half full with the cap missing. No obvious spill or leak. Projects bagged, drummed and secured.
11/6/2007 18:45	11/6/2007 19:04	0013534	Diesel Fuel	5 gallons	Establish safe area	Hazardous materials spill control and confinement	Diesel fuel leak spread adjacent to fuel pump at gas station. Fuel covered with absorbent; owner to dispose. OPD present.
11/28/2007 12:59	11/28/2007 13:16	0014525	Formaldehyde	500cc	Investigate	Hazardous condition, other	Accidental spill of formaldehyde on floor of business. Spill was contained and cleaned up by on-site personnel previous to arrival of FD. County Health Dept was contacted relative to disposal of material and cloth used for absorption.

Fire Dept. Arrival Date Time	Last Unit Cleared Date Time	Incident Number	Substance reported spilled	Amount of spilled substance	Primary Action Taken	Secondary Action Taken	Description
12/10/2007 16:57	12/10/2007 17:32	0015141	Mercury	1cc	Remove hazard	N/A	Small amount of mercury found in parking lot and placed in an air tight container to dispose.
12/18/2007 16:13	12/18/2007 16:25	0015500	Oil	Undetermined	Cancelled enroute	N/A	Responded to a reported oil spill however upon arrival EMI Environmental was in the process of cleaning up the mess. There was no water runoff.
12/26/2007 11:22	12/26/2007 11:46	0015825	Gasoline	Undetermined small amount	Hazardous materials spill control and confinement	N/A	Small gasoline spill from leak in fuel tank - secured leak and had vehicle towed to repair facility.
2/1/2008 8:05	2/1/2008 8:12	0001342	Gasoline	Undetermined	Investigate	N/A	Found truck in parking lot dripping gasoline from underneath. The clamp to the fuel filter was loose. Fire Dept tightened clamp, put down Sorball and advised owner to call tow truck.
2/13/2008 17:39	2/13/2008 17:43	0001850	Transmission Fluid	Undetermined small amount	Investigate	Hazardous materials spill control and confinement	Small amount of transmission fluid was slowly running down gutter. Reporting party states that a tow truck recently picked up a car, shoveled some dirt on the fluid and left. Fire Department used absorbent on the remaining fluid and disposed it properly.
2/16/2008 13:14	2/16/2008 17:34	0001971	Water and gasoline mix	Undetermined	Establish safe area	Control traffic	Single vehicle accident with driver losing control. Vehicle damaged the gas meter, electrical meter, water line to the house and punctured the vehicle's gas tank. Flowing water mixed with gas was running down street as police approached. OPD began diking of flow and called Public Works to assist in diversion and cleanup. Water was then shut off.
2/27/2008 14:48	2/27/2008 15:08	0002459	Fuel	Undetermined	Investigate	N/A	Investigate fuel leak in a parking lot. Small amount of fuel leaked from a car that was being worked on. Leak stopped on it's own. Advised owner to get towed.

Fire Dept. Arrival Date Time	Last Unit Cleared Date Time	Incident Number	Substance reported spilled	Amount of spilled substance	Primary Action Taken	Secondary Action Taken	Description
3/2/2008 12:21	3/2/2008 12:30	0002589	Fuel	2 gallons	Investigate	Remove hazard	Two gallon fuel spill at gas pump. Used absorbent to clean up and disposed of properly per 7-11 policy.
3/7/2008 18:26	3/7/2008 18:55	0002820	Gasoline	1.2 gallon	Hazardous materials leak control & containment	N/A	Vehicle fuel leak after running over an object. Stopped leak; owner made arrangements to have vehicle towed.
3/11/2008 22:43	3/11/2008 22:59	0003006	Fuel	Unable to determine	Hazardous materials spill control and confinement	N/A	Upon arrival, found two small areas approx. 2x2 with fuel already absorbing into asphalt. Person who reported the incident found two individuals syphoning gas from his work truck. Spread small amount of cat litter on ground to absorb remaining fuel.
3/26/2008 16:49	3/26/2008 18:34	0003631	Fuel/seawater mix	15 gallons	Investigate	Establish safe area	28 foot fishing boat at the fuel dock had approx. 15 gallons of unleaded fuel and sea water mixture in bilge. Applied class B foam and the boat towed to hoist dock to be repaired.
4/16/2008 13:41	4/16/2008 14:22	0004491	Fuel	2 gallons	Establish safe area	N/A	Response to a report of gas leaking from vehicle. Stopped leak and absorbed the two gallons of spilled fuel with cat litter. Tow truck arrived to transport vehicle.
4/24/2008 9:41	4/24/2008 10:38	0004792	Diesel Fuel	8 gallons	Investigate	Provide manpower	Diesel fuel spill about eight gallons. Helped employee on scene clean up and contain.

7.4 Urban Runoff Monitoring

The Urban Runoff Monitoring Program includes MS4 Outfall Monitoring, Source Identification Monitoring, and the Dry Weather Field Screening and Analytical Monitoring Program.

7.4.1 MS4 Outfall Monitoring and Source Identification Monitoring

The new MS4 Outfall Monitoring Program and the Source Identification Monitoring Program workplans were submitted to the RWQCB on July 1, 2008 for review. The Copermittees developed the proposed regional guidance and will begin implementing both programs in the 2008-2009 reporting year. For permit compliance, the City and County of San Diego did begin sampling for the MS4 outfall monitoring program in 2007-2008 prior to program approval.

7.4.2 Dry Weather Field Screening and Analytical Monitoring

The updated requirements of the Dry Weather Monitoring Program component in the 2007 Municipal Permit (Order 2007-001) built upon the requirements of the previous Municipal Permit (Order 2001-01). The dry weather analytical and field screening monitoring components consist of 1) field observations (site description and qualitative observations), 2) field screening monitoring (testing of sample while at site and flow estimation), and 3) analytical monitoring on a subset of sites (performing further tests of sample later at a laboratory). The new Municipal Permit also added a trash assessment component and now requires follow-up investigations to be conducted within two business days of receipt of results.

The City's complete 2008 Dry Weather Monitoring Report is provided as Attachment 7-A to this submission. This report includes:

- Reporting of all dry weather field screening and analytical monitoring results.
- Dry weather field screening and analytical monitoring report.
- Corrections for the Dry Weather Monitoring stations.
- The number and brief description of any IC/IDs found and eliminated during Dry Weather Monitoring.
- Description of activities conducted to manage IC/IDs found during Dry Weather Monitoring.

Below is a summary of the findings.

Dry weather monitoring is conducted at each site at least once between May 1st and September 30th each year. During the 2008 monitoring season, 67 primary sites were visited. Five of those sites were inaccessible and an additional nine were dry. Eighteen alternate sites were visited and two new sites with flowing or ponded water were added to the alternate list inventory. Nineteen of the ponded or flowing sites had additional analysis completed in the lab for chemistry and microbiology (29%).

When field measurements and/or laboratory analysis showed an exceedance of established action levels, the site was revisited within two business days to confirm the initial results. When follow-up sampling confirms continued exceedance of action levels, the City conducted further investigations to identify the source of the exceedance.

Thirty three sites required confirmation for an initial field screening exceedance. Of those, 19 required an IC/ID investigation. The most common exceedance was for orthophosphate. Of the 19 sites chosen for laboratory analysis, only one site had an exceedance for chemistry results. A015 exceeded the action levels for dissolved zinc. There is an ongoing investigation into the source; groundwater is suspected. There were seven exceedances for total coliforms, two for fecal coliforms, and two for Enterococcus. None of the fecal coliform or Enterococcus confirmation samples exceeded the action levels and therefore did not required an IC/ID investigation. Five of the seven total coliform exceedances required an upstream investigation.

In an historical comparison of action level exceedances, orthophosphate exceedances have increased gradually over the past several years, however, ammonia exceedances have decreased. In addition, bacteria levels continue to decrease and fewer sites are exceeding action levels.

The prevailing source for exceedances of field screening analytes was ponded water. The prevailing source of ponded and flowing water was from residential over-irrigation. With the additional push for water conservation in light of changing water availability, several avenues are being implemented to reach the general public about water conservation which will in turn reduce dry season runoff and improve water quality. These efforts include more face-to-face outreach by two new Clean Water Program Compliance Inspectors hired in February of 2008 who have responded to reports of over-irrigation in residential neighborhoods and at commercial and industrial facilities. In addition to the two new inspectors, the Water Utilities Department has hired an outreach coordinator specifically for water conservation education. Outreach avenues include information inserts in water bills, presentations on the local public access channel, and sponsoring workshops for the agricultural community and HOAs. And, as mandated by the State, the City is preparing for the impending drought and has adopted a revised drought ordinance as of July 9, 2008.

During the first year of the trash assessment, approximately 65% of the sites were either “optimal”, “suboptimal”, or “marginal” and did not require the detailed trash evaluation which identifies potential routes and sources. Twenty seven percent of the sites were “submarginal” and 7% of the sites were “poor”. The San Luis Rey Watershed had the highest percentage of “submarginal” and “poor” sites (46%). The majority of the trash found at the sites that required further trash evaluation was either food packaging or household waste. These items were most commonly at the sites via littering or from upstream. And, the most common sources of the food packaging and household wastes were households and transients.

Follow-up investigations continue to be conducted at sites with ongoing exceedances. Water conservation and urban runoff education outreach, as well as beach and creek clean-up events are on-going year-round as the City continues the effort to detect and eliminate illicit discharges to the storm drain system.

The City did not make any changes to the MS4 map during the 2007-08 fiscal year. To address MS4 inaccuracies and update the GIS layer of the MS4 map in the future, the City began researching hand-held GIS data collection units to be used collaboratively between Public Works, Engineering, and the Water Utilities Departments. Between June and August of 2008, the City purchased two Trimble GeoXH units. One of the many uses of these units is to verify

the accuracy of the MS4 map and relay the information gathered in the field to the Engineering Department to update the GIS layer. During FY 08/09, the City will be creating the data dictionary needed to collect consistent and necessary data for the storm drain system update and will roll out the field effort in the Spring and Summer of 2009.

7.5 Follow-up and Enforcement

The City implements and enforces its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Enforcement mechanisms are implemented on an escalating scale to enforce compliance, and follow-up inspections are conducted to ensure compliance has been achieved.

The administrative and judicial tools listed below are used as necessary to eliminate IC/IDs:

- Written warnings
- Enforcement of contracts
- Stop work notices
- Public nuisance abatement
- Denial or revocation of permits
- Civil and/or Criminal Court Actions
- Additional penalties or fines

The nature of the City's enforcement approach is determined on a case-by-case basis and is based on factors such as the severity of the violation, the threat to human or environmental health, site-specific circumstances, and past compliance history.

Code Enforcement recorded 375 cases potentially related to the requirements of the Municipal Permit. A total of 66 of these cases were related to potential IC/IDs. Table 7-6 presents a summary of the IC/ID investigations by Code Enforcement officers initiated during the 2007-2008 reporting year. The summary includes a brief description and the number of follow-ups and enforcement actions taken to achieve compliance. More detailed information on select IC/ID investigations by the Clean Water Program that were not a part of the Dry Weather Program are presented in Attachment 7-B.

Table 7-6. Summary of 07/08 IC/ID Investigations by Code Enforcement Officers

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Administrative Citations	Criminal Citation	Case Closed?
07-2851	Residential	7/5/2007	OIL RUNNING DOWN DRIVEWAY	Site Visit, unable to validate complaint. Phone call to reporting party left message	7/10/2007	7/10/2007	1	0	1	0	0	0	0	0	Yes
07-3150	Residential	7/20/2007	ILLEGAL DISCHARGE - DIRT	Site visit. Spoke with property owner about tracking dirt into roadway. Met with contractor. Issuec Admin cite 9173 to contractor for illegal discharge and cleanup of road.	7/20/2007	7/21/2007	2	0	1	0	0	0	1	0	Yes
07-3209	Residential	7/25/2007	ININTIAL ODOR; WASHING ANIMAL FECES INTO GUTTERLINE	Several site visits and phone calls with nothing observed. 7/28/08 received another phone call. 7/30/08 Sive visit: Property owner (PO) has connected dog run into sewer clean out. We had PO run water thru surface drain in rear yard observed feces and strong smell of urine flowing into street. po states was unaware that these drains were the problem and thought they had corrected the problem by eliminating the dog run from the rear yard surface drains. Informed property owner to get the drains cleared and not to use for cleaning out around aviary area. Asked PO to call when drains are cleared. PC to RP. RP states will be in contact if not resultved. No further contact.	7/25/2007	12/20/2007	2	0	10	0	0	0	0	0	Yes
07-3214	Residential	7/25/2007	WASHING MACHINE WATER OUT INTO STREET	Sent out a NOAV to the property owner regular mail.	7/26/2007	8/28/2007	1	0	1	1	0	0	0	0	Yes
07-3281	Residential	7/24/2007	CONCRETE RESIDUE WASHING INTO STREET	Some evidence of concrete residue observed in gutter line; most has dried up. Spoke to reportin party onsite; advised of status. Letter sent. Follow up found street and curb clear.	7/31/2007	8/1/2007	2	0	0	0	1	0	0	0	Yes
07-3357	Commercial	8/7/2007	ILLEGAL DISCHARGE	Site visit. No discharge from property. Advised manager of Stormwater concern	8/7/2007	8/7/2007	1	0	0	0	0	0	0	0	Yes
07-3363	Residential	8/7/2007	ILLEGAL DISCHARGE	Site visit. Observed illegal discharge in gutterline. Issued Admin Cite 9176. Follow up found the area clean.	8/7/2007	8/16/2007	2	0	0	0	0	0	1	0	Yes
07-3402	Residential	8/13/2007	THROWING DOG FECES IN DRAINAGE CHANNEL	Admin warning 11812 sent to property owner and occupant. Phone call from occupant states is a city employee and aware of Storm Water regs and is not throwing the dog feces into drainage channel. Asked if they observe any body throwing waste into channel to please call our office.	8/13/2007	8/30/2007	0	0	1	0	0	0	1	0	Yes
07-3567	Residential	8/27/2007	ILLEGAL DRAINAGE	Site Visit, spoke w / contractor. States had a concrete pump on Friday washed out in the dirt anc irrigation and rain on Sunday washed material into street and gutter. No evidence of discharge visible at time of site visit	8/27/2007	8/28/2007	1	0	1	0	0	0	0	0	Yes
07-3615	Residential	8/30/2007	ILLEGAL DUMPING	Site Visit, Photos Taken, Admin warning 9178 posted on property.	8/30/2007	8/30/2007	2	0	0	0	0	0	0	0	Yes
07-3677	Residential	9/4/2007	POWERWASHING ROOF	Received complaint from Parking Enforcement via water dept. Follow up found area clear	9/4/2007	9/5/2007	2	0	0	0	0	0	0	0	Yes
07-4171	Residential	9/25/2007	IMPROPER DISPOSAL OF OIL WASTE	Site Visit, Photos Taken, spoke to occupant with interruption from S.Soto. Informed that materia needs to be swept up and properly disposed of today or citation will be issued.	9/25/2007	9/25/2007	1	0	1	0	0	0	0	0	Yes
07-4191	Commercial	9/10/2007	WASHING MATS IN ALLEY AND PARKING LOT	Site Visit, spoke w / manager informed of complaints and storm water regulations concerning restaurants and washing of mats. Manager states will talk to BO and will call if any questions.	9/10/2007	2/4/2008	1	0	0	0	0	0	0	0	Yes
07-4484	Residential	10/13/2007	POWER WASHING TRASH ENCLOSURE INTO PARKING LOT	Site Visit, as requested by CE manager. BO had washed out dumpster enclosure into parking lot creating a health and safety concern and storm water issue. Issued Admin warning 9180 to BO. Called Sewer Collections to clean up and informed BO there may be cost recovery.	10/13/2007	10/13/2007	1	0	1	0	0	0	1	0	Yes
07-4520	Residential	10/18/2007	PRESSURE WASHING AND WATER GOING INTO STORM DRAIN	Site visit. Educated business owner about proper tail water collection. No further issues.	10/18/2007	10/18/2007	1	0	1	0	0	0	0	0	Yes
07-4792	Residential	11/6/2007	ILLICIT DISCHARGE ONTO CITY PROPERTY	Site Visit, Photos Taken, spoke w / manager showed him pictures taken on 11-2-07 by parking Enforcement. Manager states a carpet cleaner for a resident dumped the water in a drain in the landscape area. Informed manager this has happened before and if they could try to inform residents about proper disposal of this type of material. Follow up found area clear.	11/6/2007	2/4/2008	2	0	0	0	0	0	0	0	Yes
07-4800	Commercial	11/7/2007	OIL IN THE PARKING LOT	Informed reporting party oil container placed on private property is property owner responsibility t take care of or remove. Suggested the container of oil be taken to any recycle center such as Kragen or Pep Boys. reporting party states will take care of it.	11/7/2007	1/18/2007	0	0	1	0	0	0	0	0	Yes
07-4834	Industrial	11/9/2007	CHEMICALS GOING INTO STORM DRAIN	Reporting party states used to work at this business and was concerned about their practices an how they disposed of the haz mat. Site Visit spoke business owner states he knows who filed complaint because the person he had recently laid off due to unfavorable workmanship has already called the EPA, OSHA, SD County Haz Mat and has already been visited by each of these agencies. I called T.Welch from County Haz Mat to verify and was informed this site has never bee an issue for his dept. We made a courtesy Storm Water inspection and was satisfied with the condition of this property.	11/12/2007	11/13/2007	1	0	1	0	0	0	0	0	Yes
07-4850	Commercial	11/13/2007	WASH WATER DISCHARGE	Site Visit, spoke w / BO informed of complaint. States the water may be coming from sprinklers along top of slope he is trying to get vegetated. Observed water from car wash is diverted into reclaim system which is a requirement from city. BO will turn off sprinklers and see if that eliminates problem. Follow up found no water.	11/13/2007	11/20/2007	2	0	0	0	0	0	0	0	Yes
07-4993	Residential	11/28/2007	ILLEGAL DISCHARGE	SV, Observed tenant degreasing engine in driveway. Issued Admin Warning Cite 9181 anc instructed on proper way of clean up. Follow up found party in compliance.	11/28/2007	11/28/2007	2	0	1	0	0	0	1	0	Yes
07-5004	Commercial	11/29/2007	PROHIBITED DISCHARGE INTO SEWER	Hydranautics discharging into sewer. Several citations increasing in fine over several months 4/18/08 corrections were made.	11/29/2007	4/10/2008	3	1	1	0	0	0	1	2	Yes
07-5019	Residential	11/29/2007	UNLAWFUL DISCHARGE INTO STORM DRAIN	Site visit: Photo(s) taken of sidewalk and French drain outlet; evidence of white substanc observed and documented. Letter sent. Follow up found no further evidence of discharge.	11/27/2007	1/22/2008	2	0	0	0	2	0	0	0	Yes
07-5077	Commercial	12/3/2007	ILLEGAL DISCHARGE INTO HARBOR	Camp Pendleton discharge into harbor. Site visits and meetings with reps, but discharge continued. Referred to RWQCB.	12/3/2007	2/5/2008	3	0	3	0	0	0	0	0	Yes

Table 7-6. Summary of 07/08 IC/ID Investigations by Code Enforcement Officers

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Administrative Citations	Criminal Citation	Case Closed?
07-5263	Residential	12/7/2007	STORM WATER ISSUES	Site Visit, observed trench dug around property. At time of Site Visit, did not observe any sign of mud leaving property but did notice small amount of dirt in street and was unable to determine the source. Letter sent. Discussion with property owner; new BMPs were put in place.	12/7/2007	1/18/2008	2	0	4	1	0	0	0	0	Yes
07-5366	Residential	12/22/2007	STORM DRAINAGE VIOLATION	Site visit met w / property owner showed rear yard no violations. Property owner stated this issue has been looked at by engineering dept approx 11 yrs ago with the same determination.	12/22/2007	2/4/2008	2	0	1	1	0	0	0	0	Yes
07-5395	Residential	12/31/2007	WASHING MUD & SILT INTO STREET	Allege letter sent, Phone call to reporting party left message informing of action being take	2/4/2008	2/5/2008	1	0	0	1	0	0	0	0	Yes
08-0199	Residential	1/15/2008	OIL SPILL IN GUTTERLINE REACHED STORMDRAIN	Site Visit, Photos Taken, Phone call to reporting party met in front of his residence. Observed oil in gutter line all the way to storm drain. Unable to determine source. Phone call to Public Works C.Brust placed absorbent material on oil and will be swept on a regular sweep on1-16-08.	1/15/2008	1/15/2008	1	0	3	0	0	0	0	0	Yes
08-0202	Commercial	1/16/2008	DISCHARGE OF MUD ONTO CITY STREET	Phone call from M.Sabelis states his crew has cleaned up Mission Ave and requested our dep make contact with apartment management to place BMP's to prevent further erosion problems. Site Visit, spoke w manager states will have BMP's put in place and will do maintain drainage courses as needed.	1/16/2008	1/24/2008	2	0	1	0	0	0	0	0	Yes
08-0249	Commercial	1/17/2008	ILEGAL DISCHARGE & MAINTENANCE ISSUE	Received complaint from Vista Storm Water insp. Phone call to mgr requesting a time to insp and address concerns. Site Visit, met w / BO gave copies of photos, educated her on storm water reg and ways to keep her business clean and still be in compliance. Email reply to reporting party	2/11/2008	2/11/2008	1	0	1	0	0	0	0	0	Yes
08-0505	Residential	2/11/2008	CEMENT WASHOUT DISCHARGE FROM CAMP PENDLETON	Camp Pendleton discharge to North Terrace elementary school. Received copies of email regarding cement washout discharge. Case opened for tracking purposes. Referred to RWQCB. See detailed IC/ID Sheet in Appendix.	2/12/2008	2/12/2008	0	1	0	0	0	0	0	0	Yes
08-0686	CS	2/15/2008	PUMPING WATER ONTO STRAND	Call from OPD, Site Visit, Admin cite 12512 issued to job super for draining elevator shaft afte rain onto The Strand.	2/15/2008	2/15/2008	1	0	0	0	0	0	1	0	Yes
08-0759	Residential	2/19/2008	ILLEGAL DISCHARGE AND MAJOR AUTO REPAIR	Site visit. Observed illegal oil discharge to conveyance system. Issued Warning Cite 12513 to discharger. Clean up in progress. Follow up found area clean.	2/19/2008	2/20/2008	2	0	0	0	0	0	1	0	Yes
08-0788	Residential	2/20/2008	MOTOR HOME DUMPING WATER ON STREET	Site Visit, Phone call to reporting party states motor home sometimes discharges water from the bottom. While on-site observed what appeared to be water coming from motor home. After looking closer observed irrigation water from up-hill hitting front tire that is turned toward the curb making water run out into the street.	2/18/2008	2/18/2008	1	0	2	0	0	0	0	0	Yes
08-0789	Commercial	2/19/2008	OIL BEING DUMPED IN STORMDRAIN	Site Visit, spoke with BO unable to validate complaint. Email response sent to M.Lahsaie to be forwarded to RWQCB.	2/19/2008	2/19/2008	1	0	0	0	0	0	0	0	Yes
08-0825	Residential	2/25/2008	WASHING PAINT BRUSHES INTO STORMDRAIN	Site Visit, spoke with 19 y/o daughter of the po states her brother had placed a paint can in the trash can and the driver took it out and placed it on the sidewalk. Someone kicked it over and it spilled on the sidewalk and her brother tried to wash it away with water. Informed resident of how to properly dispose of paint and explained how this residual paint needs to be cleaned up. They will comply	2/25/2008	2/25/2008	2	0	1	0	0	0	0	0	Yes
08-0986	Residential	3/4/2008	OIL ON THE STREET	site visit, Notice of Violation sent w / photos, Follow up found area clear	3/4/2008	4/11/2008	1	0	0	1	0	0	0	0	Yes
08-1001	Residential	3/4/2008	DISCHARGING GREY WATER FROM WATER HEATER	Allege letter sent, Site Visit, Photos Taken, no change in condition. The issues on this property have previously been addressed. A Certificate of Non Compliance has been recorded on this property. Refer to case 07-2070.	3/19/2008	4/11/2008	1	0	0	1	1	0	0	0	Yes
08-1040	Residential	3/10/2008	WASHING MUD INTO STREET AND STORMDRAIN	Site Visit, Photos Taken, Admin warning 11842 sent to residence. Phone call from property owne states due to other problems associated with this tenant he was served with an eviction notice and will be out by the end of this month.	3/12/2008	3/12/2008	1	0	3	0	0	0	1	0	Yes
08-1065	Commercial	3/11/2008	ILLEGAL DISCHARGE AND UNPERMITTED STORAGE	Site Visit, Photos Taken, spoke to Harbor Patrol and Harbor Maintenance about on-going issues. i illegal discharge, smell associated with dumping into storm-drain, storing of traps on city property, creating a trip hazard with hoses and electric cords, blocking public access by doing business on the sidewalk, unlicensed business. No business activity at this time. Admin cites given. Dock cleaned up and no further discharge.	3/11/2008	4/9/2008	3	2	1	0	0	0	0	0	Yes
08-1310	Residential	3/18/2008	ILLEGAL DISCHARGE INTO STORMWATER CONVEYANCE SYSTEM	Site visit. Observed contractor washing plaster into rear yard drain which flows out to gutterline. Issued Admin Warning for cleanup. Follow up - gutter clean	3/18/2008	3/19/2008	2	0	0	0	0	0	1	0	Yes
08-1323	Residential	3/19/2008	OIL ON THE STREET	Vehicle is leaking oil in the street at night when parked. Made site visit. Observed some staining i front of residence. Drafted and sent via mail notice to property owner. Follow up - no further problem.	3/19/2008	3/26/2008	2	0	1	0	1	0	0	0	Yes
08-1342	Residential	3/20/2008	ILLEGAL DISCHARGE INTO STORMWATER CONVEYANCE SYSTEM	Site visit. Issued Admin Warning 9186 to acting manager for improper washing of parking lot,drive thru,and dumpster enclosure. Several follow-ups and discussion with managers; no further problems.	3/20/2008	5/20/2008	4	0	1	0	0	0	1	0	Yes
08-1343	Residential	3/20/2008	ILLEGAL DISCHARGE INTO STORMWATER CONVEYANCE SYSTEM	Site visit. Issued Admin Warning to contractor for cleanup of spilled concrete. Advised of precautions to take in the future. Follow up found no further problems.	3/20/2008	3/24/2008	2	0	1	0	0	0	1	0	Yes
08-1345	Residential	3/18/2008	ILLEGAL DISCHARGE INTO STORMDRAIN	Site visit. Issued Admin Warning to contractor for cleanup of spilled concrete. Advised o precautions to take in the future. Follow up found business complying.	3/20/2008	7/23/2008	3	0	1	0	0	0	0	0	Yes

Table 7-6. Summary of 07/08 IC/ID Investigations by Code Enforcement Officers

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Administrative Citations	Criminal Citation	Case Closed?
08-1346	Residential	3/20/2008	ILLEGAL DISCHARGE INTO STORMDRAIN	Drafted and sent notice to property owner about washing yard waste into storm drain. Follow up found no further problem.	3/24/2008	4/21/2008	1	0	2	0	1	0	0	0	Yes
08-1379	Residential	3/25/2008	ILLEGAL DISCHARGE INTO STORMWATER CONVEYANCE SYSTEM	Site visit. Issued Admin Warning site for illegal discharge and clean up. Follow up found area clean.	3/25/2008	3/26/2008	2	0	1	0	0	0	1	0	Yes
08-1471	Residential	4/1/2008	STORM WATER VIOLATION AND GRAFFITI ON THE PROPERTY	reporting party complained of smell and discharge coming from back of business. Site visit. Spoke with manager. Observed illegal discharge coming from trash dumpster area. Issued Admin Warning 9187 to MGR for illegal discharge and poor maint of rear area. Concrete apron broken and seepa is creating its own septic system. Improvements completed; no further issues.	4/1/2008	4/21/2008	3	0	2	0	0	0	1	0	Yes
08-1631	Residential	4/2/2008	ILLEGAL DISCHARGE INTO STORM DRAIN	Received report from city personnel regarding a carpet cleaning business dumping waste water int the Stormwater conveyance system. Site visit. Vehicle GOA. Used info from reporting party to locate business in Oceanside. Sent admin cite to business owner.	4/2/2008	5/7/2008	1	0	2	0	1	0	1	0	Yes
08-1632	Commercial	4/1/2008	ILLEGAL DISCHARGE INTO STORM DRAIN	Site visit. Spoke with new manager about better upkeep of trash enclosure area. She stated it woul be cleaned up to standards immediately. Site visit later in day confirmed proper maint of dumpster area. Will monitor because of past history with business.	4/1/2008	7/29/2008	2	0	0	0	0	0	0	0	Yes
08-1748	Residential	4/14/2008	OIL IN ALLEY	Site visit photo taken of two oil pans in alley. Follow up found area clear	4/14/2008	4/22/2008	2	0	0	0	0	0	0	0	Yes
08-1776	Residential	4/16/2008	SEDIMENT DISCHARGE	Site visit. Observed sediment from off road dirt track on property impacting storm water conveyanc system. Drafted and sent letter to property owner. Compliance met.	4/21/2008	8/11/2008	2	0	1	0	1	0	1	0	No
08-1837	Residential	4/22/2008	ILLEGAL DISCHARGE INTO STORMWATER CONVEYANCE SYSTEM	Observed property discharging sediment laden water. Issued Admin Warning 9188 to Contracto cleaning out a stagnant swimming pool. Will return to check on proper cleanup of discharge. Follow up found property in compliance.	4/22/2008	4/24/2008	2	0	0	0	0	0	1	0	Yes
08-1878	Commercial	4/23/2008	ILLEGAL DISCHARGE	Site visit. Spoke with Maint about issue. Someone has been dumping paint and other construction materials into the dumpster on a regular basis. Maint is going to keep an eye out. Will monitor.	4/23/2008	5/6/2008	2	0	1	0	0	0	0	0	Yes
08-2030	Commercial	5/5/2008	POWERWASHING GREASE GRATE	Site visit. Spoke with Manager about proper cleaning techniques. Manager stated that he will tell hi manager of the situation and call back. Follow up found all employees properly trained.	5/5/2008	7/23/2008	2	0	1	0	0	0	0	0	Yes
08-2201	Commercial	5/8/2008	OIL, TRASH IN STORMDRAIN HASN T MET PROPERLY PLACED/ STORED	Site Visit, met w / BO walked site pointed out areas of concern. BO states will have issues addressed within a couple weeks. PC from BO asking for extension. BO planning complete remodel which will address issues. Plans in the works. Extension granted.	5/8/2008	6/4/2008	1	0	1	0	0	0	0	0	Yes
08-2220	Commercial	5/9/2008	ILLEGAL DISCHARGE INTO STORMWATER CONVEYANCE SYSTEM	Site visit. Observed overflowing grease trap because of block in lateral line. City vactor truck an crew on site monitoring spill. Spoke with regional manager about getting a pump truck and a plumber to rectify situation. Issued Admin Warning cite 9189 to acting manager on scene for discharge and cleanup. Several Follow up visits; now in compliance.	5/9/2008	5/20/2008	5	0	3	0	0	0	1	0	Yes
08-2269	Commercial	5/14/2008	ILLEGAL DISCHARGE	Site visit. Observed soapy water discharge from property. Spoke with general manager. Vehicles i rear of business being washed. Issued Admin Cite 9190 to business. Explained alternative methods of BMP usage. Business in compliance on Follow up.	5/14/2008	7/15/2008	4	0	1	0	0	0	1	0	Yes
08-2286	Industrial	5/15/2008	DISPOSING OF SPOILED LIQUIDS IN DUMPSTER	Site Visit, met with P.Yosuico and BO discussed different ways of disposing of spent material. BO will be contacting waste management to get green waste totes.	5/14/2008	5/15/2008	1	0	0	0	0	0	0	0	Yes
08-2364	Residential	5/22/2008	POWER WASHING STREET INTO L A C	Site Visit, Photos Taken, Admin warning 12517 issued to po. Stopped washing street while on-site. Informed po either hire a street sweeper or clean up by other means of dry sweep.	5/22/2008	5/22/2008	1	0	0	0	0	0	1	0	Yes
08-2365	Residential	5/22/2008	WATER RUNNING INTO STORMDRAIN	Site Visit, this area has a sump pump at the top of the hill towards Skyhaven at the retiremen community that keeps this water flowing continuously into the Right of Way. PC to RP to explain situation. RP appreciated info.	5/22/2008	5/26/2008	1	0	1	0	0	0	0	0	Yes
08-2479	Residential	6/4/2008	ILLEGAL STORMWATER DISCHARGE	Observed MA power washing roof of dwelling on the property; residue was observed to be runnin into gutter and street, and flowing west towards Elm Tree Dr. storm drain. Admin warning for discharge and expired business license. Discharge cleaned. Follow up on business license - no action; two admin cites. Compliance was achieved.	6/4/2008	7/29/2008	3	0	2	0	0	0	2	2	Yes
08-2495	Residential	6/6/2008	CEMENT DEBRIS, WASHING PAINT BRUSHES DOWN DRAIN	Site Visit, observed brick and sand stored in Right of Way to be placed in driveway. Informed worker this is normally not permitted but because it was to be placed in driveway and it is not a busy or thru street to hurry and get material placed and clean up all residual dirt in street and gutter line. Follow up - area clean.	6/6/2008	6/10/2008	2	0	0	0	0	0	0	0	Yes
08-2511	Residential	6/9/2008	DUMPING MOTOR OIL IN WATER MOTOR BOX EXCESSIVE OIL	Site visit, Notice of Violation sent w / photos.	6/5/2008	8/20/2008	1	0	0	1	0	0	0	0	No
08-2638	Residential	6/11/2008	HAZARDOUS WASTE	Phone call from Chip (public Works). Observed containers of spent oil and e waste along parkwa in front of residence. Issued Warning cite 9191 to property owner for proper disposal. Follow up showed compliance.	6/11/2008	6/12/2008	2	0	1	0	0	0	1	0	Yes
08-2705	CS	6/18/2008	ILLEGAL DISCHARGE INTO HARBOR	Camp Pendleton discharging mud. Referred to RWQCB. Went on base and noticed two workers ir a storm drain inlet installing filter systems. They had removed the BMP's that was holding back the residual mud creating the discharge. Hunt Corp. job superintendent stating the workers had mistakenly removed the BMP's in the inlets and has since replaced them to prevent any further discharge. They will be using a vactor to remove any sediment before removing BMP's	6/13/2008	6/16/2008	1	0	5	0	0	0	0	0	Yes

7.6 Illicit Discharge, Detection, and Elimination Component Effectiveness Assessment

Effectiveness assessment is an important component of the JURMP because it can assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The San Diego County Copermittees developed two guidance documents to assist in the assessment of the JURMP components as well as the jurisdictions overall JURMP program. These two documents are titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* and the *Baseline Long-term Effectiveness Assessment* (BLTEA). The City participated in regional efforts to develop these documents in anticipation of the requirement to assess their JURMP programs.

The effectiveness assessment approach developed by the Copermittees during the 2005-06 permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below:

- Level 1: Compliance with Activity-Based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

The establishment of measurable outcomes is necessary for both incremental program component improvements and as a basis for future establishment of relationships between implementation and water quality improvement outcomes.

This section discusses the effectiveness assessment of the IDDE components of the JURMP. Overall program effectiveness assessment is discussed in Section 11 of the 2007-2008 City of Oceanside JURMP Annual Report submitted September 30, 2008.

A large effort of the IDDE element is the City's Dry Weather Monitoring Program. The City revised the historical program to meet the 2007 Municipal Permit requirements and implemented the new program between May 1 and September 30, 2008. Table 7-7 provides a summary of the Level 1 activity-based compliance assessment of the program. This was the first year the City used a replacement program for dry or inaccessible sites. While there were 67 sites on the primary site list, fourteen were either dry or inaccessible. An additional 18 sites were visited to find ponded or flowing water. Although staff thought that all dry sites were replaced, the City fell one site short of the original number of sites, resulting in a 99% completion rate. This will be addressed in the next monitoring year. The City continued laboratory sampling at more sites than required which resulted in a 112% completion rate. All initial site exceedances of action levels were confirmed within two business days and all sites, even those without ponded or flowing water, that were accessible were assessed for trash extent and amount.

Table 7-7. Dry Weather Monitoring Component - Level 1: Compliance with Activity-Based Requirements.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
IDDE D.4	Site Visits	Primary Dry Weather Sites Listed	Primary & Alternate Dry Weather Sites Visited	Actual/Target	Percent ( ) Completion
		67	85	85/67	127
	Field Screening	Primary Dry Weather Sites Listed	Number of Sites Screened with Flowing/Ponded Water	Actual/Target	Percent ( ) Completion
		67	66	66/67	99
	Laboratory Analysis	Number of Sites Required for Lab Analysis	Number of Sites Sampled for Lab Analysis	Actual/Target	Percent ( ) Completion
		17	19	19/17	112
	Follow-Ups (Within Two Business Days)	Number of Sites Requiring Confirmation	Number of Site Follow-up within Two Business Days	Actual/Target	Percent ( ) Completion
		33	33	33/33	100
	Trash Assessment	Number of Dry Weather Sites Accessible	Number of Trash Assessments Conducted	Actual/Target	Percent ( ) Completion
		81	81	81/81	100

The City's Dry Weather Monitoring program was first implemented in 2002. Although the program has evolved and the number of sites and location of sites has varied, some assessment of discharge water quality can be made (Level 5 assessments). Figure 7-3 provides a summary of the percent of action level exceedances for select field screening parameters from 2002 through 2008. Nitrate action level exceedances have remained the same. Orthophosphate exceedances vary and do not show any trends, but have stayed under 25% since 2002. Ammonia exceedances for 2002, 2003, and 2004 occurred in over 80% of the sites. The 2005 Dry Weather Report indicates that these exceedances were likely due to false positives with the method being used. The methods were changed in 2005 and ammonia exceedances were increasing slightly until the 2008 monitoring year. In the 2008 dry weather season, ammonia exceedances were below 2006 levels.

Figure 7-4 provides a summary of the microbiology results from 2002 through 2008. Bacterial exceedances have been on a decreasing trend since 2005. Total coliform exceedances have fallen from 100% of the samples, to 37% of the samples analyzed. Fecal coliform exceedances comprised just over 20% of the samples in 2005, 2006, and 2007, and fell to 11% in 2008. Enterococcus results have remained stable at 11% over the last three years.

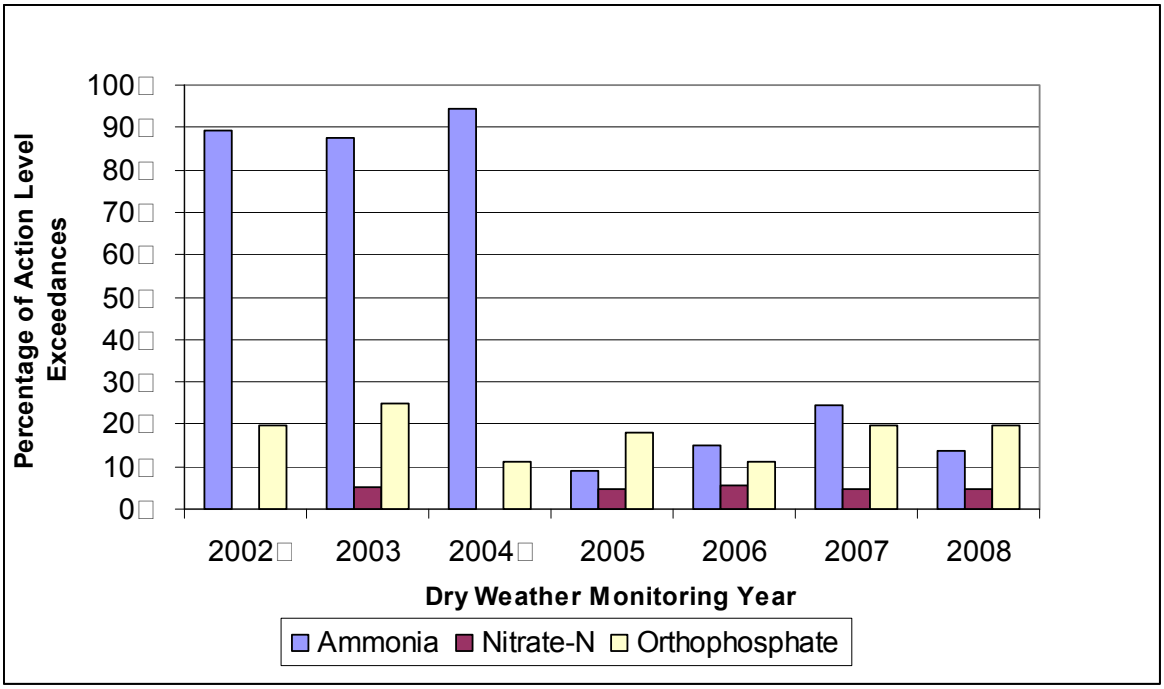

In 2004, nitrate was not analyzed in field screening samples. In 2002, the results for nitrate were likely reported as Nitrate (NO_3) as opposed to Nitrate as N (NO_3-N). Not converting the results to the appropriate action level format creates a larger number of exceedances, than should be. Reporting years 2003 through 2006 were corrected, but documentation was not available to definitively clain that this was the case for 2002. Therefore, the results were omitted from this assessment.

Figure 7-3. Dry Weather Monitoring – Level 5: Changes in Discharge Quality. Summary of Field Screening Action Level Exceedances from 2002 - 2008.

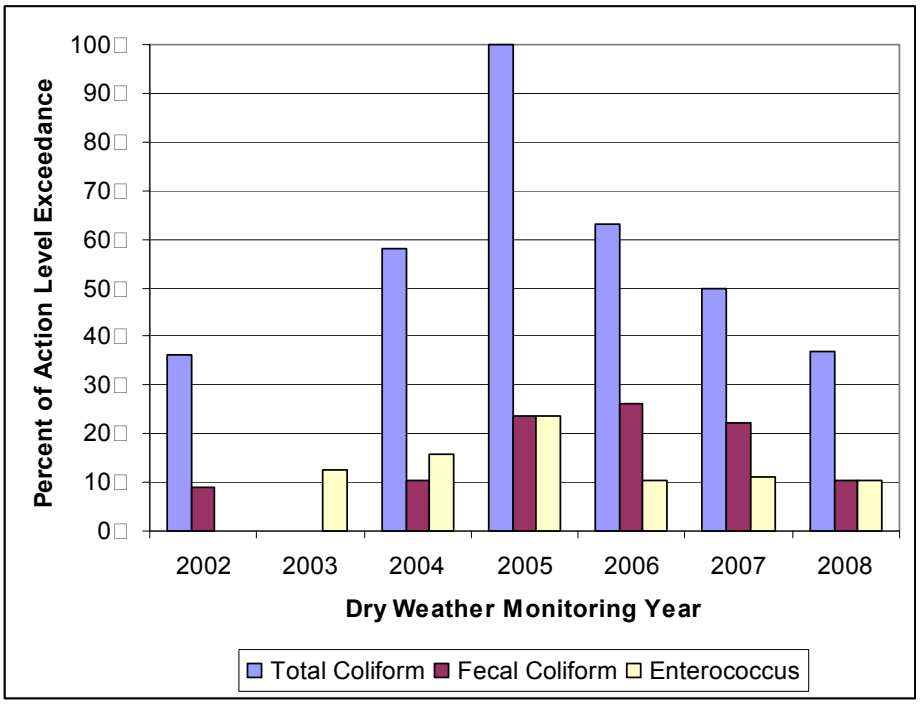

Figure 7-4. Dry Weather Monitoring – Level 5: Changes in Discharge Quality. Summary of Bacteriological Action Level Exceedances from 2002 - 2008.

7.7 Program Review and Modification

Two recommendations for the IDDE component of the Municipal Permit are suggested. As discussed in Section 15 of the JURMP Annual Report, a database tracking system has been recommended and is being researched to better track the inter-departmental effort to gather data related to the requirements of the 2007 Municipal Permit. Specific to the IDDE Component, the Clean Water Program is working with the Engineering Department and Public Works to update the MS4 map utilizing GIS technology.

7.7.1 Database Tracking System for various departments and divisions

Public reporting of potential IDDEs, in addition to staff investigations across the Water Department, Public Works, and Code Enforcement require detailed information from across departmental boundaries and, therefore, across various data collection systems within the City. As part of the March 2008 Integrated Water Utilities Master Plan, the Information Technology component provided several key strategies which will focus on integrating reporting requirements and, therefore, collection systems across businesses and operations. As the Urban Runoff Hotline is utilized more, the Clean Water Program will be integrating information from Hotline calls into the main Water Utilities database. This will ensure complaints and inquires are tracked as they are distributed through Water and Sewer Maintenance Divisions, Code Enforcement Division and the Clean Water Program and will more easily gather and provide detailed information for reporting purposes.

As land use development continues in the City, challenges associated with data management, such as tracking of post-construction BMPs, maintenances agreements, and associated documents, as emerged. It is important to update available tools with up-to-date information. This will be an issue to address during the next reporting period. The Clean Water Program will also be working with other City departments to ensure that the details of inspections, complaints, and follow-ups will be tracked appropriately to be included in future annual reports.

7.7.2 Maintenance of MS4 Maps using GIS Technology

To address MS4 inaccuracies and update the GIS layer of the MS4 map in the future, the City began researching hand-held GIS data collection units to be used collaboratively between Public Works, Engineering, and the Water Utilities Departments. Between June and August of 2008, the City purchased two Trimble GeoXH units. One of the many uses of these units is to verify the accuracy of the MS4 map and relay the information gathered in the field to the Engineering Department to update the GIS layer. During FY 08/09, the City will be creating the data dictionary needed to collect consistent and necessary data for the storm drain system update and will roll out the field effort in the Spring and Summer of 2009.

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Dry Weather Monitoring Report

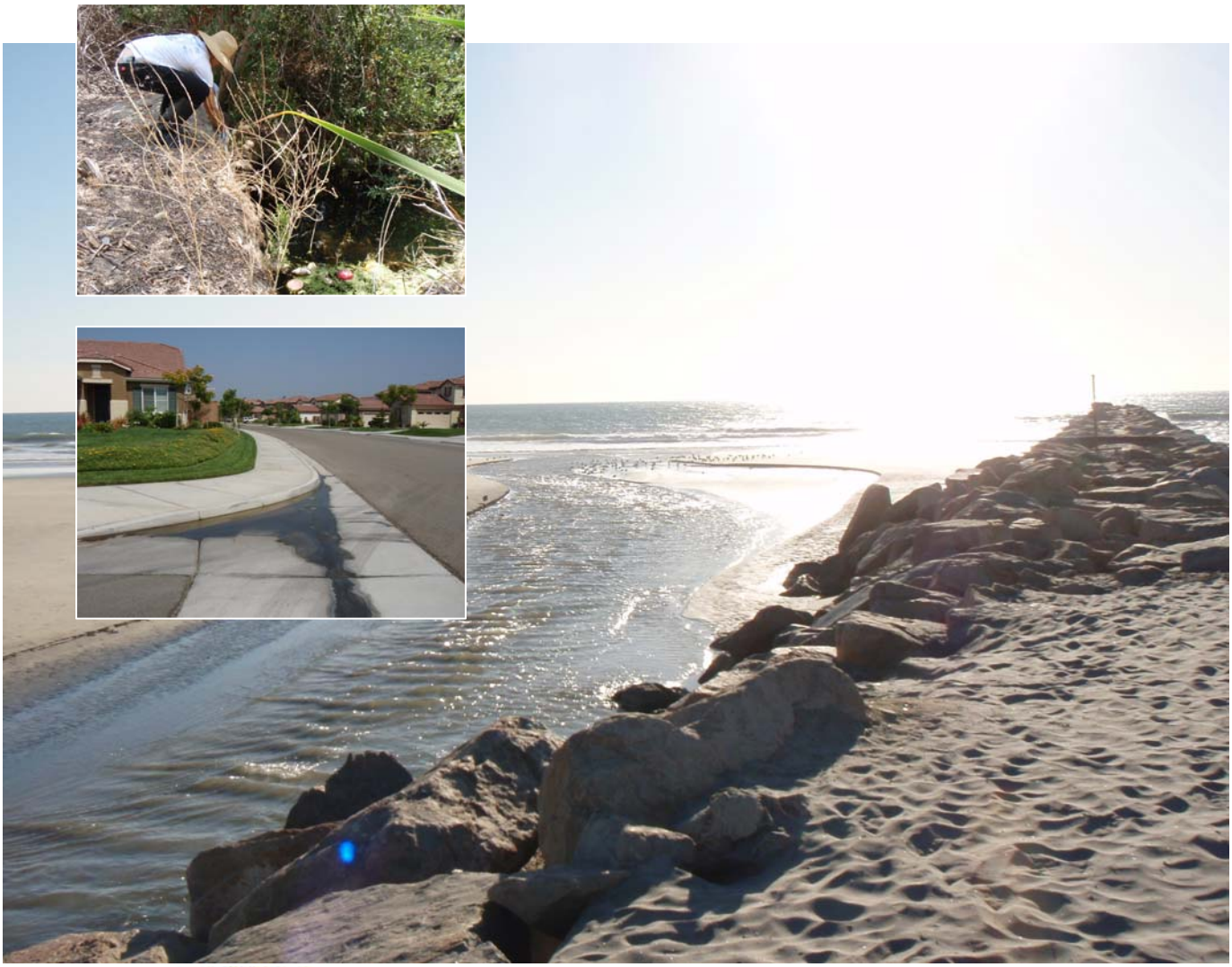

Prepared by:

City of Oceanside
Clean Water Program
January 31, 2008

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1 INTRODUCTION

1.1 Program Summary

In February 2001, the San Diego Regional Water Quality Control Board issued Order No. 2001-01 to the communities of San Diego County. As part of Order 2001-01, the City of Oceanside was required to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program. The purpose of the program was to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. Information collected from dry weather monitoring is used to characterize dry weather discharges in the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as necessary to detect and eliminate the sources of these pollutants.

In 2007 the San Diego Regional Water Quality Control Board issued a new five-year permit for Receiving Waters and Urban Runoff Monitoring and Reporting, Order No. 2007-0001. The Copermittees in San Diego County are required, as part of their Jurisdictional Urban Runoff Management Program (JURMP), to update their Dry Weather Program to meet or exceed the requirements of Order No. 2007-0001. The City of Oceanside's Dry Weather Program was reviewed and updated and the details of the new program are included in the City of Oceanside 2007 JURMP Update.

This report presents the results of the City of Oceanside's 2008 Dry Weather Field Screening and Analytical Monitoring Program which includes the revisions to the program required by Order No. 2007-0001. The key changes to the new Municipal Permit were adding a trash assessment component and requiring follow-up investigations to be conducted within two business days of receipt of results. Details of the program are presented in Section 3.

1.2 City of Oceanside Drainage Summary

The City of Oceanside lies on the northern coast of San Diego County, 35 miles north of the City of San Diego and 83 miles south of the City of Los Angeles. The City is bounded to the west by the Pacific Ocean, the north by Camp Pendleton Marine Corps Base, the east by unincorporated areas of the County of San Diego and the City of Vista, and the south by the City of Carlsbad. The City covers approximately 42 square miles with a population of just over 173,000 people. California's main highway, Interstate 5, runs through the City, as does Highway 78, which provides southeast access to Interstate 15. Highway 76, which runs northeast, also provides access to Interstate 15.

The City's boundaries include two major watersheds; the San Luis Rey Watershed, which includes the San Luis Rey River and the Carlsbad Hydrologic Unit, which includes Loma Alta Creek, Buena Vista Creek, and Agua Hedionda Creek.

1.2.1 San Luis Rey Watershed

1.2.1.1 San Luis Rey River

The San Luis Rey Watershed is the northernmost watershed within the City of Oceanside. It is approximately 558 square miles and extends inland to encompass a large portion of the northern unincorporated areas of the County of San Diego. The San Luis Rey River is the primary watercourse of the watershed and discharges to the Pacific Ocean near the northern border of the City of Oceanside. While the San Luis Rey Watershed is the largest hydrologic unit in the San Diego region, 92.5% of the watershed lies within the unincorporated part of the County, and not within the City of Oceanside. However, a wide floodplain is prominent through the City, including levees on either side of the river to protect the surrounding developments, adjacent to or within the historical floodplain, from future storm events. In 2007, the Pacific Street Bridge Project broke ground to restore the river mouth to its natural open state by creating a bridge over the river and removing the "Arizona crossing," a land berm and large culvert intended to wash out during large storm events. The new bridge was completed and opened in September of 2008 and the hardscape of the Arizona crossing was removed at the end of October 2008.

The one named tributary within the City's boundaries is Pilgrim Creek, which drains a relatively undeveloped portion of the City with some residential areas and a municipal golf course in addition to an undeveloped area of Camp Pendleton. The remaining drainage areas within the City include areas of agricultural, residential, and some industrial land uses.

1.2.2 Carlsbad Watershed

1.2.2.1 Loma Alta Creek

Loma Alta Creek is the northernmost watershed in the Carlsbad Hydrologic Unit. It flows alongside Oceanside Boulevard, beginning as a rising spring just west of Melrose Drive in the City of Vista and ending at Buccaneer Beach Park where it enters the Pacific Ocean. Approximately five percent of the Loma Alta Creek Watershed is in the City of Vista, and the remaining portion is entirely in the City of Oceanside. Loma Alta Creek is over seven miles long and encompasses nearly 6,300 acres of land, 70 percent of which is developed. Almost 90% of the land within the watershed is privately owned.

Several tributaries drain into Loma Alta Creek, however, the only named tributary is Garrison Creek, located along Garrison Street west of El Camino Real. Much of the creek has been modified throughout the years, with the use of fully or partially concrete-lined channels to stabilize the creek-bed slopes. Loma Alta winds through a highly industrial area towards the western portion of the creek. Other land uses include residential and commercial uses.

1.2.2.2 Buena Vista Creek

The Buena Vista Watershed extends approximately 10.6 miles inland from the coast, totaling 14,437 acres and draining 21 square miles. The Watershed begins on the western slopes of the San Marcos Mountains, flows through areas of the County of San Diego and the Cities of Vista, Carlsbad, and Oceanside, turns into a lagoon and then ends at the

Pacific Ocean. A weir was built in 1940 to stop tidal flow at the mouth and the lagoon now functions as a freshwater lagoon.

In the City of Oceanside, Buena Vista Creek parallels Highway 78. The lagoon is located south of Highway 78 and west of Jefferson Street. The upper and western basins of the Buena Vista Watershed are primarily in the City of Vista, the southeastern portions are primarily in the San Diego County jurisdiction, and the lower basin is straddled between the Cities of Carlsbad and Oceanside as the Creek weaves its way between the two cities. Approximately 80% of the Buena Vista Watershed is developed, primarily with commercial and residential land uses. Some agricultural activities also exist in the watershed. Because of the intense development in the watershed, large sections of Buena Vista Creek have been concrete-channelized to reduce the chance of flooding private property.

1.2.2.3 Agua Hedionda Creek

A small portion of the City of Oceanside lies within the watershed of a tributary of Agua Hedionda Creek, called Calavera Creek. Beginning in an undeveloped portion of land just west of Highway 78, Calavera Creek's headwaters start in Vista, proceed through a pocket of San Diego County unincorporated area, head into Oceanside, and then eventually drain to Lake Calavera. Lake Calavera was created by the building of a dam in the 1940s. While the creekbed downstream of the lake is typically dry, the creek reforms in wet weather to wind its way through Carlsbad and joins the major artery of Agua Hedionda Creek. Near the Pacific Ocean, Agua Hedionda Creek opens up into a lagoon. The entire Calavera Creek Basin is approximately 3,770 acres. The primary land use in the portion of the Agua Hedionda Watershed that lies within the City of Oceanside's boundaries is residential.

2 SAMPLING LOCATIONS

2.1 Site Selection

City monitoring staff worked with a consultant experienced in dry weather monitoring to update the City's Dry Weather Monitoring Program site locations during the 2008 JURMP Update process. This process involved preparing maps integrating the City's drainage system, watersheds, major water bodies, current dry weather monitoring locations, and land use. The sites were referenced against major drainage lines to see if any major lines were not being sampled, if any existing sites captured only very small drainage areas, or if any existing sites were redundant in that two or more neighboring sites provided data about essentially the same area. Historical data was also evaluated to determine which sites had routinely been dry in recent years and monitoring staff identified sites that had been found to be inaccessible. During this process it was determined that approximately 40 percent of the City's existing sites were routinely dry, were inaccessible, and/or assessed only very small drainage areas. Assessment of existing sites and prepared maps also found that the existing sites missed larger drainage areas or did not capture some of the recently developed areas. A list of potential new sites was drafted based on the following criteria:

- The site was downstream of any sources of suspected illicit discharge or illicit activity.
- The location took into account hydrological conditions, total drainage area, traffic density, age of the structures or buildings, history, and land use types.
- The site was located at the farthest downstream manhole or other accessible location in the drainage area being assessed.

A primary and an alternate site list were created after verification of accessibility was assessed. As a result of this process, a number of inaccessible or dry sites were removed, several sites with small drainage areas were redesignated as alternate sites, and several new sites were selected. The City's revised program now provides a more thorough, overall coverage of its MS4 while more efficiently allocating resources to sites that provide useful data. For a detailed list of site changes see the 2008 JURMP Update.

The updated list of 67 primary monitoring stations, their locations, land uses, and drainage areas is presented in Table 1. Alternate dry weather monitoring stations have been selected and are listed in Table 2. These stations are used as replacements for primary stations where no flowing or ponded water is observed. A map of the MS4 with primary and alternate sampling station locations is included as Figure 1.

2.2 Site Descriptions

Site visits were conducted at 67 of the primary monitoring stations. Five of the primary stations were inaccessible and nine were dry, so an additional 18 alternate stations were visited in search of flowing or ponded water within the City in 2008. This section includes a detailed description of each monitoring station.

The site identification numbers are not arranged by location (for example, from east to west) because over the course of the Dry Weather Program, sites have been eliminated

and added to best represent the City's MS4. The site identification numbers do either start with an A, B, L, or S which corresponds with the Agua Hedionda Creek (A), Buena Vista Creek (B), Loma Alta Creek (L), or the San Luis Rey River (S). For example, Site S112 would have been sampled from San Luis Rey River at location 112. The site locations are shown in Figure 1 and described below. The site identification numbers, descriptions, GPS coordinates, and conveyance structure types of the primary stations are listed in Table 1 and of the alternate stations in Table 2. Photos of each site visited are included as Appendix A.

Table 1. 2008 Primary Dry Weather Monitoring Site Locations.

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse 1	LandUse 2	Convey Type
A002	South end Cannon Road	904.3	33.16125	-117.27073	1107	E5	Residential	None	Outlet
A004a	N/W Cannon Road	904.3	33.17054	-117.27088	1107	E4	Residential	None	Outlet
A004b	Concrete Drainage	904.3	33.17057	-117.27087	1107	E4	Residential	None	Concrete Channel
A013	36" RCP Lake & Alameda Drive	904.3	33.17358	-117.26132	1107	F3	Residential	None	Outlet
A014	36" RCP east of Lake & Alameda Drive	904.3	33.17349	-117.26030	1107	F3	Residential	None	Outlet
A015	Lake Boulevard Lake Elementary	904.3	33.17269	-117.25671	1107	F3	Residential	Parks	Outlet
A016	36" RCP east of Amigos Court	904.3	33.17575	-117.27534	1107	D3	Residential	None	Outlet
A019	24" RCP in Oak Riparian Park	904.3	33.17628	-117.26932	1107	E3	Residential	Parks	Outlet
A021	36" RCP Sky Haven Lane	904.3	33.17418	-117.28068	1107	D3	Residential	None	Outlet
B002	72" RCP on Lagoon View Drive	904.2	33.18073	-117.34243	1106	E2	Commercial	Residential	Outlet
B022	48" RCP in Buena Vista Creek wall Upstream of Thunder Dr. Bridge	904.2	33.18117	-117.28720	1107	C2	Residential	None	Outlet
B023	36" RCP west of 3524 Lake Blvd	904.2	33.18039	-117.29005	1107	B2	Residential	None	Outlet
B024	36" RCP S/W corner College Bridge	904.2	33.18020	-117.29586	1107	B2	Commercial	Residential	Outlet
B026	48" RCP south TCxRoads Plaza	904.2	33.18053	-117.29100	1107	B2	Commercial	None	Outlet
B027	South Coast Material	904.2	33.18133	-117.30074	1107	A2	Residential	Commercial	Outlet
B032	2 - 60" RCPs between Haymar & SR78	904.2	33.18160	-117.32544	1106	G2	Commercial	Parks	Outlet
B033	42" RCP rear of Black Angus SR78	904.2	33.18138	-117.33409	1106	F2	Commercial	None	Outlet
B034	North of SR78 behind Burger King Jefferson St	904.2	33.18154	-117.33712	1106	F2	Commercial	None	Outlet
B102	South of SR78 north of BV Creek	904.2	33.17934	-117.31077	1106	J2	Residential	None	Outlet
B103	Outlet west end of Lagoon View Drive	904.2	33.17975	-117.34615	1106	E2	Commercial	None	Outlet
B104	RCP along South Coast Highway at Eaton St	904.2	33.17062	-117.35825	1106	D4	Residential	Commercial	Manhole
B105	El Camino Golf Course, end of Nicklaus	904.2	33.18603	-117.31846	1106	H2	Parks	Residential	Manhole
B106	N BV Creek, W of College	904.2	33.18065	-117.29643	1107	B2	Residential	Commercial	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse 1	LandUse 2	Convey Type
L001	48" RCP North Avenue & Vista Pacific	904.1	33.21298	-117.26702	1087	E5	Industrial	None	Outlet
L002	66" RCP North Avenue & Vista Pacific	904.1	33.21325	-117.26810	1087	E5	Industrial	None	Catch Basin
L003	South of Loma Alta off of North Ave, east of Autumn	904.1	33.21112	-117.27053	1087	E5	Residential	None	Outlet
L009	8'x3' concrete box under College Boulevard	904.1	33.20590	-117.28512	1087	C6	Commercial	Residential	Concrete Channel
L010	Two 36" RCPs north of tracks west of College	904.1	33.20580	-117.28535	1087	C6	Residential	None	Outlet
L013	42" RCP via manhole behind ReMax in shopping center	904.1	33.20559	-117.28692	1087	C6	Commercial	Residential	Manhole
L019	48" RCP south of Corporate Centre Drive	904.1	33.20367	-117.30575	1087	A6	Industrial	None	Outlet
L020	South of Oceanside Blvd, East of Corporate Centre Drive	904.1	33.20350	-117.30091	1087	A6	Industrial	None	Outlet
L024	South of Oceanside Blvd at west end of nursery	904.1	33.20137	-117.32225	1086	H6	Commercial	Open Space	Outlet
L027	NE corner of Oceanside Blvd and Garrison	904.1	33.20192	-117.33708	1086	F6	Residential	Park	Natural Creek
L032	Intersection of Camelot and Industry Wy	904.1	33.19865	-117.34302	1086	E7	Industrial	Residential	Outlet
L036	Manhole adjacent to intersection of Skylark Dr and Downs St	904.1	33.19613	-117.35007	1086	D7	Residential	None	Manhole
L040	Concrete channel in back of Vons	904.1	33.18947	-117.36091	1106	C1	Commercial	Residential	Concrete Channel
L046	Abutment of Coast Hwy bridge over Loma Alta Creek, north side	904.1	33.18037	-117.36630	1106	C2	Commercial	None	Outlet
L054	16" RCP in front of 242 Evergreen	904.1	33.18350	-117.36476	1106	C2	Residential	Park	Outlet
L103	72" RCP west of Corporate Centre Dr	904.1	33.20707	-117.30399	1087	A6	Industrial	None	Catch Basin
L105	MH near 2847 Industry Wy, north of Loma Alta	904.1	33.20066	-117.33981	1086	F7	Residential	Commercial	Manhole
L107	MH on SW corner of Crouch and Oceanside Blvd	904.1	33.19510	-117.35329	1086	D7	Commercial	Industrial	Manhole

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
L108	Loma Alta Tributary west of 5	904.1	33.18250	-117.36512	1106	C2	Residential	None	Concrete Channel
L110	Garrison Creek at Mesa and Parsley	904.1	33.21206	-117.32186	1086	H5	Residential	Park	Outlet
S006	36" CMP under I-5N, off Carmelo	903.1	33.20747	-117.38482	1085	J6	Residential	Open	Outlet
S032	36" RCP on south side of SLR-near Foussat Rd	903.1	33.22098	-117.34728	1086	E4	Residential	Commercial	Outlet
S035	42" RCP on south side of SLR River	903.1	33.23981	-117.32706	1086	G1	Residential	None	Outlet
S043	Southside of SLR River under the College Ave Bridge	903.1	33.25012	-117.29770	1067	A7	Residential	None	Outlet
S044	2 - 8'x8' Concrete Boxes □ Frazee/Oleander	903.1	33.24142	-117.30112	1087	A1	Residential	Commercial	Concrete Channel
S045	Southside of SLR River near Frazee Rd	903.1	33.23822	-117.30830	1086	J1	Residential	None	Outlet
S065	Pilgrim Creek and San Luis Rey River	903.1	33.24099	-117.33596	1086	F1	Residential	Parks	Natural Creek
S072	60" RCP north side SLR, off River Tree at the park	903.1	33.23142	-117.34488	1086	E2	Residential	Parks	Outlet
S075	24" RCP north side SLR, off Benet	903.1	33.22234	-117.35305	1086	D4	Residential	None	Outlet
S077	Hitching Post south of SR76	903.1	33.24904	-117.27079	1067	D7	Residential	Commercial	Concrete Channel
S088	36" RCP □ Mesa & North Santa Fe	903.1	33.24196	-117.27633	1087	D1	Residential	None	Outlet
S102	NE of int. of N. Santa Fe and Hwy 76	903.1	33.24813	-117.27823	1067	D7	Residential	None	Outlet
S103	South of SLR River off of Gooseberry Way	903.1	33.25218	-117.27600	1067	D6	Residential	None	Outlet
S104	24" RCP at NE end of Gooseberry Drive	903.1	33.25371	-117.27390	1067	D6	Residential	None	Outlet
S106	Three - 36" pipes □ NRR & Sleeping Ind.	903.1	33.26023	-117.26414	1067	E5	Agricultural	Residential	Outlet
S107	Under North River Road north of SLR River	903.1	33.26346	-117.24859	1067	G5	Agricultural	None	Earthen Channel
S108	Via Puerta Del Sol □ Big View Road	903.1	33.27085	-117.24501	1067	G4	Agricultural	Residential	Earthen Channel
S109	18" RCP NE of College and SLR River on S side	903.1	33.25338	-117.29511	1067	B6	Residential	None	Outlet
S110	North side of SLR River near Douglas Dr	903.1	33.24116	-117.32228	1086	G1	Residential	None	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse 1	LandUse 2	Convey Type
S111	Concrete channel Fireside Park E of Fireside	903.1	33.22722	-117.33851	1086	F3	Residential	Commercial	Concrete Channel
S113	Off of Capistrano Drive	903.1	33.21095	-117.38024	1086	A5	Residential	None	Outlet
S115	Open channel adjacent to SR78 near Mission Ave	903.1	33.22192	-117.33538	1086	F4	Commercial	Residential	Concrete Channel
S116	North River and School	903.1	33.25568	-117.29310	1067	B6	Residential	Parks	Concrete Channel
S117	NW of N Santa Fe and Champlain	903.1	33.24018	-117.27193	1087	D1	Residential	None	Outlet

Table 2. 2008 Alternate Dry Weather Monitoring Site Locations.

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse 1	LandUse 2	Convey Type
A022	Alternate; Lake and Chauncey/Southridge	904.3	33.17412	-117.26408	1107	E3	Residential	None	Outlet
A023	Alternate; Lake and Evening Canyon	904.3	33.17710	-117.27176	1107	E3	Residential	None	Outlet
A024	Alternate; Lake and Emerald	904.3	33.17709	-117.27254	1107	D3	Residential	None	Outlet
B030	Alternate; 36" RCP - easement south SR78, no. BV	904.2	33.18030	-117.31637	1106	J2	Residential	Commercial	Outlet
B031	Alternate; Between Haymar Dr & SR78 across from Country Club westernmost pipe	904.2	33.18185	-117.32221	1106	H2	Parks	Commercial	Outlet
L004	Alternate; 3 - 24" RCP on North Avenue east of Autumn	904.1	33.21051	-117.27157	1087	D5	Residential	None	Outlet
L005	Alternate; 2 - 24" and 1 - 36" RCP North Avenue & Autumn	904.1	33.20983	-117.27358	1087	D5	Residential	None	Outlet
L006	Alternate; Intersection of North Ave & Season Rd-south of Loma Alta Creek	904.1	33.20882	-117.27664	1087	D5	Residential	None	Outlet
L007	Alternate; 48" RCP off of North Avenue, west of Seasons	904.1	33.20817	-117.27888	1087	D5	Residential	None	Outlet
L008	Alternate; 40" RCP - corner of Westridge & Quailridge	904.1	33.21210	-117.27714	1087	D5	Residential	None	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse 1	LandUse 2	Convey Type
L016	Alternate; 36" RCP inside M/H on Rancho Del Oro	904.1	33.20200	-117.31077	1086	J6	Residential	None	Manhole
L029	Alternate; 42" RCP inside M/H at 3060 Industry Way	904.1	33.20078	-117.33532	1086	F7	Industrial	None	Manhole
L034	Alternate; South of Oceanside Blvd b/w Waste Mgt and Self-Storage	904.1	33.19709	-117.35051	1086	E7	Residential	Industrial	Outlet
L037	Alternate; South side of Loma Alta Creek; East of end of South Oceanside Blvd	904.1	33.19300	-117.35595	1106	D1	Commercial	Residential	Earthen Channel
L050	Alternate; Casitas Trailer Park north of Loma Alta Creek	904.1	33.18131	-117.36567	1106	C2	Residential	None	Outlet
L052	Alternate; West of I-5 overpass on south side of Loma Alta	904.1	33.18848	-117.36146	1106	C1	Residential	None	Outlet
L102	Alternate; 36" RCP inside M/H on Esperanza	904.1	33.20618	-117.28260	1087	C6	Residential	None	Manhole
L109	Alternate; East of Loma Alta Creek at La Salina	904.1	33.18111	-117.36564	1106	C2	Residential	None	Outlet
L111	Alternate; RDO Drainage Basin	904.1	33.20420	-117.30985	1086	J6	Industrial	Commercial	Outlet
L114	Alternate; Under PCH, north side	904.1	33.18019	-117.36642	1106	C2	Commercial	None	Outlet
S025	Alternate; North side of SLR River on W. Airport Road	903.1	33.21746	-117.36155	1086	C4	Industrial	None	Outlet
S085	Alternate; SE of Guajome Lake Park on N side of N. Santa Fe	903.1	33.24026	-117.27226	1087	D1	Residential	None	Outlet
S118	Alternate; College and Silver Bluff - large outfall	903.1	33.23951	-117.29121	1087	B1	Residential	None	Outlet
S119	Alternate; Douglas and Golf Course	903.1	33.25528	-117.31996	1066	H6	Residential	Park	Concrete Channel
S120	Alternate; East end of Jeffries Ranch Road	903.1	33.25174	-117.24901	1067	G6	Residential	None	Outlet
S121	Alternate; College and Frazee	903.1	33.23722	-117.29306	1087	B1	Residential	None	Outlet

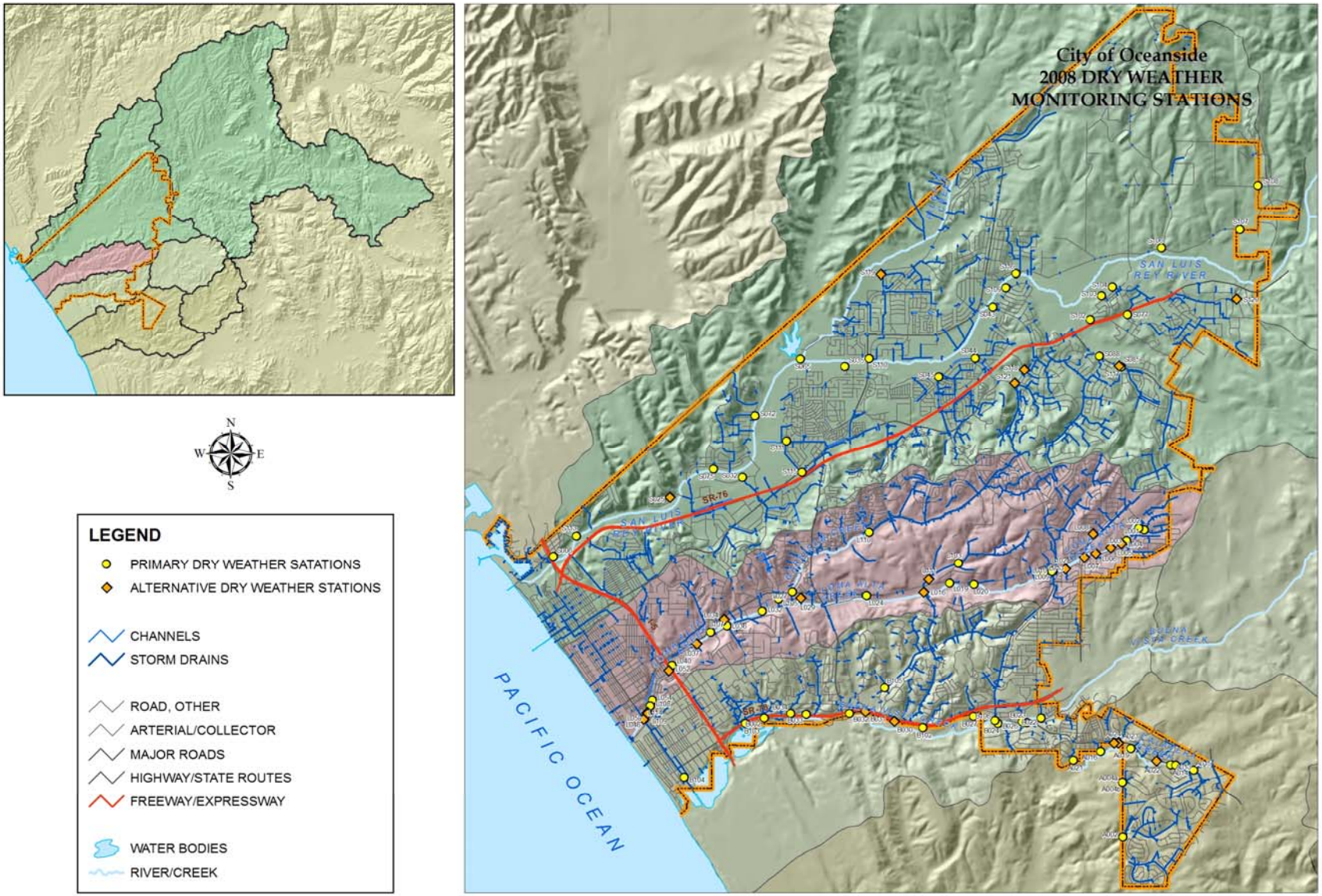

Figure 1. 2008 City of Oceanside Dry Weather Monitoring Stations.

2.2.1 Agua Hedionda Site Descriptions

A002
Site A002 is a 74-inch RCP located at the end of Cannon Road. The outlet drains the residential areas along Cannon Road. Access to the site is from Cannon Road. Field screening and laboratory samples were collected from the flowing water.

A004a
Site A004a is a 48-inch RCP located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The outlet drains the residential areas south and east of the outlet. Access to the site is from Cannon Road to the pump station access road. Field screening and laboratory samples were collected from the flowing water.

A004b
Site A004b is a brow ditch located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The concrete drainage ditch drains the irrigated areas on the slope behind the residences on Spinnaker Ridge. Access to the site is via Cannon Road to the pump station access road. Field screening and laboratory samples were collected from the flowing water.

A013
Site A013 is a 36-inch RCP located at the intersection of Lake Boulevard and Alameda Drive, south of Agua Hedionda Creek. The outlet drains the residential areas south of the site. Access to the site is from Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A014
Site A014 is a 36-inch RCP located east of the intersection of Lake Boulevard and Alameda Drive, north of Agua Hedionda Creek. The outlet drains the school and residential areas north of Lake Boulevard. Access to the site is from Lake Boulevard. Field screening samples were collected from the flowing water.

A015
Site A015 is a 48-inch RCP located south of Lake Boulevard and south of the creek. The outlet drains the residential areas south and east along Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A016
Site A016 is a 36-inch RCP located southeast of the intersection of Amigos Court and Serena Lane, south of Lake Boulevard. The outlet drains the residential areas north across Lake Boulevard. Access to the site is through open space off of Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A019
Site A019 is a 36-RCP located in Oak Riparian Park off of Lake Boulevard, north of Agua Hedionda Creek. The outlet drains the residential and park areas north and south of

Lake Boulevard. Access to the site is from the parking lot off of Lake Boulevard. Field screening samples were collected from the ponded water.

A021
Site A021 is a 36-inch RCP located off of Sky Haven Lane, north of Agua Hedionda Creek. The outlet drains the residential areas to the north of the outfall. Access to the site is from a residential driveway and down a steep embankment in the middle of a densely vegetated area. Due to overgrowth of vegetation on the hill, the site was deemed too dangerous to access. It was replaced by A022.

A022
Site A022 is an alternate site. It is a concrete box outlet located at the southwest corner of Lake Boulevard and Southridge Road, north of Agua Hedionda Creek. The outlet drains the residential areas to the north of the outfall. Access to the site is from Southridge Road. Field screening samples were collected from the ponded water.

2.2.2 Buena Vista Creek Site Descriptions

B002
Site B002 is a 72-inch RCP located on Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial and residential areas north of SR-78. Access to the site is via Lagoon View Drive. Field screening and laboratory samples were collected from the ponded water.

B022
Site B022 is a 48-inch RCP constructed in the north side of the Buena Vista Creek channel wall, east of the Thunder Drive Bridge. The outlet drains the residential area north of Buena Vista Creek. Access to the site is from within the Buena Vista Creek channel. Field screening and laboratory samples were collected from the flowing water.

B023
Site B023 is a 36-inch RCP located west of 3524 Lake Boulevard south of Buena Vista Creek. The outlet drains the residential areas southeast of Lake Boulevard. Access to the site is from Lake Boulevard. Field screening samples were collected from the ponded water.

B024
Site B024 is a 36-inch RCP located on the southwest corner of College Boulevard Bridge on the south side of Buena Vista Creek. The outlet drains the residential areas east and west of College Boulevard south of the creek. Access to the site is from College Boulevard. Field screening samples were collected from the ponded water.

B026
Site B026 is a 48-inch RCP located south of the Tri-City Crossroads Plaza off of Plaza Drive on the north of Buena Vista Creek. The outlet drains the commercial areas around Plaza Drive. Access to the site is from Tri-City Crossroads Plaza or the open lot to the east of the plaza. Field screening samples were collected from the flowing water.

B027
Site B027 is located off of Haymar Drive at South Coast Material yard north of Buena Vista Creek. The outlet drains the residential and commercial areas north of SR-78. Access to the site is from Haymar Drive. Access to the site that was sampled in previous years was overgrown and near a dangerous bank. The sampling site was moved 50 yards downstream this year due to vegetation overgrowth on the steep bank accessing the sampling point. No additional inputs between the two sites were apparent. Field screening samples were collected from the flowing water.

B030
Site B030 is an alternate site. It is a 36-inch RCP located within a sewer easement south of SR-78, west of AAA and north of Buena Vista Creek. The outlet drains the residential areas north of SR-78. Access to the site is from the sewer easement road. Field screening samples were collected from the flowing water.

B031
Site B031 includes four 54-inch RCPs located between Haymar Drive and SR-78, across from Camino Real County Club, and north of Buena Vista Creek. The western-most outfall is sampled. This outlet drains the golf course, commercial, and residential areas north of SR-78. Access to the site is via Haymar Drive. Field screening samples were collected from the flowing water.

B032
Site B032 includes two 60-inch RCPs located between Haymar Drive and SR-78, across from Carlsbad Plaza, north of Buena Vista Creek. Both pipes are from the same source. The outlet drains the golf course and commercial areas north of SR-78. Access to the site is from Haymar Drive. Field screening samples were collected from the flowing water.

B033
Site B033 is a 42-inch RCP located north of SR-78 behind the Black Angus restaurant, north of Buena Vista Creek. The outlet drains the commercial areas north of SR-78 into a large catch basin with ponded water. The outfall that was sampled is the largest input to the basin. Access to the site is from SR-78. Field screening samples were collected from the flowing water.

B034
Site B034 is a 36-inch RCP located north of SR-78 behind Burger King at the Jefferson Street exit. The outlet drains the commercial areas north of SR-78. Access to the site is from SR-78. Overgrown vegetation and a steep slope made this site inaccessible this year.

B102
Site B102 is a 36-inch CMP located within a sewer easement south of SR-78 and north of Buena Vista Creek. The outlet drains the residential and commercial areas north of SR-78. Access to the site is from the sewer easement road. The sewer road was slightly

overgrown and the surrounding areas were very overgrown. The storm drain could not be found in the vegetation and the trail previously used was inaccessible.

B103
Site B103 is located at the end of Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial areas north of SR-78. Access to the site is via Lagoon View Drive. Field screening samples were collected from the ponded water.

B104
Site B104 is a manhole on the southeast corner of South Coast Highway and Eaton Street. The outlet drains the commercial and residential areas on the east side of South Coast Highway. This site replaced B001 by moving it upstream approximately 230 yards out of tidal influence. Access to the site is from South Coast Highway. Field screening samples were collected from the ponded water.

B105
Site B105 is a large manhole capped with an open grate on the El Camino Golf Course and the end of Nicklaus Way. The storm drain carries flows from the large residential area to the north east of the site and the golf course. Access to the site is from Nicklaus Way. Field screening samples were collected from the flowing water.

B106
Site B106 is a 72 inch RCP outlet just north of Buena Vista Creek off of College Boulevard. The storm drain system begins just under a mile upstream and drains a large commercial and residential area north of Buena Vista Creek along College. Access to the site is from Nicklaus Way. Field screening samples were collected from the flowing water.

2.2.3 Loma Alta Creek Site Descriptions

L001
Site L001 is a 48-inch RCP located at the intersection of North Avenue and Vista Pacific Drive, north of Loma Alta Creek. The outlet drains the industrial areas south of North Avenue. Access to the site is via North Avenue. Field screening samples and analytical lab samples were collected from the flowing water.

L002
Site L002 is a 66-inch RCP located northwest of the intersection of North Avenue and Vista Pacific Drive, north of Loma Alta Creek. The outlet drains the industrial areas east of the outlet. Access to the site is from a walking path off of North Avenue. Field screening samples were collected from the flowing water.

L003
Site L003 is a 48-inch RCP located off of North Avenue and east of Autumn Drive, south of Loma Alta Creek. The outlet drains the residential area southeast of North Avenue. Access to the site is via North Avenue. Field screening samples were collected from the flowing water.

L007
Site L007 is an alternate site. It is a 48-inch RCP located north of North Avenue west of Seasons Road, south of Loma Alta Creek. The outlet drains the residential areas on the hillside south of North Avenue. The outlet is partially submerged with ponded water. Access to the site is from North Avenue. Field screening samples were collected from the ponded water.

L008
Site L008 is an alternate site. It is a 40-inch RCP located on the corner of Westridge Drive and Quailridge Drive, north of Loma Alta Creek. The outlet drains the residential areas on the hillside north of Oceanside Boulevard. Access to the site is from Westridge Drive. Field screening samples were collected from the ponded water.

L009
Site L009 is under College Boulevard at the Loma Alta Creek crossing. Three box culverts are present and drain the residential and commercial areas east of College Boulevard. Access to the site is via College Boulevard. Field screening samples and analytical lab samples were collected from the flowing water.

L010
Site L010 are two 36-inch RCP located west of College Boulevard near the railroad tracks. The outlet drains the residential areas on the hillside south of Loma Alta Creek adjacent to College Boulevard. Access to the site is from College Boulevard. Field screening samples were collected from the flowing water.

L013
Site L013 is a manhole located south of the shopping center on the corner of Oceanside Boulevard and College Boulevard, north of Loma Alta Creek. The outlet is no longer accessible due to overgrown vegetation, but the manhole upstream of the outlet is now sampled. Access to the site is from parking lot behind ReMax. Field screening samples were collected from the flowing water.

L019
Site L019 is a 48-inch RCP, located south of the intersection of Corporate Centre Drive and Oceanside Boulevard, north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. Field screening and analytical samples were collected from the ponded water.

L020
Site L020 is a 36-inch RCP located east of the intersection of Corporate Centre and Oceanside Boulevard, north of Loma Alta Creek. The outlet drains the commercial areas located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. Field screening samples were collected from the flowing water.

L024
Site L024 is a 36-inch RCP located south of Oceanside Boulevard at the west end of the Evergreen Nursery. The outlet drains the commercial and open space area located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. This site was overgrown with cattails and the outfall was inaccessible.

L027
Site L027 has historically been sampled at the intersection of Garrison Street and Industry Way, north of Loma Alta Creek, where Garrison Creek flows in a concrete channel. That location was not accessible and L027 was sampled upstream of the intersection of Garrison Street and Oceanside Boulevard where the creek is flows through a box culvert to an earthen channel. The channel drains the residential and commercial areas located northeast of Oceanside Boulevard. Access to the site is from Garrison Street. Field screening and laboratory samples were collected from the flowing water.

L032
Site L032 is a 64-inch RCP located south of the intersection of Camelot Drive and Industry Way, north of Loma Alta Creek. The outlet drains the industrial and commercial area north of Industry Way. Access to the site is through a private business from Industry Way and was blocked and inaccessible in 2007. Access was available during the 2008 dry weather season, but the outlet was dry and therefore, no field screening samples were collected.

L034
Site L034 is an alternate site. It is a 24-inch RCP located between Waste Management and a self storage lot south of Oceanside Boulevard. Field screening samples were collected from the ponded water.

L036
Site L036 is located adjacent to the intersection of Skylark Drive and Downs Street, south of the Loma Alta Creek. The outlet is now in the Sprinter rail right of way, so the manhole upstream of the outlet was visited. The outlet drains the residential area north of Loma Alta Creek. Access to the site is via Skylark Drive. There was not enough ponded water to conduct field screening.

L037
Site L037 is an alternate site. It is an earthen channel south of Loma Alta Creek. The channel drains the commercial area south of Loma Alta Creek. The site is at the east end of South Oceanside Boulevard. Dry weather flows were not observed at this site.

L040
Site L40 is an open concrete trapezoidal channel north of Loma Alta Creek. The outlet drains the commercial and residential areas located adjacent and to the north of Oceanside Boulevard. Access to the site is through the Vons parking lot off of Oceanside Boulevard. Field screening and laboratory samples were collected from the channel.

L046
Site L046 is a 24-inch RCP constructed in the north wall of the Loma Alta Creek channel just east of the Coast Highway Bridge. This outfall conveys flow from commercial and residential area north of Loma Alta Creek. Access to the site is from Coast Highway. Field screening samples were collected from the ponded water.

L050
Site L050 is a 24-inch RCP constructed in the north wall of the Loma Alta Creek channel. The outlet drains the Casitas Trailer Park located north of the Loma Alta Creek. Access to the site requires going into Loma Alta Creek channel. Dry weather flows were not observed at this site.

L052
Site L052 is a 36-inch RCP located just west of the I-5 overpass on the south side of Loma Alta. The outlet drains Cavalier Trailer Park. Access to the site requires going into Loma Alta Creek channel. Dry weather flows were not observed at this site.

L054
Site L054 is a 24-inch RCP constructed in the south wall of Loma Alta Creek. The outlet is located southwest of the intersection of Hillside and Evergreen Lane. Site L054 drains the trailer park, Marshall Park, and the residential area to the south. Access to the site requires entering the Loma Alta Creek channel. Field screening and laboratory samples were collected from the channel.

L103
Site L103 is a 72-inch RCP located west of Corporate Centre, north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Boulevard off of Corporate Centre. Access to the site is from Corporate Centre. Field screening samples were collected from the flowing water.

L105
Site L105 is a manhole located on Industry Way, north of Loma Alta Creek. The outlet within the manhole drains the residential and commercial area located north of Industry Way. Access to the site is from Industry Way. Dry weather flows were not observed at this site.

L107
Site L107 has historically been a 36-inch RCP outlet located on the north side of Loma Alta Creek near the intersection of Crouch Street and Oceanside Boulevard. Due to Sprinter rail construction and other changes to the channel walls, the site was moved upstream to a manhole at the corner of Crouch and Oceanside Boulevard. The storm system drains the commercial and residential areas located north of Oceanside Boulevard. Ponded water was observed however there was insufficient volume to conduct field screening.

L108
Site L108 is a concrete channel that flows into Loma Alta Creek west of Interstate 5 from the north. This site replaced L050 because it is in the same general area, but has a larger watershed and has continuous flow. Access to the site is from Loma Alta Creek through Cavalier Trailer Park. Field screening samples were collected from the flowing water.

L109
Site L109 is a 24-inch RCP constructed in the south wall of the Loma Alta Creek channel. The outlet drains the trailer park and the residential area south of Loma Alta surrounding La Salina Street. Access to the site requires going into Loma Alta Creek channel. The outfall was wet and ponded water was observed however there was insufficient volume to conduct field screening.

L110
Site L110 is an outlet from Garrison Creek at Mesa Boulevard and Parsley. Access to the site is from Mesa Boulevard through a locked fence at an open field. Field screening samples were collected from the ponded water.

L111
Site L111 was added during the 2008 Dry Weather Monitoring season. This area is undergoing commercial and light industrial growth and was added to the alternate list to capture these land uses. The outlet is northeast of the intersection of Rancho del Oro and Oceanside Boulevard. Access is from Seagate Drive. Field screening samples were collected from the ponded water.

L114
Site L114 was added during the 2008 Dry Weather Monitoring season. This outfall is located under the Pacific Coast Highway Bridge on the northwest side. The drainage area has not been identified, but it is likely from the areas north along the Coast Highway. Access to the site requires going into Loma Alta Creek channel. Field screening samples were collected from the flowing water.

2.2.4 San Luis Rey Site Descriptions

S006
Site S006 is a 36-inch corrugated metal pipe (CMP) located under Interstate 5. Access to Site S006 is from Carmelo Drive. Site S006 conveys flows from the residential area south of Camp Pendleton and east of Interstate 5 to the north side of the trail under I-5. Field screening samples and analytical lab samples were collected from the flowing water.

S025
Site S025 is an alternate site. It is located on the north side of the San Luis Rey River on West Airport Road across from a junkyard. S025 is a 24-inch RCP in a headwall that drains the junkyard located just north of the outlet. No dry weather flows were observed.

S032
Site S032 is a 36-inch RCP with a flap gate installed and is located on the south side of the San Luis Rey River. The S032 outlet conveys flows from the residential, commercial, and open space areas located on the south side of SR-76. Access to the site is from Foussat Road to the access road that runs parallel to the River on the south side. Field screening samples were collected from the ponded water.

S035
Site S035 is located on the south side of the San Luis Rey River. Site S035 is a 42-inch RCP with a flap gate installed. Access to the site is from Douglas Drive to the access road south of the San Luis Rey River. Dry weather flows were not observed at this site.

S043
Site S043 is a 30-inch RCP with a flap gate installed and is located on the south side of the San Luis Rey River under the College Boulevard Bridge. The site collects dry weather flows from the residential area immediately south of the outlet. Access to the site is via College Boulevard to the access road on the south side of the River. No dry weather flows were observed.

S044
Site S044 is an open channel located on the south side of the San Luis Rey River. It conveys flows from residential and commercial areas. Access to the site is at northeast corner of Frazee Road and Oleander Drive. Field screening samples were collected.

S045
Site S045 is at the outfall of three 4-foot by 6-foot boxes on the south side of the San Luis Rey River. S045 conveys flows from the residential areas south of Frazee Road to the River. Access to the site is via Frazee Road. Field screening samples were collected from the flowing water.

S065
Site S065 is located within the open channel of Pilgrim Creek prior to confluence with the San Luis Rey River. Access to the site is from the San Luis Rey Wastewater Treatment Plant via North River Road to the access road located on the north side of San Luis Rey River. Site S065 conveys dry weather flows from a municipal golf course, residential, agricultural, parks, and open areas located to the north to the San Luis Rey River. Dry weather flows were not observed. This site was replaced by S118.

S072
Site S072 is a 60-inch RCP with a flap gate installed and is located on the north side of the San Luis Rey River. Access to the site is from River Tree Drive at Marlado Park. Site S072 conveys dry weather flows to the River from the park and residential community located north of the outlet. Dry weather flows were not observed.

S075
Site S075 is a 24-inch RCP in a headwall located on the north side of the San Luis Rey River. Access to the site is from the access road that runs parallel to the River between Benet and Foussat Roads. Site S075 conveys dry weather flows from the new residential developments north of the San Luis Rey River. Field screening samples from the flowing water were collected.

S077
Site S077 is an open channel south of SR-76 and upstream of Guajome Lake. Access to the site is from Hitching Post Drive. The runoff consists primarily of residential and commercial flows from east of the outlet. Samples are collected where the channel is concrete. Downstream of the sampling point, the channel is a natural swale that leads to Guajome Regional Park. Field screening samples were collected from the flowing water.

S085
Site S085 is an alternate site. It includes two 24-inch RCPs located at North Santa Fe Avenue and Champlain Street. The outlet drains into a concrete channel south of the San Luis Rey River. S085 conveys the dry weather flows from the residential area to the south of North Santa Fe Avenue. Access to the site is from North Santa Fe Avenue. Field screening samples were collected from the ponded water.

S088
Site S088 is a 36-inch RCP located at the intersection of Mesa Drive and North Santa Fe Avenue. The site is located west of the Guajome Regional Park and south of the San Luis Rey River. Site S088 conveys dry weather flows from the residential area to the west into Guajome Regional Park. Access to the site is via North Santa Fe Avenue. Field screening samples were collected of the ponded water.

S102
Site S102 is located north of SR-76 between North Santa Fe Road and Guajome Lake Road, south of the San Luis Rey River. It is a 24-inch RCP that drains a residential area immediately east. Access to the site is from SR-76 and requires entering private property; therefore, access is limited. Field screening samples were collected of the ponded water.

S103
Site S103 is located south of the San Luis Rey River. Access to the site is from the park east of 5396 Gooseberry Way. The outlet drains the residential and park areas in the neighborhood to the south. Field screening samples were collected of the ponded water.

S104
Site S104 in a 24-inch RCP located south of the San Luis Rey River. Access to the site is from park east of 5476 Gooseberry Way. The outlet drains the residential area south of the site. Field screening samples were collected of the ponded water.

S106
Site S106 includes four 36-inch plastic pipes at the intersection of North River Road and Sleeping Indian Road on the north side of the San Luis Rey River. The outlet drains the agricultural and residential area immediately north of the site. Access to the site is from North River Road. Field screening samples and analytical lab samples were collected from the flowing water.

S107
Site S107 is a natural channel that crosses under North River Road on the north side of the San Luis Rey River. The channel drains the agricultural area immediately north of the site. Access to the site is from North River Road. Field screening samples were collected from the flowing water.

S108
Site S108 is a natural channel that crosses under Via Puerta del Sol on the north side of the San Luis Rey River. The channel drains residential areas and agricultural areas in the immediate vicinity. Access to the site is at the intersection of Via Puerta del Sol and Big View Road. Dry weather flows were not observed. This site was replaced by S120.

S109
Site S109 is an 18-inch RCP located on the south side of the San Luis Rey River. The site conveys the runoff from the residential area immediately south of the outlet. Access to the site is from the access road to the east of College Boulevard. Field screening samples were collected from the ponded water.

S110
Site S110 is located on the north side of the San Luis Rey River. S110 is a 30-inch RCP with a flap gate installed. Access to Site 110 is from Rainier Way east of Douglas Drive. Field screening samples were collected from the ponded water.

S111
Site S111 is a concrete channel adjacent to Fireside Park, east of San Luis Rey River. The channel drains residential and commercial areas east of the site. Access to the site is from Fireside Street. Field screening samples were taken from the ponded water.

S113
Site S113 is located off of Capistrano Drive across from Capistrano Park. The site conveys flows from Camp Pendleton and from Capistrano Park south to the San Luis Rey River. The cliff appears to have eroded into the river and access to the outfall was not possible. Attempted to sample at next manhole up, but was also inaccessible. There was overland flow coming into drain that was further investigated.

S115
Site S115 is an open concrete channel between Mission Avenue and SR-76 west of El Camino Real. The site conveys flows from the commercial area to the east along Mission

Avenue towards Douglas Drive. Access to the site is from Mission Avenue. Field screening samples were collected from the flowing water.

S116
Site S116 is located off of North River Road across from Del Rio Elementary School. The outfall conveys flows from the school and the residential area north of North River Road. It consists of two six-foot by six-foot boxes. Access to the site is from North River Road. This site replaced the historically dry S052 sampling site. Field screening samples were collected from the flowing water.

S117
Site S117 is a 48-inch RCP located northwest of North Sante Fe Road and Champlain Road. The outfall conveys flows from the residential areas east and south along North Santa Fe Road. Access to the site is from North Santa Fe Road. Field screening samples were collected from the flowing water.

S118
Site S118 is an alternate site. It is located at the southwest corner of College and Silver Bluff. It consists of two pipes originating from the same source. The largest pipe, a 72-inch RCP, was sampled, which conveys flows from the residential area to the north and east along Silver Bluff and Mosaic. This site was added to the Dry Weather Monitoring Program as a replacement for S085. Access to the site is from Silver Bluff. Field screening samples were collected from the ponded water.

S119
Site S119 is an alternate site. It is an open concrete channel located off of Douglas Drive at the municipal golf course. The site conveys flows from the residential areas south and east, as well as the golf course. Access to the site is from Douglas Drive. Field screening samples were collected from the ponded water.

S120
Site S120 is an alternate site. It is a 36-inch RCP outfall at the east end of Jeffries Ranch Road. It conveys flows from the residential area west of the outfall. Access to the site is from Jeffries Ranch Road. Field screening samples were collected from the ponded water.

S121
Site S121 is an alternate site. It consists of two partially submerged 48-inch RCPs at the northwest intersection of College Boulevard and Frazee Road. It conveys flows from the residential area southeast of the intersection. Access to the site is from Frazee Road through a locked gate. Field screening samples were collected from the ponded water.

3 METHODS

Dry weather monitoring is conducted at least once at each primary station where flowing or ponded water is observed during the dry season (May 1 – September 30). If a primary site is visited and no flowing or ponded water is present, this information is documented on the field sheet (or electronically in the field tablet) and a station from the alternate list is then visited. Dry weather monitoring is only conducted when there has been at least 72 hours of dry weather prior to the time of the sampling. Grab samples are collected for laboratory analysis at a minimum of 25 percent of the stations where water is present.

The following describes the City of Oceanside's Dry Weather Program components including field site visits, laboratory analysis of water samples, and IC/ID investigations. The general site description and atmospheric conditions were recorded for each site visit whether or not runoff was observed. An example of the hard copy data sheet is provided in Appendix B. However, the 2008 dry weather season was the first program to begin collecting field data electronically on Panasonic Toughbooks using a database specifically created based on the field data sheet and the data sharing format approved by the Dry Weather Monitoring Workgroup. A photograph was also taken at each site (Appendix A). Monitoring was not conducted during any rain event or within 72 hours of the end of any rain event greater than one tenth of an inch.

3.1 Qualitative Observations

Qualitative field observations were made during each site visit where ponded or flowing water was observed and sampled. These observations were intended to provide a general assessment of the runoff and include parameters such as odor, water clarity, and the presence of floatables, visible deposits, stains and aquatic life. These descriptions were recorded on the field data sheet or electronically in the field tablet.

3.2 Flow Measurement

Flow measurements can be used to estimate pollutant mass loading, prioritize storm drains for future investigations, or to identify significant changes in flow that may be indicative of an illegal release upstream. Since all of the sample locations lack a permanent flow measurement installation, several field methods were employed to estimate flow rates for different flow types such as an open channel, outfall, or drainage pipe. These methods have been adapted from the County of San Diego's Dry Weather Monitoring Program Quality Assurance Project Plan[1].

Velocity-area method - This method requires the physical measurement of the velocity (V), depth (D), and width (W) of flowing water. Discharge is determined as follows:

$$\text{Discharge} = V \times D \times W \qquad \text{Eq. (1)}$$

[1] County of San Diego. 2004. Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program. April 2004.

Where the water depth was adequate, a Global Flow Probe was used to get the average velocity in feet per second. Stream depth and width were recorded on the field data sheet and the discharge in cubic feet per second (cfs) was calculated using Eq. (1).

Where the flow was too slow or the water too shallow to measure the velocity using the probe, the velocity was estimated by timing the travel of a piece of floating debris (e.g., a leaf). The velocity was calculated by dividing the travel distance (feet) by the recorded travel time (seconds).

Fill a bottle method - If the flowing water was able to be captured, such as from a raised pipe, the fill-a-bottle method was used. The time it took to fill a known volume was recorded. Discharge was calculated by dividing the volume by the time and converting that value into cubic feet per second.

3.3 Field Screening

Water physicochemical properties (e.g., pH, conductivity, turbidity, dissolved oxygen (DO), and temperature) are important indicators of water quality. The Horiba U-10 6-parameter probe was used to measure:

- pH.
- Conductivity.
- Turbidity.
- Dissolved oxygen (DO).
- Water temperature.

If the water was deep enough, the probe was placed horizontally in the water column, facing upstream. If water was shallow, a syringe or cup was used to collect water and transfer into a container and then the properties were measured. Due to the sampling process involved, DO measurements in a beaker may be different from *in situ* measurements. The Horiba U-10 was calibrated daily prior to use in the field using the standard calibration solution as well as a three-point pH calibration.

At each site with ponded or flowing water, water samples were collected and analyzed in the field for:

- Ammonia (NH_3).
- Nitrate as N (NO_3-N).
- Orthophosphate (PO_4).
- MBAS (Surfactants).

Ammonia, nitrate, orthophosphate, and MBAS were measured in the field using CHEMetrics field test kits. Each test kit contained a sample mixing container, necessary reagent-filled ampoules, the appropriate color standards for colorimetric analysis, filters for photometric analysis, and instructions for each kit. The procedures instructed by CHEMetrics were followed.

3.4 Laboratory Water Quality Analyses

Laboratory samples were collected at a minimum of 25% of the sites with flowing or ponded water. Samples were submitted to EnviroMatrix Analytical, Inc. for chemistry analysis and Weston Solutions, Inc. for microbiology analysis. Below is the complete list of laboratory analytes:

- Oil and Grease
- Total Hardness
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Enterococcus Bacteria
- Total Coliform Bacteria
- Fecal Coliform Bacteria
- Chlorpyrifos
- Diazinon

All samples were analyzed using Standard Methods or EPA Methods by the laboratories.

3.5 IC/ID Investigations

Each station is visited at least once per dry weather season, if accessible and safe. When field measurements and/or laboratory analysis showed an exceedance of established action levels, the site was revisited within two business days to confirm the initial results. When follow-up sampling confirms continued exceedance of action levels, the City conducted further investigations to identify the source of the exceedance. Upstream investigations were not conducted when exceedances were not noted during the follow-up visit or when the exceedance is known not to be the result of IC/IDs, as without a high constituent level to track, the investigation is unlikely to identify any sources.

The action levels used for the 2008 dry weather monitoring period are presented in Table 3. If the initial results were confirmed and an exceedance continued, an upstream investigation was initiated. In addition, any potential IC/IDs found visually or with any other evidence of gross contamination, an IC/ID investigation was pursued immediately (e.g., substantial petroleum sheen, excessive turbidity, extremely high ammonia concentration, evidence of sewage release, etc.).

In general, IC/ID investigations include identifying pollution sources and correcting or eliminating them. Various methods can be used for source identification, for example, observation by following flows or discharges upstream, field measurements or laboratory analysis of water samples. The correction and elimination of identified sources may be achieved by outreach/education, best management practices (BMPs) implementation, and enforcement when necessary.

Table 3. 2008 Dry Weather Monitoring Action Levels

Analyte	Action Level
Field Measurements	
pH	6.5-9.0 pH units
Conductivity	N/A
Turbidity	N/A
Dissolved Oxygen	Not a required analyte
Temperature	N/A
Ammonia Nitrogen	1.0 mg/L
Nitrate as N	10.0 mg/L
Orthophosphate	2.0 mg/L
Surfactants (MBAS)	1.0 mg/L
Laboratory Measurements	
Oil and Grease	15 mg/L
Total Hardness	N/A
Cadmium (Dissolved)	California Toxics Rule (CTR)
Copper (Dissolved)	California Toxics Rule (CTR)
Lead (Dissolved)	California Toxics Rule (CTR)
Zinc (Dissolved)	California Toxics Rule (CTR)
Total Coliform Bacteria	50,000 MPN/100mL
Fecal Coliform Bacteria	20,000 MPN/100mL
Enterococcus	10,000 MPN/100mL
Chlorpyrifos	0.5 µg/L
Diazinon	0.5 µg/L

3.6 Trash Assessment

Section II.B.3.C (7) of the 2007 Municipal Permit requires Copermittees to assess the presence of trash in receiving water and urban runoff at each dry weather monitoring station. A work plan for trash assessment was finalized in August of 2007 which outlined procedures and created field assessment forms to be used by the Copermittees[2] . The field form is included in Appendix B.

The assessment is primarily a qualitative assessment. The assessment includes five categories with a narrative description and a range of number of pieces. The five categories are:

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.

[2] Weston Solutions and Brown and Caldwell. 2007. Final Monitoring Workplan for the Assessment of Trash in San Diego County Watersheds. Prepared for the County of San Diego. August 30, 2007.

- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human and/or aquatic health is assessed at each site by the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g., medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).
- *Threat to Aquatic Health* – Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category.

If a site falls into the poor or submarginal category, then the type of trash is denoted and ranked and the potential routes and sources are identified. Options for types, routes and sources are listed below:

Types of Trash	*Potential Routes*	*Potential Sources*
Automotive	Dumping	Household
Biohazard Waste	Littering	Construction
Business Related	Upstream	Commercial
Ciagrette Butts	Unable to Determine	Industrial
Construction		School
Fabric/Clothing		Transient
Food Packaging		Unable to Determine
Food Waste		
Household		
Shopping Carts		
Toxic		
Yard Waste		

4 RESULTS

The dry weather monitoring program was conducted from May 1, 2008 through September 30, 2008. A site visit at all 67 of the primary sites was attempted, however five of those sites were inaccessible or deemed unsafe. An additional nine primary sites were dry. A total of 85 sites were visited, 66 were ponded or flowing and field screening was conducted, and of those, 19 were chosen for additional laboratory analysis (Table 4).

The results of the qualitative observations, flow measurements, field measurements and laboratory measurements are presented in the following sections.

Table 4. 2008 Summary of Dry Weather Monitoring Sites Visited.

Watershed	No. Primary Sites Listed	No. Primary Sites Inaccessible	No. Primary Sites Dry	No. Alternate Sites Visited	No. Sites Sampled for Lab Analysis	Total No. Sites Visited
Agua Hedionda	9	1	0	1	6	10
Buena Vista	14	2	0	2	3	16
Loma Alta	20	1	4	9	6	29
San Luis Rey	24	1	5	6	4	30
TOTAL	67	5	9	18	19	**85**

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the field screening program. Weather conditions were recorded at each site and any evidence of dry weather flows were documented. Visual observations of the sample water and the vicinity of the sampling location such as odor, color, clarity, floatable materials, vegetation and biological organisms were also recorded. Observations are summarized below and presented in Table 5.

Light Conditions

Sixty six of the 85 sites visited had sunny conditions during site visits. Seven sites had overcast conditions, and 12 sites had partly cloudy conditions. No sites were visited during foggy conditions.

Odor

Forty nine of the sites with water had no distinguishable odor associated with the storm drain outlets. Sixteen sites had a musty odor, one site smelled of rotten eggs, no sites had a sewage odor, and no sites had a chemical odor.

Color

Forty four of the sites with water had no observed color. Eighteen sites had a yellow color and two sites had a brown color. One site had a green color. Another site had a white color.

Table 5. 2008 Visual Observation Results.

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
Agua Hedionda									
A002	8/18/2008	Sunny	None	None	Clear	Bubbles, Foam, leaf debris	None	Normal	None
A004a	8/18/2008	Sunny	None	None	Clear	None	Fine Particulate	Normal	Algae
A004b	8/18/2008	Sunny	None	None	Clear	None	Leaf debris	None	Algae
A013	8/25/2008	Partly Cloudy	None	None	Clear	Sheen, Bubbles, Foam, red foam	Stains	Normal	Algae, Insects
A014	8/20/2008	Partly Cloudy	Musty	Brown	Clear	Trash, leaf debris	None	Normal	Algae, Insects
A015	8/25/2008	Overcast	None	White	Slightly Cloudy	Bubbles, Foam	White fine particulates	Normal	None
A016	8/25/2008	Partly Cloudy	None	Yellow	Slightly Cloudy	Bubbles, Foam	algae	Normal	Algae, Insects
A019	8/14/2008	Sunny	None	Yellow	Clear	Leaf debris	None	Normal	Insects
A021	8/19/2008	Sunny	NA	NA	NA	NA	NA	NA	NA
A022	8/19/2008	Sunny	None	None	Clear	Trash, Algae	Fine Particulate	Normal	Algae, Fish
Buena Vista									
B002	8/5/2008	Sunny	None	None	Opaque	Trash, Algae	Coarse Particulate	Normal	Insects, Algae, crawdad
B022	8/5/2008	Sunny	None	None	Clear	None	None	Normal	Algae
B023	8/14/2008	Sunny	None	None	Clear	Algae	None	Normal	Insects, Algae
B024	8/25/2008	Sunny	Musty	Yellow	Clear	None	None	Normal	Fish
B026	8/21/2008	Overcast	None	None	Clear	Trash	None	Normal	Insects
B027	8/21/2008	Partly Cloudy	None	None	Clear	leaves	None	Normal	Insects
B030	9/3/2008	Sunny	None	None	Clear	Trash, Leaves	Fine Particulate	Normal	None
B031	9/3/2008	Sunny	None	None	Clear	None	Fine Particulate	Normal	Fish
B032	9/3/2008	Sunny	None	None	Clear	None	Algae	Normal	Algae
B033	8/21/2008	Sunny	None	Yellow	Clear	Bubbles, Foam	leaves	None	Algae, Fish
B034	8/21/2008	Sunny	NA	NA	NA	NA	NA	NA	NA
B102	9/3/2008	Sunny	NA	NA	NA	NA	NA	NA	NA
B103	8/21/2008	Sunny	None	None	Clear	Trash, Sheen, Algae	None	Normal	Algae
B104	8/18/2008	Sunny	None	None	Clear	None	None	None	None
B105	9/3/2008	Sunny	None	None	Clear	None	None	None	None
B106	9/3/2008	Sunny	None	None	Clear	Trash, Leaves	Coarse Particulate	Normal	None
Loma Alta									
L001	7/21/2008	Sunny	Musty	None	Clear	Sheen	Fine Particulate	Normal	Insects, Algae, crawfish

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
L002	7/23/2008	Sunny	None	None	Clear	Trash	algae	Normal	Insects
L003	7/28/2008	Overcast	None	None	Clear	Trash, Sheen, Algae	None	None	Algae, Insects
L007	8/14/2008	Sunny	Musty	None	Clear	Algae, duckweed	None	Normal	Algae
L008	8/6/2008	Sunny	Musty	None	Clear	Trash, Algae	None	Normal	Insects, Algae
L009	7/21/2008	Sunny	Musty	None	Clear	Trash, Sheen, Bubbles, Foam, Algae	Fine Particulate, Algae	Normal	Algae
L010	7/28/2008	Overcast	None	None	Clear	Trash, Sheen, Algae	None	None	Algae
L013	7/28/2008	Overcast	None	None	Clear	None	None	None	None
L019	7/21/2008	Sunny	None	Green	Slightly Cloudy	Trash, Algae	None,	Normal	Algae, Fish, crawfish
L020	7/29/2008	Sunny	None	None	Clear	Trash	None	Normal	Algae, Insects
L024	7/29/2008	Partly Cloudy	NA	NA	NA	NA	NA	NA	NA
L027	7/21/2008	Sunny	None	None	Clear	None	Algae	Normal	Algae, Fish, Crawfish
L032	7/30/2008	Partly Cloudy	NS	NS	NS	Trash	None	Normal	None
L034	8/11/2008	Sunny	Musty	Yellow	Clear	Algae	None	Normal	Algae, Insects
L036	7/30/2008	Sunny	NS	NS	NS	Trash, leaf debris	Fine Particulate	None	None
L037	8/6/2008	Sunny	NS	NS	NS	None	None	Normal	None
L040	8/5/2008	Partly Cloudy	None	None	Clear	Trash, Algae	Fine Particulate	Normal	Algae, Insects, Fish, duckweed
L046	7/30/2008	Sunny	None	None	Clear	None	Algae	None	Algae, Insects
L050	7/31/2008	Sunny	NS	NS	NS	None	None	None	None
L052	8/6/2008	Sunny	NS	NS	NS	None	None	None	None
L054	8/5/2008	Partly Cloudy	None	None	Clear	None	Coarse Particulate	None	Algae, Insects
L103	7/28/2008	Partly Cloudy	Rotten Eggs	None	Clear	Trash, Algae	Fine Particulate	None	Insects, Algae, Frogs, Crustaceans
L105	7/28/2008	Partly Cloudy	NS	NS	NS	None	None	None	None
L107	7/30/2008	Partly Cloudy	NS	NS	NS	Trash	None	None	None
L108	7/30/2008	Partly Cloudy	None	None	Clear	Trash, Algae	None	None	Algae, Insects
L109	7/31/2008	Sunny	NS	NS	NS	None	Coarse Particulate	None	Algae, Insects
L110	7/28/2008	Sunny	None	None	Clear	Trash, duckweed	None	Normal	None
L111	8/7/2008	Sunny	None	None	Clear	Sheen, Bubbles, Foam	Fine Particulate	Normal	Algae
L114	7/31/2008	Sunny	None	None	Clear	Trash	Coarse Particulate	None	Fish

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
San Luis Rey									
S006	7/1/2008	Overcast	Musty	Yellow	Clear	Trash, Sheen	None	Normal	None
S025	7/15/2008	Sunny	NS	NS	NS	NS	NS	NS	NS
S032	7/15/2008	Sunny	Musty	Yellow	Slightly Cloudy	Trash, Sheen, leaf debris	None	Normal	Insects
S035	7/15/2008	Sunny	NS	NS	NS	None	None	Normal	None
S043	6/16/2008	Sunny	NS	NS	NS	None	None,	None,	None,
S044	6/30/2008	Sunny	Musty	None	Clear	Trash, Algae	Fine Particulate	Normal	Insects, Algae, Fish
S045	6/30/2008	Sunny	None	Yellow	Clear	Sheen, Bubbles, Foam	None	Normal	Algae, Insects, tadpoles and duckweed
S065	7/1/2008	Sunny	NS	NS	NS	None	None	Excessive	None
S072	7/23/2008	Sunny	NS	NS	NS	None	None	Normal	None
S075	7/15/2008	Sunny	Musty	Yellow	Clear	Trash, Grass clippings	Fine Particulate	None	Insects, Algae
S077	6/23/2008	Sunny	None	None	Clear	Trash	Fine Particulate	Normal	Insects, Algae, Fish, Duckweed
S085	7/23/2008	Sunny	Musty	Yellow	Clear	Trash, Algae	Leaf debris and algae	None	Insects
S088	6/19/2008	Sunny	None	None	Clear	Trash, Algae, Duckweed	None,	Normal	Algae, Frogs
S102	6/23/2008	Sunny	None	None	Clear	Algae	None,	Normal	Insects
S103	6/23/2008	Sunny	None	Yellow	Clear	Trash, glass clippings	Fine Particulate	Normal	Insects, Algae, Snails
S104	6/23/2008	Sunny	Musty	Yellow	Clear	Leaf debris	Fine Particulate	Normal	Insects
S106	7/1/2008	Sunny	None	None	Clear	Trash, Bubbles, Foam, Fecal Matter	None	LImited	Insects
S107	6/16/2008	Sunny	Musty	None	Clear	Algae	None,	Normal	Insects, tadpole
S108	7/1/2008	Sunny	NS	NS	NS	None	Fine Particulate	Normal	None
S109	8/7/2008	Sunny	Musty	Brown	Clear	Trash, Leaf Debris	None	Excessive	None
S110	6/16/2008	Sunny	None	Yellow	Clear	Leaf debris	None,	None,	Insects
S111	7/15/2008	Sunny	Musty	Yellow	Clear	Trash	None	None	Insects, Algae
S113	7/15/2008	Sunny	NA	NA	NA	NA	NA	NA	NA
S115	6/30/2008	Sunny	None	Yellow	Clear	Trash, Algae	Fine Particulate	Normal	Insects, Algae
S116	6/16/2008	Sunny	None	Yellow	Clear	Trash, leaf debris	None,	None,	Insects
S117	6/19/2008	Sunny	None	None	Clear	Trash	Fine Particulate, sand	Normal	Insects
S118	7/1/2008	Sunny	None	None	Clear	Trash, Algae	Fine Particulate	Normal	Algae

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
S119	6/19/2008	Sunny	None	Yellow	Clear	Algae, leaves	None,	Excessive	Insects
S120	8/18/2008	Overcast	None	Yellow	Clear	Leaf debris	Fine Particulate	Normal	None
S121	7/23/2008	Sunny	None	None	Clear	Sheen, duckweed	None	Normal	None

NS – Not Sampled (dry)
NA – Not Accessible

Clarity
Sixty one of the sites with water were clear with negligible suspended particles observed. Four of the sites sampled were slightly cloudy and one of the samples was opaque.

Floatable Materials
The categories of floatable materials were trash, bubbles/foam, sheen, fecal matter, and other and each site had the potential to have multiple categories of floatable materials listed. Twenty two sites were observed to have no floatable materials. Thirty seven sites were observed to have trash in or near the sampling location. Nine sites were observed to have bubbles and/or foam. Eleven sites had a visible sheen. At one site, fecal matter was observed. Thirty nine sites observed also had floatable materials outside of the categories listed; those materials, were algae, leaf debris, or grass clippings.

Deposits
The categories of deposits were coarse particulates (sediment/gravel), fine particulates, stains, oily deposits, and other. Multiple types of deposits could have been identified at each site. Forty four sites did not have any deposits at the sampling site. Twenty one sites had fine particulate deposits. Five sites had course particulate deposits of sediment and/or gravel. One site had some type of stain at the sampling point. No sites had an oily deposit. Nine sites had deposits listed as other, which included algae and/or leaf debris.

Vegetation
The categories for amount of vegetation present at and around the sampling area were none, limited, normal, and excessive. Twenty four sites and no vegetation present. One site had limited vegetation growth signifying some type of eradication program. Fifty one sites observed had normal vegetation growth. Three sites had excessive vegetation growth around the sampling area.

Biology
The categories for types of life present at the sites were insects, algae, fish, snails, and mussels/barnacles. Multiple types of life could have been identified at each site. Thirty eight of the sites had algae present; eleven of those sites also having some other type of life present. One site had snails present. Thirty seven sites had insects present. Seven sites had fish present. Seven sites had some “other” type of life present; usually crawfish or tadpoles/frogs. Twenty four sites did not have any visible life present at the sampling site.

4.2 Field Water Quality Results

Field analyses were conducted at all sites with flowing or ponded water. The field analyses were conducted using a Horiba U-10 and CHEMetrics field test kits. A summary of the initial screening results from field analysis is presented in Table 6. If action levels were exceeded, the site was revisited to confirm the initial results and an IC/ID investigation was initiated. Follow-up investigations are presented in Section 4.4.

Table 6. 2008 Initial Screening Field Measurement Results for Sites with Ponded or Flowing Water.

Station ID	Date	Time	Flow Rate	pH (Units)	EC (mS cm)	Turbidity (NTU)	DO (mg L)	Temp (C)	NH_3 (mg L)	NO_3-N (mg L)	PO_4 (mg L)	MBAS (mg L)
Agua Hedionda												
A002	8/18/2008	10:25	40	8.25	2.46	1	8.33	21.5	0.2	0.6	0.30	0.25
A004a	8/18/2008	12:15	29	8.25	1.20	4	7.06	25.6	0.4	0.4	**2.70**	0.25
A004b	8/18/2008	12:33	1	7.91	4.21	1	7.57	26.0	0.3	0.3	0.40	0.50
A013	8/25/2008	10:02	12	7.08	5.28	11	NS	24.5	0.8	0.6	0.25	0.75
A014	8/20/2008	9:43	7	7.24	4.04	100	4.83	20.8	**10**	1.3	**4.10**	0.50
A015	8/25/2008	11:33	15	**6.26**	6.94	47	6.86	23.2	0.6	3.1	0.2	**1.00**
A016	8/25/2008	9:29	6	7.70	7.80	22	5.77	23.8	0.6	1.9	0.2	**1.00**
A019	8/14/2008	10:38	Ponded	7.70	2.74	17	5.75	20.2	0.8	0.4	**3.35**	0.50
A022	8/19/2008	13:44	Ponded	7.89	4.21	19	6.71	23.1	0.6	2.9	1.10	0.60
Buena Vista												
B002	8/5/2008	14:05	Ponded	8.26	4.01	2	13.05	25.2	0.6	**12.6**	0.25	0.50
B022	8/5/2008	12:42	4	8.50	4.79	6	7.57	24.6	0.6	0.9	0.70	0.60
B023	8/14/2008	9:48	Ponded	7.95	11.00	1	7.17	22.8	0.6	1.5	**2.05**	**1.00**
B024	8/25/2008	14:26	Ponded	8.11	1.83	2	6.15	30.4	**1.0**	0.9	1.65	0.25
B026	8/21/2008	10:05	7	8.01	4.69	2	5.55	20.7	0.4	1.3	0.30	0.60
B027	8/21/2008	11:07	Ponded	7.96	3.76	1	2.70	19.9	0.4	0.7	0.35	0.50
B030	9/3/2008	10:36	1	8.17	1.70	5	NS	23.3	**1.0**	1.0	0.80	0.30
B031	9/3/2008	14:06	10	7.69	4.89	15	NS	22.9	0.5	1.8	0.35	0.60
B032	9/3/2008	13:47	32	7.68	5.12	11	NS	24.5	0.4	2.6	0.35	0.60
B033	8/21/2008	11:48	2	8.19	2.14	3	NS	22.7	0.4	0.4	**2.25**	0.50
B103	8/21/2008	13:28	Ponded	7.65	4.35	20	NS	24.0	0.4	9.7	0.2	0.60
B104	8/18/2008	9:10	Ponded	7.90	1.57	11	3.71	24.5	0.3	1.9	**2.35**	0.50
B105	9/3/2008	14:47	NS	8.20	5.01	7	NS	23.1	0.6	1.1	0.65	0.70
B106	9/3/2008	9:46	39	7.79	4.64	2	NS	23.4	0.6	1.9	0.30	0.65
Loma Alta												
L001	7/21/2008	9:34	3	8.15	5.10	10	6.61	19.8	0.6	AE	0.40	0.75
L002	7/23/2008	13:27	95	8.21	5.87	12	5.30	20.8	**2.0**	1.3	1.8	**1.50**
L003	7/28/2008	10:57	10	8.38	4.20	1	7.56	21.8	0.8	2.2	1.30	0.65
L007	8/14/2008	21:02	Ponded	6.57	5.87	8	3.44	23.4	0.8	0.5	1.35	0.60
L008	8/6/2008	14:25	Ponded	7.14	5.38	4	11.53	28.1	0.6	0.7	0.65	0.60

Station ID	Date	Time	Flow Rate	pH (Units)	EC (mS□cm)	Turbidity (NTU)	DO (mg□L)	Temp (□C)	NH_3 (mg□L)	NO_3-N (mg□L)	PO_4 (mg□L)	MBAS (mg□L)
L009	7/21/2008	10:48	75	8.25	4.58	5	6.45	21.5	0.6	0.6	0.70	0.60
L010	7/28/2008	9:24	1	7.31	5.31	□1	4.18	21.5	0.6	2.8	1.55	**1.00**
L013	7/28/2008	10:07	1	8.17	3.21	5	6.68	21.8	0.3	0.7	0.80	0.50
L019	7/21/2008	12:44	Ponded	**9.32**	1.74	75	18.13	28.1	0.6	0.2	1.95	0.80
L020	7/29/2008	14:51	1	8.30	2.90	9	7.45	23.7	0.4	1.2	1.00	0.75
L027	7/21/2008	13:41	225	8.32	3.99	12	10.95	24.2	0.8	□0.2	0.70	0.75
L034	8/11/2008	14:42	Ponded	8.09	2.01	51	6.08	24.3	**1.0**	0.4	1.80	**1.75**
L040	8/5/2008	9:29	7	7.97	1.60	2	7.02	24.1	0.4	0.2	0.95	0.40
L046	7/30/2008	12:47	Ponded	7.99	6.34	2	12.60	26.2	0.4	0.8	□0.2	0.75
L054	8/5/2008	10:29	11	8.19	2.68	□1	7.95	23.8	0.1	**16.6**	□0.2	0.25
L103	7/28/2008	12:37	4	7.57	2.87	6	5.28	20.6	0.8	0.2	1.45	0.75
L108	7/30/2008	11:50	35	8.30	10.90	2	16.51	26.4	0.6	0.8	□0.2	0.85
L110	7/28/2008	13:34	Ponded	8.06	3.10	13	6.84	21.1	0.6	1.1	1.30	0.50
L111	8/7/2008	11:35	Ponded	7.40	2.67	8	6.10	24.5	0.6	0.3	0.25	0.25
L114	7/31/2008	11:30	12	7.31	7.19	□1	2.97	23.8	0.6	0.6	0.35	0.85
San Luis Rey												
S006	7/1/2008	11:00	5	8.29	1.86	6	8.41	20.9	0.3	□0.2	**2.00**	0.50
S032	7/15/2008	9:22	Ponded	7.60	2.63	64	0.43	19.8	**1.0**	□0.2	**5**	0.50
S044	6/30/2008	10:35	40	7.55	3.70	7	5.09	23.0	0.4	□0.2	0.50	0.50
S045	6/30/2008	11:43	11	8.25	4.09	11	17.15	20.6	0.8	□0.2	0.20	0.60
S075	7/15/2008	14:32	□1	8.20	1.59	39	5.82	23.1	0.6	0.2	**2.05**	0.30
S077	6/23/2008	10:51	101	7.20	4.82	2	7.43	27.3	0.8	1.8	0.25	0.25
S085	7/23/2008	10:28	Ponded	7.87	1.61	37	3.26	26.8	**3.0**	0.3	**4.65**	**1.00**
S088	6/19/2008	11:35	Ponded	8.44	2.47	5	11.58	23.1	0.6	1.3	0.65	0.25
S102	6/23/2008	14:34	Ponded	8.06	0.98	36	4.41	22.1	**1.0**	0.3	0.85	0.75
S103	6/23/2008	13:39	Ponded	**9.17**	1.18	10	13.62	30.8	0.4	□0.2	1.50	0.75
S104	6/23/2008	12:51	Ponded	7.53	1.21	35	4.03	19.5	0.6	0.7	1.35	0.50
S106	7/1/2008	9:23	28	8.20	3.74	2	8.24	21.4	0.3	**53.0**	0.70	**1.25**
S107	6/16/2008	10:25	3	7.52	3.63	8	5.68	24.1	0.6	0.4	0.40	0.40
S109	8/7/2008	9:20	Ponded	7.90	1.27	11	5.80	23.4	**2.0**	0.5	**5**	0.85
S110	6/16/2008	13:59	Ponded	**10.11**	1.09	11	11.65	32.9	0.2	0.2	0.35	0.25
S111	7/15/2008	10:18	Ponded	8.83	3.08	8	8.88	29.2	0.4	□0.2	□0.2	**1.50**

Station ID	Date	Time	Flow Rate	pH (Units)	EC (mS cm)	Turbidity (NTU)	DO (mg L)	Temp (C)	NH_3 (mg L)	NO_3-N (mg L)	PO_4 (mg L)	MBAS (mg L)
S115	6/30/2008	14:04	2	**9.79**	2.01	18	11.06	33.4	0.2	0.2	0.2	0.35
S116	6/16/2008	11:59	1	8.52	1.58	6	5.68	20.8	0.4	0.2	**2.45**	**1.00**
S117	6/19/2008	10:31	18	8.23	4.60	9	8.00	20.0	0.6	1.5	0.30	0.60
S118	7/1/2008	13:52	Ponded	7.96	3.97	37	10.15	21.9	0.4	0.6	0.2	0.25
S119	6/19/2008	9:05	Ponded	8.51	10.40	10	11.24	23.9	0.8	2.6	1.20	**1.00**
S120	8/18/2008	8:25	Ponded	7.71	1.32	2	7.43	20.9	0.3	0.5	**2.10**	0.25
S121	7/23/2008	9:35	Ponded	7.69	2.87	3	5.28	21.3	0.8	0.9	0.95	0.25

Bold/Highlighted values indicate action level exceedances.
NS – Not sampled/Field Equipment Malfunction.
AE – Analyst Error/Data Entry Error. While the data was lost inexplicably in the database, the analytes that exceeded action levels were recorded in a hard copy format and follow-ups were completed.

Flow Rate
Twenty seven of the 66 sites with water were ponded. The flow rates at the sites with measurable flow ranged from 0.1 gpm at S075 to 225 gpm at L027.

Water Temperature
Water temperature was measured in the field immediately upon sample collection at each site with flowing or ponded water. Temperature readings ranged from 19.5˚C at S104 on June 23, 2008 to 33.4˚C at S115 on June 30, 2008. The average temperature during field screening was 23.5˚C with a standard deviation of 2.93˚C.

pH
pH is a term used to indicate the alkalinity or acidity of a substance as ranked on a scale from 1.0 to 14.0. Acidity increases as the pH gets lower. Figure 3 presents the pH of some common liquids.

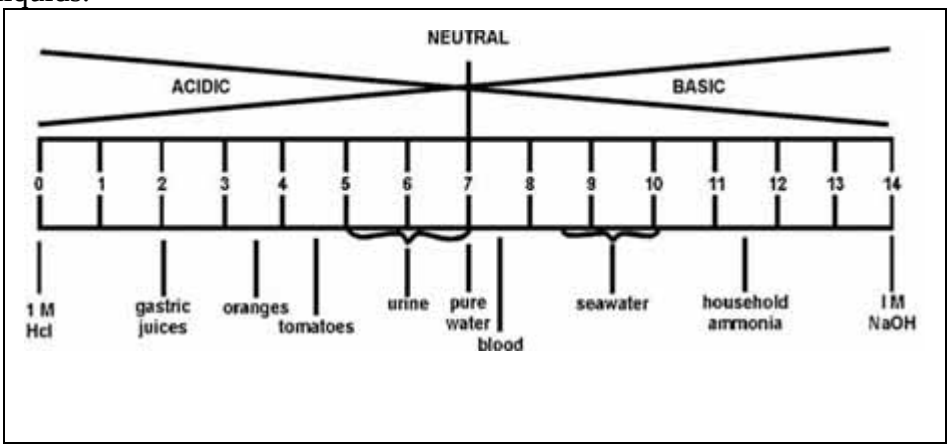

Figure 2. pH of Selected Liquids.

pH affects many chemical and biological processes in the water. For example, different organisms flourish within different ranges of pH. The largest varieties of aquatic animals prefer a range of 6.5-8.0. pH outside this range reduces the diversity in the stream because it stresses the physiological systems of most organisms and can reduce reproduction. Low pH can also allow toxic elements and compounds to become mobile and "available" for uptake by aquatic plants and animals. This can produce conditions that are toxic to aquatic life. Changes in acidity can be caused by atmospheric deposition (acid rain), surrounding rock, and certain wastewater discharges. An unusually high pH reading could be an indicator of an industrial discharge in the sample area; therefore, pH is used as an indicator of illicit discharges.

The pH values taken from the ponded or flowing water ranged from 6.26 at A015 to 10.11 at S110. The average pH value observed during the field screening was 8.0 with a standard deviation of 0.6. The three sites that were outside of the acceptable range were A015, S115, and S110. A015 was the only site that had pH levels below the acceptable range. The area around A015 is known to have a high water table with geologic conditions that cause low pH, foam, and crystalline deposits on the soil. S115 and S110 are associated with concrete channels or pipes. Concrete is known to be basic and have high pH values associated with the cement components. This may be a cause of the high pH values.

Conductivity
Conductivity is a measure of the ability of water to pass an electrical current. Conductivity in water is affected by the presence of inorganic dissolved solids such as chloride, nitrate, sulfate, and phosphate anions (ions that carry a negative charge) or sodium, magnesium, calcium, iron, and aluminum cations (ions that carry a positive charge). Organic compounds like oil, phenol, alcohol, and sugar do not conduct electrical current very well and therefore have a low conductivity when in water. Conductivity is also affected by temperature: the warmer the water, the higher the conductivity. In addition, discharges to streams can also change the conductivity depending on their make-up. A failing sewage system would raise the conductivity because of the presence of chloride, phosphate, and nitrate; an oil spill would lower the conductivity. The conductivity values ranged from 0.98 mS/cm at S102 to 11.0 mS/cm at B023. The average conductivity value observed during field screening was 3.9 mS/cm.

Turbidity
Turbidity is a measure of water clarity, how much the material suspended in water decreases the passage of light through the water. Suspended materials include soil particles (clay, silt, and sand), algae, microbes and other substances. Turbidity can affect the color of the water.

Higher turbidity increases water temperatures because suspended particles absorb more heat. This, in turn, reduces the concentration of dissolved oxygen because warm water holds less dissolved oxygen than cold. Higher turbidity also reduces the amount of light penetrating the water, which reduces photosynthesis and the production of dissolved oxygen. Suspended materials can clog fish gills, reducing resistance to disease in fish, lowering growth rates, and affecting egg and larval development. As the particles settle, they can blanket the stream bottom, especially in slower waters, and smother fish eggs.

Turbidity can be useful as an indicator of the effects of runoff from construction, agricultural practices, logging activity, discharges, and other sources. Turbidity often increases sharply during a rainfall, especially in developed watersheds, which typically have relatively high percentages of impervious surfaces. The flow of storm water runoff from impervious surfaces rapidly increases stream velocity, which increases the erosion rates of stream banks and channels. Turbidity can also rise sharply during dry weather if earth-disturbing activities are occurring in or near a stream without erosion control practices in place. The turbidity values ranged from <1 at five sites to 100 NTU at A014. The average turbidity value observed during field screening was 15 NTU.

Dissolved Oxygen
Dissolved oxygen analysis measures the amount of gaseous oxygen dissolved in an aqueous solution. Oxygen gets into water by diffusion from the surrounding air, by aeration, and as a waste product of photosynthesis.

Adequate dissolved oxygen is necessary for good water quality. Oxygen is a necessary element to all forms of life. Natural stream purification processes require adequate oxygen levels in order to provide for aerobic life forms. As dissolved oxygen levels in the water

drop below 5.0 mg/L, aquatic life is put under stress. The lower the concentration, the greater the stress is on aquatic life. The dissolved oxygen values ranged from 0.43 mg/L at S032 to 18.13 mg/L at L019. The average dissolved oxygen value observed during field screening was 7.5 mg/L. All but one of the sites that had DO levels less than 4.0 mg/L were ponded and frequently had higher turbidity and nutrient levels, indicating nutrient breakdown.

Ammonia

Ammonia is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment, however, in higher quantities it can become toxic to fish and other organisms. The ammonia values range from 0.1 to >10 mg/L. The average ammonia value observed during the field screening was 0.6 mg/L with a standard deviation of 0.4 mg/L. Six of the nine sites that exceeded the action level for ammonia were ponded and were likely caused by decaying organic matter in the ponded water.

Orthophosphate

Both phosphorus and nitrogen are essential nutrients for the plants and animals that make up the aquatic food web. Since phosphorus is the nutrient in short supply in most fresh waters, even a modest increase in phosphorus can, under the right conditions, set off a chain of undesirable events in a stream including accelerated plant growth, algae blooms, and low dissolved oxygen.

There are many sources of phosphorus, both natural and human. These include soil and rocks, wastewater treatment plants, runoff from fertilized lawns and cropland, failing septic systems, runoff from animal manure storage areas, disturbed land areas, drained wetlands, water treatment, and commercial cleaning preparations. The orthophosphate values ranged from <0.2 mg/L to >5 mg/L. The average orthophosphate value observed during field screening was 1.2 mg/L. Thirteen sites exceeded the action level.

Nitrate-N

Nitrate is the most readily available form of nitrogen for plant uptake and is a limiting factor in plant growth. Nitrates are naturally occurring in soil and rocks, but are also added to watersheds from anthropogenic sources such as fertilizers, failing septic systems, and animal waste. The nitrate-N values from the 2008 dry weather monitoring season ranged from 0.2 to 53 mg/L at S106. The average nitrate-N value was 2.3 mg/L with a standard deviation of 7.0 mg/L. The nitrate levels at S106 were over three times greater than the next highest levels of nitrate-N at L054 and B002. Three sites exceeded the nitrate action level.

Surfactants (MBAS)

Surfactants or MBAS were previously analyzed in the laboratory, but in the new permit are required as part of the field screening. Surfactants are analyzed to detect detergent pollution from residential, commercial, or industrial washing activities. MBAS results were greater than or equal to the action level of 1.0 mg/L at 11 of the initial screening sites. Over half of those sites had conductivity results greater that 5 mS/cm. Several Copermittees reported exceedances in the field screening data at sites with higher conductivity levels, but when the

samples were taken to the laboratory, there were no exceedances. In the City of Oceanside there were 11 exceedances of MBAS action levels, but upon confirmation, none of them required further investigation.

4.3 Laboratory Water Quality Results

Laboratory analysis was conducted at 19 sites, representing 29% of the sites with ponded or flowing water. Laboratory chemistry results are summarized and presented in Table 7 and microbiology results in Table 8. If action levels were exceeded, the site was revisited to confirm the initial results and an IC/ID investigation was initiated. Follow-up investigations are presented in Section 4.4 and Appendix C.

Oil and Grease

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities. Oil and grease was not detected at any of the dry weather sites.

Total Hardness

Total hardness measures the amount of polyvalent cations in water. It generally represents calcium and magnesium ions in a water sample because they are the most common cations. Results are expressed in mg/L of $CaCO_3$. The California Toxics Rule (CTR) applies hardness-based water quality objectives to dissolved metals. Increasing hardness has the effect of decreasing the toxicity of metals[3]. The hardness values ranged from 340 mg/L of $CaCO_3$ at A004a to 3120 mg/L of $CaCO_3$ at A015 with an average of 1261 mg/L of $CaCO_3$ and a standard deviation of 882 mg/L of Ca CO_3. Three of the four sites with hardness values over 2000 mg/L of $CaCO_3$ were in the Agua Hedionda watershed near the intersection of Lake and Cannon; an area with a high groundwater table and historical geologic crystalline formations.

Dissolved Metals

Metal concentrations in the environment can originate from a variety of sources including automobiles, automobile repair facilities, car washing, and industrial activities, as well as natural geologic processes. The laboratory samples collected during the 2008 Dry Weather Monitoring Program were analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Results were compared to the hardness-based CTR CMC (1-hour) criterion. Dissolved cadmium was detected at one site, A015, but was below the action level. Dissolved copper was detected at ten sites, but they were all below the CTR criterion. Dissolved lead results were below the laboratory detection limits at all sites. Dissolved zinc was detected at three of the sites and it also exceeded the CTR criterion at site A015.

[3] US Environmental Protection Agency. 2002. National Recommended Water Quality Criteria. November 2002. EPA-822-R-02-047

Table 7. 2008 Dry Weather Chemistry Results.

StationID	Date	Time	Oil Grease (mg/L)	Hardness Total as CaCO3 (mg/L)	Dissolved Cadmium (mg/L)	Dissolved Copper (mg/L)	Dissolved Lead (mg/L)	Dissolved Zinc (mg/L)	Chlorpyrifos (µg/L)	Diazinon (µg/L)
Agua Hedionda										
A002	8/18/2008	10:30	<5	749	<0.005	0.005	<0.005	<0.02	<0.05	<0.05
A004a	8/18/2008	12:20	<5	340	<0.005	0.005	<0.005	<0.02	<0.05	<0.05
A004b	8/18/2008	12:25	<5	1160	<0.005	0.009	<0.005	<0.02	<0.05	<0.05
A013	8/25/2008	10:10	<5	2390	<0.005	<0.005	<0.005	0.196	<0.05	<0.05
A015	8/25/2008	11:40	<5	3120	0.007	0.007	<0.005	**0.498**	<0.05	<0.05
A016	8/25/2008	9:40	<5	2460	<0.005	0.028	<0.005	<0.02	<0.05	<0.05
Buena Vista										
B002	8/5/2008	14:10	<5	948	<0.005	<0.005	<0.005	<0.02	<0.05	<0.05
B022	8/5/2008	12:55	<5	1180	<0.005	0.005	<0.005	<0.02	<0.05	<0.05
B104	8/18/2008	9:15	<5	497	<0.005	0.009	<0.005	0.039	<0.05	<0.05
Loma Alta										
L001	7/21/2008	9:40	<5	3000	<0.005	0.005	<0.005	<0.02	<0.05	<0.05
L009	7/21/2008	10:49	<5	1500	<0.005	<0.005	<0.005	<0.02	<0.05	<0.05
L019	7/21/2008	12:50	<5	471	<0.005	<0.005	<0.005	<0.02	<0.05	<0.05
L027	7/21/2008	13:45	<5	1190	<0.005	0.007	<0.005	<0.02	<0.05	<0.05
L040	8/5/2008	9:35	<5	437	<0.005	<0.005	<0.005	<0.02	<0.05	<0.05
L054	8/5/2008	10:35	<5	572	<0.005	<0.005	<0.005	<0.02	<0.05	<0.05
San Luis Rey										
S006	7/1/2008	11:05	<5	694	<0.005	<0.005	<0.005	<0.02	<0.05	<0.05
S106	7/1/2008	9:47	<5	1430	<0.005	<0.005	<0.005	<0.02	<0.05	<0.05
S118	7/1/2008	14:00	<5	1430	<0.005	<0.005	<0.005	<0.02	<0.05	<0.05
S120	8/18/2008	8:30	<5	382	<0.005	0.008	<0.005	<0.02	<0.05	<0.05

Table 8. 2008 Dry Weather Microbiology Results.

StationID	Date	Time	Total Coliform (MPN/100mL)	Fecal Coliform (MPN/100mL)	Enterococcus (MPN/100mL)
Agua Hedionda					
A002	8/18/2008	11:15	5,000	1,100	199
A004a	8/18/2008	12:20	**70,000**	8,000	**17,239**
A004b	8/18/2008	12:32	7,000	80	114
A013	8/25/2008	10:35	**80,000**	2,800	52
A015	8/25/2008	11:50	3,000	70	<10
A016	8/25/2008	9:40	13,000	1,400	176
Buena Vista					
B002	8/5/2008	14:10	9,000	5,000	537
B022	8/5/2008	13:03	**300,000**	**23,000**	**14,136**
B104	8/18/2008	13:45	5,000	20	10
Loma Alta					
L001	7/21/2008	12:26	**280,000**	2,200	1,169
L009	7/21/2008	11:00	8,000	500	2,310
L019	7/21/2008	13:05	**50,000**	1,400	473
L027	7/21/2008	13:45	3,000	170	31
L040	8/5/2008	15:05	3,000	500	119
L054	8/5/2008	11:25	30,000	**23,000**	638
San Luis Rey					
S006	7/21/2008	15:05	**50,000**	2,800	2,014
S106	7/1/2008	12:57	30,000	110	512
S118	7/1/2008	14:00	23,000	5,000	189
S120	8/25/2008	8:54	**240,000**	5,000	2,178

Chlorpyrifos and Diazinon

Chlorpyrifos and diazinon are organophosphate pesticides used to control insects, fleas and ticks. As of December 31, 2004, it became unlawful to sell diazinon outdoor, non-agricultural products. Chlorpyrifos can now only be used for nursery production, golf courses and road medians. Neither chlorpyrifos nor diazinon was detected at any of the laboratory sampling sites.

Total Coliform Bacteria

Total coliform bacteria are mostly harmless bacteria that are ubiquitous in the environment living in soil, water, and mammalian digestive tracts. Water samples are analyzed for total coliform bacteria to indicate the presence of other more harmful pathogenic (disease causing) organisms that are associated with coliform but are difficult to test for because they are present in much smaller quantities. During the dry weather monitoring period total coliform results ranged from 3,000 MPN/100mL to 300,000 MPN/100 ml. Seven of the 19 sites sampled for laboratory analysis exceeded total coliform action levels.

Fecal Coliform and Enterococcus

Members of two bacteria sub-groups, fecal coliforms and enterococcus, are used as indicators of possible sewage contamination because they are specifically found in human and animal

digestive tracks. Although they are generally not harmful themselves, they indicate the possible presence of pathogenic bacteria, viruses, and protozoans that also live in human and animal digestive systems. Since it is difficult, time-consuming, and expensive to test directly for the presence of a large variety of pathogens, these fecal indicator bacteria are used. Sources of fecal contamination to surface waters include wastewater treatment plants, on-site septic systems, domestic and wild animal manure, and storm water runoff.

In addition to the possible health risk associated with the presence of elevated levels of fecal bacteria, they can also cause cloudy water, unpleasant odors, and an increased oxygen demand. Fecal coliform results ranged from 20 MPN/100mL to 23,000 MPN/100 ml. Two of the 19 sites sampled for laboratory analysis exceeded the fecal coliform action level. Enterococcus results ranged from <10 MPN/100mL to 17,239 MPN/100mL. Two of the 19 sites sampled exceeded the Enterococcus action level. Only one site, B022, exceeded all three microbiology action levels.

4.4 IC/ID Investigations

Sites that exceeded one or more action level were revisited and resampled to confirm the initial result. If the confirmation result also exceeded an action level, an IC/ID investigation was initiated. Thirty three sites had one or more action level exceedances that required confirmation. Nineteen of those sites, upon confirmation, required an IC/ID investigation

The most common exceedance was for orthophosphate; 13 sites had an initial exceedance. All but two of those sites were ponded or had very low flow. Eight of the 13 sites required an IC/ID investigation. Eleven sites had an initial exceedance for MBAS (surfactants) but none of the confirmation samples exceeded the action level. This may be due to either the fleeting use of surfactants, such as in car washing, or the amount of degradation in environment. Nine of the sites had an initial exceedance for ammonia; five of those required an IC/ID investigation. Figure 4 provides the number of sites by watershed exceeding the initial field screening action levels.

Only one of the 19 sites sampled for laboratory chemistry analysis required an upstream investigation. A015 continued to exceed action levels for dissolved zinc. There is an ongoing investigation attempting to identify the source of this exceedance. Microbiology exceedances were mostly for total coliforms. There were seven exceedances for total coliforms, two for fecal coliforms, and two for Enterococcus. None of the fecal coliform or Enterococcus confirmation samples required an IC/ID investigation. Five of the seven total coliform exceedances required an upstream investigation. Figure 5 provides the number of sites by watershed that exceeded the microbiology action levels.

Appendix C contains a detailed description of the confirmation and IC/ID investigations at each site and the actions that were taken to reduce contaminants.

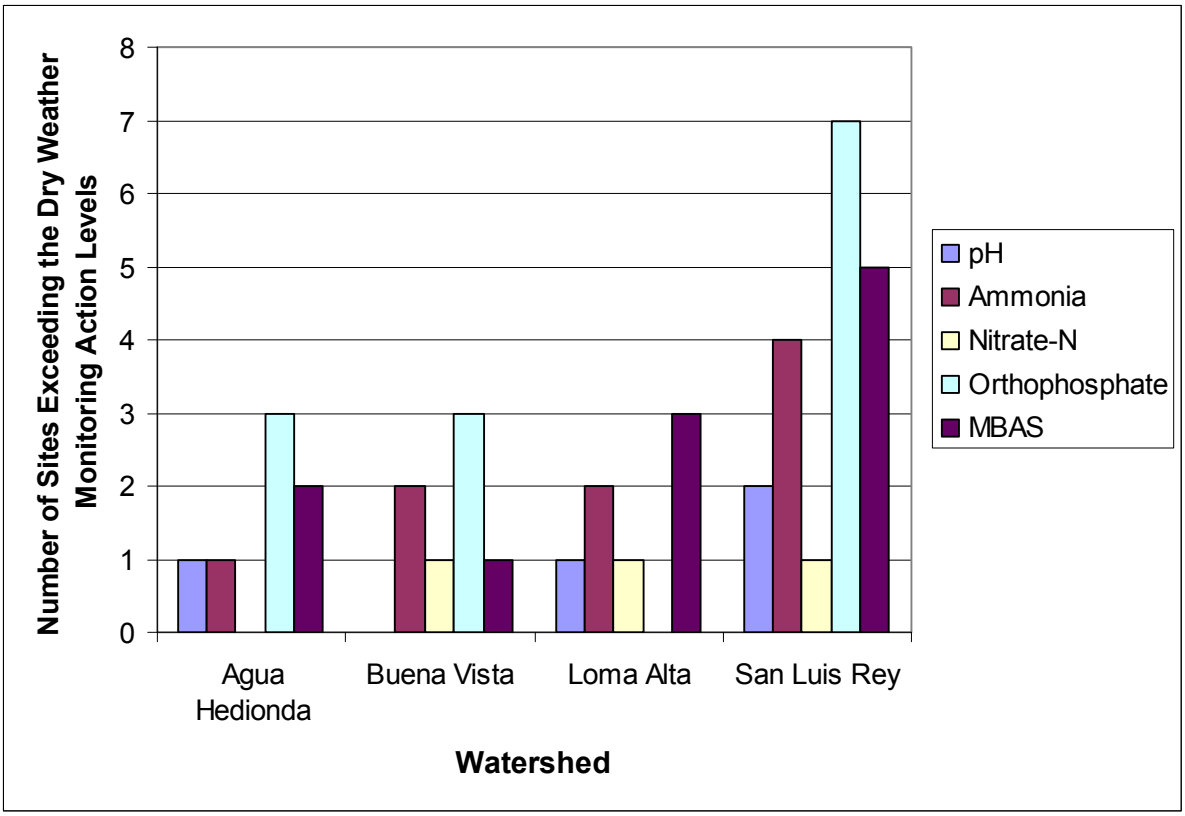

Figure 3. Number of Initial Field Screening Exceedances by Analyte and Watershed.

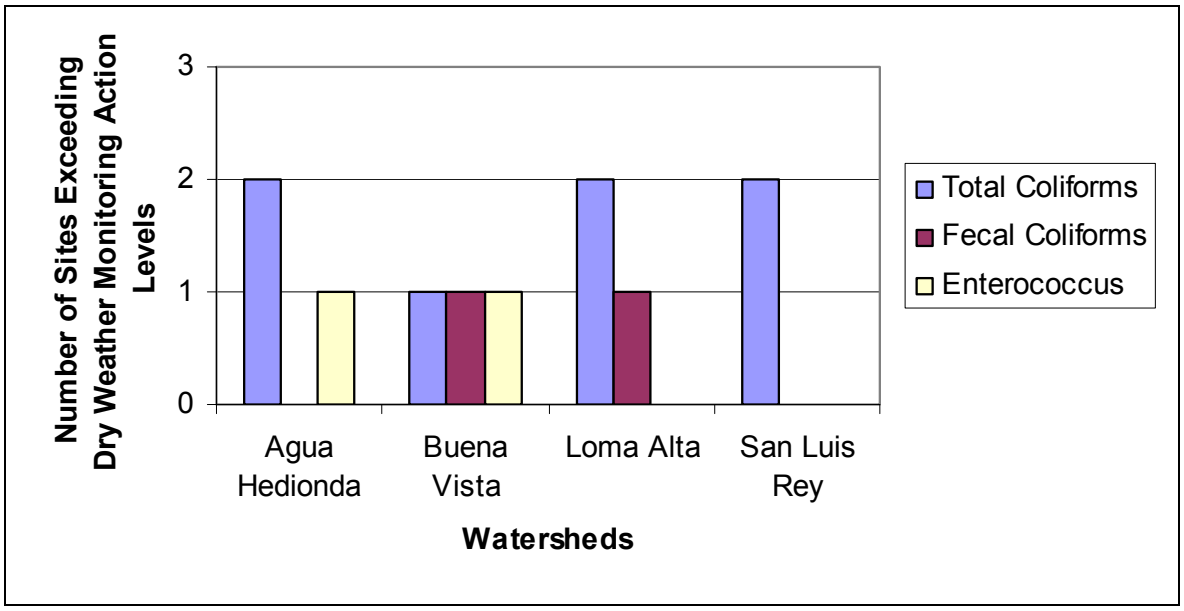

Figure 4. Number of Microbiology Exceedances by Analyte and Watershed.

4.5 Trash Assessment

Eighty one sites were assessed for trash amount and extent. The majority of sites were in the mid-range of the assessment and were either suboptimal, marginal, or submarginal. Figure 6 and Table 9 present a summary of trash assessment throughout the City. Loma Alta and San Luis Rey Watersheds were the only watersheds to include sites with a "poor" rating. The distribution across watersheds is presented in four charts that make up Figure 7. In addition, Figures 7 and 8 provide an orthophoto of the San Luis Rey and Carlsbad Watersheds and the distribution of trash assessment ratings throughout each watershed.

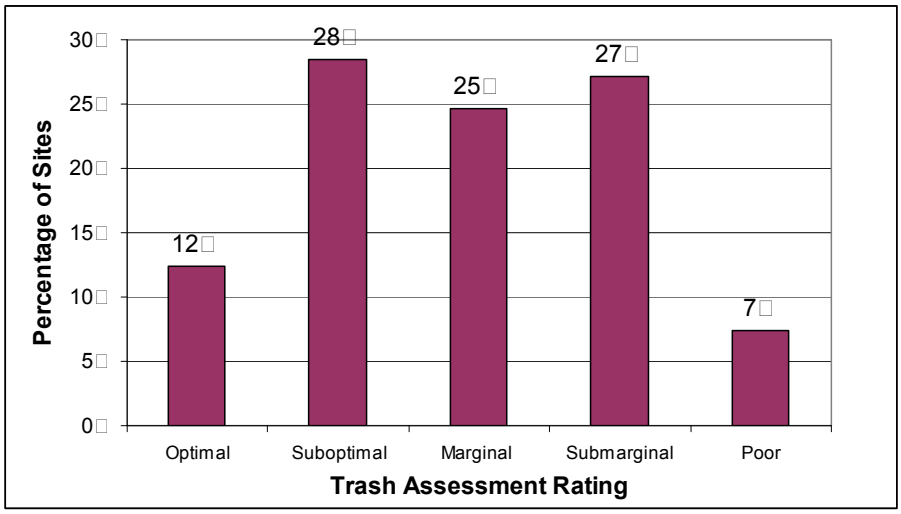

Figure 5. Summary of City of Oceanside Trash Assessment Ratings.

Table 9. Trash Assessment Results.

Optimal (10 Sites)	Suboptimal (23 Sites)	Marginal (20 Sites)	Submarginal (22 Sites)	Poor (6 Sites)
A004b	A004a	A002	A015	L008
B027	A013	A014	A016	L010
B104	A019	A022	B002	L037
B105	B033	B022	B026	L110
L036	B034	B023	B030	S116
L050	L013	B024	B106	S118
L052	L019	B031	L001	
L109	L027	B032	L002	
S065	L034	B103	L009	
S108	L046	L003	L020	
	L054	L007	L032	
	L103	L040	S006	
	L105	L108	S043	
	L107	L114	S044	
	L111	S032	S045	
	S025	S035	S072	
	S085	S077	S075	
	S104	S103	S088	
	S106	S107	S102	
	S111	S110	S109	
	S115		S120	
	S117		S121	
	S119			

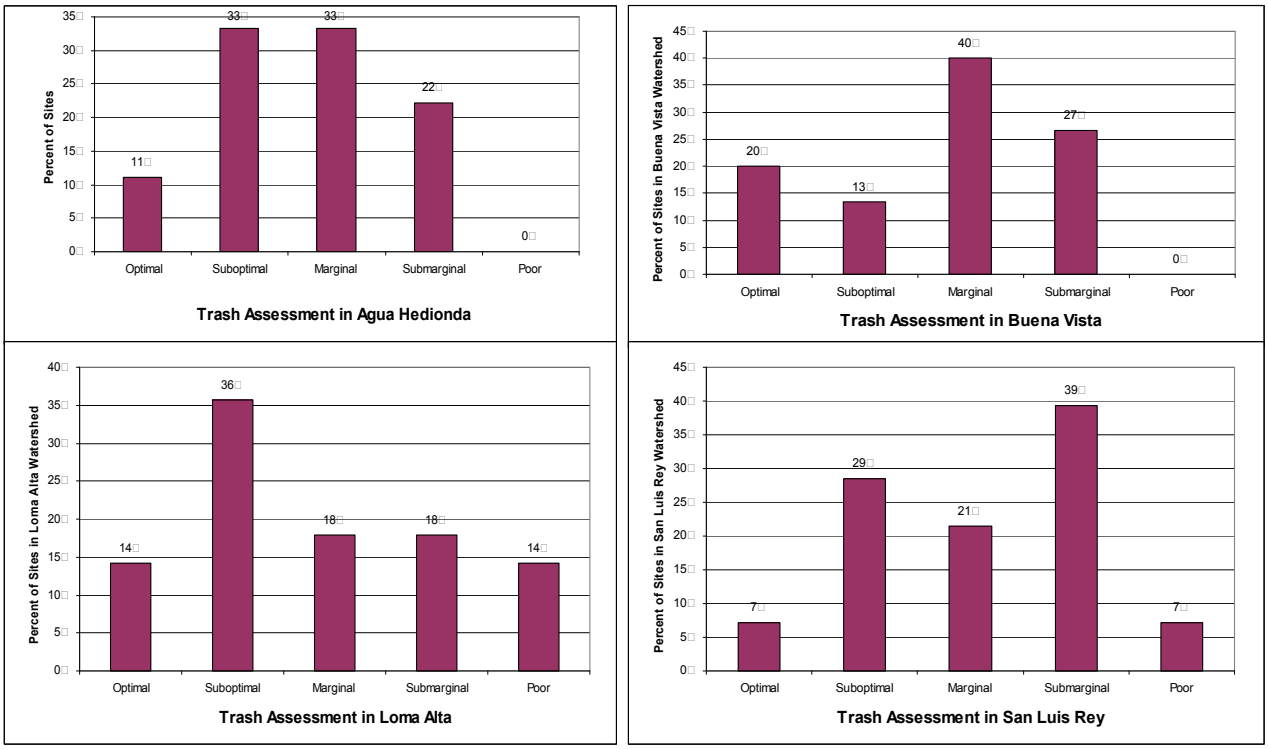

Figure 6. Trash Assessment by Watershed.

4.5.1 Threat to Human or Aquatic Health

The threat to human and aquatic health was assessed at each site. A threat to human health includes trash and debris that have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria or have the potential for physical harm. A threat to aquatic health includes trash and debris such as small floatable material that is persistent and can be transported long distances that resemble food and may be ingested. The threat also includes debris that has the potential for entanglement or oil or chemicals that could harm aquatic life.

Three sites (4% of all sites) were deemed a threat to human health in the 2008 dry weather survey; sites B022, L001, S106. Site B022 was an assessment of both the storm drain and receiving water. Several dirty diapers were found at this site in the receiving water. It appeared as though residents of the neighboring apartment complex threw their trash into the channelized creek. A used syringe was found at L001. And, at Site S106, possible human feces was found at the storm drain outfall.

Nine sites (11% of all sites) were deemed a threat to aquatic health; Sites A002, B030, L032, S045, S072, S102, S104, S118, and S120. Sites L032, S104, and S120 all had small Styrofoam pieces that be mistaken for food by aquatic life. S102 had countless small, yellow, air gun pellets around the outfall that could also be mistaken for food. B030 had green netting present that has the potential to cause entanglement. Sites A002, S118, S072, and S045 all had spray paint cans present.

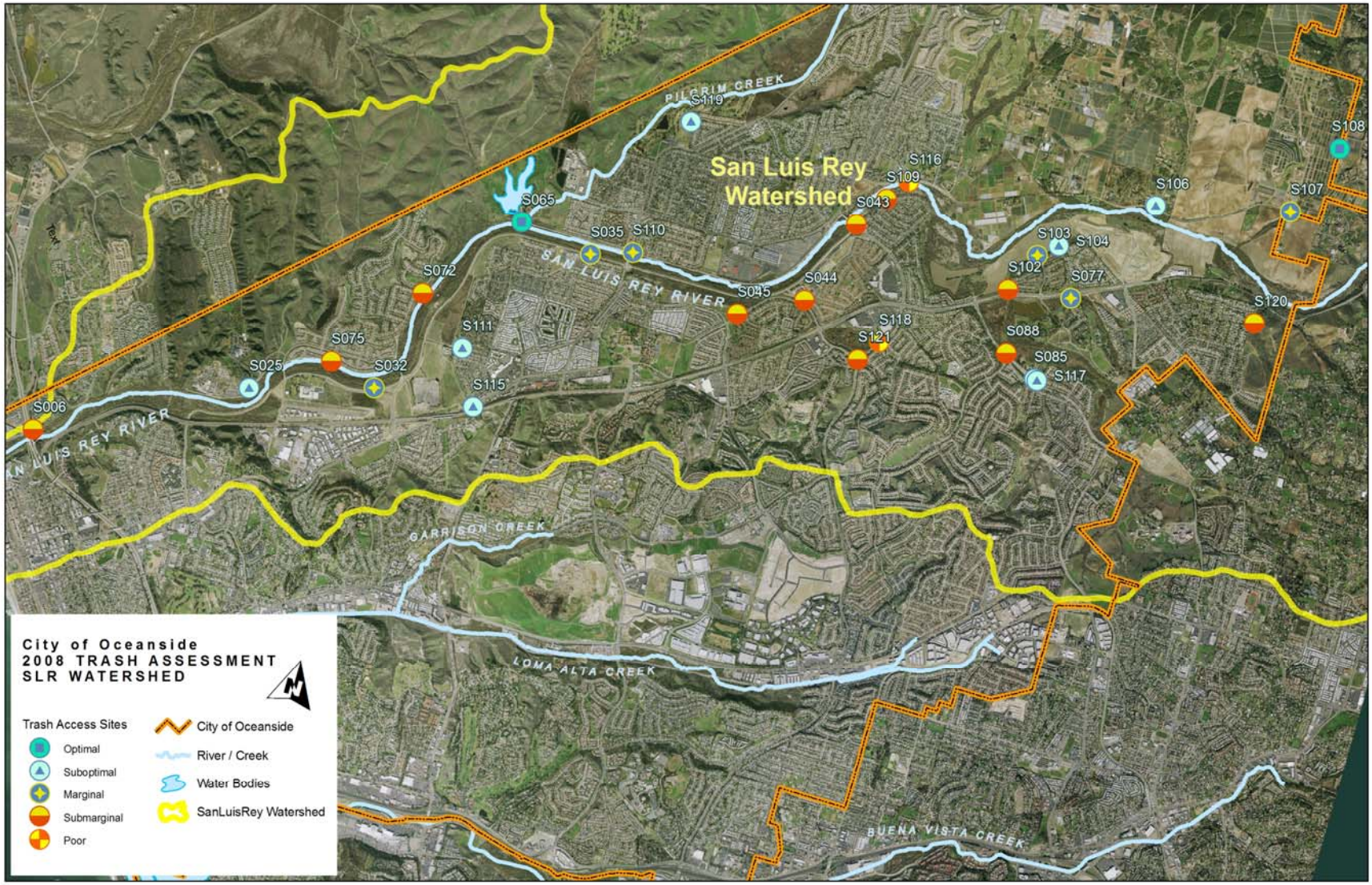

Figure 7. 2008 Trash Assessment for the San Luis Rey Watershed.

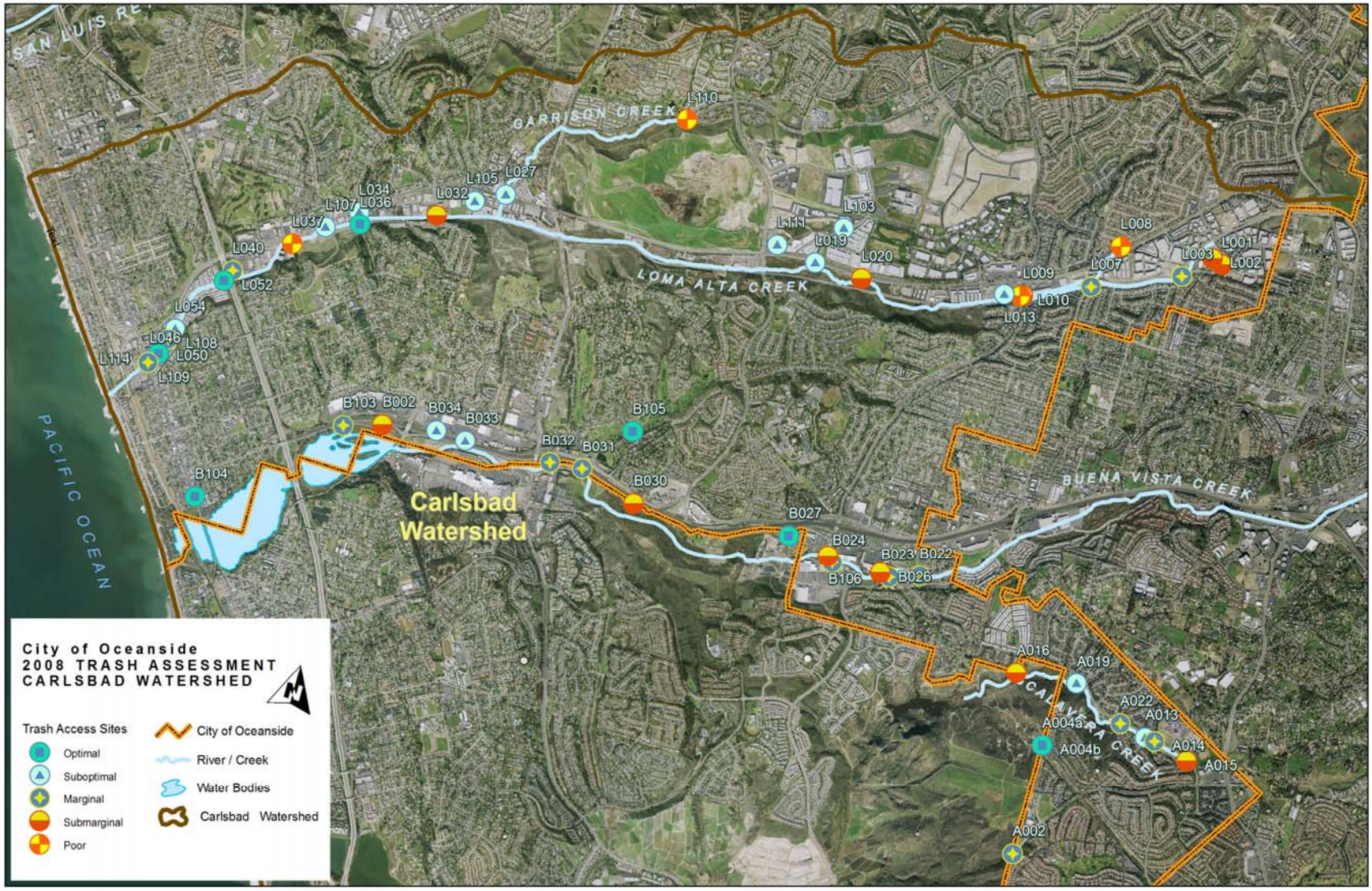

Figure 8. 2008 Trash Assessment for the Carlsbad Watersheds.

4.5.2 Submarginal and Poor Site Assessment

Twenty two of the 81 sites (27%) assessed were deemed submarginal and six of the 81 (7%) were deemed poor. Table 10 presents a summary of the sites that were submarginal and poor and identifies the ranking for the types of trash found. For example, a rank of "1" for Household and "2" for Food Packaging would mean that there was more household waste than food packaging waste. In addition, up to two potential routes and sources were identified and are listed in the Table 10.

Sixty seven percent of the trash found in submarginal and poor sites fell into the household or food packaging categories (Figure 8). There was no "automotive" or "toxic" waste found at any of the assessment locations. The two most common potential routes of trash entering the area were littering (46%) or upstream (40%). Household waste was the most common potential source of the trash (55%). Twenty seven percent of the trash also listed "transient" a potential source (Figure 9).

Table 10. Summary of Trash Type and Potential Routes and Sources for Submarginal and Poor Sites During the 2008 Dry Weather Monitoring Program.

Station ID	Trash Type	Rank	Potential Route	Additional Potential Route (if needed)	Potential Source	Additional Potential Source (if needed)
Submarginal Sites						
A015	Household	1	Littering	Upstream	Household	-
	Food Packaging	2	Littering	Upstream	Household	-
A016	Household	1	Littering	Upstream	Household	-
	Food Packaging	2	Littering	Upstream	Household	-
	Construction	3	Dumping	-	Household	Construction
B002	Household	1	Littering	Upstream	Household	Transient
	Food Packaging	2	Littering	Upstream	Household	Transient
B026	Food Packaging	1	Littering	Upstream	Household	Transient
B030	Food Packaging	1	Littering	Upstream	Household	Transient
	Business Related	2	Upstream	-	Construction	Commercial
	Shopping Carts	3	Dumping	-	Commercial	Transient
B106	Food Packaging	1	Littering	Upstream	Household	Transient
	Household	2	Littering	Upstream	Household	Transient
	Cigarette Butts	3	Littering	-	Household	Transient
L001	Household	1	Littering	Upstream	Household	-
	Food Packaging	2	Littering	Upstream	Household	-
	Biohazard Waste	3	Littering	-	Transient	-
L002	Household	1	Littering	Upstream	Household	Transient
	Food Packaging	2	Littering	Upstream	Household	Transient
L009	Food Packaging	1	Littering	Upstream	Household	Unable to determine
	Cigarette Butts	2	Littering	Upstream	Household	Unable to determine
L020	Household	1	Littering	Upstream	Household	-
L032	Household	1	Littering	Upstream	Household	-
	Food Packaging	2	Littering	Upstream	Household	Transient
S006	Food Packaging	1	Dumping	Littering	Household	Transient
	Shopping Carts	2	Littering	-	Transient	-
S043	Food Packaging	1	LIttering	-	Household	Transient
S044	Household	1	Littering	Upstream	Household	-
S045	Household	1	Littering	Upstream	Household	Transient
	Food Waste	2	Littering	Upstream	Household	Transient
S072	Household	1	Littering	Unable to determine	Household	Transient
	Food Packaging	2	Littering	Unable to determine	Household	Transient
S075	Household	1	Upstream	-	Household	-
	Yard Waste	2	Upstream	-	Household	-
	Food Packaging	3	Littering	Upstream	Household	Transient
S088	Food Packaging	1	Littering	-	Household	-
	Household	2	Littering	Upstream	Household	-
	Cigarette Butts	3	Littering	-	Unable to	

Station ID	Trash Type	Rank	Potential Route	Additional Potential Route (if needed)	Potential Source	Additional Potential Source (if needed)
					Determine	
S102	Household	1	Littering	Upstream	Household	-
	Food Packaging	2	Littering	Upstream	Household	Transient
	Business Related	3	Upstream	-	Commercial	-
	Cigarette Butts	4	Littering	-	Household	Transient
S109	Household	1	Littering	Upstream	Household	-
	Food Packaging	2	Littering	Upstream	Household	-
S120	Construction	1	Dumping	Unable to determine	Household	Construction
	Household	2	Dumping	Littering	Household	Construction
	Business Related	3	Dumping	Unable to Determine	Household	Construction
S121	Food Packaging	1	Upstream	-	Household	Transient
	Household	2	Upstream	-	Household	Transient
Poor Sites						
L008	Food Waste	1	Littering	Upstream	Household	-
	Food Packaging	2	Littering	Upstream	Household	-
L010	Household	1	Upstream	-	Household	-
	Food Packaging	2	Upstream	-	Household	-
L037	Food Packaging	1	Dumping	Littering	Household	Unable to determine
	Cigarette Butts	2	Dumping	Littering	Household	-
	Business Related	3	Dumping	Littering	Commercial	-
L110	Household	1	Littering	Upstream	Household	-
	Food Packaging	2	Littering	Upstream	Household	-
S116	Food Packaging	1	Littering	Upstream	Unable to Determine	-
	Construction	2	Dumping	Upstream	Construction	School
	Household	3	Littering	Upstream	Household	School
	Fabric/Clothing	4	Littering	-	Household	Transient
	Shopping Carts	5	Dumping	Littering	Commercial	Transient
S118	Food Packaging	1	Littering	Upstream	Household	Transient
	Household	2	Littering	Upstream	Household	-

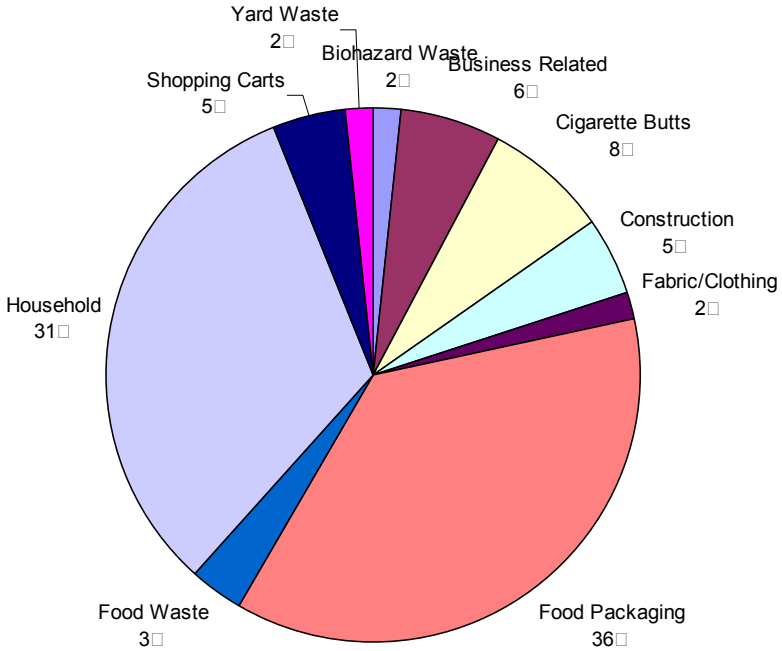

Figure 9. Types of Trash Identified at Submarginal and Poor Sites.

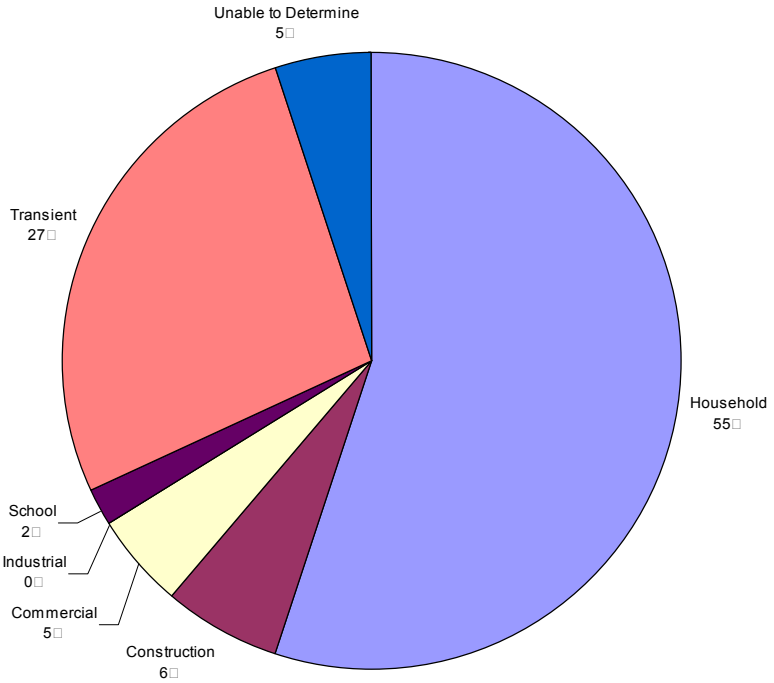

Figure 10. Potential Sources of Trash Assessed at Submarginal and Poor Sites.

5 DISSCUSION

5.1 2008 Dry Weather Summary

The 2008 Dry Weather Monitoring season marked the first year for implementation of Order No. 2007-0001, the San Diego Region's Municipal Permit. In the City's 2007 JURMP Update, sites were reassessed and procedures were refined to fit the new requirements. The City now has a list of 67 primary sites and 24 alternate sites to visit between May 1 and October 30 of each year. If a primary site is inaccessible or dry, an alternate site, ideally from the same watershed, is screened. If samples from any site with ponded or flowing water exceed Dry Weather Monitoring action levels, those sites are resampled within two business days. If the site continues to exceed action levels then an IC/ID investigation is initiated. A trash assessment is completed at each site.

During the 2008 monitoring season, the 67 primary sites were visited. Five of those sites were inaccessible and an addition nine were dry. Eighteen alternate sites were visited and two new sites with flowing or ponded water were added to the alternate list inventory. Nineteen of the ponded or flowing sites had additional analysis completed in the lab for chemistry and microbiology (29%).

Thirty three sites required confirmation for an initial field screening exceedance. Of those, 19 required an IC/ID investigation. Figure 10 represents the percentage of sites in each watershed that exceeded an initial field screening analyte. The most common exceedance was for orthophosphate.

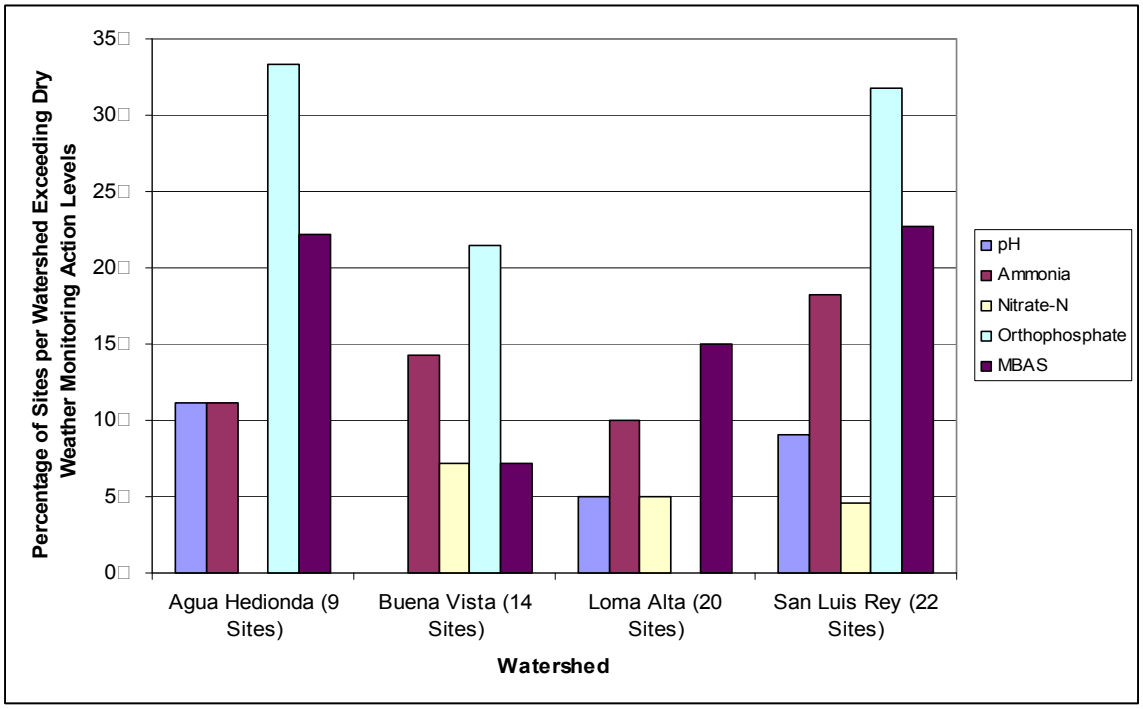

Figure 11. Percentage of Initial Exceedances in Each Watershed.

Of the 19 sites chosen for laboratory analysis, only one site had an exceedance for chemistry results. A015 exceeded the CTR for dissolved zinc. There is an ongoing investigation into the source; groundwater is suspected. For microbiology results, there were seven exceedances for total coliforms, two for fecal coliforms, and two for Enterococcus. None of the fecal coliform or Enterococcus confirmation samples required an IC/ID investigation. Five of the seven total coliform exceedances required an upstream investigation.

The prevailing source for exceedances of field screening analytes was ponded water. The prevailing source of ponded and flowing water was from residential over-irrigation. With the additional push for water conservation in light of changing water availability, several avenues are being implemented to reach the general public about water conservation which will in turn improve water quality. These efforts include more face-to-face outreach by two new Clean Water Program Compliance Inspectors responding to reports of over-irrigation in residential and commercial neighborhoods. On their daily work assignment the City Water Utilities Department water meter crew identifies and reports city-wide over-irrigation runoff cases to the Clean Water Program Compliance Inspectors for further follow-up investigations. In addition to two new inspectors, the Water Utility Department has hired an outreach coordinator specifically for water conservation education. And, as mandated by the State, the City is preparing for the impending drought and has adopted a revised drought ordinance as of July 9, 2008.

In addition, informational inserts have been placed in each water bill almost every month of the past year. The inserts include information about water incentive programs, community workshops, water-wise landscape suggestions, and repeated information about reducing water consumption particularly on outside landscaping. Outreach is also being provided on the local public access channel, the Oceanside Magazine, public education to schools, scout troops, and having staff available at community events such as Harbor Days and the local farmer's market. Outreach efforts have also extended to homeowner's associations. The City in coordination with the Water Conservation Garden at Cuyamaca College and the San Diego County Water Authority sponsored a free workshop entitled, "Saving Water and Money for Your HOA." It was the highest attended workshop for HOAs in the county with 129 attendees.

5.2 Historical Data Comparison

In February 2001, the San Diego Regional Water Quality Control Board issued Order No. 2001-01 to the communities of San Diego County. As part of Order 2001-01, the City of Oceanside was required to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program. The Dry Weather Program under this order was implemented in the 2002 Dry Weather season. This section provides a comparison of the last seven years of dry weather data.

The majority of exceedances from the last several years are nutrients (nitrate, orthophosphate, and ammonia) and bacterial indicators (total coliform, fecal coliform, and Enterococcus). Table 11 provides a summary of the previous seven years of dry weather monitoring data including the number of sites monitored and the number of exceedances of these specific field and laboratory analytes.

Table 11. 2002-2008 Dry Weather Monitoring Report Data Comparison.

Monitoring Year	2008	2007	2006	2005	2004	2003	2002
Total No. of Sites Visited	85	93	99	100	68	99	290
No. of Sites Sampled for Initial Field Screening	66	61	54	44	18	56	56
No. of Sites Exceeding Nitrate Action Level*	3	3	3	2	NS	3	11*
No. of Sites Exceeding Orthophosphate Action Level	13	12	6	8	2	14	11
No. of Sites Exceeding Ammonia Action Level	9	15	8	4	17	49	50
No. of Sites Exceeding MBAS Action Level	13	N/A	N/A	N/A	N/A	N/A	N/A
No. of Sites Sampled for Laboratory Analysis	19	18	19	17	19	16	11
No. of Sites Exceeding Total Coliform Action Level	7	9	12	17	11	0	4
No. of Sites Exceeding Fecal Coliform Action Level	2	4	5	4	2	0	1
No. of Sites Exceeding Enterococcus Action Level	2	2	2	4	3	2	0

*In the 2007 Dry Weather Monitoring Report, a discussion of the reporting of historical nitrate data was presented. Previous reports indicated that nitrate reported in monitoring years 2002, 2003, 2005 and 2006 may have been reported as NO_3, as opposed to NO_3-N. Without converting to the appropriate form of nitrate to compare to the set action levels, the number of exceedances was likely erroneously high. These numbers have been changed to reflect the conversion to NO_3-N, with the exception of the 2002 monitoring year. Without notes or written discussions to verify the lack of conversion, the data will continue to be reported as originally printed.

Orthophosphate exceedances have increase gradually over the past several years, however, ammonia exceedances have decreased. The majority of those sites in both cases were ponded water, where decaying plant debris may be a cause of spikes in the results. Bacteria levels continue to decrease and fewer sites are exceeding action levels.

5.3 Trash Assessment

The 2008 Dry Weather Monitoring Program is the first year for assessing the amount and extent of trash at each dry weather monitoring location. Approximately 65% of the sites were either “optimal”, “suboptimal”, or “marginal” and did not require the detailed trash evaluation. Twenty seven percent of the sites were “submarginal” and 7% of the sites were “poor”. The San Luis Rey Watershed had the highest percentage of “submarginal” and “poor” sites (46%).

The majority of the trash found in the sites that required further trash evaluation was either food packaging or household waste. These items were most commonly at the sites via littering or from upstream. And, the most common source of the food packaging and household wastes are households and transients.

Three sites (4% of all sites) were deemed a threat to human health in the 2008 dry weather survey. One site had dirty diapers; at one site a syringe was found; and at the final site, possible human feces were observed. Nine sites (11% of all sites) were deemed a threat to aquatic health. Four sites had small Styrofoam or plastic pieces that be mistaken for food by aquatic life. One site had green netting present that had the potential to cause entanglement. And four sites had spray paint cans present.

6 CONCLUSIONS

The City of Oceanside's boundaries include two major watersheds; the San Luis Rey Watershed, which includes the San Luis Rey River, and the Carlsbad Hydrologic Unit, which consists of Loma Alta Creek, Buena Vista Creek, and Agua Hedionda Creek. As part of Order 2001-01, the San Diego Regional Water Quality Control Board required all Copermittees to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program beginning in 2002. The purpose of the program was to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain system, minimizing the negative impacts of human activities on these water bodies. In 2007 the San Diego Regional Water Quality Control Board issued a new five-year permit for Receiving Waters and Urban Runoff Monitoring and Reporting, Order No. 2007-0001. The Copermittees in San Diego County were required, as part of their Jurisdictional Urban Runoff Management Program (JURMP), to update their Dry Weather Program to meet or exceed the requirements of Order No. 2007-0001. The key changes to the new Municipal Permit were adding a trash assessment component and requiring follow-up investigations to be conducted within two business days of receipt of results.

This report presents the results of the City of Oceanside's 2008 Dry Weather Field Screening and Analytical Monitoring Program which includes the revisions to the program required by Order No. 2007-0001.

Prior to the new requirements outlined in Order No. 2007-001, the City's Dry Weather Monitoring Program consisted of approximately 100 sites that were visited every year. If a site was dry, all observations were noted, but it was not replaced. The City's new Dry Weather Monitoring Program, as outlined in the 2008 JURMP Update, includes 67 primary monitoring stations and 24 alternate monitoring stations. If one of the primary stations was dry, alternate stations were visited until a site with ponded or flowing water was found and field screening was completed. Trash assessments were completed at every accessible site, whether the site was dry or had water.

During the 2008 monitoring season, the 67 primary sites were visited. Five of those sites were inaccessible and an additional nine were dry. Eighteen alternate sites were visited and two new sites with flowing or ponded water were added to the alternate list inventory. Nineteen of the ponded or flowing sites had additional analysis completed in the lab for chemistry and microbiology (29%).

Thirty three sites required confirmation for an initial field screening exceedance. Of those, 19 required an IC/ID investigation. The most common exceedance was for orthophosphate. Of the 19 sites chosen for laboratory analysis, only one site had an exceedance for chemistry results. A015 exceeded the CTR for dissolved zinc. There is an ongoing investigation into the source; groundwater is suspected. For microbiology results, there were seven exceedances for total coliforms, two for fecal coliforms, and two for Enterococcus. None of the fecal coliform or Enterococcus confirmation samples required an IC/ID investigation. Five of the seven total coliform exceedances required an upstream investigation.

An historical comparison of action level exceedances shows that orthophosphate exceedances have increase gradually over the past several years, however, ammonia exceedances have decreased. In addition, bacteria levels continue to decrease and fewer sites are exceeding action levels.

The prevailing source for exceedances of field screening analytes was ponded water. The prevailing source of ponded and flowing water was from residential over-irrigation. With the additional push for water conservation in light of changing water availability, several avenues are being implemented to reach the general public about water conservation which will in turn reduce dry season runoff flow and improve water quality. These efforts include more face-to-face outreach by two new Clean Water Program Compliance Inspectors hired in February of 2008 who have responded to reports of over-irrigation in residential neighborhoods and at commercial and industrial facilities. In addition to two new inspectors, the Water Utility Department has hired an outreach coordinator specifically for water conservation education. Outreach avenues include information inserts in water bills, presentation on the local public access channel, and sponsoring workshops for the agricultural community and HOAs. And, as mandated by the State, the City is preparing for the impending drought and has adopted a revised drought ordinance as of July 9, 2008.

During the first year of the trash assessment, approximately 65% of the sites were either "optimal", "suboptimal", or "marginal" and did not require the detailed trash evaluation which identified potential routes and sources. Twenty seven percent of the sites were "submarginal" and 7% of the sites were "poor". The San Luis Rey Watershed had the highest percentage of "submarginal" and "poor" sites (46%). The majority of the trash found at the sites that required further trash evaluation was either food packaging or household waste. These items were most commonly at the sites via littering or from upstream. And, the most common source of the food packaging and household wastes are households and transients.

Follow-up investigations continue to be conducted at sites with ongoing exceedances. Water conservation and urban runoff outreach, as well as beach and creek clean-ups continues year-round as the City continues the effort to detect and eliminate illicit discharges to the storm drain system.

APPENDIX A

2008 SITE PHOTOS

AGUA HEDIONDA

A002

A004a

A004b

A013

A014

A015

A016

A019

A021 (Not accessible)

A022

BUENA VISTA

B002

B022

B023

B024

B026

B027

B030

B031

B032

B033

B034

B103

B104

B105

B106

LOMA ALTA

L001

L002

L003

L007

L008

L009

L010

L013

L019

L020 (2007 photo; no photo 2008)

L024

L027

L032

L034

L036

L037

L040

L046

L050

L052

L054

L103

L105

L107

L108

L109

L110

L111

L114

SAN LUIS REY

S006

S025

S032

S035

S043

S044

S045

S065

S072

S075

S077

S085

S088

S103

S102

S104

S106

S107

S108

S109

S110

S111

S113

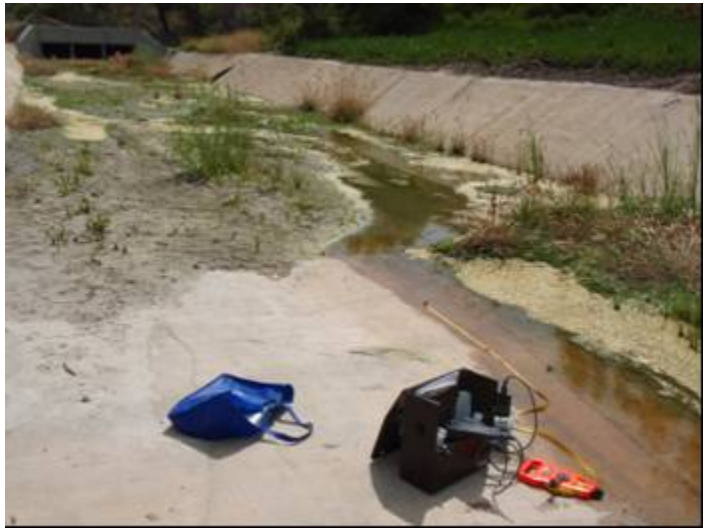

S115

S116

S117

S118

S119

S120

S121

APPENDIX B

2008 FIELD DATA SHEETS

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☐ **Receiving Water**

Site ID		**Latitude**	(e.g., 33.41174)	**Watershed**	**Hydrologic Unit**	(e.g., 7.00)
Location		**Longitude**	(e.g., -117.35213)		**Hydrologic Area**	(e.g., 7.10)
Date		**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time		**Observer**			**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☐ > 72 hours ☐ < 72 hours

Rainfall ☐ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

Trash Assessment Form

SITE ID: □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ **DATE:** □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

LOCATION: □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ **TIME:** □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

OBSERVER: □□□□□□□□□□□□□□□□□□□□

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX C

2008 IC/ID INVESTIGATIONS

A004a	Dry Weather 2008	8/18/2008

Site Summary:

Site A004a is 48-inch RCP located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The outlet drains the residential areas north and south of the outlet.

Investigatory Actions

Date	Action	Staff
8/18/2008	Initial investigation conducted. Field Screening showed exceedances for the following parameters: Orthophosphate: 2.70 mg/L Total Coliforms: 70,000 MPN/100mL Enterococcus: 17,239 MPN/100mL Flow was estimated at 29 gpm.	Witheridge
8/19/2008	Follow-up investigation conducted for field screening parameters. Orthophosphate results within acceptable parameters. Orthophosphate: 1.6 mg/L Flow was much less and estimated at 2 gpm.	Witheridge
8/27/2008	Follow-up laboratory samples collected at the outfall. Results showed an exceedance for total coliforms, but the Enterococcus result was below the action level. Total Coliforms: 240,000 MPN/100mL Enterococcus: 4,160 MPN/100mL Flow was back up and approximated at 35 gpm. An upstream investigation was initiated. The next upstream manhole in a brow ditch west of the homes on Nighthawk was sampled (A004a-1): Total Coliforms: 140,000 MPN/100mL Enterococcus: 6,488 MPN/100mL The manhole further upstream within the subdivision on Nighthawk was opened, but no flow was coming through the catch basin. However, flow could be heard elsewhere in the line. The flow was found coming from the brow ditch between Nighthawk and Viewridge and was	Witheridge/ Gremmels

<table>
<tr><td></td><td>sampled as it was going into a catch basin (A004a-2):
<table>
<tr><td>Total Coliforms</td><td>23,000 MPN/100mL</td></tr>
<tr><td>Enterococcus</td><td>2,603 MPN/100mL</td></tr>
</table>
The flow was traced upstream to a broken irrigation system. The landscape company was onsite and repairing the problem.</td><td></td></tr>
</table>

Investigatory Status

The high flows were traced back to the broken irrigation system between Nighthawk and Viewridge. While, bacteria results were under the action levels at the most upstream location, the flows were likely affected by debris such as grass clippings, leaves, and trash, and the storm drain itself which are all reservoirs for bacteria growth. A code enforcement officer was present when the source was found, but repairs were already being made during the visit so no enforcement actions were taken.

Attachments

Upstream Sampling Points

A004a-1

A004a-2

Source: Irrigation System

A013	Dry Weather 2008	8/25/2008

Site Summary:

Site A013 is a 36-inch RCP located at the intersection of Lake Boulevard and Alameda Drive, south of Agua Hedionda Creek. The outlet drains the residential areas immediately south of the site.

Follow-up Actions

Date	Action	Staff
8/25/2008	Initial investigation conducted. Laboratory screening showed exceedances for the total coliforms: Total Coliforms: 80,000 MPN/100mL Flow estimated at 12 gpm.	Witheridge
9/3/2008	Follow-up investigation conducted within two business days of receipt of results. Total coliforms again exceeded the action levels. Fecal coliforms, which did not exceed during initial screening, did exceed the action level (result = 23,000 MPN/100ml) Total Coliforms: 70,000 MPN/100mL An upstream investigation was also begun. The highest flows were tracked upstream to a manhole at the corner of Alameda and Amador. The orange deposits typical of A013 were found at this manhole. Total coliform and fecal coliform results were below the action levels (A013A): Total Coliforms: 30,000 MPN/100mL The flow was tracked further upstream to the next manhole without the orange deposits in front of 4920 Amador. Total coliform and fecal coliform results were below the action levels here, as well (A013B). Total Coliforms: 22,000 MPN/100mL	Witheridge/ Gremmels

Investigatory Status

This site was investigated in 2006 for the same tan foam, low pH, and total coliform exceedances. The same characteristic foam and lower pH were noted at neighboring Dry Weather site A015, as well. An investigation in the MS4 system and reports of similar

foam and unique geologic crystalline formations were noted in a natural channel along Shadow Ridge Road, as well as an open space area near Calaveras Lake.

At this time all investigations indicate that natural geologic and ground water phenomena in the Agua Hedionda region are responsible for the low pH and foam deposition seen at A013. The MS4 in this area commonly has groundwater seepage and mineral deposits throughout the system. The orange deposits are likely from this, but don't seem to correlate to bacterial exceedances. The bacterial exceedances also don't appear to be coming from urban runoff directly. Because fecal coliform and Enterococcus results remain well below their respective action levels, these bacteria exceedances don't appear to be a threat to human health. Causes are likely natural sources of bacteria attached to trash, leaf debris, or regrowth within the catch basin. This area will continue to be monitored.

Attachments

A013A

A013B

A014	Dry Weather 2008	8/20/08

Site Summary:

Site A014 is a 36-inch RCP located east of the intersection of Lake Boulevard and Alameda Drive, north of Agua Hedionda Creek. The outlet drains the school and residential areas north of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
8/20/08	Initial investigation conducted. Field screening showed the following exceedance for orthophosphate: Orthophosphate: 4.10 mg/L Ammonia: >10 mg/L Flow estimated at 7gpm.	Witheridge
8/21/08	Follow-up investigation conducted. Field screening results continued to exceed action levels for orthophosphate: Orthophosphate: 4.75 mg/L Ammonia: >10 mg/L Flow estimated at 25 gpm. Upstream Investigation was initiated. The manhole on the north side of Lake Boulevard was tested (A014A). Field observations noted the same flow as the outlet and similar field screening results: Orthophosphate: 3.65 mg/L Ammonia: >10 mg/L Investigation continued to a manhole up the hill north of Lake Blvd and under Madison Middle School's track (A014B). This manhole had two sources; one to the north and one to the east neither of which had comparable flows to the downstream site nor was the water the same brown turbid color. Results from the ponded water were: Orthophosphate: 0.25 mg/L Ammonia: 0.3 mg/L The only other inputs found between the two manholes were two field drains on the inside of the track. The ground was very wet and in some portions ponded.	Witheridge/ Gremmels

	Further investigation near three storage trailers found piles of mulch with weeds, plants, and algae growing in and around the piles. While there was no direct runoff to drains, groundwater seepage is suspected.	
9/11/08	Site visit conducted by Mo Lahsaie (Clean Water Program Coordinator) and Wil Perdomo (Clean Water Program Inspector). Observed recent application of manure to the school track. The school potentially could have irrigated the field to avoid body contact and to push the fertilizer through the root zone. Also observed a large manure pile at Madison Middle School track. Dr. Lahsaie contacted Vista School District to discuss alternate practices.	Lahsaie/ Perdomo

Investigatory Status

The flow and nutrient exceedances were tracked to the school's track and field area. The Clean Water Program Coordinator contacted Steve Presley at the Vista School District. Dr. Lahsaie also spoke with the Maintenance Supervisor, Mr. Jeff Gyer, who understood the potential for leaching manure/nutrients into the storm drain. Mr. Gyer contacted the Grounds Supervisor to coordinate more frequent irrigation practices with a shorter duration time to avoid potential runoff.

Attachments

A014A – Manhole on north side of Lake Blvd.

A014B – Manhole north of Madison Middle School track.

Mulch piles and wet ground around storage trailers.

Mulch piles on north side of trailers; wet ground with algae. Plants growing out of piles.

A015	Dry Weather 2008	8/25/2008

Site Summary:
Site A015 is a 48-inch RCP located south of Lake Park, off of Lake Boulevard, south of Agua Hedionda Creek. The outlet drains the residential areas east along Lake Boulevard Drive. Access to the site is from Lake Boulevard Drive.

Investigatory Actions

Date	Action	Staff
8/25/2008	Initial investigation conducted. Field and laboratory screening showed exceedances for the following parameters: pH: 6.26 pH Units MBAS: 1.0 mg/L Dissolved Zinc (Hardness): 0.498 mg/L (3120 mg/L as $CaCO_3$) Flow was estimated at 15 gpm, but appeared to also be coming from around the outlet directly from a groundwater source.	Witheridge
8/27/2008	Follow up investigation for field screening showed pH and MBAS levels to be under the action levels: pH: 6.62 pH Units MBAS: 0.65 mg/L During this visit, no flow could be found coming directly from the storm drain; it was ponded.	Witheridge
9/8/2008	Follow up investigation for dissolved zinc showed a continued exceedance of action levels: Dissolved Zinc (Hardness): 0.45 mg/L (2490 mg/L as $CaCO_3$) An upstream investigation was initiated. The majority of flow was tracked upstream to a manhole on the southwest corner of Lake and Cannon (A015A): Dissolved Zinc (Hardness): 0.62 mg/L (2550 mg/L as $CaCO_3$) The next manhole upstream was too deep and unsafe to sample (i.e. required confined-space entry permit).	Witheridge

<table>
<tr><td>10/23/2008</td><td>Further upstream investigation was performed for pH and dissolved zinc. See map below for exact locations.
Higher flows and pH were used in the field to indicate the direction of possible exceedances.
<table>
<tr><th>SiteID</th><th>pH (pH Unit)</th><th>Diss. Zinc (mg□L)</th></tr>
<tr><td>A015A</td><td>4.62</td><td>0.455</td></tr>
<tr><td>A015B</td><td>N/S</td><td>N/S</td></tr>
<tr><td>A015C</td><td>6.43</td><td>0.117</td></tr>
<tr><td>A015D</td><td>4.37</td><td>0.642</td></tr>
<tr><td>A015E</td><td>4.38</td><td>N/S</td></tr>
<tr><td>A015F</td><td>4.38</td><td>N/S</td></tr>
<tr><td>A015G</td><td>Green pipe from SE □ 4.40
Small opening in wall with pulsating flow below green pipe □4.29
Storm drain from SW □ 4.7</td><td>Green pipe □N/S
Small pipe □0.464
Storm drain □N/S</td></tr>
<tr><td>A015H</td><td>N/S (not enough flow)</td><td>N/S (not enough flow)</td></tr>
</table></td><td></td></tr>
</table>

Investigatory Status

A015 has been subject to an ongoing investigation to locate the source of persistent white foam in runoff since 2004. Historically, total coliform exceedances and low pH also seem to be a common characteristic in this area. In 2006, the white foam was traced back through the MS4 system to a french drain from a hillside in a residential development. Other investigations show similar depositions of foam as well as unique geologic crystalline formations in the watershed. The visual upstream investigation in 2007 found groundwater seepage in the intersection of Lake and Canon with a similar white color which supports the hypothesis that the discharge and exceedances may be naturally occurring.

While coliform results during the 2008 monitoring year were below action levels, the low pH continued, as well as an exceedance of dissolved zinc were found. Dissolved metals had been investigated at this site in 2002. There were also exceedances of dissolved zinc in 2004 and 2006. The site was not sampled for laboratory analysis in 2003 or 2005. No source of dissolved zinc was ever found and so exceedances in groundwater were also assumed.

This year's investigation is ongoing. The flow with low pH and dissolved zinc exceedances was traced to a manhole with two French drains, one smaller green storm drain and one larger storm drain outfall. Ground water seepage was apparent from the larger storm drain and the associated French drain. The characteristic foam of that area and water trickling from the pipe seams were visible. The other two pipes are part of an ongoing investigation. When several subdivisions were engineered in this area, the ground was leveled and a large rubber mat with French drains was placed below the fill dirt and the buildings due to the high ground water table. The drainage from all of these

drains is likely from this construction, but research is being performed to confirm this hypothesis.

Four drains leading into manhole at A015G.

Map of A015 investigation on 10/23/2008.

A016	Dry Weather 2008	8/25/2008

Site Summary:

Site A016 is a 36-inch RCP located east of Amigos Court, south of Lake Boulevard, and north of Calavera Creek at the border of Oceanside and Carlsbad. The outlet drains the residential areas to the north and south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
8/25/2008	Initial investigation conducted. Field Screening showed an exceedance for the following parameters: MBAS 1.0 mg/L Flow was estimated at 6gpm.	Witheridge
8/27/2008	Follow-up investigation conducted. Field screening results found MBAS to be within acceptable parameters: MBAS 0.75 mg/L Flow estimated at 1gpm.	Witheridge

Investigatory Status:
The follow-up investigation showed MBAS results were under the Dry Weather Monitoring Program action levels.

A019	Dry Weather 2008	8/14/2008

Site Summary:

Site A019 is a 24 inch RCP located in Oak Riparian Park off of Lake Boulevard, north of Agua Hedionda Creek. The outlet drains the residential and park areas north and south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
8/14/2008	Initial investigation conducted. Field Screening from the ponded water showed exceedances for the following parameters: Orthophoshate 3.35 mg/L	Witheridge
8/15/2008	Follow up investigations from the ponded water continued to show exceedances for the following parameters: Orthophoshate 2.70 mg/L An upstream investigation was initiated. The next manhole upstream in the landscaped area of the parking lot was very deep (A019A). Although hard to see, it appeared there was either a small amount of ponded water or a slight trickle. No samples were collected. The next manhole upstream on the northeast corner of Ridge and Lake (A019B) had no flow, but the ground was wet. Leaves were observed in the bottom of the catch basin. A final manhole was investigated on the northwest corner of Ridge and Lake (A019C). This is a curb inlet that is piped directly to A109A. The ground was wet, but there was no flow.	Witheridge

Investigatory Status

Initial screening of ponded water at site A019 resulted in an action level exceedance of orthophosphate. The follow-up visit found a continued exceedance of orthophosphate. During the 2007 monitoring year, several areas of ponded water and excess runoff appeared to be coming from park landscaping. Clean Water Program staff met with Park

staff to discuss several options for water conservation and more efficient fertilization. In addition, beginning in October 2007, the Water Utilities Department requested that all City managed areas reduce their water use by 20%. Public Works achieved and surpassed this request by getting up to a 50% reduction in water use during the winter. These efforts have worked and during the 2008 monitoring year, there was no visible evidence of over-irrigation from the park. In addition, the Water Utilities Department is working with the Public Works Department to find grants to install smart controller irrigation systems on City property.

The ponded water is therefore likely from residential flow. With the additional push for water conservation in light of changing water availability, several other avenues are being implemented to reach the general public about water conservation which will in turn improve water quality. These efforts include more face-to-face outreach by Clean Water Program Inspectors responding to reports of over-irrigation in residential neighborhoods. In addition to two new inspectors, the Water Utility Department has hired an outreach coordinator specifically for water conservation education. And, as mandated by the State, the City is preparing for the impending drought and has adopted a revised drought ordinance as of July 9, 2008. On a daily basis, the City Water Utilities Department Meter-Reader Crew reports any over-irrigation issues from residential dwelling and commercial facilities to the Clean Water Program Compliance Inspectors for follow-up investigations and public education outreach.

B002	Dry Weather 2008	8/5/2008

Site Summary:

Site B002 is a 72-inch RCP located on Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial and residential areas north of SR-78. Access to the site is via Lagoon View Drive.

Investigatory Actions

Date	Action	Staff
8/5/2008	Initial investigation conducted. Field Screening results showed an exceedance for the following parameter: Nitrate-N 12.6 mg/L	Witheridge
8/6/2008	Follow-up investigation conducted. Nitrate-N results were below the action level. Nitrate-N 5.8 mg/L	Witheridge

Investigatory Status
Nitrate-N results were below the action levels upon confirmation.

This site was also sampled four times during calendar year 2008 in coordination with Investigative Order R9-2006-076 to gain monitoring information for the upcoming nutrient TMDL associated with coastal lagoons. Detailed nutrient information about this site should be available in 2009.

B022	Dry Weather 2008	8/5/2008

Site Summary:

Site B022 is a 48-inch RCP built into the Buena Vista Creek channel wall east of the Thunder Drive Bridge. The outlet drains the residential areas north of Buena Vista Creek. Access to the site is from within Buena Vista Creek channel.

Investigatory Actions

<table>
<tr><th>Date</th><th>Action</th><th>Staff</th></tr>
<tr><td>8/5/2008</td><td>Initial investigation conducted. Field Screening and laboratory results showed exceedances for the following parameters:
<table>
<tr><td>Total Coliforms</td><td>300,000 MPN/100mL</td></tr>
<tr><td>Fecal Coliforms</td><td>23,000 MPN/100mL</td></tr>
<tr><td>Enterococcus</td><td>14,136 MPN/100mL</td></tr>
</table>
Several diapers were found at around the outfall during sampling.</td><td>Witheridge</td></tr>
<tr><td>8/13/2007</td><td>Follow-up investigation conducted. Fecal coliform and Enterococcus results were below the action levels, but total coliform results were at the action level which does qualify it as an exceedance:
<table>
<tr><td>Total Coliforms</td><td>50,000 MPN/100mL</td></tr>
<tr><td>Fecal Coliforms</td><td>3,500 MPN/100mL</td></tr>
<tr><td>Enterococcus</td><td>1,137 MPN/100mL</td></tr>
</table>
A thorough upstream investigation was conducted. The MS4 begins with overland flow north of the 78 at the intersection of Thunder Drive and Waring Road. This area was ponded. The main line manholes were opened, although technically lie within the City of Vista, but were too deep to sample. It appeared they contained ponded water with a lot of leaf debris. The first upstream sample was collected from a manhole northeast of the intersection of Vista Way and Thunder Drive (B022A):
<table>
<tr><td>Total Coliforms</td><td>22,000 MPN/100mL</td></tr>
<tr><td>Fecal Coliforms</td><td>13,000 MPN/100mL</td></tr>
<tr><td>Enterococcus</td><td>798 MPN/100mL</td></tr>
</table></td><td>Witheridge/ Sabelis</td></tr>
</table>

<table>
<tr>
<td></td>
<td>The next downstream manhole is located within the City of Oceanside at a tire store off of Plaza south of the 78 (B022C):
<table>
<tr><td>Total Coliforms</td><td>13,000 MPN/100mL</td></tr>
<tr><td>Fecal Coliforms</td><td>1,300 MPN/100mL</td></tr>
<tr><td>Enterococcus</td><td>323 MPN/100mL</td></tr>
</table>
Further downstream, and the next manhole upstream of the outfall, samples were collected from a manhole inside the condominium complex near the intersection of Thunder Drive and Tiburon (B022B):
<table>
<tr><td>Total Coliforms</td><td>7,000 MPN/100mL</td></tr>
<tr><td>Fecal Coliforms</td><td>700 MPN/100mL</td></tr>
<tr><td>Enterococcus</td><td>2,014 MPN/100mL</td></tr>
</table>
</td>
<td></td>
</tr>
</table>

Investigatory Status

Follow-up investigations did not find any point sources for bacterial exceedances. Only total coliform continued to exceed upon confirmation and all IC/ID results were below action levels. The runoff appears to be coming from commercial and residential flow north of the 78 in the area of Thunder Drive and Waring Road, however no excessive runoff was observed from point sources. Over-irrigation is likely the source as the ground near storm drains were wet.

Residential behavior in the condominium complex closest to the outfall may be the source of bacterial contamination, although no runoff was found. A trash can is located in the parking lot directly above the outfall, but plastic bags with diapers were found thrown into the concrete channel. Code enforcement officers have discussed the trash issue with the manager of the complex. They have recommended management move the trash bins. No littering has been witnessed by staff.

B023	Dry Weather 2008	8/14/2008

Site Summary:

Site B023 is a 36-inch RCP located west of the intersection of Lake Boulevard and Thunder Drive south at 3524 Lake Blvd. The outlet drains the residential areas south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
8/14/2008	Initial investigation conducted. Field screening results showed conductivity levels to be high: Orthophosphate: 2.05 mg/L MBAS: 1.0 mg/L	Witheridge
7/23/2007	Follow-up investigation conducted. Field screening showed orthophosphate and MBAS levels to be lower than the action level: Orthophosphate: 1.85 mg/L MBAS: 0.8 mg/L	Witheridge

Investigatory Status

Confirmation of initial results proved to be below action levels.

Previous investigations during the 2007 monitoring year showed that this runoff is from groundwater seepage upstream off of Mira Monte Drive.

B024	Dry Weather 2008	8/25/2008

Site Summary:

Site B024 is a 36-inch RCP located on the southwest corner of College Boulevard Bridge over Buena Vista Creek. The outlet drains the commercial and residential areas south on College Boulevard. Access to the site is from College Boulevard.

Investigatory Actions

Date	Action	Staff
8/25/2008	Initial investigation conducted. Field showed exceedances for the following parameters: Ammonia-N 1.0 mg/L	Witheridge
8/27/2008	Follow-up investigation showed that the field screening results were below the action level for ammonia: Ammonia-N 0.8 mg/L	Witheridge

Investigatory Status

Follow-up investigation showed ammonia levels to decrease below action level upon confirmation.

B030	Dry Weather 2008	9/3/2008

Site Summary:

Site B030 is an alternate site. It is a 36-inch RCP located within a sewer easement south of SR-78, west of AAA and north of Buena Vista Creek. The outlet drains the residential areas north of SR-78. Access to the site is from the sewer easement road.

Investigatory Actions

Date	Action	Staff
9/3/2008	Initial investigation conducted. Field showed exceedances for the following parameters: Ammonia-N: 1.0 mg/L Flow was estimated at 1gpm.	Witheridge
9/8/2008	Follow-up investigation was completed within two business days ("dark" Friday and weekend). Results showed that the field screening results continued to exceed the action level for ammonia: Ammonia-N: 1.0 mg/L Flow had decreased to approximately 0.25 gpm. An upstream investigation was initiated. The next manhole upstream was north of the 78 at the bus stop in front of AAA. The catch basin had a small amount of flow, but not enough to sample.	Witheridge

Investigatory Status

Follow-up investigation showed ammonia levels to continue above the action level but at a very low flow. The next upstream manhole did not have enough water to sample. There were leaves and trash in the catch basin that may contribute to the ammonia exceedance.

B033	Dry Weather 2008	8/21/2008

Site Summary:

Site B033 is a 42-inch RCP located north of SR-78 behind the Black Angus restaurant, north of Buena Vista Creek. The outlet drains the commercial areas north of SR-78 into a large catch basin with ponded water. The outfall that was sampled is the largest input to the basin. Access to the site is from SR-78.

Investigatory Actions

Date	Action	Staff
8/21/2008	Initial investigation conducted. Field screening showed an exceedance for the following parameter: Orthophosphate 2.25 mg/L	Witheridge
8/25/2008	Follow-up investigation was completed within two business days ("dark" Friday and weekend). Results showed that the field screening results continued to exceed the action level for orthophosphate: Orthophosphate 1.10 mg/L	Witheridge

Investigatory Status

Upon confirmation, orthophosphate levels were below the Dry Weather Monitoring action levels.

B104	Dry Weather 2008	8/18/2008

Site Summary:

Site B104 is a manhole on the southeast corner of South Coast Highway and Eaton Street. The outlet drains the commercial and residential areas on the east side of South Coast Highway. This site replaced B001 by moving it upstream approximately 230 yards out of tidal influence. Access to the site is from South Coast Highway.

Investigatory Actions

Date	Action	Staff
8/18/2008	Initial investigation conducted. The ponded water in the catch basin was sampled. Field screening showed an exceedance for the following parameter: Orthophosphate — 2.35 mg/L	Witheridge
8/19/2008	Follow-up investigation was completed within two business days. Results showed that the field screening results continued to exceed the action level for orthophosphate: Orthophosphate — 2.60 mg/L An upstream investigation was initiated; however there was only a trickle of water coming from the upstream box. There was not enough water to sample. An upstream manhole on Eaton street was investigated. The catch basin was wet, but no flowing water. Historical flows seem to be from landscaped areas and overland flow from homes. The next upstream manhole on the Coast Highway was investigated. There was evidence of overland flow from the commercial area, but there was not enough to track upstream.	Witheridge

Investigatory Status

Upon confirmation, orthophosphate levels from the ponded water in the catch basin continued to exceed action levels. There was no upstream flow to follow, however. The ponded water seems to be most likely from residential irrigation on Eaton Street. This is

being addressed by water conservation efforts throughout the City. These efforts include more face-to-face outreach by Clean Water Program Inspectors responding to reports of over-irrigation in residential neighborhoods. In addition to two new inspectors, the Water Utility Department has hired an outreach coordinator specifically for water conservation education. And, as mandated by the State, the City is preparing for the impending drought and has adopted a revised drought ordinance as of July 9, 2008.

Ponded water at B104 looking upstream.

L001	Dry Weather 2008	7/21/2008

Site Summary:

Site L001 is a 48-inch RCP located at the intersection of North Avenue and Vista Pacific Drive, north of Loma Alta Creek. The outlet drains the industrial areas south of North Avenue. Access to the site is via North Avenue.

Investigatory Actions

Date	Action	Staff
7/21/2008	Initial investigation conducted. Laboratory screening showed an exceedance for the following parameter: Total Coliforms: 280,000 MPN/100mL	Witheridge
7/29/2008	Follow-up investigation was completed within two business days of receipt of results. Results showed that the laboratory screening results were below the action level for total coliforms: Total Coliforms: 23,000 MPN/100mL An upstream investigation was initiated while the sampling team was onsite. Flow was coming from two directions; one from North Avenue and one from Vista Pacific. Both manholes were too deep to sample (greater than 25 feet).	Witheridge

Investigatory Status

Upon confirmation, total coliform results were below the action level.

L002	Dry Weather 2008	7/23/2008

Site Summary:

Site L002 is a 66-inch RCP located near North Avenue and Vista Pacific Drive, north of Loma Alta. It drains the industrial and commercial area to the north of the creek and east of North Avenue.

Follow-up Actions

Date	Action	Staff
7/23/2008	Initial investigation conducted. Field screening showed exceedances for the following parameters: Ammonia — Data Entry Error MBAS — Data Entry Error During the initial field screening, the flow rate increased while the sampling team was present. The increased flow pushed more turbid flow into the receiving water. The flow sampled was likely a mixture of ponded water from the catch basin and the runoff coming from upstream. Although ammonia and MBAS were recorded on paper as an exceedance, the true results were lost from the computer database either through user or computer error. An upstream investigation was initiated immediately to find the source of the heavier flow. Brown, turbid water was traced to a drainage ditch next to the Sprinter train tracks. Access to the drainage ditch was through the North County Transit District right-of-way, and therefore was not able to be followed. A Code Enforcement Officer was called to assist in the investigation. The flow was determined to be from somewhere between Temple Heights Road to the west to east of the City Operations Center. The area was thoroughly searched, but as the flow dried up, no evidence of discharge was found. Hobie Company, a manufacturer of kayaks and sailboats, operates on next to the City Operations Center. Code Enforcement completed an inspection of their operation, but no runoff was found. The flow stopped while the investigation continued and made finding the source difficult.	Witheridge/ Gremmels

7/24/08	A follow-up investigation for ammonia and MBAS at L002 showed results below the action levels: Ammonia: 0.60 mg/L MBAS: 0.75 mg/L	Witheridge

Investigatory Status
It appears that this was an illicit discharge, but the source was not identified. In addition to the other commercial buildings in the area, it appears that the street sweeper washout area within the City Operations Center may be the culprit. The area is bermed and drains to the sewer, but there is a possibility that the area may have clogged and/or overflowed. A municipal inspection of this site was performed on April 29, 2008 and this area was not identified as a problem. Although this was not specifically identified as the source, to be certain that this is not a problem in the future, municipal trainings will cover the potential for a discharge at this area and ensure that City staff know how to avoid it.

Attachments

7/23/2008 - Flow at Temple Heights and the Sprinter tracks.

7/24/2008 - Example of street sweeper washout discharge into the City sewer system. This was taken the next day and no water was overflowing to the storm drain.

L010	Dry Weather 2008	7/28/2008

Site Summary:

Site L010 are two 36-inch RCP located west of College Boulevard near the railroad tracks. The outlet drains the residential areas on the hillside south of Loma Alta Creek adjacent to College Boulevard. Access to the site is from College Boulevard.

Follow-up Actions

Date	Action		Staff
7/28/2008	Initial investigation conducted. Field screening showed exceedances for the following parameters:		Witheridge
	MBAS	1.00 mg/L	
7/29/08	A follow-up investigation for MBAS resulted in levels below the action levels:		Witheridge
	MBAS	0.75 mg/L	

Investigatory Status

Upon confirmation, MBAS levels were below the Dry Weather Monitoring action levels.

L019	Dry Weather 2008	7/21/2008

Site Summary:

Site L19 is a 48-inch RCP, located south of the Corporate Centre and Oceanside Boulevard intersection, north of Loma Alta Creek. The outlet drains the commercial and open space areas located on the hill north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard

Investigatory Actions

Date	Action	Staff
7/21/2008	Initial investigation conducted. Field and laboratory results of the ponded water showed exceedances for the following parameters: pH: 9.32 pH units Total Coliforms: 50,000 MPN/100mL	Witheridge
7/23/2008	Follow-up investigation conducted. Field screening result for pH continued to exceed the action level: pH: 9.07 pH units An upstream investigation was initiated. The manhole on the northeast side of Oceanside Blvd and Corporate Center way was visited (L019A). The catch basin was wet, but there was no flow or ponded water. The manhole on the northwest side of Oceanside Blvd and Corporate Center Way was visited (L019B). There was ponded water approximately five inches deep. The field screening result for pH was below the action level: pH: 8.25 pH units	Witheridge
7/29/2008	Follow-up investigation for bacteria was conducted. Laboratory results were below the bacteria action levels: Total Coliforms: 8,000 MPN/100mL An upstream sample was also collected on the northwest corner at the intersection of Corporate Center and Oceanside Blvd (L019B). The bacteria levels here exceeded the action levels: Total Coliforms: >1,600,000 MPN/100mL Fecal Coliforms: 1,400 MPN/100mL The catch basin was also observed to have grass clippings,	Witheridge

	trash and sediment in it. These floatables likely provided the reservoir for total coliforms to grow.	

Investigation Status

The ponded water at this site was collected and sampled. Generally, the water has a slight trickle over the banks to the receiving water of Loma Alta. The pH level continued to exceed the action level upon confirmation but was in the acceptable range upstream. The source remains unknown at this time.

Total coliforms were below the action level upon confirmation. However, an upstream sample was taken from the ponded water which did exceed the action levels. Grass clippings, trash and sediment were observed in the ponded water and bacteria growing on these substances may have caused the IC/ID exceedance, as well as the initial exceedance.

Attachments

L019B – ponded water in catch basin.

L034	Dry Weather 2008	8/11/2008

Site Summary:

Site L034 is an alternate site. It is a 24-inch RCP located between Waste Management and a self storage lot south of Oceanside Boulevard.

Investigatory Actions

Date	Action	Staff
8/11/2008	Initial investigation conducted. Field and laboratory results of the ponded water showed exceedances for the following parameters: Ammonia: 1.0 mg/L MBAS: 1.75 mg/L	Witheridge
8/13/2008	Follow-up investigation conducted. Field screening result for ammonia continued to exceed the action level, while MBAS was below the action level: Ammonia: 3.0 mg/L MBAS: 0.85 mg/L An upstream investigation was initiated. The grate upstream had approximately a half inch of water in it, but was unable to be sampled. The next manhole upstream, across Oceanside Blvd, was dry. The investigation continued up Canyon toward several apartment complexes and single family homes, but no runoff was visible.	Witheridge

Investigation Status

The ponded water at this site was collected and sampled. Upstream samples were unable to be collected and no runoff was apparent. The likely source of flow is residential irrigation. This small flow then ponds and when leaves and grass clippings decay, ammonia may rise. With the additional push for water conservation in light of changing water availability, several new avenues are being implemented to reach the general public about water conservation which will in turn improve water quality. These efforts include more face-to-face outreach by Clean Water Program Inspectors responding to reports of over-irrigation in residential neighborhoods. In addition to two new inspectors, the Water Utility Department has hired an outreach coordinator specifically for water conservation education. And, as mandated by the State, the City is preparing for the impending drought and has adopted a revised drought ordinance as of July 9, 2008.

L054	Dry Weather 2008	8/5/2008

Site Summary:

Site L054 is a 16-inch RCP outlet on the south side of Loma Alta Creek west of I-5. Access to the outfall is from Cavalier Mobile Estates through the channel. The outlet drains the residential area to the south and Marshall Park.

Investigatory Actions

Date	Action	Staff
8/5/2008	Initial investigation conducted. Field and laboratory screening of the flowing water showed the following exceedances: Nitrate-N: 16.6 mg/L Fecal Coliforms: 23,000 MPN/100mL	Witheridge
8/6/2008	Follow-up investigation conducted for nitrate. Field screening was conducted and showed nitrate levels continued to exceed the acceptable limits: Nitrate-N: 12.9 mg/L An upstream investigation was conducted and the flow tracked to an upstream inlet at the northwest corner of Port Marshall Park. Two main flows were found; one from a small PVC pipe coming from the east (L054A) and the other from an outlet of the MS4 system upstream (L054B). L054A is connected to a groundwater pump on the Cavalier Mobile Home Park property. This area had historical flooding problems, so the pump was installed approximately nine years ago. Field screening for nitrate was conducted here: Nitrate-N at L054A: 9.14 mg/L L054B is an outfall from the MS4 from the neighboring community of Marshall and California Streets. Upon closer inspection, the outfall was ponded, but flow was coming from a crack in the concrete to the left of the outfall pipe. This flow was sampled, however the nitrate data was not saved in the database. While the result did not exceed the action level, the specific level is not available.	Witheridge
8/13/2008	Follow-up investigation conducted for fecal coliforms. Laboratory screening showed the fecal coliform result to	Witheridge

	be below the action level: Fecal Coliforms: 5,000 MPN/100mL Upstream samples were collected from the two main flows and analyzed on the same day. Both fecal coliform results were well below the action level: Fecal Coliforms at L054A: <20 MPN/100mL Fecal Coliforms at L054B: 80 MPN/100mL	

Investigatory Status

Flow was tracked upstream from Loma Alta Creek to an inlet in the northwestern corner of Marshall Park. Flow from a sump pump in Cavalier Mobile Estate was found to the main source of flow and nitrate. This pump was investigated during the 2007 monitoring year. Cavalier Mobile Estates constructed a set of three sump pumps to continuously pump groundwater to the storm drain system in approximately 1999 to avoid flooding. It was hypothesized that a combination of natural seepage (from being built on a wetland) and over-irrigation from the residential area and park to the south caused continuous flooding of the mobile home park. Further sampling of the groundwater pump flow was conducted through May 2007. The park was not fertilized after October to see if a reduction in nitrate levels occurred. Watering of the park was also decreased. Results of the field testing are shown below in Table 1 in Attachments below.

Results did not seem to be affected by the lack of fertilizer or decrease of irrigation. Flows seemed to increase with rain events. However, Public Works will continue to conserve water for irrigation purposes. Beginning in October 2007, the Water Utilities Department requested that all City managed areas reduce their water use by 20%. Public Works achieved and surpassed this request by getting up to a 50% reduction in water use during the winter. In addition, the Water Utilities Department is working with the Public Works Department to find grants to install smart controller irrigation systems on City property.

This site was also sampled four times during calendar year 2008 in coordination with Investigative Order R9-2006-076 to gain monitoring information for the upcoming nutrient TMDL associated with coastal lagoons. Detailed nutrient information about this site should be available in 2009.

Attachments

L054B – Main flow coming from opening to the left of the outlet.

L054A - Pump outfall is small white PVC pipe which flows to drain.

Table 1. Monitoring Results from Groundwater Pump in Cavalier Mobile Estates.

Date	Time	Nitrate-N (mg/L)	Flow (gpm)	pH	Water Temp (C)	Turb (NTU)	Cond (mS/cm)	DO (mg/L)	Total Chlorine (ppm)□	Comments
9/12/07	14:00	**10.6**	N/S	6.96	23.6	0	2.72	5.84	N/S	
9/17/07	14:00	**11.5**	6.0	N/S	N/S	N/S	N/S	N/S	N/S	
9/25/07		Water shut off in Marshall Park								
10/1/07	7:00	**10.6**	5.7	6.74	20.4	0	2.76	6.19	N/S	
10/4/07	13:00	8.9	5.9	N/S	N/S	N/S	N/S	N/S	N/S	
10/4/07		Fertilizer used on Park								
10/5/07		Water turned back on								
10/12/07	11:15	**10.8**	5.5	6.89	21.1	0	2.74	5.99	1	
10/30/07	16:15	**10.3**	6.3	6.98	21.4	0	2.77	6.32	0.5	
11/13/07	14:43	9.4	6.1	7.2	21.7	1	2.74	6.09	0.5	
11/26/07	12:45	9.8	5.4	7.24	20.8	0	2.73	6.07	0.5	
12/13/07	13:35	9.0	8.9	6.84	19.3	0	2.76	6.89	N/S	
12/18/07	9:55	**10.9**	8.6	7.14	18.2	0	2.68	6.12	0.5	
1/17/08	16:05	**12.1**	8.3	7.22	18.3	0	2.74	7.14	0.5	rain previous couple of weeks
1/31/08	13:50	**11.5**	9.4	7.33	18.4	0	2.75	6.6	0.5	rain previous couple of weeks
2/11/08	15:07	**14.4**	8.6	7.4	18.9	0	2.75	6.57	0.5	
2/28/08	13:10	**10.8**	8.1	7.26	18.7	0	2.74	11.61	1	rain 96 hours prior
3/10/08	14:02	**10.2**	6.8	7.26	20	0	2.74	13.71	N/S	
3/24/08	12:40	**12.2**	8.5	7.3	20.7	4	2.69	7.03	0.5	
4/1/08	14:50	9.1	8.2	7.23	19.6	0	2.78	6.74	0.5	
4/14/08	12:45	9.6	7.6	7.25	21	0	2.69	5.11	0.5	
5/12/08	15:12	**15.0**	N/S	7.22	20.9	1	2.69	5.91	N/S	
5/27/08	9:35	9.8	6.0	7.03	21	0	2.66	5.8	1	rain 4 days prior

□Total Chlorine approximated by field test strip.

S006	Dry Weather 2008	7/1/08

Site Summary:

Site S006 is a 36-inch corrugated metal pipe (CMP) located under I-5. S006 drains the interstate and the residential community to the northeast of the San Luis Rey River and I-5. The site was moved down stream because the original outfall pipe was inaccessible.

Investigatory Actions

Date	Action	Staff
7/1/2008	Initial investigation conducted. Field screening showed the following exceedance for orthophosphate: Orthophosphate-P: 2.00 mg/L	Witheridge
7/2/2008	Follow-up investigation conducted. Field screening results continued to exceed action levels for orthophosphate: Orthophosphate-P: 2.00 mg/L Upstream investigation was initiated. The next upstream inlet was at the west end of San Luis Rey Drive. There was evidence of overland run off into the Caltrans drain, but no flow.	Witheridge
7/21/2008	Initial laboratory bacteria sample was collected. Results showed the following exceedance for total coliform: Total Coliform: 50,000 MPN/100mL	Witheridge
7/29/2008	Follow-up investigation conducted. Laboratory results continued to exceed the action level for total coliforms: Total Coliform: 130,000 MPN/100mL Fecal coliform results were well below their respective action level at 230 MPN/100mL. An upstream investigation was initiated. Again, the inlet at the west end of San Luis Rey Drive was dry.	Witheridge

Investigatory Status

Both orthophosphate and total coliform results exceeded their respective action levels upon confirmation. An upstream investigation was initiated on two separate events. Both follow-up events showed very low flows (less than one gpm). Residential runoff is likely the source from the Capistrano neighborhood which drains through a CalTrans drain.

Residential over-irrigation is being addressed through several avenues being implemented to reach the general public about water conservation which will in turn improve water quality. These efforts include more face-to-face outreach by Clean Water Program Inspectors responding to reports of over-irrigation in residential neighborhoods. In addition to two new inspectors, the Water Utility Department has hired an outreach coordinator specifically for water conservation education. And, as mandated by the State, the City is preparing for the impending drought and has adopted a revised drought ordinance as of July 9, 2008.

S032	Dry Weather 2008	7/15/08

Site Summary:

Site S032 is a 36-inch RCP with a flap gate installed and is located on the south side of the San Luis Rey River. S032 outlet conveys flows from the residential, commercial, and open space areas located on the south side of SR-76.

Investigatory Actions

Date	Action	Staff
7/15/2008	Initial investigation conducted. Field and laboratory screening of the ponded water showed the following exceedances for ammonia and orthophosphate: Ammonia-N: 1.0 mg/L Orthophosphate-P: >8.0 mg/L	Witheridge
7/17/2008	Follow-up investigation conducted. Field screening was conducted and ammonia and orthophosphate results continued to be above the action levels: Ammonia-N: 1.0 mg/L Orthophosphate-P: 5.95 mg/L Upstream investigation initiated. Dry up stream at inlet.	Witheridge

Investigatory Status

Initial screening of S032 resulted in an action level exceedance of ammonia and orthophosphate. The investigation continued upstream to the other side of the bike path. The area was dry with no evidence of the source of the flow.

S075	Dry Weather 2008	7/15/2008

Site Summary:

Site S075 is a 24-inch RCP in a headwall located on the north side of the San Luis Rey River. Site S075 conveys dry weather flows from the newer residential developments north of the San Luis Rey River.

Investigatory Actions

Date	Action	Staff
7/15/2008	Initial investigation conducted. Field and laboratory screening showed the following exceedance for orthophosphate: Orthophosphate-P: 2..05 mg/L	Witheridge
7/17/2008	Follow-up investigation conducted. Field screening was conducted and orthophosphate results continued to be above the action level: Orthophosphate-P: 2.00 mg/L	Witheridge
7/17/2008	Upstream investigation was initiated. Two catch basins were identified at the intersection of Toopal and Big Sky. Three overland flows were investigated. S075A was the flow coming from the west corner of the northern catch basin at Toopal and Big Sky. Orthophosphate-P at S075A: 0.80 mg/L S075B was the flow coming from the east corner of the southern catch basin at Toopal and Big Sky. Orthophosphate-P at S075B: 0.70 mg/L S075C was the flow coming from the west corner of the southern catch basin at Toopal and Big Sky. Orthophosphate-P at S075C: 0.75 mg/L	Witheridge

Investigatory Status

Upon confirmation, orthophosphate results continued to exceed the action level. An upstream investigation was performed in the residential area to the north of the outfall. All of the flows were coming from area drains from private residences. These area drains capture the water from backyards which then drain to the curbs on the street. Clean Water Program inspectors went through the neighborhood on July 18, 2008 and spoke with homeowners and left door hangers identifying the problem and giving them recommendations on how to reduce their discharge. Not unusual, one home was found vacant and was owned by the bank. Contractors are being used to manage the landscapes of these homes.

S085	Dry Weather 2008	7/23/2008

Site Summary:

Site S085 is an alternate site. It includes two 24-inch RCPs located at North Santa Fe Avenue and Champlain Street. The outlet drains into a concrete channel south of the San Luis Rey River. S085 conveys the dry weather flows from the residential area to the south of North Santa Fe Avenue. Access to the site is from North Santa Fe Avenue.

Investigatory Actions

Date	Action	Staff
7/23/2008	Initial investigation conducted. Field screening showed the following exceedances: Ammonia 3.0 mg/L Orthophosphate 4.65 mg/L MBAS 1.0 mg/L	Witheridge
7/24/2008	Follow-up investigation conducted. Field screening was conducted and ammonia and orthophosphate results continued to be above the action level, while MBAS results were below the action level: Ammonia 1.0 mg/L Orthophosphate 2.70 mg/L MBAS 0.65 mg/L There was more ponded water on 7/24/08 than the day prior. An upstream investigation was initiated. A small flow of water was found coming from a broken sprinkler at 1322 Henshaw. Clean Water Program staff left a door hanger that requested the resident fix the broken sprinkler.	Witheridge

Investigatory Status

Upon confirmation, ammonia and orthophosphate results continued to exceed the action levels. An upstream investigation was performed and a broken sprinkler system was found at a private residence. Clean Water Program staff left a door hanger informing the resident of the problem. A phone call was received the same day that indicated the resident had fixed the irrigation system.

S102	Dry Weather 2008	6/23/2008

Site Summary:

Site S102 is located north of SR-76 and south of the San Luis Rey River. It is a 24-inch RCP that drains a residential area immediately east.

Investigatory Actions

Date	Action	Staff
6/23/2008	Initial investigation conducted. Field screening showed the following exceedance for ammonia: Ammonia-N: 1.0 mg/L	Witheridge
6/25/2008	Follow-up investigation conducted. Field screening was conducted and ammonia results were below the action level: Ammonia-N: 0.6 mg/L	Witheridge

Investigatory Status

Initial screening of S102 resulted in an action level exceedance of ammonia. The follow-up visit found decreased ammonia results below the action level.

S103	Dry Weather 2008	6/23/2008

Site Summary:

Site S103 is a concrete outfall located south of the San Luis Rey River. The outlet drains the residential and park areas south of the site outlet in the neighborhood to the south of the site.

Investigatory Actions

Date	Action	Staff
6/23/2008	Initial investigation conducted. Field screening showed the following exceedance for pH: pH 9.17	Witheridge
6/25/2008	Follow-up investigation conducted. Field screening was conducted and pH was below the action level: pH 7.7	Witheridge

Investigatory Status

Initial screening of S103 resulted in an action level exceedance of pH. The follow-up visit found that the pH had decreased below the action level.

S106	Dry Weather 2008	7/1/08

Site Summary:

Site S106 includes four 36-inch plastic pipes at the intersection of North River Road and Sleeping Indian Road on the north side of the San Luis Rey River. The outlet drains an agricultural area immediately north of the site. Access to the site is from North River Road.

Investigatory Actions

Date	Action	Staff
7/1/2008	Initial investigation conducted. Field Screening and laboratory results showed an exceedance for nitrate and MBAS: MBAS: 1.25 mg/L Nitrate-N: 53.0 mg/L	Witheridge
7/2/2008	Follow-up investigation conducted. Results show that MBAS was below the action levels but nitrate continued to exceed: MBAS: 0.85 mg/L Nitrate-N: >68.0 mg/L	Witheridge

Investigation Status

Nitrate loading from the agricultural area around Sleeping Indian has been an on-going issue. Clean Water Program staff began special investigations in the summer of 2006 to assess agricultural contribution to nitrate exceedance and began working with the contributing agricultural parties to voluntarily implement appropriate BMP's.

An investigation was completed during the 2008 monitoring year on May 21 specifically investigating the Sleeping Indian Road drainage area for nitrate exceedances and sources. The investigation identified that the most upstream source of the flow is a groundwater spring north of Grove View (SI5) that has a nitrate result below the dry weather monitoring action level. On the downstream side of the property at the corner of Las Tunas and Sleeping Indian (SI6), the flow is higher and the nitrate levels exceed the action level, but no point source was found. It seems that groundwater seepage is the source of this water high in nitrates and therefore the real source of the nitrate will be difficult to pinpoint. The table and map below provide the results of the investigation.

Table 1. Sleeping Indian Road Nitrate Investigation May 21, 2008.

Downstream→

SiteID	Description	Lat	Long	Date	Time	Nitrate as N (mg/L)
SI7	S106	33.26000	-117.26432	05/21/08	8:55	>81
SI1	Upstream of Nursery	33.26335	-117.26355	05/21/08	7:40	>81
SI2	At 475 & 525 Sleeping Indian Rd.	33.26499	-117.26295	05/21/08	7:50	58
SI3	Northern Trib from Singh Farm	33.26723	-117.26241	05/21/08	8:00	41
SI4	Upstream of Singh Trib	33.26730	-117.26287	05/21/08	8:10	28
SI6	Flow crosses Sleeping Indian	33.26910	-117.26317	05/21/08	8:45	23
SI5	Flow crosses Las Tunas/Grove View	33.27106	-117.26333	05/21/08	8:23	<2

While the majority of the agriculture and nursery facilities in the area are open to City inspections and recommendations, during the dry season, there is little surface water runoff to manage. The majority of water in this particular drainage area is groundwater seepage. Water conservation efforts may assist as well as assistance through the U.S. Department of Agriculture – Natural Resource Conservation District. A mandatory 30% decrease in water usage at agriculture facilities was enacted. The City will continue to maintain a good working relationship with these facilities and complete inspections and provide education on BMPs and water conservation.

SI5

SI4

SI6

SI2

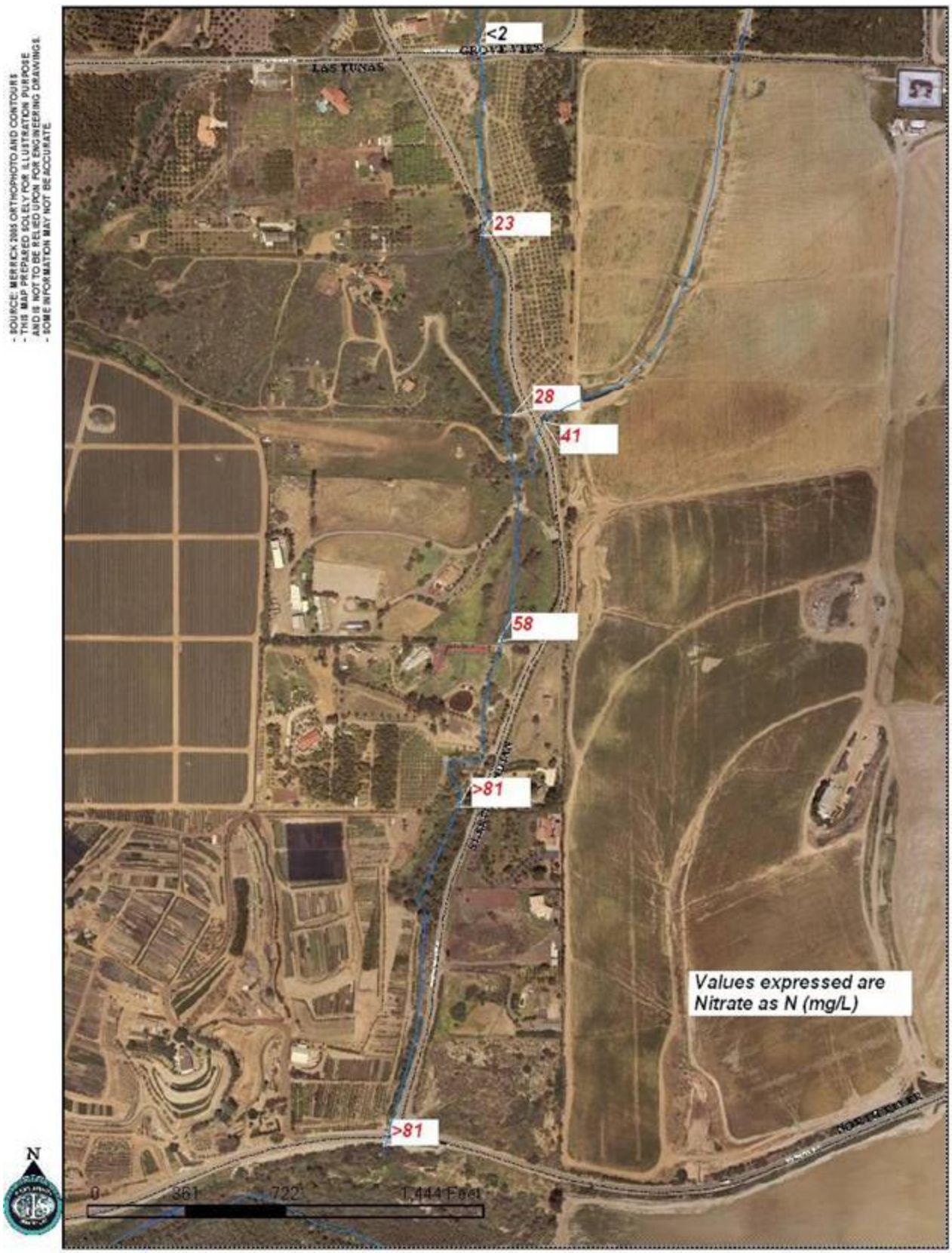

Sleeping Indian Road Nitrate Study May 21, 2008

S109	Dry Weather 2008	8/7/2008

Site Summary:

Site S109 is an 18-inch RCP located on the south side of the San Luis Rey River. The site conveys the runoff from the residential area immediately south of the outlet.

Investigatory Actions

Date	Action	Staff
8/7/2008	Initial investigation conducted from the ponded water. Field Screening results showed exceedances for the following parameters: Ammonia-N: 1.5 mg/L Orthophosphate: 3.70 mg/L	Witheridge
8/11/2008	Follow-up investigation conducted. The outfall was dry with no water to be sampled.	Witheridge

Investigation Status

Upon confirmation, the outfall at S109 was dry. While a formal investigation was not required, a drive through the upstream was area completed. The upstream investigation indicated the original ponded water was likely runoff from residential over irrigation.

S110	Dry Weather 2008	6/16/2008

Site Summary:

Site S110 is located on the north side of the San Luis Rey River. S110 is a 30-inch RCP with a flap gate installed. Access to Site S110 is from Douglas Drive to the access road on the north side of the River

Investigatory Actions

Date	Action	Staff
6/16/2008	Initial investigation conducted. Field Screening results showed exceedances for pH: pH: 10.11 The sample was taken at 2:00pm on a very hot day (water temperature = 32.09 C)	Witheridge
6/18/2008	Follow up investigation conducted; field screening results showed pH within acceptable parameters. pH: 9.0	Witheridge

Investigatory Status

Upon confirmation, the pH result at S110 was within an acceptable range for pH. Historically, this site has repeatedly experienced high pH readings. The cause is unknown, but may be affected by biological processes of algae during the day or perhaps leaching from the basic components of the concrete.

S111	Dry Weather 2008	7/15/2008

Site Summary:

Site S111 is a concrete channel adjacent to Fireside Park, east of the San Luis Rey River. The channel drains the residential area east of the site.

Investigatory Actions

Date	Action	Staff
7/15/2008	Initial investigation conducted. Field Screening results showed an exceedance for MBAS: MBAS: 1.5 mg/L	Witheridge
7/17/2008	Follow-up investigation conducted. MBAS was under the action level: MBAS: 0.75 mg/L	Witheridge

Investigation Status

Upon confirmation, the MBAS result was below the Dry Weather Monitoring action level.

S115	Dry Weather 2008	6/30/2008

Site Summary:
Site S115 is an open concrete channel between Mission Avenue and SR-76 west of El Camino Real. The site conveys flows from the commercial area to the east along Mission Avenue towards Douglas Drive. Access to the site is from Mission Avenue.

Investigatory Actions

Date	Action	Staff
6/30/2008	Initial investigation conducted. Field screening showed the following exceedance for pH: pH 9.79	Witheridge
7/2/2008	Follow-up investigation conducted. Field screening was conducted and pH results were below the action level: pH 8.47	Witheridge

Investigatory Status

Upon confirmation, the pH result was within an acceptable range for the Dry Weather Monitoring action levels.

S116	Dry Weather 2008	6/16/2008

Site Summary:
Site S116 is located off of North River Road across from Del Rio Elementary School. The outfall conveys flows from the school and the residential area north of North River Road. It consists of two six-foot by six-foot boxes. Access to the site is from North River Road. This site replaced the historically dry S052 sampling site.

Investigatory Actions

Date	Action	Staff
6/16/2008	Initial investigation conducted. Field screening showed the following exceedance for orthophosphate and MBAS: Orthophosphate: 2.45 mg/L MBAS: 1.0 mg/L	Witheridge
6/18/2008	Follow-up investigation conducted. No water was present.	Witheridge

Investigatory Status

On June 16, 2008, S116 was visited and field screening results exceeded the action levels for orthophosphate and MBAS. There was very low flow estimated at 0.4 gpm during the initial screening. The site was again visited on June 18, 2008 for confirmation sampling. There was no water present.

S119	Dry Weather 2008	6/19/2008

Site Summary:
Site S119 is an alternate site. It is an open concrete channel located off of Douglas Drive at the municipal golf course. The site conveys flows from the residential areas south and east, as well as the golf course. Access to the site is from Douglas Drive.

Investigatory Actions

Date	Action	Staff
6/19/2008	Initial investigation conducted. Field screening showed the following exceedance for MBAS: MBAS: 1.0 mg/L	Witheridge
6/23/2008	Follow-up investigation conducted within two business days (weekend). MBAS result was below the action level: MBAS: 0.75 mg/L	Witheridge

Investigatory Status

Upon confirmation, the MBAS result was below the action level. Of note, there was considerably less water present the second day visited. The initial flow appeared to be from irrigation of the municipal golf course. The driving range area just underwent a remodel and the sprinklers were running longer to get grass growing. Clean Water Program staff spoke with the grounds crew on June 19, 2008 and requested a thorough check of the irrigation system with respect to broken sprinkler heads and timer settings.

Attachments

S119 on 6/23/2008.

S120	Dry Weather 2008	8/18/2008

Site Summary:
Site S120 is an alternate site. It is a 36-inch RCP outfall at the east end of Jeffries Ranch Road. It conveys flows from the residential area west of the outfall. Access to the site is from Jeffries Ranch Road.

Investigatory Actions

Date	Action	Staff
8/18/2008	Initial investigation conducted. Field screening showed the following exceedance for orthophosphate: Orthophosphate: 2.10 mg/L Laboratory samples were also collected, however, to ensure proper bacteria holding times, the site was revisited in the afternoon to collect the microbiology samples. The site was dry upon arrival, so the bacteria samples were collected on 8/25/2008.	Witheridge
8/19/2008	Follow-up investigation conducted. The orthophosphate result continued to exceed the action level: Orthophosphate: 2.20 mg/L An upstream investigation was initiated. Catch basins were wet, but had very little flow. A small amount of overland flow was identified at the southwest corner of Jefferies Ranch Road and Del Mar Drive (S120B): Orthophosphate: >8 mg/L This flow was traced upstream to two residential area drains with flowing water and visible algae. The first drain at 1617 Del Mar Drive (S120C) appeared to be contributing the most orthophosphate: Orthophosphate: >8 mg/L The next residential area drain from 1627 Del Mar Drive (S120D) was also exceeding action levels: Orthophosphate: 4.30 mg/L	Witheridge
8/25/2008	Initial investigation conducted for bacteria. Laboratory screening showed the following exceedance for total coliforms: Total Coliforms: 240,000 MPN/100mL	Witheridge
9/3/2008	A follow-up investigation was conducted. Total coliform	Witheridge

	results continued to exceed action levels: Total Coliforms: 110,000 MPN/100mL An upstream investigation was initiated. Flow was again coming from the southwest corner of Jeffries Ranch Road and Del Mar Drive. A sample was taken of overland flow entering the catch basin (S120A): Total Coliforms: 70,000 MPN/100mL The overland flow was coming from the same two residential area drains but was not individually sampled.	

Investigatory Status

Upon confirmation, the orthophosphate and total coliforms continued to exceed Dry Weather Monitoring action levels. The flow was traced upstream to two residential area drains. On the first investigation, door hangers were placed on the door with an explanation of findings and more facts about water conservation. In addition, Clean Water Program Inspectors were asked to attempt to speak with the residents and provide further suggestions. These visits were made on July 18, 2008.

Attachments

S120A

S120C

S120B

Camp Pendleton	Non-Dry Weather IC/ID 2007-2008	Ongoing

Site Summary:

Investigatory Actions

Date	Action	Staff
11/30/2007 12/3/2007 12/4/2007 12/7/2007 12/27/2007 1/5/2008- 1/7/2008 1/28/2008 1/29/2008 2/22/2008 2/25/2008	Discharge from Camp Pendleton into Oceanside Harbor at two outfalls: 1) In front of Harbor Administration Building and 2) at the corner of A and Z docks. All releases were photo documented. Contact with Camp Pendleton was made, but the releases continued. Referred to Regional Board.	Quan/ Balch/ Lahsaie/ Ericson
12/4/2007	Contact from Regional Water Quality Control Board to Camp Pendleton representatives.	Clemente
2/7/2008	Release of a few 1000 gallons of liquid with a pH of 11 to North Terrace Elementary School from Camp Pendleton. A large containment basin had been breached at a construction site adjacent to the school and the wash water was flowing into school property at 5 gpm. The flow was contained and Camp Pendleton's contractor hired NRC to clean up the spill.	Lahsaie/ Ericson
2/12/2008	Referred to Regional Water Quality Control Board.	

Investigatory Status

Camp Pendleton received a Notice of Violation for construction related BMP failures at the Del Mar North-Del Mar Housing project.

North Coast Village	Non-Dry Weather IC/ID 2007-2008	October 2007

Site Summary:

North Coast Village is a condominium complex located on the beach on the south side of the San Luis Rey River.

Investigatory Actions

Date	Action	Staff
10/2008	Drain on north east corner of property discharging water. Aegea HOA management company to resolve issue.	Lahsaie
10/3/2008	Letter to Clean Water Program Coordinator describing action. A plumbing company was hired to clear drains.	Lahsaie

Investigatory Status

Additional investigation completed and discharge was likely coming from construction on the roof remodel. The discharge was stopped.

Vista Unified School District	Non-Dry Weather IC/ID 2007-2008	11/21/2007

Site Summary:

Vista Unified School District is building a new magnet school near the intersection of Melrose and SR 76.

Investigatory Actions

Date	Action	Staff
11/21/2007	It was brought to Clean Water Program staff attention that the construction site of the Vista Magnet High School had large amount of rock and dirt on the property. With the impending storm season, the Clean Water Program Coordinator and two Engineering Inspectors conducted a site visit.	Lahsaie/ S. Kemp/ K. Kaimuloa
11/26/2007	Clean Water Program Coordinator, the Lead Engineering Inspector, and two Code Enforcement Officers met with School District Representatives and their contractor at the construction site.	Lahsaie/ Kemp/ Ericson/ Gremmels
11/28/2008	Clean Water Program Coordinator sent summary site visit and list of action items to School District Representative.	Lahsaie
12/14/2008	Response from School District Representative listing measures that had already been taken.	

Investigatory Status

While the City does not have direct enforcement authority of the school district, the City is required to inspect all construction activities in its jurisdiction that could have a potential to impact the city's surface and groundwater quality. The City continued to work with Vista Unified School District to eliminate the potential for discharges during construction.

Monterey Bay Canners	Non-Dry Weather IC/ID 2007-2008	2/11/08

Site Summary:

Monterey Bay Canners Restaurant is located in Oceanside Harbor between K and Y Dock. There are two storm drain outlets near the restaurant.

Investigatory Actions

Date	Action	Staff
2/11/2008	During Coastal Storm Drain Monitoring, runoff and wet pavement noticed at Monterey Bay Canners trash area. Evidence of runoff going into the storm drain, although at the time of the visit, runoff was ponded just before the storm drain. City staff talked to Assistant Manager on duty and discussed improved practices for trash area.	Witheridge
4/1/2008	During Coastal Storm Drain Monitoring, runoff seen coming from trash area and again ponded at storm drain. Referred to Code Enforcement.	Witheridge
4/2/2008	Code Enforcement talked with Manager of Monterey Bay Canners Restaurant. Found leaking water pipe on roof. Problem was fixed immediately.	Gremmels

Investigatory Status

Code Enforcement officer spoke with manager and problem was fixed. This site is monitored regularly as part of the Coastal Storm Drain Program and no problems have occurred since.

Falling Leaf	Non-Dry Weather IC/ID 2007-2008	2/13/2008

Site Summary:

2338 Falling Leaf. Private residence with backyard backing up to a residential property located in the County unincorporated area with a septic system. Retaining wall on back side of slope constantly wet.

Investigatory Actions

Date	Action	Staff
2/12/2008	Initial investigation conducted in response to resident complaint. Possible septic failure at the top of the hill on County property.	Witheridge/ Lahsaie
2/13/2008	Follow-up investigation conducted. Samples collected for microbiology analysis and field test kit used for ammonia and nitrate measurements. See results below.	Witheridge/ Lahsaie

Investigatory Status

Investigation was conducted, but bacteria levels did not indicate a bacterial release:

Date	Time	Site ID	Location	Flow (gpm)	NO3-N[1] (mg/L)	NH4[2] (mg/L)	Total Coliform[3] (MPN/ 100mL)	E.coli[3] (MPN/ 100mL)	Entero[3] (MPN/ 100mL)
2/13/08	1405	FL1	Outlet onto street at 2336	0.7	17.3	0.6	1730	10	41
2/13/08	1420	FL2	Front yard of 2336	0.18	18	0.6	364	<10	10
2/13/08	1425	FL3	West side of backyard 2336	Ponded	N/S	N/S	5490	10	63

[1] CHEMetrics Field Test Kit for Nitrate as N - Cadmium Reduction Method

[2] CHEMetrics Field Test Kit for Ammonia as N - Direct Nesslerization Method

[3] Analyzed by City of Oceanside Water Utilities Laboratory

This property was also investigated in 2003 for similar concerns. Results were inconclusive then, as well. Results were sent to the resident and it was recommended that they contact the County for further issues, since the City of Oceanside does not have jurisdiction over the properties located in the County unincorporated areas.

Genentech	Non-Dry Weather IC/ID 2007-2008	2/17/2008

Site Summary:

Genentech is a large biotech company located in the Loma Alta watershed.

Investigatory Actions

Date	Action	Staff
2/17/2008	Release of an estimated 5,000 gallons of process water was discharged to the storm drain on Genentech property due to equipment malfunction. The water consisted of softened city water and a blowdown from Genentech's high purity water-distillation process. The water was free of pollutants. The release was stopped in approximately 50 minutes.	
2/20/2008	Release reported to Clean Water Program.	Lahsaie
2/22/2008	Genentech took a proactive approach and sent a letter to the Regional Water Quality Control Board and the City of Oceanside detailing the events of the release and correction action they had taken.	

Investigatory Status

No further contact.

Eastview Court	Non-Dry Weather IC/ID 2007-2008	2/27/2008

Site Summary:

Road buckling and water discharge coming from 1400 block of Eastview Court.

Investigatory Actions

Date	Action	Staff
2/27/2008	Clean Water Program Coordinator received detailed report of water runoff causing road cracking in the 1400 block of Eastview Court. Several City Departments were involved including Roads, Water, and the Clean Water Program.	Mallett/ Lahsaie
2/28/2008	Issue was forwarded to City Engineer and City consultant for geotechnical work. Chlorine tests of runoff indicated groundwater. Solution will require capital improvements project to put drain pipe in.	Smith/ Knowlton

Investigatory Status

No further contact.

Desmond Circle	Non-Dry Weather IC/ID 2007-2008	3/17/2008

Site Summary:

Resident complaint of runoff from neighbor's yard caused by over-irrigation and possible leak. Runoff is also entering storm drain.

Investigatory Actions

Date	Action	Staff
3/17/2008	Complaint received. On going problem that Code Enforcement has been a part of.	Lahsaie/ Crawford
3/18/2008	Water Utilities checked water meter records. Records indicate water use within reason currently, but historical high segments.	Lahsaie/ Ludlow
3/20/2008	Clean Water Program Coordinator spoke with resident. A broken irrigation line was fixed. Swimming pool in backyard may also be leaking. Suggested that resident hire an expert to determine if the source is groundwater or irrigation. Offered to take water sample for chlorine.	Lahsaie

Investigatory Status

No further contact.

CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT

DATE: **September 25, 2009**

RE: **STATEMENT OF CERTIFICATION**
CITY OF OCEANSIDE JURISDICTIONAL URMP

I certify under penalty of law that the Jurisdictional Urban Runoff Management Program Annual Report for 2008-2009 was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE: M. A. Lahsaiezadeh

NAME: Mo Lahsaiezadeh
TITLE: Clean Water Program Coordinator
JURISDICTION: City of Oceanside

300 NORTH COAST HIGHWAY • OCEANSIDE, CA 92054 • TELEPHONE 760-435-5800 • FAX 760-435-5814

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ES EXECUTIVE SUMMARY

Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the San Diego Copermittees. Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2007-2008 annual reporting period (July 1, 2008 – June 30, 2009).

Report Organization

Section J of Municipal Permit 2007-0001 defines the requirements for the Jurisdictional Urban Runoff Management Program (JURMP) Annual Report and states that each JURMP Annual Report shall, at a minimum, contain a comprehensive description of all activities conducted by the Copermittee for each required component. Table ES-1 presents these components and the section in which they are discussed.

Table ES-1. Municipal Permit 2007-0001 Reference Table.

Municipal Permit 2007-0001 Components	Annual Report Section
Development Planning Component	Section 2.0
Land-Use Planning	Section 2.2
Environmental Review Process	Section 2.3
Development Project Approval and Verification Process	Section 2.4
Construction Component	Section 3.0
Municipal Component	Section 4.0
Industrial and Commercial Component	Section 5.0
Residential Component	Section 6.0
Illicit Discharge Detection and Elimination Component	Section 7.0
Education Component	Section 8.0
Public Participation	Sections 9.0
Fiscal Analysis Component	Section 10.0
Effectiveness Assessment Component	Section 11.0
Special Investigations	Section 12.0
Non-Emergency Fire Fighting	Section 13.0
JURMP Revisions	Section 14.0
Conclusions and Recommendations	Section 15.0

Pursuant with the Municipal Permit this document contains all of the required information.

Program Highlights

Below is a summary of each section which describes the Clean Water Program activities appearing in this Annual Report. Please refer to the individual section for more detailed information.

Section 2.0 Development Planning Component

All new development and redevelopment projects are subject to the priority project or standard project provisions in the City's Interim SUSMP. During this reporting period the City adopted an Interim SUSMP which includes revisions that conform to the requirements of the Municipal Permit. Minimum storm water BMP requirements are part of the City's standard conditions of approval and are required of all projects receiving discretionary permits. The City will not support the entitlement of a project or issue development permits until the appropriate documents are reviewed by City staff and approved by the City Engineer. During the 2008-09 reporting period document reviews for each SWPPP and SWMP submitted by project applicants were performed. The City evaluated its established environmental review process for all development projects to determine compliance with the new Municipal Permit and determined that the current environmental review process adequately addresses the requirements of the Municipal Permit.

Section 3.0 Construction Component

The City of Oceanside Clean Water Program provided an updated inventory of construction sites with the 2008 JURMP and has revised that inventory during this reporting period. During the reporting period, the Clean Water Program inspected 55 construction sites to ensure they were in compliance with the City Code.

Section 4.0 Municipal Component

The City of Oceanside Clean Water Program utilized its 2008-09 municipally owned inventory and inspected 181 municipal areas to ensure these facilities are in compliance with the City Code. A total of 2,062 tons of waste was removed as a result of street sweeping and a total of 65.89 tons of waste was removed from the storm drain system (MS4) as part of the annual cleaning. Four-thousand and fifty two (4,052) feet of City sewer pipes were slip lined and 47 manholes rehabilitated.

Section 5.0 Industrial and Commercial Component

During this reporting period the staff of the Clean Water Program conducted a comprehensive update of its Industrial and Commercial business inventory. Working in conjunction with the Businesses Licensing division, the city updated its inventory based on commercial and industrial classifications, watershed location, and assignment of high, medium and low priorities. The inventory now includes 2,373 Industrial and Commercial businesses. Thirty three (33) industrial businesses and 539 commercial businesses were inspected during this reporting period, to ensure these facilities are in compliance with City Code.

Section 6.0 Residential Component

The City of Oceanside has developed an extensive program that aims to reduce pollutant runoff from residential areas and activities to the maximum extent practical (MEP). The City of Oceanside Clean Water Program received 124 calls on the Urban Runoff Hotline and Code Enforcement Program received 109 complaints from residents regarding potential urban runoff violations from residential areas and activities. Extensive educational efforts were made to help

Oceanside residents understand watersheds, water quality and urban runoff impacts through presentations on a local television channel, Clean Water Program newsletters mailed to each household, and through information available on the Clean Water Program Website.

Section 7.0 Illicit Discharges Detection and Elimination Component

This section is intended to document the activities conducted by the City of Oceanside during the 2008-2009 reporting period to manage illicit discharges. In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2008-09 Illicit Discharge Detection and Elimination Component, including the 2009 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2009.

Section 8.0 Education Component

The City of Oceanside Clean Water Program continued to use a variety of avenues to educate various internal and external groups about the Clean Water Program and the requirements of Municipal Permit Order 2007-0001. These outreach activities included municipal staff training, CWP newsletters, staffing community booths, conducted watershed education presentations, continued implementation of a 5th grade curriculum titled Project SWELL and targeting under-served audiences with educational materials.

Section 9.0 Public Participation Component

The Clean Water Program continued to sponsor beach and creek cleanup events and supported private groups who wanted to coordinate their own cleanup events. During this reporting period a total of 2,426 volunteers participated in these events, removing more than nine tons of trash, and debris, from the local waterways. In addition the City participated in regional education events including staffing a stormwater booth at the San Diego County Fair's EnviroFair Day.

Section 10.0 Fiscal Component

The City of Oceanside Clean Water Program continued to acquire funding from various sources to implement programs to meet Municipal Permit Order 2007-0001. To secure adequate funding, the Water Utilities Department collects a Clean Water Program surcharge that is delineated on the utility bills for each household and is based on the customer's water consumption. Approximate expenditures for the 2008-09 fiscal year is provided as well as the budget for the 2009-10 reporting period.

Section 11.0 Effectiveness Component

The City implemented an effectiveness assessment program to assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The City gathered and evaluated data for some of the program components for assessment during this reporting period. This data will be valuable for incorporation into long-term effectiveness evaluation on a jurisdictional level.

Section 12.0 Special Investigations

The City of Oceanside received funding from two sources to implement two water quality related projects: the San Luis Rey Bacteria Source Tracking Study and the Loma Alta Creek Ultraviolet Treatment Facility.

Lower San Luis Rey Bacteria Source Tracking
As part of the Proposition 50 Clean Beaches Initiative, the City of Oceanside was awarded $554,375 to track the sources of bacteria in the Lower San Luis Rey River. This study project has a goal to identify the sources and quantify the loading of bacterial contamination in the lower San Luis Rey River using a tiered approach. This approach will permit prioritization for mitigation of microbial contaminants and appropriate actions will be recommended to eliminate sources of bacterial contamination. Unfortunately, on December 19, 2008, the State Water Resource Control Board issued a Budget Letter that suspended all projects including the Lower San Luis Rey Source Identification Project, due to State budgetary constraints.

The Loma Alta Creek Ultraviolet Treatment Facility
The City was awarded a $5,000,000 Proposition 40 Clean Beaches Initiative (CBI) grant by the State Water Resources Control Board to construct an ultraviolet (UV) light treatment facility at the existing La Salina Wastewater Treatment Facility. The anticipated project goal is to eliminate beach closures during the dry season at Buccaneer Beach in Oceanside, California. This will be achieved by diverting the flow from the Loma Alta Lagoon through a UV treatment facility prior to discharging the flow onto the shoreline.

The Loma Alta Creek Ultraviolet Light Treatment Facility started treatment in June 2009 and continued September 2009. Water samples were taken weekly from Buccaneer Beach directly in front of the discharge pipe and seventy-five feet north and south of the discharge pipe. The samples were tested for total and fecal coliform and Enterococcus. All samples taken during summer 2009 met California Department of Health Services AB411 Objectives and there were no postings due to bacterial levels exceeding standards set by the County Department of Environmental Health.

Section 13.0 Non-Emergency Fire Fighting
Non-emergency fire fighting BMPs and educational methods for reducing the discharge of pollutants from non-emergency flows to the MEP are described in Section 13.

Section 14.0 JURMP Revisions
During this reporting period there were several revisions made to the City's 2008 JURMP. See Section 14 for more details.

Section 15.0 Conclusions and Recommendations
This section presents the conclusions from the 2008-2009 reporting year and provides recommendations for future activities and management actions for JURMP program components. To facilitate more streamlined JURMP reporting and aide in the effectiveness assessment period several departments within the City moved forward with implementation of various data tracking systems toward the end of the reporting period. It is anticipated that these data tracking systems will be fully functional in the 2009-10 reporting period.

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1.0 INTRODUCTION

This annual report document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) (referred to in this document as the Municipal Permit) draining the Watersheds of the County of San Diego, which include agencies with land use authority including the incorporated Cities of San Diego County, the County of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport Authority (collectively called Copermittees). Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2008-2009 annual reporting period (July 1, 2008 – June 30, 2009).

This Municipal Permit is based on the Federal Clean Water Act (CWA), the Porter–Cologne Water Quality Control Act, applicable state and federal regulations, all applicable provision of statewide Water Quality Control Plans and Polices adopted by the State Water Resources Control Board (SWRCB), the Water Quality Control Plan for the San Diego Basin adopted by the Regional Water Quality Control Board (RWCQB), the California Toxics Rule, and the California Toxics Rule Implementation Plan. This Annual Report addresses the renewed NPDES Permit No. CAS0108758, which was first issued on July 16, 1990 (Order No. 90-42), renewed on February 21, 2001 (Order No. 2001-01), and renewed again on January 24, 2007

In the interests of communicating consistent messages to the community regarding the most efficient and effective means of reducing storm water and urban runoff pollution, and as directed under Part J.5 of the Municipal Permit, this document was developed following the standardized format developed and agreed upon by the Copermittees. For the most part, compliance with the Municipal Permit was undertaken by the Copermittees through the development and implementation of the JURMP; therefore this Annual Report is organized in a similar format as the 2008 JURMP.

1.1 Background

Urban development typically involves conversion of natural space to developed areas that include impervious surfaces such as streets, buildings, and parking lots. With the increase in human population and impervious surfaces associated with developed areas there tends to be higher runoff volume and velocity due to the impervious area's incapacity to absorb and hold rainwater. Also, human use of developed areas is associated with a number of pollutants that can be conveyed to the municipal separate storm sewer system (MS4) by a rain event or non-storm water discharges. This is called non-point source pollution. Non-point source pollution, such as urban runoff discharges to the MS4, is a large source of pollutants to receiving water bodies in the San Diego region and throughout the United States. Pollutants commonly associated with urban runoff include sediments, pesticides, fertilizers, herbicides, trash, oil and grease, and heavy metals. Such pollutants are generated by everyday activities such as construction, landscaping and vehicle use and maintenance.

Pollutants that reach receiving water bodies, such as streams, lakes, bays, lagoons, and the ocean, have the potential to significantly impact human and environmental health as well as wildlife that utilize these water bodies and surrounding habitat for survival. Notably, environmentally sensitive areas (ESA) are especially threatened by urban development because such areas tend to have lower capacities to withstand pollutants entering the area.

1.2 Purpose and Objectives

The purpose of this annual report is to present the activities the City conducted during the Fiscal reporting period of July 1, 2008 through June 30, 2009 to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The activities involved implementing, and improving where needed, existing programs and developing new programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. Improving the quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

Table 1-1 presents the organization of the City's JURMP Annual Report and a summary of the corresponding permit requirement in Order No. 2007-0001. Some Report sections and permit requirements overlap and will be found in multiple locations throughout the document.

Table 1-1. City of Oceanside 2008-09 Annual Report Compliance Summary.

2008-09 Annual Report	Description	Order No. 2007-0001
Section 1.0	Introduction	-
Section 2.0	Development Planning	D.1 J.3.a(3)(a)
Section 3.0	Construction	D.2 J.3.a(3)(b)
Section 4.0	Municipal Development	D.3.a J.3.a(3)(c)
Section 5.0	Industrial and Commercial Development	D.3.b J.3.a(3)(d)
Section 6.0	Residential	D.3.c J.3.a(3)(e)
Section 7.0	Illicit Discharge Detection and Elimination	D.4 J.3.a(3)(f)
Section 8.0	Education	D.5 J.3.a(3)(g)
Section 9.0	Public Participation	D.6 J.3.a(3)(h)
Section 10.0	Fiscal Analysis	J.3.a(3)(j)
Section 11.0	Effectiveness Assessment	-
Section 12.0	Special Investigations	J.3.a(3)(k)
Section 13.0	Non-Emergency Fire Fighting	J.3.a(3)(l)
Section 14.0	JURMP Revision	J.3.a(3)(m)
Section 15.0	Conclusions and Recommendations	-

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The development of urban areas has the potential to negatively impact the surrounding environment. The addition of impervious surfaces can alter the natural drainage patterns of the area, and development can facilitate the introduction of pollutants to the environment resulting from human activities. Accordingly, the City has developed measures to limit the potential for urban development to negatively impact the environment through careful land use planning and thoughtful design of development projects. Development projects are defined by the Municipal Permit as new development or redevelopment with land disturbing activities, structural development including construction or installation of a building or structure, the creation of impervious surfaces, public agency projects, and land subdivision. Through the implementation of the City's development planning component the City will reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP), protect receiving water bodies while managing increases in runoff that have the potential to increase erosion in streams or rivers.

This section documents the City Jurisdictional Urban Runoff Management Program (JURMP) Development Planning activities performed by the City of Oceanside during the reporting period of July 1, 2008 to June 30, 2009. The City has continued to implement the comprehensive Land-Use Planning component of the JURMP in order to satisfy the provisions of Section D.1 of the San Diego RWQCB Order No. R9-2007-0001; also referred to as the Municipal Permit. A directory of the subsections within the Municipal Permit Section J.3.a and corresponding Annual Report compliance sections are listed in Table 2-1, below.

Table 2-1. Order No. R9-2007-0001 Compliance Summary.

J.3.a.(3)(a).i Amendments to General Plan	See Section 2.2.1 of this Annual Report
J.3.a.(3)(a).ii Projects underwent urban runoff approval process	See Section 2.4.3 of this Annual Report
J.3.a.(3)(a).iii Project with SUSMP Requirements	See Section 2.4.4.8 of this Annual Report
J.3.a.(3)(a).iv SUSMP BMP requirements were applied	See Section 2.4.4.2 of this Annual Report
J.3.a.(3)(a).v Example of priority development project	See Section 2.4.4.4 of this Annual Report
J.3.a.(3)(a).vi Projects allowed to implement low removal efficiency BMPs	See Section 2.2.3 of this Annual Report
J.3.a.(3)(a).vii Treatment Control Inventory	See Section 2.4.4.7 of this Annual Report
J.3.a.(3)(a).viii Number of treatment control BMPs inspected	See Section 2.4.4.7 of this Annual Report
J.3.a.(3)(a).ix	See Section 2.4.4.7 of this Annual Report

Description of verification of O&M for treatment control BMPs	
J.3.a.(3)(a).x Confirmation that BMP verification was conducted for all priority development projects	See Section 2.4.3 of this Annual Report
J.3.a.(3)(a).xi Projects with SUSMP waivers	See Section 2.4.4.8 of this Annual Report
J.3.a.(3)(a).xii Description of SUSMP waiver mitigation program	See Section 2.4.4.1 of this Annual Report
J.3.a.(3)(a).xiii HMP collaboration and participation	See Section 2.4.4.1 of this Annual Report
J.3.a.(3)(a).xiv Development projects required to meet HMP	See Section 2.4.4.8 of this Annual Report
J.3.a.(3)(a).xv Development projects not required to meet HMP requirements	See Section 2.2.3 of this Annual Report
J.3.a.(3)(a).xvi Development projects disturbing 50 acres or more	See Section 2.2.3 of this Annual Report
J.3.a.(3)(a).xvii Violations and enforcement actions for development projects	See Section 3 Attachment 3-C of this Annual Report
J.3.a.(3)(a).xviii Notable activities	See Section 2.2.1 of this Annual Report

2.2 Land Use Planning

2.2.1 Background

The development planning component focuses on efforts to mitigate erosion and reduce pollutant discharges in urban runoff resulting from new development and redevelopment projects to the MEP through land use planning and development process that includes project review, approval, and verification.

The Land Use Element of the General Plan was amended in 2003 to include a number of water quality and watershed protection measures. The primary focus of the measures was to provide a more balanced relationship between the needs of the community and development interests, while managing finite natural resources. There were no water quality related amendments adopted into the General plan during this reporting period. The specific policies are detailed in Section 4.2.3 of the 2008 Jurisdictional Urban Runoff Management Plan.

2.2.1.1 Notable Activities

The City engaged in two notable activities to promote the management of urban runoff from development projects including participation in regional workgroups related to development projects and the decisions to move forward with the implementation of a new data tracking system.

The City of Oceanside, including staff from the CWP and the Engineering Division, regularly participated in the HMP-TAC and the Copermittee Development and Construction workgroups. City staff attended meetings and provided comments on the development of regional work products including the County-wide Model SUSMP.

During this reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water, Sewer, and the Clean Water Program, continued rolling out the GBA Masters Series software. Water and Sewer continued to utilize the product and the Clean Water Program gained approval to purchase additional licenses and hire a consultant to help modify the software to their needs. Complete roll-out for the Clean Water Program is expected in reporting year 2009/2010. The Development Services Department, which includes Code Enforcement, Building, and Engineering, choose CRW Systems, Inc. and will begin roll-out in the 2009/2010 reporting year. These systems will allow for tracking and reporting of needed information, including stormwater data, across the departments.

2.2.2 Source Characterization

Source characterization is an important component of any urban runoff program. Various land use types and activities are known to generate different combinations of pollutants that have the potential to negatively affect the surrounding environment, including the receiving waters.

The Interim SUSMP identifies twelve (12) separate "Project Categories", which are cited as anticipated or potential sources of storm water pollution based upon a particular land use and specific site conditions. By identifying pollutant sources and the impairments to the receiving waters; a project may effectively mitigate storm water impacts, to the Maximum Extent Practicable (MEP) through the implementation of Low Impact Development (LID) practices and the appropriate application of a combination of Source Control, Site Design, and Treatment Control BMPs. Project Categories and General Pollutant Categories appear in Table 3 of the Interim SUSMP.

2.2.3 Best Management Practice Requirements

There are established minimum design requirements for all development projects, which are discussed in Section 4.4.3 of the 2008 JURMP. In addition, the Land Use Planning Element of the General Plan contains policies to protect water quality that are reflected in Section 4.2.3 of the 2008 JURMP. During the latter part of this reporting period (i.e. March 2008), the City adopted an Interim SUSMP which contains several new storm water requirements. The BMP requirements were influenced by the inclusion of the LID practices and the phased introduction of the Hydromodification Plan (HMP) as part of the Municipal Permit.

LID practices are included in the Site Design BMP discussion of the Interim SUSMP. The addition of LID practices lends direct support to the HMP component by providing a broad spectrum of design concepts aimed at minimizing the introduction of pollutants and offsetting the conditions of concern associated with impacts to the hydrologic regime. During this reporting period, there were no projects subject to the "Interim Hydromodification Criteria for Projects Disturbing 50 Acres or More".

The Interim SUSMP also includes Treatment Control BMP discussion which provides a direct correlation to pollutant types and physical characteristics that enable transport. This information assists the design professional in developing an effective BMP "treatment train" and facilitates the pursuit of the MEP standard. Treatment Control BMPs are required to meet the medium removal efficiency standard for the identified Primary Pollutants of Concern associated with a specific site development. The implementation of a Treatment Control BMPs with low removal efficiency is not permissible. The Interim SUSMP is available at the City of Oceanside – Engineering Division counter or may be downloaded from the City website at http://www.oceansidecleanwaterprogram.org/dev_susmp.asp.

2.2.4 Program Implementation

The General Plan has been adopted by the City Council and is a legally binding document; the City of Oceanside is required to abide by its policies. In addition to the General Plan, the City addresses water pollution through implementation of its Municipal Code. Chapter 40 of the Municipal Code is the Urban Runoff Management and Discharge Control Ordinance and is commonly referred to as the Storm Water Ordinance. The Ordinance contains multiple references to the SUSMP. The City first adopted the SUSMP in 2002 as a condition of the governing Municipal Permit. The document was based on a regionally developed Model SUSMP. More recently, the SUSMP was revised to conform to the 2007 Municipal Permit and was adopted in March 2008 as the Interim SUSMP.

All new development and redevelopment projects are subject to the priority project or standard project provisions in this Interim Local SUSMP, subject to the lawful prior approval provisions of the Municipal Permit. Development projects deemed not to be a threat to storm water quality, per the City's Urban Runoff Assessment form and on a case-by-case basis, may be exempt from SUSMP requirements. The Interim SUSMP was developed to address post-construction urban runoff pollution from various types of development projects. Certain categories of development projects were deemed more likely to discharge pollutants and are defined as Priority Development Projects (Priority Project) and are subject to additional storm water requirements. As part of the design process, Priority Projects must submit post-construction BMP plans, known as Storm Water Mitigation Plans (SWMPs). These SWMPs must list the BMPs proposed to address the potential pollutants likely to be generated by the development and conditions of concern typically associated with the type of development.

Details on the completed and planned SUSMP updates may be found in Section 4.4.4.4 of the 2008 JURMP. In addition, information pertaining to the legal authority to implement a storm water program is located in Section 2 of the 2008 JURMP.

2.3 Environmental Review Process

The City has evaluated its established environmental review process for all development projects to determine compliance with the new Municipal Permit. The City guides the developers through the filing necessary documents and identifies which reports are required to be submitted and approved before development may begin. The current environmental review process places emphasis on the evaluation of water quality impacts and related issues that may result from the project development.

The Planning Division and Engineering Division of the Development Services Department are responsible for reviewing development projects for conformance with storm water requirements. The City will continue to assess all development and redevelopment projects for compliance with the California Environmental Quality Act (CEQA) by reviewing the Environmental Initial Study checklist completed by each project applicant. A copy of this checklist is included in Appendix D of the 2008 JURMP. The checklist contains questions to evaluate potential negative impacts on receiving water bodies. Projects which are determined to have "potentially significant impacts" to the surrounding environment and receiving waters are required to prepare Environmental Impact Reports (EIRs) for City review. Development projects that are not required to prepare EIRs proceed to the next phase of the approval process.

During the development of the 2008 JURMP, the City evaluated its current established environmental review process for all new development and redevelopment projects to determine compliance with the new Municipal Permit. The City determined that the current environmental review process adequately addresses the requirements of the Municipal Permit. While the specific requirements evaluated during the environmental review process are expected to change periodically, the basic review structure did not require revision during this reporting period. Details of the current environmental review process are provided in Section 4.3 of the 2008 JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City has an established administrative and discretionary approval processes that provides multiple reviews by the Planning and Engineering Divisions. The Planning Division is responsible for determining acceptable land uses, development constraints, and identifying environmental issues. The Engineering Division is composed of various disciplines (i.e., Engineering Improvements, Grading and Drainage, Water and Sewer Utilities, Hydrology, Geotechnical, Storm Water, Traffic, and Landscape), which perform a coordinated review of all project applications. In addition, the Building Division coordinates with Storm Water Review to ensure that new development, remodeling projects, additions, or demolitions are reviewed for compliance with storm water regulations. The Fire Department also performs multiple reviews and notifies the appropriate division in the event of a discrepancy or nonconformance. The coordinated involvement of all Divisions and disciplines provides an elevated degree of assurance that all projects are subjected to thorough scrutiny as part of the normal review process. Particulars surrounding the project approval and process verification are discussed in the following sections.

2.4.2 Source Characterization

Understanding and identifying pollutant sources is a basic component in developing a comprehensive storm water mitigation program. Sufficient data exists to support the claim that a particular land use will generate, or potentially generate, certain types of pollutants.

Table 3 of the Interim SUSMP identifies twelve (12) individual "Project Categories" that have been determined to contribute pollutants based upon land use type and proximity to

environmentally sensitive areas. The pollutants associated with various land uses are categorized as being anticipated or potential; depending on site specific conditions. All projects, i.e. Priority Development and Standard Development Projects, are required to identify "Pollutants of Concern from the Project Area" as part of the SWMP or Runoff Assessment Report (RAR). Once identified, the project shall implement appropriate BMPs to mitigate the pollutants generated by the project area. The Project Categories and General Pollutant Categories appear in Table 3 of the Interim SUSMP.

2.4.3 Best Management Practice Requirements

The Municipal Permit dictates minimum BMP requirements for all new development and redevelopment projects. The requirements are included in the City Storm Water Ordinance and Interim SUSMP and shall include, but not be limited to, the implementation of the following BMPs and LID practices by the project proponent:

- Source control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed outdoor material storage areas, properly designed trash storage areas, the implementation of Integrated Pest Management Principles (IPM) and the inclusion of efficient irrigation system, and drought tolerant/native species landscape design.

- Low Impact Development (LID) BMPs implemented where feasible to maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, utilization of natural drainage systems, and constructing impervious surfaces to minimum widths necessary;

- Buffer zones for natural water bodies, where feasible. Require the project proponent to implement other types of buffers such as trees or access restrictions where conventional setbacks are not feasible;

- Measures to mitigate discharges of pollutants that result during grading or construction activities as specified in the Section D.2 of the Municipal Permit; and

- Submittal of a mechanism under which ongoing long-term maintenance of all structural post-construction BMPs will be conducted.

These minimum storm water BMP requirements are an integral part of the City standard conditions of approval and are required of all projects receiving discretionary permits. The City will not support the entitlement of a project or issue development permits until the appropriate Interim SUSMP documents are reviewed by City staff and approved by the City Engineer. Any subsequent changes that affect the approved BMPs will be subject to an amendment process that includes review by City staff and approval by the City Engineer.

2.4.4 Program Implementation

2.4.4.1 SUSMP Revision

During this reporting period the City continued to implement requirements and practices cited in the Interim SUSMP. A permanent, full-time staff member was added to the Water Utilities

Department, Clean Water Program to continue the storm water review program that was previously initiated in the Engineering Division; i.e. reviewing SUSMP documents for conformance with the Interim SUSMP and to ensure that related final engineering plans are consistent with the approved SUSMP documents. There were no revisions to the City Interim SUSMP during this reporting period.

The City has continued working toward the adoption of a final HMP by participating in shareholder and Copermittee meetings, and sessions of the HMP TAC. The final HMP is expected to be submitted to the RWQCB by late December 2009. For the time being, the City will continue to implement Interim Hydromodification Criteria until the final HMP is approved.

2.4.4.2 SUSMP Document Review

Each new development and redevelopment project is required to complete the Urban Runoff Threat Assessment Form – Attachment D of the Interim SUSMP. The form and associated development plans provide staff with information to perform a SUSMP determination. SUSMP determinations are performed on a case-by-case basis. A SUSMP determination typically places the vast majority of projects into a Priority Development or Standard Development category.

A very limited number of projects are not required to submit a SUSMP document and are noted as SUSMP exemptions. A SUSMP exemption differs from a SUSMP wavier of infeasibility. The City has never granted a waiver of infeasibility to a Priority Project and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may elect to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the project watershed.

A project with a SUSMP exemption is not categorized as a Priority or Standard Project; is not subject to permanent storm water requirements, and does not have a greater than “low” threat to water quality construction prioritization, pursuant to Section 1, Part A and Part B of the Urban Runoff Threat Assessment Form. Projects which are granted a SUSMP exemption typically involve incidental construction with negligible ground disturbance. Examples include the addition of an antenna to an existing cellular tower or interior tenant improvements to an existing building.

The overwhelming majority of new development and redevelopment projects are subject to the provisions of the Interim SUSMP. Projects are identified as Priority Development or Standard Development projects based upon land use categories and applicability of permanent storm water BMPs pursuant to Section 1 of the Urban Runoff Threat Assessment Form.

2.4.4.3 Priority Projects

Priority Projects are required to obtain an approved SWMP as part of the entitlement process. The items required in a SWMP are described in Section 2.2.2 of the Interim SUSMP. In summary, Priority Projects must determine the Primary Pollutants of Concern based upon source characterization and impacts to the 303(d) impaired receiving waters. This category of development is required to provide Source Control BMPs while implementing LID practices and Site Design BMPs. The project must incorporate Structural Treatment Control BMPs into the

site development. The selected Treatment Control BMPs must have a medium to high removal efficiency for the identified Primary Pollutants of Concern. The Treatment Control BMPs with low pollutant removal efficiencies are not permissible in the City of Oceanside.

Priority Projects must also have an approved Operation and Maintenance Plan (O&M Plan) and enter into a Storm Water Facilities Maintenance Agreement (SWFMA) to ensure the long-term maintenance and operation of the Treatment Control BMPs. The City Engineer will not consider Priority Project structural Treatment Control BMPs "effective," and therefore will not accept storm water BMPs as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. This mechanism shall be proposed by the project proponent as part of the SWMP and will be refined though the City's review process until satisfactory verification of maintenance is provided to the City Engineer. Such verification may include but is limited to covenants, legal agreements, maintenance agreements, and/or conditional use permits. A security may be required.

2.4.4.4 Priority Project Example

The Elfens Children's School (ADP-6-07) is an example of an infill Priority Development Project. The project is located on a 1.36-acre pre-graded site. The surrounding subdivision and adjacent Arrowood Golf Course were constructed in 2003. The development includes the following Priority Project categories; Commercial Development > 1 acre, restaurant, and parking lot. The project has integrated LID practices, Site Design, Source Control, and Treatment Control BMPs into a comprehensive storm water mitigation plan.

The project LID and Site Design BMPs include minimizing impervious drive aisles and parking, maximizing rainfall interception by incorporating drought tolerant groundcover and canopy intercepting landscape, and minimizing directly connected impervious areas by discharging roof drains to stabilized landscape areas. Source Control BMPs implemented onsite include properly designed trash storage areas, utilizing an efficient irrigation system, prohibiting outdoor material and processing areas, installing prohibitive dumping signage and stenciling, and providing public education to the occupants.

The project is divided into three watershed management areas (WMAs) for the purpose of mitigating storm water runoff and offsetting potential changes to the hydrologic regime. Two of the WMAs will be developed, while the third will remain a pre-graded pad. The pre-graded pad will be stabilized by a combination of erosion control and treatment control BMPs, which include but are not limited to the placement of straw wattles and gravel bags, the application of hydroseed, and the installation of a proprietary filter. Future development considerations will be addressed by amending the approved SWMP.

The remaining portion of the site consists of building, parking, and landscape area, which form two separate WMAs. Approximately two-thirds of the school building and the majority of landscape area form the southern watershed. Roof drains are directed to the stabilized outfall locations within the landscape area. There they form a confluence with landscape runoff. The combined flows receive treatment in a vegetated swale that conveys the runoff to a grated inlet. The remaining portion of the site is comprised on parking and roof area. Runoff from this WMA

is conveyed by sheet and gutter flow to a sand media filter. The treated flows are collected in a subdrain prior to discharge to the MS4.

2.4.4.5 Standard Projects

Standard Projects are required to obtain an approved RAR. The items required in a RAR are listed in Section 2.2.2 of the Interim SUSMP. Standard Projects must also identify the anticipated and potential pollutants based upon land use. The projects are required to implement Source Control and Site Design BMPs, and LID practices. Standard Projects are not required include Treatment Control BMPs. As such, the projects are not required to provide an O&M Plan or enter into a SWFMA.

2.4.4.6 Adequacy of Proposed Plans

The City Engineer will review submitted SUSMP documents and other relevant plans for compliance with the applicable SUSMP requirements. The City Engineer may approve proposed alternatives to the BMP requirements in the City's SUSMP if they are determined to be applicable and equally or more effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs and will be requested as part of a staff review cycle. The SWMP or RAR will be deemed complete when the City Engineer determines that the project complies with the Interim SUSMP. Project status is tracked by database and confirmed by hardcopy records.

2.4.4.7 Inspection

The City has compiled an inventory a Treatment Control BMP inventory with information for all approved Priority Projects. See Attachment 2-A for this inventory list. All installed Treatment Control BMPs are regularly inspected by City inspectors to ensure intended function and proper maintenance. Inspection frequencies are based on the project's assigned Threat to Water Quality (TTWQ) as determined by Interim SUSMP Attachment D, the Urban Runoff Threat Assessment form. The Municipal Permit dictates that high priority sites shall be inspected annually and medium priority sites are to be inspected every two years. Low priority site are inspected as needed. In addition, the Municipal Permit requires a minimum of 20% of the total number of projects with approved Treatment Controls and a maximum of twice the average number of projects with Treatment Control BMPs approved per year will be inspected annually. The Municipal Permit dictates 50% of all medium priority sites with drainage inserts will be inspected annually. City Inspection staff performed a total of 40 SUSMP inspections during this reporting period.

It is the responsibility of the inspection staff to ensure that all BMPs proposed for the project have been built according to the construction plans before signing off on each stage of construction. The inspectors will use the project's plans to identify any missing or incorrectly installed structural BMPs and deny approval for sites with observed problems. City Staff inspected all Priority Projects subject to SUSMP requirements prior to occupancy to ensure that all LID, Source Control, and Treatment Control BMPs proposed for the project have been constructed in compliance with all approved plans and City permits and ordinances. Inspections of Priority Project sites prior to occupancy allows the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied use of the site are generated.

The current plan check process includes steps to enforce the implementation of development requirements during construction. Since all Treatment Control BMPs are required to be shown on the project's plans, inspectors check to make sure these BMPs have been correctly installed during their routine inspections. Errors in BMP installation are noted during plan checks. Projects are required to promptly correct errors until BMP installation is consistent with the approved plan.

Inspections will include examination of all Treatment Control BMPs at the site to verify that each Treatment Control BMP is in working order, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings will be documented by the inspector using the City of Oceanside Treatment Control BMP Inspection form in Appendix D of the 2008 JURMP. Deficiencies in Treatment Control operation and maintenance are noted during the inspection, the responsible party is notified and appropriate enforcement actions take place as described in Section 4.4.4.9 of the 2008 JURMP, in order to achieve compliance.

The City will require annual verification of proper maintenance of all treatment control BMPs by the responsible party for maintenance prior to the start of the rainy season. The City requires all Priority Projects to include Operation and Maintenance checklists and a self-inspection log for the site's Treatment Control BMPs found in the project SWMP. The City will require these forms to be completed by the site's responsible party and be submitted to the City annually. The annual maintenance verification of Treatment Controls by the party responsible for maintenance is unlike any current program within the City. Due to this circumstance, the City anticipates re-evaluation of its annual maintenance verification procedure to conform to current Municipal Permit requirements. See Attachment 2-A for sites that were inspected and/or have BMP maintenance verification on file for this reporting period

The City will use a variety of enforcement methods to ensure storm water requirements for all development projects within the City's jurisdiction are implemented. Enforcement measures will escalate with continued violations as necessary. A detailed description of the different enforcement measures used by the City of Oceanside to enforce its storm water regulations can be found in Section 2 of the 2008 JURMP.

Since installation of structural BMPs will be closely inspected and signed off during regular grading and building inspections, the City does not expect major deficiencies in BMP installation to be found once construction is completed. However, some Treatment Control BMPs, such as filter inserts, are usually installed post-construction and thus may not be checked during grading and building inspections. To address this, correct BMP installation is also examined during the final project inspection, and building inspectors sign off on the final "red line" drawings that include any approved changes that were made to the plans during the course of construction. This provides City personnel with the ability to check the constructed project against the approved storm water documents. If any BMP, including filter inserts, is noted to be missing or incorrectly installed by City inspectors during or upon completion of construction, the City will require project to correct BMP deficiencies.

Enforcement of post-construction BMP maintenance after occupancy will include verbal and written warnings and monetary penalties. All enforcement actions will be documented appropriately in the development project's database file. If a development site receives frequent citations or is not responsive to previously issued enforcement actions, more severe actions, such as court actions, will be used as necessary. Details surrounding the City Treatment Control BMP inspection program may be found in Section 4.4.4.7 of the 2008 JURMP.

2.4.4.8 2008-2009 SUSMP Document Submittal and Review Summary

A number of SUSMP document reviews were performed during the 2008-2009 reporting period. There were 53 Priority Project SWMP submittals which prompted 145 reviews with a total 24 of projects receiving approval. During the same period there were 7 Priority Projects that submitted Amendments to a previously approved SWMP that prompted 10 reviews and yielded 3 approvals. In addition, there were 10 Standard Projects that submitted an RAR which prompted 20 reviews. During the 2008-2009 reporting period a total of 5 Standard Projects received an RAR approval.

During the reporting period there were 17 Priority Projects that submitted O&M plans as part of the final engineering process. There were a total of 34 reviews performed with a total of 9 O&M Plans receiving approval. The SWMFA is typically submitted with O&M Plan. Some projects elect to "trail" the SWFMA submittal. During this reporting period 16 SWFMAs were submitted, prompting 43 reviews, resulting in 9 approved agreements.

All projects are subject to a SUSMP Determination. The determination process places the majority of developments into Priority Project or Standard Project categories. A small number of projects were found to be exempt from SUSMP requirements. Projects which are granted a SUSMP exemption typically involve minor construction with minimal ground disturbance. Examples of projects that are eligible to receive an exemption include interior tenant improvements to an existing structure or the addition of an antenna to an existing cellular tower. During this reporting period there were 81 reviews linked to the evaluation of 64 Urban Runoff Threat Assessments; submitted as part of the SUSMP Determination process. At total of 45 projects were not categorized as a Priority or Standard Project and therefore were not required to submit a SWMP or RAR.

A SUSMP exemption differs from a SUSMP wavier of infeasibility. The City has never granted a waiver of treatment control BMP infeasibility to a Priority Project and does not anticipate granting waivers in the future. However, if a waiver is deemed necessary, the City may elect to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the project watershed. There were no SUSMP waivers of infeasibility granted during this reporting period. See Table 2-2 for more detail on project submittals and review results.

Table 2-2. 2008-2009 SUSMP Document Submittal and Review Summary.

File Number(s)	Project Name	Type of Development	Number of Reviews in FY 08-09	Approved in FY 08-09 (Y N)
SWMPs				
P-210-09	312 S. The Strand	Residential	1	N
D-200-07	412 S. The Strand	Residential	3	N
RC-11-07	825 S. Pacific Street	Residential	3	Y
RC-16-07	831 S. Pacific Street	Residential	4	Y
RC-14-07	833 S. Pacific Street	Residential	4	Y
P-12-08	1852 Ivy Road	Residential	1	N
P-11-08	1869 Avocado Road	Commercial	1	N
ADP-1-09	Amerillum	Commercial	2	N
T-2-06	Avocado Highlands	Residential	1	N
P-9-08	Cannon Property	Commercial	1	N
D-12-01 Rev07	Canyon Plaza	Commercial	2	N
D-3-07	Cassidy Plaza	Commercial	1	N
T-7-05	Clublife	Residential	1	Y
D-11-06	Community Lutheran Church	Commercial	2	N
T-9-05	Del Oro Heights	Residential	1	N
ADP-2-07	Downs Residence	Residential	4	Y
ADP-6-07	Elfen Children School	Commercial	4	Y
D-13-07	Fawcett Residence	Residential	2	N
T-6-05	Guajome Crest	Residential	3	N
C-33-05	Guajome Lake	ESA	3	Y
RMA-1-01	Hansen Aggregates	Commercial	1	N
RC-2-09	Harbor Aquatics Center- CIP	Commercial/ESA	1	Y
T-200-07	Hyatt-Guest House Inn	Commercial/ESA	4	Y
RC-13-01	Jones Residence	Residential	2	N
P-19-06	Lil Jackson	Commercial	4	Y
T-11-04	Lusardi Capistrano	Residential	1	Y
D-11-06	Lutheran Community Church	Commercial	1	N
D-3-08	Melrose Station	Commercial	5	Y
D-1-08	Mission Animal Hospital	Commercial	4	Y
D-2-07	Mission San Luis Rey Cemetery	Commercial	6	Y
D-15-07	Mission San Luis Rey Parking	Parking	1	N
D-15-07	Myers Street CIP Storm Drain	CIP	1	N
D-10-08REV07	North County Place	Commercial	5	N
P-6-08	Oceanside Airport Park	Commercial	1	N
D-6-07	Oceanside Recovery Center	Commercial	4	N
ADP-2-08	Pacific Animal Hospital	Commercial	3	Y
T-202-07	Pacific Blue Residences	Residential	3	Y
P-3-08	Pacific Coast Medical Center	Commercial	3	Y
D-14-08	Pacific Marine Credit Union	Commercial	3	Y
D-6-06	Pavilion	Commercial	6	Y
D-2-85REV08	Presidio Apartments	Commercial	4	Y
T-16-02	Rancho Vista	Residential	9	Y
P-1-86	Rancho Del Oro Commercial Condos	Commercial	2	N
T-2-08	Sutton Place	Residential	1	N
D-10-08	Taco Bell 1715 Oceanside Blvd	Commercial	1	N
D-25-06	Tri-City Medical Office Building	Commercial	1	N
D-9-08	VA Clinic	Commercial	4	Y
D-5-07	Villa at Mission San Luis Rey	Residential	5	N

ADP-4-08	Vine Street Commercial	Commercial	4	Y
P-23-06	Vista Del Oro Medical Offices	Commercial	1	N
C-34-07	Walker Chapel	Commercial	4	N
P-4-08	Windstar Ocean Ranch	Commercial	5	Y
E-4-07	Worms Residence	Residential	1	N

Total SWMP Project Submittals: 53 Total SWMP Reviews: 145 Total SWMPs Approved: 24

SWMP Amendments Addendums

P-8-08	3186 Vista Way	Commercial	2	Y
P-1-01	Barnwell	Residential	1	N
RC-2-06-04	Holiday Inn & Suites	Commercial	1	N
D-12-01REV05	Jack-in-the-Box	Commercial	1	Y
D-11-03	Mohsen Oil	RGO	1	N
D-19-04	Oceanside Market Place	Commercial	2	N
D-25-05	San Luis Rey Crossing	Commercial	2	Y

Total SWMP Project Amendments: 7 Total SWMP Amendment Reviews: 9
Total SWMP Amendments Approved: 3

RARs

T-201-04	523 S. Myers Street Condos	Residential	1	N
D-205-06	717 N. Pacific Street	Residential	1	N
P-13-08	916 Tait Street Condos	Residential	3	Y
P-2-05	Avocado (Fraser) Parcel Map	Residential	1	Y
P-3-07	Bahama Garden	Residential	3	Y
P-206-07	Hayek Parcel Map	Residential	1	N
D-13-08	Ivey Ranch Equine Center	Commercial	4	Y
E-2-08	Jackson Residence	Residential	3	Y
ADP-1-08	McKay Residence	Residential	1	N
D-15-07	Mission San Luis Rey Parking	Parking	2	N

Total RAR Projects Submitted: 10 Total RAR Reviews: 20 Total RARs Approved: 5

O M Plans

D-200-07	412 S. The Strand	Residential	1	N
RC-206-07	516 S. The Strand	Residential	1	N
RC-11-07	825 S. Pacific Street	Residential	2	Y
P-8-08	3186 Vista Way	Commercial	1	N
ADP-2-06	Alta Loma Creekside	Commercial	4	N
D-13-07	Fawcett Residence	Residential	1	N
P-19-06	Lil Jackson	Commercial	2	N
D-1-08	Mission Animal Hospital	Commercial	2	Y
D-11-03	Mohsen Oil	RGO	2	Y
D-35-06	Oceanside Shopping Center	Commercial	2	N
P-1-06	Oceanview Plaza	Commercial	2	Y
P-3-08	Pacific Coast Medical Center	Commercial	2	Y
ADP-2-08	Pacific Animal Hospital	Commercial	2	Y
D-14-08	Pacific Marine Credit Union	Commercial	2	Y
P-203-08	Pacific View Villas	Residential	1	N
D-25-05	San Luis Rey Crossing	Commercial	4	Y
D-9-08	VA Clinic	Commercial	3	Y

Total O M Plan Projects Submitted: 17 Total O M Plan Reviews: 34 Total O M Plans Approved: 9

SWFMAs				
D-200-07	412 S. The Strand	Residential	1	N
RC-206-07	516 S. The Strand	Residential	1	N
RC-11-07	825 S. Pacific Street	Residential	3	Y
ADP-2-06	Alta Loma Creekside	Commercial	4	N
D-13-07	Fawcett Residence	Residential	1	N
P-19-06	Lil Jackson	Commercial	2	N
D-1-08	Mission Animal Hospital	Commercial	4	Y
D-11-03	Mohsen Oil	RGO	3	Y
D-35-06	Oceanside Shopping Center	Commercial	2	N
P-1-06	Oceanview Plaza	Commercial	3	Y
P-3-08	Pacific Coast Medical Center	Commercial	4	Y
ADP-2-08	Pacific Animal Hospital	Commercial	3	Y
D-14-08	Pacific Marine Credit Union	Commercial	3	Y
P-203-08	Pacific View Villas	Residential	1	N
D-25-05	San Luis Rey Crossing	Commercial	4	Y
D-9-08	VA Clinic	Commercial	4	Y

Total SWFMAs Submitted: 16 Total SWFMA Reviews: 43 Total SWFMAs Approved: 9

SUSMP Exemptions				
ADP-3-08	202 S. El Camino Real	Residential	2	N
RC-10-08	311 Eaton Remodel	Residential	1	Y
RC-4-08	500 Motors	Commercial	1	Y
D-205-06	717 N. Pacific Street	Residential	1	N
D-27-02REV08	1302 S. Pacific Street	Residential	1	Y
ACP-7-08	1509 Marquette Street	Residential	2	Y
RC-6-07	1733 S. Pacific Street	Residential	1	Y
D-25-06	Adobe Estates	Residential	2	Y
ADP-5-04TE	Airport Auto Center	Commercial	1	N
D-28-06	Amazon Bikes	Commercial	4	Y
C-31-07	American Tower Prince Abbey	Commercial	1	N
Plan ID 09-106	Arco-KA MGT 1501 Melrose Drive	RGO	1	Y
Plan ID 09-114	Argon Gas Tank	Commercial	1	Y
C-31-08	ATT Ocean Hills	Commercial	1	Y
Plan ID 09-138	Belk Addition	Residential	1	Y
Plan ID 09-173	Bob s Gas 1742 S. Coast Highway	RGO	1	Y
Plan ID 09-83	Broeker Residence	Residential	2	Y
RC-1-09	BVAS Trail & Observation Deck	Commercial	2	Y
C-4-09	California Career School	Commercial	2	N
D-6-08	Cassidy Cove Condos	Residential	2	N
C-38-08	Cejas Mexican Grill & Diner	Commercial	1	Y
CIP-1-07	College Boulevard Median	Street	1	Y
ACUP-17-08	Cricket 650 Benet Hill Road	Commercial	1	Y
T-3-97	Del Oro Marketplace	Commercial	1	N
CIP	Desalination Pilot Facility	Commercial	1	Y
GPA-1-08	El Corazon Specific Plan	Multiple-use	1	N
D-24-06	Eternal Hills Clear & Grub	Commercial	1	N
C-25-08	Euro Institute of Skin Care	Commercial	2	Y
C-36-08	Exxon 44 Remodel	RGO	2	N

T-6-05	Guajome Crest	Residential	1	N
Plan ID 09-117	Healy Tank San Luis Rey Service Station	RGO	1	Y
P-12-01	Hensel Parcel Map	Residential	2	Y
ACP-6-08	Hostetter Addition	Residential	2	Y
RC-11-06	Hunter Variance	Residential	1	Y
C-35-08	Iglesia Ebenezer	Commercial	1	N
D-13-08	Ivey Ranch Equine Center	Commercial	1	N
Plan ID 09-	Johnson Residence 1995 Chopin	Residential	1	Y
Plan ID 09-	Larry s Beach Club 1145 S. Tremont	Commercial	1	Y
ACP-2-09	Lopez Residence	Residential	1	N
V-1-09	Martin Variance	Residential	1	Y
C-37-86REV08	MediaFLO 650 Benet Hill Road	Commercial	2	Y
T-3-05	Mesa Ridge	Residential	2	N
D-15-07	Mission San Luis Rey Parking Lot	Parking	2	N
RC-205-08	Mobile Service Station	RGO	1	N
D-15-09	Mohsen 628 S. Pacific Coast Highway	RGO	1	Y
Plan ID 09-285	Mountain Ice Company	Commercial	1	Y
C-15-08	N. Coast Methodist Sprint Renewal	Commercial	1	Y
CSP-2-08	Ocean Terrace Professional Center	Commercial	1	Y
ACUP-14-08	Oceanside CrossFit	Commercial	1	Y
Plan ID 09-149	Oceanside Gas 3495 Mission Avenue	RGO	1	Y
D-17-04REV08	Pacific Coast Business Park Revision	Commercial	1	Y
RC-9-08	Parker Residence Terrace Extension	Residential	1	Y
Plan ID 09-133	Ramirez Residence 1537 Marjorie Street	Residential	1	Y
P-15-04TE08	Robertson Time Extension	Residential	1	N
Plan ID 09-134	Rowley Chevron 2191 Vista Way	RGO	1	Y
C-56-05	Sprint SDGE Substation	Commercial	1	Y
T-5-05	St. Cloud	Residential	1	Y
Plan ID 09-178	Surfrider Chevron	RGO	1	Y
C-14-08	Susie s Adult Daycare	Commercial	1	Y
Plan ID 09-	Tetalman Residence 4223 N. Freeman	Residential	1	Y
C-34-08	T-Mobile 5151 Loma Verde	Commercial	1	Y
Plan ID 09-150	Valero Gas 1202 S. Coast Highway	RGO	1	Y
ACUP-2-07	Wind Turbine at 4040 Echo Place	Residential	1	Y
C-28-06REV08	Wings, Pizza, and Things	Restaurant	1	N
Total SUSMP Exempt Submitted: 64 Total Exempt Reviews: 81 Total Exempt Approved: 45				

2.4.4.9 Outreach and Staff Training

City officials involved in planning and review of development projects received a comprehensive training on storm water requirements during this reporting period. See Table 2-3 for the departments and city officials that were provided training. Training topics during this reporting period focused on general water quality concepts, specific SUMSP requirements, LID components that can be recommended for specific projects, implementation procedures and minimal information about future HMP components.

Table 2-3. Staff Training during the 2008-2009 Reporting Period.

Department Division	Training Date	Number in Attendance
Building Division	July 30, 2008	12
Engineering Inspectors	October 23, 2008	10
Engineering-Capital Improvement staff	April 9, 2009	6
Planning Division	May 5, 2009	10

2.5 Development Planning Component Effectiveness Assessment

See Section 11.0 for an assessment of the development planning component of the City's JURMP.

2.6 Program Review and Modification

The Development Planning components of this Report, the City JURMP, and the SUSMP will be revised as necessary to conform to the future requirements of the Municipal Permit. Major revisions to the Development Planning component will be cited in Section 14 of the City JURMP.

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

Construction and grading activities have the potential to impact neighboring water bodies due to the presence of disturbed soils and building materials. It is important that construction sites take appropriate measures to prevent potential pollutants from entering the storm drain system.

The purpose of the construction component section of the City's JURMP is to provide guidance in order to limit the negative impact that construction and grading activities can have on receiving water bodies. The information in this section of the annual report describes how the City of Oceanside met the minimum requirements outlined in Section D.2 of the Municipal Permit Order 2007-0001 to reduce the release of pollutants into the storm drain system to the Maximum Extent Practicable (MEP) (Table 3-1).

Table 3-1. Order 2007-0001 Compliance Summary

J.3.a.(3)(d).iv Updated construction site inventory	See Section 3.2.1 of this Annual Report
J.3.a.(3)(d).i Ordinance update and approval process modifications	See Section 3.3 of this Annual Report
J.3.a.(3)(d).vi BMP Implementation	See Sections 3.4 and 3.5 of this Annual Report
J.3.a.(3)(d).ix Confirmation that sites went through urban runoff approval process	See Section 2.4.3 of this Annual Report
J.3.a.(3)(d).x and xi Inspection of construction sites	See Section 3.5.2 of this Annual Report
J.3.a.(3)(d).xiii and xiv Enforcement of construction sites	See Section 3.5.3 of this Annual Report
J.3.a.(3)(d).xii Inspection frequency and totals during dry and wet seasons	See Section 3.5.2.3 of this Annual Report
J.3.a.(3)(d).vii Requirements for application of erosion and sediment control BMPs	See Section 3.5 of this Annual Report
J.3.a.(3)(d).viii Construction sites requiring Advanced Treatment	See Section 3.5 of this Annual Report

A large portion of the Construction Component of the City's JURMP is described in three documents:

- Chapter 40 of the City Code or Ordinances
- City's Grading Regulations Manual
- City's *Construction Urban Runoff Requirements Manual* (Construction Manual).

All of these documents are available on-line via the City's website.

The Construction Manual was developed by the City to provide construction projects with guidance in order to comply with the City Code and its ordinances. The Construction Manual is a living document and will change with time to ensure an effectively implemented program. Updated versions of the manual will be made available whenever modifications have been proposed and approved by the City. During this reporting period no changes were made to the Construction Manual. The City's full Construction Manual can be found in Appendix C of the 2008 JURMP Update. It is anticipated that this manual will change during this permit cycle once a new Construction Permit is adopted by the State Water Resources Control Board.

3.2 Source Characterization

3.2.1 Site Inventory

The City has compiled a watershed-based inventory of all active construction sites within its jurisdiction. The inventory includes details on each construction site, including project name, location, and threat to water quality (TTWQ) as determined by the process described in Section 5.2.1.1 of the 2008 JURMP.

The inventory process for construction sites is based on information collected from construction projects when they are applying for a grading or building permit. When the permit is approved, this information is then entered into a database developed by the City. If a permit was previously issued for a project, then the database is updated to reflect the most up-to-date information. A spreadsheet of active construction projects in the City's jurisdiction as of June 30, 2009 can be found in Attachment 3-A.

3.2.2 Construction Site Prioritization

All construction sites within the City's jurisdiction are assigned a priority of high, medium, or low TTWQ. Following are criteria used to determine the level of TTWQ.

Construction sites that meet any of the following criteria are considered a **High** TTWQ:

- A site 50 acres or more in size where grading will occur during the wet season.
- A site one acre or more and tributary to a CWA section 303(d) water body segment impaired for sediment or within, directly adjacent to, or discharging directly to a receiving water within an ESA.
- A site that has been determined by the City or the RWQCB to pose a significant threat to water quality.

Sites that are greater than one acre but do not meet any of the above criteria are considered a **Medium** TTWQ.

Sites less than one acre and are not determined to be a significant threat to water quality are considered a **Low** TTWQ. See Table 3-2 at the end of this section for a list of active construction sites and their assigned TTWQ.

Construction projects determine their TTWQ priority by completing the City's Urban Runoff Threat Assessment Form (Appendix D of the 2008 JURMP Update). This form contains information from the City's Construction Urban Runoff Requirements Manual (Construction

Manual) on how to evaluate a construction site's TTWQ. The Urban Runoff Threat Assessment form requires all construction sites to respond to the following questions when assigning priority:

- Item 1 – Project Size: Are you grading or otherwise disturbing soil of one acre or more?
- Item 2 – Planned period of grading: Will the project involve grading or soil disturbance?
- Item 3 – Vicinity of the Project to Environmentally Sensitive areas: Is the project tributary or adjacent to environmentally sensitive water bodies within the City?
- Item 4 – Presence of significant erodible slopes: Does the project include significant erodible slopes?
- Item 5 – Potential to produce significant non-storm water discharges or pollutants: Does the project have the potential to produce non-storm water discharges or pollutants?
- Item 6 – Project type: Will the project result in more than 5,000 square feet of impervious surface area?

All project proponents are directed to reference a prioritization matrix to determine the priority of the project. An example of the matrix is provided as Table 3-2 below. The matrix is used by first locating the appropriate row in the matrix according to the size of the project, then moving across the row. The proponent should refer to the answers given to the five questions above. If "Yes" was responded to a question, the corresponding box in the matrix provides the priority for the project. The use of this matrix was developed consistent with the requirements of the Permit Order 2007-0001. Under this process, construction sites that meet either of the following conditions must be classified as High Priority.

Table 3-2. Construction Project TTWQ Prioritization Matrix.

Project Size	Item 2	Item 3	Item 4	Item 5	Item 6	Default Priority
Greater than 50 acres	High	High	High	High	High	Medium
5□50 acres	□	High	High	High	High	Medium
1□5 acres	□	High	Medium	Medium	Medium	Medium
Less than 1 acre	□	Medium	Medium	Medium	Medium	Low

3.3 Updates to Ordinances and Approval Processes

During this reporting period there were no updates to the City's ordinances or approval process. Storm water compliance requirements for construction activities are included in the City's Construction Manual found in Appendix C of its 2008 JURMP.

The City made one revision to its SUSMP during this reporting period by exchanging an older isopoluvial map with a more recent version. Also, the City will be responsible for the adoption and implementation of a revised SUSMP by March 2010 which is based on a model SUSMP developed by the San Diego County copermittees. Once the City revises its SUSMP, the Construction Manual will again be reviewed and changes will be made appropriately. In addition, ordinances will be reviewed to make sure they reflect the information in the SUSMP and allow for LID components to be implemented into development projects. City of Oceanside Clean Water Program staff has been regularly attending and participating in meetings with San Diego County copermittees for the development of the model SUSMP.

3.4 Best Management Practice Requirements

The City has a set of minimum Best Management Practices (BMPs) that must be implemented at all construction sites regardless of TTWQ priority including implementing and maintaining general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the MEP. Table 5-2 of the City's 2008 JURMP (pp. 5-4 and 5-5) outlines the minimum construction BMPs required by the City along with the reference to corresponding current fact sheets obtained from the Caltrans Storm Water Quality BMP Handbook and California Stormwater Quality Association (CASQA) for Construction Sites.

A Construction BMP brochure titled "A Pollution Prevention Guide for the Construction Industry" is provided to the developer during pre-development meetings. This brochure provides a sample drawing that illustrates the minimum BMPs that must be used at all construction sites to protect storm drains and minimize pollution. See Attachment 3-B for a copy of this brochure. This brochure is also available at both the Engineering and Building Department counters of the City. Approximately 250 brochures were distributed to the public by building division staff during this reporting period.

3.5 Program Implementation

All construction sites are required to select, install, and maintain BMPs that meet or exceed the minimum BMP requirements described in the City Construction Manual and in Section 5.4.1 of the 2008 JURMP. There in no minimum threshold of disturbed area that relieves a project of the responsibility to implement erosion and sediment control BMPs. Moreover, all sites requiring a grading permit are obligated to implement an Erosion Control Plan as part of the Grading Plan review and permit process. Construction activities that result in a land disturbance equal to or greater than one acre are subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). Projects that are subject to the CGP are required to file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB), obtain a Waste Discharge Identification Number (WDID#), and develop and implement a site specific Storm Water Pollution Plan (SWPPP) prior to the commencement of any grading activities. SWPPPs are required to include a list of BMPs that will be implemented during each phase of construction to reduce pollution discharges to the MEP. In addition, selected projects governed by the CGP may be required to employ advanced treatment as part of their SWPPP. Each project will perform a site assessment that includes the determination of a Sediment Risk Factor and a Receiving Water Risk Factor to ascertain a Combined Risk Level. Projects with Risk Levels associated with (Numeric Effluent Limits) NELs may find it necessary to implement an Advanced Treatment System (ATS) to achieve effluent standards. Projects faced with physical constraints that "inhibit the ability to construct a correctly sized sediment basin" may also elect to implement an ATS to comply with the MEP standard.

3.5.1 Education and Staff Training

Site owner/developer education and training

The City provides all appropriate parties involved with construction activities with training and informational materials regarding storm water quality, as applicable. These parties include but are not limited to City employees and project proponents, which can include contractors, subcontractors, developers, property owners, and superintendents. Education and training of the

development community in Oceanside is typically done on a project-by-project basis during a mandatory pre-construction meeting with the City and during construction site inspections.

Prior to the issuance of permits, construction site owners and developers meet during a pre-construction meeting with City staff and developer staff and/or contractors, subcontractors and superintendents. During these meetings City staff from various departments review what is expected of the project proponent in order to develop the project. At least one Clean Water Program staff person attends these meetings. Topics covered during these meetings specific to storm water pollution prevention include:

- Grading - Reference to the City of Oceanside Grading Regulations manual and the BMP Construction manual (both available on the City's website).
- Site Plan review for storm water inlets and associated BMPs
- Review of site-specific BMPs more applicable to the site and associated with the potential pollutants that could be generated from the proposed business operations
- Inspection Requirements and Frequency – Unannounced and upon call-outs from the public
- Expectations of BMPs during dry and wet seasons
- Construction BMP Brochure is provided

Prior to wet season, all currently permitted construction sites were contacted to remind site owners and developers to assess, repair and update their sites BMPs to reduce erosion potential and prevent storm water pollution. Site owners and developers are also advised to update their erosion control plans and SWPPPs that are applicable to the site.

Municipal Staff Training

City staff directly involved with development and construction sites are provided training on a departmental basis. For further details on topics covered during the City's construction educational program, please refer to Sections 10.2.2 and 10.3.1 of the City's 2008 JURMP. During this reporting period three groups were provided training in regards to erosion control and BMP installation and maintenance for construction sites. See Table 3-3 below for those who received training.

Table 3-3. Municipal Staff Training.

Department Commission	Training Date	Number in Attendance
Engineering Inspectors	October 23, 2008	6
Capital Improvement Project (CIP) Staff	April 9, 2009	8
Planning Division	May 5, 2009	10

3.5.2 Inspection of Construction Sites

Permit Order 2007-0001 requires that the City develop and implement an inspection program to ensure that each construction site properly complies with the City's relevant ordinances, permits, and the Permit Order 2007-0001. This section describes the City's inspection program for 2008-09 of construction sites developed in accordance with Part F.2.g of the Permit Order 2007-0001.

Each project was assigned an engineering and storm water inspector who was tasked with conducting inspections at the site throughout the construction phase of the project. All inspectors have been educated in the requirements of the Permit Order 2007-0001 and through in-house training and seminars, and/or construction-specific certificate training seminars.

3.5.2.1 Initial Site Inspections

Upon commencement of work at a construction site, a City inspector will visit the site and perform the following:

- Where applicable, a check for proof of coverage under the General Construction Permit.
- A review of the SWPPP (where applicable) and erosion control plans with the appropriate project proponent on site.
- A check for proper implementation of the BMPs outlined in the projects plans.
- A review of the maintenance schedule and procedures for each BMP.

All construction sites in the City's construction site inventory receive initial site inspections regardless of TTWQ priority. If any required documents or BMPs are found to be missing or deficient, the City may issue a stop work notice until the deficiencies are corrected.

3.5.2.2 Routine and Follow-Up Inspections

Once an initial site inspection is performed, additional routine inspections will be performed. The frequency of these routine inspections depends on the site's assigned TTWQ. The criteria used to determine a construction site's TTWQ presented in Section 5.2.1.1 were developed to correspond to the routine inspection frequencies required by the new Municipal Permit. Table 3-4 presents the different TTWQ categories and their corresponding minimum inspection frequencies for the wet (October 1 through April 30) and dry (May 1 through September 30) seasons.

Table 3-4. Construction Site Inspection Frequency

Construction Site TTWQ	Wet Season Inspection Frequency	Dry Season Inspection Frequency
High	Every two weeks	As needed
Medium	Monthly	
Low	As Needed	

3.5.2.3 Construction Site Inspection Frequencies

Attachment 3-A provides the number of inspections conducted during both rainy and dry seasons for active construction sites during the reporting period. This table provides inspection numbers from both engineering and building department staff.

It was determined that there were 55 active construction sites with grading permits during the reporting period. As required by the Permit, these construction sites were assigned high, medium and low priority ratings based on the Permit requirements. Table 3-5 below provides the ratings of the priority construction sites and the minimum number of inspections required per the Permit for both rainy and dry seasons.

Table 3-5. Prioritized Construction Site Inventory Summary and Required Inspection Frequency.

Prioritized Construction Sites		Minimum Required Inspection Frequency		
Threat Priority		**Wet Season**	**Minimum number of required inspections**	**Dry Season - As Needed**
High	20	Bi-weekly over 32 weeks	320	As Needed
Medium	17	Monthly over 5 months	85	As Needed
Low	18		90	As Needed
Total	**55**		**495**	As Needed

The City conducted 1,016 wet season and 250 dry season storm water related inspections of prioritized construction sites.

During the reporting period the City conducted inspections of construction sites in accordance with the requirements of the Permit. See table 3-6 below for a summary of the construction site inspections completed during wet and dry seasons.

Table 3-6. Inspection Frequency Verification Table.

Wet Season Inspections		Dry Season Inspections		Total Number of Prioritized Construction Site Inspections
Engineering Dept.	**Building Dept.**	**Engineering Dept.**	**Building Dept.**	
884	132	168	82	
1,016		250		1,266

Based on tables 3-5 and 3-6 above, the City conducted the minimum required inspections.

3.5.3 Enforcement Measures for Construction Sites

The City will be responsible for enforcement of applicable local ordinances and permits at all construction sites in its jurisdiction. When violations are observed and documented during a site inspection, the City will implement appropriate enforcement measures based on the severity of the violation. Enforcement can range from written warnings to more severe enforcement such as stop work notices. Stronger enforcement measures will be used as necessary if proper corrective actions are not implemented during the allotted time frame or if the severity of the violation warrants stricter enforcement.

The typical progressive enforcement steps that the City will implement include the following:

- Written warnings
- Enforcement of contracts (Municipal projects)
- Stop work notices
- Administrative citations
- Denial or revocation of permits
- Civil and/or criminal court actions

Enforcement actions by Code Enforcement Officers for construction sites begin with a referral from another department, a site visit, or by a complaint lodged via phone. Depending on the severity of the violation, follow up activities may include phone calls, site visits, written correction notices with specified compliance timeframes, or administrative warnings. If these actions do not produce the required improvements, administrative citations (starting at $100 with a $1,000 maximum fine) and/or stop-work notices are given.

Enforcement actions conducted for construction sites by Code Enforcement and Engineering Divisions, including enforcement action dates, administrative abatement costs, and compliance status, are included as Attachment 3-C. More details about enforcement actions during this reporting period are available on file at the City.

3.5.4 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of non-compliant sites in the City that are determined to pose a threat to human or environmental health. Verbal notification is required within 24 hours of the discovery of non-compliance and a written report should be submitted to the RWQCB within 5 days of the incident. The criteria established for determining when a site is not compliant and poses a threat to human or environmental health is described in Section 5.5.5 of the 2008 JURMP. See Table 3-7 below for the sites issued high enforcement correction notices during this reporting period: See Attachment 3-A for the status of these sites during this reporting period.

Table 3-7. Construction Sites issued Stop Work Notices

Project Name	WDID	Watershed	Address Location	Stop Work Notice Issue Date
Hi Hope Ranch	937C22214	San Luis Rey	Highway 76 and Melrose	12/29/08
Darwin Glen	937C325609	San Luis Rey	Darwin and Sagewood Drive	3/30/09
Darwin Knolls	937C325610	San Luis Rey	Darwin and Ocean Ridge Ct.	3/30/09
Ocean Heights	937C330740	San Luis Rey	Mission Avenue & Valley Heights Drive	
Bellon Residence	937C341136	San Luis Rey		11/04/08
Fire Mountain Estates	937C341032	Carlsbad – Loma Alta	Fire Mountain	12/18/08

3.6 Construction Activities Effectiveness Assessment (Optional)

See Section 11.0 for an assessment of the Construction Component of the City's JURMP.

3.7 Program Review and Modification

The Clean Water Program will continue to review and modify the construction component as needed. Clarifications and updates were made to FY 2007-08 Annual Report inspections, enforcement actions, and the reporting of non-compliant sites in response to the meeting and follow-up written request from RWQCB staff in December 2007 and January 2008. In addition, the Development Services Department, which includes Planning, Building, Engineering, and Code Enforcement, will be rolling out new tracking software, CRW Systems, Inc., which will assist in tracking and reporting of stormwater data. Training and official roll-out will begin in the 2009-10 reporting year.

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4.0 MUNICIPAL COMPONENT

4.1 Introduction

This section documents the activities conducted by the City of Oceanside at its municipally owned, leased and/or managed facilities during the 2008-2009 reporting period to meet the requirements of Section D.3 of Municipal Permit Order 2007-0001 (Table 4-1). The City of Oceanside owns and/or maintains a variety of municipal facilities including operation centers/facilities, public parks, administration buildings, fire stations, a fire training facility, industrial facilities, potable reservoirs, sewage pump stations, wastewater treatment facilities, public roads, streets and parking facilities and other miscellaneous facilities. Additionally, the City conducts activities that have a high threat to water quality such as power washing, street and sidewalk repair, painting, graffiti removal, parking meter maintenance, MS4 maintenance, and regular upkeep of the sanitary sewer system to prevent overflows and leaking.

Table 4-1. Order 2007-0001 Compliance Summary

D.3.a Municipal (Existing Development)	Section 4 of this Annual Report
J.3.a.(3)(c).i Updates to Municipal Inventory	See Section 4.1.1 of this Annual Report
J.3.a.(3)(c).ii BMP Implementation	See Section 4.2.3, 4.3.3, 4.4.3,4.5.3, 4.6.3, and 4.8.3 of this Annual Report
J.3.a.(3)(c).iii Inspection and maintenance of municipal treatment controls	See Sections 4.4.3 of this annual report
J.3.a.(3)(c).iv Number of catch basins and inlets, inspections, and cleaning	See Section 4.4.3 of this annual report
J.3.a.(3)(c).v Distance of MS4 inspected and cleaned	See Section 4.4.2 of this annual report
J.3.a.(3)(c).vi Distance of open channels inspected and cleaned	See Section 4.4.2 of this annual report
J.3.a.(3)(c).vi Amount of waste removed from MS4 and open channels	See Section 4.4.3 of this annual report
J.3.a.(3)(c).viii MS4 inspected less than annually	See Section 4.4.1 of this annual report
J.3.a.(3)(c).ix Implementation of BMPs for pesticides, herbicides, and fertilizers	See Section 4.3.3 of this Annual Report
J.3.a.(3)(c).x, xi, xii, xiii Curb miles	See Section 4.2.2 and 4.2.4, of this Annual Report
J.3.a.(3)(c).xiv Municipal parking lots	See Section 4.2.2, 4.2.4., and 4.2.5.1 of this Annual Report
J.3.a.(3)(c).xv Tonnage of debris removed from streets and parking lots	See Section 4.2.5.2of this Annual Report
J.3.a.(3)(c).xvi	See Section 4.5 of this Annual Report

Prevention of infiltration from sanitary sewer	
J.3.a.(3)(c).xvii Sites inspected and frequency	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xviii Inspection results	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xix Inspections steps determined full compliance	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xx Violations and enforcement actions	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xxi Notable activities	See Section 4.1 and 4.5 of this Annual Report

To comply with the Municipal Permit, the City of Oceanside has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas and municipal activities. Some of the significant activities include street sweeping, inspections of municipal facilities, and educational efforts geared toward municipal personnel.

The City continues to use its Municipal Urban Runoff Procedures Manual (Municipal Manual) as a useful reference document for training staff and developing and implementing educational programs. The Municipal Manual contains BMP requirements and related guidance for City facilities and employees and was circulated to relevant City staff directly involved with the Municipal NPDES Permit. This manual was first prepared as part of the JURMP in 2002 and updated and provided with the 2008 JURMP. See Appendix C.3 of the 2008 JURMP for this manual. No changes were made to this manual during this reporting period.

Notable Activities

During this reporting period there was one notable activity for the municipal component. An outfall replacement project was conducted which replaced 6020 linear feet of 36” HDPE and PVC pipe that runs parallel to Oceanside Blvd. See Section 4.5.3 for more information.

4.1.1 Source Identification

As required in Section D.3.a(1) of Permit Order 2007-0001, the City of Oceanside has developed a prioritized, watershed-based inventory of municipal properties and activities. The City of Oceanside maintains a number of municipal facilities, including parks, administrative buildings, fire stations, and public works yards. The inventory of municipal facilities, including areas and activities, is updated annually. The inventory used for fiscal year 2008-09 is Attachment 4-A to this report. Table 4-2 provides a summary of the facility categories within the City’s inventory.

Table 4-2. Summary of Municipal Facilities by Category.

Facility Category	Number of Facilities
Park and Recreation Facilities	46
Public Works Operations Facilities	3
Municipal Landfills	2
Marinas	3
Municipal Airport	1
Potable Water Treatment Facilities	13
Wastewater Treatment Facilities and Lift Stations	36
Police and Fire Facilities	14
Other Fixed and Leased Facilities	26
Roads, Streets, Highways and Parking Facilities	37
Total Facilities	**181**

4.2 Roads, Streets, Highways, and Parking Facilities

4.2.1 Background

Roads, streets, highways, and parking facilities are an integral part of any functional City. These facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control the level of pollutants, such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities. Other City activities include building new roads, resurfacing existing roads, and similar construction-related activities. All construction-related activities conducted by the City will continue to be conducted under the requirements of the construction component, which is described in detail in Section 3 of this document.

4.2.2 Source Characterization

The City of Oceanside maintains approximately 571 miles of public roads and streets throughout the City. During this reporting period, 28,954 curb miles were calculated. This number is the actual miles when the brooms on the street sweepers were down - not the total mileage for the City's street sweeping vehicles.

A parking facility is defined as a stand-alone parking facility, which is a parking facility that is not associated and/or adjacent to other inventoried municipal facilities. Parking facilities that are associated and/or adjacent to municipal facilities will continue to be included in regular maintenance activities of the associated municipal facility. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included as Attachment 4-A of this annual report. There are 36 parking facilities within the City.

4.2.3 Best Management Practice Requirements

Similar to municipal fixed facilities, the City will continue to utilize the City-developed Municipal BMP Manual to choose applicable BMPs to implement for public roads, streets, parking facilities and operational facilities within the City.

Street sweeping and cleaning continues to be the main BMP that is implemented for roads, streets, and parking facilities. The frequency of cleaning takes into account the following:

variations in climate conditions, surrounding land use, design of existing structures, traffic volume, frequency and quantity of accidental spills and leaks, and areas with historical trash and/or debris problems. Treatment control BMPs will be used for road sections subject to SUSMP.

The City will continue to implement an aggressive street sweeping program to reduce the amount of pollutants discharged from roads, streets, and parking facilities in the City with a particular focus on facilities that drain to environmentally sensitive areas (ESAs). If in the future negative impacts to ESAs associated with runoff from roads, streets, highways, or parking facilities are noted, the City will take the measures necessary to mitigate the negative impacts.

4.2.4 Program Implementation

As an effort to reduce the pollutant load entering local receiving water bodies, the City continued to implement a sweeping schedule for roads, streets, highways, and parking facilities to meet the requirements of the Municipal Permit. There have been no significant changes to the existing programs during the reporting period.

Roads, streets, and highways that have been observed as generating relatively high volumes of trash, sediment, and debris are included as high priority and will continue to be swept at least twice per month; medium priority streets are streets in the City that generate moderate volumes of trash, sediment, and debris and will continue to be swept at least monthly. Low priority streets have been observed as generating relatively low volumes of trash, sediment, and debris and will continue to be swept as needed, but not less than once per year. In the event of a National Holiday, sweeping is made up in a timely manner, usually by the next working day. Due to the City's proximity to the Pacific Ocean and as a means to target watershed constituents of concern, the City typically sweeps all streets within the City above baseline jurisdictional activity standards. Additional program details can be found in Section 6.3 of the 2008 JURMP.

All public streets in the City of Oceanside are swept at least monthly. There is a total of 571 miles of public streets that are swept regularly per the frequency outlined below. There were 28,954 curb miles swept during this reporting period. Some streets are swept more frequently than others.

- Every Monday, Wednesday, and Friday, the downtown commercial areas and other high use areas are swept using regenerative air vacuum street sweepers. These areas include the medians on Mission Avenue, Canyon Drive, and the Civic Center Drive Bridge, Wisconsin Avenue to Pacific Street to Ditmar Street, the Strand, and all downtown parking lots.
- The majority of all other public streets, not included in the areas listed above, are swept every other week. In some low use residential areas, the streets may be swept monthly.
- As necessary, sweepers or other clean up crews will respond to public or municipal staff reports to collect debris and/or sweep.
- Inspection of streets and curbs for cleaning is continuous. City employees are encouraged to identify areas that should be cleaned and to call the municipal employee reporting line, Oceanside Eyes. Residents are encouraged to call the Public Works Maintenance Hotline.

4.2.5 Inspection and Maintenance Results

4.2.5.1 Inspections

Inspections and maintenance activities were conducted throughout the reporting period as described in the previous section. Following is a review of the results form inspection and maintenance.

There are 37 facilities in the Roads, Streets, Highway and Parking Facilities categories which include 36 parking lots and 571 miles of public road. During this reporting period all 37 of these facilities were inspected by CWP staff. Some corrections were noted but were addressed by appropriate staff in a timely manner. Due to the fact that many of these parking facilities are swept at least once per week, debris and sediment are removed on a very frequent basis.

4.2.5.2 Maintenance

Street sweeping activities resulted in the collection of over 2,062 tons of waste from public streets and parking lots during the reporting period. These results are comparable with tonnage amounts from previous reporting years. See Table 4-3 for a summary of debris collected during this reporting period and in previous reporting periods.

Table 4-3. Summary of amount of street sweeping debris collected.

Reporting year	Tons
2003-2004	2,604
2004-2005	2,538
2005-2006	2,283
2006-2007	2,480
2007-2008	2,358
2008-2009	2,062

4.2.6 Roads, Streets, Highways, and Parking Facilities Element Effectiveness Assessment

See Section 11.0 for an assessment of the Municipal component of the City's JURMP.

4.3 Parks and Recreational Facilities

4.3.1 Background

The City of Oceanside is committed to providing the highest quality of service to its residents by providing the opportunity for them to enjoy a variety of recreational activities at both outdoor parks and indoor recreational facilities. Operating and maintaining 46 community attractions from public pools, beaches, parks and community centers, the City of Oceanside works hard every day to maintain the high level of service. The inspection and maintenance of these facilities in regards to storm water is important because of the number of facilities throughout the city and the public exposure that these facilities receive.

One park was added to the inventory during this reporting period: Mance Buchanon Park. Construction of this 29-acre park was completed during this reporting period. The park is located

on College Boulevard just south of the San Luis Rey River crossing and is slated to be an active recreational park that includes ball and soccer fields.

4.3.2 Source Characterization

The City regularly inspects, cleans and maintains 46 Parks and Recreational Facilities. Because of high public use these facilities have the potential to generate a variety of pollutants including trash and debris, organic material and sediment. See Attachment 4-A of is annual report for the updated Parks and Recreational Facilities inventory.

4.3.3 Program Implementation

The City has selected BMPs to implement at Parks and Recreational Facilities to reduce the contribution of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers. These BMPs are detailed in the Municipal Manual. All 46 facilities were inspected during this reporting period with only minor corrections noted. See Attachment 4-A for inspection information for these facilities.

Pesticides, herbicides and fertilizers are seldom used directly by the City, as it contracts out the majority of work involving these substances. To facilitate compliance with this Section of the Municipal Permit, the City has reviewed its landscaping contract and has integrated BMP requirements into the conditions of the contract.

4.4 Municipal Separate Storm Sewer System

4.4.1 Background

As required by Section D.3.a.(3) of the Municipal Permit, the City has implemented a schedule of maintenance activities for the City's entire Municipal Separate Storm Sewer System (MS4), including any structural controls designed to reduce pollutant discharges to or from its MS4s and related drainage structures. The City has determined, through historical knowledge and records, the locations within the MS4 that require regular waste removal and those areas that are less likely to require any waste removal. The City has developed a comprehensive Flood Control Annual Maintenance Program which includes a list of the high priority areas, divided into zones, which are to be inspected annually using an inspection checklist. Approximately 110 sites are inspected and maintained annually. No sites are inspected and cleaned less than annually.

4.4.2 Source Characterization

The Public Works, Street Division, performs ongoing inspection and cleaning of storm drains and flood control facilities, as well as annual maintenance of all major facilities such as creeks, desilting basins, detention basins and rock and concrete lined channels. There are approximately 104 concrete and earthen channels that are inspected and maintained throughout the city. Over 49,000 linear feet of storm drains, catch basins, and concrete and earthen channels are maintained on at least an annual basis. In addition, the Street Division performs annual maintenance/cleaning in September, October, and November for all major MS4 facilities. The results of this work are recorded on an Annual Maintenance List that is available at the City Operations Center.

4.4.3 Best Management Practices

In order to inspect and clean storm drains as described above, during the May through September period, the City contracted with United Storm Water Inc. A total of 3,354 structures (catch basins, manholes, inlets, outlets, etc.) were inspected and cleaned during the reporting period by the City contractors and City maintenance crews. A total of 65.89 tons of waste was removed. The waste generally consisted of trash, green waste, dirt, sand, roots, solids, rocks, and silt. During the inspections if a storm drain was not labeled with a marker, one was installed. During this reporting period 779 were labeled with a placard stating: "No Dumping – Drains to Creek" in both English and Spanish. See the photo below for a copy of the storm drain placard installed. See Table 4-4 for a summary of the amount of waste removed from catch basins, inlets, the MS4 and open channels by category.

Table 4-4. Waste removed from catch basins, inlets, the MS4 and open channels by category.

Structure	Number Inspected	Contractor or City Crew	Drain Markers Installed	Cleaned	Amount of Material Removed
Catch Basin/Inlet	3,074	Contractor	779	3,074	65.89 tons
Catch Basin/Inlet	280	City Staff		280	
Total Catch Basin/Inlet	3,354			3,354	
Open Channels	104	City Staff	N/A	49,455 ft.	1,536 tons
Drain Pipe		City Staff	N/A	2,545	

Trash Trap at the Oceanside Municipal Golf Course

In addition to standard maintenance, staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. City staff installed a trash trap downstream of this priority residential area and upstream of Pilgrim Creek in the open channel that parallels the driving range at the municipal golf course. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. This trash trap was installed in March 2009.

After installation there was one rain event that captured 40 pounds of trash and organic debris. During future reporting years, the volume or weight of trash will be tracked. See the photos

below of the newly installed trash trap and a photo of the effectiveness of the trash trap in stopping debris from reaching the waterway.

Trash trap immediately after installation

Trash trap with debris

4.5 Sanitary Sewer

4.5.1 Background

The City of Oceanside Sewer Division maintains the sanitary sewer system within the jurisdictional boundaries which includes sewer lines, lift stations, sewage treatment plants. This sanitary sewer system uses pipes to remove human waste from homes and businesses and transport that waste to one of two waste water treatment plants in the City. The two treatment plants are operated by city crews.

4.5.2 Source Characterization

The City regularly inspects, cleans and maintains thousands of feet of sanitary sewer pipe, 34 sewer lift stations and two sewage treatment plants. See Attachment 4-A for the 2008-09 wastewater Facilities inventory.

4.5.3 Best Management Practices

Since the City owns and operates the sewage system, these facilities are regularly inspected and maintained for proper operation and maintenance, and to ensure that BMPs are in place for the protection of receiving waters that may be impacted from the system. The City's preventive and corrective sewer maintenance programs consist of a variety of components provided for the operation, maintenance, repair and replacement of sewer mains, manholes, and pump stations.

In order to ensure that the sanitary sewer lines do not leak, the city has a long term plan to slip line the sewer pipes throughout the City. During this reporting period 4,054 feet of City sewer lines were slip lined. In addition 47 manholes were rehabilitated. Since the 2005-06 reporting period the City has slip-lined a total of 17,285 feet of sewer. The City also inspected and cleaned 312 miles (1,649,702 feet) of sanitary sewer.

Notable Activity

Land Outfall Sewer Replacement

During this reporting period 6020 liner feet of pipe of the Land outfall were replaced. The existing land outfall was constructed in 1972 and consists of approximately 34,000 linear-feet of 24-inch ductile iron pipe. Several failures of the existing land outfall have occurred recently and

one segment (approx. 6,000 linear-feet) was identified for immediate replacement. The segment targeted for replacement, runs parallel to the centerline of Oceanside Boulevard, and begins approximately 600 feet west of Vine Street and terminates approximately 1200 feet east of Crouch Street. This project consisted of the installation of 6020 linear feet of 36" HDPE and PVC pipe in this segment.

A formal bid process was used to select the contractor. A Notice to Proceed was issued on June 19, 2008. The project was completed on June 4, 2009 with a project budget of $4,059,486.60.

4.6 City Operations Center

4.6.1 Background

The City Operations Center (COC) is a municipally owned and operated facility that houses several departments or divisions for the City including Public Works, fleet maintenance, road maintenance, parks and recreation maintenance and others. Because of the diverse activities of these departments and divisions, the City developed a Storm Water Pollution Prevention Plan (SWPPP) for the COC in the fall of 2002.

The COC includes the following areas: employee parking lot, COC main building (offices, storage and fleet maintenance), traffic control lot, back lot, city vehicle parking lot, large vehicle equipment lot, fueling area, waste disposal area, wash facilities, general use yard and west corner lot. The SWPPP has the following objectives:

- Identify and evaluate sources of pollutants from the facility that may affect the quality of urban runoff discharge and to identify and
- Implement site-specific best management practices to reduce or prevent pollutants in urban runoff discharges.

The SWPPP outlines BMPs to be implemented at each of the respective areas. A comprehensive training program was also developed and has been implemented in concert with the COC SWPPP.

4.6.2 Source Characterization

Due to the nature of the various activities from the departments and divisions it was determined that there are various activities that generate pollutants and have the potential to reach storm water conveyance systems. Some of these activities include vehicle washing, disposal of street sweeping debris, temporary storage of wrecked vehicles, and storage of various materials, including paints, solvents, metal piping and infrastructure materials. In addition steep hillside landscaped areas can be a potential pollutant source if BMPs are not managed properly.

4.6.3 Best Management Practices

Since the implementation of the SWPPP at the COC some permanent BMPs have been installed and continue to be used for protection of receiving waters. Following is a brief description of the BMPs in place at the COC and any new BMPs installed during this reporting period.

4.6.3.1 Wash Facility

The main wash facility is used for washing large vehicles and equipment, and collection of street sweeper and vactor truck contents. The main wash facility is a completely contained area,

surrounded on all sides by berms and curbs. The entire area drains to the eastern corner of the pad where it enters a grated inlet that leads to a clarifier and then the sewer. An overflow is available if the drain to the sewer is clogged or the volume of water exceeds its capacity, however, this is not anticipated to happen frequently because the drain is maintained daily.

4.6.3.2 Storm Drain Filters and other inlet BMPs

BMPs in place before reporting period

During previous reporting periods the Public Works Department installed two BioClean filters at the only two outlets which drain runoff from the City Operations Center: one on the south side of the COC where a 36” box outlet discharges directly into Loma Alta Creek, and one at the 12” pipe which discharges onto Oceanside Blvd. These filters were inspected and repaired as necessary during the late summer/early fall, spring and prior to forecast storms. Also a brushless filter was added to the 36” box outlet during prior reporting periods.

During fiscal year 2007-08 three broom gate were installed at the COC. The outlets where these broom gates were installed at the COC are located at the southern property line next to the SDGE easement, Loma Alta Creek and Sprinter RXR. See the photo below for an example of the broom gate installed. During the next reporting period the effectiveness of the debris removal and the maintenance of these broom gates will be assessed.

During fiscal year 2007-08 the BioClean filter that was installed on the 12” pipe that discharges to Oceanside Blvd was removed due to constant clogging and replaced with fiber rolls around the inlet. This drainage area will be checked regularly to remove debris collected around the fiber rolls and to ensure that the fiber rolls in proper working order.

BMPs installed or changed during Fiscal Year 2008-09

There were no new inlet BMPs installed at this facility during the reporting period.

4.6.3.3 Structural BMPs

BMPs in place before reporting period

BMPs installed in FY 2005-2006 included a garage cover built to cover drums in the storage area, and an area was designated to hold all wrecked vehicles from police department with secondary containment installed around wrecked vehicles contain any fluid runoff from the vehicles.

During Fiscal Year 2007-08 the water utilities department installed two structural covers to prevent rain from reaching these metal materials and causing rusting and deterioration. Metal materials that are subject to rusting and deterioration when exposed to the elements, including scrap metal are contained and covered until used or disposed of through a licensed commercial metal recycling company.

BMPs installed or changed during Fiscal Year 2008-09

There were no new structural BMPs installed at this facility during the reporting period.

4.6.3.4 Pollution Prevention and Recycling

BMPs in place before reporting period

The COC continues to implement an aggressive pollution prevention/recycling program including: purchasing re-refined oils, recycling used oils, oil filters, fuel filters, antifreeze, used tires, and batteries. In addition solid waste recycling bins are located throughout the facility for collection of bottles, cans, glass and mixed paper.

Additional solid waste recycling bins were installed throughout the COC including ones outside of the facility so field crews can easily deposit their recyclable when cleaning the interior of their vehicles. Also, each vehicle driver was provided with a convenient recycling basket to use in their vehicle for easy collection of their recyclables.

BMPs installed or changed during Fiscal Year 2008-09

There were no new pollution prevention BMPs installed at this facility during the reporting period.

4.6.4 Program Implementation

4.6.4.1 Facility Inspection

A thorough walk through inspection of the COC Facility was conducted by the operation manager of the facility and Clean Water Program inspectors on February 27, 2009. See Attachment 4-A for a list of minor corrections needed for this facility. A second inspection conducted on April 14, 2009 verified that the corrections needed had been addressed.

4.7 Other Facilities

4.7.1 Background

The City of Oceanside owns and operates two closed landfills (Maxson Street Landfill, WDID 9375005695 and Mission Avenue Landfill, WDID 9375005696). The City also operates and maintains eight fire fighting facilities including one fire fighting training facility.

4.7.2 Source Characterization

The two closed landfills maintained by the City have the potential to generate pollutants that can negatively impact receiving waters. If potential storm water discharges are identified, appropriate BMPs are implemented to prevent pollutants from entering MS4.

Also fire fighting stations have the potential to generate pollutants such as trash and debris, organic materials and fluids and wash water from fire fighting vehicles. The two closed landfills and the fire fighting facilities are included in the City's municipal inventory, which is included as Attachment 4-A of this annual report.

4.7.3 Program Implementation

Closed Landfills

Both closed landfills are inspected quarterly per permit requirements and an annual report is prepared each for submittal to the Regional Water Quality Control Board. See Attachment 4-B for copies of the 2008-09 Annual Report for Storm Water Discharges Associated with Industrial Activities for these two landfills.

Fire Stations

All fire stations were inspected during the reporting period. During the station inspections no violations or potential violations were noted.

4.8 Special Events

The City of Oceanside hosts a variety of Special Events in the City. These events include major sporting events and community fairs and festivals. A Special Events Permit is required for any organized activity involving the use of, or having impact upon, public property, public facilities, parks, beaches, sidewalks street areas or the temporary use of private property in a manner that varies from its current land use. The permit process includes a BMP implementation plan. The City has a Special Events Committee comprised of various City Department representatives who review permit applications to insure events are held safely and do not adversely impact the community.

4.8.1 Source Characterization

The City issues Special Event permits for both internal city sponsored events and event organizations that coordinate events that may include vendors or various event related elements.

- Antiques on Mission
- Dia de los Muertos
- Turkey Trot 5k Run
- Ironman Triathlon
- Race Across America
- Freedom Day Parade

Typically, special events have a high density use of people per square foot raising the potential for pollutant types at special events, such as:

- Setup and teardown of equipment booths
- Booth operation generating trash
- Food and drink preparation and consumption – illicit discharges and organic material
- Hydraulic rides – oil and grease
- Temporary portable restroom – chemicals and bacteria
- Hydration stations – water cups and other trash material

4.8.2 Best Management Practices

All special events are required to implement designated BMPs and comply with all applicable regulations outlined in the Oceanside Municipal Code. During pre-event application meetings for large events, event organizers are provided with an event permit packet that includes storm water related information including a copy of the Storm Water Compliance Guidelines for Special Events brochure and the Special Events Inspection Form. Copies of the brochure and inspection form are attached. It is explicitly stated that the company coordinating the event is required to leave the site as clean as the pre-event condition and shall not allow any materials or liquid to enter the storm drain system.

4.8.3 Program Implementation

4.8.3.1 Event Inspections

A storm water inspection report form has been developed for use before and after large special events. Storm water compliance inspection reports will be completed prior to the start of the event to ensure that appropriate BMPs are in place. A post-event inspection will ensure that the site is properly cleaned. A special events office representative will conduct pre- and post-inspections. This office may designate another city department representative to conduct the pre- or post-event inspections, when needed.

During this reporting period two of the event locations that were listed in the updated revision to the 2008 JURMP were moved out of City jurisdiction and were held on private property. These two events are Antiques on Mission and Dia de los Muertos. The Race Across America event was determined to be a low priority event because bicycle riders start in Oceanside, in small groups and leave the city in phases to travel across the United States.

The Freedom Day parade was held on Saturday June 27, 2009. Because this event attracts thousands of people who gather along the sidewalks of Coast Highway, the City first ensures that there is no debris or material that can cause liability to the citizens attending the event. After the event street sweeping crews are on-site within one hour to remove any debris left behind by event attendees.

During this reporting period one event was inspected which was the Ironman Triathlon which was held between the dates of April 2- 4, 2009 with staging starting in the harbor and beaches area. No stormwater relate violations were noted during the event and during the post-event inspection it determined that the site was clean and did not pose any potential storm water violations. See Attachment 4-C for copy of the inspection form for this event.

4.8.3.2 Street Sweeping

Most special events occur in the downtown area which is swept 5 days a week, with sweeping vehicles generally onsite within 12 hours from the end of the event.

For special events that cause an added impact to the community street sweeping is conducted immediately after the end of the event. On an annual basis, the City holds one parade in the downtown area after which street sweeping is immediately conducted.

4.8.3.3 Harbor and Beaches Maintenance

Large events held in the Harbor and Beaches area can have the potential to generate large quantities of trash. In addition to the above information, the Harbor and Beaches Maintenance Division conducts the following activities after large events and holidays held in the Harbor and Beaches area:

- A litter abatement contractor provides staff to walk beach and hand pick up litter.
- City staff uses trucks and/or utility carts to follow and pick up items that are too large for the litter abatement contractor such as logs, furniture, etc.
- City staff further screens the beach using Cherrington beach sweeping machines.
- A pressure-washing contractor or City staff washes the hardscapes with all wash water being recovered and disposed of properly.

4.9 Power Washing

4.9.1 Background

The City conducts a number of activities which are not designated and/or confined to a specific location. Because such activities are not confined to a fixed facility, where BMPs may be permanently implemented, BMPs must actively be implemented during all mobile municipal activities.

4.9.2 Source Characterization

Mobile activities that City employees may use during their day-to-day operations that have a potential to create polluted runoff include:

- Power Washing
- Infrastructure Maintenance
- Street and sidewalk repair
- Street striping
- Waste removal
- Traffic light maintenance
- Parking meter maintenance
- Landscape/Right-of-Way Maintenance

4.9.3 Best Management Practice Requirements

As previously mentioned, the City will continue to implement good housekeeping and general pollution prevention measures during municipal activities including the mobile activities listed above. City personnel will continue to be trained to collect all water generated by power washing activities. City personnel continue to use the City's Municipal BMP Manual to choose applicable BMPs to implement for municipal areas and activities. Pesticide, herbicide, and fertilizer management BMPs similar to those discussed in Section 6.2.3.1 of the City's 2008 JURMP will continue to be implemented during landscaping of City right of way such as medians.

4.9.4 Program Implementation

City field crews will continue to be actively trained to implement BMPs during all mobile activities including how to properly contain, control, and capture any discharge generated by power washing (or any other discharge-generating activities). The City uses fiber rolls, geo logs,

silt fencing, check dams, gravel bags, and filter inserts during mobile activities, where applicable. City personnel involved in mobile activities are trained to be aware of Illicit Connections/Illicit Discharges and report them to the appropriate City staff promptly. More information about the City's education program, including municipal training activities, is included in Section 10 of this document.

4.10 Municipal Component Effectiveness Assessment

See Section 11.0 for an assessment of the municipal component of the City's JURMP.

4.11 Program Modification and Review

The Clean Water Program will continue to implement its SWPPP at the City Operations Center and continue its ongoing inspection and maintenance program for the facilities listed in the Municipal Inventory. Any changes to the program will be reported in the next annual report.

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5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City of Oceanside continues to implement a comprehensive program that aims to reduce and prevent industrial and commercial pollution discharges to and from the MS4 to the maximum extent practicable (MEP) to protect local receiving water bodies and to comply with the Municipal Permit. This section documents the activities conducted by the City of Oceanside during the 2008-2009 reporting period to meet the reporting requirements of Section J.1.a(3)(f) of Order 2007-0001 Municipal Permit (Table 5-1).

Table 5-1. Order 2007-0001 Reporting Summary.

Permit Section	Annual Report Section Reference
J.3.a.(3)(d).i -Any updates to the industrial and commercial inventory.	See Section 5.2.2 of this Annual Report
J.3.a.(3)(d).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	See Section 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).iii - A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	See Section 5.2.1 and 5.3.3 of this Annual Report
J.3.a.(3)(d).iv - Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	See Section 5.2.2 of this Annual Report
J.3.a.(3)(d).v - Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	See Section 5.2.2, 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).vi - Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	See Section 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).vii - Identification of the number of third party inspections conducted.	See Section 5.2.4.1 of this Annual Report
J.3.a.(3)(d).viii - Identification of efforts conducted to verify third party inspection effectiveness.	See Section 5.2.4.3 of this Annual Report
J.3.a.(3)(d).ix - A description of efforts implemented to address mobile businesses.	See Section 5.3 of this Annual Report
J.3.a.(3)(d).x - The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 5.2.4.2 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).xi - A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	See Section 5.2.4.1 and 5.2.4.2 of this Annual Report
J.3.a.(3)(d).xii - A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	See Section 5.1.1 of this Annual Report

The City has compiled a list of industrial and commercial sources and developed BMP requirements, including pollution prevention measures, for each source and activity. Implementation of these requirements will be accomplished through education, inspection, and enforcement.

5.1.1 Notable Activities

The City of Oceanside Clean Water Program conducted several notable activities during this reporting period including a comprehensive update of its Industrial and Commercial business inventory, updating the 2008 JURMP with narrative to check for coverage under the General Industrial Permit while conducting inspections and developing a protocol for non-filers, and the attendance of CWP staff at a BMP training for concrete mix trucks:

- Working in conjunction with the Businesses Licensing division, the city updated its inventory based on commercial and industrial classifications, watershed location, and assignment of high, medium and low priorities. See Section 5.2.2 for more information about the updated inventory.
- Updated JURMP. Added check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.). See Section 14.2.
- Added section on Identification of Industrial Non-filers; Created a Non-filer checklist and flow chart for reference by inspectors to convey to industrial businesses what qualifies as a non-filer and how to submit to the SWRCB non-filer applications. See Section 14.2.
- Employee presentation by local business: Palomar Transit Mix, a subsidiary of Vulcan Materials Company, conducted an informational presentation for city Clean Water Program (CWP) staff outlining the Best Management Practices for the concrete trucks used by their company. See Section 5.3.4.3 for more information about this training.

5.2 Stationary Industrial and Commercial Sites Sources Element

5.2.1 Background

Section 7 of the City's 2008 JURMP, titled Industrial and Commercial Component, requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by industrial owners and/or operators pursuant to City Code to minimize or eliminate the impacts of industrial and commercial activities on receiving waters and other sensitive environmental resources. The City uses a variety of ways to educate and ensure that BMPs are implemented at industrial and commercial facilities including dissemination of the City's industrial and commercial BMP manuals, site inspections and enforcement.

5.2.2 Source Characterization

The City annually updates its watershed-based industrial/commercial inventory which contains the name, address, and description of all industrial sites within its jurisdiction, regardless of site ownership. During this reporting period the staff of the Clean Water Program conducted a comprehensive update of its Industrial and Commercial business inventory. Working in conjunction with the Businesses Licensing division, the city updated its inventory based on commercial and industrial classifications, watershed location, and assignment of high, medium and low priorities.

Attachment 5-A provides this comprehensive list and serves as an updated inventory to the inventory submitted with the 2008 JURMP. The attached inventory was used to conduct FY 2008-09 inspections and will be updated where needed during the FY 2009-10 inspections. This table does not include mobile businesses that have City of Oceanside business licenses. See section 5.3 of this report for mobile business information.

In the City there are a total of 2,373 Industrial and Commercial businesses. See Tables 5-2 and 5-3 below for a summary of the number of industrial and commercial businesses inventoried in the City according to watershed location.

Table 5-2. Industrial Businesses in the City by Watershed.

Watershed	Number of Industrial Business	
	2007-08 Inventory	2008-09 Inventory
San Luis Rey	95	13
Loma Alta	141	49
Buena Vista	5	0
Agua Hedionda	0	0
Total	**241**	**62**

Table 5-3. Commercial Businesses in the City by Watershed.

Watershed	Number of Commercial Businesses	
	2007-08 Inventory	2008-09 Inventory
San Luis Rey & Harbor	331	859
Loma Alta	338	966
Buena Vista	151	463
Agua Hedionda	6	23
Not Verified	10	0
Total	**836**	**2311**

Based on this updated inventory, the City contains approximately 62 industrial businesses. Each of these businesses was prioritized on their threat to water quality. Table 5-4 provides a summary of the prioritization for industrial businesses.

Table 5-4. Industrial Businesses in the City by Priority.

Priority	Number of Industrial Business
High	20
Medium	14
Low	28
Total	**62**

Based on the 2008 inventory, the City contains approximately 2311 commercial businesses. Each of these businesses was prioritized on their threat to water quality. Table 5-5 provides a summary of the prioritization for industrial businesses.

Table 5-5. Commercial Businesses in the City by Priority.

Priority	Number of Commercial Business
High	496
Medium	98
Low	1717
Total	**2311**

5.2.3 Best Management Practice Requirements

BMP Manuals

Two manuals originally developed in 2001, *Industrial Urban Runoff Requirements Manual* and *Commercial Urban Runoff Requirements Manual,* detail requirements of industrial and commercial businesses to comply with the City's Urban Runoff Management and Discharge Control Regulations. In order to ensure industrial and commercial owners and operators are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for industrial and commercial areas and activities located within the City, are specified in these two manuals.

The manuals were first produced in FY 2001-02 as a result of requirements under Municipal Permit Order No. 2001-01 and were revised in 2004 to include additional state requirements. These manuals were again reviewed and revised during the 2007-08 reporting period to ensure compliance with the new Municipal Permit Order No. R9-2007-0001. The main changes were the additional of categories and a list of specific BMPs for those industrial and commercial activities. Inspections, enforcement, and reporting and the definitions have not been changed. See this section of the 2007-08 report for a list of changes to both the industrial and commercial manuals.

The City conducted efforts to ensure industrial and commercial business owners and/or operators have received a copy of the Industrial Manual either through an annual inspection or a response to a complaint or concern reported through the Urban Runoff Hotline. In addition, copies of the Industrial Manual are available on the Clean Water Program website.

5.2.4 Program Implementation

Annual inspections of commercial and industrial businesses are conducted by Clean Water Program inspectors, Code Enforcement officers and a private contractor to ensure that applicable pollution prevention activities are implemented by industrial and commercial business owners and/or operators. In addition, inspections are conducted based on calls received on the Urban Runoff Hotline. All industrial and commercial businesses visited, through the annual inspection program or by complaint call acknowledged on the Hotline, receive follow-up visits until the industrial business is deemed in-compliance with City Code. All documentation pertaining to site visits are on file at the City. City staff conducted a total of 588 inspections during the 2008-2009 reporting year: 33 of industrial businesses, 539 of commercial businesses, including eating and drinking establishments, and 16 nursery or greenhouse businesses.

5.2.4.1 Inspections of Industrial Businesses

During this reporting period the Clean Water Program updated its 2008 JURMP with the following information in regards to inspection of industrial businesses. This program was updated in order to comply with part D.3.b.(3) of Permit Order 2007-0001. See Section 14.2 for the specific areas updated for the Industrial business inspections. Inspections of industrial businesses by third parties were not conducted during this reporting period.

Inspections of industrial businesses will typically be conducted by designated Clean Water Program Inspectors and Code Enforcement personnel. Inspections will be tracked using the City's Urban Runoff Business database. Inspectors will utilize a Commercial and Industrial businesses Inspection Form provided in Appendix D of the 2008 JURMP. The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

- Completion of 33 site inspections of industrial businesses during the reporting period.
- Completion of 20 required annual inspections of high priority industrial businesses during the reporting period.
- Completion of 13 required annual inspections of medium and low priority industrial businesses during the reporting period.
- Completion of eleven follow-up visits either in response to the initial inspection or response to a complaint.
- Dissemination of the Industrial Manual to help industrial owners and/or operators become aware of the City Code requirements for BMP implementation, and information on applicable BMPs for specific industrial businesses and activities.
- Ensuring proper and continued training of the Code Enforcement officers and Clean Water Program compliance inspectors dedicated to the Clean Water Program.

See Attachment 5-B for inspection dates, corrective items needed and compliance dates for industrial businesses.

5.2.4.2 Enforcement of Industrial Businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for enforcement of ordinances at an industrial site. This program was designed in accordance with part D.3.b.(3) of Municipal Permit Order 2007-0001. There were no enforcement actions required for Industrial businesses during this reporting period.

5.2.4.3 Inspections of Commercial businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for conducting inspections of commercial businesses. This program was developed and implemented in accordance with part D.3.b.(3) of the Municipal Permit Order 2007-0001. As detailed in the JURMP, inspections of High and Low Priority Commercial Businesses are conducted as deemed necessary by the Code Enforcement personnel and CWP inspectors. Some inspections are initiated in response to a public or municipal staff report, an illicit discharge source investigation, or as a follow up to a previous inspection.

The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

- Three hundred twenty (320) eating and drinking establishments were inspected at least once for the proper implementation and maintenance of storm water BMPs and grease control devices. The inspector forwarded all facilities that were not in-compliance with storm water regulations to Code Enforcement Officers.
- One hundred sixty four (164) inspections of high priority commercial businesses were inspected, excluding restaurants and agricultural operations
- Thirty nine (39) inspections of medium and low priority commercial businesses were inspected, excluding restaurants and agricultural operations
- Sixteen (16) inspections of nursery and greenhouse operations within the City of Oceanside was conducted for compliance to urban runoff regulation City Code Chapter 40.
- Ensuring proper and continuing training of the Code Enforcement Officers and Clean Water Program inspectors dedicated to the Clean Water Program.

See Attachment 5-B for inspection dates, corrective items needed and compliance dates for commercial businesses

During the 2008-09 reporting periods, all eating and drinking establishments were inspected for compliance with the City's urban runoff regulations and adequate implementation and maintenance of BMPs. These 320 inspections were conducted by a city-hired private contractor. Throughout the year Clean Water Program Inspectors would randomly ride along with the private contractor to verify the inspection effectiveness.

When CWP Inspectors and Code Enforcement Officers conduct inspections at high priority areas, they target the entire commercial/industrial complex, because these areas often contain a mix of industrial and commercial operations. Rather than just focus on the High Priority businesses located in these areas, CWP Inspectors and Code Enforcement officers inspect all businesses in the complex to ensure owners and/or operators understand their BMP requirements and can work collaboratively with their neighbors to implement BMPs or solve drainage problems.

Code Enforcement officers inspected 16 nursery and greenhouse operations according to the City's Business Licensing Department. These sites, along with the larger agricultural facilities that are annually inspected by the County Weights and Measures Department, are visited several times a year by City staff due to the evolving nature of their business. With constant plowing and crop rotation, CWP staff not only complete annual inspections, but also complete a pre-rain event inspection and visit the agricultural areas frequently during the rainy season as well as during rain events. The City maintains a cooperative relationship with the U.S. Department of Agriculture NRCS for assisting the agricultural community in Oceanside in design and implementation of BMPs.

5.2.4.4 Enforcement of Commercial Businesses

All other commercial businesses, except for two, were in compliance after the second visit. These two commercial businesses were refereed to the Code Enforcement Division for lack of

proper storage of hazardous materials under cover and on secondary containment. Code Enforcement (CE) conducted an inspection upon the referral date upon which the owner/operator completed with requests. No additional code enforcement action was taken against these businesses. See Table 5-6 below for inspection information on these two businesses.

Table 5-6. Code Enforcement action for Commercial Businesses.

Businesses Name	Principal Products Services	1st Inspec. Date	Corrective Action Needed	2nd Inspec. Date	Corrective Action Needed	Referred to CE Date	Code Enforcement Inspection Date	Compliance Status
Mohsen Oil	Gasoline Station w/Convenience Store	11/19/08	Properly store Haz Mat.	12/18/08	Same	1/28/09	1/28/09	IC
Thrifty Gasoline	Gasoline Station w/Convenience Store	11/20/08	Properly store Haz Mat.	12/18/08	Same	1/28/09	1/28/09	IC

IC In Compliance

5.2.4.5 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of noncompliant sites in the City that are determined to pose a threat to human or environmental health. Oral notification is required within 24 hours of the discovery of noncompliance and a written report should be submitted to the RWQCB within five days of the incident.

The Regional Water Quality Control Board was notified of businesses or operations that were not compliant after follow-up visits and despite issuance of the City code from CWP staff and/or Code Enforcement officers, or for operations that were not under the City's regulatory jurisdiction (Camp Pendleton). Following is a list of these businesses and operations.

- Camp Pendleton housing development sediment discharge to Oceanside Harbor.
- Camp Pendleton housing development sediment discharge to Capistrano Park.
- Private owner placing graded soil and rock material within flood plain of San Luis Rey River

5.2.5 Stationary Industrial and Commercial Sites Sources Effectiveness Assessment

See Section 11.0 for an assessment of the Industrial and Commercial Component of the City's JURMP.

5.3 Mobile Sources Element

5.3.1 Background

Due to the lack of a stationary location for proper disposal of potentially hazardous liquids and materials, there is a major area of concern about where mobile businesses discharge water used in their line of work. Due to the nature of their activities, mobile businesses will continue to be regulated differently than other businesses. Mobile businesses can be difficult to identify because they may not have a City business license, they go out of business on a relatively regular basis and, though they may have a home base, they can cross jurisdictional lines to operate their business. For the reasons regular inspections of mobile businesses will be challenging and time consuming in the future.

5.3.2 Source Characterization

The mobile businesses known to operate within the City's jurisdiction are noted on the City's commercial inventory. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Pest control services
- Mobile carpet, drape or furniture cleaning
- Mobile construction trades
  - Painting and coating
  - Cement mixing or cutting
  - Masonry
  - Other contractors
- Landscaping
- Pool and fountain cleaning
- Power washing services

Because not all mobile businesses have obtained business licenses in the City or have a base of operations in the City, the City expects that a continual process of refining and updating its inventory will be needed. Sources for such inventory updates will include reported incidents, general observations by City staff, and available business licenses. The City intends to participate in an education outreach program through the Industrial Commercial Sources Workgroup to educate Mobile Businesses of their minimum BMPs. The regional workgroup requested Mobile Business inventories from each Copermittee, of which Oceanside complied, which will be compiled into one list. It is anticipated that this education piece will be sent to the inventory list during the next reporting period. The inventory of Mobile Commercial Businesses is available in Appendix B.5 of the City's 2008 JURMP as part of the Commercial Inventory.

5.3.3 Best Management Practice Requirements

The City updated its Commercial Urban Runoff Requirements Manual during the 2007-08 reporting period with information on the required BMPs for both mobile and stationary sources. This updated manual can be referenced in Appendix C of the City's 2008 JURMP. One example of a BMP included in the updated manual is for outdoor vehicle detailing by a mobile business and the BMP explains how to capture and contain the rinse water so that it does not enter the storm drain system. Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses.

5.3.4 Program Implementation

5.3.4.1 Education Outreach

Because a specific element of the industrial and commercial program for mobile businesses is being newly developed, it is anticipated that some mobile businesses are not aware of storm water requirements and that education will need to be a significant portion of the program. The City of Oceanside will notify the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three years of implementation of the City's 2008 JURMP.

5.3.4.2 Inter-Jurisdictional Cooperation

The City of Oceanside is participating in the Regional Industrial Commercial Sources workgroup which is developing a plan to educate mobile businesses about proper BMPs and protection of water quality. A complete report on these activities of this workgroup will be included in the Regional Urban Runoff Management Program report due to the RWQCB in January 2010.

5.3.4.3 Staff Training

Code Enforcement Division Officers and Clean Water Program Compliance Inspectors are responsible for conducting storm water compliance inspections and enforcement of mobile sources. Officers and inspectors are trained annually on inspection and enforcement procedures and BMP implementation as they relate to mobile businesses. City staff is encouraged to report potential illegal discharges from mobile businesses when working in the City to the storm water hotline.

Palomar Transit Mix BMP Presentation
Also during this reporting period Palomar Transit Mix a subsidiary of Vulcan Materials Company conducted a presentation for CWP staff outlining the Best Management Practices for the concrete trucks used by their company. This training, held on June 9, 2008 demonstrated the use of a new technology that limits jobsite waste and protects concrete from getting on the ground which can have a potential to reach the MS4.

There were three City staff in attendance at this workshop including two Code Enforcement Officers and one Clean Water Program staff person. Although this training was held in the previous reporting period the information presented was very useful for dissemination to other concrete truck drives during this reporting period.

5.3.4.4 Inspections

During this reporting period, inspection of mobile businesses was conducted on an as needed basis. The most common triggers for these inspections were from incident reports received over the Urban Runoff Hotline and direct visual observations by City staff.

5.3.4.5 Enforcement

During this reporting period Code Enforcement officers responded to complaint calls regarding mobile businesses that were allowing water to enter the storm drain system. During the site visit, depending on the nature of the complaint, Code Enforcement officers issued notices to comply and/or educated the operator on the proper BMPs that should be in place during their operation and provided them with the power washing brochure.

5.4 Industrial and Commercial Component Effectiveness Assessment

See Section 11.0 for an assessment of the Industrial and Commercial Component of the City's JURMP.

5.5 Program Review and Modification

During this reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water, Sewer, and the Clean Water Program, continued rolling out the GBA Masters

Series software. Water and Sewer continued to utilize the product and the Clean Water Program gained approval to purchase additional licenses and hire a consultant to help modify the software to their needs. Complete roll-out for the Clean Water Program is expected in reporting year 2009/2010. The Development Services Department, which includes Code Enforcement, Building, and Engineering, choose CRW Systems, Inc. and will begin roll-out in the 2009/2010 reporting year. These systems will allow for tracking and reporting of needed information, including stormwater data, across the departments.

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

A total of 39 percent of the City's 26,983 acres is designated as either multi- or single-family residential according to the San Diego Association of Governments (SANDAG). Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the quality of receiving waters in and around the City. The City of Oceanside has developed an extensive program that aims to reduce pollutant runoff from residential areas and activities to the MEP.

This section documents the activities conducted by the City of Oceanside during the 2008-2009 reporting period to meet the requirements of Section D.3.c of the Municipal Permit (Table 6-1). The City continued the implementation of an enforcement program that responds to and monitors potential violation calls received on the Oceanside Urban Runoff Hotline (Hotline).

Table 6-1. Order 2007-0001 Compliance Summary.

D.3.c Residential Program	See Section 6 of this Annual Report
J.3.a.(3)(e).i High threat residential areas	See Section 6.2 of this Annual Report
J.3.a.(3)(e).ii Designated BMPs were implemented	See Section 6.3 of this Annual Report
J.3.a.(3)(e).iii Proper disposal of used oil and HHW	See Section 6.4.2 of this Annual Report
J.3.a.(3)(e).iv Amounts of HHW collected	See Section 6.4.2 of this Annual Report
J.3.a.(3)(e).v Evaluation of methods used for oversight of residential areas	See Section 6.2.1 of this Annual Report
J.3.a.(3)(e).vi Violations and enforcement actions	See Section 6.4.7 of this Annual Report
J.3.a.(3)(e).vii Collaboration on implementation of Regional Residential Education Program	See Section 6.5 of this Annual Report
J.3.a.(3)(e).viii Notable Activities	See Section 6.3.1 and 6.4.1 of this Annual Report

The City also utilizes its revised Urban Runoff Requirements Manual for Residents (Residential Manual) that contains BMP requirements and related guidance information for residents of the City. This manual has been made available to residents through the City's Clean Water Program Website. Changes to the Residential Manual were made during the 2007-08 reporting period.

6.1.1 Notable Activities

- Trash trap BMP installed in priority residential area. See section 6.3.1 for more information.

- Development of email distribution list for newsletters and event notifications to replace the traditional US Postal Service mailings. See section 6.4.1 for more information.

6.2 Source Characterization

Residential neighborhoods can be the source of a variety of pollutants depending on the activities conducted in residentially developed areas. Pursuant to Section D.3.c.(1) of the Permit Order 2007-0001, the City identified High Priority Residential Areas and Activities in the JURMP. The following residential activities have been identified by the City to be High Priority Activities:

- Automobile or boat repair and maintenance.
- Automobile washing.
- Automobile parking.
- Home and garden care activities and product use.
- Disposal of household hazardous waste.
- Disposal of pet waste.
- Disposal of green waste.
- Any other residential activity that contributes a significant pollutant load to the MS4.
- Power washing activity (both do-it-yourself and contracting services).

The City has also identified residential areas of High Priority. These areas include the following:

- Any residential area tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired
- Any residential area within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA

6.2.1 Evaluation of methods for oversight of residential areas and activities.

The Public Works storm drain maintenance staff has the best opportunity to inform the Clean Water Program staff about drainage areas that have a lot of trash and debris. On a regular basis the CWP staff request from public works maintenance staff areas within the city that are generating for two reasons:

1. To identify areas within the City where the public can become involved to assist in removing trash and debris from the specific areas where debris ahs collected, and
2. To target the residential areas for future outreach.

During this reporting period two residential areas were identified as contributing excessive trash to the MS4 and potentially the receiving waters. The first was a neighborhood that drains to Pilgrim Creek and eventually the San Luis Rey River. The second was a portion of MS4 that drains to Garrison Creek and then Loma Alta Creek near El Camino High School. See section 6.3.1 below for more specific information on these areas and the BMPs chosen.

6.3 Best Management Practice Requirements

The City's JURMP Residential Component requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by residents pursuant to City Code. In order to ensure residents are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention

methods for residential areas and activities, located within the City, are specified in the Residential Manual. This manual is found in Appendix C of the City's 2008 JURMP.

Education and outreach aimed at residents helps facilitate the implementation of BMPs, including pollution prevention methods. A detailed discussion of the City's education program can be found later in Section 10 of the 2008 JURMP. Details on education outreach to the residential community can be found in Sections 8 and 9 of this annual report.

6.3.1 BMP Implementation

Trash Trap at the Oceanside Municipal Golf Course

Staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. City staff installed a trash trap downstream of this priority residential area and upstream of the municipal golf course in the open channel that parallels the driving range. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. This trash trap was installed in March 2009.

After installation there was one rain event that captured 40 pounds of trash and organic debris. During future reporting years, the volume or weight of trash will be tracked. See the photos below of the newly installed trash trap and a photo of the effectiveness of the trash trap in stopping debris from reaching the waterway.

Trash trap immediately after installation

Trash trap with debris

Non-Structural, Administrative BMP for Trash from Oceanside Unified School District

Public Works staff identified a section of MS4 that had a large amount of tennis balls and other trash, such as plastic bottles, after storm events where Garrison Creek daylights off of Mesa Boulevard. It appeared that a large amount of the trash, including tennis balls, softballs, plastic drink bottles, and food wrappers, was likely coming from El Camino High School and Martin Luther King, Jr. Middle School. The Clean Water Program Coordinator notified the Maintenance and Operations Director of the Oceanside Unified School District of the problem. On January 22, 2009, the Director notified all area principals about the accumulation of trash and asked the principals to share the photos with staff and students using school newspapers, assemblies, and brochures.

Trash accumulation at Garrison Creek.

6.4 Program Implementation

6.4.1 Outreach

The most efficient way to encourage pollution prevention and BMP implementation and to restrict polluting practices is to educate residents on how to carry out their daily activities in ways that have the smallest potentials to discharge pollutants to the MS4. During this reporting period the Clean Water Program provided educational information and training to residents, in the following ways:

- Cleanup events
- Booths at public events
- Public television notices
- Presentations
- Website
- Email notifications
- Residential BMP Manual

During this reporting period the Clean Water Program discontinued mailing upcoming event notices to interested parties through the US Postal Service. In order to save time and money an email distribution list was created. This will allow for people to receive notifications by email which eliminates postage costs. Also, receivers of the information can easily forward the fliers to other people who may be interested in the specific information.

The City will also consider conducting an outreach program upstream of this trash trap mentioned in 6.3.1 above in future reporting periods. The goal will be to educate residents in this targeted neighborhood about proper disposal of trash and the negative effects of fugitive trash that enters local waterways.

Further outreach program details for this reporting period can be found in the Education and Public Participation, Section 8 and Section 9, of this document.

6.4.2 Household Hazardous Waste

The City continued to facilitate the proper management and disposal of used oil, toxic materials, and all other HHW to the residential audience. Residents have the opportunity to take used oil to approximately 12 private auto parts stores within the jurisdiction. In addition Waste Management, Inc., the City's franchise trash hauler, accepts HHW at its Oceanside facility. Residents may bring up to five gallons per day of used motor oil, used oil filters, and anti-freeze, Tuesday through Saturday from 8 a.m. to 4 p.m. without an appointment. HHW may be brought on Saturdays by appointment only. Details of the locations mentioned above can be found in Section 8.4.2 of the City's 2008 JURMP.

During the 2008-2009 reporting period, 3,430 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 146.59 tons of hazardous materials (including universal waste) during the reporting period. An additional 127.56 tons of E-waste was recycled in the same reporting year.

Furthermore, as part of the City's collection program, a 1,500-gallon used oil collection receptacle is provided at the City's harbor. This receptacle is available for residents who live on the boats in the Marina as well as for those boat owners and operators who rent a harbor slip to conveniently recycle the used motor oil and oil filters generated from the boats. During the reporting period 832 gallons of used oil were collected and recycled. In addition one 55-gallon barrel of used oil filters were collected from Harbor residents.

6.4.3 Clean Water Program Newsletters

Twice per year, educational newsletters are mailed with the utility to over 42,000 homes in the City. Topics in the newsletters explain storm water pollution, effects on water quality, pollutants of concern, illegal discharges, BMP implementation, and special events.

During this reporting period two Clean Water Program Newsletters were distributed to over 42,000 households. An overview of topics in these two newsletters is listed below. A copy of these two newsletters is included in Attachment 6-A this annual report.

Fall 2008

- Bacteria Source Tracking Project on the San Luis Rey River
- Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
- Water conservation tips to eliminate water runoff
- West Nile virus and over watering connection

Spring 2009

- Loma Alta Creek Cleanup event
- Cleanup events calendar for 2009
- Green Week 2009
- Storm Drains vs. Sewer
- Water Conservation Landscaping Workshops

6.4.4 Oceanside Update

In addition to printed media, the City's community television station, KOCT, airs thirty-minute public service announcements with three-minute presentations from various City departments. Those households in the City who have access to the KOCT local channel are able to view this show. During this reporting period the Clean Water Program provided ten three-minute presentations. Table 6-2 provides an overview of the topics covered during each taping.

Table 6-2. Summary of 2008-09 Oceanside Update Topics by Month

Date	Topic Discussed
July 2008	Pick up pet waste
August 2008	State drought situation, water conservation tips, and Coastal Cleanup Day
September 2008	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
October 2008	Water rebate programs
December 2008	How to protect water quality during the rainy season
January 2009	2009 Cleanup event schedule and storm drains vs. sewers.
March 2009	Storm drains and sewer difference and Loma Alta Creek Cleanup
April 2009	Oceanside watersheds and Loma Alta Creek and Oceanside Beach Cleanup
May 2009	Water awareness month, water conservation & irrigation runoff
June 2009	Pool draining tips to protect water quality

6.4.5 Website

The Clean Water Program maintains its own Website providing convenient electronic access to program information for residents and the general public. The address for this website is www.oceansidecleanwaterprogram.org. This Website provides the opportunity to learn about storm water pollution, the sources of this pollution, and what can be done to eliminate these pollutants from entering the storm drain system, thereby improving water quality in receiving waters. During this reporting period there were 35,647 hits to the Clean Water Program website. This number does not account for traffic from within the Oceanside network.

Specific web pages available on the Clean Water Program Website are as follows:

- Commercial Business
- Development
- Events
- Industrial Business
- Just for Kids
- Water Quality Laws
- Other Websites
- Landslide Prevention
- Clean Water Projects
- Report Violations
- Residential/General
- Just for Educators
- Waterbodies

The residential web page offers the following information:

- An overview of pollutants in receiving waters and how those pollutants get there
- The difference between the storm drain system and the sewer system
- Links to pollutant factsheets in PDF format
- Links to brochures in PDF format, including the Storm Water Pollution prevention Tips for Residents
- Links to past Clean Water Program Newsletters in PDF format
- Link to the Residential Urban Runoff Requirements Manual

The Website address is disseminated to the public in a variety of ways:

- Listed in all Clean Water Program Newsletters
- Mentioned during each Oceanside Update Taping and shown at the bottom of the screen
- Listed on promotional items
- Listed on Clean Water Program staff business cards

6.4.6 Hotline

The City will continue to encourage public reporting of illicit discharges and illegal dumping through the City's Urban Runoff Hotline, which is run by the Water Utilities Department. The Hotline phone number is (760) 435-5800. All calls related to potential urban runoff violations were documented and forwarded to Code Enforcement.

The Urban Runoff Hotline was promoted through a variety of media during this reporting period, including announcements on local television stations, placement on brochures, click-message pens, pencils, and other promotional "give-aways", advertisement on the City's Clean Water Program webpage and in Clean Water Program newsletters. During the reporting period, 124 calls were received on the Urban Runoff Hotline by residents concerning potential urban runoff violations. This is a significant increase from the 55 calls received in the 2007-08 Reporting period and the 14 calls received during the 2006-07 reporting period. The majority of the urban runoff calls were related to over-irrigation runoff. There was significant outreach to the public about the importance of conserving water. As a result, there was a significant increase in the number of calls related to over-irrigation, homes irrigating on other than their assigned day, and hosing down of hardscapes.

6.4.7 Enforcement

Section 8.4.4 of the JURMP describes the City's program for enforcement of ordinances in residential areas. The major activities and accomplishments undertaken by the City during this reporting period included:

- Code Enforcement responded to 109 urban runoff related cases, related to residential areas and activities, during the reporting period.
- An accounting of all residential enforcement actions, taken by Code Enforcement Officers, is shown in the following table.

See Table 6-3 for an accounting of Code Enforcement Actions during 2008-09.

Table 6-3. Accounting of Residential Code Enforcement Actions for the 2008-2009 Reporting Year.

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Inspection Report	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept	Stop Work Notice
of Actions	113	178	4	4	32	13	26	1	2	0

6.5 Collaboration to implement Regional Residential Education Program

During this reporting period the City of Oceanside elected to serve as Co-chair for the Education and Residential Sources Workgroup (ERS Workgroup) which is tasked with implementing the Regional Residential Education Program. The ERS workgroup was established as one of several workgroups under the Memorandum of Understanding amongst the San Diego County Copermittees (Copermittees). The chair of each of these workgroups presides over and provides leadership and direction to the workgroup. This includes serving as the point of contact to external entities, soliciting group input, developing meeting content, facilitating meetings, and coordinating with the Secretary to finalize work products for distribution to the workgroup. The City of Oceanside Co-chaired this workgroup with staff from the City of Imperial Beach. The City of Oceanside plans to continue serving as the co-chair for the ERS Workgroup.

Details of the activities of the ERS Workgroup will be provided in the submittal of the annual report of the Regional Urban Runoff Management Program due to the RWQCB in January 2010.

6.6 Residential Component Effectiveness Assessment

See Section 11.0 for an assessment of the education component of the City's JURMP.

6.7 Program Review and Modification

During this reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water, Sewer, and the Clean Water Program, continued rolling out the GBA Masters Series software. Water and Sewer continued to utilize the product and the Clean Water Program gained approval to purchase additional licenses and hire a consultant to help modify the software to their needs. Complete roll-out for the Clean Water Program is expected in reporting year 2009/2010. The Development Services Department, which includes Code Enforcement, Building, and Engineering, choose CRW Systems, Inc. and will begin roll-out in the 2009/2010 reporting year. These systems will allow for tracking and reporting of needed information, including stormwater data, across the departments.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

This section is intended to document the activities conducted by the City of Oceanside during the 2008-2009 reporting period to manage illicit discharges and meet the requirements of Sections D.4 and J.3.a.(3)(f) of the 2007 Municipal Permit.

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2008-09 Illicit Discharge Detection and Elimination Component, including the 2009 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2009.

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8.0 EDUCATION COMPONENT

8.1 Introduction

Education is an important step in working towards improving receiving water quality both locally and regionally. By increasing public awareness and encouraging a change in both the attitude and the behavior of the general public and the regulated community, the City may reduce or eliminate storm water pollution caused by common daily activities.

This section documents the activities conducted by the City of Oceanside during the 2008-2009 reporting period to meet the requirements of Section D.3.g of the Municipal Permit. The City continued the implementation of an education outreach program for municipal staff, industrial and commercial businesses, and the general public.

Table 8-1. Order 2007-0001 Compliance Summary.

J.3.a.(3)(g).i Description of education efforts	See Section 8.0 of this Annual Report
J.3.a.(3)(g).ii Underserved target audiences	See Section 8.3.1 of this Annual Report
J.3.a.(3)(g).iii Education of municipal employees	See Section 8.2 of this Annual Report
J.3.a.(3)(g).iv Education of construction community	See Section 8.4 of this Annual Report
J.3.a.(3)(g).v City education efforts for residents, general public and school children	See Section 8.3 of this Annual Report

The City of Oceanside continued to provide a comprehensive storm water education program to achieve the following objectives:

- Measurably increase the knowledge of target communities regarding MS4s, impacts of urban runoff on receiving waters, and BMP solutions for the target audience.
- Measurably change the behavior of target communities, and thereby reduce pollutant releases to MS4s and the environment.

Educational programs and activities are tailored to meet the needs of the following target audiences:

- Municipal departments and personnel.
- Construction site owners and developers.
- Industrial and commercial owners and operators.
- Residential community, general public, and school children.
- “Underserved” target audiences, where applicable.

Many education outreach efforts are conducted on an ongoing basis, such as direct interaction during inspections, pre-construction meetings, or when taking calls from the City’s Urban Runoff Hotline. Educational materials are also available throughout the year at special events and at the City’s Water Utilities Department counter. Targeted mailings, focused training

sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of complaints, and other similar factors.

8.2 Staff Training Element

City personnel are the eyes and ears of the City, and can provide valuable information on storm water related discharges and potential violations that may be occurring within the City. The City presents general storm water educational content, which is described in Section 10.3 of the 2008 JURMP, to all City departments. The City primarily educates its municipal personnel through classroom training, on-the-job training sessions, and the Municipal BMP Manual (Appendix C of the 2008 JURMP). Customized training programs are designed for personnel targeting fieldwork-related departments such as storm water compliance inspectors, building/engineering inspectors, public works, planning department staff, and park and recreation personnel. General informational storm water training sessions are provided for municipal personnel in other departments to review storm water regulations in the City, impacts of urban runoff and BMPs to be implemented to reduce or eliminate runoff.

During this reporting period twenty (20) departments or divisions were provided a training on storm water related issues. In addition one division from the solid waste and recycling trash hauler for the City was provided with storm water training. A total of 195 City staff and 64 staff from the trash hauler attended storm water trainings.

During this reporting period one of two Storm Water Pollution Prevention Education Programs developed by a private company, EXCAL Visual, were used for municipal staff trainings. These programs include a 15-20 minute video and a quiz specific to the video. Also, during this reporting period, a specific quiz was developed for Engineering staff who work on Capital Improvement Projects.

Prior to the start of these training sessions using the programs mentioned above a multiple choice quiz was given to each participant to establish a baseline of knowledge for that individual. The quiz also served as the sign-in sheet for the individual attending each training session. After the completion of the video additional storm water related details were provided depending on the department or division being trained. Time was allotted for questions and answers toward the end of the training session. Prior to the end of the training session the same multiple choice quiz was given to each participant. One hundred sixteen (116) municipal employees took both a pre and post-quiz during a municipal training session. For more information on the effectiveness of these training programs based on the pre- and post-quiz scores see Section 11.0 of this report.

One program titled “Storm Water Pollution Prevention - Strom Warnings” covers Everyday Best Management Practices for Industrial Facilities. Specific BMPs are covered to address the following issues related to industrial facilities:

- Good Housekeeping
- Materials Management
- Spill Response
- Equipment Fueling & Repair
- Outdoor Manufacturing
- Preventive Maintenance

- Waste Management
- Dust Producing Processes

Departments or Divisions that received this training were:

- Water Distribution - Reverse Osmosis Plant
- Water Distribution – Operations
- Water Distribution – Maintenance
- Sewer Collections – La Salina Waste Water Treatment Plant
- Sewer Collections – Field Staff
- Water Distribution – Weese Plant (Drinking Water Treatment Plant)

The other program titled "Municipal Storm Water Pollution Prevention – Storm Watch" covers everyday BMPs for other municipal staff activities such as Parks and Recreation and Fleet Maintenance. Specific BMPs covered in this course are as follows:

- Good Housekeeping and Spill Prevention
- Vehicle and Equipment Washing
- Vehicle and Equipment maintenance
- Spill Reporting and Response
- Street Maintenance
- Outdoor Storage of Materials and Wastes
- Landscaping and Lawn Care

Departments or Divisions that received this training were:

- Streets Division – Street Repair and Maintenance
- Streets Division – Street Sweepers
- Parks and Recreation Maintenance
- Fleet Maintenance
- Water Meter Services
- Harbor Division – Maintenance Staff
- Harbor Division - Harbor Police
- Harbor Division - Lifeguards

Other Departmental staff received customized training because of their need for specific education that was not covered in these two programs or information covered in these programs was not needed to convey to these groups due to the nature of their work as municipal employees. The following departments were trained using a customized Power Point Presentation and an interactive format to allow for questions and answers throughout the training program:

- Planning Division
- Engineering Division – Engineering Inspectors
- Engineering Division- Capital Improvement Project Staff
- Building Maintenance
- Business Licensing, Revenue and Utility Billing
- Water Utilities Administration

Waste Management is the solid waste and recycling company that services residential and commercial/industrial businesses in the City of Oceanside. Though they are not a department or division of the City, they are an important entity to target with storm water related education programs due to the nature of their business. During this reporting period the trash haulers with Waste Management were targeted for storm water education. A customized power point presentation was used to emphasize the importance of proper handling of solid waste during servicing of trash cans and dumpsters and how to report potential storm water violations to Oceanside's Clean Water Program staff. The targeted audience was:

- Waste Management – Trash, Recycling and Green Waste Truck Drivers

In addition to the above training, Palomar Transit Mix a subsidiary of Vulcan Materials Company conducted a training session for local municipal employees outlining the Best Management Practices for the concrete trucks used by their company. This training, held on June 9, 2008 demonstrated the use of a new technology that limits jobsite waste and protects concrete from getting on the ground which can have a potential to reach the MS4.

There was three City staff in attendance at this workshop including two Code Enforcement Officers and one Clean Water Program staff person. Although this training was held in the previous reporting period the information presented was very useful for dissemination to other concrete truck drives during this reporting period.

8.3 Educational Outreach Element

Residential areas make up a large portion of the land use in the City, and therefore even small pollutant discharges can be magnified significantly and have the potential to affect the quality of the receiving waters. Activities such as residential car washing and over irrigation are harmful to receiving water bodies by contributing pollutants such as heavy metals, detergents, and nutrients. Providing residents with appropriate educational materials may help to increase overall awareness, and encourage residents to change harmful behaviors and subsequently reduce the potential for pollutants to enter the storm drain system and reach receiving water bodies.

Media

Twice per year, educational newsletters are mailed to all homes in the City with water utility bills. Topics in the newsletters explain storm water pollution, effects on water quality, pollutants of concern, illegal discharges, BMP implementation, and special events.

During this reporting period two Clean Water Program Newsletters were distributed to over 42,000 households. An overview of topics in these two newsletters are as follows:

Fall 2008

- Bacteria Source Tracking Project on the San Luis Rey River
- Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
- Water conservation tips to eliminate water runoff
- West Nile virus and over watering connection

Spring 2009

- Loma Alta Creek Cleanup event

- Cleanup events calendar for 2009
- Green Week 2009
- Storm Drains vs. Sewer
- Water Conservation Landscaping Workshops

A copy of these two newsletters is included as Attachment 6-A to this annual report.

Website

The City's Clean Water Program website also offers electronic copies of a variety of storm water fact sheets covering topics such as proper pesticide and fertilizer use, trash disposal, pet waste and lawn waste disposal, proper chlorine and other swimming pool chemical disposal, sedimentation, effects of soaps and detergents on receiving waters, and other storm water-related topics. During this reporting period there were 35,647 hits to the Clean Water Program website. This number does not account for traffic from within the Oceanside network.

Oceanside Update

In addition to printed media, the City's community television station, KOCT, airs thirty-minute public service announcements with three-minute presentations from various City departments. During this reporting period the Clean Water Program will provided ten three-minute presentations. Table 8-2 provides an overview of the topics covered during each taping.

Table 8-2. Summary of 2008-09 Oceanside Update Topics by Month

Date	Topic Discussed
July 2008	Pick up pet waste
August 2008	State drought situation, water conservation tips, and Coastal Cleanup Day
September 2008	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
October 2008	Water rebate programs
December 2008	How to protect water quality during the rainy season
January 2009	2009 Cleanup event schedule and storm drains vs. sewers.
March 2009	Storm drains and sewer difference and Loma Alta Creek Cleanup
April 2009	Oceanside watersheds and Loma Alta Creek and Oceanside Beach Cleanup
May 2009	Water awareness month, water conservation & irrigation runoff
June 2009	Pool draining tips to protect water quality

Community Events – Booths and Outreach Activities

The Clean Water Program staff participated independently and in conjunction with other cities in the North County Storm Water Program by staffing nine booths at several community events in Oceanside and north San Diego County. The Clean Water Program staff talked to residents, handed out educational materials, and responded to questions and concerns.

Table 8-3 lists community events attended between July 2008 and June 2009 to encourage community participation and education of the effects of polluted urban runoff:

Table 8-3. 2008-09 Community Events.

Date	Event	Participants (Estimated)
07/19/08	Grand Opening of Fire Station 7	2,500
09/19/08	Harbor Days	30,000
10/11/08	Pride the Beach - Oceanside	500
10/26/08	North County Human Society Paws Fiesta	200
10/29/09	Genentech ECO Fair	500
03/21/09	Green Fair Oceanside	500
04/19/2009	Fallbrook Avocado Festival	50,000
4/26/09	Earth Day at Mission San Luis Rey	5,000
05/16/09	Operation Appreciation - Oceanside	2,500

School Education

Educating the City's youngest residents is important in two ways: ideally the good habits/behaviors learned will be carried into adulthood, and secondly, children may educate their families and friends around them with the information they have learned. Children are impressionable at a young age, and are therefore more likely to act upon the knowledge given to them now and throughout their life.

The City continued its outreach to school age children through the use of the watershed model during presentations. A total of ten presentations were conducted reaching 248 school-age children and 13 adults. Table 8-4 provides a list of groups and classrooms that were educated about storm water pollution via these presentations.

Table 8-4. 2008-09 School Age Children Watershed Presentations.

Date	Group	Children	Adults
11/20/2008	Libby Elementary (3rd Grade)	24	1
11/20/2008	Libby Elementary (3rd Grade)	27	1
11/20/2008	Libby Elementary (3rd Grade)	22	1
11/20/2008	Libby Elementary (3rd Grade)	22	1
01/28/2009	Balderrama After School Program	25	3
3/27/2009	Alamosa Elementary (5th Grade)	33	1
3/27/2009	Alamosa Elementary (5th Grade)	34	1
3/27/2009	Alamosa Elementary (5th Grade)	31	1
5/04/2009	Girl Scout Troop 1424	15	1
5/04/2009	Girl Scout Troop 1018	15	2
	Totals	**248**	**13**

Splash Lab

The San Diego County Office of Education Splash Science Lab is a completely self-contained mobile laboratory brought to local schools to provide students with hands-on experience with the following resources:

- Watershed/storm drain model presentations
- GIS computer stations
- Water Conservation Station
- San Diego Estuary Station

- Microscopes - with live specimens!
- Chemistry experiments
- State of the art computers
- Cooperative learning skills

The curriculum is designed for grade levels 4-6 and is aligned with California Science Content Standards.

During this reporting period three schools received the Science Splash Lab with the costs covered by the City Water Utilities Department. See Table 8-5 below for information on the schools and number of students who participated in the program

Table 8-5. Schools using Science Splash Lab during the 2008/2009 Reporting Year.

Date	School	Grade	Number Attended	Number of classes
4/8/2009	Garrison Elementary	4-5	100	4
4/10/2009	San Luis Rey Elementary	4-5	117	4
4/21/2009	McAuliffe Elementary	5	97	4
Totals			**314**	**12**

Project SWELL (SWELL = Stewardship: Water Education for Lifelong Leadership)

The City continues to collaborate with San Diego CoastKeeper and the San Diego Unified School District (SDUSD) to customize and implement Project SWELL, a water-based science curriculum, for different grade levels in the Oceanside Unified School District (OUSD). The Project SWELL curriculum will foster a sense of stewardship for our natural environment and help to empower and educate these future leaders of America to understand and improve the condition of San Diego's coast and waterways. Project SWELL balances environmental and scientific studies as a comprehensive and hands-on K-12 water quality and pollution prevention curricula. More information about this curriculum can be found at http://www.projectswell.org/. This curriculum provides students with knowledge of water resources in San Diego County and Oceanside, watershed functions, water conservation, the effects of polluted urban runoff, and how students can help prevent water pollution. The City of Oceanside is currently implementing the 5th grade curriculum and is considering implementing the 6th grade and 4th grade curricula in the future.

5th Grade

During this reporting period the 5th grade level curriculum continued to be implemented. The OUSD adopted a slightly revised version of the FOSS science kits used for K-5th grade levels for the 2009-10 school year. FOSS (Full Option Science Systems) is a research-based science curriculum for grades K–8 developed at the Lawrence Hall of Science, University of California at Berkeley. During the next reporting period, the curriculum will be revised to reflect the use of the revised FOSS kits.

6th Grade

For 6th grade the OUSD and the SDUSD adopted different science kits for implementation during the 2008-09 school year. The SDUSD will need to change the 6th grade curriculum to reflect the materials that will be used in the new science kit. Once the SDUSD curriculum is

revised the City of Oceanside will move forward with customizing the curriculum for Oceanside and hopefully piloting the curriculum during the 2009-10 school year.

In preparation for the 6th grade curriculum, the City of Oceanside developed a table that had specific information related to the various watersheds and water bodies in the northern watersheds of San Diego County. (See Table 8-4 of Oceanside's 2007-08 JURMP Annual report.) There is a possibility that this table will need to be updated once the new 303(d) list of impaired water bodies is finalized which will be done before implementation of the curriculum.

Other Education Outreach opportunities

Communities Alive in Nature, a local non-profit organization, implements education outreach programs to local school districts in San Diego County. One component of their education outreach program is to educate high school age students about water quality and how to assess water quality based on water chemistry and the biological community of benthic macroinvertebrates living within the streams. The Clean Water Program was invited to participate in a hands-on field training for these students to demonstrate how to properly use field test kits for water quality analysis and the proper protocols for collection of benthic macroinvertebrates. Clean Water Program staff participated in two training sessions for 9th grade students who attend Pacific Ridge School, a local private school located in the Carlsbad Hydrologic Unit. These two events were held on March 19 and March 26, 2009 at Dawson Reserve and Green Oaks Ranch respectively, both located in Vista along Agua Hedionda Creek. 47 students and 12 adults participated in the training.

Over-Irrigation

Clean Water Inspectors responded and documented over irrigation issues after receiving complaints from the general public or city staff. Inspectors investigated water sources and contacted property owners in person if possible or provided informational door hangers indicating the need to curtail overwatering or fix broken irrigation system if applicable, as well as provided information to educate the public to conserve water. After responding to complaints, inspector's maintained electronic files of all complaints and revisited locations to make sure over irrigation had stopped. In problematic areas where overwatering was caused by many property owners, the entire area was notified by door hangers and/or letters informing the property owners the need to conserve water and avoid polluting the storm drain systems. After the institution of Stage II Drought ordinance, inspectors also enforced the new requirements for the time and duration of irrigation through out the City per the requirements of the new ordinance. If the property owners did not curtail overwatering, the information was submitted to Code Enforcement for further processing of the violations.

Water meter reader personnel are trained to document and respond to urban runoff and over-irrigation issues as they come across such activities during their normal activities. While in the field these personnel will enter the address location into a hand-held meter of a site that may have an urban runoff violation. These addresses are then compiled and given to the Clean Water Inspectors for follow-up. When possible, the water meter reader personnel will also leave door hangers and report incidents of urban runoff. Depending on the situation a meter shop personnel will visit the site or the Clean Water Inspector will follow-up.

Residential Car Washing

Residents continued to be encouraged to use professional car washes or to implement BMPs at their homes to prevent water produced by residential car washing from entering the storm water conveyance system.

Pick Up Your Pet Waste Campaign

During the previous reporting period a relationship between the Clean Water Program and Girl Scout Troop 1215 was established. Troop 1215 agreed to participate in an education outreach campaign encouraging dog owners and dog walkers to pick up after their pets. This project is included as a Watershed Activity under the San Luis Rey Watershed Management Program.

Pet waste left on grass, sidewalks, and along trails is not only a leading cause of bacterial contamination in waterways, but it is also an issue that concerns Oceanside residents. In the spring of 2009, the City of Oceanside Clean Water Program launched a Pick Up Your Pet Waste Campaign to encourage dog owners to clean up after their pets. The project focused on the San Luis Rey River Trail which is used for a variety of recreational purposes including walking, running, and biking. Many people also bring their dogs with them to the Trail. Although most dog owners who use the trail clean up after their pets, some pet waste still accumulates along the trail.

To kick off the campaign, an intercept survey was conducted by members of Girl Scout Troop 1215. While walking along the trail, the Girl Scouts asked people the location of where they accessed the trail, the street name they lived on and if they walk a dog along the trail. The results of this intercept survey allowed for the next component of the program, a mail survey, to target the neighborhoods where most people come from to use the trail.

The next component was a brief survey that was mailed to 300 Oceanside households located in neighborhoods near the trail. The goal of the survey was to identify the reasons why people do or do not pick up after their pets on the trail and in other public areas. Sixty-five percent of the households completed the survey and returned it to the City. Of those residents who completed the survey, 70 percent had visited the trail in the past and 48 percent reported that they had a dog in their household. Following are the overall results of the survey.

Reasons for Picking Up Dog Waste

Both dog owners and non-dog-owners agree that it is important to pick up dog waste, rating the importance of the issue as 9.6 out of 10. The top-rated reasons for picking up dog waste and throwing it in the trash were because: “It is the right thing to do” and “It pollutes parks, rivers, and beaches.”

Barriers to Picking up Dog Waste

The vast majority of Oceanside dog owners who walk their dogs reported that they always pick up after their pet, but 17 percent stated that they sometimes leave their dog’s waste behind without picking it up. Among dog owners, the most common reasons cited for why someone might leave dog waste behind while walking the Trail were:

- Forgot to bring a bag
- Nowhere to throw it away

- No one else around to see them

Survey Recommendations

The results of the survey provided clear recommendations for the Pick Up Your Pet Waste Campaign at the Trail including the installation of additional trash cans and pet waste bag dispensers as well as modifying signage to emphasize pet owner responsibility. Ninety-three percent of survey respondents agreed that more pet waste dispensers are needed in the community. As a result, the City will consider installing additional signage, trash cans, and pet waste bag dispensers along the trail during the next reporting period.

8.3.1 Targeting Underserved Communities

Underserved communities are communities the City has determined may require increased educational efforts. The City targeted the following underserved communities and high-risk behaviors.

Mobile Businesses

Due to their nature, mobile businesses are typically not inspected during the routine industrial and commercial inspection program; therefore they may not be receiving the same educational material as other industrial and commercial businesses. As part of the regional outreach efforts, the City submitted their inventory to the Industrial Commercial Workgroup which plans to develop a regional inventory and provide a list of minimum BMPs to these types of businesses. The City continues to use Code Enforcement to respond to complaint calls related to mobile businesses.

Also, the City of Oceanside was involved in the Industrial Commercial Business workgroup which was formed under the Memorandum of Understanding amongst the Copermittees. During this reporting period the City of Oceanside submitted their inventory of mobile businesses to this workgroup. This comprehensive inventory list will be compiled from all Copermittees that have such an inventory, to eventually develop an education outreach piece for this underserved target audience.

Spanish-speaking population

The City will continue to target the large Spanish-speaking population in the City by offering a number of educational brochures and handouts, including the Green Wrench Guide and Integrated Pest Management tip cards in both English and Spanish. Additional Spanish language education outreach materials will be developed in future years. In addition there are posters available in Spanish for restaurants and automotive related businesses.

Nursery and Greenhouse Operations

Due to the amount of agricultural land use in the City, the City distributed a number of printed educational materials to agricultural/nursery/greenhouse site owners and operators. The City continues to provide educational materials, when needed, to nursery and greenhouse operations during annual inspections and on unannounced visits throughout the year.

Education Materials Distributed

Materials are regularly developed and updated to provide residents, the general public, and students with information about urban runoff, water quality, BMPs, Clean Water Program projects, and the Urban Runoff Hotline number. These materials include brochures and promotional items that are distributed upon request and during community events where the Clean Water Program staff a booth. No significant changes were made to any of the brochures during this reporting period. Copies of these brochures were submitted with previous annual reports. Table 8-6 lists the educational materials distributed during the 2008-2009 reporting period and Figure 8-1 provides a photo of the educational materials.

Table 8-6. Educational Brochures and Promotional Items Developed and/or Distributed.

Education Material	Description	Number Distributed
	Educational Brochures	
Urban Runoff Guidelines for Residents Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from residential activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	250
Pollution Prevention Tips for Gardening Activities Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from gardening activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	100
Urban Runoff Guidelines for Commercial Businesses Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from commercial and industrial business activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	100
Urban Runoff BMPs for Construction Projects handout	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from home-improvement activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	250
Urban Runoff Guidelines for Powerwashers	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from powerwashing activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	50
Guide to Oceanside Waterbodies Booklet	A colorful introduction to the waterbodies in Oceanside. The Guide is intended to help residents develop a sense of stewardship, as well as provide information about local creeks, rivers, lakes, wetlands, and lagoons, the history behind each waterbody, and stakeholder information. In addition, the Guide includes a description of a watershed and current monitoring programs implemented to test recreational water quality.	150
	Total number of educational brochures distributed during this reporting period.	**900**

Promotional Items		
Poop Pollutes Pet Waste Bag Dispensers	Pet waste bag dispensers were distributed at community events.	100
Click Message Pen	Each pen has Oceanside's Urban Runoff Hotline phone number as well as the following text, "Protect our Waterways: sweep sidewalks, all storm drains led to the ocean, recycle motor oil and filters, eliminate irrigation runoff, pick up pet waste, litter pollutes our waterways and conserve water."	2,000
Pencils	Each pencil has Oceanside's Urban Runoff Hotline phone number and is made from recycled newsprint	500
Decals	These static cling decals have Oceanside's Urban Runoff Hotline phone number and can be placed on the windshield for quick reference to report potential storm water violations.	200
Gel Pen	These gel pens have Oceanside's Urban Runoff Hotline phone number and were distributed to City employees only during municipal training sessions.	150
Goodie Bags	These vinyl bags have ten ways to protect our water and Oceanside's Urban Runoff Hotline and were distributed to school and scout troops (filled with other promotional items) and handed out at community event booths.	500
T-shirts	T-shirts are offered as a give-away option for beach and creek cleanup volunteers.	900
Tote Bags	These reusable tote bags are made from recycled cotton and have the words "One Less Plastic Bag" and the Green Oceanside logo. They were distributed to employees and as a give-away option for beach and creek cleanup volunteers.	400
Water bottles	These reusable aluminum water bottles were distributed to employees and as a give-away option for beach and creek cleanup volunteers.	300
Rally Towels	These 11"x15" rally towels have ht slogan "Only Rain in the Strom Drain and were offered to beach and creek cleanup volunteers.	200
Bracelets	These translucent blue bracelets state "I Love Clean Water City of Oceanside Clean Water Program" and were distributed to children during community events and in goodie bags for classroom presentations.	250
Flashlights	These flashlights have the Clean Water Program name on them and were provided as a raffle item during municipal training sessions.	20
Scratch Note Pads	These 4.25 x 5.5 inch note pads provided stormwater pollution prevention tips and were distributed to municipal employees and to the public at community events.	750
Dog Poop Calendars	The Monthly Doos Calendar, which displays dog poop piles in unique venues, was distributed at special events to people completing a pet waste survey.	50
	Total number of promotional items distributed during this reporting period.	**6,320**

Figure 8-1. Promotional Items Distributed During Reporting Year 2008-09.

8.4 Education of Construction Community

The City provides all appropriate parties involved with construction activities with training and informational materials regarding storm water quality, as applicable. These parties include but are not limited to City employees and project proponents, which can include contractors, subcontractors, developers, property owners, and superintendents.

Education and training of the development community in Oceanside is typically done on a project-by-project basis during a mandatory pre-construction meeting with the City and during construction site inspections.

Prior to the issuance of any permits, construction site owners and developers are either given printed educational material or referred to the Clean water Program website for information that includes the municipal permitting process, as well as the state and local storm water permit requirements for construction sites. Prior to the wet season, all currently permitted construction sites are contacted reminding site owners and developers to update their sites' BMPs to reduce erosion and prevent storm water pollution, as well as update erosion control plans and SWPPPs.

The Building Division counter in City Hall references websites that have the following documents for construction site owners and developers to reference:

- Clean Water Program Website to for a link to the General Construction Storm Water Permit
- The City's Construction Manual
- Construction related sections of the Municipal Storm Water Permit Order R9-2007-0001
- Standard Urban Storm Water Mitigation Plan, when applicable

In addition to referring the construction community to the documents mentioned above, a copy of the Urban Runoff BMPs for Construction Projects brochure is stapled on to the storm water

related development plans for the project. This ensures that the construction community has received BMP information and is required to follow the minimum BMPs listed and shown in the brochure. Additional BMPs may be required by the City based on a review of the Storm Water Pollution Prevention Plan prepared by the project applicant. Storm water information is also disseminated to the construction community through storm water compliance inspections of construction sites.

Training of City staff is done continually using a variety of methods such as workshops and memorandums. For further detail regarding the City's construction educational program, please refer to Sections 10.2.2 and 10.3.1 of this document.

8.5 Outreach Component Effectiveness Assessment (Optional)

See Section 11.0 for an assessment of the education component of the City's JURMP.

8.6 Program Review and Modification (Optional)

Staff Training

The Clean Water Program will continue to implement its comprehensive municipal staff training program, including the implementation of pre- and post-test quizzes. The scores from the pre- and post-quizzes will continue to be assessed to determine the effectiveness of the training programs. If specific divisions or departments are in need of educational materials or reference materials related to storm water, the Clean Water Program staff will assist in the development of these materials to provide to those departments or divisions for dissemination or reference.

9.0 PUBLIC PARTICIPATION COMPONENT

In order to ensure success with any City-wide program, the public must be involved. Stewardship and participation by the general public will increase the acceptance and willingness to comply with new regulations. The City of Oceanside has actively pursued public involvement in the Clean Water Program through the implementation of various programs and feedback mechanisms. This section documents the activities conducted by the City of Oceanside during the 2008-2009 reporting period to meet the requirements of Section D.6 of the Municipal Permit (Table 9-1).

Table 9-1. Order 2007-0001 Compliance Summary.

J.3.a.(3)(h).i Public Participation Efforts	See Entire Section 9 of this Annual Report

9.1 Local Public Participation Opportunities

The City of Oceanside encourages its residents to become involved in the Clean Water Program in various ways. The variety of ways the public can participate in the Clean Water Program include reporting potential violations to the Urban Runoff Hotline, beach and creek cleanup events, and community events.

9.1.1 Urban Runoff Hotline

With the establishment of the Urban Runoff Hotline, (760) 435-5800, the public can report potential violations that could pollute the City's receiving waters. The Urban Runoff Hotline was promoted through a variety of media during this reporting period, including announcements on local television stations, placement on brochures, click-message pens, pencils, and other promotional "give-aways", and advertisement on the City's Clean Water Program webpage.

- During the reporting period, one hundred twenty four (124) calls were received on the Urban Runoff Hotline by residents concerning potential urban runoff violations. This is a significant increase from the 55 calls received in the 2007-08 Reporting period and the 14 calls received during the 2006-07 reporting period.
- In addition, Code Enforcement responded to 109 urban runoff related cases, related to residential areas and activities, during the reporting period.

9.1.2 Oceanside Eyes

In addition to the Urban Runoff Hotline City Staff is encouraged to participate in the Clean Water Program through the use of a special City Enhancement Hotline specifically for Oceanside employees called "Oceanside Eyes." This hotline is call incentive driven and promoted internally. During storm water classes for municipal staff, this hotline is mentioned as an alternative for calling the Urban Runoff Hotline.

9.1.3 Cleanup Events

City Sponsored events

To increase Oceanside residents' stewardship toward our local waterways, the Clean Water Program hosts annual cleanup events at every major waterway in Oceanside including Buena

Vista Creek, Loma Alta Creek, San Luis Rey River and City beaches. Each cleanup averages between 100 to 300 participants. During the 2009-09 reporting period, approximately 1,561 volunteers removed approximately 8.98 tons of trash, debris, appliances, furniture, shopping carts and other unwanted material from Oceanside waterways.

Private group sponsored events

Also, private groups regularly approach the city to coordinate their own beach cleanup. The city of Oceanside including the Clean Water Program, Lifeguard division and the harbor maintenance staff support these groups by providing them guidance on what areas to target for cleanup, supplies for their event (bags and gloves) and safety instructions for the group. During this reporting period six private groups coordinated their own beach cleanup event in Oceanside. A total of 1,904 volunteers removed 485 pounds form Oceanside beaches.

Between the City sponsored and private group sponsored events, 1,561 volunteers removed 17,968 pounds of trash and debris from Oceanside City beaches and the three waterways that traverse the City of Oceanside. Table 9-2 lists cleanup events held between July 2008 and June 2009 to encourage community participation and education of the effects of urban runoff:

Table 9-2. Cleanup Events Held during the 2008-09 Reporting Year.

Date	Event	Number of Participants	Pounds Tonnage of Waste Removed
City Sponsored Cleanup Events			
7/5/2008	Morning After Mess	305	175 pounds
9/20/2008	Buena Vista Creek Cleanup	128	9,000 pounds
9/20/2008	Oceanside Beach Cleanup	307	215 pounds
11/08/2008	San Luis Rey River Cleanup	315	5,000 pounds
4/25/2009	Loma Alta Creek Cleanup	99	2,000 pounds
4/25/2009	Oceanside Beach Cleanup - Pier	204	127 pounds
4/25/2009	Oceanside Beach Cleanup Buccaneer Beach	203	451 pounds
	Total City Sponsored Events	**1,561**	**17,968 pounds**
Private Group Sponsored Events			
01/10/2008	Oceanside High School Environmental Club	10	10 pounds
02/23/2008	Oceanside High School Baseball Players	52	260 pounds
4/05/2008	Pacific Kiwanis High School Students	25	50 pounds
4/07/2008	Vista High School Key Club	5	10 pounds
4/19/2008	Black Student Union Cal State San Marcos	33	55 pounds
6/06/2008	Kid's Oceanside Beach Cleanup	800	100 pounds

Date	Event	Number of Participants	Pounds Tonnage of Waste Removed
	Total Private Group Events	**865**	**485 pounds**
	Grand Totals	**2,426**	**18,453 pounds**

Cleanup event mailing lists

During this reporting period and in previous years all volunteers were placed on a mailing list and were periodically mailed fliers with event information allowing them a sense of ownership and responsibility toward the Program. See Attachment 9-A for 2008-09 reporting year fliers mailed to past participants. In order to become more environmentally conscious and use less paper, during the next reporting period, the Clean Water Program will create an email distribution list as a way to inform interested parties about upcoming cleanup events. This will save time for staff to update mailing labels and eliminate the postage and printing costs for mailing these fliers.

9.1.4 Oceanside Update Show

Clean Water Program staff appears regularly on the Oceanside Update Show broadcast through Oceanside Channel KOCT. Each spot allows staff to spend three to five minutes discussing specific storm water pollution programs, pollution prevention, and BMPs to reduce impacts. The show is broadcast twice daily at 7:00 a.m. and 7:00 p.m. Topics are varied with every taping of Oceanside Update, therefore the viewing audience learns about a multitude of BMPs. While KOCT is unable to determine the actual number of residents who watch Channels 17 and 18 regularly or for any length of time, both channels broadcast to approximately 50,000 Oceanside households. Table 9-3 summarizes topics discussed each month in which the Clean Water Program aired a spot:

Table 9-3. Summary of Oceanside Update Topics by Month.

Date	Topic Discussed
July 2008	Pick up pet waste
August 2008	State drought situation, water conservation tips, and Coastal Cleanup Day
September 2008	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
October 2008	Water rebate programs
December 2008	How to protect water quality during the rainy season
January 2009	2009 Cleanup event schedule and storm drains vs. sewers.
March 2009	Storm drains and sewer difference and Loma Alta Creek Cleanup
April 2009	Oceanside watersheds and Loma Alta Creek and Oceanside Beach Cleanup
May 2009	Water awareness month, water conservation & irrigation runoff
June 2009	Pool draining tips to protect water quality

9.1.5 Additional Public Participation Opportunities

Other opportunities for local public participation during this reporting period are discussed in this section.

Pick Up Your Pet Waste Campaign

During the previous reporting period a relationship between the Clean Water Program and Girl Scout Troop 1215 was established. Troop 1215 agreed to participate in an education outreach campaign encouraging dog owners and dog walkers to pick up after their pets. This project is included as a Watershed Activity under the San Luis Rey Watershed Management Program.

Pet waste left on grass, sidewalks, and along trails is not only a leading cause of bacterial contamination in waterways, but it is also an issue that concerns Oceanside residents. In the spring of 2009, the City of Oceanside Clean Water Program launched a Pick Up Your Pet Waste Campaign to encourage dog owners to clean up after their pets. The project focused on the San Luis Rey River Trail which is used for a variety of recreational purposes including walking, running, and biking. Many people also bring their dogs with them to the Trail. Although most dog owners who use the trail clean up after their pets, some pet waste still accumulates along the trail.

To kick off the campaign, an intercept survey was conducted by members of Girl Scout Troop 1215. While walking along the trail, the Girl Scouts asked people the location of where they accessed the trail, the street name they lived on and if they walk a dog along the trail. The results of this intercept survey allowed for the next component of the program, a mail survey, to target the neighborhoods where most people come from to use the trail.

The next component was a brief survey that was mailed to 300 Oceanside households located in neighborhoods near the trail. The goal of the survey was to identify the reasons why people do or do not pick up after their pets on the trail and in other public areas. Sixty-five percent of the households completed the survey and returned it to the City. Of those residents who completed the survey, 70 percent had visited the trail in the past and 48 percent reported that they had a dog in their household. Following are the overall results of the survey.

Reasons for Picking Up Dog Waste

Both dog owners and non-dog-owners agree that it is important to pick up dog waste, rating the importance of the issue as 9.6 out of 10. The top-rated reasons for picking up dog waste and throwing it in the trash were because: “It is the right thing to do” and “It pollutes parks, rivers, and beaches.”

Barriers to Picking up Dog Waste

The vast majority of Oceanside dog owners who walk their dogs reported that they always pick up after their pet, but 17 percent stated that they sometimes leave their dog’s waste behind without picking it up. Among dog owners, the most common reasons cited for why someone might leave dog waste behind while walking the Trail were:

- Forgot to bring a bag
- Nowhere to throw it away
- No one else around to see them

Survey Recommendations

The results of the survey provided clear recommendations for the Pick Up Your Pet Waste Campaign at the Trail including the installation of additional trash cans and pet waste bag

dispensers as well as modifying signage to emphasize pet owner responsibility. Ninety-three percent of survey respondents agreed that more pet waste dispensers are needed in the community. As a result, the City will consider installing additional signage, trash cans, and pet waste bag dispensers along the trail during the next reporting period.

Interpublic Education. The City has developed programs to educate the public and various target communities of the JURMP and the numerous ways the public can contribute to reducing pollution of the City's waterways and Receiving Waters. However, the City recognizes that no matter how many educational programs it implements, there will always be a need for ongoing outreach to various audiences. Therefore, "spreading the word" is another significant effort that the public will be encouraged to participate in that will substantially contribute to the success of the JURMP. When speaking with the public about urban runoff issues, they are encouraged to speak with neighbors about how everyday activities can potentially pollute local waterways.

During this reporting period the Clean Water Program was contacted by a city resident living in a neighborhood with a Homeowners Association. This resident requested informational brochures that could be distributed to households in the neighborhood that address urban runoff and water conservation information. Brochures and information provided to the resident for distribution were as follows:

- Urban Runoff Guidelines for Residents – 125 each
- Pollution Prevention Tips for Gardening Activities - 125
- Pollution Prevention Tips for Landscape Contractors – 5
- Miscellaneous promotional items

The City will continue to provide homeowners associations with informational brochures for distribution throughout their communities.

City Staff Activities. City staff is the public at work. Staff is encouraged to report violations and provide feedback on the implementation of the JURMP. City staff is the eyes and ears of the City, and can provide valuable information on which components and programs are working and provide suggestions or recommendations on improving the programs. The City staff is provided an incentive based hotline called Oceanside Eyes for reporting potential runoff violations as well as other problems that require remediation, such as road repair or infrastructure maintenance needs. In addition, City staff provides feedback during municipal training sessions, information meetings, and by direct contact with the Clean Water Program Manager and staff. Comments are discussed and if changes can be made to better improve the program, then they are planned and implemented.

9.2 Regional Public Participation Opportunities

This section describes those mechanisms available, at the regional level, for the public to participate in to assist in the implementation of regional JURMP related programs and to provide feedback to the Copermittees and contribute to the continuing development of the numerous JURMPs in effect around the County:

9.2.1 Media

Outreach to the public through the media serves as a widespread public education BMP and is an important element of public participation and keeps communication open between government

staff and the public. During Fiscal year 2008-09 all cleanup events were covered in the Oceanside Magazine:

- 2008 Oceanside Beach and River Cleanup Events – Article in summer 2008 *Oceanside Magazine*
- 2009 Oceanside Beach and River Cleanup Events – Article in spring 2009 *Oceanside Magazine*

Copies of the media coverage are located in Attachment 9-B.

9.2.2 Regional Events

San Diego County Fair

The San Diego Regional Storm Water Copermittees sponsored the San Diego County Fair (Fair) in 2008 as an education and outreach activity. The sponsorship was a joint effort between the City of San Diego's Think Blue program and the regional Copermittees. The Fair was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental message. The Residential Sources and Outreach Workgroup (Outreach Workgroup) was responsible for overseeing sponsorship activities with the City of San Diego leading the coordination and implementation efforts.

The 2008 Fair was held June 14th through July 6th, spanning two fiscal years and will be included in both the FY 07/08 and FY 08/09 annual reports. The attendance for the fair was estimated at 1,235,698 persons for the 21 days the event occurred. Sponsorship for the Fair included staffing an outreach booth for 11 days, in which the majority of the jurisdictions provided staffing support. Two staff people from the City of Oceanside's Clean Water Program staffed the booth on June 21, 2008.

The outreach booth served as the primary method for educating the public about watershed protection and pollution prevention. The Outreach Workgroup elected to promote Integrated Pest Management (IPM) as the primary theme and collaborated on the distribution of IPM materials in both English and Spanish. Individual jurisdictions were invited to distribute their own materials in addition to the IPM materials. The Copermittees received credit as both a Flower & Garden Show sponsor and an Enviro-Fair sponsor.

Think Blue was designated as the brand for the Copermittees' during the event and signage demarking the symbol included banners, planter box displays and recycle bin stickers, which were visible at over 500 locations throughout the Fair. Media exposure included TV, radio and press releases. The sponsorship was printed in both the Fair program and included on the Fair map. Other promotions included newspaper advertisements, electronic messaging over the Jumbo Tron, website logos and links, and PA system announcements in both English and Spanish.

Think Blue, City of San Diego developed an event survey for the purposes of assessment. Over 1,200 survey cards were completed during the 11 days the booth was staffed. The questions focused on general storm water knowledge and awareness. The results are being tabulated and will be reported in the 2008-09 RURMP.

Independence Jam

The Independence jam was a concert event held at the Oceanside Amphitheatre attracting 4,000 people from throughout the region. At this event the organizers had and Eco-village where environmentally conscious businesses and organizations were able to a staff a table. Copermittees staffed a table in the Eco-Village to educate event participants about storm water pollution. At this event promotional give-away items distributed were rally towels, tattoos, and displayed the watershed map of the San Diego region. Participants were able to ask questions of staff about which watershed they lived in and were provided with stormwater education information.

Copermittee Working Bodies

The Copermittees collectively developed ten (10) Working body groups to coordinate the implementation of regional programs required by the Municipal Permit. Each Copermittee is required to provide at least one representative to each working body. These working bodies meet at least four times per year unless a different meeting frequency is established through unanimous approval of all Copermittees.

During this reporting period the City of Oceanside participated in each working body. In addition The City of Oceanside Co-chaired the Educational and Residential Sources Workgroup. Activities related to each of these ten working bodies during FY 2008-09 will be provided in the Regional Urban Runoff Management Program (RURMP) annual report scheduled to be submitted to the RWQCB in January 2010.

Regional Hotlines

The regional hotlines provide a direct connection for public participation. Historically, the hotlines have worked well and should continue to increase in use as more people are educated of the hotline and the types of issues to report. The City will encourage reporting through its local hotlines, however, the regional hotlines will serve as an alternative to the local hotlines and also provide an opportunity for reporting by visitors to the City, from other areas in the County, who are not familiar with the local hotlines.

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10.0 FISCAL ANALYSIS COMPONENT

The City of Oceanside acquires the funds necessary to facilitate the City's storm water program through four departments or divisions in the City: Water Utilities, Public Works, Engineering and Code Enforcement. Much of City's storm water program falls under the responsibility of these four departments/divisions. Funds obtained for use in implementing the City's storm water program are utilized for a number of different programs, including jurisdictional, watershed, and regional programs. This section documents the activities conducted by the City of Oceanside during the 2008-2009 reporting period to meet the requirements of Section G of the Municipal Permit Order 2007-0001 (Table 10-1).

Table 10-1. Order 2007-0001 Compliance Summary.

G: Fiscal Analysis Component	See Entire Section 10 of this Annual Report
J.3.a.(3)(j).i Fiscal analysis of City urban runoff management program	See Entire Section 10 of this Annual Report

Effective programs require adequate funding to implement planned activities. The first step in securing adequate funding for the JURMP is to provide a strategy for effectively conducting a fiscal analysis of the JURMP in its entirety. This year's fiscal analysis included an evaluation of the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities described in the JURMP and required under investigation orders and Total Maximum Daily Loads (TMDLs).

10.1 Fiscal Analysis Methods

10.1.1 Program Funding

As previously mentioned, the City secures funding for the implementation of the storm water program through the Water Utilities, Public Works, and Engineering departments/divisions in the City. To secure adequate funding, the Water Utilities Department collects a Clean Water Program surcharge. The surcharge is based on the customer's water consumption, so the surcharge is also designed as an incentive for individuals to conserve water. This amount is equal to $0.07 per unit of water used.

The Development Services Department secures funding from development-related programs. The Engineering Division receives funding through fees assessed on developers for grading plan checks and inspections. Funding for Public Works departments is obtained through general allocations to the department.

10.1.2 Urban Runoff Management Programs

The City's storm water budget is used to support the following departments/divisions:

- Water Utilities Department - Administration of the City's Clean Water Program
- Development Service Department, Engineering Division – Storm water plan review, SUSMP and HMP
- Development Service Department, Engineering Division - Capital Improvement Projects

- Public Works Department - Storm Drain Maintenance
- Public Works department - Solid Waste
- Public Works Department - Flood Control
- Public Works Department - Street and Median Maintenance

Personnel from various City departments and divisions are involved in the implementation of the City's storm water program. Refer to Section 2 and the City's certification letter in Appendix A, pages 2 and 3, of the City's 2008 JURMP for further detail regarding the responsibilities of various departments. Other program expenditures include watershed and regional storm water activities.

10.1.3 Expenditure and Budget Reporting

Following are the expenditures for fiscal year 2008-09 as well as a proposed budget for the next fiscal year. The fiscal year expenditures are presented in tabular format with separate rows for different expenditure categories and the associated budget. The budget for the next fiscal year is presented in the same table.

The JURMP budgeting for the Water Clean Water Program which includes various departments is described in the following sections and summarized in Table 10-2 at the end of this section. Currently there is eight staff people dedicated to the City's Clean Water Program.

- One full-time Clean Water Program/JURMP Coordinator
- Two full-time Environmental Specialists (focusing on water quality monitoring, education outreach, and program administration)
- Two full-time CWP inspectors
- One full-time Engineering Assistant (focusing on SUSMP and HMP)
- Two full-time Code Enforcement Officers

10.1.3.1 Water Utilities Department

The surcharge rate described above under Program Funding is listed as a separate line item on Oceanside customers' utility bills. This allows for the clear delineation of the revenue being secured for the Clean Water Program in the Water Utilities section of the utility bill. The costs to administer the Clean Water Program during Fiscal Year 2008-09 totaled 1,020,583. It is anticipated that the Water Utilities Department will expend $1,253,458 during Fiscal year 2009-10.

10.1.3.2 Public Works

The City calculated the curb miles swept for the reporting period and they totaled 28,954 miles. The overall cost of the City's street sweeping program during FY 2008-09 was estimated to cost $944,000 during this reporting period. This includes $460,000 for equipment costs and $484,000 for staff costs. With a total of 28,954 curb miles swept in the City at a cost of $944,000, this averages out to $32.60 per curb mile.

The cost for inspection and maintenance of the MS4 was $360,580 during this reporting period. These costs are expected to increase to $369,597 during fiscal year 2009-10. During fiscal year

2008-09 the Public Works Department spent approximately $1,369,580. It is anticipated that the Public Works Department will expend $1,415,597 during Fiscal year 2009-10.

10.1.3.3 Engineering

Municipal Permit Order 2007-001 requires an increased focus and effort in development-related review and inspection, development of a Hydromodification Plan and revisions to the Standard Urban Storm Water Mitigation Plan. The approximate costs to implement this program during Fiscal year 2008-09 totaled $275,006. It is anticipated that Engineering Department will expend $195,000 during Fiscal year 2008-09.

10.1.3.4 Overall Clean Water Program Costs

During Fiscal Year 2008-09 approximately $2,665,169 was expended amongst four departments for the implementation of the Clean Water Program. It is anticipated that the total program costs for Fiscal Year 2009-10 will total $2,864,055.

Table 10-2. JURMP Budgeting for Water Utilities, Public Works and Engineering Departments/Divisions.

Department	Item	Fiscal Year 2007-2008	Fiscal Year 2008-2009	Projected Fiscal Year 2009-2010
Water Utilities	Personnel (including Code Enforcement)	410,330	557,023	686,260
	Misc. office supplies, postage, uniforms	2,000	424	4,700
	Print Materials	0	10,229	34,500
	Monitoring Programs including lab materials, supplies and services	17,191	41,733	89,000
	Other Misc Cleanups and booths	73,000	24,027	2,000
	Consultant Fees Investigation Order, TMDL	730,440	202,876	250,800
	Independent Contractors	0	39,000	0
	Permits	135,000	27,178	25,000
	Dues, Travel, Advertising	9,400	934	8,950
	Equipment	2,000	0	5,000
	Regional Copermittee Cost-share Monitoring, RURMP, WURMP	71,618	117,159	147,248
Water Utilities	**Total**	**1,450,979**	**1,020,583**	**1,253,458**
Public Works	Street Sweeping (Equipment)	442,000	460,000	478,000
	Street Sweeping (staffing and /or contract costs)	465,000	484,000	503,000
	Conveyance System Cleaning (Contracted Work and City Staff	351,910	360,580	369,597
	Personnel for CWP Monitoring	65,000	65,000	65,000
Public Works	**Total**	**1,323,910**	**1,369,580**	**1,415,597**
Engineering	Personnel	250,000	260,000	165,000
	Hydromodification Plan	22,510	15,006	30,000
Engineering	**Total**	**272,510**	**275,006**	**195,000**
	Grand Total	**3,047,399**	**2,665,169**	**2,864,055**

11.0 EFFECTIVENESS ASSESSMENT COMPONENT

11.1 Introduction

Effectiveness assessment is an important component of the JURMP because it can assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The San Diego County Copermittees developed two guidance documents to assist in the assessment of the JURMP components as well as the jurisdictions overall JURMP program. These two documents are titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* and the *Baseline Long-term Effectiveness Assessment* (BLTEA). The City participated in regional efforts to develop these documents in anticipation of the requirement to assess their JURMP programs.

The City gathered and evaluated data for some of the program components for assessment during this reporting period. This data will be valuable for incorporation into long-term effectiveness evaluation on a jurisdictional level. In future reporting years, the issue of standardized assessment metrics and procedures will be addressed by the Copermittees. The City anticipates participation in the further development of these work products.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes.

Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique. The effectiveness assessment approach developed by the Copermittees during the 2005-06 permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

- Level 1: Compliance with Activity-Based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation

- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

The establishment of measurable outcomes is necessary for both incremental program component improvements and as a basis for future establishment of relationships between implementation and water quality improvement outcomes.

11.2 Effectiveness Assessment Results

The Municipal Permit Order 2007-0001 requires the City to assess the effectiveness of each significant activity specific to each program component, for each program component as a whole, and for the storm water program as a whole. Levels 1, 2, 3, 4, 5, and 6 outcomes are discussed in the text below. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome level assessments

Level 1 – Compliance with Activity-Based Permit Requirements: Documenting Activities

Compliance with Activity-based permit requirements is intended to provide a quantitative assessment that reflects the regional long-term effectiveness assessment framework through targeted outcomes for the City based on various components of the Municipal Permit. Level 1 outcomes take the form of a simple yes or no answer basically answering "Was the control measure completed?" or it may provide feedback that may be quantified, counted, or tracked over time to demonstrate effort or progress.

Level 2 – Changes in Knowledge/Awareness: Raising Awareness

An important goal of stormwater programs is to increase the level of knowledge and awareness among target audiences such as residents, businesses, and municipal employees. Level 2 outcomes provide program managers feedback on how effective the various control measures have been in raising awareness and changing attitudes of the target audience.

Level 3 – Behavioral Change/BMP Implementation: Changing Behavior

A key focus of the stormwater management program is to affect changes in behavior. By building increases in knowledge and awareness (Level 2), Level 3 outcomes provide program managers with feedback on how effective the program elements and control measures have been in motivating target audiences to change their behaviors and implement appropriate BMPs.

Level 4 – Load Reductions: Reducing Loads from Sources

Many control measures are intended to reduce the loading of pollutants from targeted sources. Load reductions should, in turn, result in improvements to discharge and receiving water quality. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning.

Level 5 – Changes in Discharge Quality: Improving Runoff Quality

A primary focus of stormwater management programs is to reduce pollutants in stormwater to the maximum extent practicable, and to ensure that these discharges do not cause or contribute to violations of water quality standards in receiving waters. At this level baseline measurements of runoff quality are measured to allow comparison. Multi-year data sets are needed in order to have any confidence in the measured change.

Level 6 – Changes in Receiving Water Quality: Protecting Receiving Water Quality

The ultimate objective of stormwater management programs is the protection of water bodies. At level 6, program mangers will focus on outcomes such as compliance with water quality standards, protection of biological integrity, and beneficial use attainment.

Summary

Program elements and control measures will typically have outcomes at more than one of the levels described above and not all outcome levels will necessarily be applicable to all activities. The information submitted with this report will address levels 1, 2, 3 and 4. Section 7 of this report, IDDE, will be submitted prior to December 15 and will address level 5.

11.2.2 Overall Component Assessments

11.2.2.1 Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency BMPs. Based on some interaction with responsible parties during the reporting period and the results of the treatment control inspections, it appears that there is a consistent desire by developers to include just structural BMPs instead of a combination of LID, site design, and source control and treatment controls BMPs. The City will work with the parties responsible for maintenance of treatment control BMPs to address this issue during FY 2009-10. The following information highlights the Development Component of the City's JURMP. Table 11-1 presents the level 1 effectiveness assessment.

Revised SUSMP Manual

The City of Oceanside Interim Local SUSMP is based on the Interim Model SUSMP developed collectively by the Copermittees to address post-construction urban runoff pollution from new development and redevelopment projects that fall under both "priority project" and "standard project" categories. The general goal of the SUSMP is to develop and implement practicable policies to ensure to the maximum extent practicable that development does not increase pollutant loads from a project site and urban runoff flow rates, volumes, velocities, and durations. This goal may be achieved through site-specific controls and/or drainage area-based structural treatment controls. The City's Interim Local SUSMP identifies appropriate BMPs for certain designated project types to achieve this goal. Projects that are identified as priority projects are required to prepare a Stormwater Mitigation Plan (SWMP). Development projects not qualifying as priority projects will be required to prepare a Runoff Assessment Report (RAR) as specified in this SUSMP. The RAR will require the applicant to incorporate LID concepts, site design

BMPs, and source control BMPs in the project design, but no structural treatment control BMPs will be required. The manual is available on the Clean Water Program website.

Interdepartmental Coordination
The City's SUSMP and development review process includes multiple departments and divisions throughout the City. The City has taken necessary steps to maintain compliance with SUSMP requirements through the coordination of these multiple departments and divisions.

Dedicated Storm Water Management Program
The City established the Clean Water Program (CWP) in 2001 under the Water Utilities Department. During this reporting period the CWP program in conjunction with the Engineering Department provided the necessary oversight for all management components of the SUSMP.

Table 11-1. Development Planning – Level 1: Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Development Planning D.1.e	Development Projects	Projects needing SWMP	Projects completing SWMP	Actual/Target	Percent ( ) Completion
	Priority Projects (Required SWMP)	53	24	24/53	45
		Sites needing RAR	Sites completing RAR	Actual/Target	
	Standard Projects (Require RAR)	10	5	5/10	50
	SUSMP Inspections	Sites targeted for Inspection	Sites Inspected	Actual/Target	
	High, Medium and Low Priority Sites (Total 41)	41	40	40/41	97

The 45% and 50% completion rates for Development Projects reflect the fact that several projects are continuing to move through the approval process for SWMP or RAR. Some projects may take one or two reviews before approval, while other project can take significant more plan reviews before receiving approval.

As the City continues to grow and evolve, challenges associated with data management emerges such as tracking of post-construction BMPs, maintenances agreements, and associated documents. It is important to update available tools with up-to-date information. The Development Services Department, which includes Code Enforcement,

Building, and Engineering, have chosen CRW Systems, Inc. as a data tracking system and will begin roll-out in the FY 2009-10 reporting year.

11.2.2.2 Construction

The construction component of the City's JURMP continues to be effectively implemented through inspection and enforcement, education and training and BMP maintenance (Table 11-2). As construction activities continue, the City will maintain the level of performance established from past years, and continue to meet the regulatory standards mandated in the Municipal permit.

Table 11-2. Construction – Level 1: Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Development Planning D.2.d	Construction Projects	sites targeted for Inspection	sites inspected	Actual/Target	Percent (%) Completion
	High Priority Sites	20	20	20/20	100
	Medium Priority	17	17	17/17	100
	Low Priority Sites	18	18	18/18	100

11.2.2.3 Municipal

The municipal component of the City's JURMP continues to provide a well-rounded approach and will continue to implement a comprehensive education program along with inspections of municipal facilities, MS4 maintenance, sanitary sewer slip-lining and street sweeping (Table 11-3).

In addition the City implemented a training program that provided pre- and post-quizzes to assess the effectiveness of the training course specific to each department or division. During the 2008-09 reporting year, 195 City staff were trained on the City's storm water program requirements. Pre- and post- tests were given to assess the level of knowledge before and after each training session. Depending on the nature of the employee's department, the employee's were given an eight, a 15, or a 20 questions test. The eight question test was designed specifically for the engineering inspectors. The 15-question test targeted City staff that worked in various departments including fleet maintenance, parks and recreation and street maintenance. The 20-question test targeted staff who work at and maintain industrial facilities. The average City pre-test score was 68% percent of the questions correct. The average City post-test score was 98% percent of the questions correct. Figure 11-1 presents the pre- and post-test scores by City department.

Table 11-3. Municipal – Level 1: Compliance with Activity-Based Requirements; Level 4 - Load Reductions: Reducing Loads from Sources.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.a	Municipal Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent (□) Completion
	(High, Medium and Low priority facilities)	181	181	181/181	100
	MS4	of catch Basins to be cleaned	of catch Basins actually cleaned	Actual/Target	Percent (□) Completion
	Catch basins cleaned	3,350	3,354	3,354/3,350	100
	Sanitary Sewer	of feet to be slip-lined	of feet actually slip-lined	Actual/Target	Percent (□) Completion
	Feet of sewer slip-lined	4,000	4,054	4,054/4,000	101
	Street Sweeping	of miles of streets to be swept	of miles of streets actually swept	Actual/Target	Percent (□) Completion
	Curb miles of street swept	28,954	28,954	28,954/28,954	100

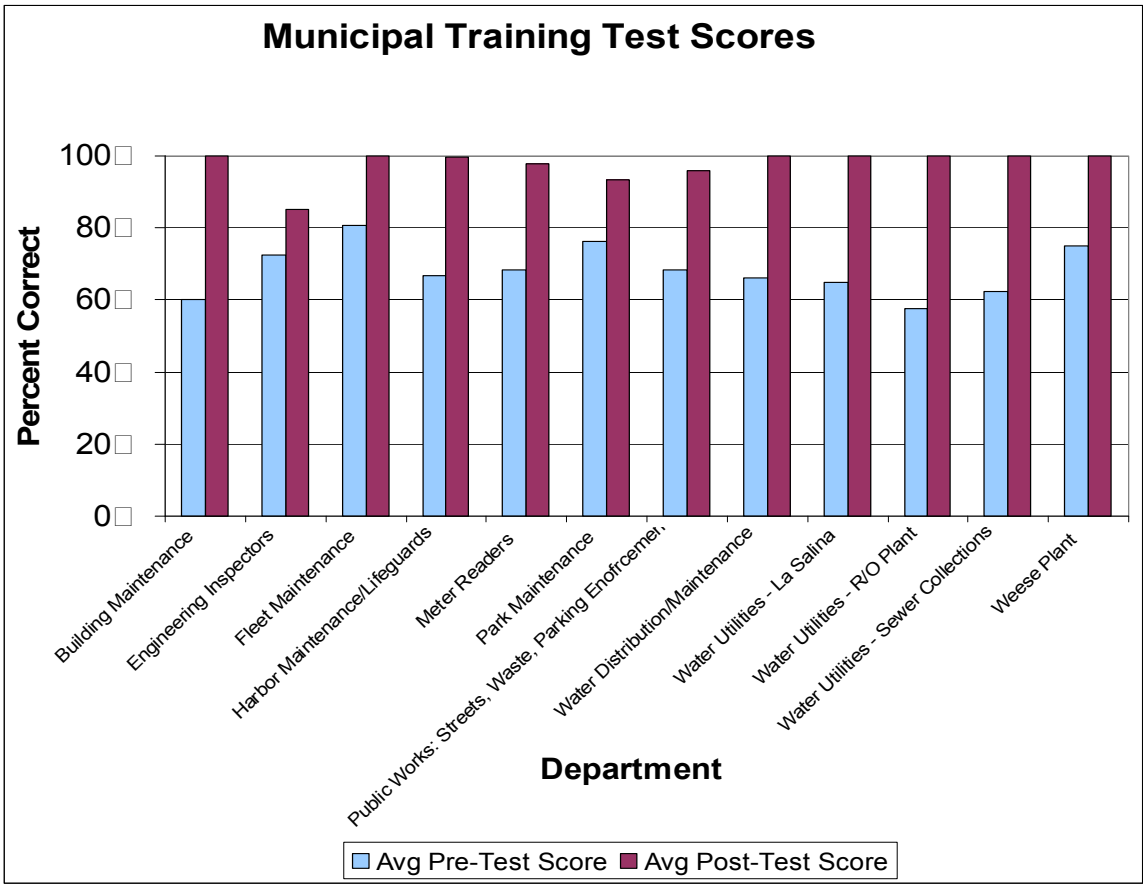

Figure 11-1. Municipal – Level 2: Changes in Knowledge/Awareness: Raising Awareness.

11.2.2.4 Industrial and Commercial

The City implements a comprehensive inspection program for industrial and commercial facilities including all restaurants and nursery and greenhouse operations. Table 11-4 provides an assessment for the inspections.

Table 11-4. Industrial and Commercial Component - Level 1: Compliance with Activity-Based Requirements.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.b	Industrial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	High, priority facilities)	21	20	20/21	95
	Industrial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	Medium and Low priority facilities	As Needed	13	N/A	N/A

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
	Commercial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	High priority facilities - Restaurants	320	320	320/320	100
	Commercial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	High priority facilities Other than restaurants	165	164	164/165	99
	Commercial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	Medium and Low priority facilities	As needed	39	N/A	N/A
	Nursery and Greenhouses	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	All High Priority	16	16	16/16	100

During this reporting period one facility assigned a high rating under the industrial facilities, Hobie Cat, was down-graded form high to medium, and was not inspected. The majority of the work for this facility is conducted inside and under cover. Also, this facility is surrounded by the City Operations Center and the Clean Water Program staff views this facility on a daily basis during regular day-to-day operations.

11.2.2.5 Residential

The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. The City is also conducting additional monitoring studies to help identify and mitigate residential sources of pollution more effectively. Although fewer households participated in dropping off household hazardous waste during this reporting period, more quantity of household hazardous waste was collected for proper disposal (Table 11-5).

Table 11-5. Residential Component - Behavioral Change/BMP Implementation Changing Behavior.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Residential D.3.e	Household Hazardous Material	Quantity of waste targeted	Quantity of waste collected	Actual/Target	Percent ( ) Completion
		130 tons	274.46 tons	274.46/130	211
	Households Participating in Program	of households targeted	of households participating	Actual/Target	Percent ( ) Completion
		3,500	3,430	3,430/3,500	98

11.2.2.6 IDDE

An assessment of this component will be provided in Section 7 when the City submits the entire FY 2007-08 Illicit Discharge Detection and Elimination Component, including the 2008 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2009.

11.2.2.7 Education and Public Participation

The City implements a comprehensive education outreach program for both municipal staff and the public as well as a comprehensive public participation program (Table 11-6). See 11.2.2.3 above for an assessment of the Municipal training program. The City prides itself on educating children within its jurisdiction through the use of a watershed model and the Project SWELL curriculum incorporated into the 5th grade science curriculum.

Table 11-6. Education and Public Participation Component - Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.g	Student Presentations	of presentations targeted	of presentations completed	Actual/Target	Percent ( ) Completion
		10	13	10/13	130
	CWP Newsletters	of newsletters targeted for completion	of newsletters completed	Actual/Target	Percent ( ) Completion
		2	2	2/2	100
	Oceanside Update Tapings	of tapings planned	of tapings completed	Actual/Target	Percent ( ) Completion
		6	10	10/6	166
	CWP Website	of targeted hits	of actual hits	Actual/Target	Percent ( ) Completion
		45,000	35,647	35,647/45,000	79.2

11.3 Program Review and Modification

No changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

12.0 SPECIAL INVESTIGATIONS

12.1 Lower San Luis Rey Bacteria Source Identification Project

12.1.1 Overview

As part of the Proposition 50 Clean Beaches Initiative, the City of Oceanside has been awarded a grant to track the sources of bacteria in the Lower San Luis Rey River. The shoreline at the outlet of the San Luis Rey (SLR) River mouth in Oceanside, California is visited by thousands of people each year. Elevated levels of fecal indicator bacteria (FIB) have affected water quality in the river mouth and the adjacent shoreline. In 2007, this beach was posted due to bacterial exceedances for 54 days; in 2006, it was posted for 71 days; in 2005, this beach was posted for 209 days and 186 of those days were during one consecutive stretch. As a result of the exceedances, the river mouth and one-half mile of shoreline is listed as an impaired water body under section 303(d) of the Clean Water Act for exceedances of indicator bacterial standards. The beach is also listed as a Clean Beach Task Force priority beach.

A major objective of the San Luis Rey Watershed Urban Runoff Management Program (WURMP) lead by the City of Oceanside is to identify sources of the FIB at the river mouth. As directed by the WURMP, the City of Oceanside and the County of San Diego have jointly sampled the San Luis Rey River since March of 2004 to determine if the river is the source of the high concentrations of FIB at the river mouth. Thus far, the results are inconclusive and indicate the need for focused sampling in the lower river and at the river mouth.

To address this issue, the City received $554,375 from the SWQCB and, with the assistance of other stakeholders, will match $141,750 to implement the source identification project in the lower river and river mouth. The City awarded MACTEC Engineering and Consulting, Inc. (MACTEC) and their team of leading scientist in the field the lead contract for the organization and completion of the two-year study.

The overall goal of the proposed study is to identify the sources and quantify the loading of bacterial contamination using a tiered approach. The project will analyze for FIB to identify "hot spots" and to assess bacterial flux. Based on these results, genetic microbial and viral analyses on selected samples will be conducted to pinpoint potential sources and identify potential public health risks. The suite of analyses include *Bacteroides spp,* ESP gene quantification, enterovirus analyses using quantitative PCR (QPCR), sequencing of the enterovirus from the field samples, community based bacterial analyses, and *Enterococcus* speciation. In addition, the joint monthly monitoring program between the City of Oceanside and the County of San Diego will continue and the bacteria monitoring data will be collected and utilized throughout the duration of the project.

This approach will permit prioritization for mitigation of microbial contaminants and appropriate actions will be recommended to eliminate sources of fecal contamination. The three following objectives will be accomplished to achieve the overall goal set forward above:

- Identify point and non-point sources of bacteria contamination in the Lower San Luis Rey River and at the river mouth during the dry and wet season,
- Estimate the bacterial loading from tributaries and along the main stem of the San Luis Rey River during the dry and wet season, and
- Recommend Best Management Practices (BMPs) to reduce and/or eliminate bacterial sources.

12.1.2 Activities completed during previous reporting period

Establishment of a TAC

The first TAC meeting was held on November 1, 2007 from 9:30 to noon. Members included six representatives from the Regional Water Quality Control Board, County of San Diego, City of Vista, and San Diego CoastKeeper in addition to three representatives from the City of Oceanside. An overview of the project and historical data was presented for the benefit of the stakeholders. The role of the TAC was discussed. The TAC will be involved in all aspects of the project, including final approval of the project approach and oversight of the monitoring and reporting. The meeting was concluded with a tour of the mouth of the San Luis Rey to orient members with the complexity of the river. A final list of the TAC was submitted to the SWRCB on January 10, 2008.

A second TAC meeting was held on February 4, 2008 with six representatives from the Regional Water Quality Control Board, County of San Diego, City of Vista, and San Diego CoastKeeper in addition to two representatives from the City of Oceanside. The MACTEC project team presented the proposed project approach to the TAC. The approach was discussed and the TAC made recommendations to be included in the Monitoring Plan and QAPP.

Consultant Selection

A Request for Proposals (RFP) was sent out on November 8, 2007 to solicit proposals from interested and experienced consultants to perform a bacteria source tracking project on the San Luis Rey River. Proposals were due to the City of Oceanside by December 4, 2007 and a subcommittee of the TAC reviewed the proposals on December 7, 2007. MACTEC Engineering and Consulting, Inc. was officially awarded and given a notice to proceed by City Council on February 20, 2008.

Monitoring Plan and Quality Assurance Project Plan Approval

Other important work included the development and approval by the SWRCB of the Monitoring Plan and Quality Assurance Project Plan (QAPP) by the MACTEC project team with input from the TAC. The consultants and members of the TAC and City staff participated in a conference call to discuss the draft Monitoring Plan and QAPP on March 28, 2008. These documents were reviewed by the SWRCB and revised based upon their comments. The SWRCB approved the Monitoring Plan and QAPP on June 19, 2008.

First Monitoring Event

The first dry season monitoring event took place on June 18 and 19, 2008. Dr. Rachel Noble traveled to San Diego to prepare for the first event with the project team and participate both days of monitoring. The project team collected bacteria samples and flow measurements at six

monitoring locations in the Lower San Luis Rey River. The bacteria samples were analyzed for fecal indicator bacteria and the remaining sample volume was filtered and frozen for molecular analysis. The river mouth was not sampled, as planned, due to construction of the Pacific Street Bridge.

The City of Oceanside and the County of San Diego implemented the changes to the joint monthly monitoring program during the June 2008 monitoring event. The program will continue using SWAMP protocols throughout the remainder of the source identification project allowing the bacteria data from monthly monitoring to supplement the dry and wet weather event data.

12.1.3 Activities completed during current reporting period

Second Monitoring Event

The second dry season event took place on July 23 and 24, 2008. The project team collected bacteria samples and flow measurements at five of six monitoring locations in the Lower San Luis Rey River. As part of the Visual Observation Program, observations were conducted July 23 and 24, 2008 within the Lower San Luis Rey River and upstream in the drainage basin to identify possible sources of bacteria. The river mouth was again not sampled, due to construction of the Pacific Street Bridge.

The City of Oceanside and the County of San Diego continued to use SWAMP protocols to allow for use of the monthly monitoring data to supplement the project monitoring event data.

Genetic Molecular Analysis

Based on the fecal indicator bacteria (FIB) results of the first two dry weather monitoring events, four of six project sampling sites (Murray Bridge, Douglas Bridge, Pilgrim Creek, and Sleeping Indian) were selected for additional genetic molecular analysis. Two were river sites and two were tributaries. Genetic molecular analysis was conducted on samples collected at these sites during days 1 and 2 of the June 2008 event. There were no FIB exceedances of standards during the July 2008 event and, therefore, none of those sites were chosen for additional analysis per the QAPP and Monitoring Plan.

Visual Observation Program

The City of Oceanside and the project team continued to develop the visual observation program based on the results from the July event, including modifications to the field forms, prioritization of the observation zones, and coordination of volunteer support with San Diego CoastKeeper.

Suspension of Funds from State Water Resource Control Board, Dept. of Finance

On December 19, 2008, the State Water Resource Control Board issued a Budget Letter that suspended all projects including the Lower San Luis Rey Source Identification Project. All work on the Visual Observation Program and all planned wet and dry weather events were stopped. The work completed after this notice was primarily to assess the status of various elements of the project, including laboratory work and the effect of the stop work notice on genetic analysis. In addition, the potential for American Relief and Recovery Act (ARRA) funds was assessed and answers to the survey were researched and submitted on March 13, 2009. On April 6, 2009, The City of Oceanside received a conditional approval letter that the project was eligible for funding

from the ARRA. Unfortunately on April 7, 2009 the City of Oceanside received a letter saying that new guidance from the EPA regarding "shovel ready" projects indicated our project was no longer eligible for the ARRA funding.

With more time passing, the City of Oceanside requested an assessment from MACTEC of the molecular sample holding times for samples not yet analyzed and a summary from our contractors of what and where data that had been analyzed is located. Unfortunately, samples for two of the three types of genetic analyses had expired and are therefore no longer available for use to the program. Samples were analyzed for *Enterovirus A* by Dr. Jed Furman's laboratory at the University of Southern California. *Enterovirus A* was not detected in any of the samples.

The monthly joint monitoring program conducted by the City of Oceanside and the County of San Diego continued as modified for the Grant project until June of 2009. In June 2009, the City and County agreed to continue the monitoring program, but the City brought the monitoring in-house to the San Luis Rey Wastewater Treatment Plan Laboratory. The same field procedures were followed, but the reporting limits changed to above SWAMP recommendations. This change is not expected to effect results, as bacteria levels are usually at or above these reporting limits.

The City and MACTEC are prepared to restart the project as soon as approval is received from the State Board.

12.2 Loma Alta Creek Ultraviolet Light Treatment Facility

12.2.1 Overview

Loma Alta Creek Lagoon and Buccaneer Beach, located in the City of Oceanside, are currently impacted by high levels of bacteria. This is a family beach adjacent to a park with a large parking area, showers and an eating establishment that sees large crowds during the dry months. The City has determined that a key source of bacteria and nutrients in Loma Alta Creek is urban runoff that discharges into the creek. The source of water for Loma Alta Creek is from storm drain flows and hillside seepage from the Loma Alta watershed, which drains approximately 6,400 acres, and flows through densely developed residential, commercial, and industrial land uses.

Just over eight acres of the Loma Alta Slough are included on Section 303(d) of the federal Clean Water Act list of impaired water bodies for bacterial indicators and eutrophication within the and for 1.1 miles of coastline at the opening. The increased presence of bacteria and pathogens in the watershed poses a threat to REC-1 and REC-2 beneficial uses and directly impacts the ocean water quality at Buccaneer Beach. The bacteria that are present in Loma Alta Creek have resulted in numerous beach closures and postings at Buccaneer Beach. Historically, Buccaneer Beach was subject to closures that last the entire summer season. To

reduce the bacterial loading on Buccaneer Beach, the City will allow the lagoon opening to sand closed as the south swell arrives in May and divert 100% of the dry weather flow through an ultraviolet light treatment facility then discharge the treated water at the high tide line into the ocean. The project, once completed, will capture up to 1,000,000 gallons per day of urban runoff Loma Alta Creek Ultraviolet Light Treatment Facility

12.2.2 Project Scope

The City was awarded a $5,000,000 Proposition 40 Clean Beaches Initiative (CBI) grant by the State Water Resources Control Board to construct an ultraviolet (UV) light treatment facility at the existing La Salina Wastewater Treatment Facility. One hundred percent of the dry weather creek flows (averaging 300 to 700 gallons per minute) will be intercepted in the lagoon and diverted to the UV treatment facility, located on the northern bank of the creek. The treatment facility consists of piping flows from an exiting diversion structure by gravity from the lagoon through a 2 micron fine screen to a wet well where the flow is pumped into two large sand filters followed by two UV disinfection units housed in a reinforced concrete building. The treated water is discharged through a pipe extended along the existing section of rip-rap that runs along the north side of the Loma Alta creek outlet at Buccaneer Beach. During wet weather months (November through April), the lagoon would be opened to allow free flow to the ocean and the UV system would be bypassed.

12.2.3 Progress Milestones Achieved Schedule

The California Coastal Commission approved Permit No. 6-06-152 for construction of the outfall pipe associated with the UV treatment facility on June 14, 2007. Loma Alta Creek UV Treatment Facility project entered into the construction phase on August 13, 2007 when the official Notice to Proceed was issued to Orion Construction Corporation.

Fiscal year 2008-09 Update

The Loma Alta Creek Ultraviolet Light Treatment Facility started treatment in June 2009 and continued throughout the summer. The plant typically ran three to four days a week with average flows of 300 gallons per minute. No water was discharged onto the beach when the UV Facility was offline. Flows were lower than expected due to drought conditions and conservation efforts of Oceanside residents.

Water samples were taken weekly from Buccaneer Beach directly in front of the discharge pipe and seventy-five feet north and south of the discharge pipe. The samples were tested for total and fecal coliform and Enterococcus. All samples taken during summer 2009 met California Department of Health Services AB411 Objectives and there were no postings due to bacterial levels exceeding standards set by the County Department of Environmental Health. The UV Facility will run through September 2009 unless heavy rains arrive earlier than expected.

Oceanside Loma Alta Creek UV Outfall pipe releasing treated water

12.2.4 Project Outcomes Effectiveness Benefits

The anticipated project goal is to eliminate beach closures during the dry months at Buccaneer Beach in Oceanside, California. This will be achieved by diverting the flow from the Loma Alta Lagoon through a UV treatment facility prior to discharging the flow onto the shoreline. The City will monitor the UV treated storm drain outlet and the surf zone for bacteria for the 2009 AB411 period. The approved Monitoring Plan and Quality Assurance Project Plan developed for this project was implemented.

13.0 NON-EMERGENCY FIRE FIGHTING

Emergency fire fighting flows (flows necessary for the protection of life or property) are allowed by the Municipal Permit and do not require implementation of BMPs. Non-emergency fire fighting BMPs and educational methods for reducing the discharge of pollutants from non-emergency flows to the MEP are described below.

Order 2007-0001 Compliance Summary

J.3.a(3)(1)iv Non-Emergency Fire Fighting	See Entire Section 13 of this Annual Report

13.1 Best Management Practices

The City developed and implemented a program to reduce pollutants from non-emergency fire fighting flows, in accordance with Section B.3 of Permit Order 2007-0001. BMPs were implemented when the following activities were conducted:

- Regular Maintenance of Fire and Emergency Vehicles and Equipment
- Training Exercises
- Facilities Maintenance
- Post-Emergency Rehabilitation of Response Equipment

These activities were conducted in a way to either minimize or eliminate the discharge of pollutants to the MS4. Detailed descriptions of BMPs are given for each activity below:

Regular Maintenance of Fire and Emergency Vehicles and Equipment

- Vehicles and equipment were cleaned where runoff was directed to either the sanitary sewer system or to a drain with an oil/water separator system.
- Vehicles and equipment were cleaned where runoff would pond and evaporate and/or where runoff would filter through landscaped areas.
- Sewer drains in a vehicle cleaning area were outfitted with a hydro screen fabric barrier to collect debris.
- Spill kits were available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents were minimized, and general cleaning solutions were disposed of into the sanitary sewer system.

Training Exercises

- Water used in training exercises was directed to landscaped areas whenever possible, and runoff from the training exercises was not allowed to discharge to the MS4.
- Live fire training activities were pre-planned to allow integration of barriers to off-site runoff that could contribute to non-storm water discharges.

Facilities Maintenance

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways were swept to remove debris. Debris was placed in the trash.
- Landscaped areas were maintained as required to reduce the introduction of leaves and other landscape waste into the MS4.
- Irrigation systems were monitored and maintained as required to reduce irrigation water from going off-site.

- Spills were cleaned up using spill kits provided at the work site, and disposal of spilled material was in accordance with applicable regulations.
- Spills that required a cleanup beyond the ability of the on-site employees were reported to the City's Public Works Department for assistance with appropriate resources.
- Maintenance and repair of structures were conducted using methods that do not contribute pollutants to the MS4.

Post-Emergency Rehabilitation of Response Equipment
Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency were restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. The use of water that could contribute to storm water discharges was used unless another practical and immediately available method was identified, and was performed in a manner that minimized discharges to the MEP.

13.2 Educational Methods

During live fire fighting training exercises all fire fighters were educated about the requirement to not allow water flows to enter the MS4. Fire fighters in attendance for training sessions about how to use high pressure fire fighting hoses were educated on how to direct the water to percolation basins that are permanently in place at the training grounds. Water that is directed to these basins was allowed to infiltrate into the soil and/or evaporate.

Prior to building structures at the training grounds being set on fire, perimeter controls were put in place to ensure that water from the non-emergency training session did not reach the MS4. Fire fighters in attendance were educated on the proper type and installation protocol of perimeter controls. These perimeter controls were also used for training sessions related to vehicle fires.

14.0 JURMP REVISIONS

On December 19, 2008, Regional Water Quality Control Board (RWQCB) and City of Oceanside staff met to review the City's 2008 JURMP and 2007/2008 JURMP Annual Report. Based on that meeting, the RWQCB sent a letter with requested revisions and updates to the JURMP and JURMP Annual Report. The revisions made to the City's JURMP are provided in the sections below. Updates to the JURMP 2007/2008 that were applicable and made this reporting year are discussed throughout this Annual Report in the appropriate section.

14.1 Section 6.0 (Municipal)

The following update will replace Section 6.7 in its entirety of the City of Oceanside's 2008 JURMP.

6.7 Special Events

The City of Oceanside hosts a variety of Special Events in the City. These events include major sporting events and community fairs and festivals. A Special Events Permit is required for any organized activity involving the use of, or having impact upon, public property, public facilities, parks, beaches, sidewalks street areas or the temporary use of private property in a manner that varies from its current land use. The permit process includes a BMP implementation plan. The City has a Special Events Committee comprised of various City Department representatives who review permit applications to insure events are held safely and do not adversely impact the community.

6.7.1 Source Characterization

The City issues Special Event permits for both internal city sponsored events and event organizations that coordinate events that may include vendors or various event related elements. Samples of these events include:

- Antiques on Mission
- Dia de los Muertos
- Turkey Trot 5k Run
- Ironman Triathlon
- Race Across America
- Freedom Day Parade

Typically, special events have a high density use of people per square foot raising the potential for pollutant types at special events, such as:

- Setup and teardown of equipment booths
- Booth operation generating trash
- Food and drink preparation and consumption – illicit discharges and organic material
- Hydraulic rides – oil and grease
- Temporary portable restroom – chemicals and bacteria
- Hydration stations – water cups and other trash material

6.7.2 Best Management Practices

All special evens are required to implement designated BMPs and comply with all applicable regulations outlined in the Oceanside Municipal Code. During pre-event application meetings for large events, event organizers are provided with an event permit packet that includes storm water related information including a copy of the Storm Water Compliance Guidelines for Special Events brochure and the Special Events Inspection Form. Copies of the brochure and inspection form are provided in Attachment 14-A. It is explicitly stated that the company coordinating the event is required to leave the site as clean as the pre-event condition and shall not allow any materials or liquid to enter the storm drain system.

6.7.3 Program Implementation

6.7.4.1 Event Inspections

A storm water inspection report form has been developed for use before and after large special events. Storm water compliance inspection reports will be completed prior to the start of the event to ensure that appropriate BMPs are in place. A post-event inspection will ensure that the site is properly cleaned. A special events office representative will conduct pre- and post-inspections. This office may designate another city department representative to conduct the pre- or post-event inspections, when needed.

6.7.4.2 Street Sweeping

Most special events occur in the downtown area which is swept 5 days a week, with sweeping vehicles generally onsite within 12 hours from the end of the event.

For special events that cause an added impact to the community street sweeping is conducted immediately after the end of the event. On an annual basis, the City holds one parade in the downtown area after which street sweeping is immediately conducted.

6.7.4.3 Harbor and Beaches Maintenance

Large events held in the Harbor and Beaches area can have the potential to generate large quantities of trash. In addition to the above information, the Harbor and Beaches Maintenance Division conducts the following activities after large events and holidays held in the Harbor and Beaches area:

- A litter abatement contractor provides staff to walk beach and hand pick up litter.
- City staff uses trucks and/or utility carts to follow and pick up items that are too large for the litter abatement contractor such as logs, furniture, etc.
- City staff further screens the beach using Cherrington beach sweeping machines.
- A pressure-washing contractor or City staff washes the hardscapes with all wash water being recovered and disposed of properly.

14.2 Section 7.0 (Industrial)

The following information highlighted in red shall amend the City of Oceanside's 2008 JURMP. The additional language provides further detail on the City's process to determine and report non-filers. The notification process has not been amended and will continue as written in Section 7.2.4.4 of Oceanside's 2008 JURMP. A list of any identified non-filers will be provided in future annual reports.

7.2.4.3 Facility Inspections

Inspections of industrial businesses will typically be conducted by designated Clean Water Program compliance inspectors and/or Code Enforcement personnel. Inspections will be tracked using the City's Urban Runoff Business Database or another similar database. Inspectors will utilize a Commercial and Industrial businesses Inspection Form, an example of which is provided in Appendix D. City inspectors will use a restaurant-specific form and grease control report for inspections at food service establishments in the City. These forms are included in Appendix D. The following describes the procedures that inspectors will follow to conduct inspections.

Step 1: Initiation

An inspection is initiated as a result of one of the following:

- A report by the public or a municipal staff member
- An illicit discharge investigation
- As a follow up to a previous inspection, violation, or citation
- An inspector identifying that the business is due for a routine inspection

The inspectors will always conduct a complete inspection of the business regardless of the initiating circumstances. However, the inspectors may choose to focus on specific issues that were previously identified for noncompliance or which were the initial reason for an inspection.

Step 2: Pre-Inspection Preparation

Prior to visiting a business, the inspector will access the Urban Runoff Business Database and complete the general information portion of the Commercial and Industrial businesses Inspection Form. An option to print out an inspection form may become available with further development of the Urban Runoff Business Database. The inspector will review the sheet to determine the business's primary activity, general location, proximity to water bodies, applicable BMPs, and other relevant information. The inspector will also note incomplete portions of the business's general description so as to attempt to complete the information during the inspection.

Step 3: The Site Visit

Approach to the Site

Prior to entering onto the business facility, the inspector will document the following:

- Adjacent conveyances or water bodies

- Visible discharge points along perimeter of the site
- Outdoor areas of intensive industrial activity
- Signs of recent additions or remodels.

The Management Office

After introductions, the inspector will obtain information from the business operator or other responsible individual. At this time the inspector will conduct the following:

- Obtain updated information for the Urban Runoff Business Database, including changes in ownership or operations.
- Verify the SIC Code and other descriptions of the business.
- Clarify observations made before entering the facility (i.e., any changes in activities, materials, or physical structures).
- Check for coverage under the General Industrial Permit.
- Review the SWPPP if available.
- Identify which general BMP requirements apply to the businesses.
- Interview the responsible individual about which non-structural BMPs are implemented and how the various BMP requirements are met, since a majority of these BMPs may be incorporated into operations and may not be evident in a walkthrough.
- Review other relevant items such as existing pollution prevention plans or an environmental management system.

Facility Walkthrough with Management and Supervisor

The site map, if available, will be used to orient the inspector while conducting a walkthrough of the facility. Areas in which industrial activities are exposed to precipitation, thereby increasing the risk of pollutants entering storm water will be noted. Attention will also be given to run-on of storm water and runoff in these areas, as well as pollution prevention measures. From the walkthrough, an inspector can assess the following:

- Accuracy of site map, descriptions of the business, materials list, and SWPPP.
- Confirmation of additions or changes observed while approaching the facility.
- Evidence of illegal discharges (i.e., ongoing leaks or recent spills, or connections not authorized under an NPDES permit).
- Effectiveness of BMP implementation in each area of the business.

The Inspection Form

The inspector will fill out the inspection form during the interview of the responsible party and the walkthrough of the business. Once the inspection is completed, while still onsite, the inspector will complete the inspection form and revise information as necessary. A signature on the form will be obtained by the responsible person, or designated responsible person, at the business site.

Identification of Industrial Non-filers

During the site visit, if the inspector suspects the facility to be a covered facility under the General Industrial Permit (GIP) and/or Waste Discharge Requirements, the inspector will notify the business owner and/or operator of the reporting requirements. The inspector will review the

General Industrial Permit requirements and coverage and then provide the owner/operator with a fact sheet that provides resources for further information. A copy of the fact sheet is located in Attachment 14-B. Upon determination of the facility's Permit requirements, Clean Water Program staff will notify the RWQCB in the City's JURMP Annual Report as described in Section 7.2.4.4.

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15.0 CONCLUSIONS AND RECOMMENDATIONS

15.1 Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the San Diego Copermittees. Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2007-2008 annual reporting period (July 1, 2008 – June 30, 2009).

15.2 Conclusions

This annual report presents the activities the City conducted from July 1, 2008 through June 30, 2009 to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The activities involved implementing, and improving where needed, existing programs and developing new programs intended to minimize or eliminate the effects of urban runoff within the City's jurisdiction on receiving water bodies. Improving water quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

As detailed in the Program Effectiveness Assessment Component, the City met all of the development planning targets and met the municipal targets. Long-term effectiveness assessment is an ongoing and iterative process and the City will continue to use this process to further improve its storm water program.

15.3 Recommendations

15.3.1 Database Tracking System for various departments and divisions

During this reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water, Sewer, and the Clean Water Program, continued rolling out the GBA Masters Series software. Water and Sewer continued to utilize the product and the Clean Water Program gained approval to purchase additional licenses and hire a consultant to help modify the software to their needs. Complete roll-out for the Clean Water Program is expected in reporting year 2009/2010. The Development Services Department, which includes Code Enforcement, Building, and Engineering, choose CRW Data Tracking Systems and will begin roll-out in the 2009/2010 reporting year. These systems will allow for tracking and reporting of needed information, including stormwater data, across the departments.

15.3.2 Assessment of Education Program

During this reporting period the City of Oceanside conduct a comprehensive education outreach program along the San Luis Rey River Trail titled the Pick Up Your Pet Waste Campaign. During the next reporting period an assessment of this program will be conducted.

15.3.3 Underserved Target Audience Outreach - Including Mobile Businesses and Spanish Speaking Population

Underserved target audiences will be targeted with educational information during reporting period 2009-10. The City intends to participate in an education outreach program through the Industrial Commercial Sources Workgroup to educate Mobile Businesses of their minimum BMPs. The regional workgroup requested Mobile Business inventories from each Copermittee, of which Oceanside complied, which will be compiled into one list. It is anticipated that this education piece will be sent to the inventory list during the next reporting period. The inventory of Mobile Commercial Businesses is available in Appendix B.5 of the City's 2008 JURMP as part of the Commercial Inventory.

Attachment 2-A. Treatment Control BMP Inventory
Inspection and/or Maintenance Verification
City of Oceanside FY 2008-09

Project Name	Project Address	Project Site Size (acres)	Watershed	# of Selected Treatment Control BMPs													Inspection and/or maintenance information on file
				TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	
Ashworth, Inc.	4010 Ocean Ranch Blvd.	9.83	Loma Alta							7							X
Barnwell St./Ritter	303 S. Barnwell St. Oceansde, CA	1.06	Loma Alta							5				4			X
Benet Industrial Center	Highway 76 and Benet Road	4.62	San Luis Rey							1			3	4		1	X
Californa Funeral Services, INC "Eternal Hi	1999 El Camino Real Oceanside, CA 92054	90.6	Loma Alta							7			5	5			X
Calvary Chapel	3715 Oceanic Way	7.3	Loma Alta	4						5					4		X
Car Sound Exhaust	1901 Corporate Ctr. Dr.	11.76	Loma Alta							2				1	1		X
Coca Cola Bottling Company	2303 Ocean Ranch Blvd.	10.74	Loma Alta							2					1		X
Darwin Knolls		7.7								2							X
Darwn Glen		11.6								2							X
Deutsch Industrial Products	250 Eddie Jones Way	1.03	San Luis Rey										1 sand				X
El Camino Medical Condo	El Camnino Real Oceanside	2	Buena Vista						2	2				2		2	X
Eternal Hills Memorial Park	1919 El Camino Real																X
Hooter's Restaurant	El Camino Road & Vista Way	1.82	Buena Vista							1		2			1		X
La Mision Village	Mission Ave, Oceanside, CA		San Luis Rey							13							X
La Pacifica II Buisness Park - Marriot and Kaiser	Lot 11, Ocean Ranch, La Pacifica buisness park	15.1	Loma Alta							4			2	5		1	X
Lot 36, Rancho Del Oro Industrial Park	Avenida Del Oro & Aviende del Plata	1.3	San Luis Rey							1	6						X
Manheim San Diego Auto Auction	4691 Calle Joven, Oceanside, cA 92054		San Luis Rey										30				X
Marriott Residence Inn	3603 Ocean Ranch Blvd.		Loma Alta					3		1				10			X
Mission Wells HOA	Franciscan Way										3						X
Morro Hills Village E	Varies	14.7	San Luis Rey							2				1	1		X
Native Bouquet	3927 Oceanice Dr.	3.18	Loma Alta		1					3			2	1			X
North Coast Methodist Church	1702 S. Ditmar St.	8.83	Buena Vista							2							X
North Oceanside Batch Plant	1030, 1032,1050 Airport Rd	4.35	San Luis Rey						1	1							X
Ocean Ranch, Lot 6 - HK Plastics	Corporate Center and Ocean Ranch	5.3	Loma Alta							4				6			X
Ocean Terrace Professional Center	Rancho Del Oro Rd at W. Vista Way	9.93	Buena Vista							1			5	6			X
Oceanic Business Park, Parcel 1	Oceanside Boulevard & Corporate Center Drive	4.83	Loma Alta							2			1	2	2		X
Oceanic Business Park, Parcels 2, 3, and 4	Oceanside Boulevard & Corporate Center Drive									3				11			X
Oceanside Gateway Business Park	4700 Blk Ocenside Blvd	32.4	Loma Alta							1				28	3		X
Oceanside Harbor			San Luis Rey										9				X
Pacific Coast Medical Center	3876 Mission Ave, Oceanside, CA 92058	7.88	San Luis Rey							4							X
Pelican Cove		5.6	San Luis Rey										2 sand				X
Rancho Rose	Highway 76 and Melrose Drive	8.52	San Luis Rey		3												X
Round Table Pizza @ Quarry Creek	3440 Marron Rd.	0.37	Buena Vista							1							X
Seagate Corporate Center	East of Rancho Del oro Drive West of corporate center drive at avenida del la Plata	29.01	Loma Alta							8	2						X
Simba International	2654 Vista Pacific Dr.	1.5	Loma Alta							1							X
Starbucks	3504 College Blvd.	0.516	Buen Vista							1	1		1				X
Taylor Estates	0000 Sunridge Dr Oceanside Ca, 92056	30.1	San Luis Ray							5							X
The Church of Jesus	2080 California St.									1							X

Attachment 2-A. Treatment Control BMP Inventory
Inspection and/or Maintenance Verification
City of Oceanside FY 2008-09

Project Name	Project Address	Project Site Size (acres)	Watershed	# of Selected Treatment Control BMPs													Inspection and/or maintenance information on file
				TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	
The Coastal Townlofts	400 block of Cleveland Street	1.01	Loma Alta							7				14			X
Tri-City Medical Center Parking	4000 Vista Way	1.48	Buena Vista							1							X
VA Clinic, Seagate Corp. Center	3500, 3504 Rancho Del Oro Rd. Oceanside, CA									16				11	11		X
VCC	Rancho Del Oro Drive & Oceanside Boulevard	8.5	Loma Alta							17				9			X
Walgreens	3507 Cannon Rd Oceanside Ca, 92056	1.91								1				3			X
Windstar Ocean Ranc Lot 19	Windstar corporate center, 4800 Block Of Ocean Ranch Blvd	14.13	Loma Alta							4			1	10			X
Windward Villas	691 N. Tremont	0.98	San Luis Rey														X
Z Market	3204 Mission Ave.		San Luis Rey							2				2			X
1213 South Pacific Street	1213 South Pacific Street Oceanside, CA 92054	0.11	Loma Alta	1	1												
2137 Willowbrook Drive	2137 Willowbrook Drive Oceanside, CA 9205	2.08	San Luis Rey								1		1				
400-404 South The Strand	400-404 South The Strand, Oceanside, CA	0.3	Loma Alta										1				
516 South the Strand	516 South the Strand, Oceanside, CA	0.104	Loma Alta										1				
595 Las Tunas Drive	595 Las Tunas Drive Oceanside, CA 92057	5.2	San Luis Rey	1													
823 S. Pacfic St.	823 S. Pacfic St. Oceansde, CA 92054	0.075	Loma Alta	1													
825 S. Pacfic St.	825 S. Pacfic St. Oceanside, CA 92054	0.1	Loma Alta		1												
Airport Road Automotive	Airport Road	2.11	San Luis Rey														
All State Moving Systems	Pacific Centre Industrial Park, 4670 North Ave., Oceanside, CA 92056								2				4		4		
AM/PM Carwash & Fuel	607 North Douglas Drive	0.82	San Luis Rey											4			
Arrowood East																	
Brezza Di Pacifica Residences	1443 S. Pacific Oceanside CA	0.72	Loma Alta		1												
Carpenter Towing	1601 North Coast Highway, Oceanside, CA	0.42	San Luis Rey										2				
Casiatas at Spring Creek	5501 Old Ranch Road 3 Oceanside, CA 92057	13.84	San Luis Rey							1				2			
Cornerstone RR-Right of Way-Parking	0000 Union Plaza Oceanside Ca, 92054																
Cross/Matlach Residence	400 N. Pacific St. 308 Oceanside, CA 92054	0.16	Loma Alta	1													
Cypress Estates	Cypress Road	3.18	Loma Alta		1									1	1		
Employer's Choice Insurance Services	2111 S El Camino Real # 201, Oceanside, CA 92056	0.5	Buena Vista						1	1				2			
Essex Ranch Del Oro		3.63	Loma Alta	2						1				3	2		
Harbor View	Harbor Cliff												15				
Holiday Inn and Suites Hotel	1401 Carmelo Drive, Oceanside, CA	1.07	San Luis Rey							6			1	1			
Jack In the Box #3068 Canyon Plaza	3068 Canyon Plaza 1900 Mission Ave. Oceanside, CA 92054	0.05	San Luis Rey											2	2	2	
Jiffy Lube		0.42	Loma Alta							1			2				
Libby Lake Vllage	N. River rd. at Calle Montecito	3.34	San Luis Rey						1				1	1	1		
Margulis Residence	1621 S. Pacific St.	0.16	Loma Alta						1								
Martin Residence	6638 Morro Heights Road	X	X									?		1			
Mission and Douglas Retail Center	S.W. corner of Mission and Douglas	1.3	San Luis Rey		2											1	
Monarch at Rancho Del Oro	Rancho Del Oro @Vista Way												2				
Monarch at Rancho Del Oro	??												3				
Montego/Sam Oceanside 1 Condominium	Bounded by Sportsfisher Dr., and N. Pacific St. to the SW	0.33	San Luis Rey										1			1	
Morro Hills Golf Course and Neighborhoods	C,D,E,F,G,H,I,J,K,L, and M		San Luis Rey										1				
Moshen Oil Gas Company	3213 Mission ave. Oceanside, CA 92054	0.51	San Luis Rey	2	2					1	1			2			

Attachment 2-A. Treatment Control BMP Inventory
Inspection and/or Maintenance Verification
City of Oceanside FY 2008-09

Project Name	Project Address	Project Site Size (acres)	Watershed	# of Selected Treatment Control BMPs													Inspection and/or maintenance information on file
				TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	
New Venture Christian Fellowsip	400 Mystera Oceanside, CA 92056	0.3	Agua Hedionda											5			
Nobel Homes	Laurel and Ivy rd.	4.7								1				1	1		
North River Village										1	1						
Ocean Heights Estates	Valley Heights Drive	11.64	San Luis Rey										2				
Oceanside Terraces	NE side of Cleveland St. btw. Mission Blvd and Seagaze Dr.	0.87	San Luis Rey								4			2			
Oksnee Residence	475 Sleeping indian rd. Oceanside, CA 92057	3.72	San Luis Rey							1							
Pacific Animal Hospital	2801 Oceanside blvd Oceanside, CA 92054	0.355	Loma Alta											1	1		
Pacific Coast Business Park/ Park "C" Parcels 18 &20		7.42	Loma Alta										2			2	
Portola					9					3			3			1	
Ratkoski Resdence	931, 933 South Pacific St. Oceanside, CA 92054	0.075	Loma Alta	1													
San Luis Rey Crossing	Intersection of N. River Rd and College Blvd.	1.98	San Luis Rey										4		4		
San Luis Rey Valley United Methodist Church	5570 Old Ranch Road	5.4	San Luis Rey							1				1			
Schnell Industrial Center	Oceanside Boulevard & Corporate Center Drive	2.58	Loma Alta							3				4	3		
St. Cloud	South of 76 at Via Rancho Rd.	34.9	Loma Alta											2			
St. Margaret Parish	430 Oceanside Blvd	9.3	Loma Alta										2				
The Strand's End	809 S. Pacific St.	0.22	Loma Alta		2												
Trade Winds	314 N. Cleveland St., Oceanside, CA	0.23	San Luis Rey														
Union 76 Oceanside the Oceansider	1660 Oceanside Blvd		Loma Alta							1				1			
Wal-Mart Expansion	705 College Blvd Oceanside, CA 920547	15.6	San Luis Rey										1	5		1	
Wilson Residence	77 Saint Malo Beach Oceanside, CA 92054		Coastal Outlet							2	1						

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Attachement 3-A. Construction Site Inventory
Dry and Wet Season Inspection Totals
Ocenaside FY 2008-09

PROJECT NAME	FILE NUMBER	DEVELOPER	PROJECT TYPE	SITE ACREAGE	CONST. START DATE	WDID	THREAT PRIORITY	WATERSHED	LOCATION	ENGINEERING INSPECTIONS		BUILDING INSPECTIONS		STOP WORK NOTICES	Project Status
										Wet Season	Dry Season	Wet Season	Dry Season		
St. Cloud	T-05-05	John Laing Homes	Residential	3.00	02/03/06	937C16051	High	Loma Alta Creek/ Garrison Creek	Mesa and Old Grove Road	31	5	0	7	--	
Darwin Glen	T-11-2002	Heritage Pacific Homes	Residential	11.60	12/01/05	937C325609	High	San Luis Rey	Darwin and Sagewood Drive	31				Yes	
Renaissance Terrace	T-200-01	D. R. Horton	Residential	4.14	04/11/06	937C339535	High	San Luis Rey	North Coast Highway north of Highway 76	10	6	16	12	Yes	
Hi Hope Ranch	T-2-03	Hillcrest Homes	Residential	76.00	4/30/2007	9o-37C322214	High	San Luis Rey River	Melrose Drive & Hwy 76	50	5			Yes	Abandoned
Lot 27 Parcel 2 6147 Indian View Drive	Adp-01-2004	Bellon Construction	Residential	3.97	07/19/06	937L341136	Medium	San Luis Rey	6147 Indian View Drive	6	2			Yes	
Ocean Heights	T-13-022565	Shoreline Communities	Residential	11.60	12/13/04	937C330740	High	San Luis Rey	Mission Avenue & Valley Heights Drive	45	5				Abandoned
Wilmont Ranch, Unit 4	T-4-91(4)	KB Homes	Residential	75.00	08/01/04	937S302152	High	San Luis Rey	Papagallo & Vandegrift	45	5	59	21	--	
Seagate Corporate Center	D-21-04	Segate Corporate Center Lp	Commercial	24.00	02/06/06	937C334863	High	Loma alta Creek	Corporate Center and Avenida de la Plata	30	5			--	
Monarch At Rancho del Oro	T-8-2004	K Hounanian	Residential	15.00	01/26/06	937C333976	High	Buena Vista	Vista Way and Rancho del Oro	45	5	15	4	--	
Ocean Ranch Corporate Center, Lot 15	P-04-05	Hamann Constr.	Commercial	10.50	5/15/2007	937C340879	High	Loma Alta	RDO/Ocean Ranch Blvd.	30	5	7	4	--	
North River Village	T-3-04	Taylor Woodrwow Homes, Inc	Residential/Commercial	9.90	11/12/07	937C348354	High	San Luis Rey	North River Road at Vandergrift	45	5			--	
Darwin Knolls	T-11-2002	Heritage Pacific Homes	Residential	5.70	12/02/05	937C325610	High	San Luis Rey	Darwin and Ocean Ridge Court	31				--	
Ocean Market Place & Business Center	D-19-04	Abdul H. Sheikh	Commercial	3.80	12/26/2006		High	Loma Alta	SE Corner of Oceanside Blvd. & Arroyo	45	5			--	
210 S. Nevads St.	P-13-06	Brian Moore	Residential	0.11	11/19/2007	N/A	Low	Loma Alta	210 S. Nevada St.	6	2			--	
1925 S. Myers St.	RC-3-06	Mary Spite	Residential	0.07	09/12/07	N/A	Low	Coastal Outlet	1925 S. Myers	10	2			--	
Arrowood J - Augusta	T-12-99 (11)	Richmond American Homes	Residential	21.00	09/19/05		Medium	San Luis Rey	Vandegrift Blvd and Granite Place	45	5			--	
Arrowood M - Bellinham	F-12-99	Richmond American Homes	Residential	19.00	09/19/05		Medium	San Luis Rey	Vandegrift Blvd and Granite Place	45	5			--	
Libby Lake Village	T-5-06	S.D. Habitat for Humanity	Residential	2.00	June 2008	937C348915	Medium	San Luis Rey	Libby Village Way (N. River Road) & Calle Monecito	30	5	0	4	--	

Attachement 3-A. Construction Site Inventory
Dry and Wet Season Inspection Totals
Ocenaside FY 2008-09

PROJECT NAME	FILE NUMBER	DEVELOPER	PROJECT TYPE	SITE ACREAGE	CONST. START DATE	WDID	THREAT PRIORITY	WATERSHED	LOCATION	ENGINEERING INSPECTIONS		BUILDING INSPECTIONS		STOP WORK NOTICES	Project Status
										Wet Season	Dry Season	Wet Season	Dry Season		
Holiday Inn Hotel	RC-206-04	CJK International Investments, LLC	Commercial	1.24	07/08/07	937C347352	Medium	San Lus Rey/Coastal Outlet	1401 Carmelo	46	6	4	4	--	
Union 76 "The Oceansider"	D-19-03	Joe Warsoff	Commercial	0.50	03/10/08	N/A	Medium	Loma Alta Watershed	O'side Blvd. & Vine St.	4	10			--	
The Montego-Condominuims	T-201-05	Sam Oceanside 1, LLC	Residential	0.34	03/17/08	N/A	Medium	Coastal Outlet	504 N. Pacific Sportfisher/Pacific	32	5			--	
Crystal Sands	T-101-06	502 N. Myers, LLC	Residential	0.31	01/03/08	N/A	Medium	Coastal Outlet	512 N. Myers Street	32	5			--	
400 S. The Strand	T-200-06	Residencia, LLC	Commercial	0.30	02/08/07	N/A	Medium	Coastal Outlet	400 South The Strand	20	2			--	
1003 So. Tremont	P-12-06	All American Homes & Estates, LLC	Residential	0.20	07/24/07	N/A	Medium	Coastal Outlet	1003 S. Tremont	10	2			--	
Projects completed during this reporting period															
Pacific Coast Business Pk-C	D-31-06	AMB DFS Pacific Coast LLC c/o AMB Property Corp.	Commercial	7.42	03/10/08	937C341845	High	Loma Alta Creek	Rocky Point & Windward Sea	15	5			--	Finished
Pacific Coast Business Park	D-17-04(1)	Headland Realty Corporation	Commercial	116.00	06/27/06	937C341845	High	Loma Alta Creek	College Blvd. and Old Grove Rd.	1	5			--	Finished
Wilmount Ranch	T-4-91	KB Homes	Residential	100.00	12/01/00	937S302152	High	San Luis Rey	Eastside of Vandegrift Blvd. Just North of Douglas Dr.	0	0			--	Finished
Barnwell Street Project	P-1-01 D-4-01	Loren & Nancy Ritter	Residential	1.06	03/31/05	937C332964	High	Loma Alta	303 S. Barnwell Street					--	Finished
Harmon Residence Improvement	E-20-05	Harmon, J.C	Residential	0.50	11/01/05	N/A	Low	Buena Vista	1796 Troy Lane nearest cross st. Ivy Road					--	Finished
2532 Pahvant	E-3-07	Garth Packard	Residential	0.25	04/14/08	N/A	Low	San Luis Rey Watershed	Pahvant Street/Lotus Mesa Drive		5			--	Finished
Hyta Residence	E-4-05	Phil & Ashei Hyta	Residential	0.25	10/12/06	N/A	Low	Loma Alta Watershed	267 Hoover St.					--	Finished
Claire Village	D-204-04	Premier Proerties, Geroge Piner	Residential	0.23	09/05/06	N/A	Low	Coastal Outlet	Freeman/Neptune					--	Finished
Schuller Residence	E-16-05	One Time Construction	Residential	0.15	7/35/06	N/A	Low	Loma Alta	1016 Alberta Ave.					--	Finished
Tremont Condos	P-202-03	Robert Morris	Residential	0.14	07/14/06	N/A	Low	Coastal Outlet	534 Tremont Street					--	Finished
1621 and 1623 S. Pacific Street	RC-14-06 RC-15-06	South Pacific LLC	Residential	0.33	11/30/06	N/A	Medium	Coastal Outlet	1621 and 1623 S. Pacific Street					--	Finished
Brezza di Pacifica	P-14-05	1443 So. Pacific, LLC	Residential	0.09	08/18/06	N/A	Medium	Coastal Outlet	1443 S. Pacific St.					--	Finished

Attachement 3-A. Construction Site Inventory
Dry and Wet Season Inspection Totals
Ocenaside FY 2008-09

PROJECT NAME	FILE NUMBER	DEVELOPER	PROJECT TYPE	SITE ACREAGE	CONST. START DATE	WDID	THREAT PRIORITY	WATERSHED	LOCATION	ENGINEERING INSPECTIONS		BUILDING INSPECTIONS		STOP WORK NOTICES	Project Status
										Wet Season	Dry Season	Wet Season	Dry Season		
Pacific Coast Business Pk-B	P-21-06 D-30-06	AMB DFS Pacific Coast LLC c/o AMB Property Corp.	Commercial	4.00	UNK	937C341845	Medium	Loma Alta Creek	Rocky Point and Windward Sea	15	5	31	17	--	Finished
Oceanside Gateway Business Park	D-6-2003	BKM Development	Commercial	38.00	04/05/04	937C323499	High	Loma Alta	Oceaside Blvd, S. of Peacock Blvd.						Finished
Morro Hills	T-12-99	Fieldstone	Residential	52.00	05/05/03	937S317198	High	San Luis Rey	NW and SW corner of Douglas Dr./ Vandegrift			0	9	--	Finished
New Projects															
Pacific Tides	D-33-05	SMC	Residential	0.10			Low	Coastal Outlet	Pacific St. and Witherby	32	16				
Loma Alta Village	T-1-06	RDL	Commercial	2.00		9376350098	High	Loma Alta	Crouch St and Apple	38	20				
Jackson Residence	E-2-08	Owner	Residential	0.25	4/1/2009	9376347403	Low	San Luis Rey	223 Stallion		5				
Singh Property	D-8-99	Singh	Commercial	9.50	7/12/2007	9376347403	High	San Luis Rey	Mission and Melrose	45					
Kogan Residence	ADP-11-05	Owner	Residential	0.80	8/9/2007	N/A	Low	San Luis Rey	Sleeping Indian	7					
Howe Barn	E-13-06	Owner	Residential	0.80	6/11/2007	9376346381	Low	San Luis Rey	Sleeping Indian	7					
Mission Animal Hospital	D-1-08	Carlton Family LLC	Commercial	0.90	3/22/2008	N/A	Low	San Luis Rey	Benet/76						
607/609 N. Pacific St.	D-203-08	Owner	Residential	0.23		N/A	Low	Coastal Outlet	607/609 N. Pacific Street						
717 N. Pacific St.	D-205-06	Owner	Residential	0.01	6/15/2009	N/A	Low	Coastal Outlet	717 N. Pacific St.						
Emergency Crib Wall Repair	ADP-16-02	Owner	Commercial	1.60	2/27/2009	N/A	Low	Buena Vista	El Camino		5				
V.A. Clinic	D-9-08	Rockefeller	Commercial	8.42	03/04/09	9376353279	Medium	Loma Alta	RDO/Seagate						
Powers Residence	RC-12-07	Owner	Residential	0.07	07/22/08	N/A	Medium	Coastal Outlet	823 S. Pacific St.						
Jack-in-the Box	D-12-01	Owner	Commercial	0.22	09/11/08	N/A	Low	SLR	Canyon/Mission						
Pacific Marine Credit Union	D-14-08	Owner	Commercial	6.50	07/28/09	9376353845	Medium	Loma Alta	Rocky Point						
828 S. Cleveland	RC-20-06	All American Homes	Residential	0.27	09/10/08	N/A	Low	Coastal Outlet	828 S. Cleveland						
Wal-Mart	P-2-92	Owner	Commercial	1.50	11/04/08	7376349426	Medium	SLR	College/76						
										Wet Season	Dry Season	Wet Season	Dry Season		
Total number										**884**	**168**	**132**	**82**		
									Total Wet Season	**1016**					
									Total Dry Season	**250**					

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Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad 760-602-2719

City of San Marcos 760-744-1050

City of Encinitas 760-633-2787

City of Del Mar 858-755-9313

City of Oceanside 760-435-5800

City of Solana Beach 858-720-2470

City of Vista 760-726-1340

Best Management Practices

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.

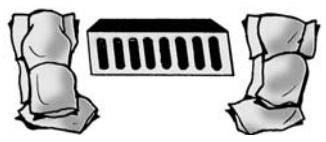

The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.

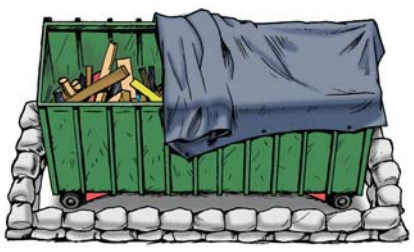

Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.

Water Quality Regulations for Construction Sites

In 1972, the Environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

A Pollution Prevention Guide for the Construction Industry

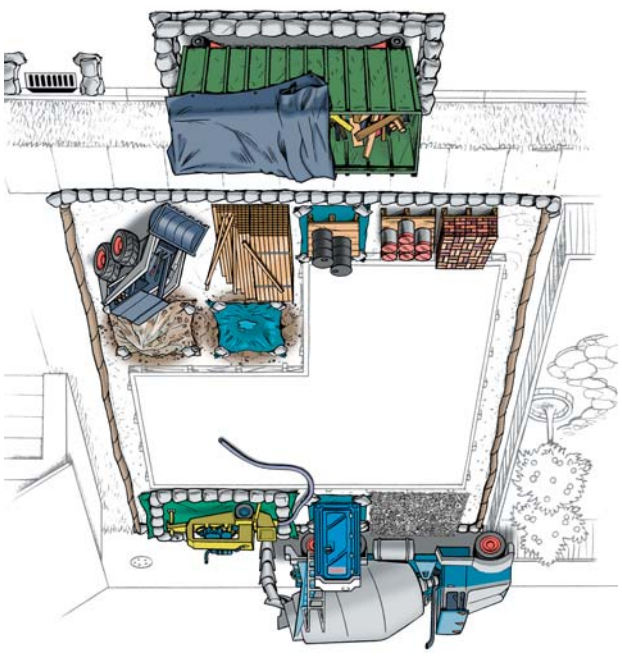

North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Perimeter controls

Gravel bags, silt fences, and straw wattles are acceptable perimeter controls, and must be used to surround the entire site to control run-on and run-off. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Keep extra absorbent materials and/or a wet/dry vacuum on site to quickly pick up unintended spills. Sites must also be checked and maintained daily.

Building materials/staging areas

Construction materials must be stored on site at all times unless a right-of-way permit has been obtained. Building materials should always be covered when not in use to prevent run-off caused by wind or rain. To apply for a right-of-way permit, contact the appropriate department of your local jurisdiction.

Dumpsters/Port-a-Potty

Always cover dumpsters with a rollback tarp. Areas around dumpsters should be swept daily. Perimeter controls should also surround dumpsters and all Port-a-Potties. If dumpsters or Port-a-Potties are kept on the street, right-of-way permits are needed.

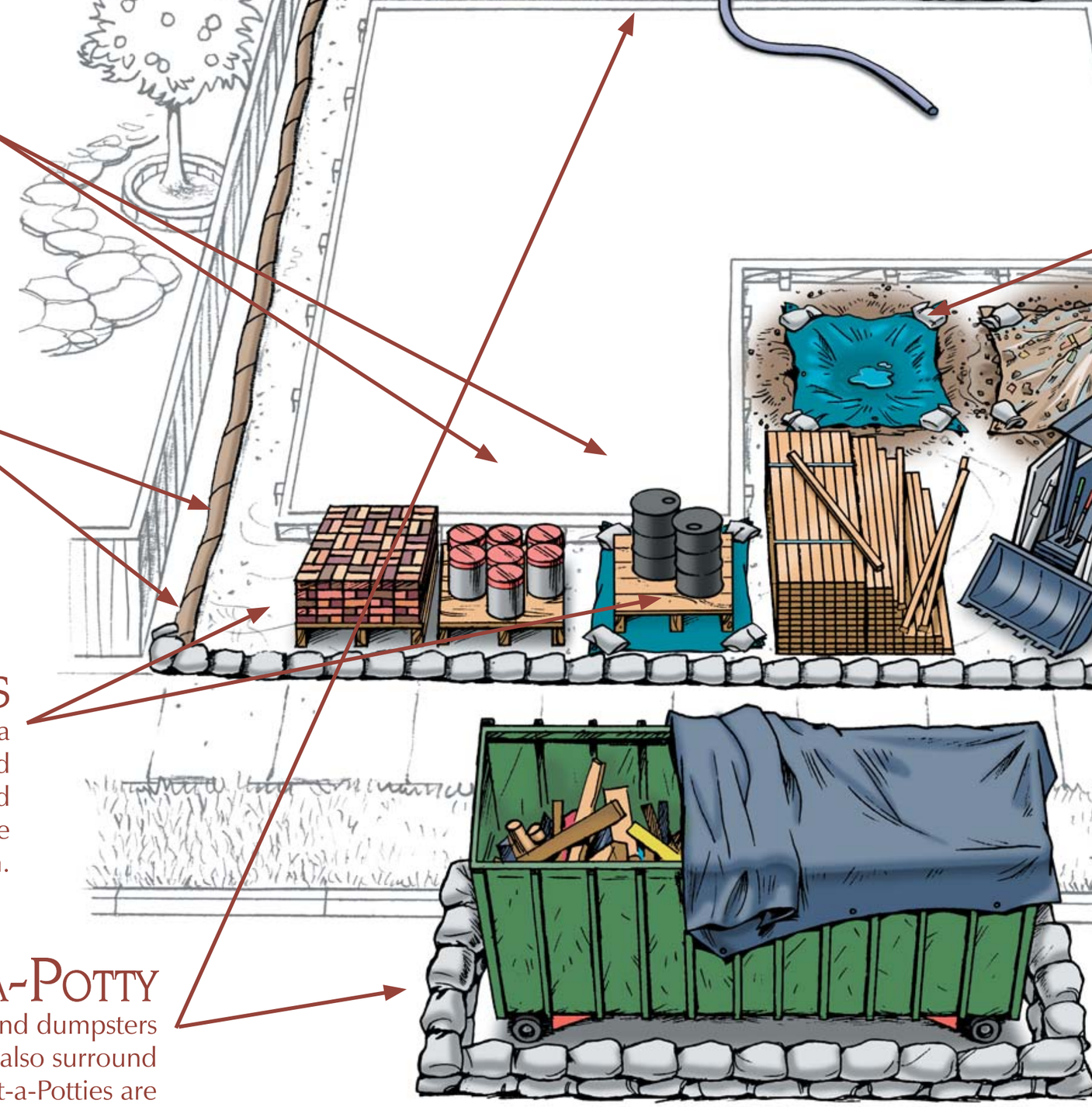

These guidelines are generalized. Please check specific requiren

Attachment 3-C Construction Site Enforcement Actions
Code Enforcement and Building Division
City of Oceanside FY 2008-09

PROJECT NAME	DEVELOPER	PROJECT TYPE	SITE ACREAGE	WDID	THREAT PRIORITY	WATERSHED	LOCATION	PROJECT STATUS	BUIDLING DIVISION ENFORCEMENT ACTIONS			CODE ENFORCEMENT ACTIONS				
									Written Warning Date(s)	Admisntirave Abatement	Suspension, Revocation or Denial of Permits	Written Warning Date(s)	Corrective Action Needed	Administrative Citation Date(s)	Administrative Abatement	Compliance Status
Hi Hope Ranch	Hillcrest Homes	Residential	76.00	937C322214	High	San Luis Rey River	Melrose Drive & Hwy 76	Abandoned	12/29/2008	85,900		1/8/2009	BMP Maint.	1/21/2009		BMPs being maintained by City contractor
Darwin Glen	Heritage Pacific Homes	Residential	11.60	937C325609	High	San Luis Rey	Darwin and Sagewood Drive	Constructing	12/22/2009							
									1/8/2009							
									3/30/2009							5/16/09 In Compliance
Darwin Knolls	Heritage Pacific Homes	Residential	5.70	937C325610	High	San Luis Rey	Darwin and Ocean Ridge Court	Constructing	12/22/2009							
									1/8/2009							
									3/30/2009							5/16/09 In Compliance
Ocean Heights	Shoreline Communities	Residential	11.60	937C330740	High	San Luis Rey	Mission Avenue & Valley Heights Drive	Abandoned		1,300		2/9/2009	BMP Maint.			6/1/09 In Compliance
Bellon Residence	Bellon Construction	Residential	3.97	937L341136	Medium	San Luis Rey	6147 Indian View Drive	In progress	11/4/2008	600		8/28/2008	BMP Maint.			1/15/09 In Compliance
Fire Mountain Estates		Residential		937C341032	High	Carlsbad - Loma Alta	Fire Mountain	Completed	12/8/2008			12/19/2008	BMP Maint.			1/5/09 In Compliance

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Attachment 4-A Municipal Inventory and Inspection Information
City of Oceanside FY 2008-09

No	Name	Facility Address	Facility Description	TTWQ	Watershed	Inspection Date	1st Inspection: Note Corrections needed; IC = In Compliance	Inspection Date	2nd Inspection: Note corrections addressed; IC = In Compliance	Notes
Parks and Recreational Facilities										
1	Alamosa Park	Mesa Drive South of Alamosa Park Drive	6.97 acre park that includes a picnic area, restrooms, parking, play area, and fields	High	San Luis Rey	1/28/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
2	Americanization School Park	Division Street and Center Avenue	0.34 acre park	High	Loma Alta	1/28/2009	IC			
3	Beach Amphitheater	200 North the Strand	Amphitheater, stage, seating, and restrooms	High	San Luis Rey	1/28/2009	IC			
4	Beach Community Center	The Strand North of Pier	17,000-square-foot facility including gymnasium, game/activities room, meeting room, kitchen, stage, locker/shower rooms, and City of Oceanside Sports Office.	High	San Luis Rey	1/28/2009	IC			
5	Brooks Swim Center	Brooks Street West of Barnes Street	100-foot outdoor pool surrounded by walls and buildings, with parking at the adjacent park.	High	Loma Alta	1/28/2009	IC			
6	Buccaneer Beach	Pacific Street North of Morse Street	6.35 acre park that includes restrooms, food, parking, fields, courts, and picnic area.	High	Buena Vista	1/28/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
7	Buddy Todd Park	Mesa Drive North of Barnwell Drive	19 acre park that includes a picnic area, restrooms, parking, play area, fields, and courts.	High	San Luis Rey	1/28/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
8	Buena Vista Lagoon Nature Center	2202 South Coast Highway	0.2 acre park that includes parking and outside areas	High	Buena Vista	1/29/2009	IC			
9	Capistrano Park	Capistrano Drive East of Sunset Drive	14 acre park that includes a picnic area, restrooms, parking, play area, fields, and courts.	High	San Luis Rey	1/29/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
10	Carrasco Park	Skylark Drive West of Partridge Lane	3.44 acre park that includes a picnic area.	High	Loma Alta	1/29/2009	IC			
11	Ceaser Chavez	Division Street West of Garfield	0.1 acre park	High	Loma Alta	1/28/2009	IC			
12	Center City Golf Course	2323 Greenbrier Drive	71.75 acre golf course	High	Loma Alta	2/4/2009	Trash, batteries around maintenance Bldg. Broken silt fence and sediment on driveway.	3/24/2009	IC	
13	Community Garden	Civic Center Drive and Weitzel Street	Community Garden	High	San Luis Rey	1/30/2009	IC			
14	Crown Heights Community Garden	Division at Garfield	Community Garden	High	Loma Alta	2/3/2009	IC			
15	Fireside Park	Fireside Drive and Parkside Drive	4 acre park that includes a picnic area, play area, fields, and courts.	High	San Luis Rey	1/30/2009	IC			
16	Heritage Park	Peyri Drive North of Old San Luis Rey Mission	4 acre park that includes a picnic area, restrooms, parking, gazebo, and historic areas.	High	San Luis Rey	1/30/2009	Clean Storm drain inlet. Close trash bin lids.	3/24/2009	IC	
17	Ivey Ranch Park	Mission Avenue East of Rancho Del Oro	11.06 acre park that includes a picnic area, restrooms, parking, play area, and fields	High	San Luis Rey	2/3/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
18	Joe Balderrama Community Center	709 San Diego Street	3.86 acre park that includes a picnic area, restrooms, parking, play area, fields, and courts.	High	San Luis Rey	2/3/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
19	John Landes Community Center	Lewis Street West of Cedar Road	10.95 acre park that includes a picnic area, restrooms, parking, play area, fields, and courts.	High	Loma Alta	2/3/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
20	Joseph Sepulveda Park	Marvin Street East of Oxford Place	19 acre park that includes a picnic area, play area, and fields.	High	Loma Alta	1/29/2009	IC			
21	Lake Park	Lake Blvd East of Windsor Road	10 acre park that includes picnic areas, restrooms, parking, play area, fields, and food.	High	Agua Hedionda	1/29/2009	Open trash bin lids at trash enclosure. Untidy trash enclousure. Dirt at southwest corner of parking area.	3/24/2009	IC	
22	Libby Lake Park	Libby Lake East of Marblehead Bay	27.61 acre park that includes a picnic area, parking, and a play area.	High	San Luis Rey	2/3/2009	IC			
23	Lion's Club Park	Cassidy Street and Broadway	0.5 acre park that includes a picnic area.	High	Buena Vista	1/28/2009	IC			
24	Leased Oceanside Dog Park	301 Jones Road	1 acre dog park for Humane Society	High	San Luis Rey	2/2/2009	IC			
25	Luisiano Park	Teal Way and Douglas	10 acre park that includes a picnic area, restrooms, fields, and parking.	High	San Luis Rey	2/2/2009	Open trash bin lids at trash enclosure. Clean storm drain inlet at parking lot.	3/24/2009	IC	
26	Mance Buchanon Park	425 College Boulevard	29 acre Park	High	San Luis Rey	1/30/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
27	Marlado Park	West of Rivertree Drive North of Southwood Drive	6 acre park that includes a picnic area and a play area.	High	San Luis Rey	1/30/2009	IC			

Attachment 4-A Municipal Inventory and Inspection Information
City of Ocenaside FY 2008-09

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28	Marshall Street Pool	Marshall Street - North End	75-foot outdoor pool surrounded by walls and buildings, with parking at adjacent park	High	Loma Alta	2/2/2009	IC			
29	Marshall Street Park	Lucky Street and West of Marshall	4 acre park	High	Loma Alta	2/2/2009	IC			
30	Martin Luther King Junior Park	Mesa Drive East of Ivey Ranch Road	15 acre park that includes picnic area, restrooms, parking, play area, fields, courts	High	Loma Alta	1/28/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
31	Melba Bishop Park	5306 North River Road	Park	High	San Luis Rey	2/2/2009	Open trash bin lids at trash enclosure.	3/24/2009	IC	
32	Mission Wells Historic Lot	Peyri Road	Park	High	San Luis Rey	1/30/2009	IC			
33	Municipal Golf Course	Douglas Drive West of Foxwood Drive	147.7 acre golf course	High	San Luis Rey	2/4/2009	Sand, rubble and asphalt pieces at SW corner of parking areas.	3/24/2009	IC	
34	Oak Riparian Park	Lake Blvd and Ridge Road	26.71 acre park that includes picnic area, restrooms, parking, play area, and fields.	High	Agua Hedionda	1/29/2009	IC			
35	Oceanside Pier	1 Oceanside Pier	Pier	High	San Luis Rey	2/4/2009	IC			
36	Pacific Street Linear Park	Wisconsin to Surfrider	12 acre park	High	Loma Alta/San Luis Rey	1/30/2009	IC			
37	Palisades Park	Rancho Del Oro North of Vista Del Oro	6.37 acre park that includes a play area and fields.	High	Loma Alta	1/29/2009	IC			
38	Rancho Del Oro Park	College Blvd South of Mesa Drive	16.51 acre park that includes restrooms, parking, play area, fields, and courts.	High	San Luis Rey	1/29/2009	IC			
39	Ron Ortega Recreation Park	Brooks Street and Maxon Street	15.03 acre park that includes restrooms, parking, fields, and food.	High	Loma Alta	1/28/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
40	Senior Center	Interstate 5 West of Greenbrier	14,000-square-foot facility including an auditorium, meeting rooms, a game/activities room, and a library.	High	Loma Alta	2/3/2009	Open trash bin lids at trash enclosure	3/24/2009	IC	
41	El Corazon Senior Center	Rancho del Oro Drive North of Oceanside Blvd.	square foot facility being built.	Medium	Loma Alta	2/4/2009	IC			
42	South Oceanside	South Oceanside School	4 acre tennis courts	High	Buena Vista	1/30/2009	IC			
43	Spring Creek Park	Old Ranch Road West of Melrose	3 acre park	High	San Luis Rey	1/30/2009	IC			
44	Strand Beach Park	200 The Strand South of Seagaze Drive	0.58 acre park	High	Loma Alta	1/29/2009	IC			
45	Tyson Street Park	500 The Strand North of Tyson Street	1.59 acre park	High	Loma Alta	1/28/2009	IC			
46	Women's Club Park	Mission Avenue between San Diego and Brooks	0.5 acre park	High	Loma Alta	2/3/2009	IC			
Public Works Operations Facilities										
47	City Operations Center	Oceanside Boulevard West of Melrose	City Yard	High	Loma Alta	2/27/2009	Restablish material bin berm. Close trash bin lids. Remove open containers at vehicle storage yard. Provide drip pans for stored vehicles at vehicle yard. Provide drain filters at various locations. Cover wrecked vehicles next to Fleet Management.	4/14/2009	IC	
48	F Lot	1300 North Pacific Street	Outdoor maintenance storage for dumpsters, tractors, etc.	High	San Luis Rey	2/27/2009	General House cleaning needed	3/9/2009	IC	
48	Lot 1 Storage	1304 Riverside Drive	Maintenance and police storage	High	San Luis Rey	2/27/2009	General House cleaning needed	3/9/2009	IC	
Closed Landfills										
50	Maxson Landfill	Brooks Street and Maxon Street	Closed Landfill	High	Loma Alta	2/5/2009	IC			
51	Mission Avenue Landfill	2070 Mission Avenue	Closed Landfill	High	San Luis Rey	2/5/2009	IC			
Marinas										

Attachment 4-A Municipal Inventory and Inspection Information
City of Ocenaside FY 2008-09

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52	Harbor Marina and Administration	Oceanside Small Craft Harbor	Area around harbor contains several parking lots, administration buildings, storage areas, a boat ramp, wash areas, sewage pump out facilities, restrooms, and other associated amenities.	High	San Luis Rey	2/4/2009	IC			
53	Leased Harbor Marina	Oceanside Small Craft Harbor	Leased marina slips	High	San Luis Rey	2/4/2009	IC			
54	Leased Harbor Fuel Dock	1380 North Pacific Street	Leased Land	High	San Luis Rey	2/4/2009	IC			
Municipal Airports										
55	Oceanside Airport	618 Airport Road	Airport	High	San Luis Rey	2/4/2009	IC			
Potable Water Facilities										
56	Fire Mountain Reservoir	Fire Mountain Drive and East of Yucca	Reservoir	Low	Loma Alta	2/19/2009	Large amount of rusting water line pipes and fittings.	7/20/2009	IC	
57	Guajome Reservoir	Peacock Boulevard Northeast of Temple Heights	Reservoir	Low	Loma Alta	2/23/2009	IC			
58	Henie Hills Reservoir	Mira Costa College	Reservoir	Low	Buena Vista	2/24/2009	IC			
59	Heritage Reservoir	Via Rancho East of Rancho Del Oro Drive	Reservoir	Low	San Luis Rey	2/19/2009	IC			
60	Morro Hills Reservoir	Wilshire Road Southeast of Sleeping Industry	Reservoir	Low	San Luis Rey	2/19/2009	Slopes need repairs and vegetation, all inlets need protection from debris and silt infiltration.	3/10/2009	IC	
61	Pilgrim Reservoir	Vandegrift Boulevard South of Camp Pendleton	Reservoir	Low	San Luis Rey	2/23/2009	IC			
62	Reverse Osmosis Facility	Fireside Drive South of Parkside Drive	Treatment Plant	High	San Luis Rey	3/3/2009	IC			
63	SF Peak Reservoir	Nighthawk Court West of Nighthawk Way	Reservoir	Low	Agua Hedionda	2/23/2009	IC			
64	Talone Reservoir	Paseo Hermosa North of Panorama Ridge Way	Reservoir	Low	San Luis Rey	2/23/2009	IC			
65	Water Facility	Jones Road North of San Luis Rey Road	Offices and Storage	Low	San Luis Rey	2/24/2009	IC			
66	Water Pressure Station	Wilshire Road	Pump Station	Low	San Luis Rey	2/24/2009	IC			
67	Weese Water Treatment Plant	Twin Oaks Valley Road	Water Treatment Plant	High	San Luis Rey	3/24/2009	2 exposed metal pipes, a 55 gallon drum needs to be put indoors or placed off of the ground and covered	4/9/2009	IC	
68	Wire Mountain Reservoir and Vacant	Tulley Canyon	Reservoir	Low	San Luis Rey	2/24/2009	IC			
Wastewater Facilities										
69	Bandstand Sewer Lift Station	200 North Strand	Sewer lift station	High	San Luis Rey	2/19/2009	IC			
70	Harbor #1 Sewer Lift Station	2000 North Harbor Drive	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
71	Harbor #2 Sewer Lift Station	1830 North Harbor Drive	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
72	Harbor #3 Sewer Lift Station	1325 North Harbor Drive	Sewer lift station	High	San Luis Rey	2/12/2009	IC			
73	Harbor #4 Sewer Lift Station	283 South Harbor Drive	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
74	Harbor #5 Sewer Lift Station	1200 North Pacific Street	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
75	Ninth St. Sewer Lift Station	997 Breakwater Way	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
76	North Bridge Sewer Lift Station	304 South Harbor Drive	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
77	Buena Vista (New) Sewer Lift Station	2501 Haymar Road	Sewer lift station	High	Buena Vista	2/11/2009	IC			

No	Name	Facility Address	Facility Description	TTWQ	Watershed	Inspection Date	1st Inspection: Note Corrections needed; IC = In Compliance	Inspection Date	2nd Inspection: Note corrections addressed; IC = In Compliance	Notes
78	Buena Vista (Old) Sewer Lift	2501 Haymar Road	Sewer lift station	High	Buena Vista	2/11/2009	IC			
79	Calaveras Sewer Lift Station	3636 Skyhaven Lane	Sewer lift station	High	Agua Hedionda	2/5/2009	IC			
80	La Salina Treatment Plant	1330 South Tait Street	Wastewater Treatment Plant	High	Loma Alta	2/26/2009	IC			
81	Lake Blvd. Sewer Lift Station	Lake Blvd at Ridge Rd	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
82	Leisure Village #1 Sewer Lift Station	4706 Cannon Road	Sewer lift station	High	Agua Hedionda	2/11/2009	IC			
83	Leisure Village #2 Sewer Lift Station	4933 Leisure Village Drive South of Arcadia Way	Sewer lift station	High	Agua Hedionda	2/11/2009	IC			
84	Loretta Sewer Lift Station	1261 Loretta Street	Sewer lift station	High	San Luis Rey	2/17/2009	IC			
85	Mar Lado Sewer Lift Station	401 North Fousatt	Sewer lift station	High	San Luis Rey	2/17/2009	IC			
86	Mission Sewer Lift Station	3476 Mission Avenue East of Frontier Drive	Sewer lift station	High	San Luis Rey	2/16/2009	IC			
87	Ninth St. Sewer Lift Station	997 Breakwater Way	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
88	North Bridge Sewer Lift Station	304 South Harbor Drive	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
89	Pier Bait Shop	1 Oceanside Pier	Sewer lift station	High	San Luis Rey	2/17/2009	IC			
90	Pier Restroom	1 Oceanside Pier	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
91	Ruby's	1 Oceanside Pier	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
92	North Valley	3930 North River Rd	Sewer lift station	High	San Luis Rey	2/16/2009	IC			
93	Oceanside Blvd	1664 Oceanside Blvd East of Vine St.	Sewer lift station	High	Loma Alta	2/17/2009	IC			
94	Pacifica	4991 Macario Rd	Sewer lift station	High	San Luis Rey	2/17/2009	IC			
95	Pilgram Creek	855 Douglas Dr East of Golf Course	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
96	Roja	703 Roja St	Sewer lift station	High	San Luis Rey	2/17/2009	IC			
97	Old Roymar Sewer Lift Station	110 Jones Road	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
98	Roymar Sewer Lift Station	110 Jones Road	Sewer lift station	High	San Luis Rey	2/11/2009	IC			
99	Shyhaven	3521 Skyhaven Lane	Sewer lift station	High	Agua Hedionda	2/17/2009	IC			
100	Sewer Lift Station	Hwy 78 West of South Vista Way	Sewer lift station	High	Buena Vista	2/18/2009	Not in service. IC			
101	Southridge Trails Sewer Lift Station	4900 Cannon Rd South of Leisure Village Drive	Sewer lift station	High	Agua Hedionda	2/19/2009	IC			
102	San luis Rey Treatment Plant	3950 North River Road	Sewer lift station	High	San Luis Rey	3/5/2009	Provide BMP at top of concrete channel at SW entrance.	4/14/2009	IC	
103	Saint Malo Sewer Lift Station	52 Saint Malo Beach	Sewer lift station	High	Buena Vista	2/19/2009	IC			
104	Wisconsin Sewer Lift Station	715 South the Strand	Sewer lift station	High	Loma Alta	2/17/2009	IC			
Police and Fire Facilities										
105	Beach Lock-Up	122 North Strand	Offices and lock-up	Low	San Luis Rey	2/5/2009	IC			
106	Code Enforcement/Future location of a new fire station	602 Civic Center Drive	Building	Medium	San Luis Rey	2/27/2009	IC			
107	Fire Station No. 1	714 Pier View Way	Fire Station	Medium	San Luis Rey	3/3/2009	IC			

No	Name	Facility Address	Facility Description	TTWQ	Watershed	Inspection Date	1st Inspection: Note Corrections needed; IC = In Compliance	Inspection Date	2nd Inspection: Note corrections addressed; IC = In Compliance	Notes
108	Fire Station No. 2	1640 South Ditmar	Fire Station	Medium	San Luis Rey	3/3/2009	IC			
109	Fire Station No. 3	3101 Oceanside Boulevard	Fire Station	Medium	Loma Alta	3/3/2009	IC			
110	Fire Station No. 5	4841 North River Road	Fire Station	Medium	San Luis Rey	3/3/2009	IC			
111	Fire Station No. 6	895 North Santa Fe Avenue	Fire Station	Medium	San Luis Rey	3/3/2009	IC			
112	Fire Station No. 7	3350 Mission Avenue	Fire Station	Medium	San Luis Rey	3/4/2009	IC			
113	Fire Training Facility	110 Jones Road	Training Facilities - All of the wash/training water drains to previous infiltration area or sewer.	High	San Luis Rey	3/4/2009	IC			
114	New Fire Sta. No. 4	3990 Lake Boulevard	Fire Station	Medium	Agua Hedionda	3/4/2009	IC			
115	Old Fire Sta. No. 4	College Blvd South of Thunder Drive	Fire Station	Medium	Buena Vista	3/4/2009	IC			
116	Police Department	3855 Mission Avenue	Offices and parking lot	Low	San Luis Rey	3/3/2009	IC			
117	Police Shooting Range	3950 North River Road	Outdoor shooting range for small firearms	Low	San Luis Rey	3/5/2009	IC			
118	Police Station	Mission Avenue West of Barnes Street	Offices	Low	Loma Alta	3/3/2009	IC			
Other Fixed Facilities										
119	Americanization School	Division Street and Center Street	Building	Low	Loma Alta	2/5/2009	IC			
120	Civic Center	North Coast Highway 300	Civic Center	Medium	San Luis Rey	2/27/2009	Open trash bin lids.	3/3/2009	IC	
121	Closed Ball Field	Lee Drive South of City Operations Center	See Section 6 of the JURMP for a discussing of this facility	High	Loma Alta	2/9/2009	IC			
122	Junior Lifeguard Facility	1311 North Pacific Street	Headquarters, locker room, meeting room, offices (225 square feet), and storage (800 square feet)	Medium	San Luis Rey	2/10/2009	IC			
123	Leased La Mission	3200 Mission Avenue	Leased Land/Residential	High	San Luis Rey	2/9/2009	IC			
124	Libby Lake Community Center	4700 North River Road	Building	High	San Luis Rey	2/5/2009	IC			
125	Lifeguard Headquarters	301 North the Strand	Meeting facilities, lockers, offices, and rescue equipment	Medium	San Luis Rey	2/5/2009	IC			
126	Leased Farm	Mission Avenue East of Saddle Ridge Road	Leased Land	High	San Luis Rey	2/5/2009	IC			
127	Leased Farm	Mission Avenue West of Saddle Ridge Road	Leased Land	High	San Luis Rey	2/5/2009	IC			
128	Leased Farm	San Luis Rey River North of Guajome Park	Leased Land	High	San Luis Rey	2/5/2009	IC			
129	Leased Hotel: Marina Suites (formerly Marina Inn)	Harbor Drive Northerly Terminus	Leased Commercial	High	San Luis Rey	2/5/2009	IC			
130	Leased Nature Center	Coast Highway North of Buena Vista Lagoon	Leased Land	High	San Luis Rey	2/5/2009	IC			
131	Leased Residential	100 Block of North Pacific	Leased Residential	Medium	San Luis Rey	2/5/2009	IC			
132	Leased Residential - Marina Del Mar Condominium	1202 North Pacific Street	Leased Residential	High	San Luis Rey	2/5/2009	IC			
133	Leased Residential - Marina Towers	1200 Harbor Drive North	Leased Residential	High	San Luis Rey	2/5/2009	IC			
134	Leased Pier Baitshop	Oceanside Pier	Leased Commercial	High	Pacific Ocean	2/5/2009	IC			

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135	Leased Theater and Museums	217-221 North Coast Highway	Leased Building	Low	San Luis Rey	2/5/2009	Open trash bin lids.	3/3/2009	IC	
136	Leased Visitor Information Center	928 North Coast Highway	Leased Land	Medium	San Luis Rey	2/9/2009	IC			
137	Pier Lifeguard Tower	1 Oceanside Pier	Lifeguard Tower	Low	San Luis Rey	2/5/2009	IC			
138	Project Oz	Barnes Street North of Maxson Street	Building	Low	Loma Alta	2/5/2009	IC			
139	Resource Center	Calle Montecito at North River Road	Building	Low	San Luis Rey	2/5/2009	IC			
140	Shelter	San Diego Street South of Laurel Street	Building	Low	San Luis Rey	2/5/2009	IC			
141	Skate Park - Closed	Pier View Way; between Pier and Tracks	Skate Park, closed	Low	San Luis Rey	2/5/2009	IC			
142	Sunshine Brooks Theater	217 North Coast Highway	Building	Low	San Luis Rey	2/5/2009	Open trash bin lids	3/3/2009	IC	
143	San Diego Auto Auction	4691 Calle Joven	Leased Auto Auction	High	San Luis Rey					
144	Transient Housing Shelter	Apple Street and Greenbrier Drive	Building	Low	Loma Alta	2/5/2009	IC			
Roads, Streets, Highways, and Parking Facilities										
145	Refer to City map	Refer to City map	571 miles of roads, streets, and highways throughout the City.	High	Various					
146	Lot A	The Strand and Mission	Not public (Police & Aquatics)	High	San Luis Rey	2/4/2009	IC			
147	Lot B	200 North the Strand	Not public (Pier Amphitheater)	High	San Luis Rey	2/4/2009	IC			
148	Lot C	Lifeguard Headquarters	Not public (Lifeguard Headquarters)	High	San Luis Rey	2/4/2009	IC			
149	Lot D	Beach Community Center	Not public (Beach Community Center)	High	San Luis Rey	2/4/2009	IC			
150	Lot E	300 North Coast Highway	Not public (Civic Center)	High	San Luis Rey	2/4/2009	IC			
151	Lot 1	1304 Riverside Drive/Harbor Drive South	Free Harbor Parking on 3.32 acres.	High	San Luis Rey	1/29/2009	Clean trash enclosure area, all storm drain inlets need oil/grease-trash filters. Staging area needs general house cleaning.	3/30/2009	IC	Filter installed
152	Lot 2	1900 Harbor Drive North/North side of harbor	Free and Permit Harbor Parking; 142 spaces	High	San Luis Rey	1/29/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/30/2009		Due to budgetary contraints the city will consider installing filters in future reporting periods.
153	Lot 3	1800 Harbor Drive North/North side of harbor	Free and Permit Harbor Parking; 201 spaces	High	San Luis Rey	1/28/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/30/2009		Due to budgetary contraints the city will consider installing filters in future reporting periods.
154	Lot 4	1300 Harbor Drive North/North side of harbor	Free and Permit Harbor Parking	High	San Luis Rey	1/28/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/30/2009		Due to budgetary contraints the city will consider installing filters in future reporting periods.
155	Lot 5	1300 Harbor Drive North/North side of harbor	Free and Permit Harbor Parking; 170 spaces	High	San Luis Rey	1/29/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/30/2009	IC	Filter installed
156	Lot 6	200 Harbor Drive South/South side of harbor	Free and Permit Harbor Parking; 104 spaces	High	San Luis Rey	1/29/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/30/2009		Due to budgetary contraints the city will consider installing filters in future reporting periods.
157	Lot 7	200 Harbor Drive South/South side of harbor	Self-pay and Permit Harbor Parking; 104 spaces	High	San Luis Rey	1/29/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/30/2009		Due to budgetary contraints the city will consider installing filters in future reporting periods.
158	Lot 8 & 8a	300 Harbor Drive South/East side of harbor	Free Harbor Parking; 54 spaces	High	San Luis Rey	1/29/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/30/2009		Due to budgetary contraints the city will consider installing filters in future reporting periods.
159	Lot 9	300 Harbor Drive South/East side of harbor	Free Harbor Parking; 35 spaces	High	San Luis Rey	1/29/2009	Trash enclosure area needs cleaning and removal of grease trap container	3/30/2009	IC	
160	Lot 10	1200 North Pacific Street/West side of harbor	Self-pay Harbor Parking; 44 spaces	High	San Luis Rey	1/28/2009	IC			
161	Lot 11A	1300 North Pacific Street/West side of harbor	Overnight Self-pay Harbor Parking; 158 spaces	High	San Luis Rey	1/26/2009	IC			
162	Lot 11B	1301 North Pacific Street/West side of harbor	Overnight Self-pay Harbor Parking; 158 spaces	High	San Luis Rey	1/26/2009	IC			
163	Lot 12	1400 North Pacific Street/West side of harbor	Overnight Self-pay Harbor Parking; 97 spaces	High	San Luis Rey	1/26/2009	IC			
164	Lot 20	Myers, North of Neptune	Self-pay Parking; 117 spaces	High	San Luis Rey	1/26/2009	Clean staging area.	6/24/2009	IC	
165	Lot 21	Myers, North of Windward	Self-pay Parking; 154 spaces	High	San Luis Rey	2/3/2009	2 D-25 storm drain outlets need trash filters at Windward entrance.	3/10/2009	IC	

No	Name	Facility Address	Facility Description	TTWQ	Watershed	Inspection Date	1st Inspection: Note Corrections needed; IC = In Compliance	Inspection Date	2nd Inspection: Note corrections addressed; IC = In Compliance	Notes
166	Lot 22	Cleveland, South of Windward	Self-pay Parking; 24 spaces	High	San Luis Rey	2/3/2009	IC			
167	Lot 23	Cleveland, North of Pier View Way	Self-pay Parking; 183 spaces	High	San Luis Rey	2/3/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/10/2009	IC	
168	Lot 24	Myers, North of Mission	Self-pay Parking; 74 spaces	High	San Luis Rey	2/3/2009	IC			
169	Lot 24A	Myers, North of Mission	Self-pay Parking; 74 spaces	High	San Luis Rey	2/3/2009	IC			
170	Lot 25	Myers, North of Seagaze	Self-pay Parking; 61 spaces	High	San Luis Rey	2/3/2009	IC			
171	Lot 26	Myers, North of Tyson	Self-pay Parking; 268 spaces	High	Loma Alta	2/3/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/10/2009	IC - Parking lot deemed not a high potential, filters not needed.	
172	Lot 27	Myers, South of Minnesota	Self-pay Parking; 46 spaces	High	Loma Alta	2/3/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/10/2009	IC - Parking lot deemed not a high potential, filters not needed.	
173	Lot 28	The Strand, North of Pier View Way	Self-pay Parking; 12 spaces	High	San Luis Rey	2/3/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/10/2009	IC - Parking lot deemed not a high potential, filters not needed.	
174	Lot 29	The Strand at the Pier	Self-pay Parking; 20 spaces	High	San Luis Rey	2/3/2009	IC			
175	Lot 30	The Strand, North of Seagaze	Self-pay Beach Parking; 102 spaces	High	San Luis Rey	2/3/2009	IC			
176	Lot 31	The Strand, North of Wisconsin Avenue	Self-pay Parking; 32 spaces	High	Loma Alta	2/3/2009	IC			
177	Lot 32	North Cleveland Street North of Mission Avenue	Free 4-hour Parking	High	San Luis Rey	2/3/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/10/2009	IC - Parking lot deemed not a high potential, filters not needed.	
178	Lot 33	W. of Cleveland/ S. of Missions		Hs	Ss	2/3/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/10/2009	IC - Parking lot deemed not a high potential, filters not needed.	
179	Lot 34	Pier View Way, East of Tremont Street	Free 2-hour Parking on 0.34 acres.	High	San Luis Rey	2/3/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/10/2009	IC - Parking lot deemed not a high potential, filters not needed.	
180	Lot 35	Civic Center Drive, East of Tremont Street	Free 2-hour on 0.34 acres	High	San Luis Rey	2/3/2009	All storm drain inlets need oil/grease-trash filters and labels.	3/10/2009	IC - Parking lot deemed not a high potential, filters not needed.	
181	Lot 36	Ditmar Street, North of Seagaze Drive	Parking Lot	High	San Luis Rey	2/3/2009	IC			
MS4										
182	Refer to City MS4 Map	Refer to City MS4 Map	Refer to City MS4 Map	High	Various					
Mobile Municipal Activities, Including Power Washing										
183	Hazardous Waste Program	Throughout City	Waste Management holds events to collect hazardous wastes, see Section 8 of the JURMP for details	High	Various					
184	Infrastructure Maintenance	Throughout City	See Section 6 of the JURMP for details	Medium	Various					
185	Landscaping/Right of Way Maintenance	Throughout City	Involves collection and disposal of debris, application of herbicides, clearing of vegetation, and cleaning	Medium	Various					
186	Parking Meter Maintenance	Throughout City	Parking meter repair	Low	Various					
187	Power Washing	Throughout City	See Section 6 of the JURMP for details	High	Various					
Special Events										
188	Special Events	Throughout City	See Section 6 of the JURMP for details	High	Various					

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STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
2008-2009 ANNUAL REPORT
FOR STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2008 through June 30, 2009

An Annual Report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers, and e-mail addresses of the Regional Board contacts, as well as the Regional Board Offices addresses are indicated below.

REGIONAL BOARD INFORMATION:

San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Contact: Tony Felix
Tel: (858) 636-3134
Email: Tfelix@waterboards.ca.gov

GENERAL INFORMATION

A. Facility Information:

Oceanside City Maxson Landfill
Brooks St And Maxson St
Oceanside, CA 92054
WDID No: 9 37I005695

Facility Contact: Forward Bryan
Email: bforward@ci.oceanside.ca.us
Phone: 760-435-519~~3~~4

SIC Code(s):
4953 Refuse Systems

B. Facility Operator Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Operator Contact: Bryan Forward
Email: bforward@ci.oceanside.ca.us
Phone: 760-435-~~5111~~ 5194

C. Facility Billing Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Billing Contact: Bryan Forward
Email: bforward@ci.oceanside.ca.us
Phone: 760-435-~~5111~~ 5194

Additional Table D Parameters: Fe
(Hazardous Waste Facilities, see Table D, Sector K of the Permit for Additional Parameters)

2008-2009

ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

   ☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

   i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

   ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

   iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

   iv. ☐ Received Regional Board Certification Certification Date: _____

   v. ☐ Received Local Agency Certification Cetification Date: _____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

   ☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 0 If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

   ☐ **YES** ☐ **NO, attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? 1

4. For each storm event sampled, did you collect and analyze a sample from each of the facilitys' storm water discharge locations? ☒ YES, go to Item E.6 ☐ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☐ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated _____

6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☐ YES ☒ NO, **attach explanation**

8. Were there any discharges of stormwater that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☐ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

       _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

       _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

       _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler.
- Parameters tested.
- Name of analytical testing laboratory.
- Discharge location identification.
- Testing results.
- Test methods used.
- Test detection limits.
- Date of testing.
- Copies of the laboratory analytical results.

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**
Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

☒ **YES** ☐ **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers**. Indicate "N/A" for quarters without any authorized non-storm water discharges.

July -September	☒ **YES**	☐ **NO**	☐ **N/A**	October-December	☒ **YES**	☐ **NO**	☐ **N/A**
January-March	☒ **YES**	☐ **NO**	☐ **N/A**	April-June	☒ **YES**	☐ **NO**	☐ **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information.

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**
Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources. **Attach an explanation for any "NO" answers**.

July -September	☒ **YES**	☐ **NO**	October-December	☒ **YES**	☐ **NO**
January-March	☒ **YES**	☐ **NO**	April-June	☒ **YES**	☐ **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

☒ **YES** ☐ **NO** Go to item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

☐ **YES** ☒ **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information.

i. name of each unauthorized non-storm water discharge.
ii. date and time of observation.
iii. source and location of each unauthorized non-storm water discharge.
iv. characteristics of the discharge at its source and impacted drainage area/discharge location.
v. name, title, and signature of observer.
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers**. Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information.

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed.
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occured during the last year.
   - outdoor wash and rinse areas.
   - process/manufacturing areas.
   - loading, unloading, and transfer areas.
   - waste storage/disposal areas.
   - dust/particulate generating areas.
   - erosion areas.
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map, is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- Sampling and Analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken.

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☐ YES	☒ NO	☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☐ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: _____

Signature: _____ Date: _____

Title: _____

- the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as necessa

NAME OF PERSON COLLECTING SAMPLE(S): C brust TITLE: Maint. Specialist SIGNATURE: C

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHE		
			pH	TSS	SC	O&G	TOC			
South End of Division st.	☐ AM ☐ PM	☐ AM ☐ PM				N/A				
	☐ AM ☐ PM	☐ AM ☐ PM				N/A				
	☐ AM ☐ PM	☐ AM ☐ PM				N/A				
	☐ AM ☐ PM	☐ AM ☐ PM				N/A				
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Car

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as necessa

NAME OF PERSON COLLECTING SAMPLE(S): C Brust TITLE: Maint. specialist SIGNATURE: C

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHE		
			pH	TSS	SC	O&G	TOC			
South End of Division st.	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Car

- Observe each authorized NSWD source, impacted drainage area, and discharge location.
- Make additional copies of this form as necessa

QUARTER: **JULY-SEPT.** DATE: 7/30/08	Observers Name: C Brust Title: Maint. specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **OCT.-DEC.** DATE: 10/30/08	Observers Name: C Brust Title: Maint. specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **JAN.-MARCH** DATE: 1/29/09	Observers Name: C Brust Title: Maint. specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **APRIL-JUNE** DATE: 5/28/09	Observers Name: C Brust Title: Maint. specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐

DATE /TIME OF OBSERVATION	SOURCE AND LOCATION OF AUTHORIZED NSWD EXAMPLE: Air conditioner Units on Building C	NAME OF AUTHORIZED NSWD EXAMPLE: Air conditioner condensate	DESCRIBE AUTHORIZED NSWD CHARACTERISTICS Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		DESCRIBE BMPs IMPL
			At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
7/30/08 10 ☒ AM ☐ PM	Brook St. Swim Center	Swim complex back washing of pool filter	Water is clear no odor, sheen, floatables	Discharge is clear	Place st Storm drain from enter
10/30/08 9:30 ☒ AM ☐ PM					
1/29/09 9:30 ☒ AM ☐ PM					
5/28/09 9 ☒ AM ☐ PM					
____ ____ ☐ AM ☐ PM					

Section D (pages 5-6) of the General Permit.

- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accor with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** **DATE/TIME OF OBSERVATIONS** 7/30/08 10 ☑ AM ☐ PM	Observers Name: C Brust Title: Signature:	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ Y **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ Y
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** 10/30/08 9 30 ☑ AM ☐ PM	Observers Name: Title: Signature:	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ Y **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ Y
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** 1-29-09 9 30 ☑ AM ☐ PM	Observers Name: Title: Signature:	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ Y **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ Y
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** 5-28-09 9 ☑ AM ☐ PM	Observers Name: Title: Signature:	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ Y **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ Y

(FROM REVERSE SIDE)	NSWD EXAMPLE: Vehicle Wash Water	UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.		F N
			AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION	
_____ ____ ☐ AM ☐ PM			N/A		
_____ ____ ☐ AM ☐ PM			N/A		
_____ ____ ☐ AM ☐ PM			N/A		
_____			N/A		
____ ☐ AM ☐ PM					

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

Observation Date: October 30 2008	Drainage Location Description	#1 S. outfall @ Division St.	#2	#3
Observers Name:	Observation Time	9:30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
Title:	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature:	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: November 26 2008	Drainage Location Description	#1 S. outfall @ Division St.	#2	#3
Observers Name:	Observation Time	9:15 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
Title:	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature:	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: December 29 2008	Drainage Location Description	#1 S. outfall @ Division St.	#2	#3
Observers Name:	Observation Time	9:40 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
Title:	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature:	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: January 29 2009	Drainage Location Description	#1 S. outfall @ Division St.	#2	#3
Observers Name:	Observation Time	9:20 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
Title:	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature:	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO

(From Reverse Side)	EXAMPLE: Discharge from material storage Area #2	Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.
_____ ____ ☐ AM ☐ PM			
_____ ____ ☐ AM ☐ PM		N/A	
_____ ____ ☐ AM ☐ PM			
_____ ____ ☐ AM ☐ PM			
_____ ____ ☐ AM ☐ PM			

at all discharge locations.

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

Observation Date: February 26 2009	Drainage Location Description	#1 S. outfall @ Division St.	#2	#3
Observers Name: _____	Observation Time	9:00 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Title: _____	Time Discharge Began	☐ P.M. ☑ A.M.	☐ P.M. ☐ A.M.	
Signature: _____	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☑	YES ☐ NO ☐	YES ☐ NO
Observation Date: March 30 2009	Drainage Location Description	#1 S. outfall @ Division St.	#2	#3
Observers Name: _____	Observation Time	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Title: _____	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature: _____	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO
Observation Date: April 30 2009	Drainage Location Description	#1 S. outfall @ Division St.	#2	#3
Observers Name: _____	Observation Time	10:45 ☐ P.M. ☑ A.M.	☐ P.M. ☐ A.M.	
Title: _____	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature: _____	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO
Observation Date: May 28 2009	Drainage Location Description	#1 S. outfall @ Division St.	#2	#3
Observers Name: _____	Observation Time	9 ☐ P.M. ☑ A.M.	☐ P.M. ☐ A.M.	
Title: _____	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature: _____	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO

	EXAMPLE: Discharge from material storage Area #2	Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.	
_____ ☐ AM ☐ PM				
_____ ☐ AM ☐ PM		N/A		
_____ ☐ AM ☐ PM				
_____ ☐ AM ☐ PM				
_____ ☐ AM ☐ PM				

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	D co
Landfill Run-OFF	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☑NO	If yes, to either question, complete the next two columns of this form		Con Lan Rain and
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D co
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D co
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D co
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D co
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D co
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D co
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D co
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			

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STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
2008-2009 ANNUAL REPORT
FOR STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2008 through June 30, 2009

An Annual Report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers, and e-mail addresses of the Regional Board contacts, as well as the Regional Board Offices addresses are indicated below.

REGIONAL BOARD INFORMATION:

San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Contact: Tony Felix
Tel: (858) 636-3134
Email: Tfelix@waterboards.ca.gov

GENERAL INFORMATION

A. Facility Information:

Oceanside City Mission Avenue
2070 Mission Ave
Oceanside, CA 92054
WDID No: 9 37I005696

Facility Contact: Forward Bryan
Email:
Phone: 760-435-~~5193~~ 5194

SIC Code(s):
4953 Refuse Systems

B. Facility Operator Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Operator Contact: Bryan Forward
Email:
Phone: 760-435-~~5111~~ 5194

C. Facility Billing Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Billing Contact: Bryan Forward
Email:
Phone: 760-435-~~5111~~ 5194

Additional Table D Parameters: Fe
(Hazardous Waste Facilities, see Table D, Sector K of the Permit for Additional Parameters)

2008-2009

ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

   ☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

   i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

   ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

   iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

   iv. ☐ Received Regional Board Certification Certification Date: _____

   v. ☐ Received Local Agency Certification Cetification Date: _____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

   ☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 0 If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

   ☐ **YES** ☒ **NO, attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? 1

E-2. Sampling and Analysis

First storm event of the season that produced a discharge occurred during non working hours.

4. For each storm event sampled, did you collect and analyze a sample from each of the facilitys' storm water discharge locations? ☒ YES, go to Item E.6 ☐ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☐ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated _____

6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☐ YES ☒ NO, **attach explanation**

8. Were there any discharges of stormwater that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☐ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

       _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

       _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

       _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler.
- Parameters tested.
- Name of analytical testing laboratory.
- Discharge location identification.
- Testing results.
- Test methods used.
- Test detection limits.
- Date of testing.
- Copies of the laboratory analytical results.

E-6. Sampling and Analysis

No samples were collected during the reporting period of 08-09. All storm water discharges occurred before or after working hours, and were not preceded by 3 working days.

E-7. Sampling and Analysis

No samples were collected during the reporting period of 08-09. All storm water discharges occurred before or after working hours, and were not preceded by 3 working days.

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**
Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

[x] **YES** [ ] **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers**. Indicate "N/A" for quarters without any authorized non-storm water discharges.

July -September	[x] **YES**	[ ] **NO**	[ ] **N/A**	October-December	[x] **YES**	[ ] **NO**	[ ] **N/A**
January-March	[x] **YES**	[ ] **NO**	[ ] **N/A**	April-June	[x] **YES**	[ ] **NO**	[ ] **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information.

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**
Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources. **Attach an explanation for any "NO" answers**.

July -September	[x] **YES**	[ ] **NO**	October-December	[x] **YES**	[ ] **NO**
January-March	[x] **YES**	[ ] **NO**	April-June	[x] **YES**	[ ] **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

[x] **YES** [ ] **NO** Go to item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

[ ] **YES** [x] **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information.

i. name of each unauthorized non-storm water discharge.
ii. date and time of observation.
iii. source and location of each unauthorized non-storm water discharge.
iv. characteristics of the discharge at its source and impacted drainage area/discharge location.
v. name, title, and signature of observer.
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers**. Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information.

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed.
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occured during the last year.
   - outdoor wash and rinse areas.
   - process/manufacturing areas.
   - loading, unloading, and transfer areas.
   - waste storage/disposal areas.
   - dust/particulate generating areas.
   - erosion areas.
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map, is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- Sampling and Analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken.

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☐ YES	☒ NO	☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☐ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: _____

Signature: _____ Date: _____

Title: _____

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as necessa

NAME OF PERSON COLLECTING SAMPLE(S): C Brust TITLE: Maint. Specialist SIGNATURE: C

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHE		
			pH	TSS	SC	O&G	TOC			
N end of Canyon Dr @ Hwy 76	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Car

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as necessa

NAME OF PERSON COLLECTING SAMPLE(S): C Brust TITLE: Maint. Specialist SIGNATURE: C

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHE		
			pH	TSS	SC	O&G	TOC			
N end of Canyon @ Hwy 76	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				N/A				
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Car

discharge location.

QUARTER: **JULY-SEPT.** DATE: 7-30-08	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **OCT.-DEC.** DATE: 10-30-08	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **JAN.-MARCH** DATE: *1-29-09*	Observers Name: *C Brust* Title: *Maint. Specialist* Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **APRIL-JUNE** DATE: 5-28-09	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐

OBSERVATION	LOCATION OF AUTHORIZED NSWD EXAMPLE: Air conditioner Units on Building C	AUTHORIZED NSWD EXAMPLE: Air conditioner condensate	CHARACTERISTICS Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		BMPs IMPl
			At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
7-30-08 10:30 ☒ AM ☐ PM	Irrigation run-off from public parkways, Oceanside School Maint yard	School Maint yard, private irrigation	Water is clear in color, no odor,sheen, or floatables	Discharge is clear	Place eco-b
10-30-08 9:00 ☒ AM ☐ PM	Irrigation run-off from public parkways, Oceanside School Maint yard	School Maint yard, private irrigation	Water is clear in color, no odor,sheen, or floatables	Discharge is clear	Place eco-b
1-29-09 9:45 ☒ AM ☐ PM	Irrigation run-off from public parkways, Oceanside School Maint yard	School Maint yard, private irrigation	Water is clear in color, no odor,sheen, or floatables	Discharge is clear	Place eco-b
5-28-09 9:30 ☒ AM ☐ PM	Irrigation run-off from public parkways, Oceanside School Maint yard	School Maint yard, private irrigation	Water is clear in color, no odor,sheen, or floatables	Discharge is clear	Place eco-b
____ ____ ☐ AM ☐ PM					

Section D (pages 5-6) of the General Permit.

- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accord with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** **DATE/TIME OF OBSERVATIONS** 7-30-08 10:30 ☒ AM ☐ PM	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** 10-30-08 9:00 ☒ AM ☐ PM	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** 1-29-09 9:45 ☒ AM ☐ PM	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** 5-28-09 9:30 ☒ AM ☐ PM	Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE

REVERSE SIDE)	NSWD EXAMPLE: Vehicle Wash Water	UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.		P N
			AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION	
_____ ____ ☐ AM ☐ PM			N/A		
_____ ____ ☐ AM ☐ PM			N/A		
_____ ____ ☐ AM ☐ PM			N/A		
_____ ____ ☐ AM ☐ PM			N/A		

at the time of discharge.

Observation Date: October 30 2008 Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	Drainage Location Description	#1 N end of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	9:00 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: November 26 2008 Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	Drainage Location Description	#1 N end of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	8:45 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: December 29 2008 Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	Drainage Location Description	#1 N end of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	9:20 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: January 29 2009 Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	Drainage Location Description	#1 N end of Canyon Dr @Hwy 76	#2	#3
	Observation Time	9:45 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO

	EXAMPLE: Discharge from material storage Area #2	Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.
_____ ____ ☐ AM ☐ PM		N/A	
_____ ____ ☐ AM ☐ PM		N/A	
_____ ____ ☐ AM ☐ PM		N/A	
_____ ____ ☐ AM ☐ PM		N/A	
_____ ____ ☐ AM ☐ PM		N/A	

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

Observation Date: February 26 2009 Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	Drainage Location Description	#1 N end of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	10 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: March 30 2009 Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	Drainage Location Description	#1 N end of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	9:30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: April 30 2009 Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	Drainage Location Description	#1 N end of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	10:15 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: May 28 2009 Observers Name: C Brust Title: Maint. Specialist Signature: C Brust	Drainage Location Description	#1 N end of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	11 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	0
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO

	EXAMPLE: Discharge from material storage Area #2	cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.	
_____ ☐ AM ☐ PM		N/A		
_____ ☐ AM ☐ PM		N/A		
_____ ☐ AM ☐ PM		N/A		
_____ ☐ AM ☐ PM		N/A		
_____ ☐ AM ☐ PM		N/A		

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	D c
Landfill Run-Off	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☒ NO	If yes, to either question, complete the next two columns of this form		Place
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D c
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D c
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D c
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO			

SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	implementation	c
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D c
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D c
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	D c
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			

SPECIAL EVENTS
Inspection Form

Pursuant to Oceanside City Code – Urban Runoff and Discharge Control 40.2.1

Inspector:	TERRY GOODMAN	Date:	4/4/09	Season	Priority
Event Name	CALIFORNIA HALF IRONMAN	Event Type	SPORTS / TRIATHLON		
Event Location	HARBOR / PACIFIC ST / STRAND	Event Address			
Contact Name	ROCH FRYE, RACE DIRECTOR	Contact Phone			

Weather Conditions: ☐ Heavy Rain ☐ Light Rain ☒ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain Expected at ____% chanc

PRE-EVENT (1)									POST-EVENT (2)								
Time: 5:00 A.M	NEEDS								NEEDS								Time: 3:00 A.
SOURCE	N/A	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	N/A	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	COMMENTS
Solid Waste Storage and Disposal																	
Waste Containers							X								X		
Grease Storage	X								X								
Recycling Containers							X								X		
Disposal Areas	X								X								
Vehicles and Heavy Equipment																	
Washing Area	X								X								
Spill Response	X								X								
Storage Area	X								X								
Outdoor Materials Handling and Storage																	
Storage Tanks	X								X								
er Liquid Containers	X								X								
Equipment Storage	X								X								
Food Preparation and Eating Areas																	
Spill Kits									X								
Food Disposal							X								X	X	
Eating Areas							X								X	X	
Grounds Maintenance and Housekeeping																	
Storm Drains							X								X		
Parking lots							X								X		
Staff/Vendor Training and SWPPP																	
SWPPP																	
Training																	
Portable Restrooms																	
Storage Area							X										

OBSERVATIONS

PRE-EVENT (1)	POST-EVENT (2)
☒ No violations observed during the inspection.	☒ No violations observed during the inspection.
☐ Violations observed during the inspection	☐ Violations observed during the inspection
☐ Implement Corrective Actions As Required Below	☐ Implement Corrective Actions As Required Below

CORRECTIVE ACTION REQUIRED: ☐ Photos Taken

1	2	
☐	☐	Prevent trash/recycling from overflowing.
☐	☐	**Immediately** clean up oil/grease spills and leaks.
☐	☐	Post-event street sweeping required.
☐	☐	Provide immediate protection for storm drain inlets.
☐	☐	Clean in and around storm drains.
☐	☐	Train staff, vendors, and participants on pollution prevention.

1	2	
☐	☐	Sweep up trash and debris.
☐	☐	**Immediately** discontinue outdoor washing or hosing.
☐	☐	Dumpsters & trash receptacles must be covered during rain events
☐	☐	Provide spill kit(s) in required areas.
☐	☐	Provide secondary containment for portable restroom(s).

O _____

Implement corrective actions by_____. A City staff person will return to verify that corrective actions implemented as required. If you have any questions or comments, please contact the Special Events office at 760-435-5540.

Inspector Signature:	Received By – Please Print	Received By - Signature ☐ Mailed	Date

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2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	AMADORS REPAIR SERVICE	260		AIRPORT RD	A	Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-27-155-00		C	10/7/2008	None	N/A		Yes		W	
OC	A B C SMOG	260		AIRPORT RD	C	Oceanside	CA	92054	San Luis Rey	903.1	7549	811112	Automotive Services - Emission Testing											High	Not applicable	160-27-155-00		C	10/7/2008	None	N/A		Yes		W	
OC	DONALD ERBE CO INC	340		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5531	44431	Automotive Parts Supply Store											High	Not applicable	160-271-16-00		C	12/1/2008	Protect materials stored outdoors.	1/20/2009	Trash bin lids were closed.	Yes		W	
OC	TNT REPAIR SERVICES INC	350		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-271-16-00		C	10/7/2008	None	N/A		Yes		W	
OC	AIRPORT AUTOMOTIVE	360		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-271-16-00		C	10/7/2008	None	N/A		Yes		W	
OC	PLAVAN PETROLEUM INC	575		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Service Station											High	Not applicable	146-031-18-00		C	11/18/2008	None	N/A		Yes		W	
OC	FIRST TRANSIT	576		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	7532	81111	Automotive, Interior Repair and Maintenance											High	Not applicable	146-031-09-00		C	12/1/2008	Clean storm drain inlet	12/18/2008	Inlet was cleaned	Yes		W	
OC	PHIL GALLANT TRUCK SALVAGE	1020		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											High	**9 371013145**	145-020-41-00		I	12/3/2008	None	N/A		Yes		W	
OC	ECOLOGY SCRAP YARD	1030		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											High	**9 371013177**	145-020-33-00		I	12/8/2008	None	N/A		Yes		W	
OC	A-1 AUTO DISMANTLING LLC	1045		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											High	**9 371013219**	145-030-29-00		I	12/3/2008	None	N/A		Yes		W	
OC	HANSON AGGREGATES	1050		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	3273	327320	Manufacturing, Concrete											High	**9 000 001 3**	145-020-33-00		I	12/3/2008	None	N/A		Yes		W	
OC	CHEVRON / O'SIDE MART	656		BENET RD		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	145-030-43-00		C	12/1/2008	Removed Store items from trash	1/9/2009	Items were removed from trash	Yes		W	
OC	MOUNTAIN WATER ICE CO	2843		BENET RD		Oceanside	CA	92054	San Luis Rey	903.1	2097	312113	Manufacturing/Ice											High	**9 000000436**	146-090-30-00		I	1/20/2009	Close trash bin lids. Clean storm	1/28/2009	Trash bin lids closed. Storm drain	Yes		W	
OC	JUNGLE JACK'S INC.	1865		CALIFORNIA STREET		Oceanside	CA	92054	Loma Alta	904.1	181		Horiculture Specialties - Nurseries											High	Not applicable	154-040-67-00			3/17/2009				Yes		R	
OC	ECOLOGY AUTO PARTS INC	2315		CARPENTER ROAD		Oceanside	CA	92054	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											High	**9 371013069**	145-030-35-00		C	12/8/2008	None	N/A		Yes		W	
OC	SEASIDE BODY AND PAINT	907	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	7532	811121	Automobile, Body and Paint Shop											High	Not applicable	150-371-14-00		C	12/1/2008	None	N/A		Yes		W	
OC	ONE STOP AVIATION INC	1119	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	3724	336412	Airplane, Engine Repair											High	Not applicable	152-016-04-00		C	11/18/2008	None	N/A		Yes		W	
OC	O'SIDE TRANSMISSION UNLIMITED	229	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-045-08-00		C	11/19/2008	None	N/A		Yes		W	
OC	ACE SMOG	242	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-051-11-00		C	11/19/2008	None	N/A		Yes		W	
OC	BEAUDRY'S AUTO COLLISION CENTER	325	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7532	811121	Automotive - Body Shop											High	Not applicable	150-047-05-00		C	11/19/2008	Replace missing waste bin lid	12/15/2008	Missing waste bin lid was replaced	Yes		W	
OC	TOYOTA CARLSBAD CERTIFIED SVC CNTR	409	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-183-13-00		C	11/19/2008	Close trash lid	12/15/2008	Trash bin lid closed	Yes		W	
OC	EDDIE'S AUTOMOTIVE INC	501	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-184-09-00		C	11/19/2008	Close trash lid	12/15/2008	Trash bin lid closed	Yes		W	
OC	PACIFIC TIRE & WHEEL	523	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	147-081-01-00		C	11/19/2008	Label storm drain inlet	12/15/2008	Storm drain inled was labeled	Yes		W	
OC	CHEVRON / O'SIDE MART	601	N	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	143-245-07-00		C	11/20/2008		N/A		Yes		W	
OC	MOHSEN OIL	628	S	COAST HWY	E	Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	150-301-16-00		C	11/19/2008	Remove hazadorous material	12/18/2008	Remove hazadorous material	No	1/28/2009	W	
OC	THRIFTY GASOLINE	802	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	143-206-05-00		C	11/20/2008	Remove hazadorous material	12/18/2008	Trash bin lids were closed. Remove	No	1/28/2009	W	
OC	AJ'S AUTO CLINIC	920	S	COAST HWY	B	Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-304-19-00		C	11/18/2008	None	N/A		Yes		W	
OC	S & T AUTO PAINT & BODY	920	S	COAST HWY	C	Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-304-19-00		C	11/18/2008	None	N/A		Yes		W	
OC	DISCOUNT TIRES	1037	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5531	423130	Retail Sales, Vehicle Tires											High	Not applicable	152-011-10-00		C	11/18/2008	None	N/A		Yes		W	
OC	GOODYEAR EXPRESS TIRE	1151	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5531	423130	Retail Sales, Vehicle Tires											High	Not applicable	152-014-06-00		C	11/18/2008	None	N/A		Yes		W	
OC	VALERO GASOLINE	1202	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5541		Gasoline Station with Convenience Store											High	Not applicable	152-193-06-00		C	2/10/2009				Yes		G	
OC	WALT BILT TRANSMISSION	1303	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	152-172-01-00		C	3/4/2009				Yes		G	Has permit with RWQCE
OC	VESPA OF OCEANSIDE	1425	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5571		Motorcycle Sale and Service											High	Not applicable	152-178-02-00		C	3/4/2009				Yes		G	
OC	WESTCOAST TIRE AND WHEEL	1434	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	152-200-10-00		C	3/4/2009				Yes		G	
OC	NORTH COUNTY AUTO BODY INC.	1512	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7539		General Auto Repair Shop											High	Not applicable	152-200-13-00		C	3/4/2009				Yes		G	
OC	AUTOMAN CAR SERVICES	1515	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-030-26-00		C	3/4/2009				Yes		G	
OC	OCEANSIDE SELF SERVICE CAR WASH	1515	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7542		Automotive Carwash											High	Not applicable	153-030-26-00		C	3/4/2009				Yes		G	
OC	NORTH COUNTY AUTO SERVICE INC	1520	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	152-200-13-00		C	2/10/2009				Yes		G	
OC	B & R BUGGIE	1523	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-030-04-00		C	2/10/2009				Yes		G	
OC	GARY'S AUTO REPAIR/BOB'S CARBS	1540	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	152-200-13-00		C	2/10/2009				Yes		G	
OC	WEST COAST CUSTOM	1540	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	152-200-13-00		C	3/4/2009				Yes		G	
OC	WESTSIDE CLASSICS	1540	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7699		Miscellaneous Repair Services - Motorcycles											High	Not applicable	152-200-13-00		C	3/6/2009				Yes		G	
OC	DAVE'S ALL MOBILE	1555	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-030-20-00		C	4/6/2009				Yes		G	
OC	CHEVRON / O'SIDE MART	1601	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	143-090-21-00		C	11/20/2008	Close trash bin lids	1/21/2009	Trash bin lids closed	Yes		W	
OC	BOB'S CARBS	1602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-112-01-00		C	3/8/2009				Yes		G	
OC	JOSE'S AUTO ELECTRIC	1602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-112-01-00		C	3/7/2009				Yes		G	
OC	LSI AUTOMOTIVE SERVICE	1602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-112-01-00		C	3/9/2009				Yes		G	
OC	SMOKEYS AUTO PARTS/MACHINE	1602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-112-01-00		C	3/11/2009				Yes		G	
OC	T AND T AUTO SMOG	1602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-112-01-00		C	3/10/2009				Yes		G	
OC	OCEANSIDE CYCLE SUPPLY	1617	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7699		Miscellaneous Repair Services - Motorcycles											High	Not applicable	153-111-13-00		C	3/11/2009				Yes		G	
OC	COAST CAR WASH	1621	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7542		Automotive Carwash											High	Not applicable	153-111-19-00		C	3/11/2009				Yes		G	
OC	MOTORCYCLE GALLERY	1639	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7699		Miscellaneous Repair Services - Motorcycles											High	Not applicable	153-111-18-00		C	3/11/2009				Yes		G	
OC	CENTRAL AUTOMOTIVE	1702	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	7538		General Auto Repair Shop											High	Not applicable	153-213-40-00		C	3/11/2009				Yes		G	
OC	BOB'S GAS INC.	1742	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	153-213-43-00		C	3/10/2009				Yes		G	
OC	7-ELEVEN STORE 26190C-2111	1749	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	153-113-08-00		C	3/11/2009				Yes		G	
OC	CIRCLE K GASOLINE	1801	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	153-271-22-00		C	3/12/2009				Yes		G	
OC	LIBERTY OIL	1943	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	153-274-21-00		C	2/9/2009				Yes		R	
OC	OCEANSIDE AUTOMOTIVE	499		COLLEGE BLVD	B	Oceanside	CA	92057	San Luis Rey	903.1	7538		General Auto Repair Shop											High	Not applicable	157-101-08-00		C	2/10/2009				Yes		R	
OC	OCEANSIDE TIRE AND SERVICE CENTER	499		COLLEGE BLVD	A	Oceanside	CA	92057	San Luis Rey	903.1	7534		Tire Repair Shop											High	Not applicable	157-101-08-00		C	2/10/2009				Yes		R	
OC	COLLEGE BLVD EXXON	1990		COLLEGE BLVD		Oceanside	CA	92056	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	162-240-44-00		C	2/10/2009				Yes		R	
OC	CIRCLE K / 76 #2705246	3350		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	166-010-40-00		C	1/8/2009	After initial inspection, site needs	1/27/2009	I went to the site for a follow up	Yes		GC	
OC	APRO #44 EXXON	3401		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	168-011-03-00		C	10/8/2008	During initial visit I found some	12/5/2008	When I went to the site on 12/5/08 I	Yes		GC	
OC	QUARRY CREEK CHEVRON	3490		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	168-013-03-00		C	10/8/2008	On my second visit to the site I	1/15/2009	I went to the site for a follow up	Yes		GC	
OC	REFLECTSHINE AUTO WASH	3528		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	7542		Automotive Carwash											High	Not applicable	168-012-53-00		C	10/9/2008	On my initial visit I found that	12/3/2008	On my second visit I found that all	Yes		GC	
OC	MACHINE TECH RACING ENGINES	620		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	3714		AUTO ENGINE ASSEMBLY											High	Not applicable	149-330-16-00		C	10/30/2008	Needs grease filters in drainage	1/15/2009	I met with Robert Gremmels from	No		GC	
OC	BIG FAB OFF ROAD RACING	634		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	7539	811121	Automotive - Body Shop											High	Not applicable	149-330-17-00		C	11/17/2008	None	N/A		Yes		W	
OC	SOS UPHOLSTERY	660		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	7532	811121	Upholstery Repair Shops											High	Not applicable	149-330-17-00		C	10/30/2008	None	N/A		Yes		W	
OC	THE DING MAN	660		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	7539	811121	Automotive - Body Shop											High	Not applicable	149-330-17-00		C	10/30/2008	None	N/A		Yes		W	
OC	WARNER'S MUFFLER	190		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1	7538		General Auto Repair Shop											High	Not applicable	158-052-07-00		C	1/27/2009						R	
OC	ARCO	607		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	158-030-43-00		C	2/4/2009						R	
OC	SHELL	660		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	157-810-58-00		C	2/4/2009						R	
OC	DEUTSCH CO ELECTRONICS	250		EDDIE JONES WAY		Oceanside	CA	92054	San Luis Rey	903.1	3679	35599	Manufacturing, Electric Components											High	**9 000000519**	145-021-29-00		I	1/26/2009	None	N/A		Yes		W	
OC	SAN LUIS REY AUTO SALVAGE AND STORAGE	471	N	EL CAMINO REAL		Oceanside	CA	92057	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											High	Not applicable	158-066-05-00		C	2/25/2009						R	
OC	MOE'S OCEANA UNION 76	502	S	EL CAMINO REAL		Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	160-140-07-00		C	2/5/2009						R	
OC	EMERALD ISLE GOLF COURSE	660	S	EL CAMINO REAL		Oceanside	CA	92057	San Luis Rey	903.1	7292		Public Golf course											High	Not applicable	162-04-037-00		C	2/5/2009						R	
OC	DISCOUNT TIRE	2281	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2	7534		Tire Repair Shop											High	Not applicable	165-013-24-00		C	3/19/2009				Yes		G	
OC	500 MOTORS	115	S	FREEMAN ST	B	Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	147-283-02-00		C	12/1/2008	Close trash bin lids	12/15/2008	Trash bin lids closed	Yes		W	
OC	MOBIL-HARBOR DRIVE, INC	477	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	143-090-14-00		C	11/20/2008	Clean storm dain inlet and label	12/15/2008	Storm drain inlet was cleaned and	Yes		W	
OC	AAMCO	2255		INDUSTRY ST	A	Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-09-00		C	3/16/2009				Yes		G	
OC	CITYWIDE AUTOMOTIVE	2255		INDUSTRY ST	B	Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-09-00		C	3/16/2009				Yes		G	
OC	B M W PRESCISION MACHINING	2379		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3444		Manufacturing - Sheet Metal											High	Not applicable	149-271-34-00		I	3/31/2009				Yes		G	
OC	WASTE MANAGEMENT OF NO CO INC	2381		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	4953		Sanitary Services - Trash Collection											High	Not applicable	149-271-35-00		I	3/31/2009				Yes		G	
OC	JOHN'S TOWING SERVICE	2401		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7549		Automobile Services - Towing											High	Not applicable	149-271-56-00		C	3/16/2009				Yes		G	
OC	OCEANSIDE TRUCK SERVICE	2403		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7538		General Truck Repair Shop											High	Not applicable	149-271-56-00		C	3/16/2009				Yes		G	
OC	CONOVER TIRE PRO	2405		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7534		Tire Repair Shop											High	Not applicable	149-271-56-00		C	3/18/2009				Yes		G	
OC	FENCEWORKS INC.	2421		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	1799		Miscellaneous Special Trades - Fence Installers											High	Not applicable	149-271-56-00		I	3/19/2009				Yes		G	
OC	OCEANSIDE DRIVELINE	2435		INDUSTRY ST	B	Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-271-26-00		C	3/18/2009				Yes		G	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	ARTISTIC MAINTENANCE INC	2505		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7389		Interior Landscaping Services											High	Not applicable	149-271-27-00		C	3/18/2009				Yes		G	
OC	JOHN DEERE LANDSCAPES, INC	2511		INDUSTRY ST	C	Oceanside	CA	92054	Loma Alta	904.1	782		Lanscape Services - Landscape Contractor											High	Not applicable	149-271-23-00		C	3/25/2009				Yes		G	
OC	SOUTHER CAST STONE INC	2511		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3272		Manufacturing - Concrete Products											High	Not applicable	149-271-04-00		I	3/25/2009				Yes		G	
OC	JUST FOAM LLC	2515		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3949		Manufacturing - Surboard blanks											High	Not applicable	149-271-23-00		I	3/31/2009				Yes		G	
OC	SAN DIEGO MIRROR & WINDOW	2515		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3231		Manufacturing - Glass Windows & Doors											High	Not applicable	149-271-23-00		I	3/31/2009				Yes		G	
OC	WEILAND SLIDING DOOR & WINDOW INC	2601		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3231		Manufacturing - Glass Windows & Doors											High	Not applicable	149-271-21-00		I	3/18/2009				Yes		G	
OC	SANTOURIAN MANUFACTURING INC	2603		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3444		Manufacturing - Sheet Metal											High	Not applicable	149-271-22-00		I	3/18/2009				Yes		G	
OC	ARGO STONE AND SUPPLY CO	2609		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	5211		Building Material Dealers											High	Not applicable	149-271-52-00		C	3/18/2009				Yes		G	
OC	MASTERTECH INC	2801		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-271-14-00		C	3/18/2009				Yes		G	
OC	PALOMAR TRANSIT MIX CO	2925		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3273		Manufacturing - Ready Mix Concrete											High	Not applicable	162-031-02-00		I	3/19/2009				Yes		G	
OC	GLASSWERKS SD	3021		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3231		Manufacturing - Glass Products											High	Not applicable	162-031-33-00		I	3/19/2009				Yes		G	
OC	CLINICON CORPORATION	3025		INDUSTRY ST	A	Oceanside	CA	92054	Loma Alta	904.1	3841		Manufacturing - Medical Apparatus											High	Not applicable	162-031-36-00		I	3/19/2009				Yes		G	
OC	CAMPBELL CERTIFIED INC	3045		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3441		Manufacturer - Certified Welding											High	Not applicable	162-031-30-00		I	3/30/2009				Yes		G	
OC	METROTILE MANUFACTURING	3093		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3999		Manufacturer - Roofing Tile											High	Not applicable	162-031-34-00		I	3/25/2009				Yes		G	
OC	ELITE METAL FINSIHING	2550		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	3471		METAL FINISHING											High	Not applicable	161-660-21-00		I	10/14/2008	Site needs spill clean up training, and move materials stored outside moved indoors.	12/10/2008	All items completed and paperwork updated.	Yes		GC	
OC	STONE TRUSS COMPANY INC	507		JONES RD		Oceanside	CA	92054	San Luis Rey	903.1	2439		Structural Wood Members											High	Not applicable	146-030-91-00		C	11/24/2008	Replace missing downspout on layout area	1/16/2009	Downspout was replaced			W	
OC	MELROSE ARCO	1501	N	MELROSE DR		Oceanside	CA	92056	Loma Alta	904.1	5541		GASOLINE STATION											High		161-030-17-00		C	10/1/2008	Site needs storm drain labels, filters, hazardous materials removed, cleaning of trash enclosure, and landscaping cleanup.	12/16/2008	All items completed and paperwork updated.	Yes		GC	
OC	BUSSEYS AUTOMOTIVE SERVICE	1402		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	148-143-09-00		C	11/25/2008	Protect materials stored outdoors.	1/20/2009	Materials stored outdoors were covered	Yes		W	
OC	TERRY'S BODY SHOP, INC	1408		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	148-143-19-00		C	11/25/2008	Protect material stored outdoor.Close trash bin lids.	12/19/2008	Material stored outdoor was protected. Trash bin lids closed	Yes		W	
OC	CAR QUEST AUTO PARTS	1531		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5531	441310	Automotive Parts Supply Store											High	Not applicable	148-260-18-00		C	12/29/2009	None	N/A		Yes		W	
OC	ECONO LUBE N TUNE #23	1618		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	145-151-26-00		C	11/25/2008	None	N/A		Yes		W	
OC	MISSION ARCO AM/PM	1920		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	145-150-31-00		C	11/21/2008	None	N/A		Yes		W	
OC	MISSION UNOCAL	2003		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	148-170-08-00		C	11/21/2008	None	N/A		Yes		W	
OC	PEP BOYS/MANNY MOE & JACK OFCA #667	2041		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	Automotive Parts Supply Store/Auto Repair											High	Not applicable	148-170-06-00		C	11/21/2008	None	N/A		Yes		W	
OC	OCEANSIDE SCHOOL DISTRICT FLEET MANAGEMENT	2070		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	Oceanside School District - Fleet Management											High	**9 371005696**	145-150-08-00		C	1/28/2009	None	N/A		Yes		W	
OC	MOHSEN OIL, INC	3213		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	160-270-11-00		C	11/18/2008	None	N/A		Yes		W	
OC	MISSION 76	3361		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	160-550-10-00		C	11/18/2008	None	N/A		Yes		W	
OC	MIDAS MUFFLERS	3510		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-290-47-00		C	11/18/2008	None	N/A		Yes		W	
OC	OCEANSIDE AUTO REPAIR	3582		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-290-09-00		C	12/1/2008	None	N/A		Yes		W	
OC	MISSION AUTO CARE INC.	3588		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-290-09-00		C	10/3/2008	None	N/A		Yes		W	
OC	OCEANSIDE CAR WASH INC	3655		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7542	811192	Automotive Carwash											High	Not applicable	160-291-05-00		C	10/3/2008	None	N/A		Yes		W	
OC	MISSION EXXON	3865		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	160-560-03-00		C	2/11/2009				Yes		R	
OC	O'SIDE GAS	3945		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	158-052-12-00		C	2/19/2009				Yes		R	
OC	LAS PALMAS RANCH	6508		MORRO HEIGHTS ROAD		Oceanside	CA	92057	San Luis Rey	903.1	181		Ornamental Floriculture Nursery Products											High	Not applicable	122-170-14-00		C	3/3/2009				Yes		R	
OC	THE OCEANSIDER	1660		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	152-320-25-00		C	1/21/2009	None	N/A		Yes		W	
OC	SMOG-THIS	1950		OCEANSIDE BLVD	O	Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-27-00		C	12/2/2008	None	N/A		Yes		W	
OC	JIFFY LUBE #1278	1970		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-27-00		C	12/2/2008	None	N/A		Yes		W	
OC	VIP CAR WASH	1980		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7542	811192	Automotive Carwash											High	Not applicable	149-330-27-00		C	10/28/2008	None	N/A		Yes		W	
OC	ARCO AMPM GAS STATION	1990		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5541		Gasoline Station											High	Not applicable	149-330-11-00		C	10/28/2009				Yes		G	
OC	7 DAY TIRE BRAKE	2001		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-04-00		C	3/31/2009				Yes		G	
OC	AGRI CHEMICAL SUPPLY, INC	2002		OCEANSIDE BLVD	J	Oceanside	CA	92054	Loma Alta	904.1	7342		Disinfecting and Pest Control Services											High	Not applicable	149-330-05-00		C	10/28/2009				Yes		G	
OC	ADVANCE PAINT AND BODY	2017		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-14-00		C	3/31/2009				Yes		G	
OC	DISCOUNT TRANSMISSION & REPAIR SERVICE	2017		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-14-00		C	3/31/2009				Yes		G	
OC	MARIO'S AUTO REPAIR	2017		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-14-00		C	3/31/2009				Yes		G	
OC	LEO'S TOWING & AUTO REPAIR	2019		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-14-00		C	3/31/2009				Yes		G	
OC	7 DAY MECHANIC	2021		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-15-00		C	3/31/2009				Yes		G	
OC	CLASSIC MUSCLE CARS	2021		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-15-00		C	3/31/2009				Yes		G	
OC	SMITTY'S SURFSIDE GARAGE	2022		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-01-00		C	10/29/2008	None	N/A		Yes		W	
OC	PADILLAS COLLISION REPAIR	2026		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-01-00		C	10/28/2008	None	N/A		Yes		W	
OC	BROTHER'S AUTO GLASS	2027		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-15-00		C	3/31/2009				Yes		G	
OC	EARL SCHEIB AUTO PAINTING	2027		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-15-00		C	3/31/2009				Yes		G	
OC	PEDRO'S AUTO REPAIR & TOW TRK	2027		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-15-00		C	3/31/2009				Yes		G	
OC	LAEL'S INTERNATIONAL AUTO SERVICE CENTER	2042		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-01-00		C	10/29/2008	No second visit needed	N/A		Yes		W	
OC	CONSTANT VELOCITY MOTORSPORTS	2044		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-01-00		C	12/3/2008	No second visit needed	N/A		Yes		W	
OC	WASTE MANAGEMENT OF NO CO INC	2141		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	4953		Sanitary Services - Trash Collection											High	Not applicable	149-370-07-00		C	3/31/2009				Yes		G	
OC	MAX RENTALS	2365		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7359		Equipment Rentals											High	Not applicable	149-271-42-00		C	3/16/2009				Yes		G	
OC	GORILLA RENTALS	2372		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7359		Equipment Rentals											High	Not applicable	149-271-41-00		C	3/16/2009				Yes		G	
OC	OCEANSIDE BUGGY BATH CARWASH	2946		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7542	811192	Automotive Carwash											High	Not applicable	162-030-69-00		C	10/22/2008	None	N/A		Yes		W	
OC	SUPERIOR READY MIX CONCRETE LP	3227		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	3273		Manufacturing - Ready Mix Concrete											High	Not applicable	162-502-23-00		C	3/30/2009				Yes		G	
OC	EVERGREEN NURSERY	3231		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	181		Horiculture Specialties - Nurseries											High	Not applicable	162-050-07-00		C	3/27/2009				Yes		G	
OC	ORCO BLOCK CO. INC.	3501		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	3271		Manufacturing -Concrete Block Products											High	Not applicable	162-082-23-00		C	3/27/2009				Yes		G	
OC	D & J AUTO DOCTORS INC	4035		OCEANSIDE BLVD	C11	Oceanside	CA	92056	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	162-111-06-00		C	3/19/2009				Yes		G	
OC	RANCHO DEL ORO CAR WASH	4101		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	7542		Automotive Carwash											High	Not applicable	162-241-32-00		C	3/19/2009				Yes		G	
OC	JIFFY LUBE	4106		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	7538		General Auto Repair Shop - Oil Change											High	Not applicable	162-502-28-00		C	6/30/2009				Yes		R	
OC	ARMSTRONG GARDEN CENTERS	4131		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	181		Horiculture Specialties - Nurseries											High	Not applicable	162-241-38-00		C	3/19/2009				Yes		G	
OC	RANCHO DEL ORO 76	4181		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5541		Gasoline Station with Convenience Store											High	Not applicable	162-241-18-00		C	3/30/2009				Yes		G	
OC	SHELL GASOLINE & FOOD STORE	185		OLD GROVE ROAD	G & H	Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	158-101-47-00		C	10/20/2008	All items completed and paperwork updated.	12/10/2008		Yes		GC	
OC	PEP BOYS OF CA #742	3752		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	1521		General Auto Repair Shop											High	Not applicable	168-012-57-00		C	1/13/2009	After initial inspection, I found that the site needs training documentation, the storm drain needs trash and oil filters, and the loading area needs a general house cleaning.	1/22/2009	All items were completed	Yes		GC	
OC	ECONO LUBE N' TUNE/MEINEKE CAR CENTER #4068	3844		PLAZA DR	381	Oceanside	CA	92056	Buena Vista	904.2	8811		General Auto Repair Shop											High	Not applicable	168-012-21-00		C	1/12/2009				Yes		GC	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	ARCO AM/PM	3804		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	8811		Gasoline Station with Convenience Store											High	Not applicable	168-012-17-00		C	6/1/2009	Needs training doumentation, clean up hazardous materials and remove all debries from rear of station.	6/18/2009	Hazardous materials were cleaned up and all debries from the rear of the station were removed. Traning documentation was provided.	Yes		GC	
OC	INGWERSEN NURSERY INC.	1620		RIDGEWAY STREET		Oceanside	CA	92054	Loma Alta	904.1	181		Ornamental Floriculture Nursery Products											High	Not applicable	151-200-20-00		C	2/26/2009				Yes		R	
OC	G&W TRUCK & SUV ACCESSORIES & LINE-X OF OCEANSIDE	230		ROYMAR RD	F-H	Oceanside	CA	92054	San Luis Rey	903.1	5531	441310	Automotive Parts Supply Store											High	Not applicable	160-271-48-00		C	12/2/2008	None	N/A		Yes		W	
OC	JOSH'S BOARS NEST	3207		ROYMAR RD	D	Oceanside	CA	92054	San Luis Rey	903.1	7699	811490	Miscellaneous, Repair Services - Motorcycle											High	Not applicable	160-271-17-00		C	12/2/2008	None	N/A		Yes		W	
OC	ESHBACHS AUTO BODY & PAINT	2954		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7539	811121	Automotive - Body Shop											High	Not applicable	146-050-69-00		C	11/24/2008	Clean and label storm drain inlet	12/15/2008	Storm drain was cleaned and	Yes		W	
OC	GUERRERO'S AUTO REPAIR	2954		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	146-050-68-00		C	11/21/2008	None	N/A		Yes		W	
OC	THE MUFFLER MAN	2954		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7538	811121	General Auto Repair Shop											High	Not applicable	146-050-68-00		C	11/25/2008	None	N/A		Yes		W	
OC	CARCOA QUALITY BODY & PAINT	3018		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7539	811121	Automotive - Body Shop											High	Not applicable	146-050-34-00		C	11/21/2008	Close Trash bin lids. Provide	12/18/2008	Trash bin lids closed and	Yes		W	
OC	KENNEDYS CUSTOM CYCLES	3028		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7699	811490	Miscellaneous Repair Services - Motorcycles											High	Not applicable	146-050-33-00		C	11/21/2008	None	N/A		Yes		W	
OC	D & K GROWERS INC	1319		SLEEPING INDIAN RD		Oceanside	CA	92057	San Luis Rey	903.1	181		Ornamental Floriculture Nursery Products											High	Not applicable	121-150-20-00		C	3/11/2009				Yes		R	
OC	PUURFECT AUTO SERVICE	407		TOPEKA STREET		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-045-01-00		C	11/19/2008	Protect materials stored outdoors	1/21/2009	Materials stored outdoor were	Yes		W	
OC	EDDIE'S AUTOMOTIVE INC	512	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	7532	811111	General Auto Repair Shop											High	Not applicable	150-184-02-00		C	11/19/2008	None	N/A		Yes		W	
OC	PROCUSTOM	520	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	7539	811121	Automotive - Body Shop											High	Not applicable	150-184-03-00		C	11/20/2008	None			Yes		W	
OC	GHETTO CHOPPERS CUSTOMS INC	602	S	TREMONT ST	A	Oceanside	CA	92054	Loma Alta	904.1	7699	811490	Miscellaneous, Repair Services - Motorcycle											High	Not applicable	150-376-10-00		C	11/20/2008	None	N/A		Yes		W	
OC	AUTO POWER	602	S	TREMONT ST	B	Oceanside	CA	92054	Loma Alta	904.1	7532	811111	General Auto Repair Shop											High	Not applicable	150-376-10-00		C	11/20/2008	None	N/A		Yes		W	
OC	S & S RADIATOR	620	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	7532	811111	General Auto Repair Shop											High	Not applicable	150-376-09-00		C	11/20/2008	None	N/A		Yes		W	
OC	OCEAN PAINT AND BODY	1112	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	7539	811121	Automotive - Body Shop											High	Not applicable	152-014-16-00		C	11/25/2008	Protect materials stored outdoors.		Trash bin lids closed. Materials	Yes		W	
OC	CHANDLER TRANSMISSION	304		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	7532	811111	General Auto Repair Shop											High	Not applicable	146-050-18-00		C	11/21/2008	Protect materials stored outdoors	1/20/2009	Materials stored outdoors were	Yes		W	
OC	NCTD MAINTENANCE YARD	305		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	7532	811111	General Auto Repair Shop											High	9 371010395	145-030-26-00		C	1/20/2009	None	N/A		Yes		W	
OC	A & A AUTO REPAIR	312		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	7532	811111	General Auto Repair Shop											High	Not applicable	146-050-41-00		C	11/25/2008	None	N/A		Yes		W	
OC	TOPS AUTO UPHOLSTERY	227		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	7532	811121	Automotive, Upholstery Repair Shops											High	Not applicable	146-050-19-00		C	12/2/2008	None	N/A		Yes		W	
OC	FULL RV SERVICE	444		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	146-050-70-00		C	11/21/2008	None	N/A		Yes		W	
OC	CLASSIC SHOWCASE INC	2640		VISTA PACIFIC DR		Oceanside	CA	92054	Loma Alta	904.1	7532		Automotive Restorations											High	Not applicable	161-470-03-00		C	1/8/2009	No second visit needed			Yes		GC	
OC	ROWLEY CHEVRON	2191		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5542		Gasoline Station with Convenience Store											High	Not applicable	154-130-24-00		C	4/13/2009				Yes		G	
OC	SATURN OF WEST 78	2205		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5511		Automotive General Automotive Repairs											High	Not applicable	165-120-20-00		C	4/13/2009				Yes		G	
OC	BUBBLE BATH CAR WASH 76	2315		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	7542		Automotive Carwash											High	Not applicable	165-120-52-00		C	4/6/2009				Yes		G	
OC	CMA GROWERS, INC	370		WILSHIRE RD		Oceanside	CA	92057	San Luis Rey	903.1	181		Ornamental Floriculture Nursery Products											High	Not applicable	122-090-12-00		C	3/9/2009				Yes		R	
OC	LOPEZ NURSERY	461		WILSHIRE RD		Oceanside	CA	92057	San Luis Rey	903.1	181		Ornamental Floriculture Nursery Products											High	Not applicable	122-020-23-00		C	3/5/2009				Yes		R	
OC	ONE MORE THAT'S IT PUB	231		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	146-050-24-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE THIRD PLACE ESPRESSO	656		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	145-030-43-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OCEAN'S 11 CASINO	121		BROOKS STREET		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	148-340-29-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	FRUGOS YOGURT	3509		CANNON RD	E-2A	Oceanside	CA	92056	Agua Hedionda	904.3	5411		Eating/Drinking Establishments											R-High	Not applicable	169-011-42-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	PIZZA HUT	3509		CANNON RD	E1	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	169-011-42-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MC DONALD'S	3517		CANNON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	169-011-40-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	TACO BELL #16065	3521		CANNON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	169-011-39-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MIKES BAGELS & COFFEE HOUSE	3529		CANNON RD	2D	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	169-011-3700		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	RALPH'S GROCERY COMPANY #138	3533		CANNON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5411		Eating/Drinking Establishments											R-High	Not applicable	169-011-37-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MACDONALDS	137		CANYON DRIVE		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-160-25-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DEL TACO	1601		CARMELO DRIVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-060-36-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BREAKWATER BREWING CO.	101	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HOSIE'S PACIFIC PUB	113	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5813	722410	Eating/Drinking Establishments											R-High	Not applicable	147-272-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	EARTHQUAKE PIZZA	119	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	147-272-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LOS PANCHOS TACO SHOP	202	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	150-051-01-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SPANKY'S PIZZA	206	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-097-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KEALANI'S	207	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-087-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LONGBOARDER CAFE INC	228	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-097-08-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BESSIE'S CAFE	232	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	150-051-20-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MARYS FAMILY RESTAURANT	307	N	COAST HWY	B	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-086-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ANITA'S #2	309	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	150-047-09-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SUBWAY	323	N	COAST HWY	B	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-086-01-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LONE STAR BBQ	406	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-093-07-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JITTER COFFE PUB	510	N	COAST HWY	D	Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	147-094-11-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	FISH JOINT	514	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	150-203-11-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ALFREDO'S MEXICAN FOOD	602	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-246-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PIZZA TOWNE	604	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-246-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE STRAND BAR	608	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-246-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ANGELO'S BURGERS	619	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-245-09-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	WIENERSCHNITZEL	624	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-246-09-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	COSTABRASIL CAFÉ	624	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	150-301-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	101 CAFÉ	631	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	150-376-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HARBOR HOUSE CAFE	714	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-205-10-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CARROWS # 954	936	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-020-37-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE MAIN ATTRACTION	939	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	143-040-26-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	AZAFRAN	1001	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	152-011-01-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	GRUBY'S DINER	1030	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	152-022-26-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DIEGO'S MEXICAN FOOD	1034	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	152-022-26-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ANGELO'S BURGERS	1050	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-022-24-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE FLYING BRIDGE RESTAURANT	1105	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	143-040-41-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SK DONUT	1129	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-014-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SUPER RANCHITO TACO SHOP	1129	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-014-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	STAR PIZZA & ITALIAN RESTAURANT	1706	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	153-213-39-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	HON SUSHI	1733	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	153-113-23-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	BEACH BREAK CAFE INC	1902	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	153-273-26-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	HILL STREET DONUT HOUSE	1926	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	153-273-07-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	OCEANSIDE CAFE	1938	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	153-273-24-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	ANGELO'S BURGERS	2035	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	155-031-15-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	ROUND TABLE PIZZA	455		COLLEGE BLVD.	10	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-14-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	OHANA HAWAIIAN BBQ	459		COLLEGE BLVD	2	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-14-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	TRUPIANO'S ITALIAN RESTAURANT	461		COLLEGE BLVD	3	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-14-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	SUBWAY SANDWICHES	475		COLLEGE BLVD	J1	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-11-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	MCDONALD'S	487		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-10-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	HOMETOWN BUFFET INC #735	491		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-15-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	OCEANSIDE CHINESE FOOD	495		COLLEGE BLVD	B	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-11-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	VICTORIAS MEXICAN FOOD INC	495		COLLEGE BLVD	C	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-11-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	DENNY'S RESTAURANT	605		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-05-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	TACO BELL #17285	695		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-06-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CARL'S JR	775		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-07-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CHEVRON USA INC #203189	785		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-08-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	PAPA PEPPERONI	805		COLLEGE BLVD	102	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-17-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CHU'S QUICKWOK	815		COLLEGE BLVD	107	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-10-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	STARBUCKS COFFEE #5212	815		COLLEGE BLVD	108	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-10-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	DEL TACO LLC	1970		COLLEGE BLVD		Oceanside	CA	92056	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-48-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	7-11 FOOD STORE #15591B	3407		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5411		Eating/Drinking Establishments											R-High	Not applicable	168-011-04-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	DE KOTIJA TACO SHOP	3504		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-37-00		C		Inspected by ECIS		Inspected by ECIS	Yes		GC	Inspected by ECIS
OC	LA HACIENDA RESTAURANT & PARTY HALL	300		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-051-17-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CARL'S JR	611		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-030-44-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	THE DONUT PARK	650		DOUGLAS DR	104	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-810-57-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	DOMINO'S PIZZA #7750	650		DOUGLAS DR	103	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-810-57-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	PYRAMID'S RESTAURANT	650		DOUGLAS DR	111	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-810-57-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	RIVERBOTTOM BAR	473	N	EL CAMINO REAL		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-066-10-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CHIN'S PALACE INC	2241	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-19-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	NANCY'S COFFEE	2247	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2			Eating/Drinking Establishments											R-High	Not applicable	165-013-19-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	TERI'S CAFÉ INC	2249	S	EL CAMINO REAL	A2	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-19-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	ANITA'S RESTAURANT	2251	S	EL CAMINO REAL	B	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-23-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	SMOKEY J'S PIT BBQ	2251	S	EL CAMINO REAL	A	Oceanside	CA	92054	Buena Vista	904.2	5813		Eating/Drinking Establishments											R-High	Not applicable	165-013-23-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	DEL TACO LLC	2269	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-09-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	DENNY'S RESTAURANT #1149	2273	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-10-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	IN AND OUT BURGERS	4605		FRAZEE ROAD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-77-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	COLSTONE CREAMERY	4635		FRAZEE ROAD	A	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-76-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	SUBMARINA	4635		FRAZEE ROAD	B	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-76-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	GUPPY'S COFFEE	4635		FRAZEE ROAD	C	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-76-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	GREAT WOK OF CHINA	4635		FRAZEE ROAD	F	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-76-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	ALBERTO'S	4645		FRAZEE ROAD	I	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-76-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	JITTER COFFEE EXPRESS	208	N	FREEMAN ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	147-096-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KONA HUT COFFEE HOUSE	1940	S	FREEMAN ST		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	153-351-10-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	KYOTO GIFT + FOOD	559		GREENBRIER DR		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-43-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HOOLIGANS	560		GREENBRIER DR		Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	149-330-26-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	NAUTICAL BEAN	240	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HARBOR SNACKS AND HOTDOGS	258	S	HARBOR DR	A	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ROCKING BAHA	258	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DOMINIC'S - ITALIAN RESTAURANT	268	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	VINNIE'S SPORT BAR	274	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HARBOR FISH AND CHIPS	276	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ROBIN'S NEST CAFÉ	280	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JOE'S CRAB SHACK	314	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DENNY'S	407	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-090-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MONTEREY BAY CANNERS	1325	N	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JOLLY ROGER RESTAURANT	1900	N	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	Unknown		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ROUND TABLE PIZZA	3440		MARRON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-07-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	LOS PRIMOS 16, L P	3490		MARRON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-03-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	DAPHNE'S GREEK CAFE	3480		MARRON RD	3B104	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-02-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	JAMBA JUICE #643	3480		MARRON RD	3B103	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-02-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	KARABAS SUBS INC (SUBWAY)	3480		MARRON RD	3B102	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-02-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	STARBUCKS COFFEE #2847	3480		MARRON RD	101	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-02-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	MAIU WOWI	301		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-271-15-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	RED CUP YOGURT	301		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-15-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DAIRY QUEEN	302		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-089-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JOHNNY MANANAS	308		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-089-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PASTA MIA'S	400		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-087-15-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	COLSTONE CREAMERY	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SANTINO'S PIZZA	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OCEANS' BURRITO	508		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-097-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE WOK IN	511		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-284-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	VIGILUCCI'S RESTAURANT GROUP	608		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-096-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	WENDY'S #30	1002		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-01-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	EL POLLO LOCO	1004		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SUBWAY	1024		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-08-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MANHATTAN'S GIANT PIZZA, INC	1060		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-08-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PANDA EXPRESS 941	1068		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CHINA STAR SUPER BUFFET	1401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	148-340-30-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BURGER KING	1420		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-143-20-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ARMANDO'S MEXICAN FOOD	1426		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-143-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MISSION DONUT HOUSE	1502		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-152-32-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	VALENTINA'S MEXICAN FOOD	1602		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-151-27-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ARBY'S #1396	1863		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-160-36-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JACK IN THE BOX #3068	1900		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	145-180-29-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KFC - OCEANSIDE	2007		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-170-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CHINA DYNASTY BUFFET - OUT OF BUSINESS	2009		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	148-170-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LAS BRISAS RESTAURANT	2011		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	148-170-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JUGOS JUQUILA	2027		MISSION AVE	E1	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-170-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	YUMYUM DONUTS	3304		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	160-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DAVINA'S MEXICAN RESTAURANT	3320		MISSION AVE	Q-R	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	160-271-12-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SZECHUAN PALACE	3365		MISSION AVE	E	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	160-550-13-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DELBERTOS MEXICAN FOOD	3371		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	160-550-03-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	TAN'S DONUTS	3375		MISSION AVE	A	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	160-550-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SHANANIGANS SPORTS BAR AND GRILL	3375		MISSION AVE	I	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	160-550-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MACDONALDS	3720		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	160-290-40-01		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ARIA JAPANESE/KOREAN BBQ	3744		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	158-390-17-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BURGER KING	3746		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-08-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LOS JUANITOS MEXICAN FOOD	3753		MISSION AVE	123	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	160-291-11-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	STARBUCKS COFFEE	3760		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	158-390-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KILLER PIZZA FROM MARS	3772		MISSION AVE	127	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	OCEANSIDE DONUTS	3772		MISSION AVE	119	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PETITE MADELINE BAKERY	3776		MISSION AVE	137	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SUBWAY	3776		MISSION AVE	140	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	FIESTA MEXICANA	3784		MISSION AVE	151	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	158-390-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OCEAN RAINBOW - ICE CREAM PARLOR	3784		MISSION AVE	147	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KURANDO	3815		MISSION AVE	101	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	160-560-06-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	VALLEY BUZZ	3846		MISSION AVE	A1	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-03-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	OCEAN THAI CUSINE	3846		MISSION AVE	A3-A4	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-03-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	LITTLE CEASAR	3852		MISSION AVE	B3-B4	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-02-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	EDNA'S THAI, CHINESE, FILIPINO AND VIETNAMESE	3861		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	160-560-14-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	TACO BELL #3837	3895		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	160-560-01-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	COCO'S #0886	3905		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	JACK IN THE BOX #3061	3909		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CAPOZZOLI'S	3915		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	EL TUCAN MEXICAN RESTAURANT	3935		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	QUIZNO'S SUB STORE #10327	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE RICE GARDEN INC	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	UMI JAPANESE GRILL & CAFE INC	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE MANDARIN	1060		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-08-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BAJA TACOS	1527		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-260-18-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PERLA TAPATIA	1919		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-160-30-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OHZEN SUSHI	3772		MISSION AVE	130	Oceanside	CA	92054	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	160-560-02-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	ROSINA ITALIAN RESTAURANT AT DEL ORO	3613		OCEAN RANCH BLVD	100	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	BERRY SWIRL	3613		OCEAN RANCH BLVD	105	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	FELIX BBQ WITH SOUL	3613		OCEAN RANCH BLVD	106-107	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	GANDELFO'S DELI	3617		OCEAN RANCH BLVD	100	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-13-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	ROBERTO'S TACO SHOP	3617		OCEAN RANCH BLVD	108	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-13-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	THE FLAME BROILER	3617		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-13-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CROQUE FAMOUS SANDWICHES	3800		OCEANIC DR	118	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-680-20-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CHURCH'S CHICKEN	510		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-023-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PORT OF SUBS	510		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-023-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LITTLE CEASAR'S PIZZA	518		OCEANSIDE BLVD	103/104	Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-023-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OCEAN CITY BUFFET	518		OCEANSIDE BLVD	108/9/10	Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	152-023-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ROBERTO'S TACO SHOP	518		OCEANSIDE BLVD	111	Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-023-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MC DONALD'S OF OCEANSIDE #16327	1701		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	151-310-19-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	PAPA JOHN'S PIZZA	1710		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	151-011-09-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MARSHA'S DELI	1759		OCEANSIDE BLVD	E	Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	151-310-26-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	PHILLY'S BEST	1771		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	151-310-26-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	STARBUCKS COFFEE #9688	1779		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	151-310-18-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	I HOP RESTAURANT	1806		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	151-010-47-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DA GIORGIO CUCINA ITALIANA	1810		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	151-010-47-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CAFÉ ROSARITA	1816		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	151-010-47-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PIZZA HUT	1840		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-47-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DOMINO'S PIZZA	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-40-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CHOW'S DONUT	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	151-010-40-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KAISEN SUSHI	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	151-010-40-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	P + Q PUB	1910		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	151-010-31-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SUBWAY	1910		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-31-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THAI TABLE	1910		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-31-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	QUICK FIX - ESSPRESSO	1918		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	151-010-30-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ALBERTO'S MEXICAN FOOD	1920		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-30-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	TACO BELL	1940		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-45-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KEN'S DONUGHTS	1950		OCEANSIDE BLVD	C	Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	149-330-27-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DELIA'S MEXICAN FOOD	1950		OCEANSIDE BLVD	R	Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	149-330-27-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	WIENERSCHNITZEL	1960		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	149-330-27-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	RED ROOSTER	1985		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	149-330-14-00		C		Inspected by ECIS		Inspected by ECIS			G	Third Party Inspection
OC	KFC #Y305091	4100		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-502-27-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	JUICE IT UP	4111		OCEANSIDE BLVD	100	Oceanside	CA	92056	Loma Alta	904.1	5811		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	ENZOS' BBQ	4111		OCEANSIDE BLVD	101	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	LA SALSA MEXICAN RESTAURANT	4111		OCEANSIDE BLVD	103	Oceanside	CA	92056	Loma Alta	904.1	5813		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	PANDA EXPRESS	4121		OCEANSIDE BLVD	200	Oceanside	CA	92056	Loma Alta	904.1	5814		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	PASTA BREAK	4121		OCEANSIDE BLVD	201	Oceanside	CA	92056	Loma Alta	904.1	5815		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	GOGO JAPAN	4121		OCEANSIDE BLVD	202	Oceanside	CA	92056	Loma Alta	904.1	5816		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	KNOCKOUT PIZZERIA	4121		OCEANSIDE BLVD	203	Oceanside	CA	92056	Loma Alta	904.1	5817		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	COLSTONE CREAMERY	4121		OCEANSIDE BLVD	204	Oceanside	CA	92056	Loma Alta	904.1	5818		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CHIN'S SZECHWAN-OCEANSIDE	4140		OCEANSIDE BLVD	139	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-502-24-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	SHAKEY'S PIZZA	4141		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5818		Eating/Drinking Establishments											R-High	Not applicable	162-241-35-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	GOLDEN SPOON FROZEN YOGURT	4150		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-502-25-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	MCDONALD'S	4151		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5818		Eating/Drinking Establishments											R-High	Not applicable	162-241-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	KAM BERI	4160		OCEANSIDE BLVD	163	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-502-25-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	SUBWAY'S SANDWICHES	4160		OCEANSIDE BLVD	171	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-502-25-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	LITTLE CEASAR	4170		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-43-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	STARBUCK'S COFFEE #5832	4170		OCEANSIDE BLVD	177	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-43-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	EL BRONCO TACO SHOP OF OCEANSIDE	4171		OCEANSIDE BLVD	105	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-39-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	DONUT HOUSE	4171		OCEANSIDE BLVD	106	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-241-39-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CARLS JR	4176		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-43-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CAFE DE THAI	4186		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-43-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	UPPER CRUST PIZZA	4196		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-43-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	BASKIN ROBBINS/TOGO'S	4201		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-10-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	RUBIO'S FRESH MEXICAN GRILL #063	4201		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-10-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	JACK IN THE BOX #3026	4211		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	ANGELITA FOODS & SPICE	4225		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	BLENDZ FUN FRESH FOOD	4225		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	PAPA JOHN'S PIZZA	4225		OCEANSIDE BLVD	C	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	HAWIIAN BARBECUE	4225		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	OCEANSIDE HB INC	4225		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	HAPPY NOODLE HOUSE	4225		OCEANSIDE BLVD	F	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	JAPANES CAFÉ	4225		OCEANSIDE BLVD	K	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	LE RENDEZ-VOUS FRENCH BAKERY	4225		OCEANSIDE BLVD	Q	Oceanside	CA	92056	Loma Alta	904.1	5461		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	WINGS PIZZA N THINGS	4225		OCEANSIDE BLVD	Y	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	EL ASADOR	4750		OCEANSIDE BLVD	A8	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	K - DONUTS	4750		OCEANSIDE BLVD	A23	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	MR PHO RESTAURANT	4750		OCEANSIDE BLVD	A9	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	THAI GARDEN RESTAURANT	4750		OCEANSIDE BLVD	A21	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	VARAII SUSHI	4750		OCEANSIDE BLVD	A18	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	KID'Z BIZ INC.	4750		OCEANSIDE BLVD	A20	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	TWO BROTHERS FROM ITALY OCEANSIDE	4760		OCEANSIDE BLVD	B4	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	PIER VIEW COFFEE CO	1		OCEANSIDE PIER		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	Unknown		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	RUBY'S DINER	1		OCEANSIDE PIER	A	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	Unknown		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LOVE BOAT SUSHI BAR	125		OLD GROVE ROAD	5	Oceanside	CA	92057	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	158-101-51-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	PICK UP STIX #7223	125		OLD GROVE ROAD	C-2	Oceanside	CA	92057	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	158-101-51-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	POLLOS MARIA #2	125		OLD GROVE ROAD	8	Oceanside	CA	92057	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	158-101-51-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	FRESH O YOUGURT	125		OLD GROVE ROAD	4	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-101-51-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	SUBWAY'S SANDWICHES	125		OLD GROVE ROAD	16	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-101-51-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	STARBUCK'S COFFEE #9349	175		OLD GROVE ROAD		Oceanside	CA	92057	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	158-101-48-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MCDONALD'S	185		OLD GROVE ROAD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-101-47-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	BUCCANEER BEACH CLUB	1508	S	PACIFIC ST		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	153-011-03-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	333 PACIFIC	333	N	PACIFIC STREET		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-075-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HARBOR PELICAN DELI MART	1380	N	PACIFIC STREET		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	Unknown		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PIERVIEW COFFEE CO	300		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	147-088-03-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PIERVIEW PUB	301		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	147-089-11-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BUBBLE TEA	318		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	147-088-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CREPES UP	318		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-088-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	COLINA'S MEXICAN FOOD	404		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-086-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE WHISKEY BARREL	406		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-086-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	STARBUCK'S COFFEE #10314	3702		PLAZA DR	A	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-39-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	WENDY'S RESTAURANT	3705		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-39-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MC DONALD'S / PLAZA DR	3794		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-16-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	SIZZLER RESTAURANT #883 ?	3805		Plaza Dr		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-11-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	JACK IN THE BOX #89	3808		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-18-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	I LOVE PHO	3809		PLAZA DR	115	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-01-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	SUBMARINA	3809		PLAZA DR	110S	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-01-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	TERRI CAFÉ TERIYAKI NOOLDE H0USE	3809		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-01-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	CUSIMANO'S PIZZERIA	3809		PLAZA DR	106	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-01-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	TOP THIS FROZEN YOGURT	3827		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-05-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	CHEF CHIN	3829		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-45-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	TACO BELL	3845		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-10-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	PIZZA HUT #315023	610	N	REDONDO DR	F	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-040-36-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	DJ'S PIZZA	617	N	REDONDO DR		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-040-26-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	LA PERLA TAPATIA	625	N	REDONDO DR		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-040-27-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	ERIBERTO'S MEXICAN FOOD	644	N	REDONDO DR		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-040-37-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CARLITO'S CHICKEN	160		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	160-271-13-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LUK'S KITCHEN	162		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	160-271-13-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ASADA TACOS	405		SAN DIEGO ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-141-22-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PHIL'S PLACE	2949		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	146-050-52-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	EL MUNDO DE MARISCOS	3110		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	146-050-25-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CROQUE FAMOUS SANDWICHES	2600		TEMPLE HEIGHTS DR	A	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	161-470-17-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	DOMINOS PIZZA	2858		THUNDER DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	166-535-16-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	HAUNTED HEAD SALOON	207	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-089-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SURRENDER THE BOOTY	207	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-089-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BURGER KING	207	S	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-350-24-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LA CASA PIZZA	209	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-089-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DAVINA'S CABO GRILL LLC	212	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-087-15-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	TREMONT STREET SPORTS BAR	311	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	147-088-10-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	TO'S MEXICAN RESTAURANT	626	S	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	150-376-07-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MC CABES BEACH CLUB	1145	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	152-015-09-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MARIETA'S MEXICAN RESTAURANT	485		VANDEGRIFT BLVD	2	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-040-29-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	ROBERTO'S TACO SHOP	2983		VIA LAS ROSAS	C	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-02-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	GRANDMA HILLTOP HIDE AWAY CAFÉ	539		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	160-140-13-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	HUNTER STEAKHOUSE 210255	1221		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	155-140-26-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	APPLEBEES NEIGHBORHOOD GRILL & BAR	2146		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-32-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	MIMI'S CAFE	2177		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-37-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	STARBUCK'S COFFEE	2183		VISTA WAY	B1	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	SUBMARINA #24	2183		VISTA WAY	B7	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	BROOKLYN BOYS PIZZA	2183		VISTA WAY	B8	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	LOS TACOS	2183		VISTA WAY	B9	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	EINSTEIN BROS BAGELS #3047	2183		VISTA WAY	B10	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	QUIK WOK	2184		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-31-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	MCDONALD'S	2185		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-35-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	BURGER KING	2325		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-51-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CALIFORNIA YOGURT CO #4	2401		VISTA WAY	E	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-26-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	HANA RESTAURANT	2415		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-46-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	OCEAN THAI CUISINE	2455		VISTA WAY	F	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	STUART ANDERSON'S BLACK ANGUS	2471		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-40-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	JACK IN THE BOX 98	2474		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-240-64-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CHUCK E CHEESE'S	2481		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-44-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	OCEANSIDE STEAKHOUSE	2485		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-38-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	WINGS N THINGS	2525		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-35-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	SUSHI N JOY	2530		VISTA WAY	J	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-240-55-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	SUBWAY	2535		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-35-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	GAME STOP # 1627	2535		VISTA WAY	C	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-35-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CHIPOTLE MEXICAN GRILL	2611		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	QUIZNOS' SUBS	2611		VISTA WAY	B	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	PK 11 EL CAMINO NORTH L.P.	2615		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-09-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	BARNES AND NOBLE BOOKSELLERS INC.	2615		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-09-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	JAMBA JUICE	2617		VISTA WAY	B2	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-09-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	CHILI'S GRILL & BAR	2627		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-23-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	ROMANO'S MACARONI GRILL	2655		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-09-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	RED LOBSTER REST #503	2685		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-28-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	EL TORITO RESTAURANT, INC # 7093	2693		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-19-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	Q RESTAURANT	2725		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-17-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	STARBUCK'S COFFEE #651	3125		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-192-13-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	HOOTERS OF OCEANSIDE	3186		VISTA WAY	100	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-350-39-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CHINA TOWN CHINESE FOOD	3910		VISTA WY	109	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	166-010-45-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	GIANNIS PIZZA	3910		VISTA WY	108	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	166-010-45-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	JOES TACO	3910		VISTA WY	110	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	166-010-45-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	PERKY BEAN	4002		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	166-010-43-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	THE CUP	206		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	150-263-17-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	TIRE CENTERS LLC	4055		CALLE PLATINO		Oceanside	CA	92056	Loma Alta	904.1			Tire Sales and Service											M-Medium	Not applicable	165-503-30-00		C							R	
OC	ACE SMOG	242	S	COAST HWY	B	Oceanside	CA	92054	Loma Alta	904.1	7549		Automotive Services - Emission Testing											M-Medium	Not applicable	150-051-11-00		C							W	
OC	OCEANSIDE TEST ONLY CENTER	1106	S	COAST HWY	B	Oceanside	CA	92054	Loma Alta	904.1	7549	811112	Automotive Services - Emission Testing											M-Medium	Not applicable	152-023-06-00		C	11/25/2008	None	N/A		Yes		W	
OC	COAST PERFORMANCE AND OFFROAD	1707	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5531		Automotive Services - Tires											M-Medium	Not applicable	147-231-06-00		C							G	
OC	AUTOZONE #5661	1040		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5531	441310	Automotive Parts Supply Store											M-Medium	Not applicable	147-231-06-00		C	12/1/2008	Close trash bin lids	12/18/2008	Trash bin lids closed	Yes		W	
OC	KRAGEN AUTO SUPPLY #1329	3661		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5531	441310	Automotive Parts Supply Store											M-Medium	Not applicable	160-291-04-00		C	12/1/2008	Close trash bin lids	12/18/2008	Trash bin lids closed	Yes		W	
OC	AUTOZONE	3975		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Automotive Parts Supply Store											M-Medium	Not applicable	158-080-12-00		C							R	
OC	KRAGEN AUTO SUPPLY #331	502		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5531	441310	Automotive Parts Supply Store											M-Medium	Not applicable	152-023-04-00		C	12/1/2008	Close Trash bin lids	12/18/2008	Trash bin lids closed	Yes		W	
OC	ALL STAR GLASS	1950		OCEANSIDE BLVD	A + B	Oceanside	CA	92054	Loma Alta	904.1	7536	811122	Automobile Glass Replacement Shop											M-Medium	Not applicable	149-330-27-00		C	12/2/2008	None	N/A		Yes		W	
OC	OCEANSIDE AUTO UPHOLSTERY	2024		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	7532	811121	Automotive, Upholstery Repair Shops											M-Medium	Not applicable	149-330-01-00		C	1/28/2009	None	N/A		Yes		W	
OC	CALIFORNIA PACIFIC/JBUGS	2040		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5531	441310	Automotive Parts Supply Store											M-Medium	Not applicable	149-330-01-00		C	10/29/2008	None	N/A		Yes		W	
OC	ALL SMOG TEST ONLY CENTER	2601		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7549		Automotive Services - Emission Testing											M-Medium	Not applicable	149-271-47-00		C	3/25/2009				Yes		G	
OC	WINDSHIELD PROS	2933		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7536		Automobile Glass Replacement Shop											M-Medium	Not applicable	162-031-11-00		C	3/25/2009				Yes		G	
OC	NAPA AUTO PARTS-OCEANSIDE	2954		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5531	441310	Automotive Parts Supply Store											M-Medium	Not applicable	162-030-65-00		C	12/2/2008	Label storm drain inlet	1/21/2009	Storm drain labeled	Yes		W	
OC	HOBIE CAT COMPANY	4925		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5012		RECREATIONAL VEHICLES											M-Medium	Not applicable	161-501-07-00		C							GC	
OC	KRAGEN AUTO PARTS #794	3840		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5531		Automotive Parts Supply Store											M-Medium	Not applicable	168-012-20-00		C	1/12/2009	No second visit needed					GC	
OC	CALIFORNIA SMOG CENTER	3204		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7549	811112	Automotive Services - Emission Testing											M-Medium	Not applicable	160-271-15-00		C	12/2/2008	None	N/A		Yes		W	
OC	AUTO GLASS AMERICA	2949		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7536	811122	Automobile Glass Replacement Shop											M-Medium	Not applicable	146-050-52-00		C	12/2/2008	None	N/A		Yes		W	
OC	DIAZ PAINTLESS DENT REPAIR	3030 1/2		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7232		Automotive Paintless Dent Repair											M-Medium	Not applicable	146-050-33-00		C							W	
OC	CENTRAL FLOOD MANAGEMENT	2604		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	7349		FLOOD MANAGEMENT											M-Medium	Not applicable	161-470-18-00		I	11/6/2008	A second inspection was done	12/29/2008	I met with Robert Gremmels from	No		GC	
OC	CARRILLO DESIGN CENTER	2605		TEMPLE HEIGHTS DR	C	Oceanside	CA	92056	Loma Alta	904.1	3541		MACHINING, METAL CUTTING											M-Medium	Not applicable	161-470-28-00		I	10/2/2008	Needs containment kit.	1/15/2009	I went to the site for a follow up	Yes		GC	
OC	APICAL INDUSTRIES INC	2608		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	3544		HELICOPTER FLOATS											M-Medium	Not applicable	161-470-39-00		I	10/1/2008	Needs stormdrain filters, training	12/10/2008		Yes		GC	
OC	SUMMIT STEEL INC	2608		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	3732		MANUFACTURING , EQUIPMENT											M-Medium	Not applicable	161-470-39-00		I	10/1/2008	No second visit needed			Yes		GC	
OC	STANDARD FLYWHEELS INC	2612		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	3499		AUTOMOTIVE PARTS											M-Medium	Not applicable	161-470-40-00		I	10/9/2008	This business needs traing and	12/31/2008	All items completed and	Yes		GC	
OC	SIERRA SPRINGS WATER	2615		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	5963		DIRECT SELLING ESTABLISHMENT											M-Medium	Not applicable	161-470-09-00		C	10/21/2008	Needs lids on dumster			Yes		GC	
OC	COMPUTER CIRCULATION CNTR INC	2618		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	562920		NON-HAZARDOUS WASTE RECYLING											M-Medium	Not applicable	161-501-15-00		I	12/3/2008	This site needs training	1/5/2009	All items completed and	Yes		GC	
OC	PRECISION CARPENTRY INC	2620		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	1751													M-Medium	Not applicable	161-470-01-00		C	10/20/2008	Close dumpster lids			Yes		GC	
OC	TURNKEY ENGINE SUPPLY	2620		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	3714		AUTO ENGINE ASSEMBLY											M-Medium	Not applicable	161-470-01-00		C	10/20/2008	Site needs training	12/10/2008	All items have been taken care of.	Yes		GC	
OC	PRO SPOT INTERNATIONAL INC	2625		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	5084		MAUNFACTURING, EQUIPMENT											M-Medium	Not applicable	161-470-08-00		I	10/9/2008	All items have been taken care of	1/7/2009		Yes		GC	
OC	AUTO GLASS AMERICA	358		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	7536	811122	Automobile Glass Replacement Shop											M-Medium	Not applicable	146-050-17-00		C	12/2/2008	None	N/A		Yes		W	
OC	NICHOLAS CABINETS	219		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	2434		Manufacturer, Wood Cabinets											M-Medium	Not applicable	146-050-70-00		C							W	
OC	PRECISION AUTO GLASS	444		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	7536	811122	Automobile Glass Replacement Shop											M-Medium	Not applicable	146-050-70-00		C	12/2/2008	None	N/A		Yes		W	
OC	SOUTHCOAST HEATING & AIR	2664		VISTA PACIFIC DR		Oceanside	CA		Loma Alta	904.1	1711		PLUMBING & MECHANICAL											M-Medium	Not applicable	161-660-32-00		C	1/8/2009	After intial inspection site needs	1/29/2008	All items have been taken care of as	Yes		GC	
OC	RALPH'S	3533		CANNON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5411		SUPERMARKET											S-Medium	Not applicable	169-011-37-00		C							GC	
OC	PAPPY'S MARKET	601	N	CLEVELAND ST		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	143-243-04-00		C							W	
OC	AKKA CARIBBEAN MARKET	105	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	147-272-02-00		C							W	
OC	CIRCLE K#2702967	420	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	147-093-09-00		C							W	
OC	COASTAL LIQUOR	432	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5921	424410	Groceries Store											S-Medium	Not applicable	150-204-09-00		C							W	
OC	RED & WHITE SUPERETTE	700	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	143-205-08-00		C							W	
OC	CREAM OF THE CROP	2009	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5411		Groceries Store											S-Medium	Not applicable	155-031-13-00		C							G	
OC	HENRY'S FARMERS MARKET	471		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Groceries Store											S-Medium	Not applicable	157-101-07-00		C							R	
OC	VONS STORE #2360	845		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Groceries Store											S-Medium	Not applicable	161-553-02-00		C							R	
OC	GIANT K MARKET	606		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Grocerie Stores											S-Medium	Not applicable	149-330-23-00		C							W	
OC	AUTLAN MEATS	608		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Grocerie Stores											S-Medium	Not applicable	149-330-22-00		C							W	
OC	FIVE STAR DISC. MRKT & LIQUOR	650		DOUGLAS DR	113-120	Oceanside	CA	92057	San Luis Rey	903.1			Grocerie Stores											S-Medium	Not applicable	157-810-57-00		C							R	
OC	7 - ELEVEN	4625		FRAZEE ROAD		Oceanside	CA	92057	San Luis Rey	903.1			Grocerie Stores											S-Medium	Not applicable	161-781-75-00		C							R	
OC	AMIGO'S RANCHO MERCADO	326	N	HORNE STREET		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	147-231-03-00		C							W	
OC	ALBERTSON'S #6733	3450		MARRON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5411		Groceries Store											S-Medium	Not applicable	168-013-01-00		C							GC	
OC	VALUE PLUS	1527		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	148-260-25-00		C							W	
OC	MISSION TIANGUIS	2027		MISSION AVE	D	Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	148-170-06-00		C							W	
OC	VIVA SUPERMERCADO	2031		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	148-170-06-00		C							W	
OC	7 ELEVEN #25818D	2255		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Grocerie Stores											S-Medium	Not applicable	145-170-14-00		C							W	
OC	Z-MART MARKET	3200		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	160-271-43-00		C							W	
OC	MISSION ASIAN MARKET	3320		MISSION AVE	L	Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	160-271-12-00		C							W	
OC	SEVENDAY MARKET	3365		MISSION AVE	A-B	Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	160-550-13-00		C							W	
OC	MISSION KABAYAN ORIENTAL MARKET	3753		MISSION AVE	121-122	Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceris Store											S-Medium	Not applicable	160-291-11-00		C							W	
OC	MISSION SEAFOOD	3753		MISSION AVE	117	Oceanside	CA	92054	San Luis Rey	903.1	5421	445110	Groceries Store - Seafood											S-Medium	Not applicable	160-291-11-00		C							W	
OC	STATER BROTHERS	3770		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	158-390-15-00		C							W	
OC	MISSION MARKETPLACE	3772		MISSION AVE	135	Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Groceries Store											S-Medium	Not applicable	158-390-14-00		C							W	
OC	MILANO'S LIQUOR	3846		MISSION AVE	A2	Oceanside	CA	92057	San Luis Rey	903.1			Groceries Store											S-Medium	Not applicable	158-052-03-00		C							R	
OC	RODEOS MARKET AND RESTAURANT	3858		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Groceries Store											S-Medium	Not applicable	158-052-02-00		C							R	
OC	LITA'S FISH MARKET	3864		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Groceries Store											S-Medium	Not applicable	158-052-02-00		C							R	
OC	ALBERTSON'S 6767	3925		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Groceries Store											S-Medium	Not applicable	158-052-13-00		C							R	
OC	PRIMO FOOD	606		MORSE ST		Oceanside	CA	92054	Buena Vista	904.2			Groceries Store											S-Medium	Not applicable	153-041-15-00		C							G	
OC	RALPHS GROCER	1702		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Groceries Store											S-Medium	Not applicable	151-011-10-00		C							W	
OC	BONEY'S MARKETPLACE	1820		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Groceries Store											S-Medium	Not applicable	151-010-47-00		C							W	
OC	OLOA SAMOA	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Groceries Store											S-Medium	Not applicable	151-010-40-00		C							W	
OC	SUPER VALUE MARKET	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Groceries Store											S-Medium	Not applicable	151-010-40-00		C							W	
OC	LA GRANJA MARKET	1950		OCEANSIDE BLVD	H	Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Groceries Store											S-Medium	Not applicable	149-330-27-00		C							W	
OC	NORTH COUNTY FRESH POULTRY	2600		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	2015		Poultry Slaughtering & Processing											S-Medium	Not applicable	149-232-10-00		C							W	
OC	A MARKET - MARISCOS & MEXICAN FOOD	2936		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Groceries Store											S-Medium	Not applicable	162-030-50-00		C							W	
OC	ALBERTSON'S #6740	4140		OCEANSIDE BLVD	137	Oceanside	CA	92056	Loma Alta	904.1			Groceries Store											S-Medium	Not applicable	162-502-24-00		C							R	
OC	RALPH'S GROCERY COMPANY #298	4251		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5411		Groceries Store											S-Medium	Not applicable	162-241-22-00		C							GC	
OC	RALPHS #54	101		OLD GROVE ROAD		Oceanside	CA	92057	San Luis Rey	903.1	5411		Groceries Store											S-Medium	Not applicable	158-101-50-00		C							GC	
OC	MIKE'S CHOICE MEATS	1638		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5421		Groceries Store											S-Medium	Not applicable	162-120-86-05		C							GC	
OC	BIG LIQUOR	617	N	REDONDO DR		Oceanside	CA	92057	San Luis Rey	903.1			Groceries Store											S-Medium	Not applicable	157-040-26-00		C							R	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	NOVILLO'S MEAT MARKET	620	N	REDONDO DR	E	Oceanside	CA	92057	San Luis Rey	903.1			Groceries Store											S-Medium	Not applicable	157-040-35-00		C							R	
OC	EL NOPALITO MARKET	410		SAN DIEGO ST		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Grocerie Stores											S-Medium	Not applicable	148-152-26-00		C							W	
OC	EL TORITO MEAT MARKET	422		SAN DIEGO ST		Oceanside	CA	92054	San Luis Rey	903.1	5411	424410	Grocerie Stores											S-Medium	Not applicable	148-152-30-00		C							W	
OC	PRIMO THUNDER MARKET	2810		THUNDER DR		Oceanside	CA	92056	Buena Vista	904.2	5411		Grocerie Stores											S-Medium	Not applicable	166-535-15-00		C					Yes		GC	
OC	7-11 STORE #13615	2850		THUNDER DR		Oceanside	CA	92056	Buena Vista	904.2	5411		Grocerie Stores											S-Medium	Not applicable	166-535-14-00		C							GC	
OC	PACIFIC GROCERY AND RESTAURANT	626	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Groceries Store											S-Medium	Not applicable	150-376-07-00		C							W	
OC	7-ELEVEN #20342C - 2111	487		VANDEGRIFT BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Groceries Store											S-Medium	Not applicable	157-040-28-00		C							R	
OC	RED & WHITE MARKET	510		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5411		Groceries Store											S-Medium	Not applicable	153-273-25-00		C							G	
OC	STATER BROS MARKETS #151	2170		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5411		Groceries Store											S-Medium	Not applicable	154-130-30-00		C							G	
OC	FARMER BOY	2530		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5411		Groceries Store											S-Medium	Not applicable	165-240-67-00		C							G	
OC	TRADER JOE'S #22	2570		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5411		Groceries Store											S-Medium	Not applicable	165-240-56-00		C							G	
OC	WISCONSIN MARKET	202		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Groceries Store											S-Medium	Not applicable	150-263-17-00		C							W	
OC	OCEAN 7 FOOD STORE	205		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	5411	424410	Groceries Store											S-Medium	Not applicable	150-352-12-00		C							W	
OC	500 MOTORS	114	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	147-283-05-00		C							W	
OC	501 MOTORS	205	S	COAST HWY	B	Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	150-045-11-00		C							W	
OC	ANGELO'S KARS	222	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	150-051-05-00		C							W	
OC	WHOLESALE AUTOS	501	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	150-184-09-00		C							W	
OC	HOMETOWN MOTORS INC	502	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	150-203-13-00		C							W	
OC	WHOLESALE AUTOS	515	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	150-184-08-00		C							W	
OC	NORTH COUNTY BMW	601	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5511	441120	Vehicle Dealers											V-Medium	Not applicable	150-376-11-00		C							W	
OC	CONTINENTAL MOTORS	617	S	COAST HWY	A	Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	150-376-04-00		C							W	
OC	101 AUTO SALES	801	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	150-373-07-00		C							W	
OC	500 MOTORS	902	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	150-304-01-00		C							W	
OC	PHAT CITY MOTORS	1009	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	152-011-03-00		C							W	
OC	OLYMPIC AUTO SALES	1111	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	152-014-03-00		C							W	
OC	OCEANSIDE IMPORTS	1426	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	152-200-02-00		C							G	
OC	CERTIFIED AUTO SALES	1520	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	152-200-13-00		C							G	
OC	KARZ PLUS RV	1555	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	153-030-20-00		C							W	
OC	NORTH COUNTY AUTO CONNECTION	515		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5521	441120	Vehicle Dealers											V-Medium	Not applicable	152-193-10-00		C							G	
OC	CRYSTAL CATERING FOOD SERVICE MANAGEMENT	263		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	7361	561311	Personal Supply Services, Temporary Staffing											Z-Low	Not applicable	146-050-56-00		C							W	
OC	TERI CENTER FOR ART & ADULT EDUCATION	305		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	8322	624120	Individual & Family Social Services											Z-Low	Not applicable	146-050-57-00		C							W	
OC	TRANSWORLD MAGAZINES - OUT OF BUSINESS ?	353		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	2741	323110	Miscellaneous Publishing											Z-Low	Not applicable	146-050-85-00		C							W	
OC	AQUA-FILL INC	572		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	1521	333319	Manufacturing, Equipment											Z-Low	Not applicable	146-030-76-00		I							W	
OC	PROCESS COOLING AND HEATING	580		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	1711	238220	Contractor, HACV											Z-Low	Not applicable	146-030-61-00		I							W	
OC	UNIQUE METAL FABRICATION	594		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	3444	331271	Manufacturer, Sheet Metal											Z-Low	Not applicable	146-030-72-00		I							W	
OC	NELGO INDUSTRIES INC	598		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	3444	331271	Manufacturer, Sheet Metal											Z-Low	Not applicable	146-030-73-00		I							W	
OC	PROCAST INC	602		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	3363	331521	Manufacturer, Die Casting											Z-Low	Not applicable	146-030-70-00		C							W	
OC	SILVERADO BARNS INC	622		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	3448	332311	Manufacturing, Prefabricated Metal Building											Z-Low	Not applicable	146-030-67-00		C							W	
OC	FISHEL COMPANY	666		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	1623	237130	Contractor, Underground Utilitites											Z-Low	Not applicable	146-030-18-00		C							W	
OC	J F CASSAN	1032		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											Z-Low	Not applicable	145-020-33-00		C							W	
OC	K-FAB	1040		AIRPORT RD	A	Oceanside	CA	92054	San Luis Rey	903.1	3444	331271	Manufacturer, Sheet Metal											Z-Low	Not applicable	145-030-29-00		C							W	
OC	S & R TOWING	1060		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	7549	488410	Automotive Wrecker/ Towing Service											Z-Low	Not applicable	145-020-33-00		C							W	
OC	GENENTECH INC	1		ANTIBODY WAY		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-571-21-00		C							R	
OC	GUCKENHEIMER	1		ANTIBODY WAY		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-571-21-00		C							R	
OC	CARPETS BY PHILLIPS	4001		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-680-17-09		C							R	
OC	ACADEMIC COMMUNICATION ASSOC, INC	4001		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-680-17-10		C							R	
OC	EVOLUTION SUOTORS CORP	4011		AVENIDA DE LA PLATA	301	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-680-17-10		C							R	
OC	ORIS GROUP CONSULTING INC	4011		AVENIDA DE LA PLATA	302	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-680-17-10		C							R	
OC	NILO TOYS	4011		AVENIDA DE LA PLATA	302	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-680-17-10		C							R	
OC	WISDOMILING.COM INC	4015		AVENIDA DE LA PLATA	401	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-680-17-10		C							R	
OC	ENVIREMEDIAL SERVICES INC	4015		AVENIDA DE LA PLATA	402	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-680-17-10		C							R	
OC	AMERICAN FOOD INGREDIENTS	4021		AVENIDA DE LA PLATA	501	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-680-17-10		C							R	
OC	DTI INTERNATIONAL	4021		AVENIDA DE LA PLATA	502	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-082-17-00		C							R	
OC	ACUSHNET TEST FACILITY	4033		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	165-503-22-00		C							R	
OC	PRESERVED TREESCAPES INTERNATIONAL	4039		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-28-00		C							R	
OC	COMPUTER CIRCULATION CENTER	4040		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-03-00		C							R	
OC	ROCKY'S FOOD DIST INC	4048		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-02-00		C							R	
OC	GENENTECH INC	4049		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	160-571-22-00		C							R	
OC	COX COMMUNICATIONS	4100		AVENIDA DE LA PLATA	A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-01-00		C							R	
OC	MC COMMUNICATIONS INC	4100		AVENIDA DE LA PLATA	B	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-01-00		C							R	
OC	RANCHO DEL ORO LANDSCAPE & MAINT INC	4100		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-01-00		C							R	
OC	ALLEN L IND INC	4112		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-02-00		C							R	
OC	BAY CAL COMMERCIAL PAINTING	4112		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-02-00		C							R	
OC	LANDMARK MFG,INC	4112		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-02-00		C							R	
OC	R & N PROPERTIES	4113		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-09-00		C							R	
OC	SEPRO MEMBRANES INC	4115		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-09-00		C							R	
OC	COASTAL WINE STORAGE	4119		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-45-00		C							R	
OC	JONES BROADBAND INTERNATIONAL INC	4120		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-03-00		C							R	
OC	PROFESSIONAL DEVELOPMENT COURSES	4121		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-46-00		C							R	
OC	FULL CIRCLE MANAGEMENT	4123		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-44-00		C							R	
OC	B & M HARDWARE CO.	4125		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-46-00		C							R	
OC	ELMEC MANUFACTURING	4127		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-43-00		C							R	
OC	DECORATIVE SERVICES	4128		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-04-00		C							R	
OC	OCEANSCIENCE GROUP LTD.	4129		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-48-00		C							R	
OC	APPLIED COMPOSITE SOLUTIONS	4131		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	161-512-09-00		C							R	
OC	SAN DIEGO FUME WORKS COMPANY	4131		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	161-512-09-00		C							R	
OC	US MAILING HOUSE	4133		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-504-02-00		C							R	
OC	LANDMARK MFG INC	4136		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-05-00		C							R	
OC	ROYAL BUSINESS GROUP INC	4139		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-504-05-00		C							R	
OC	CARBON BY DESIGN LP	4141		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-504-06-00		C							R	
OC	SQUARE UP FASHIONS INC	4143		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-504-07-00		C							R	
OC	DUPACO INC	4144		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-504-13-00		C							R	
OC	BDS TACTICAL INC	4149		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-504-10-00		C							R	
OC	CREATURES OF LEISURE	4151		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-504-11-00		C							R	
OC	CALIBER BODYWORKS	4156		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-07-00		C							R	
OC	CALIFORNIA CAREER SCHOOLS	4167		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	GUTH CENTER	4167		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	KHERUBIM INC	4167		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	FOUR YOUNG INC	4167		AVENIDA DE LA PLATA	102	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	LAW OFFICES OF JACK B. FRIEDELL	4167		AVENIDA DE LA PLATA	104	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	ADVANCED EDUCATIONAL STRATEGIES INSTITUTE	4167		AVENIDA DE LA PLATA	106	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	THE RESOURCE CENTER	4167		AVENIDA DE LA PLATA	108	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	SENIOR RESOURCE CENTERS	4167		AVENIDA DE LA PLATA	108	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	RANCHO DEL ORO LANDSCAPE & MAINTENANACE	4167		AVENIDA DE LA PLATA	109	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	EAGLE NEST REALTY & MORTGAGE INC.	4167		AVENIDA DE LA PLATA	110	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	KHERUAIM	4167		AVENIDA DE LA PLATA	111	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	CAROLLO ENGINEERING	4167		AVENIDA DE LA PLATA	114	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	FREE RADICAL TECHNOLOGY	4167		AVENIDA DE LA PLATA	116	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	DLT & V SYSTEMS ENGINEERING INC.	4167		AVENIDA DE LA PLATA	118	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	ADVANCE PERSONNEL SYSTEMS INC	4167		AVENIDA DE LA PLATA	126	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-03-00		C							R	
OC	RUSHING WIND MNINISTRY	4168		AVENIDA DE LA PLATA	101	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-06-00		C							R	
OC	JANI-TECH	4168		AVENIDA DE LA PLATA	103	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-06-00		C							R	
OC	MISSION POWER SOLUTIONS	4168		AVENIDA DE LA PLATA	105	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-06-00		C							R	
OC	DORADO ENTERPRISES	4168		AVENIDA DE LA PLATA	108	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-06-00		C							R	
OC	JEN MAX FOODS	4168		AVENIDA DE LA PLATA	110	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-06-00		C							R	
OC	RECON MOUNTAINER	4168		AVENIDA DE LA PLATA	111	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-06-00		C							R	
OC	IDEADON LLC	4168		AVENIDA DE LA PLATA	111	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-06-00		C							R	
OC	I SPEED	4168		AVENIDA DE LA PLATA	115	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-06-00		C							R	
OC	QC ENTERPRISES INC	4168		AVENIDA DE LA PLATA	116	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-06-00		C							R	
OC	LA PETITE ACADEMY INC. # 7237	4179		AVENIDA DE LA PLATA		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-11-00		C							R	
OC	L.R. DESIGN ASSOCIATES	4183		AVENIDA DE LA PLATA	201	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-501-12-00		C							R	
OC	COX COMMUNICATIONS	1922		AVENIDA DEL ORO		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-11-00		C							R	
OC	GIMMINY KIDS OCEANSIDE	1935		AVENIDA DEL ORO		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-13-00		C							R	
OC	QUANTUM LEARNING NETWORK INC	1938		AVENIDA DEL ORO		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-13-00		C							R	
OC	LEARNING CENTER INTERNATIONAL	1938		AVENIDA DEL ORO		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-13-00		C							R	
OC	TALLY RAND INDUSTRIAL SYSTEMS INC.	1945		AVENIDA DEL ORO	126	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-12-00		C							R	
OC	MATRIX MEMBRANES INC	1945		AVENIDA DEL ORO	128	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-12-00		C							R	
OC	KACOR INC.	1949		AVENIDA DEL ORO	102	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-12-00		C							R	
OC	CONSUMER CREDIT COUNSELING SERVICES	1949		AVENIDA DEL ORO	104-108	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-12-00		C							R	
OC	ARBOR E & T INC.	1949		AVENIDA DEL ORO	106	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-12-00		C							R	
OC	HARDWARE SPECILATY COMPANY INC.	1951		AVENIDA PLAZA REAL		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-502-38-00		C							R	
OC	CALIFORNIA CREATIVE FOODS INC	649		BENET RD		Oceanside	CA	92054	San Luis Rey	903.1	2032	311421	Manufacturing/Salsa Canning											Z-Low	Not applicable	145-030-47-00		C							W	
OC	PRECISION LABEL INC	659		BENET RD		Oceanside	CA	92054	San Luis Rey	903.1	2759	322222	Manufacturing, Labeling Services											Z-Low	Not applicable	145-030-48-00		C							W	
OC	DALE'S LIQUOR	105		BROOKS STREET		Oceanside	CA	92054	San Luis Rey	903.1	5921	445310	Liquor Store											Z-Low	Not applicable	148-340-24-00		C							W	
OC	D.C.'S ACROSS THE STREET	107		BROOKS STREET		Oceanside	CA	92054	San Luis Rey	903.1	5813	722410	Drinking Establishments											Z-Low	Not applicable	148-340-24-00		C							W	
OC	U.S. POST OFFICE	211		BROOKS STREET		Oceanside	CA	92054	San Luis Rey	903.1	8999	491110	Postal Services											Z-Low	Not applicable	148-340-28-00		C							W	
OC	PASSPORT PHOTOS PLUS	223		BROOKS STREET		Oceanside	CA	92054	San Luis Rey	903.1	7221	541922	Photographic Services											Z-Low	Not applicable	148-340-26-00		C							W	
OC	UNDERWATER SCHOOLS OF AMERICA	225		BROOKS STREET		Oceanside	CA	92054	San Luis Rey	903.1	8299		Miscellaneous Schools											Z-Low	Not applicable	148-340-26-00		C							W	
OC	SAN DIEGO AUTO AUCTION INC	4691		CALLE JOVEN		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable	157-060-45-00		C							R	
OC	EAST BAY ATTENTION TO DETAIL INC	4691		CALLE JOVEN		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable	157-060-45-00		C							R	
OC	ESSENCE OF FOOD	4691		CALLE JOVEN		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable	157-060-45-00		C							R	
OC	DIRECT MOULDING	4039		CALLE PLATINO	A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-31-00		C							R	
OC	INDIGO LABS INC	4039		CALLE PLATINO	C	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-31-00		C							R	
OC	SO CAL ATHLETICS	4039		CALLE PLATINO	D	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-31-00		C							R	
OC	THE KINKO COMPANY	4039		CALLE PLATINO	E	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-31-00		C							R	
OC	AMFLEX PLASTICS INC	4039		CALLE PLATINO	G	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-31-00		C							R	
OC	BRIXTON	4040		CALLE PLATINO	102	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-32-00		C							R	
OC	FRIENDS AMERICA INC	4040		CALLE PLATINO	105	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-32-00		C							R	
OC	O C RIPTIDES INC	4040		CALLE PLATINO	108	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-32-00		C								
OC	KITCHEN GENIOS	4040		CALLE PLATINO	110	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-32-00		C							R	
OC	NORTH COAST MOTORSPORTS	4040		CALLE PLATINO	111	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-32-00		C							R	
OC	SAN JUAN SPECIALTY WOOD PRODUCTS	4040		CALLE PLATINO	112	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-32-00		C							R	
OC	AUDIO VIDEO BUSINESS RESOURCES	4040		CALLE PLATINO	114	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-32-00		C							R	
OC	CITY ELECTRIC SUPPLY	4040		CALLE PLATINO	116	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-32-00		C							R	
OC	OCEANSIDE CROSSFIT	4040		CALLE PLATINO	120	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-32-00		C							R	
OC	CJ PRODUCTS	4040		CALLE PLATINO	124	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-32-00		C							R	
OC	PUMBMASTER INC.	4056		CALLE PLATINO		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-33-00		C							R	
OC	TV SHOW PRODUCTIONS INC	4056		CALLE PLATINO	102	Oceanside	CA	92056	Loma Alta	904.1	7812		VIDEO TAPE PRODUCTIONS											Z-Low	Not applicable	162-503-33-00		C							R	
OC	CAL-MIL PLASTIC PRODUCTS, INC	4079		CALLE PLATINO		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable	162-503-34-00		C							R	
OC	WALGREENS	3507		CANNON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5912		DRUG STORE											Z-Low	Not applicable	169-011-47-00		C							GC	
OC	MONTESSORI SCHOOL OF O'SIDE	3525		CANNON RD		Oceanside	CA	92056	Agua Hedionda	904.3			School											Z-Low	Not applicable	169-011-38-00		C							GC	
OC	CHIROPRACTIC	3529		CANNON RD	2E	Oceanside	CA	92056	Agua Hedionda	904.3	8041		CHIROPRACTIC OFFICE											Z-Low	Not applicable	169-011-37-00		C							GC	
OC	DAVINA'S NAILS	3529		CANNON RD	2A	Oceanside	CA	92056	Agua Hedionda	904.3	7231		BEAUTICIANS											Z-Low	Not applicable	169-011-37-00		C							GC	
OC	DENTIST 2000	3529		CANNON RD	2G	Oceanside	CA	92056	Agua Hedionda	904.3	8049		DENTIST											Z-Low	Not applicable	169-011-37-00		C							GC	
OC	POSTAL ANNEX	3529		CANNON RD	2B	Oceanside	CA	92056	Agua Hedionda	904.3	4311		POSTAL SERVICES											Z-Low	Not applicable	169-011-37-00		C							GC	
OC	THE PERFECT CUT	3529		CANNON RD		Oceanside	CA	92056	Agua Hedionda	904.3	7231		HAIRDRESSERS											Z-Low	Not applicable	169-011-37-00		C							GC	
OC	DAYS INN	1501		CARMELO DRIVE		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels, Motels											Z-Low	Not applicable	143-060-37-00		C							W	
OC	OCEANSIDE CONSTRUCTION CO	512		CIVIC CENTER DR		Oceanside	CA	92054	San Luis Rey	903.1	1521		General Contractor, Residential Buildings											Z-Low	Not applicable	147-093-06-00		C							W	
OC	ST CLAIRE PROPERTIES	702		CIVIC CENTER DR	3C	Oceanside	CA	92054	San Luis Rey	903.1	6531		Real Estate Agents, Brokers, Managers											Z-Low	Not applicable	147-103-12-00		C							W	
OC	PIERVIEW MARKET AND LIQUOR	218	N	CLEVELAND ST		Oceanside	CA	92054	San Luis Rey	903.1	5921		Liquor Store											Z-Low	Not applicable	147-089-09-00		C							W	
OC	TALK OF THE TOWN SALON	306	N	CLEVELAND ST		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable	147-088-12-00		C							W	
OC	BRYANT & DWYER SIGN SERVICE	406	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	3993		Manufacturing, Sign and Avertising Specialities											Z-Low	Not applicable	150-182-01-00		C							W	
OC	NORTH COUNTY PRINTERS & SIGNS	406	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	3993		Manufacturing, Sign and Avertising Specialities											Z-Low	Not applicable	150-182-01-00		C							W	
OC	KADDYMART	629	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	5088		Repair - Electric Golf Carts											Z-Low	Not applicable	150-378-05-00		C							W	
OC	OCEANSIDE BOARD OUTLET	1023	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	3949		Manufacturer, Surfboards											Z-Low	Not applicable	152-013-05-00		C							W	
OC	LINDEN SURFBOARDS	1027	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	3949		Manufacturer, Surfboards											Z-Low	Not applicable	152-013-05-00		C							W	
OC	SPECTRUM VIDEO INC	1043	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	3699		Miscellaneous, Commercial Machinery											Z-Low	Not applicable	152-013-13-00		C							W	
OC	PRIME CO PAINTING, INC	1119	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	1721		Contractor, Painting											Z-Low	Not applicable	152-016-04-00		C							W	
OC	CHECK MATE	101	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	6141		Personal Loans											Z-Low	Not applicable	147-272-01-00		C							W	
OC	QUICK CORNER DELI AND LIQUOR	102	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5921		Liquor Store											Z-Low	Not applicable	147-284-06-00		C							W	
OC	500 MOTORS	102	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5521		Vehicle Dealers											Z-Low	Not applicable	147-283-08-00		C							W	
OC	HILL STREET LOCK & KEY	109	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7699		Repair Shop, Locksmith Service											Z-Low	Not applicable	147-272-03-00		C							W	
OC	YARD RECORDS	111	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Stores, Music/CD's											Z-Low	Not applicable	147-272-04-00		C							W	
OC	RAXXX	117	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable	147-272-05-00		C							W	
OC	BOREE & THILL LLC D.B.P.P	125	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	6512		Operator of Non Residential Building											Z-Low	Not applicable			C							W	
OC	KINGSMEN CLEANERS	126	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7212		Laundry, Dry Cleaners and Garment Services											Z-Low	Not applicable	147-284-07-00		C							W	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	GLOBAL TACTICAL SOLUTIONS	127	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5999		Retail Sales, Military Gear Products											Z-Low	Not applicable	147-272-07-00		C							W	
OC	DOLPHIN HOTEL	133	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels, Motels											Z-Low	Not applicable	147-272-08-00		C							W	
OC	T-SHIRT MART	201	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5699		Miscellaneous Retail, T-Shirts											Z-Low	Not applicable	147-087-13-00		C							W	
OC	JOHNSON SPORTING GOODS	202	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5941		Miscellaneous Retail, Sporting goods											Z-Low	Not applicable	147-097-05-00		C							W	
OC	MILLENIUM ELECTRONICS	204	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5734		Equipment Stores, Computer/Electronics											Z-Low	Not applicable	147-097-06-00		C							W	
OC	COAST HWY DRYCLEANERS	208	N	COAST HWY		Oceanside	CA	92055	San Luis Rey	904.1	7231		Drycleaners											Z-Low	Not applicable	147-097-07-00		C							W	
OC	INNER WORLD	209	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5947		Miscellaneous Retail, Gifts, Novelty & Souvenir											Z-Low	Not applicable	147-087-04-00		C							W	
OC	VINE TO GLASS	210	N	COAST HWY	A	Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail, Wine Sales											Z-Low	Not applicable	147-097-07-00		C							W	
OC	DELUXE BARBERSHOP	210	N	COAST HWY	B	Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shops											Z-Low	Not applicable	147-097-07-00		C							W	
OC	IDEAL COMMUNICATIONS	212	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5734		Equipment Stores, Computer/Electronics											Z-Low	Not applicable	147-097-07-00		C							W	
OC	VA HOME LOAN CENTER	213	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	6162		Mortage Banks and Loan Correpondents											Z-Low	Not applicable	147-087-16-00		C							W	
OC	FIGHT GEAR	214	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail, Fight Gear											Z-Low	Not applicable	147-097-07-00		C							W	
OC	SKIRT ESSENTIAL BOUTIQUE	216	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5621		Retail Sales, Women's Clothing											Z-Low	Not applicable	147-097-07-00		C							W	
OC	SUNSHIRE BROOKS THEATER	217	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7922		Theatrical Productions, Community Theate											Z-Low	Not applicable	147-087-14-00		C							W	
OC	OCEANSIDE MUSEUM OF ART SCHOOL	219	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	8299		School and Educational Services Not Elsewere											Z-Low	Not applicable	147-087-14-00		C							W	
OC	CIGAR GROTTO	220	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5993		Miscellaneous Retail, Tobacco Sales											Z-Low	Not applicable	147-097-08-00		C							W	
OC	JEWLERY BUY AND SELL	222	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5944		Retail Sales, Jewelry Stores											Z-Low	Not applicable	147-097-08-00		C							W	
OC	CALIFORNIA SURF MUSEAUM	223	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	8412		Museum and Art Galeries											Z-Low	Not applicable	147-087-14-00		C							W	
OC	JAMAICA ME TAN	224	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	904.1	7299		Miscellaneous Personal Services, Tanning Salon											Z-Low	Not applicable	147-097-08-00		C							W	
OC	OCEANSIDE MUSIC SUPPLY	228	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5736		Retail Store, Musical Instruments											Z-Low	Not applicable	150-051-07-00		C							W	
OC	AA&B INSURANCE	234	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	6411		Insurance Agents											Z-Low	Not applicable	150-051-09-00		C							W	
OC	OEX OCEANSIDE	236	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5941		Miscellaneous Retail, Kayaks											Z-Low	Not applicable	150-051-10-00		C							W	
OC	FREEDOM E;ECTRONICS	263	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5731		Retail Sales, Electronics											Z-Low	Not applicable	150-045-12-00		C							W	
OC	H & M SUPPLIES	301	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5699		Miscellaneous Retail, Apparel - Military											Z-Low	Not applicable	147-086-03-00		C							W	
OC	PRO CUSTOM	303	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5731		Retail Sales, Automobile Audio and Wheels											Z-Low	Not applicable	150-047-11-00		C							W	
OC	COTTON PATCH	307	N	COAST HWY	A	Oceanside	CA	92054	San Luis Rey	903.1	5947		Miscellaneous Retails, Gifts, Novelties,											Z-Low	Not applicable	147-086-02-00		C							W	
OC	JEAN'S GIFTS GALORE	307	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5947		Miscellaneous Retails, Gifts, Novelties,											Z-Low	Not applicable	147-086-02-00		C							W	
OC	DIGITAL SOUND	307	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5731		Retail Sales, Automobile Audio and Wheels											Z-Low	Not applicable	147-086-02-00		C							W	
OC	MASSAGE WORLD	310	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7299		Miscellaneous Personal Services, Massage											Z-Low	Not applicable	150-054-03-00		C							W	
OC	2ND HAND BARGAIN HOUSE	322	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5932		Used Merchandise Store											Z-Low	Not applicable	150-054-19-00		C							W	
OC	OCEANSIDE SALES AND RENTALS	323	N	COAST HWY	A	Oceanside	CA	92054	San Luis Rey	903.1	6531		Real Estate Agents, Brokers, Managers											Z-Low	Not applicable	147-086-01-00		C							W	
OC	WINCHESTER FUNDING GROUP	323	N	COAST HWY	C	Oceanside	CA	92054	San Luis Rey	903.1	6162		Mortage Banks and Loan Correpondents											Z-Low	Not applicable	147-086-01-00		C							W	
OC	COAST HIGHWAY BARBERSHOP	323	N	COAST HWY	D	Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shops											Z-Low	Not applicable	147-086-01-00		C							W	
OC	THE LEGAL CENTER	323	N	COAST HWY	E	Oceanside	CA	92054	San Luis Rey	903.1	8111		Legal Services											Z-Low	Not applicable	147-086-01-00		C							W	
OC	OMNI LOANS	325	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	6163		Loan Agents											Z-Low	Not applicable	150-047-05-00		C							W	
OC	FASHION IDENTITY	401	N	COAST HWY	101	Oceanside	CA	92054	San Luis Rey	903.1	5621		Women's Clothing Store											Z-Low	Not applicable	147-082-17-00		C							W	
OC	STAR THEATER	402	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7922		Theatrical Productions, Community Theate											Z-Low	Not applicable	147-093-07-00		C							W	
OC	JOE'S CREDIT FUNITURE	404	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5712		Furniture Store											Z-Low	Not applicable	147-093-07-00		C							W	
OC	GOOD WILL VOCATIONAL TRAINING CENTER	414	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	8331		Job Training and Vocational Rehabilatior											Z-Low	Not applicable	147-093-08-00		C							W	
OC	GOLDEN DAY SPA	417	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	PROPERTY ADVANTAGE	419	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	6531		Real Estate Management											Z-Low	Not applicable			C							W	
OC	QUANTICO ARMS - TACTICAL SUPER STORE	420	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5699		Apparel and accessory Store											Z-Low	Not applicable			C							W	
OC	LEADING EDGE INDSURANCE	421	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	6411		Insurance Agents											Z-Low	Not applicable			C							W	
OC	PEOPLE'S CHECK CASHING	421	S	COAST HWY	A	Oceanside	CA	92054	Loma Alta	904.1	6141		Personal Loans											Z-Low	Not applicable			C							W	
OC	ABOUT FACE	423	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7299		Miscellaneous Personal Services											Z-Low	Not applicable			C							W	
OC	AUDIO LAND	424	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5731		Retail Sales, Automobile Audio and Wheels											Z-Low	Not applicable			C							W	
OC	LABOR READY	425	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7361		Employment agency											Z-Low	Not applicable			C							W	
OC	COASTAL MARKET AND LIQUOR	426	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5921		Liquor Store											Z-Low	Not applicable			C							W	
OC	CASINO DEALER SCHOOL	427	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	8299		School and Educational Services Not Elsewere											Z-Low	Not applicable			C							W	
OC	DIAMONDS' HAIR SALON	429	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	OCEANSIDE BOARD SHOP	431	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7999		Miscellaneous Amusement And Recreation											Z-Low	Not applicable			C							W	
OC	OCEAN BREEZE FLOWERS	507	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5992		Florists											Z-Low	Not applicable			C							W	
OC	BLUE PACIFIC REALTY	509	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	6531		Real Estate Agents, Brokers, Managers											Z-Low	Not applicable			C							W	
OC	KINDRED JOURNEYS	510	N	COAST HWY	A	Oceanside	CA	92054	San Luis Rey	903.1	4724		Travel Agency											Z-Low	Not applicable			C							W	
OC	LIFE ENHANCEMENT FAMILY CHIROPRACTIC	510	N	COAST HWY	B-C	Oceanside	CA	92054	San Luis Rey	903.1	8041		Office and Clinic of Chiropractor											Z-Low	Not applicable			C							W	
OC	MALINDA ORIGINAL'S INC.	514	N	COAST HWY	BB-C	Oceanside	CA	92054	San Luis Rey	903.1	5137		Wholesale - Children's Clothing											Z-Low	Not applicable			C							W	
OC	RESULTS ONE ON ONE FITNESS STUDIO	514	N	COAST HWY	D-E	Oceanside	CA	92054	San Luis Rey	903.1	7991		Physical Fitness Facility											Z-Low	Not applicable			C							W	
OC	HAIR STUDIO	514	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	THE POD ROOM	514	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5999		Miscellaneous Stores, Not Elsewhere Classified											Z-Low	Not applicable			C							W	
OC	JACQUES COMPANY REAL ESTATE	520	N	COAST HWY	A-B	Oceanside	CA	92054	San Luis Rey	903.1	6531		Real Estate Agents, Brokers, Managers											Z-Low	Not applicable			C							W	
OC	BROOKE INSURANCE	520	N	COAST HWY	B-C	Oceanside	CA	92054	San Luis Rey	903.1	6411		Insurance Agents											Z-Low	Not applicable			C							W	
OC	ONE LILY INC	520	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7379		Computer Business Services - Website Design											Z-Low	Not applicable			C							W	
OC	JASON GREENWAY INSURANCE AGENCY	520	N	COAST HWY	103	Oceanside	CA	92054	San Luis Rey	903.1	6411		Insurance Agents											Z-Low	Not applicable			C							W	
OC	K-FIVE	525	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5941		Sporting Goods Shop											Z-Low	Not applicable			C							W	
OC	GARDNER'S BARGAIN CENTER	528	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5932		Furniture Store, Secondhand Retail											Z-Low	Not applicable			C							W	
OC	SWIV TACKLE CIRCUS	530	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7999		Miscellaneous Amusement And Recreation											Z-Low	Not applicable			C							W	
OC	OCEANSIDE MORTUARY	602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7261		Funeral Service and Crematories											Z-Low	Not applicable			C							W	
OC	TAILS A WAGGIN	612	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	904.1	5999		Pet Shops, Retail											Z-Low	Not applicable			C							W	
OC	MISSION URGENT CARE	616	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	8011		Offices and Clinics of Physicians											Z-Low	Not applicable			C							W	
OC	OCEANSIDE PSYCHIC EYE	618	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	8999		Services, Not Elsewhere Classified											Z-Low	Not applicable			C							W	
OC	HARBOR LIQUOR	707	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	904.1	5921		Liquor Store											Z-Low	Not applicable			C							W	
OC	U-HAUL CENTER OF OCEANSIDE	802	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7513		Truck Rental/ and Storage											Z-Low	Not applicable			C							W	
OC	ALAN'S BIKE SHOP	805	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5941		Bicycle Shop											Z-Low	Not applicable			C							W	
OC	GARDNER'S SLEEP CENTER	815	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5712		Retail Sales, Furniture											Z-Low	Not applicable			C							W	
OC	CDS SECURITY SOLUTIONS	820	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	1799		Special Trade Contractor, Security Systems											Z-Low	Not applicable			C							W	
OC	MOTEL 9	822	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels, Motels											Z-Low	Not applicable			C							W	
OC	GOLDEN'S TELEVISION - SALES AND SERVICE	835	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5731		Radio, Television, Consumer Electronics Store											Z-Low	Not applicable			C							W	
OC	UNION BANK OF CALIFORNIA	840	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	6021		National commercial Bank											Z-Low	Not applicable			C							W	
OC	FRED ASTAIRE	845	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7911		Dance Studio											Z-Low	Not applicable			C							W	
OC	ACD ADVANCE COLOR COATING	865	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5713		Retail Sales, Floor Covering Stores											Z-Low	Not applicable			C							W	
OC	ENTERPRISE RENT-A-CAR COMPANY OF LA	875	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7514		Passenger Car Rental											Z-Low	Not applicable			C							W	
OC	PACIFIC INN	901	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels, Motels											Z-Low	Not applicable			C							W	
OC	MIKE'S LIQUOR	907	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5921		Liquor Store											Z-Low	Not applicable			C							W	
OC	MOTEL 6	909	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels, Motels											Z-Low	Not applicable			C							W	
OC	JES TAXES	909	S	COAST HWY	A	Oceanside	CA	92054	Loma Alta	904.1	7291		Tax Preparation											Z-Low	Not applicable			C							W	
OC	VICKIE'S ATTIC	909	S	COAST HWY	B	Oceanside	CA	92054	Loma Alta	904.1	5621		Retail Sales - Women's Clothing											Z-Low	Not applicable			C							W	
OC	AAA - GOLD AND DIAMONDS	909	S	COAST HWY	C	Oceanside	CA	92054	Loma Alta	904.1	5944		Jewlery Store											Z-Low	Not applicable			C							W	
OC	TAILOR SHOP	913	S	COAST HWY	C	Oceanside	CA	92054	Loma Alta	904.1	7219		Garment Services, Tailor Shop											Z-Low	Not applicable			C							W	

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Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	LA QUINTA INN	917	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels, Motels											Z-Low	Not applicable			C							W	
OC	JORDAN'S UPHOLTERY	917	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7641		Reupholstery and Furniture Repai											Z-Low	Not applicable			C							W	
OC	COAST INN	921	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels, Motels											Z-Low	Not applicable			C							W	
OC	GATEWAY INSURANCE	923	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	6411		Insurance Agents											Z-Low	Not applicable			C							W	
OC	CALIFORNIA VISITOR'S CENTER	928	N	COAST HWY	A	Oceanside	CA	92054	San Luis Rey	903.1	8999		Miscellaneous Services											Z-Low	Not applicable			C							W	
OC	OCEANSIDE CHAMBER OF COMMERCE	928	N	COAST HWY	B	Oceanside	CA	92054	San Luis Rey	903.1	8611		Business Association											Z-Low	Not applicable			C							W	
OC	ST ANN CHURCH	1002	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	8661		Religious Organizations											Z-Low	Not applicable			C							W	
OC	SURFZONE SURF SHOP	1009	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5941		Sporting Goods Shop											Z-Low	Not applicable			C							W	
OC	SHEILA BRYANT-TUCKER	1012	S	COAST HWY	A	Oceanside	CA	92054	Loma Alta	904.1	8111		Legal Services											Z-Low	Not applicable			C							W	
OC	CARPETS ETC	1012	S	COAST HWY	B	Oceanside	CA	92054	Loma Alta	904.1	5713		Carpet, Stores, Retail											Z-Low	Not applicable			C							W	
OC	DR. TOMMY GRINDY	1012	S	COAST HWY	C	Oceanside	CA	92054	Loma Alta	904.1	8011		Offices and Clinics of Physicians											Z-Low	Not applicable			C							W	
OC	REALTY MASTERS/CUSTOM PROPERTY BROKERS	1012	S	COAST HWY	D	Oceanside	CA	92054	Loma Alta	904.1	6531		Real Estate Agents, Brokers, Managers											Z-Low	Not applicable			C							W	
OC	NORTH COUNTY VACUMNS AND MORE	1012	S	COAST HWY	E	Oceanside	CA	92054	Loma Alta	904.1	5722		Vacuum Cleaners Stores, Retail											Z-Low	Not applicable			C							W	
OC	WILLIAM C. SIGRIT CPA	1012	S	COAST HWY	F	Oceanside	CA	92054	Loma Alta	904.1	8721		Accounting Services											Z-Low	Not applicable			C							W	
OC	JAMES MILLER CPA	1012	S	COAST HWY	G	Oceanside	CA	92054	Loma Alta	904.1	8721		Accounting Services											Z-Low	Not applicable			C							W	
OC	FIRE SAFETY SERVICES	1012	S	COAST HWY	H	Oceanside	CA	92054	Loma Alta	904.1	7389		Fire Extinguishers, Services											Z-Low	Not applicable			C							W	
OC	HUDGINS CHIROPRACTIC	1012	S	COAST HWY	I	Oceanside	CA	92054	Loma Alta	904.1	8041		Office of Chiropractor											Z-Low	Not applicable			C							W	
OC	J TEKKER INSURANCE	1012	S	COAST HWY	J	Oceanside	CA	92054	Loma Alta	904.1	6411		Insurance Agents											Z-Low	Not applicable			C							W	
OC	CERRUDO SERVICES	1012	S	COAST HWY	K	Oceanside	CA	92054	Loma Alta	904.1	1542		Contractor, General, Non Residential											Z-Low	Not applicable			C							W	
OC	WESTURF LANDSCAPE	1012	S	COAST HWY	L	Oceanside	CA	92054	Loma Alta	904.1	782		Contractor, Lanscape											Z-Low	Not applicable			C							W	
OC	N PERLA	1012	S	COAST HWY	M	Oceanside	CA	92054	Loma Alta	904.1	7361		Employment Services											Z-Low	Not applicable			C							W	
OC	BILL RIFE	1012	S	COAST HWY	N	Oceanside	CA	92054	Loma Alta	904.1	8811		Private Household, Maintenance and Repairs											Z-Low	Not applicable			C							W	
OC	DESCANO LTD FUNDING	1017	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	6163		Loan Brokers											Z-Low	Not applicable			C							W	
OC	CALIFORNIA REALTY NETWOOK	1019	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	6531		Real Estate Agents, Brokers, Managers											Z-Low	Not applicable			C							W	
OC	THE DELIO	1019	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5941		Retail											Z-Low	Not applicable			C							W	
OC	PUPPYS AND KITTENS	1021	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5999		Pet Shops, Retail											Z-Low	Not applicable			C							W	
OC	POTPOURRI	1024	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5932		Secondhand, Furniture, Clothing Storc											Z-Low	Not applicable			C							W	
OC	STAIN GLASS	1025	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	3211		Glass Colored, Stained Retail Sales											Z-Low	Not applicable			C							W	
OC	REAL SURF	1101	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5941		Sporting Goods, Apparel Store											Z-Low	Not applicable			C							W	
OC	GUESTHOUSE INN	1103	N	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7011		Hotels, Motels											Z-Low	Not applicable			C							W	
OC	GREMMIE SIDEWALK SURFER	1105	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5999		Miscellaneous Retail -Custom Skateboards											Z-Low	Not applicable			C							W	
OC	SOUND SOLUTION AUTO STYLING	1106	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5013		Retail Auto Stereo and Wheels											Z-Low	Not applicable			C								
OC	REMODEL SOLUTIONS	1107	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	1521		Contractor, Building and Landscaping											Z-Low	Not applicable			C							W	
OC	BASKIN ROBBINS - 31 FLAVORS ICE CREAM	1112	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5451		Dairy products											Z-Low	Not applicable			C							W	
OC	LAUNDROMAT	1118	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7215		Coin operated Laundry and Dry Cleaners											Z-Low	Not applicable			C							W	
OC	NEW CREATIONS CHILD CARE	1122	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	8351		Child Day Care Services											Z-Low	Not applicable			C							W	
OC	THE HAIR AFFAIR	1124	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	NAIL AFFAIR	1126	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	RITE AID	1201	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5912		Drug Stores											Z-Low	Not applicable			C							G	
OC	AUTO SOUND & IMAGE	1220	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5941		Retail											Z-Low	Not applicable			C							G	
OC	BODY PIERCING BY TRACY	1319	S	COAST HWY	A	Oceanside	CA	92054	Loma Alta	904.1	7299		Miscellaneous Personal Services											Z-Low	Not applicable			C							G	
OC	HYDROWBREW	1319	S	COAST HWY	B/C	Oceanside	CA	92054	Loma Alta	904.1	5999		Miscellaneous Retail - Beer making Supplies											Z-Low	Not applicable			C							G	
OC	ACE WELDING	1325	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7692		Miscellaneous Repair Services - Welding											Z-Low	Not applicable			C							G	
OC	TRAVEL LODGE	1401	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels and motels											Z-Low	Not applicable			C							W	
OC	SURF BOWL	1401	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7933		Bowling Center											Z-Low	Not applicable			C							G	
OC	ECLIPSE APPAREL MANUFACTURING	1403	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	2331		Manufacturing - Women's Apparel											Z-Low	Not applicable			C							G	
OC	DICKIE WALKER MARINE	1405	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5551		Wholesale - Apparel											Z-Low	Not applicable			C							G	
OC	ISLANDS SPA	1409	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	GOLDEN STATE PAINT BALL AND AIRSOFT	1411	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Store - Supplies &											Z-Low	Not applicable			C							W	
OC	ANGLER TACKLE	1413	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5941		Sporting Goods Shop - Fishing Tackle											Z-Low	Not applicable			C							W	
OC	SAN DIEGO HOME FINDING CENTER	1415	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	6531		Real Estate Agents, Brokers, Managers											Z-Low	Not applicable			C							W	
OC	UP SPORTS	1421	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5941		Sporting Goods Shop, Watersports											Z-Low	Not applicable			C							W	
OC	SECURITY PUBLIC STORAGE	1501	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	8999		Miscellanous Services - Storage											Z-Low	Not applicable			C							G	
OC	FIDDLIN GREEN YACHT YARD	1517	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1			Miscellaneous Services - Boat Storage											Z-Low	Not applicable			C							G	
OC	SUNSET MARINE	1517	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5551		Miscellaneous Retail - Marine Supplies											Z-Low	Not applicable			C							G	
OC	OCEANSIDE PRO TOWING INC	1521	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7549		Miscellaneous Services - Towing											Z-Low	Not applicable			C							G	
OC	PARADISE BY THE SEA	1537	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OCEANSIDE COLLEGE OF BEAUTY	1575	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	HILLTOP MOTEL	1607	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	DUSTY'S GUITAR	1609	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	KUNG FU SAN DOO	1611	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	DAV INDUSTRIES	1624	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	LIQUOR PLUS	1629	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	D'CAPELLI SALON	1704	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	DR. OCEANSIDE	1709	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ANTIQUES COLLECTOR'S MART	1714	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	STATE SALE WAREHOUSE	1715	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TLC ANTIQUES, JEWELS, UNIQUE GIFTS	1719	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	NORTH COUNTY TIMES	1722	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ARIEL'S DANCE STUDIO	1743	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	AFS TAX, REALESTATE	1817	S	COAST HWY	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	QUICK BAIL BOND	1817	S	COAST HWY	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	OCEANSIDE INN	1820	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	THE FRAME HOUSE	1824	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SNOWWHITE LAUNDRY	1826	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	WAGS LIQUOR	1827	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SOUTH COAST SCOOTERS	1828	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	H & R BLOCK TAX SERVICES	1829	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DESIGN NAIL AND SPA	1833	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	P C H SPORTS BAR & GRILL	1835	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TREASURE ON THE COAST	1836	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	GOLD COAST FUTON	1837	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	COAST COMPOUNDING PHARMACY	1838	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TNT HAIR DESIGN	1839	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	HAIR QUEST BEAUTY SHOP AND SUPPLIES	1840	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	COIN UP LAUNDRY	1902	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BEACH CLUB	1903	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TWO DOLLAR CLEANER	1904	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	

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Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	SURFRIDE SURF SHOP	1909	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	JOHNSTON'S INTERIORS	1916	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PARRA ACCOUNTING	1918	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	RELIANT SENIOR CARE	1920	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	OCEANSIDE FLORIST INC.	1921	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SIMPLICITY JEWELERS AND CRYSTAL ZONE	1922	S	COAST HWY	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	WAVE WEAPONS SURF SHOP	1922	S	COAST HWY	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	WESTTURF LANDSCAPE MAINTENANCE	1930	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	NEW WAVE ELECTRIC INC	1930	S	COAST HWY	102	Oceanside	CA	92054	Buena Vista	904.2	1731		Electrical contractor											Z-Low	Not applicable			C							G	
OC	ANTIGUA COSIGNMENT	1931	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BARBER SHOP	1931	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ALLEN ROGERS HAIR DESIGNER	1933	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TOP OF THE WORLD COSIGNMENT	1933	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ONE STOP BUSINESS AND LEGAL CENTER	1935	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	7389													Z-Low	Not applicable			C							G	
OC	PCH POSTAL	1935	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MARQUEZ CARRASQUILLO CORP.	1935	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ECONO LUBE AND OIL	1942	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	LIBERTY OIL	1943	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ARDILLOS CARDS	2001	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	AVENTURE 16	2002	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PACIFIC COAST CYCLES	2003	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5941		Bicycle Shop Sales and Service											Z-Low	Not applicable			C	3/12/2009				Yes		G	
OC	MOOSE LODGE #1325	2017	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	OCEAN BREEZE INN	2020	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	OUTERLIMITS SMOKE SHOP	2027	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BAMBOO SOURCE	2028	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SEA BIRD MOTEL	2034	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BLAKE MANAGEMENT GROUP	2110	S	COAST HWY	C	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	KAATZ COMPUTERS	2110	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ANDREW K. JOHN DDS	2123	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	FRANK MISSION MARKET PLACE	427		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	PEPPERTREE MONTESSORI SCHOOL	427		COLLEGE BLVD.	I	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SPEARS CONSTRUCTION, INC	427		COLLEGE BLVD	L	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	ULTRA STAR CINEMA	431		COLLEGE BLVD.		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	KMART	443		COLLEGE BLVD.		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	PIONEER SERVICES	447		COLLEGE BLVD.		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	ACTIVE WEAR PLUS	455		COLLEGE BLVD.	6	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	AVENUE	455		COLLEGE BLVD.	7	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	DAHN YOGA	455		COLLEGE BLVD.	5	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	ECHO PLUS	455		COLLEGE BLVD.	2	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	FRAZEE PAINT	455		COLLEGE BLVD.	1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SKATE TIME	455		COLLEGE BLVD.	9	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	FALLAS	459		COLLEGE BLVD.	1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	OMEGA BICYCLES	459		COLLEGE BLVD.	3	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SNAZZY CLEANERS	459		COLLEGE BLVD.	4	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	COX	461		COLLEGE BLVD.		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	RITE AID	463		COLLEGE BLVD.		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	RINOKIRO ENTERPRISES	465		COLLEGE BLVD.	1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	UNITED PHYSICIAN'S GROUP	465		COLLEGE BLVD.	1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	CHECK AND GO	467		COLLEGE BLVD.	H6	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	COLLEGE DENTAL	467		COLLEGE BLVD.	H2	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	NAIL 2001	467		COLLEGE BLVD.	H4	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	GAME STOP	467		COLLEGE BLVD	H7	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	HLA AUNG NIKKO ENTERPRISES	471		COLLEGE BLVD	I1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	BARBERSHOP EXPRESS	475		COLLEGE BLVD	J5	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	COLLEGE COIN LAUNDRY	475		COLLEGE BLVD	J7	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	COLLEGE PET CLINIC	475		COLLEGE BLVD	J8	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	EMBROIDERY ARTS	475		COLLEGE BLVD	J3	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	I SOLD IT ON E-BAY	475		COLLEGE BLVD	J2	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	JACKSON HEWITT TAX SERVICE	475		COLLEGE BLVD	J4	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	BAY VIEW WIRELESS	495		COLLEGE BLVD	A	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	WASHINGTON MUTUAL	615		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	BLOCKBUSTER VIDEO	625		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	WAL-MART STORE #2245	705		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	PAYLESS SHOE SOURCE	805		COLLEGE BLVD	101	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	THE THREE SISTERS	805		COLLEGE BLVD	103	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	BLU ECHO	815		COLLEGE BLVD	102	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	LANE BRYANT	815		COLLEGE BLVD	101	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MARLENE'S HALLMARK CARDS	815		COLLEGE BLVD	103	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	RADIO SHACK	815		COLLEGE BLVD	105	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	RANCHO DEL ORO DENTAL	815		COLLEGE BLVD	106	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	POSTAL ANNEX	825		COLLEGE BLVD	102	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SALLY BEAUTY SUPPLY	825		COLLEGE BLVD	103	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SUPERCUTS	825		COLLEGE BLVD	101	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	GNC	835		COLLEGE BLVD	102	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	NAILS CLUB	835		COLLEGE BLVD	101	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	TOWN CLEANERS	835		COLLEGE BLVD	103	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	JOSE M DUENES DDS APDC	3502		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	8021		DENTIST											Z-Low	Not applicable			C							GC	
OC	MIRA COSTA DENTAL	3502		COLLEGE BLVD	B	Oceanside	CA	92056	Buena Vista	904.2	8021		DENTIST											Z-Low	Not applicable			C							GC	
OC	SINSATIONS	3502		COLLEGE BLVD	A	Oceanside	CA	92056	Buena Vista	904.2			WOMENS ACCESSORIES											Z-Low	Not applicable			C							GC	
OC	DRY CLEANING STATION	3504		COLLEGE BLVD	F	Oceanside	CA	92056	Buena Vista	904.2	7212		GARMENT PRESSING											Z-Low	Not applicable			C							GC	
OC	FOOTHILL LAUNDRY	3504		COLLEGE BLVD	C	Oceanside	CA	92056	Buena Vista	904.2	7212		GARMENT PRESSING											Z-Low	Not applicable			C							GC	
OC	GLAMOUR SALON & SPA	3504		COLLEGE BLVD	E	Oceanside	CA	92056	Buena Vista	904.2	7231		BEAUTY SHOP											Z-Low	Not applicable			C							GC	
OC	HIDDEN BARBER SHOP	3504		COLLEGE BLVD	A	Oceanside	CA	92056	Buena Vista	904.2	7241		BARBER SHOP											Z-Low	Not applicable			C							GC	
OC	LENS FOR LESS	3504		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	3851		EYE LENS MANUFACTURER											Z-Low	Not applicable			C							GC	
OC	SAMS DONUTS	3504		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	2051		BACKERY											Z-Low	Not applicable			C							GC	
OC	OCEANSIDE GROCERY OUTLET	3508		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5411		GROCERY STORE											Z-Low	Not applicable			C	10/7/2008	No second visit needed			Yes		GC	
OC	95 COLLEGE PLAZA LTD	3514		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	6512		RENTAL PROPERTIES											Z-Low	Not applicable			C							GC	
OC	DICKS SPORTING GOODS	3514		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5941		SPORTING GOODS RETAIL											Z-Low	Not applicable			C							GC	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	PRODUCE BROKERS OF OCEANSIDE INC	3520		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5148		FRESH FRUIT & VEGETABLES										Z-Low	Not applicable			C							GC	
OC	BEYOND FITNESS	3520		COLLEGE BLVD	102	Oceanside	CA	92056	Buena Vista	904.2	7991		FITNESS SALON										Z-Low	Not applicable			C							GC	
OC	BEYOND FITNESS	3520		COLLEGE BLVD	102	Oceanside	CA	92056	Buena Vista	904.2	7299		MISCELILANEOUS PERSONAL SERVICES										Z-Low	Not applicable			C							GC	
OC	CARLISLE & BEATRIZ GILLIMORE	3520		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	6512		RENTAL PROPERTIES										Z-Low	Not applicable			C							GC	
OC	FARMERS INSURANCE	3520		COLLEGE BLVD	105	Oceanside	CA	92056	Buena Vista	904.2	6411		INSUSRANCE SERVICES										Z-Low	Not applicable			C							GC	
OC	J B COMMUNITY SERVICES	3520		COLLEGE BLVD	202	Oceanside	CA	92056	Buena Vista	904.2	6531		REAL ESTATE AGENTS										Z-Low	Not applicable			C							GC	
OC	JOE JOHNSTON KEMCO CORP	3520		COLLEGE BLVD	205	Oceanside	CA	92056	Buena Vista	904.2	1521		GENERAL CONTRACTING HOMES										Z-Low	Not applicable			C							GC	
OC	JOHN Y CHO	3520		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	6411		INSURANCE SERVICES										Z-Low	Not applicable			C							GC	
OC	KEMCO	3520		COLLEGE BLVD	205	Oceanside	CA	92056	Buena Vista	904.2	1521		GENERAL CONTRACTOR										Z-Low	Not applicable			C							GC	
OC	STATE FARM INSURANCE	3520		COLLEGE BLVD	104	Oceanside	CA	92056	Buena Vista	904.2	6411		INSURANCE SERVICES										Z-Low	Not applicable			C							GC	
OC	GRABB-IT INC	3520		COLLEGE BLVD	201	Oceanside	CA	92056	Buena Vista	904.2													Z-Low	Not applicable			C							GC	
OC	THE ANIMAL KEEPER INC	3532		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	752		ANIMAL SPECIALTIES										Z-Low	Not applicable			C							GC	
OC	KINDER-CARE LEARNING CENTER	3536		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	8351		CHILD DAY CARE SERVIVCES										Z-Low	Not applicable			C							GC	
OC	KELLY KOZIUL PHOTOGRAPHY	3618		COLLEGE BLVD	48	Oceanside	CA	92056	Buena Vista	904.2	7221												Z-Low	Not applicable			C							GC	
OC	STANDARD LIFE SAFETY	101		COPPERWOOD WAY	D	Oceanside	CA	92054	San Luis Rey	903.1	1799		Contractor, Fire Protection Systems										Z-Low	Not applicable			C							W	
OC	MILLENNIUM FIRE PROTECTION CORP.	101		COPPERWOOD WAY	F	Oceanside	CA	92054	San Luis Rey	903.1	1799		Contractor, Fire Protection Systems										Z-Low	Not applicable			C							W	
OC	MACORD CONSTRUCTION CORP	101		COPPERWOOD WAY	H	Oceanside	CA	92054	San Luis Rey	903.1	1742		Contractor, Drywall										Z-Low	Not applicable			C							W	
OC	MCR CONSTRUCTORS	101		COPPERWOOD WAY	J	Oceanside	CA	92054	San Luis Rey	903.1	1542		Contractor, General										Z-Low	Not applicable			C							W	
OC	SILVER OLAS ENTERPRISES INC	101		COPPERWOOD WAY	M	Oceanside	CA	92054	San Luis Rey	903.1	7217		Carpet/Furniture Cleaning										Z-Low	Not applicable			C							W	
OC	DIAN AUSTIN COUTURE HOME	102		COPPERWOOD WAY	A & B	Oceanside	CA	92054	San Luis Rey	903.1	2392		Miscellaneous Fabricated Textile Products										Z-Low	Not applicable			C							W	
OC	OCEANSIDE HYDRAULICS	102		COPPERWOOD WAY	E	Oceanside	CA	92054	San Luis Rey	903.1	7699		Miscellaneous Repair Sercies										Z-Low	Not applicable			C							W	
OC	REAL ESTATE RENOVATIONS	105		COPPERWOOD WAY	A	Oceanside	CA	92054	San Luis Rey	903.1	1542		Contractor, General										Z-Low	Not applicable			C							W	
OC	MACURD CONSTRUCTION	105		COPPERWOOD WAY	E	Oceanside	CA	92054	San Luis Rey	903.1	1542		Contractor, General										Z-Low	Not applicable			C							W	
OC	NEW WAVE ELECTRIC INC	110		COPPERWOOD WAY	C	Oceanside	CA	92054	San Luis Rey	903.1	1731		Contractor, Electrical										Z-Low	Not applicable			C							W	
OC	ENDLESS SUMMER HEATING AND AIR CONDITIONING	110		COPPERWOOD WAY	G	Oceanside	CA	92054	San Luis Rey	903.1	1711		Contractor, Heating and Air Conditioning										Z-Low	Not applicable			C							W	
OC	WILCO PRODUCTS LLC - SKYLIGHT SHADES	110		COPPERWOOD WAY	H	Oceanside	CA	92054	San Luis Rey	903.1	3499		Manufacturing, Fabricated Metal - Skylight										Z-Low	Not applicable			C							W	
OC	CUSTOM CARPET CREATIONS	110		COPPERWOOD WAY	J	Oceanside	CA	92054	San Luis Rey	903.1	5713		Retail Sales, Floor Covering Stores										Z-Low	Not applicable			C							W	
OC	MARINE SYSTEM CORPORATION	110		COPPERWOOD WAY	O-P	Oceanside	CA	92054	San Luis Rey	903.1	8711		Engineering Services										Z-Low	Not applicable			C							W	
OC	HK PLASTICS ENGINEERING INC.	1825		CORPORATE CENTER DR		Oceanside	CA	92056	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	CAR SOUND EXHAUST SYSTEMS	1901		CORPORATE CENTER DR		Oceanside	CA	92056	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	JH HOME DETAILING	1888		CORTE TORERO		Oceanside	CA	92056	Loma Alta	904.1	7349		HOME CLEANING										Z-Low	Not applicable			C							GC	
OC	SERVICIOS LEGALES INTEGRADOS	650		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	8111		Legal Services										Z-Low	Not applicable			C							W	
OC	MARQUEZ CARRASQUILLO CORP.	656		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	8111		Legal Services										Z-Low	Not applicable			C							W	
OC	MONTANO MANAGEMENT LLC	292		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	THE EXOTIC GREENERY FLORIST	292		DOUGLAS DR	A	Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	OCEANSIDE SPRINT INC	650		DOUGLAS DR	107	Oceanside	CA	92057	San Luis Rey	903.1	4812		Telephone Communications										Z-Low	Not applicable			C							GC	
OC	DOUGLAS SQUARE FAMILY DENTAL OFFICE	650		DOUGLAS DR	101	Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	DOUGLAS SQUARE CLEANERS	650		DOUGLAS DR	102	Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	OCEANSIDE GOLF LLC	825		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	WHOLESALE DISCOUNT FLOORING	650		DOUGLAS DR	105	Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	CRICKET WIRELESS	650		DOUGLAS DR	106-107	Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	HAPPY HAIR AND NAIL	650		DOUGLAS DR	108-109	Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	TMH VIDEO	650		DOUGLAS DR	110	Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	EZ STOREAGE	444		EDGEHILL LANE		Oceanside	CA	92054	Loma Alta	904.1	4222		Storage of Household Goods, Furniture										Z-Low	Not applicable			C							W	
OC	KASEY SMITH L. AC.	480	N	EL CAMINO REAL		Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	VIENNA VILLAGE MARKET	1401	S	EL CAMINO REAL	103A	Oceanside	CA	92054	Loma Alta	904.1													Z-Low	Not applicable			C							G	
OC	CHEVEU SALON	1401	S	EL CAMINO REAL	103B	Oceanside	CA	92054	Loma Alta	904.1													Z-Low	Not applicable			C							G	
OC	FAMILY BILLIARD CENTERS	1401	S	EL CAMINO REAL	107	Oceanside	CA	92054	Loma Alta	904.1													Z-Low	Not applicable			C							G	
OC	OROWHEAT/ENTENMANN'S	1401	S	EL CAMINO REAL	108	Oceanside	CA	92054	Loma Alta	904.1													Z-Low	Not applicable			C							G	
OC	ENSENADA TACOS	1405	S	EL CAMINO REAL	107B	Oceanside	CA	92054	Loma Alta	904.1													Z-Low	Not applicable			C							G	
OC	JAZZY NAILS	1405	S	EL CAMINO REAL	110	Oceanside	CA	92054	Loma Alta	904.1													Z-Low	Not applicable			C							G	
OC	MB RETAIL INTERPRISES	1405	S	EL CAMINO REAL	111	Oceanside	CA	92054	Loma Alta	904.1													Z-Low	Not applicable			C							G	
OC	ETERNAL HILLS MEMORIAL PARK	1999	S	EL CAMINO REAL		Oceanside	CA	92054	Loma Alta	904.1													Z-Low	Not applicable			C							G	
OC	JORDAN AND JORDAN	2003	S	EL CAMINO REAL	101	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	DRAGON PRINTING	2003	S	EL CAMINO REAL	104	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	ROBERT EISELE CPA	2003	S	EL CAMINO REAL	105	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	MONA LEE WARMBRAND LCSW	2003	S	EL CAMINO REAL	107	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	OCEANVIEW REALTY	2003	S	EL CAMINO REAL	109	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	DEWILT ENVIROMENTAAL INC.	2003	S	EL CAMINO REAL	202	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	WESTWARD MORTGAGE & REAL ESTATE	2003	S	EL CAMINO REAL	205	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	BELTRAN COUNSELING SEERVICES	2003	S	EL CAMINO REAL	208	Oceanside	CA	92054	Buena Vista	904.2	8049		Counseling Services										Z-Low	Not applicable			C							G	
OC	GORDON VAL WHITE	2101	S	EL CAMINO REAL	203B	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	PACIFIC COAST COUNSELING	2101	S	EL CAMINO REAL	204	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	NORTH COUNTY FINANCIAL ASSOCIATES	2101	S	EL CAMINO REAL	206	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	LILY BHATTACHARGYA PSYD	2101	S	EL CAMINO REAL	207	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	VILLA OFFICE BLDG.	2103	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	SPRINT TELEPHONY PCS LP	2103	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	NEWLOOK MD INC	2103	S	EL CAMINO REAL	101A	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	GET ABLE	2103	S	EL CAMINO REAL	102	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	SIMULSTAT INC	2103	S	EL CAMINO REAL	102B	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	JOANNE ORTEGA TAX SERVICES	2103	S	EL CAMINO REAL	103	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	ESTATE PRESERVATION GROUP	2103	S	EL CAMINO REAL	103A	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	LENDER'S CONSTRUCTION SERVICES INC	2103	S	EL CAMINO REAL	103B	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	TICKET ESCAPE	2103	S	EL CAMINO REAL	104B	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	WELCOME HOME	2103	S	EL CAMINO REAL	105A	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	BRAVE, WEBER MAC APLC	2103	S	EL CAMINO REAL	105B	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	ROBCO PRESS COMM	2103	S	EL CAMINO REAL	106B	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	DORICA DE LA FUENTE INC	2103	S	EL CAMINO REAL	107	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	CALIFORNIA COMEDY TRAFFIC SCHOOLS	2103	S	EL CAMINO REAL	108	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	HORANCE MANN INSURANCE	2103	S	EL CAMINO REAL	108C	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	CHRISTIAN PROFESIONAL COUNSELING CENTER	2103	S	EL CAMINO REAL	108D	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	TSC ACCOUNTS RECEIVABLE SOLUTIONS	2103	S	EL CAMINO REAL	201	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	DEBT REDUCTION LAW CENTER	2103	S	EL CAMINO REAL	202	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	ALISA WILLENS-DAVIS PHD	2103	S	EL CAMINO REAL	203	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	V CORE	2103	S	EL CAMINO REAL	204	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	REBUILD	2103	S	EL CAMINO REAL	205	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	PACIFICA ENGINEERING	2111	S	EL CAMINO REAL	200	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	EMPLOYER'S CHOICE INSURANCE SERVICES INC	2111	S	EL CAMINO REAL	201	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	SAMSON WILLIS LAFOE LLP	2111	S	EL CAMINO REAL	30	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	NXT AGENCY LLC	2111	S	EL CAMINO REAL	301	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PERFORMANCE IMPROVEMENTS INTERNATIONAL	2111	S	EL CAMINO REAL	302	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TRICITY PODIATRY	2119	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	EL CAMINO PROFESSIONAL CENTER LLC	2119	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TOOTHMAKER LAB	2123	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ANDREW K. JOHN DDS	2123	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	STEVEN STREELMAN DDS	2123	S	EL CAMINO REAL	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MEDICAL ELECTRONIC SERVICES	2123	S	EL CAMINO REAL	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CROWN CASTLE MU LLC	2125	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	OCEANVIEW DENTAL	2125	S	EL CAMINO REAL	101	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	FUTURES	2125	S	EL CAMINO REAL	101	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CHEATHAM TAX SERVICES	2125	S	EL CAMINO REAL	102	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SUZANNE OBRIEN PHD	2125	S	EL CAMINO REAL	104	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DENNIS ALTERS MD INC	2125	S	EL CAMINO REAL	104	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	RADY CHILDREN'S BEHAVIORAL CRISIS CENTER	2125	S	EL CAMINO REAL	200	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	COREMARK	2125	S	EL CAMINO REAL	204	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BURTON BLACK PHD	2125	S	EL CAMINO REAL	206	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CHARLES E COULL PSYD	2125	S	EL CAMINO REAL	206	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	HARVEY FEIMAN PHD	2125	S	EL CAMINO REAL	206	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MARGOT KUPLEY PSYD	2125	S	EL CAMINO REAL	206	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	NON SURGICAL SPINE CARE CENTER	2125	S	EL CAMINO REAL	210	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	J TEK DESIGN AND DRAFTING	2131	S	EL CAMINO REAL	103	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	LIGHTNING PROPERTY MANAGEMENT	2131	S	EL CAMINO REAL	201	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	WISNOSKY BUILDING	2141	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	COATES CONSTRUCTION & DEVELOPMENT INC	2141	S	EL CAMINO REAL	D	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ALTA LOMA LANDSCAPE MAINTENANCE	2141	S	EL CAMINO REAL	G	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ALLEN LANDSCAPE INC	2141	S	EL CAMINO REAL	I	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TETRA TECH INC	2141	S	EL CAMINO REAL	J	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ADAMANTINE MEDIA INC	2171	S	EL CAMINO REAL	100	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DAVID PANZER MARKETING INC	2171	S	EL CAMINO REAL	101	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MOBILE MEDICINE OUTREACH	2171	S	EL CAMINO REAL	104	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	EAST TECH SOLUTION	2171	S	EL CAMINO REAL	204	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SUDEXO AMERICA LLC	2171	S	EL CAMINO REAL	207	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ODONNEL GROUP	2181	S	EL CAMINO REAL	100	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ABSOLUTELY SMOKE FREE - ONE HOUR	2181	S	EL CAMINO REAL	201	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ANN FRAZEN & GRAHAM PROPERTY	2191	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	NORTH COUNTY PODIATRY CLINICS	2191	S	EL CAMINO REAL	101	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CREDITO BUSINESS SERVICES	2191	S	EL CAMINO REAL	104	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	KEY MAY INSURANCE SERVICES	2191	S	EL CAMINO REAL	105	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	FAMILY CONNECTIONS CHRISTIAN ADOPTIONS	2191	S	EL CAMINO REAL	202	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	JAMYSON COMPANY	2191	S	EL CAMINO REAL	206	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	THRIVENT FINANCIAL FOR LUTHERANS	2191	S	EL CAMINO REAL	207	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ALWAYS SCRAPBOOKING	2191	S	EL CAMINO REAL	208	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	LIVING LIFE INSURANCE AND SERVICES	2191	S	EL CAMINO REAL	208	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	FRAZER ENGINEERING INC	2191	S	EL CAMINO REAL	208	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PIGEON POINT SYSTEMS	2191	S	EL CAMINO REAL	209	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CAMINO TOWN AND COUNTRY	2213	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	24 HOUR FITNESS CLUB	2213	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	JO-ANN FABRICS AND CRAFTS # 464	2227	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	RENAL ADVANTAGE INC	2227	S	EL CAMINO REAL	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SMS MEDICAL INC.	2227	S	EL CAMINO REAL	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SUNSHINE LIQUOR	2229	S	EL CAMINO REAL	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MAXDON'S	2231	S	EL CAMINO REAL	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	LINDA LARSON MASSAGE THERAPHY	2231	S	EL CAMINO REAL	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CHIROPRATIC 1ST	2235	S	EL CAMINO REAL	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MERLE NORMAN COSMETICS	2235	S	EL CAMINO REAL	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CUTS FOR LITTLE PEOPLE	2235	S	EL CAMINO REAL	C	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	EUROPEAN TAYLOR SHOP	2235	S	EL CAMINO REAL	E	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CUSTOM FLOORS BY KEN	2235	S	EL CAMINO REAL	H	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	EL CAMINO SHOE REPAIR	2235	S	EL CAMINO REAL	I	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ERICA'S LIL BARBERSHOP	2235	S	EL CAMINO REAL	O	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	JOSIE LUNA/PROFESSIONAL HAIRSTYLIST	2245	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	COASTAL CHIROPRACTIC WELLNESS CENTER	2245	S	EL CAMINO REAL	C	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	INNOVATION HAIR SALON AND SUPPLIES	2245	S	EL CAMINO REAL	E	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SINTRI DIGITAL	2249	S	EL CAMINO REAL	C	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MAXMUSCLE	2249	S	EL CAMINO REAL	E	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PLAYA DEL SOL TRAVEL AGENT	2249	S	EL CAMINO REAL	F1	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SOUKAYE MAVE	2249	S	EL CAMINO REAL	F2	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	STUDIO MAVE	2249	S	EL CAMINO REAL	F2	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TARGET STORES # 303	2253	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CVS PHARMACY	4615		FRAZEE ROAD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	EMERALD DENTAL	4645		FRAZEE ROAD	A	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	RITZ CLEANERS	4645		FRAZEE ROAD	B	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	USA TAEKWONDO CENTER	4645		FRAZEE ROAD	C	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SEASON'S HAIR SALON	4645		FRAZEE ROAD	D	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	GEORGEOUS NAILS	4645		FRAZEE ROAD	E	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	24 HOUR FITNESS	4655		FRAZEE ROAD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	GRACE CHAPEL OF THE COAST	102	N	FREEMAN ST		Oceanside	CA	92054	San Luis Rey	903.1	8661		Religious Organizations											Z-Low	Not applicable			C							W	
OC	SERENA'S ALTERATIONS	108	S	FREEMAN ST		Oceanside	CA	92054	San Luis Rey	903.1	7219		Tailor Shop											Z-Low	Not applicable			C							W	
OC	ANALYTICS DATA LLC	110	S	FREEMAN ST		Oceanside	CA	92054	San Luis Rey	903.1	7331		Online marketing list sales											Z-Low	Not applicable			C							W	
OC	SHORTCUT BARBERSHOP	124	N	FREEMAN ST		Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shops											Z-Low	Not applicable			C							W	
OC	TANG SOO DO	206	N	FREEMAN ST		Oceanside	CA	92054	San Luis Rey	903.1	8299		Martial Art School											Z-Low	Not applicable			C							W	
OC	STUD CUTS BARBERSHOP	210	N	FREEMAN ST		Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shops											Z-Low	Not applicable			C							W	
OC	MANNINGS DRY CLEANERS	212	N	FREEMAN ST		Oceanside	CA	92054	San Luis Rey	903.1	7212		Laundry, Dry Cleaners and Garment Services											Z-Low	Not applicable			C							W	
OC	MAISONNETTE LLC	523	N	FREEMAN ST		Oceanside	CA	92054	San Luis Rey	903.1	5999		Retail sales											Z-Low	Not applicable			C							W	
OC	P J GRAPHICS	603		GARRISON ST		Oceanside	CA	92054	Loma Alta	904.1			Commercial Printing											Z-Low	Not applicable			C							G	
OC	BOAT RENTALS OF AMER INC HARBOR	256	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	7999		Miscellaneous Amusement And Recreation											Z-Low	Not applicable			C							W	

2008 - 2009 INSPECTION INVENTORY

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OC	OLD SKULL RENTALS	260	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	7999		Miscellaneous Amusement And Recreation											Z-Low	Not applicable			C							W	
OC	YE OLD HAWAIIAN HUT	270	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5399		Miscellaneous General Merchandise Store											Z-Low	Not applicable			C							W	
OC	HARBOR VILLAGE MART	272	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5399		Miscellaneous General Merchandise Store											Z-Low	Not applicable			C							W	
OC	HARBOR GIFT SHOP	278	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5399		Miscellaneous General Merchandise Store											Z-Low	Not applicable			C							W	
OC	NANA AND POP'S SWEET SHOP - ICE CREAM PARLOR	280	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5451		Dairy products											Z-Low	Not applicable			C							W	
OC	URBANWARE	280	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5399		Miscellaneous General Merchandise Store											Z-Low	Not applicable			C							W	
OC	HELGRENS OCEANSIDE SPORTFISHING	315	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	7999		Miscellaneous Amusement And Recreation											Z-Low	Not applicable			C							W	
OC	SEA STAR CHARTERS	315	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	7999		Miscellaneous Amusement And Recreation											Z-Low	Not applicable			C							W	
OC	GREAT ESCAPE SPORTFISHING	315	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	7999		Miscellaneous Amusement And Recreation											Z-Low	Not applicable			C							W	
OC	OCEAN AQUATICS	1400	N	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	7999		Miscellaneous Amusement And Recreation											Z-Low	Not applicable			C							W	
OC	ALL HANDS ON DECK	1540	N	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	4493		Marina - Yatch Management & Maintenance											Z-Low	Not applicable			C							W	
OC	OCEANSIDE MARINE CENTRE, INC	1550	N	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5551		Boat Dealers											Z-Low	Not applicable			C							W	
OC	YEARLEY SAIL BOATS	1850	N	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	7999		Miscellaneous Amusement And Recreation											Z-Low	Not applicable			C							W	
OC	MISSION DENTAL	219	N	HORNE STREET		Oceanside	CA	92054	San Luis Rey	903.1	8021		Offices of Dentist											Z-Low	Not applicable			C							W	
OC	PERLA'S HAIR SALON	221	N	HORNE STREET	A	Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	ABC BARBERSHOP	221	N	HORNE STREET	B	Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shops											Z-Low	Not applicable			C							W	
OC	CASITAS # 2 NUTRITION STORE MARKET	221	N	HORNE STREET	C	Oceanside	CA	92054	San Luis Rey	903.1	5499		Miscellaneous Food Stores											Z-Low	Not applicable			C							W	
OC	GRUPO NUESTRA MISSION	223	N	HORNE STREET	A	Oceanside	CA	92054	San Luis Rey	903.1	8399		Miscellaneous Social Services											Z-Low	Not applicable			C							W	
OC	BEYOND NAIL AND SPA	223	N	HORNE STREET	B	Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	MISSION SQUARE COIN LAUNDRY	306	N	HORNE STREET		Oceanside	CA	92054	San Luis Rey	903.1	7215		Coin operated Laundry and Dry Cleaners											Z-Low	Not applicable			C							W	
OC	HARBOR FREIGHT	316	N	HORNE STREET		Oceanside	CA	92054	San Luis Rey	903.1	5251		Harware Stores											Z-Low	Not applicable			C							W	
OC	RICHER AUTO & TRUCK ELECTRC CO	2372		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7538		Auto Repair Shop - Rebuilding Electric Motors											Z-Low	Not applicable			C	3/19/2009				Yes		G	
OC	WARNER TRUCK RENTAL	2372		INDUSTRY ST	B	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CONSTRUCTION SERVICES AND RECLAMATION	2401		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	AT&T (Pacific Bell)	2727		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OCEANSIDE TRUSS INC - OUT OF BUSINESS	2847		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	2349		Manufacturing - Wood Trusses											Z-Low	Not applicable			C	3/18/2009				Yes		G	
OC	JESSUP SERVICES LLC	2850		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	WASTE MANAGEMENT OF NO CO INC	2880		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SEASIDE HEATING & AIR COND INC	2942		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SEASIDE HEATING & AIR COND INC	2942		INDUSTRY ST	A	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	NIHON SEIMEN CO	2948		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PME AUDIO / VIDEO	2956		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	BAMBOO BUDDY LLC	3025		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	5023		Wholesale - Importer Bamboo Furnitur											Z-Low	Not applicable			C							G	
OC	CTM RACING PRODUCTS INC	3038		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	GERMAN AUTOWERKE	3038		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OCEANSIDE PLASTIC ENTERPRISES CORP	3038		INDUSTRY ST	108	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OCEANSIDE PLASTIC ENTERPRISES CORP	3038		INDUSTRY ST	108	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	W R ROBBINS CO, INC	3038		INDUSTRY ST	106	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	AMERICAN ARBOR TREE SERVICES	3041		INDUSTRY ST	C	Oceanside	CA	92054	Loma Alta	904.1	783		Miscellaneous Services - Tree Services											Z-Low	Not applicable			C	3/18/2009				Yes		G	
OC	CTM RACING PRODUCTS INC	3041		INDUSTRY ST	B	Oceanside	CA	92054	Loma Alta	904.1	3714		Manufacturing - Automobile Parts											Z-Low	Not applicable			C	3/18/2009				Yes		G	
OC	PBW BRAZILIAN DOORS	3041		INDUSTRY ST	A	Oceanside	CA	92054	Loma Alta	904.1	5211		Retail Sales - Wood Doors											Z-Low	Not applicable			C	3/18/2009				Yes		G	
OC	BASHORE CABINETS	3044		INDUSTRY ST	103	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	BASHORE CABINETS	3044		INDUSTRY ST	103	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	HENDIG SURFBOARD REPAIR	3044		INDUSTRY ST	108	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CALIFORNIA MILLWORKS	3052		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ELLIOTT DRILLING SERVICES INC	3052		INDUSTRY ST	107	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	BLUE WATER	3052		INDUSTRY ST	103	Oceanside	CA	92054	Loma Alta	904.1	7389		Business Services - Valet Parking											Z-Low	Not applicable			C							G	
OC	RANDAL INC	3052		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	VITASHOTS INC	3052		INDUSTRY ST	102	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	BDS TACTICAL INC	3060		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PINPOINT PEST CONTROL CO. INC.	3060		INDUSTRY ST	104	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PHARMAGENX INC	3052		INDUSTRY ST	101	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	KINETIC COMPOSITES, INC	2520		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	3999		MANUFACTURING IDUSTRIAL											Z-Low	Not applicable			I	10/14/2008				Yes		GC	
OC	APRIA HEALTHCARE INC	2530		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	5047		MEDICAL, DENTAL, HOSPITAL											Z-Low	Not applicable			C							GC	
OC	CARBON RESOURCES, LLC ?	2535		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	5199		NON-DURABLE GOODS											Z-Low	Not applicable			C							GC	
OC	EXECUTIVE PLUMBING INC	2550		JASON CT		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							GC	
OC	PROLINE CONCRETE TOOLS INC	2560		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	5082		CONCRETE STAMPS											Z-Low	Not applicable			C	10/13/2008	No second visit needed			Yes		GC	
OC	PACIFIC TURBINE SUPPORT, INC	2575		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	5088		AIRCRAFT PARTS DISTRIBUTORS											Z-Low	Not applicable			I	10/13/2008				Yes		GC	
OC	SEASIDE HELICOPTERS INC	2580		JASON CT	C	Oceanside	CA	92056	Loma Alta	904.1	5088		TRANSPORTATION EQUIPMENT											Z-Low	Not applicable			C							GC	
OC	PACIFIC COAST CABINETS	2585		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	2434		WOOD CABINET MANUFACTURER											Z-Low	Not applicable			C							GC	
OC	H & M DISTRIBUTING INC	2590		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	2295		MANUFACTURING FABRIC CONDITIONER											Z-Low	Not applicable			I	10/15/2008	All items completed and	1/7/2009		Yes		GC	
OC	KAHLER INTERNATIONAL INC	2525		JASON CT	101	Oceanside	CA	92056	Loma Alta	904.1	3931		MUSICAL INSTRUMENTS											Z-Low	Not applicable			C		Needs to be removed from list			Yes		GC	
OC	KAHLER INTERNATIONAL INC ?	2520		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	8811		MUSICAL INSTRUMENTS											Z-Low	Not applicable			C							GC	
OC	WALLDESIGN INC	2525		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	1742		CONSTRUCTION COMPANY											Z-Low	Not applicable			C							GC	
OC	CALPEX PLASTICS INC	2570		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	3083		LAMINATED PLASTICS											Z-Low	Not applicable			C							GC	
OC	SEASIDE HELICOPTERS INC	2580		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	5088		TRANSPORTATION EQUIPMENT											Z-Low	Not applicable			C							GC	
OC	HYDRANAUTICS	401		JONES RD		Oceanside	CA	92054	San Luis Rey	903.1	3999		Manufacturing, Plastics/Filters											Z-Low	Not applicable			C							W	
OC	VERNON TOOL CO	503		JONES RD		Oceanside	CA	92054	San Luis Rey	903.1	3541		Manufacturing, Pipe Cutting Tools											Z-Low	Not applicable			C	11/24/2008	Provide filters for storm drain	1/16/2009	Filters were provided, storm drain			W	
OC	NORTH COUNTY COOLING	504		JONES RD		Oceanside	CA	92054	San Luis Rey	903.1	5148		Fresh Fruits and Vegetables Packing											Z-Low	Not applicable			C							W	
OC	LEN'S AUTO BODY, INC	510		JONES RD		Oceanside	CA	92054	San Luis Rey	903.1	7539	811121	Automotive - Body Shop											Z-Low	Not applicable	146-030-96-00		C	11/24/2008	Protect materials stored outdoors.	12/15/2008	Materials stored outdoors were	Yes		W	
OC	ENTERPRISE RENT A CAR	510		JONES RD		Oceanside	CA	92054	San Luis Rey	903.1	7514		Passenger Car Rental											Z-Low	Not applicable			C							W	
OC	1435 MARQUETTE APTS	1435		MARQUETTE STREET		Oceanside	CA	92054	San Luis Rey	903.1	6513		Operator of Apartment Building																							
OC	PETSMART	3420		MARRON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5999		OTHER CONTRACTOR											Z-Low	Not applicable			C							GC	
OC	WANTED BRAND INC.	3460		MARRON RD		Oceanside	CA	92056	Agua Hedionda	904.3	2262													Z-Low	Not applicable			C							GC	
OC	SCRIPPS COASTAL MEDICAL CENTER	2215		MESA DRIVE		Oceanside	CA	92054	San Luis Rey	903.1	8049		Offices and clinics of Helath Practicioners											Z-Low	Not applicable			C							W	
OC	ENSEMBLE	301		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5621		Women's Clothing Store											Z-Low	Not applicable			C							W	
OC	ASYLUM SURF GEAR	310		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Store - Surf Gear											Z-Low	Not applicable			C							W	
OC	LITTLE LOUI'S GIFT SHOP	312		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5947		Miscellaneous Retail											Z-Low	Not applicable			C							W	
OC	RANCH AND SEA MANAGEMENT	316		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6531		Real Estate Agents and Managers											Z-Low	Not applicable			C							W	
OC	ASYLUM SURF CLOTHING	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5699		Miscellaneous Apparel and Accessory Store											Z-Low	Not applicable			C							W	
OC	REGAL CINEMA	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7832		Motion Picture Theater											Z-Low	Not applicable			C							W	
OC	SUNGLASS CORNER	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5947		Miscellaneous Retail											Z-Low	Not applicable			C							W	
OC	APOLLO DEPOT	404		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5699		Miscellaneous Retail Store - Military Supplies											Z-Low	Not applicable			C							W	
OC	ROGUES INN	406		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5699		Miscellaneous Retail Store - Videos, Comics											Z-Low	Not applicable			C							W	
OC	YOUNG'S SHOE REPAIR	408		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7251		Shoe Repair Shop											Z-Low	Not applicable			C							W	
OC	G & R TRAVEL	408		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	4724		Travel Agency											Z-Low	Not applicable			C							W	
OC	MAI'S NAIL AND DAY SPA	409		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	OCEANSIDE CLOSET INC.	409		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5621		Women's Clothing Store											Z-Low	Not applicable			C							W	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	AT THE BEACH			MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7231		Day Spa											Z-Low	Not applicable			C							W	
OC	MAX MUSCLE OCEANSIDE	410		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5499		Health Food Supplement Store											Z-Low	Not applicable			C							W	
OC	FULLERTON MORTGAGE	501		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6162		Mortgage Lenders											Z-Low	Not applicable			C							W	
OC	1 ON ONE NUTRITION	509		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5499		Health Food Supplement Store											Z-Low	Not applicable			C							W	
OC	KID'S COTTAGE	515		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5641		Children's Clothing Store											Z-Low	Not applicable			C							W	
OC	THE HOP SPOT	517		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6411		Insurance Agents											Z-Low	Not applicable			C							W	
OC	ORIENTAL WIGS AND GIFTS	519		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5947		Miscellaneous Retail - Gifts											Z-Low	Not applicable			C							W	
OC	HOME BANK OF CALIFORNIA	600		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6021		Commercial Banks											Z-Low	Not applicable			C							W	
OC	NAPUR SECURITY ACADEMY	601		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	8299		School and Educational Services Not Elsewere											Z-Low	Not applicable			C							W	
OC	OCEANSIDE ART GALLERY	602		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	8412		Art Gallery											Z-Low	Not applicable			C							W	
OC	ANTIQUES	604		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5932		Used Merchandise Store											Z-Low	Not applicable			C							W	
OC	OCEAN SKY BEADS	605		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5947		Miscellaneous Retail - Beads											Z-Low	Not applicable			C							W	
OC	KUHL COLLECTIBLES	605		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5947		Miscellaneous Retail - Collectibles											Z-Low	Not applicable			C							W	
OC	COMICS	606		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5947		Miscellaneous Retail - Comic Books											Z-Low	Not applicable			C							W	
OC	LLL REPTILE AND SUPPLY CO. INC.	609		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail - Pet Supplies											Z-Low	Not applicable			C							W	
OC	STUDIO CUSTUME CLASSICS	610		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail - costumes											Z-Low	Not applicable			C							W	
OC	BELLON & LISIECKI LLP ATTORNEYS AT LAW	611		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	8111		Legal Services											Z-Low	Not applicable			C							W	
OC	NORTH COUNTY TROPHIES	612		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail - Trophys											Z-Low	Not applicable			C							W	
OC	OCEAN SHINE NAIL SALON AND DAY SPA	613		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	CORNERSTONE ENGINEEERING	620		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	8711		Engineering Services											Z-Low	Not applicable			C							W	
OC	BANK OF AMERICA	702		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6021		National Commercial Bank											Z-Low	Not applicable			C							W	
OC	4 DESIGN ARCHITECTURE	707		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	8712		Architectural Services											Z-Low	Not applicable			C							W	
OC	PAYDAY LOANS	711		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6141		Personal Loans											Z-Low	Not applicable			C							W	
OC	THE UPS STORE	711		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7299		Miscellaneous Personal Services											Z-Low	Not applicable			C							W	
OC	WASHINGTON MUTUAL	801		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6021		National Commercial Bank											Z-Low	Not applicable			C							W	
OC	NORTH COUNTY TRANSIT DISTRICT	810		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	4111		Local and Suburban Transi											Z-Low	Not applicable			C							W	
OC	CALIFORNIA BUSINESS SOLUTION	818		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	8721		Accounting, Booking Services											Z-Low	Not applicable			C							W	
OC	OCEANSIDE PHOTO AND TELESCOPE	918		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5946		Camera and Photographic Supply Store											Z-Low	Not applicable			C							W	
OC	HAPINESS NAIL AND SPA	1014		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	DANIEL'S JEWLERY	1016		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5944		Jewlwery Stores											Z-Low	Not applicable			C							W	
OC	GALAXY SHOES	1018		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5661		Shoe Store											Z-Low	Not applicable			C							W	
OC	RADIO SHACK	1020		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5731		Radio, Television, Consumer Electronic Store											Z-Low	Not applicable			C							W	
OC	FASHION TOWN	1022		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5651		Family Clothing Store											Z-Low	Not applicable			C							W	
OC	FACTORY OUTLET	1028		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5651		Family Clothing Store											Z-Low	Not applicable			C							W	
OC	0.99 ONLY STORE	1036		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Store											Z-Low	Not applicable			C							W	
OC	HAPINESS NAIL AND SPA	1041		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	OFFICE DEPOT	1046		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5943		Stationary Store											Z-Low	Not applicable			C							W	
OC	MISSION SQUARE BARBER SHOP	1062		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shops											Z-Low	Not applicable			C							W	
OC	QUALITY INN	1403		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels and Motels											Z-Low	Not applicable			C							W	
OC	MOBIL OIL	1407		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											Z-Low	Not applicable	148-340-02-00		C	12/1/2008	Close trash bin lids	1/20/2009	Trash bin lids closed	Yes		W	
OC	RAMADA INN - OCEANSIDE	1440		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels and Motels											Z-Low	Not applicable			C							W	
OC	CHECK'S CASHED	1444		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6141		Personal Loans											Z-Low	Not applicable			C							W	
OC	MISSION MATTRESS AND FURNITURE	1510		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5712		Furniture Store											Z-Low	Not applicable			C							W	
OC	MISSION BAZZAR	1527		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5939		Miscellaneous Retail Store											Z-Low	Not applicable			C							W	
OC	THE SHOW PALACE	1527		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7929		Amusement & Recreation Services											Z-Low	Not applicable			C							W	
OC	LA CASA DEL BAQUERO ELEGANTE	1527		MISSION AVE	C-14	Oceanside	CA	92054	San Luis Rey	903.1	5611		Retail Sales																							
OC	BALBOA LIQUOR	1604		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5921		Liquor Store											Z-Low	Not applicable			C							W	
OC	COUNTY OF SAN DIEGO - SOCIAL SERVICES	1701		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	8322		Individual & Family Social Services											Z-Low	Not applicable			C							W	
OC	AUDIO ZONE	1710		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5731		Retail Sales, Automobile Audio and Wheels											Z-Low	Not applicable			C							W	
OC	CASA DE NINOS	1718		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	8351		Child Day Care Services											Z-Low	Not applicable			C							W	
OC	MORELIA DENTAL	1910		MISSION AVE	D	Oceanside	CA	92054	San Luis Rey	903.1	8021		Offices and Clinics of Dentists											Z-Low	Not applicable			C							W	
OC	EL INDIO PRODUCTOS BOTANICOS DE MEXICO	1919		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5499		Miscellaneous Food Stores											Z-Low	Not applicable			C							W	
OC	LA FRONTERA CHECK'S CASHED	1919		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6141		Personal Loans											Z-Low	Not applicable			C							W	
OC	NORMA'S BEAUTY SHOP	1919		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	PAYLESS SHOES SOURCE	1919		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5661		Shoe Store											Z-Low	Not applicable			C							W	
OC	MR BEST CLEANERS	2019		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7212		Laundry, Dry Cleaners and Garment Services											Z-Low	Not applicable			C							W	
OC	TMH VIDEO	2021		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7841		Video Tape Rental											Z-Low	Not applicable			C							W	
OC	CRICKET COMMUNICATION	2023		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5999		Telephone Service Store											Z-Low	Not applicable			C							W	
OC	OCEANSIDE LAWNMOWERS REPAIR	2025		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7699		Miscellaneous Repair Shops											Z-Low	Not applicable			C							W	
OC	PLAYA DE LA PLATA	2027		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5944		Jewelry Stores											Z-Low	Not applicable			C							W	
OC	SMILE LINGERIE	2027		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5632		Miscellaneous Retail Stores											Z-Low	Not applicable			C							W	
OC	MUNOZ BIKINIS	2027		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5621		Retail store -Women's Clothing											Z-Low	Not applicable			C							W	
OC	CLASSY NAILS # 2	2027		MISSION AVE	A7	Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	MULTISERVICES EXPRESS #3	2027		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Stores											Z-Low	Not applicable			C							W	
OC	OCEAN 98	2027		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Stores											Z-Low	Not applicable			C							W	
OC	MI TIENDITA CANDY STORE	2027		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Stores											Z-Low	Not applicable			C							W	
OC	BIKES AND PARTS	2027		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5941		Miscellaneous Retail Stores - Bicycle Shop											Z-Low	Not applicable			C							W	
OC	JUST FOR HIM	2027		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5611		Retail Sales - Men's Clothing											Z-Low	Not applicable			C							W	
OC	EMANUEL FASHIONS	2027		MISSION AVE	C-7	Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Stores											Z-Low	Not applicable			C							W	
OC	LEE'STSHIRT PLUS	2027		MISSION AVE	D2	Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Stores											Z-Low	Not applicable			C							W	
OC	ROYAL JEWELRY	2027		MISSION AVE	D5	Oceanside	CA	92054	San Luis Rey	903.1	5944		Jewelry Stores											Z-Low	Not applicable			C							W	
OC	SOX AND SOX	2027		MISSION AVE	D6	Oceanside	CA	92054	San Luis Rey	903.1	5699		Miscellaneous Apparel Store - Spots Wear											Z-Low	Not applicable			C							W	
OC	EL GRANITO DE MOSTAZA	2027		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6000		Miscellaneous Retail Stores											Z-Low	Not applicable			C							W	
OC	BODOS ALTERATION	2027		MISSION AVE	E	Oceanside	CA	92054	San Luis Rey	903.1	7219		Laundry, Dry Cleaners and Garment Services											Z-Low	Not applicable			C							W	
OC	MAURICE AND SON AUTO SERVICES	2027		MISSION AVE	E3	Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Stores											Z-Low	Not applicable			C							W	
OC	BOREALIS JEWELRY	2027		MISSION AVE	E7	Oceanside	CA	92054	San Luis Rey	903.1	5944		Jewelry Stores											Z-Low	Not applicable			C							W	
OC	TWINS HANDBAG	2027		MISSION AVE	E7	Oceanside	CA	92054	San Luis Rey	903.1	5948		Miscellaneous Retail Store - Luggage, Handbags											Z-Low	Not applicable			C							W	
OC	FASHION LAND	2027		MISSION AVE	E8	Oceanside	CA	92054	San Luis Rey	903.1	5632		Women's Apparel and Accessory Store											Z-Low	Not applicable			C							W	
OC	SEAFINE	2027		MISSION AVE	E13	Oceanside	CA	92054	San Luis Rey	903.1	3993		Signs and Advertizing Specialties											Z-Low	Not applicable			C							W	
OC	CHUNG SHOES	2027		MISSION AVE	F6	Oceanside	CA	92054	San Luis Rey	903.1	5661		Apparel and Accessory Store - Shoes											Z-Low	Not applicable			C							W	
OC	LACIADO EXPRESS SALON	2029		MISSION AVE	B	Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	RENT-A-CENTER WEST INC	2033		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7359		Furniture Rental and Leasing											Z-Low	Not applicable			C							W	
OC	MAGDA'S FASHION BOUTIQUE	2035		MISSION AVE	A	Oceanside	CA	92054	San Luis Rey	903.1	5632		Women's Clothing Store - Specialty Store											Z-Low	Not applicable			C							W	
OC	GALVAN'S BARBERSHOP	2035		MISSION AVE	B	Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shops											Z-Low	Not applicable			C							W	
OC	BBC TRAVEL	2037		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	4724		Travel Agency											Z-Low	Not applicable			C							W	
OC	LA ILLUSION CRAFT	2039		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5699		Miscellaneous Apparel and Accessory Store -											Z-Low	Not applicable			C							W	
OC	SCRIPPS COASTAL MEDICAL CENTER	2201		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	8011		Ofices and Clinics of Doctors of Medicine											Z-Low	Not applicable			C							W	
OC	MARTY'S VALLEY INN	3240		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7011		Hotels and Motels											Z-Low	Not applicable			C							W	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	THE FURNITURE STORE	3296		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5712		Furniture Store											Z-Low	Not applicable			C							W	
OC	MISSION ANIMAL & BIRD HOSPITAL	3308		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	742		Veterinary Services, Animal Hospital											Z-Low	Not applicable			C							W	
OC	NORTH COUNTY HEALTH SERVICES - LA MISSION	3308		MISSION AVE	I	Oceanside	CA	92054	San Luis Rey	903.1	8049		Health Center											Z-Low	Not applicable			C							W	
OC	D & J GLASS AND PAINT	3320		MISSION AVE	A-D	Oceanside	CA	92054	San Luis Rey	903.1	5231		Paint, Glass and Wallpaper Store											Z-Low	Not applicable			C							W	
OC	CLASSY K-9 CLIPS	3320		MISSION AVE	G	Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail - Pet Shop											Z-Low	Not applicable			C							W	
OC	CALVARY CHURCH	3320		MISSION AVE	H	Oceanside	CA	92054	San Luis Rey	903.1	8661		Religious Organizations											Z-Low	Not applicable			C							W	
OC	IPT MINISTRY	3320		MISSION AVE	J	Oceanside	CA	92054	San Luis Rey	903.1	8661		Religious Organizations											Z-Low	Not applicable			C							W	
OC	BUDGET CAR & TRUCK RENTAL	3320		MISSION AVE	M	Oceanside	CA	92054	San Luis Rey	903.1	7514		Passenger Car Rental											Z-Low	Not applicable			C							W	
OC	TRANSCONTINENTAL MANAGEMENT	3355		MISSION AVE	111	Oceanside	CA	92054	San Luis Rey	903.1	8999		Miscellaneous Services - HOA Management											Z-Low	Not applicable			C							W	
OC	PMGU	3355		MISSION AVE	115	Oceanside	CA	92054	San Luis Rey	903.1	8999		Miscellaneous Services											Z-Low	Not applicable			C							W	
OC	PMGU TRANING ROOM	3355		MISSION AVE	120	Oceanside	CA	92054	San Luis Rey	903.1	8999		Miscellaneous Services											Z-Low	Not applicable			C							W	
OC	PACIFIC TRUST LENDING	3355		MISSION AVE	123	Oceanside	CA	92054	San Luis Rey	903.1	6163		Mortgage Brokers											Z-Low	Not applicable			C							W	
OC	COASTAL COMMUNICATION	3355		MISSION AVE	131	Oceanside	CA	92054	San Luis Rey	903.1	8711		Engineering Services											Z-Low	Not applicable			C							W	
OC	PACIFIC VIEW CHARTER SCHOOL	3355		MISSION AVE	139	Oceanside	CA	92054	San Luis Rey	903.1	8211		Elementary and Secondary School											Z-Low	Not applicable			C							W	
OC	FIELD ARCHITECTURAL CORP. INC.	3355		MISSION AVE	211	Oceanside	CA	92054	San Luis Rey	903.1	8712		Architectural Services											Z-Low	Not applicable			C							W	
OC	PACIFIC FLYER NEWSPAPERS	3355		MISSION AVE	213	Oceanside	CA	92054	San Luis Rey	903.1	2721		Periodicals: Publishing											Z-Low	Not applicable			C							W	
OC	DEALER SERVICES CORP.	3355		MISSION AVE	214	Oceanside	CA	92054	San Luis Rey	903.1	8999		Miscellenous Services											Z-Low	Not applicable			C							W	
OC	CASA DE AMPARO FAMILY SUPPORT SERVICES	3355		MISSION AVE	215	Oceanside	CA	92054	San Luis Rey	903.1	8322		Individual & Family Social Services											Z-Low	Not applicable			C							W	
OC	CASA DE AMPARO FAMILY SUPPORT SERVICES	3355		MISSION AVE	215	Oceanside	CA	92054	San Luis Rey	903.1	8322		Individual & Family Social Services											Z-Low	Not applicable			C							W	
OC	PROTECTIVE PRODUCTS INTERNATIONAL	3355		MISSION AVE	222	Oceanside	CA	92054	San Luis Rey	903.1	5943		Stationary Store											Z-Low	Not applicable			C							W	
OC	TEAM FISHEL	3355		MISSION AVE	223	Oceanside	CA	92054	San Luis Rey	903.1	1623		Contractor, Underground Utiltites											Z-Low	Not applicable			C							W	
OC	NORTH COUNTY PSYCOTHERAPY SERVICES	3355		MISSION AVE	231	Oceanside	CA	92054	San Luis Rey	903.1	8049		Office of Health Practicioners -											Z-Low	Not applicable			C							W	
OC	GROTH ARCHITECTS INC.	3355		MISSION AVE	234	Oceanside	CA	92054	San Luis Rey	903.1	8712		Architectural Services											Z-Low	Not applicable			C							W	
OC	FIRMA SIGNING SOLUTIONS	3355		MISSION AVE	236	Oceanside	CA	92054	San Luis Rey	903.1	8999		Miscellenous Services											Z-Low	Not applicable			C							W	
OC	CASA DE AMPARO ADMINISTRATION	3355		MISSION AVE	238	Oceanside	CA	92054	San Luis Rey	903.1	8322		Individual & Family Social Services											Z-Low	Not applicable			C							W	
OC	OLY UNIQUE TOUCH	3365		MISSION AVE	H	Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	MINUTE PRESS	3365		MISSION AVE	I-J	Oceanside	CA	92054	San Luis Rey	903.1	2752		Commercial Priting											Z-Low	Not applicable			C							W	
OC	A TOUCH OF GOLD	3375		MISSION AVE	G	Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail - Pet Shop											Z-Low	Not applicable			C							W	
OC	COPPERWOOD BARBERSHOP	3375		MISSION AVE	B	Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shops											Z-Low	Not applicable			C							W	
OC	STEEL GUITARS OF NORTH COUNTY	3375		MISSION AVE	D	Oceanside	CA	92054	San Luis Rey	903.1	5736		Musical Instrument Store											Z-Low	Not applicable			C							W	
OC	THAI BOXING	3375		MISSION AVE	E	Oceanside	CA	92054	San Luis Rey	903.1	7991		Physical Fitness Facility											Z-Low	Not applicable			C							W	
OC	WOMEN'S RESOURCE CENTER - THRIFT STORE	3385		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5932		Used Merchandise Store											Z-Low	Not applicable			C							W	
OC	FOUSSAT SWAP MEET LLC	3480		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5999		Misscellaneous Retail - Swap meet											Z-Low	Not applicable			C							W	
OC	MIKE'S LIQUOR II	3549		MISSION AVE	A	Oceanside	CA	92054	San Luis Rey	903.1	5921		Liquor Store											Z-Low	Not applicable			C							W	
OC	JOHNNIE'S BARBERSHOP	3549		MISSION AVE	D	Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shops											Z-Low	Not applicable			C							W	
OC	STORAMERICA OCEANSIDE	3560		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	3751		Manufacturing, Equipment											Z-Low	Not applicable			C							W	
OC	YOUNG'S WATER	3742		MISSION AVE	101	Oceanside	CA	92054	San Luis Rey	903.1	5499		Miscellaneous Food Stores											Z-Low	Not applicable			C							W	
OC	WE THE PEOPLE	3742		MISSION AVE	103	Oceanside	CA	92054	San Luis Rey	903.1	8111		Legal Services											Z-Low	Not applicable			C							W	
OC	WASHINGTON MUTUAL	3748		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6021		National Commercial Bank											Z-Low	Not applicable			C							W	
OC	WALGREENS DRUG STORE	3752		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5912		Drug Stores											Z-Low	Not applicable			C							W	
OC	MIKE'S MEATS - VACANT	3753		MISSION AVE	115	Oceanside	CA	92054	San Luis Rey	903.1														Z-Low	Not applicable			C							W	
OC	AMERICAN ROYALE MORTGAGE	3753		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6162		Mortgage Banker and Loan Correspondants											Z-Low	Not applicable			C							W	
OC	BODY TEMPLE	3753		MISSION AVE	118	Oceanside	CA	92054	San Luis Rey	903.1	7299		Miscellaneous Personal Services											Z-Low	Not applicable			C							W	
OC	EXTREME POWER GYM	3753		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7991		Physical Fitness Facility											Z-Low	Not applicable			C							W	
OC	GEMS N' LOANS	3753		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail											Z-Low	Not applicable			C							W	
OC	MEDICAL SUPPLY EQUIPMENT	3753		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7352		Miscellaneous Retail - Medical Eqipment											Z-Low	Not applicable			C							W	
OC	MISSION CAMINO DENTAL	3753		MISSION AVE	116	Oceanside	CA	92054	San Luis Rey	903.1	8021		Offices of Dentist											Z-Low	Not applicable			C							W	
OC	MISSION REAL ESTATE & MORTGAGE	3753		MISSION AVE	200	Oceanside	CA	92054	San Luis Rey	903.1	6531		Real Estate Agents and Managers											Z-Low	Not applicable			C							W	
OC	SALON DE BAIN	3753		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	T & T NAILS	3753		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	THE SPOT BARBER SHOP	3753		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shop											Z-Low	Not applicable			C							W	
OC	VERA'S HOME MADE TAMALES	3753		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	209		Food Preparation - Tamales											Z-Low	Not applicable			C							W	
OC	BANK OF AMERICA	3756		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	6021		National Commercial Bank											Z-Low	Not applicable			C							W	
OC	VERIZONS	3760		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5999		Telephone Service Store											Z-Low	Not applicable			C							W	
OC	GROOMING WITH TLC	3762		MISSION AVE	106	Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail - Pet Shop											Z-Low	Not applicable			C							W	
OC	THOMAS F. FORD DDS	3762		MISSION AVE	104	Oceanside	CA	92054	San Luis Rey	903.1	8021		Offices of Dentist											Z-Low	Not applicable			C							W	
OC	KAHOOTS ANIMALS AND SUPPLIES	3764		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail - Pet Shop											Z-Low	Not applicable			C							W	
OC	KIDDIE ACADEMIE	3766		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	8351		Child Day Care Services											Z-Low	Not applicable			C							W	
OC	COST CUTTERS HAIR SALON	3772		MISSION AVE	117	Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	HAPINESS NAIL AND SPA	3772		MISSION AVE	118	Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	CASITA NUTRITION #3	3772		MISSION AVE	130	Oceanside	CA	92054	San Luis Rey	903.1	5411		WIC Store											Z-Low	Not applicable			C							W	
OC	MISSION COIN LAUNDRY	3772		MISSION AVE	134	Oceanside	CA	92054	San Luis Rey	903.1	7215		Coin operated Laundry and Dry Cleaners											Z-Low	Not applicable			C							W	
OC	MISSION DRY CLEANERS	3772		MISSION AVE	136	Oceanside	CA	92054	San Luis Rey	903.1	7212		Laundry, Dry Cleaners and Garment Services											Z-Low	Not applicable			C							W	
OC	SMOKE DEPOT	3772		MISSION AVE	131	Oceanside	CA	92054	San Luis Rey	903.1	5993		Tobacco Stores											Z-Low	Not applicable			C							W	
OC	CAL AUTO	3776		MISSION AVE	139	Oceanside	CA	92054	San Luis Rey	903.1	7299		Miscellaneous Personal Services											Z-Low	Not applicable			C							W	
OC	DENTAL CARE OF OCEANSIDE	3776		MISSION AVE	138	Oceanside	CA	92054	San Luis Rey	903.1	8021		Offices of Dentist											Z-Low	Not applicable			C							W	
OC	BLOCKBUSTER'S VIDEO	3780		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7841		Video Tape Rental											Z-Low	Not applicable			C							W	
OC	CHECKS CASHED	3784		MISSION AVE	154	Oceanside	CA	92054	San Luis Rey	903.1	6141		Personal Loans											Z-Low	Not applicable			C							W	
OC	CONTOUR EXPRESS	3784		MISSION AVE	152	Oceanside	CA	92054	San Luis Rey	903.1	7991		Physical Fitness Facility - Women											Z-Low	Not applicable			C							W	
OC	DESANTI & ASSOCIATES	3784		MISSION AVE	149	Oceanside	CA	92054	San Luis Rey	903.1	8721		Accounting, Booking Services											Z-Low	Not applicable			C							W	
OC	OLD MISSION BARBER SHOP	3784		MISSION AVE	153	Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shop											Z-Low	Not applicable			C							W	
OC	SHEAR FX HAIR SALON	3784		MISSION AVE	155	Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	THE REAL ESTATE CONSULTANT	3784		MISSION AVE	156	Oceanside	CA	92054	San Luis Rey	903.1	6531		Real Estate Agents and Managers											Z-Low	Not applicable			C							W	
OC	UPOST	3784		MISSION AVE	148	Oceanside	CA	92054	San Luis Rey	903.1	7389		Business Services, Mail and Packaging											Z-Low	Not applicable			C							W	
OC	VACANT	3805		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MISSION CHIROPRACTIC	3815		MISSION AVE	103	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	TOGETHER WE GROW	3815		MISSION AVE	105-107	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	IMAGE CENTER SALON	3815		MISSION AVE	110	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	GEORGE ALVES AGENCY - OHANA INSURANCE	3815		MISSION AVE	201	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MBA PRODUCE GROUP	3815		MISSION AVE	203	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	BUFFEET AMERICA - OUT OF BUSINESS	3825		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	CRICKET WIRELESS	3825		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SAN LUIS REY DENTAL CARE	3825		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	FSNB SERVICE CENTER	3825		MISSION AVE	9	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	GREAT CLIPS	3825		MISSION AVE	11	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MARIA C GALDIANO DMD INC	3826		MISSION AVE	D5	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MAGIC CUT HAIR SALON	3852		MISSION AVE	B1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	STUDIO NAILS AND HAIR	3852		MISSION AVE	B2	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	OCEANSIDE POLICE OFFICER'S ASSOCIATION	3855		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	ALL AMERICAN BARBER SHOP	3861		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	THE TAX AND ACCOUNTING GROUP	3861		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	CENTURY NAILS SALON AND SPA	3861		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	TOLEDO'S FLOORING	3861		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MIMI'S BEAUTY SUPPLY	3861		MISSION AVE	B10	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	LBC COURIER SERVICE	3870		MISSION AVE	D1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	FARMERS INSURANCE	3870		MISSION AVE	D2	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	DR. KAM JENBREIL DENTISTRY	3870		MISSION AVE	D3-D4	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	HEARX WEST	3870		MISSION AVE	D5	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MISSION CHILD DEVELOPMENT CENTER	3870		MISSION AVE	D6	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	FABIOLA'S LE SALON	3875		MISSION AVE	B29	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	PETCO	3875		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	CHECK INTO CASH	3875		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	DRY CLEANERS OF AMERICA	3875		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	THE FLORIST	3882		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	TOPSTYLES HAIR DESIGNS	3915		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	DOLLAR MART	3915		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	WATER SHOP	3915		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	LUCKY BOB'S INTERNET CAFÉ	3915		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	NORTH COAST OPTOMETRIST	3915		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	POSTAL ANNEX # 6017	3915		MISSION AVE	D1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	T-SHIRT FASHIONS	3935		MISSION AVE	1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	CURVES	3935		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	FORUM BEAUTY SUPPLIES BOTIQUE	3935		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	LOVELY NAILS	3935		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MISSION FAMILY DENTISTRY	3935		MISSION AVE	9	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MISSION WASH LAUNDRY	3935		MISSION AVE	10	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	H & R BLOCK TAX SERVICE	3935		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	FUELMAN NETWORK/CARR SERVICE CENTER	3940		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	BROTHER BENNO'S THRIFT SHOP	3965		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	RAINBOW CHILDREN CARE	3965		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	STATE FAR INSURANCE	3965		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	NEW SONG CHURCH	3985		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MISSION SAN LUIS REY PARISH	4070		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	CASA DE AMPARO	4070		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1																		C								
OC	NORTH COUNTY ALANO CLUB	4198		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	CHRISTIAN PRESCHOOL OF THE ARTS	4507		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SYMPLY BEAUTIFUL FLOWERS	4507		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	THE HOME DEPOT #1018	5755		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	H & G SERVICE CORP.	5780		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	RANCHO DEL ORO LANDSCAPE MAINTENANCE	6000		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	GYAN PRODUCE	6041		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	FEDERAL HEATH SIGN CO INV	4602		NORTH AVE	A	Oceanside	CA	92056	Loma Alta	904.1	3993		SIGN MANUFACTURING											Z-Low	Not applicable			I	10/14/2008	All items completed and	12/8/2008		Yes		GC	
OC	HOLMES LANDSCAPE COMPANY	4616		NORTH AVE		Oceanside	CA	92056	Loma Alta	904.1	781		LANDSCAPE											Z-Low	Not applicable			C							GC	
OC	INTERFACE DISPLAYS & CONTROLS INC ?	4630		NORTH AVE	B	Oceanside	CA	92056	Loma Alta	904.1	3812		NAVIGATIONAL SEARCH EQUIPMENT											Z-Low	Not applicable			C							GC	
OC	AMERICAN SURFACES, INC	4650		NORTH AVE		Oceanside	CA	92056	Loma Alta	904.1	1741		MASONARY STONE											Z-Low	Not applicable			I							GC	
OC	AUTOMOTIVE MARKETING CONSULTANTS INC	4660		NORTH AVE	B	Oceanside	CA	92056	Loma Alta	904.1	4226		WAREHOUSING & STORAGE											Z-Low	Not applicable			I							GC	
OC	BD MEDICAL	4665		NORTH AVE		Oceanside	CA	92056	Loma Alta	904.1	5047		MEDICAL, DENTAL, HOSPITAL SUPPLIES											Z-Low	Not applicable			C	1/27/2009	No second visit needed			Yes		GC	
OC	ALLSTATE MOVING SYSTEMS	4670		NORTH AVE	A	Oceanside	CA	92056	Loma Alta	904.1	4212		FURNITURE MOVING											Z-Low	Not applicable			C							GC	
OC	BUILDING RESTORATION INC?	4670		NORTH AVE	B	Oceanside	CA	92056	Loma Alta	904.1	752													Z-Low	Not applicable			C		Check on location					GC	
OC	D & M WELDING?	4670		NORTH AVE		Oceanside	CA	92056	Loma Alta	904.1	1793		OTHER CONTRACTOR											Z-Low	Not applicable			C		Check on location					GC	
OC	SERVICEMASTER ABSOLUTE WATER & FIRE SERVICES	4670		NORTH AVE	A	Oceanside	CA	92056	Loma Alta	904.1	3825		Manufacturing, Electronics											Z-Low	Not applicable			I		Check on location					GC	
OC	MIRAMAR STORAGE & TRANSFER CO ?	4670		NORTH AVE	B	Oceanside	CA	92056	Loma Alta	904.1	4214		LOCAL TRUCKING WITH STORAGE											Z-Low	Not applicable			C							GC	
OC	LAMVIN INC	4675		NORTH AVE		Oceanside	CA	92056	Loma Alta	904.1	3271		CONCRETE BLOCK & BRICK											Z-Low	Not applicable			C							GC	
OC	GREEN ALTERNATIVE	3600		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	PRF RESIDENT	3600		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	RESIDENCE INN BY MARRIOT OCEANSIDE	3603		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	IMPACT SOLUTIONS	3604		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	OCEAN SYSTEM ENGINEERING CORP	3605		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	BERGENSON'S PROPERTY SERVICES INC.	3605		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	KAISER PERMANENTE PHARMACY	3609		OCEAN RANCH BLVD	204	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	OCEAN RANCH DENTISTRY	3609		OCEAN RANCH BLVD	205	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	RED PERSIMMON NAILS AND SPA	3613		OCEAN RANCH BLVD	103	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ANGEL PRINTING INC	3614		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	GOURMET TAMALES	3616		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1	5812		Food Preparation											Z-Low	Not applicable			C							GC	
OC	ROYAL AMBIANCE SALON AND SPA	3617		OCEAN RANCH BLVD	106	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ANDERGENE	3618		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ANZO BIOTECH	3626		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TARGET BILLING & COLLECTIONS	3630		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ROCKMOND FINANCIAL HOLDINGS	3632		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	NATIONWIDE CREDIT RECOVERY	3632		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	PHARM-AID INC	3634		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ARCHITERRA LLP	3636		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ELCTRONIC BILLING SOLUTIONS INC	3638		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ACCUDIAGNOSTICS	3640		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SANDOVAL FAMILY MANAGEMENT	3643		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	QUANTUM COMMUNICATIONS	3648		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	GENERAL CAR LEASING	3650		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SOUTHERN WINDS INTERNATIONAL	3658		OCEAN RANCH BLVD	101	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SPG SOLAR INC	3801		OCEAN RANCH BLVD	103	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	COLORKOTE CA LLC	3801		OCEAN RANCH BLVD	105-106	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			I							R	
OC	HOLSUM BAKERY INC.	3801		OCEAN RANCH BLVD	108	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	STERLING BUSINESS FORMS INC.	3809		OCEAN RANCH BLVD	E	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	RICH LTD.	3809		OCEAN RANCH BLVD	110	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SLIDING VISIONS INC.	3809		OCEAN RANCH BLVD	114	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	COCA-COLA BOTTLING CO OF SOUTHERN CA	3900		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	HYDRONAUTICS	3977		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	

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OC	ASHWORTH EDC, LLC	4010		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ATOMICA RESEARCH & DEVELOPMENT INC	3800		OCEANIC DR	101	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TACTICAL CONTROLS	3800		OCEANIC DR	104	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	OCEANSIDE ALE WORKS	3800		OCEANIC DR	105	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	EMCO INDUSTRIES	3800		OCEANIC DR	109	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	BEHNE CHIROPRACTIC	3800		OCEANIC DR	110	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	COMCY COUCHES	3800		OCEANIC DR	110	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	RAIN GEAR DEPOT	3800		OCEANIC DR	111	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	EURO INDUSTRIES INC	3800		OCEANIC DR	112	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TRIBECA TECHNOLOGY SOLUTIONS	3800		OCEANIC DR	113-115	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TRIUMPH UNITED INC.	3800		OCEANIC DR	116	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	CDS FIRST	3800		OCEANIC DR	117	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TRIBECA TECHNOLOGY SOLUTIONS	3800		OCEANIC DR	113	Oceanside	CA	92056	Loma Alta	904.1	5064		ELECTRICAL APPLIANCE DISTRIBUTION											Z-Low	Not applicable			C							GC	
OC	OCEANSIDE VINEYARD CHURCH	3803		OCEANIC DR	202	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	THE COMPOUNDMIXED MARTIAL ARTS & FITNESS	3803		OCEANIC DR	203	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ELECTREX USA LTD.	3803		OCEANIC DR	201	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TRUELINE WOODSWORKS	3810		OCEANIC DR	207-208	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	POLYVUE DISTRIBUTION INC.	3810		OCEANIC DR	209	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	JDM CONCEPTS	3820		OCEANIC DR	304	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	JONES GLASS	3820		OCEANIC DR	305	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	WEST COAST PARTY RENTALS	3820		OCEANIC DR	306	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	MAR MAR IMPORTING INC.	3820		OCEANIC DR	307	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	MOBILE SOLUTIONS	3820		OCEANIC DR	308	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	HEART TO HEART GIFTS ECT	3820		OCEANIC DR	308	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	KINETIC SYSTEMS INC	3820		OCEANIC DR	309	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	PICK ON US INC,	3820		OCEANIC DR	310	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	WOODCHUCK	3820		OCEANIC DR	311	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	STARR SPECIALTIES	3820		OCEANIC DR	312-313	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	RESSAC	3830		OCEANIC DR	402	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	VANDER PARTY RENTAL	3830		OCEANIC DR	410	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	READY TO FLY FUN	3830		OCEANIC DR	410	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SLICE OF HEAVEN CATERING	3830		OCEANIC DR	411	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TACTICAL GEAR DISTRIBUTORS	3903		OCEANIC DR	402	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	HANSEN ARCHITECTURAL SYSTEMS, INC	3907		OCEANIC DR	301-302	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	NOVA VOICE & DATA SYSTEMS, INC	3909		OCEANIC DR	401	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SAN DIEGO MOTORING ACCESSORIES INC	3909		OCEANIC DR	403	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	BEDE WINDOWS AND DOORS	3913		OCEANIC DR	501-502	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	CUSTOM ACQUATIC INC.	3915		OCEANIC DR	601	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	CALTERM EXTERMINATORS INC	3915		OCEANIC DR	603	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	MYO SCI TECHNOGICS INC	3919		OCEANIC DR	703	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SUPER WONG USA INC	3921		OCEANIC DR	803	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	NEXT DAY SPECIALTY LLC	3923		OCEANIC DR	100	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	GSM LLC	3923		OCEANIC DR	200	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	NATIVE BOUQUET, LLC	3927		OCEANIC DR		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	U - BILD	3800		OCEANIC DR	107	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	RAMTECH MFG INC	3801		OCEANIC DR	101	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	BARON PAPER COMPANY INC.	3840		OCEANIC DR	511	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	A-ROO DISTRIBUTING OF CALIFORNIA LLC	3840		OCEANIC DR	512	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ROBERT MANN PACKAGING INC.	3931		OCEANIC DR		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	RAYO WHOLESALE INC	3941		OCEANIC DR		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ONE SOURCE DISTRIBUTORS LLC	3951		OCEANIC DR		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	CEMEC MARTIAL ARTS	3700		OCEANIC WAY		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	BOONSTRA CONSTRUCTION	3700		OCEANIC WAY	102	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	MIT ENGINEERING & CONSTR.	3720		OCEANIC WAY	203	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ASPEN COOLING & HEATING	3720		OCEANIC WAY	205	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SEAGAZE REALTY/ALL IN ONE LOANS	3720		OCEANIC WAY	207	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	MORRISSEY CONSTRUCTION	3720		OCEANIC WAY	209	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	AM CONTRACTING INC	3720		OCEANIC WAY	301	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	PACIFIC GYRE	3720		OCEANIC WAY	301A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	MANTEL DEPOT INC	3720		OCEANIC WAY	302	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	CODE MICRO	3720		OCEANIC WAY	303	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	BELL BLUEPRINT CO.	3720		OCEANIC WAY	304	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ODYSSEY PROPERTIES & GARRISON CONSTRUCTION	3720		OCEANIC WAY	305	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ADVANCE THERMAL FORMING ENT INC	3720		OCEANIC WAY	307	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	M I SOLUTIONS	3750		OCEANIC WAY	402	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SIMULSTAT INC	3750		OCEANIC WAY	103	Oceanside	CA	92056	Loma Alta	904.1			Computer Programming Services											Z-Low	Not applicable			C							R	
OC	NORTH COUNTY MOBILE ELECTRONICS	3760		OCEANIC WAY	501	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	QUALITY PLUS	3760		OCEANIC WAY	502	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	BROADCAST DESIGNS INTERNATIONAL	3760		OCEANIC WAY	502	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TUTOR TIME CHILD CARE LEARNING CENTER	3760		OCEANIC WAY	503	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	JORDAN ENGINEERING LLC	3791		OCEANIC WAY		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	AM CONTRACTING	3740		OCEANIC WY	301	Oceanside	CA	92056	Loma Alta	904.1	1521		GENERAL CONTRACTOR HOUSING											Z-Low	Not applicable			I							GC	
OC	THE SURFER'S PRO SHOP	220		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5941		Sporting Goods Store											Z-Low	Not applicable			C							W	
OC	MEDIATECH INSTITUTE	302		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	8222		Audio/Video Production Trade School											Z-Low	Not applicable			C							W	
OC	500 MOTORS	515		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CAL-AUTO	518		OCEANSIDE BLVD	106	Oceanside	CA	92054	Loma Alta	904.1	7299		Miscellaneous Personal Services											Z-Low	Not applicable			C							W	
OC	CELLULAR PHONE SERVICE	518		OCEANSIDE BLVD	105	Oceanside	CA	92054	Loma Alta	904.1	5999		Telephone Service Store											Z-Low	Not applicable			C							W	
OC	LV NAIL AND SPA	518		OCEANSIDE BLVD	101-B	Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	MONEY TREE - CHECK CASHING	518		OCEANSIDE BLVD	112	Oceanside	CA	92054	Loma Alta	904.1	6141		Personal Loans											Z-Low	Not applicable			C							W	
OC	MULTISERVICES	518		OCEANSIDE BLVD	101-A	Oceanside	CA	92054	Loma Alta	904.1	8111		Legal Services											Z-Low	Not applicable			C							W	
OC	LIBERTY TAX SERVICE	601		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PROTEC - LOCK	601		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	NORTH COUNTY LIFE LINE	707		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	7-11 FOOD STORE #17043 D/2011	711		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OCEANSIDE INN	1680		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7011		Hotels, Motels											Z-Low	Not applicable			C							W	
OC	CVS DRUG STORE	1706		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5912		Drug Stores											Z-Low	Not applicable			C							W	
OC	BLOCKBUSTER VIDEO	1710		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1	7841		Video tape Rental											Z-Low	Not applicable			C							W	
OC	WEST MARINE	1719		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	LAUNDRY COIN OP	1727		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OCEAN CLINIC	1727		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SMOKE DEPOT	1727		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	WEIGHT WATCHERS	1729		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SMART AND FINAL	1737		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	DISCOVERY PRESCHOOL	1759		OCEANSIDE BLVD	G	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OCEAN NAILS	1759		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SSI AUTO INSURANCE	1759		OCEANSIDE BLVD	I	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	VIDEO TOWN	1759		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ABSOLUTE HAIR	1763		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CREATIVE AQUATICS	1763		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PLANET SUN TANNING	1763		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	AVIS CAR RENTAL	1771		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	NORTH COUNTY DENTAL CENTER	1771		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	A-1 SELF STORAGE	1783		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	FIRST CLASS FITNESS CENTER	1791		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	FRAZEE PAINT	1793		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	LOANN'S DESIGNS	1810		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	VINCENT AND SON BARBER SHOP	1810		OCEANSIDE BLVD	C	Oceanside	CA	92054	Loma Alta	904.1	7231		Barber Shops											Z-Low	Not applicable			C							W	
OC	SPA AND NAIL DESIGNS	1810		OCEANSIDE BLVD	D	Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	CRICKET COMMUNICATION	1810		OCEANSIDE BLVD	E	Oceanside	CA	92054	Loma Alta	904.1	5999		Telephone Service Store											Z-Low	Not applicable			C							W	
OC	HARPER CHIROPRACTOR	1816		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	8041		Office of Chiropractor											Z-Low	Not applicable			C							W	
OC	HERTZ LOCAL EDITION	1816		OCEANSIDE BLVD	C	Oceanside	CA	92054	Loma Alta	904.1	7514		Passenger Car Rental											Z-Low	Not applicable			C							W	
OC	SPARKLE PLENTY	1816		OCEANSIDE BLVD	F	Oceanside	CA	92054	Loma Alta	904.1	5632		Women's Apparel and Accessory Store											Z-Low	Not applicable			C							W	
OC	COMMAND CENTER	1824		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1	7361		Employment Services											Z-Low	Not applicable			C							W	
OC	NOBLE KNITS	1824		OCEANSIDE BLVD	C	Oceanside	CA	92054	Loma Alta	904.1	5621		Women's Clothing Store											Z-Low	Not applicable			C							W	
OC	OCEANSIDE COIN LAUNDRY	1824		OCEANSIDE BLVD	D	Oceanside	CA	92054	Loma Alta	904.1	7215		Coin operated Laundry and Dry Cleaners											Z-Low	Not applicable			C							W	
OC	LITTLE BEARS CHILD CARE	1828		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	8351		Child Day Care Services											Z-Low	Not applicable			C							W	
OC	NEW TO YOU - THRIFT STORE	1830		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	5932		Used Merchandise store											Z-Low	Not applicable			C							W	
OC	THALIA'S BRIDAL	1830		OCEANSIDE BLVD	C2	Oceanside	CA	92054	Loma Alta	904.1	5651		Women's Clothing Store											Z-Low	Not applicable			C							W	
OC	AWARD SOURCE	1830		OCEANSIDE BLVD	C3	Oceanside	CA	92054	Loma Alta	904.1	5999		Miscellaneous Retail Stores											Z-Low	Not applicable			C							W	
OC	SMILE DENTAL OF OCEANSIDE	1830		OCEANSIDE BLVD	D	Oceanside	CA	92054	Loma Alta	904.1	8021		Offices and Clinics of Dentists											Z-Low	Not applicable			C							W	
OC	EL CAMINO RENTALS	1833		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PLAYER'S AUTOSOUND INC.	1833		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	EL CAMINO RENTALS	1833		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OSHKOSH REGIONAL LOGISTICS CENTER	1833		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CHECK AND GO	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	6141		Personal Loans											Z-Low	Not applicable			C							W	
OC	FAST ACTION PRINTING & COPYING	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	2759		Commercial Printing											Z-Low	Not applicable			C							W	
OC	GREGORIO TOLENTINO DENTIST	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	8021		Offices and Clinics of Dentists											Z-Low	Not applicable			C							W	
OC	HACIENDA HOME LOANS	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	6162		Mortage Banks and Loan Correpondents											Z-Low	Not applicable			C							W	
OC	HOLISTIC CLINIC	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	8049		Office or Clinics of Other Health Practicioners											Z-Low	Not applicable			C							W	
OC	J R FLOWERS	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5992		Florist											Z-Low	Not applicable			C							W	
OC	KLASSY SALON	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	MOMILANI'S ISLAND TRADITIONS - ALOHA WEAR	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5661		Family Clothing Store											Z-Low	Not applicable			C							W	
OC	NAVY FEDERAL CREDIT UNION	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	6061		Credit Union											Z-Low	Not applicable			C							W	
OC	OCEANSIDE NUTRITION	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	8322		Individual & Family Social Services											Z-Low	Not applicable			C							W	
OC	OCEANSIDE PET SALON	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5999		Pet Shops, Retail											Z-Low	Not applicable			C							W	
OC	SUZ BEAUTY SUPPLY	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5999		Miscellaneous Retail Stores											Z-Low	Not applicable			C							W	
OC	THE POTTER'S HOUSE	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	8661		Religious Organizations											Z-Low	Not applicable			C							W	
OC	WIC PROGRAM	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	8322		Individual & Family Social Services											Z-Low	Not applicable			C							W	
OC	OCEANSIDE LIQUOUR	1910		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5921		Liquor Store											Z-Low	Not applicable			C							W	
OC	OCEAN NAILS AND HAIR	1950		OCEANSIDE BLVD	D	Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	PLATINUM HAIR AND NAIL	1950		OCEANSIDE BLVD	D + E	Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	PAYDAY CASH ADVANCE	1950		OCEANSIDE BLVD	F	Oceanside	CA	92054	Loma Alta	904.1	6141		Personal Loans											Z-Low	Not applicable			C							W	
OC	H & H JR INC.	1950		OCEANSIDE BLVD	H	Oceanside	CA	92054	Loma Alta	904.1			Money Wiring											Z-Low	Not applicable			C							W	
OC	FRED LOYA INSURANCE	1950		OCEANSIDE BLVD	L & M	Oceanside	CA	92054	Loma Alta	904.1	6411		Insurance Agents											Z-Low	Not applicable			C							W	
OC	FRONTLINE - BODY PIERCING	1950		OCEANSIDE BLVD	K	Oceanside	CA	92054	Loma Alta	904.1	7299		Miscellaneous Personal Services											Z-Low	Not applicable			C							W	
OC	ALLSTAR GLASS	1950		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5231		PAINT, WALLPAPER											Z-Low	Not applicable			C	12/2/2008	No second visit needed			Yes		GC	
OC	RED CLIPPER BARBER SHOP	1979		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	FIRE MOUNTAIN MARKET	1991		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	IMPACT DESIGNS	2024		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1	5699		Miscellaneous Apparel and Accessory Store											Z-Low	Not applicable			C							W	
OC	HAMILTON INDUSTRIES	2026		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SHAVER VISUAL MERCHANDIZING	2042		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1	5211		Cabinet Kitchen, To Be Install - Retail											Z-Low	Not applicable			C							W	
OC	THE CORNER LIQUOR	2600		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5921		Liquor Store											Z-Low	Not applicable			C							W	
OC	WAHOO INTERNATIONAL INC	2605		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PACIFIC ANIMAL HOSPITAL	2801		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	GROOMING DALES	2805		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	MCALISTER INSTITUTE NORTH COASTAL RRC	2821		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CABLE SOLUTIONS, LLC	2905		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ANDY'S GLASS AND REPAIR	2913		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ANGELITA FOODS & SPICE	2925		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	BAUER BRO LLC	2925		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SOLID RESTORATION	2925		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PESTMASTER SERVICES	2929		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	DYNOTECH MOTOR SPORTS	2933		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	NORTH COUNTY HYPER SPORTS	2933		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	RIED'S CUSTOM GLASS TINTING	2933		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SAFELITE AUTO GLASS	2933		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	W.C. HYPER SPORTS	2933		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	A-1 SELF STORAGE	3030		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	OLD WORLD STANDARDS	3040		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	GALLAGHER DRILLING SERVICE	3040		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	HUCK FINN'S MINI WAREHOUSE	3091		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ORCO BLOCK CO INC	3501		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	3271		Manufacturing - Concrete Products											Z-Low	Not applicable			C	3/27/2009				Yes		G	
OC	PACIFIC MINI STORAGE	4015		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	TIME MACHINE RACECRAFT	4035		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1	7549		Automobile Services - Except Repairs											Z-Low	Not applicable			C	3/18/2009				Yes		G	
OC	SPIRAL STAIRCASE FACTORY	4035		OCEANSIDE BLVD	A1	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	LINCO	4035		OCEANSIDE BLVD	A10	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	

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Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	ALFRED DUNATTE CABINETS	4035		OCEANSIDE BLVD	B23	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	UPHOLTERY BY MESTAZ	4035		OCEANSIDE BLVD	B24	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	NORTH COUNTY IRON WORKS	4035		OCEANSIDE BLVD	C12	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	JORDAN ENGINEERING	4035		OCEANSIDE BLVD	C16	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	1 800 GOTJUNK	4035		OCEANSIDE BLVD	C19	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	TRUE WOOD GRAINS	4035		OCEANSIDE BLVD	D29	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OLD WORLD STANDARDS	4035		OCEANSIDE BLVD	D28	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	RICHER RACING	4035		OCEANSIDE BLVD	D33	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	DERRY PRECISION MACHINING	4035		OCEANSIDE BLVD	E35	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	MARSWAY MACHINING, INC	4035		OCEANSIDE BLVD	E41	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	HENMAN BEVILACQUA	4035		OCEANSIDE BLVD	F44	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	G. S. MARINE INTERIORS	4035		OCEANSIDE BLVD	F48	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ALLENS CUSTOM WOODWORKING	4035		OCEANSIDE BLVD	G52	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	HARBOR HARDWOOD FLOORS INC.	4035		OCEANSIDE BLVD	G56	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PINAMONTI INDUSTRIAL PARK	4035		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	GREEN JUNGLE INC.	4035		OCEANSIDE BLVD	40	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PARKER AIR BRUSH	4035		OCEANSIDE BLVD	A3	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	TEC SERVICE	4035		OCEANSIDE BLVD	B25	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OLD WORLD STANDARDS	4035		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	1521		GENERAL CONTRACTING HOMES											Z-Low	Not applicable			C							GC	
OC	GOLDEN STATE FENCE COMPANY	4051		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	THE PRESCOTT COMPANIES	4055		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SELECT PHYSICAL THERAPY	4055		OCEANSIDE BLVD	AC	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	HOME HELPERS/DIRECT LINK	4055		OCEANSIDE BLVD	D	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	RANCHO DEL ORO CHIROPRACTIC	4055		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	GANATOL LAND COMPANY	4055		OCEANSIDE BLVD	KM	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PARTNERSHIP WITH INDUSTRY	4059		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SOUTH COAST SECURITY	4059		OCEANSIDE BLVD	F	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	MY FAMILY'S SEASONINGS INC	4059		OCEANSIDE BLVD	H	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	MIRACLE METHOD	4059		OCEANSIDE BLVD	L	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	STEAMATIC OF SAN DIEGO	4059		OCEANSIDE BLVD	L	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CURTIS MANAGEMENT CO. INC.	4059		OCEANSIDE BLVD	M	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PACIFIC BATTERY SYSTEMS	4061		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ARROWHEAD PACKAGING CO.	4061		OCEANSIDE BLVD	C	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SHEPHERD'S CHURCH	4061		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	GOING TO BEAT CANCER	4061		OCEANSIDE BLVD	F	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	AD COMPUTERS	4061		OCEANSIDE BLVD	J	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	MBM BOSS STRATEGIC MATERIALS	4061		OCEANSIDE BLVD	L	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	LITE COSMETICS	4061		OCEANSIDE BLVD	M	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CANYON LAND SURVEYING	4061		OCEANSIDE BLVD	N	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	VALERIE HILFERTY	4065		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ALL ABOUT EYES OPTOMETRIC	4065		OCEANSIDE BLVD	C	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	KAIGAN KARATE	4065		OCEANSIDE BLVD	D	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	UNYEWAY INC.	4065		OCEANSIDE BLVD	EH	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	BLUE WORLD INDUSTRIES	4065		OCEANSIDE BLVD	K	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	AM CHEMICAL LLC	4065		OCEANSIDE BLVD	M	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	AQUATIC SPECIALTIES INC	4065		OCEANSIDE BLVD	P	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	RANDOX LABORATORIES LTD	4065		OCEANSIDE BLVD	Q	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	MORGAN TAX & FINANCIAL SERVICES	4065		OCEANSIDE BLVD	T	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	INDULGE HAIR SALON	4065		OCEANSIDE BLVD	UV	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	KC BLY MULTICULTURAL STYLIST	4065		OCEANSIDE BLVD	UV	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	RANCHO DEL ORO BUSINESS CENTER	4079		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	VETERAN'S VILLAGES OF SAN DIEGO	4079		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OCEANSIDE CENTER FOR SPIRITUAL LIVING	4079		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	HI-TECH SWISS ENGINEERING	4079		OCEANSIDE BLVD	J	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	GRETCHEN'S PET GROOMING	4083		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	BLOXTON CHIROPRACTIC CENTER	4083		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ILLEGAL PRODUCTIONS	4083		OCEANSIDE BLVD	C	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SCRIPPS COASTAL MEDICAL CENTER	4083		OCEANSIDE BLVD	D	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	MALOTTE AND RAE	4083		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	TECHNICAL ASSISTANCE & SERVICES CO.	4083		OCEANSIDE BLVD	F	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	THE GREAT STATE OF BEER	4083		OCEANSIDE BLVD	J	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	R H ELECTRONICS INC.	4083		OCEANSIDE BLVD	K	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	F. I. OPTICS INC.	4089		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	WORLD TECH DENTAL LAB INC.	4089		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ABD TECHNOLOGY LLC	4089		OCEANSIDE BLVD	C	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	FOTOSIX STUDIO	4089		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SERVPRO OF NORTH VISTA/SAN MARCOS	4089		OCEANSIDE BLVD	G	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	WHITE DOG ENTERPRISES	4089		OCEANSIDE BLVD	J	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CAMERFORD IRISH DANCING	4093		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SMOG SHOP	4093		OCEANSIDE BLVD	C	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PEREIRA BRAZILIAN JIU JITSU	4093		OCEANSIDE BLVD	D	Oceanside	CA	92056	Loma Alta	904.1	7999		Martial Arts Instruction											Z-Low	Not applicable			C							G	Third Party Inspection
OC	ABOVE BOARDS	4093		OCEANSIDE BLVD	G	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	RANCHO DEL ORO VETERINARY HOSP	4093		OCEANSIDE BLVD	J	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CASH A CHECK	4095		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	PREGNANCY RESOURCE CENTER	4095		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	A.C. AND FLOOR DÉCOR INC.	4095		OCEANSIDE BLVD	D	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	OCEANSIDE DANCE ACADEMY	4095		OCEANSIDE BLVD	G	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	EXPRESS PERSONNEL SERVICES	4095		OCEANSIDE BLVD	J	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CITI BANK - OUT OF BUSINESS	4120		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	LONG'S DRUGS - OUT OF BUSINESS	4130		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	DOWNEY SAVINGS - OUT OF BUSINESS	4136		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ANGIE BEAUTY SUPPLY	4140		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	PLAZA DEL ORO CLEANERS	4140		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	LETICIA TRINIDAD	4140		OCEANSIDE BLVD	133	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	MAIL DEPOT	4140		OCEANSIDE BLVD	136	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	PACIFIC MARINE CREDIT UNION - OUT OF BUSINESS	4140		OCEANSIDE BLVD	141	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	UNITED STUDIOS OF SELF DEFENSE	4140		OCEANSIDE BLVD	143	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	RANCHO DENTAL PRACTICE	4140		OCEANSIDE BLVD	149	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	

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Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	NAIL BOUTIQUE	4140		OCEANSIDE BLVD	159	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	CHASE BANK	4147		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	7231													Z-Low	Not applicable			C							G	
OC	H & R BLOCK TAX SERVICE	4160		OCEANSIDE BLVD	169	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	DANIEL AND CO.	4160		OCEANSIDE BLVD	173	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	HAIRPORT	4160		OCEANSIDE BLVD	167E	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	JJ'S SWEET PARDISEFLOWERS & GIFT	4160		OCEANSIDE BLVD	161	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	MICROCENTER COMPUTER	4160		OCEANSIDE BLVD	173	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	NEW MONEY EXPRESS	4160		OCEANSIDE BLVD	165	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SELECT STAFFING	4161		OCEANSIDE BLVD	100	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SYLVAN LEARNING CENTER	4161		OCEANSIDE BLVD	101	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	CRAIG HUEHERGARDT DDS INC	4161		OCEANSIDE BLVD	102	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	DOLLAR TREE	4161		OCEANSIDE BLVD	103	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	MAJESTIC SALON	4170		OCEANSIDE BLVD	191	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	HAIR AND NAIL	4170		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	JAMES WHITE	4170		OCEANSIDE BLVD	179	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	PET PEOPLE	4170		OCEANSIDE BLVD	189	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	UMAX1 INC/CIGARETTES 4 LESS	4170		OCEANSIDE BLVD	175	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	AARON'S SALES & LEASE OWNERSHIP	4171		OCEANSIDE BLVD	100A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	WHITE DRAGON KUNG FU	4171		OCEANSIDE BLVD	100B	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	SUPERSTAR SALON	4171		OCEANSIDE BLVD	101A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ELIDA EDGE	4171		OCEANSIDE BLVD	101B	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	COLLEGE CLEANERS	4171		OCEANSIDE BLVD	102A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	ITAN	4171		OCEANSIDE BLVD	102B	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	BEST NAILS	4171		OCEANSIDE BLVD	103	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							G	
OC	WELLS FARGO BANK	4176		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	EDWARD JONES & CO.	4196		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	BLOCK BUSTER	4221		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	7841		VIDEO RENTALS											Z-Low	Not applicable			C							GC	
OC	POSTNET	4225		OCEANSIDE BLVD	M	Oceanside	CA	92056	Loma Alta	904.1	4311		POSTAL SERVICES											Z-Low	Not applicable			C							GC	
OC	NORTH COUNTY CAT HOSPITAL	4225		OCEANSIDE BLVD	U	Oceanside	CA	92056	Loma Alta	904.1	742		Veterinary Services											Z-Low	Not applicable			C							GC	
OC	ADORA SALON	4225		OCEANSIDE BLVD	D	Oceanside	CA	92056	Loma Alta	904.1	7231		HAIRDRESSERS											Z-Low	Not applicable			C							GC	
OC	CASH ADVANCE	4225		OCEANSIDE BLVD	N	Oceanside	CA	92056	Loma Alta	904.1	6029		BANK											Z-Low	Not applicable			C							GC	
OC	DENTIST	4225		OCEANSIDE BLVD	G	Oceanside	CA	92056	Loma Alta	904.1	8049S		DENTIST											Z-Low	Not applicable			C							GC	
OC	FOOT SOLUTIONS	4225		OCEANSIDE BLVD	H	Oceanside	CA	92056	Loma Alta	904.1	5661		FOOT WEAR STORE											Z-Low	Not applicable			C							GC	
OC	GATEWAY CLEANER	4225		OCEANSIDE BLVD	V	Oceanside	CA	92056	Loma Alta	904.1	7212		CLEANERS											Z-Low	Not applicable			C							GC	
OC	KARATE FOR KIDS	4225		OCEANSIDE BLVD	W	Oceanside	CA	92056	Loma Alta	904.1	7999		KARATE INSTRUCTION											Z-Low	Not applicable			C							GC	
OC	PERFECT NAILS	4225		OCEANSIDE BLVD	J	Oceanside	CA	92056	Loma Alta	904.1	7231		BEAUTY SHOP											Z-Low	Not applicable			C							GC	
OC	SUPER CUTS	4225		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1	7231		HAIRDRESSERS											Z-Low	Not applicable			C							GC	
OC	VALDIVIA JEWELRY	4225		OCEANSIDE BLVD	P	Oceanside	CA	92056	Loma Alta	904.1	5944		JEWELRY SHOP											Z-Low	Not applicable			C							GC	
OC	CABLE SOLUTIONS, LLC	4225		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							GC	
OC	EXTRA SPACE STORAGE #645	4567		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	1521		OTHER CONTRACTOR											Z-Low	Not applicable			C							GC	
OC	JWI CONTRACTING	4747		OCEANSIDE BLVD	F	Oceanside	CA	92056	Loma Alta	904.1	1623		GENERAL CONTRACTOR											Z-Low	Not applicable			I							GC	
OC	PBM FREIGHT SOLUTIONS	4747		OCEANSIDE BLVD	N	Oceanside	CA	92056	Loma Alta	904.1	4731		TRUCKING BROKERS											Z-Low	Not applicable			C							GC	
OC	JORDAN ENGINEERING LLC	4747		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1	7217		Carpet/Furniture Cleaning											Z-Low	Not applicable			C							GC	
OC	JOSEPH HAMPEL CONTRUCTION	4747		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1	1623		GENERAL CONTRACTOR											Z-Low	Not applicable			I							GC	
OC	MILLINNEUM FLOORING	4747		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	8811		LANDSCAPING											Z-Low	Not applicable			C							GC	
OC	STRAIGHT LINE GENERAL CONTRACTOR	4747		OCEANSIDE BLVD	C	Oceanside	CA	92056	Loma Alta	904.1	1623		GENERAL CONTRACTOR											Z-Low	Not applicable			I							GC	
OC	CALIFORNIA VIDEO REPAIRS	4747		OCEANSIDE BLVD	D	Oceanside	CA	92056	Loma Alta	904.1	7622		VIDEO REPAIRS											Z-Low	Not applicable			C							GC	
OC	JAZI CRAFTS	4747		OCEANSIDE BLVD	G	Oceanside	CA	92056	Loma Alta	904.1	7999		AMUSEMENT & RECREATIONAL SERVISES											Z-Low	Not applicable			C							GC	
OC	STAIRS BY DESIGN INC	4747		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							GC	
OC	TINA'S SEWING COMPANY	4747		OCEANSIDE BLVD	H	Oceanside	CA	92056	Loma Alta	904.1	7219		CLOTHING ALTERATIONS											Z-Low	Not applicable			C							GC	
OC	AUSMON FINACIAL INVESTMENTS	4749		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1	6282		FINACIAL INVESTMENTS											Z-Low	Not applicable			C							GC	
OC	OCEANSIDE FAMILY CHIROPRACTOR	4749		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	8041		CHIROPRACTOR											Z-Low	Not applicable			C							GC	
OC	GIANT A&M	4749		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							GC	
OC	ENCORE CLOTHING REVIVAL	4750		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5932													Z-Low	Not applicable			C							GC	
OC	FARTHING CHIROPRACTIC	4750		OCEANSIDE BLVD	A8	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	LTS INC	4750		OCEANSIDE BLVD	A17	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	OCEANSIDE KUMON	4750		OCEANSIDE BLVD	A16	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	OCEANSIDE SQUARE LLC	4750		OCEANSIDE BLVD	A12	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	ONE STOP CONVENIENCE STORE	4750		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SILVER CLIPPER BARBERSHOP	4750		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SILVER STAR SALON	4750		OCEANSIDE BLVD	A7	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TEMPLE HEIGHTS ANIMAL HOSPITAL	4750		OCEANSIDE BLVD	A4	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TEMPLE HEIGHTS CLEANERS	4750		OCEANSIDE BLVD	A2	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	TEMPLE HEIGHTS DENTISTRY	4750		OCEANSIDE BLVD	A15	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	VANESSA NAILS	4750		OCEANSIDE BLVD	A15	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	VERNON ALLEN	4750		OCEANSIDE BLVD	A11	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	SILVER STAR SALON	4750		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	7231		HAIR & NAIL SALON											Z-Low	Not applicable			C							GC	
OC	SANDALZ	4751		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1	5139		FOOT WEAR STORE											Z-Low	Not applicable			C							GC	
OC	PATHFINDER INSTRUMENT INC.	4751		OCEANSIDE BLVD	D	Oceanside	CA	92056	Loma Alta	904.1																										
OC	AUDIO VIDEO AUTHORITH	4751		OCEANSIDE BLVD	H	Oceanside	CA	92056	Loma Alta	904.1	3651		VIDEO INSTALLATIONS											Z-Low	Not applicable			C							GC	
OC	TECH EXPERT EXPRESS	4751		OCEANSIDE BLVD	I	Oceanside	CA	92056	Loma Alta	904.1	7622		TV & RADIO REPAIRS											Z-Low	Not applicable			C							GC	
OC	MY WORLD AT&T	4225		OCEANSIDE BLVD	L	Oceanside	CA	92056	Loma Alta	904.1	4812		TELEPHONE COMMUNICATIONS											Z-Low	Not applicable			C							GC	
OC	LASAIR DESIGN	4747		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1	8711		ELECTRICAL ENGINEERING											Z-Low	Not applicable			I							GC	
OC	PRECISION 4 SWISS MACHINING INC	4747		OCEANSIDE BLVD	L & M	Oceanside	CA	92056	Loma Alta	904.1	3949		MANUFACTURING, PLASTIC/RUBBER											Z-Low	Not applicable			I							GC	
OC	WHAMO INC	4747		OCEANSIDE BLVD	J	Oceanside	CA	92056	Loma Alta	904.1	1711		OTHER CONTRACTOR											Z-Low	Not applicable			C							GC	
OC	BZ SURF BOARDS	4747		OCEANSIDE BLVD	J&K	Oceanside	CA	92056	Loma Alta	904.1	3949		SURF BOARD MFG											Z-Low	Not applicable			C							GC	
OC	ALLSTATE INSURANCE	4749		OCEANSIDE BLVD	D	Oceanside	CA	92056	Loma Alta	904.1	6331		AUTO INSURANCE											Z-Low	Not applicable			C							GC	
OC	CORNERSTONE CHURCH	4749		OCEANSIDE BLVD	H	Oceanside	CA	92056	Loma Alta	904.1	8661		RELIGIOUS SERVICES											Z-Low	Not applicable			C							GC	
OC	USA TAE KWOK DO	4760		OCEANSIDE BLVD	B1	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	NASTY DOG SPA	4760		OCEANSIDE BLVD	B3	Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							R	
OC	POSTAL ANNEX #4008	125		OLD GROVE ROAD	9	Oceanside	CA	92057	San Luis Rey	903.1	492210		POSTAL SERVICES											Z-Low	Not applicable			C							GC	
OC	MISSION FEDERAL CREDIT UNION	125		OLD GROVE ROAD	1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	POSTAL ANNEX	125		OLD GROVE ROAD	9	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	H & R BLOCK	125		OLD GROVE ROAD	10	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	PRESTIGE NAILS	125		OLD GROVE ROAD	11	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	EXCELLENT DRYCLEANERS	125		OLD GROVE ROAD	13	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	KOKOMO'S TAN	125		OLD GROVE ROAD	14	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	OCEANSIDE FAMILY DENTISTRY	125		OLD GROVE ROAD	15	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	LOWE'S HIW INC #1588	155		OLD GROVE ROAD	F	Oceanside	CA	92057	San Luis Rey	903.1	5211		HARDWARE STORE											Z-Low	Not applicable			I							GC	
OC	LOWE'S	155		OLD GROVE ROAD	B10	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SAN DIEGO NATIOANL BANK	165		OLD GROVE ROAD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MY WIRELESS	175		OLD GROVE ROAD	1	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	LESLIE SKYLIGHTS	1601		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	1761		SKYLIGHT INSTALLATION											Z-Low	Not applicable			I							GC	
OC	FORD SIGNS INC	1605		ORD WAY	B	Oceanside	CA	92056	Loma Alta	904.1	3544		MANUFACTURING, EQUIPMENT											Z-Low	Not applicable			I							GC	
OC	SURF RIDE	1609		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	3949		SURFBOARDS											Z-Low	Not applicable			C							GC	
OC	BIG EVENTS	1613		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5999		GIANT INFLATEABLES											Z-Low	Not applicable			C							GC	
OC	FOAMTEC INTENATIONAL	1621		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5162		PLASTICS DISTRIBUTOR											Z-Low	Not applicable			C							GC	
OC	SCHLOSSADLER WINES	1625		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5182		WINE											Z-Low	Not applicable			C							GC	
OC	CAMBELL CERTIFIED STEEL CONSTRUCTOR	1629		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	1791		STEEL WORK STRUCTURAL											Z-Low	Not applicable			I							GC	
OC	JAIME MENDEZ RESTORATION & CONSERVATION	1630		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	3429													Z-Low	Not applicable			I							GC	
OC	MICHAEL PATTI PAINTING	1632		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	1752		PAINTING/COATING											Z-Low	Not applicable			C							GC	
OC	FINANCIAL SERVICES	1640		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	6282		FINACIAL ADVISE											Z-Low	Not applicable			C							GC	
OC	RANCHO DEL ORO VET HOSPITAL	1646		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	742		Veterinary Services											Z-Low	Not applicable			C							GC	
OC	EXPRESS EMPLOYMENT PROFFESSIONALS	1652		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	7363		EMPLOYMENT LEASING											Z-Low	Not applicable			C							GC	
OC	ARETOY FABRIC STORE	1656		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5949		FABRIC STORE											Z-Low	Not applicable			C							GC	
OC	DO IT TENNIS SHOP	1658		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5941		TENNIS GOODS											Z-Low	Not applicable			C							GC	
OC	TWIN IMAGING TECHNOLOGY	1662		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	7374		COMPUTER DATA PROCESSING											Z-Low	Not applicable			C							GC	
OC	INTERNET HOBBY SHOP	1664		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5945		HOBBY TOYS											Z-Low	Not applicable			C							GC	
OC	3V WHEEL DISTRIBUTION INC ?	1666		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	3679		MANUFACTURING,ELECTRONICS											Z-Low	Not applicable			I							GC	
OC	VERSA SPA	1668		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5091		POOL EQUIPMENT											Z-Low	Not applicable			C							GC	
OC	WESTCOAST FTA	1670		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5063		ELECTRICAL SUPPLIES											Z-Low	Not applicable			C							GC	
OC	SAN DIEGO FUME WORKS COMPANY	1672		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	8811		LANDSCAPING											Z-Low	Not applicable			C							GC	
OC	OLIVA'S FLOORING, INC	1672		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	1752		FLOOR LAYING											Z-Low	Not applicable			C							GC	
OC	UNIQUE FLOORING	1672		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5211		FLOORING RETAIL											Z-Low	Not applicable			C							GC	
OC	INFOPLACE USA	1674		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	8741		PUBLIC RELATIONS											Z-Low	Not applicable			C							GC	
OC	TEACH LOGIC FOR SOUND LEARNIG	1688		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	8299		TUTORING											Z-Low	Not applicable			C							GC	
OC	PACIFIC BACKFLOW CO	1690		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	1521		OTHER CONTRACTOR											Z-Low	Not applicable			C							GC	
OC	MBC PROMOTIONS	1696		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	8742		MANAGEMENT CONSULTANT											Z-Low	Not applicable			C							GC	
OC	BEAUTY LOVE INC	1700		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5087		BEAUTY SUPPLIES											Z-Low	Not applicable			C							GC	
OC	3V WHEEL DISTRIBUTION INC	1710		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	8811		PANTING/COATING											Z-Low	Not applicable			C							GC	
OC	PHD MANUFACTURING INC	1710		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	3599		MANUFACTURING											Z-Low	Not applicable			C							GC	
OC	PLAY GROUNDS WEST INC	1712		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	3949		PLAY GROUND EQUIPMENT											Z-Low	Not applicable			C							GC	
OC	NOVA BIOLOGICS	1714		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	8742		MANAGEMENT CONSULTANT											Z-Low	Not applicable			C							GC	
OC	RIDGE LANDSCAPING ARCHITECTS	1716		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	781		LANDSCAPING ARCHITECH											Z-Low	Not applicable			I							GC	
OC	HUME & CO TERMITE REPAIRS	1724		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	1541		TERMITE DAMAGE REPAIRS											Z-Low	Not applicable			C							GC	
OC	OESTING BOUTIQUE	1726		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	781		MANUFACTURING BATH PRODUCTS											Z-Low	Not applicable			I							GC	
OC	E N J WINDOWS & GLASS	1728		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5032		BUILDING MATERIALS											Z-Low	Not applicable			C							GC	
OC	JS MANUFACTURING	1742		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	8711		ENGINEERING SERVICES											Z-Low	Not applicable			I							GC	
OC	MANUFACTURING SOLUTIONS	1742		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	7389		CONSULTING											Z-Low	Not applicable			I							GC	
OC	BUDGET BLINDS	1744		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5719		WINDOW SHADE SHOPS											Z-Low	Not applicable			C							GC	
OC	BLU BANDO INC	1746		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							GC	
OC	THE TOTAL DOG	1750		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	742		ANIMAL SPECIALTIES											Z-Low	Not applicable			C							GC	
OC	ALL FLOOR INSTALL	1752		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	1752		FLOOR COVERINGS											Z-Low	Not applicable			C	10/1/2008	No second visit needed			Yes		GC	
OC	MAIN ST INTERIORS	1758		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	7389		INTERIOR DESIGNS											Z-Low	Not applicable			C							GC	
OC	STEICO INDUSTRIES	1814		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5084		WELDING											Z-Low	Not applicable			I							GC	
OC	MARCO POLO INC.	1816		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	7538		General Auto Repair Shop											Z-Low	Not applicable			C							GC	New business 5/20/2009
OC	ONE SOURCE DISTRIBUTORS	1865		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5063		ELECTRICAL MANUFACTURERS											Z-Low	Not applicable			C							GC	
OC	ACI DISTRIBUTION	1875		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	3211		FLAT GLASS MANUFACTURERS											Z-Low	Not applicable			C							GC	
OC	COMPUTER GEEKS	1890		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	5734		COMPUTER PARTS SALES											Z-Low	Not applicable			C							GC	
OC	CIRCUITS PROC TECH INC	1817		PEACOCK BLVD		Oceanside	CA	92056	Loma Alta	904.1	3674		SEMICONDUTORS											Z-Low	Not applicable			C							GC	
OC	JDM UNLIMITED	1818		PEACOCK BLVD	E	Oceanside	CA	92056	Loma Alta	904.1	5013		AUTO SUPPLIES											Z-Low	Not applicable			C							GC	
OC	RHODE FLUX, INC.	1818		PEACOCK BLVD	H	Oceanside	CA	92056	Loma Alta	904.1	3823		PROCESS CONTROLS											Z-Low	Not applicable			C							GC	
OC	BOBBIES HAIR SALON	1818		PEACOCK BLVD	C	Oceanside	CA	92056	Loma Alta	904.1	7231		HAIRDRESSERS											Z-Low	Not applicable			C							GC	
OC	COASTAL LAMINATE & CABINETRY	1818		PEACOCK BLVD		Oceanside	CA	92056	Loma Alta	904.1	1521		OTHER CONTRACTOR											Z-Low	Not applicable			C							GC	
OC	PROPERTY DAMAGE APPRAISERS	1818		PEACOCK BLVD	B	Oceanside	CA	92056	Loma Alta	904.1	6531		REAL ESTATE APPRAISERS											Z-Low	Not applicable			C							GC	
OC	PRYOR PRODUCTS	1819		PEACOCK BLVD		Oceanside	CA	92056	Loma Alta	904.1	5047		MEDICAL DENTAL HOSPITAL SUPPLIES											Z-Low	Not applicable			C							GC	
OC	EAGLE GRINDING	1820		PEACOCK BLVD		Oceanside	CA	92056	Loma Alta	904.1	3599		INDUSTRIAL MANUFACTUIRERS											Z-Low	Not applicable			C							GC	
OC	MR. EXTERMINATOR	1820		PEACOCK BLVD	H	Oceanside	CA	92056	Loma Alta	904.1	7342		PEST CONTROL											Z-Low	Not applicable			I							GC	
OC	TRYPLEX TECHNOLOGIES	1820		PEACOCK BLVD	B	Oceanside	CA	92056	Loma Alta	904.1	7378		COMPUTER MAINTENANCE											Z-Low	Not applicable			C							GC	
OC	PRECISION RESTORATION	1820		PEACOCK BLVD	C	Oceanside	CA	92056	Loma Alta	904.1	1521		HOME RESTORATION											Z-Low	Not applicable			C							GC	
OC	THE OUTDOOR ADVERTISING SPECIALIST	1820		PEACOCK BLVD	A	Oceanside	CA	92056	Loma Alta	904.1	7312		ADVERTISING SIGNS											Z-Low	Not applicable			I							GC	
OC	DEW MFG, INC	1970		PEACOCK BLVD		Oceanside	CA	92056	Loma Alta	904.1	3751		MOTER CYCLE PARTS											Z-Low	Not applicable			C							GC	
OC	DAVID SHAPOSHNICK, INC	1980		PEACOCK BLVD		Oceanside	CA	92056	Loma Alta	904.1	1711		PLUMBING & MECHANICAL											Z-Low	Not applicable			I	10/15/2008	All items completed and	1/7/2009		Yes		GC	
OC	INTEGRITY IMAGING SOLUTIONS	1980		PEACOCK BLVD	E	Oceanside	CA	92056	Loma Alta	904.1	7699		REPAIR SHOPS											Z-Low	Not applicable			C							GC	
OC	SEASIDE COLOR	1980		PEACOCK BLVD	H	Oceanside	CA	92056	Loma Alta	904.1	2759		COMMERCIAL PRINTERS											Z-Low	Not applicable			C							GC	
OC	OZONE GOLD	1980		PEACOCK BLVD	G	Oceanside	CA	92056	Loma Alta	904.1	7999		FASTPITCH TRAINING CENTER											Z-Low	Not applicable			C							GC	
OC	TITEFLEX CORPORATION	1995		PEACOCK BLVD		Oceanside	CA	92056	Loma Alta	904.1	3599		INDUSTRIAL MANUFACTUIRERS											Z-Low	Not applicable			C							GC	
OC	ACCUWELD INC	1980		PEACOCK BLVD	D	Oceanside	CA	92056	Loma Alta	904.1	333992		WELDING FABRICATION											Z-Low	Not applicable			C	12/1/2008	No second visit needed			Yes		GC	
OC	BEACHCOMBER BARBERSHOP	309		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	7241		Barber Shops											Z-Low	Not applicable			C							W	
OC	MIDNIGHT ADULT BOOK	316		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Store											Z-Low	Not applicable			C							W	
OC	GI JOES - MILITARY SUPPLIES	404		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Store											Z-Low	Not applicable			C							W	
OC	CAMMIE BOB - MILITARY SUPPLIES	408		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail Store											Z-Low	Not applicable			C							W	
OC	1ST MARINE DIVISION ASSOCIATION	410		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	8641		Military Association											Z-Low	Not applicable			C							W	
OC	TEEHEE ENGINEERING INC	705		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	8711		Engineering Services											Z-Low	Not applicable			C							W	
OC	VSAT NETWORK COMMUNICATIONS	1232		PLAYERS DR		Oceanside	CA	92056	San Luis Rey	903.1	1731		TV ANTENNA REPAIRS											Z-Low	Not applicable			C							GC	
OC	COIN LAUNDRY	3504		PLAZA DR	C	Oceanside	CA	92056	Buena Vista	904.2	7215		LAUNDROMATS											Z-Low	Not applicable			C							GC	
OC	ATTAR BAZAR/IMC DIGITAL	3520		PLAZA DR	101	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							GC	
OC	VERIZON WIRELESS	3702		PLAZA DR	B	Oceanside	CA	92056	Buena Vista	904.2	4812		TELEPHONE COMMUNICATIONS											Z-Low	Not applicable			C							GC	
OC	MOTEL 6	3708		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	7011		MOTEL											Z-Low	Not applicable			C							GC	
OC	DENTIST	3809		PLAZA DR	114	Oceanside	CA	92056	Buena Vista	904.2	8049		DENTIST											Z-Low	Not applicable			C							GC	
OC	EYE SITE OPTOMETRIC	3809		PLAZA DR	103	Oceanside	CA	92056	Buena Vista	904.2	5995		OPTICIANS											Z-Low	Not applicable			C							GC	
OC	PHYSICAL THERAPY	3809		PLAZA DR	112	Oceanside	CA	92056	Buena Vista	904.2	8049		PHYSICAL THERAPISTS											Z-Low	Not applicable			C							GC	
OC	STATE FARM INSURANCE	3809		PLAZA DR	108	Oceanside	CA	92056	Buena Vista	904.2	6411		INSURANCE SERVICES											Z-Low	Not applicable			C							GC	
OC	UNIQUE SALON HAIR, NAIL & WAX	3809		PLAZA DR	109	Oceanside	CA	92056	Buena Vista	904.2	7231		BEAUTY SHOP											Z-Low	Not applicable			C							GC	
OC	RITE AID PHARMACY	3813		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5912		PHARMACY											Z-Low	Not applicable			C							GC	
OC	TJ MAX	3817		PLAZA DR	A	Oceanside	CA	92056	Buena Vista	904.2	6512		RETAIL											Z-Low	Not applicable			C							GC	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	Z FASHION	3817		PLAZA DR	B	Oceanside	CA	92056	Buena Vista	904.2	6512		RETAIL											Z-Low	Not applicable			C							GC	
OC	FAIRLANE CLEANERS	3821		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	7212		CLEANSERS											Z-Low	Not applicable			C							GC	
OC	INSURANCE PLACE	3821		PLAZA DR	402	Oceanside	CA	92056	Buena Vista	904.2	6411		AUTO INSURANCE											Z-Low	Not applicable			C							GC	
OC	DOLLAR TREE	3825		PLAZA DR	501	Oceanside	CA	92056	Buena Vista	904.2	6512		RETAIL											Z-Low	Not applicable			C							GC	
OC	AMERICAN GENERAL FINACIAL SERVICES	3829		PLAZA DR	603	Oceanside	CA	92056	Buena Vista	904.2	6141		FINACIAL SERVICES											Z-Low	Not applicable			C							GC	
OC	PRO NAIL	3833		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	7231		BEAUTY SHOP											Z-Low	Not applicable			C							GC	
OC	SO CAL DISCOUNT TIRE CO	3836		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	8811		LANDSCAPING											Z-Low	Not applicable			C							GC	
OC	LESLIE'S SWIMMINGPOOL SUPPLIES #302	3837		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5999		LANDSCAPING											Z-Low	Not applicable			C							GC	
OC	DENTIST	3837		PLAZA DR	805	Oceanside	CA	92056	Buena Vista	904.2	8049		DENTIST											Z-Low	Not applicable			C							GC	
OC	PERFORMANCE BICYCLE	3837		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5941		BICYCLES AND PARTS											Z-Low	Not applicable			C							GC	
OC	THE TUTORING CENTER	3837		PLAZA DR	803	Oceanside	CA	92056	Buena Vista	904.2	8299		CHILD GUIDANCE AGENCY											Z-Low	Not applicable			C							GC	
OC	GOODWILL	3841		PLAZA DR	902	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							GC	
OC	CLASSIC FLOORS	3844		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	1752		FLOOR COVERINGS											Z-Low	Not applicable			C							GC	
OC	BYRNE SURFBOARDS	3204		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	3949		Manufacturing - Sporting and Athletic Goods											Z-Low	Not applicable			C							W	
OC	FASHIONS "TWO"	3204		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	2339		Manufacturing - Women Apparel											Z-Low	Not applicable			C							W	
OC	OCEANSIDE AUTO REGISTRATION SERVICES	3204		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1																										
OC	BAY CITY APPAREL	3205		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	2329		Manufacturing - Men and Boys Apparel											Z-Low	Not applicable			C							W	
OC	INTERNATIONAL SALES INC	3205		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	3949		Manufacturing - Sporting and Athletic Goods											Z-Low	Not applicable			C							W	
OC	THE LAB SURF COMPANY INC	3205		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	3949		Manufacturing - Sporting and Athletic Goods											Z-Low	Not applicable			C							W	
OC	MAACO AUTO PAINT & BODY	3210		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7532		Automotive Repair Services - Body Shop											Z-Low	Not applicable			C							W	
OC	ADVANCED FIBERGLASS	3215		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	3239		Manufacturing - Fiberglass Products											Z-Low	Not applicable			C							W	
OC	CUSTOM WINDOW DESIGN INC	3225		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	3999		Manufacturing - Wood Doors and Windows											Z-Low	Not applicable			C							W	
OC	MTM INDUSTRIAL	3230		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	3499		Manufacturing - Machine Shop											Z-Low	Not applicable			C							W	
OC	NORTH COUNTY MILLING & MANUFACTURING	3230		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	3499		Manufacturing - Garage Doors											Z-Low	Not applicable			C							W	
OC	WOODCRAFTERS INTERNATIONAL	3230		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	2434		Manufacturing - Cabinets											Z-Low	Not applicable			C							W	
OC	AARK CONSTRUCTION	3245		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	1521		General Contractor, Residential Buildings											Z-Low	Not applicable			C							W	
OC	TEQOPH SURFBOARDS	3245		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	3949		Manufacturing - Sporting and Athletic Goods											Z-Low	Not applicable			C							W	
OC	WAVERLY TILE INC	3245		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5032		Wholesale Sales - Tiles, Stones											Z-Low	Not applicable			C							W	
OC	3D FOAM INC.	3265		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	3086		Manufacturing - Packing Foam											Z-Low	Not applicable			C							W	
OC	AAA N.COUNTY HANDYMAN SERVICE	159		RAMONA WY		Oceanside	CA	92056	San Luis Rey	903.1	8811		Handyman Service											Z-Low	Not applicable			I							GC	
OC	CASA DE AMPARO	103		RANCHO DEL ORO		Oceanside	CA	92054	San Luis Rey	903.1																										
OC	1ST SAMOAN CONGREGATION CHUCH MESA MARGARITA	610	N	REDONDO DR	G	Oceanside	CA	92057	San Luis Rey	903.1			Liquor store											Z-Low	Not applicable			C							R	
OC	AZTEC/OCEANSIDE TRAFFIC SCHOOL	610	N	REDONDO DR	A	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	CARLO'S WATER	610	N	REDONDO DR	B101	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SERVICE CENTER OF THE SOUTH	610	N	REDONDO DR	B102	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MUNGIA INSURANCE SERVICES	610	N	REDONDO DR	B103	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MARIE'S INTERNATIONAL BEAUTY SALON	610	N	REDONDO DR	C	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MESA NUTRITION	610	N	REDONDO DR	D	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	MIX DIX DISCOTECA	610	N	REDONDO DR	I	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SUAREZ FASHION	610	N	REDONDO DR	H	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	NUEVA IGLESIAAPOSTOLICA DE JESUCRISTO	610	N	REDONDO DR		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	RISING STAR BAPTIST MISSIONARY CHHURCH	610	N	REDONDO DR		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	GOOD STUFF ONLY	620	N	REDONDO DR	C	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	COIN-UP WASH AND DRY	620	N	REDONDO DR	F	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	PASE Y ADELGACE	620	N	REDONDO DR		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	FRESH PAC INTERNATIONAL	3925	N	RIVER RD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	CVR PHARMACY	3925	N	RIVER RD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SAN DIEGO COUNTY SERVICES	4665	N	RIVER RD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	VISTA COMMUNITY CLINIC	4700	N	RIVER RD	C	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	EXTRA SPACE STORAGE #200	4700	N	RIVER RD	A	Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	J LEON CONSTRUCTION	4705	N	RIVER RD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	PACIFIC PARADISE NURSERY INC	4785	N	RIVER RD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	DM COLOR EXPRESS INC.	5708	N	RIVER RD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	NEZZY SURFBOARDS	158		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	3949		Manufacturing - Sporting and Athletic Goods											Z-Low	Not applicable			C							W	
OC	BIG JAMES'S BARBERSHOP	164		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	7241		Barbershop											Z-Low	Not applicable			C							W	
OC	THE RAPTURE SALON	166		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	SILVA ACCOUNTING	168		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	8721		Services - Accounting											Z-Low	Not applicable			C							W	
OC	RISING STAR ACADEMY - CHILD CARE	169		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	8351		Services - Child Care											Z-Low	Not applicable			C							W	
OC	CERAMIC TILE SUPPLY INC	179		ROYMAR RD	A	Oceanside	CA	92054	San Luis Rey	903.1	5211		Retail Sales - Tile and Stone											Z-Low	Not applicable			C							W	
OC	NEPTUNE INDUSTRIES - NEZZY SURFBOARDS	180		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	3949		Manufacturing - Sporting and Athletic Goods											Z-Low	Not applicable			C							W	
OC	O'SHEAS DELIVERY SERVICES	180		ROYMAR RD	H	Oceanside	CA	92054	San Luis Rey	903.1	4214		Transportation - Local Trucking and Storage											Z-Low	Not applicable			C							W	
OC	THE TOTAL PROS - AUTO DETAILING TRAINING CENTER	230		ROYMAR RD	A	Oceanside	CA	92054	San Luis Rey	903.1	8289		Services - Auto Detailing School											Z-Low	Not applicable			C							W	
OC	WEST COAST FIRE PROTECTION	230		ROYMAR RD	C	Oceanside	CA	92054	San Luis Rey	903.1	1799		General Contractor - Fire Sprinkler Systems											Z-Low	Not applicable			C							W	
OC	PAYLESS CUSTOM VEHICLE MAGNETS	230		ROYMAR RD	E	Oceanside	CA	92054	San Luis Rey	903.1	3999		Custom Vehicle Magnets											Z-Low	Not applicable			C							W	
OC	REX LAMB SCREENPRINTING	230		ROYMAR RD	F	Oceanside	CA	92054	San Luis Rey	903.1	5999		Retail Sales - Silkscreening Shirt											Z-Low	Not applicable			C							W	
OC	KLEENMASTER PRODUCTS CO	271		ROYMAR RD	F	Oceanside	CA	92054	San Luis Rey	903.1	2899		Manufacturing - Chemical Cleaning Solvents											Z-Low	Not applicable			C							W	
OC	CERTIFIED WELD & FAB	291		ROYMAR RD	D	Oceanside	CA	92054	San Luis Rey	903.1	7692		Miscellaneous Services -Welding											Z-Low	Not applicable			C							W	
OC	ACADEMY MACHINE PRODUCTS, INC	3207		ROYMAR RD	A & B	Oceanside	CA	92054	San Luis Rey	903.1	3444		Manufacturing - Machine Shop											Z-Low	Not applicable			C							W	
OC	DYNAMIC INNOVATIONS	3207		ROYMAR RD	C	Oceanside	CA	92054	San Luis Rey	903.1	7539		Manufacturer, Machine Shop											Z-Low	Not applicable			C	12/2/208				Yes		W	
OC	ACE AVIATION SERVICES	3239		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	3728		Manufacturing - Aircraft part											Z-Low	Not applicable			C							W	
OC	FIEDLER BUILDING CO	3239		ROYMAR RD	B	Oceanside	CA	92054	San Luis Rey	903.1	1521		General Contractor, Residential Buildings											Z-Low	Not applicable			C							W	
OC	MAIL BOXES Y MAS	214		SAN DIEGO ST		Oceanside	CA	92054	San Luis Rey	903.1	7291		Tax Preparation											Z-Low	Not applicable			C							W	
OC	EL CYBERPAISA	218		SAN DIEGO ST		Oceanside	CA	92054	San Luis Rey	903.1	7299		Miscellaneous Services - Fax, E-mail, Check											Z-Low	Not applicable			C							W	
OC	EL CHICLE	401		SAN DIEGO ST		Oceanside	CA	92054	San Luis Rey	903.1	5947		Miscellaneous Retail											Z-Low	Not applicable			C							W	
OC	BENNY'S MUSIC	401 1/2		SAN DIEGO ST		Oceanside	CA	92054	San Luis Rey	903.1	5499		Miscellaneous Retail - CD's											Z-Low	Not applicable			C							W	
OC	RUBY'S RENTALS	407		SAN DIEGO ST		Oceanside	CA	92054	San Luis Rey	903.1	7841		Video Tape Rental											Z-Low	Not applicable			C							W	
OC	RUBY'S BEAUTY SALON	409		SAN DIEGO ST		Oceanside	CA	92054	San Luis Rey	903.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	
OC	NORTH COUNTY HUMANE SOCIETY	2905		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail - Pet Shop											Z-Low	Not applicable			C							W	
OC	OCEANSIDE PET HOTEL & TRAINING KENNEL	2909		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5999		Miscellaneous Retail - Pet Shop											Z-Low	Not applicable			C							W	
OC	SPEEDSKINS	2919		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5199		Wholesale - Miscellaneous Non Durable Goods											Z-Low	Not applicable			C							W	
OC	BEN RECYCLING & SCRAP METAL	2929		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5093		Scrape and Waste Materials											Z-Low	Not applicable			C							W	
OC	ASIGMA	2930		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	3444		Manufacturing - Sheet Metal											Z-Low	Not applicable			C							W	
OC	RIOPELLE DEVELOPMENT CO INC	2935		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	1521		General Contractor											Z-Low	Not applicable			C							W	
OC	OCEANSIDE PUBLIC STORAGE	2936		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	4225		Transportation - General Warehousing											Z-Low	Not applicable			C							W	
OC	MU, INC.	2941		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	3229		Manufacturing, Vacumn Tubes											Z-Low	Not applicable			C							W	
OC	SIMMONS METAL FAB INC	2950		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	3444		Manufacturing - Sheet Metal											Z-Low	Not applicable			C							W	
OC	AMERICAN AUTO GLASS	2951		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7536		Automobile Glass Replacement Shop											Z-Low	Not applicable			C							W	
OC	OCEANSIDE VETERINARY HOS.	2960		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	742		Veterinary Services for Animal Services											Z-Low	Not applicable			C							W	

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Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	BIO CLEAN ENVIROMENTAL SERVICES	2972		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5199		Wholesale - Non Durable Products - Filters										Z-Low	Not applicable			C							W	
OC	BEST MATTRESS & FURNITURE BUYS	3102		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5712		Home Furniture Store										Z-Low	Not applicable			C							W	
OC	BIKER OUTLET STORE	3108		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5571		Motorcycle Parts Retail										Z-Low	Not applicable			C							W	
OC	TRILAR MANAGEMENT	3118		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	6531		Real Estate Agents and Managers										Z-Low	Not applicable			C							W	
OC	MAJ HOLDINGS L.P./ MAJ INVESTMENTS	3122		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	6722		Management Investments Office										Z-Low	Not applicable			C							W	
OC	JET CONSTRUCTION INC	3124		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	1521		General Contractor - Office										Z-Low	Not applicable			C							W	
OC	SEAGATE COPRORATE CENTER	3508		SEAGATE WAY		Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							R	
OC	COPLEY DESIGN COLLABORATIVE	3508		SEAGATE WAY	140	Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							R	
OC	GROTH ARCHITECTS INC	3520		SEAGATE WAY	100	Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							R	
OC	THOMAS E. SHAUGNESSY CONSULTING	3528		SEAGATE WAY	110	Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							R	
OC	PROMPTLINK COMMUNICATIONS	3532		SEAGATE WAY		Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							R	
OC	VIEWTECH INC	3544		SEAGATE WAY	110/110	Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							R	
OC	NETHERLAND & MOSCARI CPAS APC	3548		SEAGATE WAY	210	Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							R	
OC	CMC FURNITURE	401		SEAGAZE DRIVE		Oceanside	CA	92054	San Luis Rey	903.1	5712		Home Furniture Store										Z-Low	Not applicable			C							W	
OC	SHAWN BORELLI DESIGNS	550		SEAGAZE DRIVE	2	Oceanside	CA	92054	San Luis Rey	903.1													Z-Low	Not applicable			C							W	
OC	SHANGRI-LA TRAVEL	603		SEAGAZE DRIVE		Oceanside	CA	92054	San Luis Rey	903.1			Travel Agency										Z-Low	Not applicable			C							W	
OC	A1 GOLF CARS	2600		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							GC	
OC	MADRIGAL'S CUSTOM UPHOLSTERY	2600		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	2099		MANUFACTURING										Z-Low	Not applicable			C							GC	
OC	SIGNS@ONCE	2605		TEMPLE HEIGHTS DR	B	Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							GC	
OC	SAITECH SCHOOL FOR TECHNOLOGIES	2611		TEMPLE HEIGHTS DR	A-D	Oceanside	CA	92056	Loma Alta	904.1	8249		VOCATIONAL SCHOOL										Z-Low	Not applicable			C							GC	
OC	VERSA MEDICAL	2611		TEMPLE HEIGHTS DR	E	Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							GC	
OC	DS WATERS OF AMERICA, LP ?	2612		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	3444		MANUFACTURING , FABRICATED METAL										Z-Low	Not applicable			C							GC	
OC	WEST COAST PLATING	2613		TEMPLE HEIGHTS DR	C&D	Oceanside	CA	92056	Loma Alta	904.1	3599		MANUFACTURING, EQUIPMENT										Z-Low	Not applicable			I							GC	
OC	DOWNFORCE ENGINEERING	2613		TEMPLE HEIGHTS DR	A	Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			C							GC	
OC	SAITECH SCHOOL FOR TECHNOLOGIES	2613		TEMPLE HEIGHTS DR	F&G	Oceanside	CA	92056	Loma Alta	904.1	8249		VOCATIONAL SCHOOL										Z-Low	Not applicable			C							GC	
OC	DLE CUSTOM FABRICATION & CONVERTING	2613		TEMPLE HEIGHTS DR	B	Oceanside	CA	92056	Loma Alta	904.1													Z-Low	Not applicable			I							GC	
OC	COMPUTER CIRCULATION CENTER INC.	2618		TEMPLE HEIGHTS DR		Oceanside	CA	92057	Loma Alta	905.1																									
OC	DS WATERS OF AMERICA, LP ?	2620		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	3845		MANUFACTURING, ELECTRONICS										Z-Low	Not applicable			C							GC	
OC	CUSTOM CONVERTING, INC	2625		TEMPLE HEIGHTS DR	C	Oceanside	CA	92056	Loma Alta	904.1	3931		MANUFACTURING, FABRICATED METAL										Z-Low	Not applicable			C							GC	
OC	SUPERIOR SOURCING	2625		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	5199		NON-DURABLE GOODS										Z-Low	Not applicable			C							GC	
OC	COIN LAUNDRY	2810		THUNDER DR	B	Oceanside	CA	92056	Buena Vista	904.2	7215		LAUNDROMATS										Z-Low	Not applicable			C							GC	
OC	CHILD DEVELOPMENT CENTER	2860		THUNDER DR		Oceanside	CA	92056	Buena Vista	904.2	8299		TUTORING										Z-Low	Not applicable			C							GC	
OC	NORTH STAR AGENCY	207	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	6531		Real Estate Agents and Managers										Z-Low	Not applicable			C							W	
OC	M & H BARBERSHOP	211	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	7241		Barbershop										Z-Low	Not applicable			C							W	
OC	DOROTHY'S MILITARY SHOP AND LAUNDRY	213	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	7212		Laundry, Dry Cleaners and Garment Services										Z-Low	Not applicable			C							W	
OC	BARBERSHOP	313	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	7241		Barbershop										Z-Low	Not applicable			C							W	
OC	ROMANTIX	315	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	7299		Miscellaneous Personal Services										Z-Low	Not applicable			C							W	
OC	BEST BUSINESS MANAGEMENTS SERVICES	423	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	7389		Miscellaneous Business Services										Z-Low	Not applicable			C							W	
OC	SURF CO.	520	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	3949		Manufacturing - Sporting and Athletic Goods										Z-Low	Not applicable			C							W	
OC	BOARDWORKS	615	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	3949		Manufacturing - Sporting and Athletic Goods										Z-Low	Not applicable			C							W	
OC	TEAK FURNITURE	821	S	TREMONT ST	A	Oceanside	CA	92054	Loma Alta	904.1	5712		Furniture Store, Household Retail										Z-Low	Not applicable			C							W	
OC	WERBY LLC	901	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	7389		Recording Studio										Z-Low	Not applicable			C							W	
OC	MIKE CROES CONSULTING	1036	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	8811		Consulting										Z-Low	Not applicable			C							W	
OC	FOREX/ASIANSIDE VARIETY STORE	465		VANDEGRIFT BLVD		Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	D&M HOLDINGS INC	487		VANDEGRIFT BLVD		Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	DIAMOND NAILS	511		VANDEGRIFT BLVD		Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	POPEYE CHICKEN AND BISCUITS	511		VANDEGRIFT BLVD		Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	STAR DRY CLEANERS	521		VANDEGRIFT BLVD	A	Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	MICK AND DICK'S BARBERSHOP	521		VANDEGRIFT BLVD		Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	SEMPER FI FLORIST	521		VANDEGRIFT BLVD	E	Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	THE SECRET PLACE	3310		VIA DE LA VALLE	B	Oceanside	CA	92054	San Luis Rey	903.1	5712		Retail Sales - Furniture										Z-Low	Not applicable			C							W	
OC	H&M CREATIVE DESIGNS INC	3310		VIA DE LA VALLE		Oceanside	CA	92054	San Luis Rey	903.1	3949		Manufacturing - Sporting and Athletic Goods										Z-Low	Not applicable			C							W	
OC	OCEANSIDE SURF INDUSTRIES	3310		VIA DE LA VALLE	C	Oceanside	CA	92054	San Luis Rey	903.1	3949		Manufacturer, Surfboards										Z-Low	Not applicable			C							W	
OC	STAMPED CONCRETE	3310		VIA DE LA VALLE		Oceanside	CA	92054	San Luis Rey	903.1	1771		Contractor, Concrete										Z-Low	Not applicable			C							W	
OC	FM DIAZ CONSTRUCTION INC.	222		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	1541		Contractor, General										Z-Low	Not applicable			C							W	
OC	STEPHEN S HALVERSON INC	235		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	3999		Manufacturer, Architectural Foam Products										Z-Low	Not applicable			C							W	
OC	J & W APPLIANCE SERVICE	250		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	7699		Miscellaneous Repairs - Appliances										Z-Low	Not applicable			C							W	
OC	KKL	265		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	3949		Manufacturer, Surfboards										Z-Low	Not applicable			C							W	
OC	HARVEST TIME PRODUCE	303		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	5148		Fresh Fruits and Vegetables										Z-Low	Not applicable			C							W	
OC	OCEAN BREEZE	350		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	2449		Manufacturer, Wood Crates										Z-Low	Not applicable			C							W	
OC	HYDRANAUTICS	501		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	3089	339999	Manufacturer - Filters										Z-Low	Not applicable	145-060-25-00		I	1/28/2009	None	N/A		Yes		W	
OC	NITTO DENKO TECHNICAL CORP	501		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	3999		Manufacturing, Plastics/Filters										Z-Low	Not applicable			C							W	
OC	NITTO DENKO TECHNICAL CORP	502		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	7389		Business Services, Administrative										Z-Low	Not applicable			C							W	
OC	TEK STEEL WELDING & FABRICATION	302		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	3498		Manufacturer, Pipe and Pipe Fitting										Z-Low	Not applicable			C							W	
OC	FERGUSSON WATERWOARKS	304		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	5211		Building Material Supplies										Z-Low	Not applicable			C							W	
OC	WILEY CONSTRUCTION CO INC	310		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	1542		Contractor, General										Z-Low	Not applicable			C							W	
OC	A & G INDUSTRIES, INC	316		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	3444		Manufacturer, Sheet Metal work										Z-Low	Not applicable			C							W	
OC	CANDLES	326		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	3999		Miscellaneous Manufacturer, Wax Candles										Z-Low	Not applicable			C							W	
OC	BEN RECYCLING & SCRAP METAL	395		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	5093		Scrape and Waste Materials										Z-Low	Not applicable			C							W	
OC	SOUTHWEST SPAS	417		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	3088		Manufacturer, Rubber and Miscellaneous										Z-Low	Not applicable			C							W	
OC	WALTER'S DING REPAIR	456		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	3949		Manufacturer, Surfboards										Z-Low	Not applicable			C							W	
OC	STORAGE WEST	201		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	4225		Transportation - General Warehousing										Z-Low	Not applicable			C							W	
OC	BUYRIGHT	208		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	2391		Manufacturing, Window Coverings										Z-Low	Not applicable			C							W	
OC	SAN DIEGO BATTERY - OCEANSIDE	216		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	5531		Automotive Parts Supply Store										Z-Low	Not applicable			C							W	
OC	MOBILE TRENDS	229		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	5531	336350	Used Automotive Engines and Transmissions										Z-Low	Not applicable	146-050-19-00		C	12/2/2008	None	N/A		Yes		W	
OC	STAMPED CONCRETE	303		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	1771		Contractor, Concrete										Z-Low	Not applicable			C							W	
OC	PALAPA KINGS INC	305		VIA EL CENTRO	110	Oceanside	CA	92054	San Luis Rey	903.1	3999		Manufacturer, Shade Structures										Z-Low	Not applicable			C							W	
OC	PACIFIC CANVAS	311		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	2394		Manufacturer, Canvas Awnings										Z-Low	Not applicable			C							W	
OC	OCEANSIDE MACHINE AND TOOL, INC	360		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	3444		Manufacturer, Sheet Metal work										Z-Low	Not applicable			C							W	
OC	HILTON CLEANERS	2983		VIA LAS ROSAS	A	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	EL CAMINO COIN LAUNDRY	2983		VIA LAS ROSAS	B	Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	7 - ELEVEN # 18159 B	2985		VIA LAS ROSAS		Oceanside	CA	92054	Buena Vista	904.2													Z-Low	Not applicable			C							G	
OC	PARDEE TREE NURSERY	30970		VIA PUERTA DEL SOL		Oceanside	CA	92057	San Luis Rey	903.1													Z-Low	Not applicable			C							R	
OC	DISH NETWORK	503		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	4841		Communications - Satellite TV Service										Z-Low	Not applicable			C							R	
OC	EARTHLINK INTERNET SERVICE	503		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	7372		Business Services - Prepackage Software										Z-Low	Not applicable			C							R	
OC	HOSPITALITY SERVICES	503		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	8999		Miscellaneous Services - Telemarketing										Z-Low	Not applicable			C							R	
OC	INTERNATIONAL HOTEL MARKETING CORPORATION	503		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	8999		Miscellaneous Services - Telemarketing										Z-Low	Not applicable			C							R	
OC	JBL ASSOCIATES	503		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	8999		Miscellaneous Services										Z-Low	Not applicable			C							R	

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Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Polutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	ON THE ROAD INSURANCE	503		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	6411		Insurance Agents, Brokers and Service											Z-Low	Not applicable			C							R	
OC	SIEGEL BROTHERS THEATERS	503		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	7819		Motion Pictures -Services Allied To Motion											Z-Low	Not applicable			C							R	
OC	RESIDENTIAL WATERPRROFING CONTRACTORS	503		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	1799		Construction Special Trade - Waterproofing											Z-Low	Not applicable			C							R	
OC	D ADDIGNTON	503		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	8999		Miscellaneous Services											Z-Low	Not applicable			C							R	
OC	JOANN DELLAPOSTA	503		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	8999		Miscellaneous Services											Z-Low	Not applicable			C							R	
OC	OCEANA RESALES & RENTALS	531		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	6531		Real Estate Agents and Managers											Z-Low	Not applicable			C							R	
OC	SOUTHERN CALIFORNIA CORPORATE REAL ESTATE	531		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	6531		Real Estate Agents and Managers											Z-Low	Not applicable			C							R	
OC	ROBERT YADROW - NOTARY PUBLIC	531		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	8999		Miscellaneous Services - Notary Public											Z-Low	Not applicable			C							R	
OC	OCEANA FASHION	531		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	5632		Apparel and Accessory Store - Women											Z-Low	Not applicable			C							R	
OC	RED HAT SOCIETY	531		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	5632		Apparel and Accessory Store - Women											Z-Low	Not applicable			C							R	
OC	OCEANA CHIROPRATIC - JOSEPH LEEDY MDC	535		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	8041		Offices and Clinics of Chiropractor											Z-Low	Not applicable			C							R	
OC	OCEANA PET STOP	537		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	5999		Pet Shops, Retail											Z-Low	Not applicable			C							R	
OC	COASTLINE BAPTIST CHURCH AUDITORIUM	547		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	8661		Membership Organizations - Religious											Z-Low	Not applicable			C							R	
OC	COASTLINE BAPTIST CHURCH OFFICES	557		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	8661		Membership Organizations - Religious											Z-Low	Not applicable			C							R	
OC	FIREMOUNTAIN FINANCIAL	573		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	6531		Real Estate Agents and Managers											Z-Low	Not applicable			C							G	
OC	ALLIED SWISS SCREW PRODUCTS	2636		VISTA PACIFIC DR		Oceanside	CA	92056	Loma Alta	904.1	3949													Z-Low	Not applicable			C							GC	
OC	RK EXCEL AMERICA INC	2645		VISTA PACIFIC DR		Oceanside	CA	92056	Loma Alta	904.1	3999		MANUFACTURING, MISC											Z-Low	Not applicable			C							GC	
OC	SIMBA INTERNATIONAL	2654		VISTA PACIFIC DR		Oceanside	CA	92056	Loma Alta	904.1	5093		PLASTICS RECYCLING											Z-Low	Not applicable			C							GC	
OC	SOUTHWEST GREENE INT	2655		VISTA PACIFIC DR		Oceanside	CA	92056	Loma Alta	904.1	4225		WHOLESALE/STORAGE/WAREHOUSING											Z-Low	Not applicable			C							GC	
OC	DURACORP LLC	2660		VISTA PACIFIC DR		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							GC	
OC	CHEMI-SOURCE INC.	2665		VISTA PACIFIC DR		Oceanside	CA	92056	Loma Alta	904.1														Z-Low	Not applicable			C							GC	
OC	VESSELL PROPERTIES	402		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	STEARNS BUSINESS MACHINES	507		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	GAME ADX	509		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DAGO'S HAIRCUT	511		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DON'T TREAD ON ME	513		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	HAMBLEYS UPHOLTERY	513		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DOJO AMERICANA	515		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	HAMBLY'S UPHOLSTERY	515		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PALOMAR MEDICAL SUPPLIES	602		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CHRISTOPHER H CLAYTON D.D.S.	603		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ART ADVENTURES	605		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SPLIT ENDS HAIR STUDIO	607		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	OCEANSIDE ACUPUNTURE	608		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	EQUITY SAVERS GROUP INC.	609		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MINA INTERNATIONAL ENTERPROSES	814		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PEGASUS PRODUCTIONS	904		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	QUICK HOME SOLUTIONS	917		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CHELSEA LOPEZ PHOTOGRAPHY	917		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PURE PLAY	1122		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	WEST COAST RENOVATIONS	1202		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SHARON NEWBERY'S CREATIVE ESPRESSIONS	1212		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CHOPPER'S PARTS TO GO	1213		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	AMAZON BIKES	1227		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	WAL-MART # 2494	2100		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BESTBUY	2110		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BED BATH AND BEYOND	2120		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PARTY CITY OF OCEANSIDE #437	2130		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	KAMAY BEAUTY CENTER AND SALON	2134		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	COST PLUS WORLD MARKET	2140		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	STAPLES THE OFFICE SUPERSTORE	2150		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SPORT'S AUTHORITY	2160		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	HAPINESS NAILS	2174		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	POSTAL ANNEX	2174	B	VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PCS LEASING CO LP	2178		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MODA BEAUTY SHOP	2178		VISTA WAY	E3	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	YES CLEANERS	2178		VISTA WAY	E4	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BLUE ECHO	2180		VISTA WAY	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	APPLE ONE EMPLOYMENT SERVICES	2183		VISTA WAY	B2	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	A & D ORIENTAL RUGS	2305		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MERVYN'S - OUT OF BUSINESS	2335		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BRINDUSA SES	2401		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CHANTELLE DAY SPA	2401		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	E & C JEWELWERS	2401		VISTA WAY	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	JOY NAIL AND SPA	2401		VISTA WAY	C	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	S. LASKEN & SONS INC.	2401		VISTA WAY	C2	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PATTI'S HALLMARK	2401		VISTA WAY	H	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BOOT BARN INC	2405		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	REMEDY HEARING AIDS	2420		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	OCEANSIDE PLAZA INVESTORS	2420		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	OCEANVIEW FAMILY DENTISTRY	2420		VISTA WAY	100	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	VISTA OPTICS INC	2420		VISTA WAY	101	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PACIFIC COAST COUNSELING	2420		VISTA WAY	105	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PACIFIC SLEEP MEDICINE	2420		VISTA WAY	115	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CHING C TI MD	2420		VISTA WAY	120	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PEAK TECHNICAL SERVICES	2420		VISTA WAY	215	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	LNW INSURANCE ADMINISTRATION INC.	2424		VISTA WAY	101	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	FISCHER & VAN THIEL LLP	2424		VISTA WAY	104	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	JAMIESON COMPANY	2424		VISTA WAY	201	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	D LINK LADUTKO ESQ.	2424		VISTA WAY	202	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MANGINI & STEWART OC	2424		VISTA WAY	202	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	HENSEL FINANCIAL	2424		VISTA WAY	202	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DESANTI AND ASSOCIATES	2424		VISTA WAY	203	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	HORACE MANN	2424		VISTA WAY	210	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	I LEVEL BY WEYERHAUSER	2424		VISTA WAY	315	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SWI MANAGEMENT CO. INC.	2424		VISTA WAY	317	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TOYS "R" US	2425		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ANNA'S LINEN	2435		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	FED EX KINKO'S #2694	2444		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PETCO ANIMAL SUPPLIES	2445		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	VISTA WAY HAWAIIAN BBQ	2455		VISTA WAY	D	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ONCE UPON A CHILD	2455		VISTA WAY	K	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PS PLUS SIZES PLUS SAVINGS	2455		VISTA WAY	M	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SOUTH OCEANSIDE DENTAL	2484		VISTA WAY	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SEW PRO'S SEW & VACUMN	2484		VISTA WAY	C	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BEVERAGES & MORE	2500		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MOHNACKY ANIMAL HOSPITALS, INC	2505	S	VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	FAMOUS FOOTWEAR	2505		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	STEINMART INC.	2505		VISTA WAY	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ROSS DERSS FOR LESS	2505		VISTA WAY	C	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MATTRESS DISCOUNTERS	2515		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	FRAME DESIGNS & GALLERY	2515		VISTA WAY	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SAVON FLOORS	2521	S	VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	HAIRCUTTERS	2525		VISTA WAY	E	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	FIRE MOUNTAIN CLEANERS	2530		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	VANITY BEAUTY BOUTIQUE	2530		VISTA WAY	C	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	VENUS NIALS	2530		VISTA WAY	E	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PLUS MAIL BOXES	2530		VISTA WAY	F	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	FIRE MOUNTAIN SPINE & REHABILATION CENTER	2530		VISTA WAY	H	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	A T & T MOBILITY	2530		VISTA WAY	N	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TREASURE HOUSE AND GIFTS	2530		VISTA WAY	R	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	AARON BROTHERS' INC. #93	2550		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PIER 1 IMPORTS #436	2555		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	THE MEN'S WAREHOUSE	2555		VISTA WAY	C	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CT RETAIL PROPERTIES FINANCE III LLC	2570		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CONFORT ZONE FUTONS & FURNITURE	2570		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	LAMP PLUS INC	2598		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	WORLD OF JEANS AND TOPS	2641		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	THE VITAMIN SHOPPE	2641		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ULTA SALON COSMETICS & FRAGRANCE	2645		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	MICHAEL'S ARTS AND CRAFTS	2649		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SLEEP TRAIN MATTRESS CENTERS	2665		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	LENSCRAFTERS	2665		VISTA WAY	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ALFRED ANGELO	2665		VISTA WAY	C	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	JAZZERCISE INC	2677		VISTA WAY	B	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	WELL'S FARGO INVESTMENTS	2701		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	FRAME DESIGNS & GALLERY	2717		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ERICH SCHIMIDT DDS	2741		VISTA WAY	101	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	GREGORY M. KUSNER	2741		VISTA WAY	103	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	VISION WORKS OPTOMETRICS	2741		VISTA WAY	105	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	LEO HAMEL FINE JEWELERS INC.	2741		VISTA WAY	109	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	VICTOR TOMASSETTI	2741		VISTA WAY	111	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	AVA INTEGRATIVE MEDICINE	2741		VISTA WAY	201	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BRADLEY CPA INC.	2741		VISTA WAY	209	Oceanside	CA	92054	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	WESTERN DENTAL SERVICES	3125		VISTA WAY	113/202	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	GREENE PROPERTIES	3142		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	QUALITY MEDICAL CARE CENTER	3142		VISTA WAY	100	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TERESA LAMBERT SMITH DDS APDC	3142		VISTA WAY	203	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CHILDREN'S HOSPITAL & HEALTH CENTER	3142		VISTA WAY	207	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	BUCCOLA ENGINEERING	3142		VISTA WAY	301	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SEASIDE DENTAL	3142		VISTA WAY	305	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SCRIPPS COASTAL MEDICAL CENTER	3142		VISTA WAY	400	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	NORTH COAST UROLOGY MEDICAL ASSOCIATES	3156		VISTA WAY	100	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	NANCY S. WALLS	3156		VISTA WAY	160	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	NORTON A. GRIMES LLP	3156		VISTA WAY	200	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	LAW OFFICES OF ERIC D. MORTON APC	3156		VISTA WAY	200	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DAVID MILLER	3156		VISTA WAY	200	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	ISLAND STAFFING	3156		VISTA WAY	203	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SUKUT CONSTRUCTION, INC	3156		VISTA WAY	205	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	CRITICAL CARE SPECIAL BILLING ASSOCIATION	3156		VISTA WAY	405	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	TRICITY EMERGENCY MEDICAL GROUP	3156		VISTA WAY	410	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	HOLIDAY INN EXPRESS	3170		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DEI, LLC	3186		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	HOOT WINC LLC	3186		VISTA WAY	200	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PROVIDER'S FINANCIAL	3186		VISTA WAY	300	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	EXTENDED STAY AMERICA	3190		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	EL CAMINO COUNTRY CLUB	3202		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	KILYA PROPERTIES	3300		VISTA WAY	B	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	RICHARD BARAGER MD	3300		VISTA WAY	B	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	AMY T MATAYOSHI MD	3300		VISTA WAY	B	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	JAMES A. RAMENOFSKY	3300		VISTA WAY	D	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	AUTOMOBILE CLUB OF SOUTHERN CALIFORNIA	3330		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	PACIFIC BREEZE APTS II	3522		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	OTCP LLC	3601		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	NORTH COAST UROLOGY MEDICAL ASSOCIATES	3609		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DERMATOLOGY MEDICAL GROUP OF N. COUNTY	3613		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	N. COUNTY ONCOLGY MEDICAL CLINIC	3617		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	GM SALLY MELLGREN MD INC.	3621		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	SAN DIEGO VITRORETINAL ASSOCIATES	3629		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	DERMATOLOGY SPECIALISTS INC.	3633		VISTA WAY	101	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	IAN PARCELL MD PHD	3633		VISTA WAY	102	Oceanside	CA	92056	Buena Vista	904.2														Z-Low	Not applicable			C							G	
OC	1 STOP UNIFORM SHOP	3710		VISTA WY	115	Oceanside	CA	92056	Buena Vista	904.2	7213		UNIFORM SUPPLY											Z-Low	Not applicable			C							GC	
OC	NORTHCOAST DENTAL GROUP	3710		VISTA WY	111	Oceanside	CA	92056	Buena Vista	904.2	8021		DENTIST											Z-Low	Not applicable			C							GC	
OC	PIKE INSURANCE	3710		VISTA WY	107	Oceanside	CA	92056	Buena Vista	904.2	6411		INSURANCE SERVICES											Z-Low	Not applicable			C							GC	
OC	PREFAB GRANITE DEPOT	3710		VISTA WY	116	Oceanside	CA	92056	Buena Vista	904.2	3281		GRANITE MFG											Z-Low	Not applicable			C							GC	
OC	HOME DEPOT	3838		VISTA WY		Oceanside	CA	92056	Buena Vista	904.2	5251		HARDWARE STORE											Z-Low	Not applicable			C							GC	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	COASTAL ORTHORPEDICS SPORTS MED.	3998		W. VISTA WY		Oceanside	CA	92056	Buena Vista	904.2	8011		MEDICAL OFFICE											Z-Low	Not applicable			C							GC	
OC	FANCY PLANTS	190		WILSHIRE RD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	SKYDANCE RANCH	321		WILSHIRE RD		Oceanside	CA	92057	San Luis Rey	903.1			Horse Training											Z-Low	Not applicable			C							R	
OC	ARMSTRONG GARDEN CENTERS INC.	1492		WILSHIRE RD		Oceanside	CA	92057	San Luis Rey	903.1														Z-Low	Not applicable			C							R	
OC	CALIFORNIA SCREENS	201		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	7699		Miscellaneous Repair Services - Screen Repair											Z-Low	Not applicable			C							W	
OC	WISCONSIN COIN LAUNDRY	203		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	7215		Coin Operated Laundry and Dry Cleaners											Z-Low	Not applicable			C							W	
OC	SEASIDE PROPERTIES	206		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	6531		Real Estate Agents and Managers											Z-Low	Not applicable			C							W	
OC	T-SHIRT FACTORY	214		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	5699		Miscellaneous Apparel											Z-Low	Not applicable			C							W	
OC	KM FRAMES/SCREENS	218		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	7699		Miscellaneous Repair Services - Screen Repair											Z-Low	Not applicable			C							W	
OC	ELECTRIC AND FOLDING BIKES	220		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	5571		Motorcycle Sales - Electric and Folding Bikes											Z-Low	Not applicable			C							W	
OC	ROOM 222 - ART MUSIC GIFTS	222		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	8412		Art Gallery											Z-Low	Not applicable			C							W	
OC	THE YOGA BODY	222		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	7999		Ammusement & Recreation Services											Z-Low	Not applicable			C							W	
OC	MARINETIME INDUSTRIAL - MARINE ENGINE PARTS	306		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	3732		Boat Parts											Z-Low	Not applicable			C							W	
OC	HOT SPOT INSURANCE	314		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	6411		Insurance Agents											Z-low	Not applicable			C							W	
OC	DENNIS AUTOMOTIVE	315		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											Z-Low	Not applicable	150-372-13-00		C	11/21/2008	Close trash bin lids	12/15/2008	Trash bin lids closed	Yes		W	
OC	DONALDSON PLUMBING	315		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	1711		Contractor - Plumbing											Z-Low	Not applicable			C							W	
OC	OCEANFRONT ENGINEERING	402		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	8711		Engineering Services											Z-Low	Not applicable			C							W	
OC	RESURRECTION RECOVERY THRIFT	403		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	5932		Used Merchandise store											Z-Low	Not applicable			C							W	
OC	SOUND ODYSSEY	403		WISCONSIN AVE	C	Oceanside	CA	92054	Loma Alta	904.1	5999		Miscellaneous Retail Store - CD											Z-Low	Not applicable			C							W	
OC	S. S. CLOTHING	403		WISCONSIN AVE	C-2	Oceanside	CA	92054	Loma Alta	904.1	5651		Family's Clothing Store											Z-Low	Not applicable			C							W	
OC	101 HAIR INK	403		WISCONSIN AVE	E	Oceanside	CA	92054	Loma Alta	904.1	7231		Beauty Shops											Z-Low	Not applicable			C							W	

High	**516**
Medium	112
Low	1745
Total	2373

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	PEP BOYS OF CA #742	3752		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	1521		General Auto Repair Shop											High	Not applicable	168-012-57-00		C	1/13/2009	After initial inspection, I found that the site needs training documentation, the storm drain needs trash and oil filters, and the loading area needs a general house cleaning.	1/22/2009	All items were completed	Yes		GC	
OC	CIRCLE K / 76 #2705246	3350		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	166-010-40-00		C	1/8/2009	After initial inspection, site needs	1/27/2009	I went to the site for a follow up	Yes		GC	
OC	SHELL GASOLINE & FOOD STORE	185		OLD GROVE ROAD	G & H	Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	158-101-47-00		C	10/20/2008	All items completed and paperwork updated.	12/10/2008		Yes		GC	
OC	ESHBACHS AUTO BODY & PAINT	2954		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7539	811121	Automotive - Body Shop											High	Not applicable	146-050-69-00		C	11/24/2008	Clean and label storm drain inlet	12/15/2008	Storm drain was cleaned and	Yes		W	
OC	MOBIL-HARBOR DRIVE, INC	477	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	143-090-14-00		C	11/20/2008	Clean storm dain inlet and label	12/15/2008	Storm drain inlet was cleaned and	Yes		W	
OC	FIRST TRANSIT	576		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	7532	81111	Automotive, Interior Repair and Maintenance											High	Not applicable	146-031-09-00		C	12/1/2008	Clean storm drain inlet	12/18/2008	Inlet was cleaned	Yes		W	
OC	CHEVRON / O'SIDE MART	1601	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	143-090-21-00		C	11/20/2008	Close trash bin lids	1/21/2009	Trash bin lids closed	Yes		W	
OC	500 MOTORS	115	S	FREEMAN ST	B	Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	147-283-02-00		C	12/1/2008	Close trash bin lids	12/15/2008	Trash bin lids closed	Yes		W	
OC	CARCOA QUALITY BODY & PAINT	3018		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7539	811121	Automotive - Body Shop											High	Not applicable	146-050-34-00		C	11/21/2008	Close Trash bin lids. Provide	12/18/2008	Trash bin lids closed and	Yes		W	
OC	TOYOTA CARLSBAD CERTIFIED SVC CNTR	409	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-183-13-00		C	11/19/2008	Close trash lid	12/15/2008	Trash bin lid closed	Yes		W	
OC	EDDIE'S AUTOMOTIVE INC	501	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-184-09-00		C	11/19/2008	Close trash lid	12/15/2008	Trash bin lid closed	Yes		W	
OC	APRO #44 EXXON	3401		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	168-011-03-00		C	10/8/2008	During initial visit I found some	12/5/2008	When I went to the site on 12/5/08 I	Yes		GC	
OC	PACIFIC TIRE & WHEEL	523	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	147-081-01-00		C	11/19/2008	Label storm drain inlet	12/15/2008	Storm drain inled was labeled	Yes		W	
OC	MACHINE TECH RACING ENGINES	620		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	3714		AUTO ENGINE ASSEMBLY											High	Not applicable	149-330-16-00		C	10/30/2008	Needs grease filters in drainage	1/15/2009	I met with Robert Gremmels from	No		GC	
OC	ARCO AM/PM	3804		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	8811		Gasoline Station with Convenience Store											High	Not applicable	168-012-17-00		C	6/1/2009	Needs training doumentation, clean up hazardous materials and remove all debries from rear of station.	6/18/2009	Hazardous materials were cleaned up and all debries from the rear of the station were removed. Traning documentation was provided.	Yes		GC	
OC	LAEL'S INTERNATIONAL AUTO SERVICE CENTER	2042		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-01-00		C	10/29/2008	No second visit needed	N/A		Yes		W	
OC	CONSTANT VELOCITY MOTORSPORTS	2044		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-01-00		C	12/3/2008	No second visit needed	N/A		Yes		W	
OC	CLASSIC SHOWCASE INC	2640		VISTA PACIFIC DR		Oceanside	CA	92054	Loma Alta	904.1	7532		Automotive Restorations											High	Not applicable	161-470-03-00		C	1/8/2009	No second visit needed			Yes		GC	
OC	MISSION AUTO CARE INC.	3588		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-290-09-00		C	10/3/2008	None	N/A		Yes		W	
OC	OCEANSIDE CAR WASH INC	3655		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7542	811192	Automotive Carwash											High	Not applicable	160-291-05-00		C	10/3/2008	None	N/A		Yes		W	
OC	AMADORS REPAIR SERVICE	260		AIRPORT RD	A	Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-27-155-00		C	10/7/2008	None	N/A		Yes		W	
OC	A B C SMOG	260		AIRPORT RD	C	Oceanside	CA	92054	San Luis Rey	903.1	7549	811112	Automotive Services - Emission Testing											High	Not applicable	160-27-155-00		C	10/7/2008	None	N/A		Yes		W	
OC	TNT REPAIR SERVICES INC	350		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-271-16-00		C	10/7/2008	None	N/A		Yes		W	
OC	AIRPORT AUTOMOTIVE	360		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-271-16-00		C	10/7/2008	None	N/A		Yes		W	
OC	OCEANSIDE BUGGY BATH CARWASH	2946		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7542	811192	Automotive Carwash											High	Not applicable	162-030-69-00		C	10/22/2008	None	N/A		Yes		W	
OC	VIP CAR WASH	1980		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7542	811192	Automotive Carwash											High	Not applicable	149-330-27-00		C	10/28/2008	None	N/A		Yes		W	
OC	PADILLAS COLLISION REPAIR	2026		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-01-00		C	10/28/2008	None	N/A		Yes		W	
OC	SMITTY'S SURFSIDE GARAGE	2022		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-01-00		C	10/29/2008	None	N/A		Yes		W	
OC	SOS UPHOLSTERY	660		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	7532	811121	Upholstery Repair Shops											High	Not applicable	149-330-17-00		C	10/30/2008	None	N/A		Yes		W	
OC	THE DING MAN	660		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	7539	811121	Automotive - Body Shop											High	Not applicable	149-330-17-00		C	10/30/2008	None	N/A		Yes		W	
OC	BIG FAB OFF ROAD RACING	634		CROUCH ST		Oceanside	CA	92054	Loma Alta	904.1	7539	811121	Automotive - Body Shop											High	Not applicable	149-330-17-00		C	11/17/2008	None	N/A		Yes		W	
OC	ONE STOP AVIATION INC	1119	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	3724	336412	Airplane, Engine Repair											High	Not applicable	152-016-04-00		C	11/18/2008	None	N/A		Yes		W	
OC	AJ'S AUTO CLINIC	920	S	COAST HWY	B	Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-304-19-00		C	11/18/2008	None	N/A		Yes		W	
OC	S & T AUTO PAINT & BODY	920	S	COAST HWY	C	Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-304-19-00		C	11/18/2008	None	N/A		Yes		W	
OC	DISCOUNT TIRES	1037	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5531	423130	Retail Sales, Vehicle Tires											High	Not applicable	152-011-10-00		C	11/18/2008	None	N/A		Yes		W	
OC	GOODYEAR EXPRESS TIRE	1151	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5531	423130	Retail Sales, Vehicle Tires											High	Not applicable	152-014-06-00		C	11/18/2008	None	N/A		Yes		W	
OC	PLAVAN PETROLEUM INC	575		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Service Station											High	Not applicable	146-031-18-00		C	11/18/2008	None	N/A		Yes		W	
OC	MOHSEN OIL, INC	3213		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	160-270-11-00		C	11/18/2008	None	N/A		Yes		W	
OC	MISSION 76	3361		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	160-550-10-00		C	11/18/2008	None	N/A		Yes		W	
OC	MIDAS MUFFLERS	3510		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-290-47-00		C	11/18/2008	None	N/A		Yes		W	
OC	O'SIDE TRANSMISSION UNLIMITED	229	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-045-08-00		C	11/19/2008	None	N/A		Yes		W	
OC	ACE SMOG	242	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-051-11-00		C	11/19/2008	None	N/A		Yes		W	
OC	EDDIE'S AUTOMOTIVE INC	512	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	7532	811111	General Auto Repair Shop											High	Not applicable	150-184-02-00		C	11/19/2008	None	N/A		Yes		W	
OC	PROCUSTOM	520	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	7539	811121	Automotive - Body Shop											High	Not applicable	150-184-03-00		C	11/20/2008	None			Yes		W	
OC	GHETTO CHOPPERS CUSTOMS INC	602	S	TREMONT ST	A	Oceanside	CA	92054	Loma Alta	904.1	7699	811490	Miscellaneous, Repair Services - Motorcycle											High	Not applicable	150-376-10-00		C	11/20/2008	None	N/A		Yes		W	
OC	AUTO POWER	602	S	TREMONT ST	B	Oceanside	CA	92054	Loma Alta	904.1	7532	811111	General Auto Repair Shop											High	Not applicable	150-376-10-00		C	11/20/2008	None	N/A		Yes		W	
OC	S & S RADIATOR	620	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	7532	811111	General Auto Repair Shop											High	Not applicable	150-376-09-00		C	11/20/2008	None	N/A		Yes		W	
OC	MISSION ARCO AM/PM	1920		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	145-150-31-00		C	11/21/2008	None	N/A		Yes		W	
OC	MISSION UNOCAL	2003		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	148-170-08-00		C	11/21/2008	None	N/A		Yes		W	
OC	PEP BOYS/MANNY MOE & JACK OFCA #667	2041		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	Automotive Parts Supply Store/Auto Repair											High	Not applicable	148-170-06-00		C	11/21/2008	None	N/A		Yes		W	
OC	GUERRERO'S AUTO REPAIR	2954		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	146-050-68-00		C	11/21/2008	None	N/A		Yes		W	
OC	KENNEDYS CUSTOM CYCLES	3028		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7699	811490	Miscellaneous Repair Services - Motorcycles											High	Not applicable	146-050-33-00		C	11/21/2008	None	N/A		Yes		W	
OC	FULL RV SERVICE	444		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	146-050-70-00		C	11/21/2008	None	N/A		Yes		W	
OC	ECONO LUBE N TUNE #23	1618		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	145-151-26-00		C	11/25/2008	None	N/A		Yes		W	
OC	THE MUFFLER MAN	2954		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7538	811121	General Auto Repair Shop											High	Not applicable	146-050-68-00		C	11/25/2008	None	N/A		Yes		W	
OC	A & A AUTO REPAIR	312		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	7532	811111	General Auto Repair Shop											High	Not applicable	146-050-41-00		C	11/25/2008	None	N/A		Yes		W	
OC	SEASIDE BODY AND PAINT	907	S	CLEVELAND ST		Oceanside	CA	92054	Loma Alta	904.1	7532	811121	Automobile, Body and Paint Shop											High	Not applicable	150-371-14-00		C	12/1/2008	None	N/A		Yes		W	
OC	OCEANSIDE AUTO REPAIR	3582		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	160-290-09-00		C	12/1/2008	None	N/A		Yes		W	
OC	SMOG-THIS	1950		OCEANSIDE BLVD	O	Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-27-00		C	12/2/2008	None	N/A		Yes		W	
OC	JIFFY LUBE #1278	1970		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											High	Not applicable	149-330-27-00		C	12/2/2008	None	N/A		Yes		W	
OC	G&W TRUCK & SUV ACCESSORIES & LINE-X OF OCEANSIDE	230		ROYMAR RD	F-H	Oceanside	CA	92054	San Luis Rey	903.1	5531	441310	Automotive Parts Supply Store											High	Not applicable	160-271-48-00		C	12/2/2008	None	N/A		Yes		W	
OC	JOSH'S BOARS NEST	3207		ROYMAR RD	D	Oceanside	CA	92054	San Luis Rey	903.1	7699	811490	Miscellaneous, Repair Services - Motorcycle											High	Not applicable	160-271-17-00		C	12/2/2008	None	N/A		Yes		W	
OC	TOP'S AUTO UPHOLSTERY	227		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	7532	811121	Automotive, Upholstery Repair Shops											High	Not applicable	146-050-19-00		C	12/2/2008	None	N/A		Yes		W	
OC	ECOLOGY AUTO PARTS INC	2315		CARPENTER ROAD		Oceanside	CA	92054	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											High	**9 371013069**	145-030-35-00		C	12/8/2008	None	N/A		Yes		W	
OC	NCTD MAINTENANCE YARD	305		VIA DEL NORTE		Oceanside	CA	92054	San Luis Rey	903.1	7532	811111	General Auto Repair Shop											High	**9 371010395**	145-030-26-00		C	1/20/2009	None	N/A		Yes		W	
OC	THE OCEANSIDER	1660		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	152-320-25-00		C	1/21/2009	None	N/A		Yes		W	
OC	OCEANSIDE SCHOOL DISTRICT FLEET MANAGEMENT	2070		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	Oceanside School District - Fleet Management											High	**9 371005696**	145-150-08-00		C	1/28/2009	None	N/A		Yes		W	
OC	CAR QUEST AUTO PARTS	1531		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5531	441310	Automotive Parts Supply Store											High	Not applicable	148-260-18-00		C	12/29/2009	None	N/A		Yes		W	
OC	REFLECTSHINE AUTO WASH	3528		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	7542		Automotive Carwash											High	Not applicable	168-012-53-00		C	10/9/2008	On my initial visit I found that	12/3/2008	On my second visit I found that all	Yes		GC	
OC	QUARRY CREEK CHEVRON	3490		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	168-013-03-00		C	10/8/2008	On my second visit to the site I	1/15/2009	I went to the site for a follow up	Yes		GC	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	TERRY'S BODY SHOP, INC	1408		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	148-143-19-00		C	11/25/2008	Protect material stored outdoor.Close trash bin lids.	12/19/2008	Material stored outdoor was protected. Trash bin lids closed	Yes		W	
OC	PUURFECT AUTO SERVICE	407		TOPEKA STREET		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	150-045-01-00		C	11/19/2008	Protect materials stored outdoors	1/21/2009	Materials stored outdoor were	Yes		W	
OC	CHANDLER TRANSMISSION	304		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	7532	811111	General Auto Repair Shop											High	Not applicable	146-050-18-00		C	11/21/2008	Protect materials stored outdoors	1/20/2009	Materials stored outdoors were	Yes		W	
OC	BUSSEYS AUTOMOTIVE SERVICE	1402		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7538	811111	General Auto Repair Shop											High	Not applicable	148-143-09-00		C	11/25/2008	Protect materials stored outdoors.	1/20/2009	Materials stored outdoors were covered	Yes		W	
OC	OCEAN PAINT AND BODY	1112	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	7539	811121	Automotive - Body Shop											High	Not applicable	152-014-16-00		C	11/25/2008	Protect materials stored outdoors.		Trash bin lids closed. Materials	Yes		W	
OC	DONALD ERBE CO INC	340		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5531	44431	Automotive Parts Supply Store											High	Not applicable	160-271-16-00		C	12/1/2008	Protect materials stored outdoors.	1/20/2009	Trash bin lids were closed.	Yes		W	
OC	MOHSEN OIL	628	S	COAST HWY	E	Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	150-301-16-00		C	11/19/2008	Remove hazadorous material	12/18/2008	Remove hazadorous material	No	1/28/2009	W	
OC	THRIFTY GASOLINE	802	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	143-206-05-00		C	11/20/2008	Remove hazadorous material	12/18/2008	Trash bin lids were closed. Remove	No	1/28/2009	W	
OC	CHEVRON / O'SIDE MART	656		BENET RD		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	145-030-43-00		C	12/1/2008	Removed Store items from trash	1/9/2009	Items were removed from trash	Yes		W	
OC	STONE TRUSS COMPANY INC	507		JONES RD		Oceanside	CA	92054	San Luis Rey	903.1	2439		Structural Wood Members											High	Not applicable	146-030-91-00		C	11/24/2008	Replace missing downspout on layout area	1/16/2009	Downspout was replaced			W	
OC	BEAUDRY'S AUTO COLLISION CENTER	325	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7532	811121	Automotive - Body Shop											High	Not applicable	150-047-05-00		C	11/19/2008	Replace missing waste bin lid	12/15/2008	Missing waste bin lid was replaced	Yes		W	
OC	MELROSE ARCO	1501	N	MELROSE DR		Oceanside	CA	92056	Loma Alta	904.1	5541		GASOLINE STATION											High		161-030-17-00		C	10/1/2008	Site needs storm drain labels, filters, hazardous materials removed, cleaning of trash enclosure, and landscaping cleanup.	12/16/2008	All items completed and paperwork updated.	Yes		GC	
OC	CHEVRON / O'SIDE MART	601	N	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5541	447190	Gasoline Station with Convenience Store											High	Not applicable	143-245-07-00		C	11/20/2008		N/A		Yes		W	
OC	ECONO LUBE N' TUNE/MEINEKE CAR CENTER #4068	3844		PLAZA DR	381	Oceanside	CA	92056	Buena Vista	904.2	8811		General Auto Repair Shop											High	Not applicable	168-012-21-00		C	1/12/2009				Yes		GC	
OC	WARNER'S MUFFLER	190		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1	7538		General Auto Repair Shop											High	Not applicable	158-052-07-00		C	1/27/2009						R	
OC	ARCO	607		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	158-030-43-00		C	2/4/2009						R	
OC	SHELL	660		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	157-810-58-00		C	2/4/2009						R	
OC	MOE'S OCEANA UNION 76	502	S	EL CAMINO REAL		Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	160-140-07-00		C	2/5/2009						R	
OC	EMERALD ISLE GOLF COURSE	660	S	EL CAMINO REAL		Oceanside	CA	92057	San Luis Rey	903.1	7292		Public Golf course											High	Not applicable	162-04-037-00		C	2/5/2009						R	
OC	LIBERTY OIL	1943	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	153-274-21-00		C	2/9/2009				Yes		R	
OC	VALERO GASOLINE	1202	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5541		Gasoline Station with Convenience Store											High	Not applicable	152-193-06-00		C	2/10/2009				Yes		G	
OC	NORTH COUNTY AUTO SERVICE INC	1520	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	152-200-13-00		C	2/10/2009				Yes		G	
OC	B & R BUGGIE	1523	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-030-04-00		C	2/10/2009				Yes		G	
OC	GARY'S AUTO REPAIR/BOB'S CARBS	1540	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	152-200-13-00		C	2/10/2009				Yes		G	
OC	OCEANSIDE AUTOMOTIVE	499		COLLEGE BLVD	B	Oceanside	CA	92057	San Luis Rey	903.1	7538		General Auto Repair Shop											High	Not applicable	157-101-08-00		C	2/10/2009				Yes		R	
OC	OCEANSIDE TIRE AND SERVICE CENTER	499		COLLEGE BLVD	A	Oceanside	CA	92057	San Luis Rey	903.1	7534		Tire Repair Shop											High	Not applicable	157-101-08-00		C	2/10/2009				Yes		R	
OC	COLLEGE BLVD EXXON	1990		COLLEGE BLVD		Oceanside	CA	92056	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	162-240-44-00		C	2/10/2009				Yes		R	
OC	MISSION EXXON	3865		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	160-560-03-00		C	2/11/2009				Yes		R	
OC	O'SIDE GAS	3945		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1	5541		Gasoline Station with Convenience Store											High	Not applicable	158-052-12-00		C	2/19/2009				Yes		R	
OC	SAN LUIS REY AUTO SALVAGE AND STORAGE	471	N	EL CAMINO REAL		Oceanside	CA	92057	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											High	Not applicable	158-066-05-00		C	2/25/2009						R	
OC	INGWERSEN NURSERY INC.	1620		RIDGEWAY STREET		Oceanside	CA	92054	Loma Alta	904.1	181		Ornamental Floriculture Nursery Products											High	Not applicable	151-200-20-00		C	2/26/2009				Yes		R	
OC	LAS PALMAS RANCH	6508		MORRO HEIGHTS ROAD		Oceanside	CA	92057	San Luis Rey	903.1	181		Ornamental Floriculture Nursery Products											High	Not applicable	122-170-14-00		C	3/3/2009				Yes		R	
OC	WALT BILT TRANSMISSION	1303	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	152-172-01-00		C	3/4/2009				Yes		G	Has permit with RWQCE
OC	VESPA OF OCEANSIDE	1425	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5571		Motorcycle Sale and Service											High	Not applicable	152-178-02-00		C	3/4/2009				Yes		G	
OC	WESTCOAST TIRE AND WHEEL	1434	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	152-200-10-00		C	3/4/2009				Yes		G	
OC	NORTH COUNTY AUTO BODY INC.	1512	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7539		General Auto Repair Shop											High	Not applicable	152-200-13-00		C	3/4/2009				Yes		G	
OC	AUTOMAN CAR SERVICES	1515	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-030-26-00		C	3/4/2009				Yes		G	
OC	OCEANSIDE SELF SERVICE CAR WASH	1515	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7542		Automotive Carwash											High	Not applicable	153-030-26-00		C	3/4/2009				Yes		G	
OC	WEST COAST CUSTOM	1540	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	152-200-13-00		C	3/4/2009				Yes		G	
OC	LOPEZ NURSERY	461		WILSHIRE RD		Oceanside	CA	92057	San Luis Rey	903.1	181		Ornamental Floriculture Nursery Products											High	Not applicable	122-020-23-00		C	3/5/2009				Yes		R	
OC	WESTSIDE CLASSICS	1540	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7699		Miscellaneous Repair Services - Motorcycles											High	Not applicable	152-200-13-00		C	3/6/2009				Yes		G	
OC	JOSE'S AUTO ELECTRIC	1602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-112-01-00		C	3/7/2009				Yes		G	
OC	BOB'S CARBS	1602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-112-01-00		C	3/8/2009				Yes		G	
OC	LSI AUTOMOTIVE SERVICE	1602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-112-01-00		C	3/9/2009				Yes		G	
OC	CMA GROWERS, INC	370		WILSHIRE RD		Oceanside	CA	92057	San Luis Rey	903.1	181		Ornamental Floriculture Nursery Products											High	Not applicable	122-090-12-00		C	3/9/2009				Yes		R	
OC	BOB'S GAS INC.	1742	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	153-213-43-00		C	3/10/2009				Yes		G	
OC	T AND T AUTO SMOG	1602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-112-01-00		C	3/10/2009				Yes		G	
OC	CENTRAL AUTOMOTIVE	1702	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	7538		General Auto Repair Shop											High	Not applicable	153-213-40-00		C	3/11/2009				Yes		G	
OC	7-ELEVEN STORE 26190C-2111	1749	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	153-113-08-00		C	3/11/2009				Yes		G	
OC	SMOKEYS AUTO PARTS/MACHINE	1602	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-112-01-00		C	3/11/2009				Yes		G	
OC	OCEANSIDE CYCLE SUPPLY	1617	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7699		Miscellaneous Repair Services - Motorcycles											High	Not applicable	153-111-13-00		C	3/11/2009				Yes		G	
OC	COAST CAR WASH	1621	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7542		Automotive Carwash											High	Not applicable	153-111-19-00		C	3/11/2009				Yes		G	
OC	MOTORCYCLE GALLERY	1639	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7699		Miscellaneous Repair Services - Motorcycles											High	Not applicable	153-111-18-00		C	3/11/2009				Yes		G	
OC	D & K GROWERS INC	1319		SLEEPING INDIAN RD		Oceanside	CA	92057	San Luis Rey	903.1	181		Ornamental Floriculture Nursery Products											High	Not applicable	121-150-20-00		C	3/11/2009				Yes		R	
OC	CIRCLE K GASOLINE	1801	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5541		Gasoline Station with Convenience Store											High	Not applicable	153-271-22-00		C	3/12/2009				Yes		G	
OC	AAMCO	2255		INDUSTRY ST	A	Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-09-00		C	3/16/2009				Yes		G	
OC	CITYWIDE AUTOMOTIVE	2255		INDUSTRY ST	B	Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-09-00		C	3/16/2009				Yes		G	
OC	JOHN'S TOWING SERVICE	2401		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7549		Automobile Services - Towing											High	Not applicable	149-271-56-00		C	3/16/2009				Yes		G	
OC	OCEANSIDE TRUCK SERVICE	2403		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7538		General Truck Repair Shop											High	Not applicable	149-271-56-00		C	3/16/2009				Yes		G	
OC	MAX RENTALS	2365		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7359		Equipment Rentals											High	Not applicable	149-271-42-00		C	3/16/2009				Yes		G	
OC	GORILLA RENTALS	2372		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7359		Equipment Rentals											High	Not applicable	149-271-41-00		C	3/16/2009				Yes		G	
OC	CONOVER TIRE PRO	2405		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7534		Tire Repair Shop											High	Not applicable	149-271-56-00		C	3/18/2009				Yes		G	
OC	OCEANSIDE DRIVELINE	2435		INDUSTRY ST	B	Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-271-26-00		C	3/18/2009				Yes		G	
OC	ARTISTIC MAINTENANCE INC	2505		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7389		Interior Landscaping Services											High	Not applicable	149-271-27-00		C	3/18/2009				Yes		G	
OC	ARGO STONE AND SUPPLY CO	2609		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	5211		Building Material Dealers											High	Not applicable	149-271-52-00		C	3/18/2009				Yes		G	
OC	MASTERTECH INC	2801		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-271-14-00		C	3/18/2009				Yes		G	
OC	DISCOUNT TIRE	2281	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2	7534		Tire Repair Shop											High	Not applicable	165-013-24-00		C	3/19/2009				Yes		G	
OC	D & J AUTO DOCTORS INC	4035		OCEANSIDE BLVD	C11	Oceanside	CA	92056	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	162-111-06-00		C	3/19/2009				Yes		G	
OC	RANCHO DEL ORO CAR WASH	4101		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	7542		Automotive Carwash											High	Not applicable	162-241-32-00		C	3/19/2009				Yes		G	
OC	ARMSTRONG GARDEN CENTERS	4131		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	181		Horiculture Specialties - Nurseries											High	Not applicable	162-241-38-00		C	3/19/2009				Yes		G	
OC	JOHN DEERE LANDSCAPES, INC	2511		INDUSTRY ST	C	Oceanside	CA	92054	Loma Alta	904.1	782		Lanscape Services - Landscape Contractor											High	Not applicable	149-271-23-00		C	3/25/2009				Yes		G	
OC	EVERGREEN NURSERY	3231		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	181		Horiculture Specialties - Nurseries											High	Not applicable	162-050-07-00		C	3/27/2009				Yes		G	
OC	ORCO BLOCK CO. INC.	3501		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	3271		Manufacturing -Concrete Block Products											High	Not applicable	162-082-23-00		C	3/27/2009				Yes		G	
OC	SUPERIOR READY MIX CONCRETE LP	3227		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	3273		Manufacturing - Ready Mix Concrete											High	Not applicable	162-502-23-00		C	3/30/2009				Yes		G	
OC	RANCHO DEL ORO 76	4181		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5541		Gasoline Station with Convenience Store											High	Not applicable	162-241-18-00		C	3/30/2009				Yes		G	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	7 DAY TIRE BRAKE	2001		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-04-00		C	3/31/2009				Yes		G	
OC	ADVANCE PAINT AND BODY	2017		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-14-00		C	3/31/2009				Yes		G	
OC	DISCOUNT TRANSMISSION & REPAIR SERVICE	2017		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-14-00		C	3/31/2009				Yes		G	
OC	MARIO'S AUTO REPAIR	2017		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-14-00		C	3/31/2009				Yes		G	
OC	LEO'S TOWING & AUTO REPAIR	2019		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-14-00		C	3/31/2009				Yes		G	
OC	7 DAY MECHANIC	2021		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-15-00		C	3/31/2009				Yes		G	
OC	CLASSIC MUSCLE CARS	2021		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-15-00		C	3/31/2009				Yes		G	
OC	BROTHER'S AUTO GLASS	2027		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-15-00		C	3/31/2009				Yes		G	
OC	EARL SCHEIB AUTO PAINTING	2027		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-15-00		C	3/31/2009				Yes		G	
OC	PEDRO'S AUTO REPAIR & TOW TRK	2027		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	149-370-15-00		C	3/31/2009				Yes		G	
OC	WASTE MANAGEMENT OF NO CO INC	2141		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	4953		Sanitary Services - Trash Collection											High	Not applicable	149-370-07-00		C	3/31/2009				Yes		G	
OC	BUBBLE BATH CAR WASH 76	2315		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	7542		Automotive Carwash											High	Not applicable	165-120-52-00		C	4/6/2009				Yes		G	
OC	DAVE'S ALL MOBILE	1555	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	7538		General Auto Repair Shop											High	Not applicable	153-030-20-00		C	4/6/2009				Yes		G	
OC	ROWLEY CHEVRON	2191		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5542		Gasoline Station with Convenience Store											High	Not applicable	154-130-24-00		C	4/13/2009				Yes		G	
OC	SATURN OF WEST 78	2205		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5511		Automotive General Automotive Repairs											High	Not applicable	165-120-20-00		C	4/13/2009				Yes		G	
OC	JIFFY LUBE	4106		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	7538		General Auto Repair Shop - Oil Change											High	Not applicable	162-502-28-00		C	6/30/2009				Yes		R	
OC	ARCO AMPM GAS STATION	1990		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5541		Gasoline Station											High	Not applicable	149-330-11-00		C	10/28/2009				Yes		G	
OC	AGRI CHEMICAL SUPPLY, INC	2002		OCEANSIDE BLVD	J	Oceanside	CA	92054	Loma Alta	904.1	7342		Disinfecting and Pest Control Services											High	Not applicable	149-330-05-00		C	10/28/2009				Yes		G	
OC	JUNGLE JACKS INC.	1865		CALIFORNIA STREET		Oceanside	CA	92054	Loma Alta	904.1	181		Horiculture Specialties - Nurseries											High	Not applicable	154-040-67-00		C	3/17/2009				Yes		R	
OC	MOUNTAIN WATER ICE CO	2843		BENET RD		Oceanside	CA	92054	San Luis Rey	903.1	2097	312113	Manufacturing/ Ice											High	9 000000436	146-090-30-00		I	1/20/2009	Close trash bin lids. Clean storm	1/28/2009	Trash bin lids closed. Storm drain	Yes		W	
OC	PHIL GALLANT TRUCK SALVAGE	1020		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											High	9 371013145	145-020-41-00		I	12/3/2008	None	N/A		Yes		W	
OC	A-1 AUTO DISMANTLING LLC	1045		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											High	9 371013219	145-030-29-00		I	12/3/2008	None	N/A		Yes		W	
OC	HANSON AGGREGATES	1050		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	3273	327320	Manufacturing, Concrete											High	9 000 001 3	145-020-33-00		I	12/3/2008	None	N/A		Yes		W	
OC	ECOLOGY SCRAP YARD	1030		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5015	441310	Automotive, Parts Dealer Used											High	9 371013177	145-020-33-00		I	12/8/2008	None	N/A		Yes		W	
OC	DEUTSCH CO ELECTRONICS	250		EDDIE JONES WAY		Oceanside	CA	92054	San Luis Rey	903.1	3679	35599	Manufacturing, Electric Components											High	9 000000519	145-021-29-00		I	1/26/2009	None	N/A		Yes		W	
OC	ELITE METAL FINSIHING	2550		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	3471		METAL FINISHING											High	Not applicable	161-660-21-00		I	10/14/2008	Site needs spill clean up training, and move materials stored outside moved indoors.	12/10/2008	All items completed and paperwork updated.	Yes		GC	
OC	WEILAND SLIDING DOOR & WINDOW INC	2601		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3231		Manufacturing - Glass Windows & Doors											High	Not applicable	149-271-21-00		I	3/18/2009				Yes		G	
OC	SANTOURIAN MANUFACTURING INC	2603		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3444		Manufacturing - Sheet Metal											High	Not applicable	149-271-22-00		I	3/18/2009				Yes		G	
OC	FENCEWORKS INC.	2421		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	1799		Miscellaneous Special Trades - Fence Installers											High	Not applicable	149-271-56-00		I	3/19/2009				Yes		G	
OC	PALOMAR TRANSIT MIX CO	2925		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3273		Manufacturing - Ready Mix Concrete											High	Not applicable	162-031-02-00		I	3/19/2009				Yes		G	
OC	GLASSWERKS SD	3021		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3231		Manufacturing - Glass Products											High	Not applicable	162-031-33-00		I	3/19/2009				Yes		G	
OC	CLINICON CORPORATION	3025		INDUSTRY ST	A	Oceanside	CA	92054	Loma Alta	904.1	3841		Manufacturing - Medical Apparatus											High	Not applicable	162-031-36-00		I	3/19/2009				Yes		G	
OC	SOUTHER CAST STONE INC	2511		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3272		Manufacturing - Concrete Products											High	Not applicable	149-271-04-00		I	3/25/2009				Yes		G	
OC	METROTILE MANUFACTURING	3093		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3999		Manufacturer - Roofing Tile											High	Not applicable	162-031-34-00		I	3/25/2009				Yes		G	
OC	CAMPBELL CERTIFIED INC	3045		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3441		Manufacturer - Certified Welding											High	Not applicable	162-031-30-00		I	3/30/2009				Yes		G	
OC	B M W PRESCISION MACHINING	2379		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3444		Manufacturing - Sheet Metal											High	Not applicable	149-271-34-00		I	3/31/2009				Yes		G	
OC	WASTE MANAGEMENT OF NO CO INC	2381		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	4953		Sanitary Services - Trash Collection											High	Not applicable	149-271-35-00		I	3/31/2009				Yes		G	
OC	JUST FOAM LLC	2515		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3949		Manufacturing - Surboard blanks											High	Not applicable	149-271-23-00		I	3/31/2009				Yes		G	
OC	SAN DIEGO MIRROR & WINDOW	2515		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	3231		Manufacturing - Glass Windows & Doors											High	Not applicable	149-271-23-00		I	3/31/2009				Yes		G	
OC	CENTRAL FLOOD MANAGEMENT	2604		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	7349		FLOOD MANAGEMENT											M-Medium	Not applicable	161-470-18-00		I	11/6/2008	A second inspection was done	12/29/2008	I met with Robert Gremmels from	No		GC	
OC	SOUTHCOAST HEATING & AIR	2664		VISTA PACIFIC DR		Oceanside	CA		Loma Alta	904.1	1711		PLUMBING & MECHANICAL											M-Medium	Not applicable	161-660-32-00		C	1/8/2009	After intial inspection site needs	1/29/2008	All items have been taken care of as	Yes		GC	
OC	PRO SPOT INTERNATIONAL INC	2625		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	5084		MAUNFACTURING, EQUIPMENT											M-Medium	Not applicable	161-470-08-00		I	10/9/2008	All items have been taken care of	1/7/2009		Yes		GC	
OC	PRECISION CARPENTRY INC	2620		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	1751													M-Medium	Not applicable	161-470-01-00		C	10/20/2008	Close dumpster lids			Yes		GC	
OC	KRAGEN AUTO SUPPLY #331	502		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5531	441310	Automotive Parts Supply Store											M-Medium	Not applicable	152-023-04-00		C	12/1/2008	Close Trash bin lids	12/18/2008	Trash bin lids closed	Yes		W	
OC	AUTOZONE #5661	1040		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5531	441310	Automotive Parts Supply Store											M-Medium	Not applicable	147-231-06-00		C	12/1/2008	Close trash bin lids	12/18/2008	Trash bin lids closed	Yes		W	
OC	KRAGEN AUTO SUPPLY #1329	3661		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5531	441310	Automotive Parts Supply Store											M-Medium	Not applicable	160-291-04-00		C	12/1/2008	Close trash bin lids	12/18/2008	Trash bin lids closed	Yes		W	
OC	NAPA AUTO PARTS-OCEANSIDE	2954		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5531	441310	Automotive Parts Supply Store											M-Medium	Not applicable	162-030-65-00		C	12/2/2008	Label storm drain inlet	1/21/2009	Storm drain labeled	Yes		W	
OC	CARRILLO DESIGN CENTER	2605		TEMPLE HEIGHTS DR	C	Oceanside	CA	92056	Loma Alta	904.1	3541		MACHINING, METAL CUTTING											M-Medium	Not applicable	161-470-28-00		I	10/2/2008	Needs containment kit.	1/15/2009	I went to the site for a follow up	Yes		GC	
OC	SIERRA SPRINGS WATER	2615		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	5963		DIRECT SELLING ESTABLISHMENT											M-Medium	Not applicable	161-470-09-00		C	10/21/2008	Needs lids on dumster			Yes		GC	
OC	APICAL INDUSTRIES INC	2608		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	3544		HELICOPTER FLOATS											M-Medium	Not applicable	161-470-39-00		I	10/1/2008	Needs stormdrain filters, training	12/10/2008		Yes		GC	
OC	SUMMIT STEEL INC	2608		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	3732		MANUFACTURING , EQUIPMENT											M-Medium	Not applicable	161-470-39-00		I	10/1/2008	No second visit needed			Yes		GC	
OC	KRAGEN AUTO PARTS #794	3840		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5531		Automotive Parts Supply Store											M-Medium	Not applicable	168-012-20-00		C	1/12/2009	No second visit needed					GC	
OC	CALIFORNIA PACIFIC/JBUGS	2040		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5531	441310	Automotive Parts Supply Store											M-Medium	Not applicable	149-330-01-00		C	10/29/2008	None	N/A		Yes		W	
OC	OCEANSIDE TEST ONLY CENTER	1106	S	COAST HWY	B	Oceanside	CA	92054	Loma Alta	904.1	7549	811112	Automotive Services - Emission Testing											M-Medium	Not applicable	152-023-06-00		C	11/25/2008	None	N/A		Yes		W	
OC	ALL STAR GLASS	1950		OCEANSIDE BLVD	A + B	Oceanside	CA	92054	Loma Alta	904.1	7536	811122	Automobile Glass Replacement Shop											M-Medium	Not applicable	149-330-27-00		C	12/2/2008	None	N/A		Yes		W	
OC	CALIFORNIA SMOG CENTER	3204		PRODUCTION AVE		Oceanside	CA	92054	San Luis Rey	903.1	7549	811112	Automotive Services - Emission Testing											M-Medium	Not applicable	160-271-15-00		C	12/2/2008	None	N/A		Yes		W	
OC	AUTO GLASS AMERICA	2949		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	7536	811122	Automobile Glass Replacement Shop											M-Medium	Not applicable	146-050-52-00		C	12/2/2008	None	N/A		Yes		W	
OC	AUTO GLASS AMERICA	358		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	7536	811122	Automobile Glass Replacement Shop											M-Medium	Not applicable	146-050-17-00		C	12/2/2008	None	N/A		Yes		W	
OC	PRECISION AUTO GLASS	444		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	7536	811122	Automobile Glass Replacement Shop											M-Medium	Not applicable	146-050-70-00		C	12/2/2008	None	N/A		Yes		W	
OC	OCEANSIDE AUTO UPHOLSTERY	2024		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	7532	811121	Automotive, Upholstery Repair Shops											M-Medium	Not applicable	149-330-01-00		C	1/28/2009	None	N/A		Yes		W	
OC	TURNKEY ENGINE SUPPLY	2620		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	3714		AUTO ENGINE ASSEMBLY											M-Medium	Not applicable	161-470-01-00		C	10/20/2008	Site needs training	12/10/2008	All items have been taken care of.	Yes		GC	
OC	STANDARD FLYWHEELS INC	2612		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	3499		AUTOMOTIVE PARTS											M-Medium	Not applicable	161-470-40-00		I	10/9/2008	This business needs traing and	12/31/2008	All items completed and	Yes		GC	
OC	COMPUTER CIRCULATION CNTR INC	2618		TEMPLE HEIGHTS DR		Oceanside	CA	92056	Loma Alta	904.1	562920		NON-HAZARDOUS WASTE RECYLING											M-Medium	Not applicable	161-501-15-00		I	12/3/2008	This site needs training	1/5/2009	All items completed and	Yes		GC	
OC	ALL SMOG TEST ONLY CENTER	2601		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7549		Automotive Services - Emission Testing											M-Medium	Not applicable	149-271-47-00		C	3/25/2009				Yes		G	
OC	WINDSHIELD PROS	2933		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	7536		Automobile Glass Replacement Shop											M-Medium	Not applicable	162-031-11-00		C	3/25/2009				Yes		G	
OC	FRUGOS YOGURT	3509		CANNON RD	E-2A	Oceanside	CA	92056	Agua Hedionda	904.3	5411		Eating/Drinking Establishments											R-High	Not applicable	169-011-42-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	PIZZA HUT	3509		CANNON RD	E1	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	169-011-42-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MC DONALD'S	3517		CANNON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	169-011-40-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	TACO BELL #16065	3521		CANNON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	169-011-39-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MIKES BAGELS & COFFEE HOUSE	3529		CANNON RD	2D	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	169-011-3700		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	RALPH'S GROCERY COMPANY #138	3533		CANNON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5411		Eating/Drinking Establishments											R-High	Not applicable	169-011-37-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	ROUND TABLE PIZZA	3440		MARRON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-07-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	LOS PRIMOS 16, L P	3490		MARRON RD		Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-03-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	DAPHNE'S GREEK CAFE	3480		MARRON RD	3B104	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-02-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	JAMBA JUICE #643	3480		MARRON RD	3B103	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-02-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	KARABAS SUBS INC (SUBWAY)	3480		MARRON RD	3B102	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-02-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	STARBUCKS COFFEE #2847	3480		MARRON RD	101	Oceanside	CA	92056	Agua Hedionda	904.3	5812		Eating/Drinking Establishments											R-High	Not applicable	168-013-02-00		C		Inspected by ECIS		Inspected by ECIS			GC	
OC	STAR PIZZA & ITALIAN RESTAURANT	1706	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	153-213-39-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	HON SUSHI	1733	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	153-113-23-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	BEACH BREAK CAFE INC	1902	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	153-273-26-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	HILL STREET DONUT HOUSE	1926	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	153-273-07-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	OCEANSIDE CAFE	1938	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	153-273-24-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	ANGELO'S BURGERS	2035	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	155-031-15-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	7-11 FOOD STORE #15591B	3407		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5411		Eating/Drinking Establishments											R-High	Not applicable	168-011-04-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	DE KOTIJA TACO SHOP	3504		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-37-00		C		Inspected by ECIS		Inspected by ECIS	Yes		GC	Inspected by ECIS
OC	CHIN'S PALACE INC	2241	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-19-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	NANCY'S COFFEE	2247	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2			Eating/Drinking Establishments											R-High	Not applicable	165-013-19-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	TERI'S CAFÉ INC	2249	S	EL CAMINO REAL	A2	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-19-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	ANITA'S RESTAURANT	2251	S	EL CAMINO REAL	B	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-23-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	SMOKEY J'S PIT BBQ	2251	S	EL CAMINO REAL	A	Oceanside	CA	92054	Buena Vista	904.2	5813		Eating/Drinking Establishments											R-High	Not applicable	165-013-23-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	DEL TACO LLC	2269	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-09-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	DENNY'S RESTAURANT #1149	2273	S	EL CAMINO REAL		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-10-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	STARBUCK'S COFFEE #10314	3702		PLAZA DR	A	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-39-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	WENDY'S RESTAURANT	3705		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-39-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MC DONALD'S / PLAZA DR	3794		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-16-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	SIZZLER RESTAURANT #883 ?	3805		Plaza Dr		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-11-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	JACK IN THE BOX #89	3808		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-18-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	I LOVE PHO	3809		PLAZA DR	115	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-01-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	SUBMARINA	3809		PLAZA DR	110S	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-01-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	TERRI CAFÉ TERIYAKI NOOLDE H0USE	3809		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-01-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	CUSIMANO'S PIZZERIA	3809		PLAZA DR	106	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-01-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	TOP THIS FROZEN YOGURT	3827		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-05-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	CHEF CHIN	3829		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-45-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	TACO BELL	3845		PLAZA DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	168-012-10-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	DOMINOS PIZZA	2858		THUNDER DR		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	166-535-16-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	ROBERTO'S TACO SHOP	2983		VIA LAS ROSAS	C	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-013-02-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	HUNTER STEAKHOUSE 210255	1221		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	155-140-26-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	APPLEBEES NEIGHBORHOOD GRILL & BAR	2146		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-32-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	MIMI'S CAFE	2177		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-37-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	STARBUCK'S COFFEE	2183		VISTA WAY	B1	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	SUBMARINA #24	2183		VISTA WAY	B7	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	BROOKLYN BOYS PIZZA	2183		VISTA WAY	B8	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	LOS TACOS	2183		VISTA WAY	B9	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	EINSTEIN BROS BAGELS #3047	2183		VISTA WAY	B10	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	QUIK WOK	2184		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-31-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	MCDONALD'S	2185		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	154-130-35-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	BURGER KING	2325		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-51-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CALIFORNIA YOGURT CO #4	2401		VISTA WAY	E	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-26-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	HANA RESTAURANT	2415		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-46-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	OCEAN THAI CUISINE	2455		VISTA WAY	F	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	STUART ANDERSON'S BLACK ANGUS	2471		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-40-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	JACK IN THE BOX 98	2474		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-240-64-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CHUCK E CHEESE'S	2481		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-44-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	OCEANSIDE STEAKHOUSE	2485		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-38-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	WINGS N THINGS	2525		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-35-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	SUSHI N JOY	2530		VISTA WAY	J	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-240-55-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	SUBWAY	2535		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-35-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	GAME STOP # 1627	2535		VISTA WAY	C	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-35-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CHIPOTLE MEXICAN GRILL	2611		VISTA WAY	A	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	QUIZNOS' SUBS	2611		VISTA WAY	B	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-120-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	PK 11 EL CAMINO NORTH L.P.	2615		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-09-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	BARNES AND NOBLE BOOKSELLERS INC.	2615		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-09-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	JAMBA JUICE	2617		VISTA WAY	B2	Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-09-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CHILI'S GRILL & BAR	2627		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-23-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	ROMANO'S MACARONI GRILL	2655		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-09-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	RED LOBSTER REST #503	2685		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-28-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	EL TORITO RESTAURANT, INC # 7093	2693		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-19-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	Q RESTAURANT	2725		VISTA WAY		Oceanside	CA	92054	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-121-17-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	STARBUCK'S COFFEE #651	3125		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-192-13-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	HOOTERS OF OCEANSIDE	3186		VISTA WAY	100	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	165-350-39-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CHINA TOWN CHINESE FOOD	3910		VISTA WY	109	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	166-010-45-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	GIANNIS PIZZA	3910		VISTA WY	108	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	166-010-45-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	JOES TACO	3910		VISTA WY	110	Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	166-010-45-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	PERKY BEAN	4002		VISTA WAY		Oceanside	CA	92056	Buena Vista	904.2	5812		Eating/Drinking Establishments											R-High	Not applicable	166-010-43-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MACDONALDS	137		CANYON DRIVE		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-160-25-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LOS PANCHOS TACO SHOP	202	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	150-051-01-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BESSIE'S CAFE	232	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	150-051-20-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ANITA'S #2	309	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	150-047-09-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	FISH JOINT	514	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	150-203-11-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	COSTABRASIL CAFÉ	624	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	150-301-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	101 CAFÉ	631	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	150-376-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	AZAFRAN	1001	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	152-011-01-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	GRUBY'S DINER	1030	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	152-022-26-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DIEGO'S MEXICAN FOOD	1034	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	152-022-26-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ANGELO'S BURGERS	1050	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-022-24-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SK DONUT	1129	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-014-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SUPER RANCHITO TACO SHOP	1129	S	COAST HWY		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-014-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KONA HUT COFFEE HOUSE	1940	S	FREEMAN ST		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	153-351-10-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	KYOTO GIFT + FOOD	559		GREENBRIER DR		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-43-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HOOLIGANS	560		GREENBRIER DR		Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	149-330-26-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ROSINA ITALIAN RESTAURANT AT DEL ORO	3613		OCEAN RANCH BLVD	100	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	BERRY SWIRL	3613		OCEAN RANCH BLVD	105	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	FELIX BBQ WITH SOUL	3613		OCEAN RANCH BLVD	106-107	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	GANDELFO'S DELI	3617		OCEAN RANCH BLVD	100	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-13-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	ROBERTO'S TACO SHOP	3617		OCEAN RANCH BLVD	108	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-13-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	THE FLAME BROILER	3617		OCEAN RANCH BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-572-13-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CROQUE FAMOUS SANDWICHES	3800		OCEANIC DR	118	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	160-680-20-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CHURCH'S CHICKEN	510		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-023-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PORT OF SUBS	510		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-023-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LITTLE CEASAR'S PIZZA	518		OCEANSIDE BLVD	103/104	Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-023-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OCEAN CITY BUFFET	518		OCEANSIDE BLVD	108/9/10	Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	152-023-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ROBERTO'S TACO SHOP	518		OCEANSIDE BLVD	111	Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	152-023-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MC DONALD'S OF OCEANSIDE #16327	1701		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	151-310-19-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	P'APA JOHN'S PIZZA	1710		OCEANSIDE BLVD	B	Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	151-011-09-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MARSHA'S DELI	1759		OCEANSIDE BLVD	E	Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	151-310-26-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	P'HILLY'S BEST	1771		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	151-310-26-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	STARBUCK'S COFFEE #9688	1779		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	151-310-18-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	I HOP RESTAURANT	1806		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	151-010-47-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DA GIORGIO CUCINA ITALIANA	1810		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	151-010-47-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CAFÉ ROSARITA	1816		OCEANSIDE BLVD	A	Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	151-010-47-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PIZZA HUT	1840		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-47-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DOMINO'S PIZZA	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-40-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CHOW'S DONUT	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	151-010-40-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KAISEN SUSHI	1906		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	151-010-40-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	P + Q PUB	1910		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	151-010-31-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SUBWAY	1910		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-31-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THAI TABLE	1910		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-31-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	QUICK FIX - ESSPRESSO	1918		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	151-010-30-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ALBERTO'S MEXICAN FOOD	1920		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-30-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	TACO BELL	1940		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	151-010-45-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KEN'S DONUGHTS	1950		OCEANSIDE BLVD	C	Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	149-330-27-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DELIA'S MEXICAN FOOD	1950		OCEANSIDE BLVD	R	Oceanside	CA	92054	Loma Alta	904.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	149-330-27-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	WIENERSCHNITZEL	1960		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	149-330-27-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	RED ROOSTER	1985		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	149-330-14-00		C		Inspected by ECIS		Inspected by ECIS			G	Third Party Inspection
OC	KFC #Y305091	4100		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-502-27-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	JUICE IT UP	4111		OCEANSIDE BLVD	100	Oceanside	CA	92056	Loma Alta	904.1	5811		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	ENZOS' BBQ	4111		OCEANSIDE BLVD	101	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	LA SALSA MEXICAN RESTAURANT	4111		OCEANSIDE BLVD	103	Oceanside	CA	92056	Loma Alta	904.1	5813		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	PANDA EXPRESS	4121		OCEANSIDE BLVD	200	Oceanside	CA	92056	Loma Alta	904.1	5814		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	PASTA BREAK	4121		OCEANSIDE BLVD	201	Oceanside	CA	92056	Loma Alta	904.1	5815		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	GOGO JAPAN	4121		OCEANSIDE BLVD	202	Oceanside	CA	92056	Loma Alta	904.1	5816		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	KNOCKOUT PIZZERIA	4121		OCEANSIDE BLVD	203	Oceanside	CA	92056	Loma Alta	904.1	5817		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	COLSTONE CREAMERY	4121		OCEANSIDE BLVD	204	Oceanside	CA	92056	Loma Alta	904.1	5818		Eating/Drinking Establishments											R-High	Not applicable	162-241-33-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CHIN'S SZECHWAN-OCEANSIDE	4140		OCEANSIDE BLVD	139	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-502-24-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	SHAKEY'S PIZZA	4141		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5818		Eating/Drinking Establishments											R-High	Not applicable	162-241-35-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	GOLDEN SPOON FROZEN YOGURT	4150		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-502-25-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	MCDONALD'S	4151		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5818		Eating/Drinking Establishments											R-High	Not applicable	162-241-36-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	KAM BERI	4160		OCEANSIDE BLVD	163	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-502-25-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	SUBWAY'S SANDWICHES	4160		OCEANSIDE BLVD	171	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-502-25-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	LITTLE CEASAR	4170		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-43-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	STARBUCK'S COFFEE #5832	4170		OCEANSIDE BLVD	177	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-43-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	EL BRONCO TACO SHOP OF OCEANSIDE	4171		OCEANSIDE BLVD	105	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-39-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	DONUT HOUSE	4171		OCEANSIDE BLVD	106	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-241-39-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CARLS JR	4176		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-43-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CAFE DE THAI	4186		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-43-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	UPPER CRUST PIZZA	4196		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-43-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	BASKIN ROBBINS/TOGO'S	4201		OCEANSIDE BLVD	A	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-10-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	RUBIO'S FRESH MEXICAN GRILL #063	4201		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-10-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	JACK IN THE BOX #3026	4211		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	ANGELITA FOODS & SPICE	4225		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	BLENDZ FUN FRESH FOOD	4225		OCEANSIDE BLVD	B	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	PAPA JOHN'S PIZZA	4225		OCEANSIDE BLVD	C	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	HAWIIAN BARBECUE	4225		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	OCEANSIDE HB INC	4225		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	HAPPY NOODLE HOUSE	4225		OCEANSIDE BLVD	F	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	JAPANES CAFÉ	4225		OCEANSIDE BLVD	K	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	LE RENDEZ-VOUS FRENCH BAKERY	4225		OCEANSIDE BLVD	Q	Oceanside	CA	92056	Loma Alta	904.1	5461		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	WINGS PIZZA N THINGS	4225		OCEANSIDE BLVD	Y	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	162-241-23-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	EL ASADOR	4750		OCEANSIDE BLVD	A8	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	K - DONUTS	4750		OCEANSIDE BLVD	A23	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	MR PHO RESTAURANT	4750		OCEANSIDE BLVD	A9	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	THAI GARDEN RESTAURANT	4750		OCEANSIDE BLVD	A21	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	VARAII SUSHI	4750		OCEANSIDE BLVD	A18	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	KID'Z BIZ INC.	4750		OCEANSIDE BLVD	A20	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	TWO BROTHERS FROM ITALY OCEANSIDE	4760		OCEANSIDE BLVD	B4	Oceanside	CA	92056	Loma Alta	904.1			Eating/Drinking Establishments											R-High	Not applicable	161-540-19-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	BUCCANEER BEACH CLUB	1508	S	PACIFIC ST		Oceanside	CA	92054	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	153-011-03-00		C		Inspected by ECIS		Inspected by ECIS			G	Inspected by ECIS
OC	CROQUE FAMOUS SANDWICHES	2600		TEMPLE HEIGHTS DR	A	Oceanside	CA	92056	Loma Alta	904.1	5812		Eating/Drinking Establishments											R-High	Not applicable	161-470-17-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MC CABES BEACH CLUB	1145	S	TREMONT ST		Oceanside	CA	92054	Loma Alta	904.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	152-015-09-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE CUP	206		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	150-263-17-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ONE MORE THAT'S IT PUB	231		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	146-050-24-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE THIRD PLACE ESPRESSO	656		AIRPORT RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	145-030-43-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OCEAN'S 11 CASINO	121		BROOKS STREET		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	148-340-29-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DEL TACO	1601		CARMELO DRIVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-060-36-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BREAKWATER BREWING CO.	101	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	HOSIE'S PACIFIC PUB	113	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5813	722410	Eating/Drinking Establishments											R-High	Not applicable	147-272-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	EARTHQUAKE PIZZA	119	S	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	147-272-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SPANKY'S PIZZA	206	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-097-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KEALANI'S	207	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-087-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LONGBOARDER CAFE INC	228	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-097-08-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MARYS FAMILY RESTAURANT	307	N	COAST HWY	B	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-086-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SUBWAY	323	N	COAST HWY	B	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-086-01-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LONE STAR BBQ	406	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-093-07-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JITTER COFFE PUB	510	N	COAST HWY	D	Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	147-094-11-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ALFREDO'S MEXICAN FOOD	602	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-246-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PIZZA TOWNE	604	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-246-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE STRAND BAR	608	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-246-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ANGELO'S BURGERS	619	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-245-09-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	WIENERSCHNITZEL	624	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-246-09-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HARBOR HOUSE CAFE	714	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-205-10-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CARROWS # 954	936	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-020-37-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE MAIN ATTRACTION	939	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	143-040-26-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE FLYING BRIDGE RESTAURANT	1105	N	COAST HWY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	143-040-41-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ROUND TABLE PIZZA	455		COLLEGE BLVD.	10	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-14-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	OHANA HAWAIIAN BBQ	459		COLLEGE BLVD	2	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-14-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	TRUPIANO'S ITALIAN RESTAURANT	461		COLLEGE BLVD	3	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-14-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	SUBWAY SANDWICHES	475		COLLEGE BLVD	J1	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-11-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	MCDONALD'S	487		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-10-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	HOMETOWN BUFFET INC #735	491		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-15-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	OCEANSIDE CHINESE FOOD	495		COLLEGE BLVD	B	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-11-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	VICTORIAS MEXICAN FOOD INC	495		COLLEGE BLVD	C	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-101-11-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	DENNY'S RESTAURANT	605		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-05-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	TACO BELL #17285	695		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-06-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CARL'S JR	775		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-07-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CHEVRON USA INC #203189	785		COLLEGE BLVD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-08-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	PAPA PEPPERONI	805		COLLEGE BLVD	102	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-17-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CHU'S QUICKWOK	815		COLLEGE BLVD	107	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-10-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	STARBUCKS COFFEE #5212	815		COLLEGE BLVD	108	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-553-10-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	DEL TACO LLC	1970		COLLEGE BLVD		Oceanside	CA	92056	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	162-240-48-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	LA HACIENDA RESTAURANT & PARTY HALL	300		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-051-17-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CARL'S JR	611		DOUGLAS DR		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-030-44-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	THE DONUT PARK	650		DOUGLAS DR	104	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-810-57-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	DOMINO'S PIZZA #7750	650		DOUGLAS DR	103	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-810-57-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	PYRAMID'S RESTAURANT	650		DOUGLAS DR	111	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-810-57-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	RIVERBOTTOM BAR	473	N	EL CAMINO REAL		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-066-10-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	IN AND OUT BURGERS	4605		FRAZEE ROAD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-77-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	COLSTONE CREAMERY	4635		FRAZEE ROAD	A	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-76-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	SUBMARINA	4635		FRAZEE ROAD	B	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-76-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	GUPPY'S COFFEE	4635		FRAZEE ROAD	C	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-76-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	GREAT WOK OF CHINA	4635		FRAZEE ROAD	F	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-76-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	ALBERTO'S	4645		FRAZEE ROAD	I	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	161-781-76-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	JITTER COFFEE EXPRESS	208	N	FREEMAN ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	147-096-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	NAUTICAL BEAN	240	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HARBOR SNACKS AND HOTDOGS	258	S	HARBOR DR	A	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ROCKING BAHA	258	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DOMINIC'S - ITALIAN RESTAURANT	268	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	VINNIE'S SPORT BAR	274	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HARBOR FISH AND CHIPS	276	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ROBIN'S NEST CAFÉ	280	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JOE'S CRAB SHACK	314	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DENNY'S	407	S	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-090-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MONTEREY BAY CANNERS	1325	N	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	143-010-16-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JOLLY ROGER RESTAURANT	1900	N	HARBOR DR		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	Unknown		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MAIU WOWI	301		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-271-15-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	RED CUP YOGURT	301		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-15-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DAIRY QUEEN	302		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-089-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JOHNNY MANANAS	308		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-089-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PASTA MIA'S	400		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-087-15-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	COLSTONE CREAMERY	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SANTINO'S PIZZA	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OCEANS' BURRITO	508		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-097-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE WOK IN	511		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-284-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	VIGILUCCI'S RESTAURANT GROUP	608		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-096-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	WENDY'S #30	1002		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-01-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	EL POLLO LOCO	1004		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SUBWAY	1024		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-08-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MANHATTAN'S GIANT PIZZA, INC	1060		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-08-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PANDA EXPRESS 941	1068		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CHINA STAR SUPER BUFFET	1401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	148-340-30-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BURGER KING	1420		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-143-20-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ARMANDO'S MEXICAN FOOD	1426		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-143-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MISSION DONUT HOUSE	1502		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-152-32-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	VALENTINA'S MEXICAN FOOD	1602		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-151-27-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ARBY'S #1396	1863		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-160-36-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JACK IN THE BOX #3068	1900		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	145-180-29-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KFC - OCEANSIDE	2007		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-170-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CHINA DYNASTY BUFFET - OUT OF BUSINESS	2009		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	148-170-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub-Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	LAS BRISAS RESTAURANT	2011		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	148-170-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	JUGOS JUQUILA	2027		MISSION AVE	E1	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-170-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	YUMYUM DONUTS	3304		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	160-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DAVINA'S MEXICAN RESTAURANT	3320		MISSION AVE	Q-R	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	160-271-12-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SZECHUAN PALACE	3365		MISSION AVE	E	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	160-550-13-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DELBERTOS MEXICAN FOOD	3371		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	160-550-03-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	TAN'S DONUTS	3375		MISSION AVE	A	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	160-550-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SHANANIGANS SPORTS BAR AND GRILL	3375		MISSION AVE	I	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	160-550-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MACDONALDS	3720		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	160-290-40-01		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ARIA JAPANESE/KOREAN BBQ	3744		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	158-390-17-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BURGER KING	3746		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-08-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LOS JUANITOS MEXICAN FOOD	3753		MISSION AVE	123	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	160-291-11-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	STARBUCKS COFFEE	3760		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	158-390-04-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KILLER PIZZA FROM MARS	3772		MISSION AVE	127	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OCEANSIDE DONUTS	3772		MISSION AVE	119	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PETITE MADELINE BAKERY	3776		MISSION AVE	137	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SUBWAY	3776		MISSION AVE	140	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	FIESTA MEXICANA	3784		MISSION AVE	151	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	158-390-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OCEAN RAINBOW - ICE CREAM PARLOR	3784		MISSION AVE	147	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	158-390-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	KURANDO	3815		MISSION AVE	101	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	160-560-06-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	VALLEY BUZZ	3846		MISSION AVE	A1	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-03-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	OCEAN THAI CUSINE	3846		MISSION AVE	A3-A4	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-03-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	LITTLE CEASAR	3852		MISSION AVE	B3-B4	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-02-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	EDNA'S THAI, CHINESE, FILIPINO AND VIETNAMESE	3861		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	160-560-14-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	TACO BELL #3837	3895		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	160-560-01-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	COCO'S #0886	3905		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	JACK IN THE BOX #3061	3909		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CAPOZZOLI'S	3915		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	EL TUCAN MEXICAN RESTAURANT	3935		MISSION AVE		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-052-12-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	QUIZNO'S SUB STORE #10327	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE RICE GARDEN INC	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	UMI JAPANESE GRILL & CAFE INC	401		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-271-14-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE MANDARIN	1060		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-231-08-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BAJA TACOS	1527		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-260-18-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PERLA TAPATIA	1919		MISSION AVE	C	Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-160-30-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	OHZEN SUSHI	3772		MISSION AVE	130	Oceanside	CA	92054	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	160-560-02-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	PIER VIEW COFFEE CO	1		OCEANSIDE PIER		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	Unknown		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	RUBY'S DINER	1		OCEANSIDE PIER	A	Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	Unknown		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LOVE BOAT SUSHI BAR	125		OLD GROVE ROAD	5	Oceanside	CA	92057	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	158-101-51-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	PICK UP STIX #7223	125		OLD GROVE ROAD	C-2	Oceanside	CA	92057	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	158-101-51-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	POLLOS MARIA #2	125		OLD GROVE ROAD	8	Oceanside	CA	92057	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	158-101-51-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	FRESH O YOUGURT	125		OLD GROVE ROAD	4	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-101-51-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	SUBWAY'S SANDWICHES	125		OLD GROVE ROAD	16	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-101-51-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	STARBUCKS COFFEE #9349	175		OLD GROVE ROAD		Oceanside	CA	92057	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	158-101-48-00		C		Inspected by ECIS		Inspected by ECIS			GC	Inspected by ECIS
OC	MCDONALD'S	185		OLD GROVE ROAD		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	158-101-47-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	333 PACIFIC	333	N	PACIFIC STREET		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-075-05-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HARBOR PELICAN DELI MART	1380	N	PACIFIC STREET		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	Unknown		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PIERVIEW COFFEE CO	300		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	147-088-03-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PIERVIEW PUB	301		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	147-089-11-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BUBBLE TEA	318		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722213	Eating/Drinking Establishments											R-High	Not applicable	147-088-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	CREPES UP	318		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-088-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	COLINA'S MEXICAN FOOD	404		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-086-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	THE WHISKEY BARREL	406		PIER VIEW WAY		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-086-06-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PIZZA HUT #315023	610	N	REDONDO DR	F	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-040-36-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	DJ'S PIZZA	617	N	REDONDO DR		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-040-26-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	LA PERLA TAPATIA	625	N	REDONDO DR		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-040-27-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	ERIBERTO'S MEXICAN FOOD	644	N	REDONDO DR		Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-040-37-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	CARLITO'S CHICKEN	160		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	160-271-13-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LUK'S KITCHEN	162		ROYMAR RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	160-271-13-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	ASADA TACOS	405		SAN DIEGO ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	148-141-22-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	PHIL'S PLACE	2949		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	146-050-52-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	EL MUNDO DE MARISCOS	3110		SAN LUIS REY RD		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	146-050-25-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	HAUNTED HEAD SALOON	207	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-089-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	SURRENDER THE BOOTY	207	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722110	Eating/Drinking Establishments											R-High	Not applicable	147-089-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	BURGER KING	207	S	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-350-24-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	LA CASA PIZZA	209	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-089-02-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	DAVINA'S CABO GRILL LLC	212	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	147-087-15-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	TREMONT STREET SPORTS BAR	311	N	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722410	Eating/Drinking Establishments											R-High	Not applicable	147-088-10-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	TO'S MEXICAN RESTAURANT	626	S	TREMONT ST		Oceanside	CA	92054	San Luis Rey	903.1	5812	722111	Eating/Drinking Establishments											R-High	Not applicable	150-376-07-00		C		Inspected by ECIS		Inspected by ECIS			W	Inspected by ECIS
OC	MARIETA'S MEXICAN RESTAURANT	485		VANDEGRIFT BLVD	2	Oceanside	CA	92057	San Luis Rey	903.1			Eating/Drinking Establishments											R-High	Not applicable	157-040-29-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	GRANDMA HILLTOP HIDE AWAY CAFÉ	539		VISTA BELLA		Oceanside	CA	92057	San Luis Rey	903.1	5812		Eating/Drinking Establishments											R-High	Not applicable	160-140-13-00		C		Inspected by ECIS		Inspected by ECIS			R	Inspected by ECIS
OC	FEDERAL HEATH SIGN CO INV	4602		NORTH AVE	A	Oceanside	CA	92056	Loma Alta	904.1	3993		SIGN MANUFACTURING											Z-Low	Not applicable			I	10/14/2008	All items completed and	12/8/2008		Yes		GC	
OC	H & M DISTRIBUTING INC	2590		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	2295		MANUFACTURING FABRIC CONDITIONER											Z-Low	Not applicable			I	10/15/2008	All items completed and	1/7/2009		Yes		GC	
OC	DAVID SHAPOSHNICK, INC	1980		PEACOCK BLVD		Oceanside	CA	92056	Loma Alta	904.1	1711		PLUMBING & MECHANICAL											Z-Low	Not applicable			I	10/15/2008	All items completed and	1/7/2009		Yes		GC	
OC	DENNIS AUTOMOTIVE	315		WISCONSIN AVE		Oceanside	CA	92054	Loma Alta	904.1	7538	811111	General Auto Repair Shop											Z-Low	Not applicable	150-372-13-00		C	11/21/2008	Close trash bin lids	12/15/2008	Trash bin lids closed	Yes		W	
OC	MOBIL OIL	1407		MISSION AVE		Oceanside	CA	92054	San Luis Rey	903.1	5541	447190	Gasoline Station with Convenience Store											Z-Low	Not applicable	148-340-02-00		C	12/1/2008	Close trash bin lids	1/20/2009	Trash bin lids closed	Yes		W	
OC	ALL FLOOR INSTALL	1752		ORD WAY		Oceanside	CA	92056	Loma Alta	904.1	1752		FLOOR COVERINGS											Z-Low	Not applicable			C	10/1/2008	No second visit needed			Yes		GC	
OC	OCEANSIDE GROCERY OUTLET	3508		COLLEGE BLVD		Oceanside	CA	92056	Buena Vista	904.2	5411		GROCERY STORE											Z-Low	Not applicable			C	10/7/2008	No second visit needed			Yes		GC	
OC	PROLINE CONCRETE TOOLS INC	2560		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	5082		CONCRETE STAMPS											Z-Low	Not applicable			C	10/13/2008	No second visit needed			Yes		GC	
OC	ACCUWELD INC	1980		PEACOCK BLVD	D	Oceanside	CA	92056	Loma Alta	904.1	333992		WELDING FABRICATION											Z-Low	Not applicable			C	12/1/2008	No second visit needed			Yes		GC	
OC	ALLSTAR GLASS	1950		OCEANSIDE BLVD		Oceanside	CA	92054	Loma Alta	904.1	5231		PAINT, WALLPAPER											Z-Low	Not applicable			C	12/2/2008	No second visit needed			Yes		GC	
OC	BD MEDICAL	4665		NORTH AVE		Oceanside	CA	92056	Loma Alta	904.1	5047		MEDICAL, DENTAL, HOSPITAL SUPPLIES											Z-Low	Not applicable			C	1/27/2009	No second visit needed			Yes		GC	

2008 - 2009 INSPECTION INVENTORY

Agency	Facility Name	Address Number	Street Direction	Address	Suite Number	City	State	Zip code	Watershed	Hydrologic Sub Area	SIC	NAICS	Principal Products/ Services	Potential Polutants: Bacteria	Gross Pollutants	Metals	Nutrients	Oil and Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303 (d) Listed	Total Threat to Water Quality	Industrial Permit Waste Discharge ID No.	GIS Mapping: Assessors Parcel Number (APN)	Conditional Non Exposure Permit	Industrial or Commercial	First Inspection Date	Corrective Action Needed	Second Inspection Date	Corrective Action Taken	Compliant	Date Reffered to Code Enforcement	Inspector	Notes
OC	MOBILE TRENDS	229		VIA EL CENTRO		Oceanside	CA	92054	San Luis Rey	903.1	5531	336350	Used Automotive Engines and Transmissions											Z-Low	Not applicable	146-050-19-00		C	12/2/2008	None	N/A		Yes		W	
OC	HYDRANAUTICS	501		VIA DEL MONTE		Oceanside	CA	92054	San Luis Rey	903.1	3089	339999	Manufacturer - Filters											Z-Low	Not applicable	145-060-25-00		I	1/28/2009	None	N/A		Yes		W	
OC	LEN'S AUTO BODY, INC	510		JONES RD		Oceanside	CA	92054	San Luis Rey	903.1	7539	811121	Automotive - Body Shop											Z-Low	Not applicable	146-030-96-00		C	11/24/2008	Protect materials stored outdoors.	12/15/2008	Materials stored outdoors were	Yes		W	
OC	VERNON TOOL CO	503		JONES RD		Oceanside	CA	92054	San Luis Rey	903.1	3541		Manufacturing, Pipe Cutting Tools											Z-Low	Not applicable			C	11/24/2008	Provide filters for storm drain	1/16/2009	Filters were provided, storm drain			W	
OC	PACIFIC TURBINE SUPPORT, INC	2575		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	5088		AIRCRAFT PARTS DISTRIBUTORS											Z-Low	Not applicable			I	10/13/2008				Yes		GC	
OC	KINETIC COMPOSITES, INC	2520		JASON CT		Oceanside	CA	92056	Loma Alta	904.1	3999		MANUFACTURING IDUSTRIAL											Z-Low	Not applicable			I	10/14/2008				Yes		GC	
OC	PACIFIC COAST CYCLES	2003	S	COAST HWY		Oceanside	CA	92054	Buena Vista	904.2	5941		Bicycle Shop Sales and Service											Z-Low	Not applicable			C	3/12/2009				Yes		G	
OC	OCEANSIDE TRUSS INC - OUT OF BUSINESS	2847		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	2349		Manufacturing - Wood Trusses											Z-Low	Not applicable			C	3/18/2009				Yes		G	
OC	AMERICAN ARBOR TREE SERVICES	3041		INDUSTRY ST	C	Oceanside	CA	92054	Loma Alta	904.1	783		Miscellaneous Services - Tree Services											Z-Low	Not applicable			C	3/18/2009				Yes		G	
OC	CTM RACING PRODUCTS INC	3041		INDUSTRY ST	B	Oceanside	CA	92054	Loma Alta	904.1	3714		Manufacturing - Automobile Parts											Z-Low	Not applicable			C	3/18/2009				Yes		G	
OC	PBW BRAZILIAN DOORS	3041		INDUSTRY ST	A	Oceanside	CA	92054	Loma Alta	904.1	5211		Retail Sales - Wood Doors											Z-Low	Not applicable			C	3/18/2009				Yes		G	
OC	TIME MACHINE RACECRAFT	4035		OCEANSIDE BLVD	E	Oceanside	CA	92056	Loma Alta	904.1	7549		Automobile Services - Except Repairs											Z-Low	Not applicable			C	3/18/2009				Yes		G	
OC	RICHER AUTO & TRUCK ELECTRC CO	2372		INDUSTRY ST		Oceanside	CA	92054	Loma Alta	904.1	7538		Auto Repair Shop - Rebuilding Electric Motors											Z-Low	Not applicable			C	3/19/2009				Yes		G	
OC	ORCO BLOCK CO INC	3501		OCEANSIDE BLVD		Oceanside	CA	92056	Loma Alta	904.1	3271		Manufacturing - Concrete Products											Z-Low	Not applicable			C	3/27/2009				Yes		G	
OC	DYNAMIC INNOVATIONS	3207		ROYMAR RD	C	Oceanside	CA	92054	San Luis Rey	903.1	7539		Manufacturer, Machine Shop											Z-Low	Not applicable			C	12/2/208				Yes		W	

	Comm	Industrial
High	164	20
R-High	332	
Total H	**496**	**20**
M-Medium	**19**	**7**
Z-Low	**24**	**6**
Total	**539**	**33**

CITY OF OCEANSIDE
clean water program

Volume 6, Issue 2 - Fall 2008

Coastal Cleanup Day September 20, 2008 9 am - 12 pm

Celebrate California Coastal Cleanup Day by participating in the eigth annual Buena Vista Creek Cleanup and Oceanside Pier Beach Cleanup. The City of Oceanside, together with I Love a Clean San Diego, Coastkeeper, and 1-800-GOT-JUNK will be hosting a cleanup along the banks of Buena Vista Creek, as well as a beach cleanup south of Oceanside Pier on September 20th, from 9 a.m. to 12:00 p.m. Volunteers will receive cleanup supplies, refreshments, community service hours, and a free T-shirt. Call the Clean Water Program Event Information Line for more details at 760-435-5536.

Cleanup sites

- Behind Chicks Sporting Goods at Plaza Drive and College Boulevard (3514 College Boulevard)
- North of fire station #4 located at Thunder Drive and Lake Boulevard.
- Behind Kohl's store at College Boulevard and Marron Rd.
- South side of Oceanside Pier

Join us while we remove unwanted materials from the creek and beach and help to improve Oceanside water quality. For more information about cleanup events and how you can prevent water pollution visit ourWebsite at

www.oceansidecleanwaterprogram.org.

In This Issue

- Coastal Cleanup Day Sept. 20 - Buena Vista Creek & Pier
- Bacteria source tracking project on the San Luis Rey River
- West Nile virus and over watering connection
- Water conservation tips to eliminate water runoff

Bacteria source tracking project on the San Luis Rey River

The shoreline at the outlet of the San Luis Rey River mouth in Oceanside, California is visited by thousands of people each year to enjoy a variety of recreational activities. However, for a number of years, elevated levels of indicator bacteria (total coliform, fecal coliform, and Enterococcus) have affected water quality in the river mouth and the adjacent shoreline. The beach has had significantly more beach postings and closures as a result of elevated bacterial levels than other beaches in the City. Public health is a priority for the City of Oceanside who is striving to improve water quality through its Clean Water Program.

To address this issue, the City of Oceanside Clean Water Program was awarded $554,375 from the Clean Beaches Initiative (CBI) Proposition 50 grant. The objective of this study is to identify the source or sources of bacteria that are causing the high bacteria levels. The sources could be from humans, pet waste, coyotes, dogs, raccoons, birds who land at the river mouth, or other wildlife. More in-depth bacterial analysis will better determine the exact source. After the data is analyzed a list of potential activities to eliminate the input of those sources will be developed.

Water quality sampling along the river has been ongoing since 2004. Scheduled smapling for this grant will be done in June 2008, August 2008, winter 2008/09 and summer 2009. The final report for the project is scheduled for completion in January 2010 with release to the public shortly thereafter. For more information about this project, call the Clean Water Program staff at 760-435-5800.

DID YOU KNOW...

Over Watering

↓

Urban Runoff

↓

West Nile Virus

...ARE CONNECTED?

Our imported water supplies have ben cut, so we need to reduce water use immediately. You can help by not over watering your yard. Eliminate one day a week from your watering schedule, or cut your watering times by two minutes. To learn other water saving tips visit www.20gallonchallenge.com.

Underground backyard french drains that reach the curb can contribute to runoff and ponded water in your street. Ponded water is the perfect breeding ground for mosquitos that can carry the West Nile virus.

→

→

Tips to eliminate water runoff

Check your landscape for any water runoff both during the water cycle and after the cycle is complete.

If water runs onto the driveway, sidewalk, or street:

- ❑ Adjust sprinklers so they spray only landscape.
- ❑ Reduce the irrigation cycle 1-3 minutes.
- ❑ Check for and repair leaks and broken sprinkler heads.
- ❑ Water after 8:00 p.m. and before 6:00 a.m.

If water comes out of the curb drain in front of your house

- ❑ You may be over watering or have a leak.
- ❑ Reveiw the above tips and make any appropriate changes.

City of Oceanside
Clean Water Program
300 North Coast Highway
Oceanside, California 92054
760-435-5800
www.oceansidecleanwaterprogram.org

Urban Runoff Hotline

760-435-5800

Call the Urban Runoff Hotline if you see water runoff in in your street or anything other than rainwater going down the storm drain.

CITY OF OCEANSIDE
clean water program
Volume 7, Issue 1 - Winter 2009

Loma Alta Creek Cleanup
April 25, 2009
9 a.m. - 12 p.m.

Celebrate Earth Day by participating in the 10th Annual Creek to Bay Cleanup event on April 25, 2009. The City of Oceanside, together with I Love a Clean San Diego and 1-800-GOT-JUNK, will be hosting a cleanup along the banks of Loma Alta Creek and at two sites on the Pacific Ocean.

Choose from five sites

- Buccaneer Park at Pacific and Morse Streets (1500 South Pacific Street)
- Behind McDonald's on Oceanside Boulevard and I-5 (1701 Oceanside Boulevard)
- Mesa Drive between El Camino Real and Rancho Del Oro Drive
- Behind commercial buildings at 1629 Ord Way (Off Oceanside Boulevard between College Boulevard and Temple Heights Drive)
- South side of the Oceanside Pier

Join us while we remove unwanted materials from the creek and beach and help to improve Oceanside water quality. Volunteers will receive cleanup supplies, refreshments, community service hours, and a free T-shirt or other giveaway item. For more information call 760-435-5536 or 760-435-5807.

Receive event notices by email

To receive event announcements by email, send your email address to cleanwaterprogramevents@ci.oceanside.ca.us, or log on to the events tab at www.oceansidecleanwaterprogram.org to register. While visiting the Web site, learn how you can protect water quality.

Together we can prevent water pollution.

In This Issue

- 2009 river, creek, and beach cleanup events
- Green Week at Oceanside Library: March 16 - 21, 2009
- Water Conservation Landcaping Workshops for residents
- Storm drains are not connected to the sanitary sewer

Green Week: March 16 - 21, 2009
At the Oceanside Public Library
Learn how your family can be better stewards of the planet

Each day during Green Week there will be fun children's activities to teach them how to be better stewards of the planet including recycling, water conservation, and preventing water pollution. Students can also participate in two contests:

- Bookmark Contest - Winning designs will be printed for distribution.
- Recycling Challenge - Classrooms compete to collect the most cans and plastic bottles during the week. The winning class earns a lunch party for their entire classroom. Details at any OUSD school.

Don't miss these fun and educational events. For more information visit www.oceansidecleanwaterprogram.org or call the Oceanside Library at 760-435-5590.

- Monday, March 16 - 6 p.m.: Our Blue Planet
- Tuesday, March 17 - 6 p.m.: Reduce, Reuse, Recycle
- Wednesday, March 18 - 6 p.m.: Stories & author visit
- Thursday, March 19 - All Day: Children Eco-crafts
- Friday, March 20 - Bookmark Contest Deadline
- Saturday, March 21 - 9 a.m. to 12 p.m.: The Green Fair

Come to the downtown Civic Center Plaza and enjoy games, food, and information booths. An awards ceremony will be held for contest winners. For event fliers and contest details visit your local library or visit www.oceansidecleanwaterprogram.org.

Green Week is sponsored by the Friends of the Oceanside Public Library, the City of Oceanside's Solid Waste and Recycling Division, and the Water Utilities Department's Water Conservation and Clean Water Programs.

Urban Runoff Hotline - Help protect our local waterways

Please report if you see anything other than rain water entering the storm drain.

760-435-5800 "Only Rain in the Storm Drain!"

FREE Water Conservation Landscaping Workshops

Space is limited! Call 760-435-5800 to reserve a seat.

Did you know that 60% of our urban water is used for landscape irrigation and other outdoor purposes? In an effort to help the community conserve water outdoors, the City of Oceanside's Water Utilities Department is offering a series of free landscaping workshops to help homeowners save water (and money) while making their gardens colorful, healthy, and attractive. Homeowners will learn about efficient irrigation and landscape management. These workshops have been created specifically for landscaping in California with a focus on water conservation landscaping techniques.

Residential Landscaping Workshop
Date: Saturday, May 23, 2009
Time: 9 a.m. to 12 p.m.
Mira Costa College @ One Barnard Dr.
Horticulture Building 7000
Oceanside, CA 92056

This one-day workshop will cover:

- Garden design for homeowners
- Use of California-friendly plants
- Sprinkler system basics
- Introduction to irrigation scheduling

Bye Bye Grass Workshop (Two-day workshop)
Dates: June 23 AND June 25, 2009
Time: 6:30 - 8:30 p.m.
Oceanside City Hall
Civic Center Library Community Rooms
330 N. Coast Highway
Oceanside, CA 92054

This two-day workshop will focus on:

- Fast, effective, and inexpensive methods to remove your lawn (day one), and
- Irrigation systems demonstration, kinds of spaces you need in your garden, and creative ideas for installing beautiful low-water-use plants (day two).

For more information call 760-435-5800 or log on to www.ci.oceanside.ca.us and click on water saving opportunities. Space is limited. To reserve a seat at any of these workshops call the Water Utilities Department at 760-435-5800.

Did You Know That...

Storm Drains Lead to the Nearest Waterway

Rain water (also called storm water) that flows off buildings, walkways and streets into storm drains ultimately flows to the Pacific Ocean. Unlike water that goes to the sanitary sewer system (like your sink, shower, and toilet water), storm water is not treated or filtered before it is discharged to the ocean. Storm water runoff can pick up pollutants from yards and streets that can have harmful effects on wildlife and the recreational uses of rivers, creeks and beaches. Sometimes area beaches are posted or closed due to pollution. It is important to keep storm water runoff clean.

What can I do?

- Don't dump anything down the storm drain - remember "Only Rain in the Storm Drain!"
- Pick up pet waste promptly- it transmits disease
- Place landscape clippings in curbside carts - don't sweep into streets or down storm drains
- Wait three days after rain to apply fertilizers and pesticides
- Visit www.oceansidecleanwaterprogram.org for more tips

2009 River, Creek, and Beach Cleanup Events

Please join the Clean Water Program staff and citizen volunteers to assist in removing trash and debris from our local rivers, creeks and beaches.

Event Times: 9:00 a.m. - 12:00 p.m.
Event Details: 760-435-5536

- April 25, 2009: Loma Alta Creek Cleanup
- July 5, 2009: Morning After Mess - City Beaches
- September 19, 2009: Buena Vista Creek Cleanup and California Coastal Cleanup Day
- November 7, 2009: San Luis Rey River Cleanup

City of Oceanside

Clean Water Program
300 North Coast Highway
Oceanside, California 92054
760-435-5800
www.oceansidecleanwaterprogram.org

SUN DIEGO PRESENTS

THE MORNING AFTER MESS

BEACH CLEAN UP DAY

JULY 5TH, 2008 Surfrider Foundation San Diego Chapter

6 BEACHES! 8-11AM AT EACH LOCATION!

VOLCOM
DEL MAR
POWERHOUSE

O'NEILL
PACIFIC BEACH
PB DRIVE

Quiksilver
OCEAN BEACH
OB PIER

Billabong
PONTO BEACH
IN SOUTH CARLSBAD

OCEAN MINDED
MISSION BEACH
BELMONT PARK

...LUST
OCEANSIDE
OCEANSIDE PIER

★ EARN YOUR COMMUNITY SERVICE CREDITS!
★ FREE T-SHIRT TO THE FIRST 50 PARTICIPANTS AT EACH LOCATION!
★ PRIZE PACKAGES FROM EACH VENDOR AT EACH LOCATION!

FOR MORE INFO AND PRE-REGISTRATION VISIT SURFRIDERSD.ORG OR SUNDIEGO.COM

BROUGHT TO YOU BY THE SURFRIDER FOUNDATION, SAN DIEGO CHAPTER (858) 792-9940 AND SUN DIEGO BOARDSHOPS

SUN DIEGO | Surfrider Foundation San Diego Chapter | CLIF | SAN DIEGO Clean Beach Coalition | Kashi

WWW. SUNDIEGO.COM SURFRIDERSD.ORG CLEANBEACHCOALITION.BLOGSPOT.COM

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City of Oceanside
San Luis Rey River Cleanup

Saturday, November 8, 2008

9:00 a.m. to 12:00 p.m.

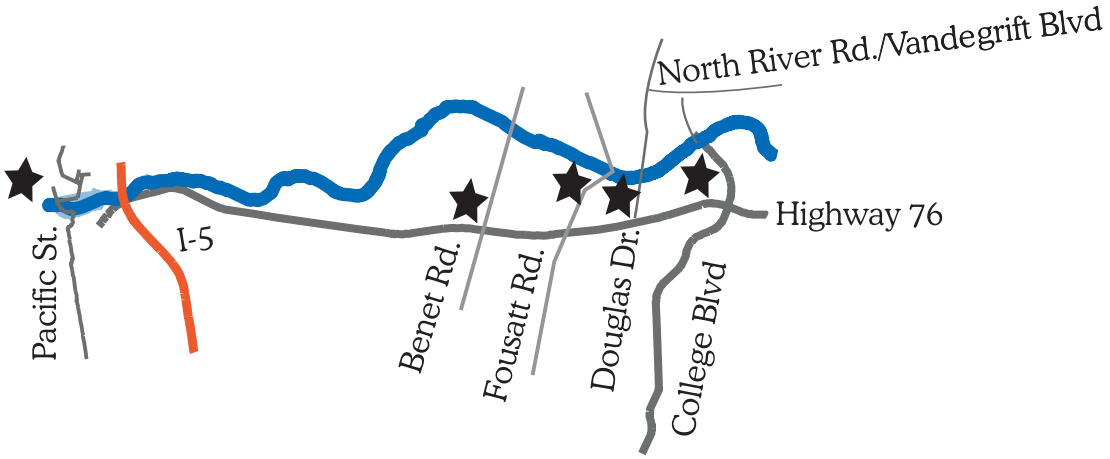

Volunteers receive refreshments, cleanup supplies, community service hours and a free T-shirt.
For more information and site details, call 760-435-5536 or log onto www.oceansidecleanwaterprogram.org.

Sponsored By:

City of Oceanside Clean Water Program

1-800-GOT-JUNK? North America's Largest Junk Removal Service

iDesign Impact

Join us at any of the following sites:

- Oceanside Harbor - Parking Lot #10
- Highway 76 & Benet Road
- Highway 76 & Foussat Road at bike path
- Douglas Drive at the bike path on south side of SLR River north of Pala Road
- Mance Buchanon Park on College Blvd. just north of Adams Ave.

Do You Know Your Watershed?

The San Luis Rey Watershed is located along the northern border of San Diego County, California. It originates in the Palomar and Hot Springs Mountains and extends over 55 miles across northern San Diego County. This forms a watershed* with an area of approximately 360,000 acres or 562 square miles making it the third largest in the San Diego region (SANDAG 1998). The river ultimately discharges to the Pacific Ocean at the western boundary of the City of Oceanside.

The San Luis Rey Watershed is comprised of three Hydrologic Areas (HAs), which have been delineated based on drainage patterns: Lower San Luis, Monserate, and Warner Valley. Over 54% of the land in the watershed is vacant or undeveloped. The next largest land uses in the watershed are residential (15%) and agriculture (14%). The highest concentration of population is located in the Lower San Luis HA. There are six federally recognized Tribal Indian Reservations with land in the watershed. The highest point in the San Luis Rey watershed and in San Diego County is Hot Springs Mountain with an elevation of 6,533 feet (1,991 meters).

A watershed defines where any litter, debris, oil, grease, fertilizers, or other pollutants will travel when it rains. During the rainy season or when over watering occurs, these pollutants are carried down the curb, into a storm drain, and are released into a "receiving water". Receiving waters can be any body of water including creeks, rivers (like the San Luis Rey), lakes, and the ocean. You can help protect the receiving waters where you live by disposing of trash properly, washing your car on the grass or at a car wash (not on your driveway), and not applying fertilizer before it rains. Report anything but rain water traveling down the gutter or storm drain to the Oceanside Urban Runoff Hotline (760-435-5800). Remember "Only Rain in the Storm Drain".

To learn more about Oceanside watersheds log onto www.oceansidecleanwaterprogram.org and click on waterbodies. And for more information about the watersheds in San Diego County, log onto www.projectcleanwater.org.

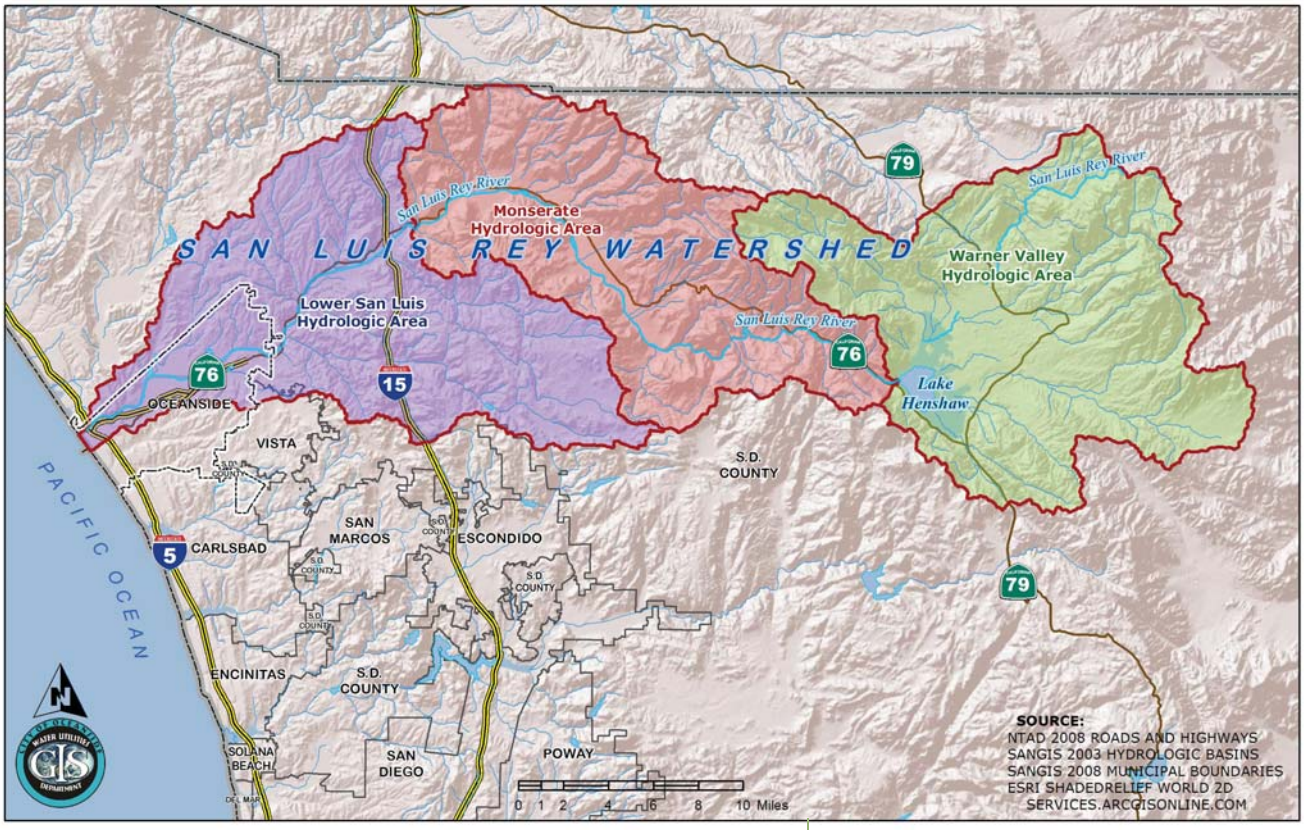

*wa·ter·shed – noun
1. the ridge or crest line dividing two drainage areas; water parting; divide;
2. the region or area drained by a river, stream, etc.; drainage area.

News Briefs

Early Start to Trash Collection on July 5th

Trash and recycling collection for residential, multifamily and commercial customers who would normally be serviced on Friday, July 4th, will be serviced on Saturday, July 5th. Because of the expected crowds in the beach and harbor areas, Waste Management will begin collection at 4:00 am, beginning in the areas that are located west of Coast Highway, between Oceanside Blvd. and the harbor. This early start time is expected to minimize the difficulties associated with holiday crowds. Waste Management and the City would like to thank customers in advance for their patience and cooperation.

Recycling at Harbor and Beaches

The City of Oceanside is proud to announce that we have more than doubled the amount of recycling containers at our Harbor and Beaches. This summer, while you are out enjoying our Harbor and Beaches, please remember to recycle your empty beverage bottles and cans. Be on the look out for our brand new recycling containers and remember to place your empty bottles and cans in one of these containers, and NOT in a trash can. These new recycling containers will be available along The Strand and Harbor for your convenience, so let's save our landfills.

OCEANSIDE RECYCLES, Recycling Hotline: 435-5015.

Beach and River Cleanup Events

Please join the Clean Water Program staff and citizen volunteers to assist in removing trash and debris from our local beaches, rivers, and creeks. All volunteers receive cleanup supplies, refreshments, community service hours and a free T-shirt. All events are held from 9:00 am to 12:00 pm. For more information about cleanup events call 435-5536 or log onto www.oceansidecleanwaterprogram.org.

- July 5: Morning After Mess – City Beaches
- September 20: California Coastal Cleanup Day – Buena Vista Creek Cleanup
- November 8: San Luis Rey River Cleanup

Sushi Spurs Oceanside Redevelopment

Located in the heart of downtown at 301 Mission Avenue in the recently completed Oceanside Terraces development, Harney Sushi, of San Diego fame, is set to unveil its new Oceanside location June 27 with a private preview event and silent auction benefiting the California Surf Museum. To celebrate the opening and help support its new neighbors, Harney Sushi Oceanside will also be donating 5% of its first week sales to the California Surf Museum. With a 600-gallon fish tank, cascading wall of water, fireplace, comfortable indoor and outdoor seating, sushi and sake bars, private VIP room and DJs six nights a week, Harney Sushi provides a distinct dining experience and aesthetic that sets it apart as truly progressive. Harney Sushi will serve lunch Monday through Friday and dinner daily until midnight. Visit Harney Sushi online at www.harneysushi.com.

Health and Wellness Fair

Tri-City Medical Center will host the Inaugural Mid-Summer's Health and Wellness Fair Thursday, July 10, from 4:00-7:00 pm, on the Medical Center campus located at 4002 Vista Way, Oceanside. It will take place in the northwest Parking lot.

Tri-City professionals will provide free health screenings, information about disease prevention and explain how to access services offered by the hospital, including the new Health and Wellness Complex scheduled to open November 2008. The fair will also feature entertainment, food, drinks and guest appearances by sports celebrities. For additional information call 450-4785 or 908-6458.

Kids IV Golf Tournament

North County Health Services will be holding their fourth annual Fore For Kids IV Golf Tournament on August 22 at Lake San Marcos Resort and Country Club. Shotgun time will start promptly at 12:30 pm. Please come join us for 18 holes of golf, feasting, auctions and an amazing day of fun. Sign up soon as the event sells out rapidly. One hundred percent of the proceeds aid comprehensive pediatric programs. To participate or get information about sponsorship opportunities, call Victor Botello at 736-6710 or Michelle Davis at 736-8705.

In Search of...Volunteers

The City has expanded its Volunteer program and is looking for additional volunteers to fill interesting and rewarding opportunities Citywide. These opportunities range from working on various recreational, sports and literacy programs, to providing office support. Presently, the City has 500+ active volunteers working with various City projects and programs. These volunteers supplement existing services.

In effort to expand the program, Human Resources created a Volunteer Web site which may be reached at the following link: http://www.ci.oceanside.ca.us/datarelation.aspx?Content=286.

Once on the Web site, download application forms, view the procedures manual, the policy that governs this program and the different City departments that are participating. Volunteers are placed by matching interests with work needed.

For additional information please visit the volunteer Web site or call Armando Fernandez at 435-3508.

continued on page 12

We Make Feet Happy...

Knees, hips and backs too!!

Feel as though your shoes never really fit?

- Bunions
- Plantar Faciitis
- Heel & Arch Pain
- Calluses/Corns
- Arthrithis
- Diabetic Shoes

Foot Solutions carries a complete line of stylish comfort footwear for dress, work and play. We specialize in custom orthotics and the hardest to fit feet.

FOOT SOLUTIONS

OCEANSIDE
4225 Oceanside Blvd.
(at College Blvd. Ralph's Center)
760.806.8121

FREE Foot Analysis

Earth Day: April 22, 2009

This year you can contribute to the environment on Earth Day by reducing or permanently eliminating your use of plastic bags!

Get Rid of Plastic Bags... And Plastic!

The raw material of plastic bags is oil. Therefore, the more we use plastic bags, the more we waste oil — a non-renewable energy source.

The petroleum-based plastic bags take hundreds of years to break down, so if they are not recycled they become litter.

It creates visual pollution: in the streets, on the beaches, etc. Also, they can clog roadside drains, which could cause street flooding during heavy rainfall.

Plastic bags can be recycled but it rarely happens: according to the United States Environmental Protection Agency, only 1% of plastic bags were recycled in 2000, against twenty percent for paper bags.

They endanger wildlife and particularly sea life such as sea turtles and dolphins, which can die of entanglement, suffocation, and ingestion because they assume that these bags are jellyfish.

Plastic: A Not-So-Safe Material

Bisphenol-A, a common chemical used to make certain plastics has been linked to potentially deadly diseases like diabetes, heart disease, and cancer.

Studies have shown that 90% of American people have Bisphenol-A in their bodies.

Exposure to Bisphenol comes from many different sources such as the foods we eat, the water and beverages we drink, electronics, and even our dentists.

Even babies come in contact with Bisphenol at an early age, as many baby bottles are made from the plastic.

What YOU Can Do!

Use reusable grocery bags, which always have a lower environmental impact.

Reuse your plastic shopping bags: use them for trash so as not to buy others that are more energy wasting; use them for storage.

Use paper bags rather than plastic bags when you are given the choice, but keep in mind that paper bags generate 70 percent more air and 50 times more water pollutants than plastic bags, and it takes more than four times as much energy to manufacture a paper bag as it does to manufacture a plastic bag.

Heritage Park Village & Museum

Heritage Park centers around an idyllic main street lined with many of Oceanside's original buildings and period furnishings. This two-acre site is a perfect setting for picnics, reunions, company barbecues, wedding receptions, and other special events.

Park grounds are open daily 9:00 AM – 4:00 PM, with the historic buildings open on Sundays 1:00 PM – 4:00 PM. For a personal tour, please call 433-8297 to make an appointment.

220 Peyri Road • Oceanside
(760) 435-5540

Oceanside Beach and River Cleanup Events

Please join the Oceanside Clean Water Program staff and citizen volunteers to assist in removing trash and debris from our local beaches, rivers, and creeks. All volunteers receive cleanup supplies, refreshments, community service hours and a free t-shirt or other giveaway item. All events are held from 9:00 am to 12:00 pm.

If you would like to receive an email notice about these events send an email to cleanwaterprogramevents@ci.oceanside.ca.us. For more information about cleanup events call 435-5536 or log onto www.oceansidecleanwaterprogram.org.

April 25, 2009
Loma Alta Creek Cleanup Event
Creek to Bay Cleanup

July 5, 2009
Morning After Mess – City Beaches

September 19, 2009
Buena Vista Creek Cleanup
California Coastal Cleanup Day

November 7, 2009
San Luis Rey River Cleanup

have been prioritized according to type of event, number in attendance, proximity to the nearest water body, and potential threat to water quality. Based on this prioritization, the City of Oceanside will be conducting storm water compliance inspections of most special events within the City. These compliance inspections will include a pre-event inspection where storm water BMPs are evaluated. An event inspection is required to determine the effectiveness of BMPs, and a post-event inspection to ensure the site is properly cleaned. Compliance inspections may also include recommendations for additional measures that may be required to comply with the storm water regulations.

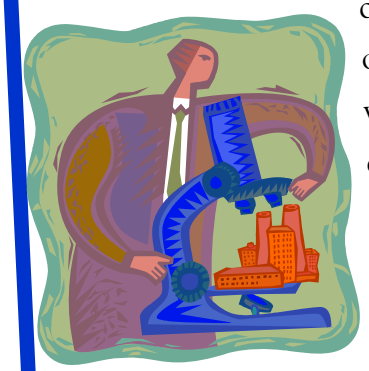

Please note that all special events in the City of Oceanside are required to implement all of the minimum special event BMPs and comply with all applicable regulations outlined in the Oceanside Municipal Code

Remember "Only Rain in the Storm Drain"

wastewater treatment plant discharged to the ocean. The storm drain system, on the other hand, is designed to carry rainwater away from streets, parking lots, and driveways to help prevent flooding during rain events. Water entering the storm drain system does not receive any treatment and flows directly to our creeks, lagoons, and ocean.

CITY OF OCEANSIDE
SPECIAL EVENTS OFFICE

City of Oceanside
Neighborhood Services Department
Parks and Recreation Division
Office of Special Events

Phone: 760-435-5540
Fax: 760-722-0650
E-mail:
specialevents@ci.oceanside.ca.us

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ONLY RAIN IN THE STORM DRAIN!

Preventing Pollution is Up to Us!

Did you know that storm drains are NOT connected to sanitary sewer systems or other treatment plants? As rainfall flows over the ground, it picks up a variety of pollutants that flow directly to our creeks, lagoons, and ocean.

Special Event Pollutants

Special event activities can generate a variety of pollutants that can pollute our waterways.

- Trash and Debris
- Oil and Grease
- Metals
- Detergents
- Bacteria and Viruses
- Sediment

Best Management Practices Work!

Best Management Practices (BMPs) are procedures and practices that all special event organizers **are required** to implement to prevent pollutants from entering our storm drains. Once sources of pollution have been identified, the next step is to select BMPs that eliminate or reduce storm water pollution. Storm Water Compliance staff can work with you to develop BMPs for your specific event.

Protection for All Seasons

Even when rain is not expected, event organizers are required to implement BMPs. Depending on the size, location, number of participants, and other relevant factors, a Storm Water Pollution Prevention Plan (SWPPP) may need to be developed and must be approved by the City prior to Special Event Permit issuance. The SWPPP is intended to demonstrate that appropriate measures are being implemented before, during, and after the event to reduce and prevent pollutants from leaving the event venue.

Good Housekeeping

- **Use dry clean-up methods first!** Never use a water hose or pressure washing system to clean up spills. Use mops, brooms, or wire brushes to clean sidewalks, pavements, and other impervious surfaces. Wash water must be disposed of to the sanitary sewer and never the storm drain.
- Minimize the use of cleaning solutions and chemical agents. Dispose of waste properly.
- Keep site free of litter. Place trash and recycling receptacles around the site to minimize litter.

Preventive Maintenance

- Inspect equipment and vehicles frequently and clean up leaks and spills immediately.
- Prior to the event, locate and protect all drainage points using storm drain protection devices such as sand bags, fabric filters, berms, containment booms, etc.
- Label or place signs at, around, or adjacent to storm drains with the following wording: "No Dumping" or other pollution preventative message.
- Regularly inspect storm drains during the event to prevent pollutants from accumulating.

Waste Maintenance

- Reduce, Reuse, Recycle.
- Frequently inspect trash and recycling receptacles to ensure they do not overflow. Place trash inside dumpsters or plastic bags until it can be removed.
- Dumpsters must be kept closed when not in use.
- Never place liquid waste, leaky bags, or hazardous waste in dumpsters or trash bins.

Materials Storage and Handling

- Store materials in covered areas not exposed to rain.
- Keep outdoor storage areas clean.

Food Preparation

- Food vendors must have spill kits in or adjacent to their work area. Spill kits include: towels, kitty litter, and/or clean-up materials. All spilled materials must be promptly cleaned up and disposed of properly.

Temporary Relief Stations

- Relief stations must be placed away from locations that have the potential to impact the storm drain systems.
- All relief stations are required to have a secondary containment or additional BMPs to contain possible overflows or debris from rechign storm drian inlets.

Staff and Vendor Training

- Discuss and distribute information about storm water pollution prevention during staff (including contractor) training and vendor registration.

Post Event Clean Up

- All streets, sidewalks, and public areas must be cleaned (sweeping, litter pickup, etc.) and returned to the pre-event condition.
- Remove temporary public art (chalk, paint, charcoal, clay, etc) using dry-clean up methods only.
- If a street sweeper will be used, ensure they are onsite promptly after the event.
- Assign an appropriate number of staff to promptly and adequately clean-up after the event.
- After the site has been cleaned, storm drain containment and protection devices must be removed.

For more information or assistance, please call 760-435-5540 or 760-435-5800.

SPECIAL EVENTS

Inspection Form

Pursuant to Oceanside City Code Urban Runoff and Discharge C

Inspector:		Date		Season	
Event Name		Event Type			
Event Location		Event Address			
Contact Name		Contact Phone			
Weather Conditions	☐ Heavy Rain ☐ Light Rain ☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain I				

PRE-EVENT (1)									POST-EVENT								
Time:	NEEDS								NEEDS								
SOURCE	NA	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	NA	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	
Solid Waste Storage and Disposal																	
Waste Containers																	
Grease Storage																	
Recycling Containers																	
Disposal Areas																	
Vehicles and Heavy Equipment																	
Washing Area																	
Spill Response																	
Storage Area																	
Outdoor Materials Handling and Storage																	
Storage Tanks																	
Other Liquid Containers																	
Equipment Storage																	
Food Preparation and Eating Areas																	
Spill Kits																	
Food Disposal																	
Eating Areas																	
Grounds Maintenance and Housekeeping																	
Storm Drains																	
Parking lots																	
Staff Vendor Training and SWPPP																	
SWPPP																	
Training																	
Portable Restrooms																	
Storage Area																	

OBSERVATIONS

☐ **No violations observed during the inspection.**	☐ **No violations observed during the**
☐ **Violations observed during the inspection**	☐ **Violations observed during the ins**
☐ **Implement Corrective Actions As Required Below**	☐ **Implement Corrective Actions As**

CORRECTIVE ACTION REQUIRED: ☐ Ph

1	2		1	2	
☐	☐	Prevent trash/recycling from overflowing.	☐	☐	Sweep up trash and debris.

4116

(City of Oceanside Inspection Report Page 2)

EVENT SUMMARY

PRE-EVENT	POST-EVENT

IMPROVEMENTS AND RECCOMENDATIONS

ADDITIONAL INFORMATION

Potential Pollutants	☐ **Bacteria** ☐ **Gross Pollutants** ☐ **Metals** ☐ **Nutrients** ☐ **Oil and Grease** ☐ **Organics** ☐ **Pesticides** ☐ **Sediments** ☐ **Trash** ☐ **Hazardous Materials** ☐ **Other**		
Enforcement Required	☐ Verbal Warning ☐ Written Warning ☐ Notice of Violation ☐ Stop Work Order ☐ Charge Back ☐ Administrative Citation/Fine ☐ Referred for Action		
BMP Assessment (circle one)	**5 4 3 2 1**	**Knowledge Assessment (circle one)**	**5 4 3 2 1** ☐ **Contact not available**

Comments Notes

General Industrial Permit Fact Sheet

WHAT IS THE GENERAL INDUSTRIAL PERMIT?

The California State Water Resources Control Board (SWRCB) adopted the current National Pollutant Discharge Elimination System (NPDES) General Industrial Permit in 1997. It requires certain industrial businesses to obtain a storm water permit in order to discharge runoff into a city's storm drain system or a local waterbody. The storm water permit mandates that regulated industrial businesses must develop and implement various programs to prevent the contamination of storm water runoff draining off their site. An update of this Permit was drafted in 2005, but has not yet been adopted.

HOW DO I KNOW IF I NEED THIS PERMIT?

If the Standard Industrial Classification (SIC) Code of your business is between 0211 and 5171, you may be subject to regulation under the Permit, unless conditionally excluded. If subject, you are required to submit a Notice of Intent (NOI) to the San Diego Regional Water Quality Control Board (RWQCB) and be in compliance with the other planning, monitoring, and training requirements of the permit. Below is a list of general facility descriptions that are subject to the Permit:

- Facilities with effluent limitations, new source performance standards, or toxic pollutant effluent standards
- Manufacturing
- Oil and Gas/Mining
- Hazardous Waste Treatment, Storage, or Disposal
- Landfills, Land Application Sites, and Open Dumps
- Recycling Facilities
- Steam Electric Power Plants
- Transportation Facilities
- Sewage or Wastewater Treatment Works
- Manufacturing facilities where industrial materials, equipment, or activities are exposed to storm water (Light Industrial)

A complete list of SIC Codes regulated under the General Industrial Permit is available on the SWRCB website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/sicnum.shtml

CAN A FACILITY BE EXEMPT FROM PERMITTING?

There is an exemption from storm water permitting for industrial facilities which have no exposure of industrial materials and activities to storm water. The intent is to provide all regulated industrial facilities whose activities are completely indoors (with no potential to discharge to a storm drain) with a simplified method of complying with the Permit. You still must file with the RWQCB, but you only need to submit a No Exposure Certification Form:

http://www.epa.gov/npdes/pubs/msgp2008_appendixk.pdf

WHO DO I CONTACT FOR MORE INFORMATION?

For answers to frequently asked questions and links to the Permit:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/indusfaq.shtml

For additional information about the No Exposure Exclusion:

http://cfpub.epa.gov/npdes/stormwater/exposure.cfm

For additional information on local regulations versus state regulations:

http://www.oceansidecleanwaterprogram.org/industrial.asp

For all other questions, contact:

- San Diego RWQCB General Number: (858) 467-2952
- SWRCB Industrial General Number: (916) 341-5538

CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT

DATE: December 10, 2009

RE: STATEMENT OF CERTIFICATION
CITY OF OCEANSIDE JURISDICTIONAL URMP

I certify under penalty of law that the Illicit Discharge, Detection, and Elimination Section (Section 7) of the Jurisdictional Urban Runoff Management Program Annual Report for 2008-2009 was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE: M. A. Lahsaiezadeh

NAME: Mo Lahsaiezadeh
TITLE: Clean Water Program Coordinator
JURISDICTION: City of Oceanside

300 NORTH COAST HIGHWAY • OCEANSIDE, CA 92054 • TELEPHONE 760-435-5800 • FAX 760-435-5814

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2008-2009 reporting period to manage illicit discharges and meet the requirements of Sections D.4 and J.3.a.(3)(f) of the 2007 Municipal Permit. A directory of the subsections within the Municipal Permit Section J.3.a. and corresponding Annual Report compliance sections are listed in Table 7-1.

Table 7-1. Order No. R9-2007-0001 Compliance Summary.

J.3.a(3)(f)i. MS4 corrections and the Dry Weather Field Screening Map	See Section 7.7.3 and Appendix 7-A of this Annual Report
J.3.a(3)(f)ii. Reporting of all dry weather field screening and analytical monitoring results	See Section 7.4.3 and Appendix 7-A of this Annual Report
J.3.a(3)(f)iii. Dry weather consultant reports	N/A
J.3.a(3)(f)iv. Brief description of any other investigations and follow-up activities	See Section 7.5 and Appendix 7-B of this Annual Report
J.3.a(3)(f)v. and vi. Number and descriptions of IC/IDs identified and eliminated	See Section 7.4.3 and Appendix 7.5 of this Annual Report
J.3.a(3)(f)vii. Spills to the MS4	See Section 7.3.3 of this Annual Report
J.3.a(3)(f)viii. Activities to prevent spills from entering the MS4	See Section 7.3.1 of this Annual Report
J.3.a(3)(f)ix. Notification of sewage spills	See Section 7.3.2 of this Annual Report
J.3.a(3)(f)x. Hotline calls	See Section 7.2 of this Annual Report
J.3.a(3)(f)xi. Public reporting of illicit discharges	See Section 7.2 and Section 8 of this Annual Report
J.3.a(3)(f)xii. Violations and enforcement actions	See Section 7.5 of this Annual Report
J.3.a(3)(f)xiii. Description of notable activities	See Section 7.1 of this Annual Report

7.1 Introduction

Illicit connections and illicit discharges (IC/IDs) can result in unauthorized discharges of pollutants to MS4s. IC/IDs can be defined as the following:

- An ***illicit connection*** is a connection that conveys an illicit discharge to the MS4 (pipe, drain, channel, catch basin, grated inlet, junction box, etc.).
- An ***illicit discharge*** is the act of disposing of any pollutant that is prohibited by the City either intentionally or unintentionally to the MS4. This does not include non-storm water exemptions and discharges resulting from emergency fire fighting activities. A list of non-prohibited, non-storm water discharges is provided in Chapter 3 of the City's JURMP Update (2007).

The main objective of the illicit discharge, detection, and elimination (IDDE) component of the City's storm water program is to seek and eliminate IC/IDs into the MS4. Eliminating IC/IDs helps minimize potentially negative impacts of human activities on receiving water bodies.

The City uses its municipal personnel to assist in actively seeking, identifying, and reporting IC/IDs during their daily activities. Detection and prevention of IC/IDs is achieved by:

- Operating a public complaint hotline,
- Inspecting local businesses and municipal facilities,
- Conducting dry weather field screening and analytical monitoring,
- Maintaining municipal MS4 and sewer systems, and
- Educating the local community.

The City investigates, inspects, and follows-up on every IC/ID that is reported or detected, to identify the source or sources of the discharge. Voluntary compliance and escalating enforcement mechanisms are implemented to immediately eliminate the IC/ID once the source has been identified when appropriate. Educational materials are distributed to help prevent future IC/ID occurrences. In addition, the City is in the process of developing MS4 outfall and source identification monitoring programs as part of a regional and jurisdictional effort to aid in identifying IC/IDs.

Notable Activities

To reduce the risk of sanitary sewer overflows, the City Sewer Department installed sewer monitoring alarm systems in several high priority areas. In addition, the land outfall replacement project was completed which replaced 6020 linear feet of 36" HDPE and PVC sewer pipe in the Loma Alta Creek watershed. See Section 7.3.1.1 for more information.

7.2 Public Reporting of Illicit Discharges and Connections

To aid the process of identifying illicit discharges, the City encourages the public and City staff to report illicit discharges and connections. A public complaint hotline specifically for urban runoff has been developed, and is currently operated by the Water Utilities Department:

Oceanside Urban Runoff Hotline
(760) 435-5800

The hotline is answered during business hours by City staff. Bilingual staff is available to handle calls by Spanish speakers. For after hours, holidays and weekend calls, callers needing immediate assistance are referred to the Oceanside Police and/or Fire Departments and the remaining are prompted to leave a message. Maintenance and operations staff are also trained to promptly refer potential storm water violations observed in the field to the Hotline (details of municipal staff training are in Section 10.2). City staff is provided with their own incentive based reporting hotline called *Oceanside Eyes*, which allows them to earn credit towards certain awards for each report that they phone in.

In addition to the Urban Runoff Hotline, IDDE related public complaints are also reported to Code Enforcement:

Code Enforcement
(760) 435-3944

Once a complaint is received, it is logged into a database for documentation and tracking purposes. The complaint is then forwarded to either a Clean Water Program Inspector or a Code Enforcement Officer. City personnel investigate every complaint logged through the hotline to

determine if pollutants are in fact being discharged to the MS4. If investigators find evidence of a violation or other IC/ID, every effort is made to find the responsible party and inform them of the complaint or issue a violation.

A total of 98 public complaints were received through the Urban Runoff Hotline during the 2008-2009 reporting period compared to 54 calls in the previous reporting period. Figure 7-1 is a summary of the nature of calls made to the Urban Runoff Hotline. The Code Enforcement Hotline reported 112 calls for storm water/Clean Water Program complaints compared to 190 calls in the previous reporting period. However, due to tracking procedures, the 190 reported complaints may have included additional code enforcement inspections related to urban runoff issues. A revised tracking policy is planned for upcoming years to better manage the information.

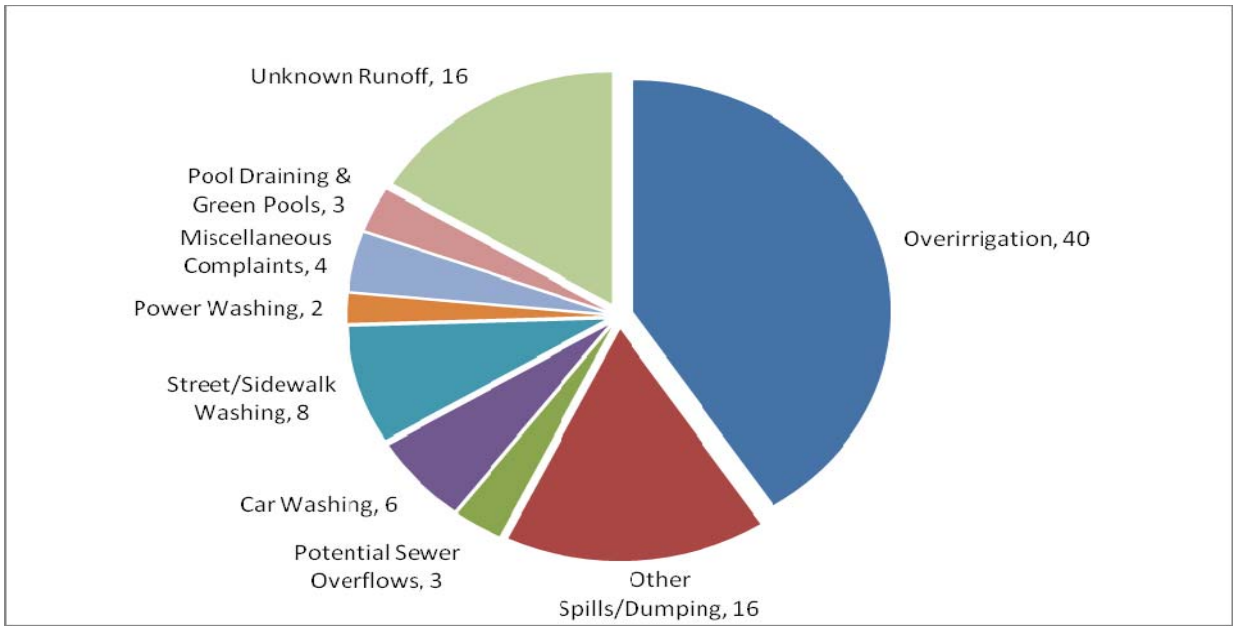

Figure 7-1. Summary of Urban Runoff Hotline Calls during the 2008-2009 Reporting Year.

The Urban Runoff Hotline is publicized in the *Oceanside Community Magazine*, the *North County Times* newspaper, the City's website, the Clean Water Program website, on a monthly local TV program called KOCT Oceanside Update, informational literature for public distribution, and at local community events and meetings. In addition, education to the public stresses the importance of reporting discharges and describes the critical role that the public plays in the identification and elimination of Urban Runoff pollution related problems.

7.3 Spill Reporting, Response, and Prevention

The City implements spill reporting, spill response, and spill prevention mechanisms to prevent, respond to, contain, and clean up all sewage and other spills that discharge to its MS4 from any source.

7.3.1 Spill Prevention

7.3.1.1 Sanitary Sewers

The City's preventive and corrective sewer maintenance programs consist of a variety of components provided for the operation, maintenance, repair and replacement of sewer mains, manholes, and pump stations. The programs provide for the routine monitoring, inspection, cleaning, and related maintenance of all components of the collection system in order to reduce the potential of sanitary sewer overflows (SSO) and other structural failures. Potential problems are noted and maintenance schedules adjusted accordingly. If necessary, repairs are initiated by City maintenance crews. Larger more complex projects are referred for inclusion in the capitol improvement projects (CIP) process for planning, design, and construction.

When system malfunctions do occur, such as SSO main stoppages, electrical outages, and mechanical breakdowns, the cause of the problem is investigated and analyzed. Maintenance schedules are then adjusted accordingly. If appropriate, the infrastructure component is referred for repair or replacement by maintenance crews.

Cleaning schedules are analyzed and adjusted for proper scheduling. During the 2008-09 reporting year, 312 miles (1,649,702 feet) of sanitary sewer were cleaned.

In order to ensure that the sanitary sewer lines do not leak, the city has a long term plan to slip line the sewer pipes through the City. During this reporting period 4,054 feed of City sewer lines were slip lines and an additional 47 manholes were rehabilitated.

In high priority areas, five SmartCover sewer monitoring and alarm systems were in use during the 2008-09 reporting year. These systems continuously monitor water level and at a pre-determined high water marks an alarm is sent to on-duty personnel to inspect the line to prevent a spill.

The land outfall replacement project, a large CIP project, was completed during the 2008-2009 reporting year. 6,020 linear feet of pipe of the land outfall were replaced in the Loma Alta Watershed. The previous land outfall was constructed in 1972 and consisted of approximately 34,000 linear feet of 24-inch ductile iron pipe. Several failures of the existing land outfall had occurred along Oceanside Boulevard, therefore a 6,000 linear foot segment was identified for immediate replacement. This project consisted of the installation of 6,020 linear feet of 36-inch HDPE and PVC pipe in this segment. The project was completed on June 4, 2009 with a budget of over $4,000,000.

In addition, the almost mile and a half segment of ocean outfall pipe was inspected by cctv for preventative maintenance.

Private Sewer Laterals and Septic Systems

The City requires that private sewer laterals and septic systems be designed and operated in accordance to industry standards. The City also requires the proper maintenance of these facilities in order to avoid spills, breakages, and failures.

7.3.1.2 Other Spills

The City prevents spills from private businesses and residents through required BMPs, education, and enforcement of relevant regulations for the storage and usage of hazardous materials.

The City also received funds from the California Integrated Waste Management Board to establish a permanent household hazardous waste (HHW) collection facility for its residents. The City's objective was to encourage a convenient, proper disposal and collection of HHW materials for its residents. This facility is currently open Monday through Friday for used oil, paint, and antifreeze disposal and every Saturday for collection of the following materials:

- Aerosols
- All purpose cleaners
- Ammonia
- Antifreeze
- Automobile cleaners
- Barbecue lighter fluid
- Batteries
- Brake fluid
- Chlorine bleach
- Detergents
- Disinfectants
- Drain opener
- Furniture polish
- Gasoline
- Glass cleaner
- Herbicides
- Mothballs
- Motor oil
- Oven cleaner
- Paint
- Paint thinner
- Pesticides
- Rubber cement
- Rug/upholstery cleaner
- Scouring powder
- Silver polish
- Toilet bowl cleaner
- Transmission fluid
- Tube and tile cleaner
- Turpentine varnish
- Water sealant
- Wood finish

The HHW collection facility is periodically promoted by the City through the *Oceanside Community Magazine*, the *North County Times* newspaper, on the Clean Water Program website and at local community events and meetings where literature is distributed. There is also literature available to the public at the City offices.

During the 2008-2009 reporting period, 3,430 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 146.59 tons of hazardous materials (including universal waste) during the reporting period. An additional 127.56 tons of E-waste was recycled in the same reporting year.

The City provides information to the public on used motor oil recycling and identifies the local state certified collection centers in the City. Furthermore, as part of the City's collection program, a 1,500-gallon used oil collection receptacle is provided at the City's harbor for use by harbor slip renters. During FY 2008-09, 832 gallons of oil were recycled along with one 55-gallon barrel of used oil filters.

7.3.1.3 Prevention of Fugitive Trash

In addition to spills from sewer overflows or hazardous waste dumping activities, the City is also addressing the prevention of trash getting into our receiving waters.

As discussed in detail in Section 4 of the 2008-2009 Annual Report, 571 miles of public streets in the City of Oceanside are swept at least monthly. During this reporting year, 28,954 curb

miles were swept. Last year's estimate of 1,142 curb miles (length of total street miles in the City doubled) was an underestimation compared to the actual tracked amount during the 2008-2009 reporting period by the City's Public Works Department. Street sweeping activities resulted in the collection of over 2,062 tons of waste from public streets and parking lots during this reporting year. In addition, a total of 3,354 structures (catch basins, manholes, inlets, outlets, etc.) were inspected and cleaned during the reporting period. A total of 65.89 tons of waste was removed. The waste generally consisted of trash, green waste, dirt, sand, roots, solids, rocks, and silt.

Trash Trap at the Oceanside Municipal Golf Course

In addition to standard maintenance, staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. City staff installed a trash trap downstream of this priority residential area and upstream of Pilgrim Creek in the open channel that parallels the driving range at the municipal golf course. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. This trash trap was installed in March 2009 (Figure 7-2).

After installation there was one rain event that captured 40 pounds of trash and organic debris. During future reporting years, the volume or weight of trash will be tracked. See the photos below of the newly installed trash trap and a photo of the effectiveness of the trash trap in stopping debris from reaching the waterway.

Trash trap immediately after installation

Trash trap with debris

Figure 7-2. Trash BMP installed at the Oceanside Municipal Golf Course.

Cigarette Butt Boxes in the Harbor and at the Beach

Cigarettes and their associated trash, including wrappers and cartons, are the most littered item in America. During FY 2007-08 the Department of Harbors and Beaches purchased and began installation of cigarette butt collection boxes to mitigate this litter in Oceanside Harbor and along Oceanside's beaches. Cigarette Pollution Solutions, a private company with its own special cigarette filter receptacle, called the Butts Only Box, was determined to be an ideal design for placement in the harbor and near the beach areas. The Box is designed to accept cigarette and cigar butts and keep them from being exposed to rain and irrigation water until they are collected for proper disposal. It features a stainless steel construction that resists the salt weather environment at the coast and has a removable inner basket for easy servicing.

During that first year, the Department of Harbors and Beaches purchased 23 Butts Only Boxes at a cost of $375 each and installed 20 of them throughout the Harbor and along Oceanside beach parks. Thirteen of these boxes were installed in the harbor area near restaurants, docks, and bathrooms. Seven Boxes were installed along the heavily walked road that parallels the beach called The Strand and at the top of the municipal pier (Figure 7-3).

Figure 7-3. Butts Only Boxes in Oceanside Harbor and along the Strand.

Cigarette Pollution Solutions also provides a disposal and tracking service with a monthly statement of the amount of cigarette filters collected from all of the Boxes. The boxes were phased in throughout the spring and summer of 2008 and continued to be maintained throughout FY 2008-09. In September 2008, Cigarette Pollution Solutions also installed a Butts Only Box on one of the sport fishing boats that runs out of Oceanside Harbor. Table 7-2 provides a summary of the amount of cigarette butts collected during this reporting year from the Harbor and Strand and Table 7-3 provides a summary of the butts collected on the sport fishing boat.

Table 7-2. Cigarette Butts Collected from Harbor and Strand in FY 2008-09.

Date	Time period covered	Number of butts collected
8/26/2008	7/23-8/22/08	3,418
9/23/2008	8/23-9/22/08	3,456
10/23/2008	9/23-10/22/08	2,397
11/23/2008	10/23-11/22/08	2,259
12/23/2008	11/23-12/22/08	3,606
1/23/2009	12/23/08-1/22/09	2,491
2/23/2009	1/23-2/22/09	2,832
3/23/2009	2/23-3/22/09	2,521
4/23/2009	3/23-4/22/09	2,338
5/23/2009	4/23-5/22/09	4,197
6/23/2009	5/23-6/22/09	4,488
	Total butts collected	**34,003**
	Weight	**25.47 pounds**

Table 7-3. Cigarette Butts Collected from Sport Fishing Boats FY 2008-09.

Date	Time period covered	Number of butts collected
9/23/2008	8/23-9/22/08	238
10/23/2008	9/23-10/22/08	271
11/23/2008	10/23-11/22/08	279
12/23/2008	11/23-12/22/08	341
1/23/2009	12/23/08-1/22/09	0
2/23/2009	1/23-2/22/09	0
3/23/2009	2/23-3/22/09	0
4/23/2009	3/23-4/22/09	212
5/23/2009	4/23-5/22/09	0
6/23/2009	5/23-6/22/09	356
	Total butts collected	**1,697**
	Weight	**1.27 pounds**

7.3.2 Spill Reporting

7.3.2.1 Public Reporting of Spills

Spills entering the MS4 may be discovered during routine maintenance activities, scheduled monitoring, or observed and reported to the City by citizens. Citizens may use the Urban Runoff Hotline, Code Enforcement, or Oceanside Police Department phone numbers to report spills. Any reports by the public or City staff are referred to the Wastewater Division of the Water Utilities Department.

7.3.2.2 City Spill Reporting

The City complies with the sewage spill reporting requirements outlined in Table 7-4 and detailed in Section 9 of the JURMP Update:

Table 7-4. Summary of Sewage Spill Reporting Requirements

Spill Volume	Criteria	Agency Receiving Report	Reporting Period
Any	Spills to waters of the State	SWRCB online RWQCB DEH	3 days (initial) 24 hours Immediate
Any	Municipal Permit non-compliance threatening human or environmental health	RWQCB SWRCB online	24 hours verbal and 5 days written 3 days (initial)
Any	Mitigated spills (absorbed, cleaned up, or captured)	DEH	24 hours
Any	Unmitigated spills to areas with potential public contact	DEH	Immediate
Any	Unmitigated spills to areas without potential public contact	DEH	24 hours

Spill Volume	Criteria	Agency Receiving Report	Reporting Period
>1000 gallons	Anywhere	OES RWQCB DEH SWRCB online	Immediate 24 hours Immediate 3 days (initial)

County of San Diego Department of Environmental Health (DEH)
State Office of Emergency Services (OES)
Regional Water Quality Control Board (RWQCB)
State Water Resources Control Board (SWRCB)

7.3.3 Spill Response

Responses to sewer spills are conducted in accordance to the City's Sewer Overflow Response Plan and the responsible agencies are summarized in Table 7-5.

Table 7-5. Responsible Agency for Sewage Spills

Source	Responsible Agency
Leaks and spills from publicly owned collection system	City of Oceanside
Private residence (failing septic systems)	County DEH
Any spill reaching MS4	City of Oceanside

During the 2008-2009 reporting period, the City responded to eight sewer spills, one of which was privately owned. Only one spill reached the receiving water and only 7% of the total overflow volume for the year was released to the environment (down from 20% the previous year). Quick response times and the use of City vactor trucks assisted in the decrease in spill volume for the reporting year. In addition, the Clean Water Program and the Wastewater Division of the Water Utilities Department continued the public outreach effort initiated in the last reporting year for residential contribution of grease in the sanitary sewer. As a result, there were fewer spills this year with grease as the primary cause. The remaining causes of spills were primarily because of debris or roots and half of them were due to unique situations like a plane crash or asphalt from a contractor. Notifications of these spills are submitted to the Regional Water Quality Control Board (RWQCB) through quarterly reports. A summary of SSO overflows during 2008-2009 is presented in Table 7-6.

Responses to other spills are conducted by the Fire Department or qualified personnel in the Public Works Department, as appropriate to the situation. Both small and large spills are handled following HAZMAT Incident Response Team (HIRT) Policies and Procedures as issued by the Unified San Diego County Emergency Services Organization. The Oceanside Fire Department responded to all of the non-sewer related spills during the 2008-2009 permit year. A summary of the 26 spills is presented in Table 7-7. The majority of the spills were small fuel spills from leaking vehicles.

Table 7-6. Summary of SSO Overflows during the 2008-2009 Fiscal Year.

Overflow Start Date Time	Overflow End Date Time	Total Overflow Volume (gal)	Overflow Volume Released to Environment (gal)	Overflow Cause	Did the SSO Enter a Storm Drain?	Did the SSO Reach Other Surface Waters?	Initial Secondary Receiving Waters	Prevention Corrective Measures
8/6/08 13:30	8/6/08 13:55	135	0	Asphalt from contractor street overlay job	Yes	No	N/A	Made entry into manholes to remove all asphalt from channel and decks
10/16/08 12:30	10/16/08 12:55	375	325	Unknown	Yes	No	N/A	Will inspect in future to make sure College is on a maintenance program to avoid future spills
10/26/08 6:00	10/26/08 6:20	200	200	Debris	Yes	No	N/A	Line will be placed on semi-annual maintenance program
1/24/09 10:45	1/24/09 11:35	25,000	0	Plane Crash	No	No	N/A	None (single accident/valve repaired)
2/1/09 8:00	2/1/09 9:16	532	132	Roots, Debris, Grease, Manhole Failure	Yes	No	N/A	City crews are going to clean out, repair and raise manhole
2/25/09 6:34	2/25/09 8:14	1000	600	Grease & Blockage	Yes	Yes	Oceanside Harbor	Line was jetted and televised. Industrial Waste Inspector on site to deal with restaurant FOG issues.
4/6/09 7:42	4/6/09 8:10	280	280	Large amount of rags and debris	Yes	No	N/A	Add section of sewer to vactor annual cleaning
6/15/09 9:28	6/15/09 10:10	440	440	Roots	Yes	No	N/A	Televise line to determine maintenance schedule.

Table 7-7. Summary of Non-SSO Spills during the 2008-2009 Fiscal Year.

Fire Dept. Arrival Date Time	Last Unit Cleared Date Time	Incident Number	Substance reported spilled	Amount of spilled substance	Primary Action Taken	Secondary Action Taken	Description
7/7/2008 11:13	7/7/2008 11:47	0007844	Gasoline	Several	Investigate	Hazardous materials leak control & containment	SUV struck object in road per driver. Found leaking fuel from underside of vehicle on arrival, most of which absorbed in to shoulder or roadway. Leak controlled. CalTrans handle rest of collection.
7/17/2008 23:24	7/17/2008 23:38	0008299	Gasoline	Unknown	Investigate	N/A	Evidence of someone trying to, or succeeding in stealing fuel from van owned by the hotel. Fuel had evaporated.
7/20/2008 15:14	7/20/2008 15:30	0008421	Oil	Unknown	Hazardous condition	N/A	Clean up small oil spill from previous MVA
7/27/2008 13:19	7/27/2008 13:38	0008718	Gasoline	5 gallons	Hazardous materials spill control and confinement	N/A	Gasoline spilled on the service station s ground from a leaking rental truck gas tank. The spill was absorbed and allowed to evaporate. Spent absorbent was bagged and discarded
8/22/2008 15:12	8/22/2008 15:19	0009806	Gasoline	Unknown	Hazardous condition	N/A	Gasoline leak from a vehicle reported. Tank was emptied.
9/7/2008 9:49	9/7/2008 9:56	0010473	Gasoline	Unknown	Hazardous materials spill control and confinement	N/A	Car in parking lot found to be leaking fuel, leak contained and stopped, parking enforcement contacted
9/23/2008 3:12	9/23/2008 7:33	0011193	Diesel Fuel	20 Gallons	Refer to proper authority	Hazardous materials spill control and confinement	Tractor trailer accident. Fuel leak temporarily stopped by driver with hand over the leak. Hole sealed, area diked at entrance to storm drain. Contacted DEH and SDCO HRT. DEH contacted OES. Public works contacted to determine storm drain locations and spill removal option.

Fire Dept. Arrival Date Time	Last Unit Cleared Date Time	Incident Number	Substance reported spilled	Amount of spilled substance	Primary Action Taken	Secondary Action Taken	Description
9/26/2008 17:03	9/26/2008 17:10	0011367	Gasoline	Unknown	Investigate	N/A	Fuel leak reported at residence. No fuel leaking upon OFD arrival. Owner was contacted and told to fix problem before driving. No fuel on ground and none appeared to have entered gutter.
10/11/2008 23:35	10/11/2008 23:42	0012072	Gasoline	2 Gallons	Investigate	Establish safe area	Man stated fuel was siphoned from his car, causing spill on the side of the roadway. No fuel appeared to reach the storm drain. Absorbent material placed over run of spill.
10/19/2008 9:37	10/19/2008 9:47	0012425	Gasoline	Unknown	Investigate	Hazardous materials spill control and confinement	Found small leak coming from RP car. Put absorbent on the ground to help with containing the small amounts of leaking gas.
11/10/2008 15:43	11/10/2008 17:17	0013439	Motor Oil and Petroleum	gallon and 8 Gallons	Refer to proper authority	Hazardous materials spill control and confinement	Motor vehicle accident in water way; Primary jurisdiction: Vista. Referred to DFG and Coast Guard.
11/18/2008 18:27	11/18/2008 18:39	0013806	Gasoline	1 Quart	Hazardous materials spill control and confinement	N/A	Vehicle owner reported small fuel leak. On arrival, there was no active fuel leak. Absorbent was spread to control spill
12/17/2008 12:21	12/17/2008 18:20	0015070	Petroleum	55 Gallons	Hazardous materials spill control and confinement	N/A	Petroleum found leaking into the Loma Alta creek from unknown underground source by code enforcement. Found to be leaking from unknown source in excavation area into storm drain. No spill to ocean.

Fire Dept. Arrival Date Time	Last Unit Cleared Date Time	Incident Number	Substance reported spilled	Amount of spilled substance	Primary Action Taken	Secondary Action Taken	Description
1/15/2009 7:36	1/15/2009 7:48	0000654	Diesel Fuel	1 Gallon	Investigate	N/A	Diesel fuel reported in the water near C dock in Oceanside harbor.
3/17/2009 20:55	3/17/2009 21:09	0003275	Gasoline	Small amount	Investigate	N/A	A gas tank was being removed from a car in the street and a small amount spilled on the asphalt. Absorbent put down
3/21/2009 20:18	3/21/2009 21:07	0003485	Gasoline	Unknown	Hazardous materials spill control and confinement	Establish safe area	Minor leak to inline fuel filter caused by debris on HWY 78. Fuel leak stopped. Vehicle towed to owners residence
3/25/2009 18:38	3/25/2009 18:43	0003639	Gasoline	Unknown	Hazardous materials spill control and confinement	N/A	Fuel leak found in a fuel/vent line, and was plugged with a golf tee. Vehicle owner contacted a towing service
3/25/2009 20:39	3/25/2009 21:04	0003646	Oil	4 Quarts	Remove Hazard	N/A	Remove approximately 4 quarts of oil from roadway after traffic collision
4/15/2009 13:24	4/15/2009 14:50	0004572	Mercury	1 thermometer	Establish safe area	Decontaminate Persons or equipment	Mercury thermometer broke inside county health office. Notification to HIRT and DEH.
4/18/2009 12:12	4/18/2009 12:15	0004715	Gasoline	Unknown	Investigate	N/A	Vehicle owner reported that her car leaked when she attempted to pour gasoline into the tank. Called for tow. Station attendant cleaned up spill.
4/26/2009 16:37	4/26/2009 17:36	0005108	Gasoline	5 Gallons	Hazardous materials spill control and confinement	N/A	Responded to no detail MVA. Leak in the gas tank, contained spill, vehicle gas tank near empty, spill stopped. OPD and tow on scene

Fire Dept. Arrival Date Time	Last Unit Cleared Date Time	Incident Number	Substance reported spilled	Amount of spilled substance	Primary Action Taken	Secondary Action Taken	Description
6/3/2009 14:54	6/3/2009 17:51	0006665	Muriatic Acid	1 Gallon	Investigate	Establish safe area	Chemical leak reported. Approximately 1 gallon of yellow liquid found seeping from under pump room floor. Substance was identified as muriatic acid for the pool. The leak was stopped. Spill was removed by a private contractor
6/13/2009 21:11	6/13/2009 21:51	0007151	Gasoline	Unknown	Hazardous materials spill control and confinement	N/A	Control gasoline leak from vehicle in garage. Secured leak and removed vehicle from garage outside. Owner of vehicle requested not to return vehicle to garage until fuel leak was fully repaired.
6/14/2009 7:14	6/14/2009 7:21	0007170	Oil	2 quarts	Investigate	Determine is materials were non-hazardous	OPD on scene with a vehicle that was leaking motor oil. 2 qts. on asphalt. Spread Sorball.
6/14/2009 20:45	6/14/2009 21:24	0007198	Motor Oil	Unknown	Hazardous materials spill control and confinement	N/A	Responded to motor oil leak from vehicle. Isolated spill area and applied absorbent, notified OPD and Streets Div for traffic control and clean up
6/29/2009 17:19	6/29/2009 17:30	0007846	Hydraulic fluid	20 gallons	Hazardous condition, other		Heavy equipment leaking hydraulic fluid, contained with absorbent. OPD controlled traffic, public works finished cleanup and removal.

7.4 Urban Runoff Monitoring

The Urban Runoff Monitoring Program includes MS4 Outfall Monitoring, Source Identification Monitoring, and the Dry Weather Field Screening and Analytical Monitoring Program.

7.4.1 MS4 Outfall Monitoring

In accordance with RWQCB Order R9-2007-0001, the Copermittees developed the MS4 Outfall Monitoring Program Work Plan through a collaborative effort in 2007–2008 and submitted the final Work Plan on June 25, 2008 (County of San Diego Copermittees, 2008). The MS4 Outfall Monitoring Work Plan is the framework for random dry and random wet monitoring and the targeted dry and targeted wet monitoring. The collection and analysis of water samples discharging from MS4 outfalls to receiving waters during all four types of sampling will be used to address Core Management Question 3:

> What is the relative urban runoff contribution to the receiving water problem(s)?

Random sampling was conducted to address the following subquestions identified in the MS4 Outfall Work Plan:

1. What are the characteristics of the discharges from MS4 outfalls in regard to high-priority pollutants?

2. Are constituent loadings changing over time?

Targeted sampling was conducted to address the following subquestions:

1. Which of the targeted MS4 outfalls have the greatest pollutant loading?

2. Are the pollutant loadings decreasing over time from these MS4 outfalls?

The City of Oceanside is responsible for targeted dry weather sampling at 13 sites throughout Oceanside. A regional water quality monitoring contractor is hired by the Copermittees for the collection the random dry, random wet and targeted wet weather samples throughout San Diego County.

In FY 2008-09, the City of Oceanside visited the 13 targeted dry weather monitoring sites. All five sites in the Buena Vista or Loma Alta HAs were flowing. Four of the eight sites in the San Luis Rey River Watershed were dry. Table 7-8 presents the targeted dry weather monitoring sites visited during the 2008-09 fiscal year. A contractor for the Copermittees conducted the random dry and random wet weather sampling through San Diego County as the first phase of the program. The targeted wet weather monitoring will be implemented in FY 2009-10.

Table 7-8. FY 2008-09 City of Oceanside Targeted Dry Weather Monitoring Sites.

StationID	Sample Date	WaterFlow	FlowRate (gpm)	Analytes Monitored
Carlsbad Watersheds				
B002	6/8/2009	Flowing	6	Bacteria, TDS, TSS, Total Nitrogen-N, Total Phosphorus-P
L009	6/8/2009	Flowing	103	Bacteria, TDS, Total Nitrogen-N, Total Phosphorus-P
L027	6/8/2009	Flowing	94	
L054	6/8/2009	Flowing	8	
L111	5/20/2009	Flowing	3	
San Luis Rey River Watershed				
S006	5/27/2009	Flowing	□1	Bacteria, Chlorides, TDS, Total Nitrogen-N, Total Phosphorus-P
S075	5/27/2009	Flowing	□1	
S106	5/27/2009	Flowing	53	
S107	5/27/2009	Dry	0	
S116	5/27/2009	Dry	0	
S119	5/20/2009	Dry	0	
S122	5/20/2009	Flowing	1	
S123	5/20/2009	Dry	0	

The results of all three types of monitoring are presented in detail in Section 12 and each WMA Section of the 2008-09 Regional Urban Runoff Monitoring Report. At this time, additional data is still needed to properly characterize the pollutant discharges from MS4 outfalls in each WMA. It is anticipated that more meaningful spatial comparisons can be made as a more robust data set is developed in subsequent years for the MS4 Outfall Monitoring Program.

7.4.2 Source Identification Monitoring

The Source Identification Program is a requirement of San Diego RWQCB Order R9-2007-0001 (Section B.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program). The Copermittees provided a framework for source identification studies entitled "Urban Runoff Source Identification Program in San Diego County Watersheds" (County of San Diego Copermittees, 2008). This framework described the conceptual monitoring to be conducted over the course of the Permit. The original framework stated two sites would be monitored: one from the City of Carlsbad and one from the City of La Mesa. The City of Carlsbad study area was changed to the City of Del Mar. The Copermittees subsequently developed a workplan for implementation during the 2008–2009 Permit Year. The workplan, "2008-2009 Source Identification Monitoring, Residential Area Runoff Assessment was designed to assess dry weather runoff from single family residences.

The primary goal of this study was to collect dry weather residential land use discharge data for application to regional assessments since residential land uses comprise the most common land uses in urban areas. A secondary goal of collecting the data was to compare data collected in San Diego County to data collected from an intensive residential land use runoff study under a Proposition 50 Grant in Orange and Sacramento Counties (Haver, 2007[1]).

[1] The results of the Proposition 50 Nonpoint Source Pollution Control Program Grant entitled "Evaluating Best Management Practices (BMPs) Effectiveness to Reduce Volumes of Runoff and Improve the Quality of Runoff

To address the study questions the following information is presented. More detailed information about the 2008-09 Source Identification Monitoring is presented in Section 12 of the 2008-09 Regional Urban Runoff Monitoring Report:

1. **When are the dry weather or nuisance flows detected from single-family residences (during what part of the day/week)?**

In general, peak discharge times varied amongst all sites. It is likely that individual residences water use activities occur at different times and at different schedules. Based on a review of the data, residential flow in La Mesa was highest during the week, specifically on Tuesdays. However, flows at the downstream site in La Mesa were indicative of groundwater influences and may be associated with a lag time from residential water uses over the weekend. In Del Mar, flow was highest on the weekend, specifically on Saturday.

2. **What is the water quality and load of constituents of dry weather or nuisance flows from single-family residences?**

Overall, concentrations from the general chemistry constituents were below the WQOs, with the exceptions of total nitrate and total phosphorus, which were above their respective WQOs for all samples measured. The highest loads for the general chemistry constituents were measured at the La Mesa study area. The highest loads were from TDS and chloride. Based on the levels of the general chemistry constituents, it is possible that Site LM-SID-1 has a groundwater influence, explaining the continuous flow at this location and the high TDS, chloride, and nitrate levels.

Organophosphorus pesticides were not detected in either of the drainage areas monitored. Synthetic pyrethroids were detected in 6 of the 7 samples collected. Of the samples which did have detectable pyrethroid results, Bifenthrin was above the LC_{50} in the Del Mar study area and Permethrin was above the LC_{50} in the La Mesa study area. The Permethrin result was recorded at Site LM-SID-2, during the second sampling event. But, of the pyrethroid load per acre results for the entire monitoring season, Site DM-SID-1 had the higher results. This also suggests that single-family residences present a likely source of synthetic pyrethroids in urban runoff. The results are also consistent with the findings from the *Characterization and Assessment of Storm Drain Sediments from Switzer Creek* (WESTON, 2009). Synthetic pyrethroids were most commonly detected in the sediments in storm drains which drained residential areas, and specifically in the upper reaches of the drainage areas studied.

Dissolved metals (i.e., cadmium, copper, lead, and zinc) were not detected above the California Toxics Rule benchmark values from any of the residential runoff samples collected. The loads per acre were slightly higher in the La Mesa study area, but loads for these constituents were generally very low. These low load results, especially in the Chollas Creek subwatershed, where dissolved metals are constituents of concern, may be reflective of the small commercial and industrial land use in the upper drainage areas included in the study.

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from Urban Environments" is being conducted by Dr. Darren Haver of the UC Davis. Dr. Haver is coordinating the collection of wet and dry samples from four residential communities in Sacramento and four residential communities in Orange County. Work currently is suspended at the request of the State of California.

Indicator bacteria (i.e., total coliforms, fecal coliforms, *E.coli*, and enterococci) were highest in the smaller drainage areas monitored in La Mesa study area (i.e., LM-SID-2 and LM-SID-3) and also in the Del Mar site. Between the two residential sites, DM-SID-1 had the greater bacterial concentrations. Site DM-SID-1 also was above the benchmark for fecal coliforms whereas the Site LM-SID-1 was not. However, due to the larger flow volume, greater bacterial loads were observed for the LM-SID-1 residential runoff site.

3. What are the potential sources of dry weather flows from single-family residences?

Flows from single-family residences occur from various activities. In general, it was evident that dry weather flows from the upper sites in La Mesa and the Del Mar site likely occurred from residential lawn watering which were observed periodically during the sampling events or from random discharges associated with urban areas. However, flows from the downstream site at La Mesa appear to be from groundwater sources, which may be associated with residential over-irrigation and low permeability soils.

This study was also designed to be comparable to the Proposition 50 Non-Point Source Grant Study being conducted by Dr. Darrin Haver from U.C. Davis. However, due to the current State of California economic conditions, the State has withheld funding for this study. Therefore, at this time, the results of Dr. Haver's study are not available for comparison.

The San Diego County Water Authority and most water districts in the County of San Diego, including the City of Oceanside, have implemented water use restrictions due to the current drought conditions. The outreach and enforcement programs sponsored by these agencies aim to reduce water consumption and water waste through several different means, though better management of irrigation runoff is most applicable to storm water management. As discussed in the next section and in Attachment 7-A, the 2009 Dry Weather Monitoring Report, these restrictions, outreach, and enforcement programs do seem to be making a difference in Oceanside shown by more dry sampling sites in the City.

7.4.3 Dry Weather Field Screening and Analytical Monitoring

The requirements of the current Dry Weather Monitoring Program component in the 2007 Municipal Permit (Order 2007-001) built upon the requirements of the previous Municipal Permit (Order 2001-01). The dry weather analytical and field screening monitoring components consist of 1) field observations (site description and qualitative observations), 2) field screening monitoring (testing of sample while at site and flow estimation), and 3) analytical monitoring on a subset of sites (performing further tests of sample later at a laboratory). The new Municipal Permit also added a trash assessment component and now requires follow-up investigations to be conducted within two business days of receipt of results.

The City's complete 2009 Dry Weather Monitoring Report is provided as Attachment 7-A to this submission. This report includes:

- Reporting of all dry weather field screening and analytical monitoring results.
- Dry weather field screening and analytical monitoring report.
- Corrections for the Dry Weather Monitoring stations.

- The number and brief description of any IC/IDs found and eliminated during Dry Weather Monitoring.
- Description of activities conducted to manage IC/IDs found during Dry Weather Monitoring.

Below is a summary of the findings.

Dry weather monitoring is conducted at each site at least once between May 1st and September 30th each year. During the 2009 monitoring season, 67 primary sites were visited. Three of those sites were inaccessible and an additional fourteen were dry. All 28 alternate sites were visited and two new sites with flowing or ponded water were added to the alternate list inventory. Nineteen of the ponded or flowing sites had additional analysis completed in the lab for chemistry and microbiology (28%).

When field measurements and/or laboratory analysis showed an exceedance of established action levels, the site was revisited within two business days to confirm the initial results. When follow-up sampling confirms continued exceedance of action levels, the City conducted further investigations to identify the source of the exceedance.

Twenty four sites required confirmation for an initial field screening exceedance. Of those, 18 required an IC/ID investigation. The most common exceedance was for orthophosphate. Of the 19 sites chosen for laboratory analysis, two sites had an exceedance for chemistry results. A013 exceeded the CTR for dissolved cadmium and B002 for dissolved zinc. There was an upstream investigation at A013 and groundwater is the suspected source as no discharges were found. Confirmation samples at B002 found results for dissolved zinc under the action level. For microbiology results, there were seven exceedances for total coliforms, four for fecal coliforms, and two for Enterococcus. Six of the seven total coliform exceedances required an upstream investigation. Two of the four fecal coliform confirmation samples and both of the Enterococcus confirmation samples required an IC/ID investigation.

An historical comparison of action level exceedances shows that while orthophosphate exceedances are the predominant field analyte exceedance, there were fewer in 2009 than the previous two years. Ammonia exceedances have decreased. This may be due, in part, to a change in the analytical field test kit method. In practice and in discussion with other Copermittees, the 2009 method seems more accurate for environmental samples (as opposed to drinking water samples). Bacteria exceedances were similar to the previous year and continue to have fewer sites exceeding action levels.

Similar to the 2008 dry weather results, in 2009 a little less than half of the sites that were sampled were ponded. Many of these did not have a flowing source upstream. Exceedances at these sites may be attributed to periodic upstream flow and/or the decay of organic material in the ponded water to cause Dry Weather exceedances. More sites were dry this year as compared to the 2008 season; 19 as opposed to ten the previous year. This may be due to drought conditions and the Drought Level 2 Water Restrictions that became effective July 1, 2009.

The most common source of flowing water was residential and commercial landscape over-irrigation. In addition to the restrictions, the City of Oceanside Water Utilities Department

increased public outreach and awareness of water conservation needs and measures between the summer of 2008 and the summer of 2009. This outreach included hiring a part-time Water Conservation Specialist to assist in presentations to HOAs and community groups, and on the local public access channel and written outreach for inserts in water bills and press releases. The education effort is described in detail in Section 8 of the Oceanside JURMP Annual Report, but it did include a newsletter topic in the Fall of 2008 addressing water conservation tips to eliminate water runoff and three minute public service announcements including a topic addressing irrigation runoff. Staff outreach to respond to complaints, violations, and Dry Weather Monitoring exceedances included face-to-face outreach by two Clean Water Program Compliance Inspectors. Historical mail-outs have yielded little response. New door-hangers that can be personalized were created and utilized by the Inspectors when residents were not home.

The 2009 Dry Weather Monitoring Program is the second year for assessing the amount and extent of trash at each dry weather monitoring location. Approximately 73% of the sites were either "optimal", "suboptimal", or "marginal" and did not require the detailed trash evaluation. Twenty four percent of the sites were "submarginal" and 3% of the sites were "poor". The San Luis Rey Watershed continued to have the highest percentage of "submarginal" and "poor" sites (32%), but that percentage was down from last year (46%). The majority of the trash found in the sites that required further trash evaluation was either food packaging or household waste. These items were most commonly at the sites via littering or from upstream. And, the most common source of the food packaging and household wastes are households and transients. These are consistent results with the previous trash assessment year.

Follow-up investigations continue to be conducted at sites with ongoing exceedances. Water conservation and urban runoff education outreach, as well as beach and creek clean-up events are on-going year-round as the City continues the effort to detect and eliminate illicit discharges to the storm drain system. The Dry Weather Monitoring program during 2009, detected seven potential IC/IDs, of which four were eliminated. It should be noted that several of the IC/IDs were from residential and commercial over-irrigation which was not a violation until July1, 2009 when the Stage 2 Drought Ordinance became effective. Details for each follow-up is provided in Appendix 7-A.

To address MS4 inaccuracies and update the GIS layer of the MS4 map, the City purchased two Trimble GeoXH units in FY 2008-09 to be used collaboratively between Public Works, Engineering, and the Water Utilities Departments. One of the many uses of these units is to verify the accuracy of the MS4 map and relay the information gathered in the field to the Engineering Department to update the GIS layer. The City continued the effort to create the data dictionary needed to collect consistent and necessary data for the storm drain system update. Although he City did not make any changes to the MS4 map during the 2008-09 fiscal year, the Trimble units were field tested and used for upstream investigations and mapping small segments of the MS4, but a full roll out the field effort is anticipated during FY 2009-10.

7.5 Follow-up and Enforcement

The City implements and enforces its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Enforcement mechanisms are implemented on an

escalating scale to enforce compliance, and follow-up inspections are conducted to ensure compliance has been achieved.

The administrative and judicial tools listed below are used as necessary to eliminate IC/IDs:

- Written administrative warnings and citations
- Stop work notices
- Public nuisance abatement
- Denial or revocation of permits
- Civil and/or Criminal Court Actions
- Additional penalties or fines

The nature of the City's enforcement approach is determined on a case-by-case basis and is based on factors such as the severity of the violation, the threat to human or environmental health, site-specific circumstances, and past compliance history.

Code Enforcement recorded 308 cases potentially related to the requirements of the Municipal Permit. A total of 112 of these cases were related to potential IC/IDs, almost three times the number of cases in the previous reporting year. Of these, 75 cases did detect an IC/ID and 74 of those were eliminated. The one case that is still open without resolution includes ongoing discussions with Camp Pendleton and is presented in Appendix 7-B in greater detail. Table 7-9 presents a summary of the IC/ID investigations by Code Enforcement officers initiated during the 2008-2009 reporting year. The summary includes a brief description and the number of follow-ups and enforcement actions taken to achieve compliance. More detailed information on IC/ID investigations by the Clean Water Program that were not a part of the Dry Weather Program are presented in Attachment 7-B.

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Table 7-6. Summary of 08/09 IC/ID Investigations by Code Enforcement Officers

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Administrative Warning	Administrative Citations	Criminal Citation	Case Closed?
08-4900	Residential	12/12/2008	ABANDONED CAR LEAKING OIL IN FRONT OF THIS HOUSE	Site visit. No vehicle observed on street. Note: street sweeping occurs at this location on this day. No further action.	1/13/2009	1/13/2009	1	0	0	0	0	0	0	0	0	Yes
08-4105	Residential	10/2/2008	ALLEGED STORM WATER VIOLATION	Investigated a complaint that a man was degreasing his engine in the street. No violation could be determined at the scene, and accused man denied the charge.	10/2/2008	10/3/2008	1	0	0	0	0	0	0	0	0	Yes
09-0331	Commercial Construction Site	2/5/2009	BMP FAILURE	Site visit. Cursory inspection of outfall coming from the base onto Capistrano Park. Severe failure of BMP structure and sediment discharge resulting from failure noted.Documented BMP failure with photos. Met with Camp Pendleton rep. Work delayed due to funding. Will monitor.	2/4/2009	5/13/2009	5	0	0	0	0	0	0	0	0	Yes
09-1632	Residential	5/8/2009	BROKEN SPRINKLERS - WATER RUNNING DOWN STREET	Attempted contact with reporting party. Drafted and sent notice to property owner to repair/adjust irrigation or broken pipe. Phone call from property owner stating that issue will be looked into by her gardener. Site visit in AM on 5/19. Area dry. No further issues.	5/11/2009	5/19/2009	1	0	0	1	0	0	0	0	0	Yes
08-3683	Commercial	8/25/2008	CAR WASHING OPERATION ON PUBLIC STREET	Phone call to reporting party requesting if he observes this activity to call my cell.Site visit, Observed a male in Black Ford Explorer washing a pick up truck in street. This male was very stand offish almost confrontational states he has only washed vehicles here a couple of times and knows who is complaining. Informed this person doesn t matter who complained, he still needs a business license, can t conduct business on city streets and needs to comply with storm water regs. Person states will cease doing work in street and will not be doing business in this city any longer. Informed if we observe this activity again he will be cited for all three violations. Phone call to reporting party. Happy with response.	8/25/2008	8/27/2008	1	0	0	0	0	0	0	0	0	Yes
08-4341	Residential	10/22/2008	CARPET VAN DUMPING INTO STORM DRAIN	Phone call to reporting party. Area visit. Unable to locate violation. Will monitor. Area visits 11/5 and 12/2. Still unable to locate violation. Case closed until violation occurs again.	10/22/2008	12/2/2008	3	0	0	0	0	0	0	0	0	Yes
09-2229	Residential	6/29/2009	CHANGING OIL IN THE STREET	Site visit. No evidence of violation. Attempted contact with reporting party. No further issues.	6/30/2009	6/30/2009	1	0	0	0	0	0	0	0	0	Yes
08-4712	Residential	12/4/2009	CHANGING THE OIL OF A BLCK VW IN GUEST PARKING LOT	Site visit; no vehicle observed in general location. Observed multiple locations where oil has dripped onto parking spaces. Phone call to property manager; left voicemail. 12/15 Noted return call back from property manager regarding complaint issues. No further action.	12/5/2008	12/10/2008	1	0	0	0	0	0	0	0	0	Yes
08-3104	Residential	7/14/2008	CHEVY WITH TRAILER ATTACHED IS LEAKING OIL	Phone call to reporting party. Site visit. Spoke with property owner. Property owner stated that power steering hose developed a leak. Property owner is now storing vehicle on driveway with proper protection until repairs can be made. No further issues.	7/15/2008	7/15/2008	1	0	0	0	0	0	0	0	0	Yes
08-4808	Residential	12/10/2008	CROSS-LOT DRAINAGE	Site Visit, met with property owner and reporting party on-site. Explained to both parties that since the drainage pattern on both of their properties has been altered this problem is a civil matter.	12/10/2008	1/6/2009	1	0	0	0	0	0	0	0	0	Yes
08-4018	Residential	9/24/2008	DIRT ON THE STREE AND GOING INTO STORM DRAIN	Phone call to reporting party. No answer. 9/30 Reattempted phone call to reporting party. No answer. Site visit on 10/8. Observed a small amount of dirt in driveway. No issues.	9/25/2008	10/8/2008	1	0	0	0	0	0	0	0	0	Yes
08-4705	Residential	12/4/2008	DISCHARGING GRAY WATER INTO STREET	Site Visit, Photos Taken. Admin warning 14003 mailed to property owner on 12/5 with photos. Site Visit. No discharge of grey water observed at this time. Will monitor. Amin warning returned to sender.1/13 Admin warning 14003 resent to occupant.	12/2/2008	1/13/2008	2	0	0	0	0	0	1	0	0	Yes
08-4349	Residential	10/23/2008	DRAINAGE BACKING UP BEHIND HIS PROPERTY	Site Visit. Area referred to County.	10/23/2008	10/23/2008	1	0	0	0	0	0	0	0	0	Yes
08-4651	Commercial	8/18/2008	DRAINAGE CHANNEL MAINTENANCE	Public works complaint received regarding stagnating waterand vector control problem in wetland area / creek along Oside blvd. County vector contacted; treated area. Three administrative warnings issued for channel maintenance.	8/4/2008	10/21/2009	1	0	2	0	0	0	3	0	0	No
09-1168	Residential	4/9/2009	DRAINAGE COURSE MAINTENANCE	Site visit, located area of concern. Notice sent w / photo. Property owner says management supposed to maintain. Contact property management asked to be notified when problem is fixed (within two weeks). Site visit. Drainage channel cleared.	4/6/2009	6/11/2009	2	0	1	0	0	0	0	0	0	Yes
08-3809	Residential	9/9/2008	DRAINAGE COURSE MAINTENANCE	Site visit. Clarified drain area of responsibility for property management.	9/9/2008	10/3/2008	1	0	0	0	0	0	0	0	0	Yes
08-3284	Residential	7/30/2008	DRAINAGE DITCH HAS WEEDS AND WATER THAT STINKS	Letter sent 8/21. Site Visit, Photos Taken, drainage course remains blocked. Administrative warning 11850 mailed to property owner.Site Visit 10/24, ditch cleared.	8/21/2008	10/24/2008	2	0	0	0	1	0	1	0	0	Yes
08-3147	Residential	7/15/2008	DRAINING WASHING MACHINE INTO STREET	Site visit. No wash water or any unlawful discharge observed.	7/15/2008	8/13/2008	1	0	0	0	0	0	0	0	0	Yes
09-0555	Residential	2/24/2009	DUMPING OIL INTO STORM DRAIN	Phone call to reporting party. Site visit. Observed stain in gutter from property. Absorbent had been placed to soak up fluid. Drafted and sent notice to property owner for cleanup and prevention of future spills. Phone from reporting party. Area cleaned . No further issues at this time.	2/26/2009	3/4/2009	1	0	0	1	0	0	0	0	0	Yes
08-3556	Residential	8/12/2008	EMPTYING KOI POND INTO LOMA ALTA CREEK	Letter sent.	8/21/2008	8/21/2008	0	0	0	0	1	0	0	0	0	Yes
09-0534	Residential	2/23/2009	EROSION ON ACCESS ROAD/ EASEMENT	Site visit, Photos Taken. Phone call to property management and emailed photos of area of concern. Site visit. Met w/Sewer collections and Landscape/Maintenance supervisors for both properties. Walked areas of concern. Supervisors stated they would be in contact with HOA s and will start work when given the OK by property management. Site visit, Photo taken, property being maintained by GRG management have not cleared drainage courses. Phone call to property management states they will have landscaper clear drainage courses immediately.Phone call from landscaper states drainage course cleared.	3/2/2009	8/25/2009	3	0	2	0	0	0	0	0	0	Yes
08-3961	Commercial	9/17/2008	EXCESSIVE WATER INTO STORMDRAIN - FUNDRAISER CAR WASHES	Site visit. Spoke to manager, explained storm water regulations.	11/5/2008	11/5/2008	1	0	0	0	0	0	0	0	0	Yes
09-0100	Commercial Construction Site	1/14/2009	FAILURE TO COMPLY W/ SWPPP	Site visit, met w /developer and SWIM Erosion Control Contractor. Explained the entire site needs to be brought into compliance with SWPPP along with all documentation. Also explained the City will not be in the position to point out or instruct what the erosion control contractor needs to do or how he chooses to do it. Administrative warning 14012 emailed to developer.Site visit 1/21, Photos Taken, no change in condition. Administraven citation 14013 sent. Phone call to Montage Holdings confirms receipt of citation; states contract with SWIM erosion control has been signed for 4 phases of work pertaining to SWPPP. Site visit with Erosion control contractor (2/2). Site not completely in compliance at this time. Site Visit 4/23, no change in condition. Site is inactive site due to downturn in economy.	1/8/2009	5/27/2009	4	`0	1	0	0	0	1	1	0	Yes

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Administrative Warning	Administrative Citations	Criminal Citation	Case Closed?
08-4565	Commercial Construction Site	11/7/2008	FAILURE TO COMPLY W/ SWPPP	Site visit. Met with foreman, city inspectors, and construction management. Site visit. Administrative warning 14002 issued. Site visit 11/8. Area looks OK. 11/17 - Stop work issued for failure to keep street clean and need to provide a plan for maintaining and cleaning street for rest of project. Stop work lifted 11/18. Three more site visits to monitor street cleaning measures.	11/7/2008	1/27/2009	6	0	1	0	0	1	1	0	0	Yes
08-4721	Commercial Construction Site	12/5/2008	FAILURE TO INSTALL AND MAINTAIN BMP'S	Received complaint from Engineering. Site visit with property owner. Explained Best Management Practices requirements and erosion control. Issued Administrative citation 14007 to property owner. Site visit 12/15 during rain. Property is under manageable control concerning BMPs. Will monitor.Site visit 1/15. Property in compliance at this time. Closed. Case reopened by request of engineering department.PO has been using generator for power, tapped into construction meter for water into the house, has not complied with SWPPP or notice of intent. Spoke to property owner. Informed would be posting property with a Notice and Order for Public Nuisance.	12/5/2008	10/21/2009	4	0	0	0	0	0	0	1	0	No
09-2262	Commercial	6/30/2009	HOSING OFF AROUND FUEL PUMPS	Site visit. Spoke to manager about proper BMP's for this type of work. Informed manager that as of 7/1 stage 2 drought ordinance goes into effect. Manager states he will comply.	6/30/2009	6/30/2009	1	0	0	0	0	0	0	0	0	Yes
08-4036	Residential	9/25/2008	ILLEGAL CROSS LOT DRAINAGE - PIPE INSTALLED	Reporting party reports that neighboring home has installed a drainage pipe to the rear of the property impacting surrounding properties.Drafted and sent notice to property owner for removal of pipe. Property owner states that drainage from rear of property has historically drained to the brow ditch also located to the rear of the property. Made site visit. The rear yard drainage pipe installed properly dumps any runoff into the concrete brow ditch. Installation of this pipe will help alleviate impact to the storm drain.Reporting party states that pipe is going to cause erosion on his property. Made site visit. Explained to reporting party that installed pipe will help reduce sediment discharge and erosion.	9/25/2008	1/5/2009	2	0	0	0	0	0	0	0	0	Yes
08-4099	Residential	10/2/2008	ILLEGAL DISCHARDE	Site visit 10/2. Issued Administrative citation 12364 to contractor for illegal discharge (tile saw).Site visit 10/3. Area clean.	10/2/2008	10/3/2008	2	0	0	0	0	0	0	1	0	Yes
08-4338	Residential	10/21/2008	ILLEGAL DISCHARGE	Site visit. Notice of Violation issued and assigned case numbers VA08-0346 & 0347. 11/6 One of the vehicles in compliance and 2nd in process. Phone call from owner stated that intent is to show operability. Site visit, vehicles are in compliance at this time with one gone on arrival from location.	10/22/2008	11/6/2008	3	0	0	0	0	0	0	0	0	Yes
08-4640	Residential	11/19/2008	ILLEGAL DISCHARGE	Drafted and sent notice to property owner, drafted and sent notice to occupant. Phone call received from occupant- explained violation. 12/2 - No further issues.	11/20/2008	11/21/2008	1	0	0	0	2	0	0	0	0	Yes
09-1505	Residential	5/4/2008	ILLEGAL DISCHARGE	Reporting party states that property owner s tenants are allowing vehicle fluids to drain into the storm drain. Drafted and sent notice to property owner.Phone call from tenant stated that smell was from special fuel used in off-road vehicles and that it was not being discharged into the gutter line.Explained storm water requirements. Tenant agreed to take proper steps to avoid any impact to the storm water system.	5/5/2009	5/13/2009	0	0	0	0	1	0	0	0	0	Yes
09-1659	Commercial	5/12/2008	ILLEGAL DISCHARGE	Site visit, spoke to business owner. Unable to validate complaint. Business owner aware of stormwater regulations and not to clean mats in gutter line.	5/12/2009	5/14/2009	1	0	0	0	0	0	0	0	0	Yes
08-4860	Residential	12/18/2008	ILLEGAL DISCHARGE	Administrative warning 12524 issued to job superintendent. Multiple site visits showed site to be in compliance.	12/17/2008	2/26/2009	8	0	0	0	0	0	1	0	0	Yes
09-1662	Residential	5/12/2008	ILLEGAL DISCHARGE	Site Visit, spoke to RP pointed out clean out cap removed.Phone call to property owner. Left message concerning necessary repairs. Site visit- repairs made.	5/12/2009	5/18/2009	2	0	1	0	0	0	0	0	0	Yes
08-3305	Commercial Construction Site	7/31/2008	ILLEGAL DISCHARGE	Phone call from Harbor Maintenance. Site visit. Observed contractor Pumping ground water into storm drain. Project in need of best management practices maintenance. Spoke with project manager.Drafted and delivered Warning 12356 to Project manager with understanding that project will properly monitor and maintain all best management practices. Monitored. Project in compliance. Project completed.	7/31/2008	11/5/2008	5	0	0	0	0	0	1	0	0	Yes
09-1853	Commercial	5/29/2009	ILLEGAL DISCHARGE	Phone call to reporting party.Phone call to corporate office left detailed message for operations manager.Phone call to operations manager. States she met with store manager and employees educating them on proper methods of cleaning surrounding property, grease and dumpster enclosure.	5/29/2009	6/17/2009	2	0	0	0	0	0	0	0	0	Yes
09-1899	Residential	6/3/2009	ILLEGAL DISCHARGE	Received a call about reddish water in the gutter. Site visit found a painting contractor power washing the hallways in the complex. I had workers stop work and capture all the water in the gutters. Phone call to contractor advised him of the situation. Stated he would immediately resolve all the issues. Two hours later all the water had been removed from the gutters. Met with the contractor who had already begun installing the best management practices. Site visit, all best management practices in place. No water was entering the storm drains.	6/3/2009	6/4/2009	3	0	0	0	0	0	0	0	0	Yes
08-2952	Residential	7/8/2008	ILLEGAL DISCHARGE	Spoke with homeowner. Explained storm water requirements. Owner stated that they will comply. Drafted and sent letter reiterating conversation. Monitored. No further issues.	7/8/2008	8/25/2008	2	0	0	0	1	0	0	0	0	Yes
08-4886	Commercial	12/23/2008	ILLEGAL DISCHARGE	Site visit. Sediment discharge off property. Issued Administrative citation 12368 to Manager for cleanup and prevention. Monitored. Business in compliance.	12/23/2008	2/25/2009	2	0	0	0	0	0	0	1	0	Yes
08-4679	Commercial	12/1/2008	ILLEGAL DISCHARGE	Property has discharged sediment from recent rain. Site visit. Nursery in process of cleanup. 12/3 Site visit. Nursery in compliance.	12/1/2008	12/3/2008	2	0	0	0	0	0	0	0	0	Yes
08-3041	Commercial	7/9/2008	ILLEGAL DISCHARGE (TRASH AND DEBRIS)	Site visit. Observed loading dock full of grey water. Spoke with manager. Made site inspection. Discussed areas of concern, proper maintenance and cleanup with manager. Issued Admin Warning 9193 to Mgr. Sump pump had ceased working due to improper maint. Site visit. Business in compliance at this time.	7/9/2008	8/11/2008	2	0	0	0	0	0	1	0	0	Yes
09-0556	Residential	2/24/2009	ILLEGAL DISCHARGE / ZONING - CUP FOR NEW LOCATION	Site visit. Spoke with manager about possible illegal discharge. He pointed to the neighboring business. They have a drain that undergrounds the entrance of Ben s Recycling. Spoke with neighboring business (Harvest Foods). A condensation line was hit by a vehicle causing the discharge. The smell was due to a slow drain causing backup in the line. This was being repaired today to avoid any future problems. A CUP is on file and they have installed a filtering system on property.No further issues.	2/25/2009	2/25/2009	1	0	0	0	0	0	0	0	0	Yes
09-0155	Residential	1/21/2009	ILLEGAL DISCHARGE INTO STORM DRAIN	Property has been given prior notice to maintain property so it does not affect the storm water conveyance system. Site visit. Discussed issues with manager. Issued Administrative Citation 12370. Business in compliance at this time.	1/21/2009	2/12/2009	2	0	0	0	0	0	0	1	0	Yes

Table 7-6. Summary of 08/09 IC/ID Investigations by Code Enforcement Officers

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Administrative Warning	Administrative Citations	Criminal Citation	Case Closed?
08-4634	Residential	11/5/2008	ILLEGAL DISCHARGE INTO STORM DRAIN/ MAJOR AUTO REPAIR	Site visit. Issues being investigated are major automotive and illegal discharge.Issued Administrative Citation 12367 to property owner.Phone call from reporting party stating many cars are being washed possibly a business. Site visit. Observed vehicle washing and no major automotive work. All vehicles involved are owned by property owner. No issues at this time. Will monitor.	11/5/2008	1/5/2009	2	0	0	0	0	0	0	1	0	Yes
09-0116	Residential	1/15/2009	ILLEGAL DISCHARGE INTO STORM DRAN	Drafted and sent notice to property owner regarding proper fluid disposal. Site visit. No evidence of discharge.	1/16/2009	1/22/2009	1	0	0	1	0	0	0	0	0	Yes
08-3763	Residential	9/4/2008	ILLEGAL DISCHARGE INTO STORM WATER CONVEYANCE SYSTEM	Site visit. Observed a white powdery residue coming from property. Issued Administrative Warning 9199 to property owner.Phone call from property owner stated pool man cleaned the pool filters, that impacted areas will be cleaned up and pool man will be notified of issue. Site visit. Area cleaned up.	9/4/2008	9/10/2008	2	0	0	0	0	0	1	0	0	Yes
08-3759	Residential	9/3/2008	ILLEGAL DISCHARGE INTO THE STORMWATER CONVEYANCE SYSTEM	Phone call from Sewer Department regarding sewage spilling out of apartment complex. Site visit. Contacted property owner to shut off water and get an emergency repair person to respond. Issued Administrative Warning 9198 to property owner for an illegal discharge. Approximately 10:00 PM repairman showed and repaired. Site visit. No further issues at this time.	9/3/2008	9/10/2008	2	0	1	0	0	0	1	0	0	Yes
09-0860	Residential	3/13/2009	ILLEGAL DISCHARGE, GARAGE CONVERSION, VEHICLE LEAKS OIL	Tenants hooked up grey water from the washing machine to a French drain. The water is released over the side walk and down the storm drain. The tenant gave code enforcement access to the garage to make sure that the water source is the washer. The garage has been converted to habitable space. Tenants gave code enforcement officer a hard time about the garage violation. Administrative warning with photos sent to property owner. Phone call from property owner to clarify the violations in the warning. Property owner said Building Department told her she did not need a permit for hook up to the sewer. Also discussed garage and an oil leak found coming from a car in the driveway. On the next site visit, no one was seen in garage. However, no permit could be found on file. Administrative Citation for □100 issued to property owner to obtain permits. Phone call to contractor obtained permit number. Permit found. Administrative Citation has been dismissed by Code Enforcement Manager.	3/13/2009	4/10/2009	2	0	0	0	0	0	1	1	0	Yes
09-1852	Residential	6/2/2009	ILLEGAL DISCHARGE/ HOME OCCUPATION	Sent notice of administrative violation to property owner.Tenant called and stated that he has not dumped anything down in the storm drain and he also stated that he does not have a business. Phoned the reporting party to request more information. No return call from reporting party and no evidence of a business.	6/2/2009	6/18/2009	0	0	1	0	0	0	0	0	0	Yes
09-1217	Residential	4/14/2009	ILLEGAL DISCHARGE/ OVERWATERING	Site visit. Reporting Party states that run off from adjacent parcel is impacting their property. I noted some evidence of sediment and staining. Attempted contact with discharging property owner. Drafted and sent notice to property owner. No contact from reporting party. It is assumed that complaint has been rectified.	4/14/2009	5/6/2009	1	0	1	0	0	0	0	0	0	Yes
09-1491	Commercial	4/30/2009	ILLEGAL GRADING/ DISCHARGE	Site visit with CE, CWP, and Engineering. Observed a large amount of imported soil bermed along the south west corner of the property. This importation of soil is bermed along a □blue line□ waterway(401d) and has great potential for erosion and illegal discharge.. Agreed that a meeting with state agencies and the property owner would be the first step toward compliance. The property is in need of permits and proper BMP implementation. Stop Work notice given and warning citation issued. Notified RWQCB.	4/30/2009	11/16/2009	3	0	4	0	0	1	1	0	0	No
08-4699	Residential	12/2/2009	IMPROPER GRADING	PC from M.Sabelis. Nursery has installed a property drainage pipe that is causing erosion along the road side. PC to MGR. Issue will be repaired. Site visit 12/3. Area has been repaired and re-engineered to prevent erosion.	12/2/2008	12/3/2008	1	0	1	0	0	0	0	0	0	Yes
08-3040	Residential	7/8/2008	LEAKING GREY WATER ON STREET	Site Visit, as requested by Harbor Patrol. Photos Taken, Ad min warning 12521 posted to motorhome. 7/9 Motorhome still there with site posted. 7/10 Motorhome gone.	7/8/2008	7/10/2008	3	0	0	0	0	0	1	0	0	Yes
09-0094	Commercial	1/12/2009	MONITORING HABITAT RESTORATION	Received inquiry via Mo concerning proper BMP installation on property. This inquiry has to do with the restoration of habitat. Site visit. Spoke with worker on property. Worker stated that the habitat restoration has begun and that proper BMP installation is part of the plan. Walked entire property, took photos. Continued to monitor.	1/12/2009	9/29/2009	6	0	0	0	0	0	0	0	0	No
08-4884	Industrial	12/24/2008	MUD GOING ONTO SIDEWALK	The mud on the sidewalk was cleared by Public Works on 12/24/08. Photo reflects the location where vehicles enter and exit the vacant parcel. Further site visits reveal that there have been no deposits of mud or debris on the sidewalk since case inception date. Property to be periodically monitored for future violations. At that time, issue will be discussed with CEM for remedies to inhibit vehicular access to property. RP advised.	12/24/2008	2/12/2009	1	0	0	0	0	0	0	0	0	Yes
08-3657	Residential	8/25/2008	MUD RUNNING OVER SIDEWALK AND DOWN THE STREET	Site Visit, observed a small amount of dirt on sidewalk. No violation exists or action needed.	8/26/2008	8/26/2008	1	0	0	0	0	0	0	0	0	Yes
08-3252	Residential	7/28/2008	NEED TO MAINTAIN THE DRAINAGE	Site visit. Drainage ditch in front of house needs maintained. PC to RP. Drafted and sent notice to PO. PC from PO. Explained notice. Granted extension for compliance. 8/25 Property in compliance at this time.	7/29/2008	8/25/2008	1	0	2	1	0	0	0	0	0	Yes
08-3916	Residential	9/11/2008	NISSAN CAR IS LEAKING OIL ON THE STREET	Attempted PC to RP. No Answer. Site visit. UTL vehicle. PC to RP. Site visit. Unable to locate vehicle. No return call from RP.	9/11/2008	9/16/2008	2	0	1	0	0	0	0	0	0	Yes
08-4223	Residential	10/7/2008	OIL IN ALLEY	Site visit, alley clear of any oil. No violations observed.	10/7/2008	10/23/2008	1	0	0	0	0	0	0	0	0	Yes
09-0906	Residential	3/17/2009	OIL ON STREET - WORK ON CARS IN THE STREET	Site visit. Observed vehicle fluids in gutter and stains on the street. Spoke with PO. PO states that vehicle was in a hit and run accident where the other vehicle hit their parked truck and took off. The insurance company is supposed to remove the wrecked vehicle tomorrow. Admin Warning 12372 to PO for clean up and removal of 3/25 Site visit. Vehicle GOA. Fluids cleaned up. No further issues at this time.	3/18/2009	3/25/2009	2	0	0	0	0	0	1	0	0	Yes
09-2250	Residential	6/30/2009	OIL RUNNING DOWN SIDEWALK	Site visit. located 5 &1gallon containers next to garage by gate to side yard. Poured the quarter full 1 gallon containers into the 5 gallon container placed dirt over oil on sidewalk and put containers in rear yard out of public view. PC to RP informed of action taken.	6/30/2009	7/15/2009	1	0	1	0	0	0	0	0	0	Yes
08-3148	Residential	7/14/2009	OVER IRRIGATION	Site visit. Property is over irrigating new sod causing runoff. Drafted and sent notice to PO. Site visit. No further issues.	7/16/2008	8/28/2008	2	0	0	1	0	0	0	0	0	Yes
08-3976	Residential	9/17/2008	OVER IRRIGATION	Drafted and sent over-irrigation letter to PO. Received letter from PO stating that issue will be looked Site visit. No further issues at this time.	9/17/2008	1/5/2009	1	0	0	0	1	0	0	0	0	Yes
08-3977	Residential	9/17/2008	OVER IRRIGATION	PC to RP. Drafted and sent over-irrigation letter to PO. PC from PO who stated that they will look into the problem. Site visit. No further issues at this time.	9/17/2008	1/5/2009	1	0	1	0	1	0	0	0	0	Yes

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Administrative Warning	Administrative Citations	Criminal Citation	Case Closed?
08-4581	Residential	11/12/2008	OVERWATERING	Drafted and sent notice to PO. 11/21 No further issues at this time.	11/18/2008	11/21/2008	0	0	0	1	0	0	0	0	0	Yes
09-1202	Residential	4/13/2009	OVERWATERING	OV from RP, informed RP would be sending a Allege letter to PO. Allege letter sent. Office visit from RP with photos of retaining wall with what appears to be water damage from seepage from neighboring property and photos of water from overwatering flowing over sidewalk in front yard. Referring over to G.Clark and W.Perdomo to educate PO on overwatering.	4/13/2009	5/4/2009	0	2	0	0	1	0	0	0	0	Yes
09-1503	Residential	4/30/2009	OVERWATERING	PC to RP. RP states that water is flowing constantly from PO's curb drain. Drafted and sent notice to PO. Contact from PO. PO states that issue is being looked into. Area in question has a tendency for underground streams. No further issues.	5/6/2009	5/18/2009	0	0	2	1	0	0	0	0	0	Yes
08-4854	Residential	12/17/2008	PAINT DUMPING	PC to RP. Site visit. Spoke with PO. Informed PO of proper way to dispose of paint. No further issues	12/17/2008	12/17/2008	0	0	1	0	0	0	0	0	0	Yes
09-1836	Residential	5/27/2009	PAN FULL OF OIL WASTE	Received call from RP stating oil is GOA.	6/8/2009	6/8/2009	0	0	1	0	0	0	0	0	0	Yes
08-3725	Residential	9/2/2008	PEOPLE POURING PAINT DOWN THE DRAIN	Site visit. Observed discharge from property. Spoke with contractor. Worker accidently washed gypsum into the storm drain. Issued Admin Warning 9197 to contractor for cleanup. 9/10 Site visit. No further issues at this time.	9/2/2008	9/10/2008	2	0	0	0	0	0	1	0	0	Yes
09-1131	Commercial	4/6/2009	POTENTIAL RUN OFF FROM EMERGENCY REPAIR	Site Visit, by request of engineering inspector to look at BMP's and associated construction. Site is in substantial compliance. Work is being performed as emergency repair to an existing building due to ground movement. Contractor in process of obtaining SWPPP and all required permits. Site Visit w / M.Lahsaie made in response to a complaint made about potential sediment runoff onto neighboring property. BMP's are in place to prevent any potential runoff. Photos Taken, Will monitor.	2/18/2009	4/10/2009	3	0	0	0	0	0	0	0	0	Yes
08-3079	Residential	7/10/2008	POWER WASHING TILE ROOF - RESIDUE GOING INTO STORM DRAIN	7:50AM Site Visit, Photos Taken, Ad min warning 12522 issued to BO. PC to RP.	7/10/2008	7/10/2008	1	0	0	0	0	0	1	0	0	Yes
08-3624	Commercial	8/20/2008	RINSING OFF SIDEWALKS WITHOUT CAPTURE	Site visit. Spoke with Mgr. about proper BMP use and general compliance. 8/28 Site visit. No further issues	8/20/2008	8/28/2008	2	0	0	0	0	0	0	0	0	Yes
09-0847	Residential	3/11/2009	SEDIMENT DISCHARGE	Site visit. Observed sediment discharge from Singh property onto road way. PC to Russ(field maint.). Explained violation. Russ stated cleanup will commence immediately. 3/24 Site visit. Clean up not adequate. PC to Russ. Russ stated that crew will be sent to clean properly. 3/31 Site visit. PC to Russ inquiring about lack of compliance. Left message. 4/13 Site visit. Discharge has been removed. No further issues. Contacted Public Works w/results.	3/11/2009	3/31/2009	4	0	0	0	0	0	0	0	0	Yes
08-4704	Commercial	12/4/2008	SEDIMENT DISCHARGE OFF PROERTY	Received complaint from Public Works regarding sediment discharge from property resulting from a plugged outfall.. Site visit. Spoke with manager. Manager stated that work to clean up and prevent future discharges will begin immediately. 12/15 Site visit during rain event. Area in question working properly. Will monitor. 12/18 Site visit. No violations.	12/4/2008	12/18/2008	3	0	0	0	0	0	0	0	0	Yes
08-3693	Commercial	8/28/2009	SEWAGE BEING SWEPT INTO STORM DRAIN	Site visit. Upon arrival, business had a cleanup service just finishing up. Spoke with general manager. Directed manager to clean out affected storm drain in which he complied. PC from Perri (water) asking me to attend meeting with McDonald's owners on Thursday. This will be a good time to discuss areas of concern with managers on storm water BMP maintenance 10/8 Site visit. No further issues at this time.	8/28/2008	10/8/2008	2	0	0	0	0	0	0	0	0	Yes
08-4020	Residential	9/24/2008	STAGNANT WATER AROUND THE PROPERTY - MOSQUITOS	PC from RP requesting an inspection of stagnant water in a city maintained brow ditch. 10/1 Site visit w/M.Sabelis. Observed ponded water in brow ditch. Public works has ditch on schedule for cleaning at the end of the month. Suggested ways of reducing water to PO. PO's landscape is likely causing the brow ditch to rise (tree root). Will monitor. 11/5 Site visit. Public Works has maintained ditch. Ponded water was caused by PO's Landscape. No further issues at this time.	9/24/2008	11/5/2008	2	0	0	0	0	0	0	0	0	Yes
08-3984	Residential	9/17/2008	STANDING WATER/ DRAINAGE ISSUE	PC from RP. Mobile home park has several areas that incur standing water. RP is concerned about standing water and mosquitoes. 9/18 Site visit. Met with RP and general manager. Discussed issue. Manager needed a citation to get owners to approve work order. Issued Admin Cite 9200 to manager. 11/5 Site visit. Work order was approved and implemented. Issue has been resolved.	9/17/2008	11/5/2008	2	0	0	0	0	0	0	1	0	Yes
08-3484	Residential	8/4/2008	SWIMMING POOL WATER RUNNING DOWN THE STREET	PC to RP no answer or answer machine. Site Visit, pool draining appears to be in compliance.	8/4/2005	8/4/2008	1	0	0	0	0	0	0	0	0	Yes
08-2947	Residential	7/8/2008	THERE ARE TWO VEHICLES LEAKING OIL ON THE STREET	Site visit. Spoke with father of leaking vehicle. Explained city code requirements. Father stated that vehicle will be parked on their property with a drip pan until repairs can be made. Will monitor. 7/16 Site visit. No further issues.	7/9/2008	7/16/2008	2	0	0	0	0	0	0	0	0	Yes
09-0980	Commercial	3/24/2009	THREE MOBILE DETAILERS WASHING VEHICLES	Site visit. PC to RP Observed mobile detailer washing vehicle over storm drain. Issued Admin Warning 12373 to detailer. Will monitor area.	3/24/2009	4/27/2009	1	0	0	0	0	0	1	0	0	Yes
08-3575	Commercial	8/18/2008	UNMAINTAINED DRAINAGE CHANNEL	Site visit. Took Photos. Area in need of cleanup. Mitigated area. Spoke with M.Sabelis who stated that church is in process of acquiring permission to clean in mitigated area. Mo is following up on this. Will monitor as needed.	8/20/2008	12/4/2008	1	0	0	0	0	0	0	0	0	Yes
08-4813	Commercial	12/10/2008	UNPERMITTED FILL AND EROSION CONTROL ISSUES	Received complaint w / photos. Site Visit, Photos Taken, observed significant erosion impacting adjacent properties. 12/11 Site Visit, Notice & Order posted on property. 12/15 Site Visit, Photos Taken, some BMP,s in place, PC to RP. Informed of actions taken, and requested a rep from the church make contact with RP to clean out drainage ditch on RP,s property. Receive email from RP stating material will removed in April Informed RP will be closing case and reopen if necessary.	12/10/2008	3/4/2009	3	0	2	1	0	0	0	0	0	Yes
09-0204	Residential	1/22/2009	VAN IS LEAKING OIL ON THE STREET	PC to RP. Left message. Site visit. Observed van leaking fluid on street. Directed owner to properly store vehicle on property(driveway) until repairs can be made. No further issues.	1/26/2009	1/27/2009	1	0	1	0	0	0	0	0	0	Yes
09-0945	Residential	3/23/2009	VEHICLE IS LEAKING OIL	PC to RP. Site visit. Spoke with PO. PO stated that son's car had a leak and is now not allowed to park vehicle in the complex. Directed PO to properly clean affected area. 3/25 Area has been cleaned.	3/24/2009	3/25/2009	1	0	1	0	0	0	0	0	0	Yes
09-0093	Residential	1/12/2009	VEHICLE IS LEAKING OIL	PC to RP. Site visit. Observed leaking vehicle parked in street next to property. Posted Admin cite 12369 for illegal disharge and proper cleanup of fluids (oil). Site visit. Vehicle stored on property but without proper drip pan. No attempt to clean fluid discharge. Spoke with PO. Explained requirements. Site visit. Vehicle stored properly with drip pan. Attempt at cleanup of fluids. PC to RP.	1/12/2009	1/15/2009	3	0	1	0	0	0	0	0	0	Yes

Table 7-6. Summary of 08/09 IC/ID Investigations by Code Enforcement Officers

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Administrative Warning	Administrative Citations	Criminal Citation	Case Closed?
08-3139	Residential	7/15/2008	VEHICLE IS LEAKING OIL - CHEVY PICK UP	Attempted PC to RP. Site visit. Vehicle GOA.	7/16/2008	7/16/2008	1	0	0	0	0	0	0	0	0	Yes
08-3087	Residential	7/10/2008	VEHICLE IS LEAKING OIL ON THE STREET	Site visit. Observed a couple of small oil spots under vehicle but not enough to qualify as an illegal discharge. Attempted contact with RP. Vehicle does have marks on tires from parking Enf.	7/16/2008	7/16/2008	1	0	1	0	0	0	0	0	0	Yes
09-1187	Residential	4/13/2009	VEHICLE IS LEAKING OIL ON THE STREET	Received complaint. Made site visit. Observed vehicle parked along roadside with fluid stains underneath. Attempted contact with RO. Wrong address on tag info. Spoke with HOA manager who happened to drive up for same complaint. She tagged vehicle and stated that she would contact me if vehicle remained. Email from HOA manager with vehicle owner information. Ran license. Drafted and sent notice to properly store vehicle until repairs can be made after receiving correct RO info.	4/1/2009	4/27/2009	2	0	0	1	0	0	0	0	0	Yes
08-4546	Residential	11/5/2008	VEHICLE LEAKING EXCESSIVE AMOUNT OF OIL ON CITY STREETS	Site Visit, Photos Taken, Letter sent, Site Visit, spoke to owner of vehicle, gave example of what needs to be done to get oil deposits clean up in street. Site Visit, vehicle GOA.	10/31/2008	12/10/2008	3	0	0	0	1	0	0	0	0	Yes
08-3494	Residential	8/11/2008	VEHICLE LEAKING OIL (CHEVY TRUCK)	Site Visit, Photos Taken, Letter sent, Site Visit, oil deposit cleaned up. No further complaints.	8/11/2008	11/12/2008	2	0	0	0	1	0	0	0	0	Yes
08-4245	Residential	7/14/2008	VEHICLE LEAKING OIL IN STREET	PC to RP. Site visit. Spoke with PO. PO stated that power steering hose developed a leak. PO is now storing vehicle on driveway with proper protection until repairs can be made.. No further issues.	10/8/2008	10/27/2008	1	0	1	0	0	0	0	0	0	Yes
09-1800	Residential	5/21/2009	VEHICLE LEAKING OIL IN THE STREET	PC to RP. RP stated that property that vehicle is from has a lot of tenants. Will wait for DMV info before sending notice. Drafted and sent notice to PO regarding leaking vehicle. Site visit. Vehicle GOA. PC to RP. RP satisfied with contact of PO. RP will contact me if problem returns.	5/22/2009	6/8/2009	1	0	0	1	0	0	0	0	0	Yes
08-3191	Residential	7/15/2008	VEHICLE LEAKING OIL ON STREET WHITE CHEVY LIC. 6L09995)	Attempted PC to RP. Site visit. Vehicle GOA.	8/7/2008	10/7/2008	0	0	1	0	0	0	0	0	0	Yes
09-2152	Residential	6/22/2009	VEHICLE LEAKING OIL ON THE STREET	Site visit. Observed oil discharge in street in front of residence. Spoke with PO's son who said that his father's truck was responsible. I explained the need to keep the fluids out of the storm drain and how to properly store vehicle until repairs could be made. Issued Admin cite 14223 to PO via mail. 6/30 Site visit. No further issues at this time. PC to RP for follow up.	6/25/2009	7/1/2009	2	0	0	0	0	0	0	1	0	Yes
08-3724	Residential	9/2/2008	VEHICLE LEAKS OIL IN THE STREET	Site visit. Spoke with RO of leaking vehicle. RO stated that he would park vehicle on own property until repairs can be made(valve cover gasket). Will monitor. Site visit. Vehicle GOA	9/2/2008	11/21/2008	2	0	0	0	0	0	0	0	0	Yes
08-3482	Residential	8/6/2008	VEHICLE REPAIR ON PUBLIC STREET	Site visit. Observed automotive work being done on street in front of residence. Issued Admin. Warning to mechanic. Site visit. No further issues.	8/6/2008	8/7/2008	2	0	0	0	0	0	1	0	0	Yes
08-3557	Residential	8/12/2008	VEHICLES LEAKING OIL ON STREET	Letter sent to PO. SV, unable to verify driveway condition due to vehicle on location. Continue to monitor. SV, area has no visible copious oil staining. No further action at this time.	8/12/2008	9/2/2008	2	0	0	0	1	0	0	0	0	Yes
08-3558	Residential	8/12/2008	VEHICLES LEAKING OIL ON STREET	Letter sent to PO. SV, oil staining on driveway resolved w/ absorbent placed on driveway.	8/12/2008	8/14/2008	1	0	0	0	1	0	0	0	0	Yes
09-0966	Residential	3/23/2009	WASHES TOW TRUCK AND VEHICLE MAINTENANCE EQUIPMENT	Site visit. Attempted contact with PO. Drafted notice to cease discharge. 3/25 Sent Notice to PO. Site visit. No further issues. Contacted RP with results.	3/24/2009	4/13/2009	2	0	0	1	0	0	0	0	0	Yes
08-4396	Residential	10/29/2008	WASHING BOAT AND FISH BLOOD GOING INTO DRAIN	Site Visit, spoke with boat owner explained storm water regs. Boat owner states neighbors have already spoke to him. He states he does his washing of his boat at the harbor wash out and he is only lobster fishing so he does not clean fish out in the street. PC to RP.	11/5/2008	11/5/2008	1	0	0	0	0	0	0	0	0	Yes
08-4653	Residential	11/18/2008	WASHING DOG FECES INTO STORM DRAIN	Per CEO management will be holding off on enforcement action due to neighborhood dispute. 12/5 No further complaints. Closing case	11/21/2008	12/5/2008	0	1	0	0	0	0	0	0	0	Yes
09-1126	Residential	4/6/2009	WASHING DOG FECES INTO STREET	Allege letter sent. PC from PO states he doesn t wash feces into street and this complaint is prompted by other issues. Informed PO was aware of some other issues and that is why only allege letter was sent. PO states he understands appreciate the way this was handled. PC to RP left message I am closing case and to call back if issue is not resolved.	4/9/2009	4/23/2009	0	0	2	0	1	0	0	0	0	Yes
08-3542	Commercial	8/13/2008	WASHING MOTOR OIL DOWN THE STREET	PC to RP. Site visit. Issued Admin Warning Cite 9196 to BO to maintain property. Site visit. Business in compliance.	8/13/2008	10/7/2008	2	0	1	0	0	0	1	0	0	Yes
08-3562	Residential	8/14/2008	WASHING PAINT DOWN THE GUTTER - MEN WORKING AT THIS SITE	PC to RP. Site visit. Spoke with contractor. Contractor stated that the cleaning crew was responsible for the discharge. PC to PO. PO stated that cleanup will begin immediately. 8/25 Site visit. No further issues.	8/14/2008	8/25/2008	1	0	1	0	0	0	0	0	0	Yes
09-1039	Residential	2/24/2009	WASHING RED TILE DUST INTO STREET	PC to RP. Site visit. Observed stain in gutter from property. Absorbent had been placed to soak up fluid. Drafted and sent notice to PO for cleanup and prevention of future spills. PC from RP. Area cleaned .	3/31/2009	4/13/2009	1	0	1	0	0	0	0	0	0	Yes
08-3128	Residential	7/9/2008	WATER GOING DOWN FOUSSAT RD TOWARDS OCEANSIDE BLVD	Site visit w/M.Sabelis. Determined that runoff caused by upper neighborhood irrigation and groundwater infiltration. No Stormwater issues at his time. PC to RP with results.	7/15/2008	7/15/2008	1	0	1	0	0	0	0	0	0	Yes
08-4606	Residential	11/17/2008	WATER IS RUNNING INTO NEIGHBORS PROPERTY	Two site visits revealed no obvious water drainage onto adjacent property. Prior case history reveals RP was advised of potential civil issue regarding water leakage onto adjacent property. PC to RP: VM left requesting details of complaint. Second site visit: Photos taken of water draining off property onto sidewalk, potential trip hazard. Administrative Warning 13788 issued and sent to PO with photos. 1/5 water leak appears to have been fixed, eliminating trip hazard on sidewalk.	11/17/2008	1/5/2009	4	0	0	0	0	0	1	0	0	Yes
08-3772	Residential	9/4/2008	WATER LEAK	PC to RP. Site visit. Observed a small amount of flow coming from French drain. Drafted and sent notice to PO. 9/16 Site visit. Extension to repair. 1/5 Site visit. No discharge from pipe drain. No other issues at this time.	9/10/2008	1/5/2009	3	0	3	0	0	0	0	0	0	Yes
09-0104	Commercial	1/8/2009	WATER LINE REPAIR ON NCTD R.O.W	Site Visit, by request of M.Lahsaie to look at project. Made suggestions as to placement of BMP s Site Visit, met w / K.Thomas from NCTD she expressed their conditions and concerns. M.Lahsaie contacted RWQCB. 1/9 pointed out areas of concern and placement of BMP s. BMP maintenance prior to storm. 3/26 Site Visit, Photos Taken, project near completion.	1/7/2009	3/26/2009	14	0	0	0	0	0	0	0	0	Yes

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Administrative Warning	Administrative Citations	Criminal Citation	Case Closed?
08-3493	Residential	8/7/2008	WATER RUNNING 24/7 FORM CURB ENTRANCE TO COMPLEX	Site Visit, PC to RP left message was on-site. Contacted a Plumber from ACT Plumbing on-site trying to locate source of leak. Will call when source is located. 8/21 PC from Plumber has determined the source to be ground water. PC to RP left message with findings.	8/7/2008	8/20/2008	1	0	2	0	0	0	0	0	0	Yes
08-3499	Residential	8/6/2008	WATER RUNNING DOWN THE STREET DUE TO BROKEN PIPE	Site Visit, Photos Taken, spoke with maintenance person who showed me inside utility shed has almost 2 of standing water. Went to property next door where management believes water is coming from. Unable to verify the source. Spoke to manager states will contact corporate office and inform them of city involvement. I suggested they get a leak detection service to try to figure the source of water. Site Visit, manager states had leak detection service on-site and unable to determine source. Water located problem. Fixed.	8/6/2008	8/14/2008	2	0	2	0	0	0	0	0	0	Yes

7.6 Illicit Discharge, Detection, and Elimination Component Effectiveness Assessment

Effectiveness assessment is an important component of the JURMP because it can assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The San Diego County Copermittees developed two guidance documents to assist in the assessment of the JURMP components as well as the jurisdictions overall JURMP program. These two documents are titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* and the *Baseline Long-term Effectiveness Assessment* (BLTEA). The City participated in regional efforts to develop these documents in anticipation of the requirement to assess their JURMP programs.

The effectiveness assessment approach developed by the Copermittees during the 2005-06 permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below:

- Level 1: Compliance with Activity-Based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

The establishment of measurable outcomes is necessary for both incremental program component improvements and as a basis for future establishment of relationships between implementation and water quality improvement outcomes.

This section discusses the effectiveness assessment of the IDDE components of the JURMP. Overall program effectiveness assessment is discussed in Section 11 of the 2007-2008 City of Oceanside JURMP Annual Report submitted September 30, 2008.

A large effort of the IDDE element is the City's Dry Weather Monitoring Program. Table 7-10 provides a summary of the Level 1 activity-based compliance assessment of the program. This was the second year the City used a replacement program for dry or inaccessible sites. While there were 67 sites on the primary site list, fourteen were either dry or inaccessible. An additional 30 sites were visited to find ponded or flowing water. The City continued laboratory sampling at more sites than required which resulted in a 112% completion rate. All but one initial site exceedances of action levels were confirmed within two business days resulting in a 96% completion rate. Confirmation at L029 was missed, but the error was corrected and the site was revisited within five business days. Eighty eight sites, even those without ponded or flowing water, were assessed for trash extent and amount which resulted in a 131% completion rate.

Table 7-10. Dry Weather Monitoring Component - Level 1: Compliance with Activity-Based Requirements.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
IDDE D.4	Site Visits	Primary Dry Weather Sites Listed	Primary & Alternate Dry Weather Sites Visited	Actual/Target	Percent ( ) Completion
		67	97	97/67	145
	Field Screening	Primary Dry Weather Sites Listed	Number of Sites Screened with Flowing/Ponded Water	Actual/Target	Percent ( ) Completion
		67	67	67/67	100
	Laboratory Analysis	Number of Sites Required for Lab Analysis	Number of Sites Sampled for Lab Analysis	Actual/Target	Percent ( ) Completion
		17	19	19/17	112
	Follow-Ups (Within Two Business Days)	Number of Sites Requiring Confirmation	Number of Site Follow-up within Two Business Days	Actual/Target	Percent ( ) Completion
		24	23	23/24	96
	Trash Assessment	Number of Field Screening or Analytical Monitoring Stations	Number of Trash Assessments Conducted	Actual/Target	Percent ( ) Completion
		67	88	88/67	131

The City's Dry Weather Monitoring program was first implemented in 2002. Although the program has evolved and the number of sites and location of sites has varied, some assessment of discharge water quality can be made (Level 5 assessments). Figure 7-4 provides a summary of the percent of action level exceedances for selected field screening parameters from 2002 through 2009. Nitrate action level exceedances have been stable but decreased this year with only one site exceedance (1%). Orthophosphate exceedances vary and do not show any trends, but have stayed under 25% since 2002 and are equal to the 2004 and 2006 monitoring season at the lowest exceedance percentage of 11%. Ammonia exceedances for 2002, 2003, and 2004 occurred in over 80% of the sites. The 2005 Dry Weather Report indicates that these exceedances were likely due to false positives with the method being used. The methods were changed in 2005 and once again this dry weather season and ammonia exceedances are the lowest they have been in 2009 at 5%.

Figure 7-5 provides a summary of the microbiology results from 2002 through 2009. Bacterial exceedances have been on a decreasing trend since 2005. Total coliform and Enterococcus

exceedances are the same as the last reporting year. Fecal coliform exceedances in 2009 increased from the previous years from 11% to 21%.

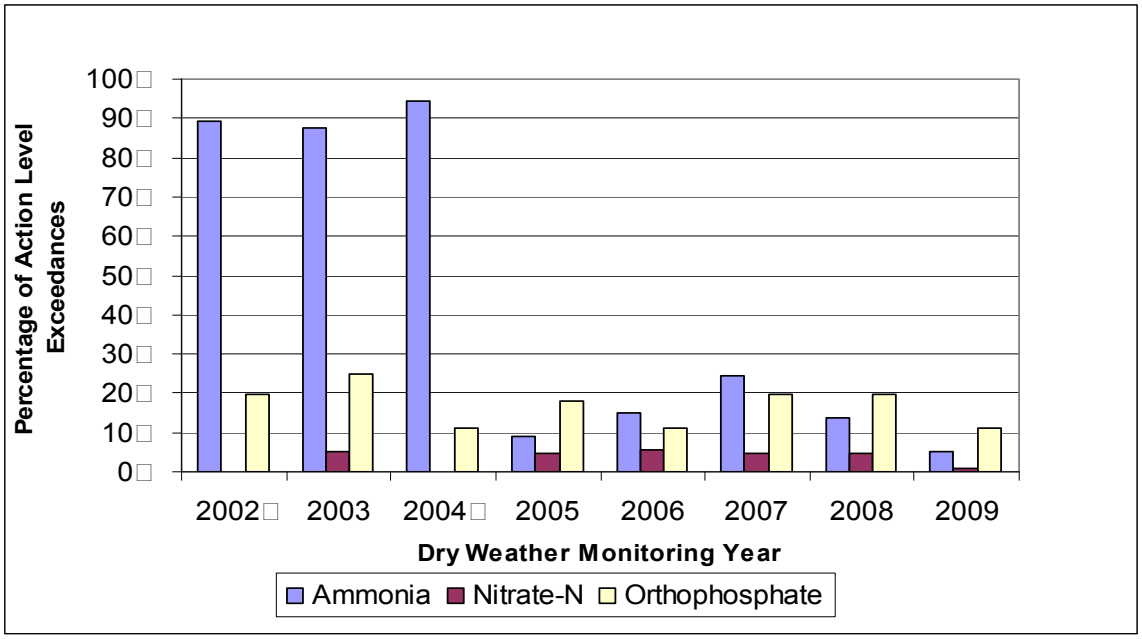

In 2004, nitrate was not analyzed in field screening samples. In 2002, the results for nitrate were likely reported as Nitrate (NO_3) as opposed to Nitrate as N (NO_3-N). Not converting the results to the appropriate action level format creates a larger number of exceedances, than should be. Reporting years 2003 through 2006 were corrected, but documentation was not available to definitively clain that this was the case for 2002. Therefore, the results were omitted from this assessment.

Figure 7-4. Dry Weather Monitoring – Level 5: Changes in Discharge Quality. Summary of Field Screening Action Level Exceedances from 2002 - 2009.

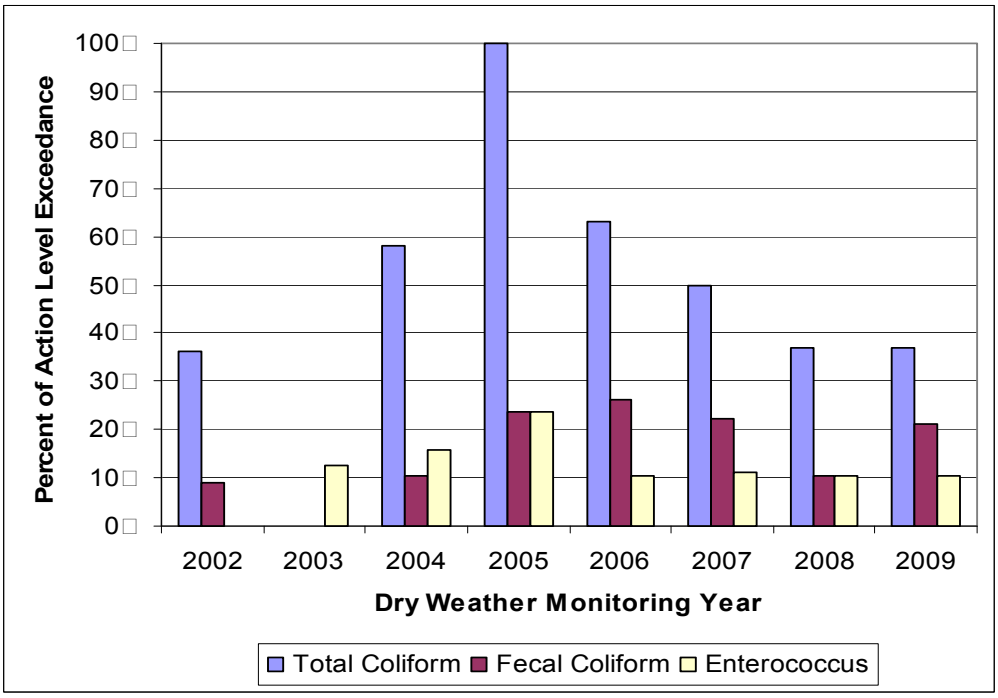

Figure 7-5. Dry Weather Monitoring – Level 5: Changes in Discharge Quality. Summary of Bacteriological Action Level Exceedances from 2002 - 2009.

7.7 Program Review and Modification

Three recommendations for the IDDE component of the Municipal Permit are suggested: 1) The Regional Monitoring Workgroup re-evaluated the dry-weather action levels and are providing a recommended change. 2) As discussed in Section 15 of the JURMP Annual Report, a database tracking system was needed both for the Clean Water Program and other departments within the City. These systems were created and some implemented within the 2008-09 reporting year. 3) Specific to the IDDE Component, the Clean Water Program is working with the Engineering Department and Public Works to update the MS4 map utilizing GIS technology.

7.7.1 Bacterial Action Levels for Dry Weather Monitoring

The Regional Monitoring Workgroup in November 2009 requested the Dry Weather Monitoring Sub-workgroup to evaluate dry weather action levels that were submitted in April 2003 by the County of San Diego on behalf of the Copermittees. The Dry Weather Sub-workgroup determined that the bacterial indicators action levels required additional analysis. All other action levels were deemed appropriate and will not change. The Dry Weather Sub-workgroup contracted the services of D-Max Engineering through the City of La Mesa to conduct the evaluation of historical bacterial data collected from dry weather monitoring from 2002 through 2007. Details of their evaluation are posted on the Project Clean Water Website at http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf. The Regional Monitoring Workgroup on May 19, 2009 evaluated the recommendations of the Dry Weather Sub-workgroup and selected the 80th percentile values to be proposed as the dry weather action levels for bacterial indicators beginning on May 1, 2010. The current levels and the levels proposed to effective as of May 1, 2010 are presented in Table 7-11.

Table 7-11. Bacterial Indicators Action Levels for Dry Weather Monitoring Program

	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	Enterococcus (MPN/100mL)
2003-2009 Action Levels	50,000	20,000	10,000
Proposed 2010 -2012 Action Levels	130,000	13,000	7,000

7.7.2 Database Tracking System for various departments and divisions

During this reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water, Sewer, and the Clean Water Program, continued rolling out the GBA Masters Series software. Water and Sewer continued to utilize the product and the Clean Water Program gained approval to purchase additional licenses and hire a consultant to help modify the software to their needs. Complete roll-out for the Clean Water Program is expected in reporting year 2009-10. The Development Services Department, which includes Code Enforcement, Building, Planning and Engineering, choose CRW Data Tracking Systems and will begin roll-out in the 2009-10 reporting year. These systems will allow for tracking and reporting of needed information, including storm water data, across the departments. The Clean Water Program has been working closely with other City departments to ensure that the details of inspections, complaints, follow-ups, post-construction BMPs, maintenance agreements, and other associated documents will be tracked appropriately to be included in future annual reports.

7.7.3 Maintenance of MS4 Maps using GIS Technology

One of the many uses of these units is to verify the accuracy of the MS4 map and relay the information gathered in the field to the Engineering Department to update the GIS layer. The City continued the effort to create the data dictionary needed to collect consistent and necessary data for the storm drain system update. Although he City did not make any changes to the MS4 map during the 2008-09 fiscal year, the Trimble units were field tested used for upstream investigations and mapping small segments of the MS4, but a full roll out the field effort is anticipated during FY 2009-10.

City of Oceanside
2009
Dry Weather Monitoring Report

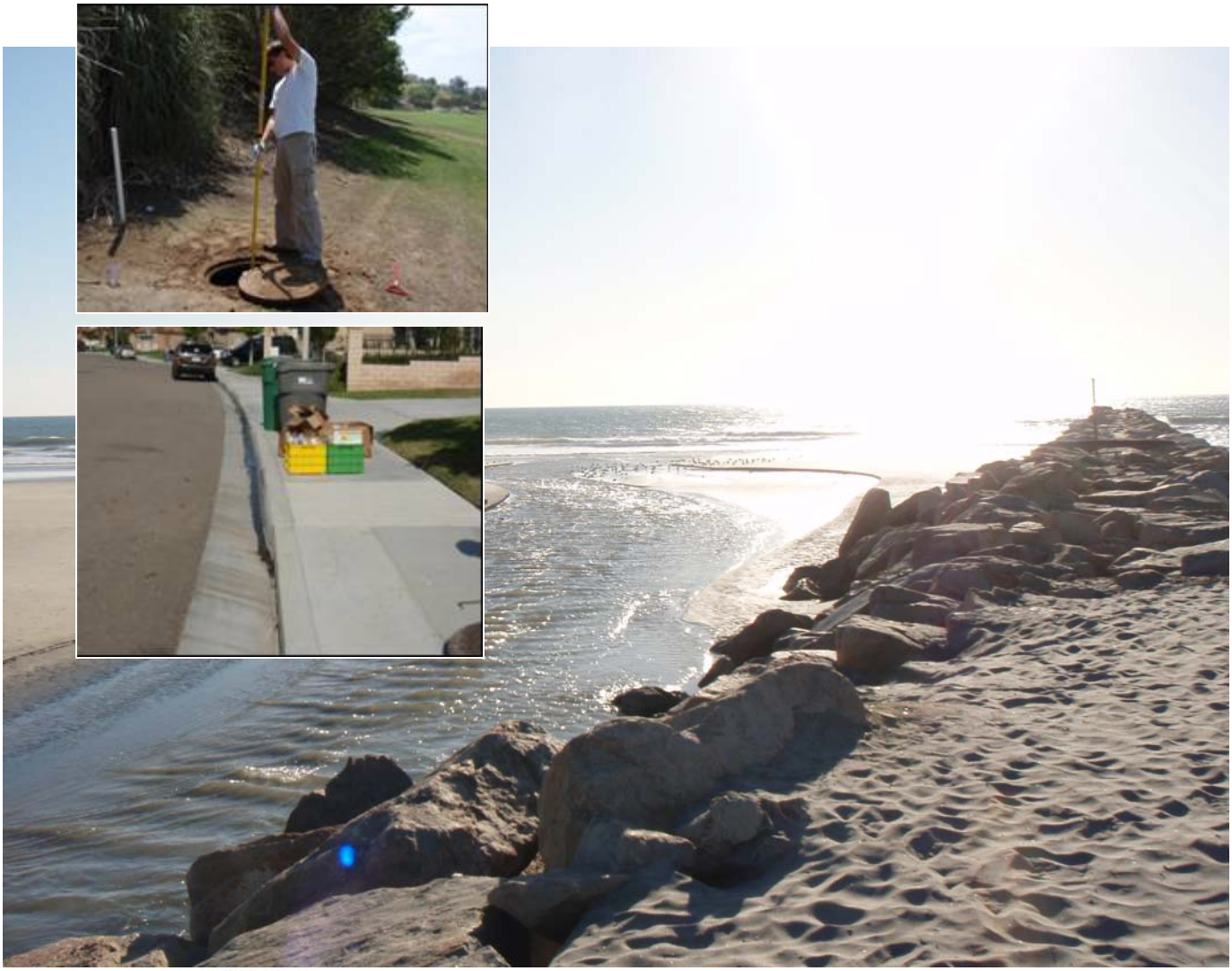

Prepared by:

City of Oceanside
Clean Water Program
December 15, 2009

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1 INTRODUCTION

1.1 Program Summary

In February 2001, the San Diego Regional Water Quality Control Board issued Order No. 2001-01 to the communities of San Diego County. As part of Order 2001-01, the City of Oceanside was required to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program. In 2007, the San Diego Regional Water Quality Control Board issued a new five-year permit for Receiving Waters and Urban Runoff Monitoring and Reporting, Order No. 2007-0001. The Copermittees in San Diego County were required, as part of their Jurisdictional Urban Runoff Management Program (JURMP), to update their Dry Weather Program to meet or exceed the requirements of Order No. 2007-0001. The City of Oceanside's Dry Weather Program was reviewed and updated and the details of the current program are included in the City of Oceanside 2008 JURMP Update.

The purpose of the dry weather program is to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. Information collected from dry weather monitoring is used to characterize dry weather discharges in the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as necessary to detect and eliminate the sources of these pollutants.

This report presents the results of the City of Oceanside's 2009 Dry Weather Field Screening and Analytical Monitoring Program.

1.2 City of Oceanside Drainage Summary

The City of Oceanside lies on the northern coast of San Diego County, 35 miles north of the City of San Diego and 83 miles south of the City of Los Angeles. The City is bounded to the west by the Pacific Ocean, the north by Camp Pendleton Marine Corps Base, the east by unincorporated areas of the County of San Diego and the City of Vista, and the south by the City of Carlsbad. The City covers approximately 42 square miles with a population of just over 173,000 people. California's main highway, Interstate 5, runs through the City, as does Highway 78, which provides southeast access to Interstate 15. Highway 76, which runs northeast, also provides access to Interstate 15.

The City's boundaries include two major watersheds; the San Luis Rey Watershed, which includes the San Luis Rey River and the Carlsbad Hydrologic Unit, which includes Loma Alta Creek, Buena Vista Creek, and Calavera Creek a tributary to Agua Hedionda Creek.

1.2.1 San Luis Rey Watershed

1.2.1.1 San Luis Rey River

The San Luis Rey Watershed is the northernmost watershed within the City of Oceanside. It is approximately 558 square miles and extends inland to encompass a large portion of

the northern unincorporated areas of the County of San Diego. The San Luis Rey River is the primary watercourse of the watershed and discharges to the Pacific Ocean near the northern border of the City of Oceanside. While the San Luis Rey Watershed is the largest hydrologic unit in the San Diego region, 92.5% of the watershed lies within the unincorporated part of the County, and not within the City of Oceanside. However, a wide floodplain is prominent through the City, including levees on either side of the river to protect the surrounding developments, adjacent to or within the historical floodplain, from future storm events. In 2007, the Pacific Street Bridge Project broke ground to restore the river mouth to its natural open state by creating a bridge over the river and removing the "Arizona crossing," a land berm and large culvert intended to wash out during large storm events. The new bridge was completed and opened in September of 2008 and the hardscape of the Arizona crossing was removed at the end of October 2008.

The one named tributary within the City's boundaries is Pilgrim Creek, which drains a relatively undeveloped portion of the City with some residential areas and a municipal golf course in addition to an undeveloped area of Camp Pendleton. The remaining drainage areas within the City include areas of agricultural, residential, and some industrial land uses.

1.2.2 Carlsbad Watershed

1.2.2.1 Loma Alta Creek

Loma Alta Creek is the northernmost watershed in the Carlsbad Hydrologic Unit. It flows alongside Oceanside Boulevard, beginning as a rising spring just west of Melrose Drive in the City of Vista and ending at Buccaneer Beach Park where it enters the Pacific Ocean. Approximately five percent of the Loma Alta Creek Watershed is in the City of Vista, and the remaining portion is entirely in the City of Oceanside. Loma Alta Creek is over seven miles long and encompasses nearly 6,300 acres of land, 70 percent of which is developed. Almost 90% of the land within the watershed is privately owned.

Several tributaries drain into Loma Alta Creek, however, the only named tributary is Garrison Creek, located along Garrison Street west of El Camino Real. Much of the creek has been modified throughout the years, with the use of fully or partially concrete-lined channels to stabilize the creek-bed slopes. Loma Alta winds through a highly industrial area towards the western portion of the creek. Other land uses include residential and commercial uses.

1.2.2.2 Buena Vista Creek

The Buena Vista Watershed extends approximately 10.6 miles inland from the coast, totaling 14,437 acres and draining 21 square miles. The Watershed begins on the western slopes of the San Marcos Mountains, flows through areas of the County of San Diego and the Cities of Vista, Carlsbad, and Oceanside, turns into a lagoon and then ends at the Pacific Ocean. A weir was built in 1940 to stop tidal flow at the mouth and the lagoon now functions as a freshwater lagoon.

In the City of Oceanside, Buena Vista Creek parallels Highway 78. The lagoon is located south of Highway 78 and west of Jefferson Street. The upper and western basins of the

Buena Vista Watershed are primarily in the City of Vista, the southeastern portions are primarily in the San Diego County jurisdiction, and the lower basin is straddled between the Cities of Carlsbad and Oceanside as the Creek weaves its way between the two cities. Approximately 80% of the Buena Vista Watershed is developed, primarily with commercial and residential land uses. Some agricultural activities also exist in the watershed. Because of the intense development in the watershed, large sections of Buena Vista Creek have been concrete-channelized to reduce the chance of flooding private property.

1.2.2.3 Agua Hedionda Creek

A small portion of the City of Oceanside lies within the watershed of a tributary of Agua Hedionda Creek, called Calavera Creek. Beginning in an undeveloped portion of land just west of Highway 78, Calavera Creek's headwaters start in Vista, proceed through a pocket of San Diego County unincorporated area, head into Oceanside, and then eventually drain to Lake Calavera. Lake Calavera was created by the building of a dam in the 1940s. While the creekbed downstream of the lake is typically dry, the creek reforms in wet weather to wind its way through Carlsbad and joins the major artery of Agua Hedionda Creek. Near the Pacific Ocean, Agua Hedionda Creek opens up into a lagoon. The entire Calavera Creek Basin is approximately 3,770 acres. The primary land use in the portion of the Agua Hedionda Watershed that lies within the City of Oceanside's boundaries is residential.

2 SAMPLING LOCATIONS

2.1 Site Selection

City monitoring staff worked with a consultant experienced in dry weather monitoring to update the City's Dry Weather Monitoring Program site locations during the 2008 JURMP Update process. This process involved preparing maps integrating the City's drainage system, watersheds, major water bodies, current dry weather monitoring locations, and land use. The sites were referenced against major drainage lines to see if any major lines were not being sampled, if any existing sites captured only very small drainage areas, or if any existing sites were redundant in that two or more neighboring sites provided data about essentially the same area. Historical data was also evaluated to determine which sites had routinely been dry in recent years and monitoring staff identified sites that had been found to be inaccessible. During this process it was determined that approximately 40 percent of the City's existing sites were routinely dry, were inaccessible, and/or assessed only very small drainage areas. Assessment of existing sites and prepared maps also found that the existing sites missed larger drainage areas or did not capture some of the recently developed areas. A list of potential new sites was drafted based on the following criteria:

- The site was downstream of any sources of suspected illicit discharge or illicit activity.
- The location took into account hydrological conditions, total drainage area, traffic density, age of the structures or buildings, history, and land use types.
- The site was located at the farthest downstream manhole or other accessible location in the drainage area being assessed.

A primary and an alternate site list were created after verification of accessibility was assessed. As a result of this process, a number of inaccessible or dry sites were removed, several sites with small drainage areas were redesignated as alternate sites, and several new sites were selected. The City's revised program now provides a more thorough, overall coverage of its MS4 while more efficiently allocating resources to sites that provide useful data. For a detailed list of site changes see the 2008 JURMP Update.

The updated list of 67 primary monitoring stations, their locations, land uses, and drainage areas is presented in Table 1. Alternate dry weather monitoring stations have been selected and are listed in Table 2. These stations are used as replacements for primary stations where no flowing or ponded water is observed. A map of the MS4 with primary and alternate sampling station locations is included as Figure 1.

2.2 Site Descriptions

Site visits were attempted at the 67 primary monitoring stations. Three of the primary stations were inaccessible and fourteen were dry, so the additional 28 alternate stations were visited in addition to creating two new stations in search of flowing or ponded water within the City in 2009. This section includes a detailed description of each monitoring station.

The site identification numbers are not arranged by location (for example, from east to west) because over the course of the Dry Weather Program, sites have been eliminated and added to best represent the City's MS4. The site identification numbers do either start with an A, B, L, or S which corresponds with the Agua Hedionda Creek (A), Buena Vista Creek (B), Loma Alta Creek (L), or the San Luis Rey River (S). For example, Site S112 would have been sampled from San Luis Rey River at location 112. The site locations are shown in Figure 1 and described below. The site identification numbers, descriptions, GPS coordinates, and conveyance structure types of the primary stations are listed in Table 1 and of the alternate stations in Table 2. Photos of each site visited are included as Appendix A.

Table 1. 2009 Primary Dry Weather Monitoring Site Locations.

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
A002	South end Cannon Road	904.3	33.16125	-117.27073	1107	E5	Residential	None	Outlet
A004a	N/W Cannon Road	904.3	33.17054	-117.27088	1107	E4	Residential	None	Outlet
A004b	Concrete Drainage	904.3	33.17057	-117.27087	1107	E4	Residential	None	Concrete Channel
A013	36" RCP □ Lake & Alameda Drive	904.3	33.17358	-117.26132	1107	F3	Residential	None	Outlet
A014	36" RCP east of Lake & Alameda Drive	904.3	33.17349	-117.26030	1107	F3	Residential	None	Outlet
A015	Lake Boulevard □ Lake Elementary	904.3	33.17269	-117.25671	1107	F3	Residential	Parks	Outlet
A016	36" RCP east of Amigos Court	904.3	33.17575	-117.27534	1107	D3	Residential	None	Outlet
A019	24" RCP in Oak Riparian Park	904.3	33.17628	-117.26932	1107	E3	Residential	Parks	Outlet
A021	36" RCP □ Sky Haven Lane	904.3	33.17418	-117.28068	1107	D3	Residential	None	Outlet
B002	72" RCP on Lagoon View Drive	904.2	33.18073	-117.34243	1106	E2	Commercial	Residential	Outlet
B022	48" RCP in Buena Vista Creek wall Upstream of Thunder Dr. Bridge	904.2	33.18117	-117.28720	1107	C2	Residential	None	Outlet
B023	36" RCP west of 3524 Lake Blvd	904.2	33.18039	-117.29005	1107	B2	Residential	None	Outlet
B024	36" RCP S/W corner College Bridge	904.2	33.18020	-117.29586	1107	B2	Commercial	Residential	Outlet
B026	48" RCP south TCxRoads Plaza	904.2	33.18053	-117.29100	1107	B2	Commercial	None	Outlet
B027	South Coast Material	904.2	33.18133	-117.30074	1107	A2	Residential	Commercial	Outlet
B032	2 - 60" RCPs between Haymar & SR78	904.2	33.18160	-117.32544	1106	G2	Commercial	Parks	Outlet
B033	42" RCP rear of Black Angus □ SR78	904.2	33.18138	-117.33409	1106	F2	Commercial	None	Outlet
B034	North of SR78 behind Burger King □ Jefferson St	904.2	33.18154	-117.33712	1106	F2	Commercial	None	Outlet
B102	South of SR78 north of BV Creek	904.2	33.17934	-117.31077	1106	J2	Residential	None	Outlet
B103	Outlet □ west end of Lagoon View Drive	904.2	33.17975	-117.34615	1106	E2	Commercial	None	Outlet
B104	RCP along South Coast Highway at Eaton St	904.2	33.17062	-117.35825	1106	D4	Residential	Commercial	Manhole
B105	El Camino Golf Course, end of Nicklaus	904.2	33.18603	-117.31846	1106	H2	Parks	Residential	Manhole
B106	N BV Creek, W of College	904.2	33.18065	-117.29643	1107	B2	Residential	Commercial	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
L001	48" RCP North Avenue & Vista Pacific	904.1	33.21298	-117.26702	1087	E5	Industrial	None	Outlet
L002	66" RCP North Avenue & Vista Pacific	904.1	33.21325	-117.26810	1087	E5	Industrial	None	Catch Basin
L003	South of Loma Alta off of North Ave, east of Autumn	904.1	33.21112	-117.27053	1087	E5	Residential	None	Outlet
L009	8'x3' concrete box under College Boulevard	904.1	33.20590	-117.28512	1087	C6	Commercial	Residential	Concrete Channel
L010	Two 36" RCPs north of tracks west of College	904.1	33.20580	-117.28535	1087	C6	Residential	None	Outlet
L013	42" RCP via manhole behind ReMax in shopping center	904.1	33.20559	-117.28692	1087	C6	Commercial	Residential	Manhole
L019	48" RCP south of Corporate Centre Drive	904.1	33.20367	-117.30575	1087	A6	Industrial	None	Outlet
L020	South of Oceanside Blvd, East of Corporate Centre Drive	904.1	33.20350	-117.30091	1087	A6	Industrial	None	Outlet
L024	South of Oceanside Blvd at west end of nursery	904.1	33.20137	-117.32225	1086	H6	Commercial	Open Space	Outlet
L027	NE corner of Oceanside Blvd and Garrison	904.1	33.20192	-117.33708	1086	F6	Residential	Park	Natural Creek
L032	Intersection of Camelot and Industry Wy	904.1	33.19865	-117.34302	1086	E7	Industrial	Residential	Outlet
L036	Manhole adjacent to intersection of Skylark Dr and Downs St	904.1	33.19613	-117.35007	1086	D7	Residential	None	Manhole
L040	Concrete channel in back of Vons	904.1	33.18947	-117.36091	1106	C1	Commercial	Residential	Concrete Channel
L046	Abutment of Coast Hwy bridge over Loma Alta Creek, north side	904.1	33.18037	-117.36630	1106	C2	Commercial	None	Outlet
L054	16" RCP in front of 242 Evergreen	904.1	33.18350	-117.36476	1106	C2	Residential	Park	Outlet
L103	72" RCP west of Corporate Centre Dr	904.1	33.20707	-117.30399	1087	A6	Industrial	None	Catch Basin
L105	MH near 2847 Industry Wy, north of Loma Alta	904.1	33.20066	-117.33981	1086	F7	Residential	Commercial	Manhole
L107	MH on SW corner of Crouch and Oceanside Blvd	904.1	33.19510	-117.35329	1086	D7	Commercial	Industrial	Manhole

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
L108	Loma Alta Tributary west of 5	904.1	33.18250	-117.36512	1106	C2	Residential	None	Concrete Channel
L110	Garrison Creek at Mesa and Parsley	904.1	33.21206	-117.32186	1086	H5	Residential	Park	Outlet
S006	36" CMP under I-5N, off Carmelo	903.1	33.20747	-117.38482	1085	J6	Residential	Open	Outlet
S032	36" RCP on south side of SLR-near Foussat Rd	903.1	33.22098	-117.34728	1086	E4	Residential	Commercial	Outlet
S035	42" RCP on south side of SLR River	903.1	33.23981	-117.32706	1086	G1	Residential	None	Outlet
S043	Southside of SLR River under the College Ave Bridge	903.1	33.25012	-117.29770	1067	A7	Residential	None	Outlet
S044	2 - 8'x8' Concrete Boxes □ Frazee/Oleander	903.1	33.24142	-117.30112	1087	A1	Residential	Commercial	Concrete Channel
S045	Southside of SLR River near Frazee Rd	903.1	33.23822	-117.30830	1086	J1	Residential	None	Outlet
S065	Pilgrim Creek and San Luis Rey River	903.1	33.24099	-117.33596	1086	F1	Residential	Parks	Natural Creek
S072	60" RCP north side SLR, off River Tree at the park	903.1	33.23142	-117.34488	1086	E2	Residential	Parks	Outlet
S075	24" RCP north side SLR, off Benet	903.1	33.22234	-117.35305	1086	D4	Residential	None	Outlet
S077	Hitching Post south of SR76	903.1	33.24904	-117.27079	1067	D7	Residential	Commercial	Concrete Channel
S088	36" RCP □ Mesa & North Santa Fe	903.1	33.24196	-117.27633	1087	D1	Residential	None	Outlet
S102	NE of int. of N. Santa Fe and Hwy 76	903.1	33.24813	-117.27823	1067	D7	Residential	None	Outlet
S103	South of SLR River off of Gooseberry Way	903.1	33.25218	-117.27600	1067	D6	Residential	None	Outlet
S104	24" RCP at NE end of Gooseberry Drive	903.1	33.25371	-117.27390	1067	D6	Residential	None	Outlet
S106	Three - 36" pipes □ NRR & Sleeping Ind.	903.1	33.26023	-117.26414	1067	E5	Agricultural	Residential	Outlet
S107	Under North River Road north of SLR River	903.1	33.26346	-117.24859	1067	G5	Agricultural	None	Earthen Channel
S108	Via Puerta Del Sol □ Big View Road	903.1	33.27085	-117.24501	1067	G4	Agricultural	Residential	Earthen Channel
S109	18" RCP NE of College and SLR River on S side	903.1	33.25338	-117.29511	1067	B6	Residential	None	Outlet
S110	North side of SLR River near Douglas Dr	903.1	33.24116	-117.32228	1086	G1	Residential	None	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
S111	Concrete channel □ Fireside Park E of Fireside	903.1	33.22722	-117.33851	1086	F3	Residential	Commercial	Concrete Channel
S113	Off of Capistrano Drive	903.1	33.21095	-117.38024	1086	A5	Residential	None	Outlet
S115	Open channel adjacent to SR78 near Mission Ave	903.1	33.22192	-117.33538	1086	F4	Commercial	Residential	Concrete Channel
S116	North River and School	903.1	33.25568	-117.29310	1067	B6	Residential	Parks	Concrete Channel
S117	NW of N Santa Fe and Champlain	903.1	33.24018	-117.27193	1087	D1	Residential	None	Outlet

Table 2. 2009 Alternate Dry Weather Monitoring Site Locations.

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
A022	Alternate; Lake and Chauncey/Southridge	904.3	33.17412	-117.26408	1107	E3	Residential	None	Outlet
A023	Alternate; Lake and Evening Canyon	904.3	33.17710	-117.27176	1107	E3	Residential	None	Outlet
A024	Alternate; Lake and Emerald	904.3	33.17709	-117.27254	1107	D3	Residential	None	Outlet
B030	Alternate; 36" RCP - easement south SR78, no. BV	904.2	33.18030	-117.31637	1106	J2	Residential	Commercial	Outlet
B031	Alternate; Between Haymar Dr & SR78 across from Country Club westernmost pipe	904.2	33.18185	-117.32221	1106	H2	Parks	Commercial	Outlet
B108	Alternate; Manhole on golf course; access from park at end of Viscaya; replaced B105	904.2	33.19183	-117.31234	1106	J1	Residential	None	Manhole
L004	Alternate; 3 - 24" RCP on North Avenue east of Autumn	904.1	33.21051	-117.27157	1087	D5	Residential	None	Outlet
L005	Alternate; 2 - 24" and 1 - 36" RCP North Avenue & Autumn	904.1	33.20983	-117.27358	1087	D5	Residential	None	Outlet
L006	Alternate; Intersection of North Ave & Season Rd-south of Loma Alta Creek	904.1	33.20882	-117.27664	1087	D5	Residential	None	Outlet
L007	Alternate; 48" RCP off of North Avenue, west of Seasons	904.1	33.20817	-117.27888	1087	D5	Residential	None	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse 1	LandUse 2	Convey Type
L008	Alternate; 40" RCP - corner of Westridge & Quailridge	904.1	33.21210	-117.27714	1087	D5	Residential	None	Outlet
L016	Alternate; 36" RCP inside M/H on Rancho Del Oro	904.1	33.20200	-117.31077	1086	J6	Residential	None	Manhole
L029	Alternate; 42" RCP inside M/H at 3060 Industry Way	904.1	33.20078	-117.33532	1086	F7	Industrial	None	Manhole
L034	Alternate; South of Oceanside Blvd b/w Waste Mgt and Self-Storage	904.1	33.19709	-117.35051	1086	E7	Residential	Industrial	Outlet
L037	Alternate; South side of Loma Alta Creek; East of end of South Oceanside Blvd	904.1	33.19300	-117.35595	1106	D1	Commercial	Residential	Earthen Channel
L050	Alternate; Casitas Trailer Park north of Loma Alta Creek	904.1	33.18131	-117.36567	1106	C2	Residential	None	Outlet
L052	Alternate; West of I-5 overpass on south side of Loma Alta	904.1	33.18848	-117.36146	1106	C1	Residential	None	Outlet
L102	Alternate; 36" RCP inside M/H on Esperanza	904.1	33.20618	-117.28260	1087	C6	Residential	None	Manhole
L109	Alternate; East of Loma Alta Creek at La Salina	904.1	33.18111	-117.36564	1106	C2	Residential	None	Outlet
L111	Alternate; RDO Drainage Basin	904.1	33.20420	-117.30985	1086	J6	Industrial	Commercial	Outlet
L114	Alternate; Under PCH, north side	904.1	33.18019	-117.36642	1106	C2	Commercial	None	Outlet
L115	Alternate; Manhole at end of Gem View Drive; replaced L102	904.1	33.20526	-117.28240	1087	C6	Residential	None	Manhole
S025	Alternate; North side of SLR River on W. Airport Road	903.1	33.21746	-117.36155	1086	C4	Industrial	None	Outlet
S085	Alternate; SE of Guajome Lake Park on N side of N. Santa Fe	903.1	33.24026	-117.27226	1087	D1	Residential	None	Outlet
S118	Alternate; College and Silver Bluff - large outfall	903.1	33.23951	-117.29121	1087	B1	Residential	None	Outlet
S119	Alternate; Douglas and Golf Course	903.1	33.25528	-117.31996	1066	H6	Residential	Park	Concrete Channel
S120	Alternate; East end of Jeffries Ranch	903.1	33.25174	-117.24901	1067	G6	Residential	None	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse 1	LandUse 2	Convey Type
	Road								
S121	Alternate; College and Frazee	903.1	33.23722	-117.29306	1087	B1	Residential	None	Outlet
S122	Alternate; RCP with flap gate at end of Tishmal Court	903.1	33.22181	-117.35628	1086	D4	Residential	None	Outlet
S123	Alternate; Concrete Channel from Fireside Drainage Basin	903.1	33.22710	-117.34289	1086	E3	Residential	Commercial	Concrete Channel

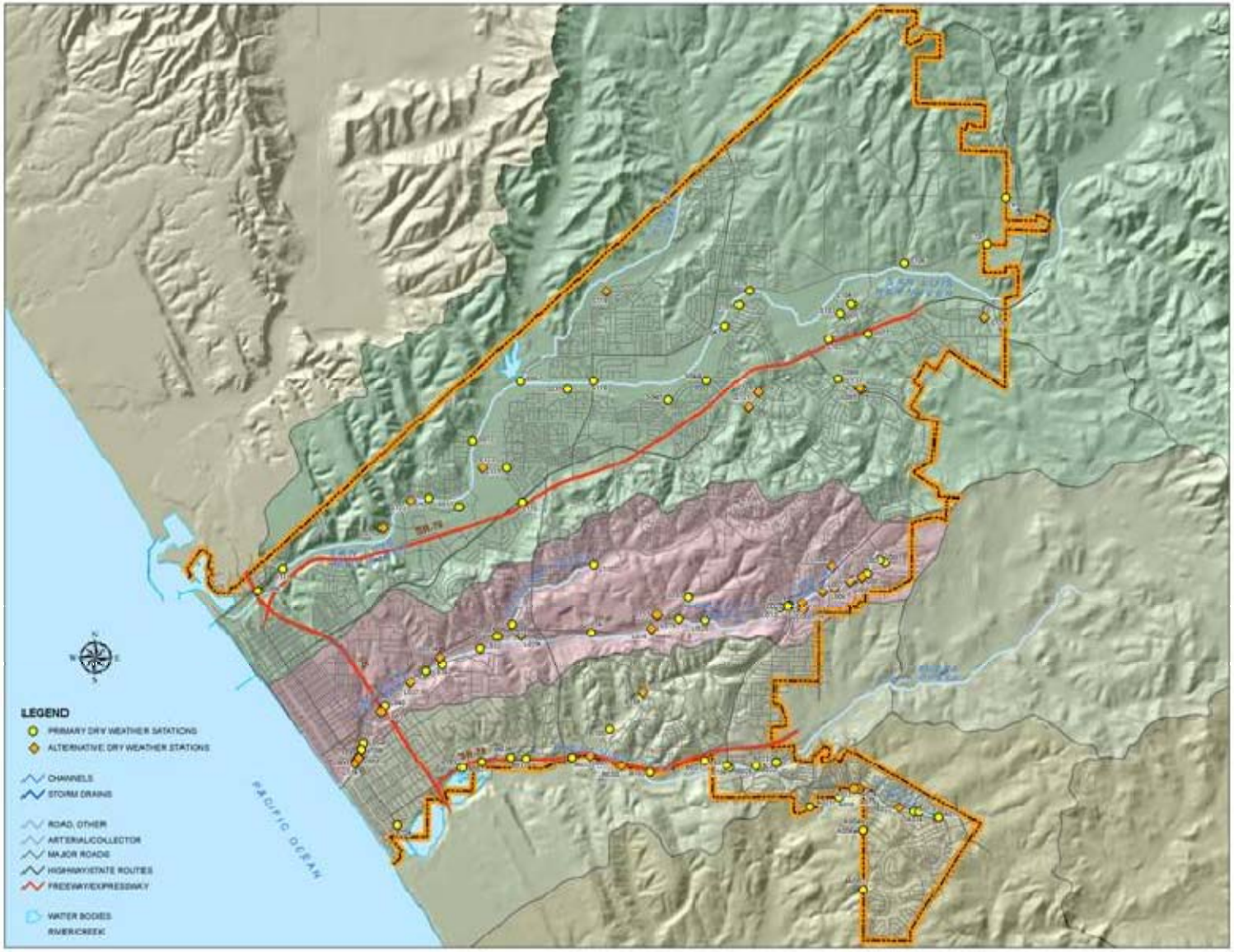

Figure 1. 2009 City of Oceanside Dry Weather Monitoring Stations.

2.2.1 Agua Hedionda Site Descriptions

A002
Site A002 is a 74-inch RCP located at the end of Cannon Road. The outlet drains the residential areas along Cannon Road. Access to the site is from Cannon Road. Field screening and laboratory samples were collected from the flowing water.

A004a
Site A004a is a 48-inch RCP located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The outlet drains the residential areas south and east of the outlet. Access to the site is from Cannon Road to the pump station access road. Field screening and laboratory samples were collected from the flowing water.

A004b
Site A004b is a brow ditch located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The concrete drainage ditch drains the irrigated areas on the slope behind the residences on Spinnaker Ridge. Access to the site is via Cannon Road to the pump station access road. Field screening and laboratory samples were collected from the flowing water.

A013
Site A013 is a 36-inch RCP located at the intersection of Lake Boulevard and Alameda Drive, south of Agua Hedionda Creek. The outlet drains the residential areas south of the site. Access to the site is from Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A014
Site A014 is a 36-inch RCP located east of the intersection of Lake Boulevard and Alameda Drive, north of Agua Hedionda Creek. The outlet drains the school and residential areas north of Lake Boulevard. Access to the site is from Lake Boulevard. Field screening samples were collected from the flowing water.

A015
Site A015 is a 48-inch RCP located south of Lake Boulevard and south of the creek. The outlet drains the residential areas south and east along Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A016
Site A016 is a 36-inch RCP located southeast of the intersection of Amigos Court and Serena Lane, south of Lake Boulevard. The outlet drains the residential areas north across Lake Boulevard. Access to the site is through open space off of Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A019
Site A019 is a 36-RCP located in Oak Riparian Park off of Lake Boulevard, north of Agua Hedionda Creek. The outlet drains the residential and park areas north and south of

Lake Boulevard. Access to the site is from the parking lot off of Lake Boulevard. Field screening samples were collected from the ponded water.

A021
Site A021 is a 36-inch RCP located off of Sky Haven Lane, north of Agua Hedionda Creek. The outlet drains the residential areas to the north of the outfall. Access to the site is from a residential driveway and down a steep embankment in the middle of a densely vegetated area. Field screening samples were collected from the ponded water.

A022
Site A022 is an alternate site. It is a concrete box outlet located at the southwest corner of Lake Boulevard and Southridge Road, north of Agua Hedionda Creek. The outlet drains the residential areas to the north of the outfall. Access to the site is from Southridge Road. Field screening samples were collected from the ponded water.

A023
Site A023 is an alternate site. It is a RCP outlet located on the south side of Lake Boulevard west of Evening Canyon Road. Access to the site is from Lake Boulevard. Field screening samples were collected from the ponded water.

A024
Site A024 is an alternate site. It is a RCP outlet located on the south side of Lake Boulevard east of Emerald Drive. Access to the site is from Lake Boulevard. Field screening samples were collected from the ponded water.

2.2.2 Buena Vista Creek Site Descriptions

B002
Site B002 is a 72-inch RCP located on Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial and residential areas north of SR-78. Access to the site is via Lagoon View Drive. Field screening and laboratory samples were collected from the flowing water.

B022
Site B022 is a 48-inch RCP constructed in the north side of the Buena Vista Creek channel wall, east of the Thunder Drive Bridge. The outlet drains the residential area north of Buena Vista Creek. Access to the site is from within the Buena Vista Creek channel. Field screening and laboratory samples were collected from the flowing water.

B023
Site B023 is a 36-inch RCP located west of 3524 Lake Boulevard south of Buena Vista Creek. The outlet drains the residential areas southeast of Lake Boulevard. Access to the site is from Lake Boulevard. Field screening samples were collected from the ponded water.

B024
Site B024 is a 36-inch RCP located on the southwest corner of College Boulevard Bridge on the south side of Buena Vista Creek. The outlet drains the residential areas east and west of College Boulevard south of the creek. Access to the site is from College Boulevard. Field screening samples were collected from the ponded water.

B026
Site B026 is a 48-inch RCP located south of the Tri-City Crossroads Plaza off of Plaza Drive on the north of Buena Vista Creek. The outlet drains the commercial areas around Plaza Drive. Access to the site is from Tri-City Crossroads Plaza or the open lot to the east of the plaza. Field screening samples were collected from the flowing water.

B027
Site B027 is located off of Haymar Drive at South Coast Material yard north of Buena Vista Creek. The outlet drains the residential and commercial areas north of SR-78. Access to the site is from Haymar Drive. Access to the site is located in South Coast Material yard at the first right hand turn. Field screening samples were collected from the flowing water.

B030
Site B030 is an alternate site. It is a 36-inch RCP located within a sewer easement south of SR-78, west of AAA and north of Buena Vista Creek. The outlet drains the residential areas north of SR-78. Access to the site is from the sewer easement road, however, the area around the site was overgrown and the outlet inaccessible.

B031
Site B031 is an alternate site. It includes four 54-inch RCPs located between Haymar Drive and SR-78, across from Camino Real County Club, and north of Buena Vista Creek. The western-most outfall is sampled. This outlet drains the golf course, commercial, and residential areas north of SR-78. Access to the site is off of Haymar Drive on the sewer easement road. Field screening samples were collected from the ponded water, which was likely a mixture of outfall and creek water.

B032
Site B032 includes two 60-inch RCPs located between Haymar Drive and SR-78, across from Carlsbad Plaza, north of Buena Vista Creek. Both pipes are from the same source. The outlet drains the golf course and commercial areas north of SR-78. Access to the site is from Haymar Drive. Field screening samples were collected from the flowing water.

B033
Site B033 is a 42-inch RCP located north of SR-78 behind the Black Angus restaurant, north of Buena Vista Creek. The outlet drains the commercial areas north of SR-78 into a large catch basin with ponded water. The outfall that was sampled is the largest input to the basin. Access to the site is from SR-78. Field screening samples were collected from the flowing water.

B034
Site B034 is a 36-inch RCP located north of SR-78 behind Burger King at the Jefferson Street exit. The outlet drains the commercial areas north of SR-78. Access to the site is from SR-78. Overgrown vegetation and a steep slope made this site inaccessible.

B102
Site B102 is a 36-inch CMP located within a sewer easement south of SR-78 and north of Buena Vista Creek. The outlet drains the residential and commercial areas north of SR-78. Access to the site is from the sewer easement road. The sewer road was slightly overgrown and the surrounding areas were very overgrown. The storm drain could not be found in the vegetation and the trail previously used was inaccessible.

B103
Site B103 is located at the end of Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial areas north of SR-78. Access to the site is via Lagoon View Drive. Field screening samples were collected from the ponded water.

B104
Site B104 is a manhole on the southeast corner of South Coast Highway and Eaton Street. The outlet drains the commercial and residential areas on the east side of South Coast Highway. This site replaced B001 by moving it upstream approximately 230 yards out of tidal influence. Access to the site is from South Coast Highway. Field screening samples were collected from the ponded water.

B105
Site B105 is a large manhole capped with an open grate on the El Camino Golf Course and the end of Nicklaus Way. The storm drain carries flows from the large residential area to the north east of the site and the golf course. Access to the site is from Nicklaus Way. The sampling team was unable to remove the grate on top of the manhole and the bars were too narrow to sample through. Therefore, this site was inaccessible, but a site further upstream was created on the same MS4 line, B108.`

B106
Site B106 is a 72 inch RCP outlet just north of Buena Vista Creek off of College Boulevard. The storm drain system begins just under a mile upstream and drains a large commercial and residential area north of Buena Vista Creek along College. Access to the site is from Nicklaus Way. Field screening samples were collected from the flowing water.

B108
Site B108 is a manhole on the El Camino Country Club golf course. The storm drain system drains a large residential area north and east of the manhole. Access to the site is from Viscaya Way. Field screening samples were collected from the flowing water.

2.2.3 Loma Alta Creek Site Descriptions

L001
Site L001 is a 48-inch RCP located at the intersection of North Avenue and Vista Pacific Drive, north of Loma Alta Creek. The outlet drains the industrial areas south of North Avenue. Access to the site is via North Avenue. Field screening samples and analytical lab samples were collected from the flowing water.

L002
Site L002 is a 66-inch RCP located northwest of the intersection of North Avenue and Vista Pacific Drive, north of Loma Alta Creek. The outlet drains the industrial areas east of the outlet. Access to the site is from a walking path off of North Avenue. Field screening samples were collected from the flowing water.

L003
Site L003 is a 48-inch RCP located off of North Avenue and east of Autumn Drive, south of Loma Alta Creek. The outlet drains the residential area southeast of North Avenue. Access to the site is via North Avenue. Field screening samples were collected from the flowing water.

L004
Site L004 is an alternate site. It includes three 24" RCPs on North Avenue east of Autumn. The south eastern outfall was sampled. It drains a small residential area. Access to the site is via North Avenue. Field screening samples were collected from the ponded water.

L005
Site L005 is an alternate site. It includes two 24" and one 36" RCP at North Avenue & Autumn. It drains a small residential area. Access to the site is via North Avenue. No dry weather flows were observed.

L006
Site L006 is an alternate site. It is an RCP outfall at the intersection of North Ave. and Season Road south of Loma Alta Creek. It drains a small residential area. Access to the site is via North Avenue. Field screening samples were collected from the ponded water that was likely a mix of outfall and creek water.

L007
Site L007 is an alternate site. It is a 48-inch RCP located north of North Avenue west of Seasons Road, south of Loma Alta Creek. The outlet drains the residential areas on the hillside south of North Avenue. The outlet is partially submerged with ponded water. Access to the site is from North Avenue. Field screening samples were collected from the ponded water.

L008
Site L008 is an alternate site. It is a 40-inch RCP located on the corner of Westridge Drive and Quailridge Drive, north of Loma Alta Creek. The outlet drains the residential areas on the hillside north of Oceanside Boulevard. Access to the site is from Westridge Drive. Field screening samples were collected from the ponded water.

L009
Site L009 is under College Boulevard at the Loma Alta Creek crossing. Three box culverts are present and drain the residential and commercial areas east of College Boulevard. Access to the site is via College Boulevard. Field screening samples and analytical lab samples were collected from the flowing water.

L010
Site L010 are two 36-inch RCP located west of College Boulevard near the railroad tracks. The outlet drains the residential areas on the hillside south of Loma Alta Creek adjacent to College Boulevard. Access to the site is from College Boulevard. Field screening samples were collected from the flowing water.

L013
Site L013 is a manhole located south of the shopping center on the corner of Oceanside Boulevard and College Boulevard, north of Loma Alta Creek. The outlet is no longer accessible due to overgrown vegetation, but the manhole upstream of the outlet is now sampled. Access to the site is from the parking lot behind ReMax. Field screening samples were collected from the flowing water.

L016
Site L016 is an alternate site. It is a 36-inch RCP inside a manhole on Rancho Del Oro. This site has been altered by North County Transit District with the Sprinter Railway and is not accessible.

L019
Site L019 is a 48-inch RCP, located south of the intersection of Corporate Centre Drive and Oceanside Boulevard, north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. Field screening and analytical samples were collected from the ponded water.

L020
Site L020 is a 36-inch RCP located east of the intersection of Corporate Centre and Oceanside Boulevard, north of Loma Alta Creek. The outlet drains the commercial areas located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. Field screening samples were collected from the flowing water.

L024
Site L024 is a 36-inch RCP located south of Oceanside Boulevard at the west end of the Evergreen Nursery. The outlet drains the commercial and open space area located north

of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. No dry weather flows were observed.

L027
Site L027 is located on Garrison Creek upstream of Oceanside Boulevard. The site is sampled where the creek is a natural channel. The channel drains the residential and commercial areas located northeast of Oceanside Boulevard. Access to the site is from Garrison Street. Field screening and laboratory samples were collected from the flowing water.

L029
Site L029 is an alternate site. It is a manhole at 3060 Industry Way. This site is the beginning of the short storm drain line that drains the surrounding commercial and industrial area. Access to the site is from Industry Way. Field screening samples were collected from the ponded water.

L032
Site L032 is a 64-inch RCP located south of the intersection of Camelot Drive and Industry Way, north of Loma Alta Creek. The outlet drains the industrial and commercial area north of Industry Way. Access to the site is through a private business from Industry Way. Dry weather flows were not observed at this site.

L034
Site L034 is an alternate site. It is a 24-inch RCP located between Waste Management and a self storage lot south of Oceanside Boulevard. Field screening samples were collected from the ponded water.

L036
Site L036 is located adjacent to the intersection of Skylark Drive and Downs Street, south of the Loma Alta Creek. The outlet is now in the Sprinter rail right of way, so the manhole upstream of the outlet was visited. The outlet drains the residential area north of Loma Alta Creek. Access to the site is via Skylark Drive. Dry weather flows were not observed at this site.

L037
Site L037 is an alternate site. It is an earthen channel south of Loma Alta Creek. The channel drains the commercial area south of Loma Alta Creek. The site is at the east end of South Oceanside Boulevard. Dry weather flows were not observed at this site.

L040
Site L40 is an open concrete trapezoidal channel north of Loma Alta Creek. The outlet drains the commercial and residential areas located adjacent and to the north of Oceanside Boulevard. Access to the site is through the Vons parking lot off of Oceanside Boulevard. Field screening and laboratory samples were collected from the ponded water in the channel.

L046
Site L046 is a 24-inch RCP constructed in the north wall of the Loma Alta Creek channel just east of the Coast Highway Bridge. This outfall conveys flow from commercial and residential area north of Loma Alta Creek. Access to the site is from Coast Highway. Field screening samples were collected from the ponded water.

L050
Site L050 is a 24-inch RCP constructed in the north wall of the Loma Alta Creek channel. The outlet drains the Casitas Trailer Park located north of the Loma Alta Creek. Access to the site requires going into Loma Alta Creek channel. Dry weather flows were not observed at this site.

L052
Site L052 is a 36-inch RCP located just west of the I-5 overpass on the south side of Loma Alta. The outlet drains Cavalier Trailer Park. Access to the site requires going into Loma Alta Creek channel. Dry weather flows were not observed at this site.

L054
Site L054 is a 24-inch RCP constructed in the south wall of Loma Alta Creek. The outlet is located southwest of the intersection of Hillside and Evergreen Lane. Site L054 drains the trailer park, Marshall Park, and the residential area to the south. Access to the site requires entering the Loma Alta Creek channel. Field screening and laboratory samples were collected from the flowing water.

L102
Site L102 is a 36-inch RCP inside a manhole on Esperanza Way. The site drains a residential area on the south side of Loma Alta. The site was flowing, but it was not enough to sample. A new site upstream, L115, was created to capture the flows in this storm drain system.

L103
Site L103 is a 72-inch RCP located west of Corporate Centre, north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Boulevard off of Corporate Centre. Access to the site is from Corporate Centre. Field screening samples were collected from the flowing water.

L105
Site L105 is a manhole located on Industry Way, north of Loma Alta Creek. The outlet within the manhole drains the residential and commercial area located north of Industry Way. Access to the site is from Industry Way. Dry weather flows were not observed at this site.

L107
Site L107 has historically been a 36-inch RCP outlet located on the north side of Loma Alta Creek near the intersection of Crouch Street and Oceanside Boulevard. Due to Sprinter rail construction and other changes to the channel walls, the site was moved

upstream to a manhole at the corner of Crouch and Oceanside Boulevard. The storm system drains the commercial and residential areas located north of Oceanside Boulevard. Dry weather flows were not observed at this site.

L108
Site L108 is a concrete channel that flows into Loma Alta Creek west of Interstate 5 from the north. This site replaced L050 because it is in the same general area, but has a larger watershed and has continuous flow. Access to the site is from Loma Alta Creek through Cavalier Trailer Park. Field screening samples were collected from the flowing water.

L109
Site L109 is a 24-inch RCP constructed in the south wall of the Loma Alta Creek channel. The outlet drains the trailer park and the residential area south of Loma Alta surrounding La Salina Street. Access to the site requires going into Loma Alta Creek channel. Dry weather flows were not observed at this site.

L110
Site L110 is an outlet from Garrison Creek at Mesa Boulevard and Parsley. Access to the site is from Mesa Boulevard through a locked fence at an open field. Field screening samples were collected from the ponded water.

L111
Site L111 was added as an alternate site during the 2008 Dry Weather Monitoring season. This area is undergoing commercial and light industrial growth and was added to the alternate list to capture these land uses. The outlet is northeast of the intersection of Rancho del Oro and Oceanside Boulevard. Access is from Seagate Drive. Field screening samples were collected from the ponded water.

L114
Site L114 was added as an alternate site during the 2008 Dry Weather Monitoring season. This outfall is located under the Pacific Coast Highway Bridge on the northwest side. The drainage area has not been identified, but it is likely from the areas north along the Coast Highway. Access to the site requires going into Loma Alta Creek channel. This site was visited towards the end of the summer when the UV Treatment System at the mouth of Loma Alta Creek was being tested. Loma Alta Slough water levels were raised with the operation of the UV System and this outfall became submerged and inaccessible.

L115
Site L115 was added as an alternate site during the 2009 Dry Weather Monitoring season. The site is a pipe inside a manhole at the end of Gem View Drive and replaced site L102. The land use in the drainage area is residential. The eastern outfall in the box was sampled. Field screening samples were collected from the flowing water.

2.2.4 San Luis Rey Site Descriptions

S006

Site S006 is a 36-inch corrugated metal pipe (CMP) located under Interstate 5. Access to Site S006 is from Carmelo Drive. Site S006 conveys flows from the residential area south of Camp Pendleton and east of Interstate 5 to the north side of the trail under I-5. Field screening samples and analytical lab samples were collected from the ponded water.

S025

Site S025 is an alternate site. It is located on the north side of the San Luis Rey River on West Airport Road across from a junkyard. S025 is a 24-inch RCP in a headwall that drains the junkyard located just north of the outlet. No dry weather flows were observed.

S032

Site S032 is a 36-inch RCP with a flap gate installed and is located on the south side of the San Luis Rey River. The S032 outlet conveys flows from the residential, commercial, and open space areas located on the south side of SR-76. Access to the site is from Foussat Road to the access road that runs parallel to the River on the south side. Field screening samples were collected from the ponded water.

S035

Site S035 is located on the south side of the San Luis Rey River. Site S035 is a 42-inch RCP with a flap gate installed. Access to the site is from Douglas Drive to the access road south of the San Luis Rey River. Dry weather flows were not observed at this site.

S043

Site S043 is a 30-inch RCP with a flap gate installed and is located on the south side of the San Luis Rey River under the College Boulevard Bridge. The site collects dry weather flows from the residential area immediately south of the outlet. Access to the site is via College Boulevard to the access road on the south side of the River. No dry weather flows were observed.

S044

Site S044 is an open channel located on the south side of the San Luis Rey River. It conveys flows from residential and commercial areas. Access to the site is at northeast corner of Frazee Road and Oleander Drive. Field screening and analytical laboratory samples were collected.

S045

Site S045 is at the outfall of three 4-foot by 6-foot boxes on the south side of the San Luis Rey River. S045 conveys flows from the residential areas south of Frazee Road to the River. Access to the site is via Frazee Road. Field screening samples were collected from the flowing water.

S065
Site S065 is located within the open channel of Pilgrim Creek prior to confluence with the San Luis Rey River. Access to the site is from the San Luis Rey Wastewater Treatment Plant via North River Road to the access road located on the north side of San Luis Rey River. Site S065 conveys dry weather flows from a municipal golf course, residential, agricultural, parks, and open areas located to the north to the San Luis Rey River. Dry weather flows were not observed.

S072
Site S072 is a 60-inch RCP with a flap gate installed and is located on the north side of the San Luis Rey River. Access to the site is from River Tree Drive at Marlado Park. Site S072 conveys dry weather flows to the River from the park and residential community located north of the outlet. Dry weather flows were not observed.

S075
Site S075 is a 24-inch RCP in a headwall located on the north side of the San Luis Rey River. Access to the site is from the access road that runs parallel to the River between Benet and Foussat Roads. Site S075 conveys dry weather flows from the new residential developments north of the San Luis Rey River. Field screening samples from the flowing water were collected.

S077
Site S077 is an open channel south of SR-76 and upstream of Guajome Lake. Access to the site is from Hitching Post Drive. The runoff consists primarily of residential and commercial flows from east of the outlet. Samples are collected where the channel is concrete. Downstream of the sampling point, the channel is a natural swale that leads to Guajome Regional Park. Field screening samples were collected from the flowing water.

S085
Site S085 is an alternate site. It includes two 24-inch RCPs located at North Santa Fe Avenue and Champlain Street. The outlet drains into a concrete channel south of the San Luis Rey River. S085 conveys the dry weather flows from the residential area to the south of North Santa Fe Avenue. Access to the site is from North Santa Fe Avenue. Field screening samples were collected from the ponded water.

S088
Site S088 is a 36-inch RCP located at the intersection of Mesa Drive and North Santa Fe Avenue. The site is located west of the Guajome Regional Park and south of the San Luis Rey River. Site S088 conveys dry weather flows from the residential area to the west into Guajome Regional Park. Access to the site is via North Santa Fe Avenue. Field screening samples were collected of the ponded water.

S102
Site S102 is located north of SR-76 between North Santa Fe Road and Guajome Lake Road, south of the San Luis Rey River. It is a 24-inch RCP that drains a residential area immediately east. Access to the site is from SR-76 and requires entering private

property; therefore, access is limited. Field screening samples were collected of the ponded water.

S103
Site S103 is located south of the San Luis Rey River. Access to the site is from the park east of 5396 Gooseberry Way. The outlet drains the residential and park areas in the neighborhood to the south. Field screening samples were collected of the ponded water.

S104
Site S104 in a 24-inch RCP located south of the San Luis Rey River. Access to the site is from the sewer easement and tomato fields northwest of the site. The outlet drains the residential area south of the site. Field screening samples were collected of the ponded water.

S106
Site S106 includes four 36-inch plastic pipes at the intersection of North River Road and Sleeping Indian Road on the north side of the San Luis Rey River. The outlet drains the agricultural and residential area immediately north of the site. Access to the site is from North River Road. Field screening samples and analytical lab samples were collected from the flowing water.

S107
Site S107 is a natural channel that crosses under North River Road on the north side of the San Luis Rey River. The channel drains the agricultural area immediately north of the site. Access to the site is from North River Road. Dry weather flows were not observed.

S108
Site S108 is a natural channel that crosses under Via Puerta del Sol on the north side of the San Luis Rey River. The channel drains residential areas and agricultural areas in the immediate vicinity. Access to the site is at the intersection of Via Puerta del Sol and Big View Road. Dry weather flows were not observed.

S109
Site S109 is an 18-inch RCP located on the south side of the San Luis Rey River. The site conveys the runoff from the residential area immediately south of the outlet. Access to the site is from the access road to the east of College Boulevard. Dry weather flows were not observed.

S110
Site S110 is located on the north side of the San Luis Rey River. S110 is a 30-inch RCP with a flap gate installed. Access to Site 110 is from Rainier Way east of Douglas Drive. Field screening samples were collected from the flowing water.

S111
Site S111 is a concrete channel adjacent to Fireside Park, east of San Luis Rey River. The channel drains residential and commercial areas east of the site. Access to the site is from Fireside Street. Field screening samples were taken from the ponded water.

S113
Site S113 is located off of Capistrano Drive across from Capistrano Park. The site conveys flows from Camp Pendleton and from Capistrano Park south to the San Luis Rey River. The cliff appears to have eroded into the river and access to the outfall was not possible. The next manhole up was visited, but the site was dry and no samples were collected.

S115
Site S115 is an open concrete channel between Mission Avenue and SR-76 west of El Camino Real. The site conveys flows from the commercial area to the east along Mission Avenue towards Douglas Drive. Access to the site is from Mission Avenue. Field screening samples were collected from the flowing water.

S116
Site S116 is located off of North River Road across from Del Rio Elementary School. The outfall conveys flows from the school and the residential area north of North River Road. It consists of two six-foot by six-foot boxes. Access to the site is from North River Road. This site replaced the historically dry S052 sampling site. Dry weather flows were not observed.

S117
Site S117 is a 48-inch RCP located northwest of North Sante Fe Road and Champlain Road. The outfall conveys flows from the residential areas east and south along North Santa Fe Road. Access to the site is from North Santa Fe Road. Field screening samples were collected from the flowing water.

S118
Site S118 is an alternate site. It is located at the southwest corner of College and Silver Bluff. It consists of two pipes originating from the same source. The largest pipe, a 72-inch RCP, was sampled, which conveys flows from the residential area to the north and east along Silver Bluff and Mosaic. This site was added to the Dry Weather Monitoring Program as a replacement for S085. Access to the site is from Silver Bluff. Field screening samples were collected from the ponded water.

S119
Site S119 is an alternate site. It is an open concrete channel located off of Douglas Drive at the municipal golf course. The site conveys flows from the residential areas south and east, as well as the golf course. Access to the site is from Douglas Drive. Dry weather flows were not observed.

S120
Site S120 is an alternate site. It is a 36-inch RCP outfall at the east end of Jeffries Ranch Road. It conveys flows from the residential area west of the outfall. Access to the site is from Jeffries Ranch Road. Dry weather flows were not observed.

S121
Site S121 is an alternate site. It consists of two partially submerged 48-inch RCPs at the northwest intersection of College Boulevard and Frazee Road. It conveys flows from the residential area southeast of the intersection. Access to the site is from Frazee Road through a locked gate. Field screening samples were collected from the ponded water.

S122
Site S122 is an alternate site. It is a RCP with a flap gate at the end of Tishmal Court. It conveys flows from the residential area north of the river. Access to the site is from the sewer easement path and pedestrian path on the north side of the river. Field screening and analytical screening samples were collected from the flowing water.

S123
Site S123 is an alternate site. It is a concrete channel from the Fireside Road drainage basin. It conveys flows from the residential area to the east and the commercial area to the south. Access to the site is from the easement/foot path on the southeast side of the river. Dry weather flows were not observed.

3 METHODS

Dry weather monitoring is conducted at least once at each primary station where flowing or ponded water is observed during the dry season (May 1 – September 30). If a primary site is visited and no flowing or ponded water is present, this information is documented on the field sheet (or electronically in the field tablet) and a station from the alternate list is then visited. Dry weather monitoring is only conducted when there has been at least 72 hours of dry weather prior to the time of the sampling. Grab samples are collected for laboratory analysis at a minimum of 25% of the stations where water is present.

The following describes the City of Oceanside's Dry Weather Program components including field site visits, laboratory analysis of water samples, and IC/ID investigations. The general site description and atmospheric conditions were recorded for each site visit whether or not runoff was observed. An example of the hard copy data sheet is provided in Appendix B. However, the 2008 dry weather season was the first program to begin collecting field data electronically on Panasonic Toughbooks using a database specifically created based on the field data sheet and the data sharing format approved by the Dry Weather Monitoring Workgroup. In 2009, the same Access-based database was used for electronic data entry in the field using a Dell Rugged Laptop. A photograph was also taken at each site (Appendix A). Monitoring was not conducted during any rain event or within 72 hours of the end of any rain event greater than one tenth of an inch.

3.1 Qualitative Observations

Qualitative field observations were made during each site visit where ponded or flowing water was observed and sampled. These observations were intended to provide a general assessment of the runoff and include parameters such as odor, water clarity, and the presence of floatables, visible deposits, stains and aquatic life. These descriptions were recorded on the field data sheet or electronically in the field tablet.

3.2 Flow Measurement

Flow measurements can be used to estimate pollutant mass loading, prioritize storm drains for future investigations, or to identify significant changes in flow that may be indicative of an illegal release upstream. Since all of the sample locations lack a permanent flow measurement installation, several field methods were employed to estimate flow rates for different flow types such as an open channel, outfall, or drainage pipe. These methods have been adapted from the County of San Diego's Dry Weather Monitoring Program Quality Assurance Project Plan[1].

Velocity-area method - This method requires the physical measurement of the velocity (V), depth (D), and width (W) of flowing water. Discharge is determined as follows:

$$\text{Discharge} = V \times D \times W \qquad \text{Eq. (1)}$$

[1] County of San Diego. 2004. Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program. April 2004.

Where the water depth was adequate, a Global Flow Probe was used to get the average velocity in feet per second. Stream depth and width were recorded on the field data sheet and the discharge in cubic feet per second (cfs) was calculated using Eq. (1).

Where the flow was too slow or the water too shallow to measure the velocity using the probe, the velocity was estimated by timing the travel of a piece of floating debris (e.g., a leaf). The velocity was calculated by dividing the travel distance (feet) by the recorded travel time (seconds).

Fill a bottle method - If the flowing water was able to be captured, such as from a raised pipe, the fill-a-bottle method was used. The time it took to fill a known volume was recorded. Discharge was calculated by dividing the volume by the time and converting that value into cubic feet per second.

3.3 Field Screening

Water physicochemical properties (e.g., pH, conductivity, turbidity, dissolved oxygen (DO), and temperature) are important indicators of water quality. The Hydrolab Quanta 5-parameter probe was used to measure:

- pH.
- Conductivity.
- Turbidity.
- Dissolved oxygen.
- Water temperature.

If the water was deep enough, the probe was placed horizontally in the water column. If water was shallow, a syringe was used to collect water and transfer into a sampling cup and then the properties were measured. The Hydrolab Quanta has a built-in circulator to more accurately assess *in situ* measurements. The Quanta was calibrated daily prior to use in the field using the standard calibration solutions or secondary standards as well as a three-point pH calibration.

At each site with ponded or flowing water, water samples were collected and analyzed in the field for:

- Ammonia (NH_3) using CHEMetrics K-1403.
- Nitrate as N (NO_3-N) using CHEMetrics K-6923 or K-6933.
- Orthophosphate (PO_4) using CHEMetrics K-8513.
- MBAS (Surfactants) using CHEMetrics K-9400.

Ammonia, nitrate, orthophosphate, and MBAS were measured in the field using CHEMetrics field test kits. Each test kit contained a sample mixing container, necessary reagent-filled ampoules, the appropriate color standards for colorimetric analysis, filters for photometric analysis, and instructions for each kit. The test kits for ammonia, nitrate, and orthophosphate used the V-2000 photometer. The test kit for MBAS uses a visual color comparator. The procedures instructed by CHEMetrics were followed.

There were two major method changes for the 2009 Dry Weather Monitoring season. The City upgraded to the V-2000 photometer and a new method of analysis was used for ammonia. The V-2000 photometer was used with the same analysis methods for nitrate and orthophosphate from pervious years, but CHEMetrics changed the upper and lower detection limits. The ammonia test kit used for the 2009 Dry Weather Monitoring season did change methods and added the use of the photometer. Historically, the City used a CHEMetrics test kit that used the Direct Nesslerization Method. This method utilizes mercury in the analysis and therefore creates hazardous waste as a by-product of the test kit. During the 2009 monitoring season, the City switched to the CHEMetrics test kit that uses the Salicylate Method which does not create hazardous waste, and was later discovered to be more accurate for surface water samples.

3.4 Laboratory Water Quality Analyses

Laboratory samples were collected at a minimum of 25% of the sites with flowing or ponded water. Samples were submitted to the City of Oceanside San Luis Rey Wastewater Treatment Plant Laboratory, EnviroMatrix Analytical, Inc., or Weston Solutions for chemistry and microbiology analysis. Below is the complete list of laboratory analytes:

- Oil and Grease
- Total Hardness
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Enterococcus Bacteria
- Total Coliform Bacteria
- Fecal Coliform Bacteria
- Chlorpyrifos
- Diazinon

All samples were analyzed using Standard Methods or EPA Methods by the laboratories.

3.5 IC/ID Investigations

Each station is visited at least once per dry weather season, if accessible and safe. When field measurements and/or laboratory analysis showed an exceedance of established action levels, the site was revisited within two business days to confirm the initial results. When follow-up sampling confirms continued exceedance of action levels, the City conducted further investigations to identify the source of the exceedance. Upstream investigations were not conducted when exceedances were not noted during the follow-up visit, as without a high constituent level to track, the investigation is unlikely to identify any sources.

The action levels used for the 2009 dry weather monitoring period are presented in Table 3. If the initial results were confirmed and an exceedance continued, an upstream investigation was initiated. In addition, any potential IC/IDs found visually or with any

other evidence of gross contamination, an IC/ID investigation was pursued immediately (e.g., substantial petroleum sheen, excessive turbidity, extremely high ammonia concentration, evidence of sewage release, etc.).

Table 3. 2009 Dry Weather Monitoring Action Levels

Analyte	Action Level
Field Measurements	
pH	6.5-9.0 pH units
Conductivity	N/A
Turbidity	N/A
Dissolved Oxygen	Not a required analyte
Temperature	N/A
Ammonia Nitrogen	1.0 mg/L
Nitrate as N	10.0 mg/L
Orthophosphate	2.0 mg/L
Surfactants (MBAS)	1.0 mg/L
Laboratory Measurements	
Oil and Grease	15 mg/L
Total Hardness	N/A
Cadmium (Dissolved)	California Toxics Rule (CTR)
Copper (Dissolved)	California Toxics Rule (CTR)
Lead (Dissolved)	California Toxics Rule (CTR)
Zinc (Dissolved)	California Toxics Rule (CTR)
Total Coliform Bacteria	50,000 MPN/100mL
Fecal Coliform Bacteria	20,000 MPN/100mL
Enterococcus	10,000 MPN/100mL
Chlorpyrifos	0.5 µg/L
Diazinon	0.5 µg/L

In general, IC/ID investigations include identifying pollution sources and correcting or eliminating them. Various methods can be used for source identification, for example, observation by following flows or discharges upstream, field measurements or laboratory analysis of water samples. The correction and elimination of identified sources may be achieved by outreach/education, best management practices (BMPs) implementation, and enforcement when necessary.

3.6 Trash Assessment

Section II.B.3.C (7) of the 2007 Municipal Permit requires Copermittees to assess the presence of trash in receiving water and urban runoff at each dry weather field screening or analytical monitoring station. A work plan for trash assessment was finalized in August of 2007 which outlined procedures and created field assessment forms to be used by the Copermittees[2]. The field form is included in Appendix B.

[2] Weston Solutions and Brown and Caldwell. 2007. Final Monitoring Workplan for the Assessment of Trash in San Diego County Watersheds. Prepared for the County of San Diego. August 30, 2007.

The assessment is primarily a qualitative assessment. The assessment includes five categories with a narrative description and a range of number of pieces. The five categories are:

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human and/or aquatic health is assessed at each site. The definitions for these threats were amended to clarify and streamline the designations in this reporting year. The following definitions are also found on the 2009 Trash Assessment Form:

- *Potential Threat to Human Health* – Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
- *Potential Threat to Aquatic Health* – Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic item such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

If a site falls into the poor or submarginal category, then the type of trash is denoted and ranked and the potential routes and sources are identified. Options for types, routes and sources are listed below:

Types of Trash	*Potential Routes*	*Potential Sources*
Automotive	Dumping	Household
Biohazard Waste	Littering	Construction
Business Related	Upstream	Commercial
Cigarette Butts	Unable to Determine	Industrial
Construction		School
Fabric/Clothing		Transient
Food Packaging		Unable to Determine
Food Waste		
Household		
Shopping Carts		
Toxic		
Yard Waste		

4 RESULTS

The dry weather monitoring program was conducted between May 1, 2009 and September 30, 2009. A site visit at all 67 of the primary sites was attempted, however three of those sites were inaccessible or deemed unsafe. An additional fourteen primary sites were dry. A total of 97 sites were visited, 67 were ponded or flowing and field screening was conducted, and of those, 19 were chosen for additional laboratory analysis (Table 4).

The results of the qualitative observations, flow measurements, field measurements and laboratory measurements are presented in the following sections.

Table 4. 2009 Summary of Dry Weather Monitoring Sites Visited.

Watershed	No. Primary Sites Listed	No. Primary Sites Inaccessible	No. Primary Sites Dry	No. Alternate Sites Visited	No. Sites Sampled for Lab Analysis	Total No. Sites Visited
Agua Hedionda	9	0	0	3	6	12
Buena Vista	14	3	0	3	3	17
Loma Alta	20	0	5	16	6	36
San Luis Rey	24	0	9	8	4	32
TOTAL	67	3	14	30	19	**97**

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the field screening program. Weather conditions were recorded at each site and any evidence of dry weather flows were documented. Visual observations of the sample water and the vicinity of the sampling location such as odor, color, clarity, floatable materials, vegetation and biological organisms were also recorded. Observations from the 90 accessible sites are summarized below and presented in Table 5.

Light Conditions

Seventy three of the 90 accessible sites had sunny conditions during site visits. Five sites had overcast conditions, and 12 sites had partly cloudy conditions.

Odor

Forty seven of the sites with water had no distinguishable odor associated with the storm drain outlets. Ten sites had a musty odor, two sites smelled of rotten eggs, one site had a sewage odor, one site had a chemical odor, and six sites had an odor designated as other.

Color

Forty seven of the sites with water had no observed color. Fifteen sites had a yellow color and three sites had a brown color. One site had a green color. Another site had a grey color.

Table 5. 2009 Visual Observation Results.

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
Agua Hedionda									
A002	7/27/2009	Sunny	None	None	Clear	None	None	None	Algae
A004a	7/27/2009	Sunny	None	None	Clear	None	Fine Particulate	None	Insects
A004b	7/27/2009	Sunny	Other - fish like	Yellow	Clear	Bubbles/Foam	None	None	None
A013	7/29/2009	Sunny	Other - metallic	None	Clear	Sheen, orange foam	orange	Normal	Algae
A014	8/24/2009	Partly Cloudy	None	None	Clear	None	None	Normal	None
A015	7/29/2009	Sunny	Other - forest	Gray	Slightly Cloudy	Bubbles/Foam	Fine Particulate	None	None
A016	7/29/2009	Partly Cloudy	None	Yellow	Clear	None	None	Excessive	Algae
A019	8/24/2009	Sunny	None	None	Clear	Trash, leaf debris	None	Normal	None
A021	8/24/2009	Partly Cloudy	Musty	Yellow	Clear	None	None	Excessive	Snails
A022	9/9/2009	Sunny	None	None	Clear	Trash	Fine Particulate	Normal	Algae
A023	9/9/2009	Sunny	None	None	Clear	Trash, duckweed	None	Excessive	None
A024	9/9/2009	Sunny	None	Yellow	Clear	Trash, Algae	None	Normal	Algae
Buena Vista									
B002	6/8/2009	Sunny	None	None	Clear	Sheen, Bubbles, Foam, Algae	None	Normal	Insects, Algae
B022	7/27/2009	Sunny	None	Yellow	Clear	Leaf debris	None	None	Algae
B023	8/3/2009	Sunny	None	None	Clear	Trash, Sheen ,leaf debris	None	Normal	None
B024	8/4/2009	Sunny	Musty	Brown	Clear	Trash, Sheen	None	Normal	Algae, Snails
B026	8/4/2009	Sunny	None	None	Clear	Trash, Sheen	None	Normal	None
B027	8/24/2009	Sunny	Musty	None	Clear	leaves	None	Normal	tadpole/frog
B031	8/24/2009	Sunny	None	None	Clear	None	Coarse Particulate	Normal	Algae
B032	8/24/2009	Sunny	None	None	Clear	None	Fine Particulate	None	Algae
B033	8/31/2009	Sunny	None	Yellow	Clear	None	Fine Particulate	None	Algae
B103	6/17/2009	Partly Cloudy	None	None	Clear	Trash, Sheen	None	Excessive	Algae
B104	7/15/2009	Sunny	None	Yellow	Clear	None	None	None	None
B106	8/4/2009	Sunny	None	None	Clear	None	None	None	Insects
B108	8/31/2009	Sunny	None	None	Clear	Bubbles/Foam	None	None	None
Loma Alta									
L001	6/23/2009	Sunny	None	None	Clear	Trash, Leaf litter	Fine Particulate	Normal	Algae, Snails, Crawdad
L002	7/20/2009	Sunny	None	None	Clear	None, Trash	None	Excessive	Insects, Algae, Snails

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
L003	5/26/2009	Sunny	None	None	Clear	Trash	Coarse Particulate, Leaf Debris	Normal	Snails
L004	9/2/2009	Sunny	Musty	Brown	Opaque	Sheen	Fine Particulate	Excessive	None
L005	9/2/2009	Sunny	NS	NS	NS	None	None	None	None
L006	8/31/2009	Sunny	None	None	Clear	Trash	None	Normal	None
L007	8/3/2009	Sunny	None	None	Clear	Sheen, Algae, duckweed	None	Excessive	Algae
L008	8/3/2009	Sunny	None	None	Clear	Trash, Algae	None	Normal	Algae
L009	6/8/2009	Sunny	None	None	Clear	Sheen, Bubbles, Foam, ,Algae	Fine Particulate	Normal	Algae, crawfish
L010	7/20/2009	Sunny	None	None	Clear	None	Coarse Particulate, Fine Particulate	Normal	Algae, Snails
L013	7/20/2009	Sunny	Chemical	Yellow	Slightly Cloudy	None	None	None	None
L019	6/23/2009	Sunny	Musty	Other green	Clear	None	None	Normal	Algae, Fish, crawdad
L020	7/21/2009	Sunny	None	None	Clear	None	None	None	Algae, Snails
L024	7/21/2009	Sunny	NS	NS	NS	None	Coarse Particulate	Excessive	None
L027	6/8/2009	Sunny	None	None	Clear	Trash, yard waste	None	Normal	Algae
L029	8/24/2009	Sunny	Rotten Eggs	Yellow	Clear	Trash, leafs	None	None	None
L032	7/20/2009	Sunny	NS	NS	NS	None	None	Normal	None
L034	8/3/2009	Sunny	Musty	None	Clear	Trash	Fine Particulate	None	Snails
L036	7/20/2009	Sunny	NS	NS	NS	None	Coarse Particulate	None	None
L037	7/21/2009	Sunny	NS	NS	NS	None	None	Normal	None
L040	7/15/2009	Sunny	Musty	Yellow	Clear	Trash, duckweed	Coarse Particulate, Fine Particulate	Normal	Algae, Snails, duckweed
L046	7/15/2009	Sunny	None	None	Clear	Trash, Algae	None	None	Insects, Algae, Snails
L050	7/15/2009	Sunny	NS	NS	NS	None	None	None	None
L052	8/24/2009	Sunny	NS	NS	NS	None	None	None	None
L054	6/8/2009	Sunny	None	None	Clear	None	Coarse Particulate	None	Algae, Snails
L103	8/10/2009	Sunny	Musty	Yellow	Clear	Trash, Sheen, Algae	Fine Particulate	None	Algae, Snails, Hyalella
L105	7/20/2009	Sunny	NS	NS	NS	Trash	Coarse Particulate, Fine Particulate, Oily Deposits	None	None
L107	7/21/2009	Sunny	NS	NS	NS	None	Coarse Particulate	None	None

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
L108	7/15/2009	Sunny	None	None	Clear	Trash, Algae	None	None	Insects, Algae, Snails
L109	7/15/2009	Sunny	NS	NS	NS	None	None	None	None
L110	7/20/2009	Sunny	None	None	Clear	Trash, duckweed	Oily Deposits	Excessive	None
L111	8/3/2009	Sunny	Other fish like	None	Clear	Sheen, Algae	Fine Particulate	Excessive	Algae
L115	9/2/2009	Sunny	None	None	Clear	None	None	None	None
San Luis Rey									
S006	6/22/2009	Partly Cloudy	None	Yellow	Clear	Trash	None	Normal	Insects
S025	9/9/2009	Sunny	NS	NS	NS	None	None	Normal	None
S032	6/2/2009	Sunny	None	Brown	Slightly Cloudy	Trash, Sheen	None	Normal	Insects
S035	7/1/2009	Sunny	NS	NS	NS	None	None	Normal	None
S043	6/4/2009	Partly Cloudy	NS	NS	NS	None	None	None	None
S044	7/15/2009	Overcast	None	None	Clear	Trash, Algae	Fine Particulate	Normal	Algae, Snails
S045	7/1/2009	Sunny	None	None	Clear	Trash, Sheen, Bubbles, Foam, ,Algae	None	Normal	Insects Algae, Snails, duckweed, frogs, tadpoles
S065	6/22/2009	Sunny	NS	NS	NS	None	None	Excessive	None
S072	7/1/2009	Sunny	NS	NS	NS	None	None	Normal	None
S075	5/27/2009	Overcast	None	Yellow	Clear	Trash	Fine Particulate, Grass clippings	None	Algae, Snails
S077	6/3/2009	Partly Cloudy	None	None	Clear	Algae, duckweed	Fine Particulate	Normal	Insects, Algae, Snails, duckweed
S085	6/2/2009	Sunny	None	None	Clear	Trash	Leaf litter	None	Insects, Algae, Snails
S088	6/3/2009	Sunny	None	None	Clear	Trash, Duckweed	None	Normal	None
S102	6/4/2009	Partly Cloudy	None	None	Clear	Trash	None	Normal	Snails
S103	6/4/2009	Partly Cloudy	Rotten Eggs	None	Clear	Trash, Sheen	Fine Particulate	Excessive	Snails, worms
S104	8/31/2009	Sunny	Other	Yellow	Clear	None	None	Normal	Insects, Snails
S106	6/22/2009	Overcast	Other	Yellow	Clear	Algae	Coarse Particulate	Normal	Algae, Snails, Fish
S107	5/27/2009	Overcast	NS	NS	NS	None	None	Normal	None
S108	6/22/2009	Overcast	NS	NS	NS	None	Coarse Particulate	Normal	None
S109	9/9/2009	Sunny	NS	NS	NS	None	Coarse Particulate	None	None
S110	6/4/2009	Partly Cloudy	Sewage	None	Clear	Trash, Leaf litter	None	None	None
S111	7/1/2009	Sunny	None	None	Clear	Trash, Algae	None	Limited	Algae, Snails
S113	6/2/2009	Sunny	NS	NS	NS	None	None	None	None

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
S115	6/2/2009	Sunny	None	None	Clear	None	Fine Particulate	Normal	Insects, Algae, Snails
S116	5/27/2009	Partly Cloudy	NS	NS	NS	None	None	Normal	None
S117	6/2/2009	Sunny	None	None	Clear	Trash, Algae	None	Excessive	Algae, Snails
S118	7/1/2009	Sunny	Musty	None	Clear	Trash, Algae, leaf	Coarse Particulate, Fine Particulate	Normal	Insects, Algae, Snails
S119	5/20/2009	Sunny	NS	NS	NS	Trash	Fine Particulate	None	None
S120	6/22/2009	Partly Cloudy	NS	NS	NS	None	None	Normal	None
S121	7/1/2009	Sunny	None	None	Clear	Trash, duckweed	None	Normal	Fish
S122	7/15/2009	Sunny	Musty	None	Clear	Trash, Algae	None	None	Algae, Snails, Fish
S123	7/1/2009	Sunny	NS	NS	NS	None	None	Normal	None

NS – Not Sampled (dry)
NA – Not Accessible

Clarity
Sixty three of the sites with water were clear with negligible suspended particles observed. Three of the sites sampled were slightly cloudy and one of the samples was opaque.

Floatable Materials
The categories of floatable materials were trash, bubbles/foam, sheen, fecal matter, and other and each site had the potential to have multiple categories of floatable materials listed. Thirty nine sites were observed to have no floatable materials. Thirty eight sites were observed to have trash in or near the sampling location. Seven sites were observed to have bubbles and/or foam. Eight sites had a visible sheen. Thirty sites observed also had floatable materials outside of the categories listed; those materials, were algae, leaf debris, grass clippings, and/or duckweed.

Deposits
The categories of deposits were coarse particulates (sediment/gravel), fine particulates, stains, oily deposits, and other. Multiple types of deposits could have been identified at each site. Fifty seven sites did not have any deposits at the sampling site. Twenty one sites had fine particulate deposits. Thirteen sites had course particulate deposits of sediment and/or gravel. One site had some type of stain at the sampling point. Two sites had an oily deposit. Three sites had deposits listed as other, which included algae, leaf debris, or grass clippings.

Vegetation
The categories for amount of vegetation present at and around the sampling area were none, limited, normal, and excessive. Thirty four sites had no vegetation present. One site had limited vegetation growth signifying some type of eradication program. Forty two sites observed had normal vegetation growth. Thirteen sites had excessive vegetation growth around the sampling area.

Biology
The categories for types of life present at the sites were insects, algae, fish, snails, and mussels/barnacles. Multiple types of life could have been identified at each site. Thirty eight of the sites had algae present; twenty four of those sites also having some other type of life present. Twenty seven sites had snails present. Fourteen sites had insects present. Three sites had fish present. Eight sites had some “other” type of life present; usually crawfish or tadpoles/frogs. Forty sites did not have any visible life present at the sampling site.

4.2 Field Water Quality Results

Field analyses were conducted at all sites with flowing or ponded water. The field analyses were conducted using a Hydrolab Quanta and CHEMetrics field test kits. A summary of the initial screening results from field analysis is presented in Table 6. If action levels were exceeded, the site was revisited to confirm the initial results and an IC/ID investigation was initiated. Follow-up investigations are presented in Section 4.4.

Table 6. 2009Initial Screening Field Measurement Results for Sites with Ponded or Flowing Water.

Station ID	Date	Time	Flow Rate (gpm)	pH (Units)	EC (mS□cm)	Turbidity (NTU)	DO (mg□L)	Temp (□C)	NH_3 (mg□L)	NO_3-N (mg□L)	PO_4 (mg□L)	MBAS (mg□L)
Agua Hedionda												
A002	7/27/2009	11:02	12	8.07	2.62	0.5	8.19	22.86	0.80	0.41	0.31	0.40
A004a	7/27/2009	9:34	2	7.71	1.59	4.0	7.34	22.60	0.22	0.49	1.27	0.65
A004b	7/27/2009	9:47	1	7.62	4.49	1.9	8.62	25.54	0.12	0.56	□0.3	0.50
A013	7/29/2009	9:59	11	**6.33**	6.69	28.2	6.45	23.25	0.63	1.41	□0.3	0.75
A014	8/24/2009	9:54	□1	7.06	5.26	9.2	5.41	21.59	0.57	0.97	0.37	0.50
A015	7/29/2009	10:41	3	6.84	5.19	92.7	7.88	23.15	0.72	1.33	**2.04**	0.50
A016	7/29/2009	8:58	14	7.80	10.92	13.2	7.85	21.17	0.38	2.71	0.42	**1.50**
A019	8/24/2009	9:19	Ponded	7.82	1.18	5.8	4.33	20.69	0.22	0.36	**2.16**	0.40
A021	8/24/2009	8:24	Ponded	7.21	1.26	15.9	1.42	21.64	0.54	0.22	**2.88**	0.50
A022	9/9/2009	13:27	Ponded	7.71	3.30	10.1	5.65	23.35	0.35	2.93	0.78	0.25
A023	9/9/2009	15:00	Ponded	7.13	4.10	0.5	5.00	21.86	0.30	2.89	0.73	0.50
A024	9/9/2009	12:45	Ponded	6.95	5.23	2.7	5.40	22.97	0.64	2.72	1.28	0.75
Buena Vista												
B002	6/8/2009	9:12	6	7.81	3.71	2.3	8.33	19.57	0.26	5.51	0.31	0.25
B022	7/27/2009	8:41	1	8.01	0.17	3.6	6.59	22.82	0.25	0.90	0.76	0.50
B023	8/3/2009	14:15	Ponded	7.69	13.08	1.5	6.42	25.78	0.34	1.94	0.53	**1.25**
B024	8/4/2009	10:10	Ponded	7.69	2.15	7.7	5.12	22.54	0.78	1.01	**5.49**	**1.50**
B026	8/4/2009	9:16	4	7.96	3.03	18.8	6.36	22.20	0.25	0.91	□0.3	0.50
B027	8/24/2009	10:41	1	7.68	2.99	7.4	3.18	21.49	0.41	1.12	0.59	0.75
B031	8/24/2009	12:44	Ponded	8.03	2.50	0.9	9.66	23.59	0.24	0.48	□0.3	0.30
B032	8/24/2009	13:21	29	7.40	5.13	0.2	8.64	23.90	0.62	2.45	□0.3	0.50
B033	8/31/2009	13:15	2	8.08	4.14	□0.1	7.35	24.00	0.32	0.68	0.86	0.50
B103	6/17/2009	11:25	Ponded	7.48	0.23	5.4	9.23	22.91	0.70	3.10	□0.3	0.25
B104	7/15/2009	11:15	Ponded	8.04	1.52	11.7	5.27	23.72	0.14	0.73	**2.25**	0.25
B106	8/4/2009	10:23	12	7.84	7.01	1.1	6.84	23.48	0.40	1.75	□0.3	0.65
B108	8/31/2009	12:50	5	7.59	5.68	2.1	7.08	22.19	0.80	1.14	0.67	0.50

Station ID	Date	Time	Flow Rate (gpm)	pH (Units)	EC (mS□cm)	Turbidity (NTU)	DO (mg□L)	Temp (□C)	NH_3 (mg□L)	NO_3-N (mg□L)	PO_4 (mg□L)	MBAS (mg□L)
Loma Alta												
L001	6/23/2009	11:57	□1	8.20	1.45	1.7	9.43	19.44	0.82	1.03	0.87	0.50
L002	7/20/2009	8:34	2	7.90	6.93	14.6	7.04	20.03	0.28	2.25	□0.3	0.50
L003	5/26/2009	14:09	1	7.97	4.41	0.3	8.34	20.96	0.26	2.23	1.12	0.50
L004	9/2/2009	11:00	Ponded	8.15	6.15	100.0	5.92	24.93	0.84	4.90	1.63	0.50
L006	8/31/2009	9:31	Ponded	7.61	3.44	2.1	4.30	23.12	0.77	0.33	1.02	0.25
L007	8/3/2009	11:03	Ponded	6.78	2.23	14.5	4.75	24.50	0.86	0.71	1.93	0.35
L008	8/3/2009	10:18	Ponded	6.64	8.86	8.1	1.24	21.95	0.36	1.97	0.99	0.85
L009	6/8/2009	13:02	103	7.96	5.71	1.4	8.35	19.70	0.37	2.25	0.31	0.50
L010	7/20/2009	13:16	2	7.33	6.31	31.5	5.00	24.75	0.35	1.74	1.41	0.75
L013	7/20/2009	9:19	3	7.23	5.88	56.8	4.89	23.80	**2.40**	1.37	**2.91**	**2.00**
L019	6/23/2009	12:42	Ponded	8.84	1.61	40.2	17.84	26.78	0.39	0.25	0.52	0.75
L020	7/21/2009	13:34	2	8.17	2.78	3.6	7.52	24.92	0.22	1.60	0.37	**1.50**
L027	6/8/2009	11:28	94	7.89	4.41	2.2	10.80	22.00	0.21	1.32	0.39	0.50
L029	8/24/2009	14:49	Ponded	7.09	1.50	9.5	0.93	25.61	**3.80**	0.40	**2.02**	0.75
L034	8/3/2009	12:49	Ponded	8.20	1.06	16.0	7.91	28.42	0.34	0.40	1.07	0.25
L040	7/15/2009	10:26	Ponded	7.55	5.26	12.5	10.14	29.99	0.72	0.53	0.97	0.85
L046	7/15/2009	14:43	Ponded	7.21	11.20	2.2	6.96	25.99	0.57	0.82	0.39	**1.00**
L054	6/8/2009	10:24	8	7.97	2.50	1.5	8.34	21.09	0.12	3.80	□0.3	0.25
L103	8/10/2009	12:36	3	7.83	2.65	5.7	5.62	21.06	0.58	2.18	**3.05**	0.65
L108	7/15/2009	14:20	14	8.00	12.05	□0.1	14.13	31.32	0.19	0.61	□0.3	0.85
L110	7/20/2009	11:41	Ponded	7.76	2.87	5.1	7.37	21.21	0.27	1.30	0.82	0.25
L111	8/3/2009	13:31	Ponded	7.14	2.87	1.6	6.05	24.49	0.49	0.81	□0.3	0.25
L115	9/2/2009	12:20	Ponded	6.89	1.24	□0.1	5.82	27.14	□0.1	0.59	□0.3	0.25
San Luis Rey												
S006	6/22/2009	10:06	Ponded	8.03	2.21	7.9	8.56	18.57	0.22	0.78	0.82	0.50
S032	6/2/2009	13:47	Ponded	7.39	1.59	13.2	1.70	23.32	0.29	0.52	**6.58**	**3**
S044	7/15/2009	8:32	14	7.82	4.56	1.2	9.64	22.19	0.23	1.76	□0.3	0.75

Station ID	Date	Time	Flow Rate (gpm)	pH (Units)	EC (mS□cm)	Turbidity (NTU)	DO (mg□L)	Temp (□C)	NH_3 (mg□L)	NO_3-N (mg□L)	PO_4 (mg□L)	MBAS (mg□L)
S045	7/1/2009	10:45	3	7.91	5.59	3.6	8.42	20.00	0.68	1.94	□0.3	0.50
S075	5/27/2009	10:01	□1	8.13	1.56	3.2	6.37	19.10	0.22	0.70	1.10	0.40
S077	6/3/2009	11:04	11	7.00	4.58	4.2	5.94	23.88	0.95	1.92	0.44	0.50
S085	6/2/2009	10:58	Ponded	8.53	1.63	4.9	13.58	28.32	0.39	0.30	0.73	0.75
S088	6/3/2009	10:20	Ponded	7.83	2.54	5.1	3.54	22.06	0.20	1.93	0.41	0.25
S102	6/4/2009	9:38	Ponded	7.79	1.06	13.3	6.72	18.94	0.37	0.32	0.60	0.15
S103	6/4/2009	8:47	Ponded	7.16	1.10	4.1	4.04	18.97	0.30	0.25	1.23	0.25
S104	8/31/2009	13:57	Ponded	7.53	1.25	11.4	5.06	20.98	**1.05**	0.56	**2.58**	0.25
S106	6/22/2009	8:39	32	8.09	4.24	11.4	8.57	18.40	0.36	**68**	0.61	**1.25**
S110	6/4/2009	10:41	1	7.97	1.38	3.0	7.85	19.21	0.68	0.64	0.61	0.25
S111	7/1/2009	11:42	Ponded	**9.72**	1.05	4.1	19.29	30.80	0.14	0.20	0.30	0.25
S115	6/2/2009	14:40	1	**10.03**	1.49	10.4	12.50	32.01	0.10	0.25	□0.3	0.65
S117	6/2/2009	10:15	16	7.97	4.64	1.0	8.53	20.34	0.25	2.11	□0.3	0.65
S118	7/1/2009	8:57	Ponded	7.52	3.90	0.7	3.62	18.35	**1.28**	0.85	0.38	0.50
S121	7/1/2009	9:44	Ponded	7.45	4.30	0.1	3.75	20.27	**9**	1.30	0.73	0.50
S122	7/15/2009	9:26	1	7.81	2.37	3.4	6.27	20.55	0.25	1.16	**2.06**	0.40

Bold/Highlighted values indicate action level exceedances.
NS – Not sampled/Field Equipment Malfunction.
AE – Analyst Error/Data Entry Error. While the data was lost inexplicably in the database, the analytes that exceeded action levels were recorded in a hard copy format and follow-ups were completed.

Flow Rate
Thirty two of the 67 sites with water were ponded. The flow rates at the sites with measurable flow ranged from 0.2gpm at S075 to 103gpm at L027.

Water Temperature
Water temperature was measured in the field immediately upon sample collection at each site with flowing or ponded water. Temperature readings ranged from 18.35˚C at S118 on July 1, 2009 to 32.01˚C at S115 on June 2, 2009. The median temperature was 22.60; the average temperature was 22.96˚C with a standard deviation of 3.11˚C.

pH
pH is a term used to indicate the alkalinity or acidity of a substance as ranked on a scale from 1.0 to 14.0. Acidity increases as the pH gets lower. Figure 2 presents the pH of some common liquids.

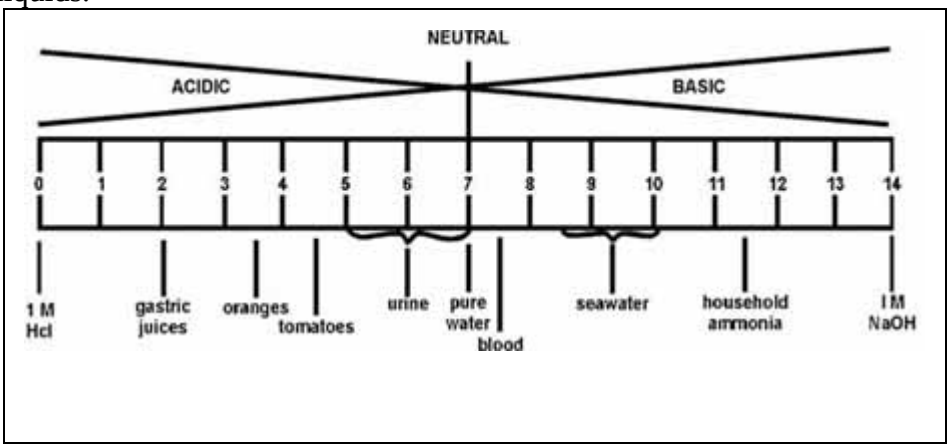

Figure 2. pH of Selected Liquids.

pH affects many chemical and biological processes in the water. For example, different organisms flourish within different ranges of pH. The largest varieties of aquatic animals prefer a range of 6.5-8.0. pH outside this range reduces the diversity in the stream because it stresses the physiological systems of most organisms and can reduce reproduction. Low pH can also allow toxic elements and compounds to become mobile and "available" for uptake by aquatic plants and animals. This can produce conditions that are toxic to aquatic life. Changes in acidity can be caused by atmospheric deposition (acid rain), surrounding rock, and certain wastewater discharges. An unusually high pH reading could be an indicator of an industrial discharge in the sample area; therefore, pH is used as an indicator of illicit discharges.

The pH values taken from the ponded or flowing water ranged from 6.33 at A013 to 10.03 at S115. The median pH value observed during field screening was 7.80; the average pH value was 7.72 with a standard deviation of 0.6. The three sites that were outside of the acceptable range were A013, S115, and S111. A013 was the only site that had pH levels below the acceptable range. The area around A013 is known to have a high water table with geologic conditions that cause low pH, foam, and orange deposits. S111 and S115 are associated with concrete channels or pipes. Concrete is known to be basic and have high pH values associated with the cement components. This may be a cause of the high pH values. In

addition the temperature of the sample in both cases was greater than 30˚C which may also play a role in the pH value

Conductivity

Conductivity is a measure of the ability of water to pass an electrical current. Conductivity in water is affected by the presence of inorganic dissolved solids such as chloride, nitrate, sulfate, and phosphate anions (ions that carry a negative charge) or sodium, magnesium, calcium, iron, and aluminum cations (ions that carry a positive charge). Organic compounds like oil, phenol, alcohol, and sugar do not conduct electrical current very well and therefore have a low conductivity when in water. Conductivity is also affected by temperature: the warmer the water, the higher the conductivity. In addition, discharges to streams can also change the conductivity depending on their make-up. A failing sewage system would raise the conductivity because of the presence of chloride, phosphate, and nitrate; an oil spill would lower the conductivity. The conductivity values ranged from 0.17 mS/cm at B022 to 13.08 mS/cm at B023. The median conductivity value observed during field screening was 3.03. The average conductivity value was 3.84 mS/cm with a standard deviation of 2.78.

Turbidity

Turbidity is a measure of water clarity, how much of the material suspended in water decreases the passage of light through the water. Suspended materials include soil particles (clay, silt, and sand), algae, microbes and other substances. Turbidity can affect the color of the water.

Higher turbidity increases water temperatures because suspended particles absorb more heat. This, in turn, reduces the concentration of dissolved oxygen because warm water holds less dissolved oxygen than cold. Higher turbidity also reduces the amount of light penetrating the water, which reduces photosynthesis and the production of dissolved oxygen. Suspended materials can clog fish gills, reducing resistance to disease in fish, lowering growth rates, and affecting egg and larval development. As the particles settle, they can blanket the stream bottom, especially in slower waters, and smother fish eggs.

Turbidity can be useful as an indicator of the effects of runoff from construction, agricultural practices, logging activity, discharges, and other sources. Turbidity often increases sharply during a rainfall, especially in developed watersheds, which typically have relatively high percentages of impervious surfaces. The flow of storm water runoff from impervious surfaces rapidly increases stream velocity, which increases the erosion rates of stream banks and channels. Turbidity can also rise sharply during dry weather if earth-disturbing activities are occurring in or near a stream without erosion control practices in place. The turbidity values ranged from <1 at ten sites to 100 NTU at L004. The median turbidity value observed during field screening was 4.6 NTU. High turbidity values were usually caused by the nature of low flow sampling with a syringe. This was the case at L004, a clean sample was not possible due to the decaying organic matter on the bottom of the channel that had less than half an inch of water.

Dissolved Oxygen
Dissolved oxygen analysis measures the amount of gaseous oxygen dissolved in an aqueous solution. Oxygen gets into water by diffusion from the surrounding air, by aeration, and as a waste product of photosynthesis.

Adequate dissolved oxygen is necessary for good water quality. Oxygen is a necessary element to all forms of life. Natural stream purification processes require adequate oxygen levels in order to provide for aerobic life forms. As dissolved oxygen levels in the water drop below 5.0 mg/L, aquatic life is put under stress. The lower the concentration, the greater the stress is on aquatic life. The dissolved oxygen values ranged from 0.93 mg/L at L029 to 19.29 mg/L at S111. The median dissolved oxygen value observed during field screening was 6.84 mg/L. All but one of the sites that had DO levels less than 4.0 mg/L were ponded and frequently had higher turbidity and nutrient levels, indicating nutrient breakdown.

Ammonia
Ammonia is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment, however, in higher quantities it can become toxic to fish and other organisms. The ammonia values range from <0.1 to >10 mg/L. The median ammonia value observed during the field screening was 0.36 mg/L. Four of the five sites that exceeded the action level for ammonia were ponded and were likely caused by decaying organic matter in the ponded water.

Orthophosphate
Both phosphorus and nitrogen are essential nutrients for the plants and animals that make up the aquatic food web. Since phosphorus is the nutrient in short supply in most fresh waters, even a modest increase in phosphorus can, under the right conditions, set off a chain of undesirable events in a stream including accelerated plant growth, algae blooms, and low dissolved oxygen. Locally, in San Diego County, however, the pH of soils here is higher than 8.0, which creates an unavailable to plantlife.

There are many sources of phosphorus, both natural and human. These include soil and rocks, wastewater treatment plants, runoff from fertilized lawns and cropland, failing septic systems, runoff from animal manure storage areas, disturbed land areas, drained wetlands, water treatment, and commercial cleaning preparations. The orthophosphate values ranged from <0.3 mg/L to 6.58 mg/L. The median orthophosphate value observed during field screening was 0.82 mg/L.

Nitrate-N
Nitrate is the most readily available form of nitrogen for plant uptake and is a limiting factor in plant growth. Nitrates are naturally occurring in soil and rocks, but are also added to watersheds from anthropogenic sources such as fertilizers, failing septic systems, and animal waste. The nitrate-N values from the 2009 dry weather monitoring season ranged from 0.2 to >68 mg/L at S106. The median nitrate-N value was 1.03 mg/L. Only site S106 exceeded the

nitrate action level. This site has historic nitrate exceedances primarily from groundwater seepage.

Surfactants (MBAS)

Surfactants or MBAS were previously analyzed in the laboratory, but in the current permit are required as part of the field screening. Surfactants are analyzed to detect detergent pollution from residential, commercial, or industrial washing activities. MBAS results were greater than or equal to the action level of 1.0 mg/L at eight of the initial screening sites. Half of those sites had conductivity results greater that 5 mS/cm. Several Copermittees reported exceedances in the field screening data at sites with higher conductivity levels, but when the samples were taken to the laboratory, there were no exceedances. In the City of Oceanside there were eight exceedances of MBAS action levels. Four of those exceedances were followed up with a laboratory sample where all results were below the detection limit. Three others were below the field test kit detection limit upon confirmation. One site continued to exceed, but was from ponded water with no upstream influence.

4.3 Laboratory Water Quality Results

Laboratory analysis was conducted at 19 sites, representing 28% of the sites with ponded or flowing water. Laboratory chemistry results are summarized and presented in Table 7 and microbiology results in Table 8. If action levels were exceeded, the site was revisited to confirm the initial results and an IC/ID investigation was initiated. Follow-up investigations are presented in Section 4.4 and Appendix C.

Oil and Grease

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities. Oil and grease was detected at two sites, but both were well below the action level of 15 mg/L.

Total Hardness

Total hardness measures the amount of polyvalent cations in water. It generally represents calcium and magnesium ions in a water sample because they are the most common cations. Results are expressed in mg/L of $CaCO_3$. The California Toxics Rule (CTR) applies hardness-based water quality objectives to dissolved metals. Increasing hardness has the effect of decreasing the toxicity of metals[3]. The hardness values ranged from 340 mg/L of $CaCO_3$ at B104 to 3160 mg/L of $CaCO_3$ at A016 with a median value of 1090 mg/L of Ca CO_3. The average hardness value was 1139 mg/L of $CaCO_3$ and a standard deviation of 699 mg/L of Ca CO_3. The two sites with hardness values over 2000 mg/L of $CaCO_3$ were in the Agua Hedionda watershed near the intersection of Lake and Cannon; an area with a high groundwater table and historical geologic crystalline formations.

[3] US Environmental Protection Agency. 2002. National Recommended Water Quality Criteria. November 2002. EPA-822-R-02-047

Table 7. 2009 Dry Weather Chemistry Results.

StationID	Date	Time	Oil Grease (mg/L)	Hardness Total as CaCO3 (mg/L)	Dissolved Cadmium (mg/L)	Dissolved Copper (mg/L)	Dissolved Lead (mg/L)	Dissolved Zinc (mg/L)	Chlorpyrifos (µg/L)	Diazinon (µg/L)
Agua Hedionda										
A002	7/27/2009	11:10	<5	714	0.0005	0.005	<0.005	0.004	<0.05	<0.05
A004a	7/27/2009	9:50	<5	426	0.0004	0.029	<0.005	0.007	<0.05	<0.05
A004b	7/27/2009	9:55	<5	1110	<0.0003	0.01	<0.005	<0.002	<0.05	<0.05
A013	7/29/2009	10:05	<5	2200	**0.008**	<0.001	<0.005	0.357	<0.05	<0.05
A015	7/29/2009	10:48	<2	1680	0.0039	0.005	<0.005	0.163	<0.05	<0.05
A016	7/29/2009	9:05	<2	3160	0.001	0.019	<0.005	<0.002	<0.05	<0.05
Buena Vista										
B002	6/8/2009	9:20	<2	1510	<0.0009	0.017	<0.004	**0.607**	<0.05	<0.05
B022	7/27/2009	8:45	<2	841	<0.0003	0.034	<0.005	0.028	<0.05	<0.05
B104	7/15/2009	11:20	3	340	<0.005	0.023	<0.005	0.039	<0.05	<0.05
Loma Alta										
L001	6/23/2009	12:05	<2	1470	0.0005	0.00406	<0.005	0.0127	<0.05	<0.05
L009	6/8/2009	13:10	<3	1390	<0.0009	0.006	<0.004	0.005	<0.05	<0.05
L019	6/23/2009	12:45	<3	440	0.0003	0.001	<0.005	0.003	<0.05	<0.05
L027	6/8/2009	11:40	<3	1090	<0.0009	0.002	<0.004	0.004	<0.05	<0.05
L040	7/15/2009	10:40	3	880	<0.005	0.018	<0.005	<0.02	<0.05	<0.05
L054	6/8/2009	10:35	<2	424	<0.0009	0.002	<0.004	0.006	<0.05	<0.05
San Luis Rey										
S006	6/22/2009	10:15	<2	745	0.000791	0.00331	<0.005	0.0443	<0.05	<0.05
S044	7/15/2009	8:35	<2	1100	<0.005	<0.01	<0.005	<0.02	<0.05	<0.05
S106	6/22/2009	8:45	<2	1460	0.0004	0.002	<0.005	<0.002	<0.05	<0.05
S122	7/15/2009	9:35	<2	660	<0.005	0.018	<0.005	<0.02	<0.05	<0.05

Table 8. 2008 Dry Weather Microbiology Results.

StationID	Date	Time	Total Coliform (MPN/100mL)	Fecal Coliform (MPN/100mL)	Enterococcus (MPN/100mL)
Agua Hedionda					
A002	7/27/2009	11:10	2,300	300	280
A004a	7/27/2009	9:50	**130,000**	**22,000**	7,660
A004b	7/27/2009	9:55	1,700	230	500
A013	7/29/2009	10:05	**70,000**	5,000	1,010
A015	7/29/2009	10:48	**90,000**	**30,000**	650
A016	7/29/2009	9:05	**300,000**	14,000	3,960
Buena Vista					
B002	6/8/2009	9:20	17,000	7,000	6,480
B022	7/27/2009	8:45	**300,000**	**50,000**	**22,200**
B104	7/15/2009	11:20	**50,000**	170	530
Loma Alta					
L001	6/23/2009	12:05	13,000	130	670
L009	6/8/2009	13:10	9,000	1,100	2,500
L019	6/23/2009	12:45	13,000	500	180
L027	6/8/2009	11:40	22,000	2,200	140
L040	7/15/2009	10:40	17,000	700	82
L054	6/8/2009	10:35	800	110	220
San Luis Rey					
S006	6/22/2009	10:15	17,000	1,700	6,590
S044	7/15/2009	8:35	3,500	20	570
S106	6/22/2009	8:45	5,000	40	450
S122	7/15/2009	9:35	**300,000**	**80,000**	**72,700**

Dissolved Metals

Metal concentrations in the environment can originate from a variety of sources including automobiles, automobile repair facilities, car washing, and industrial activities, as well as natural geologic processes. The laboratory samples collected during the 2009 Dry Weather Monitoring Program were analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Results were compared to the hardness-based CTR CMC (1-hour) criterion. Dissolved cadmium equaled the action level at one site, A013, and an upstream investigation was initiated. There were no exceedances of dissolved copper or lead. Dissolved zinc exceeded the CTR criterion at site B002, but was below the action level upon confirmation.

Chlorpyrifos and Diazinon

Chlorpyrifos and diazinon are organophosphate pesticides used to control insects, fleas and ticks. As of December 31, 2004, it became unlawful to sell diazinon outdoor, non-agricultural products. Chlorpyrifos can now only be used for nursery production, golf courses and road medians. Neither chlorpyrifos nor diazinon were detected at any of the laboratory sampling sites.

Total Coliform Bacteria
Total coliform bacteria are mostly harmless bacteria that are ubiquitous in the environment living in soil, water, and mammalian digestive tracts. Water samples are analyzed for total coliform bacteria to indicate the presence of other more harmful pathogenic (disease causing) organisms that are associated with coliform but are difficult to test for because they are present in much smaller quantities. During the dry weather monitoring period total coliform results ranged from 800 MPN/100mL to 300,000 MPN/100 ml. Seven of the 19 sites sampled for laboratory analysis exceeded total coliform action levels.

Fecal Coliform and Enterococcus
Members of two bacteria sub-groups, fecal coliforms and enterococcus, are used as indicators of possible sewage contamination because they are specifically found in human and animal digestive tracks. Although they are generally not harmful themselves, they indicate the possible presence of pathogenic bacteria, viruses, and protozoans that also live in human and animal digestive systems. Since it is difficult, time-consuming, and expensive to test directly for the presence of a large variety of pathogens, these fecal indicator bacteria are used. Sources of fecal contamination to surface waters include wastewater treatment plants, on-site septic systems, domestic and wild animal manure, and storm water runoff.

In addition to the possible health risk associated with the presence of elevated levels of fecal bacteria, they can also cause cloudy water, unpleasant odors, and an increased oxygen demand. Fecal coliform results ranged from 20 MPN/100mL to 80,000 MPN/100 ml. Four of the 19 sites sampled for laboratory analysis exceeded the fecal coliform action level. Enterococcus results ranged from 82 MPN/100mL to 72,700 MPN/100mL. Two of the 19 sites sampled exceeded the Enterococcus action level. Two sites, B022 and S122, exceeded all three microbiology action levels.

4.4 IC/ID Investigations

Sites that exceeded one or more action level were revisited and resampled to confirm the initial result. If the confirmation result also exceeded an action level, an IC/ID investigation was initiated. Twenty four sites had one or more action level exceedances that required confirmation. Eighteen of those sites, upon confirmation, required an IC/ID investigation

The most common exceedance was for orthophosphate; 11 sites had an initial exceedance. Seven of those sites were ponded and the remaining four had a flow of 3gpm or less. Eight of the 11 sites required an IC/ID investigation. Eight sites had an initial exceedance for MBAS (surfactants). Four of those sites were followed up with laboratory MBAS analysis. All four were below the detection limit. Three of the remaining sites were below the action level upon confirmation and just one remained exceeding; this one had ponded water with no upstream influence. Five of the sites had an initial exceedance for ammonia; four of those sites were ponded and three of those required an IC/ID investigation. Figure 3 provides the number of sites by watershed exceeding the initial field screening action levels.

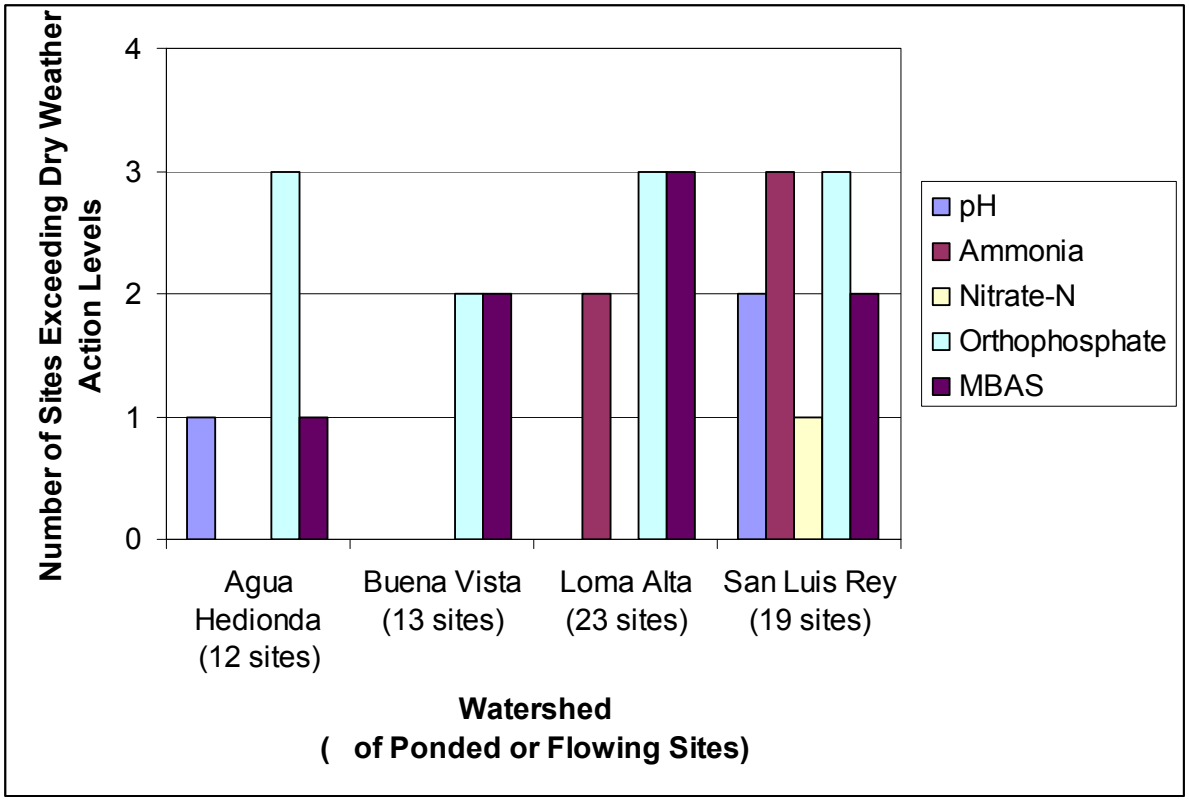

Figure 3. Number of Initial Field Screening Exceedances by Analyte and Watershed.

Two of the 19 sites sampled for laboratory chemistry analysis required an upstream investigation. B002 had an initial exceedance for dissolved zinc, but upon confirmation, the results were below the action level. A013 exceeded the action level for dissolved cadmium. Groundwater is the suspected source after completion of the upstream investigation. Seven of the 19 sites chosen for laboratory analysis had at least one indicator bacteria exceedance. There were seven exceedances for total coliforms, four for fecal coliforms, and two for Enterococcus. Six of the seven total coliform exceedances required an upstream investigation. Two of the four fecal coliform confirmation samples and both of the Enterococcus confirmation samples required an IC/ID investigation. Figure 4 provides the number of sites by watershed that exceeded the microbiology action levels.

Appendix C contains a detailed description of the confirmation and IC/ID investigations at each site and the actions that were taken to reduce contaminants.

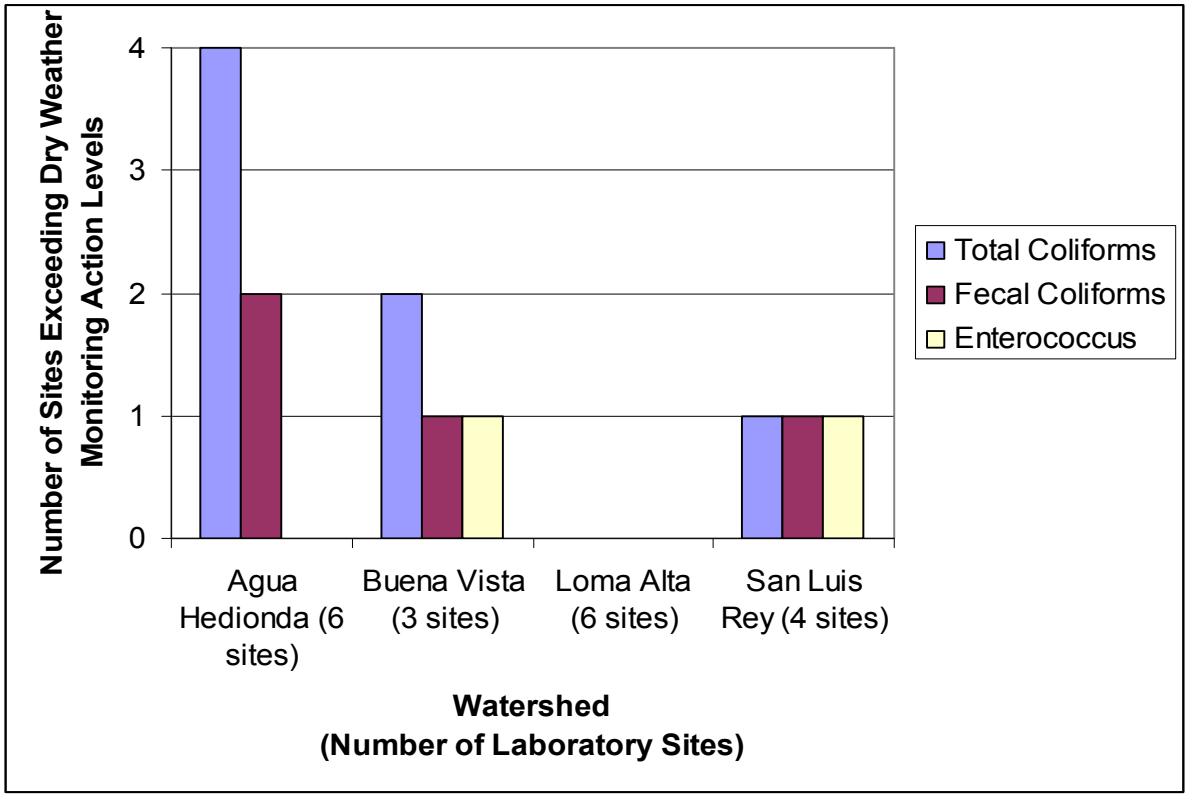

Figure 4. Number of Microbiology Exceedances by Analyte and Watershed.

4.5 Trash Assessment

Eighty one sites were assessed for trash amount and extent. The majority of sites was in the mid-range of the assessment and was either suboptimal, marginal, or submarginal. Table 9 and Figure 5 present a summary of trash assessment throughout the City. Loma Alta and San Luis Rey Watersheds were again the only watersheds to include sites with a “poor” rating. The distribution across watersheds is presented in four charts that make up Figure 6. In addition, Figures 7 and 8 provide an orthophotograph of the San Luis Rey and Carlsbad Watersheds and the distribution of trash assessment ratings throughout each watershed.

Table 9. Trash Assessment Results.

Optimal (13 Sites)	Suboptimal (20 Sites)	Marginal (31 Sites)	Submarginal (21 Sites)	Poor (3 Sites)
A004b	A013	A002	A021	L037
B027	B023	A004a	A023	L110
B104	B031	A014	A024	S116
L019	B032	A015	B026	
L024	B033	A016	B106	
L050	B034	A019	L002	
L054	L006	A022	L008	
L109	L007	B002	L009	
L111	L013	B022	L029	
S035	L032	B024	L040	
S065	L034	B103	L107	
S077	L046	L001	L108	
S113	L103	L003	S043	
	L105	L004	S044	
	L115	L005	S045	
	S025	L010	S075	
	S108	L020	S085	
	S111	L027	S088	
	S115	L036	S103	
	S123	S006	S109	
		S032	S118	
		S072		
		S102		
		S106		
		S107		
		S110		
		S117		
		S119		
		S120		
		S121		
		S122		

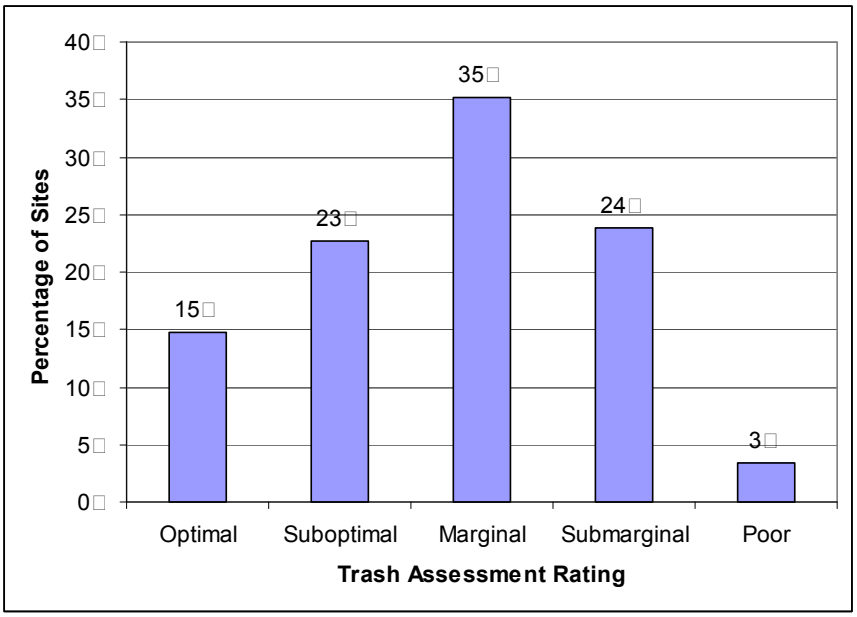

Figure 5. Summary of City of Oceanside Trash Assessment Ratings.

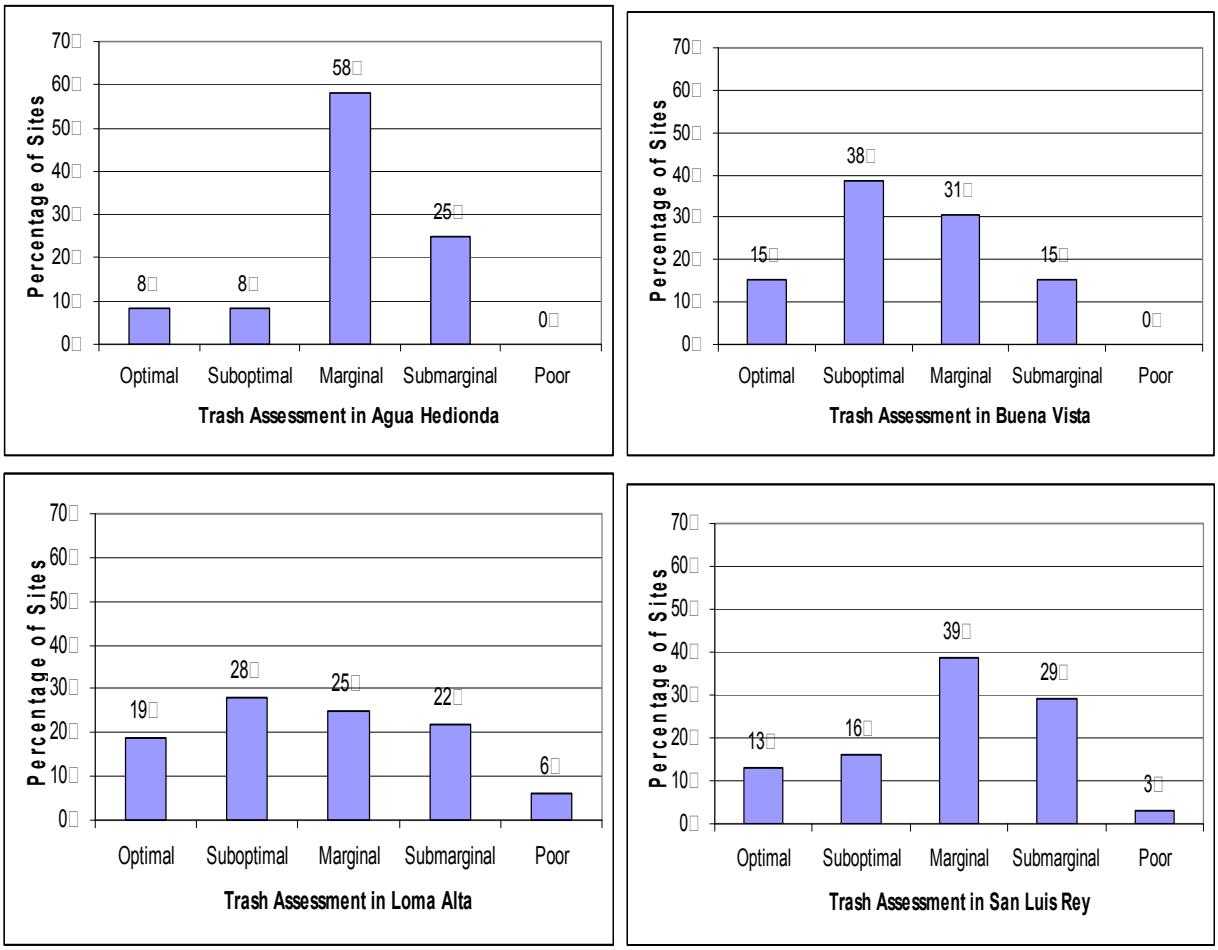

Figure 6. Trash Assessment by Watershed.

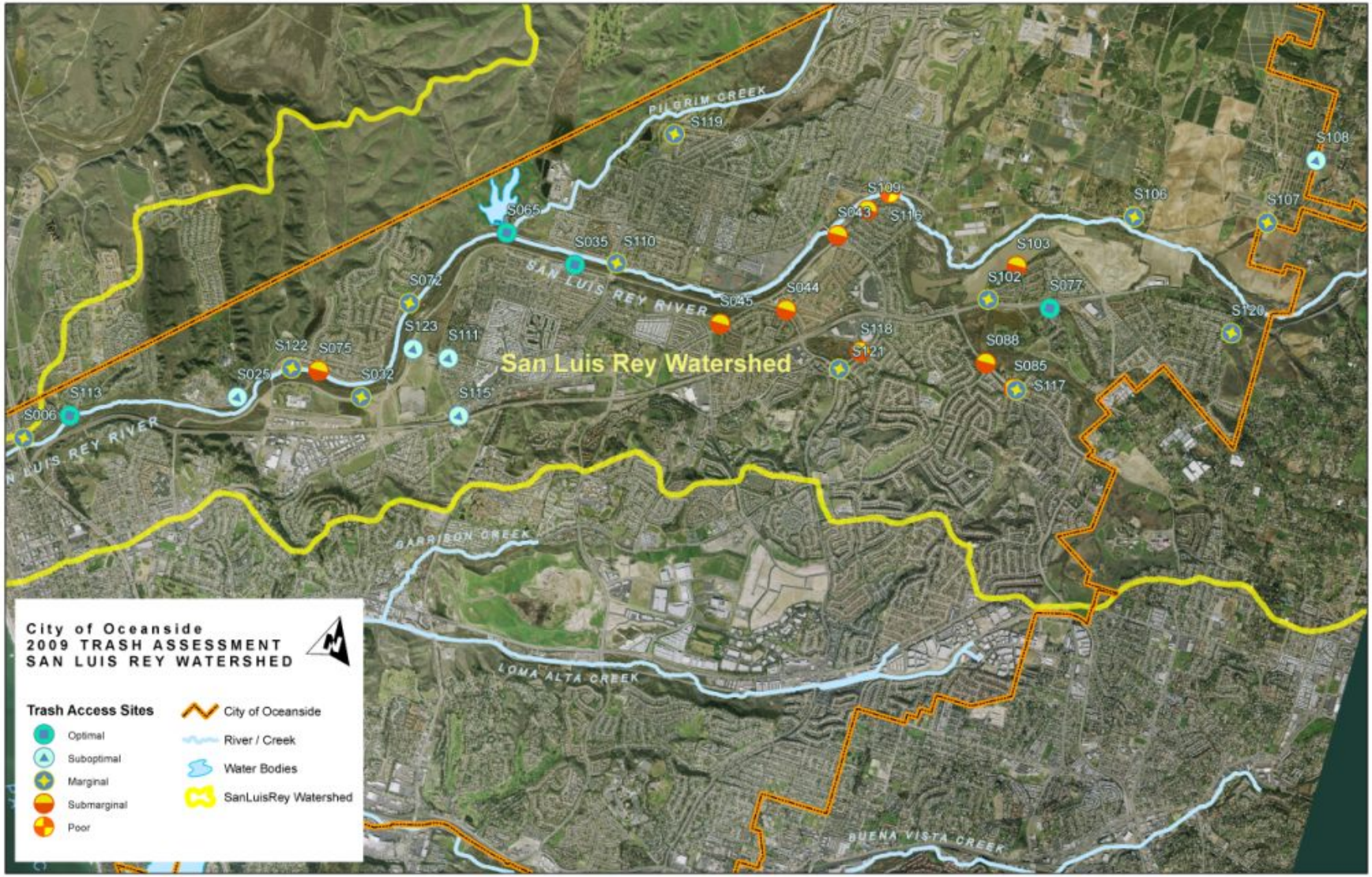

Figure 7. 2009 Trash Assessment for the San Luis Rey Watershed.

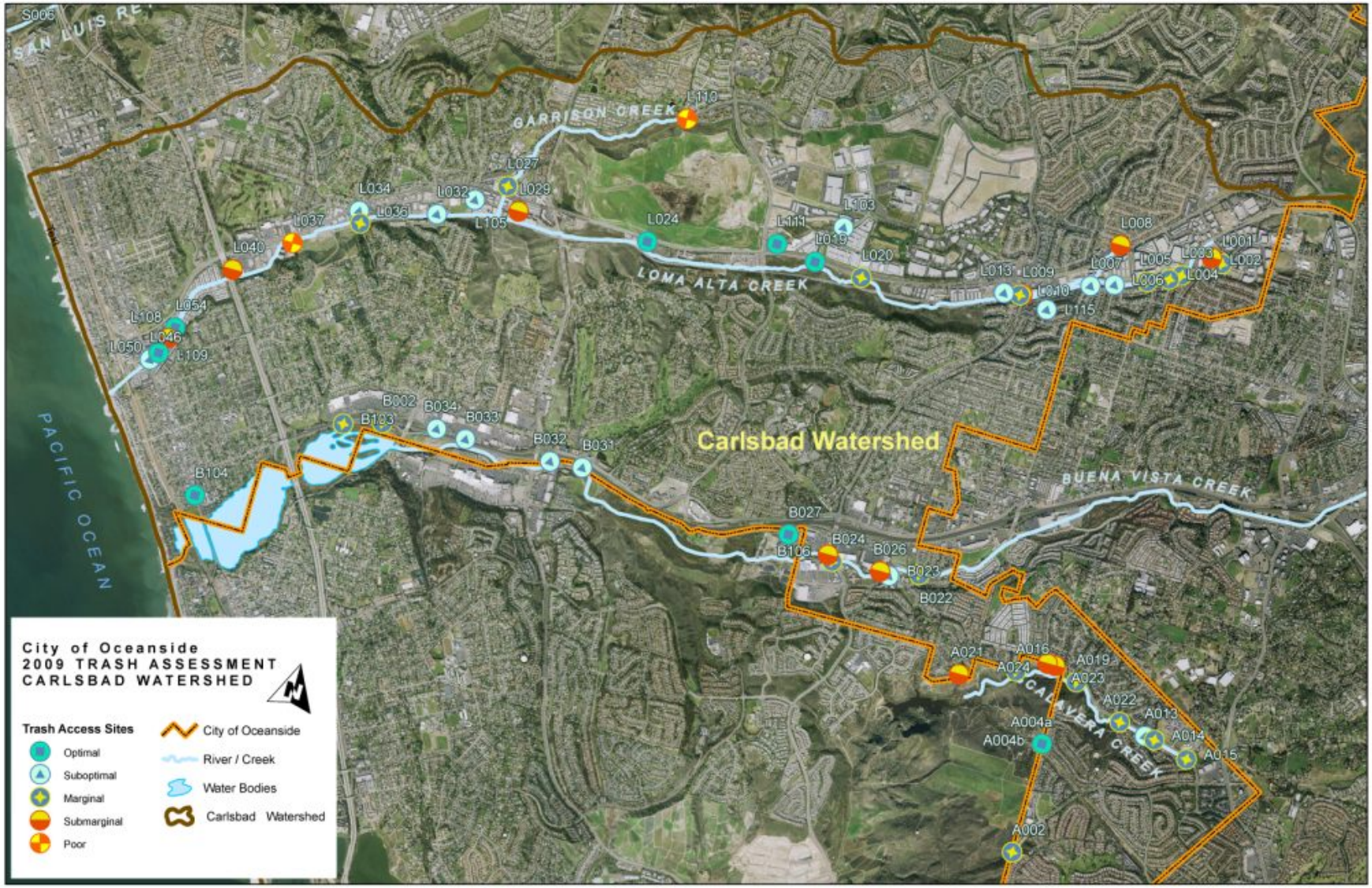

Figure 8. 2009 Trash Assessment for the Carlsbad Watersheds.

4.5.1 Threat to Human or Aquatic Health

The threat to human and aquatic health was assessed at each site. Detailed definitions for these threats are found in Section 2.8. In general, a threat to human health includes trash and debris that have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria or have the potential for physical harm. This year, the presence of mosquito larvae was specifically added as cause for a threat to human health if the water was ponded due to trash. A threat to aquatic health includes trash and debris such as small floatable material that is persistent and can be transported long distances that resemble food and may be ingested. The threat also includes debris that has the potential for entanglement or oil or chemicals that could harm aquatic life.

Two sites (2% of all sites) were deemed a threat to human health in the 2009 dry weather survey; sites B022 and L037. Site B022 was an assessment of both the storm drain and receiving water. Several dirty diapers were found at this site in the receiving water. An ongoing problem at this site appears to be residents of the condominium complex throwing trash into the channelized creek. A used diaper was also found at site L037.

Three sites (3% of all sites) were deemed a threat to aquatic health; Sites L008, L110, and S118. Sites L008 and L110 had small Styrofoam pieces that can be mistaken for food by aquatic life. Site S118 had spray paint cans present.

4.5.2 Submarginal and Poor Site Assessment

Twenty one of the 88 sites (24%) assessed were deemed submarginal and three of the 88 (3%) were deemed poor. Table 10 presents a summary of the sites that were submarginal and poor and identifies the ranking for the types of trash found. For example, a rank of “1” for Household and “2” for Food Packaging would mean that there was more household waste than food packaging waste. In addition, up to two potential routes and sources were identified and are listed in the Table 10.

Sixty nine percent of the trash found in submarginal and poor sites fell into the household or food packaging categories (Figure 9). There was no “automotive,” “biohazard,” “food waste,” or “toxic” waste found at any of the assessment locations. The two most common potential routes of trash entering the area were littering (49%) or upstream (42%). Household waste was the most common potential source of the trash (56%). Eighteen percent of the trash also listed “transient” as a potential source and 16% listed “commercial” as a potential source (Figure 10).

Table 10. Summary of Trash Type and Potential Routes and Sources for Submarginal and Poor Sites During the 2008 Dry Weather Monitoring Program.

Station ID	Trash Type	Rank	Potential Route	Additional Potential Route (if needed)	Potential Source	Additional Potential Source (if needed)
Submarginal Sites						
A021	food packaging	1	Littering	Upstream	Household	-
A023	household	1	Dumping	Littering	Household	Transient
	food packaging	2	Dumping	Littering	Household	Transient
A024	food packaging	1	Littering	Upstream	Household	Transient
	household	2	Littering	Upstream	Household	Transient
B026	business related	1	Upstream	-	Household	Commercial
	food packaging	2	Littering	Upstream	Household	Transient
	fabric/clothing	3	Littering	Upstream	Household	Transient
B106	business related	1	Littering	-	Commercial	Transient
	food packaging	2	Littering	-	Commercial	Transient
	household	3	Littering	-	Household	Transient
L002	household	1	Littering	Upstream	Household	Transient
	business related	2	Littering	Upstream	Commercial	Industrial
L008	household	1	Littering	Upstream	Household	Commercial
	food packaging	2	Littering	Upstream	Household	Commercial
L009	food packaging	3	Littering	Upstream	Household	-
	household	2	Littering	Upstream	Household	-
	yard waste	1	Littering	Upstream	Household	Commercial
L029	food packaging	1	Littering	Upstream	Household	Commercial
	yard waste	2	Littering	Upstream	Household	Commercial
L040	food packaging	1	Littering	Upstream	Household	Commercial
	household	2	Littering	Upstream	Household	Commercial
L107	food packaging	1	Upstream	-	Household	Commercial
	household	2	Upstream	-	Household	-
L108	household	1	Upstream	-	Household	-
	yard waste	2	Upstream	-	Household	-
S043	food packaging	1	Littering	Upstream	Household	Transient
	household	2	Littering	Upstream	Household	Transient
	cigarette butts	3	Littering	Upstream	Household	Transient
S044	construction	2	Littering	-	Construction	School
	food packaging	1	Littering	Upstream	Household	School
S045	household	2	Littering	Upstream	Household	-
	food packaging	1	Littering	Upstream	Household	-
	shopping carts	3	Dumping	Littering	Commercial	-
S075	household	1	Littering	Upstream	Household	-
	food packaging	2	Littering	Upstream	Household	-
	yard waste	3	Upstream	-	Household	Commercial
	cigarette butts	4	Littering	Upstream	Household	-
S085	yard waste	1	Upstream	-	Household	Construction

Station ID	Trash Type	Rank	Potential Route	Additional Potential Route (if needed)	Potential Source	Additional Potential Source (if needed)
	food packaging	2	Littering	Upstream	Household	-
	cigarette butts	3	Littering	Upstream	Household	-
S088	food packaging	2	Littering	-	Household	-
	household	1	Littering	Upstream	Household	-
	cigarette butts	3	Littering	-	Household	-
S103	yard waste	1	Dumping	-	Household	Commercial
	household	2	Littering	Upstream	Household	-
	cigarette butts	3	Littering	Upstream	Household	-
S109	household	1	Littering	Upstream	Household	Unable to determine
	food packaging	2	Littering	Upstream	Household	
S118	food packaging	1	Dumping	Littering	Household	Transient
	household	2	Dumping	Littering	Household	Transient
Poor Sites						
L037	food packaging	1	Dumping	Littering	Household	Transient
	household	2	Dumping	Littering	Household	Transient
	shopping carts	3	Dumping	Littering	Commercial	
L110	household	1	Littering	Upstream	Household	Unable to determine
	food packaging	2	Littering	Upstream	Household	-
S116	food packaging	1	Littering	Upstream	Household	School
	household	2	Littering	Upstream	Household	School
	fabric/clothing	3	Littering	Upstream	Household	School

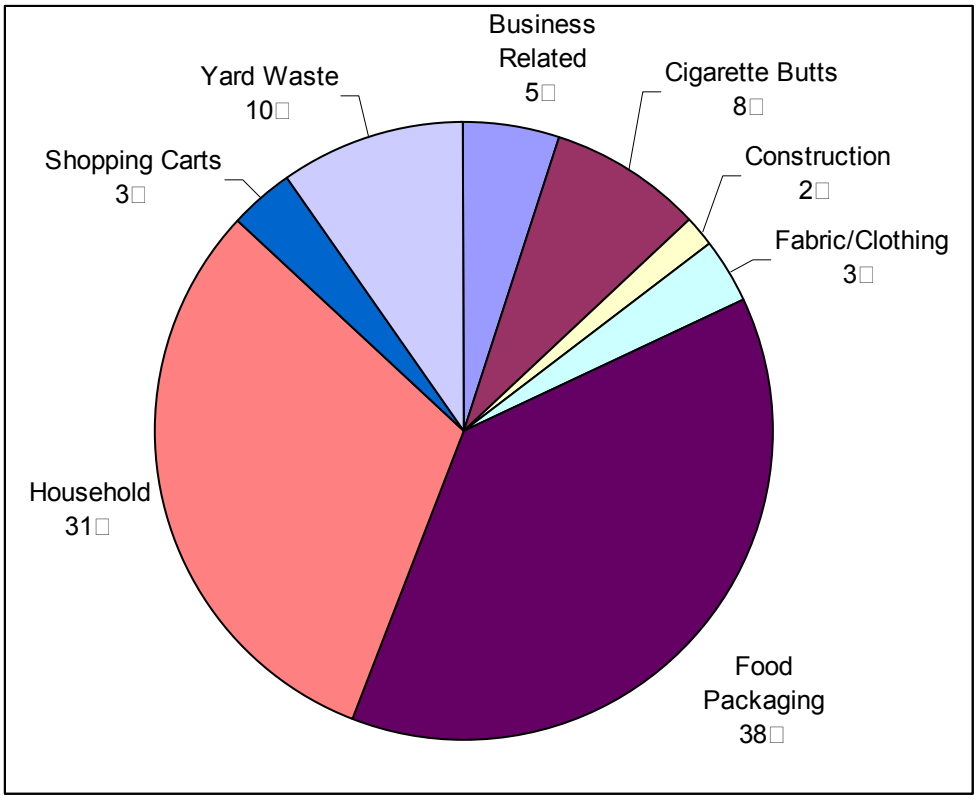

Figure 9. Types of Trash Identified at Submarginal and Poor Sites.

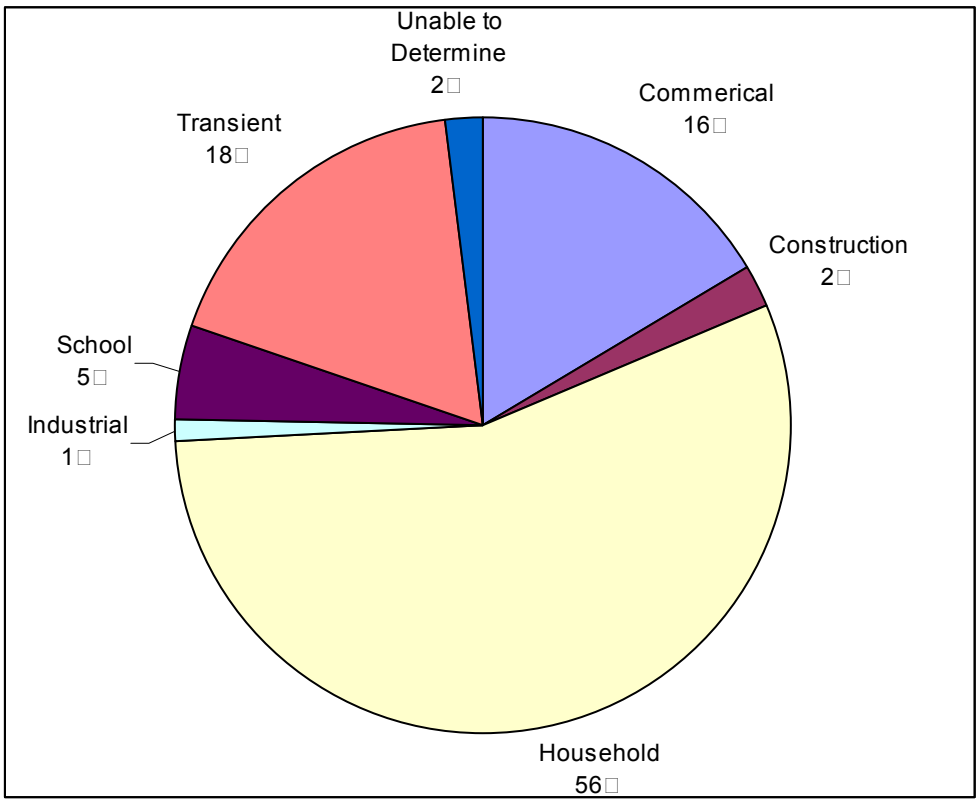

Figure 10. Potential Sources of Trash Assessed at Submarginal and Poor Sites.

5 DISSCUSION

5.1 2009 Dry Weather Summary

The 2009 Dry Weather Monitoring season marked the second year for implementation of Order No. 2007-0001, the San Diego Region's Municipal Permit. In the City's 2007 JURMP Update, sites were reassessed and procedures were refined to fit the new requirements. The City has a list of 67 primary sites and 28 alternate sites to visit between May 1 and October 30 of each year. If a primary site is inaccessible or dry, an alternate site, ideally from the same watershed, is screened. If samples from any site with ponded or flowing water exceed Dry Weather Monitoring action levels, those sites are resampled within two business days. If the site continues to exceed action levels then an IC/ID investigation is initiated. A trash assessment is completed at each site.

During the 2009 monitoring season, the 67 primary sites were visited. Three of those sites were inaccessible and an addition fourteen were dry. All 28 alternate sites were visited and two new sites with flowing or ponded water were added to the alternate list inventory. Nineteen of the ponded or flowing sites had additional analysis completed in the lab for chemistry and microbiology (28%).

Twenty four sites required confirmation for an initial field screening exceedance. Of those, 18 required an IC/ID investigation. Figure 11 represents the percentage of sites in each watershed that exceeded an initial field screening analyte. The most common exceedance was for orthophosphate.

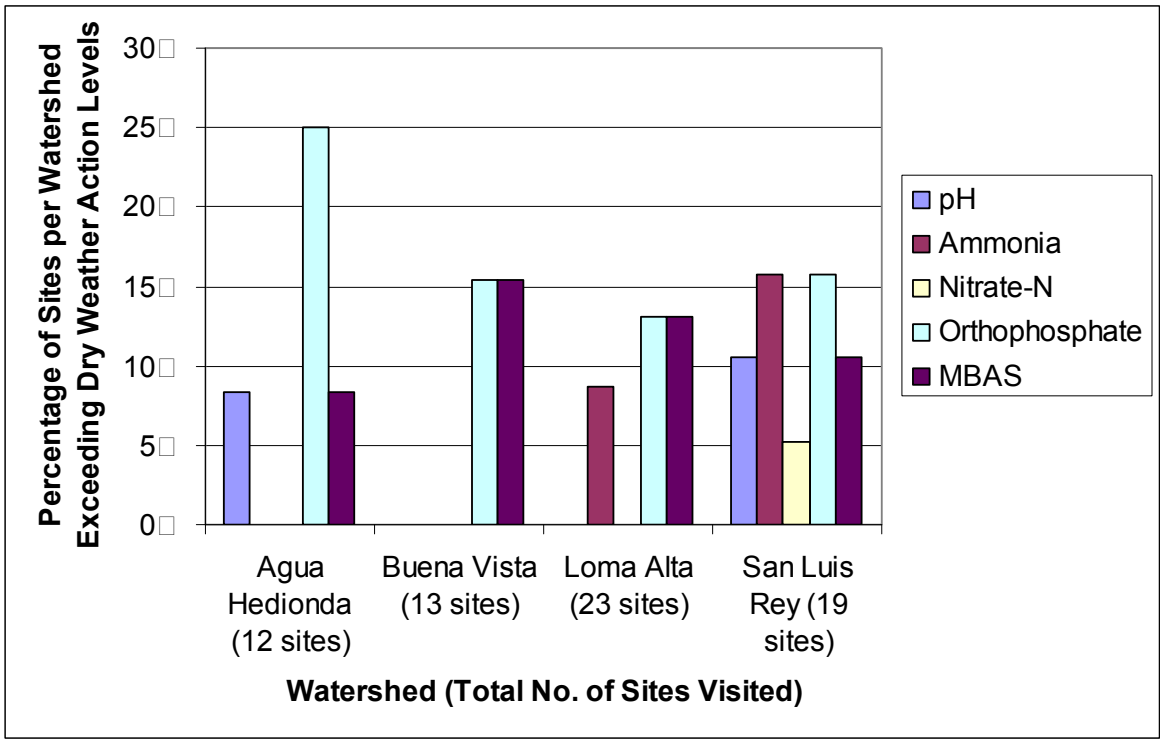

Figure 11. Percentage of Initial Exceedances in Each Watershed.

Of the 19 sites chosen for laboratory analysis, two sites had an exceedance for chemistry results. A013 exceeded the CTR for dissolved cadmium and B002 for dissolved zinc. There was an upstream investigation at A013 and groundwater is the suspected source as no discharges were found. Confirmation samples at B002 found results for dissolved zinc under the action level. For microbiology results, there were seven exceedances for total coliforms, four for fecal coliforms, and two for Enterococcus. Six of the seven total coliform exceedances required an upstream investigation. Two of the four fecal coliform confirmation samples and both of the Enterococcus confirmation samples required an IC/ID investigation.

The majority of exceedances were from ponded water. The prevailing source of ponded and flowing water was from residential and commercial over-irrigation. With the continual push for water conservation in light of changing water availability, several avenues are being implemented to reach the general public about water conservation which will in turn improve water quality. On May 9, 2009, the Oceanside City Council voted to declare a Drought Level 2 with new water use restrictions for residents and businesses taking effect on July 1, 2009. Level 2 restrictions include:

- No washing down of paved surfaces.
- Stop water waste from inefficient landscape irrigation.
- Water before 10:00am and after 6:00pm.
- Wash vehicles using a bucket and hand-held hose equipped with a positive shut-off nozzle.
- Serve and refill water in restaurants only upon request.
- Offer hotel guests the option of not laundering towels and linens daily.
- Limit residential and commercial landscape irrigation to no more than 3 assigned days per week.
- Water landscaped areas, including trees and shrubs not irrigated by a landscape irrigation system, no more than 3 assigned days per week using a bucket, hand held hose with positive shut-off nozzle, or low-volume non-spray irrigation.
- Limit lawn watering and landscape irrigation using sprinklers to no more than 10 minutes per water station per assigned day.
- Sop operating ornamental fountains unless re-circulated water is used.
- Repair all leaks within 72 hours of notification by the City of Oceanside.

These efforts may be a reason for the increase in Dry Weather Monitoring sites without any ponded or flowing water. Staff outreach to respond to complaints, violations, and Dry Weather Monitoring exceedances include face-to-face outreach by two Clean Water Program Compliance Inspectors. Historical mail-outs have yielded little response. New door-hangers that can be personalized were created and utilized by the Inspectors when inhabitants were not home. In addition, on their daily work assignment the City Water Utilities Department water meter crew identifies and reports city-wide over-irrigation runoff cases to the Clean Water Program Compliance Inspectors for further follow-up investigations. In addition to two new inspectors, the Water Utility Department hired an outreach coordinator specifically for water conservation education in November of 2008.

The Water Conservation Specialist and Clean Water Program Environmental Specialists conducted water conservation and water quality outreach in many forms. Informational inserts, press releases, and fliers have been placed in water bills and distributed throughout the reporting year. The inserts include information about water saving incentive programs, community workshops, water-wise landscape suggestions, and repeated information about reducing water consumption particularly on outside landscaping. Outreach is also being provided on the local public access channel, the Oceanside Magazine, public education to schools, scout troops, and having staff available at community events such as Harbor Days and the local farmer's market. Table 11 provides a summary of the types and number of outreach provided to the community to reduce water waste and improve water quality.

Table 11. Summary of Water Conservation and Water Quality Outreach for Fiscal Year 2008/09.

Type of Outreach	Number of Events in 2008/09	Approximate Attendance for Reporting Year
Booths at Community Events	9	2,700
Speaker's Bureau to Community Groups	16	680
Youth Education in Schools	9	787
Landscape Workshops	4	254
Local Public Television PSAs	6	N/A
Utility Bill Stuffers	2	N/A
Press Releases/Flyers	14	N/A

5.2 Historical Data Comparison

In February 2001, the San Diego Regional Water Quality Control Board issued Order No. 2001-01 to the communities of San Diego County. As part of Order 2001-01, the City of Oceanside was required to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program. The Dry Weather Program under this order was implemented in the 2002 Dry Weather season. This section provides a comparison of the last seven years of dry weather data.

The majority of exceedances from the last several years are nutrients (nitrate, orthophosphate, and ammonia) and bacterial indicators (total coliform, fecal coliform, and Enterococcus). Table 12 provides a summary of the previous seven years of dry weather monitoring data including the number of sites monitored and the number of exceedances of these specific field and laboratory analytes.

Orthophosphate exceedances have increased gradually over the past several years, however, ammonia exceedances have decreased. The majority of those sites in both cases were ponded water, where decaying plant debris may be a cause of spikes in the results. Bacteria levels have decreased and fewer sites are exceeding action levels.

Table 12. 2002-2009 Dry Weather Monitoring Report Data Comparison.

Monitoring Year	2009	2008	2007	2006	2005	2004	2003	2002
Total No. of Sites Visited	97	85	93	99	100	68	99	290
No. of Sites Sampled for Initial Field Screening	67	66	61	54	44	18	56	56
No. of Sites Exceeding Nitrate Action Level*	1	3	3	3	2	NS	3	11[1]
No. of Sites Exceeding Orthophosphate Action Level	11	13	12	6	8	2	14	11
No. of Sites Exceeding Ammonia Action Level	5	9	15	8	4	17	49	50
No. of Sites Exceeding MBAS Action Level	8	13	N/A	N/A	N/A	N/A	N/A	N/A
No. of Sites Sampled for Laboratory Analysis	19	19	18	19	17	19	16	11
No. of Sites Exceeding Total Coliform Action Level	7	7	9	12	17	11	0	4
No. of Sites Exceeding Fecal Coliform Action Level	4	2	4	5	4	2	0	1
No. of Sites Exceeding Enterococcus Action Level	2	2	2	2	4	3	2	0

1-In the 2007 Dry Weather Monitoring Report, a discussion of the reporting of historical nitrate data was presented. Previous reports indicated that nitrate reported in monitoring years 2002, 2003, 2005 and 2006 may have been reported as NO_3, as opposed to NO_3-N. Without converting to the appropriate form of nitrate to compare to the set action levels, the number of exceedances was likely erroneously high. These numbers have been changed to reflect the conversion to NO_3-N, with the exception of the 2002 monitoring year. Without notes or written discussions to verify the lack of conversion, the data will continue to be reported as originally printed.

5.3 Trash Assessment

The 2009 Dry Weather Monitoring Program is the second year for assessing the amount and extent of trash at each dry weather monitoring location. Approximately 73% of the sites were either "optimal", "suboptimal", or "marginal" and did not require the detailed trash evaluation. Twenty four percent of the sites were "submarginal" and 3% of the sites were "poor". The San Luis Rey Watershed continued to have the highest percentage of "submarginal" and "poor" sites (32%), but that percentage was down from last year (46%). Comparison statistics for the trash assessment are presented in Table 13.

The majority of the trash found in the sites that required further trash evaluation was either food packaging or household waste. These items were most commonly at the sites via littering or from upstream. And, the most common source of the food packaging and household wastes are households and transients. These are consistent results with the previous trash assessment year.

Two sites (2% of all sites) were deemed a threat to human health in the 2009 dry weather survey. At both sites, dirty diapers were observed. Three sites (3% of all sites) were deemed a threat to aquatic health. Two sites had small Styrofoam or plastic pieces that be mistaken for food by aquatic life. One site had spray paint cans present.

Table 13. 2008 – 2009 Trash Assessment Comparison.

Monitoring Year	2009	2008
Total No. of Sites Visited	88	81
No. of Sites Considered Optimal, Suboptimal, or Marginal	64	53
No. of Sites Considered Submarginal or Poor	24	28
No. of Sites With Better Rating than Previous Year	23	N/A
No. of Sites With Worse Rating than Previous Year	13	N/A
Two Most Common Types of Trash	Food Packaging (38%), Household (31%)	Food Packaging (36%), Household (31%)
Two Most Common Potential Routes	Littering (49%), Upstream (42%)	Littering (46%), Upstream (40%)
Two Most Common Potential Sources	Household (56%), Transient (18%)	Household (55%), Transient (27%)
No. of Sites with a Threat to Human Health	2	3
No. of Sites with a Threat to Aquatic Health	3	9

The 2008 trash assessment was used to identify sites that would be good candidates for City-sponsored and private clean-up events. The City of Oceanside coordinates four clean-up events per year. These four clean-up events include multiple sites throughout the watershed at each event. In addition to the City coordinated events, 12 times on average throughout the year, private citizen groups conduct beach and watershed clean-ups with City supplies and council. Both of these types of clean-ups utilized the 2008 trash assessment to identify high priority sites which were then included as a location for a clean-up.

In addition to clean-up events, the City identified two key sites where a structural and non-structural BMP was needed. The historic and future trash assessments will help in identifying these high priority areas for future BMP placement. The two BMPS are discussed below.

Trash Trap at the Oceanside Municipal Golf Course (Dry Weather Site S119)

Staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. City staff installed a trash trap downstream of this priority residential area and upstream of the municipal golf course in the open channel that parallels the driving range. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. This trash trap was installed in March 2009.

After installation there was one rain event that captured 40 pounds of trash and organic debris. During future reporting years, the volume or weight of trash will be tracked. See the photos below of the newly installed trash trap and a photo of the effectiveness of the trash trap in stopping debris from reaching the waterway.

Trash trap immediately after installation

Trash trap with debris

Non-Structural, Administrative BMP for Trash from Oceanside Unified School District (Dry Weather Site L110)

Public Works staff identified a section of MS4 that had a large amount of tennis balls and other trash, such as plastic bottles, after storm events where Garrison Creek daylights off of Mesa Boulevard. It appeared that a large amount of the trash, including tennis balls, softballs, plastic drink bottles, and food wrappers, was likely coming from El Camino High School and Martin Luther King, Jr. Middle School. The Clean Water Program Coordinator notified the Maintenance and Operations Director of the Oceanside Unified School District of the problem. On January 22, 2009, the Director notified all area principals about the accumulation of trash and asked the principals to share the photos with staff and students using school newspapers, assemblies, and brochures.

Trash accumulation at Garrison Creek.

6 CONCLUSIONS

The City of Oceanside's boundaries include two major watersheds; the San Luis Rey Watershed, which includes the San Luis Rey River, and the Carlsbad Hydrologic Unit, which consists of Loma Alta Creek, Buena Vista Creek, and Agua Hedionda Creek. As part of Order 2001-01, the San Diego Regional Water Quality Control Board required all Copermittees to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program beginning in 2002. The purpose of the program was to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain system, minimizing the negative impacts of human activities on these water bodies. In 2007 the San Diego Regional Water Quality Control Board issued a new five-year permit for Receiving Waters and Urban Runoff Monitoring and Reporting, Order No. 2007-0001. The Copermittees in San Diego County were required, as part of their Jurisdictional Urban Runoff Management Program (JURMP), to update their Dry Weather Program to meet or exceed the requirements of Order No. 2007-0001. The key changes to the 2007 Municipal Permit were adding a trash assessment component and requiring follow-up investigations to be conducted within two business days of receipt of results.

This report presents the results of the City of Oceanside's 2009 Dry Weather Field Screening and Analytical Monitoring Program which includes the revisions to the program required by Order No. 2007-0001.

The City's Dry Weather Monitoring Program, as outlined in the 2008 JURMP Update with site updates from 2008, includes 67 primary monitoring stations and 28 alternate monitoring stations. If one of the primary stations was dry, alternate stations were visited until a site with ponded or flowing water was found and field screening was completed. Trash assessments were completed at every accessible site, whether the site was dry or had water.

During the 2009 monitoring season, the 67 primary sites were visited. Three of those sites were inaccessible and an additional fourteen were dry. Twenty eight alternate sites were visited and two new sites with flowing or ponded water were added to the alternate list inventory. Nineteen of the ponded or flowing sites had additional analysis completed in the lab for chemistry and microbiology (28%).

Twenty four sites required confirmation for an initial field screening exceedance. Of those, 18 required an IC/ID investigation. The most common exceedance was for orthophosphate. Of the 19 sites chosen for laboratory analysis, two sites had an exceedance for chemistry results. A013 exceeded the CTR for dissolved cadmium and B002 exceeded the CTR for dissolved zinc. There was upstream investigation conducted at A013 and groundwater is suspected. Confirmation results at B002 did not show a continued exceedance for zinc. For microbiology results, there were seven exceedances for total coliforms, four for fecal coliforms, and two for Enterococcus. Six of the seven total coliform exceedances required an upstream investigation. Two of the four fecal coliform confirmation samples and both of the Enterococcus confirmation samples required an IC/ID investigation.

A historical comparison of action level exceedances shows that while orthophosphate exceedances are the predominant field analyte exceedance, there were fewer in 2009 than the previous two years. Ammonia exceedances have decreased. This may be due, in part, to a change in the analytical field test kit method. In practice and in discussion with with other Copermittees the 2009 method seems more accurate for environmental samples (as opposed to drinking water samples). Bacteria exceedances were similar to the previous year and continue to have fewer sites exceeding action levels.

Similar to the 2008 dry weather results, in 2009 a little less than half of the sites that were sampled were ponded. Many of these did not have a flowing source upstream. Exceedances at these sites may be attributed to periodic upstream flow and/or the decay of organic material in the ponded water to cause Dry Weather exceedances. More sites were dry this year as compared to the 2008 season; 19 as opposed to ten the previous year.

The most common source of flowing water was residential and commercial landscape over-irrigation. In addition to the restrictions, the City of Oceanside Water Utilities Department increased public outreach and awareness of water conservation needs and measures between the summer of 2008 and the summer of 2009. This outreach included hiring a part-time Water Conservation Specialist to assist in presentations to HOAs and community groups, and on the local public access channel and written outreach for inserts in water bills and press releases. The education effort is described in detail in Section 8 of the Oceanside JURMP Annual Report, but it did include a newsletter topic in the fall of 2008 addressing water conservation tips to eliminate water runoff and three minute public service announcements including a topic addressing irrigation runoff. Staff outreach to respond to complaints, violations, and Dry Weather Monitoring exceedances included face-to-face outreach by two Clean Water Program Compliance Inspectors. Historical mail-outs have yielded little response. New door-hangers that can be personalized were created and utilized by the Inspectors when residents were not home.

The 2009 Dry Weather Monitoring Program is the second year for assessing the amount and extent of trash at each dry weather monitoring location. Approximately 73% of the sites were either “optimal”, “suboptimal”, or “marginal” and did not require the detailed trash evaluation. Twenty four percent of the sites were “submarginal” and 3% of the sites were “poor”. The San Luis Rey Watershed continued to have the highest percentage of “submarginal” and “poor” sites (32%), but that percentage was down from last year (46%). The majority of the trash found in the sites that required further trash evaluation was either food packaging or household waste. These items were most commonly at the sites via littering or from upstream. And, the most common source of the food packaging and household wastes are households and transients. These are consistent results with the previous trash assessment year.

Follow-up investigations continue to be conducted at sites with ongoing exceedances. Water conservation and urban runoff outreach, as well as beach and creek clean-ups continues year-round as the City continues the effort to detect and eliminate illicit discharges to the storm drain system.

APPENDIX A

2009 SITE PHOTOS

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AGUA HEDIONDA

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BUENA VISTA

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B030 (Photo 2008-Inaccessible 2009)

B031

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B033 (Photo 2008- No picture 2009)

B034

B103

B104

B105 (Photo 2008; Replaced by B108)

B106

B108

LOMA ALTA

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L046

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L052

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L102 (Unable to Sample, See L115)

L103

L105

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L111

L114 (Photo 2008- Inaccessible 2009)

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SAN LUIS REY

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S006

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APPENDIX B

2009 FIELD DATA SHEETS

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San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☐ **Receiving Water**

Site ID		**Latitude**	(e.g., 33.41174)	**Watershed**	**Hydrologic Unit**	(e.g., 7.00)
Location		**Longitude**	(e.g., -117.35213)		**Hydrologic Area**	(e.g., 7.10)
Date		**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time		**Observer**			**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☐ > 72 hours ☐ < 72 hours

Rainfall ☐ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

2009 Trash Assessment Form

SITE ID: _____ **DATE:** _____

LOCATION: _____ **TIME:** _____

OBSERVER: _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____

ESTIMATED AREA OF ASSESSMENT L X W (FT): _____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES: ☐ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (400 pieces).

In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

_____

_____

_____

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_____

_____

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_____

APPENDIX C

2009 IC/ID INVESTIGATIONS

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A004a	Dry Weather 2009	7/27/2009

Site Summary:

Site A004a is 48-inch RCP located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The outlet drains the residential areas north and south of the outlet.

Investigatory Actions

Date	Action	Staff
7/27/2009	Initial investigation conducted. Analytical Screening showed exceedances for the following parameters: Total Coliforms: 130,000 MPN/100mL Fecal Coliforms: 22,000 MPN/100mL Flow was estimated at 1.7 gpm.	Witheridge
8/5/2009	Follow-up investigation conducted for bacteria (official results were sent on 8/17/2009, but preliminary results were used to initiate the follow-up): Total Coliforms: 900,000 MPN/100mL Fecal Coliforms: 80,000 MPN/100mL Flow was less and estimated at 0.4 gpm. An upstream investigation was initiated. The MS4 system diverges. One line flows from the south and the other from the east. The line from the south had a trickle of water, but was not able to be sampled (A004a-A). The line from the east was sampled (A004a-B): Total Coliforms: >1,600,000 MPN/100mL Fecal Coliforms: 220,000 MPN/100mL Flow from this manhole increased while sampling. Samples were collected after the flow increased.	Witheridge
9/30/2009	The investigation continued upstream on the MS4 line to the east. The same manhole was resampled (A004a-B): Total Coliforms: 110,000 MPN/100mL Fecal Coliforms: 11,000 MPN/100mL Flow was approximated at 0.5 gpm. The next manhole upstream, on Nighthawk Way was	Witheridge/ Gremmels

<table>
<tr>
<td></td>
<td>visited. There was overland flow that was identified as over-irrigation from a home. The flow, estimated at 0.25 gpm, was sampled prior to entering the gutter (A004a-C):
<table>
<tr><td>Total Coliforms</td><td>80,000 MPN/100mL</td></tr>
<tr><td>Fecal Coliforms</td><td>1,400 MPN/100mL</td></tr>
</table>

However flow was also coming from the MS4 further east. A sample was not possible from this manhole due to depth and low flow.

This flow was traced upstream to Viewridge and was identified as overland flow coming primarily from area drains of two homes. The overland flow, estimated at 0.25 gpm, entering the MS4 was sampled (A004a-G):
<table>
<tr><td>Total Coliforms</td><td>80,000 MPN/100mL</td></tr>
<tr><td>Enterococcus</td><td>23,000 MPN/100mL</td></tr>
</table>
</td>
<td></td>
</tr>
</table>

Investigatory Status

The source of the flow was identified as likely over-irrigation from the area drains of the residential community to the northeast of the outfall. This is a gated-community with single-family homes. Three homes were identified as the major contributors. On October 7, 2009, contact with the homeowners was attempted by Clean Water Program Inspectors, however no homeowners were present. Educational materials were left at the residences in the form of residential brochures.

Attachments

A004a-C

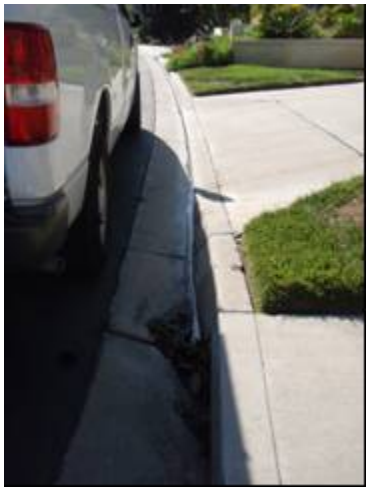

A004a-G

A013	Dry Weather 2009	7/29/2009

Site Summary:

Site A013 is a 36-inch RCP located at the intersection of Lake Boulevard and Alameda Drive, south of Agua Hedionda Creek. The outlet drains the residential areas immediately south of the site.

Follow-up Actions

Date	Action	Staff
7/29/2009	Initial investigation conducted. Field screening showed an exceedance for pH. The lab results showed an exceedance for Total Coliform: pH: 6.33 Total Coliforms: 70,000 MPN/100mL Dissolved Cadmium: 0.008 mg/L	Witheridge
7/30/2009	Follow up was conducted and pH was within the acceptable range: pH: 6.65	Witheridge
8/5/2009	Follow-up investigation conducted (official receipt of laboratory results was on August 17th, but preliminary results were used for bacteria follow-up). Total coliforms again exceeded the action levels: Total Coliforms: 170,000 MPN/100mL An upstream investigation was initiated. The highest flows were tracked upstream to a manhole at the corner of Amador and Alameda Drive. Total coliform and fecal coliform results were above the action levels (A013A): Total Coliforms: 170,000 MPN/100mL The flow was tracked further upstream to the next manhole without the orange deposits in front of 4920 Amador. Total coliform, fecal coliform, and Enterococcus results were above the action levels here (A013B). Total Coliforms: 900,000 MPN/100mL	Witheridge
8/13/2009	Confirmation sampling was conducted for dissolved cadmium (official receipt of results were on August 17th,	Witheridge

<table>
<tr><td></td><td>however preliminary results were used for metals follow-up). The confirmation result continued to exceed the action level:
<table><tr><td>Dissolved Cadmium</td><td>0.0091 mg/L</td></tr></table></td><td></td></tr>
<tr><td>9/30/2009</td><td>ICID investigation continued for both cadmium and bacteria.
At A013 (original site), a sample was collected for cadmium. Flow was estimated at 3pgm:
<table><tr><td>Dissolved Cadmium</td><td>0.0124 mg/L</td></tr><tr><td>Total Hardness</td><td>2400 mg/L as CaCO3</td></tr></table>
At the next upstream manhole, A013A, a sample was collected for cadmium. Orange deposits were noted in the MS4. Flow was estimated at 3 gpm :
<table><tr><td>Dissolved Cadmium</td><td>0.0179 mg/L</td></tr><tr><td>Total Hardness</td><td>2760 mg/L as CaCO3</td></tr></table>
At the next upstream manhole, A013B, samples were collected for bacteria and cadmium. No orange deposits were seen at this manhole. Flow was estimated at 3 gpm:
<table><tr><td>Dissolved Cadmium</td><td>0.0242 mg/L</td></tr><tr><td>Total Hardness</td><td>1760 mg/L as CaCO3</td></tr><tr><td>Total Coliforms</td><td>300,000 MPN/100ml</td></tr></table>
The next three manholes were visited, but samples were not collected. Flow was consistent in the pipe. Overland flow was observed from two locations above the 3rd manhole location (A013E) from over-irrigation. In this 1000 foot section of the MS4, the elevation does increase approximately 90 to 100 feet.

The next upstream manhole, A013F, was sampled for cadmium and bacteria. Flow was estimated at 1.5 gpm:
<table><tr><td>Dissolved Cadmium</td><td><0.0006 mg/L</td></tr><tr><td>Total Hardness</td><td>226 mg/L as CaCO3</td></tr><tr><td>Total Coliforms</td><td>900,000 MPN/100ml</td></tr></table>
Three more manholes were located on the MS4 upstream of this site, but all were sealed and not accessible. There was evidence of overland flow, but a source could not be identified as the curbs and gutter quickly dried.</td><td>Witheridge/ Gremmels</td></tr>
</table>

Investigatory Status

This area has been investigated for several years. Surrounding open space areas have been investigated along with the MS4 system each year. This area has a shallow groundwater table, along with a unique geologic make-up. White and orange crystalline

deposits are found in storm drains and in open space areas alike. The storm drain lines have been inspected using closed circuit television (CCTV) and groundwater can be seen coming into the joints of the MS4. Water quality action level exceedances this year include bacteria, pH, and dissolved cadmium.

This year, the SWRCB GeoTracker database was used to verify the highest depth of the groundwater table. A monitoring well less than a mile away at a similar elevation (380 feet) used for a Leaking Underground Storage Tank (LUST) Cleanup site, T0607391311, indicated the highest groundwater depth below ground surface was 11 feet. As stated in the above table, the downstream sites (A013 through A013E) begin at an elevation of 300 feet and increase in elevation by approximately 90 feet with manholes that are between 8 and 12 feet deep. This is another indication that groundwater infiltration is the primary cause of the flow.

The out of range pH reading was within an acceptable range upon confirmation, but the results historically are low and have been attributed to the natural geologic processes.

For this year's investigations for dissolved cadmium, samples within the 300 to 380 feet elevation had a total hardness 1760 and 2760 mg/L as CaCO3. The dissolved cadmium values were between 0.0124 and 0.0242 mg/L. The hardness levels, along with a flow of water that was not observed from overland flow, and the historical knowledge from CCTVing this line, indicate groundwater infiltration as the source of the cadmium.

However, bacteria levels seem to vary and were still exceeding the action levels at site A013F, upstream of what appeared to be the majority of the groundwater infiltration. The flow was half of what the downstream flows were, but observations of overland flow were scarce. Two area drains from single family homes were identified with significant flow, one that was green with algae. These were addressed by a Clean Water Program Inspector on October 7, 2009. Educational materials were provided to the residences. In addition, ongoing education and outreach programs are being conducted in conjunction with the drought restrictions and discussed in the Discussion Section of the Dry Weather Monitoring Report.

Attachments

A013A

A013B

A015	Dry Weather 2009	7/29/2009

Site Summary:
Site A015 is a 48-inch RCP located south of Lake Park, off of Lake Boulevard, south of Agua Hedionda Creek. The outlet drains the residential areas east along Lake Boulevard Drive. Access to the site is from Lake Boulevard Drive.

Investigatory Actions

Date	Action	Staff
7/29/2009	Initial investigation conducted. Field and laboratory screening showed exceedances for the following parameters: Orthophosphate-P: 2.04 mg/L Total Coliforms: 90,000 MPN/100 mL Fecal Coliforms: 30,000 MPN/100 mL	Witheridge
7/30/2009	A follow up investigation for orthophosphate showed levels to be under the action levels: Orthophosphate-P: 0.32 mg/L	Witheridge
8/5/2009	A follow up investigation for bacteria was initiated. Results were received on 8/17/09, but preliminary results were used to begin the investigation. The follow-up showed bacteria levels to be under the action levels: Total Coliforms: 22,000 MPN/100 mL Fecal Coliforms: 230 MPN/100 mL	Witheridge

Investigatory Status
A015 has been subject to an ongoing investigation to locate the source of persistent white foam in runoff since 2004. Historically, total coliform exceedances and low pH also seem to be a common characteristic in this area. This monitoring year, upon confirmation, all field and laboratory results were under the action levels and no further action was required.

A016	Dry Weather 2009	7/29/2009

Site Summary:

Site A016 is a 36-inch RCP located east of Amigos Court, south of Lake Boulevard, and north of Calavera Creek at the border of Oceanside and Carlsbad. The outlet drains the residential areas to the north and south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
7/29/2009	Initial investigation conducted. Field and laboratory screening showed an exceedance for the following parameters: MBAS: 1.5 mg/L Total Coliforms: 300,000 MPN/100ml Flow was measured at 13.76gpm. Because the MBAS field test kit resulted in an exceedance, a sample for laboratory processing was collected later in the day. The laboratory results were below the action level: MBAS: <0.5 mg/L	Witheridge
7/30/2009	Prior to the MBAS results being reported, a follow-up investigation was conducted for the MBAS field test kit result. Field screening results found MBAS to be within acceptable parameters: MBAS: 0.85 mg/L Flow was estimated at 1gpm.	Witheridge
8/5/2009	A confirmation sample for total coliforms was collected. Official receipt of results was on 8/17/2009, however preliminary results were used to initiate the sampling: Total Coliforms: 130,000 MPN/100ml	Witheridge
9/30/2009	An upstream investigation was conducted for total coliform. Flow was identified in the next upstream manhole, but it could not be sampled due to the depth of the manhole. Flow was traced up to the Rancho Calevero Mobile Home Park. White irrigation pipe was found with flow dumping into the storm drain. This flow, a little over 3 gpm, was sampled: Total Coliforms: 130,000 MPN/100ml	Witheridge/ Gremmels

	The pipe was followed back to a pump, pumping out a decorative concrete lined pond in the middle of the park. Photos and documentation were turned over to Code Enforcement.	

Investigatory Status:
The follow-up investigation showed MBAS results were under the Dry Weather Monitoring Program action levels. Total coliform results continued to exceed the action levels and were attributed to Rancho Calevero Mobile Home Park pond maintenance. The mobile home park had a similar violation with another one of their ponds in 2007. In 2007, the Clean Water Program Coordinator visited and educated park management about storm water regulations and the options of using their drained un-chlorinated pond water on landscape. An administration warning citation was given on October 10, 2009 after Code Enforcement officers met with the Clean Water Program Coordinator. On October 13, 2009 a Code Enforcement officer met with management at the mobile home park and discussed the citation. On October 15, 2009, a site visit was made and the flow had ceased although the piping was still present.

Attachments

A016A

Upstream pond pump

A019	Dry Weather 2009	8/25/2009

Site Summary:

Site A019 is a 24 inch RCP located in Oak Riparian Park off of Lake Boulevard, north of Agua Hedionda Creek. The outlet drains the residential and park areas north and south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
8/24/2009	Initial investigation conducted. Field Screening from the ponded water showed exceedances for the following parameters: Orthophosphate-P: 2.16 mg/L	Witheridge
8/26/2009	Follow up investigations from the ponded water continued to show exceedances for the following parameters: Orthophosphate-P: 2.62 mg/L An upstream investigation was initiated. Two upstream manholes were investigated on Ridge Rd. However, while they were wet, no flow was seen and there was not enough water to sample. Both inlets contained a significant amount of leaf debris.	Witheridge

Investigatory Status

Initial screening of the ponded water at site A019 resulted in an action level exceedance of orthophosphate. The follow-up visit found a continued exceedance of orthophosphate. It appears that the ponded water is likely from the upstream residential neighbor, as there was no evidence of erosion or over-irrigation from the park. The storm drain collection boxes at the base of the neighborhood showed evidence of overland flow such as water stains and wet leaf debris, but not flows were occurring. Ongoing education and outreach programs are being conducted in conjunction with the drought restrictions and discussed in the Discussion Section of the Dry Weather Monitoring Report. In addition, mosquito larvae were present upon the routine investigation and the County Vector Control was notified. The ponded water was treated on August 25, 2009 and is now on the County's regular maintenance schedule.

A021	Dry Weather 2009	8/24/2009

Site Summary:

Site A021 is a 36 inch RCP located off of Sky Haven Lane, north of Calaveras Creek. The outlet drains the residential areas to the north of the outfall. Access to the site is from a residential driveway and down an embankment.

Investigatory Actions

Date	Action	Staff
8/24/2009	Initial investigation conducted. Field Screening from the ponded water showed exceedances for the following parameters: Orthophosphate — 2.88 mg/L	Witheridge
8/26/2009	Follow up investigations from the ponded water continued to show exceedances for the following parameters: Orthophosphate — 3.64 mg/L An upstream investigation was initiated. The next upstream manhole has 3 RCP inlets. One had a trickle of water, but it was not enough flow to sample. The other two were stained with water, but were not flowing. Since there was no significant flow to track, overland flow was investigated. There were puddles of water in the curb, but no source was identified, nor were they in places where over-irrigation or car washing seemed to occur.	Witheridge

Investigatory Status

Initial screening of the ponded water at site A021 resulted in an action level exceedance of orthophosphate. The follow-up visit found a continued exceedance of orthophosphate. There was not enough flow found in the upstream manhole to sample or track. Overland flow was evident in the surrounding neighborhood, but was ponded so sources were not identifiable. From the stains on the asphalt and previous dry weather investigations

(2007) in the area, groundwater seepage is the likely culprit of the water and the nutrient exceedance.

Investigatory Status

Overland ponding southwest of A021 manhole and curb inlet.

B002	Dry Weather 2009	6/8/2009

Site Summary:

Site B002 is a 72-inch RCP located on Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial and residential areas north of SR-78. Access to the site is via Lagoon View Drive.

Investigatory Actions

Date	Action	Staff
6/8/2009	Initial investigation conducted. Laboratory results showed an exceedance for dissolved zinc: Dissolved Zinc: 0.607 mg/L Total Hardness: 1510 mg/L as CaCO3	Witheridge
6/17/2009	Follow-up investigation conducted; receipt of results was on the same day. Dissolved zinc results were below Dry Weather action levels. Dissolved Zinc: 0.00957 mg/L Total Hardness: 866 mg/L as CaCO3 An upstream investigation was conducted on the day of the confirmation visit. The next accessible upstream manhole is north of Interstate 78 in a lane of traffic on Vista Way in the shopping center. This manhole was opened, but was too deep to sample. The next upstream manhole is in the parking lot/alley of the shopping center just west of Stater Bros. Market. The manhole was accessible and was sampled (B002B). Dissolved zinc was below the action levels: Dissolved Zinc: 0.004 mg/L Total Hardness: 947 mg/L as CaCO3 The line was followed further north into the residential area off of Ivy. The first manhole on the eastern side of the connection was dry. The next manhole west of the connection to the outfall was flowing and samples were collected (B002D). Dissolved zinc was below the action levels: Dissolved Zinc: <0 .002 mg/L Total Hardness: 970 mg/L as CaCO3	Witheridge

Investigatory Status

A follow up investigation was conducted and two upstream samples were taken. However, all samples submitted to the laboratory showed dissolved zinc results that were below the dry weather action level.

B022	Dry Weather 2009	7/27/2009

Site Summary:

Site B022 is a 48-inch RCP built into the Buena Vista Creek channel wall east of the Thunder Drive Bridge. The outlet drains the residential areas north of Buena Vista Creek. Access to the site is from within Buena Vista Creek channel.

Investigatory Actions

Date	Action	Staff
7/27/2009	Initial investigation conducted. Field Screening and laboratory results showed exceedances for the following parameters: Total Coliforms: 300,000 MPN/100mL Fecal Coliforms: 50,000 MPN/100mL Enterococcus: 22,200 MPN/100mL One diaper was found near the outfall but in the receiving water during sampling.	Witheridge
8/5/2009	Confirmation conducted. Laboratory results were received on 8/17/2009, however preliminary results were used to initiate confirmation. Total Coliform, Fecal Coliform and Enterococcus were all above exceedance levels during resample as well. Total Coliforms: 240,000 MPN/100mL Fecal Coliforms: 130,000 MPN/100mL Enterococcus: >24,196 MPN/100mL	Witheridge
10/7/2009	A follow-up investigation was conducted. The outfall was resampled and continued to exceed action levels for all indicator bacteria. Flow was estimated at approximately 1gpm. There were grass clippings deposits in the drain. Total Coliforms: 130,000 MPN/100mL Fecal Coliforms: 130,000 MPN/100mL Enterococcus: 72,700 MPN/100mL The next upstream manhole, located at Tiburon near Thunder Drive, B022A was sampled. Visual observations reported grass clippings and leaf debris just downstream of the sampling point in the storm drain creating ponded water. Some overland ponded water with birds bathing was observed. Total Coliforms: 56,000 MPN/100mL Fecal Coliforms: 36,000 MPN/100mL Enterococcus: 60,200 MPN/100mL	Witheridge/ Gremmels

	The next upstream manhole, B022B, a small amount of flow was observed, but there was not enough flow to sample. No grass clippings or leaf debris was observed in the storm drain. The next upstream manhole, B022C, is in the middle of Plaza Drive and was not accessible due to safety precautions for lack of traffic control.	

Investigatory Status
All indicator bacteria at this site continued to exceed action levels during the follow-up investigation. During the previous reporting year, action levels were exceeded initially, but upon a thorough investigation, no exceedances were found. Based on last year's results, it was estimated that the source of bacteria was between the outfall and the next upstream manhole. The outfall and accessible manholes south of the 76 and the City of Vista were visited, but only two sites were sampled. These two sites indicated that grass clippings, leaf debris, and irrigation runoff (with birds bathing) are likely the source of the bacteria exceedances.

The area was referred to a Clean Water Program Inspector to provide in-person education regarding appropriate irrigating and landscaping techniques. In addition, ongoing bilingual education and outreach will be provided to the condominium residents regarding the apparent improper disposal of trash into the receiving water.

B022A

Upstream → Downstream
Grass clippings in drain causing ponding.

B023	Dry Weather 2009	8/3/2009

Site Summary:

Site B023 is a 36-inch RCP located west of the intersection of Lake Boulevard and Thunder Drive south at 3524 Lake Blvd. The outlet drains the residential areas south of Lake Boulevard.

Investigatory Actions

Date	Action		Staff
8/3/2009	Initial investigation conducted. Field screening results showed conductivity levels to be exceed the action level:		Witheridge
	MBAS	1.25 mg/L	
8/4/2009	Follow-up investigation conducted. Field screening showed MBAS levels to be at the action level:		Witheridge
	MBAS	1.0 mg/L	
8/11/09	A laboratory sample was collected for MBAS. The result was non-detect:		Witheridge
	MBAS	< 0.5 mg/L	

Investigatory Status

Conductivity at this site ranged between 13 and 16 mg/L. Previous investigations have shown this to be a result of groundwater seepage. Because elevated conductivity is suspected to interfere with the MBAS field test kit, a laboratory sample was taken for measurement of MBAS. Laboratory analysis resulted in a non-detect for MBAS at B023.

B024	Dry Weather 2008	8/4/2009

Site Summary:

Site B024 is a 36-inch RCP located on the southwest corner of College Boulevard Bridge over Buena Vista Creek. The outlet drains the commercial and residential areas south on College Boulevard. Access to the site is from College Boulevard.

Investigatory Actions

Date	Action	Staff
8/4/2009	An initial investigation was conducted on the ponded water. Field investigations showed exceedances for the following parameters: Orthophosphate: 5.49 mg/L MBAS: 1.5 mg/L	Witheridge
8/5/2009	Follow-up investigation showed that the field screening results were below the action level for MBAS, but continued to exceed for orthophosphate: Orthophosphate: 3.98 mg/L MBAS: 0.5 mg/L	Witheridge

Investigatory Status

Follow up investigation showed that MBAS was no longer exceeding. However, orthophosphate still exceeded, and an upstream investigation was conducted. The storm drain line runs under a lane of traffic on a major thoroughfare, College Boulevard. The next safely accessible manhole is in the bike lane of southbound College Boulevard, south of Lake Boulevard. The manhole was wet, but there was not enough flow to sample. Previous year's upstream investigations have pointed to irrigation run-off from the residential neighborhoods within the City of Carlsbad. No source could be found for the ponded water or orthophosphate exceedance.

B104	Dry Weather 2009	7/15/2009

Site Summary:

Site B104 is a manhole on the southeast corner of South Coast Highway and Eaton Street. The outlet drains the commercial and residential areas on the east side of South Coast Highway. This site replaced B001 by moving it upstream approximately 230 yards out of tidal influence. Access to the site is from South Coast Highway.

Investigatory Actions

Date	Action	Staff
7/15/2009	Initial investigation conducted. The ponded water in the catch basin was sampled. Field screening and laboratory analysis showed exceedances for the following parameter: Orthophosphate: 2.25 mg/L Total Coliform: 50,000 MPN/100mL	Witheridge
7/16/2009	Follow-up investigation was completed within two business days. Results showed that the field screening no longer exceeded the action level for orthophosphate: Orthophosphate: 1.74mg/L	Witheridge
7/21/2009	A confirmation sample was collected for bacteria. Laboratory results were received on 8/12/2009, however preliminary results were used to initiate the investigation. Total coliforms continued to exceed the action level, however there was no flow from upstream. Total Coliform: 300,000 MPN/100mL	Witheridge

Investigatory Status

Upon confirmation, orthophosphate levels from the ponded water in the catch basin no longer exceeded action levels. A follow up was conducted for total coliforms. However, there was not flow coming in from upstream so a source could not be identified.

L013	Dry Weather 2009	7/20/2009

Site Summary:

Site L013 is a manhole located south of the shopping center on the corner of Oceanside Blvd., north of Loma Alta Creek. The outlet is no longer accessible due to overgrown vegetation. The manhole upstream is now sampled. Access to the site is from parking lot behind ReMax.

Follow-up Actions

Date	Action	Staff
7/20/2009	Initial investigation conducted. Field screening showed exceedances for the following parameters: MBAS 2.0 mg/L Orthophosphate-P 2.91 mg/L Ammonia-N 2.4 mg/L An initial sample was taken and the flow was estimated at approximately 1 gpm. A few minutes later, the flow increased to approximately 3 gpm and a new sample was collected and processed (which is shown above). The source of the flow was followed upstream to a manhole with flow coming from the east. The area was canvassed, however, no source was found.	Witheridge
7/21/2009	A confirmation investigation for MBAS and ammonia resulted in levels below the action levels. Orthophosphate continued to exceed: MBAS 0.25 mg/L Orthophosphate-P 3.39 mg/L Ammonia-N 0.25 mg/L The flow was estimated at 1 gpm. The flow was traced upstream and was coming from the west (unlike the previous day). The area was canvassed, but no source was found.	Witheridge
10/7/2009	Another follow-up investigation was conducted. There was a small amount of ponded water, but no flow and not enough ponded water to sample.	Witheridge/ Gremmels

Investigatory Status

The two visits to the site that warranted upstream investigations were from two different directions. The first exceedance on July 20th, was likely from McDonalds. This location

has a history of washwater dumping and sewer overflows, however, no definitive violation was found on that day. On August 11, 2009 the grease trap was observed overflowing into the storm drain and the business was shut down by County Health Department and City Code Enforcement issued an Administrative Citation. Clean Water Program, Sewer, and Code Enforcement officers met with the McDonalds management on August 17th to review proper procedures, requiring increased cleanouts, and increased training and record keeping.

The exceedance on July 21st, was unidentified. The flow at the next upstream manhole was coming from the west. The line was walked, but no further accessible (without inserts) manholes were found. Armstrong Nursery is a possible source, but no overland flow was identified.

Regular inspections of both facilities are continuous and both facilities are marked as high priority. Code Enforcement officers are aware of potential threats to water quality at both locations and continue ongoing education and inspection efforts.

L020	Dry Weather 2009	7/21/2009

Site Summary:

Site L020 is a 36-inch RCP, located east of the intersection of Corporate Centre and Oceanside Blvd., north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Blvd. Access to the site is from Oceanside Blvd.

Follow-up Actions

Date	Action	Staff
7/21/2009	Initial investigation conducted. Field screening showed exceedances for the following parameters: MBAS 1.5 mg/L	Witheridge
7/22/2009	A follow-up investigation for MBAS resulted in levels below the action levels: MBAS 0.75 mg/L	Witheridge

Investigatory Status

Upon confirmation, MBAS levels were below the Dry Weather Monitoring action levels.

L029	3060 Industry Way	8/24/2009

Site Summary:

Site L029 is a manhole on the north side of Loma Alta Creek. Access to the outfall is not available. The first accessible sampling point is at a curb inlet that begins the storm drain system in front of 3060 Industry Way. The outlet drains the commercial and industrial area south of Oceanside Boulevard.

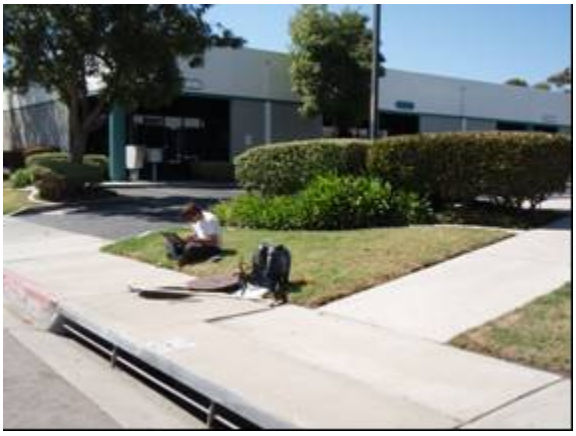

Investigatory Actions

Date	Action	Staff
8/24/2009	Initial investigation conducted. Field screening of the ponded water showed the following exceedances: Ammonia: 3.8 mg/L Orthophosphate: 2.02 mg/L	Witheridge
8/31/2009	Follow-up investigation conducted. Field screening was conducted and showed ammonia and orthophosphate levels continued to exceed the action limits: Ammonia: 4.5 mg/L Orthophosphate: 2.22 mg/L	Witheridge

Investigatory Status

This site was taken off of the primary list during the 2008 JURMP Update because it is a small watershed and the only accessible sampling point is at the most upstream manhole/gurb inlet. The outfall is blocked by tree roots and so the sampling point is ponded. This site was selected this year because the lack of flowing and ponded sites. The initial visit results exceeded ammonia and orthophosphate action levels. A follow-up was conducted, but outside of the required five days. This site was overlooked on the follow-up list the following day, but when the mistake was realized, was immediately revisited one week later. This year and the investigation in 2007 indicated the ammonia and orthophosphate exceedances are most likely caused by leaf debris in the ponded water in the manhole. The sources of water are most likely over-irrigation and storm runoff.

L046	Dry Weather 2009	7/15/2009

Site Summary:

Site L046 is a 24-inch RCP constructed in the north wall of the Loma Alta Creek channel just east of the Coast Highway Bridge. This outfall conveys flow from commercial and residential area north of Loma Alta Creek. Access to the site is from Coast Highway.

Follow-up Actions

Date	Action		Staff
7/15/2009	Initial investigation conducted. Field screening showed exceedances for the following parameters:		Witheridge
	MBAS	1.0 mg/L	
7/16/2009	A follow-up investigation for MBAS resulted in levels that continued to exceed action levels:		Witheridge
	MBAS	2.0 mg/L	
7/29/2009	A sample was sent to the lab and MBAS resulted in levels below the action levels.		Witheridge
	MBAS	<0.5 mg/L	

Investigatory Status

Field results for this site exceeded the MBAS action level initially and upon confirmation. It is suspected that there is interference with the test kit when a sample has an elevated conductivity result. Conductivity was between 11 and 14 mS/cm this monitoring period. This site is influenced by Loma Alta Slough and subject to creek backflow. It was inaccessible during three attempted follow-up visits. It was finally accessible on July 29th and a laboratory sample was collected. The laboratory result indicated that there was no exceedance at this site.

L103	Dry Weather 2009	8/10/2009

Site Summary:

Site L103 is a 72-inch RCP located west of Corporate Centre, north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Blvd. off of Corporate Centre. Access to this site is from Corporate Centre.

Follow-up Actions

Date	Action	Staff
8/10/2009	Initial investigation conducted. Field screening showed exceedances for the following parameters: Orthophosphate-P: 3.05 mg/L	Witheridge
8/11/2009	A follow-up investigation for orthophosphate continued to exceed action levels: Orthophosphate-P: 2.73 mg/L An upstream investigation was conducted. The flows were tracked upstream to a manhole at the intersection of Avenida de la Plata and Corporate Center Drive (L103A). Orthophosphate continued to exceed: Orthophosphate-P: 2.22 mg/L The main flow of this line continues up Avenida de la Plata. There is a small tributary to this line that connects from the north west of Avenida del Oro. A manhole on this smaller line, in front of the post office, was opened, but there was no flow. The flow was tracked further upstream on Avenida de la Plata west of Avenida del Oro, but east of the small tributary split (L103B). Orthophosphate continued to exceed: Orthophosphate-P: 2.29 mg/L The investigation continued to a manhole in front of 4128 Avenida de la Plata, east of Avenida del Oro (L103C). There was no flow from this storm drain, but there was evidence of over-irrigation in the form of water stains in the curb.	Witheridge

	The next downstream manhole, in front of 4112 Avenida de la Plata was opened. There was a small amount of flow from a 6-inch plastic pipe (0.08 gpm) coming from the commercial area. The plastic pipe was sampled and the orthophosphate levels continued to exceed at this manhole: Orthophosphate-P: 2.34 mg/L	

Investigatory Status
Initial investigation and confirmation sample at L103 resulted in a continued orthophosphate exceedance. The flow was followed upstream to a storm drain junction outside of 4112 Avenida De La Plata. A small amount of water was coming from a six inch plastic pipe likely draining the landscaped areas in the business park. The flow was very low, 0.08 gpm. There were other observations of historical overland flow from water stains in the curb. There was also leaf debris in the storm drains and the curbs and gutters. Therefore, the flow is likely from over-irrigation and/or small drains from landscaped areas throughout the industrial/commercial business park area.

The business at 4112 Avenida De La Plata does maintain the small grassy area in front of property. Another property management company maintains the remaining curb areas. Follow-up conducted by Clean Water Inspector, but no runoff was apparent. The business was educated about reducing irrigation timers and was turning off timers for wet season.

S032	Dry Weather 2009	6/2/2009

Site Summary:

Site S032 is a 36-inch RCP with a flap gate installed and is located on the south side of the San Luis Rey River. S032 outlet conveys flows from the residential, commercial, and open space areas located on the south side of SR-76.

Investigatory Actions

Date	Action	Staff
6/2/2009	Initial investigation conducted. Field and laboratory screening of the ponded water showed the following exceedances for orthophosphate and MBAS: Orthophosphate-P: 6.58 mg/L MBAS: >3.0 mg/L Ammonia-N: 0.29 mg/L	Witheridge
6/3/2009	Follow-up investigation conducted. Field screening was conducted and ammonia and orthophosphate results continued to be above the action levels: Orthophosphate-P: 6.11 mg/L MBAS: >3.0 mg/L Ammonia-N: >15 mg/L The ammonia test kit may show a false negative if there is a high amount of ammonia. The sample was diluted in the follow up sampling and showed that the ammonia exceeded. An upstream investigation was initiated, but no flow was found. The other side of the levee is a large, dry basin.	Witheridge

Investigatory Status

Initial screening of S032 resulted in an action level exceedance of ammonia, orthophosphate, and MBAS. The investigation continued upstream to the other side of the bike path. The area was dry with no evidence of the source of the flow.

This was one of the first sites using a new CHEMetrics ammonia test kit. The possibility for false negatives was found and was documented for future use.

S104	Dry Weather 2009	8/31/2009

Site Summary:

Site S104 is a 24-inch RCP located south of the San Luis Rey River. Access to the site is through the tomato fields. The outlet drains the residential area south of the site.

Investigatory Actions

Date	Action	Staff
8/31/2009	Initial investigation conducted on the ponded water. Field Screening and laboratory results showed an exceedance for ammonia and orthophosphate: Ammonia: 1.05 mg/L Orthophosphate: 2.58 mg/L	Witheridge
9/2/2009	Follow-up investigation conducted. Results show that ammonia was below the action levels but orthophosphate continued to exceed: Ammonia: 0.15 mg/L Orthophosphate: 2.19 mg/L An upstream investigation was conducted. The next upstream manhole was at the end of the easement on the east side of Gooseberry (S104A): Ammonia: 0.47 mg/L Orthophosphate: 2.28 mg/L The next upstream manhole sampled was on the west side of Cranberry Drive (S104B). There were three influences, but only one drain from the northeast on Cranberry Drive was flowing. The flow was estimated at 0.5 gpm. Orthophosphate: 2.78 mg/L The next upstream site sampled was a from an area drain in front of 638 Creekside (S104C). There were other area drains that were wet, but this was the most upstream trickle (0.1gpm): Orthophosphate: 4.92 mg/L A visitor to the homeowner was spoken with. Educational material such as drought information and a suggestion to check the irrigation system and timers were left.	Witheridge

Investigation Status

Site S104 had an initial exceedance for ammonia and orthophosphate. Ammonia results on the confirmation visit were below action level exceedances. Orthophosphate continued to exceed action levels. The drainage area is single-family residential community with a home owner's association. The ponded water is most likely from over-irrigation within the neighborhood. One home was identified as a source this year. In previous years, blanket mail-outs have been sent to this neighborhood with little effect. When a broken irrigation or improperly run irrigation system is spotted, we now have a Clean Water Program Inspector to personally go to the home to provide information.

Attachments

S104A

S104B

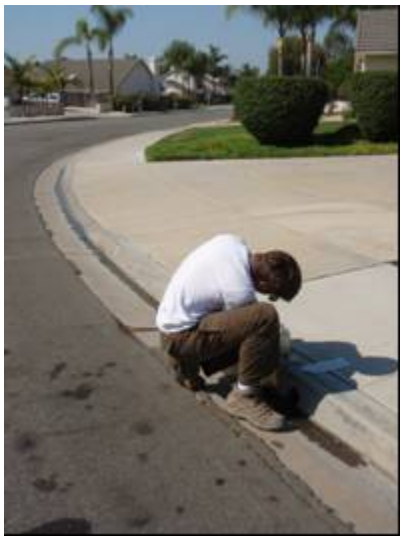

S104C

S106	Dry Weather 2009	6/22/2009

Site Summary:

Site S106 includes four 36-inch plastic pipes at the intersection of North River Road and Sleeping Indian Road on the north side of the San Luis Rey River. The outlet drains an agricultural area immediately north of the site. Access to the site is from North River Road.

Investigatory Actions

Date	Action	Staff
6/22/2009	Initial investigation conducted. Field Screening and laboratory results showed an exceedance for nitrate and MBAS: MBAS: 1.25 mg/L Nitrate-N: >68.0 mg/L	Witheridge
6/23/2009	Follow-up investigation conducted. Results show that both analytes continued to exceed action levels: MBAS: 1.0 mg/L Nitrate-N: 49.11 mg/L An analytical sample for MBAS was collected at the time of sampling as well, and laboratory results showed that the level of MBAS is below the action level: MBAS: <0.5 mg/L	Witheridge

Investigation Status

Nitrate loading from the agricultural area around Sleeping Indian has been an on-going issue. Up-stream investigations have been conducted and were reported in the 2008 Dry Weather Report. Groundwater seepage has been identified as the main source of flow from up-stream. The site is also monitored under the WURMP San Luis Rey River Watershed joint monitoring program between the City and the County of San Diego. During the summer of 2009, between August 10th and September 22nd, the outlet stopped flowing. As of November 2009, there is still no flow from the Sleeping Indian drainage area.

S111	Dry Weather 2009	7/1/2009

Site Summary:

Site S111 is a concrete channel adjacent to Fireside Park, east of the San Luis Rey River. The channel drains the residential area east of the site.

Investigatory Actions

Date	Action	Staff
7/1/2009	Initial investigation conducted. Field Screening results showed an exceedance for pH: pH 9.72	Witheridge
7/2/2009	Follow-up investigation conducted earlier in the day. pH was under the action level: pH 8.30 High pH levels could be due to leaching of the concrete at high temperatures.	Witheridge

Investigation Status

Upon confirmation, the pH result was below the Dry Weather Monitoring action level.

S115	Dry Weather 2009	6/2/2009

Site Summary:
Site S115 is an open concrete channel between Mission Avenue and SR-76 west of El Camino Real. The site conveys flows from the commercial area to the east along Mission Avenue towards Douglas Drive. Access to the site is from Mission Avenue.

Investigatory Actions

Date	Action	Staff
6/2/2009	Initial investigation conducted. Field screening showed the following exceedance for pH: pH: 10.03 pH units	Witheridge
6/3/2009	Follow-up investigation conducted. Field screening was conducted and pH results continued to exceed the action level: pH: 9.08 pH units An upstream investigation was conducted. The flow was sampled approximately 100 feet upstream at the outflow of the box culvert. The pH results were below the action level: pH: 8.35 High pH levels may be due to high temperatures or leaching of the concrete.	Witheridge

Investigatory Status

Upon confirmation, the pH result continued to exceed action levels in the concrete channel. A sample was taken approximately 100 feet upstream where the flow day-lighted from a covered box culvert. The pH results were in the acceptable pH range. There were no other influences between the original site and the upstream sample. The cause is likely the high temperatures and/or the leaching of the concrete at high temperatures.

S118	Dry Weather 2009	7/1/2009

Site Summary:
Site S118 is an alternative site located at the southwest corner of College and Silver Bluff. It consists of two pipes originating from the same source. The largest pipe, a 72-inch RCP, conveys flows from the residential area to the north and east along Silver Bluff and Mosaic. Access is from Silver Bluff.

Investigatory Actions

Date	Action	Staff
7/1/2009	Initial investigation conducted of the ponded water. Field screening showed the following exceedance for Ammonia: Ammonia-N: 1.28 mg/L	Witheridge
7/2/2009	Follow-up investigation conducted on the ponded water. Ammonia continued to exceed action levels: Ammonia-N: 4.4 mg/L An upstream investigation was conducted. The flow was followed east. Water coming from a curb outlet on Silver Bluff and Masters was sampled (S118A). The flow was approximated at 2 gpm. Ammonia levels did not continue to exceed: Ammonia-N: 0.42 mg/L From the original site the MS4 was followed northeast to a manhole on Mosaic Circle (S118B). The box was wet with some ponded water, but no water could be sampled. The next manhole upstream on the MS4 is in front of 749 Mosaic Circle. No flow was observed.	Witheridge

Investigatory Status

Ammonia continued to exceed Dry Weather Monitoring action levels upon confirmation. An upstream investigation was conducted. A source of water was found, but historical knowledge from Public Works indicates it is groundwater and it was not exceeding the ammonia action level. A source for the exceedance could be from homeless encampments or from decaying organic matter in the ponded water. Code Enforcement was notified of the presence of the homeless encampments and they were removed.

S121	Dry Weather 2009	7/1/2009

Site Summary:
Site S121 is an alternative site. It consists of two partially submerged 48-inch RCP's at the northwest intersection of College Boulevard and Frazee Road. It conveys flows from the residential area southeast of the intersection. Access to the site is from Frazee Road through a locked gate.

Investigatory Actions

Date	Action	Staff
7/1/2009	Initial investigation conducted. Field screening showed the following exceedance for ammonia: Ammonia-N: >9.0 mg/L	Witheridge
7/2/2009	Follow-up investigation conducted. Ammonia was below the action level. Ammonia-N: 0.92 mg/L The ammonia test kit will result in a false positive if there are too many dilutions performed.	Witheridge

Investigatory Status
The exceedance during the routine investigation for ammonia was likely a false positive caused by over-dilution of the sample. The 2009 Dry Weather Monitoring season was the first season to use a non-mercury CHEMetrics kit for ammonia. Upon discussion with CHEMetrics and other municipalities, it appears that the previous kit being used over-estimated the amount of ammonia. Therefore, the field team during 2009 diluted samples that seemed low, only to create false-positives. For example, at this site, the initial sample was diluted by 2. Upon a dark yellow color, the dilution was then increased to a 3-times dilution. On the follow-up investigation, no dilution was used, and the result was within the detection range of the kit and a reasonably expected result for the site.

S122	Dry Weather 2009	7/15/2009

Site Summary:

S122 is a RCP with a flap gate at the end of Tishmal Court. It conveys flows from the residential area north of the river. Access to the site is from the sewer easement path and pedestrian path on the north side of the river.

Investigatory Actions

Date	Action	Staff
7/15/2009	Initial investigation conducted. Field screening showed exceedances for the following parameters: Orthophosphate-P: 2.06 mg/L Total Coliform: 300,000 MPN/100mL Fecal Coliforms: 80,000 MPN/100mL Enterococcus: 72,700 MPN/100mL	Witheridge
7/16/2009	Follow-up investigation conducted. Orthophosphate was below the action level: Orthophosphate-P: 1.11 mg/L	Witheridge
7/21/2009	Confirmation laboratory samples were collected. Total coliform and Enterococcus continued to exceed action levels: Total Coliform: 500,000 MPN/100mL Fecal Coliforms: 5,000 MPN/100mL Enterococcus: 50,000 MPN/100mL Although the confirmation sample results were unknown, overland flow from 3168 Toopal was identified as the only overland source and sampled (S122A). Total coliform exceeded at this location: Total Coliform: 1,600,000 MPN/100mL Fecal Coliforms: 50,000 MPN/100mL Enterococcus: 160,000 MPN/100mL This flow was identified as coming from a broken irrigation head at a residence and was visited by Clean Water Program Inspectors on July 18, 2009. The resident was personally spoken to and the leak was fixed upon a follow-up.	Witheridge

<table>
<tr><td>10/15/2009</td><td>The outfall was once again visited. Total coliforms exceeded action levels upon the second confirmation visit:
<table>
<tr><td>Total Coliform</td><td>220,000 MPN/100mL</td></tr>
<tr><td>Fecal Coliforms</td><td>5,000 MPN/100mL</td></tr>
<tr><td>Enterococcus</td><td>5,340 MPN/100mL</td></tr>
</table>

An upstream investigation of the MS4 was initiated. The next upstream manhole contained water, but was too deep to sample. The next manhole upstream that was able to be sampled was on the north side of Benet in the City easement (S122B). Approximately 2 inches of ponded water was at the bottom of the manhole:
<table>
<tr><td>Total Coliform</td><td>80,000 MPN/100mL</td></tr>
<tr><td>Fecal Coliforms</td><td>11,000 MPN/100mL</td></tr>
<tr><td>Enterococcus</td><td>13,000 MPN/100mL</td></tr>
</table>

The next upstream manhole was dry. There was overland flow entering the storm drain which was sampled (S122D), but did not exceed any of the action levels:
<table>
<tr><td>Total Coliform</td><td>8,000 MPN/100mL</td></tr>
<tr><td>Fecal Coliforms</td><td>1,300 MPN/100mL</td></tr>
<tr><td>Enterococcus</td><td>1,900 MPN/100mL</td></tr>
</table></td><td>Witheridge/ Gremmels</td></tr>
</table>

Investigatory Status

The orthophosphate result was below the Dry Weather action levels upon confirmation, but total coliform and Enterococcus continued to exceed. An upstream investigation was conducted but no manholes contained enough water to sample or were too deep. However, overland flow was found coming from the west along Toopal Drive. Water flooding a meter box at 3168 Toopal Dr. was sampled. The house was referred to a Clean Water Inspector and the problem was fixed upon the follow-up visit.

The site was revisited on October 15, 2009 with an improved manhole cover lifter and a longer sampling pole. The outfall exceeded for total coliforms, but not for fecal coliforms or Enterococcus. One overland flow was identified and sampled, but did not exceed the dry weather action levels. The manhole off of Benet Road in the easement was sampled with a long sampling pool. Total coliforms and Enterococcus did exceed the Dry Weather Program action levels. More information from an Engineering Inspector familiar with this site was gained. The storm drain system in the neighborhood provides an overflow from the Lake to the north, through the MS4 system to the San Luis Rey River. It is suspected that the deep manhole (S122B) is standing water from rain, the lake, and irrigation. Bacteria is likely regrowing in this low point and may be causing the exceedances.

Overland flows that were identified on October 15, 2009 were reported to Clean Water Program Inspectors and were visited on October 20, 2009 and education materials were provided. The effort to make personal visits will continue.

APPENDIX 7-B

2009 NON-DRY WEATHER MONITORING IC/IDS

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King of Kings Lutheran Church	Non-Dry Weather IC/ID 2008-2009	7/28/2008

Site Summary:

King of Kings Lutheran Church is located at 2993 McDonald Street in the Loma Alta Watershed.

Investigatory Actions

Date	Action	Staff
7/28/2008	While conducting Dry Weather Monitoring at several sites on Industry Street in the Loma Alta Watershed, overland flow (visually approximated at a little about 1gpm) was identified flowing down Industry Street. No samples were taken, but an upstream investigation was conducted. The investigation lead across Oceanside Boulevard to King of Kings Lutheran Church. While no water was currently running, the ground was very wet in a newly planted section of the embankment. AT&T had put new lines through the property and on the hill and had recently put down grass and new plants, along with BMPs in the area. The area was being heavily watered to get the plants to grow to avoid erosion. Clean Water staff spoke with the landscaper over the telephone and he agreed to reduce the sprinkler timers and conduct an irrigation system check during his next visit.	Witheridge

Investigatory Status

The flow found on Industry Street was tracked up to King of Kings Lutheran Church. New grass and other ground cover had been planted to prevent erosion on the sloop. The area was being over-watered. The landscaper was contacted and asked to reduce irrigation times.

Attachments

Flow on Industry Street

Irrigation of New Grass

AgriChemical and Supply, Inc.	Non-Dry Weather IC/ID 2008-2009	9/11/08

Site Summary:

AgriChemical and Supply, Inc. is a business located at 2002 Oceanside Boulevard. They provide non-native plant species control in the area, primarily using Round-Up herbicide.

Investigatory Actions

Date	Action	Staff
9/11/2008	A complaint of smelly water in a storm drain was received. Code Enforcement and Clean Water Program personnel investigated the complaint. There was ponded water in the storm drain at the bottom of their facility. The water was gray, opaque, and smelled of chemicals. A portion of the ponded water was in the sunlight. The sample was taken from the darkened, manhole portion of the ponded water and tested for glyphosate, the main chemical in Round-Up. Results were non-detect: Glyphosate: < 5 µg/L	Witheridge/ Erickson/ Lahsaie

Investigatory Status

Ponded water was found in the storm drain but there was no upstream flow at the time of the visit. Code Enforcement and the Clean Water Program Coordinator spoke with the business and instructed them on their wash-out procedures.

Camp Pendleton	Non-Dry Weather IC/ID 2008-2009	9/29/2008

Site Summary:
Camp Pendleton is located north and east of Oceanside Harbor. There are several storm drains that carry flow from the construction site of a residential area of the base and discharge to the Harbor.

Investigatory Actions

Date	Action	Staff
9/28/2008	Harbor Maintenance reported sediment discharge from Camp Pendleton to Oceanside Harbor during a rain event. The Clean Water Program Coordinator contacted the base and requested action/BMPs to prevent future sediment discharge.	Balch/ Lahsaie

Site Summary:
Capistrano Park is located just east of I-5 on the northern border of the City.

Investigatory Actions

Date	Action	Staff
2/4/2009	A stormwater inspector for the City conducted a cursory inspection of the outfall coming from the base into Capistrano Park and reported a severe failure of the BMPs installed in Camp Pendleton. There was erosion undermining the gabions downstream and a partial collapse of the east side of the hillside and undermining of the BMP structure.	
2/5/2009	Camp Pendleton notified by email with photos of the erosion and failures.	Lahsaie
2/10/2009	Four City employees met with four Camp Pendleton employees to discuss the sediment discharge and failure of erosion and sediment control BMPs on Camp Pendleton. Camp Pendleton agreed to include the BMP repair in their maintenance plan but due to budgetary constraints were unable to take immediate corrective action. Will put temporary BMPs in place (such as cleaning upstream detention basins in the housing development). The City Public Works' Department will repair the eroded area on the City side after Camp Pendleton has completed the repair on their side and will remove sediment as soon as is dry to bring the equipment.	Lahsaie, Sabelis, Tanner Kellison

Investigatory Status
The Regional Water Quality Control Board was notified in writing with photos on both issues and efforts are ongoing.

CITY OF OCEANSIDE

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM

ANNUAL REPORT 2009-2010

Prepared for the
San Diego Regional Water Quality Control Board

September 30, 2010

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CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT

DATE: **September 29, 2010**

RE: **STATEMENT OF CERTIFICATION**
CITY OF OCEANSIDE JURISDICTIONAL URMP

I certify under penalty of law that the Jurisdictional Urban Runoff Management Program Annual Report for 2009-2010 was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

M.A. Lahsaiezadeh

SIGNATURE:

NAME: Mo Lahsaiezadeh
TITLE: Clean Water Program Coordinator
JURISDICTION: City of Oceanside

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City of Oceanside

Jurisdictional Urban Runoff Management Program

2009-10 Annual Report

Prepared for:
San Diego Regional Water Quality Control Board

September 30, 2010

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ES EXECUTIVE SUMMARY

Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the San Diego Copermittees. Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2007-2008 annual reporting period (July 1, 2009 – June 30, 2010).

Report Organization

Section J of Municipal Permit 2007-0001 defines the requirements for the Jurisdictional Urban Runoff Management Program (JURMP) Annual Report and states that each JURMP Annual Report shall, at a minimum, contain a comprehensive description of all activities conducted by the Copermittee for each required component. Table ES-1 presents these components and the section in which they are discussed.

Table ES-1. Municipal Permit 2007-0001 Reference Table.

Municipal Permit 2007-0001 Components	Annual Report Section
Development Planning Component	Section 2.0
Land-Use Planning	Section 2.2
Environmental Review Process	Section 2.3
Development Project Approval and Verification Process	Section 2.4
Construction Component	Section 3.0
Municipal Component	Section 4.0
Industrial and Commercial Component	Section 5.0
Residential Component	Section 6.0
Illicit Discharge Detection and Elimination Component	Section 7.0
Education Component	Section 8.0
Public Participation	Sections 9.0
Fiscal Analysis Component	Section 10.0
Effectiveness Assessment Component	Section 11.0
Special Investigations	Section 12.0
Non-Emergency Fire Fighting	Section 13.0
JURMP Revisions	Section 14.0
Conclusions and Recommendations	Section 15.0

Pursuant with the Municipal Permit this document contains all of the required information.

Program Highlights

Below is a summary of each section which describes the Clean Water Program activities appearing in this Annual Report. Please refer to the individual section for more detailed information.

Section 2.0 Development Planning Component

The development planning component focuses on the collective effort to mitigate impacts which may result from new development and redevelopment projects. The process of verifying compliance with the Municipal Permit is accomplished through the consistent application of storm water principles and regulations during all phases of development.

During this reporting period, the City continued to actively participate in the Copermittee Workgroups, Sub-workgroups, and HMP-TAC. The combined Copermittee effort resulted in the release of the Countywide Model SUSMP in February 2010, adoption of the Hydromodification Management Plan by the RWQCB in June 2010, and completion of the Regional Construction BMP Guidelines in June 2010.

During this same period the City released an update SUSMP in March 2010; consistent with the Countywide Model SUSMP and the Municipal Permit. Subsequent to the updated SUSMP, the City released a draft Storm Water Mitigation Plan (SWMP) template. The purpose of the template is to provide the design professional with a standardized presentation format while facilitating plan review. The SWMP template will become finalized upon complete implementation of the HMP.

Other notable activities that took place during this reporting period included the continued implementation of data tracking systems by multiple divisions within the City Water Utilities and Development Services Departments.

Section 3.0 Construction Component

The City of Oceanside Clean Water Program provided an updated inventory of construction sites with the 2008 JURMP and has revised that inventory during this reporting period. During the reporting period, the Clean Water Program inspected 54 construction sites to ensure they were in compliance with the City Code.

Section 4.0 Municipal Component

The City of Oceanside Clean Water Program utilized its end of fiscal year 2008-09 municipally owned inventory and inspected 176 municipal areas to ensure these facilities are in compliance with the City Code. A total of 2,093 tons of waste was removed as a result of street sweeping and a total of 894.52 tons of waste was removed from the storm drain system (MS4) as part of the annual cleaning. Three thousand four hundred and eight one (3,481) feet of City sewer pipes were slip lined and 53 manholes rehabilitated.

Section 5.0 Industrial and Commercial Component

The City annually updates its watershed-based industrial/commercial inventory which contains the name, address, and description of all industrial sites within its jurisdiction, regardless of site ownership. During this reporting period a new asset management software tool was implemented. The inventory existing at the beginning of the reporting period, with commercial

and industrial classifications, watershed location, and assigned priority was pulled into the new software. However, throughout the year, duplicate records, inadvertently changed priority levels, and missing, new, or out of business facilities were found. The inventory now includes 2,412 Industrial and Commercial businesses. Seventeen (17) industrial businesses and 597 commercial businesses were inspected during this reporting period, to ensure these facilities are in compliance with City Code.

The Water and Sewer Divisions of the Water Utilities Department have been using GBA Master Series Software, a maintenance management tool to track NPDES facility inspections, incoming hotline storm water complaint calls, and use with the jurisdictional monitoring program. This annual report is the first report utilizing the new technology. The Clean Water Program will be reviewing the effectiveness of the new tracking tool and will continue to implement improvements in the use or the system in the coming years.

Section 6.0 Residential Component

The City of Oceanside has developed an extensive program that aims to reduce pollutant runoff from residential areas and activities to the maximum extent practical (MEP). The City of Oceanside Clean Water Program received 251 calls on the Urban Runoff Hotline plus 136 referrals from City Staff. Code Enforcement responded to 84 urban runoff cases related to residential areas and activities, during the reporting period. Extensive educational efforts were made to help Oceanside residents understand watersheds, water quality and urban runoff impacts through presentations on a local television channel, Clean Water Program newsletters mailed to each household, and through information available on the Clean Water Program Website.

Section 7.0 Illicit Discharges Detection and Elimination Component

This section is intended to document the activities conducted by the City of Oceanside during the 2009-2010 reporting period to manage illicit discharges. In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2009-10 Illicit Discharge Detection and Elimination Component, including the 2010 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2010.

Section 8.0 Education Component

The City of Oceanside Clean Water Program continued to use a variety of avenues to educate various internal and external groups about the Clean Water Program and the requirements of Municipal Permit Order 2007-0001. These outreach activities included municipal staff training, CWP newsletters, staffing community booths, conducted watershed education presentations, continued implementation of a 5th grade curriculum titled Project SWELL and targeting under-served audiences with educational materials.

Section 9.0 Public Participation Component

The Clean Water Program continued to sponsor beach and creek cleanup events and supported private groups who wanted to coordinate their own cleanup events. During this reporting period a total of 2,565 volunteers participated in these events, removing more than seven tons of trash, and debris, from the local waterways. In addition the City participated in regional education events including staffing a stormwater booth at the San Diego County Fair's EnviroFair Day.

Section 10.0 Fiscal Component

The City of Oceanside Clean Water Program continued to acquire funding from various sources to implement programs to meet Municipal Permit Order 2007-0001. To secure adequate funding, the Water Utilities Department collects a Clean Water Program surcharge that is delineated on the utility bills for each household and is based on the customer's water consumption. Approximate expenditures for the 2009-10 fiscal year is provided as well as the budget for the 2010-11 reporting period.

Section 11.0 Effectiveness Component

The City implemented an effectiveness assessment program to assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The City gathered and evaluated data for some of the program components for assessment during this reporting period. This data will be valuable for incorporation into long-term effectiveness evaluation on a jurisdictional level.

Section 12.0 Special Investigations

The City of Oceanside received funding from two sources to implement two water quality related projects: the San Luis Rey Bacteria Source Tracking Study and the Loma Alta Creek Ultraviolet Treatment Facility.

Lower San Luis Rey Bacteria Source Tracking

As part of the Proposition 50 Clean Beaches Initiative, the City of Oceanside was awarded $554,375 to track the sources of bacteria in the Lower San Luis Rey River. This study project has a goal to identify the sources and quantify the loading of bacterial contamination in the lower San Luis Rey River using a tiered approach. This approach will permit prioritization for mitigation of microbial contaminants and appropriate actions will be recommended to eliminate sources of bacterial contamination.

On December 19, 2008, the State Water Resource Control Board issued a Budget Letter that suspended all projects including the Lower San Luis Rey Source Identification Project, due to State budgetary constraints. On December 17, 2009, the State Water Resources Control Board gave the City of Oceanside notice that the Lower San Luis Rey Source Identification Project grant had been selected to restart. Tasks implemented during this reporting period are detailed in Section 12.1.3.

The Loma Alta Creek Ultraviolet Treatment Facility

The City was awarded a $5,000,000 Proposition 40 Clean Beaches Initiative (CBI) grant by the State Water Resources Control Board to construct an ultraviolet (UV) light treatment facility at the existing La Salina Wastewater Treatment Facility. The anticipated project goal is to eliminate beach closures during the dry season at Buccaneer Beach in Oceanside, California. This will be achieved by diverting the flow from the Loma Alta Lagoon through a UV treatment facility prior to discharging the flow onto the shoreline.

The Loma Alta Creek Ultraviolet Light Treatment Facility first started treatment in June 2009 and continued through September 2009. The system was restarted after the 2009-10 wet season in May 2010. Water samples were taken weekly from Buccaneer Beach directly in front of the discharge pipe and seventy-five feet north and south of the discharge pipe. The samples were

tested for total and fecal coliform and Enterococcus. All samples taken during this reporting period met California Department of Health Services AB411 Objectives and there were no postings due to bacterial levels exceeding standards set by the County Department of Environmental Health.

Section 13.0 Non-Emergency Fire Fighting

Non-emergency fire fighting BMPs and educational methods for reducing the discharge of pollutants from non-emergency flows to the MEP are described in Section 13.

Section 14.0 JURMP Revisions

During this reporting period no revisions were made to the 2008 JURMP.

Section 15.0 Conclusions and Recommendations

This section presents the conclusions from the 2009-2010 reporting year and provides recommendations for future activities and management actions for JURMP program components. During this reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water and Sewer divisions, and the Clean Water Program, continued rolling out the GBA Masters Series software. The Development Services Department, which includes Code Enforcement, Building, and Engineering, chose TRAKiT, permitting software by CRW Systems, Inc and began roll-out in this reporting year. Since both of these systems were fully launched in this reporting period, the Clean Water Program will be reviewing the effectiveness of the new tracking tool and will continue to implement improvements in the use of the system in the coming years.

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1.0 INTRODUCTION

This annual report document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) (referred to in this document as the Municipal Permit) draining the Watersheds of the County of San Diego, which include agencies with land use authority including the incorporated Cities of San Diego County, the County of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport Authority (collectively called Copermittees). Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2009-2010 annual reporting period (July 1, 2009 – June 30, 2010).

This Municipal Permit is based on the Federal Clean Water Act (CWA), the Porter–Cologne Water Quality Control Act, applicable state and federal regulations, all applicable provision of statewide Water Quality Control Plans and Polices adopted by the State Water Resources Control Board (SWRCB), the Water Quality Control Plan for the San Diego Basin adopted by the Regional Water Quality Control Board (RWCQB), the California Toxics Rule, and the California Toxics Rule Implementation Plan. This Annual Report addresses the renewed NPDES Permit No. CAS0108758, which was first issued on July 16, 1990 (Order No. 90-42), renewed on February 21, 2001 (Order No. 2001-01), and renewed again on January 24, 2007

In the interests of communicating consistent messages to the community regarding the most efficient and effective means of reducing storm water and urban runoff pollution, and as directed under Part J.5 of the Municipal Permit, this document was developed following the standardized format developed and agreed upon by the Copermittees. For the most part, compliance with the Municipal Permit was undertaken by the Copermittees through the development and implementation of the JURMP; therefore this Annual Report is organized in a similar format as the 2008 JURMP.

1.1 Background

Urban development typically involves conversion of natural space to developed areas that include impervious surfaces such as streets, buildings, and parking lots. With the increase in human population and impervious surfaces associated with developed areas there tends to be higher runoff volume and velocity due to the impervious area's incapacity to absorb and hold rainwater. Also, human use of developed areas is associated with a number of pollutants that can be conveyed to the municipal separate storm sewer system (MS4) by a rain event or non-storm water discharges. This is called non-point source pollution. Non-point source pollution, such as urban runoff discharges to the MS4, is a large source of pollutants to receiving water bodies in the San Diego region and throughout the United States. Pollutants commonly associated with urban runoff include sediments, pesticides, fertilizers, herbicides, trash, oil and grease, and heavy metals. Such pollutants are generated by everyday activities such as construction, landscaping and vehicle use and maintenance.

Pollutants that reach receiving water bodies, such as streams, lakes, bays, lagoons, and the ocean, have the potential to significantly impact human and environmental health as well as wildlife that utilize these water bodies and surrounding habitat for survival. Notably, environmentally sensitive areas (ESA) are especially threatened by urban development because such areas tend to have lower capacities to withstand pollutants entering the area.

1.2 Purpose and Objectives

The purpose of this annual report is to present the activities the City conducted during the Fiscal reporting period of July 1, 2009 through June 30, 2010 to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The activities involved implementing, and improving where needed, existing programs and developing new programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. Improving the quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

Table 1-1 presents the organization of the City's JURMP Annual Report and a summary of the corresponding permit requirement in Order No. 2007-0001. Some Report sections and permit requirements overlap and will be found in multiple locations throughout the document.

Table 1-1. City of Oceanside 2009-10 Annual Report Compliance Summary.

2008-09 Annual Report	Description	Order No. 2007-0001
Section 1.0	Introduction	-
Section 2.0	Development Planning	D.1 J.3.a(3)(a)
Section 3.0	Construction	D.2 J.3.a(3)(b)
Section 4.0	Municipal Development	D.3.a J.3.a(3)(c)
Section 5.0	Industrial and Commercial Development	D.3.b J.3.a(3)(d)
Section 6.0	Residential	D.3.c J.3.a(3)(e)
Section 7.0	Illicit Discharge Detection and Elimination	D.4 J.3.a(3)(f)
Section 8.0	Education	D.5 J.3.a(3)(g)
Section 9.0	Public Participation	D.6 J.3.a(3)(h)
Section 10.0	Fiscal Analysis	J.3.a(3)(j)
Section 11.0	Effectiveness Assessment	-
Section 12.0	Special Investigations	J.3.a(3)(k)
Section 13.0	Non-Emergency Fire Fighting	J.3.a(3)(l)
Section 14.0	JURMP Revision	J.3.a(3)(m)
Section 15.0	Conclusions and Recommendations	-

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

Development is typically associated with land disturbance activities and increases in impervious surfaces. Studies indicate that unmitigated development of urban areas has the potential to negatively impact the surrounding environment. According to the Municipal Permit, an increase of "as little as 10%" is known to result in significant declines in physical habitat and biological integrity. Moreover, development projects that increase imperviousness are recognized as altering the hydrologic characteristics of a site, resulting in sediment pollutant generation, pollutant transport, and negative impacts to natural conveyances and the receiving waters. To counter these impacts, the City has developed and implemented a set of measures and procedures designed to reduce the negative effects associated with development. The application of these measures coupled with a consistent screening and review process, ensures that all applicable development projects are in compliance with the requirements of the Municipal Permit to the Maximum Extent Practicable (MEP).

This section of the JURMP Annual Report documents the Development Planning activities performed by the City of Oceanside during the reporting period beginning July 1, 2009 through June 30, 2010. During this reporting period, the City has continued to implement a comprehensive "Development Planning Component" consistent with Section D.1 of the San Diego RWQCB Order No. R9-2007-0001. Table 2-1 contains a directory of the applicable subsections found in the Municipal Permit §J.3.a.(3)(a) with corresponding sections of the Annual Report.

Table 2-1. Order No. R9-2007-0001 Compliance Summary.

J.3.a.(3)(a) i Amendments to General Plan	See Section 2.2.1 of this Annual Report
J.3.a.(3)(a).ii Application of urban runoff approval process	See Section 2.4.3 of this Annual Report
J.3.a.(3)(a).iii Projects subject to SUSMP Requirements	See Section 2.4.4.8 of this Annual Report
J.3.a.(3)(a).iv SUSMP BMP requirements were applied	See Section 2.4.4.2 of this Annual Report
J.3.a.(3)(a).v Example of Priority Development Project	See Section 2.4.4.4 of this Annual Report
J.3.a.(3)(a).vi Projects allowed to implement Treatment Control BMPs with low removal efficiency	See Section 2.2.3 of this Annual Report
J.3.a.(3)(a).vii Treatment Control BMP Inventory	See Section 2.4.4.7 of this Annual Report
J.3.a.(3)(a).viii Number of Treatment Control BMPs inspected	See Section 2.4.4.7 of this Annual Report

J.3.a.(3)(a).ix Annual verification of O&M of Treatment Control BMPs	See Section 2.4.4.7 of this Annual Report
J.3.a.(3)(a).x Confirmation that BMP verification was conducted for all Priority Development Projects prior to occupancy	See Section 2.4.3 of this Annual Report
J.3.a.(3)(a).xi Projects which received a SUSMP waivers	See Section 2.4.4.8 of this Annual Report
J.3.a.(3)(a).xii Description of SUSMP waiver mitigation program	See Section 2.4.4.1 of this Annual Report
J.3.a.(3)(a).xiii HMP collaboration and participation	See Section 2.4.4.1 of this Annual Report
J.3.a.(3)(a).xiv Development projects required to meet HMP	See Section 2.4.4.8 of this Annual Report
J.3.a.(3)(a).xv Development projects not required to meet HMP requirements	See Section 2.2.3 of this Annual Report
J.3.a.(3)(a).xvi Development projects disturbing 50 acres or more	See Section 2.2.3 of this Annual Report
J.3.a.(3)(a).xvii Violations and enforcement actions for development projects	See Section 3 Attachment 3-C of this Annual Report
J.3.a.(3)(a).xviii Notable activities	See Section 2.2.1.1 of this Annual Report

2.2 Land Use Planning

2.2.1 Background

The development planning component focuses on the collective effort to mitigate impacts which may result from new development and redevelopment projects. The process of verifying compliance with the Municipal Permit is accomplished through the consistent application of storm water principles and regulations during all phases of development.

The Land Use Element of the General Plan was amended in 2003 to include a number of water quality and watershed protection measures. The primary focus of the measures was to provide a more balanced relationship between the needs of the community and development interests, while managing finite natural resources. There were no water quality related amendments adopted into the General Plan during this reporting period. The specific policies are detailed in Section 4.2.3 of the 2008 Jurisdictional Urban Runoff Management Plan.

2.2.1.1 Notable Activities

During this reporting period, the City continued to actively participate in the Copermittee Workgroups, Sub-workgroups, and HMP-TAC. The combined Copermittee effort resulted in the

release of the Countywide Model SUSMP in February 2010, adoption of the Hydromodification Management Plan by the RWQCB in June 2010, and completion of the Regional Construction BMP Guidelines in June 2010.

During this same period the City released an update SUSMP in March 2010; consistent with the Countywide Model SUSMP and the Municipal Permit. Subsequent to the updated SUSMP, the City released a draft Storm Water Mitigation Plan (SWMP) template. The purpose of the template is to provide the design professional with a standardized presentation format while facilitating plan review. The SWMP template will become finalized upon complete implementation of the HMP.

Other notable activities that took place during this reporting period included the continued implementation of data tracking systems by multiple divisions within the City Water and Development Services Departments.

In an effort to improve productivity, the Development Services Department worked with staff from Code Enforcement, Fire Prevention, Information Technologies and Water Utilities to institute an efficient permitting system to make it easier to do business at City Hall. Following evaluation of several systems, staff selected TRAKiT, permitting software by CRW Systems, Inc. In October of 2009, the City went live with TRAKiT; the data management capabilities of TRAKiT assist front-line staff with the inputting and organization of permit data, while the software's enhanced reporting tools provide management staff with pertinent statistics and data to evaluate workflows and allocate resources. The integration of the data management systems of multiple Development Services Implements TRAKiT Software departments makes it easier to find and share this information, both with the public and among staff. In light of these benefits, the City plans to build on this system with electronic plan submittal and an Interactive Voice Response System. These features will facilitate better customer service, more efficient use of staff time, and increased collaboration between the various City disciplines involved in project review, permitting and ode enforcement.

In early 2010, Oceanside launched an online version of TRAKiT, called eTRAKiT, which is made available to the public. Public users are able to access records and view the status of projects, permits and cases via the Internet. For more information, visit www.ci.oceanside.ca.gov and click on the "eTRAKiT-Online Permitting" Quick Link.

2.2.2 Source Characterization

Source characterization is an integral component of any urban runoff program. A wide variety of land use types and activities, if left unmitigated, are known to be sources of pollutants that have the potential to negatively affect the surrounding environment and the project receiving waters.

The March 2010 SUSMP identifies ten (10) separate "Priority Project Categories", which are cited as anticipated or potential sources of storm water pollution based upon particular land use types and specific site conditions, such as site topography and proximity to environmentally sensitive areas. During this reporting period the number of PDP categories was reduced from twelve to ten by expanding the definitions for Heavy Industry projects and projects with the potential to affect Water Quality Environmentally Sensitive Areas (WQESAs).

Source characterization augments the implementation of Site Design, Low Impact Development, Treatment Control, and flow control management practices that enable development and redevelopment project to reduce impacts to the receiving waters and demonstrate compliance with the Maximum Extent Practicable (MEP) standard. Priority Project Categories and General Pollutant Categories appear in Table 1-1 of the updated SUSMP.

2.2.3 Best Management Practice Requirements

There are established minimum design requirements for all development projects, which are discussed in Section 4.4.3 of the 2008 JURMP. In addition, the Land Use Planning Element of the General Plan contains policies to protect water quality that are discussed in Section 4.2.3 of the 2008 JURMP.

The SUSMP was updated in March 2010 to address requirements of the Municipal Permit. New requirements include minimum standards for the implementation of Low Impact Development (LID) practices and the integration of flow control criteria designed to mitigate runoff peaks and durations from development sites. The updated SUSMP incorporates a unified LID procedure which combines site planning and design measures coupled with engineered, small-scale Integrated Management Practices (IMPs), such as bioretention facilities. The update approach divides a site into discrete "Drainage Management Areas", or DMAs. Runoff from an individual DMA is mitigated by a Low Impact Development – Integrated Management Practice which is specifically designed for the DMA.

The Interim SUSMP also includes an LID-IMP/Treatment Control BMP discussion which provides a direct correlation to pollutant types and physical characteristics that enable pollutant transport. This information assists the design professional in developing an effective IMP/BMP "treatment train" and facilitates the pursuit of the MEP standard. Proposed Treatment Control BMPs and IMPs are required to meet the medium removal efficiency standard for the identified Primary Pollutants of Concern for each development project. The implementation of Treatment Control BMPs with low removal efficiency is not permissible.

The expanded application of LID practices coupled with quantified IMPs lends direct support to the HMP component by providing a broad spectrum of design concepts aimed at minimizing the introduction of pollutants and offsetting the conditions of concern associated with changes in the hydrologic regime. In short, the updated method clearly accounts ever drop of water that leaves a site.

The updated SUSMP is available at the City of Oceanside – Development Services counter or may be downloaded from the City Clean Water Program website at:

http://www.oceansidecleanwaterprogram.org/pdf/OceansideSUSMP.pdf

or the City Engineering Division – Subdivision Section website at:

http://www.ci.oceanside.ca.us/pdf/OceansideSUSMP.pdf

By following the design procedure outlined in the updated SUSMP, applicants and design professionals can develop a single integrated design which complies with the complex and overlapping NPDES permit, LID, storm water treatment, and peak runoff and duration control requirements.

2.2.4 Program Implementation

Program implementation is enabled by the General Plan, which was adopted by the City Council and recognized as a legally binding document. All applicable projects, including municipal projects are required to be consistent with the plan. In addition to the General Plan, the City addresses storm water pollution issues through the application of its Municipal Code. Chapter 40 of the Municipal Code is the Urban Runoff Management and Discharge Control Ordinance and is commonly referred to as the Storm Water Ordinance. The Ordinance contains multiple references to the current NPDES, Municipal Permit, and SUSMP as the governing storm water regulations. All new development and redevelopment projects are subject to updated SUSMP and the lawful prior approval provisions of the Municipal Permit.

All project applications are subject to a formal SUSMP Determination. Formal determinations are based upon a review of the Planning Division project application submittal. The minimum amount of information necessary to perform a SUSMP Determination includes a completed Storm Water Quality Assessment form, site plan, and project description and justification. The objective of the SUSMP Determination is to provide a consistent and thorough method for the initial review of development and redevelopment projects, with the overall purpose of categorizing projects and determining applicable SUSMP requirements. Development and redevelopment projects are categorized as; projects not subject to SUSMP Treatment requirements (Exempt Projects), Standard Development Projects (SDPs), or Priority Development Projects (PDPs). The SUSMP Determination also demonstrates to the RWQCB that each project receives a consistent review and enables the City to document project categorization and satisfy Municipal Permit requirements for reporting findings in the JURMP Annual Report.

Details on the completed and planned SUSMP updates may be found in Section 4.4.4.4 of the 2008 JURMP. In addition, information pertaining to the legal authority to implement a storm water program is located in Section 2 of the 2008 JURMP.

2.3 Environmental Review Process

The City has evaluated its established environmental review process for all development projects to determine compliance with the Municipal Permit. The City guides developers through the filing necessary documents and identifies which reports are required to be submitted and approved before development may begin. The current environmental review process places emphasis on the evaluation of water quality impacts and related issues that may result from the project development.

The Planning Division and Engineering Division of the Development Services Department are responsible for reviewing development projects for conformance with storm water requirements. The City will continue to assess all development and redevelopment projects for compliance with the California Environmental Quality Act (CEQA) by reviewing the Environmental Initial

Study completed by each project applicant. A copy of this checklist is included in Appendix D of the 2008 JURMP. The checklist contains questions to evaluate potential negative impacts on receiving water bodies. Projects which are determined to have "potentially significant impacts" to the surrounding environment and receiving waters are required to prepare Environmental Impact Reports (EIRs) for City review. Development projects that are not required to prepare EIRs proceed to the next phase of the approval process.

During the development of the 2008 JURMP, the City evaluated its current established environmental review process for all new development and redevelopment projects to determine compliance with the Municipal Permit. The City determined that the current environmental review process adequately addresses the requirements of the Municipal Permit. While the specific requirements evaluated during the environmental review process are expected to be updated periodically, the basic review structure did not require revision during this reporting period. Details of the current environmental review process are provided in Section 4.3 of the 2008 JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City has an established administrative and discretionary approval processes that provides multiple reviews by the Planning and Engineering Divisions. The Planning Division is responsible for determining acceptable land uses, development constraints, and identifying environmental issues. The Engineering Division is composed of various disciplines (i.e., Engineering Improvements, Grading and Drainage, Hydrology, Geotechnical, Storm Water, Traffic, and Landscape), which perform a coordinated review of all project applications. The Fire Department also performs multiple reviews and notifies the appropriate division in the event of a discrepancy or nonconformance with development regulations. In addition, the Building Division coordinates with Storm Water Development Review to ensure that new development, remodeling projects, additions, or demolitions are reviewed for compliance with storm water regulations. The coordinated involvement of all Divisions and disciplines provides an elevated degree of assurance that all projects are subjected to thorough scrutiny as part of a typical review process. Particulars surrounding the project approval and process verification are discussed in the following sections.

2.4.2 Source Characterization

Source characterization is an integral component of any urban runoff program. A wide variety of land use types and activities, if left unmitigated, are known to be sources of pollutants that have the potential to negatively affect the surrounding environment and the project receiving waters.

The March 2010 SUSMP identifies ten (10) separate "Priority Project Categories" (PDPs), which are cited as anticipated or potential sources of storm water pollution based upon particular land use types and specific site conditions, such as site topography and proximity to environmentally sensitive areas. During this reporting period the number of PDP categories was reduced from twelve to ten by expanding the definitions for Heavy Industry projects and projects with the potential to affect Water Quality Environmentally Sensitive Areas (WQESAs).

Source characterization augments the implementation of Site Design, Low Impact Development, Treatment Control, and flow control management practices that enable development and redevelopment project to reduce impacts to the receiving waters and demonstrate compliance with the Maximum Extent Practicable (MEP) standard. Priority Development Project and General Pollutant Categories appear in Table 1-1 of the updated SUSMP.

2.4.3 Best Management Practice Requirements

The Municipal Permit dictates minimum BMP requirements for all new development and redevelopment projects. The requirements are included in the City Storm Water Ordinance and SUSMP and shall include, but not be limited to, the implementation of the following BMPs and LID practices by the project proponent:

- Source Control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed outdoor material storage areas, properly designed trash enclosure areas, the implementation of Integrated Pest Management Principles (IPM) and the inclusion of efficient irrigation system, and drought tolerant/native species landscape design consistent with the City Water Efficient Landscaping Ordinance 10-OR0412-1.

- The inclusion of Low Impact Development (LID) practices that conserve natural topographic features, provide development setbacks from natural water bodies and conveyances, minimize site imperviousness, maximize infiltration, and retain and slow runoff;

- Buffer zones from natural water bodies, where feasible. Require the project proponent to implement other types of buffers such as trees or access restrictions where conventional setbacks are not feasible;

- Measures to mitigate discharges of pollutants that result during grading or construction activities as specified in the Section D.2 of the Municipal Permit; and

- Submittal and approval of a mechanism under which ongoing long-term maintenance of all structural post-construction BMPs will be conducted.

These minimum storm water BMP requirements are an integral part of the City standard conditions of approval and are required of all projects receiving administrative and discretionary permits. The City will not support the entitlement of a project or issue development permits until the appropriate SUSMP documents are reviewed by City staff and approved by the City Engineer. Any subsequent changes that affect the approved BMPs will be subject to an amendment process that includes review by City staff and approval by the City Engineer.

2.4.4 Program Implementation

2.4.4.1 SUSMP Revision

The SUSMP updates and expands storm water requirements for new development and redevelopment projects. Storm water treatment requirements have been made more widely

applicable and more stringent. New requirements include minimum standards for the implementation of Low Impact Development (LID) practices and the integration of flow control criteria designed to mitigate runoff peaks and durations from development sites. The updated SUSMP incorporates a unified LID procedure which combines site planning and design measures coupled with engineered, small-scale Integrated Management Practices (IMPs).

The updated SUSMP includes specific design information for dispersal of runoff to landscaped areas and for the integration of pervious pavements, bioretention facilities, flow-through planters, dry wells, infiltration basins, and cisterns into the project design. Where feasible and where permissible, the water in cisterns may be directed to non-potable uses to augment irrigation practices. Bioretention facilities and planter boxes may be designed with an impermeable barrier so that runoff does not saturate native soils. Instead, runoff is filtered through an engineered soil mix and captured in a subdrain and conveyed to a storm drain system. This configuration may be needed where native soils have low infiltration rates, where groundwater is high, contaminated, or where increasing soil moisture may present a hazard to foundations or slope stability. In limited and special circumstances, such as retrofit of existing drainage systems, some pedestrian-oriented developments, and roadway widening projects; where it can also be demonstrated it is not be feasible to construct any of these facilities, higher-rate surface biofilters or higher-rate vault based filtration units may be used to address treatment requirements.

Applicants are also required to incorporate design features to control pollutants from specified on-site sources, such as refuse areas, outdoor storage areas, and vehicle washing and repair facilities. The SUSMP contains a number of Source Control BMPs designed to address the types of sources to be controlled and a corresponding list of required source control measures.

In additions to disconnecting impervious surfaces and mitigation pollutant sources, applications for approval of Priority Development Projects (PDPs) are required to demonstrate compliance with the hydromodification management criteria of the NPDES permit. The SUSMP includes guidance for demonstrating compliance. Submittals for projects smaller than 50 acres may demonstrate compliance by using the integrated LID design procedure. For larger projects, the applicant may use a continuous simulation hydrologic computer model to simulate pre-project and post-project runoff, which includes analyzing the effect of LID facilities, detention basins, or other storm water management facilities, or may identify an exemption applicable to the site.

By following the design procedure, applicants can develop a single integrated design which complies with the complex and overlapping NPDES permit, LID, storm water treatment, and peak runoff and duration control requirements.

2.4.4.2 SUSMP Document Review

During this reporting period the City continued to implement requirements and practices cited in the Municipal Permit, Interim SUSMP, and updated SUSMP. The Clean Water Program continued to use a full-time staff member to perform storm water development review. Storm water development review includes indentifying applicability of SUSMP requirements and confirming that SUSMP documents are in conformance with the Municipal Permit and SUSMP. Review also involves confirming that related final engineering/construction plans are consistent with the approved SUSMP documents.

Each new development and redevelopment project is required to complete a Storm Water Quality Assessment form. The form and associated development plans; provide staff with information to perform a SUSMP determination. A SUSMP determination typically places the bulk of projects into a Priority Development Project or Standard Development Project category.

The majority of new development and redevelopment projects are subject to the provisions of the SUSMP. Projects are identified as Priority Development or Standard Development projects based upon land use categories and applicability of permanent storm water BMPs. A very limited number of projects are not required to submit a SUSMP document and are noted as SUSMP exemptions. Projects which are granted a SUSMP exemption typically involve incidental construction with negligible or no ground disturbance activities. Examples include the addition of an antenna to an existing cellular tower or interior tenant improvements to an existing building.

A SUSMP exemption differs from a SUSMP wavier of infeasibility. The City has never granted a waiver of infeasibility to a Priority Development Project and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may elect to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the project watershed.

Projects which have been formally identified as Priority Developments or Standard Developments are required to submit a project specific Storm Water Mitigation Plan (SWMP). Entitlement project storm water plans and supporting documents are submitted to the Planning Division for distribution to Engineering and Storm Water Development Review staff. The storm water review of Priority and Standard Development Projects is an iterative process that entails examination of the SWMP for consistency with SUSMP and Municipal Permit requirements. SWMP reviews also comprise an evaluation the supporting documents that include (at a minimum); the Site Development Plan, Project Description and Justification, Hydrology Study, Geotechnical Report, Biological Study, Slope Analysis, and etc. Projects which are consistent with the Municipal Permit and SUSMP are deemed complete and forwarded to the City Development Engineer and City Engineer, respectively, for final review and approval. A digital image and hard copy of the original, wet-signed plan are retained for City records.

2.4.4.3 Priority Projects

Priority Projects are required to obtain an approved SWMP as part of the project entitlement process. The items required in a SWMP are described in Section 1.6 of the SUSMP. In summary, Priority Projects must determine the Primary Pollutants of Concern based upon source characterization and impacts to the 303(d) impaired receiving waters. This category of development is required to provide Source Control BMPs while implementing LID practices. The project must incorporate Integrated Management Practices/Structural Treatment Control BMPs into the site development. The selected IMPs/Treatment Control BMPs must have a medium to high removal efficiency for the identified Primary Pollutants of Concern. The Treatment Control BMPs with low pollutant removal efficiencies are not permissible in the City of Oceanside.

Priority Projects must also have an approved Operation and Maintenance Plan (O&M Plan) and enter into a Storm Water Facilities Maintenance Agreement (SWFMA) to ensure the long-term maintenance and operation of the Treatment Control BMPs. The City Engineer will not consider Priority Project structural Treatment Control BMPs "effective," and therefore will not accept storm water BMPs as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. This mechanism shall be proposed by the project proponent as part of the SWMP and will be refined though the City's review process until satisfactory verification of maintenance is provided to the City Engineer. Such verification may include but is limited to covenants, legal agreements, maintenance agreements, and/or conditional use permits. A non-refundable security may be required. The security provides the City with funding to perform maintenance activities in the event of default by the owner.

2.4.4.4 Priority Project Example

The Harbor Aquatics Center is an example of a capital improvement project (CIP) applying for a regular coastal permit (RC-2-09). The site is located on the peninsula forming the western bank of Oceanside Harbor. The project developed a specific SWMP which is consistent with the Interim SUSMP and was approved on December 29, 2009.

The 1.4 acre site is located immediately south of the boat launch ramp; on the eastside of North Pacific Street, north of South Harbor Drive. The proposed development resides in the Lower Ysidora Hydrologic Sub-Area (902.11) of the Santa Margarita Hydrologic Unit (902.00), with historic drainage patterns tending from west to east and discharging directly into the Oceanside Harbor. Past site usage included storage of beach recreation and maintenance equipment. The lot was vacant at the time the SWMP was prepared.

The proposed development is categorized as a commercial development of greater than 1 acre, with a parking lot having greater than 15 spaces and potentially exposed to urban runoff, and being a site directly adjacent and discharging to a Water Quality Environmentally Sensitive Area (WQESA).

The project is comprised of a community center building and adjacent storage facility/building. The buildings are aligned parallel to each other, forming a parking court and drive aisle. Each building is fronted by a supporting row of parking spaces constructed of pervious pavers. A drive aisle, constructed of "Gravelpave^2®" porous pavement, serves as a common access to the site. The pervious paver and porous pavement parking areas are equipped with perforated subdrains that collect treated runoff from parking lot and adjacent roof and flatwork areas. Adjacent landscape areas are planted with native and drought tolerant species, and are designed to self treat by elevating the grated area drains, thereby increasing volume retention and time. Approximately 80% of the site is treated within the parking and landscape areas. The treated runoff from these areas is collected in a series of perforated and tight-line drains, and is then conveyed to a final, proprietary, cartridge type "Stormfilter®" manufactured by Contech®. The "Stormfilter®" is a final, "polishing" BMP before the discharge is released to the harbor.

The remaining 20% of the site is comprised of a wash area. The wash area is designed for "hosing-down" kayak, boogie board, and surfboard rentals. Equipment used to clean the beach of debris, trash, kelp, and etc will also be washed in this area to remove sand and salt; to increase

service life. No detergents will be used during washing operations. In addition, the area is exposed and subject to runoff due to precipitation. Therefore, a system had to be designed to address non-storm water flows due to wash activities, while being capable of separating and treating storm water runoff. To facilitate treatment, the flows generated in this area drain to a sump. Storm water runoff is collected in the sump and conveyed to a vegetated swale through a low-flow discharge pipe. The swale conveys and treats runoff prior to discharge to the harbor.

The source of non-storm water flows to this area is wash water. Non-stormwater flows are generated when a hose is activated. The sump is equipped with a diversion valve (Fox® Drain Diversion System) which is automatically actuated when maintenance personnel turn on the hose. The diversion valve redirects wash flow to an sand-oil separator (Jensen Precast®) before discharging the partially treated effluent to the City sanitary sewer system.

Although this project was submitted, reviewed, and approved prior to the release of the updated SUSMP and before the Oceanside Harbor was listed as an impaired waterbody; it [the project] incorporated the application of LID principles with discrete Drainage Management Areas (DMAs) and Integrated Management Practices (IMPs), to deliver a site that is composed of approximately 66% impervious surfaces and consistent with updated SUSMP.

2.4.4.5 Standard Development Projects

Development and redevelopment projects that are not identified as Priority Development Projects or are not determined to be exempt from SUSMP Treatment requirements, and receive a formal SUSMP Determination identifying the project as a "Standard Development Project" (SDP) are required to implement Source Control BMPs consistent with Section 2.7 of the SUSMP. Projects are also required to include LID features designed to conserve natural topographic features, provide development setbacks from natural water bodies and conveyances, minimize site imperviousness, maximize infiltration, and retain and slow runoff.

Standard Development Projects are required to implement a Standard Development Project SWMP. Clean Water Program staff may also require additional controls for Standard Development Projects, appropriate to the project, which may include treatment BMPs and LID IMPs such as infiltration or bioretention. If treatment facilities are included, provisions are to be made to ensure their long-term maintenance.

2.4.4.6 Adequacy of Proposed Plans

Staff will review submitted SUSMP documents and other relevant plans for compliance with the Municipal Permit and SUSMP requirements. The City Engineer may elect to approve proposed alternatives to the BMP requirements contained in the SUSMP if they are determined to be applicable and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs and may be requested following the conclusion of a staff review cycle. A project SWMP will be deemed complete when the project complies with the requirements of the City SUSMP and Municipal Permit.

2.4.4.7 Inspection

The City has compiled a Treatment Control BMP inventory with information for all approved and/or constructed Priority Development Projects. The inventory is included in this report as

Attachment 2-A. All installed Treatment Control BMPs are regularly inspected by City Code Enforcement Inspectors to ensure intended function and proper maintenance. The Municipal Permit dictates that high priority sites shall be inspected annually and medium priority sites are to be inspected every two years. Low priority site are inspected as needed. In addition, the Municipal Permit requires a minimum of 20% of the total number of projects with approved Treatment Controls and a maximum of twice the average number of projects with Treatment Control BMPs approved per year will be inspected annually. The Municipal Permit dictates 50% of all medium priority sites with drainage inserts will be inspected annually. City Code Enforcement inspection staff performed a total of 37 treatment control bmp inspections during this reporting period.

It is the responsibility of the City Engineering Inspection staff to ensure that all BMPs proposed for a project have been built or installed according to the construction plans; before approving subsequent stages of construction. The City Engineer requires that all Priority Development Projects attached a duplicate of the approved SWMP BMP Exhibit to the construction plan set. The inspectors utilize the project plans to identify any missing or incorrectly constructed/installed Treatment Control BMPs. Engineering Inspection staff has the authority to stop a project from proceeding if BMPs are not constructed consistent with the approved SWMP. The SWMP is the governing document. Moreover, inspectors have the authority to withhold the Certificate of Occupancy (CO) and to deny approval for sites with observed problems. Inspectors also have the authority to withhold the release of bonds until plan requirements are adequately addressed. City Staff routinely inspects all development projects subject to SUSMP requirements to ensure that all LID, Source Control, and Treatment Control BMPs proposed for the project have been constructed in compliance with all approved plans and City permits and ordinances. This established method of ongoing inspection during site development and the ability to stop-work, withhold release of bonds, and/or occupancy, ensures developer compliance with the approved SWMP.

Inspections include examination of all Treatment Control BMPs at the site to verify that each Treatment Control BMP is in working order, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings will be documented by the inspector using the City of Oceanside Treatment Control BMP Inspection form in Appendix D of the 2008 JURMP. Deficiencies in Treatment Control operation and maintenance are noted during the inspection, the responsible party is notified and appropriate enforcement actions take place as described in Section 4.4.4.9 of the 2008 JURMP, in order to achieve compliance.

The City requires annual verification of proper maintenance of all treatment control BMPs by the responsible party for maintenance prior to the start of the rainy season. The City Code Enforcement section is responsible for ensuring the proper long term maintenance and operation of post construction BMPs. The City requires all Priority Projects to include Operation and Maintenance checklists and a self-inspection log for the site's Treatment Control BMPs as found in the approved project SWMP. The City requires these forms to be completed by the site's responsible party and be submitted to the City Code Enforcement staff on an annual basis. See Attachment 2-A for sites that were inspected and/or have BMP maintenance verification on file for this reporting period

A detailed description of the different enforcement measures used by the City of Oceanside to enforce its storm water regulations can be found in Section 2 of the 2010 JURMP.

Enforcement of post-construction BMP maintenance after occupancy is the responsibility of City Code Enforcement officers. Code Enforcement uses a variety of methods to ensure long term maintenance objectives are met. Enforcement actions include verbal and written warnings and monetary penalties. Enforcement measures will escalate with continued violations as necessary. All enforcement actions are documented in the development project's database file. If a development site receives frequent citations or is not responsive to previously issued enforcement actions, more severe actions, such as court actions, will be used as necessary. Details surrounding the City Treatment Control BMP inspection program may be found in Section 4.4.4.7 of the 2008 JURMP.

2.4.4.8 2009-2010 SUSMP Document Submittal and Review Summary

A number of SUSMP document reviews were performed during the 2009-2010 reporting period. There were 45 Priority Development Project SWMP submittals which prompted 105 reviews with a total 17 of projects receiving approval. During the same period there were 13 Priority Projects that submitted Amendments to a previously approved SWMP that prompted 22 reviews and yielded 7 approvals. In addition, there were 4 Standard Development Projects that submitted an SWMP which prompted 8 reviews. During the 2009-2010 reporting period a total of 5 Standard Development SWMPs were approved.

During the reporting period there were 13 Priority Development Projects that submitted O&M plans as part of the final engineering process. There were a total of 30 reviews performed with a total of 6 O&M Plans receiving approval. The SWMFA is typically submitted with O&M Plan. Some projects elect to "trail" the SWFMA submittal. During this reporting period 8 project SWFMAs were submitted, prompting 18 reviews, resulting in 2 approved agreements.

All projects are subject to a SUSMP Determination. The determination process places the majority of developments into Priority Development Project or Standard Development Project categories. During this reporting period, a number of projects were found to be exempt from SUSMP requirements. Projects which are granted a SUSMP exemption typically involve minor construction with minimal, or no ground disturbance. Examples of projects that are eligible to receive an exemption include interior tenant improvements to an existing structure, or the addition of an antenna to an existing cellular tower. During this reporting period there were 74 reviews linked to the evaluation of 53 Urban Runoff Threat or Storm Water Quality Assessments; submitted as part of the SUSMP Determination process. At total of 52 projects were not categorized as a Priority or Standard Development Project and therefore were not required to submit an SWMP.

A SUSMP exemption differs from a SUSMP wavier of infeasibility. The City has never granted a waiver of treatment control BMP infeasibility to a Priority Development Project and does not anticipate granting waivers in the future. However, if a waiver is deemed necessary, the City may elect to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the project watershed. There were no SUSMP waivers of infeasibility granted during this reporting period. See Table 2-2 for more detail on project submittals and review results.

Table 2-2. 2009-2010 SUSMP Document Submittal and Review Summary.

File Number	Project Name	Type of Development	Number of Reviews in FY 09-10	Approved in FY 09-10 (Y/N)
Priority Development Project SWMPs				
P-210-09	312 S. The Strand	Residential	2	Y
RC10-00002	817 S. The Strand	Residential	1	N
RC-4-09	1441 S. Pacific Street	Residential	1	N
P-27-06	1510 Wilshire Road	Residential	1	N
ACUP09-00007	1533 Loretta Street	Residential	1	N
RC10-00004	1705 S. Pacific Street	Residential	1	N
RC-2-08	1721 S. Pacific Street	Residential	3	Y
D-2-09	4181 Oceanside Boulevard	Commercial	2	Y
ADP-5-04TE	Airport Auto Center	Commercial	7	Y
ADP-1-09	Amerillum	Commercial	3	Y
D-3-07	Cassidy Plaza	Commercial	2	Y
P-11-08	Canyon Bluff	Residential	5	Y
P-12-08	Canyon Strand	Residential	7	Y
T-1-09	Cavalier Mobile Estates	Residential	2	N
ACP-4-08	Cavalier Storage	Commercial	1	N
ACUP09-00021	Clearwire at Benet Hill	Commercial	1	N
ACUP-6-09	Clearwire at Mira Costa College	Commercial	1	N
ACUP10-00003	Clearwire at 4705 N River Road	Commercial	1	N
RC09-00008	Cricket at 1200 Harbor Drive	Commercial	1	N
T-3-97REV09	Del Oro Marketplace	Commercial	3	Y
T-2-2004TE09	Dixie Village	Residential	1	N
D09-00004	El Corazon Green Waste Facility	Commercial	1	N
RC10-00006	Gary Stone at 1941 S. Pacific St	Residential	1	N
T-3-06	Guajome Estates (T-3-06)	Residential	4	N
C-33-06	Guajome Lake	Commercial	3	Y
D-3-09	Hampton Inn & Suites	Commercial	1	N
RC-2-09	Harbor Aquatics Center CIP	Commercial	3	Y
T-11-04	Lusardi Capistrano Subdivision	Residential	3	Y
D-11-06	Lutheran Community Church	Commercial	3	N
D-2-08	Mission Ave Car Wash & Mini Mart	Commercial	5	Y
D-2-07	Mission SLR Cemetery Expansion	Commercial	4	Y
D-22-06	Mission Square	Commercial	1	N
T-12-99	Morro Hills Village K	Residential	3	N
T-12-99(8)	Morro Hills Village L	Residential	3	N
R10-00004	Morro Hills Reservoir Improvements	Commercial	1	N
CUP10-00003	Oceanside Mixed Martial Arts	Commercial	1	N
D-1-09	Pacific Coast Business Park-Phase II	Commercial	2	Y
CIP213.755256	Rockledge Alley Improvements	Residential	1	N
T-2-08	Sutton Place	Residential	2	N
CUP10-00002	T-Mobile at 851 Wilshire Road	Commercial	1	N
E-18-09	Veridiam Parking Lot	Commercial	1	N
C-23-08	Verizon at 1-5 & 78	Commercial	1	N
D-5-07	Villas at Mission SLR	Residential	6	Y
ADP-4-08	Vine Street Commercial	Commercial	2	N
C-34-07	Walker Chapel Revision	Commercial	5	Y
Total PDP-SWMP Project Submittals: 45 Total PDP-SWMP Reviews: 105 Total PDP-SWMPs Approved: 17				

SWMP Amendments				
D-2-09	4181 Oceanside Boulevard	Commercial	4	N
ADP-1-09	Amerillum	Commercial	1	N
D-17-05	Arrowood Phase I	Residential	1	N
T-12-99(10)	Arrowood Models	Residential	1	N
D-15-04	Coca Cola Center	Commercial	2	Y
D-25-05	Mission & Douglas Center	Commercial	3	N
D-1-08	Mission Animal Hospital	Commercial	1	N
D-11-03	Mohsen Oil	Commercial	1	Y
D-29-03	New Venture Christian Fellowship	Commercial	1	Y
T-13-02	Ocean Heights Estates	Residential	1	Y
ADP16-02	Social Security Building	Commercial	3	Y
RC-206-04	Upscale Holiday Inn & Suites	Commercial	1	Y
ADP-4-08	Vine Street Commercial	Commercial	2	Y
Total Amendments: 13	**Total Amendment Reviews: 22**		**Total Amendments Approved: 7**	
Standard Development Project SWMPs				
P-2-05	Fraser Parcel Map	Residential	2	Y
P-5-08	Cassidy Cove	Residential	3	Y
P-7-08	Hahn Parcel Map	Residential	1	Y
D10-00002	Pepper Tree Lane	Residential	2	N
Total SDP-SWMP Project Submittals: 4	**Total SDP-SWMP Reviews: 8**		**Total SDP-SWMPs Approved: 3**	
O M Plans				
P-8-08	3186 Vista Way Parcel 2	Commercial	2	Y
D-2-09	4181 Oceanside Boulevard	Commercial	2	N
D-3-07	Cassidy Plaza	Commercial	1	N
D-15-04	Coca Cola Center	Commercial	2	N
T-3-97REV09	Del Oro Marketplace	Commercial	4	Y
RC-13-01	Jones Residence	Residential	4	N
P-16-06	Lil Jackson	Commercial	4	N
D-2-07	Mission SLR Cemetery Expansion	Commercial	3	Y
D-2-93	New Venture Christian Fellowship (Rev)	Commercial	1	Y
T-13-02	Ocean Heights Estates (Rev)	Residential	1	Y
P-203-08	Pacific View Villas	Residential	2	Y
G10-00004	San Luis Rey Transit Center	Commercial	1	N
ADP-4-08	Vine Street Commercial	Commercial	3	N
Total O M Plans Submitted: 13	**Total O M Plan Reviews: 30**		**Total O M Plans Approved: 6**	
SWFMAs				
P-8-08	3186 Vista Way Parcel 2	Commercial	3	Y
D-2-09	4181 Oceanside Boulevard	Commercial	2	N
T-3-97REV09	Del Oro Marketplace	Commercial	3	N
RC-13-01	Jones Residence	Residential	3	N
P-16-06	Lil Jackson	Commercial	3	N
D-2-07	Mission SLR Cemetery Expansion	Commercial	2	Y
P-203-08	Pacific View Villas	Residential	1	N
ADP-4-08	Vine Street Commercial	Commercial	2	N
Total SWFMAs Submitted: 8	**Total SWFMA Reviews: 18**		**Total SWFMAs Approved: 2**	

SUSMP Exemptions				
ADP-3-08	202 S. El Camino Real	Residential	2	N
RC09-00007	75 St. Malo Beach	Residential	1	Y
E-21-09	801-803 N. Pacific Street	Residential	2	Y
ACP09-00006	1313 Breeze Remodel	Residential	2	Y
RC-6-09	1443 S. Pacific Street Remodel	Residential	1	Y
ERO10-00007	1531-33 S. Coast Highway	Commercial	2	Y
C-7-09	1617 Mission Ave Veterans Center	Commercial	2	Y
CUP10-00010	American Tower at 4039 Avenida Plata	Commercial	1	Y
E-17-09	Arroyo-Comanche Remedial Grading	Residential	1	Y
ACUP10-00010	ATT Douglas Square	Commercial	1	Y
CUP10-00012	ATT 3471 Cannon Rd	Commercial	1	Y
ADP-4-06	Betyar Residence	Residential	3	Y
CUP10-00006	Buggy Bath Mini Mart	Commercial	2	Y
C-4-09	California Career School	Commercial	3	Y
MGP10-00002	Caufield Renovation 2023 S. Pacific St	Residential	2	Y
ACUP-5-09	Clear Wire at 4700 Mesa Drive	Commercial	1	Y
RC10-00001	Clear Wire at Marina Towers	Commercial	1	Y
ACUP09-00019	Clear Wire at 420 N El Camino Real	Commercial	1	Y
ACUP09-00018	Clear Wire at 502 Oceanside Blvd	Commercial	1	Y
ACUP09-00011	Clear Wire at 551 S El Camino Real	Commercial	1	Y
ACUP09-00017	Clear Wire at 650 N River Road	Commercial	1	Y
ACUP09-00020	Clear Wire at 835 College Blvd	Commercial	2	Y
C-205-2009	Clear Wire at 1155 Sportfisher Way	Commercial	1	Y
ACUP09-00010	Clear Wire at 1501 Kelly	Commercial	1	Y
ACUP10-00006	Clear Wire at 1606 Missouri	Commercial	1	Y
ACUP10-00004	Clear Wire at 1919 Mission	Commercial	2	Y
ACUP09-00023	Clear Wire at 2103 El Camino Real	Commercial	2	Y
ACUP09-00009	Clear Wire at 2215 Mesa	Commercial	1	Y
ACUP09-00013	Clear Wire at 2424 Vista Way	Commercial	1	Y
ACUP09-00022	Clear Wire at 2605 Temple Heights	Commercial	2	Y
CUP10-00007	Clear Wire at 2855 Cedar Road	Commercial	1	Y
ACUP09-00024	Clear Wire at 3000 Guajome Lake Road	Commercial	2	Y
ACUP10-00008	Clear Wire at 3036 Oceanside Blvd	Commercial	1	Y
ACUP10-00007	Clear Wire at 3471 Cannon Road	Commercial	1	Y
ACUP09-00008	Clear Wire at 3570 Sky Haven Lane	Commercial	1	Y
ACUP09-00014	Clear Wire at 3784 Mission	Commercial	1	Y
ACUP09-00016	Clear Wire at 4002 Vista Way	Commercial	1	Y
ACUP09-00012	Clear Wire at 4039 Avenida Plata	Commercial	1	Y
ACUP10-00005	Clear Wire at 4250 Mesa Drive	Commercial	1	Y
ACUP09-00015	Clear Wire at 428 Sleeping Indian Road	Commercial	2	Y
ACUP-4-09	Clear Wire at 4183 Avenida Plata	Commercial	1	Y
CUP10-00009	Fitness 19	Commercial	1	Y
ACUP10-00002	Josh s Boars Nest	Commercial	1	Y
D-3-93REV07	King of Kings Lutheran Church	Commercial	2	Y
P10-00002	Lloyds Wells Trust (Ashworth)	Commercial	1	Y
ACP-3-09	McKissick Residence	Residential	2	Y
09-438	Mission Plaza Gas Healy Tank	Commercial	1	Y
RCUP10-00002	Pawn Shop at 205 N Coast Hwy	Commercial	1	Y
CIP00032	Signal Modification Civic Ctr & Pier View	Commercial	1	Y
RC10-00005	Stroud Residence at 1507 S Pacific St	Residential	1	Y

CUP09-00016	Surfside Animal Hospital	Commercial	2	Y
D-15-92REV05	West Coast Tire	Commercial	2	Y
09-434	Wilson Remodel 1501 Kelly Street	Residential	1	Y
Total Project Submittals: 53	**Total Project Reviews: 74**	**Total Identified Exemptions: 52**		

2.4.4.9 Outreach and Staff Training

City officials involved in planning and review of development projects received a comprehensive training on storm water requirements during this reporting period. See Table 2-3 for the departments and city officials that were provided training. Training topics during this reporting period focused on general water quality concepts, specific SUMSP requirements, LID components that can be recommended for specific projects, implementation procedures and minimal information about future HMP components.

Table 2-3. Staff Training during the 2009-2010 Reporting Period.

Department Division	Training Date	Number in Attendance
Building Inspectors	June 30, 2010	3
Engineering Inspectors	January 14, 2010	6
Planning Division	April 27, 2010	7

2.5 Development Planning Component Effectiveness Assessment

See Section 11.0 for an assessment of the development planning component of the City's JURMP.

2.6 Program Review and Modification

The Development Planning components of this Report, the City JURMP, and the SUSMP will be revised as necessary to conform to the future requirements of the Municipal Permit. Major revisions to the Development Planning component will be cited in Section 14 of the City JURMP.

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3.0 CONSTRUCTION COMPONENT

3.1 Introduction

Construction and grading activities have the potential to impact neighboring water bodies due to the presence of disturbed soils and building materials. It is important that construction sites take appropriate measures to prevent potential pollutants from entering the storm drain system.

The purpose of the construction component section of the City's JURMP is to provide guidance in order to limit the negative impact that construction and grading activities can have on receiving water bodies. The information in this section of the annual report describes how the City of Oceanside met the minimum requirements outlined in Section D.2 of the Municipal Permit Order 2007-0001 to reduce the release of pollutants into the storm drain system to the Maximum Extent Practicable (MEP) (Table 3-1).

Table 3-1. Order 2007-0001 Compliance Summary

J.3.a.(3)(d).iv Updated construction site inventory	See Section 3.2.1 of this Annual Report
J.3.a.(3)(d).i Ordinance update and approval process modifications	See Section 3.3 of this Annual Report
J.3.a.(3)(d).vi BMP Implementation	See Sections 3.4 and 3.5 of this Annual Report
J.3.a.(3)(d).ix Confirmation that sites went through urban runoff approval process	See Section 2.4.3 of this Annual Report
J.3.a.(3)(d).x and xi Inspection of construction sites	See Section 3.5.2 of this Annual Report
J.3.a.(3)(d).xiii and xiv Enforcement of construction sites	See Section 3.5.3 of this Annual Report
J.3.a.(3)(d).xii Inspection frequency and totals during dry and wet seasons	See Section 3.5.2.3 of this Annual Report
J.3.a.(3)(d).vii Requirements for application of erosion and sediment control BMPs	See Section 3.5 of this Annual Report
J.3.a.(3)(d).viii Construction sites requiring Advanced Treatment	See Section 3.5 of this Annual Report

A large portion of the Construction Component of the City's JURMP is described in three documents:

- Chapter 40 of the City Code or Ordinances
- City's Grading Regulations Manual
- City's *Construction Urban Runoff Requirements Manual* (Construction Manual).

All of these documents are available on-line via the Clean Water Program website at www.oceansidecleanwaterprogram.org.

The Construction Manual was developed by the City to provide construction projects with guidance in order to comply with the City Code and its ordinances. The Construction Manual is a living document and will change with time to ensure an effectively implemented program. Updated versions of the manual will be made available whenever modifications have been proposed and approved by the City. During this reporting period no changes were made to the Construction Manual. The City's full Construction Manual can be found in Appendix C of the 2008 JURMP Update. It is anticipated that this manual will change during this permit cycle once a new Construction Permit is adopted by the State Water Resources Control Board.

3.1.1 Notable Activities

During this reporting period several departments within the City moved forward with implementation of various data tracking systems. The Development Services Department, which includes Building, and Engineering, and the Code Enforcement division, selected TRAKiT, permitting software by CRW Systems, Inc and began roll-out in this reporting year. See section 3.2.1 for more information about the TRAKiT software. Since both of these systems were fully launched in this reporting period, the Clean Water Program will be reviewing the effectiveness of the new tracking tools and will continue to implement improvements in the use of the system in the coming years.

3.2 Source Characterization

3.2.1 Site Inventory

The City has compiled a watershed-based inventory of all active construction sites within its jurisdiction that may have a significant impact to local water bodies. The projects on this list are scheduled to be inspected by both engineering and building division inspectors. Small projects such as Tenant Improvements that do not require grading are not listed on the inventory. The inventory includes details on each construction site, including project name, location, and threat to water quality (TTWQ) as determined by the process described in Section 5.2.1.1 of the 2008 JURMP. A spreadsheet of active construction projects in the City's jurisdiction as of June 30, 2010 can be found in Attachment 3-A.

The inventory process for construction sites is based on information collected from construction projects when they are applying for a grading or building permit. When the permit is approved, this information is then entered into a database developed by the City. If a permit was previously issued for a project, then the database is updated to reflect the most up-to-date information.

In an effort to improve productivity, the Development Services Department worked with staff from Code Enforcement, Fire Prevention, Information Technologies and Water Utilities to institute an efficient permitting system to make it easier to do business at City Hall. Following evaluation of several systems, staff selected TRAKiT, permitting software by CRW Systems, Inc. In October of 2009, the City went live with TRAKiT; the data management capabilities of TRAKiT assist front-line staff with the inputting and organization of permit data, while the software's enhanced reporting tools provide management staff with pertinent statistics and data to evaluate workflows and allocate resources. The integration of the data management systems of multiple Development Services Implements TRAKiT Software departments makes it easier to

find and share this information, both with the public and among staff. In light of these benefits, the City plans to build on this system with electronic plan submittal, electronically filed field inspection/enforcement reports, and an Interactive Voice Response System. These features will facilitate better customer service, more efficient use of staff time, and increased collaboration between the various City disciplines involved in project review, permitting and code enforcement.

In early 2010, Oceanside launched an online version of TRAKiT, called eTRAKiT, which is made available to the public. Public users are able to access records and view the status of projects, permits and cases via the Internet. For more information, visit www.ci.oceanside.ca.gov and click on the "eTRAKiT-Online Permitting" Quick Link.

Since TRAKiT was fully launched in this reporting period, the Clean Water Program will be reviewing the effectiveness of the new tracking tools and will continue to implement improvements in the use of the system in the coming years.

3.2.2 Construction Site Prioritization

All construction sites within the City's jurisdiction are assigned a priority of high, medium, or low TTWQ. Following are criteria used to determine the level of TTWQ.

Construction sites that meet any of the following criteria are considered a **High** TTWQ:

- A site 50 acres or more in size where grading will occur during the wet season.
- A site one acre or more and tributary to a CWA section 303(d) water body segment impaired for sediment or within, directly adjacent to, or discharging directly to a receiving water within an ESA.
- A site that has been determined by the City or the RWQCB to pose a significant threat to water quality.

Sites that are greater than one acre but do not meet any of the above criteria are considered a **Medium** TTWQ.

Sites less than one acre and are not determined to be a significant threat to water quality are considered a **Low** TTWQ. See Table 3-2 at the end of this section for a list of active construction sites and their assigned TTWQ.

Construction projects determine their TTWQ priority by completing the City's Urban Runoff Threat Assessment Form (Appendix D of the 2008 JURMP Update). This form contains information from the City's Construction Urban Runoff Requirements Manual (Construction Manual) on how to evaluate a construction site's TTWQ. The Urban Runoff Threat Assessment form requires all construction sites to respond to the following questions when assigning priority:

- Item 1 – Project Size: Are you grading or otherwise disturbing soil of one acre or more?
- Item 2 – Planned period of grading: Will the project involve grading or soil disturbance?
- Item 3 – Vicinity of the Project to Environmentally Sensitive areas: Is the project tributary or adjacent to environmentally sensitive water bodies within the City?

- Item 4 – Presence of significant erodible slopes: Does the project include significant erodible slopes?
- Item 5 – Potential to produce significant non-storm water discharges or pollutants: Does the project have the potential to produce non-storm water discharges or pollutants?
- Item 6 – Project type: Will the project result in more than 5,000 square feet of impervious surface area?

All project proponents are directed to reference a prioritization matrix to determine the priority of the project. An example of the matrix is provided as Table 3-2 below. The matrix is used by first locating the appropriate row in the matrix according to the size of the project, then moving across the row. The proponent should refer to the answers given to the five questions above. If "Yes" was responded to a question, the corresponding box in the matrix provides the priority for the project. The use of this matrix was developed consistent with the requirements of the Permit Order 2007-0001. Under this process, construction sites that meet either of the following conditions must be classified as High Priority.

Table 3-2. Construction Project TTWQ Prioritization Matrix.

Project Size	Item 2	Item 3	Item 4	Item 5	Item 6	Default Priority
Greater than 50 acres	High	High	High	High	High	Medium
5□50 acres	□	High	High	High	High	Medium
1□5 acres	□	High	Medium	Medium	Medium	Medium
Less than 1 acre	□	Medium	Medium	Medium	Medium	Low

3.3 Updates to Ordinances and Approval Processes

During this reporting period, the City continued to actively participate in the Copermittee Workgroups, Sub-workgroups, and HMP-TAC. The combined Copermittee effort resulted in the release of the Countywide Model SUSMP in February 2010, adoption of the Hydromodification Management Plan by the RWQCB in June 2010, and completion of the Regional Construction BMP Guidelines in June 2010. The City also released an updated SUSMP in March 2010; consistent with the Countywide Model SUSMP and the Municipal Permit. Subsequent to the updated SUSMP, the City released a draft Storm Water Mitigation Plan (SWMP) template. The purpose of the template is to provide the design professional with a standardized presentation format while facilitating plan review. The SWMP template will become finalized upon complete implementation of the HMP.

The updated SUSMP and expands storm water requirements for new development and redevelopment projects. Storm water treatment requirements have been made more widely applicable and more stringent. New requirements include minimum standards for the implementation of Low Impact Development (LID) practices and the integration of flow control criteria designed to mitigate runoff peaks and durations from development sites. The updated SUSMP incorporates a unified approach to the application of LID practices which combines site planning and design measures coupled with engineered, small-scale Integrated Management Practices (IMPs).

In addition to the updated SUSMP, the City continued to require all development and redevelopment projects that cause land disturbance, including projects subject to the Statewide Construction General Permit (CGP), to complete and implement a City Erosion Control Plan. Erosion control plans are reviewed by Engineering Division staff and approved by the City Engineer. The Erosion Control Plan may appear to be a redundant document, as it typically overlaps the GCP SWPPP. However, the erosion control plan differs from the SWPPP because it requires a bond prior to approval. The erosion control bond creates a maintenance funding mechanism that assures funds will be available to repair or construct BMPs in the event of default by the Responsible Party. Plans are required to be updated on annual basis, prior to the rainy season, to assure that plans are consistent with site conditions and to update the erosion control bond.

3.4 Best Management Practice Requirements

The City has a set of minimum Best Management Practices (BMPs) that must be implemented at all construction sites regardless of TTWQ priority including implementing and maintaining general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the MEP. Table 5-2 of the 2008 JURMP (pp. 5-4 and 5-5) outlines the minimum construction BMPs required by the City. The table also provides references to the corresponding BMP fact sheets obtained from the Caltrans Storm Water Quality BMP Handbook and California Stormwater Quality Association (CASQA) Construction BMP Handbook.

A Construction BMP brochure titled "A Pollution Prevention Guide for the Construction Industry" is provided to the developer during pre-development meetings. This brochure provides a sample drawing that illustrates the minimum BMPs that must be used at all construction sites to protect storm drains and minimize pollution. This brochure was provided as Attachment 3-B in the 2008-09 JURMP Annual Report. This brochure is also available at both the Engineering and Building Department counters of the City. Approximately 600 brochures were distributed to the public by building division staff during this reporting period.

3.5 Program Implementation

All construction sites are required to select, install, and maintain BMPs that meet or exceed the minimum BMP requirements described in the City Construction Manual and in Section 5.4.1 of the 2008 JURMP. There is no minimum threshold of disturbed area that relieves a project of the responsibility to implement erosion and sediment control BMPs. Moreover, all sites requiring a grading permit are obligated to implement an Erosion Control Plan as part of the Grading Plan review and permit process. Construction activities that result in a land disturbance equal to or greater than one acre are subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). Projects that are subject to the CGP are required to file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB), obtain a Waste Discharge Identification Number (WDID#), and develop and implement a site specific Storm Water Pollution Plan (SWPPP) prior to the commencement of any grading activities. SWPPPs are required to include a list of BMPs that will be implemented during each phase of construction to reduce pollution discharges to the MEP. In addition, selected projects governed by the CGP may be required to employ advanced treatment as part of their SWPPP. Each project will perform a site assessment that includes the determination of a

Sediment Risk Factor and a Receiving Water Risk Factor to ascertain a Combined Risk Level. Projects with Risk Levels associated with (Numeric Effluent Limits) NELs may find it necessary to implement an Advanced Treatment System (ATS) to achieve effluent standards. Projects faced with physical constraints that "inhibit the ability to construct a correctly sized sediment basin" may also elect to implement an ATS to comply with the MEP standard.

3.5.1 Education and Staff Training

Site owner/developer education and training

The City provides all appropriate parties involved with construction activities with training and informational materials regarding storm water quality, as applicable. These parties include but are not limited to City employees and project proponents, which can include contractors, subcontractors, developers, property owners, and superintendents. Education and training of the development community in Oceanside is typically done on a project-by-project basis during a mandatory pre-construction meeting with the City and during construction site inspections.

Prior to the issuance of permits, construction site owners and developers meet during a pre-construction meeting with City staff and developer staff and/or contractors, subcontractors and superintendents. During these meetings City staff from various departments review what is expected of the project proponent in order to develop the project. At least one Clean Water Program staff person attends these meetings. Topics covered during these meetings specific to storm water pollution prevention include:

- Grading - Reference to the City of Oceanside Grading Regulations manual and the BMP Construction manual (both available on the City's website).
- Site Plan review for storm water inlets and associated BMPs
- Review of site-specific BMPs more applicable to the site and associated with the potential pollutants that could be generated from the proposed business operations
- Inspection Requirements and Frequency – Unannounced and upon call-outs from the public
- Expectations of BMPs during dry and wet seasons
- Construction BMP Brochure is provided

Prior to wet season, all currently permitted construction sites were contacted to remind site owners and developers to assess, repair and update their sites BMPs to reduce erosion potential and prevent storm water pollution. Site owners and developers are also advised to update their erosion control plans and SWPPPs that are applicable to the site.

Municipal Staff Training

City staff directly involved with development and construction sites are provided training on a departmental basis. For further details on topics covered during the City's construction educational program, please refer to Sections 10.2.2 and 10.3.1 of the City's 2008 JURMP. During this reporting period three groups were provided training in regards to erosion control and BMP installation and maintenance for construction sites. See Table 3-3 below for those who received training.

Table 3-3. Municipal Staff Training.

Training Date	Department Division	Number in Attendance
1/14/10	Engineering Inspectors	6
4/27/10	Planning Division	7
6/30/10	Building Inspectors	3

In addition to the in-house trainings listed above, city staff involved in land development attended other trainings provided by outside agencies. See Table 3-4 below for a list of these trainings and staff who attended.

Table 3-4. Municipal staff attendance at land development-related trainings.

Training Date	Topic	City Staff in Attendance	Presenter(s)
8/05/09	Web Conference California CGP Part I	Foley Lardner/Rick Engineering	State Construction General Permit
10/01/09	Web Conference California CGP Part II	Foley Lardner/Rick Engineering	State Construction General Permit
11/18/09	Web Conference California CGP Part III	Foley Lardner/Rick Engineering	State Construction General Permit
12/09/09	CASQA BMP Database	Geosyntec	Updates to CASQA BMPs
03/03/10	Model SUSMP Training	CWP Coordinator (1) Storm Water Plan Checker (1) Environmental Specialist (1)	County of San Diego
3/23/10	Environmental Enforcement Training	Cal/EPA	Conducting effective interviews, evidence to prove a violation, enviro crimes, enforcement options, case development & referrals
4/08/10	State Construction General Permit	SWRCB, RWQCB, Carlsbad Library	Risk levels, implementation schedule, SMARTS
5/4/10	State Construction General permit Overview (Webinar)	CWP Coordinator (1)	Foley and Lardner LLP (Private Firm)
6/23/10	State Construction General permit Overview (Webinar)	CWP Coordinator (1)	Foley and Lardner LLP (Private Firm)

3.5.2 Inspection of Construction Sites

Permit Order 2007-0001 requires that the City develop and implement an inspection program to ensure that each construction site properly complies with the City's relevant ordinances, permits, and the Permit Order 2007-0001. This section describes the City's inspection program for 2008-09 of construction sites developed in accordance with Part F.2.g of the Permit Order 2007-0001.

Each project was assigned an engineering and storm water inspector who was tasked with conducting inspections at the site throughout the construction phase of the project. All inspectors have been educated in the requirements of the Permit Order 2007-0001 and through in-house training and seminars, and/or construction-specific certificate training seminars.

3.5.2.1 Initial Site Inspections

Upon commencement of work at a construction site, a City inspector will visit the site and perform the following:

- Where applicable, a check for proof of coverage under the General Construction Permit.
- A review of the SWPPP (where applicable) and erosion control plans with the appropriate project proponent on site.
- A check for proper implementation of the BMPs outlined in the projects plans.
- A review of the maintenance schedule and procedures for each BMP.

All construction sites in the City's construction site inventory receive initial site inspections regardless of TTWQ priority. If any required documents or BMPs are found to be missing or deficient, the City may issue a stop work notice until the deficiencies are corrected.

3.5.2.2 Routine and Follow-Up Inspections

Once an initial site inspection is performed, additional routine inspections will be performed. The frequency of these routine inspections depends on the site's assigned TTWQ. The criteria used to determine a construction site's TTWQ presented in Section 5.2.1.1 were developed to correspond to the routine inspection frequencies required by the new Municipal Permit. Table 3-5 presents the different TTWQ categories and their corresponding minimum inspection frequencies for the wet (October 1 through April 30) and dry (May 1 through September 30) seasons.

Table 3-5. Construction Site Inspection Frequency

Construction Site TTWQ	Wet Season Inspection Frequency	Dry Season Inspection Frequency
High	Every two weeks	As needed
Medium	Monthly	
Low	As Needed	

3.5.2.3 Construction Site Inspection Frequencies

Attachment 3-A provides the number of inspections conducted during both rainy and dry seasons for active construction sites during the reporting period. This table provides inspection numbers from both engineering and building department staff.

It was determined that there were 54 active construction sites that may have a significant impact to local water bodies during this reporting period. As required by the Permit, these construction sites were assigned high, medium and low priority ratings based on the Permit requirements. Table 3-6 below provides the ratings of the priority construction sites and the minimum number of inspections required per the Permit for both rainy and dry seasons.

Table 3-6. Prioritized Construction Site Inventory Summary and Required Inspection Frequency.

Prioritized Construction Sites		Minimum Required Inspection Frequency		
Threat Priority		**Wet Season**	**Minimum number of required inspections**	**Dry Season - As Needed**
High	20	Bi-weekly over 32 weeks	320	As Needed
Medium	16	Monthly over 5 months	80	As Needed
Low	18		90	As Needed
Total	**54**		**490**	As Needed

The City conducted 728 wet season and 102 dry season storm water related inspections of prioritized construction sites. During the reporting period the City conducted inspections of construction sites in accordance with the requirements of the Permit. See table 3-7 below for a summary of the construction site inspections completed during wet and dry seasons.

Table 3-7. Inspection Frequency Verification Table.

Wet Season Inspections		Dry Season Inspections		Total Number of Prioritized Construction Site Inspections
Engineering Dept.	**Building Dept.**	**Engineering Dept.**	**Building Dept.**	
722	6	102	0	
728		102		830

3.5.3 Enforcement Measures for Construction Sites

The City will be responsible for enforcement of applicable local ordinances and permits at all construction sites in its jurisdiction. When violations are observed and documented during a site inspection, the City will implement appropriate enforcement measures based on the severity of the violation. Enforcement can range from written warnings to more severe enforcement such as stop work notices. Stronger enforcement measures will be used as necessary if proper corrective actions are not implemented during the allotted time frame or if the severity of the violation warrants stricter enforcement.

The typical progressive enforcement steps that the City will implement include the following:

- Written warnings
- Enforcement of contracts (Municipal projects)
- Stop work notices

- Administrative citations
- Denial or revocation of permits
- Civil and/or criminal court actions

Enforcement actions by Code Enforcement Officers for construction sites begin with a referral from another department, a site visit, or by a complaint lodged via phone. Depending on the severity of the violation, follow up activities may include phone calls, site visits, written correction notices with specified compliance timeframes, or administrative warnings. If these actions do not produce the required improvements, administrative citations (starting at $100 with a $1,000 maximum fine) and/or stop-work notices are given.

3.5.4 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of non-compliant sites in the City that are determined to pose a threat to human or environmental health. Verbal notification is required within 24 hours of the discovery of non-compliance and a written report should be submitted to the RWQCB within 5 days of the incident. The criteria established for determining when a site is not compliant and poses a threat to human or environmental health is described in Section 5.5.5 of the 2008 JURMP. No sites were issued stop work notices during this reporting period.

Four sites issued stop work notices during FY 2008-09 have not had those stop work notices lifted. All of these sites continue to be abandoned. The stop work notices will be lifted once they are in compliance with State and City general construction stormwater permit requirements. Table 3-7 below provides a list of these sites.

Table 3-7. Construction Sites issued Stop Work Notices in FY 2008-09

Project Name	WDID	Watershed	Address Location
Hi Hope Ranch	937C22214	San Luis Rey	Highway 76 and Melrose
Darwin Glen	937C325609	San Luis Rey	Darwin and Sagewood Drive
Darwin Knolls	937C325610	San Luis Rey	Darwin and Ocean Ridge Ct.
Ocean Heights	937C330740	San Luis Rey	Mission Avenue & Valley Heights Drive

One site that was issued a stop work notice in FY 2008-09 required code enforcement action during this reporting period. See Table 3-8 for code enforcement actions related to this construction site during this reporting period.

Table 3-8. Construction site Code Enforcement Actions during FY 2009-10

PROJECT NAME	WDID	WATERSHED	LOCATION	CODE ENFORCEMENT ACTION			
				Corrective Action Needed	Administrative Citation Date(s)	Administrative Abatement	Compliance Status
Hi Hope Ranch	937C322214	San Luis Rey	Melrose Drive & Hwy 76	BMP Maintenance	1/14/10, 1/27/10	0	In Compliance

3.6 Construction Activities Effectiveness Assessment (Optional)

See Section 11.0 for an assessment of the Construction Component of the City's JURMP.

3.7 Program Review and Modification

The Clean Water Program will continue to review and modify the construction component as needed. The Development Services Department, which includes Planning, Building, Engineering, and Code Enforcement, rolled out new tracking software, CRW Systems, Inc. TRAKiT, which will assist in tracking and reporting of stormwater data. See section 3.2.1 for more information about this tracking software.

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4.0 MUNICIPAL COMPONENT

4.1 Introduction

This section documents the activities conducted by the City of Oceanside at its municipally owned, leased and/or managed facilities during the 2009-2010 reporting period to meet the requirements of Section D.3 of Municipal Permit Order 2007-0001 (Table 4-1). The City of Oceanside owns and/or maintains a variety of municipal facilities including operation centers/facilities, public parks, administration buildings, fire stations, a fire training facility, industrial facilities, potable reservoirs, sewage pump stations, wastewater treatment facilities, public roads, streets and parking facilities and other miscellaneous facilities. Additionally, the City conducts activities that have a high threat to water quality such as power washing, street and sidewalk repair, painting, graffiti removal, parking meter maintenance, MS4 maintenance, and regular upkeep of the sanitary sewer system to prevent overflows and leaking.

Table 4-1. Order 2007-0001 Compliance Summary

D.3.a Municipal (Existing Development)	Section 4 of this Annual Report
J.3.a.(3)(c).i Updates to Municipal Inventory	See Section 4.1.1 of this Annual Report
J.3.a.(3)(c).ii BMP Implementation	See Section 4.2.3, 4.3.3, 4.4.3,4.5.3, 4.6.3, and 4.8.3 of this Annual Report
J.3.a.(3)(c).iii Inspection and maintenance of municipal treatment controls	See Sections 4.4.3 of this annual report
J.3.a.(3)(c).iv Number of catch basins and inlets, inspections, and cleaning	See Section 4.4.3 of this annual report
J.3.a.(3)(c).v Distance of MS4 inspected and cleaned	See Section 4.4.2 of this annual report
J.3.a.(3)(c).vi Distance of open channels inspected and cleaned	See Section 4.4.2 of this annual report
J.3.a.(3)(c).vi Amount of waste removed from MS4 and open channels	See Section 4.4.3 of this annual report
J.3.a.(3)(c).viii MS4 inspected less than annually	See Section 4.4.1 of this annual report
J.3.a.(3)(c).ix Implementation of BMPs for pesticides, herbicides, and fertilizers	See Section 4.3.3 of this Annual Report
J.3.a.(3)(c).x, xi, xii, xiii Curb miles	See Section 4.2.2 and 4.2.4, of this Annual Report
J.3.a.(3)(c).xiv Municipal parking lots	See Section 4.2.2, 4.2.4., and 4.2.5.1 of this Annual Report
J.3.a.(3)(c).xv Tonnage of debris removed from streets and parking lots	See Section 4.2.5.2 of this Annual Report
J.3.a.(3)(c).xvi	See Section 4.5 of this Annual Report

Prevention of infiltration from sanitary sewer	
J.3.a.(3)(c).xvii Sites inspected and frequency	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xviii Inspection results	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xix Inspections steps determined full compliance	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xx Violations and enforcement actions	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xxi Notable activities	See Section 4.1 and 4.5 of this Annual Report

To comply with the Municipal Permit, the City of Oceanside has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas and municipal activities. Some of the significant activities include street sweeping, inspections of municipal facilities, and educational efforts geared toward municipal personnel.

The City continues to use its Municipal Urban Runoff Procedures Manual (Municipal Manual) as a useful reference document for training staff and developing and implementing educational programs. The Municipal Manual contains BMP requirements and related guidance for City facilities and employees and was circulated to relevant City staff directly involved with the Municipal NPDES Permit. This manual was first prepared as part of the JURMP in 2002 and updated and provided with the 2008 JURMP. See Appendix C.3 of the 2008 JURMP for this manual. No changes were made to this manual during this reporting period.

4.1.1 Notable Activities

GBA Master Series Software roll-out for tracking inspections

During this reporting year, several departments within the City moved forward with implementation of various data tracking systems. The Water and Sewer Divisions of the Water Utilities Department have been using GBA Master Series Software, a maintenance management tool, and gradually rolling it into the various programs for several years. The Clean Water Program purchased additional licenses and hired a consultant to help modify the software for use with the NPDES permit. The Clean Water Program began using GBA to track NPDES facility inspections, incoming hotline storm water complaint calls, and use with the jurisdictional monitoring program. This annual report is the first report utilizing the new technology. The Clean Water Program will be reviewing the effectiveness of the new tracking tool and will continue to implement improvements in the use or the system in the coming years.

4.1.2 Source Identification

As required in Section D.3.a(1) of Permit Order 2007-0001, the City of Oceanside has developed a prioritized, watershed-based inventory of municipal properties and activities. The City of Oceanside maintains a number of municipal facilities, including parks, administrative buildings, fire stations, and public works yards. The inventory of municipal facilities, including areas and

activities, is updated annually. The inventory used for fiscal year 2009-10 is Attachment 4-A to this report. Table 4-2 provides a summary of the facility categories within the City's inventory.

Table 4-2. Summary of Municipal Facilities by Category.

Facility Category	Number of Facilities
Park and Recreation Facilities	48
Public Works Operations Facilities	2
Municipal Landfills	2
Marinas	3
Municipal Airport	1
Potable Water Treatment Facilities	13
Wastewater Treatment Facilities and Lift Stations	37
Police and Fire Facilities	13
Other Fixed and Leased Facilities	24
Roads, Streets, Highways and Parking Facilities	33
Total Facilities	**176**

4.2 Roads, Streets, Highways, and Parking Facilities

4.2.1 Background

Roads, streets, highways, and parking facilities are an integral part of any functional City. These facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control the level of pollutants, such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities. Other City activities include building new roads, resurfacing existing roads, and similar construction-related activities. All construction-related activities conducted by the City will continue to be conducted under the requirements of the construction component, which is described in detail in Section 3 of this document.

4.2.2 Source Characterization

The City of Oceanside maintains approximately 571 miles of public roads and streets throughout the City and sweeps 28,954 curb miles. A parking facility is defined as a stand-alone parking facility, which is a parking facility that is not associated and/or adjacent to other inventoried municipal facilities. Parking facilities that are associated and/or adjacent to municipal facilities will continue to be included in regular maintenance activities of the associated municipal facility. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included as Attachment 4-A of this annual report. There are 33 parking facilities within the City.

4.2.3 Best Management Practice Requirements

Similar to municipal fixed facilities, the City will continue to utilize the City-developed Municipal BMP Manual to choose applicable BMPs to implement for public roads, streets, parking facilities and operational facilities within the City.

Street sweeping and cleaning continues to be the main BMP that is implemented for roads, streets, and parking facilities. The frequency of cleaning takes into account the following:

variations in climate conditions, surrounding land use, design of existing structures, traffic volume, frequency and quantity of accidental spills and leaks, and areas with historical trash and/or debris problems. Treatment control BMPs will be used for road sections subject to SUSMP.

The City will continue to implement an aggressive street sweeping program to reduce the amount of pollutants discharged from roads, streets, and parking facilities in the City with a particular focus on facilities that drain to environmentally sensitive areas (ESAs). If in the future negative impacts to ESAs associated with runoff from roads, streets, highways, or parking facilities are noted, the City will take the measures necessary to mitigate the negative impacts.

4.2.4 Program Implementation

As an effort to reduce the pollutant load entering local receiving water bodies, the City continued to implement a sweeping schedule for roads, streets, highways, and parking facilities to meet the requirements of the Municipal Permit. There have been no significant changes to the existing programs during the reporting period.

Roads, streets, and highways that have been observed as generating relatively high volumes of trash, sediment, and debris are included as high priority and will continue to be swept at least twice per month; medium priority streets are streets in the City that generate moderate volumes of trash, sediment, and debris and will continue to be swept at least monthly. Low priority streets have been observed as generating relatively low volumes of trash, sediment, and debris and will continue to be swept as needed, but not less than once per year. In the event of a National Holiday, sweeping is made up in a timely manner, usually by the next working day. Due to the City's proximity to the Pacific Ocean and as a means to target watershed constituents of concern, the City typically sweeps all streets within the City above baseline jurisdictional activity standards. Additional program details can be found in Section 6.3 of the 2008 JURMP.

All public streets in the City of Oceanside are swept at least monthly. There is a total of 571 miles of public streets that are swept regularly per the frequency outlined below. There were 28,954 curb miles swept during this reporting period. Some streets are swept more frequently than others.

- Every Monday, Wednesday, and Friday, the downtown commercial areas and other high use areas are swept using regenerative air vacuum street sweepers. These areas include the medians on Mission Avenue, Canyon Drive, and the Civic Center Drive Bridge, Wisconsin Avenue to Pacific Street to Ditmar Street, the Strand, and all downtown parking lots.
- The majority of all other public streets, not included in the areas listed above, are swept every other week. In some low use residential areas, the streets may be swept monthly.
- As necessary, sweepers or other clean up crews will respond to public or municipal staff reports to collect debris and/or sweep.
- Inspection of streets and curbs for cleaning is continuous. City employees are encouraged to identify areas that should be cleaned and to call the municipal employee reporting line, Oceanside Eyes. Residents are encouraged to call the Public Works Maintenance Hotline.

4.2.5 Inspection and Maintenance Results

4.2.5.1 Inspections

Inspections and maintenance activities were conducted throughout the reporting period as described in the previous section. Following is a review of the results form inspection and maintenance.

There are 33 parking lots in the Roads, Streets, Highway and Parking Facilities categories in addition to 571 miles of public roads. During this reporting period all 33 of these facilities were inspected by CWP staff. Some corrections were noted but were addressed by appropriate staff in a timely manner. Due to the fact that many of these parking facilities are swept at least once per week, debris and sediment are removed on a very frequent basis.

4.2.5.2 Maintenance

Street sweeping activities resulted in the collection of over 2,093 tons of waste from public streets and parking lots during the reporting period. These results are comparable with tonnage amounts from previous reporting years. See Table 4-3 for a summary of debris collected during this reporting period and in previous reporting periods.

Table 4-3. Summary of amount of street sweeping debris collected.

Reporting year	Tons
2003-2004	2,604
2004-2005	2,538
2005-2006	2,283
2006-2007	2,480
2007-2008	2,358
2008-2009	2,062
2009-2010	2,093

4.2.6 Roads, Streets, Highways, and Parking Facilities Element Effectiveness Assessment

See Section 11.0 for an assessment of the Municipal component of the City's JURMP.

4.3 Parks and Recreational Facilities

4.3.1 Background

The City of Oceanside is committed to providing the highest quality of service to its residents by providing the opportunity for them to enjoy a variety of recreational activities at both outdoor parks and indoor recreational facilities. Operating and maintaining 48 community attractions from public pools, beaches, parks and community centers, the City of Oceanside works hard every day to maintain the high level of service. The inspection and maintenance of these facilities in regards to storm water is important because of the number of facilities throughout the city and the public exposure that these facilities receive.

4.3.2 Source Characterization

The City regularly inspects, cleans and maintains 48 Parks and Recreational Facilities. Because of high public use these facilities have the potential to generate a variety of pollutants including trash and debris, organic material and sediment. See Attachment 4-A of is annual report for the updated Parks and Recreational Facilities inventory.

4.3.3 Program Implementation

The City has selected BMPs to implement at Parks and Recreational Facilities to reduce the contribution of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers. These BMPs are detailed in the Municipal Manual. All 48 facilities were inspected during this reporting period and no potential storm water violations were noted.

Pesticides, herbicides and fertilizers are seldom used directly by the City, as it contracts out the majority of work involving these substances. To facilitate compliance with this Section of the Municipal Permit, the City has reviewed its landscaping contract and has integrated BMP requirements into the conditions of the contract.

4.4 Municipal Separate Storm Sewer System

4.4.1 Background

As required by Section D.3.a.(3) of the Municipal Permit, the City has implemented a schedule of maintenance activities for the City's entire Municipal Separate Storm Sewer System (MS4), including any structural controls designed to reduce pollutant discharges to or from its MS4s and related drainage structures. The City has determined, through historical knowledge and records, the locations within the MS4 that require regular waste removal and those areas that are less likely to require any waste removal. The City has developed a comprehensive Flood Control Annual Maintenance Program which includes a list of the high priority areas, divided into zones, which are to be inspected annually using an inspection checklist. Approximately 110 sites are inspected and maintained annually. No sites are inspected and cleaned less than annually.

4.4.2 Source Characterization

The Public Works, Street Division, performs ongoing inspection and cleaning of storm drains and flood control facilities, as well as annual maintenance of all major facilities such as creeks, desilting basins, detention basins and rock and concrete lined channels. There are approximately 104 concrete and earthen channels that are inspected and maintained throughout the city. Over 49,000 linear feet of storm drains, catch basins, and concrete and earthen channels are maintained on at least an annual basis. In addition, the Street Division performs annual maintenance/cleaning in September, October, and November for all major MS4 facilities. The results of this work are recorded on an Annual Maintenance List that is available at the City Operations Center.

4.4.3 Best Management Practices

In order to inspect and clean storm drains as described above, during the May through September period, the City contracted with United Storm Water Inc. A total of 3,377 structures (catch basins, manholes, inlets, outlets, etc.) were inspected and cleaned during the reporting period by

the City contractors and City maintenance crews. A total of 81.88 tons of waste was removed. The waste generally consisted of trash, green waste, dirt, sand, roots, solids, rocks, and silt. During the inspections if a storm drain was not labeled with a marker, one was installed. During this reporting period 742 were labeled with a placard stating: "No Dumping – Drains to Creek" in both English and Spanish. See the photo below for a copy of the storm drain placard installed. See Table 4-4 for a summary of the amount of waste removed from catch basins, inlets, the MS4 and open channels by category.

Table 4-4. Waste removed from catch basins, inlets, the MS4 and open channels by category.

Structure	Number Inspected	Contractor or City Crew	Drain Markers Installed	Cleaned	Amount of Material Removed
Catch Basin/Inlet	3,297	Contractor	342	3,297	54.52 tons
Catch Basin/Inlet	136	City Staff		136	
Total Catch Basin/Inlet	3,433			3,433	
Open Channels	104	City Staff	N/A	49,455 ft.	840 tons
Drain Pipe	1,800 ft	City Staff	N/A	1,800 ft	

Trash Trap at the Oceanside Municipal Golf Course

Staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. In March 2009 City staff installed a trash trap downstream of this priority residential area and upstream of the municipal golf course in the open channel that parallels the driving range. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. During this reporting period approximately 180 pounds of trash and organic debris were removed from this device. Photos of the trash trap were provided in Section 6.3.1 of the FY 2008-09 JURMP Annual Report.

4.5 Sanitary Sewer

4.5.1 Background

The City of Oceanside Sewer Division maintains the sanitary sewer system within the jurisdictional boundaries which includes sewer lines, lift stations, sewage treatment plants. This sanitary sewer system uses pipes to remove human waste from homes and businesses and transport that waste to one of two waste water treatment plants in the City. The two treatment plants are operated by city crews.

4.5.2 Source Characterization

The City regularly inspects, cleans and maintains 450 miles of sanitary sewer pipe, 35 sewer lift stations and two sewage treatment plants. The inventory was updated to reflect a sixth harbor sewer lift station. See Attachment 4-A for the 2009-10 wastewater Facilities inventory.

4.5.3 Best Management Practices

Since the City owns and operates the sewage system, these facilities are regularly inspected and maintained for proper operation and maintenance, and to ensure that BMPs are in place for the protection of receiving waters that may be impacted from the system. The City's preventive and corrective sewer maintenance programs consist of a variety of components provided for the operation, maintenance, repair and replacement of sewer mains, manholes, and pump stations.

In order to ensure that the sanitary sewer lines do not leak, the city has a long term plan to slip line the sewer pipes throughout the City. During this reporting period 3,481 feet of City sewer lines were slip lined. In addition 53 manholes were rehabilitated. Since the 2005-06 reporting period the City has slip-lined a total of 20,766 feet of sewer. The City also inspected and cleaned 236 miles (1,244,858 feet) of sanitary sewer.

4.6 City Operations Center

4.6.1 Background

The City Operations Center (COC) is a municipally owned and operated facility that houses several departments or divisions for the City including Public Works, fleet maintenance, road maintenance, parks and recreation maintenance and others. Because of the diverse activities of these departments and divisions, the City developed a Storm Water Pollution Prevention Plan (SWPPP) for the COC in the fall of 2002.

The COC includes the following areas: employee parking lot, COC main building (offices, storage and fleet maintenance), traffic control lot, back lot, city vehicle parking lot, large vehicle equipment lot, fueling area, waste disposal area, wash facilities, general use yard and west corner lot. The SWPPP has the following objectives:

- Identify and evaluate sources of pollutants from the facility that may affect the quality of urban runoff discharge and to identify and
- Implement site-specific best management practices to reduce or prevent pollutants in urban runoff discharges.

The SWPPP outlines BMPs to be implemented at each of the respective areas. A comprehensive training program was also developed and has been implemented in concert with the COC SWPPP.

4.6.2 Source Characterization

Due to the nature of the various activities from the departments and divisions it was determined that there are various activities that generate pollutants and have the potential to reach storm water conveyance systems. Some of these activities include vehicle washing, disposal of street sweeping debris, temporary storage of wrecked vehicles, and storage of various materials, including paints, solvents, metal piping and infrastructure materials. In addition steep hillside landscaped areas can be a potential pollutant source if BMPs are not managed properly.

4.6.3 Best Management Practices

Since the implementation of the SWPPP at the COC some permanent BMPs have been installed and continue to be used for protection of receiving waters. Following is a brief description of the BMPs in place at the COC and any new BMPs installed during this reporting period.

4.6.3.1 Wash Facility

The main wash facility is used for washing large vehicles and equipment, and collection of street sweeper and vactor truck contents. The main wash facility is a completely contained area, surrounded on all sides by berms and curbs. The entire area drains to the eastern corner of the pad where it enters a grated inlet that leads to a clarifier and then the sewer. An overflow is available if the drain to the sewer is clogged or the volume of water exceeds its capacity, however, this is not anticipated to happen frequently because the drain is maintained daily.

4.6.3.2 Pollution Prevention and Recycling

COC BMPs in place

There was no new pollution prevention BMPs installed at this facility during this reporting period and all existing BMPs were maintained during this reporting period. There were no potential storm water violations identified during the inspection of this facility.

4.6.4 Program Implementation

4.6.4.1 Facility Inspection

A thorough walk through inspection of the COC Facility was conducted by the operation manager of the facility and Clean Water Program inspectors on October 6, 2009. The facility was in compliance upon the first visit.

4.7 Other Facilities

4.7.1 Background

The City of Oceanside owns and operates two closed landfills (Maxson Street Landfill, WDID 9375005695 and Mission Avenue Landfill, WDID 9375005696). The City also operates and maintains eight fire fighting facilities including one at the COC in addition to one fire fighting training facility.

4.7.2 Source Characterization

The two closed landfills maintained by the City have the potential to generate pollutants that can negatively impact receiving waters. If potential storm water discharges are identified, appropriate BMPs are implemented to prevent pollutants from entering MS4.

Also fire fighting stations have the potential to generate pollutants such as trash and debris, organic materials and fluids and wash water from fire fighting vehicles. The two closed landfills and the fire fighting facilities are included in the City's municipal inventory, which is included as Attachment 4-A of this annual report.

4.7.3 Program Implementation

Closed Landfills

Both closed landfills are inspected quarterly per permit requirements and an annual report is prepared each for submittal to the Regional Water Quality Control Board. See Attachment 4-B for copies of the 2009-10 Annual Report for Storm Water Discharges Associated with Industrial Activities for these two landfills.

Fire Stations

All fire stations were inspected during this reporting period. During the station inspections no violations or potential violations were noted.

4.8 Special Events

The City of Oceanside hosts a variety of Special Events in the City. These events include major sporting events and community fairs and festivals. A Special Events Permit is required for any organized activity involving the use of, or having impact upon, public property, public facilities, parks, beaches, sidewalks street areas or the temporary use of private property in a manner that varies from its current land use. The permit process includes a BMP implementation plan. The City has a Special Events Committee comprised of various City Department representatives who review permit applications to insure events are held safely and do not adversely impact the community.

4.8.1 Source Characterization

The City issues Special Event permits for both internal city sponsored events and event organizations that coordinate events that may include vendors or various event related elements.

- Antiques on Mission
- Turkey Trot 5k Run
- Ironman Triathlon
- Race Across America
- Freedom Day Parade

Typically, special events have a high density use of people per square foot raising the potential for pollutant types at special events, such as:

- Setup and teardown of equipment booths
- Booth operation generating trash

- Food and drink preparation and consumption – illicit discharges and organic material
- Hydraulic rides – oil and grease
- Temporary portable restroom – chemicals and bacteria
- Hydration stations – water cups and other trash material

4.8.2 Best Management Practices

All special events are required to implement designated BMPs and comply with all applicable regulations outlined in the Oceanside Municipal Code. During pre-event application meetings for large events, event organizers are provided with an event permit packet that includes storm water related information including a copy of the Storm Water Compliance Guidelines for Special Events brochure and the Special Events Inspection Form. Copies of the brochure and inspection form are attached. It is explicitly stated that the company coordinating the event is required to leave the site as clean as the pre-event condition and shall not allow any materials or liquid to enter the storm drain system.

4.8.3 Program Implementation

4.8.3.1 Event Inspections

A storm water inspection report form has been developed for use before and after large special events. Storm water compliance inspection reports will be completed by City staff prior to the start of the event to ensure that appropriate BMPs are in place. A post-event inspection will ensure that the site is properly cleaned. A special events office representative will conduct pre- and post-inspections. This office may designate another city department representative to conduct the pre- or post-event inspections, when needed.

The Freedom Day parade was not held during this reporting period. Usually scheduled on the last weekend of June, the parade was scheduled for July 3, 2010.

During this reporting period one event was inspected which was the Ironman Triathlon was held on March 29, 2010 with staging starting in the harbor and beaches area. No stormwater related violations were noted during event set-up, during the event or after event. The pre- and post-event inspections it was determined that the site was clean and did not pose any potential storm water violations. See Attachment 4-C for copy of the inspection form for this event.

4.8.3.2 Street Sweeping

Most special events occur in the downtown area which is swept 5 days a week, with sweeping vehicles generally onsite within 12 hours from the end of the event.

For special events that cause an added impact to the community street sweeping is conducted immediately after the end of the event. On an annual basis, the City holds one parade in the downtown area after which street sweeping is immediately conducted.

4.8.3.3 Harbor and Beaches Maintenance

Large events held in the Harbor and Beaches area can have the potential to generate large quantities of trash. In addition to the above information, the Harbor and Beaches Maintenance

Division conducts the following activities after large events and holidays held in the Harbor and Beaches area:

- A litter abatement contractor provides staff to walk beach and hand pick up litter.
- City staff uses trucks and/or utility carts to follow and pick up items that are too large for the litter abatement contractor such as logs, furniture, etc.
- City staff further screens the beach using Cherrington beach sweeping machines.
- A pressure-washing contractor or City staff washes the hardscapes with all wash water being recovered and disposed of properly.

Cigarette Butt Service

The Harbor and Beaches Maintenance Division has contracted with a cigarette butt service company to install and service cigarette butt receptacles in the harbor, pier and beach areas. The receptacle selected is made by Butts Only Box and is designed to prevent rain and irrigation water from contacting the butts until collection. This prevents leaching of toxic compounds into sensitive habitats.

The company has several models to choose from, two of which have been installed in the City of Oceanside. The trail model is used along high foot traffic areas adjacent to the beach and harbor sidewalks. There are a total of 17 of these installed in the coastal areas of Oceanside: 11 in the harbor, 2 on the pier, and 4 on The Strand (the road that parallels a large section of beach). Two boat models were installed on two sport fishing boats docked in the harbor. See Figure 4-1 for an image of these two models.

Figure 4-1. Butts Only Box cigarette trash receptacles installed in beach areas and sport fishing boats.

Butts Only Boxes also has a sister company, Cigarette Butt Services, that services the boxes. The City of Oceanside subscribes to this service and the company provides a monthly statement that includes the number of butts removed and the weight of the debris.

During this reporting period a total of 73,439 cigarette butts were collected from the 17 trail models and two sport fishing models. The weight of this debris totaled 37.48 pounds.

The City plans to continue servicing boxes currently in place. The City will also seek additional funding to cover costs for purchasing, installation and servicing of additional receptacles within the jurisdiction.

4.9 Power Washing

4.9.1 Background

The City conducts a number of activities which are not designated and/or confined to a specific location. Because such activities are not confined to a fixed facility, where BMPs may be permanently implemented, BMPs must actively be implemented during all mobile municipal activities.

4.9.2 Source Characterization

Mobile activities that City employees may use during their day-to-day operations that have a potential to create polluted runoff include:

- Power Washing
- Infrastructure Maintenance
- Street and sidewalk repair
- Street striping
- Waste removal
- Traffic light maintenance
- Parking meter maintenance
- Landscape/Right-of-Way Maintenance

4.9.3 Best Management Practice Requirements

As previously mentioned, the City will continue to implement good housekeeping and general pollution prevention measures during municipal activities including the mobile activities listed above. City personnel will continue to be trained to collect all water generated by power washing activities. City personnel continue to use the City's Municipal BMP Manual to choose applicable BMPs to implement for municipal areas and activities. Pesticide, herbicide, and fertilizer management BMPs similar to those discussed in Section 6.2.3.1 of the City's 2008 JURMP will continue to be implemented during landscaping of City right of way such as medians.

4.9.4 Program Implementation

City field crews will continue to be actively trained to implement BMPs during all mobile activities including how to properly contain, control, and capture any discharge generated by power washing (or any other discharge-generating activities). The City uses fiber rolls, geo logs, silt fencing, check dams, gravel bags, and filter inserts during mobile activities, where applicable. City personnel involved in mobile activities are trained to be aware of Illicit Connections/Illicit Discharges and report them to the appropriate City staff promptly. More information about the City's education program, including municipal training activities, is included in Section 10 of this document.

4.10 Municipal Component Effectiveness Assessment

See Section 11.0 for an assessment of the municipal component of the City's JURMP.

4.11 Program Modification and Review

The Clean Water Program will continue to implement its SWPPP at the City Operations Center and continue its ongoing inspection and maintenance program for the facilities listed in the Municipal Inventory. Any changes to the program will be reported in the next annual report.

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City of Oceanside continues to implement a comprehensive program that aims to reduce and prevent industrial and commercial pollution discharges to and from the MS4 to the maximum extent practicable (MEP) to protect local receiving water bodies and to comply with the Municipal Permit. This section documents the activities conducted by the City of Oceanside during the 2009-2010 reporting period to meet the reporting requirements of Section J.1.a(3)(f) of Order 2007-0001 Municipal Permit (Table 5-1).

Table 5-1. Order 2007-0001 Reporting Summary.

Permit Section	Annual Report Section Reference
J.3.a.(3)(d).i -Any updates to the industrial and commercial inventory.	See Section 5.2.2 of this Annual Report
J.3.a.(3)(d).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	See Section 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).iii - A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	See Section 5.2.1 and 5.3.3 of this Annual Report
J.3.a.(3)(d).iv - Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	See Section 5.2.2 of this Annual Report
J.3.a.(3)(d).v - Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	See Section 5.2.2, 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).vi - Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	See Section 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).vii - Identification of the number of third party inspections conducted.	See Section 5.2.4.1 of this Annual Report
J.3.a.(3)(d).viii - Identification of efforts conducted to verify third party inspection effectiveness.	See Section 5.2.4.3 of this Annual Report
J.3.a.(3)(d).ix - A description of efforts implemented to address mobile businesses.	See Section 5.3 of this Annual Report
J.3.a.(3)(d).x - The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 5.2.4.2 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).xi - A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	See Section 5.2.4.1 and 5.2.4.2 of this Annual Report
J.3.a.(3)(d).xii - A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	See Section 5.1.1 of this Annual Report

The City has compiled a list of industrial and commercial sources and developed BMP requirements, including pollution prevention measures, for each source and activity. Implementation of these requirements will be accomplished through education, inspection, and enforcement.

5.1.1 Notable Activities

GBA Master Series Software roll-out for tracking inspections

During this reporting year, several departments within the City moved forward with implementation of various data tracking systems. The Water and Sewer Divisions of the Water Utilities Department have been using GBA Master Series Software, a maintenance management tool, and gradually rolling it into the various programs for several years. The Clean Water Program purchased additional licenses and hired a consultant to help modify the software for use with the NPDES permit. The Clean Water Program began using GBA to track NPDES facility inspections, incoming hotline storm water complaint calls, and use with the jurisdictional monitoring program. This annual report is the first report utilizing the new technology. The Clean Water Program will be reviewing the effectiveness of the new tracking tool and will continue to implement improvements in the use or the system in the coming years.

5.2 Stationary Industrial and Commercial Sites Sources Element

5.2.1 Background

Section 7 of the City's 2008 JURMP, titled Industrial and Commercial Component, requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by industrial owners and/or operators pursuant to City Code to minimize or eliminate the impacts of industrial and commercial activities on receiving waters and other sensitive environmental resources. The City uses a variety of ways to educate and ensure that BMPs are implemented at industrial and commercial facilities including dissemination of the City's industrial and commercial BMP manuals, site inspections and enforcement.

5.2.2 Source Characterization

The City annually updates its watershed-based industrial/commercial inventory which contains the name, address, and description of all industrial sites within its jurisdiction, regardless of site ownership. During this reporting period a new asset management software tool was implemented. The existing inventory with commercial and industrial classifications, watershed location, and assigned priority was pulled into the new software. However, throughout the year, duplicate records, inadvertently changed priority levels, and missing, new, or out of business facilities were found. The software was updated throughout the year, but an extensive inventory review will be conducted during the next reporting period.

Attachment 5-A, the industrial inventory list and Attachment 5-B, the commercial inventory list, was used to conduct FY 2009-10 inspections and will be updated each reporting period. Attachment 5-C is the Mobile Business inventory for which current business licenses were on file. See section 5.3 of this report for mobile business tasks implemented during this reporting period.

In the City there are a total of 2,412 Industrial and Commercial businesses that have the potential to impact water quality. See Tables 5-2 and 5-3 below for a summary of the number of industrial and commercial businesses inventoried in the City according to watershed location.

Table 5-2. Industrial Businesses in the City by Watershed.

Watershed	Number of Industrial Business		
	2007-08 Inventory	2008-09 Inventory	2009-10 Inventory
San Luis Rey	95	13	14
Loma Alta	141	49	22
Buena Vista	5	0	0
Agua Hedionda	0	0	0
Total	**241**	**62**	**36**

Table 5-3. Commercial Businesses in the City by Watershed.

Watershed	Number of Commercial Businesses		
	2007-08 Inventory	2008-09 Inventory	2009-10 Inventory
San Luis Rey & Harbor	331	859	877
Loma Alta	338	966	996
Buena Vista	151	463	480
Agua Hedionda	6	23	14
Not Verified	10	0	9
Total	**836**	**2311**	**2376**

Based on this updated inventory, the City contains approximately 36 industrial businesses. Each of these businesses was prioritized on their threat to water quality. Table 5-4 provides a summary of the prioritization for industrial businesses.

Table 5-4. Industrial Businesses in the City by Priority.

Priority	Number of Industrial Business
High	9
Medium	7
Low	20
Total	**36**

Based on the 2009-2010 annual update of the inventory, the City contains approximately 2,376 commercial businesses. Each of these businesses was prioritized on their threat to water quality. Table 5-5 provides a summary of the prioritization for commercial businesses.

Table 5-5. Commercial Businesses in the City by Priority.

Priority	Number of Commercial Business
High	575
Medium	115
Low	1686
Total	**2376**

5.2.3 Best Management Practice Requirements

BMP Manuals

Two manuals originally developed in 2001, *Industrial Urban Runoff Requirements Manual* and *Commercial Urban Runoff Requirements Manual*, detail requirements of industrial and commercial businesses to comply with the City's Urban Runoff Management and Discharge Control Regulations. In order to ensure industrial and commercial owners and operators are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for industrial and commercial areas and activities located within the City, are specified in these two manuals.

The manuals were first produced in FY 2001-02 as a result of requirements under Municipal Permit Order No. 2001-01 and were revised in 2004 to include additional state requirements. These manuals were again reviewed and revised during the 2007-08 reporting period to ensure compliance with the new Municipal Permit Order No. R9-2007-0001. The main changes were the additional of categories and a list of specific BMPs for those industrial and commercial activities. Inspections, enforcement, and reporting and the definitions have not been changed. See this section of the 2007-08 report for a list of changes to both the industrial and commercial manuals.

The City conducted efforts to ensure industrial and commercial business owners and/or operators have received a copy of the Industrial Manual either through an annual inspection or a response to a complaint or concern reported through the Urban Runoff Hotline. In addition, copies of the Industrial Manual are available on the Clean Water Program website.

5.2.4 Program Implementation

Annual inspections of commercial and industrial businesses are conducted by Clean Water Program inspectors, Code Enforcement officers and a private contractor to ensure that applicable pollution prevention activities are implemented by industrial and commercial business owners and/or operators. In addition, inspections are conducted based on calls received on the Urban Runoff Hotline. All industrial and commercial businesses visited, through the annual inspection program or by complaint call acknowledged on the Hotline, receive follow-up visits until the industrial business is deemed in-compliance with City Code. All documentation pertaining to site visits are on file at the City. City staff conducted a total of 614 inspections during the 2009-2010 reporting year: 17 of industrial businesses, 597 of commercial businesses, including eating and drinking establishments and nursery or greenhouse businesses.

5.2.4.1 Inspections of Industrial Businesses

Inspections of industrial businesses will typically be conducted by designated Clean Water Program Inspectors and Code Enforcement personnel. Inspections will be tracked using the City's Urban Runoff Business database. Inspectors will utilize a Commercial and Industrial businesses Inspection Form provided in Appendix D of the 2008 JURMP. The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

- Completion of 17 site inspections of industrial businesses during the reporting period.

- Completion of 8 of the 9 required annual inspections of high priority industrial businesses during the reporting period. The Oceanside School District Fleet Yard was the only high priority site that was not inspected by the Clean Water Program inspectors. The Fleet Yard Manager did not allow the annual inspection by the City. The manager stated that this facility is inspected annually by the County and the State and he sees no need for the city to conduct triplicate inspections of the site.
- Completion of 9 additional annual inspections of medium and low priority industrial businesses during the reporting period.
- Dissemination of the Industrial Manual to help industrial owners and/or operators become aware of the City Code requirements for BMP implementation, and information on applicable BMPs for specific industrial businesses and activities.
- Ensuring proper and continued training of the Code Enforcement officers and Clean Water Program compliance inspectors dedicated to the Clean Water Program.

5.2.4.2 Enforcement of Industrial Businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for enforcement of ordinances at an industrial site. This program was designed in accordance with part D.3.b.(3) of Municipal Permit Order 2007-0001. See Table 5-6 below for Table 5-5 presents the actions taken by Code Enforcement officers on industrial businesses within the City for this reporting year

Table 5-6. Accounting of Industrial Code Enforcement Actions for the 2009-2010 Reporting Year.

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Inspection Report	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept.	Stop Work Notice
of Actions	2	33	0	0	2	39	0	0	0	0

5.2.4.3 Inspections of Commercial businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for conducting inspections of commercial businesses. This program was developed and implemented in accordance with part D.3.b.(3) of the Municipal Permit Order 2007-0001. As detailed in the JURMP, inspections of Medium and Low Priority Commercial Businesses are conducted as deemed necessary by the Code Enforcement personnel and CWP inspectors. Some inspections are initiated in response to a public or municipal staff report, an illicit discharge source investigation, or as a follow up to a previous inspection.

The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

- A total of 597 commercial facilities were inspected during the reporting year. Eating and drinking establishments were inspected for the proper implementation and maintenance of storm water BMPs and grease control devices. Nursery and greenhouse operations

were inspected for compliance with urban runoff regulations within City Code Chapter 40.

- If the Clean Water Program Inspector found continued non-compliance after a second visit or gross non-compliance on an initial visit, the facilities were referred to Code Enforcement for further enforcement actions.
- Four hundred ninety (497) high priority commercial facility inspections were completed, including eating and drinking establishments and nurseries. Eighteen (18) facilities were inadvertently not inspected. It is estimated that three of these 18 facilities were inspected, but the records were lost. The transition to the new asset management software is the likely cause of this oversight and steps are being taken to ensure these issues are remedied. The remaining facilities in the inventory were either duplicate records or the facility was out of business.
- An additional 72 medium and 30 low priority commercial facility inspections were completed during the reporting year.
- Ensuring proper and continuing training of the Code Enforcement Officers and Clean Water Program inspectors dedicated to the Clean Water Program.

During the 2009-10 reporting period, all facility inspections were completed by City staff. The city is no longer using a third-party inspector for eating and drinking establishments.

Code Enforcement officers completed 10 inspections of nursery and greenhouse operations. Inspected. Three businesses on the nursery and greenhouse inventory were visited but were closed, thus no inspection of the facility was done. With drought restrictions and increasing water rates, the number of nursery and greenhouse operations has been decreasing each year. These sites, along with the larger agricultural facilities that are annually inspected by the County Agriculture, Weights and Measures Department, are visited several times a year by City staff due to the evolving nature of their business. With constant plowing and crop rotation, CWP staff not only complete annual inspections, but also complete a pre-rain event inspection and visit the agricultural areas frequently during the rainy season as well as during rain events. The City maintains a cooperative relationship with the U.S. Department of Agriculture NRCS for assisting the agricultural community in Oceanside in design and implementation of BMPs.

5.2.4.4 Enforcement of Commercial Businesses

Commercial businesses that are not in compliance after the second inspection are referred to Code Enforcement for follow-up. An accounting of all enforcement actions, taken by Code Enforcement Officers, is shown in Table 5-7.

Table 5-7. Accounting of Commercial Code Enforcement Actions for the 2009-2010 Reporting Year.

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Inspection Report	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept	Stop Work Notice
of Actions	21	183	2	1	3	128	5	4	0	0

During this reporting period two commercial businesses had significant storm water violations that were referred directly to code Enforcement. See Table 5-8 below for code enforcement actions specific to these two businesses.

Table 5-8. Code Enforcement actions specific to two Commercial Businesses.

Businesses Name	Principal Products Services	1st Inspection Date	Corrective Action Needed	2nd Inspection Date	Code Enforcement Action	Compliance Status
Ruby s Diner	Eating and Drinking Est.	8/7/09	Drain pipe repair	8/10/9	Administrative Citations Issued	IC
McDonald s	Eating and Drinking Est.	11/20/08	Sewage spill due to grease blockage.	12/18/08	Administrative Citations Issued	IC

IC In Compliance

5.2.4.5 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of noncompliant sites in the City that are determined to pose a threat to human or environmental health. Oral notification is required within 24 hours of the discovery of noncompliance and a written report should be submitted to the RWQCB within five days of the incident. During this reporting period there were no sites to report to the RWQCB.

5.2.5 Stationary Industrial and Commercial Sites Sources Effectiveness Assessment

See Section 11.0 for an assessment of the Industrial and Commercial Component of the City's JURMP.

5.3 Mobile Sources Element

5.3.1 Background

Due to the lack of a stationary location for proper disposal of potentially hazardous liquids and materials, there is a major area of concern about where mobile businesses discharge water used in their line of work. Due to the nature of their activities, mobile businesses will continue to be regulated differently than other businesses. Mobile businesses can be difficult to identify because they may not have a City business license, they go out of business on a relatively regular basis and, though they may have a home base, they can cross jurisdictional lines to operate their

business. For the reasons regular inspections of mobile businesses will be challenging and time consuming in the future.

5.3.2 Source Characterization

The mobile businesses known to operate within the City's jurisdiction are noted on the City's commercial inventory. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Pest control services
- Mobile carpet, drape or furniture cleaning
- Mobile construction trades
  - Painting and coating
  - Cement mixing or cutting
  - Masonry
  - Other contractors
- Landscaping
- Pool and fountain cleaning
- Power washing services

Because not all mobile businesses have obtained business licenses in the City or have a base of operations in the City, the City expects that a continual process of refining and updating its inventory will be needed. Sources for such inventory updates will include reported incidents, general observations by City staff, and available business licenses. See Attachment 5-C for the Mobile Business inventory for which current business licenses were on file during this reporting period.

As part of the regional outreach efforts implemented through the Industrial/Commercial Sources Workgroup, the City submitted their inventory in FY 2008-09 to the Industrial/Commercial Workgroup for the development of a regional inventory of Mobile Businesses. This inventory was created in order to send information to the businesses about the minimum BMP requirements specific to Mobile businesses.

During this reporting period the City of Oceanside mailed "Required Minimum BMPs For Mobile Businesses" education materials to 34 Oceanside Mobile Businesses with current business licenses. See attachment 8-A for a copy of these materials. Of the 34 mailed, four were returned to the City.

5.3.3 Best Management Practice Requirements

The City updated its Commercial Urban Runoff Requirements Manual during the 2007-08 reporting period with information on the required BMPs for both mobile and stationary sources. This updated manual can be referenced in Appendix C of the City's 2008 JURMP. One example of a BMP included in the updated manual is for outdoor vehicle detailing by a mobile business and the BMP explains how to capture and contain the rinse water so that it does not enter the storm drain system. Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses.

5.3.4 Program Implementation

5.3.4.1 Education Outreach

Because a specific element of the industrial and commercial program for mobile businesses is being newly developed, it is anticipated that some mobile businesses are not aware of storm water requirements and that education will need to be a significant portion of the program. The City of Oceanside will notify the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three years of implementation of the City's 2008 JURMP.

5.3.4.2 Inter-Jurisdictional Cooperation

The City of Oceanside is participating in the Regional Industrial Commercial Sources workgroup which is developing a plan to educate mobile businesses about proper BMPs and protection of water quality. A complete report on these activities of this workgroup will be included in the Regional Urban Runoff Management Program report due to the RWQCB in January 2010.

5.3.4.3 Staff Training

Code Enforcement Division Officers and Clean Water Program Compliance Inspectors are responsible for conducting storm water compliance inspections and enforcement of mobile sources. Officers and inspectors are trained annually on inspection and enforcement procedures and BMP implementation as they relate to mobile businesses. City staff is encouraged to report potential illegal discharges from mobile businesses when working in the City to the urban runoff hotline.

During this reporting period the California EPA office conducted a training titled Environmental Enforcement Training. Five city staff attended this training and received a Certificate of Completion, including two Code Enforcement Officers and three Clean Water Program inspection staff. In addition these same staff completed an on-line training course titled, "Fundamental Inspector Course." See table 5-9 for a summary of the course dates and main topics conveyed during the trainings.

Table 5-9. Inspection trainings courses attended by City staff during FY 2009-10.

Title	Date	Attendees	Subjects Covered	Course length
Environmental Enforcement Training; Cal/EPA	3/23/10	Code Enforcement staff (2) Clean Water Program Inspectors (3)	▪Access, Entry and Warrants ▪Conducting Effective Interviews ▪Elements of a Violation ▪Evidence to Support a Violation ▪Report Writing ▪Environmental crimes ▪Enforcement Options ▪Case Development and Referral	8 hours
Fundamental Inspector Course-Online Training	March & February 2010	Code Enforcement staff (2) Clean Water Program Inspectors (3)	▪Environmental law ▪Environmental Science ▪Role of the Inspector ▪Health and Safety	6 Hours

5.3.4.4 Inspections

During this reporting period, inspection of mobile businesses was conducted on an as needed basis. The most common triggers for these inspections were from incident reports received over the Urban Runoff Hotline and direct visual observations by City staff.

5.3.4.5 Enforcement

During this reporting period Code Enforcement officers responded to complaint calls regarding mobile businesses that were allowing water to enter the storm drain system. During the site visit, depending on the nature of the complaint, Code Enforcement officers issued notices to comply and/or educated the operator on the proper BMPs that should be in place during their operation and provided them with the power washing brochure.

5.4 Industrial and Commercial Component Effectiveness Assessment

See Section 11.0 for an assessment of the Industrial and Commercial Component of the City's JURMP.

5.5 Program Review and Modification

During this reporting year, several departments within the City moved forward with implementation of various data tracking systems. The Water and Sewer Divisions of the Water Utilities Department have been using GBA Master Series Software, a maintenance management tool, and gradually rolling it into the various programs for several years. The Clean Water Program purchased additional licenses and hired a consultant to help modify the software for use with the NPDES permit. The Clean Water Program began using GBA to track NPDES facility inspections, incoming hotline storm water complaint calls, and use with the jurisdictional monitoring program. This annual report is the first report utilizing the new technology. The Clean Water Program will be reviewing the effectiveness of the new tracking tool and will continue to implement improvements in the use or the system in the coming years.

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

A total of 39 percent of the City's 26,983 acres is designated as either multi- or single-family residential according to the San Diego Association of Governments (SANDAG). Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the quality of receiving waters in and around the City. The City of Oceanside has developed an extensive program that aims to reduce pollutant runoff from residential areas and activities to the MEP.

This section documents the activities conducted by the City of Oceanside during the 2009-2010 reporting period to meet the requirements of Section D.3.c of the Municipal Permit (Table 6-1). The City continued the implementation of an enforcement program that responds to and monitors potential violation calls received on the Oceanside Urban Runoff Hotline (Hotline).

Table 6-1. Order 2007-0001 Compliance Summary.

D.3.c Residential Program	See Section 6 of this Annual Report
J.3.a.(3)(e).i High threat residential areas	See Section 6.2 of this Annual Report
J.3.a.(3)(e).ii Designated BMPs were implemented	See Section 6.3 of this Annual Report
J.3.a.(3)(e).iii Proper disposal of used oil and HHW	See Section 6.4.2 of this Annual Report
J.3.a.(3)(e).iv Amounts of HHW collected	See Section 6.4.2 of this Annual Report
J.3.a.(3)(e).v Evaluation of methods used for oversight of residential areas	See Section 6.2.1 of this Annual Report
J.3.a.(3)(e).vi Violations and enforcement actions	See Section 6.4.7 of this Annual Report
J.3.a.(3)(e).vii Collaboration on implementation of Regional Residential Education Program	See Section 6.5 of this Annual Report
J.3.a.(3)(e).viii Notable Activities	See Section 6.3.1 and 6.4.1 of this Annual Report

The City also utilizes its revised Urban Runoff Requirements Manual for Residents (Residential Manual) that contains BMP requirements and related guidance information for residents of the City. This manual has been made available to residents through the City's Clean Water Program Website. Changes to the Residential Manual were made during the 2007-08 reporting period.

6.1.1 Notable Activities

During this reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which

includes Water, Sewer, and the Clean Water Program, continued rolling out the GBA Masters Series software. The Development Services Department, which includes Code Enforcement, Building, and Engineering, selected TRAKiT, permitting software by CRW Systems, Inc and began roll-out in this reporting year. Since both of these systems were fully launched in this reporting period, the Clean Water Program will be reviewing the effectiveness of the new tracking tools and will continue to implement improvements in the use of the system in the coming years.

6.2 Source Characterization

Residential neighborhoods can be the source of a variety of pollutants depending on the activities conducted in residentially developed areas. Pursuant to Section D.3.c.(1) of the Permit Order 2007-0001, the City identified High Priority Residential Areas and Activities in the JURMP. The following residential activities have been identified by the City to be High Priority Activities:

- Automobile or boat repair and maintenance.
- Automobile washing.
- Automobile parking.
- Home and garden care activities and product use.
- Disposal of household hazardous waste.
- Disposal of pet waste.
- Disposal of green waste.
- Any other residential activity that contributes a significant pollutant load to the MS4.
- Power washing activity (both do-it-yourself and contracting services).

The City has also identified residential areas of High Priority. These areas include the following:

- Any residential area tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired
- Any residential area within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA

6.2.1 Evaluation of methods for oversight of residential areas and activities.

The Public Works storm drain maintenance staff has the best opportunity to inform the Clean Water Program staff about drainage areas that have a lot of trash and debris. On a regular basis the CWP staff request from public works maintenance staff areas within the city that are generating for two reasons:

1. To identify areas within the City where the public can become involved to assist in removing trash and debris from the specific areas where debris has collected, and
2. To target the residential areas for future outreach.

During the previous reporting period two residential areas were identified as contributing excessive trash to the MS4 and potentially the receiving waters. The first is a neighborhood that drains to Pilgrim Creek and eventually the San Luis Rey River. The second is a portion of MS4 that drains to Garrison Creek near El Camino High School and then Loma Alta Creek. See section 6.3.1 below for more specific information on these areas tasks implemented to address the pollutant sources.

6.3 Best Management Practice Requirements

The City's JURMP Residential Component requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by residents pursuant to City Code. In order to ensure residents are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for residential areas and activities, located within the City, are specified in the Residential Manual. This manual is found in Appendix C of the City's 2008 JURMP.

Education and outreach aimed at residents helps facilitate the implementation of BMPs, including pollution prevention methods. A detailed discussion of the City's education program can be found later in Section 10 of the 2008 JURMP. Details on education outreach to the residential community can be found in Sections 8 and 9 of this annual report.

6.3.1 BMP Implementation

Trash Trap at the Oceanside Municipal Golf Course

Staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. In March 2009 City staff installed a trash trap downstream of this priority residential area and upstream of the municipal golf course in the open channel that parallels the driving range. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. During this reporting period approximately 180 pounds of trash and organic debris were removed from this device. Photos of the trash trap were provided in Section 6.3.1 of the FY 2008-09 JURMP Annual Report.

Non-Structural, Administrative BMP for Trash from Oceanside Unified School District

In the previous reporting period Public Works staff identified a section of MS4 where a large amount of tennis balls and plastic drink bottles accumulate after storm events where Garrison Creek daylights off of Mesa Boulevard. In the previous reporting period the director of the Oceanside Unified School District notified all area principals about the accumulation of trash and asked the principals to share the photos with staff and students using school newspapers, assemblies, and brochures.

During this reporting period the debris still accumulated in this section of Garrison Creek. Clean Water Program inspectors again contacted the school district to discuss the issue. Four storm drain inlets were identified as the potential point of entry of trash located downstream from a local high school, middle school, elementary school and several apartment and condominium complexes. It was determined that inlet filters are a BMP that could prevent the pollutants from entering the MS4. The City of Oceanside Engineering Division/CIP is planning to allocate funding in the next fiscal year to install the proposed inlet filters in four inlets in this area.

6.4 Program Implementation

6.4.1 Outreach

The most efficient way to encourage pollution prevention and BMP implementation and to restrict polluting practices is to educate residents on how to carry out their daily activities in ways that have the smallest potentials to discharge pollutants to the MS4. During this reporting period the Clean Water Program provided educational information and training to residents, in the following ways:

- Cleanup events
- Booths at public events
- Public television notices
- Presentations
- Website
- Email notifications
- Residential BMP Manual

During the 2008-09 reporting period the Clean Water Program discontinued mailing upcoming event notices to interested parties through the US Postal Service. In order to save time and money an email distribution list was created. This will allow for people to receive notifications by email which eliminates postage costs. Also, receivers of the information can easily forward the fliers to other people who may be interested in the specific information. During the reporting period almost 300 email addresses were compiled to which e-notices are provided for upcoming events.

Further outreach program details for this reporting period can be found in the Education and Public Participation, Section 8 and Section 9, of this document.

6.4.2 Household Hazardous Waste

The City continued to facilitate the proper management and disposal of used oil, toxic materials, and all other HHW to the residential audience. Residents have the opportunity to take used oil to approximately 12 private auto parts stores within the jurisdiction. In addition Waste Management, Inc., the City's franchise trash hauler, accepts HHW at its Oceanside facility. Residents may bring up to five gallons per day of used motor oil, used oil filters, and anti-freeze, Tuesday through Saturday from 8 a.m. to 4 p.m. without an appointment. HHW may be brought on Saturdays by appointment only. Details of the locations mentioned above can be found in Section 8.4.2 of the City's 2008 JURMP.

During the 2009-2010 reporting period, 3,356 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 154.75 tons of hazardous materials (including universal waste) during the reporting period.

As part of Oceanside Green Week (see Section 9.1.6 for more details) a free E-Waste drop-off event, open to the public, was held simultaneously during the Green Fair, thus providing a much needed service to the community, as participants enjoyed the benefit and entertainment of the fair itself. In most communities, disposing of all types of electronic waste can prove costly,

which oftentimes discourages the proper disposal of these materials. Via a partnership/sponsorship by E-World Recyclers, the City was able to provide this service free of charge to anyone who wished to participate in the Green Fair. At this event there were 6.55 tons of universal waste collected for proper recycling and disposal.

Furthermore, as part of the City's collection program, a 1,500-gallon used oil collection receptacle is provided at the City's harbor. This receptacle is available for residents who live on the boats in the Marina as well as for those boat owners and operators who rent a harbor slip to conveniently recycle the used motor oil and oil filters generated from the boats. During the reporting period 1,583 gallons of used oil were collected and recycled. In addition two 55-gallon barrels of used oil filters were collected from Harbor residents.

6.4.3 Clean Water Program Newsletters

Twice per year, educational newsletters titled *City of Oceanside Clean Water Program* are mailed with the utility bill to over 42,000 homes in the City. Topics in the newsletters explain storm water pollution, effects on water quality, pollutants of concern, illegal discharges, BMP implementation, and special events.

During this reporting period two Clean Water Program Newsletters were distributed to over 42,000 households. An overview of topics in these two newsletters is listed below. A copy of these two newsletters is included in Attachment 6-A this annual report.

Fall 2009

- Upcoming creek, river and beach cleanup events
- Pick up your pet waste campaign – Pet waste survey results
- Bacteria Source Tracking Project on the San Luis Rey River
- Water conservation water pollution prevention tips

Winter/Spring 2010

- Loma Alta Creek Cleanup event
- Pool draining tips to protect water quality
- Cigarette litter statistics you should know
- 2010 creek, river, and beach cleanup events

6.4.4 Oceanside Update

In addition to printed media, the City's community television station, KOCT, airs thirty-minute public service announcements with three-minute presentations from various City departments. Those households in the City who have access to the KOCT local channel are able to view this show. During this reporting period the Clean Water Program provided ten three-minute presentations. Table 6-2 provides an overview of the topics covered during each taping.

Table 6-2. Summary of 2009-10 Oceanside Update Topics by Month

Date	Topic Discussed
August 2009	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
September 2009	Girl Scout Troop 1215 □Pick Up Your Pet Waste
October 2009	Prepare your yard for the rainy season
November 2009	San Luis Rey River Cleanup Event
December 2010	Great pacific Garbage Patch (Gyre)
January 2010	Proper fertilizer application to prevent polluted runoff to water bodies
February 2010	City of Oceanside□s Green Week
April 2010	History of Earth Day; Creek to Bay Cleanup Event at Loma Alta Creek and beach
May 2010	Oceanside Water Bodies Overview

6.4.5 Website

The Clean Water Program maintains its own Website providing convenient electronic access to program information for residents and the general public. The address for this website is www.oceansidecleanwaterprogram.org. This Website provides the opportunity to learn about storm water pollution, the sources of this pollution, and what can be done to eliminate these pollutants from entering the storm drain system, thereby improving water quality in receiving waters. During this reporting period there were 60,319 hits to the Clean Water Program website. This number does not account for traffic from within the Oceanside network. This is a significant increase to the 35,647 hits from the previous reporting period.

Specific web pages available on the Clean Water Program Website are as follows:

- Commercial Business
- Development
- Events
- Industrial Business
- Just for Kids
- Water Quality Laws
- Other Websites
- Landslide Prevention
- Clean Water Projects
- Report Violations
- Residential/General
- Just for Educators
- Waterbodies

The residential web page offers the following information:

- An overview of pollutants in receiving waters and how those pollutants get there
- The difference between the storm drain system and the sewer system
- Links to pollutant factsheets in PDF format
- Links to brochures in PDF format
- Links to past Clean Water Program Newsletters in PDF format
- Link to the Residential Urban Runoff Requirements Manual

The Website address is disseminated to the public in a variety of ways:

- Listed in all Clean Water Program Newsletters
- Mentioned during each Oceanside Update Taping and shown at the bottom of the screen
- Listed on promotional items
- Listed on Clean Water Program staff business cards
- Listed in email notifications for upcoming events

6.4.6 Hotline

The City will continue to encourage public reporting of illicit discharges and illegal dumping through the City's Urban Runoff Hotline, which is run by the Water Utilities Department. The Hotline phone number is (760) 435-5800. All calls related to potential urban runoff violations were documented and forwarded to Code Enforcement.

The Urban Runoff Hotline was promoted through a variety of media during this reporting period, including announcements on local television stations, placement on brochures, click-message pens, pencils, and other promotional "give-aways", advertisement on the City's Clean Water Program webpage and in Clean Water Program newsletters. During the reporting period, two hundred fifty on (251) calls were received on the Urban Runoff Hotline by residents concerning potential urban runoff violations. This is a significant increase (100%) from the 124 calls received in the 2008-09, 55 calls received in the 2007-08 and the 14 calls received during the 2006-07 reporting period.

In addition to calls from the public to the hotline there were 136 referrals to the Clean Water Program from City staff. All storm water related calls to the City (387) either from residents or City staff referrals were entered into the GBA database system for tracking.

6.4.7 Enforcement

Section 8.4.4 of the JURMP describes the City's program for enforcement of ordinances in residential areas. The major activities and accomplishments undertaken by the City during this reporting period included:

- Code Enforcement responded to 84 urban runoff related cases, related to residential areas and activities, during the reporting period.
- An accounting of all residential enforcement actions, taken by Code Enforcement Officers, is shown in the following table.

See Table 6-3 for an accounting of Code Enforcement Actions during 2009-10.

Table 6-3. Accounting of Residential Code Enforcement Actions for the 2009-2010 Reporting Year.

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept	Stop Work Notice
of Actions	93	145	6	N/A	26	19	0	1	0

6.5 Collaboration to implement Regional Residential Education Program

During this reporting period the City of Oceanside elected to serve as Co-chair for the Education and Residential Sources Workgroup (ERS Workgroup) which is tasked with implementing the Regional Residential Education Program. The ERS workgroup was established as one of several workgroups under the Memorandum of Understanding amongst the San Diego County Copermittees (Copermittees). The chair of each of these workgroups presides over and provides leadership and direction to the workgroup. This includes serving as the point of contact to external entities, soliciting group input, developing meeting content, facilitating meetings, and coordinating with the Secretary to finalize work products for distribution to the workgroup. The City of Oceanside Co-chaired this workgroup with staff from the City of Imperial Beach. The City of Oceanside plans to continue serving as the co-chair for the ERS Workgroup.

Details of the activities of the ERS Workgroup will be provided in the submittal of the annual report of the Regional Urban Runoff Management Program due to the RWQCB in January 2011.

6.6 Residential Component Effectiveness Assessment

See Section 11.0 for an assessment of the education component of the City's JURMP.

6.7 Program Review and Modification

During this reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water, Sewer, and the Clean Water Program, continued rolling out the GBA Masters Series software. The Development Services Department, which includes Code Enforcement, Building, and Engineering, selected TRAKiT, permitting software by CRW Systems, Inc and began roll-out in this reporting year. Since both of these systems were fully launched in this reporting period, the Clean Water Program will be reviewing the effectiveness of the new tracking tools and will continue to implement improvements in the use of the system in the coming years.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

This section is intended to document the activities conducted by the City of Oceanside during the 2009-2010 reporting period to manage illicit discharges and meet the requirements of Sections D.4 and J.3.a.(3)(f) of the 2007 Municipal Permit.

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2009-10 Illicit Discharge Detection and Elimination Component, including the 2010 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2010.

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8.0 EDUCATION COMPONENT

8.1 Introduction

Education is an important step in working towards improving receiving water quality both locally and regionally. By increasing public awareness and encouraging a change in both the attitude and the behavior of the general public and the regulated community, the City may reduce or eliminate storm water pollution caused by common daily activities.

This section documents the activities conducted by the City of Oceanside during the 2009-2010 reporting period to meet the requirements of Section D.3.g of the Municipal Permit (Table 8-1). The City continued the implementation of an education outreach program for municipal staff, industrial and commercial businesses, and the general public.

Table 8-1. Order 2007-0001 Compliance Summary.

J.3.a.(3)(g).i Description of education efforts	See Section 8.0 of this Annual Report
J.3.a.(3)(g).ii Underserved target audiences	See Section 8.3.1 of this Annual Report
J.3.a.(3)(g).iii Education of municipal employees	See Section 8.2 of this Annual Report
J.3.a.(3)(g).iv Education of construction community	See Section 8.4 of this Annual Report
J.3.a.(3)(g).v City education efforts for residents, general public and school children	See Section 8.3 of this Annual Report

The City of Oceanside continued to provide a comprehensive storm water education program to achieve the following objectives:

- Measurably increase the knowledge of target communities regarding MS4s, impacts of urban runoff on receiving waters, and BMP solutions for the target audience.
- Measurably change the behavior of target communities, and thereby reduce pollutant releases to MS4s and the environment.

Educational programs and activities are tailored to meet the needs of the following target audiences:

- Municipal departments and personnel.
- Construction site owners and developers.
- Industrial and commercial owners and operators.
- Residential community, general public, and school children.
- “Underserved” target audiences, where applicable.

Many education outreach efforts are conducted on an ongoing basis, such as direct interaction during inspections, pre-construction meetings, or when fielding calls from the City’s Urban Runoff Hotline. Educational materials are also available throughout the year at special events and at the City’s Water Utilities Department counter. Targeted mailings, focused training

sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of complaints, and other similar factors.

8.2 Staff Training Element

City personnel are the eyes and ears of the City, and can provide valuable information on storm water related discharges and potential violations that may be occurring within the City. The City presents general storm water educational content, which is described in Section 10.3 of the 2008 JURMP, to all City departments. The City primarily educates its municipal personnel through classroom training, on-the-job training sessions, and the Municipal BMP Manual (Appendix C of the 2008 JURMP). Customized training programs are designed for personnel targeting fieldwork-related departments such as storm water compliance inspectors, building/engineering inspectors, public works, planning department staff, and park and recreation personnel. General informational storm water training sessions are provided for municipal personnel in other departments to review storm water regulations in the City, impacts of urban runoff and BMPs to be implemented to reduce or eliminate runoff.

During this reporting period twenty (21) City departments or divisions were provided a training on storm water related issues. In addition one division from the solid waste and recycling trash hauler for the City was provided with storm water training. A total of 190 City staff and 64 staff from the trash hauler attended storm water trainings.

During this reporting period one of two Storm Water Pollution Prevention Education Programs developed by a private company, EXCAL Visual, were used for municipal staff trainings. These programs include a 15-20 minute video and a quiz specific to the video. In addition some departments and divisions received a customized power point focused on their specific jurisdictional duties related to storm water.

Prior to the start of these training sessions using the programs mentioned above a multiple choice quiz was given to each participant to establish a baseline of knowledge for that individual. The quiz also served as the sign-in sheet for the individual attending each training session. After the completion of the video additional storm water related details were provided depending on the department or division being trained. Time was allotted for questions and answers toward the end of the training session. Prior to the end of the training session the same multiple choice quiz was given to each participant. One hundred forty-seven (147) municipal employees took both a pre and post-quiz during a municipal training session. For more information on the effectiveness of these training programs based on the pre- and post-quiz scores see Section 11.0 of this report.

One program titled “Storm Water Pollution Prevention - Storm Warnings” covers Everyday Best Management Practices for Industrial Facilities. Specific BMPs are covered to address the following issues related to industrial facilities:

- Good Housekeeping
- Materials Management
- Spill Response
- Equipment Fueling & Repair
- Outdoor Manufacturing
- Preventive Maintenance

- Waste Management
- Dust Producing Processes

Departments or Divisions that received this training were:

- Water Distribution – Operations
- Water Distribution – Maintenance
- Sewer Collections – La Salina Waste Water Treatment Plant
- Sewer Collections – San Luis Rey Waste Water Treatment Plant
- Water Distribution – Weese Plant (Drinking Water Treatment Plant)

The other program titled "Municipal Storm Water Pollution Prevention – Storm Watch" covers everyday BMPs for other municipal staff activities such as Parks and Recreation and Fleet Maintenance. Specific BMPs covered in this course are as follows:

- Good Housekeeping and Spill Prevention
- Vehicle and Equipment Washing
- Vehicle and Equipment maintenance
- Spill Reporting and Response
- Street Maintenance
- Outdoor Storage of Materials and Wastes
- Landscaping and Lawn Care

Departments or Divisions that received this training were:

- Streets Division – Street Repair and Maintenance
- Streets Division – Street Sweepers
- Streets Division – Parking Enforcement
- Parks and Recreation Maintenance Division
- Public Works – Solid Waste Division
- Fleet Maintenance Division
- Harbor Maintenance Staff
- Sewer Collections – Field Staff
- Water Utilities – Meter Services

Other Departmental staff received customized training because of their need for specific education that was not covered in these two programs or information covered in these programs was not needed to convey to these groups due to the nature of their work as municipal employees. The following departments were trained using a customized Power Point Presentation and an interactive format to allow for questions and answers throughout the training program:

- Building Division – Building Inspectors
- Engineering Division – Engineering Inspectors
- Harbor Police
- Harbor Police Volunteers
- Planning Division
- Police Dispatch
- Water Utilities Administration Division

Waste Management is the solid waste and recycling company that services residential and commercial/industrial businesses in the City of Oceanside. Though they are not a department or division of the City, they are an important entity to target with storm water related education programs due to the nature of their business. During this reporting period the trash haulers with Waste Management were targeted for storm water education. A customized power point presentation was used to emphasize the importance of proper handling of solid waste during servicing of trash cans and dumpsters and how to report potential storm water violations to Oceanside's Clean Water Program staff. The targeted audience was:

- Waste Management, Inc. – Trash, Recycling, and Green Waste Truck Drivers

8.2.1 Other Staff Trainings

Several city staff also attended additional training to increase their knowledge on storm water regulations, enforcement inspection protocols, and the new construction permit. Table 8-2 provides a list of stormwater related trainings attended by City staff.

8-2. Storm water-related trainings attended by City staff

Date	Title	Organizer	Overview	Attendee Name	Total hours for all attendees
8/05/09	Web Conference California CGP Part I	Foley Lardner/Rick Engineering	State Construction General Permit	Storm Water Development Review (1) CWP Coordinator (1)	4
10/01/09	Web Conference California CGP Part II	Foley Lardner/Rick Engineering	State Construction General Permit	Storm Water Development Review (1) CWP Coordinator (1)	4
11/18/09	Web Conference California CGP Part III	Foley Lardner/Rick Engineering	State Construction General Permit	Storm Water Development Review (1) CWP Coordinator (1)	4
12/09/09	CASQA BMP Database	Geosyntec	Updates to CASQA BMPs	Storm Water Development Review (1)	1
1/29/10	SW Management & Sustainable Urban Landscape	Craig Kolodge Ph.D.	Compost BMPs for SW Mgt & Landscape Design	Storm Water Development Review (1) Landscape Review (1) Landscape Inspection (1)	2

8-2. Storm water-related trainings attended by City staff (continued)

Date	Title	Organizer (Course Hours)	Overview	Attendee Name	Total hours for all attendees
2/10/10	The State Model Water Efficient Landscape Ordinance	Hunter Industries	CA State Efficient Landscape Ordinance	Storm Water Development Review (1) Landscape Review (1) Landscape Inspection (1)	2
3/01/10	Watershed Academy Webcast	U.S. EPA	Watershed Nutrient Load Management	CWP Coordinator	2
3/02/10	City GIS Viewer	City Water Department GIS Division	Access, Revisions & Features of Major Update to City GIS	Storm Water Development Review (1)	1
3/03/10	Model SUSMP Training	San Diego County	Training on SUSMP model for San Diego County Copermittees	CWP Coordinator (1) Storm Water Development Review (1) Environmental Specialist (1)	12
3/09/10	Fundamental Inspector Course Online Training	Cal/EPA	Core knowledge and skills to conduct quality inspections	CWP Inspectors (2) Industrial Waste Inspector (1)	18
3/18/10	California First Energy Conservation Workshop	California Center for Sustainable Energy	California First Program Planning	CWP Coordinator (1)	3
3/23/10	Environmental Enforcement Training	Cal/EPA	Conducting effective interviews, evidence to prove a violation, enviro crimes, enforcement options, case development & referrals	Code Enforcement (2) CWP Inspectors (2) Industrial Waste Inspector (1)	35

8-2. Storm water-related trainings attended by City staff (continued)

Date	Title	Organizer (Course Hours)	Overview	Attendee Name	Total hours for all attendees
4/08/10	State Construction General Permit	SWRCB, RWQCB, Carlsbad Library	Risk levels, implementation schedule, SMARTS	Storm Water Development Review (1) Engineering Inspector (1)	4
5/4/10	State Construction General Permit Overview	Group Organizing: SWRCB	State Construction General Permit	CWP Coordinator (1)	3.5
6/3/10	Oil Spill Training Workshop	U.S. Coast Guard		CWP Coordinator (1)	2.5
6/23/10	State Construction General Permit Webinar	SWRCB	State Construction General Permit	CWP Coordinator (1)	1

8.3 Educational Outreach Element

Residential areas make up a large portion of the land use in the City, and therefore even small pollutant discharges can be magnified significantly and have the potential to affect the quality of the receiving waters. Activities such as residential car washing and over irrigation are harmful to receiving water bodies by contributing pollutants such as heavy metals, detergents, and nutrients. Providing residents with appropriate educational materials may help to increase overall awareness, and encourage residents to change harmful behaviors and subsequently reduce the potential for pollutants to enter the storm drain system and reach receiving water bodies.

Media

Twice per year, educational newsletters are mailed to all homes in the City with water utility bills. Topics in the newsletters explain storm water pollution, effects on water quality, pollutants of concern, illegal discharges, BMP implementation, and special events.

During this reporting period two Clean Water Program Newsletters were distributed to over 44,000 households. An overview of topics in these two newsletters is as follows:

Fall 2009

- Pick Up Your Pet Waste Campaign along the San Luis Rey Recreation Trail – Pet Waste Survey Results
- 2009 CA Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
- Water conservation and water pollution prevention tips

Winter/Spring 2010

- Loma Alta Creek Cleanup event
- 2010 River, Creek, and Beach Cleanup Events
- Cigarette Litter Statistics You Should Know!
- Pool Draining Tips to Protect Water Quality

A copy of these two newsletters are included as Attachment 6-A to this annual report.

Website

The City's Clean Water Program website also offers electronic copies of a variety of storm water fact sheets covering topics such as proper pesticide and fertilizer use, trash disposal, pet waste and lawn waste disposal, proper chlorine and other swimming pool chemical disposal, sedimentation, effects of soaps and detergents on receiving waters, and other storm water-related topics. During this reporting period there were 60,319 hits to the Clean Water Program website. This number does not account for traffic from within the Oceanside network. This is a significant increase from the years past. Table 8-1 below provide a summary of the number of hits to the webpage.

Table 8-1. Summary of Clean Water Program Webpage Hits

Fiscal year	of Website Hits
2009-10	60,319
2008-09	35,647
2007-08	38,146
2006-07	45,267
2005-06	42,367

Oceanside Update

In addition to printed media, the City's community television station, KOCT, airs thirty-minute public service announcements with three-minute presentations from various City departments. During this reporting period the Clean Water Program will provided nine three-minute presentations. Table 8-2 provides an overview of the topics covered during each taping.

Table 8-2. Summary of 2009-10 Oceanside Update Topics by Month

Date	Topic Discussed
August 2009	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
September 2009	Girl Scout Troop 1215 Pick Up Your Pet Waste
October 2009	Prepare your yard for the rainy season
November 2009	San Luis Rey River Cleanup Event
December 2010	Great pacific Garbage Patch (Gyre)
January 2010	Proper fertilizer application to prevent polluted runoff to water bodies
February 2010	City of Oceanside s Green Week
April 2010	History of Earth Day; Creek to Bay Cleanup Event at Loma Alta Creek and beach
May 2010	Oceanside Water Bodies Overview

Community Events – Booths and Outreach Activities

The Clean Water Program staff participated independently and in conjunction with other cities in the North County Storm Water Program by staffing a booth at several community events in Oceanside and north San Diego County. The Clean Water Program staff talked to residents, handed out educational materials, and responded to questions and concerns. Table 8-3 lists community events attended between July 2009 and June 2010 to encourage community participation and to educate participants of the effects of polluted urban runoff:

Table 8-3. 2009-10 Community Events.

Date	Event	Participants (Estimated)
10/10/09	Pride the Beach - Oceanside	250
12/18/09	Day without a Bag	300
3/8/10	Oceanside Green Fair	300
04/18/10	Fallbrook Avocado Festival	50,000
04/25/10	Earth Day North at Mission San Luis Rey	400
05/15/10	Operation Appreciation	500

School Education

Educating the City's youngest residents is important in two ways: ideally the good habits/behaviors learned will be carried into adulthood, and secondly, children may educate their families and friends around them with the information they have learned. Children are impressionable at a young age, and are therefore more likely to act upon the knowledge given to them now and throughout their life.

The City continued its outreach to school age children through the use of the watershed model during presentations. A total of twenty one presentations were conducted reaching 534 school-age children and 21 adults. Table 8-4 provides a list of groups and classrooms that were educated about storm water pollution via these presentations.

Table 8-4. 2009-10 School Age Children Watershed Presentations.

Date	Group	Children	Adults
2/23/2010	Reynolds Elementary (2nd Grade)	23	1
2/23/2010	Reynolds Elementary (2nd Grade)	24	1
2/23/2010	Reynolds Elementary (2nd Grade)	23	1
2/24/2010	Reynolds Elementary (2nd Grade)	23	1
2/24/2010	Reynolds Elementary (2nd Grade)	22	1
3/24/2009	Palmquist Elementary (4th Grade)	35	1
3/24/2009	Palmquist Elementary (4th Grade)	36	1
3/29/2009	Palmquist Elementary (4th Grade)	34	1
4/19/2010	Palmquist Elementary (5th Grade)	30	1
4/19/2010	Palmquist Elementary (5th Grade)	31	1
4/19/2010	Palmquist Elementary (5th Grade)	30	1
5/17/2010	Foussat Elementary (2nd Grade)	28	1
5/17/2010	Foussat Elementary (2nd Grade)	31	1
5/17/2010	Foussat Elementary (2nd Grade)	28	1
5/26/2010	Stuart Mesa Elementary Science	15	1

Date	Group	Children	Adults
	Discovery Day (3-5th grades)		
5/26/2010	Stuart Mesa Elementary Science Discovery Day (3-5th Grades)	14	1
5/26/2010	Stuart Mesa Elementary Science Discovery Day (3-5th Grades)	10	1
6/4/2010	Palmquist Elementary (2nd Grade)	25	1
6/4/2010	Palmquist Elementary (2nd Grade)	25	1
6/4/2010	Palmquist Elementary (2nd Grade)	24	1
6/4/2010	Palmquist Elementary (2nd Grade)	23	1
	Totals	**534**	**21**

Splash Lab

The San Diego County Office of Education Splash Science Mobile Lab (Splash Lab) is a completely self-contained mobile laboratory brought to local schools to provide students with hands-on experience with the following resources:

- Watershed/storm drain model presentations
- GIS computer stations
- Water Conservation Station
- San Diego Estuary Station
- Microscopes - with live specimens!
- Chemistry experiments
- State of the art computers
- Cooperative learning skills

The curriculum is designed for grade levels 4-6 and is aligned with California Science Content Standards.

Green Machine

The "Green Machine" is a hands-on interactive learning program brought directly into your classroom. Included are:

- A soils research station (complete with live earthworms)
- An integrated pest management station (complete with role play scenarios and puppets)
- A water cycle station (complete with dramatic role play and costumes)
- Musical and dramatic wrap-up designed to reinforce the learning
- Comprehensive teacher packet complete with pre and post "Green Machine" activities

During this reporting period 16 classes at four schools received the Splash Lab with the costs covered by the City Water Utilities Department. Also, eight classes at two schools received the Green Machine program. See Table 8-5 below for information on the schools and number of students who participated in the programs.

Table 8-5. Schools using Splash Lab & Green Machine during FY 2009/2010.

Date	School	Grade	Topic	Number Attended	Number of classes
10/12/2009	Foussat Elementary	3	Green Machine	113	4
11/12/2009	Laurel Elementary	4-5	Splash Lab	172	4
1/19/2010	North Terrace Elementary	3	Green Machine	80	4
1/19/10	Ivey Ranch Elementary	4-5	Splash Lab	92	4
3/18/2010	Mission Elementary	4-5	Splash Lab	75 (est.)	4
3/22/2010	Stuart Mesa Elementary	4-6	Splash Lab	75 (est.)	4
Totals				**607**	**24**

Project SWELL (SWELL = Stewardship: Water Education for Lifelong Leadership)

The City continued to collaborate with San Diego CoastKeeper and the San Diego Unified School District (SDUSD) to customize and implement Project SWELL (Stewardship: Water Education for Lifelong Leadership), a water-based science curriculum, for different grade levels in the Oceanside Unified School District (OUSD). The City of Oceanside is currently implementing the 5th grade curriculum and is considering implementing the 6th grade and 4th grade curricula in the future.

The Project SWELL curriculum will foster a sense of stewardship for our natural environment and help to empower and educate these future leaders of America to understand and improve the condition of San Diego's coast and waterways. Project SWELL balances environmental and scientific studies as a comprehensive and hands-on K-12 water quality and pollution prevention curricula. More information about this curriculum can be found at http://www.projectswell.org/. This curriculum provides students with knowledge of water resources in San Diego County and Oceanside, watershed functions, water conservation, the effects of polluted urban runoff, and how students can help prevent water pollution.

5th Grade

During this reporting period the 5th grade level curriculum continued to be implemented. The OUSD adopted a slightly revised version of the FOSS (Full Option Science Systems) science kits used for K-5th grade levels for the 2009-10 school year. The curriculum was slightly revised to reflect the use of the revised FOSS kits. FOSS is a research-based science curriculum for grades K–8 developed at the Lawrence Hall of Science, University of California at Berkeley.

6th Grade

For 6th grade the OUSD and the SDUSD adopted different science kits for implementation during the 2008-09 school year. The SDUSD will need to change the 6th grade curriculum to reflect the materials that will be used in the new science kit. Once the SDUSD curriculum is revised the City of Oceanside will move forward with customizing the curriculum for Oceanside and hopefully piloting the curriculum during the 2010-11 school year.

In preparation for the 6th grade curriculum, the City of Oceanside developed a table that had specific information related to the various watersheds and water bodies in the northern watersheds of San Diego County. This table was completed during the previous reporting period (See Table 8-4 of Oceanside's 2007-08 JURMP Annual report.) With the 2008 303(d) list

scheduled to be adopted in 2010 this table will be updated during the 2010-11 reporting period to reflect any changes in water body listings with in the City of Oceanside.

Other Education Outreach opportunities

Communities Alive in Nature, a local non-profit organization, implements education outreach programs to local school districts in San Diego County. One component of their education outreach program is to educate high school age students about water quality and how to assess water quality based on water chemistry and the biological community of benthic macroinvertebrates living within the streams. The Clean Water Program was invited to participate in a hands-on field training for these students to demonstrate how to properly use field test kits for water quality analysis and the proper protocols for collection of benthic macroinvertebrates. This activity is reported in the Carlsbad WURMP Annual Report.

During FY 2009-10 one field sampling bioassessment training event was conducted on March 25, 2010. Two training events were scheduled for March 25 and April 1 but rain caused the cancellation of the April 1 training event. Due to the school classroom scheduling the second field sampling event was not able to be rescheduled.

Thirty students participated in the field sampling event on March 25 and were divided into three groups. Each group conducting the following tasks at three sites along Agua Hedionda Creek in the Dawson Reserve: Chemical analysis, physical assessment, and biological sampling. The benthic macroinvertebrate samples were taken back to the school where the students sorted the insects with the use of high-powered microscopes. 45 students who were not able to attend the April 1 field sampling event were provided classroom training on proper field sampling protocols.

The BMI samples that were collected on March 25th were sorted by all students in a series of five lab classes. The samples are at the Dawson Reserve and labeled with the March 25, 2010 date. Students were then asked to analyze the data from the physical, chemical and BMI counts and draw a conclusion about water quality in Agua Hedionda Creek (AHC) at the Dawson Reserve. In making their case for the conclusion, students were asked to use all the data and observations from the sampling day. The conclusion was to be drawn from the observations and facts not on speculation.

Over-Irrigation

Clean Water Inspectors continue to respond to and document over irrigation issues after receiving complaints from the general public or city staff. Inspectors investigated water sources and contacted property owners in person if possible or provided informational door hangers indicating the need to curtail overwatering or fix broken irrigation system if applicable, as well as provided information to educate the public to conserve water. After responding to complaints, inspector's maintained electronic files of all complaints and revisited locations to make sure over irrigation had stopped. In problematic areas where overwatering was caused by many property owners, the entire area was notified by door hangers and/or letters informing the property owners the need to conserve water and avoid polluting the storm drain systems. After the institution of Stage II Drought ordinance in FY 09-10, inspectors also enforced the new requirements for the time and duration of irrigation through out the City per the requirements of the new ordinance. If

the property owners did not curtail overwatering, the information was submitted to Code Enforcement for further processing of the violations.

Water meter reader personnel are trained to document and respond to urban runoff and over-irrigation issues as they come across such activities during their normal activities. While in the field these personnel will enter the address location into a hand-held meter of a site that may have an urban runoff violation. These addresses are then compiled and given to the Clean Water Inspectors for follow-up. When possible, the water meter reader personnel will also leave door hangers and report incidents of urban runoff. Depending on the situation a meter shop personnel will visit the site or the Clean Water Inspector will follow-up.

Residential Car Washing

Residents continued to be encouraged to use professional car washes or to implement BMPs at their homes to prevent water produced by residential car washing from entering the storm water conveyance system.

Pick Up Your Pet Waste Campaign

Pet waste left on grass, sidewalks, and along trails is not only a leading cause of bacterial contamination in waterways, but it is also an issue that concerns Oceanside residents. In FY 2008-09 the City of Oceanside Clean Water Program (CWP) implemented a Pick Up Your Pet Waste Campaign focused on a section of the San Luis Rey Recreation Trail (Trail) that travels parallel to the San Luis Rey River. Following is information on what was implemented during this reporting period.

During FY 2008-09 a relationship between the Clean Water Program (CWP) and Girl Scout Troop 1215 was established. Troop 1215 agreed to participate in an education outreach campaign encouraging dog owners and dog walkers to pick up after their pets along the Trail. This project is included as a Watershed Activity under the San Luis Rey Watershed Management Program.

To kick off the campaign, an intercept survey was conducted by members of Girl Scout Troop 1215. While walking along the trail, the Girl Scouts asked people the location of where they accessed the trail, the street name they lived on and if they walk a dog along the trail. The results of this intercept survey allowed for the next component of the program, a mail survey, to target the neighborhoods where most people come from to use the trail.

The next component was a brief survey that was mailed to 300 Oceanside households located in neighborhoods near the trail. More details about the survey results are provided in Section 9.1.5 of the FY 2008-09 JURMP Annual Report. The goal of the survey was to identify the reasons why people do or do not pick up after their pets on the trail and in other public areas. Among dog owners, the most common reasons cited for why someone might leave dog waste behind while walking the Trail were:

- Forgot to bring a bag
- Nowhere to throw it away
- No one else around to see them

Ninety-three percent of survey respondents agreed that more pet waste dispensers are needed in the community.

Survey Recommendations

The results of the survey provided clear recommendations for the Pick Up Your Pet Waste Campaign that included the installation of additional trash cans and pet waste bag dispensers as well as modifying signage to emphasize pet owner responsibility. As a result, the City moved forward with purchasing and installing four pet waste bag dispensers and two trash cans along the trail.

During this reporting period four pet waste bag dispensers were ordered but not installed. Also, a new sign was created to emphasize pet owner responsibility. Installation and assessment of the effectiveness of these dispensers and signs will be completed during the next reporting period.

8.3.1 Targeting Underserved Communities

Underserved communities are communities the City has determined may require increased educational efforts. The City targeted the following underserved communities and high-risk behaviors.

Mobile Businesses

Due to their nature, mobile businesses are typically not inspected during the routine industrial and commercial inspection program; therefore they may not be receiving the same educational material as other industrial and commercial businesses. The City continued to use Code Enforcement to respond to complaint calls related to mobile businesses at which time Mobile Business BMP information was given to the operator.

As part of the regional outreach efforts implemented through the Industrial/Commercial Sources Workgroup, the City submitted their inventory in FY 2008-09 to the Industrial/Commercial Workgroup for the development of a regional inventory of Mobile Businesses. This inventory was created in order to send information to the businesses about the minimum BMP requirements specific to Mobile businesses.

During this reporting period the City of Oceanside mailed “Required Minimum BMPs For Mobile Businesses” education materials to 34 Oceanside Mobile Businesses with current business licenses. See attachment 8-A for a copy of these materials. Of the 34 mailed only four were returned to the City.

Spanish-speaking population

The City will continue to target the large Spanish-speaking population in the City by offering a number of educational brochures and handouts, including the Green Wrench Guide and Integrated Pest Management tip cards in both English and Spanish. In addition there are posters available in Spanish for restaurants and automotive related businesses and are provided to these business where inspectors feel there is a need or upon request.

Nursery and Greenhouse Operations

Due to the amount of agricultural land use in the City, the City distributed a number of printed educational materials to agricultural/nursery/greenhouse site owners and operators. The City

continues to provide educational materials, when needed, to nursery and greenhouse operations during annual inspections and on unannounced visits throughout the year.

During this reporting period the City of Oceanside, in collaboration with the San Luis Rey and Carlsbad WURMP workgroups, implemented a workshop targeting nurseries and agricultural businesses. Held on June 24, 2010 at the San Diego County Farm Bureau in Escondido, four speakers provided this target audience with information on water quality runoff management, regulatory regulations and opportunities to collaborate on and water quality monitoring. More details on this workshop will be reported in the 2009-10 San Luis Rey and Carlsbad WURMP Annual Reports.

Education Materials Distributed

Materials are regularly developed and updated to provide residents, the general public, and students with information about urban runoff, water quality, BMPs, Clean Water Program projects, and the Urban Runoff Hotline number. These materials include brochures and promotional items that are distributed upon request and during community events where the Clean Water Program staffed a booth. No significant changes were made to any of the brochures during this reporting period. Copies of these brochures were submitted with previous annual reports. Table 8-6 lists the educational materials distributed during the 2009-2010 reporting period and Figure 8-1 provides a photo of the promotional materials.

Table 8-6. Educational Brochures and Promotional Items Developed and/or Distributed.

Education Material	Description	Number Distributed
Educational Brochures		
Urban Runoff Guidelines for Residents Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from residential activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	100
Pollution Prevention Tips for Gardening Activities Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from gardening activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	50
Urban Runoff Guidelines for Commercial Businesses Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from commercial and industrial business activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	100
Urban Runoff BMPs for Construction Projects handout	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from home-improvement activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	600

Urban Runoff Guidelines for Powerwashers	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from powerwashing activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	25
Guide to Oceanside Waterbodies Booklet	A colorful introduction to the waterbodies in Oceanside. The Guide is intended to help residents develop a sense of stewardship, as well as provide information about local creeks, rivers, lakes, wetlands, and lagoons, the history behind each waterbody, and stakeholder information. In addition, the Guide includes a description of a watershed and current monitoring programs implemented to test recreational water quality.	150
	Total number of educational brochures distributed during this reporting period.	**1,025**
Promotional Items		
Click Message Pen	Each pen has Oceanside's Urban Runoff Hotline number on the outside barrel number as well as the following messages inside that rotate when the pen is clicked: "Protect our Waterways: sweep sidewalks, all storm drains lead to the ocean, Sweep (don't hose off) driveways and sidewalks, pick up pet waste, www.OceansidCleanWaterProgram.org, Water saving tips:www.SaveWaterOceanside.com, Conserve water - don't overwater landscapes.	1,025
Pencils	Each pencil has Oceanside's Urban Runoff Hotline phone number and is made from recycled newsprint	5000
Tattoos	These tattoos have the slogan "Clean Water - Only Rain in the Storm Drain" and were distributed at community events.	100
Decals	These static cling decals have Oceanside's Urban Runoff Hotline phone number and can be placed on the windshield for quick reference to report potential storm water violations.	100
Gel Pen	These gel pens have Oceanside's Urban Runoff Hotline phone number and were distributed to City employees during municipal training sessions.	500
Goodie Bags	Reusable bags stuffed with storm water information, stickers and pencils with the Oceanside Urban Runoff Hotline were distributed to each school classroom and scout troop receiving a watershed model presentation.	25
T-shirts	T-shirts are offered as a give-away option for beach and creek cleanup volunteers.	1,000
Tote Bags	These reusable tote bags are made from recycled cotton and have the words "Protect and Conserve Oceanside Water". They were distributed to employees and as a give-away option for beach and creek cleanup volunteers.	500
Water bottles	These reusable steel Bisphenol A (BPA) free water bottles were distributed to employees and as a give-away option for beach and creek cleanup volunteers.	500

Rally Towels	These 11 x15 rally towels have the slogan Only Rain in the Strom Drain and were offered to beach and creek cleanup volunteers.	200
Bracelets	These translucent blue bracelets state I Love Clean Water City of Oceanside Clean Water Program and were distributed to children during community events and in goodie bags for classroom presentations.	400
Flap hats	These flap hats were provided as a raffle item during municipal training sessions.	20
Stickers	These stickers are provided to young children and have storm water related slogans such as You Are the Solution to Storm Water Pollution.	250
	Total number of promotional items distributed during this reporting period.	**6,620**

Figure 8-1. Promotional Items Distributed During Reporting Year 2009-10.

8.4 Education of Construction Community

The City provides all appropriate parties involved with construction activities with training and informational materials regarding storm water quality, as applicable. These parties include but are not limited to City employees and project proponents, which can include contractors, subcontractors, developers, property owners, and superintendents.

Education and training of the development community in Oceanside is typically done on a project-by-project basis during a mandatory pre-construction meeting with the City and during construction site inspections.

Prior to the issuance of any permits, construction site owners and developers are either given printed educational material or referred to the Clean water Program website for information that includes the municipal permitting process, as well as the state and local storm water permit requirements for construction sites. Prior to the wet season, all currently permitted construction sites are contacted reminding site owners and developers to update their sites' BMPs to reduce erosion and prevent storm water pollution, as well as update erosion control plans and SWPPPs.

The Building Division counter in City Hall references websites that have the following documents for construction site owners and developers to reference:

- Clean Water Program Website to for a link to the General Construction Storm Water Permit
- The City's Construction Manual
- Construction related sections of the Municipal Storm Water Permit Order R9-2007-0001
- Standard Urban Storm Water Mitigation Plan, when applicable

In addition to referring the construction community to the documents mentioned above, a copy of the Urban Runoff BMPs for Construction Projects brochure is stapled on to the storm water related development plans for the project. This ensures that the construction community has received BMP information and is required to follow the minimum BMPs listed and shown in the brochure. Additional BMPs may be required by the City based on a review of the Storm Water Pollution Prevention Plan prepared by the project applicant. Storm water information is also disseminated to the construction community through storm water compliance inspections of construction sites.

8.5 Outreach Component Effectiveness Assessment (Optional)

See Section 11.0 for an assessment of the education component of the City's JURMP.

8.6 Program Review and Modification (Optional)

During this reporting period there were no changes to the Education Outreach component of Oceanside's Clean Water Program.

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9.0 PUBLIC PARTICIPATION COMPONENT

In order to ensure success with any City-wide program, the public must be involved. Stewardship and participation by the general public will increase the acceptance and willingness to comply with new regulations. The City of Oceanside has actively pursued public involvement in the Clean Water Program through the implementation of various programs and feedback mechanisms. This section documents the activities conducted by the City of Oceanside during the 2008-2009 reporting period to meet the requirements of Section D.6 of the Municipal Permit (Table 9-1).

Table 9-1. Order 2007-0001 Compliance Summary.

J.3.a.(3)(h).i Public Participation Efforts	See Entire Section 9 of this Annual Report

9.1 Local Public Participation Opportunities

The City of Oceanside encourages its residents to become involved in the Clean Water Program in various ways. The variety of ways the public can participate in the Clean Water Program include reporting potential violations to the Urban Runoff Hotline, beach and creek cleanup events, and attendance at community events.

9.1.1 Notable Activities

Beach Cleanup manual created

During this reporting period the Clean Water Program created a Beach Cleanup Manual to assist private groups in coordinating their own beach cleanup event. See Section 9.1.4 for more details.

Girl Scout Troop 1215 KOCT Airing

During this reporting period, three members of Girl Scout Troop 1215 gave a three minute presentation on KOCT Oceanside Update about the importance of picking up pet waste. See Section 9.1.6 for more information.

Green Oceanside Campaign

In late 2008, a group of city employees from various departments and divisions, including the Clean Water Program, discovered that they had a goal in common: to bring environmental awareness and stewardship to the citizens of Oceanside in a coordinated manner by educating them on how environmental protection covers many different arenas and is most effective when implemented collectively. They joined forces and became “The Green Team” and later the driving force behind the Green Oceanside campaign. See section 9.1.6 for detailed information about activities implemented for this campaign.

New tracking database for hotline calls

During this reporting year, the City moved forward with implementation of a data tracking systems to track hotline calls. The tracking system is the GBA Master Series Software, which is a maintenance management tool, but has been customized for various programs related to tracking information for the Clean Water Program. The Clean Water Program began using GBA to track NPDES facility inspections, incoming hotline storm water complaint calls, and use with the jurisdictional monitoring program. This annual report is the first report utilizing the new

technology. The Clean Water Program will be reviewing the effectiveness of the new tracking tool and will continue to implement improvements in the use or the system in the coming years.

9.1.2 Urban Runoff Hotline

The public can report potential storm water violations that could pollute the City's receiving waters through the Oceanside Urban Runoff Hotline (760) 435-5800. The Urban Runoff Hotline was promoted through a variety of media during this reporting period, including announcements on local television stations, placement on brochures, newsletters, click-message pens, pencils, and other promotional "give-aways", and advertisement on the City's Clean Water Program webpage.

During the reporting period, two hundred fifty nine (259) calls were received on the Urban Runoff Hotline by residents concerning potential urban runoff violations. This is a significant increase from the 124 calls received in the 2008-09 (102%), 55 calls received in the 2007-08 and the 14 calls received during the 2006-07 reporting period.

In addition to hotline calls from the public there were 137 referrals to the Clean Water Program from City staff. All storm water related calls to the City (396) either from residents or City staff referrals were entered into the GBA database system for tracking. Table 9-2 provides a summary of the nature of the calls received via the Hotline or by City staff referral. Of the calls received through the Hotline, nine (9) were referred directly to Code Enforcement for investigation.

Table 9-2. Urban Runoff Hotline calls and City staff referral summary

Department	Problem	City Employee Referral	Public Hotline	Total
Clean Water Program	Follow-up	0	16	16
	Leak Repair	0	2	2
	Other	1	11	12
	Over-irrigation/Broken irrigation	125	112	237
	Power Washing	0	8	8
	Spills/Dumping	2	24	26
	Street/Driveway Washing	1	12	13
	Unidentified water runoff	6	48	54
	Watering Time	0	5	5
	Yard waste/Landscape Activity	1	13	14
	Total For CWP	136	251	**387**
Referred Directly to Code Enforcement	Leak Repair	0	1	1
	Other	0	1	1
	Power Washing	0	1	1
	Spills/Dumping	0	5	5
	Street/Driveway Washing	1	0	1
	Total for CE	1	8	**9**

9.1.3 Oceanside Eyes

In addition to the Urban Runoff Hotline City Staff is encouraged to participate in the Clean Water Program through the use of a special City Enhancement Hotline specifically for Oceanside employees called "Oceanside Eyes." This hotline is call incentive driven and promoted internally. During storm water classes for municipal staff, this hotline is mentioned as an alternative for calling the Urban Runoff Hotline.

9.1.4 Cleanup Events

City Sponsored events

To increase Oceanside residents' stewardship toward our local waterways, the Clean Water Program hosts annual cleanup events at every major waterway in Oceanside including Buena Vista Creek, Loma Alta Creek, San Luis Rey River and City beaches. Between 70 and 300 volunteers participate in these cleanup events. During the 2009-10 reporting period, 1,561 volunteers removed over 6.5 tons of trash, debris, shopping carts and other unwanted material from Oceanside waterways during City-sponsored events. See Table 9-2 for data related to the City-sponsored events.

Private group sponsored events

Private groups regularly approach the city to coordinate their own cleanup event. The City of Oceanside including the Clean Water Program, Lifeguard division and the harbor maintenance staff support these groups by providing them guidance on what areas to target for cleanup, supplies for their event (bags and gloves), and safety instructions for the group.

To assist these groups in coordinating their own beach cleanup event the Clean Water Program created a Beach Cleanup manual. This manual provides the following information:

- How to coordinate a beach cleanup
- Day of cleanup instructions
- City of Oceanside "Beach Cleanup Pledge"
- Safety fact sheet
- Supply checklist
- Cleanup summary sheet

See Attachment 9-A for a copy of the Beach Cleanup Manual.

During this reporting period twelve private groups coordinated their own beach cleanup event in Oceanside. After the completion of their event, private groups are requested to provide the number of volunteers and the number of bags collected or pounds of trash removed from the target area. Every attempt is made to gather this data but some groups do not always keep track of the data or report back to the City. At least 1,004 volunteers removed 2,720 pounds of trash from Oceanside beaches and waterways. See Table 9-2 for data related to the private group sponsored events.

Between the City sponsored and private group sponsored events, 2,565 volunteers removed 15,795 pounds of trash and debris from Oceanside City beaches and three waterways that traverse the City of Oceanside. Table 9-2 lists cleanup events held between July 2009 and June 2010 including the number of volunteers and the pounds of trash removed from the waterways.

Table 9-2. Cleanup Events Held during the 2009-10 Reporting Year.

Date	Event	Number of Participants	Pounds Tonnage of Waste Removed
City Sponsored Cleanup Events			
7/6/2009	Morning After Mess	71	476
9/19/2009	Buena Vista Creek Cleanup	183	2,500
9/19/2009	Oceanside Beach Cleanup	410	880
9/19/2009	Buccaneer Beach Cleanup	154	527
11/07/2009	San Luis Rey River Cleanup	154	5,500
11/07/2009	Harbor Beach Cleanup	57	175
4/24/2010	Loma Alta Creek Cleanup	90	2,000
4/24/2010	Oceanside Beach Cleanup - Pier	188	205
4/24/2010	Buccaneer Beach Cleanup	192	812
	Total City Sponsored Events	**1,561**	**13,075 pounds**
Private Group Sponsored Events			
7/5/2009	San Gorgonio Girl Scouts	5	
8/14/2009	Vons Grocery Stores	25	
9/9/2009	Oceanside Tourism Council	90	
9/30/2009	Coca Cola	19	250
10/12/2009	Oceanside Pop Warner	100	
12/5/2009	Oceanside High School Surf Team	15	20
2/27/2010	Oceanside Baseball Team	50	
3/8/2010	Coastkeeper	230	450
3/13/2010	Julian Charter Academy	20	
5/1/2010	Escondido High School Leadership Group	30	
5/9/2010	Church of Latter Day Saints	370	2000
5/22/2010	GEAR UP (College Prep Group)	50	
6/12/2010	Coastkeeper		
	Total Private Group Events	**1,004**	**2,720 pounds**
	Grand Totals	**2,565**	**15,795 pounds**

Cleanup event mailing lists

In previous reporting years all volunteers were placed on a mailing list and were periodically mailed fliers with event information allowing them a sense of ownership and responsibility toward the program. In FY 2008-09 the Clean Water Program eliminated the mailing through the US Postal Service and created an email distribution list as a way to inform interested parties about upcoming cleanup events. This saved staff time to update mailing lists and eliminated the postage and printing costs for mailing these notifications. In FY 2009-10 two event fliers and two Clean Water Program Newsletters with cleanup event information were sent via email.

During FY 2009-10 there were approximately 300 email addresses on the distribution list. See Attachment 6-A for newsletters and Attachment 9-B for event fliers emailed to interested parties who registered to receive e-notifications during the 2009-10 reporting year.

9.1.5 Oceanside Update Show

Clean Water Program staff appears regularly on the Oceanside Update show broadcast through Oceanside Television Station KOCT. Each spot allows staff to spend three to five minutes discussing specific storm water pollution programs, pollution prevention tips, and BMPs to reduce impacts. The 30-minute show is broadcast twice daily at 7:00 a.m. and 7:00 p.m. Topics are varied with every taping of Oceanside Update, therefore the viewing audience learns about a multitude of BMPs. While KOCT is unable to determine the actual number of residents who watch Channels 17 and 18 regularly or for any length of time, both channels broadcast to approximately 45,000 Oceanside households. Table 9-3 summarizes topics discussed each month in which the Clean Water Program aired a spot.

Table 9-3. Summary of Oceanside Update Topics by Month.

Date	Topic Discussed
August 2009	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
September 2009	Girl Scout Troop 1215 Pick Up Your Pet Waste
October 2009	Prepare your yard for the rainy season
November 2009	San Luis Rey River Cleanup Event
December 2010	Great pacific Garbage Patch (Gyre)
January 2010	Proper fertilizer application to prevent polluted runoff to water bodies
February 2010	City of Oceanside s Green Week
April 2010	History of Earth Day; Creek to Bay Cleanup Event at Loma Alta Creek and beach
May 2010	Oceanside Water Bodies Overview

9.1.6 Additional Public Participation Opportunities

Other opportunities for local public participation during this reporting period are discussed in this section.

Pick Up Your Pet Waste Campaign

Pet waste left on grass, sidewalks, and along trails is not only a leading cause of bacterial contamination in waterways, but it is also an issue that concerns Oceanside residents. In FY 2008-09 the City of Oceanside Clean Water Program (CWP) implemented a Pick Up Your Pet Waste Campaign focused on a section of the San Luis Rey Recreation Trail (Trail) that travels parallel to the San Luis Rey River. Following is information on what was implemented during this reporting period.

During FY 2008-09 a relationship between the Clean Water Program (CWP) and Girl Scout Troop 1215 was established. Troop 1215 agreed to participate in an education outreach campaign encouraging dog owners and dog walkers to pick up after their pets along the Trail. This project is included as a Watershed Activity under the San Luis Rey Watershed Management Program.

To kick off the campaign, an intercept survey was conducted by members of Girl Scout Troop 1215. While walking along the trail, the Girl Scouts asked people the location of where they accessed the trail, the street name they lived on and if they walk a dog along the trail. The results of this intercept survey allowed for the next component of the program, a mail survey, to target the neighborhoods where most people come from to use the trail.

During this reporting period, three members of Girl Scout Troop 1215 prepared a script and presented information on the KOCT channel encouraging people to pick up after the pet and why it is important to do so. This aired during the month of September 2009.

The next component of the campaign was a brief survey that was mailed to 300 Oceanside households located in neighborhoods near the trail. More details about the survey results are provided in Section 9.1.5 of the FY 2008-09 JURMP Annual Report. The goal of the survey was to identify the reasons why people do or do not pick up after their pets on the trail and in other public areas. Among dog owners, the most common reasons cited for why someone might leave dog waste behind while walking the Trail were:

- Forgot to bring a bag
- Nowhere to throw it away
- No one else around to see them

Ninety-three percent of survey respondents agreed that more pet waste dispensers are needed in the community.

Survey Recommendations

The results of the survey provided clear recommendations for the Pick Up Your Pet Waste Campaign that included the installation of additional trash cans and pet waste bag dispensers as well as modifying signage to emphasize pet owner responsibility. As a result, the City moved forward with the recommendations.

During this reporting period four pet waste bag dispensers were ordered but not installed. Also, a new sign was created to emphasize pet owner responsibility. See Figure 9-1 of the Pet Waste Sign created during this reporting period. Four dispensers, fours signs and trash cans will be installed during the next reporting period where most people access specific sections of the trail.

Figure 9-1. Pet Waste Sign created during FY 2009-10 reporting period.

Interpublic Education. The City has developed programs to educate the public and various target communities of the JURMP and the numerous ways the public can contribute to reduce pollution of the City's waterways and receiving waters. However, the City recognizes that no matter how many educational programs it implements, there will always be a need for ongoing outreach to various audiences. Therefore, "spreading the word" is another significant effort that the public will be encouraged to participate in that will substantially contribute to the success of the JURMP. When speaking with the public about urban runoff issues, they are encouraged to speak with neighbors about how everyday activities can potentially pollute local waterways.

City Staff Activities. City staff is the public at work. Staff is encouraged to report potential violations and provide feedback on the implementation of the JURMP. City staff is the eyes and ears of the City, and can provide valuable information on which components and programs are working and provide suggestions or recommendations on improving the programs. The City staff is provided an incentive based hotline called Oceanside Eyes for reporting potential runoff violations as well as other problems that require remediation, such as road repair or infrastructure maintenance needs. In addition, City staff provides feedback during municipal training sessions, information meetings, and by direct contact with the Clean Water Program Manager and staff. Comments are discussed and if changes can be made to better improve the program, then they are planned and implemented.

Green Oceanside Campaign

Environmental protection and improvement requires ongoing education and awareness in order to enact behavioral change within a community. In late 2008, a group of city employees from various departments, and divisions, including the Clean Water Program, discovered that they had a goal in common: to bring environmental awareness and stewardship to the citizens of Oceanside in a coordinated manner by educating them on how environmental protection covers many different arenas and is most effective when implemented collectively. They joined forces and became "The Green Team" and later the driving force behind the Green Oceanside campaign.

Green Week

The Green Team's mission is to collaborate each year to present a highlighted week of educational programs and free services for the public that provides the tools needed for the community to be better stewards of the planet by recycling, reducing our waste, composting, conserving water, preventing water pollution and conserving energy. Activities during this week highlight programs and environmental habits that can be implemented collectively throughout the year by the community, non-profit organizations, businesses, and other local agencies.

The Green Team asked themselves how to best reach the citizens of Oceanside.

- How can citizens of all ages participate in environmentally related activities?
- Would it be best to coordinate a one-day green event or hold it on multiple days?
- Can an event be developed that would inherently establish and promote green behaviors by the community throughout the year?
- How can partnerships be established between the public/private sectors that would be mutually beneficial and provide a sense of environmental pride to everybody involved?
- What topics are of greatest importance in this era of the environmental movement?

The Green Team wanted to ensure that Oceanside citizens were aware of their City's active environmental departments, fostering collaboration between these departments, and other environmentally-conscious organizations, and that these collaborations are a vital link to the public to create long term environmental stewardship. Through this department collaboration and eventually through partnerships with outside entities, the City brainstormed a full week of environmentally related activities that citizens of all ages could participate in. The event was inclusive rather than exclusive, by being open and free to anyone who wanted to attend, welcoming visitors from other cities. This inherently provided the Green Oceanside community the opportunity to share their development of positive change with the greater population of North County San Diego. The team determined that this week of activities would best promote the continuation of green stewardship by being offered as an annual event. Since being "green" was the objective, the annual event was christened "Green Week" and was first presented to the public in March of 2009, with the second annual event held in March 2010.

Green Week 2010

Green Week 2010 was held March 8 – 13, 2010. Several activities were coordinated for Green Week, some prior to and some during the week.

- Green Oceanside Classroom Presentations – These complimentary presentations were available to classrooms and youth groups prior to and after Green Week. Presentation topics include Reduce Reuse Recycle, Water Conservation and Water Quality and are promoted throughout the year.
- Environmental Youth Art Contest – This poster contest was open to all Oceanside Unified School District students who were eligible to submit a poster and/or a video about "What does Green Oceanside mean to you?"
- Environmental Story-time and Crafts – The Oceanside Library offered environmental story time and crafts during Green Week.
- Environmental Film Festival – On Wednesday March 10 the film "Tapped" was shown to over 60 attendees. This film examines the role of the bottled water industry and its' effects on our health, climate change, pollution, and our reliance on oil.
- Green Fair – The culmination of Green Week ended with the Green Fair at which over 30 environmentally conscious organizations and businesses staffed a table to provide information and resources to the public.
- Electronic Waste Drop-off Event – The public had the opportunity to bring unwanted electronic waste for proper recycling and disposal. This event was located next to the Green Fair. At this event there were 6.55 tons of universal waste collected for proper recycling and disposal.
- Beach Cleanup – Coastkeeper sponsored a beach cleanup event on the morning of the Green Fair. 230 volunteers participated.
- Local Community Support – several local businesses provided sponsorship money that went toward the purchase of prizes for the youth contest winners and supplies for teachers who had a winning student in their classroom.
- Media/Marketing: In order to ensure the success and longevity of Green Week 2010, the Green Team pursued an assertive media/marketing plan that included coverage with local newspapers, local media/TV, city website, community college website, school bulletins, local announcement community boards, as well as extensive email notification chains

amongst the local environmental community. A Green Oceanside section in the local Oceanside magazine, highlighting Green Week 2010, was sent to over 44,000 households prior to the event. See Attachment 9-C for Green Oceanside information placed in the Oceanside Magazine. As part of the overall marketing campaign the Green Team created a logo to be placed on promotional materials. See figure 9-2 for an image of the logo.

Figure 9-2 Green Oceanside logo

9.2 Regional Public Participation Opportunities

This section describes those mechanisms available, at the regional level, for the public to participate in to assist in the implementation of regional JURMP related programs and to provide feedback to the Copermittees and contribute to the continuing development of the numerous JURMPs in effect around the County:

9.2.1 Media

Outreach to the public through the media serves as a widespread public education BMP and is an important element of public participation and keeps communication open between government staff and the public. The Oceanside Magazine is an economical and effective way to share storm water related information with residents of Oceanside. These magazines were directly mailed to over 44,000 Oceanside households. In addition to the mailing, the magazines are placed in several high traffic locations throughout the City for the public to pick-up.

During Fiscal year 2009-10 all cleanup events and other storm water related information were covered in the *Oceanside Magazine* within the Green Oceanside section:

- 2009-10 Fall-Winter issue
  - One Less Plastic Bag
  - Storm Drains Lead to the Nearest Waterway
  - 2010 River, Creek, and Beach Cleanup Events
  - Pick Up Your Pet Waste
- 2010 Spring issue
  - Tips for Draining Your Pool
  - 2010 River, Creek and Beach cleanup Events
  - 10 Water-Saving Tips for 2010

Copies of the media coverage are located in Attachment 9-C.

9.2.2 Regional Events

San Diego County Fair

The San Diego Regional Storm Water Copermittees sponsored the 2009 San Diego County Fair (Fair) as an education and outreach activity under the Regional Education and Residential Sources workgroup. This workgroup created branded the group as Think Blue San Diego Region and included a logo. The Fair was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental storm water and pollution prevention message. Details of the activities related to this event will be included in the FY 09/10 Regional Urban Runoff Management Program (RURMP) annual reports.

The 2009 Fair was held June 12th through July 5th, spanning two fiscal years. During this reporting period the "Think Blue San Diego Region" logo was placed in the San Diego County Fair program which is offered to fair-goers when entering the fair grounds.

During 2009 the Education and Residential Sources workgroup of the San Diego County copermittees staffed an outreach booth for one day during the EnviroFair. Two staff from the City of Oceanside's Clean Water Program staffed the booth on June 20, 2009. Fair attendance for that day was 58,045.

Copermittee Working Bodies

The Copermittees collectively developed ten (10) Working body groups to coordinate the implementation of regional programs required by the Municipal Permit. Each Copermittee is required to provide at least one representative to each working body. These working bodies meet at least four times per year unless a different meeting frequency is established through unanimous approval of all Copermittees.

During this reporting period the City of Oceanside participated in each working body. In addition the City of Oceanside Co-chaired the Educational and Residential Sources Workgroup. Activities related to each of these ten working bodies during FY 2009-10 will be provided in the Regional Urban Runoff Management Program (RURMP) annual report scheduled to be submitted to the RWQCB in January 2011.

Regional Hotlines and Website

The regional hotlines provide a direct connection for public participation. Historically, the hotlines have worked well and should continue to increase in use as more people are educated of the hotline phone number and the types of issues to report. The City will encourage reporting through its local hotlines, however, the regional hotlines will serve as an alternative to the local hotlines and also provide an opportunity for reporting by visitors to the City, from other areas in the County, who are not familiar with copermittee hotlines.

During FY 2009-10 the ERS Workgroup launched a new regional website: www.thinbkuesdregion.org. This website provides the public with a link to their own jurisdictional stormwater website, a phone number to report potential stormwater violations. And

resource links to get storm water related information. More detailed information on the successes of this website will be provided in the Regional Urban Runoff Management Program (RURMP) annual report scheduled to be submitted to the RWQCB in January 2011.

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10.0 FISCAL ANALYSIS COMPONENT

The City of Oceanside acquires the funds necessary to facilitate the City's storm water program through four departments or divisions in the City: Water Utilities Department, Public Works Department, Engineering Division and Code Enforcement Division. Much of City's storm water program falls under the responsibility of these four departments/divisions. Funds obtained for use in implementing the City's storm water program are utilized for a number of different programs, including jurisdictional, watershed, and regional programs. This section documents the activities conducted by the City of Oceanside during the 2009-2010 reporting period to meet the requirements of Section G of the Municipal Permit Order 2007-0001 (Table 10-1).

Table 10-1. Order 2007-0001 Compliance Summary.

G: Fiscal Analysis Component	See Entire Section 10 of this Annual Report
J.3.a.(3)(j).i Fiscal analysis of City urban runoff management program	See Entire Section 10 of this Annual Report

Effective programs require adequate funding to implement planned activities. The first step in securing adequate funding for the JURMP is to provide a strategy for effectively conducting a fiscal analysis of the JURMP in its entirety. This year's fiscal analysis included an evaluation of the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities described in the JURMP and required under investigation orders and Total Maximum Daily Loads (TMDLs) mandates.

10.1 Fiscal Analysis Methods

10.1.1 Program Funding

As previously mentioned, the City secures funding for the implementation of the storm water program through the Water Utilities, Public Works Departments, and Engineering Divisions in the City. To secure adequate funding, the Water Utilities Department collects a Clean Water Program surcharge. The surcharge is based on the customer's water consumption, so the surcharge is also designed as an incentive for individuals to conserve water. This amount is equal to $0.07 per unit of water used.

The City Engineering Division as part of the Development Services Department secures funding from development-related programs. The Engineering Division receives funding through fees assessed on developers for grading plan checks and inspections. Funding for Public Works departments is obtained through general fund allocations to the department.

10.1.2 Urban Runoff Management Programs

The City's storm water budget is used to support the following departments/divisions:

Water Utilities Department - Administration of the City's Clean Water Program

Development Service Department, Engineering Division – Storm water plan review, SUSMP and HMP

Development Service Department, Engineering Division - Capital Improvement Projects

Public Works Department - Storm Drain Maintenance
Public Works Department - Solid Waste
Public Works Department - Flood Control
Public Works Department - Street and Median Maintenance

Personnel from various City departments and divisions are involved in the implementation of the City's storm water program. Refer to Section 2 and the City's certification letter in Appendix A, pages 2 and 3, of the City's 2008 JURMP for further detail regarding the responsibilities of various departments. Other program expenditures include watershed and regional storm water activities.

10.1.3 Expenditure and Budget Reporting

Following are the expenditures for fiscal year 2009-10 as well as a proposed budget for the next fiscal year. The fiscal year expenditures are presented in tabular format with separate rows for different expenditure categories and the associated budget. The budget for the next fiscal year is presented in the same table.

The JURMP budgeting for the Water Clean Water Program which includes various departments is described in the following sections and summarized in Table 10-2 at the end of this section. Currently there is eight staff people dedicated to the City's Clean Water Program.

One full-time Clean Water Program Coordinator
Two full-time Environmental Specialists (focusing on water quality monitoring, education outreach, and program administration)
Two full-time CWP inspectors
One full-time Engineering Assistant (focusing on SUSMP and HMP)
Two full-time Code Enforcement Officers

10.1.3.1 Water Utilities Department

The surcharge rate described above under Program Funding is listed as a separate line item on Oceanside customers' utility bills. This allows for the clear delineation of the revenue being secured for the Clean Water Program in the Water Utilities section of the utility bill. The costs to administer the Clean Water Program during Fiscal Year 2009-10 totaled $882,559. It is anticipated that the Water Utilities Department will expend $1,121,688 during Fiscal year 2010-11.

10.1.3.2 Public Works

The City calculated the curb miles swept for the reporting period and they totaled 28,954 miles. The overall cost of the City's street sweeping program during FY 2009-10 was estimated to cost $981,000 during this reporting period. This includes $478,000 for equipment costs and $503,000 for staff costs. With a total of 28,954 curb miles swept in the City at a cost of $981,000, this averages out to $33.88 per curb mile.

The cost for inspection and maintenance of the MS4 was $369,597 during this reporting period. These costs are expected to increase to $523,000 during fiscal year 2010-11. During fiscal year

2009-10 the Public Works Department spent approximately $1,350,597. It is anticipated that the Public Works Department will expend $1,543,000 during Fiscal year 2010-11.

10.1.3.3 Engineering

Municipal Permit Order 2007-001 requires an increased focus and effort in development-related review and inspection, development of a Hydromodification Plan and revisions to the Standard Urban Storm Water Mitigation Plan. The approximate costs to implement this program during Fiscal year 2009-10 totaled $130,000. It is anticipated that Engineering Department will expend $130,000 during Fiscal year 2010-11.

10.1.3.4 Overall Clean Water Program Costs

During Fiscal Year 2009-10 approximately $2,799,055 was expended amongst four departments for the implementation of the Clean Water Program. It is anticipated that the total program costs for Fiscal Year 2010-11 will total $2,817,392.

Table 10-2. JURMP Budgeting for Water Utilities, Public Works and Engineering Departments/Divisions.

Department	Item	Fiscal Year 2008-2009	Fiscal Year 2009-2010	Projected Fiscal Year 2010-2010
Water Utilities	Personnel (including Code Enforcement)	557,023	$686,260	$655,435
	Misc. office supplies, postage, uniforms	$424	$4,700	$1,700
	Print Materials	$10,229	34,500	$20,000
	Monitoring Programs including lab materials, supplies and services	$41,733	89,000	$93,500
	Other Misc – Cleanups and booths	$24,027	2,000	$1,000
	Consultant Fees – Investigation Order, TMDL	$202,876	250,800	$321,660
	Independent Contractors	$39,000	0	0
	Permits	$27,178	25,000	$30,000
	Dues, Travel, Advertising	$934	8,950	$1,500
	Equipment	$0	5,000	$1,000
	Regional Copermittee Cost-share Monitoring, RURMP, WURMP	$117,159	$147,248	$146,000
Water Utilities	**Total**	**$1,020,583**	**$1,253,458**	**$1,271,795**
Public Works	Street Sweeping (Equipment)	$460,000	$478,000	$478,000
	Street Sweeping (staffing and /or contract costs)	$484,000	$503,000	$503,000
	Conveyance System Cleaning (Contracted Work and City Staff	$360,580	$369,597	$369,597
	Personnel for CWP Monitoring	$65,000	$65,000	$65,000
Public Works	**Total**	**$1,369,580**	**$1,415,597**	**1,415,597**
Engineering Division	Personnel	$260,000	$130,000	$130,000
	Hydromodification Plan	$15,006	$0,000	0
Engineering Division	**Total**	**$275,006**	**$130,000**	**$130,000**
	Grand Total	**$2,665,169**	**$2,799,055**	**2,817,392**

11.0 EFFECTIVENESS ASSESSMENT COMPONENT

11.1 Introduction

Effectiveness assessment is an important component of the JURMP because it can assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The San Diego County Copermittees developed two guidance documents to assist in the assessment of the JURMP components as well as the jurisdictions overall JURMP program. These two documents are titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* and the *Baseline Long-term Effectiveness Assessment* (BLTEA). The City participated in regional efforts to develop these documents in anticipation of the requirement to assess their JURMP programs.

The City gathered and evaluated data for some of the program components for assessment during this reporting period. This data will be valuable for incorporation into long-term effectiveness evaluation on a jurisdictional level. In future reporting years, the issue of standardized assessment metrics and procedures will be addressed by the Copermittees. The City anticipates participation in the further development of these work products.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes.

Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique. The effectiveness assessment approach developed by the Copermittees during the 2005-06 permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

- Level 1: Compliance with Activity-Based Permit Requirements
- Level 2: Changes in Knowledge/Awareness

- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

The establishment of measurable outcomes is necessary for both incremental program component improvements and as a basis for future establishment of relationships between implementation and water quality improvement outcomes.

11.2 Effectiveness Assessment Results

The Municipal Permit Order 2007-0001 requires the City to assess the effectiveness of each significant activity specific to each program component, for each program component as a whole, and for the storm water program as a whole. Levels 1, 2, 3, 4, 5, and 6 outcomes are discussed in the text below. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome level assessments

Level 1 – Compliance with Activity-Based Permit Requirements: Documenting Activities

Compliance with Activity-based permit requirements is intended to provide a quantitative assessment that reflects the regional long-term effectiveness assessment framework through targeted outcomes for the City based on various components of the Municipal Permit. Level 1 outcomes take the form of a simple yes or no answer basically answering "Was the control measure completed?" or it may provide feedback that may be quantified, counted, or tracked over time to demonstrate effort or progress.

Level 2 – Changes in Knowledge/Awareness: Raising Awareness

An important goal of stormwater programs is to increase the level of knowledge and awareness among target audiences such as residents, businesses, and municipal employees. Level 2 outcomes provide program managers feedback on how effective the various control measures have been in raising awareness and changing attitudes of the target audience.

Level 3 – Behavioral Change/BMP Implementation: Changing Behavior

A key focus of the stormwater management program is to affect changes in behavior. By building increases in knowledge and awareness (Level 2), Level 3 outcomes provide program managers with feedback on how effective the program elements and control measures have been in motivating target audiences to change their behaviors and implement appropriate BMPs.

Level 4 – Load Reductions: Reducing Loads from Sources

Many control measures are intended to reduce the loading of pollutants from targeted sources. Load reductions should, in turn, result in improvements to discharge and

receiving water quality. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning.

Level 5 – Changes in Discharge Quality: Improving Runoff Quality

A primary focus of stormwater management programs is to reduce pollutants in stormwater to the maximum extent practicable, and to ensure that these discharges do not cause or contribute to violations of water quality standards in receiving waters. At this level baseline measurements of runoff quality are measured to allow comparison. Multi-year data sets are needed in order to have any confidence in the measured change.

Level 6 – Changes in Receiving Water Quality: Protecting Receiving Water Quality

The ultimate objective of stormwater management programs is the protection of water bodies. At level 6, program mangers will focus on outcomes such as compliance with water quality standards, protection of biological integrity, and beneficial use attainment.

Summary

Program elements and control measures will typically have outcomes at more than one of the levels described above and not all outcome levels will necessarily be applicable to all activities. The information submitted with this report will address levels 1, 2, 3 and 4. Section 7 of this report, IDDE, will be submitted prior to December 15 and will address level 5.

11.2.2 Overall Component Assessments

11.2.2.1 Development Planning

Interactions with the development community during the reporting period indicate a degree of frustration with what appear to be “ever changing and more restrictive” storm water regulations. Many voice the desire to address treatment control requirements through the implementation of “end-of-pipe” proprietary BMPs or “area-wide/assessment district” type facilities.

Conversely, the reissued Municipal Permit updates and expands stormwater requirements. Stormwater treatment requirements have been made more widely applicable and more stringent; minimum standards for Low Impact Development (LID) have been added, and the Copermittees are required to develop and implement criteria for the control of runoff peaks and durations from development sites. The following information highlights the Development Component of the City’s JURMP. Table 11-1 presents the level 1 effectiveness assessment for Development Planning.

Revised SUSMP Manual

The SUSMP updates and expands storm water requirements for new development and redevelopment projects. Storm water treatment requirements have been made more widely applicable and more stringent. New requirements include minimum standards for the implementation of Low Impact Development (LID) practices and the integration of flow control criteria designed to mitigate runoff peaks and durations from development sites. The updated SUSMP incorporates a unified LID procedure which combines site

planning and design measures coupled with engineered, small-scale Integrated Management Practices (IMPs).

The updated SUSMP includes specific design information for dispersal of runoff to landscaped areas and for the integration of pervious pavements, bioretention facilities, flow-through planters, dry wells, infiltration basins, and cisterns into the project design. Where feasible and where permissible, the water in cisterns may be directed to non-potable uses to augment irrigation practices. Bioretention facilities and planter boxes may be designed with an impermeable barrier so that runoff does not saturate native soils. Instead, runoff is filtered through an engineered soil mix and captured in a subdrain and conveyed to a storm drain system. This configuration may be needed where native soils have low infiltration rates, where groundwater is high, contaminated, or where increasing soil moisture may present a hazard to foundations or slope stability. In limited and special circumstances, such as retrofit of existing drainage systems, some pedestrian-oriented developments, and roadway widening projects; where it can also be demonstrated it is not be feasible to construct any of these facilities, higher-rate surface biofilters or higher-rate vault based filtration units may be used to address treatment requirements.

Applicants are also required to incorporate design features to control pollutants from specified on-site sources, such as refuse areas, outdoor storage areas, and vehicle washing and repair facilities. The SUSMP contains a number of Source Control BMPs designed to address the types of sources to be controlled and a corresponding list of required source control measures.

In additions to disconnecting impervious surfaces and mitigation pollutant sources, applications for approval of Priority Development Projects (PDPs) are required to demonstrate compliance with the hydromodification management criteria of the NPDES permit. The SUSMP includes guidance for demonstrating compliance. Submittals for projects smaller than 50 acres may demonstrate compliance by using the integrated LID design procedure. For larger projects, the applicant may use a continuous simulation hydrologic computer model to simulate pre-project and post-project runoff, which includes analyzing the effect of LID facilities, detention basins, or other storm water management facilities, or may identify an exemption applicable to the site.

By following the design approach, applicants can develop a single integrated design which complies with the complex and overlapping NPDES permit, LID, storm water treatment, and peak runoff and duration control requirements.

The updated SUSMP is available at the City of Oceanside – Development Services counter or may be downloaded from the City Clean Water Program website at:

http://www.oceansidecleanwaterprogram.org/pdf/OceansideSUSMP.pdf

or the City Engineering Division – Subdivision Section website at:

http://www.ci.oceanside.ca.us/pdf/OceansideSUSMP.pdf

Interdepartmental Coordination
The City's SUSMP and development review process involves multiple Departments and Divisions throughout the City. The City has taken necessary steps to maintain compliance with SUSMP requirements through the coordination of these multiple departments and divisions.

Dedicated Storm Water Management Program
The City established the Clean Water Program (CWP) in 2001 under the Water Utilities Department. During this reporting period the CWP program in conjunction with the Engineering Division provided the necessary oversight for all management components of the SUSMP.

Table 11-1. Development Planning – Level 1: Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Development Planning D.1.e	Development Projects	Projects requiring SWMP	Projects completing SWMP	Actual/Target	Percent (□) Completion
	Priority Projects (Required PDP-SWMP)	45	17	17/45	38
	Standard Projects (Require SDP-SWMP)	4	3	3/4	75
	SUSMP Inspections	Sites targeted for Inspection	Sites Inspected	Actual/Target	□
	High Priority Sites (Annual)	16	16	16/16	100
	All Sites (Target: 20□ of 141)	28	36	36/28	129

The 38% and 75% SWMP completion rates indicate that many of the projects that are required to submit a SWMP; remain active in the project review process. The actual number of SWMP reviews per project may vary significantly. Some projects obtain plan approval in the second review cycle, while others may require as many as ten review cycles to produce a sound SWMP. The average project can expect SWMP within 3 to 4 review cycles.

As the City develops more projects which are subject to the requirements of the Municipal Permit, the inherent challenges associated with data management will emerge such as tracking of post-construction BMPs, maintenances agreements, and associated documents become more numerous. To counter the possibility, the City Development Services Department, which includes Code Enforcement, Building, and Engineering Divisions, chose CRW Systems, Inc. program called TRAKiT® as a data tracking system

which was rolled out in this reporting year. See section 3.2.1 of this annual report for more detailed information about the TRAKiT® database.

11.2.2.2 Construction

The construction component of the City's JURMP continues to be effectively implemented through inspection and enforcement, education and training and BMP maintenance (Table 11-2). As construction activities continue, the City will maintain the level of performance established from past years, and continue to meet the regulatory standards mandated in the Municipal permit.

Table 11-2. Construction – Level 1: Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Development Planning D.2.d	Construction Projects	sites targeted for Inspection	sites inspected	Actual/Target	Percent (%) Completion
	High Priority Sites	20	20	20/20	100
	Medium Priority	16	16	16/16	100
	Low Priority Sites	18	18	18/18	100

11.2.2.3 Municipal

The municipal component of the City's JURMP continues to provide a well-rounded approach and will continue to implement a comprehensive education program along with inspections of municipal facilities, MS4 maintenance, sanitary sewer slip-lining and street sweeping.

Table 11-3 provides the Level 1 Compliance with Activity-Based Requirements and Level 4 - Load Reductions Reducing Loads from Sources.

Table 11-3. Municipal – Level 1: Compliance with Activity-Based Requirements; Level 4 - Load Reductions: Reducing Loads from Sources.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.a	Municipal Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent (□) Completion
	(High, Medium and Low priority facilities)	176	176	176/176	100
	MS4	of catch Basins to be cleaned	of catch Basins actually cleaned	Actual/Target	Percent (□) Completion
	Catch basins cleaned	3,350	3,433	3,433/3,350	102
	Sanitary Sewer	of feet to be slip-lined	of feet actually slip-lined	Actual/Target	Percent (□) Completion
	Feet of sewer slip-lined	4,000	3,481	3,481/4,000	87
	Street Sweeping	of miles of streets to be swept	of miles of streets actually swept	Actual/Target	Percent (□) Completion
	Curb miles of street swept	28,954	28,954	28,954/28,954	100

In addition the City implemented a training program that provided pre- and post-quizzes to assess the effectiveness of the training course specific to some departments or divisions. During the 2009-10 reporting year, 254 City and contractor staff was trained on the City's storm water program requirements. Pre- and post- tests were given to some groups to assess the level of knowledge before and after each training session. 147 City employees took both the pre- and post-test. The other 107 trainees either completed a pre or post test or their group only received a customized power point presentation.

Depending on the nature of the employee's department, the employee's were given a 15 or 20 question test. The 15-question test targeted City staff that worked in various departments including fleet maintenance, parks and recreation and street maintenance. The 20-question test targeted staff that work at and maintain industrial facilities. The average City pre-test score was 76% percent of the questions correct. The average City post-test score was 99% percent of the questions correct. Figure 11-1 presents the pre- and post-test scores by City department.

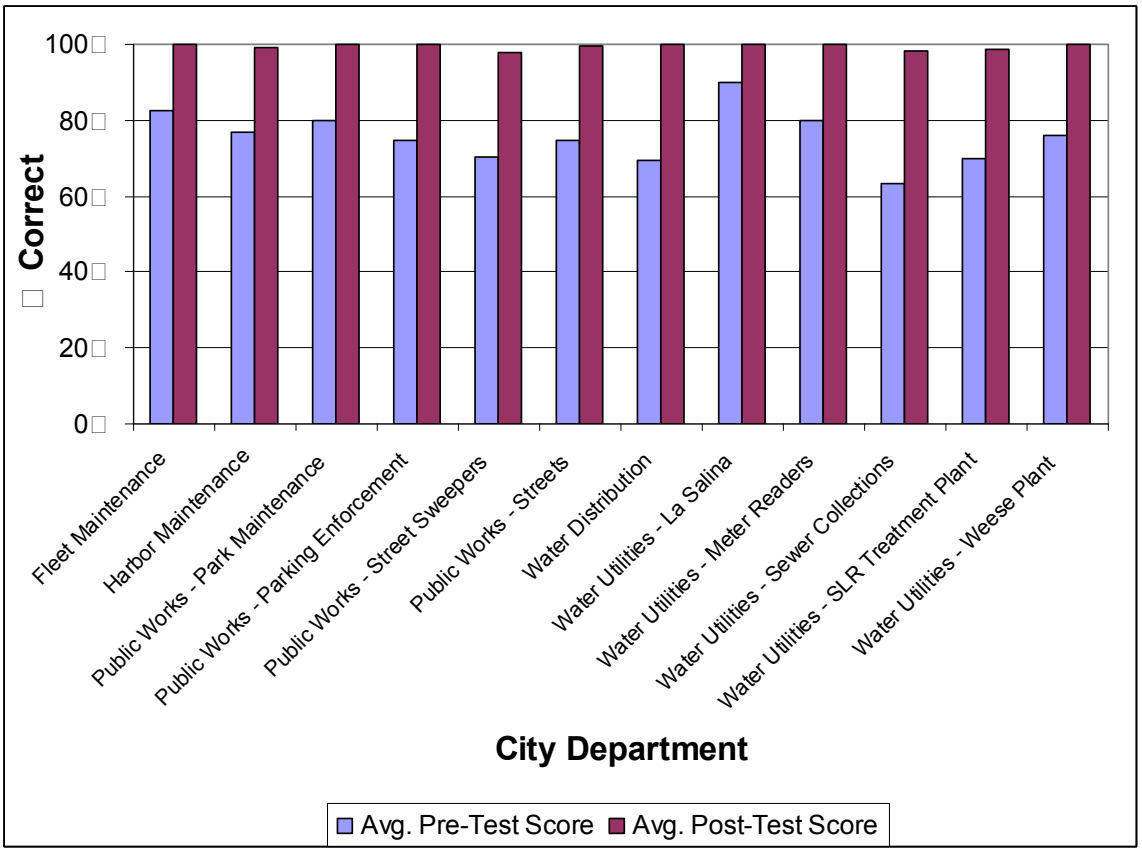

Figure 11-1. Municipal – Level 2: Changes in Knowledge/Awareness: Raising Awareness.

11.2.2.4 Industrial and Commercial

The City implements a comprehensive inspection program for industrial and commercial facilities including all restaurants and nursery and greenhouse operations. Table 11-4 provides an assessment for the inspections.

Table 11-4. Industrial and Commercial Component - Level 1: Compliance with Activity-Based Requirements.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.b	Industrial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	High Priority Facilities	9	8	8/9	89
	Industrial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	Medium and Low Priority Facilities	As Needed	9	N/A	N/A
	Commercial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	High Priority Facilities	515	497	497/515	97
	Commercial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent ( ) Completion
	Medium and Low priority facilities	As needed	102	N/A	N/A

During this reporting period a new asset management software tool was implemented for the industrial and commercial NPDES inspections. Several discrepancies were found throughout the year, such as duplicate records, inadvertently changed priority levels, and missing, new, or out of business facilities. As these were found, the inventory list in the software was updated. However, as with any new technological tool, updating and using a changing list was a challenge in the first year. A full review of all 3,000 records is being completed and fewer with the goal of no missed facilities next year.

11.2.2.5 Residential

The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. The City is also conducting additional monitoring studies to help identify and mitigate residential sources of pollution more effectively. Although fewer households participated in dropping off household hazardous waste during this reporting period, more quantity of household hazardous waste was collected for proper disposal (Table 11-5).

Table 11-5. Residential Component - Behavioral Change/BMP Implementation Changing Behavior.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Residential D.3.e	Household Hazardous Material	Quantity of waste targeted	Quantity of waste collected	Actual/Target	Percent ( ) Completion
		130 tons	154.75 tons	154.75/130	119
	Households Participating in Program	of households targeted	of households participating	Actual/Target	Percent ( ) Completion
		3,500	3,356	3,356/3,500	96

11.2.2.6 IDDE

An assessment of this component will be provided in Section 7 when the City submits the entire FY 2009-10 Illicit Discharge Detection and Elimination Component, including the 2010 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2010.

11.2.2.7 Education and Public Participation

The City implements a comprehensive education outreach program for both municipal staff and the public as well as a comprehensive public participation program (Table 11-6). See 11.2.2.3 above for an assessment of the Municipal training program. The City prides itself on educating children within its jurisdiction through the use of a watershed model and the Project SWELL curriculum incorporated into the 5th grade science curriculum.

Table 11-6. Education and Public Participation Component - Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.g	Student Presentations	of presentations targeted	of presentations completed	Actual/Target	Percent ( ) Completion
		10	21	21/10	210
	CWP Newsletters	of newsletters targeted for completion	of newsletters completed	Actual/Target	Percent ( ) Completion
		2	2	2/2	100
	Oceanside Update Tapings	of tapings planned	of tapings completed	Actual/Target	Percent ( ) Completion
		6	9	9/6	150
	CWP Website	of targeted hits	of actual hits	Actual/Target	Percent ( ) Completion
		45,000	60,319	60,319/45,000	134

11.3 Program Review and Modification

No changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

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12.0 SPECIAL INVESTIGATIONS

12.1 Lower San Luis Rey Bacteria Source Identification Project

12.1.1 Overview

As part of the Proposition 50 Clean Beaches Initiative, the City of Oceanside has been awarded a grant to track the sources of bacteria in the Lower San Luis Rey River. The shoreline at the outlet of the San Luis Rey (SLR) River mouth in Oceanside, California is visited by thousands of people each year. Elevated levels of fecal indicator bacteria (FIB) have affected water quality in the river mouth and the adjacent shoreline. In 2007, this beach was posted due to bacterial exceedances for 54 days; in 2006, it was posted for 71 days; in 2005, this beach was posted for 209 days and 186 of those days were during one consecutive stretch. As a result of the exceedances, the river mouth and one-half mile of shoreline is listed as an impaired water body under section 303(d) of the Clean Water Act for exceedances of indicator bacterial standards. The beach is also listed as a Clean Beach Task Force priority beach.

A major objective of the San Luis Rey Watershed Urban Runoff Management Program (WURMP) led by the City of Oceanside is to identify sources of the FIB at the river mouth. As directed by the WURMP, the City of Oceanside and the County of San Diego have jointly sampled the San Luis Rey River since March of 2004 to determine if the river is the source of the high concentrations of FIB at the river mouth. Thus far, the results are inconclusive and indicate the need for focused sampling in the lower river and at the river mouth.

To address this issue, the City received $554,375 from the State Water Resources Control Board (SWRCB) and, with the assistance of other stakeholders, will match $141,750 to implement the source identification project in the lower river and river mouth. The City awarded MACTEC Engineering and Consulting, Inc. (MACTEC) and their team of leading field scientists, the lead contract for the organization and completion of the two-year study.

The overall goal of the proposed study is to identify the sources and quantify the loading of bacterial contamination using a tiered approach. The project will analyze for FIB to identify "hot spots" and to assess bacterial flux. Based on these results, genetic microbial and viral analyses on selected samples will be conducted to pinpoint potential sources and identify potential public health risks. The suite of analyses include *Bacteroides spp,* ESP gene quantification, enterovirus analyses using quantitative PCR (QPCR), sequencing of the enterovirus from the field samples, community based bacterial analyses, and *Enterococcus* speciation. In addition, the joint monthly monitoring program between the City of Oceanside and the County of San Diego will continue and the bacteria monitoring data will be collected and utilized throughout the duration of the project.

This approach will permit prioritization for mitigation of microbial contaminants and appropriate actions will be recommended to eliminate sources of fecal contamination. The three following objectives will be accomplished to achieve the overall goal set forward above:

- Identify point and non-point sources of bacteria contamination in the Lower San Luis Rey River and at the river mouth during the dry and wet season,
- Estimate the bacterial loading from tributaries and along the main stem of the San Luis Rey River during the dry and wet season, and
- Recommend Best Management Practices (BMPs) to reduce and/or eliminate bacterial sources.

12.1.2 Activities completed during previous reporting periods

Establishment of a TAC

The first TAC meeting was held on November 1, 2007 from 9:30 to noon. Members included six representatives from the Regional Water Quality Control Board, County of San Diego, City of Vista, and San Diego CoastKeeper in addition to three representatives from the City of Oceanside. An overview of the project and historical data was presented for the benefit of the stakeholders. The role of the TAC was discussed. The TAC will be involved in all aspects of the project, including final approval of the project approach and oversight of the monitoring and reporting. The meeting was concluded with a tour of the mouth of the San Luis Rey to orient members with the complexity of the river. A final list of the TAC was submitted to the SWRCB on January 10, 2008.

A second TAC meeting was held on February 4, 2008 with six representatives from the Regional Water Quality Control Board, County of San Diego, City of Vista, and San Diego CoastKeeper in addition to two representatives from the City of Oceanside. The MACTEC project team presented the proposed project approach to the TAC. The approach was discussed and the TAC made recommendations to be included in the Monitoring Plan and QAPP.

Consultant Selection

A Request for Proposals (RFP) was sent out on November 8, 2007 to solicit proposals from interested and experienced consultants to perform a bacteria source tracking project on the San Luis Rey River. Proposals were due to the City of Oceanside by December 4, 2007 and a subcommittee of the TAC reviewed the proposals on December 7, 2007. MACTEC Engineering and Consulting, Inc. was officially awarded and given a notice to proceed by City Council on February 20, 2008.

Monitoring Plan and Quality Assurance Project Plan Approval

Other important work included the development and approval by the SWRCB of the Monitoring Plan and Quality Assurance Project Plan (QAPP) by the MACTEC project team with input from the TAC. The consultants and members of the TAC and City staff participated in a conference call to discuss the draft Monitoring Plan and QAPP on March 28, 2008. These documents were reviewed by the SWRCB and revised based upon their comments. The SWRCB approved the Monitoring Plan and QAPP on June 19, 2008.

First Monitoring Event

The first dry season monitoring event took place on June 18 and 19, 2008. Dr. Rachel Noble traveled to San Diego to prepare for the first event with the project team and to participate in both days of monitoring. The project team collected bacteria samples and flow measurements at

six monitoring locations in the Lower San Luis Rey River. The bacteria samples were analyzed for fecal indicator bacteria and the remaining sample volume was filtered and frozen for molecular analysis. The river mouth was not sampled, as planned, due to construction of the Pacific Street Bridge.

The City of Oceanside and the County of San Diego implemented the changes to the joint monthly monitoring program during the June 2008 monitoring event. The program will continue using SWAMP protocols throughout the remainder of the source identification project allowing the bacteria data from monthly monitoring to supplement the dry and wet weather event data.

Second Monitoring Event

The second dry season event took place on July 23 and 24, 2008. The project team collected bacteria samples and flow measurements at five of six monitoring locations in the Lower San Luis Rey River. As part of the Visual Observation Program, observations were conducted July 23 and 24, 2008 within the Lower San Luis Rey River and upstream in the drainage basin to identify possible sources of bacteria. The river mouth was again not sampled, due to construction of the Pacific Street Bridge.

The City of Oceanside and the County of San Diego continued to use SWAMP protocols to allow for use of the monthly monitoring data to supplement the project monitoring event data.

Genetic Molecular Analysis

Based on the fecal indicator bacteria (FIB) results of the first two dry weather monitoring events, four of six project sampling sites (Murray Bridge, Douglas Bridge, Pilgrim Creek, and Sleeping Indian) were selected for additional genetic molecular analysis. Two were river sites and two were tributaries. Genetic molecular analysis was conducted on samples collected at these sites during days 1 and 2 of the June 2008 event. There were no FIB exceedances of standards during the July 2008 event and, therefore, none of those sites were chosen for additional analysis per the QAPP and Monitoring Plan.

Visual Observation Program

The City of Oceanside and the project team continued to develop the visual observation program based on the results from the July event, including modifications to the field forms, prioritization of the observation zones, and coordination of volunteer support with San Diego CoastKeeper.

Suspension of Funds from State Water Resource Control Board, Dept. of Finance

On December 19, 2008, the SWRCB issued a Budget Letter that suspended all projects including the Lower San Luis Rey Source Identification Project. All work on the Visual Observation Program and all planned wet and dry weather events were stopped. The work completed after this notice was primarily to assess the status of various elements of the project, including laboratory work and the effect of the stop work notice on genetic analysis. In addition, the potential for American Relief and Recovery Act (ARRA) funds was assessed and answers to the survey were researched and submitted on March 13, 2009. On April 6, 2009, The City of Oceanside received a conditional approval letter that the project was eligible for funding from the ARRA. Unfortunately on April 7, 2009 the City of Oceanside received a letter saying that

new guidance from the EPA regarding "shovel ready" projects indicated our project was no longer eligible for the ARRA funding.

With more time passing, the City of Oceanside requested an assessment from MACTEC of the molecular sample holding times for samples not yet analyzed and a summary from our contractors of what and where data that had been analyzed is located. Unfortunately, samples for two of the three types of genetic analyses had expired and are therefore no longer available for use to the program. Samples were analyzed for *Enterovirus A* by Dr. Jed Furman's laboratory at the University of Southern California. *Enterovirus A* was not detected in any of the samples.

The monthly joint monitoring program conducted by the City of Oceanside and the County of San Diego continued as modified for the grant project until June of 2009. In June 2009, the City and County agreed to continue the monitoring program, but the City brought the monitoring in-house to the San Luis Rey Wastewater Treatment Plan Laboratory. The same field procedures were followed, but the reporting limits changed to above SWAMP recommendations. This change is not expected to effect results, as bacteria levels are usually at or above these reporting limits.

12.1.3 Activities completed during current reporting period

Reinstatement of Funds from State Water Resource Control Board

On December 17, 2009, the State Water Resources Control Board gave the City of Oceanside notice that the Lower San Luis Rey Source Identification Project grant had been selected to restart. With an original grant end date of March 31, 2010, the City of Oceanside, on January 4, 2010, submitted a Request for Time Extension in order to complete the remaining two-thirds of the field and laboratory work required.

While awaiting an amended grant agreement, the monthly joint monitoring conducted by the City of Oceanside and the County of San Diego supplementing the grant field work did restart. On April 14, 2010, the City of Oceanside received the executed amendment to the Grant Agreement and work began immediately to restart the project. The deadline for the final project report was extended to June 1, 2011.

Third Monitoring Event

The third dry season monitoring event in the Lower San Luis Rey River/River Mouth was implemented on May 18, 19, and 20, 2010. On May 18, 2010, The City of Oceanside and the County of San Diego conducted the joint monitoring at 17 locations in Lower San Luis Rey River and the grant project team collected composite water samples and sediment samples at five locations in the River Mouth. In addition, the City of Oceanside collected additional samples at each Watershed monitoring location for potential further genetic analysis on upstream sites within the City boundary. On May 19 and 20, 2010, the grant project team collected composite water samples and sediment samples at five locations in the River Mouth and composite water samples at two river locations (Bonsall Bridge and Benet Bridge).

Visual Observation Program

The Visual Observations Program was implemented on the first day of sampling, May 18, 2010. Two teams of two walked a total of four locations adjacent to the river mouth. Teams were

looking for urban runoff and wildlife that could be affecting the river mouth. Observations that were recorded included human behavior, maintenance procedures, and wildlife distribution.

TAC Meeting

A third TAC meeting was held on June 28, 2010 to refresh ongoing members and educate new members about the work completed prior to the SWRCB stop work notice, what was lost during the year break, and how to restart the project with limited resources and time. It was decided that focus would be on the mouth of the river near the beach, where the impairment is currently listed. The final dry season event was scheduled for late July/early August and will focus on supporting the data from previous dry season events to answer the question of if bacteria are exceeding thresholds at the river mouth and if sediment could be a source of the bacteria. The next TAC meeting was tentatively scheduled for the beginning of the wet season to plan the final wet season monitoring activities.

12.2 Loma Alta Creek Ultraviolet Light Treatment Facility

12.2.1 Overview

Loma Alta Creek Lagoon and Buccaneer Beach, located in the City of Oceanside, have historically been impacted by high levels of bacteria. This is a family beach adjacent to a park with a large parking area, showers and an eating establishment that sees large crowds during the dry months. The City has determined that a key source of bacteria and nutrients in Loma Alta Creek is urban runoff that discharges into the creek. The source of water for Loma Alta Creek is from storm drain flows and hillside seepage from the Loma Alta watershed, which drains approximately 6,400 acres, and flows through densely developed residential, commercial, and industrial land uses.

In 2005, the City was awarded a $5,000,000 Proposition 40 Clean Beaches Initiative (CBI) grant by the SWRCB to construct an ultraviolet (UV) light treatment facility at the existing La Salina Wastewater Treatment Facility. One hundred percent of the dry weather creek flows (averaging 300 to 700 gallons per minute) will be intercepted in the lagoon and diverted to the UV treatment facility, located on the northern bank of the creek. The treatment facility consists of piping flows from an exiting diversion structure by gravity from the lagoon through a 2 micron fine screen to a wet well where the flow is pumped into two large sand filters followed by two UV disinfection units housed in a reinforced concrete building. The treated water is discharged through a pipe extended along the existing section of rip-rap that runs along the north side of the Loma Alta creek outlet at Buccaneer Beach. During wet weather months (November through April), the lagoon would be opened to allow free flow to the ocean and the UV system would be bypassed. See Figure 12-1 for a photo of the facility.

Figure 12-1. Oceanside Loma Alta Creek UV Facility

12.2.2 Activities completed during previous reporting periods

The California Coastal Commission approved Permit No. 6-06-152 for construction of the outfall pipe associated with the UV treatment facility on June 14, 2007. Loma Alta Creek UV Treatment Facility project entered into the construction phase on August 13, 2007 when the official Notice to Proceed was issued to Orion Construction Corporation.

Each year the Loma Alta Creek Ultraviolet Light Treatment Facility is scheduled to start treatment in May and continue through September. In May 2009, during start-up procedures, it was discovered that the existing UV lamps were defective. In addition, in June 2009, the electrical system for the UV System bar screen/auger was upgraded. After the completion of these repairs and upgrades the plant began operation later in June 2009. The plant typically ran three to four days a week with average flows of 300 gallons per minute. No water was discharged onto the beach when the UV Facility was offline. Flows were lower than expected due to drought conditions and conservation efforts of Oceanside residents. See Figure 12-2 for a photo of treated water being released from the UV Outfall pipe.

Figure 12-2. Oceanside Loma Alta Creek UV Outfall pipe releasing treated water

Water samples were taken weekly from Buccaneer Beach directly in front of the discharge pipe and seventy-five feet north and south of the discharge pipe. The samples were tested for total and fecal coliform and Enterococcus. All samples taken during summer 2009 met California Department of Health Services AB411 Objectives and there were no postings due to bacterial levels exceeding standards set by the County Department of Environmental Health. The UV Facility ran through September 2009.

12.2.3 Activities completed during current reporting period

During the 2009-10 reporting year, Loma Alta Creek flows continued to be lower than expected during drought conditions warranting sporadic running of the UV facility. The facility began running in May 2010 for the summer dry season. It ran for five days in May and seven days in June of 2010. The facility will run through September 2010 unless heavy rains arrive earlier than expected.

13.0 NON-EMERGENCY FIRE FIGHTING

Emergency fire fighting flows (flows necessary for the protection of life or property) are allowed by the Municipal Permit and do not require implementation of BMPs. Non-emergency fire fighting BMPs and educational methods for reducing the discharge of pollutants from non-emergency flows to the MEP are described below.

Order 2007-0001 Compliance Summary

J.3.a(3)(1)iv Non-Emergency Fire Fighting	See Entire Section 13 of this Annual Report

13.1 Best Management Practices

The City developed and implemented a program to reduce pollutants from non-emergency fire fighting flows, in accordance with Section B.3 of Permit Order 2007-0001. BMPs were implemented when the following activities were conducted:

- Regular Maintenance of Fire and Emergency Vehicles and Equipment
- Training Exercises
- Facilities Maintenance
- Post-Emergency Rehabilitation of Response Equipment

These activities were conducted in a way to either minimize or eliminate the discharge of pollutants to the MS4. Detailed descriptions of BMPs are given for each activity below:

Regular Maintenance of Fire and Emergency Vehicles and Equipment

- Vehicles and equipment were cleaned where runoff was directed to either the sanitary sewer system or to a drain with an oil/water separator system.
- Vehicles and equipment were cleaned where runoff would pond and evaporate and/or where runoff would filter through landscaped areas.
- Sewer drains in a vehicle cleaning area were outfitted with a hydro screen fabric barrier to collect debris.
- Spill kits were available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents were minimized, and general cleaning solutions were disposed of into the sanitary sewer system.

Training Exercises

- Water used in training exercises was directed to landscaped areas whenever possible, and runoff from the training exercises was not allowed to discharge to the MS4.
- Live fire training activities were pre-planned to allow integration of barriers to off-site runoff that could contribute to non-storm water discharges.

Facilities Maintenance

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways were swept to remove debris. Debris was placed in the trash.
- Landscaped areas were maintained as required to reduce the introduction of leaves and other landscape waste into the MS4.
- Irrigation systems were monitored and maintained as required to reduce irrigation water from going off-site.

- Spills were cleaned up using spill kits provided at the work site, and disposal of spilled material was in accordance with applicable regulations.
- Spills that required a cleanup beyond the ability of the on-site employees were reported to the City's Public Works Department for assistance with appropriate resources.
- Maintenance and repair of structures were conducted using methods that do not contribute pollutants to the MS4.

Post-Emergency Rehabilitation of Response Equipment
Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency were restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. The use of water that could contribute to storm water discharges was used unless another practical and immediately available method was identified, and was performed in a manner that minimized discharges to the MEP.

13.2 Educational Methods

During live fire fighting training exercises all fire fighters were educated about the requirement to not allow water flows to enter the MS4. Fire fighters in attendance for training sessions about how to use high pressure fire fighting hoses were educated on how to direct the water to percolation basins that are permanently in place at the training grounds. Water that is directed to these basins was allowed to infiltrate into the soil and/or evaporate.

Prior to building structures at the training grounds being set on fire, perimeter controls were put in place to ensure that water from the non-emergency training session did not reach the MS4. Fire fighters in attendance were educated on the proper type and installation protocol of perimeter controls. These perimeter controls were also used for training sessions related to vehicle fires.

14.0 JURMP REVISIONS

There were no changes made to the City of Oceanside's 2008 JURMP during this reporting period. Updates were made to the 2008 JURMP during the 2008-09 reporting period. Details of these changes can be found in Section 14 of the 2008-09 JURMP Annual Report.

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15.0 CONCLUSIONS AND RECOMMENDATIONS

15.1 Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the San Diego Copermittees. Pursuant to Part J.3.a., of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2009-2010 annual reporting period (July 1, 2009 – June 30, 2010).

15.2 Conclusions

This annual report presents the activities the City conducted from July 1, 2009 through June 30, 2010 to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The activities involved implementing, and improving where needed, existing programs and developing new programs intended to minimize or eliminate the effects of urban runoff within the City's jurisdiction on receiving water bodies. Improving water quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

As detailed in the Program Effectiveness Assessment Component, the City met all of the development planning targets and met the municipal targets. Long-term effectiveness assessment is an ongoing and iterative process and the City will continue to use this process to further improve its storm water program.

15.3 Recommendations

15.3.1 Database Tracking System for various departments and divisions

During this reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water and Sewer divisions, and the Clean Water Program, continued rolling out the GBA Masters Series software. The Development Services Department, which includes Code Enforcement, Building, and Engineering, chose TRAKiT, permitting software by CRW Systems, Inc and began roll-out in this reporting year. Since both of these systems were fully launched in this reporting period, the Clean Water Program will be reviewing the effectiveness of the new tracking tool and will continue to implement improvements in the use of the system in the coming years.

15.3.2 Assessment of Education Program

During this reporting period the City of Oceanside continued the implementation of a comprehensive education outreach program along the San Luis Rey River Trail titled the Pick Up Your Pet Waste Campaign. Pet waste bag dispensers were purchased during this reporting period. Installation and assessment of the effectiveness of these dispensers and signs will be completed during the next reporting period.

15.3.3 Underserved Target Audience Outreach - Mobile Businesses

During this reporting period one underserved target audience, Mobile Businesses, was targeted with educational materials informing them of the minimum BMPs that should be applied during their business operations. See Section 8.3 for more information about this activity and attachment 8-A for a copy of materials mailed to this target audience.

								# of Selected Treatment Control BMPs												
Priority Rating	Project Name	Project Address	APN	Permit #	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator
			ACTIVE SITES																	
H	All State Moving Systems	4670 North Ave	161-660-03	ADP-6-04	I	3.08	Loma Alta						2				4		4	
H	Benet Industrial Center	649 Benet Rd	162-120-46	D-1-03	I	4.62	San Luis Rey							1			3	4		1
H	Chevron Products Service Company Service Station	1601 North Coast Highway	140-090-17	RC-207-04	C	0.42	San Luis Rey													
H	Harbor View Condominiums	800 Harbor Cliff	144-270-07	T-10-2	R	16.15	San Luis Rey										15			
H	Jack In the Box	1900 Mission Ave.	145-180-29	D-12-01	C	0.05	San Luis Rey											2	2	2
H	Marriott Residence Inn	3603 Ocean Ranch Blvd.	160-572-14	D-16-05	C	3	Loma Alta					3		1				10		
H	Native Bouquet	3927 Oceanic Dr.	160-680-25	ADP-11-03	C	3.18	Loma Alta		1					3			2	1		
H	North Oceanside Batch Plant	1050 Airport Rd	145-020-33	D-12-02	I	4.35	San Luis Rey						1	1						
H	Ocean Ranch Plaza	3605-3617 Ocean Ranch Blvd.	160-572-15	D-11-05	C	15.1	Loma Alta							4			2	5		1
H	Ocean Terrace Professional Center	3601-3637 Vista Way	165-362-32-1-18	D-27-05	C	9.93	Buena Vista							1			5	6		
H	Oceanside Gateway Business Park	1600 Block of Ord Way	162-120-88	D-6-03	C	32.4	Loma Alta							1				28	3	
H	San Luis Rey Station Inc	607 North Douglas Drive	158-030-43	D-23-05	C	0.82	San Luis Rey											4		
H	Schnell Industrial Center	3923 Oceanic Dr	160-680-24	ADP-14-03	I	2.58	Loma Alta							3				4	3	
H	Venture Commerce Center	3600 Ocean Ranch Blvd.	160-572-04-02	D-24-04	C	8.5	Loma Alta							17				9		
H	Oceanic Business Park South, Parcel 1	3801-3803 Oceanic Drive	160-572-18	ADP-11-04	C	4.83	Loma Alta							2			1	2	2	
H	Oceanic Business Park South, Parcels 2,3,4	3907-3291 Oceanic Drive	160-680-21	ADP-12-03	C	5.31	Loma Alta							3				11		
H	Piazzo D' Oro Mixed Use	3402 Vista Way			C,R		Buena Vista										2			
M	Ashworth, Inc.	4010 Ocean Ranch Blvd.	Vacant		C	9.83	Loma Alta							7						
M	Calvary Chapel	3715 Oceanic Way	160-680-26	D-23-02	C	7.3	Loma Alta	4						5					4	
M	Car Sound Exhaust	1901 Corporate Ctr. Dr.	160-680-04	D-5-03	C	11.76	Loma Alta							2				1	1	
M	Coca Cola Bottling Company	2303 Ocean Ranch Blvd.	160-572-07	D-15-04(1)	C	10.74	Loma Alta							2					1	
M	Cornerstone RR-Right of Way-Parking	0000 Union Plaza	151-310-33-00	DD-16-02	C	8.2	Loma Alta													
M	Deutsch Industrial Products- Molding Assembly Plant Additions	250 Eddie Jones Way	145-021-29	ADP-7-04	I	1.03	San Luis Rey										1sand			
M	Employer's Choice Insurance Services	2111 S El Camino Real # 201	165-011-44	ADP-9-03	C	0.5	Buena Vista						1	1				2		
M	HK Plastics	1825 Corporate Center Dr.	160-571-39	ADP-10-04	C	5.3	Loma Alta							4				6		
M	Hooter's Restaurant	3186 Vista Way	165-350-39	D-26-02	C	1.82	Buena Vista							1		2			1	
M	Jiffy Lube	4106 Oceanside Blvd	165-502-28	D-2-86	C	0.42	Loma Alta							1			2			
M	Loma Alta Village	Crouch and Apple Streets	149-330-06	T-1-06	C	1.97	Loma Alta													
M	Mission and Douglas Retail Center	35 Douglas Dr	160-020-53-	GR 2774	C	1.3	San Luis Rey		2											1
M	Monarch at Rancho Del Oro	Vista Way and Rancho Del Oro	165-362-05	P-5-03	C,R	14.76	Buena Vista													
M	NEW BUSINESS	1702 S. Ditmar			R	8.83	Buena Vista							2						
M	New Venture Christian Fellowsip	400 Mystera Way	1169-562-01-00	D-2-93	C	0.3	Agua Hedionda											5		

								# of Selected Treatment Control BMPs												
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M	North Coast Methodist Church	1501 Kelly St.	154-170-76-00	D-12-97	C	8.83	Buena Vista							2						
M	Pacific Coast Medical Center	3876 Mission Ave,	158-052-02	P-3-08 C-8-08 D-4-08	C	7.88	San Luis Rey							4						
M	Pelican Cove Multiple Residential	308 Island way	158-051-19	T-3-02	R	5.6	San Luis Rey										2 sand			
M	Rancho Rose Multiple Residential	Highway 76 and Melrose Drive	157-110-91-93	T-9-02	R	8.52	San Luis Rey		3											
M	San Luis Rey Valley United Methodist Church	5570 Old Ranch Road	157-412-18-00	D-7-90	C	5.4	San Luis Rey							1				1		
M	Seagate Corporate Center	3532 - 3548 Seagate Way			C	29.01	Loma Alta							8	2					
M	Starbucks	3702 Plaza Dr	168-012-32-00	C-32-02	C	0.516	Buena Vista							1	1		1			
M	Union 76 Oceanside the Oceansider	1660 Oceanside Blvd	152-320-25-00	D-19-03 C-29-03	C		Loma Alta							1				1		
M	Walgreens	3507 Cannon Rd	169-011-47-00	D-12-90	C	1.91	Buena Vista							1				3		
M	Wal-Mart Expansion	705 College Blvd	161-553-01	P-2-92, D-15-93	C	15.6	San Luis Rey										1	5		1
M	Z Market	3204 Mission Ave.	160-271-43-00	D-8-04	C		San Luis Rey							2				2		
L	1611 S. Pacific Street	1611 S. Pacific Street	153-091-05	RC-19-07	R	0.14	Loma Alta													
L	2137 Willowbrook Dr.	2137 Willowbrook Drive	159-112-13	T-5-04	R	2.04	San Luis Rey													
L	400-404 South The Strand	400-404 South The Strand	150-072-18-00, 150-072-19-00, 150-072-20-00	P-200-06	R	0.3	Loma Alta													
L	519-523 N. Tremont St.	519-523 N. Tremont St.	147-084-01, 147-084-02	P-200-08, D-200-08, RC-201-08	R	0.23	Loma Alta													
L	807 N. Pacific Street	807 N. Pacific St.	143-227-05-00	P-208-06, D-214-06, RC-216-06	R	0.11	San Luis Rey													
L	916 Tait Street Condos	916 Tait St.	150-353-12	P-13-08	R	0.08	Loma Alta													
L	Airport Rd. Automotive	Airport Rd	146-050-80, 81, 82, 83	D-17-97	C	2.11	San Luis Rey													
L	Bahama Garden	420 Cleveland St.	150-182-05	P-3-07	R	0.23	Loma Alta													
L	Barnwell St./Ritter 3 Single Family Homes	303 S. Barnwell Rd.	149-152-07	D-4-01	R	1.06	Loma Alta							5				4		
L	Buddy Todd Park	Todd Memorial Park, Mesa Dr.	149-090-01	CIP	M	16.54	San Luis Rey													
L	Casa De Amparo Child Development Center at Ivey Ranch Park	110 Rancho Del Oro Drive	760-185-08	C-41-05, D-20-05	C	1.5	San Luis Rey													
L	Casitas at Spring Creek Condominiums	5501 Old Ranch Road			R	13.84	San Luis Rey							1				2		
L	Chaparral Industrial	3093 Industry St.	162-031-34	ADP-11-02	C	1	Loma Alta													
L	Community Lutheran Church	4507 Mission Ave.	158-701-21	D-11-06	C	3.64	San Luis Rey													

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L	Cross/Matlach Residence	400 N. Pacific St. 308	153-091-48	RC-2-04	R	0.16	Loma Alta	1												
L	Cypress Estates 13 Single Family Homes	Cypress Road	158-630-3 Thru 22	D-7-02 T33-88	R	3.18	Loma Alta		1									1	1	
L	D & K Growers	Sleeping Indian Rd.	121-150-20, 122-030-81, 82, & 83	AAP-1-04	C	7.1	San Luis Rey													
L	Edwards/Zajda Twin Home	916 Tait St.	150-353-12	P-13-08	R	0.086	Loma Alta													
L	Fire Mountain Estates	Fire Mountain and Yucca Rd.		T-2-05	R	1.9	Loma Alta													
L	Hamilton Residence	Stewart St.	155-071-06-00	ACP-13-05	R		Buena Vista													
L	Holiday Inn and Suites Hotel	1401 Carmelo Drive	143-060-38	RC-206-04	C	1.07	San Luis Rey							6			1	1		
L	Jackson Residence	Stallion Drive	122-081-04	E-208	R	0.6	San Luis Rey													
L	La Mision Village Mixed Use	3220 Mission Ave	160-271-57	D-9-05	R	3.02	San Luis Rey							13						
L	La Pacifica II Business Park	Ocean Ranch Blvd., Lot 11, Buildings 1,2, & 3	160-572-19-02	D-08-07	C	14.8	Loma Alta													
L	Laguna Pacifica	2020 Stewart St.	155-071-50-00	P-29-06, RC-28-06, C-56-06, V-19-06	R	0.55	Loma Alta													
L	Libby Lake Village Single Family Homes	N. River rd. at Calle Montecito	157-06-51, 52	T-5-06	R	3.34	San Luis Rey						1				1	1	1	
L	Loma Alta Creekside, Elliott Drilling Building	Oceanside Blvd.	162-050-40	ADP-2-06	C		Loma Alta													
L	Loma Alta Village, Lot 1	southerly side of intersection of Apple Street and Crouch Street	149-330-06	CC-7-05	C	1.97	Loma Alta													
L	Margulis Single Family Residence	1621 S. Pacific St.	153-091-09-00	RC-15-06	R	0.16	Loma Alta						1							
L	Margulis Single Family Residence	1623 S. Pacific St.	153-091-09-00	RC-14-06	R	0.16	Loma Alta													
L	Martin Single Family Residence	6638 Morro Heights Road	122-170-11-00	ADP-12-04	R		San Luis Rey											1		
L	Miljkovic	Single family residence	165-062-12	P-15-05	R	0.58	Buena Vista													
L	Mission Animal & Bird Hospital	655 Benet Rd.	145-030-49	ADP-5-08	C	1.25	San Luis Rey													
L	Mission Wells HOA Single Family Homes	Franciscan Way			R		San Luis Rey								3					
L	Mizukami	Single family residence		P-13-99	R	8	Loma Alta													
L	MJK Oceanside	1444 Mssion Ave	148-143-17	ADP-14-04	C	0.25	Loma Alta													
L	Montego/Sam Oceanside 1 Condominium	Bounded by Sportsfisher Dr., and N. Pacific St. to the SW	149-071-06 & 07	T-201-05	R	0.33	San Luis Rey										1			1
L	Morro Hills Golf Course and Neighborhoods C,D,E,F,G,H,I,J,K,L, and M	Varies	Varies		R		San Luis Rey										1			
L	Morro Hills Village E	Varies	Varies	T-12-99(1)	R	14.7	San Luis Rey							2				1	1	
L	Moss Residence	1632 S. Pacific St.	153-092-05	P-7-04	R	0.14	Loma Alta													
L	Mossy Nissan	3535 College Blvd.	168-011-17-00	D-1-98	C	1.6	Buena Vista													

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L	Mudge Residence	1721 S. Pacific St.	153-091-45	RC-2-08	R	2.3	Loma Alta													
L	Multiple Residential Condominiums	400-404 South The Strand			R	0.3	Loma Alta										1			
L	Myer's Estates LLC	402 South Myers Street	150-077-12	T-202-04	R	0.14	Loma Alta													
L	Nobel Homes Single Family Homes	Laurel and Ivy rd.	165-630-08 165-630-10	T-3-03	R	4.7	Buena Vista							1				1	1	
L	North River Village Mixed Use	N River Rd & Vandergrift	157-040-42	T-3-04	R/C	7.6	San Luis Rey							1	1					
L	North Tremont Condos	N. Tremont and Surfrider Way		P-202-03	R	0.1	San Luis Rey													
L	Oceanside Pier Resort	333 North Meyers Street	147-075-1,2,3,4,5,6,7	D-200-03	C	1.4	San Luis Rey													
L	Oceanside Terraces Condomoniums	NE side of Cleveland St. btw. Mission Blvd and Seagaze Dr.	147-271-15	T-203-02	R	0.87	San Luis Rey								4			2		
L	Oksnee Single Family Residence	475 Sleeping Indian Rd	122-100-55-00	D-7-03	R	3.72	San Luis Rey							1						
L	Pacific Animal Hospital	2801 Oceanside Blvd	149-271-10-00	ADP-2-08	C	0.355	Loma Alta											1	1	
L	Pacific Blue Residences	620-714 South The Strand	150-260-25, 150-260-33, 150-260-34, 150-260-35, 150-260-36, 150-260-37, 150-260-38, 150-260-39	T-202-07 D-200-07 RC-211-07	R	0.858	Loma Alta													
L	Pacific St. Bridge over the San Luis Rey	Pacific St.	N/A	CIP	M	0.31	San Luis Rey													
L	Pacific Tides Condominiums	1334 South Pacific Street	152-143-09 & 10	P-19-05 D-33-05	R	0.2	Loma Alta													
L	Pacific View Villas	607 N. Pacific St. 609 N. Pacific St.	143-222-206, 143-222-207	P-203-08, D-203-08, RC-204-08	R	0.115	San Luis Rey													
L	Palazzi Di Pacifica Residences	1621-1623 Pacific St.	153-091-09-00	RC-11-05	R	0.18	Loma Alta													
L	Platino Court	4040 Calle Platino	162-503-32	P-2-06	C	5.76	San Luis Rey													
L	Portola	Pier View Way and Horn Street			R	0.35	Buena Vista		9					3			3			1
L	Portola	Pier View Way and Horn Street	147-107-09,14	T-203-04	R	0.35	San Luis Rey													
L	Rancho Del Oro Industrial Park, lot 36, Unit 1	4096 Avenida De La Plata	162-503-01-00	ADP-8-04	C	1.3	Loma Alta													
L	Rancho Vista	San Dimas Ave.	160-020-37	T-16-02	R	16.87	San Luis Rey													
L	Ratkoski Single Family Residence	931, 933 South Pacific St	150-355-09-00	RC-4-05 & RC-14-05	R	0.075	Loma Alta	1												
L	Residential Single Family Homes	Arrowood East			R		San Luis Rey													
L	River Park Complex	425 College Blvd	157-080-54	CIP	M	43	San Luis Rey													
L	Robertson Development	228 Hoover St.	149-064-04	D-10-06	R	0.71	Loma Alta													

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L	Round Table Pizza @ Quarry Creek	3440 Marron Rd.	167-040-21	ADP-3-06	C	0.37	Buena Vista							1						
L	Samber Inc./502 Via Del Monte	502 Via Del Monte	145-030-44	D-11-04	C	1.74	San Luis Rey													
L	Simba International	2654 Vista Pacific Dr.	161-660-40	D-21-02	C	1.5	Loma Alta							1						
L	Single Family Residence	1213 South Pacific Street	152-141-05-00	P-2-08, D-15-03, RC-12-03	R	0.11	Loma Alta	1	1											
L	Single Family Residence	516 South the Strand	150-072-38-00	P-204-07 D-205-07 RC-206-07	R	0.104	Loma Alta										1			
L	Single Family Residence	5951 Las Tunas Drive	122-090-32,-33	ADP-10-03	R	5.2	San Luis Rey	1												
L	Single Family Residence	823 S. Pacfic St.	150-356-21-00	RC-12-07, V-12-07	R	0.075	Loma Alta	1												
L	Single Family Residence	825 S. Pacfic St.	150-356-20	RC-11-07, D-10-07	R	0.1	Loma Alta		1											
L	Single Family Residence	1443 S. Pacific	153-012-48-00	P-14-05, D-18-05, RC-08-05	R	0.72	Loma Alta		1											
L	Single Family Residence	502 S. The Strand	150-260-04	D-210-04 RC-210-04	R	0.2	Loma Alta													
L	Single Family Residence	815 S. Pacific St., Lot 9	150-356-15-00	RC-16-05	R	0.22	Loma Alta													
L	Single Family Residence	815 S. Pacific St., Lot 8	150-356-14-00	RC-15-05	R	0.22	Loma Alta													
L	Single Family Residence	815 S. Pacific St., Lot 10	150-356-16-00	RC-17-05	R	0.22	Loma Alta													
L	Single Family Residence	2137 Willowbrook Drive			R	2.08	San Luis Rey								1		1			
L	St. Cloud Multiple Residential	South of 76 at Via Rancho Rd.	160-571-29	T-5-05	R	34.9	Loma Alta											2		
L	St. Margaret Parish	4300 Oceanside Blvd	162-120-50-00	D-2-04	C	9.3	Loma Alta										2			
L	Taylor Estates Multiple Residential	0000 Sunridge Dr	158-810-01-29	T-2-01	R	30.1	San Luis Ray							5						
L	The Church of Jesus	2080 California St.	151-190-26-00		C	3.69	Loma Alta							1						
L	The Coastal Townlofts Multiple Residential	400 block of Cleveland Street	150-181-1-4	T-202-01	R	1.01	Loma Alta							7				14		
L	The Strand's End Multiple Residential	809 S. Pacific St. 810 Tite Stranel	153-091-46	D-32-02	R	0.22	Loma Alta		2											
L	The Villas at Mission San Luis Rey	4050 Mission Ave.	158-070-39	D-05-07	C,R	8	San Luis Rey													
L	Thunderbird Drive	683 Thunderbird Dr.	157-520-64	T-15-05	R	1.6	San Luis Rey													
L	Trade Winds Multiple Residential	314 N. Cleveland St.	147-088-13 &14	T-201-07 RC-210-07	R	0.23	San Luis Rey													
L	Tri-City Medical Center Parking	4000 Vista Way	166-010-43	ADP-3-05	C	1.48	Buena Vista							1						
L	Vallas-Phase 1	Oceanview Rd.	165-092-18, 20, 21	P-3-01	R	3.52	Buena Vista													

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L	Walgreen's Pharmacy at Market place Del Rio	3752 Mission Ave.	158-390-06	C-13-05	C	21.8	San Luis Rey													
L	Wilson Single Family Residence	77 Saint Malo Beach	851-024-400	RC-13-04	R	0.21	Buena Vista							2	1					
L	Windward Villas Multiple Residential	691 N. Tremont	143-242-12-00	T-202-02	R	0.98	San Luis Rey													
	Mission 76 Office Building	Hwy 76 and Mission	158-101-42	T-4-05	C	2.35	San Luis Rey													
	Ocean Ranch Corporate Center Lot 1	Northwest corner of Oceanside Blvd. and Corporate Center Drive	160-680-16	PLA-12-02	C	5	Loma Alta													
	Pacific Coast Buisness Park-Park B Parcels 13, 14, 15 & 16	South of Windansea Street between Avenida Del Oro and Rocky Point Drive	161-512-06, 161-512-09	P-21-06, D-30-06	C	7.67	Loma Alta													
	Village Knoll/ Shopkeepers Homes	southerly side of intersection of Apple Street and Crouch Street		T-15-02	C,R	2.01	Loma Alta													
	Windstar-Ocean Ranch, lot 19	4800 block, Ocean Ranch Blvd.	160-571-27	P-4-08, D-5-08, G02842	C	14.13	Loma Alta													
UNDER CONSTRUCTION																				
H	Eternal Hills Memorial Park	1999 El Camino Real Oceanside	165-040-02, 165-040-11, 165-040-21, 165-021-01	D-24-06, C-013-99	C	16.85	Loma Alta													
H	New West Petroleum	3401 College Blvd.	168-011-03-00	D-2-03	C	0.68	Buena Vista													
H	San Luis Rey Crossing	Intersection of N. River Rd and College Blvd.	157-040-45-00	D-25-05	R	1.98	San Luis Rey										4		4	
H	VA Clinic	3500-3504 Rancho Del Oro Dr, lots 1,2, 11, & 12	162-600-1-2-11-12	D-9-08, C-19-08	C	7.75	Loma Alta							16				11	11	
M	Faris Professional Building	2180 El Camino Real	165-012-10-00	ADP-8-02	C	0.517	Buena Vista													
M	Pacific Marine Credit Union	Old Grove Rd & College Blvd	161-512-35	D-14-08	C	6.489	Loma Alta													
L	Arrowood Village H+I	Breakaway Dr. and Treetop	122-570-00-00	646?	R	8.5	San Luis Rey													
L	Ocean Heights Estates	Valley Heights Drive	158-260-07	T-13-02, D-28-02, C-37-02 C-38-02 C-39-02	R	11.64	San Luis Rey										2			
L	Ocean Ranch Lot 15	Ocean Ranch Blvd., Lot 11, Buildings 1,2, & 3	190-571-09	D-31-05	I	10.52	Loma Alta													
	Lil Jackson Senior Community	3512 Lake Blvd.	168-012-28-00	P-19-06, D-26-06, C-49-06	R	5.02	Buena Vista													

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			IN PLANNING																	
H	California Funeral Services, INC "Eternal Hills"	1999 El Camino Real Oceanside	165-430-12-00	P-14-02	C	90.6	Loma Alta							7			5	5		
H	Mohsen Oil Gas Co.	3213 Mission Ave.	160-271-43	D-11-03, C-15-03, C-29-03	C	0.51	San Luis Rey													
H	Oceanside Harbor, Harbor Aquatics Center	200 Harbor Dr	Various Locations, 143-010-16-00	RC-2-09	C	1.44	San Luis Rey										9			
H	Pepper Tree	Pepper Tree Lane		T-4-97	R	1.97	San Luis Rey													
H	El Camino Medical Plaza	2160 El Camino Real			C	2	Buena Vista						2	2				2		2
M	Pacific Coast Business Park/ Park "B" Parcels 13,14,15,16	South of Wind and Sea Between Avenida Del oro and Rocky Peina	161-512-06, 161-512-09	P-21-06, D-30-06	I	7.67	Loma Alta													
L	Darwin Knolls	Darwin and Sagewood	159	T-11-02	R	7.7	San Luis Rey							2						
L	Darwn Glen	Darwin and Sagewood	159-430 1 Thru 26	T-8-00	R	11.6	San Luis Rey							2						
L	Essex Rancho Del Oro		162-503-25	D-28-05	I	3.63	Loma Alta													
	217 South Pacific St. Lot 7, 218 South Pacific St. Lot 8	217 South Pacific St. & 218 S. The Strand	150-072-07	P-201-08, D-201-08, RC-202-08, P-202-08, D-202-08, RC-203-08	R	0.1	Loma Alta													
	Amerillum/Ocean Ranch Corporate Center 4+5		In Const	ADP-01-2009	C	2.99	Loma Alta													
	Avocado Highlands Subdivision		165-210-63	T-2-06, C-15-06, C-16-06	R	3	Buena Vista													
	Breanna Estates II	Bounded By SR-76, Willowbrook Drive, Guajome Regional Park and Bobier Drive	159-112-12	T-13-04	R	2	San Luis Rey													
	Club Life Senior Living Center	Between The Depot Road and Hwy 76 at Melrose Drive	157-411-19	T-7-05	R	7.02	San Luis Rey													
	Dixie Village	Dixie St.		T-2-04	R	3.53	Loma Alta													
	El Camino Medical Condo	El Camino Real	165-012-05,-06,-07	P-01-07, D-01-07	C	2	BuenaVista													
	Hawkes Holdings Project	S. El Camino Real	165-430-23	D-23-06	C	3.48	Buena Vista													
	Hi Hope Ranch			T-2-03	R	76	San Luis Rey													
	Jeffries Ranch	S. Mission Ave and east of Del Mar Rd	157-150-47,48,49 & 157-151-06	T-9-99, D-24-99	R	82.5	San Luis Rey													

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Priority Rating	Project Name	Project Address	APN	Permit #	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator
	Liberty Walk Phase 1	Maxson St. and Country Club Ln.	148-292-41	T-11-05, D-22-05, C-44-05	R	1.6	Loma Alta													
	Liberty Walk Phase 2	444 Country Club Lane		T-11-05, D-22-05, C-44-05	R	2.81	Loma Alta													
	Mesa Ridge Tentative Map		146-161-01-60	ZA-2-05	R	12.6	San Luis Rey													
	Mission San Luis Rey Retreat Parking Lot Expansion	4050 Mission Ave.	158-070-42	D-15-07, H-5-07	C	0.95	San Luis Rey													
	Oceanpointe	Southeast corner of State Route 76 and El Camino Real	160-020-50	T-12-04	R	15.8	San Luis Rey													
	Oceanview Plaza, Lots 1,2, & 3		165-24-22	D-1-06, P-1-06, C-1-06, & C-2-06	C, R	1.8	Buena Vista													
	One Mission Ave., Block 18	N. East corner of Myers Street and Pier View Way	147-350-18	T-203-06, D-210-06, RC-212-06	R	1.13	San Luis Rey													
	One Mission Ave., Block 19	N. East corner of Myers Street and Pier View Way	147-350-19	T-203-06, D-210-06, RC-212-06	R	1.14	San Luis Rey													
	One Mission Ave., Block 20	N. East corner of Myers Street and Pier View Way	147-350-20	T-203-06, D-210-06, RC-212-06	R	1.02	San Luis Rey													
	One Mission Ave., Block 21	N. East corner of Myers Street and Pier View Way	147-350-21	T-203-06, D-210-06, RC-212-06	R	1.02	San Luis Rey													
	One Mission Ave., Block 5	N. East corner of Myers Street and Pier View Way	147-161-05	T-203-06, D-210-06, RC-212-06	R	1.05	San Luis Rey													
	Pacific Coast Buisness Park	west of college blvd. between old grove road and suite B	161-512-06, 161-512-09	D-29-06, P-20-06	C	6.67	Loma Alta													
	Pavilion	3480 Mission Ave.	160-270-31, 82,79, 160-280-14, 48-51,53-55 and 160-290-58,60,63 160-270-77	P-7-06, DP 6-06	C	92	San Luis Rey													
	Ralph's Fuel Station	Cannon Rd. and Lake Blvd.	169-011-43-00	C-5-05	C	0.45	Agua Hedionda													

								# of Selected Treatment Control BMPs												
Priority Rating	Project Name	Project Address	APN	Permit #	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator
	Rancho Del Oro Commercial Condominium Project	Avenida Del Oro, North of Oceanside Blvd.	162-502-30	P-1-86	C	0.44	Loma Alta													
	Red Point- Dixie Village	NW. corner of Dixie St. and Grace St.		T-10-04	R	1.82	Loma Alta													
	The Casitas at Spring Creek	End of Depot Rd		T-4-03	R	13.84	San Luis Rey													
	The Strand Condominiums	The Strand between Seagaze Drive and Wisconsin	150-072-15, 16 & 17	T-203-05	R	0.39	Loma Alta													
	Vista Pacific	N. of Highway 78; E side of Rancho Del Oro @ W. terminus of Mira Pacific Drive	165-362-02	T-6-06	R	3.35	Buena Vista													

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Attachement 3-A. Construction Site Inventory
Dry and Wet Season Inspection Totals
Oceanside FY 2009-10

PROJECT NAME	FILE NUMBER	DEVELOPER	PROJECT TYPE	SITE ACREAGE	CONST. START DATE	WDID	THREAT PRIORITY	WATERSHED	LOCATION	ENGINEERING INSPECTIONS		BUILDING INSPECTIONS		STOP WORK NOTICES	Project Status
										Wet Season	Dry Season	Wet Season	Dry Season		
Darwin Glen	T-11-2002	Heritage Pacific Homes	Residential	11.60	12/01/05	937C325609	High	San Luis Rey	Darwin and Sagewood Drive	42	5			yes (FY 08-09)	abandoned
Darwin Knolls	T-11-2002	Heritage Pacific Homes	Residential	5.70	12/02/05	937C325610	High	San Luis Rey	Darwin and Ocean Ridge Court	35	5			yes (FY 08-09)	abandoned
Hi Hope Ranch	T-2-03	Hillcrest Homes	Residential	76.00	4/30/2007	9o-37C322214	High	San Luis Rey	Melrose Drive & Hwy 76	35	6			yes (FY 08-09)	abandoned
Monarch At Rancho del Oro	T-8-2004	K Hounanian	Residential	15.00	01/26/06	937C333976	High	Buena Vista	Vista Way and Rancho del Oro						
North River Village	T-3-04	Taylor Woodrwow Homes, Inc	Residential/Commercial	9.90	11/12/07	937C348354	High	San Luis Rey	North River Road at Vandergrift	27	5				
Ocean Heights	T-13-022565	Shoreline Communities	Residential	11.60	12/13/04	937C330740	High	San Luis Rey	Mission Avenue & Valley Heights Drive	30					
Ocean Ranch Corporate Center, Lot 15	P-04-05	Hamann Constr.	Commercial	10.50	5/15/2007	937C340879	High	Loma Alta	RDO/Ocean Ranch Blvd.	31	5			yes (FY 08-09)	abandoned
Seagate Corporate Center	D-21-04	Segate Corporate Center Lp	Commercial	24.00	02/06/06	937C334863	High	Loma alta	Corporate Center and Avenida de la Plata	32	6				
St. Cloud	T-05-05	John Laing Homes	Residential	3.00	02/03/06	937C16051	High	Loma Alta	Mesa and Old Grove Road	30					abandoned
1925 S. Myers St.	RC-3-06	Mary Spite	Residential	0.07	09/12/07	N/A	Low	Coastal Outlet	1925 S. Myers	0	0				
210 S. Nevads St.	P-13-06	Brian Moore	Residential	0.11	11/19/2007	N/A	Low	Loma Alta	210 S. Nevada St.	0	0				
717 N. Pacific St.	D-205-06	Owner	Residential	0.01	6/15/2009	N/A	Low	Coastal Outlet	717 N. Pacific St.						
Emergency Crib Wall Repair	ADP-16-02	Owner	Commercial	1.60	2/27/2009	N/A	Low	Buena Vista	El Camino						
Howe Barn	E-13-06	Owner	Residential	0.80	6/11/2007	9376346381	Low	San Luis Rey	Sleeping Indian	8					abandoned
Jackson Residence	E-2-08	Owner	Residential	0.25	4/1/2009	9376347403	Low	San Luis Rey	223 Stallion						
Arrowood J - Augusta	T-12-99 (11)	Richmond American Homes	Residential	21.00	09/19/05		Medium	San Luis Rey	Vandegrift Blvd and Granite Place	35		2			
Arrowood M - Bellingham	F-12-99	Richmond American Homes	Residential	19.00	09/19/05	937C336592	Medium	San Luis Rey	Vandegrift Blvd and Granite Place	35		2			
Libby Lake Village	T-5-06	S.D. Habitat for Humanity	Residential	2.00	June 2008	937C348915	Medium	San Luis Rey	Libby Village Way (N. River Road) & Calle Monecito	20	5				
Lot 27 Parcel 2 6147 Indian View Drive	Adp-01-2004	Bellon Construction	Residential	3.97	07/19/06	937L341136	Medium	San Luis Rey	6147 Indian View Drive	7	3				
Pacific Marine Credit Union	D-14-08	Owner	Commercial	6.50	07/28/09	9376353845	Medium	Loma Alta	Rocky Point	25	5	1			
Powers Residence	RC-12-07	Owner	Residential	0.07	07/22/08	N/A	Medium	Coastal Outlet	823 S. Pacific St.						

Attachement 3-A. Construction Site Inventory
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Oceanside FY 2009-10

PROJECT NAME	FILE NUMBER	DEVELOPER	PROJECT TYPE	SITE ACREAGE	CONST. START DATE	WDID	THREAT PRIORITY	WATERSHED	LOCATION	ENGINEERING INSPECTIONS		BUILDING INSPECTIONS		STOP WORK NOTICES	Project Status
										Wet Season	Dry Season	Wet Season	Dry Season		
Union 76 "The Oceansider"	D-19-03	Joe Warsoff	Commercial	0.50	03/10/08	N/A	Medium	Loma Alta Watershed	O'side Blvd. & Vine St.	0	0				
V.A. Clinic	D-9-08	Rockefeller	Commercial	8.42	03/04/09	9376353279	Medium	Loma Alta	RDO/Seagate	32	5				
Wal-Mart	P-2-92	Owner	Commercial	1.50	11/04/08	7376349426	Medium	SLR	College/76						
Projects completed during FY 09-10															
Loma Alta Village	T-1-06	RDL	Commercial	2.00		9376350098	High	Loma Alta	Crouch St and Apple	5	0				Finished
Ocean Market Place & Business Center	D-19-04	Abdul H. Sheikh	Commercial	3.80	12/26/2006		High	Loma Alta	SE Corner of Oceanside Blvd. & Arroyo						Finished
Renaissance Terrace	T-200-01	D. R. Horton	Residential	4.14	04/11/06	937C339535	High	San Luis Rey	North Coast Highway north of Highway 76						Finished
Singh Property	D-8-99	Singh	Commercial	9.50	7/12/2007	9376347403	High	San Luis Rey	Mission and Melrose						Finished
Wilmont Ranch, Unit 4	T-4-91(4)	KB Homes	Residential	75.00	08/01/04	937S302152	High	San Luis Rey	Papagallo & Vandegrift						Finished
607/609 N. Pacific St.	D-203-08	Owner	Residential	0.23		N/A	Low	Coastal Outlet	607/609 N. Pacific Street	30	3				Finished
828 S. Cleveland	RC-20-06	All American Homes	Residential	0.27	09/10/08	N/A	Low	Coastal Outlet	828 S. Cleveland	0	0				Finished
Jack-in-the Box	D-12-01	Owner	Commercial	0.22	09/11/08	N/A	Low	SLR	Canyon/Mission						Finished
Kogan Residence	ADP-11-05	Owner	Residential	0.80	8/9/2007	N/A	Low	San Luis Rey	Sleeping Indian						Finished
Mission Animal Hospital	D-1-08	Carlton Family LLC	Commercial	0.90	3/22/2008	N/A	Low	San Luis Rey	Benet/76						Finished
Pacific Tides	D-33-05	SMC	Residential	0.10			Low	Coastal Outlet	Pacific St. and Witherby	0	0				Finished
1003 So. Tremont	P-12-06	All American Homes & Estates, LLC	Residential	0.20	07/24/07	N/A	Medium	Coastal Outlet	1003 S. Tremont	0	0				Finished
400 S. The Strand	T-200-06	Residencia, LLC	Commercial	0.30	02/08/07	N/A	Medium	Coastal Outlet	400 South The Strand	0	0				Finished
Crystal Sands	T-101-06	502 N. Myers, LLC	Residential	0.31	01/03/08	N/A	Medium	Coastal Outlet	512 N. Myers Street	12	0				Finished
Holiday Inn Hotel	RC-206-04	CJK International Investments, LLC	Commercial	1.24	07/08/07	937C347352	Medium	San Lus Rey/Coastal Outlet	1401 Carmelo	9	1				Finished
The Montego-Condominuims	T-201-05	Sam Oceanside 1, LLC	Residential	0.34	03/17/08	N/A	Medium	Coastal Outlet	504 N. Pacific Sportfisher/Pacific	28	2				Finished

Attachement 3-A. Construction Site Inventory
Dry and Wet Season Inspection Totals
Oceanside FY 2009-10

PROJECT NAME	FILE NUMBER	DEVELOPER	PROJECT TYPE	SITE ACREAGE	CONST. START DATE	WDID	THREAT PRIORITY	WATERSHED	LOCATION	ENGINEERING INSPECTIONS		BUILDING INSPECTIONS		STOP WORK NOTICES	Project Status
										Wet Season	Dry Season	Wet Season	Dry Season		
New Projects															
Adobe Eststes	A-26-05	Vista	Commercial	2.00	03/05/10	937C345696	High	San Luis Rey	Sports Park Way	8	2				
Eternal Hills Memorial Park Expansion	D-24-09	SCI California Services, Inc.	Commercial	15.00	10/15/09	937C353402	High	Loma Alta	1999 El Camino Real	30	5				
Lil Jackson	P-19-06	Benjamin Beckler III, SCPH	Residential	2.20	12/01/09	937C355670	High	Buena Vista	3512 Lake Blvd.	15	5				
Morro Hills H & I	T-12-99/10	RSB Homes Inc.	Residential	6.80	02/01/10	37C356385	High	San Luis Rey		14	3				
Piazza D' Oro Monarch C Rancho Del Oro	T-8-2004		Residential	15.00	01/26/06	937C333976	High	Buena Vista	Vista Way & Rancho Del Oro Rd.	20	5				
San Luis Rey Crossing	D-25-05	North River Investments	Commercial	1.98	10/13/09	937C353687	High	San Luis Rey	North River Rd. and College Blvd.						
Exxon # 44 Remodel	C-36-08	Apro LLC #44	Commercial	0.50	07/31/09	N/A	Low	Buena Vista	3401 College Blvd.	20	5				
Casitas	T-403	Casitas Oceanside One	Residential	0.40	03/19/10	N/A	Low	San Luis Rey		6	2				
Faris Professional Bldg	ADP-08-02	Faris Construction	Commercial	0.50	03/01/06	N/A	Low	Buena Vista	2180 El Camino Real	20	5				
Pacific Animal Hospital	ADP-2-08	Caskey	Commercial	0.36	09/22/09	N/A	Low	Loma Alta	2801 Oceanside Blvd.	24	3	1			
Parcel 9	P-1-86	Allen Dental	Commercial	0.44	10/29/09	N/A	Low	Loma Alta	Avenida del Oro	18	2				
Social Security Adm Bldg Emergency Crib Wall Repair	ADP-16-02	Gary Green Trustee	Commercial	0.50	02/27/09	N/A	Low	Buena Vista	2160 El Camino Real	20	5				
Amerillum	ADP-01-09	ORCC II Lot 15 LLC	Commercial	2.99	02/09/10	37C6356994	Medium	Loma Alta	Ocean Ranch	13	2				
Coca Cola	D-15-04	Coca Cola	Commercial	9.00	03/02/10	N/A	Medium	Loma Alta	Ocean Ranch	6	2				
										Wet Season	Dry Season	Wet Season	Dry Season		
Total number										**722**	**102**	**6**	**0**		
									Total Wet Season	**728**					
									Total Dry Season	**102**					

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Attachment 4-A Municipal Inventory and Inspection information
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc/Facility Name	TYPE	TTWQ	Business Type	HSA	Watershed
230320004	1545	N	HARBOR DRIVE		Harbor Marina and Administration & Small Craft Harbor	Marinas	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321009	1380	N	PACIFIC STREET		Leased Harbor Fuel Dock	Marinas	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321008	0	N	HARBOR DRIVE		Leased Harbor Marina Oceanside Small Craft Harbor	Marinas	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230719039	0		AIRPORT ROAD		Municipal Airports DUPLICATE	Municipal Airport	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230719040	618		AIRPORT ROAD		OCEANSIDE AIRPORT	Municipal Airport	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230622025	0		MAXON STREET		Maxson Landfill Brooks Street and Maxon Street	Municipal Landfills	High	Municipal	904.1 (Loma Alta)	Carlsbad
230621066	2070		MISSION AVENUE		Mission Avenue Landfill	Municipal Landfills	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230523091	0		DIVISION STREET		Americanization School Division Street and Center Street	Other Fixed and Leased Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230522042	300	N	COAST HWY		Civic Center North Coast Highway 300	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321013	1311	N	PACIFIC STREET		Junior Lifeguard Facility	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231712003	0		MISSION AVENUE		Leased Farm Mission Avenue East of Saddle Ridge Road	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231712004	0		MISSION AVENUE		Leased Farm Mission Avenue West of Saddle Ridge Road	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231512001	0	N	SANTA FE DRIVE		Leased Farm San Luis Rey River North of Guajome Park	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230320006	2008	N	HARBOR DRIVE		Leased Hotel: Marina Suites	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230819094	3200		MISSION AVENUE		Leased La Mission	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230727043	2202	S	COAST HWY.		Leased Nature Center	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423064	1		OCEANSIDE PIER		Leased Pier Baitshop Oceanside Pier	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	
230321014	1202	N	PACIFIC STREET		Leased Residential - Marina Del Mar Condominium	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230421042	1200	N	HARBOR DRIVE		Leased Residential - Marina Towers	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423063	100	N	PACIFIC STREET		Leased Residential 100 Block of North Pacific	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423065	217	N	COAST HWY		Leased Theater and Museums 217-221 North Coast Highway	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230421043	928	N	COAST HWY		Leased Visitor Information Center 928 North Coast Highway	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423062	301	N	THE STRAND		Lifeguard Headquarters	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231214009	4691		CALLE JOVEN		SAN DIEGO AUTO AUCTION INC	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230521002	0		SAN DIEGO STREET		Shelter San Diego Street South of Laurel Street	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423067	0		PIER VIEW WAY		Skate Park - Closed Pier View Way; between Pier and Tracks	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423068	217	N	COAST HWY		Sunshine Brooks Theater	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230723103	1963		APPLE STREET		TRANSIENT HOUSING SHELTER	Other Fixed and Leased Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230423066	1		OCEANSIDE PIER		Pier Lifeguard Tower 1 Oceanside Pier	Other Fixed and Leased Facilities	Low	Municipal	903.1 (San Luis Rey)	San Luis Rey
230622026	205		BARNES STREET		PROJECT OZ	Other Fixed and Leased Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
231214008	0		CALLE MONTECITO		Resource Center Calle Montecito at North River Road	Other Fixed and Leased Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230720030	301		JONES ROAD		Leased Oceanside Dog Park	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231515001	5100		ALAMOSA PARK DRIVE		ALAMOSA PARK	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230523090	0		DIVISION STREET		AMERICANIZATION SCHOOL PARK	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230423052	200	N	THE STRAND		Beach Amphitheater	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423053	0	N	THE STRAND		Beach Community Center The Strand North of Pier	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230622021	130		BROOKS STREET		BRROKS STREET POOL	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230626038	0	S	PACIFIC STREET		Buccaneer Beach Pacific Street North of Morse Street	Park and Recreation Facilities	High	Municipal	904.2 (Buena Vista)	Carlsbad
230820017	0		MESA DRIVE		Buddy Todd Park Mesa Drive North of Barnwell Drive	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230727042	2202	S	COAST HWY.		Buena Vista Lagoon Nature Center	Park and Recreation Facilities	High	Municipal	904.2 (Buena Vista)	Carlsbad
230420010	770		CAPISTRANO DRIVE		CAPISTRANO PARK	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230822031	0		SKYLARK DRIVE		Carrasco Park Skylark Drive West of Partridge Lane	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230623002	0		DIVISION STREET		CEASAR CHAVEZ PARK West of Garfield	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230623003	2323		GREENBRIER DRIVE		Center City Golf Course	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
231619069	0		LEE DRIVE		Closed Ball Field Lee Drive South of City Operations Center	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230522040	0		CIVIC CENTER DRIVE		Community Garden Civic Center Drive and Weitzel Street	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey

Attachment 4-A Municipal Inventory and Inspection information
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc/Facility Name	TYPE	TTWQ	Business Type	HSA	Watershed
230623004	0		GARDFIELD AVENUE		Crown Heights Community Garden Division at Garfield	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
231121001	3302		SENIOR CETER DRIVE		EL CORAZON SENIOR CENTER	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	
230917019	0		FIRESIDE DRIVE		Fireside Park Fireside Drive and Parkside Drive	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231116003	0		PEYRI DRIVE		Heritage Park Peyri Drive North of Old San Luis Rey Mission	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231116004	0		MISSION AVENUE		Ivey Ranch Park Mission Avenue East of Rancho Del Oro	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230521001	709		SAN DIEGO STREET		Joe Balderrama Community Center	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231423006	2855		CEDAR ROAD		JOHN LANDES COMMUNITY PARK	Park and Recreation Facilities	High	Municipal	904.2 (Buena Vista)	
231316001	0		SHERBOURNE DRIVE		Joseph Sepulveda Park Marvin Street East of Oxford Place	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
231727015	0		LAKE BLVD.		Lake Park Lake Blvd East of Windsor Road	Park and Recreation Facilities	High	Municipal	904.3 (Agua Hedionda)	Carlsbad
231213003	4700	N	RIVER ROAD		Libby Lake Community Center	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231213002	504		CALLE MONTECITO		LIBBY LAKE PARK	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230627030	0		CASSIDY STREET		LION'S CLUB PARK West of Broadway	Park and Recreation Facilities	High	Municipal	904.2 (Buena Vista)	Carlsbad
231309001	0		TEAL WAY		Luisiano Park Teal Way and Douglas	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231313010	425		COLLEGE BLVD.		Mance Buchanon Park	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230816001	0		RIVERTREE DRIVE		Marlado Park West of Rivertree Drive North of Southwood Drive	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230625048	1400		MARSHALL STREET		Marshall Street Park Lucky Street and West of Marshall	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230625047	1404		MARSHALL STREET		Marshall Street Pool Marshall Street - North End	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
231412001	5306	N	RIVER ROAD		Melba Bishop Park	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231116005	0		PEYRI DRIVE		Mission Wells Historic Lot Peyri Road	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231219001	0		MESA DRIVE		MLK Jr Park East of Ivey Ranch Road	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
231112002	0		DOUGLAS DRIVE		Municipal Golf Course Douglas Drive West of Foxwood Drive	Park and Recreation Facilities	High	Municipal	904.2 (Buena Vista)	Carlsbad
231626001	0		LAKE BLVD.		Oak Riparian Park Lake Blvd and Ridge Road	Park and Recreation Facilities	High	Municipal	904.3 (Agua Hedionda)	Carlsbad
230423054	1		OCEANSIDE PIER		Oceanside Pier	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423055	0		PACIFIC STREET		Pacific Street Linear Park Wisconsin to Surfrider	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	
231222001	0		VISTA DEL ORO		Palisades Park Rancho Del Oro North of Vista Del Oro	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
231418002	0		AVENIDA EMPRESSA		RANCHO DEL ORO PARK East of College Blvd	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230622022	0		MAXON STREET		Ron Ortega Recreation Park Brooks Street and Maxon Street	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230622023	455		COUNTRY CLUB LANE		SENIOR CENTER	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230726007			STEWART STREET		South Oceanside Tennis Courts	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231713001	0		OLD RANCH ROAD		Spring Creek Park Old Ranch Road West of Melrose	Park and Recreation Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423056	200	S	THE STRAND		Strand Beach Park	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230424001	500	N	THE STRAND		Tyson Street Park	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230622024	0		MISSION AVENUE		Women's Club Park Mission Avenue between San Diego and Brooks	Park and Recreation Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230423061	122	N	THE STRAND		Beach Lock-Up	Police and Fire Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230422057	602		CIVIC CENTER DRIVE		CODE ENFORCEMENT	Police and Fire Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230626041	1640	S	DITMAR STREET		FIRE STATION 2	Police and Fire Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230522041	714		PIERVIEW WAY		Fire Station No. 1	Police and Fire Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230922061	3101		OCEANSIDE BLVD.		Fire Station No. 3	Police and Fire Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
231313011	4841	N	RIVER ROAD		Fire Station No. 5	Police and Fire Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231515002	895	N	SANTA FE DRIVE		Fire Station No. 6	Police and Fire Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230720034	110		JONES ROAD		Fire Training Facility	Police and Fire Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230819093	3350		MISSION AVENUE		Fire Station No. 7	Police and Fire Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231426001	3990		LAKE BLVD.		Fire Sta. No. 4	Police and Fire Facilities	High	Municipal	904.3 (Agua Hedionda)	Carlsbad
231017091	3855		MISSION AVENUE		Police Department	Police and Fire Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231013002	3950	N	RIVER ROAD		Police Shooting Range	Police and Fire Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230621067	1617		MISSION AVENUE		Police Station Mission Avenue West of Barnes Street	Police and Fire Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad

Attachment 4-A Municipal Inventory and Inspection information
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc/Facility Name	TYPE	TTWQ	Business Type	HSA	Watershed
231618001	0		PEACOCK BLVD.		Guajome Reservoir Northeast of Temple Heights	Potable Water Treatment Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
231224001	0				Henie Hills Reservoir Mira Costa College	Potable Water Treatment Facilities	High	Municipal	904.2 (Buena Vista)	Carlsbad
231118001	0		VIA RANCHO		Heritage Reservoir East of Rancho Del Oro Drive	Potable Water Treatment Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231604001	0		WILSHIRE ROAD		Morro Hills Reservoir Southeast of Sleeping Industry	Potable Water Treatment Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231409001	0		VANDEGRIFT BLVD		Pilgrim Reservoir South of Camp Pendleton	Potable Water Treatment Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230917020	0		FIRESIDE DRIVE		Reverse Osmosis Facility Fireside Drive South of Parkside Drive	Potable Water Treatment Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231627001	0		NIGHTHAWK COURT		SF Peak Reservoir Nighthawk Court West of Nighthawk Way	Potable Water Treatment Facilities	High	Municipal	904.3 (Agua Hedionda)	Carlsbad
231516001	0		PASEO HERMOSA		Talone Reservoir Paseo Hermosa North of Panorama Ridge Way	Potable Water Treatment Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230720031	0		JONES ROAD		Water Facility Jones Road North of San Luis Rey Road	Potable Water Treatment Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231605001	0		SLEEPING INDIAN ROAD		Water Pressure Station Sleeping Indiant	Potable Water Treatment Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
232615001	0		TWIN OAKS VALLE ROAD		Weese Water Treatment Plant Twin Oaks Valley Road	Potable Water Treatment Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230717001	0				Wire Mountain Reservoir and Vacant Tulley Canyon	Potable Water Treatment Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230923001	0		FIRE MOUNTAIN DRIVE		Fire Mountain Reservoir and East of Yucca	Potable Water Treatment Facilities	Low	Municipal	904.1 (Loma Alta)	Carlsbad
231619068	0		OCEANSIDE BLVD.		City Operations Center Oceanside Boulevard West of Melrose	Public Works Operations Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230321007	1300	N	PACIFIC STREET		Lot F	Public Works Operations Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230421044	1304	S	HARBOR DRIVE		Lot 1	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321020	1200	N	PACIFIC STREET		Lot 10	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321021	1300	N	PACIFIC STREET		Lot 11A	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321022	1300	N	PACIFIC STREET		Lot 11B	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230320007	1900	N	HARBOR DRIVE		Lot 2	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230422058	0	N	MYERS STREET		Lot 20 Myers, North of Neptune	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230422059	0	N	MYERS STREET		Lot 21 Myers, North of Windward	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230422060	0	S	CLEVELAND STREET		LOT 22 South of Windward	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423073	0	N	CLEVELAND STREET		LOT 23 North of Pier View Way	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423074	0		MYERS STREET		Lot 24 Myers, North of Mission	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423075	0		MYERS STREET		Lot 25 Myers, North of Seagaze	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230523092	0	N	MYERS STREET		Lot 26 Myers, North of Tyson	Roads, Streets, Highways and Parking Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230524084	0	S	MYERS STREET		Lot 27 Myers, South of Minnesota	Roads, Streets, Highways and Parking Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230423076	0	N	THE STRAND		Lot 28 The Strand, North of Pier View Way	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423077	0	N	THE STRAND		Lot 29 The Strand at the Pier	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230319003	1800	N	HARBOR DRIVE		Lot 3	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423078	0	N	THE STRAND		Lot 30 The Strand, North of Seagaze	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230524085	0	N	THE STRAND		Lot 31 The Strand, North of Wisconsin Avenue	Roads, Streets, Highways and Parking Facilities	High	Municipal	904.1 (Loma Alta)	Carlsbad
230423079	0	N	CLEVELAND STREET		LOT 32 North of Mission Avenue	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423080	0		PIER VIEW WAY		Lot 34 Pier East of Tremont Street	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230422061	0		CIVIC CENTER DRIVE		LOT 35 East of Tremont Street	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230523093	0	N	DITMAR STREET		Lot 36 Ditmar Street, North of Seagaze Drive	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321015	1300	N	HARBOR DRIVE		Lot 4	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321016	1300	N	HARBOR DRIVE		Lot 5	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321017	200	N	HARBOR DRIVE		Lot 6	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321018	200	N	HARBOR DRIVE		Lot 7	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230421045	300	S	HARBOR DRIVE		Lot 8 & 8a	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321019	300	N	HARBOR DRIVE		Lot 9	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423069	0	N	THE STRAND		Lot A The Strand and Mission	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423070	0	N	THE STRAND		Lot B 200 North the Strand	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423071	0	N	THE STRAND		Lot C Lifeguard Headquarters	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey

Attachment 4-A Municipal Inventory and Inspection information
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc/Facility Name	TYPE	TTWQ	Business Type	HSA	Watershed
230423072	0	N	THE STRAND		Lot D Beach Community Center	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230522043	300	N	COAST HWY.		Lot E	Roads, Streets, Highways and Parking Facilities	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423057	200	N	THE STRAND		Bandstand Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230926001	2501		HAYMAR ROAD		Buena Vista (New) Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.2 (Buena Vista)	Carlsbad
230926002	2501		HAYMAR ROAD		Buena Vista (Old) Sewer Lift	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.2 (Buena Vista)	Carlsbad
231527001	3636		SKYHAVEN LANE		Calaveras Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.3 (Agua Hedionda)	Carlsbad
230320005	200	N	HARBOR DRIVE		Harbor 1 Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230319002	1830	N	HARBOR DRIVE		Harbor 2 Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321010	1325	N	HARBOR DRIVE		Harbor 3 Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230421040	283	S	HARBOR DRIVE		Harbor 4 Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321011	1200	N	PACIFIC STREET		Harbor 5 Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230321012	1384	N	PACIFIC STREET		Harbor 6 Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230626039	1330	S	TAIT STREET		La Salina Treatment Plant	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.1 (Loma Alta)	Carlsbad
231626002	4700 1/2		LAKE BLVD.		Lake Blvd. Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231629001	4706		CANNON ROAD		LEISURE VILLAGE 1 SEWER LIFT STATION	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.3 (Agua Hedionda)	Carlsbad
231630001	4933		LEISURE VILLAGE DRIVE		Leisure Village 2 Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.3 (Agua Hedionda)	Carlsbad
230520001	1261		LORETTA STREET		Loretta Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230818001	401		FOUSSAT ROAD		Man Lado Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230918022	3476		MISSION AVENUE		Mission Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230422056	997		BREAKWATER WAY		NINTH STREET SEWER LIFT STATION	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230421041	304	S	HARBOR DRIVE		North Bridge Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231014017	3930	N	RIVER ROAD		North Valley Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230624006	1664		OCEANSIDE BLVD.		Oceanside Boulevard Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.1 (Loma Alta)	Carlsbad
230720032	110		JONES ROAD		Old Roymar Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231212001	4991		MACARIO ROAD		Pacifica Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423058	1		OCEANSIDE PIER		Pier Baitshop Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423059	1		OCEANSIDE PIER		Pier Restroom Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231111001	855		DOUGLAS DRIVE		Pilgrim Creek Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231211001	703		ROJA STREER		Roja Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230720033	110		JONES ROAD		Roymar Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230423060	1		OCEANSIDE PIER		Ruby's Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
230728001	52		SAINT MALO BEACH		Saint Malo Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.2 (Buena Vista)	Carlsbad
231013001	3950	N	RIVER ROAD		San Luis Rey Treatment Plant	Wastewater Treatment Facilities and Lift Stations	High	Municipal	903.1 (San Luis Rey)	San Luis Rey
231325046	0				Sewer Lift Station Hwy 78 West of South Vista Way	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.2 (Buena Vista)	Carlsbad
231627002	0		NIGHTHAWK WAY		Sewer Lift Station Nighthawk Way (South Ridge Trails 11)	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.3 (Agua Hedionda)	Carlsbad
231525001	3521		SKYHAVEN LANE		Skyhaven Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.3 (Agua Hedionda)	Carlsbad
230626040	1330	S	TAIT STREET		South Pacific Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.1 (Loma Alta)	Carlsbad
231729001	4900		CANNON ROAD		SOUTHRIDGE TRAILS SEWER LIFT STATION	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.3 (Agua Hedionda)	Carlsbad
230524083	715	S	THE STRAND		Wisconsin Sewer Lift Station	Wastewater Treatment Facilities and Lift Stations	High	Municipal	904.1 (Loma Alta)	Carlsbad

State Water Resources Control Board

Linda S. Adams
Secretary for
Environmental Protection

Division of Water Quality
1001 I Street • Sacramento, California 95814 • (916) 341-5538
Mailing Address: P.O. Box 1977 • Sacramento, California • 95812-1977
Fax (916) 341-5543 • http://www.waterboards.ca.gov

Arnold Schwarzenegger
Governor

To Interested Parties:

2009-2010 ANNUAL REPORT ANNUAL REPORT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Storm Water Annual Reporting Module (SWARM) allows an individual discharger to file and submit their Annual Report electronically to the Regional Water Board. Currently SWARM is not a mandatory reporting method, but we encourage all dischargers to register and use SWARM.

To register to use SWARM please visit:
http://www.waterboards.ca.gov/water_issues/programs/ciwqs/chc_swarm.shtml
and download the SWARM registration form and instructions. Please fill out the form and mail it back to: SWARM Registration, P.O. Box 1977, Sacramento, CA 95812. Once a complete registration form is received, a login name and password will be emailed to you.

For SWARM registration questions or information please contact the SWARM help center at (916) 341-5536 or by email at smarts@waterboards.ca.gov.

To receive email updates on Storm Water Industrial permitting issues, please sign up at
http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml
The Storm Water program currently maintains five email lists:

- Storm Water Database Issues
- Storm Water Construction Permitting Issues
- Storm Water Industrial Permitting Issues
- Storm Water Municipal Permitting Issues
- Sustainable Development

For all other permitting questions please contact the Storm Water Section at (916) 341-5538 or by email at stormwater@waterboards.ca.gov.

Sincerely,

Storm Water Section

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
2009-2010 ANNUAL REPORT
FOR STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2009 through June 30, 2010

An Annual Report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers, and e-mail addresses of the Regional Board contacts, as well as the Regional Board Offices addresses are indicated below.

REGIONAL BOARD INFORMATION:

San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Contact: Tony Felix
Tel: (858) 636-3134
Email: Tfelix@waterboards.ca.gov

GENERAL INFORMATION

A. Facility Information:

Oceanside City Maxson Landfill
Brooks St And Maxson St
Oceanside, CA 92054
WDID No: 9 37I005695

Facility Contact: Bryan Forward
Email:
Phone: 760-435-5193

SIC Code(s):
4953 Refuse Systems

B. Facility Operator Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Operator Contact: Bryan Forward
Email:
Phone: 760-435-5111

C. Facility Billing Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Billing Contact: Bryan Forward
Email:
Phone: 760-435-5111

Additional Table D Parameters: Fe
(Hazardous Waste Facilities, see Table D, Sector K of the Permit for Additional Parameters)

2009-2010

ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

   ☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

   i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

   ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

   iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

   iv. ☐ Received Regional Board Certification Certification Date: _____

   v. ☐ Received Local Agency Certification Cetification Date: _____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

   ☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 0 If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

   ☐ **YES** ☒ **NO, attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? 1

E-2. Sampling and Analysis

First storm event of the season that produced a discharge occurred during non working hours.

4. For each storm event sampled, did you collect and analyze a sample from each of the facilitys' storm water discharge locations? ☒ YES, go to Item E.6 ☐ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☐ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated _____

6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☐ YES ☒ NO, **attach explanation**

8. Were there any discharges of stormwater that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☒ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

    _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

    _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

    _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler.
- Parameters tested.
- Name of analytical testing laboratory.
- Discharge location identification.
- Testing results.
- Test methods used.
- Test detection limits.
- Date of testing.
- Copies of the laboratory analytical results.

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**
Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

[x] **YES** [ ] **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers**. Indicate "N/A" for quarters without any authorized non-storm water discharges.

July -September	[x] **YES**	[ ] **NO**	[ ] **N/A**	October-December	[x] **YES**	[ ] **NO**	[ ] **N/A**
January-March	[x] **YES**	[ ] **NO**	[ ] **N/A**	April-June	[x] **YES**	[ ] **NO**	[ ] **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information.

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**
Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July -September	[x] **YES**	[ ] **NO**	October-December	[x] **YES**	[ ] **NO**
January-March	[x] **YES**	[ ] **NO**	April-June	[x] **YES**	[ ] **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

[x] **YES** [ ] **NO** Go to item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

[ ] **YES** [x] **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information.

i. name of each unauthorized non-storm water discharge.
ii. date and time of observation.
iii. source and location of each unauthorized non-storm water discharge.
iv. characteristics of the discharge at its source and impacted drainage area/discharge location.
v. name, title, and signature of observer.
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers**. Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information.

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed.
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occured during the last year.
   - outdoor wash and rinse areas.
   - process/manufacturing areas.
   - loading, unloading, and transfer areas.
   - waste storage/disposal areas.
   - dust/particulate generating areas.
   - erosion areas.
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map, is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- Sampling and Analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken.

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

E-6. Sampling and Analysis

No samples were collected during the reporting period of 09-10. All storm water discharges occurred before or after working hours and were not preceded by 3 working days.

E-7. Sampling and Analysis

No samples were collected during the reporting period of 09-10. All storm water discharges occurred before or after working hours and were not preceded by 3 working days.

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☐ YES	☒ NO	☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☐ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Bryan Forward

Signature: _____ Date: _____

Title: _____

DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

The Industrial Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least four parameters. These are pH, Total Suspended Solids (TSS), Specific Conductance (SC),and Total Organic Carbon (TOC). Oil and Grease (O&G) may be substituted for TOC. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge as a result of industrial activity and analytical parameters listed in Table D of the General Permit. There are no numeric limitations for the parameters you test for.

The four parameters which the General Permit requires to be tested are considered *indicator* parameters. In other words, regardless of what type of facility you operate, these parameters are nonspecific and general enough to usually provide some indication whether pollutants are present in your storm water discharge. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and a alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or industrial activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure of the undissolved solids that are present in your storm water discharge. Sources of TSS include sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Specific Conductance (SC) is a numerical expression of the ability of the water to carry an electric current. SC can be used to assess the degree of mineralization, salinity, or estimate the total dissolved solids concentration of a water sample. Because of air pollution, most rain water has a SC a little above zero. A high SC could affect the usability of waters for drinking, irrigation, and other commercial or industrial use.

Total Organic Carbon (TOC) is a measure of the total organic matter present in water. (All organic matter contains carbon) This test is sensitive and able to detect small concentrations of organic matter. Organic matter is naturally occurring in animals, plants, and man. Organic matter may also be man made (so called synthetic organics). Synthetic organics include pesticides, fuels, solvents, and paints. Natural organic matter utilizes the oxygen in a receiving water to biodegrade. Too much organic matter could place a significant oxygen demand on the water, and possibly impact its quality. Synthetic organics either do not biodegrade or biodegrade very slowly. Synthetic organics are a source of toxic chemicals that can have adverse affects at very low concentrations. Some of these chemicals bioaccumulate in aquatic life. If your levels of TOC are high, you should evaluate all sources of natural or synthetic organics you may use at your site.

Oil and Grease (O&G) is a measure of the amount of oil and grease present in your storm water discharge. At very low concentrations, O&G can cause a sheen (that floating "rainbow") on the surface of water (1 qt. of oil can pollute 250,000 gallons of water). O&G can adversely affect aquatic life and create unsightly floating material and film on water, thus making it undrinkable. Sources of O&G include maintenance shops, vehicles, machines and roadways.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at http://www.swrcb.ca.gov. It is contained in the Sampling and Analysis Reduction Certification.

See Storm Water Contacts at

http://www.waterboards.ca.gov/water_issues/programs/stormwater/contact.shtml

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as necessar

NAME OF PERSON COLLECTING SAMPLE(S): C Brust **TITLE:** Maint. Specialist **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHER		
			pH	TSS	SC	O&G	TOC			
S. End of Division St	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Car

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as necessar

NAME OF PERSON COLLECTING SAMPLE(S): C Brust **TITLE:** Maint. Specialist **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHER		
			pH	TSS	SC	O&G	TOC			
S. End of Division St	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Car

- Observe each authorized NSWD source, impacted drainage area, and discharge location.
- Make additional copies of this form as necessa

QUARTER: **JULY-SEPT.** DATE: 7-31-09	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **OCT.-DEC.** DATE: 10-30-09	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **JAN.-MARCH** DATE: *1-29-10*	**Observers Name:** *C Brust* **Title:** *Maint. Specialist* **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **APRIL-JUNE** DATE: 5-28-10	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐

DATE/TIME OF OBSERVATION	SOURCE AND LOCATION OF AUTHORIZED NSWD EXAMPLE: Air conditioner Units on Building C	AUTHORIZED NSWD EXAMPLE: Air conditioner condensate	CHARACTERISTICS Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		BMPs IMPL
			At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
7-31-09 10;30 ☒ AM ☐ PM	Brook St. Swim Center	Back washing of pool filters	Water is clear in color,no odor,sheen or floatables	Discharge is clear	Place straw prevent con
10-30-09 10;00 ☒ AM ☐ PM	Brook St. Swim Center	Back washing of pool filters	Water is clear in color,no odor,sheen or floatables	Discharge is clear	Place straw prevent con
1-29-10 10;30 ☒ AM ☐ PM	Brook St. Swim Center	Back washing of pool filters	Water is clear in color,no odor,sheen or floatables	Discharge is clear	Place straw prevent con
5-28-10 10;00 ☒ AM ☐ PM	Brook St. Swim Center	Back washing of pool filters	Water is clear in color,no odor,sheen or floatables	Discharge is clear	Place straw prevent con
_____ ____ ☐ AM ☐ PM					

Section D (pages 5-6) of the General Permit.

- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accord with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** **DATE/TIME OF OBSERVATIONS** 7-31-09 10 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** 10-30-09 9;45 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** 1-29-10 9;30 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** 5-28-10 11 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE

(FROM REVERSE SIDE)	NSWD EXAMPLE: Vehicle Wash Water	OF UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.		UN PI NS
			AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION	
_____ ____ ☐ AM ☐ PM			NA		
_____ ____ ☐ AM ☐ PM			NA		
_____ ____ ☐ AM ☐ PM			NA		
_____ ____ ☐ AM ☐ PM			NA		

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

Observation Date: October 30 2009	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
Observers Name: C Brust	Observation Time	9 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
Title: Maint. Specialist	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature:	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: November 27 2009	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
Observers Name: C Brust	Observation Time	9;45 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
Title: Maint. Specialist	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature:	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: December 28 2009	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
Observers Name: C Brust	Observation Time	10;00 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
Title: Maint. Specialist	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature:	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: January 29 2010	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
Observers Name: C Brust	Observation Time	9;30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
Title: Maint. Specialist	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
Signature:	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO

(From Reverse Side)	EXAMPLE: Discharge from material storage Area #2	Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.
_____ ____ ☐ AM ☐ PM		NA	
_____ ____ ☐ AM ☐ PM		NA	
_____ ____ ☐ AM ☐ PM		NA	
_____ ____ ☐ AM ☐ PM		NA	
_____ ____ ☐ AM ☐ PM		NA	

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

Observation Date: February 26 2010 Observers Name: C Brust Title: Maint Specialist Signature:	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
	Observation Time	10;30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: March 26 2010 Observers Name: C Brust Title: Maint Specialist Signature:	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
	Observation Time	9 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: April 30 2010 Observers Name: C Brust Title: Maint Specialist Signature:	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
	Observation Time	10;30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: May 28 2010 Observers Name: C Brust Title: Maint Specialist Signature:	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
	Observation Time	10 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	0
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO

	EXAMPLE: Discharge from material storage Area #2	Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.	
_____ ☐ AM ☐ PM		NA		
_____ ☐ AM ☐ PM		NA		
_____ ☐ AM ☐ PM		NA		
_____ ☐ AM ☐ PM		NA		
_____ ☐ AM ☐ PM		NA		

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	De co
Landfill Run-Off	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☒NO	If yes, to either question, complete the next two columns of this form		Cont allow
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	De co
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	De co
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	De co
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐ **YES** ☐ **NO**	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**D co**
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ **YES** ☐ **NO**			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐ **YES** ☐ **NO**	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**D co**
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ **YES** ☐ **NO**			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐ **YES** ☐ **NO**	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**D co**
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ **YES** ☐ **NO**			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐ **YES** ☐ **NO**	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**D co**
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ **YES** ☐ **NO**			

State Water Resources Control Board

Linda S. Adams
Secretary for
Environmental Protection

Division of Water Quality
1001 I Street • Sacramento, California 95814 • (916) 341-5538
Mailing Address: P.O. Box 1977 • Sacramento, California • 95812-1977
Fax (916) 341-5543 • http://www.waterboards.ca.gov

Arnold Schwarzenegger
Governor

To Interested Parties:

2009-2010 ANNUAL REPORT ANNUAL REPORT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Storm Water Annual Reporting Module (SWARM) allows an individual discharger to file and submit their Annual Report electronically to the Regional Water Board. Currently SWARM is not a mandatory reporting method, but we encourage all dischargers to register and use SWARM.

To register to use SWARM please visit:
http://www.waterboards.ca.gov/water_issues/programs/ciwqs/chc_swarm.shtml
and download the SWARM registration form and instructions. Please fill out the form and mail it back to: SWARM Registration, P.O. Box 1977, Sacramento, CA 95812. Once a complete registration form is received, a login name and password will be emailed to you.

For SWARM registration questions or information please contact the SWARM help center at (916) 341-5536 or by email at smarts@waterboards.ca.gov.

To receive email updates on Storm Water Industrial permitting issues, please sign up at
http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml
The Storm Water program currently maintains five email lists:

- Storm Water Database Issues
- Storm Water Construction Permitting Issues
- Storm Water Industrial Permitting Issues
- Storm Water Municipal Permitting Issues
- Sustainable Development

For all other permitting questions please contact the Storm Water Section at (916) 341-5538 or by email at stormwater@waterboards.ca.gov.

Sincerely,

Storm Water Section

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
2009-2010 ANNUAL REPORT
FOR STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2009 through June 30, 2010

An Annual Report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers, and e-mail addresses of the Regional Board contacts, as well as the Regional Board Offices addresses are indicated below.

REGIONAL BOARD INFORMATION:

San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Contact: Tony Felix
Tel: (858) 636-3134
Email: Tfelix@waterboards.ca.gov

GENERAL INFORMATION

A. Facility Information:

Oceanside City Mission Avenue
2070 Mission Ave
Oceanside, CA 92054
WDID No: 9 37I005696

Facility Contact: Bryan Forward
Email:
Phone: 760-435-5193

SIC Code(s):
4953 Refuse Systems

B. Facility Operator Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Operator Contact: Bryan Forward
Email:
Phone: 760-435-5111

C. Facility Billing Information:

Oceanside PWD
300 N Coast Hwy
Oceanside, CA 92054

Billing Contact: Bryan Forward
Email:
Phone: 760-435-5111

Additional Table D Parameters: Fe
(Hazardous Waste Facilities, see Table D, Sector K of the Permit for Additional Parameters)

2009-2010

ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

   ☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

   i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

   ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

   iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

   iv. ☐ Received Regional Board Certification Certification Date: _____

   v. ☐ Received Local Agency Certification Cetification Date: _____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

   ☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 0 If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

   ☐ **YES** ☒ **NO, attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? 1

E-2. Sampling and Analysis

First storm event of the season that produced a discharge occurred during non working hours.

4. For each storm event sampled, did you collect and analyze a sample from each of the facilitys' storm water discharge locations? ☒ YES, go to Item E.6 ☐ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☐ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated _____

6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☐ YES ☒ NO, **attach explanation**

8. Were there any discharges of stormwater that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☒ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

       _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

       _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

       _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler.
- Parameters tested.
- Name of analytical testing laboratory.
- Discharge location identification.
- Testing results.
- Test methods used.
- Test detection limits.
- Date of testing.
- Copies of the laboratory analytical results.

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**
Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

[x] **YES** [ ] **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers**. Indicate "N/A" for quarters without any authorized non-storm water discharges.

July -September	[x] **YES**	[ ] **NO**	[ ] **N/A**	October-December	[x] **YES**	[ ] **NO**	[ ] **N/A**
January-March	[x] **YES**	[ ] **NO**	[ ] **N/A**	April-June	[x] **YES**	[ ] **NO**	[ ] **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information.

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**
Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July -September	[x] **YES**	[ ] **NO**	October-December	[x] **YES**	[ ] **NO**
January-March	[x] **YES**	[ ] **NO**	April-June	[x] **YES**	[ ] **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

[x] **YES** [ ] **NO** Go to item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

[ ] **YES** [x] **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information.

i. name of each unauthorized non-storm water discharge.
ii. date and time of observation.
iii. source and location of each unauthorized non-storm water discharge.
iv. characteristics of the discharge at its source and impacted drainage area/discharge location.
v. name, title, and signature of observer.
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers**. Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information.

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed.
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occured during the last year.
   - outdoor wash and rinse areas.
   - process/manufacturing areas.
   - loading, unloading, and transfer areas.
   - waste storage/disposal areas.
   - dust/particulate generating areas.
   - erosion areas.
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map, is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- Sampling and Analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken.

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

E-6. Sampling and Analysis

No samples were collected during the reporting period of 09-10. All storm water discharges occurred before or after working hours and were not preceded by 3 working days.

E-7. Sampling and Analysis

No samples were collected during the reporting period of 09-10. All storm water discharges occurred before or after working hours and were not preceded by 3 working days.

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☐ YES	☒ NO	☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☐ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Bryan Forward

Signature: _____ Date: _____

Title: _____

DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

The Industrial Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least four parameters. These are pH, Total Suspended Solids (TSS), Specific Conductance (SC),and Total Organic Carbon (TOC). Oil and Grease (O&G) may be substituted for TOC. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge as a result of industrial activity and analytical parameters listed in Table D of the General Permit. There are no numeric limitations for the parameters you test for.

The four parameters which the General Permit requires to be tested are considered *indicator* parameters. In other words, regardless of what type of facility you operate, these parameters are nonspecific and general enough to usually provide some indication whether pollutants are present in your storm water discharge. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and a alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or industrial activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure of the undissolved solids that are present in your storm water discharge. Sources of TSS include sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Specific Conductance (SC) is a numerical expression of the ability of the water to carry an electric current. SC can be used to assess the degree of mineralization, salinity, or estimate the total dissolved solids concentration of a water sample. Because of air pollution, most rain water has a SC a little above zero. A high SC could affect the usability of waters for drinking, irrigation, and other commercial or industrial use.

Total Organic Carbon (TOC) is a measure of the total organic matter present in water. (All organic matter contains carbon) This test is sensitive and able to detect small concentrations of organic matter. Organic matter is naturally occurring in animals, plants, and man. Organic matter may also be man made (so called synthetic organics). Synthetic organics include pesticides, fuels, solvents, and paints. Natural organic matter utilizes the oxygen in a receiving water to biodegrade. Too much organic matter could place a significant oxygen demand on the water, and possibly impact its quality. Synthetic organics either do not biodegrade or biodegrade very slowly. Synthetic organics are a source of toxic chemicals that can have adverse affects at very low concentrations. Some of these chemicals bioaccumulate in aquatic life. If your levels of TOC are high, you should evaluate all sources of natural or synthetic organics you may use at your site.

Oil and Grease (O&G) is a measure of the amount of oil and grease present in your storm water discharge. At very low concentrations, O&G can cause a sheen (that floating "rainbow") on the surface of water (1 qt. of oil can pollute 250,000 gallons of water). O&G can adversely affect aquatic life and create unsightly floating material and film on water, thus making it undrinkable. Sources of O&G include maintenance shops, vehicles, machines and roadways.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at http://www.swrcb.ca.gov. It is contained in the Sampling and Analysis Reduction Certification.

See Storm Water Contacts at

http://www.waterboards.ca.gov/water_issues/programs/stormwater/contact.shtml

- the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- meters, etc.), indicate "PA" in the appropriate te
- Make additional copies of this form as necessar

NAME OF PERSON COLLECTING SAMPLE(S): C Brust **TITLE:** Maint. Specialist **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHER		
			pH	TSS	SC	O&G	TOC			
N. End of Canyon Dr@ Hwy 76	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Car

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as necessar

NAME OF PERSON COLLECTING SAMPLE(S): C Brust **TITLE:** Maint. Specialist **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			BASIC PARAMETERS					OTHER		
			pH	TSS	SC	O&G	TOC			
N. end of Canyon Dr@ Hwy 76	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
	_____ ☐ AM ☐ PM	_____ ☐ AM ☐ PM				NA				
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l			
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
ANALYZED BY (SELF/LAB):										

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Car

- Observe each authorized NSWD source, impacted drainage area, and discharge location.
- Make additional copies of this form as necessa

QUARTER: **JULY-SEPT.** DATE: 7-31-09	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **OCT.-DEC.** DATE: 10-30-09	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **JAN.-MARCH** DATE: *1-29-10*	**Observers Name:** *C Brust* **Title:** *Maint. Specialist* **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐
QUARTER: **APRIL-JUNE** DATE: 5-28-10	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☒ ☐

DATE / TIME OF OBSERVATION	SOURCE AND LOCATION OF AUTHORIZED NSWD EXAMPLE: Air conditioner Units on Building C	NAME OF AUTHORIZED NSWD EXAMPLE: Air conditioner condensate	DESCRIBE AUTHORIZED NSWD CHARACTERISTICS Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		DESCRIBE BMPs IMPL
			At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
7-31-09 10;15 ☒ AM ☐ PM	irrigation run-off from public prkways O'side school district maint. yard	School maint. yard, private irrigation	Water is clear in color, no odor,sheen, or floatables	Water is clear in color, no odor,sheen, or floatables	Place Eco-B
10-30-09 9;30 ☒ AM ☐ PM	irrigation run-off from public prkways O'side school district maint. yard	School maint. yard, private irrigation	Water is clear in color, no odor,sheen, or floatables	Water is clear in color, no odor,sheen, or floatables	Place Eco-B
1-29-10 10 ☒ AM ☐ PM	irrigation run-off from public prkways O'side school district maint. yard	School maint. yard, private irrigation	Water is clear in color, no odor,sheen, or floatables	Water is clear in color, no odor,sheen, or floatables	Place Eco-B
5-28-10 10;20 ☒ AM ☐ PM	irrigation run-off from public prkways O'side school district maint. yard	School maint. yard, private irrigation	Water is clear in color, no odor,sheen, or floatables	Water is clear in color, no odor,sheen, or floatables	Place Eco-B
☐ AM ☐ PM					

Section D (pages 5-6) of the General Permit.

- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accord with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** **DATE/TIME OF OBSERVATIONS** 7-31-09 10;15 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** 10-30-09 9;30 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** 1-29-10 10 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** 5-28-10 10;20 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maint. Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YE **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YE

(FROM REVERSE SIDE)	NSWD EXAMPLE: Vehicle Wash Water	OF UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.		UN P NS
			AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION	
_____ ____ ☐ AM ☐ PM			NA		
_____ ____ ☐ AM ☐ PM			NA		
_____ ____ ☐ AM ☐ PM			NA		
_____ ____ ☐ AM ☐ PM			NA		

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

Observation Date: October 30 2009 Observers Name: C Brust Title: Maint. Specialist Signature:	Drainage Location Description	#1 N. end of Canyon Dr.@ Hwy 76	#2	#3
	Observation Time	9;30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: November 27 2009 Observers Name: C Brust Title: Maint. Specialist Signature:	Drainage Location Description	#1 N. end of Canyon Dr.@ Hwy 76	#2	#3
	Observation Time	9;15 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO
Observation Date: December 28 2009 Observers Name: C Brust Title: Maint. Specialist Signature:	Drainage Location Description	#1 N. end of Canyon Dr.@ Hwy 76	#2	#3
	Observation Time	9;30 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO
Observation Date: January 29 2010 Observers Name: C Brust Title: Maint. Specialist Signature:	Drainage Location Description	#1 N. end of Canyon Dr.@ Hwy 76	#2	#3
	Observation Time	9 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO

(From Reverse Side)	EXAMPLE: Discharge from material storage Area #2	Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.
_____ ____ ☐ AM ☐ PM		NA	
_____ ____ ☐ AM ☐ PM		NA	
_____ ____ ☐ AM ☐ PM		NA	
_____ ____ ☐ AM ☐ PM		NA	
_____ ____ ☐ AM ☐ PM		NA	

at all discharge locations.

- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.

Observation Date: February 26 2010 Observers Name: C Brust Title: Maint. Specialist Signature:	Drainage Location Description	#1 N. end of Canyon Dr. @ Hwy 76	#2	#3
	Observation Time	10;15 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: March 26 2010 Observers Name: C Brust Title: Maint. Specialist Signature:	Drainage Location Description	#1 N. end of Canyon Dr. @ Hwy 76	#2	#3
	Observation Time	9;45 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: April 30 2010 Observers Name: C Brust Title: Maint. Specialist Signature:	Drainage Location Description	#1 N. end of Canyon Dr. @ Hwy 76	#2	#3
	Observation Time	10 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO
Observation Date: May 28 2010 Observers Name: C Brust Title: Maint. Specialist Signature:	Drainage Location Description	#1 N. end of Canyon Dr. @ Hwy 76	#2	#3
	Observation Time	11 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	0
	Time Discharge Began	0 ☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO

	EXAMPLE: Discharge from material storage Area #2	indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.	
_____ ☐ AM ☐ PM		NA		
_____ ☐ AM ☐ PM		NA		
_____ ☐ AM ☐ PM		NA		
_____ ☐ AM ☐ PM		NA		
_____ ☐ AM ☐ PM		NA		

SPECIAL EVENTS
Inspection Form

Pursuant to Oceanside City Code – Urban Runoff and Discharge Control 40.2.1

Inspector:	TERRY GOODMAN	Date	8/29/10	Season	SPRING	Priority	
Event Name	IRONMAN TRIATHLON			Event Type	SPORTS		
Event Location	HARBOR / PIER / COASTAL STREETS			Event Address	OCEANSIDE HARBOR		
Contact Name	TERRY GOODMAN			Contact Phone	760 435-5215		
Weather Conditions	☐ Heavy Rain ☐ Light Rain ☒ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain Expected at ____% chance						

PRE-EVENT (1)									POST-EVENT (2)								
Time:	NEEDS								NEEDS								Time:
SOURCE	N/A	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	N/A	Containment	Cover	Cleaning	Training	Other BMP	Adequate	ID Observed	COMMENTS
Solid Waste Storage and Disposal																	
Waste Containers																	
Grease Storage																	
Recycling Containers																	
Disposal Areas																	
Vehicles and Heavy Equipment																	
Washing Area	X								X								
Spill Response	X								X								
Storage Area	X								X								
Outdoor Materials Handling and Storage																	
Storage Tanks																	
Other Liquid Containers																	
Equipment Storage																	
Food Preparation and Eating Areas																	
Spill Kits																	
Food Disposal																	
Eating Areas																	
Grounds Maintenance and Housekeeping																	
Storm Drains																	
Parking lots																	
Staff/Vendor Training and SWPPP																	
SWPPP																	
Training																	
Portable Restrooms																	
Storage Area																	

OBSERVATIONS

PRE-EVENT (1)	POST-EVENT (2)
☒ **No violations observed during the inspection.**	☒ **No violations observed during the inspection.**
☐ **Violations observed during the inspection**	☐ **Violations observed during the inspection**
☐ **Implement Corrective Actions As Required Below**	☐ **Implement Corrective Actions As Required Below**

CORRECTIVE ACTION REQUIRED: ☐ Photos Taken

1	2	
☐	☐	Prevent trash/recycling from overflowing.
☐	☐	**Immediately** clean up oil/grease spills and leaks.
☐	☐	Post-event street sweeping required.
☐	☐	Provide immediate protection for storm drain inlets.
☐	☐	Clean in and around storm drains.
☐	☐	Train staff, vendors, and participants on pollution prevention.
☐	☐	Sweep up trash and debris.
☐	☐	**Immediately** discontinue outdoor washing or hosing.
☐	☐	Dumpsters & trash receptacles must be covered during rain events.
☐	☐	Provide spill kit(s) in required areas.
☐	☐	Provide secondary containment for portable restroom(s).

Other _____

Implement corrective actions by_____. A City staff person will return to verify that corrective actions implemented as required. If you have any questions or comments, please contact the Special Events office at 760-435-5540.

Inspector Signature:	Received By – Please Print	Received By - Signature ☐ Mailed	Date

(City of Oceanside Inspection Report Page 2)

EVENT SUMMARY

PRE-EVENT	POST-EVENT

IMPROVEMENTS AND RECCOMENDATIONS

ADDITIONAL INFORMATION

Potential Pollutants	☐ Bacteria ☐ Gross Pollutants ☐ Metals ☐ Nutrients ☐ Oil and Grease ☐ Organics ☐ Pesticides ☐ Sediments ☐ Trash ☐ Hazardous Materials ☐ Other		
Enforcement Required	☐ Verbal Warning ☐ Written Warning ☐ Notice of Violation ☐ Stop Work Order ☐ Charge Back ☐ Administrative Citation/Fine ☐ Referred for Action		
BMP Assessment (circle one)	5 4 3 2 1	Knowledge Assessment (circle one)	5 4 3 2 1 ☐ Contact not available

Comments/Notes

EVENT WAS WELL MANAGED WITH NO AREAS OF CONCERN

Attachment 5-A Industrial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc/Facility Name	TTWQ	Business Type	HSA
230619003	1045		AIRPORT ROAD		A-1 AUTO DISMANTLING LLC	High	Industrial	903.1 (San Luis Rey)
230719037	250		EDDIE JONES WAY		DEUTSCH CO ELECTRONICS	High	Industrial	903.1 (San Luis Rey)
230719031	1030		AIRPORT ROAD		ECOLOGY SCRAP YARD	High	Industrial	903.1 (San Luis Rey)
230719036	1050		AIRPORT ROAD		HANSON AGGREGATES	High	Industrial	903.1 (San Luis Rey)
230720029	2843		BENET ROAD		MOUNTAIN WATER ICE CO	High	Industrial	903.1 (San Luis Rey)
230720028	305		VIA DEL NORTE		NCTD MAINTENANCE YARD	High	Industrial	903.1 (San Luis Rey)
230719030	1020		AIRPORT ROAD		PHIL GALLANT TRUCK SALVAGE	High	Industrial	903.1 (San Luis Rey)
231619048	2550		JASON COURT		ELITE METAL FINSIHING	High	Industrial	904.1 (Loma Alta)
230621065	2070		MISSION AVENUE		OCEANSIDE SCHOOL DISTRICT FLEET MANAGEMENT	High	Industrial	903.1 (San Luis Rey)
231619039	2608		TEMPLE HEIGHTS DRIVE		APICAL INDUSTRIES INC	Medium	Industrial	904.1 (Loma Alta)
231619040	2605		TEMPLE HEIGHTS DRIVE	C	CARRILLO DESIGN CENTER	Medium	Industrial	904.1 (Loma Alta)
231619038	2604		TEMPLE HEIGHTS DRIVE		CENTRAL FLOOD MANAGEMENT	Medium	Industrial	904.1 (Loma Alta)
231619049	2618		TEMPLE HEIGHTS DRIVE		COMPUTER CIRCULATION CNTR INC	Medium	Industrial	904.1 (Loma Alta)
231619047	2625		TEMPLE HEIGHTS DRIVE		PRO SPOT INTERNATIONAL INC	Medium	Industrial	904.1 (Loma Alta)
231619037	2614		TEMPLE HEIGHTS DRIVE		STANDARD FLYWHEELS INC	Medium	Industrial	904.1 (Loma Alta)
231619041	2608		TEMPLE HEIGHTS DRIVE		SUMMIT STEEL INC	Medium	Industrial	904.1 (Loma Alta)
230719038	572		AIRPORT ROAD		AQUA-FILL INC	Low	Industrial	903.1 (San Luis Rey)
230719032	580		AIRPORT ROAD		PROCESS COOLING AND HEATING	Low	Industrial	903.1 (San Luis Rey)
230719034	594		AIRPORT ROAD		UNIQUE METAL FABRICATION	Low	Industrial	903.1 (San Luis Rey)
230719035	598		AIRPORT ROAD		NELGO INDUSTRIES INC	Low	Industrial	903.1 (San Luis Rey)
231117001	159		RAMONA WAY		AAA N.COUNTY HANDYMAN SERVICE	Low	Industrial	903.1 (San Luis Rey)
230719033	501		VIA DEL MONTE		HYDRANAUTICS	Low	Industrial	903.1 (San Luis Rey)
231520040	1601		ORD WAY		LESLIE SKYLIGHTS	Low	Industrial	904.1 (Loma Alta)
231520037	1605		ORD WAY	B10	FORD SIGNS INC	Low	Industrial	904.1 (Loma Alta)
231520041	1629		ORD WAY		CAMBELL CERTIFIED STEEL CONSTRUCTOR	Low	Industrial	904.1 (Loma Alta)
231520043	1630		ORD WAY		JAIME MENDEZ RESTORATION & CONSERVATION	Low	Industrial	904.1 (Loma Alta)
231520038	1666		ORD WAY		3V WHEEL DISTRIBUTION INC ?	Low	Industrial	904.1 (Loma Alta)
231520036	1716		ORD WAY		RIDGE LANDSCAPING ARCHITECTS	Low	Industrial	904.1 (Loma Alta)
231520035	1742		ORD WAY		JS MANUFACTURING	Low	Industrial	904.1 (Loma Alta)
231520034	1742		ORD WAY		MANUFACTURING SOLUTIONS	Low	Industrial	904.1 (Loma Alta)
231520042	1814		ORD WAY		STEICO INDUSTRIES	Low	Industrial	904.1 (Loma Alta)
231619050	1820		PEACOCK BLVD	H	MR. EXTERMINATOR	Low	Industrial	904.1 (Loma Alta)
231619035	1820		PEACOCK BLVD	A	THE OUTDOOR ADVERTISING SPECIALIST	Low	Industrial	904.1 (Loma Alta)
231619051	1980		PEACOCK BLVD		DAVID SHAPOSHNICK, INC	Low	Industrial	904.1 (Loma Alta)
231619053	2613		TEMPLE HEIGHTS DRIVE	B	DLE CUSTOM FABRICATION & CONVERTING	Low	Industrial	904.1 (Loma Alta)
231619045	2613		TEMPLE HEIGHTS DRIVE	C-D	WEST COAST PLATING	Low	Industrial	904.1 (Loma Alta)

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Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230719012	656		BENET ROAD		CHEVRON / O'SIDE MART	High	Commercial	903.1 (San Luis Rey)
231425007	3844		PLAZA DRIVE	381	ECONO LUBE N' TUNE/MEINEKE CAR CENTER #4068	High	Commercial	904.2 (Buena Vista)
231619024	4925		OCEANSIDE BLVD		HOBIE CAT COMPANY	High	Commercial	904.1 (Loma Alta)
231216001	185		OLD GROVE ROAD	G-H	OLD GROVE SHELL	High	Commercial	903.1 (San Luis Rey)
231325044	3804		PLAZA DRIVE		PDM AM/PM	High	Commercial	904.2 (Buena Vista)
231325020	3752		PLAZA DRIVE		PEP BOYS OF CA #742	High	Commercial	904.2 (Buena Vista)
231216004	185		OLD GROVE ROAD		SHELL GASOLINE & FOOD STORE	High	Commercial	903.1 (San Luis Rey)
230719029	507		JONES ROAD		STONE TRUSS COMPANY INC	High	Commercial	903.1 (San Luis Rey)
230723091	2021		OCEANSIDE BLVD		7 DAY MECHANIC	High	Commercial	904.1 (Loma Alta)
230723086	2001		OCEANSIDE BLVD		7 DAY TIRE BRAKE	High	Commercial	904.1 (Loma Alta)
230626007	1749	S	COAST HWY		7-ELEVEN STORE 26190C-2111	High	Commercial	904.2 (Buena Vista)
230720009	312		VIA DEL NORTE		A & A AUTO REPAIR - OUT OF BUSINESS	High	Commercial	903.1 (San Luis Rey)
230819006	260		AIRPORT ROAD	C	A B C SMOG	High	Commercial	903.1 (San Luis Rey)
230822008	2255		INDUSTRY STREET	A	AAMCO	High	Commercial	904.1 (Loma Alta)
230723087	2017		OCEANSIDE BLVD		ADVANCE PAINT AND BODY	High	Commercial	904.1 (Loma Alta)
230723019	2002		OCEANSIDE BLVD	J	AGRI CHEMICAL SUPPLY, INC	High	Commercial	904.1 (Loma Alta)
230819034	360		AIRPORT ROAD		AIRPORT AUTOMOTIVE	High	Commercial	903.1 (San Luis Rey)
230524030	920	S	COAST HWY	B	AJ'S AUTO CLINIC	High	Commercial	904.1 (Loma Alta)
231326020	3450		MARRON ROAD		ALBERTSON'S #6733	High	Commercial	904.2 (Buena Vista)
230819032	260		AIRPORT ROAD	A	AMADORS REPAIR SERVICE	High	Commercial	903.1 (San Luis Rey)
231325018	3401		COLLEGE BLVD		APRO #44 EXXON	High	Commercial	904.2 (Buena Vista)
231014007	607		DOUGLAS DR		ARCO	High	Commercial	903.1 (San Luis Rey)
230723043	1990		OCEANSIDE BLVD		ARCO AMPM GAS STATION	High	Commercial	904.1 (Loma Alta)
230822005	2609		INDUSTRY STREET		ARGO STONE AND SUPPLY CO	High	Commercial	904.1 (Loma Alta)
230822013	2505		INDUSTRY STREET		ARTISTIC MAINTENANCE INC	High	Commercial	904.1 (Loma Alta)
230523030	409	S	COAST HWY		AUTO FOR LESS	High	Commercial	904.1 (Loma Alta)
230422021	602	S	TREMONT ST	B	AUTO POWER	High	Commercial	904.1 (Loma Alta)
230625027	1515	S	COAST HWY		AUTOMAN CAR SERVICES	High	Commercial	904.1 (Loma Alta)
230625029	1523	S	COAST HWY		B & R BUGGIE	High	Commercial	904.1 (Loma Alta)
230822018	2379		INDUSTRY STREET		B M W PRESCISION MACHINING	High	Commercial	904.1 (Loma Alta)
230523003	325	S	COAST HWY		BEAUDRY'S AUTO COLLISION CENTER	High	Commercial	904.1 (Loma Alta)
230723001	634		CROUCH ST		BIG FAB OFF ROAD RACING	High	Commercial	904.1 (Loma Alta)
230723004	634		CROUCH ST		BIG FAB OFF ROAD RACING	High	Commercial	904.1 (Loma Alta)
230626011	1602	S	COAST HWY		BOB'S CARBS	High	Commercial	904.1 (Loma Alta)
230626006	1742	S	COAST HWY		BOB'S GAS INC.	High	Commercial	904.2 (Buena Vista)
230723092	2027		OCEANSIDE BLVD		BROTHER'S AUTO GLASS	High	Commercial	904.1 (Loma Alta)
230925025	2315		VISTA WAY		BUBBLE BATH CAR WASH 76	High	Commercial	904.2 (Buena Vista)
230522022	1402		MISSION AVENUE		BUSSEYS AUTOMOTIVE SERVICE	High	Commercial	903.1 (San Luis Rey)
230922006	3045		INDUSTRY STREET		CAMPBELL CERTIFIED INC	High	Commercial	904.1 (Loma Alta)
230820001	3018		SAN LUIS REY RD		CARCOA QUALITY BODY & PAINT	High	Commercial	903.1 (San Luis Rey)
230626016	1702	S	COAST HWY		CENTRAL AUTOMOTIVE	High	Commercial	904.2 (Buena Vista)
230719013	304		VIA DEL MONTE		CHANDLER TRANSMISSION	High	Commercial	903.1 (San Luis Rey)
230420003	1601	N	COAST HWY		CHEVRON / O'SIDE MART	High	Commercial	903.1 (San Luis Rey)
230422017	601	N	COAST HWY		CHEVRON / O'SIDE MART	High	Commercial	904.1 (Loma Alta)
231314002	785		COLLEGE BLVD		CHEVRON USA INC #203189	High	Commercial	903.1 (San Luis Rey)
231326004	3350		COLLEGE BLVD		CIRCLE K / 76 #2705246	High	Commercial	904.2 (Buena Vista)
230626008	1801	S	COAST HWY		CIRCLE K GASOLINE	High	Commercial	904.2 (Buena Vista)
230822009	2255		INDUSTRY STREET	B	CITYWIDE AUTOMOTIVE	High	Commercial	904.1 (Loma Alta)
230722003	2021		OCEANSIDE BLVD		CLASSIC MUSCLE CARS	High	Commercial	904.1 (Loma Alta)
231620007	2640		VISTA PACIFIC DR		CLASSIC SHOWCASE INC	High	Commercial	904.1 (Loma Alta)
230922010	3025		INDUSTRY STREET	A	CLINICON CORPORATION	High	Commercial	904.1 (Loma Alta)
230626001	1621	S	COAST HWY		COAST CAR WASH	High	Commercial	904.1 (Loma Alta)
231421051	1990		COLLEGE BLVD		COLLEGE BLVD EXXON	High	Commercial	903.1 (San Luis Rey)
230822024	2405		INDUSTRY STREET		CONOVER TIRE PRO	High	Commercial	904.1 (Loma Alta)
230723051	2044		OCEANSIDE BLVD		CONSTANT VELOCITY MOTORSPORTS	High	Commercial	904.1 (Loma Alta)
230723050	2044		OCEANSIDE BLVD		CONSTANT VELOCITY MOTOSPORTS (inactive)	High	Commercial	904.1 (Loma Alta)
230822026	2401		INDUSTRY STREET		CONSTRUCTION SERVICES AND RECLAMATION	High	Commercial	904.1 (Loma Alta)
231321003	4035		OCEANSIDE BLVD	C11	D & J AUTO DOCTORS INC	High	Commercial	904.1 (Loma Alta)
230626010	1555	S	COAST HWY		DAVE'S ALL MOBILE	High	Commercial	904.1 (Loma Alta)
230723088	2017		OCEANSIDE BLVD		DISCOUNT TRANSMISSION - OUT OF BUSINESS	High	Commercial	904.1 (Loma Alta)
230819003	340		AIRPORT ROAD		DONALD ERBE CO INC	High	Commercial	903.1 (San Luis Rey)
230723093	2027		OCEANSIDE BLVD		EARL SCHEIB AUTO PAINTING	High	Commercial	904.1 (Loma Alta)
230619002	2315		CARPENTER ROAD		ECOLOGY AUTO PARTS INC	High	Commercial	903.1 (San Luis Rey)
230621023	1618		MISSION AVENUE		ECONO LUBE N TUNE #23	High	Commercial	903.1 (San Luis Rey)
230524029	501	S	COAST HWY		EDDIE'S AUTOMOTIVE INC	High	Commercial	903.1 (San Luis Rey)
230422020	512	S	TREMONT ST		EDDIE'S AUTOMOTIVE INC	High	Commercial	904.1 (Loma Alta)
230720003	2954		SAN LUIS REY RD		ESHBACHS AUTO BODY & PAINT - OUT OF BUSINESS	High	Commercial	903.1 (San Luis Rey)
230822021	2421		INDUSTRY STREET		FENCEWORKS INC.	High	Commercial	904.1 (Loma Alta)
230719005	576		AIRPORT ROAD		FIRST TRANSIT	High	Commercial	903.1 (San Luis Rey)
230719014	444		VIA EL CENTRO		FULL RV SERVICE	High	Commercial	903.1 (San Luis Rey)
230819004	230		ROYMAR RD Suite: F-H		G&W TRUCK & SUV ACCESSORIES	High	Commercial	903.1 (San Luis Rey)
230626009	1540	S	COAST HWY		GARY'S AUTO REPAIR/BOB'S CARBS	High	Commercial	904.1 (Loma Alta)
230422043	602	S	TREMONT ST	A	GHETTO CHOPPERS CUSTOMS INC	High	Commercial	904.1 (Loma Alta)
230922009	3021		INDUSTRY STREET		GLASSWERKS SD	High	Commercial	904.1 (Loma Alta)
230625018	1151	S	COAST HWY		GOODYEAR EXPRESS TIRE	High	Commercial	904.1 (Loma Alta)
230822007	2372		OCEANSIDE BLVD		GORILLA RENTALS	High	Commercial	904.1 (Loma Alta)
230720007	2954		SAN LUIS REY RD		GUERRERO'S AUTO REPAIR	High	Commercial	903.1 (San Luis Rey)
231421053	4106		OCEANSIDE BLVD		JIFFY LUBE - MOVED TO SUSUMP	High	Commercial	904.1 (Loma Alta)
230723045	1970		OCEANSIDE BLVD		JIFFY LUBE #1278	High	Commercial	904.1 (Loma Alta)
230822014	2511		INDUSTRY STREET	C	JOHN DEERE LANDSCAPES, INC - OUT OF BUSINESS	High	Commercial	904.1 (Loma Alta)
230822003	2401		INDUSTRY STREET		JOHN'S TOWING SERVICE	High	Commercial	904.1 (Loma Alta)
230626012	1602	S	COAST HWY		JOSE'S AUTO ELECTRIC	High	Commercial	904.1 (Loma Alta)
230819070	3207		ROYMAR RD Suite: D		JOSH'S BOARS NEST	High	Commercial	903.1 (San Luis Rey)
230822020	2515		INDUSTRY STREET		JUST FOAM LLC - OUT OF BUSINESS	High	Commercial	904.1 (Loma Alta)
230820012	3028		SAN LUIS REY RD		KENNEDYS CUSTOM CYCLES	High	Commercial	903.1 (San Luis Rey)
230723048	2042		OCEANSIDE BLVD		LAELS INTERNATIONAL	High	Commercial	904.1 (Loma Alta)
230723049	2042		OCEANSIDE BLVD	B	LAEL'S INTERNATIONAL AUTO SERVICE CENTER	High	Commercial	904.1 (Loma Alta)
230723090	2019		OCEANSIDE BLVD		LEO'S TOWING & AUTO REPAIR	High	Commercial	904.1 (Loma Alta)
230626013	1602	S	COAST HWY		LSI AUTOMOTIVE SERVICE	High	Commercial	904.1 (Loma Alta)
230723067	620		CROUCH ST		MACHINE TECH RACING ENGINES	High	Commercial	904.1 (Loma Alta)
230723002	620		CROUCH ST		MACHINE TECH RACING ENGINES	High	Commercial	904.1 (Loma Alta)
230723089	2017		OCEANSIDE BLVD		MARIO'S AUTO REPAIR	High	Commercial	904.1 (Loma Alta)
230822011	2801		INDUSTRY STREET		MASTERTECH INC	High	Commercial	904.1 (Loma Alta)
230822006	2365		OCEANSIDE BLVD		MAX RENTALS	High	Commercial	904.1 (Loma Alta)
231718001	1501	N	MELROSE DR		MELROSE ARCO	High	Commercial	904.1 (Loma Alta)
230922007	3093		INDUSTRY STREET		METROTILE MANUFACTURING	High	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
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Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230918009	3510		MISSION AVENUE		MIDAS MUFFLERS	High	Commercial	903.1 (San Luis Rey)
230819031	3361		MISSION AVENUE		MISSION 76	High	Commercial	903.1 (San Luis Rey)
230621021	1920		MISSION AVENUE		MISSION ARCO AM/PM	High	Commercial	903.1 (San Luis Rey)
230918011	3596		MISSION AVENUE		MISSION AUTO CARE INC.	High	Commercial	903.1 (San Luis Rey)
231017037	3865		MISSION AVENUE		MISSION EXXON	High	Commercial	903.1 (San Luis Rey)
230621022	2003		MISSION AVENUE		MISSION UNOCAL - OUT OF BUSINESS	High	Commercial	903.1 (San Luis Rey)
230321004	477	S	HARBOR DR		MOBIL-HARBOR DRIVE, INC	High	Commercial	903.1 (San Luis Rey)
230919022	502	S	EL CAMINO REAL		MOE'S OCEANA UNION 76	High	Commercial	903.1 (San Luis Rey)
230524028	628	S	COAST HWY	E	MOHSEN OIL	High	Commercial	903.1 (San Luis Rey)
230819030	3213		MISSION AVENUE		MOHSEN OIL, INC	High	Commercial	903.1 (San Luis Rey)
230626020	1639	S	COAST HWY		MOTORCYCLE GALLERY	High	Commercial	904.1 (Loma Alta)
230625026	1512	S	COAST HWY		NORTH COUNTY AUTO BODY INC.	High	Commercial	904.1 (Loma Alta)
230625028	1520	S	COAST HWY		NORTH COUNTY AUTO SERVICE INC	High	Commercial	904.1 (Loma Alta)
230525002	1112	S	TREMONT ST		OCEAN PAINT AND BODY	High	Commercial	904.1 (Loma Alta)
230918010	3582		MISSION AVENUE		OCEANSIDE AUTO REPAIR II	High	Commercial	903.1 (San Luis Rey)
231414019	499		COLLEGE BLVD	B	OCEANSIDE AUTOMOTIVE	High	Commercial	903.1 (San Luis Rey)
230922001	2946		OCEANSIDE BLVD		OCEANSIDE BUGGY BATH CARWASH	High	Commercial	904.1 (Loma Alta)
230918001	3655		MISSION AVENUE		OCEANSIDE CAR WASH INC	High	Commercial	903.1 (San Luis Rey)
230626019	1617	S	COAST HWY		OCEANSIDE CYCLE SUPPLY	High	Commercial	904.1 (Loma Alta)
230822010	2435		INDUSTRY STREET	B	OCEANSIDE DRIVELINE	High	Commercial	904.1 (Loma Alta)
230625020	1515	S	COAST HWY		OCEANSIDE SELF SERVICE CAR WASH	High	Commercial	904.1 (Loma Alta)
230822012	2403		INDUSTRY STREET		OCEANSIDE TRUCK SERVICE	High	Commercial	904.1 (Loma Alta)
230525001	1119	S	CLEVELAND ST		ONE STOP AVIATION INC	High	Commercial	904.1 (Loma Alta)
231017038	3945		MISSION AVENUE		O'SIDE GAS	High	Commercial	903.1 (San Luis Rey)
230523028	229	S	COAST HWY		O'SIDE TRANSMISSION UNLIMITED	High	Commercial	904.1 (Loma Alta)
230723047	2026		OCEANSIDE BLVD		PADILLAS COLLISION REPAIR	High	Commercial	904.1 (Loma Alta)
230922011	2925		INDUSTRY STREET		PALOMAR TRANSIT MIX CO	High	Commercial	904.1 (Loma Alta)
230723094	2027		OCEANSIDE BLVD		PEDRO'S AUTO REPAIR & TOW TRK	High	Commercial	904.1 (Loma Alta)
230621002	2041		MISSION AVENUE		PEP BOYS/MANNY MOE & JACK OFCA #667	High	Commercial	903.1 (San Luis Rey)
230719011	575		AIRPORT ROAD		PLAVAN PETROLEUM INC	High	Commercial	903.1 (San Luis Rey)
230422001	520	S	TREMONT ST		PROCUSTOM	High	Commercial	904.1 (Loma Alta)
230523032	407		TOPEKA STREET		PUURFECT AUTO SERVICE	High	Commercial	903.1 (San Luis Rey)
231325019	3490		COLLEGE BLVD		QUARRY CREEK CHEVRON	High	Commercial	904.2 (Buena Vista)
231421025	4101		OCEANSIDE BLVD		RANCHO DEL ORO CAR WASH	High	Commercial	904.1 (Loma Alta)
231326001	3528		COLLEGE BLVD		REFLECTSHINE AUTO WASH	High	Commercial	904.2 (Buena Vista)
230825009	2191		VISTA WAY		ROWLEY CHEVRON	High	Commercial	904.2 (Buena Vista)
230422022	620	S	TREMONT ST		S & S RADIATOR	High	Commercial	904.1 (Loma Alta)
230524031	920	S	COAST HWY	C	S & T AUTO PAINT & BODY	High	Commercial	904.1 (Loma Alta)
230822016	2515		INDUSTRY STREET		SAN DIEGO MIRROR & WINDOW	High	Commercial	904.1 (Loma Alta)
230919019	471	N	EL CAMINO REAL		SAN LUIS REY AUTO SALVAGE AND STORAGE	High	Commercial	903.1 (San Luis Rey)
230919020	480	N	EL CAMINO REAL		SAN LUIS REY AUTO SERVICE	High	Commercial	903.1 (San Luis Rey)
230822019	2603		INDUSTRY STREET		SANTOURIAN MANUFACTURING INC	High	Commercial	904.1 (Loma Alta)
230925001	2205		VISTA WAY		SATURN OF WEST 78 - OUT OF BUSINESS	High	Commercial	904.2 (Buena Vista)
230524002	907	S	CLEVELAND ST		SEASIDE BODY AND PAINT	High	Commercial	904.1 (Loma Alta)
231014010	660		DOUGLAS DR		SHELL	High	Commercial	903.1 (San Luis Rey)
230723046	2022		OCEANSIDE BLVD		SMITTY'S SURFSIDE GARAGE	High	Commercial	904.1 (Loma Alta)
230626014	1602	S	COAST HWY		SMOKEYS AUTO PARTS/MACHINE	High	Commercial	904.1 (Loma Alta)
230822015	2511		INDUSTRY STREET		SOUTHER CAST STONE INC - MOVED TO VIA DEL MONTE	High	Commercial	904.1 (Loma Alta)
231022002	3227		OCEANSIDE BLVD		SUPERIOR READY MIX CONCRETE LP	High	Commercial	904.1 (Loma Alta)
230626015	1602	S	COAST HWY		T AND T AUTO SMOG	High	Commercial	904.1 (Loma Alta)
230522023	1408		MISSION AVENUE		TERRY'S BODY SHOP, INC	High	Commercial	903.1 (San Luis Rey)
230720008	2954		SAN LUIS REY RD		THE MUFFLER MAN - OUT OF BUSINESS	High	Commercial	903.1 (San Luis Rey)
230624001	1660		OCEANSIDE BLVD		THE OCEANSIDER	High	Commercial	904.1 (Loma Alta)
230422018	802	N	COAST HWY		THRIFTY GASOLINE	High	Commercial	903.1 (San Luis Rey)
230819033	350		AIRPORT ROAD		TNT REPAIR SERVICES INC	High	Commercial	903.1 (San Luis Rey)
230820003	227		VIA EL CENTRO		TOPS AUTO UPHOLSTERY - OUT OF BUSINESS	High	Commercial	903.1 (San Luis Rey)
230625023	1202	S	COAST HWY		VALERO GASOLINE	High	Commercial	904.1 (Loma Alta)
230625037	1425	S	COAST HWY		VESPA OF OCEANSIDE	High	Commercial	904.1 (Loma Alta)
230723006	1980		OCEANSIDE BLVD		VIP CAR WASH	High	Commercial	904.1 (Loma Alta)
231016002	190		DOUGLAS DR		WARNER'S MUFFLER	High	Commercial	903.1 (San Luis Rey)
230822023	2381		INDUSTRY STREET		WASTE MANAGEMENT OF NO CO INC	High	Commercial	904.1 (Loma Alta)
230722004	2141		OCEANSIDE BLVD		WASTE MANAGEMENT OF NO CO INC	High	Commercial	904.1 (Loma Alta)
230822017	2601		INDUSTRY STREET		WEILAND SLIDING DOOR & WINDOW INC	High	Commercial	904.1 (Loma Alta)
230625030	1540	S	COAST HWY		WEST COAST CUSTOM	High	Commercial	904.1 (Loma Alta)
230625025	1434	S	COAST HWY		WESTCOAST TIRE AND WHEEL	High	Commercial	904.1 (Loma Alta)
230626018	1540	S	COAST HWY		WESTSIDE CLASSICS	High	Commercial	904.1 (Loma Alta)
230524015	631	S	COAST HWY		101 CAFÉ	High	Eat/Drink Est.	904.1 (Loma Alta)
230423018	333	N	PACIFIC STREET		333 PACIFIC	High	Eat/Drink Est.	903.1 (San Luis Rey)
231315009	4645		FRAZEE ROAD	I	ALBERTO'S	High	Eat/Drink Est.	903.1 (San Luis Rey)
230621010	1602		MISSION AVENUE		ALBERTO'S MEXICAN FOOD	High	Eat/Drink Est.	903.1 (San Luis Rey)
230723035	1920		OCEANSIDE BLVD		ALBERTO'S MEXICAN FOOD	High	Eat/Drink Est.	904.1 (Loma Alta)
231421054	4140		OCEANSIDE BLVD	137	ALBERTSON'S #6740	High	Eat/Drink Est.	904.1 (Loma Alta)
230422008	602	N	COAST HWY		ALFREDO'S MEXICAN FOOD	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421007	4225		OCEANSIDE BLVD		ANGELITA FOODS & SPICE	High	Eat/Drink Est.	904.1 (Loma Alta)
230422011	621	N	COAST HWY		ANGELO'S BURGERS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230525006	1050	S	COAST HWY		ANGELO'S BURGERS	High	Eat/Drink Est.	904.1 (Loma Alta)
230727004	2035	S	COAST HWY		ANGELO'S BURGERS	High	Eat/Drink Est.	904.2 (Buena Vista)
230523019	309	S	COAST HWY		ANITA'S #2	High	Eat/Drink Est.	904.1 (Loma Alta)
231025004	2251	S	EL CAMINO REAL	B	ANITA'S RESTAURANT	High	Eat/Drink Est.	904.2 (Buena Vista)
230825001	2146		VISTA WAY		APPLEBEES NEIGHBORHOOD GRILL & BAR	High	Eat/Drink Est.	904.2 (Buena Vista)
230621011	1863		MISSION AVENUE		ARBY'S #1396	High	Eat/Drink Est.	903.1 (San Luis Rey)
230918006	3744		MISSION AVENUE		ARIA JAPANESE/KOREAN BBQ	High	Eat/Drink Est.	903.1 (San Luis Rey)
230622006	1426		MISSION AVENUE		ARMANDO'S MEXICAN FOOD	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421055	4131		OCEANSIDE BLVD		ARMSTRONG GARDEN CENTERS - OUT OF BUSINESS	High	Eat/Drink Est.	904.1 (Loma Alta)
231409002	5201		VILLAGE DRIVE		ARROWOOD GOLF CLUB CAFETERIA	High	Eat/Drink Est.	903.1 (San Luis Rey)
230621018	405		SAN DIEGO STREET		ASADA TACOS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230524016	1001	S	COAST HWY		AZAFRAN	High	Eat/Drink Est.	904.1 (Loma Alta)
230622008	1527		MISSION AVENUE	C	BAJA TACOS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421005	4201		OCEANSIDE BLVD	A	BASKIN ROBBINS/TOGO'S	High	Eat/Drink Est.	904.1 (Loma Alta)
230627001	1900	S	COAST HWY		BEACH BREAK CAFE INC	High	Eat/Drink Est.	904.2 (Buena Vista)
230423084	215	N	Coast Hwy		BEACHSIDE GRILL	High	Eat/Drink Est.	903.1 (San Luis Rey)
231220003	3613		OCEAN RANCH BLVD	105	BERRY SWIRL	High	Eat/Drink Est.	904.1 (Loma Alta)
230523018	232	S	COAST HWY		BESSIE'S CAFE	High	Eat/Drink Est.	904.1 (Loma Alta)
230723034	1918		OCEANSIDE BLVD		BLACK ROCK COFFEE BAR	High	Eat/Drink Est.	904.1 (Loma Alta)
231421008	4225		OCEANSIDE BLVD	B	BLENDZ FUN FRESH FOOD	High	Eat/Drink Est.	904.1 (Loma Alta)
230523011	101	N	COAST HWY		BREAKWATER BREWING CO.	High	Eat/Drink Est.	903.1 (San Luis Rey)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230825005	2183		VISTA WAY	B8	BROOKLYN BOYS PIZZA	High	Eat/Drink Est.	904.2 (Buena Vista)
230423022	318		PIER VIEW WAY		BUBBLE TEA	High	Eat/Drink Est.	903.1 (San Luis Rey)
230626005	1508	S	PACIFIC STREET		BUCCANEER BEACH CLUB	High	Eat/Drink Est.	904.1 (Loma Alta)
230523009	515		MISSION AVENUE		BURGER HOUSE	High	Eat/Drink Est.	903.1 (San Luis Rey)
230918007	3746		MISSION AVENUE		BURGER KING	High	Eat/Drink Est.	903.1 (San Luis Rey)
230622005	1420		MISSION AVENUE		BURGER KING	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423030	227	S	TREMONT ST		BURGER KING	High	Eat/Drink Est.	903.1 (San Luis Rey)
230925003	2325		VISTA WAY		BURGER KING	High	Eat/Drink Est.	904.2 (Buena Vista)
231114006	650		DOUGLAS DRIVE	122	CABO BEACH GRILL	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421046	4186		OCEANSIDE BLVD		CAFE DE THAI	High	Eat/Drink Est.	904.1 (Loma Alta)
230723026	1816		OCEANSIDE BLVD	A	CAFE ROSARITA	High	Eat/Drink Est.	904.1 (Loma Alta)
230925004	2401		VISTA WAY	E1	CALIFORNIA YOGURT CO #4	High	Eat/Drink Est.	904.2 (Buena Vista)
231017033	3915		MISSION AVENUE		CAPOZZOLI'S	High	Eat/Drink Est.	903.1 (San Luis Rey)
230819025	160		ROYMAR ROAD		CARLITO'S CHICKEN	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421045	4186		OCEANSIDE BLVD		CARLS JR	High	Eat/Drink Est.	904.1 (Loma Alta)
231314001	775		COLLEGE BLVD		CARL'S JR	High	Eat/Drink Est.	903.1 (San Luis Rey)
231014001	611		DOUGLAS DRIVE		CARL'S JR	High	Eat/Drink Est.	903.1 (San Luis Rey)
230523016	119	S	COAST HWY		CARMINE'S PIZZA	High	Eat/Drink Est.	903.1 (San Luis Rey)
230421007	936	N	COAST HWY		CARROWS # 954	High	Eat/Drink Est.	903.1 (San Luis Rey)
231520046	4259		OCEANSIDE BLVD		CEJA'S MEXICAN DINER AND GRILL	High	Eat/Drink Est.	904.1 (Loma Alta)
231421129	4231		OCEANSIDE BLVD	C	CHARMING SIAM RESTAURANT	High	Eat/Drink Est.	904.1 (Loma Alta)
231325041	3829		PLAZA DRIVE		CHEF CHIN	High	Eat/Drink Est.	904.2 (Buena Vista)
231326031	3475		MARRON ROAD		Chik-Fil-A #1507	High	Eat/Drink Est.	904.2 (Buena Vista)
231025008	2627		VISTA WAY		CHILI'S GRILL & BAR	High	Eat/Drink Est.	904.2 (Buena Vista)
230621014	2009		MISSION AVENUE		CHINA DYNASTY BUFFET - OUT OF BUSINESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230522017	1401		MISSION AVENUE		CHINA STAR SUPER BUFFET	High	Eat/Drink Est.	903.1 (San Luis Rey)
231225002	3910		VISTA WAY	109	CHINA TOWN CHINESE FOOD	High	Eat/Drink Est.	904.2 (Buena Vista)
231025001	2241	S	EL CAMINO REAL		CHIN'S PALACE INC	High	Eat/Drink Est.	904.2 (Buena Vista)
231421035	4140		OCEANSIDE BLVD	139	CHIN'S SZECHWAN-OCEANSIDE	High	Eat/Drink Est.	904.1 (Loma Alta)
230925015	2611		VISTA WAY	A	CHIPOTLE MEXICAN GRILL	High	Eat/Drink Est.	904.2 (Buena Vista)
230723029	1906		OCEANSIDE BLVD		CHOW'S DONUT	High	Eat/Drink Est.	904.1 (Loma Alta)
230925009	2481		VISTA WAY		CHUCK E CHEESE'S	High	Eat/Drink Est.	904.2 (Buena Vista)
230625010	510		OCEANSIDE BLVD	A	CHURCH'S CHICKEN	High	Eat/Drink Est.	904.1 (Loma Alta)
231315002	815		COLLEGE BLVD	107	CHU'S QUICKWOK	High	Eat/Drink Est.	903.1 (San Luis Rey)
231017031	3905		MISSION AVENUE		COCO'S #0886	High	Eat/Drink Est.	903.1 (San Luis Rey)
231315005	4635		FRAZEE ROAD	A	COLDSTONE CREAMERY	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423011	409		MISSION AVENUE		COLDSTONE CREAMERY	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421034	4121		OCEANSIDE BLVD	204	COLDSTONE CREAMERY	High	Eat/Drink Est.	904.1 (Loma Alta)
230423023	308		PIER VIEW WAY		COLIMA'S MEXICAN FOOD	High	Eat/Drink Est.	903.1 (San Luis Rey)
230524014	624	S	COAST HWY		COSTABRASIL CAFÉ - OUT OF BUSINESS	High	Eat/Drink Est.	904.1 (Loma Alta)
230423021	318		PIER VIEW WAY		CREPES UP	High	Eat/Drink Est.	903.1 (San Luis Rey)
231315007	4635		FRAZEE ROAD	C	CUPPY'S COFFEE	High	Eat/Drink Est.	903.1 (San Luis Rey)
231325014	3809		PLAZA DRIVE	106	CUSIMANO'S PIZZERIA	High	Eat/Drink Est.	904.2 (Buena Vista)
230723025	1810		OCEANSIDE BLVD	A	DA GIORGIO CUCINA ITALIANA	High	Eat/Drink Est.	904.1 (Loma Alta)
230423008	302		MISSION AVENUE		DAIRY QUEEN	High	Eat/Drink Est.	903.1 (San Luis Rey)
231326015	3480		MARRON ROAD	3B104	DAPHNE'S GREEK CAFE	High	Eat/Drink Est.	904.2 (Buena Vista)
230423028	212	N	TREMONT ST		DAVINA'S CABO GRILL LLC	High	Eat/Drink Est.	903.1 (San Luis Rey)
230819022	3320		MISSION AVENUE	Q-R	DAVINA'S MEXICAN RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
230819024	3371		MISSION AVENUE		DEIBERTOS MEXICAN FOOD	High	Eat/Drink Est.	903.1 (San Luis Rey)
230420002	1601		CARMELO DRIVE		DEL TACO	High	Eat/Drink Est.	903.1 (San Luis Rey)
231420001	1970		COLLEGE BLVD		DEL TACO LLC	High	Eat/Drink Est.	903.1 (San Luis Rey)
231025006	2269	S	EL CAMINO REAL		DEL TACO LLC	High	Eat/Drink Est.	904.2 (Buena Vista)
230321002	487	S	HARBOR DRIVE		DENNY'S	High	Eat/Drink Est.	903.1 (San Luis Rey)
231414006	605		COLLEGE BLVD		DENNY'S RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
231025007	2273	S	EL CAMINO REAL		DENNY'S RESTAURANT #1149	High	Eat/Drink Est.	904.2 (Buena Vista)
230524018	1034	S	COAST HWY		DIEGO'S MEXICAN FOOD	High	Eat/Drink Est.	904.1 (Loma Alta)
231312002	617	N	REDONDO DRIVE		DJ'S PIZZA	High	Eat/Drink Est.	903.1 (San Luis Rey)
230421013	268	S	HARBOR DRIVE		DOMINIC'S - ITALIAN RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
231423001	2858		THUNDER DRIVE		DOMINOS PIZZA	High	Eat/Drink Est.	904.2 (Buena Vista)
230723028	1906		OCEANSIDE BLVD		DOMINO'S PIZZA	High	Eat/Drink Est.	904.1 (Loma Alta)
231014003	650		DOUGLAS DRIVE	103	DOMINO'S PIZZA #7750	High	Eat/Drink Est.	903.1 (San Luis Rey)
230727003	1938	S	COAST HWY		DON'S COUNTRY CAFE	High	Eat/Drink Est.	904.2 (Buena Vista)
231421044	4171		OCEANSIDE BLVD	106	DONUT HOUSE	High	Eat/Drink Est.	904.1 (Loma Alta)
231017029	3861		MISSION AVENUE		EDNA'S THAI, CHINESE, FILIPINO - OUT OF BUSINESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230825007	2183		VISTA WAY	B10	EINSTEIN BROS BAGELS #3047	High	Eat/Drink Est.	904.2 (Buena Vista)
231519022	4750		OCEANSIDE BLVD	A8	EL ASADOR	High	Eat/Drink Est.	904.1 (Loma Alta)
231421043	4171		OCEANSIDE BLVD	105	EL BRONCO TACO SHOP OF OCEANSIDE	High	Eat/Drink Est.	904.1 (Loma Alta)
230820005	3110		SAN LUIS REY ROAD		EL MUNDO DE MARISCOS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230522013	1004		MISSION AVENUE		EL POLLO LOCO	High	Eat/Drink Est.	903.1 (San Luis Rey)
231025011	2693		VISTA WAY		EL TORITO RESTAURANT, INC # 7093	High	Eat/Drink Est.	904.2 (Buena Vista)
231017034	3935		MISSION AVENUE		EL TUCAN MEXICAN RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421028	4111		OCEANSIDE BLVD	101	ENZOS' BBQ	High	Eat/Drink Est.	904.1 (Loma Alta)
231312004	644	N	REDONDO DRIVE		ERIBERTO'S MEXICAN FOOD	High	Eat/Drink Est.	903.1 (San Luis Rey)
231016005	420	N	EL CAMINO REAL		FAMILY FELLOWSHIP CHURCH CAFETERIA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231220004	3613		OCEAN RANCH BLVD	106-10	FELIX BBQ WITH SOUL	High	Eat/Drink Est.	904.1 (Loma Alta)
231318001	4490		MESA DRIVE		FIARWINDS SENIOR COMMUNITY CAFETERIA	High	Eat/Drink Est.	904.1 (Loma Alta)
231017012	3784		MISSION AVENUE	151	FIESTA MEXICANA	High	Eat/Drink Est.	903.1 (San Luis Rey)
230524013	514	S	COAST HWY		FISH JOINT	High	Eat/Drink Est.	904.1 (Loma Alta)
231217006	125		OLD GROVE ROAD	4	FRESH O YOUGURT	High	Eat/Drink Est.	903.1 (San Luis Rey)
231727005	3509		CANNON RD	E-2A	FRUGOS YOGURT	High	Eat/Drink Est.	904.3 (Agua Hedionda)
231025076	2320	S	EL CAMINO REAL		Fuddrucker's # 434	High	Eat/Drink Est.	904.2 (Buena Vista)
231220005	3617		OCEAN RANCH BLVD	100	GANDELFO'S DELI	High	Eat/Drink Est.	904.1 (Loma Alta)
231225003	3710		VISTA WAY	108	GIANNIS PIZZA	High	Eat/Drink Est.	904.2 (Buena Vista)
231421032	4121		OCEANSIDE BLVD	202	GOGO JAPAN	High	Eat/Drink Est.	904.1 (Loma Alta)
231421037	4150		OCEANSIDE BLVD		GOLDEN SPOON FROZEN YOGURT	High	Eat/Drink Est.	904.1 (Loma Alta)
231019006	539		VISTA BELLA		GRANDMA HILLTOP HIDE AWAY CAFÉ	High	Eat/Drink Est.	903.1 (San Luis Rey)
231315008	4635		FRAZEE ROAD	F	GREAT WOK OF CHINA	High	Eat/Drink Est.	903.1 (San Luis Rey)
230524017	1030	S	COAST HWY		GRUBY'S DINER	High	Eat/Drink Est.	904.1 (Loma Alta)
231221003	3800		OCEANIC DRIVE	118	GUAHAN GRILL	High	Eat/Drink Est.	904.1 (Loma Alta)
230925005	2415		VISTA WAY		HANA RESTAURANT	High	Eat/Drink Est.	904.2 (Buena Vista)
231421012	4225		OCEANSIDE BLVD	F	HAPPY NOODLE HOUSE	High	Eat/Drink Est.	904.1 (Loma Alta)
230421015	276	S	HARBOR DRIVE		HARBOR FISH AND CHIPS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230422013	714	N	COAST HWY		HARBOR HOUSE CAFE	High	Eat/Drink Est.	903.1 (San Luis Rey)
230321003	1380	N	PACIFIC STREET		HARBOR PELICAN DELI MART	High	Eat/Drink Est.	903.1 (San Luis Rey)
230421012	258	S	HARBOR DRIVE	A	HARBOR SNACKS AND HOTDOGS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423083	301		MISSION AVENUE		Harney Sushi	High	Eat/Drink Est.	903.1 (San Luis Rey)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230423025	207	N	TREMONT STREET		HAUNTED HEAD SALOON	High	Eat/Drink Est.	903.1 (San Luis Rey)
230524086	524	S	COAST HWY		HILL STREET CAFÉ	High	Eat/Drink Est.	904.1 (Loma Alta)
230727002	1926	S	COAST HWY		HILL STREET DONUT HOUSE	High	Eat/Drink Est.	904.2 (Buena Vista)
230420011	1401		CARMELO DRIVE		HOLIDAY INN/MARINA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231414003	491		COLLEGE BLVD		HOMETOWN BUFFET INC #735	High	Eat/Drink Est.	903.1 (San Luis Rey)
230626004	1733	S	COAST HWY		HON SUSHI	High	Eat/Drink Est.	904.2 (Buena Vista)
230723022	560		GREENBRIER DRIVE		HOOLIGANS	High	Eat/Drink Est.	904.1 (Loma Alta)
231025014	3186		VISTA WAY	100	HOOTERS OF OCEANSIDE	High	Eat/Drink Est.	904.2 (Buena Vista)
230523015	113	S	COAST HWY		HOSIE'S PACIFIC PUB	High	Eat/Drink Est.	903.1 (San Luis Rey)
230726001	1221		VISTA WAY		HUNTER STEAKHOUSE 210255	High	Eat/Drink Est.	904.2 (Buena Vista)
230723024	1806		OCEANSIDE BLVD		I HOP RESTAURANT	High	Eat/Drink Est.	904.1 (Loma Alta)
231325010	3809		PLAZA DRIVE	115	I LOVE PHO	High	Eat/Drink Est.	904.2 (Buena Vista)
231520047	4253		OCEANSIDE BLVD		IHOP	High	Eat/Drink Est.	904.1 (Loma Alta)
231315004	4605		FRAZEE ROAD		IN AND OUT BURGERS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421006	4211		OCEANSIDE BLVD		JACK IN THE BOX #3026	High	Eat/Drink Est.	904.1 (Loma Alta)
231017032	3909		MISSION AVENUE		JACK IN THE BOX #3061	High	Eat/Drink Est.	903.1 (San Luis Rey)
230621012	1900		MISSION AVENUE		JACK IN THE BOX #3068	High	Eat/Drink Est.	903.1 (San Luis Rey)
231325040	3808		PLAZA DRIVE		JACK IN THE BOX #89	High	Eat/Drink Est.	904.2 (Buena Vista)
230925008	2474		VISTA WAY		JACK IN THE BOX 98	High	Eat/Drink Est.	904.2 (Buena Vista)
230925019	2619		VISTA WAY	B2	JAMBA JUICE	High	Eat/Drink Est.	904.2 (Buena Vista)
231326016	3480		MARRON ROAD	3B103	JAMBA JUICE #643	High	Eat/Drink Est.	904.2 (Buena Vista)
231421010	4225		OCEANSIDE BLVD	K	JF JAPANESE CAFÉ	High	Eat/Drink Est.	904.1 (Loma Alta)
230422007	510	N	COAST HWY	D	JITTER COFFE PUB	High	Eat/Drink Est.	903.1 (San Luis Rey)
230523020	208	N	FREEMAN ST		JITTER COFFEE EXPRESS - OUT OF BUSINESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230421017	314	S	HARBOR DRIVE		JOE'S CRAB SHACK	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423009	308		MISSION AVENUE		JOHNNY MANANAS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231017036	3935		MISSION AVENUE	7	JOLI FILIPINO EXPRESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230320002	1900	N	HARBOR DRIVE		JOLLY ROGER RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
231225004	3910		VISTA WAY	110	JOSES TACO	High	Eat/Drink Est.	904.2 (Buena Vista)
230621016	2027		MISSION AVENUE	E1	JUGOS JUQUILA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421027	4111		OCEANSIDE BLVD	100	JUICE IT UP	High	Eat/Drink Est.	904.1 (Loma Alta)
231519023	4750		OCEANSIDE BLVD	A23	K - DONUTS	High	Eat/Drink Est.	904.1 (Loma Alta)
230723030	1906		OCEANSIDE BLVD		KAISEN SUSHI	High	Eat/Drink Est.	904.1 (Loma Alta)
231421039	4160		OCEANSIDE BLVD	163	KAM BERI - OUT OF BUSINESS	High	Eat/Drink Est.	904.1 (Loma Alta)
231326017	3480		MARRON ROAD	3B102	KARABAS SUBS INC (SUBWAY)	High	Eat/Drink Est.	904.2 (Buena Vista)
230523013	207	N	COAST HWY		KEALANI'S	High	Eat/Drink Est.	903.1 (San Luis Rey)
230723038	1950		OCEANSIDE BLVD	C	KEN'S DONUGHTS	High	Eat/Drink Est.	904.1 (Loma Alta)
230918023	3747		MISSION AVENUE		KFC	High	Eat/Drink Est.	903.1 (San Luis Rey)
230621013	2007		MISSION AVENUE		KFC - OCEANSIDE	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421026	4100		OCEANSIDE BLVD		KFC #Y305091	High	Eat/Drink Est.	904.1 (Loma Alta)
231017008	3772		MISSION AVENUE	127	KILLER PIZZA FROM MARS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231326032	3490		MARRON ROAD		King Burrito	High	Eat/Drink Est.	904.2 (Buena Vista)
231421033	4121		OCEANSIDE BLVD	203	KNOCKOUT PIZZERIA - OUT OF BUSINESS	High	Eat/Drink Est.	904.1 (Loma Alta)
230727005	1940	S	FREEMAN STREET		KONA HUT COFFEE HOUSE	High	Eat/Drink Est.	904.1 (Loma Alta)
231325008	3504		COLLEGE BLVD		KOTIJA MEXICAN FOOD	High	Eat/Drink Est.	904.2 (Buena Vista)
231017025	3815		MISSION AVENUE	101	KURANDO	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421009	4225		OCEANSIDE BLVD	E	L&L HAWAIIAN BARBECUE	High	Eat/Drink Est.	904.1 (Loma Alta)
230423027	209	N	TREMONT STREET		LA CASA PIZZA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231619057	2600		TEMPLE HEIGHTS DR	A	La Fuente Mexican Restaurant	High	Eat/Drink Est.	904.1 (Loma Alta)
231016001	300		DOUGLAS DRIVE		LA HACIENDA RESTAURANT & PARTY HALL	High	Eat/Drink Est.	903.1 (San Luis Rey)
230621017	1919		MISSION AVENUE	C	LA PERLA TAPATIA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231312003	625	N	REDONDO DRIVE		LA PERLA TAPATIA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421029	4111		OCEANSIDE BLVD	103	LA SALSA MEXICAN RESTAURANT - OUT OF BUSINESS	High	Eat/Drink Est.	904.1 (Loma Alta)
230525007	1145	S	TREMONT ST		LARRY'S BEACH CLUB	High	Eat/Drink Est.	904.1 (Loma Alta)
230621015	2011		MISSION AVENUE		LAS BRISAS RESTAURANT - OUT OF BUSINESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421013	4225		OCEANSIDE BLVD	Q	LE RENDEZ-VOUS FRENCH BAKERY	High	Eat/Drink Est.	904.1 (Loma Alta)
231017028	3852		MISSION AVENUE	B3-4	LITTLE CEASAR	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421041	4170		OCEANSIDE BLVD		LITTLE CEASAR	High	Eat/Drink Est.	904.1 (Loma Alta)
230625013	518		OCEANSIDE BLVD	103-4	LITTLE CEASAR'S PIZZA	High	Eat/Drink Est.	904.1 (Loma Alta)
230422006	406	N	COAST HWY		LONE STAR BBQ - OUT OF BUSINESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230523014	228	N	COAST HWY		LONGBOARDER CAFE INC	High	Eat/Drink Est.	903.1 (San Luis Rey)
230918008	3753		MISSION AVENUE	123	LOS JUANITOS MEXICAN FOOD - OUT OF BUSINESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230723037	1950		OCEANSIDE BLVD	R	LOS PINOS MARISCOS MEXICAN FOOD	High	Eat/Drink Est.	904.1 (Loma Alta)
231326014	3490		MARRON ROAD		LOS PRIMOS 16, L P	High	Eat/Drink Est.	904.2 (Buena Vista)
230825006	2183		VISTA WAY	B9	LOS TACOS	High	Eat/Drink Est.	904.2 (Buena Vista)
231217003	125		OLD GROVE ROAD	5	LOVE BOAT SUSHI BAR	High	Eat/Drink Est.	903.1 (San Luis Rey)
231217007	125		OLD GROVE ROAD	5	LOVEBOAT SUSHI	High	Eat/Drink Est.	903.1 (San Luis Rey)
230819026	162		ROYMAR ROAD		LUK'S KITCHEN	High	Eat/Drink Est.	903.1 (San Luis Rey)
231420119	1943		AVENIDA PLAZA REAL		MAHLER'S BAKERY	High	Eat/Drink Est.	904.1 (Loma Alta)
230522015	1060		MISSION AVENUE		MANHATTAN'S GIANT PIZZA, INC	High	Eat/Drink Est.	903.1 (San Luis Rey)
231312005	485		VANDEGRIFT BLVD	2	MARIETA'S MEXICAN RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
230724001	1759		OCEANSIDE BLVD	E	MARSHA'S DELI OUT - OF BUSINESS	High	Eat/Drink Est.	904.1 (Loma Alta)
230422004	307	N	COAST HWY	B	MARYS FAMILY RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423006	301		MISSION AVENUE		MAUI WAUI COFFEE & SMOOTHIES	High	Eat/Drink Est.	903.1 (San Luis Rey)
231727010	3517		CANNON ROAD		MC DONALD'S	High	Eat/Drink Est.	904.3 (Agua Hedionda)
231326012	3405		MARRON ROAD		MC DONALD'S / OCEANSIDE WAL-MART	High	Eat/Drink Est.	904.2 (Buena Vista)
231325037	3794		PLAZA DRIVE		MC DONALD'S / PLAZA DR	High	Eat/Drink Est.	904.2 (Buena Vista)
230624003	1701		OCEANSIDE BLVD		MC DONALD'S OF OCEANSIDE #16327	High	Eat/Drink Est.	904.1 (Loma Alta)
230621009	137		CANYON DRIVE		MCDONALDS	High	Eat/Drink Est.	904.1 (Loma Alta)
231414002	487		COLLEGE BLVD		MCDONALD'S	High	Eat/Drink Est.	903.1 (San Luis Rey)
231216003	185		OLD GROVE ROAD		MCDONALD'S	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421038	4151		OCEANSIDE BLVD		MCDONALD'S	High	Eat/Drink Est.	904.1 (Loma Alta)
230925002	2185		VISTA WAY		MCDONALD'S	High	Eat/Drink Est.	904.2 (Buena Vista)
230825024	2100		VISTA WAY		MCDONALD'S # 23057	High	Eat/Drink Est.	904.2 (Buena Vista)
230918005	3720		MISSION AVENUE		MCDONALDS # 5244	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423082	302	N	THE STRAND		McDonald's #17526	High	Eat/Drink Est.	903.1 (San Luis Rey)
231727003	3529		CANNON RD	2D	MIKES BAGELS & COFFEE HOUSE	High	Eat/Drink Est.	904.3 (Agua Hedionda)
230825002	2177		VISTA WAY		MIMI'S CAFE	High	Eat/Drink Est.	904.2 (Buena Vista)
231224002	1		BARNARD DRIVE		MIRA COSTA CAETERIA	High	Eat/Drink Est.	904.2 (Buena Vista)
230622007	1502		MISSION AVENUE		MISSION DONUT HOUSE	High	Eat/Drink Est.	903.1 (San Luis Rey)
230321001	1325	N	HARBOR DRIVE		MONTEREY BAY CANNERS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231519024	4750		OCEANSIDE BLVD	A9	MR PHO RESTAURANT	High	Eat/Drink Est.	904.1 (Loma Alta)
231025002	2247	S	EL CAMINO REAL		NANCY'S COFFEE	High	Eat/Drink Est.	904.2 (Buena Vista)
230421010	240	S	HARBOR DRIVE		NAUTICAL BEAN	High	Eat/Drink Est.	903.1 (San Luis Rey)
231115001	4250		OLD GROVE ROAD		NICHOLS ELEMENTARY SCHOOL CAFETERIA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231017013	3784		MISSION AVENUE	147	OCEAN RAINBOW - ICE CREAM PARLOR	High	Eat/Drink Est.	903.1 (San Luis Rey)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230925006	2455		VISTA WAY	F	OCEAN THAI CUISINE	High	Eat/Drink Est.	904.2 (Buena Vista)
231017027	3846		MISSION AVENUE	A3-4	OCEAN THAI CUSINE	High	Eat/Drink Est.	903.1 (San Luis Rey)
230625012	518		OCEANSIDE BLVD	108-10	OCEAN VIEW BUFFET - OUT OF BUSINESS	High	Eat/Drink Est.	904.1 (Loma Alta)
230622004	121		BROOKS STREET		OCEAN'S 11 CASINO	High	Eat/Drink Est.	903.1 (San Luis Rey)
231414004	495		COLLEGE BLVD	B	OCEANSIDE CHINESE FOOD	High	Eat/Drink Est.	903.1 (San Luis Rey)
231017009	3772		MISSION AVENUE	119	OCEANSIDE DONUTS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421048	4225		OCEANSIDE BLVD	E	OCEANSIDE HB INC	High	Eat/Drink Est.	904.1 (Loma Alta)
230320023	1950	N	HARBOR DRIVE		Oceanside Yacht Club	High	Eat/Drink Est.	903.1 (San Luis Rey)
231414008	459		COLLEGE BLVD	2	OHANA HAWAIIAN BBQ	High	Eat/Drink Est.	903.1 (San Luis Rey)
231017035	3772		MISSION AVENUE	130	OHZEN SUSHI - OUT OF BUSINESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230819020	231		AIRPORT ROAD		ONE MORE THAT'S IT PUB	High	Eat/Drink Est.	903.1 (San Luis Rey)
230925010	2485		VISTA WAY		OUTBACK STEAKHOUSE	High	Eat/Drink Est.	904.2 (Buena Vista)
230723033	1910		OCEANSIDE BLVD		P + Q PUB	High	Eat/Drink Est.	904.1 (Loma Alta)
230422014	626	S	TREMONT ST		PACIFIC GROCERY AND RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
230422027	626	S	TREMONT STREET		PACIFIC GROCERY AND RESTAURANT	High	Eat/Drink Est.	904.1 (Loma Alta)
231421030	4121		OCEANSIDE BLVD	200	PANDA EXPRESS	High	Eat/Drink Est.	904.1 (Loma Alta)
231017093	47		DOUGLAS DRIVE		Panda Express #1633	High	Eat/Drink Est.	903.1 (San Luis Rey)
230522016	1068		MISSION AVENUE		PANDA EXPRESS 941	High	Eat/Drink Est.	903.1 (San Luis Rey)
230723023	1710		OCEANSIDE BLVD	B	PAPA JOHN'S PIZZA	High	Eat/Drink Est.	904.1 (Loma Alta)
231421011	4225		OCEANSIDE BLVD	C	PAPA JOHN'S PIZZA	High	Eat/Drink Est.	904.1 (Loma Alta)
231315001	805		COLLEGE BLVD	102	PAPA PEPPERONI	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421031	4121		OCEANSIDE BLVD	201	PASTA BREAK	High	Eat/Drink Est.	904.1 (Loma Alta)
230423010	400		MISSION AVENUE		PASTA MIA'S	High	Eat/Drink Est.	903.1 (San Luis Rey)
230918024	3671		MISSION AVENUE		Paul's Place	High	Eat/Drink Est.	903.1 (San Luis Rey)
230719045	656		BENET ROAD		PEDRO'S TACOS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231425013	4002		VISTA WAY		PERKY BEAN	High	Eat/Drink Est.	904.2 (Buena Vista)
231017010	3776		MISSION AVENUE	137	PETITE MADELINE BAKERY	High	Eat/Drink Est.	903.1 (San Luis Rey)
230724002	1771		OCEANSIDE BLVD		PHILLY'S BEST	High	Eat/Drink Est.	904.1 (Loma Alta)
231217008	125		OLD GROVE ROAD	6	PICK UP STICKS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231217004	125		OLD GROVE ROAD	C-2	PICK UP STIX #7223	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423017	1		OCEANSIDE PIER	B	PIER VIEW COFFEE CO - OUT OF BUSINESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423020	301		PIER VIEW WAY		PIER VIEW PUB	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423019	300		PIER VIEW WAY		PIERVIEW COFFEE CO	High	Eat/Drink Est.	903.1 (San Luis Rey)
231017049	3825		MISSION AVENUE		PIT STOP	High	Eat/Drink Est.	903.1 (San Luis Rey)
230723027	1836		OCEANSIDE BLVD		PIZZA HUT	High	Eat/Drink Est.	904.1 (Loma Alta)
231727006	3509		CANNON ROAD	E1	PIZZA HUT	High	Eat/Drink Est.	904.3 (Agua Hedionda)
231312001	610	N	REDONDO DRIVE	F	PIZZA HUT #315023	High	Eat/Drink Est.	903.1 (San Luis Rey)
231025075	2216	S	EL CAMINO REAL		PIZZAROS PIZZA	High	Eat/Drink Est.	904.2 (Buena Vista)
231217009	125		OLD GROVE ROAD	8	POLLOS MARIA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231217005	125		OLD GROVE ROAD	8	POLLOS MARIA #2	High	Eat/Drink Est.	903.1 (San Luis Rey)
230625011	510		OCEANSIDE BLVD	B	PORT OF SUBS	High	Eat/Drink Est.	904.1 (Loma Alta)
231423002	2810		THUNDER DRIVE		PRIMO THUNDER MARKET	High	Eat/Drink Est.	904.2 (Buena Vista)
231014004	650		DOUGLAS DRIVE	111	PYRAMID'S RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
231025012	2725		VISTA WAY		Q RESTAURANT	High	Eat/Drink Est.	904.2 (Buena Vista)
230825008	2184		VISTA WAY		QUIK WOK	High	Eat/Drink Est.	904.2 (Buena Vista)
230423013	401		MISSION AVENUE		QUIZNO'S SUB STORE #10327	High	Eat/Drink Est.	903.1 (San Luis Rey)
230925016	2611		VISTA WAY	B	QUIZNOS' SUBS	High	Eat/Drink Est.	904.2 (Buena Vista)
231421015	4251		OCEANSIDE BLVD		RALPH'S GROCERY COMPANY #298	High	Eat/Drink Est.	904.1 (Loma Alta)
231217001	101		OLD GROVE ROAD		RALPHS #54	High	Eat/Drink Est.	903.1 (San Luis Rey)
230623001	1702		OCEANSIDE BLVD		RALPHS GROCER	High	Eat/Drink Est.	904.1 (Loma Alta)
231727012	3533		CANNON ROAD		RALPH'S GROCERY COMPANY #138	High	Eat/Drink Est.	904.3 (Agua Hedionda)
230727007	510		VISTA WAY		RED & WHITE MARKET	High	Eat/Drink Est.	904.2 (Buena Vista)
230423007	301		MISSION AVENUE		RED CUP YOGURT	High	Eat/Drink Est.	903.1 (San Luis Rey)
231025010	2685		VISTA WAY		RED LOBSTER REST #503	High	Eat/Drink Est.	904.2 (Buena Vista)
230523021	508		MISSION AVENUE		RIM TALAY	High	Eat/Drink Est.	903.1 (San Luis Rey)
230919018	473	N	EL CAMINO REAL		RIVERBOTTOM BAR	High	Eat/Drink Est.	903.1 (San Luis Rey)
231220006	3617		OCEAN RANCH BLVD	108	ROBERTO'S TACO SHOP	High	Eat/Drink Est.	904.1 (Loma Alta)
230625014	518		OCEANSIDE BLVD	111	ROBERTO'S TACO SHOP	High	Eat/Drink Est.	904.1 (Loma Alta)
231024001	2983		VIA LAS ROSAS	C	ROBERTO'S TACO SHOP	High	Eat/Drink Est.	904.2 (Buena Vista)
230421016	280	S	HARBOR DRIVE		ROBIN'S NEST CAFÉ	High	Eat/Drink Est.	903.1 (San Luis Rey)
230421011	258	S	HARBOR DRIVE		ROCKING BAHA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231025009	2655		VISTA WAY		ROMANO'S MACARONI GRILL	High	Eat/Drink Est.	904.2 (Buena Vista)
231024084	2216	S	EL CAMINO REAL		Rookie's Sports Bar	High	Eat/Drink Est.	904.2 (Buena Vista)
231220002	3613		OCEAN RANCH BLVD	100	ROSINA ITALIAN RESTAURANT AT DEL ORO	High	Eat/Drink Est.	904.1 (Loma Alta)
231313001	455		COLLEGE BLVD	10	ROUND TABLE PIZZA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231326013	3440		MARRON ROAD		ROUND TABLE PIZZA	High	Eat/Drink Est.	904.2 (Buena Vista)
230720006	2949		SAN LUIS REY ROAD		ROYAL DIVE	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421050	4201		OCEANSIDE BLVD	B	RUBIO'S FRESH MEXICAN GRILL #063	High	Eat/Drink Est.	904.1 (Loma Alta)
230423016	1		OCEANSIDE PIER	A	RUBY'S DINER	High	Eat/Drink Est.	903.1 (San Luis Rey)
231016006	490	N	EL CAMINO REAL		SAN LUIS REY RESTAURANT AND BAKERY	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423012	401		MISSION AVENUE		SANTINO'S PIZZA	High	Eat/Drink Est.	903.1 (San Luis Rey)
230524019	206		WISCONSIN AVE		SEASIDE COFFEE EXPRESS	High	Eat/Drink Est.	904.1 (Loma Alta)
230523017	202	S	COAST HWY		SENOR PANCHOS TACO SHOP	High	Eat/Drink Est.	904.1 (Loma Alta)
231421036	4141		OCEANSIDE BLVD		SHAKEY'S PIZZA	High	Eat/Drink Est.	904.1 (Loma Alta)
230919006	3375		MISSION AVENUE	I	SHANANIGANS SPORTS BAR AND GRILL	High	Eat/Drink Est.	903.1 (San Luis Rey)
231325038	3805		PLAZA DRIVE		SIZZLER RESTAURANT #883 ? OUT OF BUSINESS	High	Eat/Drink Est.	904.2 (Buena Vista)
231325039	3805		PLAZA DRIVE		SIZZLER RESTAURANT ? OUT OF BUSINESS	High	Eat/Drink Est.	904.2 (Buena Vista)
230625008	1129	S	COAST HWY		SK DONUT	High	Eat/Drink Est.	904.1 (Loma Alta)
231220047	3613		OCEAN RANCH BLVD		SKEWERS ON FIRE	High	Eat/Drink Est.	904.1 (Loma Alta)
231025005	2251	S	EL CAMINO REAL	A	SMOKEY J'S PIT BBQ - OUT OF OFFICE	High	Eat/Drink Est.	904.2 (Buena Vista)
230523012	206	N	COAST HWY		SPANKY'S PIZZA	High	Eat/Drink Est.	903.1 (San Luis Rey)
230626003	1706	S	COAST HWY		STAR PIZZA & ITALIAN RESTAURANT	High	Eat/Drink Est.	904.2 (Buena Vista)
230825003	2183		VISTA WAY	B1	STARBUCKS COFFEE # 5432	High	Eat/Drink Est.	904.2 (Buena Vista)
231325042	3702		PLAZA DRIVE	A	STARBUCKS COFFEE #10314	High	Eat/Drink Est.	904.2 (Buena Vista)
231326018	3480		MARRON ROAD	3B101	STARBUCKS COFFEE #2847	High	Eat/Drink Est.	904.2 (Buena Vista)
231315003	815		COLLEGE BLVD	108	STARBUCKS COFFEE #5212	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421042	4170		OCEANSIDE BLVD	177	STARBUCK'S COFFEE #5832	High	Eat/Drink Est.	904.1 (Loma Alta)
231025013	3125		VISTA WAY		STARBUCKS COFFEE #651 - OUT OF BUSINESS	High	Eat/Drink Est.	904.2 (Buena Vista)
230917005	3760		MISSION AVENUE	C	STARBUCKS COFFEE #6784	High	Eat/Drink Est.	903.1 (San Luis Rey)
231216002	175		OLD GROVE ROAD		STARBUCKS COFFEE #9349	High	Eat/Drink Est.	903.1 (San Luis Rey)
230724003	1779		OCEANSIDE BLVD		STARBUCKS COFFEE #9688	High	Eat/Drink Est.	904.1 (Loma Alta)
	2615		VISTA WAY		STARBUCKS INSIDE BARNES AND NOBLES	High	Eat/Drink Est.	
230825010	2170		VISTA WAY		STATER BROS MARKETS #151	High	Eat/Drink Est.	904.2 (Buena Vista)
230925007	2471		VISTA WAY		STUART ANDERSON'S BLACK ANGUS -OUT OF BUSINESS	High	Eat/Drink Est.	904.2 (Buena Vista)
231315006	4635		FRAZEE ROAD	B	SUBMARINA	High	Eat/Drink Est.	903.1 (San Luis Rey)
231325011	3809		PLAZA DRIVE	110S	SUBMARINA	High	Eat/Drink Est.	904.2 (Buena Vista)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230825004	2183		VISTA WAY	B7	SUBMARINA #24	High	Eat/Drink Est.	904.2 (Buena Vista)
230422005	323	N	COAST HWY	B	SUBWAY	High	Eat/Drink Est.	903.1 (San Luis Rey)
230522014	1024		MISSION AVENUE		SUBWAY	High	Eat/Drink Est.	903.1 (San Luis Rey)
231017011	3776		MISSION AVENUE	140	SUBWAY	High	Eat/Drink Est.	903.1 (San Luis Rey)
230925013	2535		VISTA WAY		SUBWAY	High	Eat/Drink Est.	904.2 (Buena Vista)
231414001	475		COLLEGE BLVD	J1	SUBWAY	High	Eat/Drink Est.	903.1 (San Luis Rey)
230723031	1910		OCEANSIDE BLVD		SUBWAY - MOVED TO 1836 OCEANSIDE BLVD.	High	Eat/Drink Est.	904.1 (Loma Alta)
230723104	1836		OCEANSIDE BLVD		SUBWAY # 14452	High	Eat/Drink Est.	903.1 (San Luis Rey)
231414032	705		COLLEGE BLVD		Subway # 46626	High	Eat/Drink Est.	903.1 (San Luis Rey)
231217010	125		OLD GROVE ROAD	16	SUBWAY'S SANDWICHES	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421040	4160		OCEANSIDE BLVD	171	SUBWAY'S SANDWICHES	High	Eat/Drink Est.	904.1 (Loma Alta)
230719046	250		EDDIE JONES WAY		Sunnyside Café	High	Eat/Drink Est.	903.1 (San Luis Rey)
231414033	467		COLLEGE BLVD	5	SUPER JUICE	High	Eat/Drink Est.	903.1 (San Luis Rey)
230625009	1129	S	COAST HWY		SUPER RANCHITO TACO SHOP	High	Eat/Drink Est.	904.1 (Loma Alta)
230423026	207	N	TREMONT STREET		SURRENDER THE BOOTY - DOES NOT EXIST	High	Eat/Drink Est.	903.1 (San Luis Rey)
231024083	2216	S	EL CAMINO REAL		Sushi 21	High	Eat/Drink Est.	904.2 (Buena Vista)
231315032	4645		FRAZEE ROAD	F-G	SUSHI ISLAND	High	Eat/Drink Est.	903.1 (San Luis Rey)
230925012	2530		VISTA WAY	J	SUSHI N JOY	High	Eat/Drink Est.	904.2 (Buena Vista)
230819023	3365		MISSION AVENUE	E	SZECHUAN PALACE - OUT OF BUSINESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230723036	1940		OCEANSIDE BLVD		TACO BELL	High	Eat/Drink Est.	904.1 (Loma Alta)
231425005	3845		PLAZA DRIVE		TACO BELL	High	Eat/Drink Est.	904.2 (Buena Vista)
231727011	3521		CANNON ROAD		TACO BELL #16065	High	Eat/Drink Est.	904.3 (Agua Hedionda)
231414007	695		COLLEGE BLVD		TACO BELL #17285	High	Eat/Drink Est.	903.1 (San Luis Rey)
231017030	3895		MISSION AVENUE		TACO BELL #3837	High	Eat/Drink Est.	903.1 (San Luis Rey)
230919007	3375		MISSION AVENUE	A	TAN'S DONUTS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231619070	1550		TEMPLE HEIGHT DRIVE		TEMPLE HEIGHTS ELEMENTARY SCHOOL CAFETERIA	High	Eat/Drink Est.	904.1 (Loma Alta)
231025003	2249	S	EL CAMINO REAL	A2	TERI'S CAFE INC	High	Eat/Drink Est.	904.2 (Buena Vista)
231325012	3809		PLAZA DRIVE		TERRI CAFE TERIYAKI NOOLDE H0USE	High	Eat/Drink Est.	904.2 (Buena Vista)
231519025	4750		OCEANSIDE BLVD	A21	THAI GARDEN RESTAURANT	High	Eat/Drink Est.	904.1 (Loma Alta)
230723032	1910		OCEANSIDE BLVD		THAI TABLE	High	Eat/Drink Est.	904.1 (Loma Alta)
231014002	650		DOUGLAS DRIVE	104	THE DONUT PARK	High	Eat/Drink Est.	903.1 (San Luis Rey)
231220007	3617		OCEAN RANCH BLVD		THE FLAME BROILER	High	Eat/Drink Est.	904.1 (Loma Alta)
230421009	1105	N	COAST HWY		THE FLYING BRIDGE RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
230421008	939	N	COAST HWY		THE MAIN ATTRACTION	High	Eat/Drink Est.	903.1 (San Luis Rey)
230522018	1060		MISSION AVENUE		THE MANDARIN	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423014	401		MISSION AVENUE		THE RICE GARDEN INC	High	Eat/Drink Est.	903.1 (San Luis Rey)
230719008	656		BENET ROAD		THE THIRD PLACE ESPRESSO - OUT OF BUSINESS	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423024	406		PIER VIEW WAY		THE WHISKEY BARREL	High	Eat/Drink Est.	903.1 (San Luis Rey)
230523022	511		MISSION AVENUE		THE WOK IN	High	Eat/Drink Est.	903.1 (San Luis Rey)
230421014	274	S	HARBOR DRIVE		TONY'S SPORT BAR & GRILL	High	Eat/Drink Est.	903.1 (San Luis Rey)
231325013	3827		PLAZA DRIVE		TOP THIS FROZEN YOGURT	High	Eat/Drink Est.	904.2 (Buena Vista)
230917021	3776		MISSION AVENUE		TOPSY TURVY FROZEN YOGURT	High	Eat/Drink Est.	903.1 (San Luis Rey)
230423029	311	N	TREMONT ST		TREMONT STREET SPORTS BAR	High	Eat/Drink Est.	903.1 (San Luis Rey)
231425043	4002		VISTA WAY		TRI-CITY HOSPISTAL CAFETERIA	High	Eat/Drink Est.	904.2 (Buena Vista)
231414009	461		COLLEGE BLVD	3	TRUPIANO'S ITALIAN RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
231519028	4760		OCEANSIDE BLVD	B4	TWO BROTHERS FROM ITALY OCEANSIDE	High	Eat/Drink Est.	904.1 (Loma Alta)
231425042	3829		PLAZA DRIVE		TWO SPOONS COFFEE ROASTERS	High	Eat/Drink Est.	904.2 (Buena Vista)
230423015	401		MISSION AVENUE		UMI JAPANESE GRILL & CAFE INC	High	Eat/Drink Est.	903.1 (San Luis Rey)
231421047	4196		OCEANSIDE BLVD		UPPER CRUST PIZZA	High	Eat/Drink Est.	904.1 (Loma Alta)
231017026	3846		MISSION AVENUE	A1	VALLEY BUZZ	High	Eat/Drink Est.	903.1 (San Luis Rey)
230422009	604	N	COAST HWY		VENETO'S PIZZA TOWNE	High	Eat/Drink Est.	903.1 (San Luis Rey)
230422010	608	N	COAST HWY		VENETO'S RESTAURANT	High	Eat/Drink Est.	903.1 (San Luis Rey)
231414005	495		COLLEGE BLVD	C	VICTORIAS MEXICAN FOOD INC	High	Eat/Drink Est.	903.1 (San Luis Rey)
230523023	608		MISSION AVENUE		VIGILUCCI'S RESTAURANT GROUP	High	Eat/Drink Est.	903.1 (San Luis Rey)
231519026	4750		OCEANSIDE BLVD	A18	WARAII SUSHI	High	Eat/Drink Est.	904.1 (Loma Alta)
230522012	1002		MISSION AVENUE		WENDY'S #30	High	Eat/Drink Est.	903.1 (San Luis Rey)
231325009	3705		PLAZA DRIVE		WENDY'S RESTAURANT	High	Eat/Drink Est.	904.2 (Buena Vista)
230422012	624	N	COAST HWY		WIENERSCHNITZEL	High	Eat/Drink Est.	903.1 (San Luis Rey)
230723039	1960		OCEANSIDE BLVD		WIENERSCHNITZEL	High	Eat/Drink Est.	904.1 (Loma Alta)
230925011	2525		VISTA WAY	A	WINGS N THINGS	High	Eat/Drink Est.	904.2 (Buena Vista)
231421049	4225		OCEANSIDE BLVD	Y	WINGS PIZZA N THINGS	High	Eat/Drink Est.	904.1 (Loma Alta)
230819021	3304		MISSION AVENUE		YUMYUM DONUTS	High	Eat/Drink Est.	903.1 (San Luis Rey)
231710001	665		SLEEPING INDIAN ROAD		ADB Labs	High	Nurseries	903.1 (San Luis Rey)
231508001	1492		WILSHIRE RD		ARMSTRONG GARDEN CENTERS INC.	High	Nurseries	903.1 (San Luis Rey)
231421128	4131		OCEANSIDE BLVD		Armstrong Garden Centers, Inc.	High	Nurseries	904.1 (Loma Alta)
230822032	2521		OCEANSIDE BLVD	A	California Flower Bulb Co	High	Nurseries	904.1 (Loma Alta)
231626003	3597		KELLINTON COURT		Carol's Garden	High	Nurseries	904.2 (Buena Vista)
231510004	370		WILSHIRE RD		CMA Growers - OUT OF BUSINESS	High	Nurseries	
231510002	370		WILSHIRE RD		CMA GROWERS, INC - OUT OF BUSINESS	High	Nurseries	903.1 (San Luis Rey)
231606001	1319		SLEEPING INDIAN ROAD		Collectable Colors Inc.	High	Nurseries	903.1 (San Luis Rey)
231716001	2016		WILLOBROOK DRIVE		Cruz Nursery	High	Nurseries	
231727016	4966		LASSEN DRIVE		Cycad Santuary	High	Nurseries	904.2 (Buena Vista)
230919023	3396		TONAPAH STREET		Cycadseedling. Com	High	Nurseries	903.1 (San Luis Rey)
231607002	1319		SLEEPING INDIAN ROAD		D & K GROWERS INC	High	Nurseries	903.1 (San Luis Rey)
231606002	1319		SLEEPING INDIAN ROAD		D & K Growers, Inc	High	Nurseries	903.1 (San Luis Rey)
231611002	5712	N	RIVER ROAD		DM Color Express, Inc.	High	Nurseries	903.1 (San Luis Rey)
231122002	3231		OCEANSIDE BLVD		Evergreen Nursery	High	Nurseries	904.1 (Loma Alta)
231022001	3231		OCEANSIDE BLVD		EVERGREEN NURSERY	High	Nurseries	904.1 (Loma Alta)
231811001	6060	N	RIVER ROAD		Exotic Bamboo	High	Nurseries	903.1 (San Luis Rey)
231511002	300		WILSHIRE RD		Fancy Plants	High	Nurseries	
230725001	1629		HUNSAKER STREET		Fire Mountain Enterprises	High	Nurseries	904.1 (Loma Alta)
230824002	1620		RIDGEWAY STREET		INGWERSEN NURSERY INC.	High	Nurseries	904.1 (Loma Alta)
230824003	1620		RIDGEWAY STREET		Ingwersen Nursery, Inc.	High	Nurseries	904.1 (Loma Alta)
231716002	2016		WILLOBROOK DRIVE		J Plants	High	Nurseries	
231607003	6508		MORRO HEIGHTS ROAD		LAS PALMAS RANCH	High	Nurseries	903.1 (San Luis Rey)
231607001	6508		MORRO HEIGHTS ROAD		LAS PALMAS RANCH	High	Nurseries	903.1 (San Luis Rey)
231510003	461		WILSHIRE RD		LOPEZ NURSERY	High	Nurseries	903.1 (San Luis Rey)
231509001	461		WILSHIRE RD		Lopez Nursery	High	Nurseries	
231606003	1319		SLEEPING INDIAN ROAD		Pacific Growers	High	Nurseries	903.1 (San Luis Rey)
231809001	30970		VIA PUERTA DEL SOL		PARDEE TREE NURSERY	High	Nurseries	903.1 (San Luis Rey)
231809002	30970		VIA PUERTA DEL SOL		PARDEE TREE NURSERY	High	Nurseries	
231321080	4039		AVENIDA DE LA PLATA		Preserved Treescapes	High	Nurseries	904.1 (Loma Alta)
231712005	6000		MISSION AVENUE		Rancho del Oro Landscape & Maintenance	High	Nurseries	903.1 (San Luis Rey)
230925081	2371		IVY ROAD		Santa Fe Nursery	High	Nurseries	903.1 (San Luis Rey)
231510001	321		WILSHIRE RD		SKYDANCE RANCH	High	Nurseries	903.1 (San Luis Rey)
230524080	801	S	COAST HWY		101 AUTO SALES	Medium	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230523086	114	S	COAST HWY		500 MOTORS	Medium	Commercial	903.1 (San Luis Rey)
230625042	515		OCEANSIDE BLVD		500 MOTORS	Medium	Commercial	904.1 (Loma Alta)
230523031	115	S	FREEMAN STREET	B	500 MOTORS	Medium	Commercial	904.1 (Loma Alta)
230523087	205	S	COAST HWY	B	501 MOTORS	Medium	Commercial	904.1 (Loma Alta)
231315010	4625		FRAZEE ROAD		7 - ELEVEN	Medium	Commercial	903.1 (San Luis Rey)
230720011	2255		MISSION AVENUE		7 ELEVEN #25818D	Medium	Commercial	903.1 (San Luis Rey)
231325036	3407		COLLEGE BLVD		7-11 FOOD STORE #15591B	Medium	Commercial	904.2 (Buena Vista)
231423003	2850		THUNDER DRIVE		7-11 STORE #13615	Medium	Commercial	904.2 (Buena Vista)
231017092	41		DOUGLAS DRIVE		7Eleven	Medium	Commercial	903.1 (San Luis Rey)
231312008	487		VANDEGRIFT BLVD		7-ELEVEN #20342C - 2111	Medium	Commercial	903.1 (San Luis Rey)
230922003	2936		OCEANSIDE BLVD		A MARKET - MARISCOS & MEXICAN FOOD	Medium	Commercial	904.1 (Loma Alta)
230523029	242	S	COAST HWY		ACE SMOG	Medium	Commercial	904.1 (Loma Alta)
230523033	105	S	COAST HWY		AKKA CARIBBEAN MARKET	Medium	Commercial	903.1 (San Luis Rey)
231017042	3925		MISSION AVENUE		ALBERTSON'S 6767	Medium	Commercial	903.1 (San Luis Rey)
230822004	2601		OCEANSIDE BLVD		ALL SMOG TEST ONLY CENTER	Medium	Commercial	904.1 (Loma Alta)
230723003	1950		OCEANSIDE BLVD	A-B	ALL STAR GLASS	Medium	Commercial	904.1 (Loma Alta)
230522024	326	N	HORNE STREET		AMIGO'S RANCHO MERCADO	Medium	Commercial	903.1 (San Luis Rey)
230523088	222	S	COAST HWY		ANGELO'S KARS	Medium	Commercial	904.1 (Loma Alta)
230722002	608		CROUCH ST		AUTLAN MEATS	Medium	Commercial	904.1 (Loma Alta)
230720001	2949		SAN LUIS REY ROAD		AUTO GLASS AMERICA	Medium	Commercial	903.1 (San Luis Rey)
230719001	358		VIA DEL MONTE		AUTO GLASS AMERICA	Medium	Commercial	903.1 (San Luis Rey)
230625038	1220	S	COAST HWY		AUTO SOUND AND IMAGE	Medium	Commercial	904.1 (Loma Alta)
230625024	1303	S	COAST HWY		AUTO SOUND AND IMAGE	Medium	Commercial	904.1 (Loma Alta)
231017024	3975		MISSION AVENUE		AUTOZONE	Medium	Commercial	903.1 (San Luis Rey)
230522003	1040		MISSION AVENUE		AUTOZONE #5661	Medium	Commercial	903.1 (San Luis Rey)
231312006	617	N	REDONDO DRIVE		BIG LIQUOR	Medium	Commercial	903.1 (San Luis Rey)
230723052	1820		OCEANSIDE BLVD		BONEY'S MARKETPLACE	Medium	Commercial	904.1 (Loma Alta)
231321004	4035		OCEANSIDE BLVD		CALIFORNIA AUTOMOTIVE	Medium	Commercial	904.1 (Loma Alta)
230723007	2040		OCEANSIDE BLVD		CALIFORNIA PACIFIC/JBUGS	Medium	Commercial	904.1 (Loma Alta)
230819007	3204		PRODUCTION AVE		CALIFORNIA SMOG CENTER	Medium	Commercial	903.1 (San Luis Rey)
231619013	2570		JASON COURT		CALPEX PLASTICS INC	Medium	Commercial	904.1 (Loma Alta)
230622002	1531		MISSION AVENUE		CAR QUEST AUTO PARTS	Medium	Commercial	903.1 (San Luis Rey)
230625040	1520	S	COAST HWY		CERTIFIED AUTO SALES	Medium	Commercial	904.1 (Loma Alta)
230422025	420	N	COAST HWY		CIRCLE K#2702967	Medium	Commercial	903.1 (San Luis Rey)
230626002	1707	S	COAST HWY		COAST PERFORMANCE AND OFFROAD	Medium	Commercial	904.2 (Buena Vista)
230523034	432	S	COAST HWY		COASTAL LIQUOR	Medium	Commercial	904.1 (Loma Alta)
230524079	617	S	COAST HWY	A	CONTINENTAL MOTORS - SAAB - FORMERLY BMW	Medium	Commercial	904.1 (Loma Alta)
230727006	2009	S	COAST HWY		CREAM OF THE CROP	Medium	Commercial	904.2 (Buena Vista)
230723020	1706		OCEANSIDE BLVD		CVS DRUG STORE	Medium	Commercial	904.1 (Loma Alta)
231315025	4615		FRAZEE ROAD		CVS PHARMACY	Medium	Commercial	903.1 (San Luis Rey)
231025015	2281	S	EL CAMINO REAL		DISCOUNT TIRE	Medium	Commercial	904.2 (Buena Vista)
230525012	1037	S	COAST HWY		DISCOUNT TIRES	Medium	Commercial	904.1 (Loma Alta)
230621024	410		SAN DIEGO STREET		EL NOPALITO MARKET	Medium	Commercial	903.1 (San Luis Rey)
230621025	422		SAN DIEGO STREET		EL TORITO MEAT MARKET	Medium	Commercial	903.1 (San Luis Rey)
230920001	660	S	EL CAMINO REAL		EMERALD ISLE GOLF COURSE	Medium	Commercial	903.1 (San Luis Rey)
230925082	2530		VISTA WAY		FARM BOY	Medium	Commercial	904.2 (Buena Vista)
230723101	1991		OCEANSIDE BLVD		FIRE MOUNTAIN MARKET	Medium	Commercial	904.1 (Loma Alta)
231014005	650		DOUGLAS DRIVE	113-20	FIVE STAR DISC. MRKT & LIQUOR	Medium	Commercial	903.1 (San Luis Rey)
230722001	606		CROUCH ST		GIANT K MARKET	Medium	Commercial	904.1 (Loma Alta)
231414010	471		COLLEGE BLVD		HENRY'S FARMERS MARKET	Medium	Commercial	903.1 (San Luis Rey)
230524076	502	S	COAST HWY		HOMETOWN MOTORS INC	Medium	Commercial	904.1 (Loma Alta)
231619017	2520		JASON COURT		KAHLER INTERNATIONAL INC ?	Medium	Commercial	904.1 (Loma Alta)
230626023	1555	S	COAST HWY		KARZ PLUS RV	Medium	Commercial	904.1 (Loma Alta)
231425001	3840		PLAZA DR		KRAGEN AUTO PARTS #794	Medium	Commercial	904.2 (Buena Vista)
230918002	3661		MISSION AVENUE		KRAGEN AUTO SUPPLY #1329	Medium	Commercial	903.1 (San Luis Rey)
230625001	502		OCEANSIDE BLVD		KRAGEN AUTO SUPPLY #331	Medium	Commercial	904.1 (Loma Alta)
230723021	559		GREENBRIER DRIVE		KYOTO GIFT + FOOD	Medium	Commercial	904.1 (Loma Alta)
230723055	1950		OCEANSIDE BLVD	H	LA GRANJA MARKET	Medium	Commercial	904.1 (Loma Alta)
231017041	3864		MISSION AVENUE		LITA'S FISH MARKET	Medium	Commercial	903.1 (San Luis Rey)
231520011	1638		ORD WAY		MIKE'S CHOICE MEATS	Medium	Commercial	904.1 (Loma Alta)
231017039	3846		MISSION AVENUE	A2	MILANO'S LIQUOR	Medium	Commercial	903.1 (San Luis Rey)
230819039	3320		MISSION AVENUE	L	MISSION ASIAN MARKET	Medium	Commercial	903.1 (San Luis Rey)
230917008	3753		MISSION AVENUE	121-22	MISSION KABAYAN ORIENTAL MARKET	Medium	Commercial	903.1 (San Luis Rey)
231017015	3772		MISSION AVENUE	135	MISSION MARKETPLACE	Medium	Commercial	903.1 (San Luis Rey)
230917007	3753		MISSION AVENUE	117	MISSION SEAFOOD	Medium	Commercial	903.1 (San Luis Rey)
230621026	2027		MISSION AVENUE	D	MISSION TIANGUIS	Medium	Commercial	903.1 (San Luis Rey)
230922002	2954		OCEANSIDE BLVD		NAPA AUTO PARTS-OCEANSIDE	Medium	Commercial	904.1 (Loma Alta)
230820010	219		VIA EL CENTRO		NICHOLAS CABINETS	Medium	Commercial	903.1 (San Luis Rey)
230524078	601	S	COAST HWY		NORTH COUNTY BMW	Medium	Commercial	904.1 (Loma Alta)
230822022	2600		OCEANSIDE BLVD		NORTH COUNTY FRESH POULTRY	Medium	Commercial	904.1 (Loma Alta)
230720020	2905		SAN LUIS REY ROAD		NORTH COUNTY HUMANE SOCIETY	Medium	Commercial	903.1 (San Luis Rey)
231312007	620	N	REDONDO DRIVE	E	NOVILLO'S MEAT MARKET	Medium	Commercial	903.1 (San Luis Rey)
230524034	205		WISCONSIN AVENUE		OCEAN 7 FOOD STORE	Medium	Commercial	904.1 (Loma Alta)
230723008	2024		OCEANSIDE BLVD	B	OCEANSIDE AUTO UPHOLSTERY	Medium	Commercial	904.1 (Loma Alta)
230625039	1426	S	COAST HWY		OCEANSIDE IMPORTS	Medium	Commercial	904.1 (Loma Alta)
230525003	1106	S	COAST HWY	B	OCEANSIDE TEST ONLY CENTER	Medium	Commercial	904.1 (Loma Alta)
231414020	499		COLLEGE BLVD	A	OCEANSIDE TIRE AND SERVICE CENTER	Medium	Commercial	903.1 (San Luis Rey)
230723053	1906		OCEANSIDE BLVD		OLOA SAMOA	Medium	Commercial	904.1 (Loma Alta)
230422019	523	N	COAST HWY		PACIFIC TIRE & WHEEL	Medium	Commercial	903.1 (San Luis Rey)
230422024	601	N	CLEVELAND ST		PAPPY'S MARKET	Medium	Commercial	903.1 (San Luis Rey)
230421038	1009	S	COAST HWY		PHAT CITY MOTORS	Medium	Commercial	904.1 (Loma Alta)
231520017	1710		ORD WAY		PHD MANUFACTURING INC	Medium	Commercial	904.1 (Loma Alta)
230719002	444		VIA EL CENTRO		PRECISION AUTO GLASS	Medium	Commercial	903.1 (San Luis Rey)
231619034	2620		TEMPLE HEIGHTS DRIVE		PRECISION CARPENTRY INC	Medium	Commercial	904.1 (Loma Alta)
230626017	606		MORSE STREET		PRIMO FOOD	Medium	Commercial	904.2 (Buena Vista)
231727008	3533		CANNON RD		RALPH'S	Medium	Commercial	904.3 (Agua Hedionda)
230422026	700	N	COAST HWY		RED & WHITE SUPERETTE	Medium	Commercial	903.1 (San Luis Rey)
230625022	1201	S	COAST HWY		RITE AID	Medium	Commercial	904.1 (Loma Alta)
231017040	3858		MISSION AVENUE		RODEOS MARKET AND RESTAURANT	Medium	Commercial	903.1 (San Luis Rey)
231619026	2580		JASON COURT		SEASIDE HELICOPTERS INC	Medium	Commercial	904.1 (Loma Alta)
230919009	3365		MISSION AVENUE	A-B	SEVENDAY MARKET	Medium	Commercial	903.1 (San Luis Rey)
230524081	902	S	COAST HWY		SHOWTIME MOTORS	Medium	Commercial	904.1 (Loma Alta)
231619006	2615		TEMPLE HEIGHTS DRIVE		SIERRA SPRINGS WATER	Medium	Commercial	904.1 (Loma Alta)
230724007	1737		OCEANSIDE BLVD		SMART AND FINAL	Medium	Commercial	904.1 (Loma Alta)
230723044	1950		OCEANSIDE BLVD	O	SMOG-THIS	Medium	Commercial	904.1 (Loma Alta)
230723079	660		CROUCH ST		SOS UPHOLSTERY	Medium	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
231620010	2664		VISTA PACIFIC DR		SOUTHCOAST HEATING & AIR	Medium	Commercial	904.1 (Loma Alta)
231017014	3770		MISSION AVENUE		STATER BROTHERS	Medium	Commercial	903.1 (San Luis Rey)
230723054	1906		OCEANSIDE BLVD		SUPER VALUE MARKET	Medium	Commercial	904.1 (Loma Alta)
230723005	660		CROUCH ST		THE DING MAN	Medium	Commercial	904.1 (Loma Alta)
231321005	4055		CALLE PLATINO		TIRE CENTERS LLC	Medium	Commercial	904.1 (Loma Alta)
230925020	2570		VISTA WAY		TRADER JOE'S #22	Medium	Commercial	904.2 (Buena Vista)
231619001	2620		TEMPLE HEIGHTS DRIVE		TURNKEY ENGINE SUPPLY	Medium	Commercial	904.1 (Loma Alta)
230622010	1527		MISSION AVENUE		VALUE PLUS	Medium	Commercial	903.1 (San Luis Rey)
230621027	2031		MISSION AVENUE		VIVA SUPERMERCADO	Medium	Commercial	903.1 (San Luis Rey)
231315011	845		COLLEGE BLVD		VONS STORE #2360	Medium	Commercial	903.1 (San Luis Rey)
231421052	4181		OCEANSIDE BLVD		WALGREENS DRUG STORE - REPLACED RDO UNION 76	Medium	Commercial	904.1 (Loma Alta)
231619005	2525		JASON COURT		WALLDESIGN INC	Medium	Commercial	904.1 (Loma Alta)
230524075	501	S	COAST HWY		WHOLESALE AUTOS	Medium	Commercial	904.1 (Loma Alta)
230524077	515	S	COAST HWY		WHOLESALE AUTOS	Medium	Commercial	904.1 (Loma Alta)
230922004	2933		OCEANSIDE BLVD		WINDSHIELD PROS - OUT OF BUSINESS	Medium	Commercial	904.1 (Loma Alta)
230524033	202		WISCONSIN AVENUE		WISCONSIN MARKET	Medium	Commercial	904.1 (Loma Alta)
230525015	1111	S	COAST HWY		YES AUTO SALES	Medium	Commercial	904.1 (Loma Alta)
230819038	3200		MISSION AVENUE		Z-MART MARKET	Medium	Commercial	903.1 (San Luis Rey)
230522030	1036		MISSION AVENUE		0.99 ONLY STORE	Low	Commercial	903.1 (San Luis Rey)
231321035	4035		OCEANSIDE BLVD	C19	1 800 GOTJUNK	Low	Commercial	904.1 (Loma Alta)
230523035	509		MISSION AVENUE		1 ON ONE NUTRITION	Low	Commercial	903.1 (San Luis Rey)
231225007	3710		VISTA WY	115	1 STOP UNIFORM SHOP	Low	Commercial	904.2 (Buena Vista)
230524005	403		WISCONSIN AVENUE	E	101 HAIR INK	Low	Commercial	904.1 (Loma Alta)
230423034	410		PIER VIEW WAY		1ST MARINE DIVISION ASSOCIATION	Low	Commercial	903.1 (San Luis Rey)
231312009	610	N	REDONDO DRIVE	G	1ST SAMOAN CONGREGATION CHUCH MESA MARGARITA	Low	Commercial	903.1 (San Luis Rey)
231315031	4655		FRAZEE ROAD		24 HOUR FITNESS	Low	Commercial	903.1 (San Luis Rey)
231024079	2213	S	EL CAMINO REAL		24 HOUR FITNESS CLUB	Low	Commercial	904.2 (Buena Vista)
230523083	322	S	COAST HWY		2ND HAND BARGAIN HOUSE	Low	Commercial	904.1 (Loma Alta)
230819056	3265		PRODUCTION AVENUE		3D FOAM INC.	Low	Commercial	903.1 (San Luis Rey)
231520021	1710		ORD WAY		3V WHEEL DISTRIBUTION INC	Low	Commercial	904.1 (Loma Alta)
230522002	707		MISSION AVENUE		4 DESIGN ARCHITECTURE	Low	Commercial	903.1 (San Luis Rey)
230523085	102	S	COAST HWY		500 MOTORS	Low	Commercial	903.1 (San Luis Rey)
231024082	2985		VIA LAS ROSAS		7 - ELEVEN # 18159 B	Low	Commercial	904.2 (Buena Vista)
230625046	711		OCEANSIDE BLVD		7-11 FOOD STORE #17043 D/2011	Low	Commercial	904.1 (Loma Alta)
231326023	3514		COLLEGE BLVD		95 COLLEGE PLAZA LTD	Low	Commercial	904.2 (Buena Vista)
230925024	2305		VISTA WAY		A & D ORIENTAL RUGS	Low	Commercial	904.2 (Buena Vista)
230720013	316		VIA DEL NORTE		A & G INDUSTRIES, INC	Low	Commercial	903.1 (San Luis Rey)
230925073	2530		VISTA WAY	N	A T & T MOBILITY	Low	Commercial	904.2 (Buena Vista)
230919013	3375		MISSION AVENUE	G	A TOUCH OF GOLD	Low	Commercial	903.1 (San Luis Rey)
231421089	4095		OCEANSIDE BLVD	D	A.C. AND FLOOR D□COR INC.	Low	Commercial	904.1 (Loma Alta)
231619064	2600		TEMPLE HEIGHTS DRIVE		A1 GOLF CARS	Low	Commercial	904.1 (Loma Alta)
230724017	1783		OCEANSIDE BLVD		A-1 SELF STORAGE	Low	Commercial	904.1 (Loma Alta)
230922057	3030		OCEANSIDE BLVD		A-1 SELF STORAGE	Low	Commercial	904.1 (Loma Alta)
230523038	234	S	COAST HWY		AA&B INSURANCE	Low	Commercial	904.1 (Loma Alta)
230524039	909	S	COAST HWY	C	AAA - GOLD AND DIAMONDS	Low	Commercial	904.1 (Loma Alta)
230819036	3245		PRODUCTION AVENUE		AARK CONSTRUCTION	Low	Commercial	903.1 (San Luis Rey)
230925075	2550		VISTA WAY		AARON BROTHERS' INC. #93	Low	Commercial	904.2 (Buena Vista)
231421119	4171		OCEANSIDE BLVD	100A	AARON'S SALES & LEASE OWNERSHIP	Low	Commercial	904.1 (Loma Alta)
230522004	221	N	HORNE STREET	B	ABC BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
231421079	4089		OCEANSIDE BLVD	C	ABD TECHNOLOGY LLC	Low	Commercial	904.1 (Loma Alta)
230524045	423	S	COAST HWY		ABOUT FACE	Low	Commercial	904.1 (Loma Alta)
231421085	4093		OCEANSIDE BLVD	G	ABOVE BOARDS	Low	Commercial	904.1 (Loma Alta)
230724012	1763		OCEANSIDE BLVD		ABSOLUTE HAIR	Low	Commercial	904.1 (Loma Alta)
231024066	2181	S	EL CAMINO REAL	201	ABSOLUTELY SMOKE FREE - ONE HOUR	Low	Commercial	904.2 (Buena Vista)
231220010	4001		AVENIDA DE LA PLATA		ACADEMIC COMMUNICATION ASSOC, INC	Low	Commercial	904.1 (Loma Alta)
230819054	3207		ROYMAR ROAD	A-B	ACADEMY MACHINE PRODUCTS, INC	Low	Commercial	903.1 (San Luis Rey)
231220031	3640		OCEAN RANCH BLVD		ACCUDIAGNOSTICS	Low	Commercial	904.1 (Loma Alta)
231619030	1980		PEACOCK BLVD	D	ACCUWELD INC	Low	Commercial	904.1 (Loma Alta)
230524064	865	S	COAST HWY		ACD ADVANCE COLOR COATING	Low	Commercial	904.1 (Loma Alta)
230819048	3239		ROYMAR ROAD		ACE AVIATION SERVICES	Low	Commercial	903.1 (San Luis Rey)
230625033	1325	S	COAST HWY		ACE WELDING	Low	Commercial	904.1 (Loma Alta)
231620003	1875		ORD WAY		ACI DISTRIBUTION	Low	Commercial	904.1 (Loma Alta)
231313004	455		COLLEGE BLVD	6	ACTIVE WEAR PLUS	Low	Commercial	903.1 (San Luis Rey)
231320009	4033		AVENIDA DE LA PLATA		ACUSHNET TEST FACILITY	Low	Commercial	904.1 (Loma Alta)
231321065	4061		OCEANSIDE BLVD	J	AD COMPUTERS	Low	Commercial	904.1 (Loma Alta)
231024060	2171	S	EL CAMINO REAL	100	ADAMANTINE MEDIA INC	Low	Commercial	904.2 (Buena Vista)
231421016	4225		OCEANSIDE BLVD	D	ADORA SALON	Low	Commercial	904.1 (Loma Alta)
231420042	4167		AVENIDA DE LA PLATA	126	ADVANCE PERSONNEL SYSTEMS INC	Low	Commercial	904.1 (Loma Alta)
231221061	3720		OCEANIC WAY	307	ADVANCE THERMAL FORMING ENT INC	Low	Commercial	904.1 (Loma Alta)
231420033	4167		AVENIDA DE LA PLATA	106	ADVANCED EDUCATIONAL STRATEGIES INSTITUTE	Low	Commercial	904.1 (Loma Alta)
230819051	3215		PRODUCTION AVENUE		ADVANCED FIBERGLASS	Low	Commercial	903.1 (San Luis Rey)
230627002	1817	S	COAST HWY	A	AFS TAX, REALESTATE	Low	Commercial	904.2 (Buena Vista)
230524006	805	S	COAST HWY		ALAN'S BIKE SHOP	Low	Commercial	904.1 (Loma Alta)
231025043	2665		VISTA WAY	C	ALFRED ANGELO	Low	Commercial	904.2 (Buena Vista)
231321031	4035		OCEANSIDE BLVD	B23	ALFRED DUNATTE CABINETS	Low	Commercial	904.1 (Loma Alta)
231024026	2103	S	EL CAMINO REAL	203	ALISA WILLENS-DAVIS PHD	Low	Commercial	904.2 (Buena Vista)
231321070	4065		OCEANSIDE BLVD	C	ALL ABOUT EYES OPTOMETRIC	Low	Commercial	904.1 (Loma Alta)
231017058	3861		MISSION AVENUE		ALL AMERICAN BARBER SHOP	Low	Commercial	903.1 (San Luis Rey)
231520007	1752		ORD WAY		ALL FLOOR INSTALL	Low	Commercial	904.1 (Loma Alta)
230320003	1540	N	HARBOR DRIVE		ALL HANDS ON DECK	Low	Commercial	903.1 (San Luis Rey)
231420005	4112		AVENIDA DE LA PLATA		ALLEN L IND INC	Low	Commercial	904.1 (Loma Alta)
231024058	2141	S	EL CAMINO REAL	I	ALLEN LANDSCAPE INC	Low	Commercial	904.2 (Buena Vista)
230727009	1933	S	COAST HWY		ALLEN ROGERS HAIR DESIGNER	Low	Commercial	904.2 (Buena Vista)
231321043	4035		OCEANSIDE BLVD	G52	ALLENS CUSTOM WOODWORKING	Low	Commercial	904.1 (Loma Alta)
231620012	2636		VISTA PACIFIC DRIVE		ALLIED SWISS SCREW PRODUCTS	Low	Commercial	904.1 (Loma Alta)
230723072	1950		OCEANSIDE BLVD		ALLSTAR GLASS	Low	Commercial	904.1 (Loma Alta)
231519002	4749		OCEANSIDE BLVD	D	ALLSTATE INSURANCE	Low	Commercial	904.1 (Loma Alta)
231619008	4670		NORTH AVENUE	A	ALLSTATE MOVING SYSTEMS	Low	Commercial	904.1 (Loma Alta)
231024057	2141	S	EL CAMINO REAL	G	ALTA LOMA LANDSCAPE MAINTENANCE	Low	Commercial	904.2 (Buena Vista)
231024074	2191	S	EL CAMINO REAL	208	ALWAYS SCRAPBOOKING	Low	Commercial	904.2 (Buena Vista)
231321074	4065		OCEANSIDE BLVD	M	AM CHEMICAL LLC	Low	Commercial	904.1 (Loma Alta)
231221002	3740		OCEANIC WAY	301	AM CONTRACTING	Low	Commercial	904.1 (Loma Alta)
231221055	3720		OCEANIC WAY	301	AM CONTRACTING INC	Low	Commercial	904.1 (Loma Alta)
230726006	1227		VISTA WAY		AMAZON BIKES	Low	Commercial	904.2 (Buena Vista)
230922013	3041		INDUSTRY STREET	C	AMERICAN ARBOR TREE SERVICES	Low	Commercial	904.1 (Loma Alta)
230720002	2951		SAN LUIS REY ROAD		AMERICAN AUTO GLASS	Low	Commercial	903.1 (San Luis Rey)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
231320007	4021		AVENIDA DE LA PLATA	501	AMERICAN FOOD INGREDIENTS	Low	Commercial	904.1 (Loma Alta)
231325016	3829		PLAZA DRIVE	603	AMERICAN GENERAL FINACIAL SERVICES	Low	Commercial	904.2 (Buena Vista)
230918018	3753		MISSION AVENUE		AMERICAN ROYALE MORTGAGE	Low	Commercial	903.1 (San Luis Rey)
231619046	4650		NORTH AVENUE		AMERICAN SURFACES, INC	Low	Commercial	904.1 (Loma Alta)
231321012	4039		CALLE PLATINO	G	AMFLEX PLASTICS INC	Low	Commercial	904.1 (Loma Alta)
231125005	3300		VISTA WAY	B	AMY T MATAYOSHI MD	Low	Commercial	904.2 (Buena Vista)
231220024	3618		OCEAN RANCH BLVD		ANDERGENE	Low	Commercial	904.1 (Loma Alta)
230727024	2123	S	COAST HWY		ANDREW K. JOHN DDS	Low	Commercial	904.2 (Buena Vista)
231024037	2123	S	EL CAMINO REAL		ANDREW K. JOHN DDS	Low	Commercial	904.2 (Buena Vista)
230922047	2913		OCEANSIDE BLVD		ANDY'S GLASS AND REPAIR	Low	Commercial	904.1 (Loma Alta)
231220022	3614		OCEAN RANCH BLVD		ANGEL PRINTING INC	Low	Commercial	904.1 (Loma Alta)
230922048	2925		OCEANSIDE BLVD		ANGELITA FOODS & SPICE	Low	Commercial	904.1 (Loma Alta)
231421095	4140		OCEANSIDE BLVD		ANGIE BEAUTY SUPPLY	Low	Commercial	904.1 (Loma Alta)
230420008	1413	N	COAST HWY		ANGLER TACKLE	Low	Commercial	903.1 (San Luis Rey)
231024067	2191	S	EL CAMINO REAL		ANN FRAZEN & GRAHAM PROPERTY	Low	Commercial	904.2 (Buena Vista)
230925052	2435		VISTA WAY		ANNA'S LINEN	Low	Commercial	904.2 (Buena Vista)
230627026	1931	S	COAST HWY		ANTIGUA COSIGNMENT	Low	Commercial	904.2 (Buena Vista)
230523084	604		MISSION AVENUE		ANTIQUES	Low	Commercial	903.1 (San Luis Rey)
230626032	1714	S	COAST HWY		ANTIQUES COLLECTOR'S MART	Low	Commercial	904.2 (Buena Vista)
231220025	3626		OCEAN RANCH BLVD		ANZO BIOTECH	Low	Commercial	904.1 (Loma Alta)
230423042	404		MISSION AVENUE		APOLLO DEPOT	Low	Commercial	903.1 (San Luis Rey)
230825023	2183		VISTA WAY	B2	APPLE ONE EMPLOYMENT SERVICES	Low	Commercial	904.2 (Buena Vista)
231420017	4131		AVENIDA DE LA PLATA		APPLIED COMPOSITE SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
231619015	2530		JASON COURT		APRIA HEALTHCARE INC	Low	Commercial	904.1 (Loma Alta)
231321075	4065		OCEANSIDE BLVD	P	AQUATIC SPECIALTIES INC	Low	Commercial	904.1 (Loma Alta)
231421064	1949		AVENIDA DEL ORO	106	ARBOR E & T INC.	Low	Commercial	904.1 (Loma Alta)
231220029	3636		OCEAN RANCH BLVD		ARCHITERRA LLP	Low	Commercial	904.1 (Loma Alta)
230727015	2001	S	COAST HWY		ARDILLOS CARDS	Low	Commercial	904.2 (Buena Vista)
231520005	1656		ORD WAY		ARETOY FABRIC STORE	Low	Commercial	904.1 (Loma Alta)
230626036	1743	S	COAST HWY		ARIEL'S DANCE STUDIO	Low	Commercial	904.2 (Buena Vista)
231221048	3840		OCEANIC DRIVE	512	A-ROO DISTRIBUTING OF CALIFORNIA LLC	Low	Commercial	904.1 (Loma Alta)
231321062	4061		OCEANSIDE BLVD	C	ARROWHEAD PACKAGING CO.	Low	Commercial	904.1 (Loma Alta)
230727034	605		VISTA WAY		ART ADVENTURES	Low	Commercial	904.2 (Buena Vista)
231220043	4010		OCEAN RANCH BLVD		ASHWORTH EDC, LLC	Low	Commercial	904.1 (Loma Alta)
230720015	2930		SAN LUIS REY ROAD		ASIGMA	Low	Commercial	903.1 (San Luis Rey)
231221052	3720		OCEANIC WAY	205	ASPEN COOLING & HEATING	Low	Commercial	904.1 (Loma Alta)
230423035	401		MISSION AVENUE		ASYLUM SURF CLOTHING	Low	Commercial	903.1 (San Luis Rey)
230423043	310		MISSION AVENUE		ASYLUM SURF GEAR	Low	Commercial	903.1 (San Luis Rey)
230822027	2727		INDUSTRY STREET		AT&T (Pacific Bell)	Low	Commercial	904.1 (Loma Alta)
231221004	3800		OCEANIC DRIVE	101	ATOMICA RESEARCH & DEVELOPMENT INC	Low	Commercial	904.1 (Loma Alta)
231325045	3520		PLAZA DRIVE	101	ATTAR BAZAR/IMC DIGITAL	Low	Commercial	904.2 (Buena Vista)
230523072	424	S	COAST HWY		AUDIO LAND	Low	Commercial	904.1 (Loma Alta)
231519015	4751		OCEANSIDE BLVD	H	AUDIO VIDEO AUTHORITH	Low	Commercial	904.1 (Loma Alta)
231321018	4040		CALLE PLATINO	114	AUDIO VIDEO BUSINESS RESOURCES	Low	Commercial	904.1 (Loma Alta)
230621055	1710		MISSION AVENUE		AUDIO ZONE	Low	Commercial	903.1 (San Luis Rey)
231519006	4749		OCEANSIDE BLVD	B	AUSMON FINACIAL INVESTMENTS	Low	Commercial	904.1 (Loma Alta)
231125007	3330		VISTA WAY		AUTOMOBILE CLUB OF SOUTHERN CALIFORNIA	Low	Commercial	904.2 (Buena Vista)
231619052	4660		NORTH AVENUE	B	AUTOMOTIVE MARKETING CONSULTANTS INC	Low	Commercial	904.1 (Loma Alta)
231025052	2741		VISTA WAY	201	AVA INTEGRATIVE MEDICINE	Low	Commercial	904.2 (Buena Vista)
230727016	2002	S	COAST HWY		AVENTURE 16	Low	Commercial	904.2 (Buena Vista)
231313005	455		COLLEGE BLVD	7	AVENUE	Low	Commercial	903.1 (San Luis Rey)
230724015	1771		OCEANSIDE BLVD		AVIS CAR RENTAL	Low	Commercial	904.1 (Loma Alta)
230723064	1830		OCEANSIDE BLVD	C3	AWARD SOURCE	Low	Commercial	904.1 (Loma Alta)
231312011	610	N	REDONDO DRIVE	A	AZTEC/OCEANSIDE TRAFFIC SCHOOL	Low	Commercial	903.1 (San Luis Rey)
231420014	4125		AVENIDA DE LA PLATA		B & M HARDWARE CO.	Low	Commercial	904.1 (Loma Alta)
230621034	1604		MISSION AVENUE		BALBOA LIQUOR	Low	Commercial	903.1 (San Luis Rey)
230922015	3025		INDUSTRY STREET		BAMBOO BUDDY LLC	Low	Commercial	904.1 (Loma Alta)
230727020	2028	S	COAST HWY		BAMBOO SOURCE	Low	Commercial	904.2 (Buena Vista)
230522032	702		MISSION AVENUE		BANK OF AMERICA	Low	Commercial	903.1 (San Luis Rey)
230917014	3756		MISSION AVENUE		BANK OF AMERICA	Low	Commercial	903.1 (San Luis Rey)
230627027	1931	S	COAST HWY		BARBER SHOP	Low	Commercial	904.2 (Buena Vista)
230423003	313	N	TREMONT STREET		BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
231414012	475		COLLEGE BLVD	J5	BARBERSHOP EXPRESS	Low	Commercial	903.1 (San Luis Rey)
230925018	2615		VISTA WAY		BARNES AND NOBLE BOOKSELLERS INC.	Low	Commercial	904.2 (Buena Vista)
231221047	3840		OCEANIC DRIVE	511	BARON PAPER COMPANY INC.	Low	Commercial	904.1 (Loma Alta)
230922034	3044		INDUSTRY STREET	103	BASHORE CABINETS	Low	Commercial	904.1 (Loma Alta)
230922035	3044		INDUSTRY STREET	103	BASHORE CABINETS	Low	Commercial	904.1 (Loma Alta)
230625007	1112	S	COAST HWY		BASKIN ROBBINS - 31 FLAVORS ICE CREAM	Low	Commercial	904.1 (Loma Alta)
230922049	2925		OCEANSIDE BLVD		BAUER BRO LLC	Low	Commercial	904.1 (Loma Alta)
231420006	4112		AVENIDA DE LA PLATA		BAY CAL COMMERCIAL PAINTING	Low	Commercial	904.1 (Loma Alta)
230819055	3205		PRODUCTION AVENUE		BAY CITY APPAREL	Low	Commercial	903.1 (San Luis Rey)
231414018	495		COLLEGE BLVD	A	BAY VIEW WIRELESS	Low	Commercial	903.1 (San Luis Rey)
230621060	2037		MISSION AVENUE		BBC TRAVEL	Low	Commercial	903.1 (San Luis Rey)
231619054	4665		NORTH AVENUE		BD MEDICAL	Low	Commercial	904.1 (Loma Alta)
230922042	3060		INDUSTRY STREET		BDS TACTICAL INC	Low	Commercial	904.1 (Loma Alta)
231420025	4149		AVENIDA DE LA PLATA		BDS TACTICAL INC	Low	Commercial	904.1 (Loma Alta)
230627017	1903	S	COAST HWY		BEACH CLUB	Low	Commercial	904.2 (Buena Vista)
230423001	309		PIER VIEW WAY		BEACHCOMBER BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
230825013	2120		VISTA WAY		BED BATH AND BEYOND	Low	Commercial	904.2 (Buena Vista)
231221037	3913		OCEANIC DRIVE	501-02	BEDE WINDOWS AND DOORS	Low	Commercial	904.1 (Loma Alta)
231221008	3800		OCEANIC DRIVE	110	BEHNE CHIROPRACTIC	Low	Commercial	904.1 (Loma Alta)
231221059	3720		OCEANIC WAY	304	BELL BLUEPRINT CO.	Low	Commercial	904.1 (Loma Alta)
230523042	611		MISSION AVENUE		BELLON & LISIECKI LLP ATTORNEYS AT LAW	Low	Commercial	903.1 (San Luis Rey)
230720023	2929		SAN LUIS REY ROAD		BEN RECYCLING & SCRAP METAL	Low	Commercial	903.1 (San Luis Rey)
230719028	395		VIA DEL NORTE		BEN RECYCLING & SCRAP METAL	Low	Commercial	903.1 (San Luis Rey)
231220018	3605		OCEAN RANCH BLVD		BERGENSON'S PROPERTY SERVICES INC.	Low	Commercial	904.1 (Loma Alta)
230422039	423	S	TREMONT STREET		BEST BUSINESS MANAGEMENTS SERVICES	Low	Commercial	904.1 (Loma Alta)
230820007	3102		SAN LUIS REY ROAD		BEST MATTRESS & FURNITURE BUYS	Low	Commercial	903.1 (San Luis Rey)
231421125	4171		OCEANSIDE BLVD	103	BEST NAILS	Low	Commercial	904.1 (Loma Alta)
230825012	2110		VISTA WAY		BESTBUY	Low	Commercial	904.2 (Buena Vista)
230925061	2500		VISTA WAY		BEVERAGES & MORE	Low	Commercial	904.2 (Buena Vista)
231326002	3520		COLLEGE BLVD	102	BEYOND FITNESS	Low	Commercial	904.2 (Buena Vista)
231326022	3520		COLLEGE BLVD	102	BEYOND FITNESS	Low	Commercial	904.2 (Buena Vista)
230522007	223	N	HORNE STREET	B	BEYOND NAIL AND SPA	Low	Commercial	903.1 (San Luis Rey)
231520010	1613		ORD WAY		BIG EVENTS	Low	Commercial	904.1 (Loma Alta)
230819008	164		ROYMAR ROAD		BIG JAMES'S BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230820013	3108		SAN LUIS REY ROAD		BIKER OUTLET STORE	Low	Commercial	903.1 (San Luis Rey)
230621050	2027		MISSION AVENUE	C	BIKES AND PARTS	Low	Commercial	903.1 (San Luis Rey)
230524057	1012	S	COAST HWY	N	BILL RIFE	Low	Commercial	904.1 (Loma Alta)
230720027	2972		SAN LUIS REY ROAD		BIO CLEAN ENVIROMENTAL SERVICES	Low	Commercial	903.1 (San Luis Rey)
230727022	2110	S	COAST HWY	C	BLAKE MANAGEMENT GROUP	Low	Commercial	904.2 (Buena Vista)
231421023	4221		OCEANSIDE BLVD		BLOCK BUSTER	Low	Commercial	904.1 (Loma Alta)
231414022	625		COLLEGE BLVD		BLOCKBUSTER VIDEO	Low	Commercial	903.1 (San Luis Rey)
230723081	1710		OCEANSIDE BLVD	A	BLOCKBUSTER VIDEO	Low	Commercial	904.1 (Loma Alta)
231017023	3780		MISSION AVENUE		BLOCKBUSTER'S VIDEO	Low	Commercial	903.1 (San Luis Rey)
231421070	4083		OCEANSIDE BLVD	B	BLOXTON CHIROPRACTIC CENTER	Low	Commercial	904.1 (Loma Alta)
231520033	1746		ORD WAY		BLU BANDO INC	Low	Commercial	904.1 (Loma Alta)
231315014	815		COLLEGE BLVD	102	BLU ECHO	Low	Commercial	903.1 (San Luis Rey)
230825022	2180		VISTA WAY	B	BLUE ECHO	Low	Commercial	904.2 (Buena Vista)
230422049	509	N	COAST HWY		BLUE PACIFIC REALTY	Low	Commercial	903.1 (San Luis Rey)
231321073	4065		OCEANSIDE BLVD	K	BLUE WORLD INDUSTRIES	Low	Commercial	904.1 (Loma Alta)
230422036	615	S	TREMONT STREET		BOARDWORKS	Low	Commercial	904.1 (Loma Alta)
230321006	256	S	HARBOR DRIVE		BOAT RENTALS OF AMER INC HARBOR	Low	Commercial	903.1 (San Luis Rey)
231619009	1818		PEACOCK BLVD	C	BOBBIES HAIR SALON	Low	Commercial	904.1 (Loma Alta)
230621033	2027		MISSION AVENUE	E	BODOS ALTERATION	Low	Commercial	903.1 (San Luis Rey)
230625032	1319	S	COAST HWY	A	BODY PIERCING BY TRACY	Low	Commercial	904.1 (Loma Alta)
230917009	3753		MISSION AVENUE	118	BODY TEMPLE	Low	Commercial	903.1 (San Luis Rey)
231221050	3700		OCEANIC WAY	102	BOONSTRA CONSTRUCTION	Low	Commercial	904.1 (Loma Alta)
230925033	2405		VISTA WAY		BOOT BARN INC	Low	Commercial	904.2 (Buena Vista)
230621031	2027		MISSION AVENUE	E7	BOREALIS JEWELRY	Low	Commercial	903.1 (San Luis Rey)
231025053	2741		VISTA WAY	209	BRADLEY CPA INC.	Low	Commercial	904.2 (Buena Vista)
231024018	2103	S	EL CAMINO REAL	105B	BRAVE, WEBER MAC APLC	Low	Commercial	904.2 (Buena Vista)
230925027	2401		VISTA WAY	A	BRINDUSA SES	Low	Commercial	904.2 (Buena Vista)
231321013	4040		CALLE PLATINO	102	BRIXTON	Low	Commercial	904.1 (Loma Alta)
231221065	3760		OCEANIC WAY	502	BROADCAST DESIGNS INTERNATIONAL	Low	Commercial	904.1 (Loma Alta)
230422030	520	N	COAST HWY	B-C	BROOKE INSURANCE	Low	Commercial	903.1 (San Luis Rey)
231017087	3965		MISSION AVENUE		BROTHER BENNO'S THRIFT SHOP	Low	Commercial	903.1 (San Luis Rey)
230422037	406	S	CLEVELAND STREET		BRYANT & DWYER SIGN SERVICE	Low	Commercial	904.1 (Loma Alta)
231025059	3142		VISTA WAY	301	BUCCOLA ENGINEERING	Low	Commercial	904.2 (Buena Vista)
231520031	1744		ORD WAY		BUDGET BLINDS	Low	Commercial	904.1 (Loma Alta)
230819077	3320		MISSION AVENUE	M	BUDGET CAR & TRUCK RENTAL	Low	Commercial	903.1 (San Luis Rey)
231619033	4670		NORTH AVENUE	B	BUILDING RESTORATION INC?	Low	Commercial	904.1 (Loma Alta)
231024048	2125	S	EL CAMINO REAL	206	BURTON BLACK PHD	Low	Commercial	904.2 (Buena Vista)
230820011	208		VIA EL CENTRO		BUYRIGHT	Low	Commercial	903.1 (San Luis Rey)
230819057	3204		PRODUCTION AVENUE		BYRNE SURFBOARDS	Low	Commercial	903.1 (San Luis Rey)
231519012	4747		OCEANSIDE BLVD	J-K	BZ SURF BOARDS	Low	Commercial	904.1 (Loma Alta)
231421024	4225		OCEANSIDE BLVD		CABLE SOLUTIONS, LLC	Low	Commercial	904.1 (Loma Alta)
230922046	2905		OCEANSIDE BLVD		CABLE SOLUTIONS, LLC	Low	Commercial	904.1 (Loma Alta)
231017017	3776		MISSION AVENUE	139	CAL AUTO	Low	Commercial	903.1 (San Luis Rey)
230625016	518		OCEANSIDE BLVD	106	CAL-AUTO	Low	Commercial	904.1 (Loma Alta)
231420027	4156		AVENIDA DE LA PLATA		CALIBER BODYWORKS	Low	Commercial	904.1 (Loma Alta)
230522001	818		MISSION AVENUE		CALIFORNIA BUSINESS SOLUTION	Low	Commercial	903.1 (San Luis Rey)
231420028	4167		AVENIDA DE LA PLATA		CALIFORNIA CAREER SCHOOLS	Low	Commercial	904.1 (Loma Alta)
231024021	2103	S	EL CAMINO REAL	108	CALIFORNIA COMEDY TRAFFIC SCHOOLS	Low	Commercial	904.2 (Buena Vista)
230719026	649		BENET ROAD		CALIFORNIA CREATIVE FOODS INC	Low	Commercial	903.1 (San Luis Rey)
230922037	3052		INDUSTRY STREET		CALIFORNIA MILLWORKS	Low	Commercial	904.1 (Loma Alta)
230421034	1019	S	COAST HWY		CALIFORNIA REALTY NETWOOK	Low	Commercial	904.1 (Loma Alta)
230524046	201		WISCONSIN AVENUE		CALIFORNIA SCREENS	Low	Commercial	904.1 (Loma Alta)
230523066	223	N	COAST HWY		CALIFORNIA SURF MUSEAUM	Low	Commercial	903.1 (San Luis Rey)
231519016	4747		OCEANSIDE BLVD	D	CALIFORNIA VIDEO REPAIRS	Low	Commercial	904.1 (Loma Alta)
230421032	928	N	COAST HWY	A	CALIFORNIA VISITOR'S CENTER	Low	Commercial	903.1 (San Luis Rey)
231321024	4079		CALLE PLATINO		CAL-MIL PLASTIC PRODUCTS, INC	Low	Commercial	904.1 (Loma Alta)
231221039	3915		OCEANIC DRIVE	603	CALTERM EXTERMINATORS INC	Low	Commercial	904.1 (Loma Alta)
230819080	3320		MISSION AVENUE	H	CALVARY CHURCH	Low	Commercial	903.1 (San Luis Rey)
231421083	4093		OCEANSIDE BLVD	A	CAMERFORD IRISH DANCING	Low	Commercial	904.1 (Loma Alta)
231024078	2213	S	EL CAMINO REAL		CAMINO TOWN AND COUNTRY	Low	Commercial	904.2 (Buena Vista)
230423041	408		PIER VIEW WAY		CAMMIE BOB - MILITARY SUPPLIES	Low	Commercial	903.1 (San Luis Rey)
230720018	326		VIA DEL NORTE		CANDLES	Low	Commercial	903.1 (San Luis Rey)
231321068	4061		OCEANSIDE BLVD	N	CANYON LAND SURVEYING	Low	Commercial	904.1 (Loma Alta)
231220012	1901		CORPORATE CENTER DR		CAR SOUND EXHAUST SYSTEMS	Low	Commercial	903.1 (San Luis Rey)
231420022	4141		AVENIDA DE LA PLATA		CARBON BY DESIGN LP	Low	Commercial	904.1 (Loma Alta)
231619019	2535		JASON COURT		CARBON RESOURCES, LLC ?	Low	Commercial	904.1 (Loma Alta)
231326024	3520		COLLEGE BLVD		CARLISLE & BEATRIZ GILLIMORE	Low	Commercial	904.2 (Buena Vista)
231312012	610	N	REDONDO DRIVE	B101	CARLO'S WATER	Low	Commercial	903.1 (San Luis Rey)
230523089	405		SEAGAZE DRIVE		CARMEN'S - OUT OF BUSINESS	Low	Commercial	903.1 (San Luis Rey)
231420039	4167		AVENIDA DE LA PLATA	114	CAROLLO ENGINEERING	Low	Commercial	904.1 (Loma Alta)
231220009	4001		AVENIDA DE LA PLATA		CARPETS BY PHILLIPS	Low	Commercial	904.1 (Loma Alta)
230421004	1012	S	COAST HWY	B	CARPETS ETC	Low	Commercial	904.1 (Loma Alta)
230819042	3355		MISSION AVENUE	238	CASA DE AMPARO ADMINISTRATION	Low	Commercial	903.1 (San Luis Rey)
230819043	3355		MISSION AVENUE	215	CASA DE AMPARO FAMILY SUPPORT SERVICES	Low	Commercial	903.1 (San Luis Rey)
230621008	1718		MISSION AVENUE		CASA DE NINOS	Low	Commercial	903.1 (San Luis Rey)
231421087	4095		OCEANSIDE BLVD	A	CASH A CHECK	Low	Commercial	904.1 (Loma Alta)
231421001	4225		OCEANSIDE BLVD	N	CASH ADVANCE	Low	Commercial	904.1 (Loma Alta)
230524067	427	S	COAST HWY		CASINO DEALER SCHOOL	Low	Commercial	904.1 (Loma Alta)
230522028	221	N	HORNE STREET	C	CASITAS # 2 NUTRITION STORE MARKET	Low	Commercial	903.1 (San Luis Rey)
231221014	3800		OCEANIC DRIVE	117	CDS FIRST	Low	Commercial	904.1 (Loma Alta)
230524069	820	S	COAST HWY		CDS SECURITY SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
230625019	518		OCEANSIDE BLVD	105	CELLULAR PHONE SERVICE	Low	Commercial	904.1 (Loma Alta)
231221049	3700		OCEANIC WAY		CEMEC MARTIAL ARTS	Low	Commercial	904.1 (Loma Alta)
231017060	3861		MISSION AVENUE		CENTURY NAILS SALON AND SPA	Low	Commercial	903.1 (San Luis Rey)
230819084	179		ROYMAR ROAD	A	CERAMIC TILE SUPPLY INC	Low	Commercial	903.1 (San Luis Rey)
230421005	1012	S	COAST HWY		CERRUDO SERVICES	Low	Commercial	904.1 (Loma Alta)
230819069	291		ROYMAR ROAD	D	CERTIFIED WELD & FAB	Low	Commercial	903.1 (San Luis Rey)
230925028	2401		VISTA WAY	A	CHANTELLE DAY SPA	Low	Commercial	904.2 (Buena Vista)
231024049	2125	S	EL CAMINO REAL	206	CHARLES E COULL PSYD	Low	Commercial	904.2 (Buena Vista)
231421103	4147		OCEANSIDE BLVD		CHASE BANK	Low	Commercial	904.1 (Loma Alta)
231024043	2125	S	EL CAMINO REAL	102	CHEATHAM TAX SERVICES	Low	Commercial	904.2 (Buena Vista)
231414029	467		COLLEGE BLVD	H6	CHECK AND GO	Low	Commercial	903.1 (San Luis Rey)
230723074	1906		OCEANSIDE BLVD		CHECK AND GO	Low	Commercial	904.1 (Loma Alta)
231017070	3875		MISSION AVENUE		CHECK INTO CASH	Low	Commercial	903.1 (San Luis Rey)
230523067	101	S	COAST HWY		CHECK MATE	Low	Commercial	903.1 (San Luis Rey)
231017019	3784		MISSION AVENUE	154	CHECKS CASHED	Low	Commercial	903.1 (San Luis Rey)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230622017	1444		MISSION AVENUE		CHECK'S CASHED	Low	Commercial	903.1 (San Luis Rey)
230727041	917		VISTA WAY		CHELSEA LOPEZ PHOTOGRAPHY	Low	Commercial	904.2 (Buena Vista)
230922017	1401	S	EL CAMINO REAL	103B	CHEVEU SALON	Low	Commercial	904.1 (Loma Alta)
231423005	2860		THUNDER DRIVE		CHILD DEVELOPMENT CENTER	Low	Commercial	904.2 (Buena Vista)
231025058	3142		VISTA WAY	207	CHILDREN'S HOSPITAL & HEALTH CENTER	Low	Commercial	904.2 (Buena Vista)
230925039	2420		VISTA WAY	120	CHING C TI MD	Low	Commercial	904.2 (Buena Vista)
231727002	3529		CANNON ROAD	2E	CHIROPRACTIC	Low	Commercial	904.3 (Agua Hedionda)
231025022	2235	S	EL CAMINO REAL	A	CHIROPRATIC 1ST	Low	Commercial	904.2 (Buena Vista)
230726005	1213		VISTA WAY		CHOPPER'S PARTS TO GO	Low	Commercial	904.2 (Buena Vista)
231216005	4507		MISSION AVENUE		CHRISTIAN PRESCHOOL OF THE ARTS	Low	Commercial	903.1 (San Luis Rey)
231024023	2103	S	EL CAMINO REAL	108D	CHRISTIAN PROFESIONAL COUNSELING CENTER	Low	Commercial	904.2 (Buena Vista)
230727033	603		VISTA WAY		CHRISTOPHER H CLAYTON D.D.S.	Low	Commercial	904.2 (Buena Vista)
230621001	2027		MISSION AVENUE	F6	CHUNG SHOES	Low	Commercial	903.1 (San Luis Rey)
230523061	220	N	COAST HWY		CIGAR GROTTO	Low	Commercial	903.1 (San Luis Rey)
231620006	1817		PEACOCK BLVD		CIRCUITS PROC TECH INC	Low	Commercial	904.1 (Loma Alta)
231421092	4120		OCEANSIDE BLVD		CITI BANK - OUT OF BUSINESS	Low	Commercial	904.1 (Loma Alta)
231321019	4040		CALLE PLATINO	116	CITY ELECTRIC SUPPLY	Low	Commercial	904.1 (Loma Alta)
231321021	4040		CALLE PLATINO	124	CJ PRODUCTS	Low	Commercial	904.1 (Loma Alta)
231425006	3841		PLAZA DRIVE		CLASSIC FLOORS	Low	Commercial	904.2 (Buena Vista)
230819067	3320		MISSION AVENUE	G	CLASSY K-9 CLIPS	Low	Commercial	903.1 (San Luis Rey)
230621005	2027		MISSION AVENUE	A7	CLASSY NAILS # 2	Low	Commercial	903.1 (San Luis Rey)
230523036	401		SEAGAZE DRIVE		CMC FURNITURE	Low	Commercial	903.1 (San Luis Rey)
230627013	1838	S	COAST HWY		COAST COMPOUNDING PHARMACY	Low	Commercial	904.2 (Buena Vista)
230422002	323	N	COAST HWY	D	COAST HIGHWAY BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
230421021	921	N	COAST HWY		COAST INN	Low	Commercial	903.1 (San Luis Rey)
231025030	2245	S	EL CAMINO REAL	C	COASTAL CHIROPRACTIC WELLNESS CENTER	Low	Commercial	904.2 (Buena Vista)
230819028	3355		MISSION AVENUE	131	COASTAL COMMUNICATION	Low	Commercial	903.1 (San Luis Rey)
230925055	2445		VISTA WAY		COASTAL COSIGNMENT HOME FURNISHINGS	Low	Commercial	904.2 (Buena Vista)
231619021	1818		PEACOCK BLVD		COASTAL LAMINATE & CABINETRY	Low	Commercial	904.1 (Loma Alta)
230523044	426	S	COAST HWY		COASTAL MARKET AND LIQUOR	Low	Commercial	904.1 (Loma Alta)
231425010	3998	W	VISTA WY		COASTAL ORTHORPEDICS SPORTS MED.	Low	Commercial	904.2 (Buena Vista)
231420010	4119		AVENIDA DE LA PLATA		COASTAL WINE STORAGE	Low	Commercial	904.1 (Loma Alta)
231019008	547		VISTA BELLA		COASTLINE BAPTIST CHURCH AUDITORIUM	Low	Commercial	903.1 (San Luis Rey)
231019009	557		VISTA BELLA		COASTLINE BAPTIST CHURCH OFFICES	Low	Commercial	903.1 (San Luis Rey)
231024056	2141	S	EL CAMINO REAL	D	COATES CONSTRUCTION & DEVELOPMENT INC	Low	Commercial	904.2 (Buena Vista)
231220041	3900		OCEAN RANCH BLVD		COCA-COLA BOTTLING CO OF SOUTHERN CA	Low	Commercial	904.1 (Loma Alta)
231221058	3720		OCEANIC WAY	303	CODE MICRO	Low	Commercial	904.1 (Loma Alta)
231325024	3504		PLAZA DRIVE	C	COIN LAUNDRY	Low	Commercial	904.2 (Buena Vista)
231423004	2810		THUNDER DRIVE	B	COIN LAUNDRY	Low	Commercial	904.2 (Buena Vista)
230627016	1902	S	COAST HWY		COIN UP LAUNDRY	Low	Commercial	904.2 (Buena Vista)
231312021	620	N	REDONDO DRIVE	F	COIN-UP WASH AND DRY	Low	Commercial	903.1 (San Luis Rey)
231421123	4171		OCEANSIDE BLVD	102A	COLLEGE CLEANERS	Low	Commercial	904.1 (Loma Alta)
231414013	475		COLLEGE BLVD	J7	COLLEGE COIN LAUNDRY	Low	Commercial	903.1 (San Luis Rey)
231414030	467		COLLEGE BLVD	H2	COLLEGE DENTAL	Low	Commercial	903.1 (San Luis Rey)
231414014	475		COLLEGE BLVD	J8	COLLEGE PET CLINIC	Low	Commercial	903.1 (San Luis Rey)
231221009	3800		OCEANIC DRIVE	110	COMCY COUCHES	Low	Commercial	904.1 (Loma Alta)
230523051	606		MISSION AVENUE		COMICS	Low	Commercial	903.1 (San Luis Rey)
230723040	1824		OCEANSIDE BLVD	A	COMMAND CENTER	Low	Commercial	904.1 (Loma Alta)
231320011	4040		AVENIDA DE LA PLATA		COMPUTER CIRCULATION CENTER	Low	Commercial	904.1 (Loma Alta)
231620001	1890		ORD WAY		COMPUTER GEEKS	Low	Commercial	904.1 (Loma Alta)
230925079	2570		VISTA WAY	A	CONFORT ZONE FUTONS & FURNITURE	Low	Commercial	904.2 (Buena Vista)
231421063	1949		AVENIDA DEL ORO	104-08	CONSUMER CREDIT COUNSELING SERVICES	Low	Commercial	904.1 (Loma Alta)
231017020	3784		MISSION AVENUE	152	CONTOUR EXPRESS	Low	Commercial	903.1 (San Luis Rey)
231221069	3508		SEAGATE WAY	140	COPLEY DESIGN COLLABORATIVE	Low	Commercial	904.1 (Loma Alta)
230919001	3375		MISSION AVENUE	B	COPPERWOOD BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
231024047	2125	S	EL CAMINO REAL	204	COREMARK	Low	Commercial	904.2 (Buena Vista)
231519011	4749		OCEANSIDE BLVD	H	CORNERSTONE CHURCH	Low	Commercial	904.1 (Loma Alta)
230523024	620		MISSION AVENUE		CORNERSTONE ENGINEEERING	Low	Commercial	903.1 (San Luis Rey)
231017003	3772		MISSION AVENUE	117	COST CUTTERS HAIR SALON	Low	Commercial	903.1 (San Luis Rey)
230825015	2140		VISTA WAY		COST PLUS WORLD MARKET	Low	Commercial	904.2 (Buena Vista)
230422041	307	N	COAST HWY	A	COTTON PATCH	Low	Commercial	903.1 (San Luis Rey)
230621028	1701		MISSION AVENUE		COUNTY OF SAN DIEGO - SOCIAL SERVICES	Low	Commercial	903.1 (San Luis Rey)
231414026	461		COLLEGE BLVD		COX	Low	Commercial	903.1 (San Luis Rey)
231420002	4100		AVENIDA DE LA PLATA	A	COX COMMUNICATIONS	Low	Commercial	904.1 (Loma Alta)
231321007	1922		AVENIDA DEL ORO		COX COMMUNICATIONS	Low	Commercial	904.1 (Loma Alta)
231421112	4161		OCEANSIDE BLVD	102	CRAIG HUEHERGARDT DDS INC	Low	Commercial	904.1 (Loma Alta)
230724013	1763		OCEANSIDE BLVD		CREATIVE AQUATICS	Low	Commercial	904.1 (Loma Alta)
231420026	4151		AVENIDA DE LA PLATA		CREATURES OF LEISURE	Low	Commercial	904.1 (Loma Alta)
231024069	2191	S	EL CAMINO REAL	104	CREDITO BUSINESS SERVICES	Low	Commercial	904.2 (Buena Vista)
230621059	2023		MISSION AVENUE		CRICKET COMMUNICATION	Low	Commercial	903.1 (San Luis Rey)
230723078	1810		OCEANSIDE BLVD	E	CRICKET COMMUNICATION	Low	Commercial	904.1 (Loma Alta)
231014012	650		DOUGLAS DRIVE	106-07	CRICKET WIRELESS	Low	Commercial	903.1 (San Luis Rey)
231017050	3825		MISSION AVENUE		CRICKET WIRELESS	Low	Commercial	903.1 (San Luis Rey)
231025069	3156		VISTA WAY	405	CRITICAL CARE SPECIAL BILLING ASSOCIATION	Low	Commercial	904.2 (Buena Vista)
231024040	2125	S	EL CAMINO REAL		CROWN CASTLE MU LLC	Low	Commercial	904.2 (Buena Vista)
230819079	263		AIRPORT ROAD		CRYSTAL CATERING FOOD SERVICE MANAGEMENT	Low	Commercial	903.1 (San Luis Rey)
230925078	2570		VISTA WAY		CT RETAIL PROPERTIES FINANCE III LLC	Low	Commercial	904.2 (Buena Vista)
230922029	3038		INDUSTRY STREET		CTM RACING PRODUCTS INC	Low	Commercial	904.1 (Loma Alta)
230922008	3041		INDUSTRY STREET	B	CTM RACING PRODUCTS INC	Low	Commercial	904.1 (Loma Alta)
231321060	4059		OCEANSIDE BLVD	M	CURTIS MANAGEMENT CO. INC.	Low	Commercial	904.1 (Loma Alta)
231017080	3935		MISSION AVENUE		CURVES	Low	Commercial	903.1 (San Luis Rey)
231221038	3915		OCEANIC DRIVE	601	CUSTOM ACQUATIC INC.	Low	Commercial	904.1 (Loma Alta)
230919016	110		COPPERWOOD WAY	J	CUSTOM CARPET CREATIONS	Low	Commercial	903.1 (San Luis Rey)
231619061	2625		TEMPLE HEIGHTS DRIVE	C	CUSTOM CONVERTING, INC	Low	Commercial	904.1 (Loma Alta)
231025026	2235	S	EL CAMINO REAL	H	CUSTOM FLOORS BY KEN	Low	Commercial	904.2 (Buena Vista)
230819065	3225		PRODUCTION AVENUE		CUSTOM WINDOW DESIGN INC	Low	Commercial	903.1 (San Luis Rey)
231025024	2235	S	EL CAMINO REAL	C	CUTS FOR LITTLE PEOPLE	Low	Commercial	904.2 (Buena Vista)
231014016	3925	N	RIVER ROAD		CVS PHARMACY	Low	Commercial	903.1 (San Luis Rey)
230819076	3320		MISSION AVENUE	A-D	D & J GLASS AND PAINT	Low	Commercial	903.1 (San Luis Rey)
231619020	4670		NORTH AVENUE		D & M WELDING?	Low	Commercial	904.1 (Loma Alta)
231019011	503		VISTA BELLA		D ADDIGNTON	Low	Commercial	903.1 (San Luis Rey)
230925044	2424		VISTA WAY	202	D LINK LADUTKO ESQ.	Low	Commercial	904.2 (Buena Vista)
231312024	487		VANDEGRIFT BLVD		D&M HOLDINGS INC	Low	Commercial	903.1 (San Luis Rey)
230622003	107		BROOKS STREET		D.C.'S ACROSS THE STREET	Low	Commercial	903.1 (San Luis Rey)
230727027	511		VISTA WAY		DAGO'S HAIRCUT	Low	Commercial	904.2 (Buena Vista)
231313006	455		COLLEGE BLVD	5	DAHN YOGA	Low	Commercial	903.1 (San Luis Rey)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230622013	105		BROOKS STREET		DALE'S LIQUOR	Low	Commercial	903.1 (San Luis Rey)
231421105	4160		OCEANSIDE BLVD	173	DANIEL AND CO.	Low	Commercial	904.1 (Loma Alta)
230522026	1016		MISSION AVENUE		DANIEL'S JEWLERY	Low	Commercial	903.1 (San Luis Rey)
230626029	1624	S	COAST HWY		DAV INDUSTRIES	Low	Commercial	904.1 (Loma Alta)
231025066	3156		VISTA WAY	200	DAVID MILLER	Low	Commercial	904.2 (Buena Vista)
231024061	2171	S	EL CAMINO REAL	101	DAVID PANZER MARKETING INC	Low	Commercial	904.2 (Buena Vista)
231727001	3529		CANNON ROAD	2A	DAVINA'S NAILS	Low	Commercial	904.3 (Agua Hedionda)
230420005	1501		CARMELO DRIVE		DAYS INN	Low	Commercial	903.1 (San Luis Rey)
230819074	3355		MISSION AVENUE	214	DEALER SERVICES CORP.	Low	Commercial	903.1 (San Luis Rey)
231024025	2103	S	EL CAMINO REAL	202	DEBT REDUCTION LAW CENTER	Low	Commercial	904.2 (Buena Vista)
231420016	4128		AVENIDA DE LA PLATA		DECORATIVE SERVICES	Low	Commercial	904.1 (Loma Alta)
231025072	3186		VISTA WAY		DEI, LLC	Low	Commercial	904.2 (Buena Vista)
230523004	210	N	COAST HWY	B	DELUXE BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
231024045	2125	S	EL CAMINO REAL	104	DENNIS ALTERS MD INC	Low	Commercial	904.2 (Buena Vista)
230524032	315		WISCONSIN AVENUE		DENNIS AUTOMOTIVE	Low	Commercial	904.1 (Loma Alta)
231017018	3776		MISSION AVENUE	138	DENTAL CARE OF OCEANSIDE	Low	Commercial	903.1 (San Luis Rey)
231421004	4225		OCEANSIDE BLVD	G	DENTIST	Low	Commercial	904.1 (Loma Alta)
231325007	3809		PLAZA DRIVE	114	DENTIST	Low	Commercial	904.2 (Buena Vista)
231425012	3837		PLAZA DRIVE	805	DENTIST	Low	Commercial	904.2 (Buena Vista)
231727009	3529		CANNON ROAD	2G	DENTIST 2000	Low	Commercial	904.3 (Agua Hedionda)
231225011	3613		VISTA WAY		DERMATOLOGY MEDICAL GROUP OF N. COUNTY	Low	Commercial	904.2 (Buena Vista)
231225016	3633		VISTA WAY	101	DERMATOLOGY SPECIALISTS INC.	Low	Commercial	904.2 (Buena Vista)
231321039	4035		OCEANSIDE BLVD	E35	DERRY PRECISION MACHINING	Low	Commercial	904.1 (Loma Alta)
231017001	3784		MISSION AVENUE	149	DESANTI & ASSOCIATES	Low	Commercial	903.1 (San Luis Rey)
230925047	2424		VISTA WAY	203	DESANTI AND ASSOCIATES	Low	Commercial	904.2 (Buena Vista)
230421023	1017	S	COAST HWY		DESCANO LTD FUNDING	Low	Commercial	904.1 (Loma Alta)
230627009	1833	S	COAST HWY		DESIGN NAIL AND SPA	Low	Commercial	904.2 (Buena Vista)
231619016	1970		PEACOCK BLVD		DEW MFG, INC	Low	Commercial	904.1 (Loma Alta)
231023006	2003	S	EL CAMINO REAL	202	DEWILT ENVIROMENTAAL INC.	Low	Commercial	904.2 (Buena Vista)
231312025	511		VANDEGRIFT BLVD		DIAMOND NAILS	Low	Commercial	903.1 (San Luis Rey)
230524003	429	S	COAST HWY		DIAMONDS' HAIR SALON	Low	Commercial	904.1 (Loma Alta)
230919011	102		COPPERWOOD WAY	A-B	DIAN AUSTIN COUTURE HOME	Low	Commercial	903.1 (San Luis Rey)
230625041	1405	S	COAST HWY		DICKIE WALKER MARINE	Low	Commercial	904.1 (Loma Alta)
231326025	3514		COLLEGE BLVD		DICKS SPORTING GOODS	Low	Commercial	904.2 (Buena Vista)
230523071	307	S	COAST HWY		DIGITAL SOUND	Low	Commercial	904.1 (Loma Alta)
231321008	4039		CALLE PLATINO	A	DIRECT MOULDING	Low	Commercial	904.1 (Loma Alta)
230724008	1759		OCEANSIDE BLVD	G	DISCOVERY PRESCHOOL	Low	Commercial	904.1 (Loma Alta)
231019004	503		VISTA BELLA		DISH NETWORK	Low	Commercial	903.1 (San Luis Rey)
231420041	4167		AVENIDA DE LA PLATA	118	DLT & V SYSTEMS ENGINEERING INC.	Low	Commercial	904.1 (Loma Alta)
231611001	5708	N	RIVER ROAD		DM COLOR EXPRESS INC.	Low	Commercial	903.1 (San Luis Rey)
231520027	1658		ORD WAY		DO IT TENNIS SHOP	Low	Commercial	904.1 (Loma Alta)
230727030	515		VISTA WAY		DOJO AMERICANA	Low	Commercial	904.2 (Buena Vista)
231017074	3915		MISSION AVENUE		DOLLAR MART	Low	Commercial	903.1 (San Luis Rey)
231421113	4161		OCEANSIDE BLVD	103	DOLLAR TREE	Low	Commercial	904.1 (Loma Alta)
231325031	3825		PLAZA DRIVE	501	DOLLAR TREE	Low	Commercial	904.2 (Buena Vista)
230523037	133	S	COAST HWY		DOLPHIN HOTEL	Low	Commercial	903.1 (San Luis Rey)
230524010	315		WISCONSIN AVENUE		DONALDSON PLUMBING	Low	Commercial	904.1 (Loma Alta)
230727028	513		VISTA WAY		DON'T TREAD ON ME	Low	Commercial	904.2 (Buena Vista)
231420046	4168		AVENIDA DE LA PLATA	108	DORADO ENTERPRISES	Low	Commercial	904.1 (Loma Alta)
231024020	2103	S	EL CAMINO REAL	107	DORICA DE LA FUENTE INC	Low	Commercial	904.2 (Buena Vista)
230423032	213	N	TREMONT STREET		DOROTHY'S MILITARY SHOP AND LAUNDRY	Low	Commercial	903.1 (San Luis Rey)
231014009	650		DOUGLAS DRIVE	102	DOUGLAS SQUARE CLEANERS	Low	Commercial	903.1 (San Luis Rey)
231014008	650		DOUGLAS DRIVE	101	DOUGLAS SQUARE FAMILY DENTAL OFFICE	Low	Commercial	903.1 (San Luis Rey)
231421094	4136		OCEANSIDE BLVD		DOWNEY SAVINGS - OUT OF BUSINESS	Low	Commercial	904.1 (Loma Alta)
231619067	2613		TEMPLE HEIGHTS DRIVE	A	DOWNFORCE ENGINEERING	Low	Commercial	904.1 (Loma Alta)
231017065	3870		MISSION AVENUE	D3-4	DR. KAM JENBREIL DENTISTRY	Low	Commercial	903.1 (San Luis Rey)
230626031	1709	S	COAST HWY		DR. OCEANSIDE	Low	Commercial	904.2 (Buena Vista)
230524054	1012	S	COAST HWY	C	DR. TOMMY GRINDY	Low	Commercial	904.1 (Loma Alta)
231023003	2003	S	EL CAMINO REAL	104	DRAGON PRINTING	Low	Commercial	904.2 (Buena Vista)
231017071	3875		MISSION AVENUE		DRY CLEANERS OF AMERICA	Low	Commercial	903.1 (San Luis Rey)
231325017	3504		COLLEGE BLVD	F	DRY CLEANING STATION	Low	Commercial	904.2 (Buena Vista)
231619059	2612		TEMPLE HEIGHTS DRIVE		DS WATERS OF AMERICA, LP ?	Low	Commercial	904.1 (Loma Alta)
231619060	2620		TEMPLE HEIGHTS DRIVE		DS WATERS OF AMERICA, LP ?	Low	Commercial	904.1 (Loma Alta)
231320008	4021		AVENIDA DE LA PLATA	502	DTI INTERNATIONAL	Low	Commercial	904.1 (Loma Alta)
231420024	4144		AVENIDA DE LA PLATA		DUPACO INC	Low	Commercial	904.1 (Loma Alta)
231620013	2660		VISTA PACIFIC DRIVE		DURACORP LLC	Low	Commercial	904.1 (Loma Alta)
230626027	1609	S	COAST HWY		DUSTY'S GUITAR	Low	Commercial	904.1 (Loma Alta)
230819045	3207		ROYMAR ROAD	C	DYNAMIC INNOVATIONS	Low	Commercial	903.1 (San Luis Rey)
230922052	2933		OCEANSIDE BLVD		DYNOTECH MOTOR SPORTS	Low	Commercial	904.1 (Loma Alta)
230925029	2401		VISTA WAY	B	E & C JEWELWERS	Low	Commercial	904.2 (Buena Vista)
231520002	1728		ORD WAY		E N J WINDOWS & GLASS	Low	Commercial	904.1 (Loma Alta)
231619011	1820		PEACOCK BLVD		EAGLE GRINDING	Low	Commercial	904.1 (Loma Alta)
231420037	4167		AVENIDA DE LA PLATA	110	EAGLE NEST REALTY & MORTGAGE INC.	Low	Commercial	904.1 (Loma Alta)
231019003	503		VISTA BELLA		EARTHLINK INTERNET SERVICE	Low	Commercial	903.1 (San Luis Rey)
231214002	4691		CALLE JOVEN		EAST BAY ATTENTION TO DETAIL INC	Low	Commercial	903.1 (San Luis Rey)
231024063	2171	S	EL CAMINO REAL	204	EAST TECH SOLUTION	Low	Commercial	904.2 (Buena Vista)
231313007	455		COLLEGE BLVD	2	ECHO PLUS	Low	Commercial	903.1 (San Luis Rey)
230625031	1403	S	COAST HWY		ECLIPSE APPAREL MANUFACTURING	Low	Commercial	904.1 (Loma Alta)
230727013	1942	S	COAST HWY		ECONO LUBE AND OIL	Low	Commercial	904.2 (Buena Vista)
231421127	4196		OCEANSIDE BLVD		EDWARD JONES & CO.	Low	Commercial	904.1 (Loma Alta)
231024081	2983		VIA LAS ROSAS	B	EL CAMINO COIN LAUNDRY	Low	Commercial	904.2 (Buena Vista)
231125002	3202		VISTA WAY		EL CAMINO COUNTRY CLUB	Low	Commercial	904.2 (Buena Vista)
231024035	2119	S	EL CAMINO REAL		EL CAMINO PROFESSIONAL CENTER LLC	Low	Commercial	904.2 (Buena Vista)
230723096	1833		OCEANSIDE BLVD		EL CAMINO RENTALS	Low	Commercial	904.1 (Loma Alta)
230723098	1833		OCEANSIDE BLVD		EL CAMINO RENTALS	Low	Commercial	904.1 (Loma Alta)
231025027	2235	S	EL CAMINO REAL	I	EL CAMINO SHOE REPAIR	Low	Commercial	904.2 (Buena Vista)
230621040	401		SAN DIEGO STREET		EL CHICLE	Low	Commercial	903.1 (San Luis Rey)
230622016	218		SAN DIEGO STREET		EL CYBERPAISA	Low	Commercial	903.1 (San Luis Rey)
230621048	2027		MISSION AVENUE		EL GRANITO DE MOSTAZA	Low	Commercial	903.1 (San Luis Rey)
230621037	1919		MISSION AVENUE		EL INDIO PRODUCTOS BOTANICOS DE MEXICO	Low	Commercial	903.1 (San Luis Rey)
231220030	3638		OCEAN RANCH BLVD		ELCTRONIC BILLING SOLUTIONS INC	Low	Commercial	904.1 (Loma Alta)
231221017	3803		OCEANIC DRIVE	201	ELECTREX USA LTD.	Low	Commercial	904.1 (Loma Alta)
230524050	220		WISCONSIN AVENUE		ELECTRIC AND FOLDING BIKES	Low	Commercial	904.1 (Loma Alta)
231421122	4171		OCEANSIDE BLVD	101B	ELIDA EDGE	Low	Commercial	904.1 (Loma Alta)
230922038	3052		INDUSTRY STREET	107	ELLIOTT DRILLING SERVICES INC	Low	Commercial	904.1 (Loma Alta)
231420015	4127		AVENIDA DE LA PLATA		ELMEC MANUFACTURING	Low	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230621046	2027		MISSION AVENUE	C-7	EMANUEL FASHIONS	Low	Commercial	903.1 (San Luis Rey)
231414015	475		COLLEGE BLVD	J3	EMBROIDERY ARTS	Low	Commercial	903.1 (San Luis Rey)
231221007	3800		OCEANIC DRIVE	109	EMCO INDUSTRIES	Low	Commercial	904.1 (Loma Alta)
231315026	4645		FRAZEE ROAD	A	EMERALD DENTAL	Low	Commercial	903.1 (San Luis Rey)
231024030	2111	S	EL CAMINO REAL	201	EMPLOYER'S CHOICE INSURANCE SERVICES INC	Low	Commercial	904.2 (Buena Vista)
231519043	4750		OCEANSIDE BLVD		ENCORE CLOTHING REVIVAL	Low	Commercial	904.1 (Loma Alta)
230919017	110		COPPERWOOD WAY	G	ENDLESS SUMMER HEATING AND AIR CONDITIONING	Low	Commercial	903.1 (San Luis Rey)
230423050	301		MISSION AVENUE		ENSEMBLE	Low	Commercial	903.1 (San Luis Rey)
230719027	510		JONES ROAD		ENTERPRISE RENT A CAR	Low	Commercial	903.1 (San Luis Rey)
230524055	875	S	COAST HWY		ENTERPRISE RENT-A-CAR COMPANY OF LA	Low	Commercial	904.1 (Loma Alta)
231320006	4015		AVENIDA DE LA PLATA	402	ENVIREMEDIAL SERVICES INC	Low	Commercial	904.1 (Loma Alta)
230727037	609		VISTA WAY		EQUITY SAVERS GROUP INC.	Low	Commercial	904.2 (Buena Vista)
231025028	2235	S	EL CAMINO REAL	O	ERICA'S LIL BARBERSHOP	Low	Commercial	904.2 (Buena Vista)
231025048	2741		VISTA WAY	101	ERICH SCHIMIDT DDS	Low	Commercial	904.2 (Buena Vista)
230621038	402		SAN DIEGO STREET		ESCUELA DE NUTRICION	Low	Commercial	903.1 (San Luis Rey)
231214003	4691		CALLE JOVEN		ESSENCE OF FOOD	Low	Commercial	903.1 (San Luis Rey)
231024014	2103	S	EL CAMINO REAL	103A	ESTATE PRESERVATION GROUP	Low	Commercial	904.2 (Buena Vista)
231023001	1999	S	EL CAMINO REAL		ETERNAL HILLS MEMORIAL PARK	Low	Commercial	904.1 (Loma Alta)
231221011	3800		OCEANIC DRIVE	112	EURO INDUSTRIES INC	Low	Commercial	904.1 (Loma Alta)
231025025	2235	S	EL CAMINO REAL	E	EUROPEAN TAYLOR SHOP	Low	Commercial	904.2 (Buena Vista)
231217016	125		OLD GROVE ROAD	13	EXCELLENT DRYCLEANERS	Low	Commercial	903.1 (San Luis Rey)
231619032	2550		JASON COURT		EXECUTIVE PLUMBING INC	Low	Commercial	904.1 (Loma Alta)
231520004	1652		ORD WAY		EXPRESS EMPLOYMENT PROFFESSIONALS	Low	Commercial	904.1 (Loma Alta)
231421091	4095		OCEANSIDE BLVD	J	EXPRESS PERSONNEL SERVICES	Low	Commercial	904.1 (Loma Alta)
231125001	3190		VISTA WAY		EXTENDED STAY AMERICA	Low	Commercial	904.2 (Buena Vista)
231214006	4700	N	RIVER ROAD	A	EXTRA SPACE STORAGE #200	Low	Commercial	903.1 (San Luis Rey)
231520018	4567		OCEANSIDE BLVD		EXTRA SPACE STORAGE #645	Low	Commercial	904.1 (Loma Alta)
230918019	3753		MISSION AVENUE		EXTREME POWER GYM	Low	Commercial	903.1 (San Luis Rey)
231325026	3809		PLAZA DRIVE	103	EYE SITE OPTOMETRIC	Low	Commercial	904.2 (Buena Vista)
230921001	444		EDGEHILL LANE		EZ STOREAGE	Low	Commercial	904.1 (Loma Alta)
231421077	4089		OCEANSIDE BLVD	A	F. I. OPTICS INC.	Low	Commercial	904.1 (Loma Alta)
231017068	3875		MISSION AVENUE	B29	FABIOLA'S LE SALON	Low	Commercial	903.1 (San Luis Rey)
230522021	1028		MISSION AVENUE		FACTORY OUTLET	Low	Commercial	903.1 (San Luis Rey)
231325005	3821		PLAZA DRIVE		FAIRLANE CLEANERS	Low	Commercial	904.2 (Buena Vista)
231414023	459		COLLEGE BLVD	1	FALLAS	Low	Commercial	903.1 (San Luis Rey)
230922018	1401	S	EL CAMINO REAL	107	FAMILY BILLIARD CENTERS	Low	Commercial	904.1 (Loma Alta)
231024071	2191	S	EL CAMINO REAL	202	FAMILY CONNECTIONS CHRISTIAN ADOPTIONS	Low	Commercial	904.2 (Buena Vista)
230925062	2505		VISTA WAY	A	FAMOUS FOOTWEAR	Low	Commercial	904.2 (Buena Vista)
231511001	190		WILSHIRE ROAD		FANCY PLANTS	Low	Commercial	903.1 (San Luis Rey)
231017064	3870		MISSION AVENUE	D2	FARMERS INSURANCE	Low	Commercial	903.1 (San Luis Rey)
231326007	3520		COLLEGE BLVD	105	FARMERS INSURANCE	Low	Commercial	904.2 (Buena Vista)
231519031	4750		OCEANSIDE BLVD	A8	FARTHING CHIROPRACTIC	Low	Commercial	904.1 (Loma Alta)
230422054	401	N	COAST HWY	101	FASHION IDENTITY	Low	Commercial	903.1 (San Luis Rey)
230621063	2027		MISSION AVENUE	E8	FASHION LAND	Low	Commercial	903.1 (San Luis Rey)
230522020	1022		MISSION AVENUE		FASHION TOWN	Low	Commercial	903.1 (San Luis Rey)
230819064	3204		PRODUCTION AVENUE		FASHIONS "TWO"	Low	Commercial	903.1 (San Luis Rey)
230723017	1906		OCEANSIDE BLVD		FAST ACTION PRINTING & COPYING	Low	Commercial	904.1 (Loma Alta)
230925053	2444		VISTA WAY		FED EX KINKO'S #2694	Low	Commercial	904.2 (Buena Vista)
231520039	4602		NORTH AVENUE	A	FEDERAL HEATH SIGN CO INV	Low	Commercial	904.1 (Loma Alta)
230720004	304		VIA DEL NORTE		FERGUSSON WATERWOARKS	Low	Commercial	903.1 (San Luis Rey)
230626021	1517	S	COAST HWY		FIDDLIN GREEN YACHT YARD	Low	Commercial	904.1 (Loma Alta)
230819037	3239		ROYMAR ROAD	B	FIEDLER BUILDING CO	Low	Commercial	903.1 (San Luis Rey)
230819001	3355		MISSION AVENUE	211	FIELD ARCHITECTURAL CORP. INC.	Low	Commercial	903.1 (San Luis Rey)
230523057	214	N	COAST HWY		FIGHT GEAR	Low	Commercial	903.1 (San Luis Rey)
231520006	1640		ORD WAY		FINANCIAL SERVICES	Low	Commercial	904.1 (Loma Alta)
230925068	2530		VISTA WAY	A	FIRE MOUNTAIN CLEANERS	Low	Commercial	904.2 (Buena Vista)
230925072	2530		VISTA WAY	H	FIRE MOUNTAIN SPINE & REHABILATION CENTER	Low	Commercial	904.2 (Buena Vista)
230524024	1012	S	COAST HWY	H	FIRE SAFETY SERVICES	Low	Commercial	904.1 (Loma Alta)
231019021	573		VISTA BELLA		FIREMOUNTAIN FINANCIAL	Low	Commercial	903.1 (San Luis Rey)
230819071	3355		MISSION AVENUE	236	FIRMA SIGNING SOLUTIONS	Low	Commercial	903.1 (San Luis Rey)
230724018	1791		OCEANSIDE BLVD		FIRST CLASS FITNESS CENTER	Low	Commercial	904.1 (Loma Alta)
230925042	2424		VISTA WAY	104	FISCHER & VAN THIEL LLP	Low	Commercial	904.2 (Buena Vista)
230719007	666		AIRPORT ROAD		FISHEL COMPANY	Low	Commercial	903.1 (San Luis Rey)
230820004	222		VIA DEL MONTE		FM DIAZ CONSTRUCTION INC.	Low	Commercial	903.1 (San Luis Rey)
231520022	1621		ORD WAY		FOAMTEC INTENATIONAL	Low	Commercial	904.1 (Loma Alta)
231421014	4225		OCEANSIDE BLVD	H	FOOT SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
231325043	3504		COLLEGE BLVD	C	FOOTHILL LAUNDRY	Low	Commercial	904.2 (Buena Vista)
231312023	465		VANDEGRIFT BLVD		FOREX/ASIANSIDE VARIETY STORE	Low	Commercial	903.1 (San Luis Rey)
231017081	3935		MISSION AVENUE		FORUM BEAUTY SUPPLIES BOTIQUE	Low	Commercial	903.1 (San Luis Rey)
231421080	4089		OCEANSIDE BLVD	E	FOTOSIX STUDIO	Low	Commercial	904.1 (Loma Alta)
231420031	4167		AVENIDA DE LA PLATA	102	FOUR YOUNG INC	Low	Commercial	904.1 (Loma Alta)
230918017	3480		MISSION AVENUE		FOUSSAT SWAP MEET LLC	Low	Commercial	903.1 (San Luis Rey)
230925066	2515		VISTA WAY	B	FRAME DESIGNS & GALLERY	Low	Commercial	904.2 (Buena Vista)
231025047	2717		VISTA WAY		FRAME DESIGNS & GALLERY	Low	Commercial	904.2 (Buena Vista)
231314003	427		COLLEGE BLVD		FRANK MISSION MARKET PLACE	Low	Commercial	903.1 (San Luis Rey)
231313008	455		COLLEGE BLVD	1	FRAZEE PAINT	Low	Commercial	903.1 (San Luis Rey)
230723095	1793		OCEANSIDE BLVD		FRAZEE PAINT	Low	Commercial	904.1 (Loma Alta)
231024076	2191	S	EL CAMINO REAL	208	FRAZER ENGINEERING INC	Low	Commercial	904.2 (Buena Vista)
230524012	845	S	COAST HWY		FRED ASTAIRE	Low	Commercial	904.1 (Loma Alta)
230723058	1950		OCEANSIDE BLVD	L-M	FRED LOYA INSURANCE	Low	Commercial	904.1 (Loma Alta)
231420040	4167		AVENIDA DE LA PLATA	116	FREE RADICAL TECHNOLOGY	Low	Commercial	904.1 (Loma Alta)
230523073	263	S	COAST HWY		FREEDOM E;ECTRONICS	Low	Commercial	904.1 (Loma Alta)
231014015	3925	N	RIVER ROAD		FRESH PAC INTERNATIONAL	Low	Commercial	903.1 (San Luis Rey)
231321014	4040		CALLE PLATINO	105	FRIENDS AMERICA INC	Low	Commercial	904.1 (Loma Alta)
230723063	1950		OCEANSIDE BLVD	K	FRONTLINE - BODY PIERCING	Low	Commercial	904.1 (Loma Alta)
231017052	3825		MISSION AVENUE	9	FSNB SERVICE CENTER	Low	Commercial	903.1 (San Luis Rey)
231017086	3940		MISSION AVENUE		FUELMAN NETWORK/CARR SERVICE CENTER	Low	Commercial	903.1 (San Luis Rey)
231420013	4123		AVENIDA DE LA PLATA		FULL CIRCLE MANAGEMENT	Low	Commercial	904.1 (Loma Alta)
230523065	501		MISSION AVENUE		FULLERTON MORTGAGE	Low	Commercial	903.1 (San Luis Rey)
231024042	2125	S	EL CAMINO REAL	101	FUTURES	Low	Commercial	904.2 (Buena Vista)
230423049	408		MISSION AVENUE		G & R TRAVEL	Low	Commercial	903.1 (San Luis Rey)
231321042	4035		OCEANSIDE BLVD	F48	G. S. MARINE INTERIORS	Low	Commercial	904.1 (Loma Alta)
230522038	1018		MISSION AVENUE		GALAXY SHOES	Low	Commercial	903.1 (San Luis Rey)
230922059	3040		OCEANSIDE BLVD		GALLAGHER DRILLING SERVICE	Low	Commercial	904.1 (Loma Alta)
230621003	2035		MISSION AVENUE	B	GALVAN'S BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
230727026	509		VISTA WAY		GAME ADX	Low	Commercial	904.2 (Buena Vista)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
231414011	467		COLLEGE BLVD	H7	GAME STOP	Low	Commercial	903.1 (San Luis Rey)
230925014	2535		VISTA WAY	C	GAME STOP # 1627	Low	Commercial	904.2 (Buena Vista)
231321054	4055		OCEANSIDE BLVD	KM	GANATOL LAND COMPANY	Low	Commercial	904.1 (Loma Alta)
230524026	528	S	COAST HWY		GARDNER'S BARGAIN CENTER	Low	Commercial	904.1 (Loma Alta)
230524065	815	S	COAST HWY		GARDNER'S SLEEP CENTER	Low	Commercial	904.1 (Loma Alta)
231421003	4225		OCEANSIDE BLVD	V	GATEWAY CLEANER	Low	Commercial	904.1 (Loma Alta)
230524036	923	S	COAST HWY		GATEWAY INSURANCE	Low	Commercial	904.1 (Loma Alta)
230917010	3753		MISSION AVENUE		GEMS N' LOANS	Low	Commercial	903.1 (San Luis Rey)
231320001	1		ANTIBODY WAY		GENENTECH INC	Low	Commercial	904.1 (Loma Alta)
231320013	4049		AVENIDA DE LA PLATA		GENENTECH INC	Low	Commercial	904.1 (Loma Alta)
231220034	3650		OCEAN RANCH BLVD		GENERAL CAR LEASING	Low	Commercial	904.1 (Loma Alta)
231017047	3815		MISSION AVENUE	201	GEORGE ALVES AGENCY - OHANA INSURANCE	Low	Commercial	903.1 (San Luis Rey)
231315030	4645		FRAZEE ROAD	E	GEORGEOUS NAILS	Low	Commercial	903.1 (San Luis Rey)
230922030	3038		INDUSTRY STREET		GERMAN AUTOWERKE	Low	Commercial	904.1 (Loma Alta)
231024011	2103	S	EL CAMINO REAL	102	GET ABLE	Low	Commercial	904.2 (Buena Vista)
230423040	404		PIER VIEW WAY		GI JOES - MILITARY SUPPLIES	Low	Commercial	903.1 (San Luis Rey)
231519030	4749		OCEANSIDE BLVD	A	GIANT A&M	Low	Commercial	904.1 (Loma Alta)
231421057	1935		AVENIDA DEL ORO		GIMMINY KIDS OCEANSIDE	Low	Commercial	904.1 (Loma Alta)
231325034	3504		COLLEGE BLVD	E	GLAMOUR SALON & SPA	Low	Commercial	904.2 (Buena Vista)
230523075	127	S	COAST HWY		GLOBAL TACTICAL SOLUTIONS	Low	Commercial	903.1 (San Luis Rey)
231225013	3621		VISTA WAY		GM SALLY MELLGREN MD INC.	Low	Commercial	904.2 (Buena Vista)
231315022	835		COLLEGE BLVD	102	GNC	Low	Commercial	903.1 (San Luis Rey)
231321064	4061		OCEANSIDE BLVD	F	GOING TO BEAT CANCER	Low	Commercial	904.1 (Loma Alta)
230627012	1837	S	COAST HWY		GOLD COAST FUTON	Low	Commercial	904.2 (Buena Vista)
230523007	417	S	COAST HWY		GOLDEN DAY SPA	Low	Commercial	904.1 (Loma Alta)
231321049	4051		OCEANSIDE BLVD		GOLDEN STATE FENCE COMPANY	Low	Commercial	904.1 (Loma Alta)
230420006	1411	N	COAST HWY		GOLDEN STATE PAINT BALL AND AIRSOFT	Low	Commercial	903.1 (San Luis Rey)
230524058	835	S	COAST HWY		GOLDEN'S TELEVISION - SALES AND SERVICE	Low	Commercial	904.1 (Loma Alta)
231312010	620	N	REDONDO DRIVE	C	GOOD STUFF ONLY	Low	Commercial	903.1 (San Luis Rey)
230422032	414	N	COAST HWY		GOOD WILL VOCATIONAL TRAINING CENTER	Low	Commercial	903.1 (San Luis Rey)
231425011	3841		PLAZA DRIVE	902	GOODWILL	Low	Commercial	904.2 (Buena Vista)
231024004	2101	S	EL CAMINO REAL	203B	GORDON VAL WHITE	Low	Commercial	904.2 (Buena Vista)
231220001	3616		OCEAN RANCH BLVD		GOURMET TAMALES	Low	Commercial	904.1 (Loma Alta)
231326026	3520		COLLEGE BLVD	201	GRABB-IT INC	Low	Commercial	904.2 (Buena Vista)
230523068	102	N	FREEMAN STREET		GRACE CHAPEL OF THE COAST	Low	Commercial	903.1 (San Luis Rey)
231017053	3825		MISSION AVENUE	11	GREAT CLIPS	Low	Commercial	903.1 (San Luis Rey)
230421027	315	S	HARBOR DRIVE		GREAT ESCAPE SPORTFISHING	Low	Commercial	903.1 (San Luis Rey)
231220013	3600		OCEAN RANCH BLVD		GREEN ALTERNATIVE	Low	Commercial	904.1 (Loma Alta)
231321046	4035		OCEANSIDE BLVD	40	GREEN JUNGLE INC.	Low	Commercial	904.1 (Loma Alta)
231025055	3142		VISTA WAY		GREENE PROPERTIES	Low	Commercial	904.2 (Buena Vista)
230723071	1906		OCEANSIDE BLVD		GREGORIO TOLENTINO DENTIST	Low	Commercial	904.1 (Loma Alta)
231025049	2741		VISTA WAY	103	GREGORY M. KUSNER	Low	Commercial	904.2 (Buena Vista)
230525010	1105	S	COAST HWY		GREMMIE SIDEWALK SURFER	Low	Commercial	904.1 (Loma Alta)
231421069	4083		OCEANSIDE BLVD	A	GRETCHEN'S PET GROOMING	Low	Commercial	904.1 (Loma Alta)
230822030	2805		OCEANSIDE BLVD		GROOMING DALES	Low	Commercial	904.1 (Loma Alta)
230917011	3762		MISSION AVENUE	106	GROOMING WITH TLC	Low	Commercial	903.1 (San Luis Rey)
231221070	3520		SEAGATE WAY	100	GROTH ARCHITECTS INC	Low	Commercial	904.1 (Loma Alta)
230819002	3355		MISSION AVENUE	234	GROTH ARCHITECTS INC.	Low	Commercial	903.1 (San Luis Rey)
230522031	223	N	HORNE STREET	A	GRUPO NUESTRA MISSION	Low	Commercial	903.1 (San Luis Rey)
231221043	3923		OCEANIC DRIVE	200	GSM LLC	Low	Commercial	904.1 (Loma Alta)
231220008	1		ANTIBODY WAY		GUCKENHEIMER	Low	Commercial	904.1 (Loma Alta)
230421022	1103	N	COAST HWY		GUESTHOUSE INN	Low	Commercial	904.1 (Loma Alta)
231420029	4167		AVENIDA DE LA PLATA		GUTH CENTER	Low	Commercial	904.1 (Loma Alta)
231812002	6041		MISSION AVENUE		GYAN PRODUCE	Low	Commercial	903.1 (San Luis Rey)
231712002	5780		MISSION AVENUE		H & G SERVICE CORP.	Low	Commercial	903.1 (San Luis Rey)
231619042	2590		JASON COURT		H & M DISTRIBUTING INC	Low	Commercial	904.1 (Loma Alta)
230422040	301	N	COAST HWY		H & M SUPPLIES	Low	Commercial	903.1 (San Luis Rey)
231217014	125		OLD GROVE ROAD	10	H & R BLOCK	Low	Commercial	903.1 (San Luis Rey)
231017085	3935		MISSION AVENUE		H & R BLOCK TAX SERVICE	Low	Commercial	903.1 (San Luis Rey)
231421104	4160		OCEANSIDE BLVD	169	H & R BLOCK TAX SERVICE	Low	Commercial	904.1 (Loma Alta)
230627008	1829	S	COAST HWY		H & R BLOCK TAX SERVICES	Low	Commercial	904.2 (Buena Vista)
230819063	3310		VIA DE LA VALLE		H&M CREATIVE DESIGNS INC	Low	Commercial	903.1 (San Luis Rey)
230723066	1906		OCEANSIDE BLVD		HACIENDA HOME LOANS	Low	Commercial	904.1 (Loma Alta)
231421115	4170		OCEANSIDE BLVD		HAIR AND NAIL	Low	Commercial	904.1 (Loma Alta)
230627015	1840	S	COAST HWY		HAIR QUEST BEAUTY SHOP AND SUPPLIES	Low	Commercial	904.2 (Buena Vista)
230524004	514	S	COAST HWY		HAIR STUDIO	Low	Commercial	904.1 (Loma Alta)
230925067	2525		VISTA WAY	E	HAIRCUTTERS	Low	Commercial	904.2 (Buena Vista)
231421106	4160		OCEANSIDE BLVD	167E	HAIRPORT	Low	Commercial	904.1 (Loma Alta)
230727029	513		VISTA WAY		HAMBLEYS UPHOLTERY	Low	Commercial	904.2 (Buena Vista)
230727031	515		VISTA WAY		HAMBLY'S UPHOLSTERY	Low	Commercial	904.2 (Buena Vista)
230723102	2026		OCEANSIDE BLVD	A	HAMILTON INDUSTRIES	Low	Commercial	904.1 (Loma Alta)
231221034	3907		OCEANIC DRIVE	301-02	HANSEN ARCHITECTURAL SYSTEMS, INC	Low	Commercial	904.1 (Loma Alta)
230522008	1014		MISSION AVENUE		HAPINESS NAIL AND SPA	Low	Commercial	903.1 (San Luis Rey)
230522009	1041		MISSION AVENUE		HAPINESS NAIL AND SPA	Low	Commercial	903.1 (San Luis Rey)
231017004	3772		MISSION AVENUE	118	HAPINESS NAIL AND SPA	Low	Commercial	903.1 (San Luis Rey)
230825018	2174		VISTA WAY		HAPINESS NAILS	Low	Commercial	904.2 (Buena Vista)
231014013	650		DOUGLAS DRIVE	108-09	HAPPY HAIR AND NAIL	Low	Commercial	903.1 (San Luis Rey)
230522025	316	N	HORNE STREET		HARBOR FREIGHT	Low	Commercial	903.1 (San Luis Rey)
230421030	278	S	HARBOR DRIVE		HARBOR GIFT SHOP	Low	Commercial	903.1 (San Luis Rey)
231321044	4035		OCEANSIDE BLVD	G56	HARBOR HARDWOOD FLOORS INC.	Low	Commercial	904.1 (Loma Alta)
230422034	707	N	COAST HWY		HARBOR LIQUOR	Low	Commercial	904.1 (Loma Alta)
230421029	272	S	HARBOR DRIVE		HARBOR VILLAGE MART	Low	Commercial	903.1 (San Luis Rey)
231420054	1951		AVENIDA PLAZA REAL		HARDWARE SPECILATY COMPANY INC.	Low	Commercial	904.1 (Loma Alta)
230723068	1816		OCEANSIDE BLVD	B	HARPER CHIROPRACTOR	Low	Commercial	904.1 (Loma Alta)
230719009	303		VIA DEL MONTE		HARVEST TIME PRODUCE	Low	Commercial	903.1 (San Luis Rey)
231024050	2125	S	EL CAMINO REAL	206	HARVEY FEIMAN PHD	Low	Commercial	904.2 (Buena Vista)
231221025	3820		OCEANIC DRIVE	308	HEART TO HEART GIFTS ECT	Low	Commercial	904.1 (Loma Alta)
231017066	3870		MISSION AVENUE	D5	HEARX WEST	Low	Commercial	903.1 (San Luis Rey)
230421025	315	S	HARBOR DRIVE		HELGRENS OCEANSIDE SPORTFISHING	Low	Commercial	903.1 (San Luis Rey)
230922036	3044		INDUSTRY STREET	108	HENDIG SURFBOARD REPAIR	Low	Commercial	904.1 (Loma Alta)
231321041	4035		OCEANSIDE BLVD	F44	HENMAN BEVILACQUA	Low	Commercial	904.1 (Loma Alta)
230925046	2424		VISTA WAY	202	HENSEL FINANCIAL	Low	Commercial	904.2 (Buena Vista)
230723073	1816		OCEANSIDE BLVD	C	HERTZ LOCAL EDITION	Low	Commercial	904.1 (Loma Alta)
231325003	3504		COLLEGE BLVD	A	HIDDEN BARBER SHOP	Low	Commercial	904.2 (Buena Vista)
230523069	109	S	COAST HWY		HILL STREET LOCK & KEY	Low	Commercial	903.1 (San Luis Rey)
230626026	1607	S	COAST HWY		HILLTOP MOTEL	Low	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
231024080	2983		VIA LAS ROSAS	A	HILTON CLEANERS	Low	Commercial	904.2 (Buena Vista)
231421068	4079		OCEANSIDE BLVD	J	HI-TECH SWISS ENGINEERING	Low	Commercial	904.1 (Loma Alta)
231220011	1825		CORPORATE CENTER DR		HK PLASTICS ENGINEERING INC.	Low	Commercial	903.1 (San Luis Rey)
231413001	471		COLLEGE BLVD	I1	HLA AUNG NIKKO ENTERPRISES	Low	Commercial	903.1 (San Luis Rey)
231025071	3170		VISTA WAY		HOLIDAY INN EXPRESS	Low	Commercial	904.2 (Buena Vista)
230723069	1906		OCEANSIDE BLVD		HOLISTIC CLINIC	Low	Commercial	904.1 (Loma Alta)
231620004	4616		NORTH AVENUE		HOLMES LANDSCAPE COMPANY	Low	Commercial	904.1 (Loma Alta)
231220037	3801		OCEAN RANCH BLVD	108	HOLSUM BAKERY INC.	Low	Commercial	904.1 (Loma Alta)
230523010	600		MISSION AVENUE		HOME BANK OF CALIFORNIA	Low	Commercial	903.1 (San Luis Rey)
231325022	3838		VISTA WY		HOME DEPOT	Low	Commercial	904.2 (Buena Vista)
231321052	4055		OCEANSIDE BLVD	D	HOME HELPERS/DIRECT LINK	Low	Commercial	904.1 (Loma Alta)
231025073	3186		VISTA WAY	200	HOOT WINC LLC	Low	Commercial	904.2 (Buena Vista)
230925048	2424		VISTA WAY	210	HORACE MANN	Low	Commercial	904.2 (Buena Vista)
231024022	2103	S	EL CAMINO REAL	108C	HORANCE MANN INSURANCE	Low	Commercial	904.2 (Buena Vista)
231019014	503		VISTA BELLA		HOSPITALITY SERVICES	Low	Commercial	903.1 (San Luis Rey)
230524038	314		WISCONSIN AVENUE		HOT SPOT INSURANCE	Low	Commercial	904.1 (Loma Alta)
230922060	3091		OCEANSIDE BLVD		HUCK FINN'S MINI WAREHOUSE	Low	Commercial	904.1 (Loma Alta)
230524052	1012	S	COAST HWY	I	HUDGINS CHIROPRACTIC	Low	Commercial	904.1 (Loma Alta)
231520028	1724		ORD WAY		HUME & CO TERMITE REPAIRS	Low	Commercial	904.1 (Loma Alta)
230719023	401		JONES ROAD		HYDRANAUTICS	Low	Commercial	903.1 (San Luis Rey)
231220042	3977		OCEAN RANCH BLVD		HYDRONAUTICS	Low	Commercial	904.1 (Loma Alta)
230625034	1319	S	COAST HWY	B-C	HYDROWBREW	Low	Commercial	904.1 (Loma Alta)
230925049	2424		VISTA WAY	315	I LEVEL BY WEYERHAUSER	Low	Commercial	904.2 (Buena Vista)
231414016	475		COLLEGE BLVD	J2	I SOLD IT ON E-BAY	Low	Commercial	903.1 (San Luis Rey)
231420050	4168		AVENIDA DE LA PLATA	115	I SPEED	Low	Commercial	904.1 (Loma Alta)
231225015	3633		VISTA WAY	102	IAN PARCELL MD PHD	Low	Commercial	904.2 (Buena Vista)
231420049	4168		AVENIDA DE LA PLATA	111	IDEADON LLC	Low	Commercial	904.1 (Loma Alta)
230523026	212	N	COAST HWY		IDEAL COMMUNICATIONS	Low	Commercial	903.1 (San Luis Rey)
231421071	4083		OCEANSIDE BLVD	C	ILLEGAL PRODUCTIONS	Low	Commercial	904.1 (Loma Alta)
231017046	3815		MISSION AVENUE	110	IMAGE CENTER SALON	Low	Commercial	903.1 (San Luis Rey)
230723062	2024		OCEANSIDE BLVD	A	IMPACT DESIGNS	Low	Commercial	904.1 (Loma Alta)
231220016	3604		OCEAN RANCH BLVD		IMPACT SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
231321009	4039		CALLE PLATINO	C	INDIGO LABS INC	Low	Commercial	904.1 (Loma Alta)
231321078	4065		OCEANSIDE BLVD	UV	INDULGE HAIR SALON	Low	Commercial	904.1 (Loma Alta)
231520025	1674		ORD WAY		INFOPLACE USA	Low	Commercial	904.1 (Loma Alta)
230523058	209	N	COAST HWY		INNER WORLD	Low	Commercial	903.1 (San Luis Rey)
231025031	2245	S	EL CAMINO REAL	E	INNOVATION HAIR SALON AND SUPPLIES	Low	Commercial	904.2 (Buena Vista)
231325001	3821		PLAZA DRIVE	402	INSURANCE PLACE	Low	Commercial	904.2 (Buena Vista)
231619025	1980		PEACOCK BLVD	E	INTEGRITY IMAGING SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
231620005	4630		NORTH AVENUE	B	INTERFACE DISPLAYS & CONTROLS INC ?	Low	Commercial	904.1 (Loma Alta)
231019015	503		VISTA BELLA		INTERNATIONAL HOTEL MARKETING CORPORATION	Low	Commercial	903.1 (San Luis Rey)
230819058	3205		PRODUCTION AVENUE		INTERNATIONAL SALES INC	Low	Commercial	903.1 (San Luis Rey)
231520012	1664		ORD WAY		INTERNET HOBBY SHOP	Low	Commercial	904.1 (Loma Alta)
230819081	3320		MISSION AVENUE	J	IPT MINISTRY	Low	Commercial	903.1 (San Luis Rey)
231025067	3156		VISTA WAY	203	ISLAND STAFFING	Low	Commercial	904.2 (Buena Vista)
230420001	1409	N	COAST HWY		ISLANDS SPA	Low	Commercial	903.1 (San Luis Rey)
231421124	4171		OCEANSIDE BLVD	102B	ITAN	Low	Commercial	904.1 (Loma Alta)
230720019	250		VIA DEL MONTE		J & W APPLIANCE SERVICE	Low	Commercial	903.1 (San Luis Rey)
231326009	3520		COLLEGE BLVD	202	J B COMMUNITY SERVICES	Low	Commercial	904.2 (Buena Vista)
230619001	1032		AIRPORT ROAD		J F CASSAN	Low	Commercial	903.1 (San Luis Rey)
231214007	4705	N	RIVER ROAD		J LEON CONSTRUCTION	Low	Commercial	903.1 (San Luis Rey)
230723042	1906		OCEANSIDE BLVD		J R FLOWERS	Low	Commercial	904.1 (Loma Alta)
231024053	2131	S	EL CAMINO REAL	103	J TEK DESIGN AND DRAFTING	Low	Commercial	904.2 (Buena Vista)
230524037	1012	S	COAST HWY	J	J TEKKER INSURANCE	Low	Commercial	904.1 (Loma Alta)
231414017	475		COLLEGE BLVD	J4	JACKSON HEWITT TAX SERVICE	Low	Commercial	903.1 (San Luis Rey)
230422050	520	N	COAST HWY	A-B	JACQUES COMPANY REAL ESTATE	Low	Commercial	903.1 (San Luis Rey)
230523048	224	N	COAST HWY		JAMAICA ME TAN	Low	Commercial	904.1 (Loma Alta)
231125006	3300		VISTA WAY	D	JAMES A. RAMENOFSKY	Low	Commercial	904.2 (Buena Vista)
230421002	1012	S	COAST HWY	G	JAMES MILLER CPA	Low	Commercial	904.1 (Loma Alta)
231421116	4170		OCEANSIDE BLVD	179	JAMES WHITE	Low	Commercial	904.1 (Loma Alta)
230925043	2424		VISTA WAY	201	JAMIESON COMPANY	Low	Commercial	904.2 (Buena Vista)
231024072	2191	S	EL CAMINO REAL	206	JAMYSON COMPANY	Low	Commercial	904.2 (Buena Vista)
231420044	4168		AVENIDA DE LA PLATA	103	JANI-TECH	Low	Commercial	904.1 (Loma Alta)
230422031	520	N	COAST HWY	103	JASON GREENWAY INSURANCE AGENCY	Low	Commercial	903.1 (San Luis Rey)
231519001	4747		OCEANSIDE BLVD	G	JAZI CRAFTS	Low	Commercial	904.1 (Loma Alta)
231025045	2677		VISTA WAY	B	JAZZERCISE INC	Low	Commercial	904.2 (Buena Vista)
230922021	1405	S	EL CAMINO REAL	110	JAZZY NAILS	Low	Commercial	904.1 (Loma Alta)
231019010	503		VISTA BELLA		JBL ASSOCIATES	Low	Commercial	903.1 (San Luis Rey)
231221020	3820		OCEANIC DRIVE	304	JDM CONCEPTS	Low	Commercial	904.1 (Loma Alta)
231619002	1818		PEACOCK BLVD	E	JDM UNLIMITED	Low	Commercial	904.1 (Loma Alta)
230422042	307	N	COAST HWY		JEAN'S GIFTS GALORE	Low	Commercial	903.1 (San Luis Rey)
231420047	4168		AVENIDA DE LA PLATA	100	JEN MAX FOODS	Low	Commercial	904.1 (Loma Alta)
230524071	909	S	COAST HWY	A	JES TAXES	Low	Commercial	904.1 (Loma Alta)
230922023	2850		INDUSTRY STREET		JESSUP SERVICES LLC	Low	Commercial	904.1 (Loma Alta)
230820006	3124		SAN LUIS REY ROAD		JET CONSTRUCTION INC	Low	Commercial	903.1 (San Luis Rey)
230523074	222	N	COAST HWY		JEWLERY BUY AND SELL	Low	Commercial	903.1 (San Luis Rey)
231418001	1888		CORTE TORERO		JH HOME DETAILING	Low	Commercial	904.1 (Loma Alta)
231421107	4160		OCEANSIDE BLVD	161	JJ'S SWEET PARDISEFLOWERS & GIFT	Low	Commercial	904.1 (Loma Alta)
231019012	503		VISTA BELLA		JOANN DELLAPOSTA	Low	Commercial	903.1 (San Luis Rey)
231025016	2227	S	EL CAMINO REAL		JO-ANN FABRICS AND CRAFTS # 464	Low	Commercial	904.2 (Buena Vista)
231024013	2103	S	EL CAMINO REAL	103	JOANNE ORTEGA TAX SERVICES	Low	Commercial	904.2 (Buena Vista)
231326005	3520		COLLEGE BLVD	205	JOE JOHNSTON KEMCO CORP	Low	Commercial	904.2 (Buena Vista)
230523027	404	S	COAST HWY		JOE'S CREDIT FUNITURE	Low	Commercial	904.1 (Loma Alta)
231326021	3520		COLLEGE BLVD		JOHN Y CHO	Low	Commercial	904.2 (Buena Vista)
230918003	3549		MISSION AVENUE	D	JOHNNIE'S BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
230523060	202	N	COAST HWY		JOHNSON SPORTING GOODS	Low	Commercial	903.1 (San Luis Rey)
230627020	1916	S	COAST HWY		JOHNSTON'S INTERIORS	Low	Commercial	904.2 (Buena Vista)
231420011	4120		AVENIDA DE LA PLATA		JONES BROADBAND INTERNATIONAL INC	Low	Commercial	904.1 (Loma Alta)
231221021	3820		OCEANIC DRIVE	305	JONES GLASS	Low	Commercial	904.1 (Loma Alta)
231023002	2003	S	EL CAMINO REAL	101	JORDAN AND JORDAN	Low	Commercial	904.2 (Buena Vista)
231321034	4035		OCEANSIDE BLVD	16	JORDAN ENGINEERING	Low	Commercial	904.1 (Loma Alta)
231221067	3791		OCEANIC WAY		JORDAN ENGINEERING LLC	Low	Commercial	904.1 (Loma Alta)
231519003	4747		OCEANSIDE BLVD	B	JORDAN ENGINEERING LLC	Low	Commercial	904.1 (Loma Alta)
230524066	917	S	COAST HWY		JORDAN'S UPHOLTERY	Low	Commercial	904.1 (Loma Alta)
231325035	3502		COLLEGE BLVD		JOSE M DUENES DDS APDC	Low	Commercial	904.2 (Buena Vista)
231519019	4747		OCEANSIDE BLVD	B	JOSEPH HAMPEL CONTRUCTION	Low	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
231025029	2245	S	EL CAMINO REAL		JOSIE LUNA/PROFESSIONAL HAIRSTYLIST	Low	Commercial	904.2 (Buena Vista)
230925030	2401		VISTA WAY	C	JOY NAIL AND SPA	Low	Commercial	904.2 (Buena Vista)
230824001	1865		CALIFORNIA STREET		JUNGLE JACKS INC.	Low	Commercial	904.1 (Loma Alta)
230621054	2027		MISSION AVENUE	C	JUST FOR HIM	Low	Commercial	903.1 (San Luis Rey)
231519018	4747		OCEANSIDE BLVD	F	JWI CONTRACTING	Low	Commercial	904.1 (Loma Alta)
230727023	2110	S	COAST HWY		KAATZ COMPUTERS	Low	Commercial	904.2 (Buena Vista)
231421062	1949		AVENIDA DEL ORO	102	KACOR INC.	Low	Commercial	904.1 (Loma Alta)
230422055	629	S	CLEVELAND STREET		KADDYMART	Low	Commercial	904.1 (Loma Alta)
231619018	2525		JASON COURT	101	KAHLER INTERNATIONAL INC	Low	Commercial	904.1 (Loma Alta)
230917012	3764		MISSION AVENUE		KAHOOTS ANIMALS AND SUPPLIES	Low	Commercial	903.1 (San Luis Rey)
231321071	4065		OCEANSIDE BLVD	D	KAIGAN KARATE	Low	Commercial	904.1 (Loma Alta)
231220019	3609		OCEAN RANCH BLVD	204	KAISER PERMANENTE PHARMACY	Low	Commercial	904.1 (Loma Alta)
230925023	2134		VISTA WAY		KAMAY BEAUTY CENTER AND SALON	Low	Commercial	904.2 (Buena Vista)
231421019	4225		OCEANSIDE BLVD	W	KARATE FOR KIDS	Low	Commercial	904.1 (Loma Alta)
230919021	480	N	EL CAMINO REAL		KASEY SMITH L. AC.	Low	Commercial	903.1 (San Luis Rey)
231321079	4065		OCEANSIDE BLVD	UV	KC BLY MULTICULTURAL STYLIST	Low	Commercial	904.1 (Loma Alta)
230922039	3052		INDUSTRY STREET	103	KEAHANA KIT	Low	Commercial	904.1 (Loma Alta)
231326019	3520		COLLEGE BLVD	205	KEMCO	Low	Commercial	904.2 (Buena Vista)
231024070	2191	S	EL CAMINO REAL	105	KEY MAY INSURANCE SERVICES	Low	Commercial	904.2 (Buena Vista)
230719017	1040		AIRPORT ROAD	A	K-FAB	Low	Commercial	903.1 (San Luis Rey)
230524070	525	S	COAST HWY		K-FIVE	Low	Commercial	904.1 (Loma Alta)
231420038	4167		AVENIDA DE LA PLATA	111	KHERUAIM	Low	Commercial	904.1 (Loma Alta)
231420030	4167		AVENIDA DE LA PLATA		KHERUBIM INC	Low	Commercial	904.1 (Loma Alta)
230917003	3766		MISSION AVENUE		KIDDIE ACADEMIE	Low	Commercial	903.1 (San Luis Rey)
231519027	4750		OCEANSIDE BLVD	A20	KID'Z BIZ INC.	Low	Commercial	904.1 (Loma Alta)
231125003	3300		VISTA WAY	B	KILYA PROPERTIES	Low	Commercial	904.2 (Buena Vista)
231326011	3536		COLLEGE BLVD		KINDER-CARE LEARNING CENTER	Low	Commercial	904.2 (Buena Vista)
230422052	510	N	COAST HWY	A	KINDRED JOURNEYS	Low	Commercial	903.1 (San Luis Rey)
231619043	2520		JASON COURT		KINETIC COMPOSITES, INC	Low	Commercial	904.1 (Loma Alta)
231221026	3820		OCEANIC DRIVE	309	KINETIC SYSTEMS INC	Low	Commercial	904.1 (Loma Alta)
230523040	126	N	COAST HWY		KINGSMEN CLEANERS	Low	Commercial	903.1 (San Luis Rey)
231321015	4040		CALLE PLATINO	110	KITCHEN GENIOS	Low	Commercial	904.1 (Loma Alta)
230720014	265		VIA DEL MONTE		KKL	Low	Commercial	903.1 (San Luis Rey)
230723012	1906		OCEANSIDE BLVD		KLASSY SALON	Low	Commercial	904.1 (Loma Alta)
230819050	271		ROYMAR ROAD	F	KLEENMASTER PRODUCTS CO	Low	Commercial	903.1 (San Luis Rey)
230524047	218		WISCONSIN AVENUE		KM FRAMES/SCREENS	Low	Commercial	904.1 (Loma Alta)
231313002	443		COLLEGE BLVD		KMART	Low	Commercial	903.1 (San Luis Rey)
231217017	125		OLD GROVE ROAD	14	KOKOMO'S TAN	Low	Commercial	903.1 (San Luis Rey)
230523050	605		MISSION AVENUE		KUHL COLLECTIBLES	Low	Commercial	903.1 (San Luis Rey)
230626028	1611	S	COAST HWY		KUNG FU SAN DOO	Low	Commercial	904.1 (Loma Alta)
230925056	2455		VISTA WAY	D	L&L HAWAIIAN BARBEQUE	Low	Commercial	904.2 (Buena Vista)
231420053	4183		AVENIDA DE LA PLATA	201	L.R. DESIGN ASSOCIATES	Low	Commercial	904.1 (Loma Alta)
230621053	1919		MISSION AVENUE		LA FRONTERA CHECK'S CASHED	Low	Commercial	903.1 (San Luis Rey)
230621035	2039		MISSION AVENUE		LA ILLUSION CRAFT	Low	Commercial	903.1 (San Luis Rey)
231420052	4179		AVENIDA DE LA PLATA		LA PETITE ACADEMY INC. # 7237	Low	Commercial	904.1 (Loma Alta)
230421020	917	N	COAST HWY		LA QUINTA INN	Low	Commercial	903.1 (San Luis Rey)
230524020	425	S	COAST HWY		LABOR READY	Low	Commercial	904.1 (Loma Alta)
230621006	2029		MISSION AVENUE	B	LACIADO EXPRESS SALON	Low	Commercial	903.1 (San Luis Rey)
230925080	2598		VISTA WAY		LAMP PLUS INC	Low	Commercial	904.2 (Buena Vista)
231619003	4675		NORTH AVENUE		LAMVIN INC	Low	Commercial	904.1 (Loma Alta)
231420020	4136		AVENIDA DE LA PLATA		LANDMARK MFG INC	Low	Commercial	904.1 (Loma Alta)
231420007	4112		AVENIDA DE LA PLATA		LANDMARK MFG,INC	Low	Commercial	904.1 (Loma Alta)
231315015	815		COLLEGE BLVD	101	LANE BRYANT	Low	Commercial	903.1 (San Luis Rey)
231519017	4747		OCEANSIDE BLVD	A20	LASAIR DESIGN	Low	Commercial	904.1 (Loma Alta)
230625006	1118	S	COAST HWY		LAUNDROMAT	Low	Commercial	904.1 (Loma Alta)
230724004	1727		OCEANSIDE BLVD	A	LAUNDRY COIN OP	Low	Commercial	904.1 (Loma Alta)
231025065	3156		VISTA WAY	200	LAW OFFICES OF ERIC D. MORTON APC	Low	Commercial	904.2 (Buena Vista)
231420032	4167		AVENIDA DE LA PLATA	104	LAW OFFICES OF JACK B. FRIEDELL	Low	Commercial	904.1 (Loma Alta)
231017063	3870		MISSION AVENUE	D1	LBC COURIER SERVICE	Low	Commercial	903.1 (San Luis Rey)
230524035	421	S	COAST HWY		LEADING EDGE INDSURANCE	Low	Commercial	904.1 (Loma Alta)
231421059	1938		AVENIDA DEL ORO		LEARNING CENTER INTERNATIONAL	Low	Commercial	904.1 (Loma Alta)
230621047	2027		MISSION AVENUE	D2	LEE'STSHIRT PLUS	Low	Commercial	903.1 (San Luis Rey)
231024015	2103	S	EL CAMINO REAL	103B	LENDER'S CONSTRUCTION SERVICES INC	Low	Commercial	904.2 (Buena Vista)
230719003	510		JONES ROAD		LEN'S AUTO BODY, INC	Low	Commercial	903.1 (San Luis Rey)
231325015	3504		COLLEGE BLVD		LENS FOR LESS	Low	Commercial	904.2 (Buena Vista)
231025042	2665		VISTA WAY	B	LENSCRAFTERS	Low	Commercial	904.2 (Buena Vista)
231425009	3837		PLAZA DRIVE		LESLIE'S SWIMMINGPOOL SUPPLIES #302	Low	Commercial	904.2 (Buena Vista)
231421096	4140		OCEANSIDE BLVD	133	LETICIA TRINIDAD	Low	Commercial	904.1 (Loma Alta)
230727014	1943	S	COAST HWY		LIBERTY OIL	Low	Commercial	904.2 (Buena Vista)
230625043	601		OCEANSIDE BLVD	B	LIBERTY TAX SERVICE	Low	Commercial	904.1 (Loma Alta)
230422045	510	N	COAST HWY	B-C	LIFE ENHANCEMENT FAMILY CHIROPRACTIC	Low	Commercial	903.1 (San Luis Rey)
231024054	2131	S	EL CAMINO REAL	201	LIGHTNING PROPERTY MANAGEMENT	Low	Commercial	904.2 (Buena Vista)
231024007	2101	S	EL CAMINO REAL	207	LILY BHATTACHARGYA PSYD	Low	Commercial	904.2 (Buena Vista)
231321030	4035		OCEANSIDE BLVD	A10	LINCO	Low	Commercial	904.1 (Loma Alta)
231025021	2231	S	EL CAMINO REAL	A	LINDA LARSON MASSAGE THERAPHY	Low	Commercial	904.2 (Buena Vista)
230525009	1027	S	CLEVELAND STREET		LINDEN SURFBOARDS	Low	Commercial	904.1 (Loma Alta)
230626030	1629	S	COAST HWY		LIQUOR PLUS	Low	Commercial	904.1 (Loma Alta)
231321067	4061		OCEANSIDE BLVD	M	LITE COSMETICS	Low	Commercial	904.1 (Loma Alta)
230723015	1828		OCEANSIDE BLVD		LITTLE BEARS CHILD CARE	Low	Commercial	904.1 (Loma Alta)
230423037	312		MISSION AVENUE		LITTLE LOUI'S GIFT SHOP	Low	Commercial	903.1 (San Luis Rey)
231024075	2191	S	EL CAMINO REAL	208	LIVING LIFE INSURANCE AND SERVICES	Low	Commercial	904.2 (Buena Vista)
230523054	609		MISSION AVENUE		LLL REPTILE AND SUPPLY CO. INC.	Low	Commercial	903.1 (San Luis Rey)
230925041	2424		VISTA WAY	101	LNW INSURANCE ADMINISTRATION INC.	Low	Commercial	904.2 (Buena Vista)
230723010	1810		OCEANSIDE BLVD	B	LOANN'S DESIGNS	Low	Commercial	904.1 (Loma Alta)
231421093	4130		OCEANSIDE BLVD		LONG'S DRUGS - OUT OF BUSINESS	Low	Commercial	904.1 (Loma Alta)
231017082	3935		MISSION AVENUE		LOVELY NAILS	Low	Commercial	903.1 (San Luis Rey)
231217019	155		OLD GROVE ROAD	B10	LOWE'S	Low	Commercial	903.1 (San Luis Rey)
231217002	155		OLD GROVE ROAD	F	LOWE'S HIW INC #1588	Low	Commercial	903.1 (San Luis Rey)
231216009	155		OLD GROVE ROAD		Lowe's HIW Inc.	Low	Commercial	
231519032	4750		OCEANSIDE BLVD	A17	LTS INC	Low	Commercial	904.1 (Loma Alta)
231017076	3915		MISSION AVENUE		LUCKY BOB'S INTERNET CAF	Low	Commercial	903.1 (San Luis Rey)
230625004	518		OCEANSIDE BLVD	101B	LV NAIL AND SPA	Low	Commercial	904.1 (Loma Alta)
230423002	211	N	TREMONT STREET		M & H BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
231221062	3750		OCEANIC WAY	402	M I SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
230819005	3210		PRODUCTION AVENUE		MAACO AUTO PAINT & BODY	Low	Commercial	903.1 (San Luis Rey)
230819014	101		COPPERWOOD WAY	H	MACORD CONSTRUCTION CORP	Low	Commercial	903.1 (San Luis Rey)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230919005	105		COPPERWOOD WAY	E	MACURD CONSTRUCTION	Low	Commercial	903.1 (San Luis Rey)
231619058	2600		TEMPLE HEIGHTS DRIVE		MADRIGAL'S CUSTOM UPHOLSTERY	Low	Commercial	904.1 (Loma Alta)
230621064	2035		MISSION AVENUE	A	MAGDA'S FASHION BOUTIQUE	Low	Commercial	903.1 (San Luis Rey)
231017055	3852		MISSION AVENUE	B1	MAGIC CUT HAIR SALON	Low	Commercial	903.1 (San Luis Rey)
230622020	214		SAN DIEGO STREET		MAIL BOXES Y MAS	Low	Commercial	903.1 (San Luis Rey)
231421097	4140		OCEANSIDE BLVD	136	MAIL DEPOT	Low	Commercial	904.1 (Loma Alta)
231520013	1758		ORD WAY		MAIN ST INTERIORS	Low	Commercial	904.1 (Loma Alta)
230423005	409		MISSION AVENUE		MAI'S NAIL AND DAY SPA	Low	Commercial	903.1 (San Luis Rey)
230820008	3122		SAN LUIS REY ROAD		MAJ HOLDINGS L.P./ MAJ INVESTMENTS	Low	Commercial	903.1 (San Luis Rey)
231421114	4170		OCEANSIDE BLVD	191	MAJESTIC SALON	Low	Commercial	904.1 (Loma Alta)
230422053	514	N	COAST HWY	BB-C	MALINDA ORIGINAL'S INC.	Low	Commercial	903.1 (San Luis Rey)
231421073	4083		OCEANSIDE BLVD	E	MALOTTE AND RAE	Low	Commercial	904.1 (Loma Alta)
230925045	2424		VISTA WAY	202	MANGINI & STEWART OC	Low	Commercial	904.2 (Buena Vista)
230523041	212	N	FREEMAN STREET		MANNINGS DRY CLEANERS	Low	Commercial	903.1 (San Luis Rey)
231221057	3720		OCEANIC WAY	302	MANTEL DEPOT INC	Low	Commercial	904.1 (Loma Alta)
231221023	3820		OCEANIC DRIVE	307	MAR MAR IMPORTING INC.	Low	Commercial	904.1 (Loma Alta)
231520045	1816		ORD WAY		MARCO POLO INC.	Low	Commercial	904.1 (Loma Alta)
231024051	2125	S	EL CAMINO REAL	206	MARGOT KUPLEY PSYD	Low	Commercial	904.2 (Buena Vista)
231017054	3826		MISSION AVENUE	D5	MARIA C GALDIANO DMD INC	Low	Commercial	903.1 (San Luis Rey)
231312015	610	N	REDONDO DRIVE	C	MARIE'S INTERNATIONAL BEAUTY SALON	Low	Commercial	903.1 (San Luis Rey)
230919008	110		COPPERWOOD WAY	O-P	MARINE SYSTEM CORPORATION	Low	Commercial	903.1 (San Luis Rey)
230524007	306		WISCONSIN AVENUE		MARINETIME INDUSTRIAL - MARINE ENGINE PARTS	Low	Commercial	904.1 (Loma Alta)
230922020	1405	S	EL CAMINO REAL	107B	MARISCOS ENSENADAS TACOS	Low	Commercial	904.1 (Loma Alta)
231315016	815		COLLEGE BLVD	103	MARLENE'S HALLMARK CARDS	Low	Commercial	903.1 (San Luis Rey)
230723060	656		CROUCH STREET		MARQUEZ CARRASQUILLO CORP.	Low	Commercial	904.1 (Loma Alta)
230727012	1935	S	COAST HWY		MARQUEZ CARRASQUILLO CORP.	Low	Commercial	904.2 (Buena Vista)
231321040	4035		OCEANSIDE BLVD	E41	MARSWAY MACHINING, INC	Low	Commercial	904.1 (Loma Alta)
230819040	3240		MISSION AVENUE		MARTY'S VALLEY INN	Low	Commercial	903.1 (San Luis Rey)
230523047	310	S	COAST HWY		MASSAGE WORLD	Low	Commercial	904.1 (Loma Alta)
231421061	1945		AVENIDA DEL ORO	128	MATRIX MEMBRANES INC	Low	Commercial	904.1 (Loma Alta)
230925065	2515		VISTA WAY	A	MATTRESS DISCOUNTERS	Low	Commercial	904.2 (Buena Vista)
230621049	2027		MISSION AVENUE	E3	MAURICE AND SON AUTO SERVICES	Low	Commercial	903.1 (San Luis Rey)
230423031	410		MISSION AVENUE		MAX MUSCLE OCEANSIDE	Low	Commercial	903.1 (San Luis Rey)
231025020	2231	S	EL CAMINO REAL	B	MAXDON'S	Low	Commercial	904.2 (Buena Vista)
231025033	2249	S	EL CAMINO REAL	E	MAXMUSCLE	Low	Commercial	904.2 (Buena Vista)
230922022	1405	S	EL CAMINO REAL	111	MB RETAIL INTERPRISES	Low	Commercial	904.1 (Loma Alta)
231017048	3815		MISSION AVENUE	203	MBA PRODUCE GROUP	Low	Commercial	903.1 (San Luis Rey)
231520015	1696		ORD WAY		MBC PROMOTIONS	Low	Commercial	904.1 (Loma Alta)
231321066	4061		OCEANSIDE BLVD	L	MBM BOSS STRATEGIC MATERIALS	Low	Commercial	904.1 (Loma Alta)
231420003	4100		AVENIDA DE LA PLATA	B	MC COMMUNICATIONS INC	Low	Commercial	904.1 (Loma Alta)
230922045	2821		OCEANSIDE BLVD		MCALISTER INSTITUTE NORTH COASTAL RRC	Low	Commercial	904.1 (Loma Alta)
230819017	101		COPPERWOOD WAY	J	MCR CONSTRUCTORS	Low	Commercial	903.1 (San Luis Rey)
231024039	2123	S	EL CAMINO REAL	B	MEDICAL ELECTRONIC SERVICES	Low	Commercial	904.2 (Buena Vista)
230918016	3753		MISSION AVENUE		MEDICAL SUPPLY EQUIPMENT	Low	Commercial	903.1 (San Luis Rey)
231025023	2235	S	EL CAMINO REAL	B	MERLE NORMAN COSMETICS	Low	Commercial	904.2 (Buena Vista)
230925026	2335		VISTA WAY		MERVYN'S - OUT OF BUSINESS	Low	Commercial	904.2 (Buena Vista)
231312016	610	N	REDONDO DRIVE	D	MESA NUTRITION	Low	Commercial	903.1 (San Luis Rey)
230621045	2027		MISSION AVENUE	C	MI TIENDITA CANDY STORE	Low	Commercial	903.1 (San Luis Rey)
231520020	1632		ORD WAY		MICHAEL PATTI PAINTING	Low	Commercial	904.1 (Loma Alta)
231025041	2649		VISTA WAY		MICHAEL'S ARTS AND CRAFTS	Low	Commercial	904.2 (Buena Vista)
231312028	521		VANDEGRIFT BLVD		MICK AND DICK'S BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
231421108	4160		OCEANSIDE BLVD	173	MICROCENTER COMPUTER	Low	Commercial	904.1 (Loma Alta)
230423039	316		PIER VIEW WAY		MIDNIGHT ADULT BOOK	Low	Commercial	903.1 (San Luis Rey)
230524009	1036	S	TREMONT STREET		MIKE CROES CONSULTING	Low	Commercial	904.1 (Loma Alta)
230524041	907	S	COAST HWY		MIKE'S LIQUOR	Low	Commercial	904.1 (Loma Alta)
230918013	3549		MISSION AVENUE	A	MIKE'S LIQUOR II	Low	Commercial	903.1 (San Luis Rey)
230917018	3753		MISSION AVENUE	115	MIKE'S MEATS - VACANT	Low	Commercial	903.1 (San Luis Rey)
230523025	204	N	COAST HWY		MILLENIUM ELECTRONICS	Low	Commercial	903.1 (San Luis Rey)
230819016	101		COPPERWOOD WAY	F	MILLENNIUM FIRE PROTECTION CORP.	Low	Commercial	903.1 (San Luis Rey)
231519009	4747		OCEANSIDE BLVD		MILLINNEUM FLOORING	Low	Commercial	904.1 (Loma Alta)
231017062	3861		MISSION AVENUE	B10	MIMI'S BEAUTY SUPPLY	Low	Commercial	903.1 (San Luis Rey)
230727038	814		VISTA WAY		MINA INTERNATIONAL ENTERPROSES	Low	Commercial	904.2 (Buena Vista)
230819011	3365		MISSION AVENUE	I-J	MINUTE PRESS	Low	Commercial	903.1 (San Luis Rey)
231325006	3502		COLLEGE BLVD	B	MIRA COSTA DENTAL	Low	Commercial	904.2 (Buena Vista)
231321058	4059		OCEANSIDE BLVD	L-M	MIRACLE METHOD	Low	Commercial	904.1 (Loma Alta)
231619014	4670		NORTH AVENUE	B	MIRAMAR STORAGE & TRANSFER CO ?	Low	Commercial	904.1 (Loma Alta)
230819090	3308		MISSION AVENUE		MISSION ANIMAL & BIRD HOSPITAL	Low	Commercial	903.1 (San Luis Rey)
230622014	1527		MISSION AVENUE		MISSION BAZZAR	Low	Commercial	903.1 (San Luis Rey)
230917015	3753		MISSION AVENUE	116	MISSION CAMINO DENTAL	Low	Commercial	903.1 (San Luis Rey)
231017067	3870		MISSION AVENUE	D6	MISSION CHILD DEVELOPMENT CENTER	Low	Commercial	903.1 (San Luis Rey)
231017044	3815		MISSION AVENUE	104	MISSION CHIROPRACTIC	Low	Commercial	903.1 (San Luis Rey)
231017007	3772		MISSION AVENUE	134	MISSION COIN LAUNDRY	Low	Commercial	903.1 (San Luis Rey)
230522034	219	N	HORNE STREET		MISSION DENTAL	Low	Commercial	903.1 (San Luis Rey)
231017016	3772		MISSION AVENUE	136	MISSION DRY CLEANERS	Low	Commercial	903.1 (San Luis Rey)
231017083	3935		MISSION AVENUE	9	MISSION FAMILY DENTISTRY	Low	Commercial	903.1 (San Luis Rey)
231217012	125		OLD GROVE ROAD	1	MISSION FEDERAL CREDIT UNION	Low	Commercial	903.1 (San Luis Rey)
230621020	1510		MISSION AVENUE		MISSION MATTRESS AND FURNITURE	Low	Commercial	903.1 (San Luis Rey)
231420045	4168		AVENIDA DE LA PLATA	105	MISSION POWER SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
230918020	3753		MISSION AVENUE	200	MISSION REAL ESTATE & MORTGAGE	Low	Commercial	903.1 (San Luis Rey)
231116001	4070		MISSION AVENUE		MISSION SAN LUIS REY PARISH	Low	Commercial	903.1 (San Luis Rey)
230522005	1062		MISSION AVENUE		MISSION SQUARE BARBER SHOP	Low	Commercial	903.1 (San Luis Rey)
230522011	306	N	HORNE STREET		MISSION SQUARE COIN LAUNDRY	Low	Commercial	903.1 (San Luis Rey)
230524053	616	S	COAST HWY		MISSION URGENT CARE	Low	Commercial	904.1 (Loma Alta)
231017084	3935		MISSION AVENUE	10	MISSION WASH LAUNDRY	Low	Commercial	903.1 (San Luis Rey)
231221051	3720		OCEANIC WAY	203	MIT ENGINEERING & CONSTR.	Low	Commercial	904.1 (Loma Alta)
231312017	610	N	REDONDO DRIVE	I	MIX DIX DISCOTECA	Low	Commercial	903.1 (San Luis Rey)
230622009	1407		MISSION AVENUE		MOBIL OIL	Low	Commercial	903.1 (San Luis Rey)
231024062	2171	S	EL CAMINO REAL	104	MOBILE MEDICINE OUTREACH	Low	Commercial	904.2 (Buena Vista)
231221024	3820		OCEANIC DRIVE	308	MOBILE SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
230820016	229		VIA EL CENTRO		MOBILE TRENDS	Low	Commercial	903.1 (San Luis Rey)
230825020	2178		VISTA WAY	E3	MODA BEAUTY SHOP	Low	Commercial	904.2 (Buena Vista)
230925021	2505	S	VISTA WAY		MOHNACKY ANIMAL HOSPITALS, INC	Low	Commercial	904.2 (Buena Vista)
230723041	1906		OCEANSIDE BLVD		MOMILANI'S ISLAND TRADITIONS - ALOHA WEAR	Low	Commercial	904.1 (Loma Alta)
231023005	2003	S	EL CAMINO REAL	107	MONA LEE WARMBRAND LCSW	Low	Commercial	904.2 (Buena Vista)
230625017	518		OCEANSIDE BLVD	112	MONEY TREE - CHECK CASHING	Low	Commercial	904.1 (Loma Alta)
231016003	292		DOUGLAS DRIVE		MONTANO MANAGEMENT LLC	Low	Commercial	903.1 (San Luis Rey)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
231727014	3525		CANNON ROAD		MONTESSORI SCHOOL OF O'SIDE	Low	Commercial	904.3 (Agua Hedionda)
230727017	2017	S	COAST HWY		MOOSE LODGE #1325	Low	Commercial	904.2 (Buena Vista)
230621051	1910		MISSION AVENUE	D	MORELIA DENTAL	Low	Commercial	903.1 (San Luis Rey)
231321077	4065		OCEANSIDE BLVD	T	MORGAN TAX & FINANCIAL SERVICES	Low	Commercial	904.1 (Loma Alta)
231221054	3720		OCEANIC WAY	209	MORRISSEY CONSTRUCTION	Low	Commercial	904.1 (Loma Alta)
230421019	909	N	COAST HWY		MOTEL 6	Low	Commercial	903.1 (San Luis Rey)
231325025	3708		PLAZA DRIVE		MOTEL 6	Low	Commercial	904.2 (Buena Vista)
230422028	822	N	COAST HWY		MOTEL 9	Low	Commercial	903.1 (San Luis Rey)
230621032	2019		MISSION AVENUE		MR BEST CLEANERS	Low	Commercial	903.1 (San Luis Rey)
230819053	3230		PRODUCTION AVENUE		MTM INDUSTRIAL	Low	Commercial	903.1 (San Luis Rey)
230720017	2941		SAN LUIS REY ROAD		MU, INC.	Low	Commercial	903.1 (San Luis Rey)
230625015	518		OCEANSIDE BLVD	101A	MULTISERVICES	Low	Commercial	904.1 (Loma Alta)
230621043	2027		MISSION AVENUE	C	MULTISERVICES EXPRESS #3	Low	Commercial	903.1 (San Luis Rey)
231312014	610	N	REDONDO DRIVE	B103	MUNGIA INSURANCE SERVICES	Low	Commercial	903.1 (San Luis Rey)
230621056	2027		MISSION AVENUE		MUNOZ BIKINIS	Low	Commercial	903.1 (San Luis Rey)
231321057	4059		OCEANSIDE BLVD	H	MY FAMILY'S SEASONINGS INC	Low	Commercial	904.1 (Loma Alta)
231216008	175		OLD GROVE ROAD	1	MY WIRELESS	Low	Commercial	903.1 (San Luis Rey)
231421021	4225		OCEANSIDE BLVD	L	MY WORLD AT&T	Low	Commercial	904.1 (Loma Alta)
231221040	3919		OCEANIC DRIVE	703	MYO SCI TECHNOGICS INC	Low	Commercial	904.1 (Loma Alta)
230524021	1012	S	COAST HWY	M	N PERLA	Low	Commercial	904.1 (Loma Alta)
231225012	3617		VISTA WAY		N. COUNTY ONCOLGY MEDICAL CLINIC	Low	Commercial	904.2 (Buena Vista)
231414031	467		COLLEGE BLVD	H4	NAIL 2001	Low	Commercial	903.1 (San Luis Rey)
230625003	1126	S	COAST HWY		NAIL AFFAIR	Low	Commercial	904.1 (Loma Alta)
231421098	4140		OCEANSIDE BLVD	159	NAIL BOUTIQUE	Low	Commercial	904.1 (Loma Alta)
231315023	835		COLLEGE BLVD	101	NAILS CLUB	Low	Commercial	903.1 (San Luis Rey)
230421006	280	S	HARBOR DRIVE		NANA AND POP'S SWEET SHOP - ICE CREAM PARLOR	Low	Commercial	903.1 (San Luis Rey)
231025063	3156		VISTA WAY	160	NANCY S. WALLS	Low	Commercial	904.2 (Buena Vista)
230523079	601		MISSION AVENUE		NAPUR SECURITY ACADEMY	Low	Commercial	903.1 (San Luis Rey)
231519045	4760		OCEANSIDE BLVD	B3	NASTY DOG SPA	Low	Commercial	904.1 (Loma Alta)
231221044	3927		OCEANIC DRIVE		NATIVE BOUQUET, LLC	Low	Commercial	904.1 (Loma Alta)
231511003	190		WILSHIRE ROAD		Natural Stone Waterfalls	Low	Commercial	
230723018	1906		OCEANSIDE BLVD		NAVY FEDERAL CREDIT UNION	Low	Commercial	904.1 (Loma Alta)
230819062	180		ROYMAR ROAD		NEPTUNE INDUSTRIES - NEZZY SURFBOARDS	Low	Commercial	903.1 (San Luis Rey)
231220046	3548		SEAGATE WAY	210	NETHERLAND & MOSCARI CPAS APC	Low	Commercial	904.1 (Loma Alta)
230625005	1122	S	COAST HWY		NEW CREATIONS CHILD CARE	Low	Commercial	904.1 (Loma Alta)
231421109	4160		OCEANSIDE BLVD	165	NEW MONEY EXPRESS	Low	Commercial	904.1 (Loma Alta)
231017090	3985		MISSION AVENUE		NEW SONG CHURCH	Low	Commercial	903.1 (San Luis Rey)
230723080	1830		OCEANSIDE BLVD	B	NEW TO YOU - THRIFT STORE	Low	Commercial	904.1 (Loma Alta)
230919003	110		COPPERWOOD WAY	C	NEW WAVE ELECTRIC INC	Low	Commercial	903.1 (San Luis Rey)
231024010	2103	S	EL CAMINO REAL	101A	NEWLOOK MD INC	Low	Commercial	904.2 (Buena Vista)
231221042	3923		OCEANIC DRIVE	100	NEXT DAY SPECIALTY LLC	Low	Commercial	904.1 (Loma Alta)
230819061	158		ROYMAR ROAD		NEZZY SURFBOARDS	Low	Commercial	903.1 (San Luis Rey)
230922027	2948		INDUSTRY STREET		NIHON SEIMEN CO	Low	Commercial	904.1 (Loma Alta)
231320004	4011		AVENIDA DE LA PLATA	302	NILO TOYS	Low	Commercial	904.1 (Loma Alta)
230719024	501		VIA DEL MONTE		NITTO DENKO TECHNICAL CORP	Low	Commercial	903.1 (San Luis Rey)
230719006	502		VIA DEL MONTE		NITTO DENKO TECHNICAL CORP	Low	Commercial	903.1 (San Luis Rey)
230723083	1824		OCEANSIDE BLVD	C	NOBLE KNITS	Low	Commercial	904.1 (Loma Alta)
231024052	2125	S	EL CAMINO REAL	210	NON SURGICAL SPINE CARE CENTER	Low	Commercial	904.2 (Buena Vista)
230621004	1919		MISSION AVENUE		NORMA'S BEAUTY SHOP	Low	Commercial	903.1 (San Luis Rey)
231321016	4040		CALLE PLATINO	111	NORTH COAST MOTORSPORTS	Low	Commercial	904.1 (Loma Alta)
231017077	3915		MISSION AVENUE		NORTH COAST OPTOMETRIST	Low	Commercial	903.1 (San Luis Rey)
231025062	3156		VISTA WAY	100	NORTH COAST UROLOGY MEDICAL ASSOCIATES	Low	Commercial	904.2 (Buena Vista)
231225010	3609		VISTA WAY		NORTH COAST UROLOGY MEDICAL ASSOCIATES	Low	Commercial	904.2 (Buena Vista)
231116002	4198		MISSION AVENUE		NORTH COUNTY ALANO CLUB	Low	Commercial	903.1 (San Luis Rey)
231421022	4225		OCEANSIDE BLVD	U	NORTH COUNTY CAT HOSPITAL	Low	Commercial	904.1 (Loma Alta)
230719010	504		JONES ROAD		NORTH COUNTY COOLING	Low	Commercial	903.1 (San Luis Rey)
230724016	1771		OCEANSIDE BLVD		NORTH COUNTY DENTAL CENTER	Low	Commercial	904.1 (Loma Alta)
231024006	2101	S	EL CAMINO REAL	206	NORTH COUNTY FINANCIAL ASSOCIATES	Low	Commercial	904.2 (Buena Vista)
230819092	3308		MISSION AVENUE	I	NORTH COUNTY HEALTH SERVICES - LA MISSION	Low	Commercial	903.1 (San Luis Rey)
230922053	2933		OCEANSIDE BLVD	B	NORTH COUNTY HYPER SPORTS	Low	Commercial	904.1 (Loma Alta)
231321033	4035		OCEANSIDE BLVD	C12	NORTH COUNTY IRON WORKS	Low	Commercial	904.1 (Loma Alta)
230625045	707		OCEANSIDE BLVD		NORTH COUNTY LIFE LINE	Low	Commercial	904.1 (Loma Alta)
230819052	3230		PRODUCTION AVENUE		NORTH COUNTY MILLING & MANUFACTURING	Low	Commercial	903.1 (San Luis Rey)
231221063	3760		OCEANIC WAY	501	NORTH COUNTY MOBILE ELECTRONICS	Low	Commercial	904.1 (Loma Alta)
231024068	2191	S	EL CAMINO REAL	101	NORTH COUNTY PODIATRY CLINICS	Low	Commercial	904.2 (Buena Vista)
230422038	406	S	CLEVELAND STREET		NORTH COUNTY PRINTERS & SIGNS	Low	Commercial	904.1 (Loma Alta)
230819075	3355		MISSION AVENUE	231	NORTH COUNTY PSYCOTHERAPY SERVICES	Low	Commercial	903.1 (San Luis Rey)
230626035	1722	S	COAST HWY		NORTH COUNTY TIMES	Low	Commercial	904.2 (Buena Vista)
230522027	810		MISSION AVENUE		NORTH COUNTY TRANSIT DISTRICT	Low	Commercial	903.1 (San Luis Rey)
230523055	612		MISSION AVENUE		NORTH COUNTY TROPHIES	Low	Commercial	903.1 (San Luis Rey)
230524074	1012	S	COAST HWY	E	NORTH COUNTY VACUMNS AND MORE	Low	Commercial	904.1 (Loma Alta)
230423047	207	N	TREMONT STREET		NORTH STAR AGENCY	Low	Commercial	903.1 (San Luis Rey)
231225001	3710		VISTA WY	111	NORTHCOAST DENTAL GROUP	Low	Commercial	904.2 (Buena Vista)
231025064	3156		VISTA WAY	200	NORTON A. GRIMES LLP	Low	Commercial	904.2 (Buena Vista)
231520016	1714		ORD WAY		NOVA BIOLOGICS	Low	Commercial	904.1 (Loma Alta)
231221035	3909		OCEANIC DRIVE	401	NOVA VOICE & DATA SYSTEMS, INC	Low	Commercial	904.1 (Loma Alta)
231312019	610	N	REDONDO DRIVE		NUEVA IGLESIAAPOSTOLICA DE JESUCRISTO	Low	Commercial	903.1 (San Luis Rey)
231024032	2111	S	EL CAMINO REAL	301	NXT AGENCY LLC	Low	Commercial	904.2 (Buena Vista)
230621044	2027		MISSION AVENUE	C	OCEAN 98	Low	Commercial	903.1 (San Luis Rey)
230321005	1400	N	HARBOR DRIVE		OCEAN AQUATICS	Low	Commercial	903.1 (San Luis Rey)
230719020	350		VIA DEL MONTE		OCEAN BREEZE	Low	Commercial	903.1 (San Luis Rey)
230422015	507	N	COAST HWY		OCEAN BREEZE FLOWERS	Low	Commercial	903.1 (San Luis Rey)
230727018	2020	S	COAST HWY		OCEAN BREEZE INN	Low	Commercial	904.2 (Buena Vista)
230724005	1727		OCEANSIDE BLVD	A	OCEAN CLINIC	Low	Commercial	904.1 (Loma Alta)
230724009	1759		OCEANSIDE BLVD	B	OCEAN NAILS	Low	Commercial	904.1 (Loma Alta)
231220020	3609		OCEAN RANCH BLVD	205	OCEAN RANCH DENTISTRY	Low	Commercial	904.1 (Loma Alta)
230523008	613		MISSION AVENUE		OCEAN SHINE NAIL SALON AND DAY SPA	Low	Commercial	903.1 (San Luis Rey)
230523049	605		MISSION AVENUE		OCEAN SKY BEADS	Low	Commercial	903.1 (San Luis Rey)
231220017	3605		OCEAN RANCH BLVD		OCEAN SYSTEM ENGINEERING CORP	Low	Commercial	904.1 (Loma Alta)
231019017	535		VISTA BELLA		OCEANA CHIROPRATIC - JOSEPH LEEDY MDC	Low	Commercial	903.1 (San Luis Rey)
231019001	531		VISTA BELLA		OCEANA FASHION	Low	Commercial	903.1 (San Luis Rey)
231019018	537		VISTA BELLA		OCEANA PET STOP	Low	Commercial	903.1 (San Luis Rey)
231019019	531		VISTA BELLA		OCEANA RESALES & RENTALS	Low	Commercial	903.1 (San Luis Rey)
230524022	402		WISCONSIN AVENUE		OCEANFRONT ENGINEERING	Low	Commercial	904.1 (Loma Alta)
230727036	608		VISTA WAY		OCEANSIDE ACUPUNTURE	Low	Commercial	904.2 (Buena Vista)
231221006	3800		OCEANIC DRIVE	105	OCEANSIDE ALE WORKS	Low	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230523002	602		MISSION AVENUE		OCEANSIDE ART GALLERY	Low	Commercial	903.1 (San Luis Rey)
230525008	1023	S	CLEVELAND STREET		OCEANSIDE BOARD OUTLET	Low	Commercial	904.1 (Loma Alta)
230524042	431	S	COAST HWY		OCEANSIDE BOARD SHOP	Low	Commercial	904.1 (Loma Alta)
231421067	4079		OCEANSIDE BLVD	E	OCEANSIDE CENTER FOR SPIRITUAL LIVING	Low	Commercial	904.1 (Loma Alta)
230421003	928	N	COAST HWY	B	OCEANSIDE CHAMBER OF COMMERCE	Low	Commercial	903.1 (San Luis Rey)
230423051	409		MISSION AVENUE		OCEANSIDE CLOSET INC.	Low	Commercial	903.1 (San Luis Rey)
230723016	1824		OCEANSIDE BLVD	D	OCEANSIDE COIN LAUNDRY	Low	Commercial	904.1 (Loma Alta)
230626025	1575	S	COAST HWY		OCEANSIDE COLLEGE OF BEAUTY	Low	Commercial	904.1 (Loma Alta)
230422023	512		CIVIC CENTER DRIVE		OCEANSIDE CONSTRUCTION CO	Low	Commercial	903.1 (San Luis Rey)
231321020	4040		CALLE PLATINO	120	OCEANSIDE CROSSFIT	Low	Commercial	904.1 (Loma Alta)
231421090	4095		OCEANSIDE BLVD	G	OCEANSIDE DANCE ACADEMY	Low	Commercial	904.1 (Loma Alta)
231519004	4749		OCEANSIDE BLVD		OCEANSIDE FAMILY CHIROPRACTOR	Low	Commercial	904.1 (Loma Alta)
231217018	125		OLD GROVE ROAD	15	OCEANSIDE FAMILY DENTISTRY	Low	Commercial	903.1 (San Luis Rey)
230627023	1921	S	COAST HWY		OCEANSIDE FLORIST INC.	Low	Commercial	904.2 (Buena Vista)
231112001	825		DOUGLAS DRIVE		OCEANSIDE GOLF LLC	Low	Commercial	903.1 (San Luis Rey)
231325021	3508		COLLEGE BLVD		OCEANSIDE GROCERY OUTLET	Low	Commercial	904.2 (Buena Vista)
230919012	102		COPPERWOOD WAY	E	OCEANSIDE HYDRAULICS	Low	Commercial	903.1 (San Luis Rey)
230624002	1680		OCEANSIDE BLVD		OCEANSIDE INN	Low	Commercial	904.1 (Loma Alta)
230626037	1820	S	COAST HWY		OCEANSIDE INN	Low	Commercial	904.2 (Buena Vista)
231519033	4750		OCEANSIDE BLVD	A16	OCEANSIDE KUMON	Low	Commercial	904.1 (Loma Alta)
230621039	2025		MISSION AVENUE		OCEANSIDE LAWNMOWERS REPAIR	Low	Commercial	903.1 (San Luis Rey)
230723061	1910		OCEANSIDE BLVD		OCEANSIDE LIQUOUR	Low	Commercial	904.1 (Loma Alta)
230719018	360		VIA EL CENTRO		OCEANSIDE MACHINE AND TOOL, INC	Low	Commercial	903.1 (San Luis Rey)
230320001	1550	N	HARBOR DRIVE		OCEANSIDE MARINE CENTRE, INC	Low	Commercial	903.1 (San Luis Rey)
230524025	602	S	COAST HWY		OCEANSIDE MORTUARY	Low	Commercial	904.1 (Loma Alta)
230523078	219	N	COAST HWY		OCEANSIDE MUSEUM OF ART SCHOOL	Low	Commercial	903.1 (San Luis Rey)
230523077	228	S	COAST HWY		OCEANSIDE MUSIC SUPPLY	Low	Commercial	904.1 (Loma Alta)
230723056	1906		OCEANSIDE BLVD		OCEANSIDE NUTRITION	Low	Commercial	904.1 (Loma Alta)
230720021	2909		SAN LUIS REY ROAD		OCEANSIDE PET HOTEL & TRAINING KENNEL	Low	Commercial	903.1 (San Luis Rey)
230723076	1906		OCEANSIDE BLVD		OCEANSIDE PET SALON	Low	Commercial	904.1 (Loma Alta)
230522010	918		MISSION AVENUE		OCEANSIDE PHOTO AND TELESCOPE	Low	Commercial	903.1 (San Luis Rey)
230922031	3038		INDUSTRY STREET	108	OCEANSIDE PLASTIC ENTERPRISES CORP	Low	Commercial	904.1 (Loma Alta)
230922032	3038		INDUSTRY STREET	108	OCEANSIDE PLASTIC ENTERPRISES CORP	Low	Commercial	904.1 (Loma Alta)
230925035	2420		VISTA WAY		OCEANSIDE PLAZA INVESTORS	Low	Commercial	904.2 (Buena Vista)
231017057	3855		MISSION AVENUE		OCEANSIDE POLICE OFFICER'S ASSOCIATION	Low	Commercial	903.1 (San Luis Rey)
230626022	1521	S	COAST HWY		OCEANSIDE PRO TOWING INC	Low	Commercial	904.1 (Loma Alta)
230524068	618	S	COAST HWY		OCEANSIDE PSYCHIC EYE	Low	Commercial	904.1 (Loma Alta)
230720024	2936		SAN LUIS REY ROAD		OCEANSIDE PUBLIC STORAGE	Low	Commercial	903.1 (San Luis Rey)
230422048	323	N	COAST HWY	A	OCEANSIDE SALES AND RENTALS	Low	Commercial	903.1 (San Luis Rey)
231014006	650		DOUGLAS DRIVE	107	OCEANSIDE SPRINT INC	Low	Commercial	903.1 (San Luis Rey)
231519034	4750		OCEANSIDE BLVD	A12	OCEANSIDE SQUARE LLC	Low	Commercial	904.1 (Loma Alta)
230819047	3310		VIA DE LA VALLE	C	OCEANSIDE SURF INDUSTRIES	Low	Commercial	903.1 (San Luis Rey)
230922012	2847		INDUSTRY STREET		OCEANSIDE TRUSS INC - OUT OF BUSINESS	Low	Commercial	904.1 (Loma Alta)
230720025	2960		SAN LUIS REY ROAD		OCEANSIDE VETERINARY HOS.	Low	Commercial	903.1 (San Luis Rey)
231221015	3803		OCEANIC DRIVE	202	OCEANSIDE VINEYARD CHURCH	Low	Commercial	904.1 (Loma Alta)
231024041	2125	S	EL CAMINO REAL	101	OCEANVIEW DENTAL	Low	Commercial	904.2 (Buena Vista)
230925036	2420		VISTA WAY	100	OCEANVIEW FAMILY DENTISTRY	Low	Commercial	904.2 (Buena Vista)
231024002	2003	S	EL CAMINO REAL	109	OCEANVIEW REALTY	Low	Commercial	904.2 (Buena Vista)
231024065	2181	S	EL CAMINO REAL	100	ODONNEL GROUP	Low	Commercial	904.2 (Buena Vista)
231221060	3720		OCEANIC WAY	305	ODYSSEY PROPERTIES & GARRISON CONSTRUCTION	Low	Commercial	904.1 (Loma Alta)
230523059	236	S	COAST HWY		OEX OCEANSIDE	Low	Commercial	904.1 (Loma Alta)
230522039	1046		MISSION AVENUE		OFFICE DEPOT	Low	Commercial	903.1 (San Luis Rey)
231017002	3784		MISSION AVENUE	153	OLD MISSION BARBER SHOP	Low	Commercial	903.1 (San Luis Rey)
230421024	260	S	HARBOR DRIVE		OLD SKULL RENTALS	Low	Commercial	903.1 (San Luis Rey)
231321001	4035		OCEANSIDE BLVD		OLD WORLD STANDARDS	Low	Commercial	904.1 (Loma Alta)
231321037	4035		OCEANSIDE BLVD	D28	OLD WORLD STANDARDS	Low	Commercial	904.1 (Loma Alta)
230922058	3040		OCEANSIDE BLVD		OLD WORLD STANDARDS	Low	Commercial	904.1 (Loma Alta)
231520008	1672		ORD WAY		OLIVA'S FLOORING, INC	Low	Commercial	904.1 (Loma Alta)
230819009	3365		MISSION AVENUE	H	OLY UNIQUE TOUCH	Low	Commercial	903.1 (San Luis Rey)
231414024	459		COLLEGE BLVD	3	OMEGA BICYCLES	Low	Commercial	903.1 (San Luis Rey)
230523045	325	S	COAST HWY		OMNI LOANS	Low	Commercial	904.1 (Loma Alta)
231019007	503		VISTA BELLA		ON THE ROAD INSURANCE	Low	Commercial	903.1 (San Luis Rey)
230925057	2455		VISTA WAY	K	ONCE UPON A CHILD	Low	Commercial	904.2 (Buena Vista)
230422003	520	N	COAST HWY		ONE LILY INC	Low	Commercial	903.1 (San Luis Rey)
231620002	1865		ORD WAY		ONE SOURCE DISTRIBUTORS	Low	Commercial	904.1 (Loma Alta)
231321027	3951		OCEANIC DRIVE		ONE SOURCE DISTRIBUTORS LLC	Low	Commercial	904.1 (Loma Alta)
230727011	1935	S	COAST HWY		ONE STOP BUSINESS AND LEGAL CENTER	Low	Commercial	904.2 (Buena Vista)
231519035	4750		OCEANSIDE BLVD		ONE STOP CONVENIENCE STORE	Low	Commercial	904.1 (Loma Alta)
231122001	3501		OCEANSIDE BLVD		ORCO BLOCK CO INC	Low	Commercial	904.1 (Loma Alta)
230523053	519		MISSION AVENUE		ORIENTAL WIGS AND GIFTS	Low	Commercial	903.1 (San Luis Rey)
231320003	4011		AVENIDA DE LA PLATA	302	ORIS GROUP CONSULTING INC	Low	Commercial	904.1 (Loma Alta)
230922019	1401	S	EL CAMINO REAL	108	OROWHEAT/ENTENMANN'S	Low	Commercial	904.1 (Loma Alta)
230819089	180		ROYMAR ROAD	H	O'SHEAS DELIVERY SERVICES	Low	Commercial	903.1 (San Luis Rey)
230723099	1833		OCEANSIDE BLVD		OSHKOSH REGIONAL LOGISTICS CENTER	Low	Commercial	904.1 (Loma Alta)
231225009	3601		VISTA WAY		OTCP LLC	Low	Commercial	904.2 (Buena Vista)
230727019	2027	S	COAST HWY		OUTERLIMITS SMOKE SHOP	Low	Commercial	904.2 (Buena Vista)
231619007	1980		PEACOCK BLVD	G	OZONE GOLD	Low	Commercial	904.1 (Loma Alta)
230627010	1835	S	COAST HWY		P C H SPORTS BAR & GRILL	Low	Commercial	904.2 (Buena Vista)
230922005	603		GARRISON STREET		P J GRAPHICS	Low	Commercial	904.1 (Loma Alta)
230822029	2801		OCEANSIDE BLVD		PACIFIC ANIMAL HOSPITAL	Low	Commercial	904.1 (Loma Alta)
231520019	1690		ORD WAY		PACIFIC BACKFLOW CO	Low	Commercial	904.1 (Loma Alta)
231321061	4061		OCEANSIDE BLVD	B	PACIFIC BATTERY SYSTEMS	Low	Commercial	904.1 (Loma Alta)
231225008	3522		VISTA WAY		PACIFIC BREEZE APTS II	Low	Commercial	904.2 (Buena Vista)
230819044	311		VIA EL CENTRO		PACIFIC CANVAS	Low	Commercial	903.1 (San Luis Rey)
231619031	2585		JASON COURT		PACIFIC COAST CABINETS	Low	Commercial	904.1 (Loma Alta)
231024005	2101	S	EL CAMINO REAL	204	PACIFIC COAST COUNSELING	Low	Commercial	904.2 (Buena Vista)
230727001	2003	S	COAST HWY		PACIFIC COAST CYCLES	Low	Commercial	904.2 (Buena Vista)
230819078	3355		MISSION AVENUE	213	PACIFIC FLYER NEWSPAPERS	Low	Commercial	903.1 (San Luis Rey)
231221056	3720		OCEANIC WAY	301A	PACIFIC GYRE	Low	Commercial	904.1 (Loma Alta)
230422029	901	N	COAST HWY		PACIFIC INN	Low	Commercial	903.1 (San Luis Rey)
231421099	4140		OCEANSIDE BLVD	141	PACIFIC MARINE CREDIT UNION - OUT OF BUSINESS	Low	Commercial	904.1 (Loma Alta)
231321028	4015		OCEANSIDE BLVD		PACIFIC MINI STORAGE	Low	Commercial	904.1 (Loma Alta)
231213001	4785	N	RIVER ROAD		PACIFIC PARADISE NURSERY INC	Low	Commercial	903.1 (San Luis Rey)
230925038	2420		VISTA WAY	115	PACIFIC SLEEP MEDICINE	Low	Commercial	904.2 (Buena Vista)
231619036	2575		JASON COURT		PACIFIC TURBINE SUPPORT, INC	Low	Commercial	904.1 (Loma Alta)
230819027	3355		MISSION AVENUE	139	PACIFIC VIEW CHARTER SCHOOL	Low	Commercial	903.1 (San Luis Rey)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
231024029	2111	S	EL CAMINO REAL	200	PACIFICA ENGINEERING	Low	Commercial	904.2 (Buena Vista)
230819046	305		VIA EL CENTRO	110	PALAPA KINGS INC	Low	Commercial	903.1 (San Luis Rey)
230727032	602		VISTA WAY		PALOMAR MEDICAL SUPPLIES	Low	Commercial	904.2 (Buena Vista)
230626024	1537	S	COAST HWY		PARADISE BY THE SEA	Low	Commercial	904.1 (Loma Alta)
231321047	4035		OCEANSIDE BLVD	A3	PARKER AIR BRUSH	Low	Commercial	904.1 (Loma Alta)
230627021	1918	S	COAST HWY		PARRA ACCOUNTING	Low	Commercial	904.2 (Buena Vista)
231321055	4059		OCEANSIDE BLVD	B	PARTNERSHIP WITH INDUSTRY	Low	Commercial	904.1 (Loma Alta)
230825014	2130		VISTA WAY		PARTY CITY OF OCEANSIDE #437	Low	Commercial	904.2 (Buena Vista)
231312022	620	N	REDONDO DRIVE		PASE Y ADELGACE	Low	Commercial	903.1 (San Luis Rey)
230622018	223		BROOKS STREET		PASSPORT PHOTOS PLUS	Low	Commercial	903.1 (San Luis Rey)
230925032	2401		VISTA WAY	H	PATTI'S HALLMARK	Low	Commercial	904.2 (Buena Vista)
230723075	1950		OCEANSIDE BLVD	F	PAYDAY CASH ADVANCE	Low	Commercial	904.1 (Loma Alta)
230522035	711		MISSION AVENUE		PAYDAY LOANS	Low	Commercial	903.1 (San Luis Rey)
230819019	230		ROYMAR ROAD	E	PAYLESS CUSTOM VEHICLE MAGNETS	Low	Commercial	903.1 (San Luis Rey)
231315012	805		COLLEGE BLVD	101	PAYLESS SHOE SOURCE	Low	Commercial	903.1 (San Luis Rey)
230621057	1919		MISSION AVENUE		PAYLESS SHOES SOURCE	Low	Commercial	903.1 (San Luis Rey)
231519013	4747		OCEANSIDE BLVD	N	PBM FREIGHT SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
230922014	3041		INDUSTRY STREET	A	PBW BRAZILIAN DOORS	Low	Commercial	904.1 (Loma Alta)
230727010	1935	S	COAST HWY		PCH POSTAL	Low	Commercial	904.2 (Buena Vista)
230825019	2178		VISTA WAY		PCS LEASING CO LP	Low	Commercial	904.2 (Buena Vista)
230925040	2420		VISTA WAY	215	PEAK TECHNICAL SERVICES	Low	Commercial	904.2 (Buena Vista)
230727039	904		VISTA WAY		PEGASUS PRODUCTIONS	Low	Commercial	904.2 (Buena Vista)
230524056	421	S	COAST HWY	A	PEOPLE'S CHECK CASHING	Low	Commercial	904.1 (Loma Alta)
231314005	427		COLLEGE BLVD	I	PEPPERTREE MONTESSORI SCHOOL	Low	Commercial	903.1 (San Luis Rey)
231421056	4093		OCEANSIDE BLVD	D	PEREIRA BRAZILIAN JIU JITSU	Low	Commercial	904.1 (Loma Alta)
231421002	4225		OCEANSIDE BLVD	J	PERFECT NAILS	Low	Commercial	904.1 (Loma Alta)
231425003	3837		PLAZA DRIVE		PERFORMANCE BICYCLE	Low	Commercial	904.2 (Buena Vista)
231024033	2111	S	EL CAMINO REAL	302	PERFORMANCE IMPROVEMENTS INTERNATIONAL	Low	Commercial	904.2 (Buena Vista)
230522006	221	N	HORNE STREET	A	PERLA'S HAIR SALON	Low	Commercial	903.1 (San Luis Rey)
230922051	2929		OCEANSIDE BLVD		PESTMASTER SERVICES	Low	Commercial	904.1 (Loma Alta)
231421117	4170		OCEANSIDE BLVD	189	PET PEOPLE	Low	Commercial	904.1 (Loma Alta)
231017069	3875		MISSION AVENUE		PETCO	Low	Commercial	903.1 (San Luis Rey)
230925054	2445		VISTA WAY		PETCO ANIMAL SUPPLIES	Low	Commercial	904.2 (Buena Vista)
231326008	3420		MARRON ROAD		PETSMART	Low	Commercial	904.2 (Buena Vista)
230922044	3052		INDUSTRY STREET	101	PHARMAGENX INC	Low	Commercial	904.1 (Loma Alta)
231220028	3634		OCEAN RANCH BLVD		PHARM-AID INC	Low	Commercial	904.1 (Loma Alta)
231325028	3809		PLAZA DRIVE	112	PHYSICAL THERAPY	Low	Commercial	904.2 (Buena Vista)
231221027	3820		OCEANIC DRIVE	310	PICK ON US INC,	Low	Commercial	904.1 (Loma Alta)
230925076	2555		VISTA WAY		PIER 1 IMPORTS #436	Low	Commercial	904.2 (Buena Vista)
230423033	218	N	CLEVELAND STREET		PIERVIEW MARKET AND LIQUOR	Low	Commercial	903.1 (San Luis Rey)
231024077	2191	S	EL CAMINO REAL	209	PIGEON POINT SYSTEMS	Low	Commercial	904.2 (Buena Vista)
231225006	3710		VISTA WY	107	PIKE INSURANCE	Low	Commercial	904.2 (Buena Vista)
231321045	4035		OCEANSIDE BLVD		PINAMONTI INDUSTRIAL PARK	Low	Commercial	904.1 (Loma Alta)
230922043	3060		INDUSTRY STREET	104	PINPOINT PEST CONTROL CO. INC.	Low	Commercial	904.1 (Loma Alta)
231313003	447		COLLEGE BLVD		PIONEER SERVICES	Low	Commercial	903.1 (San Luis Rey)
230925017	2615		VISTA WAY		PK 11 EL CAMINO NORTH L.P. - Leasing Office	Low	Commercial	904.2 (Buena Vista)
230724014	1763		OCEANSIDE BLVD		PLANET SUN TANNING	Low	Commercial	904.1 (Loma Alta)
230723013	1950		OCEANSIDE BLVD	D-E	PLATINUM HAIR AND NAIL	Low	Commercial	904.1 (Loma Alta)
231520023	1712		ORD WAY		PLAY GROUNDS WEST INC	Low	Commercial	904.1 (Loma Alta)
230621029	2027		MISSION AVENUE		PLAYA DE LA PLATA	Low	Commercial	903.1 (San Luis Rey)
231025034	2249	S	EL CAMINO REAL	F1	PLAYA DEL SOL TRAVEL AGENT	Low	Commercial	904.2 (Buena Vista)
230723097	1833		OCEANSIDE BLVD		PLAYER'S AUTOSOUND INC.	Low	Commercial	904.1 (Loma Alta)
231421100	4140		OCEANSIDE BLVD		PLAZA DEL ORO CLEANERS	Low	Commercial	904.1 (Loma Alta)
230925071	2530		VISTA WAY	F	PLUS MAIL BOXES	Low	Commercial	904.2 (Buena Vista)
230922028	2956		INDUSTRY STREET		PME AUDIO / VIDEO	Low	Commercial	904.1 (Loma Alta)
230819072	3355		MISSION AVENUE	115	PMGU	Low	Commercial	903.1 (San Luis Rey)
230819073	3355		MISSION AVENUE	120	PMGU TRANING ROOM	Low	Commercial	903.1 (San Luis Rey)
231221019	3810		OCEANIC DRIVE	209	POLYVUE DISTRIBUTION INC.	Low	Commercial	904.1 (Loma Alta)
231312026	511		VANDEGRIFT BLVD		POPEYE CHICKEN AND BISCUITS	Low	Commercial	903.1 (San Luis Rey)
231315019	825		COLLEGE BLVD	102	POSTAL ANNEX	Low	Commercial	903.1 (San Luis Rey)
231217013	125		OLD GROVE ROAD	9	POSTAL ANNEX	Low	Commercial	903.1 (San Luis Rey)
231727007	3529		CANNON ROAD	2B	POSTAL ANNEX	Low	Commercial	904.3 (Agua Hedionda)
231017078	3915		MISSION AVENUE	D1	POSTAL ANNEX # 6017	Low	Commercial	903.1 (San Luis Rey)
231217011	125		OLD GROVE ROAD	9	POSTAL ANNEX #4008	Low	Commercial	903.1 (San Luis Rey)
231421020	4225		OCEANSIDE BLVD	M	POSTNET	Low	Commercial	904.1 (Loma Alta)
230421036	1024	S	COAST HWY		POTPOURRI	Low	Commercial	904.1 (Loma Alta)
231519021	4747		OCEANSIDE BLVD	L-M	PRECISION 4 SWISS MACHINING INC	Low	Commercial	904.1 (Loma Alta)
230719021	659		BENET ROAD		PRECISION LABEL INC	Low	Commercial	903.1 (San Luis Rey)
231619010	1820		PEACOCK BLVD	C	PRECISION RESTORATION	Low	Commercial	904.1 (Loma Alta)
231225005	3710		VISTA WY	116	PREFAB GRANITE DEPOT	Low	Commercial	904.2 (Buena Vista)
231421088	4095		OCEANSIDE BLVD	B	PREGNANCY RESOURCE CENTER	Low	Commercial	904.1 (Loma Alta)
231320010	4039		AVENIDA DE LA PLATA		PRESERVED TREESCAPES INTERNATIONAL	Low	Commercial	904.1 (Loma Alta)
231217015	125		OLD GROVE ROAD	11	PRESTIGE NAILS	Low	Commercial	903.1 (San Luis Rey)
231220014	3600		OCEAN RANCH BLVD		PRF RESIDENT	Low	Commercial	904.1 (Loma Alta)
230525005	1119	S	CLEVELAND STREET		PRIME CO PAINTING, INC	Low	Commercial	904.1 (Loma Alta)
230523070	303	S	COAST HWY		PRO CUSTOM	Low	Commercial	904.1 (Loma Alta)
231425002	3833		PLAZA DRIVE		PRO NAIL	Low	Commercial	904.2 (Buena Vista)
230719015	602		AIRPORT ROAD		PROCAST INC	Low	Commercial	903.1 (San Luis Rey)
231326003	3520		COLLEGE BLVD		PRODUCE BROKERS OF OCEANSIDE INC	Low	Commercial	904.2 (Buena Vista)
231420012	4121		AVENIDA DE LA PLATA		PROFESSIONAL DEVELOPMENT COURSES	Low	Commercial	904.1 (Loma Alta)
231619004	2560		JASON COURT		PROLINE CONCRETE TOOLS INC	Low	Commercial	904.1 (Loma Alta)
231221071	3532		SEAGATE WAY		PROMPTLINK COMMUNICATIONS	Low	Commercial	904.1 (Loma Alta)
230524061	419	S	COAST HWY		PROPERTY ADVANTAGE	Low	Commercial	904.1 (Loma Alta)
231619023	1818		PEACOCK BLVD	B	PROPERTY DAMAGE APPRAISERS	Low	Commercial	904.1 (Loma Alta)
230625044	601		OCEANSIDE BLVD	A	PROTEC - LOCK	Low	Commercial	904.1 (Loma Alta)
230819088	3355		MISSION AVENUE	222	PROTECTIVE PRODUCTS INTERNATIONAL	Low	Commercial	903.1 (San Luis Rey)
231025074	3186		VISTA WAY	300	PROVIDER'S FINANCIAL	Low	Commercial	904.2 (Buena Vista)
231619062	1819		PEACOCK BLVD		PRYOR PRODUCTS	Low	Commercial	904.1 (Loma Alta)
230925058	2455		VISTA WAY	M	PS PLUS SIZES PLUS SAVINGS	Low	Commercial	904.2 (Buena Vista)
231321022	4056		CALLE PLATINO		PUMBMASTER INC.	Low	Commercial	904.1 (Loma Alta)
230421033	1021	S	COAST HWY		PUPPYS AND KITTENS	Low	Commercial	904.1 (Loma Alta)
230726002	1122		VISTA WAY		PURE PLAY	Low	Commercial	904.2 (Buena Vista)
231420051	4168		AVENIDA DE LA PLATA	116	QC ENTERPRISES INC	Low	Commercial	904.1 (Loma Alta)
230622011	1403		MISSION AVENUE		QUALITY INN	Low	Commercial	903.1 (San Luis Rey)
231025056	3142		VISTA WAY	100	QUALITY MEDICAL CARE CENTER	Low	Commercial	904.2 (Buena Vista)
231221064	3760		OCEANIC WAY	502	QUALITY PLUS	Low	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230523001	420	S	COAST HWY		QUANTICO ARMS - TACTICAL SUPER STORE	Low	Commercial	904.1 (Loma Alta)
231220033	3648		OCEAN RANCH BLVD		QUANTUM COMMUNICATIONS	Low	Commercial	904.1 (Loma Alta)
231421058	1938		AVENIDA DEL ORO		QUANTUM LEARNING NETWORK INC	Low	Commercial	904.1 (Loma Alta)
230627003	1817	S	COAST HWY	B	QUICK BAIL BOND	Low	Commercial	904.2 (Buena Vista)
230523043	102	N	COAST HWY		QUICK CORNER DELI AND LIQUOR	Low	Commercial	903.1 (San Luis Rey)
230727040	917		VISTA WAY		QUICK HOME SOLUTIONS	Low	Commercial	904.2 (Buena Vista)
231420008	4113		AVENIDA DE LA PLATA		R & N PROPERTIES	Low	Commercial	904.1 (Loma Alta)
231421076	4083		OCEANSIDE BLVD	K	R H ELECTRONICS INC.	Low	Commercial	904.1 (Loma Alta)
231315017	815		COLLEGE BLVD	105	RADIO SHACK	Low	Commercial	903.1 (San Luis Rey)
230522036	1020		MISSION AVENUE		RADIO SHACK	Low	Commercial	903.1 (San Luis Rey)
231024046	2125	S	EL CAMINO REAL	200	RADY CHILDREN'S BEHAVIORAL CRISIS CENTER	Low	Commercial	904.2 (Buena Vista)
231221010	3800		OCEANIC DRIVE	111	RAIN GEAR DEPOT	Low	Commercial	904.1 (Loma Alta)
231017088	3965		MISSION AVENUE		RAINBOW CHILDREN CARE	Low	Commercial	903.1 (San Luis Rey)
230622012	1440		MISSION AVENUE		RAMADA INN - OCEANSIDE	Low	Commercial	903.1 (San Luis Rey)
231221046	3801		OCEANIC DRIVE	101	RAMTECH MFG INC	Low	Commercial	904.1 (Loma Alta)
230423046	316		MISSION AVENUE		RANCH AND SEA MANAGEMENT	Low	Commercial	903.1 (San Luis Rey)
231421065	4079		OCEANSIDE BLVD		RANCHO DEL ORO BUSINESS CENTER	Low	Commercial	904.1 (Loma Alta)
231321053	4055		OCEANSIDE BLVD	E	RANCHO DEL ORO CHIROPRACTIC	Low	Commercial	904.1 (Loma Alta)
231315018	815		COLLEGE BLVD	106	RANCHO DEL ORO DENTAL	Low	Commercial	903.1 (San Luis Rey)
231420004	4100		AVENIDA DE LA PLATA		RANCHO DEL ORO LANDSCAPE & MAINT INC	Low	Commercial	904.1 (Loma Alta)
231420036	4167		AVENIDA DE LA PLATA	109	RANCHO DEL ORO LANDSCAPE & MAINTENANACE	Low	Commercial	904.1 (Loma Alta)
231812001	6000		MISSION AVENUE		RANCHO DEL ORO LANDSCAPE MAINTENANCE	Low	Commercial	903.1 (San Luis Rey)
231520030	1646		ORD WAY		RANCHO DEL ORO VET HOSPITAL	Low	Commercial	904.1 (Loma Alta)
231421086	4093		OCEANSIDE BLVD	J	RANCHO DEL ORO VETERINARY HOSP	Low	Commercial	904.1 (Loma Alta)
231421101	4140		OCEANSIDE BLVD	149	RANCHO DENTAL PRACTICE	Low	Commercial	904.1 (Loma Alta)
230922040	3052		INDUSTRY STREET		RANDAL INC	Low	Commercial	904.1 (Loma Alta)
231321076	4065		OCEANSIDE BLVD	Q	RANDOX LABORATORIES LTD	Low	Commercial	904.1 (Loma Alta)
231321026	3941		OCEANIC DRIVE		RAYO WHOLESALE INC	Low	Commercial	904.1 (Loma Alta)
231221032	3830		OCEANIC DRIVE	410	READY TO FLY FUN	Low	Commercial	904.1 (Loma Alta)
230919004	105		COPPERWOOD WAY	A	REAL ESTATE RENOVATIONS	Low	Commercial	903.1 (San Luis Rey)
230525014	1101	S	COAST HWY		REAL SURF	Low	Commercial	904.1 (Loma Alta)
230524060	1012	S	COAST HWY	D	REALTY MASTERS/CUSTOM PROPERTY BROKERS	Low	Commercial	904.1 (Loma Alta)
231024028	2103	S	EL CAMINO REAL	205	REBUILD	Low	Commercial	904.2 (Buena Vista)
231420048	4168		AVENIDA DE LA PLATA	111	RECON MOUNTAINER	Low	Commercial	904.1 (Loma Alta)
230723100	1979		OCEANSIDE BLVD		RED CLIPPER BARBER SHOP	Low	Commercial	904.1 (Loma Alta)
231019002	531		VISTA BELLA		RED HAT SOCIETY	Low	Commercial	903.1 (San Luis Rey)
231220021	3613		OCEAN RANCH BLVD	103	RED PERSIMMON NAILS AND SPA	Low	Commercial	904.1 (Loma Alta)
230723085	1985		OCEANSIDE BLVD		RED ROOSTER	Low	Commercial	904.1 (Loma Alta)
230423045	401		MISSION AVENUE		REGAL CINEMA	Low	Commercial	903.1 (San Luis Rey)
230627022	1920	S	COAST HWY		RELIANT SENIOR CARE	Low	Commercial	904.2 (Buena Vista)
230925034	2420		VISTA WAY		REMEDY HEARING AIDS	Low	Commercial	904.2 (Buena Vista)
230525004	1107	S	COAST HWY		REMODEL SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
231025017	2227	S	EL CAMINO REAL	B	RENAL ADVANTAGE INC	Low	Commercial	904.2 (Buena Vista)
230621019	2033		MISSION AVENUE		RENT-A-CENTER WEST INC	Low	Commercial	903.1 (San Luis Rey)
231220015	3603		OCEAN RANCH BLVD		RESIDENCE INN BY MARRIOT OCEANSIDE	Low	Commercial	904.1 (Loma Alta)
231019005	503		VISTA BELLA		RESIDENTIAL WATERPRROFING CONTRACTORS	Low	Commercial	903.1 (San Luis Rey)
231221030	3830		OCEANIC DRIVE	402	RESSAC	Low	Commercial	904.1 (Loma Alta)
230422047	514	N	COAST HWY	D-E	RESULTS ONE ON ONE FITNESS STUDIO	Low	Commercial	903.1 (San Luis Rey)
230524073	403		WISCONSIN AVENUE		RESURRECTION RECOVERY THRIFT	Low	Commercial	904.1 (Loma Alta)
230819083	230		ROYMAR ROAD	F	REX LAMB SCREENPRINTING	Low	Commercial	903.1 (San Luis Rey)
231619022	1818		PEACOCK BLVD	H	RHODE FLUX, INC.	Low	Commercial	904.1 (Loma Alta)
231220039	3809		OCEAN RANCH BLVD	110	RICH LTD.	Low	Commercial	904.1 (Loma Alta)
231125004	3300		VISTA WAY	B	RICHARD BARAGER MD	Low	Commercial	904.2 (Buena Vista)
230822002	2372		INDUSTRY STREET		RICHER AUTO & TRUCK ELECTRC CO	Low	Commercial	904.1 (Loma Alta)
231321038	4035		OCEANSIDE BLVD	D33	RICHER RACING	Low	Commercial	904.1 (Loma Alta)
230922054	2933		OCEANSIDE BLVD		RIED'S CUSTOM GLASS TINTING	Low	Commercial	904.1 (Loma Alta)
231414027	465		COLLEGE BLVD	1	RINOKIRO ENTERPRISES	Low	Commercial	903.1 (San Luis Rey)
230720010	2935		SAN LUIS REY ROAD		RIOPELLE DEVELOPMENT CO INC	Low	Commercial	903.1 (San Luis Rey)
230819087	169		ROYMAR ROAD		RISING STAR ACADEMY - CHILD CARE	Low	Commercial	903.1 (San Luis Rey)
231312020	610	N	REDONDO DRIVE		RISING STAR BAPTIST MISSIONARY CHHURCH	Low	Commercial	903.1 (San Luis Rey)
231314007	463		COLLEGE BLVD		RITE AID	Low	Commercial	903.1 (San Luis Rey)
231325027	3813		PLAZA DRIVE		RITE AID PHARMACY	Low	Commercial	904.2 (Buena Vista)
231315027	4645		FRAZEE ROAD	B	RITZ CLEANERS	Low	Commercial	903.1 (San Luis Rey)
231620008	2645		VISTA PACIFIC DRIVE		RK EXCEL AMERICA INC	Low	Commercial	904.1 (Loma Alta)
231024019	2103	S	EL CAMINO REAL	106B	ROBCO PRESS COMM	Low	Commercial	904.2 (Buena Vista)
231023004	2003	S	EL CAMINO REAL	105	ROBERT EISELE CPA	Low	Commercial	904.2 (Buena Vista)
231321025	3931		OCEANIC DRIVE		ROBERT MANN PACKAGING INC.	Low	Commercial	904.1 (Loma Alta)
231019013	531		VISTA BELLA		ROBERT YADROW - NOTARY PUBLIC	Low	Commercial	903.1 (San Luis Rey)
231220027	3632		OCEAN RANCH BLVD		ROCKMOND FINANCIAL HOLDINGS	Low	Commercial	904.1 (Loma Alta)
231320012	4048		AVENIDA DE LA PLATA		ROCKY'S FOOD DIST INC	Low	Commercial	904.1 (Loma Alta)
230423044	406		MISSION AVENUE		ROGUES INN	Low	Commercial	903.1 (San Luis Rey)
230423036	315	N	TREMONT STREET		ROMANTIX	Low	Commercial	903.1 (San Luis Rey)
230524001	222		WISCONSIN AVENUE		ROOM 222 - ART MUSIC GIFTS	Low	Commercial	904.1 (Loma Alta)
230925064	2505		VISTA WAY	C	ROSS DERSS FOR LESS	Low	Commercial	904.2 (Buena Vista)
231220023	3617		OCEAN RANCH BLVD	106	ROYAL AMBIANCE SALON AND SPA	Low	Commercial	904.1 (Loma Alta)
231420021	4139		AVENIDA DE LA PLATA		ROYAL BUSINESS GROUP INC	Low	Commercial	904.1 (Loma Alta)
230621030	2027		MISSION AVENUE	D5	ROYAL JEWELRY	Low	Commercial	903.1 (San Luis Rey)
231320002	4011		AVENIDA DE LA PLATA	301	ROYAL PACIFIC CONSTRUCTION INC	Low	Commercial	904.1 (Loma Alta)
230621007	409		SAN DIEGO STREET		RUBY'S BEAUTY SALON	Low	Commercial	903.1 (San Luis Rey)
230621062	407		SAN DIEGO STREET		RUBY'S RENTALS	Low	Commercial	903.1 (San Luis Rey)
231420043	4168		AVENIDA DE LA PLATA	101	RUSHING WIND MNINISTRY	Low	Commercial	904.1 (Loma Alta)
230719004	1060		AIRPORT ROAD		S & R TOWING	Low	Commercial	903.1 (San Luis Rey)
230925031	2401		VISTA WAY	C2	S. LASKEN & SONS INC.	Low	Commercial	904.2 (Buena Vista)
230524023	403		WISCONSIN AVENUE	C2	S. S. CLOTHING	Low	Commercial	904.1 (Loma Alta)
230922055	2933		OCEANSIDE BLVD		SAFELITE AUTO GLASS	Low	Commercial	904.1 (Loma Alta)
231619028	2611		TEMPLE HEIGHTS DRIVE	A-D	SAITECH SCHOOL FOR TECHNOLOGIES	Low	Commercial	904.1 (Loma Alta)
231619029	2613		TEMPLE HEIGHTS DRIVE	F-G	SAITECH SCHOOL FOR TECHNOLOGIES	Low	Commercial	904.1 (Loma Alta)
231315020	825		COLLEGE BLVD	103	SALLY BEAUTY SUPPLY	Low	Commercial	903.1 (San Luis Rey)
230918004	3753		MISSION AVENUE		SALON DE BAIN	Low	Commercial	903.1 (San Luis Rey)
231325002	3504		COLLEGE BLVD		SAMS DONUTS	Low	Commercial	904.2 (Buena Vista)
231024031	2111	S	EL CAMINO REAL	300	SAMSON WILLIS LAFOE LLP	Low	Commercial	904.2 (Buena Vista)
231214001	4691		CALLE JOVEN		SAN DIEGO AUTO AUCTION INC	Low	Commercial	903.1 (San Luis Rey)
230820002	216		VIA EL CENTRO		SAN DIEGO BATTERY - OCEANSIDE	Low	Commercial	903.1 (San Luis Rey)
231214004	4665	N	RIVER ROAD		SAN DIEGO COUNTY SERVICES	Low	Commercial	903.1 (San Luis Rey)
231420018	4131		AVENIDA DE LA PLATA		SAN DIEGO FUME WORKS COMPANY	Low	Commercial	904.1 (Loma Alta)
231520014	1672		ORD WAY		SAN DIEGO FUME WORKS COMPANY	Low	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230420007	1415	N	COAST HWY		SAN DIEGO HOME FINDING CENTER	Low	Commercial	903.1 (San Luis Rey)
231221036	3909		OCEANIC DRIVE	403	SAN DIEGO MOTORING ACCESSORIES INC	Low	Commercial	904.1 (Loma Alta)
231216007	165		OLD GROVE ROAD		SAN DIEGO NATIOANL BANK	Low	Commercial	903.1 (San Luis Rey)
231225014	3629		VISTA WAY		SAN DIEGO VITRORETINAL ASSOCIATES	Low	Commercial	904.2 (Buena Vista)
231321017	4040		CALLE PLATINO	112	SAN JUAN SPECIALTY WOOD PRODUCTS	Low	Commercial	904.1 (Loma Alta)
231017051	3825		MISSION AVENUE		SAN LUIS REY DENTAL CARE	Low	Commercial	903.1 (San Luis Rey)
231519007	4751		OCEANSIDE BLVD	A	SANDALZ	Low	Commercial	904.1 (Loma Alta)
231220032	3643		OCEAN RANCH BLVD		SANDOVAL FAMILY MANAGEMENT	Low	Commercial	904.1 (Loma Alta)
230925022	2521	S	VISTA WAY		SAVON FLOORS	Low	Commercial	904.2 (Buena Vista)
231520032	1625		ORD WAY		SCHLOSSADLER WINES	Low	Commercial	904.1 (Loma Alta)
230720022	2215		MESA DRIVE		SCRIPPS COASTAL MEDICAL CENTER	Low	Commercial	903.1 (San Luis Rey)
230621052	2201		MISSION AVENUE		SCRIPPS COASTAL MEDICAL CENTER	Low	Commercial	903.1 (San Luis Rey)
231421072	4083		OCEANSIDE BLVD	D	SCRIPPS COASTAL MEDICAL CENTER	Low	Commercial	904.1 (Loma Alta)
231025061	3142		VISTA WAY	400	SCRIPPS COASTAL MEDICAL CENTER	Low	Commercial	904.2 (Buena Vista)
230727021	2034	S	COAST HWY		SEA BIRD MOTEL	Low	Commercial	904.2 (Buena Vista)
230421026	315	S	HARBOR DRIVE		SEA STAR CHARTERS	Low	Commercial	903.1 (San Luis Rey)
230621058	2027		MISSION AVENUE	E13	SEAFINE	Low	Commercial	903.1 (San Luis Rey)
231221068	3508		SEAGATE WAY		SEAGATE COPRORATE CENTER	Low	Commercial	904.1 (Loma Alta)
231221053	3720		OCEANIC WAY	207	SEAGAZE REALTY/ALL IN ONE LOANS	Low	Commercial	904.1 (Loma Alta)
231619055	1980		PEACOCK BLVD	H	SEASIDE COLOR	Low	Commercial	904.1 (Loma Alta)
231025060	3142		VISTA WAY	305	SEASIDE DENTAL	Low	Commercial	904.2 (Buena Vista)
230922025	2942		INDUSTRY STREET		SEASIDE HEATING & AIR COND INC	Low	Commercial	904.1 (Loma Alta)
230922026	2942		INDUSTRY STREET	A	SEASIDE HEATING & AIR COND INC	Low	Commercial	904.1 (Loma Alta)
231619027	2580		JASON COURT	C	SEASIDE HELICOPTERS INC	Low	Commercial	904.1 (Loma Alta)
230524059	206		WISCONSIN AVENUE		SEASIDE PROPERTIES	Low	Commercial	904.1 (Loma Alta)
231315029	4645		FRAZEE ROAD	D	SEASON'S HAIR SALON	Low	Commercial	903.1 (San Luis Rey)
230625036	1501	S	COAST HWY		SECURITY PUBLIC STORAGE	Low	Commercial	904.1 (Loma Alta)
231321051	4055		OCEANSIDE BLVD	AC	SELECT PHYSICAL THERAPY	Low	Commercial	904.1 (Loma Alta)
231421110	4161		OCEANSIDE BLVD	100	SELECT STAFFING	Low	Commercial	904.1 (Loma Alta)
231312029	521		VANDEGRIFT BLVD	E	SEMPER FI FLORIST	Low	Commercial	903.1 (San Luis Rey)
231420035	4167		AVENIDA DE LA PLATA	108	SENIOR RESOURCE CENTERS	Low	Commercial	904.1 (Loma Alta)
231420009	4115		AVENIDA DE LA PLATA		SEPRO MEMBRANES INC	Low	Commercial	904.1 (Loma Alta)
230523080	108	S	FREEMAN STREET		SERENA'S ALTERATIONS	Low	Commercial	903.1 (San Luis Rey)
231312013	610	N	REDONDO DRIVE	B102	SERVICE CENTER OF THE SOUTH	Low	Commercial	903.1 (San Luis Rey)
231619044	4670		NORTH AVENUE	A	SERVICEMASTER ABSOLUTE WATER & FIRE SERVICES	Low	Commercial	904.1 (Loma Alta)
230723059	650		CROUCH STREET		SERVICIOS LEGALES INTEGRADOS	Low	Commercial	904.1 (Loma Alta)
231421081	4089		OCEANSIDE BLVD	G	SERVPRO OF NORTH VISTA/SAN MARCOS	Low	Commercial	904.1 (Loma Alta)
230925060	2484		VISTA WAY	C	SEW PRO'S SEW & VACUMN	Low	Commercial	904.2 (Buena Vista)
230523082	603		SEAGAZE DRIVE		SHANGRI-LA TRAVEL	Low	Commercial	903.1 (San Luis Rey)
230726004	1212		VISTA WAY		SHARON NEWBERY'S CREATIVE ESPRESSIONS	Low	Commercial	904.2 (Buena Vista)
230723014	2042		OCEANSIDE BLVD	A	SHAVER VISUAL MERCHANDIZING	Low	Commercial	904.1 (Loma Alta)
231017005	3784		MISSION AVENUE	155	SHEAR FX HAIR SALON	Low	Commercial	903.1 (San Luis Rey)
230524040	1012	S	COAST HWY	A	SHEILA BRYANT-TUCKER	Low	Commercial	904.1 (Loma Alta)
231321063	4061		OCEANSIDE BLVD	E	SHEPHERD'S CHURCH	Low	Commercial	904.1 (Loma Alta)
230523005	124	N	FREEMAN STREET		SHORTCUT BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
231019016	503		VISTA BELLA		SIEGEL BROTHERS THEATERS	Low	Commercial	903.1 (San Luis Rey)
231619065	2605		TEMPLE HEIGHTS DRIVE	B	SIGNS@ONCE	Low	Commercial	904.1 (Loma Alta)
230819085	168		ROYMAR ROAD		SILVA ACCOUNTING	Low	Commercial	903.1 (San Luis Rey)
231519036	4750		OCEANSIDE BLVD		SILVER CLIPPER BARBERSHOP	Low	Commercial	904.1 (Loma Alta)
230919002	101		COPPERWOOD WAY	M	SILVER OLAS ENTERPRISES INC	Low	Commercial	903.1 (San Luis Rey)
231519008	4750		OCEANSIDE BLVD		SILVER STAR SALON	Low	Commercial	904.1 (Loma Alta)
231519037	4750		OCEANSIDE BLVD	A7	SILVER STAR SALON	Low	Commercial	904.1 (Loma Alta)
230719025	622		AIRPORT ROAD		SILVERADO BARNS INC	Low	Commercial	903.1 (San Luis Rey)
231620009	2654		VISTA PACIFIC DRIVE		SIMBA INTERNATIONAL	Low	Commercial	904.1 (Loma Alta)
230720016	2950		SAN LUIS REY ROAD		SIMMONS METAL FAB INC	Low	Commercial	903.1 (San Luis Rey)
230627024	1922	S	COAST HWY	B	SIMPLICITY JEWELERS AND CRYSTAL ZONE	Low	Commercial	904.2 (Buena Vista)
231024012	2103	S	EL CAMINO REAL	102B	SIMULSTAT INC	Low	Commercial	904.2 (Buena Vista)
231325033	3502		COLLEGE BLVD	A	SINSATIONS	Low	Commercial	904.2 (Buena Vista)
231025032	2249	S	EL CAMINO REAL	C	SINTRI DIGITAL	Low	Commercial	904.2 (Buena Vista)
231313009	455		COLLEGE BLVD	9	SKATE TIME	Low	Commercial	903.1 (San Luis Rey)
230523076	216	N	COAST HWY		SKIRT ESSENTIAL BOUTIQUE	Low	Commercial	903.1 (San Luis Rey)
231025044	2665		VISTA WAY	A	SLEEP TRAIN MATTRESS CENTERS	Low	Commercial	904.2 (Buena Vista)
231221033	3830		OCEANIC DRIVE	411	SLICE OF HEAVEN CATERING	Low	Commercial	904.1 (Loma Alta)
231220040	3809		OCEAN RANCH BLVD	114	SLIDING VISIONS INC.	Low	Commercial	904.1 (Loma Alta)
230723070	1830		OCEANSIDE BLVD	D	SMILE DENTAL OF OCEANSIDE	Low	Commercial	904.1 (Loma Alta)
230621042	2027		MISSION AVENUE		SMILE LINGERIE	Low	Commercial	903.1 (San Luis Rey)
231421084	4093		OCEANSIDE BLVD	C	SMOG SHOP	Low	Commercial	904.1 (Loma Alta)
231017022	3772		MISSION AVENUE	131	SMOKE DEPOT	Low	Commercial	903.1 (San Luis Rey)
230724006	1727		OCEANSIDE BLVD	B	SMOKE DEPOT	Low	Commercial	904.1 (Loma Alta)
231025018	2227	S	EL CAMINO REAL	B	SMS MEDICAL INC.	Low	Commercial	904.2 (Buena Vista)
231414025	459		COLLEGE BLVD	4	SNAZZY CLEANERS	Low	Commercial	903.1 (San Luis Rey)
230627005	1826	S	COAST HWY		SNOWWHITE LAUNDRY	Low	Commercial	904.2 (Buena Vista)
231321010	4039		CALLE PLATINO	D	SO CAL ATHLETICS	Low	Commercial	904.1 (Loma Alta)
231425008	3836		PLAZA DRIVE		SO CAL DISCOUNT TIRE CO	Low	Commercial	904.2 (Buena Vista)
230922050	2925		OCEANSIDE BLVD		SOLID RESTORATION	Low	Commercial	904.1 (Loma Alta)
231025035	2249	S	EL CAMINO REAL	F2	SOUKAYE MAVE	Low	Commercial	904.2 (Buena Vista)
230524048	403		WISCONSIN AVENUE	C	SOUND ODYSSEY	Low	Commercial	904.1 (Loma Alta)
230627007	1828	S	COAST HWY		SOUTH COAST SCOOTERS	Low	Commercial	904.2 (Buena Vista)
231321056	4059		OCEANSIDE BLVD	F	SOUTH COAST SECURITY	Low	Commercial	904.1 (Loma Alta)
230925059	2484		VISTA WAY	B	SOUTH OCEANSIDE DENTAL	Low	Commercial	904.2 (Buena Vista)
231019020	531		VISTA BELLA		SOUTHERN CALIFORNIA CORPORATE REAL ESTATE	Low	Commercial	903.1 (San Luis Rey)
231220035	3658		OCEAN RANCH BLVD	101	SOUTHERN WINDS INTERNATIONAL	Low	Commercial	904.1 (Loma Alta)
231620011	2655		VISTA PACIFIC DRIVE		SOUTHWEST GREENE INT	Low	Commercial	904.1 (Loma Alta)
230719016	417		VIA DEL NORTE		SOUTHWEST SPAS	Low	Commercial	903.1 (San Luis Rey)
230621036	2027		MISSION AVENUE	D6	SOX AND SOX	Low	Commercial	903.1 (San Luis Rey)
230723011	1810		OCEANSIDE BLVD	D	SPA AND NAIL DESIGNS	Low	Commercial	904.1 (Loma Alta)
230723082	1816		OCEANSIDE BLVD	F	SPARKLE PLENTY	Low	Commercial	904.1 (Loma Alta)
231314004	427		COLLEGE BLVD	L	SPEARS CONSTRUCTION, INC	Low	Commercial	903.1 (San Luis Rey)
230525011	1043	S	CLEVELAND STREET		SPECTRUM VIDEO INC	Low	Commercial	904.1 (Loma Alta)
230720026	2919		SAN LUIS REY ROAD		SPEEDSKINS	Low	Commercial	903.1 (San Luis Rey)
231220036	3801		OCEAN RANCH BLVD	103	SPG SOLAR INC	Low	Commercial	904.1 (Loma Alta)
231321029	4035		OCEANSIDE BLVD	A1	SPIRAL STAIRCASE FACTORY	Low	Commercial	904.1 (Loma Alta)
230727035	607		VISTA WAY		SPLIT ENDS HAIR STUDIO	Low	Commercial	904.2 (Buena Vista)
230825017	2160		VISTA WAY		SPORT'S AUTHORITY	Low	Commercial	904.2 (Buena Vista)
231024009	2103	S	EL CAMINO REAL		SPRINT TELEPHONY PCS LP	Low	Commercial	904.2 (Buena Vista)
231420023	4143		AVENIDA DE LA PLATA		SQUARE UP FASHIONS INC	Low	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230724010	1759		OCEANSIDE BLVD	I	SSI AUTO INSURANCE	Low	Commercial	904.1 (Loma Alta)
230421035	1002	S	COAST HWY		ST ANN CHURCH	Low	Commercial	904.1 (Loma Alta)
230522037	702		CIVIC CENTER DRIVE	3C	ST CLAIRE PROPERTIES	Low	Commercial	903.1 (San Luis Rey)
230421018	1025	S	COAST HWY		STAIN GLASS	Low	Commercial	904.1 (Loma Alta)
231519029	4747		OCEANSIDE BLVD		STAIRS BY DESIGN INC	Low	Commercial	904.1 (Loma Alta)
230819012	3310		VIA DE LA VALLE		STAMPED CONCRETE	Low	Commercial	903.1 (San Luis Rey)
230819013	303		VIA EL CENTRO		STAMPED CONCRETE	Low	Commercial	903.1 (San Luis Rey)
230819015	101		COPPERWOOD WAY	D	STANDARD LIFE SAFETY	Low	Commercial	903.1 (San Luis Rey)
230825016	2150		VISTA WAY		STAPLES THE OFFICE SUPERSTORE	Low	Commercial	904.2 (Buena Vista)
231312027	521		VANDEGRIFT BLVD	A	STAR DRY CLEANERS	Low	Commercial	903.1 (San Luis Rey)
230422051	402	N	COAST HWY		STAR THEATER	Low	Commercial	903.1 (San Luis Rey)
231221029	3820		OCEANIC DRIVE	312-13	STARR SPECIALTIES	Low	Commercial	904.1 (Loma Alta)
231017089	3965		MISSION AVENUE		STATE FAR INSURANCE	Low	Commercial	903.1 (San Luis Rey)
231326006	3520		COLLEGE BLVD	104	STATE FARM INSURANCE	Low	Commercial	904.2 (Buena Vista)
231325023	3809		PLAZA DRIVE	108	STATE FARM INSURANCE	Low	Commercial	904.2 (Buena Vista)
230626033	1715	S	COAST HWY		STATE SALE WAREHOUSE	Low	Commercial	904.2 (Buena Vista)
231321059	4059		OCEANSIDE BLVD	L	STEAMATIC OF SAN DIEGO	Low	Commercial	904.1 (Loma Alta)
230727025	507		VISTA WAY		STEARNS BUSINESS MACHINES	Low	Commercial	904.2 (Buena Vista)
230919014	3375		MISSION AVENUE	D	STEEL GUITARS OF NORTH COUNTY	Low	Commercial	903.1 (San Luis Rey)
230925063	2505		VISTA WAY	B	STEINMART INC.	Low	Commercial	904.2 (Buena Vista)
230820009	235		VIA DEL MONTE		STEPHEN S HALVERSON INC	Low	Commercial	903.1 (San Luis Rey)
231220038	3809		OCEAN RANCH BLVD	E	STERLING BUSINESS FORMS INC.	Low	Commercial	904.1 (Loma Alta)
231024038	2123	S	EL CAMINO REAL	A	STEVEN STREELMAN DDS	Low	Commercial	904.2 (Buena Vista)
230820015	201		VIA EL CENTRO		STORAGE WEST	Low	Commercial	903.1 (San Luis Rey)
230918014	3560		MISSION AVENUE		STORAMERICA OCEANSIDE	Low	Commercial	903.1 (San Luis Rey)
231519020	4747		OCEANSIDE BLVD	C	STRAIGHT LINE GENERAL CONTRACTOR	Low	Commercial	904.1 (Loma Alta)
230523006	210	N	FREEMAN STREET		STUD CUTS BARBERSHOP	Low	Commercial	903.1 (San Luis Rey)
230523052	610		MISSION AVENUE		STUDIO CUSTUME CLASSICS	Low	Commercial	903.1 (San Luis Rey)
231025036	2249	S	EL CAMINO REAL	F2	STUDIO MAVE	Low	Commercial	904.2 (Buena Vista)
231017056	3852		MISSION AVENUE	B2	STUDIO NAILS AND HAIR	Low	Commercial	903.1 (San Luis Rey)
231312018	610	N	REDONDO DRIVE	H	SUAREZ FASHION	Low	Commercial	903.1 (San Luis Rey)
231024064	2171	S	EL CAMINO REAL	207	SUDEXO AMERICA LLC	Low	Commercial	904.2 (Buena Vista)
231025068	3156		VISTA WAY	205	SUKUT CONSTRUCTION, INC	Low	Commercial	904.2 (Buena Vista)
230423038	401		MISSION AVENUE		SUNGLASS CORNER	Low	Commercial	903.1 (San Luis Rey)
230625035	1517	S	COAST HWY		SUNSET MARINE	Low	Commercial	904.1 (Loma Alta)
231025019	2229	S	EL CAMINO REAL	A	SUNSHINE LIQUOR	Low	Commercial	904.2 (Buena Vista)
230523081	217	N	COAST HWY		SUNSHIRE BROOKS THEATER	Low	Commercial	903.1 (San Luis Rey)
231421017	4225		OCEANSIDE BLVD	A	SUPER CUTS	Low	Commercial	904.1 (Loma Alta)
231221041	3921		OCEANIC DRIVE	803	SUPER WONG USA INC	Low	Commercial	904.1 (Loma Alta)
231315021	825		COLLEGE BLVD	101	SUPERCUTS	Low	Commercial	903.1 (San Luis Rey)
231619063	2625		TEMPLE HEIGHTS DRIVE		SUPERIOR SOURCING	Low	Commercial	904.1 (Loma Alta)
231421121	4171		OCEANSIDE BLVD	101A	SUPERSTAR SALON	Low	Commercial	904.1 (Loma Alta)
230625021	1401	S	COAST HWY		SURF BOWL	Low	Commercial	904.1 (Loma Alta)
230422035	520	S	TREMONT STREET		SURF CO.	Low	Commercial	904.1 (Loma Alta)
231520026	1609		ORD WAY		SURF RIDE	Low	Commercial	904.1 (Loma Alta)
230627019	1909	S	COAST HWY		SURFRIDE SURF SHOP	Low	Commercial	904.2 (Buena Vista)
230421037	1009	N	COAST HWY		SURFZONE SURF SHOP	Low	Commercial	903.1 (San Luis Rey)
230723065	1906		OCEANSIDE BLVD		SUZ BEAUTY SUPPLY	Low	Commercial	904.1 (Loma Alta)
231024044	2125	S	EL CAMINO REAL	104	SUZANNE OBRIEN PHD	Low	Commercial	904.2 (Buena Vista)
230925050	2424		VISTA WAY	317	SWI MANAGEMENT CO. INC.	Low	Commercial	904.2 (Buena Vista)
230524043	530	S	COAST HWY		SWIV TACKLE CIRCUS	Low	Commercial	904.1 (Loma Alta)
231421111	4161		OCEANSIDE BLVD	101	SYLVAN LEARNING CENTER	Low	Commercial	904.1 (Loma Alta)
231216006	4507		MISSION AVENUE		SYMPLY BEAUTIFUL FLOWERS	Low	Commercial	903.1 (San Luis Rey)
230917002	3753		MISSION AVENUE		T & T NAILS	Low	Commercial	903.1 (San Luis Rey)
231221005	3800		OCEANIC DRIVE	104	TACTICAL CONTROLS	Low	Commercial	904.1 (Loma Alta)
230524027	913	S	COAST HWY	C	TAILOR SHOP	Low	Commercial	904.1 (Loma Alta)
230422046	612	N	COAST HWY		TAILS A WAGGIN	Low	Commercial	904.1 (Loma Alta)
230423004	306	N	CLEVELAND STREET		TALK OF THE TOWN SALON	Low	Commercial	903.1 (San Luis Rey)
231421060	1945		AVENIDA DEL ORO	126	TALLY RAND INDUSTRIAL SYSTEMS INC.	Low	Commercial	904.1 (Loma Alta)
230523046	206	N	FREEMAN STREET		TANG SOO DO	Low	Commercial	903.1 (San Luis Rey)
231220026	3630		OCEAN RANCH BLVD		TARGET BILLING & COLLECTIONS	Low	Commercial	904.1 (Loma Alta)
231025037	2253	S	EL CAMINO REAL		TARGET STORES # 303	Low	Commercial	904.2 (Buena Vista)
231520029	1688		ORD WAY		TEACH LOGIC FOR SOUND LEARNIG	Low	Commercial	904.1 (Loma Alta)
230422016	821	S	TREMONT STREET	A	TEAK FURNITURE	Low	Commercial	904.1 (Loma Alta)
230819018	3355		MISSION AVENUE	223	TEAM FISHEL	Low	Commercial	903.1 (San Luis Rey)
231321048	4035		OCEANSIDE BLVD	B25	TEC SERVICE	Low	Commercial	904.1 (Loma Alta)
231519014	4751		OCEANSIDE BLVD	I	TECH EXPERT EXPRESS	Low	Commercial	904.1 (Loma Alta)
231421074	4083		OCEANSIDE BLVD	F	TECHNICAL ASSISTANCE & SERVICES CO.	Low	Commercial	904.1 (Loma Alta)
230522019	705		PIER VIEW WAY		TEEHEE ENGINEERING INC	Low	Commercial	903.1 (San Luis Rey)
230720012	302		VIA DEL NORTE		TEK STEEL WELDING & FABRICATION	Low	Commercial	903.1 (San Luis Rey)
231519038	4750		OCEANSIDE BLVD	A4	TEMPLE HEIGHTS ANIMAL HOSPITAL	Low	Commercial	904.1 (Loma Alta)
231519039	4750		OCEANSIDE BLVD	A20	TEMPLE HEIGHTS CLEANERS	Low	Commercial	904.1 (Loma Alta)
231519040	4750		OCEANSIDE BLVD	A15	TEMPLE HEIGHTS DENTISTRY	Low	Commercial	904.1 (Loma Alta)
230819060	3245		PRODUCTION AVENUE		TEQOPH SURFBOARDS	Low	Commercial	903.1 (San Luis Rey)
231025057	3142		VISTA WAY	203	TERESA LAMBERT SMITH DDS APDC	Low	Commercial	904.2 (Buena Vista)
230819041	305		AIRPORT ROAD		TERI CENTER FOR ART & ADULT EDUCATION	Low	Commercial	903.1 (San Luis Rey)
231024059	2141	S	EL CAMINO REAL	J	TETRA TECH INC	Low	Commercial	904.2 (Buena Vista)
230919015	3375		MISSION AVENUE	E	THAI BOXING	Low	Commercial	903.1 (San Luis Rey)
230723084	1830		OCEANSIDE BLVD	C2	THALIA'S BRIDAL	Low	Commercial	904.1 (Loma Alta)
231326010	3532		COLLEGE BLVD		THE ANIMAL KEEPER INC	Low	Commercial	904.2 (Buena Vista)
231221016	3803		OCEANIC DRIVE	203	THE COMPOUNDMIXED MARTIAL ARTS & FITNESS	Low	Commercial	904.1 (Loma Alta)
230822001	2600		OCEANSIDE BLVD		THE CORNER LIQUOR	Low	Commercial	904.1 (Loma Alta)
231016004	292		DOUGLAS DRIVE	A	THE EXOTIC GREENERY FLORIST	Low	Commercial	903.1 (San Luis Rey)
231017072	3882		MISSION AVENUE		THE FLORIST	Low	Commercial	903.1 (San Luis Rey)
230627004	1824	S	COAST HWY		THE FRAME HOUSE	Low	Commercial	904.2 (Buena Vista)
230819029	3296		MISSION AVENUE		THE FURNITURE STORE	Low	Commercial	903.1 (San Luis Rey)
231421075	4083		OCEANSIDE BLVD	J	THE GREAT STATE OF BEER	Low	Commercial	904.1 (Loma Alta)
230625002	1124	S	COAST HWY		THE HAIR AFFAIR	Low	Commercial	904.1 (Loma Alta)
231712001	5755		MISSION AVENUE		THE HOME DEPOT #1018	Low	Commercial	903.1 (San Luis Rey)
230523039	517		MISSION AVENUE		THE HOP SPOT	Low	Commercial	903.1 (San Luis Rey)
231321011	4039		CALLE PLATINO	E	THE KINKO COMPANY	Low	Commercial	904.1 (Loma Alta)
230819059	3205		PRODUCTION AVENUE		THE LAB SURF COMPANY INC	Low	Commercial	903.1 (San Luis Rey)
230422033	323	N	COAST HWY	E	THE LEGAL CENTER	Low	Commercial	903.1 (San Luis Rey)
230925077	2555		VISTA WAY	C	THE MEN'S WAREHOUSE	Low	Commercial	904.2 (Buena Vista)
231727013	3529		CANNON ROAD		THE PERFECT CUT	Low	Commercial	904.3 (Agua Hedionda)
230524049	514	S	COAST HWY		THE POD ROOM	Low	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230723077	1906		OCEANSIDE BLVD		THE POTTER'S HOUSE	Low	Commercial	904.1 (Loma Alta)
231321050	4055		OCEANSIDE BLVD		THE PRESCOTT COMPANIES	Low	Commercial	904.1 (Loma Alta)
230819010	166		ROYMAR ROAD		THE RAPTURE SALON	Low	Commercial	903.1 (San Luis Rey)
231017021	3784		MISSION AVENUE	156	THE REAL ESTATE CONSULTANT	Low	Commercial	903.1 (San Luis Rey)
231420034	4167		AVENIDA DE LA PLATA	108	THE RESOURCE CENTER	Low	Commercial	904.1 (Loma Alta)
230819082	3310		VIA DE LA VALLE	B	THE SECRET PLACE	Low	Commercial	903.1 (San Luis Rey)
230622001	1527		MISSION AVENUE		THE SHOW PALACE	Low	Commercial	903.1 (San Luis Rey)
230917001	3753		MISSION AVENUE		THE SPOT BARBER SHOP	Low	Commercial	903.1 (San Luis Rey)
230525013	220		OCEANSIDE BLVD		THE SURFER'S PRO SHOP	Low	Commercial	904.1 (Loma Alta)
231017059	3861		MISSION AVENUE		THE TAX AND ACCOUNTING GROUP	Low	Commercial	903.1 (San Luis Rey)
231315013	805		COLLEGE BLVD	103	THE THREE SISTERS	Low	Commercial	903.1 (San Luis Rey)
231520001	1750		ORD WAY		THE TOTAL DOG	Low	Commercial	904.1 (Loma Alta)
230819086	230		ROYMAR ROAD	A	THE TOTAL PROS - AUTO DETAILING TRAINING CENTER	Low	Commercial	903.1 (San Luis Rey)
231425004	3837		PLAZA DRIVE	803	THE TUTORING CENTER	Low	Commercial	904.2 (Buena Vista)
230522029	711		MISSION AVENUE		THE UPS STORE	Low	Commercial	903.1 (San Luis Rey)
231025039	2641		VISTA WAY	A	THE VITAMIN SHOPPE	Low	Commercial	904.2 (Buena Vista)
230524082	222		WISCONSIN AVENUE		THE YOGA BODY	Low	Commercial	904.1 (Loma Alta)
231220044	3528		SEAGATE WAY	110	THOMAS E. SHAUGNESSY CONSULTING	Low	Commercial	904.1 (Loma Alta)
230917016	3762		MISSION AVENUE	105	THOMAS F. FORD DDS	Low	Commercial	903.1 (San Luis Rey)
231024073	2191	S	EL CAMINO REAL	207	THRIVENT FINANCIAL FOR LUTHERANS	Low	Commercial	904.2 (Buena Vista)
231024016	2103	S	EL CAMINO REAL	104B	TICKET ESCAPE	Low	Commercial	904.2 (Buena Vista)
231321002	4035		OCEANSIDE BLVD	E	TIME MACHINE RACECRAFT	Low	Commercial	904.1 (Loma Alta)
231519005	4747		OCEANSIDE BLVD	H	TINA'S SEWING COMPANY	Low	Commercial	904.1 (Loma Alta)
231619012	1995		PEACOCK BLVD		TITEFLEX CORPORATION	Low	Commercial	904.1 (Loma Alta)
231325029	3817		PLAZA DRIVE	A	TJ MAX	Low	Commercial	904.2 (Buena Vista)
230626034	1719	S	COAST HWY		TLC ANTIQUES, JEWELS, UNIQUE GIFTS	Low	Commercial	904.2 (Buena Vista)
231014014	650		DOUGLAS DRIVE	11	TMH VIDEO	Low	Commercial	903.1 (San Luis Rey)
230621061	2021		MISSION AVENUE		TMH VIDEO	Low	Commercial	903.1 (San Luis Rey)
230627014	1839	S	COAST HWY		TNT HAIR DESIGN	Low	Commercial	904.2 (Buena Vista)
231017045	3815		MISSION AVENUE	105-17	TOGETHER WE GROW	Low	Commercial	903.1 (San Luis Rey)
231017061	3861		MISSION AVENUE		TOLEDO'S FLOORING	Low	Commercial	903.1 (San Luis Rey)
231024036	2123	S	EL CAMINO REAL		TOOTHMAKER LAB	Low	Commercial	904.2 (Buena Vista)
230627028	1933	S	COAST HWY		TOP OF THE WORLD COSIGNMENT	Low	Commercial	904.2 (Buena Vista)
231017073	3915		MISSION AVENUE		TOPSTYLES HAIR DESIGNS	Low	Commercial	903.1 (San Luis Rey)
231315024	835		COLLEGE BLVD	103	TOWN CLEANERS	Low	Commercial	903.1 (San Luis Rey)
230925051	2425		VISTA WAY		TOYS "R' US	Low	Commercial	904.2 (Buena Vista)
230819068	3355		MISSION AVENUE	11	TRANSCONTINENTAL MANAGEMENT	Low	Commercial	903.1 (San Luis Rey)
230819066	353		AIRPORT ROAD		TRANSWORLD MAGAZINES - OUT OF BUSINESS ?	Low	Commercial	903.1 (San Luis Rey)
230420004	1401	N	COAST HWY		TRAVEL LODGE	Low	Commercial	903.1 (San Luis Rey)
230925074	2530		VISTA WAY	R	TREASURE HOUSE AND GIFTS	Low	Commercial	904.2 (Buena Vista)
230627011	1836	S	COAST HWY		TREASURE ON THE COAST	Low	Commercial	904.2 (Buena Vista)
231221001	3800		OCEANIC DRIVE	113	TRIBECA TECHNOLOGY SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
231221012	3800		OCEANIC DRIVE	113-15	TRIBECA TECHNOLOGY SOLUTIONS	Low	Commercial	904.1 (Loma Alta)
231025070	3156		VISTA WAY	410	TRICITY EMERGENCY MEDICAL GROUP	Low	Commercial	904.2 (Buena Vista)
231024034	2119	S	EL CAMINO REAL		TRICITY PODIATRY	Low	Commercial	904.2 (Buena Vista)
230820014	3118		SAN LUIS REY ROAD		TRILAR MANAGEMENT	Low	Commercial	903.1 (San Luis Rey)
231221013	3800		OCEANIC DRIVE	116	TRIUMPH UNITED INC.	Low	Commercial	904.1 (Loma Alta)
231321036	4035		OCEANSIDE BLVD	D28	TRUE WOOD GRAINS	Low	Commercial	904.1 (Loma Alta)
231221018	3810		OCEANIC DRIVE	207-08	TRUELINE WOODSWORKS	Low	Commercial	904.1 (Loma Alta)
231619056	1820		PEACOCK BLVD	B	TRYPLEX TECHNOLOGIES	Low	Commercial	904.1 (Loma Alta)
231024024	2103	S	EL CAMINO REAL	201	TSC ACCOUNTS RECEIVABLE SOLUTIONS	Low	Commercial	904.2 (Buena Vista)
230524044	214		WISCONSIN AVENUE		T-SHIRT FACTORY	Low	Commercial	904.1 (Loma Alta)
231017079	3935		MISSION AVENUE	1	T-SHIRT FASHIONS	Low	Commercial	903.1 (San Luis Rey)
230523062	201	N	COAST HWY		T-SHIRT MART	Low	Commercial	903.1 (San Luis Rey)
231221066	3760		OCEANIC WAY	503	TUTOR TIME CHILD CARE LEARNING CENTER	Low	Commercial	904.1 (Loma Alta)
231321023	4056		CALLE PLATINO	102	TV SHOW PRODUCTIONS	Low	Commercial	904.1 (Loma Alta)
231321006	4056		CALLE PLATINO		TV SHOW PRODUCTIONS INC	Low	Commercial	904.1 (Loma Alta)
231520003	1662		ORD WAY		TWIN IMAGING TECHNOLOGY	Low	Commercial	904.1 (Loma Alta)
230621041	2027		MISSION AVENUE	E7	TWINS HANDBAG	Low	Commercial	903.1 (San Luis Rey)
230627018	1904	S	COAST HWY		TWO DOLLAR CLEANER	Low	Commercial	904.2 (Buena Vista)
231221045	3800		OCEANIC DRIVE	107	U - BILD	Low	Commercial	904.1 (Loma Alta)
230622019	211		BROOKS STREET		U.S. POST OFFICE	Low	Commercial	903.1 (San Luis Rey)
230524072	802	S	COAST HWY		U-HAUL CENTER OF OCEANSIDE	Low	Commercial	904.1 (Loma Alta)
231025040	2645		VISTA WAY		ULTA SALON COSMETICS & FRAGRANCE	Low	Commercial	904.2 (Buena Vista)
231314006	431		COLLEGE BLVD		ULTRA STAR CINEMA	Low	Commercial	903.1 (San Luis Rey)
231421118	4170		OCEANSIDE BLVD	175	UMAX1 INC/CIGARETTES 4 LESS	Low	Commercial	904.1 (Loma Alta)
230622015	225		BROOKS STREET		UNDERWATER SCHOOLS OF AMERICA	Low	Commercial	903.1 (San Luis Rey)
230524051	840	S	COAST HWY		UNION BANK OF CALIFORNIA	Low	Commercial	904.1 (Loma Alta)
231520009	1672		ORD WAY		UNIQUE FLOORING	Low	Commercial	904.1 (Loma Alta)
231325004	3809		PLAZA DRIVE	109	UNIQUE SALON HAIR, NAIL & WAX	Low	Commercial	904.2 (Buena Vista)
231414028	465		COLLEGE BLVD	1	UNITED PHYSICIAN'S GROUP	Low	Commercial	903.1 (San Luis Rey)
231421102	4140		OCEANSIDE BLVD	131	UNITED STUDIOS OF SELF DEFENSE	Low	Commercial	904.1 (Loma Alta)
231321072	4065		OCEANSIDE BLVD	EH	UNYEWAY INC.	Low	Commercial	904.1 (Loma Alta)
230420009	1421	N	COAST HWY		UP SPORTS	Low	Commercial	903.1 (San Luis Rey)
231321032	4035		OCEANSIDE BLVD	B24	UPHOLTERY BY MESTAZ	Low	Commercial	904.1 (Loma Alta)
231017006	3784		MISSION AVENUE	148	UPOST	Low	Commercial	903.1 (San Luis Rey)
230421031	280	S	HARBOR DRIVE		URBANWARE	Low	Commercial	903.1 (San Luis Rey)
231420019	4133		AVENIDA DE LA PLATA		US MAILING HOUSE	Low	Commercial	904.1 (Loma Alta)
231519044	4760		OCEANSIDE BLVD	B1	USA TAE KWOK DO	Low	Commercial	904.1 (Loma Alta)
231315028	4645		FRAZEE ROAD	C	USA TAEKWONDO CENTER	Low	Commercial	903.1 (San Luis Rey)
231024027	2103	S	EL CAMINO REAL	204	V CORE	Low	Commercial	904.2 (Buena Vista)
230523064	213	N	COAST HWY		VA HOME LOAN CENTER	Low	Commercial	903.1 (San Luis Rey)
231017043	3805		MISSION AVENUE		VACANT	Low	Commercial	903.1 (San Luis Rey)
231421018	4225		OCEANSIDE BLVD	P	VALDIVIA JEWELRY	Low	Commercial	904.1 (Loma Alta)
231321069	4065		OCEANSIDE BLVD		VALERIE HILFERTY	Low	Commercial	904.1 (Loma Alta)
231221031	3830		OCEANIC DRIVE	410	VANDER PARTY RENTAL	Low	Commercial	904.1 (Loma Alta)
231519041	4750		OCEANSIDE BLVD	A15	VANESSA NAILS	Low	Commercial	904.1 (Loma Alta)
230925069	2530		VISTA WAY	C	VANITY BEAUTY BOUTIQUE	Low	Commercial	904.2 (Buena Vista)
230925070	2530		VISTA WAY	E	VENUS NIALS	Low	Commercial	904.2 (Buena Vista)
230917006	3753		MISSION AVENUE		VERA'S HOME MADE TAMALES	Low	Commercial	903.1 (San Luis Rey)
231325032	3702		PLAZA DRIVE	B	VERIZON WIRELESS	Low	Commercial	904.2 (Buena Vista)
230917017	3760		MISSION AVENUE		VERIZONS	Low	Commercial	903.1 (San Luis Rey)
231519042	4750		OCEANSIDE BLVD	A11	VERNON ALLEN	Low	Commercial	904.1 (Loma Alta)
230719022	503		JONES ROAD		VERNON TOOL CO	Low	Commercial	903.1 (San Luis Rey)
231619066	2611		TEMPLE HEIGHTS DRIVE	E	VERSA MEDICAL	Low	Commercial	904.1 (Loma Alta)
231520024	1668		ORD WAY		VERSA SPA	Low	Commercial	904.1 (Loma Alta)

Attachment 5-B Commercial Inventory
City of Oceanside FY-2009-10

Structure	Address	Direction	Street Name	Suite	Loc Facility Name	TTWQ	Business Type	HSA
230627029	402		VISTA WAY		VESSELL PROPERTIES	Low	Commercial	904.2 (Buena Vista)
231421066	4079		OCEANSIDE BLVD	A	VETERAN'S VILLAGES OF SAN DIEGO	Low	Commercial	904.1 (Loma Alta)
230524063	909	S	COAST HWY	B	VICKIE'S ATTIC	Low	Commercial	904.1 (Loma Alta)
231025051	2741		VISTA WAY	111	VICTOR TOMASSETTI	Low	Commercial	904.2 (Buena Vista)
230724011	1759		OCEANSIDE BLVD	A	VIDEO TOWN	Low	Commercial	904.1 (Loma Alta)
230922016	1401	S	EL CAMINO REAL	103A	VIENNA VILLAGE MARKET	Low	Commercial	904.1 (Loma Alta)
231220045	3544		SEAGATE WAY	110	VIEWTECH INC	Low	Commercial	904.1 (Loma Alta)
231024008	2103	S	EL CAMINO REAL		VILLA OFFICE BLDG.	Low	Commercial	904.2 (Buena Vista)
230723009	1810		OCEANSIDE BLVD	C	VINCENT AND SON BARBER SHOP	Low	Commercial	904.1 (Loma Alta)
230523063	210	N	COAST HWY	A	VINE TO GLASS	Low	Commercial	903.1 (San Luis Rey)
231025050	2741		VISTA WAY	105	VISION WORKS OPTOMETRICS	Low	Commercial	904.2 (Buena Vista)
231214005	4700	N	RIVER ROAD	C	VISTA COMMUNITY CLINIC	Low	Commercial	903.1 (San Luis Rey)
230925037	2420		VISTA WAY	101	VISTA OPTICS INC	Low	Commercial	904.2 (Buena Vista)
230922041	3052		INDUSTRY STREET	102	VITASHOTS INC	Low	Commercial	904.1 (Loma Alta)
231410001	1232		PLAYERS DRIVE		VSAT NETWORK COMMUNICATIONS	Low	Commercial	903.1 (San Luis Rey)
230922033	3038		INDUSTRY STREET	106	W R ROBBINS CO, INC	Low	Commercial	904.1 (Loma Alta)
230922056	2933		OCEANSIDE BLVD		W.C. HYPER SPORTS	Low	Commercial	904.1 (Loma Alta)
230627006	1827	S	COAST HWY		WAGS LIQUOR	Low	Commercial	904.2 (Buena Vista)
230822028	2605		OCEANSIDE BLVD		WAHOO INTERNATIONAL INC	Low	Commercial	904.1 (Loma Alta)
231727004	3507		CANNON ROAD		WALGREENS	Low	Commercial	904.3 (Agua Hedionda)
230917004	3752		MISSION AVENUE		WALGREENS DRUG STORE	Low	Commercial	903.1 (San Luis Rey)
230825011	2100		VISTA WAY		WAL-MART # 2494	Low	Commercial	904.2 (Buena Vista)
231415001	705		COLLEGE BLVD		WAL-MART STORE #2245	Low	Commercial	903.1 (San Luis Rey)
230719019	456		VIA DEL NORTE		WALTER'S DING REPAIR	Low	Commercial	903.1 (San Luis Rey)
231326027	3460		MARRON ROAD		WANTED BRAND INC.	Low	Commercial	904.2 (Buena Vista)
230822025	2372		INDUSTRY STREET	B	WARNER TRUCK RENTAL	Low	Commercial	904.1 (Loma Alta)
231414021	615		COLLEGE BLVD		WASHINGTON MUTUAL	Low	Commercial	903.1 (San Luis Rey)
230522033	801		MISSION AVENUE		WASHINGTON MUTUAL	Low	Commercial	903.1 (San Luis Rey)
230917013	3748		MISSION AVENUE		WASHINGTON MUTUAL	Low	Commercial	903.1 (San Luis Rey)
230922024	2880		INDUSTRY STREET		WASTE MANAGEMENT OF NO CO INC	Low	Commercial	904.1 (Loma Alta)
231017075	3915		MISSION AVENUE		WATER SHOP	Low	Commercial	903.1 (San Luis Rey)
230627025	1922	S	COAST HWY	A	WAVE WEAPONS SURF SHOP	Low	Commercial	904.2 (Buena Vista)
230819091	3245		PRODUCTION AVENUE		WAVERLY TILE INC	Low	Commercial	903.1 (San Luis Rey)
230918012	3742		MISSION AVENUE	103	WE THE PEOPLE	Low	Commercial	903.1 (San Luis Rey)
230624005	1729		OCEANSIDE BLVD	B	WEIGHT WATCHERS	Low	Commercial	904.1 (Loma Alta)
231024017	2103	S	EL CAMINO REAL	105A	WELCOME HOME	Low	Commercial	904.2 (Buena Vista)
231421126	4176		OCEANSIDE BLVD		WELLS FARGO BANK	Low	Commercial	904.1 (Loma Alta)
231025046	2701		VISTA WAY		WELL'S FARGO INVESTMENTS	Low	Commercial	904.2 (Buena Vista)
230524062	901	S	TREMONT STREET		WERBY LLC	Low	Commercial	904.1 (Loma Alta)
230819035	230		ROYMAR ROAD	C	WEST COAST FIRE PROTECTION	Low	Commercial	903.1 (San Luis Rey)
231221022	3820		OCEANIC DRIVE	306	WEST COAST PARTY RENTALS	Low	Commercial	904.1 (Loma Alta)
230726003	1202		VISTA WAY		WEST COAST RENOVATIONS	Low	Commercial	904.2 (Buena Vista)
230624004	1719		OCEANSIDE BLVD		WEST MARINE	Low	Commercial	904.1 (Loma Alta)
231520044	1670		ORD WAY		WESTCOAST FTA	Low	Commercial	904.1 (Loma Alta)
231025054	3125		VISTA WAY	113-202	WESTERN DENTAL SERVICES	Low	Commercial	904.2 (Buena Vista)
230727008	1930	S	COAST HWY		WESTTURF LANDSCAPE MAINTENANCE	Low	Commercial	904.2 (Buena Vista)
230524011	1012	S	COAST HWY	L	WESTURF LANDSCAPE	Low	Commercial	904.1 (Loma Alta)
231024003	2003	S	EL CAMINO REAL	205	WESTWARD MORTGAGE & REAL ESTATE	Low	Commercial	904.2 (Buena Vista)
231519010	4747		OCEANSIDE BLVD	J	WHAMO INC	Low	Commercial	904.1 (Loma Alta)
231421082	4089		OCEANSIDE BLVD	J	WHITE DOG ENTERPRISES	Low	Commercial	904.1 (Loma Alta)
231421120	4171		OCEANSIDE BLVD	100B	WHITE DRAGON KUNG FU	Low	Commercial	904.1 (Loma Alta)
231014011	650		DOUGLAS DRIVE	105	WHOLESALE DISCOUNT FLOORING	Low	Commercial	903.1 (San Luis Rey)
230723057	1906		OCEANSIDE BLVD		WIC PROGRAM	Low	Commercial	904.1 (Loma Alta)
230919010	110		COPPERWOOD WAY	H	WILCO PRODUCTS LLC - SKYLIGHT SHADES	Low	Commercial	903.1 (San Luis Rey)
230720005	310		VIA DEL NORTE		WILEY CONSTRUCTION CO INC	Low	Commercial	903.1 (San Luis Rey)
230421001	1012	S	COAST HWY	F	WILLIAM C. SIGRIT CPA	Low	Commercial	904.1 (Loma Alta)
230422044	323	N	COAST HWY	C	WINCHESTER FUNDING GROUP	Low	Commercial	903.1 (San Luis Rey)
230524008	203		WISCONSIN AVENUE		WISCONSIN COIN LAUNDRY	Low	Commercial	904.1 (Loma Alta)
231320005	4015		AVENIDA DE LA PLATA	401	WISDOMILING.COM INC	Low	Commercial	904.1 (Loma Alta)
231024055	2141	S	EL CAMINO REAL		WISNOSKY BUILDING	Low	Commercial	904.2 (Buena Vista)
230918021	3385		MISSION AVENUE		WOMEN'S RESOURCE CENTER - THRIFT STORE	Low	Commercial	903.1 (San Luis Rey)
231221028	3820		OCEANIC DRIVE	311	WOODCHUCK	Low	Commercial	904.1 (Loma Alta)
230819049	3230		PRODUCTION AVENUE		WOODCRAFTERS INTERNATIONAL	Low	Commercial	903.1 (San Luis Rey)
231025038	2641		VISTA WAY		WORLD OF JEANS AND TOPS	Low	Commercial	904.2 (Buena Vista)
231421078	4089		OCEANSIDE BLVD	B	WORLD TECH DENTAL LAB INC.	Low	Commercial	904.1 (Loma Alta)
230523056	111	S	COAST HWY		YARD RECORDS	Low	Commercial	903.1 (San Luis Rey)
230421028	270	S	HARBOR DRIVE		YE OLD HAWAIIAN HUT	Low	Commercial	903.1 (San Luis Rey)
230319001	1850	N	HARBOR DRIVE		YEARLEY SAIL BOATS	Low	Commercial	903.1 (San Luis Rey)
230825021	2178		VISTA WAY	E4	YES CLEANERS	Low	Commercial	904.2 (Buena Vista)
230423048	408		MISSION AVENUE		YOUNG'S SHOE REPAIR	Low	Commercial	903.1 (San Luis Rey)
230918015	3742		MISSION AVENUE	101	YOUNG'S WATER	Low	Commercial	903.1 (San Luis Rey)
231325030	3817		PLAZA DRIVE	B	Z FASHION	Low	Commercial	904.2 (Buena Vista)

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Attachment 5-C. Mobile Business Inventory

Business Name	Mailing Address
AAA Anytime Anyplace Auto Detail	45776 Clubhouse Drive, Temecula, CA 92592-6041
Alis Mobile Carwash	1418 Olive Street, Oceanside, CA 92058,2624
Aussie Pet Mobile North County	3928 Tortuga Cove, Oceanside, CA 92058-7996
Auto Solutions	P. O. Box 52, Oceanside, CA 92049-0052
Bubu Mobile Auto Detailer	4224 Lewis Street, Oceanside, CA 92056-4251
Detail Green	7960 Berwyn Road, San Diego, CA 92126-3104
El Gueyo Mobile Auto Detail	4801 Cardiff Bay Drive, Oceanside, CA 92057-3414
F & G Detailing	1370 Calle Jules # 15, Vista, CA 92084-3952
Four Winds Boat Detailing	3761 Stanford Drive, Oceanside, CA 92056-6320
Fully Restored Pressure Washing	1670 Roadrunner Ct., Unit 265, Chula Vista, CA 91915-2949
H20 Power Wash Inc.	4401 Maple Drive, Oceanside, CA 92056-3535
Integrity Pressure Wash	1508 Glacier Road, Oceanside, CA 92056-1825
Jerry's Mobile Auto Service	5410 Rocking Horse Lane, Oceanside, CA 92057-5511
JM Power Washing	P. O. Box 2601, Vista, CA 92085-2601
King's Automotive Repair	4409 Tortilla Circle, Oceanside, CA 92057-6623
Lopez Car Wash	180 Canyon Dr., Apt. 39, Oceanside, CA 92054-3567
M. R. Mobile Car Cleaner	1323 Puls Street, Oceanside, CA 92058-2639
Marcos Mecanic Mobile	267 Douglas Dr., Apt. 138, Oceanside, CA 92058-7842
Mobil Auto Detail	315 S. Coast Hwy 101, Ste 296, Encinitas, CA 92024-3543
Mobile Auto Detail	1913 West Dr., Apt. 13, Vista, CA 92083-6144
Mobile Wit It	3244 Carolyn Circle, Oceanside, CA 92054-3843
Mr. Clean Mobile Auto Detail	4896 Glenhollow Circle, Oceanside, CA 92057-7945
Perk's Detailing	506 Calle Montecito, Unit 34, Oceanside, CA 92057-5248
Qmobile Detail	1408 Darwin Drive, Oceanside, CA 92056-3043
R B Mobile Wash	166 N. Barnwell Street, Oceanside, CA 92054-3747
R & C Auto Detailing	603 Seagaze Dr., # 268, Oceanside, CA 92054-3005
Reggie's Mobile Auto Detailing	4565 Winyard Street, Oceanside, CA 92057-5126
Ricardo's Boat Detail	1540 Harbor Dr. N Slip 112, Oceanside, CA 92054-1052
Royal Beauty Mobile Spa	910 Dogwood Ln N, Oceanside, CA 92058-6623
So. Cal Auto Detail	190 Avenida Del Gado, Oceanside, CA 92057-6710
Starrs Auto Detailing	737 Los Arbolitos Blvd., Oceanside, CA 92054-1608
The Detailer	188 Plumosa Street, Oceanside, CA 92058-7970
The Power Washing Pros	362 Mainsail Road, Oceanside, CA 92054-4609
Victor's Mobile Mower Repair & Service	727 Castro Street, Solana Beach, CA 92075-2410

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CITY OF OCEANSIDE clean water program

Volume 7, Issue 2 - Fall 2009

California Coastal Cleanup Day & Buena Vista Creek Cleanup September 19, 2009 9 a.m. - 12 p.m.

Celebrate the 25th Anniversary of California Coastal Cleanup Day by participating in the ninth annual Buena Vista Creek Cleanup and Oceanside Beach Cleanup. The City of Oceanside, together with I Love a Clean San Diego, Coastkeeper, and 1-800-GOT-JUNK will be hosting a cleanup along the banks of Buena Vista Creek, as well as a beach cleanup, on September 19th, from 9 a.m. to 12 p.m. Volunteers will receive cleanup supplies, refreshments, community service hours, and a free give-away item. Call the Clean Water Program Event Information Line for more details at 760-435-5536.

Cleanup sites

- Behind Dicks Sporting Goods at Plaza Drive and College Boulevard (3514 College Boulevard)
- North of Fire Station #4 located at Thunder Drive and Lake Boulevard.
- Behind Kohl's store at College Boulevard and Marron Road
- South side of Oceanside Pier
- Buccaneer Beach at Pacific and Morse Streets (1500 South Pacific Street)

To register for this event click on www.cleanupday.org.

For more information about Oceanside cleanup events and how you can prevent water pollution, visit this Web site: www.oceansidecleanwaterprogram.org.

In This Issue

- Upcoming creek, river and beach cleanup events
- Pick Up Your Pet Waste Campaign - Pet waste survey results
- Water conservation and water pollution prevention tips

Pick Up Your Pet Waste Campaign along the San Luis Rey Recreation Trail

Pet Waste Survey Results

Pet waste left on grass, sidewalks, and along trails is not only a leading cause of bacterial contamination in waterways, but it is also an issue that concerns Oceanside residents. In the spring of 2009, the City of Oceanside Clean Water Program launched a Pick Up Your Pet Waste Campaign to encourage dog owners to clean up after their pets. The project focuses on the San Luis Rey River Trail which is used for a variety of recreational purposes including walking, running, and biking. Many people also bring their dogs with them to the Trail. Although most dog owners who use the trail clean up after their pets, some pet waste still accumulates along the trail.

To kick off the campaign, a brief survey was mailed to 300 Oceanside households located in neighborhoods near the Trail. The goal of the survey was to identify the reasons why people do or do not pick up after their pets on the Trail and in other public areas. Sixty-five percent of the households completed the survey and returned it to the City. Of those residents who completed the survey, 70 percent had visited the Trail in the past and 48 percent reported that they had a dog in their household.

Reasons for Picking Up Dog Waste

Both dog owners and non-dog-owners agree that it is important to pick up dog waste, rating the importance of the issue as 9.6 out of 10. The top-rated reasons for picking up dog waste and throwing it in the trash were because: "It is the right thing to do" and "It pollutes parks, rivers, and beaches."

Continued on back page

Urban Runoff Hotline - Help protect our local waterways

Please report anything other than rain water entering the storm drain.

760-435-5800 "Only Rain in the Storm Drain!"

Pet Waste Survey Results continued from front page

Barriers to Picking up Dog Waste

The vast majority of Oceanside dog owners who walk their dogs reported that they ***always*** pick up after their pet, but 17 percent stated that they sometimes leave their dog's waste behind without picking it up. Among dog owners, the most common reasons cited for why someone might leave dog waste behind while walking the Trail were:

- Forgot to bring a bag
- Nowhere to throw it away
- No one else around to see them

Survey Recommendations

The results of the survey provided clear recommendations for the Pick Up Your Pet Waste Campaign at the Trail including the installation of additional trash cans and pet waste bag dispensers as well as modifying signage to emphasize pet owner responsibility. Ninety-three percent of survey respondents agreed that more pet waste dispensers are needed in the community. As a result, the City plans to move forward with installing additional signage, trash cans, and pet waste bag dispensers along the Trail.

Scoop the Poop – It's a Dog Owner Doody!

The City asks that you keep the following tips in mind when you plan to walk your dog.

- Take a bag with you or use a personal pet waste bag dispenser
- Pick up and dispose of waste in a trash can, not along the side of the trail or sidewalk

For copies of the survey along with final survey results log on to www.oceansidecleanwaterprogram.org. Thank you for doing your part to protect water quality by picking up after your dog.

2009-2010 River, Creek, & Beach Cleanup Events

Please join the Clean Water Program staff and citizen volunteers to assist in removing trash and debris from our local rivers, creeks, and beaches.

Event Times: 9:00 a.m. - 12:00 p.m.
Event Details: 760-435-5536

- November 7, 2009: San Luis Rey River Cleanup
- April 24, 2010: Loma Alta Creek Cleanup
- July 5, 2010: Morning After Mess - City Beaches (8 - 11 a.m.)
- September 18, 2010: Buena Vista Creek Cleanup and California Coastal Cleanup Day
- November 6, 2010: San Luis Rey River Cleanup

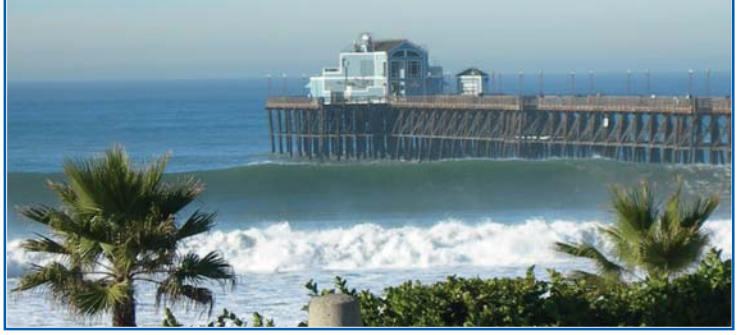

Protect Water Quality and Conserve Water by following these simple tips

The City of Oceanside is committed to water conservation and water pollution prevention. Oceanside is in a Drought Level 2 with mandatory water restrictions to reduce its water use by at least 8 percent. Follow these simple tips to help conserve water and prevent water pollution.

- Repair broken or leaking hose bibs, sprinklers and valves.
- Eliminate water runoff.
- Sweep driveway, sidewalk, patio and deck. No hosing down of paved surfaces.
- Use a shutoff nozzle on your hose.
- Add 2" to 3" of mulch around trees and plants to reduce evaporation.
- Replace grass with low-water-use plants.
- Check faucets and toilets for leaks and fix promptly.
- Take shorter showers.

Online Resources

www.SaveWaterOceanside.com

The City of Oceanside now has a Web site dedicated to water conservation. Log onto www.SaveWaterOceanside.com for more water-saving tips and useful resource information.

www.bewaterwise.com

The Metropolitan Water District is offering free online low-water-use landscape classes for residents and professionals at www.bewaterwise.com. The following classes are available:

- Mini tutorials on the Basics: Four short lessons cover the key points of water-wise gardening. (15 minutes each)
- In-Depth tutorials for Home Gardeners: Residential gardeners can dig into these more detailed lessons. (60 minutes each)
- Professional Landscape Maintenance tutorials: If you landscape for a living, update your knowledge on landscape irrigation systems, fine tuning the controller, irrigation scheduling considerations, and much more.
- Seminarios Profesionales de Mantenimiento de Paisaje - Ahora en español: Si usted trabaja en mantenimiento de jardines, actualice su conocimiento en sistemas de riego, en ajustar el controlador, en el plan de riego, y mucho más.

Get a No-Cost Home Energy and Water Savings Kit from SDG&E

Save energy, save money, and help the environment with this complimentary kit which contains a low-flow shower head and three faucet aerators. When installed, they can help you save water and the energy used to heat it. To request your kit today, visit www.sdge.com/energykit, or call 1-800-644-6133.

City of Oceanside
Clean Water Program
300 North Coast Highway
Oceanside, California 92054
760-435-5800
www.oceansidecleanwaterprogram.org

CITY OF OCEANSIDE clean water program

Volume 8, Issue 1 - Winter/Spring 2010

Loma Alta Creek Cleanup
April 24, 2010
9 a.m. - 12 p.m.

Celebrate Earth Day by participating in the 11th Annual Creek to Bay Cleanup event on April 24, 2010. The City of Oceanside, together with event sponsors I Love a Clean San Diego and 1-800-GOT-JUNK, will be hosting a cleanup along the banks of Loma Alta Creek and at two sites on the Pacific Ocean.

Choose from five sites

- Buccaneer Park at 1500 Pacific Street (cross street is Morse Street))
- Behind Smart & Final on Oceanside Boulevard and I-5 (1701 Oceanside Boulevard)
- Mesa Drive between El Camino Real and Rancho Del Oro Drive
- Behind commercial buildings at 1629 Ord Way (Off Oceanside Boulevard between College Boulevard and Temple Heights Drive)
- South side of the Oceanside Pier

Join us while we remove unwanted materials from the creek and beach and help to improve Oceanside water quality. Volunteers will receive cleanup supplies, refreshments, community service hours, and a free T-shirt or other giveaway item. For more information call 760-435-5536 or 760-435-5807.

Receive event notices by email

To receive event announcements by email, send your email address to cleanwaterprogramevents@ci.oceanside.ca.us, or log on to the events tab at www.oceansidecleanwaterprogram.org to register.

Together we can prevent water pollution.

In This Issue

- Loma Alta Creek Cleanup Event
- Pool draining tips to protect water quality
- Cigarette litter statistics you should know!
- 2010 creek, river and beach cleanup events

Pool Draining Tips to Protect Water Quality

Do you or your friends have a pool? Please read and share this important article with them to learn the proper steps to prepare pool water before draining to the curb and gutter.

With summer right around the corner, many Oceanside residents will be readying their swimming pools in anticipation of the season's heat. As part of this process, some pool owners like to drain old swimming pool water which has been sitting all winter. Though not a necessary task, the following tips are provided for you to properly drain pool water in order to protect the water resources in your community.

Whenever possible, it is best to drain your pool onto your landscape. This recycles your pool water, conserves irrigation water, and avoids the environmental risks associated with draining your pool to the street. Before draining your pool water to the street or to your landscape, be sure to follow the guidelines outlined below.

While draining pool water to the street is a common practice, it can prove harmful to the environment if the pool owner does not properly plan and prepare prior to draining. When pool water is drained to the street, it can carry other pollutants such as oil, grease, sediment, bacteria and trash down the storm drain and into the nearest creek, river, or the Pacific Ocean. Swimming pool water also often contains harmful additives and chemicals. If the water is not properly treated to remove these pollutants prior to draining, they can cause further damage to the health of our waterways and to the plants and animals that live there.

For **chlorine pools**, chlorine levels must be lowered to less than 1 part per million prior to draining. This can be done naturally, by simply allowing the pool water to sit in the sun for a minimum of three days. Alternatively, de-chlorination kits can be purchased at home supply stores at a very reasonable cost. These kits have the tools you need to reach the appropriate chlorine levels before draining your pool to the curb and gutter.

continued on next page

Urban Runoff Hotline - Help protect our local waterways

Please report anything other than rain water entering the storm drain.

760-435-5800 "Only Rain in the Storm Drain!"

Cigarette Litter Statistics You Should Know!

Do you or someone you know smoke cigarettes? Cigarette butts should be properly disposed in the trash can - not thrown out the car window or snuffed on the ground without being picked up. Below is information about cigarette litter.

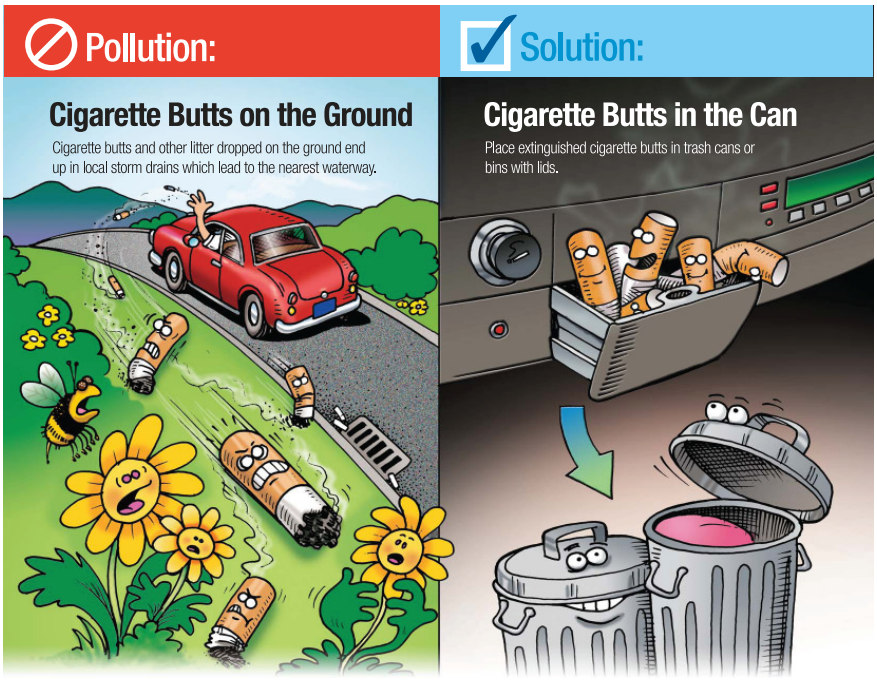

Did you know?

- Over 50,000 cigarette butts are picked up from local beaches each year.
- Using a portable ashtray to store cigarette butts until they can be properly disposed in a trash can is simple and protects the environment.

Cigarette filters:

- are made of plastic
- take 15 - 20 years to decompose
- release toxins into the environment

Please share this information with friends, family, and co-workers so they learn the importance of properly dipsosing of cigarette butts.

Special thanks to think BLUE San Diego Region for use of these graphics.

Pool Draining Tips continued from front page

Some people have **salt water pool systems** which may be preferred due to the lower amount of chemicals required for their operation. However, these pools must not be drained to the storm drain system due to their high salt content relative to the fresh water systems they drain into. Total dissolved solids (TDS) must be below 500 parts per million in order to drain into the street.

"**Green pools**," which are pools in which algae is growing, also must not be drained to the street. In these instances, algae must first be killed and removed. This is usually done by chlorinating the swimming pool until the algae is gone, then lowering chlorine to the allowable discharge level. Cartridge filters or diatomaceous earth (DE) filters should be rinsed onto a pervious surface such as landscaped areas or grass. While DE is actually beneficial in your garden, it can build up in storm drains and clog them. DE residues can be scooped up and simply thrown in the trash or put to use fending off worms in your garden.

For more information on how to reach acceptable chemical and TDS levels, call your pool maintenance specialist. For questions about safe pool drainage, call the City of Oceanside's Urban Runoff Hotline at 760-435-5800. By taking these simple steps, you can enjoy your pool, stay cool, and protect the environment, too!

2010 River, Creek, & Beach Cleanup Events

Please join the Clean Water Program staff and citizen volunteers to assist in removing trash and debris from our local rivers, creeks, and beaches.

Event Times: 9:00 a.m. - 12:00 p.m.
Event Details: 760-435-5536

- April 24, 2010: Loma Alta Creek Cleanup
- July 5, 2010: Morning After Mess - City Beaches (8 - 11 a.m.)
- September 25, 2010: Buena Vista Creek Cleanup and California Coastal Cleanup Day
- November 6, 2010: San Luis Rey River Cleanup

City of Oceanside

Clean Water Program
300 North Coast Highway
Oceanside, California 92054
760-435-5800
www.oceansidecleanwaterprogram.org

June 29, 2010
Facility Name
Facility Address
Facility Representative

Subject: Stormwater Pollution Prevention requirements for your mobile business

Dear Business Owner:

As part of local water quality regulations, cities in the San Diego region are required to work with businesses conducting mobile operations to prevent stormwater pollution. Best Management Practices, commonly referred to as "BMPs", are operational efforts consisting of housekeeping practices, spill control and prevention, and proper use and storage of materials that are designed to reduce the environmental impact from certain activities. Using BMPs will help prevent pollution from your business. Proper implementation and maintenance of BMPs are critical to their effectiveness.

To date, the cities have collaborated to develop a set of minimum BMPs for all mobile businesses operating in the San Diego region. The attached document identifies the required minimum BMPs for mobile businesses and provides details on how to satisfactorily implement each of the BMPs that pertain to your business. This list of minimum BMPs is required for every mobile businesses operating in the San Diego region, where applicable and feasible. Therefore, your business is required to implement the minimum BMPs identified in this notification. Additional details about the required BMPs for mobile businesses are available on the "Project Clean Water Toolbox" website (http://www.projectcleanwater.org/bmp/).

Please verify that you are in compliance with the regulations for the city or cities where you conduct business, as the BMP requirements for each city may vary slightly.

Please review and evaluate your business's BMPs and revise your practices as necessary to ensure that you do your part in preventing stormwater pollution. If you have any questions or concerns, please contact the City of Oceanside Clean Water Program at 760-435-5803.

Sincerely,

Mo Lahsaie, Ph.D., REHS
Clean Water Program coordinator

Required Minimum BMPs
For
Mobile Businesses

1) Storm Water Training:

Proper training is required to prevent the discharge of pollutants in to the storm water conveyance system. Train all workers to properly identify, transport and manage materials to prevent a discharge to the storm water conveyance system. Train all employees on discharge prohibitions, storm water best management practices (BMPs), pollution prevention and methods to control, contain and clean up spills.

2) Contain and Clean Up Spills (Spill Kits):

Keep written spill procedures and cleanup materials in each vehicle. Spill kits must be appropriate for materials used in the business activities. In the event of a spill immediately contain the spill on site. Use appropriate equipment and/or materials to clean up the spill. Immediately report any spill that cannot be completely contained to the jurisdiction where the spill occurred. Sweep up the material and dispose of it properly. If the spill is hazardous, contact the appropriate reporting agency and take appropriate clean up and disposal actions. In the City of Oceanside you can contact the following in case of a spill:

Nonhazardous spills: Urban Runoff Hotline at 760-435-5807

Hazardous spills: Fire Department at 760-435-4101.

3) Properly Handle All Waste (Solid, Liquid and Hazardous):

Before starting a job consider the weather conditions and determine how to dispose of all waste. Properly remove all waste from the worksite or place in proper waste containers with lids. Never pour liquids into trashcans, dumpsters or storm drains. Place liquid non-hazardous waste in sealed containers and remove from the worksite and dispose of properly. Inspect and label all hazardous waste containers prior to removal. For details on the management and disposal of specific chemical waste contact the County Hazardous Materials Division at (619) 338-2231.

4) Protect Storm Water Conveyance System: (Streets, Gutters and Alleys)

The storm water conveyance system is a direct connection to creeks, rivers, bays and the ocean. At the work site, locate the probable pollutant discharge points and install appropriate materials to contain the pollutants. Capture and remove pollutants from your activity as close to the work area as possible. Properly dispose of any collected liquid waste. If doing businesses in the City of Oceanside contact the Clean Water Program (760-435-5800) prior to disposing liquid wastes to the sanitary sewer system (mop sink, toilet, etc.) or whether they can be directed to landscaped areas that will not run off into the storm water conveyance system.

5) Provide Proper Handling and Containment Of Materials:

To prevent spills or discharges, all materials must be properly contained during use and transport. Provide secondary containment, to the maximum extent practicable, for all liquids in the event of spills, punctures or leaks during use and transport. Store materials and equipment securely in the vehicle to prevent loss. Provide leak proof lids for liquids and cover all materials and waste while not in use and during transport. Maintain a materials inventory and material safety data sheet (MSDS) if hazardous materials are being used or transported. Keep a copy of (MSDS) sheets in a binder labeled MSDS and keep in vehicle. Inspect and label all chemical containers.

6) Provide Equipment Washout Area:

Equipment washout areas should be located away from any storm drain inlets or open drainage facilities. The washout area can be a container, a berm or a liner to collect and contain liquids and prevent runoff. Remove washout waste from the job site and dispose of properly.

For additional details on mobile business best management practices consult:

- Project Clean Water Tool Box at **www.projectcleanwater.org/bmp**
- California Storm Water BMP Handbook at **www.cabmphandbooks.com**
- Oceanside Clean Water Program at **www.OceansideCleanWaterProgram.org**

These practices represent the minimum requirements. Contact the City of Oceanside Clean Water Program for specific City requirements.

REQUIRED MINIMUM BMPS FOR MOBILE BUSINESSES

Minimum Core BMPs						
Business Types	Storm Water Training	Contain and Clean up Spills	Properly Handle All Waste (Liquid, Solid & Hazardous)	Protect Storm Water Conveyance System	Provide Proper Handling & Containment of Materials	Provide Equipment Washout Area
Auto repair, Maintenance, fueling, cleaning	X	X	X	X	X	
Equipment Repair, Maintenance, Fueling, Cleaning	X	X	X	X	X	
All Vehicle Washing	X	X	X	X	X	
Pest Control Services	X	X	X	X	X	
Carpet Drape and Furniture Cleaning	X	X	X	X	X	
Cement Mixing and Cutting	X	X	X	X	X	X
All Masonry	X	X	X	X	X	X
Painting and Coating	X	X	X	X	X	X
Landscaping	X	X	X	X	X	
Pool and Fountain Cleaning	X	X	X	X	X	
Portable Sanitary Toilet Services	X	X	X	X	X	
Power Washing Services	X	X	X	X	X	

City of Oceanside
Beach Cleanup Manual

Contents

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Send Completed Forms to:
City of Oceanside Clean Water Program
300 N. Coast Hwy.
Oceanside, CA 92054
Or e-mail to Cynthia Mallett: cmallett@ci.oceanside.ca.us
Phone: 760-435-5807

How to Coordinate a Beach Cleanup

Before the Cleanup

- Pick a date and time for your cleanup.
- Choose a location in need of a cleanup.
- Plan where volunteers will meet to check in, preferably a visible location or popular landmark.
- Think about parking. Find a site that has convenient parking for volunteers.
- Know who to contact in case of an emergency.
- Familiarize yourself with hazardous areas to be avoided so that you may inform your volunteers of possible dangers.
- Know what to do when hazardous items (like syringes and hazardous waste) or injured animals are found. See “Safety Fact Sheet”.
- Familiarize yourself with the particularly dirty areas to be targeted.
- Check the availability of restrooms on site and know whether or not they will be open during your cleanup.
- Check the availability and location of trash and recycling receptacles on-site.
- Speak with lifeguards and/or park rangers before cleanup so they are aware you will be conducting a cleanup on your chosen date and time.

Recruit volunteers and pick up supplies:

- Organize friends, co-workers and/or family to join you in your beach cleanup.
- Take a head count of participants to determine how many supplies will be needed. City will provide gloves and trash bags for up to 50 participants.
- All volunteers must fill out and sign a Liability Waiver. Any volunteer under the age of 18 must have a parent or guardian sign the waiver before participating. Waivers can be downloaded and printed from www.cleanwaterprogram.org.
- Pick up and/or organize all necessary items. See “Supply Checklist.”
- Also, encourage your volunteers to bring their own supplies (like gloves, bags, and/or buckets for trash) to reduce the waste generated at your cleanup.

Day of Cleanup

- Arrive at your cleanup site early so you are ready to collect waivers, sign up volunteers and hand out supplies.
- Set up table and any signage.
- Have your volunteers form groups of 2-5 people. Groups can share bags and data cards.
- Hand out supplies. One glove per person, one bag and one data card per group. It is important to make sure volunteers are not taking more supplies than necessary; you do not want to create excess trash. See the City of Oceanside "Beach Cleanup Pledge".
- Explain the procedure for filling out data cards (City will provide if desired).
- Give safety talk. See "Safety Fact Sheet".
- Point out any hazardous locations to be avoided.
- Remind volunteers that they should not pick up natural items (such as algae, kelp, driftwood, shells, etc.) these items are a part of the ecosystem you are trying to restore.
- Decide how long you will clean the beach and remind your volunteers what time to arrive back at the meeting point with their trash. Make sure volunteers know to bring back trash so that it can be weighed.
- Direct volunteers to remove trash from the streets near the beach, as well as from the beach, so this trash does not make its way onto the beach and eventually into the ocean.
- Start your cleanup!
- During cleanup, people may ask why you are out cleaning the beach. Be informed on the threats that trash poses to aquatic life. You may want to have informational brochures to hand out as well. For more information, contact Cynthia Mallett at:
  (760) 435-5807 or e-mail: cmallett@ci.oceanside.ca.us
- Brochures can be downloaded from www.OceansideCleanWaterProgram.org.
- Take photos of your cleanup.

City of Oceanside "Beach Cleanup Pledge"

I pledge to reduce the amount of waste generated at this beach cleanup by doing the following:

1) Providing drinking water from a cooler rather than from single use plastic bottles.
2) Encouraging volunteers to bring their own reusable water bottles.
3) Recycling all plastic, glass and aluminum bottles and cans found during the cleanup.
4) Providing one trash bag per group (not per person) and/or encouraging volunteers to bring their own bucket to use for picking up trash.
5) Only providing one glove per person and/or encouraging volunteers to bring their own work gloves.
6) If providing food for volunteers, buying food locally and with minimal packaging.
7) Not leaving any trash at cleanup location.

_____ _____

Name Printed Signature

Remember, you are at the beach today in an attempt to remove marine debris and restore the natural coastal ecosystem. Reduce the amount of trash generated in the process and you will have completed a successful cleanup!

Safety Fact Sheet

1. Do not go near any large drums or barrels.
2. Wear gloves and closed-toe shoes at all times, as well as protection from the sun, such as a hat and sun-block.
3. Stay away from any ecologically fragile areas (e.g. sand dunes, nesting areas, sensitive plants).
4. Don't lift anything too heavy; when in doubt, don't try!
5. Don't touch or pick up dead animals, or attempt to move injured animals. Make your cleanup captains or a lifeguard aware of the animals and where they are located.
6. Don't pick up syringes, needles, or any sharp objects. Mark the area and notify the cleanup captain or lifeguard of their location.
7. Make sure that fire pits are cold before reaching into them.
8. Always stay in teams of at least two.
9. Avoid over-exertion, sunburn, heat exhaustion, and dehydration. When in doubt, come in early.
10. If cleaning on or near streets please be on the lookout for cars and proceed with caution.
11. Children should always be supervised by an adult.

City of Oceanside Emergency Contact Information:

Please call the Oceanside Lifeguards at (760) 722-8000 for any of the following:

Injured Marine Animal or Other Injured Wildlife, Dead Animal, Hazardous Waste Items, Accidents/Injuries

Serious Injury or Life-Threatening Emergency: Call 911

Supply Checklist

- ☐ Table
- ☐ Trash Bags
- ☐ Gloves
- ☐ Liability Waiver Forms
- ☐ Marine Debris Data Cards
- ☐ Clip Boards
- ☐ Pencils/Pens
- ☐ First Aid Kit
- ☐ Sunscreen
- ☐ Water Cooler
- ☐ Community Service Forms (if you will be offering community service hours to participants)

Additional Items You May Wish to Bring:

- ☐ Cleanup Sign/Banner
- ☐ Trash Grabbers
- ☐ Digital Camera
- ☐ Snacks/Coffee
- ☐ Sign describing which items are recyclable.
- ☐ Informational Material (brochures etc.)
- ☐ Scale
- ☐ Hand Sanitizer
- ☐ Tape/Scissors

Cleanup Summary Sheet

After your cleanup, please fill out this summary sheet and return it to the Clean Water Program so we can keep track of our community's successes!

Cleanup Site Location:

_____

Cleanup Captain Name(s):

_____

Captain's Address:

_____

_____

Captain Phone and Email

_____

STATISTICS

Total mileage/area cleaned by participants: _____

Total Number of Cleanup Volunteers: _____

Volume Collected: Trash Recyclables

Number of Bags: _____ _____

Most unusual items found:

Please share the fun details of your day with us!

Thank You,

Cynthia Mallett for the Oceanside Clean Water Program

300 N. Coast Hwy.

Oceanside, CA 92054

cmallett@ci.oceanside.ca.us

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SUN DIEGO PRESENTS

THE MORNING AFTER MESS

BEACH CLEAN UP DAY

JULY 6TH, 2009 Surfrider Foundation San Diego Chapter

5 BEACHES! 8-11AM AT EACH LOCATION!

VOLCOM
OCEAN BEACH
OB PIER

O'NEILL
MISSION BEACH
BELMONT PARK

Quiksilver
PACIFIC BEACH
PB DRIVE

Billabong
PONTO BEACH
IN SOUTH CARLSBAD

...LOST
OCEANSIDE
SOUTH HARBOR JETTY

★ EARN YOUR COMMUNITY SERVICE CREDITS!
★ FREE T-SHIRT TO THE FIRST 50 PARTICIPANTS AT EACH LOCATION!
★ PRIZE PACKAGES FROM EACH VENDOR AT EACH LOCATION!

BROUGHT TO YOU BY THE SURFRIDER FOUNDATION, SAN DIEGO CHAPTER
(858) 792-9940 AND SUN DIEGO BOARDSHOPS

SUN DIEGO BOARDSHOPS | Surfrider Foundation SAN DIEGO CHAPTER | SILK SCREEN SHIRTS! | 91X

WWW. SUNDIEGO.COM SURFRIDERSD.ORG CLEANBEACHCOALITION.BLOGSPOT.COM

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City of Oceanside
San Luis Rey River Cleanup

Saturday, November 7, 2009

9:00 a.m. to 12:00 p.m.

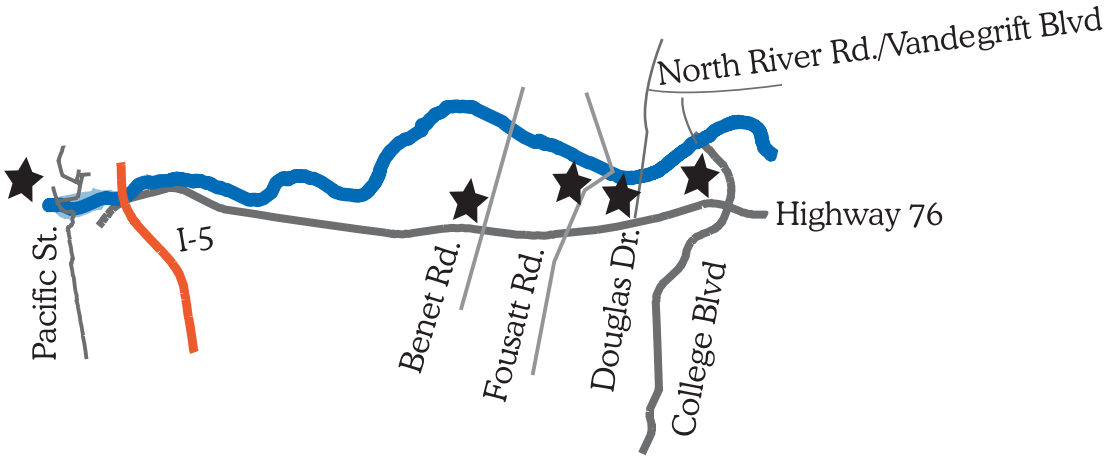

Volunteers receive refreshments, cleanup supplies, community service hours and a free give-away item. For more information and site details, call 760-435-5536 or log onto www.OceansideCleanWaterProgram.org.

Sponsored By:

City of Oceanside Clean Water Program

1-800-GOT-JUNK? North America's Largest Junk Removal Service

iDesign Impact

Join us at any of the following sites:

- Oceanside Harbor - Parking Lot #10
- Highway 76 & Benet Road
- Highway 76 & Foussat Road at bike path
- Douglas Drive at the bike path on south side of SLR River north of Pala Road
- Mance Buchanon Park on College Blvd. just north of Adams Ave.

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FALL-WINTER 2009-2010

Oceanside MAGAZINE

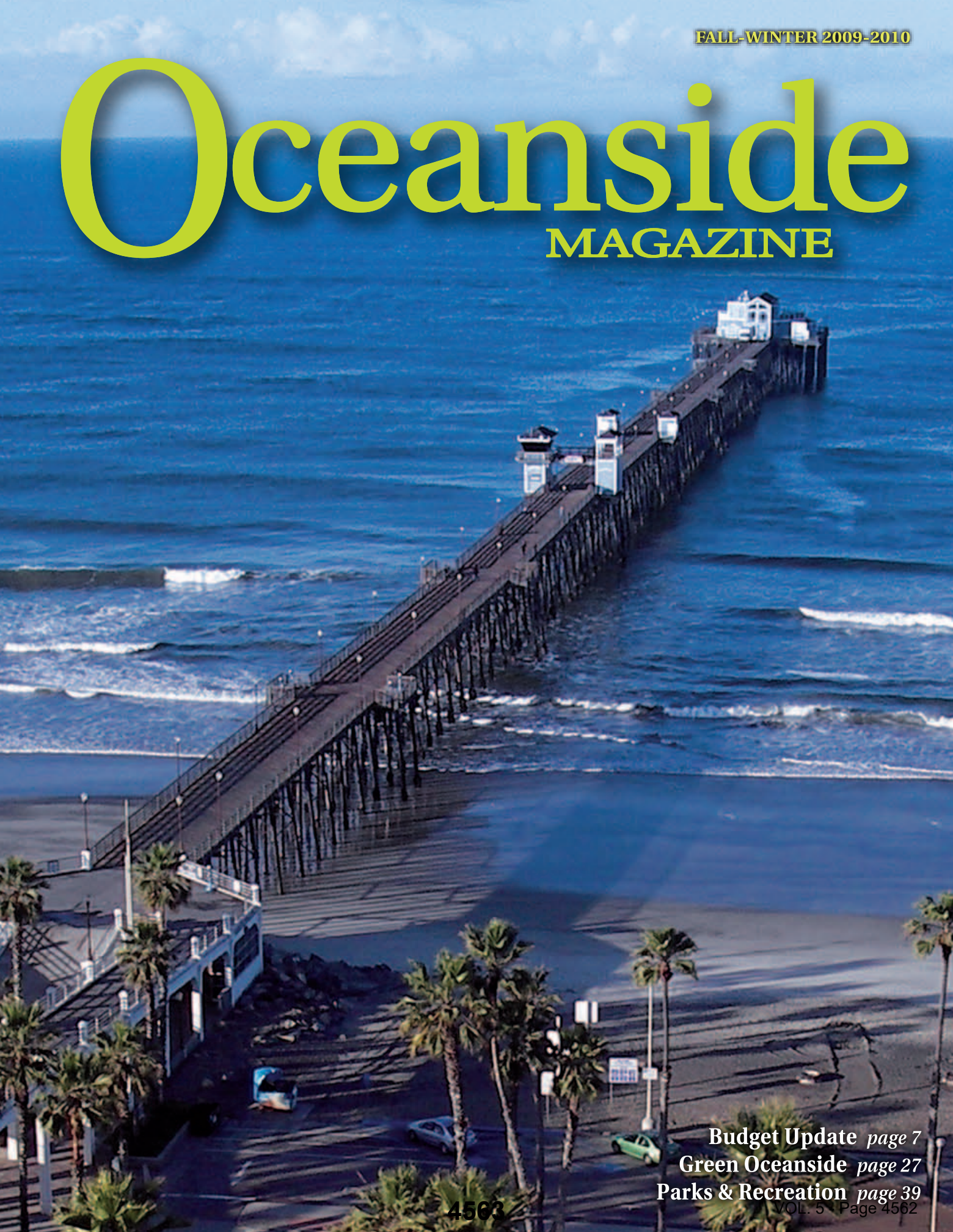

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UPCOMING EVENTS AT MISSION SAN LUIS REY

A Celebration of Life

9th Annual
Día de los Muertos
Sunday, November 1st • 10 am – 4 pm

A family-friendly event that has its roots in pre-Columbian cultures of Mexico and Central America.

Enjoy Music and Dancing on the Main Stage, Traditional Oaxacan Ofrendas (altars), Children's Crafts, Unique Retail Booths and Delicious Food

FREE ADMISSION
Fees will apply for parking and shuttle services.

Christmas at the Mission
Saturday, December 19th • 6 – 9 pm
A Night of a Thousand Lights & Christmas Carols
Enjoy a variety of tasty food from local restaurants and the Mission Kitchen.
Tickets: $35, includes food and 1 drink ticket

Visit www.sanluisrey.org for more details or call (760) 757-3651.

Green Oceanside

Promoting Environmental Sustainability and Conservation

Be sure to clip out and save these pages for reference.

One Less Plastic Bag

The decision is simple: Protect our environment, our local marine life and our beaches — take part in a greater Green Oceanside by saying no to plastics and, in particular, plastic bags.

Get a reusable tote from the Solid Waste and Recycling booth at the following upcoming events: Harbor Days, December's 18th "Day without a Bag" Green Oceanside Fair, and the Earth Day Sunset Market.

Did you see the new Green Oceanside logo? A special thanks goes to Joey Chavez Gallery and Studio, and Impact Design for the development of our new logo.

All types of plastics including plastic bags make up the greatest amount of litter debris in our streets, our waterways, and on our beaches. Plastic bags in particular are considered a significant component of litter in the environment due to their durability and light weight. In fact it takes approximately 1,000 years for a plastic bag to fully biodegrade. This single-use item basically equates to over ten lifetimes of existence. This is an impact on our environment everyone needs to consider the next time they go to the grocery store.

Even when disposed of properly, plastic bags are often blown out of trash and/or recycling containers, and are easily carried by the natural elements of wind and water to become entangled in vegetation, clog storm drains and contribute to free-floating plastic debris in the ocean. The California Coastal Commission estimates that 60% to 80% of all marine debris, and 90% of all floating debris is plastic. Plastic litter is mistaken for food and, unfortunately, often results in the death of sea life. It is a sad and not very uncommon sight to see a bird with plastic packaging wrapped around its foot, or worse, its neck and airways. This is just one reason why it is important that in our daily lives we make the conscious decision to forego the use of plastic bags and excess plastic packaging. These environmentally conscious acts are vital in protecting the earth.

Concern and efforts to reduce our use of plastic materials and, in particular, plastic bags, is not just a local movement but is a national and international one as well. Across the globe, communities are taking great strides to reduce the use and production of these types of single-use materials. Cities in the United States are taking the lead in implementing bans and resolutions that either eliminate the use of plastic bags, or at the very least, greatly reduce the use of these materials. The list of California communities taking action via bans, resolutions, or education and outreach, include but are not limited to San Francisco, Malibu, Santa Monica, Encinitas, and our very own "Green Oceanside." A couple of years ago in Los Angeles the "Day Without A Bag" event was first celebrated. Now the event has become a countrywide movement that has proven to be a success in many communities, including Oceanside. In 2008, the City of Oceanside encouraged the community to celebrate December 18th's "Day without a Bag" event for the first time, by giving back to the environment during the holidays by foregoing disposable plastic and paper bags in favor of reusable totes. Public facilities, along with local grocery stores and our very own Sunset Market, participated in the event. In fact over 4,000 reusable bags were handed out to the public during that event alone. Oceanside continues to distribute reusable bags as part of the "One Less Plastic Bag" campaign. Be sure to get a reusable tote from the Solid Waste and Recycling booth at the following upcoming events: Harbor Days, December's 18th "Day without a Bag" Green Oceanside Fair, and the Earth Day Sunset Market.

Reduce, Reuse, and Recycle!

Reduce: your use and consumption of all plastic materials and plastic bags. Buy materials with less plastic packaging.

Reuse: Next time at the grocery store, say no to plastic or paper bags. Make a difference by bringing your own reusable bag instead. It can be a stylish way to promote a sustainable community.

Recycle: Be sure to recycle any used plastic bags at a local grocery store. Recycle all other plastic packaging (#1-7) as well.

1 PETE | 2 HDPE | 3 PVC | 4 LDPE | 5 PP | 6 PS | 7 OTHER

Did You Know That...

Storm Drains Lead to the Nearest Waterway

Help protect our local waterways. Please report if you see anything other than rain water entering the storm drain.

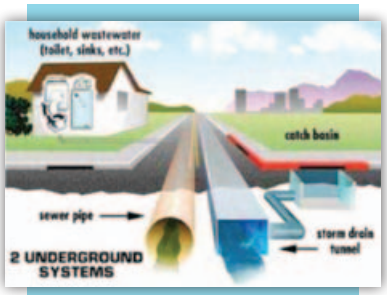

Urban Runoff Hotline (760) 435-5800

"Only Rain in the Storm Drain!"

Rain water (also called storm water) that flows off buildings, walkways and streets into storm drains ultimately flows to the Pacific Ocean. Unlike water that goes to the sanitary sewer system (like your sink, shower, and toilet water), storm water is not treated or filtered before it is discharged to the ocean. Storm water runoff can pick up pollutants from yards and streets that can have harmful effects on wildlife and the recreational uses of rivers, creeks and beaches. Sometimes area beaches are posted or closed due to pollution. It is important to keep storm water runoff clean.

What can you do?

- Don't dump anything down the storm drain. Remember "Only Rain in the Storm Drain!"
- Pick up pet waste promptly — it transmits disease.
- Place landscape clippings in curbside carts — don't sweep into streets or down storm drains.
- Wait three days after rain to apply fertilizers and pesticides.
- Visit www.OceansideCleanWaterProgram.org for more tips.

2010 River, Creek, and Beach Cleanup Events

The City of Oceanside Clean Water Program wants to make our waters clean for all residents and visitors. We need your help in order to improve water quality. There are several cleanup events throughout the year that get people outdoors and in touch with our environment. A big Thank You goes out to all volunteers who take the time out of their busy schedules to help with these important cleanup events. For 2010 there are four events scheduled, all from 9:00 am to 12:00 pm except for the July 5 Morning After Mess scheduled from 8:00-11:00 am. All volunteers will receive a T-shirt or other give-away item, cleanup supplies including bags and gloves, and refreshments. Please wear closed-toe shoes, hats and sunscreen. For more event details call 435-5536.

April 24 ..... Loma Alta Creek Cleanup

July 5 ..... Morning After Mess: City Beaches

September 18 ..... Buena Vista Creek Cleanup and California Coastal Cleanup Day

November 6 ..... San Luis Rey River Cleanup

Keep up to date on Oceanside's River, Creek, and Beach Cleanup Events and the quality of our surface water by receiving event notices and the Clean Water Program Newsletter. Sign up by entering your e-mail address on the Oceanside Clean Water Program Web site, events page: www.oceansidecleanwaterprogram.org/signup.asp

Frequently Requested Phone Numbers

Solid Waste & Recycling Hotline ..... (760) 435-5015
www.ci.oceanside.ca.us

Waste Management:
Trash/Recycling/HHW ..... (760) 439-2824

El Corazon Compost Facility ..... (760) 439-9920

Utility Billing ..... (760) 435-3900

Code Enforcement (violations/scavenging) ... (760) 435-3945

Street Sweeping ..... (760) 435-5043

Water Department ..... (760) 435-5800

Oceanside Urban Runoff Hotline ..... (760) 435-5800

Oceanside Cleanup Event Hotline ..... (760) 435-5536

Report Water Waste Hotline ..... (760) 435-5865

Water Conservation Education/
Speakers Bureau ..... (760) 435-5828

California Department of Conservation ..... (916) 322-1080
www.conservation.ca.gov

Surfrider Foundation (S.D. Chapter) ..... (858) 792-9940

Web Site Links

Oceanside Solid Waste & Recycling Division:
www.ci.oceanside.ca.us Click on City Services / Departments / Public Works Department / Solid Waste & Recycling Division

Oceanside Clean Water Program:
www.OceansideCleanWaterProgram.org

Oceanside Water Conservation Website:
www.SaveWaterOceanside.com

Pick Up Your Pet Waste

Pet waste left on grass, sidewalks, and along trails is not only a leading cause of bacterial contamination in waterways, but it is also an issue that concerns Oceanside residents. In the spring of 2009, the City of Oceanside Clean Water Program launched a Pick Up Your Pet Waste Campaign to encourage dog owners to clean up after their pets. The project focuses on the San Luis Rey River Trail which is used for a variety of recreational purposes including walking, running, and biking. Many people also bring their dogs with them to the trail. Although most dog owners who use the trail clean up after their pets, some pet waste still accumulates along the trail.

To kick off the campaign, a brief survey was mailed to 300 Oceanside households located in neighborhoods near the trail. The goal of the survey was to identify the reasons why people do or do not pick up after their pets on the trail and in other public areas. Sixty-five percent of the households completed the survey and returned it to the City. Of those residents who completed the survey, 70% had visited the trail in the past and 48% reported that they had a dog in their household.

Reasons for Picking Up Dog Waste

Both dog owners and non-dog-owners agree that it is important to pick up dog waste, rating the importance of the issue as 9.6 out of 10. The top-rated reasons for picking up dog waste and throwing it in the trash were: "It is the right thing to do" and "It pollutes parks, rivers, and beaches."

Barriers to Picking up Dog Waste

The vast majority of Oceanside dog owners who walk their dogs reported that they always pick up after their pet, but 17% stated that they sometimes leave their dog's waste behind without picking it up. Among dog owners, the most common reasons cited for why someone might leave dog waste behind while walking the trail were:

- Forgot to bring a bag
- Nowhere to throw it away
- No one else around to see them

Survey Recommendations

The results of the survey provided clear recommendations for the Pick Up Your Pet Waste Campaign at the trail including the installation of additional trash cans and pet waste bag dispensers as well as modifying signage to emphasize pet owner responsibility. Ninety-three percent of survey respondents agreed that more pet waste bag dispensers are needed in the community. As a result, the City plans to move forward with installing additional signage, trash cans, and pet waste bag dispensers along the trail.

Scoop the Poop: It's a Dog Owner Doody!

The City asks that you keep the following tips in mind when you plan to walk your dog.

- Take a bag with you or use a personal pet waste bag dispenser.
- Pick up and dispose of waste in a trash can, not along the side of the trail or sidewalk.

For copies of the survey along with final survey results log on to www.OceansideCleanWaterProgram.org. Thank you for doing your part to protect water quality by picking up after your dog.

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SPRING 2010

Oceanside MAGAZINE

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Oceanside MAGAZINE

SPRING 2010

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UPCOMING EVENTS AT MISSION SAN LUIS REY

Earth Day NORTH 2010
Clean & Green
Sunday, April 25th • 10 am - 4 pm

FREE Admission

A family-friendly celebration. Activities include essay contest, lady bug release, plant sale, garden workshops with Friar James, food, crafts and much more.

More details available at www.EarthDayNorth.com

Heritage Ball 2010
Saturday, August 28th • 6 pm
The Mission's annual fundraising gala will celebrate the community and longevity of our Historical Landmark.
Call for details, 760.757.3651

Visit SanLuisRey.org for more details or call (760) 757-3651

Be sure to clip out and save these pages for reference.

Green Oceanside

Promoting Environmental Sustainability and Conservation

Green Week 2010

and the 2nd Annual Oceanside Green Fair

Green Oceanside is about teaching families in our local community how to be better stewards of the planet by recycling, composting, conserving water, conserving energy, and preventing water pollution.

The City of Oceanside invites you to participate in the 2nd Annual Green Week 2010. From March 8-13 the City will be honoring the event at various community events. Green Week is coordinated by the Green Oceanside campaign, which is a collaboration between several City Departments, local environmental organizations and businesses dedicated to educating the public about environmental conservation. Green Oceanside is about teaching families in our local community how to be better stewards of the planet by recycling, composting, conserving water, conserving energy, and preventing water pollution.

All Green Week events from March 8-13 will be FREE to the entire family. Events will include a Citywide environmental youth art contest, film festival, "Green" story time at the Library, a beach cleanup, an electronic waste collection event, and a Green Fair. The following is information about the week's activities and how you can be a part of Green Oceanside's Green Week 2010.

On Tuesday, March 9, the first-ever "Green Oceanside Environmental Film Festival" will be held at the Civic Center Community Rooms adjacent to the Library in downtown Oceanside. The feature film for the evening will be the movie "Tapped." From the producers of "Who Killed the Electric Car," "Tapped" is a timely documentary that provides a behind-the-scenes look into the unregulated and unseen world of the water bottle industry. The film cites the large amount of waste and pollution that is generated from single-use water bottles. Also at the Film Festival, we will be showcasing some of the audio-visual entries and top finalist poster entries as part of the environmental youth art contest.

The Citywide Environmental Youth Art Contest invites Oceanside Unified School District students (K-12) to identify what "Green Oceanside" means to them. Students will submit either an audio-visual entry or a poster entry that incorporates the following concepts: Reduce, Reuse, Recycle, Water Conservation, Pollution Prevention and/or Clean Earth. Due to the success of last year's Bookmark Art Contest, the City has expanded this year's contest. It will include the audio-visual portion and provide an opportunity for top finalists to have their entries showcased at our Film Festival. Please join us at this year's Green Fair to support our local eco-artists and cast a crowd's choice vote at the Film Festival. The awards ceremony at the Green Fair will honor top winners of each age group, as well as teachers/classrooms of winning contestants.

The Civic Center Library will also be having environment-themed story times throughout Green Week. These will be held at 10:30 am on Tuesday, Wednesday, and Thursday. On Friday, environmental story time will be held at 10:30 am at the Mission Branch Library

continued on page 34

Green Week Events March 8-13

Environmental Youth Art Contest. Posters and Audio Visual entries due March 3, 2010

Green Story Time at Libraries. March 9-12, 10:30 am

Environmental Film Festival. Featuring "Tapped" and top finalists of Youth Art Contest, March 9

Beach Cleanup. Hosted by Coastkeeper, March 13, 9:00 am to 12:00 pm, South side of pier

Green Fair at Beach Amphitheatre. March 13, 11:00 am-4:00 pm

FREE E-waste Recycling Event. Next to Beach Amphitheatre. March 13, 11:00 am-4:00 pm

For specific event details log onto www.ci.oceanside.ca.us and look under "What Is New."

Tips for Draining Your Pool

With summer right around the corner, many Oceanside residents will be readying their swimming pools in anticipation of the season's heat. As part of this process, some pool owners like to drain old swimming pool water which has been sitting all winter. Though this task is not necessary, please follow these tips to properly drain pool water in order to protect the water resources in your community.

Whenever possible, it is best to drain your pool onto your landscape. This recycles your pool water, conserving irrigation water, and avoids the environmental risks associated with draining your pool to the street. Before draining your pool water to the street or to your landscape, be sure to follow the guidelines outlined below.

While draining pool water to the street is a common practice, it can prove harmful to the environment if the pool owner does not properly plan and prepare prior to draining. When pool water is drained to the street, it can carry other pollutants such as oil, grease, sediment, bacteria and trash, down the storm drain and into the nearest creek, river, or the Pacific Ocean. Swimming pool water also often contains harmful additives and chemicals. If the water is not properly treated to remove these pollutants prior to draining, they can cause further damage to the health of our waterways and to the plants and animals that live there.

For chlorine pools, chlorine levels must be lowered to less than 1 part per million prior to draining. This can be done naturally, by simply allowing the pool water to sit in the sun for a minimum of three days. Alternatively, de-chlorination kits can be purchased at home supply stores at a very reasonable cost. These kits have the tools you need to reach the appropriate chlorine levels before draining your pool to the curb and gutter.

Some people have salt water pool systems which may be preferred due to the lower amount of chemicals required for their operation. However, these pools must not be drained to the storm drain system due to their high salt content relative to the fresh water systems they drain into. Total dissolved solids (TDS) must be below 500 parts per million in order to drain into the street.

"Green pools," which are pools in which algae is growing, also must not be drained to the street. In these instances, algae must first be killed and removed. This is usually done by chlorinating the swimming pool until the algae is gone, then lowering chlorine to the allowable discharge level. Cartridge filters or diatomaceous earth (DE) filters should be rinsed onto a pervious surface such as landscaped areas or grass. While DE is actually beneficial in your garden, it can build up in storm drains and clog them. DE residues can be scooped up and simply thrown in the trash or put to use fending off worms in your garden.

For more information on how to reach acceptable chemical and TDS levels, call your pool maintenance specialist. For questions about safe pool drainage, call the City of Oceanside's Urban Runoff Hotline at 760-435-5800

By taking these simple steps, you can enjoy your pool, stay cool, and protect the environment, too!

Green Week, from page 33

location. Educating our children at an early age is the key to environmental preservation for generations to come.

Green Week 2010 will have its grand finale on March 13 at a Beach Cleanup and our 2nd Annual Green Fair. Coastkeeper will be hosting this beach cleanup to be held from 9:00 am to 12:00 pm. The registration site for this Beach Cleanup event will be on the south side of the pier. Interested groups can log onto www.sdcoastkeeper.org. Help us keep our beaches beautiful and clean.

After the Beach Cleanup we invite the entire family to join us at the 2nd Annual Green Fair, from 11:00 am to 4:00 pm at the Oceanside Amphitheater located at the south side of the pier. The Fair will have environmentally related booths that will be distributing information and free green goodies to all who attend. Also confirmed for the event will be the Oceanside High School Jazz Band, which will be performing in the afternoon. Top Finalists and Grand Prize winners of the Environmental Youth Art Contest will be announced at the Award Ceremony in the afternoon at the Amphitheater. Please join us in celebrating our creative youth as they shed light on environmental conservation and preservation.

Another highlight of the Green Fair will be the opportunity to drop off your Electronic Waste to recycle for free. This is courtesy of E-World Recyclers. The drop-off event will be held from 11:00 am to 4:00 pm, at Betty's Parking Lot, immediately adjacent to the Green Fair at the Amphitheater.

For more information about Green Week 2010 events and the Green Fair log onto the City of Oceanside Web site at www.ci.oceanside.ca.us and look under "What's New" for a link to Green Week 2010. Thank you for being a part of Green Oceanside.

Recycle Your Used Motor Oil

Did you know that used motor oil never wears out? It just gets dirty and can be recycled, cleaned, and used again. Recycling used motor oil conserves a natural resource (oil) and is good for the environment too! Motor oil poured onto the ground or into storm drains, or tossed into trash cans (even in a sealed container) can contaminate and pollute the soil, groundwater, streams, rivers, and beaches (and it's illegal!). Recycling your used motor oil reduces this pollution threat. When you take your used oil to a certified center for recycling, you are protecting the environment, conserving a valuable resource, and getting paid for it. That's a winning combination!

You can do your part by simply following these steps:

- Remove the oil filter from your car and drain it for at least 24 hours; then place it in a plastic bag
- Drain the oil from your car into a clear, reusable plastic container
- If you can't take the oil and filter to the recycling center right away, store it away from children and pets
- Most State-certified recycling centers take up to 5 gallons of used oil per person, per day
- Don't leave oil behind if the center is closed for the day

For more information please call the Recycling Hotline at 760-435-5015, and find out when the next free used oil filter exchange event will be held in Oceanside.

The following are certified collection centers in Oceanside (*Accepts Filters)

Auto Zone
3975 Mission Blvd
Oceanside, CA 92054
(760) 967-7395

*Oceanside Tires & Service Center
499 A College Blvd.
Oceanside, CA 92057
(760) 940-1100

*Oceanside Automotive
4998 College Blvd.
Oceanside, CA 92057
(760) 414-9850

*Kragen/O'Reilly Auto Parts
502 Oceanside Blvd.
Oceanside, CA 92054
(760) 722-1878

*Econo Lube N'Tune
844 Plaza Dr. .
Oceanside, CA 92056
(760) 945-1105

*Jiffy Lube
1970 Oceanside Blvd.
Oceanside, CA 92054
(760) 439-5050

*Kragen/O'Reilly Auto Parts
3840 Plaza Dr..
Oceanside, CA 92056
(760) 940-1808

*Kragen/O'Reilly Auto Parts
3661 W. Mission Ave
Oceanside, CA 92054
(760) 439-3101

*Jiffy Lube
4106 Oceanside Blvd.
Oceanside, CA 92056
(760) 643-9268

Ecology Autoparts
1030 Airport Rd.
Oceanside, CA 92054
(760) 757-7772

*Pep Boys
2041 Mission Ave.
Oceanside, CA 92054
(760) 721-1608

*Pep Boys
3752 Plaza Dr.
Oceanside, CA 92056
(760) 724-2726

Ocean Hills Country Club 'Woodchucks' Collect Cans for a Worthy Cause

About three years ago, the "Woodchucks," a club of about 100 woodworking members residing at Ocean Hills Country Club, started an annual practice of making beautiful wooden toys for Marine Corps families at Camp Pendleton for Christmas. In addition to the toys they make in their wood shop, they also collect toys purchased from other residents, and then donate all of the toys collected at Ocean Hills Country Club to families at Camp Pendleton in need.

The Woodchucks help subsidize their charitable campaign by collecting aluminum cans in their community, and then using the funds collected from recycling them towards the cause. Recently, Mr. Mellman, who is a member of the Woodchucks, contacted the City of Oceanside's Solid Waste & Recycling Division, interested in joining the Cash for Cans program and adopting a recycling container for their cause. The program provides recycling containers to nonprofit organizations, schools, clubs, etc., in Oceanside, in order to assist with the collection of recyclable beverage containers for fundraising needs. The Solid Waste & Recycling Division was happy to deliver a large recycling container to help support the cause without delay. It gives City employees great pride to be a part of something so special that is also a worthy cause. As a bonus, more recycling gets done in their community because of their charity work.

For more information about how you can join the City of Oceanside's Cash for Cans Program, please call the Recycling Hotline at 435-5015.

Five of our popular Cash for Cans containers

2010 River, Creek and Beach Cleanup Events

All Oceanside residents are encouraged to actively participate in the protection and improvement of our waterways.

Every year, approximately 10 million tons of plastic ends up in the ocean as plastic bags, water bottles, toys, and many, many other items that have been thrown away or littered. Much of this plastic is swept out to sea on ocean currents, some if which is eventually trapped in the Pacific Ocean Gyre, which has now become a swirling mass of trash larger than the state of Texas. Plastic particles are mistaken for food by small fish, then work their way up the food chain right back to us. As a coastal city, Oceanside residents can be instrumental in reducing the influx of trash into the ocean.

The City of Oceanside's Clean Water Program would like to encourage all Oceanside residents to actively participate in the protection and improvement of our waterways. We have a number of opportunities for everyone to get outdoors and get involved with river, creek, and beach cleanup events scheduled throughout the year. By participating in these cleanup events you are taking one step toward reducing trash that has the potential to be part of the Pacific Ocean Gyre.

There are four events scheduled for 2010, all from 9:00 am until noon except for the event on July 5th, from 8:00 am until 11:00 am. For the river and beach cleanups there is always at least one registration site at the beach and multiple river or creek sites as well. For the July 5th cleanup there is just one registration site, at the beach. All volunteers are provided with cleanup supplies and rewarded with refreshments, community service hours, and one free give-away item. Please wear closed-toe shoes, hats and sunscreen. We look forward to seeing you there!

April 24 • Saturday
Creek to Bay Cleanup Event • Loma Alta Creek

July 5 • Monday
Morning After Mess • Oceanside Harbor and beaches

September 25 • Saturday
California Coastal Cleanup Day • Buena Vista Creek

November 6 • Saturday
San Luis Rey River Clean Up Event

For more information and event details, call 760-435-5536. To keep up to date on cleanups and other ways that you can keep our local waterways free from pollution, please sign up for Oceanside Clean Water Program Event notifications by entering your e-mail address on the City of Oceanside's Clean Water Program Web site, events page: www.oceansidecleanwaterprogram.org/signup.asp.

Recycling Mandate: In 1989 the California legislature passed Assembly Bill 939 (AB 939), requiring all California cities to divert a minimum of 50% from landfill disposal. Additionally, the Oceanside City Code (chapter 13) requires that you properly dispose of solid waste and recycling materials.

For more information, please call our
Recycling Hotline
(760) 435-5015

City of Oceanside
Solid Waste &
Recycling Division
300 N. Coast Hwy.
Oceanside, CA 92054

HABLAMOS ESPAÑOL

CITY OF OCEANSIDE RECYCLING SERVICES

GOT RECYCLING? Need recycling containers?

The City of Oceanside offers various recycling services whether you are a resident or business owner. Please review the following information and determine which recycling service works best for you. Recycling helps preserve our natural resources, and it's easy! If you need recycling containers or more information about multifamily or commercial recycling, mail the bottom portion with your utility bill or send to: City of Oceanside, Attn: Jessica Moen, 4927 Oceanside Blvd., Oceanside, CA 92056.

WHAT CAN BE RECYCLED?

ALUMINUM, BI METAL & TIN CANS
- Aluminum beverage cans
- Tin Cans (i.e., canned vegetables and soups)

GLASS
- Beverage bottles (ALL colors)
- Food jars (i.e., sauces & pickles)

NO DISHES, DRINKING GLASSES, LIGHT BULBS, WINDOWS OR MIRRORS.

PLASTIC (NO plastic bags!)
- Plastic beverage containers with recycling symbols numbered 1—7
- Empty bottles from household cleaners with recycling symbols numbered 1—7 (i.e., shampoo, laundry detergent, window cleaners, etc.)

Any CRV Material (California Redemption Value)

PAPER AND CARDBOARD
- Newspaper, mixed paper (all colors), cardboard
- Catalogs, magazines, telephone books, shoe boxes, cereal boxes (remove liners)
- Any color computer/fax paper, junk mail, paper bags and flattened cardboard

GREEN WASTE

Yard waste such as grass clippings, leaves, weeds and other prunings. Prunings and branches must be tied into 4-foot sections in bundles not to exceed 18 inches in diameter. DO NOT use wire for bundles. Please use string. Place green waste cart on the curb by 6 a.m. on your regular trash day. **DO NOT USE PLASTIC BAGS. Green waste in plastic bags will not be collected.**

If you need information regarding Recycling or Solid Waste Services, please call the Recycling Hotline at (760) 435-5015 or visit www.ci.oceanside.ca.us

SINGLE FAMILY / CURBSIDE PICK-UP

- Curbside Recycling Crates:
  - Glass, Plastics 1—7, Cans & Bi-metals (NO PLASTIC BAGS)
  - Mixed paper (all colors), junk mail, catalogs, magazines, flattened cardboard & newspapers (REMOVE PLASTIC BAGS)
- Green Waste carts (NO PLASTIC BAGS FOR GREEN WASTE)
- Curbside solid waste cans, sealed trash bags or wheeled cart
- Large item pick-up (by appointment): Call WM at 760-439-2824

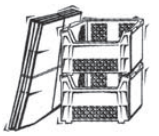

NO PLASTIC BAGS IN RECYCLING CONTAINERS PLEASE
(Plastic Bags may be recycled at local grocery or discount retail stores)

Sharps, E-Waste, Light Bulbs, Batteries & Household Hazardous Waste (HHW) can be taken to the WM Recycling Center at 2880 Industry St. (HHW requires an appt.; call 760-439-2824.)

MULTIFAMILY (Condos, Apartments, etc.)

- Wheeled Recycling Carts (96 gallon):
  - Glass, Plastics 1—7, Cans & Bi-metals (NO PLASTIC BAGS)
  - Mixed paper (all colors), junk mail, catalogs, magazines, flattened cardboard & newspapers (REMOVE PLASTIC BAGS)
  - Green Waste (NO PLASTIC BAGS)
- 3 Yard Bins
  - Solid Waste (large green bins)
  - Flattened cardboard (large white bins)
  - Green Waste (NO PLASTIC BAGS)

NO PLASTIC BAGS IN RECYCLING CONTAINERS PLEASE
(Plastic Bags may be recycled at local grocery or discount retail stores)

Sharps, E-Waste, Light Bulbs, Batteries & Household Hazardous Waste (HHW) can be taken to the WM Recycling Center at 2880 Industry St. (HHW requires an appt.; call 760-439-2824.)

COMMERCIAL / INDUSTRIAL / SMALL BUSINESS

- Wheeled Recycling Carts (96 gallon):
  - Glass, Plastics 1—7, Cans & Bi-metals (NO PLASTIC BAGS)
  - Mixed Paper (all colors), junk mail, catalogs, magazines, flattened cardboard & newspapers (REMOVE PLASTIC BAGS)
  - Green Waste (NO PLASTIC BAGS)
- 3 & 4 Yard Bins:
  - Trash collection
  - Recyclables: same as mentioned above (for larger quantities)

NO PLASTIC BAGS IN RECYCLING CONTAINERS PLEASE

Please fill out, detach and return the bottom portion with your utility bill or mail to: City of Oceanside, Attn: Jessica Moen, 4927 Oceanside Blvd., Oceanside, CA 92056

CITY OF OCEANSIDE SOLID WASTE & RECYCLING SERVICES

☐ Curbside Single-Family Recycling Service
Containers needed:
- ☐ Glass / Plastics / Cans Crate
- ☐ Mixed paper / Newspaper / Cardboard Crate
- ☐ Green Waste Cart
- ☐ Program Instructions

☐ MultiFamily (Condos, Apartments, etc.) Recycling Service
☐ Commercial / Industrial / Small Business Recycling Service

DATE _____

NAME/BUSINESS ADDRESS

_____

_____

ZIP CODE

_____

PHONE NUMBER (_____)_____-_____

REDUCE. REUSE. RECYCLE. Funded by the California Department of Conservation.

CaliforniaFIRST Program

Financing of renewable energy, energy-efficiency and water-efficiency improvements for residential, commercial, and industrial properties.

The City of Oceanside adopted a resolution in January 2010 to allow the financing of renewable energy, energy-efficiency and water-efficiency improvements on private property, called the CaliforniaFIRST Program. If approved by the State Public Utilities Commission, the CaliforniaFIRST program would allow property owners to finance renewable energy, energy-efficiency and water-efficiency improvements on their properties.

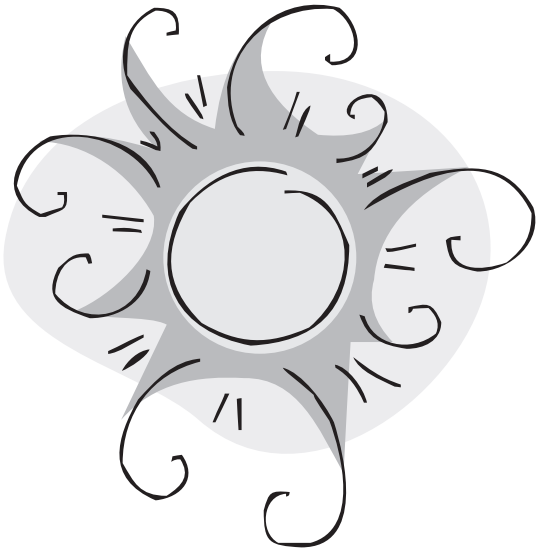

If a property owner chooses to participate, the improvements will be financed by the issuance of bonds by California Communities, which is a joint powers authority sponsored by the League of California Cities and the California State Association of Counties.

The member agencies of California Communities include all 58 counties and more than 400 other local agencies throughout California, including the City of Oceanside. California Communities will levy "contractual assessments" on the owner's property to repay the bonds issued to finance the improvements on that property.

The benefits to the property owner include:

- Only property owners who choose to participate in the program will have assessments imposed on their property.
- In today's economic environment, there may not be attractive private enterprise alternatives for property owners to finance renewable energy/energy-efficiency/water-efficiency improvements.
- Even if there were private enterprise alternatives, most private loans are due on sale of the benefited property, which makes it difficult for property owners to match the life of the repayment obligation with the useful life of the financed improvements. Under the CaliforniaFIRST Program, the assessment obligation will transfer with the property upon sale.
- The property owner can choose to pay off the assessments at any time, subject to applicable prepayment penalties.
- By virtue of regional aggregation provided by the CaliforniaFIRST Program, small projects, both residential and commercial, can have access to the municipal bond market, which may produce a lower borrowing cost.

The benefits to the City include:

- As in conventional assessment financing, the City is not obligated to repay the bonds issued by California Communities or to pay the assessments levied on the participating properties.
- California Communities handles all assessment administration, bond issuance and bond administration functions. A participating city can provide financing of renewable energy, energy-efficiency and water-efficiency improvements to property owners through the CaliforniaFIRST Program — thereby meeting its political and environmental goals - while committing virtually no staff time to administer the program.

This program is very important as a catalyst for installation of energy-and water-efficiency improvements. The upfront costs of making residential, commercial, or industrial improvements of this kind, along with the fact that most commercial loans for that purpose are due on the sale of the property, prevents many property owners from installing these improvements.

The City of Oceanside is anxious to begin implementing components of the CaliforniaFIRST Program in Oceanside but cannot move forward until approval by the State Public Utilities Commission. A program status update will be published in the next issue of the *Oceanside Magazine*. For more information about this program, please contact the Water Utilities Department at (760) 435-5800.

Save Our Water Releases:

10 Water-Saving Tips for 2010

The water-saving tips include:

1. **Fix those drips.** A dripping faucet can waste 20 gallons of water a day, while a leaking toilet can waste 90,000 gallons in a month.
2. **Shorten that shower.** Cut five minutes off your shower time and save up to 25 gallons a day.
3. **Slow the flow.** Inexpensive faucet aerators can save gallons of water per person every day.
4. **Turn off the tap.** When brushing your teeth or shaving, turn off the tap and save eight gallons a day.
5. **Go low-flow.** Replace your old showerhead with a low-flow model and cut your water use by 20% or more every time you shower.
6. **Update those appliances.** When it's time to update your appliances, go for a front-loading washing machine and a water-efficient dishwasher. You'll save both water and energy.
7. **Replace that water-guzzling toilet.** If possible, replace your old toilet with a modern, water-efficient one and use about half the water per flush.
8. **Sweep up savings.** Instead of hosing your driveway or sidewalk, use a broom.
9. **Think beyond the lawn.** Choose plants appropriate to your climate when you landscape. They'll need much less water.
10. **Irrigate like a pro.** Your lawn probably needs less water than you think. And your sidewalk doesn't need any.

The complete list, along with other water-saving tips and resources, can be found at http://www.saveourh2o.org/index.cfm/what-you-can-do/10-water-saving-tips-for-2010/.

The Save Our Water program, launched in April 2009, aims to provide ongoing education for Californians about the State's water challenges and encourage greater water conservation. You can also visit www.SaveWaterOceanside.com.

New Water Conservation Web Site

The City of Oceanside now has a Web site dedicated to water conservation. Log onto www.SaveWaterOceanside.com to learn about:

- Rebates for water-saving devices
- Tips, facts, and resources to save water
- How to report water wasters
- Water-wise gardening and plants
- Water news and events
- Free landscaping workshops
- Drought Response Conservation Ordinance
- Free residential programs to help save water indoors and outdoors

Water Awareness Month Poster Contest

May is California's Water Awareness Month! Therefore, each year the City of Oceanside joins other agencies in North San Diego County in sponsoring the Fourth Grade Water Awareness Poster Contest. This year's theme is "Water is Life" and all fourth grade students are being asked to imagine and illustrate the importance of water and how it affects their lives. Students are encouraged to use their water conservation knowledge to creatively share their ideas on how to use water wisely.

The contest is for fourth grade students in the Oceanside Unified School District area. The top three winning entries will be awarded a special prize, have their posters published in the North County Water Agencies' 2011 calendar, and receive recognition by the City. The calendars are distributed throughout the county. To participate, obtain an official entry form, or for information about the contest, please visit www.SaveWaterOceanside.com or contact Oceanside Water Utilities Department at 435-5800. The deadline for entries is March 31, 2010.

Sustainable Communities and Organics Management "Building Healthy Communities — from the Ground Up"

In Oceanside, what was once considered waste has become a resource. The **El Corazon Compost Facility** takes in landscape trimmings both from residential curbside pick-up and from local landscapers. The grass and brush is then put through the composting or mulching process to create finished products that benefit local soils by reducing the need for chemical fertilizers and pesticides. The facility processes over 100 tons of yard trimmings a day from Oceanside's residential pick-up alone; that's over 25% of the entire waste stream in the City of Oceanside! Not only does the facility create useful products, but it helps the City reduce costs through proper waste and resource management. Locally recycling organics offers an opportunity to conserve natural resources, purify local waters, reduce greenhouse gas emissions, and generate Green Jobs in our local economy.

Oceanside residents benefit with access to high quality organic compost and mulches at no cost. This special **Give-Away Program** was the first of its kind in California. Residents can shovel compost and mulch for use in their home gardens and landscapes Monday – Saturday. On the 1st and 3rd Saturdays of the month, they can have their truck or trailer filled for a small $2 fee.

Using compost and mulch jump-starts plants and improves success rates, which save money in labor and replacement costs. They provide slow-release nutrients, organics to increase water-holding capacity, and beneficial microbes to build healthy soils and plants. This also allows us to minimize the application of nitrogen fertilizers, reduce our potable water usage, and benefit from soil and plant health.

Total Erosion Control, Inc., a sister company to Agri Service, Inc., offers a line of products that utilize the composted organics from the El Corazon Compost Facility and a patented filter sock process. These "compost socks" provide watershed quality with proven superiority by binding petro-chemicals, nutrients, and heavy metals for cleaner runoff. The City of Oceanside has implemented compost socks as part of its erosion control strategy for the trail extension work along the San Luis Rey River.

The El Corazon Compost Facility is located at 3210 Oceanside Boulevard and is open from 7:30 am-5:00 pm Monday-Friday and 8:00 am-4:00 pm on Saturday. The facility phone number is 760-439-9920 if you have any questions.

CITY OF OCEANSIDE
WATER UTILITIES DEPARTMENT

DATE: December 13, 2010

RE: STATEMENT OF CERTIFICATION
CITY OF OCEANSIDE JURISDICTIONAL URMP

I certify under penalty of law that the Illicit Discharge, Detection, and Elimination Section (Section 7) of the Jurisdictional Urban Runoff Management Program Annual Report for 2009-2010 was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

M. A. Lahsaiezadeh

SIGNATURE:

NAME: Mo Lahsaiezadeh
TITLE: Clean Water Program Coordinator
JURISDICTION: City of Oceanside

300 NORTH COAST HIGHWAY • OCEANSIDE, CA 92054 • TELEPHONE 760-435-5800 • FAX 760-435-5814

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7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

This section documents the activities conducted by the City of Oceanside during the 2009-2010 reporting period to manage illicit discharges and meet the requirements of Sections D.4 and J.3.a.(3)(f) of the 2007 Municipal Permit. A directory of the subsections within the Municipal Permit Section J.3.a. and corresponding Annual Report compliance sections are listed in Table 7-1.

Table 7-1. Order No. R9-2007-0001 Compliance Summary.

J.3.a(3)(f)i. MS4 corrections and the Dry Weather Field Screening Map	See Section 7.7.3 and Attachment 7-A of this Annual Report
J.3.a(3)(f)ii. Reporting of all dry weather field screening and analytical monitoring results	See Section 7.4.3 and Attachment 7-A of this Annual Report
J.3.a(3)(f)iii. Dry weather consultant reports	N/A
J.3.a(3)(f)iv. Brief description of any other investigations and follow-up activities	See Section 7.5 of this Annual Report
J.3.a(3)(f)v. and vi. Number and descriptions of IC/IDs identified and eliminated	See Section 7.4.3, Section 7.5, and Attachment 7-A of this Annual Report
J.3.a(3)(f)vii. Spills to the MS4	See Section 7.3.3 of this Annual Report
J.3.a(3)(f)viii. Activities to prevent spills from entering the MS4	See Section 7.3.1 of this Annual Report
J.3.a(3)(f)ix. Notification of sewage spills	See Section 7.3.2 of this Annual Report
J.3.a(3)(f)x. Hotline calls	See Section 7.2 of this Annual Report
J.3.a(3)(f)xi. Public reporting of illicit discharges	See Section 7.2 and Section 8 of this Annual Report
J.3.a(3)(f)xii. Violations and enforcement actions	See Section 7.5 of this Annual Report
J.3.a(3)(f)xiii. Description of notable activities	See Section 7.1 of this Annual Report

7.1 Introduction

Illicit connections and illicit discharges (IC/IDs) can result in unauthorized discharges of pollutants to MS4s. IC/IDs can be defined as the following:

- An ***illicit connection*** is a connection that conveys an illicit discharge to the MS4 (pipe, drain, channel, catch basin, grated inlet, junction box, etc.).
- An ***illicit discharge*** is the act of disposing of any pollutant that is prohibited by the City either intentionally or unintentionally to the MS4. This does not include non-storm water exemptions and discharges resulting from emergency fire fighting activities. A list of non-prohibited, non-storm water discharges is provided in Chapter 3 of the City's JURMP Update (2007).

The main objective of the illicit discharge, detection, and elimination (IDDE) component of the City's storm water program is to seek and eliminate IC/IDs into the MS4. Eliminating IC/IDs helps minimize potentially negative impacts of human activities on receiving water bodies.

The City uses its municipal personnel to assist in actively seeking, identifying, and reporting IC/IDs during their daily activities. Detection and prevention of IC/IDs is achieved by:

- Operating a public complaint hotline,
- Inspecting local businesses and municipal facilities,
- Conducting dry weather field screening and analytical monitoring,
- Conducting MS4 monitoring through the regional program (detail presented in Regional Report),
- Conducting Coastal Storm Drain Monitoring Program (detail presented in Regional Report),
- Maintaining municipal MS4 and sewer systems, and
- Educating the local community.

The City investigates, inspects, and follows-up on every IC/ID that is reported or detected, to identify the source or sources of the discharge. Voluntary compliance and escalating enforcement mechanisms are implemented to immediately eliminate the IC/ID once the source has been identified when appropriate. Educational materials are distributed to help prevent future IC/ID occurrences.

Notable Activities

To reduce the risk of sanitary sewer overflows, the City Sewer Department installed one additional sewer monitoring alarm system in a high priority area. This is in addition to the five that were installed during the previous reporting year. These systems continuously monitor water level and at a predetermined high water mark, an alarm is sent to on-duty personnel to inspect the line to prevent a spill.

Also during this reporting year, the Clean Water Program within the City moved forward with implementation of data tracking system to stream line and track hotline calls and inspector responses. The Water and Sewer Divisions of the Water Utilities Department have been using GBA Master Series Software, a maintenance management tool, and gradually rolling it into the various programs for several years. The Clean Water Program purchased additional licenses and hired a consultant to help modify the software for use with the NPDES permit. The Clean Water Program began using GBA to track NPDES facility inspections, incoming hotline storm water complaint calls, and use with the jurisdictional monitoring program. This annual report is the first report utilizing the new technology. The Clean Water Program will be reviewing the effectiveness of the new tracking tool and will continue to implement improvements in the use or the system in the coming years.

7.2 Public Reporting of Illicit Discharges and Connections

To aid the process of identifying illicit discharges, the City encourages the public and City staff to report illicit discharges and connections. A public complaint hotline specifically for urban runoff has been developed, and is currently operated by the Water Utilities Department:

Oceanside Urban Runoff Hotline
(760) 435-5800

The hotline is answered during business hours by City staff. Bilingual staff is available to answer calls by Spanish speakers. For after hours, holidays and weekend calls, callers needing

immediate assistance are referred to the Oceanside Police and/or Fire Departments and the remaining are prompted to leave a message. Maintenance and operations staff are also trained to promptly refer potential storm water violations observed in the field to the Hotline (details of municipal staff training are in Section 10.2).

IDDE related public complaints may also be reported directly to Code Enforcement:

Code Enforcement
(760) 435-3944

Once a complaint is received, it is logged into a Code Enforcement database for documentation and tracking purposes. The complaint is then forwarded to either a Clean Water Program Inspector or a Code Enforcement Officer. City personnel investigate every complaint logged through the hotline to determine if pollutants are in fact being discharged to the MS4. If investigators find evidence of a violation or other IC/ID, every effort is made to find the responsible party and inform them of the complaint or issue a violation.

A total of 259 public complaints were received through the Urban Runoff Hotline during the 2009-2010 reporting period compared to 98 calls in the previous reporting period. In addition to hotline calls from the public there were 137 referrals to the Clean Water Program from City staff. All storm water related calls to the City (396) either from residents or City staff referrals were entered into the GBA database system for tracking. Table 7-2 provides a summary of the nature of the calls received via the Hotline or by City staff referral. Of the calls received through the Hotline, nine (9) were referred directly to Code Enforcement for immediate investigation. Figure 7-1 is a summary of the nature of calls made to the Urban Runoff Hotline.

Code Enforcement reported 112 cases for storm water/Clean Water Program complaints; the exact same number from the previous reporting period. Of these 112 cases, 87 of these cases did detect an IC/ID and 86 of these were eliminated. The majority (57) of the cases were complaints of spills or dumping. Additional detail for Code Enforcement cases are provided in Section 7.5.

The Urban Runoff Hotline is publicized in the *Oceanside Community Magazine*, the City's website, the Clean Water Program website, on a monthly local TV program, KOCT Oceanside Update, informational literature for public distribution, and at local community events and meetings. In addition, education to the public stresses the importance of reporting discharges and describes the critical role that the public plays in the identification and elimination of urban runoff pollution related problems.

Table 7-2. Urban Runoff Hotline calls and City Staff Referral Summary.

Department	Problem	City Employee Referral	Public Hotline	Total
Clean Water Program	Follow-up	0	16	16
	Leak Repair	0	2	2
	Other	1	11	12
	Over-irrigation/Broken irrigation	125	112	237
	Power Washing	0	8	8
	Spills/Dumping	2	24	26
	Street/Driveway Washing	1	12	13
	Unidentified water runoff	6	48	54
	Watering Time	0	5	5
	Yard waste/Landscape Activity	1	13	14
	Total For CWP	136	251	**387**
Referred from the Hotline Directly to Code Enforcement	Leak Repair	0	1	1
	Other	0	1	1
	Power Washing	0	1	1
	Spills/Dumping	0	5	5
	Street/Driveway Washing	1	0	1
	Total for CE	1	8	**9**

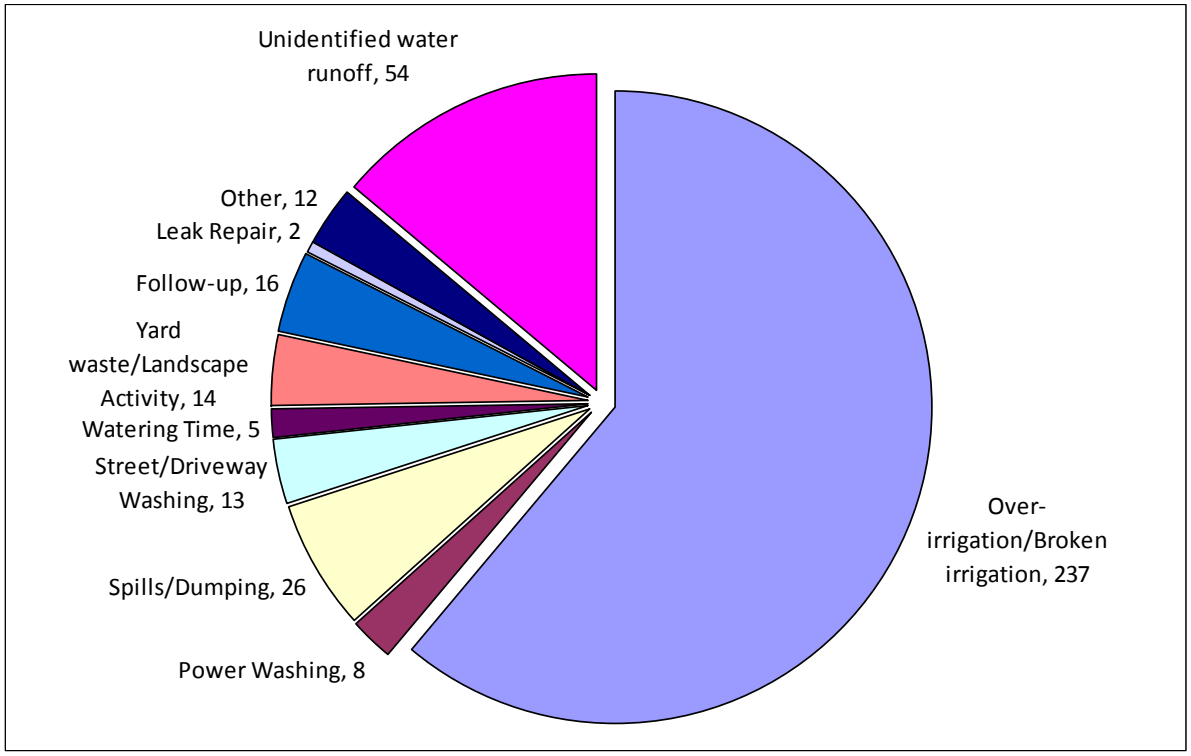

Figure 7-1. Summary of Urban Runoff Hotline Calls during the 2009-2010 Reporting Year.

7.3 Spill Reporting, Response, and Prevention

The City implements spill reporting, spill response, and spill prevention mechanisms to prevent, respond to, contain, and clean up all sewage and other spills that discharge to its MS4 from any source.

7.3.1 Spill Prevention

7.3.1.1 Sanitary Sewers

The City's preventive and corrective sewer maintenance programs consist of a variety of components provided for the operation, maintenance, repair and replacement of sewer mains, manholes, and pump stations. The programs provide for the routine monitoring, inspection, cleaning, and related maintenance of all components of the collection system in order to reduce the potential of sanitary sewer overflows (SSO) and other structural failures. Potential problems are noted and maintenance schedules adjusted accordingly. If necessary, repairs are initiated by City maintenance crews. Larger more complex projects are referred for inclusion in the capitol improvement projects (CIP) process for planning, design, and construction.

When system malfunctions do occur, such as SSO main stoppages, electrical outages, and mechanical breakdowns, the cause of the problem is investigated and analyzed. Maintenance schedules are then adjusted accordingly. If appropriate, the infrastructure component is referred for repair or replacement by maintenance crews.

Cleaning schedules are analyzed and adjusted for proper scheduling. During the 2009-10 reporting year, 236 miles (1,244,858 feet) of sanitary sewer were cleaned.

In order to ensure that the sanitary sewer lines do not leak, the city has a long term plan to slip line the sewer pipes through the City. During this reporting period 3,481 feed of City sewer lines were slip lines and an additional 53 manholes were rehabilitated.

A total of six SmartCover sewer monitoring and alarm systems are being used within the City in high priority areas. These systems continuously monitor water level and at a pre-determined high water marks an alarm is sent to on-duty personnel to inspect the line to prevent a spill. Five were installed during the previous reporting year and one was installed during the current 2009-10 reporting year.

Private Sewer Laterals and Septic Systems

The City requires that private sewer laterals and septic systems be designed and operated in accordance to industry standards. The City also requires the proper maintenance of these facilities in order to avoid spills, breakages, and failures.

7.3.1.2 Other Spills

The City prevents spills from private businesses and residents through required BMPs, education, and enforcement of relevant regulations for the storage and usage of hazardous materials.

The City also received funds from the California Integrated Waste Management Board to establish a permanent household hazardous waste (HHW) collection facility for its residents. The City's objective was to encourage a convenient, proper disposal and collection of HHW materials for its residents. This facility is currently open Monday through Friday for used oil, paint, and antifreeze disposal and every Saturday for collection of the following materials:

- Aerosols
- All purpose cleaners
- Ammonia
- Antifreeze
- Automobile cleaners
- Barbecue lighter fluid
- Batteries
- Brake fluid
- Chlorine bleach
- Detergents
- Disinfectants
- Drain opener
- Furniture polish
- Gasoline
- Glass cleaner
- Herbicides
- Mothballs
- Motor oil
- Oven cleaner
- Paint
- Paint thinner
- Pesticides
- Rubber cement
- Rug/upholstery cleaner
- Scouring powder
- Silver polish
- Toilet bowl cleaner
- Transmission fluid
- Tube and tile cleaner
- Turpentine varnish
- Water sealant
- Wood finish

The HHW collection facility is periodically promoted by the City through the *Oceanside Community Magazine*, the *North County Times* newspaper, on the Clean Water Program website and at local community events and meetings where literature is distributed. There is also literature available to the public at the City offices.

During the 2009-10 reporting period, 3,356 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 154.75 tons of hazardous materials (including universal waste) during the reporting period. An additional 126 tons of E-waste was recycled in the same reporting year. In addition, as part of Oceanside Green Week (see Section 9.1.6 for more details) a free E-Waste drop-off event, open to the public, was held simultaneously during the Green Fair. Thirteen thousand one hundred eleven (13,111) additional pounds of E-waste were collected during this event.

The City provides information to the public on used motor oil recycling and identifies the local state certified collection centers in the City. Furthermore, as part of the City's collection program, a 1,500-gallon used oil collection receptacle is provided at the City's harbor for use by harbor slip renters. During FY 2009-10, 1,583 gallons of oil were recycled along with two 55-gallon barrel of used oil filters.

7.3.1.3 Prevention of Fugitive Trash

In addition to spills from sewer overflows or hazardous waste dumping activities, the City is also addressing the prevention of trash getting into our receiving waters.

As discussed in detail in Section 4 of the 2009-10 Annual Report, 571 miles of public streets in the City of Oceanside are swept at least monthly. During this reporting year, 28,954 curb miles were swept. Last year's estimate of 1,142 curb miles (length of total street miles in the City doubled) was an underestimation compared to the actual tracked amount during the 2009-2010 reporting period by the City's Public Works Department. Street sweeping activities resulted in

the collection of over 2,093 tons of waste from public streets and parking lots during this reporting year. In addition, a total of 3,433 structures (catch basins, manholes, inlets, outlets, etc.) were inspected and cleaned during the reporting period. A total of 54.52 tons of waste were removed from the structures, as well as 840 tons of waste from open channels and drain pipes. The waste generally consisted of trash, green waste, dirt, sand, roots, solids, rocks, and silt.

Trash Trap at the Oceanside Municipal Golf Course

In addition to standard maintenance, staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. City staff installed a trash trap downstream of this priority residential area and upstream of Pilgrim Creek in the open channel that parallels the driving range at the municipal golf course. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. This trash trap was installed in March 2009 (Figure 7-2). During the 2009-10 reporting year, 180 pounds of trash and organic debris were captured and removed from the trash trap.

Trash trap immediately after installation

Trash trap with debris

Figure 7-2. Trash BMP installed at the Oceanside Municipal Golf Course.

Cigarette Butt Boxes in the Harbor and at the Beach

The Harbor and Beaches Maintenance Division has contracted with a cigarette butt service company to install and service cigarette butt receptacles in the harbor, pier and beach areas. The receptacle selected is made by Butts Only Box and is designed to prevent rain and irrigation water from contacting the butts until collection. This prevents leaching of toxic compounds into sensitive habitats.

The company has several models to choose from, two of which have been installed in the City of Oceanside. The trail model is used along high foot traffic areas adjacent to the beach and harbor sidewalks. There are a total of 17 of these installed in the coastal areas of Oceanside: 11 in the harbor, 2 on the pier, and 4 on The Strand (the road that parallels a large section of beach). Two boat models were installed on two sport fishing boats docked in the harbor (Figure 7-3).

Figure 7-3. Butts Only Box cigarette trash receptacles installed in beach areas and sport fishing boats.

Cigarette Butt Services, a sister company to Butts Only Boxes, services the boxes. The City of Oceanside subscribes to this service and the company provides a monthly statement that includes the number of butts removed and the weight of the debris.

During this reporting period a total of 73,439 cigarette butts were collected from the 17 trail models and two sport fishing models. The weight of this debris totaled 37.48 pounds.

The City plans to continue servicing boxes currently in place. The City will also seek additional funding to cover costs for purchasing, installation and servicing of additional receptacles within the jurisdiction.

7.3.2 Spill Reporting

7.3.2.1 Public Reporting of Spills

Spills entering the MS4 may be discovered during routine maintenance activities, scheduled monitoring, or observed and reported to the City by citizens. Citizens may use the Urban Runoff Hotline, Code Enforcement, or Oceanside Police Department phone numbers to report spills. Any reports by the public or City staff are referred to the Wastewater Division of the Water Utilities Department.

7.3.2.2 City Spill Reporting

The City complies with the sewage spill reporting requirements outlined in Table 7-3 and detailed in Section 9 of the JURMP Update:

Table 7-3. Summary of Sewage Spill Reporting Requirements

Spill Volume	Criteria	Agency Receiving Report	Reporting Period
Any	Spills to waters of the State	SWRCB online RWQCB DEH	3 days (initial) 24 hours Immediate
Any	Municipal Permit non-compliance threatening human or environmental health	RWQCB SWRCB online	24 hours verbal and 5 days written 3 days (initial)
Any	Mitigated spills (absorbed, cleaned up, or captured)	DEH	24 hours
Any	Unmitigated spills to areas with potential public contact	DEH	Immediate
Any	Unmitigated spills to areas without potential public contact	DEH	24 hours
>1000 gallons	Anywhere	OES RWQCB DEH SWRCB online	Immediate 24 hours Immediate 3 days (initial)

County of San Diego Department of Environmental Health (DEH)
State Office of Emergency Services (OES)
Regional Water Quality Control Board (RWQCB)
State Water Resources Control Board (SWRCB)

7.3.3 Spill Response

Responses to sewer spills are conducted in accordance to the City's Sewer Overflow Response Plan and the responsible agencies are summarized in Table 7-4.

Table 7-4. Responsible Agency for Sewage Spills

Source	Responsible Agency
Leaks and spills from publicly owned collection system	City of Oceanside
Private residence (failing septic systems)	County DEH
Any spill reaching MS4	City of Oceanside

During the 2009-2010 reporting period, the City responded to ten sewer spills, four of which were privately owned. This is the least number of sewer spills from City owned lines within recent years. Three of the City's six spills reached the receiving water. New SmartCover alarm systems have aided in the decrease of sewer spills in high priority areas. The SmartCover sewer monitoring systems continuously monitor water level and at a predetermined high water mark, an alarm is sent to on-duty personnel to inspect the line to prevent a spill. In addition, the Clean Water Program and the Wastewater Division of the Water Utilities Department continued the public outreach effort initiated in the last reporting year for residential contribution of grease in the sanitary sewer. As a result, there were fewer spills this year with grease as the primary cause. The remaining causes of spills were primarily because of debris or roots. Notifications of

these spills are submitted to the Regional Water Quality Control Board (RWQCB) through quarterly reports. A summary of SSO overflows during 2009-2010 is presented in Table 7-5.

Responses to other spills are conducted by the Fire Department or qualified personnel in the Public Works Department, as appropriate to the situation. Both small and large spills are handled following HAZMAT Incident Response Team (HIRT) Policies and Procedures as issued by the Unified San Diego County Emergency Services Organization. The Oceanside Fire Department responded to all of the non-sewer related spills during the 2009-2010 permit year. A summary of the 15 spills is presented in Table 7-6. The majority of the spills were small fuel and oil spills from leaking vehicles.

Table 7-5. Summary of SSO Overflows during the 2009-2010 Fiscal Year.

Overflow Start Date Time	Overflow End Date Time	Total Overflow Volume (gal)	Overflow Volume Released to Environment (gal)	Overflow Cause	Did the SSO Enter a Storm Drain?	Did the SSO Reach Other Surface Waters?	Initial Secondary Receiving Waters	Prevention Corrective Measures
7/5/2009 10:30	7/5/2009 11:30	180	140	Private lateral - cause unknown	Yes	Yes	Libby Lake	Condo's were requested to put main lateral on maintenance schedule
8/6/2009 13:00	8/6/2009 21:00	3,120	3,120	Private line break	No	Yes	Pacific Ocean	Plummer made corrective repairs to broken lateral
8/11/2009 9:45	8/11/2009 10:35	100	20	Private grease interceptor failed	Yes	No	N/A	Restaurant cited and meeting has been arranged to discuss maintenance schedule.
9/3/2009 7:20	9/3/2009 8:00	600	200	Unknown blockage	Yes	Yes	Buena Vista Creek	Line was cleaned the day before and line was inspected visually and televised after.
12/10/2009 12:05	12/10/2009 12:35	150	150	Roots	Yes	No	N/A	CCTV crew is scheduled to televise and find root infiltration and severity.
12/12/2009 17:07	12/12/2009 17:55	240	240	Roots	Yes	Yes	Buena Vista Creek	Scheduled CCTV Inspection for root infiltration.
1/21/2010 11:20	1/21/2010 13:50	22,500	22,500	Rain caused capacity issues	No	No	N/A	All upstream lines will be inspected during and after storm to note significant changes in flow.
1/26/2010 7:00	1/26/2010 7:01	50	1	Biosolid spill from trailer	Yes	No	N/A	Better management of biosolids' condition in trailer
2/20/10 9:40	2/20/10 10:05	625	625	Grease Stoppage in city main	Yes	Yes	Golf Course Pond	Jetted line and dropped 100 pounds of chlorine tablets upstream.
5/20/10 unknown time	5/20/10 11:45	500	250	Stoppage in private lateral	Yes	No	N/A	Owner was cited

Table 7-6. Summary of Non-SSO Spills during the 2009-2010 Fiscal Year.

Fire Dept. Arrival Date Time	Last Unit Cleared Date Time	Incident Number	Substance reported spilled	Amount of spilled substance	Primary Action Taken	Secondary Action Taken	Description
7/29/2009 9:31	7/29/2009 9:39	0009218	Transmission and motor oil	4 Quarts	Applied absorbent to spill		Traffic accident caused transmission and engine oil leak
8/8/2009 10:01	8/8/2009 10:04	0009705	Oil	Unknown	Established safe area		Older truck had minor oil leak that went into storm drain when sprinkler from up the street caused some runoff
8/26/2009 20:52	8/26/2009 21:17	0010559	Oil	2 quarts	HazMat spill control and confinement	Applied absorbent to spill	Motorcycle had leaked oil in the street
9/7/2009 13:31	9/7/2009 14:00	0011131	Oil	Unknown	HazMat spill control and confinement	Owner was given instructions on further mitigation	Truck had used oil in bed of their truck that leaked
11/7/2009 19:39	11/7/2009 19:53	0013928	Oil and other combustible liquid spill	Unknown	HazMat spill control and confinement	Applied absorbent to spill	Car ran over engine block in the center of road causing a transmission and engine oil leak
11/8/2009 0:58	11/8/2009 1:05	0013935	Fuel	Unknown	Container was placed to collect leaking fuel	Applied absorbent to spill and was removed	Car collision caused a small gas leak from one of the vehicles
11/8/2009 13:04	11/8/2009 14:01	0013953	Fuel	Unknown	Plugged leak in vehicle	Spread absorbent and removed material	City car with a fuel leak
12/1/2009 15:36	12/1/2009 15:42	0014959	Fuel spill	2-3 quarts	Home owner was directed to clean up and dispose of fuel		Small fuel spill at a residential home
1/19/2010 9:50	1/19/2010 10:24	0000964	Diesel Fuel/Fuel oil	2,000-3,000 sq ft of sheen on water	OES Warning Center was notified		Fuel from a boat leaked into the Oceanside harbor.

Fire Dept. Arrival Date Time	Last Unit Cleared Date Time	Incident Number	Substance reported spilled	Amount of spilled substance	Primary Action Taken	Secondary Action Taken	Description
1/30/2010 10:54	1/30/2010 11:01	0001488	Oil	10 quarts	Applied absorbent to spill	Public works was notified to remove materials left in street	Oil was found to be running down the street along the curb line
2/14/2010 16:43	2/14/2010 17:19	0002252	Fuel	5 gallons	Applied absorbent to spill and was removed		Two vehicles in parking lot found with leaks caused by running over aluminum in street
2/17/2010 14:04	2/17/2010 14:06	0002381	Oil	1 quart	Investigate	Applied absorbent to spill	Small oil spill in street
3/19/2010 7:17	3/19/2009 7:38	0003735	Fuel	1 Gallon	Leak was stopped	Applied absorbent to spill and was removed	School bus had fuel leak
5/3/2010 10:16	5/3/2010 10:26	0005700	Oil	Unknown	Identify and Analyze Hazardous Material	Decontaminate area	Truck had leaked oil into gutter but was mitigated before arrival. Did not reach storm drain
6/16/2010 21:32	6/16/2010 22:14	0007652	Oil	1 Gallon	Called SDG&E HazMat	Notified Storm Water Runoff	SDG&E truck leaked oil into storm drain

7.4 Urban Runoff Monitoring

The Urban Runoff Monitoring Program includes MS4 Outfall Monitoring, Source Identification Monitoring, and the Dry Weather Field Screening and Analytical Monitoring Program.

7.4.1 MS4 Outfall Monitoring

In accordance with RWQCB Order R9-2007-0001, the Copermittees developed the MS4 Outfall Monitoring Program Work Plan through a collaborative effort in 2007–2008 and submitted the final Work Plan on June 25, 2008 (County of San Diego Copermittees, 2008). The MS4 Outfall Monitoring Work Plan is the framework for random dry and random wet monitoring and the targeted dry and targeted wet monitoring. The collection and analysis of water samples discharging from MS4 outfalls to receiving waters during all four types of sampling will be used to address Core Management Question 3:

> What is the relative urban runoff contribution to the receiving water problem(s)?

Random sampling was conducted to address the following subquestions identified in the MS4 Outfall Work Plan:

1. What are the characteristics of the discharges from MS4 outfalls in regard to high-priority pollutants?

2. Are constituent loadings changing over time?

Targeted sampling was conducted to address the following subquestions:

1. Which of the targeted MS4 outfalls have the greatest pollutant loading?

2. Are the pollutant loadings decreasing over time from these MS4 outfalls?

The City of Oceanside is responsible for targeted dry weather sampling at 13 sites throughout Oceanside. A regional water quality monitoring contractor is hired by the Copermittees for the collection of the random dry, random wet and targeted wet weather samples throughout San Diego County.

In FY 2009-10, the City of Oceanside visited the 13 targeted dry weather monitoring sites. The one Buena Vista site was flowing; four of the five Loma Alta sites were flowing; and two of the eight San Luis Rey River sites were flowing. One site in Loma Alta was not accessible due to construction of a box culvert around the original sampling area. Table 7-7 presents the targeted dry weather monitoring sites visited during the 2009-10 fiscal year and the priority pollutants analyzed for each site. A contractor for the Copermittees conducted the random dry, random wet, and targeted wet weather sampling throughout San Diego County.

Table 7-7. FY 2009-10 City of Oceanside Targeted Dry Weather Monitoring Sites.

StationID	Sample Date	WaterFlow	FlowRate (gpm)	Analytes Monitored
Carlsbad Watersheds				
B002	05/24/10	Flowing	4	Bacteria, TDS, TSS, Total Nitrogen-N, Total Phosphorus-P
L009	05/13/10	Flowing	112	Bacteria, TDS, Total Nitrogen-N, Total Phosphorus-P
L027	05/12/10	Flowing	130	
L054	05/13/10	Not Accessible		
L111	05/24/10	Flowing	4	
San Luis Rey River Watershed				
S006	05/13/10	Flowing	1	Bacteria, Chlorides, TDS, Total Nitrogen-N, Total Phosphorus-P
S075	05/24/10	Dry	0	
S106	06/16/10	Dry	0	
S107	06/16/10	Dry	0	
S116	06/16/10	Dry	0	
S119	06/16/10	Dry	0	
S122	06/16/10	Flowing	1	
S123	06/16/10	Dry	0	

The results of all three types of monitoring are presented in detail in Section 12 and each WMA Section of the 2009-10 Regional Urban Runoff Monitoring Report. At this time, additional data is still needed to properly characterize the pollutant discharges from MS4 outfalls in each WMA. It is anticipated that more meaningful spatial comparisons can be made as a more robust data set is developed and will be presented in the Long Term Effectiveness Assessment (LTEA) 5-year document.

7.4.2 Source Identification Monitoring

The Source Identification Program is a requirement of San Diego RWQCB Order R9-2007-0001 (Section B.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program). The Copermittees provided a framework for source identification studies entitled "Urban Runoff Source Identification Program in San Diego County Watersheds" (County of San Diego Copermittees, 2008). This framework described the conceptual monitoring to be conducted over the course of the Permit. The original framework stated two sites would be monitored: one from the City of Carlsbad and one from the City of La Mesa. The City of Carlsbad study area was changed to the City of Del Mar in 2008-09. The La Mesa study area was monitored in the previous fiscal year, but changed to a site within the City of Oceanside for 2009-10. For the 2009-10 Monitoring Season, the workplan entitled *2009–2010 Source Identification Monitoring Wet Weather Residential Area Runoff Assessment* was designed to assess wet weather runoff from residential areas at one site within each jurisdiction.

The primary goal of this study was to collect residential land use discharge data for application to regional assessments since residential land uses comprise the most common land uses in urban areas. This study will build on the information collected from the dry weather residential source identification study conducted during the 2008–09 monitoring season. A secondary goal of collecting the data was to compare data collected in San Diego County to data collected from an

intensive residential land use runoff study under a Proposition 50 Grant in Orange and Sacramento Counties (Haver, 2007[1]).

In accordance with the Permit, the Copermittees developed the 2009–10 Source Identification Workplan with respect to collecting data useful in addressing the goals and management questions listed in the Permit. The Permit provided flexibility in developing the Source Identification Study and the questions were tailored to fit the Copermittees' needs. More detailed information about the 2009-10 Source Identification Monitoring is presented in Section 12 of the 2009-10 Regional Urban Runoff Monitoring Report. A summary of the study questions and results to date are presented below:

1. What are the flow volumes during storm conditions from single-family residences?

Flow volumes varied considerably during storm events both between storm events and between the two study locations. Flow volumes in Del Mar ranged from 1,011 cf to 17,353 cf over the three storms. Oceanside flow volumes were generally much greater than those at Del Mar, due in part to the larger size of the watershed and its higher percentage of impervious area. Flow volumes in Oceanside ranged from 1,697 cf during the January 26, 2010 storm to 103,501 cf during the January 18, 2010 storm. Rainfall during the three monitored storms ranged from 0.13 inches in both Del Mar and Oceanside on January 26, 2010 to 1.28 inches in Del Mar on December 7, 2009 and to 1.20 inches in Oceanside on January 18, 2010.

2. What is the water quality and load of constituents of wet weather flows from single-family residences?

Del Mar had five constituents with results above benchmarks for wet weather in more than 50% of the samples (high priority constituents), whereas Oceanside had two high priority constituents. Both fecal coliforms and bifenthrin were categorized as high priority constituents in both Del Mar and Oceanside. Turbidity, dissolved copper, and cyfluthrin were the other high priority constituents in Del Mar. Medium priority constituents, which were analytes above benchmarks in greater than 25% to less than or equal to 50% of samples, included TSS, L-cyhalothrin, and permethrin in Del Mar, and turbidity and L-cyhalothrin in Oceanside. Malathion was the only low priority constituent in Del Mar, whereas in Oceanside, TDS, cyfluthrin, dissolved copper, and dissolved zinc were low priority constituents. These results indicate that TSS, turbidity, synthetic pyrethroids, dissolved metals, and the pesticide malathion may occur in concentrations above benchmarks in single family residential land use areas.

Wet weather flow at the Oceanside location (198,338 cf) was more than six times higher than the flow in Del Mar. Wet weather loads per acre for the Oceanside drainage area, however, were not

[1] The results of the Proposition 50 Nonpoint Source Pollution Control Program Grant entitled "Evaluating Best Management Practices (BMPs) Effectiveness to Reduce Volumes of Runoff and Improve the Quality of Runoff from Urban Environments" is being conducted by Dr. Darren Haver of the UC Davis. Dr. Haver is coordinating the collection of wet and dry samples from four residential communities in Sacramento and four residential communities in Orange County. Work currently is suspended at the request of the State of California.

substantially higher in Oceanside than in Del Mar for most of the constituents measured. Dissolved metal loads per acre for copper and zinc were approximately 3 to 4 orders of magnitude greater in Del Mar than in Oceanside.

3. How does the pollutant loading compare between dry weather nuisance flows and wet weather storm flows?

To answer this question, wet and dry weather loads collected from the same single family residential area in Del Mar were compared. Overall, the dry weather loads from 3 months of nuisance flow were considerably lower in comparison to wet weather loads from the three storm events for most constituents. General chemistry and nutrient loads were one to two orders of magnitude greater during wet weather than during dry weather, whereas synthetic pyrethroid loads of bifenthrin, cyfluthrin, danitol, esfenvalerate, fluvalinate, L-cyhalothrin, and permethrin were approximately two to seven orders of magnitude greater during wet weather than during dry weather. Similarly, bacteria loads for fecal coliforms, enterococcus, total coliforms, and *E. coli* were approximately two orders of magnitude greater during wet weather than during dry weather. The load of malathion (an organophosphorus pesticide) was greater during wet weather, as it was measured in two of the three storm events but was not detected during dry weather. Metals loads for dissolved copper and dissolved zinc were approximately two orders of magnitude greater during wet weather than during dry weather. Use of copper and zinc in roofing materials and copper in automobile brake pads may be potential sources of these dissolved metals in runoff during wet weather.

7.4.3 Dry Weather Field Screening and Analytical Monitoring

The requirements of the current Dry Weather Monitoring Program component in the 2007 Municipal Permit (Order 2007-001) built upon the requirements of the previous Municipal Permit (Order 2001-01). The dry weather analytical and field screening monitoring components consist of 1) field observations (site description and qualitative observations), 2) field screening monitoring (testing of sample while at site and flow estimation), and 3) analytical monitoring on a subset of sites (performing further tests of sample later at a laboratory). The current Municipal Permit also added a trash assessment component and now requires follow-up investigations to be conducted within two business days of receipt of results.

The City's complete 2010 Dry Weather Monitoring Report is provided as Attachment 7-A to this submission. This report includes:

- Reporting of all dry weather field screening and analytical monitoring results.
- Dry weather field screening and analytical monitoring report.
- Corrections for the Dry Weather Monitoring stations.
- The number and brief description of any IC/IDs found and eliminated during Dry Weather Monitoring.
- Description of activities conducted to manage IC/IDs found during Dry Weather Monitoring.

Below is a summary of the findings.

Dry weather monitoring is conducted at each site at least once between May 1st and September 30th each year. During the 2010 monitoring season, 67 primary sites were visited. Two of those

sites were inaccessible and an additional eleven were dry. Twenty six alternate sites were visited. Nineteen of the ponded or flowing sites had additional analysis completed in the lab for chemistry and microbiology (28%).

When field measurements and/or laboratory analysis showed an exceedance of established action levels, the site was revisited within two business days to confirm the initial results. When follow-up sampling confirms continued exceedance of action levels, the City conducted further investigations to identify the source of the exceedance.

Seventeen sites required confirmation for an initial field screening exceedance. The most common exceedance was for MBAS and ammonia. Of the 17 initial exceedances, only four sites required an IC/ID investigation. Of the 19 sites chosen for laboratory analysis, there were no exceedances for chemistry results. Microbiology analysis resulted in five exceedances for total coliforms, three for fecal coliforms, and four for Enterococcus. Only one site with a continued total coliform and fecal coliform exceedance required an upstream investigation.

During the 2010 Dry Weather season it was determined that, historically, orthophosphate (PO_4) results have been compared to an action level for orthophosphate as phosphorus (PO_4-P). This has therefore resulted in more historical exceedances, and an overly conservative valuation, since the results for orthophosphate are higher than the results for orthophosphate-P. The historical comparison of action level exceedances from 2007 through 2010 in the Dry Weather Monitoring Report has corrected the number of exceedances as best as possible and the reporting reflects the conversion.

In the historical comparison, both ammonia and MBAS initial exceedances have decreased since the beginning of the permit cycle. The primary reason for the decrease in ammonia exceedances is likely due to equipment change and using the best technology for the water being sampled to avoid false positives. The number of bacteria exceedances has remained relatively stable throughout this permit cycle.

Follow-up IC/ID investigations were conducted at sites with ongoing exceedances. The 2010 monitoring year resulted in a much reduced list of follow-ups necessary and resulted in the least number of initial exceedances and the least number of IC/ID investigations required in the past four years. Of the 17 initial field screening exceedances, only four potential IC/ID investigations were required and only one was suspected to be an actual illegal discharge. That one discharge was not considered eliminated because the discharge ceased before the source could be found. The remaining exceedances were due to equipment malfunction or ponding of water. The pH exceedance at S110 was likely an equipment malfunction. The ammonia exceedance at site B024 was likely due to the ponding of water with decaying organic matter. The MBAS exceedance at B023 was likely due to interference with the test kit method, as the laboratory result was below action levels. Finally, at A016, the increased turbid flow while sampling was likely due residential vehicle washing and had stopped by the time sampling was concluded. Details for each follow-up are provided in Attachment 7-A.

The 2010 Dry Weather Monitoring Program is the third year for assessing the amount and extent of trash at each dry weather monitoring location. Approximately 94% of the sites were either

"optimal", "suboptimal", or "marginal" and did not require the detailed trash evaluation, compared to 73% during the last monitoring year. This is a large reduction in sites that were considered submarginal and poor in all watersheds. The majority of the trash found in the sites that required further trash evaluation was either food packaging or household waste. These items were most commonly at the sites via littering or from upstream. And, the most common source of the food packaging and household wastes are households and transients. These are consistent results with the previous trash assessment year.

Water conservation and urban runoff outreach, as well as beach and creek clean-ups continues year-round as the City continues the effort to detect and eliminate illicit discharges to the storm drain system.

To address MS4 inaccuracies and update the GIS layer of the MS4 map, the City purchased two Trimble GeoXH units in FY 2008-09 to be used collaboratively between Public Works, Engineering, and the Water Utilities Departments. One of the many uses of these units is to verify the accuracy of the MS4 map and relay the information gathered in the field to the Engineering Department to update the GIS layer. During the 2008-09 fiscal year, the City created the data dictionary needed to collect consistent and necessary data for the storm drain system update and field tested the units. During this fiscal year, in April 2010, the Clean Water Program and Engineering Department solicited the assistance of one unpaid 30-hour per week student volunteer to assist with water quality monitoring and data gathering for support of the Dry Weather Program and MS4 map update. Throughout the summer of 2010, the volunteer was assisting with field monitoring and began mapping the MS4s. The completion date for the project is estimated for FY 2012-13.

7.5 Follow-up and Enforcement

The City implements and enforces its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Enforcement mechanisms are implemented on an escalating scale to enforce compliance, and follow-up inspections are conducted to ensure compliance has been achieved.

The administrative and judicial tools listed below are used as necessary to eliminate IC/IDs:

- Written administrative warnings and citations
- Stop work notices
- Public nuisance abatement
- Denial or revocation of permits
- Civil and/or Criminal Court Actions
- Additional penalties or fines

The nature of the City's enforcement approach is determined on a case-by-case basis and is based on factors such as the severity of the violation, the threat to human or environmental health, site-specific circumstances, and past compliance history.

A total of 112 Code Enforcement cases potentially related to the requirements of the Municipal Permit were reported, the exact same number of cases as in the previous reporting year. Of these, 87 cases did detect an IC/ID and 86 were eliminated within the fiscal year. The one case

that is still open without resolution involves an issue about illegally draining a washing machine and other violations on the property. The IC/ID was resolved and eliminated on 11/29/2010, but the case remains open pending other, non-storm water related issues. Table 7-8 presents a summary of the IC/ID investigations by Code Enforcement officers initiated during the 2009-2010 reporting year. The summary includes a brief description and the number of follow-ups and enforcement actions taken to achieve compliance. This year, there were no additional investigations by the Clean Water Program that were not a part of the Dry Weather Program or presented in the Code Enforcement cases.

Table 7-8. Summary of 2009/10 IC/ID Investigation by Code Enforcement Officers

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	IC ID Identified	IC ID Eliminated	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Admin-istrative Warning	Admin-istrative Citations	Criminal Citation	Case Closed?
009-0094	COMMERCIAL	1/14/2009	MONITORING HABITAT RESTORATION	Received inquiry via Mo concerning proper BMP installation on property. This inquiry has to do with the restoration of habitat. No further issues at this time. Property management and planning have taken the lead on this property. Will reopen if enforcement is needed	N	N/A	1/12/2009	3/10/2010	12	1	0	0	0	0	0	0	0	Yes
009-1775	COMMERCIAL	5/20/2009	STORM WATER COMPLIANCE	Site visit. PC to Property manager about proper maintenance / cleaning of dumpster enclosure areas and grease barrels. Manager stated that they will address the issue. Site visit. Property in compliance.	N	N/A	5/27/2009	10/8/2009	14	0	3	0	0	0	1	5	0	Yes
009-2258	COMMERCIAL	7/1/2009	ILLEGAL DISCHARGE	Site visit. Observed major spill from grease trap system. Spill affected entire parking lot and drive through as cars and people were allowed to drive/walk through the area. Absorbent placed on spill to soak up oil/grease. Spoke with day manager (Rosa) about situation. She stated that spill happened Sunday afternoon (2 days prior). A cleaning business was contacted for cleanup but did not show. Directed manager to get a cleanup crew on site immediately and to rope off affected area to reduce tracking. Issued Admin Warning cite 12383 to manager for discharge. Main operations manager(Ernesto) arrived shortly after. Remained on site until clean up crew arrived to provide proper instruction. Site visit. Business still not in compliance. Required a second cleaning of area.Site visit. Business in compliance at this time.	Y	Y	6/30/2009	7/8/2009	3	0	0	0	0	0	1	0	0	Yes
009-2275	RESIDENTIAL	7/2/2009	DRAINAGE COURSE BLOCKED W / VEGETATION	Received email from M.Sabelis with photos attached dated 6-19-09 requesting notification be sent to this address for drainage course maintenance. Drainage course letter sent to PO with photos and GIS map showing area of concern. Site visit, drainage not cleared AdMin Warning 14035 sent to PO with photos and GIS map showing area of concern.	Y	Y	7/1/2009	9/14/2009	3	0	0	0	1	0	1	0	0	Yes
009-2284	COMMERCIAL	7/6/2009	SEWAGE RUUNING DOWNHILL	Site visit spoke to manger at Roberto's pointed out problem. manager stated will call plumber. PC to Prop Mgmt informed of problem. Will be meeting Prop mgr on-site 7-8-09 to discuss other issues that were found regarding practices of other businesses in same center. PC states plumber was on-site and made corrections.	Y	Y	7/7/2009	7/7/2009	1	0	2	0	0	0	0	0	0	Yes
009-2371	RESIDENTIAL	7/8/2009	SEWER SPILL INTO LIBBY LAKE	Received copy of spill report from Sewer collections dept. Ad min warning 14025 sent to property management for HOA. Regarding sewage spill into Libby lake. PC to prop mgmt informing of cite being sent and requested educating occupants about depositing oils and grease into sinks and sewer system.	Y	Y	7/7/2009	7/13/2009	1	0	1	0	0	0	1	0	0	Yes
009-2409	RESIDENTIAL	7/14/2009	OVERWATERING FRIONT YARD	Email to CWP Inspectors requesting making a site visit and educate PO on drought restrictions. PC to RP informing of action being taken. PC to RP states problem appears to be resolved. Will call back if needed.	Y	Y	7/16/2009	7/30/2009	0	0	2	0	0	0	0	0	0	Yes
009-2451	RESIDENTIAL	7/16/2009	SEWAGE SPILLING	Received email from J.Hass RWQCB regarding sewer spill on 7-14-09 at approx 5:20PM. site visit, problem appeared to be resolved. Spoke to a man who claimed to be prop manager stated he received a call about 9:30PM on 7-14-09 called out a plumber and had line cleared by about 11:00PM. PC to RP left 2 messages no return PC. PC to J.Hass informed of findings. PC from J.Hass asking for some clarification on spill. Emailed GIS photo showing area of concern.	Y	Y	7/16/2009	7/23/2009	1	0	5	0	0	0	0	0	0	Yes
009-2472	RESIDENTIAL	7/22/2009	OIL RUNNING DOWN THE STREET	Site visit photo taken spoke to PO states is aware oil is not to be disposed in this manner it was accidently placed for collection. Started immediately cleaning up. Site visit Oil cleaned up as good as possible. Some staining left on sidewalk	Y	Y	7/22/2009	7/29/2009	2	0	0	0	0	0	0	0	0	Yes
009-2527	RESIDENTIAL	7/29/2009	BROW DITCH MAINTENANCE	Site visit. Observed blocked brow ditches. Drafted and sent notice to PO regarding maintenance of brow ditches. Message from RP stating work is completed.	Y	Y	7/27/2009	10/23/2009	1	0	3	0	1	0	0	0	0	Yes
009-2528	RESIDENTIAL	7/29/2009	BROW DITCH MAINTENANCE	Site visit. Observed Blocked drainage channel. Drafted and sent notice to PO regarding clean up and maintenance of brow ditches.PC from /to PO. Explained requirements.PC to/from PO. Work has been completed.	Y	Y	7/27/2009	9/10/2009	2	0	1	0	1	0	0	0	0	Yes
009-2529	RESIDENTIAL	7/29/2009	BROW DITCH MAINTENANCE	Site visit. Observed water and silt discharge coming from hillside behind house through property. Investigated hillside and found blocked drainage ditches. Water discharge was from above property and supply was shut down by Public Works. HOA was contacted for repair of water line. Drafted and sent notice to maintain brow ditches on property. PC from PO stating work has been completed. Site visit. Property in compliance.	Y	Y	7/27/2009	9/10/2009	2	0	1	0	0	0	1	0	0	Yes
009-2543	RESIDENTIAL	7/29/2009	OVERWATERING FRIONT YARD	Site visit, Photo taken, PC to RP states will talk to neighbor and try to resolve issue without city involvement. Will call back if needed.	Y	Y	8/3/2009	8/5/2009	1	0	1	0	0	0	0	0	0	Yes
009-2551	RESIDENTIAL	7/30/2009	VEHICLE LEAKING OIL	Site visit, observed Astro Van lic plate parked in driveway. Spoke to a person that resides at this address states they have received the letter sent to 385 via the PO. Requested vehicle not be parked on city street until oil leak is fixed. Will be resending letter to this address. Letter sent for oil deposit.PC from PO states has received letter and will comply. Has placed absorbent on oil deposit in street and will continue to clean it up to the best of his ability and will not park vehicle on city street until oil leak is fixed.	Y	Y	7/28/2009	8/5/2009	1	0	1	0	1	0	0	0	0	Yes
009-2579	RESIDENTIAL	8/2/2009	OVER WATERING	Drafted and sent notice to PO regarding overwatering and impacting the storm water conveyance system. PC to PO. PO stated that neighbor is constant complainer and that she has checked the irrigation several times. She stated that they will check it again this weekend. This property is vacant at this time. Resent notice to correct address. Site visit. No further issues at this time.	Y	Y	8/5/2009	8/24/2009	1	0	1	0	1	0	0	0	0	Yes
009-2556	COMMERCIAL	8/3/2009	PLUMBING LEAK IN PARKWAY	Site visit, PC to PO informed of water leak. States will contact landscaper and have leak repaired. PC to RP informed of action taken. PC from RP spoke to S.Soto states repair has been made and wants PO name & phone number. Informed S.Soto to give PO name only. Site visit to verify repair made.	Y	Y	8/6/2009	8/13/2009	1	0	3	0	0	0	0	0	0	Yes
009-2658	RESIDENTIAL	8/6/2009	LEAVING GREEN WASTE IN GUTTER	Drafted and sent notice to PO regarding green waste in gutter line. PC from RP. Explained process. PC from PO. Explained violation and solutions. PC from RP stating issue has been resolved.	Y	Y	8/10/2009	8/24/2010	0	0	3	0	1	0	0	0	0	Yes
009-2675	COMMERCIAL	8/10/2009	ILLEGAL DISCHARGE	PC from Water and Sewer Departments about leaking drain line under Ruby's Diner. Made site visit. Observed leak coming from pipe between Ruby's and the collection pit located under the pier. Spoke with workers in area who stated that a plumber was on the way to repair. Per conversation with Perri business has complied with their requests and installation requirements. No further issues at this time.	Y	Y	8/7/2009	12/9/2009	10	1	3	0	0	0	0	3	0	Yes
009-2667	RESIDENTIAL	8/10/2009	OVER WATERING	Drafted and sent notice to PO regarding overwatering and impact to storm drain.Received email from PO stating that irrigation has been repaired. Site visit. No further issues	Y	Y	8/11/2009	8/24/2009	1	0	1	0	1	0	0	0	0	Yes
009-2738	RESIDENTIAL	8/10/2009	VEHICLE LEAKING OIL IN STREET	Site visit. Observed fluid stains under vehicle parked in front of residence. Drafted and sent notice to PO regarding fluids on city streets. Received email from parking regarding a call from RO. Made site visit and vehicle was properly stored in driveway. PC to RO. Explained compliance terms. Told RO that registered vehicle could be stored on street for no more than 24 hours with a metal drip pan in case they needed the driveway for any reason. No further issues at this time.	Y	Y	8/20/2009	9/8/2009	1	0	1	0	1	0	0	0	0	Yes
009-2688	COMMERCIAL	8/11/2009	ILLEGAL DISCHARGE	Site visit, Admin Warning 12385 for illegal discharge	Y	Y	8/11/2009	8/24/2009	2	0	0	0	0	0	1	0	0	Yes

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	IC ID Identified	IC ID Eliminated	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Admin-istrative Warning	Admin-istrative Citations	Criminal Citation	Case Closed?
009-2683	COMMERCIAL	8/11/2009	ILLEGAL DISCHARGE	PC from Water and Sewer Departments. Observed overflowing grease trap into storm drain. County health had already shut down business until cleanup is completed. Spoke with manager who was in process of attempting cleanup and helped prioritize the effort. He stated that lateral line from trap was plugged and caused backup. Spoke with property manager about proper maintenance of system and previous history of business. The business has a history of spills in the past. This has been addressed before in meetings with the owner and district managers.. Issued Admin. Cite 12384(100.00) to PM via mail. Meeting has been scheduled to discuss increased maintenance of system and preventative actionsMeeting with Property Management and city discussed issue at hand and proper ways to prevent future spills. Requiring increase in maintenance of system, Training of employees, and record keeping of tasks and training. Will monitor for 30 days. Site visit. No further issues at this time.	Y	Y	8/11/2009	10/5/2009	1	1	1	0	0	0	0	1	0	Yes
009-3892	RESIDENTIAL	8/11/2009	VEHICLE LEAKING OIL	Site visit. Vehicle GOA. PC to RP. Left message. No further issues	N	N/A	12/23/2009	12/30/2009	1	0	1	0	0	0	0	0	0	Yes
009-2706	RESIDENTIAL	8/13/2009	SLAB LEAK	Site visit. Observed water discharge from property. After discussion with tenants, the PM was contacted to expedite repairs. It is assumed that the house has a slab leak. Tenant stated that repair was requested a month ago. PC from PM stating that temporary repairs are being made. Will monitor. Site visit. No further issues at this time.	Y	Y	8/13/2009	8/26/2009	2	0	1	0	0	0	0	0	0	Yes
009-2715	RESIDENTIAL	8/17/2009	ILLEGAL DISCHARGE	Site visit, Photo taken, no contact with resident. PC from RP left message. Site visit, material still in gutter line. AdMin Warning 14034 sent to PO with photos. PC to RP informing of action taken.	Y	Y	8/17/2009	8/25/2009	2	0	2	0	0	0	1	0	0	Yes
009-2716	COMMERCIAL	8/17/2009	WASHING DOWN SIDEWALK	Site visit, left drought ordinance info w / business card requesting a return PC. PC from BO, informed of complaint and regulations associated with washing sidewalk without recovery and drought restriction.	Y	Y	8/27/2009	8/28/2009	1	0	1	0	0	0	0	0	0	Yes
009-2776	RESIDENTIAL	8/19/2009	OIL IN THE STREET	Site visit. Spoke with occupants about proper storage of leaking vehicles. They stated that 1 car has been repaired and the other one still leaks. Required proper cleanup and storage of leaker. PC from RO stating vehicle has been repaired. Site visit. Vehicle GOA. NO further issues at this time.	Y	Y	8/20/2009	9/22/2009	5	0	2	0	1	0	1	0	0	Yes
009-2759	COMMERCIAL	8/20/2009	GREASE RUNNING INTO STREET	Site visit, area was clean of trash and debris. The pipe RP is referring too is condensation pipe coming from rooftop mechanical area not from grease trap. PC to RP informing of what was found. Will continue to monitor for trash and debris and reopen if necessary	Y	Y	8/20/2009	8/24/2009	1	0	1	0	0	0	0	0	0	Yes
009-2773	RESIDENTIAL	8/24/2009	DUMPING GRAY WATER INTO ALLEY	Site visit with Gene. Observed gray water discharge from property. Possibly from washing machine. Received info from Gene. Drafted and sent notice to PO. Site visit. No discharges from property observed. Spoke with PO and they supplied me with new contact info in case of future issues.	Y	Y	8/20/2009	9/8/2009	2	0	0	0	1	0	0	0	0	Yes
009-2786	RESIDENTIAL	8/25/2009	WASHING PAINT INTO STORM DRAIN	PC from RP. RP states that neighbor is washing paint into the parking lot and storm drain. Site visit. Attempted contact with PO. PO was home but would not answer the door. Issued Admin Warning for immediate clean up and posted on PO's door. PC to RP requesting a call if clean up wasn't done. PC from RP stating clean up did not happen. Site visit. No clean up attempt observed. Was able to contact PO. Explained that if compliance wasn't met by today, a monetary cite would follow. Site visit. No further issues.	Y	Y	8/25/2009	9/8/2009	3	0	3	0	0	0	1	0	0	Yes
009-2796	RESIDENTIAL	8/29/2009	ILLEGAL DISCHARGE	Site visit. Observed leaking vehicle. Spoke with RO. Informed RO to store leaking vehicle on their property until repairs can be made and to take means for cleanup of spilled fluids. Issued Warning Cite 12387 to RO. PC from RO concerning cleanup of fluids. I explained that some staining will remain and that to follow my recommendations for storage and cleanup. Site visit. Vehicle GOA and clean up of fluids as best as possible has been completed. No further issues at this time.	Y	Y	8/26/2009	9/8/2009	2	0	1	0	0	0	1	0	0	Yes
009-2833	RESIDENTIAL	9/2/2009	DRAINAGE COURSE MAINTENANCE	Site visit, made by W.Perdomo RO to code for follow up.Site visit, to verify condition and location of violation. case opened. Drainage course letter sent to PO. PC to RP left message requesting return PC if needed. No further contact from RP.	Y	Y	8/31/2009	11/17/2009	1	0	1	0	1	0	0	0	0	Yes
009-2834	RESIDENTIAL	9/2/2009	DRAINAGE COURSE MAINTENANCE	Site visit, made by W.Perdomo RO to code for follow up. Site visit, to verify condition and location of violation. case opened. Drainage course letter sent to PO. PC from PO states drainage course is cleared has had to put in a screen to prevent his dogs from getting out and coyotes coming into his property. Also states he feels this complaint was generated by neighbor due to a on-going neighbor dispute. Informed PO to keep screened area of drainage course free of debris and obstructions. PO will comply.	Y	Y	8/31/2009	9/11/2009	2	0	1	0	1	0	0	0	0	Yes
009-2854	COMMERCIAL	9/3/2009	BROKEN DRAIN PIPE	Site visit, unable to validate complaint. PC to RP. RP unsure where leak is. Informed RP would keep monitoring try to find the source. Frequent Site visits while in area. No leaks observed.	N	N/A	9/3/2009	11/3/2009	5	0	1	0	0	0	0	0	0	No
009-2943	COMMERCIAL	9/3/2009	STAGNANT WATER IN PARKING LOT	Received complaint PC to water utilities states will look into problem. PC from JR.Fulton on-site, turned off water service. JR spoke to PO who will make necessary repairs to water line. PC to RP left message with action taken.	Y	Y	9/3/2009	9/8/2009	0	0	3	0	0	0	0	0	0	Yes
009-2952	RESIDENTIAL	9/9/2009	DUMPING CHEMICALS INTO STREET	PC to/from RP. RP is a PM for the housing development. PM states that she has had several complaints of dumping late at night, cleaning equipment and tools, and discharging into the storm drain. She is sending photos and video of evidence of this practice. Site visit. Observed staining on driveway and street in front of residence. No other staining observed in area. Drafted and sent Admin Warning Cite 14234 to PO for illegal discharge. PC from/to PO. Left message with occupant to call back. Received photos from neighbors regarding case. Will monitor. PO has yet to call back. Site visit. No evidence of discharge. No further issues at this time.	Y	Y	9/9/2009	10/19/2009	1	0	2	0	0	0	1	0	0	Yes
009-3046	RESIDENTIAL	9/17/2009	ILLEGAL GRADING	Office Visit, from Gabe Santo, received photos of completed corrections. Received email from City of Vista Engineering Division with attached letter from RP regarding what is believed to be illegal grading. Message forwarded to M.Sabelis will make Site visit, to determine if violation exists. Office Visit, from Gabe Santo, received photos of completed corrections.	N	N/A	9/16/2009	12/1/2009	2	1	3	0	0	0	1	0	0	Yes
009-3078	RESIDENTIAL	9/23/2009	WASHING DEBRIS INTO STORMDRAIN	PC to RP. RP explained that neighbor is constantly hosing off driveway and brow ditch causing debris to pile up in front of his home and go into the storm drain. Drafted and sent notice to PO. Site visit. No further issues at this time.	Y	Y	9/23/2009	10/19/2009	1	0	1	0	1	0	0	0	0	Yes
009-3077	RESIDENTIAL	9/24/2009	WORKING ON VEHICLE IN STREET	Site visit. Observed vehicle being worked on in street. Thermostat replacement. Issued Admin Warning cite 12388 to mechanic for illegal discharge and proper clean up. Site visit. Area clean . Vehicle GOA.	Y	Y	9/24/2010	9/25/2010	2	0	0	0	0	0	1	0	0	Yes
009-3147	RESIDENTIAL	9/30/2009	SEWER BACKUP	PC from PWs. Site visit. Observed sewer backup in front of residence. Spoke with tenant. Plumber is on his way. PC to PM. PC from tenant. Plumber has arrived and is repairing problem. Site visit. Issue has been resolved.	Y	Y	9/30/2009	10/1/2009	1	0	2	0	0	0	0	0	0	No

Table 7-8. Summary of 2009/10 IC/ID Investigation by Code Enforcement Officers

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	IC ID Identified	IC ID Eliminated	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Admin-istrative Warning	Admin-istrative Citations	Criminal Citation	Case Closed?
009-3172	RESIDENTIAL	10/5/2009	ILLEGAL DISCHARGE	PC from dispatch requesting response to a complaint of power washing tile roof with no recovery and water flowing down street into storm drain. Site visit, observed contractor power washing roof with sandbags in gutter line with electric pump sucking up runoff and putting in landscape area. There wa a small amount of water leaving sandbag berm. RP on-site with HOA members wanting to find out if this is a violation of city codes. Informed all parties that what he has in place is acceptable.. Issued AdMin Warning 12529 for business license and illegal discharge.	Y	Y	10/2/2009	10/23/2009	1	0	0	0	0	0	1	0	0	Yes
009-3190	RESIDENTIAL	10/6/2009	ILLEGAL DISCHARGE	Site visit while conducting a dry weather sampling detail. Observed drained pond with piping leading to the property's storm drain. Took Photos. Office meeting with Mo and Glen regarding issue. Both stated that they met with management a couple of years ago about the same discharge issue. Management was told not to discharge into storm drain but to use water for irrigation. Drafted and sent Admin Warning Cite 14236 to PO for illegal discharge. PC from/to manager. Explained violation and possible remedies to removing water from pond. I also explained that piping the water into the storm drain system was a direct violation. Site visit. No illegal activity noted. Will monitor. Site visit. No further issues at this time.	Y	Y	9/30/2009	12/8/2009	3	1	1	0	0	0	1	0	0	Yes
009-3336	RESIDENTIAL	10/12/2009	ICE PLANT IN SWAIL	Letter sent, PC to RP mailbox full could not leave message. No further contact from RP. PC to RP mailbox full unable to leave message. Closing case will re-open if necessary.	N	N/A	10/12/2009	2/8/2010	0	0	2	0	1	0	0	0	0	Yes
009-3373	COMMERCIAL	10/12/2009	ILLEGAL DISCHARGE	Site visit, observed workers washing down parking and eating areas. AdMin Warning 12530 issued for illegal discharge and educated workers on drought level 2 restrictions. Have not observed any washing of parking or eating areas.	Y	Y	10/12/2009	10/26/2009	1	0	0	0	0	0	1	0	0	Yes
009-3392	RESIDENTIAL	10/14/2009	GRASS CLIPPING GOING INTO STREET.	Allege letter sent.	Y	Y	10/14/2009	12/4/2009	0	0	0	0	1	0	0	0	0	Yes
009-3392	RESIDENTIAL	10/14/2009	GRASS CLIPPING GOING INTO STREET.	Allege letter sent.	Y	Y	10/14/2009	12/4/2009	0	0	0	0	1	0	0	0	0	Yes
009-3403	RESIDENTIAL	10/15/2009	OIL IN THE STREET	PC to/from RP. RP explained that PO is conducting major automotive on evenings and weekends. Site visit. Observed Honda in front of residence leaking a small amount of oil. No major automotive work observed. Property clean. Drafted and sent notice to PO regarding complaints. OV from PO. Explained issues to PO. PO stated that compliance is not an issue. He also stated for the record that the neighbor complaining has a "nit picking" issue with most people on the block. Site visit. No further issues.	Y	Y	10/22/2009	11/4/2009	2	1	0	0	1	0	0	0	0	Yes
009-3425	RESIDENTIAL	10/20/2009	ILLEGAL DISCHARGE	Site visit. Observed illegal discharge from property. Admin warning Cite 12390 to PO for cleanup. Contractor at residence cleaned out water system resulting in material discharging into gutter line. PC from PO stating cleanup complete. Made site visit. Issue resolved.	Y	Y	10/20/2009	10/20/2009	2	0	1	0	0	0	1	0	0	Yes
009-3428	RESIDENTIAL	10/20/2009	OVER IRRIGATION IMPACTING NEIGHBOR	PC to RP. Drafted and sent notice to PO regarding overwatering and/or impact to neighboring properties. Spoke with PO. PO states that new drainage installed has been working. No further issues.	Y	Y	10/22/2009	1/26/2010	3	0	9	0	0	0	0	0	0	Yes
009-3430	COMMERCIAL	10/21/2009	WASHING CARS IN FRONT OF BUILDING	PC to RP. RP explained that business was washing several vehicles to the rear of the building and that it was impacting the storm drain. Site visit. Spoke with Manager. Required manager to cease all vehicle washing in lot. She stated that she would comply. Will monitor. Site visit. No further issues.	Y	Y	10/23/2009	12/8/2009	2	0	1	0	0	0	0	0	0	Yes
009-3437	RESIDENTIAL	10/21/2009	3 VEHICLES LEAKING OIL	PC to RP requesting more detail. Drafted and sent notice to PO regarding leaking vehicle. PC from occupant. Occupant states that oil was from visiting friends/family and that they cleaned it up. Also, they purchased drip pans for any visitors with leaking vehicles and will have them park in the driveway. Site visit. No further issues at this time.	Y	Y	10/27/2009	11/6/2009	1	0	2	0	1	0	0	0	0	Yes
009-3468	RESIDENTIAL	10/27/2009	VEHICLE LEAKING OIL	Drafted and sent notice to PO regarding leaking vehicle. Site visit. Vehicle GOA	Y	Y	10/28/2009	11/10/2009	1	0	0	0	1	0	0	0	0	Yes
009-3466	RESIDENTIAL	10/27/2009	VEHICLE LEAKING OIL IN STTREET.	Drafted and sent letter to PO regarding leaking vehicle. PC from PO. Explained violation and requirements. Site visit. No further issues.	Y	Y	10/28/2009	11/6/2009	1	0	1	0	1	0	0	0	0	No
009-3465	RESIDENTIAL	10/27/2009	VEHICLE LEAKING OIL ON DRIVEWAY.	Drafted and sent notice to PO regarding leaking vehicle. Site visit. No further issues.	Y	Y	10/28/2009	11/6/2009	1	0	0	0	1	0	0	0	0	Yes
009-3614	RESIDENTIAL	11/6/2009	VEHICLE LEAKING OIL IN STTREET.	Site visit. Spoke with occupant. Vehicle in question was a visiting friend. Vehicle is GOA	Y	Y	11/6/2009	11/10/2009	1	0	0	0	0	0	0	0	0	Yes
009-3644	RESIDENTIAL	11/12/2009	VEHICLE LEAKING OIL IN STTREET.	Site visit. UTL vehicle. Drafted and sent notice to PO. No further issues at this time.	Y	Y	11/16/2009	12/1/2009	1	0	0	0	1	0	0	0	0	Yes
009-3714	RESIDENTIAL	11/19/2009	DUMPLING GREEN WASTE IN CHANNEL	Site visit, Spoke to son of PO who was cleaning up debris when we arrived. Site visit, area cleaned up. PC to RP.	Y	Y	11/19/2009	11/20/2009	2	0	1	0	0	0	0	0	0	Yes
009-3683	RESIDENTIAL	11/19/2009	DRAINING WATER TO NEIGHBORS PROPERTY	Allege letter sent. PC from PO wants a Site visit, to explain problem. Site visit, water is following the natural flow of the property. Recommended they add a piece of drainage pipe to the roof drains to eliminate further problems. PO also states the two parties have been in a neighbor dispute for a couple of months. Informed any further problems would be a civil matter.	N	N/A	2/12/2010	2/15/2010	0	0	1	0	1	0	0	0	0	Yes
009-3719	RESIDENTIAL	11/30/2009	ILLEGAL DISCHARGE	Site visit, w / R.Gremmels, spoke to PO explained SW regs, states he understands and would not have washed out the cement bucket if had realized it was going to leave such a mess. Asked if he would sweep along the gutter line to remove the debris that remains. PO will comply. No phone number for return PC.	Y	Y	11/30/2009	11/30/2009	1	0	0	0	0	0	0	0	0	Yes
009-3855	RESIDENTIAL	12/14/2009	MUD GOING INTO STORM DRAIN	Site visit, spoke with Pastor informed of problem states will take care of. Received second PC form RP states after last nights rain mud is still running into street. Site visit, spoke to maintenance person states will clean up area and install bmp's. Geo logs placed at storm drain by city crew.	Y	Y	12/14/2009	1/21/2010	6	0	0	0	0	0	0	0	0	Yes
009-3908	RESIDENTIAL	12/29/2009	COLLAPSED STORM DRAIN ACCESS	Site visit, met w/ M.Sabelis states was called by HOA to repair damaged storm drain access. M.Sabelis was unaware access's were even there. It appears that sometime after building was built a planter box was put in; plywood was placed over metal grate and filled in with soil for plants. Over the years the soil and moisture had deteriorated the plywood and metal grate collapsing into storm drain access. PC to HOA manager informed this was not city responsibility. HOA manager believes it is because City owns the property. Set up appointment with HOA manager to meet on-site with M.Sabelis, D.Eddow Property management on 12-29-09.Site visit, HOA in process of making necessary repairs. Will reopen if necessary.	N	N/A	12/14/2009	3/24/2010	3	0	2	0	0	0	0	0	0	Yes
CE10-00006	RESIDENTIAL	1/4/2010	VEHICLE LEAKING OIL ON STREET	Spoke to property owner explained storm water regulations regarding leaking vehicles. Requested parking truck (lic 887777J) in driveway with a drip pan untill leak is fixed. PO states will comply. 1/6/2010 Vehicle parked in driveway with drip pan	Y	Y	1/5/2010	1/6/2010	2	0	0	0	0	0	0	0	0	Yes

Table 7-8. Summary of 2009/10 IC/ID Investigation by Code Enforcement Officers

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	IC ID Identified	IC ID Eliminated	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Admin-istrative Warning	Admin-istrative Citations	Criminal Citation	Case Closed?
CE10-00050	CONSTRUCTION SITE	1/14/2010	FAILURE TO COMPLY W/ SWPPP	1-14-10 Site visit, photos taken observed failed BMPs. Admin cite 14040 emailed to and hardcopy sent by regular mail. 1-25-10 Site visit, photos taken observed failed BMPs. Admin cite 14041 emailed to PO and hardcopy sent by regular mail. (1/29/2010 1:00 PM GEE) No change in condition of site. (2/18/2010 2:04 PM GEE)Met with J.Werner from Cadence Homes, S.Kemp,R.Gremmels, Phil Boccola and Rep from Summitt erosion control. Waked site pointed out deficencies and what we felt needed to be done Immediately. Summitt will mobilize on 2-19-10. (8/9/2010 2:47 PM GEE)Met w S.Kemp states erosion control contractor on-site in process of winterizing site. OK to close and will continue to monitor.	N	N/A	1/14/2010	8/9/2010	5	2	0	0	0	0	0	2	0	Yes
CE10-00099	RESIDENTIAL	1/27/2010	ILLEGAL DISCHARGE	PC to RP. Left message. Site visit to Mellano Farms. Spoke with Mgr who stated that they will take care of issue.	Y	Y	1/27/2010	1/27/2010	1	0	1	0	0	0	0	0	0	Yes
CE10-00103	RESIDENTIAL	1/27/2010	ILLEGAL DISCHARGE	PC to RP: Issues discussed; site to be visited.SV: Photos taken; violations documented and observed.Administrative Warning 16063 issued on 1/2810, sent to PO	Y	Y	1/27/2010	3/26/2010	5	2	1	0	0	0	1	0	0	Yes
CE10-00114	RESIDENTIAL	2/1/2010	VEHICLE LEAKING OIL ON STREET	Unable to locate vehicle.	N	N/A	2/1/2010	2/15/2010	1	0	1	0	0	0	0	0	0	Yes
CE10-00125	RESIDENTIAL	2/2/2010	POURING CHEMICALS INTO THE LAWN	Duplicate Case	Y	Y	2/2/2010	2/2/2010	0	0	0	0	0	0	0	0	0	Yes
CE10-00133	RESIDENTIAL	2/3/2010	SEWAGE DISCHARGING OFF PROPERTY BEING SWEPT INTO STORM DRAIN	PC from Sewr Dept concerning sewage discharge from property. PC to PO. PO states that HOA does not properly maintain system. PC to Management CO. Explained to Rep that system needs maintenance. (2/23/2010 8:14 AM RG) PV from PM. Issueis being taken care of.	Y	Y	2/3/2010	2/22/2010	0	0	2	0	0	0	0	0	0	Yes
CE10-00162	RESIDENTIAL	2/4/2010	DRAINING POOL INTO NEIGHBORING PROPERTY	(2/12/2010 9:00 AM GEE)Left message w / RP informing will be sending allege letter.(2/12/2010 9:15 AM GEE)PC from RP unhappy with the procedure in which the case was going to be handled. RP wanted an officer to make contact and issue a citation to neighbor. When procedure was explained to RP she became very upset and verbally abusive, told me she did want me to do anything and wanted a return PC from Supervisor today.(2/12/2010 10:54 AM GEE)Per CE management holding off on sending allege letter to neighbor until further notice.(2/22/2010 9:57 AM DLM)PC with the RP. Enforcement process explained. RP did not agree with process and became upset/angry. RP stated that the phone calls were recorded and requested that no action be taken by Code Enforcement. A follow up Email was sent to the RP requesting a future contact to our office if they would like the property inspected.	N	N/A	2/4/2010	2/22/2010	0	2	4	0	0	0	0	0	0	Yes
CE10-00163	COMMERCIAL	2/4/2010	DUMPING PAINT INTO STORMDRAIN	Made site visit. PO was discharging water and paint from property. Explained violation to PO and informed that admin warning will be sent in mail.(2/4/2010 1:48:52 PM RG) Action CreatedAdmin warning for illegal discharge sent via mail. (2/23/2010 2:51 PM RG)Made Site visit. Business in process of compliance. Granted 1 week extension.	Y	Y	2/4/2010	2/23/2010	2	0	0	0	0	0	1	0	0	Yes
CE10-00345	RESIDENTIAL	2/18/2010	ILLEGAL DISCHARGE	(2/23/2010 3:09 PM RG)Made Site visit. No discharge observed (2/23/2010 3:10 PM RG)RP states that issue is resolved	N	N/A	2/18/2010	2/24/2010	1	0	1	0	0	0	0	0	0	Yes
CE10-00371	RESIDENTIAL	2/18/2010	ILLEGAL DISCHARGE	Email /phone call from water. Explained possible violation.Site visit. No violation observed. No evidence of illegal discharge.Spoke with tenant. Tenant states that they did not puor anything into drain.	N	N/A	2/18/2010	2/23/2010	1	0	1	0	0	0	0	0	0	Yes
CE10-00374	RESIDENTIAL	2/18/2010	ILLEGAL DISCHARGE	Made site visit. Discharge has been cleaned up	Y	Y	2/18/2010	2/23/2010	2	0	0	0	0	0	1	0	0	Yes
CE10-00461	CONSTRUCTION SITE	2/25/2010	TRACKING MUD INTO STREET	Observed a small amount of mud in street. Spoke to worker on-site informed of problem. Worker started clean up while I was there	Y	Y	2/25/2010	6/7/2010	4	0	2	0	0	0	0	0	0	Yes
CE10-00458	RESIDENTIAL	2/26/2010	WASHING MACHING DRAINING INTO BACKYARD	Illegal discharge of washing machine water in backyard and then down storm drain. Other violations on property, as well. ICID issue remedied on 11/29/10.	Y	Y	2/26/2010	11/29/2010	1	0	0	0	0	0	0	0	0	No
CE10-00620	RESIDENTIAL	3/4/2010	OIL SPILL IN ALLEY	Made site visit. Unable to verify violator. Public works has mitigated the issue	Y	Y	3/4/2010	3/8/2010	1	0	0	0	0	0	0	0	0	Yes
CE10-00674	RESIDENTIAL	3/4/2010	VEHICLE LEAKING OIL ON STREET	Photo taken of vehicle, PC to RP. RP states this vehicle belongs to her husbands caretaker and request we send a letter to her (the RP)so she can show vehicle owner it needs to be repaired to stop leaking fluids in front of her house	Y	Y	3/4/2010	4/6/2010	2	0	0	0	1	0	0	0	0	Yes
CE10-00737	RESIDENTIAL	3/15/2010	PAINT SPILLING INTO STREET	Photo taken, Letter sent to PO w/ photos, PC to RP informing of action taken,paint containers GOA.	Y	Y	3/15/2010	4/6/2010	2	0	1	0	1	0	0	0	0	Yes
CE10-00771	RESIDENTIAL	3/15/2010	VEHICLE LEAKING OIL ON STREET	Made site visit. Observed vehicle with small leak parked in front of the residence.PC from/to PO regarding proper storage of vehicle until repairs can be made. Waiting for call back from PO.	Y	Y	3/15/2010	3/24/2010	1	0	2	0	0	0	0	0	0	Yes
CE10-00757	RESIDENTIAL	3/16/2010	FILLING IN OF BIO-SWAILS	Informed PO that SUSMP requirements require Planning Commission approval. Per B.Walker will be looking into ways to bring this property into compliance	N	N/A	3/16/2010	7/6/2010	1	0	1	0	1	0	0	0	0	No
CE10-00787	COMMERCIAL	3/18/2010	WASTE OIL IN ALLEY	Contacted waste oil business for barrel removal. Contacted city crew for cleanup. Business is permanetely closed. Barrel removed.	Y	Y	3/18/2010	3/24/2010	3	0	2	0	0	0	0	0	0	Yes
CE10-00815	RESIDENTIAL	3/23/2010	BRAKE FLUID IN ALLEY	Issued Admin cite for repair to vehicle. Vehicle GOA	Y	Y	3/23/2010	3/26/2010	2	0	1	0	0	0	1	0	0	Yes
CE10-00823	COMMERCIAL	3/23/2010	PAINT CANS & PAINT IN STREET	Paint in street near property. No evidence showing paint came from property in question. City crew has cleaned up spill as best as possible.	Y	Y	3/23/2010	3/24/2010	1	0	0	0	0	0	0	0	0	Yes
CE10-00824	RESIDENTIAL	3/23/2010	PAINT GOING DOWN THE STREET	PC to RP. Site visit. No evidence of discharge. Left card for educational followup.	Y	Y	3/23/2010	3/24/2010	1	0	1	0	0	0	0	0	0	Yes
CE10-00862	RESIDENTIAL	3/29/2010	CONSTATN WATER IN STREET FROM BACKYARD	Observed water in gutterline that appears to be flowing for an extended period of time due to the erosion in the concrete. (4/7/2010 9:56 AM GEE) PC fro PO states this has been adressed a couple of times with the city. Two weeks ago Gene Clark was called out and determined it was ground water from rear slope. PO states this has been a long standing problem since they bought the house 11 years ago. When they had the pool put in they had to install a pump system under the pool to drain the slope to keep the pool from sinking.(4/9/2010 10:04 AM GEE)PC to RP informing of problem. RP upset doesn't believe the pool should have been permitted to be built and drain into street. I Informed him it wasn't the pool being drained it is the ground water from rear slope that is being drained to the street. He then started complaining about a couple other houses in the neighborhood. I asked if he would like to file a complaint. He stated he would think about it and call back.	N	N/A	3/29/2010	4/9/2010	3	0	2	0	0	0	0	0	0	Yes
CE10-00888	RESIDENTIAL	3/30/2010	WATER RUNNING DOWN CHANNEL CAUSING DAMAGE TO PROPERTY	Site visit to verify this is same private property issue that has been addressed in the past.Refered to engineering dept	N/A	N/A	3/30/2010	6/30/2010	2	0	0	0	0	0	0	0	0	Yes
CE10-00959	RESIDENTIAL	4/1/2010	SAND BLASTING	SV w/ GREMMELS. Contractor has taken proper BMPs to reduce overspray and has containment/ recovery system in place.	Y	Y	4/1/2010	4/1/2010	1	0	0	0	0	0	0	0	0	Yes
CE10-01019	RESIDENTIAL	4/8/2010	ILLEGAL POOL DISCHARGE	Spoke with tenant about proper removal of "green" pool water and proper discharge of pools in general.	Y	Y	4/8/2010	4/8/2010	1	0	0	0	1	0	0	0	0	Yes

Table 7-8. Summary of 2009/10 IC/ID Investigation by Code Enforcement Officers

Case Number	Occupancy Status	Date Received	Nature of Complaint	Actions Taken	IC ID Identified	IC ID Eliminated	First Contact	Last Contact	Site Visits	Office Visits	Phone Contacts	Written Notices	Letters Sent	Stop Work Notices	Admin-istrative Warning	Admin-istrative Citations	Criminal Citation	Case Closed?
CE10-01020	COMMERCIAL	4/8/2010	ILLEGAL DISCHARGE	Site visit. Observed business discharging wash water into the storm water conveyance system. Spoke with general manager.Issued warning Cite (via mail) to cease all and future discharges. (4/14/2010 9:24 AM RG) Business in compliance.	Y	Y	4/8/2010	4/14/2010	2	0	0	0	0	0	1	0	0	Yes
CE10-01048	RESIDENTIAL	4/12/2010	SEWER BACKUP	Made site visit. Spoke with PO. PO had already had sewer jetted out and functional . No further issues.	Y	Y	4/12/2010	4/12/2010	1	0	0	0	0	0	0	0	0	Yes
CE10-01049	RESIDENTIAL	4/12/2010	PILE OF DIRT IN STREET	Made site visit. Pile of dirt GOA.	Y	Y	4/12/2010	4/12/2010	1	0	0	0	0	0	0	0	0	Yes
CE10-01050	RESIDENTIAL	4/12/2010	VEHICLE LEAKING OIL ON STREET	RP gave false contact info. SV. Unable to locate vehicle.	Y	Y	4/13/2010	4/13/2010	1	0	0	0	0	0	0	0	0	Yes
CE10-01125	COMMERCIAL	4/19/2010	ILLEGAL DISCHARGE	Site visit. Spoke with workers on site. Explained proper containment and BMP usage of wash water. PC to supervisor.	Y	Y	4/19/2010	4/19/2010	1	0	1	0	0	0	0	0	0	Yes
CE10-01141	RESIDENTIAL	4/22/2010	ILLEGAL DISCHARGE	SV. No violation. PC to PO. PO states that there is an ongoing dispute with neighbor	N	N/A	4/22/2010	4/22/2010	1	0	1	0	0	0	0	0	0	Yes
CE10-01288	RESIDENTIAL	5/4/2010	ILLEGAL DISCHARGE	SV. Spoke with MGR. Issued Warning Cite for compliance. (5/10/2010 2:48 PM RG) No further issues at this time.	Y	Y	5/4/2010	5/10/2010	2	0	0	0	0	0	1	0	0	Yes
CE10-01303	RESIDENTIAL	5/5/2010	DRAINING POOL	SV. PO draining pool legally	N	N/A	5/5/2010	5/5/2010	1	0	0	0	0	0	0	0	0	Yes
CE10-01316	COMMERCIAL	5/5/2010	GREASE RECEPTOR MAINTENANCE	Site visit. Observed grease recepticle and dumster in need of clean up/maintenance. Site visit with BO. Educated BO about proper grease and dumpster maintenance. Issued Warning cite to ensure proper maintenance of grease recepticle and dumpster. Site visit. No further issues.	N	N/A	5/5/2010	5/25/2010	3	0	0	0	0	0	1	0	0	Yes
CE10-01294	RESIDENTIAL	5/5/2010	OVER IRRIGATION	Made SV. No evidence of over irrigation. PC to RP. No response	N	N/A	5/5/2010	5/5/2010	1	0	1	0	0	0	0	0	0	Yes
CE10-01335	RESIDENTIAL	5/6/2010	OVER IRRIGATION	SV. No evidence of discharge. Spoke with PO. PO states that they have not had any runoff from property.PC to RP. No response.	N	N/A	5/6/2010	5/7/2010	1	0	1	0	0	0	0	0	0	Yes
CE10-01318	RESIDENTIAL	5/6/2010	OVER IRRIGATION	SV Spoke with neighboring property about leaking sprinkler. PO stated that they will repair this weekend.	Y	Y	5/6/2010	5/6/2010	1	0	0	0	0	0	0	0	0	Yes
CE10-01336	RESIDENTIAL	5/7/2010	OVER IRRIGATION	Spoke with PO. Neighbor has broken irrigation causing flooding of his yard. Made site visit. Neighbor has broken irrigation line. Told RP I would make a courtest call to PM. Spoke with PM. PM states tha they will have someone repair or shut off broken line and contact me when completed. PC from RP. Issue has been corrected. No further action.	Y	Y	5/7/2010	5/11/2010	3	0	2	0	0	0	0	0	0	Yes
CE10-01332	RESIDENTIAL	5/7/2010	ILLEGAL DISCHARGE	Issued Admin Warning. Crew began immediate cleanup. (5/10/2010 2:52 PM RG) No further issues at this time.	Y	Y	5/7/2010	5/10/2010	2	0	0	0	0	0	1	0	0	Yes
CE10-01349	RESIDENTIAL	5/10/2010	BROKEN IRRIGATION	PO was worried about possible city water line leak. Educated PO on possible irrigation leak and ways to detect.	Y	Y	5/10/2010	5/10/2010	1	0	0	0	0	0	0	0	0	Yes
CE10-01407	RESIDENTIAL	5/12/2010	WATER DISCHARGING INTO NEIGHBORING PROPERTY	SV. Issue is a civil matter between POs.	N	N/A	5/12/2010	6/8/2010	2	0	0	0	0	0	0	0	0	Yes
CE10-01395	RESIDENTIAL	5/12/2010	LEAKING VEHICLE IN STREET	SV. PO admitted washing leaking vehicle in street. Issued Admin Warning to cease activity. No further issues.	Y	Y	5/12/2010	5/12/2010	1	0	0	0	0	0	1	0	0	Yes
CE10-01436	COMMERCIAL	5/17/2010	ILLEGAL DISCHARGE	SV. Spoke with foreman about proper BMP usage when cleaning buildings	Y	Y	5/17/2010	5/17/2010	1	0	0	0	0	0	0	0	0	Yes
CE10-01470	RESIDENTIAL	5/19/2010	OIL RUNNING DOWN STREET	SV, observed owner's son working on a burgundy Volvo. He stated he just washed off the engine with engine cleaner and water. Oil sheen still visible in gutter. Advised him to immediately place an oil absorbent to pick up oil and water and remove same from stormwater conveyance ystem. He placed absorbent while I waited. SV, oil and absorbent have been cleaned up.	Y	Y	5/19/2010	5/27/2010	4	0	0	0	0	0	1	0	0	Yes
CE10-01485	RESIDENTIAL	5/20/2010	SEWAGE SPILLING INTO THE ALLEY	While driving by, I observed a large amount of water in the alley way. I traced it back to a clean out at this location. I made several calls to PO at number on utility records, left a message. I was finally able to locate a cell number to the manager Heidi. PC made and she advised a maintenance person would be enroute immediately. I had contacted J. Kemp in Sewer Dept. for assistance. I advised the tenants water needed to be shut off temporarily until clog was cleared. Sewer arrived and began cleanup. I called PO via maintence persons phone and discussed illegal discharge. Drain cleared by maintenance person and PO was advised to have reqular jetting of the property to prevent further violations.	Y	Y	5/20/2010	6/2/2010	2	0	2	0	0	0	1	0	0	Yes
CE10-01617	RESIDENTIAL	6/1/2010	VEHICLE LEAKING OIL IN THE DRIVEWAY	Truck was not in the best shape but did not fall under policy guidelines to address as an inop.Spoke with occupant about truck. She stated that truck was her sons and that the vehicle leaks alittle. Instructed occupant to properly store vehicle on private property with a drip pan underneath. No further issues.	N	N/A	6/1/2010	7/22/2010	2	0	0	0	0	0	0	0	0	Yes
CE10-01797	RESIDENTIAL	6/21/2010	V TRENCH RUN-OFF	PC to RP informed this is civil matter between PO's and or Marbella HOA	N	N/A	6/21/2010	7/7/2010	0	0	2	0	0	0	0	0	0	Yes
CE10-01884	RESIDENTIAL	6/22/2010	VEHICLE LEAKING OIL	SV UTL vehicle.attempted contact with RP.No answer. No further issues at this time	Y	Y	6/22/2010	7/22/2010	2	0	0	0	0	0	0	0	0	Yes
CE10-01929	RESIDENTIAL	6/24/2010	DRAINAGE HAS A SEWER SMELL	Site visit made and there was no visible discharge coming from the residence. A picture was taken of the residence. RP stated they would call back if the problem reoccurs	N	N/A	6/24/2010	7/2/2010	1	0	1	0	0	0	0	0	0	Yes

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7.6 Illicit Discharge, Detection, and Elimination Component Effectiveness Assessment

Effectiveness assessment is an important component of the JURMP because it can assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The San Diego County Copermittees developed two guidance documents to assist in the assessment of the JURMP components as well as the jurisdictions overall JURMP program. These two documents are titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* and the *Baseline Long-term Effectiveness Assessment* (BLTEA). The City participated in regional efforts to develop these documents in anticipation of the requirement to assess their JURMP programs.

The effectiveness assessment approach developed by the Copermittees during the 2005-06 permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below:

- Level 1: Compliance with Activity-Based Permit Requirements
- Level 2: Changes in Knowledge/Awareness
- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

The establishment of measurable outcomes is necessary for both incremental program component improvements and as a basis for future establishment of relationships between implementation and water quality improvement outcomes.

This section discusses the effectiveness assessment of the IDDE components of the JURMP. Overall program effectiveness assessment is discussed in Section 11 of the 2009-2010 City of Oceanside JURMP Annual Report submitted September 30, 2010.

A large effort of the IDDE element is the City's Dry Weather Monitoring Program. Table 7-9 provides a summary of the Level 1 activity-based compliance assessment of the program. This was the third year the City used a replacement program for dry or inaccessible sites. While there were 67 sites on the primary site list, thirteen were either dry or inaccessible. An additional 26 sites were visited to find ponded or flowing water. The City continued laboratory sampling at more sites than required which resulted in a 112% completion rate. All initial site exceedances of action levels were confirmed within two business days resulting in a 100% completion rate. Ninety sites, even those without ponded or flowing water, were assessed for trash extent and amount which resulted in a 134% completion rate.

Table 7-9. Dry Weather Monitoring Component - Level 1: Compliance with Activity-Based Requirements.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
IDDE D.4	Site Visits	Primary Dry Weather Sites Listed	Primary & Alternate Dry Weather Sites Visited	Actual/Target	Percent ( ) Completion
		67	93	93/67	139
	Field Screening	Primary Dry Weather Sites Listed	Number of Sites Screened with Flowing/Ponded Water	Actual/Target	Percent ( ) Completion
		67	68	68/67	101
	Laboratory Analysis	Number of Sites Required for Lab Analysis	Number of Sites Sampled for Lab Analysis	Actual/Target	Percent ( ) Completion
		17	19	19/17	112
	Follow-Ups (Within Two Business Days)	Number of Sites Requiring Confirmation	Number of Site Follow-up within Two Business Days	Actual/Target	Percent ( ) Completion
		17	17	17/17	100
	Trash Assessment	Number of Field Screening or Analytical Monitoring Stations	Number of Trash Assessments Conducted	Actual/Target	Percent ( ) Completion
		67	90	90/67	134

The City's Dry Weather Monitoring program was first implemented in 2002 and then amended in 2007. The program has evolved and the number of sites and location of sites has varied, but some level of assessment of discharge water quality can be made (Level 5 assessment) within the current permit cycle. Figure 7-4 provides a summary of the percent of action level exceedances for selected field screening parameters from 2007 through 2010. Monitoring year 2007 is provided as a reference to past conditions and was part of the former permit cycle monitoring program. The percentage of sites with exceedances has decreased during the 2010 monitoring year. The percentage of sites exceeding field screening action levels was less than 10% for all constituents this monitoring year.

Figure 7-5 provides a summary of the percentage of action level exceedances for microbiology parameters from 2007 through 2010. For bacteriological exceedances, there was an action level change for the 2010 monitoring year. The total coliform action level increased from 50,000 MPN/100ml to 130,000 MPN/100ml. The fecal coliform action level decreased from 20,000 MPN/100ml to 13,000 MPN/100ml, as did the Enterococcus action level which decreased from 10,000 MPN/100ml to 7,000 ml. For ease of comparison, the exceedances provided in figure 7-5

reflect the 2010 action level for all years, as opposed to the number of exceedances in previous reports. Bacterial exceedances have been under 10% of all sites since the beginning of this permit cycle. No trends are apparent within the last four years and the results continue to stay steady. More information about the action level change is provided in Attachment 7-A.

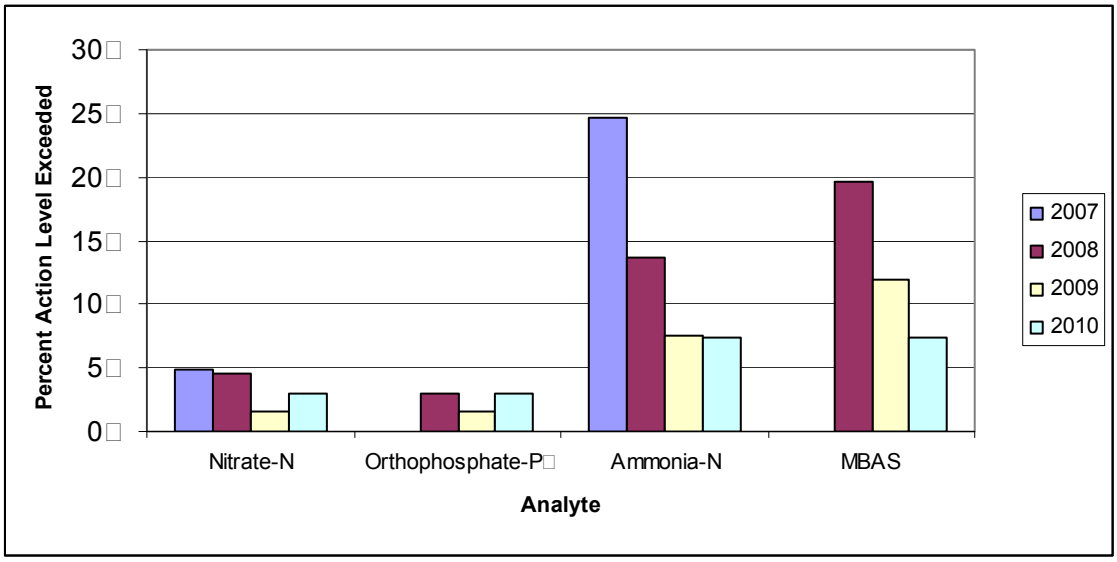

1-In the 2010 Dry Weather Monitoring Report, a discussion of the reporting of historical orthophosphate data is presented. In previous years, the results have been reported as orthophosphate and compared to an action level for orthophosphate-P. This has therefore resulted in more exceedances, and an overly conservative valuation, since the results for orthophosphate are higher than the results for orthophosphate-P. The number of exceedances for previous years has been corrected and noted where possible. In 2008, two results were reported as 5mg/L PO_4, and thus it cannot be determined if the action level was exceeded for PO_4-P.

Figure 7-4. Dry Weather Monitoring – Level 5: Changes in Discharge Quality. Summary of Field Screening Action Level Exceedances from 2007 - 2010.

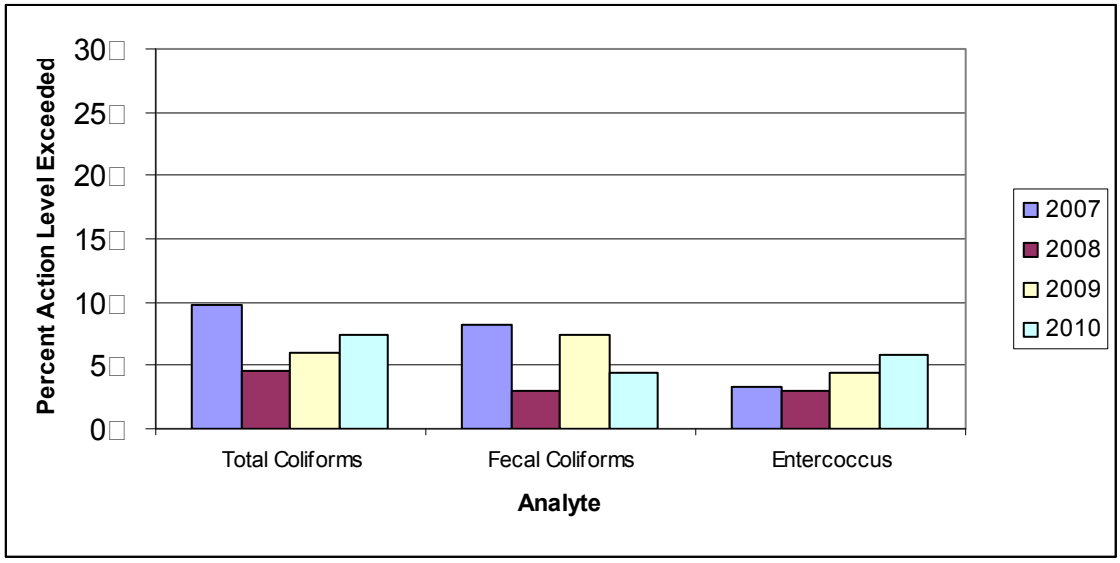

The action level for total coliforms, fecal coliforms, and Enterococcus changed for the 2010 monitoring year. For this data assessment, the 2010 action levels were used for comparison to all other reporting years to calculate the presented number of sites exceeding.

Figure 7-5. Dry Weather Monitoring – Level 5: Changes in Discharge Quality. Summary of Bacteriological Action Level Exceedances from 2007 - 2010.

7.7 Program Review and Modification

7.7.1 Database Tracking System for various departments and divisions

During this reporting year, several departments within the City moved forward with implementation of various data tracking systems. The Water and Sewer Divisions of the Water Utilities Department have been using GBA Master Series Software, a maintenance management tool, and gradually rolling it into the various programs for several years. The Clean Water Program purchased additional licenses and hired a consultant to help modify the software for use with the NPDES permit. The Clean Water Program began using GBA to track NPDES facility inspections, incoming hotline storm water complaint calls, and use with the jurisdictional monitoring program. This annual report is the first report utilizing the new technology. The Clean Water Program will be reviewing the effectiveness of the new tracking tool and will continue to implement improvements in the use or the system in the coming years.

7.7.2 Maintenance of MS4 Maps using GIS Technology

To address MS4 inaccuracies and update the GIS layer of the MS4 map, the City purchased two Trimble GeoXH units in FY 2008-09 to be used collaboratively between Public Works, Engineering, and the Water Utilities Departments. One of the many uses of these units is to verify the accuracy of the MS4 map and relay the information gathered in the field to the Engineering Department to update the GIS layer. During the 2008-09 fiscal year, the City created the data dictionary needed to collect consistent and necessary data for the storm drain system update and field tested the units. During this fiscal year, in April 2010, the Clean Water Program and Engineering Department solicited the assistance of one unpaid 30-hour per week student volunteer to assist with water quality monitoring and data gathering for support of the Dry Weather Program and MS4 map update. Throughout the summer of 2010, the volunteer was assisting with field monitoring and began mapping the MS4s. The completion date for the project is estimated for FY 2012-13.

City of Oceanside
2010
Dry Weather Monitoring Report

Prepared by:

City of Oceanside
Clean Water Program
December 15, 2010

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1 INTRODUCTION

1.1 Program Summary

In February 2001, the San Diego Regional Water Quality Control Board issued Order No. 2001-01 to the communities of San Diego County. As part of Order 2001-01, the City of Oceanside was required to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program. In 2007, the San Diego Regional Water Quality Control Board issued a new five-year permit for Receiving Waters and Urban Runoff Monitoring and Reporting, Order No. 2007-0001. The Copermittees in San Diego County were required, as part of their Jurisdictional Urban Runoff Management Program (JURMP), to update their Dry Weather Program to meet or exceed the requirements of Order No. 2007-0001. The City of Oceanside's Dry Weather Program was reviewed and updated and the details of the current program are included in the City of Oceanside 2008 JURMP Update.

The purpose of the dry weather program is to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain system, minimizing the negative impacts of human activities on receiving water bodies. Information collected from dry weather monitoring is used to characterize dry weather discharges in the storm drain system and identify conveyances that are discharging elevated levels of pollutants. Follow-up studies and source investigations are conducted as necessary to detect and eliminate the sources of these pollutants.

This report presents the results of the City of Oceanside's 2010 Dry Weather Field Screening and Analytical Monitoring Program.

1.2 City of Oceanside Drainage Summary

The City of Oceanside lies on the northern coast of San Diego County, 35 miles north of the City of San Diego and 83 miles south of the City of Los Angeles. The City is bounded to the west by the Pacific Ocean, the north by Camp Pendleton Marine Corps Base, the east by unincorporated areas of the County of San Diego and the City of Vista, and the south by the City of Carlsbad. The City covers approximately 42 square miles with a population of just over 173,000 people. California's main highway, Interstate 5, runs through the City, as does Highway 78, which provides southeast access to Interstate 15. Highway 76, which runs northeast, also provides access to Interstate 15.

The City's boundaries include two major watersheds; the San Luis Rey Watershed, which includes the San Luis Rey River and the Carlsbad Hydrologic Unit, which includes Loma Alta Creek, Buena Vista Creek, and Calavera Creek a tributary to Agua Hedionda Creek.

1.2.1 San Luis Rey Watershed

1.2.1.1 San Luis Rey River

The San Luis Rey Watershed is the northernmost watershed within the City of Oceanside. It is approximately 558 square miles and extends inland to encompass a large portion of

the northern unincorporated areas of the County of San Diego. The San Luis Rey River is the primary watercourse of the watershed and discharges to the Pacific Ocean near the northern border of the City of Oceanside. While the San Luis Rey Watershed is the largest hydrologic unit in the San Diego region, 92.5% of the watershed lies within the unincorporated part of the County, and not within the City of Oceanside. However, a wide floodplain is prominent through the City, including levees on either side of the river to protect the surrounding developments, adjacent to or within the historical floodplain, from future storm events.

The one named tributary within the City's boundaries is Pilgrim Creek, which drains a relatively undeveloped portion of the City with some residential areas and a municipal golf course in addition to an undeveloped area of Camp Pendleton. The remaining drainage areas within the City include areas of agricultural, residential, and some industrial land uses.

1.2.2 Carlsbad Watershed

1.2.2.1 Loma Alta Creek

Loma Alta Creek is the northernmost watershed in the Carlsbad Hydrologic Unit. It flows alongside Oceanside Boulevard, beginning as a rising spring just west of Melrose Drive in the City of Vista and ending at Buccaneer Beach Park where it enters the Pacific Ocean. Approximately five percent of the Loma Alta Creek Watershed is in the City of Vista, and the remaining portion is entirely in the City of Oceanside. Loma Alta Creek is over seven miles long and encompasses nearly 6,300 acres of land, 70 percent of which is developed. Almost 90% of the land within the watershed is privately owned.

Several tributaries drain into Loma Alta Creek, however, the only named tributary is Garrison Creek, located along Garrison Street west of El Camino Real. Much of the creek has been modified throughout the years, with the use of fully or partially concrete-lined channels to stabilize the creek-bed slopes. Loma Alta winds through a highly industrial area towards the western portion of the creek. Other land uses include residential and commercial uses.

1.2.2.2 Buena Vista Creek

The Buena Vista Watershed extends approximately 10.6 miles inland from the coast, totaling 14,437 acres and draining 21 square miles. The Watershed begins on the western slopes of the San Marcos Mountains, flows through areas of the County of San Diego and the Cities of Vista, Carlsbad, and Oceanside, turns into a lagoon and then ends at the Pacific Ocean. A weir was built in 1940 to stop tidal flow at the mouth and the lagoon now functions as a freshwater lagoon.

In the City of Oceanside, Buena Vista Creek parallels Highway 78. The lagoon is located south of Highway 78 and west of Jefferson Street. The upper and western basins of the Buena Vista Watershed are primarily in the City of Vista, the southeastern portions are primarily in the San Diego County jurisdiction, and the lower basin is straddled between the Cities of Carlsbad and Oceanside as the Creek weaves its way between the two cities. Approximately 80% of the Buena Vista Watershed is developed, primarily with

commercial and residential land uses. Some agricultural activities also exist in the watershed. Because of the intense development in the watershed, large sections of Buena Vista Creek have been concrete-channelized to reduce the chance of flooding private property.

1.2.2.3 Agua Hedionda Creek

A small portion of the City of Oceanside lies within the watershed of a tributary of Agua Hedionda Creek, called Calavera Creek. Beginning in an undeveloped portion of land just west of Highway 78, Calavera Creek's headwaters start in Vista, proceed through a pocket of San Diego County unincorporated area, head into Oceanside, and then eventually drain to Lake Calavera. Lake Calavera was created by the building of a dam in the 1940s. While the creekbed downstream of the lake is typically dry, the creek reforms in wet weather to wind its way through Carlsbad and joins the major artery of Agua Hedionda Creek. Near the Pacific Ocean, Agua Hedionda Creek opens up into a lagoon. The entire Calavera Creek Basin is approximately 3,770 acres. The primary land use in the portion of the Agua Hedionda Watershed that lies within the City of Oceanside's boundaries is residential.

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2 SAMPLING LOCATIONS

2.1 Site Selection

City monitoring staff worked with a consultant experienced in dry weather monitoring to update the City's Dry Weather Monitoring Program site locations during the 2008 JURMP Update process. This process involved preparing maps integrating the City's drainage system, watersheds, major water bodies, current dry weather monitoring locations, and land use. The sites were referenced against major drainage lines to see if any major lines were not being sampled, if any existing sites captured only very small drainage areas, or if any existing sites were redundant in that two or more neighboring sites provided data about essentially the same area. Historical data was also evaluated to determine which sites had routinely been dry in recent years and monitoring staff identified sites that had been found to be inaccessible. During this process it was determined that approximately 40 percent of the City's existing sites were routinely dry, were inaccessible, and/or assessed only very small drainage areas. Assessment of existing sites and prepared maps also found that the existing sites missed larger drainage areas or did not capture some of the recently developed areas. A list of potential new sites was drafted based on the following criteria:

- The site was downstream of any sources of suspected illicit discharge or illicit activity.
- The location took into account hydrological conditions, total drainage area, traffic density, age of the structures or buildings, history, and land use types.
- The site was located at the farthest downstream manhole or other accessible location in the drainage area being assessed.

A primary and an alternate site list were created after verification of accessibility was assessed. As a result of this process, a number of inaccessible or dry sites were removed, several sites with small drainage areas were redesignated as alternate sites, and several new sites were selected. The City's revised program now provides a more thorough, overall coverage of its MS4 while more efficiently allocating resources to sites that provide useful data. For a detailed list of site changes see the 2008 JURMP Update.

The updated list of 67 primary monitoring stations, their locations, land uses, and drainage areas is presented in Table 1. Alternate dry weather monitoring stations have been selected and are listed in Table 2. These stations are used as replacements for primary stations where no flowing or ponded water is observed. A map of the MS4 with primary and alternate sampling station locations is included as Figure 1.

2.2 Site Descriptions

Site visits were attempted at the 67 primary monitoring stations. Two of the primary stations were inaccessible and twelve were dry, so an additional 26 alternate stations were visited. This section includes a detailed description of each monitoring station.

The site identification numbers are not arranged by location (for example, from east to west) because over the course of the Dry Weather Program, sites have been eliminated and added to best represent the City's MS4. The site identification numbers do either

start with an A, B, L, or S which corresponds with the Agua Hedionda Creek (A), Buena Vista Creek (B), Loma Alta Creek (L), or the San Luis Rey River (S). For example, Site S112 would have been sampled from San Luis Rey River at location 112. The site locations are shown in Figure 1 and described below. The site identification numbers, descriptions, GPS coordinates, and conveyance structure types of the primary stations are listed in Table 1 and of the alternate stations in Table 2. Photos of each site visited are included as Appendix A.

Table 1. 2010 Primary Dry Weather Monitoring Site Locations.

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse 1	LandUse 2	Convey Type
A002	South end Cannon Road	904.3	33.16125	-117.27073	1107	E5	Residential	None	Outlet
A004a	N/W Cannon Road	904.3	33.17054	-117.27088	1107	E4	Residential	None	Outlet
A004b	Concrete Drainage	904.3	33.17057	-117.27087	1107	E4	Residential	None	Concrete Channel
A013	36" RCP Lake & Alameda Drive	904.3	33.17358	-117.26132	1107	F3	Residential	None	Outlet
A014	36" RCP east of Lake & Alameda Drive	904.3	33.17349	-117.26030	1107	F3	Residential	None	Outlet
A015	Lake Boulevard Lake Elementary	904.3	33.17269	-117.25671	1107	F3	Residential	Parks	Outlet
A016	36" RCP east of Amigos Court	904.3	33.17575	-117.27534	1107	D3	Residential	None	Outlet
A019	24" RCP in Oak Riparian Park	904.3	33.17628	-117.26932	1107	E3	Residential	Parks	Outlet
A021	36" RCP Sky Haven Lane	904.3	33.17418	-117.28068	1107	D3	Residential	None	Outlet
B002	72" RCP on Lagoon View Drive	904.2	33.18073	-117.34243	1106	E2	Commercial	Residential	Outlet
B022	48" RCP in Buena Vista Creek wall Upstream of Thunder Dr. Bridge	904.2	33.18117	-117.28720	1107	C2	Residential	None	Outlet
B023	36" RCP west of 3524 Lake Blvd	904.2	33.18039	-117.29005	1107	B2	Residential	None	Outlet
B024	36" RCP S/W corner College Bridge	904.2	33.18020	-117.29586	1107	B2	Commercial	Residential	Outlet
B026	48" RCP south TCxRoads Plaza	904.2	33.18053	-117.29100	1107	B2	Commercial	None	Outlet
B027	South Coast Material	904.2	33.18133	-117.30074	1107	A2	Residential	Commercial	Outlet
B032	2 - 60" RCPs between Haymar & SR78	904.2	33.18160	-117.32544	1106	G2	Commercial	Parks	Outlet
B033	42" RCP rear of Black Angus SR78	904.2	33.18138	-117.33409	1106	F2	Commercial	None	Outlet
B034	North of SR78 behind Burger King Jefferson St	904.2	33.18154	-117.33712	1106	F2	Commercial	None	Outlet
B102	South of SR78 north of BV Creek	904.2	33.17934	-117.31077	1106	J2	Residential	None	Outlet
B103	Outlet west end of Lagoon View Drive	904.2	33.17975	-117.34615	1106	E2	Commercial	None	Outlet
B104	RCP along South Coast Highway at Eaton St	904.2	33.17062	-117.35825	1106	D4	Residential	Commercial	Manhole
B105	El Camino Golf Course, end of Nicklaus	904.2	33.18603	-117.31846	1106	H2	Parks	Residential	Manhole
B106	N BV Creek, W of College	904.2	33.18065	-117.29643	1107	B2	Residential	Commercial	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
L001	48" RCP North Avenue & Vista Pacific	904.1	33.21298	-117.26702	1087	E5	Industrial	None	Outlet
L002	66" RCP North Avenue & Vista Pacific	904.1	33.21325	-117.26810	1087	E5	Industrial	None	Catch Basin
L003	South of Loma Alta off of North Ave, east of Autumn	904.1	33.21112	-117.27053	1087	E5	Residential	None	Outlet
L009	8'x3' concrete box under College Boulevard	904.1	33.20590	-117.28512	1087	C6	Commercial	Residential	Concrete Channel
L010	Two 36" RCPs north of tracks west of College	904.1	33.20580	-117.28535	1087	C6	Residential	None	Outlet
L013	42" RCP via manhole behind ReMax in shopping center	904.1	33.20559	-117.28692	1087	C6	Commercial	Residential	Manhole
L019	48" RCP south of Corporate Centre Drive	904.1	33.20367	-117.30575	1087	A6	Industrial	None	Outlet
L020	South of Oceanside Blvd, East of Corporate Centre Drive	904.1	33.20350	-117.30091	1087	A6	Industrial	None	Outlet
L024	South of Oceanside Blvd at west end of nursery	904.1	33.20137	-117.32225	1086	H6	Commercial	Open Space	Outlet
L027	NE corner of Oceanside Blvd and Garrison	904.1	33.20192	-117.33708	1086	F6	Residential	Park	Natural Creek
L032	Intersection of Camelot and Industry Wy	904.1	33.19865	-117.34302	1086	E7	Industrial	Residential	Outlet
L036	Manhole adjacent to intersection of Skylark Dr and Downs St	904.1	33.19613	-117.35007	1086	D7	Residential	None	Manhole
L040	Concrete channel in back of Vons	904.1	33.18947	-117.36091	1106	C1	Commercial	Residential	Concrete Channel
L046	Abutment of Coast Hwy bridge over Loma Alta Creek, north side	904.1	33.18037	-117.36630	1106	C2	Commercial	None	Outlet
L054	16" RCP in front of 242 Evergreen	904.1	33.18350	-117.36476	1106	C2	Residential	Park	Outlet
L103	72" RCP west of Corporate Centre Dr	904.1	33.20707	-117.30399	1087	A6	Industrial	None	Catch Basin
L105	MH near 2847 Industry Wy, north of Loma Alta	904.1	33.20066	-117.33981	1086	F7	Residential	Commercial	Manhole
L107	MH on SW corner of Crouch and Oceanside Blvd	904.1	33.19510	-117.35329	1086	D7	Commercial	Industrial	Manhole

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
L108	Loma Alta Tributary west of 5	904.1	33.18250	-117.36512	1106	C2	Residential	None	Concrete Channel
L110	Garrison Creek at Mesa and Parsley	904.1	33.21206	-117.32186	1086	H5	Residential	Park	Outlet
S006	36" CMP under I-5N, off Carmelo	903.1	33.20747	-117.38482	1085	J6	Residential	Open	Outlet
S032	36" RCP on south side of SLR-near Foussat Rd	903.1	33.22098	-117.34728	1086	E4	Residential	Commercial	Outlet
S035	42" RCP on south side of SLR River	903.1	33.23981	-117.32706	1086	G1	Residential	None	Outlet
S043	Southside of SLR River under the College Ave Bridge	903.1	33.25012	-117.29770	1067	A7	Residential	None	Outlet
S044	2 - 8'x8' Concrete Boxes □ Frazee/Oleander	903.1	33.24142	-117.30112	1087	A1	Residential	Commercial	Concrete Channel
S045	Southside of SLR River near Frazee Rd	903.1	33.23822	-117.30830	1086	J1	Residential	None	Outlet
S065	Pilgrim Creek and San Luis Rey River	903.1	33.24099	-117.33596	1086	F1	Residential	Parks	Natural Creek
S072	60" RCP north side SLR, off River Tree at the park	903.1	33.23142	-117.34488	1086	E2	Residential	Parks	Outlet
S075	24" RCP north side SLR, off Benet	903.1	33.22234	-117.35305	1086	D4	Residential	None	Outlet
S077	Hitching Post south of SR76	903.1	33.24904	-117.27079	1067	D7	Residential	Commercial	Concrete Channel
S088	36" RCP □ Mesa & North Santa Fe	903.1	33.24196	-117.27633	1087	D1	Residential	None	Outlet
S102	NE of int. of N. Santa Fe and Hwy 76	903.1	33.24813	-117.27823	1067	D7	Residential	None	Outlet
S103	South of SLR River off of Gooseberry Way	903.1	33.25218	-117.27600	1067	D6	Residential	None	Outlet
S104	24" RCP at NE end of Gooseberry Drive	903.1	33.25371	-117.27390	1067	D6	Residential	None	Outlet
S106	Three - 36" pipes □ NRR & Sleeping Ind.	903.1	33.26023	-117.26414	1067	E5	Agricultural	Residential	Outlet
S107	Under North River Road north of SLR River	903.1	33.26346	-117.24859	1067	G5	Agricultural	None	Earthen Channel
S108	Via Puerta Del Sol □ Big View Road	903.1	33.27085	-117.24501	1067	G4	Agricultural	Residential	Earthen Channel
S109	18" RCP NE of College and SLR River on S side	903.1	33.25338	-117.29511	1067	B6	Residential	None	Outlet
S110	North side of SLR River near Douglas Dr	903.1	33.24116	-117.32228	1086	G1	Residential	None	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
S111	Concrete channel □ Fireside Park E of Fireside	903.1	33.22722	-117.33851	1086	F3	Residential	Commercial	Concrete Channel
S113	Off of Capistrano Drive	903.1	33.21095	-117.38024	1086	A5	Residential	None	Outlet
S115	Open channel adjacent to SR78 near Mission Ave	903.1	33.22192	-117.33538	1086	F4	Commercial	Residential	Concrete Channel
S116	North River and School	903.1	33.25568	-117.29310	1067	B6	Residential	Parks	Concrete Channel
S117	NW of N Santa Fe and Champlain	903.1	33.24018	-117.27193	1087	D1	Residential	None	Outlet

Table 2. 2010 Alternate Dry Weather Monitoring Site Locations.

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
A022	Alternate; Lake and Chauncey/Southridge	904.3	33.17412	-117.26408	1107	E3	Residential	None	Outlet
A023	Alternate; Lake and Evening Canyon	904.3	33.17710	-117.27176	1107	E3	Residential	None	Outlet
A024	Alternate; Lake and Emerald	904.3	33.17709	-117.27254	1107	D3	Residential	None	Outlet
B030	Alternate; 36" RCP - easement south SR78, no. BV	904.2	33.18030	-117.31637	1106	J2	Residential	Commercial	Outlet
B031	Alternate; Between Haymar Dr & SR78 across from Country Club westernmost pipe	904.2	33.18185	-117.32221	1106	H2	Parks	Commercial	Outlet
B108	Alternate; Manhole on golf course; access from park at end of Viscaya; replaced B105	904.2	33.19183	-117.31234	1106	J1	Residential	None	Manhole
L004	Alternate; 3 - 24" RCP on North Avenue east of Autumn	904.1	33.21051	-117.27157	1087	D5	Residential	None	Outlet
L005	Alternate; 2 - 24" and 1 - 36" RCP North Avenue & Autumn	904.1	33.20983	-117.27358	1087	D5	Residential	None	Outlet
L006	Alternate; Intersection of North Ave & Season Rd-south of Loma Alta Creek	904.1	33.20882	-117.27664	1087	D5	Residential	None	Outlet
L007	Alternate; 48" RCP off of North Avenue, west of Seasons	904.1	33.20817	-117.27888	1087	D5	Residential	None	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
L008	Alternate; 40" RCP - corner of Westridge & Quailridge	904.1	33.21210	-117.27714	1087	D5	Residential	None	Outlet
L016	Alternate; 36" RCP inside M/H on Rancho Del Oro	904.1	33.20200	-117.31077	1086	J6	Residential	None	Manhole
L029	Alternate; 42" RCP inside M/H at 3060 Industry Way	904.1	33.20078	-117.33532	1086	F7	Industrial	None	Manhole
L034	Alternate; South of Oceanside Blvd b/w Waste Mgt and Self-Storage	904.1	33.19709	-117.35051	1086	E7	Residential	Industrial	Outlet
L037	Alternate; South side of Loma Alta Creek; East of end of South Oceanside Blvd	904.1	33.19300	-117.35595	1106	D1	Commercial	Residential	Earthen Channel
L050	Alternate; Casitas Trailer Park north of Loma Alta Creek	904.1	33.18131	-117.36567	1106	C2	Residential	None	Outlet
L052	Alternate; West of I-5 overpass on south side of Loma Alta	904.1	33.18848	-117.36146	1106	C1	Residential	None	Outlet
L102	Alternate; 36" RCP inside M/H on Esperanza	904.1	33.20618	-117.28260	1087	C6	Residential	None	Manhole
L109	Alternate; East of Loma Alta Creek at La Salina	904.1	33.18111	-117.36564	1106	C2	Residential	None	Outlet
L111	Alternate; RDO Drainage Basin	904.1	33.20420	-117.30985	1086	J6	Industrial	Commercial	Outlet
L114	Alternate; Under PCH, north side	904.1	33.18019	-117.36642	1106	C2	Commercial	None	Outlet
L115	Alternate; Manhole at end of Gem View Drive; replaced L102	904.1	33.20526	-117.28240	1087	C6	Residential	None	Manhole
S025	Alternate; North side of SLR River on W. Airport Road	903.1	33.21746	-117.36155	1086	C4	Industrial	None	Outlet
S085	Alternate; SE of Guajome Lake Park on N side of N. Santa Fe	903.1	33.24026	-117.27226	1087	D1	Residential	None	Outlet
S118	Alternate; College and Silver Bluff - large outfall	903.1	33.23951	-117.29121	1087	B1	Residential	None	Outlet
S119	Alternate; Douglas and Golf Course	903.1	33.25528	-117.31996	1066	H6	Residential	Park	Concrete Channel
S120	Alternate; East end of Jeffries Ranch	903.1	33.25174	-117.24901	1067	G6	Residential	None	Outlet

StationID	Location	HSA	Latitude	Longitude	TBPage	TBGrid	LandUse□1	LandUse□2	Convey□Type
	Road								
S121	Alternate; College and Frazee	903.1	33.23722	-117.29306	1087	B1	Residential	None	Outlet
S122	Alternate; RCP with flap gate at end of Tishmal Court	903.1	33.22181	-117.35628	1086	D4	Residential	None	Outlet
S123	Alternate; Concrete Channel from Fireside Drainage Basin	903.1	33.22710	-117.34289	1086	E3	Residential	Commercial	Concrete Channel

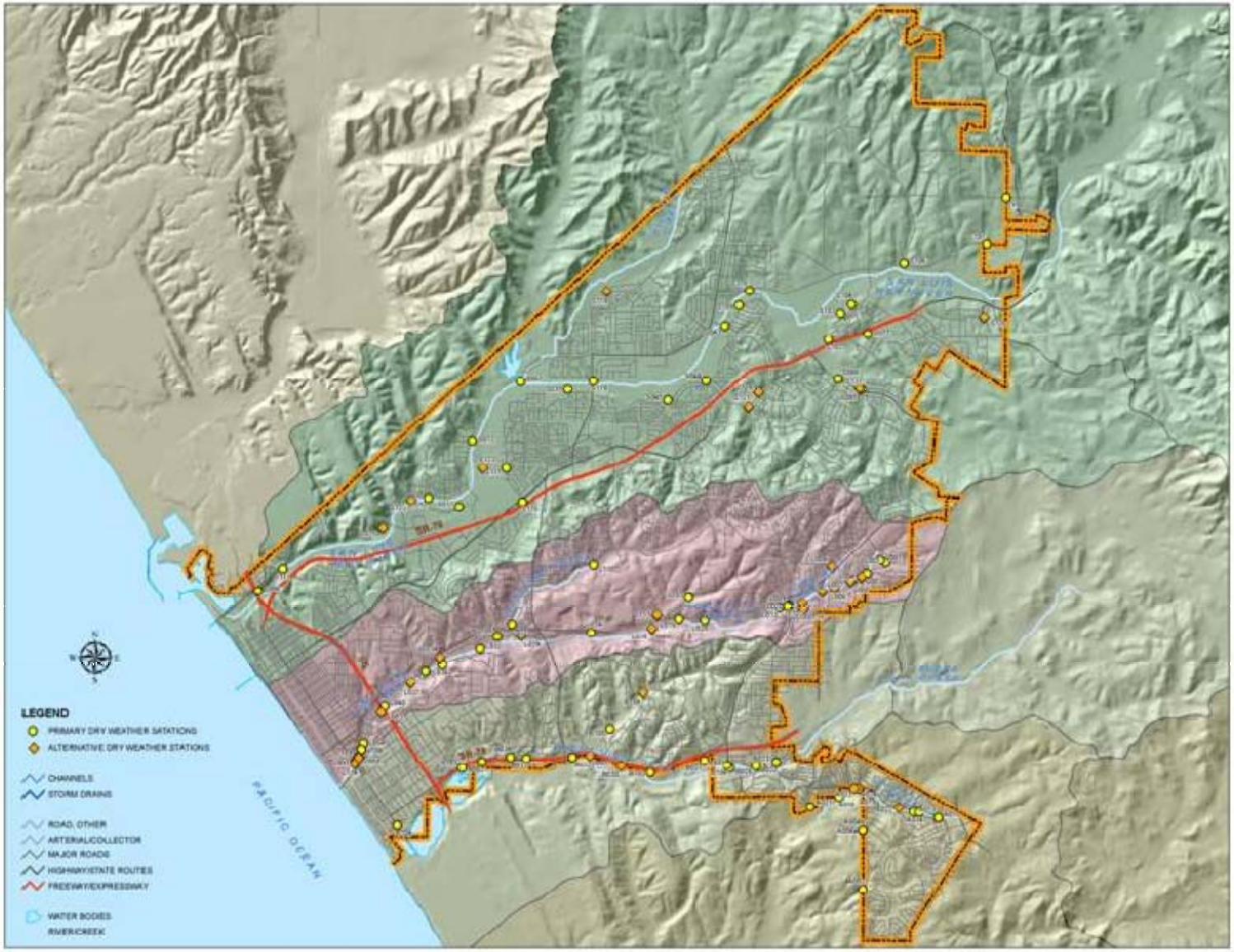

Figure 1. 2010 City of Oceanside Dry Weather Monitoring Stations.

2.2.1 Agua Hedionda Site Descriptions

A002
Site A002 is a 74-inch RCP located at the end of Cannon Road. The outlet drains the residential areas along Cannon Road. Access to the site is from Cannon Road. Field screening and laboratory samples were collected from flowing water.

A004a
Site A004a is a 48-inch RCP located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The outlet drains the residential areas south and east of the outlet. Access to the site is from Cannon Road to the pump station access road. Field screening and laboratory samples were collected from ponded water.

A004b
Site A004b is a brow ditch located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The concrete drainage ditch drains the irrigated areas on the slope behind the residences on Spinnaker Ridge. Access to the site is via Cannon Road to the pump station access road. Field screening and laboratory samples were collected from the flowing water.

A013
Site A013 is a 36-inch RCP located at the intersection of Lake Boulevard and Alameda Drive, south of Agua Hedionda Creek. The outlet drains the residential areas south of the site. Access to the site is from Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A014
Site A014 is a 36-inch RCP located east of the intersection of Lake Boulevard and Alameda Drive, north of Agua Hedionda Creek. The outlet drains the school and residential areas north of Lake Boulevard. Access to the site is from Lake Boulevard. Field screening samples were collected from the flowing water.

A015
Site A015 is a 48-inch RCP located south of Lake Boulevard and south of the creek. The outlet drains the residential areas south and east along Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A016
Site A016 is a 36-inch RCP located southeast of the intersection of Amigos Court and Serena Lane, south of Lake Boulevard. The outlet drains the residential areas north across Lake Boulevard. Access to the site is through open space off of Lake Boulevard. Field screening and laboratory samples were collected from the flowing water.

A019
Site A019 is a 36-RCP located in Oak Riparian Park off of Lake Boulevard, north of Agua Hedionda Creek. The outlet drains the residential and park areas north and south of

Lake Boulevard. Access to the site is from the parking lot off of Lake Boulevard. Field screening samples were collected from the ponded water.

A021
Site A021 is a 36-inch RCP located off of Sky Haven Lane, north of Agua Hedionda Creek. The outlet drains the residential areas to the north of the outfall. Access to the site is from a residential driveway and down a steep embankment in the middle of a densely vegetated area. Field screening samples were collected from the ponded water.

A022
Site A022 is an alternate site. It is a concrete box outlet located at the southwest corner of Lake Boulevard and Southridge Road, north of Agua Hedionda Creek. The outlet drains the residential areas to the north of the outfall. Access to the site is from Southridge Road. Field screening samples were collected from the ponded water.

A023
Site A023 is an alternate site. It is a RCP outlet located on the south side of Lake Boulevard west of Evening Canyon Road. Access to the site is from Lake Boulevard. Field screening samples were collected from the ponded water.

A024
Site A024 is an alternate site. It is a RCP outlet located on the south side of Lake Boulevard east of Emerald Drive. Access to the site is from Lake Boulevard. Field screening samples were collected from the ponded water.

2.2.2 Buena Vista Creek Site Descriptions

B002
Site B002 is a 72-inch RCP located on Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial and residential areas north of SR-78. Access to the site is via Lagoon View Drive. Field screening and laboratory samples were collected from the flowing water.

B022
Site B022 is a 48-inch RCP constructed in the north side of the Buena Vista Creek channel wall, east of the Thunder Drive Bridge. The outlet drains the residential area north of Buena Vista Creek. Access to the site is from within the Buena Vista Creek channel. Field screening and laboratory samples were collected from the flowing water.

B023
Site B023 is a 36-inch RCP located west of 3524 Lake Boulevard south of Buena Vista Creek. The outlet drains the residential areas southeast of Lake Boulevard. Access to the site is from Lake Boulevard. Field screening samples were collected from the flowing water.

B024
Site B024 is a 36-inch RCP located on the southwest corner of College Boulevard Bridge on the south side of Buena Vista Creek. The outlet drains the residential areas east and west of College Boulevard south of the creek. Access to the site is from College Boulevard. Field screening samples were collected from the ponded water.

B026
Site B026 is a 48-inch RCP located south of the Tri-City Crossroads Plaza off of Plaza Drive on the north of Buena Vista Creek. The outlet drains the commercial areas around Plaza Drive. Access to the site is from Tri-City Crossroads Plaza or the open lot to the east of the plaza. Field screening samples were collected from the flowing water.

B027
Site B027 is located off of Haymar Drive at South Coast Material yard north of Buena Vista Creek. The outlet drains the residential and commercial areas north of SR-78. Access to the site is from Haymar Drive. Access to the site is located in South Coast Material yard at the first right hand turn. Field screening samples were collected from the flowing water.

B030
Site B030 is an alternate site. It is a 36-inch RCP located within a sewer easement south of SR-78, west of AAA and north of Buena Vista Creek. The outlet drains the residential areas north of SR-78. Access to the site is from the sewer easement road, however, the area around the site was overgrown and the outlet was inaccessible.

B031
Site B031 is an alternate site. It includes four 54-inch RCPs located between Haymar Drive and SR-78, across from Camino Real County Club, and north of Buena Vista Creek. The western-most outfall is sampled. This outlet drains the golf course, commercial, and residential areas north of SR-78. Access to the site is off of Haymar Drive on the sewer easement road. This site was not visited during the 2010 dry weather season.

B032
Site B032 includes two 60-inch RCPs located between Haymar Drive and SR-78, across from Carlsbad Plaza, north of Buena Vista Creek. Both pipes are from the same source. The outlet drains the golf course and commercial areas north of SR-78. Access to the site is from Haymar Drive. Field screening samples were collected from the flowing water.

B033
Site B033 is a 42-inch RCP located north of SR-78 behind the Black Angus restaurant, north of Buena Vista Creek. The outlet drains the commercial areas north of SR-78 into a large catch basin with ponded water. The outfall that was sampled is the largest input to the basin. Access to the site is from SR-78. Field screening samples were collected from the flowing water.

B034
Site B034 is a 36-inch RCP located north of SR-78 behind Burger King at the Jefferson Street exit. The outlet drains the commercial areas north of SR-78. Access to the site is from SR-78. Field screening samples were collected from the flowing water.

B102
Site B102 is a 36-inch CMP located within a sewer easement south of SR-78 and north of Buena Vista Creek. The outlet drains the residential and commercial areas north of SR-78. Access to the site is from the sewer easement road. The sewer road was slightly overgrown and the surrounding areas were very overgrown. The storm drain could not be found in the vegetation and the trail previously used was inaccessible.

B103
Site B103 is located at the end of Lagoon View Drive, north of the Buena Vista Lagoon. The outlet drains the commercial areas north of SR-78. Access to the site is via Lagoon View Drive. Field screening samples were collected from the flowing water.

B104
Site B104 is a manhole on the southeast corner of South Coast Highway and Eaton Street. The outlet drains the commercial and residential areas on the east side of South Coast Highway. This site replaced B001 by moving it upstream approximately 230 yards out of tidal influence. Access to the site is from South Coast Highway. Field screening samples were collected from the ponded water.

B105
Site B105 is a large manhole capped with an open grate on the El Camino Golf Course and the end of Nicklaus Way. The storm drain carries flows from the large residential area to the north east of the site and the golf course. Access to the site is from Nicklaus Way. Field screening samples were collected from the flowing water.

B106
Site B106 is a 72 inch RCP outlet just north of Buena Vista Creek off of College Boulevard. The storm drain system begins just under a mile upstream and drains a large commercial and residential area north of Buena Vista Creek along College. Access to the site is from Nicklaus Way. Field screening and laboratory samples were collected from the flowing water

B108
Site B108 is a manhole on the El Camino Country Club golf course. The storm drain system drains a large residential area north and east of the manhole. Access to the site is from Viscaya Way. This site was not visited during the 2010 dry weather season.

2.2.3 Loma Alta Creek Site Descriptions

L001
Site L001 is a 48-inch RCP located at the intersection of North Avenue and Vista Pacific Drive, north of Loma Alta Creek. The outlet drains the industrial areas south of North Avenue. Access to the site is via North Avenue. Field screening samples and analytical lab samples were collected from the flowing water.

L002
Site L002 is a 66-inch RCP located northwest of the intersection of North Avenue and Vista Pacific Drive, north of Loma Alta Creek. The outlet drains the industrial areas east of the outlet. Access to the site is from a walking path off of North Avenue. Field screening samples were collected from the flowing water.

L003
Site L003 is a 48-inch RCP located off of North Avenue and east of Autumn Drive, south of Loma Alta Creek. The outlet drains the residential area southeast of North Avenue. Access to the site is via North Avenue. Field screening and laboratory samples were collected from the flowing water.

L004
Site L004 is an alternate site. It includes three 24" RCPs on North Avenue east of Autumn. The south eastern outfall was sampled. It drains a small residential area. Access to the site is via North Avenue. Field screening samples were collected from the ponded water.

L005
Site L005 is an alternate site. It includes two 24" and one 36" RCP at North Avenue & Autumn. It drains a small residential area. Access to the site is via North Avenue. No dry weather flows were observed.

L006
Site L006 is an alternate site. It is an RCP outfall at the intersection of North Ave. and Season Road south of Loma Alta Creek. It drains a small residential area. Access to the site is via North Avenue. Field screening samples were collected from the ponded water.

L007
Site L007 is an alternate site. It is a 48-inch RCP located north of North Avenue west of Seasons Road, south of Loma Alta Creek. The outlet drains the residential areas on the hillside south of North Avenue. The outlet is partially submerged with ponded water. Access to the site is from North Avenue. Field screening samples were collected from the ponded water.

L008
Site L008 is an alternate site. It is a 40-inch RCP located on the corner of Westridge Drive and Quailridge Drive, north of Loma Alta Creek. The outlet drains the residential areas on the hillside north of Oceanside Boulevard. Access to the site is from Westridge Drive. Field screening samples were collected from the ponded water.

L009
Site L009 is under College Boulevard at the Loma Alta Creek crossing. Three box culverts are present and drain the residential and commercial areas east of College Boulevard. Access to the site is via College Boulevard. Field screening and analytical lab samples were collected from the flowing water.

L010
Site L010 are two 36-inch RCP located west of College Boulevard near the railroad tracks. The outlet drains the residential areas on the hillside south of Loma Alta Creek adjacent to College Boulevard. Access to the site is from College Boulevard. Field screening samples were collected from the ponded water.

L013
Site L013 is a manhole located south of the shopping center on the corner of Oceanside Boulevard and College Boulevard, north of Loma Alta Creek. The outlet is no longer accessible due to overgrown vegetation, but the manhole upstream of the outlet is now sampled. Access to the site is from the parking lot behind ReMax. Field screening samples were collected from the flowing water.

L016
Site L016 is an alternate site. It is a 36-inch RCP inside a manhole on Rancho Del Oro. This site has been altered by North County Transit District with the Sprinter Railway and is not accessible.

L019
Site L019 is a 48-inch RCP, located south of the intersection of Corporate Centre Drive and Oceanside Boulevard, north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. Field screening and analytical laboratory samples were collected from ponded water.

L020
Site L020 is a 36-inch RCP located east of the intersection of Corporate Centre and Oceanside Boulevard, north of Loma Alta Creek. The outlet drains the commercial areas located north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. Field screening samples were collected from the flowing water.

L024
Site L024 is a 36-inch RCP located south of Oceanside Boulevard at the west end of the Evergreen Nursery. The outlet drains the commercial and open space area located north

of Oceanside Boulevard. Access to the site is from Oceanside Boulevard. No dry weather flows were observed.

L027
Site L027 is located on Garrison Creek upstream of Oceanside Boulevard. The site is sampled where the creek is a natural channel. The channel drains the residential and commercial areas located northeast of Oceanside Boulevard. Access to the site is from Garrison Street. Field screening and laboratory samples were collected from the flowing water.

L029
Site L029 is an alternate site. It is a manhole at 3060 Industry Way. This site is the beginning of the short storm drain line that drains the surrounding commercial and industrial area. Access to the site is from Industry Way. Field screening samples were collected from the ponded water.

L032
Site L032 is a 64-inch RCP located south of the intersection of Camelot Drive and Industry Way, north of Loma Alta Creek. The outlet drains the industrial and commercial area north of Industry Way. Access to the site is through a private business from Industry Way. Field screening samples were collected from the ponded water.

L034
Site L034 is an alternate site. It is a 24-inch RCP located between Waste Management and a self storage lot south of Oceanside Boulevard. Field screening samples were collected from the ponded water.

L036
Site L036 is located adjacent to the intersection of Skylark Drive and Downs Street, south of the Loma Alta Creek. The outlet is now in the Sprinter rail right of way, so the manhole upstream of the outlet was visited. The outlet drains the residential area north of Loma Alta Creek. Access to the site is via Skylark Drive. Field screening samples were collected from the ponded water.

L037
Site L037 is an alternate site. It is an earthen channel south of Loma Alta Creek. The channel drains the commercial area south of Loma Alta Creek. The site is at the east end of South Oceanside Boulevard. Dry weather flows were not observed at this site.

L040
Site L40 is an open concrete trapezoidal channel north of Loma Alta Creek. The outlet drains the commercial and residential areas located adjacent and to the north of Oceanside Boulevard. Access to the site is through the Vons parking lot off of Oceanside Boulevard. Field screening and laboratory samples were collected from the flowing water in the channel.

L046

Site L046 is a 24-inch RCP constructed in the north wall of the Loma Alta Creek channel just east of the Coast Highway Bridge. This outfall conveys flow from commercial and residential area north of Loma Alta Creek. Access to the site is from Coast Highway. Field screening samples were collected from the ponded water.

L050
Site L050 is a 24-inch RCP constructed in the north wall of the Loma Alta Creek channel. The outlet drains the Casitas Trailer Park located north of the Loma Alta Creek. Access to the site requires going into Loma Alta Creek channel. Dry weather flows were not observed at this site.

L052
Site L052 is a 36-inch RCP located just west of the I-5 overpass on the south side of Loma Alta. The outlet drains Cavalier Trailer Park. Access to the site requires going into Loma Alta Creek channel. Dry weather flows were not observed at this site.

L054
Site L054 is a 24-inch RCP constructed in the south wall of Loma Alta Creek. The outlet is located southwest of the intersection of Hillside and Evergreen Lane. Site L054 drains the trailer park, Marshall Park, and the residential area to the south. Access to the site requires entering the Loma Alta Creek channel. A flood gate was installed at this location and was and was closed. The next upstream point of access had also been altered with a concrete basin. The flow was inaccessible.

L102
Site L102 is a 36-inch RCP inside a manhole on Esperanza Way. The site drains a residential area on the south side of Loma Alta. No dry weather flows were observed at this site.

L103
Site L103 is a 72-inch RCP located west of Corporate Centre, north of Loma Alta Creek. The outlet drains the industrial and commercial areas located north of Oceanside Boulevard off of Corporate Centre. Access to the site is from Corporate Center Drive. Field screening samples were collected from the ponded water.

L105
Site L105 is a manhole located on Industry Way, north of Loma Alta Creek. The outlet within the manhole drains the residential and commercial area located north of Industry Way. Access to the site is from Industry Way. Field screening samples were collected from the flowing water.

L107
Site L107 has historically been a 36-inch RCP outlet located on the north side of Loma Alta Creek near the intersection of Crouch Street and Oceanside Boulevard. Due to Sprinter rail construction and other changes to the channel walls, the site was moved upstream to a manhole at the corner of Crouch and Oceanside Boulevard. The storm

system drains the commercial and residential areas located north of Oceanside Boulevard. Field screening samples were collected from the ponded water.

L108
Site L108 is a concrete channel that flows into Loma Alta Creek west of Interstate 5 from the north. This site replaced L050 because it is in the same general area, but has a larger watershed and has continuous flow. Access to the site is from Loma Alta Creek through Cavalier Trailer Park. In 2010 field screening samples were collected from the flowing water in the main channel (Loma Alta Creek), and not the tributary. Historically this site is the tributary to the north of the creek.

L109
Site L109 is a 24-inch RCP constructed in the south wall of the Loma Alta Creek channel. The outlet drains the trailer park and the residential area south of Loma Alta surrounding La Salina Street. Access to the site requires going into Loma Alta Creek channel. Dry weather flows were not observed at this site.

L110
Site L110 is an outlet from Garrison Creek at Mesa Boulevard and Parsley. Access to the site is from Mesa Boulevard through a locked fence at an open field. Field screening samples were collected from the ponded water.

L111
Site L111 was added as an alternate site during the 2008 Dry Weather Monitoring season. This area is undergoing commercial and light industrial growth and was added to the alternate list to capture these land uses. The outlet is northeast of the intersection of Rancho del Oro and Oceanside Boulevard. Access is from Seagate Drive. Field screening samples were collected from flowing water.

L114
Site L114 was added as an alternate site during the 2008 Dry Weather Monitoring season. This outfall is located under the Pacific Coast Highway Bridge on the northwest side. The drainage area has not been identified, but it is likely from the areas north along the Coast Highway. Access to the site requires going into Loma Alta Creek channel. Field screening samples were collected from the ponded water.

L115
Site L115 was added as an alternate site during the 2009 Dry Weather Monitoring season. The site is a pipe inside a manhole at the end of Gem View Drive and replaced site L102. The land use in the drainage area is residential. The eastern outfall in the box was sampled. No dry weather flows were observed.

2.2.3 San Luis Rey Site Descriptions

S006

Site S006 is a 36-inch corrugated metal pipe (CMP) located under Interstate 5. Access to Site S006 is from Carmelo Drive. Site S006 conveys flows from the residential area south of Camp Pendleton and east of Interstate 5 to the north side of the trail under I-5. Field screening and laboratory samples were collected from the flowing water.

S025

Site S025 is an alternate site. It is located on the north side of the San Luis Rey River on West Airport Road across from a junkyard. S025 is a 24-inch RCP in a headwall that drains the junkyard located just north of the outlet. No dry weather flows were observed.

S032

Site S032 is a 36-inch RCP with a flap gate installed and is located on the south side of the San Luis Rey River. The S032 outlet conveys flows from the residential, commercial, and open space areas located on the south side of SR-76. Access to the site is from Foussat Road to the access road that runs parallel to the River on the south side. No dry weather flows were observed.

S035

Site S035 is located on the south side of the San Luis Rey River. Site S035 is a 42-inch RCP with a flap gate installed. Access to the site is from Douglas Drive to the access road south of the San Luis Rey River. Dry weather flows were not observed at this site.

S043

Site S043 is a 30-inch RCP with a flap gate installed and is located on the south side of the San Luis Rey River under the College Boulevard Bridge. The site collects dry weather flows from the residential area immediately south of the outlet. Access to the site is via College Boulevard to the access road on the south side of the River. No dry weather flows were observed. No dry weather flows were observed.

S044

Site S044 is an open channel located on the south side of the San Luis Rey River. It conveys flows from residential and commercial areas. Access to the site is at northeast corner of Frazee Road and Oleander Drive. Field screening samples were collected from the flowing water.

S045

Site S045 is at the outfall of three 4-foot by 6-foot boxes on the south side of the San Luis Rey River. S045 conveys flows from the residential areas south of Frazee Road to the River. Access to the site is via Frazee Road. Field screening samples were collected from the flowing water.

S065
Site S065 is located within the open channel of Pilgrim Creek prior to confluence with the San Luis Rey River. Access to the site is from the San Luis Rey Wastewater Treatment Plant via North River Road to the access road located on the north side of San Luis Rey River. Site S065 conveys dry weather flows from a municipal golf course, residential, agricultural, parks, and open areas located to the north to the San Luis Rey River. Field screening and laboratory samples were collected from ponded water.

S072
Site S072 is a 60-inch RCP with a flap gate installed and is located on the north side of the San Luis Rey River. Access to the site is from River Tree Drive at Marlado Park. Site S072 conveys dry weather flows to the River from the park and residential community located north of the outlet. Field screening samples were collected from ponded water.

S075
Site S075 is a 24-inch RCP in a headwall located on the north side of the San Luis Rey River. Access to the site is from the access road that runs parallel to the River between Benet and Foussat Roads. Site S075 conveys dry weather flows from the new residential developments north of the San Luis Rey River. No dry weather flows were observed at this site.

S077
Site S077 is an open channel south of SR-76 and upstream of Guajome Lake. Access to the site is from Hitching Post Drive. The runoff consists primarily of residential and commercial flows from east of the outlet. Samples are collected where the channel is concrete. Downstream of the sampling point, the channel is a natural swale that leads to Guajome Regional Park. Field screening samples were collected from the flowing water.

S085
Site S085 is an alternate site. It includes two 24-inch RCPs located at North Santa Fe Avenue and Champlain Street. The outlet drains into a concrete channel south of the San Luis Rey River. S085 conveys the dry weather flows from the residential area to the south of North Santa Fe Avenue. Access to the site is from North Santa Fe Avenue. Field screening samples were collected from the ponded water.

S088
Site S088 is a 36-inch RCP located at the intersection of Mesa Drive and North Santa Fe Avenue. The site is located west of the Guajome Regional Park and south of the San Luis Rey River. Site S088 conveys dry weather flows from the residential area to the west into Guajome Regional Park. Access to the site is via North Santa Fe Avenue. Field screening samples were collected of the ponded water.

S102
Site S102 is located north of SR-76 between North Santa Fe Road and Guajome Lake Road, south of the San Luis Rey River. It is a 24-inch RCP that drains a residential area

immediately east. Access to the site is from SR-76 and requires entering private property; therefore, access is limited. Field screening samples were collected of the ponded water.

S103
Site S103 is located south of the San Luis Rey River. Access to the site is from the park east of 5396 Gooseberry Way. The outlet drains the residential and park areas in the neighborhood to the south. Field screening samples were collected from the flowing water.

S104
Site S104 in a 24-inch RCP located south of the San Luis Rey River. Access to the site is from the sewer easement and tomato fields northwest of the site. The outlet drains the residential area south of the site. Field screening samples were collected from the flowing water.

S106
Site S106 includes four 36-inch plastic pipes at the intersection of North River Road and Sleeping Indian Road on the north side of the San Luis Rey River. The outlet drains the agricultural and residential area immediately north of the site. Access to the site is from North River Road. No dry weather flows were observed.

S107
Site S107 is a natural channel that crosses under North River Road on the north side of the San Luis Rey River. The channel drains the agricultural area immediately north of the site. Access to the site is from North River Road. Dry weather flows were not observed.

S108
Site S108 is a natural channel that crosses under Via Puerta del Sol on the north side of the San Luis Rey River. The channel drains residential areas and agricultural areas in the immediate vicinity. Access to the site is at the intersection of Via Puerta del Sol and Big View Road. Dry weather flows were not observed.

S109
Site S109 is an 18-inch RCP located on the south side of the San Luis Rey River. The site conveys the runoff from the residential area immediately south of the outlet. Access to the site is from the access road to the east of College Boulevard. Dry weather flows were not observed.

S110
Site S110 is located on the north side of the San Luis Rey River. S110 is a 30-inch RCP with a flap gate installed. Access to Site 110 is from Rainier Way east of Douglas Drive. Field screening samples were collected from the ponded water.

S111
Site S111 is a concrete channel adjacent to Fireside Park, east of San Luis Rey River. The channel drains residential and commercial areas east of the site. Access to the site is from Fireside Street. Field screening samples were taken from the ponded water.

S113
Site S113 is located off of Capistrano Drive across from Capistrano Park. The site conveys flows from Camp Pendleton and from Capistrano Park south to the San Luis Rey River. The cliff appears to have eroded into the river and access to the outfall was not possible. No dry weather flows were observed.

S115
Site S115 is an open concrete channel between Mission Avenue and SR-76 west of El Camino Real. The site conveys flows from the commercial area to the east along Mission Avenue towards Douglas Drive. Access to the site is from Mission Avenue. Field screening samples were collected from the ponded water.

S116
Site S116 is located off of North River Road across from Del Rio Elementary School. The outfall conveys flows from the school and the residential area north of North River Road. It consists of two six-foot by six-foot boxes. Access to the site is from North River Road. This site replaced the historically dry S052 sampling site. Dry weather flows were not observed.

S117
Site S117 is a 48-inch RCP located northwest of North Sante Fe Road and Champlain Road. The outfall conveys flows from the residential areas east and south along North Santa Fe Road. Access to the site is from North Santa Fe Road. Field screening and laboratory samples were collected from the flowing water.

S118
Site S118 is an alternate site. It is located at the southwest corner of College and Silver Bluff. It consists of two pipes originating from the same source. The largest pipe, a 72-inch RCP, was sampled, which conveys flows from the residential area to the north and east along Silver Bluff and Mosaic. This site was added to the Dry Weather Monitoring Program as a replacement for S085. Access to the site is from Silver Bluff. Field screening samples were collected from the ponded water.

S119
Site S119 is an alternate site. It is an open concrete channel located off of Douglas Drive at the municipal golf course. The site conveys flows from the residential areas south and east, as well as the golf course. Access to the site is from Douglas Drive. No dry weather flows were observed at this site.

S120
Site S120 is an alternate site. It is a 36-inch RCP outfall at the east end of Jeffries Ranch Road. It conveys flows from the residential area west of the outfall. Access to the site is from Jeffries Ranch Road. Dry weather flows were not observed.

S121
Site S121 is an alternate site. It consists of two partially submerged 48-inch RCPs at the northwest intersection of College Boulevard and Frazee Road. It conveys flows from the residential area southeast of the intersection. Access to the site is from Frazee Road through a gate, which was locked, so samples could not be obtained.

S122
Site S122 is an alternate site. It is a RCP with a flap gate at the end of Tishmal Court. It conveys flows from the residential area north of the river. Access to the site is from the sewer easement path and pedestrian path on the north side of the river. Field screening and analytical labratory samples were collected from the flowing water.

S123
Site S123 is an alternate site. It is a concrete channel from the Fireside Road drainage basin. It conveys flows from the residential area to the east and the commercial area to the south. Access to the site is from the easement/foot path on the southeast side of the river. Dry weather flows were not observed.

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3 METHODS

Dry weather monitoring is conducted at least once at each primary station where flowing or ponded water is observed during the dry season (May 1 – September 30). If a primary site is visited and no flowing or ponded water is present, this information is documented on the field sheet (or electronically in the field tablet) and a station from the alternate list is then visited. Dry weather monitoring is only conducted when there has been at least 72 hours of dry weather prior to the time of the sampling. Grab samples are collected for laboratory analysis at a minimum of 25% of the stations where water is present.

The following describes the City of Oceanside's Dry Weather Program components including field site visits, laboratory analysis of water samples, and IC/ID investigations. The general site description and atmospheric conditions were recorded for each site visit whether or not runoff was observed. An example of the hard copy data sheet is provided in Appendix B. In 2010, a new database was used for electronic data entry in the field by City staff using a Dell Rugged Laptop. This database, gbaMS, was created for the Oceanside's Clean Water Program and is the same one used for inspections, other monitoring, the Water and Sewer Departments, and GIS. A photograph was also taken at each site (Appendix A). Monitoring was not conducted during any rain event or within 72 hours of the end of any rain event greater than one tenth of an inch.

Midway through the season, the City contracted with D-Max Engineering Inc. to assist with approximately 30 field screenings. The hard copy field datasheets were submitted to the City, entered into the City's database, and all follow-ups were completed by City staff.

3.1 Qualitative Observations

Qualitative field observations were made during each site visit where ponded or flowing water was observed and sampled. These observations were intended to provide a general assessment of the runoff and include parameters such as odor, water clarity, and the presence of floatables, visible deposits, stains and aquatic life. These descriptions were recorded on the field data sheet or electronically in the field tablet.

3.2 Flow Measurement

Flow measurements can be used to estimate pollutant mass loading, prioritize storm drains for future investigations, or to identify significant changes in flow that may be indicative of an illegal release upstream. Since all of the sample locations lack a permanent flow measurement installation, several field methods were employed to estimate flow rates for different flow types such as an open channel, outfall, or drainage pipe. These methods have been adapted from the County of San Diego's Dry Weather Monitoring Program Quality Assurance Project Plan[1].

[1] County of San Diego. 2004. Quality Assurance Project Plan for the County of San Diego's Dry Weather Monitoring Program. April 2004.

Velocity-area method - This method requires the physical measurement of the velocity (V), depth (D), and width (W) of flowing water. Discharge is determined as follows:

$$\text{Discharge} = V \times D \times W \qquad \text{Eq. (1)}$$

Where the water depth was adequate, a Global Flow Probe was used to get the average velocity in feet per second. Stream depth and width were recorded on the field data sheet and the discharge in cubic feet per second (cfs) was calculated using Eq. (1).

Where the flow was too slow or the water too shallow to measure the velocity using the probe, the velocity was estimated by timing the travel of a piece of floating debris (e.g., a leaf). The velocity was calculated by dividing the travel distance (feet) by the recorded travel time (seconds).

Fill a bottle method - If the flowing water was able to be captured, such as from a raised pipe, the fill-a-bottle method was used. The time it took to fill a known volume was recorded. Discharge was calculated by dividing the volume by the time and converting that value into cubic feet per second.

3.3 Field Screening

Water physicochemical properties (e.g., pH, conductivity, turbidity, dissolved oxygen (DO), and temperature) are important indicators of water quality. The Hydrolab Quanta 5-parameter probe was used to measure:

- pH.
- Conductivity.
- Turbidity.
- Dissolved oxygen.
- Water temperature.

If the water was deep enough, the probe was placed horizontally in the water column. If water was shallow, a syringe was used to collect water and transfer into a sampling cup and then the properties were measured. The Hydrolab Quanta has a built-in circulator to more accurately assess *in situ* measurements. The Quanta was calibrated daily prior to use in the field using the standard calibration solutions or secondary standards as well as a two-point pH calibration.

At each site with ponded or flowing water, water samples were collected and analyzed in the field for:

- Ammonia as N (NH_3-N) using CHEMetrics K-1403.
- Nitrate as N (NO_3-N) using CHEMetrics K-6923 or K-6933.
- Orthophosphate as P (PO_4-P) using CHEMetrics K-8513.
- MBAS (Surfactants) using CHEMetrics K-9400.

Ammonia, nitrate, orthophosphate, and MBAS were measured in the field using CHEMetrics field test kits. Each test kit contained a sample mixing container, necessary reagent-filled ampoules, the appropriate color standards for colorimetric analysis, filters

for photometric analysis, and instructions for each kit. The test kits for ammonia, nitrate, and orthophosphate used the V-2000 photometer. The test kit for MBAS uses a visual color comparator. The procedures instructed by CHEMetrics were followed.

During the 2010 Dry Weather season, there were no changes to field test kit methods. However, it was realized that historically orthophosphate (PO_4) results have been compared to an action level for orthophosphate as phosphorus (PO_4-P). Oxygen is 67.4% of phosphate by mass but is not a plant nutrient in this form. Therefore, the orthophosphate result must be multiplied by a conversion factor of 0.326, the ratio of the molecular weight of P (31 g/mol) to PO_4 (95 g/mol), to reach the orthophosphate-P result. In previous years, the results have been reported as orthophosphate, and compared to an action level for orthophosphate-P. This has therefore resulted in more exceedances, and an overly conservative valuation, since the results for orthophosphate are higher than the results for orthophosphate-P. The number of exceedances for previous years has been corrected and noted where possible in Section 5.2, Historical Data Comparison.

3.4 Laboratory Water Quality Analyses

Laboratory samples were collected at a minimum of 25% of the sites with flowing or ponded water. Samples were submitted to the City of Oceanside San Luis Rey Wastewater Treatment Plant Laboratory and EnviroMatrix Analytical Inc. for chemistry and microbiology analysis. Below is the complete list of laboratory analytes:

- Oil and Grease
- Total Hardness
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- Enterococcus Bacteria
- Total Coliform Bacteria
- Fecal Coliform Bacteria
- Chlorpyrifos
- Diazinon

All samples were analyzed using Standard Methods or EPA Methods by the laboratories.

3.5 IC/ID Investigations

Each station is visited at least once per dry weather season, if accessible and safe. When field measurements and/or laboratory analysis showed an exceedance of established action levels, the site was revisited within two business days to confirm the initial results. When follow-up sampling confirms continued exceedance of action levels, the City conducted further investigations to identify the source of the exceedance. Upstream investigations were not conducted when exceedances were not noted during the follow-up visit, as without a high constituent level to track, the investigation is unlikely to identify any sources.

The action levels used for the 2010 dry weather monitoring period are presented in Table 3. If the initial results were confirmed and an exceedance continued, an upstream investigation was initiated. In addition, any potential IC/IDs found visually or with any other evidence of gross contamination, an IC/ID investigation was pursued immediately (e.g., substantial petroleum sheen, excessive turbidity, extremely high ammonia concentration, evidence of sewage release, etc.).

The Regional Monitoring Workgroup in November 2009 requested that the Dry Weather Monitoring Sub-workgroup evaluate the dry weather action levels that have been used since 2003. It was determined that the bacteriological action levels required further analysis, but the remaining chemistry and field analytes would not change. The Dry Weather Sub-workgroup contracted the services of D-Max Engineering through the City of La Mesa to conduct the evaluation of historical bacterial data collected from dry weather monitoring from 2002 through 2007. Details of their evaluation are posted on the Project Clean Water Website at http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf. The Regional Monitoring Workgroup selected the 80th percentile values to be proposed as the dry weather action levels for bacterial indicators beginning on May 1, 2010. The levels were submitted in 2008-09 JURMP Annual Report and are presented in Table 3 for use during the 2010 monitoring year.

Table 3. 2010 Dry Weather Monitoring Action Levels

Analyte	Action Level
Field Measurements	
pH	6.5-9.0 pH units
Conductivity	N/A
Turbidity	N/A
Analyte	**Action Level**
Dissolved Oxygen	Not a required analyte
Temperature	N/A
Ammonia-N	1.0 mg/L
Nitrate- N	10.0 mg/L
Orthophosphate-P	2.0 mg/L
Surfactants (MBAS)	1.0 mg/L
Laboratory Measurements	
Oil and Grease	15 mg/L
Total Hardness	N/A
Cadmium (Dissolved)	California Toxics Rule (CTR)
Copper (Dissolved)	California Toxics Rule (CTR)
Lead (Dissolved)	California Toxics Rule (CTR)
Zinc (Dissolved)	California Toxics Rule (CTR)
Total Coliform Bacteria	130,000 MPN/100mL
Fecal Coliform Bacteria	13,000 MPN/100mL
Enterococcus	7,000 MPN/100mL
Chlorpyrifos	0.5 µg/L
Diazinon	0.5 µg/L

In general, IC/ID investigations include identifying pollution sources and correcting or eliminating them. Various methods can be used for source identification, for example, observation by following flows or discharges upstream, field measurements or laboratory analysis of water samples. The correction and elimination of identified sources may be achieved by outreach/education, best management practices (BMPs) implementation, and enforcement when necessary.

3.6 Trash Assessment

Section II.B.3.C (7) of the 2007 Municipal Permit requires Copermittees to assess the presence of trash in receiving water and urban runoff at each dry weather field screening or analytical monitoring station. A work plan for trash assessment was finalized in August of 2007 which outlined procedures and created field assessment forms to be used by the Copermittees[2]. The field form is included in Appendix B.

The assessment is primarily a qualitative assessment. The assessment includes five categories with a narrative description and a range of number of pieces. The five categories are:

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human and/or aquatic health is assessed at each site. The definitions for these threats were amended to clarify and streamline the designations in this reporting year. The following definitions are also found on the 2010 Trash Assessment Form:

- *Potential Threat to Human Health* – Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or

[2] Weston Solutions and Brown and Caldwell. 2007. Final Monitoring Workplan for the Assessment of Trash in San Diego County Watersheds. Prepared for the County of San Diego. August 30, 2007.

laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.

- *Potential Threat to Aquatic Health* – Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic item such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

If a site falls into the poor or submarginal category, then the type of trash is denoted and ranked and the potential routes and sources are identified. Options for types, routes and sources are listed below:

Types of Trash	*Potential Routes*	*Potential Sources*
Automotive	Dumping	Household
Biohazard Waste	Littering	Construction
Business Related	Upstream	Commercial
Cigarette Butts	Unable to Determine	Industrial
Construction		School
Fabric/Clothing		Transient
Food Packaging		Unable to Determine
Food Waste		
Household		
Shopping Carts		
Toxic		
Yard Waste		

4 RESULTS

The dry weather monitoring program was conducted between May 1, 2010 and September 30, 2010. A site visit at all 68 of the primary sites was attempted, however two of those sites were inaccessible or deemed unsafe. An additional twelve primary sites were dry. A total of 93 sites were visited, 68 were ponded or flowing and field screening was conducted, and of those, 19 were chosen for additional laboratory analysis (Table 4).

The results of the qualitative observations, flow measurements, field measurements and laboratory measurements are presented in the following sections.

Table 4. 2010 Summary of Dry Weather Monitoring Sites Visited.

Watershed	No. Primary Sites Listed	No. Primary Sites Inaccessible	No. Primary Sites Dry	No. Alternate Sites Visited	No. Sites Sampled for Lab Analysis	Total No. Sites Visited
Agua Hedionda	9	0	0	3	6	12
Buena Vista	14	1	0	1	3	15
Loma Alta	20	1	1	15	6	35
San Luis Rey	24	0	10	7	4	31
TOTAL	67	2	11	26	19	**93**

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the field screening program. Weather conditions were recorded at each site and any evidence of dry weather flows were documented. Visual observations of the sample water and the vicinity of the sampling location such as odor, color, clarity, floatable materials, vegetation and biological organisms were also recorded. Observations from the 91 accessible sites are summarized below and presented in Table 5.

Light Conditions

Sixty eight of the 91 accessible sites had sunny conditions during site visits. Seventeen sites had overcast conditions, and six sites had partly cloudy conditions.

Odor

Fifty nine of the sites with water had no distinguishable odor associated with the storm drain outlets. Five sites had a musty odor, two sites smelled of rotten eggs, and two sites had a chemical odor, and one had an odor designated as other.

Color

Fifty three of the sites with water had no observed color. Twelve sites had a yellow color, one site had a white color and one site had a green color. One site also had brown color.

Table 5. 2010 Visual Observation Results.

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
Agua Hedionda									
A002	8/9/10	Sunny	None	None	Clear	None	Coarse particulate	Normal	Insects
A004a	8/23/10	Sunny	Musty	Yellow	Clear	Algae	None	Excessive	algae &snails
A004b	8/23/10	Sunny	None	Yellow	Clear	Other	Fine particulate	Normal	Other
A013	7/26/10	Sunny	None	None	Clear	Bubbles/Foam	Stain	Normal	None
A014	8/30/10	Partly Cloudy	Other	None	Clear	None	Coarse & Fine	None	Insect & Snail
A015	8/9/10	Partly Cloudy	None	White	Opaque	Bubbles/Foam	Coarse particulate	Normal	None
A016	7/26/10	Overcast	Musty	Brown	Opaque	None	Fine particulate	Normal	None
A019	9/20/10	Sunny	None	None	Clear	None	Coarse & Fine	None	Insects
A021	8/30/10	Sunny	None	None	Clear	None	Coarse & Fine	Normal	Insects
A022	9/13/10	Sunny	None	None	Clear	None	Coarse particulate	Normal	Fish
A023	9/13/10	Sunny	None	None	Clear	None	Coarse particulate	Normal	Other
A024	9/13/10	Sunny	Chemical	Yellow	Slightly Cloudy	None	Coarse particulate	Excessive	Snails
Buena Vista									
B002	5/24/10	Sunny	None	None	Clear	Trash & Algae	Coarse particulate	Normal	Insect & Algae
B022	7/26/10	Overcast	Musty	None	Clear	Trash	Fine particulate	Normal	algae and snails
B023	8/30/10	Sunny	None	None	Clear	None	Coarse & Fine	Normal	Other
B024	8/30/10	Sunny	None	None	Clear	None	Coarse & Fine	Normal	Insect & Snail & Fish
B026	8/31/10	Sunny	None	None	Slightly Cloudy	Other	Coarse & Fine	Normal	Insect & Algae
B027	8/11/10	Overcast	None	Yellow	Clear	Other	None	Normal	None
B032	9/1/10	Sunny	None	None	Clear	Trash	Coarse & Fine	Normal	Insect & Algae
B033	8/31/10	Sunny	None	None	Clear	None	Coarse & Fine	Normal	Other
B034	8/31/10	Sunny	None	None	Clear	None	Coarse & Fine	Normal	Insect & Algae
B103	8/31/10	Sunny	None	None	Clear	Trash	Coarse & Fine	Normal	Insect & Algae
B104	7/26/10	Overcast	None	Yellow	Clear	None	Fine particulate	None	None
B105	9/1/10	Sunny	None	None	Clear	None	None	None	None
B106	8/9/10	Sunny	None	None	Clear	Trash & Bubbles/Foam	Fine particulate	Normal	Insect & Algae
Loma Alta									
L001	6/30/10	Sunny	None	None	Clear	Trash & Sheen	Fine particulate	Normal	Crawfish and Snails
L002	9/1/10	Sunny	None	None	Clear	None	Coarse & Fine	Normal	Other
L003	8/9/10	Sunny	None	None	Clear	Other	Fine particulate	Normal	Other
L004	9/9/10	Sunny	None	None	Clear	None	Coarse & Fine	Normal	Insect & Algae
L005	9/10/10	Sunny	NS	NS	NS	NS	Coarse particulate	Limited	Insect & Algae

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
L006	9/10/10	Sunny	None	None	Clear	Trash	Coarse particulate	Excessive	Algae
L007	9/10/10	Sunny	None	None	Clear	Trash	Coarse particulate	Normal	Insect & Algae
L008	9/10/10	Sunny	None	None	Clear	Trash & Bubbles/Foam	Coarse particulate	Normal	Algae
L009	5/13/10	Sunny	None	None	Clear	None	Coarse particulate	None	Snails
L010	9/1/10	Sunny	None	None	Clear	Trash	Coarse & Fine	Normal	Other
L013	9/3/10	Sunny	None	None	Clear	None	Fine particulate	None	None
L019	6/30/10	Sunny	None	Green	Slightly Cloudy	Algae	None	Normal	Insect, Algae,Snail, Fish
L020	9/1/10	Sunny	None	None	Clear	None	Coarse & Fine	Normal	Other
L024	9/7/10	Sunny	NS	NS	NS	NS	Coarse particulate	Normal	None
L027	5/12/10	Sunny	None	None	Clear	Algae	Coarse particulate	Limited	None
L029	9/10/10	Sunny	Chemical	None	Clear	Trash	Coarse particulate	None	None
L032	9/8/10	Sunny	None	None	Clear	None	Coarse particulate	Normal	Insect & Algae
L034	9/13/10	Sunny	None	None	Clear	None	Coarse particulate	Limited	Other
L036	9/8/10	Sunny	None	Yellow	Clear	None	Coarse particulate	None	None
L037	9/13/10	Sunny	NS	NS	NS	NS	Coarse particulate	Normal	None
L040	6/30/10	Overcast	None	None	Clear	None	Fine particulate	Normal	Snail, Insects, Algae
L046	8/11/10	Sunny	None	None	Clear	Trash & Algae	Fine particulate	None	Insect & Fish
L050	8/11/10	Sunny	NS	NS	NS	NS	None	None	None
L052	8/11/10	Sunny	NS	NS	NS	NS	None	None	None
L054	5/13/10	Sunny	NA	NA	NA	Algae	Coarse & Fine	Normal	Insects
L102	9/13/10	Sunny	NS	NS	NS	NS	Coarse particulate	None	None
L103	9/8/10	Sunny	None	None	Clear	Trash	Coarse particulate	Normal	Insect & Algae
L105	9/8/10	Sunny	None	None	Clear	None	Coarse particulate	None	None
L107	9/9/10	Sunny	None	None	Clear	Trash	Coarse particulate	None	None
L108	8/11/10	Sunny	None	None	Clear	Algae	Fine particulate	None	Insect & Algae
L109	8/11/10	Sunny	NS	NS	NS	NS	Fine particulate	None	None
L110	9/8/10	Partly Cloudy	None	None	Clear	Trash	Coarse particulate	Normal	Insect & Algae
L111	5/24/10	Sunny	None	None	Clear	Bubbles/Foam, Sheen	Fine particulate	Normal	Insect & Algae
L114	8/11/10	Sunny	None	None	Clear	None	None	None	None
L115	9/13/10	Sunny	NS	NS	NS	NS	Coarse particulate	None	None
San Luis Rey									
S006	5/13/10	Sunny	Rotten Eggs	Yellow	Clear	None	Coarse particulate	None	Algae, Snails, Insects
S025	7/7/10	Overcast	NS	NS	NS	NS	Coarse particulate	Normal	None
S032	7/7/10	Overcast	NS	NS	NS	NS	Coarse particulate	Normal	None

StationID	Date	Weather	Odor	Color	Clarity	Floatables	Deposit	Vegetation	Biology
S035	7/7/10	Overcast	NS	NS	NS	NS	None	Normal	None
S043	9/7/10	Overcast	NS	NS	NS	NS	Coarse particulate	None	None
S044	7/8/10	Overcast	None	None	Clear	Algae	Fine particulate	Normal	Snails, insects, algae
S045	7/8/10	Overcast	None	Yellow	Clear	Other	Fine particulate	Normal	Snails, insects, algae
S065	6/16/10	Sunny	None	Yellow	Clear	Sheen	Fine particulate	Normal	Tadpoles
S072	7/7/10	Overcast	Musty	Yellow	Clear	Other	Coarse particulate	Normal	None
S075	5/24/10	Sunny	NS	NS	NS	Trash & Algae	Fine particulate	Normal	Insect & Algae
S077	9/3/10	Sunny	None	None	Clear	Other	Coarse & Fine	Normal	Insect, Algae,Snail, Fish
S085	8/23/10	Sunny	None	None	Clear	Algae	Coarse particulate	None	algae &snails
S088	9/3/10	Sunny	None	None	Clear	Other	Coarse & Fine	Normal	Insect & Algae
S102	9/3/10	Sunny	None	None	Slightly Cloudy	None	Coarse & Fine	Normal	None
S103	9/3/10	Sunny	None	Yellow	Clear	None	Coarse & Fine	Normal	Other
S104	9/3/10	Sunny	None	None	Clear	None	Coarse & Fine	Normal	Insect & Algae
S106	6/16/10	Partly Cloudy	NS	NS	NS	NS	Coarse particulate	Excessive	None
S107	6/16/10	Overcast	NS	NS	NS	NS	Coarse particulate	Normal	None
S108	6/30/10	Partly Cloudy	NS	NS	NS	NS	Coarse particulate	Normal	None
S109	9/7/10	Overcast	NS	NS	NS	NS	Coarse particulate	None	None
S110	7/8/10	Overcast	None	None	Clear	None	Coarse particulate	None	None
S111	9/7/10	Overcast	None	None	Clear	None	Coarse particulate	Limited	Other
S113	7/7/10	Overcast	NS	NS	NS	NS	None	None	None
S115	9/7/10	Sunny	None	None	Clear	Trash	Coarse particulate	Limited	Other
S116	6/16/10	Sunny	NS	NS	NS	NS	None	None	None
S117	8/23/10	Sunny	None	None	Clear	Algae	Fine particulate	None	algae &snails
S118	9/9/10	Sunny	None	None	Clear	Trash	Coarse particulate	Normal	Other
S119	6/16/10	Sunny	NS	NS	NS	NS	Coarse particulate	Normal	None
S120	9/10/10	Sunny	NS	NS	NS	NS	Coarse particulate	Normal	None
S122	6/16/10	Sunny	Musty	Yellow	Clear	None	None	None	Algae
S123	6/16/10	Partly Cloudy	NS	NS	NS	NS	None	Normal	None

NS – Not Sampled (dry)
NA – Not Accessible

Clarity
Sixty two of the sites with water were clear with negligible suspended particles observed. Four of the sites sampled were slightly cloudy and two of the samples were opaque.

Floatable Materials
The categories of floatable materials were trash, bubbles/foam, sheen, fecal matter, algae and other and each site had the potential to have multiple categories of floatable materials listed. Thirty two sites were observed to have no floatable materials. Nineteen sites were observed to have trash in or near the sampling location. Seven sites were observed to have bubbles and/or foam. Five sites had a visible sheen. Fifteen sites had algae present. Six sites observed also had floatable materials outside of the categories listed; those materials were, leaf debris, and/or duckweed.

Deposits
The categories of deposits were coarse particulates (sediment/gravel), fine particulates, stains, oily deposits, and other. Multiple types of deposits could have been identified at each site. Twelve sites did not have any deposits at the sampling site. Eighteen sites had fine particulate deposits. Forty sites had course particulate deposits of sediment and/or gravel. One site had some type of stain at the sampling point. Twenty sites had deposits with particulates that were both course and fine.

Vegetation
The categories for amount of vegetation present at and around the sampling area were none, limited, normal, and excessive. Twenty seven sites had no vegetation present. Five sites had limited vegetation growth signifying some type of eradication program. Fifty five sites observed had normal vegetation growth. Four sites had excessive vegetation growth around the sampling area.

Biology
The categories for types of life present at the sites were insects, algae, fish, snails, and mussels/barnacles. Multiple types of life could have been identified at each site. Forty three of the sites had algae present; forty of those sites also having some other type of life present. Twenty seven sites had snails present. Thirty nine sites had insects present. Six sites had fish present. Three sites had some “other” type of life present; they were tadpoles, leeches and crawfish. Thirty six sites did not have any visible life present at the sampling site.

4.2 Field Water Quality Results

Field analyses were conducted at all sites with flowing or ponded water. The field analyses were conducted using a Hydrolab Quanta and CHEMetrics field test kits. A summary of the initial screening results from field analysis is presented in Table 6. If action levels were exceeded, the site was revisited to confirm the initial results and an IC/ID investigation was initiated. Follow-up investigations are presented in Section 4.4.

Table 6. 2010 Initial Screening Field Measurement Results for Sites with Ponded or Flowing Water.

Station ID	Date	Time	Flow Rate (gpm)	pH (Units)	EC (mS□cm)	Turbidity (NTU)	DO (mg□L)	Temp (□C)	NH_3-N (mg□L)	NO_3-N (mg□L)	PO_4-P (mg□L)	MBAS (mg□L)
Agua Hedionda												
A002	8/9/10	9:28	17	8.11	2.15	4	7.31	19.64	0.2	0.5	□0.3	0.25
A004a	8/23/10	9:28	Ponded	7.28	1.51	4	4.30	21.03	□0.2	0.4	□0.3	0.50
A004b	8/23/10	9:45	2	7.88	5.42	9	8.53	22.95	□0.2	0.6	□0.3	0.50
A013	7/26/10	13:27	15	6.53	7.17	17	6.26	24.79	0.6	1.6	□0.3	0.50
A014	8/30/10	10:00	□1	6.80	3.82	□1	5.12	20.50	0.2	□1.1	□0.3	0.50
A015	8/9/10	8:56	□1	7.11	5.48	77	7.58	19.94	0.3	2.2	□0.3	0.50
A016	7/26/10	11:11	26	7.92	5.28	200	5.75	19.87	**1.2**	□1.1	**5.2**	**3**
A019	9/20/10	10:50	Ponded	7.90	1.11	1	5.29	18.10	□0.2	□1.1	0.6	0.13
A021	8/30/10	11:50	Ponded	7.30	1.21	5	3.35	20.40	**1.3**	□1.1	0.4	0.50
A022	9/13/10	15:20	Ponded	7.70	4.41	2	5.21	21.60	0.3	7.7	□0.3	0.50
A023	9/13/10	14:40	Ponded	7.00	3.88	2	4.48	20.90	0.4	2.9	□0.3	0.75
A024	9/13/10	13:50	Ponded	7.20	5.20	40	2.16	20.70	**1.2**	□1.1	0.7	0.50
Buena Vista												
B002	5/24/10	10:32	4	7.90	3.76	1	8.96	16.59	0.3	8.9	□0.3	0.50
B022	7/26/10	10:33	7	8.38	4.49	1	8.50	20.46	□0.2	0.9	□0.3	0.75
B023	8/30/10	14:10	□1	7.60	12.88	9	6.52	25.10	0.4	1.2	□0.3	**1.25**
B024	8/30/10	3:10	Ponded	7.80	1.66	2	4.20	13.30	**3**	2.8	0.6	0.50
B026	8/31/10	11:10	4	7.80	1.24	49	6.24	23.40	0.6	1.2	□0.3	**3**
B027	8/11/10	8:51	□1	7.92	2.20	2	4.68	18.44	0.3	1.0	□0.3	0.50
B032	9/1/10	9:45	10	7.30	4.62	□1	6.45	21.20	0.2	2.8	□0.3	0.50
B033	8/31/10	12:50	□1	7.90	2.13	4	6.04	23.00	□0.2	□0.4	□0.3	0.50
B034	8/31/10	14:30	□1	8.10	2.38	2	6.43	22.90	□0.2	□0.4	0.3	0.63
B103	8/31/10	15:15	□1	7.50	4.26	3	5.47	22.40	0.2	3.1	□0.3	0.50
B104	7/26/10	9:16	Ponded	7.51	1.93	4	4.28	21.69	□0.2	**14.6**	1.2	0.50
B105	9/1/10	10:40	5	7.80	4.96	1	6.75	21.10	0.3	1.9	□0.3	0.50
B106	8/9/10	13:21	17	8.07	3.17	1	9.05	21.85	0.5	2.4	□0.3	0.60

Station ID	Date	Time	Flow Rate (gpm)	pH (Units)	EC (mS□cm)	Turbidity (NTU)	DO (mg□L)	Temp (□C)	NH_3-N (mg□L)	NO_3-N (mg□L)	PO_4-P (mg□L)	MBAS (mg□L)
Loma Alta												
L001	6/30/10	9:58	□1	8.13	0.75	3	8.49	19.84	0.2	1.0	□0.3	0.25
L002	9/1/10	0:30	□1	7.80	7.33	□1	5.58	19.40	0.2	2.4	□0.3	0.63
L003	8/9/10	11:11	4	8.30	5.09	2	8.55	21.03	0.2	2.8	□0.3	0.40
L004	9/9/10	15:15	Ponded	8.10	5.67	11	5.42	21.70	0.3	7.3	□0.3	0.50
L006	9/10/10	11:40	Ponded	7.20	1.82	2	4.82	21.80	0.6	□0.4	0.3	0.25
L007	9/10/10	12:10	Ponded	6.70	3.55	8	3.57	23.00	0.6	1.2	0.3	0.25
L008	9/10/10	14:40	Ponded	7.60	11.03	3	5.47	21.50	0.2	5.8	0.3	0.75
L009	5/13/10	11:42	112	7.91	3.44	2	8.35	19.53	0.4	2.0	□0.3	0.75
L010	9/1/10	14:30	□1	7.70	5.21	2	5.46	25.90	0.5	2.0	0.3	0.50
L013	9/3/10	9:30	□1	7.80	1.74	5	5.18	22.50	□0.2	0.4	□0.3	0.50
L019	6/30/10	11:10	Ponded	8.57	0.38	91	14.94	26.09	0.4	□1.1	0.9	**1.00**
L020	9/1/10	15:20	□1	7.90	1.36	1	6.21	22.80	□0.2	1.0	0.3	0.25
L027	5/12/10	13:43	130	7.75	4.54	1	10.18	19.33	0.3	0.4	□0.3	0.50
L029	9/10/10	10:10	Ponded	7.10	1.11	4	2.45	22.10	0.8	0.1	0.3	0.50
L032	9/8/10	22:40	Ponded	7.60	4.60	8	5.42	20.30	0.3	0.5	□0.3	0.50
L034	9/13/10	11:05	Ponded	8.10	1.05	4	7.97	25.40	□0.2	□1.1	□0.3	0.25
L036	9/8/10	23:30	Ponded	7.30	1.99	10	3.28	21.20	0.4	0.5	1.4	0.50
L040	6/30/10	13:09	4	8.51	2.23	9	13.78	28.46	□0.2	□0.4	□0.3	0.25
L046	8/11/10	11:23	Ponded	7.79	2.56	5	12.41	26.68	0.3	1.5	□0.3	0.85
L103	9/8/10	12:20	Ponded	7.70	1.74	6	6.93	20.00	□0.2	1.0	0.3	0.25
L105	9/8/10	14:10	□1	7.70	3.96	18	5.36	20.40	0.3	0.6	0.3	0.50
L107	9/9/10	12:30	Ponded	7.80	1.28	11	5.15	22.90	0.6	□0.4	**2.3**	**1.50**
L108	8/11/10	10:42	24	8.27	11.68	□1	14.89	26.57	0.2	2.0	□0.3	0.75
L110	9/8/10	15:00	Ponded	7.30	3.08	5	4.43	21.90	0.3	1.4	0.4	0.25
L111	5/24/10	11:18	4	6.98	0.53	3	4.88	18.18	□0.2	1.2	□0.3	0.25
L114	8/11/10	11:29	Ponded	7.53	8.25	1	5.59	22.51	□0.2	1.5	□0.3	0.75

Station ID	Date	Time	Flow Rate (gpm)	pH (Units)	EC (mS□cm)	Turbidity (NTU)	DO (mg□L)	Temp (□C)	NH_3-N (mg□L)	NO_3-N (mg□L)	PO_4-P (mg□L)	MBAS (mg□L)
San Luis Rey												
S006	5/13/10	10:23	□1	7.96	0.91	5	8.18	18.79	0.4	□1	□0.3	0.25
S044	7/8/10	10:33	4	7.74	4.70	0	8.63	19.04	□0.2	1.8	□0.3	0.50
S045	7/8/10	11:42	□1	7.58	4.06	1	7.21	18.94	0.2	2.1	□0.3	0.75
S065	6/16/10	12:55	Ponded	7.85	3.83	12	3.30	23.46	0.2	□0.4	0.8	0.25
S072	7/7/10	8:44	Ponded	7.02	0.54	5	6.25	17.77	0.3	□1	0.4	0.75
S077	9/3/10	10:30	Ponded	7.00	4.53	7	4.22	22.30	0.5	1.6	□0.3	0.50
S085	8/23/10	11:46	Ponded	8.03	4.25	9	7.75	25.75	0.2	2.1	0.4	0.50
S088	9/3/10	11:25	Ponded	8.00	2.12	0	5.07	23.60	□0.2	1.1	□0.3	0.25
S102	9/3/10	12:10	Ponded	7.80	0.94	26	5.47	20.00	0.3	0.6	□0.3	0.13
S103	9/3/10	14:00	□1	7.30	1.04	6	5.32	24.10	□0.2	□0.4	0.4	0.13
S104	9/3/10	14:55	□1	7.30	1.08	2	3.90	20.70	**1.2**	□0.4	0.4	0.13
S110	7/8/10	13:23	Ponded	**9.43**	1.04	8	17.33	21.00	0.2	0.4	□0.3	0.25
S111	9/7/10	12:15	Ponded	7.80	1.60	3	6.15	19.80	0.3	**15.1**	0.4	0.25
S115	9/7/10	15:00	Ponded	8.20	1.82	3	7.12	24.00	□0.2	5.0	□0.3	0.13
S117	8/23/10	11:22	2	7.99	4.20	3	8.97	20.84	0.2	3.8	□0.3	0.75
S118	9/9/10	14:30	Ponded	7.50	4.11	□1	5.62	20.70	0.6	1.4	□0.3	0.25
S122	6/16/10	11:49	1	7.77	3.90	5	5.84	19.53	□0.2	□1	0.4	0.75

Bold/Highlighted values indicate action level exceedances.

Flow Rate
Thirty two of the 68 sites with water were ponded. The flow rates at the sites with measurable flow ranged from <1 gpm at B027 to 130 gpm at L027.

Water Temperature
Water temperature was measured in the field immediately upon sample collection at each site with flowing or ponded water. Temperature readings ranged from 13.30˚C at B024 on August 30, 2010 to 28.46˚C at L040 on June 30, 2010. The average temperature was 21.52˚C with a standard deviation of 2.57˚C.

pH
pH is a term used to indicate the alkalinity or acidity of a substance as ranked on a scale from 1.0 to 14.0. Acidity increases as the pH gets lower. Figure 2 presents the pH of some common liquids.

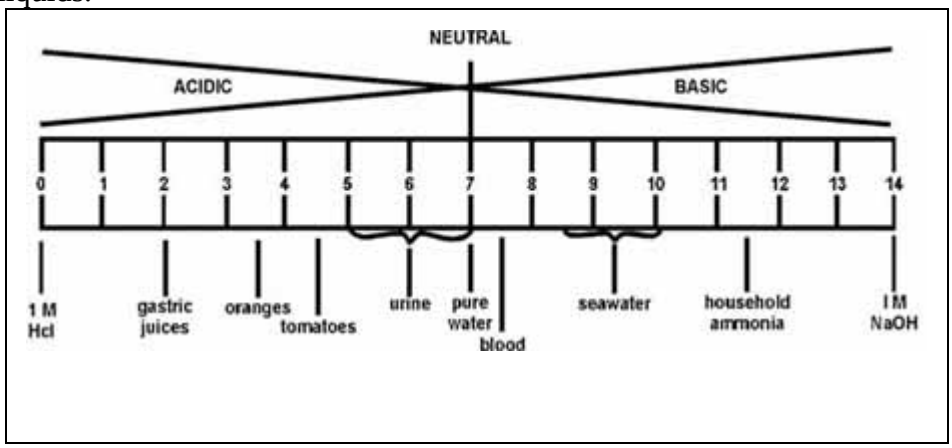

Figure 2. pH of Selected Liquids.

pH affects many chemical and biological processes in the water. For example, different organisms flourish within different ranges of pH. The largest varieties of aquatic animals prefer a range of 6.5-8.0. pH outside this range reduces the diversity in the stream because it stresses the physiological systems of most organisms and can reduce reproduction. Low pH can also allow toxic elements and compounds to become mobile and "available" for uptake by aquatic plants and animals. This can produce conditions that are toxic to aquatic life. Changes in acidity can be caused by atmospheric deposition (acid rain), surrounding rock, and certain wastewater discharges. An unusually high pH reading could be an indicator of an industrial discharge in the sample area; therefore, pH is used as an indicator of illicit discharges.

The pH values taken from the ponded or flowing water ranged from 6.53 at A013 to 9.43 at S110. The median pH value observed during field screening was 7.80; the average pH value was 7.70 with a standard deviation of 0.48. The one site that was outside of the acceptable range was S110. There were no sites that had pH levels below the acceptable range. S110 was ponded and is associated with a concrete channel or pipe. Concrete is known to be basic and have high pH values associated with the cement components. This may be a cause of the high pH values.

Conductivity
Conductivity is a measure of the ability of water to pass an electrical current. Conductivity in water is affected by the presence of inorganic dissolved solids such as chloride, nitrate, sulfate, and phosphate anions (ions that carry a negative charge) or sodium, magnesium, calcium, iron, and aluminum cations (ions that carry a positive charge). Organic compounds like oil, phenol, alcohol, and sugar do not conduct electrical current very well and therefore have a low conductivity when in water. Conductivity is also affected by temperature: the warmer the water, the higher the conductivity. In addition, discharges to streams can also change the conductivity depending on their make-up. A failing sewage system would raise the conductivity because of the presence of chloride, phosphate, and nitrate; an oil spill would lower the conductivity. The conductivity values ranged from 0.38 mS/cm at L019 to 12.88 mS/cm at B023. The median conductivity value observed during field screening was 3.31mS/cm. The average conductivity value was 3.48 mS/cm with a standard deviation of 2.57 mS/cm.

Turbidity
Turbidity is a measure of water clarity, how much of the material suspended in water decreases the passage of light through the water. Suspended materials include soil particles (clay, silt, and sand), algae, microbes and other substances. Turbidity can affect the color of the water.

Higher turbidity increases water temperatures because suspended particles absorb more heat. This, in turn, reduces the concentration of dissolved oxygen because warm water holds less dissolved oxygen than cold. Higher turbidity also reduces the amount of light penetrating the water, which reduces photosynthesis and the production of dissolved oxygen. Suspended materials can clog fish gills, reducing resistance to disease in fish, lowering growth rates, and affecting egg and larval development. As the particles settle, they can blanket the stream bottom, especially in slower waters, and smother fish eggs.

Turbidity can be useful as an indicator of the effects of runoff from construction, agricultural practices, logging activity, discharges, and other sources. Turbidity often increases sharply during a rainfall, especially in developed watersheds, which typically have relatively high percentages of impervious surfaces. The flow of storm water runoff from impervious surfaces rapidly increases stream velocity, which increases the erosion rates of stream banks and channels. Turbidity can also rise sharply during dry weather if earth-disturbing activities are occurring in or near a stream without erosion control practices in place. The turbidity values ranged from <1 NTU at B032 to >200 NTU at A016. The median turbidity value observed during field screening was 4 NTU.

Dissolved Oxygen
Dissolved oxygen analysis measures the amount of gaseous oxygen dissolved in an aqueous solution. Oxygen gets into water by diffusion from the surrounding air, by aeration, and as a waste product of photosynthesis.

Adequate dissolved oxygen is necessary for good water quality. Oxygen is a necessary element to all forms of life. Natural stream purification processes require adequate oxygen levels in order to provide for aerobic life forms. As dissolved oxygen levels in the water drop below 5.0 mg/L, aquatic life is put under stress. The lower the concentration, the greater the stress is on aquatic life. The dissolved oxygen values ranged from 2.16 mg/L at A024 to 17.33 mg/L at S110. The median dissolved oxygen value observed during field screening was 5.8 mg/L. All but three of the sites that had DO levels less than 5.0 mg/L were ponded or had little flow. Frequently, ponded water has higher turbidity and nutrient levels, indicating nutrient breakdown which leads to low DO levels.

Ammonia

Ammonia is a common indicator of pollution from decomposing organic matter, agricultural or household fertilizer runoff, or the presence of sewage. Ammonia occurs naturally in the environment, however, in higher quantities it can become toxic to fish and other organisms. The ammonia values range from <0.2 mg/L to >3 mg/L. The median ammonia value observed during the field screening was 0.3 mg/L. Four of the five sites that exceeded the action level for ammonia were ponded or had flow that was <1gpm and were likely caused by decaying organic matter in the ponded water.

Orthophosphate

Both phosphorus and nitrogen are essential nutrients for the plants and animals that make up the aquatic food web. Since phosphorus is the nutrient in short supply in most fresh waters, even a modest increase in phosphorus can, under the right conditions, set off a chain of undesirable events in a stream including accelerated plant growth, algae blooms, and low dissolved oxygen. Locally, in San Diego County, however, the pH of soils here is higher than 8.0, which creates an unavailability to plant life.

There are many sources of phosphorus, both natural and human. These include soil and rocks, wastewater treatment plants, runoff from fertilized lawns and cropland, failing septic systems, runoff from animal manure storage areas, disturbed land areas, drained wetlands, water treatment, and commercial cleaning preparations. The orthophosphate values ranged from <0.3 mg/L to 5.2 mg/L at A016. The median orthophosphate value observed during field screening was 0.15 mg/L. Two sites exceeded the action level, of which, one was ponded.

Nitrate-N

Nitrate is the most readily available form of nitrogen for plant uptake and is a limiting factor in plant growth. Nitrates are naturally occurring in soil and rocks, but are also added to watersheds from anthropogenic sources such as fertilizers, failing septic systems, and animal waste. The nitrate-N values from the 2010 dry weather monitoring season ranged from <0.4 mg/L to 15.1 mg/L at S111. The median nitrate-N value was 1.07 mg/L. B104 and S111 were the only two sites that exceeded the action level for nitrate.

Surfactants (MBAS)

Surfactants or MBAS were previously analyzed in the laboratory, but in the current permit are required as part of the field screening. Surfactants are analyzed to detect detergent

pollution from residential, commercial, or industrial washing activities. Several Copermittees hvee reported exceedances in the field screening data at sites with higher conductivity levels, but when the samples were taken to the laboratory, there were no exceedances. MBAS results were greater than or equal to the action level of 1.0 mg/L at five of the initial screening sites. Two of those sites had conductivity results greater that 5 mS/cm. One site continued to exceed, but was due to high conductivity. A lab sample was taken and the result was below the detection limit of 0.5 mg/L.

4.3 Laboratory Water Quality Results

Laboratory analysis was conducted at 19 sites, representing 28% of the sites with ponded or flowing water. Laboratory chemistry results are summarized and presented in Table 7 and microbiology results in Table 8. If action levels were exceeded, the site was revisited to confirm the initial results and an IC/ID investigation was initiated. Follow-up investigations are presented in Section 4.4 and Appendix C.

Oil and Grease

Oil and grease analysis is used to detect hydrocarbon pollution from a variety of sources including parking lots and streets, washing activities, illegal discharges, and automobile repair facilities. Oil and grease was detected at three sites, but all three results were well below the action level of 15 mg/L.

Total Hardness

Total hardness measures the amount of polyvalent cations in water. It generally represents calcium and magnesium ions in a water sample because they are the most common cations. Results are expressed in mg/L of $CaCO_3$. The California Toxics Rule (CTR) applies hardness-based water quality objectives to dissolved metals. Increasing hardness has the effect of decreasing the toxicity of metals[3]. The hardness values ranged from 406 mg/L as $CaCO_3$ at L019 to 2,300 mg/L as $CaCO_3$ at A013 with a median value of 890 mg/L as Ca CO_3. The average hardness value was 1,068mg/L of $CaCO_3$ and a standard deviation of 589 mg/L as $CaCO_3$.

[3] US Environmental Protection Agency. 2002. National Recommended Water Quality Criteria. November 2002. EPA-822-R-02-047

Table 7. 2010 Dry Weather Chemistry Results.

StationID	Date	Time	Oil Grease (mg/L)	Hardness Total as CaCO3 (mg/L)	Dissolved Cadmium (µg/L)	Dissolved Copper (µg/L)	Dissolved Lead (µg/L)	Dissolved Zinc (µg/L)	Chlorpyrifos (µg/L)	Diazinon (µg/L)
Agua Hedionda										
A002	8/9/2010	09:25	<2	609	0.3	5	<4	4	<0.05	<0.05
A004A	8/23/2010	09:35	<2	446	0.8	13.2	<4	5.77	<0.05	<0.05
A004B	8/23/2010	09:45	<2	1180	0.6	10.7	<4	<2	<0.05	<0.05
A013	7/26/2010	13:35	<2	2300	<2	3.9	<4	360	<0.05	<0.05
A015	8/9/2010	09:06	2	1860	4.7	7.65	<4	289	<0.05	0.2
A016	7/26/2010	11:15	5.6	820	<2	36	<4	100	<0.05	<0.05
Buena Vista										
B002	5/24/2010	10:40	<2	818	<0.3	2	<4	<2	<0.05	<0.05
B022	7/26/2010	10:35	<2	890	<2	6.3	<4	<6	<0.05	<0.05
B106	8/9/2010	13:25	<2	2280	<0.3	17.1	<4	9.33	<0.05	<0.05
Loma Alta										
L001	6/30/2010	10:06	<2	609	1.5	12.7	<4	33.6	<0.05	<0.05
L003	8/9/2010	11:15	<2	1430	<0.3	8.99	<4	<2	<0.05	<0.05
L009	5/13/2010	11:50	<3	1550	<0.3	5	<4	2	<0.05	<0.05
L019	6/30/2010	11:15	4	406	<0.3	3	<4	5.58	<0.05	<0.05
L027	5/12/2010	13:50	<2	1260	<0.3	3	<4	6.96	<0.05	<0.05
L040	6/30/2010	13:10	<2	520	<0.3	5	<4	5.88	<0.05	<0.05
San Luis Rey										
S006	5/13/2010	10:20	<2	527	<0.3	7.08	<4	26.4	<0.05	<0.05
S065	6/16/2010	13:00	<2	598	<0.3	<2	4	10.6	<0.05	<0.05
S117	8/23/2010	11:25	<2	1150	0.4	<2	<4	<2	<0.05	<0.05
S122	6/16/2010	12:00	<2	1030	<0.3	21.8	4	21.4	<0.05	<0.05

Table 8. 2008 Dry Weather Microbiology Results.

StationID	Date	Time	Total Coliform (MPN/100mL)	Fecal Coliform (MPN/100mL)	Enterococcus (MPN/100mL)
Agua Hedionda					
A002	8/9/2010	09:25	17,000	3,000	1,460
A004A	8/23/2010	09:35	**240,000**	**22,000**	**7,910**
A004B	8/23/2010	09:45	11,000	40	3,380
A013	7/26/2010	13:35	14,000	500	439
A015	8/9/2010	09:06	**130,000**	**50,000**	320
A016	7/26/2010	11:15	**1,600,000**	**300,000**	**72,700**
Buena Vista					
B002	5/24/2010	10:40	11,000	270	610
B022	7/26/2010	10:35	30,000	600	6,480
B106	8/9/2010	13:25	17,000	800	5,620
Loma Alta					
L001	6/30/2010	10:06	110,000	3,000	**8,560**
L003	8/9/2010	11:15	**170,000**	2,300	4,660
L009	5/13/2010	11:50	23,000	1,100	1,460
L019	6/30/2010	11:15	23,000	300	280
L027	5/12/2010	13:50	5,000	300	97
L040	6/30/2010	13:10	17,000	300	270
San Luis Rey					
S006	5/13/2010	10:20	30,000	500	4,990
S065	6/16/2010	13:00	36,000	60	170
S117	8/23/2010	11:25	2,200	500	260
S122	6/16/2010	12:00	**130,000**	5,000	**21,400**

Dissolved Metals

Metal concentrations in the environment can originate from a variety of sources including automobiles, automobile repair facilities, car washing, and industrial activities, as well as natural geologic processes. The laboratory samples collected during the 2010 Dry Weather Monitoring Program were analyzed for the presence of dissolved cadmium, copper, lead, and zinc. Results were compared to the hardness-based CTR CMC (1-hour) criterion. There were no exceedances of dissolved copper, lead, cadmium or zinc at any of the sites visited.

Chlorpyrifos and Diazinon

Chlorpyrifos and diazinon are organophosphate pesticides used to control insects, fleas and ticks. As of December 31, 2004, it became unlawful to sell diazinon outdoor, non-agricultural products. Chlorpyrifos can now only be used for nursery production, golf courses and road medians. Diazinon was detected at one location (A015) but was below the action level. Chlorpyrifos was not detected at any of the laboratory sampling sites.

Total Coliform Bacteria
Total coliform bacteria are mostly harmless bacteria that are ubiquitous in the environment living in soil, water, and mammalian digestive tracts. Water samples are analyzed for total coliform bacteria to indicate the presence of other more harmful pathogenic (disease causing) organisms that are associated with coliform but are difficult to test for because they are present in much smaller quantities. During the dry weather monitoring period total coliform results ranged from 700 MPN/100mL to 1,600,000 MPN/100 ml. Five of the 19 sites sampled for laboratory analysis exceeded total coliform action levels.

Fecal Coliform and Enterococcus
Members of two bacteria sub-groups, fecal coliforms and Enterococcus, are used as indicators of possible sewage contamination because they are specifically found in human and animal digestive tracks. Although they are generally not harmful themselves, they indicate the possible presence of pathogenic bacteria, viruses, and protozoans that also live in human and animal digestive systems. Since it is difficult, time-consuming, and expensive to test directly for the presence of a large variety of pathogens, these fecal indicator bacteria are used. Sources of fecal contamination to surface waters include wastewater treatment plants, on-site septic systems, domestic and wild animal manure, and storm water runoff.

In addition to the possible health risk associated with the presence of elevated levels of fecal bacteria, they can also cause cloudy water, unpleasant odors, and an increased oxygen demand. Fecal coliform results ranged from 20 MPN/100mL to 300,000 MPN/100 ml. Three of the 19 sites sampled for laboratory analysis exceeded the fecal coliform action level. Enterococcus results ranged from 97 MPN/100mL to 72,700 MPN/100mL. Four of the 19 sites sampled exceeded the Enterococcus action level. Two sites, A004a and A016, exceeded all three microbiology action levels.

4.4 IC/ID Investigations

Sites that exceeded one or more action level were revisited and resampled to confirm the initial result. If the confirmation result also exceeded an action level, an IC/ID investigation was initiated. Seventeen sites had one or more action level exceedances that required confirmation. Four of those sites, upon confirmation, required an IC/ID investigation

The most common exceedances for field screening analytes were MBAS and ammonia; 5 sites had an initial exceedance for each pollutant. Only one MBAS and one ammonia exceedance required an IC/ID investigation. In addition, one site that exceeded the pH action level required an IC/ID. Figure 3 provides the number of sites by watershed exceeding the initial field screening action levels.

None of the 19 sites sampled for laboratory chemistry analysis required an upstream investigation. Six of the 19 sites chosen for laboratory analysis had at least one indicator bacteria exceedance. There were five exceedances for total coliforms, three for fecal coliforms, and four for Enterococcus. One of the five total coliform exceedances required an upstream investigation. One of the three fecal coliform confirmation samples and none of the Enterococcus confirmation samples required an IC/ID investigation. Figure 4 provides the number of sites by watershed that exceeded the microbiology action levels.

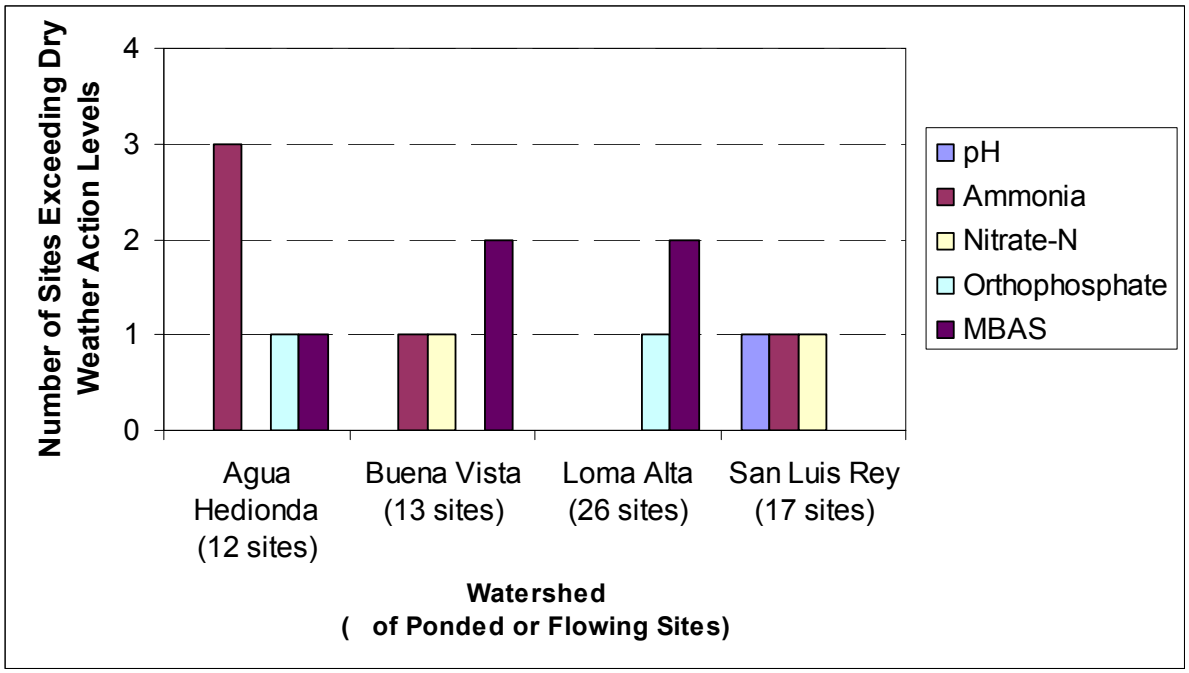

Figure 3. Number of Initial Field Screening Exceedances by Analyte and Watershed.

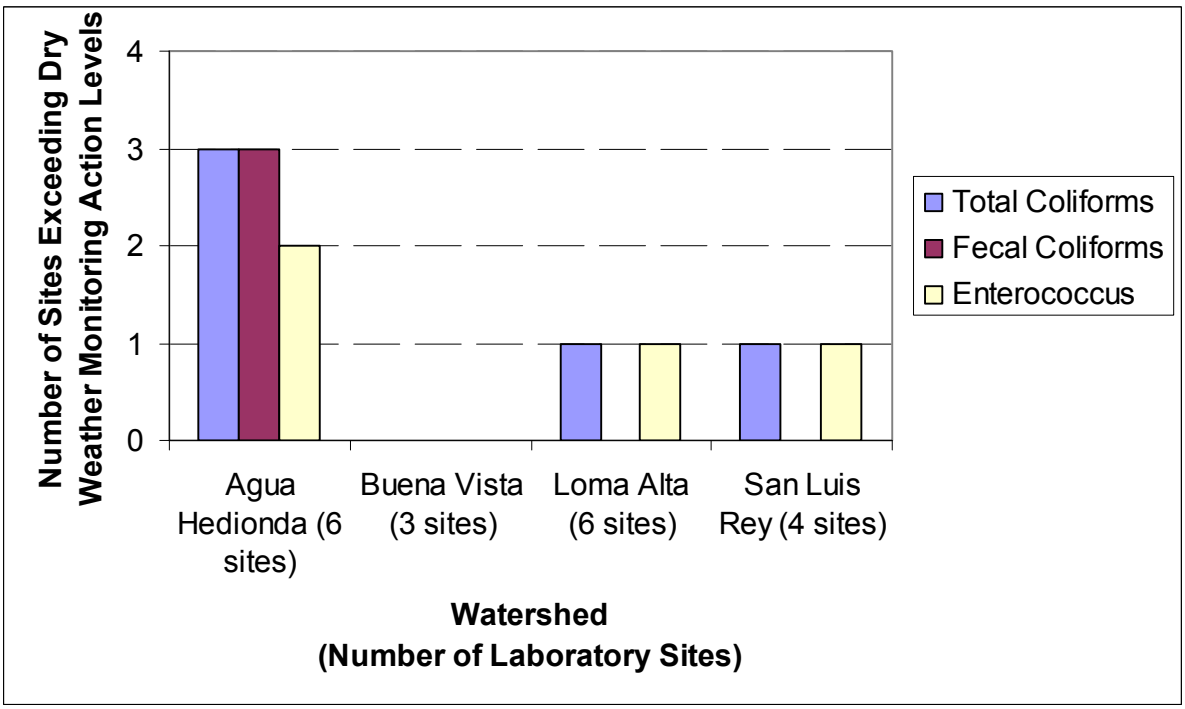

Figure 4. Number of Microbiology Exceedances by Analyte and Watershed.

Appendix C contains a detailed description of the confirmation and IC/ID investigations at each site and the actions that were taken to reduce contaminants.

4.5 Trash Assessment

Ninety sites were assessed for trash amount and extent. The majority of sites were in the top-range of the assessment and were either optimal or marginal. Table 9 and Figure 5 present a summary of trash assessment throughout the City. San Luis Rey Watershed was the only watershed to include sites with a "poor" rating. The distribution across watersheds is presented in four charts that make up Figure 6. In addition, Figures 7 and 8 provide an orthophotograph of the San Luis Rey and Carlsbad Watersheds and the distribution of trash assessment ratings throughout each watershed.

Table 9. Trash Assessment Results.

Optimal (34 Sites)	Suboptimal (22 Sites)	Marginal (29 Sites)	Submarginal (4 Sites)	Poor (1 Site)
A004b	A002	A004a	B106	S116
A019	A013	A016	L037	
A022	A014	A021	L110	
A024	A015	A023	S118	
B023	B103	B002		
B024	L003	B022		
B027	L005	B026		
B032	L006	L001		
B033	L008	L002		
B034	L019	L007		
B104	L036	L009		
B105	L040	L020		
L004	L052	L029		
L010	L103	L046		
L013	L105	L108		
L024	L107	S006		
L027	L111	S032		
L032	S035	S044		
L034	S065	S045		
L050	S111	S072		
L102	S117	S075		
L109	S122	S085		
L114		S102		
L115		S106		
S025		S107		
S043		S110		
S077		S113		
S088		S119		
S103		S123		
S104				
S108				
S109				
S115				
S120				

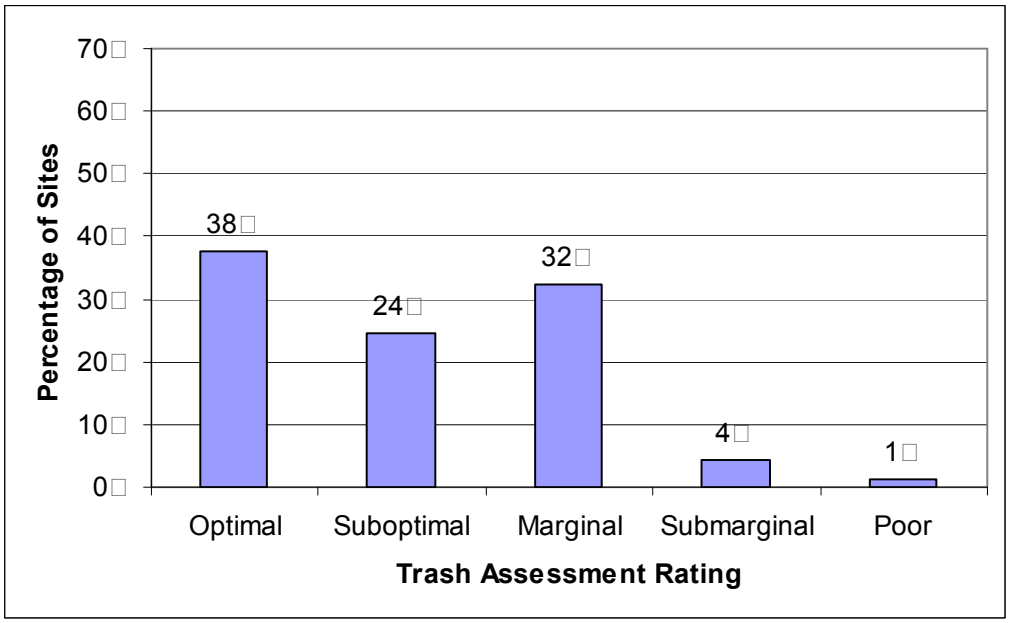

Figure 5. Summary of City of Oceanside Trash Assessment Ratings.

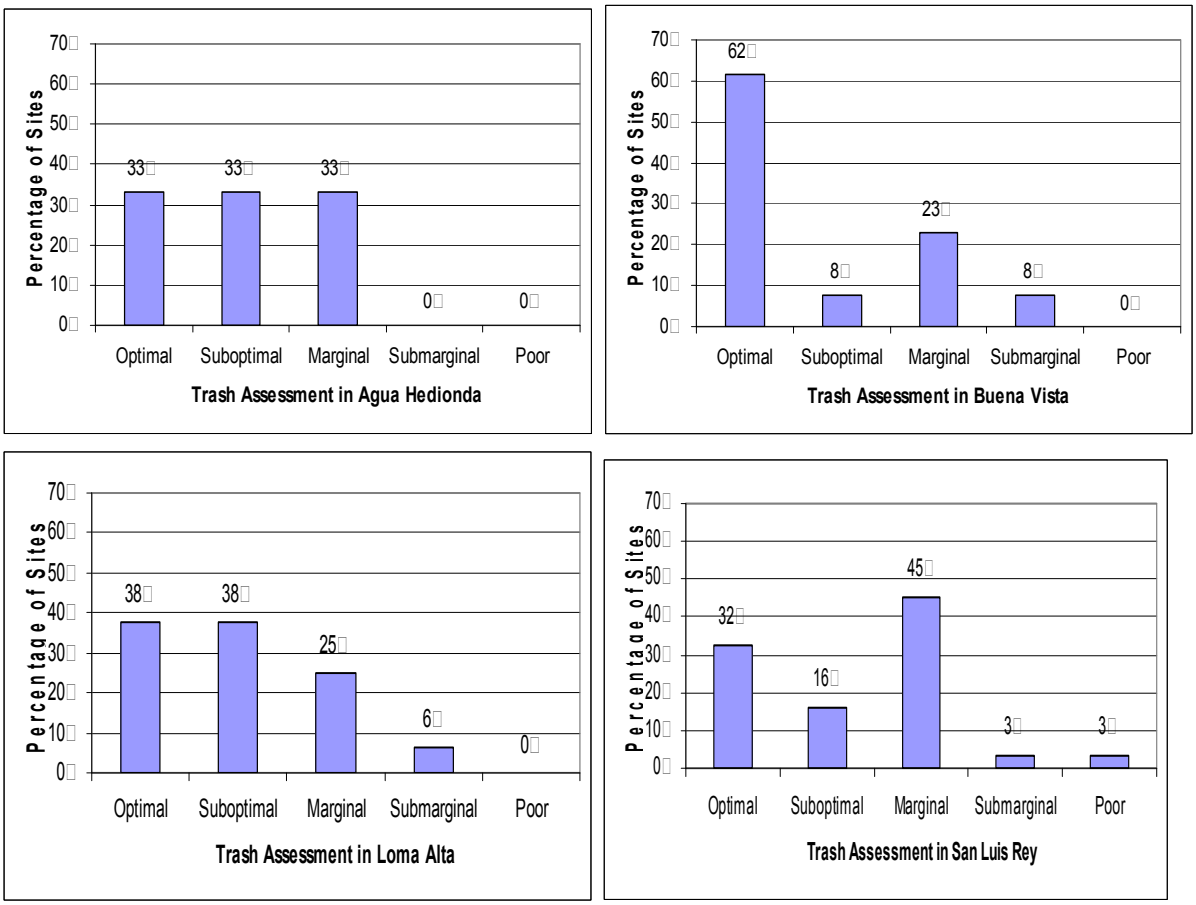

Figure 6. Trash Assessment by Watershed.

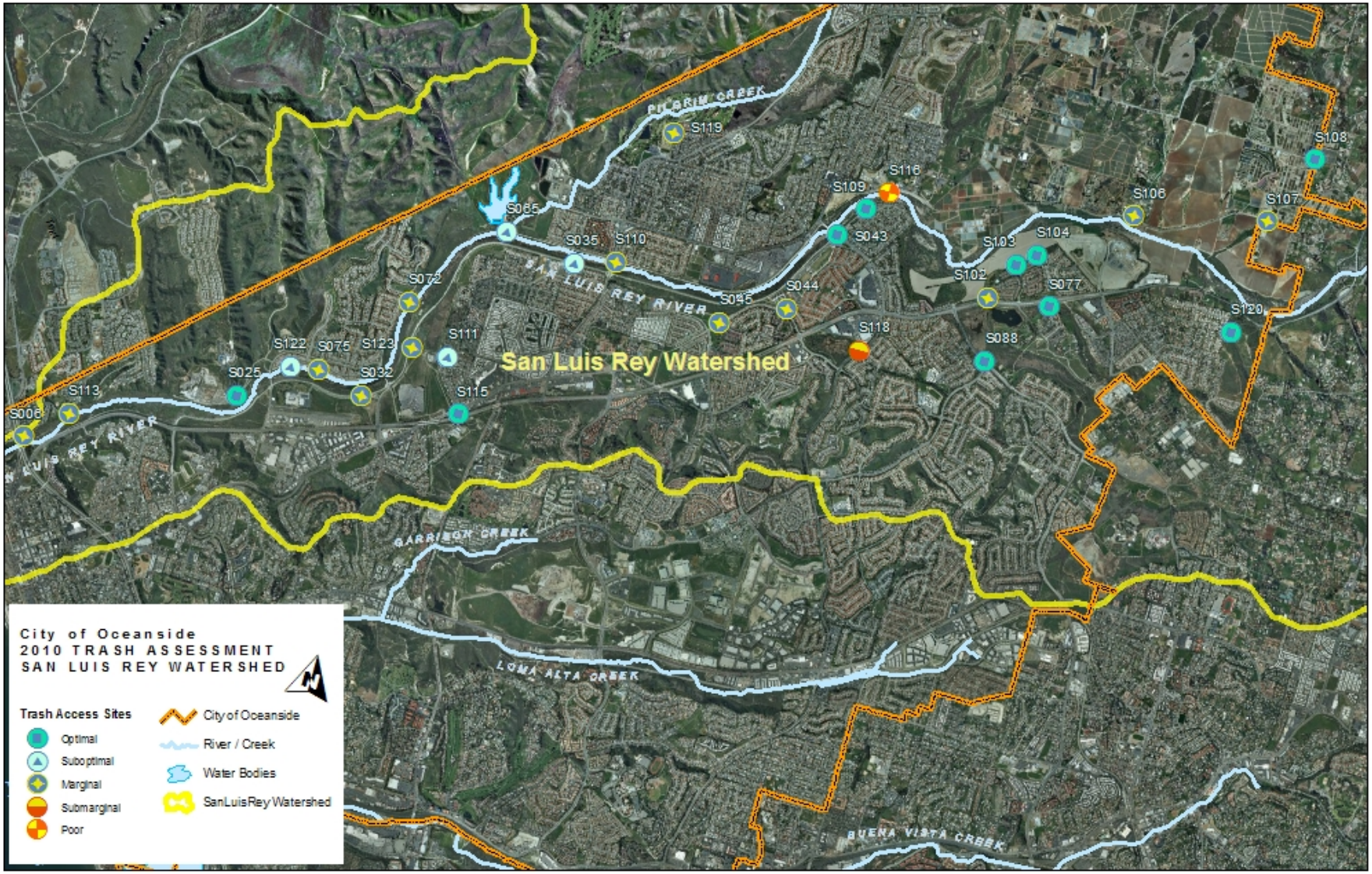

Figure 7. 2010 Trash Assessment for the San Luis Rey Watershed.

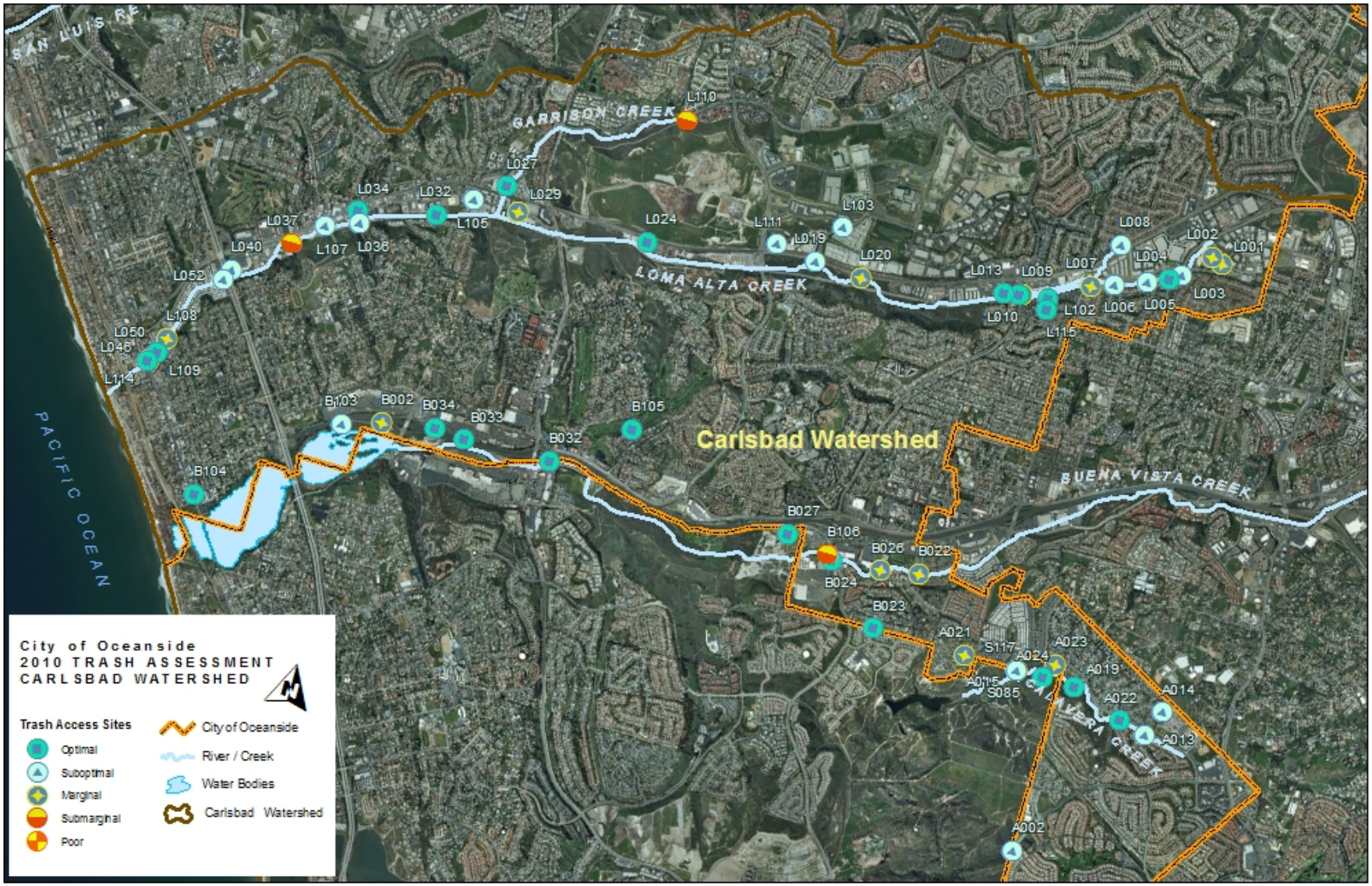

Figure 8. 2010 Trash Assessment for the Carlsbad Watersheds.

4.5.1 Threat to Human or Aquatic Health

The threat to human and aquatic health was assessed at each site. Detailed definitions for these threats are found in Section 2.8. In general, a threat to human health includes trash and debris that have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria or have the potential for physical harm. In 2009 the presence of mosquito larvae was specifically added as cause for a threat to human health if the water was ponded due to trash. A threat to aquatic health includes trash and debris such as small floatable material that is persistent and can be transported long distances that resemble food and may be ingested. The threat also includes debris that has the potential for entanglement or oil or chemicals that could harm aquatic life.

One site (1.1% of all sites) was deemed a threat to human health in the 2010 dry weather survey; site B022. Site B022 was an assessment of both the storm drain and receiving water. Several dirty diapers were found at this site in the receiving water. An ongoing problem at this site appears to be residents of the condominium complex throwing trash into the channelized creek.

One site (1.1% of all sites) was deemed a threat to aquatic health; Site A004a. Site A004a had quite a bit of yard waste present in and around the sample area.

4.5.2 Submarginal and Poor Site Assessment

Four of the 90 sites (4%) assessed were deemed submarginal and 1 of the 90 (1%) were deemed poor. Table 10 presents a summary of the sites that were submarginal and poor and identifies the ranking for the types of trash found. For example, a rank of “1” for Household and “2” for Food Packaging would mean that there was more household waste than food packaging waste. In addition, up to two potential routes and sources were identified and are listed in the Table 10.

Seventy eight percent of the trash found at submarginal and poor sites fell into the household or food packaging categories (Figure 9). There were no “automotive,” “biohazard,” “food waste,” or “toxic” waste found at any of the assessment locations. The two most common potential routes of trash entering the area were upstream (47%) or littering (29%). Household waste was the most common potential source of the trash (28%). Twenty four percent of the trash also listed “transient” as a potential source, and 18% listed “unable to determine” as a potential source. (Figure 10).

Table 10. Summary of Trash Type and Potential Routes and Sources for Submarginal and Poor Sites During the 2010 Dry Weather Monitoring Program.

StationID	Trash Type	Rank	Potential Route	Additional Potential Route (if needed)	Potential Source	Additional Potential Source (if needed)
Submarginal Sites						
B106	Cigarette butts	1	Littering	-	Household	Transient
	Household	2	Littering	Upstream	Household	Transient
	Food packaging	3	Littering	Upstream	Household	Transient
L037	Food packaging	1	Littering	Upstream	Commercial	Industrial
L110	Food packaging	1	Upstream	Unable to determine	Household	Unable to determine
	Household	2	Upstream	Unable to determine	Household	Unable to determine
S118	Food packaging	1	Upstream	Unable to determine	Transient	Unable to determine
Poor Sites						
S116	Food packaging	1	Littering	Upstream	School	-
	Construction	2	Dumping	Upstream	Construction	Commercial

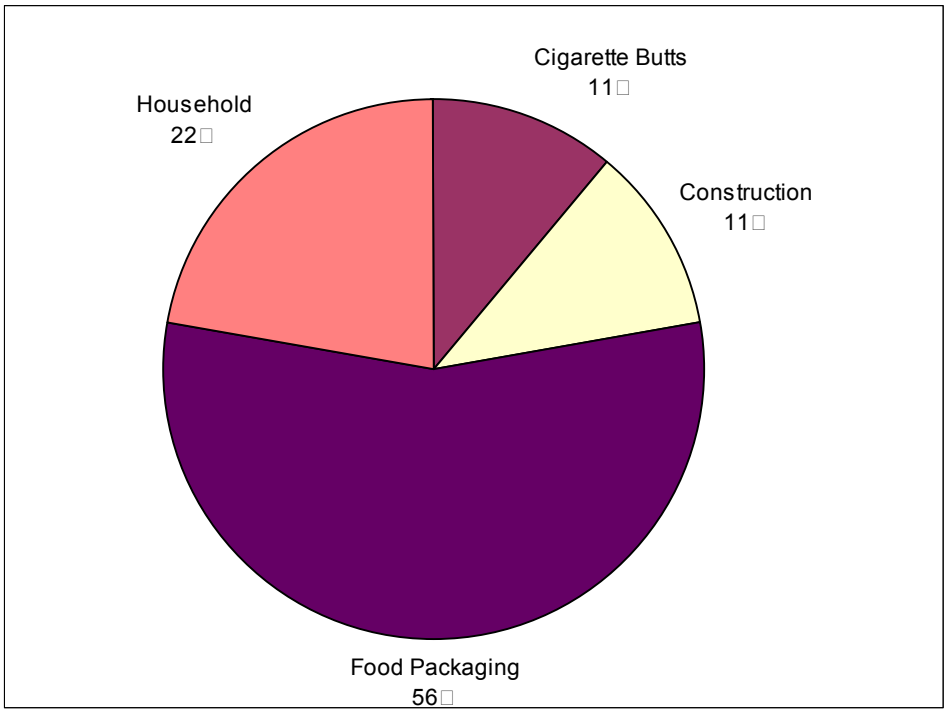

Figure 9. Types of Trash Identified at Submarginal and Poor Sites.

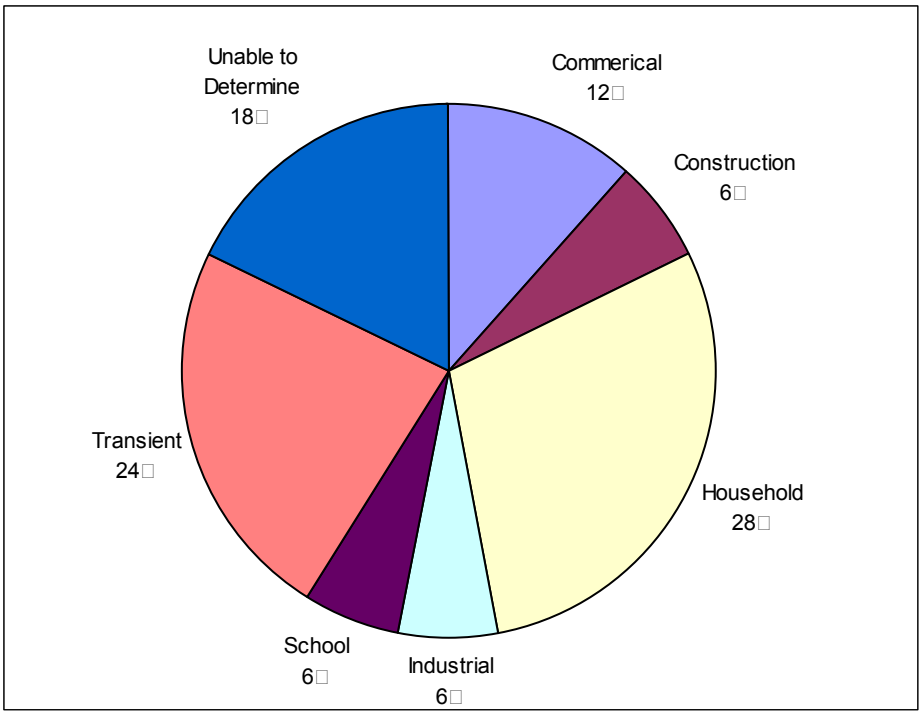

Figure 10. Potential Sources of Trash Assessed at Submarginal and Poor Sites.

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5 DISSCUSION

5.1 2010 Dry Weather Summary

The 2010 Dry Weather Monitoring season marked the third year for implementation of Order No. 2007-0001, the San Diego Region's Municipal Permit. In the City's 2008 JURMP Update, sites were reassessed and procedures were refined to fit the new requirements. The City has a list of 67 primary sites and 30 alternate sites to visit between May 1 and October 30 of each year. If a primary site is inaccessible or dry, an alternate site, ideally from the same watershed, is screened. If samples from any site with ponded or flowing water exceed Dry Weather Monitoring action levels, those sites are resampled within two business days. If the site continues to exceed action levels then an IC/ID investigation is initiated. A trash assessment is completed at each site.

During the 2010 monitoring season, the 67 primary sites were visited. Two of those sites were inaccessible and an additional eleven were dry. Twenty six alternate sites were visited. Nineteen of the ponded or flowing sites had additional analysis completed in the lab for chemistry and microbiology (28%).

Seventeen sites required confirmation for an initial field screening exceedance. Of those, only four required an IC/ID investigation. Figure 11 represents the percentage of sites in each watershed that exceeded an initial field screening analyte. The most common exceedance was for MBAS and ammonia.

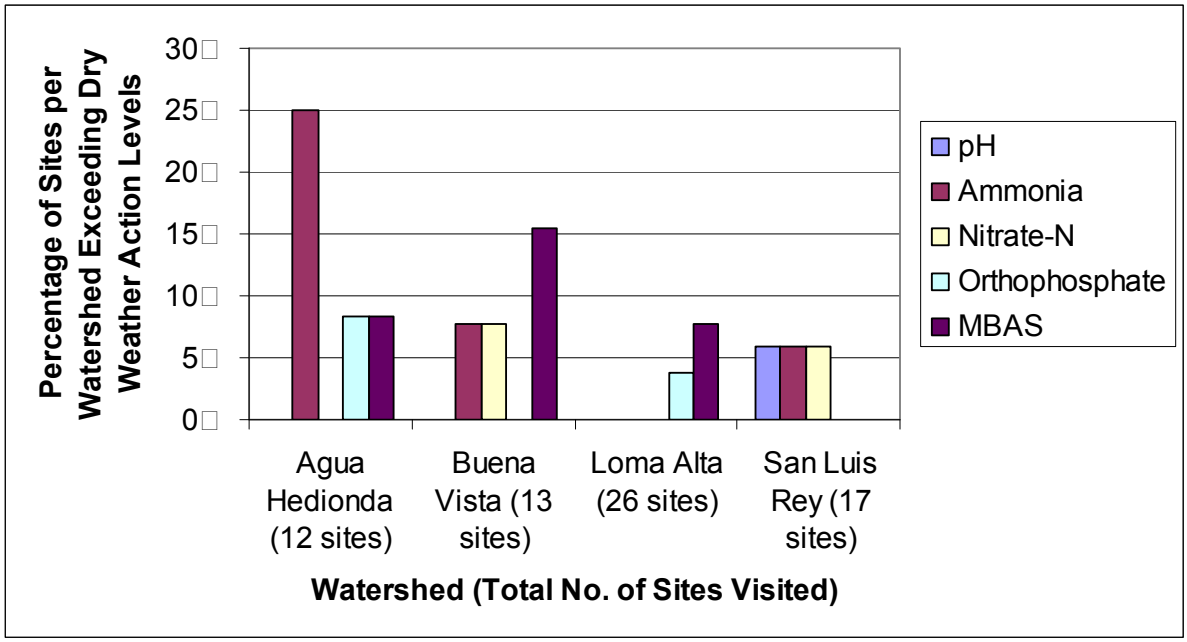

Figure 11. Percentage of Initial Exceedances in Each Watershed.

Of the 19 sites chosen for laboratory analysis, no site had an exceedance for chemistry results. Microbiology analysis resulted in five exceedances for total coliforms, three for fecal

coliforms, and four for Enterococcus. Only one site with a continued total coliform and fecal coliform exceedance required an upstream investigation.

The majority of field screening exceedances were from ponded or very low flow water (less than one gpm of flow). The prevailing source of historical ponded and flowing water is from residential and commercial over-irrigation. On May 9, 2009, the Oceanside City Council voted to declare a Drought Level 2 with new water use restrictions for residents and businesses taking effect on July 1, 2009 and continuing to the present. Level 2 restrictions include:

- No washing down of paved surfaces.
- Stop water waste from inefficient landscape irrigation.
- Water before 10:00am and after 6:00pm.
- Wash vehicles using a bucket and hand-held hose equipped with a positive shut-off nozzle.
- Serve and refill water in restaurants only upon request.
- Offer hotel guests the option of not laundering towels and linens daily.
- Limit residential and commercial landscape irrigation to no more than 3 assigned days per week.
- Water landscaped areas, including trees and shrubs not irrigated by a landscape irrigation system, no more than 3 assigned days per week using a bucket, hand held hose with positive shut-off nozzle, or low-volume non-spray irrigation.
- Limit lawn watering and landscape irrigation using sprinklers to no more than 10 minutes per water station per assigned day.
- Sop operating ornamental fountains unless re-circulated water is used.
- Repair all leaks within 72 hours of notification by the City of Oceanside.

These efforts may be a reason for the decrease in field screening exceedances during the 2010 monitoring season. Since mid-2009, staff outreach to respond to complaints, violations, and Dry Weather Monitoring exceedances have included face-to-face outreach by two Clean Water Program Compliance Inspectors. In addition, new door-hangers that can be personalized were created and utilized by the Inspectors and field monitoring crew when inhabitants were not home. The City Water Utilities Department water meter crew also has been crucial in identifying and reporting city-wide over-irrigation runoff cases to the Clean Water Program Compliance Inspectors for further follow-up investigations. In addition to two inspectors, the Water Utility Department hired an outreach coordinator specifically for water conservation education in November of 2008.

The Water Conservation Specialist and Clean Water Program Environmental Specialists conducted water conservation and water quality outreach in many forms. Informational inserts, press releases, and fliers have been placed in water bills and distributed throughout the reporting year. The inserts include information about water saving incentive programs, community workshops, water-wise landscape suggestions, and repeated information about reducing water consumption particularly on outside landscaping. Outreach is also being provided on the local public access channel, the Oceanside Magazine, public education to schools, scout troops, and having staff available at community events such as Harbor Days and the local farmer's market.

5.2 Historical Data Comparison

In February 2001, the San Diego Regional Water Quality Control Board issued Order No. 2001-01 to the communities of San Diego County. As part of Order 2001-01, the City of Oceanside was required to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program. The Dry Weather Program under this order was implemented in the 2002 Dry Weather season. In 2007, the San Diego Regional Water Quality Control Board issued a new five-year permit for Receiving Waters and Urban Runoff Monitoring and Reporting, Order No. 2007-0001. The Copermittees in San Diego County were required, as part of their Jurisdictional Urban Runoff Management Program (JURMP), to update their Dry Weather Program to meet or exceed the requirements of Order No. 2007-0001. The City of Oceanside's Dry Weather Program was reviewed and updated and the details of the current program are included in the City of Oceanside 2008 JURMP Update.

Throughout the nine years of Dry Weather Monitoring implementation, trial and error and technological upgrades have led to more accurate results. Test kits appropriate for urban runoff samples have been identified. For example, before 2009, the City was using a test kit for ammonia that was more appropriate for drinking water samples and tended to give false positive readings for runoff samples. Also prior to 2009, technology for field test kits were centered on a visual color comparator as opposed to automated field equipment for color comparator readings.

In addition, the way in which different forms of the pollutants are reported has been reviewed. In 2007 it was discovered that the City had not been using a conversion factor for nitrate to nitrate-N, and thus reporting more exceedances than actually were occurring. This year, it was discovered that the City had not been using a conversion factor for orthophosphate to orthophosphate-P, and thus reporting more orthophosphate exceedances than actually were occurring. Prior to the new permit, it cannot be determined if these conversions had been occurring, and thus only the historical data from the 2007 permit are presented in the historical data comparison.

Table 11 provides a summary of the current data and the previous three years of dry weather monitoring data including the number of sites monitored and the number of exceedances of these specific field and laboratory analytes. The data from 2007 are included as a reference and fell under the requirements of the previous permit. The majority of exceedances were MBAS, ammonia, and bacterial indicators (primarily total coliform and fecal coliform).

Both ammonia and MBAS exceedances have decreased since the beginning of the permit cycle. The primary reason for the decrease in ammonia exceedances was likely due to equipment change and using the best technology for the water being sampled. The new test kit method has reduced the occurrence of false positives. The MBAS test kit has not changed. False positives have also been the case with MBAS and not one historical exceedance that has been followed up with a laboratory sample has exceeded the action level. Higher dissolved solids and conductivity values have shown to interfere with the field test method.

Table 11. 2007-2010 Dry Weather Monitoring Report Data Comparison.

Monitoring Year	2010	2009	2008	2007
Total No. of Sites Visited	93	97	85	93
No. of Sites Sampled for Initial Field Screening	68	67	66	61
No. of Sites Exceeding Nitrate Action Level	2	1	3	3
No. of Sites Exceeding Orthophosphate Action Level[1]	2	1	2[2]	0
No. of Sites Exceeding Ammonia Action Level	5	5	9	15
No. of Sites Exceeding MBAS Action Level	5	8	13	N/A
No. of Sites Sampled for Laboratory Analysis	19	19	19	18
No. of Sites Exceeding Total Coliform Action Level[3]	5	4	3	6
No. of Sites Exceeding Fecal Coliform Action Level[3]	3	5	2	5
No. of Sites Exceeding Enterococcus Action Level[3]	4	3	2	2

1-In the 2010 Dry Weather Monitoring Report, a discussion of the reporting of historical orthophosphate data was presented. Previous reports indicated that orthophosphate reported in monitoring years 2006 through 2009 reported as PO_4, as opposed to PO_4-P. Reporting years 2005 and prior may also have been reported erroneously. Without converting to the appropriate form of orthophosphate to compare to the set action levels, the number of exceedances was likely erroneously high. These numbers have been changed to reflect the conversion to PO_4-P.
2-In 2006 and 2008, the results were reported as 5mg/L PO_4, and thus it cannot be determined if the action level was exceeded for PO_4-P and thus an exceedance is assumed for the purpose of this table.
3-The action level for total coliforms, fecal coliforms, and Enterococcus changed for the 2010 monitoring year. For this data assessment, the 2010 action levels were compared to all reporting years to calculate the number of exceeding sites.

For bacteriological exceedances, there was an action level change for the 2010 monitoring year. The total coliform action level increased from 50,000 MPN/100ml to 130,000 MPN/100ml. The fecal coliform action level decreased from 20,000 MPN/100ml to 13,000 MPN/100ml, as did the Enterococcus action level which decreased from 10,000 MPN/100ml to 7,000 ml. For ease of comparison, the exceedances provided in Table 11 reflect the 2010 action level for all years, as opposed to the number of exceedances in previous reports. The number of bacteria exceedances have remained relatively stable throughout this permit cycle.

In addition to methodology factors, a reduction in initial exceedances may be attributed to the drought ordinance and water conservation factors. Less runoff from over-irrigation means less water traveling to the storm drains and fewer pollutants being conveyed to the receiving waters.

5.3 Trash Assessment

The 2010 Dry Weather Monitoring Program is the third year for assessing the amount and extent of trash at each dry weather monitoring location. Approximately 94% of the sites were either “optimal”, “suboptimal”, or “marginal” and did not require the detailed trash evaluation, compared to 73% during the last monitoring year. This is a large reduction in sites that were considered submarginal and poor in all watersheds. Comparison statistics for the trash assessment are presented in Table 12.

Table 12. 2008 – 2010 Trash Assessment Comparison.

Monitoring Year	2010	2009	2008
Total No. of Sites Visited	90	88	81
No. of Sites Considered Optimal, Suboptimal, or Marginal	85	64	53
No. of Sites Considered Submarginal or Poor	5	24	28
No. of Sites With Better Rating than Previous Year	46	23	N/A
No. of Sites With Worse Rating than Previous Year	7	13	N/A
Two Most Common Types of Trash	Food Packaging (56%), Household (22%)	Food Packaging (38%), Household (31%)	Food Packaging (36%), Household (31%)
Two Most Common Potential Routes	Upstream (47%), Littering (29%)	Littering (49%), Upstream (42%)	Littering (46%), Upstream (40%)
Two Most Common Potential Sources	Household (28%), Transient (24%)	Household (56%), Transient (18%)	Household (55%), Transient (27%)
No. of Sites with a Threat to Human Health	1	2	3
No. of Sites with a Threat to Aquatic Health	1	3	9

The majority of the trash found in the sites that required further trash evaluation was either food packaging or household waste. These items were most commonly at the sites via littering or from upstream. And, the most common source of the food packaging and household wastes are households and transients. These are consistent results with the previous trash assessment year.

One site (1% of all sites) was deemed a threat to human health in the 2010 dry weather survey. Used diapers were observed. Another site (1% of all sites) was deemed a threat to aquatic health. This site had a lot of yard waste present.

The 2009 trash assessment was used to identify sites that would be good candidates for City-sponsored and private clean-up events. The City of Oceanside coordinates four clean-up events per year. These four clean-up events include multiple sites throughout the watershed at each event. In addition to the City coordinated events, 12 times on average throughout the year, private citizen groups conduct beach and watershed clean-ups with City supplies and council. Both of these types of clean-ups utilized the 2009 trash assessment to identify high priority sites which were then included as a location for a clean-up.

In addition to clean-up events, the City identified two key sites where a structural and non-structural BMP was needed in previous fiscal years. The historic and future trash assessments will help in identifying these high priority areas for future BMP placement. The two BMPS are discussed below.

Trash Trap at the Oceanside Municipal Golf Course (Dry Weather Site S119)

Staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. City staff installed a trash trap downstream of this priority residential area and upstream of the municipal golf course in the open channel that parallels the driving range. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. This trash trap was installed in March 2009. Annual amounts of debris collected and more information is provided in the 2010 JURMP Annual Report Section 7.3.1.3

Non-Structural, Administrative BMP for Trash from Oceanside Unified School District (Dry Weather Site L110)

Public Works staff identified a section of MS4 that had a large amount of tennis balls and other trash, such as plastic bottles, after storm events where Garrison Creek daylights off of Mesa Boulevard. It appeared that a large amount of the trash, including tennis balls, softballs, plastic drink bottles, and food wrappers, was likely coming from El Camino High School and Martin Luther King, Jr. Middle School. The Clean Water Program Coordinator notified the Maintenance and Operations Director of the Oceanside Unified School District of the problem. On January 22, 2009, the Director notified all area principals about the accumulation of trash and asked the principals to share the photos with staff and students using school newspapers, assemblies, and brochures.

During this reporting period the debris still accumulated in this section of Garrison Creek. Clean Water Program inspectors again contacted the school district to discuss the issue. Four storm drain inlets were identified as the potential point of entry of trash located downstream from a local high school, middle school, elementary school and several apartment and condominium complexes. It was determined that inlet filters are a BMP that could prevent the pollutants from entering the MS4. The City of Oceanside Engineering Division/CIP is planning to allocate funding in the next fiscal year to install the proposed inlet filters in four inlets in this area.

Trash accumulation at Garrison Creek.

6 CONCLUSIONS

The City of Oceanside's boundaries include two major watersheds; the San Luis Rey Watershed, which includes the San Luis Rey River, and the Carlsbad Hydrologic Unit, which consists of Loma Alta Creek, Buena Vista Creek, and Agua Hedionda Creek. As part of Order 2001-01, the San Diego Regional Water Quality Control Board required all Copermittees to develop and implement a Dry Weather Field Screening and Analytical Monitoring Program beginning in 2002. The purpose of the program was to detect and eliminate illicit connections and illegal discharges (IC/IDs) to the storm drain system, minimizing the negative impacts of human activities on these water bodies. In 2007 the San Diego Regional Water Quality Control Board issued a new five-year permit for Receiving Waters and Urban Runoff Monitoring and Reporting, Order No. 2007-0001. The Copermittees in San Diego County were required, as part of their Jurisdictional Urban Runoff Management Program (JURMP), to update their Dry Weather Program to meet or exceed the requirements of Order No. 2007-0001. The key changes to the 2007 Municipal Permit were adding a trash assessment component and requiring follow-up investigations to be conducted within two business days of receipt of results.

This report presents the results of the City of Oceanside's 2010 Dry Weather Field Screening and Analytical Monitoring Program which includes the revisions to the program required by Order No. 2007-0001.

The City's Dry Weather Monitoring Program, as outlined in the 2008 JURMP Update with site updates from 2008 and 2009, includes 67 primary monitoring stations and 30 alternate monitoring stations. If one of the primary stations was dry, alternate stations were visited until a site with ponded or flowing water was found and field screening was completed. Trash assessments were completed at every accessible site, whether the site was dry or had water.

During the 2010 monitoring season, the 67 primary sites were visited. Two of those sites were inaccessible and an additional eleven were dry. Twenty six alternate sites were visited. Nineteen of the ponded or flowing sites had additional analysis completed in the lab for chemistry and microbiology (28%).

Seventeen sites required confirmation for an initial field screening exceedance. Of those, only four required an IC/ID investigation. The most common exceedance was for MBAS and ammonia. Of the 19 sites chosen for laboratory analysis, no site had an exceedance for chemistry results. Microbiology analysis resulted in five exceedances for total coliforms, three for fecal coliforms, and four for Enterococcus. Only one site with a continued total coliform and fecal coliform exceedance required an upstream investigation.

During the 2010 Dry Weather season it was determined that, historically, orthophosphate (PO_4) results have been compared to an action level for orthophosphate as phosphorus (PO_4-P). This has therefore resulted in more historical exceedances, and an overly conservative valuation, since the results for orthophosphate are higher than the results for orthophosphate-

P. The historical comparison of action level exceedances from 2007 through 2010 has corrected the number of exceedances as best as possible and Table 11 reflects the conversion.

In the historical comparison, both ammonia and MBAS exceedances have decreased since the beginning of the permit cycle. The primary reason for the decrease in ammonia exceedances was likely due to the change in test kit methodology and using the best technology for the water being sampled. The number of bacteria exceedances has remained relatively stable throughout this permit cycle. In addition to methodology factors, a reduction in initial exceedances may be attributed to the drought ordinance and water conservation factors. Less runoff from over-irrigation means less water traveling to the storm drains and fewer pollutants being conveyed to the receiving waters.

The 2010 Dry Weather Monitoring Program is the third year for assessing the amount and extent of trash at each dry weather monitoring location. Approximately 94% of the sites were either “optimal”, “suboptimal”, or “marginal” and did not require the detailed trash evaluation, compared to 73% during the last monitoring year. This is a large reduction in sites that were considered submarginal and poor in all watersheds. The majority of the trash found in the sites that required further trash evaluation was either food packaging or household waste. These items were most commonly at the sites via littering or from upstream. And, the most common source of the food packaging and household wastes are households and transients. These are consistent results with the previous trash assessment year.

Follow-up investigations continue to be conducted at sites with ongoing exceedances, although the 2010 monitoring year resulted in a much reduced list of follow-ups necessary. Overall, the 2010 monitoring year had the least number of initial result exceedances and the least number of IC/IDs required in the last four years. Of the 17 initial field screening exceedances, the Dry Weather Monitoring program during 2010, detected four potential IC/IDs, of which none were eliminated. The pH exceedance at S110 was likely an equipment malfunction. The ammonia exceedance at site B024 was likely due to the ponding of water with decaying organic matter. The MBAS exceedance at B023 was likely due to interference with the test kit method, as the laboratory result was below action levels. Finally, at A016, the increased turbid flow while sampling was likely due residential vehicle washing and had stopped by the time sampling was concluded.

Water conservation and urban runoff outreach, as well as beach and creek clean-ups continues year-round as the City continues the effort to detect and eliminate illicit discharges to the storm drain system.

APPENDIX A

2010 SITE PHOTOS

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AGUA HEDIONDA

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A004a

A004b

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BUENA VISTA

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B030 (Photo 2008-Inaccessible 2010)

B032

B033

B034

B103

B104 (2009 Photo)

B105

B106

LOMA ALTA

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L108 **(should be channel to the north from this point in 2010. The main channel was sampled instead)**

L109

L110

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SAN LUIS REY

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APPENDIX B

2010 FIELD DATA SHEETS

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San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☐ **Receiving Water**

Site ID		**Latitude**	(e.g., 33.41174)	**Watershed**	**Hydrologic Unit**	(e.g., 7.00)
Location		**Longitude**	(e.g., -117.35213)		**Hydrologic Area**	(e.g., 7.10)
Date		**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time		**Observer**			**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☐ > 72 hours ☐ < 72 hours

Rainfall ☐ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

2009 Trash Assessment Form

SITE ID: □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ **DATE:** □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

LOCATION: □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ **TIME:** □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

OBSERVER: □□□□□□□□□□□□□□□□□□□□

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

_____

_____

_____

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APPENDIX C

2010 IC/ID INVESTIGATIONS

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A004a	Dry Weather 2010	8/23/2010

Site Summary:

Site A004a is 48-inch RCP located below Spinnaker Ridge adjacent to the pump station off of Cannon Road. The outlet drains the residential areas immediately south of the outlet.

Investigatory Actions

Date	Action	Staff
8/23/2010	Initial investigation conducted. Laboratory results showed exceedances for the following parameters: Total Coliforms: 240,000 MPN/100mL Fecal Coliforms: 22,000 MPN/100mL Enterococcus: 7,910MPN/100mL	Witheridge/ Mark
8/30/2010	A confirmation sample for total coliforms, fecal coliforms and enterococcus was collected. Official receipt of results was on 9/1/2010, however preliminary results were used to initiate the sampling: Total Coliforms: 34,000 MPN/100mL Fecal Coliforms: 1,900 MPN/100mL Enterococcus: 1,950 MPN/100mL	Witheridge/ DeCurtins/ Mark

Investigatory Status

A confirmation investigation for total coliforms, fecal coliforms and Enterococcus was performed and total coliforms, fecal coliforms and Enterococcus were below the action levels and thus no further action was required.

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A015	Dry Weather 2010	8/09/2010

Site Summary:
Site A015 is a 48-inch RCP located south of Lake Park, off of Lake Boulevard, south of Agua Hedionda Creek. The outlet drains the residential areas east along Lake Boulevard Drive. Access to the site is from Lake Boulevard Drive.

Investigatory Actions

Date	Action	Staff
8/09/2010	Initial investigation conducted. Laboratory screening showed exceedances for the following parameters: Total Coliforms: 130,000 MPN/100mL Fecal Coliforms: 50,000 MPN/100mL	Witheridge/ DeCurtins
8/16/2010	A confirmation sample for total and fecal coliforms was collected. Official receipt of results was on 8/25/2010, however preliminary results were used to initiate the sampling. Total and fecal coliform results were under the action levels: Total Coliforms: 17,000 MPN/100mL Fecal Coliforms: 2,200 MPN/100mL	Witheridge/ Mark

Investigatory Status
A015 has been subject to an ongoing investigation to locate the source of persistent white foam in runoff since 2004. Historically, total coliform exceedances and low pH also seem to be a common characteristic in this area. Previous investigations show similar depositions of foam as well as unique geologic crystalline formations in the watershed. This monitoring year, upon confirmation, all laboratory results were under the action levels and no further action was required.

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A016	Dry Weather 2010	7/26/2010

Site Summary:

Site A016 is a 36-inch RCP located east of Amigos Court, south of Lake Boulevard, and north of Calavera Creek at the border of Oceanside and Carlsbad. The outlet drains the residential areas to the north and south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
7/26/2010	Initial investigation conducted. Field and laboratory screening showed an exceedance for the following parameters: MBAS: 1.5 mg/L Orthophosphate-P: 5.22 mg/L Ammonia-N: 1.22 mg/L Total Coliforms: 1,600,000 MPN/100ml Fecal Coliforms: 300,000 MPN/100ml Enterococcus: 72,700 MPN/100ml Flow was measured at 25.82gpm. During the initial field screening the flow increased considerably while samples were being taken then slowed down, but water was still turbid. It was determined that there was an illegal discharge, so an upstream investigation was conducted. Search was initiated at the Rancho Calavera Mobile Home Park based on previous ICID investigations (A016D). The manhole on the south side of the pond was wet, but no flow was observed. A nearby maintenance worker could have been watering plants or washing down area, but when asked, he said he didn't know anything. Possible overland flow was tracked to lower residential area on Palmas Ct. The curb was wet and had sediment residue, overland flow was likely from car/truck or driveway being washed. Discharge had stopped and therefore difficult to locate a definite overland flow source was not identified.	Witheridge/ DeCurtins/ Mark

<table>
<tr><td>7/28/2010</td><td>A confirmation sample was taken for MBAS, orthophosphate-P and ammonia-N. All samples were found to be below action levels.
<table><tr><td>MBAS</td><td>0.63 mg/L</td></tr><tr><td>Orthophosphate-P</td><td>0.37 mg/L</td></tr><tr><td>Ammonia-N</td><td>0.28 mg/L</td></tr></table>Flow was estimated at 2.19gpm.</td><td>Witheridge/ DeCurtins/ Mark</td></tr>
<tr><td>8/2/2010</td><td>A confirmation sample for total coliforms, fecal coliforms and Enterococcus was collected. Official receipt of results was 8/25/2010, however preliminary results were used to initiate the sampling:
.
<table><tr><td>Total Coliforms</td><td>220,000 MPN/100ml</td></tr><tr><td>Fecal Coliforms</td><td>30,000 MPN/100ml</td></tr></table>Flow was estimated at 1.18 gpm.</td><td>Witheridge/ DeCurtins</td></tr>
<tr><td>8/16/2010</td><td>An ICID investigation was conducted for total and fecal Coliforms. Results showed that total and fecal coliform were below action levels.

(A016)
<table><tr><td>Total Coliforms</td><td>30,000 MPN/100ml</td></tr><tr><td>Fecal Coliforms</td><td>2,300 MPN/100ml</td></tr></table>Flow was estimated at 1.87 gpm.

An upstream investigation was conducted the same day for total and fecal coliforms. Flow was identified in the next upstream manhole, but it could not be sampled due to the depth of the manhole. Sample was taken from the south side of lake in Rancho Calavera Mobile Home Park

(A016D)
<table><tr><td>Total Coliforms</td><td>700 MPN/100ml</td></tr><tr><td>Fecal Coliforms</td><td>230 MPN/100ml</td></tr></table></td><td>Witheridge/ Mark</td></tr>
</table>

Investigatory Status:
The follow-up investigation showed MBAS, orthophosphate-P and ammonia-N results were under the Dry Weather Monitoring Program action levels. Total coliforms and fecal coliform results continued to exceed the action levels. An upstream ICID investigation was conducted on 8/16/2010 at the Rancho Calavera Mobile Home park's on site lake. Both samples taken at the outfall and the lake showed that total and fecal coliform were below action levels. The possible source of the initial exceedance was most likely

attributed to overland flow in the nearby residential neighborhood on Las Palmas Court. It appeared that a muddy truck could have been washed, which is a legal activity if appropriate drought regulations for vehicle washing were followed. Historical investigations at this site have led to identification of illegal discharges in 2007 and 2009 from the lake of the mobile home park, but during this investigation the lake bacteria sample results were well below action levels and no discharges were identified.

Attachments:

A016 D. Lake at the Rancho Calavera Mobile Home Park

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A021	Dry Weather 2010	8/30/2010

Site Summary:

Site A021 is a 36 inch RCP located off of Sky Haven Lane, north of Calaveras Creek. The outlet drains the residential areas to the north of the outfall. Access to the site is from a residential driveway and down an embankment.

Investigatory Actions

Date	Action	Staff
8/30/2010	Initial investigation conducted. Field Screening from the ponded water showed exceedances for the following parameters: Ammonia-N: 1.3 mg/L	D-Max
8/31/2010	Follow up investigations from the ponded water showed that ammonia-N results were below action levels. Ammonia-N: 0.5mg/L	D-Max

Investigatory Status

Upon confirmation, results for ammonia-N were under the action levels and no further action was required. Upon confirmation it was noted that there was trash and decaying organic matter that most likely contributed to ammonia exceeding action levels.

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A024	Dry Weather 2010	9/13/2010

Site Summary:
Site A024 is an alternate site. It is a RCP outlet located on the south side of Lake Boulevard east of Emerald Drive.

Investigatory Actions

Date	Action	Staff
9/13/2010	Initial investigation conducted. Field Screening from ponded water showed an exceedance for the following parameter: Ammonia-N: 1.2 mg/L	D-Max
9/14/2010	Follow up investigation from ponded water showed an exceedance for the following parameter: Ammonia-N: 0.7mg/L	D-Max

Investigatory Status
A confirmation investigation for ammonia-N was performed and results showed that ammonia-N levels were below action levels and no further action was required.

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B023	Dry Weather 2010	8/30/2010

Site Summary:

Site B023 is a 36-inch RCP located west of the intersection of Lake Boulevard and Thunder Drive south at 3524 Lake Blvd. The outlet drains the residential areas south of Lake Boulevard.

Investigatory Actions

Date	Action	Staff
8/30/2010	Initial investigation conducted. Field screening results showed conductivity levels to be exceed the action level: MBAS 1.25 mg/L	D-Max
8/31/2010	Follow-up investigation conducted. Field screening showed MBAS levels to be exceeding the action level: MBAS 1.25 mg/L	D-Max
9/8/2010	A laboratory sample was collected for MBAS. The result was below the laboratory reporting limit: MBAS < 0.5 mg/L	Witheridge/ DeCurtins

Investigatory Status

Conductivity at this site ranged between 10.01 mg/L and 14.50 mg/L. Previous investigations have shown this to be a result of groundwater seepage. Because elevated conductivity is suspected to interfere with the MBAS field test kit, a laboratory sample was taken for measurement of MBAS. Laboratory analysis resulted in a non-detect for MBAS at B023.

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B024	Dry Weather 2010	8/30/2010

Site Summary:

Site B024 is a 36-inch RCP located on the southwest corner of College Boulevard Bridge over Buena Vista Creek. The outlet drains the residential areas east of College Boulevard. Access to the site is from College Boulevard.

Investigatory Actions

Date	Action	Staff
8/30/2010	Initial investigation conducted. Field Screening showed an exceedance for ammonia-N. Ammonia-N: >3 mg/L	D-max
8/31/2010	Follow-up investigation showed ammonia-N still exceeding action levels. Ammonia-N: 1.57 mg/L	D-Max
9/8/2010	Ammonia-N continued to exceed action levels. Ammonia-N: >3 mg/L An ICID investigation was conducted upstream. The immediate upstream manholes were in the middle of a busy street (College Blvd.) and intersection (College Blvd. and Lake Blvd.) and were unsafe to access. One upstream manhole was identified on College Blvd. south of Lake Blvd that was accessible. There was a small amount of water in the storm drain but not enough to sample (B024A). A potential overland source was identified on the southeast corner of College Blvd and Lake Blvd. Ponded water from a manhole outlet was sampled, B024B. No flow was leaving the outlet. Ammonia was found to be below action levels. Ammonia-N: <0.2 mg/L	Witheridge /DeCurtins

Investigatory Status:
Ammonia-N results continued to exceed action levels at the outfall. There was an abundance of leaf debris in the ponded water. An ICID investigation was conducted. The immediate upstream manholes were unsafe to access. B024A was identified as the safest upstream manhole to access; it is located on College Blvd. south of Lake Blvd. There was a small amount of water in the storm drain cleanout but not enough to sample. Overland flow was identified on the south east corner of College Blvd. and Lake Blvd. (B024B). There was a private drain entering the manhole from the apartment complex above but no flow was observed from the private drain into the manhole. It appeared the ponded water at one time had been flowing into the curb on Lake Blvd.

The ponding of water and a large amount of leaf debris at the B024 outfall was most likely responsible for the continued exceedance of ammonia-N.

Attachments:

B024A

B024B

B024B

B026	Dry Weather 2010	8/31/2010

Site Summary:

Site B026 is a 48-inch RCP located south of the Tri-City Crossroads Plaza off of Plaza Drive on the north of Buena Vista Creek.

Investigatory Actions

Date	Action	Staff
8/31/2010	Initial investigation conducted. Field Screening showed the exceedances for the following parameters: MBAS >3 mg/L Flow was estimated at 3.53 gpm	D-Max
9/01/2010	Follow-up investigation was conducted, MBAS level within acceptable parameters: MBAS <0.3 mg/L Flow was estimated at 1 gpm	D-Max

Investigatory Status

Follow-up investigation showed MBAS level within acceptable parameters, no further action was required.

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B104	Dry Weather 2010	7/26/2010

Site Summary:

Site B104 is a manhole on the southeast corner of South Coast Highway and Eaton Street. The outlet drains the commercial and residential areas on the east side of South Coast Highway. This site replaced B001 by moving it upstream approximately 230 yards out of tidal influence. Access to the site is from South Coast Highway.

Investigatory Actions

Date	Action	Staff
7/26/2010	Initial investigation conducted. The ponded water in the catch basin was sampled. Field screening analysis showed exceedances for the following parameter: Nitrate-N: 14.6 mg/L	Witheridge/ DeCurtins/ Mark
7/28/2010	Follow-up investigation was completed within two business days. Results showed that the field screening no longer exceeded the action level for Nitrate-N Nitrate-N: 8.1 mg/L	Witheridge/ DeCurtins/ Mark

Investigatory Status

Upon confirmation, nitrate-N levels from the ponded water in the catch basin no longer exceeded action levels. During the initial field screening there were grass clippings and leaf debris in the ponded water which were likely the cause of the nitrate-N exceedance.

Attachments:

Leaf debris in B104

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L001	Dry Weather 2010	6/30/2010

Site Summary:

Site L001 is a 48-inch RCP located at the intersection of North Avenue and Vista Pacific Drive, north of Loma Alta Creek. The outlet drains the industrial and commercial areas south of North Avenue. Access to the site is via North Avenue.

Investigatory Actions

Date	Action	Staff
6/30/2010	Initial investigation conducted. Laboratory results showed exceedances for the following parameter: Enterococcus: 8,560 MPN/100mL Flow estimated at 0.75 gpm	Witheridge/ DeCurtins/ Mark
7/8/2010	A confirmation sample for enterococcus was collected. Official receipt of results was on 7/20/2010, however preliminary results were used to initiate the sampling: Enterococcus: 870 MPN/100mL Flow estimated at 1.53	Witheridge/ DeCurtins/ Mark

Investigation Status

Upon confirmation Enterococcus results were below action levels and no further action was required.

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L003	Dry Weather 2010	8/09/2010

Site Summary:

48-inch RCP located off of North Avenue and east of Autumn Drive, south of Loma Alta Creek.

Follow-up Actions

Date	Action	Staff
8/09/2010	Initial investigation conducted. Field screening showed exceedances for the following parameter: Total Coliforms: 170,000 MPN/100mL Flow was estimated at 4.05 gpm	Witheridge/ DeCurtins/ Mark
8/16/2010	A confirmation investigation for total coliforms was performed. Official receipt of results was on 8/25/2010, however preliminary results were used to initiate the sampling. Total coliforms were observed to be below the action level. Total Coliforms: 11,000 MPN/100mL Flow was estimated at 6.03 gpm	Witheridge/ Mark

Investigatory Status

A confirmation investigation for total coliforms was performed and the results were below the action levels. No further action was required.

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L019	Dry Weather 2010	6/30/2010

Site Summary:

Site L19 is a 48-inch RCP, located south of the Corporate Centre and Oceanside Boulevard intersection, north of Loma Alta Creek. The outlet drains the commercial and open space areas located on the hill north of Oceanside Boulevard. Access to the site is from Oceanside Boulevard

Investigatory Actions

Date	Action	Staff
6/30/2010	Initial investigation conducted. Field screening results showed MBAS to equal the action level. MBAS: 1.0 mg/L	Witheridge/ DeCurtins/ Mark
7/1/2010	A follow up was conducted. Field screening results showed the MBAS level to be below action levels. MBAS: 0.5 mg/L	Witheridge/ DeCurtins/ Mark

Investigaton Status

During the field screening analysis the color of the sample used for MBAS was green from the water collected. The sample could not be match up to the MBAS comparator so a conservative estimate of 1 mg/L was given. A confirmation investigation was performed, the color of the water had changed due to overcast conditions and the MBAS result was below the action level.

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L107	Dry Weather 2010	9/09/2010

Site Summary:

Site L107 is a manhole at the corner of Crouch and Oceanside Boulevard.

Investigatory Actions

Date	Action	Staff
9/09/2010	Initial investigation conducted. Field Screening showed exceedances for the following parameters: Orthophosphate-P: 2.4 mg/L MBAS: 1.5 mg/L	D-Max
9/10/2010	A follow up investigation was conducted for orthophosphate-P and MBAS. Orthophosphate-P: 0.63 mg/L MBAS: 0.91 mg/L	D-Max

Investigatory Status

A follow up investigations was conducted for orthophosphate-P and MBAS. The results for both orthophosphate-P and MBAS were below action levels and no further action was required.

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S104	Dry Weather 2010	9/03/2010

Site Summary:

Site S104 in a 24-inch RCP located south of the San Luis Rey River. Access to the site is from the sewer easement and tomato fields northwest of the site. The outlet drains the residential area south of the site.

Investigatory Actions

Date	Action	Staff
9/03/2010	Initial investigation conducted. Field Screening results showed an exceedance for the following parameter: Ammonia-N: 1.2 mg/L Flow was estimated at 0.5 gpm.	D-Max
9/07/2010	Follow-up investigation conducted for ammonia-N within two business days of receipt of results. The ammonia result was below the detection limit. Ammonia-N: <0.2 mg/L	D-Max

Investigation Status

Upon confirmation the ammonia-N result was below the detection limit so no further action was required.

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S110	Dry Weather 2010	7/08/2010

Site Summary:

S110 is a 30-inch RCP with a flap gate installed. Access to Site 110 is from Rainier Way east of Douglas Drive.

Investigatory Actions

Date	Action	Staff
7/08/2010	Initial investigation conducted. Field Screening results showed an exceedance for pH. pH: 9.4 pH unit	Witheridge/ DeCurtins/ Mark
7/12/2010	Follow-up investigation was conducted within two business days for pH and the result showed that pH was still exceeding action levels. pH: 9.1 pH unit An equipment malfunction was suspected.	Witheridge
7/28/2010	Another follow-up investigation was conducted and pH was below action levels. pH: 7.9 pH unit Flow estimated at 1.75 gpm	Witheridge/ DeCurtins/ Mark

Investigation Status

Upon confirmation, the pH level was still exceeding. The exceedance for pH may have been attributed to a faulty pH meter. The reference solution was replaced in the Hydrolab Quanta after 7/12/2010 and another follow-up investigation was conducted on 7/28/2010 and the pH result was below the Dry Weather Monitoring action level.

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S111	Dry Weather 2010	9/7/2010

Site Summary:

Site S111 is a concrete channel adjacent to Fireside Park, east of the San Luis Rey River. The channel drains the residential area east of the site.

Investigatory Actions

Date	Action	Staff
9/07/2010	Initial investigation conducted. Field Screening results showed an exceedance for nitrate-N. Nitrate-N: 15.1 mg/L	D-Max
9/08/2010	Follow-up investigation was conducted for nitrate-N and result showed nitrate-N to be below the action level. Nitrate-N: 5.8 mg/L	D-Max

Investigation Status

Upon confirmation, the nitrate-N result was below the Dry Weather Monitoring action level and no further action was required.

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S122	Dry Weather 2010	6/16/2010

Site Summary:

S122 is a RCP with a flap gate at the end of Tishmal Court. It conveys flows from the residential area north of the river. Access to the site is from the sewer easement path and pedestrian path on the north side of the river.

Investigatory Actions

Date	Action	Staff
6/16/2010	Initial investigation conducted. Laboratory results were equal to or exceeding action levels for the following parameters: Total Coliform: 130,000 MPN/100mL Enterococcus: 21,400 MPN/100mL	Witheridge/ DeCurtins
6/23/2010	Follow-up investigation for total coliforms and Enterococcus was conducted. Official receipt of results was on 7/27/2010, however preliminary results were used to initiate the sampling. Both total coliforms and Enterococcus were below action levels. Total Coliforms: 17,000 MPN/100mL Enterococcus: 3,000 MPN/100mL An upstream investigation was conducted the same day as the confirmation sampling. Ponded water was sampled from the north side of Toopal Drive just east of Tismal Court (S122B). **S122B** Total Coliforms: 22,000 MPN/100mL Enterococcus: 8,550 MPN/100mL The next accessible upstream site was a manhole on the north side of Benet Road west of Walla on a asphalt path between a series of homes. **S122C:** Total Coliforms: 3,500 MPN/100mL Enterococcus: 272 MPN/100mL	Witheridge/ DeCurtins/ Mark

Investigatory Status:
A confirmation was conducted on 6/23/10 for total coliforms and Enterococcus receipt of preliminary lab results. Results of the confirmation for total coliforms and Enterococcus were both below action levels. To be proactive, City staff did an upstream investigation the same day as the confirmation sampling. The first site, S122A was a manhole in the middle of Tismal Ct. The water was flowing but was too deep to sample. The next site upstream was S122B. This site was located on the north side of Toopal Road and east of Tismal Court. A sample was taken at a ponded area that drained from a vegetated bio-swale into a D-25 curb outlet. The ponded water seemed to be from irrigation runoff. The final site sampled was S122C. S122C is near an asphalt path in a vegetated area on Benet Road west of Wala Drive, lab results showed that both total coliforms and Enterococcus were below action levels. The bacteria exceedance for S122 was probably attributed to ponded landscape runoff upstream from S122.

Attachments:

S122B

S122C

CITY OF OCEANSIDE

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM

ANNUAL REPORT 2010-2011

Prepared for the
San Diego Regional Water Quality Control Board

September 30, 2011

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CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT

DATE: **September 29, 2011**

RE: **STATEMENT OF CERTIFICATION**
CITY OF OCEANSIDE JURISDICTIONAL URMP

I certify under penalty of law that the Jurisdictional Urban Runoff Management Program Annual Report for 2010-2011 was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

M. A. Lahsaiezadeh

SIGNATURE:

NAME: Mo Lahsaiezadeh
TITLE: Clean Water Program Coordinator
JURISDICTION: City of Oceanside

300 NORTH COAST HIGHWAY • OCEANSIDE, CA 92054 • TELEPHONE 760-435-5800 • FAX 760-435-5814

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City of Oceanside

Jurisdictional Urban Runoff Management Program

2010-11 Annual Report

Prepared for:
San Diego Regional Water Quality Control Board

September 30, 2011

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ES EXECUTIVE SUMMARY

Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the San Diego Copermittees. Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2007-2008 annual reporting period (July 1, 2010 – June 30, 2011).

Report Organization

Section J of Municipal Permit 2007-0001 defines the requirements for the Jurisdictional Urban Runoff Management Program (JURMP) Annual Report and states that each JURMP Annual Report shall, at a minimum, contain a comprehensive description of all activities conducted by the Copermittee for each required component. Table ES-1 presents these components and the section in which they are discussed.

Table ES-1. Municipal Permit 2007-0001 Reference Table.

Municipal Permit 2007-0001 Components	Annual Report Section
Development Planning Component	Section 2.0
Land-Use Planning	Section 2.2
Environmental Review Process	Section 2.3
Development Project Approval and Verification Process	Section 2.4
Construction Component	Section 3.0
Municipal Component	Section 4.0
Industrial and Commercial Component	Section 5.0
Residential Component	Section 6.0
Illicit Discharge Detection and Elimination Component	Section 7.0
Education Component	Section 8.0
Public Participation	Sections 9.0
Fiscal Analysis Component	Section 10.0
Effectiveness Assessment Component	Section 11.0
Special Investigations	Section 12.0
Non-Emergency Fire Fighting	Section 13.0
JURMP Revisions	Section 14.0
Conclusions and Recommendations	Section 15.0

Pursuant with the Municipal Permit this document contains all of the required information.

Program Highlights

Below is a summary of each section which describes the Clean Water Program activities appearing in this Annual Report. Please refer to the individual section for more detailed information.

Section 2.0 Development Planning Component

The development planning component focuses on the collective effort to mitigate impacts which may result from new development and redevelopment projects. The process of verifying compliance with the Municipal Permit is accomplished through the consistent application of storm water principles and regulations during all phases of development.

During this reporting period, the City continued to actively participate in the Copermittee Workgroups, Sub-workgroups, and HMP-TAC. The combined Copermittee effort resulted in the release of the updated Countywide Model SUSMP in March 2011.

During this same period, the City released a number of updated storm water documents which included the following documents:

- Oceanside SUSMP
- Storm Water Quality Assessment form
- Standard Development Plan-Storm Water Mitigation Plan (SDP-SWMP) Template
- Priority Development Project-Storm Water Mitigation Plan (PDP-SWMP) Template
- Planning Division – Development Processing Guidelines

Other notable activities that took place during this reporting period included the continued implementation of data tracking systems by multiple divisions within the City Water Utilities and Development Services Departments.

Section 3.0 Construction Component

The City of Oceanside Clean Water Program provided an updated inventory of construction sites with the 2008 JURMP and has revised that inventory during this reporting period. During the reporting period, the Clean Water Program inspected 47 construction sites to ensure they were in compliance with the City Code.

Section 4.0 Municipal Component

The City of Oceanside Clean Water Program utilized its end of fiscal year 2008-09 municipally owned inventory and inspected 176 municipal areas to ensure these facilities are in compliance with the City Code. A total of 2,342 tons of waste was removed as a result of street sweeping and a total of 840 tons of waste was removed from the storm drain system (MS4) as part of the annual cleaning. Three hundred and two (302) feet of City sewer pipes were slip lined during this reporting period.

Section 5.0 Industrial and Commercial Component

The City annually updates its watershed-based industrial/commercial inventory which contains the name, address, and description of all industrial sites within its jurisdiction, regardless of site ownership. The inventory now includes 1,927 Industrial and Commercial businesses that have a

potential to contribute pollutants to the MS4 system. Twenty-four (24) industrial businesses and 661 commercial businesses were inspected during this reporting period, to ensure these facilities are in compliance with City Code.

During the previous reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water and Sewer Divisions, and the Clean Water Program, continued rolling out the GBA Masters Series software. The Development Services Department, which includes Code Enforcement, Building, and Engineering, selected TRAKiT, permitting software by CRW Systems, Inc and began roll-out in this reporting year

During this reporting period the Clean Water Program reviewed the effectiveness of the new tracking tools and implemented improvements in the use of the system to better track Stormwater related data.

Section 6.0 Residential Component

The City of Oceanside has developed an extensive program that aims to reduce pollutant runoff from residential areas and activities to the maximum extent practical (MEP). The City of Oceanside Clean Water Program received 353 calls on the Urban Runoff Hotline which included 183 referrals from City Staff. Code Enforcement responded to 75 urban runoff cases related to residential areas and activities, during the reporting period. Extensive educational efforts were made to help Oceanside residents understand watersheds, water quality and urban runoff impacts through presentations on a local television channel, Clean Water Program newsletters mailed to approximately 44,000 households, and through information available on the Clean Water Program Website.

Section 7.0 Illicit Discharges Detection and Elimination Component

This section is intended to document the activities conducted by the City of Oceanside during the 2010-2011 reporting period to manage illicit discharges. In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2010-11 Illicit Discharge Detection and Elimination Component, including the 2010 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2011.

Section 8.0 Education Component

The City of Oceanside Clean Water Program continued to use a variety of avenues to educate various internal and external groups about the Clean Water Program and the requirements of Municipal Permit Order 2007-0001. These outreach activities included municipal staff training, CWP newsletters, staffing community booths, conducted watershed education presentations, continued implementation of a 5th grade curriculum titled Project SWELL and targeting under-served audiences with educational materials.

Section 9.0 Public Participation Component

The Clean Water Program continued to sponsor beach and creek cleanup events and supported private groups who wanted to coordinate their own cleanup events. During this reporting period a total of 1,054 volunteers participated in these events, removing more than ten tons of trash, and

debris, from the local waterways. In addition the City installed four pet waste bag dispensers stations along the San Luis Rey Recreation Trail as part of its Pick up your Pet Waste Campaign.

Section 10.0 Fiscal Component

The City of Oceanside Clean Water Program continued to acquire funding from various sources to implement programs to meet Municipal Permit Order 2007-0001. To secure adequate funding, the Water Utilities Department collects a Clean Water Program surcharge that is delineated on the utility bills for each household and is based on the customer's water consumption. Approximate expenditures for the 2010-11 fiscal year is provided in Section 10 as well as the budget for the 2011-12 reporting period.

Section 11.0 Effectiveness Component

The City implemented an effectiveness assessment program to assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The City gathered and evaluated data for some of the program components for assessment during this reporting period. This data will be valuable for incorporation into long-term effectiveness evaluation on a jurisdictional level.

Section 12.0 Special Investigations

The City of Oceanside received funding from two sources to implement two water quality related projects: the San Luis Rey Bacteria Source Tracking Study and the Loma Alta Creek Ultraviolet Treatment Facility.

Lower San Luis Rey Bacteria Source Tracking

As part of the Proposition 50 Clean Beaches Initiative, the City of Oceanside was awarded $554,375 to track the sources of bacteria in the Lower San Luis Rey River. This study project has a goal to identify the sources and quantify the loading of bacterial contamination in the lower San Luis Rey River using a tiered approach. This approach will permit prioritization for mitigation of microbial contaminants and appropriate actions will be recommended to eliminate sources of bacterial contamination.

During this reporting period dry season and wet season monitoring events were implemented and all monitoring activities had been completed for the Grant Project. The Draft Final Report is due to the SWRCB on August 1, 2011. The Final Report is due September 1, 2011. Final results will be reported in the FY 2011-12 JURMP Annual Report.

The Loma Alta Creek Ultraviolet Treatment Facility

The City was awarded a $5,000,000 Proposition 40 Clean Beaches Initiative (CBI) grant by the State Water Resources Control Board to construct an ultraviolet (UV) light treatment facility at the existing La Salina Wastewater Treatment Facility. The anticipated project goal is to eliminate beach closures during the dry season at Buccaneer Beach in Oceanside, California. This will be achieved by diverting the flow from the Loma Alta Lagoon through a UV treatment facility prior to discharging the flow onto the shoreline.

The Loma Alta Creek Ultraviolet Light Treatment Facility first started treatment in June 2009 and operated during the summers of 2010 and 2011. Water samples were taken weekly from Buccaneer Beach directly in front of the discharge pipe and seventy-five feet north and south of

the discharge pipe. The samples were tested for total and fecal coliform and Enterococcus. All samples taken during this reporting period met California Department of Health Services AB411 Objectives and there were no postings due to bacterial levels exceeding standards set by the County Department of Environmental Health.

Section 13.0 Non-Emergency Fire Fighting

Non-emergency fire fighting BMPs and educational methods for reducing the discharge of pollutants from non-emergency flows to the MEP are described in Section 13.

Section 14.0 JURMP Revisions

During this reporting period no revisions were made to the 2008 JURMP.

Section 15.0 Conclusions and Recommendations

This section presents the conclusions from the 2010-2011 reporting period and provides recommendations for future activities and management actions for JURMP program components.

During the previous reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water and Sewer Divisions, and the Clean Water Program, continued using the Lucity (previously GBA Masters Series) software. The Development Services Department, which includes Code Enforcement, Building, and Engineering, selected TRAKiT, permitting software by CRW Systems, Inc and began roll-out in this reporting year

During this reporting period the Clean Water Program reviewed the effectiveness of the new tracking tools and implemented improvements in the use of the system to better track Stormwater related data. Additional improvement may be implemented during the next reporting period.

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1.0 INTRODUCTION

This annual report document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) (referred to in this document as the Municipal Permit) draining the Watersheds of the County of San Diego, which include agencies with land use authority including the incorporated Cities of San Diego County, the County of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport Authority (collectively called Copermittees). Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2010-2011 annual reporting period (July 1, 2010 – June 30, 2011).

This Municipal Permit is based on the Federal Clean Water Act (CWA), the Porter–Cologne Water Quality Control Act, applicable state and federal regulations, all applicable provision of statewide Water Quality Control Plans and Polices adopted by the State Water Resources Control Board (SWRCB), the Water Quality Control Plan for the San Diego Basin adopted by the Regional Water Quality Control Board (RWCQB), the California Toxics Rule, and the California Toxics Rule Implementation Plan. This Annual Report addresses the renewed NPDES Permit No. CAS0108758, which was first issued on July 16, 1990 (Order No. 90-42), renewed on February 21, 2001 (Order No. 2001-01), and renewed again on January 24, 2007

In the interests of communicating consistent messages to the community regarding the most efficient and effective means of reducing storm water and urban runoff pollution, and as directed under Part J.5 of the Municipal Permit, this document was developed following the standardized format developed and agreed upon by the Copermittees. For the most part, compliance with the Municipal Permit was undertaken by the Copermittees through the development and implementation of the JURMP; therefore this Annual Report is organized in a similar format as the 2008 JURMP.

1.1 Background

Urban development typically involves conversion of natural space to developed areas that include impervious surfaces such as streets, buildings, and parking lots. With the increase in human population and impervious surfaces associated with developed areas there tends to be higher runoff volume and velocity due to the impervious area's incapacity to absorb and hold rainwater. Also, human use of developed areas is associated with a number of pollutants that can be conveyed to the municipal separate storm sewer system (MS4) by a rain event or non-storm water discharges. This is called non-point source pollution. Non-point source pollution, such as urban runoff discharges to the MS4, is a large source of pollutants to receiving water bodies in the San Diego region and throughout the United States. Pollutants commonly associated with urban runoff include sediments, pesticides, fertilizers, herbicides, trash, oil and grease, and heavy metals. Such pollutants are generated by everyday activities such as construction, landscaping and vehicle use and maintenance.

Pollutants that reach receiving water bodies, such as streams, lakes, bays, lagoons, and the ocean, have the potential to significantly impact human and environmental health as well as wildlife that utilize these water bodies and surrounding habitat for survival. Notably, environmentally sensitive areas (ESA) are especially threatened by urban development because such areas tend to have lower capacities to withstand pollutants entering the area.

1.2 Purpose and Objectives

The purpose of this annual report is to present the activities the City conducted during the Fiscal reporting period of July 1, 2010 through June 30, 2011 to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The activities involved implementing, and improving where needed, existing programs and developing new programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. Improving the quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

Table 1-1 presents the organization of the City's JURMP Annual Report and a summary of the corresponding permit requirement in Order No. 2007-0001. Some Report sections and permit requirements overlap and will be found in multiple locations throughout the document.

Table 1-1. City of Oceanside 2010-11 Annual Report Compliance Summary.

2010-11 Annual Report	Description	Order No. 2007-0001
Section 1.0	Introduction	-
Section 2.0	Development Planning	D.1 J.3.a(3)(a)
Section 3.0	Construction	D.2 J.3.a(3)(b)
Section 4.0	Municipal Development	D.3.a J.3.a(3)(c)
Section 5.0	Industrial and Commercial Development	D.3.b J.3.a(3)(d)
Section 6.0	Residential	D.3.c J.3.a(3)(e)
Section 7.0	Illicit Discharge Detection and Elimination	D.4 J.3.a(3)(f)
Section 8.0	Education	D.5 J.3.a(3)(g)
Section 9.0	Public Participation	D.6 J.3.a(3)(h)
Section 10.0	Fiscal Analysis	J.3.a(3)(j)
Section 11.0	Effectiveness Assessment	-
Section 12.0	Special Investigations	J.3.a(3)(k)
Section 13.0	Non-Emergency Fire Fighting	J.3.a(3)(l)
Section 14.0	JURMP Revision	J.3.a(3)(m)
Section 15.0	Conclusions and Recommendations	-

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

Development and re-development projects are typically associated with land disturbance activities and increases in impervious area. When development projects substitute pervious areas with impervious roofs, pavement, and flatwork; the ability of the site to absorb and infiltrate precipitation is markedly reduced. This in turn affects the hydrologic characteristics of a site by increasing the rate of runoff, flow duration, runoff volume, and discharge velocity. In natural channels or channels which are not "significantly hardened", the effect is to cause physical alteration to the channel; causing negative impacts to the biological integrity of the receiving water. To counter these impacts, the City has developed and implemented a storm water development planning program which is designed to mitigate the negative effects associated with development and redevelopment projects.

The Development Planning section of the JURMP Annual Report documents the activities performed by the City of Oceanside during the reporting period beginning July 1, 2010 and ending on June 30, 2011. During this reporting period, the City has continued to implement a comprehensive Development Planning Component consistent with Section D.1 of the San Diego RWQCB Order No. R9-2007-0001 (Municipal Permit). Table 2-1 contains a tabulation of the applicable Municipal Permit subsections and corresponding sections of the Annual Report.

Table 2-1 Compliance Summary

Municipal Permit Section	Annual Report Section
J.3.a.(3)(a).i – Amendments to General Plan	Section 2.2.1
J.3.a.(3)(a).ii – Application of urban runoff approval process	Section 2.4.3
J.3.a.(3)(a).iii – Projects subject to SUSMP Requirements	Section 2.4.4.8
J.3.a.(3)(a).iv – Application of SUSMP BMP requirements	Section 2.4.4.2
J.3.a.(3)(a).v – Example Priority Development Project	Section 2.4.4.4
J.3.a.(3)(a).vi – Low removal effectiveness Treatment Control BMPs	Section 2.2.3
J.3.a.(3)(a).vii – Treatment Control BMP Inventory	Section 2.4.4.7
J.3.a.(3)(a).viii – Treatment Control BMP Inspection	Section 2.4.4.7
J.3.a.(3)(a).ix – Verification of O&M of Treatment Control BMPs	Section 2.4.4.7

Table 2-1. Order No. R9-2007-0001 Compliance Summary (continued)	
Municipal Permit Section	Annual Report Section
J.3.a.(3)(a).x – BMP Verification Prior to Occupancy	Section 2.4.3
J.3.a.(3)(a).xi – Waiver of SUSMP infeasibility	Section 2.4.4.8
J.3.a.(3)(a).xii – Description of SUSMP waiver mitigation program	Section 2.4.4.1
J.3.a.(3)(a).xiii – HMP collaboration and participation	Section 2.4.4.1
J.3.a.(3)(a).xiv – Development projects required to meet HMP	Section 2.4.4.8
J.3.a.(3)(a).xv – Development Projects Exempt from HMP	Section 2.2.3
J.3.a.(3)(a).xvi – Development projects disturbing 50 acres or more	Section 2.2.3
J.3.a.(3)(a).xvii – Violations and Enforcement Actions	Section 3 Attachment 3-C
J.3.a.(3)(a).xviii – Notable Activities	Section 2.2.1.1

2.2 Land Use Planning

2.2.1 Background

The SUSMP Development Planning component focuses on the City Development Services – Engineering, Planning, and Building Division efforts to comply with Municipal Permit requirements that mitigate impacts which may result from new development and redevelopment projects. The process of verifying compliance with the Municipal Permit is accomplished through the consistent screening of all permit applications and subsequent implementation of SUSMP requirements are each phase of project development.

The 2003 General Plan Land Use Element incorporated watershed protection measures aimed at improving water quality by managing natural resources, while meeting the needs of the community and addressing development concerns. There were no water quality amendments to the General Plan during this reporting period. Section 4.2.3 of the 2008 Jurisdictional Urban Runoff Management Plan summarizes the addresses watershed protection measures contained in the Oceanside General Plan.

2.2.1.1 Notable Activities

During this reporting period, the City continued to actively participate in the Copermittee Land Development workgroup, the Construction sub-workgroup, and by contributing to the HMP-TAC and BMP Sizing Tool sub-workgroup.

The combined Copermittee effort resulted in the release of the updated Countywide Model SUSMP in March 2011 which included additional references to support implementation of the HMP, including but not limited to, applicability decision matrixes and facility sizing tables. During the same period in March, the Copermittees released the Final Hydromodification Management Plan (HMP) which addresses specific flow attenuation requirement and standards including applicability, performance criteria, design goals, determination of stream susceptibility, partial duration calculations, drawdown calculations, BMP selection, inspection, maintenance, and monitoring. In addition to the Final HMP, the Copermittees released the BMP Sizing Tool and the supporting Draft San Diego BMP Sizing Calculator Methodology guidance document. The BMP Sizing tool enables less complex projects to meet HMP requirements. Because of the simplicity of the tool, the applicability is very limited. The supporting guidance document provides users with full descriptions of five Low Impact Development (LID) practices that function as Integrated Management Practices (IMPs) while addressing HMP requirements. And finally during this period, the Copermittees initiated an independent, third-party review (by Clear Creek Solutions, Inc.) of the BMP Sizing Tool. In addition to validating the Sizing Tool, Clear Creek Solutions, Inc. was tasked with verifying parameters contained in their proprietary continuous simulation model, the "San Diego Hydrology Model 2011" or SDHM2011. The SDHM2011 is based upon the Western Washington Hydrology Model (WWHM) and is accepted as being consistent with HSPF, therefore parameter verification should validate the San Diego continuous simulation model. Findings of the BMP Sizing Tool validation and SDHM2011 parameters were not available during this reporting period.

During this same period, the City released a number of updated storm water documents which included the following documents:

- Oceanside SUSMP
- Storm Water Quality Assessment form
- Standard Development Plan-Storm Water Mitigation Plan (SDP-SWMP) Template
- Priority Development Project-Storm Water Mitigation Plan (PDP-SWMP) Template
- Planning Division – Development Processing Guidelines

In addition, Development Services Staff with assistance from Information Technology Staff began a significant revision to the City website. Completion of the website revision was pending at the close of this reporting period.

The update to the City SUSMP mirrored the form and content of the Countywide Model SUSMP by providing additional information to support implementation of the HMP which included several decision matrixes and HMP facility sizing tables. The City update also includes direct references to the Final Hydromodification Management Plan (HMP), BMP Sizing Tool, and Draft San Diego BMP Sizing Calculator Methodology guidance document.

The Storm Water Quality Assessment (SWQA) form is a tool that ensures all projects applying for administrative and discretionary permits receive uniform screening to determine applicability of Municipal Permit and SUSMP requirements. During this reporting period, the SWQA incorporated an additional Priority Development Project category. The additional category

includes "all other pollutant generating Development Projects that result in the disturbance of one acre or more of land", in accordance with Municipal Permit Section D.1.d.(1)(b).

The Standard Development and Priority Development Project templates were developed as an aid to the design professional and development community. The templates are designed to provide a standardized form and content that aims to address Municipal Permit development planning requirements, while facilitating storm water plan review. The SWMP templates are a work in progress and will receive periodic updates as necessary to remain consistent with Municipal Permit and SUSMP requirements, while addressing the interests of the development community.

The revision to the Planning Division-Development Processing Guidelines targeted updates to procedures and reference documents to be consistent with current Municipal Permit and SUSMP standards. Emphasis is placed on storm water requirements that typically coincide with discretionary and administrative permit processing.

In addition to these aforementioned program changes and document updates, the City continued to implement data tracking systems in the Development Services Department and the City Water Department. The City Development Services Department encompasses the Planning, Engineering, and Building Divisions. Projects which submit permit applications to Development Services are entered into a tracking database (TRAKiT by CRW Systems®) which enables monitoring of projects from initial submittal through the entitlement, preliminary grading, precise grading, engineering construction, building construction, and final occupancy phases of a project. Permit applications are routed to each discipline; Planning, Engineering (Entitlement, Final, Geotechnical, Landscape, Storm Water, and Traffic), Building, Fire, and Water for review and comment. This procedure enables a coordinated review process between Divisions and Departments prior to project entitlement or granting of a permit; whichever is applicable.

An online version of TRAKiT, called eTRAKiT is available to the public. Users may access public records and review and permit status via the web. For more information, visit www.ci.oceanside.ca.gov and click on the "eTRAKiT-Online Permitting" Quick Link.

2.2.2 Source Characterization

An integral component of the City urban runoff program is source control characterization. Unmitigated activities associated with various land use types are known to be sources of pollutants that have the potential to negatively impact the environment and receiving waters. Land use source characterization is addressed through the implementation of unified Low Impact Development practices that include Treatment Control BMPs and HMP flow attenuation measures that enable Priority Development Projects to reduce impacts to the receiving waters, while demonstrating compliance with the Maximum Extent Practicable (MEP) standard.

The updated SUSMP identifies eleven (11) separate "Priority Project Categories" (PDP). Each PDP is identified as a potential or anticipated source of storm water pollutants and is based upon specific land use, proximity to environmentally sensitive areas, topography, and disturbed area. During this reporting period PDP categories were increased by one by including "all other

pollutant generating Development Projects that result in the disturbance of one acre or more of land", consistent with Municipal Permit Section D.1.d.(1)(b). Priority Project Categories and General Pollutant Categories appear in Table 1-1 of the updated SUSMP.

2.2.3 Best Management Practice Requirements

There are established minimum design requirements for all development projects, which are discussed in Section 4.4.3 of the 2008 JURMP. In addition, the Land Use Planning Element of the General Plan contains policies to protect water quality that are discussed in Section 4.2.3 of the 2008 JURMP.

The SUSMP was updated during this reporting period to address the current requirements of the Municipal Permit. Updated requirements include implementation of a unified Low Impact Development (LID) approach with the integration of HMP flow attenuation design to mitigate runoff discharges development sites. The unified LID approach addresses, at a minimum, all site runoff by identifying discrete Drainage Management Areas (DMAs) composed of quantified surface types that self-treat, self-retain, drain to a self-retaining area, or drain an Integrated Management Practice or IMP. Proposed Treatment Control BMPs and IMPs are required to meet the medium removal efficiency standard for the identified Primary Pollutants of Concern for each development project. The implementation of Treatment Control BMPs with low removal efficiency is not permissible.

Perhaps the most significant enhancement to the City and Countywide approach to storm water mitigation is the full implementation of the Hydromodification Management Plan or HMP. Application of HMP now applies to all Priority Development and redevelopment projects, except for select projects that qualify for narrowly defined exemptions. The expanded application of HMP is intended to address sediment transport impacts to all non-hardened conveyances, thereby reducing subsequent impacts to the receiving water. The projected benefits of HMP will be observed by and documented by the Copermittees as part of a long-term quality assurance program.

The updated SUSMP is available at the City of Oceanside – Development Services counter or may be downloaded from the Engineering Division – Subdivision Section webpage at: http://www.ci.oceanside.ca.us/gov/dev/eng/stormwater/default.asp.

By following the design procedure outlined in the updated SUSMP, applicants and design professionals can develop a single integrated design which complies with the complex and overlapping NPDES permit, LID, storm water treatment, and peak runoff and duration control requirements. The implementation of a unified LID approach coupled with HMP provides the development community with a broad spectrum of design alternatives that will enable projects to achieve the Maximum Extent Practicable as cited in the Municipal Permit.

2.2.4 Program Implementation

Program implementation is enabled by the General Plan, which was adopted by the City Council and is recognized as a legally binding document. All applicable projects, including municipal projects are required to be consistent with the plan. In addition to the General Plan, the City addresses storm water pollution issues through the application of its Municipal Code. Chapter 40 of the Municipal Code is the Urban Runoff Management and Discharge Control Ordinance and is commonly referred to as the Storm Water Ordinance. The Ordinance contains multiple references to the current NPDES, Municipal Permit, and SUSMP as the governing storm water regulations. All new development and redevelopment projects are subject to updated SUSMP and the lawful prior approval provisions of the Municipal Permit.

All project applications are subject to a formal SUSMP Determination. Formal determinations are based upon a review of the Planning Division project application submittal. The minimum amount of information necessary to perform a SUSMP Determination includes a completed Storm Water Quality Assessment (SWQA) form, site plan, and project description and justification. The objective of the SUSMP Determination is to provide a consistent and thorough method for the initial review of development and redevelopment projects, with the overall purpose of categorizing projects and determining applicable SUSMP requirements. Development and redevelopment projects are categorized as; projects not subject to SUSMP Treatment requirements (Exempt Projects), Standard Development Projects (SDPs), or Priority Development Projects (PDPs). The SUSMP Determination also demonstrates to the RWQCB that each project receives a consistent review and enables the City to document project categorization and satisfy Municipal Permit requirements for reporting findings in the JURMP Annual Report.

Details on the completed and planned SUSMP updates may be found in Section 4.4.4.4 of the 2008 JURMP. In addition, information pertaining to the legal authority to implement a storm water program is located in Section 2 of the 2008 JURMP.

2.3 Environmental Review Process

The City has evaluated its established environmental review process for all development projects to determine compliance with the Municipal Permit. The City guides developers through the filing necessary documents and identifies which reports are required to be submitted and approved before development may begin. The current environmental review process places emphasis on the evaluation of water quality impacts and related issues that may result from the project development.

The Planning Division and Engineering Division of the Development Services Department are responsible for reviewing development projects for conformance with storm water requirements. The City will continue to assess all development and redevelopment projects for compliance with the California Environmental Quality Act (CEQA) by reviewing the Environmental Initial Study completed by each project applicant. A copy of this checklist is included in Appendix D of the 2010 JURMP. The checklist contains questions to evaluate potential negative impacts on receiving water bodies. Projects which are determined to have “potentially significant impacts” to the surrounding environment and receiving waters are required to prepare Environmental

Impact Reports (EIRs) for City review. Development projects that are not required to prepare EIRs proceed to the next phase of the approval process.

During the development of the 2008 JURMP, the City evaluated its current established environmental review process for all new development and redevelopment projects to determine compliance with the Municipal Permit. The City determined that the current environmental review process adequately addresses the requirements of the Municipal Permit. While the specific requirements evaluated during the environmental review process are expected to be updated periodically, the basic review structure did not require revision during this reporting period. Details of the current environmental review process are provided in Section 4.3 of the 2008 JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City has an established administrative and discretionary approval processes that provides multiple reviews by the Planning and Engineering Divisions. The Planning Division is responsible for determining acceptable land uses, development constraints, and identifying environmental issues. The Engineering Division is composed of various disciplines (i.e., Engineering Improvements, Grading and Drainage, Hydrology, Geotechnical, Storm Water, Traffic, and Landscape), which perform a coordinated review of all project applications. The Fire Department also performs multiple reviews and notifies the appropriate division in the event of a discrepancy or nonconformance with development regulations. In addition, the Building Division coordinates with Storm Water Development Review to ensure that new development, remodeling projects, additions, or demolitions are reviewed for compliance with storm water regulations. The coordinated involvement of all Divisions and disciplines provides an elevated degree of assurance that all projects are subjected to thorough scrutiny as part of a typical review process. Particulars surrounding the project approval and process verification are discussed in the following sections.

2.4.2 Source Characterization

Source characterization is an integral component of any urban runoff program. A wide variety of land use types and activities, if left unmitigated, are known to be sources of pollutants that have the potential to negatively affect the surrounding environment and the project receiving waters.

The updated SUSMP identifies eleven (11) separate “Priority Project Categories” (PDPs), which are cited as anticipated or potential sources of storm water pollution based upon particular land use types and specific site conditions, such as site topography and proximity to environmentally sensitive areas. During this reporting period PDP categories were increased by one to include “all other pollutant generating Development Projects that result in the disturbance of one acre or more of land”, consistent with Municipal Permit Section D.1.d.(1)(b). Priority Project Categories and General Pollutant Categories appear in Table 1-1 of the updated SUSMP.

Source characterization augments the implementation of unified Low Impact Development practices and flow control practices (HMP) that enable development and redevelopment project to reduce impacts to the receiving waters and demonstrate compliance with the Maximum Extent

Practicable (MEP) standard. Priority Development Project and General Pollutant Categories appear in Table 1-1 of the updated SUSMP.

2.4.3 Best Management Practice Requirements

The Municipal Permit dictates minimum BMP requirements for all new development and redevelopment projects. The requirements are addressed in the Oceanside Standard Urban Standard Management Plan (SUSMP) and Chapter 40 of the Oceanside City Code (i.e. the Storm Water Ordinance) included in the City Storm Water Ordinance and SUSMP and shall include, but not be limited to, the implementation of the following BMPs and LID practices by the project proponent:

- Source Control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed outdoor material storage areas, properly designed trash enclosure areas, the implementation of Integrated Pest Management Principles (IPM) and the inclusion of efficient irrigation system, and drought tolerant/native species landscape design consistent with the City Water Efficient Landscaping Ordinance 10-OR0412-1.

- The inclusion of Unified Low Impact Development (LID) practices that conserve natural topographic features, provide development setbacks from natural water bodies and conveyances, minimize site imperviousness, maximize infiltration, and retain and slow runoff, while addressing pollutant mitigation requirements;

- Implementation of development buffer zones from natural water bodies requires the project proponent to implement other types of buffers such as trees or access restrictions where conventional setbacks are not feasible;

- Measures to mitigate discharges of pollutants that result during grading or construction activities as specified in the Section D.2 of the Municipal Permit; and

- Submittal and approval of a mechanism under which ongoing long-term maintenance of all structural post-construction BMPs will be conducted.

Addressing storm water BMP requirements is required during the planning/permit application phase of a project. Projects must demonstrate compliance with Municipal Permit requirements prior to scheduling a public hearing. In addition, implementation of BMPs is a City standard condition of approval. The City will not support the entitlement of a project or issue development permits until the appropriate SUSMP documents are reviewed by City staff and approved by the City Engineer. Any subsequent changes that affect the approved BMPs will be subject to a formal Amendment process that includes review by City staff and approval by the City Engineer.

2.4.4 Program Implementation

2.4.4.1 SUSMP Revision

The updated SUSMP expands storm water requirements for new development and redevelopment projects. Storm water treatment requirements have been made more widely applicable and more stringent. New requirements include minimum standards for the implementation of Low Impact Development (LID) practices and the integration of flow control criteria designed to mitigate runoff peaks and durations from development sites. The updated SUSMP incorporates a unified LID procedure which combines site planning and design measures coupled with engineered, small-scale Integrated Management Practices (IMPs).

The updated SUSMP includes specific design information for dispersal of runoff to landscaped areas and for the integration of pervious pavements, bioretention facilities, flow-through planters, dry wells, infiltration basins, and cisterns into the project design. Where feasible and where permissible, the water in cisterns may be directed to non-potable uses to augment irrigation practices. Bioretention facilities and planter boxes may be designed with an impermeable barrier so that runoff does not saturate native soils. Instead, runoff is filtered through an engineered soil mix and captured in a subdrain and conveyed to a storm drain system. This configuration may be needed where native soils have low infiltration rates, where groundwater is high, contaminated, or where increasing soil moisture may present a hazard to foundations or slope stability. In limited and special circumstances, such as retrofit of existing drainage systems, some pedestrian-oriented developments, and roadway widening projects; where it can also be demonstrated it is not be feasible to construct any of these facilities, higher-rate surface biofilters or higher-rate vault based filtration units may be used to address treatment requirements. Applicants are also required to incorporate design features to control pollutants from specified on-site sources, such as refuse areas, outdoor storage areas, and vehicle washing and repair facilities. The SUSMP contains a number of Source Control BMPs designed to address the types of sources to be controlled and a corresponding list of required source control measures.

In addition to disconnecting impervious surfaces and mitigation pollutant sources, applications for approval of Priority Development Projects (PDPs) are required to demonstrate compliance with the Hydromodification Management Plan (HMP) consistent with the Municipal Permit. Applicants are directed to the HMP Applicability Determination matrix (HMP Figure 6-1) to determine if a proposed project is obligated to implement hydromodification controls. The HMP Decision Matrix applies to all PDPs. As a rule of thumb, application of flow controls to redevelopment projects would only be required if the redevelopment project increases impervious area or peak flow rates as compared to pre-project conditions. Please note that all Priority Development Projects, regardless of HMP applicability, remain subject to Municipal Permit unified LID and water quality treatment requirements.

By following the design procedure, applicants can develop a single integrated design which complies with the complex and overlapping NPDES permit, LID, storm water treatment, and peak runoff and duration control requirements.

2.4.4.2 SUSMP Document Review

During this reporting period the City continued to implement requirements and practices cited in the Municipal Permit, Interim SUSMP, and updated SUSMP. The Clean Water Program continued to use a full-time staff member to perform storm water development review. Storm water development review includes indentifying applicability of SUSMP requirements and confirming that SUSMP documents are in conformance with the Municipal Permit and SUSMP. Review also involves confirming that related final engineering/construction plans are consistent with the approved SUSMP documents.

As part of the administrative and discretionary permit application process, each development or redevelopment project is required to complete a permit application form, a Storm Water Quality Assessment form, and provide a project description and justification with supporting site development and architectural plans. The complete project application is reviewed by Storm Water Review staff with the underlying task of providing a formal SUSMP Determination. The determination clearly identifies the project type and subsequent SUSMP requirements.

The majority of new development and redevelopment projects are subject to the provisions of the SUSMP. Projects are identified as Priority Development or Standard Development projects based upon land use categories and applicability of permanent storm water BMPs. A very limited number of projects are not required to submit a SUSMP document and are noted as SUSMP exemptions. Projects which are granted a SUSMP exemption typically involve incidental construction with negligible or no ground disturbance activities. Examples include the addition of an antenna to an existing cellular tower or interior tenant improvements to an existing building.

A SUSMP exemption differs from a SUSMP wavier of infeasibility. The City has never granted a waiver of infeasibility to a Priority Development Project and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may elect to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the project watershed.

Projects which have been formally identified as Priority Developments or Standard Developments are required to submit a project specific Storm Water Mitigation Plan (SWMP). Entitlement project storm water plans and supporting documents are submitted to the Planning Division for distribution to Engineering and Storm Water Development Review staff. The storm water review of Priority and Standard Development Projects is an iterative process that entails examination of the SWMP for consistency with SUSMP and Municipal Permit requirements. SWMP reviews also comprise an evaluation the supporting documents that include (at a minimum); the Site Development Plan, Project Description and Justification, Hydrology Study, HMP Study, Geotechnical Report, Biological Study, Slope Analysis, and etc. Projects which are consistent with the Municipal Permit and SUSMP are deemed complete and forwarded to the City Development Engineer and City Engineer, respectively, for final review and approval. A digital image and hard copy of the original, wet-signed plan are retained for City records.

2.4.4.3 Priority Projects

Priority Projects are required to obtain an approved SWMP as part of the project entitlement process. The items required in a SWMP are described in Section 1.6 of the SUSMP. In summary, Priority Projects must determine the Primary Pollutants of Concern based upon source characterization and impacts to the 303(d) impaired receiving waters. This category of development is required to provide Source Control BMPs while implementing LID practices. The project must incorporate Integrated Management Practices/Structural Treatment Control BMPs into the site development. The selected IMPs/Treatment Control BMPs must have a medium to high removal efficiency for the identified Primary Pollutants of Concern. The Treatment Control BMPs with low pollutant removal efficiencies are not permissible in the City of Oceanside.

Priority Projects are also required to obtain an approved Operation and Maintenance Plan (O&M Plan) and enter into a Storm Water Facilities Maintenance Agreement (SWFMA) to ensure the long-term maintenance and operation of the Treatment Control BMPs. The City Engineer will not consider Priority Project structural Treatment Control BMPs to be effective without the assurance of a long-term maintenance component, and therefore will not accept storm water BMPs as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. This mechanism shall be proposed by the project proponent as part of the SWMP and will be refined though the City review process until satisfactory verification of maintenance is provided to the City Engineer. Such verification may include, but is not limited to, covenants, legal agreements, maintenance agreements, and/or conditional use permits. A non-refundable security may be required. The security provides the City with funding to perform maintenance activities in the event of default by the owner.

2.4.4.4 Priority Project Example

The Tyson-Wisconsin Parking Lot and Coastal Rail Trail is a Capital Improvement Project that was conceived by City staff as a means of replacing coastal access parking that will be displaced by the development of the Downtown City Mark project. Although significantly constrained by surrounding development and negligible topographic relief, the 284-space parking lot capitalizes on Low Impact Development (LID) strategies by incorporating an efficient site layout that disperses runoff from impervious areas to pervious surfaces that support treatment BMPs or Integrated Management Practices (IMPs). The extension of the Coastal Rail Trail provides an additional use element while enhancing public access.

The project is located west of, and adjacent to, the North County Transit District (NCTD) rail lines between Tyson Street and Wisconsin Avenue in the north-central coastal zone of Oceanside. The project is situated between the existing residential properties fronting Myers Street and the rail line. The site is approximately 700-feet from the Pacific Ocean Shoreline receiving water and is not located within 200-feet of a Water Quality Environmentally Sensitive Area (WQESA) or in a FEMA Flood Hazard Zone.

Application of the HMP Applicability Determination matrix indicates <u>this project is exempt from the requirements of the HMP</u> consistent with Node 5 of the decision matrix and RWQCB Order No. R9-2007-0001, Section D.1.g.(3) which states HMP "does not apply to Development

Projects where the project discharges stormwater runoff into… underground storm drains discharging to bays or the ocean…" In accordance with the Permit, hardened conveyance systems can include existing concrete channels, storm drain systems, riprap channels, and etc.
The site is a denuded, vacant strip of land 63 feet wide and approximately 2,500 feet long, encompassing an area of approximately 3.6 acres. The underlying soils are identified as Group B per Appendix A – Hydrologic Soil Groups Map of the San Diego County Hydrology Manual, June 2003. There is an existing 0.4 acre impervious, public parking lot, located at the southern terminus of the project, adjacent to Wisconsin Avenue that will be removed, reconfigured, and replaced, as part of the overall project improvements.

The topography may be described as gentle, with longitudinal slope gradients approaching flat; to cross slopes varying from 0% to 1%. Elevations range from approximately 37.0 MSL at Oak Street in the south, to 45.0 MSL at Tyson Street in the northern portion of the site. The present site topography creates an isolated project watershed with no major drainage courses; framed by existing development. The easterly project watershed boundary is the centerline of the western most NCTD rail. Sheet flow emerges from the track ballast and continues westerly, as sheet flow, either through the existing residential yards, or to the intersecting Tyson, Fir, Pine, Elm, Ash, and Oak streets, to outfall locations along Myers Street. Flows that reach Myers Street are conveyed north by gutter flow to existing storm drain located in Wisconsin Avenue. There, flows form a confluence with upstream offsite runoff and then are conveyed west to an established outfall west of the intersection of Wisconsin Avenue and The Strand.

The project is constrained by adjacent existing development and storm drainage infrastructure that place significant limitations on site grading while limiting the amount of available hydraulic head. This constraint is evident in the amount of elevation differential available to provide longitudinal slope across the length of the site. Drainage is further constrained by shallow existing storm drain structures located near the southern terminus of the site. An additional constraint is the adjacent to the NCTD rail, where grading must be performed in such a manner as to "disturb the rail ballast". Additional grading consideration was required due to multiple building and structure encroachments onto City property by rear-yards of residents fronting Myers Street. There are no geotechnical considerations that constrain the site development and there are no environmental constraints associated with this project.

The project is a coastal access parking lot containing 284 parking spaces with an adjacent Coastal Rail Bike Trail. The project design incorporates features that minimize impervious areas by optimizing the site layout. The parking lot utilizes one-way vehicular circulation, coupled with compact parking spaces and minimal width drive aisles to reduce site imperviousness while maximizing the land use element. LID practices are integrated into the landscape features, low-traffic areas, and pervious areas that receive runoff from adjacent impervious surfaces.

The site is divided into seventy discrete Drainage Management Areas (DMAs) to achieve compliance with the Municipal Permit. Each DMA is either self retaining, drains to a self retaining area or disperses runoff to an LID Integrated Management Practice (IMP). There are no self treating areas within the project. The site also uses the limited application of proprietary Treatment Control BMPs in select DMAs, where LID practices or structural BMPs are not practicable.

The project Low Impact Development design incorporates thirty-six (36)Self-Retaining Areas. Self-Retaining Areas (also referred to as a zero-discharge area) are designed to retain the first one inch of rainfall without producing any runoff. The Self-Retaining Areas are distributed along the east and west sides of the parking lot and are comprised entirely of isolated landscape islands; contained by a 6-inch perimeter curb. To facilitate the required capture depth, the finish grade within each landscape DMA is set 0.15 foot below the surrounding curb low-point. Setting the interior finish grade in this manner compensates for sloping finish top-of-curb grade. To ensure the required capture depth, each DMA is equipped with a 4" area drain and atrium grate, which is set 1-inch above the interior landscape finish grade. Each area drain is piped to a 4-inch perforated sub-drain that also services an adjacent bioretention swale or media filter. The combined flows are conveyed within the sub-drain to a curb inlet. The curb inlet is a component of the municipal storm drain that conveys area-wide flows to an existing outfall location west of terminus of Wisconsin Avenue, on the Pacific Ocean shoreline.

The Tyson-Wisconsin Parking Lot contains twenty-three (23) separate "Areas That Drain to Self-Retaining Areas". Each retaining DMA utilizes a minimum 7.5-inch pervious concrete section within the delineated low traffic areas and assumes 40% void to obtain the required minimum 3-inches of water depth over the available pervious area while not exceeding the maximum ratio of 2 parts impervious area to 1 part pervious area. The soil infiltration rate is cited as 0.05-inches per hour, as excerpted from the "Preliminary Geotechnical Investigation" prepared by Taylor Group, Inc, dated March 3, 2009. The study categorizes the onsite soils as "Group C". These findings are not consistent with the San Diego County Hydrology Manual, June 2003, Appendix A – Hydrologic Soil Groups Map, which indicates the site is within area comprised Group B soils. However, for purposes of this Plan, the more conservative study findings (Group C soils) were used to determine BMP infiltration drain-down times. Infiltration BMPs will drain-down in sixty hours; well within the ninety-six hour maximum. It is anticipated drain-down times will be less than due to seasonal evapotranspiration rates.

The Tyson-Wisconsin Parking Lot and Coastal Rail Trail storm water mitigation design incorporates a total of eight (8) areas that drain to Integrated Management Practices or IMPs. The IMPs that service these areas are comprised of bioretention swales and media filter trenches. The western half of the site utilizes a single media filter trench with three (3) bioretention swales, whereas the eastern half of the site includes four (4) media filter trenches.

The three bioretention swales are more precisely located between the western project boundary and adjacent curb and gutter, and drain from north to south. Concentrated flows enter each bioretention swale through a series of 12-inch wide curb openings, spaced approximately one-half station apart and located in the in the middle of the adjacent parking space.

The swales are trapezoidal, with a 3-foot top width, a 1-foot base and a depth of 6-inches. The longitudinal slope corresponds to the adjacent curb and gutter, with gradients varying between 0.3% and 0.5%. The side slopes and portions of the swale base are stabilized with 2-4-inch cobble; resembling a dry-riverbed feature. Landscape coverage and drought-tolerant plant material within the swale is consistent with the function and aesthetics of the dry-riverbed feature.

The relatively flat longitudinal slope slows the low-flows that enter the swale; promoting infiltration through the swale cross-section. The cross-section is comprised of an 18-inch lift of engineered soil mix, with sufficient organic material to promote plant growth, while maintaining a minimum 5-inch/hour percolation rate. The layer of engineered soil mix is underlain with 12-inch sub-drain section composed of a 2-inch lift of washed pea gravel over a 10-inch layer of ¾-inch clean, open graded, crushed, angular, washed-stone. The bioretention swale section is equipped with a 4-inch PVC perforated sub-drain. The drain directs filtrate to a Type B curb inlet. Treated flows and exceedance flows, which are treated by a proprietary curb insert, are combined within the inlet, and conveyed south in an RCP storm drain to an existing RCP storm drain located in Wisconsin Avenue. Onsite flows form a confluence with runoff from the upstream watershed, and are conveyed to an existing stabilized outfall location on the Pacific Ocean shoreline.

The IMP design includes four media filter trenches. One media filter trench is located on the west half of the site, near the Wisconsin Avenue parking lot exit. The trench services a DMA comprised of landscape, AC bike trail, and a strip of pervious concrete. The remaining three media filter trenches are located in the eastern half of the site. This series of trenches mitigates flows from the railroad ballast, AC bike trail, and strip of pervious concrete. The media filter trenches are more precisely located behind the curb and gutter between the AC bike trail or railroad ballast.

Runoff entering the media filter trench is comprised of sheet flow from the adjacent AC bike trail and/or railroad ballast. The cross section of the media filter trench is similar to that of the bioretention swale with the exception that it is not designed to support plant life. Rather than having a planted layer, the sand media filter is stabilized by a 2-inch lift of pervious PCC concrete. The section underlying the pervious concrete is comprised of an 18-inch lift of engineered soil mix with a minimum 5-inch/hour percolation rate, such as clean, washed concrete sand. Beneath the layer of engineered soil mix is a 12-inch sub-drain section composed of a 2-inch lift of washed pea gravel over a 10-inch layer of ¾-inch clean open graded, crushed, angular, washed stone. As with the bioretention swale, the sand media filter trench section is equipped with a 4-inch PVC perforated sub-drain. The drain directs filtrate to a Type B curb inlet. Treated flows and exceedance flows are combined within the inlet, and conveyed south in an RCP storm drain to an existing RCP storm drain located in Wisconsin Avenue, which as previously stated, are treated by a proprietary curb insert. Onsite flows form a confluence with runoff from the upstream watershed, and are conveyed to an existing stabilized outfall location on the Pacific Ocean shoreline.

There are areas within the site comprised of PCC curb and gutter and incidental areas that drain to the curb and gutter. The primary function of the curb and gutter is to convey runoff that exceeds the treatment flows. The only practicable method of addressing this negligible amount of treatment flow is by employing a proprietary treatment control BMP. The anticipated pollutants from this limited watershed include trash and debris. A curb inlet basket was selected to mitigate these secondary pollutants of concern. The project will implement the BMP in the five proposed curb inlets.

The IMPs are sized using methods described in Section 4 of the City SUSMP. Areas draining to IMPs are multiplied by a sizing factor to calculate the required minimum size of the IMP. The minimum permissible IMP size (i.e. footprint) for a bioretention or media filter IMP is 4% of the total DMA. The identification of DMA surface types and runoff factors are enumerated in a Tabulation of Areas Draining to DMAs.

2.4.4.5 Standard Development Projects

Development and redevelopment projects that are not identified as Priority Development Projects or are not determined to be exempt from SUSMP Treatment requirements, and receive a formal SUSMP Determination identifying the project as a "Standard Development Project" (SDP) are required to implement Source Control BMPs consistent with Section 2.7 of the SUSMP. Projects are also required to include LID features designed to conserve natural topographic features, provide development setbacks from natural water bodies and conveyances, minimize site imperviousness, maximize infiltration, and retain and slow runoff.

Standard Development Projects are required to implement a Standard Development Project SWMP. Clean Water Program staff may also require additional controls for Standard Development Projects, appropriate to the project, which may include treatment BMPs and LID IMPs such as infiltration or bioretention. If treatment facilities are included, provisions are to be made to ensure their long-term maintenance.

2.4.4.6 Adequacy of Proposed Plans

Staff is tasked with review of submitted SUSMP documents and other relevant plans for compliance with the Municipal Permit and SUSMP requirements. The City Engineer may elect to approve proposed alternatives to the BMP requirements contained in the SUSMP if they are determined to be applicable and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs and may be requested following the conclusion of a staff review cycle. A project SWMP will be deemed complete when the project complies with the requirements of the City SUSMP and Municipal Permit.

2.4.4.7 Inspection

The City has compiled a Treatment Control BMP inventory with information for all approved and/or constructed Priority Development Projects. The inventory is included in this report as Attachment 2-A. All installed Treatment Control BMPs are regularly inspected by City Code Enforcement Inspectors to ensure intended function and proper maintenance. The Municipal Permit dictates that high priority sites shall be inspected annually and medium priority sites are to be inspected every two years. Low priority sites are inspected on an "as needed" basis. In addition, the Municipal Permit requires a minimum of 20% of the total number of projects with approved Treatment Controls and a maximum of twice the average number of projects with Treatment Control BMPs approved per year will be inspected annually. The Municipal Permit dictates 50% of all medium priority sites with drainage inserts will be inspected annually. City Code Enforcement inspection staff performed a total of 37 treatment control BMP inspections during this reporting period.

It is the responsibility of the City Engineering Inspection staff to ensure that all BMPs proposed for a project have been built or installed according to the construction plans; before approving

subsequent stages of construction. The City Engineer requires that all Priority Development Projects attached a duplicate of the approved SWMP BMP Exhibit to the construction plan set. The inspectors utilize the project plans to identify any missing or incorrectly constructed/installed Treatment Control BMPs. Engineering Inspection staff has the authority to stop a project from proceeding if BMPs are not constructed consistent with the approved SWMP. The SWMP is the governing document. Moreover, inspectors have the authority to withhold the Certificate of Occupancy (CO) and to deny approval for sites with observed problems. Inspectors also have the authority to withhold the release of bonds until plan requirements are adequately addressed. City Staff routinely inspects all development projects subject to SUSMP requirements to ensure that all LID, Source Control, and Treatment Control BMPs proposed for the project have been constructed in compliance with all approved plans and City permits and ordinances. This established method of ongoing inspection during site development and the ability to stop-work, withhold release of bonds, and/or occupancy, ensures developer compliance with the approved SWMP.

Inspections include examination of all Treatment Control BMPs at the site to verify that each Treatment Control BMP is in working order, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings will be documented by the inspector using the City of Oceanside Treatment Control BMP Inspection form in Appendix D of the 2010 JURMP. Deficiencies in Treatment Control operation and maintenance are noted during the inspection, the responsible party is notified and appropriate enforcement actions take place as described in Section 4.4.4.9 of the 2010 JURMP, in order to achieve compliance.

The City requires annual verification of proper maintenance of all treatment control BMPs by the responsible party for maintenance prior to the start of the rainy season. The City Code Enforcement section is responsible for ensuring the proper long term maintenance and operation of post construction BMPs. The City requires all Priority Projects to include Operation and Maintenance checklists and a self-inspection log for the site's Treatment Control BMPs as found in the approved project SWMP. The City requires these forms to be completed by the site's responsible party and be submitted to the City Code Enforcement staff on an annual basis. See Attachment 2-A for sites that were inspected and/or have BMP maintenance verification on file for this reporting period

A detailed description of the different enforcement measures used by the City of Oceanside to enforce its storm water regulations can be found in Section 2 of the 2008 JURMP.

Enforcement of post-construction BMP maintenance after occupancy is the responsibility of City Code Enforcement officers. Code Enforcement uses a variety of methods to ensure long term maintenance objectives are met. Enforcement actions include verbal and written warnings and monetary penalties. Enforcement measures will escalate with continued violations as necessary. All enforcement actions are documented in the development project's database file. If a development site receives frequent citations or is not responsive to previously issued enforcement actions, more severe actions, such as court actions, will be used as necessary. Details surrounding the City Treatment Control BMP inspection program may be found in Section 4.4.4.7 of the 2010 JURMP.

2.4.4.8 2010-2011 SUSMP Document Submittal and Review Summary

This Section identifies the SUSMP document reviews that were performed during the 2010-2011 reporting period.

There were 26 Priority Development Project SWMP submittals which prompted 67 reviews with a total of 11 projects receiving approval. During the same period there were 15 Priority Projects that submitted Amendments to a previously approved SWMP that prompted 35 reviews and yielded 11 approvals. In addition, there were 3 Standard Development Projects that submitted an SWMP which prompted 8 reviews. One Standard Development Project SWMP was approved during the 2010-2011 reporting period.

During the reporting period there were 13 Priority Development Projects that submitted O&M plans as part of the final engineering process. There were a total of 33 reviews performed with a total of 8 O&M Plans receiving approval. The SWMFA is typically submitted with O&M Plan. Some projects elect to "trail" the SWFMA submittal. During this reporting period 8 project SWFMAs were submitted, prompting 19 reviews, resulting in 2 approved agreements.

All projects were subjected to a SUSMP Determination. The determination process places the majority of developments into Priority Development Project or Standard Development Project categories. During this reporting period, a number of projects were found to be exempt from SUSMP requirements. Projects which are granted a SUSMP exemption typically involve minor construction with minimal, or no ground disturbance. Examples of projects that are eligible to receive an exemption include interior tenant improvements to an existing structure, or the addition of an antenna to an existing cellular tower. During this reporting period there were 41 reviews linked to the evaluation of 29 project submittals as part of the SUSMP Determination process. At total of 24 projects were not categorized as a Priority or Standard Development Project and therefore were not required to submit an SWMP.

As previously stated, a SUSMP exemption differs from a SUSMP wavier of infeasibility. The City has never granted a waiver of treatment control BMP infeasibility to a Priority Development Project and does not anticipate granting such waivers in the future. However, if a waiver is deemed necessary, the City may elect to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the project watershed. There were no SUSMP waivers of infeasibility granted during this reporting period. See Table 2-2 for more detail on project submittals and review results.

Table 2-2. 2010-2011 SUSMP Document Submittal and Review Summary

File Number	Project Name	Development Type	Number of Reviews	Approved (Y/N)
Priority Development Project SWMPs				
RC10-00002	817 S Pacific St – (Beachwalk)	Residential	4	Y
RC10-00010	819 S Pacific St – (Beachwalk)	Residential	4	Y
RC-4-2010	1441 S. Pacific Street	Residential	3	Y
RC11-00004	1639 S. Pacific Street	Residential	2	N
RC10-00008	1707 Pacific Street	Residential	1	N
P-6-07	1810 S. Tremont Street	Residential	1	N
P10-00005	Bergna Remodel-1801 S. Meyers Street	Residential	1	N
RC11-00002	1513 S Pacific Street	Residential	1	N
T-2-04	Dixie Village	Residential	2	N
D11-00004	Dolphin Green Carwash	Commercial	1	N
D09-00004	El Corazon Green Waste Composting Facility	Commercial	1	N
T-3-06	Guajome Estates	Residential	4	N
ADP10-00002	Hydranautics Warehouse Expansion	Commercial	3	N
CUP11-00006	Iravani Vehicle Storage	Commercial	2	Y
D10-00005	VV Oceanside Congregation	Commercial	1	N
D10-00008	Pro Kids Golf Course	Commercial	5	Y
G11-00002	Quarry Creek	Commercial	4	Y
D10-00004	Marriot Courtyard	Commercial	5	Y
D10-00003	Red Lobster	Commercial	5	Y
P-27-06	Rodee PM	Residential	1	N
D10-00014	San Ramon HOA Paving	Residential	3	Y
T-2-08	Sutton Place	Residential	3	N
D11-00001	Taco Bell Revision	Commercial	4	Y
CUP10-00002	T-Mobile @ Mellano Farms	Commercial	1	Y
D11-00002	Tri-City Hospital Office Building	Commercial	3	N
RC10-00004	Stensrud Addition	Residential	2	N
Total PDP-SWMP Project Submittals: 26 Total PDP-SWMP Reviews: 67 Total PDP-SWMPs Approved: 11				
SWMP Amendments				
ADP-8-02	Faris Professional Building (1st)	Commercial	3	N
D-2-09	4181 Oceanside Blvd-Walgreens(2nd)	Commercial	1	Y
D-2-09	4181 Oceanside Blvd-Walgreens (3rd)	Commercial	1	Y
ADP-1-09	Amerillum Lot 15 (1st)	Commercial	3	Y
T-12-99(9)	Arrowood-Eagleridge (1st)	Residential	1	Y
T-12-99(12)	Morro Hills Village K (1st)	Residential	3	Y
BLDG11-0507	McDonalds Remodel	Commercial	4	Y
T-12-99(12)	Morro Hills Village K (2nd)	Residential	3	Y
T-12-99(8)	Morro Hills Village K (2nd)	Residential	3	Y
ADP-2-08	Pacific Animal Hospital	Commercial	2	N
P-1-86	Rancho Del Oro Commercial Condos (1st)	Commercial	2	Y
D10-00004	Marriot Courtyard (1st)	Commercial	3	Y
D10-00004	Marriot Courtyard (2nd)	Commercial	3	N
D-25-05	San Luis Rey Crossing (3rd)	Residential	2	Y
D-21-04	Seagate Corporate Center	Commercial	1	N

Total Amendments: 15 **Total Amendment Reviews: 35** **Total Amendments Approved: 11**

Standard Development Project SWMPs

RC11-00005	2003 S. Tremont Street	Residential	1	N
D-13-08	Ivey Ranch Equestrian Center	Commercial	3	Y
D10-00002	Pepper Tree Lane	Residential	4	N

Total SDP-SWMP Project Submittals: 3 **Total SDP-SWMP Reviews: 8** **Total SDP-SWMPs Approved: 1**

O&M Plans

D-2-09	4181 Oceanside Blvd-Walgreens(Revision)	Commercial	1	Y
RC-13-01	Jones Residence	Residential	4	Y
D10-00004	Marriott @ Seagate	Commercial	2	N
D-2-08	Mission Ave Carwash & Mini Mart	Commercial	1	N
T-12-99(12)	Morro Hills Village K	Residential	3	Y
G10-00005	Mudge Residence	Residential	2	Y
G10-00004	San Luis Rey Transit Center	Commercial	4	Y
G10-00014	San Ramon HOA Repaving	Residential	2	N
D-2-93	New Venture Christian Fellowship (Rev)	Commercial	1	Y
T-13-02	Ocean Heights Estates (Rev)	Residential	1	Y
P-203-08	Pacific View Villas	Residential	2	Y
G10-00004	San Luis Rey Transit Center	Commercial	1	N
ADP-4-08	Vine Street Commercial	Commercial	3	N

Total O&M Plans Submitted: 13 **Total O&M Plan Reviews: 33** **Total O&M Plans Approved: 8**

SWFMAs

P-8-08	3186 Vista Way Parcel 2	Commercial	3	Y
D-2-09	4181 Oceanside Boulevard	Commercial	2	N
T-3-97REV09	Del Oro Marketplace	Commercial	3	N
RC-13-01	Jones Residence	Residential	3	N
P-16-06	Lil Jackson	Commercial	3	N
D-2-07	Mission SLR Cemetery Expansion	Commercial	2	Y
P-203-08	Pacific View Villas	Residential	1	N
ADP-4-08	Vine Street Commercial	Commercial	2	N

Total SWFMAs Submitted: 8 **Total SWFMA Reviews: 19** **Total SWFMAs Approved: 2**

SUSMP Exemptions

RCUP10-00003	7-Eleven Tenant Improvement	Commercial	1	Y
RC10-00007	1011 S. Pacific Street Deck Addition	Residential	2	Y
RC11-00003	1301 S. Pacific Balcony Extension	Residential	2	Y
ACP10-00002	1442 Papin Street	Residential	2	Y
RC10-00009	1823 S. Pacific Street	Residential	3	Y
C-20-08	Cell Site @ 2182 El Camino Real	Commercial	1	N
CUP10-00019	2237 El Camino Real Tenant Improvement	Commercial	1	Y
G10-00016	3343 Avenida De Loyola	Residential	2	N
V11-00003	6143 Las Tunas	Residential	1	Y
CUP10-00020	ATT @ 6543 Indian Trail	Commercial	1	Y
ACUP11-00004	ATT Mobility @ 2 Barnard Drive	Commercial	1	Y
ACUP11-00002	625 Benet Hill	Commercial	1	Y
ADP10-00001	Levi Casias SFD @ Indian View Dr	Residential	1	N

CIP 902112600212	College & Vista Way – Left Turn Pocket	Municipal	1	Y
ACUP-7-09	Clear Wire @ 1909 S. Coast Highway	Commercial	1	Y
ACUP10-00009	Clear Wire @ 3156 Vista Way	Commercial	1	Y
ACUP10-00003	Clear Wire @ 470 N. River Road	Commercial	2	Y
CUP11-00005	Cricket Wireless @ 1306 Melrose Drive	Commercial	1	Y
CUP10-00018	4253 Oceanside Boulevard	Commercial	2	Y
D10-00007	Fairways @ Arrowood	Residential	1	N
D10-00006	Greens @ Arrowood	Residential	1	N
RC11-00001	Hennenhoefer Remodel	Residential	1	Y
ADP11-00002	Home Depot Temp Nursery	Commercial	3	Y
ACP10-00003	Hunter Steakhouse	Commercial	1	Y
CSP10-00001	Mission Douglass Plaza	Commercial	1	Y
D11-00003	Rancho Del Oro PRD Master Plan Amendment	Municipal	1	Y
D11-00005	Service Station interior Remodel	Commercial	2	Y
RRCP10-00004	Sheafe Coastal Permit	Residential	2	Y
CUP11-00009	Verizon @ Ocean Hills	Commercial	1	Y
Total Project Submittals: 29	**Total Project Reviews: 41**	**Total Identified Exemptions: 24**		

2.4.4.9 Outreach and Staff Training

City officials involved in planning and review of development projects received a comprehensive training on storm water requirements during this reporting period. See Table 2-3 for the departments and city officials that were provided training. Training topics during this reporting period focused on general water quality concepts, specific SUMSP requirements, LID components that can be recommended for specific projects, implementation procedures and minimal information about future HMP components.

Table 2-3. Staff Training during the 2010-2011 Reporting Period

Department/Division	Training Date	Number in Attendance
Building Inspectors	June 30, 2010	3
Engineering Inspectors	January 14, 2010	6
Planning Division	April 27, 2010	7

2.5 Development Planning Component Effectiveness Assessment

See Section 11.0 for an assessment of the Development Planning component of the City's JURMP.

2.6 Program Review and Modification

The Development Planning components of this Report, the City JURMP, and the SUSMP will be revised as necessary to conform to the future requirements of the Municipal Permit. Major revisions to the Development Planning component will be cited in Section 14 of the City JURMP.

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3.0 CONSTRUCTION COMPONENT

3.1 Introduction

Land disturbance activities associated with grading and construction when left unmitigated, are known to cause negative impacts to the receiving waters. The JURMP provides guidance designed to address potential impacts associated with construction and grading activities. The Construction Component of the Annual Report briefly describes the measures implemented by the Engineering Division – Engineering Inspection that are intended to meet the requirements of the Municipal Permit while reducing impacts to the receiving water to the Maximum Extent Practicable (MEP). A summary of applicable sections of the Municipal Permit and the corresponding Annual Report sections are presented in Table 3-1.

Table 3-1. Order 2007-0001 Compliance Summary

J.3.a.(3)(d).iv Updated construction site inventory	See Section 3.2.1 of this Annual Report
J.3.a.(3)(d).i Ordinance update and approval process modifications	See Section 3.3 of this Annual Report
J.3.a.(3)(d).vi BMP Implementation	See Sections 3.4 and 3.5 of this Annual Report
J.3.a.(3)(d).ix Confirmation that sites went through urban runoff approval process	See Section 2.4.3 of this Annual Report
J.3.a.(3)(d).x and xi Inspection of construction sites	See Section 3.5.2 of this Annual Report
J.3.a.(3)(d).xiii and xiv Enforcement of construction sites	See Section 3.5.3 of this Annual Report
J.3.a.(3)(d).xii Inspection frequency and totals during dry and wet seasons	See Section 3.5.2.3 of this Annual Report
J.3.a.(3)(d).vii Requirements for application of erosion and sediment control BMPs	See Section 3.5 of this Annual Report
J.3.a.(3)(d).viii Construction sites requiring Advanced Treatment	See Section 3.5 of this Annual Report

Portions of the JURMP Construction Component are based upon the following municipal documents:

- Chapter 40 of the City Code or Ordinances
- City of Oceanside Grading Regulations Manual
- City of Oceanside *Construction Urban Runoff Requirements Manual* (Construction Manual).

The documents are available on the City website.

The Construction Manual was developed by the City to provide construction projects with guidance in order to comply with the City Code and its ordinances. The Construction Manual is a living document and will change with time to ensure an effectively implemented program. Updated versions of the manual will be made available whenever modifications have been proposed and approved by the City. During this reporting period no changes were made to the Construction Manual. The City's full Construction Manual can be found in Appendix C of the 2008 JURMP Update. It is anticipated that this manual will change during this permit cycle once a new Construction Permit is adopted by the State Water Resources Control Board.

3.1.1 Notable Activities

During this reporting period the Development Services Department, which includes Building, Engineering, and Code Enforcement Divisions, continued to implement TRAKiT® permitting software. In addition, the City continued to provide public access to select through the online version of TRAKiT™, called eTRAKiT™. Public users are able to access records and view the status of projects, permits and cases via the Internet. For more information, visit www.ci.oceanside.ca.gov and click on the "eTRAKiT-Online Permitting" Quick Link. The Clean Water Program will be reviewing the effectiveness of the new tracking tools and will continue to implement improvements. See Section 3.2.1 for additional information regarding TRAKiT® software.

3.2 Source Characterization

3.2.1 Site Inventory

The City has compiled a watershed-based inventory of all active construction sites within its jurisdiction that may have a potential impact on receiving waters. Projects that appear in the inventory are subject to grading permit and erosion control plan requirements. Engineering Division Inspection staff and Building Division Inspection staff are tasked with performing regularly scheduled site inspections to ensure development is executed as planned and erosion controls are implemented consistent with each stage of development. Small projects that are not associated with ground disturbance and do not require a grading permit, such as cell-tower retrofit or tenant improvement, are not included in the inventory, however still receive inspection.

The inventory process begins when information is collected from construction projects at the time of grading or building permit application. When the permit is approved, this information is then entered into a database developed by the City. If a permit was previously issued for a project, then the database is updated to reflect the most current information. In an effort to improve productivity, the Development Services Department coordinated Code Enforcement, Fire Prevention, Information Technologies, and Water Utilities Department to institute an efficient permitting system and streamline processing. Permit processing and tracking has been improved since the October 2009 implementation of TRAKiT® permitting software by CRW Systems, Inc. The data management capabilities of TRAKiT assist specifically trained and dedicated Development Services Technicians (DSTs) as the "front-line" staff with regard to daily organization, input, and revision of permit data for every active project. The software contains

enhanced reporting tools to provide management staff with pertinent statistics and data to evaluate workflows and resource allocation.

The inventory includes details on each construction site, including project name, location, and threat to water quality (TTWQ) as determined by the process described in Section 5.2.1.1 of the 2008 JURMP. Construction sites that were active during this reporting period may be found in Attachment 3-A.

3.2.2 Construction Site Prioritization

All construction projects are required to hold an onsite pre-construction meeting. The meeting is scheduled after obtaining grading permit and prior to commencement of any grading activities. The purpose of the "pre-con" meeting is to acquire and disseminate project specific information, identify key participants, and determine the project Threat-To-Water-Quality (TTWQ) by completing an Urban Runoff Threat Assessment. Required attendees include, but are not limited to, the owner, general contractor, project superintendant, grading contractor, geotechnical consultant, other pertinent subcontractors (environmental, archeological, and etc), and the City inspector assigned to the project.

The completed Urban Runoff Threat Assessment enables the determination of the project TTWQ. Projects are categorized as a low, medium, or high TTWQ, which determines the minimum construction inspection frequency. The project attributes that are used to assess a construction project include:

- Project Size
- Item 2 – Planned Grading/Soil Disturbance Period
- Item 3 – Proximity to Water Quality Environmentally Sensitive Area (WQESA)
- Item 4 – Presence of Significant Erodible Slopes
- Item 5 – Potential to Produce Non-Storm Water Pollutants or Discharges
- Item 6 – Amount of Proposed Impervious Area

All project proponents are directed to reference a prioritization matrix (Table 3-2) to determine the TTWQ priority of the project. To use the matrix, first locate the project size and then identify each item that applies to the project, within the row. Each item in the row corresponds to a level of prioritization, i.e. high, medium, or low. By determining the average prioritization within the applicable row based upon project size, a project will be assigned a high, medium, or low TTWQ and construction inspection frequency. The use of this matrix was developed consistent with the requirements of the Municipal Permit.

Table 3-2. Construction Project TTWQ Prioritization Matrix.

Project Size	Item 2	Item 3	Item 4	Item 5	Item 6	Default Priority
Greater than 50 acres	High	High	High	High	High	Medium
5–50 acres	—	High	High	High	High	Medium
1–5 acres	—	High	Medium	Medium	Medium	Medium
Less than 1 acre	—	Medium	Medium	Medium	Medium	Low

3.3 Updates to Ordinances and Approval Processes

During this reporting period, the City continued to actively participate in the Copermittee Workgroups, Sub-workgroups, and HMP-Technical Advisory Committee. The combined Copermittee effort resulted in the release of the Countywide Model SUSMP in February 2010, adoption of the Hydromodification Management Plan by the RWQCB in June 2010, and completion of the Regional Construction BMP Guidelines in June 2010. The City also released an updated SUSMP in March 2010; consistent with the Countywide Model SUSMP and the Municipal Permit. Subsequent to the updated SUSMP, the City released a draft Storm Water Mitigation Plan (SWMP) template. The purpose of the template is to provide the design professional with a standardized presentation format while facilitating plan review. The SWMP template will become finalized upon complete implementation of the HMP.

The updated SUSMP expands storm water requirements for new development and redevelopment projects. Storm water treatment requirements have been made more widely applicable and more stringent. New requirements include minimum standards for the implementation of Low Impact Development (LID) practices and the integration of flow control criteria designed to mitigate runoff peaks and durations from development sites. The updated SUSMP incorporates a unified approach to the application of LID practices which combines site planning and design measures coupled with engineered, small-scale Integrated Management Practices (IMPs).

In addition to the updated SUSMP, the City continued to require all development and redevelopment projects that cause land disturbance, including projects subject to the Statewide Construction General Permit (CGP), to complete and implement a City Erosion Control Plan. Erosion control plans are reviewed by Engineering Division staff and approved by the City Engineer. The Erosion Control Plan may appear to be a redundant document, as it typically overlaps the GCP SWPPP. However, the erosion control plan differs from the SWPPP because it requires a bond prior to approval. The erosion control bond creates a maintenance funding mechanism that assures funds will be available to repair or construct BMPs in the event of default by the Responsible Party. Plans are required to be updated on annual basis, prior to the rainy season, to assure that plans are consistent with site conditions and to update the erosion control bond.

3.4 Best Management Practice Requirements

The City has a set of minimum Best Management Practices (BMPs) that must be implemented at all construction sites regardless of TTWQ priority including implementing and maintaining general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the MEP. Table 5-2 of the 2008 JURMP (pp. 5-4 and 5-5) outlines the minimum construction BMPs required by the City. The table also provides references to the corresponding BMP fact sheets obtained from the Caltrans Storm Water Quality BMP Handbook and California Stormwater Quality Association (CASQA) Construction BMP Handbook.

A Construction BMP brochure titled “A Pollution Prevention Guide for the Construction Industry” is provided to the developer during pre-development meetings. This brochure provides a sample drawing that illustrates the minimum BMPs that must be used at all construction sites to

protect storm drains and minimize pollution. This brochure was provided as Attachment 3-B in the 2008-09 JURMP Annual Report. This brochure is also available at both the Engineering and Building Department counters of the City. Approximately 200 brochures were distributed to the public by building division staff during this reporting period.

3.5 Program Implementation

All construction sites are required to select, install, and maintain BMPs that meet or exceed the minimum BMP requirements described in the City Construction Manual and in Section 5.4.1 of the 2008 JURMP. There is no minimum threshold of disturbed area that relieves a project of the responsibility to implement erosion and sediment control BMPs. Moreover, all sites requiring a grading permit are obligated to implement an Erosion Control Plan as part of the Grading Plan review and permit process. Construction activities that result in a land disturbance equal to or greater than one acre are subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). Projects that are subject to the CGP are required to file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB), obtain a Waste Discharge Identification Number (WDID#), and develop and implement a site specific Storm Water Pollution Plan (SWPPP) prior to the commencement of any grading activities. SWPPPs are required to include a list of BMPs that will be implemented during each phase of construction to reduce pollution discharges to the MEP. In addition, selected projects governed by the CGP may be required to employ advanced treatment as part of their SWPPP. Each project is required to perform a site assessment that includes the determination of a Sediment Risk Factor and a Receiving Water Risk Factor to ascertain a Combined Risk Level. Projects with Risk Levels associated with Numeric Effluent Limits (NELs) may find it necessary to implement an Advanced Treatment System (ATS) to achieve effluent standards. Projects faced with physical constraints that "inhibit the ability to construct a correctly sized sediment basin" may also elect to implement an ATS to comply with the MEP standard.

3.5.1 Education and Staff Training

Site owner/developer education and training

The City provides all appropriate parties involved with construction activities with training and informational materials regarding storm water quality, as applicable. These parties include but are not limited to City employees and project proponents, which can include contractors, subcontractors, developers, property owners, and superintendents. Education and training of the development community in Oceanside is typically done on a project-by-project basis during a mandatory pre-construction meeting with the City and during construction site inspections.

Prior to the issuance of permits, construction site owners and developers meet during a pre-construction meeting with City staff and developer staff and/or contractors, subcontractors and superintendents. During these meetings City staff from various departments review what is expected of the project proponent in order to develop the project. At least one Clean Water Program staff person attends these meetings. Topics covered during these meetings specific to storm water pollution prevention include:

- Grading - Reference to the City of Oceanside Grading Regulations manual and the BMP Construction manual (both available on the City's website).

- Site Plan review for storm water inlets and associated BMPs
- Review of site-specific BMPs more applicable to the site and associated with the potential pollutants that could be generated from the proposed business operations
- Inspection Requirements and Frequency – Unannounced and upon call-outs from the public
- Expectations of BMPs during dry and wet seasons
- Construction BMP Brochure is provided

Prior to wet season, all currently permitted construction sites were contacted to remind site owners and developers to assess, repair and update their sites BMPs to reduce erosion potential and prevent storm water pollution. Site owners and developers are also advised to update their erosion control plans and SWPPPs that are applicable to the site.

Municipal Staff Training

City staff directly involved with development and construction sites are provided training on a departmental basis. For further details on topics covered during the City's construction educational program, please refer to Sections 10.2.2 and 10.3.1 of the City's 2008 JURMP. During this reporting period three groups were provided training in regards to erosion control and BMP installation and maintenance for construction sites. See Table 3-3 below for those who received training.

Table 3-3. Municipal Staff Training.

Training Date	Department/Division	Number in Attendance
11/10/10	Engineering Inspectors	3
11/10/10	Engineering Admin	6
11/10/10	Building Inspectors	3

In addition to the in-house trainings listed above, city staff involved in land development attended other trainings provided by outside agencies. See Table 3-4 below for a list of these trainings and staff who attended.

Table 3-4. Municipal staff attendance at land development-related trainings.

Training Date	Topic	City Staff in Attendance	Presenter(s)
9/8/2010	MS4 Permit/Basin Plan/303(d)/SUSMP/SWMP	Marty Eslambolchi Gary Smith Fred Tafaghodi	Billy Walker – City Storm Water Development Review Staff
9/22/2010	HMP/O&M Plan	Marty Eslambolchi Gary Smith Fred Tafaghodi	Billy Walker – City Storm Water Development Review Staff
11/10/2010	HMP Sizing Tools	Billy Walker	American Public Works Assoc. (APWA)
11/18/2010	GIS Viewer	Engineering Staff	APWA
12/14/2010	BMP Sizing Calculator	Billy Walker	APWA
2/15/2011	Stormwater Compliance	W. Perdomo	StormWater USA
3/8/2010	Revised BMP Sizing Calculator	Billy Walker	APWA
3/15/2011	Track out: Construction most common and costly BMP violation.	Mo Lahsaie; Glenn Ericson	Webinar
3/23/2011	Environmental Enforcement	W. Perdomo	Cal/EPA
3/29/2010	SWPPP QSD	Billy Walker	American Society of Civil Engineers (ASCE)
3/30/2010	SWPPP QSD	Billy Walker	ASCE
3/31/2010	SWPPP QSD	Billy Walker	ASCE
4/6/2010	LID	Billy Walker	ASCE
4/6/2011	BMP inspection and maintenance workshop-Maintaining LID in San Diego	Glenn Ericson Steve Kemp, Keith Pirillo, Robert Gremmels	Various Speakers

3.5.2 Inspection of Construction Sites

Permit Order 2007-0001 requires that the City develop and implement an inspection program to ensure that each construction site complies with City ordinances and permits, and the Section F.2.g. of the Municipal Permit. This section describes the City inspection of construction sites during the reporting period 2010-2011.

Each project was assigned an Engineering Inspector who was tasked with conducting site inspections throughout the life of the project. All inspectors have been educated in the requirements of the Permit Order 2007-0001 and City erosion control requirements through City personnel training and/or construction-specific certificate training seminars.

3.5.2.1 Initial Site Inspections

Upon commencement of work at a construction site, a City inspector will visit the site and perform the following:

- Where applicable, confirm coverage under the General Construction Permit
- Review City required Erosion Control Plans to confirm site implementation and consistency with the project SWPPP
- Check for field implementation of the BMP as indicated on supporting plans
- Review BMP maintenance procedures/schedule

All construction sites in the City construction site inventory receive initial site inspections as part of the pre-construction meeting, regardless of TTWQ priority. If any required documents or BMPs are found to be missing or deficient, the City may issue a citation, notice of correction, or stop work notice until the deficiencies are corrected.

3.5.2.2 Routine and Follow-Up Inspections

The initial site inspection is followed by additional, regularly scheduled inspections. The minimum frequency of the routine inspections is dependent upon the site TTWQ. The criteria used to determine the site TTWQ was developed to correspond to the routine inspection frequencies required by the Municipal Permit, as discussed in Section 5.2.1.1. Table 3-5 presents the different TTWQ categories and their corresponding minimum inspection frequencies for the wet (October 1 through April 30) and dry (May 1 through September 30) seasons. Note these are minimum storm water inspection frequencies. The Engineering inspector is present onsite many times during a normal work week and when present, performs visual inspections of all the construction components of the project.

Table 3-5. Construction Site Inspection Frequency

Construction Site TTWQ	Wet Season Inspection Frequency	Dry Season Inspection Frequency
High	Bi-weekly (Every two weeks)	As needed
Medium	Monthly	
Low	As Needed	

3.5.2.3 Construction Site Inspection Frequencies

Attachment 3-A provides the number of inspections conducted during both rainy and dry seasons for active construction sites during the reporting period. This table provides the number of inspections performed by the Engineering and Building department staff.

There were 47 active construction sites included in the inventory summary. The construction sites were assessed to be a high, medium, and low TTWQ. Table 3-6 below provides the ratings of the priority construction sites and the minimum number of inspections required by the Municipal Permit for both rainy and dry seasons.

Table 3-6. Prioritized Construction Site Inventory Summary and Required Inspection Frequency.

Prioritized Construction Sites		Minimum Required Inspection Frequency		
Threat Priority		**Wet Season**	**Minimum number of required inspections**	**Dry Season - As Needed**
High	18	Bi-weekly over 30 weeks	270	As Needed
Medium	17	Monthly over 7 months	119	As Needed
Low	12		84	As Needed
Total	**47**		**473**	As Needed

The City conducted 876 wet season and 177 dry season storm water related inspections of prioritized construction sites. During the reporting period the City conducted inspections of construction sites in accordance with the requirements of the Permit. See table 3-7 for a summary of the construction site inspections completed during wet and dry seasons.

Table 3-7. Inspection Frequency Verification Table.

Wet Season Inspections		Dry Season Inspections		Total Number of Prioritized Construction Site Inspections
Engineering Dept.	Building Dept.	Engineering Dept.	Building Dept.	
855	21	175	2	
876		177		1,050

3.5.3 Enforcement Measures for Construction Sites

The City will be responsible for enforcement of applicable local ordinances and permits at all construction sites in its jurisdiction. When violations are observed and documented during a site inspection, the City will implement appropriate enforcement measures based on the severity of the violation. Enforcement can range from written warnings to more severe enforcement such as stop work notices. Stronger enforcement measures will be used as necessary if proper corrective actions are not implemented during the allotted time frame or if the severity of the violation warrants stricter enforcement.

The typical progressive enforcement steps that the City will implement include the following:

- Written warnings
- Enforcement of contracts (Municipal projects)
- Stop work notices
- Administrative citations
- Denial or revocation of permits
- Civil and/or criminal court actions

Enforcement actions by Code Enforcement Officers for construction sites begin with a referral from another department, a site visit, or by a complaint lodged via phone. Depending on the severity of the violation, follow up activities may include phone calls, site visits, written

correction notices with specified compliance timeframes, or administrative warnings. If these actions do not produce the required improvements, administrative citations (starting at $100 with a $1,000 maximum fine) and/or stop-work notices are given.

3.5.4 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of non-compliant sites in the City that are determined to pose a threat to human or environmental health. Verbal notification is required within 24 hours of the discovery of non-compliance and a written report should be submitted to the RWQCB within 5 days of the incident. The criteria established for determining when a site is not compliant and poses a threat to human or environmental health is described in Section 5.5.5 of the 2008 JURMP. No sites were issued stop work notices during this reporting period.

Two sites issued stop work notices during FY 2008-09 have not had those stop work notices lifted. These sites continue to be abandoned. The stop work notices will be lifted once they are in compliance with State and City general construction stormwater permit requirements. Table 3-7 provides a list of these sites.

Table 3-7. Construction Sites issued Stop Work Notices in FY 2008-09

Project Name	WDID #	Watershed	Address/Location
Darwin Glen	937C325609	San Luis Rey	Darwin and Sagewood Drive
Darwin Knolls	937C325610	San Luis Rey	Darwin and Ocean Ridge Ct.

Two sites required code enforcement action during this reporting period. See Table 3-8 for code enforcement actions related to these construction sites during this reporting period.

Table 3-8. Construction site Code Enforcement Actions during FY 2010-11

PROJECT NAME	WDID	WATERSHED	LOCATION	CODE ENFORCEMENT ACTION			
				Corrective Action Needed	Administrative Citation Date(s)	Administrative Abatement	Compliance Status
Fresh and Easy Market	937C35521	Loma Alta	1640 Oceanside Blvd	SWPPP Requirements and BMP Installation	10/6/10, 10/7/10, 10/8/10, 12/7/10, 12/28/10	0	In Compliance
Libby Elementary Renovation		San Luis Rey	423 W. Redondo Drive	Erosion Control	Notice 3/1/11	0	In Compliance

3.6 Construction Activities Effectiveness Assessment (Optional)

See Section 11.0 for an assessment of the Construction Component of the City's JURMP.

3.7 Program Review and Modification

The Clean Water Program will continue to review and modify the construction component as needed. The Development Services Department, which includes Planning, Building, Engineering, and Code Enforcement, rolled out new tracking software, CRW Systems, Inc. TRAKiT, which will assist in tracking and reporting of stormwater data. See section 3.2.1 for more information about this tracking software.

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4.0 MUNICIPAL COMPONENT

4.1 Introduction

This section documents the activities conducted by the City of Oceanside at its municipally owned, leased and/or managed facilities during the 2010-2011 reporting period to meet the requirements of Section D.3 of Municipal Permit Order 2007-0001 (Table 4-1). The City of Oceanside owns and/or maintains a variety of municipal facilities including operation centers/facilities, public parks, administration buildings, fire stations, a fire training facility, industrial facilities, potable reservoirs, sewage pump stations, wastewater treatment facilities, public roads, streets and parking facilities and other miscellaneous facilities. Additionally, the City conducts activities that have a high threat to water quality such as power washing, street and sidewalk repair, painting, graffiti removal, parking meter maintenance, MS4 maintenance, and regular upkeep of the sanitary sewer system to prevent overflows and leaking.

Table 4-1. Order 2007-0001 Compliance Summary

D.3.a Municipal (Existing Development)	Section 4 of this Annual Report
J.3.a.(3)(c).i Updates to Municipal Inventory	See Section 4.1.1 of this Annual Report
J.3.a.(3)(c).ii BMP Implementation	See Section 4.2.3, 4.3.3, 4.4.3,4.5.3, 4.6.3, and 4.8.3 of this Annual Report
J.3.a.(3)(c).iii Inspection and maintenance of municipal treatment controls	See Sections 4.4.3 of this annual report
J.3.a.(3)(c).iv Number of catch basins and inlets, inspections, and cleaning	See Section 4.4.3 of this annual report
J.3.a.(3)(c).v Distance of MS4 inspected and cleaned	See Section 4.4.2 of this annual report
J.3.a.(3)(c).vi Distance of open channels inspected and cleaned	See Section 4.4.2 of this annual report
J.3.a.(3)(c).vi Amount of waste removed from MS4 and open channels	See Section 4.4.3 of this annual report
J.3.a.(3)(c).viii MS4 inspected less than annually	See Section 4.4.1 of this annual report
J.3.a.(3)(c).ix Implementation of BMPs for pesticides, herbicides, and fertilizers	See Section 4.3.3 of this Annual Report
J.3.a.(3)(c).x, xi, xii, xiii Curb miles	See Section 4.2.2 and 4.2.4, of this Annual Report
J.3.a.(3)(c).xiv Municipal parking lots	See Section 4.2.2, 4.2.4., and 4.2.5.1 of this Annual Report
J.3.a.(3)(c).xv Tonnage of debris removed from streets and parking lots	See Section 4.2.5.2 of this Annual Report
J.3.a.(3)(c).xvi	See Section 4.5 of this Annual Report

Prevention of infiltration from sanitary sewer	
J.3.a.(3)(c).xvii Sites inspected and frequency	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xviii Inspection results	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xix Inspections steps determined full compliance	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xx Violations and enforcement actions	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xxi Notable activities	See Section 4.1 and 4.5 of this Annual Report

To comply with the Municipal Permit, the City of Oceanside has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas and municipal activities. Some of the significant activities include street sweeping, inspections of municipal facilities, and educational efforts geared toward municipal personnel.

The City continues to use its Municipal Urban Runoff Procedures Manual (Municipal Manual) as a useful reference document for training staff and developing and implementing educational programs. The Municipal Manual contains BMP requirements and related guidance for City facilities and employees and was circulated to relevant City staff directly involved with the Municipal NPDES Permit. This manual was first prepared as part of the JURMP in 2002 and updated and provided with the 2008 JURMP. See Appendix C.3 of the 2008 JURMP for this manual. No changes were made to this manual during this reporting period.

4.1.1 Notable Activities

The Clean Water Program continued to utilize the Lucity (previously GBA Master Series Software) during this reporting period to track NPDES facility inspections, incoming hotline storm water complaint calls, and use with the jurisdictional monitoring program. This software program was updated to accept data for NPDES tracking purposes during the 2010-11 reporting period.

4.1.2 Source Identification

As required in Section D.3.a(1) of Permit Order 2007-0001, the City of Oceanside has developed a prioritized, watershed-based inventory of municipal properties and activities. The City of Oceanside maintains a number of municipal facilities, including parks, administrative buildings, fire stations, and public works yards. The inventory of municipal facilities, including areas and activities, is updated annually. The inventory used for fiscal year 2010-11 is Attachment 4-A to this report. Table 4-2 provides a summary of the facility categories within the City's inventory.

Table 4-2. Summary of Municipal Facilities by Category.

Facility Category	Number of Facilities
Park and Recreation Facilities	48
Public Works Operations Facilities	1
Municipal Landfills	2
Marinas	3
Municipal Airport	1
Potable Water Treatment Facilities	13
Wastewater Treatment Facilities and Lift Stations	37
Police and Fire Facilities	12
Other Fixed and Leased Facilities	25
Roads, Streets, Highways and Parking Facilities	34
Total Facilities	**176**

4.2 Roads, Streets, Highways, and Parking Facilities

4.2.1 Background

Roads, streets, highways, and parking facilities are an integral part of any functional City. These facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control the level of pollutants, such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities. Other City activities include building new roads, resurfacing existing roads, and similar construction-related activities. All construction-related activities conducted by the City will continue to be conducted under the requirements of the construction component, which is described in detail in Section 3 of this document.

4.2.2 Source Characterization

The City of Oceanside maintains approximately 571 miles of public roads and streets throughout the City and sweeps 28,954 curb miles. A parking facility is defined as a stand-alone parking facility, which is a parking facility that is not associated and/or adjacent to other inventoried municipal facilities. Parking facilities that are associated and/or adjacent to municipal facilities will continue to be included in regular maintenance activities of the associated municipal facility. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included as Attachment 4-A of this annual report. There are 34 parking facilities within the City.

4.2.3 Best Management Practice Requirements

Similar to municipal fixed facilities, the City will continue to utilize the City-developed Municipal BMP Manual to choose applicable BMPs to implement for public roads, streets, parking facilities and operational facilities within the City.

Street sweeping and cleaning continues to be the main BMP that is implemented for roads, streets, and parking facilities. The frequency of cleaning takes into account the following: variations in climate conditions, surrounding land use, design of existing structures, traffic volume, frequency and quantity of accidental spills and leaks, and areas with historical trash

and/or debris problems. Treatment control BMPs will be used for road sections subject to SUSMP.

The City will continue to implement an aggressive street sweeping program to reduce the amount of pollutants discharged from roads, streets, and parking facilities in the City with a particular focus on facilities that drain to environmentally sensitive areas (ESAs). If in the future negative impacts to ESAs associated with runoff from roads, streets, highways, or parking facilities are noted, the City will take the measures necessary to mitigate the negative impacts.

4.2.4 Program Implementation

As an effort to reduce the pollutant load entering local receiving water bodies, the City continued to implement a sweeping schedule for roads, streets, highways, and parking facilities to meet the requirements of the Municipal Permit. There have been no significant changes to the existing programs during the reporting period.

Roads, streets, and highways that have been observed as generating relatively high volumes of trash, sediment, and debris are included as high priority and will continue to be swept at least twice per month; medium priority streets are streets in the City that generate moderate volumes of trash, sediment, and debris and will continue to be swept at least monthly. Low priority streets have been observed as generating relatively low volumes of trash, sediment, and debris and will continue to be swept as needed, but not less than once per year. In the event of a National Holiday, sweeping is conducted in a timely manner, usually by the next working day. Due to the City's proximity to the Pacific Ocean and as a means to target watershed constituents of concern, the City typically sweeps all streets within the City above baseline jurisdictional activity standards. Additional program details can be found in Section 6.3 of the 2008 JURMP.

All public streets in the City of Oceanside are swept at least monthly. There is a total of 571 miles of public streets that are swept regularly per the frequency outlined below. There were 28,954 curb miles swept during this reporting period. Some streets are swept more frequently than others.

- Every Monday, Wednesday, and Friday, the downtown commercial areas and other high use areas are swept using regenerative air vacuum street sweepers. These areas include the medians on Mission Avenue, Canyon Drive, and the Civic Center Drive Bridge, Wisconsin Avenue to Pacific Street to Ditmar Street, the Strand, and all downtown parking lots.
- The majority of all other public streets, not included in the areas listed above, are swept every other week. In some low use residential areas, the streets may be swept monthly.
- As necessary, sweepers or other clean up crews will respond to public or municipal staff reports to collect debris and/or sweep.
- Inspection of streets and curbs for cleaning is continuous. City employees and residents are encouraged to call the Public Works Maintenance Hotline.

4.2.5 Inspection and Maintenance Results

4.2.5.1 Inspections

Inspections and maintenance activities were conducted throughout the reporting period as described in the previous section. Following is a review of the results form inspection and maintenance.

There are 34 parking lots in the Roads, Streets, Highway and Parking Facilities categories in addition to 571 miles of public roads. During this reporting period all 34 of these facilities were inspected by CWP staff. Some corrections were noted but were addressed by appropriate staff in a timely manner. Due to the fact that many of these parking facilities are swept at least once per week, debris and sediment are removed on a more frequent basis.

4.2.5.2 Maintenance

Street sweeping activities resulted in the collection of over 2,093 tons of waste from public streets and parking lots during the reporting period. These results are comparable with tonnage amounts from previous reporting years. See Table 4-3 for a summary of debris collected during this reporting period and in previous reporting periods.

Table 4-3. Summary of amount of street sweeping debris collected.

Reporting year	Tons
2003-2004	2,604
2004-2005	2,538
2005-2006	2,283
2006-2007	2,480
2007-2008	2,358
2008-2009	2,062
2009-2010	2,093
2010 -2011	2,342

4.2.6 Roads, Streets, Highways, and Parking Facilities Element Effectiveness Assessment

See Section 11.0 for an assessment of the Municipal component of the City's JURMP.

4.3 Parks and Recreational Facilities

4.3.1 Background

The City of Oceanside is committed to providing the highest quality of service to its residents by providing the opportunity for them to enjoy a variety of recreational activities at both outdoor parks and indoor recreational facilities. Operating and maintaining 48 community attractions from public pools, beaches, parks and community centers, the City of Oceanside works hard every day to maintain the high level of service. The inspection and maintenance of these facilities in regards to storm water is important because of the number of facilities throughout the city and the public exposure that these facilities receive.

4.3.2 Source Characterization

The City regularly inspects, cleans and maintains 48 Parks and Recreational Facilities. Because of high public use these facilities have the potential to generate a variety of pollutants including trash and debris, organic material and sediment. See Attachment 4-A of this annual report that includes an inventory for Parks and Recreational Facilities.

4.3.3 Program Implementation

The City has selected BMPs to implement at Parks and Recreational Facilities to reduce the contribution of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers. These BMPs are detailed in the Municipal Manual. All 48 facilities were inspected during this reporting period. Some corrections were noted but were addressed by appropriate staff in a timely manner.

Pesticides, herbicides and fertilizers are seldom used by City staff, as it contracts out the majority of work involving these substances. To facilitate compliance with this Section of the Municipal Permit, the City has reviewed its landscaping contract and has integrated BMP requirements into the conditions of the contract.

4.4 Municipal Separate Storm Sewer System

4.4.1 Background

As required by Section D.3.a.(3) of the Municipal Permit, the City has implemented a schedule of maintenance activities for the City's entire Municipal Separate Storm Sewer System (MS4), including any structural controls designed to reduce pollutant discharges to or from its MS4s and related drainage structures. The City has determined, through historical knowledge and records, the locations within the MS4 that require regular waste removal and those areas that are less likely to require any waste removal. The City has developed a comprehensive Flood Control Annual Maintenance Program which includes a list of the high priority areas, divided into zones, which are to be inspected annually using an inspection checklist. Approximately 110 sites are inspected and maintained annually. At minimum all sites are inspected and cleaned annually.

4.4.2 Source Characterization

The Public Works, Street Division, performs ongoing inspection and cleaning of storm drains and flood control facilities, as well as annual maintenance of all major facilities such as creeks, desilting basins, detention basins and rock and concrete lined channels. There are approximately 104 concrete and earthen channels that are inspected and maintained throughout the city. Over 49,000 linear feet of storm drains, catch basins, and concrete and earthen channels are maintained on at least an annual basis. In addition, the Street Division performs annual maintenance/cleaning in September, October, and November for all major MS4 facilities. The results of this work are recorded on an Annual Maintenance List that is available at the City Operations Center.

4.4.3 Best Management Practices

In order to inspect and clean storm drains as described above, during the May through September period, the City utilizes a contractor to inspect and clean the majority of the storm drain inlets. The contractor work spans two fiscal years but their reporting data is a compilation of all their work during their summer cleaning period.

During the 2009-10 reporting period, MS4 cleaning data was reported incorrectly because it utilized data from both the summer of 2010 and 2011. The correct data for each of the reporting periods is described below and provided in two tables.

FY 2010-11 MS4 Maintenance Data

During FY 2010-11 the Public Works Department contracted with West Coast Storm who inspected and cleaned a total of 3,297 structures (catch basins, manholes, inlets, outlets, etc.). A total of 54.52 tons of waste was removed. The waste generally consisted of trash, green waste, dirt, sand, roots, solids, rocks, and silt. During the inspections if a storm drain was not labeled with a marker, one was installed. During the FY 2010-11 reporting period 342 were labeled with a placard stating: "No Dumping – Drains to Creek" in both English and Spanish. See the photo below for a copy of the storm drain placard installed. See Table 4-4 for a summary of the amount of waste removed from catch basins, inlets, the MS4 and open channels by category during this reporting period.

Table 4-4. Waste removed from catch basins, inlets, the MS4 and open channels by category during FY 2010-11.

Structure	Number Inspected	Contractor or City Crew	Drain Markers Installed	Cleaned	Amount of Material Removed
Catch Basin/Inlet	3,297	Contractor	342	3,297	54.52 tons
Catch Basin/Inlet	136	City Staff		136	
Total Catch Basin/Inlet	3,433			3,433	
Open Channels	104	City Staff	N/A	49,455 ft.	840 tons
Drain Pipe	1,800 ft	City Staff	N/A	1,800 ft	

FY 2009-10 MS4 Maintenance Data

During FY 2009-10 the Public Works Department contracted with United Storm Water who inspected and cleaned a total of 3,241 structures (catch basins, manholes, inlets, outlets, etc.). A

total of 81.88 tons of waste was removed. The waste generally consisted of trash, green waste, dirt, sand, roots, solids, rocks, and silt. During the inspections if a storm drain was not labeled with a marker, one was installed. During the FY 2009-10 reporting period 742 structures were labeled with the placard mentioned above: See Table 4-5 for a summary of the amount of waste removed from catch basins, inlets, the MS4 and open channels by category during FY 2009-10.

Table 4-5. Waste removed from catch basins, inlets, the MS4 and open channels by category during FY 2009-10.

Structure	Number Inspected	Contractor or City Crew	Drain Markers Installed	Cleaned	Amount of Material Removed
Catch Basin/Inlet	3,241	Contractor	742	3,241	81.88 tons
Catch Basin/Inlet	136	City Staff		136	
Total Catch Basin/Inlet	3,377			3,377	
Open Channels	104	City Staff	N/A	49,455 ft.	672 tons
Drain Pipe	900 ft	City Staff	N/A	900 ft	

Trash Trap at the Oceanside Municipal Golf Course

Staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. In March 2009 City staff installed a trash trap downstream of this priority residential area and upstream of the municipal golf course in the open channel that parallels the driving range. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. During this reporting period approximately 325 pounds of trash and organic debris were removed from this device. Photos of the trash trap were provided in Section 6.3.1 of the FY 2008-09 JURMP Annual Report.

4.5 Sanitary Sewer

4.5.1 Background

The City of Oceanside Sewer Division maintains the sanitary sewer system within the jurisdictional boundaries which includes sewer lines, lift stations, sewage treatment plants. This sanitary sewer system uses pipes to remove human waste from homes and businesses and transport that waste to one of two waste water treatment plants in the City. The two treatment plants are operated by city crews.

4.5.2 Source Characterization

The City regularly inspects, cleans and maintains 450 miles of sanitary sewer pipe, 34 sewer lift stations and two sewage treatment plants. See Attachment 4-A that includes the 2010-11 wastewater Facilities inventory.

4.5.3 Best Management Practices

Since the City owns and operates the sewage system, these facilities are regularly inspected and maintained for proper operation and maintenance, and to ensure that BMPs are in place for the protection of receiving waters that may be impacted from the system. The City's preventive and corrective sewer maintenance programs consist of a variety of components provided for the operation, maintenance, repair and replacement of sewer mains, manholes, and pump stations.

In order to ensure that the sanitary sewer lines do not leak, the city has a long term plan to slip line the sewer pipes throughout the City. During this reporting period 302 feet of City sewer lines were slip lined. Since the 2005-06 reporting period the City has slip-lined a total of 21,068 feet of sewer. The City also inspected and cleaned 318.5 miles (1,681,908 feet) of sanitary sewer.

4.6 City Operations Center

4.6.1 Background

The City Operations Center (COC) is a municipally owned and operated facility that houses several departments or divisions for the City including Public Works, fleet maintenance, road maintenance, parks and recreation maintenance and others. Because of the diverse activities of these departments and divisions, the City developed a Storm Water Pollution Prevention Plan (SWPPP) for the COC in the fall of 2002.

The COC includes the following areas: employee parking lot, COC main building (offices, storage and fleet maintenance), traffic control lot, back lot, city vehicle parking lot, large vehicle equipment lot, fueling area, waste disposal area, wash facilities, general use yard and west corner lot. The SWPPP has the following objectives:

- Identify and evaluate sources of pollutants from the facility that may affect the quality of urban runoff discharge and to identify and
- Implement site-specific best management practices to reduce or prevent pollutants in urban runoff discharges.

The SWPPP outlines BMPs to be implemented at each of the respective areas. A comprehensive training program was also developed and has been implemented in concert with the COC SWPPP.

4.6.2 Source Characterization

Due to the nature of the various activities from the departments and divisions it was determined that there are various activities that generate pollutants and have the potential to reach storm water conveyance systems. Some of these activities include vehicle washing, disposal of street sweeping debris, temporary storage of wrecked vehicles, and storage of various materials, including paints, solvents, metal piping and infrastructure materials. In addition steep hillside landscaped areas can be a potential pollutant source if BMPs are not managed properly.

4.6.3 Best Management Practices

Since the implementation of the SWPPP at the COC some permanent BMPs have been installed and continue to be used for protection of receiving waters. Following is a brief description of the BMPs in place at the COC and any new BMPs installed during this reporting period.

4.6.3.1 Wash Facility

The main wash facility is used for washing large vehicles and equipment, and collection of street sweeper and vactor truck contents. The main wash facility is a completely contained area, surrounded on all sides by berms and curbs. The entire area drains to the eastern corner of the pad where it enters a grated inlet that leads to a clarifier and then the sewer. An overflow is available if the drain to the sewer is clogged or the volume of water exceeds its capacity, however, this is not anticipated to happen frequently because the drain is maintained daily.

4.6.3.2 Pollution Prevention and Recycling

COC BMPs in place

There was no new pollution prevention BMPs installed at this facility during this reporting period and all existing BMPs were maintained during this reporting period.

4.6.4 Program Implementation

4.6.4.1 Facility Inspection

A thorough walk through inspection of the COC Facility was conducted by the operation manager of the facility and Clean Water Program inspectors on October 5, 2010. There were no potential storm water violations identified during the inspection of this facility.

4.7 Other Facilities

4.7.1 Background

The City of Oceanside owns and operates two closed landfills (Maxson Street Landfill, WDID 9375005695 and Mission Avenue Landfill, WDID 9375005696). The City also operates and maintains eight fire fighting facilities including one at the COC in addition to one fire fighting training facility.

4.7.2 Source Characterization

The two closed landfills maintained by the City have the potential to generate pollutants that can negatively impact receiving waters. If potential storm water discharges are identified, appropriate BMPs are implemented to prevent pollutants from entering MS4.

Also fire fighting stations have the potential to generate pollutants such as trash and debris, organic materials and fluids and wash water from fire fighting vehicles. The two closed landfills and the fire fighting facilities are included in the City's municipal inventory, which is included as Attachment 4-A of this annual report.

4.7.3 Program Implementation

Closed Landfills

Both closed landfills are inspected quarterly per permit requirements and an annual report is prepared each for submittal to the Regional Water Quality Control Board. See Attachment 4-B for copies of the 2010-11 Annual Report for Storm Water Discharges Associated with Industrial Activities for these two landfills.

Fire Stations

All fire stations were inspected during this reporting period. During the station inspections no violations or potential violations were noted.

4.8 Special Events

The City of Oceanside hosts a variety of Special Events in the City. These events include major sporting events and community fairs and festivals. A Special Events Permit is required for any organized activity involving the use of, or having impact upon, public property, public facilities, parks, beaches, sidewalks street areas or the temporary use of private property in a manner that varies from its current land use. The permit process includes a BMP implementation plan. The City has a Special Events Committee comprised of various City Department representatives who review permit applications to insure events are held safely and do not adversely impact the community.

4.8.1 Source Characterization

The City issues Special Event permits for both internal city sponsored events and event organizations that coordinate events that may include vendors or various event related elements.

- Turkey Trot 5k Run
- Ironman Triathlon
- Freedom Day Parade

Typically, special events have a high density use of people per square foot raising the potential for pollutant types at special events, such as:

- Setup and teardown of equipment booths
- Booth operation generating trash
- Food and drink preparation and consumption – illicit discharges and organic material
- Hydraulic rides – oil and grease
- Temporary portable restroom – chemicals and bacteria
- Hydration stations – water cups and other trash material

4.8.2 Best Management Practices

All special events are required to implement designated BMPs and comply with all applicable regulations outlined in the Oceanside Municipal Code. During pre-event application meetings for large events, event organizers are provided with an event permit packet that includes storm water related information including a copy of the Storm Water Compliance Guidelines for Special Events brochure and the Special Events Inspection Form. Copies of the brochure and inspection form are attached. It is explicitly stated that the company coordinating the event is required to leave the site as clean as the pre-event condition and shall not allow any materials or liquid to enter the storm drain system.

4.8.3 Program Implementation

4.8.3.1 Event Inspections

A special event storm water inspection form was developed for use before and after large special events. Storm water compliance inspection reports will be completed by City staff or event contractors prior to the start of the event to ensure that appropriate BMPs are in place. A post-event inspection will ensure that the site is properly cleaned. City staff or event contractors will also complete post-inspection reports.

During this reporting period one event was inspected which was the Ironman Triathlon was held on March 29, 2010 with staging starting in the harbor and beaches area. No stormwater related violations were noted during event set-up, during the event or after event. The pre- and post-event inspections it was determined that the site was clean and did not pose any potential storm water violations. See Attachment 4-C for copy of the inspection form for this event.

4.8.3.2 Street Sweeping

Most special events occur in the downtown area which is swept 5 days a week, with sweeping vehicles generally onsite within 12 hours from the end of the event.

For special events that cause an added impact to the community street sweeping is conducted immediately after the end of the event. On an annual basis, the City holds one parade in the downtown area after which street sweeping is immediately conducted.

4.8.3.3 Harbor and Beaches Maintenance

Large events held in the Harbor and Beaches area can have the potential to generate large quantities of trash. In addition to the above information, the Harbor and Beaches Maintenance Division conducts the following activities after large events and holidays held in the Harbor and Beaches area:

- A litter abatement contractor provides staff to walk beach and hand pick up litter.
- City staff uses trucks and/or utility carts to follow and pick up items that are too large for the litter abatement contractor such as logs, furniture, etc.
- City staff further screens the beach using Cherrington beach sweeping machines.
- A pressure-washing contractor or City staff washes the hardscapes with all wash water being recovered and disposed of properly.

Cigarette Butt Service

The Harbor and Beaches Maintenance Division has contracted with a cigarette butt service company to install and service cigarette butt receptacles in the harbor, pier and beach areas. The receptacle selected is made by Butts Only Box and is designed to prevent rain and irrigation water from contacting the butts until collection. This prevents leaching of toxic compounds into sensitive habitats.

The company has several models to choose from, two of which have been installed in the City of Oceanside. The trail model is used along high foot traffic areas adjacent to the beach and harbor sidewalks. There are a total of 18 of these installed in the coastal areas of Oceanside: 11 in the

harbor, 2 on the pier, 4 on The Strand (the road that parallels a large section of beach) and one new receptacle installed during this reporting period at Buccaneer Beach.. See Figure 4-1 for an image of the Buccaneer Beach receptacle.

Figure 4-1. Butts Only Box cigarette trash receptacle installed at Buccaneer Beach during FY 2010-11.

Butts Only Boxes also has a sister company, Cigarette Butt Services, that services the boxes. The City of Oceanside subscribes to this service and the company provides a monthly statement that includes the number of butts removed and the weight of the debris.

During this reporting period a total of 138,705 cigarette butts were collected from the 17 trail models. The weight of this debris totaled 52.01 pounds.

The City plans to continue servicing boxes currently in place. The City will also seek additional funding to cover costs for purchasing, installation and servicing of additional receptacles within the jurisdiction.

4.9 Power Washing

4.9.1 Background

The City conducts a number of activities which are not designated and/or confined to a specific location. Because such activities are not confined to a fixed facility, where BMPs may be permanently implemented, BMPs must actively be implemented during all mobile municipal activities.

4.9.2 Source Characterization

Mobile activities that City employees may use during their day-to-day operations that have a potential to create polluted runoff include:

- Power Washing
- Infrastructure Maintenance
- Street and sidewalk repair

- Street striping
- Waste removal
- Traffic light maintenance
- Parking meter maintenance
- Landscape/Right-of-Way Maintenance

4.9.3 Best Management Practice Requirements

As previously mentioned, the City will continue to implement good housekeeping and general pollution prevention measures during municipal activities including the mobile activities listed above. City personnel will continue to conduct the proper collection protocol to collect all water generated by power washing activities. City personnel continue to use the City's Municipal BMP Manual to choose applicable BMPs to implement for municipal areas and activities. Pesticide, herbicide, and fertilizer management BMPs similar to those discussed in Section 6.2.3.1 of the City's 2008 JURMP will continue to be implemented during landscaping of City right of way such as medians.

4.9.4 Program Implementation

City field crews will continue to receive refresher training to implement BMPs during all mobile activities including how to properly contain, control, and capture any discharge generated by power washing (or any other discharge-generating activities). The City uses fiber rolls, geo logs, silt fencing, check dams, gravel bags, and filter inserts during mobile activities, where applicable. City personnel involved in mobile activities are trained to be aware of Illicit Connections/Illicit Discharges and report them to the appropriate City staff promptly. More information about the City's education program, including municipal training activities, is included in Section 10 of this document.

4.10 Municipal Component Effectiveness Assessment

See Section 11.0 for an assessment of the municipal component of the City's JURMP.

4.11 Program Modification and Review

The Clean Water Program will continue to implement its SWPPP at the City Operations Center and continue its ongoing inspection and maintenance program for the facilities listed in the Municipal Inventory. Any changes to the program will be reported in the next annual report.

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City of Oceanside continues to implement a comprehensive program that aims to reduce and prevent industrial and commercial pollution discharges to and from the MS4 to the maximum extent practicable (MEP) to protect local receiving water bodies and to comply with the Municipal Permit. This section documents the activities conducted by the City of Oceanside during the 2010-2011 reporting period to meet the reporting requirements of Section J.1.a(3)(f) of Order 2007-0001 Municipal Permit (Table 5-1).

Table 5-1. Order 2007-0001 Reporting Summary.

Permit Section	Annual Report Section Reference
J.3.a.(3)(d).i -Any updates to the industrial and commercial inventory.	See Section 5.2.2 of this Annual Report
J.3.a.(3)(d).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	See Section 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).iii - A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	See Section 5.2.1 and 5.3.3 of this Annual Report
J.3.a.(3)(d).iv - Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	See Section 5.2.2 of this Annual Report
J.3.a.(3)(d).v - Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	See Section 5.2.2, 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).vi - Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	See Section 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).vii - Identification of the number of third party inspections conducted.	See Section 5.2.4.1 of this Annual Report
J.3.a.(3)(d).viii - Identification of efforts conducted to verify third party inspection effectiveness.	See Section 5.2.4.3 of this Annual Report
J.3.a.(3)(d).ix - A description of efforts implemented to address mobile businesses.	See Section 5.3 of this Annual Report
J.3.a.(3)(d).x - The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 5.2.4.2 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).xi - A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	See Section 5.2.4.1 and 5.2.4.2 of this Annual Report
J.3.a.(3)(d).xii - A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	See Section 5.1.1 of this Annual Report

The City has compiled a list of industrial and commercial sources and developed BMP requirements, including pollution prevention measures, for each source and activity. Implementation of these requirements will be accomplished through education, inspection, and enforcement.

5.1.1 Notable Activities

There were no notable activities during this reporting period.

5.2 Stationary Industrial and Commercial Sites/Sources Element

5.2.1 Background

Section 7 of the City's 2008 JURMP, titled Industrial and Commercial Component, requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by industrial owners and/or operators pursuant to City Code to minimize or eliminate the impacts of industrial and commercial activities on receiving waters and other sensitive environmental resources. The City uses a variety of ways to educate and ensure that BMPs are implemented at industrial and commercial facilities including dissemination of the City's industrial and commercial BMP manuals, site inspections and enforcement.

5.2.2 Source Characterization

The City annually updates its watershed-based industrial/commercial inventory which contains the name, address, and description of all industrial sites within its jurisdiction, regardless of site ownership.

Attachment 5-A, the commercial inventory list and Attachment 5-B, the industrial inventory list is an update to the inventories submitted with the 2008 JURMP and the 2009-10 annual report. The attached inventory was updated to include changes from the FY 2010-11 inspections and will be used for the FY 2011-12 inspections. This table does not include mobile businesses that have City of Oceanside business licenses. See section 5.3 of this report for mobile business information.

The 2010-11 inventory was provide in the 2009-10 Annual Report and utilized for inspections during FY 2010-11. In the City there were a total of 1,928 Industrial and Commercial businesses that have a potential storm water pollution threat. See Tables 5-2 and 5-3 below for a summary of the number of industrial and commercial businesses inventoried in the City according to watershed location.

Table 5-2. Industrial Businesses in the City by Watershed at beginning of FY 2010-11.

Watershed	Number of Industrial Business		
	2007-08 Inventory	2008-09 Inventory	2010-11 Inventory
San Luis Rey	95	13	14
Loma Alta	141	49	22
Buena Vista	5	0	0
Agua Hedionda	0	0	0
Total	**241**	**62**	**36**

Table 5-3. Commercial Businesses in the City by Watershed at beginning of FY 2010-11.

Watershed	Number of Commercial Business		
	2007-08 Inventory	2008-09 Inventory	2010-11 Inventory
San Luis Rey & Harbor	331	859	885
Loma Alta	338	966	732
Buena Vista	151	463	267
Agua Hedionda	6	23	7
Not Verified	10	0	0
Total	**836**	**2311**	**1891**

Based on this updated inventory, the City contains approximately 37 industrial businesses. Each of these businesses was prioritized on their threat to water quality. Table 5-4 provides a summary of the prioritization for industrial businesses.

Table 5-4. Industrial Businesses in the City by Priority.

Priority	Number of Industrial Business
High	10
Medium	19
Low	8
Total	**37**

Based on the 2010-11 inventory, the City contains approximately 1891 commercial businesses. Each of these businesses was prioritized on their threat to water quality. Table 5-5 provides a summary of the prioritization for industrial businesses.

Table 5-5. Commercial Businesses in the City by Priority.

Priority	Number of Commercial Business
High	556
Medium	108
Low	1227
Total	**1891**

5.2.3 Best Management Practice Requirements

BMP Manuals

Two manuals originally developed in 2001, *Industrial Urban Runoff Requirements Manual* and *Commercial Urban Runoff Requirements Manual,* detail requirements of industrial and commercial businesses to comply with the City's Urban Runoff Management and Discharge Control Regulations. In order to ensure industrial and commercial owners and operators are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for industrial and commercial areas and activities located within the City, are specified in these two manuals.

The manuals were first produced in FY 2001-02 as a result of requirements under Municipal Permit Order No. 2001-01 and were revised in 2004 to include additional state requirements. These manuals were again reviewed and revised during the 2007-08 reporting period to ensure compliance with the new Municipal Permit Order No. R9-2007-0001. The main changes were the additional of categories and a list of specific BMPs for those industrial and commercial activities. Inspections, enforcement, and reporting and the definitions have not been changed. See this section of the 2007-08 report for a list of changes to both the industrial and commercial manuals.

The City conducted efforts to ensure industrial and commercial business owners and/or operators have received a copy of the Industrial Manual either through an annual inspection or a response to a complaint or concern reported through the Urban Runoff Hotline. In addition, copies of the Industrial Manual are available on the Clean Water Program website.

5.2.4 Program Implementation

Annual inspections of commercial and industrial businesses are conducted by Clean Water Program inspectors and Code Enforcement officers to ensure that applicable pollution prevention activities are implemented by industrial and commercial business owners and/or operators. In addition, inspections are conducted based on calls received on the Urban Runoff Hotline. All industrial and commercial businesses visited, through the annual inspection program or by complaint call acknowledged on the Hotline, receive follow-up visits until the industrial business is deemed in-compliance with City Code. All documentation pertaining to site visits are on file at the City. City staff conducted a total of 685 inspections during the 2010-2011 reporting year: 24 of industrial businesses, 661 of commercial businesses, including eating and drinking establishments, and 12 nursery or greenhouse businesses.

5.2.4.1 Inspections of Industrial Businesses

Inspections of industrial businesses are conducted by designated Clean Water Program Inspectors and Code Enforcement personnel. Inspections are tracked using two tracking software programs Lucity (previously GBA) and TRAKiT, a permitting software by CRW Systems, Inc. Inspectors utilized a Commercial and Industrial businesses inspection form that utilizes fields customized in Lucity to address all inspection components required under the permit. The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

- Completion of 24 site inspections of industrial businesses during the reporting period.
- Completion of 10 required annual inspections of high priority industrial businesses during the reporting period.
- Completion of 14 of the required annual inspections of medium and low priority industrial businesses during the reporting period.
- Completion of 23 follow-up visits either in response to the initial inspection or response to a complaint.
- Dissemination of the Industrial Manual to help industrial owners and/or operators become aware of the City Code requirements for BMP implementation, and information on applicable BMPs for specific industrial businesses and activities.
- Ensuring proper and continued training of the Code Enforcement officers and Clean Water Program compliance inspectors dedicated to the Clean Water Program.

5.2.4.2 Enforcement of Industrial Businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for enforcement of ordinances at an industrial site. This program was designed in accordance with part D.3.b.(3) of Municipal Permit Order 2007-0001. There was no enforcement action required for Industrial businesses during this reporting period.

5.2.4.3 Inspections of Commercial businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for conducting inspections of commercial businesses. This program was developed and implemented in accordance with part D.3.b.(3) of the Municipal Permit Order 2007-0001. As detailed in the JURMP, inspections of High and Low Priority Commercial Businesses are conducted as deemed necessary by the Code Enforcement personnel and CWP inspectors. Some inspections are initiated in response to a public or municipal staff report, an illicit discharge source investigation, or as a follow up to a previous inspection.

The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

- Three hundred seventy five (375) eating and drinking establishments were inspected at least once for the proper implementation and maintenance of storm water BMPs and grease control devices. The inspector forwarded all facilities that were not in-compliance with storm water regulations to Code Enforcement Officers.
- One hundred sixty nine (169) inspections of high priority commercial businesses were inspected, excluding restaurants and agricultural operations
- One hundred five (105) inspections of medium and low priority commercial businesses were inspected, excluding restaurants and agricultural operations
- Twelve (12) inspections of nursery and greenhouse operations within the City of Oceanside were conducted for compliance to urban runoff regulation City Code Chapter 40.
- Ensuring proper and continuing training of the Code Enforcement Officers and Clean Water Program inspectors dedicated to the Clean Water Program.

During the 2010-11 reporting period, all eating and drinking establishments were inspected for compliance with the City's urban runoff regulations and adequate implementation and maintenance of BMPs. These 375 inspections were conducted by CWP inspectors.

When CWP Inspectors and Code Enforcement Officers conduct inspections at high priority areas, they target the entire commercial/industrial complex, because these areas often contain a mix of industrial and commercial operations. Rather than just focus on the High Priority businesses located in these areas, CWP Inspectors and Code Enforcement officers inspect all businesses in the complex to ensure owners and/or operators understand their BMP requirements and can work collaboratively with their neighbors to implement BMPs or solve drainage problems.

Code Enforcement officers inspected 12 nursery and greenhouse operations. The inventory of operating nurseries and greenhouses continues to decline each year. In 2010-11, approximately half of the nurseries on the inventory had been closed. These sites, along with the larger

agricultural facilities that are annually inspected by the County of San Diego Ag Weights and Measures Department, are visited several times a year by City staff due to the evolving nature of their business. With constant plowing and crop rotation, CWP staff not only complete annual inspections, but also complete a pre-rain event inspection and visit the agricultural areas frequently during the rainy season as well as during rain events. The City maintains a cooperative relationship with the U.S. Department of Agriculture Natural Resources Conservation District (NRCS) for assisting the agricultural community in Oceanside in design and implementation of BMPs.

5.2.4.4 Enforcement of Commercial Businesses

After the second inspection visit, all but 16 commercial businesses were in compliance. These 16 commercial businesses were referred to the Code Enforcement Division. Code Enforcement (CE) conducted an inspection upon the referral date upon which the owner/operator completed with requests. No additional code enforcement action was taken against these businesses. See Table 5-6 below for inspection information on these two businesses.

Table 5-6. Code Enforcement action for Commercial Businesses.

Businesses Name	Principal Products & Services	1st Inspec. Date	Corrective Action Needed	2nd Inspec. Date	Corrective Action Needed	Referred to CE Date	Code Enforcement Inspection Date	Compliance Status
Ruby's Diner	Restaurant	n/a		n/a	Properly store materials to prevent discharge	7/17/10	7/17/10 8/17/10	IC
Capozzoli's Pizzeria & Restaurant	Restaurant	4/20/10	Properly store materials to prevent discharge	7/10/10	Same	8/12/11	8/21/10 10/6/10	IC
Roberto's Taco Shop	Restaurant	n/a		n/a	Properly store materials to prevent discharge	4/4/11	4/4/11 4/18/11	IC

IC = In Compliance

5.2.4.5 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of noncompliant sites in the City that are determined to pose a threat to human or environmental health. Oral notification is required within 24 hours of the discovery of noncompliance and a written report should be submitted to the RWQCB within five days of the incident. During this reporting period there were no industrial or commercial businesses reported to the RWQCB as all came into compliance after follow-up inspections.

5.2.5 Stationary Industrial and Commercial Sites/Sources Effectiveness Assessment

See Section 11.0 for an assessment of the Industrial and Commercial Component of the City's JURMP.

5.3 Mobile Sources Element

5.3.1 Background

Due to the lack of a stationary location for proper disposal of potentially hazardous liquids and materials, there is a major area of concern about where mobile businesses discharge water used in their line of work. Due to the nature of their activities, mobile businesses will continue to be regulated differently than other businesses. Mobile businesses can be difficult to identify because they may not have a City business license, they go out of business on a relatively regular basis and, though they may have a home base, they can cross jurisdictional lines to operate their business. For these reasons regular inspections of mobile businesses are challenging and time consuming.

5.3.2 Source Characterization

The mobile businesses known to operate within the City's jurisdiction are noted on the City's commercial inventory. During this reporting period the City of Oceanside compiled their inventory in conjunction in a format agreed upon by the San Diego County regional Copermittees. Attachment 5-C provides an updated inventory of the commercial businesses.

The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Pest control services
- Mobile carpet, drape or furniture cleaning
- Mobile construction trades
  - Painting and coating
  - Cement mixing or cutting
  - Masonry
  - Other contractors
- Landscaping
- Pool and fountain cleaning
- Power washing services

Because not all mobile businesses have obtained business licenses in the City or have a base of operations in the City, the City expects that a continual process of refining and updating its inventory will be needed. Sources for such inventory updates will include reported incidents, general observations by City staff, and available business licenses.

5.3.3 Best Management Practice Requirements

The City updated its Commercial Urban Runoff Requirements Manual during the 2007-08 reporting period with information on the required BMPs for both mobile and stationary sources. This updated manual can be referenced in Appendix C of the City's 2008 JURMP. One example of a BMP included in the updated manual is for outdoor vehicle detailing by a mobile business and the BMP explains how to capture and contain the rinse water so that it does not enter the storm drain system. Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses.

5.3.4 Program Implementation

5.3.4.1 Education Outreach

Because a specific element of the industrial and commercial program for mobile businesses is being newly developed, it is anticipated that some mobile businesses are not aware of storm water requirements and that education will need to be a significant portion of the program. During the FY 2009-10 reporting period Mobile Business education materials were developed by the Regional Industrial Commercial Workgroup of the San Diego County Copermittees. The City of Oceanside sent these educational materials to the owner/operator of each of the businesses on the 2008 JURMP Mobile Business Inventory.

5.3.4.2 Inter-Jurisdictional Cooperation

The City of Oceanside is participating in the Regional Industrial Commercial Sources workgroup which developed a plan during FY 2009-10 to educate mobile businesses about proper BMPs and protection of water quality. Details of this task can be found in the Regional Urban Runoff Management Program report sent to the RWQCB in January 2011. A complete report on the activities of this workgroup for the current reporting period will be included in the Regional Urban Runoff Management Program report due to the RWQCB in January 2011.

5.3.4.3 Staff Training

Code Enforcement Division Officers and Clean Water Program Compliance Inspectors are responsible for conducting storm water compliance inspections and enforcement of mobile sources. Officers and inspectors are trained annually on inspection and enforcement procedures and BMP implementation as they relate to mobile businesses. City staff is encouraged to report potential illegal discharges from mobile businesses when working in the City to the storm water hotline.

5.3.4.4 Inspections

During this reporting period, inspection of mobile businesses was conducted on an as needed basis. The most common triggers for these inspections were from incident reports received over the Urban Runoff Hotline and direct visual observations by City staff.

5.3.4.5 Enforcement

During this reporting period Code Enforcement officers did respond to complaint calls regarding mobile businesses that were allowing water to enter the storm drain system. During the site visit, depending on the nature of the complaint, Code Enforcement officers issued notices to comply and/or educated the operator on the proper BMPs that should be in place during their operation and provided them with the power washing brochure.

5.4 Industrial and Commercial Component Effectiveness Assessment

See Section 11.0 for an assessment of the Industrial and Commercial Component of the City's JURMP.

5.5 Program Review and Modification

During the previous reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which

includes Water, Sewer, and the Clean Water Program, continued rolling out the GBA Masters Series software. The Development Services Department, which includes Code Enforcement, Building, and Engineering, selected TRAKiT, permitting software by CRW Systems, Inc and began roll-out in this reporting year

During this reporting period the Clean Water Program reviewed the effectiveness of the new tracking tools and implemented improvements in the use of the system to better track Stormwater related data.

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6.0 RESIDENTIAL COMPONENT

6.1 Introduction

A total of 39 percent of the City's 26,983 acres is designated as either multi- or single-family residential according to the San Diego Association of Governments (SANDAG). Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the quality of receiving waters in and around the City. The City of Oceanside has developed an extensive program that aims to reduce pollutant runoff from residential areas and activities to the MEP.

This section documents the activities conducted by the City of Oceanside during the 2010-2011 reporting period to meet the requirements of Section D.3.c of the Municipal Permit (Table 6-1). The City continued the implementation of an enforcement program that responds to and monitors potential violation calls received on the Oceanside Urban Runoff Hotline (Hotline).

Table 6-1. Order 2007-0001 Compliance Summary.

D.3.c Residential Program	See Section 6 of this Annual Report
J.3.a.(3)(e).i High threat residential areas	See Section 6.2 of this Annual Report
J.3.a.(3)(e).ii Designated BMPs were implemented	See Section 6.3 of this Annual Report
J.3.a.(3)(e).iii Proper disposal of used oil and HHW	See Section 6.4.2 of this Annual Report
J.3.a.(3)(e).iv Amounts of HHW collected	See Section 6.4.2 of this Annual Report
J.3.a.(3)(e).v Evaluation of methods used for oversight of residential areas	See Section 6.2.1 of this Annual Report
J.3.a.(3)(e).vi Violations and enforcement actions	See Section 6.4.7 of this Annual Report
J.3.a.(3)(e).vii Collaboration on implementation of Regional Residential Education Program	See Section 6.5 of this Annual Report
J.3.a.(3)(e).viii Notable Activities	See Section 6.1.1 and 6.3.1 of this Annual Report

The City also utilizes its revised Urban Runoff Requirements Manual for Residents (Residential Manual) that contains BMP requirements and related guidance information for residents of the City. This manual has been made available to residents through the City's Clean Water Program Website. Changes to the Residential Manual were made during the 2007-08 reporting period.

6.1.1 Notable Activities

1. Two new residential areas were prioritized for outreach during this reporting period:
   - An apartment complex community with an accumulation of litter and trash.
   - A row-house residential area with an accumulation of pet waste.

2. BMP installation in one prioritized neighborhood was conducted during this reporting period.
   - Installation of automatic retractable screens in storm drain inlets to prevent debris from entering MS4.
3. BMP maintenance of a trash trap at the Oceanside Municipal Golf Course

See section 6.3.1 below for more details on these prioritized residential areas and the activities implemented to address the specific pollutant.

6.2 Source Characterization

Residential neighborhoods can be the source of a variety of pollutants depending on the activities conducted in residentially developed areas. Pursuant to Section D.3.c.(1) of the Permit Order 2007-0001, the City identified High Priority Residential Areas and Activities in the JURMP. The following residential activities have been identified by the City to be High Priority Activities:

- Automobile or boat repair and maintenance.
- Automobile washing.
- Automobile parking.
- Home and garden care activities and product use.
- Disposal of household hazardous waste.
- Disposal of pet waste.
- Disposal of green waste.
- Any other residential activity that contributes a significant pollutant load to the MS4.
- Power washing activity (both do-it-yourself and contracting services).

The City has also identified residential areas of High Priority. These areas include the following:

- Any residential area tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired
- Any residential area within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA

6.2.1 Evaluation of methods for oversight of residential areas and activities.

The Public Works storm drain maintenance staff has the best opportunity to inform the Clean Water Program staff about drainage areas that have a lot of trash and debris. On a regular basis the CWP staff request from public works maintenance staff areas within the city that are generating pollutants of concern for two reasons:

1. To identify areas within the City where the public can become involved to assist in removing trash and debris from the specific areas where debris has collected, and
2. To target the residential areas for future outreach.

Reports by citizens and City staff are additional sources of identifying, assessing and prioritizing residential areas. See section 6.3.1 below for more specific information on the tasks implemented in these areas to address the pollutant sources.

6.3 Best Management Practice Requirements

The City's JURMP Residential Component requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by residents pursuant to City Code. In order to ensure residents are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for residential areas and activities, located within the City, are specified in the Residential Manual. This manual is found in Appendix C of the City's 2008 JURMP.

Education and outreach aimed at residents helps facilitate the implementation of BMPs, including pollution prevention methods. A detailed discussion of the City's education program can be found later in Section 10 of the 2008 JURMP. Details on education outreach to the residential community can be found in Sections 8 and 9 of this annual report.

6.3.1 BMP Implementation

Structural BMP to address debris accumulation along Mesa Drive

In FY 2008-09 Public Works staff identified debris accumulation after storm events in a section of MS4 where Garrison Creek daylights adjacent to Mesa Drive. This MS4 is located in the Loma Alta Watershed. The debris consists of tennis and sports balls, plastic drink bottles and organic debris. Four storm drain inlets along Mesa Drive were identified as the primary collection point of the debris. Within this section of Mesa Creek there is one high school, one middle school, one elementary school, one community park with sports fields, a skate park and playground and several apartment complexes. These areas have several ball fields including tennis, soccer, baseball, and football fields. This is also a heavily traveled walkway between the schools and the residential areas.

During the 2010-11 reporting period the City of Oceanside Engineering Division allocated funding to install eight Automatic Retractable Screens (ARS) on four storm drain inlets to prevent sports balls, sports drink bottles, organic debris and other material to enter the storm drain prior to street sweeping. The devices allow the street sweeper to retrieve this material before it can enter the storm drain system and eventually into the daylighted creek area. The ARS unlocks and retracts upon variable flow rates, which is important during storm water events to prevent flooding. See Figure 6.1 below for a picture of one inlet with two ARS installed and a photo of debris collected in front of the ARS.

Figure 6.1 Automatic Retractable Screens installed at one storm drain inlet prior to rain event and after rain event.

Trash problem in Los Arbolitos neighborhood

During this reporting period a manager of a local apartment complex in the Los Arbolitos community contacted the Clean Water Program requesting assistance in eliminating trash and debris from the neighborhood. This neighborhood is located in the San Luis Rey Watershed north of Highway 76 and east of El Camino Real.

The reporting party stated that there is a lot of litter and trash on the ground and in the streets specifically along Fredericks Ave. The neighborhood consists of several condominium and apartment complexes. The manager was willing to provide her tenants with any educational material that would help address the problem.

Clean Water Program inspectors contacted the manager and formulated a plan to reach out to the condominium and apartment complex units in the area. 500 copies of the inside of a door hanger were disseminated to each unit within the three complexes (See Attachment 6-A). During the next reporting period CWP inspectors will canvas the area to determine if there is a reduction in litter in this priority neighborhood.

Pet waste in downtown row-house neighborhood

During this reporting period City staff noticed an accumulation of pet waste in a downtown neighborhood area. Pet waste piles (specifically dog waste) were seen in the landscape area between the sidewalk and the road in 12 city residential blocks.

Clean Water Program Inspectors distributed education materials to the targeted area. The total homes contacted were 214 by means of a door hanger (See Attachment 6-A) with an attached letter (See Attachment 6-B). Inspectors covered 12 blocks between Civic Center Drive and Neptune Way, on both sides of Tremont Street and Cleveland Street. Inspectors also provided personal pet waste bag dispensers to four people while distributing the information pieces. These dispensers attach to the dog leash or collar and have ten bags inside allowing dog walkers to have the resources at hand to pick up pet waste.

An assessment in the area after the education outreach campaign showed that there was less pet waste left in the landscaped area. This prioritized residential area will be monitored during the next reporting period.

Trash Trap at the Oceanside Municipal Golf Course

During FY 2008-09 staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the golf course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. In March 2009 City staff installed a trash trap downstream of this priority residential area and upstream of the municipal golf course in the open channel that parallels the driving range. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. During this reporting period approximately 260 pounds of trash and organic debris were removed from this device. Photos of the trash trap were provided in Section 6.3.1 of the FY 2008-09 JURMP Annual Report.

6.4 Program Implementation

6.4.1 Outreach

The most efficient way to encourage pollution prevention and BMP implementation and to restrict polluting practices is to educate residents on how to carry out their daily activities in ways that have the smallest potentials to discharge pollutants to the MS4. During this reporting period the Clean Water Program provided educational information and training to residents, in the following ways:

- Cleanup events
- Booths at public events
- Public television notices
- Presentations
- Website
- Email notifications
- Residential BMP Manual

During the 2008-09 reporting period the Clean Water Program discontinued mailing upcoming event notices to interested parties through the US Postal Service. In order to save time and money an email distribution list was created. This allows people to receive notifications by email which eliminates postage costs. Also, receivers of the information can easily forward the fliers to other people who may be interested in the specific information. During this reporting period additional email addresses were obtained creating a total of approximately 317 email addresses in the distribution list to which e-notices were sent for upcoming events.

Further outreach program details for this reporting period can be found in the Education and Public Participation, Section 8 and Section 9, of this document.

6.4.2 Household Hazardous Waste

The City continued to facilitate the proper management and disposal of used motor oil, toxic materials, and all other HHW to the residential audience. Residents have the opportunity to take used motor oil to approximately 12 private auto parts stores within the jurisdiction. In addition Waste Management, Inc., the City's franchise trash hauler, accepts HHW at its Oceanside facility. Residents may bring up to five gallons per day of used oil, used oil filters, and anti-freeze, Monday through Friday from 8 a.m. to 4 p.m. without an appointment. HHW may be brought on Saturdays by appointment only between 9 a.m. and 1 p.m. Details of the locations mentioned above can be found in Section 8.4.2 of the City's 2008 JURMP.

During the 2010-2011 reporting period, 2,289 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 146.5 tons of hazardous materials (including universal waste) during the reporting period.

As part of Oceanside Green Week (see Section 9.1.6 for more details) a free electronic waste (E-Waste) drop-off event, open to the public, was held simultaneously during the Green Fair, thus providing a much needed service to the community, as participants enjoyed the benefit and entertainment of the fair itself. In most communities, disposing of all types of E-Waste can prove

costly, which oftentimes discourages the proper disposal of these materials. Via a partnership/sponsorship by 1-800-GOT-JUNK?, the City was able to provide this service free of charge to anyone who wished to participate in the Green Fair. At this event there were 11.5 tons of universal waste collected for proper recycling and disposal.

Furthermore, as part of the City's collection program, a 750-gallon used oil collection receptacle is provided at the City's harbor. This receptacle is available for residents who live on the boats in the Marina as well as for those boat owners and operators who rent a harbor slip to conveniently recycle the used oil and used oil filters generated from the boats. During the reporting period 1,583 gallons of used oil were collected and recycled. In addition two 55-gallon barrels of used oil filters were collected from Harbor residents.

6.4.3 Clean Water Program Newsletters

Twice per year, educational newsletters titled *City of Oceanside Clean Water Program* are mailed with the utility bill to over 42,000 homes in the City. Topics in the newsletters explain storm water pollution, effects on water quality, pollutants of concern, illegal discharges, BMP implementation, and special events.

During this reporting period two Clean Water Program Newsletters were distributed to over 42,000 households. An overview of topics in these two newsletters is listed below. A copy of these two newsletters is included in Attachment 6-C of this annual report.

Fall 2010

- River, creek and beach cleanup event information
- Pick Up Your Pet Waste Campaign - Bag dispensers installed
- Bacteria Source Tracking Project Update

Spring 2011

- Loma Alta Creek Cleanup - April 30, 2011
- Bacteria Source Tracking Project Update
- How many Oceanside water bodies can you name?
- 2011 River, Creek and Beach Cleanup Event Information

6.4.4 Oceanside Update

In addition to printed media, the City's community television station, KOCT, airs thirty-minute public service announcements with three-minute presentations from various City departments. Those households in the City who have access to the KOCT local channel are able to view this show. During this reporting period the Clean Water Program provided seven three-minute presentations. Table 6-2 provides an overview of the topics covered during each taping.

Table 6-2. Summary of 2010-11 Oceanside Update Topics by Month

Date	Topic Discussed
September 2010	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
October 2010	San Luis Rey River Cleanup event info
December 2010	Green Holiday Season tips
January 2011	Green Week events (March 2011); 2011 Cleanup Events
February 2011	Proper brow ditch maintenance
April 2011	Creek to Bay Cleanup Event at Loma Alta Creek and beach
June 2011	July 5 Beach cleanup; Five tips to prevent water pollution

6.4.5 Website

The Clean Water Program maintains its own Website providing convenient electronic access to program information for residents and the general public. The address for this website is www.oceansidecleanwaterprogram.org. This Website provides the opportunity to learn about storm water pollution, the sources of the pollution, and what can be done to eliminate these pollutants from entering the storm drain system, thereby improving water quality in receiving waters. During this reporting period there were 72,086 hits to the Clean Water Program website. This number does not account for traffic from within the Oceanside network. This is a significant increase to the 60,319 hits from the previous reporting period.

Specific web pages available on the Clean Water Program Website are as follows:

- Commercial Business
- Development
- Events
- Industrial Business
- Just for Kids
- Water Quality Laws
- Other Websites
- Landslide Prevention
- Clean Water Projects
- Report Violations
- Residential/General
- Just for Educators
- Waterbodies

The residential web page offers the following information:

- An overview of pollutants in receiving waters and how those pollutants get there
- The difference between the storm drain system and the sewer system
- Links to pollutant factsheets in PDF format
- Links to brochures in PDF format
- Links to past Clean Water Program Newsletters in PDF format
- Link to the Residential Urban Runoff Requirements Manual

The Website address is disseminated to the public in a variety of ways:

- Listed in all Clean Water Program Newsletters
- Mentioned during each Oceanside Update Taping and shown at the bottom of the screen

- Listed on promotional items
- Listed on Clean Water Program staff business cards
- Listed in email notifications for upcoming events

6.4.6 Hotline

The City will continue to encourage public reporting of illicit discharges and illegal dumping through the City's Urban Runoff Hotline, which is run by the Water Utilities Department. The Hotline phone number is (760) 435-5800. All calls related to potential urban runoff violations were documented and forwarded to Code Enforcement and/or the City's Clean Water Program Compliance Inspectors.

The Urban Runoff Hotline was promoted through a variety of media during this reporting period, including announcements on local television stations, placement on brochures, click-message pens, pencils, and other promotional "give-aways", advertisement on the City's Clean Water Program webpage and in Clean Water Program newsletters. During the reporting period, three hundred fifty three (353) calls were received on the Urban Runoff Hotline by residents concerning potential urban runoff violations. This is a significant increase (71%) from the 251 calls received during 2009-10, 124 calls received in 2008-09, 55 calls received in the 2007-08 and the 14 calls received during the 2006-07 reporting period. Of these calls to the hotline there were 183 referrals from City staff. All storm water related calls to the City either from residents or City staff referrals were entered into the Lucity (previously GBA) database system for tracking.

6.4.7 Enforcement

Section 8.4.4 of the JURMP describes the City's program for enforcement of ordinances in residential areas. The major activities and accomplishments undertaken by the City during this reporting period included:

- Code Enforcement responded to, 75 urban runoff related cases, related to residential areas and activities, during the reporting period.
- An accounting of all residential enforcement actions, taken by Code Enforcement Officers, is shown in the following table.

See Table 6-3 for an accounting of Code Enforcement Actions during 2010-11.

Table 6-3. Accounting of Residential Code Enforcement Actions for the 2010-2011 Reporting Year.

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept	Stop Work Notice
# of Actions	63	119	9	0	18	17	0	0	0

6.5 Collaboration to implement Regional Residential Education Program

During this reporting period the City of Oceanside continued to serve as Co-chair for the Education and Residential Sources Workgroup (ERS Workgroup) which is tasked with implementing the Regional Residential Education Program. The ERS workgroup was established as one of several workgroups under the Memorandum of Understanding amongst the San Diego County Copermittees (Copermittees). The chair of each of these workgroups presides over and provides leadership and direction to the workgroup. This includes serving as the point of contact to external entities, soliciting group input, developing meeting content, facilitating meetings, and coordinating with the Secretary to finalize work products for distribution to the workgroup. The City of Oceanside Co-chaired this workgroup with staff from the City of Imperial Beach.

Details of the activities of the ERS Workgroup will be provided in the submittal of the annual report of the Regional Urban Runoff Management Program due to the RWQCB in January 2012.

6.6 Residential Component Effectiveness Assessment

See Section 11.0 for an assessment of the education component of the City's JURMP.

6.7 Program Review and Modification

During the previous reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water, Sewer, and the Clean Water Program, continued rolling out the GBA Masters Series software. The Development Services Department, which includes Code Enforcement, Building, and Engineering, selected TRAKiT, permitting software by CRW Systems, Inc and began roll-out in this reporting year

During this reporting period the Clean Water Program reviewed the effectiveness of the new tracking tools and implemented improvements in the use of the system to better track Stormwater related data.

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7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

This section is intended to document the activities conducted by the City of Oceanside during the 2010-2011 reporting period to manage illicit discharges and meet the requirements of Sections D.4 and J.3.a.(3)(f) of the 2007 Municipal Permit.

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2010-11 Illicit Discharge Detection and Elimination Component, including the 2010 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2011.

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8.0 EDUCATION COMPONENT

8.1 Introduction

Education is an important step in working towards improving receiving water quality both locally and regionally. By increasing public awareness and encouraging a change in both the attitude and the behavior of the general public and the regulated community, the City may reduce or eliminate storm water pollution caused by common daily activities.

This section documents the activities conducted by the City of Oceanside during the 2010-2011 reporting period to meet the requirements of Section D.3.g of the Municipal Permit (Table 8-1). The City continued the implementation of an education outreach program for municipal staff, industrial and commercial businesses, and the general public.

Table 8-1. Order 2007-0001 Compliance Summary.

J.3.a.(3)(g).i Description of education efforts	See Section 8.0 of this Annual Report
J.3.a.(3)(g).ii Underserved target audiences	See Section 8.3.1 of this Annual Report
J.3.a.(3)(g).iii Education of municipal employees	See Section 8.2 of this Annual Report
J.3.a.(3)(g).iv Education of construction community	See Section 8.4 of this Annual Report
J.3.a.(3)(g).v City education efforts for residents, general public and school children	See Section 8.3 of this Annual Report

The City of Oceanside provides a comprehensive storm water education program to achieve the following objectives:

- Measurably increase the knowledge of target communities regarding MS4s, impacts of urban runoff on receiving waters, and BMP solutions for the target audience.
- Measurably change the behavior of target communities, and thereby reduce pollutant releases to MS4s and the environment.

Educational programs and activities are tailored to meet the needs of the following target audiences:

- Municipal departments and personnel.
- Construction site owners and developers.
- Industrial and commercial owners and operators.
- Residential community, general public, and school children.
- "Underserved" target audiences, where applicable.

Many education outreach efforts are conducted on an ongoing basis, such as direct interaction during inspections, pre-construction meetings, or when fielding calls from the City's Urban Runoff Hotline. Educational materials are made available throughout the year at special events and at the City's Water Utilities Department counter. Targeted mailings, focused training

sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of complaints, and other similar factors.

8.2 Staff Training Element

City personnel are the eyes and ears of the City, and can provide valuable information on storm water related discharges and potential violations that may be occurring within the City. The City presents general storm water educational content, which is described in Section 10.3 of the 2008 JURMP, to all City departments. The City primarily educates its municipal personnel through classroom training, on-the-job training sessions, and the Municipal BMP Manual (Appendix C of the 2008 JURMP). Customized training programs are designed for personnel targeting fieldwork-related departments such as storm water compliance inspectors, building/engineering inspectors, public works, planning department staff, and park and recreation personnel. General informational storm water training sessions are provided for municipal personnel in other departments to review storm water regulations in the City, impacts of urban runoff and BMPs to be implemented to reduce or eliminate runoff.

During this reporting period eighteen (18) City departments or divisions were provided a training on storm water related issues. In addition one division from the solid waste and recycling trash hauler for the City was provided with storm water training. A total of 268 City staff and 50 staff from the trash hauler attended storm water trainings.

As in past reporting periods one of two Storm Water Pollution Prevention Education Programs developed by a private company, EXCAL Visual, were used for most municipal staff trainings. These programs include a 15-20 minute video and a quiz specific to the video. Some departments and divisions received a customized power point focused on their specific jurisdictional duties related to storm water that are not covered in the EXCAL Visual products.

Prior to the start of these training sessions using the programs mentioned above a multiple choice quiz was given to each participant to establish a baseline of knowledge for that individual. The quiz also served as the sign-in sheet for the individual attending each training session. After the completion of the video, additional storm water related details were provided depending on the department or division being trained. Time was allotted for questions and answers at the end of the training session. Prior to the end of the training session the same multiple choice quiz was given to each participant. One hundred and five (105) municipal employees took both a pre and post-quiz during a municipal training session. For more information on the effectiveness of these training programs based on the pre- and post-quiz scores see Section 11.0 of this report.

One program titled “Storm Water Pollution Prevention - Storm Warnings” covers Everyday Best Management Practices for Industrial Facilities. Specific BMPs are covered to address the following issues related to industrial facilities:

- Good Housekeeping
- Materials Management
- Spill Response
- Equipment Fueling & Repair
- Outdoor Manufacturing
- Preventive Maintenance

- Waste Management
- Dust Producing Processes

Departments or Divisions that received this training were:

- Water Distribution – Operations
- Water Distribution – Maintenance
- Sewer Treatment – La Salina Waste Water Treatment Plant
- Sewer Treatment – San Luis Rey Waste Water Treatment Plant
- Water Distribution – Weese Plant (Drinking Water Treatment Plant)

The other program titled "Municipal Storm Water Pollution Prevention – Storm Watch" covers everyday BMPs for other municipal staff activities such as Parks and Recreation and Fleet Maintenance. Specific BMPs covered in this course are as follows:

- Good Housekeeping and Spill Prevention
- Vehicle and Equipment Washing
- Vehicle and Equipment maintenance
- Spill Reporting and Response
- Street Maintenance
- Outdoor Storage of Materials and Wastes
- Landscaping and Lawn Care

Departments or Divisions that received this training were:

- Streets Division – Street Repair and Maintenance
- Streets Division – Street Sweepers
- Streets Division – Parking Enforcement
- Parks and Recreation Maintenance Division
- Public Works – Solid Waste Division
- Fleet Maintenance Division
- Harbor Maintenance Staff
- Sewer Collections – Field Staff
- Water Utilities – Meter Services

Other Departmental staff received customized training because of their need for specific education that was not covered in these two programs or information covered in these programs was not needed to convey to these groups due to the nature of their work as municipal employees. The following departments were trained using a customized Power Point Presentation and an interactive format to allow for questions and answers throughout the training program:

- Building Division – Building Inspectors
- Engineering Division – Engineering Inspectors and administrative staff
- Police Officers
- Water Utilities Administration Division

Waste Management is the solid waste and recycling company that services residential and commercial/industrial businesses in the City of Oceanside. Though they are not a department or

division of the City, they are an important entity to target with storm water related education programs due to the nature of their business. During this reporting period the trash haulers with Waste Management were targeted for storm water education. A customized power point presentation was used to emphasize the importance of proper handling of solid waste during servicing of trash cans and dumpsters and how to report potential storm water violations to Oceanside's Clean Water Program staff. The targeted audience was:

- Waste Management, Inc. – Trash, Recycling, and Green Waste Truck Drivers

8.2.1 Other Staff Trainings

Several city staff also attended additional training to increase their knowledge on storm water regulations, enforcement inspection protocols, and the new construction permit. Table 8-2 provides a list of stormwater related trainings attended by City staff.

Table 8-2. Storm water-related trainings attended by City staff

Training Date	Topic	City Staff in Attendance	Presenter(s)
9/8/2010	MS4 Permit/Basin Plan/303(d)/SUSMP/SWMP	Marty Eslambolchi Gary Smith Fred Tafaghodi	Billy Walker – City Storm Water Development Review Staff
9/22/2010	HMP/O&M Plan	Marty Eslambolchi Gary Smith Fred Tafaghodi	Billy Walker – City Storm Water Development Review Staff
11/10/2010	HMP Sizing Tools	Billy Walker	American Public Works Assoc. (APWA)
11/18/2010	GIS Viewer	Engineering Staff	APWA
12/14/2010	BMP Sizing Calculator	Billy Walker	APWA
2/15/2011	Stormwater Compliance	W. Perdomo	StormWater USA
3/8/2010	Revised BMP Sizing Calculator	Billy Walker	APWA
3/15/2011	Track out: Construction most common and costly BMP violation.	Mo Lahsaie; Glenn Ericson	Webinar
3/23/2011	Environmental Enforcement	W. Perdomo	Cal/EPA
3/29/2010	SWPPP QSD	Billy Walker	American Society of Civil Engineers (ASCE)
3/30/2010	SWPPP QSD	Billy Walker	ASCE
3/31/2010	SWPPP QSD	Billy Walker	ASCE
4/6/2010	LID	Billy Walker	ASCE
4/6/2011	BMP inspection and maintenance workshop-Maintaining LID in San Diego	Glenn Ericson Steve Kemp, Keith Pirillo, Robert Gremmels	Various Speakers

8.3 Educational Outreach Element

Residential areas make up a large portion of the land use in the City, and therefore even small pollutant discharges can be magnified significantly and have the potential to affect the quality of the receiving waters. Activities such as residential car washing and over irrigation are harmful to receiving water bodies by contributing pollutants such as heavy metals, detergents, and nutrients. Providing residents with appropriate educational materials may help to increase overall awareness, and encourage residents to change harmful behaviors and subsequently reduce the potential for pollutants to enter the storm drain system and reach receiving water bodies.

Media

Twice per year, educational newsletters are mailed to all homes in the City with water utility bills. Topics in the newsletters explain storm water pollution, effects on water quality, pollutants of concern, illegal discharges, BMP implementation, and special events.

During this reporting period two Clean Water Program Newsletters were distributed to over 44,000 households. An overview of topics in these two newsletters is as follows:

Fall 2010

- River, creek and beach cleanup event information
- Pick Up Your Pet Waste Campaign - Bag dispensers installed
- Bacteria Source Tracking Project Update

Spring 2011

- Loma Alta Creek Cleanup - April 30, 2011
- Bacteria Source Tracking Project Update
- How many Oceanside water bodies can you name?
- 2011 River, Creek and Beach Cleanup Event Information

A copy of these two newsletters are included as Attachment 6-C to this annual report.

Website

The City's Clean Water Program website also offers electronic copies of a variety of storm water fact sheets covering topics such as proper pesticide and fertilizer use, trash disposal, pet waste and lawn waste disposal, proper chlorine and other swimming pool chemical disposal, sedimentation, effects of soaps and detergents on receiving waters, and other storm water-related topics. During this reporting period there were 72,086 hits to the Clean Water Program website. This number does not account for traffic from within the Oceanside network. This is a significant increase from the years past. Table 8-1 below provide a summary of the number of hits to the webpage.

Table 8-1. Summary of Clean Water Program Webpage Hits

Fiscal year	# of Website Hits
2010-11	72,086
2009-10	60,319
2008-09	35,647
2007-08	38,146
2006-07	45,267
2005-06	42,367

Oceanside Update

In addition to printed media, the City's community television station, KOCT, airs thirty-minute public service announcements with three-minute presentations from various City departments. During this reporting period the Clean Water Program will provided nine three-minute presentations. Table 8-2 provides an overview of the topics covered during each taping.

Table 8-2. Summary of 2010-11 Oceanside Update Topics by Month

Date	Topic Discussed
September 2010	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
October 2010	San Luis Rey River Cleanup Event, Stormwater hotline
December 2010	Protecting the environment with reusable, bags, utensils and bottles
January 2011	Upcoming river and beach cleanups as well as Green Week events
February 2010	How to prevent erosion around the house
April 2011	Loma Alta Creek Cleanup and Pollution Prevention Tips
June 2011	Morning After Mess beach cleanup

Community Events – Booths and Outreach Activities

The Clean Water Program staff participated independently and in conjunction with other cities in the North County Storm Water Program by staffing a booth at several community events in Oceanside and north San Diego County. The Clean Water Program staff talked to residents, handed out educational materials, and responded to questions and concerns. Table 8-3 lists community events attended between July 2010 and June 2011 to encourage community participation and to educate participants of the effects of polluted urban runoff:

Table 8-3. 2010-11 Community Events.

Date	Event	Participants (Estimated)
10/2 and 3/2010	Harbor Days	1000
12/16/2010	Day without a Bag	300
3/12/11	Oceanside Green Fair	300
04/17/11	Fallbrook Avocado Festival	50,000

School Education

Educating the City's youngest residents is important in two ways: ideally the good habits/behaviors learned will be carried into adulthood, and secondly, children may educate their families and friends around them with the information they have learned. Children are

impressionable at a young age, and are therefore more likely to act upon the knowledge given to them now and throughout their life.

The City continued its outreach to school age children through the use of the watershed model during presentations. A total of twenty two presentations were conducted reaching 471 school-age children and 27 adults. Table 8-4 provides a list of groups and classrooms that were educated about storm water pollution via these presentations.

Table 8-4. 2010-11 School Age Children Watershed Presentations.

Date	Group	Children	Adults
11/02/2010	Girl Scout Troop (4th Grade)	10	3
2/24/2011	Brownie Troop 1777 (2nd Grade)	12	1
2/24/2011	Brownie Troop 1675 (2nd Grade)	12	1
2/25/2011	Libby Elementary (3rd Grade)	26	1
2/25/2011	Libby Elementary (3rd Grade)	22	1
2/25/2011	Libby Elementary (3rd Grade)	25	1
4/13/2011	Reynolds Elementary (2nd Grade)	23	1
4/13/2011	Reynolds Elementary (2nd Grade)	22	1
4/13/2011	Reynolds Elementary (2nd Grade)	24	1
4/20/2011	Reynolds Elementary (2nd Grade)	23	1
4/20/2011	Reynolds Elementary (2nd Grade)	24	1
4/26/2011	Laurel Elementary (1st Grade)	23	1
4/26/2011	Laurel Elementary (1st Grade)	23	1
4/26/2011	Laurel Elementary (1st Grade)	23	1
5/09/2011	Libby Elementary (2nd Grade)	23	1
5/09/2011	Libby Elementary (2nd Grade)	23	1
5/09/2011	Libby Elementary (2nd Grade)	23	1
5/19/11	Vail Elementary (4th grade)	31	1
5/20/2011	Del Rio Elementary (4th Grade)	25	1
5/20/2011	Del Rio Elementary (4th Grade)	33	1
5/20/2011	Del Rio Elementary (4th Grade)	30	1
6/3/2011	Brownie Troop #4309	14	4
	Totals	**471**	**27**

Splash Lab

The San Diego County Office of Education Splash Science Mobile Lab (Splash Lab) is a completely self-contained mobile laboratory brought to local schools to provide students with hands-on experience with the following resources:

- Watershed/storm drain model presentations
- GIS computer stations
- Water Conservation Station
- San Diego Estuary Station
- Microscopes - with live specimens!
- Chemistry experiments
- State of the art computers
- Cooperative learning skills

The curriculum is designed for grade levels 4-6 and is aligned with California Science Content Standards.

During this reporting period a total of 627 students from 20 classes at five schools received the Splash Lab with the costs covered by the City Water Utilities Department. See Table 8-5 below for information on the schools and number of students who participated in the programs.

Table 8-5. Schools using Splash Lab during FY 2010-11.

Date	School	Grade	Topic	Number Attended	Number of classes
2/22/2011	Libby Elementary	4-5	Splash Lab	150	4
2/28/2011	Ivey Ranch Elementary	4	Splash Lab	127	4
3/10/2011	North Terrace Elementary	3-5	Splash Lab	98	4
3/14/11	Stuart Mesa Elementary	4-5	Splash Lab	126	4
5/10/11	St. Mary Star of the Sea	4-7	Splash Lab	126	4
Totals				**627**	**20**

Project SWELL (SWELL = Stewardship: Water Education for Lifelong Leadership)

The City continued to collaborate with San Diego CoastKeeper and the San Diego Unified School District (SDUSD) to customize and implement Project SWELL (Stewardship: Water Education for Lifelong Leadership), a water-based science curriculum, for different grade levels in the Oceanside Unified School District (OUSD). The City of Oceanside is currently implementing the 5th grade curriculum and is considering implementing the 6th grade curriculum in the future.

The Project SWELL curriculum will foster a sense of stewardship for our natural environment and help to empower and educate these future leaders of America to understand and improve the condition of San Diego's coast and waterways. Project SWELL balances environmental and scientific studies as a comprehensive and hands-on K-12 water quality and pollution prevention curricula. More information about this curriculum can be found at http://www.projectswell.org/. This curriculum provides students with knowledge of water resources in San Diego County and Oceanside, watershed functions, water conservation, the effects of polluted urban runoff, and how students can help prevent water pollution.

5th Grade

During this reporting period the 5th grade level curriculum continued to be implemented. The OUSD adopted a slightly revised version of the FOSS (Full Option Science Systems) science kits used for K-5th grade levels for the 2009-10 school year. The 5th grade curriculum was slightly revised to reflect the use of the revised FOSS kits. FOSS is a research-based science curriculum for grades K–8 developed at the Lawrence Hall of Science, University of California at Berkeley.

6th Grade

For 6th grade the OUSD and the SDUSD adopted different science kits for implementation during the 2008-09 school year. The SDUSD changed the 6th grade curriculum to reflect the materials that will be used in the new science kit. During this reporting period a curriculum

writer customized the 6th grade curriculum for Oceanside. The curriculum is proposed for piloting during the 2011-12 school year.

Other Education Outreach opportunities

Oceanside Citizen's Academy

During this reporting period the City of Oceanside Human Resources Department coordinated a Citizen's Academy, which is a group of Oceanside residents interested in learning more about the City's various Departments. Several meetings were held over a five month period during which speakers from City Departments were invited to provide an overview of their department and to answer any questions.

On August 19, 2010 Clean Water Program staff gave a 30 minute presentation about the following surface water quality related topics to Citi Academy members:

- Goal of the Clean Water Program
- Overview of various CWP programs:
  - Monitoring
  - Bacteria Source tracking Project
  - Education outreach
  - River and Beach Cleanup Event
  - Stormwater related inspections
  - Code enforcement involvement
- Regulatory reporting

Attendees were given 10 minutes for questions and answers. They were also provided with a reusable toe bag and reusable bottle and encouraged to use them.

Over-Irrigation

Clean Water Inspectors continue to respond to and document over irrigation issues after receiving complaints from the general public or city staff. Inspectors investigated water sources and contacted property owners in person when possible or provided informational door hangers indicating the need to curtail overwatering or fix broken irrigation system if applicable, as well as provided information to educate the public to conserve water. After responding to complaints, inspector's maintained electronic files of all complaints and revisited locations to make sure over irrigation had stopped. In problematic areas where overwatering was caused by many property owners, the entire area was notified by door hangers and/or letters informing the property owners the need to conserve water and avoid polluting the storm drain systems. After the institution of Stage II Drought ordinance in FY 09-10, inspectors also enforced the new requirements for the time and duration of irrigation through out the City per the requirements of the new ordinance. If the property owners did not curtail overwatering, the information was submitted to Code Enforcement for further processing of the violations.

Water meter reader personnel are trained to document and respond to urban runoff and over-irrigation issues as they come across such activities during their normal activities. While in the field these personnel will enter the address location into a hand-held meter of a site that may have an urban runoff violation. These addresses are then compiled and given to the Clean Water Inspectors for follow-up. When possible, the water meter reader personnel will also leave door

hangers and report incidents of urban runoff. Depending on the situation a meter shop personnel will visit the site or the Clean Water Inspector will follow-up.

Residential Car Washing

Residents continued to be encouraged to use professional car washes or to implement BMPs at their homes to prevent water produced by residential car washing from entering the storm water conveyance system.

Pick Up Your Pet Waste Campaign

The Pick Up Your Pet Waste Campaign was initiated in FY 2008-09 to address the accumulation of dog waste along the San Luis Rey Recreation Trail (Trail) which travels adjacent to the San Luis Rey River on both the north and south sides. For more detailed information about this campaign please refer to Section 9.1.5 of this annual report.

8.3.1 Targeting "Underserved" Communities

Underserved communities are communities the City has determined may require increased educational efforts. The City targeted the following underserved communities and high-risk behaviors.

Mobile Businesses

Due to their nature, mobile businesses are typically not inspected during the routine industrial and commercial inspection program; therefore they may not be receiving the same educational material as other industrial and commercial businesses. The City continued to use Code Enforcement to respond to complaint calls related to mobile businesses at which time Mobile Business BMP information was given to the operator.

As part of the regional outreach efforts implemented through the Industrial/Commercial Sources Workgroup, the City submitted their inventory in FY 2008-09 to the Industrial/Commercial Workgroup for the development of a regional inventory of Mobile Businesses. This inventory was created in order to send information to the businesses about the minimum BMP requirements specific to Mobile businesses.

During the 2009-10 reporting period the City of Oceanside mailed "Required Minimum BMPs For Mobile Businesses" education materials to 34 Oceanside Mobile Businesses with current business licenses. See attachment 8-A of the 2009-10 Annual report for a copy of these materials. Of the 34 mailed only four were returned to the City.

Spanish-speaking population

The City will continue to target the large Spanish-speaking population in the City by offering a number of educational brochures and handouts, including the Green Wrench Guide and Integrated Pest Management tip cards in both English and Spanish. In addition there are posters available in Spanish for restaurants and automotive related businesses and are provided to these business where inspectors feel there is a need or upon request.

Nursery and Greenhouse Operations

Due to the amount of agricultural land use in the City, the City distributed a number of printed educational materials to agricultural/nursery/greenhouse site owners and operators. The City continues to provide educational materials, when needed, to nursery and greenhouse operations during annual inspections and on unannounced visits throughout the year.

Education Materials Distributed

Materials are regularly developed and updated to provide residents, the general public, and students with information about urban runoff, water quality, BMPs, Clean Water Program projects, and the Urban Runoff Hotline number. These materials include brochures and promotional items that are distributed upon request and during community events where the Clean Water Program staffed a booth. No significant changes were made to any of the brochures during this reporting period. Copies of these brochures were submitted with previous annual reports. Table 8-6 lists the educational materials distributed during the 2010-2011 reporting period.

Table 8-6. Educational Brochures and Promotional Items Developed and/or Distributed.

Education Material	Description	Number Distributed
Educational Brochures		
Urban Runoff Guidelines for Residents Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from residential activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	50
Pollution Prevention Tips for Gardening Activities Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from gardening activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	25
Urban Runoff Guidelines for Commercial Businesses Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from commercial and industrial business activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	50
Urban Runoff BMPs for Construction Projects handout	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from home-improvement activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	200
Urban Runoff Guidelines for Powerwashers	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from powerwashing activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	25
	Total number of educational brochures distributed during this reporting period.	**350**

Promotional Items		
Personal Pet Waste Bag Dispensers	These convenient dispensers are small enough to hook onto the dog leash so they are conveniently available when walking the dog. The image on the dispenser is the same image as on the sign used along the San Luis Rey Recreation Trail. Each dispenser holds ten small bags. Bag refills are available at pet stores.	250
Click Message Pen	Each pen has Oceanside's Urban Runoff Hotline number on the outside barrel number as well as the following messages inside that rotate when the pen is clicked: "Protect our Waterways: sweep sidewalks, all storm drains lead to the ocean, Sweep (don't hose off) driveways and sidewalks, pick up pet waste, www.OceansidCleanWaterProgram.org, Water saving tips:www.SaveWaterOceanside.com, Conserve water – don't overwater landscapes.	500
Pencils	Each pencil has Oceanside's Urban Runoff Hotline phone number and is made from recycled newsprint	750
Decals	These static cling decals have Oceanside's Urban Runoff Hotline phone number and can be placed on the windshield for quick reference to report potential storm water violations.	50
Gel Pen	These gel pens have Oceanside's Urban Runoff Hotline phone number and were distributed to City employees during municipal training sessions.	200
T-shirts	T-shirts are offered as a give-away option for beach and creek cleanup volunteers.	1,000
Tote Bags	These reusable tote bags are made from recycled cotton and have the words "Protect and Conserve Oceanside Water". They were distributed to employees and as a give-away option for beach and creek cleanup volunteers.	500
Water bottles	These reusable steel Bisphenol A (BPA) free water bottles were distributed to beach and creek cleanup volunteers employees and as a raffle item.	1,500
Rally Towels	These 11"x15" rally towels have the slogan "Only Rain in the Strom Drain" and were offered to beach and creek cleanup volunteers.	100
Flap hats	These flap hats were provided as a raffle item during municipal training sessions.	10
Stickers	These stickers are provided to young children and have storm water related slogans such as Only Rain in the Storm Drain and "You Are the Solution to Storm Water Pollution".	250
Ceramic Coffee Mugs	These reusable ceramic coffee mugs were provided as a raffle item during municipal training sessions.	25
	Total number of promotional items distributed during this reporting period.	**5,135**

8.4 Education of Construction Community

The City provides all appropriate parties involved with construction activities with training and informational materials regarding storm water quality, as applicable. These parties include but are not limited to City employees and project proponents, which can include contractors, subcontractors, developers, property owners, and superintendents.

Education and training of the development community in Oceanside is typically done on a project-by-project basis during a mandatory pre-construction meeting with the City and during construction site inspections.

Prior to the issuance of any permits, construction site owners and developers are either given printed educational material or referred to the Clean water Program website for information that includes the municipal permitting process, as well as the state and local storm water permit requirements for construction sites. Prior to the wet season, all currently permitted construction sites are contacted reminding site owners and developers to update their sites' BMPs to reduce erosion and prevent storm water pollution, as well as update erosion control plans and SWPPPs.

The Building Division counter in City Hall references websites that have the following documents for construction site owners and developers to reference:

- Clean Water Program Website to for a link to the General Construction Storm Water Permit
- The City's Construction Manual
- Construction related sections of the Municipal Storm Water Permit Order R9-2007-0001
- Standard Urban Storm Water Mitigation Plan, when applicable

In addition to referring the construction community to the documents mentioned above, a copy of the Urban Runoff BMPs for Construction Projects brochure is stapled to the storm water related development plans for the project. This ensures that the construction community has received BMP information and is required to follow the minimum BMPs listed and shown in the brochure. Additional BMPs may be required by the City based on a review of the Storm Water Pollution Prevention Plan prepared by the project applicant. Storm water information is also disseminated to the construction community through storm water compliance inspections of construction sites.

8.5 Outreach Component Effectiveness Assessment (Optional)

See Section 11.0 for an assessment of the education component of the City's JURMP.

8.6 Program Review and Modification (Optional)

During this reporting period there were no changes to the Education Outreach component of Oceanside's Clean Water Program.

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9.0 PUBLIC PARTICIPATION COMPONENT

In order to ensure success with any City-wide program, the public must be involved. Stewardship and participation by the general public will increase the acceptance and willingness to comply with new regulations. The City of Oceanside has actively pursued public involvement in the Clean Water Program through the implementation of various programs and feedback mechanisms. This section documents the activities conducted by the City of Oceanside during the 2010-2011 reporting period to meet the requirements of Section D.6 of the Municipal Permit (Table 9-1).

Table 9-1. Order 2007-0001 Compliance Summary.

J.3.a.(3)(h).i Public Participation Efforts	See Entire Section 9 of this Annual Report

9.1 Local Public Participation Opportunities

The City of Oceanside encourages its residents to become involved in the Clean Water Program in various ways. The public can participate in the Clean Water Program including reporting potential violations through the Urban Runoff Hotline, beach and creek cleanup events, and attendance at community events.

9.1.1 Notable Activities

Green Oceanside Campaign

In late 2008, a group of city employees from various departments and divisions, including the Clean Water Program, joined forces and organized "The Green Team" which was a driving force behind the creation of the Green Oceanside campaign. This campaign continued during this reporting period. See section 9.1.5 for detailed information about activities implemented for this campaign.

9.1.2 Urban Runoff Hotline

The public and City employees can report potential storm water violations that could pollute the City's receiving waters through the Oceanside Urban Runoff Hotline (760) 435-5800. The Urban Runoff Hotline was promoted through a variety of media during this reporting period, including announcements on local television stations, placement on brochures, newsletters, click-message pens, pencils, and other promotional "give-aways", and advertisement on the City's Clean Water Program webpage.

During the reporting period, a total of three hundred and fifty three (353) storm water related calls were received through the Urban Runoff Hotline. This is a significant increase (71%) from the 251 calls received in the 2009-10 reporting period, 124 calls received in the 2008-09 reporting period, 55 calls received in the 2007-08 and the 14 calls received during the 2006-07 reporting period. This demonstrates that the general public and City employees are more aware of urban runoff issues and are reporting potential violations to the City.

Of the 353 Urban Runoff Hotline calls one hundred and seventy (170) were received by residents concerning potential urban runoff violations. There were also one hundred and eighty three (183) referrals from City staff.

All storm water related calls to the City (353) either from residents or City staff referrals were entered into the GBA database system for tracking. These calls were then forwarded to either the Clean Water Program inspectors or Code Enforcement staff, depending on the nature of the call.

Table 9-2 provides a summary of the nature of the calls received via the Hotline or by City staff referral. Of the calls received through the Hotline, sixteen (16) were referred directly to Code Enforcement for investigation.

Table 9-2. Urban Runoff Hotline calls and City staff referral summary

Department	Problem	City Employee Referral	Public Hotline	Total
Clean Water Program	Follow-up	0	9	9
	Over-irrigation/Broken irrigation	174	62	236
	Power Washing	1	3	4
	Spills/Dumping	6	17	23
	Street/Driveway Washing	0	1	1
	Unidentified water runoff	2	73	75
	Yard waste/Landscape Activity	0	5	5
	Total For CWP	183	170	**353**
Referred Directly to Code Enforcement	Over-irrigation/Broken irrigation	2	0	2
	Power Washing	1	0	1
	Spills/Dumping	2	8	10
	Street/Driveway Washing	0	2	2
	Unidentified water runoff	0	1	1
	Total for CE	5	11	**16**

9.1.3 Cleanup Events

City Sponsored events

To increase Oceanside residents' stewardship toward our local waterways, the Clean Water Program hosts annual cleanup events at every major waterway in Oceanside including Buena Vista Creek, Loma Alta Creek, San Luis Rey River and City beaches. Between 70 and 300 volunteers participate in these cleanup events. During the 2010-11 reporting period, 970 volunteers removed over 10 tons of trash, debris, shopping carts and other unwanted material from Oceanside waterways during City-sponsored events. See Table 9-3 below for data related to the City-sponsored events.

Private group sponsored events

Private groups regularly approach the city to coordinate their own cleanup event. The City of Oceanside including the Clean Water Program, Lifeguard division and the harbor maintenance

staff support these groups by providing them guidance on what areas to target for cleanup, provide supplies for their event (bags and gloves), and provide safety instructions for the group.

To assist these groups in coordinating their own beach cleanup event the Clean Water Program created a Beach Cleanup manual. This manual provides the following information:

- How to coordinate a beach cleanup
- Day of cleanup instructions
- City of Oceanside "Beach Cleanup Pledge"
- Safety fact sheet
- Supply checklist
- Cleanup summary sheet

A copy of the Beach Cleanup Manual is included as Attachment 9-A in the 2009-10 Annual Report.

During this reporting period three private groups coordinated their own beach cleanup event in Oceanside. After the completion of their event, private groups are requested to provide the number of volunteers and the number of bags collected or pounds of trash removed from the target area. Every attempt is made to gather this data but some groups do not always keep track of the data or report back to the City. 84 volunteers removed 150 pounds of trash from Oceanside beaches and waterways. See Table 9-3 for data related to the private group sponsored events.

Between the City sponsored and private group sponsored events, 1,054 volunteers removed 20,520 pounds of trash and debris from Oceanside City beaches and three waterways that traverse the City of Oceanside. Table 9-3 lists cleanup events held between July 2010 and June 2011 including the number of volunteers and the pounds of trash removed from the waterways.

Table 9-3. Cleanup Events Held during the 2010-11 Reporting Year.

Date	Event	Number of Participants	Pounds/Tonnage of Waste Removed
City Sponsored Cleanup Events			
7/5/2010	Morning After Mess	170	275
9/25/2010	Buena Vista Creek Cleanup	61	3,000
9/25/2010	Oceanside Beach Cleanup	307	436
11/06/2010	San Luis Rey River Cleanup	87	4,000
11/06/2010	Harbor Beach Cleanup	55	190
4/30/2011	Loma Alta Creek Cleanup	60	12,000
4/30/2011	Oceanside Beach Cleanup - Pier	230	469
	Total City Sponsored Events	**970**	**20,370 pounds**
Private Group Sponsored Events			
7/30/2010	Church of Jesus Christ of Latter Day Saints	33	75
3/13/2011	Ivey Ranch Elementary	25	30
3/13/2011	Human Development Club	26	45
	Total Private Group Events	**84**	**150 pounds**
	Grand Totals	**1,054**	**20,520 pounds**

Cleanup event email lists

In FY 2010-11 two event fliers and two Clean Water Program Newsletters with cleanup event information were sent via email to approximately 315 email addresses on an event notification email distribution list. See Attachment 6-C for newsletters and Attachment 9-A for event fliers emailed to interested parties during this reporting period who registered to receive e-notifications.

In addition two newspaper advertisements announcing the April 30, 2011 Loma Alta Creek Cleanup was published in two local newspapers: the North County Times and the Coast News. See Attachment 9-B for a copy of the advertisements.

9.1.4 Oceanside Update Show

Clean Water Program staff appears regularly on the Oceanside Update show broadcast through Oceanside Television Station KOCT. Each spot allows staff to spend three to five minutes discussing specific storm water pollution programs, pollution prevention tips, and BMPs to reduce impacts. The 30-minute show is broadcast twice daily at 7:00 a.m. and 7:00 p.m. on channels 17 and 18 in Oceanside. Topics are varied with every taping of Oceanside Update, therefore the viewing audience learns about public participation events and water quality BMPs. While KOCT is unable to determine the actual number of residents who watch Oceanside Update regularly or for any length of time, both channels broadcast to approximately 45,000 Oceanside households. Table 9-4 summarizes Oceanside Clean Water Program topics discussed during each of the seven tapings which aired during this reporting period.

Table 9-4. Summary of Oceanside Update Topics by Month.

Date	Topic Discussed
September 2010	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
October 2010	San Luis Rey River Cleanup Event, Stormwater hotline
December 2010	Protecting the environment with reusable, bags, utensils and bottles
January 2011	Upcoming river and beach cleanups as well as Green Week events
February 2010	How to prevent erosion around the house
April 2011	Loma Alta Creek Cleanup and Pollution Prevention Tips
June 2011	Morning After Mess beach cleanup

9.1.5 Additional Public Participation Opportunities

Other opportunities for local public participation during this reporting period are discussed in this section.

Pick Up Your Pet Waste Campaign

The Pick Up Your Pet Waste Campaign was initiated in FY 2008-09 to address the accumulation of dog waste along the San Luis Rey Recreation Trail (Trail) which travels adjacent to the San Luis Rey River on both the north and south sides. An intercept survey component was implemented to identify the neighborhoods where most people come from to use the Trail.

The next component of the campaign was a brief survey that was mailed to 300 Oceanside households located in neighborhoods near the Trail. The goal of the survey was to identify the reasons why people do or do not pick up after their pets on the Trail and in other public areas. Among dog owners, the most common reasons cited for why someone might leave dog waste behind while walking the Trail were:

- Forgot to bring a bag
- Nowhere to throw it away
- No one else around to see them

Ninety-three percent of survey respondents agreed that more pet waste dispensers are needed along the Trail.

During this reporting period the City installed four pet waste bag dispensers (Mutt Mitt brand) and four additional trash cans where most people access specific sections of the trail. Modified signage was also installed at the dispenser stations to emphasize pet owner responsibility. See Figure 9-1 for a photo of one of the installed pet waste bag dispenser stations.

Figure 9-1. Pet waste bag dispenser station installed along San Luis Rey Recreation Trail.

One week prior to installation and one week after installation a Action Research was contracted to count, pick up and weigh pet waste piles on both the north and south sides of the Trail. The south side of the Trail which is paved heavily used by bicycle riders, walkers and runners, did not have as much as the north side of the Trail. This may be due to the fact that the north Trail is not as heavily used as the south trail and the peer pressure to pick after their pets because someone is watching them is not as prevalent as on the south side Trail. Figure 9-2 provides a chart of the number of pet waste piles found on both the north and south side Trails prior to installation and after installation of the dispensers and trash cans. The south side Trail does not show much change in the number of piles. The north side Trail does show a reduction in the piles. But there is still a significant amount of pet waste left along both sides of the Trail even with resources provided for pickup and proper disposal. Additional assessment and outreach is needed to address the ongoing problem of pet waste left along these Trails.

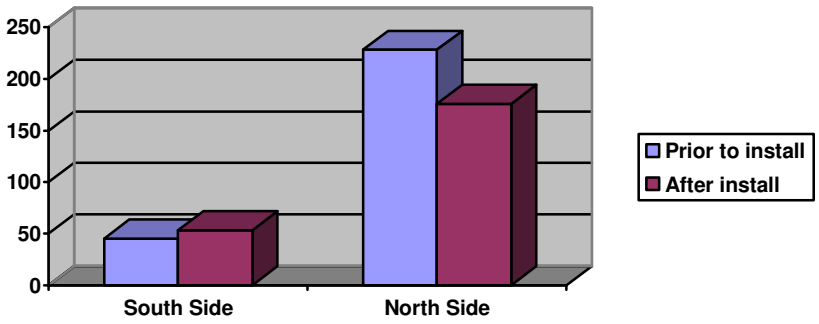

Figure 9-2. Number of pet waste piles found along Trail prior to and after installation of pet waste bag dispenser stations.

One week after installation of the dispensers and trash cans, a contractor was used to assess the specific types of bags being used to dispose of pet waste. The contractor retrieved all of the bags that had pet waste inside from each of the four trash cans. The bags were then categorized to determine the types of bags used to pickup and dispose of pet waste. The majority of the bags used were from the new dispensers. Other bag types used were plastic grocery bags, newspaper

bags, and other miscellaneous bags. Figure 9-3 provides a graph of the types of bags used one week after installation of the dispenser stations.

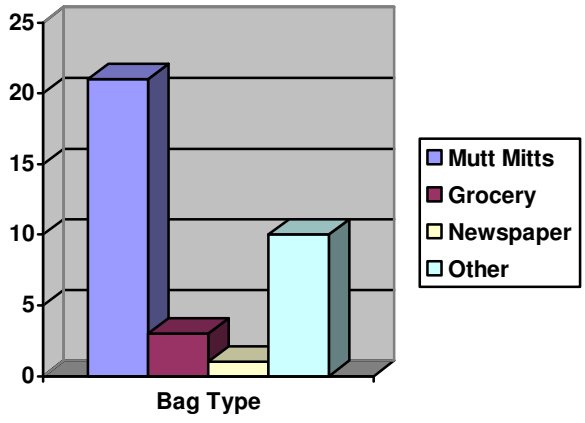

Figure 9-3. Types of bags used along Trail after dispenser station installation.

Ongoing maintenance and stocking of bags is conducted by public works staff throughout the year. During this reporting period approximately 4000 pet waste bags were used from these four dispensers. The number of dispenser bags found in the trash can and the number of bags being replaced in the dispensers demonstrates that this resource is being used by the public. See Attachment 9-C for a copy of the final report for the Pick up your Pet Waste Campaign.

Green Oceanside Campaign

In 2008, a group of city employees from various departments, and divisions, including the Clean Water Program, initiated the Green Oceanside campaign. Green Oceanside is a community awareness campaign that promotes environmental sustainability with support from Oceanside residents and businesses. The mission is to provide the community with the tools needed to be better stewards of the planet through recycling, reducing waste, composting, conserving water, preventing water pollution and conserving energy.

The Green Oceanside campaign includes the implementation of one week of environmental activities that the public can attend. Activities during this week highlight programs and environmental habits that can be implemented collectively throughout the year by the community, non-profit organizations, businesses, and other local agencies. Following is a summary of the Green Week activities.

Green Week 2011

Green Week 2011 was held March 7 – 13, 2011. Several activities were coordinated for Green Week, some prior to and some during the week.

- Green Oceanside Classroom Presentations – These free presentations were available to classrooms and youth groups prior to and after Green Week. Presentation topics included Reduce/Reuse/Recycle, Water Conservation and Water Quality and are promoted throughout the year.

- Youth Art Contest– This poster contest was open to all Oceanside Unified School District students in K-6th grade levels. The theme was "What does Green Oceanside mean to you?"
- Environmental Film Festival – On Tuesday March 8 the film "Bag It" was shown to approximately 60 attendees. This film examines the role of the plastics industry and its effects on our health, climate change, pollution, and our reliance on petroleum oil.
- Green Fair – The culmination of Green Week ended with the Green Fair on March 12, 2011 at which over 30 environmentally conscious organizations and businesses staffed tables to provide information and resources to the public.
- Electronic Waste Drop-off Event – The public had the opportunity to bring unwanted electronic waste for proper recycling and disposal. This event was held on March 12 and was located next to the Green Fair. At this event there were 11.5 tons of universal E-Waste collected for proper recycling and disposal.
- Beach Cleanup – Coastkeeper sponsored a beach cleanup event on the morning of the Green Fair. 315 volunteers participated and removed 411 pounds of trash including 8,799 cigarette butts.
- Local Community Support – several local businesses provided sponsorship money that went toward the purchase of prizes for the youth contest winners and supplies for teachers who had a winning student in their classroom.
- Media/Marketing: In order to ensure the success and longevity of Green Week 2011, the Green Team pursued an assertive media/marketing plan that included coverage with local newspapers, local media/TV, city website, community college website, school bulletins, local announcement community boards, as well as extensive email notification chains amongst the local environmental community. A Green Oceanside section in the local Oceanside magazine, highlighting Green Week 2011, was sent to over 44,000 households prior to the event. See Attachment 9-D for the spring 2011 Oceanside Magazine that included Green Week event information.

Interpublic Education. The City has developed programs to educate the public and various target communities about the JURMP and the numerous ways the public can contribute to reduce pollution of the City's waterways and receiving waters. However, the City recognizes that no matter how many educational programs it implements, there will always be a need for ongoing outreach to various audiences. Therefore, "spreading the word" is another significant effort that the public will be encouraged to participate in that will substantially contribute to the success of the JURMP. When speaking with the public about urban runoff issues, they are encouraged to speak with neighbors about how everyday activities can potentially pollute local waterways.

City Staff Activities. City staff is the public at work. Staff is encouraged to report potential violations and provide feedback on the implementation of the JURMP. City staff is the eyes and ears of the City, and can provide valuable information on which components and programs are working and provide suggestions or recommendations on improving the programs. The City staff is encouraged to use the Oceanside Urban Runoff Hotline (760) 435-5800 for reporting potential runoff violations. In addition, City staff provides feedback during municipal training sessions, information meetings, and by direct contact with the Clean Water Program Manager and staff. Comments are discussed and if changes can be made to better improve the program, then they are planned and implemented.

9.2 Regional Public Participation Opportunities

This section describes those mechanisms available, at the regional level, for the public to participate in to assist in the implementation of regional JURMP related programs and to provide feedback to the Copermittees and contribute to the continuing development of the numerous JURMPs in effect around the County:

9.2.1 Media

Outreach to the public through the media serves as a widespread public education BMP and is an important element of public participation and keeps communication open between government staff and the public. The *Oceanside Magazine* is an economical and effective way to share storm water related information with residents of Oceanside (Attachment 9-D). These magazines were directly mailed to over 44,000 Oceanside households. In addition to the mailing, the magazines are placed in several high traffic locations throughout the City for the public to pick-up.

During Fiscal year 2010-11 all cleanup events and other storm water related information were covered in the *Oceanside Magazine* within the Green Oceanside section:

- 2010 Fall issue
  - Upcoming Green Oceanside events and booths
  - Buena Vista Creek and San Luis Rey River Cleanup events
- 2010 Winter issue
  - Green Week events and Green Fair information
  - Loma Alta Creek Cleanup
  - 2011 River, Creek and Beach cleanup Events
  - Day Without A Bag
  - Water Conservation still necessary
  - Bacteria Source Tracking project update
- 2011 Winter issue
  - Green Week 2011
  - Loma Alta Creek Cleanup
  - 2011 River, Creek and Beach cleanup Events
  - Backyard composting
- 2011 Summer Issue
  - How many Oceanside water bodies can you name?
  - 2011 River, Creek and Beach cleanup Events
  - Easy and convenient ways to save water
  - Free irrigation workshop announcement

During this reporting period two Clean Water Program Newsletters were distributed to over 42,000 households. An overview of topics in these two newsletters is listed below. A copy of these two newsletters is included in Attachment 6-C this annual report.

Fall 2010

- River, creek and beach cleanup event information
- Pick Up Your Pet Waste Campaign - Bag dispensers installed
- Bacteria Source Tracking Project Update

Spring 2011

- Loma Alta Creek Cleanup - April 30, 2011
- Bacteria Source Tracking Project Update
- How many Oceanside water bodies can you name?
- 2011 River, Creek and Beach Cleanup Event Information

Regional Events

San Diego County Fair

The San Diego Regional Storm Water Copermittees sponsored the Envirofair at the 2011 San Diego County Fair (Fair) as an education and outreach activity under the Regional Education and Residential Sources workgroup. The Envirofair was held on Jun 18, 2011 and was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental storm water and pollution prevention message. Details of the activities related to this event will be included in the FY 10/11 Regional Urban Runoff Management Program (RURMP) annual reports.

Copermittee Working Bodies

The Copermittees collectively developed ten (10) Working body groups to coordinate the implementation of regional programs required by the Municipal Permit. Each Copermittee is required to provide at least one representative to each working body. These working bodies meet at least four times per year unless a different meeting frequency is established through unanimous approval of all Copermittees.

During this reporting period the City of Oceanside participated in each working body. In addition the City of Oceanside Co-chaired the Educational and Residential Sources Workgroup. Activities related to each of these ten working bodies during FY 2010-11 will be provided in the Regional Urban Runoff Management Program (RURMP) annual report scheduled to be submitted to the RWQCB in January 2012.

Regional Hotlines and Website

The regional hotlines provide a direct connection for public participation. Historically, the hotlines have worked well and should continue to increase in use as more people are educated of the hotline phone number and the types of issues to report. The City will encourage reporting through its local hotlines, however, the regional hotlines will serve as an alternative to the local hotlines and also provide an opportunity for reporting by visitors to the City, from other areas in the County, who are not familiar with copermittee hotlines.

During FY 2009-10 the ERS Workgroup launched a new regional website: www.thinkbluesdregion.org. This website provides the public with a link to their own jurisdictional stormwater website, a phone number to report potential stormwater violations. And resource links to get storm water related information. More detailed information on the successes of this website will be provided in the Regional Urban Runoff Management Program (RURMP) annual report scheduled to be submitted to the RWQCB in January 2012.

10.0 FISCAL ANALYSIS COMPONENT

10.1 Introduction

The City of Oceanside acquires the funds necessary to facilitate the City's storm water program through four departments or divisions in the City: Water Utilities Department, Public Works Department, Engineering Division and Code Enforcement Division. Much of City's storm water program falls under the responsibility of these four departments/divisions. Funds obtained for use in implementing the City's storm water program are utilized for a number of different programs, including jurisdictional, watershed, and regional programs. This section documents the activities conducted by the City of Oceanside during the 2010-2011 reporting period to meet the requirements of Section G of the Municipal Permit Order 2007-0001 (Table 10-1).

Table 10-1. Order 2007-0001 Fiscal Analysis Compliance Summary.

G.1: Each Copermittee shall secure the resources necessary to meet all requirements of the Municipal Permit.	See Section 10.1 of this Annual Report
G.2. Copermittees shall collectively develop a standardized method and format for annually conducting and reporting fiscal analyses of their urban runoff management programs in their entirety (including jurisdictional, watershed, and regional activities).	See Section 10.2 of this Annual Report
G.3. Each Copermittee shall conduct an annual fiscal analysis.	See Section 10.2.3 of this Annual Report
J.3.a.(3)(j).i Fiscal analysis of City urban runoff management program	See Entire Section 10 of this Annual Report

Effective programs require adequate funding to implement planned activities. The first step in securing adequate funding for the JURMP is to provide a strategy for effectively conducting a fiscal analysis of the JURMP in its entirety. This year's fiscal analysis included an evaluation of the expenditures (such as capital, operation and maintenance, education, enforcement, and administrative expenditures) necessary to accomplish the activities described in the JURMP and required under investigation orders and Total Maximum Daily Loads (TMDLs) mandates.

10.2 Fiscal Analysis Methods

The Municipal Permit requires the Copermittees to develop a standardized method and format for annually conducting and reporting fiscal analysis of their urban runoff management programs. The Standardized Fiscal Analysis Method and Format (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis Method document was submitted to the San Diego Regional Water Quality Control Board by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009. The Municipal Permit further requires the Copermittees to conduct their annual fiscal analysis consistent with the standardized method starting January 31,

2010. The fiscal analysis incorporated in this section is based on the standardized method. This is the first year that the standardized method is being used.

10.2.1 Program Funding

As previously mentioned, the City secures funding for the implementation of the storm water program through the Water Utilities, Public Works Departments, and Engineering Divisions in the City. To secure adequate funding, the Water Utilities Department collects a Clean Water Program surcharge. The surcharge is based on the customer's water consumption, so the surcharge is also designed as an incentive for individuals to conserve water. This amount is equal to $0.07 per unit of water used.

The City Engineering Division as part of the Development Services Department secures funding from development-related programs. The Engineering Division receives funding through fees assessed on developers for grading plan checks and inspections. Funding for Public Works departments is obtained through general fund allocations to the department.

The Standardized Fiscal Analysis Method includes a Standardized Fiscal Analysis Reporting Form, which consists of three tables separating jurisdictional, watershed, and regional expenditures. Jurisdictional expenditures are divided into components that mirror those included in the Municipal Permit as follows:

Administration
Development Planning
Construction
Municipal
Industrial and Commercial
Residential
Illegal Discharge Detection and Elimination (IDDE)
Education
Public Participation
Special Investigations
Non-Emergency Firefighting

Further, each of the above categories may be broken down into sub-categories. Potential Sub-categories may include:

Land Use Planning
Environmental Review
Development Project Approval and verification
Public Construction Projects
Private Construction Projects
Public Reporting of Illicit Connection or Illegal Discharges (ICIDs)
Jurisdictional Urban Runoff Monitoring Programs
Other

Expenditure items to be considered for each category or sub-category may include:

Administration
Permitting and Licensing
Project Planning and Engineering
Maintenance Inspections
Compliance Inspection and Enforcement
BMP Implementation
Educational Outreach
Waste Collection and Recycling
Jurisdictional Urban Runoff and Receiving Water Monitoring
Other Expenditures

For reporting purposes, only the table incorporating major jurisdictional components will be used. Sub-categories and expenditure items are intended to provide standardization of expenditures and need not be shown in the final report.

10.2.2 Urban Runoff Management Programs

The City's storm water budget is used to support the following departments/divisions:

- Water Utilities Department - Administration of the City's Clean Water Program
- Water Utilities Department – Clean Water Program Compliance Inspectors
- Development Service Department, Engineering Division – Storm water plan review, SUSMP and HMP
- Development Service Department, Engineering Division - Capital Improvement Projects
- Public Works Department - Storm Drain Maintenance
- Public Works Department - Solid Waste
- Public Works Department - Street and Median Maintenance
- Neighborhood Services Department – Code Enforcement Division

Personnel from various City departments and divisions are involved in the implementation of the City's storm water program. Refer to Section 2 and the City's certification letter in Appendix A, pages 2 and 3, of the City's 2008 JURMP for further detail regarding the responsibilities of various departments. Other program expenditures include watershed and regional storm water activities.

10.2.3 Expenditure and Budget Reporting

Following are the expenditures for fiscal year 2010-11 as well as a proposed budget for the next fiscal year. The fiscal year expenditures are presented in tabular format with separate rows for different expenditure categories and the associated budget. The budget for the next fiscal year is presented in the same table. See Table 10-2.

The JURMP budgeting for the Water Clean Water Program which includes various departments is described in the following sections and summarized in Table 10-2 at the end of this section. Currently there is eight staff people dedicated to the City's Clean Water Program.

- One full-time Clean Water Program Coordinator

- Two full-time Environmental Specialists (focusing on water quality monitoring, education outreach, and program administration)
- Two full-time CWP inspectors
- One full-time Engineering Assistant (focusing on SUSMP and HMP)
- Two full-time Code Enforcement Officers

10.2.3.1 Water Utilities Department

The surcharge rate described above under Program Funding is listed as a separate line item on Oceanside customers' utility bills. This allows for the clear delineation of the revenue being secured for the Clean Water Program in the Water Utilities section of the utility bill. The costs to administer the Clean Water Program during Fiscal Year 2010-11 totaled $1,131,730. It is anticipated that the Water Utilities Department will expend $1,313,274 during Fiscal year 2011-12.

10.2.3.2 Public Works

The City calculated the curb miles swept for the reporting period and they totaled 28,954 miles. The overall cost of the City's street sweeping program during FY 2010-11 was estimated to cost $1,450,977. This includes $677,505 for equipment costs and $773,472 for staff costs. With a total of 28,954 curb miles swept in the City at a cost of $1,450,977, this averages out to $50.11 per curb mile.

The cost for inspection and maintenance of the MS4 was $223,952 during this reporting period and. Budgeted costs for FY 2011-12 for MS4 maintenance are $370,000. During fiscal year 2010-11 the Public Works Department spent approximately $1,739,929. It is anticipated that the Public Works Department will expend $1,885,000 during Fiscal year 2011-12.

10.2.3.3 Engineering

Municipal Permit Order 2007-001 requires an increased focus and effort in development-related review and inspection, development of a Hydromodification Plan and revisions to the Standard Urban Storm Water Mitigation Plan. The approximate costs to implement this program during Fiscal year 2010-11 totaled $95,849. It is anticipated that Engineering Department will expend $100,000 during Fiscal year 2011-12.

10.2.3.4 Overall Clean Water Program Costs

During Fiscal Year 2010-11 approximately $2,967,508 was expended amongst the departments for the implementation of the Clean Water Program. It is anticipated that the total program costs for Fiscal Year 2011-12 will total $3,298,274.

Table 10-2. JURMP Budgeting for Water Utilities, Public Works and Engineering Departments/Divisions.

Department	Item	Fiscal Year 2009-2010	Fiscal Year 2010-2011	Projected Fiscal Year 2011-2012
Water Utilities	Personnel (including Code Enforcement)	$686,260	$752,433	$675,958
	Misc. office supplies, postage, uniforms	$4,700	$303	$3,000
	Print Materials	$34,500	$18,270	$34,000
	Monitoring Programs including lab materials, supplies and services	$89,000	$21,183	$46,500
	Other Misc – Cleanups and booths	$2,000	$20,000	$20,500
	Consultant Fees – Investigation Order, TMDL	$250,800	$156,689	$255,660
	Independent Contractors	0	0	0
	Permits	$25,000	$27,178	$36,000
	Dues, Travel, Advertising	$8,950	$2,099	$3,500
	Equipment – UV	$5,000	$1,673	$16,000
	Regional Copermittee Cost-share; Monitoring, RURMP, WURMP	$147,248	$131,902	$146,000
	Vehicle Maintenance			$76,156
Water Utilities	**Total**	**$1,253,458**	**$1,131,730**	**$1,313,274**
Public Works	Street Sweeping (Equipment)	$478,000	$677,505	$675,000
	Street Sweeping (staffing and /or contract costs)	$503,000	$773,472	$775,000
	Conveyance System Cleaning (Contracted Work and City Staff	$369,597	$223,952	$370,000
	Personnel for CWP Monitoring	$65,000	$65,000	$65,000
Public Works	**Total**	**$1,415,597**	**$1,739,929**	**1,885,000**
Engineering Division	Personnel	$130,000	$95,849	$100,000
	Hydromodification Plan	$0	$0	0
Engineering Division	**Total**	**$130,000**	**$95,849**	**$100,000**
	Grand Total	**$2,799,055**	**$2,967,508**	**$3,298,274**

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11.0 EFFECTIVENESS ASSESSMENT COMPONENT

11.1 Introduction

Effectiveness assessment is an important component of the JURMP because it can assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The San Diego County Copermittees developed two guidance documents to assist in the assessment of the JURMP components as well as the jurisdictions overall JURMP program. These two documents are titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* and the *Baseline Long-term Effectiveness Assessment* (BLTEA). The City participated in regional efforts to develop these documents in anticipation of the requirement to assess their JURMP programs.

The City gathered and evaluated data for some of the program components for assessment during this reporting period. This data will be valuable for incorporation into long-term effectiveness evaluation on a jurisdictional level. In future reporting years, the issue of standardized assessment metrics and procedures will be addressed by the Copermittees. The City anticipates participation in the further development of these work products.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes.

Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique. The effectiveness assessment approach developed by the Copermittees during the 2005-06 permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

- Level 1: Compliance with Activity-Based Permit Requirements
- Level 2: Changes in Knowledge/Awareness

- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

The establishment of measurable outcomes is necessary for both incremental program component improvements and as a basis for future establishment of relationships between implementation and water quality improvement outcomes.

11.2 Effectiveness Assessment Results

The Municipal Permit Order 2007-0001 requires the City to assess the effectiveness of each significant activity specific to each program component, for each program component as a whole, and for the storm water program as a whole. Levels 1, 2, 3, 4, 5, and 6 outcomes are discussed in the text below. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome level assessments

Level 1 – Compliance with Activity-Based Permit Requirements: Documenting Activities

Compliance with Activity-based permit requirements is intended to provide a quantitative assessment that reflects the regional long-term effectiveness assessment framework through targeted outcomes for the City based on various components of the Municipal Permit. Level 1 outcomes take the form of a simple yes or no answer basically answering "Was the control measure completed?" or it may provide feedback that may be quantified, counted, or tracked over time to demonstrate effort or progress.

Level 2 – Changes in Knowledge/Awareness: Raising Awareness

An important goal of stormwater programs is to increase the level of knowledge and awareness among target audiences such as residents, businesses, and municipal employees. Level 2 outcomes provide program managers feedback on how effective the various control measures have been in raising awareness and changing attitudes of the target audience.

Level 3 – Behavioral Change/BMP Implementation: Changing Behavior

A key focus of the stormwater management program is to affect changes in behavior. By building increases in knowledge and awareness (Level 2), Level 3 outcomes provide program managers with feedback on how effective the program elements and control measures have been in motivating target audiences to change their behaviors and implement appropriate BMPs.

Level 4 – Load Reductions: Reducing Loads from Sources

Many control measures are intended to reduce the loading of pollutants from targeted sources. Load reductions should, in turn, result in improvements to discharge and

receiving water quality. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning.

Level 5 – Changes in Discharge Quality: Improving Runoff Quality

A primary focus of stormwater management programs is to reduce pollutants in stormwater to the maximum extent practicable, and to ensure that these discharges do not cause or contribute to violations of water quality standards in receiving waters. At this level baseline measurements of runoff quality are measured to allow comparison. Multi-year data sets are needed in order to have any confidence in the measured change.

Level 6 – Changes in Receiving Water Quality: Protecting Receiving Water Quality

The ultimate objective of stormwater management programs is the protection of water bodies. At level 6, program mangers will focus on outcomes such as compliance with water quality standards, protection of biological integrity, and beneficial use attainment.

Summary

Program elements and control measures will typically have outcomes at more than one of the levels described above and not all outcome levels will necessarily be applicable to all activities. The information submitted with this report will address levels 1, 2, 3 and 4. Section 7 of this report, IDDE, will be submitted prior to December 15 and will address level 5.

11.2.2 Overall Component Assessments

11.2.2.1 Development Planning

The application of the Hydromodification Management Plan (HMP) to all Priority Development Projects (PDPs) and the continued implementation of the unified Low Impact Development (LID) design approach have appeared to increase the level of misunderstanding experienced by the development community, as compared to the previous reporting period. The seeming inability to accept the upgraded mitigation requirements can be attributed to a number of factors.

Perhaps the foremost reason for the marked decline in the ability to demonstrate an understanding of current storm water mitigation principles is the prevailing economic climate. Developers and consultants have not been involved in projects and therefore have not had the funding or incentive to keep abreast with current MS4 and Construction General Permit (CGP) regulations. Because the development community has experience a prolonged period of reduce or no activity, projects that were “mothballed” five-years ago are being reconsidered, only to find entire project concept is infeasible due to current regulations.

Another factor to consider is the cost associated with the implementation of the unified LID design approach, inclusion of HMP facilities, compliance with the CGP, and establishment of an O&M Plan. The cost of design to support these concepts, facilities, and compliance documents is significant. Unified LID design requires accounting of all surface types and Drainage Management Areas (DMAs). The complexities associated with HMP requires a specialized knowledge and a level of expertise that greatly adds to

capital expenditures of designing a development project; often eclipsing the combined cost of a mitigation plan and hydrology study. Meanwhile, compliance with the CGP requires the development and implementation of as SWPPP which by itself can add the expense of one-half full-time employee to a construction project. And finally, the O&M component adds yet another design and implementation expense to the final stage of a project.

Yet another consideration weighed by the development community, which creates a degree of frustration, is the land area obligations associated with LID and HMP. The development community is experiencing land appropriations to satisfy unified LID design and HMP requirements ranging from a minimum of 4% to as much as 20% of the developable project area. The material cost alone for HMP facilities begins in the tens of thousands of dollars and more typically ranges in the hundreds of thousands of dollars.

When considering all these factors, the development and consultant communities, are on the whole, unable to accept additional regulation and are somewhat frustrated with what is perceived to be storm water mitigation approaches that are "ever-changing", "too restrictive", and "too costly". In short, many developers are simply foregoing development because projects "no longer pencil-out".

The City SUSMP

The SUSMP has been updated and expanded to include revised HMP requirements, consistent with the Municipal Permit, and clarifications to the unified LID design approach. The SUSMP includes specific definitions and design parameters for the integration of porous concrete, bioretention facilities, flow-through planters, dry wells, infiltration basins, cisterns, and surface ponds. There are also provisions for implementation of higher-rate biofilters or higher-rate vault based filtration units on redevelopment or retrofit projects.

Project remain obligated to incorporate source control design features to mitigate pollutants from on-site land use or sources, such as trash enclosures, outdoor storage areas and vehicle washing. The SUSMP contains BMPs designed to address the pollutant sources and provides corresponding list of mitigation practices.

The most significant revision to the SUSMP was the inclusion of HMP as applied to all Priority Development Projects (PDPs). Direct reference is made to the San Diego County HMP and decision matrices are provided to determine applicability, susceptibility, and etc. In addition, the SUSMP includes BMP sizing tables that enable applicants and design professionals to quickly assess HMP facility requirements. Other methods of addressing HMP requirements, such as the online BMP Sizing Tool, HSPF, HEC-HMS, and SWMM are available to the development community.

By following the SUSMP unified LID design approach and addressing the HMP requirements, applicants are able to develop an integrated design which complies with the complex and overlapping NPDES permit. The updated SUSMP is available at the City of

Oceanside – Development Services counter or may be downloaded from the City Development Services Department – Engineering Division webpage.

Interdepartmental Coordination
The City's SUSMP and development review process involves multiple Departments and Divisions throughout the City. The City has taken necessary steps to maintain compliance with SUSMP requirements through the coordination of these multiple departments and divisions.

Dedicated Storm Water Management Program
The City established the Clean Water Program (CWP) in 2001 under the Water Utilities Department. During this reporting period the CWP program in conjunction with the Engineering Division provided the necessary oversight for all management components of the SUSMP.

Table 11-1. Development Planning – Level 1: Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measures of Success	
Development Planning D.1.e	Development Projects	# Projects requiring SWMP	# Projects completing SWMP	Actual/Target	Percent (%) Completion
	Priority Projects (Required PDP-SWMP)	26	11	11/26	42
	Standard Projects (Require SDP-SWMP)	3	1	1/3	33
	SUSMP Inspections	# Sites targeted for Inspection	# Sites Inspected	Actual/Target	%
	High Priority Sites (Annual)	18	16	16/18	89
	All Sites (Target: 20% of 139)	27	40	40/27	148

The 42% and 33% SWMP completion rates indicate that many of the projects remain in the process of developing an SWMP. The actual number of SWMP reviews per project may vary significantly. Some projects obtain plan approval in the second review cycle, while others may require as many as ten review cycles to produce a SWMP that is consistent with the Municipal Permit and SUSMP. The average project requires three to four reviews to obtain approve of the SWMP.

As the City develops more projects which are subject to the requirements of the Municipal Permit, the inherent challenges associated with data management will emerge such as tracking of post-construction Treatment Control BMPs, maintenances

agreements, and associated documents become more numerous. To counter the possibility, the City Development Services Department, which includes Code Enforcement, Building, and Engineering Divisions, chose CRW Systems, Inc. program called TRAKiT® as a data tracking system which was rolled out in the 2009-10 reporting year. See section 3.2.1 of this annual report for more detailed information about the TRAKiT® database.

11.2.2.2 Construction

The construction component of the City's JURMP continues to be effectively implemented through inspection and enforcement, education and training and BMP maintenance (Table 11-2). As construction activities continue, the City will maintain the level of performance established from past years, and continue to meet the regulatory standards mandated in the Municipal permit.

Table 11-2. Construction – Level 1: Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measures of Success	
Development Planning D.2.d	Construction Projects	# sites targeted for Inspection	# sites inspected	Actual/Target	Percent (%) Completion
	High Priority Sites	18	18	18/18	100
	Medium Priority	17	17	17/17	100
	Low Priority Sites	12	12	12/12	100

11.2.2.3 Municipal

The municipal component of the City's JURMP continues to provide a well-rounded approach and will continue to implement a comprehensive education program along with inspections of municipal facilities, MS4 maintenance, sanitary sewer slip-lining and street sweeping.

Table 11-3 provides the Level 1 Compliance with Activity-Based Requirements and Level 4 - Load Reductions Reducing Loads from Sources.

Table 11-3. Municipal – Level 1: Compliance with Activity-Based Requirements; Level 4 - Load Reductions: Reducing Loads from Sources.

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.a	Municipal Facilities	# of sites to be inspected	# of sites actually inspected	Actual/Target	Percent (%) Completion
	(High, Medium and Low priority facilities)	176	176	176/176	100
	MS4	# of catch Basins to be cleaned	# of catch Basins actually cleaned	Actual/Target	Percent (%) Completion
	Catch basins cleaned	3,250	3,297	3,297/3,250	101
	Sanitary Sewer	# of feet to be slip-lined	# of feet actually slip-lined	Actual/Target	Percent (%) Completion
	Feet of sewer slip-lined	300	302	302/300	100
	Street Sweeping	# of miles of streets to be swept	# of miles of streets actually swept	Actual/Target	Percent (%) Completion
	Curb miles of street swept	28,954	28,954	28,954/28,954	100

In addition the City implemented a training program that provided pre- and post-quizzes to assess the effectiveness of the training course specific to some departments or divisions. During the 2010-11 reporting year, 318 City and contractor staff was trained on the City's storm water program requirements. Pre- and post- tests were given to some groups to assess the level of knowledge before and after each training session. 105 City employees took both the pre- and post-test. The other 213 trainees either completed a pre or post-test or their group only received a customized power point presentation.

Depending on the nature of the employee's department, the employees were given a 15 or 20 question test. The 15-question test targeted City staff that worked in various departments including fleet maintenance, parks and recreation and street maintenance. The 20-question test targeted staff that work at and maintain industrial facilities. The average City pre-test score was 78% percent of the questions correct. The average City post-test score was 96% percent of the questions correct. Figure 11-1 presents the pre- and post-test scores by City department.

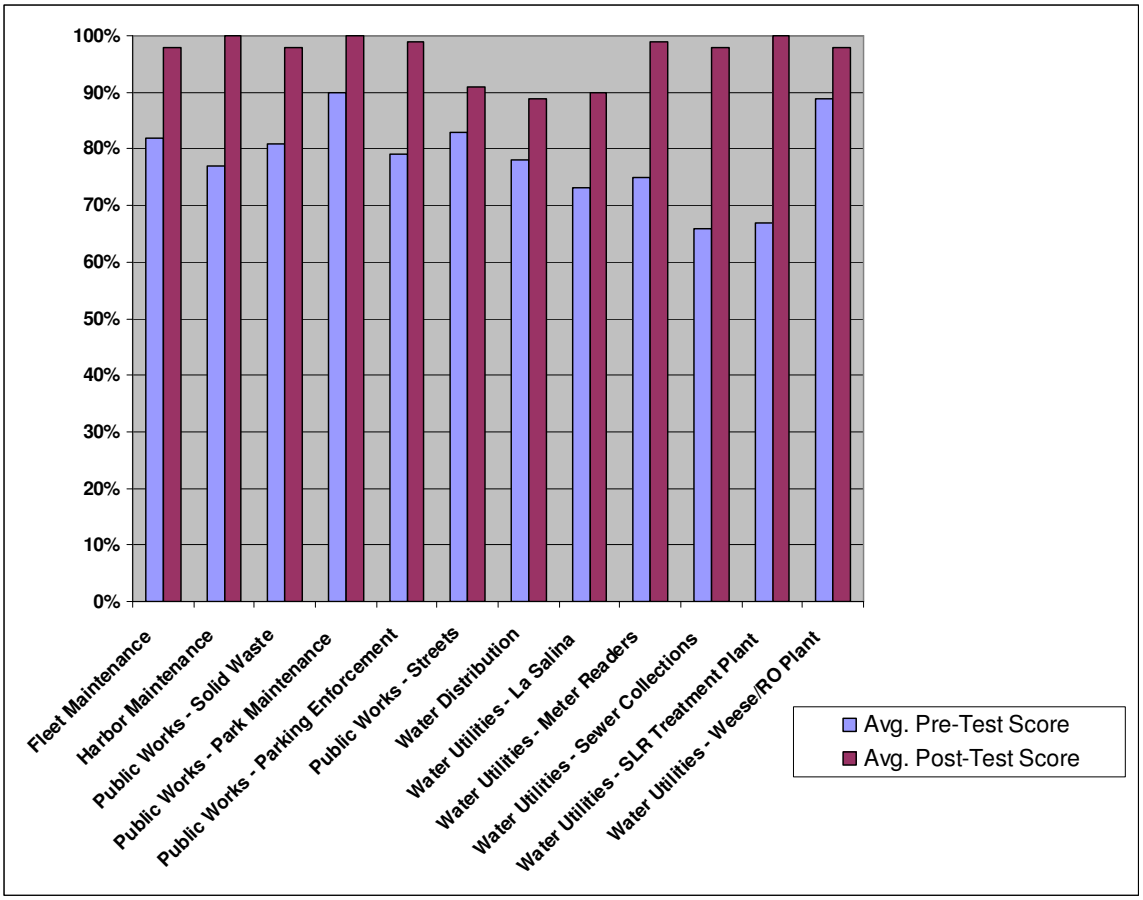

Figure 11-1. Municipal – Level 2: Changes in Knowledge/Awareness: Raising Awareness.

11.2.2.4 Industrial and Commercial

The City implements a comprehensive inspection program for industrial and commercial facilities including all restaurants and nursery and greenhouse operations. Table 11-4 provides an assessment for the inspections.

Table 11-4. Industrial and Commercial Component - Level 1: Compliance with Activity-Based Requirements.

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.b	**Industrial Facilities**	# of sites to be inspected	# of sites actually inspected	Actual/Target	Percent (%) Completion
	High Priority Facilities	10	10	10/10	100%
	Medium and Low Priority Facilities	As Needed	14	14/27	N/A
	Commercial Facilities	# of sites to be inspected	# of sites actually inspected	Actual/Target	Percent (%) Completion
	High Priority Facilities	556	556	556/556	100%
	Medium and Low priority facilities	As needed	105	105/1335	N/A
	Commercial and Industrial Facilities	# of sites to be inspected	# of sites actually inspected	Actual/Target	Percent (%) Completion
	All Inventoried Facilities (25% of 1,942 Facilities)	486	685	685/486	35% (Exceeded 25% Requirement)

A new asset management software tool was implemented during the 2009-10 reporting period for the industrial and commercial NPDES inspections. Several discrepancies were found throughout the year, such as duplicate records, inadvertently changed priority levels, and missing, new, or out of business facilities. As these were found, the inventory list in the software was updated. However, as with any new technological tool, updating and using a changing list was a challenge in the first year.

During the current reporting period a comprehensive review of 3,000 records was completed and inventory in the database was updated when necessary revisions were found.

11.2.2.5 Residential

The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. The City is also conducting additional monitoring studies to help identify and mitigate residential sources of pollution more effectively. Although fewer households participated in dropping off household hazardous waste during this reporting period, more quantity of household hazardous waste was collected for proper disposal (Table 11-5).

Table 11-5. Residential Component - Behavioral Change/BMP Implementation Changing Behavior.

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measures of Success	
Residential D.3.e	Household Hazardous Material	Quantity of waste targeted	Quantity of waste collected	Actual/Target	Percent (%) Completion
		130 tons	146.5 tons	146.5/130	112
	Households Participating in Program	# of households targeted	# of households participating	Actual/Target	Percent (%) Completion
		3,500	2,289	2,289/3,500	65

11.2.2.6 IDDE

An assessment of this component will be provided in Section 7 when the City submits the entire FY 2010-11 Illicit Discharge Detection and Elimination Component, including the 2010 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2011.

11.2.2.7 Education and Public Participation

The City implements a comprehensive education outreach program for both municipal staff and the public as well as a comprehensive public participation program (Table 11-6). See 11.2.2.3 above for an assessment of the Municipal training program. The City prides itself on educating children within its jurisdiction through the use of a watershed model and the Project SWELL curriculum incorporated into the 5th grade science curriculum.

Table 11-6. Education and Public Participation Component - Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity/Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.g	Student Presentations	# of presentations targeted	# of presentations completed	Actual/Target	Percent (%) Completion
		10	21	21/10	210
	CWP Newsletters	# of newsletters targeted for completion	# of newsletters completed	Actual/Target	Percent (%) Completion
		2	2	2/2	100
	Oceanside Update Tapings	# of tapings planned	# of tapings completed	Actual/Target	Percent (%) Completion
		6	9	9/6	150
	CWP Website	# of targeted hits	# of actual hits	Actual/Target	Percent (%) Completion
		45,000	60,319	60,319/45,000	134

11.3 Program Review and Modification

No changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

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12.0 SPECIAL INVESTIGATIONS

12.1 Lower San Luis Rey Bacteria Source Identification Project

12.1.1 Overview

Project Background

The Pacific Ocean shoreline at the outlet of the San Luis Rey (SLR) River mouth, located in the City of Oceanside, is a stretch of coastline with a large sandy beach and an easily accessible surf break, making it one of the city's most popular places for recreation. As a result of historical fecal indicator bacteria (FIB) exceedances at the beach, one-half mile of shoreline is listed as an impaired water body under section 303(d) of the Clean Water Act for exceedances of indicator bacterial standards and is included in the recently adopted Total Maximum Daily Load (TMDL) for Fecal Indicator Bacteria, Project I for Beaches and Creeks in the San Diego Region (Bacteria I TMDL).

To address the elevated levels of FIB and in anticipation of the TMDL, the City applied for and was awarded the State Water Resources Control Board (SWRCB) Proposition 50 Clean Beaches Initiative Grant Program to implement the Lower SLR River Bacterial Source Identification Project. The overall goals of the Project were to identify hotspots of FIB within the Lower SLR River, identify potential sources, and prioritize those sources and/or locations for future management measures to reduce bacteria concentrations.

Grant Award

The City received $554,375 from the SWRCB and, with the assistance of other stakeholders, was budgeted to match $141,750 to implement the source identification project in the lower river and river mouth. The City awarded MACTEC Engineering and Consulting, Inc. (MACTEC) and their team of leading scientists the contract for the organization and completion of the study.

Project Overview

The Lower SLR River Bacterial Source Identification Project was designed as the initial phase of a source investigation to provide a broad characterization of bacterial concentrations throughout the SLR River and river mouth. The Project was designed to attain the following goals:

- Assess what sources and activities have contributed most to the bacterial impairment of the SLR River mouth and from where those sources and activities may have originated.
- Analyze potential bacterial source elimination or reduction practices targeted at the identified sources and activities.
- Contribute to future achievement of bacterial TMDL objectives by identifying potential management measures (MMs) and follow-up studies to target sources and activities more effectively.

The Project goals were accomplished by integrating data from the following independent monitoring programs:

- The Microbial Source Tracking (MST) Program was implemented by the Prop 50 Grant Project team. The MST Program included monitoring 11 sites within the lower 7.5 miles of the SLR River during wet and dry conditions, a tiered analytical approach for microbial source tracking, and a visual observation program to identify upstream activities in the watershed that may be potential sources of bacteria.
- The Joint Monitoring (JM) Program was completed by the City of Oceanside and the County of San Diego, Department of Public Works as in-kind services to the Grant. Monthly dry weather monitoring was conducted at 18 locations within the lower 19.2 miles of the SLR Watershed.
- The Department of Environmental Health (DEH) AB411 Program was conducted by the County of San Diego, Department of Environmental Health. Weekly dry weather monitoring of the Pacific Shoreline was conducted 75 feet south of the SLR River outlet.

During the MST Program, the main component of the grant, water samples were collected during dry and wet weather for FIB and microbial source tracking analysis in the SLR River mouth, the main stem of the river, and tributary locations. Visual observations were conducted in conjunction with sampling activities, when possible, within 14 zones of residential, commercial, and/or park areas. The MST dry season monitoring was implemented in 2008 and 2010 between the months of May to August. There were a total of four dry season sampling events; two events per year. Due to the Stop Work Order from the State, there was no activity on the Project during 2009. Wet season monitoring was conducted in 2010 and 2011 during the months of December to February. Wet season monitoring events consisted of a dry weather baseline event, two wet weather (storm) events, and two (dry weather) base flow events.

All FIB results from the MST Program were compared to selection criteria based on the Basin Plan Rec-1 WQOs in order to identify samples for further microbial source analyses. This multi-tiered approach utilizes a tool box of traditional fecal indicator bacterial analyses and quantitative molecular assays that are optimal for microbial source tracking in urban environments. These include:

- Three quantitative polymerase chain reaction (QPCR) fecal *Bacteroides* spp. assays were conducted to confirm the presence of human fecal bacteria, taking into consideration a spectrum of specificity and sensitivity.
- Enterovirus assays quantified the enteric viral concentrations present in water samples and were used as a tool to characterize the threat to human health.
- A gull specific marker, *Catellicoccus marimammalium*, was used to provide important information about the impact of seagulls in the SLR River.
- A bacterial community analysis was used to characterize the bacterial communities in the water column and sediment in the river mouth during dry weather.

The City of Oceanside and the County of San Diego conducted the Joint Monitoring Program over the entire project duration. Water samples were collected monthly at main stem, tributary, river mouth, and AB411 locations during dry weather for the JM Program.

12.1.2 Activities completed during previous reporting periods

Establishment of a TAC

A Technical Advisory Committee (TAC) was established for the Project to be involved in all aspects of the project, including project approach and oversight of the monitoring and reporting. There were six members representing the following agencies: the Regional Water Quality Control Board, County of San Diego, City of Vista, and San Diego Coastkeeper. In addition to there were three representatives from the City of Oceanside. Two TAC meetings were held in FY 2008-09. One TAC meeting was held in FY 2009-10.

Monitoring Plan and Quality Assurance Project Plan Approval

The SWRCB approved the original Quality Assurance Project Plan (QAPP) and Monitoring Plan (MP) on June 19, 2008. Revisions throughout the duration of the Project were made to adjust for laboratory changes, genetic analyses updates, and to update the monitoring schedule.

First Dry Season Monitoring Events 2008

The first dry season monitoring event took place on June 18 and 19, 2008. The project team collected bacteria samples and flow measurements at six monitoring locations in the Lower San Luis Rey River. The bacteria samples were analyzed for fecal indicator bacteria and the remaining sample volume was filtered and frozen for molecular analysis. The river mouth was not sampled, as planned, due to construction of the Pacific Street Bridge.

The second dry season event took place on July 23 and 24, 2008. The project team collected bacteria samples and flow measurements at five of six monitoring locations in the Lower San Luis Rey River. As part of the Visual Observation Program, observations were conducted July 23 and 24, 2008 within the Lower San Luis Rey River and upstream in the drainage basin to identify possible sources of bacteria. The river mouth was again not sampled, due to construction of the Pacific Street Bridge.

Suspension of Funds from State Water Resource Control Board, Dept. of Finance

On December 19, 2008, the SWRCB issued a Budget Letter that suspended all projects including the Lower San Luis Rey Source Identification Project. All work was stopped. The work completed after this notice was primarily to assess the status of various elements of the project, including laboratory work and the effect of the stop work notice on genetic analysis. Unfortunately, during the year-long stop work order, samples for two of the three types of genetic analyses had expired and were therefore no longer available for use to the program. During this period, samples were analyzed only for *Enterovirus A* by Dr. Jed Furman's laboratory at the University of Southern California.

The monthly joint monitoring program conducted by the City of Oceanside and the County of San Diego continued as modified for the grant project until June of 2009. In June 2009, the City and County agreed to continue the monitoring program, but the City brought the monitoring in-house to the San Luis Rey Wastewater Treatment Plan Laboratory. The same field procedures were followed, but the reporting limits changed to above SWAMP recommendations.

Reinstatement of Funds from State Water Resource Control Board

On December 17, 2009, the State Water Resources Control Board gave the City of Oceanside notice that the Lower San Luis Rey Source Identification Project grant had been selected to restart. With an original grant end date of March 31, 2010, the City of Oceanside, on January 4, 2010, submitted a Request for Time Extension in order to complete the remaining two-thirds of the field and laboratory work required.

The monthly joint monitoring conducted by the City of Oceanside and the County of San Diego supplementing the grant field work restarted immediately. On April 14, 2010, the City of Oceanside received the executed amendment to the Grant Agreement and work began then to restart the project.

Dry Season Monitoring Events 2010

The third dry season monitoring event in the Lower San Luis Rey River/River Mouth was implemented on May 18, 19, and 20, 2010. On May 18, 2010, The City of Oceanside and the County of San Diego conducted the joint monitoring at 17 locations in Lower San Luis Rey River and the grant project team collected composite water samples and sediment samples at five locations in the River Mouth. In addition, the City of Oceanside collected additional samples at each Watershed monitoring location for potential further genetic analysis on upstream sites within the City boundary. On May 19 and 20, 2010, the grant project team collected composite water samples and sediment samples at five locations in the River Mouth and composite water samples at two river locations (Bonsall Bridge and Benet Bridge). The Visual Observations Program was implemented on the first day of sampling, May 18, 2010. Two teams of two walked a total of four locations adjacent to the river mouth. Activities completed during current reporting period

12.1.3 Activities completed during the current reporting period

Dry Season Monitoring Events 2010 (Continued)

The fourth dry season monitoring event in the San Luis Rey River Mouth was implemented on August 3 and 4, 2010. On August 3 and 4, 2010, the grant project team collected composite water samples and paired sediment samples at four locations in the River Mouth. A total of eight water samples and eight sediment samples were collected for the August Event. The river mouth had closed naturally, a common occurrence during this time of year, and the sampling point furthest west, Point Zero, was still included as one of the four sampling locations. During this event, bird populations were observed bathing and wading at this site.

Wet Season Monitoring Events 2010-11

The baseline monitoring event in the San Luis Rey River Mouth was implemented on December 9, 2010 and December 15, 2010. On December 9, 2010, the grant project team collected composite water samples at seven locations in the river and river mouth. On December 15, 2010, one composite water sample was collected at the Critical Point. A total of eight water samples were collected for the Baseline Event. The river mouth was open to tidal influence at the time of sampling. During this event, bird populations were observed bathing and wading around an island that formed near the River Mouth Site 1. The Visual Observations Program was implemented on December 9th. Two teams of two walked a total of five zones adjacent to the river mouth and the river adjacent to Douglas Bridge.

The first storm event sampling began on January 3, 2011. Samples were collected at nine monitoring locations on January 3, 2011 and January 4, 2011. Samples on January 3, 2011 were collected on the rising limb of the hydrograph (based on flow data from the USGS Station at Benet Bridge (Critical Point)). Samples on January 4, 2011 were collected on the falling limb of the hydrograph after the peak flow had occurred (based on flow data from the USGS Station at Benet Bridge (Critical Point)).

Following the first storm event, a baseflow event was conducted and samples were collected at nine monitoring locations on January 20, 2011 subsequent to an advisory posting of the river mouth by County Department of Environmental Health.

The second storm event began on February 17, 2011. Samples on February 17, 2011 were collected on the rising limb of the hydrograph (based on flow data from the USGS Station at Benet Bridge (Critical Point)). Samples on February 18, 2011 were collected between the peak and falling limb of the hydrograph (based on flow data from the USGS Station at Benet Bridge (Critical Point)). On February 14, 2011, two teams conducted visual observations in Zones 5, 6, 8, 9, 11, and 12. Based on the weather forecast, the team conducted visual observations of sources of bacteria in the watershed that had the potential to be introduced into runoff during the coming storm event.

A second baseflow event was conducted on February 24, 2011 after the second storm event. Samples were collected at nine monitoring locations on February 24, 2011, which was 72 hours after rainfall ended. Also on February 24, 2011, two teams conducted visual observations in Zones 1, 5, 6, 11, 12, and in the downstream portion of the Sleeping Indian watershed.

Project Report

During FY 2010-11 all monitoring activities had been completed for the Grant Project. The Draft Final Report is due to the SWRCB on August 1, 2011. The Final Report is due September 1, 2011. Final results will be reported in the FY 2011-12 JURMP Annual Report.

12.2 Loma Alta Creek Ultraviolet Light Treatment Facility

12.2.1 Overview

Loma Alta Creek Lagoon and Buccaneer Beach, located in the City of Oceanside, have historically been impacted by high levels of bacteria. This is a family beach adjacent to a park with a large parking area, showers and an eating establishment that sees large crowds during the dry months. The City has determined that a key source of bacteria and nutrients in Loma Alta Creek is urban runoff that discharges into the creek. The source of water for Loma Alta Creek is from storm drain flows and hillside seepage from the Loma Alta watershed, which drains approximately 6,400 acres, and flows through densely developed residential, commercial, and industrial land uses.

In 2005, the City was awarded a $5,000,000 Proposition 40 Clean Beaches Initiative (CBI) grant by the SWRCB to construct an ultraviolet (UV) light treatment facility at the existing La Salina Wastewater Treatment Facility. One hundred percent of the dry weather creek flows (averaging

300 to 700 gallons per minute) will be intercepted in the lagoon and diverted to the UV treatment facility, located on the northern bank of the creek. The treatment facility consists of piping flows from an exiting diversion structure by gravity from the lagoon through a 2 micron fine screen to a wet well where the flow is pumped into two large sand filters followed by two UV disinfection units housed in a reinforced concrete building. The treated water is discharged through a pipe extended along the existing section of rip-rap that runs along the north side of the Loma Alta creek outlet at Buccaneer Beach. During wet weather months (November through April), the lagoon would be opened to allow free flow to the ocean and the UV system would be bypassed. See Figure 12-1 for a photo of the facility.

Figure 12-1. Oceanside Loma Alta Creek UV Facility

12.2.2 Activities completed during previous reporting periods

The California Coastal Commission approved Permit No. 6-06-152 for construction of the outfall pipe associated with the UV treatment facility on June 14, 2007. Loma Alta Creek UV Treatment Facility project entered into the construction phase on August 13, 2007 when the official Notice to Proceed was issued to Orion Construction Corporation.

Each year the Loma Alta Creek Ultraviolet Light Treatment Facility is scheduled to start treatment in May and continue through September.

During the summer of 2009, repairs and upgrades were required to restart the facility and operation began in June. The plant typically ran three to four days a week with average flows of 300 gallons per minute. No water was discharged onto the beach when the UV Facility was offline. Flows were lower than expected due to drought conditions and conservation efforts of Oceanside residents. See Figure 12-2 for a photo of treated water being released from the UV Outfall pipe.

Figure 12-2. Oceanside Loma Alta Creek UV Outfall pipe releasing treated water

Water samples were taken weekly from Buccaneer Beach directly in front of the discharge pipe and seventy-five feet north and south of the discharge pipe. The samples were tested for total and fecal coliform and Enterococcus. All samples taken during summer 2009 met California Department of Health Services AB411 Objectives and there were no postings due to bacterial levels exceeding standards set by the County Department of Environmental Health. The UV Facility ran through September 2009.

During the 2009-10 reporting year, Loma Alta Creek flows continued to be lower than expected during drought conditions warranting sporadic running of the UV facility. The facility began running in June 2010 for the summer dry season and discontinued running in October 2010. It ran for a total of 27 days during this time period. Approximately 16 million gallons of water was treated through the facility during the summer of 2010.

12.2.3 Activities completed during current reporting period

During the 2010-11 reporting year, the Oceanside Loma Alta Creek UV Treatment Plant operated between June and August 2011 for a total of 57 days. Higher flows in the Creek allowed continuous treatment through mid-July. Approximately 25 million gallons of water was treated through the facility.

12.3 San Diego RWQCB Loma Alta Slough Bacteria and Nutrient TMDL Development

Development of the Loma Alta Slough Bacteria and Nutrient TMDL began in the fall of 2009 lead by the San Diego Regional Water Quality Control Board (SDRWQCB). Modeling for the Bacteria and Nutrient TMDL, completed by an SDRWQCB contractor, is expected to be complete by November 2011. During the development process, several data gaps had been identified and, where possible, additional monitoring was completed to fill the gaps for modeling purposes.

12.3.1 Activities completed during current reporting period

12.3.1.1 Data Sonde Deployment in the Slough

Data collected pursuant to Investigative Order R9-2006-076 in Loma Alta Slough only required one data sonde deployed at depth in the Slough. During the TMDL model development, a data gap was indentified for water quality monitoring data closer to the surface of the Slough. To capture this data, the City deployed data sondes at two depths at one location to measure temperature, specific conductivity, dissolved oxygen, turbidity, and pH. Data was collected from September 17 through October 14, 2010. This data was then submitted to the SDRWQCB contractor, the Southern California Coastal Water Research Project (SCCWRP) and their subconsultants for use with TMDL modeling.

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13.0 NON-EMERGENCY FIRE FIGHTING

Emergency fire fighting flows (flows necessary for the protection of life or property) are allowed by the Municipal Permit and do not require implementation of BMPs. Non-emergency fire fighting BMPs and educational methods for reducing the discharge of pollutants from non-emergency flows to the MEP are described below.

Order 2007-0001 Compliance Summary

J.3.a(3)(1)iv Non-Emergency Fire Fighting	See Entire Section 13 of this Annual Report

13.1 Best Management Practices

The City developed and implemented a program to reduce pollutants from non-emergency fire fighting flows, in accordance with Section B.3 of Permit Order 2007-0001. BMPs were implemented when the following activities were conducted:

Regular Maintenance of Fire and Emergency Vehicles and Equipment
Training Exercises
Facilities Maintenance
Post-Emergency Rehabilitation of Response Equipment

These activities were conducted in a way to either minimize or eliminate the discharge of pollutants to the MS4. Detailed descriptions of BMPs are given for each activity below:

Regular Maintenance of Fire and Emergency Vehicles and Equipment

Vehicles and equipment were cleaned where runoff was directed to either the sanitary sewer system or to a drain with an oil/water separator system.

Vehicles and equipment were cleaned where runoff would pond and evaporate and/or where runoff would filter through landscaped areas.

Sewer drains in a vehicle cleaning area were outfitted with a hydro screen fabric barrier to collect debris.

Spill kits were available to promptly cleanup and contain leaking or spilled vehicle fluids.

Use of soaps, cleaners, and detergents were minimized, and general cleaning solutions were disposed of into the sanitary sewer system.

Training Exercises

Water used in training exercises was directed to landscaped areas whenever possible, and runoff from the training exercises was not allowed to discharge to the MS4.

Live fire training activities were pre-planned to allow integration of barriers to off-site runoff that could contribute to non-storm water discharges.

Facilities Maintenance

Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways were swept to remove debris. Debris was placed in the trash.

Landscaped areas were maintained as required to reduce the introduction of leaves and other landscape waste into the MS4.

Irrigation systems were monitored and maintained as required to reduce irrigation water from going off-site.

Spills were cleaned up using spill kits provided at the work site, and disposal of spilled material was in accordance with applicable regulations.
Spills that required a cleanup beyond the ability of the on-site employees were reported to the City's Public Works Department for assistance with appropriate resources.
Maintenance and repair of structures were conducted using methods that do not contribute pollutants to the MS4.

Post-Emergency Rehabilitation of Response Equipment
Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency were restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. The use of water that could contribute to storm water discharges was used unless another practical and immediately available method was identified, and was performed in a manner that minimized discharges to the MEP.

13.2 Educational Methods

During live fire fighting training exercises all fire fighters were educated about the requirement to not allow water flows to enter the MS4. Fire fighters in attendance for training sessions about how to use high pressure fire fighting hoses were educated on how to direct the water to percolation basins that are permanently in place at the training grounds. Water that is directed to these basins was allowed to infiltrate into the soil and/or evaporate.

Prior to building structures at the training grounds being set on fire, perimeter controls were put in place to ensure that water from the non-emergency training session did not reach the MS4. Fire fighters in attendance were educated on the proper type and installation protocol of perimeter controls. These perimeter controls were also used for training sessions related to vehicle fires.

14.0 JURMP REVISIONS

There were no changes made to the City of Oceanside's 2008 JURMP during this reporting period. Updates were made to the 2008 JURMP during the 2008-09 reporting period. Details of these changes can be found in Section 14 of the 2008-09 JURMP Annual Report.

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15.0 CONCLUSIONS AND RECOMMENDATIONS

15.1 Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the San Diego Copermittees. Pursuant to Part J.3.a., of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2010-2011 annual reporting period (July 1, 2010 – June 30, 2011).

15.2 Conclusions

This annual report presents the activities the City conducted from July 1, 2010 through June 30, 2011 to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The activities involved implementing, and improving where needed, existing programs and developing new programs intended to minimize or eliminate the effects of urban runoff within the City's jurisdiction on receiving water bodies. Improving water quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

As detailed in the Program Effectiveness Assessment Component, the City met all of the development planning targets and met the municipal targets. Long-term effectiveness assessment is an ongoing and iterative process and the City will continue to use this process to further improve its storm water program.

15.3 Recommendations

15.3.1 Database Tracking System for various departments and divisions

During the previous reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water and Sewer Divisions, and the Clean Water Program, continued using the Lucity (previously GBA Masters Series) software. The Development Services Department, which includes Code Enforcement and Building and Engineering Divisions, selected TRAKiT, permitting software by CRW Systems, Inc and began roll-out in this reporting year.

During this reporting period the Clean Water Program reviewed the effectiveness of the new tracking tools and implemented improvements in the use of the system to better track Stormwater related data. Additional improvement may be implemented during the next reporting period.

15.3.2 Assessment of Education Program

The Pick Up Your Pet Waste Campaign was initiated in FY 2008-09 to address the accumulation of dog waste along the San Luis Rey Recreation Trail (Trail) which travels adjacent to the San Luis Rey River on both the north and south sides. A final report for the project is provided as Attachment 9-C.

Based on recommendations in the final report the City installed four pet waste bag dispensers (Mutt Mitt brand) and four additional trash cans along the Trail where most people access specific sections of the trail, during this reporting period. Modified signage was also installed at the dispenser stations to emphasize pet owner responsibility. See Section 9.1.5 more project details.

15.3.3 Underserved Target Audience Outreach – Spanish Speaking

During this reporting period Spanish materials were disseminated to target the Spanish speaking population about BMPs they can implement to prevent water pollution.

Attachment 2-A

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Attachment 2-A Treatment Control BMP Inventory
City of Oceanside FY 2010-11

															# of Selected Treatment Control BMPs													
Priority Rating	Project Name	Project Address	Permit #	Construction Date	RP Contact Name	RP Company Name	RP Contact Address	RP Contact City	RP State	RP Zip	RP Phone	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	Inspection Date	Maintenance Records on file
H	Native Bouquet	3927 Oceanic Dr.	ADP-11-03	1/26/2005	Tanya Howard	Native Floral	3927 Oceanic Dr	Oceanside	Ca	92056	760-721-4262	C	3.18	Loma Alta		1					3				3			9/29/2010	Yes
H	North Oceanside Batch Plant	1050 Airport Rd	D-12-02	3/15/2005	Bob Davies	Hanson Aggregates	PO Box 639069	San Diego	Ca	92163-9069	858-967-7913	I	4.35	San Luis Rey						1	1							9/28/2010	Yes
H	Harbor View Condominiums	800 Harbor Cliff	T-10-2	5/18/2005	Rose Reyes	Curtis Property Management	5050 Avenida Encinas	Carlsbad	Ca	92008	760-918-7720	R	16.15	San Luis Rey										15				9/28/2010	Yes
H	Schnell Industrial Center	3923 Oceanic Dr	ADP-14-03	6/6/2005	Tim Schnell	Schnell Industrial Center	2720 Loker Rd.	Carlsbad	Ca	92008	760-268-0576	I	2.58	Loma Alta							3				4	3		9/28/2010	No
H	Oceanic Business Park South, Parcels 2,3,4	3907-3291 Oceanic Drive	ADP-12-03	8/29/2005	Tom Worth	Spectrum Management	8799 Balboa Ave Ste 260	San Diego	Ca	92123	858-569-8799	C	5.31	Loma Alta							3				11			9/29/2010	Yes
H	Benet Industrial Center	649 Benet Rd	D-1-03	11/22/2005	Paul Johnson	Sabra Dipping Inc	649 Benet Rd	Oceanside	Ca	92054	760-757-2622	I	4.62	San Luis Rey							1			3	4		1	9/28/2010	Yes
H	Venture Commerce Center	3600 Ocean Ranch Blvd.	D-24-04	4/26/2006	Paul Denninger	VCC Inc.	1049 Camino Del Mar	Del Mar	Ca	94941	415-381-1600	C	8.5	Loma Alta							17				9			9/28/2010	Yes
H	Oceanic Business Park South, Parcel 1	3801-3803 Oceanic Drive	ADP-11-04	5/22/2006	Tom Worth	Spectrum Mangement	8799 Balboa Ave Ste 260	San Diego	Ca	92123	858-569-8799	C	4.83	Loma Alta							2			1	2	2		9/29/2010	Yes
H	All State Moving Systems	4670 North Ave	ADP-6-04	5/26/2006	Marc Files	All State Moving *Systems	4670 North Ave	Oceanside	Ca	92056	858-746-1071	I	3.08	Loma Alta							2			4				9/29/2010	Yes
H	San Luis Rey Station Inc	607 North Douglas Drive	D-23-05	2/16/2007	Jack Kofdarali	San Luis Rey Station	224 S. Jay St	Corona	Ca	92879	951-280-3833	C	0.82	San Luis Rey											4			9/28/2010	Yes
H	Chevron Products Service Company Service Station	1601 North Coast Highway	RC-207-04	7/6/2007	Manager	Chevron Products Company	145 State College Boulevard	Concord	CA	94524	(714)-671-3295	C	0.42	San Luis Rey														9/28/2010	Yes
H	Marriott Residence Inn	3603 Ocean Ranch Blvd.	D-16-05	9/24/2007	Steve Scarborough	Plaza At Irvine Partners LLC	2955 Main Street Third Floor	Irvine	Ca	92614	949-474-2001	C	3	Loma Alta					3		1				10			9/28/2010	Yes
H	Ocean Ranch Plaza	3605-3617 Ocean Ranch Blvd.	D-11-05	12/11/2007	Paula Langevin	Kahl& Goveia Commercial Real Estate	24855 Cel Prado	Dana Point	Ca	92629	949-276-8300	C	15.1	Loma Alta							4			2	5		1	9/28/2010	Yes
H	Ocean Terrace Professional Center	3601-3637 Vista Way	D-27-05	8/11/2008	Jacquet Meissner	Altamira Family Trust/FICO Ocean Terrace, LLC	500 Stevens Ave., Ste. 200	San Diego	Ca	92075	858-373-1240	C	9.93	Buena Vista							1			5	6			9/30/2010	Yes
H	Jack In the Box	1900 Mission Ave.	D-12-01	12/11/2008	Jason General Manager	Jack In the Box, Inc.	100 N. Barranca Pkwy., Ste. 200	West Covina	Ca	91791	760-967-3971	C	0.05	San Luis Rey											2	2	2	9/28/2010	Yes
H	Oceanside Gateway Business Park	1600 Block of Ord Way	D-6-03	3/4/2009	Debbie Cepeda	McKenna & Company	1654 Ord Way	Oceanside	Ca	92056	760-295-2185	C	32.4	Loma Alta							1				28	3		9/29/2010	Yes
H	807 N. Pacific Street	807 N. Pacific St.	P-208-06, D-214-06, RC-	4/26/2010	Tom and Sheryl Crow	Owners	45035 Via Tornada	Temecula	CA	92593	N/A	R	0.11	San Luis Rey															
H	916 Tait Street Condos	916 Tait St.	P-13-08	6/1/2011	Sarah Zajda	N/A	916 Tait Street	Oceanside	CA	92054	(213)-926-0100	R	0.08	Loma Alta															
H	400-404 South The Strand	400-404 South The Strand	P-200-06	Not Finaled	N/A	Residencia, LLC	12 Vista De San Clemente	Laguna Beach	CA	92651	(949)584-4858	R	0.3	Loma Alta															
H	519-523 N. Tremont St.	519-523 N. Tremont St.	P-200-08, D-200-08, RC-	Not Finaled	Graham Fraser and Leon Covell	Owners	519-523 North Tremont Street	Oceanside	CA	92054	N/A	R	0.23	Loma Alta															
H	Faris Professional Building	2180 El Camino Real	ADP-8-02	Not Finaled	Mary Opel	Faris ElCam LLC	34185 Blue Lantern St.	Dana Point	CA	92629	949-433-5045	C	0.517	Buena Vista															
H	Lil Jackson Senior Community	3512 Lake Blvd.	P-19-06, D-26-06, C-49-06	Not Finaled	Benjamin F. Beckler III	Lil Jackson Senior Community	516 Burchett street	Glendale	CA	91203	(818)-421-1211	R	5.02	Buena Vista															
H	California Funeral Services, INC "Eternal Hills"	1999 El Camino Real Oceanside	P-14-02	Not Finaled	Debbie Allen	SoCalifornia Funeral Services, Inc	4300 Imperial Avenue	SD	Ca	92102	760-213-3694	C	90.6	Loma Alta							7			5	5				
M	Mission Wells HOA Single Family Homes	0000 Franciscan Way	T-4-2001	7/21/2004	Lisa Locke	Equity Prop Management	42430 Winchester Rd	Temecula	Ca	92590	951-296-5640	R		San Luis Rey								3							
M	Simba International	2654 Vista Pacific Dr.	D-21-02	4/29/2005	Ashir Shah	Simba Interivarioival	2654 Vista Pacific Dr	Oceanside	Ca	92056	760-940-2775	C	1.5	Loma Alta							1								
M	Cypress Estates 13 Single Family Homes	Cypress Road	D-7-02 133-88	7/28/2005	Michael Tan	Oleander Partners LLC	5230 Carrol Canyon Rd #224	San Diego	Ca	92012	858-552-8736	R	3.18	Loma Alta		1									1	1			
M	Nobel Homes Single Family Homes	Laurel and Ivy rd.	T-3-03	3/2/2007	Jenninfer Benner	Nobel Homes Inc	2734 Loker Ave W. Stem	Carlsbad	Ca	92008	760-603-2940	R	4.7	Buena Vista							1				1	1			
M	Martin Single Family Residence	6638 Morro Heights Road	ADP-12-04	3/6/2007	Rick Martin	6638 Morro Heights Rd	6638 Morro heights Rd	Oceanside	Ca	92057	N/A	R		San Luis Rey									?		1				
M	Platino Court	4040 Calle Platino	P-2-06	4/2/2007	Calle Platino Partners, Inc.	Calle Platino Partners, Inc.	5677 Oberlin Dr., Suite 112	San Diego	CA	92121	N/A	C	5.76	San Luis Rey															
M	Ratkoski Single Family Residence	931, 933 South Pacific St	RC-4-05 & RC-14-05	6/5/2007	Don and Joyce Ratkowski	Owner	8105 N. 47th Street	Paradise Valley	AZ	84253	(602)-449-1959	R	0.075	Loma Alta	1														
M	Oksnee Single Family Residence	475 Sleeping Indian Rd	D-7-03	11/12/2007	Scott Oksnee	Owner/Resident	475 Sleeping Indian Rd.	Oceanside	CA	92057	949-661-2428	R	3.72	San Luis Rey							1								
M	Oceanside Pier Resort	333 North Meyers Street	D-200-03	11/29/2007	Manager	Cendant Timeshare Resort Group, Inc	8728 South Park Circle	Orlando	Fl	32819	866-764-2281	C	1.4	San Luis Rey															
M	Robertson Development	228 Hoover St.	D-10-06	12/4/2007	Tom Robertson	Owner	228 Hoover St.	Oceanside	CA	92054	N/A	R	0.71	Loma Alta															
M	Round Table Pizza @ Quarry Creek	3440 Marron Rd.	ADP-3-06	1/3/2008	Sandy Pujji	Pujji Development, LLC	7613 Heatherly Ln.	San Diego	CA	92130	858-205-9515	C	0.37	Buena Vista							1								
M	North Tremont Condos	530 534 N Tremont	P-202-03	2/7/2008	Robert H. Morris	Morris Investments	6430 Sunset Blvd., Suite 300	Los Angeles	CA	90028	N/A	R	0.1	San Luis Rey															
M	Pacific Tides Condominiums	1334 South Pacific Street	P-19-05 D-33-05	4/22/2008	Mike Chegini	20 Morgan Investments, LLC	20 Morgan	Irvine	Ca	92618	(949)860-4800	R	0.2	Loma Alta															
M	Oceanside Terraces Condomoniums	301 Mission	T-203-02	4/29/2008	Ron Couglas	Jane Properties Inc.	12544 High Bluff Drive, Suite 390	San Diego	Ca	92130	(858) 481- 5693	R	0.87	San Luis Rey								4			2				
M	Margulis Single Family Residence	1621 S. Pacific St.	RC-15-06	5/12/2008	Ken Margulis	1621 S. Pacific, LLC	1355 Stratford Court	Del Mar	Ca	92014	760-419-4991	R	0.16	Loma Alta						1									
M	Margulis Single Family Residence	1623 S. Pacific St.	RC-14-06	5/12/2008	Ken Margulis	1623 S. Pacific, LLC	1355 Stratford Court	Del Mar	Ca	92014	760-419-4991	R	0.16	Loma Alta															
M	Moss Residence	1632 S. Pacific St.	P-7-04	5/12/2008	Jack Nestor	1623 S. Pacific, LLC	1355 Stratford Court	Del Mar	Ca	92014	N/A	R	0.14	Loma Alta															
M	Single Family Residence	1213 South Pacific Street	P-2-08, D-15-03, RC-12-03	7/2/2008	Robert Enright	Owner	1213 S. Pacific St.	Oceanside	CA	92054	N/A	R	0.11	Loma Alta	1	1													
M	La Mision Village Mixed Use	3220 Mission Ave	D-9-05	7/3/2008	Ivy Carter	So Cal Housing	10681 Foot Hill Blvd	Rancho Cucamonga	Ca	917300	909-291-1400	R	3.02	San Luis Rey							13								
M	Barnwell St./Ritter 3 Single Family Homes	303 S. Barnwell Rd.	D-4-01	8/28/2008	Various Owners	Owner -Loren Ritter	212 South the Strand	Oceanside	CA	92054	760-722-6700	R	1.06	Loma Alta							5				4				

Attachment 2-A Treatment Control BMP Inventory
City of Oceanside FY 2010-11

Priority Rating	Project Name	Project Address	Permit #	Construction Date	RP Contact Name	RP Company Name	RP Contact Address	RP Contact City	RP State	RP Zip	RP Phone	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	Inspection Date	Maintenance Records on file
M	Jackson Residence	Stallion Drive	E-208	10/21/2009	David and Elizabeth	Owners	Stallion Drive	Oceanside	Ca	92057	N/A	R	0.6	San Luis Rey															
M	Holiday Inn and Suites Hotel	1401 Carmelo Drive	RC-206-04	1/7/2010	Chhatraca & Kim	CJK International Investments LLC	PO Box 6770	San Diego	Ca	92110	619-523-5444	C	1.07	San Luis Rey							6			1	1				
M	Montego/Sam Oceanside 1 Condominium	504 N Pacific St	T-201-05	5/18/2010	V. Joseph Stubbs	Sam Oceanside I, LLC	15260 Ventura Boulevard, 20th	Sherman Oaks	Ca	91403	(8d18) 444-4500	R	0.33	San Luis Rey										1			1		
M	Pacific View Villas	607 N. Pacific St. 609 N. Pacific St.	P-203-08, D-203-08, RC-	6/10/2010	Emery C. Master, Maureen L.	Owners	7047 Heron Circle	Carlsbad	CA	92011	(760)522-8373	R	0.115	San Luis Rey															
M	Bahama Garden	420 Cleveland St.	P-3-07	12/15/2010	Tim Empey	South Coast Investors, LLC	2051 S. Horne St.	Oceanside	CA	92054	760-	R	0.23	Loma Alta															
M	D & K Growers	1319 Sleeping Indian Rd.	AAP-1-04	Not Built	Richard Campbell	D & K Grower	630 Encinitas Blvd.	Encinitas	CA	92024	760-477-2171	C	7.1	San Luis Rey															
M	Laguna Pacifica	2020 Stewart St.	P-29-06, RC-28-06, C-56-	Not Built	Peter Biniaz	Laguna Pacific	2020 Stewart St.	Oceanside	CA	92054	(760)-439-6250	R	0.55	Loma Alta															
M	Casa De Amparo Child Development Center at Ivey Ranch Park	110 Rancho Del Oro Drive	C-41-05, D-20-05	Not Finaled	April Penderarpt	Casa De Amparo	110 Rancho Del Oro Drive	Oceanside	CA	92057	760-754-5518	C	1.5	San Luis Rey															
M	Libby Lake Village Single Family Homes	N. River rd. at Calle Montecito	T-5-06	Not Finaled	Mike Gehl	Habitat For Humanity	10222 San Diego Mission Rd.	San Diego	CA	92108	619-283-4663 ext. 313	R	3.34	San Luis Rey						1				1	1	1			
M	North River Village Mixed Use	N River Rd & Vandergrift	T-3-04	Not Finaled	April Tornillo	Taylor- Woodrow Homes Inc	16745 West Tsernardo Dr Ste	San Diego	Ca	92127	858-943-5100	R/C	7.6	San Luis Rey							1	1							
M	Pacific Animal Hospital	2801 Oceanside Blvd	ADP-2-08	Not Finaled	Valerie Ann Caskey &	Pacific Animal Hospital	7964 Sitio Fresca	Carlsbad	CA	92009	760-310-0016	C	0.355	Loma Alta											1	1			
L	Car Sound Exhaust	1901 Corporate Ctr. Dr.	D-5-03	3/14/2003	Tony Maggio	Magna Flow Exhaust	1901 Corporate Ctr. Dr	Oceanside	Ca	92056	949-858-5900	C	11.76	Loma Alta							2				1	1		9/28/2010	Yes
L	Aptera	4010 Ocean Ranch Blvd.	D-25-02	2/25/2004	Ocean ranch Venture LLC	Ocean ranch Venture LLC	165 S Union Blvd #510	Lakewood	CO	80228	303-986-2222	C	9.83	Loma Alta							7							9/28/2010	No
L	North Coast Methodist Church	1501 Kelly St.	D-12-97	5/11/2004	Les Wyman	Morth Coast United methodist Church	1501 Kelly St	Oceanside	Ca	92054	760-433-7275	C	8.83	Buena Vista							2							9/29/2010	No
L	Rancho Rose Multiple Residential	Highway 76 and Melrose Drive	T-9-02	10/6/2004	Debbie Myrick	Transcontiential Management Inc	3355 Mission Ave	Oceanside	Ca	92054	760-439-8611	R	8.52	San Luis Rey		3								2	2 san			9/30/2010	Yes
L	The Strand's End Multiple Residential	809 S. Pacific St. 810 The Strand	D-32-02	1/10/2005	Lisa Mcfarren	Strands End Inc	PO Box 1454	Rancho Santa Fe	Ca	92007	858-759-0381	R	0.22	Loma Alta		2													
L	The Church of Jesus Christ of Latter Day Saints	2080 California St.	D-22-02	2/10/2005	Bishop	Coorporation Of The Presiding Bishop	2080 California St	Oceanside	Ca	92054	760-757-0811	C	3.69	Loma Alta							1								
L	The Coastal Townlofts Multiple Residential	400 block of S Cleveland Street	T-202-01	5/4/2005	George Szabo Jr	Coastal Lowniofts Maintenance Corp	2006 Palomar Airport Rd	Carlsbad	Ca	92008	760-931-8181 x 15	R	1.01	Loma Alta							7				14				
L	Calvary Chapel	3715 Oceanic Way	D-23-02	6/15/2005	Kevin Schmit	Calvary Chapel Oceanside	3715 Oceanic Way	Oceanside	Ca	92056	760-724-1114	C	7.3	Loma Alta	4						5					4		9/29/2010	No
L	Hooter's Restaurant	3186 Vista Way	D-26-02	6/16/2005	Fred Click	Hoot Wing Inc	3186 Vista Way	Oceanside	CA	92054	760-966-3000	C	1.82	Buena Vista							1		2			1		9/30/2010	Yes
L	Deutsch Industrial Products- Molding Assembly Plant Additions	250 Eddie Jones Way	ADP-7-04	1/26/2006	Don Epstein	Deutsch Industrial Products	250 Eddie Jones Way	Oceanside	CA	92054	760-757-7500	I	1.03	San Luis Rey										1sand				9/29/2010	No
L	Windward Villas Multiple Residential	691 N. Tremont	T-202-02	3/28/2006	Windwarel Villas Hoa	Red Point Homes	3670 Camino Marglesa	Escondido	Ca	92025	(760) 489-0841	R	0.98	San Luis Rey															
L	San Luis Rey Valley United Methodist Church	5570 Old Ranch Road	D-7-90	6/8/2006	Thomas Wallace	San Luis Rey United methodist Church	5570 Old ranch Road	Oceanside	Ca	92057	760-758-9817	C	5.4	San Luis Rey							1				1			9/30/2010	Yes
L	Pelican Cove Multiple Residential	308 Island way	T-3-02	6/21/2006	Tim Maw	WMC Accounting Services	9665 Sheasapeake Dr Ste 300	San Diego	Ca	92123	858-495-0900	R	5.6	San Luis Rey										2 sand				9/29/2010	Yes
L	Single Family Residence	5951 Las Tunas Drive	ADP-10-03	8/1/2006	Fred Campbell	Owner	613 Navigator Ct.	Carlsbad	CA	92009	760-929-8198	R	5.2	San Luis Rey	1														
L	Casitas at Spring Creek Condominiums	5501 Old Ranch Road	T-4-03	9/13/2006	Ord & Rogers	Ord & Rodgers Homes	5122 Avenida Encinas #B	Carlsbad	CA	92008	760-438-1588	R	13.84	San Luis Rey							1				2				
L	Coca Cola Bottling Company	3900 Ocean Ranch Blvd.	D-15-04(1)	11/20/2006	Laura Savage	Coca Cola	2303 Ocean ranch Blvd	Oceanside	Ca	92056	760-435-7112	C	10.74	Loma Alta							2					1		9/29/2010	Yes
L	MJK Oceanside	1444 Mssion Ave	ADP-14-04	12/20/2006	Dave Baum	MJK Real Estate Holding Co., LLC	4913 Convoy St.	San Diego	CA	92111	858-204-4084	C	0.25	Loma Alta															
L	Employer's Choice Insurance Services	2111 S El Camino Real # 201	ADP-9-03	1/4/2007	Gary Menely	Employer's Choice Insurance Services, Inc.	503 Villa Bella, Ste. 10	Oceanside	Ca	92057	760-809-1676	C	0.5	Buena Vista						1	1				2			9/29/2010	Yes
L	Mossy Nissan	3535 College Blvd.	D-1-98	1/26/2007	Manager	Mossy Nissan	3535 College	Oceanside	Ca	92056	760-720-9797	C	1.6	Buena Vista															
L	Seagate Corporate Center	3532 - 3548 Seagate Way	D-21-04	2/13/2007	Danny Crouch	Lusardi Const	1570 Linda Vista dr	San Marcos	Ca	92069	760-744-3133	C	29.01	Loma Alta							8	2						9/29/2010	Yes
L	Single Family Residence	813 S. Pacific St., Lot 9	RC-16-05	4/10/2007	Revx Pacific	Security FSE-Thirty-Two, LLC , C/O Mutual Partners,	P.O. Box 1454	Rancho Santa Fe	CA	92067	858-735-0381	R	0.22	Loma Alta															
L	Single Family Residence	811 S. Pacific St., Lot 8	RC-15-05	4/11/2007	Revx Pacific	HEVX Pacific North, LLC, C/O Mutual Partners, Inc.	P.O. Box 1454	Rancho Santa Fe	CA	92067	858-735-0381	R	0.22	Loma Alta															
L	Z Market	3204 Mission Ave.	D-8-04	4/13/2007	Jalil Israil	Z Market	3204 Mission Ave	Oceanside	Ca	92054	760-967-2184	C	22,500 SqFt	San Luis Rey							2				2			9/30/2010	No
L	Single Family Residence	815 S. Pacific St., Lot 10	RC-17-05	4/13/2007	Revx Pacific	HEVX Pacific North, LLC, C/O Mutual Partners, Inc.	P.O. Box 1454	Rancho Santa Fe	CA	92067	858-735-0381	R	0.22	Loma Alta															
L	Starbucks	3702 Plaza Dr	C-32-02	4/23/2007	Jennifer	Starbucks	3702 Plaza Dr	Oceanside	Ca	92056	760-631-8213	C	0.516	Buena Vista							1	1		1				9/29/2010	No
L	Tri-City Medical Center Parking	4000 Vista Way	ADP-3-05	4/24/2007	Carl Riecke	Tri City Medial Center	400 Vista Way	Oceanside	CA	92024	760-940-7559	C	1.48	Buena Vista							1								
L	Jiffy Lube	4106 Oceanside Blvd	D-2-86	5/15/2007	Manager	Jiffy Lube Int	4106 Oceanside Blvd	Oceanside	Ca	92121	858-457-3235	C	0.42	Loma Alta							1			2				9/29/2010	Yes
L	Jiffy Lube	4106 Oceanside Blvd	05-1430	5/15/2007	Scott Leszcynski	Jiffy Lube Inc	4106 Oceanside Blvd	Oceanside	CA	92056	760-643-9268	C	0.42	Loma Alta							1				2			3/7/2010	Yes
L	Wilson Single Family Residence	77 Saint Malo Beach	RC-13-04	6/19/2007	Keith and Linda Wilson	Owners	77 Saint Malo Beach	Oceanside	CA	92054	805-965-2060	R	0.21	Buena Vista							2	1							
L	HK Plastics	1825 Corporate Center Dr.	ADP-10-04	6/21/2007	Gerry Krippner	HK Advisors LLC	1825 Corporate Center	Oceanside	Ca	92054	760-757-1200	C	5.3	Loma Alta							4				6			9/30/2010	Yes
L	Walgreen's Pharmacy at Market place Del Rio	3752 Mission Ave.	C-13-05	6/28/2007	Mary Altourian	Mission Center LLC	3146 Quiet Hills Dr.	Escondido	CA	92029	310-860-5420	C	21.8	San Luis Rey															
L	Walgreens	3507 Cannon Rd	D-12-90	7/16/2007	Mary Altourian	Bergersous Prop	1959 Plaza Real	Oceanside	Ca	92052	631-5111	C	1.91	Buena Vista							1				3			9/30/2010	Yes
L	Taylor Estates Multiple Residential	0000 Sunridge Dr	T-2-01	8/15/2007	Jessica Moore	KB Home Coastal	12235 El Camino Real St 100	San Diego	Ca	92130	858-509-2000	R	30.1	San Luis Ray							5								
L	Single Family Residence	1443 S. Pacific	P-14-05, D-18-05, RC-08-05	1/18/2008	Joann Menzies	1443 South Pacific, LLC	1355 Stratford Court	Del Mar	CA	92014	(760)419-4991	R	0.72	Loma Alta		1													

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City of Oceanside FY 2010-11

Priority Rating	Project Name	Project Address	Permit #	Construction Date	RP Contact Name	RP Company Name	RP Contact Address	RP Contact City	RP State	RP Zip	RP Phone	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	Inspection Date	Maintenance Records on file
L	St. Margaret Parish	4300 Oceanside Blvd	D-2-04	2/26/2008	Father Cavana Wallace(or	The Roman Catholic Bishop of San Diego	4300 Oceanside Blvd.	Oceanside	CA	92056	760-941-5560	C	9.3	Loma Alta										2					
L	Buddy Todd Park	Todd Memorial Park, Mesa Dr.	CIP	4/8/2008	Nathan Mertz	City of Oceanside	300 N. Coast Hwy.	Oceanside	CA	92054	760-435-5619	M	16.54	San Luis Rey															
L	Mission 76 Office Building	4318 Mission Ave	T-4-05	6/10/2008	Gary Levitt	Sea Breeze Old Grove, LLC	3525 Del Mar Heights Rd., Suite	San Diego	CA	92130	858-361-8555	C	2.35	San Luis Rey															
L	Cornerstone RR-Right of Way-Parking	0000 Union Plaza	DD-16-02	6/24/2008	Leo Todd	Cornerstone Property MGMT	727 Camino De Rio South Ste 135	San Diego	Ca	92108	619-688-0997	C	8.2	Loma Alta														9/29/2010	No
L	River Park Complex	425 College Blvd	CIP	7/20/2008	Nathan Mertz	City of Oceanside	300 N. Coast Hwy.	Oceanside	CA	92054	760-435-5619	M	43	San Luis Rey															
L	Pacific St. Bridge over the San Luis Rey	Pacific St.	CIP	9/15/2008	David Toschak	City of Oceanside	300 N. Coast Hwy.	Oceanside	CA	92054	760-435-5106	M	0.31	San Luis Rey															
L	Community Lutheran Church	4507 Mission Ave.	D-11-06	10/30/2008	Tim Jones	Community Lutheran Church	158-701-21	Oceanside	CA	92057	760-722-3337	C	3.64	San Luis Rey															
L	Union 76 Oceanside the Oceansider	1660 Oceanside Blvd	D-19-03 C-29-03	12/11/2008	Joe Warsoff	The Oceansider	4615 Sunburst Road	Carlsbad	Ca	92008	(858)350-4020	C		Loma Alta							1				1			9/29/2010	No
L	Hamilton Residence	2012 Stewart St.	ACP-13-05	12/11/2008	Eric Hamilton	N/A	1940 Lincoln St.	Oceanside	CA	92054	N/A	R		Buena Vista															
L	Single Family Residence	823 S. Pacfic St.	RC-12-07, V-12-07	2/27/2009	Philip H. Powers	Mutual Partners, Inc.	P.O. Box 1454	Rancho Santa Fe	CA	92067	858-759-0381	R	0.075	Loma Alta	1														
L	New Venture Christian Fellowsip	4000 Mystera Way	D-2-93	3/16/2009	Pastor Shawn Mitchell	New Venture Christian Fellowship	4000 Mystera Way	Oceanside	CA	92056	760-721-7777	C	0.3	Agua Hedionda											5			9/30/2010	No
L	Samber Inc./502 Via Del Monte	502 Via Del Monte	D-11-04	3/25/2009	EVW LLC	Samber Inc.	502 Via Del Monte	Oceanside	CA	92057	N/A	C	1.74	San Luis Rey															
L	Single Family Residence	825 S. Pacific St.	RC-11-07, D-10-07	4/26/2009	Charles Wilson	825 S. Pacific, LLC	1821 S. Coast Hwy.	Oceanside	CA	92054	760-453-2474	R	0.1	Loma Alta		1													
L	Loma Alta Village	605 Crouch St	T-1-06	6/19/2009	Tony Badeaux	Loma Alta Village, LLC	600 West Broadway, Suite	San Diego	CA	92101	619-400-8769	C	1.97	Loma Alta														9/30/2010	No
L	Wal-Mart Expansion	705 College Blvd	P-2-92, D-15-93	8/20/2009	Sara Cox	Wal-Mart	2001 S. E. 10th St.	Bentonville	AR	72712	479-204-3314	C	15.6	San Luis Rey										1	5		1	9/29/2010	
L	Mission Animal & Bird Hospital	655 Benet Rd.	ADP-5-08	11/12/2009	Robert Cartin	Cartin Family, LLC	655 Benet Rd.	Oceanside	Ca	92057	760-433-3763	C	1.25	San Luis Rey															
L	Mission and Douglas Retail Center	35 Douglas Dr	GR 2774	5/12/2010	William Brown	Dre Developers Resourse Companies	5230Carrol Canyon Rd	San Diego	Ca	92121	858-457-3235	C	1.3	San Luis Rey		2											1		
L	Walgreens	4181 Oceanside Blvd	C-13-05	5/27/2010	Manager	Manager	4181 Oceanside Blvd	Oceanside	CA	92056	760-536-7330	C	50,000 Sqft	Loma Alta							2		1					3/14/2011	Yes
L	Surfside Animal Hospital	3876 Mission Ave,	P-3-08 C-8-08 D-4-08	7/8/2010	Steve Lloyd	Pacific coast Partners LP	9820 Willow Creek Rd Ste 400	San Diego	Ca	92131	858-922-0641	C	0.88	San Luis Rey							4							9/29/2010	No
L	Chaparral Industrial	3093 Industry St.	ADP-11-02	9/22/2010	Michael Walsh	Chaparral Property V, L.P.	721 Monroe Way	Placentia	CA	92870	866-638-7648	C	0.1	Loma Alta															
L	Edwards/Zajda Twin Home	916 Tait St.	P-13-08	5/1/2011	Evan Pence	Owner - Pence Building Ent.	916 Tait Street	Oceanside	CA	92054	213-926-0100	R	0.086	Loma Alta															
Pending Construction																													
L	1611 S. Pacific Street	1611 S. Pacific Street	RC-19-07	Not Built	Lance Bradford	Trash 8 Investments	3441 South Eastern Avenue	Las Vegas	NV	89169	(702)-735-5030	R	0.14	Loma Alta															
L	2137 Willowbrook Dr.	2137 Willowbrook Drive	T-5-04	Not Built	Frank Fanelli	BFI Development, LLC	2706 Ormsby Way	Vista	CA	92084	760-744-7700	R	2.04	San Luis Rey															
L	Trade Winds Multiple Residential	314 N. Cleveland St.	T-201-07 RC-210-07	Not Built	Michael M. Chegini	Owner	20 Morgan	Irvine	Ca	92618	(949) 884-7763	R	0.23	San Luis Rey															
L	Airport Rd. Automotive	Airport Rd	D-17-97	Not Built	Tim Lyons	Starward Ventures Inc.	12526 High Bluff Dr., Ste. 100	San Diego	CA	92130	760-505-4283	C	2.11	San Luis Rey															
L	La Pacifica II Business Park	Ocean Ranch Blvd., Lot 11, Buildings 1,2, & 3	D-08-07	Not Built	Albert De Berardinis	Cruzan-Monroe	12770 High Bluff Dr., Suite 270	San Diego	CA	92130	858-350-4020	C	14.8	Loma Alta															
L	Loma Alta Creekside, Elliott Drilling Building	Oceanside Blvd.	ADP-2-06	Not Built	Hugh Elliott	Loma Alta Creekside Property. LLC	1354 Hubenstein Ave.	Cardiff	CA	92007	760-632-1072	C		Loma Alta															
L	Miljkovic	3079 Skyline Dr	P-15-05	Not Built	Milan Miljkovic	Miljkovic	3079 Skyline Drive	Oceanside	CA	92054	760-439-8249	R	0.58	Buena Vista															
L	Mudge Residence	1721 S. Pacific St.	RC-2-08	Not Built	Ken and LeOra Mudge	Owners	1721 S. Pacific St.	Oceanside	CA	92054	N/A	R	2.3	Loma Alta															
L	Rancho Del Oro Industrial Park, lot 36, Unit 1	4096 Avenida De La Plata	ADP-8-04	Not built	Arjay Smith	O'Bryan-Smith Investments	402 W. Broadway ste. 2900	San Diego	CA	92101	619-239-4141	C	1.3	Loma Alta															
L	Thunderbird Drive	683 Thunderbird Dr.	T-15-05	Not Built	Edward Scarpelle	683 Thunderbird, LP.	929 Orchid Way	Carlsbad	Ca	92009	(760)438-0947	R	1.6	San Luis Rey															
L	Vallas-Phase 1	Oceanview Rd.	P-3-01	Not Built	Theodore Vallas	Owner	2192 Palomar Airport Rd.	Carlsbad	CA	92049	760-483-3600	R	3.52	Buena Vista															
L	Myer's Estates LLC	402 South Myers Street	T-202-04	Not Built	Tom Ayer	Myers Estates	14320 Ventura Blvd., Suite 257	Thousand Oaks	Ca	91423	(818)-881-1191	R	0.14	Loma Alta															
L	Pacific Blue Residences	620-714 South The Strand	T-202-07 D-200-07 RC-211-07	Not Built	Sushil Garg	Owner	3737 Birch Street, Suite 200	Newport Beach	Ca	92660	N/A	R	0.858	Loma Alta															
L	Portola	Pier View Way and Horn Street	T-203-04	Not Built	Michael Chegini	Portola Condominium Development, LLC	20 Morgan	Irvine	CA	92618	(949) 860-4800 Ext. 107	R	0.35	San Luis Rey		9					3			3			1		
L	Rancho Vista	San Dimas Ave.	T-16-02	Not Built	Brian Johnson	Pelican Homes	33971 Selva Road, Suite 135	Dana Point	Ca	92629	N/A	R	16.87	San Luis Rey															
L	Ocean Ranch Corporate Center Lot 1	Northwest corner of Oceanside Blvd. and Corporate Center Drive	PLA-12-02	Not Built								C	5	Loma Alta															
L	Windstar-Ocean Ranch, lot 19	4800 block, Ocean Ranch Blvd.	P-4-08, D-5-08, G02842	Not Built		CREA Windstar Ocean Ranch LLC	11149 N. Torrey Pines RD., Ste. 250	La Jolla	CA	92037	N/A	C	14.13	Loma Alta															
L	Single Family Residence	516 South the Strand	P-204-07 D-205-07 RC-	Not Finaled	Richard Slevin	Seabreeze Investors 2, LLC	702 N. The Strand Unit A	Oceanside	Ca	92054	(760) 650-5411	R	0.104	Loma Alta										1					
L	Single Family Residence	502 S. The Strand	D-210-04 RC-210-04	Not Finaled	Jim Junio	Owner	502 S. The Strand	Oceanside	CA	92054	N/A	R	0.2	Loma Alta															
L	St. Cloud Multiple Residential	0000 St Cloud Way	T-5-05	Not Finaled	Dean Pernicone	John Laing Homes	1917 Palomar Oaks Way, Suite 200	Carlsbad	CA	92008	760-448-3942	R	34.9	Loma Alta											2				

Attachment 2-A Treatment Control BMP Inventory
City of Oceanside FY 2010-11

Priority Rating	Project Name	Project Address	Permit #	Construction Date	RP Contact Name	RP Company Name	RP Contact Address	RP Contact City	RP State	RP Zip	RP Phone	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	Inspection Date	Maintenance Records on file
L	Monarch at Rancho Del Oro	Vista Way and Rancho Del Oro	P-5-03	Not Finaled	Jeremy Rappoport	Concordia Homes	1903 Wright Place, Suite 120	Carlsbad	CA	92008	858-847-9664	C,R	14.76	Buena Vista															
L	The Villas at Mission San Luis Rey	4050 Mission Ave.	D-05-07	Not Finaled	Mark Simon	Old Mission	4050 Mission Ave.	Oceanside	CA	92057		C,R	8	San Luis Rey															
L	Piazzo D' Oro Mixed Use	3402 Vista Way	P-5-03	Not Finaled	Jimmy Rapoport	Concordia Homes	1903 Wright Place, Suite 120	Carlsbad	CA	92008	858-847-9664	C,R		Buena Vista										2				9/30/2010	
L	Multiple Residential Condominiums	400-404 South The Strand		Not Finaled								R	0.3	Loma Alta										1					
L	Ocean Ranch Lot 15	Ocean Ranch Blvd., Lot 11, Buildings 1,2, & 3	D-31-05	Not Finaled		Oceanic Enterprises Joint Venture	1000 Pioneer Way	El Cajon	Ca	92020		I	10.52	Loma Alta															
L	Ocean Heights Estates	Valley Heights Drive	T-13-02, D-28-02, C-37-	Not Finaled	Spencer	Zephyr. Partners Oceanside Heights LLC	10505 Sorrento Valley Rd Ste 400	San Diego	Ca	92121	858-348-7672	R	11.64	San Luis Rey										2					
L	Pacific Marine Credit Union	Old Grove Rd & College Blvd	D-14-08	Not Finaled	David L. Davis	Pacific Marine Credit Union	P.O. Box 555235	Camp Pendleton	CA	92055	760-430-7511	C	6.489	Loma Alta															
L	Arrowood Village H+I	Breakaway Dr. and Treetop	646?	Not Finaled	Bill Shada	RSB Homes, Inc. - DBA Sea County Homes					760-685-1660	R	8.5	San Luis Rey															
L	New West Petroleum	3401 College Blvd.	D-2-03	Not Finaled	New West Petroleum	New West Petroleum	3401 College Bld	Oceanside	Ca	92056		C	0.68	Buena Vista															
L	VA Clinic	3500-3504 Rancho Del Oro Dr, lots 1,2, 11, & 12	D-9-08, C-19-08	Not Finaled	In Construction	Michael Sajjadi	4 Plaza Park, Suite 840	Irvine	CA	92614	949-468-1812	C	7.75	Loma Alta							16				11	11			
L	Eternal Hills Memorial Park	1999 El Camino Real Oceanside	D-24-06, C-013-99	Not Finaled	Leo Redarte	SCI Funeral Services, LLC, an Iowa Limited Liability	1999 El Camino Real	Oceanside	Ca	92054	(760)213-9694	C	16.85	Loma Alta															
L	San Luis Rey Crossing	Intersection of N. River Rd and College Blvd.	D-25-05	Not Finaled	Mike Dillon	North River Investments, LLC	3638 Camino Del Rio North, Ste 102	San Diego	Ca	92108	(619)584-0451	R	1.98	San Luis Rey										4		4			
L	Fire Mountain Estates	Fire Mountain and Yucca Rd.	T-2-05	Varies	Phil Buccola	Fire Mountain 6, LP	1728 Yucca Rd.	Oceanside	CA	92054	760-754-3130	R	1.9	Loma Alta															
L	Morro Hills Golf Course and Neighborhoods C,D,E,F,G,H,I,J,K,L, and M	Varies	T-12-99(2)	Varies	Jeff Morin	Merit Property Management	5473 Kearney Villa Rd	San Diego	Ca	92123	858-657-2173	R		San Luis Rey										1					
L	Morro Hills Village E	Varies	T-12-99(1)	Varies	Jeff Morin	Merit Property Management	5473 Kearney Villa Rd	San Diego	Ca	92123	858-657-2173	R	14.7	San Luis Rey							2				1	1			
L	Pacific Coast Buisness Park-Park B Parcels 13, 14, 15 & 16	South of Windansea Street between Avenida Del Oro and Rocky Point Drive	P-21-06, D-30-06	Varies		Pacific Coast LLC	3185 Airway Ave., Suite F	Costa Mesa	CA	92626		C	7.67	Loma Alta															
	Mohsen Oil Gas Co.	3213 Mission Ave.	D-11-03, C-15-03, C-29-03		Mohsen Arabshahi	Mohsen Oil, Inc.	3213 Mission Ave.	Oceanside	CA	92054	760-945-7222	C	0.51	San Luis Rey															
	Pepper Tree	Pepper Tree Lane	T-4-97			Hallmark Communities Inc	740 Lomas Santa Fe	San Diego	CA	92126		R	1.97	San Luis Rey															
	Pacific Coast Business Park/ Park "B" Parcels 13,14,15,16	South of Wind and Sea Between Avenida Del oro and Rocky Peina	P-21-06, D-30-06		Larry Cochrum	AMB DFS Pacific Coast, LLC	17777 Center Court Dr., N, Ste. 100	Cerritos	CA	90703	(562)-345-9216	I	7.67	Loma Alta															
	Hawkes Holdings Project	S. El Camino Real	D-23-06									C	3.48	Buena Vista															
	Pacific Coast Buisness Park	west of college blvd. between old grove road and suite B	D-29-06, P-20-06			Pacific Coast LLC	3185 Airway Ave., Suite F	Costa Mesa	CA	92626		C	6.67	Loma Alta															
	Oceanside Harbor, Harbor Aquatics Center	200 Harbor Dr	RC-2-09		Frank Quan	City of Oceanside	1540 Harbor Dr	Oceanside	Ca	92054	760-435-4032	C	1.44	San Luis Rey										9					
	El Camino Medical Plaza	2160 El Camino Real			Not Built							C	2	Buena Vista							2	2			2		2		
	Avocado Highlands Subdivision		T-2-06, C-15-06, C-16-06			Avocado Highlands, LLC	171 Saxony Rd.	Encinitas	CA	92024		R	3	Buena Vista															
	Breanna Estates II	Bounded By SR-76, Willowbrook Drive, Guajome Regional Park and Bobier Drive	T-13-04									R	2	San Luis Rey															
	Club Life Senior Living Center	Between The Depot Road and Hwy 76 at Melrose Drive	T-7-05		Stephen L. Taylor	Spring Creek Commercial Ventures, LLC	1135 Camino Del Mar	Del Mar	CA	92014	(858)-755-4029	R	7.02	San Luis Rey															
	Dixie Village	Dixie St.	T-2-04			Hallmark Communities	10675 Sorrento Valley Rd., Suite	San Diego	CA	92121		R	3.53	Loma Alta															
	El Camino Medical Condo	El Camino Real	P-01-07, D-01-07		Raj Patel	El Camino Medical Condo, LLC	6635 Surfcrest	Carlsbad	CA	92009	760-310-0358	C	2	BuenaVista															
	Jeffries Ranch	S. Mission Ave and east of Del Mar Rd	T-9-99, D-24-99		N/A	Brehm Communities	2714 Loker Avenue West Suite 300	Carlsbad	CA	92010	N/A	R	82.5	San Luis Rey															
	Oceanpointe	Southeast corner of State Route 76 and El Camino Real	T-12-04									R	15.8	San Luis Rey															
	Pavilion	3480 Mission Ave.	P-7-06, DP 6-06		N/A			Oceanside	ca	92054	N/A	C	92	San Luis Rey															
	Rancho Del Oro Commercial Condominium Project	Avenida Del Oro, North of Oceanside Blvd.	P-1-86			A+C Tank Sales Co.	4530 E. Shea Blvd., Suite 100	Scottsdale	AZ	85028	602-595-6127	C	0.44	Loma Alta															
	Red Point- Dixie Village	NW. corner of Dixie St. and Grace St.	T-10-04		N/A	Red Point Homes c/o MJD Partners, Inc	3570 Camino Marglesa	Escondido	CA	92025	(760)-580-1708	R	1.82	Loma Alta															
	The Strand Condominiums	The Strand between Seagaze Drive and Wisconsin	T-203-05			The Strand Condominium, L.P.	1020 Prospect Street, Suite 314	La Jolla	CA	92037		R	0.39	Loma Alta															
	Ralph's Fuel Station	Cannon Rd. and Lake Blvd.	C-5-05		American Management	American Management Company	100 N. Crescent Dr., Suite 218	Beverly Hills	CA	90210	N/A	C	0.45	Agua Hedionda															
	Vista Pacific	N. of Highway 78; E side of Rancho Del Oro @ W. terminus of Mira Pacific Drive	T-6-06		Douglas P. Lowry	Quality Investors, LLC	4623 Torrey Circle, Suite Q109q	San Diego	CA	92130	(714)-222-4918	R	3.35	Buena Vista															
	Hi Hope Ranch		T-2-03			HillcrestHomes, Inc.	355 W. 2nd St.	Tustin	CA	92780	714-481-3020	R	76	San Luis Rey															
	Essex Rancho Del Oro		D-28-05		Burrel Magnusson	Essex Realty	3146 Redhill Ave., Suite 150	Costa Mesa	Ca	92626	(714)540-5188	I	3.63	Loma Alta															
	Mesa Ridge Tentative Map		ZA-2-05			Ord & Rodgers Homes	5122 Avenida Encinas	Carlsbad	CA	92008		R	12.6	San Luis Rey															
	Amerillum/Ocean Ranch Corporate Center 4+5		ADP-01-2009									C	2.99	Loma Alta															
	Oceanview Plaza, Lots 1,2, & 3		D-1-06, P-1-06, C-1-06, &		Eric M. Thies	Brinka Inc.	P.O. Box 1438	Rancho Santa Fe	CA	92067	858-337-0545	C, R	1.8	Buena Vista															
	One Mission Ave., Block 18	N. East corner of Myers Street and Pier View Way	T-203-06, D-210-06, RC-			Citymark Oceanside LLC	701 B Street, Suite 1100	San Diego	CA	92101		R	1.13	San Luis Rey															
	One Mission Ave., Block 19	N. East corner of Myers Street and Pier View Way	T-203-06, D-210-06, RC-			Citymark Oceanside LLC	701 B Street, Suite 1100	San Diego	CA	92101		R	1.14	San Luis Rey															
	One Mission Ave., Block 20	N. East corner of Myers Street and Pier View Way	T-203-06, D-210-06, RC-			Citymark Oceanside LLC	701 B Street, Suite 1100	San Diego	CA	92101		R	1.02	San Luis Rey															

Attachment 2-A Treatment Control BMP Inventory
City of Oceanside FY 2010-11

Priority Rating	Project Name	Project Address	Permit #	Construction Date	RP Contact Name	RP Company Name	RP Contact Address	RP Contact City	RP State	RP Zip	RP Phone	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	Inspection Date	Maintenance Records on file
	One Mission Ave., Block 21	N. East corner of Myers Street and Pier View Way	T-203-06, D-210-06, RC-			Citymark Oceanside LLC	701 B Street, Suite 1100	San Diego	CA	92101		R	1.02	San Luis Rey															
	One Mission Ave., Block 5	N. East corner of Myers Street and Pier View Way	T-203-06, D-210-06, RC-			Citymark Oceanside LLC	701 B Street, Suite 1100	San Diego	CA	92101		R	1.05	San Luis Rey															
	Darwin Knolls	Darwin and Sagewood	T-11-02		Phil Jones	Heritage Pacific Homes	5924 Balfour CT STE 100	Carlsbad	Ca	92008	760-603-3277	R	7.7	San Luis Rey							2									
	Darwn Glen	Darwin and Sagewood	T-8-00		Phil Jones	Heritage Pacific Homes	5924 Balfour CT STE 100	Carlsbad	Ca	92008	760-603-3277	R	11.6	San Luis Rey							2									
	Liberty Walk Phase 1	Maxson St. and Country Club Ln.	T-11-05, D-224-05, C-44-05		N/A	The Olson Company	3020 Old Ranch Parkway suite 400	Seal Beach	Ca	90740	N/A	R	1.6	Loma Alta																
	Liberty Walk Phase 2	444 Country Club Lane	T-11-05, D-224-05, C-44-05			The Olsen Company	320 Old Ranch Parkway Suite 400	Seal Beach	Ca	90740		R	2.81	Loma Alta																
	Mission San Luis Rey Retreat Parking Lot Expansion	4050 Mission Ave.	D-15-07, H-5-07		N/A	Mission San Luis Rey	4050 Mission Ave.	Oceanside	CA	92054	N/A	C	0.95	San Luis Rey																
	The Casitas at Spring Creek	End of Depot Rd	T-4-03		John D.Ord	Ord & Rodgers Homes	5122 Avenida Encinas, Suite B	Carlsbad	CA	92008	760-438-1588	R	13.84	San Luis Rey																
	217 South Pacific St. Lot 7, 218 South Pacific St. Lot 8	217 South Pacific St. & 218 S. The Strand	P-201-08, D-201-08, RC-		Luke Lauer		217 South Pacific St. & 218 S. The	Oceanside	CA	92054	N/A	R	0.1	Loma Alta																

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Attachment 3-A

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Attachement 3-A. Construction Site Inventory
Dry and Wet Season Inspection Totals
Oceanside FY 2010-11

PROJECT NAME	FILE NUMBER	DEVELOPER	PROJECT TYPE	SITE ACREAGE	CONST. START DATE	WDID	THREAT PRIORITY	WATERSHED	LOCATION	ENGINEERING INSPECTIONS		BUILDING INSPECTIONS		STOP WORK NOTICES	Project Status
										Wet Season	Dry Season	Wet Season	Dry Season		
210 S. Nevada St.	P-13-06	Brian Moore	Residential	0.11	11/19/2007	N/A	Low	Loma Alta	210 S. Nevada St.	0	0				Abandoned
516 S. The Strand	P-204-07	BRB Development	Residential	0.10	01/26/11	N/A	Medium	Coastal Outlet	516 S. The Strand	12	3				
Adobe Eststes	A-26-05	Vista	Commercial	2.00	03/05/10	937C345696	High	San Luis Rey	Sports Park Way	45	4				
Bahama Garden	P-03-07	Dew Pointe Condominimums	Residential	0.23	10/20/10	N/A	Low	Coastal Outlet	420 S. Cleveland	23	8				
Darwin Glen	T-11-2002	Heritage Pacific Homes	Residential	11.60	12/01/05	937C325609	High	San Luis Rey	Darwin and Sagewood Drive	45	5			1	Stop work notice not lifted since FY 08-09
Darwin Knolls	T-11-2002	Heritage Pacific Homes	Residential	5.70	12/02/05	937C325610	High	San Luis Rey	Darwin and Ocean Ridge Court	45	5			1	Stop work notice not lifted since FY 08-09
Exxon # 44 Remodel	C-36-08	Apro LLC #44	Commercial	0.50	07/31/09	N/A	Low	Buena Vista	3401 College Blvd.	15	5	1			
Faris Professional Bldg	ADP-08-02	Faris Construction	Commercial	0.50	03/01/06	N/A	Low	Buena Vista	2180 El Camino Real	15	5				
Hi Hope Ranch	T-2-03	Hillcrest Homes	Residential	76.00	4/30/2007	9o-37C322214	High	San Luis Rey	Melrose Drive & Hwy 76	45	5				
Howe Barn	E-13-06	Owner	Residential	0.80	6/11/2007	9376346381	Low	San Luis Rey	Sleeping Indian	15	2				
Libby Lake Village	T-5-06	S.D. Habitat for Humanity	Residential	2.00	June 2008	937C348915	Medium	San Luis Rey	Libby Village Way (N. River Road) & Calle Monecito	25	7	1			
Lil Jackson	P-19-06	Benjamin Beckler III, SCPH	Residential	2.20	12/01/09	937C355670	High	Buena Vista	3512 Lake Blvd.	30	5	5			
Lot 27 Parcel 2 6147 Indian View Drive	Adp-01-2004	Bellon Construction	Residential	3.97	07/19/06	937L341136	Medium	San Luis Rey	6147 Indian View Drive						
Morro Hills H & I	T-12-99/10	Tripointe	Residential	6.80	02/01/10	37C356385	High	San Luis Rey		25	5	4			
North River Village	T-3-04	Taylor Woodrwow Homes, Inc	Residential/Commercial	9.90	11/12/07	937C348354	High	San Luis Rey	North River Road at Vandergrift	30	5	3			
Ocean Heights	T-13-022565	Zephyr	Residential	11.60	12/13/04	937C330740	High	San Luis Rey	Mission Avenue & Valley Heights Drive	45	5	3			
Parcel 9	P-1-86	Allen Dental	Commercial	0.44	10/29/09	N/A	Low	Loma Alta	Avenida del Orc	6	4				
Powers Residence	RC-12-07	Owner	Residential	0.07	07/22/08	N/A	Medium	Coastal Outlet	823 S. Pacific St.						
Zajda Twin Home	P-13-08	Zajda	Residential	0.86	02/17/10	N/A	Medium	Coastal Outlet	916 Tait Street	22	13				
Projects completed during FY 10-11															
Amerillum	ADP-01-09	ORCC II Lot 15 LLC	Commercial	2.99	02/09/10	37C6356994	Medium	Loma Alta	Ocean Ranch						Finished
Arrowood J - Augusta	T-12-99 (11)	Richmond American Homes	Residential	21.00	09/19/05		Medium	San Luis Rey	Vandegrift Blvd and Granite Place						Finished

Attachement 3-A. Construction Site Inventory
Dry and Wet Season Inspection Totals
Oceanside FY 2010-11

Arrowood M - Bellingham	F-12-99	Richmond American Homes	Residential	19.00	09/19/05	937C336592	Medium	San Luis Rey	Vandegrift Blvd and Granite Place						Finished
Beach Break Café	D-3-07	Richardson	Commercial	0.41	04/20/10	N/A	Medium	Coastal Outlet	1802 S. Coast Highway	11	9				Finished
Casitas	T-403	Casitas Oceanside One	Residential	0.40	03/19/10	N/A	Low	San Luis Rey							Finished
Coca Cola	D-15-04	Coca Cola	Commercial	9.00	03/02/10	N/A	Medium	Loma Alta	Ocean Ranch						Finished
Social Security Adm Bldg Emergency Crib Wall Repair	ADP-16-02	Gary Green Trustee	Commercial	1.60	2/27/2009	N/A	Low	Buena Vista	2160 El Camino Real						Finished
Eternal Hills Memorial Park Expansion	D-24-09	SCI California Services, Inc.	Commercial	15.00	10/15/09	937C353402	High	Loma Alta	1999 El Camino Real	30	5				Finished
Fresh and Easy - Parcel A	T-3-97	Bergman	Commercial	0.90	05/04/10	N/A	Medium	Loma Alta	4131 Oceanside Blvd.		18				Finished
Jackson Residence	E-2-08	Owner	Residential	0.25	4/1/2009	9376347403	Low	San Luis Rey	223 Stallion						Finished
Pacific Animal Hospita	ADP-2-08	Caskey	Commercial	0.36	09/22/09	N/A	Low	Loma Alta	2801 Oceanside Blvd.	28	12				Finished
Pacific Marine Credit Unior	D-14-08	Owner	Commercial	6.50	07/28/09	9376353845	Medium	Loma Alta	Rocky Point						Finished
Piazza D' Oro Monarch C Rancho Del Oro	T-8-2004		Residential	15.00	01/26/06	937C333976	High	Buena Vista	Vista Way & Rancho Del Oro Rd.						Finished
Red Lobster	D-10-00003	Darden Inc.	Commercial	0.39	12/01/10	N/A	Medium	Buena Vista	2471 Vista Way	21					Finished
Ridgeway Alley		City CIP	CIP				Low	Loma Alta	Ridgeway and Vine St	10					Finished
San Luis Rey Crossing	D-25-05	North River Investments	Commercial	1.98	10/13/09	937C353687	High	San Luis Rey	North River Rd. and College Blvd.						Finished
Union 76 "The Oceansider"	D-19-03	Joe Warsoff	Commercial	0.50	03/10/08	N/A	Medium	Loma Alta Watershed	O'side Blvd. & Vine St.						Finished
V.A. Clinic	D-9-08	Rockefeller	Commercial	8.42	03/04/09	9376353279	Medium	Loma Alta	RDO/Seagate						Finished
Vine Street Comercial	ADP-04-08	Four Square Properties	Commercial	1.72	07/14/10	937c35521	High	Loma Alta	NW corner of Oside Blvd. and Vine St.	32	6	1	2	2	Finished
Walgreens - Parcel 1	D-2-09	Tatum, LLC	Commercial	1.18	05/19/10	937c357272	High	Loma Alta	4181 Oceanside Blvd.	15	16				Finished
Wal-Mart	P-2-92	Owner	Commercial	1.50	11/04/08	7376349426	Medium	SLR	College/76						Finished
New Projects FY 10-11															
Arroyo Landslide	E-17-09	Arroyo Comanche Grey LLC	Residential	2.20	06/11/10	937C356677	Medium	Loma Alta		40	4				
El Camino Detention Basin		City CIP	CIP				High	Loma Alta	El Camino Real and Oceanside Blvd.	30	5				
Harbor Restroom Lot 11B		City CIP	CIP				Low	San Luis Rey	Oceanside harbor Lot 11B	10					
Marriott	D-10-00004	RD Olson	Commercial	2.67	11/01/10	937c359641	High	Loma Alta		30	2	1			
Morro Hills K	T-12-99(12)	Toll Brothers	Residential	26.10	07/12/10	937C358433	High	San Luis Rey		60	5				
Morro Hills L	T-12-99(8)	Toll Brothers	Residential	27.30	07/12/10	937C358496	High	San Luis Rey		60	5				
Pepper Tree	D-10-00002	Hallmark	Residential	1.70	11/12/10	937C357595	High	San Luis Rey		35	2	2			
										Wet Season	Dry Season	Wet Season	Dry Season	Stop Work Notices	
Total number										**855**	**175**	**21**	**2**	**4**	
									Total Wet Season	**876**					
									Total Dry Season	**177**					

Attachment 4-A

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										POTENTIAL POLLUTANTS														
Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances		Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
OCEANSIDE AIRPORT	618		AIRPORT ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X				X		X		Municipal Airport	Not applicable	1460310100	9999	YES	NO
ALAMOSA PARK	5100's		ALAMOSA PARK DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1581310100	9999	YES	NO
TRANSIENT HOUSING SHELTER	1963		APPLE STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X			X		Transient Housing	Not applicable	1493302500	9999	YES	NO
RANCHO DEL ORO PARK	4700's		AVENIDA EMPRESSA		High	Municipal	Oceanside	San Luis Rey	903.1											Municipal Park	Not applicable	1615111700	9999	NO	NO
Henie Hills Reservoir Mira Costa College	0		BARNARD WAY		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1651120400	9999	YES	NO
PROJECT OZ	205		BARNES STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X			X		Transient Housing	Not applicable	1482601600	9999	YES	NO
Wire Mountain Reservoir and Vacant Tulley Canyon	0		BENET ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1460201600	9999	YES	NO
NINTH STREET SEWER LIFT STATION	997		BREAKWATER WAY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431710600	9999	YES	NO
BROOKS STREET POOL	130		BROOKS STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Municipal Pool	Not applicable	1482602800	9999	YES	NO
RON ORTEGA PARK	140		BROOKS STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1482602800	9999	YES	NO
LIBBY LAKE PARK	424		CALLE MONTECITO		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1575600700	9999	YES	NO
CALLE MONTECITO RESOURCE CENTER	504		CALLE MONTECITO		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Resource Center	Not applicable	1579002100	9999	YES	NO
LEISURE VILLAGE # 1 SEWER LIFT STATION	4706		CANNON ROAD		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1695620300	9999	YES	NO
SOUTHRIDGE TRAILS SEWER LIFT STATION	4900		CANNON ROAD		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1690111800	9999	YES	NO
CAPISTRANO PARK	770		CAPISTRANO DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1440301700	9999	YES	NO
LION'S CLUB PARK	1700's		CASSIDY STREET		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X			X	X		X		Municipal Park	Not applicable	1530930300	9999	YES	NO
JOHN LANDES COMMUNITY PARK	2855		CEDAR ROAD		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X			X	X		X		Municipal Park	Not applicable	1660210100	9999	YES	NO
LOT 35 East of Tremont Street	0		CIVIC CENTER DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1470860800	9999	YES	NO
CODE ENFORCEMENT	602		CIVIC CENTER DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Building	Not applicable	1470860800	9999	YES	NO
COMMUNITY GARDEN	1200's		CIVIC CENTER DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Building	Not applicable	1472305800	9999	YES	NO
LOT 23 North of Pier View Way	0	N	CLEVELAND STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1471611100	9999	YES	NO
LOT 32 North of Mission Avenue	0	N	CLEVELAND STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1473501800	9999	YES	NO
LOT 22 South of Windward	0	S	CLEVELAND STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1471601000	9999	YES	NO
SUNSHINE BROOKS THEATER	213	N	COAST HWY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Public Theather	Not applicable	1470871600	9999	YES	NO
OCEANSIDE MUSEUM OF ART SCHOOL	223	N	COAST HWY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Art School	Not applicable	1470871400	9999	YES	NO
CIVIC CENTER	300	N	COAST HWY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Building	Not applicable	1470950400	9999	YES	NO
INFORMATION CENTER	928	N	COAST HWY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Information Center	Not applicable	1470203900	9999	YES	NO
Lot E	300	N	COAST HWY.		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1470980800	9999	YES	NO
BUENA VISTA LAGOON NATURE CENTER	2202	S	COAST HWY.		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X		X		Nature Center	Not applicable	1551303400	9999	YES	YES
MANCE BUCHANON PARK	425		COLLEGE BLVD.		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1570805300	9999	YES	NO
SENIOR CENTER	455		COUNTRY CLUB LANE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Senior Citizen Center	Not applicable	1510111100	9999	YES	NO
Lot 36 Ditmar Street, North of Seagaze Drive	0	N	DITMAR STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1472811100	9999	YES	NO
FIRE STATION # 2	1640	S	DITMAR STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1531311000	9999	YES	NO
AMERICANIZATION SCHOOL	1200's		DIVISION STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1501411700	9999	YES	NO
CEASAR CHAVEZ PARK West of Garfield	1300's		DIVISION STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	2306230200	9999	YES	NO
MUNICIPAL GOLF COURSE	825		DOUGLAS DRIVE		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X			X	X		X		Municipal Golf Course	Not applicable	1570210600	9999	YES	NO
Pilgrim Creek Sewer Lift Station	855		DOUGLAS DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lif Station	Not applicable	1570210600	9999	YES	NO
Fire Mountain Reservoir and East of Yucca	0		FIRE MOUNTAIN DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1650210200	9999	YES	NO
Reverse Osmosis Facility - South of Parkside Drive	0		FIRESIDE DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Reverse Osmosis Plant	Not applicable	1602801000	9999	YES	NO
FIRESIDE PARK	300's		FIRESIDE DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1581901100	9999	YES	NO
Man Lado Sewer Lift Station	401		FOUSSAT ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1602811200	9999	YES	NO
CROWN HEIGHT COMMUNITY GARDEN	500's		GARDFIELD AVENUE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Community Garden	Not applicable	1502420100	9999	YES	NO
CENTER CITY GOLF COURSE	2323		GREENBRIER DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Golf Course	Not applicable	1510111100	9999	YES	NO
Harbor #1 Sewer Lift Station	2000	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
Lot 6	200	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1430103100	9999	YES	YES
Lot 7	200	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1430103100	9999	YES	YES
Harbor #4 Sewer Lift Station	283	S	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1430103100	9999	YES	YES
Lot 9	300	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1430103100	9999	YES	YES
Lot 8 & 8a	300	S	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1430103100	9999	YES	YES
North Bridge Sewer Lift Station	304	S	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1430101500	9999	YES	YES
Leased Residential - Marina Towers	1200	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Leased Building	Not applicable	1430103200	9999	YES	YES
Lot 4	1300	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Lot 5	1300	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Lot 1	1304	S	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1430101500	9999	YES	YES
Harbor #3 Sewer Lift Station	1325	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
HARBOR MARINA ADMINISTRATATION	1545	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Harbor Marina Building	Not applicable	1431201000	9999	YES	YES

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
Lot 3	1800	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Harbor #2 Sewer Lift Station	1830	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
Lot 2	1900	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
MARINA SUITES	2008	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Leased Building	Not applicable	1431103100	9999	YES	YES
HARBOR MARINA OCEANSIDE SMALL CRAFT HARBOR	300's	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1			X	X	X		X		X		Municipal Marina	Not applicable	1431103100	9999	YES	YES
Buena Vista (New) Sewer Lift Station	2501		HAYMAR ROAD		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1563023200	9999	YES	NO
Buena Vista (Old) Sewer Lift	2501		HAYMAR ROAD		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1563023200	9999	YES	NO
Water Facility Jones Road North of San Luis Rey Road	110		JONES ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Treatment Plant	Not applicable	1460903500	9999	YES	NO
Fire Station No. 7	110		JONES ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1460903500	9999	YES	NO
Old Roymar Sewer Lift Station	110		JONES ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1460903500	9999	YES	NO
Roymar Sewer Lift Station	110		JONES ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1460903500	9999	YES	NO
OCEANSIDE DOG PARK	301		JONES ROAD		High	Municipal	Oceanside	Buena Vista	904.2	X	X	X		X	X	X		X		Municipal Dog Park	Not applicable	1460903900	9999	YES	NO
New Fire Sta. No. 4 3990 Lake Boulevard	3990		LAKE BLVD.		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1680122600	9999	YES	NO
LAKE PARK East of Windsor Road	4600's		LAKE BLVD.		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X			X	X		X		Municipal Park	Not applicable	1690111600	9999	YES	NO
OAK RIPARIAN PARK east of Ridge Road	4600's		LAKE BLVD.		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X			X	X		X		Municipal Park	Not applicable	1690111600	9999	YES	NO
Lake Blvd. Sewer Lift Station	4700 1/2		LAKE BLVD.		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1693612000	9999	YES	NO
CLOSED BALL FIELD	2600's		LEE DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1615011000	9999	YES	NO
Leisure Village #2 Sewer Lift Station	4933		LEISURE VILLAGE DRIVE		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1693814200	9999	YES	NO
Loretta Sewer Lift Station	1261		LORETTA STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1450102500	9999	YES	NO
Pacifica Sewer Lift Station	4991		MACARIO ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1221902200	9999	YES	NO
MARSHALL STREET PARK	1400		MARSHALL STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1522706000	9999	YES	NO
MARSHALL STREET POOL	1404		MARSHALL STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Municipal Pool	Not applicable	1522706000	9999	YES	NO
MAXON LANDFILL	1600's		MAXON STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Land Fill	Not applicable	1482602800	9999	YES	NO
BUDDY TODD PARK	3000's		MESA DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1490900100	9999	YES	NO
MARTIN LUTHER KING PARK	4300's		MESA DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1605700800	9999	YES	NO
WOMEN'S CLUB PARK	1500'S		MISSION AVENUE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1482601100	9999	YES	NO
VFW LODGE - OLD POLICE STATION	1617		MISSION AVENUE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Leased Building	Not applicable	1482602400	9999	YES	NO
MISSION AVENUE LANDFILL	2070		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X					Municipal Land Fill	Not applicable	1451500200	9999	YES	NO
LA MISSION APARTMENTS	3200		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Housing	Not applicable	1602715700	9999	YES	NO
Fire Station No. 7 Mission Avenue	3350		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1602708400	9999	YES	NO
Mission Sewer Lift Station	3476		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1602906400	9999	YES	NO
POLICE DEPARTMENT	3855		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Police Station	Not applicable	1605601300	9999	YES	NO
IVEY RANCH PARK	4100's		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1580800700	9999	YES	NO
LEASED FARM LAND	5700's		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Municipal Leased Farm Land	Not applicable	1571505600	9999	YES	NO
LEASED FARM LAND	5800's		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Municipal Leased Farm Land	Not applicable	1571505600	9999	YES	NO
Lot 20 Myers, North of Neptune	0	N	MYERS STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1471601000	9999	YES	NO
Lot 21 Myers, North of Windward	0	N	MYERS STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1471601000	9999	YES	NO
Lot 24 Myers, North of Mission	0	N	MYERS STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1473502000	9999	YES	NO
Lot 25 Myers, North of Seagaze	0	N	MYERS STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1473502100	9999	YES	NO
Lot 26 Myers, North of Tyson	0	N	MYERS STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1473501600	9999	YES	NO
Lot 27 Myers, South of Minnesota	0	S	MYERS STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1502630700	9999	YES	NO
SF Peak Reservoir Nighthawk Court West of Nighthawk Way	0		NIGHTHAWK COURT		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1690111800	9999	YES	NO
Sewer Lift Station Nighthawk Way (South Ridge Trails 11)	0		NIGHTHAWK WAY		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1694534900	9999	YES	NO
Pier Baitshop Sewer Lift Station	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	Unknown	9999	YES	YES
Pier Restroom Sewer Lift Station	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	Unknown	9999	YES	YES
Ruby's Sewer Lift Station	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	Unknown	9999	YES	YES
PIER BAITSHOP	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1		X	X		X						Municipal Pier	Not applicable	Unknown	9999	YES	YES
OCEANSIDE PIER	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1		X	X		X						Municipal Pier	Not applicable	Unknown	9999	YES	YES
PIER LIFEGUARD TOWER 1	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1		X	X		X						Municipal Pier	Not applicable	Unknown	9999	YES	YES
Oceanside Boulevard Sewer Lift Station	1664		OCEANSIDE BLVD		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1523202200	9999	YES	NO
Fire Station No. 3	3101		OCEANSIDE BLVD		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1620310500	9999	YES	NO
CITY OPERATION CENTER	4927		OCEANSIDE BLVD		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Operation Center	Not applicable	1615010700	9999	YES	YES
SPRING CREEK PARK	5500's		OLD RANCH ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1577715900	9999	YES	NO
PACIFIC STREET LINEAR PARK	100's		PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	Unknown	9999	YES	NO
LEASED RESIDENTIAL AREA	100	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Housing	Not applicable	1472610700	9999	YES	NO
Harbor #5 Sewer Lift Station	1200	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS: Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances		Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
Lot 10	1200	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Leased Residential - Marina Del Mar Condominium	1202	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1430103100	9999	YES	YES
Lot 11A	1300	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Lot 11B	1300	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Lot F	1300	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1430103100	9999	YES	YES
JUNIOR LIGUARD FACILITY	1311	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Building	Not applicable	1431201000	9999	YES	YES
HARBOR FUEL DOCK	1380	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fuel Dock	Not applicable	1431201000	9999	YES	YES
Harbor #6 Sewer Lift Station	1384	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
Lot 12	1400	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
BUCANNER BEACH PARK	1500's	S	PACIFIC STREET		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X			X	X		X		Municipal Park	Not applicable	1530110600	9999	YES	NO
Talone Reservoir - North of Panorama Ridge Way	0		PASEO HERMOSA		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municiapl Water Reservoir	Not applicable	1581401200	9999	YES	NO
Guajome Reservoir Northeast of Temple Heights	0		PEACOCK BLVD.		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municiapl Water Reservoir	Not applicable	1581305800	9999	YES	NO
HERITAGE PARK	220		PEYRI DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1580403900	9999	YES	NO
MISSION WELLS PARK	200's		PEYRI DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1587913800	9999	YES	NO
Lot 34 Pier East of Tremont Street	0		PIER VIEW WAY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1470871200	9999	YES	YES
SKATE PARK	300's		PIER VIEW WAY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1471610500	9999	YES	YES
FIRE STATION NO.1	714		PIERVIEW WAY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1471081500	9999	YES	NO
North Valley Sewer Lift Station	3930	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1570210400	9999	YES	NO
Police Shooting Range	3950	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Police Shooting Range	Not applicable	1570210400	9999	YES	NO
San Luis Rey Treatment Plant	3950	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Treatment Plant	Not applicable	1570210400	9999	YES	NO
LIBBY LAKE PARK RESOURCE CENTER	4700	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Resource Center	Not applicable	1579002100	9999	YES	NO
Fire Station No. 5	4841	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1570604900	9999	YES	NO
MELBA BISHOP PARK	5306	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1220811100	9999	YES	NO
MARLADO PARK	800's		RIVERTREE DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1585313800	9999	YES	NO
Roja Sewer Lift Station	703		ROJA STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1220501100	9999	YES	NO
JOE BALDERAM COMMUNITY CENTER	709		SAN DIEGO STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Community Center	Not applicable	1480740100	9999	YES	NO
SAN DIEGO STREET SHELTER	1501		LAUREL STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Shelter	Not applicable	1480130100	9999	YES	NO
Saint Malo Sewer Lift Station	52		SAINT MALO BEACH		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1551012900	9999	YES	NO
Fire Station No. 6	895	N	SANTA FE DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1584302100	9999	YES	NO
LEASED FARM LAND	800's	N	SANTA FE DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Municipal Leased Farm Land	Not applicable	1571004200	9999	YES	YES
EL CORAZON SENIOR CENTER	3302		SENIOR CETER DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Senior Center	Not applicable	1620825000	9999	YES	NO
JOSEPH SEPULVEDA PARK	3800's		SHERBOURNE DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1655612000	9999	YES	NO
JOSEPH CARRASCO PARK	2400's		SKYLARK DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1512522200	9999	YES	NO
Skyhaven Sewer Lift Station	3521		SKYHAVEN LANE		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1682112800	9999	YES	NO
Calaveras Sewer Lift Station	3636		SKYHAVEN LANE		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1682411200	9999	YES	NO
Water Pressure Station Sleeping Indian	0		SLEEPING INDIAN ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Pressure Station	Not applicable	1212022000	9999	YES	NO
SOUTH OCEANSIDE TENNIS COURTS	1800's		STEWART STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1532340300	9999	YES	NO
Weese Water Treatment Plant Twin Oaks Valley Road	3885		SILVER LEAF LAKE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Treatment Plant	Not applicable	Not applicable	9999	YES	NO
La Salina Treatment Plant	1330	S	TAIT STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Water Treatment Plant	Not applicable	1530110600	9999	YES	NO
South Pacific Sewer Lift Station	1330	S	TAIT STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1530110600	9999	YES	NO
LUISIANO PARK	5100's		TEAL WAY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municiapl Park	Not applicable	1225020100	9999	YES	NO
Lot 28 The Strand, North of Pier View Way	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Not applicable	9999	YES	YES
Lot 29 The Strand at the Pier	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Not applicable	9999	YES	YES
Lot 30 The Strand, North of Seagaze	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Not applicable	9999	YES	YES
Lot 31 The Strand, North of Wisconsin Avenue	0	N	THE STRAND		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Not applicable	9999	YES	YES
Lot A The Strand and Mission	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Not applicable	9999	YES	YES
Lot B 200 North the Strand	200	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Not applicable	9999	YES	YES
Lot C Lifeguard Headquarters	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Not applicable	9999	YES	YES
Lot D Beach Community Center	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1470741400	9999	YES	YES
BEACH LOCK-UP	122	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Police Lock-Up	Not applicable	1472632400	9999	YES	YES
Bandstand Sewer Lift Station	200	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lif Station	Not applicable	1470741500	9999	YES	YES
BEACH AMPHITHEATER	200	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Amphitheater	Not applicable	1470741500	9999	YES	YES
BEACH COMMUNITY CENTER	300	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Community Center	Not applicable	1470741400	9999	YES	YES
LIFEGUARD'S HEADQUARTER'S	301	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1			X		X		X				Municipal Lifeguard's Headquartes	Not applicable	Not applicable	9999	YES	YES
STRAND BEACH PARK	200	S	THE STRAND		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1472640100	9999	YES	YES
TYSON STREET PARK	500	S	THE STRAND		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1500710100	9999	YES	YES

Attachment 4-A Municipal Inventory
City of Oceanside FY 2010-11

										POTENTIAL POLLUTANTS														
Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances		Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
Wisconsin Sewer Lift Station	715	S	THE STRAND		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1502602700	9999	YES	YES
Pilgrim Reservoir South of Camp Pendleton	0		VANDEGRIFT BLVD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1225211700	9999	YES	NO
OCEANSIDE POLICE DEPARTMENT RESOURCE CENTER	521		VANDEGRIFT BLVD	B	High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Resource Center	Not applicable	1570403600	9999	YES	NO
PALISADES PARK	3400's		VISTA DEL ORO		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1651131400	9999	YES	NO
Heritage Reservoir East of Rancho Del Oro Drive	0		VIA RANCHO ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1600202400	9999	YES	NO
Morro Hills Reservoir Southeast of Sleeping Indian Ranch	0		WILSHIRE ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1212011100	9999	YES	NO

Attachment 4-B

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Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Division of Water Quality
1001 I Street • Sacramento, California 95814 • (916) 341-5538
Mailing Address: P.O. Box 1977 • Sacramento, California • 95812-1977
Fax (916) 341-5543 • http://www.waterboards.ca.gov/water_issues/programs/stormwater/

Arnold Schwarzenegger
Governor

To Interested Parties:

2010-2011 ANNUAL REPORT ANNUAL REPORT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Storm Water Multi-Application Reporting and Tracking System (SMARTS) allows an individual discharger to file and submit their Annual Report electronically to the Regional Water Board. Currently SMARTS is not a mandatory reporting method, but we encourage all dischargers to register and use SMARTS.

To register to use SMARTS please visit: https://smarts.waterboards.ca.gov and download the SMARTS LRP registration form and instructions. Please fill out the form and mail it back to: SMARTS Registration, P.O. Box 1977, Sacramento, CA 95812. Once a complete registration form is received, a login name and password will be emailed to you.

For SMARTS registration questions or information please contact the SMARTS help center at 1-866-563-3107 or by email at smarts@waterboards.ca.gov.

To receive email updates on Storm Water Industrial permitting issues, please sign up at http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml The Storm Water program currently maintains five email lists:

- Storm Water Database Issues
- Storm Water Construction Permitting Issues
- Storm Water Industrial Permitting Issues
- Storm Water Municipal Permitting Issues
- Sustainable Development

For all other permitting questions please contact the Storm Water Section at 1-866-563-3107 or by email at stormwater@waterboards.ca.gov.

Sincerely,

Storm Water Section

State of California
STATE WATER RESOURCES CONTROL BOARD

2010-2011
ANNUAL REPORT
FOR
STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2010 through June 30, 2011

An annual report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers and e-mail addresses of the Regional Board contacts, as well as the Regional Board office addresses can be found at http://www.waterboards.ca.gov/stormwtr/contact.html. To find your Regional Board information, match the first digit of your WDID number with the corresponding number that appears in parenthesis on the first line of each Regional Board office.

GENERAL INFORMATION:

A. Facility Information:

Facility WDID No: 9 371005695

Facility Business Name: City of Oceanside Maxson Landfill

Contact Person: Bryan Forward

Physical Address: 1680.5 Maxson St and Brooks St

e-mail: bforward@ci.oceanside.ca.us

City: Oceanside, Ca 92054

CA Zip: 92054 Phone: 760 435 5194

Standard Industrial Classification (SIC) Code(s): 4953

B. Facility Operator Information:

Operator Name: Oceanside Public Works Department

Contact Person: Bryan Forward

Mailing Address: 300 N. Coast Hwy

e-mail:

City: Oceanside, Ca 92054

State: Ca Zip: 92054 Phone:

C. Facility Billing Information:

Operator Name: Oceanside Public Works Department

Contact Person: Bryan Forward

Mailing Address: 300 N. Coast Hwy

e-mail:

City: Oceanside ,Ca 92054

State: Ca Zip: 92054 Phone:

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

ii. ☐ Submitted **No Exposure Certification** (NEC) Date Submitted: ____/____/____

Re-evaluation Date: ____/____/____

Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: ____/____/____

Re-evaluation Date: ____/____/____

Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

iv. ☐ Received Regional Board Certification Certification Date: ____/____/____

v. ☐ Received Local Agency Certification Certification Date: ____/____/____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? ____0____ If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

☐ **YES** ☒ **NO** **attach explanation (Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? ____1____

4. For each storm event sampled, did you collect and analyze a sample from each of the facility's' storm water discharge locations? ☒ YES, go to Item E.6 ☐ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☐ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated _____/ /_____

6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☐ YES ☒ NO, **attach explanation**

8. Were there any discharges of storm water that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☒ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

       _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

       _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

       _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler
- Parameters tested
- Name of analytical testing laboratory
- Discharge location identification
- Testing results
- Test methods used
- Test detection limits
- Date of testing
- Copies of the laboratory analytical results

E-2. Sampling and Analysis

First storm event of the season that produced a discharge occurred during non working hours.

E-6. Sampling and Analysis

No samples were collected during the reporting period of 10-11. All storm water discharges occurred before or after working hours and or were not preceded by 3 working days.

E-7. Sampling and Analysis

No samples were collected during the reporting period of 10-11. All storm water discharges occurred before or after working hours and or were not preceded by 3 working days.

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**

Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

☒ **YES** ☐ **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers.** Indicate "N/A" for quarters without any authorized non-storm water discharges.

July-September	☒ **YES**	☐ **NO**	☐ **N/A**	October-December	☒ **YES**	☐ **NO**	☐ **N/A**
January-March	☒ **YES**	☐ **NO**	☐ **N/A**	April-June	☒ **YES**	☐ **NO**	☐ **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information:

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**

Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non- storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July-September	☒ **YES**	☐ **NO**	October-December	☒ **YES**	☐ **NO**
January-March	☒ **YES**	☐ **NO**	April-June	☒ **YES**	☐ **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

☒ **YES** ☐ **NO** Go to Item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

☐ **YES** ☒ **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information:

i. name of each unauthorized non-storm water discharge
ii. date and time of observation
iii. source and location of each unauthorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers.** Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information:

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occurred during the last year
   - outdoor wash and rinse areas
   - process/manufacturing areas
   - loading, unloading, and transfer areas
   - waste storage/disposal areas
   - dust/particulate generating areas
   - erosion areas
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- Sampling and Analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

2010-2011

ANNUAL REPORT

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1.	Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2.	If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☐ YES	☒ NO	☐ NA
3.	If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☐ NA
4.	Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Bryan Forward

Signature: _____ Date: _____

Title: Maintenance Supervisor

DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

The Industrial Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least four parameters. These are pH, Total Suspended Solids (TSS), Specific Conductance (SC),and Total Organic Carbon (TOC). Oil and Grease (O&G) may be substituted for TOC. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge as a result of industrial activity and analytical parameters listed in Table D of the General Permit. There are no numeric limitations for the parameters you test for.

The four parameters which the General Permit requires to be tested are considered *indicator* parameters. In other words, regardless of what type of facility you operate, these parameters are nonspecific and general enough to usually provide some indication whether pollutants are present in your storm water discharge. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and a alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or industrial activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure of the undissolved solids that are present in your storm water discharge. Sources of TSS include sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Specific Conductance (SC) is a numerical expression of the ability of the water to carry an electric current. SC can be used to assess the degree of mineralization, salinity, or estimate the total dissolved solids concentration of a water sample. Because of air pollution, most rain water has a SC a little above zero. A high SC could affect the usability of waters for drinking, irrigation, and other commercial or industrial use.

Total Organic Carbon (TOC) is a measure of the total organic matter present in water. (All organic matter contains carbon) This test is sensitive and able to detect small concentrations of organic matter. Organic matter is naturally occurring in animals, plants, and man. Organic matter may also be man made (so called synthetic organics). Synthetic organics include pesticides, fuels, solvents, and paints. Natural organic matter utilizes the oxygen in a receiving water to biodegrade. Too much organic matter could place a significant oxygen demand on the water, and possibly impact its quality. Synthetic organics either do not biodegrade or biodegrade very slowly. Synthetic organics are a source of toxic chemicals that can have adverse affects at very low concentrations. Some of these chemicals bioaccumulate in aquatic life. If your levels of TOC are high, you should evaluate all sources of natural or synthetic organics you may use at your site.

Oil and Grease (O&G) is a measure of the amount of oil and grease present in your storm water discharge. At very low concentrations, O&G can cause a sheen (that floating "rainbow") on the surface of water (1 qt. of oil can pollute 250,000 gallons of water). O&G can adversely affect aquatic life and create unsightly floating material and film on water, thus making it undrinkable. Sources of O&G include maintenance shops, vehicles, machines and roadways.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at http://www.waterboards.ca.gov. It is contained in the Sampling and Analysis Reduction Certification.

See Storm Water Contacts at

http://www.waterboards.ca.gov/water_issues/programs/stormwater/contact.shtml

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event BASIC PARAMETERS PH	TSS	SC	O&G	TOC	OTH	
S.END OF DIVISION ST.	/ / AM PM :	: AM PM				NA			
	/ / AM PM :	: AM PM				NA			
	/ / AM PM :	: AM PM				NA			
	/ / AM PM :	: AM PM				NA			
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l		
TEST METHOD DETECTION LIMIT:									
TEST METHOD USED:									
ANALYZED BY (SELF/LAB):									

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For Second Storm Event						
			BASIC PARAMETERS					OTH	
			pH	TSS	SC	O&G	TOC		
S. END OF DIVISION ST	/ / AM PM :	: AM PM				NA			
	/ / AM PM	: AM PM				NA			
	: / / AM PM	: AM PM				NA			
	: / / AM PM	: AM PM				NA			
	:								
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l		
TEST METHOD DETECTION LIMIT:									
TEST METHOD USED:									
ANALYZED BY (SELF/LAB):									

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

JULY-SEPT. DATE: 7 / 30 / 10	Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: C B	WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER? YES [x] NO [ ]
QUARTER: OCT.-DEC. DATE: 10 / 29 / 10	Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: C B	WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER? YES [x] No [ ]
QUARTER: JAN.-MARCH DATE: 1 / 27 / 11	Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: C B	WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER? YES [x] NO [ ]
QUARTER: APRIL-JUNE DATE: 4 / 29 / 11	Observers Name: C BRUST Title: Signature: C B	WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER? YES [ ] NO [ ]

	EXAMPLE: Air conditioner Units on Building C	EXAMPLE: Air conditioner condensate	At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
7 / 30 / 10 11:00 AM PM	BROOK ST SWIM CENTER	BACK WASHING OF POOL FILTERS	WATER IS CLEAR IN COLOR, NO ODOR,SHEEN OR FLOATABLES.	DISCHARGE IS CLEAR	PLACE STRA DRAINS TO F ENTERING S
10 / 29 / 10 9:30 AM PM	BROOK ST SWIM CENTER	BACK WASHING OF POOL FILTERS	WATER IS CLEAR IN COLOR, NO ODOR,SHEEN OR FLOATABLES.	DISCHARGE IS CLEAR	PLACE STRA DRAINS TO F ENTERING S
1 / 27 / 11 10:20 AM PM	BROOK ST SWIM CENTER	BACK WASHING OF POOL FILTERS	WATER IS CLEAR IN COLOR, NO ODOR,SHEEN OR FLOATABLES.	DISCHARGE IS CLEAR	PLACE STRA DRAINS TO F ENTERING S
4 / 29 / 11 9 :45 AM PM	BROOK ST SWIM CENTER	BACK WASHING OF POOL FILTERS	WATER IS CLEAR IN COLOR, NO ODOR,SHEEN OR FLOATABLES.	DISCHARGE IS CLEAR	PLACE STRA DRAINS TO F ENTERING S
/ / : AM PM					

FORM 3-QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

- Unauthorized NSWDs are discharges (such as wash or rinse waters) that do not meet the conditions provided in Section D (pages 5-6) of the General Permit.
- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accordance with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

	Signature:	
QUARTER: OCT.-DEC. DATE/TIME OF OBSERVATIONS 10 / 29 / 10 9 : 30 AM ☐ PM ☐	Observers Name: C BRUST – Title: MAINT. SPECIALIST – Signature:	WERE UNAUTHORIZED NSWDs OBSERVED? YES ☐ WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs? YES ☐
QUARTER: JAN.-MARCH DATE/TIME OF OBSERVATIONS 1 / 27 / 11 10 :20 AM ☐ PM ☐	Observers Name: C BRUST – Title: MAINT. SPECIALIST – Signature:	WERE UNAUTHORIZED NSWDs OBSERVED? YES ☐ WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs? YES ☐
QUARTER: APRIL-JUNE DATE/TIME OF OBSERVATIONS 4 /29 / 11 9 : 45 AM ☐ PM ☐	Observers Name: C BRUST – Title: MAINT.SPECIALIST – Signature:	WERE UNAUTHORIZED NSWDs OBSERVED? YES ☐ WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs? YES ☐

	Vehicle Wash Water		NSWD SOURCE	NSWD AREA AND DISCHARGE LOCATION
/ / : AM PM			NA	
/ / : AM PM			NA	
/ / : AM PM			NA	
/ / : AM PM				

Observation Date: October 29 2010 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	S. OUTFALL @ DIVISION ST		
	Observation Time	9 : 30 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: November 30 2010 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 S. OUTFALL @ DIVISION ST	#2	#3
	Observation Time	11 : 00 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: December 28 2010 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 S. OUTFALL @ DIVISION ST	#2	#3
	Observation Time	10 : 30 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: January 27 2011 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 S. OUTFALL @ DIVISION ST	#2	#3
	Observation Time	9 : 45 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐

/ / : AM PM		NA		
/ / : AM PM		NA		
/ / : AM PM		NA		
/ / : AM PM		NA		
/ / : AM PM		NA		

Observation Date: February 23 2011	Drainage Location Description	#1 S. OUTFALL @ DIVISION ST	#2	#3
Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: C B	Observation Time	8 : 30 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: March 29 2011	Drainage Location Description	#1 S. OUTFALL @ DIVISION ST	#2	#3
Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: C B	Observation Time	9 : 20 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: April 27 2011	Drainage Location Description	#1 S. OUTFALL @ DIVISION ST	#2	#3
Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: C B	Observation Time	1 : 00 ☒ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: May 31 2011	Drainage Location Description	#1 S. OUTFALL @ DIVISION ST	#2	#3
Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: C B	Observation Time	11 : 30 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐

			maintenance area.	
/ / : AM ☐ PM ☐		NA		
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		

(as identified in your SWPPP) LANDFILL RUN-OFF	FULLY IMPLEMENTED?	☒ NO	question, complete the next two columns of this form	
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO		

	ARE ADDITIONAL/REVISED BMPs NECESSARY?	YES ☐ NO ☐	complete the next two columns of this form
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	YES ☐ NO ☐	If yes, to either question, complete the next two columns of this form
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	YES ☐ NO ☐	
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	YES ☐ NO ☐	If yes, to either question, complete the next two columns of this form
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	YES ☐ NO ☐	
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?	YES ☐ NO ☐	If yes, to either question, complete the next two columns of this form
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	YES ☐ NO ☐	

Describe deficiencies in BMPs or BMP implementation	
Describe deficiencies in BMPs or BMP implementation	
Describe deficiencies in BMPs or BMP implementation	

Linda S. Adams
Secretary for
ironmental Protection

State Water Resources Control Board

Division of Water Quality
1001 I Street • Sacramento, California 95814 • (916) 341-5538
Mailing Address: P.O. Box 1977 • Sacramento, California • 95812-1977
Fax (916) 341-5543 • http://www.waterboards.ca.gov/water_issues/programs/stormwater/

Arnold Schwarzenegger
Governor

To Interested Parties:

2010-2011 ANNUAL REPORT ANNUAL REPORT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Storm Water Multi-Application Reporting and Tracking System (SMARTS) allows an individual discharger to file and submit their Annual Report electronically to the Regional Water Board. Currently SMARTS is not a mandatory reporting method, but we encourage all dischargers to register and use SMARTS.

To register to use SMARTS please visit: https://smarts.waterboards.ca.gov and download the SMARTS LRP registration form and instructions. Please fill out the form and mail it back to: SMARTS Registration, P.O. Box 1977, Sacramento, CA 95812. Once a complete registration form is received, a login name and password will be emailed to you.

For SMARTS registration questions or information please contact the SMARTS help center at 1-866-563-3107 or by email at smarts@waterboards.ca.gov.

To receive email updates on Storm Water Industrial permitting issues, please sign up at http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml The Storm Water program currently maintains five email lists:

- Storm Water Database Issues
- Storm Water Construction Permitting Issues
- Storm Water Industrial Permitting Issues
- Storm Water Municipal Permitting Issues
- Sustainable Development

For all other permitting questions please contact the Storm Water Section at 1-866-563-3107 or by email at stormwater@waterboards.ca.gov.

Sincerely,

Storm Water Section

State of California
STATE WATER RESOURCES CONTROL BOARD

2010-2011
ANNUAL REPORT
FOR
STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2010 through June 30, 2011

An annual report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers and e-mail addresses of the Regional Board contacts, as well as the Regional Board office addresses can be found at http://www.waterboards.ca.gov/stormwtr/contact.html. To find your Regional Board information, match the first digit of your WDID number with the corresponding number that appears in parenthesis on the first line of each Regional Board office.

GENERAL INFORMATION:

A. Facility Information:

Facility WDID No: 9 371005696

Facility Business Name: City of Oceanside Mission Ave.Landfill

Contact Person: Bryan Forward

Physical Address: 2070 Mission Ave

e-mail: bforward@ci.oceanside.ca.us

City: Oceanside, Ca 92054

CA Zip: 92054 Phone: 760 435 5194

Standard Industrial Classification (SIC) Code(s): 4953

B. Facility Operator Information:

Operator Name: Oceanside Public Works Department

Contact Person: Bryan Forward

Mailing Address: 300 N. Coast Hwy

e-mail:

City: Oceanside, Ca 92054

State: Ca Zip: 92054 Phone: 760 435 5194

C. Facility Billing Information:

Operator Name: Oceanside Public Works Department

Contact Person: Bryan Forward

Mailing Address: 300 N. Coast Hwy

e-mail:

City: Oceanside ,Ca 92054

State: Ca Zip: 92054 Phone:

2010-2011
ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: ____/____/____

Re-evaluation Date: ____/____/____

Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: ____/____/____

Re-evaluation Date: ____/____/____

Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

iv. ☐ Received Regional Board Certification Certification Date: ____/____/____

v. ☐ Received Local Agency Certification Certification Date: ____/____/____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? ____0____ If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

☐ **YES** ☒ **NO** **attach explanation (Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? ____1____

E-2. Sampling and Analysis

First storm event of the season that produced a discharge occurred during non working hours.

E-6. Sampling and Analysis

No samples were collected during the reporting period of 10-11. All storm water discharges occurred before or after working hours and or were not preceded by 3.working days.

E-7. Sampling and Analysis

No samples were collected during the reporting period of 10-11. All storm water discharges occurred before or after working hours and or were not preceded by 3 working days.

4. For each storm event sampled, did you collect and analyze a sample from each of the facility's' storm water discharge locations? ☒ YES, go to Item E.6 ☐ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☐ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated _____/___/_____

6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☐ YES ☒ NO, **attach explanation**

8. Were there any discharges of storm water that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☐ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

    _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

    _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

    _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler
- Parameters tested
- Name of analytical testing laboratory
- Discharge location identification
- Testing results
- Test methods used
- Test detection limits
- Date of testing
- Copies of the laboratory analytical results

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**

Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

☒ **YES** ☐ **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers.** Indicate "N/A" for quarters without any authorized non-storm water discharges.

July-September	☒ **YES**	☐ **NO**	☐ **N/A**	October-December	☒ **YES**	☐ **NO**	☐ **N/A**
January-March	☒ **YES**	☐ **NO**	☐ **N/A**	April-June	☒ **YES**	☐ **NO**	☐ **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information:

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**

Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non- storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July-September	☒ **YES**	☐ **NO**	October-December	☒ **YES**	☐ **NO**
January-March	☒ **YES**	☐ **NO**	April-June	☒ **YES**	☐ **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

☒ **YES** ☐ **NO** Go to Item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

☐ **YES** ☒ **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information:

i. name of each unauthorized non-storm water discharge
ii. date and time of observation
iii. source and location of each unauthorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach** an **explanation for any "NO" answers.** Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information:

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occurred during the last year
   - outdoor wash and rinse areas
   - process/manufacturing areas
   - loading, unloading, and transfer areas
   - waste storage/disposal areas
   - dust/particulate generating areas
   - erosion areas
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

   The following records should be reviewed:

   - quarterly authorized non-storm water discharge visual observations
   - monthly storm water discharge visual observation
   - records of spills/leaks and associated clean-up/response activities
   - quarterly unauthorized non-storm water discharge visual observations
   - Sampling and Analysis records
   - preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

   The following SWPPP items should be reviewed:

   - pollution prevention team
   - list of significant materials
   - description of potential pollutant sources
   - assessment of potential pollutant sources
   - identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

   The following BMP categories should be reviewed:

   - good housekeeping practices
   - spill response
   - employee training
   - erosion control
   - quality assurance
   - preventative maintenance
   - material handling and storage practices
   - waste handling/storage
   - structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

2010-2011

ANNUAL REPORT

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1.	Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2.	If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☐ YES	☒ NO	☐ NA
3.	If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☐ NA
4.	Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Bryan Forward

Signature: _____ Date: _____

Title: Maintenance Supervisor

DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

The Industrial Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least four parameters. These are pH, Total Suspended Solids (TSS), Specific Conductance (SC),and Total Organic Carbon (TOC). Oil and Grease (O&G) may be substituted for TOC. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge as a result of industrial activity and analytical parameters listed in Table D of the General Permit. There are no numeric limitations for the parameters you test for.

The four parameters which the General Permit requires to be tested are considered *indicator* parameters. In other words, regardless of what type of facility you operate, these parameters are nonspecific and general enough to usually provide some indication whether pollutants are present in your storm water discharge. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and a alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or industrial activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure of the undissolved solids that are present in your storm water discharge. Sources of TSS include sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Specific Conductance (SC) is a numerical expression of the ability of the water to carry an electric current. SC can be used to assess the degree of mineralization, salinity, or estimate the total dissolved solids concentration of a water sample. Because of air pollution, most rain water has a SC a little above zero. A high SC could affect the usability of waters for drinking, irrigation, and other commercial or industrial use.

Total Organic Carbon (TOC) is a measure of the total organic matter present in water. (All organic matter contains carbon) This test is sensitive and able to detect small concentrations of organic matter. Organic matter is naturally occurring in animals, plants, and man. Organic matter may also be man made (so called synthetic organics). Synthetic organics include pesticides, fuels, solvents, and paints. Natural organic matter utilizes the oxygen in a receiving water to biodegrade. Too much organic matter could place a significant oxygen demand on the water, and possibly impact its quality. Synthetic organics either do not biodegrade or biodegrade very slowly. Synthetic organics are a source of toxic chemicals that can have adverse affects at very low concentrations. Some of these chemicals bioaccumulate in aquatic life. If your levels of TOC are high, you should evaluate all sources of natural or synthetic organics you may use at your site.

Oil and Grease (O&G) is a measure of the amount of oil and grease present in your storm water discharge. At very low concentrations, O&G can cause a sheen (that floating "rainbow") on the surface of water (1 qt. of oil can pollute 250,000 gallons of water). O&G can adversely affect aquatic life and create unsightly floating material and film on water, thus making it undrinkable. Sources of O&G include maintenance shops, vehicles, machines and roadways.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at http://www.waterboards.ca.gov. It is contained in the Sampling and Analysis Reduction Certification.

See Storm Water Contacts at

http://www.waterboards.ca.gov/water_issues/programs/stormwater/contact.shtml

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event BASIC PARAMETERS PH	TSS	SC	O&G	TOC	OT	
N End of Canyon Dr@ Hwy 76	/ / AM PM :	: AM PM				NA			
	/ / AM PM	: AM PM				NA			
	: / / AM PM	: AM PM				NA			
	: / / AM PM	: AM PM				NA			
	:								
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l		
TEST METHOD DETECTION LIMIT:									
TEST METHOD USED:									
ANALYZED BY (SELF/LAB):									

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For Second Storm Event BASIC PARAMETERS ~~PH~~	~~TSS~~	~~SC~~	~~O&G~~	~~TOC~~	OTI	
N End of Canyon Dr@ Hwy 76	/ / AM PM :	: AM PM				NA			
	/ / AM PM	: AM PM				NA			
	: / / AM PM	: AM PM				NA			
	: / / AM PM	: AM PM				NA			
	:								
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l		
TEST METHOD DETECTION LIMIT:									
TEST METHOD USED:									
ANALYZED BY (SELF/LAB):									

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

QUARTER: **JULY-SEPT.** DATE: 7 / 30 / 10	**Observers Name:** C BRUST **Title:** MAINT. SPECIALIST **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** YES [ ] NO [ ]
QUARTER: **OCT.-DEC.** DATE: 10 / 29 / 10	**Observers Name:** C BRUST **Title:** MAINT. SPECIALIST **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** YES [ ] No [ ]
QUARTER: **JAN.-MARCH** DATE: 1 / 27 / 11	**Observers Name:** C BRUST **Title:** MAINT. SPECIALIST **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** YES [ ] NO [ ]
QUARTER: **APRIL-JUNE** DATE: 4 / 29 / 11	**Observers Name:** C BRUST **Title:** Maint. Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** YES [ ] NO [ ]

	EXAMPLE: Air conditioner Units on Building C	EXAMPLE: Air conditioner condensate	At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
7 / 30 / 10 10:40 AM PM	**Irrigation run-off from public prk ways. O'side school dist. Maint yard**	School Maint. Yard, private irrigation	WATER IS CLEAR IN COLOR, NO ODOR,SHEEN OR FLOATABLES.	DISCHARGE IS CLEAR	Place Eco-E storm drain
10 / 29 / 10 9:50 AM PM	**Irrigation run-off from public prk ways. O'side school dist. Maint yard**	School Maint. Yard, private irrigation	WATER IS CLEAR IN COLOR, NO ODOR,SHEEN OR FLOATABLES.	DISCHARGE IS CLEAR	Place Eco-E storm drain
1 / 27 / 11 11:20 AM PM	**Irrigation run-off from public prk ways. O'side school dist. Maint yard**	School Maint. Yard, private irrigation	WATER IS CLEAR IN COLOR, NO ODOR,SHEEN OR FLOATABLES.	DISCHARGE IS CLEAR	Place Eco-E storm drain
4 / 29 / 11 10 :45 AM PM	**Irrigation run-off from public prk ways. O'side school dist. Maint yard**	School Maint. Yard, private irrigation	WATER IS CLEAR IN COLOR, NO ODOR,SHEEN OR FLOATABLES.	DISCHARGE IS CLEAR	Place Eco-E storm drain
/ / : AM PM					

FORM 3-QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

- Unauthorized NSWDs are discharges (such as wash or rinse waters) that do not meet the conditions provided in Section D (pages 5-6) of the General Permit.
- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accordance with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

	Signature:	
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** 10 / 29 / 10 9 : 50 AM PM	**Observers Name:** C BRUST **Title:** MAINT. SPECIALIST **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** YES
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** 1 / 27 / 11 11 :20 AM PM	**Observers Name:** C BRUST **Title:** MAINT. SPECIALIST **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** YES
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** 4 /29 / 11 10 : 45 AM PM	**Observers Name:** C BRUST **Title:** MAINT.SPECIALIST **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** YES **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** YES

	EXAMPLE: Vehicle Wash Water	NW Corner of Parking Lot	AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION	
__/__/__ __:__ AM PM			NA		
__/__/__ __:__ AM PM			NA		
__/__/__ __:__ AM PM			NA		
__/__/__ __:__ AM PM					

Observation Date: October 29 2010 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 N. End of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	9 : 50 ☐ P.M. ☑ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø: ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☑	YES ☐ NO ☐	YES ☐
Observation Date: November 30 2010 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 N. End of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	10 : 40 ☐ P.M. ☑ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø: ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☑	YES ☐ NO ☐	YES ☐
Observation Date: December 28 2010 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 N. End of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	10 : 15 ☐ P.M. ☑ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☑	YES ☐ NO ☐	YES ☐
Observation Date: January 27 2011 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 N. End of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	11 : 10 ☐ P.M. ☑ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☑	YES ☐ NO ☐	YES ☐

/ / : AM PM		NA	
/ / : AM PM		NA	
/ / : AM PM		NA	
/ / : AM PM		NA	
/ / : AM PM		NA	

Observation Date: February 23 2011 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 N. End of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	9:30 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: March 29 2011 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 N. End of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	10:00 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: April 27 2011 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 N. End of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	11:30 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: May 31 2011 Observers Name: C BRUST Title: MAINT. SPECIALIST Signature: CB	Drainage Location Description	#1 N. End of Canyon Dr @ Hwy 76	#2	#3
	Observation Time	9:45 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
	Time Discharge Began	Ø : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐

			maintenance area.	
/ / : AM PM		NA		
/ / : AM PM		NA		
/ / : AM PM		NA		
/ / : AM PM		NA		
/ / : AM PM		NA		

(as identified in your SWPPP) LANDFILL RUN-OFF	FULLY IMPLEMENTED?	☒ NO	question, complete the next two columns of this form	
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO ☐		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?**	☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO ☐		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?**	☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO ☐		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?**	☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**
	ARE ADDITIONAL/REVISED BMPs NECESSARY?	☐ YES ☐ NO ☐		

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Attachment 4-C

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SPECIAL EVENTS

Inspection Form

Pursuant to Oceanside City Code Urban Runoff and Discharge C

Inspector:		**Date**		**Season**	
Event Name		**Event Type**			
Event Location		**Event Address**			
Contact Name		**Contact Phone**			
Weather Conditions	☐ Heavy Rain ☐ Light Rain ☐ Sunny ☐ Cloudy ☐ Partly Cloudy ☐ Rain				

PRE-EVENT (1)									**POST-EVENT**								
Time:	**NEEDS**								**NEEDS**								
SOURCE	**N A**	**Containment**	**Cover**	**Cleaning**	**Training**	**Other BMP**	**Adequate**	**ID Observed**	**N A**	**Containment**	**Cover**	**Cleaning**	**Training**	**Other BMP**	**Adequate**	**ID Observed**	
Solid Waste Storage and Disposal																	
Waste Containers																	
Grease Storage																	
Recycling Containers																	
Disposal Areas																	
Vehicles and Heavy Equipment																	
Washing Area																	
Spill Response																	
Storage Area																	
Outdoor Materials Handling and Storage																	
Storage Tanks																	
Other Liquid Containers																	
Equipment Storage																	
Food Preparation and Eating Areas																	
Spill Kits																	
Food Disposal																	
Eating Areas																	
Grounds Maintenance and Housekeeping																	
Storm Drains																	
Parking lots																	
Staff Vendor Training and SWPPP																	
SWPPP																	
Training																	
Portable Restrooms																	
Storage Area																	

OBSERVATIONS

☐ **No violations observed during the inspection.**	☐ **No violations observed during the**
☐ **Violations observed during the inspection**	☐ **Violations observed during the ins**
☐ **Implement Corrective Actions As Required Below**	☐ **Implement Corrective Actions As**

CORRECTIVE ACTION REQUIRED: ☐ Ph

1	2		1	2	
☐	☐	Prevent trash/recycling from overflowing.	☐	☐	Sweep up trash and debris.

4974

(City of Oceanside Inspection Report Page 2)

EVENT SUMMARY

PRE-EVENT	POST-EVENT

IMPROVEMENTS AND RECCOMENDATIONS

ADDITIONAL INFORMATION

Potential Pollutants	☐ **Bacteria** ☐ **Gross Pollutants** ☐ **Metals** ☐ **Nutrients** ☐ **Oil and Grease** ☐ **Organics** ☐ **Pesticides** ☐ **Sediments** ☐ **Trash** ☐ **Hazardous Materials** ☐ **Other**		
Enforcement Required	☐ Verbal Warning ☐ Written Warning ☐ Notice of Violation ☐ Stop Work Order ☐ Charge Back ☐ Administrative Citation/Fine ☐ Referred for Action		
BMP Assessment (circle one)	**5 4 3 2 1**	**Knowledge Assessment (circle one)**	**5 4 3 2 1** ☐ **Contact not available**

Comments Notes

This event is managed by World Triathlon Corp. All area's are maintained and well equipped.

Attachment 5-A

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Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
AMADORS REPAIR SERVICE	260		AIRPORT ROAD	A	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602715500	7538	NO	NO
DONALD ERBE CO INC	340		AIRPORT ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Parts Supply Store	Not applicable	1602711600	5531	NO	NO
TNT REPAIR SERVICES INC	350		AIRPORT ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602711600	7538	NO	NO
AIRPORT AUTOMOTIVE	360		AIRPORT ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602711600	7538	NO	NO
NORTH COUNTY HUMANE SOCIETY	572-576		AIRPORT ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Interior Repair an	Not applicable	1460310900	7532	NO	NO
PLAVAN PETROLEUM INC	575		AIRPORT ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Service Station	Not applicable	1460311800	5541	NO	NO
ROY'S AUTO REPAIR DETAIL & AUTO BODY	580		AIRPORT ROAD	B	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Interior Repair an	Not applicable	1460310800	7538	NO	NO
MISSION ANIMAL & BIRD HOSPITAL	655		BENET ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Pet Hospital	Not applicable	1450304300	742	YES	NO
CHEVRON / O'SIDE MART	656		BENET ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1450304300	5541	NO	NO
SAN DIEGO AUTO AUCTION INC	4691		CALLE JOVEN		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automobile, Auction Wholesale	Not applicable	1570604500	5012	YES	NO
ECOLOGY AUTO PARTS INC	2315		CARPENTER ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Parts Dealer Used	9 371013069	1450303500	5015	NO	NO
SEASIDE BODY AND PAINT	907	S	CLEVELAND STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automobile, Body and Paint Sho	Not applicable	1503711400	7532	NO	NO
ONE STOP AVIATION INC	1119	S	CLEVELAND STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Airplane, Engine Repair	Not applicable	1520160400	3724	NO	NO
CHEVRON / O'SIDE MART	601	N	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1432450700	5541	NO	NO
THRIFTY GASOLINE	802	N	COAST HWY		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1432060500	5541	NO	NO
CHEVRON / O'SIDE MART	1601	N	COAST HWY		High	Commercial	Oceanside	San Luis Rey	904.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1430902100	5541	NO	NO
O'SIDE TRANSMISSION UNLIMITED	229	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1500450800	7538	NO	NO
BEAUDRY'S AUTO COLLISION CENTER	325	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive - Body Shop	Not applicable	1500470500	7532	NO	NO
AUTO FOR LESS	409	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1501831300	7538	NO	NO
EDDIE'S AUTOMOTIVE INC	501	S	COAST HWY		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1501840900	7538	NO	NO
MOHSEN OIL	628	S	COAST HWY	E	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1503011600	5541	NO	NO
AJ'S AUTO CLINIC	920	S	COAST HWY	B	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1503041900	7538	NO	NO
S & T AUTO PAINT & BODY	920	S	COAST HWY	C	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1503041900	7538	NO	NO
POWER PERFORMANCE PERFECTION	1106	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1503041900	7538	NO	NO
GOODYEAR EXPRESS TIRE	1151	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1520140600	5531	NO	NO
VALERO GASOLINE	1202	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1521931300	5541	NO	NO
WESTCOAST TIRE AND WHEEL	1434	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1522001000	7538	NO	NO
NORTH COUNTY AUTO BODY INC.	1512	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1522001000	7539	NO	NO
AUTOMAN CAR SERVICES	1515	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1530302600	7538	NO	NO
OCEANSIDE SELF SERVICE CAR WASH	1515	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1530302600	7542	NO	NO
NORTH COUNTY AUTO SERVICE INC	1520	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1522001300	7538	NO	NO
B & R BUGGIE	1523	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1530300400	7538	NO	NO
GARY'S AUTO REPAIR/BOB'S CARBS	1540	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1522001300	7538	NO	YES
WEST COAST CUSTOM	1540	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1522001300	7538	NO	YES
WESTSIDE CLASSICS	1540	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Miscellaneous Repair Services	Not applicable	1522001300	7699	NO	YES
EL LOBO CHOPPERS	1540	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Motorcycle Repairs and Service	Not applicable	1522001300	7699	NO	YES
DAVE'S ALL MOBILE	1555	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1530302000	7538	NO	NO
BOB'S CARBS	1602	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
JOSE'S AUTO ELECTRIC	1602	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
LSI AUTOMOTIVE SERVICE	1602	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
SMOKEYS AUTO PARTS/MACHINE	1602	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
GHETTO CHOPPERS CUSTOMS INC	1602	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
OCEANSIDE CYCLE SUPPLY	1617	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Miscellaneous Repair Services	Not applicable	1531111300	7699	NO	NO
COAST CAR WASH	1621	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1531111900	7542	NO	NO
MOTORCYCLE GALLERY	1639	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Miscellaneous Repair Services	Not applicable	1531111800	7699	NO	NO
CENTRAL AUTOMOTIVE	1702	S	COAST HWY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			General Auto Repair Shop	Not applicable	1532134000	7538	NO	NO
BOB'S GAS INC.	1742	S	COAST HWY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1532134300	5541	NO	NO
7-ELEVEN STORE 26190C-2111	1749	S	COAST HWY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1531130800	5541	NO	NO
CIRCLE K GASOLINE	1801	S	COAST HWY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1532711900	5541	NO	NO
COLLEGE PET CLINIC	475		COLLEGE BLVD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Pet Clinic	Not applicable	1571011100	742	YES	NO
OCEANSIDE AUTOMOTIVE	499		COLLEGE BLVD	B	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1571011100	7538	NO	NO
CHEVRON USA INC #203189	785		COLLEGE BLVD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gas Station	Not applicable	1615530800	5812	NO	NO
COLLEGE BLVD EXXON	1990		COLLEGE BLVD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gas Station	Not applicable	1622404400	5541	NO	NO
CIRCLE K / 76 #2705246	3350		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1660104000	5541	NO	NO
APRO #44 EXXON	3401		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gas Station	Not applicable	1680110300	5541	NO	NO
QUARRY CREEK CHEVRON	3490		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1680130300	5541	NO	NO
REFLECTSHINE AUTO WASH	3528		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			Car Wash	Not applicable	1680125300	7542	NO	NO
ANIMAL KEEPER	3532		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X				Pet Hospital	Not applicable	1680125200	742	YES	NO
MOSSY NISSAN	3535		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			General Auto Repair Shop	Not applicable	1680111700	5511	YES	NO
MACHINE TECH RACING ENGINES	620		CROUCH STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493301600	7538	NO	NO
BIG FAB OFF ROAD RACING	634		CROUCH STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493301700	7538	NO	NO
WARNER'S MUFFLER	190		DOUGLAS DRIVE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1580520700	7538	NO	NO

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
ARCO	607		DOUGLAS DRIVE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1580304300	5541	NO	NO
SHELL OIL	660		DOUGLAS DRIVE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1578105800	5541	NO	NO
SAN LUIS REY AUTO SALVAGE AND STORAGE	471	N	EL CAMINO REAL		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1580661000	7538	NO	NO
SAN LUIS REY AUTO SERVICE	481	N	EL CAMINO REAL		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1580660500	7538	NO	NO
MOE'S OCEANA UNION 76	502	S	EL CAMINO REAL		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gas Station/Convenience Store	Not applicable	2309190220	5541	NO	NO
SEASIDE AUTOMOTIVE	115	S	FREEMAN STREET	B	High	Commercial	Oceanside	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1472830200	7538	NO	NO
OCEANSIDE MARINE CENTRE, INC	1550	N	HARBOR DRIVE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Boat Dealers	Not applicable	1431201000	5551	NO	YES
MOBIL-HARBOR DRIVE, INC	477	S	HARBOR DRIVE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1430901400	5541	NO	NO
AAMCO	2255		INDUSTRY STREET	A	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493700900	7538	NO	YES
CITYWIDE AUTOMOTIVE	2255		INDUSTRY STREET	B	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493700900	7538	NO	YES
GORILLA RENTALS	2372		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Equipment Rentals	Not applicable	1492714100	7359	YES	NO
B M W PRESCISION MACHINING	2379		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Sheet Metal	Not applicable	1492713400	3444	YES	YES
WASTE MANAGEMENT OF NO CO INC	2381		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Sanitary Services - Trash Collection	Not applicable	1493701000	4953	NO	YES
JOHN'S TOWING SERVICE	2401		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automobile Services - Towing	Not applicable	1492715600	7549	NO	YES
VACANT	2401		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Construction Repair	Not applicable	1492715600	9999	YES	YES
OCEANSIDE TRUCK SERVICE	2403		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Truck Repair Shop	Not applicable	1492715600	7538	NO	YES
CONOVER TIRE PRO	2405		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Tire Repair Shop	Not applicable	1492715600	7534	NO	YES
FENCEWORKS INC.	2421		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Miscellaneous Special Trades -	Not applicable	1492715600	1799	YES	YES
OCEANSIDE DRIVELINE	2435		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1492712600	7538	NO	YES
ARTISTIC MAINTENANCE INC	2505		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X				X				Interior Landscaping Services	Not applicable	1492712700	7389	NO	YES
SAN DIEGO MIRROR & WINDOW	2515		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Glass Windows	Not applicable	1492712700	3231	NO	YES
WEILAND SLIDING DOOR & WINDOW INC	2601		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Glass Windows	Not applicable	1492712100	3231	NO	YES
SANTOURIAN MANUFACTURING INC	2603		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Sheet Metal	Not applicable	1492712200	3444	NO	YES
RUBEN'S AUTO BODY	2606		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive - Body Shop	Not applicable	1492714600	7532	NO	NO
ARGO STONE AND SUPPLY CO	2609		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X							Building Material Dealers	Not applicable	1492715200	5211	YES	YES
MASTERTECH INC	2801		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1492711400	7538	NO	YES
WASTE MANAGEMENT OF NO CO INC	2880		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Waste Management/Temp. Storage	Not applicable	1620310100	9511	NO	NO
PALOMAR TRANSIT MIX CO	2925		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Ready Mix Conc	Not applicable	1620310200	3273	NO	YES
GLASSWERKS SD	3021		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Glass Products	Not applicable	1620313300	3231	NO	YES
CLINICON CORPORATION	3025		INDUSTRY STREET	A	High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Medical Apparatus	Not applicable	1620313600	3841	NO	YES
CAMPBELL CERTIFIED INC	3045		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturer - Certified Weldiing	Not applicable	1620313000	1799	NO	YES
OSE PRODUCT DEVELOPMENT	3060		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturer - Prototyping	Not applicable	1620313500	8711	NO	NO
METROTILE MANUFACTURING	3093		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturer - Roofing Tile	Not applicable	1620313400	3444	NO	YES
E BUILD + TRUSS	507		JONES ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X				X				Structural Wood Members	Not applicable	1460312400	2439	YES	NO
LEN'S AUTOMOTIVE	510		JONES ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X				X				Automobile, Body and Paint Sho	Not applicable	1460312100	7532	YES	NO
MELROSE ARCO	1501	N	MELROSE DRIVE		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1610301700	5541	NO	NO
BUSSEYS AUTOMOTIVE SERVICE	1402		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1481430900	7538	NO	NO
MOBIL OIL	1407		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1483400200	5541	NO	NO
TERRY'S BODY SHOP, INC	1408		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1481431900	7538	NO	NO
ECONO LUBE N TUNE #23	1618		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1451512600	7538	NO	NO
MISSION ARCO AM/PM	1920		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1451503100	5541	NO	NO
PEP BOYS/MANNY MOE & JACK OFCA #667	2041		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1481700600	7538	NO	NO
OCEANSIDE SCHOOL DISTRICT FLEET MANAGEMENT	2070		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Oceanside School District - Fleet	9 371005696	1451500800	7538	NO	NO
MOHSEN OIL, INC	3213		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1602701100	5541	NO	NO
MISSION ANIMAL & BIRD HOSPITAL	3308		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Veterinary Services, Animal Hospital	Not applicable	1602711200	742	YES	NO
MISSION 76	3361		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1605501000	5541	NO	NO
MIDAS MUFFLERS	3510		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602904700	7538	NO	NO
OCEANSIDE AUTO REPAIR II	3582		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602900900	7538	NO	NO
MISSION AUTO CARE INC.	3596		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602900900	7538	NO	NO
OCEANSIDE CAR WASH INC	3655		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Carwash	Not applicable	1602910500	7542	NO	NO
MISSION EXXON	3865		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1605600300	5541	NO	NO
SURFSIDE ANIMAL HOSPITAL	3876		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Pet clinic	Not applicable	1580520200	742	YES	NO
O'SIDE GAS	3945		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1580521100	5541	NO	NO
THE OCEANSIDER	1660		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1523202500	5541	NO	NO
JIFFY LUBE #1278	1970		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493302700	7538	NO	NO
VIP CAR WASH	1980		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1493302700	7542	NO	NO
ARCO AMPM GAS STATION	1990		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X	X		Gasoline Station	Not applicable	1493301100	5541	NO	NO
AGRI CHEMICAL SUPPLY, INC	2002		OCEANSIDE BLVD	J	High	Commercial	Carlsbad	Loma Alta	904.1			X			X	X		X		Disinfecting and Pest Control	Not applicable	1493300400	7342	NO	NO
AGRI CHEMICAL SUPPLY, INC	2010		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X			X	X		X		Disinfecting and Pest Control Storage	Not applicable	1493300500	7342	NO	NO
7 DAY TIRE AND BRAKE MECHANIC	2011		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701300	7538	NO	YES
ADVANCE PAINT AND BODY	2015		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701300	7538	NO	YES
7 DAY AUTO BODY	2015		OCEANSIDE BLVD	A	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701300	7538	NO	YES

Attachment 5-A Commercial Inventory
City of Oceanside FY 2010-11

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
7 DAY MECHANIC	2015		OCEANSIDE BLVD	B	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701300	7538	NO	YES
7 DAY ALIGNMENT	2015		OCEANSIDE BLVD	C	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701300	7538	NO	YES
ROMERO'S RADIATOR AND MUFFLER	2017		OCEANSIDE BLVD	A	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701400	7538	NO	YES
LEO'S TOWING & AUTO REPAIR	2019		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701400	7538	NO	YES
PADILLAS COLLISION REPAIR	2026		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493300100	7538	NO	NO
EARL SHEIB AUTO PAINT FOR LESS	2027		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701500	7538	NO	YES
PEDRO'S AUTO REPAIR & TOW TRUCK	2027		OCEANSIDE BLVD	A	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701500	7538	NO	YES
BROTHER'S AUTO GLASS	2027		OCEANSIDE BLVD	B	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701500	7538	NO	YES
AUTO PINT FOR LESS	2027		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701500	7538	NO	YES
LAELS INTERNATIONAL	2042		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493300100	5541	NO	NO
COLOR CRAFTERS AUTO BODY	2044		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493300100	7538	NO	NO
WASTE MANAGEMENT OF NO CO INC	2141		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Sanitary Services - Trash Collection	Not applicable	1493700700	4953	NO	YES
MAX RENTALS	2365		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Equipment Rentals	Not applicable	1492714200	7359	YES	NO
PACIFIC ANIMAL HOSPITAL	2801		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1620306900	7542	NO	NO
OCEANSIDE BUGGY BATH CARWASH	2946		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1620306900	7542	NO	NO
SUPERIOR READY MIX CONCRETE LP	3227		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X					X		Manufacturing - Ready Mix Conc	Not applicable	1620502300	3273	NO	NO
D & J AUTO DOCTORS INC	4035		OCEANSIDE BLVD	C11	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1621110600	7538	NO	YES
CALIFORNIA AUTOMOTIVE	4035		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1621110600	7538	NO	YES
RANCHO DEL ORO CAR WASH	4101		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1622413200	7542	NO	NO
JIFFY LUBE	4106		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1625022800	7538	NO	NO
FRESH AND EASY NEIGHBORHOOD MARKET	4131		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X							Grocery Store	Not applicable	1622414600	5411	YES	YES
NORTH COUNTY CAT HOSPITAL	4225		OCEANSIDE BLVD	U	High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X				Pet Hospital	Not applicable	1622412300	742	YES	YES
HOBIE CAT COMPANY	4925		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Recreation Vehicles	Not applicable	1615010700	5012	NO	NO
SHELL GASOLINE & FOOD STORE	185		OLD GROVE ROAD	G-H	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1581014700	5541	NO	NO
RANCHO DL ORO VETERENARY HOSPITAL	1646		ORD WAY		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X				Pet Hospital	Not applicable	1621207902	742	YES	NO
DOG DAYZ OF CALIFORNIA	1995		PEACOCK BOULEVARD		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X				Pet Hospital	Not applicable	1614703800	742	YES	NO
PEP BOYS OF CA #742	3752		PLAZA DRIVE		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			General Auto Repair Shop	Not applicable	1680125700	1521	NO	NO
PDM AM/PM	3804		PLAZA DRIVE		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1680121700	8811	NO	NO
ECONO LUBE N' TUNE/MEINEKE CAR CENTER #4068	3844		PLAZA DRIVE	381	High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			General Auto Repair Shop	Not applicable	1680122100	8811	NO	NO
MAACO AUTO PAINT & BODY	3210		PRODUCTION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Body Shop	Not applicable	1602712800	7532	NO	NO
G&W TRUCK & SUV ACCESSORIES	230		ROYMAR ROAD	F-H	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Parts Supply Store	Not applicable	1602714800	5531	NO	NO
JOSH'S BOARS NEST	3207		ROYMAR ROAD	D	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Motorcycle, Repair Services	Not applicable	1602711700	7699	NO	NO
NORTH COUNTY HUMANE SOCIETY	2905		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Miscellaneous Retail - Pet Shop	Not applicable	1460903700	5999	YES	NO
OCEANSIDE PET MOTEL	2909		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Pet Hospital	Not applicable	1460504700	742	YES	NO
FULL ON RECYCLE	2929		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X								Recycling	Not applicable	1460504900	5093	NO	NO
GUERRERO'S AUTO REPAIR	2954		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460506800	7538	NO	NO
OCEANSIDE VETERINARY HOSPITAL	2960		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Veterinary Services for Animal	Not applicable	1460503600	742	YES	NO
CARCOA QUALITY BODY & PAINT	3018		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive - Body Shop	Not applicable	1460503400	7539	NO	NO
KENNEDYS CUSTOM CYCLES	3028		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Motorcycle, Repair Services	Not applicable	1460503300	7699	NO	NO
BENCH HOUSE WINERY INC.	1534		SLEEPING INDIAN ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X			X					Winery	Not applicable	1212021200	2084	YES	NO
PUURFECT AUTO SERVICE	407		TOPEKA STREET		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1500450100	7538	NO	NO
EDDIE'S AUTOMOTIVE INC	512	S	TREMONT STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1501840200	7532	NO	NO
PROCUSTOM	520	S	TREMONT STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive - Body Shop	Not applicable	1501840300	7539	NO	NO
VACANT	602	S	TREMONT STREET	A	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Motorcycle, Repair Services	Not applicable	1503761000	7699	NO	NO
AUTO POWER	602	S	TREMONT STREET	B	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1503761000	7532	NO	NO
S & S RADIATOR	620	S	TREMONT STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1503760900	7532	NO	NO
OCEAN PAINT AND BODY	1112	S	TREMONT STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive - Body Shop	Not applicable	1520141600	7539	NO	NO
CHANDLER TRANSMISSION	304		VIA DEL MONTE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460501800	7532	NO	NO
BEN RECYCLING & SCRAP METAL	395		VIA DEL MONTE		High	Commercial	Oceanside	San Luis Rey	903.1			X								Scrape and Waste Materials	Not applicable	1460502900	5093	NO	NO
EMPIRE TOWING	417		VIA DEL MONTE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Towing Service	Not applicable	1460502800	7549	NO	NO
SUBIE SHOP AUTOMOTIVE REPAIR	326		VIA DEL NORTE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460501800	7538	NO	NO
NCTD MAINTENANCE YARD	305		VIA DEL NORTE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	9 371010395	1450302600	7532	NO	NO
CARL'S AUTO REPAIR	389		VIA EL CENTRO		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460802900	7538	NO	NO
FULL RV SERVICE	444		VIA EL CENTRO		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460507000	7538	NO	NO
ROWLEY CHEVRON	2191		VISTA WAY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1541303400	5542	NO	NO
BUBBLE BATH CAR WASH 76	2315		VISTA WAY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			Automotice Wash	Not applicable	1651205200	7542	NO	NO
MOHNACKY ANIMAL HOSPITALS, INC	2505	S	VISTA WAY		High	Commercial	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X				Veterinary Services for Animal	Not applicable	1563020200	742	YES	YES
CLASSIC SHOWCASE INC	2640		VISTA PACIFIC DRIVE		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Restorations	Not applicable	1614700300	7532	NO	NO
SHOWTIME AUTOMOTIVE REPAIR	315		WISCONSIN AVENUE		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1503721300	7538	NO	NO
JEFFERSON JUNIOR HIGH SCHOOL	823		ACACIA AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1451500200	5812	YES	NO
ALAMOSA PARK ELEMENTARY SCHOOL	5130		ALAMOSA PARK DRIVE		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1581310200	5812	YES	NO
AVENIDA EMPRESSA ELEMENTARY CAFETERIA	4850		AVENIDA EMPRESSA		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1581303600	5812	YES	NO

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
MIRA COSTA CAFETERIA	1		BARNARD DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Cafetetia	Not applicable	1651120300	5812	YES	NO
PEDRO'S TACOS	656		BENET ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1450304300	5812	YES	NO
OCEAN'S 11 CASINO	121		BROOKS STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1483402900	5812	YES	NO
LINCOLN JUNIOR HIGH SCHOOL	1810		CALIFORNIA STREET		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1511802300	5812	YES	NO
PALMQUEST ELEMENTARY SCHOOL	1999		CALIFORNIA STREET		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1540404100	5812	YES	NO
PIZZA HUT	3509		CANNON ROAD	E1	High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1690114200	5812	YES	NO
MC DONALD'S	3517		CANNON ROAD		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1690114000	5812	YES	NO
TACO BELL #16065	3521		CANNON ROAD		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1690113900	5812	YES	NO
RALPH'S GROCERY COMPANY #138	3533		CANNON ROAD		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1690113700	5411	YES	NO
RALPH'S	3533		CANNON ROAD		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1690113700	5411	YES	NO
NORTH TERRACE ELEMENTARY SCHOOL	940		CAPISTRANO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1440601600	5812	YES	NO
HOLIDAY INN/MARINA	1401		CARMELO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430603800	5812	YES	NO
DEL TACO	1601		CARMELO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430603600	5812	YES	NO
MCDONALDS	137		CANYON DRIVE		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481602500	5812	YES	NO
BREAKWATER BREWING CO.	101	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472711400	5812	YES	NO
SPANKY'S PIZZA	206	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470970600	5812	YES	NO
KEALANI'S	207	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470870500	5812	YES	NO
BEACHSIDE GRILL	215	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Family Restaurant Limited Serv	Not applicable	1470871600	5812	YES	NO
BREAKFAST CLUB DINER CA	228	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470970800	5812	YES	NO
MARYS FAMILY RESTAURANT	307	N	COAST HWY	B	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470860200	5812	YES	NO
ALFREDO'S MEXICAN FOOD	602	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432460500	5812	YES	NO
VENETO'S PIZZA TOWNE	604	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432460600	5812	YES	NO
VENETO'S RESTAURANT	608	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432460600	5812	YES	NO
ANGELO'S BURGERS	621	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432450900	5812	YES	NO
WIENERSCHNITZEL	624	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432460900	5812	YES	NO
HARBOR HOUSE CAFE	714	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432051000	5812	YES	NO
CARROWS # 954	936	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470203700	5812	YES	NO
THE MAIN ATTRACTION	939	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430402600	5812	YES	NO
THE FLYING BRIDGE RESTAURANT dba CASA VILLA	1105	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430404100	5812	YES	NO
HOSIE'S PACIFIC PUB	113	S	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472720400	5813	YES	NO
SENOR PANCHOS TACO SHOP	202	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1500510100	5812	YES	NO
BESSIE'S CAFE	232	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1500512000	5812	YES	NO
ANITA'S #2	309	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1500470900	5812	YES	NO
FISH JOINT	514	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1502031100	5812	YES	NO
HILL STREET CAFÉ	524	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1502031000	5812	YES	NO
101 CAFÉ	631	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1503760600	5812	YES	NO
AZAFRAN	1001	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520110100	5812	YES	NO
GRUBY'S DINER	1030	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520222600	5812	YES	NO
DIEGO'S MEXICAN FOOD	1034	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520222600	5812	YES	NO
ANGELO'S BURGERS	1050	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520222400	5812	YES	NO
SUPER RANCHITO TACO SHOP	1129	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520140500	5812	YES	NO
APE HANGERS GRILL LLC	1706	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532133900	5812	YES	NO
HON SUSHI	1733	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1531132300	5812	YES	NO
BEACH BREAK CAFE INC	1802	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532720100	5812	YES	NO
BULL TACO	1815	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532712400	5812	YES	NO
P C H SPORTS BAR & GRILL	1835	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532712000	5812	YES	NO
BEACH CLUB	1903	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532742200	5812	YES	NO
DON'S COUNTRY CAFE	1938	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532732400	5812	YES	NO
ANGELO'S BURGERS	2035	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1550311500	5812	YES	NO
OHANA HAWAIIAN BBQ	459		COLLEGE BLVD	2	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1571011400	5812	YES	NO
MCDONALD'S	487		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1571011000	5812	YES	NO
HOMETOWN BUFFET INC #735	491		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1571011500	5812	YES	NO
OCEANSIDE CHINESE FOOD	495		COLLEGE BLVD	B	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1571011600	5812	YES	NO
VICTORIAS MEXICAN FOOD INC	495		COLLEGE BLVD	C	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1571011600	5812	YES	NO
DENNY'S RESTAURANT	605		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615530500	5812	YES	NO
TACO BELL #17285	695		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615530600	5812	YES	NO
CARL'S JR	775		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615530700	5812	YES	NO
TONY PEPPERONI	805		COLLEGE BLVD	102	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615531700	5812	YES	NO
CHU'S QUICKWOK	815		COLLEGE BLVD	107	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615531000	5812	YES	NO
VONS STORE #2360	845		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Grocerie Store	Not applicable	1615530200	5812	YES	NO
DEL TACO LLC	1970		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622404800	5812	YES	NO
KOTIJA MEXICAN FOOD	3504		COLLEGE BLVD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680123700	5812	YES	NO

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AUTLAN MEATS AND TACO SHOP	608		CROUCH STREET		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Grocerie Stores	Not applicable	1493302200	5411	YES	NO
PANDA EXPRESS #1633	47		DOUGLAS DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1600205600	5812	YES	NO
LA HACIENDA RESTAURANT & PARTY HALL	300		DOUGLAS DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1586511700	5812	YES	NO
CARL'S JR	611		DOUGLAS DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580304400	5812	YES	NO
DOMINO'S PIZZA #7750	650		DOUGLAS DRIVE	103	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1578105700	5812	YES	NO
ALBERTOS MEXICAN FOOD	650		DOUGLAS DRIVE	122	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1578105700	5812	YES	NO
REYNOLD'S ELEMENTARY SCHOOL	4575		DOUGLAS DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1221902700	5812	YES	NO
SUNNYSIDE CAFÉ	250		EDDIE JONES WAY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1450212900	5812	YES	NO
SAN LUIS REY RESTAURANT AND BAKERY	490	N	EL CAMINO REAL		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580620300	5812	YES	NO
VILLA PASTA SPAGHETTI & GRILL	2216	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650121800	5812	YES	NO
ROOKIE'S SPORT BAR	2216	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650121800	5812	YES	NO
SUSHI 21	2216	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650121800	5812	YES	NO
TERI'S CAFE INC	2249	S	EL CAMINO REAL	A2	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650132200	5812	YES	NO
ANITA'S RESTAURANT	2251	S	EL CAMINO REAL	B	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650131300	5812	YES	NO
DEL TACO LLC	2269	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650130900	5812	YES	NO
DENNY'S RESTAURANT #1149	2273	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650131000	5812	YES	NO
IN AND OUT BURGERS	4605		FRAZEE ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1617817700	5812	YES	NO
GREAT WOK OF CHINA	4635		FRAZEE ROAD	F	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1617817600	5812	YES	NO
ALBERTO'S	4645		FRAZEE ROAD	I	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1617817600	5812	YES	NO
SUSHI ISLAND	4645		FRAZEE ROAD	F-G	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1617817600	5812	YES	NO
GARRISON ELEMENTARY SCHOOL	333		GARRISON STREET		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1620202400	5812	YES	NO
SAN LUIS REY ELEMENTARY SCHOOL	3535		HACIENDA DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1602906500	5812	YES	NO
MONTEREY BAY CANNERS	1325	N	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
JOLLY ROGER RESTAURANT	1900	N	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	7600802400	5812	YES	YES
OCEANSIDE YACHT CLUB	1950	N	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1431201000	5812	YES	YES
ROCKING BAHA	258	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
DOMINIC'S - ITALIAN RESTAURANT	268	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
TONY'S SPORT BAR & GRILL	274	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
HARBOR FISH AND CHIPS	276	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
ROBIN'S NEST CAFÉ	280	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
JOE'S CRAB SHACK	314	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
DENNY'S	487	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430901600	5812	YES	YES
MISSION VISTA HIGH SCHOOL	1306		MELROSE DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1571007500	5812	YES	NO
MC DONALD'S / OCEANSIDE WAL-MART	3405		MARRON ROAD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680140400	5812	YES	NO
ROUND TABLE PIZZA	3440		MARRON ROAD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680130700	5812	YES	NO
ALBERTSON'S #6733	3450		MARRON ROAD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1680130100	5411	YES	NO
CHIK-FIL-A #1507	3475		MARRON ROAD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680140200	5812	YES	NO
DAPHNE'S GREEK CAFE	3480		MARRON ROAD	104	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680130200	5812	YES	NO
KING BURRITO	3490		MARRON ROAD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680130300	5812	YES	NO
FAIRWINDS SENIOR COMMUNITY CAFETERIA	4490		MESA DRIVE		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Cafeteria	Not applicable	1605702800	5812	YES	NO
HARNEY SUSHI	301		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472711500	5812	YES	NO
DAIRY QUEEN	302		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470890600	5812	YES	NO
JOHNNY MANANAS	308		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470890600	5812	YES	NO
THE LONGBOARDER CAFÉ	400		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470871500	5812	YES	NO
THE RICE GARDEN INC	401		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472711400	5812	YES	NO
SANTINO'S PIZZA	401		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472711400	5812	YES	NO
UMI JAPANESE GRILL & CAFE INC	401		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472711400	5812	YES	NO
RIM TALAY	508		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470970400	5812	YES	NO
THE WOK IN	511		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472840200	5812	YES	NO
BURGER HOUSE	515		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472840200	5812	YES	NO
SWAMI'S CAFÉ	608		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470960400	5812	YES	NO
WENDY'S #30	1002		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472310100	5812	YES	NO
EL POLLO LOCO	1004		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472310500	5812	YES	NO
MANHATTAN'S GIANT PIZZA, INC	1060		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472310800	5812	YES	NO
THE MANDARIN	1060		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472310800	5812	YES	NO
PANDA EXPRESS 941	1068		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472310200	5812	YES	NO
CHINA STAR SUPER BUFFET	1401		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1483403000	5812	YES	NO
BURGER KING	1420		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481432000	5812	YES	NO
ARMANDO'S MEXICAN FOOD	1426		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481431400	5812	YES	NO
VALUE PLUS	1527		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1482602500	5411	YES	NO
BAJA TACOS	1527		MISSION AVENUE	C	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1482601800	5812	YES	NO
THE SHOW PALACE	1527		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1482602500	5812	YES	NO

Attachment 5-A Commercial Inventory
City of Oceanside FY 2010-11

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
ALBERTO'S MEXICAN FOOD	1602		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Full Service Restaurant	Not applicable	1481512700	5812	YES	NO
KARINA'S CEVICHE & OYSTERS	1702		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481603200	5812	YES	NO
ARBY'S #1396	1863		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481603600	5812	YES	NO
JACK IN THE BOX #3068	1900		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1451802900	5812	YES	NO
LA PERLA TAPATIA	1910		MISSION AVENUE	A	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481603000	5812	YES	NO
KFC - OCEANSIDE	2007		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481700600	5812	YES	NO
VIVA SUPERMERCADO	2031		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1481700600	5411	YES	NO
MISSION ELEMENTARY SCHOOL	2100		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1451500200	5812	YES	NO
DAVINA'S MEXICAN RESTAURANT	3320		MISSION AVENUE	Q-R	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602711200	5812	YES	NO
DEIBERTOS MEXICAN FOOD	3371		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605500300	5812	YES	NO
LB'S SPORTS BAR AND GRILL	3375		MISSION AVENUE	I	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605500500	5812	YES	NO
PAUL'S PLACE	3671		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602910300	5812	YES	NO
MCDONALDS # 5244	3720		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602904001	5812	YES	NO
ARIA JAPANESE/KOREAN BBQ	3744		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1583901700	5812	YES	NO
BURGER KING	3746		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1583900800	5812	YES	NO
KFC	3747		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602910100	5812	YES	NO
FOOD FOR THE SOUL	3753		MISSION AVENUE	115	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1602904001	5812	YES	NO
PHÒ HOUSE	3753		MISSION AVENUE	120	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602904001	5812	YES	NO
MISSION KABAYAN ORIENTAL MARKET	3753		MISSION AVENUE	121-22	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Groceris Store	Not applicable	1602911100	5411	YES	NO
STATER BROTHERS	3770		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1583901500	5411	YES	NO
KILLER PIZZA FROM MARS	3772		MISSION AVENUE	127	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1583901400	5812	YES	NO
FIESTA MEXICANA	3784		MISSION AVENUE	151	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1583900200	5812	YES	NO
KURANDO	3815		MISSION AVENUE	101	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605600600	5812	YES	NO
PIT STOP	3825		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605601400	5812	YES	NO
OCEAN THAI CUSINE	3846		MISSION AVENUE	A3-4	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580520300	5812	YES	NO
LITTLE CEASAR	3852		MISSION AVENUE	B3-4	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580520300	5812	YES	NO
TACO BELL #3837	3895		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605600100	5812	YES	NO
COCO'S #0886	3905		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580521200	5812	YES	NO
JACK IN THE BOX #3061	3909		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580521200	5812	YES	NO
FRATELLI'S ITALIAN Kitchen	3915		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580521200	5812	YES	NO
ALBERTSON'S 6767	3925		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1580521300	5411	YES	NO
EL TUCAN MEXICAN RESTAURANT	3935		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580521200	5812	YES	NO
JOLI FILIPINO EXPRESS	3935		MISSION AVENUE	7	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580521200	5812	YES	NO
PRIMO FOOD MARKET	606		MORSE STREET		High	Eat/Drink Est.	Oceanside	Buena Vista	904.2	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1530411500	5411	YES	NO
SEA BREEZE CAFÉ & MARKETPLACE	333	N	MYERS STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470750800	5812	YES	NO
RUBY'S DINER	1		OCEANSIDE PIER		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	Unkown	5812	YES	NO
ROSINA ITALIAN RESTAURANT AT DEL ORO	3613		OCEAN RANCH BLVD	100	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721200	5812	YES	NO
FELIX BBQ WITH SOUL	3613		OCEAN RANCH BLVD	106-7	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721200	5812	YES	NO
JUNKYARD GRILL	3613		OCEAN RANCH BLVD	108	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721200	5812	YES	NO
GANDELFO'S DELI	3617		OCEAN RANCH BLVD	100	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721300	5812	YES	NO
BIG BOB'S PIZZA	3617		OCEAN RANCH BLVD	105	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721300	5812	YES	NO
ROBERTO'S TACO SHOP	3617		OCEAN RANCH BLVD	108	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721300	5812	YES	NO
CHURCH'S CHICKEN	510		OCEANSIDE BLVD	A	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520230400	5812	YES	NO
LITTLE CEASAR'S PIZZA	518		OCEANSIDE BLVD	103-5	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520230400	5812	YES	NO
ROBERTO'S TACO SHOP	518		OCEANSIDE BLVD	111	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520230400	5812	YES	NO
MC DONALD'S OF OCEANSIDE #16327	1701		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1513101900	5812	YES	NO
RALPHS GROCER	1702		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1510111000	5411	YES	NO
PAPA JOHN'S PIZZA	1710		OCEANSIDE BLVD	B	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510110900	5812	YES	NO
CHINALOA MEXICAN AND SEAFOOD	1759		OCEANSIDE BLVD	E	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1513102600	5812	YES	NO
THE CHEESESTEAK GRILL	1771		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1513102600	5812	YES	NO
I HOP RESTAURANT	1806		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104700	5812	YES	NO
CAFE ROSARITA	1816		OCEANSIDE BLVD	A	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104700	5812	YES	NO
PIZZA HUT	1836		OCEANSIDE BLVD	102	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104700	5812	YES	NO
DOMINO'S PIZZA	1906		OCEANSIDE BLVD	B	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104000	5812	YES	NO
KAISEN SUSHI	1906		OCEANSIDE BLVD	H1	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104000	5812	YES	NO
THAI TABLE	1910		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510103100	5812	YES	NO
P + Q PUB	1910		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510103100	5812	YES	NO
ALBERTO'S MEXICAN FOOD	1920		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510103000	5812	YES	NO
TACO BELL	1940		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104500	5812	YES	NO
WIENERSCHNITZEL	1960		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1493302700	5812	YES	NO
RED ROOSTER	1985		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1493301400	5812	YES	YES
OCEAN SHORES HIGH SCHOOL	3131		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1620502900	5812	YES	NO

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
KFC #Y305091	4100		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1625022700	5812	YES	NO
ENZOS' BBQ	4111		OCEANSIDE BLVD	101	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413300	5812	YES	NO
CHIPOLTE MEXICAN FOOD	4111		OCEANSIDE BLVD	102	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413300	5812	YES	NO
PANDA EXPRESS	4121		OCEANSIDE BLVD	200	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413300	5812	YES	NO
PASTA BREAK	4121		OCEANSIDE BLVD	201	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413300	5812	YES	NO
GOGO JAPAN	4121		OCEANSIDE BLVD	202	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413300	5812	YES	NO
CHIN'S SZECHWAN-OCEANSIDE	4140		OCEANSIDE BLVD	133-35	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1625022400	5812	YES	NO
SHAKEY'S PIZZA	4141		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622414300	5812	YES	NO
ALBERTSON'S #6740	4150		OCEANSIDE BLVD	137	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1625022200	5411	YES	NO
MCDONALD'S	4151		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413600	5812	YES	NO
LITTLE CEASAR	4170		OCEANSIDE BLVD	191	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1625022500	5812	YES	NO
EL BRONCO TACO SHOP OF OCEANSIDE	4171		OCEANSIDE BLVD	106	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622414100	5812	YES	YES
CARLS JR	4186		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622404300	5812	YES	NO
CAFE DE THAI	4196		OCEANSIDE BLVD	A	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622404300	5812	YES	NO
UPPER CRUST PIZZA	4196		OCEANSIDE BLVD	B	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622404300	5812	YES	NO
RUBIO'S FRESH MEXICAN GRILL #063	4201		OCEANSIDE BLVD	B	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622411000	5812	YES	NO
JACK IN THE BOX #3026	4211		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	NO
L&L HAWAIIAN BARBECUE	4225		OCEANSIDE BLVD	E	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	YES
HAPPY NOODLE HOUSE	4225		OCEANSIDE BLVD	F	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	NO
JF JAPANESE CAFÉ	4225		OCEANSIDE BLVD	K	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	NO
YUMMY PHÓ	4225		OCEANSIDE BLVD	W	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	NO
WINGS PIZZA N THINGS	4225		OCEANSIDE BLVD	Y	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	742	YES	NO
CHARMING SIAM RESTAURANT	4231		OCEANSIDE BLVD	C	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	NO
RALPH'S GROCERY COMPANY #298	4251		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1622412200	5411	YES	YES
IHOP	4253		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622414200	5812	YES	NO
GUAHAN GRILL	4259		OCEANSIDE BLVD	104	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622414200	5812	YES	YES
CEJA'S MEXICAN DINER AND GRILL	4259		OCEANSIDE BLVD	105-6	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412100	5812	YES	YES
SUBCENTRO MEDITERRANEAN FOOD AND SANDWHICHES	4259		OCEANSIDE BLVD	107	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412100	5812	YES	YES
THAI GARDEN RESTAURANT	4750		OCEANSIDE BLVD	A18	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615401900	5812	YES	NO
WARAII SUSHI	4750		OCEANSIDE BLVD	A20	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615401900	5812	YES	NO
MR PHO RESTAURANT	4750		OCEANSIDE BLVD	A21	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615401900	5812	YES	NO
EL ASADOR	4750		OCEANSIDE BLVD	A22-3	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615401900	5812	YES	NO
RUBY'S DINER	1		OCEANSIDE PIER	A	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	Unknown	5812	YES	YES
RALPHS #54	101		OLD GROVE ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1581015000	5411	YES	NO
LOVE BOAT SUSHI BAR	125		OLD GROVE ROAD	5	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1581015300	5812	YES	NO
PICK UP STIX #7223	125		OLD GROVE ROAD	C2	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1581015300	5812	YES	NO
POLLOS MARIA #2	125		OLD GROVE ROAD	8	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1581015300	5812	YES	NO
MCDONALD'S	185		OLD GROVE ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1581014700	5812	YES	NO
NICHOLS ELEMENTARY SCHOOL CAFETERIA	4250		OLD GROVE ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1580405000	5812	YES	NO
CESAR CHAVEZ MIDDLE SCHOOL	202		OLEANDER DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1570805400	5812	YES	NO
333 PACIFIC	333	N	PACIFIC STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470750500	5812	YES	NO
HARBOR PELICAN DELI MART	1380	N	PACIFIC STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1431201000	5812	YES	YES
BUCCANEER BEACH CLUB	1508	S	PACIFIC STREET		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1530110600	5812	YES	YES
FOUSSAT ELEMENTARY SCHOOL	3800		PALA ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1580304700	5812	YES	NO
WENDY'S RESTAURANT	3705		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680123900	5812	YES	NO
MC DONALD'S / PLAZA DR	3794		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680121600	5812	YES	NO
SIZZLER RESTAURANT #883	3805		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680121100	5812	YES	NO
JACK IN THE BOX #89	3808		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680121800	5812	YES	NO
I LOVE PHÓ	3809		PLAZA DRIVE	115	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680120100	5812	YES	NO
TERRI CAFE TERIYAKI NOOLDE H0USE	3809		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680120100	5812	YES	NO
CHEF CHIN	3829		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680124500	5812	YES	NO
TACO BELL	3845		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680121000	5812	YES	NO
COLIMA'S MEXICAN FOOD	308		PIER VIEW WAY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470860600	5812	YES	NO
OCEANSIDE HIGH SCHOOL	1		PIRATE'S COVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1473400800	5812	YES	NO
EL CAMINO HIGH SCHOOL	400		RANCHO DEL ORO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1680822000	5812	YES	NO
LIBBY LAKE ELEMENTARY SCHOOL	423	W	REDONDO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1572506200	5812	YES	NO
ROMA'S PIZZA	617	N	REDONDO DRIVE	B	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570402600	5812	YES	NO
LA PERLA TAPATIA	625	N	REDONDO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570402700	5812	YES	NO
ERIBERTO'S MEXICAN FOOD	644	N	REDONDO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570403700	5812	YES	NO
LITTLE CEASAR'S PIZZA	4904	N	RIVER ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570404500	5812	YES	NO
DEL RIO ELEMENTARY SCHOOL	5200	N	RIVER ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1220810800	5812	YES	NO
CARLITO'S CHICKEN	160		ROYMAR ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602711300	5812	YES	NO

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
LUK'S KITCHEN	162		ROYMAR ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602711300	5812	YES	NO
ROOSEVELT MIDDLE SCHOOL	850		SAGEWOOD DRIVE		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1581310400	5812	YES	NO
VACANT	405		SAN DIEGO STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481412200	5812	YES	NO
EL MUNDO DE MARISCOS	3110		SAN LUIS REY ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1460502500	5812	YES	NO
MISSION MEADOWS ELEMENTARY SCHOOL	5657		SPUR AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1571108100	5812	YES	NO
TEMPLE HEIGHTS ELEMENTARY SCHOOL CAFETERIA	1550		TEMPLE HEIGHT DRIVE		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Cafetetia	Not applicable	1615002600	5812	YES	NO
SAN LUIS MEXICAN FOOD	2600		TEMPLE HEIGHT DRIVE	A	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1614701700	5812	YES	NO
PRIMO THUNDER MARKET	2810		THUNDER DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Grocerie Stores	Not applicable	1665351500	5411	YES	NO
DOMINOS PIZZA	2858		THUNDER DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1665351600	5812	YES	NO
LA CASA PIZZA	209	N	TREMONT STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470890200	5812	YES	NO
DAVINA'S CABO GRILL LLC	212	N	TREMONT STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470871500	5812	YES	NO
TREMONT STREET SPORTS BAR	311	N	TREMONT STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470881000	5812	YES	NO
BURGER KING	227	S	TREMONT STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1473502400	5812	YES	NO
FLYING PIG PUB & KITCHEN	626	S	TREMONT STREET		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1503760700	5411	YES	NO
LARRY'S BEACH CLUB	1145	S	TREMONT STREET		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520150900	5812	YES	NO
MARIETA'S MEXICAN RESTAURANT	485		VANDEGRIFT BLVD	2	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570402900	5812	YES	NO
ROBERTO'S TACO SHOP	2983		VIA LAS ROSAS	C	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650130200	5812	YES	NO
IVEY RANCH ELEMENTARY SCHOOL	4275		VIA RANCHO ROAD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1605700700	5812	YES	NO
ARROWOOD GOLF CLUB CAFETERIA	5201		VILLAGE DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1225213200	5812	YES	NO
GRANDMA HILLTOP HIDE AWAY CAFÉ	539		VISTA BELLA		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1601401300	5812	YES	NO
RED & WHITE MARKET	510		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1532732500	5411	YES	NO
HUNTER STEAKHOUSE 210255	1221		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1551402600	5812	YES	NO
MCDONALD'S # 23057	2100		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541302300	5812	YES	NO
APPLEBEES NEIGHBORHOOD GRILL & BAR	2146		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303200	5812	YES	NO
STATER BROS MARKETS #151	2170		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Groceries Store	Not applicable	1541303000	5411	YES	NO
MIMI'S CAFE	2177		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303700	5812	YES	NO
BROOKLYN BOYS PIZZA	2183		VISTA WAY	B8	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303600	5812	YES	NO
LOS TACOS	2183		VISTA WAY	B9	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303600	5812	YES	NO
QUIK WOK	2184		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303100	5812	YES	NO
MCDONALD'S	2185		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303500	5812	YES	NO
BURGER KING	2325		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651205100	5812	YES	NO
HANA RESTAURANT	2415		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651204600	5812	YES	NO
L&L HAWAIIAN BARBEQUE	2455		VISTA WAY	D	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651203300	5812	YES	NO
OCEAN THAI CUISINE	2455		VISTA WAY	F	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651203300	5812	YES	NO
RED LOBSTER REST #6367	2471		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651206400	5812	YES	NO
JACK IN THE BOX 98	2474		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1652406400	5812	YES	NO
OUTBACK STEAKHOUSE	2485		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651203800	5812	YES	NO
WINGS N THINGS	2525		VISTA WAY	A	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651203500	5812	YES	NO
SUSHI N JOY	2530		VISTA WAY	J	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1652405500	5812	YES	NO
CHIPOTLE MEXICAN GRILL	2611		VISTA WAY	A	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651213600	5812	YES	NO
CHILI'S GRILL & BAR	2627		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651213200	5812	YES	NO
ROMANO'S MACARONI GRILL	2655		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651213600	5812	YES	NO
EL TORITO RESTAURANT, INC # 7093	2693		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651211900	5812	YES	NO
Q RESTAURANT	2725		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651211700	5812	YES	NO
HOOTERS OF OCEANSIDE	3186		VISTA WAY	100	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1653503900	5812	YES	NO
GIANNI PIZZA	3910		VISTA WAY	108	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1660104500	5812	YES	NO
CHINA TOWN CHINESE FOOD	3910		VISTA WAY	109	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1660104500	5812	YES	NO
JOSE'S TACO	3910		VISTA WAY	110	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1660104500	5812	YES	NO
TRI-CITY HOSPISTAL CAFETERIA	4002		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1660103100	5812	YES	NO
JUNGLE JACKS INC.	1865		CALIFORNIA STREET		High	Nurseries	Carlsbad	Loma Alta	904.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1540406800	742	YES	NO
LAS PALMAS RANCH	6508		MORRO HEIGHTS ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1221701400	742	YES	NO
CALIFORNIA FLOWER BULB CO.	2521		OCEANSIDE BLVD	A	High	Nurseries	Carlsbad	Loma Alta	904.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1492710500	742	YES	NO
EVERGREEN NURSERY	3231		OCEANSIDE BLVD		High	Nurseries	Carlsbad	Loma Alta	904.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1620504700	742	YES	YES
PARDEE TREE NURSERY	30970		PRECIOUS HILLS ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1220306400	742	YES	NO
INGWERSEN NURSERY	1620		RIDGEWAY STREET		High	Nurseries	Carlsbad	Loma Alta	904.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	Unkown	742	YES	NO
PACIFIC PARADISE LP.	5708	N	RIVER ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1221005300	742	YES	NO
DM COLOR EXPRESS INC.	5712	N	RIVER ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1221005900	742	YES	NO
WILLOWBROOK NURSERY	2220		WILLOBROOK DRIVE		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1591122300	742	YES	NO
CMA GROWERS	370		WILSHIRE ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	Unkown	742	YES	NO
LOPEZ NURSERY	461		WILSHIRE ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1220202300	742	YES	NO
ARMSTRONG GARDEN CENTERS INC.	1492		WILSHIRE ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1221502300	742	YES	NO
A B C SMOG	260		AIRPORT ROAD	C	Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Services - Emission	Not applicable	1602715500	7549	NO	NO

Attachment 5-A Commercial Inventory
City of Oceanside FY 2010-11

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
ATD OF CALIFORNIA INC.	4691		CALLE JOVEN		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X		Auto Reconditioning	Not applicable	1570604500	7542	NO	NO
TIRE CENTERS LLC	4055		CALLE PLATINO		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Tire Sales and Service	Not applicable	1625033000	4413	NO	NO
PAPPY'S MARKET	601	N	CLEVELAND STREET		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Groceries Store	Not applicable	1432430400	5411	YES	NO
PACIFIC TIRE & WHEEL	523	N	COAST HWY		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X		General Auto Repair Shop	Not applicable	1470810100	7538	NO	NO
CIRCLE K#2702967	420	N	COAST HWY		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Groceries Store	Not applicable	1470930900	5411	YES	NO
RED & WHITE SUPERETTE	700	N	COAST HWY		Medium	Commercial	Oceanside	San Luis Rey	904.1	X	X	X	X	X	X	X			Groceries Store	Not applicable	1432050800	5411	YES	NO
AAA AUTO GROUP	102	S	COAST HWY		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X		Vehicle Dealers	Not applicable	1472830500	5521	NO	NO
5 GRAND AUTOLAND	114	S	COAST HWY		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X		Vehicle Dealers	Not applicable	1472830500	5521	NO	NO
AUTO FINANCE EXPERTS	205	S	COAST HWY	B	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1500451100	5521	NO	NO
ANGELO'S KARS	222	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1500510500	5521	NO	NO
ACE SMOG	242	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		General Auto Repair Shop	Not applicable	1500511100	7538	NO	NO
COASTAL LIQUOR	432	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X			Groceries Store	Not applicable	1502040900	5921	YES	NO
WHOLESALE AUTOS	501	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1501840900	5521	NO	NO
HOMETOWN MOTORS INC	502	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1502031300	5521	NO	NO
WHOLESALE AUTOS	515	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1501840800	5521	NO	NO
CONTINENTAL MOTORS - SAAB	601-17	S	COAST HWY	A	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1503760400	5521	NO	NO
101 AUTO SALES	801	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1503730700	5521	NO	NO
SHOWTIME AUTO BROKERS	902	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1503040100	5521	NO	NO
PHAT CITY MOTORS	1009	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1520110300	5521	NO	NO
DISCOUNT TIRES	1037	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Retail Sales, Vehicle Tires	Not applicable	1520111000	5531	NO	NO
OCEANSIDE TEST ONLY CENTER	1106	S	COAST HWY	B	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Automotive Services - Emission	Not applicable	1520230600	7549	NO	NO
YES AUTO SALES	1111	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1520140300	5521	NO	NO
SMOG FOR LESS	1111	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Smog Check	Not applicable	1520140300	7549	NO	NO
RITE AID	1201	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X			Drug Stores	Not applicable	1521711800	5912	YES	NO
AUTO SOUND AND IMAGE	1220	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Retail	Not applicable	1521930600	5941	NO	NO
AUTO SOUND AND IMAGE	1303	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Automotive - Sound Installation	Not applicable	1521720100	7538	NO	NO
OCEANSIDE SCOOTERS	1425	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X		Motorcycle Sale and Service	Not applicable	1511781300	5571	NO	NO
OCEANSIDE IMPORTS	1426	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1522000200	5521	NO	NO
CERTIFIED AUTO SALES	1520	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1552001300	5521	NO	NO
KARZ PLUS RV	1555	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1530302000	5521	NO	NO
T AND T AUTO SMOG	1602	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X		General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
COAST PERFORMANCE AND OFFROAD	1707	S	COAST HWY		Medium	Commercial	Carlsbad	Buena Vista	904.2			X	X		X		X		Automotive Services - Tires	Not applicable	1531130100	5531	NO	NO
RICHARD'S TIRE SHOP	1742	S	COAST HWY		Medium	Commercial	Carlsbad	Buena Vista	904.2			X	X		X		X		Automotive Services - Tires	Not applicable	1532134300	5531	NO	NO
CREAM OF THE CROP	2009	S	COAST HWY		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X			Groceries Store	Not applicable	1550311300	5411	YES	NO
HENRY'S FARMERS MARKET	471		COLLEGE BLVD		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Groceries Store	Not applicable	1571010700	5411	YES	NO
OCEANSIDE TIRE AND SERVICE CENTER	499		COLLEGE BLVD	A	Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X		Automotive Tire Repair Shop	Not applicable	1571010800	5411	NO	NO
7-11 FOOD STORE #15591B	3407		COLLEGE BLVD		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X			Groceries Store	Not applicable	1680110400	5812	YES	NO
OCEANSIDE GROCERY OUTLET	3508		COLLEGE BLVD		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X			Groceries Store	Not applicable	1680123200	5411	YES	NO
GIANT K MARKET	606		CROUCH STREET		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X			Grocerie Stores	Not applicable	1493302300	5411	YES	NO
SOS UPHOLSTERY	660		CROUCH STREET		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Upholstery Repair Shops	Not applicable	1493301700	7532	NO	NO
7Eleven	41		DOUGLAS DRIVE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Convenience Food Store	Not applicable	1600205300	5411	YES	NO
FIVE STAR MARKET AND LIQUOR	650		DOUGLAS DRIVE	113-20	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Grocerie Stores	Not applicable	15781005700	5411	YES	NO
EMERALD ISLE GOLF COURSE	660	S	EL CAMINO REAL		Medium	Commercial	Oceanside	San Luis Rey	903.1										Golf Course	Not applicable	1620403700	9999	NO	NO
DISCOUNT TIRE	2281	S	EL CAMINO REAL		Medium	Commercial	Carlsbad	Buena Vista	904.2			X	X		X		X		Automotive Tire Repair Shop	Not applicable	1650132400	7534	NO	NO
PRECISION DESIGNS AND FABRICATION	612		FOUSSAT ROAD		Medium	Commercial	Carlsbad	Loma Alta	904.1										Office	Not applicable	1492715300	9999	NO	NO
CVS PHARMACY	4615		FRAZEE ROAD		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Drug Store	Not applicable	1617818400	5411	YES	NO
7 - ELEVEN	4625		FRAZEE ROAD		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Grocerie Stores	Not applicable	1617817500	5411	YES	NO
KYOTO GIFT + FOOD	559		GREENBRIER DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X			Grocerie Stores	Not applicable	1510104300	5812	YES	NO
OCEANSIDE HARBOR MARKET	272	S	HARBOR DRIVE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Groceries Store	Not applicable	1430103100	5411	YES	YES
KAHLER INTERNATIONAL INC	2520		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X	Musical Instrument Assembly	Not applicable	1616602300	8811	YES	NO
WALLDESIGN INC	2525		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X	Contractor Specialty - Drywall	Not applicable	1616603400	1742	YES	NO
APRIA HEALTHCARE INC	2530		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X	Medical Equipment Supplier	Not applicable	1616602200	5047	YES	NO
PROLINE CONCRETE TOOLS INC	2560		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X	Manufacturing - Concrete Stamps	Not applicable	1616602000	5082	YES	NO
CALPEX PLASTICS INC	2570		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X	Manufacturing - Plactic Products	Not applicable	1616601900	3083	YES	NO
SEASIDE HELICOPTERS INC	2580		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X	Helicopter Part Supplier	Not applicable	1616601600	5088	YES	NO
CARLSBAD AUTO CONNECTION	511		LEONARD STREET		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X		Vehicle Dealers	Not applicable	1520110300	5521	NO	NO
AUTOZONE #5661	1040		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X		Automotive Parts Supply Store	Not applicable	1472310600	5531	NO	NO
CAR QUEST AUTO PARTS	1531		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X		Automotive Parts Supply Store	Not applicable	1482601800	5531	NO	NO
7 ELEVEN #25818D	2255		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Grocerie Stores	Not applicable	1451701400	5411	YES	NO
Z-MART MARKET	3200		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Groceries Store	Not applicable	1602714300	5411	YES	NO
MISSION ASIAN MARKET	3320		MISSION AVENUE	L	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Groceries Store	Not applicable	1602711200	5411	YES	NO
SEVENDAY MARKET	3365		MISSION AVENUE	A-B	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X			Groceries Store	Not applicable	1605501300	5411	YES	NO

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
MIKE'S LIQUOR #2	3549		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Liquor Store	Not applicable	1602910600	5921	YES	NO
O'RIELLY AUTO SUPPLY #1329	3661		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Automotive Parts Supply Store	Not applicable	1602910400	5531	NO	NO
MISSION SEAFOOD	3753		MISSION AVENUE	117	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store - Seafood	Not applicable	1602911100	5421	YES	NO
MISSION MARKETPLACE	3772		MISSION AVENUE	135	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1583901400	5411	YES	NO
MILANO'S LIQUOR	3846		MISSION AVENUE	A2	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1580520200	5411	YES	NO
RODEOS MARKET AND RESTAURANT	3858		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1580520200	5411	YES	NO
LITA'S FISH MARKET	3864		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1580520200	5411	YES	NO
AUTOZONE	3975		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Automotive Parts Supply Store	Not applicable	1580801200	5531	NO	NO
FEDERAL HEATH SIGN CO INV	4602		NORTH AVENUE	A	Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Manufacutring - Signs	Not applicable	1614700500	3993	YES	NO
HOLMES LANDSCAPE COMPANY	4616		NORTH AVENUE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Contractor Specialty - Landscape	Not applicable	1614700600	781	YES	NO
O'RIELLY AUTO SUPPLY #331	502		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive Parts Supply Store	Not applicable	1520230400	5531	NO	NO
500 MOTORS	515		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automobile - Vehicle Dealers	Not applicable	1521931000	5521	NO	NO
CVS DRUG STORE	1706		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Drug Stores	Not applicable	1510111000	5912	YES	NO
SMART AND FINAL	1737		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1513102300	5411	YES	NO
BONEY'S MARKETPLACE	1820		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1510104700	5411	YES	NO
OLOA SAMOA	1906		OCEANSIDE BLVD	C	Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1510104000	5411	YES	NO
SUPER VALUE MARKET	1906		OCEANSIDE BLVD	Y-Z	Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1510104000	5411	YES	NO
ALL STAR GLASS	1950		OCEANSIDE BLVD	A-B	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automobile Glass Replacement S	Not applicable	1493302700	7536	NO	NO
SMOG-THIS	1950		OCEANSIDE BLVD	O	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive Services- Emission	Not applicable	1493302700	7538	NO	NO
FIRE MOUNTAIN MARKET	1991		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1493301400	5411	YES	YES
OCEANSIDE TEST ONLY SMOG	2017		OCEANSIDE BLVD	C	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive Services - Emission	Not applicable	1493701400	7538	NO	NO
SOS OCEANSIDE AUTO UPHOLSTERY	2024		OCEANSIDE BLVD	B	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive, Upholstery Repair	Not applicable	1493300100	7532	NO	NO
CALIFORNIA PACIFIC BUGS	2040		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive Parts Supply Store	Not applicable	1493300100	5531	NO	NO
ALL SMOG TEST ONLY CENTER	2601		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive Services - Emission	Not applicable	1492714700	7549	NO	NO
A MARKET - MARISCOS & MEXICAN FOOD	2936		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1620305000	5411	YES	NO
NAPA AUTO PARTS-OCEANSIDE	2954		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive Parts Supply Store	Not applicable	1620306500	5531	NO	NO
WALGREENS DRUG STORE	4181		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Drug Store	Not applicable	1622411800	5541	YES	NO
PHD MANUFACTURING INC	1710		ORD WAY		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Steel Products	Not applicable	1621208304	3599	YES	NO
CALIFORNIA MILLWORKS	1980		PEACOCK BLVD.	F	Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Wood Products	Not applicable	1614703100	3599	YES	NO
KRAGEN AUTO PARTS #794	3840		PLAZA DRIVE		Medium	Commercial	Carlsbad	Buena Vista	904.2			X	X		X		X			Automotive Parts Supply Store	Not applicable	1680122000	5531	NO	NO
CALIFORNIA SMOG CENTER	3204		PRODUCTION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Automotive Services - Emission	Not applicable	1602711500	7549	NO	NO
BIG LIQUOR	617	N	REDONDO DRIVE	A	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1570402600	5411	YES	NO
NOVILLO'S MEAT MARKET	620	N	REDONDO DRIVE	E	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1570403600	5411	YES	NO
FRESH AND EASY NEIGHBORHOOD MARKET	4908	N	RIVER ROAD		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1570404500	5411	YES	NO
EL NOPALITO MARKET	410		SAN DIEGO STREET		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Grocerie Stores	Not applicable	1481522600	5411	YES	NO
EL TORITO MEAT MARKET	422		SAN DIEGO STREET		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Grocerie Stores	Not applicable	1481523000	5411	YES	NO
AUTO GLASS AMERICA	2949		SAN LUIS REY ROAD		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Automobile Services - Glass Replacement	Not applicable	1460505200	7536	NO	NO
A1 GOLF CARS	2600		TEMPLE HEIGHTS DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Golf Car - Sales and Maintenance	Not applicable	1614701700	5941	NO	NO
SIERRA SPRINGS WATER	2615		TEMPLE HEIGHTS DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X				Wholesale - Distributor	Not applicable	1614700900	5963	YES	NO
PRECISION CARPENTRY INC	2620		TEMPLE HEIGHTS DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturer - Wood Products	Not applicable	1614700100	1751	YES	NO
TURNKEY ENGINE SUPPLY	2620		TEMPLE HEIGHTS DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive - Machine Shop	Not applicable	1614700100	3714	NO	NO
CUSTOM CONVERTING, INC	2625		TEMPLE HEIGHTS DRIVE	C	Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Metal Components	Not applicable	1614700800	3931	YES	NO
7-11 STORE #13615	2850		THUNDER DRIVE		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X				Grocerie Stores	Not applicable	1665351400	5411	YES	NO
7-ELEVEN #20342C - 2111	487		VANDEGRIFT BLVD		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1570402800	5411	YES	NO
AUTO GLASS AMERICA	358		VIA DEL MONTE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Automobile Services - Glass Replacement	Not applicable	1460501700	7536	NO	NO
NICHOLAS CABINETS	219		VIA EL CENTRO		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X				X	X	X		Manufacturer - Wood Cabinets	Not applicable	1460501900	2434	YES	NO
MASTERCRAFT WOODWORDS INC.	305		VIA EL CENTRO		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X				X	X	X		Manufacturer - Wood Products	Not applicable	1460501700	2499	YES	NO
PRECISION AUTO GLASS	444		VIA EL CENTRO		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Automobile Services - Glass Replacement	Not applicable	1460507000	7536	NO	NO
VERIDIAN ALLIED SWISS	2636		VISTA PACIFIC DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Metal Components	Not applicable	1614701500	3949	YES	NO
SIMBA INTERNATIONAL	2654		VISTA PACIFIC DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Recycling - Plastics and Metals	Not applicable	1616604000	5093	YES	NO
FARM BOY	2530		VISTA WAY		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X				Groceries Store	Not applicable	1652405500	5812	YES	NO
TRADER JOE'S #22	2570		VISTA WAY		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X				Groceries Store	Not applicable	1652403600	5411	YES	NO
WISCONSIN MARKET	202		WISCONSIN AVENUE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1502631700	5411	YES	NO
OCEAN 7 FOOD STORE	205		WISCONSIN AVENUE		Medium	Commercial	Carlsbad	Loma Alta	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1503521200	5411	YES	NO
INTEGRITY FINANCIAL	778		ABBYWOOD DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Consulting	Not applicable		7389		
OTERO ANALYTICS GROUP	132		ADELIA WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Consulting	Not applicable		7389		
ONE MORE THAT'S IT PUB	231		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1460502400	5812		
CRYSTAL CATERING FOOD SERVICE MANAGEMENT	263		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Personal Supply Services, Temp	Not applicable		7361		
TERI CENTER FOR ART & ADULT EDUCATION	305		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Individual & Family Social Ser	Not applicable		8322		
XTREME HYDROPONICS	311		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Retail Sales - Gardening Equipment	Not applicable		5261		
VACANT	353		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Publishing	Not applicable		2741		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
SKYDIVE AMERICA CALIFORNIA	408		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Skydiving Dropzone	Not applicable		7999		
COASTAL AERO SCENIC	480		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Aviation Scenic Flights	Not applicable		7999		
HERCA HEATING AND COOLING	580		AIRPORT ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, HACV	Not applicable		1711		
WAGGAMAN'S AIR STREAM STUDIO	580		AIRPORT ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1											Custom Fabrication of Auto & Motorcycle Pa	Not applicable		0		
PROCAST INC	602		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1		X	X				X				Manufacturer, Die Casting	Not applicable		3363	NO	NO
SILVERADO BARNS INC	622		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1		X	X				X				Manufacturing, Prefabricated M	Not applicable		3448		
FISHEL COMPANY	666		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, Underground Utilti	Not applicable		1623		
J F CASSAN	1032		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Automotive, Parts Dealer Used	Not applicable		5015		
K-FAB	1040		AIRPORT ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Sheet Metal	Not applicable		3444		
S & R TOWING	1060		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Automotive Wrecker/ Towing Ser	Not applicable		7549		
GUCKENHEIMER	1		ANTIBODY WAY		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
GENENTECH INC	1		ANTIBODY WAY		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
GARDNER'S MOBILE REPAIR & SERVICE	1660		APPALOOSA WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Handyman Services	Not applicable		7349		
CENTRO CRISTIANO	1905		APPLE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Education Center	Not applicable		8661		
HOME GROWN FUN	4348		ARBOR COVE CIRCLE		Low	Commercial	Oceanside	San Luis Rey	903.1											Herb Products	Not applicable		7389		
CVC LOGISTICS	4445		ARBOR COVE CIRCLE		Low	Commercial	Oceanside	San Luis Rey	903.1											Personnel Management Logistics	Not applicable		7389		
SUPERIOR MOVERS	4515		ARBOR GLENN WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Moving Services	Not applicable		4212		
PORRAS TRUCKING	717		ARTHUR AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Transportation-Trucking	Not applicable		7389		
HEALTHCARE PROFESSIONAL ORGANIZATION	749		ARTHUR AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Web Based Education/Information	Not applicable		7389		
VINTEC MOTORS	2244		AUTUMN DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											e-Commerce	Not applicable		5961		
ACADEMIC COMMUNICATION ASSOC, INC	4001		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
CARPETS BY PHILLIPS	4001		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
ROYAL PACIFIC CONSTRUCTION INC	4011		AVENIDA DE LA PLATA	301	Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
NILO TOYS	4011		AVENIDA DE LA PLATA	302	Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
ORIS GROUP CONSULTING INC	4011		AVENIDA DE LA PLATA	302	Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
AGRI CHEMICAL & SUPPLY INC.	4011		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		5191		
WISDOMILING.COM INC	4015		AVENIDA DE LA PLATA	401	Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
ENVIREMEDIAL SERVICES INC	4015		AVENIDA DE LA PLATA	402	Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
AMERICAN FOOD INGREDIENTS	4021		AVENIDA DE LA PLATA	501	Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
DTI INTERNATIONAL	4021		AVENIDA DE LA PLATA	502	Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
ACUSHNET TEST FACILITY	4033		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
PRESERVED TREESCAPES INTERNATIONAL	4039		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
COMPUTER CIRCULATION CENTER	4040		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ROCKY'S FOOD DIST INC	4048		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GENENTECH INC	4049		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
COX COMMUNICATIONS	4100		AVENIDA DE LA PLATA	A	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MC COMMUNICATIONS INC	4100		AVENIDA DE LA PLATA	B	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RANCHO DEL ORO LANDSCAPE & MAINT INC	4100		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ALLEN L IND INC	4112		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BAY CAL COMMERCIAL PAINTING	4112		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
LANDMARK MFG,INC	4112		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
R & N PROPERTIES	4113		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SEPRO MEMBRANES INC	4115		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
COASTAL WINE STORAGE	4119		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
JONES BROADBAND INTERNATIONAL INC	4120		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PROFESSIONAL DEVELOPMENT COURSES	4121		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
FULL CIRCLE MANAGEMENT	4123		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
B & M HARDWARE CO.	4125		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ELMEC MANUFACTURING	4127		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DECORATIVE SERVICES	4128		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SAN DIEGO FUME WORKS COMPANY	4131		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
APPLIED COMPOSITE SOLUTIONS	4131		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
US MAILING HOUSE	4133		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
LANDMARK MFG INC	4136		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ROYAL BUSINESS GROUP INC	4139		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CARBON BY DESIGN LP	4141		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SQUARE UP FASHIONS INC	4143		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DUPACO INC	4144		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
COAST 101 ESTATE SERVICES	4144		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1											Off-Site Estate Sales			7389		
BDS TACTICAL INC	4149		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
CREATURES OF LEISURE	4151		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CALIBER BODYWORKS	4156		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ADVANCE PERSONNEL SYSTEMS INC	4167		AVENIDA DE LA PLATA	128	Low	Commercial	Carlsbad	Loma Alta	94.1													0		
CALIFORNIA CAREER SCHOOLS	4167		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
GUTH CENTER	4167		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
KHERUBIM INC	4167		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
FOUR YOUNG INC	4167		AVENIDA DE LA PLATA	102	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
LAW OFFICES OF JACK B. FRIEDELL	4167		AVENIDA DE LA PLATA	104	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ADVANCED EDUCATIONAL STRATEGIES INSTITUTE	4167		AVENIDA DE LA PLATA	106	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SENIOR RESOURCE CENTERS	4167		AVENIDA DE LA PLATA	108	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
THE RESOURCE CENTER	4167		AVENIDA DE LA PLATA	108	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
DLT & V SYSTEMS ENGINEERING INC.	4167		AVENIDA DE LA PLATA	108	Low	Commercial	Carlsbad	Loma Alta	904.1										Electrical Engineering			8711		
RANCHO DEL ORO LANDSCAPE & MAINTENANACE	4167		AVENIDA DE LA PLATA	109	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
EAGLE NEST REALTY & MORTGAGE INC.	4167		AVENIDA DE LA PLATA	110	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
KHERUAIM	4167		AVENIDA DE LA PLATA	111	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CAROLLO ENGINEERING	4167		AVENIDA DE LA PLATA	114	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
FREE RADICAL TECHNOLOGY	4167		AVENIDA DE LA PLATA	116	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
DLT & V SYSTEMS ENGINEERING INC.	4167		AVENIDA DE LA PLATA	118	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
JEN MAX FOODS	4168		AVENIDA DE LA PLATA	100	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
RUSHING WIND MNINISTRY	4168		AVENIDA DE LA PLATA	101	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
JANI-TECH	4168		AVENIDA DE LA PLATA	103	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MISSION POWER SOLUTIONS	4168		AVENIDA DE LA PLATA	105	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
DORADO ENTERPRISES	4168		AVENIDA DE LA PLATA	108	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
IDEADON LLC	4168		AVENIDA DE LA PLATA	111	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
RECON MOUNTAINER	4168		AVENIDA DE LA PLATA	111	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
IGLESIA APOSTOLICA DE LA FE DE CRISTO JESUS	4168		AVENIDA DE LA PLATA	113	Low	Commercial	Carlsbad	Loma Alta	904.1										Church Services			8061		
I SPEED	4168		AVENIDA DE LA PLATA	115	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
QC ENTERPRISES INC	4168		AVENIDA DE LA PLATA	116	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
LA PETITE ACADEMY INC. # 7237	4179		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
L.R. DESIGN ASSOCIATES	4183		AVENIDA DE LA PLATA	201	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
COX COMMUNICATIONS	1922		AVENIDA DEL ORO		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
GIMMINY KIDS OCEANSIDE	1935		AVENIDA DEL ORO		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
LEARNING CENTER INTERNATIONAL	1938		AVENIDA DEL ORO		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
QUANTUM LEARNING NETWORK INC	1938		AVENIDA DEL ORO		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
TALLY RAND INDUSTRIAL SYSTEMS INC.	1945		AVENIDA DEL ORO	126	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MATRIX MEMBRANES INC	1945		AVENIDA DEL ORO	128	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
2H DISTRIBUTION INC.	1949		AVENIDA DEL ORO	102	Low	Commercial	Carlsbad	Loma Alta	904.1										Distributor					
KACOR INC.	1949		AVENIDA DEL ORO	102	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CONSUMER CREDIT COUNSELING SERVICES	1949		AVENIDA DEL ORO	104-8	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ARBOR E & T INC.	1949		AVENIDA DEL ORO	106	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MAHLER'S BAKERY	1943		AVENIDA PLAZA REAL		Low	Commercial	Carlsbad	Loma Alta	904.1										Wholesale Bakery		1625023600	5153		
HARDWARE SPECILATY COMPANY INC.	1951		AVENIDA PLAZA REAL		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
NEON TECH	1965		AVENIDA PLAZA REAL		Low	Commercial	Carlsbad	Loma Alta	904.1										Manufacturing Neon Signs			3993		
BAJA BRONZING BY BROOKE	1724		AVENIDA SEGOVIA		Low	Commercial	Carlsbad	Loma Alta	904.1										Mobile Airbrush Sunless Tanning			7299		
APPLIEDUS CORPORATION	1775		AVENIDA SEGOVIA		Low	Commercial	Carlsbad	Loma Alta	904.1										Office Start Up Companies			7389		
MI CASA REAL ESTATE	2336		BACK NINIE		Low	Commercial	Carlsbad	Buena Vista	904.2										Real Estate Sales			6531		
REFLECTIONS	4158		BAYCLIFF WAY		Low	Commercial	Carlsbad	Agua Hedionda	904.3										Auto Detailing			7389		
VCLS LANDSCAPING	4168		BAYCLIFF WAY		Low	Commercial	Carlsbad	Agua Hedionda	904.3										Landscaping			7349		
OCEAN HOME REPAIR SERVICES	5152		BAYWOOD CIRCLE		Low	Commercial	Carlsbad	Loma Alta	904.1										Home Repairs			7349		
T J. ENTERPRISES	5135		BERRYESSA STREET		Low	Commercial	Carlsbad	Agua Hedionda	904.3										Internet Sales	Not applicable		5961		
PC CLINIC	504		BIG BEND WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Computer Repair	Not applicable		7378		
DALE'S LIQUOR	105	N	BROOKS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Liquor Store	Not applicable		5921		
D.C.'S ACROSS THE STREET	107	N	BROOKS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Drinking Establishments	Not applicable		5813		
LUCKY DOLLAR GIFT SHOP	121	N	BROOKS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Gift Shop	Not applicable		5947		
U.S. POST OFFICE	211	N	BROOKS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Postal Services	Not applicable		8999		
PASSPORT PHOTOS PLUS	223	N	BROOKS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Photographic Services	Not applicable		7221		
UNDERWATER SCHOOLS OF AMERICA	225	N	BROOKS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Schools	Not applicable		7999		
THINK GREEN LANDSCAPING SERVICES	514	S	BROOKS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Landscape Services	Not applicable		7349		
AMERICAN SPRINKLERS	1915		BUSH STREET		Low	Commercial	San Luis Rey	San Luis Rey	903.1										Sprinkler Repairs	Not applicable		7349		
M.R. STREETER REMODELING	333		CADILLAC CIRCLE		Low	Commercial	Carlsbad	Loma Alta	904.1										Handyman Services	Not applicable		1521		
DANIEL BAUER	931		CALIFORNIA STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Landscape Services			7349		
EAST BAY ATTENTION TO DETAIL INC	4691		CALLE JOVEN		Low	Commercial	Oceanside	San Luis Rey	903.1													0		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
ESSENCE OF FOOD	4691		CALLE JOVEN		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
DIRECT MOULDING	4039		CALLE PLATINO	A	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
INDIGO LABS INC	4039		CALLE PLATINO	C	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SO CAL ATHLETICS	4039		CALLE PLATINO	D	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
THE KINKO COMPANY	4039		CALLE PLATINO	E	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
AMFLEX PLASTICS INC	4039		CALLE PLATINO	G	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BRIXTON	4040		CALLE PLATINO	102	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
KITCHEN GENIOS	4040		CALLE PLATINO	110	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NORTH COAST MOTORSPORTS	4040		CALLE PLATINO	111	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SAN JUAN SPECIALTY WOOD PRODUCTS	4040		CALLE PLATINO	112	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
AUDIO VIDEO BUSINESS RESOURCES	4040		CALLE PLATINO	114	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CITY ELECTRIC SUPPLY	4040		CALLE PLATINO	116	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OCEANSIDE CROSSFIT	4040		CALLE PLATINO	120	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CJ PRODUCTS	4040		CALLE PLATINO	124	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PUMBMASTER INC.	4056		CALLE PLATINO		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TV SHOW PRODUCTIONS	4056		CALLE PLATINO	102	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TV SHOW PRODUCTIONS INC	4056		CALLE PLATINO		Low	Commercial	Carlsbad	Loma Alta	904.1											VIDEO TAPE PRODUCTIONS			7812		
CAL-MIL PLASTIC PRODUCTS, INC	4079		CALLE PLATINO		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ELLIE'S COACHING SERVICES	3051		CAMARILLO AVENUE		Low	Commercial	Carlsbad	Buena Vista	904.2											Personal Coach Services			7299		
NC TRANSPORTATION SERVICES COOPERATIVE	624		CAMELOT DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											Administrative Services	Not applicable		7389		
WALGREENS	3507		CANNON ROAD		Low	Commercial	Carlsbad	Agua Hedionda	904.3											DRUG STORE			5912		
FRUGOS YOGURT	3509		CANNON ROAD	E-2A	Low	Commercial	Carlsbad	Agua Hedionda	904.3											FROZEN FOOD			5411		
CITY CLEANERS	3509		CANNON ROAD	E-2B	Low	Commercial	Carlsbad	Agua Hedionda	904.3											Dry Cleaners			7216		
MONTESSORI SCHOOL OF O'SIDE	3525		CANNON ROAD		Low	Commercial	Carlsbad	Agua Hedionda	904.3											School			0		
DAVINA'S NAILS	3529		CANNON ROAD	2A	Low	Commercial	Carlsbad	Agua Hedionda	904.3											Beauty Shops			7231		
POSTAL ANNEX	3529		CANNON ROAD	2B	Low	Commercial	Carlsbad	Agua Hedionda	904.3											POSTAL SERVICES			4311		
MIKES BAGELS & COFFEE HOUSE	3529		CANNON ROAD	2D	Low	Commercial	Carlsbad	Agua Hedionda	904.3											COFFEE SHOP			5812		
CHIROPRACTIC	3529		CANNON ROAD	2E	Low	Commercial	Carlsbad	Agua Hedionda	904.3											CHIROPRACTIC OFFICE			8041		
DENTIST 2000	3529		CANNON ROAD	2G	Low	Commercial	Carlsbad	Agua Hedionda	904.3											DENTIST			8049		
THE PERFECT CUT	3529		CANNON ROAD		Low	Commercial	Carlsbad	Agua Hedionda	904.3											HAIRDRESSERS			7231		
NETRIZON INC.	506		CANYON DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Computer Services	Not applicable		7378		
NATIONAL GROUP INSURANCE BROKER INC.	506		CANYON DRIVE	47	Low	Commercial	Oceanside	San Luis Rey	903.1											Life Insurance Agent	Not applicable		6411		
QUICK COMP	552		CANYON DRIVE	12	Low	Commercial	Oceanside	San Luis Rey	903.1											Office Supplies and Services	Not applicable		7389		
DAYS INN	1501		CARMELO DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels, Motels	Not applicable		7011		
X-TREME CUSTOM BUILDERS	3250		CAROLYN CIRCLE		Low	Commercial	Oceanside	San Luis Rey	903.1											Construction Remodeling	Not applicable		1521		
ULTIMATE CLEANING CONCEPTS	2419		CATALINA CIRCLE	257	Low	Commercial	Carlsbad	Loma Alta	904.1											JANITORIAL SERVICES			7349		
CABLE CONNECTION AND SERVICES	3771		CHERRYSTONE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Computer Maintenance and Repair	Not applicable		7389		
OCEANSIDE CONSTRUCTION CO	512		CIVIC CENTER DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											General Contractor, Residentia	Not applicable		1521		
HARD TO FIND INTERNATIONAL INC.	512		CIVIC CENTER DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Distribution of printed circuit board	Not applicable		5045		
ST CLAIRE PROPERTIES	702		CIVIC CENTER DRIVE	3C	Low	Commercial	Oceanside	San Luis Rey	903.1											Real Estate Agents, Brokers, M	Not applicable		6531		
CARTER'S MOBILE WELDING	714	N	CLEMENTINE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Mobile Welding Services	Not applicable		7692		
PAMELA ANNE DESIGNS	631	S	CLEMENTINE STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Sewing Purses, Wallets	Not applicable		3171		
PIERVIEW MARKET AND LIQUOR	218	N	CLEVELAND STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Liquor Store	Not applicable		5921		
TALK OF THE TOWN SALON	306	N	CLEVELAND STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Beauty Shops	Not applicable		7231		
BRYANT & DWYER SIGN SERVICE	406	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing, Sign and Averti	Not applicable		3993		
NORTH COUNTY PRINTERS & SIGNS	406	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing, Sign and Averti	Not applicable		3993		
KADDYMART	629	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Repair - Electric Golf Carts			5088		
OCEANSIDE BOARD OUTLET	1023	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturer, Surfboards	Not applicable		3949		
LINDEN SURFBOARDS	1027	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturer, Surfboards	Not applicable		3949		
SPECTRUM VIDEO INC	1043	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous, Commercial Mach	Not applicable		3699		
PRIME CO PAINTING, INC	1119	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Contractor, Painting	Not applicable		1721		
QUICK CORNER DELI AND LIQUOR	102	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Liquor Store	Not applicable		5921		
KINGSMEN CLEANERS	126	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Laundry, Dry Cleaners and Garm	Not applicable		7212		
T-SHIRT MART	201	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail, T-Shirts	Not applicable		5699		
JOHNSON SPORTING GOODS	202	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail, Sporting	Not applicable		5941		
MILLENIUM ELECTRONICS	204	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Equipment Stores, Computer/Ele	Not applicable		5734		
WEST COAST NUTRITION	208	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Sales, Health Products			5499		
INNER WORLD	209	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail, Gifts, N	Not applicable		5947		
VINE TO GLASS	210	N	COAST HWY	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail, Wine Sal	Not applicable		5999		
DELUXE BARBERSHOP	210	N	COAST HWY	B	Low	Commercial	Oceanside	San Luis Rey	903.1											Barber Shops	Not applicable		7231		
IDEAL COMMUNICATIONS	212	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Equipment Stores, Computer/Ele	Not applicable		5734		
MEGAS PLUS	213	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Retail Sales - Clothing	Not applicable		5651		

Attachment 5-A Commercial Inventory
City of Oceanside FY 2010-11

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
OCEANSIDE 420 ALTERNATIVE MEDICINE EVALUATION CENT	214	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Alternative Medical Evaluation Center	Not applicable		7299		
SKIRT ESSENTIAL BOUTIQUE	216	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales, Women's Clothing	Not applicable		5621		
CIGAR GROTTO	220	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail, Tobacco	Not applicable		5993		
JEWLERY BUY AND SELL	222	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales, Jewelry Stores	Not applicable		5944		
PETITE MADELINE BAKERY	223	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable		5812		
JAMAICA ME TAN	224	N	COAST HWY		Low	Commercial	Oceanside	Loma Alta	904.1										Miscellaneous Personal Service	Not applicable		7299		
H & M SUPPLIES	301	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	904.1										Miscellaneous Retail, Apparel	Not applicable		5699		
L & M GIFTS	307	N	COAST HWY	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retails, Gifts,	Not applicable		5947		
JEAN'S GIFTS GALORE	307	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retails, Gifts,	Not applicable		5947		
COAST HIGHWAY BARBERSHOP	323	N	COAST HWY	D	Low	Commercial	Oceanside	San Luis Rey	903.1										Barber Shops	Not applicable		7241		
OCEANSIDE SALES AND RENTALS	323	N	COAST HWY	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents, Brokers, M	Not applicable		6531		
SUBWAY	323	N	COAST HWY	B	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1470860100	5812		
WINCHESTER FUNDING GROUP	323	N	COAST HWY	C	Low	Commercial	Oceanside	San Luis Rey	903.1										Mortage Banks and Loan Correpo	Not applicable		6162		
THE LEGAL CENTER	323	N	COAST HWY	E	Low	Commercial	Oceanside	San Luis Rey	903.1										Legal Services	Not applicable		8111		
VACANT	401	N	COAST HWY	101	Low	Commercial	Oceanside	San Luis Rey	903.1										Women's Clothing Store	Not applicable		5621		
STAR THEATER	402	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Theatrical Productions, Commun	Not applicable		7922		
VACANT	406	N	COAST HWY		Low	Commercial	Oceanside	903.1 (San Luis	903.1										Eating/Drinking Establishments	Not applicable	1470930700	5812		
GOOD WILL VOCATIONAL TRAINING CENTER	414	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Job Training and Vocational Re	Not applicable		8331		
PAWS FOR STYLE	429	S	COAST HWY		Low	Commercial	Loma Alta													5	N/A			
OCEAN BREEZE FLOWERS	507	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Florists	Not applicable		5992		
BLUE PACIFIC REALTY	509	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents, Brokers, M	Not applicable		6531		
KINDRED JOURNEYS	510	N	COAST HWY	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Travel Agency	Not applicable		4724		
LIFE ENHANCEMENT FAMILY CHIROPRACTIC	510	N	COAST HWY	B-C	Low	Commercial	Oceanside	San Luis Rey	903.1										Office and Clinic of Chiroprac	Not applicable		8041		
JITTER COFFE PUB	510	N	COAST HWY	D	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1470941100	5812		
MALINDA ORIGINAL'S INC.	514	N	COAST HWY	BB-C	Low	Commercial	Oceanside	San Luis Rey	903.1										Wholesale - Children's Clothin	Not applicable		5137		
RESULTS ONE ON ONE FITNESS STUDIO	514	N	COAST HWY	D-E	Low	Commercial	Oceanside	San Luis Rey	903.1										Physical Fitness Facility	Not applicable		7991		
VACANT	520	N	COAST HWY	A-B	Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents, Brokers, M	Not applicable		6531		
BROOKE INSURANCE	520	N	COAST HWY	C	Low	Commercial	Oceanside	San Luis Rey	903.1										Insurance Agents	Not applicable		6411		
JASON GREENWAY INSURANCE AGENCY	520	N	COAST HWY	103	Low	Commercial	Oceanside	San Luis Rey	903.1										Insurance Agents	Not applicable		6411		
ONE LILY INC	520	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Computer Business Services - W	Not applicable		7379		
TAILS A WAGGIN	612	N	COAST HWY		Low	Commercial	Oceanside	Loma Alta	904.1										Pet Shops, Retail	Not applicable		5999		
HARBOR LIQUOR	707	N	COAST HWY		Low	Commercial	Oceanside	Loma Alta	904.1										Liquor Store	Not applicable		5921		
MOTEL 9	822	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Hotels, Motels	Not applicable		7011		
PACIFIC INN	901	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Hotels, Motels	Not applicable		7011		
MOTEL 6	909	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Hotels, Motels	Not applicable		7011		
LA QUINTA INN	917	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Hotels, Motels	Not applicable		7011		
COAST INN	921	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Hotels, Motels	Not applicable		7011		
CALIFORNIA VISITOR'S CENTER	928	N	COAST HWY	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Services	Not applicable		8999		
OCEANSIDE CHAMBER OF COMMERCE	928	N	COAST HWY	B	Low	Commercial	Oceanside	San Luis Rey	903.1										Business Association	Not applicable		8611		
SURFZONE SURF SHOP	1009	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Sporting Goods Shop	Not applicable		5941		
GUESTHOUSE INN	1103	N	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Hotels, Motels	Not applicable		7011		
TRAVEL LODGE	1401	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Hotels and motels	Not applicable		7011		
ISLANDS SPA	1409	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
GOLDEN STATE PAINT BALL AND AIRSOFT	1411	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Store -	Not applicable		5999		
ANGLER TACKLE	1413	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Sporting Goods Shop - Fishing	Not applicable		5941		
SAN DIEGO HOME FINDING CENTER	1415	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents, Brokers, M	Not applicable		6531		
UP SPORTS	1421	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Sporting Goods Shop, Waterspor	Not applicable		5941		
CHECK MATE	101	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Personal Loans	Not applicable		6141		
500 MOTORS	102	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Vehicle Dealers	Not applicable		5521		
AKKA CARIBBEAN MARKET	105	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Groceries Store	Not applicable	1472720200	5411		
HILL STREET LOCK & KEY	109	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Repair Shop, Locksmith Service	Not applicable		7699		
JOOXBOX OUTLET	111	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales - Men and Women Clothing	Not applicable		5651		
CARMINE'S PIZZA	119	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Fast Food Restaurant	Not applicable	1472720500	5812		
GLOBAL TACTICAL SOLUTIONS	127	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales, Military Gear Pr	Not applicable		5999		
DOLPHIN HOTEL	133	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1										Hotels, Motels	Not applicable		7011		
OCEANSIDE MUSIC SUPPLY	228	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Store, Musical Instrume	Not applicable		5736		
AA&B INSURANCE	234	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Insurance Agents	Not applicable		6411		
SKYTEL TELECOM	236	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Wireless Phones	Not applicable		5999		
FREEDOM E;ECTRONICS	263	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Sales, Electronics	Not applicable		5731		
PRO CUSTOM	303	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Sales, Automobile Audio	Not applicable		5731		
DIGITAL SOUND	307	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Sales, Automobile Audio	Not applicable		5731		
MASSAGE WORLD	310	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Personal Service	Not applicable		7299		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
2ND HAND BARGAIN HOUSE	322	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Used Merchandise Store	Not applicable		5932		
OMNI LOANS	325	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Loan Agents	Not applicable		6163		
JOE'S CREDIT FUNITURE	404	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Furniture Store	Not applicable		5712		
GOLDEN DAY SPA	417	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Beauty Shops	Not applicable		7231		
PROPERTY ADVANTAGE	419	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Real Estate Management	Not applicable		6531		
QUANTICO ARMS - TACTICAL SUPER STORE	420	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Apparel and accessory Store	Not applicable		5699		
LEADING EDGE INDSURANCE	421	S	COAST HWY	A	Low	Commercial	Carlsbad	Loma Alta	904.1										Insurance Agents	Not applicable		6411		
PEOPLE'S CHECK CASHING	421	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Personal Loans	Not applicable		6141		
DR. WATSON'S	421	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1															
ABOUT FACE	423	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Personal Service	Not applicable		7299		
AUDIO LAND	424	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Sales, Automobile Audio	Not applicable		5731		
LABOR READY	425	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Employment agency	Not applicable		7361		
COASTAL MARKET AND LIQUOR	426	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Liquor Store	Not applicable		5921		
THE SLUICE BOX	427	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Clothing, Furniture, Appliances	Not applicable		5331		
DIAMONDS' HAIR SALON	429	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Beauty Shops	Not applicable		7231		
PAWS FOR STYLE	429	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Pet Grooming	Not applicable		752		
OCEANSIDE BOARD SHOP	431	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Amusement And Re	Not applicable		7999		
HAIR STUDIO	514	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Beauty Shops	Not applicable		7231		
THE POD ROOM	514	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Stores, Not Else	Not applicable		5999		
K-FIVE	525	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Sporting Goods Shop	Not applicable		5941		
GARDNER'S BARGAIN CENTER	528	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Furniture Store, Secondhand Re	Not applicable		5932		
A BEAUTIFUL YOU	528	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Salon	Not applicable		7231		
SWIV TACKLE CIRCUS	530	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Amusement And Re	Not applicable		7999		
OCEANSIDE MORTUARY	602	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Funeral Service and Crematorie	Not applicable		7261		
MISSION URGENT CARE	616	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Offices and Clinics of Physici	Not applicable		8011		
OCEANSIDE PSYCHIC EYE	618	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Services, Not Elsewhere Classi	Not applicable		8999		
VACANT	624	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments	Not applicable	1503010500	5812		
U-HAUL CENTER OF OCEANSIDE	802	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Truck Rental/ and Storage	Not applicable		7513		
ALAN'S BIKE SHOP	805	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Bicycle Shop	Not applicable		5941		
GARDNER'S SLEEP CENTER	815	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Sales, Furniture	Not applicable		5712		
CDS SECURITY SOLUTIONS	820	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Special Trade Contractor, Secu	Not applicable		1799		
GOLDEN'S TELEVISION - SALES AND SERVICE	835	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Radio, Television, Consumer El	Not applicable		5731		
UNION BANK OF CALIFORNIA	840	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										National commercial Bank	Not applicable		6021		
FRED ASTAIRE	845	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Dance Studio	Not applicable		7911		
ACD ADVANCE COLOR COATING	865	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Sales, Floor Covering S	Not applicable		5713		
ENTERPRISE RENT-A-CAR COMPANY OF LA	875	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Passenger Car Rental	Not applicable		7514		
MIKE'S LIQUOR	907	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Liquor Store	Not applicable		5921		
CECELIA'S TILE	909	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Installation of Tile and Paiting	Not applicable		7349		
JES TAXES	909	S	COAST HWY	A	Low	Commercial	Carlsbad	Loma Alta	904.1										Tax Preparation	Not applicable		7291		
OG DANKSTER WARE	909	S	COAST HWY	A	Low	Commercial	Carlsbad	Loma Alta	904.1										Clothing	Not applicable		5947		
CORNERSTONE THRIFT	909	S	COAST HWY	B	Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Sales - Vintage Clothing	Not applicable		5932		
AAA - GOLD AND DIAMONDS	909	S	COAST HWY	C	Low	Commercial	Carlsbad	Loma Alta	904.1										Jewlery Store	Not applicable		5944		
TAILOR SHOP	913	S	COAST HWY	C	Low	Commercial	Carlsbad	Loma Alta	904.1										Garment Services, Tailor Shop	Not applicable		7219		
JORDAN'S UPHOLTERY	917	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Reupholstery and Furniture Rep	Not applicable		7641		
GATEWAY INSURANCE	923	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Insurance Agents	Not applicable		6411		
ST ANN CHURCH	1002	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Religious Organizations	Not applicable		8661		
BILL RIFE	1012	S	COAST HWY	N	Low	Commercial	Carlsbad	Loma Alta	904.1										Private Household, Maintenance	Not applicable		8811		
CARPETS ETC	1012	S	COAST HWY	B	Low	Commercial	Carlsbad	Loma Alta	904.1										Carpet, Stores, Retail	Not applicable		5713		
CERRUDO SERVICES	1012	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Contractor, General, Non Resid	Not applicable		1542		
HUDGINS CHIROPRACTIC	1012	S	COAST HWY	A	Low	Commercial	Carlsbad	Loma Alta	904.1										Office of Chiropractor	Not applicable		8041		
SHEILA BRYANT-TUCKER	1012	S	COAST HWY	A	Low	Commercial	Carlsbad	Loma Alta	904.1										Legal Services	Not applicable		8111		
DR. TOMMY GRINDY	1012	S	COAST HWY	C	Low	Commercial	Carlsbad	Loma Alta	904.1										Offices and Clinics of Physici	Not applicable		8011		
REALTY MASTERS/CUSTOM PROPERTY BROKERS	1012	S	COAST HWY	D	Low	Commercial	Carlsbad	Loma Alta	904.1										Real Estate Agents, Brokers, M	Not applicable		6531		
NORTH COUNTY VACUMNS AND MORE	1012	S	COAST HWY	E	Low	Commercial	Carlsbad	Loma Alta	904.1										Vacuum Cleaners Stores, Retail	Not applicable		5722		
WILLIAM C. SIGRIT CPA	1012	S	COAST HWY	F	Low	Commercial	Carlsbad	Loma Alta	904.1										Accounting Services	Not applicable		8721		
DR. OCEANSIDE CHIROPRACTIC	1012	S	COAST HWY	G	Low	Commercial	Carlsbad	Loma Alta	904.1										Accounting Services	Not applicable		8721		
DR. OCEANSIDE CHIROPRACTIC	1012	S	COAST HWY	G	Low	Commercial	Carlsbad	Loma Alta	904.1										Accounting Services	Not applicable		8721		
FIRE SAFETY SERVICES	1012	S	COAST HWY	H	Low	Commercial	Carlsbad	Loma Alta	904.1										Fire Extinguishers, Services	Not applicable		7389		
J TEKKER INSURANCE	1012	S	COAST HWY	J	Low	Commercial	Carlsbad	Loma Alta	904.1										Insurance Agents	Not applicable		6411		
WESTURF LANDSCAPE	1012	S	COAST HWY	L	Low	Commercial	Carlsbad	Loma Alta	904.1										Contractor, Lanscape	Not applicable		782		
N PERLA	1012	S	COAST HWY	M	Low	Commercial	Carlsbad	Loma Alta	904.1										Employment Services	Not applicable		7361		
A & S MANAGEMENT	1015	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1										Property Management	Not applicable		6231		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
DESCANO LTD FUNDING	1017	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Loan Brokers	Not applicable		6163		
CALIFORNIA REALTY NETWOOK	1019	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Real Estate Agents, Brokers, M	Not applicable		6531		
PUPPYS AND KITTENS	1021	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Pet Shops, Retail	Not applicable		5999		
POTPOURRI	1024	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Secondhand, Furniture, Clothin	Not applicable		5932		
STAIN GLASS	1025	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Glass Colored, Stained Retail	Not applicable		3211		
REAL SURF	1101	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Sporting Goods, Apparel Store	Not applicable		5941		
GREMMIE SIDEWALK SURFER	1105	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Retail -Custom S	Not applicable		5999		
REMODEL SOLUTIONS	1107	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Contractor, Building and Lands	Not applicable		1521		
BASKIN ROBBINS - 31 FLAVORS ICE CREAM	1112	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Dairy products	Not applicable		5451		
GOOD BILLS THRIFT SHOP	1116	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Resale of used Clothing, Furniture, Househo	Not applicable		5932		
LAUNDROMAT	1118	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Coin operated Laundry and Dry	Not applicable		7215		
NEW CREATIONS CHILD CARE	1122	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Child Day Care Services	Not applicable		8351		
THE HAIR AFFAIR	1124	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Beauty Shops	Not applicable		7231		
NAIL AFFAIR	1126	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Beauty Shops	Not applicable		7231		
SK DONUT	1129	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Coffee Shop	Not applicable	1520140500	5812		
BODY PIERCING BY TRACY	1319	S	COAST HWY	A	Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Personal Service			7299		
HYDROWBREW	1319	S	COAST HWY	B-C	Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Retail - Beer ma			5999		
ACE WELDING	1325	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Repair Services			7692		
SURF BOWL	1401	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Bowling Center			7933		
ECLIPSE APPAREL MANUFACTURING	1403	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Women's Appare			2331		
DICKIE WALKER MARINE	1405	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Wholesale - Apparel			5551		
SECURITY PUBLIC STORAGE	1501	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellanous Services - Storag			8999		
FIDDLIN GREEN YACHT YARD	1517	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Services - Boat			0		
SUNSET MARINE	1517	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Retail - Marine			5551		
OCEANSIDE PRO TOWING INC	1521	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Services - Towin			7549		
PARADISE BY THE SEA	1537	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OCEANSIDE COLLEGE OF BEAUTY	1575	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ROY'S CLASSIC CAR PARTS	1602	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Retail Sales - Car Parts			0		
HILLTOP MOTEL	1607	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DUSTY'S GUITAR	1609	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
KUNG FU SAN DOO	1611	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DAV INDUSTRIES	1624	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
LIQUOR PLUS	1629	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
VACANT	1706	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments			5812		
DR. OCEANSIDE	1709	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ANTIQUES COLLECTOR'S MART	1714	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
STATE SALE WAREHOUSE	1715	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
TLC ANTIQUES, JEWELS, UNIQUE GIFTS	1719	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
NORTH COUNTY TIMES	1722	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ARIEL'S DANCE STUDIO	1743	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
AFS TAX, REALESTATE	1817	S	COAST HWY	A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
QUICK BAIL BOND	1817	S	COAST HWY	B	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
OCEANSIDE INN	1820	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
THE FRAME HOUSE	1824	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
SNOWWHITE LAUNDRY	1826	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
SOURCE CRODDFIT	1826	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														7991		
WAGS LIQUOR	1827	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
MY MEDIA GROUP	1828	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2											Marketing and Advertizing			7311		
SOUTH COAST SCOOTERS	1828	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
HOLY MOLY HYDRO	1828 1/2	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														5261		
H & R BLOCK TAX SERVICES	1829	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
DESIGN NAIL AND SPA	1833	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
TREASURE ON THE COAST	1836	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
GOLD COAST FUTON	1837	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
COAST COMPOUNDING PHARMACY	1838	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
TNT HAIR DESIGN	1839	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
HAIR QUEST BEAUTY SHOP AND SUPPLIES	1840	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
COIN UP LAUNDRY	1902	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
TWO DOLLAR CLEANER	1904	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
SURFRIDE SURF SHOP	1909	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
JOHNSTON'S INTERIORS	1916	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PARRA ACCOUNTING	1918	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
RELIANT SENIOR CARE	1920	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
OCEANSIDE PHYCHIC	1920	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														7999		
OCEANSIDE FLORIST INC.	1921	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
WAVE WEAPONS SURF SHOP	1922	S	COAST HWY	A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
O.G. DANKSTER WARE	1922	S	COAST HWY	B	Low	Commercial	Carlsbad	Buena Vista	904.2											Sales, Clothing, Novelty & Souveniers			5947		
HILL STREET DONUT HOUSE	1926	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments			5812		
WESTTURF LANDSCAPE MAINTENANCE	1930	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ANTIGUA COSIGNMENT	1931	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
BARBER SHOP	1931	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ALLEN ROGERS HAIR DESIGNER	1933	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
TOP OF THE WORLD COSIGNMENT	1933	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
MARQUEZ CARRASQUILLO CORP.	1935	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ONE STOP BUSINESS AND LEGAL CENTER	1935	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														7389		
PCH POSTAL	1935	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ECONO LUBE AND OIL	1942	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
LIBERTY OIL	1943	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ARDILLOS CARDS	2001	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
AVENTURE 16	2002	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PACIFIC COAST CYCLES	2003	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2											Bicycle Shop Sales and Service			5941		
MOOSE LODGE #1325	2017	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
OCEAN BREEZE INN	2020	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
OUTERLIMITS SMOKE SHOP	2027	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
BAMBOO SOURCE	2028	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
SEA BIRD MOTEL	2034	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
BLAKE MANAGEMENT GROUP	2110	S	COAST HWY	C	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
KAATZ COMPUTERS	2110	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PRO-INSITES	2110	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2											Web Design			2389		
ANDREW K. JOHN DDS	2123	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
FRANK MISSION MARKET PLACE	427		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
PEPPERTREE MONTESSORI SCHOOL	427		COLLEGE BLVD	I	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
SPEARS CONSTRUCTION, INC	427		COLLEGE BLVD	L	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
ULTRA STAR CINEMA	431		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
KMART	443		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
PIONEER SERVICES	447		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
FRAZEE PAINT	455		COLLEGE BLVD	1	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
ECHO PLUS	455		COLLEGE BLVD	2	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
DAHN YOGA	455		COLLEGE BLVD	5	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
ACTIVE WEAR PLUS	455		COLLEGE BLVD	6	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
AVENUE	455		COLLEGE BLVD	7	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
SKATE TIME	455		COLLEGE BLVD	9	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
VACANT	455		COLLEGE BLVD	10	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments			5812		
TOYS-R-US	455		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1											Toy Store			5945		
FALLAS	459		COLLEGE BLVD	1	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
OMEGA BICYCLES	459		COLLEGE BLVD	3	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
SNAZZY CLEANERS	459		COLLEGE BLVD	4	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
VACANT	461		COLLEGE BLVD	3	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments			5812		
COX	461		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
RITE AID	463		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
RINOKIRO ENTERPRISES	465		COLLEGE BLVD	1	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
UNITED PHYSICIAN'S GROUP	465		COLLEGE BLVD	1	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
COLLEGE DENTAL	467		COLLEGE BLVD	H2	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
HAPPINESS NAILS	467		COLLEGE BLVD	H4	Low	Commercial	Oceanside	San Luis Rey	903.1														7231		
SUPER JUICE	467		COLLEGE BLVD	H5	Low	Commercial	Oceanside	San Luis Rey	903.1											ICE CREAM PARLOR			5812		
CHECK AND GO	467		COLLEGE BLVD	H6	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
GAME STOP	467		COLLEGE BLVD	H7	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
HLA AUNG NIKKO ENTERPRISES	471		COLLEGE BLVD	I1	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
SUBWAY	475		COLLEGE BLVD	J1	Low	Commercial	Oceanside	San Luis Rey	903.1											Fast Food Restaurant			5812		
I SOLD IT ON E-BAY	475		COLLEGE BLVD	J2	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
EMBROIDERY ARTS	475		COLLEGE BLVD	J3	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
JACKSON HEWITT TAX SERVICE	475		COLLEGE BLVD	J4	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
BARBERSHOP EXPRESS	475		COLLEGE BLVD	J5	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
OCEANSIDE MAIL CENTER	475		COLLEGE BLVD	J6	Low	Commercial	Oceanside	San Luis Rey	903.1											Postal Services			7389		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
COLLEGE COIN LAUNDRY	475		COLLEGE BLVD	J7	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
COLLEGE PET CLINIC	475		COLLEGE BLVD	J8	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
BAY VIEW WIRELESS	495		COLLEGE BLVD	A	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
WASHINGTON MUTUAL	615		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
BLOCKBUSTER VIDEO	625		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
WAL-MART STORE #2245	705		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
SUBWAY # 46626	705		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1										Delicatessen Restaurant		1615530100	5812		
PAYLESS SHOE STORE	805		COLLEGE BLVD	101	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
THE THREEE SISTERS	805		COLLEGE BLVD	103	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
LANE BRYANT	815		COLLEGE BLVD	101	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
BLU ECHO	815		COLLEGE BLVD	102	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MARLENE'S HALLMARK CARDS	815		COLLEGE BLVD	103	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
RADIO SHACK	815		COLLEGE BLVD	105	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
RANCHO DEL ORO DENTAL	815		COLLEGE BLVD	106	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
STARBUCKS COFFEE #5212	815		COLLEGE BLVD	108	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments			5812		
SUPERCUTS	825		COLLEGE BLVD	101	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
POSTAL ANNEX	825		COLLEGE BLVD	102	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
SALLY BEAUTY SUPPLY	825		COLLEGE BLVD	103	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
METELMEX	825		COLLEGE BLVD	435	Low	Commercial	Oceanside	San Luis Rey	903.1										Sales, Jewlery			5632		
NAILS CLUB	835		COLLEGE BLVD	101	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
GNC	835		COLLEGE BLVD	102	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
TOWN CLEANERS	835		COLLEGE BLVD	103	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
HAPPIEST CREATIONS	1888		COLLEGE BLVD	207	Low	Commercial	Carlsbad	Buena Vista	904.2										Retail Sales			5961		
GOLD MAX	3502		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										Retail Sales - Gold			5932		
JOSE M DUENES DDS APDC	3502		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										DENTIST			8021		
SINSATIONS	3502		COLLEGE BLVD	A	Low	Commercial	Carlsbad	Buena Vista	904.2										WOMENS ACCESSORIES			0		
MIRA COSTA DENTAL	3502		COLLEGE BLVD	B	Low	Commercial	Carlsbad	Buena Vista	904.2										DENTIST			8021		
HIDDEN BARBER SHOP	3504		COLLEGE BLVD	A	Low	Commercial	Carlsbad	Buena Vista	904.2										Barber Shop			7241		
FOOTHILL LAUNDRY	3504		COLLEGE BLVD	C	Low	Commercial	Carlsbad	Buena Vista	904.2										GARMENT PRESSING			7212		
GLAMOUR SALON & SPA	3504		COLLEGE BLVD	E	Low	Commercial	Carlsbad	Buena Vista	904.2										Beauty Shops			7231		
DRY CLEANING STATION	3504		COLLEGE BLVD	F	Low	Commercial	Carlsbad	Buena Vista	904.2										GARMENT PRESSING			7212		
LENS FOR LESS	3504		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										EYE LENS MANUFACTURER			3851		
SAMS DONUTS	3504		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										BACKERY			2051		
95 COLLEGE PLAZA LTD	3514		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										RENTAL PROPERTIES			6512		
DICKS SPORTING GOODS	3514		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										SPORTING GOODS RETAIL			5941		
CARLISLE & BEATRIZ GILLIMORE	3520		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										RENTAL PROPERTIES			6512		
JOHN Y CHO	3520		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										INSURANCE SERVICES			6411		
BEYOND FITNESS	3520		COLLEGE BLVD	102	Low	Commercial	Carlsbad	Buena Vista	904.2										FITNESS SALON			7991		
STATE FARM INSURANCE	3520		COLLEGE BLVD	104	Low	Commercial	Carlsbad	Buena Vista	904.2										INSURANCE SERVICES			6411		
FARMERS INSURANCE	3520		COLLEGE BLVD	105	Low	Commercial	Carlsbad	Buena Vista	904.2										INSUSRANCE SERVICES			6411		
GRABB-IT INC	3520		COLLEGE BLVD	201	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
J B COMMUNITY SERVICES	3520		COLLEGE BLVD	202	Low	Commercial	Carlsbad	Buena Vista	904.2										REAL ESTATE AGENTS			6531		
JOE JOHNSTON KEMCO CORP	3520		COLLEGE BLVD	205	Low	Commercial	Carlsbad	Buena Vista	904.2										GENERAL CONTRACTING HOMES			1521		
KEMCO	3520		COLLEGE BLVD	205	Low	Commercial	Carlsbad	Buena Vista	904.2										GENERAL CONTRACTOR			1521		
PRODUCE BROKERS OF OCEANSIDE INC	3520		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										FRESH FRUIT & VEGETABLES			5148		
THE ANIMAL KEEPER INC	3532		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										ANIMAL SPECIALTIES			752		
KINDER-CARE LEARNING CENTER	3536		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2										CHILD DAY CARE SERVIVCES			8351		
BC HYDROLICS	2905		COLUMBIA DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										Mobile Hydraulic Pallet Jack Repair			7699		
BRAYDAY INC.	4918		COLUSA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										Sales Video Games			5961		
KAILEY'S ATTIC	1941		COMANCHE STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Export Clothing			7389		
MTG PRESERVATION CO.	4926		COMPOSITION COURT		Low	Commercial	Carlsbad	Loma Alta	904.1										Preservation/Cleaning Services			7349		
STANDARD LIFE SAFETY	101		COPPERWOOD WAY	D	Low	Commercial	Oceanside	San Luis Rey	903.1										Contractor, Fire Protection Sy	Not applicable		1799		
MILLENNIUM FIRE PROTECTION CORP.	101		COPPERWOOD WAY	F	Low	Commercial	Oceanside	San Luis Rey	903.1										Contractor, Fire Protection Sy	Not applicable		1799		
MACORD CONSTRUCTION CORP	101		COPPERWOOD WAY	H	Low	Commercial	Oceanside	San Luis Rey	903.1										Contractor, Drywall	Not applicable		1742		
MCR CONSTRUCTORS	101		COPPERWOOD WAY	J	Low	Commercial	Oceanside	San Luis Rey	903.1										Contractor, General	Not applicable		1542		
SILVER OLAS ENTERPRISES INC	101		COPPERWOOD WAY	M	Low	Commercial	Oceanside	San Luis Rey	903.1										Carpet/Furniture Cleaning	Not applicable		7217		
DIAN AUSTIN COUTURE HOME	102		COPPERWOOD WAY	A-B	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Fabricated Texti	Not applicable		2392		
OCEANSIDE HYDRAULICS	102		COPPERWOOD WAY	E	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Repair Sercies	Not applicable		7699		
REAL ESTATE RENOVATIONS	105		COPPERWOOD WAY	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Contractor, General	Not applicable		1542		
MACURD CONSTRUCTION	105		COPPERWOOD WAY	E	Low	Commercial	Oceanside	San Luis Rey	903.1										Contractor, General	Not applicable		1542		
GIGANTE IMAGE GROUP	110		COPPERWOOD WAY	C	Low	Commercial	Oceanside	San Luis Rey	903.1										Photography	Not applicable		7389		
ENDLESS SUMMER HEATING AND AIR CONDITIONING	110		COPPERWOOD WAY	G	Low	Commercial	Oceanside	San Luis Rey	903.1										Contractor, Heating and Air Co	Not applicable		1711		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
WILCO PRODUCTS LLC - SKYLIGHT SHADES	110		COPPERWOOD WAY	H	Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing, Fabricated Meta	Not applicable		3499		
CUSTOM CARPET CREATIONS	110		COPPERWOOD WAY	J	Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales, Floor Covering S	Not applicable		5713		
WORLD TUNED RADIO/RECORDING	110		COPPERWOOD WAY	K	Low	Commercial	Oceanside	San Luis Rey	903.1										Broadcasting, Recording,CD Duplication	Not applicable		7389		
MARINE SYSTEM CORPORATION	110		COPPERWOOD WAY	O-P	Low	Commercial	Oceanside	San Luis Rey	903.1										Engineering Services	Not applicable		8711		
MORROWS HANDYMAN SERVICES	3151		CORAL DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										Handyman Services	Not applicable		7349		
PH INDUSTRIES	4551		CORONADO DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Property Management	Not applicable		7349		
HK PLASTICS ENGINEERING INC.	1825		CORPORATE CENTER DR		Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
CAR SOUND EXHAUST SYSTEMS	1901		CORPORATE CENTER DR		Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
SAN LUIS REY ATHLETIC ASSOCIATION	1391		CORTE BOCINA		Low	Commercial	Oceanside	San Luis Rey	903.1										Non Profit Youth Athletic Organization	Not applicable		7389		
JH HOME DETAILING	1888		CORTE TORERO		Low	Commercial	Carlsbad	Loma Alta	904.1										HOME CLEANING	Not applicable		7349		
SO SIMPLE LAUNDRY SERVICE	4273		CORTE VERDE		Low	Commercial	Oceanside	San Luis Rey	903.1										MOBILE LAUNDRY SERVICE	Not applicable		7389		
HOUSE CLEANING AND RESTORATION	3741		COSTA DEL REY		Low	Commercial	Carlsbad	Buena Vista	904.2										Restoration Contractor	Not applicable		7349		
MAN FLOWERS	3748		COSTA DEL REY		Low	Commercial	Carlsbad	Buena Vista	904.2										Flower Arrangements	Not applicable		5961		
J PRO DAIRY INC.	4014		CRAVEN ROAD	12	Low	Commercial	Oceanside	San Luis Rey	903.1										Dairy Trading	Not applicable		7389		
NATIONAL MANAGEMENT GROUP INC.	4054		CRAVEN ROAD	49	Low	Commercial	Oceanside	San Luis Rey	903.1										Consultant	Not applicable		7389		
HOUSE WHISPERER	4721		CRESCENT HEIGHTS DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										Handyman Services	Not applicable		7349		
CORE DEVELOPMENT GROUP LLC	570		CROUCH STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Redeveloping or Improving Residental Prope	Not applicable		7349		
SERVICIOS LEGALES INTEGRADOS	650		CROUCH STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Legal Services	Not applicable		8111		
MARQUEZ CARRASQUILLO CORP.	656		CROUCH STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Legal Services	Not applicable		8111		
V TECHNOLOGY SOLUTIONS INC.	3679		CYPRESS ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Mobile IT Service	Not applicable		7389		
ALASKA FINANCIAL GROUP	4321		DEER CREEK WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Mortgage Finance Broker	Not applicable		6531		
CHAIRS BY COACH	242		DIAMANTE WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													2511		
THE PINK HOME	609	S	DITMAR STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Internet Sales	Not applicable		5961		
J & J SANCHEZ CLEANING SERVICE COMPANY	279		DOUGLAS DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Home Cleaning Services	Not applicable		7349		
THE EXOTIC GREENERY FLORIST	292		DOUGLAS DRIVE	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
MONTANO MANAGEMENT LLC	292		DOUGLAS DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
DOUGLAS SQUARE FAMILY DENTAL OFFICE	650		DOUGLAS DRIVE	101	Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
DOUGLAS SQUARE CLEANERS	650		DOUGLAS DRIVE	102	Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
THE DONUT PARK	650		DOUGLAS DRIVE	104	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable		5812		
VACANT	650		DOUGLAS DRIVE	105	Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
CRICKET WIRELESS	650		DOUGLAS DRIVE	106-7	Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
HAPPY HAIR AND NAIL	650		DOUGLAS DRIVE	108-9	Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
VACANT	650		DOUGLAS DRIVE	110	Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
VACANT	650		DOUGLAS DRIVE	111	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable		5812		
VACANT	650		DOUGLAS DRIVE	112	Low	Commercial	Oceanside	San Luis Rey	903.1										Telephone Communications	Not applicable		4812		
MATERIAL GURL	650		DOUGLAS DRIVE	121	Low	Commercial	Oceanside	San Luis Rey	903.1										Sale Retail - Women's Clothing, Shoes, Acc	Not applicable		5621		
CALIFORNIA CUPCAKE	4217		DUSK LANE		Low	Commercial	Carlsbad	Buena Vista	904.2										Home Office	Not applicable		7389		
NEXT LEVEL ELITE ENTERTAINMENT	1740		EAGLES NEST WAY	328	Low	Commercial	Oceanside	San Luis Rey	903.1										Event Planning	Not applicable		7389		
EZ STOREAGE	444		EDGEHILL LANE		Low	Commercial	Carlsbad	Loma Alta	904.1										Storage of Household Goods, Fu	Not applicable		4222		
WRAP-IT CHANGE	166		EDGEWOOD DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Surf Gear	Not applicable		5699		
MIJO LIFE	220		EL CAMINO REAL	16	Low	Commercial	Oceanside	San Luis Rey	903.1										Internet Sales	Not applicable		5961		
FAMILY FELLOWSHIP CHURCH CAFETERIA	420	N	EL CAMINO REAL		Low	Commercial	Oceanside	San Luis Rey	903.1										Church	Not applicable		0		
RIVERBOTTOM BAR	473	N	EL CAMINO REAL		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable		5812		
KASEY SMITH L. AC.	480	N	EL CAMINO REAL		Low	Commercial	Oceanside	San Luis Rey	903.1											Not applicable		0		
VACANT	1401	S	EL CAMINO REAL	103A	Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
VACANT	1401	S	EL CAMINO REAL	103B	Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
VACANT	1401	S	EL CAMINO REAL	107A	Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
MARISCOS ENSENADAS TACOS	1405	S	EL CAMINO REAL	107B	Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
VACANT	1401	S	EL CAMINO REAL	108	Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
JAZZY NAILS	1405	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
MB RETAIL INTERPRISES	1405	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
ETERNAL HILLS MEMORIAL PARK	1999	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
URBAN BUILDING SERVICES	2003	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2										Janitorial Services	Not applicable		7349		
JORDAN AND JORDAN	2003	S	EL CAMINO REAL	101	Low	Commercial	Carlsbad	Buena Vista	904.2											Not applicable		0		
DRAGON PRINTING	2003	S	EL CAMINO REAL	104	Low	Commercial	Carlsbad	Buena Vista	904.2											Not applicable		0		
ROBERT EISELE CPA	2003	S	EL CAMINO REAL	105	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
MONA LEE WARMBRAND LCSW	2003	S	EL CAMINO REAL	107	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
OCEANVIEW REALTY	2003	S	EL CAMINO REAL	109	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DEWILT ENVIROMENTAAL INC.	2003	S	EL CAMINO REAL	202	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
WESTWARD MORTGAGE & REAL ESTATE	2003	S	EL CAMINO REAL	205	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
GORDON VAL WHITE	2101	S	EL CAMINO REAL	203B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PACIFIC COAST COUNSELING	2101	S	EL CAMINO REAL	204	Low	Commercial	Carlsbad	Buena Vista	904.2													0		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
NORTH COUNTY FINANCIAL ASSOCIATES	2101	S	EL CAMINO REAL	206	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
LILY BHATTACHARGYA PSYD	2101	S	EL CAMINO REAL	207	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SPRINT TELEPHONY PCS LP	2103	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
VILLA OFFICE BLDG.	2103	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
NEWLOOK MD INC	2103	S	EL CAMINO REAL	101A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
GET ABLE	2103	S	EL CAMINO REAL	102	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SIMULSTAT INC	2103	S	EL CAMINO REAL	102B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
JOANNE ORTEGA TAX SERVICES	2103	S	EL CAMINO REAL	103	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ESTATE PRESERVATION GROUP	2103	S	EL CAMINO REAL	103A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
LENDER'S CONSTRUCTION SERVICES INC	2103	S	EL CAMINO REAL	103B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TICKET ESCAPE	2103	S	EL CAMINO REAL	104B	Low	Commercial	Carlsbad	Buena Vista	904.2													7389		
WELCOME HOME	2103	S	EL CAMINO REAL	105A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TICKET ESCAPE CORP.	2103	S	EL CAMINO REAL	105B	Low	Commercial	Carlsbad	Buena Vista	904.2										Ticket Brokerage			7389		
ROBCO PRESS COMM	2103	S	EL CAMINO REAL	106B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
787.INC	2103	S	EL CAMINO REAL	107	Low	Commercial	Carlsbad	Buena Vista	904.2										Real Estate Broker			7389		
HOME MORTGAGE EXPERTS	2103	S	EL CAMINO REAL	108	Low	Commercial	Carlsbad	Buena Vista	904.2										MORTGAGE BROKER			6162		
HORANCE MANN INSURANCE	2103	S	EL CAMINO REAL	108C	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CHRISTIAN PROFESIONAL COUNSELING CENTER	2103	S	EL CAMINO REAL	108D	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TSC ACCOUNTS RECEIVABLE SOLUTIONS	2103	S	EL CAMINO REAL	201	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DEBT REDUCTION LAW CENTER	2103	S	EL CAMINO REAL	202	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ALISA WILLENS-DAVIS PHD	2103	S	EL CAMINO REAL	203	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
V CORE	2103	S	EL CAMINO REAL	204	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
REBUILD	2103	S	EL CAMINO REAL	205	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PACIFICA ENGINEERING	2111	S	EL CAMINO REAL	200	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
EMPLOYER'S CHOICE INSURANCE SERVICES INC	2111	S	EL CAMINO REAL	201	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SAMSON WILLIS LAFOE LLP	2111	S	EL CAMINO REAL	300	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
NXT AGENCY LLC	2111	S	EL CAMINO REAL	301	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PERFORMANCE IMPROVEMENTS INTERNATIONAL	2111	S	EL CAMINO REAL	302	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
EL CAMINO PROFESSIONAL CENTER LLC	2119	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TRICITY PODIATRY	2119	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ANDREW K. JOHN DDS	2123	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
STEVEN STREELMAN DDS	2123	S	EL CAMINO REAL	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
MEDICAL ELECTRONIC SERVICES	2123	S	EL CAMINO REAL	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TOOTHMAKER LAB	2123	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
INNER STRENGTH YOGA AND HEALING CENTER	2124	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2										Yoga Studio & Helaing Center			7999		
CROWN CASTLE MU LLC	2125	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
FUTURES	2125	S	EL CAMINO REAL	101	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
OCEANVIEW DENTAL	2125	S	EL CAMINO REAL	101	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CHEATHAM TAX SERVICES	2125	S	EL CAMINO REAL	102	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DENNIS ALTERS MD INC	2125	S	EL CAMINO REAL	104	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SUZANNE OBRIEN PHD	2125	S	EL CAMINO REAL	104	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
RADY CHILDREN'S BEHAVIORAL CRISIS CENTER	2125	S	EL CAMINO REAL	200	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
COREMARK	2125	S	EL CAMINO REAL	204	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
BURTON BLACK PHD	2125	S	EL CAMINO REAL	206	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CHARLES E COULL PSYD	2125	S	EL CAMINO REAL	206	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
HARVEY FEIMAN PHD	2125	S	EL CAMINO REAL	206	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
MARGOT KUPLEY PSYD	2125	S	EL CAMINO REAL	206	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
NON SURGICAL SPINE CARE CENTER	2125	S	EL CAMINO REAL	210	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
J TEK DESIGN AND DRAFTING	2131	S	EL CAMINO REAL	103	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
LIGHTNING PROPERTY MANAGEMENT	2131	S	EL CAMINO REAL	201	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
COATES CONSTRUCTION & DEVELOPMENT INC	2141	S	EL CAMINO REAL	D	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ALTA LOMA LANDSCAPE MAINTENANCE	2141	S	EL CAMINO REAL	G	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ALLEN LANDSCAPE INC	2141	S	EL CAMINO REAL	I	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TETRA TECH INC	2141	S	EL CAMINO REAL	J	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
WISNOSKY BUILDING	2141	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ADAMANTINE MEDIA INC	2171	S	EL CAMINO REAL	100	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DAVID PANZER MARKETING INC	2171	S	EL CAMINO REAL	101	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
MOBILE MEDICINE OUTREACH	2171	S	EL CAMINO REAL	104	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CORBEL INC.	2171	S	EL CAMINO REAL	201	Low	Commercial	Carlsbad	Buena Vista	904.2										Personal Training			7299		
WJ SOLUTIONS	2171	S	EL CAMINO REAL	203	Low	Commercial	Carlsbad	Buena Vista	904.2										Accounting Services			7291		
EAST TECH SOLUTION	2171	S	EL CAMINO REAL	204	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SUDEXO AMERICA LLC	2171	S	EL CAMINO REAL	207	Low	Commercial	Carlsbad	Buena Vista	904.2													0		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
BELTRAN COUNSELING SERVICES	2171	S	EL CAMINO REAL	209A	Low	Commercial	Carlsbad	Buena Vista	904.2													8049		
BELTRAN COUNSELING SERVICES	2171	S	EL CAMINO REAL	209B	Low	Commercial	Carlsbad	Buena Vista	904.2										Therapeutic Service - Massage & Hypnosis			7299		
INDUSTRIAL PROSOFT SOLUTIONS	2171	S	EL CAMINO REAL	210	Low	Commercial	Carlsbad	Buena Vista	904.2										Software Developemnt and Installation			7389		
ODONNEL GROUP	2181	S	EL CAMINO REAL	100	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ABSOLUTELY SMOKE FREE - ONE HOUR	2181	S	EL CAMINO REAL	201	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
REAL PROPERTY MANAGEMENT	2181	S	EL CAMINO REAL	207	Low	Commercial	Carlsbad	Buena Vista	904.2										Real Estate Management			6531		
ANN FRAZEN & GRAHAM PROPERTY	2191	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
NORTH COUNTY PODIATRY CLINICS	2191	S	EL CAMINO REAL	101	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
UNIQUE HARMONY FITNESS	2191	S	EL CAMINO REAL	103	Low	Commercial	Carlsbad	Buena Vista	904.2										Personal Training			7991		
CREDITO BUSINESS SERVICES	2191	S	EL CAMINO REAL	104	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
KEY MAY INSURANCE SERVICES	2191	S	EL CAMINO REAL	105	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
FAMILY CONNECTIONS CHRISTIAN ADOPTIONS	2191	S	EL CAMINO REAL	202	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
JAMYSON COMPANY	2191	S	EL CAMINO REAL	206	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
THRIVENT FINANCIAL FOR LUTHERANS	2191	S	EL CAMINO REAL	207	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
FRAZER ENGINEERING INC	2191	S	EL CAMINO REAL	208	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ALWAYS SCRAPBOOKING	2191	S	EL CAMINO REAL	208	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
LIVING LIFE INSURANCE AND SERVICES	2191	S	EL CAMINO REAL	208	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PIGEON POINT SYSTEMS	2191	S	EL CAMINO REAL	209	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
INSTITUTE FOR ANTI AGING MEDICINE	2204	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2										MEDICAL OFFICE			8011		
24 HOUR FITNESS CLUB	2213	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CAMINO TOWN AND COUNTRY	2213	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
JO-ANN FABRICS AND CRAFTS # 464	2227	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
RENAL ADVANTAGE INC	2227	S	EL CAMINO REAL	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SMS MEDICAL INC.	2227	S	EL CAMINO REAL	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SUNSHINE LIQUOR	2229	S	EL CAMINO REAL	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
LINDA LARSON MASSAGE THERAPHY	2231	S	EL CAMINO REAL	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
MAXDON'S	2231	S	EL CAMINO REAL	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CHIROPRATIC 1ST	2235	S	EL CAMINO REAL	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
MERLE NORMAN COSMETICS	2235	S	EL CAMINO REAL	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CUTS FOR LITTLE PEOPLE	2235	S	EL CAMINO REAL	C	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
EUROPEAN TAYLOR SHOP	2235	S	EL CAMINO REAL	E	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CUSTOM FLOORS BY KEN	2235	S	EL CAMINO REAL	H	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
EL CAMINO SHOE REPAIR	2235	S	EL CAMINO REAL	I	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ERICA'S LIL BARBERSHOP	2235	S	EL CAMINO REAL	O	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
COASTAL CHIROPRACTIC WELLNESS CENTER	2245	S	EL CAMINO REAL	C	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
INNOVATION HAIR SALON AND SUPPLIES	2245	S	EL CAMINO REAL	E	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
JOSIE LUNA/PROFESSIONAL HAIRSTYLIST	2245	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SINTRI DIGITAL	2249	S	EL CAMINO REAL	C	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
MAXMUSCLE	2249	S	EL CAMINO REAL	E	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PLAYA DEL SOL TRAVEL AGENT	2249	S	EL CAMINO REAL	F1	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SOUKAYE MAVE	2249	S	EL CAMINO REAL	F2	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
STUDIO MAVE	2249	S	EL CAMINO REAL	F2	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TARGET STORES # 303	2253	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
GRACE MANAGEMENT INC.	2424	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2										GOVERNMENT SERVICES			8744		
COMMISSION FINDING SOLUTIONS	1298		EL MERCADO WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Commission Advancing Service			7389		
QUICKDRAW WINDOWN CLEANING	2155		EL MONTE DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Window Cleaning			7349		
PR WINES	5415		ELDERBERRY WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Resale of wines			5182		
CARTOON PROPS	4127		ESPERANZA WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										Event Planning			7389		
GEORGE THE TECHNICIAN	4286		ESPERANZA WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										Electrical Contractor			1731		
INFORMATION 4ALL	428		FOUSSAT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Internet Sales	Not applicable		5961		
PRECISION DESIGNS AND FABRICATION	612		FOUSSAT ROAD		Low	Commercial	Carlsbad	Loma Alta	904.1										Structural Steel Fabrication			1731		
SHARKEY'S CUT FOR KIDS	4635		FRAZEE ROAD	B	Low	Commercial	Oceanside	San Luis Rey	903.1										CHILDREN SALON			7241		
EMERALD DENTAL	4645		FRAZEE ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
RITZ CLEANERS	4645		FRAZEE ROAD	B	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
USA TAEKWONDO CENTER	4645		FRAZEE ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
SEASON'S HAIR SALON	4645		FRAZEE ROAD	D	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
GEORGEOUS NAILS	4645		FRAZEE ROAD	E	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
M HAIR IMAGE	4645		FRAZEE ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										HAIR SALON			7231		
24 HOUR FITNESS	4655		FRAZEE ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
COLDSTONE CREAMERY	4635		FRAZEE ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments			5812		
SUBMARINA	4635		FRAZEE ROAD	B	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments			5812		
CUPPY'S COFFEE	4635		FRAZEE ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments			5812		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
GRACE CHAPEL OF THE COAST	102	N	FREEMAN STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Religious Organizations	Not applicable		8661		
SERENA'S ALTERATIONS	108	S	FREEMAN STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Tailor Shop	Not applicable		7219		
SHORTCUT BARBERSHOP	124	N	FREEMAN STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Barber Shops	Not applicable		7241		
TANG SOO DO	206	N	FREEMAN STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Martial Art School	Not applicable		8299		
STUD CUTS BARBERSHOP	210	N	FREEMAN STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Barber Shops	Not applicable		7241		
MANNINGS DRY CLEANERS	212	N	FREEMAN STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Laundry, Dry Cleaners and Garm	Not applicable		7212		
KONA HUT COFFEE HOUSE	1940	S	FREEMAN STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments			5812		
TUGZ 'N' TOGZ	2286		FUERTE STREET		Low	Commercial	Carlsbad	Buena Vista	904.2											Retail Sales - Crocheting, Knitting, Crafting			5961		
P J GRAPHICS	603		GARRISON STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Commercial Printing	Not applicable		2759		
BAVIN GIFTS	1818		GRANDVIEW STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											On line Sales			5961		
BAVIN FLOORING	1818		GRANDVIEW STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Flooring Installation			1521		
HOOLIGANS	560		GREENBRIER DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable	1493302600	5812		
THE SPARKLING PAW	792		GREGORY LANE		Low	Commercial	Oceanside	San Luis Rey	903.1											Mobile Pet Grooming			752		
CAROL DEGRAFF INC.	790		GREY HAWK		Low	Commercial	Oceanside	San Luis Rey	903.1											Bookeeping/Graphic			7389		
NAUTICAL BEAN	240	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1430101600	5812		
BOAT RENTALS OF AMER INC HARBOR	256	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Amusement And Re	Not applicable		7999		
HARBOR SNACKS AND HOTDOGS	258	S	HARBOR DRIVE	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1430101600	5812		
OLD SKULL RENTALS	260	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Amusement And Re	Not applicable		7999		
YE OLD HAWAIIAN HUT	270	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous General Merchand	Not applicable		5399		
HARBOR VILLAGE MART	272	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous General Merchand	Not applicable		5399		
HARBOR GIFT SHOP	278	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous General Merchand	Not applicable		5399		
NANA AND POP'S SWEET SHOP - ICE CREAM PARLOR	280	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Dairy products	Not applicable		5451		
URBANWARE	280	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous General Merchand	Not applicable		5399		
HELGRENS OCEANSIDE SPORTFISHING	315	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Amusement And Re	Not applicable		7999		
SEA STAR CHARTERS	315	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Amusement And Re	Not applicable		7999		
GREAT ESCAPE SPORTFISHING	315	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Amusement And Re	Not applicable		7999		
OCEAN AQUATICS	1400	N	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Amusement And Re	Not applicable		7999		
ALL HANDS ON DECK	1540	N	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Marina - Yatch Management & Ma	Not applicable		4493		
YEARLEY SAIL BOATS	1850	N	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Amusement And Re	Not applicable		7999		
POWER SYSTEM CONSULTING	3310		HEATHER LANE		Low	Commercial	Carlsbad	Loma Alta	904.1											Consulting - Engineering	Not applicable		7389		
OCEANSCENTS	1213		HERBY WAY		Low	Commercial	Carlsbad	Buena Vista	904.2											Direct Sales - Scentsy Accounting	Not applicable		5961		
SCISSORCOMB	3738		HICKORY WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											Esales	Not applicable	1604513300	5961		
EXPEDIENT TRANSLATIONS	1309		HODGES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Transalation Services	Not applicable		7389		
BRAD MOREAU CONSTRUCTION	311		HOLLY STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Remodeling Company	Not applicable		1521		
MISSION DENTAL	219	N	HORNE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Offices of Dentist	Not applicable		8021		
ABC BARBERSHOP	221	N	HORNE STREET	B	Low	Commercial	Oceanside	San Luis Rey	903.1											Barber Shops	Not applicable		7241		
CASITAS # 2 NUTRITION STORE MARKET	221	N	HORNE STREET	C	Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Food Stores	Not applicable		5499		
PERLA'S HAIR SALON	221	N	HORNE STREET	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Beauty Shops	Not applicable		7231		
BEYOND NAIL AND SPA	223	N	HORNE STREET	B	Low	Commercial	Oceanside	San Luis Rey	903.1											Beauty Shops	Not applicable		7231		
GRUPO NUESTRA MISSION	223	N	HORNE STREET	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Social Services	Not applicable		8399		
MISSION SQUARE COIN LAUNDRY	306	N	HORNE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Coin operated Laundry and Dry	Not applicable		7215		
HARBOR FREIGHT	316	N	HORNE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Harware Stores	Not applicable		5251		
QUANTUM ELECTRIC	270		HYACINTH WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											Electrical Contractor			1731		
RICHER AUTO & TRUCK ELECTRC CO	2372		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Auto Repair Shop - Rebuilding			7538		
WARNER TRUCK RENTAL	2372		INDUSTRY STREET	B	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
AT&T (Pacific Bell)	2727		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OCEANSIDE TRUSS INC - OUT OF BUSINESS	2847		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Wood Trusses			2349		
JESSUP SERVICES LLC	2850		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SEASIDE HEATING & AIR COND INC	2942		INDUSTRY STREET	A	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NIHON SEIMEN CO	2948		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PME AUDIO / VIDEO	2956		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BAMBOO BUDDY LLC	3025		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Wholesale - Importer Bamboo Fu			5023		
CTM RACING PRODUCTS INC	3038		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GERMAN AUTOWERKE	3038		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
W R ROBBINS CO, INC	3038		INDUSTRY STREET	106	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OCEANSIDE PLASTIC ENTERPRISES CORP	3038		INDUSTRY STREET	108	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OCEANSIDE PLASTIC ENTERPRISES CORP	3038		INDUSTRY STREET	108	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PBW BRAZILIAN DOORS	3041		INDUSTRY STREET	A	Low	Commercial	Carlsbad	Loma Alta	904.1											Retail Sales - Wood Doors			5211		
CTM RACING PRODUCTS INC	3041		INDUSTRY STREET	B	Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Automobile Par			3714		
AMERICAN ARBOR TREE SERVICES	3041		INDUSTRY STREET	C	Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Services - Tree			783		
BASHORE CABINETS	3044		INDUSTRY STREET	103	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
HENDIG SURFBOARD REPAIR	3044		INDUSTRY STREET	108	Low	Commercial	Carlsbad	Loma Alta	904.1														0		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
CALIFORNIA MILLWORKS	3052		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
RANDAL INC	3052		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PHARMAGENX INC	3052		INDUSTRY STREET	101	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VITASHOTS INC	3052		INDUSTRY STREET	102	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
KEAHANA USA LLC	3052		INDUSTRY STREET	103	Low	Commercial	Carlsbad	Loma Alta	904.1										Wholesale Surfboard Materials			5999		
ELLIOTT DRILLING SERVICES INC	3052		INDUSTRY STREET	107	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
A & M WHEATHER GUARD	3052		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Distributor - Door and Window Components			5999		
BDS TACTICAL INC	3060		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PINPOINT PEST CONTROL CO. INC.	3060		INDUSTRY STREET	104	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
GENESIS OUTDOOR LIGHTING	3060		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1										Distribution of Landscape Lighting			3646		
CONSTRUCTION SERVICES AND RECLAMATION	3018		JACQUELINE LANE		Low	Commercial	Carlsbad	Buena Vista	904.2										Demolition			1795		
KINETIC COMPOSITES, INC	2520		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1										MANUFACTURING IDUSTRIAL			3999		
KAHLER INTERNATIONAL INC	2525		JASON COURT	101	Low	Commercial	Carlsbad	Loma Alta	904.1										MUSICAL INSTRUMENTS			3931		
CARBON RESOURCES, LLC	2535		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1										NON-DURABLE GOODS			5199		
EXECUTIVE PLUMBING INC	2550		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BDS TACTICAL GEAR	2555		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1										Sales - Tactical Gear			0		
PACIFIC TURBINE SUPPORT, INC	2575		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1										AIRCRAFT PARTS DISTRIBUTORS			5088		
SEASIDE HELICOPTERS INC	2580		JASON COURT	C	Low	Commercial	Carlsbad	Loma Alta	904.1										TRANSPORTATION EQUIPMENT			5088		
PACIFIC COAST CABINETS	2585		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1										WOOD CABINET MANUFACTURER			2434		
H & M DISTRIBUTING INC	2590		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1										MANUFACTURING FABRIC CONDITION			2295		
EM LANDSCAPING SERVICES	2565		JOANN DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										Landscaping Services			7349		
HYDRANAUTICS	401		JONES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing, Plastics/Filter	Not applicable		3999		
VERNON TOOL CO	503		JONES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing, Pipe Cutting To	Not applicable		3541		
NORTH COUNTY COOLING	504		JONES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Fresh Fruits and Vegetables Pa	Not applicable		5148		
LEN'S AUTO BODY, INC	510		JONES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Automotive - Body Shop	Not applicable	1460309600	7539		
ENTERPRISE RENT A CAR	510		JONES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Passenger Car Rental	Not applicable		7514		
EJS MACHINERY CO	347		JUSTINA DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										Machinery Sales			5961		
FIRE MOUNTAIN POOL SERVICE	1524		KELLY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Pool Maintenance Services			7389		
STRASMANN PROPERTY MANAGEMENT	1304		LANGFORD STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Property Management	Not applicable		6531		
360 FITNESS	316		LA PURISSIMA		Low	Commercial	Oceanside	San Luis Rey	903.1										Mobile Personal Training	Not applicable		6531		
SUN TECH	151		LAS BRISAS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Import Export	Not applicable		7389		
JUDGEMENT DAY PERSONAL TRAINING	301		LA SOLEDAD WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Personal Training	Not applicable		7299		
COMPLETE THE CIRCLE CONSULTING SERVICES	4995		LASSEN DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										Consulting			7389		
INTEK MARKETING GROUP	4202		LINDOS WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										Consulting - Manufacturer's Representative			7989		
STEVEN G. SYPHER dba COASTAL GLASS	140		LOMA ALTA DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										Glass and Glazing Installation	Not applicable		1793		
MISS EMILIE INC.	539		LONG CREST COURT		Low	Commercial	San Luis Rey	San Luis Rey	903.1										Secretarial Services - Offsite instructor	Not applicable		7389		
HILL DESIGN	479		LOS ARBOLITOS BLVD.		Low	Commercial	Oceanside	San Luis Rey	903.1										Web and Graphic Design	Not applicable		7389		
FOREST GLEN CONDOMINUMS	612		LOS ARBOLITOS BLVD.		Low	Commercial	Oceanside	San Luis Rey	903.1										Condominiums Rental	Not applicable		6515		
DERIVAS PHOTOGRAPHY	3403		LOS MOCHIS WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										Photography			7389		
C A LATH AND PLASTER	4998		MACARIO DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Lath and Plaster and Stucco Contractor	Not applicable		7349		
JD ENTERTAIMENT SERVICES	2105		MADIERA DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										Private Poker Party Facilitator			7299		
JOSE HANDYMAN	126		MAGDALENA DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Handyman	Not applicable		7349		
SPAW DAY	3905		MAGNOLIA ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Mobile Pet Grooming	Not applicable		752		
KURTIS SCHMIDT	5249		MANDARIN DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										Truck Driver			7389		
VELASCO'S LAWN SERVICES	4621		MARDI GRAS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Landscaper	Not applicable		7349		
PJ & POOL AND SPA	4890		MARIN DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										POOL AND SPA CONTRACTOR			7389		
PETSMART	3420		MARRON ROAD		Low	Commercial	Carlsbad	Buena Vista	904.2										OTHER CONTRACTOR			5999		
WANTED BRAND INC.	3460		MARRON ROAD		Low	Commercial	Carlsbad	Buena Vista	904.2													2262		
FROYO LOVE FROZEN YOGURT	3480		MARRON ROAD	3B101	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
KARABAS SUBS INC (SUBWAY)	3480		MARRON ROAD	3B102	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
JAMBA JUICE #643	3480		MARRON ROAD	3B103	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
VACANT	3490		MARRON ROAD		Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
FIRST CHOICE CLEANING	4714		MAYFLOWER WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										House Cleaning	Not applicable		7349		
SCRIPPS COASTAL MEDICAL CENTER	2215		MESA DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Offices and clinics of Helath	Not applicable		8049		
M&M REAL ESTATE INC. dba MISSY REAL ESTATE LLC	4415		MILANO WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Realtor	Not applicable	1606433200	6513		
ENSEMBLE	301		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Women's Clothing Store	Not applicable		5621		
MAUI WAUI COFFEE & SMOOTHIES	301		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1472711500	5812		
RED CUP YOGURT	301		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1472711500	5812		
ASYLUM SURF GEAR	310		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Store - S	Not applicable		5999		
LITTLE LOUI'S GIFT SHOP	312		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail	Not applicable		5947		
RANCH AND SEA MANAGEMENT	316		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents and Manager	Not applicable		6531		
ASYLUM SURF CLOTHING	401		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Apparel and Acce	Not applicable		5699		

Attachment 5-A Commercial Inventory
City of Oceanside FY 2010-11

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
REGAL CINEMA	401		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Motion Picture Theater	Not applicable		7832		
SUNGLASS CORNER	401		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail	Not applicable		5947		
QUIZNO'S SUB STORE #10327	401		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1472711400	5812		
APOLLO DEPOT	404		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail Store - M	Not applicable		5699		
ROGUES INN	406		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail Store - V	Not applicable		5699		
J.S.P. SUBWAY	406		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
G & R TRAVEL	408		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Travel Agency	Not applicable		4724		
YOUNG'S SHOE REPAIR	408		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Shoe Repair Shop	Not applicable		7251		
MAI'S NAIL AND DAY SPA	409		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Beauty Shops	Not applicable		7231		
OCEANSIDE CLOSET INC.	409		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Women's Clothing Store	Not applicable		5621		
COLDSTONE CREAMERY	409		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1472711400	5812		
MAX MUSCLE OCEANSIDE	410		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Health Food Supplement Store	Not applicable		5499		
FULLERTON MORTGAGE	501		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Mortgage Lenders	Not applicable		6162		
MIL-MAN PROPERTY MANAGEMENT	501		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Property Management	Not applicable		6531		
1 ON ONE NUTRITION	509		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Health Food Supplement Store	Not applicable		5499		
THE HOP SPOT	517		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Insurance Agents	Not applicable		6411		
ORIENTAL WIGS AND GIFTS	519		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Gifts	Not applicable		5947		
HOME BANK OF CALIFORNIA	600		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Commercial Banks	Not applicable		6021		
NAPUR SECURITY ACADEMY	601		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											School and Educational Service	Not applicable		8299		
OCEANSIDE ART GALLERY	602		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Art Gallery	Not applicable		8412		
ANTIQUES	604		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Used Merchandise Store	Not applicable		5932		
KUHL COLLECTIBLES	605		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Collect	Not applicable		5947		
OCEAN SKY BEADS	605		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Beads	Not applicable		5947		
SOLE LAB	605 1/2		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Clothing	Not applicable		5651		
COMICS	606		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Comic B	Not applicable		5947		
LLL REPTILE AND SUPPLY CO. INC.	609		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Pet Sup	Not applicable		5999		
STUDIO CUSTUME CLASSICS	610		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - costume	Not applicable		5999		
BELLON & LISIECKI LLP ATTORNEYS AT LAW	611		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Legal Services	Not applicable		8111		
NORTH COUNTY TROPHIES	612		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Trophys	Not applicable		5999		
OCEAN SHINE NAIL SALON AND DAY SPA	613		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Beauty Shops	Not applicable		7231		
CONEHEAD INVESTMENTS INC.	615		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Franchisor for ColdStone Creamery	Not applicable		7389		
CORNERSTONE ENGINEEERING	620		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Engineering Services	Not applicable		8711		
DR FRANCO'S MEDICAL SPA	620		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Medical Clinic			8011		
BANK OF AMERICA	702		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											National Commercial Bank	Not applicable		6021		
4 DESIGN ARCHITECTURE	707		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Architectural Services	Not applicable		8712		
PAYDAY LOANS	711		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Personal Loans	Not applicable		6141		
THE UPS STORE	711		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Personal Service	Not applicable		7299		
LAURANT NYGARD PHOTOGRAPHY	711		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Photography	Not applicable		7389		
WASHINGTON MUTUAL	801		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											National Commercial Bank	Not applicable		6021		
NORTH COUNTY TRANSIT DISTRICT	810		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Local and Suburban Transit	Not applicable		4111		
DEBBIE MUNOZ ENTERPRISES INC.	815		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Staffing - Consulting	Not applicable		7361		
CALIFORNIA BUSINESS SOLUTION	818		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Accounting, Booking Services	Not applicable		8721		
OCEANSIDE PHOTO AND TELESCOPE	918		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Camera and Photographic Supply	Not applicable		5946		
HAPINESS NAIL AND SPA	1014		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Beauty Shops	Not applicable		7231		
DANIEL'S JEWLERY	1016		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Jewlwery Stores	Not applicable		5944		
GALAXY SHOES	1018		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Shoe Store	Not applicable		5661		
RADIO SHACK	1020		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Radio, Television, Consumer El	Not applicable		5731		
FASHION TOWN	1022		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Family Clothing Store	Not applicable		5651		
SUBWAY	1024		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1472310800	5812		
FACTORY OUTLET	1028		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Family Clothing Store	Not applicable		5651		
0.99 ONLY STORE	1036		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail Store	Not applicable		5999		
HAPINESS NAIL AND SPA	1041		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Beauty Shops	Not applicable		7231		
OFFICE DEPOT	1046		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Stationary Store	Not applicable		5943		
MISSION SQUARE BARBER SHOP	1062		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Barber Shops	Not applicable		7241		
QUALITY INN	1403		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels and Motels	Not applicable		7011		
RAMADA INN - OCEANSIDE	1440		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels and Motels	Not applicable		7011		
CHECK'S CASHED	1444		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Personal Loans	Not applicable		6141		
MISSION DONUT HOUSE	1502		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1481523200	5812		
MISSION MATTRESS AND FURNITURE	1510		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Furniture Store	Not applicable		5712		
MISSION BAZZAR	1527		MISSION AVENUE	B	Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail Store	Not applicable		5939		
SALUD ES VIDA	1527		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail Store	Not applicable		8999		
BALBOA LIQUOR	1604		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Liquor Store	Not applicable		5921		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
COUNTY OF SAN DIEGO - SOCIAL SERVICES	1701		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Individual & Family Social Ser	Not applicable		8322		
AUDIO ZONE	1710		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales, Automobile Audio	Not applicable		5731		
CASA DE NINOS	1718		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Child Day Care Services	Not applicable		8351		
MORELIA DENTAL	1910		MISSION AVENUE	D	Low	Commercial	Oceanside	San Luis Rey	903.1										Offices and Clinics of Dentist	Not applicable		8021		
EL INDIO PRODUCTOS BOTANICOS DE MEXICO	1919		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Food Stores	Not applicable		5499		
LA FRONTERA CHECK'S CASHED	1919		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Personal Loans	Not applicable		6141		
NORMA'S BEAUTY SHOP	1919		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
PAYLESS SHOES SOURCE	1919		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Shoe Store	Not applicable		5661		
BOOST MOBILE MTRAECOMM	1919		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales - Cell Phones	Not applicable		5999		
PHEBE'S ORIGINALS/ PURE GOLD FRAGRANCE	1927		MISSION AVENUE	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales	Not applicable		5632		
MR BEST CLEANERS	2019		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Laundry, Dry Cleaners and Garm	Not applicable		7212		
TMH VIDEO	2021		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Video Tape Rental	Not applicable		7841		
CRICKET COMMUNICATION	2023		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Telephone Service Store	Not applicable		5999		
OCEANSIDE LAWNMOWERS REPAIR	2025		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Repair Shops	Not applicable		7699		
CLASSY NAILS # 2	2027		MISSION AVENUE	A7	Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
BIKES AND PARTS	2027		MISSION AVENUE	C	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Stores -	Not applicable		5941		
JUST FOR HIM	2027		MISSION AVENUE	C	Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales - Men's Clothing	Not applicable		5611		
MI TIENDITA CANDY STORE	2027		MISSION AVENUE	C	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Stores	Not applicable		5999		
MULTISERVICES EXPRESS #3	2027		MISSION AVENUE	C	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Stores	Not applicable		5999		
OCEAN 98	2027		MISSION AVENUE	C	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Stores	Not applicable		5999		
EMANUEL FASHIONS	2027		MISSION AVENUE	C7	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Stores	Not applicable		5999		
LEE'STSHIRT PLUS	2027		MISSION AVENUE	D2	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Stores	Not applicable		5999		
ROYAL JEWELRY	2027		MISSION AVENUE	D5	Low	Commercial	Oceanside	San Luis Rey	903.1										Jewelry Stores	Not applicable		5944		
SOX AND SOX	2027		MISSION AVENUE	D6	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Apparel Store -	Not applicable		5699		
BODOS ALTERATION	2027		MISSION AVENUE	E	Low	Commercial	Oceanside	San Luis Rey	903.1										Laundry, Dry Cleaners and Garm	Not applicable		7219		
MAURICE AND SON AUTO SERVICES	2027		MISSION AVENUE	E3	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Stores	Not applicable		5999		
BOREALIS JEWELRY	2027		MISSION AVENUE	E7	Low	Commercial	Oceanside	San Luis Rey	903.1										Jewelry Stores	Not applicable		5944		
TWINS HANDBAG	2027		MISSION AVENUE	E7	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Store - L	Not applicable		5948		
FASHION LAND	2027		MISSION AVENUE	E8	Low	Commercial	Oceanside	San Luis Rey	903.1										Women's Apparel and Accessory	Not applicable		5632		
SEAFINE	2027		MISSION AVENUE	E13	Low	Commercial	Oceanside	San Luis Rey	903.1										Signs and Advertizing Specialt	Not applicable		3993		
CHUNG SHOES	2027		MISSION AVENUE	F6	Low	Commercial	Oceanside	San Luis Rey	903.1										Apparel and Accessory Store -	Not applicable		5661		
EL GRANITO DE MOSTAZA	2027		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Stores	Not applicable		6000		
MUNOZ BIKINIS	2027		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail store -Women's Clothing	Not applicable		5621		
PLAYA DE LA PLATA	2027		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Jewelry Stores	Not applicable		5944		
SMILE LINGERIE	2027		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Stores	Not applicable		5632		
JUGOS JUQUILA	2027		MISSION AVENUE	E13	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1481700600	5812		
MISSION TIANGUIS	2027		MISSION AVENUE	D	Low	Commercial	Oceanside	San Luis Rey	903.1										Groceries Store	Not applicable	1481700600	5411		
ADRIANA CORDOVA LOPEZ	2027		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales - Toys	Not applicable		5945		
LACIADO EXPRESS SALON	2029		MISSION AVENUE	B	Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
RENT-A-CENTER WEST INC	2033		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Furniture Rental and Leasing	Not applicable		7359		
MAGDA'S FASHION BOUTIQUE	2035		MISSION AVENUE	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Women's Clothing Store - Speci	Not applicable		5632		
GALVAN'S BARBERSHOP	2035		MISSION AVENUE	B	Low	Commercial	Oceanside	San Luis Rey	903.1										Barber Shops	Not applicable		7241		
BBC TRAVEL	2037		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Travel Agency	Not applicable		4724		
LA ILLUSION CRAFT	2039		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Apparel and Acce	Not applicable		5699		
SCRIPPS COASTAL MEDICAL CENTER	2201		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Ofices and Clinics of Doctors	Not applicable		8011		
LUCKY RECYCLING	2229		MISSION AVENUE	R	Low	Commercial	Oceanside	San Luis Rey	903.1										Recycling Center	Not applicable		5093		
MARTY'S VALLEY INN	3240		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Hotels and Motels	Not applicable		7011		
THE FURNITURE STORE	3296		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Furniture Store	Not applicable		5712		
YUMYUM DONUTS	3304		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Coffee Shop	Not applicable	1602711400	5812		
NORTH COUNTY HEALTH SERVICES - LA MISSION	3308		MISSION AVENUE	I	Low	Commercial	Oceanside	San Luis Rey	903.1										Health Center	Not applicable		8049		
D & J GLASS AND PAINT	3320		MISSION AVENUE	A-D	Low	Commercial	Oceanside	San Luis Rey	903.1										Paint, Glass and Wallpaper Sto	Not applicable		5231		
CLASSY K-9 CLIPS	3320		MISSION AVENUE	G	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail - Pet Sho	Not applicable		5999		
CALVARY CHURCH	3320		MISSION AVENUE	H	Low	Commercial	Oceanside	San Luis Rey	903.1										Religious Organizations	Not applicable		8661		
IPT MINISTRY	3320		MISSION AVENUE	J	Low	Commercial	Oceanside	San Luis Rey	903.1										Religious Organizations	Not applicable		8661		
BUDGET CAR & TRUCK RENTAL	3320		MISSION AVENUE	M	Low	Commercial	Oceanside	San Luis Rey	903.1										Passenger Car Rental	Not applicable		7514		
TRANSCONTINENTAL MANAGEMENT	3355		MISSION AVENUE	111	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Services - HOA M	Not applicable		8999		
PMGU	3355		MISSION AVENUE	115	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscelleneous Services	Not applicable		8999		
PMGU TRANING ROOM	3355		MISSION AVENUE	120	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscelleneous Services	Not applicable		8999		
OCEANSIDE THERAPY GROUP	3355		MISSION AVENUE	123	Low	Commercial	Oceanside	San Luis Rey	903.1										PEDRIATIC SPEECH THERAPY	Not applicable		8049		
COASTAL COMMUNICATION	3355		MISSION AVENUE	131	Low	Commercial	Oceanside	San Luis Rey	903.1										Engineering Services	Not applicable		8711		
PACIFIC VIEW CHARTER SCHOOL	3355		MISSION AVENUE	139	Low	Commercial	Oceanside	San Luis Rey	903.1										Elementary and Secondary Schoo	Not applicable		8211		
FIELD ARCHITECTURAL CORP. INC.	3355		MISSION AVENUE	211	Low	Commercial	Oceanside	San Luis Rey	903.1										Architectural Services	Not applicable		8712		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
PACIFIC FLYER NEWSPAPERS	3355		MISSION AVENUE	213	Low	Commercial	Oceanside	San Luis Rey	903.1										Periodicals: Publishing	Not applicable		2721		
DEALER SERVICES CORP.	3355		MISSION AVENUE	214	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellenous Services	Not applicable		8999		
CASA DE AMPARO FAMILY SUPPORT SERVICES	3355		MISSION AVENUE	215	Low	Commercial	Oceanside	San Luis Rey	903.1										Individual & Family Social Ser	Not applicable		8322		
PROTECTIVE PRODUCTS INTERNATIONAL	3355		MISSION AVENUE	222	Low	Commercial	Oceanside	San Luis Rey	903.1										Stationary Store	Not applicable		5943		
TEAM FISHEL	3355		MISSION AVENUE	223	Low	Commercial	Oceanside	San Luis Rey	903.1										Contractor, Underground Utilti	Not applicable		1623		
NORTH COUNTY PSYCOTHERAPY SERVICES	3355		MISSION AVENUE	231	Low	Commercial	Oceanside	San Luis Rey	903.1										Office of Health Practicioners	Not applicable		8049		
GROTH ARCHITECTS INC.	3355		MISSION AVENUE	234	Low	Commercial	Oceanside	San Luis Rey	903.1										Architectural Services	Not applicable		8712		
FIRMA SIGNING SOLUTIONS	3355		MISSION AVENUE	236	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscelleneous Services	Not applicable		8999		
CASA DE AMPARO ADMINISTRATION	3355		MISSION AVENUE	238	Low	Commercial	Oceanside	San Luis Rey	903.1										Individual & Family Social Ser	Not applicable		8322		
VACANT	3365		MISSION AVENUE	E	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1605501300	5812		
OLY UNIQUE TOUCH	3365		MISSION AVENUE	H	Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
MINUTE PRESS	3365		MISSION AVENUE	I-J	Low	Commercial	Oceanside	San Luis Rey	903.1										Commercial Priting	Not applicable		2752		
TAN'S DONUTS	3375		MISSION AVENUE	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1605500500	5812		
COPPERWOOD BARBERSHOP	3375		MISSION AVENUE	B	Low	Commercial	Oceanside	San Luis Rey	903.1										Barber Shops	Not applicable		7241		
STEEL GUITARS OF NORTH COUNTY	3375		MISSION AVENUE	D	Low	Commercial	Oceanside	San Luis Rey	903.1										Musical Instrument Store	Not applicable		5736		
THAI BOXING	3375		MISSION AVENUE	E	Low	Commercial	Oceanside	San Luis Rey	903.1										Physical Fitness Facility	Not applicable		7991		
A TOUCH OF GOLD	3375		MISSION AVENUE	G	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail - Pet Sho	Not applicable		5999		
WOMEN'S RESOURCE CENTER - THRIFT STORE	3385		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Used Merchandise Store	Not applicable		5932		
FOUSSAT SWAP MEET LLC	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ABLE ROSARIO MARTINEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
AHMAD AMIN WALI	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
AIDA VASQUEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ALAN YOUMAN	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ALBERTA JAIMES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ALEJANDRO CHANTECO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ALICIA'S	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
AMIGO LIFE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
AMILCAR MORALES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ANA BANUELOS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ANA MENDOZA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ANABEL ARAMNBULA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ANDREA'S CRAFT	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ANN YZAGUIRRE OCCUPATIONAL THERAPY	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
AQUILINO SANCHEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ARACELI ORTIZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ARROYO FOOTWEAR	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ARROYO PRODUCE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ARROYO WOOD DECORATING AND FURNITURE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ARTESANIA TORRES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ASTRAPOLY COLLECTABLES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
ATEMPA LEATHER GOODS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
AVON	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
AYALA-MEDINA TOMAS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BALDERA'S AUTO ACCESSORIES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BASILIDES CUEVAS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BARBARA CLOTHING	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BENITA CARDENA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BENITO SOTO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BENJAMIN VERDUZCO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BIKE AND PARTS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BJ FOLEY	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BLANKET & ACCESSORIES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BROMLEY JUNK	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
BUSTOS TOPPER	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
CAMPOS SALE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
CANALES JEWELRY	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
CARLOS GARCIA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
CARLOS MENDOZA HERNANDEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
CARLOS REYES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
CARLOS ROSA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
CARMELITA DIAZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
CARMEN MOGUEL	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
CHRIS FORD	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
CLAUDIA SORIANO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
CLOTHES UNLIMITED	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
COLEMAN INTERNATIONAL	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
CONDO'S NURSERY	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
CHRISTINA SANCHEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
DANIEL'S KITCHENWARE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
DEBORAH BOMBALIER	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
DENNIS LARISON	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
DIEGO'S MICELANEOS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
DOLLAR ITEMS PLUS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
DORA GARCIA HERNANDEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
DOROTEA PERAL	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
DOUBLE 9 BARGAINS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
EL CHE CHE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
EDITH VALLE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
EL PULPO LOCO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
ELEAZAR REYNOSA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
EMMA ORALIA ORTIZ RAMOS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
ERRAMIENTAS RODRIGUEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
ESPERANZA RODRIGUEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
ESTEBAN ALVARADO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
EUGENIO GIL	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
EXPISCOR LLC	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FABIAN CALDERON	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FAUSTINO GARCIA MEDINA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FELIPE MORENO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FILOMENA'S CRAFT	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FLORA'S MAID SERVICES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FLORENTINO BARRON	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FLORES DISCOUNT	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FONSECA'S	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FRANCISCA LOPEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FRANCISCO J LOPEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FRANCISCO MARTINEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FRANCISCO MAZARIEGOS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
FRANKY MAX AND MORE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GAMES GIYASH	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GENAVEVA JIMENEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GERARDO LOZA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GERARDO ORTIZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GILBERTO SALAS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GONZALEZ FASHION	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GONZALEZ JEWELRY REPAIR	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GOOD AS NEW	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GOOD BRAND TOOLS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GUALBERTO BALTADANO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GUILLERMINA GARCIA DE AGUILAR	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
GUILLERMINA MORALES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
HECTOR H. LARIS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
HECTOR PERALTA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
HELP YOURSELF	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
HERRERA'S FLOWERS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
IGNACIO DIAZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
IIT	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
IN-UI ACUPUNTURE INC. DBA MISSION ACCUPUNTURE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Medical Services - Accupunture	Not applicable		5999		
IRINEO DOMINGUEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Medical Services - Accupunture	Not applicable		5999		
IRMA GONZALES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Medical Services - Accupunture	Not applicable		5999		
ISA MORALES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Medical Services - Accupunture	Not applicable		5999		
JAMES W. WILSON	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JARAMILLOS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JAVIER MALDONADO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
JESUS GUTIERREZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JOHN ALDRICH	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Medical Services - Accupunture	Not applicable		5999		
JONG LEE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Medical Services - Accupunture	Not applicable		5999		
JOSE BENJAMIN FLORES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JOSE CRUZ SANCHEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JOSE MARCOS LANDIN	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JOSEFINA HOUSEWARE BOOTH	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JOSEFINA ZULUGA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JOYERIA FRIDA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JUAN JOSE CORNEJO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JUAN MARTINEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JUAN RODRIGUEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JULIO CRUZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JULIO GARCIA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JUNK AND STUFF	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
JUSTIANIAN CARILLO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
KIMSAM TOYS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
KOON HOI CHOW	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
LAPTOP TRADE SD	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
LEOBARDO FLORES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
LE0NARDO PEREZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
LEANDRO BARAJAS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
LESLI'S PLANTS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
LORI'S SILK FLOWERS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
LUCILIA RIVERA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
LUIS ILLANES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MACIAS PAINTINGS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MADAS ROSSY	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
M GOREN	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MAGDALENA SANCHEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MANUEL G. VARGAS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MANUEL PACHECO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MARCOS GARCIA TOLENTINO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MARIA GUTIERREZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MARIA MARTINEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MARIA SANDOVAL	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MARIA'S HOUSE SUPPLY	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MARIA F. ZAMORA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MARTIN AND AMANDA TOWNSEND	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MARTIN SOLORIO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MARY'S BEAUTY SUPPLIES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MARY RANDOLPH	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MICELLE'S 99 CENT	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MIGUEL OCAMPO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MORRIS ESCOBAR	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
MY STYLE FAMILY CLOTHING	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
NAM TO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
NORMA CERVANTES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
PABLO CRUZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
PATRICIA MORALES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
PEDRO HERNANDEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
PHIL'S SWAP SHOP	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
R M'S 5 DIAMONDS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
RAFAEL'S TOOLS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
RAMIRO F CANSECO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
RAMON CANO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
RAYMONDO LUNA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
RICHARD C. ATKINSON	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
ROMAN CANO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
ROSALES OUTLET	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
ROSALIA GOMEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		
ROSARIO GUEBELY	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Misscellaneous Retail - Swap meet	Not applicable		5999		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
SANTILLA'S CURIOS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
SERGIO LOPEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
SILVERIO HERNADEZ	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
SIVON OR	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
SLIMFORM SHAPEWEAR	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
SONIA GARCIA	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
SPECTRUM SPORTSWEAR LLC	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
SUPPLY DUDES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
SWAP MEET SALER	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
TAMARA MORALES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
TAVO'S MOTORCYCLES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
TERESA'S MISCELLANEOUS SALES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
THE BASH PURSES, SHOES PLUS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
TONY'S TIRES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
TRIGO'S PLACE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
USED STUFF	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
V C FASHION ACCESSORIES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
VARIETIES T-SHIRTS	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
VICTORIA TORRES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
VIDRIANNA JONES	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
XAVIER CASTILLO	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
YOKO PRIMROSE	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
YOUNG JA KIM	3480		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Misscellaneous Retail - Swap meet	Not applicable		5999		
MIKE'S LIQUOR II	3549		MISSION AVENUE	A-C	Low	Commercial	Oceanside	San Luis Rey	903.1										Liquor Store	Not applicable		5921		
JOHNNIE'S BARBERSHOP	3549		MISSION AVENUE	D	Low	Commercial	Oceanside	San Luis Rey	903.1										Barber Shops	Not applicable		7241		
STORAMERICA OCEANSIDE	3560		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing, Equipment	Not applicable		3751		
YOUNG'S WATER	3742		MISSION AVENUE	101	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Food Stores	Not applicable		5499		
A-B FURNITURE & DÉCOR	3742		MISSION AVENUE	102	Low	Commercial	Oceanside	San Luis Rey	903.1										Sale of furniture	Not applicable		5932		
WE THE PEOPLE	3742		MISSION AVENUE	103	Low	Commercial	Oceanside	San Luis Rey	903.1										Legal Services	Not applicable		8111		
WASHINGTON MUTUAL	3748		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										National Commercial Bank	Not applicable		6021		
WALGREENS DRUG STORE	3752		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Drug Stores	Not applicable		5912		
COLLATERAL LOAN CENTER	3753		MISSION AVENUE	103	Low	Commercial	Oceanside	San Luis Rey	903.1										Mortgage Banker and Loan Corre	Not applicable		6159		
PAGE FINANCIAL & INSURANCE SERVICES	3753		MISSION AVENUE	107	Low	Commercial	Oceanside	San Luis Rey	903.1										Financial and Insurances Services	Not applicable	16029111100	6159		
MISSION CAMINO DENTAL	3753		MISSION AVENUE	116	Low	Commercial	Oceanside	San Luis Rey	903.1										Offices of Dentist	Not applicable		8021		
BODY TEMPLE	3753		MISSION AVENUE	118	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Personal Service	Not applicable		7299		
MISSION REAL ESTATE & MORTGAGE	3753		MISSION AVENUE	200	Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents and Manager	Not applicable		6531		
EXTREME POWER GYM	3753		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Physical Fitness Facility	Not applicable		7991		
GEMS N' LOANS	3753		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail	Not applicable		5999		
MEDICAL SUPPLY EQUIPMENT	3753		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail - Medical	Not applicable		7352		
AMERICAN ROYALE MORTGAGE	3753		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Mortgage Banker and Loan Corre	Not applicable		6162		
SALON DE BAIN	3753		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
T & T NAILS	3753		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
THE SPOT BARBER SHOP	3753		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Barber Shop	Not applicable		7241		
VERA'S HOME MADE TAMALES	3753		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Food Preparation - Tamales	Not applicable		209		
GOGGED PAINTBALL	3753		MISSION AVENUE	201	Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales, Sporting Goods	Not applicable		6531		
BANK OF AMERICA	3756		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										National Commercial Bank	Not applicable		6021		
VERIZONS	3760		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Telephone Service Store	Not applicable		5999		
STARBUCKS COFFEE #6784	3760		MISSION AVENUE	C105	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	15839004000	5812		
THOMAS F. FORD DDS	3762		MISSION AVENUE	106	Low	Commercial	Oceanside	San Luis Rey	903.1										Offices of Dentist	Not applicable		8021		
GROOMING WITH TLC	3762		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail - Pet Sho	Not applicable		5999		
KAHOOTS ANIMALS AND SUPPLIES	3764		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail - Pet Sho	Not applicable		5999		
KIDDIE ACADEMIE	3766		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Child Day Care Services	Not applicable		8351		
COST CUTTERS HAIR SALON	3772		MISSION AVENUE	117	Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
HAPINESS NAIL AND SPA	3772		MISSION AVENUE	118	Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
DIVA'S FASHION	3772		MISSION AVENUE	129	Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales	Not applicable		5632		
VACANT	3772		MISSION AVENUE	130	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments			5812		
SMOKE DEPOT	3772		MISSION AVENUE	131	Low	Commercial	Oceanside	San Luis Rey	903.1										Tobacco Stores	Not applicable		5993		
MISSION COIN LAUNDRY	3772		MISSION AVENUE	134	Low	Commercial	Oceanside	San Luis Rey	903.1										Coin operated Laundry and Dry	Not applicable		7215		
MISSION DRY CLEANERS	3772		MISSION AVENUE	136	Low	Commercial	Oceanside	San Luis Rey	903.1										Laundry, Dry Cleaners and Garm	Not applicable		7212		
OCEANSIDE DONUTS	3772		MISSION AVENUE	119	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1583901400	5812		
PETITE MADELINE BAKERY	3776		MISSION AVENUE	137	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1583901400	5812		
DENTAL CARE OF OCEANSIDE	3776		MISSION AVENUE	138	Low	Commercial	Oceanside	San Luis Rey	903.1										Offices of Dentist	Not applicable		8021		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
CAL AUTO	3776		MISSION AVENUE	139	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Personal Service	Not applicable		7299		
SUBWAY	3776		MISSION AVENUE	140	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1583901400	5812		
TOPSY TURVY FROZEN YOGURT	3776		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Ice Cream Parlor		1583901400	5812		
BLOCKBUSTER'S VIDEO	3780		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Video Tape Rental	Not applicable		7841		
OCEAN RAINBOW - ICE CREAM PARLOR	3784		MISSION AVENUE	147	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1583900200	5812		
UPOST	3784		MISSION AVENUE	148	Low	Commercial	Oceanside	San Luis Rey	903.1										Business Services, Mail and Pa	Not applicable		7389		
DESANTI & ASSOCIATES	3784		MISSION AVENUE	149	Low	Commercial	Oceanside	San Luis Rey	903.1										Accounting, Booking Services	Not applicable		8721		
COUNTOUR EXPRESS	3784		MISSION AVENUE	152	Low	Commercial	Oceanside	San Luis Rey	903.1										Physical Fitness Facility - Wo	Not applicable		7991		
OLD MISSION BARBERSHOP	3784		MISSION AVENUE	153	Low	Commercial	Oceanside	San Luis Rey	903.1										Barber Shop	Not applicable		7241		
CHECKS CASHED	3784		MISSION AVENUE	154	Low	Commercial	Oceanside	San Luis Rey	903.1										Personal Loans	Not applicable		6141		
SHEAR FX HAIR SALON	3784		MISSION AVENUE	155	Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
THE REAL ESTATE CONSULTANT	3784		MISSION AVENUE	156	Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents and Manager	Not applicable		6531		
VACANT	3805		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MISSION CHIROPRACTIC	3815		MISSION AVENUE	104	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
TOGETHER WE GROW	3815		MISSION AVENUE	105-7	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
IMAGE CENTER SALON	3815		MISSION AVENUE	110	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
GEORGE ALVES AGENCY - OHANA INSURANCE	3815		MISSION AVENUE	201	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MBA PRODUCE GROUP	3815		MISSION AVENUE	203	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
CRICKET WIRELESS	3825		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
FSNB SERVICE CENTER	3825		MISSION AVENUE	9	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
GREAT CLIPS	3825		MISSION AVENUE	11	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
SAN LUIS REY DENTAL CARE	3825		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
THE PC TEKS INC.	3825		MISSION AVENUE	D3	Low	Commercial	Oceanside	San Luis Rey	903.1										PC Repairs			7328		
MARIA C GALDIANO DMD INC	3826		MISSION AVENUE	D5	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MAGIC CUT HAIR SALON	3852		MISSION AVENUE	B1	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
STUDIO NAILS AND HAIR	3852		MISSION AVENUE	B2	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
OCEANSIDE POLICE OFFICER'S ASSOCIATION	3855		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
ALL AMERICAN BARBER SHOP	3861		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
CENTURY NAILS SALON AND SPA	3861		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MIMI'S BEAUTY SUPPLY	3861		MISSION AVENUE	B10	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
THE TAX AND ACCOUNTING GROUP	3861		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
TOLEDO'S FLOORING	3861		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
LBC COURIER SERVICE	3870		MISSION AVENUE	D1	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
FARMERS INSURANCE	3870		MISSION AVENUE	D2	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
DR. KAM JENBREIL DENTISTRY	3870		MISSION AVENUE	D3-4	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
HEARX WEST	3870		MISSION AVENUE	D5	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MISSION CHILD DEVELOPMENT CENTER	3870		MISSION AVENUE	D6	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
CHECK INTO CASH	3875		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
DRY CLEANERS OF AMERICA	3875		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
FABIOLA'S LE SALON	3875		MISSION AVENUE	B29	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
PETCO	3875		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
THE FLORIST	3882		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
DOLLAR MART	3915		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
LUCKY BOB'S INTERNET CAF	3915		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
NORTH COAST OPTOMETRIST	3915		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
POSTAL ANNEX # 6017	3915		MISSION AVENUE	D1	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
TOPSTYLES HAIR DESIGNS	3915		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
WATER SHOP	3915		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
T-SHIRT FASHIONS	3915		MISSION AVENUE	1	Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales - Clothing			5651		
CURVES	3935		MISSION AVENUE	9	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
FORUM BEAUTY SUPPLIES BOTIQUE	3935		MISSION AVENUE	10	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
H & R BLOCK TAX SERVICE	3935		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
LOVELY NAILS	3935		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Nail Salon			7231		
T-SHIRT FASHIONS	3935		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MISSION FAMILY DENTISTRY	3935		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Dental Offices			8021		
MISSION WASH LAUNDRY	3935		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
GOODWILL INDUSTRIES OF SAN DIEGO	3935		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales - Second Hand Clothing			5932		
FUELMAN NETWORK/CARR SERVICE CENTER	3940		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
BROTHER BENNO'S THRIFT SHOP	3965		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
RAINBOW CHILDREN CARE	3965		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
STATE FAR INSURANCE	3965		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
NEW SONG CHURCH	3985		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													0		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
MISSION SAN LUIS REY PARISH	4070		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
NORTH COUNTY ALANO CLUB	4198		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
AWESOME PRO CLEANING SERVICES	4413		MISSION AVENUE	G203	Low	Commercial	Oceanside	San Luis Rey	903.1											Carpet/House Cleaning	Not applicable		7349		
LANITRA'S PRIVATE HOME CARE	4433		MISSION AVENUE	D108	Low	Commercial	Oceanside	San Luis Rey	903.1											Homecare Services	Not applicable		7299		
CHRISTIAN PRESCHOOL OF THE ARTS	4507		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
SYMPLY BEAUTIFUL FLOWERS	4507		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
THE ESTATE SALE	4507		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Retail Sales - Used Furniture	Not applicable		5932		
PROFESSIONAL HOUSECLEANING	4729		MISSION AVENUE	C214	Low	Commercial	Oceanside	San Luis Rey	903.1											hHouse Cleaning	Not applicable		7349		
THE HOME DEPOT #1018	5755		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
H & G SERVICE CORP.	5780		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
RANCHO DEL ORO LANDSCAPING & MAINTENANCE	6000		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
GYAN PRODUCE	6041		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
F.E. LAINIE MANN	5118		MOCHA COURT		Low	Commercial	Carlsbad	Buena Vista	904.2											Designer/Illustrator	Not applicable		7389		
CLEA'S HEALTH BASED CLEANING SERVICES	378		MOONSTONE BAY DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Janitorial Services	Not applicable		7349		
KNUCKLEHEAD SPORTFISHING	1302		MORENO WAY		Low	Commercial	Carlsbad	Loma Alta	903.1											SPORT FISHING CHARTER	Not applicable		7299		
LOWELL WEXLER	3359		MORNING VIEW DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Business Services, Mail and Packaging	Not applicable		7389		
WSF CONSTRUCTION CONSULTING	919		MORSE STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Consulting	Not applicable		7299		
ELEVATED DESIGNS	1220		MORSE STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Teaching Art to Children	Not applicable		7299		
CREATE 4B	707		MUIRWOOD DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Hand Made Crafts	Not applicable		5961		
MYERS APTS	908-12	S	MYERS STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Apts. Rental	Not applicable		6515		
A NEW YOU NOW	1605	S	MYERS STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Personal Training	Not applicable		5963		
B.A.M. LANDSCAPING	1241		NATOMA WAY	B	Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		7349		
NOVEL SOUNDS INC.	619	S	NEVADA STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Product Developement	Not applicable		7389		
VERDUGO PHOTOGRAPHY	1837	S	NEVADA STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Photography	Not applicable		7389		
INTERFACE DISPLAYS & CONTROLS INC	4630		NORTH AVENUE	B	Low	Commercial	Carlsbad	Loma Alta	904.1											NAVIGATIONAL SEARCH EQUIPMENT	Not applicable		3812		
DART HELICOPTER SERVICES LLC	4650		NORTH AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1											Management Activities for Helicopter After M	Not applicable		7389		
AUTOMOTIVE MARKETING CONSULTANTS INC	4660		NORTH AVENUE	B	Low	Commercial	Carlsbad	Loma Alta	904.1											WAREHOUSING & STORAGE	Not applicable		4226		
BD MEDICAL	4665		NORTH AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1											MEDICAL, DENTAL, HOSPITAL SUPP	Not applicable		5047		
ALLSTATE MOVING SYSTEMS	4670		NORTH AVENUE	A	Low	Commercial	Carlsbad	Loma Alta	904.1											FURNITURE MOVING	Not applicable		4212		
SERVICEMASTER ABSOLUTE WATER & FIRE SERVICES	4670		NORTH AVENUE	A	Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing, Electronics	Not applicable		3825		
BUILDING RESTORATION INC?	4670		NORTH AVENUE	B	Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		752		
MIRAMAR STORAGE & TRANSFER CO ?	4670		NORTH AVENUE	B	Low	Commercial	Carlsbad	Loma Alta	904.1											LOCAL TRUCKING WITH STORAGE	Not applicable		4214		
D & M WELDING?	4670		NORTH AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1											OTHER CONTRACTOR			1793		
LAMVIN INC	4675		NORTH AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1											CONCRETE BLOCK & BRICK			3271		
SUPERIOR INDUSTRIAL	4695		NORTH AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1											Pipe & Fittings Supplier			5074		
WESTERN HEARTS LEATHERWORK	3685		NORTH WAY		Low	Commercial	Carlsbad	Buena Vista	904.2											Manufacturer - Hand Tooled leather Accesso			5961		
BUZZ LADIES INC.	3275		NOYA WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											Internet Social Media			7389		
GREEN ALTERNATIVE	3600		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PRF RESIDENT	3600		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RESIDENCE INN BY MARRIOT OCEANSIDE	3603		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
IMPACT SOLUTIONS	3604		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BERGENSON'S PROPERTY SERVICES INC.	3605		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OCEAN SYSTEM ENGINEERING CORP	3605		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
KAISER PERMANENTE PHARMACY	3609		OCEAN RANCH BLVD	204	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OCEAN RANCH DENTISTRY	3609		OCEAN RANCH BLVD	205	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RED PERSIMMON NAILS AND SPA	3613		OCEAN RANCH BLVD	103	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ANGEL PRINTING INC	3614		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GOURMET TAMALES	3616		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											Food Preparation			0		
SWEET BUSY BEES CENTER	3617		OCEAN RANCH BLVD	106	Low	Commercial	Carlsbad	Loma Alta	904.1											Day Care Center			8351		
ANDERGENE	3618		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ANZO BIOTECH	3626		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TARGET BILLING & COLLECTIONS	3630		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ROCKMOND FINANCIAL HOLDINGS	3632		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PHARM-AID INC	3634		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ARCHITERRA LLP	3636		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ELCTRONIC BILLING SOLUTIONS INC	3638		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ACCUDIAGNOSTICS	3640		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SANDOVAL FAMILY MANAGEMENT	3643		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
QUANTUM COMMUNICATIONS	3648		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GENERAL CAR LEASING	3650		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SOUTHERN WINDS INTERNATIONAL	3658		OCEAN RANCH BLVD	101	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SPG SOLAR INC	3801		OCEAN RANCH BLVD	103	Low	Commercial	Carlsbad	Loma Alta	904.1														0		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
HOLSUM BAKERY INC.	3801		OCEAN RANCH BLVD	108	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
RICH LTD.	3809		OCEAN RANCH BLVD	110	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SLIDING VISIONS INC.	3809		OCEAN RANCH BLVD	114	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
STERLING BUSINESS FORMS INC.	3809		OCEAN RANCH BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
COCA-COLA BOTTLING CO OF SOUTHERN CA	3900		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
HYDRONAUTICS	3977		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ASHWORTH EDC, LLC	4010		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ATOMICA RESEARCH & DEVELOPMENT INC	3800		OCEANIC DRIVE	101	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
TACTICAL CONTROLS	3800		OCEANIC DRIVE	104	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
OCEANSIDE ALE WORKS	3800		OCEANIC DRIVE	105	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
U - BILD	3800		OCEANIC DRIVE	107	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
EMCO INDUSTRIES	3800		OCEANIC DRIVE	109	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BEHNE CHIROPRACTIC	3800		OCEANIC DRIVE	110	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
COMCY COUCHES	3800		OCEANIC DRIVE	110	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
RAIN GEAR DEPOT	3800		OCEANIC DRIVE	111	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
EURO INDUSTRIES INC	3800		OCEANIC DRIVE	112	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
TRIBECA TECHNOLOGY SOLUTIONS	3800		OCEANIC DRIVE	113	Low	Commercial	Carlsbad	Loma Alta	904.1										ELECTRICAL APPLIANCE DISTRIBUT			5064		
TRIBECA TECHNOLOGY SOLUTIONS	3800		OCEANIC DRIVE	114-5	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
TRIUMPH UNITED INC.	3800		OCEANIC DRIVE	116	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CDS FIRST	3800		OCEANIC DRIVE	117	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SWEET POTATOE SHACK	3800		OCEANIC DRIVE	118	Low	Commercial	Carlsbad	Loma Alta	904.1										Full Service Restaurant			5812		
RAMTECH MFG INC	3801		OCEANIC DRIVE	101	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ELECTREX USA LTD.	3803		OCEANIC DRIVE	201	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
OCEANSIDE VINEYARD CHURCH	3803		OCEANIC DRIVE	202	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
THE COMPOUNDMIXED MARTIAL ARTS & FITNESS	3803		OCEANIC DRIVE	203	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
TRUELINE WOODSWORKS	3810		OCEANIC DRIVE	207-8	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
POLYVUE DISTRIBUTION INC.	3810		OCEANIC DRIVE	209	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
HEART TO HEART GIFTS ECT	3810		OCEANIC DRIVE	201	Low	Commercial	Carlsbad	Loma Alta	904.1										Importer Wholeseller - Children's Products			5099		
JDM CONCEPTS	3820		OCEANIC DRIVE	304	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
JONES GLASS	3820		OCEANIC DRIVE	305	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
WEST COAST PARTY RENTALS	3820		OCEANIC DRIVE	306	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MAR MAR IMPORTING INC.	3820		OCEANIC DRIVE	307	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MOBILE SOLUTIONS	3820		OCEANIC DRIVE	308	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
HEART TO HEART GIFTS ECT	3820		OCEANIC DRIVE	308	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
KINETIC SYSTEMS INC	3820		OCEANIC DRIVE	309	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PICK ON US INC,	3820		OCEANIC DRIVE	310	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
WOODCHUCK	3820		OCEANIC DRIVE	311	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
STARR SPECIALTIES	3820		OCEANIC DRIVE	312-13	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
RESSAC	3830		OCEANIC DRIVE	402	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VANDER PARTY RENTAL	3830		OCEANIC DRIVE	410	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
READY TO FLY FUN	3830		OCEANIC DRIVE	410	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SLICE OF HEAVEN CATERING	3830		OCEANIC DRIVE	411	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BARON PAPER COMPANY INC.	3840		OCEANIC DRIVE	511	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
A-ROO DISTRIBUTING OF CALIFORNIA LLC	3840		OCEANIC DRIVE	512	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
HANSEN ARCHITECTURAL SYSTEMS, INC	3907		OCEANIC DRIVE	301-02	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
NOVA VOICE & DATA SYSTEMS, INC	3909		OCEANIC DRIVE	401	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SAN DIEGO MOTORING ACCESSORIES INC	3909		OCEANIC DRIVE	403	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BEDE WINDOWS AND DOORS	3913		OCEANIC DRIVE	501-2	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CUSTOM ACQUATIC INC.	3915		OCEANIC DRIVE	601	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CALTERM EXTERMINATORS INC	3915		OCEANIC DRIVE	603	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MYO SCI TECHNOGICS INC	3919		OCEANIC DRIVE	703	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SUPER WONG USA INC	3921		OCEANIC DRIVE	803	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
NEXT DAY SPECIALTY LLC	3923		OCEANIC DRIVE	100	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
GSM LLC	3923		OCEANIC DRIVE	200	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
NATIVE BOUQUET, LLC	3927		OCEANIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ROBERT MANN PACKAGING INC.	3931		OCEANIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
RAYO WHOLESALE INC	3941		OCEANIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ONE SOURCE DISTRIBUTORS LLC	3951		OCEANIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CEMEC MARTIAL ARTS	3700		OCEANIC WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BOONSTRA CONSTRUCTION	3700		OCEANIC WAY	102	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MIT ENGINEERING & CONSTR.	3720		OCEANIC WAY	203	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ASPEN COOLING & HEATING	3720		OCEANIC WAY	205	Low	Commercial	Carlsbad	Loma Alta	904.1													0		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
SEAGAZE REALTY/ALL IN ONE LOANS	3720		OCEANIC WAY	207	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MORRISSEY CONSTRUCTION	3720		OCEANIC WAY	209	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
AM CONTRACTING INC	3720		OCEANIC WAY	301	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PACIFIC GYRE	3720		OCEANIC WAY	301A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MANTEL DEPOT INC	3720		OCEANIC WAY	302	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CODE MICRO	3720		OCEANIC WAY	303	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BELL BLUEPRINT CO.	3720		OCEANIC WAY	304	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ODYSSEY PROPERTIES & GARRISON CONSTRUCTION	3720		OCEANIC WAY	305	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ADVANCE THERMAL FORMING ENT INC	3720		OCEANIC WAY	307	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
GPS TRACKED DELIVERIES	3720		OCEANIC WAY	103	Low	Commercial	Carlsbad	Loma Alta	904.1										Advertisement Delivery Service			7389		
COASTAL AIR	3720		OCEANIC WAY	204	Low	Commercial	Carlsbad	Loma Alta	904.1										Heating and Air Condition Contractor			1711		
AM CONTRACTING	3740		OCEANIC WAY	301	Low	Commercial	Carlsbad	Loma Alta	904.1										GENERAL CONTRACTOR HOUSING			1521		
M I SOLUTIONS	3750		OCEANIC WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
NORTH COUNTY MOBILE ELECTRONICS	3760		OCEANIC WAY	501	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BROADCAST DESIGNS INTERNATIONAL	3760		OCEANIC WAY	502	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
QUALITY PLUS	3760		OCEANIC WAY	502	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
TUTOR TIME CHILD CARE LEARNING CENTER	3760		OCEANIC WAY	503	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
JORDAN ENGINEERING LLC	3791		OCEANIC WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
THE SURFER'S PRO SHOP	220		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Sporting Goods Store	Not applicable		5941		
PORT OF SUBS	510		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments	Not applicable	1520230400	5812		
VACANT	518		OCEANSIDE BLVD	108-10	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments	Not applicable	1520230400	5812		
MULTISERVICES	518		OCEANSIDE BLVD	101A	Low	Commercial	Carlsbad	Loma Alta	904.1										Legal Services	Not applicable		8111		
LV NAIL AND SPA	518		OCEANSIDE BLVD	101B	Low	Commercial	Carlsbad	Loma Alta	904.1										Beauty Shops	Not applicable		7231		
CELLULAR PHONE SERVICE	518		OCEANSIDE BLVD	105	Low	Commercial	Carlsbad	Loma Alta	904.1										Telephone Service Store	Not applicable		5999		
CAL-AUTO	518		OCEANSIDE BLVD	106	Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Personal Service	Not applicable		7299		
MONEY TREE - CHECK CASHING	518		OCEANSIDE BLVD	112	Low	Commercial	Carlsbad	Loma Alta	904.1										Personal Loans	Not applicable		6141		
PROTEC - LOCK	601		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
LIBERTY TAX SERVICE	601		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
NORTH COUNTY LIFE LINE	707		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
7-11 FOOD STORE #17043 D/2011	711		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
OCEANSIDE INN	1680		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Hotels, Motels	Not applicable		7011		
VACANT	1710		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1										Video tape Rental	Not applicable		7841		
WEST MARINE	1719		OCEANSIDE BLVD	A-F	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	1727		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SMOKE DEPOT	1727		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
THE WISHY WASHY LAUNDRY COIN OP	1729		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
WEIGHT WATCHERS	1729		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VIDEO TOWN	1759		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
OCEAN NAILS	1759		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	1759		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1															
GRACIE JIU JITSU	1759		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1															
CRYSTAL PURE WATER	1759		OCEANSIDE BLVD	F	Low	Commercial	Carlsbad	Loma Alta	904.1															
DISCOVERY PRESCHOOL	1759		OCEANSIDE BLVD	G-H	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SSI AUTO INSURANCE	1759		OCEANSIDE BLVD	I	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	1759		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	1763		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PARRA ACCOUNTING AND TAX SERVICES	1763		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ABSOLUTE HAIR	1763		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
USA DISCOUNTERS	1767		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1															
NORTH COUNTY DENTAL CENTER	1771		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
AVIS CAR RENTAL	1771		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
STARBUCKS COFFEE #9688	1779		OCEANSIDE BLVD	A	Low	Eat/Drink Est.	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments	Not applicable	1513101800	5812	YES	NO
T-MOBILE	1779		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	1779		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1															
A-1 SELF STORAGE	1783		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
FIRST CLASS FITNESS CENTER	1791		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
FRAZEE PAINT	1793		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
LOANN'S DESIGNS CLEANERS AND TAILORING	1810		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1										Beauty Shops	Not applicable		7231		
VINCENT AND SON BARBER SHOP	1810		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1										Barber Shops	Not applicable		7231		
SPA AND NAIL DESIGNS	1810		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1										Beauty Shops	Not applicable		7231		
VACANT	1810		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1										Telephone Service Store	Not applicable		5999		
HARPER CHIROPRACTOR	1816		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1										Office of Chiropractor	Not applicable		8041		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
HERTZ LOCAL EDITION	1816		OCEANSIDE BLVD	C-D	Low	Commercial	Carlsbad	Loma Alta	904.1										Passenger Car Rental	Not applicable		7514		
SPARKLE PLENTY	1816		OCEANSIDE BLVD	E-F	Low	Commercial	Carlsbad	Loma Alta	904.1										Women's Apparel and Accessory	Not applicable		5632		
VACANT	1824		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1										Employment Services	Not applicable		7361		
JUVENILE COURT COMMUNITY SCHOOL	1824		OCEANSIDE BLVD	B-C	Low	Commercial	Carlsbad	Loma Alta	904.1										Women's Clothing Store	Not applicable		5621		
OCEANSIDE COIN LAUNDRY	1824		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1										Coin operated Laundry and Dry	Not applicable		7215		
LITTLE BEARS CHILD CARE	1828		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Child Day Care Services	Not applicable		8351		
NEW TO YOU - THRIFT STORE	1830		OCEANSIDE BLVD	A-B	Low	Commercial	Carlsbad	Loma Alta	904.1										Used Merchandise store	Not applicable		5932		
VACANT	1830		OCEANSIDE BLVD	C2	Low	Commercial	Carlsbad	Loma Alta	904.1										Women's Clothing Store	Not applicable		5651		
AWARD SOURCE	1830		OCEANSIDE BLVD	C3	Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Retail Stores	Not applicable		5999		
OCEANSIDE SMILE CENTER	1830		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1										Offices and Clinics of Dentist	Not applicable		8021		
YOGA OCEANSIDE	1830		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1															
PLAYER'S AUTOSOUND INC.	1833		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
OSHKOSH REGIONAL LOGISTICS CENTER	1833		OCEANSIDE BLVD	B-C	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
EL CAMINO RENTALS	1833		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	1836		OCEANSIDE BLVD	101	Low	Commercial	Carlsbad	Loma Alta	904.1															
SUBWAY # 14452	1836		OCEANSIDE BLVD	103	Low	Commercial	Oceanside	San Luis Rey	903.1										FAST FOOD RESTAURANT			5812		
CHECK AND GO	1906		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1										Personal Loans	Not applicable		6141		
GROOMING TLC	1906		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1										Pet Shops, Retail	Not applicable		5999		
SUZ BEAUTY SUPPLY	1906		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Retail Stores	Not applicable		5999		
FAST ACTION PRINTING & COPYING	1906		OCEANSIDE BLVD	G-H	Low	Commercial	Carlsbad	Loma Alta	904.1										Commercial Printing	Not applicable		2759		
BRIARMIST CAKES AND FLOWERS	1906		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1										Florist	Not applicable		5992		
MOMILANI'S ISLAND TRADITIONS - ALOHA WEAR	1906		OCEANSIDE BLVD	K	Low	Commercial	Carlsbad	Loma Alta	904.1										Family Clothing Store	Not applicable		5661		
CREATIVE HAIR AND NAIL	1906		OCEANSIDE BLVD	L	Low	Commercial	Carlsbad	Loma Alta	904.1										Beauty Shops	Not applicable		7231		
GREGORIO TOLENTINO DENTIST	1906		OCEANSIDE BLVD	M	Low	Commercial	Carlsbad	Loma Alta	904.1										Offices and Clinics of Dentist	Not applicable		8021		
NAVY FEDERAL CREDIT UNION	1906		OCEANSIDE BLVD	N	Low	Commercial	Carlsbad	Loma Alta	904.1										Credit Union	Not applicable		6061		
THE POTTER'S HOUSE	1906		OCEANSIDE BLVD	O-Q	Low	Commercial	Carlsbad	Loma Alta	904.1										Religious Organizations	Not applicable		8661		
HACIENDA HOME LOANS	1906		OCEANSIDE BLVD	R	Low	Commercial	Carlsbad	Loma Alta	904.1										Mortage Banks and Loan Correpo	Not applicable		6162		
DR CHOO ACCUPUNTURE	1906		OCEANSIDE BLVD	S	Low	Commercial	Carlsbad	Loma Alta	904.1										Office or Clinics of Other Hea	Not applicable		8049		
WIC PROGRAM	1906		OCEANSIDE BLVD	T-V	Low	Commercial	Carlsbad	Loma Alta	904.1										Individual & Family Social Ser	Not applicable		8322		
OCEANSIDE NUTRITION	1906		OCEANSIDE BLVD	W-X	Low	Commercial	Carlsbad	Loma Alta	904.1										Individual & Family Social Ser	Not applicable		8322		
CHOW'S DONUT	1906		OCEANSIDE BLVD	F	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments	Not applicable	1510104000	5812		
OCEANSIDE LIQUOUR	1910		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Liquor Store	Not applicable		5921		
BLACK ROCK COFFEE BAR	1918		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Coffee Shop	Not applicable	1510103000	5812		
MR DONUTS	1950		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments	Not applicable	1493302700	5812		
PLATINUM HAIR AND NAIL	1950		OCEANSIDE BLVD	D-E	Low	Commercial	Carlsbad	Loma Alta	904.1										Beauty Shops	Not applicable		7231		
PAYDAY CASH ADVANCE	1950		OCEANSIDE BLVD	F	Low	Commercial	Carlsbad	Loma Alta	904.1										Personal Loans	Not applicable		6141		
VACANT	1950		OCEANSIDE BLVD	I	Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
VACANT	1950		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
FRONTLINE - BODY PIERCING	1950		OCEANSIDE BLVD	K	Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Personal Service	Not applicable		7299		
FRED LOYA INSURANCE	1950		OCEANSIDE BLVD	L-M	Low	Commercial	Carlsbad	Loma Alta	904.1										Insurance Agents	Not applicable		6411		
VACANT	1950		OCEANSIDE BLVD	P	Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
RED CLIPPER BARBER SHOP	1979		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
IMPACT DESIGNS	2024		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Apparel and Acce	Not applicable		5699		
HARLO'S COCKTAILS N' DREAMS PROFESSIONAL BARTENDI	2025		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1															
LISEL SUTTER TAX & FINANCIAL SERVICES	2213		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Tax Services	Not applicable		7389		
SCOTT SUTTER REMODELING AND REPAIR	2213		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Remodeling and Repair	Not applicable		1521		
THE CORNER LIQUOR	2600		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Liquor Store	Not applicable		5921		
WAHOO INTERNATIONAL INC	2605		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PACIFIC ANIMAL HOSPITAL	2801		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
GROOMING DALES	2805		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MCALISTER INSTITUTE NORTH COASTAL RRC	2821		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CABLE SOLUTIONS, LLC	2905		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ANDY'S GLASS AND REPAIR	2913		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
FURNITURE SOURCE RENTALS	2921		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Furniture Rental			7359		
ANGELITA FOODS & SPICE	2925		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BAUER BRO LLC	2925		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SOLID RESTORATION	2925		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PESTMASTER SERVICES	2929		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
DYNOTECH MOTOR SPORTS	2933		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
NORTH COUNTY HYPER SPORTS	2933		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
RIED'S CUSTOM GLASS TINTING	2933		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SAFELITE AUTO GLASS	2933		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
W.C. HYPER SPORTS	2933		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
A-1 SELF STORAGE	3030		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
GALLAGHER DRILLING SERVICE	3040		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
OLD WORLD STANDARDS	3040		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
HUCK FINN'S MINI WAREHOUSE	3091		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ORCO BLOCK CO INC	3501		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Concrete Produ			3271		
PACIFIC MINI STORAGE	4015		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SPIRAL STAIRCASE FACTORY	4035		OCEANSIDE BLVD	A1	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PARKER AIR BRUSH	4035		OCEANSIDE BLVD	A3	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
LINCO	4035		OCEANSIDE BLVD	A10	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ALFRED DUNATTE CABINETS	4035		OCEANSIDE BLVD	B23	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
UPHOLTERY BY MESTAZ	4035		OCEANSIDE BLVD	B24	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TEC SERVICE	4035		OCEANSIDE BLVD	B25	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NORTH COUNTY IRON WORKS	4035		OCEANSIDE BLVD	C12	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
1 800 GOTJUNK	4035		OCEANSIDE BLVD	C19	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OLD WORLD STANDARDS	4035		OCEANSIDE BLVD	D28	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TRUE WOOD GRAINS	4035		OCEANSIDE BLVD	D28	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RICHER RACING	4035		OCEANSIDE BLVD	D33	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TIME MACHINE RACECRAFT	4035		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1											Automobile Services - Except R			7549		
DERRY PRECISION MACHINING	4035		OCEANSIDE BLVD	E35	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MARSWAY MACHINING, INC	4035		OCEANSIDE BLVD	E41	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
FREEDOM AUTOMATION	4035		OCEANSIDE BLVD	F42	Low	Commercial	Carlsbad	Loma Alta	904.1											Software Development			7371		
HENMAN BEVILACQUA	4035		OCEANSIDE BLVD	F44	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
G. S. MARINE INTERIORS	4035		OCEANSIDE BLVD	F48	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ALLENS CUSTOM WOODWORKING	4035		OCEANSIDE BLVD	G52	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
HARBOR HARDWOOD FLOORS INC.	4035		OCEANSIDE BLVD	G56	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
JORDAN ENGINEERING	4035		OCEANSIDE BLVD	16	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GREEN JUNGLE INC.	4035		OCEANSIDE BLVD	40	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OLD WORLD STANDARDS	4035		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											GENERAL CONTRACTING HOMES			1521		
PINAMONTI INDUSTRIAL PARK	4035		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TWO JAY MACHINING / AUTO REPAIR	4035		OCEANSIDE BLVD	E40	Low	Commercial	Carlsbad	Loma Alta	904.1											Machining / Automotive Repair			7538		
GOLDEN STATE FENCE COMPANY	4051		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SELECT PHYSICAL THERAPY	4055		OCEANSIDE BLVD	AC	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
HOME HELPERS/DIRECT LINK	4055		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RANCHO DEL ORO CHIROPRACTIC	4055		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GANATOL LAND COMPANY	4055		OCEANSIDE BLVD	KM	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
THE PRESCOTT COMPANIES	4055		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PARTNERSHIP WITH INDUSTRY	4059		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SOUTH COAST SECURITY	4059		OCEANSIDE BLVD	F	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MY FAMILY'S SEASONINGS INC	4059		OCEANSIDE BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
STEAMATIC OF SAN DIEGO	4059		OCEANSIDE BLVD	L	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MIRACLE METHOD	4059		OCEANSIDE BLVD	M	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CURTIS MANAGEMENT CO. INC.	4059		OCEANSIDE BLVD	M	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
WIZARD SPORTS EQUIPMENT INC.	4061		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1											Retail Sporting Goods			5091		
ARROWHEAD PACKAGING CO.	4061		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SHEPHERD'S CHURCH	4061		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GOING TO BEAT CANCER	4061		OCEANSIDE BLVD	F	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
AD COMPUTERS	4061		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MBM BOSS STRATEGIC MATERIALS	4061		OCEANSIDE BLVD	L	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
LITE COSMETICS	4061		OCEANSIDE BLVD	M	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CANYON LAND SURVEYING	4061		OCEANSIDE BLVD	N	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ALL ABOUT EYES OPTOMETRIC	4065		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
VALERIE HILFERTY	4065		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
KAIGAN KARATE	4065		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
UNYEWAY INC.	4065		OCEANSIDE BLVD	E-H	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BLUE WORLD INDUSTRIES	4065		OCEANSIDE BLVD	KM	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
AM CHEMICAL LLC	4065		OCEANSIDE BLVD	M	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
AQUATIC SPECIALTIES INC	4065		OCEANSIDE BLVD	P	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RANDOX LABORATORIES LTD	4065		OCEANSIDE BLVD	Q	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ARCHIVEIT	4065		OCEANSIDE BLVD	R	Low	Commercial	Carlsbad	Loma Alta	904.1											Document Storage			7389		
MORGAN TAX & FINANCIAL SERVICES	4065		OCEANSIDE BLVD	T	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
INDULGE HAIR SALON	4065		OCEANSIDE BLVD	U-V	Low	Commercial	Carlsbad	Loma Alta	904.1														0		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
KC BLY MULTICULTURAL STYLIST	4065		OCEANSIDE BLVD	U-V	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VETERAN'S VILLAGES OF SAN DIEGO	4079		OCEANSIDE BLVD	AC	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
OCEANSIDE CENTER FOR SPIRITUAL LIVING	4079		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
HI-TECH SWISS ENGINEERING	4079		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
RANCHO DEL ORO BUSINESS CENTER	4079		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
GRETCHEN'S PET GROOMING	4083		OCEANSIDE BLVD	AC	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BLOXTON CHIROPRACTIC CENTER	4083		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ILLEGAL PRODUCTIONS	4083		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SCRIPPS COASTAL MEDICAL CENTER	4083		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MALOTTE AND RAE	4083		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
TECHNICAL ASSISTANCE & SERVICES CO.	4083		OCEANSIDE BLVD	F	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
THE GREAT STATE OF BEER	4083		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
R H ELECTRONICS INC.	4083		OCEANSIDE BLVD	KM	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
F. I. OPTICS INC.	4089		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
WORLD TECH DENTAL LAB INC.	4089		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
ABD TECHNOLOGY LLC	4089		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
FOTOSIX STUDIO	4089		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SERVPRO OF NORTH VISTA/SAN MARCOS	4089		OCEANSIDE BLVD	G	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
WHITE DOG ENTERPRISES	4089		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CAMERFORD IRISH DANCING	4093		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
THERAPEUTIC SOLUTIONS INTERNATIONAL	4093		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Sales of Dental Devices to Licensed Dentists			0		
SMOG SHOP	4093		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PEREIRA BRAZILIAN JIU JITSU	4093		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1										Martial Arts Instruction			7999		
SIGNS AT ONCE	4093		OCEANSIDE BLVD	G	Low	Commercial	Carlsbad	Loma Alta	904.1													7389		
RANCHO DEL ORO VETERINARY HOSP	4093		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CASH A CHECK	4095		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PREGNANCY RESOURCE CENTER	4095		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
A.C. AND FLOOR D□COR INC.	4095		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
OCEANSIDE DANCE ACADEMY	4095		OCEANSIDE BLVD	G	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
EXPRESS PERSONNEL SERVICES	4095		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
LARRY RORICK DDS	4110		OCEANSIDE BLVD	101	Low	Commercial	Carlsbad	Loma Alta	904.1															
ALLEN ORTHODONTICS	4110		OCEANSIDE BLVD	102	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
JUICE IT UP	4111		OCEANSIDE BLVD	100	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments			5812		
CITI BANK	4120		OCEANSIDE BLVD	121-25	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4120		OCEANSIDE BLVD	127	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4120		OCEANSIDE BLVD	129	Low	Commercial	Carlsbad	Loma Alta	904.1															
COLDSTONE CREAMERY	4121		OCEANSIDE BLVD	204	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments			5812		
VACANT	4130		OCEANSIDE BLVD	205	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
US BANK	4136		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
RANCHO DENTAL PRACTICE	4140		OCEANSIDE BLVD	131	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4140		OCEANSIDE BLVD	137	Low	Commercial	Carlsbad	Loma Alta	904.1															
ANGIE BEAUTY SUPPLY	4140		OCEANSIDE BLVD	139	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
NAIL BOUTIQUE	4140		OCEANSIDE BLVD	141	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
UNITED STUDIOS OF SELF DEFENSE	4140		OCEANSIDE BLVD	143	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4140		OCEANSIDE BLVD	145	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4140		OCEANSIDE BLVD	147	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PLAZA DEL ORO CLEANERS	4140		OCEANSIDE BLVD	148-51	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4140		OCEANSIDE BLVD	153-55	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4140		OCEANSIDE BLVD	157	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4140		OCEANSIDE BLVD	159	Low	Commercial	Carlsbad	Loma Alta	904.1															
CHASE BANK	4147		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													7231		
HAIRPORT	4160		OCEANSIDE BLVD	161	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
EDWARD JONES INVESTMENTS	4160		OCEANSIDE BLVD	163	Low	Commercial	Carlsbad	Loma Alta	904.1										Tax Services & Investments	Not applicable	1625022500	0		
166-67	4160		OCEANSIDE BLVD	165-67	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
GOLDEN SPOON FROZEN YOGURT	4160		OCEANSIDE BLVD	169	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments			5812		
ALL ABOUT HEALTH	4160		OCEANSIDE BLVD	171	Low	Commercial	Carlsbad	Loma Alta	904.1													7389		
SUBWAY'S SANDWICHES	4160		OCEANSIDE BLVD	173	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments			5812		
SELECT STAFFING	4161		OCEANSIDE BLVD	100A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
U WEIGHT LOSS CLINIC	4161		OCEANSIDE BLVD	100B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SYLVAN LEARNING CENTER	4161		OCEANSIDE BLVD	101	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CRAIG HUEHERGARDT DDS INC	4161		OCEANSIDE BLVD	102	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
DOLLAR TREE	4161		OCEANSIDE BLVD	103	Low	Commercial	Carlsbad	Loma Alta	904.1													0		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
VACANT	4170		OCEANSIDE BLVD	175	Low	Commercial	Carlsbad	Loma Alta	904.1															
UMAX1 INC/CIGARETTES 4 LESS	4170		OCEANSIDE BLVD	177	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
DANIEL AND CO.	4170		OCEANSIDE BLVD	179	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4170		OCEANSIDE BLVD	181	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BRIGHT NEW DENTAL	4170		OCEANSIDE BLVD	183	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4170		OCEANSIDE BLVD	185	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4170		OCEANSIDE BLVD	187	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
AARON'S SALES & LEASE OWNERSHIP	4171		OCEANSIDE BLVD	100	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
WHITE DRAGON KUNG FU	4171		OCEANSIDE BLVD	100A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4171		OCEANSIDE BLVD	101	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
COLLEGE CLEANERS	4171		OCEANSIDE BLVD	102	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
BEST NAILS	4171		OCEANSIDE BLVD	103	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4171		OCEANSIDE BLVD	104	Low	Commercial	Carlsbad	Loma Alta	904.1															
ITAN	4171		OCEANSIDE BLVD	105	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4171		OCEANSIDE BLVD	107	Low	Commercial	Carlsbad	Loma Alta	904.1															
DOCTOR'S EXPRESS	4171		OCEANSIDE BLVD	108-9	Low	Commercial	Carlsbad	Loma Alta	904.1															
WELLS FARGO BANK	4176		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
STARBUCK'S COFFEE #5832	4176		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments			5812		
BASKIN ROBBINS/TOGO'S	4201		OCEANSIDE BLVD	A	Low	Eat/Drink Est.	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments	Not applicable	1622411000	5812		
BLOCK BUSTER	4221		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										VIDEO RENTALS			7841		
SUPER CUTS	4225		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1										HAIRDRESSERS			7231		
FRUTAS, CAFÉ AND TORTAS	4225		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments			5812		
PAPA JOHN'S PIZZA	4225		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1										Fast Food Restaurant			5812		
VACANT	4225		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1										HAIRDRESSERS			7231		
SMILE WAVE IMPLANT DENTISTY	4225		OCEANSIDE BLVD	G	Low	Commercial	Carlsbad	Loma Alta	904.1										DENTIST			8049		
VACANT	4225		OCEANSIDE BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1										FOOT WEAR STORE			5661		
PERFECT NAILS	4225		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1										Beauty Shops			7231		
VACANT	4225		OCEANSIDE BLVD	L	Low	Commercial	Carlsbad	Loma Alta	904.1										TELEPHONE COMMUNICATIONS			4812		
SPRINT	4225		OCEANSIDE BLVD	M	Low	Commercial	Carlsbad	Loma Alta	904.1										POSTAL SERVICES			4311		
ADVANCE AMERICA - CASH ADVANCE	4225		OCEANSIDE BLVD	N	Low	Commercial	Carlsbad	Loma Alta	904.1										BANK			6029		
VALDIVIA JEWELRY	4225		OCEANSIDE BLVD	O-P	Low	Commercial	Carlsbad	Loma Alta	904.1										JEWELRY SHOP			5944		
NORTH COUNTY CAT HOSPITAL	4225		OCEANSIDE BLVD	U	Low	Commercial	Carlsbad	Loma Alta	904.1										Veterinary Services			742		
GATEWAY CLEANER	4225		OCEANSIDE BLVD	V	Low	Commercial	Carlsbad	Loma Alta	904.1										CLEANERS			7212		
LE RENDEZ-VOUS FRENCH BAKERY	4225		OCEANSIDE BLVD	Q	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments			5812		
VACANT	4225		OCEANSIDE BLVD	R	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4225		OCEANSIDE BLVD	S	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4225		OCEANSIDE BLVD	T	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4259		OCEANSIDE BLVD	101	Low	Commercial	Carlsbad	Loma Alta	904.1															
SPORTS CLIPS	4259		OCEANSIDE BLVD	102	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4259		OCEANSIDE BLVD	103	Low	Commercial	Carlsbad	Loma Alta	904.1															
ADORA SALON	4259		OCEANSIDE BLVD	108-10	Low	Commercial	Carlsbad	Loma Alta	904.1															
1ST AMERICA DRY CLEANERS	4259		OCEANSIDE BLVD	111	Low	Commercial	Carlsbad	Loma Alta	904.1															
WELNESS 4 LIFE	4263		OCEANSIDE BLVD	101	Low	Commercial	Carlsbad	Loma Alta	904.1										WELLNES CENTER			7299		
BUFF AND GLOW	4263		OCEANSIDE BLVD	102	Low	Commercial	Carlsbad	Loma Alta	904.1										NAIL SALON			7231		
VACANT	4263		OCEANSIDE BLVD	103	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4263		OCEANSIDE BLVD	104	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4263		OCEANSIDE BLVD	105	Low	Commercial	Carlsbad	Loma Alta	904.1															
POST NET	4263		OCEANSIDE BLVD	106	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4263		OCEANSIDE BLVD	107	Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	4263		OCEANSIDE BLVD	108	Low	Commercial	Carlsbad	Loma Alta	904.1															
DANCE UNLIMITED	4263		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1															
EXTRA SPACE STORAGE #645	4567		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										OTHER CONTRACTOR			1521		
LASAIR DESIGN	4747		OCEANSIDE BLVD	A20	Low	Commercial	Carlsbad	Loma Alta	904.1										ELECTRICAL ENGINEERING			8711		
JORDAN ENGINEERING LLC	4747		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1										Carpet/Furniture Cleaning			7217		
JOSEPH HAMPEL CONTRUCTION	4747		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1										GENERAL CONTRACTOR			1623		
STRAIGHT LINE GENERAL CONTRACTOR	4747		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1										GENERAL CONTRACTOR			1623		
CALIFORNIA VIDEO REPAIRS	4747		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1										VIDEO REPAIRS			7622		
JWI CONTRACTING	4747		OCEANSIDE BLVD	F	Low	Commercial	Carlsbad	Loma Alta	904.1										GENERAL CONTRACTOR			1623		
JAZI CRAFTS	4747		OCEANSIDE BLVD	G	Low	Commercial	Carlsbad	Loma Alta	904.1										AMUSEMENT & RECREATIONAL SERVI			7999		
TINA'S SEWING COMPANY	4747		OCEANSIDE BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1										CLOTHING ALTERATIONS			7219		
WHAMO INC	4747		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1										OTHER CONTRACTOR			1711		
BZ SURF BOARDS	4747		OCEANSIDE BLVD	K	Low	Commercial	Carlsbad	Loma Alta	904.1										SURF BOARD MFG			3949		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
PRECISION 4 SWISS MACHINING INC	4747		OCEANSIDE BLVD	L-M	Low	Commercial	Carlsbad	Loma Alta	904.1										MANUFACTURING, PLASTIC/RUBBER			3949		
PBM FREIGHT SOLUTIONS	4747		OCEANSIDE BLVD	N	Low	Commercial	Carlsbad	Loma Alta	904.1										TRUCKING BROKERS			4731		
MILLINNEUM FLOORING	4747		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										LANDSCAPING			8811		
STAIRS BY DESIGN INC	4747		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
GIANT A&M	4749		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
AUSMON FINACIAL INVESTMENTS	4749		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1										FINACIAL INVESTMENTS			6282		
ALLSTATE INSURANCE	4749		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1										AUTO INSURANCE			6331		
CORNERSTONE CHURCH	4749		OCEANSIDE BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1										RELIGIOUS SERVICES			8661		
OCEANSIDE FAMILY CHIROPRACTOR	4749		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										CHIROPRACTOR			8041		
TEMPLE HEIGHTS ANIMAL HOSPITAL	4750		OCEANSIDE BLVD	A1-3	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SILVER STAR SALON	4750		OCEANSIDE BLVD	A4	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4750		OCEANSIDE BLVD	A5	Low	Commercial	Carlsbad	Loma Alta	904.1										HAIR & NAIL SALON			7231		
VACANT	4750		OCEANSIDE BLVD	A6	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments			5812		
SILVER CLIPPER BARBERSHOP	4750		OCEANSIDE BLVD	A7	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
EDWARD JONES INVESTMENTS	4750		OCEANSIDE BLVD	A8	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
K - DONUTS	4750		OCEANSIDE BLVD	A9	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments			5812		
VACANT	4750		OCEANSIDE BLVD	A10	Low	Commercial	Carlsbad	Loma Alta	904.1															
VANESSA NAILS	4750		OCEANSIDE BLVD	A11	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4750		OCEANSIDE BLVD	A12	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4750		OCEANSIDE BLVD	A13	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4750		OCEANSIDE BLVD	A14	Low	Commercial	Carlsbad	Loma Alta	904.1															
TEMPLE HEIGHTS DENTISTRY	4750		OCEANSIDE BLVD	A15	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VACANT	4750		OCEANSIDE BLVD	A16	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
FARTHING CHIROPRACTIC	4750		OCEANSIDE BLVD	A17	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
TEMPLE HEIGHTS CLEANERS	4750		OCEANSIDE BLVD	A19	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SANDALZ	4751		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1										FOOT WEAR STORE			5139		
AUDIO VIDEO AUTHORITH	4751		OCEANSIDE BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1										VIDEO INSTALLATIONS			3651		
TECH EXPERT EXPRESS	4751		OCEANSIDE BLVD	I	Low	Commercial	Carlsbad	Loma Alta	904.1										TV & RADIO REPAIRS			7622		
TWO BROTHERS FROM ITALY OCEANSIDE	4760		OCEANSIDE BLVD	B1-2	Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments			5812		
USA TAE KWOK DO	4760		OCEANSIDE BLVD	B3	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
NASTY DOG SPA	4760		OCEANSIDE BLVD	B4	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MONTESSORI SCHOOL OF OCEANSIDE	4760		OCEANSIDE BLVD	B5-10	Low	Commercial	Carlsbad	Loma Alta	904.1															
ONE STOP CONVENIENCE STORE	4770		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1															
VACANT	1		OCEANSIDE PIER	B	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable		5812		
MISSION FEDERAL CREDIT UNION	125		OLD GROVE ROAD	1	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
FRESH O YOUGURT	125		OLD GROVE ROAD	4	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments			5812		
POSTAL ANNEX #4008	125		OLD GROVE ROAD	9	Low	Commercial	Oceanside	San Luis Rey	903.1										POSTAL SERVICES			#####		
H & R BLOCK	125		OLD GROVE ROAD	10	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
PRESTIGE NAILS	125		OLD GROVE ROAD	11	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
EXCELLENT DRYCLEANERS	125		OLD GROVE ROAD	13	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
KOKOMO'S TAN	125		OLD GROVE ROAD	14	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
OCEANSIDE FAMILY DENTISTRY	125		OLD GROVE ROAD	15	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
SUBWAY'S SANDWICHES	125		OLD GROVE ROAD	16	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments			5812		
LOWE'S HIW Inc.	155		OLD GROVE ROAD	B10	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
LOWE'S HIW INC #1588	155		OLD GROVE ROAD	F	Low	Commercial	Oceanside	San Luis Rey	903.1										HARDWARE STORE			5211		
SAN DIEGO NATIOANL BANK	165		OLD GROVE ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MY WIRELESS	175		OLD GROVE ROAD	1	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
STARBUCKS COFFEE #9349	175		OLD GROVE ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments			5812		
MONTESSORI ADOLESCENT ACADEMY	5570		OLD RANCH ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Church - Adolescent Educational Services			0		
LESLIE SKYLIGHTS	1601		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										SKYLIGHT INSTALLATION			1761		
FORD SIGNS INC	1605		ORD WAY	B10	Low	Commercial	Carlsbad	Loma Alta	904.1										MANUFACTURING, EQUIPMENT			3544		
SURF RIDE	1609		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										SURFBOARDS			3949		
BIG EVENTS	1613		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										GIANT INFLATEABLES			5999		
FOAMTEC INTENATIONAL	1621		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										PLASTICS DISTRIBUTOR			5162		
SCHLOSSADLER WINES	1625		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										WINE			5182		
CAMBELL CERTIFIED STEEL CONSTRUCTOR	1629		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										STEEL WORK STRUCTURAL			1791		
JAIME MENDEZ RESTORATION & CONSERVATION	1630		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													3429		
MICHAEL PATTI PAINTING	1632		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										PAINTING/COATING			1752		
TKR HOUSING & RELOCATION COMPANY	1638		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										HOUSING ASSISTANCE			7389		
FINANCIAL SERVICES	1640		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										FINACIAL ADVISE			6282		
ERNESTO'S DENTAL LAB	1642		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										Dental Laboratory			3843		
RANCHO DEL ORO VET HOSPITAL	1646		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										Veterinary Services			742		

Attachment 5-A Commercial Inventory
City of Oceanside FY 2010-11

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
RIP CURLS	1650		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										FAMILY HAIR SALON			7231		
EXPRESS EMPLOYMENT PROFFESSIONALS	1652		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										EMPLOYMENT LEASING			7363		
ARETOY FABRIC STORE	1656		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										FABRIC STORE			5949		
DO IT TENNIS SHOP	1658		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										TENNIS GOODS			5941		
LOS ANGELES LAKERS	1660		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										Pro Sports - Office			7389		
TWIN IMAGING TECHNOLOGY	1662		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										COMPUTER DATA PROCESSING			7374		
INTERNET HOBBY SHOP	1664		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										HOBBY TOYS			5945		
3V WHEEL DISTRIBUTION INC ?	1666		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										MANUFACTURING,ELECTRONICS			3679		
VERSA SPA	1668		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										POOL EQUIPMENT			5091		
WESTCOAST FTA	1670		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										ELECTRICAL SUPPLIES			5063		
OLIVA'S FLOORING, INC	1672		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										FLOOR LAYING			1752		
SAN DIEGO FUME WORKS COMPANY	1672		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										LANDSCAPING			8811		
UNIQUE FLOORING	1672		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										FLOORING RETAIL			5211		
INFOPLACE USA	1674		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										PUBLIC RELATIONS			8741		
TEACH LOGIC FOR SOUND LEARNIG	1688		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										TUTORING			8299		
PACIFIC BACKFLOW CO	1690		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										OTHER CONTRACTOR			1521		
MBC PROMOTIONS	1696		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										MANAGEMENT CONSULTANT			8742		
3V WHEEL DISTRIBUTION INC	1710		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										PANTING/COATING			8811		
PLAY GROUNDS WEST INC	1712		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										PLAY GROUND EQUIPMENT			3949		
OCEANEERING INTERNATIONAL INC.	1712		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										WAREHOUSING & STAGIN MATERIAL			7389		
NOVA BIOLOGICS	1714		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										MANAGEMENT CONSULTANT			8742		
RIDGE LANDSCAPING ARCHITECTS	1716		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										LANDSCAPING ARCHITECH			781		
HUME & CO TERMITE REPAIRS	1724		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										TERMITE DAMAGE REPAIRS			1541		
E N J WINDOWS & GLASS	1728		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										BUILDING MATERIALS			5032		
JS MANUFACTURING	1742		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										ENGINEERING SERVICES			8711		
MANUFACTURING SOLUTIONS	1742		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										CONSULTING			7389		
BUDGET BLINDS	1744		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										WINDOW SHADE SHOPS			5719		
BLU BANDO INC	1746		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
MEL COOKING SOLUTION CORP.	1746		ORD WAY	D	Low	Commercial	Carlsbad	Loma Alta	904.1										Direct Sales - Cookwares			5963		
THE TOTAL DOG	1750		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										ANIMAL SPECIALTIES			742		
ALL FLOOR INSTALL	1752		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										FLOOR COVERINGS			1752		
MAIN ST INTERIORS	1758		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										INTERIOR DESIGNS			7389		
OCEANSIDE ALE WORKS	1800		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										SMALL BEER MANNUFACTURER			2082		
PELICAN PACKAGING	1806		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										Packaging Semiconductors			7389		
STEICO INDUSTRIES	1814		ORD WAY		Low	Industrial	Carlsbad	Loma Alta	904.1		X	X				X			WELDING		1621210700	5084	NO	NO
MARCO POLO INC.	1816		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										General Auto Repair Shop			7538		
ONE SOURCE DISTRIBUTORS	1865		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										ELECTRICAL MANUFACTURERS			5063		
ACI DISTRIBUTION	1875		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										FLAT GLASS MANUFACTURERS			3211		
COMPUTER GEEKS	1890		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1										COMPUTER PARTS SALES			5734		
RICHARD CAHILL ENTERPRISES	999	N	PACIFIC STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Advertizing Commission Sales	Not applicable		7311		
EMPIRE CAPITAL INC.	1730	S	PACIFIC STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Marketing	Not applicable		7389		
TAP IMPORT AND DIDTRIBUTION	735		PARKER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Import and Distribution			5961		
J. ROGERS ENTERPRISE	1112		PARKVIEW DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										On line Sales			5961		
DIGITAL UNIVERSE	2316		PASEO DE LAURA	223	Low	Commercial	Carlsbad	Buena Vista	904.2										Media Production			7389		
SAN MIGUEL'S MEXICANA	2330		PASEO DE LAURA	105	Low	Commercial	Carlsbad	Buena Vista	904.2										E-Commerce			5961		
OCEANSIDE HARDWOOD FLOORING	2330		PASEO DE LAURA	229	Low	Commercial	Carlsbad	Buena Vista	904.2										Wood Flooring			1752		
MARIO COLLURA	1817		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										Contractor			1521		
COASTAL LAMINATE & CABINETRY	1818		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										OTHER CONTRACTOR			1521		
PROPERTY DAMAGE APPRAISERS	1818		PEACOCK BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1										REAL ESTATE APPRAISERS			6531		
BOBBIES HAIR SALON	1818		PEACOCK BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1										HAIRDRESSERS			7231		
JDM UNLIMITED	1818		PEACOCK BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1										AUTO SUPPLIES			5013		
RHODE FLUX, INC.	1818		PEACOCK BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1										PROCESS CONTROLS			3823		
PRYOR PRODUCTS	1819		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										MEDICAL DENTAL HOSPITAL SUPPLI			5047		
EAGLE GRINDING	1820		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										INDUSTRIAL MANUFACTUIRERS			3599		
THE OUTDOOR ADVERTISING SPECIALIST	1820		PEACOCK BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1										ADVERTISING SIGNS			7312		
TRYPLEX TECHNOLOGIES	1820		PEACOCK BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1										COMPUTER MAINTENANCE			7378		
PRECISION RESTORATION	1820		PEACOCK BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1										HOME RESTORATION			1521		
MR. EXTERMINATOR	1820		PEACOCK BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1										PEST CONTROL			7342		
DEW MFG, INC	1970		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										MOTER CYCLE PARTS			3751		
ACCUWELD INC	1980		PEACOCK BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1										WELDING FABRICATION					
DAVID SHAPOSHNICK, INC	1980		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										PLUMBING & MECHANICAL CONTRACT			1711		
INTEGRITY IMAGING SOLUTIONS	1980		PEACOCK BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1										REPAIR SHOPS			7699		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
OZONE GOLD	1980		PEACOCK BLVD	G	Low	Commercial	Carlsbad	Loma Alta	904.1										FASTPITCH TRAINING CENTER			7999		
SEASIDE COLOR	1980		PEACOCK BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1										COMMERCIAL PRINTERS			2759		
TITEFLEX CORPORATION	1995		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1										INDUSTRIAL MANUFACTUIRERS			3599		
ESL LAB INC.	3400		PIAZZA DE ORO	110	Low	Commercial	Carlsbad	Buena Vista	904.2										Education Consulting			7389		
PIERVIEW COFFEE CO	300		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1470880300	5812		
PIER VIEW PUB	301		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Drinking Places (Alcoholic Bev		1470891100	5813		
HONU KAI	302		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Property Management	Not applicable		5941		
BEACHCOMBER BARBERSHOP	309		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Barber Shops	Not applicable		7241		
MIDNIGHT ADULT BOOK	316		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Store	Not applicable		5999		
BUBBLE TEA	318		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1470880200	5812		
CREPES UP	318		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1470880200	5812		
GI JOES - MILITARY SUPPLIES	404		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Store	Not applicable		5999		
THE WHISKEY BARREL	406		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1470860600	5812		
CAMMIE BOB - MILITARY SUPPLIES	408		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail Store	Not applicable		5999		
1ST MARINE DIVISION ASSOCIATION	410		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Military Association	Not applicable		8641		
TEEHEE ENGINEERING INC	705		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Engineering Services	Not applicable		8711		
PIERVIEW PROPERTIES	705		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Sales	Not applicable		6531		
VSAT NETWORK COMMUNICATIONS	1232		PLAYERS DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										TV ANTENNA REPAIRS			1731		
COIN LAUNDRY	3504		PLAZA DRIVE	C	Low	Commercial	Carlsbad	Buena Vista	904.2										LAUNDROMATS			7215		
ATTAR BAZAR/IMC DIGITAL	3520		PLAZA DRIVE	101	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
STARBUCKS COFFEE #10314	3702		PLAZA DRIVE	A	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
VERIZON WIRELESS	3702		PLAZA DRIVE	B	Low	Commercial	Carlsbad	Buena Vista	904.2										TELEPHONE COMMUNICATIONS			4812		
MOTEL 6	3708		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										MOTEL			7011		
EYE SITE OPTOMETRIC	3809		PLAZA DRIVE	103	Low	Commercial	Carlsbad	Buena Vista	904.2										OPTICIANS			5995		
CUSIMANO'S PIZZERIA	3809		PLAZA DRIVE	106	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
SAN DIEGO FOOT REFLEXOLOGY	3809		PLAZA DRIVE	107	Low	Commercial	Carlsbad	Buena Vista	904.2										FOOT MASSAGE THERAPY			7299		
STATE FARM INSURANCE	3809		PLAZA DRIVE	108	Low	Commercial	Carlsbad	Buena Vista	904.2										INSURANCE SERVICES			6411		
UNIQUE SALON HAIR, NAIL & WAX	3809		PLAZA DRIVE	109	Low	Commercial	Carlsbad	Buena Vista	904.2										Beauty Shops			7231		
SUBMARINA	3809		PLAZA DRIVE	110	Low	Commercial	Carlsbad	Buena Vista	904.2										Fast Food Restaurant			5812		
PHYSICAL THERAPY	3809		PLAZA DRIVE	112	Low	Commercial	Carlsbad	Buena Vista	904.2										PHYSICAL THERAPISTS			8049		
DENTIST	3809		PLAZA DRIVE	114	Low	Commercial	Carlsbad	Buena Vista	904.2										DENTIST			8049		
RITE AID PHARMACY	3813		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										PHARMACY			5912		
TJ MAX	3817		PLAZA DRIVE	A	Low	Commercial	Carlsbad	Buena Vista	904.2										RETAIL			6512		
Z FASHION	3817		PLAZA DRIVE	B	Low	Commercial	Carlsbad	Buena Vista	904.2										RETAIL			6512		
FAIRLANE CLEANERS	3821		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										CLEANSERS			7212		
INSURANCE PLACE	3821		PLAZA DRIVE	402	Low	Commercial	Carlsbad	Buena Vista	904.2										AUTO INSURANCE			6411		
DOLLAR TREE	3825		PLAZA DRIVE	501	Low	Commercial	Carlsbad	Buena Vista	904.2										RETAIL			6512		
TOP THIS FROZEN YOGURT	3827		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
AMERICAN GENERAL FINACIAL SERVICES	3829		PLAZA DRIVE	603	Low	Commercial	Carlsbad	Buena Vista	904.2										FINACIAL SERVICES			6141		
TWO SPOONS COFFEE ROASTERS	3829		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										Coffee Shop		1680120700	5812		
PRO NAIL	3833		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										Beauty Shops			7231		
SO CAL DISCOUNT TIRE CO	3836		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										LANDSCAPING			8811		
THE TUTORING CENTER	3837		PLAZA DRIVE	803	Low	Commercial	Carlsbad	Buena Vista	904.2										CHILD GUIDANCE AGENCY			8299		
DENTIST	3837		PLAZA DRIVE	805	Low	Commercial	Carlsbad	Buena Vista	904.2										DENTIST			8049		
LESLIE'S SWIMMINGPOOL SUPPLIES #302	3837		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										LANDSCAPING			5999		
PERFORMANCE BICYCLE	3837		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										BICYCLES AND PARTS			5941		
CLASSIC FLOORS	3841		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										FLOOR COVERINGS			1752		
TREASURES # 4	3841		PLAZA DRIVE	901	Low	Commercial	Carlsbad	Buena Vista	904.2										Sales, Home Décor, Rocks, Fossils			5932		
GOODWILL	3841		PLAZA DRIVE	902	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
NONNIE'S CREATIONS	3550		PONDEROSA DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Handcrafted Goods	Not applicable		5961		
BYRNE SURFBOARDS	3204		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Sporting and A	Not applicable		3949		
FASHIONS "TWO"	3204		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Women Apparel	Not applicable		2339		
BAY CITY APPAREL	3205		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Men and Boys A	Not applicable		2329		
INTERNATIONAL SALES INC	3205		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Sporting and A	Not applicable		3949		
THE LAB SURF COMPANY INC	3205		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Sporting and A	Not applicable		3949		
SMSCG INC. DBA SB SURFBOARDS	3205		PRODUCTION AVENUE	H	Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Surfboards	Not applicable		3949		
ADVANCED FIBERGLASS	3215		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Fiberglass Pro	Not applicable		3239		
CUSTOM WINDOW DESIGN INC	3225		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Wood Doors and	Not applicable		3999		
WOODCRAFTERS INTERNATIONAL	3230		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Cabinets	Not applicable		2434		
NORTH COUNTY MILLING & MANUFACTURING	3230		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Garage Doors	Not applicable		3499		
MTM INDUSTRIAL	3230		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Machine Shop	Not applicable		3499		
AARK CONSTRUCTION	3245		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										General Contractor, Residentia	Not applicable		1521		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
TEQOPH SURFBOARDS	3245		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Sporting and A	Not applicable		3949		
WAVERLY TILE INC	3245		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Wholesale Sales - Tiles, Stone	Not applicable		5032		
3D FOAM INC.	3265		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Packing Foam	Not applicable		3086		
AAA N.COUNTY HANDYMAN SERVICE	159		RAMONA WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										HANDYMAN SERVICE			8811		
CORWIN LOGISTICS CORPORATION	242		RANCHO DEL ORO DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Relocation Services			7389		
LEARNING IS FUN	610	N	REDONDO DRIVE	A	Low	Commercial	Oceanside	San Luis Rey	903.1															
CARLO'S WATER	610	N	REDONDO DRIVE	B	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MARIE'S INTERNATIONAL BEAUTY SALON	610	N	REDONDO DRIVE	C	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MESA NUTRITION	610	N	REDONDO DRIVE	D	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
PIZZA HUT	610	N	REDONDO DRIVE	E	Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments			5812		
VACANT	610	N	REDONDO DRIVE	F	Low	Commercial	Oceanside	San Luis Rey	903.1															
1ST SAMOAN CONGREGATION CHUCH MESA MARGARITA	610	N	REDONDO DRIVE	G	Low	Commercial	Oceanside	San Luis Rey	903.1										Liquor store			0		
SUAREZ FASHION	610	N	REDONDO DRIVE	H	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
MIX DIX DISCOTECA	610	N	REDONDO DRIVE	I	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
NUEVA IGLESIA APOSTOLICA DE JESUCRISTO	610	N	REDONDO DRIVE	J	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
RISING STAR BAPTIST MISSIONARY CHHURCH	610	N	REDONDO DRIVE	K	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
PASE Y ADELGAZE	620	N	REDONDO DRIVE	A	Low	Commercial	Oceanside	San Luis Rey	903.1															
AZTEC/OCEANSIDE TRAFFIC SCHOOL	620	N	REDONDO DRIVE	B	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
GOOD STUFF ONLY	620	N	REDONDO DRIVE	C	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
COIN-UP WASH AND DRY	620	N	REDONDO DRIVE	D	Low	Commercial	Oceanside	San Luis Rey	903.1													7389		
BAKER BABES	293		REEFPOINT WAY	4	Low	Commercial	Oceanside	San Luis Rey	903.1										Bakes Goods			0		
SIGNY H. LIZALDE	4753		RISING GLEN DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										Housekeeping			7349		
WHELAN LAKE BIRD SANTUARY	3950	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Bird Santuary			971		
CVS PHARMACY	3925	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
FRESH PAC INTERNATIONAL	3925	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
BLUE BAYOU FILMS	4660	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Office work			7819		
SAN DIEGO COUNTY SERVICES	4665	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
EXTRA SPACE STORAGE #200	4700	N	RIVER ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
VISTA COMMUNITY CLINIC	4700	N	RIVER ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1													0		
J LEON CONSTRUCTION	4705	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
PACIFIC PARADISE NURSERY INC	4785	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
DM COLOR EXPRESS INC.	5708	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
STARSHIP WORLDWIDE LLC	1332		ROCKY POINT DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Furniture Distribution			5021		
GIRA CORP. dba SOLAR PLUS	1361		ROCKY POINT DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Solar Photovoltaic Sales/Service and Installa			1799		
NEZZY SURFBOARDS	158		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Sporting and A	Not applicable		3949		
BIG JAMES'S BARBERSHOP	164		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Barbershop	Not applicable		7241		
THE RAPTURE SALON	166		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
SILVA ACCOUNTING	168		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Services - Accounting	Not applicable		8721		
RISING STAR ACADEMY - CHILD CARE	169		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Services - Child Care	Not applicable		8351		
CERAMIC TILE SUPPLY INC	179		ROYMAR ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales - Tile and Stone	Not applicable		5211		
NEPTUNE INDUSTRIES - NEZZY SURFBOARDS	180		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Sporting and A	Not applicable		3949		
O'SHEAS DELIVERY SERVICES	180		ROYMAR ROAD	H	Low	Commercial	Oceanside	San Luis Rey	903.1										Transportation - Local Truckin	Not applicable		4214		
THE TOTAL PROS - AUTO DETAILING TRAINING CENTER	230		ROYMAR ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1										Services - Auto Detailing Scho	Not applicable		8289		
WEST COAST FIRE PROTECTION	230		ROYMAR ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1										General Contractor - Fire Spri	Not applicable		1799		
PAYLESS CUSTOM VEHICLE MAGNETS	230		ROYMAR ROAD	E	Low	Commercial	Oceanside	San Luis Rey	903.1										Custom Vehicle Magnets	Not applicable		3999		
REX LAMB SCREENPRINTING	230		ROYMAR ROAD	F	Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales - Silkscreening S	Not applicable		5999		
KLEENMASTER PRODUCTS CO	271		ROYMAR ROAD	F	Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Chemical Clean	Not applicable		2899		
CERTIFIED WELD & FAB	291		ROYMAR ROAD	D	Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Services -Weldin	Not applicable		7692		
FIBERGLASS SERVICES INC.	291		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Wholesale Distributor	Not applicable		5131		
ACADEMY MACHINE PRODUCTS, INC	3207		ROYMAR ROAD	A-B	Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Machine Shop	Not applicable		3444		
DYNAMIC INNOVATIONS	3207		ROYMAR ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturer, Machine Shop	Not applicable		7539		
ACE AVIATION SERVICES	3239		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Aircraft part	Not applicable		3728		
FIEDLER BUILDING CO	3239		ROYMAR ROAD	B	Low	Commercial	Oceanside	San Luis Rey	903.1										General Contractor, Residentia	Not applicable		1521		
ACTIVE SOLUTIONS CORPORATION	1235		SALERNO COURT		Low	Commercial	Carlsbad	Loma Alta	904.1										Computer Consulting			8748		
MAIL BOXES Y MAS	214		SAN DIEGO STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Tax Preparation	Not applicable		7291		
EL CYBERPAISA	218		SAN DIEGO STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Services - Fax,	Not applicable		7299		
LATINA'S BEAUTY SALON	218		SAN DIEGO STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
EL CHICLE	401		SAN DIEGO STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail	Not applicable		5947		
ESCUELA DE NUTRICION	402		SAN DIEGO STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Food Stores	Not applicable		5499		
RUBY'S RENTALS	407		SAN DIEGO STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Video Tape Rental	Not applicable		7841		
RUBY'S BEAUTY SALON	409		SAN DIEGO STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Beauty Shops	Not applicable		7231		
PRECISE LANDSCAPING AND MAINTENANCE	4401		SAN JOAQUIN STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Landscaping Services	Not applicable		7349		

Attachment 5-A Commercial Inventory
City of Oceanside FY 2010-11

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
OCEANSIDE PET HOTEL & TRAINING KENNEL	2909		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Retail - Pet Sho	Not applicable		5999		
SPEEDSKINS	2919		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Wholesale - Miscellaneous Non	Not applicable		5199		
ASIGMA	2930		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing - Sheet Metal	Not applicable		3444		
RIOPELLE DEVELOPMENT CO INC	2935		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										General Contractor	Not applicable		1521		
OCEANSIDE PUBLIC STORAGE	2936		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Transportation - General Wareh	Not applicable		4225		
MU, INC.	2941		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Manufacturing, Vacumn Tubes	Not applicable		3229		
ROYAL DIVE	2949		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1460505200	5812		
CERAMISTONE INTERNATIONAL INC.	2950		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Wholesale Tiles	Not applicable		5032		
AMERICAN AUTO GLASS	2951		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Automobile Glass Replacement S	Not applicable		7536		
BIO CLEAN ENVIROMENTAL SERVICES	2972		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Wholesale - Non Durable Produc	Not applicable		5199		
BEST MATTRESS & FURNITURE BUYS	3102		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Home Furniture Store	Not applicable		5712		
BIKER OUTLET STORE	3108		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Motorcycle Parts Retail	Not applicable		5571		
TRILAR MANAGEMENT	3118		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents and Manager	Not applicable		6531		
MAJ HOLDINGS L.P./ MAJ INVESTMENTS	3122		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										Management Investments Office	Not applicable		6722		
JET CONSTRUCTION INC	3124		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1										General Contractor - Office	Not applicable		1521		
AMY LYONS MC ART STUDIO	3792		SAN RAMON DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Art Commisions	Not applicable		7336		
COPLEY DESIGN COLLABORATIVE	3508		SEAGATE WAY	140	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SEAGATE COPRORATE CENTER	3508		SEAGATE WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
LUNSTRUM WINDOWS	3516		SEAGATE WAY	100	Low	Commercial	Carlsbad	Loma Alta	904.1										Window Sales and Installation			1521		
IN CALIFORNIA INC.	3516		SEAGATE WAY	120	Low	Commercial	Carlsbad	Loma Alta	904.1										Marketing and Design			7389		
GROTH ARCHITECTS INC	3520		SEAGATE WAY	100	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
THOMAS E. SHAUGNESSY CONSULTING	3528		SEAGATE WAY	110	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
PROMPTLINK COMMUNICATIONS	3532		SEAGATE WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													0		
VIEWTECH INC	3544		SEAGATE WAY	110	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
NETHERLAND & MOSCARI CPAS APC	3548		SEAGATE WAY	210	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
CMC FURNITURE	401		SEAGAZE DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Home Furniture Store	Not applicable		5712		
	405		SEAGAZE DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Beuty Shop	Not applicable		7231		
SHANGRI-LA TRAVEL	603		SEAGAZE DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Travel Agency	Not applicable		0		
GOING 4 BROKE TRUCKS	603		SEAGAZE DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Truck Driver - Moving Co.	Not applicable		7389		
PRETTY PAWS DOG WALKING CO.	3976		SHERBOURNE DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										Dog Walking Service			7389		
ALL SURF RESTORATION	3640		SKYHAVEN LANE		Low	Commercial	Carlsbad	Loma Alta	904.1										Restoration & Maintenance of Stainless Stee			6515		
STALLMAN INSURANCE AGENCY	4462		SUMNER DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Insurance Broker			6411		
GOLDEN STATE MOTEL MANAGEMENT	210		SURFRIDER DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1										Motel	Not applicable		0		
LIVING PEOPLE	4891		SURREALIST COURT		Low	Commercial	Oceanside	San Luis Rey	903.1										Retail Sales - Handmade Jewelry	Not applicable		5961		
PACIFIC PROPERTIES	1002		TAIT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Apartment complex			6515		
PIER-LESS APARTMENTS	1032		TAIT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Apartment Complex	Not applicable		6515		
RYAN COOK SURF ACADEMY	1128		TAIT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Surf Instruction	Not applicable		7299		
MOZO'S PAINTING	320		TALON RIDGE WAY		Low	Commercial	Oceanside	San Luis Rey	903.1										Painting Services	Not applicable		7349		
MADRIGAL'S CUSTOM UPHOLSTERY	2600		TEMPLE HEIGHTS DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										MANUFACTURING			2099		
OILCLOTH ALLEY	2600		TEMPLE HEIGHTS DRIVE	B	Low	Commercial	Carlsbad	Loma Alta	904.1										Sewing			5949		
SIGNS@ONCE	2605		TEMPLE HEIGHTS DRIVE	B	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SAITECH SCHOOL FOR TECHNOLOGIES	2611		TEMPLE HEIGHTS DRIVE	A-D	Low	Commercial	Carlsbad	Loma Alta	904.1										VOCATIONAL SCHOOL			8249		
VERSA MEDICAL	2611		TEMPLE HEIGHTS DRIVE	E	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
DS WATERS OF AMERICA, LP ?	2612		TEMPLE HEIGHTS DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										MANUFACTURING , FABRICATED MET			3444		
DOWNFORCE ENGINEERING	2613		TEMPLE HEIGHTS DRIVE	A-D	Low	Commercial	Carlsbad	Loma Alta	904.1													0		
SAITECH SCHOOL FOR TECHNOLOGIES	2613		TEMPLE HEIGHTS DRIVE	F-G	Low	Commercial	Carlsbad	Loma Alta	904.1										VOCATIONAL SCHOOL			8249		
DLE CUSTOM FABRICATION & CONVERTING	2613		TEMPLE HEIGHTS DRIVE	B	Low	Industrial	Carlsbad	Loma Alta	904.1		X	X				X			Manufacutring, Miscellaneous	Not applicable	1614703000	3672	NO	NO
WEST COAST PLATING	2613		TEMPLE HEIGHTS DRIVE	C-D	Low	Industrial	Carlsbad	Loma Alta	904.1		X	X				X			Manufacturing, Equipment	Not applicable	1614703000	3599	NO	NO
DS WATERS OF AMERICA, LP ?	2620		TEMPLE HEIGHTS DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										MANUFACTURING, ELECTRONICS			3845		
SUPERIOR SOURCING	2625		TEMPLE HEIGHTS DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										NON-DURABLE GOODS			5199		
FARMER TERMITE CONTROL	4052		THOMAS STREET		Low	Commercial	Carlsbad	Buena Vista	904.2										Termite Control			7342		
1 WAY PROPERTY SERVICES	4142		THOMAS STREET		Low	Commercial	Carlsbad	Buena Vista	904.2										Property Management			6531		
ESTATE SALE & CLEAN UP	4232		THOMAS STREET		Low	Commercial	Carlsbad	Buena Vista	904.2										Janitorial Service			5999		
BAKED LOVEN	4079		THOMAS STREET		Low	Commercial	Carlsbad	Buena Vista	904.2										OFFICE WORK			7389		
COIN LAUNDRY	2810		THUNDER DRIVE	B	Low	Commercial	Carlsbad	Buena Vista	904.2										LAUNDROMATS			7215		
CHILD DEVELOPMENT CENTER	2860		THUNDER DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										TUTORING			8299		
8-BIT CUBIST	4101		TIBERON DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										Art Web Sales			7389		
HUMANI TEA SPEAKS LLC	1366		TOULON STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										Inspirational Speaking	Not applicable		7389		
NORTH STAR AGENCY	207	N	TREMONT STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents and Manager	Not applicable		6531		
HAUNTED HEAD SALOON	207	N	TREMONT STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Eating/Drinking Establishments	Not applicable	1470890200	5812		
M & H BARBERSHOP	211	N	TREMONT STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Barbershop	Not applicable		7241		
DOROTHY'S MILITARY SHOP AND LAUNDRY	213	N	TREMONT STREET		Low	Commercial	Oceanside	San Luis Rey	903.1										Laundry, Dry Cleaners and Garm	Not applicable		7212		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
BARBERSHOP	313	N	TREMONT STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Barbershop	Not applicable		7241		
ROMANTIX	315	N	TREMONT STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Personal Service	Not applicable		7299		
BEST BUSINESS MANAGEMENTS SERVICES	423	S	TREMONT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Business Service	Not applicable		7389		
SURF CO.	520	S	TREMONT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Sporting and A	Not applicable		3949		
BOARDWORKS	615	S	TREMONT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Sporting and A	Not applicable		3949		
TEAK FURNITURE	821	S	TREMONT STREET	A-D	Low	Commercial	Carlsbad	Loma Alta	904.1											Furniture Store, Household Ret	Not applicable		5712		
WERBY LLC	901	S	TREMONT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Recording Studio	Not applicable		7389		
MIKE CROES CONSULTING	1036	S	TREMONT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Consulting	Not applicable		8811		
T.E.S. TILE	1922	S	TREMONT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Tile Contractor			1743		
INTER AUTO CAR DEALER	107		VALERA WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Wholesale Car Dealership	Not applicable		5521		
GOOGLE SEO RANK	3231		VALLEY GLENN		Low	Commercial	Carlsbad	Buena Vista	904.2											Internet Marketing	Not applicable		7389		
FOREX/ASIANSIDE VARIETY STORE	465		VANDEGRIFT BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
D&M HOLDINGS INC	487		VANDEGRIFT BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
DIAMOND NAILS	511		VANDEGRIFT BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
POPEYE CHICKEN AND BISCUITS	511		VANDEGRIFT BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
SEMPER FI FLORIST	521		VANDEGRIFT BLVD	A	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
VACANT	521		VANDEGRIFT BLVD	C	Low	Commercial	Oceanside	San Luis Rey	903.1																
VACANT	521		VANDEGRIFT BLVD	D	Low	Commercial	Oceanside	San Luis Rey	903.1																
MICK AND DICK'S BARBERSHOP	521		VANDEGRIFT BLVD	E	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
STAR DRY CLEANERS	521		VANDEGRIFT BLVD	F	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
B&T FLOWERS	245		VENETIA WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											Flower Merchandising			7389		
AMRITA FINANCIAL INC.	3626		VIA ALICIA		Low	Commercial	Carlsbad	Buena Vista	904.2											Insurance Brokerage Software	Not applicable		7389		
JENNIFER FOSTER	3629		VIA BERNARDO		Low	Commercial	Carlsbad	Buena Vista	904.2											Floral Design	Not applicable		5992		
OHANA FLEET MAINTENANCE	3783		VIA CABRILLO		Low	Commercial	Carlsbad	Buena Vista	904.2											MOBILE AUTO MECHANIC	Not applicable		7538		
STAMPED CONCRETE	3310		VIA DE LA VALLE		Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, Concrete	Not applicable		1771		
H&M CREATIVE DESIGNS INC	3310		VIA DE LA VALLE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing - Sporting and A	Not applicable		3949		
THE SECRET PLACE	3310		VIA DE LA VALLE	B	Low	Commercial	Oceanside	San Luis Rey	903.1											Retail Sales - Furniture	Not applicable		5712		
OCEANSIDE SURF INDUSTRIES	3310		VIA DE LA VALLE	C	Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Surfboards	Not applicable		3949		
FM DIAZ CONSTRUCTION INC.	222		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, General	Not applicable		1541		
STEPHEN S HALVERSON INC	235		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Architectural Fo	Not applicable		3999		
J & W APPLIANCE SERVICE	250		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Repairs - Applia	Not applicable		7699		
KKL	265		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Surfboards	Not applicable		3949		
HARVEST TIME PRODUCE	303		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Fresh Fruits and Vegetables	Not applicable		5148		
OCEAN BREEZE	350		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Wood Crates	Not applicable		2449		
NITTO DENKO TECHNICAL CORP	501		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing, Plastics/Filter	Not applicable		3999		
HYDRANAUTICS	501		VIA DEL MONTE		Low	Industrial	Oceanside	San Luis Rey	903.1											Manufacturer - Filters	9 37C332746	1450602500	3089		
NITTO DENKO TECHNICAL CORP	502		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Business Services, Administrat	Not applicable		7389		
BARR DESIGNS SURFBOARDS	254		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Shaping Polyester Foam Surfboards	Not applicable		3949		
TEK STEEL WELDING & FABRICATION	302		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Pipe and Pipe Fi	Not applicable		3498		
FERGUSSON WATERWOARKS	304		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Building Material Supplies	Not applicable		5211		
WILEY CONSTRUCTION CO INC	310		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, General	Not applicable		1542		
A & G INDUSTRIES, INC	316		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Sheet Metal work	Not applicable		3444		
CANDLES	326		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Manufacturer, Wa	Not applicable		3999		
BEN RECYCLING & SCRAP METAL	395		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Scrape and Waste Materials	Not applicable		5093		
SOUTHWEST SPAS	417		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Rubber and Misce	Not applicable		3088		
WALTER'S DING REPAIR	456		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Surfboards	Not applicable		3949		
STORAGE WEST	201		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1											Transportation - General Wareh	Not applicable		4225		
BUYRIGHT	208		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing, Window Covering	Not applicable		2391		
SAN DIEGO BATTERY - OCEANSIDE	216		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1											Automotive Parts Supply Store	Not applicable		5531		
MOBILE TRENDS	229		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1											Used Automotive Engines and Tr	Not applicable	1460501900	5531		
STAMPED CONCRETE	303		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, Concrete	Not applicable		1771		
PALAPA KINGS INC	305		VIA EL CENTRO	110	Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Shade Structures	Not applicable		3999		
PACIFIC CANVAS	311		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Canvas Awnings	Not applicable		2394		
OCEANSIDE MACHINE AND TOOL, INC	360		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Sheet Metal work	Not applicable		3444		
ERWIN COLLISION INVESTIGATION	3742		VIA LAS VILLAS		Low	Commercial	Carlsbad	Buena Vista	904.2											Automotive Collision Investigative Services			7381		
HILTON CLEANERS	2983		VIA LAS ROSAS	A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
EL CAMINO COIN LAUNDRY	2983		VIA LAS ROSAS	B	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
7 - ELEVEN # 18159 B	2985		VIA LAS ROSAS		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
JOSHUA ANDREWS	5107		VIA MALAGUENA		Low	Commercial	Oceanside	San Luis Rey	903.1											Garage Door Repair and Installation	Not applicable		7349		
THE GREENS AT ARROWWOOD	5128		VILLAGE DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Sales, Office	Not applicable		0		
EARTHLINK INTERNET SERVICE	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1											Business Services - Prepackage			7372		
DISH NETWORK	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1											Communications - Satellite TV			4841		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
RESIDENTIAL WATERPRROFING CONTRACTORS	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Construction Special Trade - W			1799		
ON THE ROAD INSURANCE	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Insurance Agents, Brokers and			6411		
JBL ASSOCIATES	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Services			8999		
D ADDIGNTON	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Services			8999		
JOANN DELLAPOSTA	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Services			8999		
HOSPITALITY SERVICES	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Services - Telem			8999		
INTERNATIONAL HOTEL MARKETING CORPORATION	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Services - Telem			8999		
SIEGEL BROTHERS THEATERS	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Motion Pictures -Services Alli			7819		
OCEANA FASHION	531		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Apparel and Accessory Store -			5632		
RED HAT SOCIETY	531		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Apparel and Accessory Store -			5632		
ROBERT YADROW - NOTARY PUBLIC	531		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Miscellaneous Services - Notar			8999		
OCEANA RESALES & RENTALS	531		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents and Manager			6531		
SOUTHERN CALIFORNIA CORPORATE REAL ESTATE	531		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents and Manager			6531		
OCEANA CHIROPRATIC - JOSEPH LEEDY MDC	535		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Offices and Clinics of Chiropr			8041		
OCEANA PET STOP	537		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Pet Shops, Retail			5999		
COASTLINE BAPTIST CHURCH AUDITORIUM	547		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Membership Organizations - Rel			8661		
COASTLINE BAPTIST CHURCH OFFICES	557		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Membership Organizations - Rel			8661		
FIREMOUNTAIN FINANCIAL	573		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1										Real Estate Agents and Manager			6531		
ERIC PAGE PLUMBING	3808	S	VISTA CAMPANA		Low	Commercial	Oceanside	San Luis Rey	903.1															
RK EXCEL AMERICA INC	2645		VISTA PACIFIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										MANUFACTURING, MISC	Not applicable		3999		
SOUTHWEST GREENE INT	2655		VISTA PACIFIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										WHOLESALE/STORAGE/WAREHOUSING	Not applicable		4225		
DURACORP LLC	2660		VISTA PACIFIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											Not applicable		0		
SCHUR' MARKETING & TECHNOLOGIES INC.	2664		VISTA PACIFIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										PLUMBING & MECHANICAL CONTRACT	Not applicable		1711		
VESSELL PROPERTIES	402		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													7349		
STEARNS BUSINESS MACHINES	507		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
GAME ADX	509		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DAGO'S HAIRCUT	511		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DON'T TREAD ON ME	513		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
HAMBLEYS UPHOLTERY	513		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DOJO AMERICANA	515		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
HAMBLY'S UPHOLSTERY	515		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PALOMAR MEDICAL SUPPLIES	602		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CHRISTOPHER H CLAYTON D.D.S.	603		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ART ADVENTURES	605		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SPLIT ENDS HAIR STUDIO	607		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
OCEANSIDE ACUPUNTURE	608		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
EQUITY SAVERS GROUP INC.	609		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
THE DESIGN STYLIST	710		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										Hair Stylist			7389		
MINA INTERNATIONAL ENTERPROSES	814		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PEGASUS PRODUCTIONS	904		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CHELSEA LOPEZ PHOTOGRAPHY	917		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
QUICK HOME SOLUTIONS	917		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PURE PLAY	1122		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
WEST COAST RENOVATIONS	1202		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SHARON NEWBERY'S CREATIVE ESPRESSIONS	1212		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
NEWBERY CONSTRUCTION	1212		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										GENERAL CONTRACTOR'S OFFICE			1521		
CHOPPER'S PARTS TO GO	1213		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ASCENSION HOME THEATER DESIGNS	1224		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										Audio Video Designs			5961		
AMAZON BIKES	1227		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
WAL-MART # 2494	2100		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
BESTBUY	2110		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
BED BATH AND BEYOND	2120		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PARTY CITY OF OCEANSIDE #437	2130		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
KAMAY BEAUTY CENTER AND SALON	2134		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
COST PLUS WORLD MARKET	2140		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
STAPLES THE OFFICE SUPERSTORE	2150		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SPORT'S AUTHORITY	2160		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CORBEL INC	2171		VISTA WAY	201A	Low	Commercial	Carlsbad	Buena Vista	904.2										Tutor Training			7299		
HAPINESS NAILS	2174		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
GOLD MAX	2178		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													5932		
MODA BEAUTY SHOP	2178		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
YES CLEANERS	2178		VISTA WAY	E3	Low	Commercial	Carlsbad	Buena Vista	904.2													0		

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										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
BLUE ECHO	2180		VISTA WAY	E4	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
APPLE ONE EMPLOYMENT SERVICES	2183		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SUBMARINA #24	2183		VISTA WAY	B1	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
STARBUCKS COFFEE # 5432	2183		VISTA WAY	B2	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
EINSTEIN BROS BAGELS #3047	2183		VISTA WAY	B10	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
A & D ORIENTAL RUGS	2305		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
VACANT	2335		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
BRINDUSA SES	2401		VISTA WAY	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CHANTELLE DAY SPA	2401		VISTA WAY	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
E & C JEWELWERS	2401		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
JOY NAIL AND SPA	2401		VISTA WAY	C	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
S. LASKEN & SONS INC.	2401		VISTA WAY	C2	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CALIFORNIA YOGURT CO #4	2401		VISTA WAY	E1	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
PATTI'S HALLMARK	2401		VISTA WAY	H	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
BOOT BARN INC	2405		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
OCEANVIEW FAMILY DENTISTRY	2420		VISTA WAY	100	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
VISTA OPTICS INC	2420		VISTA WAY	101	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PACIFIC SLEEP MEDICINE	2420		VISTA WAY	115	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CHING C TI MD	2420		VISTA WAY	120	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PEAK TECHNICAL SERVICES	2420		VISTA WAY	215	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
OCEANSIDE PLAZA INVESTORS	2420		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
REMEDY HEARING AIDS	2420		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
LNW INSURANCE ADMINISTRATION INC.	2424		VISTA WAY	101	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
FISCHER & VAN THIEL LLP	2424		VISTA WAY	104	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
JAMIESON COMPANY	2424		VISTA WAY	201	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
D LINK LADUTKO ESQ.	2424		VISTA WAY	202	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
MANGINI & STEWART OC	2424		VISTA WAY	202	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
HENSEL FINANCIAL	2424		VISTA WAY	202	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DESANTI AND ASSOCIATES	2424		VISTA WAY	203	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
HORACE MANN	2424		VISTA WAY	210	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
I LEVEL BY WEYERHAUSER	2424		VISTA WAY	315	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SWI MANAGEMENT CO. INC.	2424		VISTA WAY	317	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TOYS "R' US	2425		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ANNA'S LINEN	2435		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
FED EX KINKO'S #2694	2444		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
COASTAL COSIGNMENT HOME FURNISHINGS	2445		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													5932		
PETCO ANIMAL SUPPLIES	2445		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ONCE UPON A CHILD	2455		VISTA WAY	K	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PS PLUS SIZES PLUS SAVINGS	2455		VISTA WAY	M	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CHUCK E CHEESE'S	2481		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
SOUTH OCEANSIDE DENTAL	2484		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SEW PRO'S SEW & VACUMN	2484		VISTA WAY	C	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
BEVERAGES & MORE	2500		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
FAMOUS FOOTWEAR	2505		VISTA WAY	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
STEINMART INC.	2505		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ROSS DERSS FOR LESS	2505		VISTA WAY	C	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
MATTRESS DISCOUNTERS	2515		VISTA WAY	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
FRAME DESIGNS & GALLERY	2515		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SAVON FLOORS	2521		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
HAIRCUTTERS	2525		VISTA WAY	E	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
FIRE MOUNTAIN CLEANERS	2530		VISTA WAY	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
VANITY BEAUTY BOUTIQUE	2530		VISTA WAY	C	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
VENUS NAILS	2530		VISTA WAY	E	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PLUS MAIL BOXES	2530		VISTA WAY	F	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
FIRE MOUNTAIN SPINE & REHABILATION CENTER	2530		VISTA WAY	H	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
A T & T MOBILITY	2530		VISTA WAY	N	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TREASURE HOUSE AND GIFTS	2530		VISTA WAY	R	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SUBWAY	2535		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
AARON BROTHERS' INC. #93	2550		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PIER 1 IMPORTS #436	2555		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
THE MEN'S WAREHOUSE	2555		VISTA WAY	C	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CONFORT ZONE FUTONS & FURNITURE	2570		VISTA WAY	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		

Attachment 5-A Commercial Inventory
City of Oceanside FY 2010-11

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
CT RETAIL PROPERTIES FINANCE III LLC	2570		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
LAMP PLUS INC	2598		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
JAMBA JUICE	2619		VISTA WAY	A	Low	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X	Eating/Drinking Establishments	Not applicable	1651213600	5812		
QUIZNOS' SUBS	2611		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2										Fast Food Restaurant			5812		
BARNES AND NOBLE BOOKSELLERS INC.	2615		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
PK 11 EL CAMINO NORTH L.P. - Leasing Office	2615		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
STARBUCKS INSIDE BARNES AND NOBLES	2615		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2															
THE VITAMIN SHOPPE	2641		VISTA WAY	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
WORLD OF JEANS AND TOPS	2641		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ULTA SALON COSMETICS & FRAGRANCE	2645		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
MICHAEL'S ARTS AND CRAFTS	2649		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
LENSCRAFTERS	2665		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ALFRED ANGELO	2665		VISTA WAY	C	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
JAZZERCISE INC	2677		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
WELL'S FARGO INVESTMENTS	2701		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
FRAME DESIGNS & GALLERY	2717		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ERICH SCHIMIDT DDS	2741		VISTA WAY	101	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
THRIVE PHYSICAL MEDICINE	2741		VISTA WAY	103	Low	Commercial	Carlsbad	Buena Vista	904.2										Physical Therapy			8049		
VISION WORKS OPTOMETRICS	2741		VISTA WAY	105	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
THRIVE PHYSICAL MEDICINE	2741		VISTA WAY	111	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
AVA INTEGRATIVE MEDICINE	2741		VISTA WAY	201	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
BRADLEY CPA INC.	2741		VISTA WAY	209	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
WESTERN DENTAL SERVICES	3125		VISTA WAY	113-202	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
QUALITY MEDICAL CARE CENTER	3142		VISTA WAY	100	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TERESA LAMBERT SMITH DDS APDC	3142		VISTA WAY	203	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CHILDREN'S HOSPITAL & HEALTH CENTER	3142		VISTA WAY	207	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
BUCCOLA ENGINEERING	3142		VISTA WAY	301	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
KIDS DENTAL WELLNESS	3142		VISTA WAY	305	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SCRIPPS COASTAL MEDICAL CENTER	3142		VISTA WAY	400	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
GREENE PROPERTIES	3142		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
NORTH COAST UROLOGY MEDICAL ASSOCIATES	3156		VISTA WAY	100	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
NANCY S. WALLS	3156		VISTA WAY	160	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DAVID MILLER	3156		VISTA WAY	200	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
LAW OFFICES OF ERIC D. MORTON APC	3156		VISTA WAY	200	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
NORTON A. GRIMES LLP	3156		VISTA WAY	200	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
ISLAND STAFFING	3156		VISTA WAY	203	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SUKUT CONSTRUCTION, INC	3156		VISTA WAY	205	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
CRITICAL CARE SPECIAL BILLING ASSOCIATION	3156		VISTA WAY	405	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
TRICITY EMERGENCY MEDICAL GROUP	3156		VISTA WAY	410	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
HOLIDAY INN EXPRESS	3170		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DEI, LLC	3186		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
HOOT WINC LLC	3186		VISTA WAY	200	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PROVIDER'S FINANCIAL	3186		VISTA WAY	300	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
EXTENDED STAY AMERICA	3190		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
EL CAMINO COUNTRY CLUB	3202		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
AMY T MATAYOSHI MD	3300		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
KILYA PROPERTIES	3300		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
RICHARD BARAGER MD	3300		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
JAMES A. RAMENOFSKY	3300		VISTA WAY	D	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
AUTOMOBILE CLUB OF SOUTHERN CALIFORNIA	3330		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
PACIFIC BREEZE APTS II	3522		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
OTCP LLC	3601		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
NORTH COAST UROLOGY MEDICAL ASSOCIATES	3609		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
OPTIMAS FAMILY MEDICINE	3609		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										Medical Office			8011		
DERMATOLOGY MEDICAL GROUP OF N. COUNTY	3613		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
N. COUNTY ONCOLGY MEDICAL CLINIC	3617		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
GM SALLY MELLGREN MD INC.	3621		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SAN DIEGO VITRORETINAL ASSOCIATES	3629		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2													0		
DERMATOLOGY SPECIALISTS INC.	3633		VISTA WAY	101	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
IAN PARCELL MD PHD	3633		VISTA WAY	102	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
HOME DEPOT	3838		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										HARDWARE STORE			5251		
MR. KEYMAN	3910		VISTA WAY	102	Low	Commercial	Carlsbad	Buena Vista	904.2											Not applicable		0		

Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances						
VACANT	3910		VISTA WAY	103	Low	Commercial	Carlsbad	Buena Vista	904.2															
US HEALTHWORKS MEDICAL GROUP PC	3910		VISTA WAY	104-6	Low	Commercial	Carlsbad	Buena Vista	904.2										MEDICAL OFFICE	Not applicable		8049		
PIKE INSURANCE	3910		VISTA WAY	107	Low	Commercial	Carlsbad	Buena Vista	904.2										INSURANCE SERVICES			6411		
I LOVE BAGELS	3910		VISTA WAY	108	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
NORTHCOAST DENTAL GROUP	3910		VISTA WAY	111	Low	Commercial	Carlsbad	Buena Vista	904.2										DENTIST			8011		
FONTANA MEDICAL GROUP	3910		VISTA WAY	111	Low	Commercial	Carlsbad	Buena Vista	904.2										Medical Office			8011		
VACANT	3910		VISTA WAY	112	Low	Commercial	Carlsbad	Buena Vista	904.2															
VACANT	3910		VISTA WAY	113	Low	Commercial	Carlsbad	Buena Vista	904.2															
VACANT	3910		VISTA WAY	114	Low	Commercial	Carlsbad	Buena Vista	904.2															
1 STOP UNIFORM SHOP	3910		VISTA WAY	115	Low	Commercial	Carlsbad	Buena Vista	904.2										UNIFORM SUPPLY			7213		
PREFAB GRANITE DEPOT	3910		VISTA WAY	116	Low	Commercial	Carlsbad	Buena Vista	904.2										GRANITE MFG			3281		
COASTAL ORTHORPEDICS SPORTS MED.	3998		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										MEDICAL OFFICE			8011		
EXCELL RESEARCH INC	3998		VISTA WAY	100	Low	Commercial	Carlsbad	Buena Vista	904.2															
LATTE BY THE SEA	4002		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
GAME STOP # 1627	2535		VISTA WAY	C	Low	Commercial	Carlsbad	Buena Vista	904.2										Eating/Drinking Establishments			5812		
SLEEP TRAIN MATTRESS CENTERS	2665		VISTA WAY	A	Low	Commercial	Carlsbad	Buena Vista	904.2													0		
SOAP MAT LLC	3230		WARING COURT		Low	Commercial	Carlsbad	Loma Alta	904.1										MEDICAL CLINIC	Not applicable		8011		
NORTH COUNTY CLINICAL RESEARCH INC.	3230		WARING COURT		Low	Commercial	Carlsbad	Loma Alta	904.1										MEDICAL CLINIC	Not applicable		8093		
TERESA ENVERGA	4709		WESTRIDGE DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1										Caregiving Services	Not applicable		8093		
CANEZ DESIGN	1114		WEST STREET		Low	Commercial	Carlsbad	Loma Alta	904.1										GRAPHIC DESIGN	Not applicable		7299		
Natural Stone Waterfalls	190		WILSHIRE ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
FANCY PLANTS	190		WILSHIRE ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													0		
CALIFORNIA SCREENS	201		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Repair Services	Not applicable		7699		
WISCONSIN COIN LAUNDRY	203		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Coin Operated Laundry and Dry	Not applicable		7215		
SEASIDE PROPERTIES	206		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Real Estate Agents and Manager	Not applicable		6531		
SEASIDE COFFEE EXPRESS	206		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Eating/Drinking Establishments	Not applicable	1502631700	5812		
T-SHIRT FACTORY	214		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Apparel	Not applicable		5699		
KM FRAMES/SCREENS	218		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Repair Services	Not applicable		7699		
ELECTRIC AND FOLDING BIKES	220		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Motorcycle Sales - Electric an	Not applicable		5571		
ROOM 222 - ART MUSIC GIFTS	222		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Art Gallery	Not applicable		8412		
THE YOGA BODY	222		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Ammusement & Recreation Servic	Not applicable		7999		
BEACHSIDE REALTY	222		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Real Estate Sales, Property Management	Not applicable		6531		
MARINETIME INDUSTRIAL - MARINE ENGINE PARTS	306		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Boat Parts	Not applicable		3732		
HOT SPOT INSURANCE	314		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Insurance Agents	Not applicable		6411		
DONALDSON PLUMBING	315		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Contractor - Plumbing	Not applicable		1711		
OCEANFRONT ENGINEERING	402		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1										Engineering Services	Not applicable		8711		
RESURRECTION RECOVERY THRIFT	403		WISCONSIN AVENUE	A	Low	Commercial	Carlsbad	Loma Alta	904.1										Used Merchandise store	Not applicable		5932		
SOUTH OCEANSIDE BIKE	403		WISCONSIN AVENUE	B	Low	Commercial	Carlsbad	Loma Alta	904.1										Retail Sales, Bicycles	Not applicable		5941		
SOUND ODYSSEY	403		WISCONSIN AVENUE	C	Low	Commercial	Carlsbad	Loma Alta	904.1										Miscellaneous Retail Store - C	Not applicable		5999		
S. S. CLOTHING	403		WISCONSIN AVENUE	C2	Low	Commercial	Carlsbad	Loma Alta	904.1										Family's Clothing Store	Not applicable		5651		
PEAK2PIER	403		WISCONSIN AVENUE	E	Low	Commercial	Carlsbad	Loma Alta	904.1										Surf Shop	Not applicable		5941		
PIEPER PLUMBING	1258		WOODHAVEN DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2										Plumbing Conrtactor	Not applicable		1711		
RACE TECH ELECTRIC	1418		WOODHAVEN DRIVE		Low	Commercial	San Luis Rey	San Luis Rey	903.1										Distributor			5961		

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Attachment 5-B

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Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Trib to 303d	Within 200ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substances							
PURE TURBOS	333		AIRPORT ROAD		High	Industrial	Oceanside	San Luis Rey	903.1			X	X		X		X			General Auto Repair Shop	Not applicable	1602711600	7538	NO	NO
PHIL GALLANT TRUCK SALVAGE	1020		AIRPORT ROAD		High	Industrial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Parts Dealer Used	9 371013145	1450204100	5015	NO	NO
ECOLOGY SCRAP YARD	1030		AIRPORT ROAD		High	Industrial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Parts Dealer Used	9 371013177	1450203300	5015	NO	NO
A-1 AUTO DISMANTLING LLC	1045		AIRPORT ROAD		High	Industrial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Parts Dealer Used	9 371013219	1450302900	5015	NO	NO
HANSON AGGREGATES	1050		AIRPORT ROAD		High	Industrial	Oceanside	San Luis Rey	903.1											Manufacturing, Concrete	9 000 001 3	1450203300	3273	NO	NO
CALIFORNIA CREATIVE FOODS INC	649		BENET ROAD		High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing, Salsa Canning	Not applicable	1450304700	2032	YES	NO
PRECISION LABEL INC	659		BENET ROAD		High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing, Labeling Services	Not applicable	1450304800	2759	YES	NO
MOUNTAIN WATER ICE CO	2843		BENET ROAD		High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing, Ice	9 000000436	1460903000	2097	YES	NO
SAN DIEGO AUTO AUCTION INC	4691		CALLE JOVEN		High	Industrial	Oceanside	San Luis Rey	903.1			X	X			X	X			Auto Auction	Not applicable	1570604500	5012	NO	NO
DEUTSCH CO ELECTRONICS	250		EDDIE JONES WAY		High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing, Electric Components	9 000000519	1450212900	3679	YES	NO
ELITE METAL FINSIHING	2550		JASON COURT		High	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X				Manufacturing, Metal Finishing	Not applicable	1616602100	3471	YES	NO
AMERILLUM	3728		MARITIME WAY		High	Industrial	Carlsbad	Loma Alta	904.1											Manufacutring of Lighting Fixtures	Not applicable	1605722900	3648	NO	NO
OCEANSIDE SCHOOL DISTRICT FLEET MANAGEMENT	2070		MISSION AVENUE		High	Industrial	Oceanside	San Luis Rey	903.1											Oceanside School District - Fleet	9 371005696	1451500800	7538	NO	NO
N. COUNTY MILLING	3230		PRODUCTION AVENUE	D	High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing	Not applicable	1602712700	3471	YES	NO
CENTRAL FLOOD MANAGEMENT	2604		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Water Damage Restoration	Not applicable	1614701800	7349	YES	NO
CARRILLO DESIGN CENTER	2605		TEMPLE HEIGHTS DRIVE	C	Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Metal Components	Not applicable	1614702800	3541	YES	NO
APICAL INDUSTRIES INC	2608		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X	X		X		X			Distributor - Helicopter Parts	Not applicable	1614703900	3544	YES	NO
SUMMIT STEEL INC	2608		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X	X		X		X			Supplier - Metal Products	Not applicable	1614703900	3732	YES	NO
STANDARD FLYWHEELS INC	2614		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturer - Automotive Flywheels	Not applicable	1615011600	3499	YES	NO
COMPUTER CIRCULATION CENTER INC	2618		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X				Sales - Computer Components	Not applicable	1615011500	9999	YES	NO
PRO SPOT INTERNATIONAL INC	2625		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Distributor - Welding Equipment	Not applicable	1614700800	5084	YES	NO
UNIQUE METAL FABRICATION	594		AIRPORT ROAD		Low	Industrial	Oceanside	San Luis Rey	903.1		X	X				X				Manufacturer, Sheet Metal	Not applicable	1460311400	3444	NO	NO
NELGO INDUSTRIES INC	598		AIRPORT ROAD		Low	Industrial	Oceanside	San Luis Rey	903.1		X	X				X				Manufacturer, Sheet Metal	Not applicable	1460310600	3444	NO	NO
DLE CUSTOM FABRICATION & CONVERTING	2613		TEMPLE HEIGHTS DRIVE	B	Low	Industrial	Carlsbad	Loma Alta	904.1		X	X				X				Manufacutring, Miscellaneous	Not applicable	1614703000	3672	NO	NO
WEST COAST PLATING	2613		TEMPLE HEIGHTS DRIVE	C-D	Low	Industrial	Carlsbad	Loma Alta	904.1		X	X				X				Manufacturing, Equipment	Not applicable	1614703000	3599	NO	NO

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Attachment 6-A

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Preventing pollution is less costly for taxpayers than cleaning up "after the fact." The following tips can help protect the health of our community and environment from pollutants.

- **Maintain your vehicle.** Fix oil leaks. Use an absorbent material, like cat litter, to clean up spills and take it to a household hazardous waste (HHW) facility. Recycle used motor oil. Call 1-800-CLEANUP for a HHW and used oil recycling center near you.
- **Use soaps sparingly.** If washing your car at home, use biodegradable soap sparingly. Try to wash on a grassy area. Use a bucket and a hose with a shut-off nozzle. Divert the dirty water onto landscaping or down a household sink.
- **Try nontoxic products.** If you must use a toxic household product, buy only what you need. Dispose of household hazardous waste properly. Call 1-800 CLEANUP.
- **Reduce use of landscaping chemicals.** If you must use fertilizers, pesticides, herbicides, etc., follow directions carefully, use them sparingly and avoid over-watering.
- **Clean up after your pets.** Flush pet waste down the toilet or seal it in a plastic bag and put it in the trash.
- **Recycle yard waste frequently.** Sweep grass clippings and other yard materials from driveways and streets and put in recycling container. Start a compost pile!
- **Sweep up debris on your sidewalk and driveway.** Prevent erosion and debris from leaving your property.
- **Throw your litter in a trash container.**

La prevención de la contaminación es menos costosa para los contribuyentes que su limpieza "después de lo ocurrido". Si usted sigue los siguientes consejos, puede ayudar a proteger la salud de nuestra comunidad y el medio ambiente.

- **Mantenga sus vehículos en buen estado.** Repare las goteras de aceite. Esparza las piedrecillas para los deshechos de gatos (cat litter) u otros materiales absorbentes sobre los derrames de aceite para limpiarlos, y luego llévelo a los lugares designados para desechar los materiales domésticos peligrosos. Recicle el aceite de motor. Llame a 1-800-CLEANUP para saber cuál es el centro de desecho de materiales domésticos peligrosos y de reciclaje de aceite de motor más cerca de su domicilio.
- **Use poca jabón.** Cuando lave su auto en casa, use poco jabón biodegradable. Use un reductor de agua. Tire el agua sucia por el drenaje sanitario interior.
- **Compre productos no tóxicos.** Si usa productos domésticos que son tóxicos, compre solo lo que necesite. Disponga de los desechos peligrosos de manera correcta. Llame a 1-800-CLEANUP.
- **Reduzca el uso de productos químicos de jardinería.** Si usted debe usar fertilizantes, pesticidas, etc., siga las instrucciones cuidadosamente y evite el regar demasiado.
- **Limpie los desechos de sus mascotas.** Tire los desechos de sus mascotas en el inodoro o póngalos en una bolsa plástica cerrada herméticamente y tírela en la basura.
- **Recicle los desechos de su jardín frecuentemente.** Barra los restos de césped y otros materiales de jardín sobre la entrada de su casa, garaje y banqueta, luego póngalos en el recipiente de reciclables. Comience un cúmulo de abono!
- **Barra la basura de su banqueta y entrada de garaje.**
- **Tire sus desechos en el basurero.**

Help!

Pollutants were found in your neighborhood storm drain.

¡Ayude!

Contaminantes fueron encontrados en las alcantarillas de su vecindario.

For more information,
please contact your agency.

City of Carlsbad	760-602-2799
City of Del Mar	858-755-9313
City of Encinitas	760-633-2787
City of Escondido	760-839-4668
City of Oceanside	760-435-5800
City of San Marcos	760-744-1050
City of Solana Beach	858-720-2470
City of Vista	760-726-1340 x1686
County of San Diego	1-888-846-0800

Para más información,
por favor llame su agencia.

Information for this brochure has been provided by the North County Storm Water Program, which includes the cities of Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, Vista and the County of San Diego.

La información para este folleto ha sido proveída por el Programa de Alcantarillas del Condado Norte (North County Storm Water Program), el cual incluye la ciudades de Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, Vista y el Condado de San Diego.

Did you know that storm drains are not connected to the sanitary sewer system or to treatment plants?

Anything that FLOWS into a storm drain, except rainwater, pollutes our creeks, rivers, lakes, lagoons and ocean.

Usted sabe que la alcantarilla de la calle no esta conectada con el sistema de drenaje sanitario de su casa o la planta de tratamiento de aguas negras.

Cualquier cosa que CORRE a la alcantarilla, con la excepción del agua de lluvia, contamina nuestros arroyos, ríos, lagos, lagunas y el mar.

Our field staff found the following pollutant(s spilled or dumped into a storm drain nea your home:

Empleados de la ciudad encontraron los siguiente contaminantes derramados o tirados en la alcantarillas de su vecindario:

- ❑ Motor Oil (Aceite de motor)
- ❑ Grease (Grasa)
- ❑ Antifreeze/Transmission Fluids (Anticongelante/Fluido de transmisión)
- ❑ Detergents (Detergentes)
- ❑ Solvents/Degreaser (Solventes/Desengrasantes)
- ❑ Paint/Paint Products (Pintura/Productos de la pintura)
- ❑ Pesticides/Fertilizers (Pesticidas/Fertilizantes)
- ❑ Home Improvement Waste (Desechos de Renovación de la casa)
- ❑ Animal Waste (Desechos de animales)
- ❑ Yard Waste (Desechos del jardín)
- ❑ Dirt and Gravel (Lodo y grava)
- ❑ Trash (Basura)
- ❑ Other (Otro_____)

Dumping pollutants into a storm drain not only hurts our environment, but is also illegal. However, YOU can help prevent storm water pollution. Check out the prevention tips on the back…

Si tira los contaminantes en la alcantarilla no solo daña nuestro medio ambiente y también es ilegal. Sin embargo, USTED puede ayudar a prevenir la contaminación en las alcantarillas. Por favor, lea los consejos del dorso…

Attachment 6-B

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CITY OF OCEANSIDE – CLEAN WATER PROGRAM

Our field staff has found pet waste in the right of ways areas in your neighborhood. Your help is needed to prevent this pollution from reaching our local water ways through the storm drain system.

Pet waste is a serious water quality and public health issue. Stormwater runoff washes bacteria, parasites, viruses, and nutrients from pet waste directly into our waterways. These pathogens can cause disease in humans, recreational swimming advisories, algal blooms, low dissolved oxygen levels, and impaired aquatic habitat. The City of Oceanside pet waste ordinance encourages citizens to be responsible for cleaning up their animal's waste in order to keep our waterways clean and safeguard public health.

The City's pet waste ordinance requires pet owners to:

Fully and immediately clean up after pets on any public property. (Public property consists of streets, sidewalks, right of ways, parks, plazas, stream banks, public accesses, pathways, storm drains, creeks, officially accepted easements, etc.)

Carry a clean-up device (i.e. bag, scooper) at all times.

Bag and dispose of pet waste in a closed trash receptacle or refuse container.

City of Oceanside - Code Section 4.16.2. - Animal Waste Removal

(a) It shall be unlawful for any person owning, keeping or having in his or her care, custody or control any dog knowingly fail, refuse or neglect to clean up any feces of such dog immediately and dispose of it in a sanitary manner whenever such dog has defecated upon public or private property within the Oceanside city limits without the consent of the public or private owner or person in lawful possession or charge of the property

Fines for non-compliance with the City of Oceanside's pet waste ordinance are $100 per occurrence.

Please contact our Clean Water Inspectors Wil Perdomo at 760 435-5072 or Gene Clark at 760 435-5093 if you have any questions.

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CITY OF OCEANSIDE clean water program

Volume 8, Issue 2 - Fall 2010

California Coastal Cleanup Day & Buena Vista Creek Cleanup September 25, 2010 9 a.m. - 12 p.m.

Celebrate the 26th Anniversary of California Coastal Cleanup Day by participating in the tenth annual Buena Vista Creek Cleanup and Oceanside Beach Cleanup. The City of Oceanside, together with I Love a Clean San Diego, Coastkeeper, and 1-800-GOT-JUNK will be hosting a cleanup along the banks of Buena Vista Creek, as well as a beach cleanup, on September 25th, from 9 a.m. to 12 p.m. Volunteers will receive cleanup supplies, refreshments, community service hours, and a free give-away item. Call the Clean Water Program Event Information Line for more details at 760-435-5536.

Cleanup sites

- Behind Dick's Sporting Goods at Plaza Drive and College Boulevard (3514 College Boulevard)
- North of Fire Station #4 located at Thunder Drive and Lake Boulevard.
- Behind Kohl's store at College Boulevard and Marron Road
- South side of Oceanside Pier
- Buccaneer Beach at Pacific and Morse Streets (1500 South Pacific Street)

To register for this event click on www.cleanupday.org.

For more information about Oceanside cleanup events and how you can prevent water pollution, visit this Web site: www.OceansideCleanWaterProgram.org.

In This Issue

- River, creek and beach cleanup event information
- Pick Up Your Pet Waste Campaign - Bag dispensers installed
- Bacteria Source Tracking Project Update

Pick Up Your Pet Waste Campaign along the San Luis Rey Recreation Trail

In spring 2009, the Oceanside Clean Water Program launched a Pick Up Your Pet Waste Campaign to encourage dog owners to clean up after their pets. The Campaign focused on the San Luis Rey River Trail including trails on the north and south sides between Douglas Drive and College Boulevard. These trails are used for a variety of recreational purposes including walking, running, biking, and dog walking. Although most dog owners who use the trails clean up after their pets, some pet waste still accumulates along the trails.

Barriers to Picking up Dog Waste

The project started with a public survey to identify the reasons why people do or do not pick up after their pets on the trails and in other public areas. Among dog owners, the most common reasons cited for why someone might leave dog waste behind were:

- Forgot to bring a bag
- Nowhere to throw it away
- No one else around to see them

Ninety-three percent of survey respondents agreed that more pet waste bag dispensers are needed in the community.

Project Implementation

As result of the survey the City of Oceanside installed pet waste bag dispensers and additional trash cans, where needed, at four locations along the trail. New signs were installed to emphasize proper behavior (picking up after the dog) and pet owner responsibility.

Keep the following tips in mind when you plan to walk your dog.

- Take a bag with you, grab one from a dispenser, or use a personal pet waste bag dispenser
- Pick up and dispose of waste in a trash can, not along the side of the trail or sidewalk

Following these simple steps will keep our community clean, our trails free of unwanted debris, and prevent water pollution.

Urban Runoff Hotline - Help protect our local waterways

Please report anything other than rain water entering the storm drain.

760-435-5800 "Only Rain in the Storm Drain!"

Bacteria Source Tracking Project Along the San Luis Rey River

The Oceanside Clean Water Program was awarded $554,000 from California State Water Resources Control Board (State) to conduct a study to determine the sources of elevated bacteria levels that cause beach advisories at the mouth of the San Luis Rey River. There are three components to the project:

Phase 1- Dry season monitoring (during summer months)
Phase 2 – Wet season monitoring (during winter/rainy months)
Phase 3 – Visual Observations (during summer and winter months)

The goals of the project are to identify where bacteria levels are elevated and to identify potential sources for those bacteria "hot spots" in the river and river mouth. Some of the potential sources may include birds that congregate in the mouth of the river, pet waste left on the ground, and the homeless population in the river bed.

Results from bacteria lab analysis and various genetic testing methods will be compiled and analyzed after all sampling is complete to provide an overall assessment of the lower San Luis Rey River. With potential locations and sources of bacteria identified, the City will build on the study's results by identifying management actions to reduce bacteria loads.

The first two monitoring events occurred in the summer of 2008. Water samples and river flow measurements were collected at several monitoring locations in the lower part of the San Luis Rey River. The water samples were sent to scientific laboratories for bacterial analysis and frozen for genetic analysis.

In December of 2008, the project was stopped due to state budget shortfall. Fortunately, in December of 2009 the state gave the go-ahead for the project study to restart.

The third and fourth sampling events were conducted in May and August of 2010. Additional sampling events are planned for the wet season between October 2010 and March 2011 both during a rain event and between rain events. These upcoming rainy months are critical to sample since the beach advisories are most often posted during the wet season.

Keep your eye out for future project updates in the March 2011 edition of the Clean Water Program Newsletter. In addition, the final report for the overall project will be posted at www.OceansideCleanWaterProgram.org.

2010-2011 River, Creek, & Beach Cleanup Events

Please join the Clean Water Program staff and citizen volunteers to assist in removing trash and debris from our local rivers, creeks, and beaches.

Event Times: 9:00 a.m. - 12:00 p.m.
Event Details: 760-435-5536

- November 6, 2010: San Luis Rey River Cleanup
- April 23, 2011: Loma Alta Creek Cleanup
- July 5, 2011: Morning After Mess - City Beaches (8 - 11 a.m.)
- September 17, 2011: Buena Vista Creek Cleanup and California Coastal Cleanup Day
- November 5, 2011: San Luis Rey River Cleanup

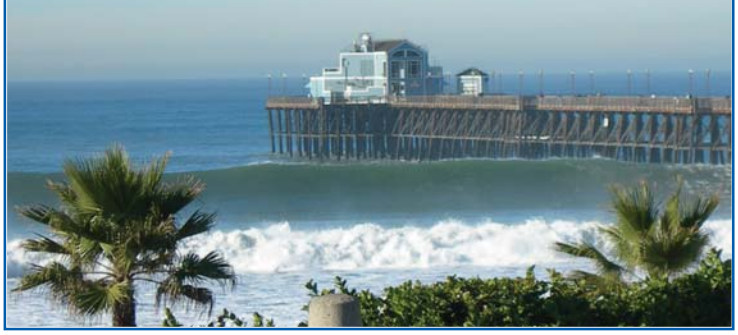

City of Oceanside
Clean Water Program
300 North Coast Highway
Oceanside, California 92054
760-435-5800
www.OceansideCleanWaterProgram.org

CITY OF OCEANSIDE clean water program

Volume 9, Issue 1 - Spring 2011

Loma Alta Creek Cleanup
April 30, 2011
9 a.m. - 12 p.m.

Celebrate Earth Day by participating in the 12th Annual Creek to Bay Cleanup event on April 30, 2011. The City of Oceanside, together with event sponsors I Love a Clean San Diego and 1-800-GOT-JUNK?, will be hosting a cleanup along the banks of Loma Alta Creek and at two sites on the beach.

Cleanup sites

- Buccaneer Park at 1500 Pacific Street (cross street is Morse Street)
- Behind Smart & Final on Oceanside Boulevard and I-5 (1701 Oceanside Boulevard)
- Mesa Drive between El Camino Real and Rancho Del Oro Drive
- Behind commercial buildings at 1629 Ord Way (Off Oceanside Boulevard between College Boulevard and Temple Heights Drive)
- South side of the Oceanside Pier

Join other volutneers to remove trash and debris from the creek and beach to improve Oceanside water quality. Volunteers will receive cleanup supplies, refreshments, community service hours, and a free T-shirt or other giveaway item. For more infomraiton call 760-436-5536 or 760-435-5807.

To register for this event click on www.creektobay.org.

For more information about Oceanside cleanup events and how you can prevent water pollution, visit www.OceansideCleanWaterProgram.org.

In This Issue

- Loma Alta Creek Cleanup - April 30, 2011
- Bacteria Source Tracking Project Update
- How many Oceanside water bodies can you name?
- 2011 River, Creek and Beach Cleanup Event Information

Bacteria Source Tracking Project

Along the San Luis Rey River

The Oceanside Clean Water Program was awarded a grant from the State Water Resources Control Board to conduct a multi-year investigation into the cause of high bacteria levels near the mouth of the San Luis Rey River that cause beach advisories and closures. The study is underway and final results are expected by Fall 2011.

In addition to using genetic testing to identify bacteria sources, visual observations within the San Luis Rey Watershed were conducted during dry weather conditions and before a rainstorm to identify sources. These observations, conducted by staff and volunteers, were designed to note potential bacteria sources from the environment (soils and decaying vegetation), animal wastes (including pet waste), and human sources (sewage and trash including improperly disposed diapers). Observations also took note of how the bacteria from these sources get to the river, such as by rain or urban runoff.

Results from Neighborhood Observations

The most common sources of bacteria found in residential and commercial areas were:

- Green waste including grass clippings and yard waste improperly disposed in curbs and gutters
- Pet waste
- Litter

While pet waste may seem like the most obvious source, yard waste and litter provide a place for bacteria to grow. The bacteria growing on this debris can then be transported to water bodies in various ways.

continued on next page

Urban Runoff Hotline - Help protect our local waterways

Please report anything other than rain water entering the storm drain.

760-435-5800 "Only Rain in the Storm Drain!"

How many Oceanside water bodies can you name?

One of the first questions that Clean Water Program staff ask when giving children or adult presentations is "Name the nearest river, creek or water body." Many times people cannot answer this question. It is important for the community to be aware of these water bodies in order to learn how to protect them from polluted runoff. You can find out the water body names and more detailed information about them by going to www.OceansideCleanWaterProgram.org and clicking on Waterbodies. While on the website you can also learn what you can do to help prevent pollution from reaching these water bodies.

Schedule a Presentation

Do you know of a school classroom, youth group, or civic organization looking for a speaker? The Oceanside Clean Water Program offers presentations to groups of all ages. To get more information and to schedule a presentation contact Cynthia Mallett at 760-435-5807 or by email at cmallett@ci.oceanside.ca.us.

2011 River, Creek, & Beach Cleanup Events

Please join Clean Water Program staff and citizen volunteers to assist in removing trash and debris from our local rivers, creeks, and beaches.

Event Times: 9:00 a.m. - 12:00 p.m.
Event Details: 760-435-5536
www.OceansideCleanWaterProgram.org/events

- April 30, 2011: Loma Alta Creek Cleanup
- July 5, 2011: Morning After Mess - City Beaches (8 - 11 a.m.)
- September 17, 2011: Buena Vista Creek Cleanup and California Coastal Cleanup Day
- November 5, 2011: San Luis Rey River Cleanup

City of Oceanside

Clean Water Program
300 North Coast Highway
Oceanside, California 92054
760-435-5800
www.OceansideCleanWaterProgram.org

Bacteria Source Tracking Project Along the San Luis Rey River

continued from front page

The most common means by which bacteria is transported to storm drains and then to local water bodies are:

- Over-irrigation or broken irrigation system (a line, connection, or sprinkler head)
- Rain
- Washing of paved surfaces

When water runs through yard waste, pet waste, or litter, it picks up bacteria and transports it to the water bodies through the storm drain system.

Why Should I Care about Bacteria in our Waterways?

Bacteria can make humans, our pets, and wildlife sick. The advisories and beach closures are to protect beach visitors from the potential of getting sick.

It should be noted that bacteria are present all around us. Like bacteria in our bodies, there are some bacteria that don't harm us and there are other kinds that can make us sick. Scientists are working on distinguishing between these types and what sources can be harmful to human health. In the meantime, all potential sources of bacteria are identified for the purposes of the study.

What Can I Do to Reduce Bacteria Pollution from reaching our Rivers, Creeks and the Ocean?

1) Eliminate the sources of bacteria:
   - Ensure that you or your landscaper are picking up yard waste and either putting it in green waste bins or composting it in your own yard.
   - Pick up after your pet and dispose of the waste in a trash can.
   - Don't litter. If you see trash, pick it up. It's the right thing to do for your community.
2) Use water wisely:
   - Ensure that you or your landscaper are watering landscaped areas no more than 10 minutes per day, three times per week.
   - If you have an irrigation system, periodically check for leaks or broken sprinkler heads.
   - Do not hose paved surfaces. Instead, sweep debris and then dispose of the waste in a trash can or green waste bin.
   - When rain is predicted, ensure yard waste, pet waste, and trash are properly disposed before the rain carries it away into our curbs, storm drains, rivers and creeks, and ultimately the ocean.

Further updates will be provided in future newsletters. Thank you for doing your part to keep bacteria out of our waterways!

Attachment 9-A

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SUN DIEGO. PRESENTS

THE MORNING AFTER MESS

BEACH CLEAN UP DAY

JULY 5th, 2010 Surfrider Foundation® San Diego Chapter

5 BEACHES! 8-11AM AT EACH LOCATION!

VOLCOM
OCEAN BEACH
OB PIER

BILLABONG
MISSION BEACH
BELMONT PARK

Quiksilver
PACIFIC BEACH
SAIL BAY

O'NEILL
PONTO BEACH
IN SOUTH CARLSBAD

...LOST
OCEANSIDE
SOUTH HARBOR JETTY

★ EARN YOUR COMMUNITY SERVICE CREDITS!

★ FREE T-SHIRT TO THE FIRST 50 PARTICIPANTS AT EACH LOCATION!

★ PRIZE PACKAGES FROM EACH VENDOR AT EACH LOCATION!

BROUGHT TO YOU BY THE SURFRIDER FOUNDATION, SAN DIEGO CHAPTER
(858) 792-9940 AND SUN DIEGO BOARDSHOPS

SUN DIEGO BOARDSHOPS | Surfrider Foundation® SAN DIEGO CHAPTER | 91X | SILK SCREEN SHIRTS

WWW. SUNDIEGO.COM SURFRIDERSD.ORG CLEANBEACHCOALITION.ORG

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San Luis Rey River Cleanup Event

Saturday, November 6, 2010
9:00 AM to 12:00 PM

Five sites to choose from

- Highway 76 & Benet Road
- Highway 76 & Foussat Road at bike path
- Douglas Drive at the bike path on south side of SLR River north of Pala Road
- Mance Buchanon Park on College Boulevard just north of Adams Avenue
- Oceanside Harbor - Parking Lot #10

All volunteers receive refreshments, cleanup supplies, community service hours and a free give-away item.

For more information and site details, call 760-435-5536 or log onto www.OceansideCleanWaterProgram.org.

EVENTO DE LIMPIEZA EN EL RIO SAN LUIS REY

El sábado 6 de noviembre de 2010
De 9 a 12 del mediodía

Cinco lugares para escoger:

- Highway 76 y Benet Road
- Highway 76 y Fousat Road, en el camino de los ciclistas
- Douglas Drive, en el camino de los ciclistas, al lado sur del Rio San Luis Rey, al norte de Pala Rd.
- Parque Mance Buchanon, en College Blvd., justo al norte de Adams Ave.
- En el Harbor de Oceanside – Lote de estacionamiento # 10

Todos los voluntarios recibirán refrescos, artículos para limpieza, horas de servicio comunitario y un articulo gratis.

Para más información y más detalles del lugar, llámenos at 760-435-5536 o entre a nuestra página de Internet www.OceansideCleanWaterProgram.org.

Attachment 9-B

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Celebrate Earth Day by participating in the

12th Annual

Loma Alta Creek Cleanup

April 30th, 2011 • 9 a.m. – 12 p.m.

Join volunteers to remove trash and debris from the creek and beach to improve Oceanside water quality. Volunteers will receive cleanup supplies, refreshments, community service hours and one free give-away item.

To register for this event click on **www.creektobay.org** select ***Cleanup Sites*** then ***Zone 2***

Cleanup Sites:

- Behind Smart & Final on Oceanside Boulevard and I-5 (*1701 Oceanside Boulevard)*
- Mesa Drive between El Camino Real and Rancho Del Oro Drive
- Behind commercial buildings at 1629 Ord Way *(Off Oceanside Boulevard between College Boulevard and Temple Heights Drive)*

City of Oceanside Clean Water Program

Green Oceanside

WM Waste Management

1-800-GOT-JUNK? North America's Largest Junk Removal Service

Celebrate Earth Day by participating in the

12TH ANNUAL LOMA ALTA CREEK CLEANUP

April 30th, 2011 • 9 a.m. - 12 p.m.

Join volunteers to remove trash and debris from the creek and beach to improve Oceanside water quality. Volunteers will receive cleanup supplies, refreshments, community service hours and one free give-away item.

To register for this event click on

www.creektobay.org

select Cleanup Sites then Zone 2

CLEANUP SITES:

- Behind Smart & Final on Oceanside Boulevard and I-5 (1701 Oceanside Boulevard)
- Mesa Drive between El Camino Real and Rancho Del Oro Drive
- Behind commercial buildings at 1629 Ord Way (Off Oceanside Boulevard between College Boulevard and Temple Heights Drive)

City of Oceanside
Clean Water Program

1-800-GOT-JUNK?®
NORTH AMERICA'S LARGEST JUNK REMOVAL SERVICE

WM
WASTE MANAGEMENT

Green Oceanside

Attachment 9-C

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City of Oceanside

Pick up your Pet Waste CBSM Campaign

Final Report

August 25, 2010

Prepared by:

Jennifer J. Tabanico

Action Research
3630 Ocean Ranch Blvd
Oceanside, CA 92056

action research
Research • Social Marketing • Results

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Background

Pet waste left on grass, sidewalks, and along trails is not only a leading cause of bacterial contamination in waterways, but it also an issue that concerns Oceanside residents. In the spring of 2009, the City of Oceanside Clean Water Program launched a Pick up Your Pet Waste Campaign to encourage dog owners to clean up after their pets. The project focused on the San Luis Rey River Trail (Trail) which is used for a variety of recreational purposes including walking, running, and biking. Many people also bring their dogs with them to the Trail. Although most dog owners who use the trail clean up after their pets, some pet waste still accumulates along the trail.

Community-Based Social Marketing. The present project utilized a Community-Based Social Marketing (CBSM) approach. CBSM begins with careful selection of a specific target behavior and then uses a four-step process to foster sustainable behavior change (McKenzie-Mohr, 1999; Schultz & Tabanico, 2007; Tabanico & Schultz, 2007). These four steps are: (1) identifying the barriers to a targeted behavior, (2) using behavior change tools to overcome the barriers, (3) piloting the selected tools using empirical research methodology and a control group, and (4) evaluating the project once it has been widely implemented.

Barrier Survey. To inform the development of the campaign, a brief survey was mailed to a random sample of 300 Oceanside residents living in neighborhoods near the Trail. The goal of the survey was to identify the reasons why people do or do not pick up after their pets on the Trail and other public areas. Sixty-five percent (65%) of residents who received a survey completed it and returned it to the City. Of those residents who completed the survey, 70% had visited the Trail in the past and 48% reported that they had a dog in their household. The complete survey results are attached as Appendix A.

> **Motivations for picking up dog waste.** Both dog owners and those without dogs agreed that it is important to pick up dog waste, rating the importance of the issue as 9.6 out of 10. The top rated reasons for picking up dog waste and throwing it in the trash were: "because it is the right thing to do" and "because it pollutes parks, rivers, and beaches."
>
> **Barriers to picking up dog waste.** The vast majority of Oceanside dog owners who walk their dogs reported that they "always" pick up after their pet, but a small percentage (17%) stated that they, at least sometimes, leave their dog's waste behind without picking it up. Among dog owners, the most common reasons cited for why someone might leave dog waste behind while walking the Trail were: forget to bring a bag, nowhere to throw it away, and no one else is around to see them (anonymity).

CBSM Intervention

The results of the CBSM barrier survey provided clear recommendations for the Pick up Your Pet Waste Campaign at the Trail which include the installation of additional trash cans and pet waste bag dispensers along the Trail as well as modifying signage to emphasize pet owner responsibility. The CBSM intervention consisted of both structural and motivational components which are described in detail below.

Structural Intervention. Results of the barrier survey indicated that trash cans and bag dispensers were needed on the Trail. Not having a bag and lack of trash cans were frequency cited as important barriers. In addition, 93% of survey respondents agreed at least somewhat that more pet waste dispensers were needed in the community. To address this structural barrier, the CBSM intervention consisted of strategically placed pet waste bag dispensers and trash cans.

Figure 1: Pet Waste Bags and Trash Cans

Motivational Signage. Signage was developed that was simple, easy to read, and included focused messaging based on the motivations identified in the survey. Consistent with the CBSM approach, the signs focused on a single activity and omitted reference to other behaviors (e.g., leash laws). The signs also emphasized demonstrating the right thing to do.

Existing trail signage focused on motivating residents to pick up pet waste because it is the law or because it "transmits disease." Based on the results of the barrier survey, we developed new trail signage that focused on a shared community perception that picking up pet waste is a social responsibility. The sign also included mention of pollution prevention as survey data showed that this motivation also resonated well with the target audience.

Figure 2: "Do Your Doody" Motivational Signage

Pilot Experiment

A field experiment was conducted to evaluate the effectiveness of the CBSM intervention. Using an experimental methodology, pre- and post-test data were collected from the trail segments where dispensers and signs were installed (CBSM pilot) as well as from matched trail segments that did not receive the CBSM intervention (Control).

Study Areas

The north (unpaved) and south (paved) sides of the San Luis Rey Bike Trail were each divided into CBSM pilot and Control segments. On each side of the trail, CBSM pilot and Control segments were selected such that they were similar across a variety of dimensions including traffic, usage types, geography, and proximity to access points.

> **North Trail:** The North side of the trail is characterized by an unpaved path that runs adjacent to the backside of residential property as well as a section of public property. The unpaved trail is generally not as heavily used as the south side.
>
> **South Trail:** The South side of the trail is characterized by a paved bike path that runs adjacent to Buchanan Park. The trail is heavily used by bike and pedestrian traffic.

For both of the CBSM pilot segments (north and south), pet waste bag dispensers were installed at the primary trail access points at College and at Douglas. Red arrows indicate installation points for the intervention. See Figure 3 below.

Figure 3: Map of Trail Study Areas

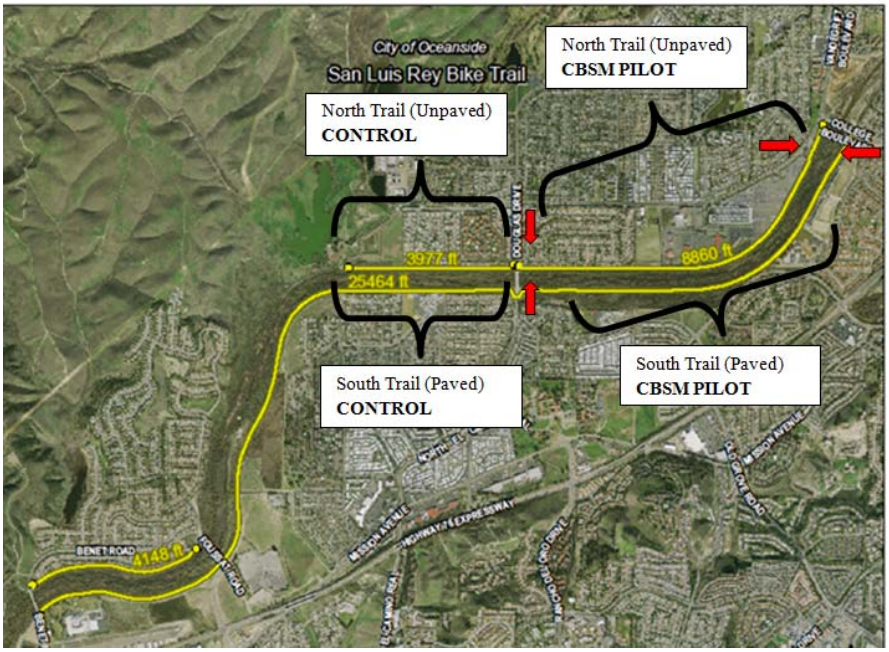

Evaluation Procedure

An experimental methodology was used to evaluate the effectiveness of the CBSM intervention that was implemented in pilot areas. Data were collected from pilot and control segments before and after implementation of the CBSM intervention. The study procedure was as follows:

1. **Clean up all existing waste in pilot and control areas.** Prior to implementing the intervention, existing pet waste was collected, weighed and counted on all sections of the trail (pilot and control).

2. **Gather baseline data.** Prior to implementing the intervention, the quantity and weight of existing pet waste was recorded separately for each of four trail segments: Pilot North, Control North, Pilot South, and Control South.

3. **Install new signage.** Existing "Poop Pollutes" signage along the pilot segments of the trail was replaced with the new CBSM "Do Your Doody" signage. Signage on the control segments of the trail was left unchanged.

4. **Install structural intervention (bag dispensers and trash bins).** Pet waste bag dispensers and trash cans were placed at the entrances to the pilot segments of the trail. For the north side pilot segment, trash bins and dispensers were placed at two major access points along the trail: one at Douglas and one adjacent to the parking lot on North River Rd and College. For the south side pilot segment, trash bins and dispensers were installed at Douglas and at the entrance to the trail near College.

5. **Process evaluation.** A variety of information about the implementation of the intervention was recorded including number and location of dispensers, frequency of refill, maintenance issues, and vandalism issues.

6. **Outcome evaluation.** Approximately one month following implementation of the structural intervention and motivational signage, the quantity and weight of existing pet waste was recorded separately for each of four trail segments: Pilot North, Control North, Pilot South, and Control South. Number and type of bags were also recorded in pilot and control areas (north side only).

Results

Number of Piles

Dog waste piles were counted and collected before and after implementation of the intervention in both pilot and control areas. Aggregated across the two pilot areas (paved and unpaved trail sections), there was a 23% decrease in the number of piles that were collected in the CBSM pilot areas where as the control segments of the trail showed no change.

Table 1: Change in Accumulated Pet Waste across Pilot and Control Sites

	CBSM Pilot (College to Douglas)	Control (Douglas to Whalen)
COMBINED		
PRE	167	106
POST	128	101
% Change	23% decrease	<1% decrease

Although overall pet waste collected decreased from baseline to follow-up in the CBSM segments, the intervention appears to have been most effective on the south (paved) side of the trail.

South Side: On the south (paved) side of the bike trail, there was a 23% decrease in the number of piles of dog waste following implementation of the CBSM intervention. During the same time frame, the number of dog waste piles collected along the control section of paved trail increased by 107%.

North Side: Although the overall number of dog waste piles decreased from pre- to post-test, the observed pattern was the same in both the CBSM and control areas. This suggests that the CBSM intervention had no substantial effect on the north side of the trail.

Table 2: Change in Accumulated Pet Waste on North and South Segments

	CBSM Pilot (College to Douglas)	Control (Douglas to Whalen)
SOUTH SIDE (Paved)		
PRE	31	14
POST	24	29
% Change	**23% decrease**	**107% increase**
NORTH SIDE (Unpaved)		
PRE	136	92

POST	104	72
% Change	**24% decrease**	**22% decrease**

Total Bags Collected

Observations of the number of bags in the trash cans on the north side (at Douglas and at College) suggest that the pet waste bag dispensers were frequency used by trail visitors. Data on the number of bags collected on the South Side was not recorded as the cans were emptied by City maintenance workers prior to the follow-up study period.

On the North Side of the trail, the total number of bags in bins was recorded separately for each of the installation sites at each end of the trail (at Douglas and at College). Of all of the bags observed in the bins, the Mutt Mitts from the CBSM dispensers accounted for between 42% and 70% of all bags in the bins.

Table 3: Bag Usage by Trail Segment

	CBSM Intervention	
SOUTH SIDE (Paved)	Bags Used (# in bins)	% CBSM Mutt Mitts
At Douglass	not available	not available
At College	not available	not available
NORTH SIDE (Unpaved)	Bags Used (# in bins)	% CBSM Mutt Mitts
At Douglass	12	42%
At College	23	70%

Conclusions and Recommendations

Overall, the CBSM intervention resulted in a 23% decrease in the amount of pet waste left along the trail. In addition, there was evidence that the bags provided at the trail were frequently used by trail visitors. Importantly, the results of the CBSM pilot experiment indicated that the CBSM intervention was only effective on the south side of the trail which is a paved bike trail characterized by a constant flow of pedestrians and bike riders. The amount of pet waste left on the south side of the trail significantly decreased as a result of the intervention. On the north side of the trail, which is unpaved and experiences much lower rates of usage, the CBSM intervention had no effect.

Observations of the number of bags in the trash cans on the north side (at Douglas and at College) suggest that the dispensers are being used by trail visitors. However, improper pet waste management continues to be a problem on this side of the trail. While the intervention addressed a key structural barrier identified in the baseline survey (availability of bags), the lack of observed effects on the north of the trail suggests that there may still be motivational barriers that the current intervention did not adequately address. We hypothesize that the lack of effect may be due to heightened anonymity on the north side of the trail. That is, the behavior of dog owners along the north side is more hidden from public view than it is on the south side.

Based on the results of the pilot, We recommend that further outreach efforts be conducted that address the anonymity issue directly. For example:

> **Obtain commitments from residents adjacent to the north trail.** Residents with homes whose backyards are adjacent to the trail could be visited by a Clean Water Program representative, local nonprofit, or girl/boy scout. Residents can be provided with a "Do your Doody" sign to place at the back perimeter of their fence. A few of the homes along the trail already display Neighborhood Watch signs, so we are confident that residents would be willing to participate.
>
> **Concentrate outreach near fire station.** Further observation indicated that a large portion of the pet waste was accumulated along the trail just behind Oceanside Fire Station #5 on North River Rd. We recommend concentrated outreach in this area by either moving the existing sign and dispenser closer to the fire station perimeter fence or by placing additional signage in problem areas. Another consideration is to establish a partnership with the the fire station to "adopt a dispenser."

Utilize Scout troops to emphasize social responsibility on the north side. We recommend sending Girl and/or Boy Scout troops out to the trail and to the surrounding community to inform trail users about the newly available dispensers and trash cans. Ideally, this outreach should be coupled with additional installation sites that are managed and maintained by the troops as part of an "adopt-a-dispenser" program.

Install additional dispensers. We recommend installing additional bag dispensers and trash cans in areas where residents or trail users have requested them as well as more frequent intervals along the north side of the trail.

Provide a trail guide for dog walkers. We recommend modifying existing trail maps to prominently show placement of dispensers and bins. These maps could be displayed at trail heads, posted on the City of Oceanside website, or handed out at local events.

Next Steps

The recommended next steps for the CBSM Pick up Your Pet Waste Campaign are as follows:

1. **Clean up both pilot and control areas.** Engage pet waste clean-up contractor to clean up and count accumulated pet waste along all four trail segments.

2. **Install additional dispensers and signage as requested in control areas.** Because baseline and follow-up data have already been collected, the intervention can now be implemented more broadly to include control areas. Following the clean-up, additional pet waste bag dispensers and signs may be installed as requested along the control segments of the trail and anywhere else deemed appropriate.

3. **Replace all existing signage.** Replace existing "Poop Pollutes" trail signage with the new "Do Your Doody" sign.

4. **Intensify outreach on the north side of the trail.** Following the above recommendations, enhance outreach on the north side of the trail by obtaining commitments from local residents to post signage, addressing problem areas by the fire station, and installing additional signage and/or dispensers.

5. **Gather outcome data from pilot and control areas.** Approximately one-month following implementation of additional outreach on the north side of the trail, engage the pet waste clean-up contractor to clean up and count accumulated pet waste along all four trail segments.

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Schultz, P. W., & Tabanico, J. (2007). Self, identity, and the natural environment: Exploring implicit connections with nature. *Journal of Applied Social Psychology, 37,* 1219 - 1247.

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Appendix A: Mail Survey Topline Results

Response Rate Details

300 Surveys Mailed, 285 Valid Addresses
183 Responded = **64% Response Rate**
180 Surveys were Completed = **63% Completion Rate**

Overall Sample Characteristics

Dog Ownership: 45% report having a dog in their household (N=81)
Age: Mean Age = 53.77
Gender: 49% Female, 46% Male, 5% Did not report gender
Interest in Results: 52 residents (29%) requested a copy of the survey results
Trail Visitors: 70% have visited the San Luis Rey River Bike Trail (N = 123)

Characteristics of Dog Owners (N=81)

Mean Age = 51.51; Range = 24-84 years
84% walk their dogs (N=69)
17% of dog walkers said that there are times when they leave their dog's waste behind: "When you walk your dog, how often do you leave your dog's waste behind without picking it up?"

- Never = 82.6%; Rarely = 13.0%; Sometimes = 4.3%

74% of dog owners have visited the San Luis Rey River Trail

How often do you see dog waste in your community
that is left behind and not cleaned up?

Dog Waste in the community is a relevant Issue. Seventy percent (70%) of residents report that they see dog waste left behind in their community at least sometimes.

Never	Rarely	Sometimes	Often	Always
4%	26%	36%	21%	13%

"I would like to see more pet waste bag dispensers in my community. "
0 = Strongly Disagree; 10 = Strongly Agree

Residents are overall positive about the idea of pet waste bag dispensers.

53% responded "strongly agree"; 67% responded 8 or higher on the 10-point scale
Only 7% of respondents strongly disagreed with this suggestion.

- Mean = 7.84 (Dog Owners = 8.36 , Non Owners = 7.43)

How important is it that dog owners always pick up their dog's waste?
0 = Not at all Important; 10 = Extremely Important

Both dog owners and non owners agree that it is important to pick up dog waste.

- Mean = 9.61 out of 10 (Dog Owners = 9.42 , Non Owners = 9.76)

Motivations for Picking up Dog Waste

Among dog owners, the top rated reasons for picking up dog waste and throwing it in the trash were: **"it is the right thing to do"** and **"because it pollutes parks, rivers, and beaches".**

Other important reasons mentioned for picking up dog waste were: because it is the personal responsibility of pet owners, because it smells and attracts bugs, because it is rude and inconsiderate to others, and to keep the community clean.

It is important for pet owners to pick up dog waste and throw it in the trash…	Dog Owners	Non Owners	Total
…because it is the right thing to do.	9.23	9.66	9.47
…because it pollutes parks, rivers, and beaches.	9.05	9.58	9.34
…because it is unsafe for children.	8.81	9.85	9.38
…because it washes into creeks, rivers, and the ocean.	8.90	9.15	9.03
...because it makes the community look bad.	8.75	9.21	8.99
…because someone might step in it.	8.56	9.30	8.97
…because pet waste transmits disease.	8.61	8.99	8.82
…because it is the law.	8.35	9.13	8.77

Barriers to Picking up Pet Waste

Among dog owners, the top rated barriers for why someone might not pick up after their dog were: **"no one else is around to see them," "forget to bring a bag," and "nowhere to throw it away."** Of the 12 people who reported that they left dog waste behind at least sometimes, the highest rated barriers were: other people don't pick up after their pets (*M* = 7.25), nowhere to throw it away (7.25), no one is around to see them (6.83), and they think it is gross (6.75).

Other barriers mentioned by residents included: laziness (42%), lack of enforcement, loose stool, no trash cans or bags, thinking someone else should do it, among others.

In my community, someone might not pick up after their dog because…	Dog Owners	Non Owners	Total
…no one else is around to see them.	6.69	5.61	6.08
…they forget to bring a bag with them.	6.58	5.44	5.94
…there is nowhere to throw it away.	6.32	4.44	5.28
…they think it is gross.	6.17	5.28	5.68
…they don't think it is important.	6.07	5.39	5.69
…other people don't pick up after their pets.	5.88	4.34	5.02
…someone will come later to clean it up.	3.88	3.92	3.90

San Luis Rey River Trail Results

710% of residents have visited the trail (N=123). Of those who have visited the trail, 83% have seen dog waste on the trail. A total of 158 reasons were listed for why there is dog waste on the trail. The primary reasons provided for why there is dog waste on the trail are listed below. Among dog owners who have visited the trail, No Bags and Trash Cans that are too far apart.

	Overall Sample		**Target Population**	
Reason	**N**	**%**	**N**	**%**
People are Lazy/Don't Care/Rude	63	40%	19	29%
No Bags	30	19%	19	29%
No Trash Cans/Trash too Far Away	29	19%	17	26%
Other	11	7%	4	6%
No One Around	10	6%	3	5%
Interrupts Exercise	5	3%	1	2%
Not Paved/Feel it is the Country	4	3%	1	2%
Lack of Enforcement	3	2%	0	0%
Already Coyote Poop	3	2%	2	3%
TOTAL	158	100%	66	100%

Target Population Results

The target population for this Pick Up Your Pet Waste CBSM project is dog owners who walk their dogs on the San Luis Rey River Trail. Because the response rate was so high, the sample included a sufficient number of responses to look at the target population as a group. The results below reflect the responses of those who met the following criteria:

Dog Owners
who Walk their Dogs
and who have visited the San Luis Rey River Trail

A total of 51 participants met these criteria (28%)

18% have left dog waste behind rarely or sometimes

Most important reasons for picking up dog waste were:

- "right thing to do" (9.20),
- "pollutes parks, rivers, and beaches" (8.76),
- "unsafe for children" (8.62), and
- "washes into creeks, rivers, and ocean" (8.60).

Highest rated barriers to picking up dog waste were:

- "forget a bag" (7.02)
- "nowhere to throw it away" (6.68)

- "no one around to see" (6.59)

Appendix B: Additional Load Reduction Data

Total Weight of Waste Collected

The total weight of pet waste collected was recorded before and after implementation of the intervention in both pilot and control areas.

	CBSM Pilot (College to Douglas)	Control (Douglas to Whalen)
SOUTH SIDE (Paved)		
PRE	3.25	1.13
POST	2.25	2.75
% Change	**31% decrease**	**143% increase**
NORTH SIDE (Unpaved)		
PRE	10.88	10.38
POST	10.50	7.75
% Change	**3% decrease**	**25% decrease**

Average Weight per Pile of Waste Collected

The average weight per pile of waste was calculated for each of the four trail segments in the study.

	CBSM Pilot (College to Douglas)	Control (Douglas to Whalen)
SOUTH SIDE (Paved)		
PRE	1.67	1.28
POST	1.50	1.50
Difference	**0.17**	**0.22**
NORTH SIDE (Unpaved)		
PRE	1.28	1.80
POST	1.62	1.72
Difference	**0.34**	**0.08**

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SUMMER 2011

Oceanside MAGAZINE

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OCEANSIDE WATER AWARENESS POSTER CONTEST WINNERS
SEE PAGE 20

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About The Cover

Every year the City's Water Utilities Department hosts a Water Awareness Poster Contest as part of Water Awareness Month. This year's top winners are from Laural, North Terrace and Foussat Elementary schools. Congratulations to Saul Figueroa, Michelle Johnson and Alondra Milena Mendoza for becoming "Water-wise"! See Article on Page 20.

www.oceansidemagazine.com

Para informacion en Espanol sobre cualquier tipo de pregunta en cuanto a Programas de Parques y Recreacion, favor de llamar a George Rivera al 435-5049.

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Green Oceanside

Be sure to save these pages for reference.

Major Changes for Commercial Recycling in Oceanside

Green Oceanside is about teaching families in our local community how to be better stewards of the planet by recycling, composting, saving water, conserving energy, and preventing water pollution.

To better meet the needs of our community and our environment, all Oceanside Commercial Customers are now offered single-stream recycling services beginning immediately.

In the past, businesses and commercial customers, including multifamily apartment complexes, were required to source separate the recycling by material type. This meant that separate containers were required to recycle paper/cardboard, and bottles/ cans. Single-stream recycling provides convenience and ease. Effective immediately all commercial customer's recycling material can be placed together into one recycling container.

Oceanside businesses have an outstanding track record for participating in the City's recycling program. By recycling, businesses are helping the City of Oceanside achieve their zero-waste goals. Oceanside businesses that recycle also help the City comply with State of California Mandate AB 939, which requires all California cities to divert a minimum of 50 percent from landfills.

Over the next few months, Waste Management will be changing out the current signage to reflect the new service offerings. Below you will find a list of recycling materials accepted in your container immediately. Customers do not have to wait for the new signage to begin this service at their place of business.

Remember, Waste Management provides different types and sizes of recycling containers to meet your needs. Recycling service is also offered at a rate that is lower than trash service. For inquiries regarding Waste Management's different service offerings, please contact Waste Management's customer service line at (760) 439-2824 or 1(866) WM RECYCLE (967-3292) from 8:00 am to 5:00 pm, Monday through Friday. Or if you are interested in a more in-depth waste and recycling analysis, please feel free to call the City of Oceanside's Recycling Hotline at (760) 435-5015 to schedule a waste audit.

Thank you for being a part of the Green Oceanside Business community.

Acceptable Items

Aluminum, bi metal & tin cans
Aluminum Cans
Tin & Steel Cans
Food Cans

Glass
Liquor Bottles
Soda Bottles
Glass Bottles
Glass Jars

Plastic (NO Plastic Bags)
Water Bottles
Plastic Condiment Bottles
Plastic Milk Jugs
Juice & Soda Bottles

Paper and Cardboard
Mixed Paper
White Paper
Colored Paper
Manila Folders
Cereal Boxes
Newspaper
Telephone Books
Envelopes
Magazines
Paper Egg Cartons
Corrugated Cardboard Boxes (broken down)
Detergent Containers
Catalogs
Direct Mail

Let Us Help You Green Your Business

Let the City of Oceanside's Green Oceanside team help you green your business by recommending ways to reduce waste, recycle, and purchase in a sustainable manner. Every business in Oceanside can be a part of the Green Oceanside solution, to a cleaner, healthier planet and community.

Please call Colleen Foster at (760) 435-5021, to schedule an appointment to discuss ways to make your establishment an eco-friendly place of business. You may also find out how we can help your business save money by reducing your trash needs and increasing your recycling services. The opportunities to go green are endless. We look forward to celebrating the Green Oceanside community with your business.

Also, please let us know if you would be interested in some free recycling containers for your business to help you get started on the path towards Zero Waste in Oceanside.

Michelle Johnson

Saul Figueroa

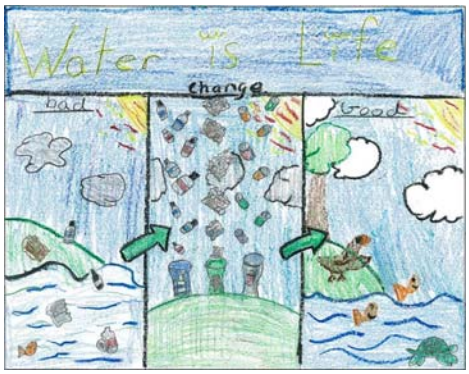

Alondra Milena Mendoza

Oceanside Water Awareness Poster Contest Winners

Congratulations to the winners of the Oceanside Water Awareness Poster Contest 2011: Michelle Johnson from North Terrace Elementary, Saul Figueroa from Laurel Elementary, and Alondra Milena Mendoza from Foussat Elementary.

This poster contest is part of California Water Awareness Month, an annual celebration sponsored each May by the North County Water Agencies. The contest challenges fourth grade students to learn about the importance of water in Southern California, including water conservation and pollution prevention. This year's theme was "Water is Life."

The top three students were recognized at the May 25, 2011, City Council meeting for their outstanding artwork that encourages everyone to protect and use water wisely. The posters will be included in the 2012 North County Water Agencies Water Awareness calendar that will be distributed in late 2011.

Easy and Convenient Ways to Save Water

Now that we have moved back to normal water supply conditions, it's still important to continue our water efficient habits. Here are some easy and convenient ways to use water efficiently.

- For saving water around your home, look for great ideas and classes from these websites: **www.bewaterwise.com** and **www.SaveWaterOceanside.com**
- SDG&E offers free home energy-savings kits which save water too. The kits include a kitchen faucet aerator, two bathroom faucet aerators and a low-flow showerhead. Visit **www.sdge.com/energykit** or call 1 (800) 644-6133 to order your complimentary kit.
- Transform your landscape into a beautiful low-water-use garden by planting low-water-use plants, checking your irrigation system and fixing any leaks, watering before 10:00 am and after 6:00 pm, and adding mulch.
- Get a free Smart Landscape Evaluation which is a free service designed to assist you with identifying indoor and outdoor water-savings opportunities. Participants can expect to have a professional technician review their indoor fixtures and evaluate the performance of their irrigation system. At the end, the participants will receive a list of recommendations and a proposed watering schedule. Call (866) 883-1332 to schedule your free landscape evaluation.

To learn more about water-saving resources, water-use efficiency tips, rebates, water news, and other water-saving programs, please visit **www.SaveWaterOceanside.com** or contact the Oceanside Water Utilities Department at (760) 435-5800.

Greening Your Special Event

The City of Oceanside is requesting that all special events at city parks, beaches, harbor and/or other city facilities, comply with state and local mandates for the proper disposal of solid waste and recycling. To ensure the greatest diversion rate possible, we would like to assist you with meeting this requirement by providing you with several options and/or recycling containers for your event. When you apply for your event permit at the City Recreation Department, they will provide a required form with all the details. Additionally, Waste Management of North County can provide bigger recycling containers for the large venues. You may also call our Recycling Hotline for more information on how to recycle at your next event at (760) 435-5015.

For those of you who are planning a small party or picnic with family and friends, please remember to do your best to keep your event green and litter-free. There are many simple ways to do this, which can be fun and entertaining for all of those attending. The following are a couple of tips on how to green your event, large or small:

* Send E-vites rather than actual invitations. Reduce your use of paper.
* Check that your event location has a recycling bin prior to the event. If there is no bin close by, designate a personal container for recycling, or for larger events, please call the Recycling Hotline at (760) 435-5015 for some free special event recycling containers.
* Avoid serving bottled water – use pitchers and reusable cups. Encourage your guests to bring their own utensils, or have a project where everyone decorates their own utensils.
* Purchase food that does not have a lot of packaging, or is in packaging that can be recycled. All plastics with the recycling symbol #1-7 can be recycled in Oceanside, as well as bottles, cans, paper, and cardboard.
* Do not use Styrofoam materials and/or plastic bags. Avoid using plastic utensils. These materials do not biodegrade, but rather end up in our landfills for hundreds of years.
* Strive to have as little leftover food as possible. Order wisely, and encourage guests to take home leftovers. Food waste is always unnecessary.
* Provide food and condiments in bulk. Avoid excess packaging.
* Leave no trace: Invite guests to help with a quick clean-up of the area, to ensure the area is cleaner than when you arrived and ready for the next set of guests.
* **HAVE FUN AND BE GREEN!**

Free Irrigation Workshop

Managing Your Irrigation System
Thursday, July 21, 4:00 to 6:00 pm
Space is limited! Call (760) 435-5828

Take a free hands-on irrigation workshop at MiraCosta College to learn about:

- Irrigation systems and basics
- How to adjust your irrigation system
- How to troubleshoot and do simple repairs
- Irrigation scheduling
- Common sprinkler problems and much more.

This workshop is sponsored by the Oceanside Water Utilities Department. Space is limited and a special parking permit is required to park on campus. Please call (760) 435-5828 to reserve a seat or for more information.

How Many Oceanside Water Bodies Can You Name?

This is the first in a series of information articles about Oceanside water bodies that will appear in the Oceanside Magazine. The Oceanside Clean Water Program would like you to be informed about the different water bodies that are in Oceanside. By being aware of the water body closest to your home, school or business, you can be better prepared to help protect them from polluted runoff.

San Luis Rey River

The San Luis Rey (SLR) River originates in the Palomar and Hot Springs Mountains in eastern San Diego County and extends over 55 miles across northern San Diego County before discharging to the Pacific Ocean in the City of Oceanside. The SLR River parallels Highway 76 in Oceanside and drains a watershed of approximately 360,000 acres or 562 square miles. Within the City of Oceanside, the SLR River is fed by one of its tributaries, Pilgrim Creek.

There are numerous land-use types within the watershed with the majority of land remaining undeveloped. Higher population concentrations are in the western area of the watershed. Residential and agriculture serve as the dominant land uses in the watershed.

These land uses have introduced many pollutants into the river and have degraded the water quality. The river shows high levels of chloride and total dissolved solids and the mouth of the river has had historical bacterial exceedances.

About 8 percent of the City of Oceanside's drinking water supply comes from the SLR Valley Groundwater Basin. Water from the basin is pumped from wells and treated at a reverse osmosis plant before being distributed to Oceanside residents.

You can find more information about other Oceanside waterbodies by logging onto **www.OceansideCleanWaterProgram.org** and clicking on Waterbodies. While on the website you can also learn what you can do to help prevent pollution from reaching these water bodies.

San Luis Rey River discharges into the Pacific Ocean.

2011 Oceanside River, Creek, and Beach Cleanup Events

Mark your calendar to join the Clean Water Program staff and citizen volunteers at these events to help remove trash and debris from our local rivers, creeks, and beaches.

July 5, 2011
Tuesday - Morning After Mess - City Beaches
Time: 8:00 - 11:00 am

September 17, 2011
Saturday - Buena Vista Creek Cleanup and California Coastal Cleanup Day
Time: 9:00 am – 12:00 pm

November 5, 2011
Saturday - San Luis Rey River Cleanup
Time: 9:00 am – 12:00 pm

More information can be found by calling the Oceanside Events Hotline at (760) 435-5536 or at **www.OceansideCleanWaterProgram.org/events.asp**

Eco Friendly Tips

These days, a growing number of people are making greener choices for their families and are working to create more sustainable homes. Here are some environmentally conscious tips to honor Mother Earth every day.

By putting into practice even a few of these easy tips, people are sure to reduce their carbon footprint, see a positive difference in family health and even a few less trips to take out the trash:

- **Eat Green:** Re-evaluate your grocery list and avoid highly processed foods, diet foods, instant and ready-made foods, juice-flavored drinks, white breads and sugary cereals and snacks.
- **Go organic:** Focus on fresh, organic in-season fruits and vegetables, whole grains high in fiber as well as beans, nuts and seeds.
- **Paper or plastic?:** How about canvas? Use recyclable canvas shopping bags when buying groceries instead of paper or plastic. Keep some in your car as well as at home so they are always on hand when you need them.
- **Dish out your meals with health in mind:** Use stainless steel or cast iron pots and pans when possible, as non-stick pans and finishes may be toxic. Serve your meals on ceramic dishes, use glass cups and avoid wasteful plastic-ware and paper plates.
- **Think twice about food storage:** Plastic containers can leach toxic chemicals into foods. Avoid reheating stored food in plastic containers and when possible, use glass jars.
- **Cut back on paper towels:** Though convenient, disposable paper towels are the cause of a lot of waste in the household. Stick with reusable sponges and micro-fiber cloths instead.
- **Drink from the tap:** Purchase a water filter to place directly on your faucet and reduce bottled water consumption by using a refillable canteen.
- **Green cleaning:** Cast out those chemical cleaning products and go back to the basics. Try wiping down surfaces with white vinegar, use baking soda in bathrooms, or purchase green-friendly products.
- **Plan a daily nature date with your kids:** Carve out some time each day to disconnect from the rest of the world and get outside with your kids. The time spent outdoors is not only healthy for the mind and body, it will help your children become more mindful about their environment.
- **Educate your children on being green:** The best way to continue the green movement is to educate the next generation. Teach your children simple ways they can help recycle, reduce and reuse.

Get CFLs out of the closet and into your sockets!

Do you still have compact fluorescent light (CFL) bulbs sitting in storage instead of in a socket? Do you still have older style (incandescent) bulbs in use?

If you answered yes to either question, don't wait any longer to put those CFLs to work! Switching out older bulbs in favor of CFLs is one of the easiest ways to save energy and money in your home.

CFLs save you money!

For starters, SDG&E helps make bulbs more affordable by providing promotional pricing at participating stores. Look for ENERGY STAR®-qualifying products with the SDG&E promotional sticker at your favorite retailer.

SDG&E also hosts lighting exchanges where customers can turn in older bulbs or lamps for newer, more energy-efficient equivalents. For upcoming exchanges in your area, visit **www.sdge.com/lighting.**

Even when purchasing bulbs at full price, the investment is well worth it. While CFLs may be a bit pricier at the register, they soon pay for themselves in energy savings. Replacing a standard 60-watt incandescent bulb with a CFL equivalent can save a single household $30 in energy costs over its lifetime. Plus, when used properly, they burn brightly for up to 10,000 hours as opposed to just 800-1,500 hours for an older incandescent.

What are you waiting for?

Make it a goal to switch to CFL lighting—the sooner the better. And if you've got a CFL sitting unused in a closet, now is the perfect time to put it to work!

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CITY OF OCEANSIDE
300 N. Coast Highway
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Councilmember ..... Gary Felien
Councilmember ..... Jack Feller
Councilmember ..... Jerome M. Kern
City Treasurer ..... Vacant
City Clerk ..... Barbara Riegel Wayne
City Manager ..... Peter Weiss
City Attorney ..... John Mullen

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About The Cover

The photo on the cover is of one of the quilts from the *ISLANDS OF COLOR: POLYNESIAN QUILTS* exhibition at the Oceanside Museum of Art. This exhibition highlights quilts recently given to the museum by Edward and Mina Smith of Rancho Santa Fe. For more information, see Page 30.

www.oceansidemagazine.com

Para informacion en Espanol sobre cualquier tipo de pregunta en cuanto a Programas de Parques y Recreacion, favor de llamar a George Rivera al 435-5049.

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Green Oceanside

Be sure to clip out and save these pages for reference.

3rd Annual Green Week & Oceanside Green Fair

The City of Oceanside invites you to participate in its 3rd Annual Green Week and Oceanside Green Fair. From March 7-12, the City will be honoring Green Week 2011 at various community events. Green Week 2011 is coordinated by the Green Oceanside campaign, which is a collaboration between several City Departments, local environmental organizations and businesses dedicated to educating the public about environmental conservation. Green Oceanside is about teaching families in our local community how to be better stewards of the planet by recycling, composting, conserving water, conserving energy, and preventing water pollution.

All Green Week events from March 7-12 will be **FREE** to the whole family. Events will include a Citywide environmental youth art contest, a film festival, "Green" storytime at the library, a beach cleanup, an electronic waste collection event, and a Green Fair. The following is information about the week's activities and how you can be a part of Green Oceanside's Green Week 2011.

On Tuesday, March 8, the City will be hosting its 2nd Annual "Green Oceanside Environmental Film Festival" at the El Corazon Senior Center from 6:00 to 8:00 pm. Last year's Film Festival featured the film "Tapped", which shed light on the water bottle industry and its impact to the environment. There was an excellent turnout last year, and audience members really enjoyed the opportunity to share dialogue with City officials and local nonprofit agencies after the show. The feature film this year has not been determined, but will definitely highlight some key environmental issue that affects us locally and internationally. For updated information, please stay tuned to our City's Web site as we near Green Week 2011.

The Citywide 3rd Annual Environmental Youth Art Contest invites Oceanside Unified School District students (K-6) to identify what "Green Oceanside" means to them. Students are asked to submit a poster entry that incorporates the following concepts: Reduce, Reuse, Recycle, Water Conservation, Pollution Prevention and/or Clean Earth. In order to highlight our young environmentalists, last year's winning artwork was actually incorporated in City outreach materials as well as in the design of several thousand reusable bags that are currently being distributed Citywide at several City events including Harbor Days 2010, and Day Without a Bag 2010, all in an effort to support the reduction of plastic bags, and the promotion of Green Week 2011. The City expects to incorporate the students' winning artwork in some kind of outreach promotional material every year after each Green Week event. Look for these items the next time you see a Green Oceanside booth at one of our great City events. Our children's artwork is an inspiration to us all to be environmental conservationists.

The Oceanside Library will also be having an environmental-themed storytime throughout Green Week 2011. For information and times, please ask at the Children's desk in your local branch, or call (760) 435-5600. Educating our children at an early age is the key to environmental preservation for generations to come.

Citizens view composting efforts.

Green Week 2011 will have its grand finale on March 12 at a Beach Cleanup and our 3rd Annual Green Fair. San Diego Coastkeeper will be sponsoring this beach cleanup which will be held from 9:00 am to 12:00 pm. The registration site for this beach cleanup event will be on the south side of the Pier. Interested groups can log onto www.oceansidecleanwaterprogram.org or www.sdcoastkeeper.org for more information. Help us keep our beaches beautiful and clean.

After the Beach Cleanup we invite the whole family to join us at the 3rd Annual Green Fair, from 11:00 am to 4:00 pm at the Oceanside Amphitheater located at the south side of the Pier. The Fair will have environmental related booths that will be distributing information and free green goodies to all who attend. There will be live entertainment for the whole family, children's activities and crafts, as well as plenty of free information and goodies all intended to help you be more environmentally sustainable at home and at work. Top Finalists and Grand Prize winners of the Environmental Youth Art Contest will be announced at the Award Ceremony in the afternoon at the Amphitheater, with some of the submitted artwork from the contest on display. Please join us in celebrating our creative youth as they shed light on environmental conservation and preservation.

Another highlight of the Green Fair will be the opportunity to drop off your electronic waste to recycle for **Free**. The drop off event will be held between 11:00 am to 4:00 pm at Parking lot 24, at the corner of Mission Avenue and Myers Street in downtown Oceanside.

For more information about Green Week 2011 events and the Green Fair call (760) 435-5015 or log onto the City of Oceanside Web site at www.ci.oceanside.ca.us and look under "Whats New" for a link to Green Week 2011, as the event nears. Thank you for being a part of Green Oceanside.

The 'Cash for Cans' Program in Oceanside

The City of Oceanside's Solid Waste and Recycling Division has a program called "Cash for Cans", and the objective of the program is to increase recycling and reduce litter in Oceanside. This program not only increases the recycling of plastic and aluminum beverage containers with CRV (California Redemption Value) fees, but it's also a fund-raising opportunity for many nonprofit organizations that "adopt" and service the recycling containers, and then turn in their recyclables for cash to use toward their cause(s).

This is how the program works: we purchase recycling containers with grant funds we receive from the California Beverage Container Grant, and then place the containers at local schools, parks, harbor, strand and beach areas, as well as other locations used by the public. Then we solicit nonprofit groups such as sports teams, schools or classrooms, youth groups, among other community non-profit organizations, who then "adopt" one or more containers, pledging to service the containers by collecting the bottles and cans on a regular basis, and delivering them to a recycling center for cash, which can then be used to benefit their cause(s). All CRV containers can be redeemed for cash at a local certified recycling center such as Waste Management's Recycling Center, located at 2880 Industry St. in Oceanside.

The next time you go to a park, school, recreation center, or other public areas in Oceanside, and happen to see a recycling container (such as the blue one shown here), please use it to recycle your empty beverage containers, and be proud that you are helping a nonprofit organization in Oceanside and contributing towards a beautiful and litter-free ***Green Oceanside.***

Is your non-profit organization interested in participating?

Please call the City's Recycling Hotline at: 435-5015

The **Cash for Cans Program** is open to schools, sports leagues, recreation programs, community groups or associations, and other nonprofit organizations in Oceanside (and/or OUSD). The only requirements for the program are:

- Sign an agreement with the City to adopt one or more containers.
- Service the containers on a regular basis.
- Take your recyclables to a certified recycling center in Oceanside.
- Maintain records with amounts of materials recycled and funds received.
- Report your findings bi-annually to the City.

Have a GREEN Holiday Season

Please remember to use items that are reusable and/or recyclable during the holidays!

Keep in mind that most people produce more waste during the holidays due to gift-wrap materials, excess packaging on toys and electronics, gift boxes, etc. We also tend to buy more packaged foods because we are home for the holidays, our children are on break from school, and/or we have more guests. Here are some tips on reusing and recycling during the holidays:

- Use less gift wrap and/or packaging for gifts. Remember to recycle all the gift-wrapping paper, gift bags, shirt boxes, and cardboard packaging afterwards!
- Reduce your use of single-use plastics such as plastic water and soda bottles. Instead buy larger sizes and use your glassware at home in order to reduce waste (bonus: you will save money too!)
- Reduce your use of disposable plates, cups, silverware and plastic bags. Instead save money, and our planet, by using your dishes and silverware that are reusable. Take your reusable bags to the grocery store instead of accepting their plastic bags, which create more waste and are harmful to the planet. *In fact, reusable bags make great gifts!* (See our "Day Without A Bag" article in this issue to find out when and where to get a free reusable bag.)

Christmas Tree Recycling

Waste Management will collect Christmas trees at the curb during the first two weeks following Christmas on <u>your regular collection day</u>, between Dec. 27 – Jan. 14.
These are the guidelines for tree-recycling at the curb:

- Trees taller than six feet must be cut in half.
- Please remove all decorations including tinsel, lights, ornaments and tree stands, and then place your tree at the curb.
- Flocked trees cannot be recycled, so they will be collected as trash instead of being recycled as green waste.
- Better yet, do not use tinsel or flock your trees at all… it can be your gift to the environment.

Finally, we hope you have a safe and pleasant Holiday Season

If you have any recycling questions or requests, please call our Recycling Hotline at: (760) 435-5015.

December 16th: Day Without A Bag

We will be handing out reusable bags at City facilities, local retail establishments, and at this year's **Bagless** Sunset Market on Thursday, December 16th. Last year we had a successful event, handing out over 4,000 reusable bags throughout the City. The purpose of "Day Without A Bag" is to encourage our residents to give back to the environment by using reusable totes instead of disposable plastic or paper bags. Plastic bags in particular are considered a significant component of litter in the environment due to their durability and light weight, and make up the greatest amount of litter debris in our streets, waterways, and beaches. In fact, it takes approximately 1,000 years for a plastic bag to fully biodegrade. Please refer to our City Web site as we get closer to December 16th, for specifics on which stores may be handing out incentives to use reusable bags, or free reusable bags.

Please stop by our booth at the Sunset Market for your free reusable bag on December 16th and show your support by using fewer plastic bags!

Reusable bags are popular.

A Message from the *Green Team:*

Thank you for your recycling efforts at home, work, and outside in public areas of our community! We want to remind all City residents that any time you need recycling containers for your home, simply call our Recycling Hotline to request them. We want to make sure you have all the recycling containers you need. Waste Management offers a green crate for all mixed paper, and a separate yellow crate for glass, plastic and bi-metal/aluminum cans. They also offer several types and sizes of recycling containers for multifamily complexes and businesses. Please call the Recycling Hotline for more information and/or to request your recycling containers, at: (760) 435-5015.

Water Conservation is Still Necessary in San Diego County

San Diego County still faces significant water supply challenges created by regulatory restrictions on water deliveries from the Bay-Delta and the lingering effects of the several years of drought. The first year of regionwide water shortage allocations and Level 2 water use restrictions began July 1, 2009. Over the next 12 months, urban water use fell by 12.8 percent. San Diego County Water Authority officials attribute the reduction in regional water use to several factors – improved water conservation by residents and businesses, suppressed demand due to the ongoing recession, and an average rainfall year following several years of below-average rainfall.

Although snowfall in the Sierra Nevada in Northern California was well above average during the winter months of 2009-2010, pumping restrictions in the Bay-Delta significantly reduced any water supply benefits from it. Imported water supplies are still recovering from three years of historic dry conditions. Even though the 2010 winter's above-average rain and snow prevented water shortage conditions from worsening, the region remains only one dry year away from potentially severe shortages. Many state reservoirs have still not returned to pre-drought levels. The Colorado River basin will take many years to recover from drought conditions in eight out of the last ten years.

Locally, rainfall provided marginal help to local reservoirs, but not enough to mitigate the San Diego region's dependence on imported supplies. Rainfall can help lower demand by reducing irrigation needs, but it only provides about five percent of the San Diego region's water supply.

The possibility of another below-average year due to the impacts of La Niña conditions forecast for the 2010-2011 winter will reduce water available from the State Water Project. Regardless of precipitation levels, regulatory restrictions on State Water Project pumping are in place and will reduce deliveries of available water to this region for the foreseeable future, making meeting the region's water needs much more challenging.

What You Can Do to Help:

1. In winter, irrigate only if needed to maintain some moisture in soil.
2. Check soil moisture using your finger or shovel and wait until the soil is dry 1 or 2 inches deep to water.
3. Use the landscape calculator at www.bewaterwise.com for advice on how much and how often to water.
4. Water only after 8:00 pm and before 6:00 am to reduce water loss due to evaporation and wind.
5. Fix leaking sprinklers, valves and pipes. A broken spray sprinkler wastes 10 gallons per minute or 100 gallons in a typical 10 minute watering cycle.
6. Place a 2- to 3-inch layer of mulch on bare spots. This will reduce water evaporation, improve the soil and control weeds.
7. Replace lawn areas with California-friendly groundcovers, trees and shrubs whenever possible.
8. Go to the City of Oceanside's Web site at ci.oceanside.ca.us; click on "Water Conservation Tips and Rebates" for information and incentives to help you save water. Or call the Water Utilities Department at 435-5800 for conservation assistance.

Loma Alta Creek Cleanup
April 23, 2011
9:00 am – 12:00 pm

Celebrate Earth Day by participating in the 12th Annual Creek to Bay Cleanup event on April 23, 2011. The City of Oceanside, together with event sponsors I Love a Clean San Diego, San Diego Coastkeeper, Harrah's Rincon Casino and 1-800-GOT-JUNK, will be hosting a cleanup along the banks of Loma Alta Creek and at two sites along the Pacific Ocean.

Join us to help remove unwanted materials from the creek and beach and help to improve Oceanside creek and beach water quality. Volunteers will receive cleanup supplies, refreshments, community service hours, and a free T-shirt or other giveaway item. For more information call (760) 435-5536 or (760) 435-5807.

Choose from five registration sites:

* Buccaneer Park at 1500 Pacific Street (cross street is Morse Street)
* Behind Smart & Final on Oceanside Boulevard and I-5 (1701 Oceanside Boulevard)
* Mesa Drive between El Camino Real and Rancho Del Oro Drive
* Behind commercial buildings at 1629 Ord Way (Off Oceanside Boulevard between College Boulevard and Temple Heights Drive)
* South side of the Oceanside Pier

Receive future event notices by email
Send your email address to cleanwaterprogramevents@ci.oceanside.ca.us, or log onto the events tab at www.OceansideCleanWaterProgram.org to register to receive event notices by email.

2011 Oceanside River, Creek and Beach Cleanup Events

Mark your calendar to join the Clean Water Program staff and citizen volunteers at these future events to help remove trash and debris from our local rivers, creeks, and beaches.

April 23, 2011
Saturday – Loma Alta Creek Cleanup
Time: 9:00 am – 12:00 pm

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More information can be found by calling the Oceanside Events Hotline at (760) 435-5536 or at www.OceansideCleanWaterProgram.org/events.asp .

Bacteria Source Tracking Project Along the San Luis Rey River

The Oceanside Clean Water Program was awarded a grant valued at $554,000 from the California State Water Resources Control Board. The grant is to be used to conduct a study to determine the sources of high bacteria levels that cause beach advisories at the mouth of the San Luis Rey River. Ultimately, the findings may help the beaches stay cleaner and improve the quality of life for Oceanside. The project consists of three components, two of which involve bacteria monitoring and one that involves visual observations.

The goal of the project is to identify where bacteria levels are elevated and to pinpoint sources. Some of these sources may include birds that congregate in the mouth of the river, pet waste left on the ground, and the homeless population in the river bed. Results from lab analysis and genetic testing will be compiled and analyzed to provide an overall assessment of the lower San Luis Rey River. With potential locations and sources of bacteria identified, the City will build on the study's results by identifying actions to help reduce bacteria loads.

The City started collecting samples and river flow measurements at several monitoring locations in the summer of 2008. In December of 2008, the project was temporarily stopped due to state budget shortfalls and then restarted in December of 2009 after the state gave the go-ahead.

Additional sampling was conducted in May and August of 2010; more is planned for the wet season between October 2010 and March 2011. These rainy months are critical to sample since these are the times when ocean water is most impacted by high bacteria levels.

Keep your eye out for project updates in future editions of the Clean Water Program Newsletter. In addition, the final report for the overall project will be posted at www.OceansideCleanWaterProgram.org.

One Year Anniversary of Cogen Facility Benefits Ratepayers and Environment

The one year anniversary of the San Luis Rey Cogen Facility provides proof that Cogen facilities in San Diego County reap many benefits for ratepayers, the environment and city entities.

The Cogen plant is a biogas generation system. It uses the methane gas by-product from the San Luis Rey Wastewater Facility's operations and converts the gas into energy and heat. That heat and energy are used to power the wastewater facility. Prior to the Cogen facility's operation, the methane gas was burned into the atmosphere.

The City is proud to host the first biogas generation system built without ratepayer funds. The Cogen plant is saving Oceanside hundreds of thousands of dollars every year without spending one dime of ratepayer money, and the environmental benefits are impressive.

The Cogen facility's operations reduce 5,600 tons of carbon dioxide emissions annually. This annual reduction of greenhouse gas is equal to removing more than 900 cars from the road each year.

The power produced at the Cogen facility is more than what a similar-size solar power project would generate on a 24-hour basis. The City of Oceanside saves an estimated $250,000 in annual electric and natural gas expenses that would have been otherwise used to operate the wastewater facility.

The entire project was funded with a grant from CHP Clean Energy, LLC, a private entity. CHP funded the project through its subsidiary, Calpwr Oceanside, LLC, which assumes all operating risk. CHP selected Calpwr to build and maintain the Cogen facility.

As private companies, Calpwr and CHP are able to obtain state and utility grants, tax incentives and renewable energy credits that are unavailable to municipalities. Building a Cogen facility is more cost-effective than other competing technologies. Coupled with the grant and tax incentives this facility demonstrates that a renewable energy project can be profitable for a private company and benefit a municipality simultaneously.

City of Oceanside Celebrates Successful Operation of Privately Funded Green Energy Project

Joe Silva, Tom Moore and the rest of the team from Calpwr have the practical experience that helped make this project a success from the start. CHP is looking to provide similar grants to 20 more municipalities, and we encourage interested parties to contact us for more information.

The CHP Clean Energy and Calpwr partnership will maintain and operate the Cogen facility for 10 years with the option of an additional decade. The Center for Sustainable Energy provided financial incentives that helped make the project economically viable.

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Spring 2011

Oceanside MAGAZINE

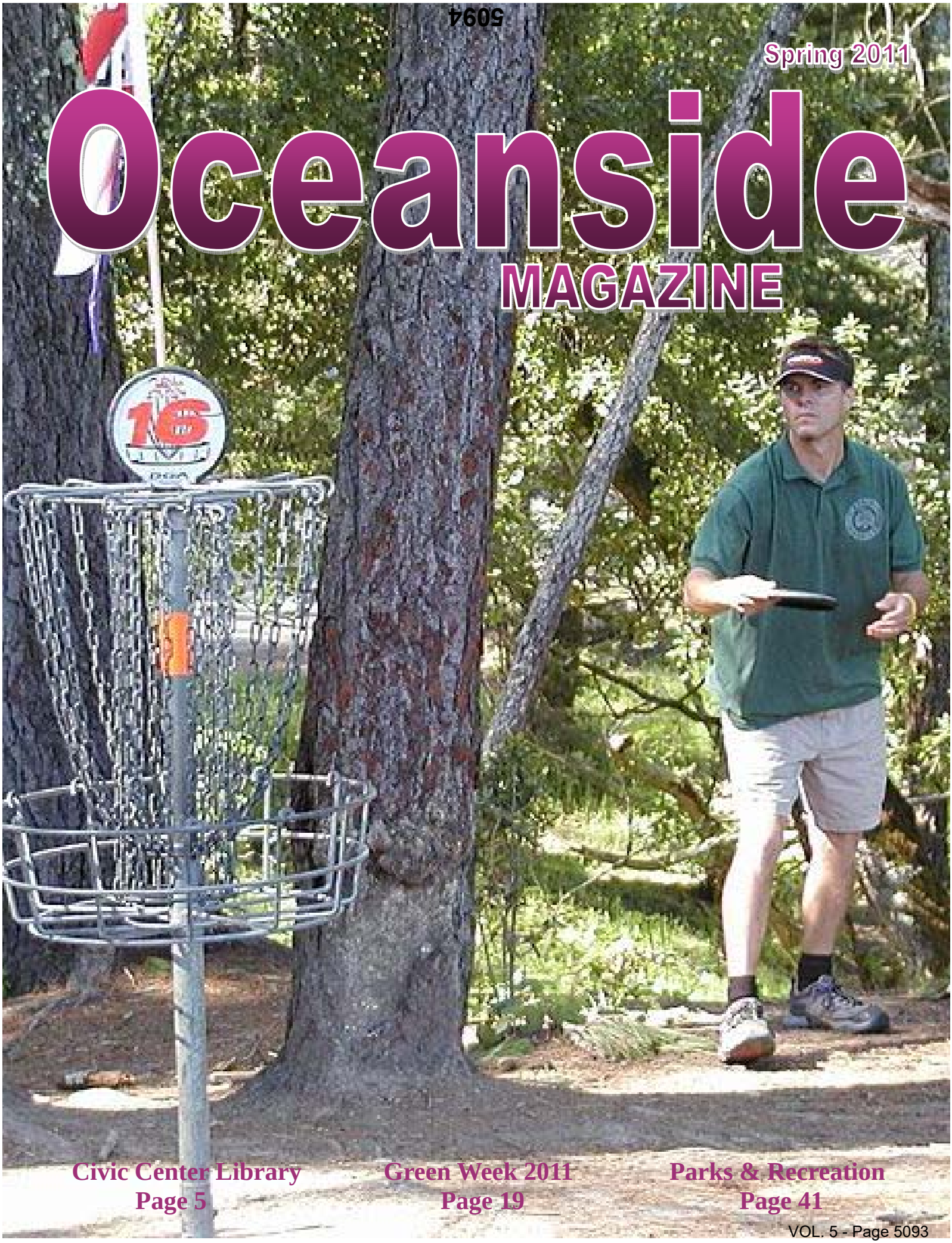

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About The Cover

Oceanside is pleased to announce a new disc golf course at Goat Hill! Disc golf will be offered side-by-side traditional golf beginning March 1. By bringing disc golf to Goat Hill, the City is looking to turn an underutilized asset into something new and exciting as well as to generate additional revenue. Please check out this new offering, get some exercise and enjoy one of Oceanside's beautiful amenities!

www.oceansidemagazine.com

Para informacion en Espanol sobre cualquier tipo de pregunta en cuanto a Programas de Parques y Recreacion, favor de llamar a George Rivera al 435-5049.

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City of Oceanside

GREEN WEEK 2011

March 7-13

Please Join Us for A Week Full of FREE Events that Promote a Green Oceanside Community!

Environmental Film Festival Featuring "Bag It"

Tuesday, March 8, 6-9pm

Sunshine Brooks Theater, 217 N. Coast Hwy, Oceanside 92054

The film "Bag It" examines our society's use and abuse of plastic. There is no admission fee and light refreshments will be served.

Compost Workshop

Tuesday, March 8, 2-4pm (Questions: 760-435-5807)

El Corazon Senior Center, 3302 Senior Center Dr., Oceanside 92054

Learn to compost kitchen scraps and garden materials at this free event.

Green Fair

Saturday, March 12, 11am- 4pm

Oceanside Pier Amphitheater

Enjoy children's activities, environmental booths, food, live music, an awards ceremony, and free goodies at this free public event.

Beach Cleanup, Hosted by Coastkeeper

Saturday, March 12, 9-11am (To Volunteer: 760-435-5807)

South side of Oceanside Pier

Free E-Waste Drop Off

Saturday, March 12, 11am-4pm

Bring your electronics free of charge for recycling at parking lot 24, corner of Mission Ave. and Myers St. More details on back.

Free Used Oil Filter Exchange Event

Sunday, March 13, 1-3pm (Information: 760-435-5021)

Kragen O'Reilly Auto Parts Store, 3661 W. Mission Ave., Oceanside 92058

Green Educational Library Programs

Monday-Friday, March 7-11

For information and times, contact children's desk 760-435-5600

Green Oceanside Youth Art Contest OUSD K-6th

Student entries will be on display at the Green Fair March 12

Don't Miss!

Environmental Film Festival

Featuring "Bag It"

March 8, 6-9pm

Green Fair

March 12, 11am-4pm

Green Week Questions

Phone:
760-435-5021
Email:
greenoceanside@ci.oceanside.ca.us
Web site:
www.ci.oceanside.ca.us

Green Week is sponsored by Green Oceanside which is a collaboration of several City departments interested in promoting environmental sustainability and awareness.

Free E-Waste Drop Off

Sponsored by: City of Oceanside & 1-800-GOT-JUNK?

Saturday, March 12, 11am-4pm

Oceanside Parking Lot 24

Bring your electronics free of charge for recycling!

A percentage of proceeds will be donated to the San Luis Rey Watershed Council.

Accepted Electronics

Cell Phones
Computers
Computer Monitors (CRT, Plasma, LCD)
Consumer Electronics
Copiers/Printers
CPUs/Computer Towers
Digital & Video Cameras
DVD Players
Fax Machines
Hard Drives
Keyboard/Mice
Laptops
Electronic Medical Equipment
Miscellaneous Wires
MP3 Players
PBXs
PDAs
Scanners
Speakers
Stereo Equipment
VCRs
Telephones
Televisions
Household Appliances

*No household hazardous waste materials will be accepted

GREEN WEEK 2011

Event Locations

Please note downtown locations for Green Week events on the map above, including Environmental Film Festival, Green Fair and E-Waste Drop Off. Free parking at Oceanside City Hall and Lot 23 located at Cleveland St. and Pier View Way.

Upcoming Green Changes in Oceanside's Solid Waste and Recycling Services

In order to be better stewards of our planet, the City of Oceanside and Waste Management understand the importance of improving solid waste and recycling services in our local community that meet and exceed the requirements set forth by the State of California. California State Mandate AB 939, requires all California cities to divert a minimum of 50% from deposit in landfills. Today, the City of Oceanside can boast a 59% diversion rate, with an ultimate goal of 75% diversion by the year 2020.

Over the next two years, residents will see changes or enhancements to their current solid waste and recycling services that will help our City become a zero-waste leader in San Diego County. Highlights of significant service changes and implementation schedules are briefly explained below.

Free Electronic Waste Pick –Up:

Early Summer 2011

- Oceanside residents will be able to have electronic waste items such as televisions, computers, and other e-waste items collected curbside as a free on-call service starting early summer of 2011. Prior to then, Oceanside residents are allowed to drop off these electronic materials at the Oceanside Recycling Center for no charge. Previously, there was a $0.50 per pound charge for non-Cathode Ray Tubes.

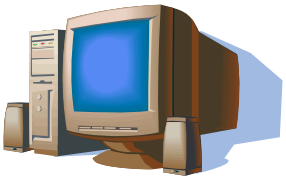

Automated Solid Waste and Recycling Service:

Phased in from mid-2011 to 2012

- Residential customers' curbside solid waste and recycling services will be transitioned from manual service to a more convenient automated recycling service that will allow the comingling of all recyclables (paper, cardboard, plastic, metals, etc.) to be placed in one cart. As the yellow and green crates residents currently use for recycling get phased out, each single-family resident will be provided a 96-gallon solid waste cart, recycling cart, and a green waste cart. Shortly after the initial implementation phase of this enhanced recycling service, low-volume generators of trash will also be provided an incentive opportunity to use a 35-gallon cart at a lower rate, to encourage recycling and the reduction of our waste stream. Commercial and multifamily accounts will also be transitioned to automated service starting as early as April of 2011. Residential automated service will begin to be phased in late 2011 to 2012.

- The automated recycling service will be provided via a new fleet of compressed-natural-gas vehicles, furthering Oceanside's commitment to reducing our greenhouse gas emissions.

Bulky Item Collection

Effective January 1, 2011

- New guidelines include 5 items per pick-up, up to three pick-ups per year, at no charge. Please remember the donation and the recycling or reuse of used household items are great ways to divert these materials from the landfills, supporting our City's diversion rate and our community's environmental standards.

Curbside Cell Phone and Household Battery Recycling:

Phased in early 2012

- Once the automated residential recycling carts are delivered, residents will be able to conveniently and properly dispose of cell phones and household batteries at the curb, by placing these items in a clear, sealed plastic bag and placing that bag on top of their recycling collection cart prior to their regularly scheduled weekly service.

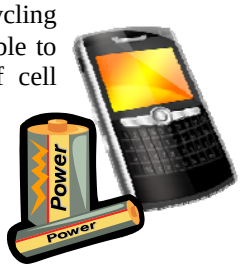

As each implementation date nears, we will inform our customers of service changes as they approach, to ensure a smooth and successful transition for our residents. For more information on current services, future changes, and Green Oceanside programs, please refer to our Solid Waste and Recycling Web page under the What is New section of the City Web site at **www.ci.oceanside.ca.us**, or call the Recycling Hotline at (760) 435-5015, or visit the Waste Management Web site at **http://northcounty.wm.com** .

CITY OF OCEANSIDE RECYCLING SERVICES

Need recycling containers?

The City of Oceanside offers various recycling services whether you are a resident or business owner. Please review the following information and determine which recycling service works best for you. Recycling helps preserve our natural resources, and it's easy! If you need recycling containers or more information about multi-family or commercial recycling, mail the bottom portion with your utility bill or send to: City of Oceanside, Attn: Jessica Moen, 4927 Oceanside Blvd., Oceanside, CA 92056.

WHAT CAN BE RECYCLED?

ALUMINUM, BI METAL & TIN CANS
- Aluminum beverage cans
- Tin Cans (i.e. canned vegetables & soups)

GLASS
- Beverage bottles (ALL colors)
- Food jars (i.e. sauces & pickles)

NO DISHES, DRINKING GLASSES, LIGHT BULBS, WINDOWS OR MIRRORS.

PLASTIC (NO plastic bags!)
- Plastic beverage containers with recycling symbols numbered 1—7
- Empty Bottles from household cleaners with recycling symbols numbered 1—7 (i.e. shampoo, laundry detergent, window cleaners, etc.)

Any CRV Material (California Redemption Value)

PAPER AND CARDBOARD
- Newspaper, mixed paper (all colors), cardboard
- Catalogs, magazines, telephone books, shoe boxes, cereal boxes (remove liners)
- Any color computer/fax paper, junk mail, paper bags and flattened cardboard

GREEN WASTE

Yard waste such as grass clippings, leaves, weeds and other prunings. Prunings and branches must be tied into 4-foot sections into bundles not to exceed 18 inches in diameter.
DO NOT use wire for bundles. Please use string. Place green waste cart on the curb by 6 a.m. on your regular trash day. **DO NOT USE PLASTIC BAGS. Green waste in plastic bags will not be collected.**

For more information please call the Recycling Hotline at (760) 435-5015, or visit www.ci.oceanside.ca.us.

SINGLE FAMILY / CURBSIDE PICK-UP

- Curbside Recycling Crates:
  - Glass, Plastics 1—7, Cans & Bi-metals (NO PLASTIC BAGS)
  - Mixed paper (all colors), junk mail, catalogs, magazines, flattened cardboard & newspapers (REMOVE PLASTIC BAGS)
- Green Waste carts (NO PLASTIC BAGS FOR GREEN WASTE)
- Curbside solid waste cans, sealed trash bags or wheeled cart
- Large item pick-up (by appointment): Call WM at 760-439-2824

NO PLASTIC BAGS IN RECYCLING CONTAINERS PLEASE
(Plastic Bags may be recycled at local grocery or discount retail stores)

Sharps, E-Waste, Light Bulbs, Batteries & Household Hazardous Waste (HHW) can be taken to the WM Recycling Center at 2880 Industry St. (HHW requires an appt.; call 760-439-2824.)

MULTI-FAMILY (Condos, Apartments, etc.)

- Wheeled Recycling Carts (96 gallon):
  - Glass, Plastics 1—7, Cans & Bi-metals (NO PLASTIC BAGS)
  - Mixed paper (all colors), junk mail, catalogs, magazines, flattened cardboard & newspapers (REMOVE PLASTIC BAGS)
  - Green Waste (NO PLASTIC BAGS)
- 3 Yard Bins
  - Solid Waste (large green bins)
  - Flattened cardboard (large white bins)
  - Green Waste (NO PLASTIC BAGS)

NO PLASTIC BAGS IN RECYCLING CONTAINERS PLEASE
(Plastic Bags may be recycled at local grocery or discount retail stores)

Sharps, E-Waste, Light Bulbs, Batteries & Household Hazardous Waste (HHW) can be taken to the WM Recycling Center at 2880 Industry St. (HHW requires an appt.; call 760-439-2824.)

COMMERCIAL / INDUSTRIAL / SMALL BUSINESS

- Wheeled Recycling Carts (96 gallon):
  - Glass, Plastics 1—7, Cans & Bi-metals (NO PLASTIC BAGS)
  - Mixed Paper (all colors), junk mail, catalogs, magazines, flattened cardboard & newspapers (REMOVE PLASTIC BAGS)
  - Green Waste (NO PLASTIC BAGS)
- 3 & 4 Yard Bins:
  - Trash collection
  - Recyclables: same as mentioned above (for larger quantities)

NO PLASTIC BAGS IN RECYCLING CONTAINERS PLEASE

Please fill out the bottom portion, detach, and mail to: City of Oceanside, Attn: Jessica Moen, 4927 Oceanside Blvd., Oceanside, CA 92056

CITY OF OCEANSIDE SOLID WASTE & RECYCLING SERVICES

☐ *Curbside Single Family Recycling Service*
Containers needed:
- ☐ Glass / Plastics / Cans Crate
- ☐ Mixed paper / Newspaper / Cardboard Crate
- ☐ Green Waste Cart
- ☐ Program Instructions

☐ *Multi-Family (Condos, Apartments, etc.) Recycling Service*
☐ *Commercial / Industrial / Small Business Recycling Service*

DATE _____

NAME/ BUSINESS_____

ADDRESS _____

ZIP CODE _____

PHONE NUMBER (_____)_____-_____

REDUCE. REUSE. RECYCLE. Funded by the California Department of Conservation.

Let it Rot!

Do you separate your bottles, cans and paper for recycling on trash day? Are you committed to practicing Reduce, Reuse Recycle? If so, it's time to take the next step to reduce your waste by COMPOSTING. In addition to recycling, you can reduce the amount of waste you place in your trash can by up to 25% by composting food scraps and landscape trimmings.

Composting is nature's way to recycle. You can create a dark, rich, organic soil by combining a balance of carbon materials, such as dead leaves, wood chips and sawdust, with nitrogen materials, like fruit and vegetable scraps and grass clippings. Then, with the addition of a little air and water, you can create an excellent natural soil amendment for your plants, garden, and landscape.

Composting Benefits

Composting has many benefits for the environment and for the consumer. Composting reduces the amount of waste going into landfills. It also helps build good soil structure which reduces the need for chemical fertilizers and it helps prevent soil erosion. It is an excellent amendment for soils laden with clay or sand, which are common in soil types around San Diego County. It provides valuable organic matter to these soil types which can help support healthy plant growth and suppress plant diseases transmitted through the soil. Compost also holds more moisture for longer periods of time than native soils, which reduces water use.

Composting Methods

There are several methods of composting, some of which use a compost bin, while some methods use a heap of material. If you plan to use food scraps in your compost pile, it is recommended that a bin be used. If you are just composting landscape material a compost bin isn't necessary. Following are three common methods for composting.

Vermicomposting.

Active Composting

Active composting takes a little more effort on your part. Materials are turned in the compost bin or heap on a regular basis (at least weekly) using a turning fork. A turning fork is similar to a pitchfork but with thicker tines. By maintaining proper moisture levels and turning the pile regularly, you can create excellent compost in as little time as one month.

Passive Composting

This type of composting takes less effort on your part, just as the term implies – passive. Turning the pile is done less frequently thus slowing down the composting process. For busy families, this is a recommend method. You grab your food scraps and landscape trimmings, bury them in the compost bin, and let it rot. Occasional turning is necessary to keep odors under control.

Vermicomposting

Composting with worms is a great way to create organic soil from your food scraps. Adding brown landscape material is discouraged since the combination with food scraps can create too much heat thus killing the worms. A manufactured worm bin is usually used with this type of composting.

For more information on composting contact the Solana Center for Environmental Innovation at 436-7986 or visit their Web site at **www.solanacenter.org.** They have compost bins for sale and regularly hold hands-on composting workshops to assist you in implementing this environmentally friendly task into your daily routine. You can also send questions to **greenoceanside@ci.oceanside.ca.us**.

Loma Alta Creek Cleanup
April 30, 2011
9:00 am – 12:00 pm

Mark your calendar to join the Clean Water Program staff and citizen volunteers for the Loma Alta Creek Cleanup event. As a coastal community, Oceanside relies on clean water for its residents, healthy beaches, public safety and a desirable environment for wildlife. When it rains, many of the pollutants that lurk on our streets, sidewalks, parking lots and gutters wash down the storm drains, and into the nearest body of water. Volunteers are needed to remove litter and trash from these waterways to improve their health and aesthetics for all users.

Bring Your Own Bucket

Volunteers are encouraged to bring their own bucket to the event. Trash collected in buckets can be emptied into fewer trash bags reducing the amount of bags used during the cleanup.

All volunteers will receive cleanup supplies, refreshments and one free-give-away item. More information can be found by calling the Oceanside Events Hotline at 435-5536 or at **www.OceansideCleanWaterProgram.org/events.asp** .

Registration sites:

* Behind Smart & Final on Oceanside Boulevard and I-5 (1701 Oceanside Boulevard)
* Mesa Drive between El Camino Real and Rancho Del Oro Drive
* Behind commercial buildings at 1629 Ord Way (Off Oceanside Boulevard between College Boulevard and Temple Heights Drive)
* Buccaneer Park at 1500 Pacific Street (cross street is Morse Street)
* South side of the Oceanside Pier

2011 Future Cleanup Events

Mark your calendar to join the Clean Water Program staff and citizen volunteers at these future events to help remove trash and debris from our local rivers, creeks, and beaches.

July 5, 2011
Tuesday – Morning After Mess - City Beaches
Time: 8:00 - 11:00 am

September 17, 2011
Saturday – Buena Vista Creek Cleanup and California Coastal Cleanup Day
Time: 9:00 am - 12:00 pm

November 5, 2011
Saturday – San Luis Rey River Cleanup
Time: 9:00 am - 12:00 pm

More information can be found by calling the Oceanside Events Hotline at (760) 435-5536 or at **www.OceansideCleanWaterProgram.org/events.asp** .

Parking Enforcement Has Gone Eco-Friendly

Back in January of 2009, the Parking Enforcement Division of the Public Works Department evaluated a solar-powered electric car. The successful evaluation opened the door to testing other makes and models of electric vehicles. The division announced the best solution for parking enforcement in the downtown area.

Public Works has purchased two GEM electric vehicles to be used to monitor 2-hour and 4-hour time zones in the downtown area as well as parking lots and metered areas. The GEM has a top speed of 25 mph and a range of 30 miles on a charge making it a perfect choice for the downtown area. For about $1, one can drive 50 miles in a GEM (the equivalent of 150 miles per gallon) making it a perfect solution for short-distance transportation. With gas price fluctuations and environmental concerns becoming more prevalent, the GEM car just made sense.

Through the efforts of the Public Works Department, the City adopted a Green Fleet Policy committing to a 100% clean-and-green fleet by using fuels and vehicles that are the most fuel-efficient, low-emission vehicles available while still meeting the business needs of the City. The policy also mandates a decrease in Green House Gas emissions by 10% by fiscal year 2012-13. The City sees many benefits associated with the use of these GEM electric vehicles, the most important being the fact that they are 100% electric and emit zero emissions.

Parking Enforcement rolled out the GEM vehicles in February.

SUMMER 2011

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CITY OF OCEANSIDE
300 N. Coast Highway
Oceanside, CA 92054
(760) 435-3065

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Councilmember ..... Gary Felien
Councilmember ..... Jack Feller
Councilmember ..... Jerome M. Kern
City Treasurer ..... Gary Ernst
City Clerk ..... Barbara Riegel Wayne
City Manager ..... Peter Weiss
City Attorney ..... John Mullen

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Oceanside Magazine is published quarterly by the City of Oceanside Media Relations Office. Make editorial inquiries to (760) 435-3071. Editorial submissions should be sent to ***Oceanside Magazine***, 300 N. Coast Hwy, Oceanside, CA 92054. Fax: (760) 435-6061. **Email: omag@ci.oceanside.ca.us**. **To place an advertisement, phone (760) 435-3071.**

About The Cover

Every year the City's Water Utilities Department hosts a Water Awareness Poster Contest as part of Water Awareness Month. This year's top winners are from Laural, North Terrace and Foussat Elementary schools. Congratulations to Saul Figueroa, Michelle Johnson and Alondra Milena Mendoza for becoming "Water-wise"! See Article on Page 20.

www.oceansidemagazine.com

Para informacion en Espanol sobre cualquier tipo de pregunta en cuanto a Programas de Parques y Recreacion, favor de llamar a George Rivera al 435-5049.

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Green Oceanside

Be sure to save these pages for reference.

Major Changes for Commercial Recycling in Oceanside

Green Oceanside is about teaching families in our local community how to be better stewards of the planet by recycling, composting, saving water, conserving energy, and preventing water pollution.

To better meet the needs of our community and our environment, all Oceanside Commercial Customers are now offered single-stream recycling services beginning immediately.

In the past, businesses and commercial customers, including multifamily apartment complexes, were required to source separate the recycling by material type. This meant that separate containers were required to recycle paper/cardboard, and bottles/ cans. Single-stream recycling provides convenience and ease. Effective immediately all commercial customer's recycling material can be placed together into one recycling container.

Oceanside businesses have an outstanding track record for participating in the City's recycling program. By recycling, businesses are helping the City of Oceanside achieve their zero-waste goals. Oceanside businesses that recycle also help the City comply with State of California Mandate AB 939, which requires all California cities to divert a minimum of 50 percent from landfills.

Over the next few months, Waste Management will be changing out the current signage to reflect the new service offerings. Below you will find a list of recycling materials accepted in your container immediately. Customers do not have to wait for the new signage to begin this service at their place of business.

Remember, Waste Management provides different types and sizes of recycling containers to meet your needs. Recycling service is also offered at a rate that is lower than trash service. For inquiries regarding Waste Management's different service offerings, please contact Waste Management's customer service line at (760) 439-2824 or 1(866) WM RECYCLE (967-3292) from 8:00 am to 5:00 pm, Monday through Friday. Or if you are interested in a more in-depth waste and recycling analysis, please feel free to call the City of Oceanside's Recycling Hotline at (760) 435-5015 to schedule a waste audit.

Thank you for being a part of the Green Oceanside Business community.

Acceptable Items

Aluminum, bi metal & tin cans
Aluminum Cans
Tin & Steel Cans
Food Cans

Glass
Liquor Bottles
Soda Bottles
Glass Bottles
Glass Jars

Plastic (NO Plastic Bags)
Water Bottles
Plastic Condiment Bottles
Plastic Milk Jugs
Juice & Soda Bottles

Paper and Cardboard
Mixed Paper
White Paper
Colored Paper
Manila Folders
Cereal Boxes
Newspaper
Telephone Books
Envelopes
Magazines
Paper Egg Cartons
Corrugated Cardboard Boxes (broken down)
Detergent Containers
Catalogs
Direct Mail

Let Us Help You Green Your Business

Let the City of Oceanside's Green Oceanside team help you green your business by recommending ways to reduce waste, recycle, and purchase in a sustainable manner. Every business in Oceanside can be a part of the Green Oceanside solution, to a cleaner, healthier planet and community.

Please call Colleen Foster at (760) 435-5021, to schedule an appointment to discuss ways to make your establishment an eco-friendly place of business. You may also find out how we can help your business save money by reducing your trash needs and increasing your recycling services. The opportunities to go green are endless. We look forward to celebrating the Green Oceanside community with your business.

Also, please let us know if you would be interested in some free recycling containers for your business to help you get started on the path towards Zero Waste in Oceanside.

Michelle Johnson

Saul Figueroa

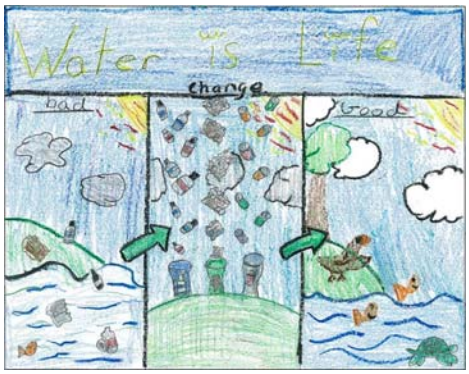

Alondra Milena Mendoza

Oceanside Water Awareness Poster Contest Winners

Congratulations to the winners of the Oceanside Water Awareness Poster Contest 2011: Michelle Johnson from North Terrace Elementary, Saul Figueroa from Laurel Elementary, and Alondra Milena Mendoza from Foussat Elementary.

This poster contest is part of California Water Awareness Month, an annual celebration sponsored each May by the North County Water Agencies. The contest challenges fourth grade students to learn about the importance of water in Southern California, including water conservation and pollution prevention. This year's theme was "Water is Life."

The top three students were recognized at the May 25, 2011, City Council meeting for their outstanding artwork that encourages everyone to protect and use water wisely. The posters will be included in the 2012 North County Water Agencies Water Awareness calendar that will be distributed in late 2011.

Easy and Convenient Ways to Save Water

Now that we have moved back to normal water supply conditions, it's still important to continue our water efficient habits. Here are some easy and convenient ways to use water efficiently.

- For saving water around your home, look for great ideas and classes from these websites: **www.bewaterwise.com** and **www.SaveWaterOceanside.com**
- SDG&E offers free home energy-savings kits which save water too. The kits include a kitchen faucet aerator, two bathroom faucet aerators and a low-flow showerhead. Visit **www.sdge.com/energykit** or call 1 (800) 644-6133 to order your complimentary kit.
- Transform your landscape into a beautiful low-water-use garden by planting low-water-use plants, checking your irrigation system and fixing any leaks, watering before 10:00 am and after 6:00 pm, and adding mulch.
- Get a free Smart Landscape Evaluation which is a free service designed to assist you with identifying indoor and outdoor water-savings opportunities. Participants can expect to have a professional technician review their indoor fixtures and evaluate the performance of their irrigation system. At the end, the participants will receive a list of recommendations and a proposed watering schedule. Call (866) 883-1332 to schedule your free landscape evaluation.

To learn more about water-saving resources, water-use efficiency tips, rebates, water news, and other water-saving programs, please visit **www.SaveWaterOceanside.com** or contact the Oceanside Water Utilities Department at (760) 435-5800.

Greening Your Special Event

The City of Oceanside is requesting that all special events at city parks, beaches, harbor and/or other city facilities, comply with state and local mandates for the proper disposal of solid waste and recycling. To ensure the greatest diversion rate possible, we would like to assist you with meeting this requirement by providing you with several options and/or recycling containers for your event. When you apply for your event permit at the City Recreation Department, they will provide a required form with all the details. Additionally, Waste Management of North County can provide bigger recycling containers for the large venues. You may also call our Recycling Hotline for more information on how to recycle at your next event at (760) 435-5015.

For those of you who are planning a small party or picnic with family and friends, please remember to do your best to keep your event green and litter-free. There are many simple ways to do this, which can be fun and entertaining for all of those attending. The following are a couple of tips on how to green your event, large or small:

* Send E-vites rather than actual invitations. Reduce your use of paper.
* Check that your event location has a recycling bin prior to the event. If there is no bin close by, designate a personal container for recycling, or for larger events, please call the Recycling Hotline at (760) 435-5015 for some free special event recycling containers.
* Avoid serving bottled water – use pitchers and reusable cups. Encourage your guests to bring their own utensils, or have a project where everyone decorates their own utensils.
* Purchase food that does not have a lot of packaging, or is in packaging that can be recycled. All plastics with the recycling symbol #1-7 can be recycled in Oceanside, as well as bottles, cans, paper, and cardboard.
* Do not use Styrofoam materials and/or plastic bags. Avoid using plastic utensils. These materials do not biodegrade, but rather end up in our landfills for hundreds of years.
* Strive to have as little leftover food as possible. Order wisely, and encourage guests to take home leftovers. Food waste is always unnecessary.
* Provide food and condiments in bulk. Avoid excess packaging.
* Leave no trace: Invite guests to help with a quick clean-up of the area, to ensure the area is cleaner than when you arrived and ready for the next set of guests.
* **HAVE FUN AND BE GREEN!**

Free Irrigation Workshop

Managing Your Irrigation System

Thursday, July 21, 4:00 to 6:00 pm

Space is limited! Call (760) 435-5828

Take a free hands-on irrigation workshop at MiraCosta College to learn about:

- Irrigation systems and basics
- How to adjust your irrigation system
- How to troubleshoot and do simple repairs
- Irrigation scheduling
- Common sprinkler problems and much more.

This workshop is sponsored by the Oceanside Water Utilities Department. Space is limited and a special parking permit is required to park on campus. Please call (760) 435-5828 to reserve a seat or for more information.

How Many Oceanside Water Bodies Can You Name?

This is the first in a series of information articles about Oceanside water bodies that will appear in the Oceanside Magazine. The Oceanside Clean Water Program would like you to be informed about the different water bodies that are in Oceanside. By being aware of the water body closest to your home, school or business, you can be better prepared to help protect them from polluted runoff.

San Luis Rey River

The San Luis Rey (SLR) River originates in the Palomar and Hot Springs Mountains in eastern San Diego County and extends over 55 miles across northern San Diego County before discharging to the Pacific Ocean in the City of Oceanside. The SLR River parallels Highway 76 in Oceanside and drains a watershed of approximately 360,000 acres or 562 square miles. Within the City of Oceanside, the SLR River is fed by one of its tributaries, Pilgrim Creek.

There are numerous land-use types within the watershed with the majority of land remaining undeveloped. Higher population concentrations are in the western area of the watershed. Residential and agriculture serve as the dominant land uses in the watershed.

These land uses have introduced many pollutants into the river and have degraded the water quality. The river shows high levels of chloride and total dissolved solids and the mouth of the river has had historical bacterial exceedances.

About 8 percent of the City of Oceanside's drinking water supply comes from the SLR Valley Groundwater Basin. Water from the basin is pumped from wells and treated at a reverse osmosis plant before being distributed to Oceanside residents.

You can find more information about other Oceanside waterbodies by logging onto **www.OceansideCleanWaterProgram.org** and clicking on Waterbodies. While on the website you can also learn what you can do to help prevent pollution from reaching these water bodies.

San Luis Rey River discharges into the Pacific Ocean.

2011 Oceanside River, Creek, and Beach Cleanup Events

Mark your calendar to join the Clean Water Program staff and citizen volunteers at these events to help remove trash and debris from our local rivers, creeks, and beaches.

July 5, 2011
Tuesday - Morning After Mess - City Beaches
Time: 8:00 - 11:00 am

September 17, 2011
Saturday - Buena Vista Creek Cleanup and California Coastal Cleanup Day
Time: 9:00 am – 12:00 pm

November 5, 2011
Saturday - San Luis Rey River Cleanup
Time: 9:00 am – 12:00 pm

More information can be found by calling the Oceanside Events Hotline at (760) 435-5536 or at **www.OceansideCleanWaterProgram.org/events.asp**

Eco Friendly Tips

These days, a growing number of people are making greener choices for their families and are working to create more sustainable homes. Here are some environmentally conscious tips to honor Mother Earth every day.

By putting into practice even a few of these easy tips, people are sure to reduce their carbon footprint, see a positive difference in family health and even a few less trips to take out the trash:

- **Eat Green:** Re-evaluate your grocery list and avoid highly processed foods, diet foods, instant and ready-made foods, juice-flavored drinks, white breads and sugary cereals and snacks.
- **Go organic:** Focus on fresh, organic in-season fruits and vegetables, whole grains high in fiber as well as beans, nuts and seeds.
- **Paper or plastic?:** How about canvas? Use recyclable canvas shopping bags when buying groceries instead of paper or plastic. Keep some in your car as well as at home so they are always on hand when you need them.
- **Dish out your meals with health in mind:** Use stainless steel or cast iron pots and pans when possible, as non-stick pans and finishes may be toxic. Serve your meals on ceramic dishes, use glass cups and avoid wasteful plastic-ware and paper plates.
- **Think twice about food storage:** Plastic containers can leach toxic chemicals into foods. Avoid reheating stored food in plastic containers and when possible, use glass jars.
- **Cut back on paper towels:** Though convenient, disposable paper towels are the cause of a lot of waste in the household. Stick with reusable sponges and micro-fiber cloths instead.
- **Drink from the tap:** Purchase a water filter to place directly on your faucet and reduce bottled water consumption by using a refillable canteen.
- **Green cleaning:** Cast out those chemical cleaning products and go back to the basics. Try wiping down surfaces with white vinegar, use baking soda in bathrooms, or purchase green-friendly products.
- **Plan a daily nature date with your kids:** Carve out some time each day to disconnect from the rest of the world and get outside with your kids. The time spent outdoors is not only healthy for the mind and body, it will help your children become more mindful about their environment.
- **Educate your children on being green:** The best way to continue the green movement is to educate the next generation. Teach your children simple ways they can help recycle, reduce and reuse.

Get CFLs out of the closet and into your sockets!

Do you still have compact fluorescent light (CFL) bulbs sitting in storage instead of in a socket? Do you still have older style (incandescent) bulbs in use?

If you answered yes to either question, don't wait any longer to put those CFLs to work! Switching out older bulbs in favor of CFLs is one of the easiest ways to save energy and money in your home.

CFLs save you money!

For starters, SDG&E helps make bulbs more affordable by providing promotional pricing at participating stores. Look for ENERGY STAR®-qualifying products with the SDG&E promotional sticker at your favorite retailer.

SDG&E also hosts lighting exchanges where customers can turn in older bulbs or lamps for newer, more energy-efficient equivalents. For upcoming exchanges in your area, visit **www.sdge.com/lighting.**

Even when purchasing bulbs at full price, the investment is well worth it. While CFLs may be a bit pricier at the register, they soon pay for themselves in energy savings. Replacing a standard 60-watt incandescent bulb with a CFL equivalent can save a single household $30 in energy costs over its lifetime. Plus, when used properly, they burn brightly for up to 10,000 hours as opposed to just 800-1,500 hours for an older incandescent.

What are you waiting for?

Make it a goal to switch to CFL lighting—the sooner the better. And if you've got a CFL sitting unused in a closet, now is the perfect time to put it to work!

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CITY OF OCEANSIDE

Jurisdictional Urban Runoff Management Program

Annual Report 2011-2012

Buena Vista Creek, El Salto Falls

Prepared for the
San Diego Regional Water Quality Control Board
September 30, 2012

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CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT

DATE: **September 28, 2012**

RE: **STATEMENT OF CERTIFICATION**
CITY OF OCEANSIDE JURISDICTIONAL URMP

I certify under penalty of law that the Jurisdictional Urban Runoff Management Program Annual Report for 2011-2012 was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE: M. A. Lahsaiezadeh

NAME: Mo Lahsaiezadeh
TITLE: Environmental Officer
JURISDICTION: City of Oceanside

300 NORTH COAST HIGHWAY • OCEANSIDE, CA 92054 • TELEPHONE 760-435-5800 • FAX 760-435-5814

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City of Oceanside

Jurisdictional Urban Runoff Management Program

2011-12 Annual Report

Prepared for:
San Diego Regional Water Quality Control Board

September 30, 2012

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ES EXECUTIVE SUMMARY

Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the San Diego Copermittees. Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2011-2012 annual reporting period (July 1, 2011 – June 30, 2012).

Report Organization

Section J of Municipal Permit 2007-0001 defines the requirements for the Jurisdictional Urban Runoff Management Program (JURMP) Annual Report and states that each JURMP Annual Report shall, at a minimum, contain a comprehensive description of all activities conducted by the Copermittee for each required component. Table ES-1 presents these components and the section in which they are discussed.

Table ES-1. Municipal Permit 2007-0001 Reference Table.

Municipal Permit 2007-0001 Components	Annual Report Section
Development Planning Component	Section 2.0
Land-Use Planning	Section 2.2
Environmental Review Process	Section 2.3
Development Project Approval and Verification Process	Section 2.4
Construction Component	Section 3.0
Municipal Component	Section 4.0
Industrial and Commercial Component	Section 5.0
Residential Component	Section 6.0
Illicit Discharge Detection and Elimination Component	Section 7.0
Education Component	Section 8.0
Public Participation	Sections 9.0
Fiscal Analysis Component	Section 10.0
Effectiveness Assessment Component	Section 11.0
Special Investigations	Section 12.0
Non-Emergency Fire Fighting	Section 13.0
JURMP Revisions	Section 14.0
Conclusions and Recommendations	Section 15.0

Pursuant with the Municipal Permit this document contains all of the required information.

Program Highlights

Below is a summary of each section which describes the Clean Water Program activities appearing in this Annual Report. Please refer to the individual section for more detailed information.

Section 2.0 Development Planning Component

The development planning component focuses on the collective effort to mitigate impacts which may result from new development and redevelopment projects. The process of verifying compliance with the Municipal Permit is accomplished through the consistent application of storm water principles and regulations during all phases of development.

The City Clean Water Program continued to contribute to the formulation of storm water Development Planning policy as an active member of the Copermittee Land Development workgroup.

During this reporting period, the City revised the following storm water documents:

- Oceanside SUSMP
- Storm Water Quality Assessment (SWQA) form
- Standard Development Plan-Storm Water Mitigation Plan (SDP-SWMP) Template
- Priority Development Project-Storm Water Mitigation Plan (PDP-SWMP) Template
- Treatment Control BMP Threat to Water Quality (TTWQ) – Determination Flow Chart

City Staff involved in planning, review, inspection, and enforcement of development projects received training during this reporting period. Training topics focused on SWMP document review, SUMSP and HMP requirements, LID implementation, inspection and maintenance.

Section 3.0 Construction Component

The City of Oceanside Clean Water Program continued to update its construction site inventory and implement inspection frequencies at construction sites that meet permit requirements. During the reporting period, engineering inspectors inspected 34 construction sites to ensure proper installation and maintenance of BMPs.

Section 4.0 Municipal Component

The City of Oceanside Clean Water Program inspected 176 municipal facilities and areas to ensure these facilities are in compliance with the City Code. A total of 2,140 tons of waste was removed as a result of street sweeping and a total of 745 tons of waste was removed from the storm drain system (MS4) as part of the annual cleaning. Eighty five (85) feet of City sewer pipes were slip lined during this reporting period.

Section 5.0 Industrial and Commercial Component

The City annually updates its watershed-based industrial and commercial inventories which contain the name, address, and description of all industrial sites within its jurisdiction, regardless of site ownership. The inventory now includes 1,516 Industrial and Commercial businesses that have a potential to contribute pollutants to the MS4 system. Twenty-seven (27) industrial businesses and 528 commercial businesses were inspected during this reporting period, to ensure these facilities are in compliance with City Code.

Section 6.0 Residential Component

The City of Oceanside has developed an extensive program that aims to reduce pollutant runoff from residential areas and activities to the maximum extent practical (MEP). The City of Oceanside Clean Water Program received a total of 162 storm water related calls through the Urban Runoff Hotline. Of the 162 Urban Runoff Hotline calls 137 were received by residents concerning potential urban runoff violations. There were also 25 referrals from City staff. Code Enforcement responded to 114 urban runoff cases related to residential areas and activities, during the reporting period.

Extensive educational efforts were made to help Oceanside residents understand watersheds, water quality and urban runoff impacts through presentations on a KOCT, the local television channel, a *Green Oceanside* newsletter mailed to over 42,000 households, and information available on the Clean Water Program Website. 3,098 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 338 tons of hazardous materials (including universal waste) during the reporting period.

Section 7.0 Illicit Discharges Detection and Elimination Component

This section is intended to document the activities conducted by the City of Oceanside during the 2011-2012 reporting period to manage illicit discharges. In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2011-12 Illicit Discharge Detection and Elimination Component, including the 2011 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2012.

Section 8.0 Education Component

The City of Oceanside Clean Water Program continued to use a variety of avenues to educate various internal and external groups about the Clean Water Program and the requirements of Municipal Permit Order 2007-0001. These outreach activities included municipal staff training, a *Green Oceanside* newsletter, staffing community booths, conducting watershed education presentations, continued implementation of a 5th grade curriculum titled Project SWELL, and targeting under-served audiences with educational materials.

Section 9.0 Public Participation Component

The Clean Water Program continued to sponsor beach and creek cleanup events and supported private groups who wanted to coordinate their own cleanup events. During this reporting period a total of 1,481 volunteers participated in City sponsored cleanup events in addition to private group volunteers. More than four tons of trash, and debris, were removed from the local waterways. In addition the City continues to replenish pet waste bags in four dispensers along the San Luis Rey Recreation Trail as part of its Pick up your Pet Waste Campaign and installed two new pet waste signs along the Loma Alta Creek walking trail.

Section 10.0 Fiscal Component

The City of Oceanside Clean Water Program continued to acquire funding from various sources to implement programs to meet Municipal Permit Order 2007-0001. To secure adequate funding, the Water Utilities Department collects a Clean Water Program surcharge that is delineated on the utility bills for each household and is based on the customer's water consumption.

Approximate expenditures for the 2011-12 fiscal year is provided in Section 10 as well as the budget for the 2012-13 reporting period.

Section 11.0 Effectiveness Component

The City implemented an effectiveness assessment program to assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The City gathered and evaluated data for some of the program components for assessment during this reporting period. This data will be valuable for incorporation into long-term effectiveness evaluation on a jurisdictional level.

Section 12.0 Special Investigations

In previous reporting periods the City of Oceanside received grant funding for two projects to implement water quality related projects: the San Luis Rey Bacteria Source Tracking Study and the Loma Alta Creek Ultraviolet Treatment Facility. Also development of the San Diego RWQCB Loma Alta Slough Bacteria and Nutrient TMDL continued during this reporting period.

Lower San Luis Rey Bacteria Source Tracking

As part of the Proposition 50 Clean Beaches Initiative, the City of Oceanside was awarded $554,375 to track the sources of bacteria in the Lower San Luis Rey River. This goal of this study was to identify the sources and quantify the loading of bacterial contamination in the lower San Luis Rey River using a tiered approach. The project was effective in characterizing bacterial concentrations throughout the Lower SLR River and river mouth during both wet and dry seasons. The Final Report was completed and accepted by the SWRCB during this reporting period.

The Loma Alta Creek Ultraviolet Treatment Facility

The City was awarded a $5,000,000 Proposition 40 Clean Beaches Initiative (CBI) grant by the State Water Resources Control Board to construct an ultraviolet (UV) light treatment facility at the existing La Salina Wastewater Treatment Facility. The anticipated project goal is to eliminate beach closures during the dry season at Buccaneer Beach in Oceanside, California. This will be achieved by diverting the flow from the Loma Alta Lagoon through a UV treatment facility prior to discharging the flow onto the shoreline.

During the 2011-12 reporting year, the Oceanside Loma Alta Creek UV Treatment Plant operated between May and September 2012. Between May and August, the plant operated a total of 80 days The September 2012 data was not available for reporting. Approximately 31 million gallons of water was treated through the facility.

San Diego RWQCB Loma Alta Slough Bacteria and Nutrient TMDL Development

Development of the Loma Alta Slough Bacteria and Nutrient TMDL began in the fall of 2009 lead by the San Diego Regional Water Quality Control Board (SDRWQCB). Additional monitoring data to support TMDL modeling was submitted to SCCWRP and their subconsultants during this reporting period.

Section 13.0 Non-Emergency Fire Fighting

Non-emergency fire fighting BMPs and educational methods for reducing the discharge of pollutants from non-emergency flows to the MEP are described in Section 13.

Section 14.0 JURMP Revisions

During this reporting period no revisions were made to the 2008 JURMP.

Section 15.0 Conclusions and Recommendations

This section presents the conclusions from the 2011-2012 reporting period and provides recommendations for future activities and management actions for JURMP program components.

The City will continue to assess the effectiveness of two relatively new data tracking systems that assist with tracking hotline calls, inventories, inspection information and monitoring information, and will modify and/or customize when needed.

The City of Oceanside continues to implement the 5th Grade Project SWELL curriculum and will conduct assessment of this curriculum in FY 2012-13 in conjunction with Coastkeeper and the City of San Diego. In addition the City will begin implementation of the 6th Grade Project SWELL curriculum during the next reporting period.

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1.0 INTRODUCTION

This annual report document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) (referred to in this document as the Municipal Permit) draining the Watersheds of the County of San Diego, which include agencies with land use authority including the incorporated Cities of San Diego County, the County of San Diego, the San Diego Unified Port District, and the San Diego County Regional Airport Authority (collectively called Copermittees). Pursuant to Part J.3.a.of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2011-2012 annual reporting period (July 1, 2011 – June 30, 2012).

This Municipal Permit is based on the Federal Clean Water Act (CWA), the Porter–Cologne Water Quality Control Act, applicable state and federal regulations, all applicable provision of statewide Water Quality Control Plans and Polices adopted by the State Water Resources Control Board (SWRCB), the Water Quality Control Plan for the San Diego Basin adopted by the Regional Water Quality Control Board (RWCQB), the California Toxics Rule, and the California Toxics Rule Implementation Plan. This Annual Report addresses the renewed NPDES Permit No. CAS0108758, which was first issued on July 16, 1990 (Order No. 90-42), renewed on February 21, 2001 (Order No. 2001-01), and renewed again on January 24, 2007

In the interests of communicating consistent messages to the community regarding the most efficient and effective means of reducing storm water and urban runoff pollution, and as directed under Part J.5 of the Municipal Permit, this document was developed following the standardized format developed and agreed upon by the Copermittees. For the most part, compliance with the Municipal Permit was undertaken by the Copermittees through the development and implementation of the JURMP; therefore this Annual Report is organized in a similar format as the 2008 JURMP.

1.1 Background

Urban development typically involves conversion of natural space to developed areas that include impervious surfaces such as streets, buildings, and parking lots. With the increase in human population and impervious surfaces associated with developed areas there tends to be higher runoff volume and velocity due to the impervious area's incapacity to absorb and hold rainwater. Also, human use of developed areas is associated with a number of pollutants that can be conveyed to the municipal separate storm sewer system (MS4) by a rain event or non-storm water discharges. This is called non-point source pollution. Non-point source pollution, such as urban runoff discharges to the MS4, is a large source of pollutants to receiving water bodies in the San Diego region and throughout the United States. Pollutants commonly associated with urban runoff include sediments, pesticides, fertilizers, herbicides, trash, oil and grease, and heavy metals. Such pollutants are generated by everyday activities such as construction, landscaping and vehicle use and maintenance.

Pollutants that reach receiving water bodies, such as streams, lakes, bays, lagoons, and the ocean, have the potential to significantly impact human and environmental health as well as wildlife that utilize these water bodies and surrounding habitat for survival. Notably, environmentally sensitive areas (ESA) are especially threatened by urban development because such areas tend to have lower capacities to withstand pollutants entering the area.

1.2 Purpose and Objectives

The purpose of this annual report is to present the activities the City conducted during the Fiscal reporting period of July 1, 2011 through June 30, 2012 to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The activities involved implementing, and improving where needed, existing programs and developing new programs intended to minimize or eliminate the effects of urban runoff from the City on receiving water bodies. Improving the quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

Table 1-1 presents the organization of the City's JURMP Annual Report and a summary of the corresponding permit requirement in Order No. 2007-0001. Some Report sections and permit requirements overlap and will be found in multiple locations throughout the document.

Table 1-1. City of Oceanside 2011-12 Annual Report Compliance Summary.

2011-12 Annual Report	Description	Order No. 2007-0001
Section 1.0	Introduction	-
Section 2.0	Development Planning	D.1 J.3.a(3)(a)
Section 3.0	Construction	D.2 J.3.a(3)(b)
Section 4.0	Municipal Development	D.3.a J.3.a(3)(c)
Section 5.0	Industrial and Commercial Development	D.3.b J.3.a(3)(d)
Section 6.0	Residential	D.3.c J.3.a(3)(e)
Section 7.0	Illicit Discharge Detection and Elimination	D.4 J.3.a(3)(f)
Section 8.0	Education	D.5 J.3.a(3)(g)
Section 9.0	Public Participation	D.6 J.3.a(3)(h)
Section 10.0	Fiscal Analysis	J.3.a(3)(j)
Section 11.0	Effectiveness Assessment	-
Section 12.0	Special Investigations	J.3.a(3)(k)
Section 13.0	Non-Emergency Fire Fighting	J.3.a(3)(l)
Section 14.0	JURMP Revision	J.3.a(3)(m)
Section 15.0	Conclusions and Recommendations	-

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

Development and re-development projects are typically associated with land disturbance activities and increases in impervious area. When development projects substitute pervious areas with impervious roofs, pavement, and flatwork; the ability of the site to absorb and infiltrate precipitation is markedly reduced. This in turn affects the hydrologic characteristics of a site by increasing the rate of runoff, flow duration, runoff volume, and discharge velocity. In natural channels or channels which are not "significantly hardened", the effect is to cause physical alteration to the channel; causing negative impacts to the biological integrity of the receiving water. To counter these impacts, the City has developed and implemented a storm water development planning program which is designed to mitigate the negative effects associated with development and redevelopment projects.

The Development Planning section of the JURMP Annual Report documents the activities performed by the City of Oceanside during the reporting period beginning July 1, 2011 and ending on June 30, 2012. During this reporting period, the City has continued to implement a comprehensive Development Planning Component consistent with Section D.1 of the San Diego RWQCB Order No. R9-2007-0001 (Municipal Permit). Table 2-1 contains a tabulation of the applicable Municipal Permit subsections and corresponding sections of the Annual Report.

Table 2-1. Order 2007-0001 Compliance Summary.

Municipal Permit Section	Annual Report Section
J.3.a.(3)(a).i Amendments to General Plan	Section 2.2.1
J.3.a.(3)(a).ii Application of urban runoff approval process	Section 2.4.3
J.3.a.(3)(a).iii Projects subject to SUSMP Requirements	Section 2.4.4.8
J.3.a.(3)(a).iv Application of SUSMP BMP requirements	Section 2.4.4.2
J.3.a.(3)(a).v Example Priority Development Project	Section 2.4.4.4
J.3.a.(3)(a).vi Low removal effectiveness Treatment Control BMPs	Section 2.2.3
J.3.a.(3)(a).vii Treatment Control BMP Inventory	Section 2.4.4.7
J.3.a.(3)(a).viii Treatment Control BMP Inspection	Section 2.4.4.7
J.3.a.(3)(a).ix Verification of O&M of Treatment Control BMPs	Section 2.4.4.7
J.3.a.(3)(a).x BMP Verification Prior to Occupancy	Section 2.4.3
J.3.a.(3)(a).xi Waiver of SUSMP infeasibility	Section 2.4.4.8
J.3.a.(3)(a).xii Description of SUSMP waiver mitigation program	Section 2.4.4.1
J.3.a.(3)(a).xiii HMP collaboration and participation	Section 2.4.4.1
J.3.a.(3)(a).xiv Development projects required to meet HMP	Section 2.4.4.8
J.3.a.(3)(a).xv Development Projects Exempt from HMP	Section 2.2.3
J.3.a.(3)(a).xvi Development projects disturbing 50 acres or more	Section 2.2.3
J.3.a.(3)(a).xvii Violations and Enforcement Actions	Section 3 Attachment 3-C
J.3.a.(3)(a).xviii Notable Activities	Section 2.2.1.1

2.2 Land Use Planning

2.2.1 Background

The SUSMP Development Planning component focuses on the City Development Services – Engineering, Planning, and Building Division efforts to comply with Municipal Permit requirements that mitigate impacts which may result from new development and redevelopment projects. The process of verifying compliance with the Municipal Permit is accomplished through the consistent screening of all permit applications and subsequent implementation of SUSMP requirements are each phase of project development.

2.2.1.1 Notable Activities

The City Clean Water Program continued to contribute to the formulation of storm water Development Planning policy as an active member of the Copermittee Land Development workgroup.

During this reporting period, the City revised the following storm water documents:

- Oceanside SUSMP
- Storm Water Quality Assessment (SWQA) form
- Standard Development Plan-Storm Water Mitigation Plan (SDP-SWMP) Template
- Priority Development Project-Storm Water Mitigation Plan (PDP-SWMP) Template
- Treatment Control BMP Threat to Water Quality (TTWQ) – Determination Flow Chart

The Storm Water Quality Assessment (SWQA) form is a tool that ensures all projects applying for Planning, Engineering, or Building permits receive uniform screening to determine applicability of Municipal Permit and SUSMP requirements. During this reporting period, the SWQA was revised to clarify project categories and include completion guidance.

The Standard Development and Priority Development Project templates were developed during the previous reporting period and were provided as guidance documents, for form and content, to the Consultant/Development Community. During this reporting period, the templates were revised to incorporate suggestions from the Consultant/Development community and to provide clarification. Clarification took on the form of a completely revised approach to the template completion guidance. The instruction was previously embedded in the document and has since been rewritten and relocated to the end of the document. The SWMP templates will continue to be a work in progress and will receive periodic updates as necessary to remain consistent with Municipal Permit and SUSMP requirements.

"A significant notable activity during this reporting period was the delegation of responsibility for Storm Water Development Review oversight to the City Development Engineer (CDE) by the City Engineer. The CDE began program changes by implementing Engineering Division Staff training to facilitate storm water document review. Engineering Division Staff received training that was comprehensive in nature and which thoroughly covered foundational principles, information sources, regulatory precedent, SUSMP concepts, LID and HMP requirements, and SWMP template completion. Review Staff continues to regularly attend SW review training to expand subject knowledge, maintain program consistency, and as part of a continuing education component. In addition, the CDE directed changes to the storm water (SW) review approach that were modeled after procedures being implemented by the County of San Diego. The

foremost goal was to improve customer service. To meet that goal, the Engineering Division Staff were encouraged to improve plan review turn-around time by focusing on general aspects of the project and holding the Engineer-of-Work (EOW) "highly accountable" by requiring the completion of the "Declaration of Responsible Charge". Plan reviewers were encouraged to focus responsibility on the EOW for providing correct BMPs and calculations. The CDE is responsible for the distribution (assignment) of SW plans to Staff for the purpose of review. The individual Staff member assigned to review the SW plan for a project is also the individual who is responsible to deem the SW plan complete or accepted."

The City continued to implement data tracking systems in the Development Services Department and the City Water Department. The City Development Services Department encompasses the Planning, Engineering and Building Divisions. Projects which submit permit applications to Development Services are entered into a tracking database (TRAKiT by CRW Systems®) which enables monitoring of projects from initial submittal through the entitlement, preliminary grading, precise grading, engineering construction, building construction, and final occupancy phases of a project. Permit applications are routed to each discipline; Planning, Engineering (Entitlement, Final, Geotechnical, Landscape, Storm Water, and Traffic), Building, Fire, and Water for review and comment. This procedure enables a coordinated review process between Divisions and Departments prior to project entitlement or granting of a permit; whichever is applicable.

An online version of TRAKiT, called eTRAKiT is available to the public. Users may access public records and review and permit status via the web. For more information, visit www.ci.oceanside.ca.gov and click on the "eTRAKiT-Online Permitting" Quick Link.

2.2.2 Source Characterization

An integral component of the City urban runoff program is source control characterization. Unmitigated activities associated with various land use types are known to be sources of pollutants that have the potential to negatively impact the environment and receiving waters. Land use source characterization is addressed through the implementation of unified Low Impact Development practices that include Treatment Control BMPs and HMP flow attenuation measures that enable Priority Development Projects to reduce impacts to the receiving waters, while demonstrating compliance with the Maximum Extent Practicable (MEP) standard.

The updated Storm Water Quality Assessment (SWQA) form continues to identify the eleven (11) separate "Priority Project Categories" (PDP) as cited in the Municipal Permit Section D.1.d.(1)(b) and SUSMP Table 1-1. Each PDP is identified as a potential or anticipated source of storm water pollutants and is based upon specific land use, proximity to environmentally sensitive areas, topography, and disturbed area.

2.2.3 Best Management Practice Requirements

There are established minimum design requirements for all development projects, which are discussed in Section 4.4.3 of the 2008 JURMP. In addition, the Land Use Planning Element of the General Plan contains policies to protect water quality that are discussed in Section 4.2.3 of the 2008 JURMP.

The SUSMP continued require the implementation of the unified Low Impact Development (LID) design approach and the integration of HMP flow attenuation into the design of applicable development and redevelopment projects.

The PDP-SWMP template enables the implementation of the unified LID approach by providing a series of tables to simplify the identification of discrete Drainage Management Areas (DMAs) composed of quantified surface types that self-treat, self-retain, drain to a self-retaining area, or drain an Integrated Management Practice or IMP. By following the design procedure outlined in the SUSMP and the SWMP Template completion guidance, the Design Professional may develop a single integrated design which complies with the complex and overlapping NPDES permit, LID, storm water treatment, and peak runoff and duration control requirements.

Proposed Treatment Control BMPs and IMPs are required to meet the medium removal efficiency standard for the identified Primary Pollutants of Concern for each development project. The implementation of Treatment Control BMPs with low removal efficiency is not consistent with the Municipal Permit and therefore is not permissible. The implementation of a unified LID approach coupled with HMP provides the development community with a broad spectrum of design alternatives that will enable projects to achieve the Maximum Extent Practicable as cited in the Municipal Permit.

2.2.4 Program Implementation

Program implementation is enabled by the General Plan, which was adopted by the City Council and is recognized as a legally binding document. All applicable projects, including municipal projects are required to be consistent with the plan. In addition to the General Plan, the City addresses storm water pollution issues through the application of its Municipal Code. Chapter 40 of the Municipal Code is the Urban Runoff Management and Discharge Control Ordinance and is commonly referred to as the Storm Water Ordinance. The Ordinance contains multiple references to the current NPDES, Municipal Permit, and SUSMP as the governing storm water regulations. All new development and redevelopment projects are subject to updated SUSMP and the lawful prior approval provisions of the Municipal Permit.

All project applications are subject to a formal SUSMP Determination. Formal determinations are based upon a review of the Planning Division project application submittal. The minimum amount of information necessary to perform a SUSMP Determination includes a completed Storm Water Quality Assessment (SWQA) form, site plan, and project description and justification. The objective of the SUSMP Determination is to provide a consistent and thorough method for the initial review of development and redevelopment projects, with the overall purpose of categorizing projects and determining applicable SUSMP requirements. Development and redevelopment projects are categorized as; projects not subject to SUSMP Treatment requirements (Exempt Projects), Standard Development Projects (SDPs), or Priority Development Projects (PDPs). The SUSMP Determination also demonstrates to the RWQCB that each project receives a consistent review and enables the City to document project categorization and satisfy Municipal Permit requirements for reporting findings in the JURMP Annual Report.

Details on the completed and planned SUSMP updates may be found in Section 4.4.4.4 of the 2008 JURMP. In addition, information pertaining to the legal authority to implement a storm water program is located in Section 2 of the 2008 JURMP.

2.3 Environmental Review Process

The City has evaluated its established environmental review process for all development projects to determine compliance with the Municipal Permit. The City guides developers through the filing necessary documents and identifies which reports are required to be submitted and approved before development may begin. The current environmental review process places emphasis on the evaluation of water quality impacts and related issues that may result from the project development.

The Planning Division and Engineering Division of the Development Services Department are responsible for reviewing development projects for conformance with storm water requirements. The City will continue to assess all development and redevelopment projects for compliance with the California Environmental Quality Act (CEQA) by reviewing the Environmental Initial Study completed by each project applicant. A copy of this checklist is included in Appendix D of the 2008 JURMP. The checklist contains questions to evaluate potential negative impacts on receiving water bodies. Projects which are determined to have "potentially significant impacts" to the surrounding environment and receiving waters are required to prepare Environmental Impact Reports (EIRs) for City review. Development projects that are not required to prepare EIRs proceed to the next phase of the approval process.

During the development of the 2008 JURMP, the City evaluated its current established environmental review process for all new development and redevelopment projects to determine compliance with the Municipal Permit. The City determined that the current environmental review process adequately addresses the requirements of the Municipal Permit. While the specific requirements evaluated during the environmental review process are expected to be updated periodically, the basic review structure did not require revision during this reporting period. Details of the current environmental review process are provided in Section 4.3 of the 2008 JURMP.

2.4 Development Project Approval and Verification Process

2.4.1 Background

The City has an established administrative and discretionary approval processes that provides multiple reviews by the Planning and Engineering Divisions. The Planning Division is responsible for determining acceptable land uses, development constraints, and identifying environmental issues. The Engineering Division is composed of various disciplines (i.e., Engineering Improvements, Grading and Drainage, Hydrology, Geotechnical, Storm Water, Traffic, and Landscape), which perform a coordinated review of all project applications. The Fire Department also performs multiple reviews and notifies the appropriate division in the event of a discrepancy or nonconformance with development regulations. In addition, the Building Division coordinates with Storm Water Development Review to ensure that new development, remodeling projects, additions, or demolitions are reviewed for compliance with storm water regulations. The coordinated involvement of all Divisions and disciplines provides an elevated degree of assurance that all projects are subjected to thorough scrutiny as part of a typical review process. Particulars surrounding the project approval and process verification are discussed in the following sections.

2.4.2 Best Management Practice Requirements

The Municipal Permit dictates minimum BMP requirements for all new development and redevelopment projects. The requirements are addressed in the Oceanside Standard Urban Standard Management Plan (SUSMP) and Chapter 40 of the Oceanside City Code (i.e. the Storm Water Ordinance) included in the City Storm Water Ordinance and SUSMP and shall include, but not be limited to, the implementation of the following BMPs and LID practices by the project proponent:

- Source Control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed outdoor material storage areas, properly designed trash enclosure areas, the implementation of Integrated Pest Management Principles (IPM) and the inclusion of efficient irrigation system, and drought tolerant/native species landscape design consistent with the City Water Efficient Landscaping Ordinance 10-OR0412-1.

- The inclusion of Unified Low Impact Development (LID) practices that conserve natural topographic features, provide development setbacks from natural water bodies and conveyances, minimize site imperviousness, maximize infiltration, and retain and slow runoff, while addressing pollutant mitigation requirements;

- Implementation of development buffer zones from natural water bodies requires the project proponent to implement other types of buffers such as trees or access restrictions where conventional setbacks are not feasible;

- Measures to mitigate discharges of pollutants that result during grading or construction activities as specified in the Section D.2 of the Municipal Permit; and

- Submittal and approval of a mechanism under which ongoing long-term maintenance of all structural post-construction BMPs will be conducted.

Addressing storm water BMP requirements is required during the planning/permit application phase of a project. Projects are obligated to demonstrate compliance with Municipal Permit requirements prior to scheduling a public hearing. In addition, implementation of BMPs is a City standard condition of approval. The City will not support the entitlement of a project or issue development permits until the appropriate SUSMP documents are reviewed and deemed complete by City Engineering Division Staff. Any subsequent changes that affect the accepted BMPs are required to be reviewed and deemed complete by City Engineering Division Staff.

2.4.3 Program Implementation

2.4.3.1 Application of SUSMP Requirements

All new development and redevelopment projects may be subject to the requirements of the Municipal Permit and SUSMP. Requirements include minimum standards for the implementation of Low Impact Development (LID) practices and the integration of flow control criteria designed to mitigate runoff peaks and durations from development sites. The updated

SUSMP incorporates a unified LID procedure which combines site planning and design measures coupled with engineered, small-scale Integrated Management Practices (IMPs).

The SUSMP contains specific design information for dispersal of runoff to landscaped areas, the integration of pervious pavements, bioretention facilities, flow-through planters, dry wells, infiltration basins, and cisterns into the project design. Where feasible, and where permissible, the water in cisterns may be directed to non-potable uses to augment irrigation practices. Bioretention facilities and planter boxes may be designed with an impermeable barrier so that runoff does not saturate native soils. Instead, runoff is filtered through an engineered soil mix and captured in a subdrain and conveyed to a storm drain system. This configuration may be needed where native soils have low infiltration rates, where groundwater is high, contaminated, or where increasing soil moisture may present a hazard to foundations or slope stability. In limited and special circumstances, such as retrofit of existing drainage systems, some pedestrian-oriented developments, and roadway widening projects; where it can also be demonstrated it is not be feasible to construct any of these facilities, higher-rate surface biofilters or higher-rate vault based filtration units may be used to address treatment requirements. Applicants are also required to incorporate design features to control pollutants from specified on-site sources, such as refuse areas, outdoor storage areas, and vehicle washing and repair facilities. The SUSMP contains a number of Source Control BMPs designed to address the types of sources to be controlled and a corresponding list of required source control measures.

In addition to disconnecting impervious surfaces and mitigation pollutant sources, applications for approval of Priority Development Projects (PDPs) are required to demonstrate compliance with the Hydromodification Management Plan (HMP) consistent with the Municipal Permit. Applicants are directed to the HMP Applicability Determination matrix (HMP Figure 6-1) to determine if a proposed project is obligated to implement hydromodification controls. The HMP Decision Matrix applies to all PDPs. As a rule of thumb, application of flow controls to redevelopment projects would only be required if the redevelopment project increases impervious area or peak flow rates as compared to pre-project conditions. Please note that all Priority Development Projects, regardless of HMP applicability, remain subject to Municipal Permit unified LID and water quality treatment requirements.

By following the design procedure, applicants can develop a single integrated design which complies with the complex and overlapping NPDES permit, LID, storm water treatment, and peak runoff and duration control requirements.

2.4.3.2 SUSMP Document Review

During this reporting period the responsibility for overseeing SUSMP document review was delegated to the City Development Engineer (CDE) by the City Engineer. The CDE began program changes by implementing Engineering Division Staff training to facilitate storm water document review. Moreover, the CDE directed changes to the storm water (SW) review approach that were modeled after procedures being implemented by the County of San Diego. The foremost goal was to improve customer service. To meet that goal, the Engineering Division Staff were encouraged to improve plan review turn-around time by focusing on general aspects of the project and holding the Engineer-of-Work (EOW) “highly accountable” by requiring the completion of the “Declaration of Responsible Charge”. Plan reviewers were

encouraged to focus responsibility on the EOW for providing correct BMPs and calculations. The CDE is responsible for the distribution (assignment) of SW plans to Staff for the purpose of review. The individual Staff member assigned to review the SW plan for a project is also the individual who is responsible for deeming the SW plan complete or accepted.

As part of the administrative and discretionary permit application process, each development or redevelopment project is required to complete a permit application form, a Storm Water Quality Assessment form, and provide a project description and justification with supporting site development and architectural plans. The complete project application is distributed by the CDE to a member of the Engineering Division Review staff with the underlying task of providing a formal SUSMP Determination. The determination clearly identifies the project type and subsequent SUSMP requirements.

The majority of new development and redevelopment projects are subject to the provisions of the SUSMP. Projects are identified as Priority Development or Standard Development projects based upon land use categories and applicability of permanent storm water BMPs. A very limited number of projects are not required to submit a SUSMP document and are noted as SUSMP exemptions. Projects which are granted a SUSMP exemption typically involve incidental construction with negligible or no ground disturbance activities. Examples include the addition of an antenna to an existing cellular tower or interior tenant improvements to an existing building.

A SUSMP exemption differs from a SUSMP wavier of infeasibility. The City has never granted a waiver of infeasibility to a Priority Development Project and does not anticipate granting waivers in the future; however, if waivers are necessary, the City may elect to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the project watershed.

Projects which have been formally identified as Priority Developments or Standard Developments are required to submit a project specific Storm Water Mitigation Plan (SWMP). Entitlement project storm water plans and supporting documents are submitted to the Planning Division for distribution to Engineering and Storm Water Development Review staff. The storm water review of Priority and Standard Development Projects is an iterative process that entails examination of the SWMP for consistency with SUSMP and Municipal Permit requirements. SWMP reviews also comprise an evaluation the supporting documents that include (at a minimum); the Site Development Plan, Project Description and Justification, Hydrology Study, HMP Study, Geotechnical Report, Biological Study, Slope Analysis, and etc. Projects which are consistent with the Municipal Permit and SUSMP are deemed complete by the individual Staff member assigned to review the project SW plans by the City Development Engineer. A digital image and hard copy of the original plan are retained for City records.

2.4.3.3 Priority Projects

Priority Projects are required to obtain an approved SWMP as part of the project entitlement process. The items required in a SWMP are described in Section 1 of the SUSMP. In summary, Priority Projects must determine the Primary Pollutants of Concern based upon source characterization and impacts to the 303(d) impaired receiving waters. This category of development is required to provide Source Control BMPs while implementing LID practices. The project must incorporate Integrated Management Practices/Structural Treatment Control

BMPs into the site development. The selected IMPs/Treatment Control BMPs are required have a medium to high removal efficiency for the identified Primary Pollutants of Concern. The Treatment Control BMPs with low pollutant removal efficiencies are not permissible in the City of Oceanside.

Priority Projects are also required to obtain an approved Operation and Maintenance Plan (O&M Plan) and enter into a Storm Water Facilities Maintenance Agreement (SWFMA) to ensure the long-term maintenance and operation of the Treatment Control BMPs. The City will not consider Priority Project structural Treatment Control BMPs to be effective without the assurance of a long-term maintenance component, and therefore will not accept storm water BMPs as meeting the MEP standard, unless a mechanism is in place that will ensure ongoing long-term maintenance of all structural BMPs. This mechanism shall be proposed by the project proponent as part of the SWMP and will be refined though the City review process until satisfactory verification of maintenance is provided to the City Development Engineer. Such verification may include, but is not limited to, covenants, legal agreements, maintenance agreements, and/or conditional use permits. A non-refundable security may be required. The security provides the City with funding to perform maintenance activities in the event of default by the owner.

2.4.3.4 Priority Project Example

The selected sample project for this report cycle involves the relocation of an existing facility to a new and upgraded location. The El Corazon Green Waste/Compost Facility is a private, commercial-enterprise located in the Loma Alta Hydrologic Area on approximately 15-acres of City-owned property. The compost facility is part El Corazon Specific Plan, which includes other elements such as sports fields, hiking trails, and an existing Senior Center. The relocation effort will re-establish the compost facility approximately one-half mile southwest of the existing location.

The El Corazon Specific Plan site was a former silica mine that ceased operation in 1990. After the sand mining operation closed, the title transferred to a private developer and subsequently to the City of Oceanside, along with funding to reclaim the former mine site. In 1994 the City leased 15 acres of the El Corazon property to Agri Services Inc. to permit and operate a green waste facility. At that time, it was estimated that the facility was processing approximately 40,000 tons of yard trimming per year. By 2000 improvements to the composing methods at the facility increased compost production to approximately 80,000 tons per year. The City has used the mulch generated from the facility as soil amendments and erosion control for the El Corazon property to help meet the provisions of the mine reclamation plan and also for City parks and other public projects. Additionally, Agri Service Inc. operates a compost and mulch giveaway, as well as education programs for the residents of Oceanside. Under this program, users of the facility have the option of bringing in their green waste to the facility or having it picked up from the curb outside their residence. Once the green waste has been composted, residents have the option of receiving the mulch for free for use in gardening and landscaping activities.

The relocated El Corazon Green Waste Facility will continue to accept yard trimmings, source separated food waste, liquid waste and untreated construction wood generated from both residential and commercial projects. Source separated food waste and liquid waste (such as gray water from domestic wastewater sources composed of wash water from kitchen, bathroom, and laundry sinks, tubs, and washers, or food juices) will help meet increasing water diversion

mandates, provide a service for local restaurants, grocery stores and food processing plants and provide a source of reclaimed water for the composting process to reduce the facilities dependence on the City potable water supply.

The facility is anticipated to process an average of 260 tons per day, however, due to seasonal fluctuations up to 400 tons per day may be received. The material will be brought to the facility by the City contract waste hauler, individual homeowners, contract haulers, and landscape contractors. Green waste material brought to the facility is weighed and delivered to a tipping floor where it is inspected by trained employees for the presence of contaminants, such as metal, plastic, and chemically treated wood. The identified contaminants will be removed prior to grinding and composting. Removed materials will be stored in dedicated disposal containers for collection by a local waste hauling company. It is anticipated that approximately 10-40 cubic yards of contaminants will be removed from the facility on a weekly basis. Chemically treated wood is not accepted at this facility; however, any incidental treated wood will be stored separately for disposal at nearest landfill that accepts this material; the San Diego County operated Otay Landfill.

Green materials, such as grass and leaves, will be mixed with high carbon materials, such as branches and limbs, to stimulate microbial activity which aides in the reduction of malodorous compounds. Fresh green waste will be ground within one week to avoid odor generation and the build up of flammable material. The grinder operated by Agri Services Inc. is capable of processing up to 60 tons of material per hour. The ground material will be placed over aeration channels in heaps containing up to 650 yards of material. The upgraded facility will support up to 12 heaps of material. Liquid waste (such as gray water or food juices) will be added to the compost to increase the moisture content of the shredded material to between 45 and 55 percent. Food waste and liquid wastes will be processed daily to reduce the likelihood of odor. If the liquid waste is not available, potable water will be used in its place. An aeration system will be employed to enable decomposition of material while reducing odor. The process is controlled by pumps designed to draw air through the mulch piles and thereby increasing the level of oxygen in the material while promoting aerobic decomposition which aids in the reduction of malodorous compounds. If the desired reduction in odor is not affected by these measures, there is a contingency for installing perforated covers over the compost heaps to minimize odors.

A typical mulch-cycle requires approximately eight weeks. After the initial sorting, grinding and adjusting of moisture content; the material is allowed to compost for two weeks. After two weeks, the material will be remixed, recovered and aerated for an additional two weeks. During this process, the temperature of the material will be monitored to ensure pathogen reduction requirements are satisfied. The material is then remixed and moved to a second staging area for curing where it is further remixed and aerated without covers for an additional two to four weeks. After curing, the material is processed through a series of screens. The screened compost is suitable for use as a soil amendment. Oversized material may be used for water conservation, erosion and weed control, and/or pathogen reduction. All composted material will be sampled and tested for pathogens and heavy metals as required by CCR Title 14, Sections 17868.1 to 17868.3.

The manipulation of the compost materials on this site is accomplished by several pieces of large equipment including four Caterpillar™ (Cat) Model 966G front end loaders, one Doppstadt™ trammel screener, and one Vermeer™ Model TG9000 tub grinder. All of this equipment is

portable and operates on diesel fuel. Because of the nature of the composting operation, all of the equipment is regularly inspected oil, fuel or coolant leaks and maintained to avoid system failures. Small repairs, fueling, and cleaning will be preformed in the pole shed maintenance area. The equipment will be positioned under the shed which is equipped with an impervious concrete floor. The shed floor is equipped with a dead-end floor drain to capture any spills or rinse water. The dead end sump has a capacity of approximately 270 gallons and is intended to be maintained (pumped) at the same interval as the on-site portable sanitary facilities. The shed canopy is equipped with a 10 foot overhang beyond the edges of the impervious floor to preclude rainfall. The floor slab is also constructed 6 inches above the adjacent ground surface to preclude run-on from other areas. Large 55 gallon drums of oil, waste oil and waste filters are kept on EPA approved secondary containment in a portable enclosed freight storage container.

The fuel tank system and dispensing equipment is presently covered under a separate permit for the current location from the County of San Diego (Unified Program Facility Permit or UPF permit). A copy of the current county permit is included in the appendix of the SWMP. A new permit will be obtained for the new location at the time of the move. The fuel tank is an above ground unit that is equipped with double wall containment to prevent the leakage of fuel from the tank and dispensing equipment. The fuel tank is located under the pole barn roof structure on the impervious concrete pad. The fuel dispensing pump is located on the tank and is more than 10 feet within the edge of the canopy.

The proposed site development is a zero-discharge low impact design project. Grading is minimized to road sections, creation of a process water pond, remedial soil preparation and excavations necessary to place stationary equipment, a truck scale, and support sheds.

The majority of the site will remain existing natural soil. Drive aisles are delineated by the placement of Class 2 road-base which is intended to reduce tracking while providing a pervious drive surface. The area where the composting operations are to occur is designed to capture all of the runoff (leachate) from the composting process, direct that leachate to an aeration chamber where it is stored and prepared to be pumped back onto the composting piles. The composting area is bound to the north and south by PCC pads to facilitate equipment operation involving material handling. All of the rainfall that enters the composting area is automatically made part of the process water and is used in the composting process. The aeration chamber is equipped with a high water overflow feature that acts similar to a sewer grease separator. In the event that the aeration chamber capacity is exceeded due to a large rainfall event, the leachate will remain in the chamber and the excess flows will bypass the leachate and be directed to the process water storage pond for later use. The pumps used to move the aerated leachate back to the compost piles are portable gasoline powered units that can be positioned anywhere they are needed on site. The pumps used are typically of the size that is comparable to a push lawnmower or walk behind rototiller (about 5 horse power). The fuel capacity of these units is typically around one gallon or less. The pumps are not exposed to rainfall because they are stored in the enclosed cargo container (primarily to prevent theft, damage and weathering) and there is no reason to pump water when rain is falling on the compost area already. The pumps are constantly monitored while they are in use. The pumped water is manually sprinkled on the compost piles to prevent ponding of the water and wasting of the pumping effort. As part of the above ground fuel tank permit and storage of new and used oil products and filters, the site is stocked with adequate spill containment and cleanup supplies. In the unlikely event that there is leakage of fluid from one of these relatively small pumps, the pump will be immediately shut down and the

spill properly cleaned up and disposed of using the on-site materials and supplies. The operation of the pumps is typically covered under the UPF permit. Under typical non-storm conditions most of the water in the composting process is located in the composting materials. Any excess water is stored in the process water pond. Normally there is little or no water in the process water pond because potable water is expensive and subject to evaporation losses without the benefit of producing composted material. The entire composting area and process water pond will be lined with an impervious membrane to eliminate the loss of process water into the subsoil. The process water collection pond is sized to hold a minimal amount of process water plus up to a 100 year runoff volume from the composting area. Any water in excess of the process water collection pond capacity will be discharged over a high water weir structure and allowed to flow down to the existing offsite detention pond.

Since there is no flow that leaves the site, no receiving waters or MS4 are impacted. If the flows were to leave the site they would be collected in the storm drain system of Oceanside Boulevard which discharges to Loma Alta Creek.

2.4.3.5 Standard Development Projects

Development and redevelopment projects that are not identified as Priority Development Projects or are not determined to be exempt from SUSMP Treatment requirements, and receive a formal SUSMP Determination identifying the project as a "Standard Development Project" (SDP) are required to implement Source Control BMPs consistent with Section 2.7 of the SUSMP. Projects are also required to include LID features designed to conserve natural topographic features, provide development setbacks from natural water bodies and conveyances, minimize site imperviousness, maximize infiltration, and retain and slow runoff.

Standard Development Projects are required to implement a Standard Development Project SWMP. Clean Water Program staff may also require additional controls for Standard Development Projects, appropriate to the project, which may include treatment BMPs and LID IMPs such as infiltration or bioretention. If treatment facilities are included, provisions are to be made to ensure their long-term maintenance.

2.4.3.6 Adequacy of Proposed Plans

Staff is tasked with review of submitted SUSMP documents and other relevant plans for compliance with the Municipal Permit and SUSMP requirements. The City Engineer may elect to accept proposed alternatives to the BMP requirements contained in the SUSMP if they are determined to be applicable and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs and may be requested following the conclusion of a staff review cycle. A project SWMP will be deemed complete when the project complies with the requirements of the City SUSMP and Municipal Permit.

2.4.3.7 Inspection

The City has compiled a Treatment Control BMP inventory with information for all approved and/or constructed Priority Development Projects. The inventory is included in this report as Attachment 2-A. All installed Treatment Control BMPs are regularly inspected by City Code Enforcement Inspectors to ensure intended function and proper maintenance. The Municipal Permit dictates that high priority sites shall be inspected annually and medium priority sites are to be inspected every two years. Low priority sites are inspected on an "as needed" basis. In addition, the Municipal Permit requires a minimum of 20% of the total number of projects with

approved Treatment Controls and a maximum of twice the average number of projects with Treatment Control BMPs approved per year will be inspected annually. The Municipal Permit dictates 50% of all medium priority sites with drainage inserts will be inspected annually. City Code Enforcement inspection staff performed a total of 52 treatment control BMP inspections during this reporting period.

It is the responsibility of the City Engineering Inspection staff to ensure that all BMPs proposed for a project have been built or installed according to the construction plans; before approving subsequent stages of construction. The City Engineer requires that all Priority Development Projects attached a duplicate of the approved SWMP BMP Exhibit to the construction plan set. The inspectors utilize the project plans to identify any missing or incorrectly constructed/installed Treatment Control BMPs. Engineering Inspection staff has the authority to stop a project from proceeding if BMPs are not constructed consistent with the approved SWMP. The SWMP is the governing document. Moreover, inspectors have the authority to withhold the Certificate of Occupancy (CO) and to deny approval for sites with observed problems. Inspectors also have the authority to withhold the release of bonds until plan requirements are adequately addressed. City Staff routinely inspects all development projects subject to SUSMP requirements to ensure that all LID, Source Control, and Treatment Control BMPs proposed for the project have been constructed in compliance with all approved plans and City permits and ordinances. This established method of ongoing inspection during site development and the ability to stop-work, withhold release of bonds, and/or occupancy, ensures developer compliance with the approved SWMP.

Inspections include examination of all Treatment Control BMPs at the site to verify that each Treatment Control BMP is in working order, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings will be documented by the inspector using the City of Oceanside Treatment Control BMP Inspection form in Appendix D of the 2011 JURMP. Deficiencies in Treatment Control operation and maintenance are noted during the inspection, the responsible party is notified and appropriate enforcement actions take place as described in Section 4.4.4.9 of the 2008 JURMP, in order to achieve compliance.

The City requires annual verification of proper maintenance of all treatment control BMPs by the responsible party for maintenance prior to the start of the rainy season. The City Code Enforcement section is responsible for ensuring the proper long term maintenance and operation of post construction BMPs. The City requires all Priority Projects to include Operation and Maintenance checklists and a self-inspection log for the site's Treatment Control BMPs as found in the approved project SWMP. The City requires these forms to be completed by the site's responsible party and be submitted to the City Code Enforcement staff on an annual basis. See Attachment 2-A for sites that were inspected and/or have BMP maintenance verification on file for this reporting period

A detailed description of the different enforcement measures used by the City of Oceanside to enforce its storm water regulations can be found in Section 2 of the 2008 JURMP.

Enforcement of post-construction BMP maintenance after occupancy is the responsibility of City Code Enforcement officers. Code Enforcement uses a variety of methods to ensure long term maintenance objectives are met. Enforcement actions include verbal and written warnings and monetary penalties. Enforcement measures will escalate with continued violations as necessary.

All enforcement actions are documented in the development project's database file. If a development site receives frequent citations or is not responsive to previously issued enforcement actions, more severe actions, such as court actions, will be used as necessary. Details surrounding the City Treatment Control BMP inspection program may be found in Section 4.4.4.7 of the 2008 JURMP.

2.4.3.8 2011-2012 SUSMP Document Submittal and Review Summary

This Section identifies the SUSMP document reviews that were performed during the 2011-2012 reporting period.

There were 33 Priority Development Project SWMP submittals which prompted 79 reviews with a total of 8 projects receiving approval. During the same period there were 9 Priority Projects that submitted Amendments to a previously approved SWMP that prompted 16 reviews and yielded 5 approvals. In addition, there were 10 Standard Development Projects that submitted an SWMP which prompted 26 reviews. Six (6) Standard Development Project SWMP were approved during the 2011-2012 reporting period.

During the reporting period there were 9 Priority Development Projects that submitted O&M plans as part of the final engineering process. There were a total of 15 reviews performed with a total of 4 O&M Plans receiving approval. The SWMFA is typically submitted with O&M Plan. Some projects elect to "trail" the SWFMA submittal. During this reporting period 7 project SWFMAs were submitted, prompting 13 reviews, resulting in 2 approved agreements.

All projects were subjected to a SUSMP Determination. The determination process places the majority of developments into Priority Development Project or Standard Development Project categories. During this reporting period, a number of projects were found to be exempt from SUSMP requirements. Projects which are granted a SUSMP exemption typically involve minor construction with minimal, or no ground disturbance. Examples of projects that are eligible to receive an exemption include interior tenant improvements to an existing structure, or the addition of an antenna to an existing cellular tower. During this reporting period there were 59 reviews linked to the evaluation of 48 project submittals as part of the SUSMP Determination process. At total of 48 projects were not categorized as a Priority or Standard Development Project and therefore were not required to submit an SWMP.

As previously stated, a SUSMP exemption differs from a SUSMP wavier of infeasibility. The City has never granted a waiver of treatment control BMP infeasibility to a Priority Development Project and does not anticipate granting such waivers in the future. However, if a waiver is deemed necessary, the City may elect to develop a waiver mitigation program. The waiver mitigation program would collect funds from projects that receive waivers and use the funds on programs to improve water quality in the project watershed. There were no SUSMP waivers of infeasibility granted during this reporting period. See Table 2-2 for more detail on project submittals and review results.

Table 2-2. 2011-2012 SUSMP Document Submittal and Review Summary.

Priority Development Project (PDP) SWMPs				
File Number	Project Name	Project Type	Number of Reviews	Completed (Y/N)
RC12-00004	26 St Malo	Residential	2	N
RC11-00013	833 S Pacific St Condos	Residential	1	N
RC-4-2009	1441 S Pacific Street □Soto Residence	Residential	1	Y
RD12-00001	Belvedere □901 Mission Avenue	Commercial	2	N
RC11-00002	Burgess/Journigan Res 1513 S Pacific St	Residential	3	Y
BLDG12-0481	Canyon Drive McDonalds	Commercial	1	N
RC10-00008	Caya Residence □1707 Pacific Street	Residential	2	N
ACP12-00003	Coastal Rail Trail □Phase 2B	CIP	1	N
D11-00014	Darwin Knolls Revision	Residential	4	N
T-2-04	Dixie Village □Grading Plan	Residential	4	N
D09-00004	El Corazon Green Waste Composting Facility	Commercial	3	Y
D11-00006	El Pollo Loco	Commercial	6	Y
SC12-00008	Gilead Sciences, Inc.	Commercial	3	N
T12-00002	Guajome Estates	Residential	1	N
D11-00012	Holiday Inn □ 3350 Mission Ave	Commercial	1	N
CUP12-00001	Immaculate Heart Radio Antenna Tower □ 2766 Santa Fe	Commercial	3	Y
RC12-00007	Incorp Services □1837 S Pacific St □Sarup Residence	Residential	1	N
D10-00010	Inns at Buena Vista Creek	Commercial	2	N
RC11-00012	Kates Residence □ 1909 S Pacific St	Residential	2	N
D11-00009	Lady of Guadalupe Sport Court/Parking 4070 Mission Ave	Residential	3	N
D11-00015	Meritage □Hi Hope Ranch	Residential	1	N
D12-00006	Mission Cove	Residential Commercial	1	N
D11-00013	Oceanside Mesa	Residential	3	N
D10-00005	Oceanside Congregation of Jehovah Witness	Commercial	2	N
T-203-2006	Oceanside Springhill Suites	Commercial	2	N
D10-00008	Pro Kids Golf Course	Commercial	5	Y
G11-00002	Quarry Creek □Hansen Aggregates Quarry	Commercial	3	Y
D11-00008	Singh Farms	Commercial	5	Y
D11-00008	Singh Farms Road	Commercial	1	N
D10-00008	South Strand Condominiums	Residential	3	N
D12-00014	Spring Creek Senior Community Living	Commercial	1	N
D12-00010	Terraza Rancho del Oro □Village XII	Residential	2	N
D11-00002	Tri-City 3 Story Medical Office & N/E Parking	Commercial	4	N
Number of PDP Applications				33
Number of PDP SWMP Reviews				79
Number of Completed PDP SWMPs				8

Priority Development Project (PDP) SWMP Amendments				
File Number	Project Name	Project Type	Number of Reviews	Completed (Y/N)
T-8-00	Darwin Glen SWMP Amendment No. 3	Residential	3	Y
T-2-03	Hi Hope Ranch SWMP Amendment No. 2	Residential	1	Y
D10-00004	Marriott Seagate Amendment No. 2	Commercial	2	Y
D10-00004	Marriott Seagate Amendment No. 3	Commercial	2	Y
D11-00015	Meritage SWMP Amendment	Residential	1	N
T-203-2006	Oceanside Springhill Suites Amendment No. 1	Commercial	2	N
G10-00004	San Luis Rey Transit Center Amendment No. 2	Commercial	1	N
D12-00008	Saybrook-Morro Hills Arrowood Village K DR Horton Amendment No. 2	Residential	3	Y
D11-00008	Singh Farms	Commercial	1	N
Number of PDPs Amending the SWMP				9
Number of PDP Amendment Reviews				16
Number of Completed PDP Amendments				5

Standard Development Project (SDP) SWMPs				
File Number	Project Name	Project Type	Number of Reviews	Completed (Y/N)
P10-00005	Bergna Remodel 1801 S. Myers Street	Residential	4	N
RC12-00006	Brusso Residence 1920 S Pacific	Residential	2	Y
RC12-00005	DAKIM New SFD 2003 S. Tremont	Residential	3	Y
P-7-08	Hahn Parcel Map	Residential	1	N
P10-00003	Ho Parcel Map/Lot Split	Residential	3	N
P11-00001	Kolostyak TPM	Residential	3	Y
RD12-00003	Motel 6 909 N. Coast Highway	Commercial	1	Y
RC11-00007	Pennant-Jones Addition & Remodel	Residential	3	Y
D12-00007	Solar Gard	Commercial	3	N
G11-00028	Weatherly Residence Faith Circle	Residential	3	Y
Number of SDP Applications				10
Number of SDP SWMP Reviews				26
Number of Completed SDP SWMPs				6

SUSMP Exempt Projects				
File Number	Project Name	Project Type	Number of Reviews	Completed (Y/N)
RRP11-00001	N. Pacific Street □Roof Deck	Residential	1	Y
ACP12-00001	801 Vista Way □Vasques Carport Conversion	Residential	1	Y
RC11-00004	1639 S. Pacific Street □Balcony Enclosure	Residential	1	Y
RC11-000015	2011 S. Pacific Street - Addition	Residential	1	Y
G10-00016	3343 Avenida De Loyola □Missett Residence	Residential	3	Y
G11-00020	3791 Oceanic Way □Slope Repair	Residential	2	Y
CUP11-00027	All Lube & Tune	Commercial	1	Y
CUP11-00023	Anita□s Restaurant	Commercial	1	Y
ACUP11-00017	ATT □ Tri-City Renewal	Commercial	1	Y
ACUP11-00021	ATT Mobility □ 2002 S Coast Hwy	Commercial	1	Y
RCUP11-00001	ATT □ 1155 Sportfisher	Commercial	1	Y
ACUP11-00009	ATT □ 3040 Oceanside Boulevard	Commercial	1	Y
ACUP 11-00007	AT&T ACUP Modification 518 Oceanside Blvd	Commercial	1	Y
ACUP 11-00006	AT&T at Lighthouse Church □CUP Renewal	Commercial	1	Y
D12-00005	Chase Drive-Thru ATM □ 155 Old Grove Road	Commercial	1	Y
ADP12-00002	Chase Walk-up ATM □ 2571 Vista Way	Commercial	1	Y
RACUP11-00002	Coastal Motion Fitness □ 302 Pier View Way	Commercial	2	Y
ACUP11-00019	Cricket Renewal □ 1919 Mission	Commercial	1	Y
ACUP11-00018	Cricket Renewal □ 2103 S El Camino Real	Commercial	1	Y
RC11-00009	Duplex Remodel □ 811 S Pacific Street	Residential	1	Y
RC11-00010	Duplex Remodel □ 813 S Pacific Street	Residential	1	Y
RC11-00011	Duplex Remodel □ 815 S Pacific Street	Residential	1	Y
CUP11-00025	Fulton Family Chiropractic □ 1720 Ord Way	Commercial	1	Y
D12-00013	G&M Gas and Food Mart	Commercial	2	Y
RACUP11-00001	La Bell Dame Reducing Salon	Commercial	1	Y
CUP11-00015	LA Fitness	Commercial	1	Y
D12-00009	Mission San Luis Rey Mausoleums	Commercial	1	Y
CUP12-00013	Muay Thai and Boxing School	Commercial	2	Y
RC12-00010	Munzer Deck Replacement 56 St Malo Beach	Residential	1	Y
C-20-08	Naughton/Verizon □ 2182 El Camino Real	Residential	2	Y
CUP11-00018	New Birth Baptist Church	Commercial	1	Y
CUP11-00017	Oceanside Vineyard Church	Commercial	1	Y
D11-00010	Oceanside Gateway LED Display	Commercial	2	Y
D11-00011	Piazza d□Oro Revision	Commercial	1	Y
CUP11-00026	Planet Fitness □ 4130 Oceanside Boulevard	Commercial	1	Y
CUP12-00003	Quantum Learning □ 1938 Avenida Del Oro	Commercial	2	Y
CUP12-00009	Roadway Auto Towing	Commercial	1	Y
CUP12-00017	San Luis Rey Waste Water Plant Solar Project	CIP	1	Y
RC12-00005	Schneider Residence Remodel 1841 S Pacific	Residential	1	Y
RCUP12-00002	Stone Brewery Retail Outlet 310 N Tremont	Commercial	1	Y
RC12-00012	Stone Vail Remodel/Addition 30 St Malo Beach	Residential	1	Y
CUP11-00022	Sundance CUP Renewal	Residential	1	Y
RC12-00012	Stone Vail Remodel/Addition 30 St Malo Beach	Residential	2	Y
CUP11-00016	Verizon Wireless □ 5131 Teal Way	Commercial	1	Y
D11-00007	Waste Management □CNG Facility	Commercial	2	Y
RC11-00008	Wermers Remodel	Residential	1	Y
RRP12-00003	Williams Residence 508 S Pacific □Rooftop Deck	Residential	1	Y
RC11-000016	Zohar Accessory Deck Addition □ 2012 Stewart St	Residential	1	Y
Number of Project Applications				48
Number of Project Reviews				59
Number of Project Exemptions				48

Operation Maintenance (O M) Plans				
File Number	Project Name	Project Type	Number of Reviews	Completed (Y/N)
T-8-2000	Darwin Glen	Residential	1	Y
G12-00011	Hi Hope Ranch (Meritage)	Residential	1	Y
D-2-2007	Mission San Luis Rey	Commercial	1	N
T-203-2006	Oceanside Springhill Suites	Commercial	2	N
D10-00008	Pro Kids Golf Course	Commercial	3	N
G10-00002	Quarry Creek	Commercial	3	Y
D11-00008	Singh Farms Road	Commercial	1	N
D11-00001	Taco Bell Revision	Commercial	2	Y
G11-00029	Tri-City Medical	Commercial	1	N
Number of O&M Plan Applications				9
Number of O&M Plan Reviews				15
Number of Completed O&M Plans				4

Storm Water Facilities Maintenance Agreement (SWFMA)				
File Number	Project Name	Project Type	Number of Reviews	Completed (Y/N)
D-2-2007	Mission San Luis Rey	Commercial	1	N
T-203-2006	Oceanside Springhill Suites	Commercial	2	N
D10-00008	Pro Kids Golf Course	Commercial	3	N
G10-00002	Quarry Creek	Commercial	3	Y
D11-00008	Singh Farms Road	Commercial	1	N
D11-00001	Taco Bell Revision	Commercial	2	Y
G11-00029	Tri-City Medical	Commercial	1	N
Number of SWFMAs				7
Number of SWFMA Reviews				13
Number of Completed SWFMAs				2

2.4.3.9 Outreach and Staff Training

City Staff involved in planning, review, inspection, and enforcement of development projects received training during this reporting period (see Table 2-3). Training topics during this reporting period focused on SWMP document review, SUMSP and HMP requirements, LID implementation, inspection and maintenance.

Table 2-3. Staff Training During the 2011-2012 Reporting Period

Department Division	Date	Number in Attendance	Topic
Engineering Review	July 26, 2011	4	Hydrology/SWMP Review
Engineering Review	August 1, 2011	1	HMP Tools
Engineering Review	August 17, 2011	1	HMP SDHM
Engineering Review	August 17, 2011	2	CGP SMARTS
Engineering CIP	August 29, 2011	7	SWPPP
Engineering Review	September 6, 2011	1	SCCWRP Screening Tool
Engineering Review/Inspection/CIP	September 22, 2011	5	Construction BMP Maintenance
Engineering Review	October 6, 2011	1	HMP
Engineering Review	October 13, 2011	1	LID/Green Infrastructure
Code Enforcement	November 17, 2011	2	Treatment Control BMP Inspection
Engineering/CIP	November 31, 2011	5	CGP
Engineering Review/Inspection/CIP	December 5, 2011	4	Non-Compliant Construction Sites
Engineering Review	January 10, 2012	1	GIS
Engineering Review	January 31, 2012	1	SDHM
Engineering Review	April 25, 2012	1	MS4 Permit
Engineering Review	May 16, 2012	2	MS4 Permit
Engineering Review	June 7, 2012	1	HMP
Engineering Review	June 18, 2012	5	SWMP Review

2.5 Development Planning Component Effectiveness Assessment

See Section 11.0 for an assessment of the Development Planning component of the City JURMP.

2.6 Program Review and Modification

The Development Planning components of this Report, the City JURMP, and the SUSMP will be revised as necessary to conform to the future requirements of the Municipal Permit. Major revisions to the Development Planning component will be cited in Section 14 of the City JURMP.

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3.0 CONSTRUCTION COMPONENT

3.1 Introduction

Land disturbance activities associated with grading and construction when left unmitigated, are known to cause negative impacts to the receiving waters. The JURMP provides guidance designed to address potential impacts associated with construction and grading activities. The Construction Component of the Annual Report briefly describes the measures implemented by the Engineering Division – Engineering Inspection that are intended to meet the requirements of the Municipal Permit while reducing impacts to the receiving water to the Maximum Extent Practicable (MEP). A summary of applicable sections of the Municipal Permit and the corresponding Annual Report sections are presented in Table 3-1.

Table 3-1. Order 2007-0001 Compliance Summary.

J.3.a.(3)(d).iv Updated construction site inventory	See Section 3.2.1 of this Annual Report
J.3.a.(3)(d).i Ordinance update and approval process modifications	See Section 3.3 of this Annual Report
J.3.a.(3)(d).vi BMP Implementation	See Sections 3.4 and 3.5 of this Annual Report
J.3.a.(3)(d).ix Confirmation that sites went through urban runoff approval process	See Section 2.4.3 of this Annual Report
J.3.a.(3)(d).x and xi Inspection of construction sites	See Section 3.5.2 of this Annual Report
J.3.a.(3)(d).xiii and xiv Enforcement of construction sites	See Section 3.5.3 of this Annual Report
J.3.a.(3)(d).xii Inspection frequency and totals during dry and wet seasons	See Section 3.5.2.3 of this Annual Report
J.3.a.(3)(d).vii Requirements for application of erosion and sediment control BMPs	See Section 3.5 of this Annual Report
J.3.a.(3)(d).viii Construction sites requiring Advanced Treatment	See Section 3.5 of this Annual Report

Portions of the JURMP Construction Component are based upon the following municipal documents:

- Chapter 40 of the City Code or Ordinances
- City of Oceanside Grading Regulations Manual
- City of Oceanside *Construction Urban Runoff Requirements Manual* (Construction Manual).
- City of Oceanside Erosion Control Plan

The documents are available on the City website at http://www.ci.oceanside.ca.us/

The Construction Manual was developed by the City to provide construction projects with guidance in order to comply with the City Code and its ordinances. The Construction Manual is subject to change to maintain consistency with the current Municipal Permit and ensure effective program implementation. Updated versions of the manual will be made available whenever modifications have been incorporated and approved by the City. During this reporting period no changes were made to the Construction Manual. The Construction Manual is located in Appendix C of the 2008 JURMP.

3.1.1 Notable Activities

During this reporting period the Development Services Department, which includes Building and Engineering Divisions, and the Neighborhood Services Department, which includes the Code Enforcement Division, continued to implement TRAKiT® software for permitting and enforcement tracking. In addition, the City continued to provide public access to select through the online version of TRAKiT™, called eTRAKiT™. Public users are able to access records and view the status of projects, permits and cases via the Internet. For more information, visit www.ci.oceanside.ca.gov and click on the "eTRAKiT-Online Permitting" Quick Link. The Clean Water Program will be reviewing the effectiveness of the new tracking tools and will continue to implement improvements. See Section 3.2.1 for additional information regarding TRAKiT® software.

3.2 Source Characterization

3.2.1 Site Inventory

The City has compiled a watershed-based inventory of all active construction sites within its jurisdiction that may have a potential impact on receiving waters. Projects that appear in the inventory are subject to grading permit and erosion control plan requirements. Engineering Division Inspection staff and Building Division Inspection staff are tasked with performing regularly scheduled site inspections to ensure development is executed as planned and erosion controls are implemented consistent with each stage of development. Small projects that are not associated with ground disturbance and do not require a grading permit, such as cel-tower retrofit or tenant improvement, are not included in the inventory, however still receive inspection.

The inventory process begins when information is collected from construction projects at the time of grading or building permit application. When the permit is approved, this information is then entered into a database developed by the City. If a permit was previously issued for a project, then the database is updated to reflect the most current information. In an effort to improve productivity, the Development Services Department coordinated with Code Enforcement, Fire Prevention, Information Technologies, and Water Utilities Department to institute an efficient permitting system and streamline processing. Permit processing and tracking has been improved since the October 2009 implementation of TRAKiT® permitting software by CRW Systems, Inc. The data management capabilities of TRAKiT assist specifically trained and dedicated Development Services Technicians (DSTs) as the "front-line" staff with regard to daily organization, input, and revision of permit data for every active project. The software contains enhanced reporting tools to provide management staff with pertinent statistics and data to evaluate workflows and resource allocation.

The inventory includes details on each construction site, including project name, location, and threat to water quality (TTWQ) as determined by the process described in Section 5.2.1.1 of the 2008 JURMP. Construction sites that were active during this reporting period may be found in Attachment 3-A.

3.2.2 Construction Site Prioritization

All construction projects are required to hold an onsite pre-construction meeting. The meeting is scheduled after obtaining grading permit and prior to commencement of any grading activities. The purpose of the "pre-con" meeting is to acquire and disseminate project specific information, identify key participants, and determine the project Threat-To-Water-Quality (TTWQ) by completing an Urban Runoff Threat Assessment. Required attendees include, but are not limited to, the owner, general contractor, project superintendant, grading contractor, geotechnical consultant, other pertinent subcontractors (environmental, archeological, and etc), and the City inspector assigned to the project.

The completed Urban Runoff Threat Assessment enables the determination of the project TTWQ. Projects are categorized as a low, medium, or high TTWQ, which determines the minimum construction inspection frequency. The project attributes that are used to assess a construction project include:

- Item 1 – Project Size
- Item 2 – Planned Grading/Soil Disturbance Period
- Item 3 – Proximity to Water Quality Environmentally Sensitive Area (WQESA)
- Item 4 – Presence of Significant Erodible Slopes
- Item 5 – Potential to Produce Non-Storm Water Pollutants or Discharges
- Item 6 – Amount of Proposed Impervious Area

All project proponents are directed to reference a prioritization matrix (Table 3-2) to determine the TTWQ priority of the project. To use the matrix, first locate the project size and then identify each item that applies to the project, within the row. Each item in the row corresponds to a level of prioritization, i.e. high, medium, or low. By determining the average prioritization within the applicable row based upon project size, a project will be assigned a high, medium, or low TTWQ and construction inspection frequency. The use of this matrix was developed consistent with the requirements of the Municipal Permit.

Table 3-2. Construction Project TTWQ Prioritization Matrix.

Item 1 - Project Size	Item 2	Item 3	Item 4	Item 5	Item 6	Default Priority
Greater than 50 acres	High	High	High	High	High	Medium
5□50 acres	□	High	High	High	High	Medium
1□5 acres	□	High	Medium	Medium	Medium	Medium
Less than 1 acre	□	Medium	Medium	Medium	Medium	Low

3.3 Updates to Ordinances and Approval Processes

During this reporting period, the City continued to actively participate in the Copermittee Workgroups and Sub-workgroups. The City also released an updated SUSMP in June 2011. Subsequent to the updated SUSMP, the City released a draft Storm Water Mitigation Plan (SWMP) template. The purpose of the template is to provide the design professional with a standardized presentation format while facilitating plan review. The Standard Development and Priority Development Project templates were developed during the previous reporting period and were provided as guidance documents, for form and content, to the Consultant/Development Community. During this reporting period, the templates were revised to incorporate suggestions from the Consultant/Development community and to provide clarification. Clarification took on the form of a completely revised approach to the template completion guidance. The instruction was previously embedded in the document and has since been rewritten and relocated to the end of the document. The SWMP templates will continue to be a work in progress and will receive periodic updates as necessary to remain consistent with Municipal Permit and SUSMP requirements.

In addition to the updated SUSMP, the City continued to require all development and redevelopment projects that cause land disturbance, including projects subject to the Statewide Construction General Permit (CGP), to complete and implement a City Erosion Control Plan. Erosion control plans are reviewed by Engineering Division staff and approved by the City Engineer. The Erosion Control Plan may appear to be a redundant document, as it typically overlaps the CGP SWPPP. However, the erosion control plan differs from the SWPPP because it requires a bond prior to approval. The erosion control bond creates a maintenance funding mechanism that assures funds will be available to repair or construct BMPs in the event of default by the Responsible Party. Plans are required to be updated on annual basis, prior to the rainy season, to assure that plans are consistent with site conditions and to update the erosion control bond.

3.4 Best Management Practice Requirements

The City has a set of construction phase Best Management Practices (BMPs) that are required to be implemented at all construction sites regardless of TTWQ priority including implementing and maintaining general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the MEP. Table 5-2 of the 2008 JURMP outlines the minimum construction BMPs required by the City. The table also provides references to the corresponding BMP fact sheets obtained from the Caltrans Storm Water Quality BMP Handbook and California Stormwater Quality Association (CASQA) Construction BMP Handbook.

A Construction BMP brochure titled “A Pollution Prevention Guide for the Construction Industry” is provided to the developer during pre-development meetings. This brochure provides a sample drawing that illustrates the minimum BMPs that must be used at all construction sites to protect storm drains and minimize pollution. This brochure was provided as Attachment 3-B in the 2008 JURMP Annual Report. This brochure is also available at both the Engineering and Building Department counters of the City. Approximately 100 brochures were distributed to the public by building division staff during this reporting period.

3.5 Program Implementation

All construction sites are required to select, install, and maintain BMPs that meet or exceed the minimum BMP requirements described in the City Construction Manual and in Section 5.4.1 of the 2008 JURMP. There is no minimum threshold of disturbed area that relieves a project of the responsibility to implement erosion and sediment control BMPs. Moreover, all sites requiring a grading permit are obligated to implement an Erosion Control Plan as part of the Grading Plan review and permit process. Construction activities that result in a land disturbance equal to or greater than one acre are subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). Projects that are subject to the CGP are required to file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB), obtain a Waste Discharge Identification Number (WDID#), and develop and implement a site specific Storm Water Pollution Plan (SWPPP) prior to the commencement of any grading activities. SWPPPs are required to include a list of BMPs that will be implemented during each phase of construction to reduce pollution discharges to the MEP. In addition, selected projects governed by the CGP may be required to employ advanced treatment as part of their SWPPP. Each project is required to perform a site assessment that includes the determination of a Sediment Risk Factor and a Receiving Water Risk Factor to ascertain a Combined Risk Level. Projects with Risk Levels associated with Numeric Effluent Limits (NELs) may find it necessary to implement an Advanced Treatment System (ATS) to achieve effluent standards. Projects faced with physical constraints that "inhibit the ability to construct a correctly sized sediment basin" may also elect to implement an ATS to comply with the MEP standard.

3.5.1 Education and Staff Training

Site owner/developer education and training

The City provides all appropriate parties involved with construction activities with training and informational materials regarding storm water quality, as applicable. These parties include but are not limited to City employees and project proponents, which can include contractors, subcontractors, developers, property owners, and superintendents. Education and training of the development community in Oceanside is typically done on a project-by-project basis during a mandatory pre-construction meeting with the City and during construction site inspections.

Prior to the issuance of permits, construction site owners and developers meet during a pre-construction meeting with City staff and developer staff and/or contractors, subcontractors and superintendents. During these meetings City staff from various departments review what is expected of the project proponent in order to develop the project. At least one Clean Water Program staff person attends these meetings. Topics covered during these meetings specific to storm water pollution prevention include:

- Grading - Reference to the City of Oceanside Grading Regulations manual and the BMP Construction manual (both available on the City's website).
- Site Plan review for storm water inlets and associated BMPs
- Review of site-specific BMPs more applicable to the site and associated with the potential pollutants that could be generated from the proposed business operations
- Inspection Requirements and Frequency – Unannounced and upon call-outs from the public

- Expectations of BMPs during dry and wet seasons
- Construction BMP Brochure is provided

Prior to wet season, all currently permitted construction sites were contacted to remind site owners and developers to assess, repair and update their sites BMPs to reduce erosion potential and prevent storm water pollution. Site owners and developers are also advised to update their erosion control plans and SWPPPs that are applicable to the site.

Municipal Staff Training

City staff directly involved with development and construction sites are provided training on a departmental basis. For further details on topics covered during the City's construction educational program, please refer to Sections 10.2.2 and 10.3.1 of the City's 2008 JURMP. During this reporting period staff from the building division attended training that related to construction and development topics. See Table 3-3 training details.

Table 3-3. Municipal staff land development-related trainings.

Department Division	Date	Number in Attendance	Topic
Engineering Review	July 26, 2011	4	Hydrology/SWMP Review
Engineering Review	August 1, 2011	1	HMP Tools
Engineering Review	August 17, 2011	1	HMP SDHM
Engineering Review	August 17, 2011	2	CGP SMARTS
Engineering CIP	August 29, 2011	7	SWPPP
Engineering Review	September 6, 2011	1	SCCWRP Screening Tool
Engineering Review/Inspection/CIP	September 22, 2011	5	Construction BMP Maintenance
Engineering Review	October 6, 2011	1	HMP
Engineering Review	October 13, 2011	1	LID/Green Infrastructure
Code Enforcement	November 17, 2011	2	Treatment Control BMP Inspection
Engineering/CIP	November 31, 2011	5	CGP
Engineering Review/Inspection/CIP	December 5, 2011	4	Non-Compliant Construction Sites
Engineering Review	January 10, 2012	1	GIS
Engineering Review	January 31, 2012	1	SDHM
Engineering Review	April 25, 2012	1	MS4 Permit
Engineering Review	May 16, 2012	2	MS4 Permit
Engineering Review	June 7, 2012	1	HMP
Engineering Review	June 18, 2012	5	SWMP Review

3.5.2 Inspection of Construction Sites

Permit Order 2007-0001 requires that the City develop and implement an inspection program to ensure that each construction site complies with City ordinances and permits, and Section F.2.g. of the Municipal Permit. This section describes the City inspection of construction sites during the 2011-12 reporting period.

Each project was assigned an Engineering Inspector who was tasked with conducting site inspections throughout the life of the project. All inspectors have been educated in the requirements of the Permit Order 2007-0001 and City erosion control requirements through City personnel training and/or construction-specific certificate training seminars.

3.5.2.1 Initial Site Inspections

Upon commencement of work at a construction site, a City inspector will visit the site and perform the following:

- Where applicable, confirm coverage under the General Construction Permit
- Review City required Erosion Control Plans to confirm site implementation and consistency with the project SWPPP
- Check for field implementation of the BMP as indicated on supporting plans
- Review BMP maintenance procedures/schedule

All construction sites in the City construction site inventory receive initial site inspections as part of the pre-construction meeting, regardless of TTWQ priority. If any required documents or BMPs are found to be missing or deficient, the City may issue a citation, notice of correction, or stop work notice until the deficiencies are corrected.

3.5.2.2 Routine and Follow-Up Inspections

The initial site inspection is followed by additional, regularly scheduled inspections. The minimum frequency of the routine inspections is dependent upon the site TTWQ. The criteria used to determine the site TTWQ was developed to correspond to the routine inspection frequencies required by the Municipal Permit, as discussed in Section 5.2.1.1. Table 3-4 presents the different TTWQ categories and their corresponding minimum inspection frequencies for the wet season (October 1 through April 30) and dry season (May 1 through September 30). Note these are minimum storm water inspection frequencies. The Engineering inspector is present onsite many times during a normal work week and when present, performs visual inspections of all the construction components of the project.

Table 3-4. Construction Site Inspection Frequency.

Construction Site TTWQ	Wet Season Inspection Frequency	Dry Season Inspection Frequency
High	Bi-weekly (Every two weeks)	As needed
Medium	Monthly	
Low	As Needed	

3.5.2.3 Construction Site Inspection Frequencies

Attachment 3-A provides the number of inspections conducted during both rainy and dry seasons for active construction sites during the reporting period. This table provides the number of inspections performed by the Engineering and Building department staff.

There were 34 active construction sites and two sites that were not active during this reporting period. All are included in Attachment 3-A. For the inactive sites one is abandoned and the other has been under a stop work notice since FY 08-09. The construction sites were assessed to be a

high, medium, and low TTWQ. Table 3-5 below categorizes the priority construction sites into one of the three ratings. This table also includes the minimum number of inspections required by the Municipal Permit for both rainy and dry seasons based on the TTWQ. The inactive sites are not included in this table (one High TTWQ and one Low TTWQ).

Table 3-5. Prioritized Construction Site Inventory Summary and Required Inspection Frequency.

Prioritized Construction Sites		Minimum Required Inspection Frequency		
Threat Priority		**Wet Season**	**Minimum number of required inspections**	**Dry Season - As Needed**
High	15	Bi-weekly over 30 weeks	225	As Needed
Medium	10	Monthly over 7 months	70	As Needed
Low	9		63	As Needed
Total	**34**		**358**	As Needed

The City conducted 433 wet season and 88 dry season storm water related inspections of prioritized construction sites. During the reporting period the City conducted inspections of construction sites in accordance with the requirements of the Permit. While the Building Division always looks for any potential storm water violations during site visits, all construction sites assigned to them for inspection during this reporting year were tenant improvements. No violations were observed. See table 3-6 for a summary of the construction site inspections completed during wet and dry seasons.

Table 3-6. Inspection Frequency Verification Table.

Wet Season Inspections		Dry Season Inspections		Total Number of Prioritized Construction Site Inspections
Engineering Division	Building Division	Engineering Division	Building Division	
433	0	88	0	
433		88		521

3.5.3 Enforcement Measures for Construction Sites

The City will be responsible for enforcement of applicable local ordinances and permits at all construction sites in its jurisdiction. When violations are observed and documented during a site inspection, the City will implement appropriate enforcement measures based on the severity of the violation. Enforcement can range from written warnings to more severe enforcement such as stop work notices. Stronger enforcement measures will be used as necessary if proper corrective actions are not implemented during the allotted time frame or if the severity of the violation warrants stricter enforcement.

The typical progressive enforcement steps that the City will implement include the following:

- Written warnings
- Enforcement of contracts (Municipal projects)

- Stop work notices
- Administrative citations
- Denial or revocation of permits
- Civil and/or criminal court actions

Enforcement actions by Code Enforcement Officers for construction sites begin with a referral from another department, a site visit, or by a complaint lodged via phone. Depending on the severity of the violation, follow up activities may include phone calls, site visits, written correction notices with specified compliance timeframes, or administrative warnings. If these actions do not produce the required improvements, administrative citations (starting at $100 with a $1,000 maximum fine) and/or stop-work notices are given.

3.5.4 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of non-compliant sites in the City that are determined to pose a threat to human or environmental health. Verbal notification is required within 24 hours of the discovery of non-compliance and a written report should be submitted to the RWQCB within 5 days of the incident. The criteria established for determining when a site is not compliant and poses a threat to human or environmental health is described in Section 5.5.5 of the 2008 JURMP. No sites were issued stop work notices during this reporting period.

Two sites issued stop work notices during FY 2008-09 were lifted: Hi Hope Ranch and Darwin Glen. The other site's stop work notice has not been lifted and has been abandoned: Darwin Knolls. Table 3-7 provides a list of these sites.

Table 3-7. Construction Sites issued Stop Work Notices in FY 2008-09

Project Name	WDID	Watershed	Address Location	Stop Work Notice Status
Hi Hope Ranch	937C322214	San Luis Rey	Melrose Drive and Highway 76	Lifted during FY 2011-12
Darwin Glen	937C325609	San Luis Rey	Darwin and Sagewood Dr.	Lifted during FY 2011-12
Darwin Knolls	937C325610	San Luis Rey	Darwin and Ocean Ridge Ct.	Not lifted since FY 2008-09

There were no construction sites requiring code enforcement action during this reporting period.

3.6 Construction Activities Effectiveness Assessment (Optional)

See Section 11.0 for an assessment of the Construction Component of the City's JURMP.

3.7 Program Review and Modification

The Clean Water Program will continue to review and modify the construction component as needed. The Development Services Department, which includes Building and Engineering, and the Neighborhood Services Department, which includes Code Enforcement, continued to utilize the TRAKiT permitting software by CRW Systems, Inc.

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4.0 MUNICIPAL COMPONENT

4.1 Introduction

This section documents the activities conducted by the City of Oceanside at its municipally owned, leased and/or managed facilities during the 2011-2012 reporting period to meet the requirements of Section D.3 of Municipal Permit Order 2007-0001 (Table 4-1). The City of Oceanside owns and/or maintains a variety of municipal facilities including operation centers/facilities, public parks, administration buildings, fire stations, a fire training facility, industrial facilities, potable reservoirs, sewage pump stations, wastewater treatment facilities, public roads, streets and parking facilities and other miscellaneous facilities. Additionally, the City conducts activities that have a high threat to water quality such as power washing, street and sidewalk repair, painting, graffiti removal, parking meter maintenance, MS4 maintenance, and regular upkeep of the sanitary sewer system to prevent overflows and leaking.

Table 4-1. Order 2007-0001 Compliance Summary.

D.3.a Municipal (Existing Development)	Section 4 of this Annual Report
J.3.a.(3)(c).i Updates to Municipal Inventory	See Section 4.1.1 of this Annual Report
J.3.a.(3)(c).ii BMP Implementation	See Section 4.2.3, 4.3.3, 4.4.3,4.5.3, 4.6.3, and 4.8.3 of this Annual Report
J.3.a.(3)(c).iii Inspection and maintenance of municipal treatment controls	See Sections 4.4.3 of this annual report
J.3.a.(3)(c).iv Number of catch basins and inlets, inspections, and cleaning	See Section 4.4.3 of this annual report
J.3.a.(3)(c).v Distance of MS4 inspected and cleaned	See Section 4.4.2 of this annual report
J.3.a.(3)(c).vi Distance of open channels inspected and cleaned	See Section 4.4.2 of this annual report
J.3.a.(3)(c).vi Amount of waste removed from MS4 and open channels	See Section 4.4.3 of this annual report
J.3.a.(3)(c).viii MS4 inspected less than annually	See Section 4.4.1 of this annual report
J.3.a.(3)(c).ix Implementation of BMPs for pesticides, herbicides, and fertilizers	See Section 4.3.3 of this Annual Report
J.3.a.(3)(c).x, xi, xii, xiii Curb miles	See Section 4.2.2 and 4.2.4, of this Annual Report
J.3.a.(3)(c).xiv Municipal parking lots	See Section 4.2.2, 4.2.4., and 4.2.5.1 of this Annual Report
J.3.a.(3)(c).xv Tonnage of debris removed from streets and parking lots	See Section 4.2.5.2 of this Annual Report
J.3.a.(3)(c).xvi	See Section 4.5 of this Annual Report

Prevention of infiltration from sanitary sewer	
J.3.a.(3)(c).xvii Sites inspected and frequency	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xviii Inspection results	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xix Inspections steps determined full compliance	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xx Violations and enforcement actions	See Attachment 4-A of this Annual Report
J.3.a.(3)(c).xxi Notable activities	See Section 4.1 and 4.5 of this Annual Report

To comply with the Municipal Permit, the City of Oceanside has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas and municipal activities. Some of the significant activities include street sweeping, inspections of municipal facilities, and educational efforts geared toward municipal personnel.

The City continues to use its Municipal Urban Runoff Procedures Manual (Municipal Manual) as a useful reference document for training staff and developing and implementing educational programs. The Municipal Manual contains BMP requirements and related guidance for City facilities and employees and was circulated to relevant City staff directly involved with the Municipal NPDES Permit. This manual was first prepared as part of the JURMP in 2002 and updated and provided with the 2008 JURMP. See Appendix C.3 of the 2008 JURMP for this manual. No changes were made to this manual during this reporting period.

4.1.1 Notable Activities

The Clean Water Program continued to utilize the Lucity (previously GBA Master Series Software) during this reporting period to track NPDES facility inspections, incoming hotline storm water complaint calls, and use with the jurisdictional monitoring program. This software program was updated to accept data for NPDES tracking purposes during the 2011-12 reporting period.

4.1.2 Source Identification

As required in Section D.3.a(1) of Permit Order 2007-0001, the City of Oceanside has developed a prioritized, watershed-based inventory of municipal properties and activities. The City of Oceanside maintains a number of municipal facilities, including parks, administrative buildings, fire stations, and public works yards. The inventory of municipal facilities, including areas and activities, is updated annually. The municipal inventory list (Attachment 4-A) is an update to the inventory submitted with the 2008 JURMP and the FY 2010-2011 annual report. The attached inventory was updated to include changes from the FY 2011-2012 inspections and will be used for the FY 2012-2013 inspections. Table 4-2 provides a summary of the facility categories within the City's inventory.

Table 4-2. Summary of Municipal Facilities by Category.

Facility Category	Number of Facilities
Park and Recreation Facilities	48
Public Works Operations Facilities	1
Municipal Landfills	2
Marina and related facilities	3
Municipal Airport	1
Potable Water Treatment Facilities	14
Wastewater Treatment Facilities and Lift Stations	36
Police and Fire Facilities	12
Other Fixed and Leased Facilities	25
Roads, Streets, Highways and Parking Facilities	34
Total Facilities	**176**

4.2 Roads, Streets, Highways, and Parking Facilities

4.2.1 Background

Roads, streets, highways, and parking facilities are an integral part of any functional City. These facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control the level of pollutants, such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities. Other City activities include building new roads, resurfacing existing roads, and similar construction-related activities. All construction-related activities conducted by the City will continue to be conducted under the requirements of the construction component, which is described in detail in Section 3 of this document.

4.2.2 Source Characterization

The City of Oceanside maintains approximately 575 miles of public roads and streets throughout the City and sweeps 32,500 curb miles. A parking facility is defined as a stand-alone parking facility, which is a parking facility that is not associated and/or adjacent to other inventoried municipal facilities. Parking facilities that are associated and/or adjacent to municipal facilities will continue to be included in regular maintenance activities of the associated municipal facility. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included as Attachment 4-A of this annual report. There are 34 parking facilities within the City.

4.2.3 Best Management Practice Requirements

Similar to municipal fixed facilities, the City will continue to utilize the City-developed Municipal BMP Manual to choose applicable BMPs to implement for public roads, streets, parking facilities and operational facilities within the City.

Street sweeping and cleaning continues to be the main BMP that is implemented for roads, streets, and parking facilities. The frequency of cleaning takes into account the following: variations in climate conditions, surrounding land use, design of existing structures, traffic volume, frequency and quantity of accidental spills and leaks, and areas with historical trash

and/or debris problems. Treatment control BMPs will be used for road sections subject to SUSMP.

The City will continue to implement an aggressive street sweeping program to reduce the amount of pollutants discharged from roads, streets, and parking facilities in the City with a particular focus on facilities that drain to environmentally sensitive areas (ESAs). If in the future negative impacts to ESAs associated with runoff from roads, streets, highways, or parking facilities are noted, the City will take the measures necessary to mitigate the negative impacts.

4.2.4 Program Implementation

As an effort to reduce the pollutant load entering local receiving water bodies, the City continued to implement a sweeping schedule for roads, streets, highways, and parking facilities to meet the requirements of the Municipal Permit. There have been no significant changes to the existing programs during the reporting period.

Roads, streets, and highways that have been observed as generating relatively high volumes of trash, sediment, and debris are included as high priority and will continue to be swept at least twice per month; medium priority streets are streets in the City that generate moderate volumes of trash, sediment, and debris and will continue to be swept at least monthly. Low priority streets have been observed as generating relatively low volumes of trash, sediment, and debris and will continue to be swept as needed, but not less than once per year. In the event of a National Holiday, sweeping is conducted in a timely manner, usually by the next working day. Due to the City's proximity to the Pacific Ocean and as a means to target watershed constituents of concern, the City typically sweeps all streets within the City above baseline jurisdictional activity standards. Additional program details can be found in Section 6.3 of the 2008 JURMP.

All public streets in the City of Oceanside are swept at least monthly. There is a total of 574.78 miles of public streets that are swept per the frequency outlined below. There were 32,500 curb miles swept during this reporting period. Some streets are swept more frequently than others.

- Every Monday, Wednesday, and Friday, the downtown commercial areas and other high use areas are swept using regenerative air vacuum street sweepers. These areas include the medians on Mission Avenue, Canyon Drive, and the Civic Center Drive Bridge, Wisconsin Avenue to Pacific Street to Ditmar Street, the Strand, and all downtown parking lots.
- The majority of all other public streets, not included in the areas listed above, are swept every other week. In some low use residential areas, the streets may be swept monthly.
- As necessary, sweepers or other clean up crews will respond to public or municipal staff reports to collect debris and/or sweep.
- Inspection of streets and curbs for cleaning is continuous. City employees and residents are encouraged to call the City of Oceanside's Customer Care number to report any maintenance needs regarding roads, streets, highways and parking facilities.

4.2.5 Inspection and Maintenance Results

4.2.5.1 Inspections

Inspections and maintenance activities were conducted throughout the reporting period as described in the previous section. Following is a review of the results from inspection and maintenance.

There are 34 parking lots in the Roads, Streets, Highway and Parking Facilities categories in addition to 575 miles of public and private roads. During this reporting period all 34 of these facilities were inspected by CWP staff. Some corrections were noted but were addressed by appropriate staff in a timely manner. Due to the fact that many of these parking facilities are swept at least once per week, debris and sediment are removed on a more frequent basis.

4.2.5.2 Maintenance

Street sweeping activities resulted in the collection of over 2,140 tons of waste from public streets and parking lots during the reporting period. These results are comparable with tonnage amounts from previous reporting years. See Table 4-3 for a summary of debris collected during this reporting period and in previous reporting periods.

Table 4-3. Summary of amount of street sweeping debris collected.

Reporting year	Tons
2003-2004	2,604
2004-2005	2,538
2005-2006	2,283
2006-2007	2,480
2007-2008	2,358
2008-2009	2,062
2009-2010	2,093
2010 -2011	2,342
2011-2012	2,140

4.2.6 Roads, Streets, Highways, and Parking Facilities Element Effectiveness Assessment

See Section 11.0 for an assessment of the Municipal component of the City's JURMP.

4.3 Parks and Recreational Facilities

4.3.1 Background

The City of Oceanside is committed to providing the highest quality of service to its residents by providing the opportunity for them to enjoy a variety of recreational activities at both outdoor parks and indoor recreational facilities. Operating and maintaining 48 community attractions from public pools, beaches, parks and community centers, the City of Oceanside works hard every day to maintain the high level of service. The inspection and maintenance of these

facilities in regards to storm water is important because of the number of facilities throughout the city and the public exposure that these facilities receive.

4.3.2 Source Characterization

The City regularly inspects, cleans and maintains 48 Parks and Recreational Facilities. Because of high public use these facilities have the potential to generate a variety of pollutants including trash and debris, organic material and sediment. See Attachment 4-A of this annual report that includes an inventory for Parks and Recreational Facilities.

4.3.3 Program Implementation

The City has selected BMPs to implement at Parks and Recreational Facilities to reduce the contribution of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers. These BMPs are detailed in the Municipal Manual. All 48 facilities were inspected during this reporting period. Some corrections were noted but were addressed by appropriate staff in a timely manner.

Pesticides, herbicides and fertilizers are seldom used by City staff, as it contracts out the majority of work involving these substances. To facilitate compliance with this Section of the Municipal Permit, the City has reviewed its landscaping contract and has integrated BMP requirements into the conditions of the contract.

4.4 Municipal Separate Storm Sewer System

4.4.1 Background

As required by Section D.3.a.(3) of the Municipal Permit, the City has implemented a schedule of maintenance activities for the City's entire Municipal Separate Storm Sewer System (MS4), including any structural controls designed to reduce pollutant discharges to or from its MS4s and related drainage structures. The City has determined, through historical knowledge and records, the locations within the MS4 that require regular waste removal and those areas that are less likely to require any waste removal. The City has developed a comprehensive Flood Control Annual Maintenance Program which includes a list of the high priority areas, divided into zones, which are to be inspected annually using an inspection checklist. Approximately 110 sites are inspected and maintained annually. At minimum all sites are inspected and cleaned annually.

4.4.2 Source Characterization

The Public Works, Street Division, performs ongoing inspection and cleaning of storm drains and flood control facilities, as well as annual maintenance of all major facilities such as creeks, desilting basins, detention basins and rock and concrete lined channels. There are approximately 104 concrete and earthen channels that are inspected and maintained throughout the city. Over 49,000 linear feet of storm drains, catch basins, and concrete and earthen channels are maintained on at least an annual basis. In addition, the Street Division performs annual maintenance/cleaning in September, October, and November for all major MS4 facilities. The results of this work are recorded on an Annual Maintenance List that is available at the City Operations Center.

4.4.3 Best Management Practices

In order to inspect and clean storm drains as described above, during the May through September period, the City utilizes a contractor to inspect and clean the majority of the storm drain inlets. The contractor work spans two fiscal years but their reporting data is a compilation of all their work during their summer cleaning period.

During the summer months of 2011 the contractor cleaned 3,562 structures (catch basins, manholes, inlets, outlets, etc.) removing 32.34 tons of waste and debris. The waste generally consisted of trash, green waste, dirt, sand, roots, solids, rocks, and silt. During the inspections if a storm drain was not labeled with a marker, one was installed. During 2011 373 were labeled with a placard stating: "No Dumping – Drains to Creek" in both English and Spanish. See the photo below for a copy of the storm drain placard installed. See Table 4-4 for a summary of the amount of waste removed from catch basins, inlets, the MS4 and open channels by category during this reporting period.

Table 4-4. Waste removed from catch basins, inlets, the MS4 and open channels by category during FY 2011-12.

Structure	Number Inspected	Contractor or City Crew	Drain Markers Installed	Cleaned	Amount of Material Removed
Catch Basin/Inlet	3,562	Contractor	373	3,562	33.59 tons
Catch Basin/Inlet	173	City Staff		173	
Total Catch Basin/Inlet	3,735			3,433	
Open Channels	104	City Staff	N/A	49,455 ft.	712 tons
Drain Pipe	2,000 ft.	City Staff	N/A	2,000 ft.	

Trash Trap at the Oceanside Municipal Golf Course

Staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. In March 2009 City staff installed a trash trap downstream of this priority residential area and upstream of the municipal golf course in the open channel that parallels the

driving range. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. During this reporting period approximately 200 pounds of trash and organic debris were removed from this device. Photos of the trash trap were provided in Section 6.3.1 of the FY 2008-09 JURMP Annual Report.

4.5 Sanitary Sewer

4.5.1 Background

The City of Oceanside Sewer Division maintains the sanitary sewer system within the jurisdictional boundaries which includes sewer lines, lift stations, sewage treatment plants. This sanitary sewer system uses pipes to remove human waste from homes and businesses and transport that waste to one of two waste water treatment plants in the City. The two treatment plants are operated by city crews.

4.5.2 Source Characterization

The City regularly inspects, cleans and maintains 480 miles of sanitary sewer pipe, 34 sewer lift stations and two sewage treatment plants. Attachment 4-A includes an updated inventory of wastewater facilities.

4.5.3 Best Management Practices

Since the City owns and operates the sewage system, these facilities are regularly inspected and maintained for proper operation and maintenance, and to ensure that BMPs are in place for the protection of receiving waters that may be impacted from the system. The City's preventive and corrective sewer maintenance programs consist of a variety of components provided for the operation, maintenance, repair and replacement of sewer mains, manholes, and pump stations.

In order to ensure that the sanitary sewer lines do not leak, the city inspects its sewer system and slip lines or replaces pipes throughout the City that are defective. During this reporting period 85 feet of 16 inch City sewer line was slip lined. Since the 2005-06 reporting period the City has slip-lined a total of 21,153 feet of sewer. The City also inspected and cleaned 320.5 miles (1,691,918 feet) of sanitary sewer.

4.6 City Operations Center

4.6.1 Background

The City Operations Center (COC) is a municipally owned and operated facility that houses several departments or divisions for the City including Public Works, fleet maintenance, road maintenance, parks and recreation maintenance and others. Because of the diverse activities of these departments and divisions, the City developed a Storm Water Pollution Prevention Plan (SWPPP) for the COC in the fall of 2002.

The COC includes the following areas: employee parking lot, COC main building (offices, storage and fleet maintenance), traffic control lot, back lot, city vehicle parking lot, large vehicle equipment lot, fueling area, waste disposal area, wash facilities, general use yard and west corner lot. The SWPPP has the following objectives:

- Identify and evaluate sources of pollutants from the facility that may affect the quality of urban runoff discharge and to identify and
- Implement site-specific best management practices to reduce or prevent pollutants in urban runoff discharges.

The SWPPP outlines BMPs to be implemented at each of the respective areas. A comprehensive training program was also developed and has been implemented in concert with the COC SWPPP.

4.6.2 Source Characterization

Due to the nature of the various activities from the departments and divisions it was determined that there are various activities that generate pollutants and have the potential to reach storm water conveyance systems. Some of these activities include vehicle washing, disposal of street sweeping debris, temporary storage of wrecked vehicles, and storage of various materials, including paints, solvents, metal piping and infrastructure materials. In addition steep hillside landscaped areas can be a potential pollutant source if BMPs are not managed properly.

4.6.3 Best Management Practices

Since the implementation of the SWPPP at the COC some permanent BMPs have been installed and continue to be used for protection of receiving waters. Following is a brief description of the BMPs in place at the COC and any new BMPs installed during this reporting period.

4.6.3.1 Wash Facility

The main wash facility is used for washing large vehicles and equipment, and collection of street sweeper and vactor truck contents. The main wash facility is a completely contained area, surrounded on all sides by berms and curbs. The entire area drains to the eastern corner of the pad where it enters a grated inlet that leads to a clarifier and then the sewer. An overflow is available if the drain to the sewer is clogged or the volume of water exceeds its capacity, however, this is not anticipated to happen frequently because the drain is maintained daily.

4.6.3.2 Pollution Prevention and Recycling

COC BMPs in place

There was no new pollution prevention BMPs installed at this facility during this reporting period and all existing BMPs were maintained during this reporting period.

4.6.4 Program Implementation

4.6.4.1 Facility Inspection

A thorough walk through inspection of the COC Facility was conducted by Clean Water Program inspectors during this reporting period. There were no potential storm water violations identified during the inspection of this facility.

4.7 Other Facilities

4.7.1 Background

The City of Oceanside owns and operates two closed landfills (Maxson Street Landfill, WDID 9375005695 and Mission Avenue Landfill, WDID 9375005696). The City also operates and maintains eight fire fighting facilities including one at the COC in addition to one fire fighting training facility.

4.7.2 Source Characterization

The two closed landfills maintained by the City have the potential to generate pollutants that can negatively impact receiving waters. If potential storm water discharges are identified, appropriate BMPs are implemented to prevent pollutants from entering MS4.

Also fire fighting stations have the potential to generate pollutants such as trash and debris, organic materials and fluids and wash water from fire fighting vehicles. The two closed landfills and the fire fighting facilities are included in the City's municipal inventory, which is included as Attachment 4-A of this annual report.

4.7.3 Program Implementation

Closed Landfills

Both closed landfills are inspected quarterly per permit requirements and an annual report is prepared each for submittal to the Regional Water Quality Control Board. See Attachment 4-B for copies of the 2011-12 Annual Report for Storm Water Discharges Associated with Industrial Activities for these two landfills.

Fire Stations

All fire stations were inspected during this reporting period. During the station inspections no violations or potential violations were noted.

4.8 Special Events

The City of Oceanside hosts a variety of Special Events in the City. These events include major sporting events and community fairs and festivals. A Special Events Permit is required for any organized activity involving the use of, or having impact upon, public property, public facilities, parks, beaches, sidewalks street areas or the temporary use of private property in a manner that varies from its current land use. The permit process includes a BMP implementation plan. The City has a Special Events Committee comprised of various City Department representatives who review permit applications to insure events are held safely and do not adversely impact the community.

4.8.1 Source Characterization

The City issues Special Event permits for both internal city sponsored events and event organizations that coordinate events that may include vendors or various event related elements.

- Turkey Trot 5k Run
- Ironman Triathlon

- Freedom Day Parade

Typically, special events have a high density use of people per square foot raising the potential for pollutant types at special events, such as:

- Setup and teardown of equipment booths
- Booth operation generating trash
- Food and drink preparation and consumption – illicit discharges and organic material
- Hydraulic rides – oil and grease
- Temporary portable restroom – chemicals and bacteria
- Hydration stations – water cups and other trash material

4.8.2 Best Management Practices

All special events are required to implement designated BMPs and comply with all applicable regulations outlined in the Oceanside Municipal Code. During pre-event application meetings for large events, event organizers are provided with an event permit packet that includes storm water related information including a copy of the Storm Water Compliance Guidelines for Special Events brochure and the Special Events Inspection Form. Copies of the brochure and inspection form are attached. It is explicitly stated that the company coordinating the event is required to leave the site as clean as the pre-event condition and shall not allow any materials or liquid to enter the storm drain system.

4.8.3 Program Implementation

4.8.3.1 Event Inspections

A special event storm water inspection form was developed for use before and after large special events. Storm water compliance inspection reports will be completed by City staff or event contractors prior to the start of the event to ensure that appropriate BMPs are in place. A post-event inspection will ensure that the site is properly cleaned. City staff or event contractors will also complete post-inspection reports.

4.8.3.2 Street Sweeping

Most special events occur in the downtown area which is swept five days a week, with sweeping vehicles generally onsite within 12 hours from the end of the event.

For special events that cause an added impact to the community street sweeping is conducted immediately after the end of the event. On an annual basis, the City holds one parade in the downtown area after which street sweeping is immediately conducted.

4.8.3.3 Harbor and Beaches Maintenance

Large events held in the Harbor and Beaches area can have the potential to generate large quantities of trash. In addition to the above information, the Harbor and Beaches Maintenance Division conducts the following activities after large events and holidays held in the Harbor and Beaches area:

- A litter abatement contractor provides staff to walk beach and hand pick up litter.
- City staff uses trucks and/or utility carts to follow and pick up items that are too large for the litter abatement contractor such as logs, furniture, etc.

- City staff further screens the beach using Cherrington beach sweeping machines.
- A pressure-washing contractor or City staff washes the hardscapes with all wash water being recovered and disposed of properly.

Cigarette Butt Service
The Harbor and Beaches Maintenance Division has contracted with a cigarette butt service company to install and service cigarette butt receptacles in the harbor, pier and beach areas. The receptacle selected is the Butts Only Box and is designed to prevent rain and irrigation water from contacting the butts until collection. This prevents leaching of toxic compounds into sensitive habitats.

The company has several models to choose from, two of which have been installed in the City of Oceanside. The trail model is used along high foot traffic areas adjacent to the beach and harbor sidewalks. There are a total of 18 of these installed in the coastal areas of Oceanside: 11 in the harbor, 2 on the pier, 4 on The Strand (the road that parallels a large section of beach) and one at Buccaneer Beach receptacle.

Butts Only Boxes also has a sister company, Cigarette Butt Services, that services the boxes. The City of Oceanside subscribes to this service and the company provides a monthly statement that includes the number of butts removed and the weight of the debris.

During this reporting period a total of 150,832 cigarette butts were collected from the 18 trail models. The weight of this debris totaled 56.56 pounds.

The City plans to continue servicing boxes currently in place. The City will also seek additional funding to cover costs for purchasing, installation and servicing of additional receptacles within the jurisdiction.

4.9 Power Washing

4.9.1 Background

The City conducts a number of activities which are not designated and/or confined to a specific location. Because such activities are not confined to a fixed facility, where BMPs may be permanently implemented, BMPs must actively be implemented during all mobile municipal activities.

4.9.2 Source Characterization

Mobile activities that City employees may use during their day-to-day operations that have a potential to create polluted runoff include:

- Power Washing
- Infrastructure Maintenance
- Street and sidewalk repair
- Street striping
- Waste removal
- Traffic light maintenance
- Parking meter maintenance

- Landscape/Right-of-Way Maintenance

4.9.3 Best Management Practice Requirements

As previously mentioned, the City will continue to implement good housekeeping and general pollution prevention measures during municipal activities including the mobile activities listed above. City personnel will continue to conduct the proper collection protocol to collect all water generated by power washing activities. City personnel continue to use the City's Municipal BMP Manual to choose applicable BMPs to implement for municipal areas and activities. Pesticide, herbicide, and fertilizer management BMPs similar to those discussed in Section 6.2.3.1 of the City's 2008 JURMP will continue to be implemented during landscaping of City right of way such as medians.

4.9.4 Program Implementation

City field crews will continue to receive refresher training to implement BMPs during all mobile activities including how to properly contain, control, and capture any discharge generated by power washing (or any other discharge-generating activities). The City uses fiber rolls, geo logs, silt fencing, check dams, gravel bags, and filter inserts during mobile activities, where applicable. City personnel involved in mobile activities are trained to be aware of Illicit Connections/Illicit Discharges and report them to the appropriate City staff promptly. More information about the City's education program, including municipal training activities, is included in Section 10 of this document.

4.10 Municipal Component Effectiveness Assessment

See Section 11.0 for an assessment of the municipal component of the City's JURMP.

4.11 Program Modification and Review

The Clean Water Program will continue to keep its municipal inventory updated and any changes to the program will be reported in the next annual report.

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5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City of Oceanside continues to implement a comprehensive program that aims to reduce and prevent industrial and commercial pollution discharges to and from the MS4 to the maximum extent practicable (MEP) to protect local receiving water bodies and to comply with the Municipal Permit. This section documents the activities conducted by the City of Oceanside during the 2011-2012 reporting period to meet the reporting requirements of Section J.1.a(3)(f) of Order 2007-0001 Municipal Permit (Table 5-1).

Table 5-1. Order 2007-0001 Reporting Summary.

Permit Section	Annual Report Section Reference
J.3.a.(3)(d).i -Any updates to the industrial and commercial inventory.	See Section 5.2.2 of this Annual Report
J.3.a.(3)(d).ii - Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	See Section 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).iii - A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	See Section 5.2.1 and 5.3.3 of this Annual Report
J.3.a.(3)(d).iv - Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	See Section 5.2.2 of this Annual Report
J.3.a.(3)(d).v - Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	See Section 5.2.2, 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).vi - Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	See Section 5.2.4.1 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).vii - Identification of the number of third party inspections conducted.	See Section 5.2.4.1 of this Annual Report
J.3.a.(3)(d).viii - Identification of efforts conducted to verify third party inspection effectiveness.	See Section 5.2.4.3 of this Annual Report
J.3.a.(3)(d).ix - A description of efforts implemented to address mobile businesses.	See Section 5.3 of this Annual Report
J.3.a.(3)(d).x - The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	See Section 5.2.4.2 and 5.2.4.4 of this Annual Report
J.3.a.(3)(d).xi - A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	See Section 5.2.4.1 and 5.2.4.2 of this Annual Report
J.3.a.(3)(d).xii - A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	See Section 5.1.1 of this Annual Report

The City has compiled a list of industrial and commercial sources and developed BMP requirements, including pollution prevention measures, for each source and activity. Implementation of these requirements will be accomplished through education, inspection, and enforcement.

5.1.1 Notable Activities

There were no notable activities during this reporting period.

5.2 Stationary Industrial and Commercial Sites Sources Element

5.2.1 Background

Section 7 of the City's 2008 JURMP, titled Industrial and Commercial Component, requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by industrial owners and/or operators pursuant to City Code to minimize or eliminate the impacts of industrial and commercial activities on receiving waters and other sensitive environmental resources. The City uses a variety of ways to educate and ensure that BMPs are implemented at industrial and commercial facilities, including dissemination of the City's industrial and commercial BMP manuals, site inspections and enforcement.

5.2.2 Source Characterization

The City annually updates its watershed-based industrial/commercial inventory which contains the name, address, and description of all commercial and industrial sites within its jurisdiction that could contribute a significant pollutant load to the MS4, regardless of site ownership.

The commercial inventory list (Attachment 5-A) and the industrial inventory list (Attachment 5-B) are updates to the inventories submitted with the 2008 JURMP and the FY 2010-2011 annual report. The attached inventory was updated to include changes from the FY 2011-2012 inspections and will be used for the FY 2012-2013 inspections. This table does not include mobile businesses that have City of Oceanside business licenses. See section 5.3 of this report for mobile business information. The FY 2011-2012 inventory was provided in the FY 2010-2011 Annual Report and was utilized for inspections during FY 2011-12. In the City there were a total of 1543 Industrial and Commercial businesses that were determined to have a potential storm water pollution threat. See Tables 5-2 and 5-3 below for a summary of the number of industrial and commercial businesses respectfully inventoried in the City according to watershed location.

Table 5-2. Industrial Businesses in the City by Watershed at beginning of FY 2011-12.

Watershed	Number of Industrial Business		
	2009-10 Inventory	2010-11 Inventory	2011-12 Inventory
San Luis Rey	15	14	15
Loma Alta	27	22	12
Buena Vista	0	0	0
Agua Hedionda	0	0	0
Total	**42**	**36**	**27**

Table 5-3. Commercial Businesses in the City by Watershed at beginning of FY 2011-12.

Watershed	Number of Commercial Business		
	2009-10 Inventory	2010-11 Inventory	2011-12 Inventory
San Luis Rey & Harbor	926	885	575
Loma Alta	1056	732	660
Buena Vista	485	267	268
Agua Hedionda	31	7	13
Not Verified	0	0	0
Total	**2498**	**1891**	**1516**

Based on the 2011-12 updated inventory, the City contains approximately 27 industrial businesses. Each of these businesses was prioritized on their threat to water quality. Table 5-4 provides a summary of the prioritization for industrial businesses.

Table 5-4. Industrial Businesses in the City by Priority.

Priority	Number of Industrial Business
High	15
Medium	6
Low	6
Total	**27**

Based on the 2011-12 updated inventory, the City contains approximately 1516 commercial businesses. Each of these businesses was prioritized on their threat to water quality. Table 5-5 provides a summary of the prioritization for commercial businesses.

During the 2011-2012 reporting year, the City of Oceanside's Clean Water Program performed a thorough review of its Low Priority commercial businesses to determine their applicability for retention in the watershed-based inventory based on the permit criteria. These Low Priority sites were reevaluated to determine if they (a): fit into one of the commercial sites/sources categories as specified in Section D.3.b.(1)(a) of the Municipal Permit; and (b): could potentially contribute a significant pollutant load to the MS4. As a result of this review, Clean Water Program staff identified 901 Low Priority commercial businesses that were not applicable for inclusion in the City's watershed-based inventory and were thus removed.

Table 5-5. Commercial Businesses in the City by Priority.

Priority	Number of Commercial Business
High	472
Medium	110
Low	934
Total	**1516**

5.2.3 Best Management Practice Requirements

BMP Manuals

Two manuals originally developed in 2001, *Industrial Urban Runoff Requirements Manual* and *Commercial Urban Runoff Requirements Manual*, detail the requirements of industrial and commercial businesses for compliance with the City's Urban Runoff Management and Discharge Control Regulations. In order to ensure industrial and commercial owners and operators are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention methods for industrial and commercial areas and activities located within the City are specified in these two manuals.

The manuals were first produced in FY 2001-02 as a result of requirements under Municipal Permit Order No. 2001-01 and were revised in 2004 to include additional state requirements. These manuals were again reviewed and revised during the 2007-08 reporting period to ensure compliance with the new Municipal Permit Order No. R9-2007-0001. Main changes included the addition of categories and a list of specific BMPs for those industrial and commercial activities. Inspections, enforcement, reporting and the definitions have not been changed. See this section of the 2007-08 report for a list of changes to both the industrial and commercial manuals.

The City conducted efforts to ensure industrial and commercial business owners and/or operators have received a copy of the Industrial Manual either through an annual inspection or a response to a complaint or concern reported through the Urban Runoff Hotline. In addition, copies of the Industrial Manual are available on the Clean Water Program website.

5.2.4 Program Implementation

Annual inspections of commercial and industrial businesses are conducted by Clean Water Program inspectors and Code Enforcement officers to ensure that applicable pollution prevention activities are implemented by industrial and commercial business owners and/or operators. In addition, inspections are conducted based on calls received on the Urban Runoff Hotline. All industrial and commercial businesses visited, through the annual inspection program or by complaint calls acknowledged on the Hotline, receive follow-up visits until the industrial business is deemed in-compliance with City Code. All documentation pertaining to site visits are kept on file with the City. City staff conducted a total of 632 site inspections during the FY 2011-2012 reporting year, which included 555 initial site visits and 62 follow-up inspections. Of the initial site visits, 15 were industrial businesses, 528 were commercial businesses (including eating and drinking establishments) and 12 were nursery or greenhouse businesses.

5.2.4.1 Inspections of Industrial Businesses

Inspections of industrial businesses are conducted by designated Clean Water Program Inspectors and Code Enforcement personnel. Inspections are tracked using two tracking software programs, Lucity (previously GBA) and TRAKiT, a permitting software by CRW Systems, Inc. Inspectors utilized a Commercial and Industrial businesses inspection form that incorporates fields customized in the Lucity database to address all inspection components required under the permit. The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

- Completion of site inspections for all industrial businesses during the reporting period.

- Completion of 15 required annual inspections of High Priority industrial businesses during the reporting period.
- Completion of 3 follow-up visits either in response to the initial inspection or response to a complaint.
- Dissemination of the Industrial Manual to help industrial owners and/or operators be aware of the City Code requirements for BMP implementation, and information on applicable BMPs for specific industrial businesses and activities.
- Ensuring proper and continued training of the Code Enforcement officers and Clean Water Program compliance inspectors dedicated to the Clean Water Program.

5.2.4.2 Enforcement of Industrial Businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for enforcement of ordinances at an industrial site. This program was designed in accordance with part D.3.b.(3) of Municipal Permit Order 2007-0001. There was no enforcement action required for Industrial businesses during this reporting period.

5.2.4.3 Inspections of Commercial businesses

Section 7.2.4.3 of the City's 2008 JURMP describes the City's program for conducting inspections of commercial businesses. This program was developed and implemented in accordance with part D.3.b.(3) of the Municipal Permit Order 2007-0001. As detailed in the JURMP, inspections of High Priority commercial businesses are inspected annually. At least 25 percent of Medium and Low Priority commercial businesses will be inspected based largely on their perceived potential to contribute pollutants of concern for local receiving water bodies. Some inspections are initiated in response to a public complaint, a municipal staff report, an illicit discharge source investigation, or as a follow up to a previous inspection.

The major activities and accomplishments undertaken by the City for this requirement during the reporting period included:

- Two hundred ninety seven (297) eating and drinking establishments were inspected at least once for the proper implementation and maintenance of storm water BMPs and grease control devices. The inspector forwarded all facilities that were not in-compliance with storm water regulations to Code Enforcement Officers.
- One hundred sixty eight (168) inspections of High Priority commercial businesses were inspected, excluding restaurants and agricultural operations.
- Fifty one (51) inspections of Medium and Low priority commercial businesses were inspected, excluding restaurants and agricultural operations.
- Twelve (12) inspections of nursery and greenhouse operations within the City of Oceanside were conducted for compliance with urban runoff regulations specified in Chapter 40 of the City Code.
- Ensuring proper and continuing training of the Code Enforcement Officers and Clean Water Program inspectors dedicated to the Clean Water Program.

During the FY 2011-2012 reporting period, all High Priority eating and drinking establishments were inspected for compliance with the City's urban runoff regulations and adequate implementation and maintenance of BMPs. There were 292 High Priority eating & drinking establishment inspections conducted by CWP inspectors.

When CWP Inspectors and Code Enforcement Officers conduct inspections at High Priority areas, they target the entire commercial/industrial complex, because these areas often contain a mix of industrial and commercial operations. Rather than just focus on the High Priority businesses located in these areas, CWP Inspectors and Code Enforcement officers inspect all businesses in the complex to ensure owners and/or operators understand their BMP requirements and can work collaboratively with their neighbors to implement BMPs or solve drainage problems.

Code Enforcement officers inspected 12 nursery and greenhouse operations. The inventory of operating nurseries and greenhouses was declining in years prior to FY 2011-12. During this reporting period, the number of nursery and greenhouse operations did not change. These sites, along with the larger agricultural facilities that are annually inspected by the County of San Diego Agriculture, Weights and Measures Department, and are visited several times a year by City staff due to the evolving nature of their business. With constant plowing and crop rotation, CWP staff not only complete annual inspections, but also complete a pre-rain event inspection and visit the agricultural areas frequently during the rainy season as well as during rain events. The City maintains a cooperative relationship with the U.S. Department of Agriculture Natural Resources Conservation District (NRCS) for assisting the agricultural community in Oceanside in design and implementation of BMPs.

5.2.4.4 Enforcement of Commercial Businesses

After the second inspection visit, all but 2 commercial businesses were in compliance. These two commercial businesses were referred to the Code Enforcement Division. Code Enforcement (CE) conducted an inspection following the referral date, upon which the owner/operator was requested to correct the issue. These two establishments were in compliance on the Code Enforcement inspection date and no additional enforcement action was taken. See Table 5-6 below for inspection information on these two businesses.

Table 5-6. Code Enforcement action for Commercial Businesses.

Business Name	Principal Products Services	1st Inspec. Date	Corrective Action Needed	2nd Inspec. Date	Corrective Action Needed	Referred to CE Date	Code Enforcement Inspection Date	Status
Q Restaurant	Restaurant	3/1/12	Proper storage of material & kitchen grease	3/9/12	Proper storage of material & kitchen grease	3/9/12	3/14/12	IC
Taco Bell	Restaurant	3/29/12	Proper storage of material & kitchen grease	4/12/12	Proper storage of material & kitchen grease	4/12/12	4/16/12	IC

IC In Compliance

5.2.4.5 Reporting of Noncompliant Sites

The City is required to provide notification to the RWQCB of noncompliant sites in the City that are determined to pose a threat to human or environmental health. Oral notification is required

within 24 hours of the discovery of noncompliance and a written report should be submitted to the RWQCB within five days of the incident. During this reporting period there were no industrial or commercial businesses reported to the RWQCB, as all came into compliance after follow-up inspections.

5.2.5 Stationary Industrial and Commercial Sites Sources Effectiveness Assessment

See Section 11.0 for an assessment of the Industrial and Commercial Component of the City's JURMP.

5.3 Mobile Sources Element

5.3.1 Background

Due to the lack of a stationary location for proper disposal of potentially hazardous liquids and materials, there is a major area of concern about where mobile businesses discharge water used in their line of work. Due to the nature of their activities, mobile businesses will continue to be regulated differently than other businesses. Mobile businesses can be difficult to identify because they may not have a City business license, they go out of business on a relatively regular basis and, though they may have a home base, they can cross jurisdictional lines to operate their business. For these reasons, regular inspections of mobile businesses are challenging and time consuming.

5.3.2 Source Characterization

Mobile businesses known to operate within the City's jurisdiction are tracked via an online database, the San Diego County Regional Copermittee Database (http://mob.envirospect.org/rbf101.aspx) that contains business contact information and runoff violation records for each business, if applicable. During this reporting period the City of Oceanside made additions to this online inventory in conjunction with the format agreed upon by the San Diego County Regional Copermittees.

The following business types are addressed by the mobile sources element of the City's industrial and commercial program:

- Mobile automobile or other vehicle washing
- Pest control services
- Mobile carpet, drape or furniture cleaning
- Mobile construction trades
  - Painting and coating
  - Cement mixing or cutting
  - Masonry
  - Other contractors
- Landscaping
- Pool and fountain cleaning
- Power washing services

Because not all mobile businesses have obtained business licenses in the City or have a base of operation in the City, the City expects that a continual process of refining and updating the

online inventory will be needed. Sources for such inventory updates will include reported incidents or violations, general observations by City staff, and available business licenses.

5.3.3 Best Management Practice Requirements

The City updated its Commercial Urban Runoff Requirements Manual during the 2007-08 reporting period with information on the required BMPs for both mobile and stationary sources. This updated manual can be referenced in Appendix C of the City's 2008 JURMP. One example of a BMP included in the updated manual is for outdoor mobile vehicle detailing, the BMP explains how to capture and contain the rinse water so that it does not enter the storm drain system. Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses.

5.3.4 Program Implementation

5.3.4.1 Education Outreach

Because a specific element of the industrial and commercial program for mobile businesses is being newly developed, it is anticipated that some mobile businesses are not aware of storm water requirements and that education will need to be a significant portion of the program. During the FY 2009-10 reporting period Mobile Business education materials were developed by the Regional Industrial Commercial Workgroup of the San Diego County Copermittees. The City of Oceanside sent these educational materials to the owner/operator of each of the businesses on the 2008 JURMP Mobile Business Inventory.

5.3.4.2 Inter-Jurisdictional Cooperation

The City of Oceanside is participating in the Regional Industrial Commercial Sources workgroup which developed a plan during FY 2009-10 to educate mobile businesses about proper BMPs and protection of water quality. Details of this task can be found in the Regional Urban Runoff Management Program report sent to the RWQCB in January 2012. A complete report on the activities of this workgroup for the current reporting period will be included in the Regional Urban Runoff Management Program report due to the RWQCB in January 2013.

5.3.4.3 Staff Training

Code Enforcement Division Officers and Clean Water Program Compliance Inspectors are responsible for conducting storm water compliance inspections and enforcement of mobile sources. Officers and inspectors are trained annually on inspection and enforcement procedures and BMP implementation as they relate to mobile businesses. City staff is encouraged to report potential illegal discharges from mobile businesses when working in the City to the storm water hotline.

5.3.4.4 Inspections

During this reporting period, inspection of mobile businesses was conducted on an as needed basis. The most common triggers for these inspections were from incident reports received over the Urban Runoff Hotline and direct visual observations by City staff.

5.3.4.5 Enforcement

During this reporting period Code Enforcement officers did respond to complaint calls regarding mobile businesses that were allowing water to run uncontained into streets, parking lots and the City's storm drain system. During the site visit, depending on the nature of the complaint, Code Enforcement officers issued notices to comply and/or educated the operator on the proper BMPs that should be in place during their operation, and provided them with the power washing brochure.

5.4 Industrial and Commercial Component Effectiveness Assessment

See Section 11.0 for an assessment of the Industrial and Commercial Component of the City's JURMP.

5.5 Program Review and Modification

During the previous reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water, Sewer, and the Clean Water Program, continued implementing the Lucity database software (formerly GBA Master Series). The Development Services Department, which includes Code Enforcement, Building, and Engineering, has been utilizing TRAKiT permitting software (CRW Systems, Inc.) to track storm water inspection and enforcement records.

During this reporting period the Clean Water Program reviewed the effectiveness of the new tracking tools and implemented improvements in the use of the system to better track storm water related data.

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6.0 RESIDENTIAL COMPONENT

6.1 Introduction

A total of 39 percent of the City's 26,983 acres is designated as either multi- or single-family residential according to the San Diego Association of Governments (SANDAG). Since residential land use comprises such a large area of the City, residential activities can have a considerable effect on the quality of receiving waters in and around the City. The City of Oceanside has developed an extensive program that aims to reduce pollutant runoff from residential areas and activities to the MEP.

This section documents the activities conducted by the City of Oceanside during the 2011-2012 reporting period to meet the requirements of Section D.3.c of the Municipal Permit (Table 6-1). The City continued the implementation of an enforcement program that responds to and monitors potential violation calls received on the Oceanside Urban Runoff Hotline (Hotline).

Table 6-1. Order 2007-0001 Compliance Summary.

D.3.c Residential Program	See Section 6 of this Annual Report
J.3.a.(3)(e).i High threat residential areas	See Section 6.2 of this Annual Report
J.3.a.(3)(e).ii Designated BMPs were implemented	See Section 6.3 of this Annual Report
J.3.a.(3)(e).iii Proper disposal of used oil and HHW	See Section 6.4.2 of this Annual Report
J.3.a.(3)(e).iv Amounts of HHW collected	See Section 6.4.2 of this Annual Report
J.3.a.(3)(e).v Evaluation of methods used for oversight of residential areas	See Section 6.2.1 of this Annual Report
J.3.a.(3)(e).vi Violations and enforcement actions	See Section 6.4.7 of this Annual Report
J.3.a.(3)(e).vii Collaboration on implementation of Regional Residential Education Program	See Section 6.5 of this Annual Report
J.3.a.(3)(e).viii Notable Activities	See Section 6.1.1 and 6.3.1 of this Annual Report

The City also utilizes its revised Urban Runoff Requirements Manual for Residents (Residential Manual) that contains BMP requirements and related guidance information for residents of the City. This manual has been made available to residents through the City's Clean Water Program Website. Changes to the Residential Manual were made during the 2007-08 reporting period.

6.1.1 Notable Activities

- The City continues to gather data on the trash trap located at the Oceanside Municipal Golf Course. See section 6.3.1 below for more details on these prioritized residential areas and the activities implemented to address the specific pollutant.

- The City of Oceanside has created a new *Green Oceanside Newsletter* which replaces the Oceanside Clean Water Program Newsletter. The *Green Oceanside Newsletter* includes storm water related information as well as other environmental-related topics such as solid waste and recycling and water use efficiency. See section 6.4.3 for more information about this newsletter.

6.2 Source Characterization

Residential neighborhoods can be the source of a variety of pollutants depending on the activities conducted in residentially developed areas. Pursuant to Section D.3.c.(1) of the Permit Order 2007-0001, the City identified High Priority Residential Areas and Activities in the JURMP. The following residential activities have been identified by the City to be High Priority Activities:

- Automobile or boat repair and maintenance.
- Automobile washing.
- Automobile parking.
- Home and garden care activities and product use.
- Disposal of household hazardous waste.
- Disposal of pet waste.
- Disposal of green waste.
- Any other residential activity that contributes a significant pollutant load to the MS4.
- Power washing activity (both do-it-yourself and contracting services).

The City has also identified residential areas of High Priority. These areas include the following:

- Any residential area tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired
- Any residential area within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA

6.2.1 Evaluation of methods for oversight of residential areas and activities

The Public Works storm drain maintenance staff has the best opportunity to inform the Clean Water Program staff about drainage areas that have a lot of trash and debris. On a regular basis the CWP staff request from public works maintenance staff areas within the city that are generating pollutants of concern for two reasons:

1. To identify areas within the City where the public can become involved to assist in removing trash and debris from the specific areas where debris has collected, and
2. To target the residential areas for future outreach.

Reports by citizens and City staff are additional sources of identifying, assessing and prioritizing residential areas. See section 6.3.1 below for more specific information on the tasks implemented in these areas to address the pollutant sources.

6.3 Best Management Practice Requirements

The City's JURMP Residential Component requires the implementation and maintenance of applicable pollution prevention Best Management Practices (BMPs) by residents pursuant to City Code. In order to ensure residents are informed and understand the applicable pollution prevention BMPs to be implemented and/or maintained, site-specific pollution prevention

methods for residential areas and activities, located within the City, are specified in the Residential Manual. This manual is found in Appendix C of the City's 2008 JURMP.

Education and outreach aimed at residents helps facilitate the implementation of BMPs, including pollution prevention methods. A detailed discussion of the City's education program can be found later in Section 10 of the 2008 JURMP. Details on education outreach to the residential community can be found in Sections 8 and 9 of this annual report.

6.3.1 BMP Implementation

Structural BMP to address debris accumulation along Mesa Drive

In FY 2008-09 Public Works staff identified debris accumulation after storm events in a section of MS4 where Garrison Creek daylights adjacent to Mesa Drive in the Loma Alta Watershed. The debris consists of tennis and sports balls, plastic drink bottles and organic debris. Four storm drain inlets along Mesa Drive were identified as the primary collection point of the debris.

During the 2010-11 reporting period the City of Oceanside Engineering Division allocated funding to install eight Automatic Retractable Screens (ARS) on four storm drain inlets to prevent sports balls, sports drink bottles, organic debris and other material to enter the storm drain prior to street sweeping. The devices allow the street sweeper to retrieve this material before it can enter the storm drain system and eventually into the daylighted creek area. During this reporting period a reduction in debris was noted in the daylighted area of Garrison Creek possibly associated with the installation of the ARS.

Figure 6.1 Automatic Retractable Screens installed at one storm drain inlet prior to rain event and after rain event.

Trash Trap at the Oceanside Municipal Golf Course

During FY 2008-09 staff at the City of Oceanside Municipal Golf Course had noted that trash and debris was collecting in Pilgrim Creek, which runs in the middle of the golf course, after storm events. The source of the trash and debris was identified as a residential area just south of the golf course across Douglas Drive. In March 2009 City staff installed a trash trap downstream of this priority residential area and upstream of the municipal golf course in the open channel that parallels the driving range. The goal of this trap was to capture trash and organic debris coming from the residential neighborhood before it enters the golf course and Pilgrim Creek. During this reporting period approximately 200 pounds of trash and organic debris were

removed from this device. Photos of the trash trap were provided in Section 6.3.1 of the FY 2008-09 JURMP Annual Report.

6.4 Program Implementation

6.4.1 Outreach

The most efficient way to encourage pollution prevention and BMP implementation and to restrict polluting practices is to educate residents on how to carry out their daily activities in ways that have the smallest potentials to discharge pollutants to the MS4. During this reporting period the Clean Water Program provided educational information and training to residents, in the following ways:

- Cleanup events
- Booths at public events
- Public television notices
- Presentations
- Website
- Email notifications
- Residential BMP Manual

The Clean Water Program promotes these events through the use of email distribution lists. Over 300 people receive environmentally-related event notifications via email. Further outreach program details for this reporting period can be found in the Education and Public Participation, Section 8 and Section 9, of this document.

6.4.2 Household Hazardous Waste

The City continued to facilitate the proper management and disposal of used motor oil, toxic materials, and all other HHW to the residential audience. Residents have the opportunity to take used motor oil to approximately 12 private auto parts stores within the jurisdiction. In addition Waste Management, Inc., the City's franchise trash hauler, accepts HHW at its Oceanside facility. Residents may bring up to five gallons per day of used oil, used oil filters, and anti-freeze, Monday through Friday from 8 a.m. to 4 p.m. without an appointment. HHW may be brought on Saturdays by appointment only between 9 a.m. and 1 p.m. Details of the locations mentioned above can be found in Section 8.4.2 of the City's 2008 JURMP.

During the 2011-2012 reporting period, 3,098 Oceanside households utilized the household hazardous waste disposal facility, disposing or recycling 338 tons of hazardous materials (including universal waste) during the reporting period.

As part of Oceanside Green Week (see Section 9.1.6 for more details) a free electronic waste (E-Waste) drop-off event, open to the public, was held simultaneously during the Green Fair, thus providing a much needed service to the community, as participants enjoyed the benefit and entertainment of the fair itself. In most communities, disposing of all types of E-Waste can prove costly, which oftentimes discourages the proper disposal of these materials. Via a partnership/sponsorship by 1-800-GOT-JUNK?, the City was able to provide this service free of charge to anyone who wished to participate in the Green Fair. At this event there were over 10

tons of universal waste and 4,980 pounds of metal and wire collected for proper recycling and disposal.

Furthermore, as part of the City's collection program, a 750-gallon used oil collection receptacle is provided at the City's harbor. This receptacle is available for residents who live on the boats in the Marina as well as for those boat owners and operators who rent a harbor slip to conveniently recycle the used oil and used oil filters generated from the boats. During the reporting period 1,237 gallons of used oil were collected and recycled. In addition one 55-gallon barrels of used oil filters were collected from Harbor residents.

6.4.3 Green Oceanside Newsletters

During this reporting period the City of Oceanside created the new *Green Oceanside Newsletter*. This newsletter will be a replacement to the *City of Oceanside Clean Water Program* newsletter. Articles in the Green Oceanside Newsletter will address storm water as well as other environmental topics such as water use efficiency and solid waste and recycling. Green Oceanside Newsletters are mailed with the utility bill to over 42,000 homes in the City of Oceanside.

During this reporting period one Green Oceanside Newsletter was distributed to over 42,000 households. An overview of topics in newsletter is listed below. A copy of this newsletter is included in Attachment 6-A of this annual report.

Fall 2011: Green Oceanside Newsletter

- Zero Waste – Overview of Oceanside's Zero waste Plan
- Day Without A Disposable Bag – encouraging use of reusable tote bags instead of single use plastic bags
- San Luis Rey River Cleanup event information
- Free Water Saving Resources

6.4.4 Oceanside Update

In addition to printed media, the City's community television station, KOCT, airs thirty-minute public service announcements with three-minute presentations from various City departments. Those households in the City who have access to the KOCT local channel are able to view this show. During this reporting period the Clean Water Program provided seven three-minute presentations. Table 6-2 provides an overview of the topics covered during each taping.

Table 6-2. Summary of 2011-12 Oceanside Update Topics by Month.

Date	Topic Discussed
September 2011	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
October 2011	San Luis Rey River Cleanup Event, Storm Water Hotline
November 2011	Fertilize After It Rains and other fertilizer and pesticide tips to protect water quality
February 2012	Ten simple ways to protect water quality
March 2012	Green Week events and Loma Alta Creek/Beach Cleanup

6.4.5 Website

The Clean Water Program maintains its own Website providing convenient electronic access to program information for residents and the general public. This Website provides the opportunity to learn about storm water pollution, the sources of the pollution, and what can be done to eliminate these pollutants from entering the storm drain system, thereby improving water quality in receiving waters.

During this reporting period the City of Oceanside revised and updated the City website in its entirety. The original Clean Water Program URL, www.oceansidecleanwaterprogram.org now redirects users to the new main Clean Water Program webpage URL: http://www.ci.oceanside.ca.us/gov/water/clean/default.asp.

There were 2,629 hits to the Clean Water Program website. This is a significant reduction in website hits that could be due to several factors. The tracking of hits to the original URL were not trackable due to the URL changes. During the next reporting period tracking of the website hits will be addressed so that the numbers reflect actual hits on the Clean Water Program main webpage. The original URL will continue to be used on outreach materials and promotional items since it is easier for the public to remember.

Specific web pages available on the Clean Water Program Website are as follows:

- Commercial Business
- Development
- Events
- Industrial Business
- Just for Kids
- Water Quality Laws
- Other Websites
- Landslide Prevention
- Clean Water Projects
- Report Violations
- Residential/General
- Just for Educators
- Waterbodies

The residential web page offers the following information:

- An overview of pollutants in receiving waters and how those pollutants get there
- The difference between the storm drain system and the sewer system
- Links to pollutant factsheets in PDF format
- Links to brochures in PDF format
- Links to past Clean Water Program Newsletters in PDF format
- Link to the Residential Urban Runoff Requirements Manual

The Website address is disseminated to the public in a variety of ways:

- Listed in all Green Oceanside Newsletters
- Mentioned during each Oceanside Update Taping
- Listed on promotional items
- Listed on Clean Water Program staff business cards
- Listed in email notifications for upcoming events

6.4.6 Hotline

The public and City employees can report potential storm water violations that could pollute the City's receiving waters through the Oceanside Urban Runoff Hotline. During this reporting period the Urban Runoff Hotline number changed to 760-435-4500. The City of Oceanside made a decision to create a centralized call center for all public calls and inquiries to the City. When calls are received through the call center, customer service representatives assess the type of call, enter information into a database called Public Stuff, and then forward the information entered into the database to the appropriate City department to address. This system is ideal in that all calls made to the call center are tracked in the Public Stuff database. Storm water and urban runoff related calls are forwarded to administrative staff in the Water Utilities Department. Thus all storm water related calls are tracked and easily queried.

Urban Runoff Hotline calls received by the Call Center are entered into a database. The information is then sent to an office specialist in the water utilities department who then determines based on the nature of the call which staff person to forward the call to. For storm water related calls the information is disseminated to the Clean Water Program inspectors, Clean Water Program administrative staff or code enforcement staff.

Promotion of the new hotline phone number began during this reporting period. All outreach materials and promotional items promote the new hotline phone number. If someone references an older education piece or promotional item with the old hotline umber (760-435-5800) the phone call will automatically roll over to the new hotline number without the caller knowing.

The Urban Runoff Hotline was promoted through a variety of media during this reporting period, including announcements on local television stations, on the City's Clean Water Program webpage placement on newsletters, click-message pens, pencils, and other promotional give-away items.

During the reporting period, a total of 162 storm water related calls were received through the Urban Runoff Hotline. Of the 162 Urban Runoff Hotline calls 137 were received by residents concerning potential urban runoff violations. There were also 25 referrals from City staff.

6.4.7 Enforcement

Section 8.4.4 of the JURMP describes the City's program for enforcement of ordinances in residential areas. The major activities and accomplishments undertaken by the City during this reporting period included:

- Code Enforcement responded to, 114 urban runoff related cases, related to residential areas and activities, during the reporting period.
- An accounting of all residential enforcement actions, taken by Code Enforcement Officers, is shown in Table 6-3.

Table 6-3. Accounting of Residential Code Enforcement Actions for the 2011-2012 Reporting Year.

Action Type	Follow-up Phone Call	Follow-up Site Visit	Follow-up Office Visit	Written Notice	Letter Sent	Admin. Warning	Administrative Monetary Citation	Referral to Other Dept	Stop Work Notice
of Actions	162	150	3	0	44	15	0	0	0

6.5 Collaboration to implement Regional Residential Education Program

During this reporting period the County of San Diego took over as chair of the Education and Residential Sources Workgroup. The City of Oceanside was an active participant in the ERS workgroup during this reporting period. The ERS workgroup was established as one of several workgroups under the Memorandum of Understanding amongst the San Diego County Copermittees (Copermittees). The chair of each of these workgroups presides over and provides leadership and direction to the workgroup. This includes serving as the point of contact to external entities, soliciting group input, developing meeting content, facilitating meetings, and coordinating with the Secretary to finalize work products for distribution to the workgroup.

Details of the activities of the ERS Workgroup will be provided in the submittal of the annual report of the Regional Urban Runoff Management Program due to the RWQCB in January 2013.

6.6 Residential Component Effectiveness Assessment

See Section 11.0 for an assessment of the education component of the City's JURMP.

6.7 Program Review and Modification

During the FY 2009-10 reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water, Sewer, and the Clean Water Program, continued utilizing Lucity software (previously called the GBA Masters Series). The Development Services Department, which includes Building and Engineering, and the Neighborhood Services Department, which includes Code Enforcement, continued to utilize the TRAKiT, permitting software by CRW Systems, Inc.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

This section is intended to document the activities conducted by the City of Oceanside during the 2011-2012 reporting period to manage illicit discharges and meet the requirements of Sections D.4 and J.3.a.(3)(f) of the 2007 Municipal Permit.

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City will submit the entire FY 2011-12 Illicit Discharge Detection and Elimination Component, including the 2011 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2012.

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8.0 EDUCATION COMPONENT

8.1 Introduction

Storm water education is an important step in working towards improving receiving water quality both locally and regionally. By increasing public awareness and encouraging a change in both the attitude and the behavior of the general public and the regulated community, the City may reduce or eliminate storm water pollution caused by common daily activities.

This section documents the activities conducted by the City of Oceanside during the 2011-2012 reporting period to meet the requirements of Section D.3.g of the Municipal Permit (Table 8-1). The City continued the implementation of an education outreach program for municipal staff, industrial and commercial businesses, and the general public.

Table 8-8-1. Order 2007-0001 Compliance Summary.

J.3.a.(3)(g).i Description of education efforts	See Section 8.0 of this Annual Report
J.3.a.(3)(g).ii Underserved target audiences	See Section 8.3.1 of this Annual Report
J.3.a.(3)(g).iii Education of municipal employees	See Section 8.2 of this Annual Report
J.3.a.(3)(g).iv Education of construction community	See Section 8.4 of this Annual Report
J.3.a.(3)(g).v City education efforts for residents, general public and school children	See Section 8.3 of this Annual Report

The City of Oceanside provides a comprehensive storm water education program to achieve the following objectives:

- Measurably increase the knowledge of target communities regarding MS4s, impacts of urban runoff on receiving waters, and BMP solutions for the target audience.
- Measurably change the behavior of target communities, and thereby reduce pollutant releases to MS4s and the environment.

Educational programs and activities are tailored to meet the needs of the following target audiences:

- Municipal departments and personnel.
- Construction site owners and developers.
- Industrial and commercial owners and operators.
- Residential community, general public, and school children.
- “Underserved” target audiences, where applicable.

Many education outreach efforts are conducted on an ongoing basis, such as direct interaction during inspections, pre-construction meetings, or when fielding calls from the City’s Urban Runoff Hotline. Educational materials are made available throughout the year at special events and at the City’s Water Utilities Department counter. Targeted mailings, focused training

sessions, and other educational efforts are provided when found to be necessary through monitoring programs, records of complaints, and other similar factors.

8.2 Staff Training Element

City personnel are the eyes and ears of the City, and can provide valuable information on storm water related discharges and potential violations that may be occurring within the City. The City presents general storm water educational content, which is described in Section 10.3 of the 2008 JURMP, to all City departments. The City primarily educates its municipal personnel through on-line training, on-the-job training sessions, and the Municipal BMP Manual (Appendix C of the 2008 JURMP). Customized training programs are designed for personnel targeting fieldwork-related departments such as storm water compliance inspectors, building/engineering inspectors, public works, planning department staff, and park and recreation personnel. General informational storm water training sessions are provided for municipal personnel in other departments to review storm water regulations in the City, impacts of urban runoff and BMPs to be implemented to reduce or eliminate runoff.

During this reporting period eleven (11) City departments or divisions received training on storm water related issues. A total of 92 City staff attended one or more of the following storm water trainings:

- On-line training program (details below)
- Quarterly staff meeting of the water utilities department
- Land use development trainings (see Table 8-2 below)

Online Training

During this reporting period online employee training was initiated for ease of implementation for both the Clean Water Program Outreach Coordinator and the staff themselves. On-line training offers employees the opportunity to watch the video and take the pre- and post-quiz at a time that is opportune for them.

During this reporting period the City of Oceanside Clean Water Program purchased a new storm water training video through Excal Visual titled "*Rain Check Stormwater Pollution Prevention for MS4s Employee Training*". The Clean Water Program has used this company's training videos in the previous five reporting periods with great success. This new video provides additional information on specific BMPs that are directly related to tasks that City of Oceanside employees conduct during their regular work day. It also offers City Employees a new educational video after seeing the same video for several years.

The new video covers a national menu of BMPs that are often important in training municipal employees. There are three two video modules: Basic BMPs and Specialty BMPs. All employees who watched this video online watched the Basic BMPs module. Topics in this module are bulleted below:

- Spill Prevention and Good Housekeeping
- Spill Control Response
- Vehicle Fueling, equipment maintenance and washing
- Materials Management
- Waste Management

In addition some employees were assigned to watch the Specialty BMPs module depending on the nature of the work they do on a daily basis. Topics in this module are bulleted below:

- BMPs for Building Maintenance Employees
- BMPs for Street, Road & Bridge Employees
- BMPs for Parks and Open Space Employees
- BMPs for Marina, Harbor or Port Employees

The new video program also includes a quiz. Prior to the start of the on-line training session employees were provided with a multiple choice quiz to establish a baseline of knowledge for that individual. The quiz also served as the sign-in sheet for the individual attending each training session. After the completion of the video the same multiple choice quiz was given to each participant. Seventy-eight (78) municipal employees took both a pre- and post-quiz related to the on-line video. For more information on the effectiveness of these training programs based on the pre- and post-quiz scores see Section 11.0 of this report.

Quarterly Staff Meeting of the Water Utilities Department

The Clean Water Program had a unique opportunity to conduct a presentation during a Water Utilities Department quarterly meeting on December 7, 2011. Staff who attended this meeting are from all divisions in the water department. The Clean Water Program staff provided an overview of the program's goals to improve water quality in the rivers creeks and streams, the flow chart of regulatory agencies and their roles in implementing municipal storm water permits, and the basic BMPs that City employees should follow that set an example for others living and working in the City. Sixty eight (68) employees attended this quarterly meeting and saw the presentation.

8.2.1 Other Staff Trainings

Departments or Divisions that received storm water related trainings during this reporting period was as follows:

- Water Utilities – Meter Services
- Water Utilities Sewer Division – Collections
- Water Utilities Sewer Division – Plant Maintenance
- Water Utilities – sewer Plant Operators
- Water Utilities – administrative Staff
- Water Utilities – Water Distribution (potable)
- Water Utilities – Reverse Osmosis and Water Treatment Plant
- Neighborhood Services Department – Engineering Division
- Neighborhood Services Department – Code Enforcement Division

During this reporting period staff from the Engineering Department and one Code Enforcement officer that oversees Treatment Control BMP inspections attended various land use development trainings. See Table 8-2 below for a summary of these trainings.

Table 8-2. Land-use related development trainings.

Department Division	Date	Number in Attendance	Topic
Engineering Review	July 26, 2011	4	Hydrology/SWMP Review
Engineering Review	August 1, 2011	1	HMP Tools
Engineering Review	August 17, 2011	1	HMP SDHM
Engineering Review	August 17, 2011	2	CGP SMARTS
Engineering CIP	August 29, 2011	7	SWPPP
Engineering Review	September 6, 2011	1	SCCWRP Screening Tool
Engineering Review/Inspection/CIP	September 22, 2011	5	Construction BMP Maintenance
Engineering Review	October 6, 2011	1	HMP
Engineering Review	October 13, 2011	1	LID/Green Infrastructure
Code Enforcement	November 17, 2011	2	Treatment Control BMP Inspection
Engineering/CIP	November 31, 2011	5	CGP
Engineering Review/Inspection/CIP	December 5, 2011	4	Non-Compliant Construction Sites
Engineering Review	January 10, 2012	1	GIS
Engineering Review	January 31, 2012	1	SDHM
Engineering Review	April 25, 2012	1	MS4 Permit
Engineering Review	May 16, 2012	2	MS4 Permit
Engineering Review	June 7, 2012	1	HMP
Engineering Review	June 18, 2012	5	SWMP Review

8.3 Educational Outreach Element

Residential areas make up a large portion of the land use in the City, and therefore even small pollutant discharges can be magnified significantly and have the potential to affect the quality of the receiving waters. Activities such as residential car washing and over irrigation are harmful to receiving water bodies by contributing pollutants such as heavy metals, detergents, and nutrients. Providing residents with appropriate educational materials may help to increase overall awareness, and encourage residents to change harmful behaviors and subsequently reduce the potential for pollutants to enter the storm drain system and reach receiving water bodies.

Media

The City of Oceanside has a unique opportunity to reach out to its residents because the City serves as the drinking water purveyor and the wastewater/sewer district. Utility bills are mailed monthly to residents for water services, sewer services, solid waste and recycling services as well as other services. The Clean Water Program takes advantage of this billing service by inserting a newsletter twice per year which has information on storm water related pollution prevention practices, opportunities for public involvement such as cleanup events, and other environmentally-related information.

Green Oceanside Newsletter
During this reporting period the Water Utilities Department created a new newsletter titled *Green Oceanside* that includes articles from various environmental programs and projects that the City manages and coordinates. Articles in the Fall 2011 issue addressed topics regarding storm water, water use efficiency, and solid waste and recycling. The Spring 2012 issue was focused on promoting annual Green Week 2012 events, a week of events that are coordinated by staff from the City's environmental programs. See section 9.1.5 for more information about Green Week 2012.

During this reporting period one *Green Oceanside* Newsletter was distributed to over 42,000 Oceanside households. A copy of this newsletters is included as Attachment 6-A to this annual report. An overview of topics in this two newsletters is as follows:

Fall 2011: Green Oceanside Newsletter
- Zero Waste – Overview of Oceanside's Zero waste Plan
- Day Without A Disposable Bag – encouraging use of reusable tote bags instead of single use plastic bags
- San Luis Rey River Cleanup event information
- Free Water Saving Resources

Also during this reporting period a flier promoting the Oceanside 2012 Green Week events was distributed to over 42,000 households. See Attachment 9-B for a copy of this flier. Below is a bulleted list of information included in the flier.

Spring 2012: Oceanside Green Week Flier – April 23 -29, 2012
- Environmental Film Festival
- Compost Workshops
- Green Oceanside Youth Art Contest
- Loma Alta Creek and Beach Cleanup event information
- E-waste drop-off event information
- Used Oil Filter Exchange event

Website
The City's Clean Water Program website also offers electronic copies of a variety of storm water fact sheets covering topics such as proper pesticide and fertilizer use, trash disposal, pet waste and lawn waste disposal, proper chlorine and other swimming pool chemical disposal, sedimentation, effects of soaps and detergents on receiving waters, and other storm water-related topics.

During this reporting period the City of Oceanside revised and updated the City website in its entirety. The original Clean Water Program URL, www.oceansidecleanwaterprogram.org now redirects users to the new main Clean Water Program webpage URL:
http://www.ci.oceanside.ca.us/gov/water/clean/default.asp.

There were 2,629 hits to the Clean Water Program website. This is a significant reduction in website hits that could be due to several factors. The tracking of hits to the original URL were

not trackable due to the URL changes. During the next reporting period tracking of the website hits will be addressed so that the numbers reflect actual hits on the Clean Water Program main webpage. Table 8-3 below provides a summary of the number of hits to the webpage. The original URL will continue to be used on outreach materials and promotional items since it is easier for the public to remember.

Table 8-3. Summary of Clean Water Program Webpage Hits.

Fiscal year	of Website Hits
2011-12	2,629
2010-11	72,086
2009-10	60,319
2008-09	35,647
2007-08	38,146
2006-07	45,267
2005-06	42,367

Oceanside Update

In addition to printed media, the City's community television station, KOCT, airs thirty-minute public service announcements with three-minute presentations from various City departments. During this reporting period the Clean Water Program will provided five three-minute presentations. Table 8-4 provides an overview of the topics covered during each taping.

Table 8-4. Summary of 2011-12 Oceanside Update Topics by Month

Date	Topic Discussed
September 2011	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
October 2011	San Luis Rey River Cleanup Event, Storm water hotline
November 2011	Fertilize After It Rains and other fertilizer and pesticide tips to protect water quality
February 2012	Ten simple ways to protect water quality
March 2012	Green Week events and Loma Alta Creek/Beach Cleanup

Community Events – Booths and Outreach Activities

The Clean Water Program staffed education outreach booths at several community events in Oceanside and north San Diego County. The Clean Water Program staff talked to residents, handed out educational materials, and responded to questions and concerns. Table 8-3 lists community events attended between July 2011 and June 2012 to encourage community participation and to educate participants of the effects of polluted urban runoff and storm water:

Table 8-5. 2011-12 Community Events.

Date	Event	Participants (Estimated)
9/24 and 25/2011	Oceanside Harbor Days	1000
12/17/2011	Day without a Bag	300
4/23 □29/12	Oceanside Green Week	500 at various events
4/28/12	Oceanside Green Fair	500

Primary School Education

Educating the City's youngest residents is important in two ways: ideally the good habits/behaviors learned will be carried into adulthood, and secondly, children may educate their families and friends around them with the information they have learned. Children are impressionable at a young age, and are therefore more likely to act upon the knowledge given to them now and throughout their life.

The City continued its outreach to school age children through the use of the watershed model during presentations. A total of 31 presentations were conducted reaching 734 primary school-age children and 37 adults.

High School Education

During this reporting period the City of Oceanside contracted with Solana Center for Environmental Innovation to provide a presentation to high school students about storm water and pollution prevention in local rivers, creeks, streams and the ocean. Mission Vista High School in Oceanside received this presentation. 250 students and 7 adults were in attendance at two presentations. Topics covered under this presentation included the following:

- What is storm water?
- Why is it a problem?
- The Great Pacific Garbage Patch
- Sources of storm water pollution
- ID sources of storm water pollution at your school and in your neighborhood

During this reporting period a total of 984 students and 42 adults received storm water related presentations in their classroom. Table 8-6 provides a list of groups and classrooms that were educated about storm water pollution prevention via these presentations.

Table 8-6. 2010-11 School Age Children Watershed Presentations.

Date	Group	Children	Adults
7/18/11	AM/PM (Summer Camp)	20	2
7/18/11	AM/PM (Summer Camp)	15	1
11/3/11	Girl Scout Troops 1669 & 1760	24	3
5/7/12	Reynolds Elementary (2nd Grade)	23	1
5/7/12	Reynolds Elementary (2nd Grade)	23	1
5/9/12	Reynolds Elementary (2nd Grade)	26	1
5/9/12	Reynolds Elementary (2nd Grade)	26	1
2/29/12	Laurel Elementary (1st Grade)	26	1
2/29/12	Laurel Elementary (1st Grade)	24	1
2/29/12	Laurel Elementary (1st Grade)	22	1
3/14/12	Laurel Elementary (2nd Grade)	30	1
3/14/12	Laurel Elementary (2nd Grade)	28	1

3/14/12	Laurel Elementary (2nd Grade)	27	1
5/14/12	Palmquist Elementary (2nd Grade)	27	1
5/14/12	Palmquist Elementary (2nd Grade)	27	1
5/17/12	Palmquist Elementary (2nd Grade)	27	1
5/17/12	Palmquist Elementary (2nd Grade)	27	1
5/21/12	Mission Meadows Elementary (2nd Grade)	24	1
5/21/12	Mission Meadows Elementary (2nd Grade)	23	2
5/21/12	Mission Meadows Elementary (2nd Grade)	22	1
5/21/12	Mission Meadows Elementary (2nd Grade)	25	1
5/23/12	Del Rio Elementary Career Day (3rd Grade)	27	1
5/23/12	Del Rio Elementary Career Day (3rd Grade)	29	1
5/23/12	Del Rio Elementary Career Day (2nd Grade)	23	1
5/23/12	Del Rio Elementary Career Day (Preschool)	22	2
5/23/12	Del Rio Elementary Career Day (Kinder)	27	2
5/23/12	Del Rio Elementary Career Day (1st Grade)	24	1
5/23/12	Mission Vista High School	200	5
5/25/12	Libby Elementary (1st/2nd Grade)	25	1
5/25/12	Libby Elementary (2nd Grade)	27	1
5/25/12	Libby Elementary (2nd Grade)	27	1
5/25/12	Libby Elementary (2nd Grade)	27	1
5/31/12	Mission Vista High School	50	2
Totals	**33 presentations**	**984**	**42**

Splash Lab

The San Diego County Office of Education Splash Science Mobile Lab (Splash Lab) is a completely self-contained mobile laboratory brought to local schools to provide students with hands-on experience with the following resources:

- Watershed/storm drain model presentations
- GIS computer stations
- Water Conservation Station
- San Diego Estuary Station
- Microscopes - with live specimens!
- Chemistry experiments

- State of the art computers
- Cooperative learning skills

The curriculum is designed for grade levels 4-6 and is aligned with California Science Content Standards.

During this reporting period a total of 493 students from 16 classes at four schools received the Splash Lab with the costs covered by the City Water Utilities Department. See Table 8-7 below for information on the schools and number of students who participated in the programs.

Table 8-7. Schools using Splash Lab during FY 2011-12.

Date	School	Grade	Topic	Number Attended	Number of classes
9/27/2011	Mission Elementary	5	Splash Lab	88	4
10/13/2011	Ivey Ranch Elementary	4	Splash Lab	115	4
11/10/2011	North Terrace Elementary	4-5	Splash Lab	144	4
11/17/11	Libby Elementary	4-5	Splash Lab	146	4
Totals				**493**	**16**

Project SWELL (SWELL = Stewardship: Water Education for Lifelong Leadership)

The City continued to collaborate with San Diego CoastKeeper and the San Diego Unified School District (SDUSD) to customize and implement Project SWELL (Stewardship: Water Education for Lifelong Leadership), a water-based science curriculum, for different grade levels in the Oceanside Unified School District (OUSD). The City of Oceanside is currently implementing the 5th grade curriculum and will begin implementation of the 6th grade curriculum curing the next reporting period.

The Project SWELL curriculum will foster a sense of stewardship for our natural environment and help to empower and educate these future leaders of America to understand and improve the condition of San Diego's coast and waterways. Project SWELL balances environmental and scientific studies as a comprehensive and hands-on K-12 water quality and pollution prevention curricula. More information about this curriculum can be found at http://www.projectswell.org/. This curriculum provides students with knowledge of water resources in San Diego County and Oceanside, watershed functions, water conservation, the effects of polluted urban runoff, and how students can help prevent water pollution.

5th Grade

During this reporting period a Project SWELL Professional Development teacher training was conducted on January 31, 2012 for 5th grade level teachers. There were thirteen teachers in attendance from seven different elementary schools in the school district. A curriculum writer who developed the original 5th grade curriculum in conjunction with the City of San Diego and Coastkeeper conducted the teacher training. During the school year the City of Oceanside Clean Water Program staff collaborated with the science kit center to ensure that the materials specific to the Project SWELL lesson plan were included in the FOSS Science Kits. The City of Oceanside also renewed the licensing agreement with City of San Diego and Coastkeeper which extended the ability to use the curriculum in OUSD schools for five more years.

6th Grade

During this reporting period the City of Oceanside and the City of San Diego worked on finalizing the licensing agreement for the 6th grade lesson plans. During the next reporting period the City will work with the Oceanside Unified School District and Coastkeeper to begin implementation of the 6th grade curriculum. This curriculum focuses on earth science and students are expected to:

- Understand the definition of a watershed.
- Identify watersheds in the North San Diego County region.
- Understand the movement of water through North San Diego County watersheds.
- Understand pollution concerns and pollution prevention measures related to North San Diego County watersheds.

Over-Irrigation

Clean Water Inspectors continue to respond to and document over irrigation issues after receiving complaints from the general public or City staff. Inspectors investigated water sources and contacted property owners in person when possible or provided informational door hangers indicating the need to curtail overwatering or fix broken irrigation systems if applicable, as well as provided information to educate the public to use water efficiently. After responding to complaints, inspector's maintained electronic files of all complaints and revisited locations to make sure over irrigation had stopped. In problematic areas where overwatering was caused by many property owners, the entire area was notified by door hangers and/or letters informing the property owners the need to conserve water and avoid polluting the storm drain systems.

Water meter reader personnel are trained to document and respond to urban runoff and over-irrigation issues as they come across such activities during their normal activities. While in the field these personnel will enter the address location into a hand-held meter of a site that may have an urban runoff violation. These addresses are then compiled and given to the Clean Water Inspectors for follow-up. When possible, the water meter reader personnel will also leave door hangers and report incidents of urban runoff. Depending on the situation a meter shop personnel will visit the site or the Clean Water Inspector will follow-up.

Residential Car Washing

Residents continued to be encouraged to use professional car washes or to implement BMPs at their homes to prevent water produced by residential car washing from entering the storm water conveyance system.

Pick Up Your Pet Waste Campaign

The Pick Up Your Pet Waste Campaign along the San Luis Rey Recreation Trail (Trail) was initiated in FY 2008-09 to address the accumulation of dog waste along the Trail which travels adjacent to the San Luis Rey River on both the north and south sides. For more detailed information about this campaign please refer to Section 9.1.5 of this annual report.

Also during this reporting period the City of Oceanside installed signs along a walking trail that parallels Loma Alta Creek. The City of Oceanside was contacted by a local RV camp park that is located adjacent to this walking trail. The facility manager complained that there was dog waste left along the trail and requested the installation of "Pick Up Your Pet Waste" signs in the

vicinity of the trail. One sign was installed at the east and west end of the trail. See figures 8.1 and 8.2 below for photos of both signs.

Figure 8.1 Pet Waste Sign installed at west end of Loma Alta Creek Trail

Figure 8.2 Pet Waste Sign installed at east end of Loma Alta Creek Trail

8.3.1 Targeting Underserved Communities

Underserved communities are communities the City has determined may require increased educational efforts. The City targeted the following underserved communities and high-risk behaviors.

Mobile Businesses

Due to their nature, mobile businesses are typically not inspected during the routine industrial and commercial inspection program; thus the opportunity to regularly reach this target audience through inspections is not viable due to the mobility of the business. The City continued to use Code Enforcement to respond to complaint calls related to mobile businesses at which time Mobile Business BMP information was given to the operator.

As part of the regional outreach efforts implemented through the Industrial/Commercial Sources Workgroup, the City submitted their inventory in FY 2008-09 to the Industrial/Commercial Workgroup for the development of a regional inventory of Mobile Businesses. This inventory was created in order to send information to the businesses about the minimum BMP requirements specific to Mobile businesses.

During the 2009-10 reporting period the City of Oceanside mailed “Required Minimum BMPs For Mobile Businesses” education materials to 34 Oceanside Mobile Businesses with current

business licenses. See Attachment 8-A of the 2009-10 Annual report for a copy of these materials. Of the 34 mailed only four were returned to the City.

Spanish-speaking population

The City will continue to target the large Spanish-speaking population in the City by offering a number of educational brochures and handouts, including the Green Wrench Guide and Integrated Pest Management tip cards in both English and Spanish. In addition there are posters available in Spanish for restaurants and automotive related businesses and are provided to these business where inspectors feel there is a need or upon request.

Nursery and Greenhouse Operations

Due to the amount of agricultural land use in the City, the City distributed a number of printed educational materials to agricultural/nursery/greenhouse site owners and operators. The City continues to provide educational materials, when needed, to nursery and greenhouse operations during annual inspections and on unannounced visits throughout the year.

Education Materials Distributed

Education outreach materials are provided to residents, the general public, and students which include information about urban runoff, water quality, BMPs, Clean Water Program projects, and the Urban Runoff Hotline number. These materials include brochures and promotional items that are distributed upon request and during community events where the Clean Water Program staffed a booth. No significant changes were made to any of the brochures during this reporting period. Copies of these brochures were submitted with previous annual reports. Table 8-8 lists the educational materials distributed during the 2011-2012 reporting period.

Table 8-8. Educational Brochures and Promotional Items Developed and/or Distributed.

Education Material	Description	Number Distributed
Educational Brochures		
Urban Runoff Guidelines for Residents Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from residential activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	45
Pollution Prevention Tips for Gardening Activities Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from gardening activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	30
Urban Runoff Guidelines for Commercial Businesses Brochure	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from commercial and industrial business activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	75

Education Material	Description	Number Distributed
Urban Runoff BMPs for Construction Projects handout	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from home-improvement activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	100
Urban Runoff Guidelines for Powerwashers	Provides information about urban runoff and the connection to water quality, as well as typical impacts resulting from powerwashing activities, BMPs to prevent urban runoff pollution, hotline for potential violations, and website address for more information.	25
	Total number of educational brochures distributed during this reporting period.	**275**
Promotional Items		
Personal Pet Waste Bag Dispensers	These convenient dispensers are small enough to hook onto the dog leash so they are conveniently available when walking the dog. The image on the dispenser is the same image as on the sign used along the San Luis Rey Recreation Trail. Each dispenser holds ten small bags. Bag refills are available at pet stores.	100
Click Message Pen	Each pen has Oceanside's Urban Runoff Hotline number on the outside barrel number as well as the following messages inside that rotate when the pen is clicked: "Protect our Waterways: sweep sidewalks, all storm drains lead to the ocean, Sweep (don't hose off) driveways and sidewalks, pick up pet waste, www.OceansidCleanWaterProgram.org, Water saving tips:www.SaveWaterOceanside.com, Conserve water – don't overwater landscapes.	550
Pencils	Each pencil has Oceanside's Urban Runoff Hotline phone number and is made from recycled newsprint. These were distributed to students and teachers as well as the general public during outreach events.	1050
Decals	These static cling decals have Oceanside's Urban Runoff Hotline phone number and can be placed on the windshield for quick reference to report potential storm water violations.	50
Gel Pen	These gel pens have Oceanside's Urban Runoff Hotline phone number and were distributed to City employees.	175
T-shirts	T-shirts are offered as a give-away option for beach and creek cleanup volunteers.	900
Tote Bags	These reusable tote bags are made from recycled cotton and have the words "Protect and Conserve Oceanside Water". They were distributed to employees and as a give-away option for beach and creek cleanup volunteers.	450
Water bottles	These reusable steel Bisphenol A (BPA) free water bottles were distributed to beach and creek cleanup volunteers.	1,000
Rally Towels	These 11"x15" rally towels have the slogan "Only Rain in the Strom Drain" and were offered to beach and creek cleanup volunteers.	90

Education Material	Description	Number Distributed
Stickers	These stickers are provided to young children and have storm water related slogans such as Only Rain in the Storm Drain and You Are the Solution to Storm Water Pollution	1000
Ceramic Coffee Mugs	These reusable ceramic coffee mugs were provided to municipal staff as a replacement for disposable coffee cups.	50
	Total number of promotional items distributed during this reporting period.	**5,135**

8.4 Education of Construction Community

The City provides all appropriate parties involved with construction activities with training and informational materials regarding storm water quality, as applicable. These parties include but are not limited to City employees and project proponents, which can include contractors, subcontractors, developers, property owners, and superintendents.

Education and training of the development community in Oceanside is typically done on a project-by-project basis during a mandatory pre-construction meeting with the City and during construction site inspections.

Prior to the issuance of any permits, construction site owners and developers are either given printed educational material or referred to the Clean water Program website for information that includes the municipal permitting process, as well as the state and local storm water permit requirements for construction sites. Prior to the wet season, all currently permitted construction sites are contacted reminding site owners and developers to update their sites' BMPs to reduce erosion and prevent storm water pollution, as well as update erosion control plans and SWPPPs.

The Building Division counter in City Hall references websites that have the following documents for construction site owners and developers to reference:

- Clean Water Program Website to for a link to the General Construction Storm Water Permit
- The City's Construction Manual
- Construction related sections of the Municipal Storm Water Permit Order R9-2007-0001
- Standard Urban Storm Water Mitigation Plan, when applicable

In addition to referring the construction community to the documents mentioned above, a copy of the Urban Runoff BMPs for Construction Projects brochure is stapled to the storm water related development plans for the project. This ensures that the construction community has received BMP information and is required to follow the minimum BMPs listed and shown in the brochure. Additional BMPs may be required by the City based on a review of the Storm Water Pollution Prevention Plan prepared by the project applicant. Storm water information is also disseminated to the construction community through storm water compliance inspections of construction sites. During this reporting period approximately 100 of these pamphlets were distributed form the Building Division counter.

8.5 Outreach Component Effectiveness Assessment (Optional)

See Section 11.0 for an assessment of the education component of the City's JURMP.

8.6 Program Review and Modification

During this reporting period the majority of the municipal storm water training was conducted online. See section 8.2 above for more details about this online training program.

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9.0 PUBLIC PARTICIPATION COMPONENT

In order to ensure success with any City-wide program, the public must be involved. Stewardship and participation by the general public will increase the acceptance and willingness to comply with new regulations. The City of Oceanside has actively pursued public involvement in the Clean Water Program through the implementation of various programs and feedback mechanisms. This section documents the activities conducted by the City of Oceanside during the 2011-2012 reporting period to meet the requirements of Section D.6 of the Municipal Permit (Table 9-1).

Table 9-1. Order 2007-0001 Compliance Summary.

J.3.a.(3)(h).i Public Participation Efforts	See Entire Section 9 of this Annual Report

9.1 Local Public Participation Opportunities

The City of Oceanside encourages its residents to become involved in the Clean Water Program in various ways. The public can participate in the Clean Water Program including reporting potential violations through the Urban Runoff Hotline, beach and creek cleanup events, and attendance at community events.

9.1.1 Notable Activities

Green Oceanside Campaign

During this reporting period the Storm Water Hotline number changed. See section 9.1.2 for more information about this change.

In late 2008, a group of city employees from various departments and divisions, including the Clean Water Program, joined forces and organized “The Green Team” which was a driving force behind the creation of the Green Oceanside campaign. This campaign continued during this reporting period. See section 9.1.5 for detailed information about activities implemented for this campaign.

9.1.2 Urban Runoff Hotline

The public and City employees can report potential storm water violations that could pollute the City’s receiving waters through the Oceanside Urban Runoff Hotline. During this reporting period the Urban Runoff Hotline number changed to 760-435-4500. The City of Oceanside made a decision to create a centralized call center for all public calls and inquiries to the City. When calls are received through the call center, customer service representatives assess the type of call, enter information into a database called Public Stuff, and then forward the information entered into the database to the appropriate City department to address. This system is ideal in that all calls made to the call center are tracked in the Public Stuff database. Storm water and urban runoff related calls are forwarded to administrative staff in the Water Utilities Department. Thus all storm water related calls are tracked and easily queried.

Urban Runoff Hotline calls received by the Call Center are entered into a database. The information is then sent to an office specialist in the water utilities department who then determines based on the nature of the call which staff person to forward the call to. The

information from storm water related calls is disseminated to the Clean Water Program inspectors, Clean Water Program administrative staff or code enforcement officer.

Promotion of the new hotline phone number began during this reporting period. All outreach materials and promotional items have the new hotline phone number. If someone references an older education piece or promotional item with the old hotline umber (760-435-5800) the phone call will automatically roll over to the new hotline number without the caller knowing.

The Urban Runoff Hotline was promoted through a variety of media during this reporting period, including announcements on local television stations, on the City's Clean Water Program webpage, placement on newsletters, click-message pens, pencils, and other promotional give-away items.

During the reporting period, a total of 162 storm water related calls were received through the Urban Runoff Hotline. Of the 162 Urban Runoff Hotline calls 137 were received by residents concerning potential urban runoff violations. There were also 25 referrals from City staff.

All storm water related calls to the City either from residents or City staff referrals were entered into the Lucity database system for tracking. These calls were then forwarded to either the Clean Water Program inspectors or Code Enforcement staff, depending on the nature of the call.

Table 9-2 provides a summary of the nature of the calls received via the Hotline or by City staff referral. Of the calls received through the Hotline, nine (9) were referred directly to Code Enforcement for investigation.

Table 9-2. Urban Runoff Hotline calls and City staff referral summary

Department	Problem	City Employee Referral	Public Hotline	Total
Clean Water Program	Follow-up	0	4	4
	Leak Repair	1	0	1
	Other	0	9	9
	Over-irrigation/Broken Irrigation	19	63	82
	Power Washing	1	0	1
	Spills/Dumping	1	8	9
	Street/Driveway Washing	0	3	3
	Unidentified Water Runoff	3	49	52
	Yard waste/Landscape Activity	0	1	1
	Total For CWP	25	137	162
Referred Directly to Code Enforcement	Other	0	2	2
	Power Washing	0	1	1
	Spills/Dumping	2	3	5
	Street/Driveway Washing	1	0	1
	Total for CE	3	6	9

9.1.3 Cleanup Events

City Sponsored events

To increase Oceanside residents' stewardship toward our local waterways, the Clean Water Program hosts annual cleanup events at every major waterway in Oceanside including Buena Vista Creek, Loma Alta Creek, San Luis Rey River and City beaches. Between 70 and 300 volunteers participate in each of these cleanup events. During the 2011-12 reporting period, 1,481 volunteers removed over four tons of trash, debris, shopping carts and other unwanted material from Oceanside waterways during City-sponsored events. See Table 9-3 below for data related to the City-sponsored events.

Table 9-3. 2011-12 Oceanside sponsored Cleanup Events.

Date	Event	Number of Participants	Pounds/Tonnage of Waste Removed
City Sponsored Cleanup Events			
7/5/2011	Morning After Mess	77	225
9/17/2011	Buena Vista Creek Cleanup	40	2,000
9/17/2011	Oceanside Beach Cleanup	627	1,155
11/05/2011	San Luis Rey River Cleanup	82	2,000
11/05/2011	Harbor Beach Cleanup	18	300
4/28/2012	Loma Alta Creek Cleanup	80	1,750
4/28/2012	Oceanside Beach Cleanup - Pier	557	647
	Total City Sponsored Events	**1,481**	**8,077 pounds**

Private group sponsored events

Private groups regularly approach the city to coordinate their own cleanup event. The City of Oceanside including the Clean Water Program, Lifeguard division and the harbor maintenance staff support these groups by providing them guidance on what areas to target for cleanup, provide supplies for their event (bags and gloves), and provide safety instructions for the group.

To assist these groups in coordinating their own beach cleanup event the Clean Water Program created a Beach Cleanup manual. This manual provides the following information:

- How to coordinate a beach cleanup
- Day of cleanup instructions
- City of Oceanside "Beach Cleanup Pledge"
- Safety fact sheet
- Supply checklist
- Cleanup event data summary sheet

A copy of the Beach Cleanup Manual is included as Attachment 9-A in the 2009-10 Annual Report.

During this reporting period nine private groups coordinated ten beach or open space cleanup events in Oceanside. After the completion of their event, private groups are requested to provide the number of volunteers and the number of bags collected or pounds of trash removed from the target area. Every attempt is made to gather this data but some groups do not always keep track of the data or report back to the City. See Table 9-4 for a list of groups that coordinated cleanup events in FY 2011-12.

Table 9-4. 2011-12 Private group sponsored cleanup events.

Private Group Sponsored Events	
10/12/11	Coca Cola
10/22/11	PASS Americorps Program
11/10/11	prAna
11/18/11	Cal State San Marcos Service Our Beaches
12/02/12	Navy Hospital
3/10/12	Coastkeeper
5/12/12	Boy Scout Pack 787
5/12/12	Coastkeeper
6/2/12	San Marcos High School Key Club
6/23/12	Bank of America

Cleanup event email lists

In FY 2011-12 four event notices, one Green Oceanside Newsletter and three fliers were sent via email to approximately 315 email addresses on an event notification email distribution list. See Attachment 6-A for the newsletter and Attachment 9-A for event fliers for Green Week, the Buena Vista Creek clean-up, and the San Luis Rey River clean up. These notices were emailed to interested parties during this reporting period who registered to receive e-notifications.

In addition two newspaper advertisements announcing the April 28, 2012 Loma Alta Creek Cleanup was published in two local newspapers: the North County Times and the Coast News.

9.1.4 Oceanside Update Show

Clean Water Program staff appears regularly on the Oceanside Update show broadcast through Oceanside Television Station KOCT. Each spot allows staff to spend three to five minutes discussing specific storm water pollution programs, pollution prevention tips, and BMPs to reduce impacts. The 30-minute show is broadcast twice daily at 7:00 a.m. and 7:00 p.m. on channels 17 and 18 in Oceanside. Topics are varied with every taping of Oceanside Update, therefore the viewing audience learns about public participation events and water quality BMPs. While KOCT is unable to determine the actual number of residents who watch Oceanside Update regularly or for any length of time, both channels broadcast to approximately 45,000 Oceanside households. Table 9-5 summarizes Oceanside Clean Water Program topics discussed during each of the seven tapings which aired during this reporting period.

Table 9-5. Summary of Oceanside Update Topics by Month.

Date	Topic Discussed
September 2011	Coastal Cleanup Day, Buena Vista Creek and Oceanside Beach Cleanup
October 2011	San Luis Rey River Cleanup Event, Storm Water hotline
November 2011	Fertilize After It Rains and other fertilizer and pesticide tips to protect water quality
February 2012	Ten simple ways to protect water quality
March 2012	Green Week events and Loma Alta Creek/Beach Cleanup

9.1.5 Additional Public Participation Opportunities

Other opportunities for local public participation during this reporting period are discussed in this section.

Pick Up Your Pet Waste Campaign

The Pick Up Your Pet Waste Campaign was initiated in FY 2008-09 to address the accumulation of dog waste along the San Luis Rey Recreation Trail (Trail) which travels adjacent to the San Luis Rey River on both the north and south sides. Detailed information about this project can be found in section 9.1.15 of the 2010-11 Annual Report. The Clean Water Program continues to provide funding to refill the pet waste bag dispensers along this section of the trail.

Green Oceanside Campaign and Green Week

The City of Oceanside continued to implement its Green Oceanside campaign which was initiated in 2008 by a group of City employees from various departments and divisions. The Green Oceanside campaign includes the implementation of one week of environmental events that the public can attend, staffing of outreach events, and working with staff to provide education and resources so they can become better stewards of the planet.

Green Week 2012 included a week of activities at which the public was invited to participate. Following is a summary of the Green Week activities.

Green Week 2012

Green Week 2012 was held April 23 – 29, 2012. A summary of environmental events and activities are noted below.

- Green Oceanside Youth Art Contest– This poster contest was open to all Oceanside Unified School District students in K-5th grade levels. The theme was "What does Green Oceanside mean to you?"
- Environmental Film Festival – On Thursday April 26 the short film "The Story of Stuff" and the movie "*Flow*" were shown to approximately 70 attendees. The Story of Stuff is an animated short film that shows how our consumer goods are produced, consumed and disposed of or recycled. The award winning film "Flow" highlights the world's dwindling fresh water supply with a focus on politics, pollution, and human rights issues.
- Green Fair – The culmination of Green Week ended with the Green Fair on April 28, 2012 at which over 30 environmentally conscious organizations and businesses staffed tables to provide information and resources to the public.

- Electronic Waste Drop-off Event – The public had the opportunity to bring unwanted electronic waste for proper recycling and disposal. This event was held on April 28 and was located near the Green Fair. At this event there were 11.5 tons of universal E-Waste collected for proper recycling and disposal.
- Loma Alta Creek and Beach Cleanup – The Clean Water Program coordinated this creek and beach cleanup event on the morning of the Green Fair. 637 volunteers participated and removed 2,397 pounds of trash including 650 cigarette butts.
- Local Community Support – several local businesses provided sponsorship money that went toward the purchase of prizes for the youth contest winners and supplies for teachers who had a winning student in their classroom.
- Media/Marketing: A flier promoting Green Week 2012 was sent to over 42,000 households prior to the event. See Attachment 9-B for a copy of this flier.

Interpublic Education. The City has developed programs to educate the public and various target communities about the JURMP and the numerous ways the public can contribute to reduce pollution of the City's waterways and receiving waters. However, the City recognizes that no matter how many educational programs it implements, there will always be a need for ongoing outreach to various audiences. Therefore, "spreading the word" is another significant effort that the public will be encouraged to participate in that will substantially contribute to the success of the JURMP. When speaking with the public about urban runoff issues, they are encouraged to speak with neighbors about how everyday activities can potentially pollute local waterways.

City Staff Activities. City staff is the public at work. Staff is encouraged to report potential violations and provide feedback on the implementation of the JURMP. City staff is the eyes and ears of the City, and can provide valuable information on which components and programs are working and provide suggestions or recommendations on improving the programs. The City staff is encouraged to use the Oceanside Urban Runoff Hotline (760) 435-4500 for reporting potential runoff violations. In addition, City staff is encouraged to provide feedback directly to the Clean Water Program Coordinator and staff. Comments are discussed and if changes can be made to better improve the program, then they are planned and implemented.

9.2 Regional Public Participation Opportunities

This section describes those mechanisms available, at the regional level, for the public to participate in to assist in the implementation of regional JURMP related programs and to provide feedback to the Copermittees and contribute to the continuing development of the numerous JURMPs in effect around the County:

9.2.1 Media

Outreach to the public through the media serves as a widespread public education BMP and is an important element of public participation and keeps communication open between government staff and the public. Utility billing inserts are an economical and effective way to share storm water related information with residents of Oceanside. These fliers were directly mailed to over 42,000 Oceanside households.

9.2.2 Regional Events

San Diego County Fair

The San Diego Regional Storm Water Copermittees sponsored the Envirofair at the 2012 San Diego County Fair (Fair) as an education and outreach activity under the Regional Education and Residential Sources workgroup. The Envirofair was held on Jun 23, 2012 and was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental storm water and pollution prevention message. Details of the activities related to this event will be included in the FY 11-12 Regional Urban Runoff Management Program (RURMP) annual reports.

Copermittee Working Bodies

The Copermittees collectively developed ten (10) working body groups to coordinate the implementation of regional programs required by the Municipal Permit. Each Copermittee is required to provide at least one representative to each working body. These working bodies meet at least four times per year unless a different meeting frequency is established through unanimous approval of all Copermittees.

During this reporting period the City of Oceanside participated in each working body. Activities related to each of these ten working bodies during FY 2011-12 will be provided in the Regional Urban Runoff Management Program (RURMP) annual report scheduled to be submitted to the RWQCB in January 2013.

Regional Hotlines and Website

The regional hotlines provide a direct connection for public participation. Historically, the hotlines have worked well and should continue to increase in use as more people are educated of the hotline phone number and the types of issues to report. The City will encourage reporting through its local hotlines, however, the regional hotlines will serve as an alternative to the local hotlines and also provide an opportunity for reporting by visitors to the City, from other areas in the County, who are not familiar with copermittee hotlines.

During FY 2009-10 the ERS Workgroup launched a new regional website: www.thinkbluesdregion.org. This website provides the public with a link to their own jurisdictional storm water website, a phone number to report potential storm water violations. And resource links to get storm water related information. More detailed information on the successes of this website will be provided in the Regional Urban Runoff Management Program (RURMP) annual report scheduled to be submitted to the RWQCB in January 2013.

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10.0 FISCAL ANALYSIS COMPONENT

10.1 Introduction

The City of Oceanside acquires the funds necessary to facilitate the City's storm water program through four departments in the City: Water Utilities Department, Public Works Department, Development Services Department and Neighborhood Services Department. Much of City's storm water program falls under the responsibility of these four departments. Funds obtained for use in implementing the City's storm water program are utilized for a number of different programs, including jurisdictional, watershed, and regional programs. This section documents the activities conducted by the City of Oceanside during the 2011-2012 reporting period to meet the requirements of Section G of the Municipal Permit Order 2007-0001 (Table 10-1).

Table 10-1. Order 2007-0001 Fiscal Analysis Compliance Summary.

G.1: Each Copermittee shall secure the resources necessary to meet all requirements of the Municipal Permit.	See Section 10.1 of this Annual Report
G.2. Copermittees shall collectively develop a standardized method and format for annually conducting and reporting fiscal analyses of their urban runoff management programs in their entirety (including jurisdictional, watershed, and regional activities).	See Section 10.2 of this Annual Report
G.3. Each Copermittee shall conduct an annual fiscal analysis.	See Section 10.2.3 of this Annual Report
J.3.a.(3)(j).i Fiscal analysis of City urban runoff management program	See Entire Section 10 of this Annual Report

Effective programs require adequate funding to implement planned activities. The first step in securing adequate funding for the JURMP is to provide a strategy for effectively conducting a fiscal analysis of the JURMP in its entirety. This year's fiscal analysis included an evaluation of the expenditures (such as capital, operation and maintenance, education, enforcement, and administrative expenditures) necessary to accomplish the activities described in the JURMP and required under investigation orders and Total Maximum Daily Loads (TMDLs) mandates.

10.2 Fiscal Analysis Methods

The Municipal Permit requires the Copermittees to develop a standardized method and format for annually conducting and reporting fiscal analysis of their urban runoff management programs. The Standardized Fiscal Analysis Method and Format (Fiscal Analysis Method) was collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis Method document was submitted to the San Diego Regional Water Quality Control Board by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009. The Municipal Permit further requires the Copermittees to

conduct their annual fiscal analysis consistent with the standardized method starting January 31, 2010. The fiscal analysis incorporated in this section is based on the standardized method.

10.2.1 Program Funding

The City secures funding for the implementation of the storm water program through the Water Utilities, Public Works Departments, and Engineering Divisions in the City. To secure adequate funding, the Water Utilities Department collects a Clean Water Program surcharge. The surcharge is based on the customer's water consumption, so the surcharge is also designed as an incentive for individuals to conserve water. This amount is equal to $0.07 per unit of water used. Total revenue for fiscal year 2011-12 generated though the surcharge fee was $771,983.

The City Engineering Division as part of the Development Services Department secures funding from development-related programs. The Engineering Division receives funding through fees assessed on developers for grading plan checks and inspections. Funding for Public Works departments is obtained through general fund allocations to the department.

The Standardized Fiscal Analysis Method includes a Standardized Fiscal Analysis Reporting Form, which consists of three tables separating jurisdictional, watershed, and regional expenditures. Jurisdictional expenditures are divided into components that mirror those included in the Municipal Permit as follows:

Administration
Development Planning
Construction
Municipal
Industrial and Commercial
Residential
Illegal Discharge Detection and Elimination (IDDE)
Education
Public Participation
Special Investigations
Non-Emergency Firefighting

Further, each of the above categories may be broken down into sub-categories. Potential Sub-categories may include:

Land Use Planning
Environmental Review
Development Project Approval and verification
Public Construction Projects
Private Construction Projects
Public Reporting of Illicit Connection or Illegal Discharges (ICIDs)
Jurisdictional Urban Runoff Monitoring Programs
Other

Expenditure items to be considered for each category or sub-category may include:

Administration
Permitting and Licensing
Project Planning and Engineering
Maintenance Inspections
Compliance Inspection and Enforcement
BMP Implementation
Educational Outreach
Waste Collection and Recycling
Jurisdictional Urban Runoff and Receiving Water Monitoring
Other Expenditures

For reporting purposes, only the table incorporating major jurisdictional components will be used. Sub-categories and expenditure items are intended to provide standardization of expenditures and need not be shown in the final report.

10.2.2 Urban Runoff Management Programs

The City's storm water budget related to the following departments, divisions, and programs are:

- Water Utilities Department - Administration of the City's Clean Water Program
- Water Utilities Department – Clean Water Program Compliance Inspections
- Development Services Department, Engineering Division – Storm water plan review, SUSMP and HMP
- Development Services Department, Engineering Division - Capital Improvement Projects
- Public Works Department - Storm Drain Maintenance
- Public Works Department - Solid Waste Disposal
- Public Works Department - Street and Median Maintenance
- Neighborhood Services Department – Code Enforcement Division

In addition the following department/division dedicate employees to address storm water related tasks required by the municipal storm water permit:

- Public Works Department – Park Maintenance (Inspections and BMP installation/maintenance)
- Public Works Department – Harbor Maintenance (Inspections and BMP installation/maintenance)

Personnel from various City departments and divisions are involved in the implementation of the City's storm water program. Refer to Section 2 and the City's certification letter in Appendix A, pages 2 and 3, of the City's 2008 JURMP for further detail regarding the responsibilities of various departments. Other program expenditures include watershed and regional storm water activities.

10.2.3 Expenditure and Budget Reporting

This section provides information on the expenditures for fiscal year 2011-12 as well as a proposed budget for fiscal year 2012-13. The fiscal year expenditures are presented in tabular

format with separate rows for different expenditure categories and the proposed budget for the next FY. See Table 10-2.

The JURMP budgeting for the Water Clean Water Program which includes various departments is described in the following sections and summarized in Table 10-2 at the end of this section. During this reporting period there were eight staff people dedicated to the City's Clean Water Program.

- One full-time Environmental officer (note title change from Clean Water Program Coordinator)
- Three full-time Environmental Specialists (focusing on water quality monitoring, education outreach, and program administration)
- One full-time CWP compliance inspectors
- One full-time Engineering Assistant (focusing on SUSMP and HMP)
- One full-time Code Enforcement Officer

10.2.3.1 Water Utilities Department

The surcharge rate described above under Program Funding is listed as a separate line item on Oceanside customers' utility bills. This allows for the clear delineation of the revenue being secured for the Clean Water Program in the Water Utilities section of the utility bill. Total revenue for fiscal year 2011-12 generated though the surcharge fee was $771,983. The costs to administer the Clean Water Program during Fiscal Year 2011-12 totaled $1,131,274. It is anticipated that the Water Utilities Department will expend $1,379,891 during Fiscal Year 2012-13.

10.2.3.2 Public Works

The City calculated the curb miles swept for the reporting period totaling 32,500 miles. The overall cost of the City's street sweeping program during FY 2011-12 was $1,450,977. This included $677,505 for equipment costs and $773,472 for staff costs. With a total of 32,500 curb miles swept in the City at a cost of $1,450,977, this averages out to $44.65 per curb mile. The cost for inspection and maintenance of the MS4 was $330,000 during this reporting period and. Budgeted costs for FY 2012-13 for MS4 maintenance are $370,000.

During fiscal year 2011-12 the Public Works Department spent approximately $1,845,000. It is anticipated that the Public Works Department will expend $1,954,920 during Fiscal year 2012-13.

10.2.3.3 Engineering

Municipal Permit Order 2007-001 requires an increased focus and effort in development-related review and inspection, development of a Hydromodification Plan and revisions to the Standard Urban Storm Water Mitigation Plan. The approximate costs to implement this program during Fiscal Year 2011-12 totaled $100,000. It is anticipated that Engineering Department will expend $110,000 during Fiscal year 2012-13 for storm water plan check review and implementation of the HMP.

10.2.3.4 Overall Clean Water Program Costs

During Fiscal Year 2011-12 approximately $3,268,274 was expended amongst the departments for the implementation of and tasks that support the Clean Water Program. It is anticipated that the total program costs for Fiscal Year 2012-13 will total $3,344,811. See Table 10-2 below for a summary of expenditures and projected budgets.

Table 10-2. JURMP Budgeting for Water Utilities, Public Works and Engineering Departments/Divisions.

Department	Item	Fiscal Year 2010-2011	Fiscal Year 2011-2012	Projected Fiscal Year 2012-2013
Water Utilities	Personnel (including Code Enforcement)	752,433	675,958	680,000
	Misc. office supplies, postage, uniforms	303	3,000	3,000
	Print Materials	18,270	34,000	15,000
	Monitoring Programs including lab materials, supplies and services	21,183	47,206	30,500
	Outreach supplies; Other Misc Cleanups and booths	20,000	20,500	20,500
	Consultant Fees Regional Monitoring, CLRP Development; Database Assistance	156,689	255,660	346,000
	Independent Contractors Teacher Training;	0	350	350
	Permits, Licenses, Fees	27,178	36,635	40,500
	Dues, Travel, Advertising	2,099	3,500	3,000
	Equipment UV	1,673	16,000	16,000
	Regional Copermittee Cost-share; Monitoring, RURMP, WURMP	131,902	146,000	146,000
	Vehicle Maintenance		76,156	79,041
Water Utilities	**Total**	**1,131,730**	**1,313,274**	**1,379,891**
Public Works	Street Sweeping (Equipment)	677,505	675,000	740,201
	Street Sweeping (staffing and /or contract costs)	773,472	775,000	$779,719
	Conveyance System Cleaning (Contracted Work and City Staff	223,952	330,000	370,000
	Personnel for CWP Monitoring	65,000	65,000	65,000
Public Works	**Total**	**1,739,929**	**1,845,000**	**1,954,920**
Engineering Division	Personnel	95,849	100,000	110,000
	Hydromodification Plan	0	0	0
Engineering Division	**Total**	**95,849**	**100,000**	**110,000**
	Grand Total	**2,967,508**	**3,268,274**	**3,344,811**

11.0 EFFECTIVENESS ASSESSMENT COMPONENT

11.1 Introduction

Effectiveness assessment is an important component of the JURMP because it can assist the City in determining which programs, and program components, are effectively improving water quality or leading to water quality improvement. The San Diego County Copermittees developed two guidance documents to assist in the assessment of the JURMP components as well as the jurisdictions overall JURMP program. These two documents are titled *A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* and the *Baseline Long-term Effectiveness Assessment* (BLTEA). The City participated in regional efforts to develop these documents in anticipation of the requirement to assess their JURMP programs.

The City gathered and evaluated data for some of the program components for assessment during this reporting period. This data will be valuable for incorporation into long-term effectiveness evaluation on a jurisdictional level. In future reporting years, the issue of standardized assessment metrics and procedures will be addressed by the Copermittees. The City anticipates participation in the further development of these work products.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The City regularly evaluates its program to make it as effective as possible. The overall structure of the City's storm water program is composed of three primary components:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes.

Next the program developed during the planning step is implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique. The effectiveness assessment approach developed by the Copermittees during the 2005-06 permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

- Level 1: Compliance with Activity-Based Permit Requirements
- Level 2: Changes in Knowledge/Awareness

- Level 3: Behavioral Change/BMP Implementation
- Level 4: Load Reductions
- Level 5: Changes in Discharge Quality
- Level 6: Changes in Receiving Water Quality

The establishment of measurable outcomes is necessary for both incremental program component improvements and as a basis for future establishment of relationships between implementation and water quality improvement outcomes.

11.2 Effectiveness Assessment Results

The Municipal Permit Order 2007-0001 requires the City to assess the effectiveness of each significant activity specific to each program component, for each program component as a whole, and for the storm water program as a whole. Levels 1, 2, 3, 4, 5, and 6 outcomes are discussed in the text below. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 Outcome level assessments

Level 1 – Compliance with Activity-Based Permit Requirements: Documenting Activities

Compliance with Activity-based permit requirements is intended to provide a quantitative assessment that reflects the regional long-term effectiveness assessment framework through targeted outcomes for the City based on various components of the Municipal Permit. Level 1 outcomes take the form of a simple yes or no answer basically answering "Was the control measure completed?" or it may provide feedback that may be quantified, counted, or tracked over time to demonstrate effort or progress.

Level 2 – Changes in Knowledge/Awareness: Raising Awareness

An important goal of storm water programs is to increase the level of knowledge and awareness among target audiences such as residents, businesses, and municipal employees. Level 2 outcomes provide program managers feedback on how effective the various control measures have been in raising awareness and changing attitudes of the target audience.

Level 3 – Behavioral Change/BMP Implementation: Changing Behavior

A key focus of the storm water management program is to affect changes in behavior. By building increases in knowledge and awareness (Level 2), Level 3 outcomes provide program managers with feedback on how effective the program elements and control measures have been in motivating target audiences to change their behaviors and implement appropriate BMPs.

Level 4 – Load Reductions: Reducing Loads from Sources

Many control measures are intended to reduce the loading of pollutants from targeted sources. Load reductions should, in turn, result in improvements to discharge and

receiving water quality. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning.

Level 5 – Changes in Discharge Quality: Improving Runoff Quality

A primary focus of storm water management programs is to reduce pollutants in storm water to the maximum extent practicable, and to ensure that these discharges do not cause or contribute to violations of water quality standards in receiving waters. At this level baseline measurements of runoff quality are measured to allow comparison. Multi-year data sets are needed in order to have any confidence in the measured change.

Level 6 – Changes in Receiving Water Quality: Protecting Receiving Water Quality

The ultimate objective of storm water management programs is the protection of water bodies. At level 6, program mangers will focus on outcomes such as compliance with water quality standards, protection of biological integrity, and beneficial use attainment.

Summary

Program elements and control measures will typically have outcomes at more than one of the levels described above and not all outcome levels will necessarily be applicable to all activities. The information submitted with this report will address levels 1, 2, 3 and 4. Section 7 of this report, IDDE, will be submitted prior to December 15 and will address level 5.

11.2.2 Overall Component Assessments

11.2.2.1 Development Planning

Despite Staff efforts and availability of document templates, the majority of City permit applicants and their consultants continued to misunderstand and underestimate the requirements of the MS4 Permit and the SUSMP. Many in the development community have experienced a prolonged period of reduced or no activity, due to economic factors and therefore, have not had the opportunity or funding to maintain familiarity with storm water mitigation requirements. Moreover, many are not prepared for the 4% to 20% land area obligations associated with LID and HMP. Those who are unfamiliar with current regulations tend to characterize storm water mitigation requirements as “every-changing”, “too restrictive”, and “too costly”. In short, many developers are simply foregoing development because projects they “no longer pencil-out”.

The City SUSMP

The SUSMP has been updated and expanded to include revised HMP requirements, consistent with the Municipal Permit, and clarifications to the unified LID design approach. The SUSMP includes specific definitions and design parameters for the integration of porous concrete, bioretention facilities, flow-through planters, dry wells, infiltration basins, cisterns, and surface ponds. There are also provisions for implementation of higher-rate biofilters or higher-rate vault based filtration units on redevelopment or retrofit projects.

Projects remain obligated to incorporate source control design features to mitigate pollutants from on-site land use or sources, such as trash enclosures, outdoor storage

areas and vehicle washing. The SUSMP contains BMPs designed to address the pollutant sources and provides corresponding list of mitigation practices.

The most significant revision to the SUSMP was the revision to the Priority Development Project – Storm Water Mitigation Plan (PDP-SWMP) template. The template was revised to incorporate clearer completion guidance, summarize project attributes, and simplify Drainage Management Area (DMA) surface tabulation. The template has been well received by the development community.

By following the SUSMP unified LID design approach and addressing the HMP requirements, applicants are able to develop an integrated design which complies with the complex and overlapping NPDES permit. The updated SUSMP, Storm Water Quality Assessment (SWQA) form, and SWMP template are available at the City of Oceanside – Development Services counter or may be downloaded from the City Development Services Department – Engineering Division webpage.

Interdepartmental Coordination
The City's SUSMP and development review process involves multiple Departments and Divisions throughout the City. The City has taken necessary steps to maintain compliance with SUSMP requirements through the coordination of these multiple departments and divisions.

Dedicated Storm Water Management Program
The City established the Clean Water Program (CWP) in 2001 under the Water Utilities Department. During this reporting period the CWP program in conjunction with the Engineering Division provided the necessary oversight for all management components of the SUSMP.

Table 11-1 presents the Level 1 Compliance with Activity-Based Requirements. The 24% and 60% SWMP completion rates indicate that many of the priority development projects remain in the process of developing an SWMP. The actual number of SWMP reviews per project may vary significantly. Some projects obtain plan approval in the second review cycle, while others may require as many as ten review cycles to produce a SWMP that is consistent with the Municipal Permit and SUSMP. The average project requires three to four reviews to obtain approve of the SWMP.

As the City develops more projects which are subject to the requirements of the Municipal Permit, the inherent challenges associated with data management will emerge such as tracking of post-construction Treatment Control BMPs, maintenances agreements, and associated documents become more numerous. To counter the possibility, the City Development Services Department, which includes Building, and Engineering Divisions, chose CRW Systems, Inc. program called TRAKiT® as a data tracking system which was rolled out in the 2009-10 reporting year. See section 3.2.1 of this annual report for more detailed information about the TRAKiT® database.

Table 11-1. Development Planning – Level 1: Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Development Planning D.1.e	Development Projects	Projects requiring SWMP	Projects completing SWMP	Actual/Target	Percent (%) Completion
	Priority Projects (Required PDP-SWMP)	33	8	8/33	24
	Standard Projects (Require SDP-SWMP)	10	6	6/10	60
	SUSMP Inspections	Sites targeted for Inspection	Sites Inspected	Actual/Target	%
	High Priority Sites (Annual)	10	10	10/10	100
	All Sites (Target: 20% of 139)	35	52	52/35	148

11.2.2.2 Construction

The construction component of the City's JURMP continues to be effectively implemented through inspection and enforcement, education and training and BMP maintenance (Table 11-2). As construction activities continue, the City will maintain the level of performance established from past years, and continue to meet the regulatory standards mandated in the Municipal permit.

Table 11-2. Construction – Level 1: Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Development Planning D.2.d	Construction Projects	sites targeted for Inspection	sites inspected	Actual/Target	Percent (%) Completion
	High Priority Sites	15	15	15/15	100
	Medium Priority	10	10	10/10	100
	Low Priority Sites	9	9	9/9	100

11.2.2.3 Municipal

The municipal component of the City's JURMP continues to provide a well-rounded approach and will continue to implement a comprehensive education program along with inspections of municipal facilities, MS4 maintenance, sanitary sewer slip-lining and street sweeping.

Table 11-3 provides the Level 1 Compliance with Activity-Based Requirements and Level 4 - Load Reductions Reducing Loads from Sources.

Table 11-3. Municipal – Level 1: Compliance with Activity-Based Requirements; Level 4 - Load Reductions: Reducing Loads from Sources.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.a	Municipal Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent (□) Completion
	(High, Medium and Low priority facilities)	168	168	168/168	100
	MS4	of catch Basins to be cleaned	of catch Basins actually cleaned	Actual/Target	Percent (□) Completion
	Catch basins cleaned	3,250	3,735	3,735/3,250	114
	Sanitary Sewer	of feet to be slip-lined	of feet actually slip-lined	Actual/Target	Percent (□) Completion
	Feet of sewer slip-lined	300	85	85/300	28
	Street Sweeping	of miles of streets to be swept	of miles of streets actually swept	Actual/Target	Percent (□) Completion
	Curb miles of street swept	28,954	32,500	32,500/28,954	112

Employee Training

The City implemented an employee training program that provided pre- and post-quizzes to assess the effectiveness of the training course. During this reporting period online employee training was initiated for ease of implementation for both the Clean Water Program Outreach Coordinator and the staff themselves. On-line training offers employees the opportunity to watch the video and take the pre- and post-quiz at a time that is opportune for them.

During this reporting period the City of Oceanside Clean Water Program purchased a new storm water training video through Excal Visual titled "*Rain Check Stormwater Pollution Prevention for MS4s Employee Training*". More details about this training video can be found in Section 8.2 of this report.

During the 2011-12 reporting year, 92 City employees were trained on the City's storm water program requirements. New pre- and post-tests based on the new Excal Visual video were given to 78 employees to assess the level of knowledge before and after they viewed the video. Depending on the nature of the employee's department, the employees were assigned specific questions from a 40-question quiz. Of the 78 employees who took the quizzes, 31 received a perfect score on the post-quiz. Thus 40% of the employees

who viewed this video for the first time were able to correctly answer the storm water related questions in the post-quiz.

11.2.2.4 Industrial and Commercial

The City implements a comprehensive inspection program for industrial and commercial facilities including all restaurants and nursery and greenhouse operations. Table 11-4 provides an assessment for the inspections.

Table 11-4. Industrial and Commercial Component - Level 1: Compliance with Activity-Based Requirements.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.b	**Industrial Facilities**	of sites to be inspected	of sites actually inspected	Actual/Target	Percent (%) Completion
	High Priority Facilities	15	15	15/15	100%
	Medium and Low Priority Facilities	As Needed	0	N/A	N/A
	Commercial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent (%) Completion
	High Priority Facilities	472	472	472/472	100%
	Medium and Low priority facilities	As needed	56	56/1044	N/A
	Commercial and Industrial Facilities	of sites to be inspected	of sites actually inspected	Actual/Target	Percent (%) Completion
	All Inventoried Facilities (25% of 1,543 Facilities)	386	570	570/386	147% (Exceeded 25% Requirement)

Lucity, the City of Oceanside's management and inspection tracking software, continued to be utilized during the 2011-12 reporting period for industrial and commercial NPDES inspections. Several discrepancies were found throughout the year, such as duplicate records, inadvertently changed priority levels, and missing, new, or out of business facilities. As these were found, the inventory master list and the database entries were updated. However, as with any data management tool, updating and using a constantly changing list of establishments continues to be a challenge.

During this reporting year, the Clean Water Program performed a comprehensive review of its Low Priority commercial businesses. The purpose was to determine whether these sites were to remain in the watershed-based inventory based on criteria set forth in the municipal permit. The Clean Water Program removed a set of establishments that were determined to pose no risk in contributing pollutants to the MS4. See Section 5.2.2 for more details.

11.2.2.5 Residential

The City's residential component achieves BMP implementation through complaint response, education, and routine monitoring to detect IC/IDs. The City is also conducting additional monitoring studies to help identify and mitigate residential sources of pollution more effectively. Although fewer households participated in dropping off household hazardous waste during this reporting period, more quantity of household hazardous waste was collected for proper disposal (Table 11-5).

Table 11-5. Residential Component - Behavioral Change/BMP Implementation Changing Behavior.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Residential D.3.e	Household Hazardous Material	Quantity of waste targeted	Quantity of waste collected	Actual/Target	Percent ( ) Completion
		130 tons	338 tons	338/130	260
	Households Participating in Program	of households targeted	of households participating	Actual/Target	Percent ( ) Completion
		3,500	3,098	3,098/3,500	88

11.2.2.6 IDDE

An assessment of this component will be provided in Section 7 when the City submits the entire FY 2010-11 Illicit Discharge Detection and Elimination Component, including the 2010 Dry Weather Field Screening and Analytical Monitoring, no later than December 15, 2011.

11.2.2.7 Education and Public Participation

The City implements a comprehensive education outreach program for both municipal staff and the public as well as a comprehensive public participation program (Table 11-6). See 11.2.2.3 above for an assessment of the Municipal training program. The City prides itself on educating children within its jurisdiction through the use of a watershed model and the Project SWELL curriculum incorporated into the 5th grade science curriculum.

Table 11-6. Education and Public Participation Component - Compliance with Activity-Based Permit Requirements: Documenting Activities.

Permit Section	Activity Source Type	Targeted Outcome	Actual	Measures of Success	
Municipal D.3.g	Student Presentations	of presentations targeted	of presentations completed	Actual/Target	Percent ( ) Completion
		10	31	31/10	310
	Green Oceanside Newsletters	of newsletters targeted for completion	of newsletters completed	Actual/Target	Percent ( ) Completion
		2	2	2/2	100
	Oceanside Update Tapings	of tapings planned	of tapings completed	Actual/Target	Percent ( ) Completion
		6	5	5/6	83
	CWP Website	of targeted hits	of actual hits	Actual/Target	Percent ( ) Completion
		45,000	2,629	2,629/45,000	5

See section 8.3 of this report for details on the low number of hits to the Clean Water Program Website.

11.3 Program Review and Modification

No changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

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12.0 SPECIAL INVESTIGATIONS

12.1 Lower San Luis Rey Bacteria Source Identification Project

12.1.1 Overview

Project Background

The Pacific Ocean shoreline at the outlet of the San Luis Rey (SLR) River mouth, located in the City of Oceanside, is a stretch of coastline with a large sandy beach and an easily accessible surf break, making it one of the city's most popular places for recreation. As a result of historical fecal indicator bacteria (FIB) exceedances at the beach, one-half mile of shoreline is listed as an impaired water body under section 303(d) of the Clean Water Act for exceedances of indicator bacterial standards and is included in the recently adopted Total Maximum Daily Load (TMDL) for Fecal Indicator Bacteria, Project I for Beaches and Creeks in the San Diego Region (Bacteria I TMDL).

To address the elevated levels of FIB and in anticipation of the TMDL, the City applied for and was awarded the State Water Resources Control Board (SWRCB) Proposition 50 Clean Beaches Initiative Grant Program to implement the Lower SLR River Bacterial Source Identification Project. The overall goals of the Project were to identify hotspots of FIB within the Lower SLR River, identify potential sources, and prioritize those sources and/or locations for future management measures to reduce bacteria concentrations.

Grant Award

The City received $554,375 from the SWRCB and, with the assistance of other stakeholders, was budgeted to match $141,750 to implement the source identification project in the lower river and river mouth. The City awarded MACTEC Engineering and Consulting, Inc. (MACTEC) and their team of leading scientists the contract for the organization and completion of the study.

Project Overview

The Lower SLR River Bacterial Source Identification Project was designed as the initial phase of a source investigation to provide a broad characterization of bacterial concentrations throughout the SLR River and river mouth. The Project was designed to attain the following goals:

- Assess what sources and activities have contributed most to the bacterial impairment of the SLR River mouth and from where those sources and activities may have originated.
- Analyze potential bacterial source elimination or reduction practices targeted at the identified sources and activities.
- Contribute to future achievement of bacterial TMDL objectives by identifying potential management measures (MMs) and follow-up studies to target sources and activities more effectively.

The Project goals were accomplished by integrating data from the following independent monitoring programs:

- The Microbial Source Tracking (MST) Program was implemented by the Prop 50 Grant Project team. The MST Program included monitoring 11 sites within the lower 7.5 miles of the SLR River during wet and dry conditions, a tiered analytical approach for microbial source tracking, and a visual observation program to identify upstream activities in the watershed that may be potential sources of bacteria.
- The Joint Monitoring (JM) Program was completed by the City of Oceanside and the County of San Diego, Department of Public Works as in-kind services to the Grant. Monthly dry weather monitoring was conducted at 18 locations within the lower 19.2 miles of the SLR Watershed.
- The Department of Environmental Health (DEH) AB411 Program was conducted by the County of San Diego, Department of Environmental Health. Weekly dry weather monitoring of the Pacific Shoreline was conducted 75 feet south of the SLR River outlet.

During the MST Program, the main component of the grant, water samples were collected during dry and wet weather for FIB and microbial source tracking analysis in the SLR River mouth, the main stem of the river, and tributary locations. Visual observations were conducted in conjunction with sampling activities, when possible, within 14 zones of residential, commercial, and/or park areas. The MST dry season monitoring was implemented in 2008 and 2010 between the months of May to August. There were a total of four dry season sampling events; two events per year. Due to the Stop Work Order from the State, there was no activity on the Project during 2009. Wet season monitoring was conducted in 2010 and 2011 during the months of December to February. Wet season monitoring events consisted of a dry weather baseline event, two wet weather (storm) events, and two (dry weather) base flow events.

All FIB results from the MST Program were compared to selection criteria based on the Basin Plan Rec-1 WQOs in order to identify samples for further microbial source analyses. This multi-tiered approach utilizes a tool box of traditional fecal indicator bacterial analyses and quantitative molecular assays that are optimal for microbial source tracking in urban environments. These include:

- Three quantitative polymerase chain reaction (QPCR) fecal *Bacteroides* spp. assays were conducted to confirm the presence of human fecal bacteria, taking into consideration a spectrum of specificity and sensitivity.
- Enterovirus assays quantified the enteric viral concentrations present in water samples and were used as a tool to characterize the threat to human health.
- A gull specific marker, *Catellicoccus marimammalium*, was used to provide important information about the impact of seagulls in the SLR River.
- A bacterial community analysis was used to characterize the bacterial communities in the water column and sediment in the river mouth during dry weather.

The City of Oceanside and the County of San Diego conducted the Joint Monitoring Program over the entire project duration. Water samples were collected monthly at main stem, tributary, river mouth, and AB411 locations during dry weather for the JM Program.

12.1.2 Activities completed during previous reporting periods

Establishment of a TAC

A Technical Advisory Committee (TAC) was established for the Project to be involved in all aspects of the project, including project approach and oversight of the monitoring and reporting. There were six members representing the following agencies: the Regional Water Quality Control Board, County of San Diego, City of Vista, and San Diego Coastkeeper. In addition to there were three representatives from the City of Oceanside. Two TAC meetings were held in FY 2008-09. One TAC meeting was held in FY 2009-10.

Monitoring Plan and Quality Assurance Project Plan Approval

The SWRCB approved the original Quality Assurance Project Plan (QAPP) and Monitoring Plan (MP) on June 19, 2008. Revisions throughout the duration of the Project were made to adjust for laboratory changes, genetic analyses updates, and to update the monitoring schedule.

First Dry Season Monitoring Events 2008

The first dry season monitoring event took place on June 18 and 19, 2008. The project team collected bacteria samples and flow measurements at six monitoring locations in the Lower San Luis Rey River. The bacteria samples were analyzed for fecal indicator bacteria and the remaining sample volume was filtered and frozen for molecular analysis. The river mouth was not sampled, as planned, due to construction of the Pacific Street Bridge.

The second dry season event took place on July 23 and 24, 2008. The project team collected bacteria samples and flow measurements at five of six monitoring locations in the Lower San Luis Rey River. As part of the Visual Observation Program, observations were conducted July 23 and 24, 2008 within the Lower San Luis Rey River and upstream in the drainage basin to identify possible sources of bacteria. The river mouth was again not sampled, due to construction of the Pacific Street Bridge.

Suspension of Funds from State Water Resource Control Board, Dept. of Finance

On December 19, 2008, the SWRCB issued a Budget Letter that suspended all projects including the Lower San Luis Rey Source Identification Project. All work was stopped. The work completed after this notice was primarily to assess the status of various elements of the project, including laboratory work and the effect of the stop work notice on genetic analysis. Unfortunately, during the year-long stop work order, samples for two of the three types of genetic analyses had expired and were therefore no longer available for use to the program. During this period, samples were analyzed only for *Enterovirus A* by Dr. Jed Furman's laboratory at the University of Southern California.

The monthly joint monitoring program conducted by the City of Oceanside and the County of San Diego continued as modified for the grant project until June of 2009. In June 2009, the City and County agreed to continue the monitoring program, but the City brought the monitoring in-house to the San Luis Rey Wastewater Treatment Plan Laboratory. The same field procedures were followed, but the reporting limits changed to above SWAMP recommendations.

Reinstatement of Funds from State Water Resource Control Board

On December 17, 2009, the State Water Resources Control Board gave the City of Oceanside notice that the Lower San Luis Rey Source Identification Project grant had been selected to restart. With an original grant end date of March 31, 2010, the City of Oceanside, on January 4, 2010, submitted a Request for Time Extension in order to complete the remaining two-thirds of the field and laboratory work required.

The monthly joint monitoring conducted by the City of Oceanside and the County of San Diego supplementing the grant field work restarted immediately. On April 14, 2010, the City of Oceanside received the executed amendment to the Grant Agreement and work began then to restart the project.

Dry Season Monitoring Events 2010

The third dry season monitoring event in the Lower San Luis Rey River/River Mouth took place on May 18, 19, and 20, 2010. On May 18, 2010, The City of Oceanside and the County of San Diego conducted the joint monitoring at 17 locations in Lower San Luis Rey River and the grant project team collected composite water samples and sediment samples at five locations in the River Mouth. In addition, the City of Oceanside collected additional samples at each Watershed monitoring location for potential further genetic analysis on upstream sites within the City boundary and the Visual Observations Program was implemented at four locations near the river mouth. On May 19 and 20, 2010, the grant project team collected composite water samples and sediment samples at five locations in the River Mouth and composite water samples at two river locations (Bonsall Bridge and Benet Bridge).

The fourth dry season monitoring event in the San Luis Rey River Mouth was implemented on August 3 and 4, 2010. On August 3 and 4, 2010, the grant project team collected composite water samples and paired sediment samples at four locations in the River Mouth. A total of eight water samples and eight sediment samples were collected for the August Event. The river mouth had closed naturally, a common occurrence during this time of year, and the sampling point furthest west, Point Zero, was still included as one of the four sampling locations. During this event, bird populations were observed bathing and wading at this site.

Wet Season Monitoring Events 2010-11

The baseline monitoring event in the San Luis Rey River Mouth was implemented on December 9, 2010 and December 15, 2010. On December 9, 2010, the grant project team collected composite water samples at seven locations in the river and river mouth. On December 15, 2010, one composite water sample was collected at the Critical Point. A total of eight water samples were collected for the Baseline Event. The river mouth was open to tidal influence at the time of sampling. During this event, bird populations were observed bathing and wading around an island that formed near the River Mouth Site 1. The Visual Observations Program was implemented on December 9th. Two teams of two walked a total of five zones adjacent to the river mouth and the river adjacent to Douglas Bridge.

The first storm event sampling began on January 3, 2011. Samples were collected at nine monitoring locations on January 3, 2011 and January 4, 2011. Samples on January 3, 2011 were collected on the rising limb of the hydrograph (based on flow data from the USGS Station at

Benet Bridge (Critical Point)). Samples on January 4, 2011 were collected on the falling limb of the hydrograph after the peak flow had occurred (based on flow data from the USGS Station at Benet Bridge (Critical Point)).

Following the first storm event, a baseflow event was conducted and samples were collected at nine monitoring locations on January 20, 2011 subsequent to an advisory posting of the river mouth by County Department of Environmental Health.

The second storm event began on February 17, 2011. Samples on February 17, 2011 were collected on the rising limb of the hydrograph (based on flow data from the USGS Station at Benet Bridge (Critical Point)). Samples on February 18, 2011 were collected between the peak and falling limb of the hydrograph (based on flow data from the USGS Station at Benet Bridge (Critical Point)). On February 14, 2011, two teams conducted visual observations in Zones 5, 6, 8, 9, 11, and 12. Based on the weather forecast, the team conducted visual observations of sources of bacteria in the watershed that had the potential to be introduced into runoff during the coming storm event.

A second baseflow event was conducted on February 24, 2011 after the second storm event. Samples were collected at nine monitoring locations on February 24, 2011, which was 72 hours after rainfall ended. Also on February 24, 2011, two teams conducted visual observations in Zones 1, 5, 6, 11, 12, and in the downstream portion of the Sleeping Indian watershed.

Project Report

During FY 2010-11 all monitoring activities were completed for the Grant Project. Effort on the final report began.

12.1.3 Activities completed during the current reporting period

Project Report

The Draft Final Report was submitted to the SWRCB on August 1, 2011. The City received comments from the SWRCB on August 18, 2011. The Final Report with changes was submitted on September 1, 2011. The Grant Manager had additional questions, which were addressed by an Addendum submitted to the SWRCB by the City on September 12, 2011.

Summary of Results and Conclusions

The Prop 50 Grant Project was effective in characterizing bacterial concentrations throughout the Lower SLR River and river mouth during wet and dry seasons. A summary of conclusions is provided below.

<u>River Mouth:</u>

- FIB concentrations were generally below WQOs in the river mouth during the summer months when human exposure and health risks are highest at the Pacific Ocean.
- Although FIB concentrations were below WQOs, multiple MST molecular markers for human-related bacterial sources were present in August when the river mouth was closed to ocean inputs and SLR River flow was significantly reduced. Human sources of contamination have been identified subsequently in this area, including an active sewer

pipe. Other factors could be important to the retention of fecal contamination in this area, including low residence time and hydrologic conditions in the river mouth during low flow.

- The bacterial community analysis showed a lack of relationship between the sediment and water samples in May when the river mouth is open to tidal exchange. Conversely, there was a strong relationship between the sediment and water samples in August when the river mouth is closed. The sediment bacterial community is stable during the dry season and was not analyzed during the wet season. It should be noted that the bacterial community analysis was only conducted on river mouth samples and no analysis was conducted to evaluate the relationship between the SLR River's main stem and tributaries and the river mouth monitoring locations.
- No enteroviruses were recorded during the dry season.
- A strong signal of gull feces was found in the river mouth during the wet and dry seasons.
- FIB concentrations significantly increased in the wet season resulting in a higher frequency of WQO exceedances.
- There was evidence of potential human-related bacterial sources (a minimum of two out of three markers) at River Mouth 1 and River Mouth 3 throughout the wet season, while at Point Zero there was evidence of potential human-related bacterial sources (a minimum of two out of three markers) at a lower frequency.
- One sample collected at River Mouth 1 during Wet Event 1 was positive for enteroviruses.
- Of the 74 samples from the DEH AB411 program, 12 results for *Enterococcus* sp, and 4 results for fecal coliform were above the respective WQOs, whereas no total coliform results exceeded the WQO.

<u>SLR River Main Stem:</u>

- The MST Program study data at the SLR main stem reinforced trends in elevated FIB concentrations seen in the data collected by the Joint Monitoring Program.
- In May of 2010, there were potential (two of three markers) human-related bacterial sources present at Bonsall Bridge, Douglas Bridge, and the Critical Point.
- No enteroviruses were detected in samples at the main stem monitoring locations during dry or wet seasons.
- During the wet season, the Douglas Bridge and Critical Point locations exhibited strong positive signals for all three MST molecular markers of human fecal *Bacteroides* spp.
- FIB concentrations and loadings did not change significantly in the river during base flow conditions.
- A trend toward delivery of bacterial loadings in the first half of the storm event was demonstrated by a simple first flush analysis. This indicates a possible first flush effect and may aid in the future selection and design of appropriate BMPs.

<u>Tributaries:</u>

- The MST Program study data at the SLR tributaries reinforced trends in elevated FIB concentrations seen in the data collected by the Joint Monitoring Program.
- In May of 2010, there were potential human-related bacterial sources present at Sleeping Indian and Pilgrim Creek.

- No enteroviruses were detected in samples at the tributaries during dry or wet seasons.
- During the wet season, Sleeping Indian and Pilgrim Creek exhibited strong positive signals for all three MST molecular markers of human fecal *Bacteroides* spp.
- FIB concentrations and loadings did not change significantly in the tributaries after storms passed during base flow conditions.
- The assessment of flow relative to concentrations of FIB and human-specific markers indicates the importance of bacterial sources stemming from low flow areas or low dilution (i.e., tributaries).
- A trend toward delivery of bacterial loadings in the first half of the storm event was demonstrated by a simple first flush analysis. This indicates a possible first flush effect and may aid in the future selection and design of appropriate BMPs.

Recommendations

The Project was designed as the first phase in source identification to assess the magnitude and extent of elevated FIB and to characterize sources on a broad scale. Based on results from this study, recommendations were developed to provide further information to help select the most feasible and effective management strategies necessary to reduce bacterial concentrations. Recommendations included follow-up source investigations, an assessment of the relationship between the river mouth and ocean, and focused management measures including source controls, decentralized treatment controls and centralized treatment controls. Some general recommendations include:

- To identify possible sources of overflow or leaks along the main stem river and tributaries, a desktop GIS analysis of the City's sewer infrastructure and septic systems may be conducted. Field surveys, such as dye testing or the use of closed circuit television (CCTV), may be considered to identify leaks or illicit connections.
- Focus education and outreach based on activities documented in visual surveys and known land use types.
- Higher resolution data is required for an evaluation of loading and possible implementation of structural treatment control BMPs. This may be accomplished through continuous flow and higher resolution FIB sampling at the outlets during the wet season to characterize conditions over the course of the hydrograph and continuous flow and higher resolution FIB sampling at the outlet over a 24 hour period during dry weather (including base flow conditions and dry season, when flow is present).
- Characterize the flow patterns within the river mouth system to understand the general transport of fecal bacteria sources and their ultimate fate.
- Design a groundwater study to gain a better understanding of groundwater dynamics and their relationship to surface water in the SLR River and river mouth during base flow conditions.
- To contribute to future achievement of the Bacteria TMDL, it will be important to assess the interaction between the river mouth and the Pacific Ocean. To characterize the dispersal of the bacterial and viral material from the SLR River outlet along the shoreline, multiple sampling locations between the river mouth and the AB411 monitoring location may be monitored.
- To allow for accurate loading calculations and an assessment of bacterial loads and flux over the course of the monitoring period at the river mouth, pollutograph monitoring may

be employed at a river mouth location to characterize bacteria on a higher resolution time frame. Acoustic Doppler current profilers (ADCPs) may be utilized to collect continuous flow measurements during sampling events.

- To identify potentially failing septic (onsite) wastewater systems viral tracking, dye testing, inspections and/or other methods may be utilized. Once identified, an inspection and maintenance schedule may be developed and revised to prioritize the septic systems in the SLR watershed, based on threats to groundwater and receiving water quality. Based on available resources and feasibility, a capital improvement plan for conversion of septic systems to sanitary sewers may be developed in appropriate areas.
- To address the human-related bacterial sources present in the river mouth during the dry season, when the river mouth is closed to ocean inputs and the SLR River flow is significantly reduced, the feasibility of hydraulic modifications to the river mouth and/or the SLR River outlet may be evaluated to reduce residence time and increase flushing during the dry season. A feasibility study may be implemented after additional monitoring has been conducted to better understand the hydrology of the river mouth and retention of FIB in the river mouth. Based on available resources, the feasibility study could identify benefits and constraints for current and alternative hydraulic configurations of the river mouth.

Future Actions

The SLR Watershed TMDL Responsible Parties have developed and are finalizing a Comprehensive Load Reduction Plan (CLRP) for the SLR Watershed to address the Bacteria I TMDL. The CLRP will provide a watershed-based approach to assess impairments and sources and implement a phased approach to pollutant reduction strategies. The results of this project will be used immediately by the SLR TMDL Responsible Parties in the development of the CLRP addressing bacteria. Project data will be used to focus the initial phase of CLRP implementation by assisting in the prioritization of source and sub-watershed activities.

With preliminary results indicating human sources of bacteria, the City of Oceanside has taken a proactive approach and already has begun to implement a key recommendation from this project, initiating the desktop GIS analysis of the City's sewage infrastructure. The City's Clean Water Program is working closely with the City's Sewer Division to develop an action plan to investigate the City's sewage infrastructure.

Project Closure

The City submitted the final quarterly report and invoice on October 7, 2011. The SWRCB closed the project on October 25, 2011.

12.2 Loma Alta Creek Ultraviolet Light Treatment Facility

12.2.1 Overview

Loma Alta Creek Lagoon and Buccaneer Beach, located in the City of Oceanside, have historically been impacted by high levels of bacteria. This is a family beach adjacent to a park with a large parking area, showers and an eating establishment that sees large crowds during the dry months. The City has determined that a key source of bacteria and nutrients in Loma Alta Creek is urban runoff that discharges into the creek. The source of water for Loma Alta Creek is

from storm drain flows and hillside seepage from the Loma Alta watershed, which drains approximately 6,400 acres, and flows through densely developed residential, commercial, and industrial land uses.

In 2005, the City was awarded a $5,000,000 Proposition 40 Clean Beaches Initiative (CBI) grant by the SWRCB to construct an ultraviolet (UV) light treatment facility at the existing La Salina Wastewater Treatment Facility. One hundred percent of the dry weather creek flows (averaging 300 to 700 gallons per minute) will be intercepted in the lagoon and diverted to the UV treatment facility, located on the northern bank of the creek. The treatment facility consists of piping flows from an exiting diversion structure by gravity from the lagoon through a 2 micron fine screen to a wet well where the flow is pumped into two large sand filters followed by two UV disinfection units housed in a reinforced concrete building. The treated water is discharged through a pipe extended along the existing section of rip-rap that runs along the north side of the Loma Alta creek outlet at Buccaneer Beach. During wet weather months (November through April), the lagoon would be opened to allow free flow to the ocean and the UV system would be bypassed. See Figure 12-1 for a photo of the facility.

Figure 12-1. Oceanside Loma Alta Creek UV Facility.

12.2.2 Activities completed during previous reporting periods

The California Coastal Commission approved Permit No. 6-06-152 for construction of the outfall pipe associated with the UV treatment facility on June 14, 2007. Loma Alta Creek UV Treatment Facility project entered into the construction phase on August 13, 2007 when the official Notice to Proceed was issued to Orion Construction Corporation.

Each year the Loma Alta Creek Ultraviolet Light Treatment Facility is scheduled to start treatment in May and continue through September.

During the summer of 2009, repairs and upgrades were required to restart the facility and operation began in June. The plant typically ran three to four days a week with average flows of 300 gallons per minute. No water was discharged onto the beach when the UV Facility was offline. Flows were lower than expected due to drought conditions and conservation efforts of Oceanside residents. See Figure 12-2 for a photo of treated water being released from the UV Outfall pipe.

Figure 12-2. Oceanside Loma Alta Creek UV Outfall pipe releasing treated water.

Water samples were taken weekly from Buccaneer Beach directly in front of the discharge pipe and seventy-five feet north and south of the discharge pipe. The samples were tested for total and fecal coliform and Enterococcus. All samples taken during summer 2009 met California Department of Health Services AB411 Objectives and there were no postings due to bacterial levels exceeding standards set by the County Department of Environmental Health. The UV Facility ran through September 2009.

During the 2009-10 reporting year, Loma Alta Creek flows continued to be lower than expected during drought conditions warranting sporadic running of the UV facility. The facility began running in June 2010 for the summer dry season and discontinued running in October 2010. It ran for a total of 27 days during this time period. Approximately 16 million gallons of water was treated through the facility during the summer of 2010.

During the 2010-11 reporting year, the Oceanside Loma Alta Creek UV Treatment Plant operated between June and August 2011 for a total of 57 days. Higher flows in the Creek allowed continuous treatment through mid-July. Approximately 25 million gallons of water was treated through the facility.

12.2.3 Activities completed during current reporting period

During the 2011-12 reporting year, the Oceanside Loma Alta Creek UV Treatment Plant operated between May and September 2012. The September 2012 data was not available for reporting, however between May and August, the plant operated a total of 80 days. Approximately 31 million gallons of water was treated through the facility.

12.3 San Diego RWQCB Loma Alta Slough Bacteria and Nutrient TMDL Development

Development of the Loma Alta Slough Bacteria and Nutrient TMDL began in the fall of 2009 lead by the San Diego Regional Water Quality Control Board (SDRWQCB). Modeling for the Bacteria and Nutrient TMDL, completed by an SDRWQCB contractor, is expected to be complete by the end of 2012. During the development process, several data gaps had been identified and, where possible, additional monitoring was completed to fill the gaps for modeling purposes.

12.3.1 Activities completed during previous reporting period

12.3.1.1 Data Sonde Deployment in the Slough

Data collected pursuant to Investigative Order R9-2006-076 in Loma Alta Slough only required one data sonde deployed at depth in the Slough. During the TMDL model development, a data gap was identified for water quality monitoring data closer to the surface of the Slough. To capture this data, the City deployed data sondes at two depths at one location to measure temperature, specific conductivity, dissolved oxygen, turbidity, and pH. Data was collected from September 17 through October 14, 2010. This data was then submitted to the SDRWQCB contractor, the Southern California Coastal Water Research Project (SCCWRP) and their subconsultants for use with TMDL modeling.

12.3.2 Activities completed during current reporting period

12.3.2.1 Low Flow Monitoring at the Mass Emissions Station

Flow data collected pursuant to Investigative Order R9-2006-076 in Loma Alta Slough at the watershed mass emissions station (MES) was flagged for questionable quality assurance in the final monitoring report. The flow was likely overestimated due to a manufacturing defect to the pressure transducer. This flow data was used in initial TMDL modeling efforts. The greatest impact to this overestimation is during dry weather where estimated watershed loads from the model are much greater than loads calculated through other monitoring. Therefore, during the TMDL model development, a data gap was identified for low flow (late summer) flow data. To capture this data, the City worked with the SDRWQCB contractor, Southern California Coastal Water Research Project (SCCWRP), and a City contractor to construct a weir, install flow equipment, and measure and maintain flow during late summer 2011. Data was collected from September 22 through October 3, 2011. This data was then submitted (SCCWRP) and their subconsultants for use with TMDL modeling.

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13.0 NON-EMERGENCY FIRE FIGHTING

Emergency fire fighting flows (flows necessary for the protection of life or property) are allowed by the Municipal Permit and do not require implementation of BMPs. Non-emergency fire fighting BMPs and educational methods for reducing the discharge of pollutants from non-emergency flows to the MEP are described below.

Table 13-1. Order 2007-0001 Compliance Summary.

J.3.a(3)(1)iv Non-Emergency Fire Fighting	See Entire Section 13 of this Annual Report

13.1 Best Management Practices

The City developed and implemented a program to reduce pollutants from non-emergency fire fighting flows, in accordance with Section B.3 of Permit Order 2007-0001. BMPs were implemented when the following activities were conducted:

- Regular Maintenance of Fire and Emergency Vehicles and Equipment
- Training Exercises
- Facilities Maintenance
- Post-Emergency Rehabilitation of Response Equipment

These activities were conducted in a way to either minimize or eliminate the discharge of pollutants to the MS4. Detailed descriptions of BMPs are given for each activity below:

Regular Maintenance of Fire and Emergency Vehicles and Equipment

- Vehicles and equipment were cleaned where runoff was directed to either the sanitary sewer system or to a drain with an oil/water separator system.
- Vehicles and equipment were cleaned where runoff would pond and evaporate and/or where runoff would filter through landscaped areas.
- Sewer drains in a vehicle cleaning area were outfitted with a hydro screen fabric barrier to collect debris.
- Spill kits were available to promptly cleanup and contain leaking or spilled vehicle fluids.
- Use of soaps, cleaners, and detergents were minimized, and general cleaning solutions were disposed of into the sanitary sewer system.

Training Exercises

- Water used in training exercises was directed to landscaped areas whenever possible, and runoff from the training exercises was not allowed to discharge to the MS4.
- Live fire training activities were pre-planned to allow integration of barriers to off-site runoff that could contribute to non-storm water discharges.

Facilities Maintenance

- Impervious areas such as apparatus floors, maintenance bays, driveways, patios, and walkways were swept to remove debris. Debris was placed in the trash.
- Landscaped areas were maintained as required to reduce the introduction of leaves and other landscape waste into the MS4.
- Irrigation systems were monitored and maintained as required to reduce irrigation water from going off-site.

- Spills were cleaned up using spill kits provided at the work site, and disposal of spilled material was in accordance with applicable regulations.
- Spills that required a cleanup beyond the ability of the on-site employees were reported to the City's Public Works Department for assistance with appropriate resources.
- Maintenance and repair of structures were conducted using methods that do not contribute pollutants to the MS4.

Post-Emergency Rehabilitation of Response Equipment
Tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency were restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for another emergency response. The use of water that could contribute to storm water discharges was used unless another practical and immediately available method was identified, and was performed in a manner that minimized discharges to the MEP.

13.2 Educational Methods

During live fire fighting training exercises all fire fighters were educated about the requirement to not allow water flows to enter the MS4. Fire fighters in attendance for training sessions about how to use high pressure fire fighting hoses were educated on how to direct the water to percolation basins that are permanently in place at the training grounds. Water that is directed to these basins was allowed to infiltrate into the soil and/or evaporate.

Prior to building structures at the training grounds being set on fire, perimeter controls were put in place to ensure that water from the non-emergency training session did not reach the MS4. Fire fighters in attendance were educated on the proper type and installation protocol of perimeter controls. These perimeter controls were also used for training sessions related to vehicle fires.

14.0 JURMP REVISIONS

There were no changes made to the City of Oceanside's 2008 JURMP during this reporting period. Updates were made to the 2008 JURMP during the 2008-09 reporting period. Details of these changes can be found in Section 14 of the 2008-09 JURMP Annual Report.

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15.0 CONCLUSIONS AND RECOMMENDATIONS

15.1 Introduction

This document was prepared by the City of Oceanside (City) pursuant to the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), Order No. 2007-0001, NPDES No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the San Diego Copermittees. Pursuant to Part J.3.a., of the Municipal Permit, this Jurisdictional Urban Runoff Management Program (JURMP) Annual Report provides a comprehensive description of the activities conducted by the City to meet the requirements of Section D of the Permit during the 2011-2012 annual reporting period (July 1, 2011 – June 30, 2012).

15.2 Conclusions

This annual report presents the activities the City conducted from July 1, 2011 through June 30, 2012 to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The activities involved implementing, and improving where needed, existing programs and developing new programs intended to minimize or eliminate the effects of urban runoff within the City's jurisdiction on receiving water bodies. Improving water quality of the discharge from the MS4 should have beneficial effects on the local receiving water bodies.

As detailed in the Program Effectiveness Assessment Component, the City met all of the development planning targets and met the municipal targets. Long-term effectiveness assessment is an ongoing and iterative process and the City will continue to use this process to further improve its storm water program.

15.3 Recommendations

15.3.1 Database Tracking System for various departments and divisions

During the 2010-11 reporting period several departments within the City moved forward with implementation of various data tracking systems. The Water Utilities Department, which includes Water and Sewer Divisions, and the Clean Water Program, continued using the Lucity (previously GBA Masters Series) software. The Development Services Department, which includes Code Enforcement and Building and Engineering Divisions, continue using TRAKiT, permitting software by CRW Systems. These two systems can accept data and allows for custom queries to provide data for the jurisdictional annual reports. Customization of modules for these two software programs to allow data entry and querying related to the Clean Water Program will be assessed and implemented when needed.

15.3.2 Assessment of Education Program

The Pick Up Your Pet Waste Campaign was initiated in FY 2008-09 to address the accumulation of dog waste along the San Luis Rey Recreation Trail (Trail) which travels adjacent to the San Luis Rey River on both the north and south sides. During FY 2010-11 the City installed four pet waste bag dispensers (Mutt Mitt brand) and four additional trash cans along the Trail where most people access specific sections of the trail.. Modified signage was also installed at the dispenser

stations to emphasize pet owner responsibility. Refill bags continue to be replenished when needed.

Assessment of the Project SWELL 5th and 6th grade curricula is planned for FY 2012-13 in conjunction with Coastkeeper and the City of San Diego. Feedback from teachers and students will be important to evaluate and modify the program, if necessary.

15.3.3 Underserved Target Audience Outreach Spanish Speaking

During this reporting period Spanish materials were disseminated to target the Spanish speaking population about BMPs they can implement to prevent water pollution. This included the Spanish 2012 Regional Storm Water Calendar. Details on this calendar will b submitted with the Regional Urban Runoff Management Program annual report to be submitted to the RWQCB in January 2013.

Attachment 2-A

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															# of Selected Treatment Control BMPs														
Priority	Project Name	Project Address	APN	Construction Date	RP Contact Name	RP Company Name	RP Contact Address	RP Contact City	RP State	RP Zip	RP Phone	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	Inspection Date	Maintenance Records on file	Notes
H	North Oceanside Batch Plant	1050 Airport Rd	145-020-33	3/15/2005	Bob Davies	Hanson Aggregates	PO Box 639069	San Diego	CA	92163-9069	858-967-7913	I	4.35	San Luis Rey						1	1							8/23/2011	Yes	
H	Harbor View Condominiums	800 Harbor Cliff	144-270-07	5/18/2005	Rose Reyes	Curtis Property Management	5050 Avenida Encinas	Carlsbad	CA	92008	760-918-7720	R	16.15	San Luis Rey										15				8/22/2011	Yes	
H	Benet Industrial Center	649 Benet Rd	162-120-46	11/22/2005	Paul Johnson	Sabra Dipping Inc	649 Benet Rd	Oceanside	CA	92054	760-757-2622	I	4.62	San Luis Rey							1			3	4		1	8/23/2011	Yes	
H	Chevron Products Service Company Service Station	1601 North Coast Highway	140-090-17	7/6/2007	Omar Montes	Chevron Products Company	145 State College	Concord	CA	94524	714-671-3295	C	0.42	San Luis Rey														8/22/2011	Yes	
H	Marriott Residence Inn	3603 Ocean Ranch Blvd.	160-572-14	9/24/2007	Steve Scarborough	Plaza At Irvine Partners LLC	2955 Main Street Third	Irvine	CA	92614	949-474-2001	C	3	Loma Alta					3		1				10			8/24/2011	Yes	
H	Ocean Ranch Plaza	3605-3617 Ocean Ranch Blvd.	160-572-15	12/11/2007	Paula Langevin	Kahl& Goveia Commercial Real	24855 Cel Prado	Dana Point	CA	92629	949-276-8300	C	15.1	Loma Alta							4			2	5		1	8/22/2011	Yes	
H	Ocean Terrace Professional Center	3601-3637 Vista Way	165-362-32-1-18	8/11/2008	Jacquet Meissner	Altamira Family Trust/FICO Ocean Terrace, LLC	500 Stevens Ave., Ste. 200	San Diego	CA	92075	858-373-1240	C	9.93	Buena Vista							1			5	6			8/12/2011	Yes	
H	Jack In the Box	1900 Mission Ave.	145-180-29	12/11/2008	Jason General	Jack In the Box, Inc.	100 N. Barranca Pkwy., Ste. 200	West Covina	CA	91791	760-967-3971	C	0.05	San Luis Rey											2	2	2	9/13/2011	Yes	
H	Oceanside Gateway Business Park	1600 Block of Ord Way	162-120-88	3/4/2009	Debbie Cepeda	McKenna & Company	1654 Ord Way	Oceanside	CA	92056	760-295-2185	C	32.4	Loma Alta							1				28	3		7/13/2011	Yes	Maintenance performed by landscapers.
H	Renaissance Terrace	1019 Costa Pacifica Way	143-040-43	3/11/2008	Bill Messer	D.R. Horton	5790 Fleet Street, Suite 210	Carlsbad	CA	92008	(760) 929-1600; 619-729-	R	3.97	San Luis Rey														7/13/2011	Yes	
M	Native Bouquet	3927 Oceanic Dr.	160-680-25	1/26/2005	Tanya Howard	Native Floral	3927 Oceanic Dr	Oceanside	CA	92056	760-721-4262	C	3.18	Loma Alta		1					3				3			8/26/2011	Yes	
M	Pacific Coast Business Park/ Park "C" Parcels 18 &20	1340 Rocky Point	161-512-06, 161-512-09	2/19/2009	Scott Irwin	AMB DFS Pacific Coast, LLC	17777 Center Court Dr., N,	Cerritos	CA	90703	562-345-9219	C		Loma Alta									2			2		7/13/2011	Built out not occupied.	
M	Pacific Coast Business Park/ Park "B" Parcels 13,14,15,16	South of Wind and Sea Between Avenida Del Oro and Rocky Peina	161-512-06, 161-512-09	2/19/2009	Scott Irwin	AMB DFS Pacific Coast, LLC	17777 Center Court Dr., N,	Cerritos	CA	90703	562-345-9219	I	7.67	Loma Alta														8/24/2011	Built out not occupied.	Pending
M	Schnell Industrial Center	3923 Oceanic Dr	160-680-24	6/6/2005	Tim Schnell	Schnell Industrial Center	2720 Loker Rd.	Carlsbad	CA	92008	760-268-0576	I	2.58	Loma Alta							3				4	3		8/26/2011	No	
M	Oceanic Business Park South, Parcels 2,3,4	3907-3291 Oceanic Drive	160-680-21	8/29/2005	Tom Worth	Spectrum Management	8799 Balboa Ave Ste 260	San Diego	CA	92123	858-569-8799	C	5.31	Loma Alta							3				11			8/26/2011	Yes	
M	Venture Commerce Center	3600 Ocean Ranch Blvd.	160-572-04-02	4/26/2006	Paul Denninger	VCC Inc.	1049 Camino Del Mar	Del Mar	CA	94941	415-381-1600	C	8.5	Loma Alta							17				9			8/24/2011	Yes	
M	Oceanic Business Park South, Parcel 1	3801-3803 Oceanic Drive	160-572-18	5/22/2006	Tom Worth	Spectrum Mangement	8799 Balboa Ave Ste 260	San Diego	CA	92123	858-569-8799	C	4.83	Loma Alta							2			1	2	2		8/26/2011	Yes	
M	All State Moving Systems	4670 North Ave	161-660-03	5/26/2006	Marc Files	All State Moving "Systems	4670 North Ave	Oceanside	CA	92056	858-746-1071	I	3.08	Loma Alta							2			4				9/29/2011	Yes	
M	San Luis Rey Station Inc	607 North Douglas Drive	158-030-43	2/16/2007	Jack Kofdarali	San Luis Rey Station	224 S. Jay St	Corona	CA	92879	951-280-3833	C	0.82	San Luis Rey											4			8/23/2011	Yes	
M	Cornerstone RR-Right of Way-Parking	0000 Union Plaza	151-310-33-00	6/24/2008	Leo Todd	Cornerstone Property MGMT	727 Camino De Rio South Ste	San Diego	CA	92108	619-688-0997	C	8.2	Loma Alta														9/13/2011		Under construction.
M	Faris Professional Building	2180 El Camino Real	165-012-10-00	Not Finaled	Mary Opel	Faris ElCam LLC	34185 Blue Lantern St.	Dana Point	CA	92629	949-433-5045	C	0.517	Buena Vista																
M	Lil Jackson Senior Community	3512 Lake Blvd.	168-012-28-00	Not Finaled	Benjamin F. Beckler III	Lil Jackson Senior Community	516 Burchett street	Glendale	CA	91203	(818)-421-1211	R	5.02	Buena Vista																Project completed at end of reporting period.
M	California Funeral Services, INC "Eternal Hills"	1999 El Camino Real Oceanside	165-430-12-00	9/21/2011	Debbie Allen	SCI California Funeral Services, Inc	4300 Imperial Avenue	SD	CA	92102	760-213-3694	C	90.6	Loma Alta							7			5	5			9/29/2011		
M	Libby Lake Village Single Family Homes	N. River rd. at Calle Montecito	157-06-51, 52	Not Finaled	Mike Gehl	Habitat For Humanity	10222 San Diego Mission	San Diego	CA	92108	619-283-4663 ext. 313	R	3.34	San Luis Rey						1				1	1	1				
M	North River Village Mixed Use	N River Rd & Vandergrift	157-040-42	Not Finaled	April Tornillo	Taylor- Woodrow Homes Inc	16745 West Tsernardo Dr	San Diego	CA	92127	858-943-5100	R/C	7.6	San Luis Rey							1	1								
M	Pacific Animal Hospital	2801 Oceanside Blvd	149-271-10-00	7/6/2010	Valerie Ann Caskey &	Pacific Animal Hospital	7964 Sitio Fresca	Carlsbad	CA	92009	760-310-0016	C	0.355	Loma Alta											1	1		9/26/2011		
M	Car Sound Exhaust	1901 Corporate Ctr. Dr.	160-680-04	3/14/2003	Tony Maggio	Magna Flow Exhaust	1901 Corporate Ctr. Dr.	Oceanside	CA	92056	949-858-5900	C	11.76	Loma Alta							2				1	1		9/26/2011	Yes	Vacant at time of inspection.
M	Aptera (Vacant)	4010 Ocean Ranch Blvd.	160-571-19	2/25/2004	Ocean ranch Venture LLC	Ocean ranch Venture LLC	165 S Union Blvd #510	Lakewood	CO	80228	303-986-2222	C	9.83	Loma Alta							7							8/24/2011	No	Maintenance performed by church volunteers.
M	North Coast Methodist Church	1501 Kelly St.	154-170-76-00	5/11/2004	Les Wyman	Morth Coast United methodist Church	1501 Kelly St	Oceanside	CA	92054	760-433-7275	C	8.83	Buena Vista							2							9/28/2011	No	
M	Calvary Chapel	3715 Oceanic Way	160-680-26	6/15/2005	Kevin Schmit	Calvary Chapel Oceanside	3715 Oceanic Way	Oceanside	CA	92056	760-724-1114	C	7.3	Loma Alta	4						5					4		9/27/2011	No	
M	Hooter's Restaurant	3186 Vista Way	165-350-39	6/16/2005	Fred Click	Hoot Wing Inc	3186 Vista Way	Oceanside	CA	92054	760-966-3000	C	1.82	Buena Vista							1		2			1		9/26/2011	Yes	Maintenance performed by landscapers.
M	Deutsch Industrial Products- Molding Assembly Plant Additions	250 Eddie Jones Way	145-021-29	1/26/2006	Don Epstein	Deutsch Industrial Products	250 Eddie Jones Way	Oceanside	CA	92054	760-757-7500	I	1.03	San Luis Rey										1sand				9/13/2011	No	
M	Coca Cola Bottling Company	3900 Ocean Ranch Blvd.	160-572-07	11/20/2006	Robert Belshaw	Coca Cola	2303 Ocean Ranch Blvd.	Oceanside	CA	92056	760-435-7112	C	10.74	Loma Alta							2					1		9/29/2011	Yes	
M	Coca Cola Sales Center	3900 Ocean Ranch Blvd.	160-571-09-00	11/20/2006	Robert Belshaw				CA	92056	619-957-5970	N	0.9	Loma Alta														9/29/2011	Yes	
M	Fresh and Easy	1640 Oceanside Blvd	153-320-39	4/12/2011	Dave Walker				CA		951-312-5054	C		Loma Alta																
M	Fresh and Easy	4131 Oceanside Blvd	162-241-46	5/21/2010	Dave Walker				CA		951-312-5054	C		Loma Alta																
M	Employer's Choice Insurance Services	2111 S El Camino Real # 201	165-011-44	1/4/2007	Gary Menely	Employer's Choice Insurance Services,	503 Villa Bella, Ste. 10	Oceanside	CA	92057	760-809-1676	C	0.5	Buena Vista						1	1				2			9/26/2011	Yes	
M	Mossy Nissan	3535 College Blvd.	168-011-17-00	1/26/2007	Manager	Mossy Nissan	3535 College	Oceanside	CA	92056	760-720-9797	C	1.6	Buena Vista														9/22/2011	No	
M	Seagate Corporate Center	3532 - 3548 Seagate Way	162-082-04	2/13/2007	Danny Crouch	Lusardi Const	1570 Linda Vista dr	San Marcos	CA	92069	760-744-3133	C	29.01	Loma Alta							8	2						8/24/2011	Yes	Business owner performs maintenance on swales.
M	Z Market	3204 Mission Ave.	160-271-43-00	4/13/2007	Jalil Israil	Z Market	3204 Mission Ave	Oceanside	CA	92054	760-967-2184	C	22,500 SqFt	San Luis Rey							2				2			8/23/2011	No	
M	Jiffy Lube	4106 Oceanside Blvd	165-502-28	5/15/2007	Manager	Jiffy Lube Int	4106 Oceanside Blvd	Oceanside	CA	92121	858-457-3235	C	0.42	Loma Alta							1			2				9/28/2011	Yes	
M	HK Plastics	1825 Corporate Center Dr.	160-571-39	6/21/2007	Gerry Krippner	HK Advisors LLC	1825 Corporate Center	Oceanside	CA	92054	760-757-1200	C	5.3	Loma Alta							4				6			8/24/2011	Yes	

Priority	Project Name	Project Address	APN	Construction Date	RP Contact Name	RP Company Name	RP Contact Address	RP Contact City	RP State	RP Zip	RP Phone	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	Inspection Date	Maintenance Records on file	Notes
M	Walgreens	3507 Cannon Rd	169-011-47-00	7/16/2007	Mary Altourian	Bergersous Prop	1959 Plaza Real	Oceanside	CA	92052	631-5111	C	1.91	Buena Vista							1				3			9/26/2011	Yes	
M	Beach Break Café	1802 S Coast Hwy	153-272-01	11/7/2011	Gary & Zell		1802 S Coast Hwy	Oceanside	CA	92054	760-439-6355			Buena Vista														9/26/2011	No	
M	Oceanside Pier Resort	333 North Meyers Street	147-075-1,2,3,4,5,6,7	11/29/2007	Tim Summers	Cendant Timeshare Resort Group, Inc	8728 South Park Circle	Orlando	Fl	32819	866-764-2281	C	1.4	San Luis Rey														9/29/2011	Yes	
M	La Mision Village Mixed Use	3220 Mission Ave	160-271-57	7/3/2008	Ivy Carter	So Cal Housing	10681 Foot Hill Blvd	Rancho Cucamonga	CA	917300	909-291-1400	R	3.02	San Luis Rey							13									New business. Plan to inspect next reporting period
M	Union 76 Oceanside the Oceansider	1660 Oceanside Blvd	152-320-25-00	12/11/2008	Joe Warsoff	The Oceansider	4615 Sunburst Road	Carlsbad	CA	92008	(858)350-4020	C		Loma Alta							1				1			9/27/2011	No	
M	New Venture Christian Fellowsip	4000 Mystera Way	1169-562-01-00	3/16/2009	Pastor Shawn Mitchell	New Venture Christian Fellowship	4000 Mystera Way	Oceanside	CA	92056	760-721-7777	C	0.3	Agua Hedionda											5			9/28/2011	No	Maintenance performed by church volunteers.
M	Loma Alta Village	605 Crouch St	149-330-06	6/19/2009	Tony Badeaux	Loma Alta Village, LLC	600 West Broadway, Suite	San Diego	CA	92101	619-400-8769	C	1.97	Loma Alta														9/28/2011	Yes	
M	Holiday Inn and Suites Hotel	1401 Carmelo Drive	143-060-38	1/7/2010	Chhatraca & Kim	CJK International Investments LLC	PO Box 6770	San Diego	CA	92110	619-523-5444	C	1.07	San Luis Rey							6			1	1					
M	Montego/Sam Oceanside 1 Condominium	504 N Pacific St	149-071-06 & 07	5/18/2010	V. Joseph Stubbs	Sam Oceanside I, LLC	15260 Ventura Boulevard, 20th	Sherman Oaks	CA	91403	(8d18) 444-4500	R	0.33	San Luis Rey										1			1			
M	Walgreens	4181 Oceanside Blvd	158-390-06	5/27/2010	Manager	Manager	4181 Oceanside Blvd	Oceanside	CA	92056	760-536-7330	C	50,000 Sqft	Loma Alta							2		1					9/21/2011	Yes	Under construction
M	Pacific Marine Credit Union	1278 Old Grove RD	161-512-35	3/18/2010	Dolores Vandenberg	Pacific Marine Credit Union	1278 Old Grove Rd	Oceanside	CA	92056	760-430-6001	C	6.489	Loma Alta														8/23/2011		Under construction
M	VA Clinic	3500-3504 Rancho Del Oro Dr, lots 1,2, 11, & 12	162-600-1-2-11-12			Michael Sajjadi	4 Plaza Park, Suite 840	Irvine	CA	92614	949-468-1812	C	7.75	Loma Alta							16				11	11		9/27/2011	Yes	
M	San Luis Rey Crossing	Intersection of N. River Rd and College Blvd.	157-040-45-00	Not Finaled	Mike Dillon	North River Investments, LLC	3638 Camino Del Rio North,	San Diego	CA	92108	(619)584-0451	R	1.98	San Luis Rey										4		4		8/29/2011	No	
M	Walgreen's Pharmacy at Market place Del Rio	3752 Mission Ave.	158-390-06	6/28/2007	Mary Altourian	Mission Center LLC	3146 Quiet Hills Dr.	Escondido	CA	92029	310-860-5420	C	21.8	San Luis Rey														9/26/2011	Yes	
M	Mission 76 Office Building (Scripps)	4318 Mission Ave	158-101-42	6/10/2008	Gary Levitt	Sea Breeze Old Grove, LLC	3525 Del Mar Heights Rd.,	San Diego	CA	92130	858-361-8555	C	2.35	San Luis Rey														7/26/2011		
M	Mission and Douglas Retail Center	35 Douglas Dr	160-020-53-	5/12/2010	William Brown	Dre Developers Resourse Companies	5230Carrol Canyon Rd	San Diego	CA	92121	858-457-3235	C	1.3	San Luis Rey		2											1	9/13/2011	Yes	
M	Taco Bell	1940 Oceanside Blvd	151-010-45	Not Built								C		Loma Alta																
M	Marriott Couryard	3501 Seagate Way	162-600-23	Not Built								C		Loma Alta																
L	MJK Oceanside	1444 Mssion Ave	148-143-17	12/20/2006	Dave Baum	MJK Real Estate Holding Co., LLC	4913 Convoy St.	San Diego	CA	92111	858-204-4084	C	0.25	Loma Alta																
L	Oceanside Terraces Condomoniums	301 Mission	147-271-15	4/29/2008	Ron Couglas	Jane Properties Inc.	12544 High Bluff Drive, Suite 390	San Diego	CA	92130	(858) 481-5693	R	0.87	San Luis Rey								4			2					
L	400-404 South The Strand	400-404 South The Strand	150-072-18-00, 150-072-19-00,	Not Finaled	N/A	Residencia, LLC	12 Vista De San Clemente	Laguna Beach	CA	92651	(949)584-4858	R	0.3	Loma Alta																
L	519-523 N. Tremont St.	519-523 N. Tremont St.	147-084-01, 147-084-02	Not Finaled	Graham Fraser and	Owners	519-523 North Tremont Street	Oceanside	CA	92054	N/A	R	0.23	Loma Alta																
L	Casa De Amparo Child Development Center at Ivey Ranch Park	110 Rancho Del Oro Drive	760-185-08	Not Finaled	April Penderarpt	Casa De Amparo	110 Rancho Del Oro Drive	Oceanside	CA	92057	760-754-5518	C	1.5	San Luis Rey																
L	D & K Growers	1319 Sleeping Indian Rd.	121-150-20, 122-030-81, 82,	Not Built	Richard Campbell	D & K Grower	630 Encinitas Blvd.	Encinitas	CA	92024	760-477-2171	C	7.1	San Luis Rey																
L	Laguna Pacifica	2020 Stewart St.	155-071-50-00	6/1/2008	Peter Biniaz	Laguna Pacific	2020 Stewart St.	Oceanside	CA	92054	(760)-439-6250	R	0.55	Loma Alta																
L	Mission Wells HOA Single Family Homes	0000 Franciscan Way	Multiple APN'S	7/21/2004	Lisa Locke	Equity Prop Management	42430 Winchester Rd	Temecula	CA	92590	951-296-5640	R		San Luis Rey								3								
L	Rancho Rose Multiple Residential	Highway 76 and Melrose Drive	157-110-91-93	10/6/2004	Debbie Myrick	Transcontiential Management Inc	3355 Mission Ave	Oceanside	CA	92054	760-439-8611	R	8.52	San Luis Rey		3								2	2 sa					
L	The Church of Jesus Christ of Latter Day Saints	2080 California St.	151-190-26-00	2/10/2005	Bishop	Coorporation Of The Presiding Bishop	2080 California St	Oceanside	CA	92054	760-757-0811	C	3.69	Loma Alta							1									
L	Simba International	2654 Vista Pacific Dr.	161-660-40	4/29/2005	Ashir Shah	Simba Interivarioival	2654 Vista Pacific Dr	Oceanside	CA	92056	760-940-2775	C	1.5	Loma Alta							1									
L	Cypress Estates 13 Single Family Homes	Cypress Road	158-630-3 Thru 22	7/28/2005	Michael Tan	Oleander Partners LLC	5230 Carrol Canyon Rd #224	San Diego	CA	92012	858-552-8736	R	3.18	Loma Alta		1									1	1				
L	San Luis Rey Valley United Methodist Church	5570 Old Ranch Road	157-412-18-00	6/8/2006	Thomas Wallace	San Luis Rey United methodist Church	5570 Old ranch Road	Oceanside	CA	92057	760-758-9817	C	5.4	San Luis Rey							1				1					
L	Pelican Cove Multiple Residential	308 Island way	158-051-19	6/21/2006	Tim Maw	WMC Accounting Services	9665 Sheasapeake Dr	San Diego	CA	92123	858-495-0900	R	5.6	San Luis Rey										2 sand						
L	Casitas at Spring Creek Condominiums	5501 Old Ranch Road	Multiple APN'S	9/13/2006	Ord & Rogers	Ord & Rodgers Homes	5122 Avenida Encinas #B	Carlsbad	CA	92008	760-438-1588	R	13.84	San Luis Rey							1				2					
L	Platino Court	4040 Calle Platino	162-503-32	4/2/2007	Calle Platino Partners, Inc.	Calle Platino Partners, Inc.	5677 Oberlin Dr., Suite 112	San Diego	CA	92121	N/A	C	5.76	San Luis Rey																Filter system part of complex.
L	Starbucks	3702 Plaza Dr	168-012-32-00	4/23/2007	Jennifer	Starbucks	3702 Plaza Dr	Oceanside	CA	92056	760-631-8213	C	0.516	Buena Vista							1	1		1				8/29/2011		
L	Ratkoski Single Family Residence	931, 933 South Pacific St	150-355-09-00	6/5/2007	Don and Joyce	Owner	8105 N. 47th Street	Paradise Valley	AZ	84253	(602)-449-1959	R	0.075	Loma Alta	1															
L	Round Table Pizza @ Quarry Creek	3440 Marron Rd.	167-040-21	1/3/2008	Sandy Pujji	Pujji Development, LLC	7613 Heatherly Ln.	San Diego	CA	92130	858-205-9515	C	0.37	Buena Vista							1									
L	Wal-Mart Expansion	705 College Blvd	161-553-01	8/20/2009	Sara Cox	Wal-Mart	2001 S. E. 10th St.	Bentonville	AR	72712	479-204-3314	C	15.6	San Luis Rey										1	5		1			
L	Surfside Animal Hospital	3876 Mission Ave,	158-052-02	7/8/2010	Steve Lloyd	Pacific coast Partners LP	9820 Willow Creek Rd Ste	San Diego	CA	92131	858-922-0641	C	0.88	San Luis Rey							4									
L	Nobel Homes Single Family Homes	Laurel and Ivy rd.	165-630-08 165-630-10	3/2/2007	Jenninfer Benner	Nobel Homes Inc	2734 Loker Ave W. Stem	Carlsbad	CA	92008	760-603-2940	R	4.7	Buena Vista							1				1	1				
L	Martin Single Family Residence	6638 Morro Heights Road	122-170-11-00	3/6/2007	Rick Martin	6638 Morro Heights Rd	6638 Morro heights Rd	Oceanside	CA	92057	N/A	R		San Luis Rey									1		1					
L	Single Family Residence	813 S. Pacific St., Lot 9	150-356-15-00	4/10/2007	Revx Pacific	Security FSE-Thirty-Two, LLC , C/O Mutual Partners, Inc.	P.O. Box 1454	Rancho Santa Fe	CA	92067	858-735-0381	R	0.22	Loma Alta																

Priority	Project Name	Project Address	APN	Construction Date	RP Contact Name	RP Company Name	RP Contact Address	RP Contact City	RP State	RP Zip	RP Phone	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	Inspection Date	Maintenance Records on file	Notes
L	Single Family Residence	811 S. Pacific St., Lot 8	150-356-14-00	4/11/2007	Revx Pacific	REVX Pacific North, LLC, C/O Mutual Partners, Inc.	P.O. Box 1454	Rancho Santa Fe	CA	92067	858-735-0381	R	0.22	Loma Alta																
L	Margulis Single Family Residence	1621 S. Pacific St.	153-091-09-00	5/12/2008	Ken Margulis	1621 S. Pacific, LLC	1355 Stratford Court	Del Mar	CA	92014	760-419-4991	R	0.16	Loma Alta						1										
L	Margulis Single Family Residence	1623 S. Pacific St.	153-091-09-00	5/12/2008	Ken Margulis	1623 S. Pacific, LLC	1355 Stratford Court	Del Mar	CA	92014	760-419-4991	R	0.16	Loma Alta																
L	Moss Residence	1632 S. Pacific St.	153-092-05	5/12/2008	Jack Nestor	1623 S. Pacific, LLC	1355 Stratford Court	Del Mar	CA	92014	N/A	R	0.14	Loma Alta																
L	Pacific View Villas	607 N. Pacific St. 609 N. Pacific St.	143-222-206, 143-222-207	6/10/2010	Emery C. Master,	Owners	7047 Heron Circle	Carlsbad	CA	92011	(760)522-8373	R	0.115	San Luis Rey																
L	Single Family Residence	5951 Las Tunas Drive	122-090-32,-33	8/1/2006	Fred Campbell	Owner	613 Navigator Ct.	Carlsbad	CA	92009	760-929-8198	R	5.2	San Luis Rey	1															
L	Oksnee Single Family Residence	475 Sleeping Indian Rd	122-100-55-00	11/12/2007	Scott Oksnee	Owner/Resident	475 Sleeping Indian Rd.	Oceanside	CA	92057	949-661-2428	R	3.72	San Luis Rey							1									
L	Robertson Development	228 Hoover St.	149-064-04	12/4/2007	Tom Robertson	Owner	228 Hoover St.	Oceanside	CA	92054	N/A	R	0.71	Loma Alta																
L	North Tremont Condos	530 534 N Tremont	Multiple APN'S	2/7/2008	Robert H. Morris	Morris Investments	6430 Sunset Blvd., Suite 300	Los Angeles	CA	90028	N/A	R	0.1	San Luis Rey																
L	Pacific Tides Condominiums	1334 South Pacific Street	152-143-09 & 10	4/22/2008	Mike Chegini	20 Morgan Investments, LLC	20 Morgan	Irvine	CA	92618	(949)860-4800	R	0.2	Loma Alta																
L	Single Family Residence	1213 South Pacific Street	152-141-05-00	7/2/2008	Robert Enright	Owner	1213 S. Pacific St.	Oceanside	CA	92054	N/A	R	0.11	Loma Alta	1	1														
L	Barnwell St./Ritter 3 Single Family Homes	303 S. Barnwell Rd.	149-152-07	8/28/2008	Various Owners	Owner -Loren Ritter	212 South the Strand	Oceanside	CA	92054	760-722-6700	R	1.06	Loma Alta							5				4					
L	Single Family Residence	516 South the Strand	150-072-38-00	Not Finaled	Richard Slevin	Seabreeze Investors 2, LLC	702 N. The Strand Unit A	Oceanside	CA	92054	(760) 650-5411	R	0.104	Loma Alta										1						
L	Single Family Residence	502 S. The Strand	150-260-04	Not Finaled	Jim Junio	Owner	502 S. The Strand	Oceanside	CA	92054	N/A	R	0.2	Loma Alta																
L	St. Cloud Multiple Residential	0000 St Cloud Way	160-571-29	Not Finaled	Dean Pernicone	John Laing Homes	1917 Palomar Oaks Way, Suite	Carlsbad	CA	92008	760-448-3942	R	34.9	Loma Alta											2					Project not complete at time of inspection.
L	Monarch at Rancho Del Oro	Vista Way and Rancho Del Oro	165-362-05	Not Finaled	Jeremy Rappoport	Concordia Homes	1903 Wright Place, Suite 120	Carlsbad	CA	92008	858-847-9664	C,R	14.76	Buena Vista																
L	The Villas at Mission San Luis Rey	4050 Mission Ave.	158-070-39	Not Finaled	Mark Simon	Old Mission	4050 Mission Ave.	Oceanside	CA	92057		C,R	8	San Luis Rey																
L	Piazzo D' Oro Mixed Use	3402 Piazza De Oro Way	Multiple APN'S		Jimmy Rapoport	Concordia Homes	1903 Wright Place, Suite 120	Carlsbad	CA	92008	858-847-9664	C,R		Buena Vista										2				9/26/2011		
L	Multiple Residential Condominiums	400-404 South The Strand	Multiple APN'S	Not Finaled								R	0.3	Loma Alta										1						Under construction
L	Ocean Ranch Lot 15	Ocean Ranch Blvd., Lot 11, Buildings 1,2, & 3	190-571-09	Not Finaled		Oceanic Enterprises Joint Venture	1000 Pioneer Way	El Cajon	CA	92020		I	10.52	Loma Alta																Under construction.
L	Ocean Heights Estates	Valley Heights Drive	158-260-07	Not Finaled	Spencer	Zephyr. Partners Oceanside Heights	10505 Sorrento Valley Rd Ste	San Diego	CA	92121	858-348-7672	R	11.64	San Luis Rey										2						Under construction.
L	Arrowood Village H+I	Breakaway Dr. and Treetop	122-570-00-00	Not Finaled	Bill Shada	RSB Homes, Inc. - DBA Sea County					760-685-1660	R	8.5	San Luis Rey																Under construction
L	New West Petroleum	3401 College Blvd.	168-011-03-00	Not Finaled	New West Petroleum	New West Petroleum	3401 College Bld	Oceanside	CA	92056		C	0.68	Buena Vista																Under construction
L	Pacific Coast Medical Center	3876 Mission Ave,	158-052-02	Steve Lloyd	Pacific coast Partners LP	9820 Willow Creek Rd Ste 400	San Diego	Ca	92131	858-922-0641		C	7.88	San Luis Rey						4								9/25/2011	No	
L	1611 S. Pacific Street	1611 S. Pacific Street	153-091-05	Not Built	Lance Bradford	Trash 8 Investments	3441 South Eastern Avenue	Las Vegas	NV	89169	(702)-735-5030	R	0.14	Loma Alta																
L	2137 Willowbrook Dr.	2137 Willowbrook Drive	159-112-13	Not Built	Frank Fanelli	BFI Development, LLC	2706 Ormsby Way	Vista	CA	92084	760-744-7700	R	2.04	San Luis Rey																
L	Trade Winds Multiple Residential	314 N. Cleveland St.	147-088-13 &14	Not Built	Michael M. Chegini	Owner	20 Morgan	Irvine	CA	92618	(949) 884-7763	R	0.23	San Luis Rey																
L	Airport Rd. Automotive	Airport Rd	146-050-80, 81, 82, 83	Not Built	Tim Lyons	Starward Ventures Inc.	12526 High Bluff Dr., Ste. 100	San Diego	CA	92130	760-505-4283	C	2.11	San Luis Rey																
L	La Pacifica II Business Park	Ocean Ranch Blvd., Lot 11, Buildings 1,2, & 3	160-572-19-02	Not Built	Albert De Berardinis	Cruzan-Monroe	12770 High Bluff Dr., Suite 270	San Diego	CA	92130	858-350-4020	C	14.8	Loma Alta																
L	Loma Alta Creekside, Elliott Drilling Building	Oceanside Blvd.	162-050-40	Not Built	Hugh Elliott	Loma Alta Creekside Property. LLC	1354 Rubenstein Ave.	Cardiff	CA	92007	760-632-1072	C		Loma Alta																
L	Miljkovic	3079 Skyline Dr	165-062-12	Not Built	Milan Miljkovic	Miljkovic	3079 Skyline Drive	Oceanside	CA	92054	760-439-8249	R	0.58	Buena Vista																
L	Mudge Residence	1721 S. Pacific St.	153-091-45	Not Built	Ken and LeOra Mudge	Owners	1721 S. Pacific St.	Oceanside	CA	92054	N/A	R	2.3	Loma Alta																
L	Rancho Del Oro Industrial Park, lot 36, Unit 1	4096 Avenida De La Plata	162-503-01-00	Not built	Arjay Smith	O'Bryan-Smith Investments	402 W. Broadway ste.	San Diego	CA	92101	619-239-4141	C	1.3	Loma Alta																
L	Thunderbird Drive	683 Thunderbird Dr.	157-520-64	Not Built	Edward Scarpelle	683 Thunderbird, LP.	929 Orchid Way	Carlsbad	CA	92009	(760)438-0947	R	1.6	San Luis Rey																
L	Vallas-Phase 1	Oceanview Rd.	165-092-18, 20, 21	Not Built	Theodore Vallas	Owner	2192 Palomar Airport Rd.	Carlsbad	CA	92049	760-483-3600	R	3.52	Buena Vista																
L	Myer's Estates LLC	402 South Myers Street	150-077-12	Not Built	Tom Ayer	Myers Estates	14320 Ventura Blvd., Suite 257	Thousand Oaks	CA	91423	(818)-881-1191	R	0.14	Loma Alta																
L	Pacific Blue Residences	620-714 South The Strand	150-260-25, 150-260-33,	Not Built	Sushil Garg	Owner	3737 Birch Street, Suite 200	Newport Beach	CA	92660	N/A	R	0.858	Loma Alta																
L	Portola	Pier View Way and Horn Street	147-107-09,14	Not Built	Michael Chegini	Portola Condominium Development, LLC	20 Morgan	Irvine	CA	92618	(949) 860-4800 Ext. 107	R	0.35	San Luis Rey		9					3			3			1			
L	Rancho Vista	San Dimas Ave.	160-020-37	Not Built	Brian Johnson	Pelican Homes	33971 Selva Road, Suite 135	Dana Point	CA	92629	N/A	R	16.87	San Luis Rey																Built out
L	Ocean Ranch Corporate Center Lot 1	Northwest corner of Oceanside Blvd. and Corporate Center Drive	160-680-16	Not Built								C	5	Loma Alta																Vacant lot
L	Windstar-Ocean Ranch, lot 19	4800 block, Ocean Ranch Blvd.	160-571-27	Not Built		CREA Windstar Ocean Ranch LLC	11149 N. Torrey Pines RD., Ste.	La Jolla	CA	92037	N/A	C	14.13	Loma Alta																
L	The Strand's End Multiple Residential	809 S. Pacific St. 810 The Strand	153-091-46	1/10/2005	Lisa Mcfarren	Strands End Inc	PO Box 1454	Rancho Santa Fe	CA	92007	858-759-0381	R	0.22	Loma Alta		2														

Priority	Project Name	Project Address	APN	Construction Date	RP Contact Name	RP Company Name	RP Contact Address	RP Contact City	RP State	RP Zip	RP Phone	Type of Development (I, C, M, R)	Project Site Size (acres)	Watershed	TC-10 Infiltration Trench	TC-11 Infiltration Basin	TC-12 Retention / Irrigation	TC-20 Wet Pond	TC-21 Constructed Wetland	TC-22 Extended Detention Basin	TC-30 Vegetative Swale	TC-31 Vegetative Buffer Strip	TC-32 Bioretention	TC-40 Media Filter	TC-50 Water Quality Inlet	TC-60 Multiple Systems	MP-51 Vortex Separator	Inspection Date	Maintenance Records on file	Notes
L	The Coastal Townlofts Multiple Residential	400 block of S Cleveland Street	150-181-1-4	5/4/2005	George Szabo Jr	Coastal Lownlofts Maintenance Corp	2006 Palomar Airport Rd	Carlsbad	CA	92008	760-931-8181 x 15	R	1.01	Loma Alta							7				14					
L	Windward Villas Multiple Residential	691 N. Tremont	143-242-12-00	3/28/2006	Windwarel Villas Hoa	Red Point Homes	3670 Camino Marglesa	Escondido	CA	92025	(760) 489-0841	R	0.98	San Luis Rey																
L	Single Family Residence	815 S. Pacific St., Lot 10	150-356-16-00	4/13/2007	Revx Pacific	REVX Pacific North, LLC, C/O Mutual	P.O. Box 1454	Rancho Santa Fe	CA	92067	858-735-0381	R	0.22	Loma Alta																
L	Tri-City Medical Center Parking	4000 Vista Way	166-010-43	4/24/2007	Carl Riecke	Tri City Medial Center	400 Vista Way	Oceanside	CA	92024	760-940-7559	C	1.48	Buena Vista							1									
L	Wilson Single Family Residence	77 Saint Malo Beach	851-024-400	6/19/2007	Keith and Linda Wilson	Owners	77 Saint Malo Beach	Oceanside	CA	92054	805-965-2060	R	0.21	Buena Vista							2	1								
L	Taylor Estates Multiple Residential	0000 Sunridge Dr	158-810-01-29	8/15/2007	Jessica Moore	KB Home Coastal	12235 El Camino Real St	San Diego	CA	92130	858-509-2000	R	30.1	San Luis Ray							5									
L	Single Family Residence	1443 S. Pacific	153-012-48-00	1/18/2008	Joann Menzies	1443 South Pacific, LLC	1355 Stratford Court	Del Mar	CA	92014	(760)419-4991	R	0.72	Loma Alta		1														
L	St. Margaret Parish	4300 Oceanside Blvd	162-120-50-00	2/26/2008	Father Cavana	The Roman Catholic Bishop of San Diego	4300 Oceanside Blvd.	Oceanside	CA	92056	760-941-5560	C	9.3	Loma Alta										2						Municipal
L	Buddy Todd Park	Todd Memorial Park, Mesa Dr.	149-090-01	4/8/2008	Nathan Mertz	City of Oceanside	300 N. Coast Hwy.	Oceanside	CA	92054	760-435-5619	M	16.54	San Luis Rey																Built out/vacant
L	River Park Complex	425 College Blvd	157-080-54	7/20/2008	Nathan Mertz	City of Oceanside	300 N. Coast Hwy.	Oceanside	CA	92054	760-435-5619	M	43	San Luis Rey																
L	Pacific St. Bridge over the San Luis Rey	Pacific St.	N/A	9/15/2008	David Toschak	City of Oceanside	300 N. Coast Hwy.	Oceanside	CA	92054	760-435-5106	M	0.31	San Luis Rey																
L	Community Lutheran Church	4507 Mission Ave.	158-701-21	10/30/2008	Tim Jones	Community Lutheran Church	158-701-21	Oceanside	CA	92057	760-722-3337	C	3.64	San Luis Rey																
L	Hamilton Residence	2012 Stewart St.	155-071-06-00	12/11/2008	Eric Hamilton	N/A	1940 Lincoln St.	Oceanside	CA	92054	N/A	R		Buena Vista																
L	Single Family Residence	823 S. Pacfic St.	150-356-21-00	2/27/2009	Philip H. Powers	Mutual Partners, Inc.	P.O. Box 1454	Rancho Santa Fe	CA	92067	858-759-0381	R	0.075	Loma Alta	1															
L	Samber Inc./502 Via Del Monte	502 Via Del Monte	145-030-44	3/25/2009	EVW LLC	Samber Inc.	502 Via Del Monte	Oceanside	CA	92057	N/A	C	1.74	San Luis Rey																
L	Single Family Residence	825 S. Pacfic St.	150-356-20	4/26/2009	Charles Wilson	825 S. Pacific, LLC	1821 S. Coast Hwy.	Oceanside	CA	92054	760-453-2474	R	0.1	Loma Alta		1														
L	Jackson Residence	Stallion Drive	122-081-04	10/21/2009	David and Elizabeth	Owners	Stallion Drive	Oceanside	Ca	92057	N/A	R	0.6	San Luis Rey																
L	Mission Animal & Bird Hospital	655 Benet Rd.	145-030-49	11/12/2009	Robert Cartin	Cartin Family, LLC	655 Benet Rd.	Oceanside	CA	92057	760-433-3763	C	1.25	San Luis Rey																
L	807 N. Pacific Street	807 N. Pacific St.	143-227-05-00	4/26/2010	Tom and Sheryl Crow	Owners	45035 Via Tornada	Temecula	CA	92593	N/A	R	0.11	San Luis Rey																
L	Chaparral Industrial	3093 Industry St.	162-031-34	9/22/2010	Michael Walsh	Chaparral Property V, L.P.	721 Monroe Way	Placentia	CA	92870	866-638-7648	C	0.1	Loma Alta																
L	Bahama Gardens	420 Cleveland St.	150-182-05	12/15/2010	Tim Empey	South Coast Investors, LLC	2051 S. Horne St.	Oceanside	CA	92054	760-	R	0.23	Loma Alta																
L	Edwards/Zajda Twin Home	916 Tait St.	150-353-12	5/1/2011	Evan Pence	Owner - Pence Building Ent.	916 Tait Street	Oceanside	CA	92054	213-926-0100	R	0.086	Loma Alta																
L	916 Tait Street Condos	916 Tait St.	150-353-12	6/1/2011	Sarah Zajda	N/A	916 Tait Street	Oceanside	CA	92054	(213)-926-0100	R	0.08	Loma Alta																
L	Fire Mountain Estates	Fire Mountain and Yucca Rd.	Various APN's	Varies	Phil Buccola	Fire Mountain 6, LP	1728 Yucca Rd.	Oceanside	CA	92054	760-754-3130	R	1.9	Loma Alta																
L	Pepper Tree	Pepper Tree Lane	Various APN's	Varies	Hallmark Communities	740 Lomas Santa Fe	San Diego	San Diego	CA	92126		R		San Luis Rey															Not Built	
L	Pelican Cove Multiple Residential	308 Island way	158-051-19	Tim Maw	WMC Accounting	9665 Sheasapeake Dr Ste 300	San Diego	San Diego	CA	92123	858-495-0900	R	5.6	San Luis Rey									2 sa							
L	Rancho Rose Multiple Residential	Highway 76 and Melrose Drive	157-110-91-93	Debbie Myrick	Transcontient ial	3355 Mission Ave	Oceanside	Oceanside	CA	92054	760-439-8611	R	8.5	San Luis Rey	3															
L	San Luis Rey Valley United Methodist Church	5570 Old Ranch Road	157-412-18-00	Thomas Wallace	San Luis Rey United	5570 Old ranch Road	Oceanside	Oceanside	CA	92057	760-758-9817	C	5.4	San Luis Rey						1				1						
L	Darwin Glen	0000 Sagewood Dr	159-060-06	Not Built								C		San Luis Rey																

Attachment 3-A

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Attachment 3-A Construction Site Inventory
Dry and Wet Season Inspection Totals
City of Oceanside FY 2011-12

PROJECT NAME	FILE NUMBER	DEVELOPER	PROJECT TYPE	SITE ACREAGE	CONST. START DATE	WDID	THREAT PRIORITY	WATERSHED	LOCATION	ENGINEERING INSPECTIONS		BUILDING INSPECTIONS		STOP WORK NOTICES	Project Status
										Wet Season	Dry Season	Wet Season	Dry Season		
210 S. Nevada St.	P-13-06	Brian Moore	Residential	0.11	11/19/2007	N/A	Low	Loma Alta	210 S. Nevada St.						Abandoned
Darwin Glen	T-11-2002	Heritage Pacific Homes	Residential	11.60	12/01/05	937C325609	High	San Luis Rey	Darwin and Sagewood Drive	26					Stop work notice lifted 12/12/11
Darwin Knolls	T-11-2002	Heritage Pacific Homes	Residential	5.70	12/02/05	937C325610	High	San Luis Rey	Darwin and Ocean Ridge Court	26				1	Stop work notice not lifted since FY 08-09
Exxon 44 Remodel	C-36-08	Apro LLC 44	Commercial	0.50	07/31/09	N/A	Low	Buena Vista	3401 College Blvd.						
Faris Professional Bldg	ADP-08-02	Faris Construction	Commercial	0.50	03/01/06	N/A	Low	Buena Vista	2180 El Camino Real	26					
Hi Hope Ranch	T-2-03	Hillcrest Homes	Residential	76.00	4/30/2007	9o-37C322214	High	San Luis Rey	Melrose Drive & Hwy 76	29	8				Stop work notice lifted after coming into compliance on 4/9/12
Howe Barn	E-13-06	Owner	Residential	0.80	6/11/2007	9376346381	Low	San Luis Rey	Sleeping Indian	17					
North River Village	T-3-04	Taylor Woodrwow Homes, Inc	Residential/ Commercial	9.90	11/12/07	937C348354	High	San Luis Rey	North River Road at Vandergrift	26					
Ocean Heights	T-13-022565	Zephyr	Residential	11.60	12/13/04	937C330740	High	San Luis Rey	Mission Avenue & Valley Heights Drive						
Powers Residence	RC-12-07	Owner	Residential	0.07	07/22/08	N/A	Medium	Coastal Outlet	823 S. Pacific St.						
El Camino Detention Basin		City CIP	CIP				High	Loma Alta	El Camino Real and Oceanside Blvd.	26					
Morro Hills K	T-12-99(12)	Toll Brothers	Residential	26.10	07/12/10	937C358433	High	San Luis Rey		26					
Morro Hills L	T-12-99(8)	Toll Brothers	Residential	27.30	07/12/10	937C358496	High	San Luis Rey		26					
Projects completed during FY 11-12															
Libby Lake Village	T-5-06	S.D. Habitat for Humanity	Residential	2.00	June 2008	937C348915	Medium	San Luis Rey	Libby Village Way (N. River Road) & Calle Monecito						Finished
Lil Jackson	P-19-06	Benjamin Beckler III, SCPH	Residential	2.20	12/01/09	937C355670	High	Buena Vista	3512 Lake Blvd.						Finished
516 S. The Strand	P-204-07	BRB Development	Residential	0.10	01/26/11	N/A	Medium	Coastal Outlet	516 S. The Strand	26	10				Finished
Adobe Eststes	A-26-05	Vista	Commercial	2.00	03/05/10	937C345696	High	San Luis Rey	Sports Park Way						Finished
Bahama Garden	P-03-07	Dew Pointe Condominimum s	Residential	0.23	10/20/10	N/A	Low	Coastal Outlet	420 S. Cleveland		8				Finished
Lot 27 Parcel 2 6147 Indian View Drive	Adp-01-2004	Bellon Construction	Residential	3.97	07/19/06	937L341136	Medium	San Luis Rey	6147 Indian View Drive						Finished
Morro Hills H & I	T-12-99/10	Tripointe	Residential	6.80	02/01/10	37C356385	High	San Luis Rey		26					Finished
Parcel 9	P-1-86	Allen Dental	Commercial	0.44	10/29/09	N/A	Low	Loma Alta	Avenida del Oro						Finished
Zajda Twin Home	P-13-08	Zajda	Residential	0.86	02/17/10	N/A	Medium	Coastal Outlet	916 Tait Street						Finished

Attachment 3-A Construction Site Inventory
Dry and Wet Season Inspection Totals
City of Oceanside FY 2011-12

PROJECT NAME	FILE NUMBER	DEVELOPER	PROJECT TYPE	SITE ACREAGE	CONST. START DATE	WDID	THREAT PRIORITY	WATERSHED	LOCATION	ENGINEERING INSPECTIONS		BUILDING INSPECTIONS		STOP WORK NOTICES	Project Status
										Wet Season	Dry Season	Wet Season	Dry Season		
Projects completed during FY 11-12 (continued)															
Arroyo Landslide	E-17-09	Arroyo Comanche Grey LLC	Residential	2.20	06/11/10	937C356677	Medium	Loma Alta		26					Finished
Harbor Restroom Lot 11B		City CIP	CIP				Low	San Luis Rey	Oceanside harbor Lot 11B						Finished
Marriott	D-10-00004	RD Olson	Commercial	2.67	11/01/10	937c359641	High	Loma Alta							Finished
Pepper Tree	D-10-00002	Hallmark	Residential	1.70	11/12/10	937C357595	High	San Luis Rey							Finished
New Projects FY 10-11															
Tyson-Wisconsin St. Parking Lot 26	CIP 000-51	City of Oceanside	Commercial		09/02/11	937C362191	High	Coastal Outlet	Intersection of Tyson and Wisconsin Streets	26					
S. Strand Condos	T-203-65	Ed Prentice	Residential	0.40	03/01/12	N/A	Medium	Coastal Outlet	314 S. The Strand	4	12				
1721 S. Pacific St.	RC-02-08	Beach Front Builders	Residential	0.12	01/19/12	N/A	Medium	Coastal Outlet	1721 S. Pacific St.	12	12				Finished
Witherby Residence	E 11-00006	Phil Witherby	Residential	0.23	05/22/12	N/A	Low	Loma Alta	Faith Circle	0	8				
Tri-City Medical Building	D-11-00002	Rich Landecith Construction	Commercial	2.30	10/26/11	9373C361704	High	Loma Alta	4002 Vista Way	24	8				
Tremont III Condos	Rc11-00005	Dakman Inc.	Residential	0.30	05/15/12	N/A	Low	Buena Vista	2000 S. Tremont		6				
Taco Bell	D11-00001	Viking	Commercial	0.49	02/03/12	N/A	Low	Loma Alta	1940 Oceanside Blvd.		8				Finished
Soputh Coast Quarry	RMA-1-2001	JT Kruer	Grading	4.10	08/04/11	937C361247	High	Buena Vista	Haymar Rd.	28	8				
Pro Kids	D11-00008	Lusardi	Commercial	6.30	03/13/12	937C361812	Medium	San Luis Rey	825 Douglas	7					
Oceana Mission 4	E-11-00004	Homeowner Association	Residential	0.24	09/13/11	N/A	Medium	San Luis Rey	Old Grove Rd.	26					
										Wet Season	Dry Season	Wet Season	Dry Season	Stop Work Notices	
Total number										**433**	**88**	**0**	**0**	**1**	
									Total Wet Season	**433**					
									Total Dry Season	**88**					

Attachment 4-A

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Attachment 4-A Municipal Inventory
City of Oceanside FY 2011-12

Loc/Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substar	Other						
Oceanside Airport	618		AIRPORT ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X				X		X		Municipal Airport	Not applicable	1460310100	9999	YES	NO
Alamosa Park	5100's		ALAMOSA PARK DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1581310100	9999	YES	NO
Rancho del Oro Park	4700's		AVENIDA EMPRESSA		High	Municipal	Oceanside	San Luis Rey	903.1											Municipal Park	Not applicable	1615111700	9999	NO	NO
Wire Mountain Reservoir	0		BENET ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1460201600	9999	YES	NO
Ninth Street Sewer Lift Station	997		BREAKWATER WAY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431710600	9999	YES	NO
Libby Lake Park	424		CALLE MONTECITO		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1575600700	9999	YES	NO
Capistrano Park	770		CAPISTRANO DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1440301700	9999	YES	NO
Lot 35 East of Tremont Street	0		CIVIC CENTER DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1470860800	9999	YES	NO
Code Enforcement	602		CIVIC CENTER DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Building	Not applicable	1470860800	9999	YES	NO
Community Garden	1200's		CIVIC CENTER DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Building	Not applicable	1472305800	9999	YES	NO
Lot 22 South of Windward	0	S	CLEVELAND STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1471601000	9999	YES	NO
Lot 23 North of Pier View Way	0	N	CLEVELAND STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1471611100	9999	YES	NO
Lot 32 North of Mission Avenue	0	N	CLEVELAND STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1473501800	9999	YES	NO
Sunshine Brooks Theater	213	N	COAST HWY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Public Theather	Not applicable	1470871600	9999	YES	NO
Oceanside Museum of Art	219	N	COAST HWY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Art School	Not applicable	1470871400	9999	YES	NO
Civic Center	300	N	COAST HWY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Building	Not applicable	1470950400	9999	YES	NO
Visitors Information Center	930	N	COAST HWY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Information Center	Not applicable	1470203900	9999	YES	NO
Lot E	300	N	COAST HWY.		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1470980800	9999	YES	NO
Mance Buchanon Park	425		COLLEGE BLVD.		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1570805300	9999	YES	NO
Lot 36 Ditmar Street, North of Seagaze Drive	0	N	DITMAR STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1472811100	9999	YES	NO
Fire Station 2	1640	S	DITMAR STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1531311000	9999	YES	NO
Pilgrim Creek Sewer Lift Station	855		DOUGLAS DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1570210600	9999	YES	NO
Reverse Osmosis Facility	0		FIRESIDE DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Reverse Osmosis Plant	Not applicable	1602801000	9999	YES	NO
Fireside Park	300's		FIRESIDE DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1581901100	9999	YES	NO
Mar Lado Sewer Lift Station	401		FOUSSAT ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1602811200	9999	YES	NO
Lot 6	200	S	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1430103100	9999	YES	YES
Lot 7	200	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1430103100	9999	YES	YES
Harbor 4 Sewer Lift Station	283	S	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1430103100	9999	YES	YES
Lot 8 & 8a	300	S	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1430103100	9999	YES	YES
Lot 9	300	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1430103100	9999	YES	YES
North Bridge Sewer Lift Station	304	S	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1430101500	9999	YES	YES
Leased Residential - Marina Towers	1200	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Leased Building	Not applicable	1430103200	9999	YES	YES
Lot 4	1300	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Lot 5	1300	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Lot 1	1304	S	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1430101500	9999	YES	YES
Harbor 3 Sewer Lift Station	1325	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
Harbor Marina Administration	1545	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Harbor Marina Building	Not applicable	1431201000	9999	YES	YES
Lot 3	1800	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Harbor 2 Sewer Lift Station	1830	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
Lot 2	1900	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Harbor 1 Sewer Lift Station	2000	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
Marina Suites	2008	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Leased Building	Not applicable	1431103100	9999	YES	YES
Harbor Marina Oceanside Small Craft Harbor	300's	N	HARBOR DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1			X	X	X		X		X		Municipal Marina	Not applicable	1431103100	9999	YES	YES
Fire Station No. 7	110		JONES ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1460903500	9999	YES	NO

Attachment 4-A Municipal Inventory
City of Oceanside FY 2011-12

Loc/Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substar	Other						
Old Roymar Sewer Lift Station	110		JONES ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1460903500	9999	YES	NO
Roymar Sewer Lift Station	110		JONES ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1460903500	9999	YES	NO
San Diego Street Shelter	1501		LAUREL STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Shelter	Not applicable	1480130100	9999	YES	NO
Loretta Sewer Lift Station	1261		LORETTA STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1450102500	9999	YES	NO
Pacifica Sewer Lift Station	4991		MACARIO ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1221902200	9999	YES	NO
Buddy Todd Park	3000's		MESA DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1490900100	9999	YES	NO
Mission Avenue Landfill	2070		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X					Municipal Land Fill	Not applicable	1451500200	9999	YES	NO
La Mission Apartments	3200		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Housing	Not applicable	1602715700	9999	YES	NO
Fire Station No. 7 Mission Avenue	3350		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1602708400	9999	YES	NO
Mission Sewer Lift Station	3476		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1602906400	9999	YES	NO
Police Department	3855		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Police Station	Not applicable	1605601300	9999	YES	NO
Ivey Ranch Park	4100's		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1580800700	9999	YES	NO
Leased Farm Land	5700's		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Municipal Leased Farm Land	Not applicable	1571505600	9999	YES	NO
Leased Farm Land	5800's		MISSION AVENUE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Municipal Leased Farm Land	Not applicable	1571505600	9999	YES	NO
Lot 20 Myers, North of Neptune	0	N	MYERS STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1471601000	9999	YES	NO
Lot 21 Myers, North of Windward	0	N	MYERS STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1471601000	9999	YES	NO
Lot 24 Myers, North of Mission	0	N	MYERS STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1473502000	9999	YES	NO
Lot 25 Myers, North of Seagaze	0	N	MYERS STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X			X		Municipal Parking Lot	Not applicable	1473502100	9999	YES	NO
Oceanside Pier	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1		X	X		X						Municipal Pier	Not applicable	Unknown	9999	YES	YES
Pier Baitshop	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1		X	X		X						Municipal Pier	Not applicable	Unknown	9999	YES	YES
Pier Lifeguard Tower	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1		X	X		X						Municipal Pier	Not applicable	Unknown	9999	YES	YES
Pier Baitshop Sewer Lift Station	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	Unknown	9999	YES	YES
Pier Restroom Sewer Lift Station	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	Unknown	9999	YES	YES
Ruby's Sewer Lift Station	1		OCEANSIDE PIER		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	Unknown	9999	YES	YES
Spring Creek Park	5500's		OLD RANCH ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1577715900	9999	YES	NO
Leased Residential Area	100	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Housing	Not applicable	1472610700	9999	YES	NO
Lot 10	1200	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Harbor 5 Sewer Lift Station	1200	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
Marina Del Mar Condominium	1202	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1430103100	9999	YES	YES
Lot 11A	1300	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Lot 11B	1300	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1431201000	9999	YES	YES
Lot F	1300	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1430103100	9999	YES	YES
Junior Lifeguard Facility	1311	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Building	Not applicable	1431201000	9999	YES	YES
Harbor Fuel Dock	1380	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fuel Dock	Not applicable	1431201000	9999	YES	YES
Harbor 6 Sewer Lift Station	1384	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
Lot 12	1400	N	PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1431201000	9999	YES	YES
Pacific Street Linear Park	100's		PACIFIC STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	Unknown	9999	YES	NO
Talone Reservoir	0		PASEO HERMOSA		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municiapl Water Reservoir	Not applicable	1581401200	9999	YES	NO
Heritage Park	220		PEYRI DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1580403900	9999	YES	NO
Mission Wells Park	200's		PEYRI DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1587913800	9999	YES	NO
Lot 34 Pier East of Tremont Street	0		PIER VIEW WAY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1470871200	9999	YES	YES
Fire Station no. 1	714		PIERVIEW WAY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1471081500	9999	YES	NO
North Valley Sewer Lift Station	3930	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1570210400	9999	YES	NO
Police Shooting Range	3950	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Police Shooting Range	Not applicable	1570210400	9999	YES	NO

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Loc/Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substar	Other						
San Luis Rey Treatment Plant	3950	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Treatment Plant	Not applicable	1570210400	9999	YES	NO
Libby Lake Housing Resource Center	4700	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Resource Center	Not applicable	1579002100	9999	YES	NO
Fire Station No. 5	4841	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1570604900	9999	YES	NO
Melba Bishop Park	5306	N	RIVER ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1220811100	9999	YES	NO
Marlado Park	800's		RIVERTREE DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1585313800	9999	YES	NO
Roja Sewer Lift Station	703		ROJA STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1220501100	9999	YES	NO
Joe Balderama Community Center	709		SAN DIEGO STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Community Center	Not applicable	1480740100	9999	YES	NO
Fire Station No. 6	895	N	SANTA FE DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1584302100	9999	YES	NO
Leased Farm Land	800's	N	SANTA FE DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Municipal Leased Farm Land	Not applicable	1571004200	9999	YES	YES
El Corazon Senior Center	3302		SENIOR CETER DRIVE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Senior Center	Not applicable	1620825000	9999	YES	NO
Weese Water Treatment Plant Twin Oaks Valley Road	3885		SILVER LEAF LAKE		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Treatment Plant	Not applicable	Unknown	9999	YES	NO
Water Pressure Station	0		SLEEPING INDIAN ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Pressure Station	Not applicable	1212022000	9999	YES	NO
South Oceanside Tennis Courts	1800's		STEWART STREET		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1532340300	9999	YES	NO
Luisiano Park	5100's		TEAL WAY		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Park	Not applicable	1225020100	9999	YES	NO
Lot 28 The Strand, North of Pier View Way	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Unknown	9999	YES	YES
Lot 29 The Strand at the Pier	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Unknown	9999	YES	YES
Lot 30 The Strand, North of Seagaze	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Unknown	9999	YES	YES
Lot A The Strand and Mission	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Unknown	9999	YES	YES
Lot C Lifeguard Headquarters	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Unknown	9999	YES	YES
Lot D Beach Community Center	0	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1470741400	9999	YES	YES
Beach Lock-Up	122	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Police Lock-Up	Not applicable	1472632400	9999	YES	YES
Beach Amphitheater	200	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Amphitheater	Not applicable	1470741500	9999	YES	YES
Lot B 200 North the Strand	200	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Unknown	9999	YES	YES
Bandstand Sewer Lift Station	200	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1470741500	9999	YES	YES
Beach Community Center	300	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Community Center	Not applicable	1470741400	9999	YES	YES
Lifeguard's Headquaters	301	N	THE STRAND		High	Municipal	Oceanside	San Luis Rey	903.1			X		X		X				Municipal Lifeguard Station	Not applicable	Unknown	9999	YES	YES
Pilgrim Reservoir South of Camp Pendleton	0		VANDEGRIFT BLVD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1225211700	9999	YES	NO
Oceanside Police Department Resource Center	521		VANDEGRIFT BLVD	B	High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Resource Center	Not applicable	1570403600	9999	YES	NO
Heritage Reservoir East of Rancho Del Oro Drive	0		VIA RANCHO ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1600202400	9999	YES	NO
Morro Hills Reservoir Southeast of Sleeping Indian Ranch	0		WILSHIRE ROAD		High	Municipal	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1212011100	9999	YES	NO
Transient Housing Shelter	1963		APPLE STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X			X		Transient Housing	Not applicable	1493302500	9999	YES	NO
Project Oz	205		BARNES STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X			X		Transient Housing	Not applicable	1482601600	9999	YES	NO
Brooks Street Pool	130		BROOKS STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Municipal Pool	Not applicable	1482602800	9999	YES	NO
Ron Ortega Park	140		BROOKS STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1482602800	9999	YES	NO
Senior Center	455		COUNTRY CLUB LANE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Senior Citizen Center	Not applicable	1510111100	9999	YES	NO
Americanization School	1200's		DIVISION STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1501411700	9999	YES	NO
Cesar Chavez Park	1300's		DIVISION STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	2306230200	9999	YES	NO
Fire Mountain Reservoir	0		FIRE MOUNTAIN DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1650210200	9999	YES	NO
Crown Heights Community Garden	500's		GARDFIELD AVENUE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Community Garden	Not applicable	1502420100	9999	YES	NO
Center City Golf Course	2323		GREENBRIER DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Golf Course	Not applicable	1510111100	9999	YES	NO
Closed Ball Field	2600's		LEE DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1615011000	9999	YES	NO
Marshall Street Park	1400		MARSHALL STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1522706000	9999	YES	NO
Marshall Street Pool	1404		MARSHALL STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Municipal Pool	Not applicable	1522706000	9999	YES	NO
Maxon Landfill	1600's		MAXON STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Land Fill	Not applicable	1482602800	9999	YES	NO

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Loc/Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS									Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substar	Other					
Martin Luther King Park	4300's		MESA DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1605700800	9999	YES	NO
North County Veteran Resource Center	1617		MISSION AVENUE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Leased Building	Not applicable	1482602400	9999	YES	NO
Women's Club Park	1500'S		MISSION AVENUE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1482601100	9999	YES	NO
Lot 26 Myers, North of Tyson	0	N	MYERS STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1473501600	9999	YES	NO
Lot 27 Myers, South of Minnesota	0	S	MYERS STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	1502630700	9999	YES	NO
Oceanside Boulevard Sewer Lift Station	1664		OCEANSIDE BLVD		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1523202200	9999	YES	NO
Fire Station No. 3	3101		OCEANSIDE BLVD		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1620310500	9999	YES	NO
City Operation Center	4927		OCEANSIDE BLVD		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Operation Center	Not applicable	1615010700	9999	YES	YES
Guajome Reservoir	0		PEACOCK BLVD.		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municiapl Water Reservoir	Not applicable	1581305800	9999	YES	NO
Joseph Sepulveda Park	3800's		SHERBOURNE DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1655612000	9999	YES	NO
Joseph Carrasco Park	2400's		SKYLARK DRIVE		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1512522200	9999	YES	NO
South Pacific Sewer Lift Station	1330	S	TAIT STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1530110600	9999	YES	NO
La Salina Treatment Plant	1330	S	TAIT STREET		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Water Treatment Plant	Not applicable	1530110600	9999	YES	NO
Lot 31 The Strand, North of Wisconsin Avenue	0	N	THE STRAND		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Parking Lot	Not applicable	Unknown	9999	YES	YES
Strand Beach Park	200	S	THE STRAND		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1472640100	9999	YES	YES
Tyson Street Park	500	S	THE STRAND		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1500710100	9999	YES	YES
Wisconsin Sewer Lift Station	715	S	THE STRAND		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1502602700	9999	YES	YES
Palisades Park	3400's		VISTA DEL ORO		High	Municipal	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Municipal Park	Not applicable	1651131400	9999	YES	NO
Leisure Village 1 Sewer Lift Station	4706		CANNON ROAD		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1695620300	9999	YES	NO
Southridge Trails Sewer Lift Station	4900		CANNON ROAD		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1690111800	9999	YES	NO
New Fire Sta. No. 4	3990		LAKE BLVD.		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Fire Station	Not applicable	1680122600	9999	YES	NO
Lake Park	4600's		LAKE BLVD.		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X			X	X		X		Municipal Park	Not applicable	1690111600	9999	YES	NO
Oak Riparian Park	4600's		LAKE BLVD.		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X			X	X		X		Municipal Park	Not applicable	1690111600	9999	YES	NO
Leisure Village 2 Sewer Lift Station	4933		LEISURE VILLAGE DRIVE		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1693814200	9999	YES	NO
San Francisco Peak Reservoir	0		NIGHTHAWK COURT		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1690111800	9999	YES	NO
Sewer Lift Station	0		NIGHTHAWK WAY		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1694534900	9999	YES	NO
Skyhaven Sewer Lift Station	3521		SKYHAVEN LANE		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1682112800	9999	YES	NO
Calaveras Sewer Lift Station	3636		SKYHAVEN LANE		High	Municipal	Carlsbad	Agua Hedionda	904.3	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1682411200	9999	YES	NO
Henie Hills Reservoir Mira Costa College	0		BARNARD WAY		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X		X		Municipal Water Reservoir	Not applicable	1651120400	9999	YES	NO
Lion's Club Park	1700's		CASSIDY STREET		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X			X	X		X		Municipal Park	Not applicable	1530930300	9999	YES	NO
John Landes Community Park	2855		CEDAR ROAD		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X			X	X		X		Municipal Park	Not applicable	1660210100	9999	YES	NO
Buena Vista Lagoon Nature Center	2202	S	COAST HWY.		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X		X		Nature Center	Not applicable	1551303400	9999	YES	YES
Municipal Golf Course	825		DOUGLAS DRIVE		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X			X	X		X		Municipal Golf Course	Not applicable	1570210600	9999	YES	NO
Oceanside Dog Park	301		JONES ROAD		High	Municipal	Oceanside	Buena Vista	904.2	X	X	X		X	X	X		X		Municipal Dog Park	Not applicable	1460903900	9999	YES	NO
Lake Blvd. Sewer Lift Station	4700 1/2		LAKE BLVD.		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1693612000	9999	YES	NO
Bucaneer Beach Park	1500's	S	PACIFIC STREET		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X			X	X		X		Municipal Park	Not applicable	1530110600	9999	YES	NO
Saint Malo Sewer Lift Station	52		SAINT MALO BEACH		High	Municipal	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X		X		Municipal Sewer Lift Station	Not applicable	1551012900	9999	YES	NO

Attachment 4-B

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To Interested Parties:

2011-2012 ANNUAL REPORT ANNUAL REPORT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Storm Water Multi-Application Reporting and Tracking System (SMARTS) allows an individual discharger to file and submit their Annual Report electronically to the Regional Water Board. Currently SMARTS is not a mandatory reporting method, but we encourage all dischargers to register and use SMARTS.

To register to use SMARTS please visit: https://smarts.waterboards.ca.gov and download the SMARTS LRP registration form and instructions. Please fill out the form and mail it back to: SMARTS Registration, P.O. Box 1977, Sacramento, CA 95812. Once a complete registration form is received, a login name and password will be emailed to you.

For SMARTS registration questions or information please contact the SMARTS help center at 1-866-563-3107 or by email at stormwater@waterboards.ca.gov.

To receive email updates on Storm Water Industrial permitting issues, please sign up at
http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml
The Storm Water program currently maintains five email lists:

- Storm Water Database Issues
- Storm Water Construction Permitting Issues
- Storm Water Industrial Permitting Issues
- Storm Water Municipal Permitting Issues
- Sustainable Development

Sincerely,

Storm Water Section

State of California
STATE WATER RESOURCES CONTROL BOARD

2011-2012

ANNUAL REPORT

FOR
STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2011 through June 30, 2012

An annual report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers and e-mail addresses of the Regional Board contacts, as well as the Regional Board office addresses can be found at http://www.waterboards.ca.gov/stormwtr/contact.html. To find your Regional Board information, match the first digit of your WDID number with the corresponding number that appears in parenthesis on the first line of each Regional Board office.

GENERAL INFORMATION:

A. Facility Information:

Facility WDID No: 9 371005695

Facility Business Name: City of Oceanside

Contact Person: Bryan Forward

Physical Address: 1680.5 Maxson St / Brooks St

e-mail: bforward@ci.oceanside.ca.us

City: Oceanside, CA 92054

CA Zip: 92056 Phone: 760 435 5194

Standard Industrial Classification (SIC) Code(s): 4953

B. Facility Operator Information:

Operator Name: Oceanside Public Works

Contact Person: Bryan Forward

Mailing Address: 4927 Oceanside Blvd

e-mail: bforward@ci.oceanside.ca.us

City: Oceanside, CA 92056

State: CA Zip: 92056 Phone: 760 435 5194

C. Facility Billing Information:

Operator Name: Oceanside Public Works

Contact Person: Bryan Forward

Mailing Address: 4927 Oceanside Blvd

e-mail: bforward@ci.oceanside.ca.us

City: Oceanside, CA 92056

State: CA Zip: 92056 Phone: 760 435 5194

2011-2012

ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

   ☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

   i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

   ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: ___/___/___

   Re-evaluation Date: ___/___/___

   Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

   iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: ___/___/___

   Re-evaluation Date: ___/___/___

   Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

   iv. ☐ Received Regional Board Certification Certification Date: ___/___/___

   v. ☐ Received Local Agency Certification Certification Date: ___/___/___

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

   ☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 2 If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

   ☒ **YES** ☐ **NO** **attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? 1

4. For each storm event sampled, did you collect and analyze a sample from each of the facility's' storm water discharge locations? ☒ YES, go to Item E.6 ☐ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☐ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated ___/___/_____

6. Were all samples collected during the first hour of discharge? ☒ YES ☐ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☒ YES ☐ NO, **attach explanation**

8. Were there any discharges of storm water that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☒ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

       _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

       _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

       _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler
- Parameters tested
- Name of analytical testing laboratory
- Discharge location identification
- Testing results
- Test methods used
- Test detection limits
- Date of testing
- Copies of the laboratory analytical results

City of Oceanside Water Utilities Laboratory
3950 N. River Rd.
Oceanside CA, 92054
(760) 435-5946
(760) 721-7392 fax

USEPA Lab Code: CA00174
ELAP Certification No.: 1740

Report No.: LF100611

Project: Stormwater

Sample Description:	Location Code:	Lab ID# :	Sample Collector:	Collection Date and Time:
Mission landfill	MISSLAND	BB71839	BRUST	October 05, 2011 3:45 PM

Analyte	Method	Result	Units	MDL	Analyst	Qualifier
Conductivity	SM 2510 B	365	µmho/cm	20	MP	
Oil and Grease	EPA 1664 A	< 5	mg/L	5	MP	
pH	SM 4500-H+ B	6.69	pH		GGA	E
Total Suspended Solids	SM 2540 D	83	mg/L	0.6	GGA	

Sample Description:	Location Code:	Lab ID# :	Sample Collector:	Collection Date and Time:
Maxson landfill	MAXLAND	BB71840	BRUST	October 05, 2011 3:30 PM

Analyte	Method	Result	Units	MDL	Analyst	Qualifier
Conductivity	SM 2510 B	377	µmho/cm	20	MP	
Oil and Grease	EPA 1664 A	7	mg/L	7	MP	
pH	SM 4500-H+ B	6.70	pH		GGA	E
Total Suspended Solids	SM 2540 D	596	mg/L	0.6	GGA	

MDL: Method Detection Limit

E: Sample was received and analyzed past the method holding time.

Unless otherwise noted, all quality control parameters were within acceptable limits.
If you have any questions regarding these analyses or procedures, please contact:

City of Oceanside
Water Utilities Department Laboratory
(760) 435-5946

City of Oceanside Water Utilities Laboratory
3950 N. River Rd.
Oceanside CA, 92058
(760) 435-5946
(760) 721-7392 fax

USEPA Lab Code: CA00174
ELAP Certification No.: 1740
Report No.: LF110411
Project: Stormwater

ocation Code and Description	Lab ID#	Sample Collector	Collection Date and Time
IAXLAND - Maxson landfill	BB72783	BRUST	November 04, 2011 9:40 AM

Analyte	Method	Result	Units	MDL	RL	Analyst	Qualifier
H	SM 4500-H+ B	6.50	pH			BMW	E
Conductivity	SM 2510 B	505	µmho/cm	20	20	MP	
Oil and Grease	EPA 1664 A	7	mg/L	6	2	MP	
Total Suspended Solids	SM 2540 D	246	mg/L	0.6	1.5	GGA	

Location Code and Description	Lab ID#	Sample Collector	Collection Date and Time
MISSLAND - Mission landfill	BB72784	BRUST	November 04, 2011 10:07 AM

Analyte	Method	Result	Units	MDL	RL	Analyst	Qualifier
pH	SM 4500-H+ B	7.24	pH			BMW	E
Conductivity	SM 2510 B	276	µmho/cm	20	20	MP	
Oil and Grease	EPA 1664 A	< 7	mg/L	7	2	MP	
Total Suspended Solids	SM 2540 D	270	mg/L	0.6	1.5	GGA	

MDL: Method Detection Limit
RL: Reporting Limit

EST: Estimated value

E: Procedural error. Sample was received and analyzed past holding time.

Unless otherwise noted, all quality control parameters were within acceptable limits.
If you have any questions regarding these analyses or procedures, please contact:

City of Oceanside
Water Utilities Department Laboratory
(760) 435-5946

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**

Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

☒ **YES** ☐ **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers**. Indicate "N/A" for quarters without any authorized non-storm water discharges.

July-September	☒ **YES**	☐ **NO**	☐ **N/A**	October-December	☒ **YES**	☐ **NO**	☐ **N/A**
January-March	☒ **YES**	☐ **NO**	☐ **N/A**	April-June	☒ **YES**	☐ **NO**	☐ **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information:

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**

Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non- storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July-September	☒ **YES**	☐ **NO**	October-December	☒ **YES**	☐ **NO**
January-March	☒ **YES**	☐ **NO**	April-June	☒ **YES**	☐ **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

☒ **YES** ☐ **NO** Go to Item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

☐ **YES** ☒ **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information:

i. name of each unauthorized non-storm water discharge
ii. date and time of observation
iii. source and location of each unauthorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers.** Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information:

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occurred during the last year
   - outdoor wash and rinse areas
   - process/manufacturing areas
   - loading, unloading, and transfer areas
   - waste storage/disposal areas
   - dust/particulate generating areas
   - erosion areas
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- Sampling and Analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

2C.

The unauthorized non storm water discharge is generated from the Oceanside Public Pool back washing pool filters as well as public parkway irrigation run off.

2011-2012

ANNUAL REPORT

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☒ YES	☐ NO	☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☐ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Bryan Forward

Signature: _____ Date: 5/31/12

Title: Ordinance Enforcement Supervisor

DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

The Industrial Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least four parameters. These are pH, Total Suspended Solids (TSS), Specific Conductance (SC),and Total Organic Carbon (TOC). Oil and Grease (O&G) may be substituted for TOC. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge as a result of industrial activity and analytical parameters listed in Table D of the General Permit. There are no numeric limitations for the parameters you test for.

The four parameters which the General Permit requires to be tested are considered *indicator* parameters. In other words, regardless of what type of facility you operate, these parameters are nonspecific and general enough to usually provide some indication whether pollutants are present in your storm water discharge. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and a alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or industrial activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure of the undissolved solids that are present in your storm water discharge. Sources of TSS include sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Specific Conductance (SC) is a numerical expression of the ability of the water to carry an electric current. SC can be used to assess the degree of mineralization, salinity, or estimate the total dissolved solids concentration of a water sample. Because of air pollution, most rain water has a SC a little above zero. A high SC could affect the usability of waters for drinking, irrigation, and other commercial or industrial use.

Total Organic Carbon (TOC) is a measure of the total organic matter present in water. (All organic matter contains carbon) This test is sensitive and able to detect small concentrations of organic matter. Organic matter is naturally occurring in animals, plants, and man. Organic matter may also be man made (so called synthetic organics). Synthetic organics include pesticides, fuels, solvents, and paints. Natural organic matter utilizes the oxygen in a receiving water to biodegrade. Too much organic matter could place a significant oxygen demand on the water, and possibly impact its quality. Synthetic organics either do not biodegrade or biodegrade very slowly. Synthetic organics are a source of toxic chemicals that can have adverse affects at very low concentrations. Some of these chemicals bioaccumulate in aquatic life. If your levels of TOC are high, you should evaluate all sources of natural or synthetic organics you may use at your site.

Oil and Grease (O&G) is a measure of the amount of oil and grease present in your storm water discharge. At very low concentrations, O&G can cause a sheen (that floating "rainbow") on the surface of water (1 qt. of oil can pollute 250,000 gallons of water). O&G can adversely affect aquatic life and create unsightly floating material and film on water, thus making it undrinkable. Sources of O&G include maintenance shops, vehicles, machines and roadways.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at http://www.waterboards.ca.gov. It is contained in the Sampling and Analysis Reduction Certification.

See Storm Water Contacts at

http://www.waterboards.ca.gov/water_issues/programs/stormwater/contact.shtml

NAME OF PERSON COLLECTING SAMPLE(S): C Brust TITLE: Maintenance Specialist

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event						
			BASIC PARAMETERS					OT	
			PH	TSS	SC	O&G	TOC		
S. End of Division St	10 / 5 / 11 3 :30 ☐ AM ☒ PM	3 :00 ☐ AM ☒ PM							
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM			SEE lab Report				
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM							
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM							
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l		
TEST METHOD DETECTION LIMIT:									
TEST METHOD USED:									
ANALYZED BY (SELF/LAB):									

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic

NAME OF PERSON COLLECTING SAMPLE(S): C Brust TITLE: Maintenance Specialist

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For Second Storm Event						
			BASIC PARAMETERS					O	
			PH	TSS	SC	O&G	TOC		
S. End of Division St	11 / 4 / 11 9 :40 ☒ AM ☐ PM	9 :20 ☒ AM ☐ PM							
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM			See lab Report				
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM							
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM							
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l		
TEST METHOD DETECTION LIMIT:									
TEST METHOD USED:									
ANALYZED BY (SELF/LAB):									

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

QUARTER: **JULY-SEPT.** DATE: 8 / 31 / 11	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C B	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**
QUARTER: **OCT.-DEC.** DATE: 10 / 31 / 11	**Observers Name** C Brust – **Title:** Maintenance Specialist **Signature:** C B	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**
QUARTER: **JAN.-MARCH** DATE: 1 / 30 / 12	**Observers Name:** C Brust – **Title:** Maintenance Specialist **Signature:** C B	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**
QUARTER: **APRIL-JUNE** DATE: 4 / 30 /12	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C B	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**

	AUTHORIZED NSWD EXAMPLE: Air conditioner Units on Building C	NSWD EXAMPLE: Air conditioner condensate	Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		I
			At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
8 / 31 / 11 10 : 30 ☒ AM ☐ PM	**Brook St Swim Center**	**Back washing of pool filters**	**Water was clr in color, no odor,sheen or floatables**	**Discharge is clear**	**Place st front of contami drains**
10 / 31 / 11 11 : 30 ☒ AM ☐ PM	**Brook St Swim Center**	**Back washing of pool filters**	**Water was clr in color, no odor,sheen or floatables**	**Discharge is clear**	**Place st front of contami drains**
1 / 30 / 12 9 : 15 ☒ AM ☐ PM	**Brook St Swim Center**	**Back washing of pool filters**	**Water was clr in color, no odor,sheen or floatables**	**Discharge is clear**	**Place st front of contami drains**
4 /30 / 12 9 : 00 ☒ AM ☐ PM	**Brook St Swim Center**	**Back washing of pool filters**	**Water was clr in color, no odor,sheen or floatables**	**Discharge is clear**	**Place st front of contami drains**
/ / : ☐ AM ☐ PM					

- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in ac with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** **DATE/TIME OF OBSERVATIONS** 8 /31 / 11 10 :30 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** 10 / 31 / 11 11:30 : ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** 1 / 30 / 12 9 :15 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** 4 /30 /12 9 :00 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C Brust	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐

REVERSE SIDE)	EXAMPLE: Vehicle Wash Water	UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	discolored, causing stains, contains floating objects or an oil sheen, has odors, etc. AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION
___/___/___ ___:___ ☐ AM ☐ PM			NA	
___/___/___ ___:___ ☐ AM ☐ PM			NA	
___/___/___ ___:___ ☐ AM ☐ PM			NA	
___/___/___ ___:___ ☐ AM ☐ PM			NA	

at the time of discharge.

Observation Date: October 31 2011	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
Observers Name: C Brust	Observation Time	11 : 30 ☐P.M. ☒A.M.	: ☐P.M. ☐A.M.	:
Title: Maintenance Specialist	Time Discharge Began	0 : ☐P.M. ☐A.M.	: ☐P.M. ☐A.M.	:
Signature: C B	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: November 30 2011	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
Observers Name: C Brust	Observation Time	9 : 50 ☐P.M. ☒A.M.	: ☐P.M. ☐A.M.	:
Title: Maintenance Specialist	Time Discharge Began	0 : ☐P.M. ☐A.M.	: ☐P.M. ☐A.M.	:
Signature: C B	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: December 29 2011	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
Observers Name: C Brust	Observation Time	10 : 00 ☐P.M. ☒A.M.	: ☐P.M. ☐A.M.	:
Title: Maintenance Specialist	Time Discharge Began	0 : ☐P.M. ☐A.M.	: ☐P.M. ☐A.M.	:
Signature: C B	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: January 30 2012	Drainage Location Description	#1 S. Outfall at Division St	#2	#3
Observers Name: C Brust	Observation Time	9 : 15 ☐P.M. ☒A.M.	: ☐P.M. ☐A.M.	:
Title: Maintenance Specialist	Time Discharge Began	: ☐P.M. ☐A.M.	: ☐P.M. ☐A.M.	:
Signature: C B	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐

	EXAMPLE: Discharge from material storage Area #2	indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.
___/___/___ ___:___ ☐ AM ☐ PM		NA	
___/___/___ ___:___ ☐ AM ☐ PM		NA	
___/___/___ ___:___ ☐ AM ☐ PM		NA	
___/___/___ ___:___ ☐ AM ☐ PM		NA	
___/___/___ ___:___ ☐ AM ☐ PM		NA	

at the time of discharge.

Observation Date: February 28 2012	Drainage Location Description	#1S. Outfall@ Division St	#2	#3
Observers Name: C Brust	Observation Time	12 : 40 ☒ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
Title: Maintenance Specialist	Time Discharge Began	0 : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
Signature: C Brust	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: March 27 2012	Drainage Location Description	#11S. Outfall@ Division St	#2	#3
Observers Name: C Brust	Observation Time	10 : 30 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
Title: Maintenance Specialist	Time Discharge Began	0 : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
Signature: C Brust	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: April 30 2012	Drainage Location Description	#1S. Outfall @ Division St	#2	#3
Observers Name: C Brust	Observation Time	9 : 00 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
Title: Maintenance Specialist	Time Discharge Began	0 : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
Signature:	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: May 31 2012	Drainage Location Description	#1S. Outfall @Division St	#2	#3
Observers Name: C Brust	Observation Time	9 : 45 ☐ P.M. ☒ A.M.	: ☐ P.M. ☐ A.M.	:
Title: Maintenance Specialist	Time Discharge Began	0 : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	:
Signature: C Brust	Were Pollutants Observed	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐

	material storage Area #2	floating objects or an oil sheen, has odors, etc.	dripped by trucks in vehicle maintenance area.	
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation
Landfill Run Off	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☒NO	If yes, to either question, complete the next two columns of this form	NA
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO		

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To Interested Parties:

2011-2012 ANNUAL REPORT ANNUAL REPORT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Storm Water Multi-Application Reporting and Tracking System (SMARTS) allows an individual discharger to file and submit their Annual Report electronically to the Regional Water Board. Currently SMARTS is not a mandatory reporting method, but we encourage all dischargers to register and use SMARTS.

To register to use SMARTS please visit: https://smarts.waterboards.ca.gov and download the SMARTS LRP registration form and instructions. Please fill out the form and mail it back to: SMARTS Registration, P.O. Box 1977, Sacramento, CA 95812. Once a complete registration form is received, a login name and password will be emailed to you.

For SMARTS registration questions or information please contact the SMARTS help center at 1-866-563-3107 or by email at stormwater@waterboards.ca.gov.

To receive email updates on Storm Water Industrial permitting issues, please sign up at
http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml
The Storm Water program currently maintains five email lists:

- Storm Water Database Issues
- Storm Water Construction Permitting Issues
- Storm Water Industrial Permitting Issues
- Storm Water Municipal Permitting Issues
- Sustainable Development

Sincerely,

Storm Water Section

State of California
STATE WATER RESOURCES CONTROL BOARD

2011-2012

ANNUAL REPORT

FOR
STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2011 through June 30, 2012

An annual report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers and e-mail addresses of the Regional Board contacts, as well as the Regional Board office addresses can be found at http://www.waterboards.ca.gov/stormwtr/contact.html. To find your Regional Board information, match the first digit of your WDID number with the corresponding number that appears in parenthesis on the first line of each Regional Board office.

GENERAL INFORMATION:

A. Facility Information:

Facility WDID No: 9 371005696

Facility Business Name: City of Oceanside

Contact Person: Bryan Forward

Physical Address: 2070 Mission Ave

e-mail: bforward@ci.oceanside.ca.us

City: Oceanside

CA Zip: 92054 Phone: 760 435 5194

Standard Industrial Classification (SIC) Code(s): 4953

B. Facility Operator Information:

Operator Name: Oceanside Public Works Department

Contact Person: Bryan Forward

Mailing Address: 4927 Oceanside Blvd

e-mail: bforward@ci.oceanside.ca.us

City: Oceanside

State: Ca Zip: 92056 Phone: 760 435 5194

C. Facility Billing Information:

Operator Name: Oceanside Public Works Department

Contact Person: Bryan Forward

Mailing Address: 4927 Oceanside Blvd.

e-mail: bforward@ci.oceanside.ca.us

City: Oceanside

State: Ca Zip: 92056 Phone: 760 435 5194

2011-2012

ANNUAL REPORT

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

   ☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

   i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

   ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: ___/___/___

   Re-evaluation Date: ___/___/___

   Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

   iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: ___/___/___

   Re-evaluation Date: ___/___/___

   Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

   iv. ☐ Received Regional Board Certification Certification Date: ___/___/___

   v. ☐ Received Local Agency Certification Certification Date: ___/___/___

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

   ☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? ___2___

   If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

   ☒ **YES** ☐ **NO** **attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? ___1___

4. For each storm event sampled, did you collect and analyze a sample from each of the facility's' storm water discharge locations? ☒ YES, go to Item E.6 ☐ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☐ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated ___/___/_____

6. Were all samples collected during the first hour of discharge? ☒ YES ☐ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☒ YES ☐ NO, **attach explanation**

8. Were there any discharges of storm water that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☒ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

       _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

       _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

       _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler
- Parameters tested
- Name of analytical testing laboratory
- Discharge location identification
- Testing results
- Test methods used
- Test detection limits
- Date of testing
- Copies of the laboratory analytical results

City of Oceanside Water Utilities Laboratory
3950 N. River Rd.
Oceanside CA, 92054
(760) 435-5946
(760) 721-7392 fax

USEPA Lab Code: CA00174
ELAP Certification No.: 1740

Report No.: LF100611

Project: Stormwater

Sample Description:	Location Code:	Lab ID# :	Sample Collector:	Collection Date and Time:	
Mission landfill	MISSLAND	BB71839	BRUST	October 05, 2011	3:45 PM

Analyte	Method	Result	Units	MDL	Analyst	Qualifier
Conductivity	SM 2510 B	365	µmho/cm	20	MP	
Oil and Grease	EPA 1664 A	< 5	mg/L	5	MP	
pH	SM 4500-H+ B	6.69	pH		GGA	E
Total Suspended Solids	SM 2540 D	83	mg/L	0.6	GGA	

Sample Description:	Location Code:	Lab ID# :	Sample Collector:	Collection Date and Time:	
Maxson landfill	MAXLAND	BB71840	BRUST	October 05, 2011	3:30 PM

Analyte	Method	Result	Units	MDL	Analyst	Qualifier
Conductivity	SM 2510 B	377	µmho/cm	20	MP	
Oil and Grease	EPA 1664 A	7	mg/L	7	MP	
pH	SM 4500-H+ B	6.70	pH		GGA	E
Total Suspended Solids	SM 2540 D	596	mg/L	0.6	GGA	

MDL: Method Detection Limit

E: Sample was received and analyzed past the method holding time.

Unless otherwise noted, all quality control parameters were within acceptable limits.
If you have any questions regarding these analyses or procedures, please contact:

City of Oceanside
Water Utilities Department Laboratory
(760) 435-5946

City of Oceanside Water Utilities Laboratory
3950 N. River Rd.
Oceanside CA, 92058
(760) 435-5946
(760) 721-7392 fax

USEPA Lab Code: CA00174
ELAP Certification No.: 1740
Report No.: LF110411
Project: Stormwater

Location Code and Description	Lab ID#	Sample Collector	Collection Date and Time
MAXLAND - Maxson landfill	BB72783	BRUST	November 04, 2011 9:40 AM

Analyte	Method	Result	Units	MDL	RL	Analyst	Qualifier
pH	SM 4500-H+ B	6.50	pH			BMW	E
Conductivity	SM 2510 B	505	µmho/cm	20	20	MP	
Oil and Grease	EPA 1664 A	7	mg/L	6	2	MP	
Total Suspended Solids	SM 2540 D	246	mg/L	0.6	1.5	GGA	

Location Code and Description	Lab ID#	Sample Collector	Collection Date and Time
MISSLAND - Mission landfill	BB72784	BRUST	November 04, 2011 10:07 AM

Analyte	Method	Result	Units	MDL	RL	Analyst	Qualifier
pH	SM 4500-H+ B	7.24	pH			BMW	E
Conductivity	SM 2510 B	276	µmho/cm	20	20	MP	
Oil and Grease	EPA 1664 A	< 7	mg/L	7	2	MP	
Total Suspended Solids	SM 2540 D	270	mg/L	0.6	1.5	GGA	

MDL: Method Detection Limit
RL: Reporting Limit
EST: Estimated value

E: Procedural error. Sample was received and analyzed past holding time.

Unless otherwise noted, all quality control parameters were within acceptable limits.
If you have any questions regarding these analyses or procedures, please contact:

City of Oceanside
Water Utilities Department Laboratory
(760) 435-5946

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**

Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

☒ **YES** ☐ **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers.** Indicate "N/A" for quarters without any authorized non-storm water discharges.

July-September	☒ **YES**	☐ **NO**	☐ **N/A**	October-December	☒ **YES**	☐ **NO**	☐ **N/A**
January-March	☒ **YES**	☐ **NO**	☐ **N/A**	April-June	☒ **YES**	☐ **NO**	☐ **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information:

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**

Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non- storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July-September	☒ **YES**	☐ **NO**	October-December	☒ **YES**	☐ **NO**
January-March	☒ **YES**	☐ **NO**	April-June	☒ **YES**	☐ **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

☒ **YES** ☐ **NO** Go to Item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

☐ **YES** ☒ **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information:

i. name of each unauthorized non-storm water discharge
ii. date and time of observation
iii. source and location of each unauthorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers.** Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information:

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occurred during the last year
   - outdoor wash and rinse areas
   - process/manufacturing areas
   - loading, unloading, and transfer areas
   - waste storage/disposal areas
   - dust/particulate generating areas
   - erosion areas
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

   The following records should be reviewed:

   - quarterly authorized non-storm water discharge visual observations
   - monthly storm water discharge visual observation
   - records of spills/leaks and associated clean-up/response activities
   - quarterly unauthorized non-storm water discharge visual observations
   - Sampling and Analysis records
   - preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

   The following SWPPP items should be reviewed:

   - pollution prevention team
   - list of significant materials
   - description of potential pollutant sources
   - assessment of potential pollutant sources
   - identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

   The following BMP categories should be reviewed:

   - good housekeeping practices
   - spill response
   - employee training
   - erosion control
   - quality assurance
   - preventative maintenance
   - material handling and storage practices
   - waste handling/storage
   - structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

2C.

The unauthorized non storm water discharge is generated from the Oceanside Unified School District Maintenance yard, as well as public parkway irrigation run off.

2011-2012

ANNUAL REPORT

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☒ YES	☐ NO	☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☑ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Bryan Forward

Signature: _____ Date: 5/31/12

Title: Ordinance Enforcement Supervisor

DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

The Industrial Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least four parameters. These are pH, Total Suspended Solids (TSS), Specific Conductance (SC),and Total Organic Carbon (TOC). Oil and Grease (O&G) may be substituted for TOC. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge as a result of industrial activity and analytical parameters listed in Table D of the General Permit. There are no numeric limitations for the parameters you test for.

The four parameters which the General Permit requires to be tested are considered *indicator* parameters. In other words, regardless of what type of facility you operate, these parameters are nonspecific and general enough to usually provide some indication whether pollutants are present in your storm water discharge. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and a alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or industrial activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure of the undissolved solids that are present in your storm water discharge. Sources of TSS include sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Specific Conductance (SC) is a numerical expression of the ability of the water to carry an electric current. SC can be used to assess the degree of mineralization, salinity, or estimate the total dissolved solids concentration of a water sample. Because of air pollution, most rain water has a SC a little above zero. A high SC could affect the usability of waters for drinking, irrigation, and other commercial or industrial use.

Total Organic Carbon (TOC) is a measure of the total organic matter present in water. (All organic matter contains carbon) This test is sensitive and able to detect small concentrations of organic matter. Organic matter is naturally occurring in animals, plants, and man. Organic matter may also be man made (so called synthetic organics). Synthetic organics include pesticides, fuels, solvents, and paints. Natural organic matter utilizes the oxygen in a receiving water to biodegrade. Too much organic matter could place a significant oxygen demand on the water, and possibly impact its quality. Synthetic organics either do not biodegrade or biodegrade very slowly. Synthetic organics are a source of toxic chemicals that can have adverse affects at very low concentrations. Some of these chemicals bioaccumulate in aquatic life. If your levels of TOC are high, you should evaluate all sources of natural or synthetic organics you may use at your site.

Oil and Grease (O&G) is a measure of the amount of oil and grease present in your storm water discharge. At very low concentrations, O&G can cause a sheen (that floating "rainbow") on the surface of water (1 qt. of oil can pollute 250,000 gallons of water). O&G can adversely affect aquatic life and create unsightly floating material and film on water, thus making it undrinkable. Sources of O&G include maintenance shops, vehicles, machines and roadways.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at http://www.waterboards.ca.gov. It is contained in the Sampling and Analysis Reduction Certification.

See Storm Water Contacts at

http://www.waterboards.ca.gov/water_issues/programs/stormwater/contact.shtml

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as nec

NAME OF PERSON COLLECTING SAMPLE(S): C Brust TITLE: Maintenance Specialist

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event						
			BASIC PARAMETERS					O	
			PH	TSS	SC	O&G	TOC		
N. end of Canyon Dr @ Hwy 76	10 / 5 / 11 3 :15 ☐ AM ☒ PM	3 :00 ☐ AM ☒ PM							
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM			SEE LAB RESULTS				
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM							
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM							
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l		
TEST METHOD DETECTION LIMIT:									
TEST METHOD USED:									
ANALYZED BY (SELF/LAB):									

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organi

- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

NAME OF PERSON COLLECTING SAMPLE(S): C Brust TITLE: Maintenance Specialist

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For Second Storm Event						
			BASIC PARAMETERS					C	
			PH	TSS	SC	O&G	TOC		
N. end of Canyon Dr @ Hwy 76	11/4/11 10:00 ☒ AM ☐ PM	9:20 ☒ AM ☐ PM							
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM		SEE LAB Results					
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM							
	/ / : ☐ AM ☐ PM	: ☐ AM ☐ PM							
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l		
TEST METHOD DETECTION LIMIT:									
TEST METHOD USED:									
ANALYZED BY (SELF/LAB):									

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

discharge location.

- Make additional copies of this form as nec

QUARTER: **JULY-SEPT.** DATE: 8 / 31 / 11	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**
QUARTER: **OCT.-DEC.** DATE: 10 /31 /11	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**
QUARTER: **JAN.-MARCH** DATE: 1 /30 /12	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**
QUARTER: **APRIL-JUNE** DATE: 4 / 30 /12	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C Brust	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**

OBSERVATION	LOCATION OF AUTHORIZED NSWD EXAMPLE: Air conditioner Units on Building C	AUTHORIZED NSWD EXAMPLE: Air conditioner condensate	CHARACTERISTICS Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		BM IM
			At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
8 / 31/ 11 10:00 ☒ AM ☐ PM	Irrigation run off from public prk ways. O'side school dist. Maint. yard	School Maintenance yard, private irrigation	Water is clr in color, no odors,sheen or floatables	Discharge is clear	Place fiber drain entra
10 /31/ 11 11:45 ☒ AM ☐ PM	Irrigation run off from public prk ways. O'side school dist. Maint. yard	School Maintenance yard, private irrigation	Water is clr in color, no odors,sheen or floatables	Discharge is clear	Place fiber drain entra
1 / 30 /12 9:40 ☒ AM ☐ PM	Irrigation run off from public prk ways. O'side school dist. Maint. yard	School Maintenance yard, private irrigation	Water is clr in color, no odors,sheen or floatables	Discharge is clear	Place fiber drain entra
4 /30 /12 9:30 ☒ AM ☐ PM	Irrigation run off from public prk ways. O'side school dist. Maint. yard	School Maintenance yard, private irrigation	Water is clr in color, no odors,sheen or floatables	Discharge is clear	Place fiber drain entra
/ / : ☐ AM ☐ PM					

- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in acc with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** **DATE/TIME OF OBSERVATIONS** 8 / 31 / 11 10 00 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C B	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** 10 / 31 / 11 11 :45 ☒ AM ☐ PM	**Observers Name:** **Title:** Maintenance Specialist **Signature:** C B	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** 1 / 30 / 12 9 :40 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C B	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** 4/ 30 / 12 9 :30 ☒ AM ☐ PM	**Observers Name:** C Brust **Title:** Maintenance Specialist **Signature:** C B	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐

REVERSE SIDE)	EXAMPLE: Vehicle Wash Water	UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.	
			AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION
___/___/___ ___:___ ☐ AM ☐ PM			NA	
___/___/___ ___:___ ☐ AM ☐ PM			NA	
___/___/___ ___:___ ☐ AM ☐ PM			NA	
___/___/___ ___:___ ☐ AM ☐ PM			NA	

at the time of discharge.

Observation Date: October 31 2011 Observers Name: C Brust Title: Maintenance Specialist Signature: C B	Drainage Location Description	#1	#2	#3
	Observation Time	11 : 45 ☐P.M. ☑A.M.	: ☐P.M. ☐A.M.	:
	Time Discharge Began	Ø : ☐P.M. ☐A.M.	: ☐P.M. ☐A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: November 30 2011 Observers Name: C Brust Title: Maintenance Specialist Signature: C B	Drainage Location Description	#1	#2	#3
	Observation Time 10:45	: ☐P.M. ☑A.M.	: ☐P.M. ☐A.M.	:
	Time Discharge Began	Ø : ☐P.M. ☐A.M.	: ☐P.M. ☐A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: December 29 2011 Observers Name: C Brust Title: Maintenance Specialist Signature: C B	Drainage Location Description	#1	#2	#3
	Observation Time	9 :30 ☐P.M. ☑A.M.	: ☐P.M. ☐A.M.	:
	Time Discharge Began	Ø : ☐P.M. ☐A.M.	: ☐P.M. ☐A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: January 30 2012 Observers Name: C Brust Title: Maintenance Specialist Signature: C B	Drainage Location Description	#1	#2	#3
	Observation Time	9 : 40 ☐P.M. ☑A.M.	: ☐P.M. ☐A.M.	:
	Time Discharge Began	Ø : ☐P.M. ☐A.M.	: ☐P.M. ☐A.M.	:
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐

	EXAMPLE: Discharge from material storage Area #2	Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.
/ / : ☐ AM ☐ PM		NA	
/ / : ☐ AM ☐ PM		NA	
/ / : ☐ AM ☐ PM		NA	
/ / : ☐ AM ☐ PM		NA	
/ / : ☐ AM ☐ PM		NA	

- Discharges or temporarily stored or contained storm water must be observed at the time of discharge.

Observation Date: February 28 2012 Observers Name: C Brust Title: Maintenance Specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon Dr@ Hwy 76	#2	#3
	Observation Time	1 : 15 ☑ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	
	Time Discharge Began	0 : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: March 29 2012 Observers Name: C Brust Title: Maintenance Specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon Dr@ Hwy 76	#2	#3
	Observation Time	11 : 15 ☐ P.M. ☑ A.M.	: ☐ P.M. ☐ A.M.	
	Time Discharge Began	0 : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: April 30 2012 Observers Name: C Brust Title: Maintenance Specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon Dr@ Hwy 76	#2	#3
	Observation Time	9 : 50 ☐ P.M. ☑ A.M.	: ☐ P.M. ☐ A.M.	
	Time Discharge Began	0 : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐
Observation Date: May 31 2012 Observers Name: C Brust Title: Maintenance Specialist Signature: C Brust	Drainage Location Description	#1 N. end of Canyon Dr@ Hwy 76	#2	#3
	Observation Time	10 : 30 ☐ P.M. ☑ A.M.	: ☐ P.M. ☐ A.M.	
	Time Discharge Began	0 : ☐ P.M. ☐ A.M.	: ☐ P.M. ☐ A.M.	
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐

	material storage Area #2	floating objects or an oil sheen, has odors, etc.	dripped by trucks in vehicle maintenance area.	
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		
/ / : ☐ AM ☐ PM		NA		

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation
Landfill Run Off	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☒NO	If yes, to either question, complete the next two columns of this form	NA
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO		

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Attachment 5-A

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Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil	Bacteria	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
MISSION ANIMAL & BIRD HOSPITAL	655		BENET ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Pet Hospital	Not applicable	1450304300	742	YES	NO
CHEVRON / O'SIDE MART	656		BENET ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1450304300	5541	NO	NO
E BUILD TRUSS	507		JONES ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X				X				Structural Wood Members	Not applicable	1460312400	2439	YES	NO
LEN'S AUTOMOTIVE	510		JONES ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X				X				Automobile, Body and Paint Sho	Not applicable	1460312100	7532	YES	NO
SHELL GASOLINE & FOOD STORE	185		OLD GROVE ROAD	G-H	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1581014700	5541	NO	NO
JEFFERSON JUNIOR HIGH SCHOOL	823		ACACIA AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1451500200	5812	YES	NO
ALAMOSA PARK ELEMENTARY SCHOOL	5130		ALAMOSA PARK DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1581310200	5812	YES	NO
EMPRESA ELEMENTARY SCHOOL	4850		AVENIDA EMPRESSA		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1581303600	5812	YES	NO
PEDRO'S TACOS	656		BENET ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1450304300	5812	YES	NO
OCEAN'S 11 CASINO	121		BROOKS STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1483402900	5812	YES	NO
NORTH TERRACE ELEMENTARY SCHOOL	940		CAPISTRANO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1440601600	5812	YES	NO
HOLIDAY INN/MARINA	1401		CARMELO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430603800	5812	YES	NO
DEL TACO	1601		CARMELO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430603600	5812	YES	NO
BREAKWATER BREWING CO.	101	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472711400	5812	YES	NO
HOSIE'S PACIFIC PUB	113	S	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472720400	5813	YES	NO
KEALANI'S	207	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470870500	5812	YES	NO
BREAKFAST CLUB DINER CA	228	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470970800	5812	YES	NO
MARYS FAMILY RESTAURANT	307	N	COAST HWY	B	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470860200	5812	YES	NO
ALFREDO'S MEXICAN FOOD	602	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432460500	5812	YES	NO
VENETO'S PIZZA TOWNE	604	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432460600	5812	YES	NO
VENETO'S RESTAURANT	608	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432460600	5812	YES	NO
ANGELO'S BURGERS	621	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432450900	5812	YES	NO
WIENERSCHNITZEL	624	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432460900	5812	YES	NO
HARBOR HOUSE CAFE	714	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1432051000	5812	YES	NO
CARROWS 954	936	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470203700	5812	YES	NO
THE MAIN ATTRACTION	939	N	COAST HWY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430402600	5812	YES	NO
OHANA HAWAIIAN BBQ	459		COLLEGE BLVD	2	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1571011400	5812	YES	NO
MCDONALDS	487		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1571011000	5812	YES	NO
HOMETOWN BUFFET INC 735	491		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1571011500	5812	YES	NO
OCEANSIDE CHINESE FOOD	495		COLLEGE BLVD	B	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1571011600	5812	YES	NO
VICTORIAS MEXICAN FOOD INC	495		COLLEGE BLVD	C	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1571011600	5812	YES	NO
DENNY'S RESTAURANT	605		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615530500	5812	YES	NO
TACO BELL 17285	695		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615530600	5812	YES	NO
CARL'S JR	775		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615530700	5812	YES	NO
TONY PEPPERONI	805		COLLEGE BLVD	102	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615531700	5812	YES	NO
CHU'S QUICKWOK	815		COLLEGE BLVD	107	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615531000	5812	YES	NO
VONS STORE 2360	845		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1615530200	5812	YES	NO
DEL TACO LLC	1970		COLLEGE BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622404800	5812	YES	NO
PANDA EXPRESS 1633	47		DOUGLAS DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1600205600	5812	YES	NO
LA HACIENDA RESTAURANT & PARTY HALL	300		DOUGLAS DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1586511700	5812	YES	NO
CARL'S JR	611		DOUGLAS DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580304400	5812	YES	NO
ALBERTO'S MEXICAN FOOD	650		DOUGLAS DRIVE	122	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1578105700	5812	YES	NO
REYNOLDS ELEMENTARY SCHOOL	4575		DOUGLAS DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1221902700	5812	YES	NO
SUNNYSIDE CAF	250		EDDIE JONES WAY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1450212900	5812	YES	NO
SAN LUIS REY RESTAURANT AND BAKERY	490	N	EL CAMINO REAL		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580620300	5812	YES	NO
BONSALL WEST ELEMENTARY SCHOOL	5050		EL MIRLO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1225220200	5812	YES	NO
IN AND OUT BURGERS	4605		FRAZEE ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1617817700	5812	YES	NO
GREAT WOK OF CHINA	4635		FRAZEE ROAD	F	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1617817600	5812	YES	NO
ALBERTO'S	4645		FRAZEE ROAD	I	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1617817600	5812	YES	NO
SUSHI ISLAND	4645		FRAZEE ROAD	F-G	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1617817600	5812	YES	NO
SAN LUIS REY ELEMENTARY SCHOOL	3535		HACIENDA DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1602906500	5812	YES	NO
ROCKING BAHA	258	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
LIGHTHOUSE OYSTER BAR & GRILL	262	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	NO
DOMINIC'S - ITALIAN RESTAURANT	268	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
TONY'S SPORT BAR & GRILL	274	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
HARBOR FISH AND CHIPS	276	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
BEACH BREAK CAFE	280	S	HARBOR DRIVE	A	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
JOE'S CRAB SHACK	314	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
DENNY'S	487	S	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430901600	5812	YES	YES
MONTEREY BAY CANNERS	1325	N	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1430101600	5812	YES	YES
JOLLY ROGER RESTAURANT	1900	N	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	7600802400	5812	YES	YES
OCEANSIDE YACHT CLUB	1950	N	HARBOR DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1431201000	5812	YES	YES

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil	Grease	Bacteria	Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
SOUTH OCEANSIDE ELEMENTARY SCHOOL	1806	S	HORNE STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	902.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1532340300	5812	YES	NO
MADISON MIDDLE SCHOOL	4930		LAKE BLVD.		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1690111500	5812	YES	NO
LAKE ELEMENTARY SCHOOL	4950		LAKE BLVD.		High	Eat/Drink Est.	Oceanside	San Luis Rey	902.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1690111500	5812	YES	NO
LAUREL ELEMENTARY SCHOOL	1410		LAUREL STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1451300600	5812	YES	NO
MISSION VISTA HIGH SCHOOL	1306		MELROSE DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1571007500	5812	YES	NO
HARNEY SUSHI	301		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472711500	5812	YES	NO
DAIRY QUEEN	302		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470890600	5812	YES	NO
JOHNNY MANANAS	308		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470890600	5812	YES	NO
THE LONGBOARDER CAF	400		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470871500	5812	YES	NO
ROBERTO'S TACO SHOP	401		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472711400	5812	YES	NO
UMI JAPANESE GRILL AND CAF	401		MISSION AVENUE	B109	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472711400	5812	YES	NO
RIM TALAY	508		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470970400	5812	YES	NO
THE WOK IN	511		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472840200	5812	YES	NO
BURGER HOUSE	515		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472840200	5812	YES	NO
SWAMI'S CAF	608		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470960400	5812	YES	NO
WENDY'S 30	1002		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472310100	5812	YES	NO
EL POLLO LOCO	1004		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472310500	5812	YES	NO
THE MANDARIN	1060		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472310800	5812	YES	NO
PANDA EXPRESS 941	1068		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472310200	5812	YES	NO
CHINA STAR SUPER BUFFET	1401		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1483403000	5812	YES	NO
BURGER KING	1420		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481432000	5812	YES	NO
ARMANDO'S MEXICAN FOOD	1426		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481431400	5812	YES	NO
THE SHOW PALACE	1527		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1482602500	5812	YES	NO
VALUE PLUS	1527		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1482602500	5411	YES	NO
ALBERTO'S MEXICAN FOOD	1602		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Full Service Restaurant	Not applicable	1481512700	5812	YES	NO
KARINA'S CEVICHE & OYSTERS	1702		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481603200	5812	YES	NO
ARBY'S 1396	1863		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481603600	5812	YES	NO
JACK IN THE BOX 3068	1900		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1451802900	5812	YES	NO
LA PERLA TAPATIA	1910		MISSION AVENUE	A	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481603000	5812	YES	NO
KFC - OCEANSIDE	2007		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481700600	5812	YES	NO
VIVA SUPERMERCADO	2031		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1481700600	5411	YES	NO
MISSION ELEMENTARY SCHOOL	2100		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1451500200	5812	YES	NO
DAVINA'S MEXICAN RESTAURANT	3320		MISSION AVENUE	Q-R	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602711200	5812	YES	NO
DEIBERTOS MEXICAN FOOD	3371		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605500300	5812	YES	NO
L.B.'S SPORTS BAR & GRILL	3375		MISSION AVENUE	J-K	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605500500	5812	YES	NO
PAUL'S PLACE	3671		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602910300	5812	YES	NO
MCDONALDS 5244	3720		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602904001	5812	YES	NO
ARIA JAPANESE/KOREAN BBQ	3744		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1583901700	5812	YES	NO
BURGER KING	3746		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1583900800	5812	YES	NO
KFC	3747		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602910100	5812	YES	NO
PHÒ HOUSE	3753		MISSION AVENUE	120	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602904001	5812	YES	NO
MISSION KABAYAN ORIENTAL MARKET	3753		MISSION AVENUE	121-22	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1602911100	5411	YES	NO
STATER BROTHERS	3770		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1583901500	5411	YES	NO
FIESTA MEXICANA	3784		MISSION AVENUE	151	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1583900200	5812	YES	NO
PIT STOP	3825		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605601400	5812	YES	NO
OCEAN THAI CUSINE	3846		MISSION AVENUE	A3-4	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580520300	5812	YES	NO
LITTLE CAESAR'S PIZZA	3852		MISSION AVENUE	B3-4	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580520300	5812	YES	NO
TACO BELL 3837	3895		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605600100	5812	YES	NO
COCO'S 0886	3905		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580521200	5812	YES	NO
JACK IN THE BOX 3061	3909		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580521200	5812	YES	NO
FRATELLI'S ITALIAN KITCHEN	3915		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580521200	5812	YES	NO
ALBERTSON'S 6767	3925		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1580521300	5411	YES	NO
KOTIJA MEXICAN FOOD	3935		MISSION AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1580521200	5812	YES	NO
RUBY'S DINER	1		OCEANSIDE PIER	A	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	Unknown	5812	YES	YES
RALPHS 54	101		OLD GROVE ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1581015000	5411	YES	NO
LOVE BOAT SUSHI BAR	125		OLD GROVE ROAD	5	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1581015300	5812	YES	NO
PICK UP STIX 7223	125		OLD GROVE ROAD	C2	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1581015300	5812	YES	NO
POLLOS MARIA 2	125		OLD GROVE ROAD	8	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1581015300	5812	YES	NO
MCDONALDS	185		OLD GROVE ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1581014700	5812	YES	NO
NICHOLS ELEMENTARY SCHOOL	4250		OLD GROVE ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1580405000	5812	YES	NO
CESAR CHAVEZ MIDDLE SCHOOL	202		OLEANDER DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1570805400	5812	YES	NO
333 PACIFIC	333	N	PACIFIC STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470750500	5812	YES	NO

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash Debris	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
HARBOR PELICAN DELI MART	1380	N	PACIFIC STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1431201000	5812	YES	YES
FOUSSAT ELEMENTARY SCHOOL	3800		PALA ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1580304700	5812	YES	NO
COLIMA'S MEXICAN FOOD	308		PIER VIEW WAY		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470860600	5812	YES	NO
OCEANSIDE HIGH SCHOOL	1		PIRATE'S COVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1473400800	5812	YES	NO
EL CAMINO HIGH SCHOOL	400		RANCHO DEL ORO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1680822000	5812	YES	NO
LIBBY LAKE ELEMENTARY SCHOOL	423	W	REDONDO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1572506200	5812	YES	NO
ROMA'S PIZZA	617	N	REDONDO DRIVE	B	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570402600	5812	YES	NO
LA PERLA TAPATIA	625	N	REDONDO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570402700	5812	YES	NO
ERIBERTO'S MEXICAN FOOD	644	N	REDONDO DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570403700	5812	YES	NO
ALBERTO'S MEXICAN FOOD	4904	N	RIVER ROAD	100	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570404500	5812	YES	NO
LITTLE CAESAR'S PIZZA	4904	N	RIVER ROAD	200	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570404500	5812	YES	NO
DEL RIO ELEMENTARY SCHOOL	5200	N	RIVER ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1220810800	5812	YES	NO
CARLITO'S CHICKEN	160		ROYMAR ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1602711300	5812	YES	NO
PANCHITO'S TACO BAR	405		SAN DIEGO STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481412200	5812	YES	NO
EL MUNDO DE MARISCOS	3110		SAN LUIS REY ROAD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1460502500	5812	YES	NO
MISSION MEADOWS ELEMENTARY SCHOOL	5657		SPUR AVENUE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1571108100	5812	YES	NO
LA CASA PIZZA	209	N	TREMONT STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470890200	5812	YES	NO
DAVINA'S CABO GRILL LLC	212	N	TREMONT STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470871500	5812	YES	NO
BURGER KING	227	S	TREMONT STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1473502400	5812	YES	NO
TREMONT STREET SPORTS BAR	311	N	TREMONT STREET		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470881000	5812	YES	NO
POPEYES LOUISIANA KITCHEN	511		VANDEGRIFT BLVD		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570403600	0	YES	NO
MARIETA'S MEXICAN RESTAURANT	485		VANDEGRIFT BLVD	2	High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1570402900	5812	YES	NO
ARROWOOD GOLF CLUB CAFETERIA	5201		VILLAGE DRIVE		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1225213200	5812	YES	NO
GRANDMA HILLTOP HIDE AWAY CAF	539		VISTA BELLA		High	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1601401300	5812	YES	NO
LAS PALMAS RANCH	6508		MORRO HEIGHTS ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1221701400	742	YES	NO
PARDEE TREE NURSERY	30970		PRECIOUS HILLS ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1220306400	742	YES	NO
PACIFIC PARADISE LP.	5708	N	RIVER ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1221005300	742	YES	NO
DM COLOR EXPRESS INC.	5712	N	RIVER ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1221005900	742	YES	NO
WILLOWBROOK NURSERY	2220		WILLOBROOK DRIVE		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1591122300	742	YES	NO
CMA GROWERS	370		WILSHIRE ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	Unknown	742	YES	NO
LOPEZ NURSERY	461		WILSHIRE ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1220202300	742	YES	NO
ARMSTRONG GARDEN CENTERS INC.	1492		WILSHIRE ROAD		High	Nurseries	Oceanside	San Luis Rey	903.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1221502300	742	YES	NO
CRAWFORD PERFORMANCE	622		AIPORT ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Assembly Auto Parts	Not applicable	1460310300	5013	NO	NO
AMADORS REPAIR SERVICE	260		AIRPORT ROAD	A	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602715500	7538	NO	NO
DONALD ERBE CO INC	340		AIRPORT ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Parts Supply Store	Not applicable	1602711600	5531	NO	NO
TNT REPAIR SERVICES INC	350		AIRPORT ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602711600	7538	NO	NO
AIRPORT AUTOMOTIVE	360		AIRPORT ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602711600	7538	NO	NO
PLAVAN PETROLEUM INC	575		AIRPORT ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Service Station	Not applicable	1460311800	5541	NO	NO
ROY'S AUTO REPAIR DETAIL & AUTO BODY	580		AIRPORT ROAD	B	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Interior Repair an	Not applicable	1460310800	7538	NO	NO
ECOLOGY AUTO PARTS INC	2315		CARPENTER ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Parts Dealer Used	9 371013069	1450303500	5015	NO	NO
EDDIE'S AUTOMOTIVE INC	501	S	COAST HWY		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1501840900	7538	NO	NO
MOHSEN OIL	628	S	COAST HWY	E	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1503011600	5541	NO	NO
THRIFTY GASOLINE	802	N	COAST HWY		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1432060500	5541	NO	NO
CHEVRON / O'SIDE MART	1601	N	COAST HWY		High	Commercial	Oceanside	San Luis Rey	904.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1430902100	5541	NO	NO
COLLEGE PET CLINIC	475		COLLEGE BLVD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Pet Clinic	Not applicable	1571011100	742	YES	NO
OCEANSIDE AUTOMOTIVE	499		COLLEGE BLVD	B	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1571011100	7538	NO	NO
CHEVRON USA INC 203189	785		COLLEGE BLVD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gas Station	Not applicable	1615530800	5812	NO	NO
CIRCLE K	1990		COLLEGE BLVD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gas Station	Not applicable	1622404400	5541	NO	NO
WARNER'S MUFFLER	190		DOUGLAS DRIVE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1580520700	7538	NO	NO
ARCO	607		DOUGLAS DRIVE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1580304300	5541	NO	NO
SHELL GASOLINE	660		DOUGLAS DRIVE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1578105800	5541	NO	NO
SAN LUIS REY AUTO SALVAGE AND STORAGE	471	N	EL CAMINO REAL		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1580661000	7538	NO	NO
SAN LUIS REY AUTO SERVICE	481	N	EL CAMINO REAL		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1580660500	7538	NO	NO
MOE'S OCEANA UNION 76	502	S	EL CAMINO REAL		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gas Station/Convenience Store	Not applicable	2309190220	5541	NO	NO
SEASIDE AUTOMOTIVE	115	S	FREEMAN STREET	B	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1472830200	7538	NO	NO
MOBIL-HARBOR DRIVE, INC	477	S	HARBOR DRIVE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1430901400	5541	NO	NO
OCEANSIDE MARINE CENTRE, INC	1550	N	HARBOR DRIVE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Boat Dealers	Not applicable	1431201000	5551	NO	YES
BUSSEYS AUTOMOTIVE SERVICE	1402		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1481430900	7538	NO	NO
MOBIL OIL	1407		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1483400200	5541	NO	NO
TERRY'S BODY SHOP, INC	1408		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1481431900	7538	NO	NO
ECONO LUBE N TUNE 23	1618		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1451512600	7538	NO	NO
MISSION ARCO AM/PM	1920		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1451503100	5541	NO	NO

Loc	Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
											Sediment	Nutrients	Trash	Oil	Bacteria	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
	PEP BOYS 667	2041		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1481700600	7538	NO	NO
	MOHSEN OIL, INC	3213		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1602701100	5541	NO	NO
	MISSION 76	3361		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1605501000	5541	NO	NO
	MIDAS MUFFLERS	3510		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602904700	7538	NO	NO
	OCEANSIDE AUTO REPAIR II	3582		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602900900	7538	NO	NO
	MISSION AUTO CARE INC.	3596		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602900900	7538	NO	NO
	OCEANSIDE CAR WASH INC	3655		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Carwash	Not applicable	1602910500	7542	NO	NO
	EXPRESS FUEL	3865		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1605600300	5541	NO	NO
	SURFSIDE ANIMAL HOSPITAL	3876		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Pet clinic	Not applicable	1580520200	742	YES	NO
	O'SIDE GAS	3945		MISSION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1580521100	5541	NO	NO
	MAACO AUTO PAINT & BODY	3210		PRODUCTION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Body Shop	Not applicable	1602712800	7532	NO	NO
	MTOELITE AUTO RESTORATION & PAINTING	3225		PRODUCTION AVENUE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Body Shop	Not applicable	1602713100	7532	NO	NO
	REV MOTO INDUSTRIES	180		ROYMAR ROAD	G	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1602710900	7538	NO	NO
	G&W TRUCK & SUV ACCESSORIES	230		ROYMAR ROAD	F-H	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Parts Supply Store	Not applicable	1602714800	5531	NO	NO
	JOSH'S BOARS NEST	3207		ROYMAR ROAD	D	High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Motorcycle, Repair Services	Not applicable	1602711700	7699	NO	NO
	NORTH COUNTY HUMANE SOCIETY	2905		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Miscellaneous Retail - Pet Shop	Not applicable	1460903700	5999	YES	NO
	OCEANSIDE PET MOTEL	2909		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Pet Hospital	Not applicable	1460504700	742	YES	NO
	FULL ON RECYCLE	2929		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X								Recycling	Not applicable	1460504900	5093	NO	NO
	SOS CUSTOMZ	2954		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460506800	7538	NO	NO
	OCEANSIDE VETERINARY HOSPITAL	2960		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1	X	X	X		X	X	X				Veterinary Services for Animal	Not applicable	1460503600	742	YES	NO
	CARCOA QUALITY BODY & PAINT	3018		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive - Body Shop	Not applicable	1460503400	7539	NO	NO
	KENNEDYS CUSTOM CYCLES	3028		SAN LUIS REY ROAD		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Motorcycle, Repair Services	Not applicable	1460503300	7699	NO	NO
	PUURFECT AUTO SERVICE	407		TOPEKA STREET		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1500450100	7538	NO	NO
	CHANDLER TRANSMISSION	304		VIA DEL MONTE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460501800	7532	NO	NO
	BEN RECYCLING & SCRAP METAL	395		VIA DEL MONTE		High	Commercial	Oceanside	San Luis Rey	903.1			X								Scrape and Waste Materials	9 371021461	1460502900	5093	NO	NO
	EMPIRE TOWING	417		VIA DEL MONTE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Towing Service	Not applicable	1460502800	7549	NO	NO
	NCTD MAINTENANCE YARD	305		VIA DEL NORTE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	9 371010395	1450302600	7532	NO	NO
	SUBIE SHOP AUTOMOTIVE REPAIR	326		VIA DEL NORTE		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460501800	7538	NO	NO
	JORGE ALONZO SERVICES LLC	311		VIA EL CENTRO		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460601800	7538	NO	NO
	CARL'S AUTO REPAIR	389		VIA EL CENTRO		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460802900	7538	NO	NO
	FULL RV SERVICE	444		VIA EL CENTRO		High	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			General Auto Repair Shop	Not applicable	1460507000	7538	NO	NO
	HOBIE CAT COMPANY	4925		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Recreation Vehicles	Not applicable	1615010700	5012	NO	NO
	BON APPETIT	1		ANTIBODY WAY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605712100	5812	YES	YES
	MCDONALDS	137		CANYON DRIVE		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1481602500	5812	YES	NO
	SENOR PANCHOS TACO SHOP	202	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1500510100	5812	YES	NO
	BESSIE'S CAFE	232	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1500512000	5812	YES	NO
	ANITA'S 2	309	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1500470900	5812	YES	NO
	FISH JOINT	514	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1502031100	5812	YES	NO
	HILL STREET CAF□	524	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1502031000	5812	YES	NO
	101 CAF□	631	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1503760600	5812	YES	NO
	AZAFRAN	1001	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520110100	5812	YES	NO
	DIEGO'S MEXICAN FOOD	1030	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520222600	5812	YES	NO
	JENNIE'S CAF□	1034	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520222600	5812	YES	NO
	ANGELO'S BURGERS	1050	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520222400	5812	YES	NO
	SUPER RANCHITO TACO SHOP	1129	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520140500	5812	YES	NO
	MARISCOS ENSENADAS TACOS	1405	S	EL CAMINO REAL	107B	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1620312400	0	YES	NO
	GARRISON ELEMENTARY SCHOOL	333		GARRISON STREET		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1620202400	5812	YES	NO
	MARTIN LUTHER KING MIDDLE SCHOOL	1290		IVEY RANCH ROAD		High	Eat/Drink Est.	Oceanside	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1605701200	5812	YES	NO
	FAIRWINDS SENIOR COMMUNITY CAFETERIA	4490		MESA DRIVE		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Cafeteria	Not applicable	1605702800	5812	YES	NO
	FELIX BBQ WITH SOUL	3613		OCEAN RANCH BLVD	106-7	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721200	5812	YES	NO
	JUNKYARD GRILL	3613		OCEAN RANCH BLVD	108	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721200	5812	YES	NO
	ROSINA ITALIAN RESTAURANT	3613		OCEAN RANCH BLVD	100	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721200	5812	YES	NO
	BIG BOB'S PIZZA	3617		OCEAN RANCH BLVD	105	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721300	5812	YES	NO
	ROBERTO'S TACO SHOP	3617		OCEAN RANCH BLVD	108	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1605721300	5812	YES	NO
	CHURCH'S CHICKEN	510		OCEANSIDE BLVD	A	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520230400	5812	YES	NO
	LITTLE CAESAR'S PIZZA	518		OCEANSIDE BLVD	103-5	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520230400	5812	YES	NO
	ROBERTO'S TACO SHOP	518		OCEANSIDE BLVD	111	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520230400	5812	YES	NO
	MCDONALDS 16327	1701		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1513101900	5812	YES	NO
	RALPHS GROCER	1702		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1510111000	5411	YES	NO
	PAPA JOHN'S PIZZA	1710		OCEANSIDE BLVD	B	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510110900	5812	YES	NO
	CHINALOA MEXICAN AND SEAFOOD	1759		OCEANSIDE BLVD	E	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1513102600	5812	YES	NO
	THE CHEESESTEAK GRILL	1771		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1513102600	5812	YES	NO

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil	Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
IHOP RESTAURANT	1806		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104700	5812	YES	NO
CAFE ROSARITA	1816		OCEANSIDE BLVD	A	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104700	5812	YES	NO
PIZZA HUT	1836		OCEANSIDE BLVD	102	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104700	5812	YES	NO
DOMINO'S PIZZA	1906		OCEANSIDE BLVD	B	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104000	5812	YES	NO
KAISEN SUSHI	1906		OCEANSIDE BLVD	H1	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510104000	5812	YES	NO
P Q PUB	1910		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510103100	5812	YES	NO
THAI TABLE	1910		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510103100	5812	YES	NO
ALBERTO'S MEXICAN FOOD	1920		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1510103000	5812	YES	NO
WIENERSCHNITZEL	1960		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1493302700	5812	YES	NO
RED ROOSTER	1985		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1493301400	5812	YES	YES
OCEAN SHORES HIGH SCHOOL	3131		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1620502900	5812	YES	NO
KFC Y305091	4100		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1625022700	5812	YES	NO
CHIPOTLE MEXICAN FOOD	4111		OCEANSIDE BLVD	102	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413300	5812	YES	NO
ENZOS BBQ	4111		OCEANSIDE BLVD	101	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413300	5812	YES	NO
GOGO JAPAN	4121		OCEANSIDE BLVD	202	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413300	5812	YES	NO
PANDA EXPRESS	4121		OCEANSIDE BLVD	200	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413300	5812	YES	NO
CHIN'S SZECHWAN-OCEANSIDE	4140		OCEANSIDE BLVD	133-35	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1625022400	5812	YES	NO
LITTLE CAESAR'S PIZZA	4140		OCEANSIDE BLVD	191	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1625022500	5812	YES	NO
SHAKEY'S PIZZA	4141		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622414300	5812	YES	NO
ALBERTSON'S 6740	4150		OCEANSIDE BLVD	137	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1625022200	5411	YES	NO
MCDONALDS	4151		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622413600	5812	YES	NO
EL BRONCO GRANDE MEXICAN FOOD	4171		OCEANSIDE BLVD	106	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622414100	5812	YES	YES
CARLS JR	4186		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622404300	5812	YES	NO
CAFE DE THAI	4196		OCEANSIDE BLVD	A	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622404300	5812	YES	NO
UPPER CRUST PIZZA	4196		OCEANSIDE BLVD	B	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622404300	5812	YES	NO
RUBIO'S FRESH MEXICAN GRILL 063	4201		OCEANSIDE BLVD	B	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622411000	5812	YES	NO
JACK IN THE BOX 3026	4211		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	NO
JF JAPANESE CAF	4225		OCEANSIDE BLVD	K	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	NO
L&L HAWAIIAN BARBECUE	4225		OCEANSIDE BLVD	E	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	YES
WINGS PIZZA N THINGS	4225		OCEANSIDE BLVD	R	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	742	YES	NO
YUMMY PH	4225		OCEANSIDE BLVD	W	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	NO
CHARMING SIAM RESTAURANT	4231		OCEANSIDE BLVD	C	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412300	5812	YES	NO
RALPHS 298	4251		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1622412200	5411	YES	YES
IHOP	4253		OCEANSIDE BLVD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622414200	5812	YES	NO
CEJA'S MEXICAN DINER AND GRILL	4259		OCEANSIDE BLVD	105-6	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412100	5812	YES	YES
GUAHAN GRILL	4259		OCEANSIDE BLVD	104	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622414200	5812	YES	YES
MAANS MEDITERRANEAN GRILL	4259		OCEANSIDE BLVD	107	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1622412100	5812	YES	YES
MI ASADOR	4750		OCEANSIDE BLVD	A22-3	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615401900	5812	YES	NO
MR PHO RESTAURANT	4750		OCEANSIDE BLVD	A21	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615401900	5812	YES	NO
THAI GARDEN RESTAURANT	4750		OCEANSIDE BLVD	A18	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615401900	5812	YES	NO
WARAII SUSHI	4750		OCEANSIDE BLVD	A20	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1615401900	5812	YES	NO
BUCCANEER BEACH CLUB	1508	S	PACIFIC STREET		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1530110600	5812	YES	YES
ROOSEVELT MIDDLE SCHOOL	850		SAGEWOOD DRIVE		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1581310400	5812	YES	NO
TEMPLE HEIGHTS ELEMENTARY SCHOOL	1550		TEMPLE HEIGHTS DRIVE		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1615002600	5812	YES	NO
SAN LUIS MEXICAN FOOD	2600		TEMPLE HEIGHTS DRIVE	A	High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1614701700	5812	YES	NO
FLYING PIG PUB & KITCHEN	626	S	TREMONT STREET		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1503760700	5411	YES	NO
LARRY'S BEACH CLUB	1145	S	TREMONT STREET		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1520150900	5812	YES	NO
IVEY RANCH ELEMENTARY SCHOOL	4275		VIA RANCHO ROAD		High	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1605700700	5812	YES	NO
JUNGLE JACKS INC.	1865		CALIFORNIA STREET		High	Nurseries	Carlsbad	Loma Alta	904.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1540406800	742	YES	NO
CALIFORNIA FLOWER BULB CO.	2521		OCEANSIDE BLVD	A	High	Nurseries	Carlsbad	Loma Alta	904.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1492710500	742	YES	NO
EVERGREEN NURSERY	3231		OCEANSIDE BLVD		High	Nurseries	Carlsbad	Loma Alta	904.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1620504700	742	YES	YES
INGWERSEN NURSERY	1620		RIDGEWAY STREET		High	Nurseries	Carlsbad	Loma Alta	904.1	X	X	X		X	X			X		Horiculture Specialties - Nurseries	Not applicable	1512005300	742	YES	NO
GILEAD SCIENCES INC.	4049		AVENIDA DE LA PLATA		High	Commercial	Carlsbad	Loma Alta	904.1			X		X				X		Pharmaceutical Manufacturing	Not applicable	1625032800	2836		NO
SEASIDE BODY AND PAINT	907	S	CLEVELAND STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automobile, Body and Paint Sho	Not applicable	1503711400	7532	NO	NO
ONE STOP AVIATION INC	1119	S	CLEVELAND STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Airplane, Engine Repair	Not applicable	1520160400	3724	NO	NO
O'SIDE TRANSMISSION UNLIMITED	229	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1500450800	7538	NO	NO
BEAUDRY'S AUTO COLLISION CENTER	325	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive - Body Shop	Not applicable	1500470500	7532	NO	NO
AUTO FOR LESS	409	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1501831300	7538	NO	NO
CHEVRON / O'SIDE MART	601	N	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1432450700	5541	NO	NO
S & T AUTO PAINT & BODY	920	S	COAST HWY	C	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1503041900	7538	NO	NO
POWER PERFORMANCE PERFECTION	1106	S	COAST HWY	A	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1520230600	7538	NO	NO
GOODYEAR EXPRESS TIRE	1151	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1520140600	5531	NO	NO

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash Debris	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
VALERO GASOLINE	1202	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1521931300	5541	NO	NO
WESTCOAST TIRE AND WHEEL	1434	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1522001000	7538	NO	NO
NORTH COUNTY AUTO BODY INC.	1512	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1522001000	7539	NO	NO
OCEANSIDE SELF SERVICE CAR WASH	1515	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1530302600	7542	NO	NO
AUTOMAN CAR SERVICES	1515	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1530302600	7538	NO	NO
NORTH COUNTY AUTO SERVICE INC	1520	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1522001300	7538	NO	NO
B & R BUGGIE	1523	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1530300400	7538	NO	NO
GARY'S AUTO REPAIR/BOB'S CARBS	1540	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1522001300	7538	NO	YES
WESTSIDE CLASSICS	1540	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Miscellaneous Repair Services	Not applicable	1522001300	7699	NO	YES
BOB'S CARBS	1602	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
GHETTO CHOPPERS CUSTOMS INC	1602	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
JOSE'S AUTO ELECTRIC	1602	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
LSI AUTOMOTIVE SERVICE	1602	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
OCEANSIDE CYCLE SUPPLY	1617	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Miscellaneous Repair Services	Not applicable	1531111300	7699	NO	NO
COAST CAR WASH	1621	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1531111900	7542	NO	NO
MOTORCYCLE GALLERY	1639	S	COAST HWY		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Miscellaneous Repair Services	Not applicable	1531111800	7699	NO	NO
MACHINE TECH RACING ENGINES	620		CROUCH STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493301600	7538	NO	NO
BIG FAB OFF ROAD RACING	634		CROUCH STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493301700	7538	NO	NO
AAMCO	2255		INDUSTRY STREET	A	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493700900	7538	NO	YES
CITYWIDE AUTOMOTIVE	2255		INDUSTRY STREET	B	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493700900	7538	NO	YES
B M W PRESCISION MACHINING	2379		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Sheet Metal	Not applicable	1492713400	3444	YES	YES
WASTE MANAGEMENT OF NO CO INC	2381		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Sanitary Services - Trash Collection	Not applicable	1493701000	4953	NO	YES
CONOVER TIRE PRO	2405		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Tire Repair Shop	Not applicable	1492715600	7534	NO	YES
FENCEWORKS INC.	2421		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Miscellaneous Special Trades -	Not applicable	1492715600	1799	YES	YES
OCEANSIDE DRIVELINE	2435		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1492712600	7538	NO	YES
ARTISTIC MAINTENANCE INC	2505		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X				X				Interior Landscaping Services	Not applicable	1492712700	7389	NO	YES
WEILAND SLIDING DOOR & WINDOW INC	2601		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Glass Windows	Not applicable	1492712100	3231	NO	YES
SANTOURIAN MANUFACTURING INC	2603		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Sheet Metal	Not applicable	1492712200	3444	NO	YES
RUBEN'S AUTO BODY	2606		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive - Body Shop	Not applicable	1492714600	7532	NO	NO
MASTERTECH INC	2801		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1492711400	7538	NO	YES
WASTE MANAGEMENT OF NO CO INC	2880		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Waste Management/Temp. Storage	Not applicable	1620310100	9511	NO	NO
PALOMAR TRANSIT MIX CO	2925		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Ready Mix Conc	Not applicable	1620310200	3273	NO	YES
GLASSWERKS SD	3021		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Glass Products	Not applicable	1620313300	3231	NO	YES
CAMPBELL CERTIFIED INC	3045		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturer - Certified Weldiing	Not applicable	1620313000	1799	NO	YES
METROTILE MANUFACTURING	3093		INDUSTRY STREET		High	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturer - Roofing Tile	Not applicable	1620313400	3444	NO	YES
MELROSE ARCO	1501	N	MELROSE DRIVE		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1610301700	5541	NO	NO
THE OCEANSIDER	1660		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1523202500	5541	NO	NO
JIFFY LUBE 1278	1970		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493302700	7538	NO	NO
VIP CAR WASH	1980		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1493302700	7542	NO	NO
ARCO AMPM GAS STATION	1990		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X	X		Gasoline Station	Not applicable	1493301100	5541	NO	NO
AGRI CHEMICAL SUPPLY, INC	2002		OCEANSIDE BLVD	J	High	Commercial	Carlsbad	Loma Alta	904.1			X			X	X		X		Disinfecting and Pest Control	Not applicable	1493300400	7342	NO	NO
7 DAY TIRE AND BRAKE MECHANIC	2011		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701300	7538	NO	YES
7 DAY ALIGNMENT	2015		OCEANSIDE BLVD	C	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701300	7538	NO	YES
7 DAY AUTO BODY	2015		OCEANSIDE BLVD	A	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701300	7538	NO	YES
7 DAY MECHANIC	2015		OCEANSIDE BLVD	B	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701300	7538	NO	YES
ADVANCE PAINT AND BODY	2015		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701300	7538	NO	YES
ROMERO'S RADIATOR AND MUFFLER	2017		OCEANSIDE BLVD	A	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701400	7538	NO	YES
LEO'S TOWING & AUTO REPAIR	2019		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701400	7538	NO	YES
EXCLUSIVE AUTOBODY REPAIR	2026		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493300100	7538	NO	NO
AUTO PAINT FOR LESS	2027		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701500	7538	NO	YES
BROTHER'S AUTO GLASS	2027		OCEANSIDE BLVD	B	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701500	7538	NO	YES
EARL SHEIB AUTO PAINT FOR LESS	2027		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701500	7538	NO	YES
PEDRO'S AUTO REPAIR & TOW TRUCK	2027		OCEANSIDE BLVD	A	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493701500	7538	NO	YES
LAELS INTERNATIONAL	2042		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493300100	5541	NO	NO
COLOR CRAFTERS AUTO BODY	2044		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1493300100	7538	NO	NO
WASTE MANAGEMENT OF NO CO INC	2141		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Sanitary Services - Trash Collection	Not applicable	1493700700	4953	NO	YES
VOLVO RENTALS	2365		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X			X	X		X		Equipment Rentals	Not applicable	1492714200	7359	YES	NO
PACIFIC ANIMAL HOSPITAL	2801		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1620306900	7542	NO	NO
OCEANSIDE BUGGY BATH CARWASH	2946		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			Automotive Carwash	Not applicable	1620306900	7542	NO	NO
SUPERIOR READY MIX CONCRETE LP	3227		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X					X		Manufacturing - Ready Mix Conc	Not applicable	1620502300	3273	NO	NO
CALIFORNIA AUTOMOTIVE	4035		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1621110600	7538	NO	YES
D & J AUTO DOCTORS INC	4035		OCEANSIDE BLVD	C11	High	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X			General Auto Repair Shop	Not applicable	1621110600	7538	NO	YES

Loc	Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
											Sediment	Nutrients	Trash	Oil	Bacteria	Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
	SUPERIOR AUTOWORKS	4035		OCEANSIDE BLVD	D32	High	Commercial	Carlsbad	Loma Alta	904.1			X	X				X	X			General Auto Repair Shop	Not applicable	1621110600	7538	NO	YES
	RANCHO DEL ORO CAR WASH	4101		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X				X	X			Automotive Carwash	Not applicable	1622413200	7542	NO	NO
	JIFFY LUBE	4106		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1			X	X				X	X			General Auto Repair Shop	Not applicable	1625022800	7538	NO	NO
	FRESH AND EASY NEIGHBORHOOD MARKET	4131		OCEANSIDE BLVD		High	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X								Grocery Store	Not applicable	1622414600	5411	YES	YES
	EDDIE'S AUTOMOTIVE INC	512	S	TREMONT STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X				X	X			General Auto Repair Shop	Not applicable	1501840200	7532	NO	NO
	PROCUSTOM	520	S	TREMONT STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X				X	X			Automotive - Body Shop	Not applicable	1501840300	7539	NO	NO
	AJ AUTOMOTIVE	602	S	TREMONT STREET	B	High	Commercial	Carlsbad	Loma Alta	904.1			X	X				X	X			General Auto Repair Shop	Not applicable	1503761000	7532	NO	NO
	S & S RADIATOR	620	S	TREMONT STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X				X	X			General Auto Repair Shop	Not applicable	1503760900	7532	NO	NO
	FIXIT AUTO BODY OCEANSIDE	1112	S	TREMONT STREET		High	Commercial	Carlsbad	Loma Alta	904.1			X	X				X	X			Automotive - Body Shop	Not applicable	1520141600	7539	NO	NO
	CLASSIC SHOWCASE INC	2640		VISTA PACIFIC DRIVE		High	Commercial	Carlsbad	Loma Alta	904.1			X	X				X	X			Automotive Restorations	Not applicable	1614700300	7532	NO	NO
	SHOWTIME AUTOMOTIVE REPAIR	315		WISCONSIN AVENUE		High	Commercial	Carlsbad	Loma Alta	904.1			X	X				X	X			General Auto Repair Shop	Not applicable	1503721300	7538	NO	NO
	LINCOLN JUNIOR HIGH SCHOOL	1810		CALIFORNIA STREET		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1511802300	5812	YES	NO
	PALMQUIST ELEMENTARY SCHOOL	1999		CALIFORNIA STREET		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X	X		X		School Cafeteria	Not applicable	1540404100	5812	YES	NO
	PIZZA HUT	3509		CANNON ROAD	E1	High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1690114200	5812	YES	NO
	MCDONALDS	3517		CANNON ROAD		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1690114000	5812	YES	NO
	TACO BELL 16065	3521		CANNON ROAD		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1690113900	5812	YES	NO
	RALPH'S	3533		CANNON ROAD		High	Eat/Drink Est.	Carlsbad	Agua Hedionda	904.3	X	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1690113700	5411	YES	NO
	PEP BOYS OF CA 742	3752		PLAZA DRIVE		High	Commercial	Carlsbad	Buena Vista	904.2			X	X				X	X			General Auto Repair Shop	Not applicable	1680125700	1521	NO	NO
	PDM AM/PM	3804		PLAZA DRIVE		High	Commercial	Carlsbad	Buena Vista	904.2			X	X				X	X	X		Gasoline Station/Convenience Store	Not applicable	1680121700	8811	NO	NO
	ECONO LUBE N' TUNE/MEINEKE CAR CENTER 4068	3844		PLAZA DRIVE	381	High	Commercial	Carlsbad	Buena Vista	904.2			X	X				X	X			General Auto Repair Shop	Not applicable	1680122100	8811	NO	NO
	MIRA COSTA CAFETERIA	1		BARNARD DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Cafetetia	Not applicable	1651120300	5812	YES	NO
	APE HANGERS GRILL LLC	1706	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532133900	5812	YES	NO
	HON SUSHI	1733	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1531132300	5812	YES	NO
	BEACH BREAK CAFE INC	1802	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532720100	5812	YES	NO
	BULL TACO	1815	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532712400	5812	YES	NO
	P C H SPORTS BAR & GRILL	1835	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532712000	5812	YES	NO
	PANCA PERUVIAN ROTISSERIE	1902	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532732600	5812	YES	NO
	BEACH CLUB	1903	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532742200	5812	YES	NO
	DON'S COUNTRY CAFE	1938	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1532732400	5812	YES	NO
	ANGELO'S BURGERS	2035	S	COAST HWY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1550311500	5812	YES	NO
	KOTIJA MEXICAN FOOD	3504		COLLEGE BLVD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680123700	5812	YES	NO
	ROOKIE'S SPORT BAR	2216	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650121800	5812	YES	NO
	SUSHI 21	2216	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650121800	5812	YES	NO
	TERI CAFE TERIYAKI NOODLE H0USE	2216	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650121800	5812	YES	NO
	CROSS ROAD BBQ	2241	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650131900	5812	YES	NO
	ANITA'S RESTAURANT	2251	S	EL CAMINO REAL	B	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650131300	5812	YES	NO
	FELIX BBQ WITH SOUL	2251	S	EL CAMINO REAL	A	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650131300	5812	YES	NO
	DEL TACO LLC	2269	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650130900	5812	YES	NO
	DENNY'S RESTAURANT 1149	2273	S	EL CAMINO REAL		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650131000	5812	YES	NO
	MC DONALD'S / OCEANSIDE WAL-MART	3405		MARRON ROAD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680140400	5812	YES	NO
	ALBERTSON'S 6733	3450		MARRON ROAD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1680130100	5411	YES	NO
	SMASH BURGERS	3460		MARRON ROAD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680130200	5812	YES	NO
	CHIK-FIL-A 1507	3475		MARRON ROAD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680140200	5812	YES	NO
	DAPHNE'S GREEK CAFE	3480		MARRON ROAD	104	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680130200	5812	YES	NO
	KING BURRITO	3490		MARRON ROAD		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680130300	5812	YES	NO
	PRIMO FOOD MARKET	606		MORSE STREET		High	Eat/Drink Est.	Oceanside	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1530411500	5411	YES	NO
	WENDY'S RESTAURANT	3705		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680123900	5812	YES	NO
	MC DONALDS	3794		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680121600	5812	YES	NO
	SIZZLER RESTAURANT 883	3805		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680121100	5812	YES	NO
	JACK IN THE BOX 89	3808		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680121800	5812	YES	NO
	I LOVE PH□	3809		PLAZA DRIVE	115	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680120100	5812	YES	NO
	TERI CAFE TERIYAKI NOODLE H0USE	3809		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680120100	5812	YES	NO
	TACO BELL	3845		PLAZA DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680121000	5812	YES	NO
	DOMINOS PIZZA	2858		THUNDER DRIVE		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1665351600	5812	YES	NO
	ROBERTO'S TACO SHOP	2983		VIA LAS ROSAS	C	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1650130200	5812	YES	NO
	RED & WHITE MARKET	510		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1532732500	5411	YES	NO
	HUNTER STEAKHOUSE 210255	1221		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1551402600	5812	YES	NO
	MCDONALDS 23057	2100		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541302300	5812	YES	NO
	APPLEBEES NEIGHBORHOOD GRILL & BAR	2146		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303200	5812	YES	NO
	STATER BROS MARKETS 151	2170		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1541303000	5411	YES	NO
	MIMI'S CAFE	2177		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303700	5812	YES	NO
	BROOKLYN BOYS PIZZA	2183		VISTA WAY	B8	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303600	5812	YES	NO

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil	Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
LOS TACOS	2183		VISTA WAY	B9	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303600	5812	YES	NO
QUIK WOK	2184		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303100	5812	YES	NO
MCDONALDS	2185		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1541303500	5812	YES	NO
BURGER KING	2325		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651205100	5812	YES	NO
HANA RESTAURANT	2415		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651204600	5812	YES	NO
BROKEN YOLK CAF	2434		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1652406600	5812	YES	NO
OCEAN THAI CUISINE	2455		VISTA WAY	F	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651203300	5812	YES	NO
VISTAWAY HAWAIIAN BBQ	2455		VISTA WAY	D	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651203300	5812	YES	NO
RED LOBSTER REST 6367	2471		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651206400	5812	YES	NO
JACK IN THE BOX 98	2474		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1652406400	5812	YES	NO
OUTBACK STEAKHOUSE	2485		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651203800	5812	YES	NO
WINGS N THINGS	2525		VISTA WAY	A	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651203500	5812	YES	NO
SUSHI N JOY	2530		VISTA WAY	J	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1652405500	5812	YES	NO
CHIPOTLE MEXICAN GRILL	2611		VISTA WAY	A	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651213600	5812	YES	NO
CHILI'S GRILL & BAR	2627		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651213200	5812	YES	NO
ROMANO'S MACARONI GRILL	2655		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651213600	5812	YES	NO
EL TORITO RESTAURANT, INC 7093	2693		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651211900	5812	YES	NO
Q RESTAURANT	2725		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651211700	5812	YES	NO
HOOTERS OF OCEANSIDE	3186		VISTA WAY	100	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1653503900	5812	YES	NO
CHINA TOWN CHINESE FOOD	3910		VISTA WAY	109	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1660104500	5812	YES	NO
GIANNI PIZZA	3910		VISTA WAY	108	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1660104500	5812	YES	NO
JOSE'S TACO	3910		VISTA WAY	110	High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1660104500	5812	YES	NO
TRI-CITY HOSPISTAL CAFETERIA	4002		VISTA WAY		High	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1660103100	5812	YES	NO
CENTRAL AUTOMOTIVE	1702	S	COAST HWY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			General Auto Repair Shop	Not applicable	1532134000	7538	NO	NO
BOB'S GAS INC.	1742	S	COAST HWY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1532134300	5541	NO	NO
7-ELEVEN STORE 26190C-2111	1749	S	COAST HWY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1531130800	5541	NO	NO
CIRCLE K GASOLINE	1801	S	COAST HWY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1532711900	5541	NO	NO
ECONO LUBE AND OIL	1942	S	COAST HWY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			General Auto Repair Shop	Not applicable	1532731200	7538	NO	NO
LIBERTY OIL	1943	S	COAST HWY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station	Not applicable	1532742100	5541	NO	NO
UNION 76 OIL	3401		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gas Station	Not applicable	1680110300	5541	NO	NO
QUARRY CREEK CHEVRON	3490		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1680130300	5541	NO	NO
REFLECTSHINE AUTO WASH	3528		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			Car Wash	Not applicable	1680125300	7542	NO	NO
THE ANIMAL KEEPER INC	3532		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X				Pet Hospital	Not applicable	1680125200	742	YES	NO
MOSSY NISSAN	3535		COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			General Auto Repair Shop	Not applicable	1680111700	5511	YES	NO
CIRCLE K / 76 2705246			COLLEGE BLVD		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1660104000	5541	NO	NO
ROWLEY CHEVRON	2191		VISTA WAY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X	X		Gasoline Station/Convenience Store	Not applicable	1541303400	5542	NO	NO
BUBBLE BATH CAR WASH 76	2315		VISTA WAY		High	Commercial	Carlsbad	Buena Vista	904.2			X	X			X	X			Automotice Wash	Not applicable	1651205200	7542	NO	NO
MOHNACKY ANIMAL HOSPITALS, INC	2505	S	VISTA WAY		High	Commercial	Carlsbad	Buena Vista	904.2	X	X	X		X	X	X				Veterinary Services for Animal	Not applicable	1563020200	742	YES	YES
A B C SMOG	260		AIRPORT ROAD	C	Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive Services - Emission	Not applicable	1602715500	7549	NO	NO
PAPPY'S MARKET	601	N	CLEVELAND STREET		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1432430400	5411	YES	NO
AAA AUTO GROUP	102	S	COAST HWY		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Vehicle Dealers	Not applicable	1472830500	5521	NO	NO
5 GRAND AUTOLAND	114	S	COAST HWY		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Vehicle Dealers	Not applicable	1472830500	5521	NO	NO
CIRCLE K 2702967	420	N	COAST HWY		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1470930900	5411	YES	NO
PACIFIC TIRE & WHEEL	523	N	COAST HWY		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			General Auto Repair Shop	Not applicable	1470810100	7538	NO	NO
RED & WHITE SUPERETTE	700	N	COAST HWY		Medium	Commercial	Oceanside	San Luis Rey	904.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1432050800	5411	YES	NO
SPROUTS FARMERS MARKET	471		COLLEGE BLVD		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1571010700	5411	YES	NO
OCEANSIDE TIRE AND SERVICE CENTER	499		COLLEGE BLVD	A	Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Automotive Tire Repair Shop	Not applicable	1571010800	5411	NO	NO
7-11 DOUGLAS DRIVE	41		DOUGLAS DRIVE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Convenience Food Store	Not applicable	1600205300	5411	YES	NO
FIVE STAR MARKET AND LIQUOR	650		DOUGLAS DRIVE	113-20	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Grocerie Stores	Not applicable	15781005700	5411	YES	NO
EMERALD ISLE GOLF COURSE	660	S	EL CAMINO REAL		Medium	Commercial	Oceanside	San Luis Rey	903.1											Golf Course	Not applicable	1620403700	9999	NO	NO
CVS PHARMACY	4615		FRAZEE ROAD		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Drug Store	Not applicable	1617818400	5411	YES	NO
7 - ELEVEN	4625		FRAZEE ROAD		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Grocerie Stores	Not applicable	1617817500	5411	YES	NO
OCEANSIDE HARBOR MARKET	272	S	HARBOR DRIVE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1430103100	5411	YES	YES
AUTOZONE 5661	1040		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Automotive Parts Supply Store	Not applicable	1472310600	5531	NO	NO
CAR QUEST AUTO PARTS	1531		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Automotive Parts Supply Store	Not applicable	1482601800	5531	NO	NO
7 ELEVEN 25818D	2255		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Grocerie Stores	Not applicable	1451701400	5411	YES	NO
Z-MART MARKET	3200		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1602714300	5411	YES	NO
MISSION ASIAN MARKET	3320		MISSION AVENUE	L	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1602711200	5411	YES	NO
SEVENDAY MARKET	3365		MISSION AVENUE	A-B	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1605501300	5411	YES	NO
MIKE'S LIQUOR 2	3549		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Liquor Store	Not applicable	1602910600	5921	YES	NO
O'RIELLY AUTO SUPPLY 1329	3661		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X			Automotive Parts Supply Store	Not applicable	1602910400	5531	NO	NO
MISSION SEAFOOD	3753		MISSION AVENUE	117	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X				Groceries Store - Seafood	Not applicable	1602911100	5421	YES	NO

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil	Grease	Bacteria	Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
MISSION MARKETPLACE	3772		MISSION AVENUE	135	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1583901400	5411	YES	NO
MILANO'S LIQUOR	3846		MISSION AVENUE	A2	Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1580520200	5411	YES	NO
RODEOS MARKET AND RESTAURANT	3858		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1580520200	5411	YES	NO
LITA'S FISH MARKET	3864		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1580520200	5411	YES	NO
AUTOZONE	3975		MISSION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X				Automotive Parts Supply Store	Not applicable	1580801200	5531	NO	NO
CALIFORNIA SMOG CENTER	3204		PRODUCTION AVENUE		Medium	Commercial	Oceanside	San Luis Rey	903.1			X	X		X		X				Automotive Services - Emission	Not applicable	1602711500	7549	NO	NO
FRESH AND EASY NEIGHBORHOOD MARKET	4908	N	RIVER ROAD		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1570404500	5411	YES	NO
EL NOPALITO MARKET	410		SAN DIEGO STREET		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X					Grocerie Stores	Not applicable	1481522600	5411	YES	NO
EL TORITO MEAT MARKET	422		SAN DIEGO STREET		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X					Grocerie Stores	Not applicable	1481523000	5411	YES	NO
NICHOLAS CABINETS	219		VIA EL CENTRO		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X				X	X	X			Manufacturer - Wood Cabinets	Not applicable	1460501900	2434	YES	NO
MASTERCRAFT WOODWORDS INC.	305		VIA EL CENTRO		Medium	Commercial	Oceanside	San Luis Rey	903.1	X	X	X				X	X	X			Manufacturer - Wood Products	Not applicable	1460501700	2499	YES	NO
ELECTRONIC RECYCLING CENTER	2618		TEMPLE HEIGHTS DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1												Electronic Recycling	Not applicable	1615011500	9999	YES	NO
TIRE CENTERS LLC	4055		CALLE PLATINO		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Tire Sales and Service	Not applicable	1625033000	4413	NO	NO
AUTO FINANCE EXPERTS	205	S	COAST HWY	B	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1500451100	5521	NO	NO
ANGELO'S KARS	222	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1500510500	5521	NO	NO
ACE SMOG	242	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				General Auto Repair Shop	Not applicable	1500511100	7538	NO	NO
COASTAL LIQUOR	432	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1502040900	5921	YES	NO
SOUTH CALI AUTO	501	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1501840900	5521	NO	NO
HOMETOWN MOTORS INC	502	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1502031300	5521	NO	NO
WHOLESALE AUTOS	515	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1501840800	5521	NO	NO
101 AUTO SALES	801	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1503730700	5521	NO	NO
CARS HOTLINE OF OCEANSIDE	902	S	COAST HWY	A	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1503040100	5521	NO	NO
BCD AUTO SALES	920	S	COAST HWY	B	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X				General Auto Repair Shop	Not applicable	1503041900	7538	NO	NO
VACANT	1009	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1520110300	5521	NO	NO
DISCOUNT TIRES	1037	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Retail Sales, Vehicle Tires	Not applicable	1520111000	5531	NO	NO
OCEANSIDE TEST ONLY CENTER	1106	S	COAST HWY	B	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Automotive Services - Emission	Not applicable	1520230600	7549	NO	NO
SMOG FOR LESS	1111	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Smog Check	Not applicable	1520140300	7549	NO	NO
YES AUTO SALES	1111	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1520140300	5521	NO	NO
RITE AID	1201	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Drug Stores	Not applicable	1521711800	5912	YES	NO
AUTO SOUND AND IMAGE	1220	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Retail	Not applicable	1521930600	5941	NO	NO
OCEANSIDE SCOOTERS - CLOSED	1425	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X				Motorcycle Sale and Service	Not applicable	1511781300	5571	NO	NO
OCEANSIDE IMPORTS	1426	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1522000200	5521	NO	NO
CARLSBAD AUTO CONNECTION	1520	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1552001300	5521	NO	NO
KARZ PLUS RV	1555	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1530302000	5521	NO	NO
T AND T AUTO SMOG	1602	S	COAST HWY		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X			X	X				General Auto Repair Shop	Not applicable	1531120100	7538	NO	NO
CONTINENTAL MOTORS - SAAB	601-17	S	COAST HWY	A	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1503760400	5521	NO	NO
GIANT K MARKET	606		CROUCH STREET		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Grocerie Stores	Not applicable	1493302300	5411	YES	NO
SOS UPHOLSTERY	660		CROUCH STREET		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Upholstery Repair Shops	Not applicable	1493301700	7532	NO	NO
PRECISION DESIGNS AND FABRICATION	612		FOUSSAT ROAD		Medium	Commercial	Carlsbad	Loma Alta	904.1												Office	Not applicable	1492715300	9999	NO	NO
KYOTO GIFT □ FOOD	559		GREENBRIER DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Grocerie Stores	Not applicable	1510104300	5812	YES	NO
KAHLER INTERNATIONAL INC	2520		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X			Musical Instrument Assembly	Not applicable	1616602300	8811	YES	NO
WALLDESIGN INC	2525		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X			Contractor Specialty - Drywall	Not applicable	1616603400	1742	YES	NO
APRIA HEALTHCARE INC	2530		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X			Medical Equipment Supplier	Not applicable	1616602200	5047	YES	NO
PROLINE CONCRETE TOOLS INC	2560		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X			Manufacturing - Concrete Stamps	Not applicable	1616602000	5082	YES	NO
CALPEX PLASTICS INC	2570		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X			Manufacturing - Plactic Products	Not applicable	1616601900	3083	YES	NO
SEASIDE HELICOPTERS INC	2580		JASON COURT		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X			Helicopter Part Supplier	Not applicable	1616601600	5088	YES	NO
CARLSBAD AUTO CONNECTION	511		LEONARD STREET		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Vehicle Dealers	Not applicable	1520110300	5521	NO	NO
FEDERAL HEATH SIGN CO INV	4602		NORTH AVENUE	A	Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X			Manufacutring - Signs	Not applicable	1614700500	3993	YES	NO
HOLMES LANDSCAPE COMPANY	4616		NORTH AVENUE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X		X	X	X		X			Contractor Specialty - Landscape	Not applicable	1614700600	781	YES	NO
O'RIELLY AUTO SUPPLY 331	502		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Automotive Parts Supply Store	Not applicable	1520230400	5531	NO	NO
CVS DRUG STORE	1706		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Drug Stores	Not applicable	1510111000	5912	YES	NO
SMART AND FINAL	1737		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1513102300	5411	YES	NO
BONEY'S MARKETPLACE	1820		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1510104700	5411	YES	NO
OLOA SAMOA	1906		OCEANSIDE BLVD	C	Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1510104000	5411	YES	NO
SUPER VALUE MARKET	1906		OCEANSIDE BLVD	Y-Z	Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1510104000	5411	YES	NO
ALL STAR GLASS	1950		OCEANSIDE BLVD	A-B	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Automobile Glass Replacement S	Not applicable	1493302700	7536	NO	NO
SMOG-THIS	1950		OCEANSIDE BLVD	O	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Automotive Services- Emission	Not applicable	1493302700	7538	NO	NO
FIRE MOUNTAIN MARKET	1991		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1493301400	5411	YES	YES
SOS OCEANSIDE AUTO UPHOLSTERY	2024		OCEANSIDE BLVD	B	Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Automotive, Upholstery Repair	Not applicable	1493300100	7532	NO	NO
CALIFORNIA PACIFIC BUGS	2040		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Automotive Parts Supply Store	Not applicable	1493300100	5531	NO	NO
A MARKET - MARISCOS & MEXICAN FOOD	2936		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X					Groceries Store	Not applicable	1620305000	5411	YES	NO
NAPA AUTO PARTS-OCEANSIDE	2954		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X				Automotive Parts Supply Store	Not applicable	1620306500	5531	NO	NO

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil	Bacteria	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
WALGREENS DRUG STORE	4181		OCEANSIDE BLVD		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Drug Store	Not applicable	1622411800	5541	YES	NO
PHD MANUFACTURING INC	1710		ORD WAY		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Steel Products	Not applicable	1621208304	3599	YES	NO
CALIFORNIA MILLWORKS	1980		PEACOCK BLVD.	F	Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Wood Products	Not applicable	1614703100	3599	YES	NO
A1 GOLF CARS	2600		TEMPLE HEIGHTS DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Golf Car - Sales and Maintenance	Not applicable	1614701700	5941	NO	NO
SIERRA SPRINGS WATER	2615		TEMPLE HEIGHTS DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X				Wholesale - Distributor	Not applicable	1614700900	5963	YES	NO
TURNKEY ENGINE SUPPLY	2620		TEMPLE HEIGHTS DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive - Machine Shop	Not applicable	1614700100	3714	NO	NO
PRECISION CARPENTRY INC	2620		TEMPLE HEIGHTS DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturer - Wood Products	Not applicable	1614700100	1751	YES	NO
CUSTOM CONVERTING, INC	2625		TEMPLE HEIGHTS DRIVE	C	Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Metal Components	Not applicable	1614700800	3931	YES	NO
DESIGN SHOPPE & FABRICATION	2625		TEMPLE HEIGHTS DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Powder Coatings	Not applicable	1614700800	3931	YES	NO
VERIDIAN ALLIED SWISS	2636		VISTA PACIFIC DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Metal Components	Not applicable	1614701500	3949	YES	NO
SIMBA INTERNATIONAL	2654		VISTA PACIFIC DRIVE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Recycling - Plastics and Metals	Not applicable	1616604000	5093	YES	NO
WISCONSIN MARKET	202		WISCONSIN AVENUE		Medium	Commercial	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1502631700	5411	YES	NO
OCEAN 7 FOOD STORE	205		WISCONSIN AVENUE		Medium	Commercial	Carlsbad	Loma Alta	903.1	X	X	X	X	X	X	X				Groceries Store	Not applicable	1503521200	5411	YES	NO
PRIMO THUNDER MARKET	2810		THUNDER DRIVE		Medium	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Grocery Store	Not applicable	1665351500	5411	YES	NO
COAST PERFORMANCE AND OFFROAD - CLOSED	1707	S	COAST HWY		Medium	Commercial	Carlsbad	Buena Vista	904.2			X	X		X		X			Automotive Services - Tires	Not applicable	1531130100	5531	NO	NO
RICHARD'S TIRE SHOP	1742	S	COAST HWY		Medium	Commercial	Carlsbad	Buena Vista	904.2			X	X		X		X			Automotive Services - Tires	Not applicable	1532134300	5531	NO	NO
CREAM OF THE CROP	2009	S	COAST HWY		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X				Groceries Store	Not applicable	1550311300	5411	YES	NO
7-11 FOOD STORE 15591B	3407		COLLEGE BLVD		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X				Groceries Store	Not applicable	1680110400	5812	YES	NO
OCEANSIDE GROCERY OUTLET	3508		COLLEGE BLVD		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X				Groceries Store	Not applicable	1680123200	5411	YES	NO
DISCOUNT TIRE	2281	S	EL CAMINO REAL		Medium	Commercial	Carlsbad	Buena Vista	904.2			X	X		X		X			Automotive Tire Repair Shop	Not applicable	1650132400	7534	NO	NO
KRAGEN AUTO PARTS 794	3840		PLAZA DRIVE		Medium	Commercial	Carlsbad	Buena Vista	904.2			X	X		X		X			Automotive Parts Supply Store	Not applicable	1680122000	5531	NO	NO
7-11 STORE 13615	2850		THUNDER DRIVE		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X				Grocerie Stores	Not applicable	1665351400	5411	YES	NO
FARM BOY	2530		VISTA WAY		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X				Groceries Store	Not applicable	1652405500	5812	YES	NO
TRADER JOE'S 22	2570		VISTA WAY		Medium	Commercial	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X				Groceries Store	Not applicable	1652403600	5411	YES	NO
CRYSTAL CATERING FOOD SERVICE MANAGEMENT	263		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Personal Supply Services, Temp	Not applicable		7361		
SUBWAY	323	N	COAST HWY	B	Low	Eat/Drink Est.	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1470860100	5812		
DOMINO'S PIZZA 7750	650		DOUGLAS DRIVE	103	Low	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1578105700	5812	YES	NO
SANTINO'S PIZZA	401		MISSION AVENUE		Low	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472711400	5812	YES	NO
MANHATTAN'S GIANT PIZZA, INC	1060		MISSION AVENUE		Low	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1472310800	5812	YES	NO
SEA BREEZE CAF & MARKETPLACE	333	N	MYERS STREET		Low	Eat/Drink Est.	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1470750800	5812	YES	NO
ONE MORE THAT'S IT PUB	231		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1460502400	5812		
HERCA HEATING AND COOLING	580		AIRPORT ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, HVAC	Not applicable		1711		
WAGGAMAN'S AIR STREAM STUDIO	580		AIRPORT ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1											Custom Fabrication of Auto & Motorcycle Parts	Not applicable		0		
PROCAST INC	602		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1		X	X				X				Manufacturer, Die Casting	Not applicable		3363	NO	NO
SILVERADO BARNS INC	622		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1		X	X				X				Manufacturing, Prefabricated M	Not applicable		3448		
FISHEL COMPANY	666		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, Underground Utilti	Not applicable		1623		
J F CASSAN	1032		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Automotive, Parts Dealer Used	Not applicable		5015		
K-FAB	1040		AIRPORT ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturer, Sheet Metal	Not applicable		3444		
S & R TOWING	1060		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Automotive Wrecker/ Towing Ser	Not applicable		7549		
SAN DIEGO HUMANE SOCIETY	572-576		AIRPORT ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Interior Repair an	Not applicable	1460310900	7532	NO	NO
GARDNER'S MOBILE REPAIR & SERVICE	1660		APPALOOSA WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Handyman Services	Not applicable		7349		
CENTRO CRISTIANO	1905		APPLE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Education Center	Not applicable		8661		
PORRAS TRUCKING	717		ARTHUR AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Transportation-Trucking	Not applicable		7389		
PC CLINIC	504		BIG BEND WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Computer Repair	Not applicable		7378		
DALE'S LIQUOR	105	N	BROOKS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Liquor Store	Not applicable		5921		
D.C.'S ACROSS THE STREET	107	N	BROOKS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Drinking Establishments	Not applicable		5813		
THINK GREEN LANDSCAPING SERVICES	514	S	BROOKS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Landscape Services	Not applicable		7349		
AMERICAN SPRINKLERS	1915		BUSH STREET		Low	Commercial	San Luis Re	San Luis Rey	903.1											Sprinkler Repairs	Not applicable		7349		
EAST BAY ATTENTION TO DETAIL INC	4691		CALLE JOVEN		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
ESSENCE OF FOOD	4691		CALLE JOVEN		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
NETRIZON INC.	506		CANYON DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Computer Services	Not applicable		7378		
DAYS INN	1501		CARMELO DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels, Motels	Not applicable		7011		
X-TREME CUSTOM BUILDERS	3250		CAROLYN CIRCLE		Low	Commercial	Oceanside	San Luis Rey	903.1											Construction Remodeling	Not applicable		1521		
CABLE CONNECTION AND SERVICES	3771		CHERRYSTONE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Computer Maintenance and Repair	Not applicable		7389		
HARD TO FIND INTERNATIONAL INC.	512		CIVIC CENTER DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Distribution of printed circuit board	Not applicable		5045		
OCEANSIDE CONSTRUCTION CO	512		CIVIC CENTER DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											General Contractor, Residentia	Not applicable		1521		
CARTER'S MOBILE WELDING	714	N	CLEMENTINE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Mobile Welding Services	Not applicable		7692		
PIERVIEW MARKET AND LIQUOR	218	N	CLEVELAND STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Liquor Store	Not applicable		5921		
QUICK CORNER DELI AND LIQUOR	102	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Liquor Store	Not applicable		5921		
500 MOTORS	102	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Vehicle Dealers	Not applicable		5521		
AKKA CARIBBEAN MARKET	105	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Groceries Store	Not applicable	1472720200	5411		
CARMINE'S PIZZA	119	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1472720500	5812		

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Debris	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
KINGSMEN CLEANERS	126	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Laundry, Dry Cleaners and Garm	Not applicable		7212		
DOLPHIN HOTEL	133	S	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels, Motels	Not applicable		7011		
MILLENIUM ELECTRONICS	204	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Equipment Stores, Computer/Ele	Not applicable		5734		
IDEAL COMMUNICATIONS	212	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Equipment Stores, Computer/Ele	Not applicable		5734		
PETITE MADELINE BAKERY	223	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
GOOD WILL VOCATIONAL TRAINING CENTER	414	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Job Training and Vocational Re	Not applicable		8331		
OCEAN BREEZE FLOWERS	507	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Florists	Not applicable		5992		
JITTER COFFE PUB	510	N	COAST HWY	D	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1470941100	5812		
MOTEL 9	822	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels, Motels	Not applicable		7011		
PACIFIC INN	901	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels, Motels	Not applicable		7011		
MOTEL 6	909	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels, Motels	Not applicable		7011		
LA QUINTA INN	917	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels, Motels	Not applicable		7011		
COAST INN	921	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels, Motels	Not applicable		7011		
TRAVEL LODGE	1401	N	COAST HWY		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels and motels	Not applicable		7011		
FRANK MISSION MARKET PLACE	427		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
PEPPERTREE MONTESSORI SCHOOL	427		COLLEGE BLVD	I	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
SPEARS CONSTRUCTION, INC	427		COLLEGE BLVD	L	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
KMART	443		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
PIONEER SERVICES	447		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
ECHO PLUS	455		COLLEGE BLVD	2	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
FRAZEE PAINT	455		COLLEGE BLVD	1	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
FALLAS	459		COLLEGE BLVD	1	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
OMEGA BICYCLES	459		COLLEGE BLVD	3	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
SNAZZY CLEANERS	459		COLLEGE BLVD	4	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
COX	461		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
RITE AID	463		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
HLA AUNG NIKKO ENTERPRISES	471		COLLEGE BLVD	I1	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
COLLEGE COIN LAUNDRY	475		COLLEGE BLVD	J7	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
WAL-MART STORE 2245	705		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
PAYLESS SHOE STORE	805		COLLEGE BLVD	101	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
LANE BRYANT	815		COLLEGE BLVD	101	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
RADIO SHACK	815		COLLEGE BLVD	105	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
TOWN CLEANERS	835		COLLEGE BLVD	103	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
SUPER JUICE	467		COLLEGE BLVD	H5	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments			5812		
SUBWAY	475		COLLEGE BLVD	J1	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
SUBWAY 46626	705		COLLEGE BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1											Delicatessen Restaurant	Not applicable	1615530100	5812		
STARBUCKS COFFEE 5212	815		COLLEGE BLVD	108	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
SILVER OLAS ENTERPRISES INC	101		COPPERWOOD WAY	M	Low	Commercial	Oceanside	San Luis Rey	903.1											Carpet/Furniture Cleaning	Not applicable		7217		
MACORD CONSTRUCTION CORP	101		COPPERWOOD WAY	H	Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, Drywall	Not applicable		1742		
MILLENNIUM FIRE PROTECTION CORP.	101		COPPERWOOD WAY	F	Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, Fire Protection Sy	Not applicable		1799		
STANDARD LIFE SAFETY	101		COPPERWOOD WAY	D	Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, Fire Protection Sy	Not applicable		1799		
MCR CONSTRUCTORS	101		COPPERWOOD WAY	J	Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, General	Not applicable		1542		
OCEANSIDE HYDRAULICS	102		COPPERWOOD WAY	E	Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Repair Sercies	Not applicable		7699		
MACURD CONSTRUCTION	105		COPPERWOOD WAY	E	Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, General	Not applicable		1542		
REAL ESTATE RENOVATIONS	105		COPPERWOOD WAY	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, General	Not applicable		1542		
ENDLESS SUMMER HEATING AND AIR CONDITIONING	110		COPPERWOOD WAY	G	Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, Heating and Air Co	Not applicable		1711		
WILCO PRODUCTS LLC - SKYLIGHT SHADES	110		COPPERWOOD WAY	H	Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing, Fabricated Meta	Not applicable		3499		
HK PLASTICS ENGINEERING INC.	1825		CORPORATE CENTER DR		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
CAR SOUND EXHAUST SYSTEMS	1901		CORPORATE CENTER DR		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
SO SIMPLE LAUNDRY SERVICE	4273		CORTE VERDE		Low	Commercial	Oceanside	San Luis Rey	903.1											MOBILE LAUNDRY SERVICE	Not applicable		7389		
J PRO DAIRY INC.	4014		CRAVEN ROAD	12	Low	Commercial	Oceanside	San Luis Rey	903.1											Dairy Trading	Not applicable		7389		
V TECHNOLOGY SOLUTIONS INC.	3679		CYPRESS ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Mobile IT Service	Not applicable		7389		
J & J SANCHEZ CLEANING SERVICE COMPANY	279		DOUGLAS DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Home Cleaning Services	Not applicable		7349		
MONTANO MANAGEMENT LLC	292		DOUGLAS DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
THE EXOTIC GREENERY FLORIST	292		DOUGLAS DRIVE	A	Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
CRICKET WIRELESS	650		DOUGLAS DRIVE	106-7	Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
DOUGLAS SQUARE CLEANERS	650		DOUGLAS DRIVE	102	Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
THE DONUT PARK	650		DOUGLAS DRIVE	104	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
SO-CLEAN SOLAR DETAILING	3405		DUNES PLACE		Low	Commercial	Oceanside	San Luis Rey	903.1											Cleaning Solar Panels	Not applicable		7349		
RIVERBOTTOM BAR	473	N	EL CAMINO REAL		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
QUICKDRAW WINDOWN CLEANING	2155		EL MONTE DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Window Cleaning			7349		
RITZ CLEANERS	4645		FRAZEE ROAD	B	Low	Commercial	Oceanside	San Luis Rey	903.1														0		

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
COLDSTONE CREAMERY	4635		FRAZEE ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
CUPPY'S COFFEE	4635		FRAZEE ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
SUBMARINA	4635		FRAZEE ROAD	B	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
SERENA'S ALTERATIONS	108	S	FREEMAN STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Tailor Shop	Not applicable		7219		
MANNINGS DRY CLEANERS	212	N	FREEMAN STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Laundry, Dry Cleaners and Garm	Not applicable		7212		
THE SPARKLING PAW	792		GREGORY LANE		Low	Commercial	Oceanside	San Luis Rey	903.1											Mobile Pet Grooming			752		
NAUTICAL BEAN	240	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1430101600	5812		
HARBOR SNACKS AND HOTDOGS	258	S	HARBOR DRIVE	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1430101600	5812		
NANA AND POP'S SWEET SHOP - ICE CREAM PARLOR	280	S	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Dairy products	Not applicable		5451		
YEARLEY SAIL BOATS	1850	N	HARBOR DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Amusement And Re	Not applicable		7999		
MISSION SQUARE COIN LAUNDRY	306	N	HORNE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Coin operated Laundry and Dry	Not applicable		7215		
HARBOR FREIGHT	316	N	HORNE STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Harware Stores	Not applicable		5251		
HYDRANAUTICS	401		JONES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing, Plastics/Filter	Not applicable		3999		
VERNON TOOL CO	503		JONES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing, Pipe Cutting To	Not applicable		3541		
NORTH COUNTY COOLING	504		JONES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Fresh Fruits and Vegetables Pa	Not applicable		5148		
LEN'S AUTO BODY, INC	510		JONES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Automotive - Body Shop	Not applicable	1460309600	7539		
ENTERPRISE RENT A CAR	510		JONES ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Passenger Car Rental	Not applicable		7514		
360 FITNESS	316		LA PURISSIMA		Low	Commercial	Oceanside	San Luis Rey	903.1											Mobile Personal Training	Not applicable		6531		
C A LATH AND PLASTER	4998		MACARIO DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Lath and Plaster and Stucco Contractor	Not applicable		7349		
JOSE HANDYMAN	126		MAGDALENA DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Handyman	Not applicable		7349		
SPAW DAY	3905		MAGNOLIA ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Mobile Pet Grooming	Not applicable		752		
VELASCO'S LAWN SERVICES	4621		MARDI GRAS STREET		Low	Commercial	Oceanside	San Luis Rey	903.1											Landscaper	Not applicable		7349		
FIRST CHOICE CLEANING	4714		MAYFLOWER WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											House Cleaning	Not applicable		7349		
MAUI WAUI COFFEE & SMOOTHIES	301		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1472711500	5812		
RED CUP YOGURT	301		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1472711500	5812		
QUIZNO'S SUB STORE 10327	401		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1472711400	5812		
J.S.P. SUBWAY	406		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
YOUNG'S SHOE REPAIR	408		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Shoe Repair Shop	Not applicable		7251		
COLDSTONE CREAMERY	409		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1472711400	5812		
NAPUR SECURITY ACADEMY	601		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											School and Educational Service	Not applicable		8299		
LLL REPTILE AND SUPPLY CO. INC.	609		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Pet Sup	Not applicable		5999		
NORTH COUNTY TRANSIT DISTRICT	810		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Local and Suburban Transit	Not applicable		4111		
GALAXY SHOES	1018		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Shoe Store	Not applicable		5661		
SUBWAY	1024		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1472310800	5812		
QUALITY INN	1403		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels and Motels	Not applicable		7011		
RAMADA INN - OCEANSIDE	1440		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels and Motels	Not applicable		7011		
MISSION DONUT HOUSE	1502		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1481523200	5812		
BALBOA LIQUOR	1604		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Liquor Store	Not applicable		5921		
PAYLESS SHOES SOURCE	1919		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Shoe Store	Not applicable		5661		
MR BEST CLEANERS	2019		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Laundry, Dry Cleaners and Garm	Not applicable		7212		
OCEANSIDE LAWNMOWERS REPAIR	2025		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Repair Shops	Not applicable		7699		
JUGOS JUQUILA	2027		MISSION AVENUE	E13	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1481700600	5812		
MISSION TIANGUIS	2027		MISSION AVENUE	D	Low	Commercial	Oceanside	San Luis Rey	903.1											Groceries Store	Not applicable	1481700600	5411		
BODOS ALTERATION	2027		MISSION AVENUE	E	Low	Commercial	Oceanside	San Luis Rey	903.1											Laundry, Dry Cleaners and Garm	Not applicable		7219		
SEAFINE	2027		MISSION AVENUE	E13	Low	Commercial	Oceanside	San Luis Rey	903.1											Signs and Advertizing Specialt	Not applicable		3993		
LUCKY RECYCLING	2229		MISSION AVENUE	R	Low	Commercial	Oceanside	San Luis Rey	903.1											Recycling Center	Not applicable		5093		
MARTY'S VALLEY INN	3240		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Hotels and Motels	Not applicable		7011		
YUMYUM DONUTS	3304		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Coffee Shop	Not applicable	1602711400	5812		
CLASSY K-9 CLIPS	3320		MISSION AVENUE	G	Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Pet Sho	Not applicable		5999		
D & J GLASS AND PAINT	3320		MISSION AVENUE	A-D	Low	Commercial	Oceanside	San Luis Rey	903.1											Paint, Glass and Wallpaper Sto	Not applicable		5231		
BUDGET CAR & TRUCK RENTAL	3320		MISSION AVENUE	M	Low	Commercial	Oceanside	San Luis Rey	903.1											Passenger Car Rental	Not applicable		7514		
TEAM FISHEL	3355		MISSION AVENUE	223	Low	Commercial	Oceanside	San Luis Rey	903.1											Contractor, Underground Utilti	Not applicable		1623		
PACIFIC VIEW CHARTER SCHOOL	3355		MISSION AVENUE	139	Low	Commercial	Oceanside	San Luis Rey	903.1											Elementary and Secondary Schoo	Not applicable		8211		
MINUTE PRESS	3365		MISSION AVENUE	I-J	Low	Commercial	Oceanside	San Luis Rey	903.1											Commercial Priting	Not applicable		2752		
TAN'S DONUTS	3375		MISSION AVENUE	A	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1605500500	5812		
A TOUCH OF GOLD	3375		MISSION AVENUE	G	Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Pet Sho	Not applicable		5999		
STEEL GUITARS OF NORTH COUNTY	3375		MISSION AVENUE	D	Low	Commercial	Oceanside	San Luis Rey	903.1											Musical Instrument Store	Not applicable		5736		
MIKE'S LIQUOR II	3549		MISSION AVENUE	A-C	Low	Commercial	Oceanside	San Luis Rey	903.1											Liquor Store	Not applicable		5921		
STORAMERICA OCEANSIDE	3560		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing, Equipment	Not applicable		3751		
YOUNG'S WATER	3742		MISSION AVENUE	101	Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Food Stores	Not applicable		5499		
A-B FURNITURE & D□COR	3742		MISSION AVENUE	102	Low	Commercial	Oceanside	San Luis Rey	903.1											Sale of furniture	Not applicable		5932		
WALGREENS DRUG STORE	3752		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Drug Stores	Not applicable		5912		

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
VERA'S HOME MADE TAMALES	3753		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Food Preparation - Tamales	Not applicable		209		
STARBUCKS COFFEE 6784	3760		MISSION AVENUE	C105	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	15839004000	5812		
GROOMING WITH TLC	3762		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Pet Sho	Not applicable		5999		
KAHOOTS ANIMALS AND SUPPLIES	3764		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Retail - Pet Sho	Not applicable		5999		
MISSION COIN LAUNDRY	3772		MISSION AVENUE	134	Low	Commercial	Oceanside	San Luis Rey	903.1											Coin operated Laundry and Dry	Not applicable		7215		
OCEANSIDE DONUTS	3772		MISSION AVENUE	119	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1583901400	5812		
MISSION DRY CLEANERS	3772		MISSION AVENUE	136	Low	Commercial	Oceanside	San Luis Rey	903.1											Laundry, Dry Cleaners and Garm	Not applicable		7212		
PETITE MADELINE BAKERY	3776		MISSION AVENUE	137	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1583901400	5812		
SUBWAY	3776		MISSION AVENUE	140	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1583901400	5812		
TOPSY TURVY FROZEN YOGURT	3776		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1583901400	5812		
CAL AUTO	3776		MISSION AVENUE	139	Low	Commercial	Oceanside	San Luis Rey	903.1											Miscellaneous Personal Service	Not applicable		7299		
OCEAN RAINBOW - ICE CREAM PARLOR	3784		MISSION AVENUE	147	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1583900200	5812		
MBA PRODUCE GROUP	3815		MISSION AVENUE	203	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
CRICKET WIRELESS	3825		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
FSNB SERVICE CENTER	3825		MISSION AVENUE	9	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
THE PC TEKS INC.	3825		MISSION AVENUE	D3	Low	Commercial	Oceanside	San Luis Rey	903.1											PC Repairs			7328		
OCEANSIDE POLICE OFFICER'S ASSOCIATION	3855		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
TOLEDO'S FLOORING	3861		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
HEARX WEST	3870		MISSION AVENUE	D5	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
MISSION CHILD DEVELOPMENT CENTER	3870		MISSION AVENUE	D6	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
DRY CLEANERS OF AMERICA	3875		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
PETCO	3875		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
THE FLORIST	3882		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
LUCKY BOB'S INTERNET CAF	3915		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
WATER SHOP	3915		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
MISSION WASH LAUNDRY	3935		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
FUELMAN NETWORK/CARR SERVICE CENTER	3940		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
BROTHER BENNO'S THRIFT SHOP	3965		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1														0		
NORTH COUNTY ALANO CLUB	4198		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
AWESOME PRO CLEANING SERVICES	4413		MISSION AVENUE	G203	Low	Commercial	Oceanside	San Luis Rey	903.1											Carpet/House Cleaning	Not applicable		7349		
LANITRA'S PRIVATE HOME CARE	4433		MISSION AVENUE	D108	Low	Commercial	Oceanside	San Luis Rey	903.1											Homecare Services	Not applicable		7299		
SYMPLY BEAUTIFUL FLOWERS	4507		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
PROFESSIONAL HOUSECLEANING	4729		MISSION AVENUE	C214	Low	Commercial	Oceanside	San Luis Rey	903.1											hHouse Cleaning	Not applicable		7349		
THE HOME DEPOT 1018	5755		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
H & G SERVICE CORP.	5780		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
RANCHO DEL ORO LANDSCAPING & MAINTENANCE	6000		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
GYAN PRODUCE	6041		MISSION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1												Not applicable		0		
CLEA'S HEALTH BASED CLEANING SERVICES	378		MOONSTONE BAY DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Janitorial Services	Not applicable		7349		
SUBWAY 14452	1836		OCEANSIDE BLVD	103	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
EXCELLENT DRYCLEANERS	125		OLD GROVE ROAD	13	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
MISSION FEDERAL CREDIT UNION	125		OLD GROVE ROAD	1	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
FRESH O YOUGURT	125		OLD GROVE ROAD	4	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments			5812		
SUBWAY'S SANDWICHES	125		OLD GROVE ROAD	16	Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable		5812		
LOWE'S HIW Inc.	155		OLD GROVE ROAD	B10	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
LOWE'S HIW INC 1588	155		OLD GROVE ROAD	F	Low	Commercial	Oceanside	San Luis Rey	903.1											HARDWARE STORE			5211		
MY WIRELESS	175		OLD GROVE ROAD	1	Low	Commercial	Oceanside	San Luis Rey	903.1														0		
STARBUCKS COFFEE 9349	175		OLD GROVE ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments			5812		
PIERVIEW COFFEE CO	300		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1470880300	5812		
PIER VIEW PUB	301		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Drinking Places (Alcoholic Bev	Not applicable	1470891100	5813		
BUBBLE TEA	318		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1470880200	5812		
CREPES UP	318		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1470880200	5812		
THE WHISKEY BARREL	406		PIER VIEW WAY		Low	Commercial	Oceanside	San Luis Rey	903.1											Eating/Drinking Establishments	Not applicable	1470860600	5812		
NONNIE'S CREATIONS	3550		PONDEROSA DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1											Handcrafted Goods	Not applicable		5961		
BYRNE SURFBOARDS	3204		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing - Sporting and A	Not applicable		3949		
FASHIONS "TWO"	3204		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing - Women Apparel	Not applicable		2339		
BAY CITY APPAREL	3205		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing - Men and Boys A	Not applicable		2329		
INTERNATIONAL SALES INC	3205		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing - Sporting and A	Not applicable		3949		
THE LAB SURF COMPANY INC	3205		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing - Sporting and A	Not applicable		3949		
SMSCG INC. DBA SB SURFBOARDS	3205		PRODUCTION AVENUE	H	Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing - Surfboards	Not applicable		3949		
ADVANCED FIBERGLASS	3215		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing - Fiberglass Pro	Not applicable		3239		
CUSTOM WINDOW DESIGN INC	3225		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing - Wood Doors and	Not applicable		3999		
WOODCRAFTERS INTERNATIONAL	3230		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1											Manufacturing - Cabinets	Not applicable		2434		

Loc	Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS: Sediment	Nutrients	Trash	Oil	Grease	Bacteria	Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other	Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
	NORTH COUNTY MILLING & MANUFACTURING	3230		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Garage Doors	Not applicable		3499		
	MTM INDUSTRIAL	3230		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Machine Shop	Not applicable		3499		
	AARK CONSTRUCTION	3245		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													General Contractor, Residentia	Not applicable		1521		
	TEQOPH SURFBOARDS	3245		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Sporting and A	Not applicable		3949		
	WAVERLY TILE INC	3245		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													Wholesale Sales - Tiles, Stone	Not applicable		5032		
	3D FOAM INC.	3265		PRODUCTION AVENUE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Packing Foam	Not applicable		3086		
	AAA N.COUNTY HANDYMAN SERVICE	159		RAMONA WAY		Low	Commercial	Oceanside	San Luis Rey	903.1													HANDYMAN SERVICE			8811		
	CARLO'S WATER	610	N	REDONDO DRIVE	B	Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	MIX DIX DISCOTECA	610	N	REDONDO DRIVE	I	Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	PIZZA HUT	610	N	REDONDO DRIVE	E	Low	Commercial	Oceanside	San Luis Rey	903.1													Eating/Drinking Establishments	Not applicable		5812		
	1ST SAMOAN CONGREGATION CHUCH MESA MARGARITA	610	N	REDONDO DRIVE	G	Low	Commercial	Oceanside	San Luis Rey	903.1													Liquor store			0		
	BIG LIQUOR	617	N	REDONDO DRIVE	A	Low	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X						Groceries Store	Not applicable	1570402600	5411	YES	NO
	AZTEC/OCEANSIDE TRAFFIC SCHOOL	620	N	REDONDO DRIVE	B	Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	COIN-UP WASH AND DRY	620	N	REDONDO DRIVE	D	Low	Commercial	Oceanside	San Luis Rey	903.1																7389		
	GOOD STUFF ONLY	620	N	REDONDO DRIVE	C	Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	NOVILLO'S MEAT MARKET	620	N	REDONDO DRIVE	E	Low	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X						Groceries Store	Not applicable	1570403600	5411	YES	NO
	BAKER BABES	293		REEFPOINT WAY	4	Low	Commercial	Oceanside	San Luis Rey	903.1													Bakes Goods			0		
	CVS PHARMACY	3925	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1														Not applicable		0		
	FRESH PAC INTERNATIONAL	3925	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	EXTRA SPACE STORAGE 200	4700	N	RIVER ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	VISTA COMMUNITY CLINIC	4700	N	RIVER ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	J LEON CONSTRUCTION	4705	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	PACIFIC PARADISE NURSERY INC	4785	N	RIVER ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1														Not applicable		0		
	STARSHIP WORLDWIDE LLC	1332		ROCKY POINT DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1													Furniture Distribution	Not applicable		5021		
	GIRA CORP. dba SOLAR PLUS	1361		ROCKY POINT DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1													Solar Photovoltaic Sales/Service and Installation	Not applicable		1799		
	NEZZY SURFBOARDS	158		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Sporting and A	Not applicable		3949		
	CERAMIC TILE SUPPLY INC	179		ROYMAR ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1													Retail Sales - Tile and Stone	Not applicable		5211		
	NEPTUNE INDUSTRIES - NEZZY SURFBOARDS	180		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Sporting and A	Not applicable		3949		
	O'SHEAS DELIVERY SERVICES	180		ROYMAR ROAD	H	Low	Commercial	Oceanside	San Luis Rey	903.1													Transportation - Local Truckin	Not applicable		4214		
	PAYLESS CUSTOM VEHICLE MAGNETS	230		ROYMAR ROAD	E	Low	Commercial	Oceanside	San Luis Rey	903.1													Custom Vehicle Magnets	Not applicable		3999		
	WEST COAST FIRE PROTECTION	230		ROYMAR ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1													General Contractor - Fire Spri	Not applicable		1799		
	THE TOTAL PROS - AUTO DETAILING TRAINING CENTER	230		ROYMAR ROAD	A	Low	Commercial	Oceanside	San Luis Rey	903.1													Services - Auto Detailing Scho	Not applicable		8289		
	KLEENMASTER PRODUCTS CO	271		ROYMAR ROAD	F	Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Chemical Clean	Not applicable		2899		
	CERTIFIED WELD & FAB	291		ROYMAR ROAD	D	Low	Commercial	Oceanside	San Luis Rey	903.1													Miscellaneous Services -Weldin	Not applicable		7692		
	FIBERGLASS SERVICES INC.	291		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Wholesale Distributor	Not applicable		5131		
	DYNAMIC INNOVATIONS	3207		ROYMAR ROAD	C	Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Machine Shop	Not applicable		7539		
	ACADEMY MACHINE PRODUCTS, INC	3207		ROYMAR ROAD	A-B	Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Machine Shop	Not applicable		3444		
	FIEDLER BUILDING CO	3239		ROYMAR ROAD	B	Low	Commercial	Oceanside	San Luis Rey	903.1													General Contractor, Residentia	Not applicable		1521		
	ACE AVIATION SERVICES	3239		ROYMAR ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Aircraft part	Not applicable		3728		
	PRECISE LANDSCAPING AND MAINTENANCE	4401		SAN JOAQUIN STREET		Low	Commercial	Oceanside	San Luis Rey	903.1													Landscaping Services	Not applicable		7349		
	OCEANSIDE PET HOTEL & TRAINING KENNEL	2909		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Miscellaneous Retail - Pet Sho	Not applicable		5999		
	SPEEDSKINS	2919		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Wholesale - Miscellaneous Non	Not applicable		5199		
	ASIGMA	2930		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Sheet Metal	Not applicable		3444		
	RIOPELLE DEVELOPMENT CO INC	2935		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													General Contractor	Not applicable		1521		
	OCEANSIDE PUBLIC STORAGE	2936		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Transportation - General Wareh	Not applicable		4225		
	MU, INC.	2941		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing, Vacumn Tubes	Not applicable		3229		
	ROYAL DIVE	2949		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Eating/Drinking Establishments	Not applicable	1460505200	5812		
	CERAMISTONE INTERNATIONAL INC.	2950		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Wholesale Tiles	Not applicable		5032		
	AMERICAN AUTO GLASS	2951		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Automobile Glass Replacement S	Not applicable		7536		
	BIO CLEAN ENVIROMENTAL SERVICES	2972		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Wholesale - Non Durable Produc	Not applicable		5199		
	BEST MATTRESS & FURNITURE BUYS	3102		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Home Furniture Store	Not applicable		5712		
	BIKER OUTLET STORE	3108		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													Motorcycle Parts Retail	Not applicable		5571		
	JET CONSTRUCTION INC	3124		SAN LUIS REY ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1													General Contractor - Office	Not applicable		1521		
	CMC FURNITURE	401		SEAGAZE DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1													Home Furniture Store	Not applicable		5712		
	GOING 4 BROKE TRUCKS	603		SEAGAZE DRIVE		Low	Commercial	Oceanside	San Luis Rey	903.1													Truck Driver - Moving Co.	Not applicable		7389		
	BENCH HOUSE WINERY INC.	1534		SLEEPING INDIAN ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1	X	X	X			X							Winery	Not applicable	1212021200	2084	YES	NO
	MOZO'S PAINTING	320		TALON RIDGE WAY		Low	Commercial	Oceanside	San Luis Rey	903.1													Painting Services	Not applicable		7349		
	HAUNTED HEAD SALOON	207	N	TREMONT STREET		Low	Commercial	Oceanside	San Luis Rey	903.1													Eating/Drinking Establishments	Not applicable	1470890200	5812		
	DOROTHY'S MILITARY SHOP AND LAUNDRY	213	N	TREMONT STREET		Low	Commercial	Oceanside	San Luis Rey	903.1													Laundry, Dry Cleaners and Garm	Not applicable		7212		
	INTER AUTO CAR DEALER	107		VALERA WAY		Low	Commercial	Oceanside	San Luis Rey	903.1													Wholesale Car Dealership	Not applicable		5521		
	FOREX/ASIANSIDE VARIETY STORE	465		VANDEGRIFT BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	7-ELEVEN 20342C - 2111	487		VANDEGRIFT BLVD		Low	Commercial	Oceanside	San Luis Rey	903.1	X	X	X	X	X	X	X						Groceries Store	Not applicable	1570402800	5411	YES	NO

Loc	Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
											Sediment	Nutrients	Trash	Oil	Grease	Bacteria	Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
	SEMPER FI FLORIST	521		VANDEGRIFT BLVD	A	Low	Commercial	Oceanside	San Luis Rey	903.1															0		
	STAR DRY CLEANERS	521		VANDEGRIFT BLVD	F	Low	Commercial	Oceanside	San Luis Rey	903.1															0		
	STAMPED CONCRETE	3310		VIA DE LA VALLE		Low	Commercial	Oceanside	San Luis Rey	903.1													Contractor, Concrete	Not applicable		1771		
	OCEANSIDE SURF INDUSTRIES	3310		VIA DE LA VALLE	C	Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Surfboards	Not applicable		3949		
	H&M CREATIVE DESIGNS INC	3310		VIA DE LA VALLE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing - Sporting and A	Not applicable		3949		
	FM DIAZ CONSTRUCTION INC.	222		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Contractor, General	Not applicable		1541		
	STEPHEN S HALVERSON INC	235		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Architectural Fo	Not applicable		3999		
	J & W APPLIANCE SERVICE	250		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Miscellaneous Repairs - Applia	Not applicable		7699		
	KKL	265		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Surfboards	Not applicable		3949		
	HARVEST TIME PRODUCE	303		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Fresh Fruits and Vegetables	Not applicable		5148		
	OCEAN BREEZE	350		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Wood Crates	Not applicable		2449		
	AUTO GLASS AMERICA	358		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1			X	X			X		X				Automobile Services - Glass Replacement	Not applicable	1460501700	7536	NO	NO
	NITTO DENKO TECHNICAL CORP	501		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing, Plastics/Filter	Not applicable		3999		
	NITTO DENKO TECHNICAL CORP	502		VIA DEL MONTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Business Services, Administrative	Not applicable		7389		
	BARR DESIGNS SURFBOARDS	254		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Shaping Polyester Foam Surfboards	Not applicable		3949		
	TEK STEEL WELDING & FABRICATION	302		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Pipe and Pipe Fi	Not applicable		3498		
	FERGUSSON WATERWOARKS	304		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Building Material Supplies	Not applicable		5211		
	WILEY CONSTRUCTION CO INC	310		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Contractor, General	Not applicable		1542		
	A & G INDUSTRIES, INC	316		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Sheet Metal work	Not applicable		3444		
	SOUTHWEST SPAS	417		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Rubber and Misce	Not applicable		3088		
	WALTER'S DING REPAIR	456		VIA DEL NORTE		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Surfboards	Not applicable		3949		
	STORAGE WEST	201		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1													Transportation - General Wareh	Not applicable		4225		
	BUYRIGHT	208		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturing, Window Covering	Not applicable		2391		
	SAN DIEGO BATTERY - OCEANSIDE	216		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1													Automotive Parts Supply Store	Not applicable		5531		
	MOBILE TRENDS	229		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1													Used Automotive Engines and Tr	Not applicable	1460501900	5531		
	STAMPED CONCRETE	303		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1													Contractor, Concrete	Not applicable		1771		
	PALAPA KINGS INC	305		VIA EL CENTRO	110	Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Shade Structures	Not applicable		3999		
	PACIFIC CANVAS	311		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Canvas Awnings	Not applicable		2394		
	OCEANSIDE MACHINE AND TOOL, INC	360		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1													Manufacturer, Sheet Metal work	Not applicable		3444		
	PRECISION AUTO GLASS	444		VIA EL CENTRO		Low	Commercial	Oceanside	San Luis Rey	903.1			X	X			X		X				Automobile Services - Glass Replacement	Not applicable	1460507000	7536	NO	NO
	RESIDENTIAL WATERPRROFING CONTRACTORS	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1													Construction Special Trade - W			1799		
	HOSPITALITY SERVICES	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1													Miscellaneous Services - Telem			8999		
	INTERNATIONAL HOTEL MARKETING CORPORATION	503		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1													Miscellaneous Services - Telem			8999		
	OCEANA PET STOP	537		VISTA BELLA		Low	Commercial	Oceanside	San Luis Rey	903.1													Pet Shops, Retail			5999		
	FANCY PLANTS	190		WILSHIRE ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	Natural Stone Waterfalls	190		WILSHIRE ROAD		Low	Commercial	Oceanside	San Luis Rey	903.1																0		
	RACE TECH ELECTRIC	1418		WOODHAVEN DRIVE		Low	Commercial	San Luis Re	San Luis Rey	903.1													Distributor			5961		
	NORTH COUNTY CAT HOSPITAL	4225		OCEANSIDE BLVD	U	Low	Commercial	Carlsbad	Loma Alta	904.1	X	X	X			X	X	X					Pet Hospital	Not applicable	1622412300	742	YES	YES
	RANCHO DEL ORO VETERINARY HOSPITAL	1646		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1	X	X	X			X	X	X					Pet Hospital	Not applicable	1621207902	742	YES	NO
	MARCO POLO INC.	1816		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													General Auto Repair Shop			7538		
	ONE SOURCE DISTRIBUTORS	1865		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													ELECTRICAL MANUFACTURERS			5063		
	ACI DISTRIBUTION	1875		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													FLAT GLASS MANUFACTURERS			3211		
	COMPUTER GEEKS	1890		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1													COMPUTER PARTS SALES			5734		
	JDM UNLIMITED	1818		PEACOCK BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1													AUTO SUPPLIES			5013		
	COASTAL LAMINATE & CABINETRY	1818		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													OTHER CONTRACTOR			1521		
	EAGLE GRINDING	1820		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													INDUSTRIAL MANUFACTUIRERS			3599		
	DOG DAYZ OF CALIFORNIA	1995		PEACOCK BOULEVARD		Low	Commercial	Carlsbad	Loma Alta	904.1	X	X	X			X	X	X					Pet Hospital	Not applicable	1614703800	742	YES	NO
	GANDELFO'S DELI	3617		OCEAN RANCH BLVD	100	Low	Eat/Drink Est.	Carlsbad	Loma Alta	904.1	X	X	X	X	X	X	X	X		X			Eating/Drinking Establishments	Not applicable	1605721300	5812	YES	NO
	STARBUCKS COFFEE 9688	1779		OCEANSIDE BLVD	A	Low	Eat/Drink Est.	Carlsbad	Loma Alta	904.1													Eating/Drinking Establishments	Not applicable	1513101800	5812	YES	NO
	BASKIN ROBBINS/TOGO'S	4201		OCEANSIDE BLVD	A	Low	Eat/Drink Est.	Carlsbad	Loma Alta	904.1													Eating/Drinking Establishments	Not applicable	1622411000	5812		
	GENENTECH INC	1		ANTIBODY WAY		Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	GUCKENHEIMER	1		ANTIBODY WAY		Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	CARPETS BY PHILLIPS	4001		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	AGRI CHEMICAL & SUPPLY INC.	4011		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		5191		
	NILO TOYS	4011		AVENIDA DE LA PLATA	302	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	ORIS GROUP CONSULTING INC	4011		AVENIDA DE LA PLATA	302	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	ROYAL PACIFIC CONSTRUCTION INC	4011		AVENIDA DE LA PLATA	301	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	ENVIREMEDIAL SERVICES INC	4015		AVENIDA DE LA PLATA	402	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	AMERICAN FOOD INGREDIENTS	4021		AVENIDA DE LA PLATA	501	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	DTI INTERNATIONAL	4021		AVENIDA DE LA PLATA	502	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	ACUSHNET TEST FACILITY	4033		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	PRESERVED TREESCAPES INTERNATIONAL	4039		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
COMPUTER CIRCULATION CENTER	4040		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ROCKY'S FOOD DIST INC	4048		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
COX COMMUNICATIONS	4100		AVENIDA DE LA PLATA	A	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MC COMMUNICATIONS INC	4100		AVENIDA DE LA PLATA	B	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RANCHO DEL ORO LANDSCAPE & MAINT INC	4100		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BAY CAL COMMERCIAL PAINTING	4112		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
LANDMARK MFG,INC	4112		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SEPRO MEMBRANES INC	4115		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
COASTAL WINE STORAGE	4119		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
JONES BROADBAND INTERNATIONAL INC	4120		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PROFESSIONAL DEVELOPMENT COURSES	4121		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
FULL CIRCLE MANAGEMENT	4123		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
B & M HARDWARE CO.	4125		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ELMEC MANUFACTURING	4127		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DECORATIVE SERVICES	4128		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
APPLIED COMPOSITE SOLUTIONS	4131		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SAN DIEGO FUME WORKS COMPANY	4131		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
LANDMARK MFG INC	4136		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ROYAL BUSINESS GROUP INC	4139		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CARBON BY DESIGN LP	4141		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DUPACO INC	4144		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CREATURES OF LEISURE	4151		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CALIBER BODYWORKS	4156		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CAROLLO ENGINEERING	4167		AVENIDA DE LA PLATA	114	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
FOUR YOUNG INC	4167		AVENIDA DE LA PLATA	102	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
FREE RADICAL TECHNOLOGY	4167		AVENIDA DE LA PLATA	116	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GUTH CENTER	4167		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
KHERUBIM INC	4167		AVENIDA DE LA PLATA		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RANCHO DEL ORO LANDSCAPE & MAINTENANACE	4167		AVENIDA DE LA PLATA	109	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SENIOR RESOURCE CENTERS	4167		AVENIDA DE LA PLATA	108	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DORADO ENTERPRISES	4168		AVENIDA DE LA PLATA	108	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
I SPEED	4168		AVENIDA DE LA PLATA	115	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
IDEADON LLC	4168		AVENIDA DE LA PLATA	111	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
JANI-TECH	4168		AVENIDA DE LA PLATA	103	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
JEN MAX FOODS	4168		AVENIDA DE LA PLATA	100	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MISSION POWER SOLUTIONS	4168		AVENIDA DE LA PLATA	105	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
QC ENTERPRISES INC	4168		AVENIDA DE LA PLATA	116	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
L.R. DESIGN ASSOCIATES	4183		AVENIDA DE LA PLATA	201	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
COX COMMUNICATIONS	1922		AVENIDA DEL ORO		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GIMMINY KIDS OCEANSIDE	1935		AVENIDA DEL ORO		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MATRIX MEMBRANES INC	1945		AVENIDA DEL ORO	128	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TALLY RAND INDUSTRIAL SYSTEMS INC.	1945		AVENIDA DEL ORO	126	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ARBOR E & T INC.	1949		AVENIDA DEL ORO	106	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
KACOR INC.	1949		AVENIDA DEL ORO	102	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
2H DISTRIBUTION INC.	1949		AVENIDA DEL ORO	102	Low	Commercial	Carlsbad	Loma Alta	904.1											Distributor					
MAHLER'S BAKERY	1943		AVENIDA PLAZA REAL		Low	Commercial	Carlsbad	Loma Alta	904.1											Wholesale Bakery	Not applicable	1625023600	5153		
HARDWARE SPECILATY COMPANY INC.	1951		AVENIDA PLAZA REAL		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NEON TECH	1965		AVENIDA PLAZA REAL		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing Neon Signs			3993		
OCEAN HOME REPAIR SERVICES	5152		BAYWOOD CIRCLE		Low	Commercial	Carlsbad	Loma Alta	904.1											Home Repairs			7349		
M.R. STREETER REMODELING	333		CADILLAC CIRCLE		Low	Commercial	Carlsbad	Loma Alta	904.1											Handyman Services	Not applicable		1521		
DANIEL BAUER	931		CALIFORNIA STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Landscape Services			7349		
AMFLEX PLASTICS INC	4039		CALLE PLATINO	G	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DIRECT MOULDING	4039		CALLE PLATINO	A	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
INDIGO LABS INC	4039		CALLE PLATINO	C	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BRIXTON	4040		CALLE PLATINO	102	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CITY ELECTRIC SUPPLY	4040		CALLE PLATINO	116	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CJ PRODUCTS	4040		CALLE PLATINO	124	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
KITCHEN GENIOS	4040		CALLE PLATINO	110	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NORTH COAST MOTORSPORTS	4040		CALLE PLATINO	111	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OCEANSIDE CROSSFIT	4040		CALLE PLATINO	120	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PUMBMASTER INC.	4056		CALLE PLATINO		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CAL-MIL PLASTIC PRODUCTS, INC	4079		CALLE PLATINO		Low	Commercial	Carlsbad	Loma Alta	904.1														0		

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										Sediment	Nutrients	Trash	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
ULTIMATE CLEANING CONCEPTS	2419		CATALINA CIRCLE	257	Low	Commercial	Carlsbad	Loma Alta	904.1											JANITORIAL SERVICES			7349		
PAMELA ANNE DESIGNS	631	S	CLEMENTINE STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Sewing Purses, Wallets	Not applicable		3171		
BRYANT & DWYER SIGN SERVICE	406	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing, Sign and Averti	Not applicable		3993		
NORTH COUNTY PRINTERS & SIGNS	406	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing, Sign and Averti	Not applicable		3993		
KADDYMART	629	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Repair - Electric Golf Carts			5088		
OCEANSIDE BOARD OUTLET	1023	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturer, Surfboards	Not applicable		3949		
LINDEN SURFBOARDS	1027	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturer, Surfboards	Not applicable		3949		
PRIME CO PAINTING, INC	1119	S	CLEVELAND STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Contractor, Painting	Not applicable		1721		
COASTAL MARKET AND LIQUOR	426	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Liquor Store	Not applicable		5921		
OCEANSIDE MORTUARY	602	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Funeral Service and Crematorie	Not applicable		7261		
TAILS A WAGGIN	612	N	COAST HWY		Low	Commercial	Oceanside	Loma Alta	904.1											Pet Shops, Retail	Not applicable		5999		
HARBOR LIQUOR	707	N	COAST HWY		Low	Commercial	Oceanside	Loma Alta	904.1											Liquor Store	Not applicable		5921		
U-HAUL CENTER OF OCEANSIDE	802	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Truck Rental/ and Storage	Not applicable		7513		
CDS SECURITY SOLUTIONS	820	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Special Trade Contractor, Secu	Not applicable		1799		
ENTERPRISE RENT-A-CAR COMPANY OF LA	875	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Passenger Car Rental	Not applicable		7514		
MIKE'S LIQUOR	907	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Liquor Store	Not applicable		5921		
CECELIA'S TILE	909	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Installation of Tile and Paiting	Not applicable		7349		
JORDAN'S UPHOLTERY	917	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Reupholstery and Furniture Rep	Not applicable		7641		
CERRUDO SERVICES	1012	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Contractor, General, Non Resid	Not applicable		1542		
WESTURF LANDSCAPE	1012	S	COAST HWY	L	Low	Commercial	Carlsbad	Loma Alta	904.1											Contractor, Lanscape	Not applicable		782		
PUPPYS AND KITTENS	1021	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Pet Shops, Retail	Not applicable		5999		
POTPOURRI	1024	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Secondhand, Furniture, Clothin	Not applicable		5932		
STAIN GLASS	1025	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Glass Colored, Stained Retail	Not applicable		3211		
GUESTHOUSE INN	1103	N	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Hotels, Motels	Not applicable		7011		
REMODEL SOLUTIONS	1107	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Contractor, Building and Lands	Not applicable		1521		
BASKIN ROBBINS - 31 FLAVORS ICE CREAM	1112	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Dairy products	Not applicable		5451		
LAUNDROMAT	1118	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Coin operated Laundry and Dry	Not applicable		7215		
SK DONUT	1129	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Coffee Shop	Not applicable	1520140500	5812		
ACE WELDING	1325	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Repair Services			7692		
SURF BOWL	1401	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Bowling Center			7933		
ECLIPSE APPAREL MANUFACTURING	1403	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Women's Appare			2331		
DICKIE WALKER MARINE	1405	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Wholesale - Apparel			5551		
FIDDLIN GREEN YACHT YARD	1517	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Services - Boat			0		
OCEANSIDE PRO TOWING INC	1521	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Services - Towin			7549		
PARADISE BY THE SEA	1537	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
HILLTOP MOTEL	1607	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DAV INDUSTRIES	1624	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
LIQUOR PLUS	1629	S	COAST HWY		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
BC HYDROLICS	2905		COLUMBIA DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											Mobile Hydraulic Pallet Jack Repair			7699		
JH HOME DETAILING	1888		CORTE TORERO		Low	Commercial	Carlsbad	Loma Alta	904.1											HOME CLEANING	Not applicable		7349		
HOUSE WHISPERER	4721		CRESCENT HEIGHTS DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											Handyman Services	Not applicable		7349		
CORE DEVELOPMENT GROUP LLC	570		CROUCH STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Redeveloping or Improving Residental Properties	Not applicable		7349		
EZ STOREAGE	444		EDGEHILL LANE		Low	Commercial	Carlsbad	Loma Alta	904.1											Storage of Household Goods, Fu	Not applicable		4222		
MB RETAIL INTERPRISES	1405	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
ETERNAL HILLS MEMORIAL PARK	1999	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
KONA HUT COFFEE HOUSE	1940	S	FREEMAN STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable		5812		
P J GRAPHICS	603		GARRISON STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Commercial Printing	Not applicable		2759		
BAVIN FLOORING	1818		GRANDVIEW STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Flooring Installation			1521		
HOOLIGANS	560		GREENBRIER DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable	1493302600	5812		
WARNER TRUCK RENTAL	2372		INDUSTRY STREET	B	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RICHER AUTO & TRUCK ELECTRC CO	2372		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Auto Repair Shop - Rebuilding			7538		
OCEANSIDE TRUSS INC - OUT OF BUSINESS	2847		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Wood Trusses			2349		
JESSUP SERVICES LLC	2850		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SEASIDE HEATING & AIR COND INC	2942		INDUSTRY STREET	A	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NIHON SEIMEN CO	2948		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CLINICON CORPORATION	3025		INDUSTRY STREET	A	Low	Commercial	Carlsbad	Loma Alta	904.1	X		X	X				X	X		Manufacturing - Medical Apparatus	Not applicable	1620313600	3841	NO	YES
CTM RACING PRODUCTS INC	3038		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GERMAN AUTOWERKE	3038		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
OCEANSIDE PLASTIC ENTERPRISES CORP	3038		INDUSTRY STREET	108	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CTM RACING PRODUCTS INC	3041		INDUSTRY STREET	B	Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Automobile Par			3714		
AMERICAN ARBOR TREE SERVICES	3041		INDUSTRY STREET	C	Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Services - Tree			783		
BASHORE CABINETS	3044		INDUSTRY STREET	103	Low	Commercial	Carlsbad	Loma Alta	904.1														0		

Loc	Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
											Sediment	Nutrients	Trash	Oil	Grease	Bacteria	Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other					
	HENDIG SURFBOARD REPAIR	3044		INDUSTRY STREET	108	Low	Commercial	Carlsbad	Loma Alta	904.1															0		
	CALIFORNIA MILLWORKS	3052		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1															0		
	ELLIOTT DRILLING SERVICES INC	3052		INDUSTRY STREET	107	Low	Commercial	Carlsbad	Loma Alta	904.1															0		
	PHARMAGENX INC	3052		INDUSTRY STREET	101	Low	Commercial	Carlsbad	Loma Alta	904.1															0		
	RANDAL INC	3052		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1															0		
	A & M WHEATHER GUARD	3052		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1													Distributor - Door and Window Components			5999		
	KEAHANA USA LLC	3052		INDUSTRY STREET	103	Low	Commercial	Carlsbad	Loma Alta	904.1													Wholesale Surfboard Materials			5999		
	PINPOINT PEST CONTROL CO. INC.	3060		INDUSTRY STREET	104	Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	OSE PRODUCT DEVELOPMENT	3060		INDUSTRY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1	X		X	X					X	X			Manufacturer - Prototyping	Not applicable	1620313500	8711	NO	NO
	KINETIC COMPOSITES, INC	2520		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1													MANUFACTURING IDUSTRIAL			3999		
	KAHLER INTERNATIONAL INC	2525		JASON COURT	101	Low	Commercial	Carlsbad	Loma Alta	904.1													MUSICAL INSTRUMENTS			3931		
	CARBON RESOURCES, LLC	2535		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1													NON-DURABLE GOODS			5199		
	EXECUTIVE PLUMBING INC	2550		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	PACIFIC TURBINE SUPPORT, INC	2575		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1													AIRCRAFT PARTS DISTRIBUTORS			5088		
	PACIFIC COAST CABINETS	2585		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1													WOOD CABINET MANUFACTURER			2434		
	H & M DISTRIBUTING INC	2590		JASON COURT		Low	Commercial	Carlsbad	Loma Alta	904.1													MANUFACTURING FABRIC CONDITION			2295		
	EM LANDSCAPING SERVICES	2565		JOANN DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1													Landscaping Services			7349		
	EJS MACHINERY CO	347		JUSTINA DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1													Machinery Sales			5961		
	FIRE MOUNTAIN POOL SERVICE	1524		KELLY STREET		Low	Commercial	Carlsbad	Loma Alta	904.1													Pool Maintenance Services			7389		
	STEVEN G. SYPHER dba COASTAL GLASS	140		LOMA ALTA DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1													Glass and Glazing Installation	Not applicable		1793		
	KURTIS SCHMIDT	5249		MANDARIN DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1													Truck Driver			7389		
	KNUCKLEHEAD SPORTFISHING	1302		MORENO WAY		Low	Commercial	Carlsbad	Loma Alta	903.1													SPORT FISHING CHARTER	Not applicable		7299		
	B.A.M. LANDSCAPING	1241		NATOMA WAY	B	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		7349		
	DART HELICOPTER SERVICES LLC	4650		NORTH AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1													Management Activities for Helicopter Parts	Not applicable		7389		
	AUTOMOTIVE MARKETING CONSULTANTS INC	4660		NORTH AVENUE	B	Low	Commercial	Carlsbad	Loma Alta	904.1													WAREHOUSING & STORAGE	Not applicable		4226		
	BUILDING RESTORATION INC?	4670		NORTH AVENUE	B	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		752		
	MIRAMAR STORAGE & TRANSFER CO ?	4670		NORTH AVENUE	B	Low	Commercial	Carlsbad	Loma Alta	904.1													LOCAL TRUCKING WITH STORAGE	Not applicable		4214		
	SERVICEMASTER ABSOLUTE WATER & FIRE SERVICES	4670		NORTH AVENUE	A	Low	Commercial	Carlsbad	Loma Alta	904.1													Manufacturing, Electronics	Not applicable		3825		
	D & M WELDING?	4670		NORTH AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1													OTHER CONTRACTOR			1793		
	LAMVIN INC	4675		NORTH AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1													CONCRETE BLOCK & BRICK			3271		
	SUPERIOR INDUSTRIAL	4695		NORTH AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1													Pipe & Fittings Supplier			5074		
	GREEN ALTERNATIVE	3600		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	PRF RESIDENT	3600		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	RESIDENCE INN BY MARRIOT OCEANSIDE	3603		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	IMPACT SOLUTIONS	3604		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	OCEAN SYSTEM ENGINEERING CORP	3605		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	ANGEL PRINTING INC	3614		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	GOURMET TAMALES	3616		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1													Food Preparation	Not applicable		0		
	ANDERGENE	3618		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	ANZO BIOTECH	3626		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	PHARM-AID INC	3634		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	ARCHITERRA LLP	3636		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	QUANTUM COMMUNICATIONS	3648		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	GENERAL CAR LEASING	3650		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	HOLSUM BAKERY INC.	3801		OCEAN RANCH BLVD	108	Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	SPG SOLAR INC	3801		OCEAN RANCH BLVD	103	Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	RICH LTD.	3809		OCEAN RANCH BLVD	110	Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	COCA-COLA BOTTLING CO OF SOUTHERN CA	3900		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	HYDRANAUTICS	3977		OCEAN RANCH BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	ATOMICA RESEARCH & DEVELOPMENT INC	3800		OCEANIC DRIVE	101	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	CDS FIRST	3800		OCEANIC DRIVE	117	Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	EMCO INDUSTRIES	3800		OCEANIC DRIVE	109	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	EURO INDUSTRIES INC	3800		OCEANIC DRIVE	112	Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	RAIN GEAR DEPOT	3800		OCEANIC DRIVE	111	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	U - BILD	3800		OCEANIC DRIVE	107	Low	Commercial	Carlsbad	Loma Alta	904.1														Not applicable		0		
	TRIBECA TECHNOLOGY SOLUTIONS	3800		OCEANIC DRIVE	113	Low	Commercial	Carlsbad	Loma Alta	904.1													ELECTRICAL APPLIANCE DISTRIBUT			5064		
	SWEET POTATO SHACK	3800		OCEANIC DRIVE	118	Low	Commercial	Carlsbad	Loma Alta	904.1													Full Service Restaurant	Not applicable		5812		
	SOLID RESTORATION	3800		OCEANIC DRIVE	104	Low	Commercial	Carlsbad	Loma Alta	904.1													Water Damage Restoration	Not applicable		1521		
	RAMTECH MFG INC	3801		OCEANIC DRIVE	101	Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	ELECTREX USA LTD.	3803		OCEANIC DRIVE	201	Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	POLYVUE DISTRIBUTION INC.	3810		OCEANIC DRIVE	209	Low	Commercial	Carlsbad	Loma Alta	904.1																0		
	TRUELINE WOODSWORKS	3810		OCEANIC DRIVE	207-8	Low	Commercial	Carlsbad	Loma Alta	904.1																0		

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
JDM CONCEPTS	3820		OCEANIC DRIVE	304	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
JONES GLASS	3820		OCEANIC DRIVE	305	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
KINETIC SYSTEMS INC	3820		OCEANIC DRIVE	309	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MAR MAR IMPORTING INC.	3820		OCEANIC DRIVE	307	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MOBILE SOLUTIONS	3820		OCEANIC DRIVE	308	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PICK ON US INC,	3820		OCEANIC DRIVE	310	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
WEST COAST PARTY RENTALS	3820		OCEANIC DRIVE	306	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
WOODCHUCK	3820		OCEANIC DRIVE	311	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RESSAC	3830		OCEANIC DRIVE	402	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
VANDER PARTY RENTAL	3830		OCEANIC DRIVE	410	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
A-ROO DISTRIBUTING OF CALIFORNIA LLC	3840		OCEANIC DRIVE	512	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
HANSEN ARCHITECTURAL SYSTEMS, INC	3907		OCEANIC DRIVE	301-02	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NOVA VOICE & DATA SYSTEMS, INC	3909		OCEANIC DRIVE	401	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SAN DIEGO MOTORING ACCESSORIES INC	3909		OCEANIC DRIVE	403	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BEDE WINDOWS AND DOORS	3913		OCEANIC DRIVE	501-2	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CALTERM EXTERMINATORS INC	3915		OCEANIC DRIVE	603	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CUSTOM ACQUATIC INC.	3915		OCEANIC DRIVE	601	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MYO SCI TECHNOGICS INC	3919		OCEANIC DRIVE	703	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GSM LLC	3923		OCEANIC DRIVE	200	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NEXT DAY SPECIALTY LLC	3923		OCEANIC DRIVE	100	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NATIVE BOUQUET, LLC	3927		OCEANIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RAYO WHOLESALE INC	3941		OCEANIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ONE SOURCE DISTRIBUTORS LLC	3951		OCEANIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BOONSTRA CONSTRUCTION	3700		OCEANIC WAY	102	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ADVANCE THERMAL FORMING ENT INC	3720		OCEANIC WAY	307	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
AM CONTRACTING INC	3720		OCEANIC WAY	301	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ASPEN COOLING & HEATING	3720		OCEANIC WAY	205	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CODE MICRO	3720		OCEANIC WAY	303	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MANTEL DEPOT INC	3720		OCEANIC WAY	302	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MIT ENGINEERING & CONSTR.	3720		OCEANIC WAY	203	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MORRISSEY CONSTRUCTION	3720		OCEANIC WAY	209	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ODYSSEY PROPERTIES & GARRISON CONSTRUCTION	3720		OCEANIC WAY	305	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PACIFIC GYRE	3720		OCEANIC WAY	301A	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
COASTAL AIR	3720		OCEANIC WAY	204	Low	Commercial	Carlsbad	Loma Alta	904.1											Heating and Air Condition Contractor			1711		
AM CONTRACTING	3740		OCEANIC WAY	301	Low	Commercial	Carlsbad	Loma Alta	904.1											GENERAL CONTRACTOR HOUSING			1521		
M I SOLUTIONS	3750		OCEANIC WAY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BROADCAST DESIGNS INTERNATIONAL	3760		OCEANIC WAY	502	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NORTH COUNTY MOBILE ELECTRONICS	3760		OCEANIC WAY	501	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
QUALITY PLUS	3760		OCEANIC WAY	502	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PORT OF SUBS	510		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable	1520230400	5812		
CAL-AUTO	518		OCEANSIDE BLVD	106	Low	Commercial	Carlsbad	Loma Alta	904.1											Miscellaneous Personal Service	Not applicable		7299		
PROTEC - LOCK	601		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NORTH COUNTY LIFE LINE	707		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
7-11 FOOD STORE 17043 D/2011	711		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
OCEANSIDE INN	1680		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											Hotels, Motels	Not applicable		7011		
WEST MARINE	1719		OCEANSIDE BLVD	A-F	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DISCOVERY PRESCHOOL	1759		OCEANSIDE BLVD	G-H	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
AVIS CAR RENTAL	1771		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
A-1 SELF STORAGE	1783		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
FRAZEE PAINT	1793		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
HERTZ LOCAL EDITION	1816		OCEANSIDE BLVD	C-D	Low	Commercial	Carlsbad	Loma Alta	904.1											Passenger Car Rental	Not applicable		7514		
OCEANSIDE COIN LAUNDRY	1824		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1											Coin operated Laundry and Dry	Not applicable		7215		
EL CAMINO RENTALS	1833		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OSHKOSH REGIONAL LOGISTICS CENTER	1833		OCEANSIDE BLVD	B-C	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
FAST ACTION PRINTING & COPYING	1906		OCEANSIDE BLVD	G-H	Low	Commercial	Carlsbad	Loma Alta	904.1											Commercial Printing	Not applicable		2759		
NAVY FEDERAL CREDIT UNION	1906		OCEANSIDE BLVD	N	Low	Commercial	Carlsbad	Loma Alta	904.1											Credit Union	Not applicable		6061		
CHOW'S DONUT	1906		OCEANSIDE BLVD	F	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable	1510104000	5812		
BRIARMIST CAKES AND FLOWERS	1906		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1											Florist	Not applicable		5992		
GROOMING TLC	1906		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1											Pet Shops, Retail	Not applicable		5999		
OCEANSIDE LIQUOUR	1910		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											Liquor Store	Not applicable		5921		
BLACK ROCK COFFEE BAR	1918		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											Coffee Shop	Not applicable	1510103000	5812		
MR DONUTS	1950		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable	1493302700	5812		

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil	Bacteria	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
OCEANSIDE TEST ONLY SMOG	2017		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive Services - Emission	Not applicable	1493701400	7538	NO	NO
THE CORNER LIQUOR	2600		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											Liquor Store	Not applicable		5921		
ALL SMOG TEST ONLY CENTER	2601		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1			X	X		X		X			Automotive Services - Emission	Not applicable	1492714700	7549	NO	NO
WAHOO INTERNATIONAL INC	2605		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GROOMING DALES	2805		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MCALISTER INSTITUTE NORTH COASTAL RRC	2821		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CABLE SOLUTIONS, LLC	2905		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ANDY'S GLASS AND REPAIR	2913		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ANGELITA FOODS & SPICE	2925		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
BAUER BRO LLC	2925		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SOLID RESTORATION	2925		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PESTMASTER SERVICES	2929		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DYNOTECH MOTOR SPORTS	2933		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NORTH COUNTY HYPER SPORTS	2933		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
W.C. HYPER SPORTS	2933		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GALLAGHER DRILLING SERVICE	3040		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
OLD WORLD STANDARDS	3040		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
HUCK FINN'S MINI WAREHOUSE	3091		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ORCO BLOCK CO INC	3501		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Concrete Produ			3271		
PACIFIC MINI STORAGE	4015		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ALFRED DUNATTE CABINETS	4035		OCEANSIDE BLVD	B23	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ALLENS CUSTOM WOODWORKING	4035		OCEANSIDE BLVD	G52	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DERRY PRECISION MACHINING	4035		OCEANSIDE BLVD	E35	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
G. S. MARINE INTERIORS	4035		OCEANSIDE BLVD	F48	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GREEN JUNGLE INC.	4035		OCEANSIDE BLVD	40	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
HARBOR HARDWOOD FLOORS INC.	4035		OCEANSIDE BLVD	G56	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
JORDAN ENGINEERING	4035		OCEANSIDE BLVD	16	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
LINCO	4035		OCEANSIDE BLVD	A10	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MARSWAY MACHINING, INC	4035		OCEANSIDE BLVD	E41	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NORTH COUNTY IRON WORKS	4035		OCEANSIDE BLVD	C12	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
OLD WORLD STANDARDS	4035		OCEANSIDE BLVD	D28	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PARKER AIR BRUSH	4035		OCEANSIDE BLVD	A3	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PINAMONTI INDUSTRIAL PARK	4035		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RICHER RACING	4035		OCEANSIDE BLVD	D33	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SPIRAL STAIRCASE FACTORY	4035		OCEANSIDE BLVD	A1	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TEC SERVICE	4035		OCEANSIDE BLVD	B25	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TRUE WOOD GRAINS	4035		OCEANSIDE BLVD	D28	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TIME MACHINE RACECRAFT	4035		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1											Automobile Services - Except R			7549		
JORDAN ENGINEERING LLC	4035		OCEANSIDE BLVD	C16	Low	Commercial	Carlsbad	Loma Alta	904.1											Carpet/Furniture Cleaning			7217		
TWO JAY MACHINING / AUTO REPAIR	4035		OCEANSIDE BLVD	E40	Low	Commercial	Carlsbad	Loma Alta	904.1											Machining / Automotive Repair			7538		
FREEDOM AUTOMATION	4035		OCEANSIDE BLVD	F42	Low	Commercial	Carlsbad	Loma Alta	904.1											Software Development			7371		
GOLDEN STATE FENCE COMPANY	4051		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GANATOL LAND COMPANY	4055		OCEANSIDE BLVD	KM	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
HOME HELPERS/DIRECT LINK	4055		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MIRACLE METHOD	4059		OCEANSIDE BLVD	M	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MY FAMILY'S SEASONINGS INC	4059		OCEANSIDE BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PARTNERSHIP WITH INDUSTRY	4059		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
STEAMATIC OF SAN DIEGO	4059		OCEANSIDE BLVD	L	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
AD COMPUTERS	4061		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ARROWHEAD PACKAGING CO.	4061		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CANYON LAND SURVEYING	4061		OCEANSIDE BLVD	N	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MBM BOSS STRATEGIC MATERIALS	4061		OCEANSIDE BLVD	L	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
AM CHEMICAL LLC	4065		OCEANSIDE BLVD	M	Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
AQUATIC SPECIALTIES INC	4065		OCEANSIDE BLVD	P	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
BLUE WORLD INDUSTRIES	4065		OCEANSIDE BLVD	KM	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RANDOX LABORATORIES LTD	4065		OCEANSIDE BLVD	Q	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ARCHIVEIT	4065		OCEANSIDE BLVD	R	Low	Commercial	Carlsbad	Loma Alta	904.1											Document Storage			7389		
HI-TECH SWISS ENGINEERING	4079		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RANCHO DEL ORO BUSINESS CENTER	4079		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
GRETCHEN'S PET GROOMING	4083		OCEANSIDE BLVD	AC	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
ILLEGAL PRODUCTIONS	4083		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MALOTTE AND RAE	4083		OCEANSIDE BLVD	E	Low	Commercial	Carlsbad	Loma Alta	904.1														0		

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										Sediment	Nutrients	Trash	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
R H ELECTRONICS INC.	4083		OCEANSIDE BLVD	KM	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
F. I. OPTICS INC.	4089		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
WHITE DOG ENTERPRISES	4089		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
RANCHO DEL ORO VETERINARY HOSP	4093		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
SMOG SHOP	4093		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
A.C. AND FLOOR DCOR INC.	4095		OCEANSIDE BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
JUICE IT UP	4111		OCEANSIDE BLVD	100	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments			5812		
COLDSTONE CREAMERY	4121		OCEANSIDE BLVD	204	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable		5812		
PLAZA DEL ORO CLEANERS	4140		OCEANSIDE BLVD	148-51	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
CHASE BANK	4147		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														7231		
GOLDEN SPOON FROZEN YOGURT	4160		OCEANSIDE BLVD	169	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments			5812		
SUBWAY'S SANDWICHES	4160		OCEANSIDE BLVD	173	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments			5812		
DANIEL AND CO.	4170		OCEANSIDE BLVD	179	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
COLLEGE CLEANERS	4171		OCEANSIDE BLVD	102	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
WELLS FARGO BANK	4176		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
STARBUCK'S COFFEE 5832	4176		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable		5812		
GATEWAY CLEANER	4225		OCEANSIDE BLVD	V	Low	Commercial	Carlsbad	Loma Alta	904.1											CLEANERS			7212		
FRUTAS, CAF AND TORTAS	4225		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable		5812		
LE RENDEZ-VOUS FRENCH BAKERY	4225		OCEANSIDE BLVD	Q	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments			5812		
PAPA JOHN'S PIZZA	4225		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable		5812		
WELNESS 4 LIFE	4263		OCEANSIDE BLVD	101	Low	Commercial	Carlsbad	Loma Alta	904.1											WELLNES CENTER			7299		
EXTRA SPACE STORAGE 645	4567		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											OTHER CONTRACTOR			1521		
STAIRS BY DESIGN INC	4747		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
JOSEPH HAMPEL CONTRUCTION	4747		OCEANSIDE BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1											GENERAL CONTRACTOR			1623		
JWI CONTRACTING	4747		OCEANSIDE BLVD	F	Low	Commercial	Carlsbad	Loma Alta	904.1											GENERAL CONTRACTOR			1623		
STRAIGHT LINE GENERAL CONTRACTOR	4747		OCEANSIDE BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1											GENERAL CONTRACTOR			1623		
MILLINNEUM FLOORING	4747		OCEANSIDE BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											LANDSCAPING			8811		
PRECISION 4 SWISS MACHINING INC	4747		OCEANSIDE BLVD	L-M	Low	Commercial	Carlsbad	Loma Alta	904.1											MANUFACTURING, PLASTIC/RUBBER			3949		
WHAMO INC	4747		OCEANSIDE BLVD	J	Low	Commercial	Carlsbad	Loma Alta	904.1											OTHER CONTRACTOR			1711		
BZ SURF BOARDS	4747		OCEANSIDE BLVD	K	Low	Commercial	Carlsbad	Loma Alta	904.1											SURF BOARD MFG			3949		
PBM FREIGHT SOLUTIONS	4747		OCEANSIDE BLVD	N	Low	Commercial	Carlsbad	Loma Alta	904.1											TRUCKING BROKERS			4731		
GIANT A&M	4749		OCEANSIDE BLVD	A	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TEMPLE HEIGHTS ANIMAL HOSPITAL	4750		OCEANSIDE BLVD	A1-3	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TEMPLE HEIGHTS CLEANERS	4750		OCEANSIDE BLVD	A19	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TEMPLE HEIGHTS DENTISTRY	4750		OCEANSIDE BLVD	A15	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
K - DONUTS	4750		OCEANSIDE BLVD	A9	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments			5812		
NASTY DOG SPA	4760		OCEANSIDE BLVD	B4	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
TWO BROTHERS FROM ITALY OCEANSIDE	4760		OCEANSIDE BLVD	B1-2	Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable		5812		
LESLIE SKYLIGHTS	1601		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											SKYLIGHT INSTALLATION			1761		
FORD SIGNS INC	1605		ORD WAY	B10	Low	Commercial	Carlsbad	Loma Alta	904.1											MANUFACTURING, EQUIPMENT			3544		
SURF RIDE	1609		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											SURFBOARDS			3949		
FOAMTEC INTENATIONAL	1621		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											PLASTICS DISTRIBUTOR			5162		
CAMBELL CERTIFIED STEEL CONSTRUCTOR	1629		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											STEEL WORK STRUCTURAL	Not applicable		1791		
JAIME MENDEZ RESTORATION & CONSERVATION	1630		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1														3429		
MICHAEL PATTI PAINTING	1632		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											PAINTING/COATING			1752		
RANCHO DEL ORO VET HOSPITAL	1646		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											Veterinary Services			742		
3V WHEEL DISTRIBUTION INC ?	1666		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											MANUFACTURING,ELECTRONICS			3679		
VERSA SPA	1668		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											POOL EQUIPMENT			5091		
WESTCOAST FTA	1670		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											ELECTRICAL SUPPLIES			5063		
OLIVA'S FLOORING, INC	1672		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											FLOOR LAYING			1752		
UNIQUE FLOORING	1672		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											FLOORING RETAIL			5211		
SAN DIEGO FUME WORKS COMPANY	1672		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											LANDSCAPING			8811		
PACIFIC BACKFLOW CO	1690		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											OTHER CONTRACTOR			1521		
3V WHEEL DISTRIBUTION INC	1710		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											PANTING/COATING			8811		
PLAY GROUNDS WEST INC	1712		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											PLAY GROUND EQUIPMENT			3949		
OCEANEERING INTERNATIONAL INC.	1712		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											WAREHOUSING & STAGIN MATERIAL			7389		
RIDGE LANDSCAPING ARCHITECTS	1716		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											LANDSCAPING ARCHITECH			781		
HUME & CO TERMITE REPAIRS	1724		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											TERMITE DAMAGE REPAIRS			1541		
E N J WINDOWS & GLASS	1728		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											BUILDING MATERIALS			5032		
MEL COOKING SOLUTION CORP.	1746		ORD WAY	D	Low	Commercial	Carlsbad	Loma Alta	904.1											Direct Sales - Cookwares			5963		
THE TOTAL DOG	1750		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											ANIMAL SPECIALTIES			742		
ALL FLOOR INSTALL	1752		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											FLOOR COVERINGS			1752		

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										Sediment	Nutrients	Trash	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
OCEANSIDE ALE WORKS	1800		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											SMALL BEER MANNUFACTURER			2082		
PELICAN PACKAGING	1806		ORD WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											Packaging Semiconductors			7389		
TRYPLEX TECHNOLOGIES	1820		PEACOCK BLVD	B	Low	Commercial	Carlsbad	Loma Alta	904.1											COMPUTER MAINTENANCE			7378		
PRECISION RESTORATION	1820		PEACOCK BLVD	C	Low	Commercial	Carlsbad	Loma Alta	904.1											HOME RESTORATION			1521		
MR. EXTERMINATOR	1820		PEACOCK BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1											PEST CONTROL			7342		
DEW MFG, INC	1970		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											MOTER CYCLE PARTS			3751		
SEASIDE COLOR	1980		PEACOCK BLVD	H	Low	Commercial	Carlsbad	Loma Alta	904.1											COMMERCIAL PRINTERS			2759		
DAVID SHAPOSHNICK, INC	1980		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											PLUMBING & MECHANICAL CONTRACT			1711		
ACCUWELD INC	1980		PEACOCK BLVD	D	Low	Commercial	Carlsbad	Loma Alta	904.1											WELDING FABRICATION					
TITEFLEX CORPORATION	1995		PEACOCK BLVD		Low	Commercial	Carlsbad	Loma Alta	904.1											INDUSTRIAL MANUFACTUIRERS			3599		
GROTH ARCHITECTS INC	3520		SEAGATE WAY	100	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
PROMPTLINK COMMUNICATIONS	3532		SEAGATE WAY		Low	Commercial	Carlsbad	Loma Alta	904.1														0		
NETHERLAND & MOSCARI CPAS APC	3548		SEAGATE WAY	210	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
MADRIGAL'S CUSTOM UPHOLSTERY	2600		TEMPLE HEIGHTS DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											MANUFACTURING			2099		
SIGNS ONCE	2605		TEMPLE HEIGHTS DRIVE	B	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DOWNFORCE ENGINEERING	2613		TEMPLE HEIGHTS DRIVE	A-D	Low	Commercial	Carlsbad	Loma Alta	904.1														0		
DS WATERS OF AMERICA, LP ?	2620		TEMPLE HEIGHTS DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											MANUFACTURING, ELECTRONICS			3845		
SUPERIOR SOURCING	2625		TEMPLE HEIGHTS DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											NON-DURABLE GOODS			5199		
SURF CO.	520	S	TREMONT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Sporting and A	Not applicable		3949		
BOARDWORKS	615	S	TREMONT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Manufacturing - Sporting and A	Not applicable		3949		
T.E.S. TILE	1922	S	TREMONT STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											Tile Contractor			1743		
B&T FLOWERS	245		VENETIA WAY		Low	Commercial	Carlsbad	Loma Alta	904.1											Flower Merchandising			7389		
RK EXCEL AMERICA INC	2645		VISTA PACIFIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											MANUFACTURING, MISC	Not applicable		3999		
SOUTHWEST GREENE INT	2655		VISTA PACIFIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											WHOLESALE/STORAGE/WAREHOUSING	Not applicable		4225		
DURACORP LLC	2660		VISTA PACIFIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1												Not applicable		0		
SCHUR' MARKETING & TECHNOLOGIES INC.	2664		VISTA PACIFIC DRIVE		Low	Commercial	Carlsbad	Loma Alta	904.1											PLUMBING & MECHANICAL CONTRACT	Not applicable		1711		
CANEZ DESIGN	1114		WEST STREET		Low	Commercial	Carlsbad	Loma Alta	904.1											GRAPHIC DESIGN	Not applicable		7299		
WISCONSIN COIN LAUNDRY	203		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1											Coin Operated Laundry and Dry	Not applicable		7215		
SEASIDE COFFEE EXPRESS	206		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1											Eating/Drinking Establishments	Not applicable	1502631700	5812		
ELECTRIC AND FOLDING BIKES	220		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1											Motorcycle Sales - Electric an	Not applicable		5571		
MARINETIME INDUSTRIAL - MARINE ENGINE PARTS	306		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1											Boat Parts	Not applicable		3732		
DONALDSON PLUMBING	315		WISCONSIN AVENUE		Low	Commercial	Carlsbad	Loma Alta	904.1											Contractor - Plumbing	Not applicable		1711		
REFLECTIONS	4158		BAYCLIFF WAY		Low	Commercial	Carlsbad	Agua Hedionda	904.3											Auto Detailing			7389		
VCLS LANDSCAPING	4168		BAYCLIFF WAY		Low	Commercial	Carlsbad	Agua Hedionda	904.3											Landscaping			7349		
WALGREENS	3507		CANNON ROAD		Low	Commercial	Carlsbad	Agua Hedionda	904.3											DRUG STORE	Not applicable		5912		
CITY CLEANERS	3509		CANNON ROAD	E-2B	Low	Commercial	Carlsbad	Agua Hedionda	904.3											Dry Cleaners			7216		
FRUGOS YOGURT	3509		CANNON ROAD	E-2A	Low	Commercial	Carlsbad	Agua Hedionda	904.3											FROZEN FOOD	Not applicable		5411		
MONTESSORI SCHOOL OF O'SIDE	3525		CANNON ROAD		Low	Commercial	Carlsbad	Agua Hedionda	904.3											School			0		
MIKES BAGELS & COFFEE HOUSE	3529		CANNON ROAD	2D	Low	Commercial	Carlsbad	Agua Hedionda	904.3											COFFEE SHOP	Not applicable		5812		
ROUND TABLE PIZZA	3440		MARRON ROAD		Low	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1680130700	5812	YES	NO
FIREHOUSE SUBS	2619		VISTA WAY	B	Low	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651213600	5812		
JAMBA JUICE	2619		VISTA WAY	A	Low	Eat/Drink Est.	Carlsbad	Buena Vista	904.2	X	X	X	X	X	X	X		X		Eating/Drinking Establishments	Not applicable	1651213600	5812		
NORTH COUNTY TIMES	1722	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
OCEANSIDE INN	1820	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
SNOWWHITE LAUNDRY	1826	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
WAGS LIQUOR	1827	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
SOUTH COAST SCOOTERS	1828	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
HOLY MOLY HYDRO	1828 1/2	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														5261		
BUCANEER'S BREW	1830	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2												Not applicable				
GOLD COAST FUTON	1837	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
COIN UP LAUNDRY	1902	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
TWO DOLLAR CLEANER	1904	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
JOHNSTON'S INTERIORS	1916	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
OCEANSIDE FLORIST INC.	1921	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
WAVE WEAPONS SURF SHOP	1922	S	COAST HWY	A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
HILL STREET DONUT HOUSE	1926	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments			5812		
WESTTURF LANDSCAPE MAINTENANCE	1930	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PCH POSTAL	1935	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
MOOSE LODGE 1325	2017	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
OCEAN BREEZE INN	2020	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
OUTERLIMITS SMOKE SHOP	2027	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
BAMBOO SOURCE	2028	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
SEA BIRD MOTEL	2034	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
KAATZ COMPUTERS	2110	S	COAST HWY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
SAMS DONUTS	3504		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2											Bakery	Not applicable		2051		
DICKS SPORTING GOODS	3514		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2											SPORTING GOODS RETAIL			5941		
GRABB-IT INC	3520		COLLEGE BLVD	201	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PRODUCE BROKERS OF OCEANSIDE INC	3520		COLLEGE BLVD		Low	Commercial	Carlsbad	Buena Vista	904.2											FRESH FRUIT & VEGETABLES			5148		
JOE JOHNSTON KEMCO CORP	3520		COLLEGE BLVD	205	Low	Commercial	Carlsbad	Buena Vista	904.2											GENERAL CONTRACTING HOMES			1521		
KEMCO	3520		COLLEGE BLVD	205	Low	Commercial	Carlsbad	Buena Vista	904.2											GENERAL CONTRACTOR			1521		
MORROWS HANDYMAN SERVICES	3151		CORAL DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											Handyman Services	Not applicable		7349		
MAN FLOWERS	3748		COSTA DEL REY		Low	Commercial	Carlsbad	Buena Vista	904.2											Flower Arrangements	Not applicable		5961		
DEWILT ENVIROMENTAAL INC.	2003	S	EL CAMINO REAL	202	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
DRAGON PRINTING	2003	S	EL CAMINO REAL	104	Low	Commercial	Carlsbad	Buena Vista	904.2												Not applicable		0		
JORDAN AND JORDAN	2003	S	EL CAMINO REAL	101	Low	Commercial	Carlsbad	Buena Vista	904.2												Not applicable		0		
MONA LEE WARMBRAND LCSW	2003	S	EL CAMINO REAL	107	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
URBAN BUILDING SERVICES	2003	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2											Janitorial Services	Not applicable		7349		
GORDON VAL WHITE	2101	S	EL CAMINO REAL	203B	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ESTATE PRESERVATION GROUP	2103	S	EL CAMINO REAL	103A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
GET ABLE	2103	S	EL CAMINO REAL	102	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
LENDER'S CONSTRUCTION SERVICES INC	2103	S	EL CAMINO REAL	103B	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
REBUILD	2103	S	EL CAMINO REAL	205	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
V CORE	2103	S	EL CAMINO REAL	204	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
VILLA OFFICE BLDG.	2103	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
WELCOME HOME	2103	S	EL CAMINO REAL	105A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PACIFICA ENGINEERING	2111	S	EL CAMINO REAL	200	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PERFORMANCE IMPROVEMENTS INTERNATIONAL	2111	S	EL CAMINO REAL	302	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
EL CAMINO PROFESSIONAL CENTER LLC	2119	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
MEDICAL ELECTRONIC SERVICES	2123	S	EL CAMINO REAL	B	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
COREMARK	2125	S	EL CAMINO REAL	204	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
CROWN CASTLE MU LLC	2125	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
FUTURES	2125	S	EL CAMINO REAL	101	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ALLEN LANDSCAPE INC	2141	S	EL CAMINO REAL	I	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ALTA LOMA LANDSCAPE MAINTENANCE	2141	S	EL CAMINO REAL	G	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
COATES CONSTRUCTION & DEVELOPMENT INC	2141	S	EL CAMINO REAL	D	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
TETRA TECH INC	2141	S	EL CAMINO REAL	J	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
WISNOSKY BUILDING	2141	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
EAST TECH SOLUTION	2171	S	EL CAMINO REAL	204	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
MOBILE MEDICINE OUTREACH	2171	S	EL CAMINO REAL	104	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
INDUSTRIAL PROSOFT SOLUTIONS	2171	S	EL CAMINO REAL	210	Low	Commercial	Carlsbad	Buena Vista	904.2											Software Developemnt and Installation			7389		
ODONNEL GROUP	2181	S	EL CAMINO REAL	100	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
FRAZER ENGINEERING INC	2191	S	EL CAMINO REAL	208	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
JAMYSON COMPANY	2191	S	EL CAMINO REAL	206	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PIGEON POINT SYSTEMS	2191	S	EL CAMINO REAL	209	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
CAMINO TOWN AND COUNTRY	2213	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
JO-ANN FABRICS AND CRAFTS 464	2227	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
SUNSHINE LIQUOR	2229	S	EL CAMINO REAL	A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
LINDA LARSON MASSAGE THERAPHY	2231	S	EL CAMINO REAL	A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
MAXDON'S	2231	S	EL CAMINO REAL	B	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
CUSTOM FLOORS BY KEN	2235	S	EL CAMINO REAL	H	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
EUROPEAN TAYLOR SHOP	2235	S	EL CAMINO REAL	E	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
MAXMUSCLE	2249	S	EL CAMINO REAL	E	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
TARGET STORES 303	2253	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
GRACE MANAGEMENT INC.	2424	S	EL CAMINO REAL		Low	Commercial	Carlsbad	Buena Vista	904.2											GOVERNMENT SERVICES			8744		
OCEANSCENTS	1213		HERBY WAY		Low	Commercial	Carlsbad	Buena Vista	904.2											Direct Sales - Scentsy Accounting	Not applicable		5961		
CONSTRUCTION SERVICES AND RECLAMATION	3018		JACQUELINE LANE		Low	Commercial	Carlsbad	Buena Vista	904.2											Demolition			1795		
PJ & POOL AND SPA	4890		MARIN DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											POOL AND SPA CONTRACTOR			7389		
PETSMART	3420		MARRON ROAD		Low	Commercial	Carlsbad	Buena Vista	904.2											OTHER CONTRACTOR			5999		
WANTED BRAND INC.	3460		MARRON ROAD		Low	Commercial	Carlsbad	Buena Vista	904.2														2262		
FROYO LOVE FROZEN YOGURT	3480		MARRON ROAD	3B101	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
JAMBA JUICE 643	3480		MARRON ROAD	3B103	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
KARABAS SUBS INC (SUBWAY)	3480		MARRON ROAD	3B102	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
WESTERN HEARTS LEATHERWORK	3685		NORTH WAY		Low	Commercial	Carlsbad	Buena Vista	904.2											Manufacturer - Hand Tooled leather Accessories			5961		
OCEANSIDE HARDWOOD FLOORING	2330		PASEO DE LAURA	229	Low	Commercial	Carlsbad	Buena Vista	904.2											Wood Flooring			1752		

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										Sediment	Nutrients	Debris	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
ESL LAB INC.	3400		PIAZZA DE ORO	110	Low	Commercial	Carlsbad	Buena Vista	904.2											Education Consulting			7389		
COIN LAUNDRY	3504		PLAZA DRIVE	C	Low	Commercial	Carlsbad	Buena Vista	904.2											LAUNDROMATS			7215		
STARBUCKS COFFEE 10314	3702		PLAZA DRIVE	A	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
MOTEL 6	3708		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											MOTEL			7011		
CUSIMANO'S PIZZERIA	3809		PLAZA DRIVE	106	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
SUBMARINA	3809		PLAZA DRIVE	110	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
RITE AID PHARMACY	3813		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											PHARMACY			5912		
FAIRLANE CLEANERS	3821		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											CLEANSERS			7212		
TOP THIS FROZEN YOGURT	3827		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments			5812		
TWO SPOONS COFFEE ROASTERS	3829		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											Coffee Shop	Not applicable	1680120700	5812		
SO CAL DISCOUNT TIRE CO	3836		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											LANDSCAPING			8811		
LESLIE'S SWIMMINGPOOL SUPPLIES 302	3837		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											LANDSCAPING			5999		
GOODWILL	3841		PLAZA DRIVE	902	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
CLASSIC FLOORS	3841		PLAZA DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											FLOOR COVERINGS			1752		
PRETTY PAWS DOG WALKING CO.	3976		SHERBOURNE DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											Dog Walking Service			7389		
FARMER TERMITE CONTROL	4052		THOMAS STREET		Low	Commercial	Carlsbad	Buena Vista	904.2											Termite Control			7342		
ESTATE SALE & CLEAN UP	4232		THOMAS STREET		Low	Commercial	Carlsbad	Buena Vista	904.2											Janitorial Service			5999		
COIN LAUNDRY	2810		THUNDER DRIVE	B	Low	Commercial	Carlsbad	Buena Vista	904.2											LAUNDROMATS			7215		
OHANA FLEET MAINTENANCE	3783		VIA CABRILLO		Low	Commercial	Carlsbad	Buena Vista	904.2											MOBILE AUTO MECHANIC	Not applicable		7538		
EL CAMINO COIN LAUNDRY	2983		VIA LAS ROSAS	B	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
HILTON CLEANERS	2983		VIA LAS ROSAS	A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
7 - ELEVEN 18159 B	2985		VIA LAS ROSAS		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ERWIN COLLISION INVESTIGATION	3742		VIA LAS VILLAS		Low	Commercial	Carlsbad	Buena Vista	904.2											Automotive Collision Investigative Services			7381		
STEARNS BUSINESS MACHINES	507		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
DON'T TREAD ON ME	513		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
HAMBLY'S UPHOLSTERY	515		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
MINA INTERNATIONAL ENTERPROSES	814		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PEGASUS PRODUCTIONS	904		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
QUICK HOME SOLUTIONS	917		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PURE PLAY	1122		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
WEST COAST RENOVATIONS	1202		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
CHOPPER'S PARTS TO GO	1213		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
AMAZON BIKES	1227		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
WAL-MART 2494	2100		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
BESTBUY	2110		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PARTY CITY OF OCEANSIDE 437	2130		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
COST PLUS WORLD MARKET	2140		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
STAPLES THE OFFICE SUPERSTORE	2150		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
SPORT'S AUTHORITY	2160		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
YES CLEANERS	2178		VISTA WAY	E3	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
EINSTEIN BROS BAGELS 3047	2183		VISTA WAY	B10	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
STARBUCKS COFFEE 5432	2183		VISTA WAY	B2	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
SUBMARINA 24	2183		VISTA WAY	B1	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
A & D ORIENTAL RUGS	2305		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PATTI'S HALLMARK	2401		VISTA WAY	H	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
CALIFORNIA YOGURT CO 4	2401		VISTA WAY	E1	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
PEAK TECHNICAL SERVICES	2420		VISTA WAY	215	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
DESANTI AND ASSOCIATES	2424		VISTA WAY	203	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
FISCHER & VAN THIEL LLP	2424		VISTA WAY	104	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
I LEVEL BY WEYERHAUSER	2424		VISTA WAY	315	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
JAMIESON COMPANY	2424		VISTA WAY	201	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
MANGINI & STEWART OC	2424		VISTA WAY	202	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
TOYS "R' US	2425		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
FED EX KINKO'S 2694	2444		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PETCO ANIMAL SUPPLIES	2445		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PS PLUS SIZES PLUS SAVINGS	2455		VISTA WAY	M	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
CHUCK E CHEESE'S	2481		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
BEVERAGES & MORE	2500		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
ROSS DERSS FOR LESS	2505		VISTA WAY	C	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
STEINMART INC.	2505		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
MATTRESS DISCOUNTERS	2515		VISTA WAY	A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
FIRE MOUNTAIN CLEANERS	2530		VISTA WAY	A	Low	Commercial	Carlsbad	Buena Vista	904.2														0		

Loc Facility Name	Address	Direction	Street Name	Suite	TTWQ	Business Type	Watershed	Hydrologic Area	HAS	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash	Oil Grease	Bacteria Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substance	Other						
SUBWAY	2535		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
PIER 1 IMPORTS 436	2555		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
LAMP PLUS INC	2598		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
QUIZNOS' SUBS	2611		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
BARNES AND NOBLE BOOKSELLERS INC.	2615		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments			5812		
PK 11 EL CAMINO NORTH L.P. - Leasing Office	2615		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments			5812		
WELL'S FARGO INVESTMENTS	2701		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
BUCCOLA ENGINEERING	3142		VISTA WAY	301	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
GREENE PROPERTIES	3142		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
SUKUT CONSTRUCTION, INC	3156		VISTA WAY	205	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
TRICITY EMERGENCY MEDICAL GROUP	3156		VISTA WAY	410	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
HOLIDAY INN EXPRESS	3170		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
DEI, LLC	3186		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
HOOT WINC LLC	3186		VISTA WAY	200	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PROVIDER'S FINANCIAL	3186		VISTA WAY	300	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
EXTENDED STAY AMERICA	3190		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
EL CAMINO COUNTRY CLUB	3202		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
RICHARD BARAGER MD	3300		VISTA WAY	B	Low	Commercial	Carlsbad	Buena Vista	904.2														0		
PACIFIC BREEZE APTS II	3522		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
OTCP LLC	3601		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2														0		
HOME DEPOT	3838		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2											HARDWARE STORE			5251		
MR. KEYMAN	3910		VISTA WAY	102	Low	Commercial	Carlsbad	Buena Vista	904.2												Not applicable		0		
I LOVE BAGELS	3910		VISTA WAY	108	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
PREFAB GRANITE DEPOT	3910		VISTA WAY	116	Low	Commercial	Carlsbad	Buena Vista	904.2											GRANITE MFG			3281		
LATTE BY THE SEA	4002		VISTA WAY		Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments	Not applicable		5812		
GAME STOP 1627	2535		VISTA WAY	C	Low	Commercial	Carlsbad	Buena Vista	904.2											Eating/Drinking Establishments			5812		
PIEPER PLUMBING	1258		WOODHAVEN DRIVE		Low	Commercial	Carlsbad	Buena Vista	904.2											Plumbing Conrtactor	Not applicable		1711		
PAWS FOR STYLE	429	S	COAST HWY		Low	Commercial	Loma Alta														5	N/A			

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Attachment 5-B

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Loc/Facility Name	Address	Direction	Street Name	Suite #	TTWQ	Business Type	Watershed	Hydrologic Area	HSA	POTENTIAL POLLUTANTS										Business Type Description	WDID Permit #	APN	SIC	Tributary to 303d	Within 200 ft ESA
										Sediment	Nutrients	Trash & Debris	Oil & Grease	Bacteria & Viruses	Pesticides	Organic Compounds	Heavy Metals	Oxygen Demanding Substanc	Other						
PURE TURBOS	333		AIRPORT ROAD		High	Industrial	Oceanside	San Luis Rey	903.1			X	X		X		X			General Auto Repair Shop	Not applicable	1602711600	7538	NO	NO
PHIL GALLANT TRUCK SALVAGE	1020		AIRPORT ROAD		High	Industrial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Parts Dealer Used	9 371013145	1450204100	5015	NO	NO
ECOLOGY SCRAP YARD	1030		AIRPORT ROAD		High	Industrial	Oceanside	San Luis Rey	903.1			X	X			X	X			Automotive, Parts Dealer Used	9 371013177	1450203300	5015	NO	NO
HANSON AGGREGATES	1050		AIRPORT ROAD		High	Industrial	Oceanside	San Luis Rey	903.1											Manufacturing, Concrete	9 000 001 3	1450203300	3273	NO	NO
CALIFORNIA CREATIVE FOODS INC	649		BENET ROAD		High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing, Salsa Canning	Not applicable	1450304700	2032	YES	NO
PRECISION LABEL INC	659		BENET ROAD		High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing, Labeling Services	Not applicable	1450304800	2759	YES	NO
MOUNTAIN WATER ICE CO	2843		BENET ROAD		High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing, Ice	9 000000436	1460903000	2097	YES	NO
SAN DIEGO AUTO AUCTION INC	4691		CALLE JOVEN		High	Industrial	Oceanside	San Luis Rey	903.1			X	X			X	X			Auto Auction	Not applicable	1570604500	5012	NO	NO
DEUTSCH CO ELECTRONICS	250		EDDIE JONES WAY		High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing, Electric Components	9 000000519	1450212900	3679	YES	NO
OCEANSIDE SCHOOL DISTRICT FLEET MANAGEMENT	2070		MISSION AVENUE		High	Industrial	Oceanside	San Luis Rey	903.1											Oceanside School District - Fleet	9 371005696	1451500800	7538	NO	NO
GOLF INSTRUMENTS	3210		PRODUCTION AVENUE		High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing	Not applicable	1602712700	3949	YES	NO
N. COUNTY MILLING	3230		PRODUCTION AVENUE	D	High	Industrial	Oceanside	San Luis Rey	903.1	X	X	X				X				Manufacturing	Not applicable	1602712700	3471	YES	NO
ELITE METAL FINSIHING	2550		JASON COURT		High	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X				Manufacturing, Metal Finishing	Not applicable	1616602100	3471	YES	NO
R & G PRECISION MACHINING INC.	2585		JASON COURT		High	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X				Manufacturing, Metal Finishing	Not applicable	1616602100	3469	YES	NO
AMERILLUM	3728		MARITIME WAY		High	Industrial	Carlsbad	Loma Alta	904.1											Manufacutring of Lighting Fixtures	Not applicable	1605722900	3648	NO	NO
CENTRAL FLOOD MANAGEMENT	2604		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Water Damage Restoration	Not applicable	1614701800	7349	YES	NO
CARRILLO DESIGN CENTER	2605		TEMPLE HEIGHTS DRIVE	C	Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturing - Metal Components	Not applicable	1614702800	3541	YES	NO
APICAL INDUSTRIES INC	2608		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X	X		X		X			Distributor - Helicopter Parts	Not applicable	1614703900	3544	YES	NO
SUMMIT STEEL INC	2608		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X	X		X		X			Supplier - Metal Products	Not applicable	1614703900	3732	YES	NO
STANDARD FLYWHEELS INC	2614		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X	X	X		Manufacturer - Automotive Flywheels	Not applicable	1615011600	3499	YES	NO
PRO SPOT INTERNATIONAL INC	2625		TEMPLE HEIGHTS DRIVE		Medium	Industrial	Carlsbad	Loma Alta	904.1	X	X	X				X		X		Distributor - Welding Equipment	Not applicable	1614700800	5084	YES	NO
UNIQUE METAL FABRICATION	594		AIRPORT ROAD		Low	Industrial	Oceanside	San Luis Rey	903.1											Manufacturer, Sheet Metal	Not applicable		3444		
NELGO INDUSTRIES INC	598		AIRPORT ROAD		Low	Industrial	Oceanside	San Luis Rey	903.1											Manufacturer, Sheet Metal	Not applicable		3444	NO	NO
HYDRANAUTICS	501		VIA DEL MONTE		Low	Industrial	Oceanside	San Luis Rey	903.1											Manufacturer - Filters	Not applicable	1450602500	3089		
STEICO INDUSTRIES	1814		ORD WAY		Low	Industrial	Carlsbad	Loma Alta	904.1		X	X				X				WELDING		1621210700	5084	NO	NO
WEST COAST PLATING	2613		TEMPLE HEIGHTS DRIVE	C-D	Low	Industrial	Carlsbad	Loma Alta	904.1		X	X				X				Manufacturing, Equipment	Not applicable	1614703000	3599	NO	NO
DLE CUSTOM FABRICATION & CONVERTING	2613		TEMPLE HEIGHTS DRIVE	B	Low	Industrial	Carlsbad	Loma Alta	904.1		X	X				X				Manufacutring, Miscellaneous	Not applicable	1614703000	3672	NO	NO

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Attachment 6-A

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City of Oceanside • Fall 2011

Green Oceanside Newsletter

In This Issue

- Zero Waste
- Day Without a Bag
- SLR River Cleanup
- FREE Water Saving Resources

Zero Waste

The City of Oceanside is a Zero Waste City that has a goal of diverting 75 percent of its waste stream from the landfill by the year 2020 through waste reduction, recycling and composting programs. The City Council approved a zero waste resolution and with your help the City can meet this diversion goal. The City of Oceanside is currently developing a Zero Waste Strategic Plan that will help our community establish and implement strategies that focus on product stewardship, waste prevention, reuse, recycling and composting. This plan, along with our new solid waste and recycling carts arriving in January, will help Oceanside lead the way in creating a Zero Waste reality by collectively working with local businesses, community groups, and the public to reduce, reuse, and recycle all materials back into nature or the marketplace. Please go to the City's website at www.ci.oceanside.ca.us and click on the Water Utilities Department webpage to find the Solid Waste and Recycling section that provides details on ways you can make zero waste a part of your daily life.

Road to ZERO Waste

Day Without a Disposable Bag: December 15, 2011

Nothing says blight quite like a plastic bag blowing down the street. They make our neighborhoods look bad, can hurt wildlife and cost our cities money to remove from the environment and to transport to the landfill.

The goal of the Day Without a Bag event is to reduce the use of single-use plastic bags throughout California by empowering shoppers to take simple and direct actions to eliminate unsightly debris and save taxpayer dollars. On December 15, 2011, the City of Oceanside will be participating in its fourth Day Without a Bag event.

Use a reusable tote bag instead of plastic.

In 2010, the event went region-wide and included a unique coalition of major retailers, local governments and regional environmental groups. The "Day Without a Bag," campaign urges consumers to forego environmentally harmful single-use plastic or paper

continued on page 2

Is the Bag Monster growing in your kitchen?

1 year, 1 shopper, 500 bags

Green Oceanside *is a community awareness campaign that promotes environmental sustainability with support from Oceanside residents and businesses. The mission is to provide the community with the tools needed to be better stewards of the planet through recycling, reducing our waste, composting, conserving water, preventing water pollution and conserving energy.*

Upcoming Events

Don't Miss!

San Luis Rey River Cleanup
November 5, 2011
9 AM – 12 PM

Day Without a Bag

December 15, 2011
Various Bag Distribution sites

Green Week 2012

April 23 – 28, 2012

Website listings

www. OceansideCleanWaterProgram.org

www.SaveWaterOceanside.com

San Luis Rey River Cleanup

November 5, 2011 • 9 AM – 12 PM - Please join the Oceanside Clean Water Program and other volunteers by participating in the San Luis Rey River Cleanup event. This event will be held on Saturday, November 5, 2011 from 9 AM to 12 PM.

Volunteers can register at one of the following sites:

- Highway 76 and Benet Road
- Highway 76 and Foussat Road at the bike path
- Douglas Drive at the bike path (southwest corner)
- Mance Buchanon Park on College Boulevard just north of Adams Avenue
- Oceanside Harbor – Parking Lot #10

All volunteers receive cleanup supplies, refreshments, community service hours and one free give-away item. Volunteers should wear closed-toed shoes, sunscreen and hats.

Please consider registering at the Benet Road, Foussat Road and Douglas Drive sites because these are always in need of more volunteers. They are also encouraged to bring their own bucket, reusable gloves and water bottle to help reduce the amount of materials generated by the event itself.

For more information and site details, call 760-435-5536 or log onto www.OceansideCleanWaterProgram.org.

Day Without a Bag (cont.)

grocery bags in favor of reusable totes. At last year's event, City staff, dozens of local businesses and community groups distributed over 5,000 reusable bags at multiple Oceanside retail establishments and at our downtown Farmer's Market and Sunset Market.

Reusable bags are a long-term practical solution to reduce the amount of plastic bags that are found littering our environment. A single reusable bag has the potential to replace over 1,000 single-use bags in its lifetime, saving a significant amount of resources. Your help and commitment towards foregoing plastic and paper bags not only on December 15, but every day of the year, brings Oceanside one step closer towards its Zero Waste goals, where resources are conserved and our neighborhoods and waterways stay clean and pristine.

Please stay tuned to the City of Oceanside's website at www.ci.oceanside.ca.us to find out where you can get a free reusable bag on December 15, 2011. Also, if you are interested in volunteering at a bag giveaway location or are interested in sponsoring this event, please contact Colleen Foster at 760-435-5021 for more information.

FREE Water Saving Resources

The City offers FREE Residential Surveys and Smart Landscape Evaluations. A Smart Landscape Evaluation is a free service designed to assist residential, multi-family and business customers with identifying inefficiencies and water waste as well as water savings opportunities. Single-family participants can expect to have technicians review indoor fixtures and evaluate the performance of the site's irrigation system. At the end, the participant will receive a list of recommendations and a proposed watering schedule.

For multi-family and business customers, an outdoor audit will be performed and participants will receive a report outlining site specific irrigation and maintenance recommendations as well as plant alternatives designed to reduce water waste and use. To enroll please contact 866-883-1332.

To learn more about water-saving resources, conservation tips, rebates, water news, and other water-saving programs, please visit www.SaveWaterOceanside.com or contact the Oceanside Water Utilities Department at 760-435-5800.

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Attachment 9-A

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City of Oceanside

GREEN WEEK 2012

April 23 - 29

Please Join Us for A Week Full of FREE Events that Promote a Green Oceanside Community!

Environmental Film Festival Featuring *FLOW* and *THE STORY OF STUFF*

Thursday, April 26, 6 - 9 p.m., Sunshine Brooks Theater, 217 N. Coast Hwy, Oceanside 92054

The Story of Stuff (6:30 p.m.) This animated short-film shows how our consumer goods are produced, consumed and disposed of or recycled. It will teach you something, as well as make you laugh. And, it just may change the way you look at all the stuff in your life forever.

Flow (7:00 p.m.) This award-winning film highlights the world's dwindling fresh water supply with a focus on politics, pollution, and human rights issues. This is a must-see film!

Compost Workshops

Tuesday, April 24, and Saturday, April 28, See Back For Details.

Learn to compost kitchen scraps and garden materials. This is a free event and Oceanside residents will have an opportunity to purchase a subsidized compost bin.

Free Used Oil Filter Exchange Event

Sunday, April 29, 10 a.m. - 2 p.m., O'Reilly Auto Parts, 502 Oceanside Blvd., Oceanside 92054

Log onto www.ci.oceanside.ca.us and search "Green Oceanside" for event details.

Green Fair

Saturday, April 28, 11 a.m. - 4 p.m. at Pier Amphitheater

Enjoy environmental booths, family and children's activities, food, live music, and an awards ceremony. There is no admission and is open to the public.

Loma Alta Creek and Beach Cleanup

Saturday, April 28, 9 a.m. - Noon

Sites along Loma Alta Creek, Buccaneer Beach, and the south side of the Oceanside Pier. Register at www.creektobay.org. Support provided by Waste Management of North County.

Free E-Waste Drop-Off

Saturday, April 28, 11 a.m. - 4 p.m.

Bring your electronics for recycling free of charge at parking lot 24, corner of Mission Ave. and Myers St. (more details on back).

Green Oceanside Youth Art Contest

Oceanside students in K-5th grades are eligible to enter. Download form from City website.

Questions/Information

Website:
www.ci.oceanside.ca.us
Search "Green Oceanside" for event details.

Email
greenoceanside@ci.oceanside.ca.us

Phone: 760-435-5021

Using your smartphone, scan the QR code for more information on Green Week 2012.

Free E-Waste Drop-Off

Sponsored by: City of Oceanside & 1-800-GOT-JUNK?

Saturday, April 28, 11 a.m. - 4 p.m.

Oceanside Parking Lot 24

Bring these electronics free of charge for recycling!

(No household hazardous waste materials will be accepted.)

- Cell Phones
- Computers
- Miscellaneous Wires
- Computer Monitors (CRT, Plasma, LCD)
- Consumer Electronics
- Copiers/Printers
- CPUs/Computer Towers
- Digital & Video Cameras
- DVD Players
- Fax Machines
- Household Appliances
- Electronic Medical Equipment
- Laptops
- Hard Drives
- Keyboard/Mice
- MP3 Players
- PBXs
- PDAs
- Scanners
- Speakers
- Stereo Equipment
- Televisions
- Telephones
- VCRs

Compost Workshops

Learn to compost kitchen scraps and garden materials at this free event. Oceanside residents will have an opportunity to purchase a subsidized compost bin.

Two dates to choose from:

Tuesday, April 24, 6:30 p.m.

Civic Center Community Rooms
300 N. Coast Hwy, Oceanside

Saturday, April 28, Noon

Pier Amphitheatre
During Green Fair

Space is limited; RSVP by logging onto
www.ci.oceanside.ca.us
and search "Green Oceanside" for details.

GREEN WEEK 2012

Event Locations

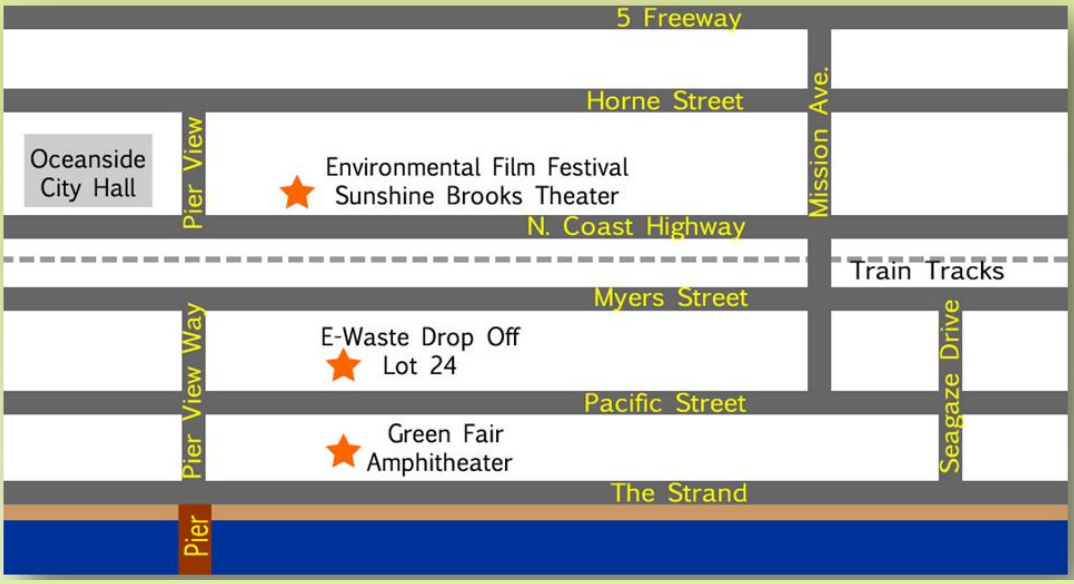

Please note downtown locations for Green Week events on the map above including Environmental Film Festival, Green Fair and E-Waste Drop Off. Free parking at Oceanside City Hall and Lot 23 located at Cleveland St. and Pier View Way.

The Green Oceanside campaign is about teaching families how to be better stewards of the planet by recycling, reducing waste, composting, using water efficiently, conserving energy, and preventing water pollution and litter.

Partially funded by a grant from the California Department of Resources Recycling and Recovery (CalRecycle).

Join the Oceanside Clean Water Program for the...

11th Annual

Buena Vista Creek CLEANUP

September 17, 2011
9:00 am to 12:00 pm

Participate in the 27th Annual California Coastal Cleanup Day by choosing from one of the following Oceanside sites:

Buena Vista Creek Sites
(Zone 2: North County—Inland)

1. **Fire Station #4: North side**
   Thunder Dr. and Lake Blvd.
2. **Kohl's: Behind store**
   College Blvd. and Marron Rd.
3. **Dicks Sporting Goods: Behind store**
   College Blvd. and Plaza Dr.

Coastal Beach Sites
(Zone 1: North County—Coastal)

1. **Oceanside Pier: South side**
2. **Buccaneer Beach: Buccaneer Park**
   Pacific St. and Morse St.
3. **Harbor: Boat launch ramp**
   1302 N. Pacific St.

Register at www.CleanUpDay.org

For more information

Oceanside Cleanup Events: 760-435-5536
www.OceansideCleanWaterProgram.org
Volunteers receive community service hours, refreshments, and one free give-away item.

Bring Your Own...

bucket (for trash), reusable gloves and reusable water bottle. You can help minimize the event's carbon footprint.

SPONSORED BY:

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San Luis Rey River Cleanup Event

Saturday, November 5, 2011
9:00 AM to 12:00 PM

Five sites to choose from

- **Highway 76 & Benet Road**
- **Highway 76 & Foussat Road at bike path**
- **Douglas Drive at the bike path on south side of SLR River north of Pala Road**
- **Mance Buchanon Park on College Boulevard just north of Adams Avenue**
- Corner of Holly and Kraft Streets

All volunteers receive refreshments, cleanup supplies, community service hours and a free give-away item.

For information and site details, call 760-435-5536 or log onto www.OceansideCleanWaterProgram.org and click on the events tab.

EVENTO DE LIMPIEZA EN EL RIO SAN LUIS REY

El sábado 5 de noviembre de 2011
De 9 a 12 del mediodía

Cinco lugares para escoger:

- Highway 76 y Benet Road
- Highway 76 y Fousat Road, en el camino de los ciclistas
- Douglas Drive, en el camino de los ciclistas, al lado sur del Rio San Luis Rey, al norte de Pala Road
- Parque Mance Buchanon, en College Blvd., justo al norte de Adams Ave.
- Esquina de las calles Holly y Kraft

Todos los voluntarios recibirán refrescos, artículos para limpieza, horas de servicio comunitario y un articulo gratis.

Para más información y más detalles del lugar, llámenos at 760-435-5536 o entre a nuestra página de Internet www.OceansideCleanWaterProgram.org y haga un click en el tabulador de eventos.

DECLARATION OF SERVICE BY EMAIL

I, the undersigned, declare as follows:

I am a resident of the County of Sacramento and I am over the age of 18 years, and not a party to the within action. My place of employment is 980 Ninth Street, Suite 300, Sacramento, California 95814.

On March 29, 2024, I served the:

- **Current Mailing List dated March 28, 2024**
- **Notice of Waiver of Procedural Requirements, Extension Request Approval, and Postponement of Hearing issued March 29, 2024**
- **Claimants' Comments on the Draft Proposed Decision and Parameters and Guidelines (Volumes 1-14) filed February 20, 2024**

  San Diego Regional Water Quality Control Board Order No. R9-2007-0001, Permit CAS0108758, Parts D.3.a.(3)(b)(iii), D.5.a.(1), D.5.a.(2), D.5.b.(1)(a), D.5.b.(1)(b)(iii-vi), D.5.b.(1)(c), D.5.b.(1)(d), D.5.b.(2), D.5.b.(3), E.2.f., E.2.g., F.1., F.2., F.3., I.1., I.2., I.5., J.3.a.(3)(c)(iv)-(viii), (x)-(xv), the first sentence of L.1. as it applies to the newly mandated activities, and L.1.a.(3)-(6), 07-TC-09-R County of San Diego, Cites of Carlsbad, Del Mar, Imperial Beach, Lemon Grove, Poway, San Marcos, Santee, Solana Beach, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, San Diego, and Vista, Claimants

by making it available on the Commission's website and providing notice of how to locate it to the email addresses provided on the attached mailing list.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this declaration was executed on March 29, 2024 at Sacramento, California.

Jill Magee

Jill Magee
Commission on State Mandates
980 Ninth Street, Suite 300
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COMMISSION ON STATE MANDATES

Mailing List

Last Updated: 3/28/24

Claim Number: 07-TC-09-R

Matter: San Diego Regional Water Quality Control Board Order No. R9-2007-0001 Permit CAS0108758 Parts D.1.d.(7)-(8), D.1.g., D.3.a.(3), D.3.a.(5), D.5, E.2.f, E.2.g, F.1, F.2, F.3, I.1, I.2, I.5, J.3.a.(3)(c)iv-viii & x-xv, and L.

Claimants: City of Carlsbad
City of Chula Vista
City of Del Mar
City of Encinitas
City of Escondido
City of Imperial Beach
City of La Mesa
City of Lemon Grove
City of National City
City of Oceanside
City of Poway
City of San Diego
City of San Marcos
City of Santee
City of Solana Beach
City of Vista

TO ALL PARTIES, INTERESTED PARTIES, AND INTERESTED PERSONS:

Each commission mailing list is continuously updated as requests are received to include or remove any party or person on the mailing list. A current mailing list is provided with commission correspondence, and a copy of the current mailing list is available upon request at any time. Except as provided otherwise by commission rule, when a party or interested party files any written material with the commission concerning a claim, it shall simultaneously serve a copy of the written material on the parties and interested parties to the claim identified on the mailing list provided by the commission. (Cal. Code Regs., tit. 2, § 1181.3.)

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